AD-A083 701 AIR FORCE AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATT--ETC F/G 1/2
COMMUNITY NOISE EXPOSURE RESULTING FROM AIRCRAFT OPERATIONS, VO--ETC(U)
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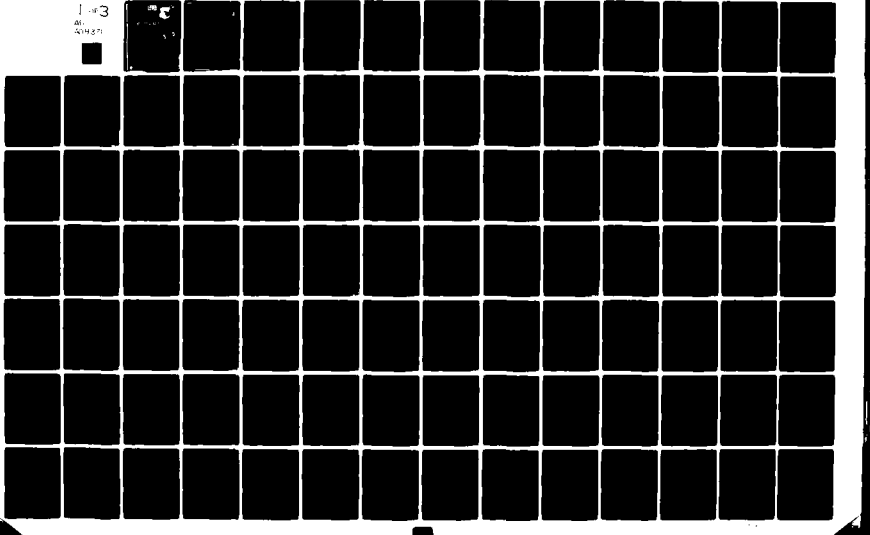

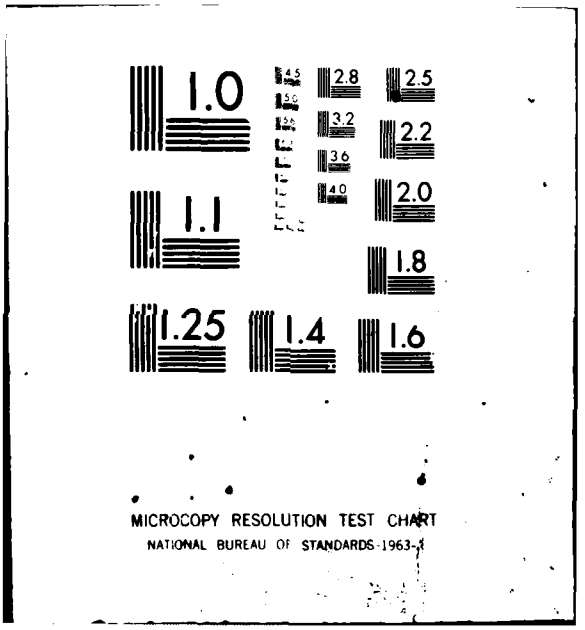
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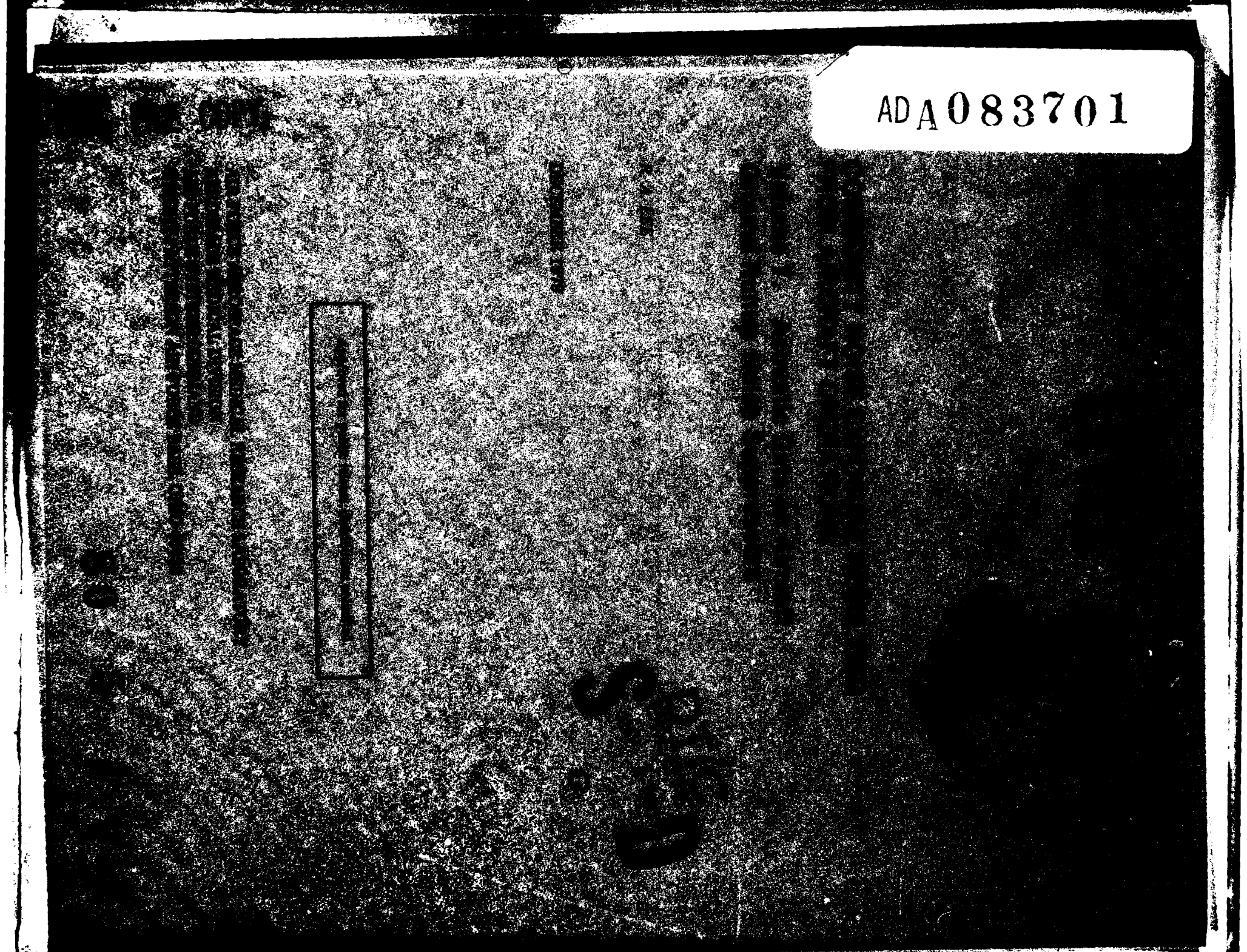
NATIONAL BUREAU OF STANDARDS-1963-A

AD A083701



SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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Aircraft Noise
Community Noise Exposure
Noise Environments
Aircraft Noise Suppressors
Suppressors

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

This report presents the results of field measurements of the far-field noise produced on the ground by military aircraft operating inside Grade-II demountable suppressors during ground runup operations. For these ground runups, data are presented as a function of angle and distance to the aircraft. All of the data are normalized to standard acoustic reference conditions of 59°F temperature and 70% relative humidity. Volume 1 discusses the

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scope, limitations, and definitions needed to understand and use the volumes containing the noise data. It provides guidance for making airspeed and engine power setting adjustments to the flight noise data for other than reference conditions as well as work sheets and several examples for computing cumulative noise exposure resulting from multiple flight or ground runup operations. Noise data are presented in this Volume 7 for the following aircraft suppressor systems: A-7 in the AF32A-19 and AF32A-24 noise suppressors, KC-135A in the modified AF32A-52 noise suppressor, F-4 in the AF32A-14 noise suppressor, F-5 in the AF32A-18 noise suppressor, F-15 in the AF32A-23 noise suppressor, F-16 in the AF32A-25 noise suppressor, F-100 in the AF32A-16 noise suppressor, F-106 in the AF32A-17 noise suppressor, F-111 in the AF32A-13 noise suppressor and T-38 in the AF32A-18 noise suppressor.

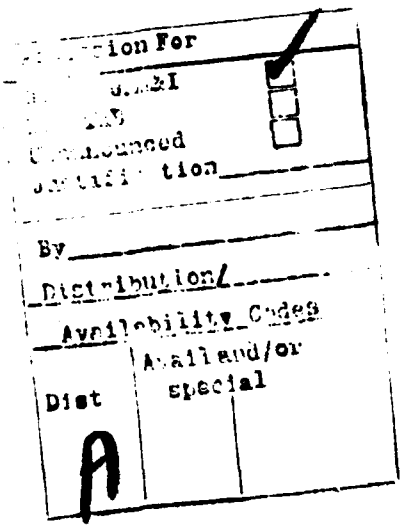
The other noise data volumes are categorized according to:

Vol. 2: Air Force Bomber/Cargo Aircraft
Vol. 3: Air Force Attack/Fighter Aircraft
Vol. 4: Air Force Trainer/Fighter Aircraft
Vol. 5: Air Force Propeller Aircraft
Vol. 6: Navy Aircraft

PREFACE

The author gratefully acknowledges the many helpful technical discussions and critical reviews of the data acquisition and reduction procedures by Bolt Beranek and Newman Inc. and Mr. John N. Cole, Mr. Jerry D. Speakman and Mr. Robert G. Powell of the Biodynamic Environment Branch; development of the OMEGA software programs by Mr. Henry Mohlman and maintenance of the data files by Mr. Fred Lampley both of the University of Dayton Research Institute, the instrumentation development and noise measurement efforts of Harald K. Hille of the Biodynamic Environment Branch; and the report preparation efforts of Mrs. Norma Peachey of the Biodynamic Environment Branch.

This report is one of a series describing the contractual and in-house research program undertaken by the Aerospace Medical Research Laboratory, Biodynamic Environment Branch, under Project/Task 723107, "Technology to Define and Assess Environmental Quality of Noise from AF Operations," to develop the procedures and acoustic data base required for predicting community noise exposure resulting from aircraft operations.



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INTRODUCTION

This report is one of a series published under the same report number (AMRL-TR-73-110) as a multi-volume databook quantifying the single event, far-field noise produced on the ground by flyover and ground runup operations of military aircraft. A companion report (AMRL-TR-73-107, "Community Noise Exposure Resulting From Aircraft Operations: Acquisition and Analysis of Acoustic Data") describes the test protocol and data reduction algorithms associated with these data.

Volume 1 discusses the scope, definitions, and limitations of the noise data volumes as well as providing work sheets and several examples of making hand computations of noise exposure from multiple flight and/or ground runup operations.

Volume 7 provides the noise characteristics of USAF aircraft in Grade II demountable suppressors during ground runup operations.

OMEGA 8.2 output pages show the expected far-field noise levels for single engine operation of the various aircraft operating inside the noise suppressors during ground runup operations. Distances and angles to the far-field noise data locations are measured from a point of origin located on the ground directly below the center of the suppressor exhaust stack. The angle is determined by the orientation of the aircraft in the suppressor with the aircraft nose representing 0° and the aircraft exhaust representing 180°.

The other noise data volumes are categorized according to:

Vol. 2: Air Force Bomber/Cargo Aircraft Noise
Vol. 3: Air Force Attack/Fighter Aircraft Noise Data
Vol. 4: Air Force Trainer/Fighter Aircraft Noise Data
Vol. 5 Air Force Propeller Aircraft Noise Data
Vol. 6: Navy Aircraft

Direct any questions concerning the data in this report to: AFAMRL/BBE, Wright-Patterson AFB OH 45433; AUTOVON 785-3664 or 785-3605; Commercial (513) 255-3664 or (513) 255-3605.

USAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAFUSAF

USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR USAF
USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR USAF
USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR USAF

NOISE PRODUCED ON THE GROUND BY

A-7 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-833-001
AIRCRAFT CODE: 833
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Idle Power, 55% RPM	5-10
Engine Runup, 70% RPM	11-16
Engine Runup, 85% RPM	17-22
Military Power, 96% RPM	23-28

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
    NORMALIZED SPL AT 250 FEET
NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
    PERCEIVED NOISE LEVEL
    TONE-CORRECTED, PERCEIVED NOISE LEVEL
    A-WEIGHTED OVERALL SOUND LEVEL
    TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL
NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR USAF
USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR USAF
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TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 01813
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
IDLE PWR, 55% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	82	80	77	81	87	83	83	84	84	83	83	83	79	76	76	76	76	77	80
63	79	78	78	81	78	78	80	78	79	79	81	83	82	80	75	73	71	71	76
80	72	73	74	74	75	75	76	75	72	71	71	74	76	76	73	69	65	64	66
100	67	65	67	68	69	68	66	67	70	70	65	64	67	68	66<	65<	63<	62<	65<
125	68	65	70	68	68	67	67	67	68	68	65	63	64	63	60	60	60	59	63<
160	62	62	68	66<	63	65<	65<	63	62	62	63<	61<	62<	61<	59<	60<	59<	58<	61<
200	65	64	65	64<	61<	63<	62<	59	61	61<	61<	59<	61<	59<	57<	61	57<	57<	59<
250	64	65	65	62<	60<	61<	60<	59<	59<	60<	59<	58<	59<	57<	56<	58<	56<	55<	58<
315	62	62	61	60<	58<	60<	58<	59<	57	59<	56<	56<	57<	55<	55<	56<	54<	54<	56<
400	63	65	58	58	57<	58<	56<	59<	57	58<	54<	54<	56<	54<	53<	54<	53<	53<	54<
500	65	65	63	64	55	56	54	59	58	57	52	53	54	52	52	52	52	51	53<
630	60	63	60	60	55	57	56	56	60	55	56	54	55	51	51	50	48	51	51<
800	61	63	61	63	58	59	60	58	60	57	57	58	58	54	54	53	52	54	49
1000	58	61	61	63	59	61	60	60	60	58	59	58	58	57	57	55	52	54	49
1250	62	67	66	69	62	68	67	67	68	64	72	66	71	67	68	67	65	68	55
1600	55	60	61	63	62	65	63	63	63	60	63	62	63	64	63	60	56	58	52
2000	55	62	62	62	62	64	63	63	65	61	63	66	60	66	62	60	57	59	52
2500	53	62	63	64	63	64	61	62	63	59	59	60	58	59	60	58	56	58	51
3150	49	61	60	62	61	62	58	59	59	55	55	54	54	54	55	53	51	55	48
4000	49	59	60	61	61	62	59	60	59	54	53	52	52	52	53	52	51	55	47
5000	47	58	58	59	59	58	56	57	57	51	49	48	48	48	50	49	49	51	43
6300	42	52	53	55	54	55	52	54	53	47	46	45	43	44	46	47	47	47	48
8000	40	50	51	52	53	51	51	52	50	44	42	42	40	41	43	43	43	43	37
10000	38	46	47	48	49	47	46	47	46	39	38	37	36	35	39	40	41	40	34
OVERALL	85	84	83	85	88	85	86	86	86	85	86	86	85	83	80	80	79	79	82

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
IDLE PWR, 55% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 01013
PROFILE VERSION A
28 NOV 79
PAGE 01

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.7	89.8	90.0	90.8	90.1	90.7	88.8	89.4	89.6	86.8	88.5	88.3	87.9	87.6	85.7	84.8	83.0	84.8	81.1
250	83.2	87.5	87.7	88.5	87.6	88.4	86.5	87.0	87.3	84.5	86.2	86.0	85.6	85.4	83.4	82.5	80.7	82.6	78.5
315	80.7	85.1	85.3	86.2	85.2	86.0	84.1	84.7	85.3	82.2	83.9	83.7	83.3	83.1	81.1	80.2	78.4	80.3	76.8
400	78.1	82.7	82.9	83.8	82.7	83.6	81.7	82.3	82.6	79.8	81.6	81.3	81.0	80.7	78.8	77.9	76.0	77.9	73.4
500	75.7	80.2	80.4	81.3	80.2	81.1	79.2	79.7	80.1	77.3	79.2	78.9	78.6	78.3	76.4	75.5	73.6	75.5	70.8
630	73.2	77.6	77.8	78.6	77.5	78.5	76.6	77.1	77.5	74.8	76.7	76.4	76.2	75.8	73.9	73.0	71.1	73.8	68.1
800	70.7	74.9	75.0	75.9	74.7	75.7	73.9	74.4	74.8	72.1	74.2	73.8	73.6	73.2	71.3	70.4	68.4	70.4	65.2
1000	68.0	72.0	72.2	73.0	71.8	72.8	71.1	71.5	72.0	69.3	71.5	70.9	71.0	70.3	68.5	67.6	65.6	67.6	62.2
1250	65.2	68.9	69.0	69.9	68.6	69.7	68.0	68.3	68.9	66.2	68.6	67.9	68.1	67.3	65.5	64.6	62.5	64.6	58.9
1600	62.1	65.5	65.5	66.5	65.1	66.2	64.6	64.9	65.6	62.9	65.5	64.6	64.9	64.0	62.3	61.3	59.2	61.3	55.3
2000	58.7	61.7	61.6	62.9	61.1	62.3	60.8	61.1	61.8	59.0	62.0	60.9	61.5	60.2	58.7	57.7	55.6	57.8	50.7
2500	54.8	57.8	57.2	59.8	56.6	58.1	56.6	56.9	57.8	54.7	58.2	56.8	57.6	56.1	54.8	53.8	51.5	53.8	45.6
3150	50.8	53.3	52.5	54.6	51.4	53.7	52.1	52.4	53.4	49.6	53.9	51.8	53.2	51.2	50.2	49.0	46.5	49.1	39.6
4000	46.5	47.7	46.7	49.1	44.4	48.0	46.3	46.5	47.9	43.5	48.8	46.1	48.1	45.5	45.0	43.7	41.2	44.2	32.8
5000	38.1	42.8	40.5	43.3	37.4	41.9	40.0	40.5	42.0	37.1	43.3	39.0	42.5	39.5	39.3	37.9	34.7	38.3	24.4
6300	31.4	35.6	33.7	36.8	30.8	35.4	33.5	34.2	35.7	30.3	37.1	32.4	36.4	32.8	32.5	31.0	27.0	31.8	7.3
8000	25.7	27.7	25.1	29.5	17.2	27.6	25.6	25.6	28.6	18.9	30.0	23.9	28.7	24.6	23.8	21.6	18.0	23.1	
10000	17.0	20.0	15.3	18.7	4.4	12.4	9.6	9.6	14.4	7.5	20.0	8.4	18.4	11.0	11.6	10.0	8.9	12.0	
12500	7.6	7.9	5.4	7.8					.2		9.9		8.0					.9	
16000																			
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 01013
PROFILE VERSION A
26 NOV 79
PAGE E1

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
IDLE PWR, 55% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	87.5	91.7	91.5	92.9	90.1	92.2	90.5	90.9	91.8	86.4	92.1	90.1	91.3	89.9	88.3	87.9	86.5	88.8	82.4
250	85.0	89.4	89.2	90.6	87.6	89.9	88.2	88.6	89.5	86.2	89.9	87.9	89.1	87.6	86.0	85.7	84.2	86.5	79.9
315	82.5	87.1	86.9	88.3	85.2	87.6	85.9	86.2	87.2	83.8	87.6	85.5	86.8	85.3	83.7	83.4	81.9	84.2	77.4
400	79.9	84.6	84.5	85.8	82.7	85.2	83.4	83.8	84.7	81.4	85.3	83.2	84.5	83.0	81.3	81.0	79.6	81.9	74.8
500	77.5	82.2	82.0	83.3	80.2	82.6	80.9	81.3	82.2	79.0	82.9	80.7	82.1	80.6	78.9	78.6	77.1	79.5	72.1
630	75.0	79.6	79.4	80.7	77.5	80.0	78.3	78.7	79.7	76.4	80.4	78.2	79.6	78.0	76.5	76.1	74.6	77.0	69.4
800	72.5	76.9	76.6	78.0	74.7	77.3	75.6	75.9	77.0	73.8	77.9	75.6	77.1	75.4	73.9	73.5	72.0	74.3	66.6
1000	69.8	74.0	73.7	75.1	71.8	74.4	72.8	73.0	74.2	70.9	75.2	72.8	74.4	72.6	71.1	70.7	69.1	71.5	63.6
1250	67.0	70.8	70.6	72.0	68.6	71.2	69.7	69.8	71.1	67.9	72.3	69.8	71.5	69.6	68.1	67.7	66.0	68.5	60.3
1600	63.9	67.5	67.1	68.5	65.1	67.7	66.3	66.4	67.8	64.5	69.1	66.5	68.4	66.2	64.9	64.4	62.7	65.3	56.7
2000	60.5	63.7	63.2	65.0	61.1	63.9	62.5	62.7	64.0	60.7	65.7	62.8	64.9	62.5	61.3	60.8	59.1	61.7	52.0
2500	56.6	59.8	58.8	61.0	56.6	59.7	58.3	58.4	60.0	56.4	61.8	58.6	61.1	58.3	57.4	56.9	55.0	57.7	47.0
3150	51.8	55.3	54.0	56.7	51.4	55.2	53.8	53.9	55.6	51.3	57.5	53.7	56.7	53.5	52.8	52.2	50.1	53.0	40.9
4000	45.9	49.3	47.9	50.8	44.4	49.2	47.7	47.7	49.7	44.8	51.7	47.6	50.9	47.4	47.1	46.2	44.1	47.4	33.9
5000	39.2	43.2	41.4	44.5	37.4	42.8	41.1	41.4	43.3	38.1	45.5	40.1	44.6	40.8	40.9	39.8	36.9	40.7	25.2
6300	32.1	36.4	34.4	37.7	30.0	36.0	34.2	34.8	36.6	31.0	38.6	33.1	37.8	33.7	33.6	32.3	28.5	33.3	7.8
8000	26.1	28.1	25.5	29.9	17.2	27.9	25.9	26.0	29.0	19.2	30.7	24.2	29.4	25.0	24.4	22.2	18.7	23.9	
10000	17.0	20.0	15.3	18.7	4.4	12.4	9.6	9.6	14.4	7.5	20.0	8.4	18.4	11.0	11.6	10.0	8.9	12.0	
12500	7.6	7.9	5.4	7.8					.2		9.9		8.8					.9	
16000																			
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
IDLE PWR, 55% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 01013
PROFILE VERSION A
28 NOV 79
PAGE F1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	71.8	75.7	75.1	76.8	74.3	76.5	74.8	75.1	75.8	72.4	76.4	74.3	75.6	74.5	73.7	72.3	70.3	72.8	65.2
250	69.7	73.5	72.9	74.6	72.1	74.3	72.6	73.0	73.7	70.2	74.2	72.2	73.5	72.4	71.6	70.2	68.1	70.6	63.1
315	67.6	71.3	70.7	72.4	69.9	72.1	70.4	70.7	71.5	68.1	72.1	70.0	71.4	70.3	69.4	68.0	66.0	68.5	61.0
400	65.5	69.1	68.5	70.2	67.6	69.9	68.2	68.5	69.3	65.9	69.9	67.8	69.2	68.1	67.2	65.8	63.8	66.3	58.8
500	63.3	66.8	66.2	67.9	65.2	67.6	65.9	66.2	67.0	63.6	67.7	65.5	67.0	65.8	64.9	63.6	61.5	64.0	56.6
630	61.1	64.5	63.8	65.5	62.8	65.2	63.5	63.8	64.6	61.3	65.4	63.2	64.7	63.5	62.6	61.3	59.2	61.7	54.3
800	58.8	62.1	61.3	63.1	60.3	62.7	61.1	61.4	62.2	58.9	63.1	60.8	62.4	61.1	60.2	58.9	56.8	59.3	51.9
1000	56.5	59.7	58.8	60.6	57.7	60.2	58.6	58.8	59.7	56.4	60.7	58.3	60.0	58.8	57.8	56.4	54.4	56.8	49.5
1250	54.1	57.1	56.1	57.9	54.9	57.5	55.9	56.2	57.1	53.8	58.1	55.7	57.4	56.0	55.2	53.8	51.8	54.2	46.9
1600	51.5	54.4	53.3	55.2	52.0	54.6	53.2	53.4	54.3	51.1	55.5	52.9	54.8	53.2	52.4	51.1	49.1	51.5	44.2
2000	48.8	51.6	50.4	52.3	48.9	51.6	50.2	50.4	51.4	48.1	52.6	50.0	51.9	50.2	49.5	48.2	46.2	48.7	41.2
2500	45.9	48.5	47.3	49.2	45.5	48.4	47.0	47.3	48.3	44.9	49.5	46.7	48.9	47.0	46.4	45.1	43.1	45.6	37.9
3150	42.6	45.2	43.9	45.9	41.9	45.0	43.6	43.8	44.9	41.4	46.2	43.2	45.6	43.5	43.0	41.7	39.7	42.3	34.3
4000	39.0	41.6	40.2	42.3	38.1	41.2	39.9	40.0	41.2	37.7	42.6	39.4	41.9	39.7	39.3	38.1	36.1	38.6	30.4
5000	34.9	37.5	36.1	38.2	33.8	37.1	35.8	35.9	37.1	33.5	38.6	35.2	38.0	35.5	35.2	34.0	32.1	34.6	26.1
6300	30.6	33.1	31.7	33.8	29.2	32.5	31.3	31.4	32.6	29.0	34.2	30.6	33.5	30.9	30.7	29.5	27.6	30.1	21.5
8000	26.7	28.9	27.3	29.3	24.7	27.7	26.7	26.7	28.0	24.5	29.3	25.8	28.6	25.8	25.7	24.6	22.7	25.2	17.5
10000	22.5	24.4	22.7	24.5	20.0	23.5	21.6	21.7	22.9	19.7	23.8	20.6	23.2	20.3	20.1	19.1	17.3	19.7	13.4
12500	18.1	19.6	17.7	19.2	15.3	18.9	16.3	16.4	17.6	14.8	17.8	15.3	17.3	14.4	14.1	13.1	11.4	13.5	9.3
16000	13.4	14.5	12.5	13.8	10.9	11.4	11.0	11.2	12.1	10.0	11.6	10.3	11.3	8.7	7.8	6.9	5.4	6.9	5.4
20000	8.5	9.2	7.3	8.5	7.1	6.4	6.3	6.5	7.0	5.8	6.3	6.1	6.1	3.8	2.0	1.3		.7	1.8
25000	3.8	3.9	2.4	3.6	4.0	2.3	2.6	2.5	2.7	2.2	2.4	2.8	2.2	.2					

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 01013
PROFILE VERSION A
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PAGE G1

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
IDLE PWR, 55% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 3.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																	
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	73.6	77.6	76.7	78.8	74.3	78.1	76.5	76.7	78.0	74.0	80.0	76.1	79.0	76.8	76.3	75.5	73.8	76.7	66.6
250	71.5	75.5	74.5	76.7	72.1	75.9	74.3	74.5	75.9	71.9	77.9	74.0	76.9	74.7	74.2	73.4	71.7	74.6	64.5
315	69.4	73.3	72.3	74.5	69.9	73.7	72.1	72.3	73.7	69.7	75.8	71.8	74.8	72.5	72.0	71.2	69.5	72.4	62.3
400	67.3	71.1	70.1	72.2	67.6	71.4	69.9	70.0	71.5	67.5	73.6	69.6	72.6	70.3	69.8	69.0	67.3	70.2	60.2
500	65.1	68.8	67.7	69.9	65.2	69.1	67.6	67.7	69.2	65.2	71.4	67.4	70.4	68.1	67.5	66.8	65.1	67.9	57.9
630	62.9	66.5	65.4	67.6	62.8	66.7	65.2	65.4	66.8	62.9	69.1	65.1	68.1	65.7	65.2	64.5	62.7	65.6	55.6
800	60.6	64.1	62.9	65.1	60.3	64.3	62.8	62.9	64.4	60.5	66.7	62.7	65.8	63.3	62.8	62.1	60.4	63.2	53.3
1000	58.3	61.6	60.4	62.6	57.7	61.7	60.3	60.4	61.9	58.0	64.3	60.2	63.4	60.9	60.4	59.6	57.9	60.8	50.8
1250	55.9	59.0	57.7	60.0	54.9	59.0	57.7	57.7	59.3	55.4	61.8	57.6	60.9	58.2	57.8	57.0	55.3	58.2	48.3
1600	53.3	56.4	54.9	57.3	52.0	56.2	54.9	54.9	56.5	52.7	59.1	54.8	58.2	55.4	55.0	54.3	52.6	55.5	45.5
2000	50.6	53.6	52.0	54.4	48.9	53.2	51.9	52.0	53.6	49.7	56.3	51.8	55.4	52.5	52.1	51.4	49.7	52.6	42.5
2500	47.7	50.5	48.8	51.3	45.5	50.0	48.7	48.8	50.5	46.5	53.2	48.6	52.3	49.3	49.0	48.3	46.6	49.5	39.2
3150	44.4	47.2	45.5	47.9	41.9	46.5	45.3	45.3	47.1	43.1	49.9	45.1	49.0	45.8	45.6	44.9	43.3	46.2	35.7
4000	40.4	43.1	41.4	43.9	38.1	42.5	41.3	41.3	43.0	39.0	45.6	40.9	44.7	41.5	41.4	40.6	38.9	41.8	31.5
5000	36.0	38.7	37.0	39.5	33.8	38.0	36.9	36.8	38.5	34.5	40.8	36.3	40.0	36.9	36.8	35.9	34.2	37.0	26.9
6300	31.3	33.9	32.3	34.6	29.2	33.1	32.0	32.0	33.5	29.6	35.6	31.3	34.9	31.8	31.7	30.8	29.0	31.7	22.1
8000	27.0	29.3	27.6	29.7	24.7	28.0	27.0	27.0	28.4	24.8	30.0	26.1	29.3	26.3	26.2	25.2	23.4	26.0	17.7
10060	22.5	24.4	22.7	24.5	20.0	22.5	21.6	21.7	22.9	19.7	23.8	20.6	23.2	20.3	20.1	19.1	17.3	19.7	13.4
12500	18.1	19.6	17.7	19.2	15.3	16.9	16.3	16.4	17.6	14.8	17.8	15.3	17.3	14.4	14.1	13.1	11.4	13.5	9.3
16000	13.4	14.5	12.5	13.8	10.9	11.4	11.0	11.2	12.1	10.0	11.6	10.3	11.3	8.7	7.8	6.9	5.4	6.9	5.4
20000	8.5	9.2	7.3	8.5	7.1	6.4	6.3	6.5	7.0	5.8	6.3	6.1	6.1	3.8	2.0	1.3		.7	1.8
25000	3.8	3.9	2.4	3.6	4.0	2.3	2.6	2.5	2.7	2.2	2.4	2.8	2.2	.2					

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
IDLE PWR, 55% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 01013
PROFILE VERSION A
28 NOV 79
PAGE J1

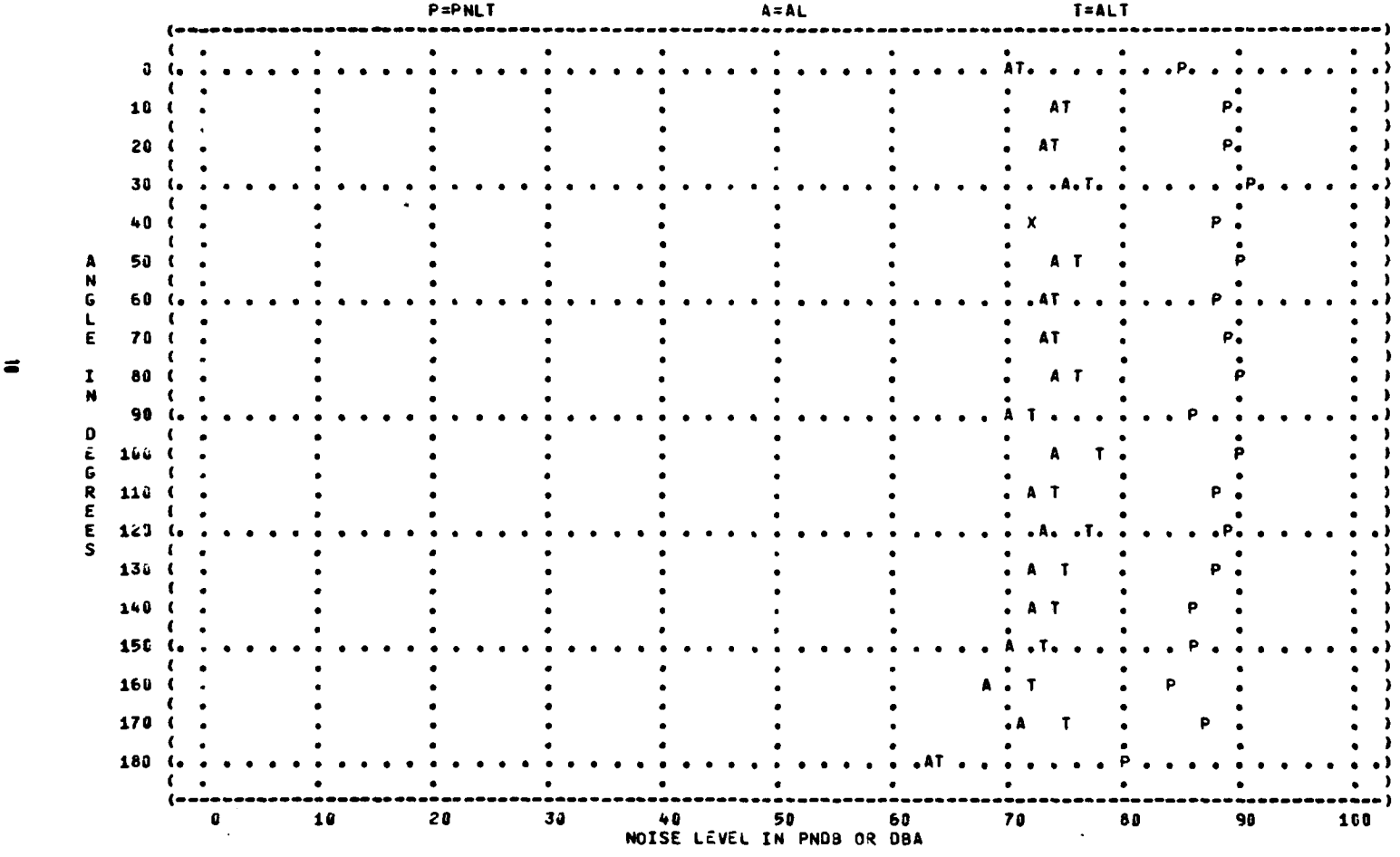

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-633-001
RUN 02

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
70% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 3.0 DB

AIRCRAFT CODE 833
OPERATION CODE 01021
PROFILE VERSION A
28 NOV 79
PAGE C2

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	88	84	87	88	85	83	84	83	82	81	81	77	83	83	84	82	81	82	83
63	87	90	91	91	87	89	91	91	91	93	93	92	85	84	87	83	80	81	83
80	87	86	88	90	89	88	85	86	85	85	88	89	88	85	84	79	75	76	81
100	80	78	79	80	79	81	78	79	81	79	77	79	81	78	74	73	72	73	76
125	78	75	78	74	74	77	76	75	74	71	73	71	72	70	71	71	70	70	66
160	75	75	80	73	73	70	73	75	73	73	72	66	67	67	62	65	67	69	63<
200	71	72	74	66	63	65	66	68	65	63	61	63<	65<	65<	61<	64<	65<	63	61<
250	69	69	71	63	62<	61<	62<	63<	61<	60<	60<	61<	62<	63<	59<	63<	63<	64	59<
315	70	70	67	62	60	57	58	59	57	56	58<	59<	61<	61<	57<	61<	62<	59	57<
400	69	70	66	63	61	57	56	56	57<	54	57<	57<	58<	58<	55<	60<	60<	56<	54<
500	66	69	67	67	61	59	57	58	56	56	55	54	55	56	53	59<	58<	53	52
630	70	70	68	68	64	64	63	64	63	63	63	62	63	63	59	58	56	58	56
800	71	71	68	71	66	66	65	64	62	64	64	64	65	66	63	60	58	61	59
1000	70	69	68	71	68	68	66	65	63	65	64	65	66	68	64	62	58	60	59
1250	66	67	67	71	68	69	67	68	66	65	66	65	66	68	67	63	60	62	57
1600	62	65	67	70	71	73	69	72	69	68	70	67	68	69	70	65	61	63	59
2000	64	66	69	69	70	71	68	69	67	68	67	66	66	71	68	65	62	64	61
2500	57	65	66	68	69	70	65	66	64	63	62	61	61	63	62	60	57	59	54
3150	56	63	66	69	68	68	65	66	65	65	61	61	61	63	60	60	59	60	54
4000	55	63	65	68	66	66	63	64	62	60	59	58	58	60	58	58	57	59	53
5000	52	61	64	65	63	63	60	61	58	56	54	53	54	55	53	53	52	55	49
6300	48	57	61	61	59	59	57	58	54	52	51	50	50	51	49	49	48	51	45
8000	44	53	56	57	54	53	52	53	49	47	46	45	45	45	45	44	43	45	39
10000	42	47	52	52	50	49	48	47	44	42	41	41	41	41	43	41	38	41	36
OVERALL	92	93	95	95	93	93	93	93	93	94	95	94	91	89	90	87	85	86	88

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 81021
PROFILE VERSION A
28 NOV 79
PAGE 02

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
70% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.5	96.2	97.8	97.9	96.5	96.8	95.5	95.9	94.9	95.2	95.3	94.5	93.8	93.9	91.9	90.1	87.9	89.4	87.7
250	92.3	94.0	95.6	95.7	94.3	94.6	93.3	93.7	92.8	93.0	93.2	92.4	91.6	91.7	89.7	87.8	85.6	87.1	85.2
315	89.9	91.8	93.4	93.5	92.8	92.3	91.1	91.5	90.6	90.8	91.0	90.2	89.3	89.4	87.4	85.5	83.2	84.7	82.7
400	87.5	89.5	91.1	91.1	89.5	89.9	88.8	89.2	88.3	88.6	88.8	88.0	86.8	87.0	85.0	83.1	80.8	82.4	80.2
500	85.1	86.9	88.7	88.6	87.0	87.4	86.4	86.7	85.8	86.3	86.5	85.8	84.3	84.6	82.6	80.6	78.3	79.9	77.6
630	82.5	84.3	86.0	86.0	84.4	84.8	83.7	84.0	83.2	83.8	84.1	83.2	81.8	82.1	80.1	78.1	75.7	77.3	75.0
800	79.9	81.6	83.2	83.3	81.7	82.0	80.9	81.3	80.4	81.0	81.4	80.5	79.2	79.4	77.5	75.5	73.1	74.6	72.2
1000	77.2	78.8	80.4	80.5	78.9	79.1	78.1	78.4	77.6	78.2	78.6	77.7	76.4	76.7	74.7	72.7	70.2	71.8	69.5
1250	73.9	75.8	77.3	77.2	75.6	76.1	75.1	75.4	74.5	75.2	75.6	74.7	73.1	73.7	71.8	69.6	67.2	68.8	66.3
1600	70.4	72.1	73.6	73.5	72.0	72.0	71.2	71.8	70.7	71.3	71.7	70.8	69.4	70.4	68.5	66.3	63.8	65.4	62.8
2000	66.5	68.1	69.5	69.4	68.4	69.2	67.0	68.2	66.5	67.1	67.4	66.4	65.2	66.0	65.0	62.6	59.9	61.6	59.0
2500	62.8	63.9	65.2	65.3	64.3	65.2	62.7	64.2	62.2	62.3	62.6	61.7	61.1	62.0	61.1	58.4	55.6	57.3	54.6
3150	58.7	59.8	60.6	60.8	59.8	60.9	58.2	59.7	57.7	57.0	58.0	56.2	56.5	58.2	56.5	53.7	50.4	52.5	49.3
4000	54.0	54.9	55.1	55.8	54.6	55.7	52.9	54.5	52.2	51.6	52.7	50.5	51.3	52.0	51.4	48.0	43.9	46.3	42.4
5000	48.8	49.4	48.7	49.9	48.6	49.9	46.4	48.5	45.9	45.1	46.5	43.8	44.6	46.6	45.2	48.7	36.4	38.4	34.7
6300	41.9	42.8	41.8	43.3	41.1	42.8	38.8	41.1	38.1	37.4	39.1	36.3	36.7	38.6	37.3	33.3	27.6	30.6	24.8
8000	36.9	36.9	35.9	37.7	33.6	35.0	31.0	32.8	29.0	28.6	31.0	28.5	29.9	31.3	29.2	23.4	16.9	22.4	13.0
10000	30.1	30.1	27.4	30.3	23.8	24.0	20.9	20.8	16.5	16.3	19.6	17.9	20.0	22.5	16.3	13.5	6.2	8.4	1.3
12500	21.0	22.2	16.2	20.1	9.3	10.2	10.7	8.7	4.0	7.9	8.2	7.4	10.0	7.3	3.3	3.6			
16000	7.4	9.9	5.1	9.8			.6						.1						
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 01021
PROFILE VERSION A
28 NOV 79
PAGE E2

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
70% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.8	96.2	98.4	97.9	97.0	96.8	95.5	97.1	94.9	96.2	96.8	94.5	94.8	95.6	91.9	90.1	87.9	90.4	89.3
250	93.6	94.0	96.2	95.7	94.8	94.6	93.3	94.9	92.8	94.0	94.6	92.4	92.6	93.3	89.7	87.8	85.6	88.1	86.8
315	91.3	91.8	94.0	93.5	92.5	92.3	91.1	92.7	90.6	91.8	92.5	90.2	90.3	91.8	87.4	85.5	83.2	85.8	84.3
400	88.9	89.5	91.7	91.1	90.0	89.9	88.8	90.4	88.3	89.6	90.2	88.0	87.8	88.7	85.0	83.1	80.8	83.4	81.7
500	86.4	86.9	89.3	88.6	87.5	87.4	86.4	87.9	85.8	87.3	88.0	85.8	85.4	86.2	82.6	80.6	78.3	80.9	79.2
630	83.9	84.3	86.6	86.0	84.9	84.8	83.7	85.2	83.2	84.8	85.5	83.2	82.8	83.7	80.1	78.1	75.7	78.4	76.5
800	81.3	81.6	83.8	83.3	82.2	82.0	80.9	82.4	80.4	82.0	82.8	80.5	80.2	81.1	77.5	75.5	73.1	75.7	73.8
1000	78.6	78.8	81.0	80.5	79.4	79.1	78.1	79.6	77.6	79.2	80.0	77.7	77.5	78.3	74.7	72.7	70.2	72.9	71.0
1250	75.3	75.8	77.9	77.2	76.1	76.1	75.1	76.6	74.5	76.2	77.1	74.7	74.1	75.3	71.8	69.6	67.2	69.8	67.9
1600	71.7	72.1	74.2	73.5	72.5	72.8	71.2	72.9	70.7	72.4	73.2	70.8	70.4	72.1	68.5	66.3	63.8	66.5	64.4
2000	67.9	68.1	70.1	69.4	68.9	69.2	67.0	69.4	66.5	68.1	68.9	66.4	66.2	68.5	65.0	62.6	59.9	62.7	60.6
2500	64.2	63.9	65.8	65.3	64.8	65.2	62.7	65.3	62.2	63.3	64.1	61.7	62.1	64.4	61.1	58.4	55.6	58.4	56.1
3150	60.0	59.8	61.2	60.8	60.3	60.9	58.2	60.9	57.7	58.0	59.5	56.2	57.6	59.9	56.5	53.7	50.4	53.6	50.8
4000	55.8	54.9	55.6	55.8	55.0	55.7	52.9	55.4	52.2	52.4	53.9	50.5	52.1	54.1	51.4	48.8	43.9	47.1	43.7
5000	49.6	49.4	49.1	49.9	48.9	49.9	46.4	49.2	45.9	45.7	47.4	43.8	45.2	47.6	45.2	40.7	36.4	39.1	35.6
6300	42.4	42.8	42.8	43.3	41.3	42.8	38.8	41.6	38.1	37.8	39.7	36.3	37.1	39.3	37.3	33.3	27.6	31.8	25.4
8000	37.2	36.9	36.8	37.7	33.7	35.0	31.0	33.1	29.0	28.8	31.3	28.5	33.1	31.6	29.2	23.4	16.9	22.6	13.3
10000	31.1	30.1	27.4	30.3	23.8	24.8	20.9	20.8	16.5	18.3	19.6	17.9	20.8	22.5	16.3	13.5	6.2	8.4	1.3
12500	21.8	22.2	16.2	20.1	9.3	10.2	10.7	8.7	4.3	7.9	8.2	7.4	10.8	7.3	3.3	3.6			
16000	7.4	9.9	5.1	9.8			.6						.1						
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
76% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 01021
PROFILE VERSION A
28 NOV 79
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DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	79.6	80.6	81.2	82.5	81.3	82.2	79.5	80.5	78.7	78.5	78.7	77.6	77.9	79.5	78.8	75.2	72.6	74.4	71.3
250	77.5	78.5	79.1	80.3	79.2	80.0	77.4	78.4	76.6	76.4	76.6	75.5	75.8	77.4	75.9	73.1	70.5	72.2	69.2
315	75.4	76.3	76.9	78.1	77.0	77.8	75.2	76.2	74.4	74.2	74.5	73.4	73.7	75.2	73.7	70.9	68.3	70.0	67.1
400	73.3	74.2	74.7	75.9	74.7	75.6	73.0	74.0	72.2	72.0	72.3	71.2	71.5	73.0	71.5	68.7	66.1	67.8	64.9
500	71.1	71.9	72.4	73.6	72.4	73.3	70.7	71.7	69.9	69.8	70.1	69.1	69.3	70.7	69.3	66.5	63.8	65.5	62.7
630	68.9	69.7	70.1	71.2	70.0	70.9	68.3	69.3	67.6	67.5	67.8	66.8	67.0	68.4	67.0	64.1	61.5	63.2	60.4
800	66.7	67.4	67.6	68.8	67.6	68.5	65.9	66.9	65.1	65.1	65.5	64.5	64.7	66.0	64.6	61.7	59.0	60.7	58.1
1000	64.3	65.0	65.1	66.3	65.0	65.9	63.4	64.4	62.6	62.6	63.1	62.2	62.2	63.5	62.1	59.2	56.5	58.2	55.7
1250	61.8	62.4	62.5	63.7	62.3	63.2	60.8	61.7	60.0	60.0	60.5	59.6	59.6	60.9	59.5	56.6	53.8	55.5	53.0
1600	59.2	59.8	59.6	60.9	59.4	60.3	57.9	58.8	57.6	57.1	57.6	56.6	56.8	58.1	56.7	53.8	50.9	52.6	50.2
2000	56.5	57.0	56.6	57.9	56.3	57.2	54.8	55.7	53.9	54.0	54.5	53.5	53.8	55.1	53.6	50.8	47.9	49.6	47.1
2500	53.5	54.0	53.3	54.8	53.0	53.9	51.5	52.4	50.5	50.7	51.2	50.1	50.6	51.9	50.4	47.5	44.6	46.4	43.8
3150	50.4	50.7	49.9	51.5	49.5	50.3	48.0	48.8	46.9	47.1	47.6	46.5	47.1	48.5	46.9	44.0	41.0	42.9	40.2
4000	46.9	47.1	46.1	47.8	45.7	46.4	44.2	44.9	43.0	43.2	43.7	42.6	43.4	44.8	43.1	40.2	37.1	39.2	36.4
5000	43.0	43.1	42.8	43.9	41.5	42.2	40.1	40.7	38.7	39.0	39.5	38.5	39.4	40.7	38.9	36.0	32.9	35.0	32.2
6300	38.8	38.8	37.6	39.5	37.8	37.6	35.6	36.1	34.1	34.5	34.9	34.0	35.0	36.2	34.3	31.4	28.3	30.5	27.7
8000	34.8	34.9	33.5	35.3	32.4	32.9	31.1	31.4	29.6	30.1	30.5	29.8	30.6	31.6	29.6	26.9	24.0	26.0	23.6
10000	30.5	30.6	29.2	30.7	27.6	27.9	26.5	26.6	24.9	25.7	26.0	25.6	26.0	26.6	24.5	22.1	19.5	21.3	19.4
12500	25.8	26.0	24.8	25.9	22.7	22.9	21.7	21.8	20.4	21.3	21.7	21.5	21.2	21.4	19.3	17.2	15.0	16.4	15.1
16000	20.8	21.2	20.4	21.8	17.9	18.1	17.3	17.3	16.4	17.3	17.9	17.7	16.5	16.1	14.5	12.5	10.5	11.5	11.2
20000	15.7	16.3	16.2	16.4	13.6	14.0	13.4	13.5	13.0	13.8	14.6	14.5	12.4	11.2	10.3	8.3	6.3	7.8	7.7
25000	11.8	11.7	12.5	12.4	10.1	10.5	10.2	10.3	10.0	10.8	11.7	11.6	9.8	7.1	7.0	4.6	2.5	3.2	4.6

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
70% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 01021
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	80.9	80.6	81.8	82.5	81.8	82.2	79.5	81.7	78.7	79.5	80.2	77.6	78.9	81.1	78.0	75.2	72.6	75.4	72.9
250	78.8	78.5	79.7	80.3	79.7	80.0	77.4	79.5	76.6	77.4	78.0	75.5	76.8	79.0	75.9	73.1	70.5	73.3	70.8
315	76.7	76.3	77.5	78.1	77.5	77.8	75.2	77.4	74.4	75.2	75.9	73.4	74.7	76.8	73.7	70.9	68.3	71.1	68.7
400	74.6	74.2	75.3	75.9	75.2	75.6	73.0	75.1	72.2	73.0	73.7	71.2	72.5	74.6	71.5	68.7	66.1	68.9	66.5
500	72.5	71.9	73.0	73.6	72.9	73.3	70.7	72.8	69.9	70.8	71.5	69.1	70.3	72.4	69.3	66.5	63.8	66.6	64.3
630	70.3	69.7	70.7	71.2	70.5	70.9	68.3	70.5	67.6	68.5	69.2	66.8	68.0	70.1	67.0	64.1	61.5	64.2	62.0
800	68.0	67.4	68.2	68.8	68.1	68.5	65.9	68.0	65.1	66.1	66.9	64.5	65.7	67.7	64.6	61.7	59.0	61.8	59.7
1000	65.7	65.0	65.7	66.3	65.5	65.9	63.4	65.5	62.6	63.6	64.5	62.2	63.3	65.2	62.1	59.2	56.5	59.2	57.2
1250	63.2	62.4	63.1	63.7	62.8	63.2	60.8	62.8	60.0	61.0	61.9	59.6	60.6	62.5	59.5	56.6	53.8	56.5	54.6
1600	60.6	59.8	60.2	60.9	59.9	60.3	57.9	59.9	57.0	58.1	59.0	56.6	57.8	59.7	56.7	53.8	50.9	53.7	51.7
2000	57.8	57.0	57.2	57.9	56.8	57.2	54.8	56.8	53.9	55.0	55.9	53.5	54.8	56.8	53.6	50.8	47.9	50.7	48.6
2500	54.9	54.0	53.9	54.8	53.5	53.9	51.5	53.5	50.5	51.7	52.6	50.1	51.6	53.6	50.4	47.5	44.6	47.4	45.3
3150	51.7	50.7	50.5	51.5	50.0	50.3	48.0	50.0	46.9	48.1	49.0	46.5	48.2	50.2	46.9	44.0	41.0	44.0	41.8
4000	48.6	47.1	46.6	47.8	46.1	46.4	44.2	45.9	43.0	44.0	44.8	42.6	44.2	46.1	43.1	40.2	37.1	40.0	37.6
5000	43.8	43.1	42.3	43.9	41.8	42.2	40.1	41.4	38.7	39.6	40.3	38.5	40.0	41.7	38.9	36.0	32.9	35.7	33.2
6300	39.3	38.8	37.8	39.5	37.2	37.6	35.6	36.5	34.1	34.9	35.5	34.0	35.4	36.8	34.3	31.4	28.3	30.9	28.4
8000	35.1	34.9	33.6	35.3	32.5	32.9	31.1	31.7	29.6	30.3	30.8	29.8	30.8	31.9	29.6	26.9	24.0	26.3	23.9
10000	30.5	30.6	29.2	30.7	27.6	27.9	26.5	26.6	24.9	25.7	26.0	25.6	26.0	26.6	24.5	22.1	19.5	21.3	19.4
12500	25.8	26.0	24.8	25.9	22.7	22.9	21.7	21.8	20.4	21.3	21.7	21.5	21.2	21.4	19.3	17.2	15.0	16.4	15.1
16000	20.8	21.2	20.4	21.0	17.9	18.1	17.3	17.3	16.4	17.3	17.9	17.7	16.5	16.1	14.5	12.5	10.5	11.5	11.2
20000	15.7	16.3	16.2	16.4	13.6	14.0	13.4	13.5	13.0	13.8	14.6	14.5	12.4	11.2	10.3	8.3	6.3	7.0	7.7
25000	11.0	11.7	12.5	12.4	10.1	10.5	10.2	10.3	10.0	10.8	11.7	11.6	9.8	7.1	7.0	4.6	2.5	3.2	4.6

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
70% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 01021
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

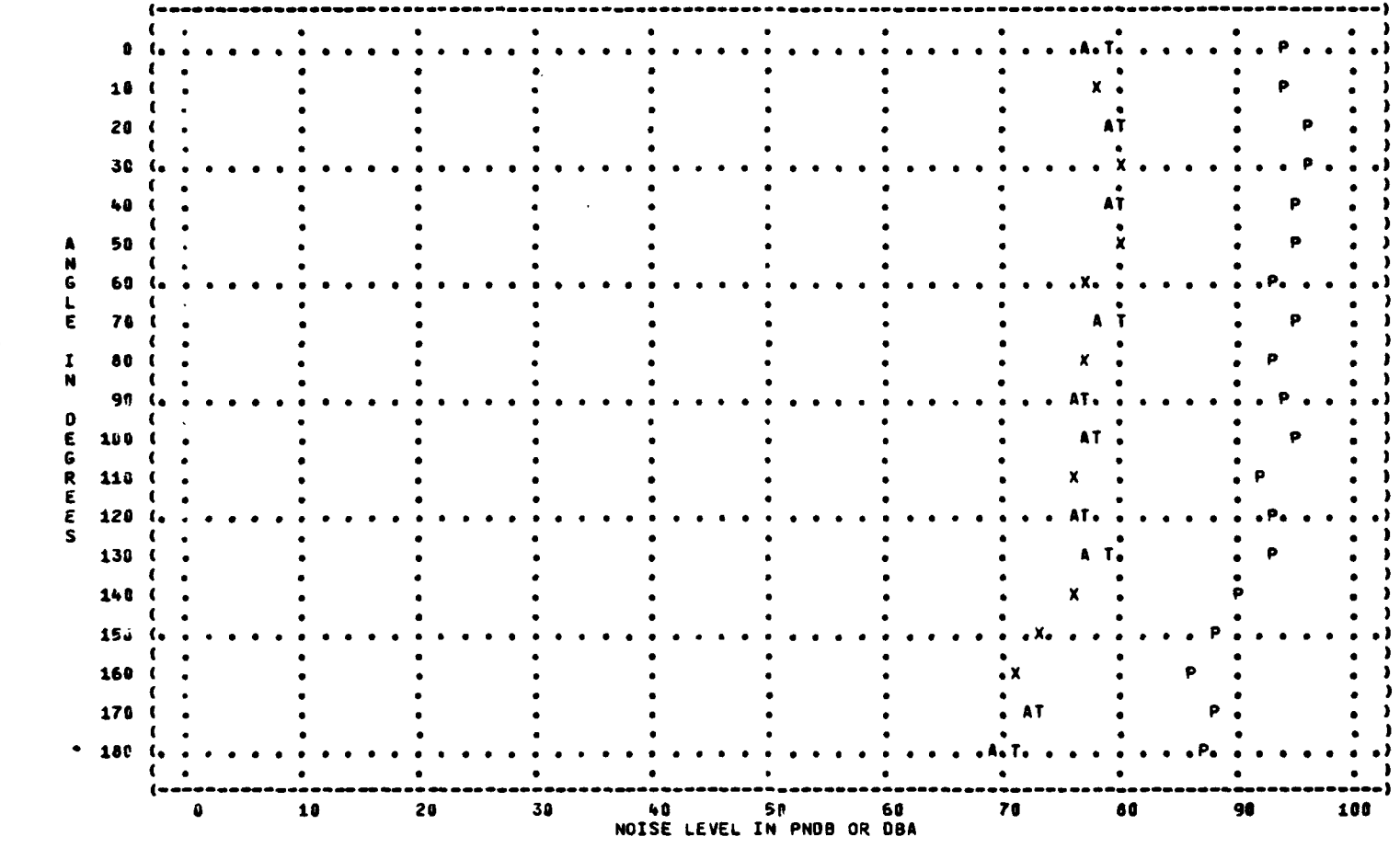


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
85% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 31018
PROFILE VERSION A
26 NOV 79
PAGE C3

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	83	83	84	85	84	85	83	85	83	82	82	83	85	86	86	85	80	82	85
63	82	82	81	84	83	84	85	82	83	84	84	83	82	84	84	82	76	76	81
80	84	81	83	84	82	81	82	84	84	84	84	82	81	80	82	79	71	72	75
100	84	83	85	85	81	79	79	82	80	79	80	80	79	78	79	80	76	74	72
125	83	79	84	82	79	76	75	79	77	75	76	75	75	74	75	77	74	72	70
160	85	87	90	85	83	80	83	84	84	82	77	78	75	73	74	76	74	74	72
200	88	90	89	85	81	81	82	82	81	78	75	73	72	71	71	74	72	71	71
250	95	96	96	91	90	84	84	87	83	79	76	72	73	78	72	76	75	70	72
315	88	89	85	80	79	77	74	77	77	70	68	66	70	69	68	69	65	66	70
400	86	89	84	83	80	76	72	72	71	69	70	69	68	68	69	70	65	66	66
500	81	86	82	86	78	77	72	73	71	68	67	68	70	72	70	71	67	67	66
630	84	84	81	82	77	75	73	74	73	71	71	72	72	71	71	72	67	67	65
800	83	84	79	84	80	79	76	77	76	75	74	75	77	77	75	76	71	71	68
1000	83	84	80	84	83	81	80	81	78	78	78	78	79	79	78	79	74	72	70
1250	80	82	80	84	84	82	79	81	79	77	78	78	78	79	79	80	75	72	68
1600	75	81	79	83	84	82	78	79	77	76	76	78	78	77	77	78	73	71	66
2000	73	80	79	82	83	82	78	77	76	74	76	76	77	75	75	76	71	69	65
2500	71	79	79	82	83	85	81	80	78	75	75	74	75	75	73	75	71	69	66
3150	69	78	77	80	80	79	77	77	75	71	70	72	71	72	70	73	68	66	64
4000	67	75	77	79	77	75	74	74	71	68	67	68	69	69	69	72	66	63	60
5000	63	71	74	74	73	72	69	70	66	64	63	64	66	65	65	68	62	59	57
6300	58	67	70	69	68	67	66	67	63	61	58	61	62	61	61	65	59	57	53
8000	55	63	66	66	65	63	63	63	59	56	53	56	57	56	57	62	54	51	48
10000	52	58	61	60	60	57	57	56	52	49	47	49	50	49	52	58	48	45	42
OVERALL	99	100	99	98	96	94	93	94	93	92	91	91	91	91	91	91	86	86	88

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-881
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 01018
PROFILE VERSION A
28 NOV 79
PAGE 03

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
85% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	107.4	109.9	109.3	109.2	108.5	108.2	105.4	105.6	103.6	101.3	100.7	100.7	101.1	101.2	100.3	101.9	97.1	95.7	93.7
250	105.3	107.8	107.1	107.0	106.3	106.0	103.2	103.4	101.3	99.1	98.5	98.5	98.8	99.0	98.0	99.6	94.8	93.4	91.4
315	103.2	105.6	105.8	104.7	104.0	103.7	100.9	101.1	99.0	96.8	96.2	96.2	96.5	96.7	95.7	97.3	92.5	91.1	89.1
400	101.0	103.4	102.7	102.4	101.7	101.4	98.5	98.8	96.7	94.4	93.8	93.9	94.2	94.3	93.4	94.9	90.1	88.7	86.7
500	98.7	101.1	100.4	100.0	99.2	98.9	96.1	96.3	94.3	92.0	91.4	91.5	91.8	91.8	91.0	92.5	87.7	86.3	84.2
630	96.2	98.6	97.8	97.5	96.7	96.4	93.5	93.7	91.7	89.4	88.8	89.0	89.3	89.3	88.5	89.9	85.1	83.7	81.7
800	93.5	95.9	95.1	94.8	94.0	93.7	90.8	91.0	89.0	86.7	86.1	86.4	86.6	86.6	85.9	87.1	82.3	81.0	79.0
1000	90.7	93.0	92.2	91.9	91.1	90.8	87.9	88.2	86.1	83.9	83.4	83.6	83.8	83.8	83.1	84.3	79.5	78.2	76.2
1250	87.7	90.0	89.0	88.9	88.1	87.8	84.8	85.1	83.1	80.8	80.4	80.7	80.9	80.7	80.2	81.3	76.4	75.1	73.1
1600	84.3	86.7	85.7	85.6	84.8	84.5	81.5	81.7	79.7	77.4	77.2	77.6	77.7	77.5	77.1	78.1	73.2	71.8	69.8
2000	80.6	83.3	81.8	82.0	81.2	80.9	77.8	78.1	76.1	73.8	73.8	74.3	74.3	74.2	73.8	74.7	69.7	68.3	66.1
2500	76.4	79.4	77.6	78.3	77.3	76.9	73.8	74.0	72.0	70.0	69.9	70.5	70.6	70.4	70.0	70.9	65.9	64.4	61.8
3150	72.1	75.1	72.8	74.2	73.2	72.3	69.2	69.4	67.6	65.8	65.5	66.3	66.4	66.2	65.8	66.7	61.7	60.2	57.5
4000	67.7	70.3	67.4	69.7	68.6	67.2	64.8	64.6	62.9	61.1	60.8	61.7	61.8	61.6	61.2	62.1	56.8	55.4	52.6
5000	62.9	65.4	62.3	64.8	63.5	61.6	58.5	59.4	57.6	55.9	55.6	56.5	56.6	56.8	56.1	57.1	51.6	49.9	46.8
6300	57.8	60.4	57.8	59.6	57.9	55.9	53.1	54.1	52.0	50.4	50.1	50.7	50.9	51.3	50.4	51.4	45.6	43.7	40.9
8000	53.7	56.2	52.7	55.3	52.6	50.5	47.7	48.9	46.5	44.8	44.1	44.3	45.3	45.8	44.5	45.6	39.5	37.7	35.8
10000	49.0	51.8	47.7	50.4	46.6	44.0	41.4	42.6	40.3	37.8	37.2	37.7	38.9	39.2	38.0	38.6	32.1	30.9	26.5
12500	43.4	46.6	42.8	44.9	39.2	36.7	33.8	35.1	32.3	30.0	29.4	30.0	31.5	31.1	30.4	31.1	22.8	20.6	16.1
16000	37.4	40.9	36.2	38.5	31.5	27.9	21.6	24.3	20.4	16.3	15.2	16.2	21.3	20.4	17.5	19.0	12.8	10.2	5.8
20000	30.8	34.2	29.8	30.9	21.4	15.1	10.1	7.7	8.6	2.5	1.1	2.4	11.1	9.7	4.6	6.8	2.8		
25000	21.5	25.3	20.3	21.8	11.3	2.3							.9						

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
85% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 01018
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	108.7	111.1	110.8	110.6	110.1	109.9	106.7	106.8	104.3	102.3	101.4	101.4	101.1	102.4	100.3	102.6	98.1	95.7	93.7
250	106.5	109.0	108.7	108.4	107.9	107.7	104.5	104.6	102.1	100.0	99.2	99.2	98.8	100.2	98.0	100.4	95.9	93.4	91.4
315	104.4	106.8	106.5	106.2	105.6	105.4	102.2	102.3	99.8	97.7	96.9	96.9	96.5	97.9	95.7	98.1	93.5	91.1	89.1
400	102.2	104.6	104.3	103.9	103.3	103.0	99.8	100.0	97.4	95.4	94.5	94.6	94.2	95.5	93.4	95.7	91.2	88.7	86.7
500	100.0	102.3	102.0	101.4	100.8	100.6	97.4	97.5	95.0	92.9	92.1	92.2	91.8	93.1	91.0	93.2	88.7	86.3	84.2
630	97.4	99.7	99.4	98.9	98.3	98.0	94.8	95.0	92.5	90.4	89.5	89.7	89.3	90.5	88.5	90.6	86.1	83.7	81.7
800	94.8	97.1	96.7	96.2	95.6	95.3	92.1	92.3	89.7	87.7	86.9	87.1	86.6	87.8	85.9	87.9	83.4	81.0	79.0
1000	91.9	94.2	93.8	93.4	92.7	92.5	89.2	89.4	86.9	84.8	84.1	84.4	83.8	85.0	83.1	85.0	80.5	78.2	76.2
1250	88.9	91.2	90.6	90.3	89.7	89.4	86.1	86.3	83.8	81.8	81.1	81.5	80.9	82.0	80.2	82.0	77.5	75.1	73.1
1600	85.6	87.9	87.2	87.1	86.4	86.1	82.8	82.9	80.5	78.4	77.9	78.3	77.7	78.8	77.1	78.9	74.2	71.8	69.8
2000	81.9	84.5	83.4	83.5	82.8	82.5	79.1	79.3	76.8	74.8	74.5	75.0	74.3	75.4	73.8	75.5	70.8	68.3	66.1
2500	77.7	80.6	79.1	79.7	78.9	78.5	75.1	75.2	72.8	71.0	70.6	71.2	70.6	71.7	70.0	71.7	66.9	64.4	61.8
3150	73.4	76.3	74.3	75.6	74.8	73.9	70.5	70.6	68.3	66.8	66.2	67.1	66.4	67.5	65.8	67.5	62.7	60.2	57.5
4000	68.7	71.3	68.6	70.8	69.9	68.5	65.0	65.6	63.5	61.8	61.4	62.3	61.8	62.6	61.2	62.7	57.6	55.4	52.6
5000	63.6	66.1	63.3	65.6	64.5	62.6	59.3	60.2	58.1	56.5	56.0	57.0	56.6	57.5	56.1	57.5	52.2	49.9	46.8
6300	58.3	60.8	57.7	60.2	58.6	56.5	53.6	54.6	52.3	50.8	50.4	50.9	50.9	51.8	50.4	51.7	46.8	43.7	40.9
8000	54.6	56.4	53.0	55.6	52.9	50.8	48.0	49.1	46.7	44.9	44.2	44.5	45.3	46.1	44.5	45.7	39.7	37.7	35.0
10000	49.0	51.8	47.7	50.4	46.6	44.0	41.4	42.6	40.3	37.8	37.2	37.7	38.9	39.2	38.0	38.6	32.1	30.9	26.5
12500	43.4	46.6	42.0	44.9	39.2	36.7	33.0	35.1	32.3	30.0	29.4	30.0	31.5	31.1	30.4	31.1	22.0	20.6	16.1
16000	37.4	40.9	36.2	38.5	31.5	27.9	21.6	24.3	20.4	16.3	15.2	16.2	21.3	20.4	17.5	19.0	12.0	10.2	5.8
20000	30.8	34.2	29.8	30.9	21.4	15.1	10.1	7.7	8.6	2.5	1.1	2.4	11.1	9.7	4.6	6.8	2.0		
25000	21.5	25.3	20.3	21.0	11.3	2.3							.9						

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
85% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-u01
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 01018
PROFILE VERSION A
28 NOV 79
PAGE F3

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.1	96.4	94.5	95.9	95.0	93.9	90.9	91.4	89.4	87.6	87.6	88.0	88.5	88.4	87.8	88.9	84.0	82.3	79.5
250	92.1	94.3	92.4	93.7	92.8	91.7	88.7	89.2	87.3	85.4	85.4	85.9	86.3	86.3	85.7	86.7	81.8	80.1	77.4
315	90.8	92.2	90.3	91.6	90.7	89.5	86.5	87.0	85.1	83.3	83.3	83.7	84.2	84.1	83.5	84.5	79.7	78.0	75.2
400	87.9	90.1	88.1	89.4	88.4	87.3	84.3	84.8	82.9	81.1	81.1	81.5	82.0	81.9	81.3	82.3	77.5	75.8	73.0
500	85.8	87.9	85.9	87.1	86.2	84.9	82.0	82.5	80.7	78.8	78.8	79.2	79.7	79.7	79.1	80.1	75.2	73.5	70.8
630	83.5	85.6	83.5	84.8	83.8	82.6	79.6	80.2	78.3	76.5	76.5	76.9	77.4	77.4	76.8	77.7	72.9	71.2	68.5
800	81.1	83.2	81.0	82.4	81.3	80.1	77.1	77.7	75.8	74.1	74.1	74.5	75.0	75.0	74.4	75.3	70.4	68.8	66.1
1000	78.6	80.8	78.4	79.9	78.8	77.5	74.5	75.1	73.3	71.6	71.6	72.1	72.6	72.5	71.9	72.8	67.9	66.3	63.7
1250	76.0	78.2	75.6	77.3	76.1	74.8	71.8	72.5	70.6	69.0	69.0	69.5	70.0	70.0	69.4	70.2	65.3	63.8	61.1
1600	73.3	75.5	72.7	74.6	73.3	71.9	68.9	69.6	67.8	66.2	66.3	66.7	67.3	67.3	66.7	67.5	62.6	61.1	58.4
2000	70.5	72.7	69.6	71.8	70.3	68.9	65.9	66.7	64.9	63.3	63.4	63.9	64.5	64.5	63.9	64.7	59.7	58.3	55.6
2500	67.4	69.5	66.3	68.8	67.1	65.6	62.7	63.5	61.7	60.3	60.3	60.8	61.4	61.5	60.9	61.6	56.7	55.2	52.5
3150	64.0	66.1	62.7	65.5	63.7	62.1	59.3	60.1	58.3	57.0	57.0	57.5	58.2	58.2	57.6	58.3	53.4	52.0	49.2
4000	60.3	62.3	58.7	61.9	60.0	58.3	55.6	56.5	54.7	53.4	53.4	53.9	54.7	54.7	54.1	54.8	49.8	48.4	45.7
5000	56.3	58.2	54.5	57.9	55.9	54.2	51.6	52.5	50.7	49.5	49.5	50.0	50.8	50.8	50.2	50.8	45.9	44.5	41.7
6300	52.0	53.8	50.1	53.5	51.4	49.7	47.2	48.2	46.3	45.2	45.1	45.6	46.4	46.6	45.9	46.5	41.5	40.2	37.5
8000	48.1	49.9	46.1	49.4	46.8	45.1	42.6	43.7	41.8	40.7	40.5	41.0	42.0	42.1	41.3	41.9	37.8	35.8	33.2
10000	43.9	45.7	41.9	44.9	41.8	40.1	37.7	38.7	36.9	35.7	35.5	35.9	37.8	37.1	36.2	36.8	32.8	31.8	28.6
12500	39.3	41.2	37.5	40.8	36.4	34.7	32.3	33.4	31.6	30.3	29.9	30.4	31.5	31.6	30.6	31.3	26.5	25.7	23.5
16000	34.3	36.4	32.9	34.8	30.7	28.8	26.4	27.6	25.9	24.4	23.8	24.3	25.5	25.5	24.4	25.1	20.5	19.9	18.1
20000	29.8	31.2	28.0	29.1	24.7	22.6	20.4	21.6	20.0	18.2	17.5	17.8	18.9	19.8	17.9	18.6	14.1	13.8	12.6
25000	23.6	25.7	23.0	23.0	18.7	16.2	14.4	15.8	14.2	12.3	11.4	11.3	12.1	12.3	11.5	12.1	7.8	7.6	7.3

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
85% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 01018
PROFILE VERSION A
28 NOV 79
PAGE G3

DISTANCE	ANGLE (DEGREES)																	
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.4	97.6	96.1	97.3	96.6	95.5	92.1	92.6	90.2	88.5	88.3	88.7	88.5	89.5	87.8	89.6	85.0	82.3	79.5
250	93.3	95.5	94.0	95.2	94.4	93.3	90.0	90.4	88.1	86.4	86.2	86.6	86.3	87.5	85.7	87.5	82.9	80.1	77.4
315	91.3	93.4	91.9	93.0	92.3	91.1	87.8	88.3	85.9	84.2	84.0	84.4	84.2	85.4	83.5	85.3	80.7	78.0	75.2
400	89.2	91.3	89.7	90.8	90.0	88.9	85.6	86.1	83.7	82.0	81.8	82.2	82.0	83.2	81.3	83.1	78.5	75.8	73.0
500	87.0	89.1	87.5	88.6	87.8	86.6	83.3	83.8	81.4	79.8	79.5	80.0	79.7	80.9	79.1	80.8	76.3	73.5	70.8
630	84.7	86.8	85.1	86.2	85.4	84.2	80.9	81.4	79.0	77.4	77.2	77.7	77.4	78.6	76.8	78.5	73.9	71.2	68.5
800	82.3	84.4	82.5	83.8	82.9	81.7	78.4	78.9	76.6	75.0	74.8	75.3	75.0	76.2	74.4	76.1	71.5	68.8	66.1
1000	79.9	82.0	79.9	81.4	80.4	79.1	75.8	76.4	74.1	72.5	72.3	72.8	72.6	73.8	71.9	73.6	69.0	66.3	63.7
1250	77.3	79.4	77.1	78.8	77.7	76.4	73.1	73.7	71.4	69.9	69.7	70.2	70.0	71.2	69.4	71.0	66.4	63.8	61.1
1600	74.5	76.7	74.2	76.1	74.9	73.5	70.2	70.9	68.6	67.2	67.0	67.5	67.3	68.5	66.7	68.3	63.7	61.1	58.4
2000	71.7	73.9	71.2	73.3	71.9	70.5	67.2	67.9	65.6	64.3	64.1	64.6	64.5	65.7	63.9	65.4	60.8	58.3	55.6
2500	68.6	70.7	67.8	70.3	68.7	67.3	64.0	64.7	62.5	61.2	61.1	61.5	61.4	62.7	60.9	62.4	57.7	55.2	52.5
3150	65.2	67.3	64.2	67.0	65.3	63.8	60.6	61.4	59.1	57.9	57.7	58.2	58.2	59.5	57.6	59.1	54.4	52.0	49.2
4000	61.3	63.3	60.0	63.1	61.2	59.7	56.6	57.5	55.3	54.2	54.0	54.5	54.7	55.7	54.1	55.4	50.7	48.4	45.7
5000	57.0	58.9	55.5	58.8	56.8	55.2	52.3	53.2	51.1	50.1	49.9	50.4	50.8	51.6	50.2	51.3	46.5	44.5	41.7
6300	52.5	54.3	50.7	54.1	52.0	50.4	47.7	48.6	46.6	45.5	45.4	45.9	46.4	47.1	45.9	46.8	41.9	40.2	37.5
8000	48.3	50.2	46.4	49.7	47.1	45.4	42.9	43.9	42.0	40.8	40.7	41.1	42.0	42.3	41.3	42.1	37.2	35.8	33.2
10000	43.9	45.7	41.9	44.9	41.8	40.1	37.7	38.7	36.9	35.7	35.5	35.9	37.0	37.1	36.2	36.8	32.0	31.0	28.6
12500	39.3	41.2	37.5	40.0	36.4	34.7	32.3	33.4	31.6	30.3	29.9	30.4	31.5	31.6	30.6	31.3	26.5	25.7	23.5
16000	34.3	36.4	32.9	34.8	30.7	28.8	26.4	27.6	25.9	24.4	23.8	24.3	25.5	25.5	24.4	25.1	20.5	19.9	18.1
20000	29.0	31.2	28.0	29.1	24.7	22.6	20.4	21.6	20.0	18.2	17.5	17.8	18.9	19.0	17.9	18.6	14.1	13.8	12.6
25000	23.6	25.7	23.0	23.0	18.7	16.2	14.4	15.8	14.2	12.3	11.4	11.3	12.1	12.3	11.5	12.1	7.8	7.6	7.3

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
85% RPM, ENGINE RUNUP
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 01016
PROFILE VERSION A
28 NOV 79
PAGE J3

P=PNLT A=AL T=ALT

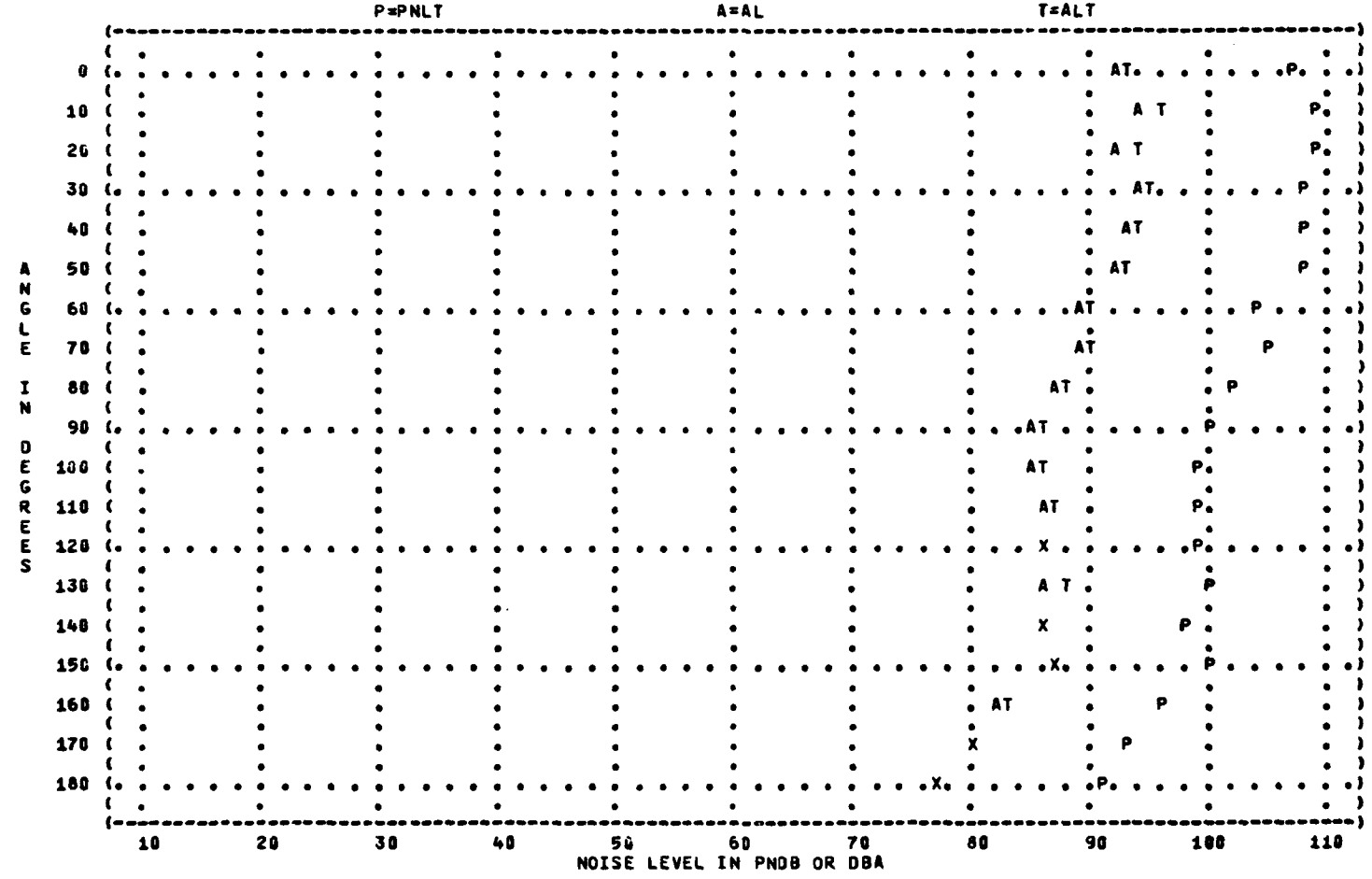


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 01004
PROFILE VERSION A
28 NOV 79
PAGE C4

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
MILITARY POWER, 96% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	89	89	89	90	90	90	89	89	87	87	86	88	88	87	88	88	88	85	88
63	86	86	86	88	90	90	88	88	88	87	87	86	86	85	86	85	84	81	85
80	81	81	82	83	83	85	86	86	87	89	86	86	84	83	82	79	77	75	80
100	86	84	86	84	83	84	84	86	86	87	83	84	82	79	81	80	79	80	75
125	86	83	87	84	83	84	81	83	81	81	78	77	78	78	78	76	80	81	76
160	84	83	86	81	79	80	80	80	79	77	74	73	73	73	72	73	74	76	73
200	85	86	87	81	77	77	76	78	76	72	73	71	70	70	71	72	72	73	73
250	81	85	87	80	76	75	77	77	76	76	77	72	73	74	71	70	69	72	73
315	88	88	88	80	79	76	79	78	77	77	79	74	75	75	74	72	70	71	72
400	91	94	91	85	81	77	79	76	76	77	78	74	76	75	77	73	68	73	70
500	85	89	90	87	84	79	80	78	77	78	78	77	76	78	78	74	70	74	70
630	84	86	88	88	84	81	79	79	79	78	80	79	79	77	78	74	70	74	69
800	84	84	84	84	83	82	82	81	81	80	82	81	82	80	81	77	72	76	69
1000	80	82	83	85	84	83	85	83	82	84	84	83	83	83	83	79	75	77	71
1250	77	79	82	83	85	84	85	84	83	85	85	82	83	82	84	80	75	76	70
1600	75	77	82	84	85	83	83	82	81	81	82	81	80	80	82	78	75	75	69
2000	75	79	83	85	85	81	81	80	79	78	81	79	79	79	81	78	75	73	66
2500	73	80	84	84	84	79	81	80	78	76	80	79	80	78	80	77	73	73	66
3150	73	79	83	83	81	79	79	78	77	75	77	77	77	77	79	76	72	72	65
4000	72	80	84	82	81	78	79	79	78	74	76	75	76	76	79	75	70	70	64
5000	69	77	81	79	78	73	74	75	74	69	73	71	72	73	76	72	67	67	61
6300	66	74	78	75	74	69	71	72	72	67	71	70	70	71	74	70	65	65	58
8000	62	71	74	72	71	64	66	66	67	62	66	64	66	67	68	65	61	60	53
10000	58	67	70	68	66	60	61	61	61	56	60	59	61	63	63	59	56	54	47
OVERALL	98	99	99	98	97	96	96	96	95	95	95	95	94	93	95	93	91	90	91

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
MILITARY POWER, 96% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 01004
PROFILE VERSION A
28 NOV 79
PAGE D4

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	107.0	109.9	111.8	110.8	109.8	106.9	107.8	107.1	106.3	104.7	106.5	105.2	105.8	105.1	106.8	103.6	100.3	100.6	95.9
250	104.9	107.7	109.5	108.6	107.6	104.7	105.6	104.9	104.1	102.5	104.3	103.0	103.5	102.8	104.6	101.4	98.0	98.4	93.6
315	102.7	105.5	107.2	106.3	105.3	102.4	103.4	102.6	101.7	100.3	102.0	100.7	101.2	100.5	102.2	99.0	95.7	96.1	91.2
400	100.5	103.3	104.7	104.0	103.0	100.0	101.0	100.2	99.2	98.0	99.7	98.3	98.8	98.1	99.8	96.6	93.3	93.7	88.8
500	98.2	101.0	102.2	101.5	100.5	97.5	98.5	97.8	96.7	95.6	97.2	95.9	96.4	95.6	97.3	94.0	90.8	91.2	86.3
630	95.9	98.6	99.6	99.0	97.9	95.0	96.0	95.2	94.1	93.1	94.6	93.3	93.8	93.0	94.6	91.4	88.2	88.6	83.6
800	93.4	96.1	96.9	96.2	95.2	92.4	93.3	92.5	91.4	90.5	91.9	90.6	91.1	90.3	91.9	88.7	85.4	85.9	80.9
1000	90.9	93.5	94.0	93.4	92.4	89.6	90.4	89.6	88.5	87.8	89.1	87.7	88.2	87.4	89.0	85.8	82.5	83.0	78.1
1250	88.2	90.8	91.1	90.3	89.4	86.6	87.3	86.6	85.5	84.9	86.0	84.7	85.2	84.4	86.0	82.8	79.4	80.0	75.1
1600	85.4	87.9	88.1	87.0	86.2	83.5	84.0	83.4	82.3	81.9	82.9	81.5	81.9	81.1	82.8	79.6	76.2	76.7	71.9
2000	82.5	84.9	85.0	83.5	82.7	80.1	80.4	80.0	78.8	78.6	79.4	78.1	78.3	77.7	79.3	76.1	72.6	73.2	68.5
2500	78.7	81.1	81.1	79.8	78.9	76.4	76.8	76.3	75.1	75.0	75.8	74.4	74.3	74.0	75.5	72.2	68.7	69.4	64.5
3150	74.4	76.8	77.0	76.8	74.7	72.3	72.8	72.1	70.9	71.0	71.8	70.3	70.3	69.8	71.4	67.9	64.3	65.1	60.1
4000	69.5	71.9	72.4	71.6	69.9	67.6	68.3	67.4	66.3	66.6	67.4	65.6	65.8	65.3	67.0	63.2	59.5	60.5	55.1
5000	64.2	66.5	67.5	66.8	64.9	62.6	63.5	62.4	61.4	61.9	62.6	60.7	61.0	60.6	62.1	58.0	54.2	55.5	49.5
6300	58.5	61.0	62.3	61.6	59.3	57.0	58.2	57.0	56.0	56.6	57.2	55.4	55.5	55.2	56.5	52.2	47.5	58.8	43.2
8000	54.6	56.9	58.1	57.1	54.2	52.0	52.7	51.9	50.6	51.2	51.9	50.2	50.5	50.2	51.2	46.6	41.4	44.1	37.8
10000	50.4	52.5	53.6	52.1	48.9	45.7	46.8	45.6	44.3	44.9	45.9	44.2	44.8	44.0	45.1	40.3	34.5	37.7	31.8
12500	45.2	47.8	48.6	46.4	43.1	39.5	39.6	38.4	37.5	37.8	39.2	37.2	38.0	36.7	38.3	32.9	24.5	30.7	22.2
16000	39.5	42.5	42.6	39.5	36.5	31.9	32.3	30.8	29.6	29.7	31.5	29.5	30.1	29.2	30.4	22.7	12.5	22.3	9.8
20000	33.4	36.0	35.8	32.2	28.9	22.4	22.7	19.3	17.1	19.4	20.2	16.4	16.6	17.4	20.4	7.8	.6	8.3	
25000	26.2	29.2	27.7	22.9	17.2	12.8	7.7	7.8	4.6	9.1	9.8	3.3	3.1	5.5	10.3				

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
MILITARY POWER, 96% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 01004
PROFILE VERSION A
28 NOV 79
PAGE E4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	107.9	110.8	111.8	110.8	109.8	106.9	107.8	107.1	106.3	104.7	106.5	105.2	105.8	105.1	106.8	103.6	100.8	100.6	95.9
250	105.8	108.6	109.5	108.6	107.6	104.7	105.6	104.9	104.1	102.5	104.3	103.0	103.5	102.8	104.6	101.4	98.5	98.4	93.6
315	103.6	106.4	107.2	106.3	105.3	102.4	103.4	102.6	101.7	100.3	102.0	100.7	101.2	100.5	102.2	99.0	96.2	96.1	91.2
400	101.4	104.2	104.7	104.0	103.0	100.0	101.0	100.2	99.2	96.0	99.7	98.3	98.8	98.1	99.8	96.6	93.8	93.7	88.8
500	99.1	101.8	102.2	101.5	100.5	97.5	98.5	97.8	96.7	95.6	97.2	95.9	96.4	95.6	97.3	94.0	91.3	91.2	86.3
630	96.7	99.4	99.6	99.0	97.9	95.0	96.0	95.2	94.1	93.1	94.6	93.3	93.8	93.0	94.6	91.4	88.7	88.6	83.6
800	94.3	96.9	96.9	96.2	95.2	92.4	93.3	92.5	91.4	90.5	91.9	90.6	91.1	90.3	91.9	88.7	85.9	85.9	80.9
1000	91.7	94.4	94.0	93.4	92.4	89.6	90.4	89.6	88.5	87.8	89.1	87.7	88.2	87.4	89.0	85.8	83.0	83.0	78.1
1250	89.1	91.6	91.1	90.3	89.4	86.6	87.3	86.6	85.5	84.9	86.0	84.7	85.2	84.4	86.0	82.8	80.0	80.0	75.1
1600	86.3	88.8	88.1	87.0	86.2	83.5	84.0	83.4	82.3	81.9	82.9	81.5	81.9	81.1	82.8	79.6	76.7	76.7	71.9
2000	83.3	85.8	85.0	83.5	82.7	80.1	80.4	80.0	78.8	78.6	79.4	78.1	78.3	77.7	79.3	76.1	73.2	73.2	68.5
2500	79.5	82.0	81.1	79.8	78.9	76.4	76.8	76.3	75.1	75.0	75.8	74.4	74.3	74.0	75.5	72.2	69.2	69.4	64.5
3150	75.2	77.6	77.0	76.0	74.7	72.3	72.8	72.1	70.9	71.0	71.8	70.3	70.3	69.8	71.4	67.9	64.8	65.1	60.1
4000	70.2	72.6	72.4	71.6	69.9	67.6	68.3	67.4	66.3	66.6	67.4	65.6	65.8	65.3	67.0	63.2	59.9	60.5	55.1
5000	64.7	67.0	67.5	66.8	64.9	62.6	63.5	62.4	61.4	61.9	62.6	60.7	61.0	60.6	62.1	58.0	54.5	55.5	49.5
6300	58.8	61.3	62.3	61.6	59.3	57.0	58.2	57.0	56.0	56.6	57.2	55.4	55.5	55.2	56.5	52.2	47.7	50.0	43.2
8000	54.7	57.1	58.1	57.1	54.2	52.0	52.7	51.9	50.6	51.2	51.9	50.2	50.5	50.2	51.2	46.6	41.5	44.1	37.0
10000	50.4	52.5	53.6	52.1	48.9	45.7	46.8	45.6	44.3	44.9	45.9	44.2	44.8	44.0	45.1	40.3	34.5	37.7	31.0
12500	45.2	47.8	48.6	46.4	43.1	39.5	39.6	38.4	37.5	37.8	39.2	37.2	38.0	36.7	38.3	32.9	24.5	30.7	22.2
16000	39.5	42.5	42.6	39.5	36.5	31.9	32.3	30.8	29.6	29.7	31.5	29.5	30.1	29.2	30.4	22.7	12.5	22.3	9.0
20000	33.4	36.8	35.8	32.2	28.9	22.4	22.7	19.3	17.1	19.4	20.2	16.4	16.6	17.4	20.4	7.8	.6	8.3	
25000	26.2	29.2	27.7	22.9	17.2	12.8	7.7	7.8	4.6	9.1	9.0	3.3	3.1	5.5	10.3				

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
MILITARY POWER, 96% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 01004
PROFILE VERSION A
28 NOV 79
PAGE F4

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	93.9	96.3	97.6	97.3	96.4	93.9	94.7	93.7	92.7	92.6	93.8	92.2	92.6	92.2	94.0	90.1	86.2	87.1	81.4
250	91.8	94.2	95.5	95.1	94.2	91.7	92.5	91.5	90.6	90.5	91.7	90.1	90.5	90.1	91.8	88.0	84.0	84.9	79.3
315	89.7	92.0	93.3	92.9	92.0	89.5	90.3	89.4	88.4	88.3	89.5	87.9	88.3	87.9	89.6	85.8	81.8	82.8	77.2
400	87.6	89.9	91.1	90.7	89.8	87.3	88.1	87.1	86.1	86.1	87.3	85.7	86.1	85.7	87.3	83.5	79.5	80.5	75.0
500	85.5	87.7	88.8	88.4	87.5	85.1	85.9	84.8	83.9	83.9	85.1	83.4	83.8	83.4	85.0	81.2	77.2	78.3	72.8
630	83.3	85.5	86.5	86.1	85.2	82.7	83.5	82.5	81.5	81.6	82.8	81.1	81.5	81.1	82.7	78.8	74.9	76.0	70.5
800	81.1	83.2	84.1	83.7	82.7	80.3	81.1	80.1	79.1	79.3	80.4	78.7	79.1	78.7	80.2	76.4	72.4	73.6	68.1
1000	78.9	80.9	81.6	81.2	80.2	77.8	78.7	77.6	76.6	76.9	77.9	76.3	76.7	75.2	77.7	73.9	69.9	71.1	65.7
1250	76.5	78.5	79.1	78.7	77.6	75.3	76.1	75.0	74.0	74.4	75.4	73.7	74.1	73.6	75.1	71.2	67.2	68.5	63.1
1600	74.1	76.1	76.5	76.0	74.9	72.6	73.4	72.3	71.3	71.7	72.7	71.0	71.4	70.9	72.4	68.5	64.4	65.9	60.5
2000	71.6	73.6	73.8	73.3	72.0	69.8	70.5	69.5	68.5	69.0	69.9	68.2	68.6	68.1	69.5	65.6	61.5	63.1	57.7
2500	68.5	70.4	70.8	70.3	69.0	66.8	67.5	66.4	65.5	66.0	66.9	65.3	65.6	65.2	66.5	62.5	58.3	60.1	54.6
3150	65.1	66.9	67.4	67.1	65.7	63.5	64.3	63.2	62.3	62.8	63.7	62.1	62.4	62.0	63.2	59.2	55.0	56.9	51.3
4000	61.3	63.0	63.6	63.5	62.1	60.0	60.7	59.7	58.7	59.3	60.1	58.6	58.9	58.5	59.7	55.6	51.3	53.4	47.7
5000	57.1	58.6	59.4	59.5	58.0	56.0	56.8	55.7	54.8	55.4	56.2	54.7	55.0	54.6	55.7	51.7	47.3	49.5	43.7
6300	52.6	54.1	55.0	55.1	53.6	51.7	52.5	51.4	50.5	51.2	51.9	50.4	50.7	50.3	51.4	47.3	42.9	45.2	39.4
8000	49.0	50.5	51.2	51.1	49.3	47.3	48.0	47.0	46.1	46.7	47.4	46.0	46.3	45.9	46.9	42.8	38.3	40.9	35.2
10000	45.8	46.7	47.2	46.7	44.6	42.5	43.1	42.1	41.2	41.7	42.5	41.2	41.5	41.0	42.0	37.9	33.4	36.2	30.8
12500	40.6	42.4	42.8	42.0	39.6	37.2	37.6	36.8	35.9	36.3	37.1	35.9	36.2	35.7	36.6	32.5	28.0	31.1	25.9
16000	35.8	37.8	38.0	36.8	34.1	31.5	31.7	30.9	30.2	30.3	31.2	30.0	30.3	29.8	30.6	26.6	22.3	25.6	20.8
20000	30.6	32.7	32.7	31.1	28.2	25.3	25.4	24.7	24.0	24.0	24.8	23.7	23.9	23.4	24.2	20.3	16.4	19.6	15.7
25000	24.9	27.1	26.8	24.7	21.9	18.9	18.9	18.3	17.6	17.5	18.1	17.0	17.1	16.7	17.4	13.9	10.8	13.4	10.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 01004
PROFILE VERSION A
28 NOV 79
PAGE G4

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
MILITARY POWER, 96% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.7	97.1	97.6	97.3	96.4	93.9	94.7	93.7	92.7	92.6	93.8	92.2	92.6	92.2	94.0	90.1	86.7	87.1	81.4
250	92.6	95.0	95.5	95.1	94.2	91.7	92.5	91.5	90.6	90.5	91.7	90.1	90.5	90.1	91.8	88.0	84.5	84.9	79.3
315	90.6	92.9	93.3	92.9	92.0	89.5	90.3	89.4	88.4	88.3	89.5	87.9	88.3	87.9	89.6	85.8	82.3	82.8	77.2
400	88.5	90.7	91.1	90.7	89.8	87.3	88.1	87.1	86.1	86.1	87.3	85.7	86.1	85.7	87.3	83.5	80.1	80.5	75.0
500	86.3	88.6	88.8	88.4	87.5	85.1	85.9	84.8	83.9	83.9	85.1	83.4	83.8	83.4	85.0	81.2	77.8	78.3	72.8
630	84.2	86.3	86.5	86.1	85.2	82.7	83.5	82.5	81.5	81.6	82.8	81.1	81.5	81.1	82.7	78.8	75.4	76.0	70.5
800	82.0	84.1	84.1	83.7	82.7	80.3	81.1	80.1	79.1	79.3	80.4	78.7	79.1	78.7	80.2	76.4	72.9	73.6	68.1
1000	79.7	81.8	81.6	81.2	80.2	77.8	78.7	77.6	76.6	76.9	77.9	76.3	76.7	76.2	77.7	73.9	70.4	71.1	65.7
1250	77.3	79.4	79.1	78.7	77.6	75.3	76.1	75.0	74.0	74.4	75.4	73.7	74.1	73.6	75.1	71.2	67.7	68.5	63.1
1600	74.9	76.9	76.5	76.0	74.9	72.6	73.4	72.3	71.3	71.7	72.7	71.0	71.4	70.9	72.4	68.5	64.9	65.9	60.5
2000	72.4	74.4	73.8	73.3	72.0	69.8	70.5	69.5	68.5	69.0	69.9	68.2	68.6	68.1	69.5	65.6	62.0	63.1	57.7
2500	69.3	71.3	70.8	70.3	69.0	66.8	67.5	66.4	65.5	66.0	66.9	65.3	65.6	65.2	66.5	62.5	58.9	60.1	54.6
3150	65.9	67.8	67.4	67.1	65.7	63.5	64.3	63.2	62.3	62.8	63.7	62.1	62.4	62.0	63.2	59.2	55.5	56.9	51.3
4000	62.0	63.7	63.6	63.5	62.1	60.0	60.7	59.7	58.7	59.3	60.1	58.6	58.9	58.5	59.7	55.6	51.7	53.4	47.7
5000	57.6	59.2	59.4	59.5	58.0	56.0	56.8	55.7	54.8	55.4	56.2	54.7	55.0	54.6	55.7	51.7	47.6	49.5	43.7
6300	53.0	54.5	55.0	55.1	53.6	51.7	52.5	51.4	50.5	51.2	51.9	50.4	50.7	50.3	51.4	47.3	43.1	45.2	39.4
8000	49.1	50.7	51.2	51.1	49.3	47.3	48.0	47.0	46.1	46.7	47.4	46.0	46.3	45.9	46.9	42.8	38.4	40.9	35.2
10000	45.0	46.7	47.2	46.7	44.6	42.5	43.1	42.1	41.2	41.7	42.5	41.2	41.5	41.0	42.0	37.9	33.4	36.2	30.8
12500	40.6	42.4	42.8	42.0	39.6	37.2	37.6	36.8	35.9	36.3	37.1	35.9	36.2	35.7	36.6	32.5	28.0	31.1	25.9
16000	35.8	37.8	38.0	36.8	34.1	31.5	31.7	30.9	30.2	30.3	31.2	30.0	30.3	29.8	30.6	26.6	22.3	25.6	20.8
20000	30.6	32.7	32.7	31.1	28.2	25.3	25.4	24.7	24.0	24.0	24.8	23.7	23.9	23.4	24.2	20.3	16.4	19.6	15.7
25000	24.9	27.1	26.8	24.7	21.9	18.9	18.9	18.3	17.6	17.5	18.1	17.0	17.1	16.7	17.4	13.9	10.8	13.4	10.7

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

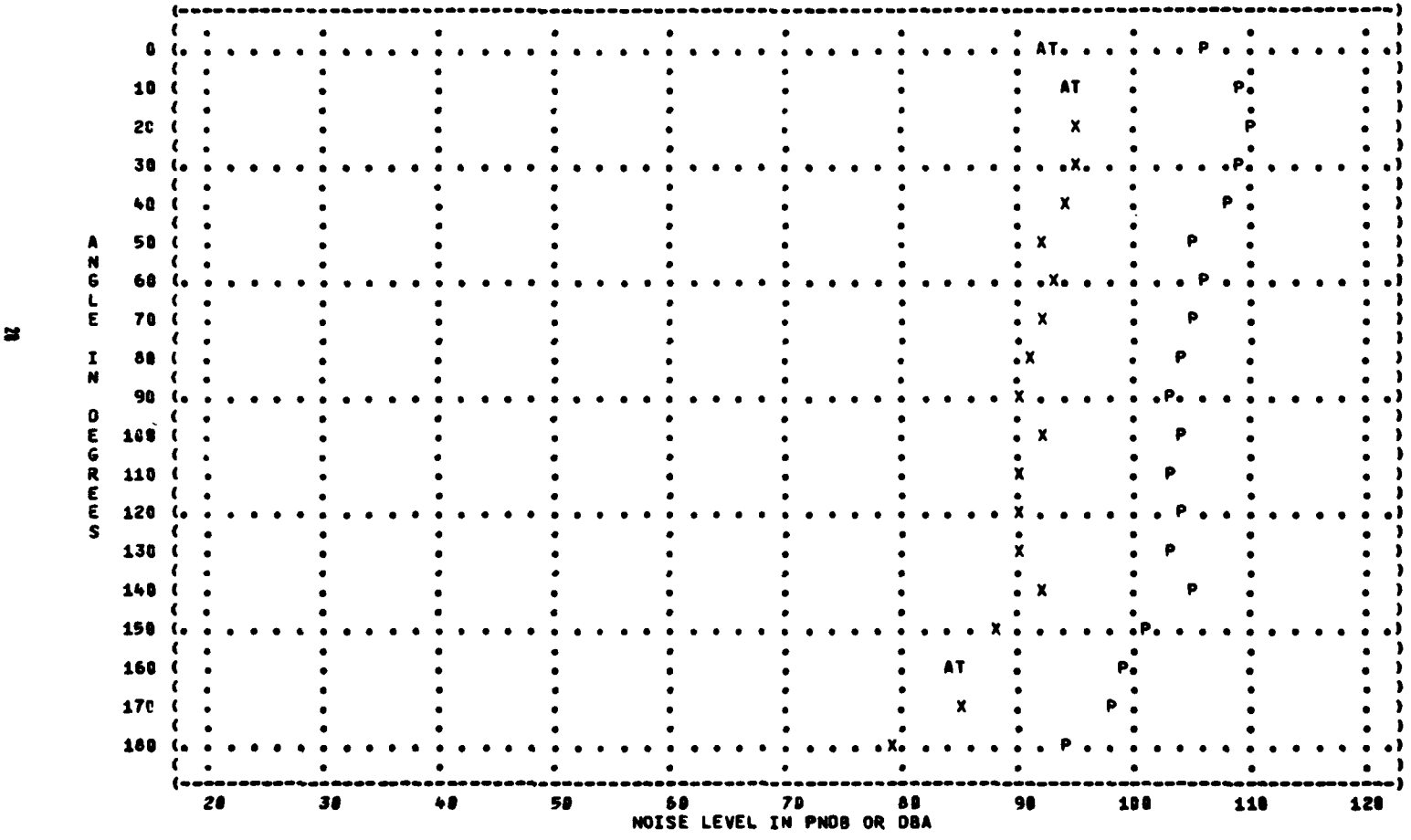
NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-19

OPERATION:
MILITARY POWER, 96% RPM
SINGLE ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 81004
PROFILE VERSION A
28 NOV 79
PAGE J4

P=PNLT A=AL T=ALT



USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR

USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR

USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR

NOISE PRODUCED ON THE GROUND BY

A-7 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 78-833-001
AIRCRAFT CODE: 833
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Idle Power, 54.4% RPM	30-35
Engine Runup, 70% RPM	36-41
Engine Runup, 85.6% RPM	42-47
Military Power, 97.7% RPM	48-53

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
- NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
- PERCEIVED NOISE LEVEL
- TONE-CORRECTED, PERCEIVED NOISE LEVEL
- A-WEIGHTED OVERALL SOUND LEVEL
- TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR

USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR

USAF A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR A-7 NOISE SUPPRESSOR

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB) 1/3 OCTAVE BAND DISTANCE = 250 FEET			IDENTIFICATION: OMEGA 8.2 TEST 78-833-001 RUN 01
NOISE SOURCE/SUBJECT: A-7 NOISE SUPPRESSOR AF32A-24	OPERATION: IDLE POWER (54.4% RPM) SINGLE ENGINE GROUND RUNUP (SUPPRESSED)	METEOROLOGY: TEMP = 59 F BAR PRESS =29.92 IN HG REL HUMID = 70 % DELTA N = 0.0 DB	AIRCRAFT CODE 833 OPERATION CODE 00113 PROFILE VERSION A 28 NOV 79 PAGE C1

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	74	73	72	67	68	68	70	66	66	63	62	63	66	65	63	61	65	65	65
63	70	68	68	67	65	64	61	62	59	64<	61	63	63	60	61<	62	62	62	62
80	72	71	72	73	69	68	61	60<	58<	65	61	59<	59<	58<	58<	58<	58<	58<	58<
100	59	60	63	63	60	59	60	59	56	58	56	55	55	56	56	54	53	53	53
125	60	61	63	61	64	60	62	64	62	65	62	58	59	61	59	59	60	60	60
160	56	56	57	56	58	54	56	54	52	55	54	51	54<	49	50	54<	53	53	53
200	57	56	57	54	56	55	55	54	53	52	51	52	49	49	50	49	52	52	52
250	56	55	54	53	52	51	54	51	49	52	52	49	47	49	48	49	48	48	48
315	54	52	52	48	47	47	47	48	47	51	52	45	46<	47<	46<	45	47	47	47
400	54	50	52	46	48	49	47	49	46	50	52	45	45	45	44	46	47	47	47
500	57	55	58	49	52	49	51	54	49	59	58	52	49	50	49	49	53	53	53
630	52	49	51	49<	50<	50<	50<	48	48<	52	55	50	51<	49<	49<	49<	49	49	49
800	54	50	50	50<	49<	51<	49<	50	48	54	57	52	52<	48<	49<	49<	48	48	48
1000	53	50	48	51<	48	52<	48	48	48	54	57	51	54<	48	49	49	49	49	49
1250	66	59	60	52	56	53	56	55	58	66	63	56	56	53	56	56	63	63	63
1600	53	50	50	47	52	50	56	50	52	54	59	50	45	47	48	46	49	49	49
2000	51	48	48	45	49	48	49	48	48	52	53	48	45	44	45	44	47	47	47
2500	50	47	48	43	46	47	47	47	46	53	52	47	43	44	46	43	47	47	47
3150	47	43	44	40	42	43	43	44	43	51	46	43	38	39	41	40	44	44	44
4000	49	43	45	34<	36<	43	43	44	43	50	48	42<	32<	33<	41<	40<	45	45	45
5000	44	40	41	28<	30<	37<	37<	38<	42	49	48	42	26<	27<	41	40	45	45	45
6300	44	34<	35<	22<	24<	31<	31<	32<	36<	48	48	36<	20<	21<	35<	34<	44	44	44
8000	38<	28<	29<	16<	18<	25<	25<	26<	30<	42<	42<	30<	14<	15<	29<	28<	38<	38<	38<
10000	32<	22<	23<	10<	12<	19<	19<	20<	24<	36<	36<	24<	8<	9<	23<	22<	32<	32<	32<
OVERALL	78	77	77	75	74	73	73	70	70	73	71	69	70	69	68	67	70	70	70

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
IDLE POWER (54.4% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.8 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE 01

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.4	78.8	78.8	75.7	75.3	75.1	77.0	75.2	75.5	82.5	81.0	75.0	73.2	71.7	73.9	73.7	78.5	78.5	78.5
250	80.2	75.7	76.6	73.4	73.1	72.8	74.8	72.9	73.3	80.3	78.8	72.7	71.0	69.5	71.7	71.5	76.3	76.3	76.3
315	77.9	73.4	74.3	71.0	70.8	70.5	72.5	70.7	71.0	78.0	76.5	70.4	68.8	67.2	69.4	69.2	74.0	74.0	74.0
400	75.6	71.1	72.0	68.6	68.5	68.2	70.2	68.3	68.6	75.7	74.1	68.1	66.4	64.8	67.0	66.8	71.7	71.7	71.7
500	73.2	68.7	69.6	66.1	66.1	65.6	67.8	65.9	66.2	73.3	71.7	65.6	64.0	62.4	64.5	64.3	69.2	69.2	69.2
630	70.8	66.2	67.1	63.5	63.6	63.0	65.3	63.3	63.5	70.8	69.2	63.0	61.4	59.8	61.9	61.7	66.7	66.7	66.7
800	68.2	63.6	64.5	60.8	60.9	60.2	62.5	60.6	60.8	68.1	66.6	60.3	58.7	57.1	59.1	59.0	64.0	64.0	64.0
1000	65.4	60.7	61.6	57.9	58.0	57.1	59.6	57.7	57.9	65.3	63.7	57.4	55.9	54.1	56.2	55.9	61.1	61.1	61.1
1250	62.4	57.6	58.5	54.2	54.9	53.7	56.5	54.5	54.7	62.4	60.7	54.1	52.7	50.8	52.9	52.7	58.1	58.1	58.1
1600	59.2	54.2	55.1	49.9	51.3	50.0	53.0	50.9	51.3	59.1	57.5	50.7	49.3	46.9	49.3	49.2	54.6	54.6	54.6
2000	55.6	50.4	51.4	44.8	47.1	45.5	49.2	46.7	47.2	55.4	53.9	46.4	44.9	42.6	45.1	45.0	51.0	51.0	51.0
2500	51.5	45.6	46.9	39.8	42.6	40.9	44.1	42.2	42.6	51.5	50.0	41.7	40.5	38.4	40.2	40.2	46.9	46.9	46.9
3150	46.8	40.2	41.2	33.7	36.6	35.0	38.2	36.5	37.5	47.3	45.4	37.2	35.8	33.8	35.2	35.4	42.3	42.3	42.3
4000	41.8	34.5	35.4	26.4	31.3	29.0	32.1	31.2	32.0	42.4	40.5	31.6	30.4	27.8	29.9	29.3	37.2	37.2	37.2
5000	36.3	28.0	28.5	16.7	22.3	18.6	24.2	21.3	23.2	36.7	35.0	24.0	22.4	16.8	20.3	22.6	30.7	30.7	30.7
6300	28.5	17.8	19.4	7.0	9.3	8.3	12.9	10.7	13.5	29.6	28.3	18.3	13.0	6.6	9.7	18.3	24.0	24.0	24.0
8000	20.4	7.6	10.2				1.6	.0	3.0	22.0	17.1		3.6				15.0	15.0	15.0
10000	8.9		1.0							9.5	5.0						6.1	6.1	6.1
12500																			
16000																			
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
IDLE POWER (54.4% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	86.8	81.0	82.5	76.9	77.2	76.2	78.5	77.3	78.0	86.6	82.7	76.7	75.2	73.7	76.5	76.5	83.4	83.4	83.4
250	84.5	78.7	80.2	74.5	75.8	73.9	76.3	75.1	75.8	84.4	80.5	74.5	73.0	71.4	74.2	74.3	81.2	81.2	81.2
315	82.3	76.5	77.9	72.2	72.7	71.6	74.0	72.8	73.5	82.1	78.2	72.2	70.8	69.2	71.9	72.0	78.9	78.9	78.9
400	80.0	74.1	75.6	69.8	70.5	69.2	71.7	70.5	71.1	79.8	75.9	69.8	68.4	66.8	69.6	69.6	76.5	76.5	76.5
500	77.6	71.7	73.2	67.3	68.1	66.7	69.2	68.0	68.7	77.4	73.4	67.4	66.0	64.3	67.1	67.2	74.1	74.1	74.1
630	75.1	69.3	70.8	64.7	65.5	64.1	66.7	65.4	66.1	74.8	70.9	64.7	63.4	61.7	64.4	64.5	71.5	71.5	71.5
800	72.5	66.6	68.1	61.9	62.8	61.3	64.0	62.7	63.4	72.2	68.3	62.0	60.8	59.0	61.7	61.8	68.8	68.8	68.8
1000	69.8	63.7	65.3	59.0	60.0	58.2	61.0	59.8	60.4	69.4	65.4	59.2	57.9	56.1	58.7	58.8	66.0	66.0	66.0
1250	66.8	60.6	62.1	55.3	56.8	54.8	57.9	56.6	57.2	66.4	62.4	55.9	54.7	52.7	55.5	55.5	62.9	62.9	62.9
1600	63.5	57.2	58.7	51.8	53.2	51.0	54.5	53.1	53.8	63.2	59.2	52.5	51.3	48.8	51.8	52.0	59.5	59.5	59.5
2000	59.9	53.4	55.0	46.0	49.0	46.6	50.7	48.8	49.7	59.5	55.6	48.2	46.9	44.5	47.7	47.9	55.9	55.9	55.9
2500	55.8	48.6	50.5	41.0	44.5	42.0	45.6	44.3	45.1	55.5	51.7	43.5	42.5	40.4	42.7	43.0	51.8	51.8	51.8
3150	51.2	43.2	44.8	34.9	38.6	36.1	39.7	38.7	40.0	51.4	47.1	38.9	37.9	34.9	37.7	38.2	47.2	47.2	47.2
4000	45.3	36.9	38.3	27.3	32.8	29.8	33.3	32.9	34.0	45.7	41.9	33.0	32.0	28.6	32.0	31.6	41.1	41.1	41.1
5000	38.9	29.8	30.6	17.4	23.5	19.3	25.1	22.6	24.7	39.2	36.1	25.1	23.7	18.0	21.8	24.3	33.7	33.7	33.7
6300	30.2	19.0	20.9	7.5	10.0	8.7	13.5	11.5	14.5	31.2	29.0	11.0	13.8	7.3	10.7	11.4	26.0	26.0	26.0
8000	21.3	8.2	10.9				1.9	.5	4.3	22.8	17.4		4.0				16.0	16.0	16.0
10000	8.9		1.8							9.5	5.8						6.1	6.1	6.1
12500																			
16000																			
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 80113
PROFILE VERSION A
28 NOV 79
PAGE F1

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
IDLE POWER (54.4% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	70.3	65.1	65.9	61.7	63.2	62.4	64.3	62.9	63.5	70.9	69.6	63.2	62.6	60.3	61.8	61.8	67.3	67.3	67.3
250	68.2	63.0	63.8	59.7	61.1	60.2	62.2	60.8	61.4	68.7	67.5	61.1	60.5	58.2	59.7	59.7	65.1	65.1	65.1
315	66.1	60.9	61.7	57.6	59.8	58.1	60.1	58.7	59.2	66.6	65.4	58.9	58.4	56.1	57.5	57.6	63.8	63.8	63.8
400	63.9	58.8	59.5	55.5	56.8	56.8	57.9	56.5	57.1	64.4	63.2	56.8	56.3	53.9	55.4	55.4	60.8	60.8	60.8
500	61.7	56.6	57.3	53.3	54.6	53.7	55.7	54.3	54.8	62.2	61.0	54.5	54.1	51.8	53.2	53.2	58.6	58.6	58.6
630	59.5	54.3	55.1	51.1	52.3	51.5	53.4	52.0	52.6	59.9	58.7	52.3	51.9	49.5	50.9	51.0	56.4	56.4	56.4
800	57.2	52.0	52.8	48.8	50.0	49.1	51.0	49.7	50.2	57.6	56.4	49.9	49.6	47.2	48.5	48.6	54.0	54.0	54.0
1000	54.8	49.6	50.4	46.4	47.6	46.7	48.6	47.2	47.7	55.2	54.0	47.5	47.2	44.8	46.1	46.3	51.6	51.6	51.6
1250	52.3	47.1	47.9	43.9	45.0	44.2	46.0	44.7	45.2	52.7	51.5	45.0	44.8	42.3	43.6	43.8	49.1	49.1	49.1
1600	49.6	44.4	45.2	41.1	42.3	41.5	43.3	42.0	42.5	50.0	48.9	42.4	42.2	39.7	41.0	41.2	46.5	46.5	46.5
2000	46.9	41.6	42.5	38.3	39.5	38.7	40.5	39.3	39.7	47.3	46.1	39.6	39.5	36.9	38.2	38.4	43.8	43.8	43.8
2500	43.9	38.6	39.5	35.2	36.4	35.6	37.4	36.3	36.7	44.3	43.2	36.7	36.7	34.0	35.2	35.5	40.8	40.8	40.8
3150	40.6	35.3	36.1	31.9	33.1	32.4	34.1	33.0	33.4	41.1	40.0	33.5	33.6	30.8	32.0	32.4	37.6	37.6	37.6
4000	37.1	31.7	32.5	28.3	29.4	28.8	30.4	29.3	29.8	37.5	36.4	30.0	30.2	27.2	28.5	28.9	34.0	34.0	34.0
5000	33.1	27.7	28.4	24.4	25.4	24.9	26.3	25.3	25.8	33.6	32.5	26.0	26.4	23.2	24.5	24.9	30.1	30.1	30.1
6300	28.7	23.3	24.0	20.1	20.9	20.6	21.8	20.9	21.3	29.2	28.1	21.7	22.1	18.9	20.2	20.6	25.7	25.7	25.7
8000	24.0	18.9	19.7	16.0	16.6	16.3	17.1	16.6	16.7	24.5	23.6	17.3	17.8	14.7	15.7	16.2	20.9	20.9	20.9
10000	18.8	14.2	15.2	11.6	11.9	11.6	12.2	12.1	11.5	19.2	18.6	12.5	13.0	10.8	10.8	11.4	15.5	15.5	15.5
12500	13.0	9.2	10.4	6.9	7.1	6.7	6.9	7.2	5.9	13.5	13.3	7.3	7.7	5.1	5.4	6.1	9.6	9.6	9.6
16000	7.1	4.2	5.5	2.1	2.1	1.5	1.6	2.1	.1	7.4	7.5	1.7	2.0			.4	3.2	3.2	3.2
20000	1.4		.8							1.2	1.3								
25000																			

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
IDLE POWER (54.4% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE G1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	74.7	68.1	69.5	62.9	65.1	63.4	65.8	65.1	66.0	74.9	71.4	64.9	64.6	62.2	64.3	64.6	72.1	72.1	72.1
250	72.6	66.0	67.4	60.8	63.0	61.3	63.7	63.0	63.9	72.8	69.2	62.8	62.5	60.1	62.2	62.5	70.8	70.8	70.8
315	70.5	63.9	65.3	58.7	60.9	59.2	61.5	60.8	61.8	70.7	67.1	60.7	60.4	58.0	60.1	60.4	67.9	67.9	67.9
400	68.3	61.8	63.2	56.6	58.8	57.0	59.4	58.7	59.6	68.5	64.9	58.5	58.3	55.9	57.9	58.3	65.7	65.7	65.7
500	66.1	59.6	61.0	54.4	56.6	54.8	57.1	56.5	57.4	66.3	62.7	56.3	56.1	53.7	55.7	56.1	63.5	63.5	63.5
630	63.9	57.3	58.7	52.2	54.3	52.5	54.9	54.2	55.1	64.0	60.4	54.0	53.9	51.4	53.4	53.8	61.2	61.2	61.2
800	61.5	55.0	56.4	49.9	51.9	50.2	52.5	51.8	52.7	61.7	58.1	51.7	51.6	49.1	51.1	51.5	58.9	58.9	58.9
1000	59.2	52.6	54.0	47.6	49.5	47.8	50.0	49.4	50.3	59.3	55.7	49.3	49.2	46.7	48.7	49.1	56.5	56.5	56.5
1250	56.6	50.1	51.5	45.0	46.9	45.2	47.5	46.9	47.7	56.7	53.2	46.8	46.8	44.2	46.1	46.6	54.0	54.0	54.0
1600	54.0	47.5	48.9	42.3	44.2	42.6	44.8	44.2	45.0	54.1	50.6	44.1	44.2	41.5	43.5	44.0	51.4	51.4	51.4
2000	51.2	44.7	46.1	39.4	41.4	39.7	41.9	41.4	42.2	51.3	47.8	41.4	41.5	38.9	40.7	41.3	48.6	48.6	48.6
2500	48.3	41.7	43.1	36.3	38.3	36.7	38.8	38.4	39.2	48.4	44.9	38.4	38.7	35.9	37.8	38.4	45.7	45.7	45.7
3150	45.0	38.3	39.8	33.1	35.0	33.5	35.5	35.1	35.9	45.1	41.7	35.2	35.6	32.7	34.6	35.2	42.4	42.4	42.4
4000	40.6	34.1	35.4	29.3	31.0	29.7	31.5	31.1	31.8	40.8	37.8	31.4	31.8	28.8	30.5	31.1	37.9	37.9	37.9
5000	35.7	29.5	30.6	25.1	26.5	25.5	27.1	26.6	27.3	36.0	33.5	27.1	27.6	24.4	26.0	26.6	33.0	33.0	33.0
6300	30.5	24.5	25.5	20.6	21.7	21.0	22.3	21.8	22.3	30.8	28.8	22.4	22.9	19.7	21.2	21.8	27.6	27.6	27.6
8000	24.9	19.5	20.5	16.2	17.0	16.5	17.4	17.1	17.2	25.3	23.9	17.7	18.2	15.0	16.2	16.8	21.9	21.9	21.9
10000	18.8	14.2	15.2	11.6	11.9	11.6	12.2	12.1	11.5	19.2	18.6	12.5	13.0	10.0	10.8	11.4	15.5	15.5	15.5
12500	13.0	9.2	10.4	6.9	7.1	6.7	6.9	7.2	5.9	13.5	13.3	7.3	7.7	5.1	5.4	6.1	9.6	9.6	9.6
16000	7.1	4.2	5.5	2.1	2.1	1.5	1.6	2.1	.1	7.4	7.5	1.7	2.0			.4	3.2	3.2	3.2
20000	1.4		.8							1.2	1.3								
25000																			

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
IDLE POWER (54.4% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 01
AIRCRAFT CODE 833
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE J1

P=PNLT A=AL T=ALT

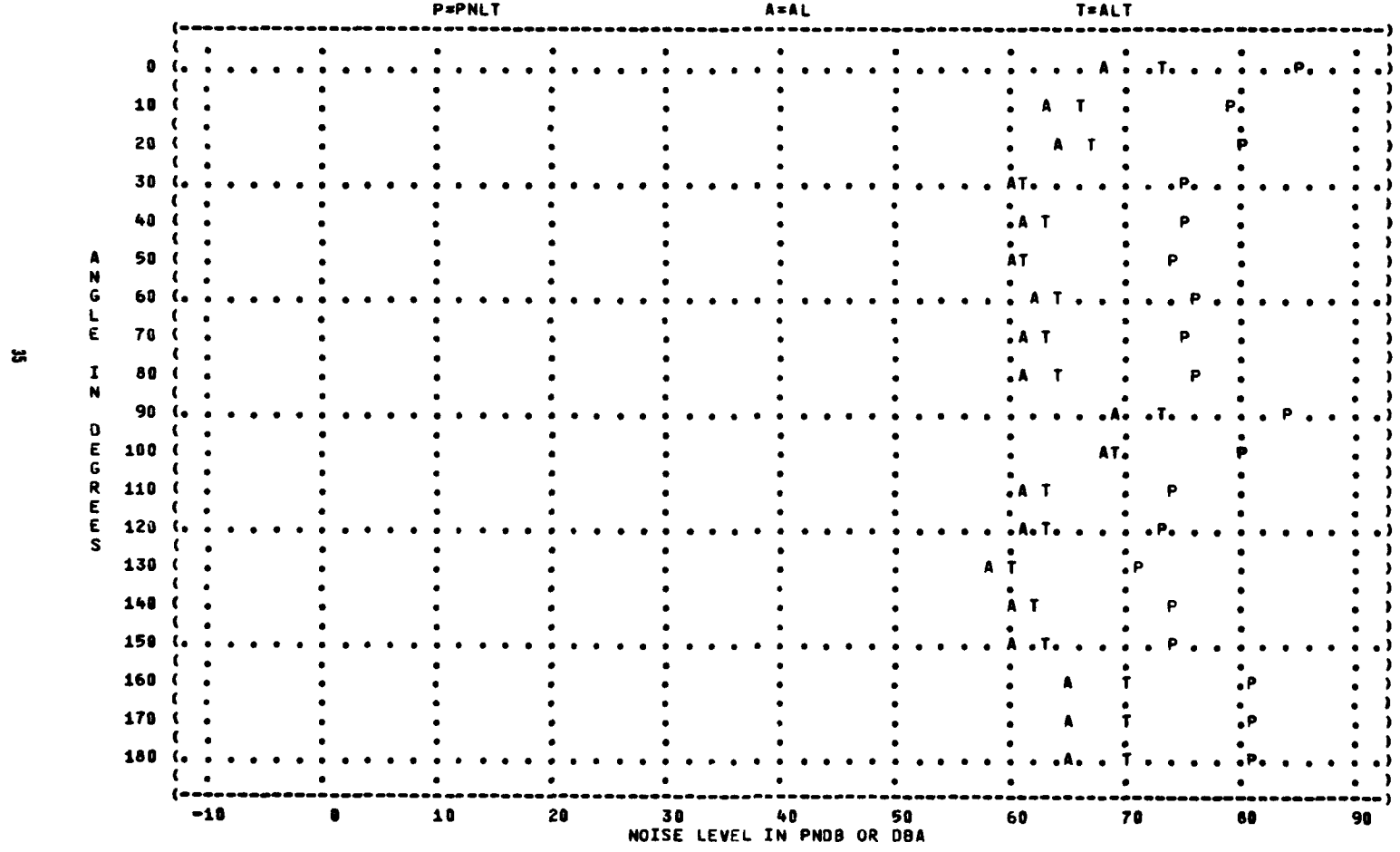


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
70% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	82	82	76	73	81	80	73	75	75	76	75	74	78	76	71	72	73	73	73
63	79	79	77	76	76	71	70	70	66	66	72	72	73	74	74	75	73	73	73
80	71	71	72	72	71	69	66	69	67	68	68	70	72	70	67	67	68	68	68
100	70	69	70	72	69	65	65	67	66	69	65	70	71	66	64	67	64	64	64
125	68	70	71	72	69	63	62	60	61	64	64	64	67	63	63	65	65	65	65
160	61	63	63	64	64	61	62	59	57	61	59	58	57	55	57	58	61	61	61
200	59	60	59	58	59	57	58	54	54	56	55	53	53	53	54	54	56	56	56
250	60	59	58	57	57	56	56	53	52	55	54	52	51	53	52	54	53	53	53
315	58	57	54	54	55	52	54	49	50	52	53	50	49	51	50	49	50	50	50
400	58	57	55	54	53	53	52	49	51	50	54	49	50	50	52	50	51	51	51
500	56	56	53	52	51	51	49	49<	50	51	52	48	50	52	53	51	51	51	51
630	57	57	53	54	50	52	50	49<	51	52	52	48<	50	52	53	53	51	51	51
800	57	55	54	55	53	51	50	48<	52	54	52	48<	50	52	52	52	50	50	50
1000	56	55	54	55	53	51	51	48<	52	56	52	48	51	53	52	52	51	51	51
1250	57	55	53	55	53	52	50	48	53	57	52	48	51	55	53	52	51	51	51
1600	60	60	56	59	55	53	52	49	55	61	53	51	55	59	58	57	54	54	54
2000	62	64	59	62	56	54	53	49	56	62	55	53	57	61	61	60	57	57	57
2500	53	52	51	52	49	47	47	44	49	54	48	45	48	53	52	52	49	49	49
3150	58	56	55	57	51	52	49	46	52	59	51	48	51	57	56	54	54	54	54
4000	55	54	53	55	50	51	48	44	50	57	48	46	48	57	53	52	52	52	52
5000	48	49	46	48	45	45	41	38<	47	52	46	44	45	54	49	49	49	49	49
6300	45	45	43	46	44	43	35<	32<	45	51	45	42	43	51	47	45	47	47	47
8000	39<	39<	37<	40<	38<	37<	28<	26<	39<	49	39<	36<	37<	46	47	39<	47	47	47
10000	33<	33<	31<	34<	32<	31<	21<	20<	33<	43<	33<	30<	31<	40<	41<	33<	41<	41<	41<
OVERALL	84	84	81	81	83	81	77	78	77	78	78	78	81	79	77	78	78	78	78

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
70% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE D2

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	86.4	87.0	83.8	85.6	82.4	80.9	78.6	76.4	80.6	85.4	80.3	78.8	81.5	84.5	83.8	83.0	81.8	81.8	81.8
250	84.2	84.7	81.6	83.3	79.9	78.4	76.3	74.0	78.3	83.1	78.1	76.4	79.2	82.2	81.6	80.7	79.5	79.5	79.5
315	81.8	82.4	79.2	81.0	77.5	76.1	74.0	71.7	76.0	80.8	75.7	74.0	76.8	79.9	79.2	78.4	77.2	77.2	77.2
400	79.5	80.0	76.9	78.6	75.1	73.6	71.7	69.3	73.6	78.4	73.4	71.6	74.5	77.4	76.8	76.0	74.8	74.8	74.8
500	77.0	77.6	74.4	76.2	72.6	71.1	69.2	66.8	71.1	75.9	70.9	69.1	72.0	75.0	74.4	73.6	72.3	72.3	72.3
630	74.5	75.1	71.9	73.7	70.0	68.4	66.7	64.3	68.6	73.3	68.3	66.6	69.4	72.4	71.8	71.1	69.7	69.7	69.7
800	71.9	72.4	69.2	71.0	67.3	65.6	64.0	61.5	65.8	70.6	65.6	63.7	66.7	69.6	69.0	68.3	66.9	66.9	66.9
1000	69.0	69.6	66.4	68.1	64.5	62.5	61.0	58.5	62.8	67.6	62.7	60.8	63.8	66.7	66.1	65.4	63.9	63.9	63.9
1250	66.0	66.6	63.3	65.0	61.3	59.3	57.7	55.0	59.6	64.4	59.4	57.4	60.6	63.5	62.9	62.2	60.5	60.5	60.5
1600	62.6	63.2	59.7	61.5	57.7	55.6	54.1	51.1	56.0	60.9	55.8	53.6	56.9	59.9	59.4	58.7	56.9	56.9	56.9
2000	58.8	59.4	55.7	57.6	53.6	51.4	49.8	46.5	52.0	57.1	51.7	49.2	52.9	56.0	55.5	54.8	52.9	52.9	52.9
2500	54.5	55.1	51.2	53.3	48.6	46.3	44.8	41.4	47.2	52.7	46.6	43.8	48.0	51.4	51.0	50.4	48.2	48.2	48.2
3150	49.4	50.2	45.6	48.0	42.8	39.7	38.0	33.7	40.8	47.0	40.0	37.0	41.9	45.5	45.6	44.6	41.6	41.6	41.6
4000	42.7	43.8	38.4	41.2	35.0	32.4	31.1	25.2	34.5	40.8	33.6	29.4	34.4	39.2	39.4	37.9	34.8	34.8	34.8
5000	35.5	36.1	30.5	34.0	25.7	23.0	20.6	11.2	25.7	33.8	24.6	15.8	26.0	32.1	32.2	30.3	26.1	26.1	26.1
6300	25.9	27.7	18.5	23.8	13.3	13.6	10.0		11.9	23.4	15.7	2.3	11.7	19.9	20.5	17.6	10.1	10.1	10.1
8000	10.2	11.8	6.6	13.7	.9	4.2				7.7	6.8			7.8	8.7	4.8			
10000				3.5															
12500																			
16000																			
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
70% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE E2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	88.4	89.8	85.7	87.8	83.8	82.0	79.8	76.4	82.1	86.9	81.7	80.6	83.6	86.2	86.0	85.0	83.8	83.8	83.8
250	86.1	87.5	83.4	85.5	81.3	79.6	77.6	74.0	79.8	84.6	79.5	78.2	81.3	83.9	83.7	82.7	81.5	81.5	81.5
315	83.8	85.2	81.1	83.2	78.8	77.2	75.3	71.7	77.5	82.3	77.1	75.8	79.0	81.6	81.4	80.4	79.1	79.1	79.1
400	81.4	82.9	78.8	80.8	76.4	74.8	72.9	69.3	75.1	79.9	74.8	73.4	76.6	79.2	79.0	78.0	76.7	76.7	76.7
500	79.0	80.4	76.3	78.4	74.0	72.2	70.5	66.8	72.6	77.4	72.3	70.9	74.1	76.7	76.5	75.6	74.2	74.2	74.2
630	76.5	77.9	73.8	75.8	71.4	69.6	67.9	64.3	70.1	74.8	69.7	68.3	71.6	74.1	74.0	73.0	71.6	71.6	71.6
800	73.8	75.3	71.1	73.2	68.7	66.7	65.3	61.5	67.3	72.1	67.0	65.5	68.8	71.3	71.2	70.3	68.9	68.9	68.9
1000	71.8	72.5	68.3	70.3	65.8	63.7	62.3	58.5	64.3	69.2	64.1	62.5	65.9	68.4	68.3	67.4	65.9	65.9	65.9
1250	68.6	69.4	65.1	67.2	62.7	60.4	58.9	55.0	61.1	65.9	60.8	59.2	62.7	65.2	65.1	64.2	62.5	62.5	62.5
1600	64.6	66.0	61.5	63.7	59.8	56.8	55.3	51.1	57.5	62.4	57.2	55.4	59.1	61.7	61.6	60.7	58.9	58.9	58.9
2000	60.7	62.2	57.6	59.8	54.9	52.6	51.1	46.5	53.5	58.6	53.1	51.0	55.0	57.7	57.7	56.7	54.8	54.8	54.8
2500	56.4	57.9	53.1	55.5	49.9	47.5	46.0	41.4	48.7	54.2	48.0	45.6	50.1	53.1	53.2	52.3	50.1	50.1	50.1
3150	51.4	53.0	47.5	50.2	44.2	40.9	39.3	33.7	42.3	48.6	41.4	38.8	44.0	47.2	47.8	46.5	43.5	43.5	43.5
4000	44.3	46.1	39.9	42.9	36.1	33.3	32.1	25.2	35.7	42.0	34.7	30.8	36.1	40.6	41.1	39.4	36.4	36.4	36.4
5000	36.7	37.8	31.7	35.3	26.5	23.7	21.3	11.2	26.5	34.7	25.5	16.9	27.2	33.1	33.5	31.5	27.3	27.3	27.3
6300	26.7	28.8	19.3	24.7	13.8	14.1	10.5		12.5	24.0	16.3	3.0	12.6	20.6	21.3	18.3	10.9	10.9	10.9
8000	10.6	12.4	6.9	14.1	1.1	4.4				8.0	7.1			8.2	9.2	5.2			
10000				3.5															
12500																			
16000																			
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE F2

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
70% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	71.3	71.5	68.6	70.5	66.9	65.5	64.2	61.9	66.1	71.1	65.5	63.4	66.2	69.8	69.0	68.1	66.5	66.5	66.5
250	69.1	69.4	66.5	68.4	64.8	63.3	62.1	59.8	63.9	68.9	63.3	61.3	64.0	67.6	66.8	65.9	64.4	64.4	64.4
315	67.0	67.2	64.3	66.2	62.6	61.1	59.9	57.7	61.7	66.7	61.2	59.1	61.9	65.3	64.6	63.7	62.1	62.1	62.1
400	64.7	65.0	62.1	64.0	60.5	58.9	57.7	55.5	59.5	64.4	59.0	56.9	59.7	63.0	62.4	61.5	59.9	59.9	59.9
500	62.5	62.7	59.9	61.7	58.2	56.7	55.5	53.3	57.2	62.0	56.7	54.7	57.4	60.7	60.0	59.2	57.5	57.5	57.5
630	60.1	60.3	57.5	59.3	55.9	54.3	53.1	51.0	54.8	59.6	54.4	52.4	55.1	58.2	57.6	56.8	55.1	55.1	55.1
800	57.7	57.9	55.0	56.8	53.5	51.9	50.7	48.6	52.4	57.1	52.0	50.0	52.7	55.7	55.1	54.3	52.6	52.6	52.6
1000	55.2	55.4	52.5	54.2	51.0	49.4	48.2	46.2	49.8	54.4	49.5	47.4	50.1	53.0	52.5	51.7	50.0	50.0	50.0
1250	52.5	52.7	49.8	51.5	48.3	46.7	45.5	43.5	47.2	51.6	46.9	44.7	47.4	50.2	49.8	49.0	47.2	47.2	47.2
1600	49.7	49.8	46.9	48.6	45.5	44.0	42.7	40.7	44.4	48.7	44.1	41.8	44.5	47.3	46.9	46.1	44.3	44.3	44.3
2000	46.7	46.8	43.8	45.4	42.4	41.0	39.7	37.7	41.4	45.6	41.2	38.7	41.4	44.1	43.8	43.0	41.2	41.2	41.2
2500	43.4	43.4	40.5	42.1	39.1	37.7	36.5	34.5	38.2	42.2	38.0	35.3	38.0	40.8	40.5	39.7	37.9	37.9	37.9
3150	39.9	39.8	36.9	38.5	35.5	34.2	33.0	31.0	34.7	38.6	34.5	31.6	34.4	37.1	36.9	36.1	34.2	34.2	34.2
4000	36.0	35.8	33.0	34.5	31.7	30.3	29.2	27.2	31.0	34.7	30.7	27.6	30.3	33.2	32.9	32.2	30.3	30.3	30.3
5000	31.7	31.4	28.7	30.2	27.4	26.1	25.0	23.0	26.8	30.4	26.6	23.3	26.0	28.8	28.5	27.8	26.0	26.0	26.0
6300	27.1	26.6	24.1	25.5	22.9	21.6	20.5	18.5	22.3	25.7	22.1	18.7	21.3	24.1	23.8	23.1	21.4	21.4	21.4
8000	22.8	22.1	19.9	21.0	18.8	17.5	16.3	14.5	17.8	20.8	17.9	14.6	17.0	19.4	19.1	18.6	17.0	17.0	17.0
10000	18.3	17.6	15.5	16.3	14.5	13.3	11.9	10.4	13.1	15.6	13.5	10.5	12.6	14.5	14.3	13.9	12.4	12.4	12.4
12500	13.8	13.1	11.1	11.6	10.3	9.1	7.3	6.1	8.2	10.3	8.9	6.4	8.4	9.6	9.4	9.1	7.8	7.8	7.8
16000	9.3	8.8	6.8	7.0	6.3	4.9	2.8	2.0	3.2	4.9	4.3	2.5	4.5	4.8	4.5	4.4	3.3	3.3	3.3
20000	5.1	4.8	2.7	2.8	2.7	1.1							1.1	.4					
25000	1.4	1.3																	

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
70% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	73.2	74.3	78.5	72.7	68.3	66.6	65.4	61.9	67.5	72.6	66.9	65.2	68.3	71.5	71.2	70.1	68.5	68.5	68.5
250	71.1	72.2	68.4	70.5	66.1	64.5	63.3	59.8	65.4	70.4	64.7	63.1	66.1	69.3	69.0	67.9	66.3	66.3	66.3
315	68.9	70.8	66.2	68.4	64.8	62.3	61.2	57.7	63.2	68.2	62.6	60.9	64.0	67.1	66.8	65.7	64.1	64.1	64.1
400	66.7	67.8	64.0	66.1	61.8	60.1	59.0	55.5	61.0	65.9	60.4	58.7	61.8	64.8	64.5	63.5	61.8	61.8	61.8
500	64.4	65.5	61.7	63.8	59.6	57.8	56.7	53.3	58.7	63.5	58.1	56.5	59.5	62.4	62.2	61.1	59.5	59.5	59.5
630	62.1	63.2	59.4	61.5	57.2	55.5	54.4	51.0	56.3	61.1	55.8	54.2	57.2	59.9	59.8	58.8	57.0	57.0	57.0
800	59.6	60.7	56.9	59.0	54.8	53.0	51.9	48.6	53.9	58.6	53.4	51.8	54.8	57.4	57.3	56.3	54.5	54.5	54.5
1000	57.1	58.2	54.4	56.4	52.3	50.5	49.4	46.2	51.3	55.9	50.9	49.2	52.2	54.7	54.7	53.7	51.9	51.9	51.9
1250	54.5	55.5	51.7	53.6	49.7	47.9	46.8	43.5	48.6	53.2	48.3	46.5	49.5	51.9	52.0	51.0	49.2	49.2	49.2
1600	51.7	52.7	48.8	50.7	46.9	45.1	43.9	40.7	45.8	50.2	45.5	43.6	46.6	49.0	49.1	48.1	46.2	46.2	46.2
2000	48.6	49.6	45.7	47.6	43.8	42.1	41.0	37.7	42.9	47.1	42.6	40.4	43.5	45.9	46.0	45.0	43.1	43.1	43.1
2500	45.4	46.3	42.4	44.3	40.5	38.9	37.7	34.5	39.7	43.8	39.4	37.1	40.1	42.5	42.7	41.7	39.8	39.8	39.8
3150	41.8	42.7	38.8	40.6	36.9	35.4	34.2	31.0	36.2	40.2	35.9	33.4	36.5	38.9	39.1	38.1	36.2	36.2	36.2
4000	37.6	38.1	34.5	36.3	32.7	31.3	30.1	27.2	32.2	35.9	31.9	29.8	32.8	34.6	34.7	33.8	31.9	31.9	31.9
5000	32.9	33.1	29.8	31.5	28.3	26.8	25.7	23.0	27.7	31.3	27.4	24.4	27.3	29.8	29.8	29.0	27.2	27.2	27.2
6300	27.9	27.7	24.9	26.4	23.5	22.0	21.0	18.5	22.9	26.3	22.6	19.5	22.2	24.7	24.6	23.9	22.1	22.1	22.1
8000	23.2	22.7	20.3	21.4	19.1	17.7	16.5	14.5	18.1	21.1	18.2	15.0	17.4	19.7	19.5	19.0	17.4	17.4	17.4
10000	18.3	17.6	15.5	16.3	14.5	13.3	11.9	10.4	13.1	15.6	13.5	10.5	12.6	14.5	14.3	13.9	12.4	12.4	12.4
12500	13.8	13.1	11.1	11.6	10.3	9.1	7.3	6.1	8.2	10.3	8.9	6.4	8.4	9.6	9.4	9.1	7.8	7.8	7.8
16000	9.3	8.8	6.8	7.0	6.3	4.9	2.8	2.0	3.2	4.9	4.3	2.5	4.5	4.8	4.5	4.4	3.3	3.3	3.3
20000	5.1	4.8	2.7	2.8	2.7	1.1							1.1	.4					
25000	1.4	1.3																	

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
78% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 02
AIRCRAFT CODE 833
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

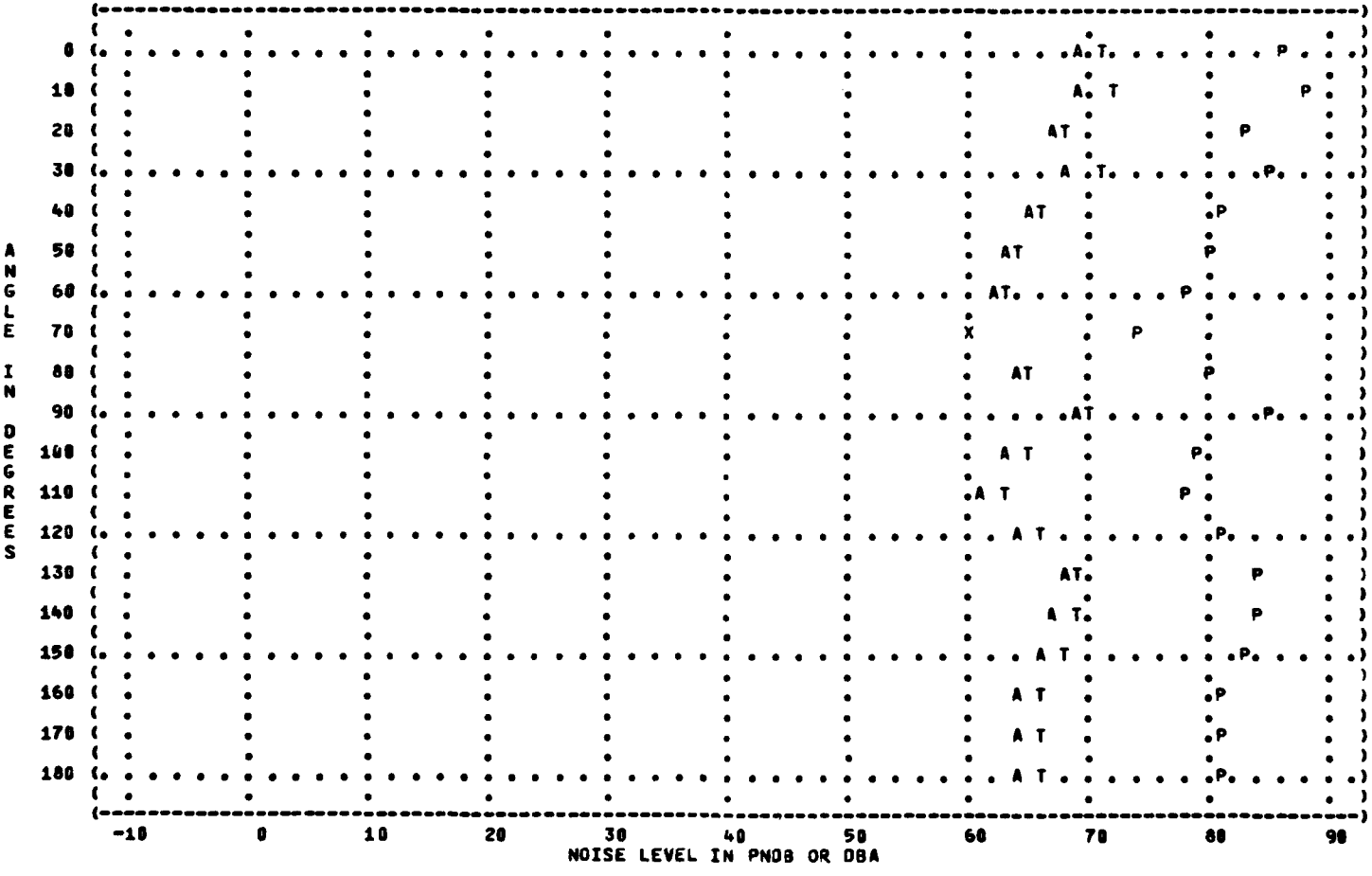


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 00118
PROFILE VERSION A
28 NOV 79
PAGE C3

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
85.6% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	77	77	77	77	76	74	75	74	73	75	72	72	73	74	73	73	73	73	73
63	81	81	81	82	78	76	76	75	73	73	73	75	78	79	78	78	76	76	76
80	78	78	78	78	77	75	75	76	74	77	76	77	76	78	78	78	76	76	76
100	80	80	83	82	81	77	76	74	76	78	78	80	78	77	78	78	72	72	72
125	85	85	88	89	85	79	74	73	76	81	81	81	81	77	79	77	80	80	80
160	81	82	83	85	83	82	77	72	74	80	81	79	76	73	77	78	81	81	81
200	83	83	84	82	78	82	81	75	74	80	80	76	72	75	77	77	79	79	79
250	81	80	78	78	76	77	76	70	69	75	75	72	71	70	71	73	75	75	75
315	76	72	70	72	71	70	72	68	64	74	75	72	67	68	68	69	69	69	69
400	77	70	70	73	73	72	74	70	65	75	76	72	69	68	69	70	70	70	70
500	75	70	71	70	70	72	73	71	66	73	74	71	71	72	72	70	70	70	70
630	73	70	70	71	69	70	71	70	64	71	70	67	68	69	69	70	67	67	67
800	72	71	71	71	69	70	71	68	64	69	67	66	68	68	69	70	66	66	66
1000	72	71	71	71	69	70	70	66	65	69	66	66	68	67	68	70	68	68	68
1250	71	70	71	70	69	70	71	65	64	69	66	66	67	66	67	69	68	68	68
1600	72	71	71	70	70	70	72	68	64	68	66	66	67	66	67	67	67	67	67
2000	70	68	68	67	67	68	69	66	61	65	64	64	64	64	64	64	64	64	64
2500	68	66	67	66	65	65	68	66	64	63	63	62	62	63	65	64	63	63	63
3150	65	64	66	65	61	62	66	63	61	60	60	59	59	59	62	61	60	60	60
4000	64	63	64	62	60	61	65	62	59	60	58	58	59	58	61	60	59	59	59
5000	60	59	60	59	56	56	61	59	57	58	57	56	57	57	59	59	57	57	57
6300	58	58	58	57	55	54	57	57	55	57	55	55	55	54	56	56	54	54	54
8000	54	54	55	53	50	50	55	54	53	53	52	52	51	50	52	52	50	50	50
10000	48<	48<	49	47<	44<	44<	49<	49	50	48	47	46<	45<	44<	48	46<	44<	44<	44<
OVERALL	91	91	92	93	90	89	87	84	84	88	88	87	86	86	87	87	87	87	87

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
85.6% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 00110
PROFILE VERSION A
28 NOV 79
PAGE 03

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	98.9	97.9	99.0	98.9	96.4	96.4	96.6	94.0	91.8	95.5	95.1	93.6	93.3	92.8	94.1	94.0	94.2	94.2	94.2
250	96.7	95.8	96.9	96.8	94.3	94.2	94.4	91.7	89.6	93.3	93.0	91.4	91.1	90.5	91.8	91.8	92.8	92.8	92.8
315	94.5	93.6	94.7	94.6	92.1	92.0	92.2	89.4	87.2	91.1	90.8	89.2	88.8	88.2	89.5	89.5	89.8	89.8	89.8
400	92.2	91.3	92.5	92.4	89.9	89.7	89.8	87.0	84.8	88.8	88.5	86.8	86.4	85.8	87.1	87.1	87.5	87.5	87.5
500	89.8	88.8	90.1	90.1	87.5	87.3	87.4	84.6	82.3	86.3	86.0	84.3	83.9	83.4	84.7	84.6	85.0	85.0	85.0
630	87.2	86.2	87.5	87.5	84.7	84.7	84.7	82.0	79.7	83.6	83.4	81.6	81.2	80.9	82.1	82.1	82.3	82.3	82.3
800	84.4	83.4	84.6	84.6	81.9	81.8	82.1	79.3	77.0	80.9	80.8	78.7	78.4	78.3	79.4	79.4	79.5	79.5	79.5
1000	81.4	80.4	81.5	81.6	78.8	78.9	79.4	76.4	74.1	78.2	78.2	76.0	75.6	75.7	76.5	76.6	76.5	76.5	76.5
1250	78.4	77.1	78.2	78.2	75.5	75.6	76.4	73.3	70.9	75.4	75.4	73.1	72.6	72.3	73.4	73.7	73.3	73.3	73.3
1600	75.4	73.6	74.6	74.6	72.4	72.3	73.3	70.0	67.5	72.4	72.4	70.1	69.5	69.8	70.4	70.5	69.9	69.9	69.9
2000	72.2	70.0	70.7	70.7	69.1	68.9	69.8	66.6	63.7	69.2	69.3	66.8	66.2	66.6	67.1	67.1	66.4	66.4	66.4
2500	68.2	66.1	66.7	66.2	65.1	65.0	66.0	62.9	59.4	65.2	65.3	63.1	62.5	63.0	63.4	63.2	62.6	62.6	62.6
3150	63.8	61.8	62.4	61.9	60.7	60.7	61.8	58.7	54.5	60.8	61.8	58.7	58.2	58.7	59.1	59.0	58.3	58.3	58.3
4000	59.0	56.8	57.4	56.8	55.6	55.8	56.9	53.9	48.9	56.1	56.2	53.8	53.3	53.9	54.3	54.1	53.2	53.2	53.2
5000	53.8	51.2	51.8	51.5	49.9	50.5	51.5	48.0	43.0	50.9	50.9	48.2	47.7	48.3	48.6	48.7	47.6	47.6	47.6
6300	48.1	45.2	45.9	45.6	43.6	44.4	45.8	42.0	35.6	44.9	45.1	42.1	41.2	42.0	42.2	42.5	41.6	41.6	41.6
8000	43.4	40.1	40.4	40.3	38.3	39.3	40.7	36.7	29.5	40.0	40.2	36.2	35.7	36.6	36.5	36.5	36.4	36.4	36.4
10000	37.7	33.9	34.2	34.3	31.5	33.2	34.8	30.8	20.5	34.2	34.2	30.3	29.6	30.8	30.6	30.1	28.6	28.6	28.6
12500	31.2	23.9	25.6	25.6	22.1	25.5	27.3	23.1	9.3	27.0	27.9	22.7	21.7	23.8	23.3	22.5	20.2	20.2	20.2
16000	22.0	10.4	12.8	14.0	10.8	14.0	17.9	13.3		18.0	19.6	11.0	10.4	13.0	12.2	11.3	9.0	9.0	9.0
20000	11.2			2.4		2.5	8.5	3.4		9.0	8.3	.9		2.2	1.0	.0			
25000	.4									.0									

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
85.6% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 00118
PROFILE VERSION A
26 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	99.5	98.5	99.9	99.8	96.9	96.4	97.3	94.7	93.0	95.5	95.1	93.6	93.9	93.8	94.1	94.0	94.8	94.8	94.8
250	97.3	96.4	97.8	97.7	94.8	94.2	95.1	92.4	90.7	93.3	93.0	91.4	91.7	91.6	91.8	91.8	92.7	92.7	92.7
315	95.2	94.2	95.6	95.5	92.6	92.0	92.9	90.1	88.4	91.1	90.8	89.2	89.4	89.3	89.5	89.5	90.5	90.5	90.5
400	92.9	91.9	93.4	93.3	90.4	89.7	90.5	87.7	86.0	88.8	88.5	86.8	87.1	86.9	87.1	87.1	88.2	88.2	88.2
500	90.4	89.5	91.0	91.0	88.0	87.3	88.1	85.3	83.5	86.3	86.0	84.3	84.6	84.4	84.7	84.6	85.7	85.7	85.7
630	87.9	86.8	88.4	88.4	85.3	84.7	85.4	82.7	80.9	83.6	83.4	81.6	81.8	81.9	82.1	82.1	83.0	83.0	83.0
800	85.0	84.0	85.5	85.5	82.4	81.8	82.8	80.0	78.2	80.9	80.8	78.7	79.0	79.4	79.4	79.4	80.1	80.1	80.1
1000	82.1	81.0	82.4	82.4	79.4	78.9	80.1	77.1	75.2	78.2	78.2	76.0	76.2	76.7	76.5	76.6	77.2	77.2	77.2
1250	79.0	77.8	79.1	79.1	76.1	75.6	77.1	74.0	72.1	75.4	75.4	73.1	73.3	73.9	73.4	73.7	73.9	73.9	73.9
1600	76.0	74.2	75.5	75.5	72.9	72.3	74.0	70.7	68.7	72.4	72.4	70.1	70.1	70.9	70.4	70.5	70.6	70.6	70.6
2000	72.8	70.7	71.6	71.6	69.6	68.9	70.5	67.3	64.9	69.2	69.3	66.8	66.8	67.7	67.1	67.1	67.1	67.1	67.1
2500	68.8	66.7	67.6	67.1	65.6	65.0	66.7	63.6	60.6	65.2	65.3	63.1	63.1	64.0	63.4	63.2	63.3	63.3	63.3
3150	64.5	62.4	63.3	62.7	61.2	60.7	62.5	59.4	55.7	60.8	61.0	58.7	58.8	59.8	59.1	59.8	58.9	58.9	58.9
4000	59.5	57.3	58.1	57.5	56.0	55.8	57.5	54.4	49.9	56.1	56.2	53.8	53.8	54.8	54.3	54.1	53.7	53.7	53.7
5040	54.2	51.6	52.4	52.0	50.3	50.5	52.0	48.5	43.7	50.9	50.9	48.2	48.1	48.9	48.6	48.7	48.8	48.0	48.0
6300	48.4	45.4	46.2	45.9	43.8	44.4	46.1	42.3	36.1	44.9	45.1	42.1	41.4	42.4	42.2	42.5	41.8	41.8	41.8
8000	43.5	40.2	40.6	40.5	38.4	39.3	40.9	36.8	29.7	40.0	40.2	36.2	35.8	36.8	36.5	36.5	36.5	36.5	36.5
10000	37.7	33.9	34.2	34.3	31.5	33.2	34.8	30.8	20.5	34.2	34.2	30.3	29.6	30.8	30.6	30.1	28.6	28.6	28.6
12500	31.2	23.9	25.6	25.6	22.1	25.5	27.3	23.1	9.3	27.0	27.9	22.7	21.7	23.8	23.3	22.5	20.2	20.2	20.2
16000	22.0	10.4	12.8	14.8	10.8	14.0	17.9	13.3		16.0	19.6	11.8	10.4	13.0	12.2	11.3	9.8	9.0	9.8
20000	11.2			2.4		2.5	8.5	3.4		9.0	8.3	.9		2.2	1.0	.8			
25000	.4									.0									

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
85.6% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 00118
PROFILE VERSION A
28 NOV 79
PAGE F3

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.0	83.4	84.0	83.7	82.1	82.5	83.2	80.0	76.9	81.0	81.5	79.5	79.4	79.3	80.1	80.6	80.1	80.1	80.1
250	82.9	81.3	81.9	81.6	80.0	80.4	81.1	77.9	74.0	79.0	79.4	77.4	77.3	77.2	78.0	78.5	78.1	78.1	78.1
315	80.0	79.2	79.0	79.5	77.9	78.3	79.0	75.7	72.6	77.7	77.4	75.3	75.2	75.1	75.9	76.4	76.0	76.0	76.0
400	78.7	77.1	77.7	77.4	75.7	76.1	76.0	73.5	70.4	75.5	75.2	73.2	73.1	73.0	73.7	74.3	73.0	73.0	73.0
500	76.4	74.0	75.4	75.1	73.5	73.9	74.6	71.3	68.1	73.3	73.0	71.0	70.9	70.0	71.5	72.0	71.5	71.5	71.5
630	74.1	72.4	73.0	72.7	71.2	71.5	72.3	69.0	65.0	71.1	70.0	68.7	68.6	68.5	69.2	69.0	69.2	69.2	69.2
800	71.7	70.0	70.6	70.3	68.0	69.1	69.9	66.6	63.3	68.7	68.4	66.3	66.2	66.2	66.0	67.4	66.0	66.0	66.0
1000	69.3	67.4	68.0	67.7	66.2	66.6	67.4	64.2	60.0	66.3	66.0	63.9	63.0	63.0	64.4	65.0	64.3	64.3	64.3
1250	66.7	64.7	65.3	65.0	63.6	64.0	64.9	61.7	58.2	63.7	63.5	61.3	61.3	61.3	61.0	62.4	61.6	61.6	61.6
1600	63.9	61.9	62.4	62.2	60.9	61.3	62.2	59.0	55.4	61.1	60.9	58.6	58.7	58.7	59.2	59.0	58.9	58.9	58.9
2000	61.1	58.9	59.4	59.2	58.0	58.4	59.4	56.3	52.5	58.4	58.2	55.9	55.9	56.0	56.4	57.0	56.0	56.0	56.0
2500	58.0	55.7	56.2	56.0	54.0	55.3	56.3	53.3	49.4	55.3	55.0	52.7	53.0	53.1	53.4	54.0	52.0	52.0	52.0
3150	54.5	52.3	52.0	52.5	51.3	51.9	53.0	50.0	46.0	51.0	51.5	49.3	49.7	49.9	50.2	50.0	49.4	49.4	49.4
4000	50.0	48.6	49.1	48.7	47.6	48.2	49.3	46.3	42.3	48.1	47.6	45.5	46.1	46.3	46.5	47.2	45.6	45.6	45.6
5000	46.6	44.5	45.0	44.7	43.4	44.1	45.2	42.2	38.2	43.9	43.3	41.3	42.0	42.2	42.5	43.2	41.5	41.5	41.5
6300	42.2	40.2	40.7	40.3	39.0	39.0	40.7	37.0	33.9	39.4	38.0	36.0	37.7	37.9	38.2	38.9	37.1	37.1	37.1
8000	38.2	36.0	36.5	36.3	35.0	35.7	36.6	33.0	29.0	35.6	35.2	33.0	33.7	34.0	34.2	34.0	33.1	33.1	33.1
10000	34.0	31.6	32.1	32.0	30.7	31.4	32.3	29.6	25.4	31.5	31.3	28.9	29.4	29.0	30.0	30.5	28.0	28.0	28.0
12500	29.5	26.9	27.5	27.5	26.1	26.7	27.6	25.1	20.7	27.1	27.1	24.6	24.0	25.3	25.4	25.7	24.2	24.2	24.2
16000	24.0	22.1	22.7	22.0	21.4	21.0	22.6	20.2	15.7	22.4	22.6	20.0	19.0	20.4	20.5	20.7	19.5	19.5	19.5
20000	19.0	17.2	18.0	18.2	16.5	16.7	17.3	14.0	10.6	17.4	17.0	15.1	14.5	15.1	15.3	15.3	14.6	14.6	14.6
25000	14.6	12.4	13.5	13.7	11.0	11.5	11.7	9.1	5.5	12.1	12.6	10.0	9.1	9.5	9.0	9.0	9.7	9.7	9.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
85.6% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 83
AIRCRAFT CODE 833
OPERATION CODE 00118
PROFILE VERSION A
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DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.6	84.8	84.9	84.5	82.6	82.5	83.9	80.7	78.1	81.8	81.5	79.5	80.1	80.4	80.1	80.6	80.8	80.8	80.8
250	83.5	81.9	82.9	82.5	80.5	80.4	81.8	78.6	75.9	79.8	79.4	77.4	78.0	78.3	78.0	78.5	78.7	78.7	78.7
315	81.4	79.8	80.8	80.4	78.4	78.3	79.7	76.4	73.8	77.7	77.4	75.3	75.9	76.2	75.9	76.4	76.6	76.6	76.6
400	79.3	77.7	78.6	78.2	76.3	76.1	77.5	74.2	71.6	75.5	75.2	73.2	73.7	74.0	73.7	74.3	74.4	74.4	74.4
500	77.1	75.4	76.3	76.0	74.0	73.9	75.3	72.0	69.3	73.3	73.0	71.0	71.5	71.8	71.5	72.0	72.2	72.2	72.2
630	74.7	73.1	73.9	73.6	71.7	71.5	73.0	69.7	67.0	71.1	70.8	68.7	69.2	69.6	69.2	69.8	69.8	69.8	69.8
800	72.4	70.6	71.5	71.2	69.3	69.1	70.6	67.3	64.5	68.7	68.4	66.3	66.9	67.3	66.8	67.4	67.4	67.4	67.4
1000	69.9	68.8	68.9	68.6	66.8	66.6	68.1	64.9	62.0	66.3	66.0	63.9	64.5	64.9	64.4	65.0	64.9	64.9	64.9
1250	67.3	65.3	66.2	65.9	64.1	64.0	65.6	62.4	59.3	63.7	63.5	61.3	61.9	62.4	61.8	62.4	62.3	62.3	62.3
1600	64.6	62.5	63.3	63.1	61.4	61.3	62.9	59.7	56.6	61.1	60.9	58.6	59.3	59.8	59.2	59.8	59.5	59.5	59.5
2000	61.8	59.6	60.4	60.1	58.5	58.4	60.1	57.0	53.7	58.4	58.2	55.9	56.6	57.1	56.4	57.0	56.6	56.6	56.6
2500	58.6	56.4	57.2	56.9	55.3	55.3	57.0	54.0	50.6	55.3	55.0	52.7	53.6	54.2	53.4	54.0	53.5	53.5	53.5
3150	55.2	52.9	53.7	53.4	51.9	51.9	53.7	50.7	47.2	51.8	51.5	49.3	50.3	50.9	50.2	50.8	50.0	50.0	50.0
4000	51.3	49.1	49.8	49.4	48.0	48.2	49.8	46.9	43.3	48.1	47.5	45.5	46.6	47.1	46.5	47.2	46.1	46.1	46.1
5000	47.0	44.9	45.6	45.2	43.7	44.1	45.6	42.6	38.9	43.9	43.3	41.3	42.4	42.8	42.5	43.2	41.9	41.9	41.9
6300	42.4	40.4	41.8	40.6	39.2	39.8	41.0	38.0	34.3	39.4	38.8	36.8	38.0	38.3	38.2	38.9	37.3	37.3	37.3
8000	38.4	36.2	36.7	36.4	35.1	35.7	36.8	34.0	30.0	35.6	35.2	33.8	33.8	34.2	34.2	34.8	33.2	33.2	33.2
10000	34.0	31.6	32.1	32.0	30.7	31.4	32.3	29.6	25.4	31.5	31.3	28.9	29.4	29.8	30.0	30.5	28.8	28.8	28.8
12500	29.5	26.9	27.5	27.5	26.1	26.7	27.6	25.1	20.7	27.1	27.1	24.6	24.8	25.3	25.4	25.7	24.2	24.2	24.2
16000	24.8	22.1	22.7	22.8	21.4	21.8	22.6	20.2	15.7	22.4	22.6	20.0	19.8	20.4	20.5	20.7	19.5	19.5	19.5
20000	19.8	17.2	18.0	18.2	16.5	16.7	17.3	14.8	10.6	17.4	17.8	15.1	14.5	15.1	15.3	15.3	14.6	14.6	14.6
25000	14.6	12.4	13.5	13.7	11.8	11.5	11.7	9.1	5.5	12.1	12.6	10.0	9.1	9.5	9.8	9.8	9.7	9.7	9.7

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
85.6% RPM RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-881
RUN 03
AIRCRAFT CODE 833
OPERATION CODE 88118
PROFILE VERSION A
28 NOV 79
PAGE J3

P=PNLT A=AL T=ALT

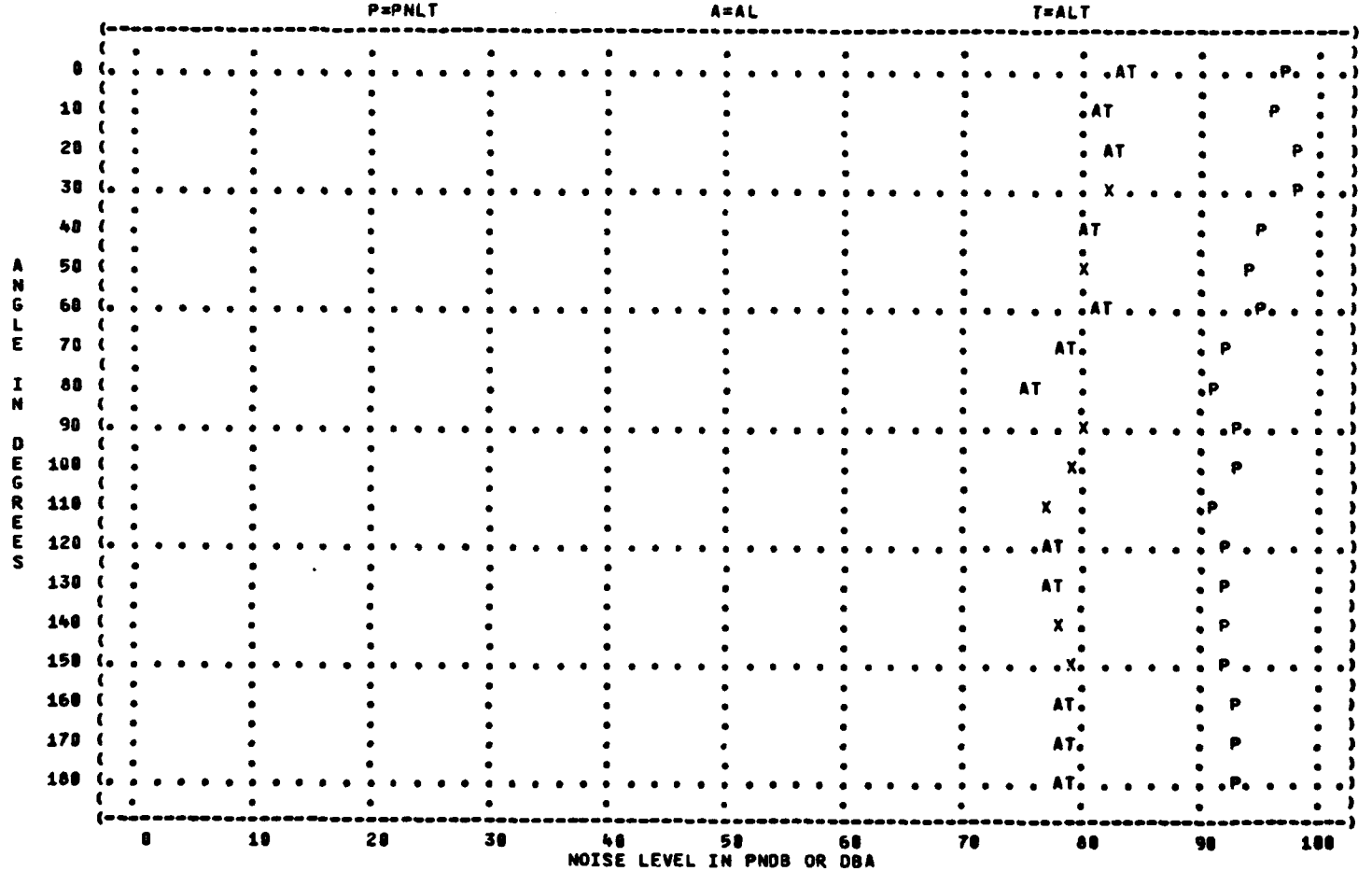

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
MILITARY POWER (97.7)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE C4

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	78	79	81	80	80	83	81	81	80	82	82	82	81	82	82	77	76	76	76
63	83	82	83	81	81	82	82	79	81	82	81	81	81	80	80	80	79	79	79
80	85	85	84	82	82	83	80	80	78	81	81	81	82	81	81	80	79	79	79
100	81	81	81	80	81	79	79	82	82	83	84	82	82	81	81	76	75	75	75
125	88	88	89	89	85	80	78	81	81	85	84	84	83	79	79	79	81	81	81
160	88	88	88	88	88	84	83	81	81	86	85	86	80	78	78	81	83	83	83
200	90	88	90	86	85	86	86	84	84	88	86	86	81	83	83	83	84	84	84
250	90	87	87	85	85	88	87	85	83	86	82	81	81	81	81	84	85	85	85
315	89	85	84	81	82	81	81	81	79	86	86	83	80	79	79	80	81	81	81
400	91	85	84	82	82	84	82	84	80	87	88	81	79	78	78	81	80	80	80
500	89	83	84	83	82	82	81	85	79	87	86	80	81	79	79	83	81	81	81
630	87	83	82	83	81	82	81	83	79	85	83	79	81	78	78	80	78	78	78
800	86	84	83	83	82	83	82	83	80	84	82	80	81	79	79	80	78	78	78
1000	85	83	82	82	80	83	82	82	80	82	81	79	80	78	78	79	79	79	79
1250	83	83	82	81	80	82	81	82	81	81	81	79	79	78	78	77	77	77	77
1600	82	82	81	80	80	81	81	81	80	81	80	79	77	78	78	75	76	76	76
2000	78	79	80	77	77	79	78	79	78	78	77	76	74	75	75	72	73	73	73
2500	77	77	78	75	75	76	76	77	75	76	75	73	72	72	72	70	70	70	70
3150	75	74	76	73	74	75	74	74	73	73	73	71	70	70	70	67	68	68	68
4000	73	73	74	73	73	73	72	73	71	72	72	70	69	68	68	67	67	67	67
5000	69	69	70	69	69	69	67	69	66	68	67	66	66	63	63	64	65	65	65
6300	68	66	68	67	67	67	64	67	64	66	66	64	63	62	62	61	62	62	62
8000	63	63	65	64	64	64	61	63	61	62	62	60	60	58	58	56	58	58	58
10000	55	54	57	56	57	56	53	53	54	55	55	51	52	49	49	50	53	53	53
OVERALL	99	97	97	96	95	96	95	95	93	97	96	94	93	92	92	92	92	92	92

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE D4

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
MILITARY POWER (97.7)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	106.6	106.7	106.7	105.2	104.9	105.7	104.9	105.3	103.9	106.3	105.8	103.6	102.3	102.3	102.0	101.5	101.6	101.6	101.6
250	106.4	104.5	104.6	103.0	102.7	103.5	102.7	103.1	101.8	104.2	103.7	101.5	100.1	99.8	99.8	99.3	99.4	99.4	99.4
315	104.3	102.3	102.3	100.8	100.5	101.3	100.5	100.9	99.6	102.0	101.5	99.2	97.9	97.6	97.6	97.1	97.2	97.2	97.2
400	102.0	100.0	100.0	98.5	98.2	99.0	98.2	98.6	97.3	99.7	99.3	97.0	95.6	95.3	95.3	94.9	95.0	95.0	95.0
500	99.8	97.7	97.7	96.1	95.8	96.6	95.8	96.3	94.9	97.4	97.0	94.6	93.2	92.9	92.9	92.6	92.7	92.7	92.7
630	97.4	95.2	95.2	93.7	93.4	94.1	93.4	93.8	92.4	95.1	94.6	92.1	90.7	90.5	90.5	90.2	90.1	90.1	90.1
800	95.0	92.7	92.6	91.1	90.8	91.6	90.8	91.2	89.8	92.6	92.2	89.5	88.1	87.9	87.9	87.7	87.4	87.4	87.4
1000	92.4	90.0	89.8	88.3	88.0	88.8	88.1	88.5	87.1	90.0	89.6	86.8	85.4	85.2	85.2	85.1	84.6	84.6	84.6
1250	89.7	87.1	86.9	85.4	85.1	85.9	85.2	85.6	84.2	87.3	86.9	83.9	82.5	82.3	82.3	82.4	81.9	81.9	81.9
1600	86.9	84.8	83.7	82.3	82.0	82.8	82.2	82.6	81.1	84.4	84.0	80.8	79.6	79.2	79.2	79.5	78.9	78.9	78.9
2000	83.9	80.6	80.4	78.9	78.6	79.5	78.8	79.4	77.8	81.3	81.0	77.4	76.4	75.9	75.9	76.5	75.8	75.8	75.8
2500	80.1	77.0	76.7	75.4	74.9	75.8	75.2	76.1	74.1	77.7	77.2	73.7	73.8	72.2	72.2	73.1	72.4	72.4	72.4
3150	75.9	72.9	72.5	71.5	70.8	71.7	71.1	72.1	70.0	73.7	73.1	69.6	69.1	68.1	68.1	69.1	68.4	68.4	68.4
4000	71.5	68.4	68.1	67.4	66.3	67.3	66.7	67.7	65.5	69.3	68.7	65.0	64.8	63.5	63.5	64.7	63.9	63.9	63.9
5000	66.7	63.7	63.2	62.7	61.6	62.6	61.9	62.8	60.4	64.5	63.8	60.0	59.9	58.5	58.5	59.7	58.9	58.9	58.9
6300	61.7	58.7	58.0	57.6	56.4	57.5	56.9	57.8	55.0	59.4	58.8	54.9	54.8	53.4	53.4	54.7	53.9	53.9	53.9
8000	57.7	54.2	53.6	53.2	51.9	52.9	52.4	53.4	50.2	55.3	54.7	50.2	50.3	48.3	48.3	50.5	49.5	49.5	49.5
10000	53.4	49.1	49.0	48.0	46.6	47.8	47.0	48.7	44.2	50.8	50.1	44.7	44.8	43.1	43.1	45.7	44.6	44.6	44.6
12500	48.5	43.2	43.4	42.2	40.9	41.8	40.6	43.1	38.4	45.6	45.0	39.0	39.0	37.4	37.4	40.1	38.9	38.9	38.9
16000	42.7	36.8	37.3	36.1	34.4	35.4	34.4	36.8	31.6	39.5	38.7	31.8	32.2	30.0	30.0	33.9	32.2	32.2	32.2
20000	35.9	29.5	29.3	26.6	25.6	26.8	25.1	28.6	21.1	32.3	31.5	22.7	23.7	20.6	20.6	25.9	23.1	23.1	23.1
25000	27.8	16.2	16.0	15.3	12.4	13.6	11.7	18.6	6.9	23.1	22.7	7.6	9.9	6.9	6.9	12.9	9.9	9.9	9.9

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 00104
PROFILE VERSION A
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NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
MILITARY POWER (97.7)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	109.1	107.4	107.6	106.0	105.4	106.4	105.4	105.3	103.9	106.3	105.8	103.6	102.3	102.5	102.5	101.5	101.6	101.6	101.6
250	107.0	105.2	105.4	103.8	103.2	104.2	103.3	103.1	101.8	104.2	103.7	101.5	100.1	100.4	100.4	99.3	99.4	99.4	99.4
315	104.8	103.0	103.1	101.6	101.0	101.9	101.0	100.9	99.6	102.0	101.5	99.2	97.9	98.1	98.1	97.1	97.2	97.2	97.2
400	102.6	100.7	100.9	99.3	98.7	99.6	98.8	98.6	97.3	99.7	99.3	97.0	95.6	95.8	95.8	94.9	95.0	95.0	95.0
500	100.3	98.4	98.5	96.9	96.4	97.3	96.4	96.3	94.9	97.4	97.0	94.6	93.2	93.5	93.5	92.6	92.7	92.7	92.7
630	98.0	95.9	96.0	94.5	93.9	94.8	93.9	93.8	92.4	95.1	94.6	92.1	90.7	91.0	91.0	90.2	90.1	90.1	90.1
800	95.5	93.4	93.4	91.9	91.3	92.2	91.4	91.2	89.8	92.6	92.2	89.5	88.1	88.4	88.4	87.7	87.4	87.4	87.4
1000	93.0	90.6	90.6	89.1	88.5	89.5	88.7	88.5	87.1	90.0	89.6	86.8	85.4	85.7	85.7	85.1	84.6	84.6	84.6
1250	90.3	87.7	87.7	86.2	85.6	86.6	85.8	85.6	84.2	87.3	86.9	83.9	82.5	82.8	82.8	82.4	81.9	81.9	81.9
1600	87.4	84.6	84.6	83.1	82.5	83.5	82.7	82.6	81.1	84.4	84.0	80.8	79.6	79.7	79.7	79.5	78.9	78.9	78.9
2000	84.4	81.3	81.2	79.7	79.1	80.2	79.4	79.4	77.8	81.3	81.0	77.4	76.4	76.4	76.4	76.5	75.8	75.8	75.8
2500	80.7	77.6	77.5	76.2	75.4	76.5	75.7	76.1	74.1	77.7	77.2	73.7	73.0	72.7	72.7	73.1	72.4	72.4	72.4
3150	76.4	73.5	73.4	72.4	71.3	72.4	71.7	72.1	70.0	73.7	73.1	69.6	69.1	68.6	68.6	69.1	68.4	68.4	68.4
4000	71.9	68.9	68.7	68.0	66.7	67.9	67.1	67.7	65.5	69.3	68.7	65.0	64.8	63.9	63.9	64.7	63.9	63.9	63.9
5000	67.0	64.1	63.6	63.2	61.9	63.0	62.3	62.8	60.4	64.5	63.8	60.0	59.9	58.9	58.9	59.7	58.9	58.9	58.9
6300	61.9	59.0	58.3	58.0	56.6	57.8	57.1	57.8	55.0	59.4	58.8	54.9	54.8	53.6	53.6	54.7	53.9	53.9	53.9
8000	57.8	54.3	53.8	53.3	52.0	53.1	52.5	53.4	50.2	55.3	54.7	50.2	50.3	48.4	48.4	50.5	49.5	49.5	49.5
10000	53.4	49.1	49.0	48.0	46.6	47.8	47.0	48.7	44.2	50.8	50.1	44.7	44.8	43.1	43.1	45.7	44.6	44.6	44.6
12500	48.5	43.2	43.4	42.2	40.9	41.8	40.6	43.1	38.4	45.6	45.0	39.0	39.0	37.4	37.4	40.1	38.9	38.9	38.9
16000	42.7	36.8	37.3	36.1	34.4	35.4	34.4	36.8	31.6	39.5	38.7	31.8	32.2	30.0	30.0	33.9	32.2	32.2	32.2
20000	35.9	29.5	29.3	26.6	25.6	26.8	25.1	28.6	21.1	32.3	31.5	22.7	23.7	20.6	20.6	25.9	23.1	23.1	23.1
25000	27.0	16.2	16.0	15.3	12.4	13.6	11.7	18.6	6.9	23.1	22.7	7.6	9.9	6.9	6.9	12.9	9.9	9.9	9.9

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
MILITARY POWER (97.7)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.5	94.2	93.8	92.8	92.0	93.3	92.6	93.2	91.3	94.3	93.5	90.8	90.2	89.3	89.3	89.6	89.3	89.3	89.3
250	94.4	92.1	91.7	90.7	89.9	91.2	90.6	91.1	89.2	92.2	91.4	88.7	88.1	87.2	87.2	87.5	87.3	87.3	87.3
315	92.3	90.0	89.6	88.6	87.8	89.1	88.4	89.0	87.0	90.1	89.3	86.5	86.0	85.1	85.1	85.5	85.2	85.2	85.2
400	90.2	87.8	87.4	86.5	85.7	86.9	86.3	86.9	84.9	88.0	87.2	84.4	83.9	82.9	82.9	83.3	83.0	83.0	83.0
500	88.1	85.6	85.2	84.3	83.4	84.7	84.1	84.7	82.6	85.8	85.0	82.2	81.7	80.7	80.7	81.2	80.8	80.8	80.8
630	85.8	83.4	82.9	82.0	81.2	82.4	81.8	82.4	80.4	83.6	82.8	79.9	79.4	78.5	78.5	78.9	78.6	78.6	78.6
800	83.6	81.0	80.6	79.7	78.8	80.1	79.5	80.1	78.0	81.3	80.6	77.6	77.1	76.1	76.1	76.7	76.3	76.3	76.3
1000	81.3	78.6	78.1	77.3	76.4	77.7	77.0	77.7	75.6	79.0	78.2	75.2	74.8	73.7	73.7	74.3	73.9	73.9	73.9
1250	78.8	76.1	75.6	74.8	73.9	75.2	74.5	75.3	73.1	76.5	75.8	72.6	72.3	71.2	71.2	71.9	71.4	71.4	71.4
1600	76.3	73.5	72.9	72.2	71.3	72.5	71.9	72.7	70.4	74.0	73.3	70.0	69.8	68.6	68.6	69.4	68.8	68.8	68.8
2000	73.8	70.8	70.2	69.5	68.5	69.8	69.2	70.0	67.7	71.4	70.7	67.3	67.2	65.9	65.9	66.8	66.1	66.1	66.1
2500	70.8	67.8	67.2	66.6	65.6	66.8	66.2	67.1	64.7	68.4	67.7	64.2	64.3	63.0	63.0	63.9	63.2	63.2	63.2
3150	67.5	64.5	63.9	63.4	62.3	63.6	63.0	63.9	61.4	65.2	64.4	61.0	61.2	59.7	59.7	60.7	59.9	59.9	59.9
4000	63.8	60.9	60.2	59.9	58.7	60.0	59.4	60.4	57.8	61.5	60.7	57.3	57.7	56.2	56.2	57.1	56.3	56.3	56.3
5000	59.7	56.9	56.2	56.0	54.7	56.0	55.5	56.3	53.8	57.4	56.5	53.3	53.7	52.2	52.2	53.1	52.3	52.3	52.3
6300	55.4	52.6	51.8	51.7	50.4	51.7	51.1	52.0	49.4	53.1	52.1	48.9	49.4	47.8	47.8	48.8	48.0	48.0	48.0
8000	51.5	48.5	47.8	47.7	46.3	47.6	47.0	48.0	45.2	49.2	48.3	44.8	45.4	43.7	43.7	44.9	44.0	44.0	44.0
10000	47.4	44.8	43.3	43.3	41.9	43.1	42.5	43.6	40.6	45.0	44.2	40.4	41.1	39.2	39.2	40.7	39.7	39.7	39.7
12500	42.9	39.1	38.6	38.5	37.2	38.2	37.6	38.9	35.6	40.5	39.7	35.6	36.3	34.4	34.4	36.2	35.0	35.0	35.0
16000	38.0	33.9	33.4	33.2	32.0	32.9	32.2	33.7	30.2	35.5	34.9	30.4	31.1	29.2	29.2	31.2	29.9	29.9	29.9
20000	32.6	28.2	28.0	27.5	26.4	27.2	26.4	28.1	24.4	30.1	29.5	24.9	25.3	23.5	23.5	25.7	24.4	24.4	24.4
25000	26.7	22.3	22.2	21.4	20.5	21.2	20.3	21.9	18.3	24.2	23.7	19.1	19.1	17.4	17.4	19.7	18.6	18.6	18.6

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
MILITARY POWER (97.7)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE G4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	97.0	94.9	94.6	93.6	92.6	94.0	93.2	93.2	91.3	94.3	93.5	90.8	90.2	89.9	89.9	89.6	89.3	89.3	89.3
250	95.0	92.8	92.5	91.5	90.5	91.9	91.1	91.1	89.2	92.2	91.4	88.7	88.1	87.8	87.8	87.5	87.3	87.3	87.3
315	92.9	90.7	90.4	89.4	88.3	89.8	89.0	89.0	87.0	90.1	89.3	86.5	86.0	85.6	85.6	85.5	85.2	85.2	85.2
400	90.8	88.5	88.3	87.3	86.2	87.6	86.8	86.9	84.9	88.0	87.2	84.4	83.9	83.5	83.5	83.3	83.0	83.0	83.0
500	88.6	86.3	86.0	85.1	84.0	85.4	84.6	84.7	82.6	85.8	85.0	82.2	81.7	81.3	81.3	81.2	80.8	80.8	80.8
630	86.4	84.1	83.7	82.8	81.7	83.1	82.4	82.4	80.4	83.6	82.8	79.9	79.4	79.0	79.0	78.9	78.6	78.6	78.6
800	84.1	81.7	81.4	80.5	79.3	80.8	80.0	80.1	78.0	81.3	80.6	77.6	77.1	76.7	76.7	76.7	76.3	76.3	76.3
1000	81.8	79.3	79.0	78.1	76.9	78.4	77.6	77.7	75.6	79.0	78.2	75.2	74.8	74.3	74.3	74.3	73.9	73.9	73.9
1250	79.4	76.8	76.4	75.6	74.4	75.8	75.1	75.3	73.1	76.5	75.8	72.6	72.3	71.8	71.8	71.9	71.4	71.4	71.4
1600	76.9	74.2	73.8	73.8	71.8	73.2	72.5	72.7	70.4	74.0	73.3	70.0	69.8	69.2	69.2	69.4	68.8	68.8	68.8
2000	74.3	71.5	71.0	70.3	69.1	70.5	69.7	70.0	67.7	71.4	70.7	67.3	67.2	66.5	66.5	66.8	66.1	66.1	66.1
2500	71.3	68.5	68.0	67.4	66.1	67.5	66.8	67.1	64.7	68.4	67.7	64.2	64.3	63.5	63.5	63.9	63.2	63.2	63.2
3150	68.0	65.2	64.7	64.3	62.8	64.3	63.5	63.9	61.4	65.2	64.4	61.0	61.2	60.3	60.3	60.7	59.9	59.9	59.9
4000	64.3	61.5	60.9	60.6	59.1	60.6	59.9	60.4	57.8	61.5	60.7	57.3	57.7	56.6	56.6	57.1	56.3	56.3	56.3
5000	60.1	57.4	56.7	56.5	55.0	56.4	55.8	56.3	53.8	57.4	56.5	53.3	53.7	52.5	52.5	53.1	52.3	52.3	52.3
6300	55.6	52.9	52.2	52.0	50.6	52.0	51.4	52.0	49.4	53.1	52.1	48.9	49.4	48.0	48.0	48.0	48.0	48.0	48.0
8000	51.7	48.6	47.9	47.9	46.4	47.7	47.1	48.0	45.2	49.2	48.3	44.8	45.4	43.8	43.8	44.9	44.0	44.0	44.0
10000	47.4	44.0	43.3	43.3	41.9	43.1	42.5	43.6	40.6	45.0	44.2	40.4	41.1	39.2	39.2	40.7	39.7	39.7	39.7
12500	42.9	39.1	38.6	38.5	37.2	38.2	37.6	38.9	35.6	40.5	39.7	35.6	36.3	34.4	34.4	36.2	35.0	35.0	35.0
16000	38.0	33.9	33.4	33.2	32.0	32.9	32.2	33.7	30.2	35.5	34.9	30.4	31.1	29.2	29.2	31.2	29.9	29.9	29.9
20000	32.6	28.2	28.0	27.5	26.4	27.2	26.4	28.1	24.4	30.1	29.5	24.9	25.3	23.5	23.5	25.7	24.4	24.4	24.4
25000	26.7	22.3	22.2	21.4	20.5	21.2	20.3	21.9	18.3	24.2	23.7	19.1	19.1	17.4	17.4	19.7	18.6	18.6	18.6

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

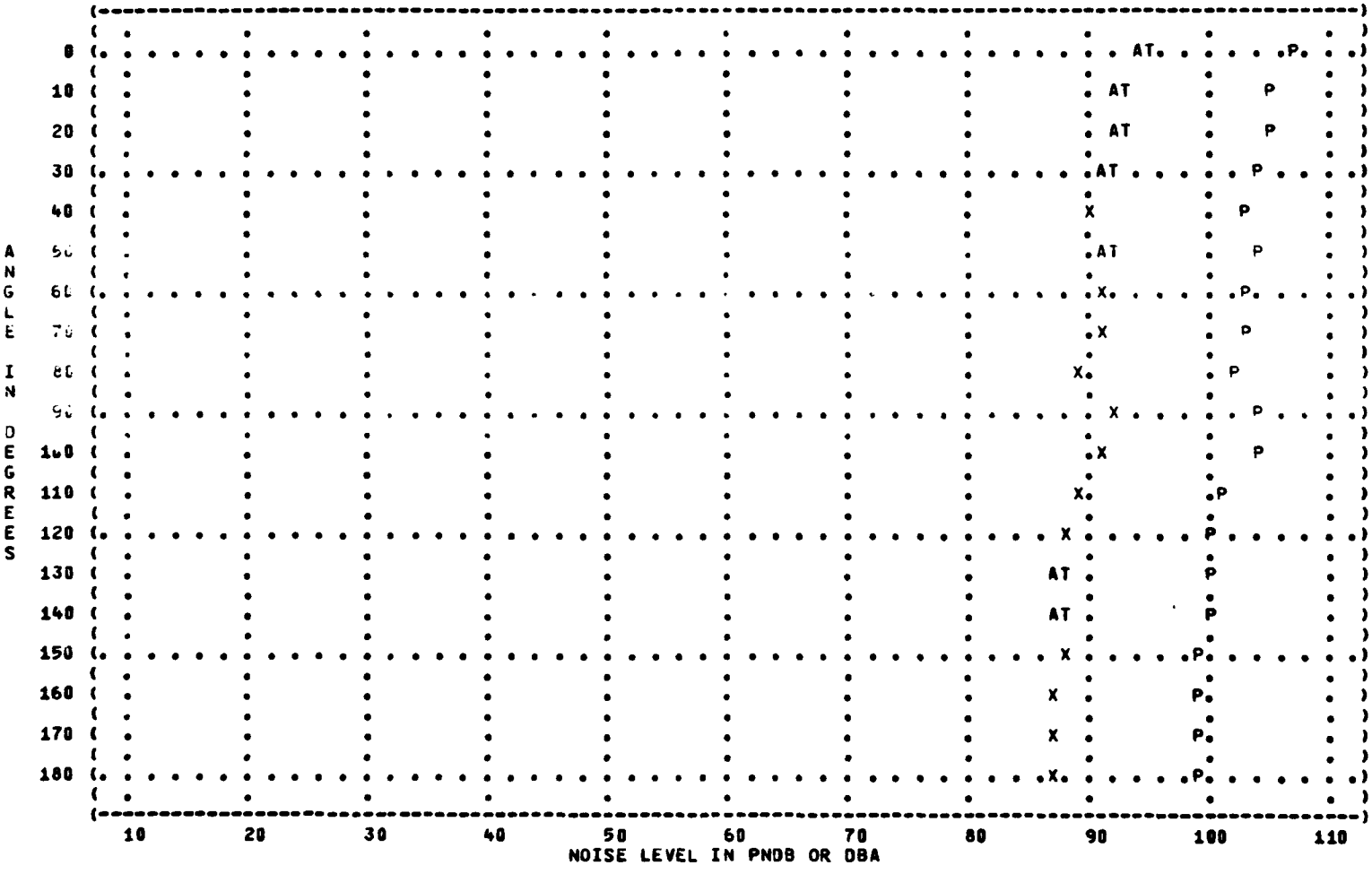
NOISE SOURCE/SUBJECT:
A-7 NOISE SUPPRESSOR
AF32A-24

OPERATION:
MILITARY POWER (97.7)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-833-001
RUN 04
AIRCRAFT CODE 833
OPERATION CODE 00104
PROFILE VERSION A
26 NOV 79
PAGE J4

P=PNLT A=AL T=ALT



USAF KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR

NOISE PRODUCED ON THE GROUND BY

KC-135A NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-726-001
AIRCRAFT CODE: 726
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Engine Runup, 80% RPM	55-60
Military Power (Dry), 96% RPM	61-66
Military Power (Wet), 96% RPM	67-72

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
- NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
- PERCEIVED NOISE LEVEL
- TONE-CORRECTED, PERCEIVED NOISE LEVEL
- A-WEIGHTED OVERALL SOUND LEVEL
- TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR KC-135A NOISE SUPPRESSOR

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 01
AIRCRAFT CODE 726
OPERATION CODE 81019
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
80% RPM
INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

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

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 01

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
80% RPM
INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

AIRCRAFT CODE 726
OPERATION CODE 01019
PROFILE VERSION A
28 NOV 79
PAGE D1

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	112.4	112.4	117.1	115.1	108.6	116.3	111.8	110.2	112.4	109.2	108.5	105.9	111.7	111.5	110.0	106.4	103.7	96.6	94.9
250	110.1	110.1	114.7	112.8	106.3	113.9	109.5	107.9	110.0	106.9	106.2	103.4	109.3	109.2	107.5	104.2	101.5	94.4	92.6
315	107.6	107.6	112.2	110.5	103.9	111.4	107.0	105.4	107.6	104.5	103.6	100.9	106.7	106.7	105.0	101.9	99.2	92.1	90.2
400	105.0	105.3	109.7	108.1	101.5	108.8	104.4	102.8	105.0	101.9	101.2	98.2	104.0	104.0	102.3	99.5	96.8	89.7	87.6
500	102.4	102.8	106.9	105.6	99.0	106.1	101.7	100.1	102.3	99.3	98.6	95.4	101.2	101.2	99.5	97.1	94.4	87.2	84.9
630	99.5	100.2	104.1	103.0	96.4	103.2	98.8	97.2	99.4	96.5	95.7	92.3	98.1	98.2	96.5	94.5	91.8	84.6	82.1
800	96.4	97.5	101.0	100.3	93.7	100.1	95.7	94.1	96.4	93.4	92.8	89.1	94.8	95.0	93.3	91.8	89.1	81.9	79.1
1000	93.4	94.6	97.6	97.4	90.8	96.8	92.3	90.7	93.0	90.2	89.9	85.7	91.7	91.5	90.4	88.9	86.3	79.0	75.8
1250	90.2	91.6	94.0	94.3	87.7	93.7	88.6	87.0	89.4	86.6	86.8	82.6	88.6	88.4	87.3	85.9	83.2	76.0	72.5
1600	86.9	88.3	89.9	91.0	84.4	90.3	84.5	82.9	85.3	83.2	83.4	79.2	85.2	85.3	83.9	82.6	80.0	72.7	69.2
2000	83.3	84.8	85.6	87.4	80.8	86.7	79.9	78.4	81.5	79.6	79.9	75.6	81.6	82.1	80.3	79.1	76.5	69.1	65.5
2500	79.3	80.9	81.6	83.5	76.8	82.7	75.3	73.4	77.5	75.7	75.9	71.6	77.6	78.1	76.4	75.2	72.6	65.1	61.5
3150	75.8	76.6	77.2	79.1	72.4	78.3	70.8	68.9	73.1	71.3	71.6	67.2	73.3	73.8	72.0	70.9	68.2	60.6	56.9
4000	70.1	71.8	72.3	74.3	67.4	73.4	65.7	63.8	68.1	66.3	66.7	62.3	68.4	69.8	67.8	65.9	63.3	55.4	51.7
5000	64.7	66.5	66.8	68.9	61.9	67.9	60.1	58.0	62.6	60.9	61.2	57.2	62.9	64.8	61.6	60.6	57.8	49.6	45.6
6300	58.6	60.3	60.6	62.7	55.5	61.6	53.6	51.6	56.4	54.6	55.2	51.8	56.9	58.9	56.2	54.5	51.8	42.5	38.8
8000	51.9	53.7	54.4	55.9	48.6	54.7	46.4	44.0	49.6	47.9	48.5	46.6	51.7	54.4	51.4	48.1	44.7	36.9	30.9
10000	43.9	45.8	47.1	48.2	39.5	46.6	37.1	34.5	41.0	41.1	42.2	40.9	46.1	49.6	45.9	40.8	38.6	30.6	20.1
12500	36.1	36.1	37.8	37.6	27.6	35.7	26.2	25.6	33.0	34.8	35.7	34.2	40.4	43.6	39.3	34.8	31.8	20.8	10.2
16000	27.0	26.4	29.0	26.1	12.2	20.8	9.9	13.4	22.8	26.3	27.6	27.8	33.3	37.4	32.8	26.7	22.1	7.2	.4
20000	12.8	11.8	15.3	8.1		5.9		1.2	10.5	13.6	16.1	14.5	25.7	30.5	23.5	15.5	11.1		
25000			1.5							.9	4.7	1.9	12.5	21.5	9.4	4.4	.1		

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
88% RPM
INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 01
AIRCRAFT CODE 726
OPERATION CODE 01019
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	114.6	115.1	119.1	118.2	111.3	119.2	114.6	113.2	115.8	112.1	111.2	107.6	113.7	113.5	111.8	108.9	106.3	98.3	97.0
250	112.2	112.7	116.8	116.0	109.0	116.8	112.3	110.8	113.5	109.8	108.8	105.1	111.3	111.1	109.3	106.6	104.1	96.1	94.6
315	109.8	110.3	114.3	113.6	106.6	114.4	109.8	108.4	111.0	107.3	106.4	102.6	108.7	108.6	106.8	104.3	101.8	93.8	92.2
400	107.2	107.9	111.7	111.2	104.2	111.8	107.2	105.8	108.4	104.8	103.9	99.9	106.0	105.9	104.1	102.0	99.4	91.4	89.6
500	104.5	105.5	109.8	108.8	101.7	109.1	104.5	103.1	105.7	102.2	101.2	97.1	103.2	103.1	101.3	99.5	96.9	88.9	87.8
630	101.7	102.9	106.1	106.2	99.1	106.2	101.6	100.2	102.9	99.3	98.4	94.0	100.1	100.1	98.3	96.9	94.4	86.4	84.1
800	98.6	100.2	103.8	103.4	96.4	103.1	98.5	97.1	99.8	96.3	95.4	90.8	96.8	96.9	95.1	94.2	91.7	83.6	81.1
1000	95.5	97.3	99.7	100.5	93.5	99.8	95.1	93.7	96.5	93.1	92.5	87.4	93.7	93.4	92.2	91.4	88.8	80.8	77.8
1250	92.4	94.3	96.0	97.4	90.4	96.6	91.4	90.0	92.8	89.5	89.4	84.3	90.6	90.3	89.1	88.3	85.8	77.7	74.6
1600	89.1	91.0	92.0	94.1	87.1	93.3	87.3	85.9	88.8	86.1	86.1	80.9	87.2	87.2	85.7	85.1	82.6	74.4	71.2
2000	85.5	87.4	87.7	90.5	83.5	89.6	82.7	81.4	84.9	82.5	82.5	77.3	83.6	84.0	82.1	81.6	79.0	70.8	67.6
2500	81.5	83.5	83.7	86.6	79.5	85.6	78.1	76.4	80.9	78.5	78.6	73.3	79.6	80.0	78.2	77.7	75.2	66.8	63.6
3150	77.2	79.3	79.2	82.3	75.1	81.2	73.6	71.8	76.5	74.1	74.2	68.9	75.3	75.7	73.8	73.3	70.8	62.3	59.0
4000	71.9	73.9	73.9	76.8	69.6	75.7	68.8	66.1	70.8	68.6	68.8	63.6	70.8	70.5	68.5	67.9	65.3	56.8	53.3
5000	66.0	68.1	68.0	70.8	63.5	69.6	61.7	59.8	64.6	62.6	62.8	58.2	64.1	65.1	62.7	62.0	59.4	50.7	46.9
6300	59.5	61.4	61.5	64.0	56.6	62.8	54.7	52.8	57.7	55.8	56.2	52.5	57.7	59.6	56.9	55.5	52.8	43.2	38.8
8000	52.3	54.2	54.8	56.6	49.1	55.3	47.0	44.6	50.3	48.5	49.1	46.9	52.1	54.7	51.7	48.6	45.2	37.3	31.3
10000	43.9	45.8	47.1	48.2	39.5	46.6	37.1	34.5	41.0	41.1	42.2	40.9	46.1	49.6	45.9	40.8	38.6	30.6	20.1
12500	36.1	36.1	37.8	37.6	27.6	35.7	26.2	25.6	33.0	34.8	35.7	34.2	40.4	43.6	39.3	34.8	31.8	20.8	10.2
16000	27.0	26.4	29.8	26.1	12.2	28.8	9.9	13.4	22.8	26.3	27.6	27.0	33.3	37.4	32.0	26.7	22.1	7.2	.4
20000	12.8	11.8	15.3	8.1		5.9		1.2	10.5	13.6	16.1	14.5	25.7	30.5	23.5	15.5	11.1		
25000			1.5							.9	4.7	1.9	12.5	21.5	9.4	4.4	.1		

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
80% RPM
INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 01
AIRCRAFT CODE 726
OPERATION CODE 81019
PROFILE VERSION A
28 NOV 79
PAGE F1

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	98.3	99.2	102.6	102.3	95.0	102.5	96.9	95.0	97.6	93.7	93.9	90.5	96.4	96.3	94.4	91.7	89.1	82.2	80.1
250	96.0	96.9	100.3	100.0	92.7	100.2	94.5	92.7	95.2	91.4	91.6	88.2	94.0	94.0	92.1	89.4	86.9	80.0	77.8
315	93.6	94.6	97.9	97.7	90.4	97.9	92.1	90.2	92.8	89.1	89.2	85.8	91.6	91.7	89.7	87.2	84.6	77.8	75.5
400	91.2	92.3	95.4	95.3	88.0	95.4	89.5	87.6	90.3	86.7	86.8	83.3	89.0	89.3	87.3	84.8	82.3	75.5	73.1
500	88.7	89.8	92.8	92.8	85.5	92.9	86.9	85.0	87.7	84.2	84.3	80.8	86.4	86.8	84.7	82.4	79.9	73.2	70.6
630	86.1	87.3	90.0	90.2	83.0	90.2	84.1	82.1	85.0	81.5	81.7	78.2	83.7	84.3	82.1	80.0	77.5	70.8	68.0
800	83.4	84.7	87.2	87.6	80.3	87.4	81.1	79.1	82.1	78.8	79.0	75.6	81.0	81.7	79.4	77.4	75.0	68.3	65.4
1000	80.5	81.9	84.2	84.7	77.4	84.4	77.9	75.9	79.1	75.0	76.2	72.9	78.2	79.2	76.7	74.8	72.4	65.7	62.6
1250	77.5	79.0	81.0	81.0	74.5	81.3	74.5	72.5	75.9	73.0	73.3	70.1	75.3	76.5	73.9	72.1	69.7	63.0	59.7
1600	74.4	75.9	77.6	78.6	71.3	78.0	70.9	68.9	72.5	70.0	70.3	67.3	72.3	73.6	71.1	69.2	66.9	60.2	56.8
2000	71.1	72.7	74.1	75.3	68.0	74.5	67.1	65.0	68.9	66.7	67.2	64.4	69.3	71.1	68.2	66.2	63.9	57.3	53.7
2500	67.6	69.2	70.3	71.7	64.3	70.7	63.1	61.0	65.1	63.4	63.0	61.4	66.1	68.1	65.0	62.9	60.7	54.1	50.4
3150	63.8	65.4	66.4	67.7	60.4	66.7	58.8	56.8	61.2	59.8	60.3	58.1	62.6	64.8	61.7	59.3	57.2	50.6	46.9
4000	59.7	61.2	62.2	63.4	56.1	62.3	54.4	52.4	56.9	55.9	56.4	54.5	58.9	61.1	58.0	55.3	53.3	46.6	43.0
5000	55.1	56.5	57.6	58.6	51.2	57.3	49.6	47.8	52.3	51.5	52.0	50.5	54.7	57.0	53.9	50.9	48.9	42.6	38.8
6300	50.1	51.3	52.6	53.1	45.8	51.8	44.4	42.7	47.2	46.9	47.3	46.1	50.1	52.6	49.4	46.2	44.2	38.1	34.2
8000	44.8	45.8	47.4	47.2	40.1	45.8	39.0	37.7	42.0	42.4	42.8	42.0	46.0	48.7	45.3	41.6	39.8	34.0	29.9
10000	39.3	39.8	41.7	40.7	34.0	39.2	33.3	32.5	36.8	37.7	38.1	37.6	41.5	44.5	40.9	36.9	35.2	29.6	25.3
12500	33.5	33.6	35.7	34.0	27.8	32.3	27.4	27.2	31.4	32.8	33.2	32.7	36.7	39.9	36.1	32.0	30.4	24.9	20.4
16000	27.5	27.3	29.3	27.3	21.7	25.4	21.4	21.6	25.7	27.4	27.9	27.4	31.6	34.9	30.9	26.9	25.2	19.9	15.1
20000	21.2	20.9	22.5	20.5	15.6	18.4	15.1	15.6	19.7	21.7	22.1	21.6	26.0	29.5	25.3	21.4	19.6	14.5	9.4
25000	14.5	14.3	15.3	13.5	9.6	11.3	8.6	9.3	13.2	15.5	15.8	15.4	20.0	23.4	19.2	15.6	13.6	8.8	3.1

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 01
AIRCRAFT CODE 726
OPERATION CODE 01019
PROFILE VERSION A
28 NOV 79
PAGE G1

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
80% RPM
INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	100.5	101.8	104.7	105.4	97.7	105.5	99.7	98.0	101.0	96.6	96.5	92.2	98.4	98.2	96.2	94.1	91.7	83.9	82.1
250	98.2	99.6	102.3	103.2	95.4	103.2	97.3	95.6	98.7	94.3	94.2	89.9	96.0	95.9	93.9	91.9	89.5	81.7	79.8
315	95.8	97.3	99.9	100.8	93.1	100.8	94.9	93.2	96.3	91.9	91.9	87.5	93.6	93.6	91.5	89.6	87.2	79.5	77.5
400	93.4	94.9	97.4	98.4	90.7	98.3	92.3	90.6	93.8	89.5	89.5	85.0	91.0	91.2	89.0	87.3	84.9	77.3	75.1
500	90.9	92.5	94.8	96.0	88.2	95.8	89.7	87.9	91.2	87.0	86.9	82.5	88.4	88.7	86.5	84.9	82.5	74.9	72.6
630	88.3	90.8	92.1	93.4	85.7	93.1	86.9	85.1	88.4	84.4	84.4	79.9	85.7	86.2	83.9	82.4	80.1	72.5	70.1
800	85.6	87.3	89.2	90.7	83.0	90.3	83.9	82.1	85.6	81.7	81.7	77.3	83.0	83.6	81.2	79.9	77.6	70.0	67.4
1000	82.7	84.6	86.2	87.9	80.2	87.4	80.7	78.9	82.5	78.9	78.9	74.6	80.2	81.0	78.5	77.3	75.0	67.5	64.6
1250	79.7	81.7	83.0	84.9	77.2	84.3	77.3	75.5	79.3	75.9	76.0	71.8	77.3	78.4	75.7	74.5	72.3	64.8	61.8
1600	76.6	78.6	79.7	81.8	74.0	81.0	73.7	71.8	75.9	72.8	72.9	69.0	74.3	75.7	72.9	71.6	69.5	62.0	58.8
2000	73.3	75.4	76.1	78.4	70.7	77.4	69.9	68.0	72.3	69.6	69.8	66.1	71.3	73.0	69.9	68.6	66.5	59.0	55.7
2500	69.8	71.9	72.4	74.8	67.1	73.7	65.9	64.0	68.6	66.2	66.5	63.0	68.1	70.0	66.8	65.3	63.3	55.8	52.4
3150	66.0	68.1	68.5	70.9	63.1	69.6	61.6	59.8	64.6	62.6	62.9	59.8	64.6	66.6	63.5	61.7	59.7	52.4	48.9
4000	61.4	63.3	63.8	65.9	58.2	64.6	56.6	54.8	59.7	58.2	58.5	55.9	60.5	62.6	59.4	57.3	55.4	48.2	44.7
5000	56.4	58.1	58.9	60.4	52.9	59.1	51.3	49.6	54.3	53.3	53.6	51.5	55.9	58.1	55.0	52.4	50.5	43.7	40.0
6300	50.9	52.4	53.5	54.4	46.9	53.0	45.5	43.9	48.5	48.0	48.3	46.8	50.9	53.3	50.2	47.1	45.3	38.8	35.0
8000	45.3	46.3	47.8	47.8	40.6	46.4	39.6	38.3	42.7	43.0	43.3	42.3	46.4	49.1	45.7	42.1	40.3	34.3	30.3
10000	39.3	39.8	41.7	40.7	34.0	39.2	33.3	32.5	36.8	37.7	38.1	37.6	41.5	44.5	40.9	36.9	35.2	29.6	25.3
12500	33.5	33.6	35.7	34.0	27.8	32.3	27.4	27.2	31.4	32.8	33.2	32.7	36.7	39.9	36.1	32.0	30.4	24.9	20.4
16000	27.5	27.3	29.3	27.3	21.7	25.4	21.4	21.6	25.7	27.4	27.9	27.4	31.6	34.9	30.9	26.9	25.2	19.9	15.1
20000	21.2	20.9	22.5	20.5	15.6	18.4	15.1	15.6	19.7	21.7	22.1	21.6	26.0	29.5	25.3	21.4	19.6	14.5	9.4
25000	14.5	14.3	15.3	13.5	9.6	11.3	8.6	9.3	13.2	15.5	15.8	15.4	20.0	23.4	19.2	15.6	13.6	8.8	3.1

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
80% RPM
INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 0.2
TEST 77-726-001
RUN 01
AIRCRAFT CODE 726
OPERATION CODE 01019
PROFILE VERSION A
28 NOV 79
PAGE J1

P=PNLT A=AL T=ALT

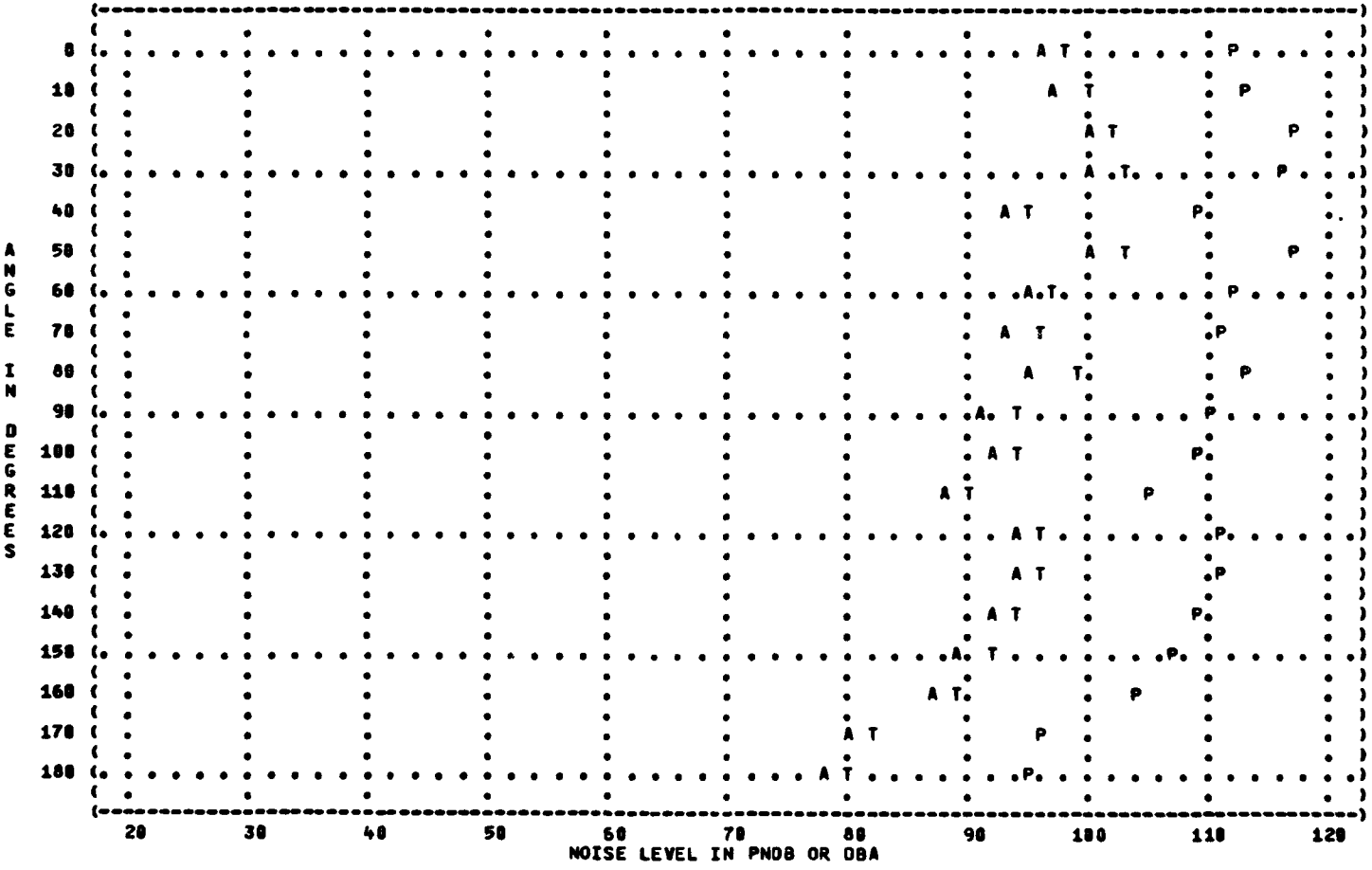


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 02
AIRCRAFT CODE 726
OPERATION CODE 01031
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (DRY)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	89	84	81	86	83	85	86	87	86	88	88	87	89	87	93	88	79	69<	66<
63	85	82	85	85	82	86	82	83	85	87	88	90	91	89	92	88	82	69<	66<
80	84	83	86	84	84	85	82	82	84	87	88	89	91	92	91	87	83	69<	66<
100	86	87	85	86	84	86	84	84	85	87	88	90	93	94	93	87	83	69<	66<
125	87	87	84	86	86	85	84	82	85	87	88	92	95	96	95	89	82	69<	66<
160	84	85	85	86	85	83	82	82	84	87	89	92	95	96	93	88	80	69	66<
200	82	83	84	84	83	82	82	82	85	86	88	91	92	95	90	86	80	71	66
250	85	85	84	84	86	82	82	81	86	87	89	94	96	95	91	88	80	71	70
315	83	84	83	84	84	80	80	78	82	86	86	96	98	95	91	87	80	73	72
400	80	82	80	79	81	77	78	75	80	86	88	95	96	95	89	86	79	70	70
500	79	80	78	78	78	75	77	73	80	86	90	93	94	92	87	84	77	66	69
630	78	79	77	77	77	74	77	72	80	86	89	92	91	91	85	84	77	67	67
800	78	80	78	78	76	74	78	72	80	85	88	93	89	91	85	83	77	68	67
1000	76	79	78	78	74	74	79	72	78	84	86	92	88	90	84	82	77	69	66
1250	76	76	76	76	72	72	76	70	77	82	84	91	86	89	83	83	76	71	66
1600	76	77	77	78	73	72	75	7u	77	83	84	90	86	88	83	82	78	71	65
2000	78	80	81	81	76	77	79	73	78	82	84	90	86	88	83	82	77	68	65
2500	86	88	90	89	85	86	90	82	85	86	83	89	86	89	85	85	78	70	68
3150	84	87	87	88	83	84	88	81	84	86	83	87	84	87	82	84	77	68	67
4000	77	80	81	81	75	76	80	72	76	79	80	84	83	85	79	78	75	64	62
5000	77	81	82	82	76	77	80	74	75	78	77	81	79	81	76	75	71	60	60
6300	75	78	79	79	74	75	80	72	75	77	76	81	78	80	75	74	71	60	58
8000	73	75	77	76	71	72	76	68	69	72	72	77	75	76	72	70	67	56	54
10000	7u	72	73	73	67	69	72	65	66	70	70	74	74	75	71	69	67	53	52
OVERALL	97	97	97	97	95	95	96	94	96	99	100	105	105	105	103	99	93	83	80

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (DRY)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 02
AIRCRAFT CODE 726
OPERATION CODE 01031
PROFILE VERSION A
26 NOV 79
PAGE D2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	110.2	111.8	112.5	112.1	109.8	109.8	112.3	106.1	109.4	112.1	111.7	116.5	115.4	116.6	112.4	111.1	105.8	95.5	93.3
250	107.9	109.6	110.3	109.9	106.7	106.7	110.0	103.8	107.2	109.8	109.4	114.3	113.2	114.4	110.2	108.9	102.8	93.2	91.1
315	105.6	107.3	108.0	107.6	104.5	104.4	107.7	101.5	104.9	107.5	107.1	112.1	111.1	112.2	108.0	106.7	100.5	90.9	88.8
400	103.3	104.9	105.6	105.2	102.1	102.1	105.3	99.1	102.6	105.2	104.8	109.7	108.8	109.9	105.7	104.3	98.1	88.5	86.4
500	100.8	102.4	103.1	102.7	99.6	99.6	102.8	96.6	100.1	102.7	102.3	107.3	106.5	107.5	103.3	101.9	95.6	86.1	83.9
630	98.2	99.8	100.5	100.1	97.0	97.0	100.2	94.0	97.5	100.2	99.8	104.8	104.1	105.0	100.7	99.3	93.0	83.5	81.3
800	95.4	97.1	97.7	97.3	94.3	94.2	97.4	91.2	94.8	97.5	97.1	102.2	101.7	102.3	98.1	96.6	90.3	80.7	78.6
1000	92.5	94.1	94.8	94.3	91.4	91.2	94.5	88.3	91.9	94.6	94.3	99.4	99.0	99.5	95.3	93.8	87.4	77.9	75.7
1250	89.3	91.0	91.6	91.1	88.2	88.0	91.3	85.1	88.8	91.5	91.2	96.3	96.1	96.5	92.2	90.7	84.2	74.8	72.6
1600	85.9	87.5	88.1	87.7	84.8	84.6	87.9	81.6	85.4	88.2	88.1	93.3	93.2	93.3	88.8	87.3	80.9	71.4	69.2
2000	82.2	83.8	84.4	83.9	81.1	80.8	84.1	77.9	81.7	84.5	85.0	90.1	90.1	90.1	85.2	83.7	77.2	67.7	65.6
2500	78.0	79.6	80.2	79.7	76.9	76.6	79.9	73.7	77.6	80.5	81.5	86.3	86.2	86.2	81.2	79.7	73.1	63.8	61.4
3150	73.4	75.0	75.5	75.0	72.2	71.9	75.3	68.9	73.0	76.1	77.6	82.1	81.9	81.9	76.9	75.2	68.7	59.5	56.9
4000	68.1	69.7	70.1	69.7	66.9	66.4	69.9	63.5	67.8	71.2	73.3	77.7	77.1	77.1	72.3	70.1	63.9	54.7	51.9
5000	62.2	63.8	64.2	63.7	60.9	60.4	63.9	57.3	61.9	66.3	68.4	73.1	72.2	72.2	67.3	64.9	58.7	49.2	46.2
6300	55.4	57.2	57.5	57.0	54.2	53.4	57.2	50.2	55.7	60.9	63.3	68.1	67.1	67.2	62.1	59.6	53.0	42.7	40.2
8000	49.5	51.3	50.4	49.9	48.4	46.0	49.9	43.0	51.0	56.6	59.1	63.7	63.2	62.8	57.9	55.1	47.4	36.5	34.9
10000	43.9	45.5	43.7	43.7	42.9	40.0	42.9	36.9	45.4	51.6	54.3	59.0	58.8	58.3	53.2	50.2	41.5	28.2	28.2
12500	37.4	39.0	37.1	37.4	36.4	32.3	35.2	28.9	38.6	46.0	49.3	54.1	54.2	53.5	48.1	44.5	34.9	17.1	19.2
16000	30.3	31.9	29.4	29.4	29.3	23.0	27.3	19.7	32.0	39.5	43.3	48.6	49.0	47.9	42.1	38.1	27.3	6.0	7.6
20000	20.1	22.8	18.5	18.4	19.4	10.8	15.4	10.5	22.6	32.6	36.2	42.2	42.6	41.6	35.5	30.3	15.9		
25000	9.9	9.9	7.6	7.4	9.6		3.6	1.3	7.6	21.9	28.0	33.8	35.8	34.6	26.1	19.8	4.5		

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PND8)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (DRY)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-081
RUN 02
AIRCRAFT CODE 726
OPERATION CODE 01031
PROFILE VERSION A
28 NOV 79
PAGE E2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	111.9	113.5	114.6	113.6	111.8	110.9	114.1	107.8	110.9	112.1	111.7	116.5	115.4	116.6	112.4	111.1	105.8	95.5	93.3
250	109.7	111.2	112.3	111.3	108.8	108.6	111.8	105.5	108.7	109.8	109.4	114.3	113.2	114.4	110.2	108.9	102.8	93.2	91.1
315	107.4	108.9	110.0	109.0	106.5	106.3	109.5	103.2	106.4	107.5	107.1	112.1	111.1	112.2	108.0	106.7	100.5	90.9	88.8
400	105.0	106.6	107.6	106.7	104.1	103.9	107.1	100.8	104.0	105.2	104.8	109.7	108.8	109.9	105.7	104.3	98.1	88.5	86.4
500	102.6	104.1	105.1	104.2	101.6	101.5	104.6	98.4	101.6	102.7	102.3	107.3	106.5	107.5	103.3	101.9	95.6	86.1	83.9
630	100.8	101.5	102.5	101.5	99.8	98.8	102.0	95.7	99.0	100.2	99.8	104.8	104.1	105.0	100.7	99.3	93.0	83.5	81.3
800	97.2	98.7	99.7	98.8	96.3	96.1	99.2	92.9	96.3	97.5	97.1	102.2	101.7	102.3	98.1	96.6	90.3	80.7	78.6
1000	94.3	95.8	96.8	95.8	93.4	93.1	96.3	90.0	93.4	94.6	94.3	99.4	99.0	99.5	95.3	93.8	87.4	77.9	75.7
1250	91.1	92.6	93.6	92.6	90.2	89.9	93.1	86.8	90.2	91.5	91.2	96.3	96.1	96.5	92.2	90.7	84.2	74.8	72.6
1600	87.7	89.2	90.1	89.1	86.8	86.4	89.6	83.4	86.9	88.2	88.1	93.3	93.2	93.3	88.8	87.3	80.9	71.4	69.2
2000	84.0	85.5	86.4	85.4	83.1	82.7	85.9	79.6	83.2	84.5	85.0	90.1	90.1	90.1	85.2	83.7	77.2	67.7	65.6
2500	79.8	81.3	82.2	81.2	78.9	78.5	81.7	75.4	79.1	80.5	81.5	86.3	86.2	86.2	81.2	79.7	73.1	63.8	61.4
3150	75.2	76.7	77.5	76.5	74.2	73.8	77.0	70.7	74.5	76.1	77.6	82.1	81.9	81.9	76.9	75.2	68.7	59.5	56.9
4000	69.5	71.0	71.8	70.8	68.5	67.9	71.3	64.9	68.9	71.2	73.3	77.7	77.1	77.1	72.3	70.1	63.9	54.7	51.9
5000	63.3	64.8	65.4	64.6	62.1	61.5	65.0	58.4	62.8	66.3	68.4	73.1	72.2	72.2	67.3	64.9	58.7	49.2	46.2
6300	56.1	57.9	58.3	57.5	55.0	54.2	57.9	50.9	56.3	60.9	63.3	68.1	67.1	67.2	62.1	59.6	53.8	42.7	40.2
8000	49.8	51.7	50.8	50.2	48.8	46.4	50.3	43.3	51.3	56.6	59.1	63.7	63.2	62.8	57.9	55.1	47.4	36.5	34.9
10000	43.9	45.5	43.7	43.7	42.9	40.8	42.9	36.9	45.4	51.6	54.3	59.0	58.8	58.3	53.2	50.2	41.5	28.2	28.2
12500	37.4	39.0	37.1	37.4	36.4	32.3	35.2	28.9	38.6	46.0	49.3	54.1	54.2	53.5	48.1	44.5	34.9	17.1	19.2
16000	30.3	31.9	29.4	29.4	29.3	23.0	27.3	19.7	32.8	39.5	43.3	48.6	49.0	47.9	42.1	38.1	27.3	6.0	7.6
20000	20.1	22.8	18.5	18.4	19.4	10.8	15.4	10.5	22.6	32.6	36.2	42.2	42.6	41.6	35.5	30.3	15.9		
25000	9.9	9.9	7.6	7.4	9.6		3.6	1.3	7.6	21.9	28.0	33.8	35.8	34.6	26.1	19.8	4.5		

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (DRY)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 02
AIRCRAFT CODE 726
OPERATION CODE 01031
PROFILE VERSION A
28 NOV 79
PAGE F2

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.3	96.4	97.2	96.8	93.2	93.1	97.2	90.2	93.9	97.3	98.2	103.5	101.9	102.6	97.5	96.2	90.2	81.8	79.5
250	92.1	94.1	94.9	94.6	91.0	90.9	95.0	87.9	91.7	95.1	96.1	101.4	99.8	100.5	95.4	94.1	88.1	79.6	77.3
315	89.8	91.9	92.6	92.2	88.8	88.6	92.7	85.7	89.5	92.9	94.0	99.2	97.7	98.3	93.2	91.9	85.8	77.5	75.1
400	87.5	89.5	90.2	89.9	86.4	86.2	90.3	83.3	87.2	90.7	91.8	97.0	95.6	96.1	91.0	89.7	83.6	75.2	72.9
500	85.1	87.1	87.7	87.4	84.0	83.8	87.8	80.9	84.8	88.4	89.6	94.8	93.4	93.9	88.8	87.4	81.3	73.8	70.6
630	82.6	84.5	85.2	84.8	81.5	81.2	85.3	78.3	82.4	86.0	87.3	92.6	91.1	91.6	86.5	85.0	78.9	70.6	68.3
800	80.0	81.9	82.5	82.1	78.9	78.5	82.5	75.7	79.8	83.5	85.0	90.2	88.9	89.2	84.1	82.6	76.4	68.2	65.9
1000	77.2	79.1	79.6	79.2	76.2	75.7	79.7	72.9	77.2	81.0	82.6	87.8	86.5	86.8	81.6	80.1	73.9	65.7	63.4
1250	74.3	76.1	76.6	76.2	73.3	72.7	76.6	69.9	74.3	78.4	80.1	85.3	84.0	84.2	79.0	77.4	71.2	63.0	60.8
1600	71.2	73.0	73.3	73.0	70.2	69.5	73.4	66.7	71.4	75.6	77.5	82.7	81.3	81.6	76.3	74.6	68.4	60.2	58.1
2000	68.0	69.7	69.9	69.5	66.9	66.0	69.9	63.3	68.3	72.8	74.8	79.9	78.6	78.8	73.4	71.8	65.5	57.3	55.2
2500	64.4	66.1	66.1	65.8	63.3	62.3	66.1	59.6	64.9	69.7	71.9	76.9	75.5	75.7	70.3	68.6	62.3	54.1	52.1
3150	60.6	62.3	62.0	61.7	59.4	58.2	62.0	55.7	61.3	66.4	68.8	73.6	72.0	72.3	66.8	65.2	58.9	50.7	48.7
4000	56.5	58.1	57.6	57.4	55.2	53.8	57.6	51.4	57.4	62.7	65.2	69.9	68.2	68.6	63.0	61.4	55.1	47.0	44.9
5000	51.9	53.6	52.8	52.7	50.6	49.1	52.9	46.8	53.2	58.6	61.2	65.9	63.9	64.4	58.9	57.2	50.9	42.8	40.8
6300	47.2	48.9	47.8	47.8	45.8	44.1	47.9	41.9	48.6	54.2	56.8	61.5	59.4	60.0	54.4	52.7	46.4	38.3	36.3
8000	43.0	44.6	43.2	43.2	41.7	39.7	43.3	37.7	44.5	50.2	52.9	57.4	55.7	56.0	50.5	48.7	42.2	33.9	32.3
10000	38.6	40.2	38.6	38.6	37.6	35.3	38.6	33.3	40.2	45.9	48.7	53.0	51.7	51.8	46.3	44.3	37.7	29.1	28.0
12500	34.0	35.5	33.8	33.9	33.1	30.7	33.6	28.7	35.5	41.2	44.1	48.2	47.4	47.1	41.7	39.6	32.9	23.9	23.3
16000	29.1	31.5	28.7	28.8	28.4	25.9	28.3	24.0	30.5	36.1	39.0	43.1	42.7	42.1	36.9	34.5	27.7	18.4	18.3
20000	23.9	25.2	23.4	23.6	23.4	20.9	22.7	19.1	25.0	30.5	33.4	37.5	37.6	36.7	31.7	29.1	22.2	12.7	12.8
25000	18.6	19.5	17.9	18.2	18.2	16.0	16.9	14.2	19.3	24.5	27.2	31.4	32.0	31.0	26.3	23.3	16.4	6.7	6.9

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (DRY)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 02
AIRCRAFT CODE 726
OPERATION CODE 01031
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.1	98.0	99.2	98.3	95.3	95.0	99.0	91.9	95.4	97.3	98.2	103.5	101.9	102.6	97.5	96.2	90.2	81.8	79.5
250	93.9	95.8	96.9	96.0	93.0	92.8	96.8	89.7	93.2	95.1	96.1	101.4	99.8	100.5	95.4	94.1	88.1	79.6	77.3
315	91.6	93.5	94.6	93.7	90.8	90.5	94.5	87.4	91.0	92.9	94.0	99.2	97.7	98.3	93.2	91.9	85.8	77.5	75.1
400	89.3	91.2	92.2	91.3	88.5	88.1	92.1	85.0	88.7	90.7	91.8	97.0	95.6	96.1	91.0	89.7	83.6	75.2	72.9
500	86.9	88.7	89.8	88.9	86.1	85.7	89.6	82.6	86.3	88.4	89.6	94.8	93.4	93.9	88.8	87.4	81.3	73.0	70.6
630	84.3	86.2	87.2	86.3	83.6	83.1	87.0	80.0	83.8	86.0	87.3	92.6	91.1	91.6	86.5	85.0	78.9	70.6	68.3
800	81.7	83.5	84.5	83.6	81.0	80.4	84.3	77.4	81.3	83.5	85.0	90.2	88.9	89.2	84.1	82.6	76.4	68.2	65.9
1000	79.0	80.8	81.6	80.7	78.2	77.6	81.5	74.6	78.6	81.0	82.6	87.8	86.5	86.8	81.6	80.1	73.9	65.7	63.4
1250	76.1	77.8	78.6	77.7	75.3	74.6	78.4	71.6	75.8	78.4	80.1	85.3	84.0	84.2	79.0	77.4	71.2	63.0	60.8
1600	73.0	74.7	75.4	74.4	72.2	71.4	75.1	68.4	72.8	75.6	77.5	82.7	81.3	81.6	76.3	74.6	68.4	60.2	58.1
2000	69.7	71.4	71.9	71.0	68.9	67.9	71.6	65.0	69.7	72.8	74.8	79.9	78.6	78.8	73.4	71.8	65.5	57.3	55.2
2500	66.2	67.8	68.1	67.2	65.3	64.2	67.9	61.4	66.4	69.7	71.9	76.9	75.5	75.7	70.3	68.6	62.3	54.1	52.1
3150	62.4	64.0	64.0	63.2	61.4	60.1	63.8	57.4	62.8	66.4	68.8	73.6	72.0	72.3	66.8	65.2	58.9	50.7	48.7
4000	57.9	59.5	59.2	58.5	56.8	55.3	59.0	52.7	58.6	62.7	65.2	69.9	68.2	68.6	63.0	61.4	55.1	47.0	44.9
5000	53.0	54.6	54.0	53.6	51.8	50.2	53.9	47.8	54.0	58.6	61.2	65.9	63.9	64.4	58.9	57.2	50.9	42.8	40.8
6300	47.9	49.6	48.6	48.3	46.6	44.9	48.6	42.6	49.2	54.2	56.8	61.5	59.4	60.0	54.4	52.7	46.4	38.3	36.3
8000	43.4	45.0	43.6	43.5	42.2	40.1	43.7	38.0	44.8	50.2	52.9	57.4	55.7	56.0	50.5	48.7	42.2	33.9	32.3
10000	38.6	40.2	38.6	38.6	37.6	35.3	38.6	33.3	40.2	45.9	48.7	53.0	51.7	51.8	46.3	44.3	37.7	29.1	28.8
12500	34.0	35.5	33.8	33.9	33.1	30.7	33.6	28.7	35.5	41.2	44.1	48.2	47.4	47.1	41.7	39.6	32.9	23.9	23.3
16000	29.1	30.5	28.7	28.8	28.4	25.9	28.3	24.0	30.5	36.1	39.0	43.1	42.7	42.1	36.9	34.5	27.7	18.4	18.3
20000	23.9	25.2	23.4	23.6	23.4	20.9	22.7	19.1	25.0	30.5	33.4	37.5	37.6	36.7	31.7	29.1	22.2	12.7	12.8
25000	18.6	19.5	17.9	18.2	18.2	16.0	16.9	14.2	19.3	24.5	27.2	31.4	32.0	31.0	26.3	23.3	16.4	6.7	6.9

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (DRY)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 02
AIRCRAFT CODE 726
OPERATION CODE 01031
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

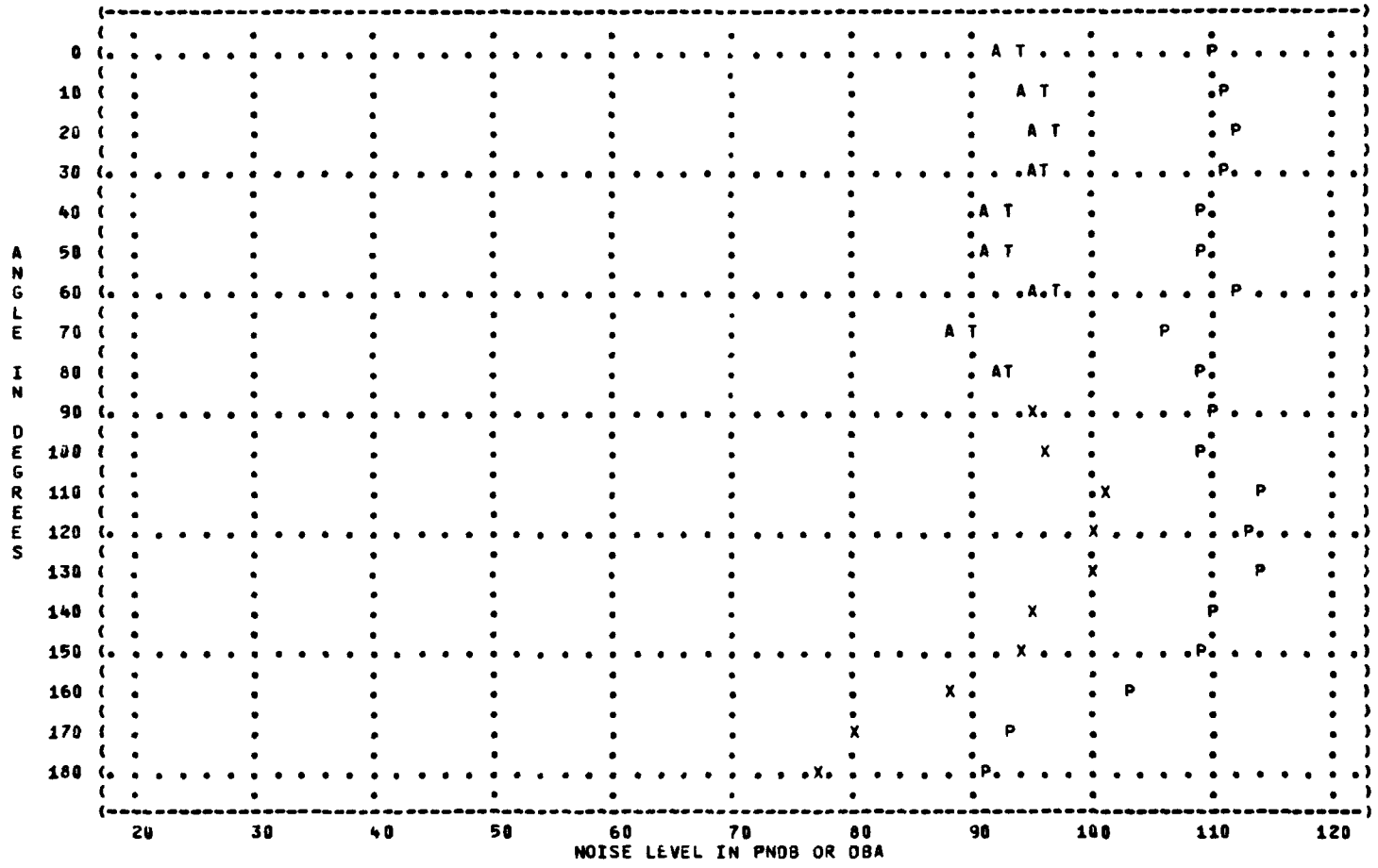


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 03
AIRCRAFT CODE 726
OPERATION CODE 01049
PROFILE VERSION A
28 NOV 79
PAGE C3

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (WET)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

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

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (MET)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 8.8 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 03
AIRCRAFT CODE 726
OPERATION CODE 81049
PROFILE VERSION A
28 NOV 79
PAGE D3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	110.5	111.2	107.3	107.3	108.4	110.8	112.5	114.7	109.6	116.8	118.1	123.5	121.3	120.3	119.3	115.4	109.7	103.3	98.2
250	108.3	108.9	105.1	105.8	106.2	108.6	110.2	112.5	107.4	113.7	115.9	121.3	119.1	118.7	117.1	113.2	107.5	101.1	95.9
315	106.8	106.6	102.8	102.7	103.9	106.3	107.9	110.2	105.1	111.5	113.6	119.8	116.9	116.5	114.8	110.9	105.2	98.8	93.5
400	103.6	104.2	100.4	100.4	101.5	103.9	105.5	107.8	102.8	109.1	111.3	116.7	114.6	114.2	112.5	108.5	102.8	96.5	91.1
500	101.1	101.7	97.9	97.9	99.8	101.4	103.8	105.3	100.4	106.7	108.9	114.3	112.2	111.8	110.8	106.8	100.2	94.8	88.6
630	98.5	99.1	95.2	95.2	96.4	98.7	100.3	102.6	97.8	104.2	106.4	111.8	109.7	109.3	107.5	103.4	97.6	91.5	86.8
800	95.6	96.3	92.4	92.4	93.5	95.9	97.5	99.8	95.0	101.5	103.8	109.2	107.2	106.7	104.8	100.7	94.8	88.8	83.2
1000	92.6	93.2	89.4	89.4	90.5	92.9	94.4	96.8	92.1	98.7	101.0	106.4	104.7	103.9	102.8	97.7	91.8	85.8	80.3
1250	89.4	90.0	86.1	86.1	87.2	89.6	91.1	93.5	88.9	95.6	98.0	103.4	101.9	100.9	99.8	94.5	88.6	82.7	77.3
1600	85.8	86.4	82.5	82.6	83.6	85.9	87.5	89.9	85.5	92.2	94.7	100.1	99.0	97.6	95.6	91.2	85.3	79.3	73.9
2000	81.9	82.5	78.6	78.6	79.7	82.0	83.6	86.0	82.2	88.6	91.5	96.7	95.9	94.4	92.8	87.9	81.6	75.6	70.4
2500	77.5	78.1	74.1	74.3	75.3	77.6	79.1	81.6	78.4	84.6	88.0	93.0	92.2	90.5	88.4	84.3	77.6	71.4	66.4
3150	72.8	73.2	69.2	69.3	70.5	72.7	74.2	77.0	74.3	80.4	84.0	88.9	88.2	86.4	84.3	80.2	73.3	67.1	61.9
4000	67.5	67.9	64.0	63.8	65.3	67.2	68.8	71.8	69.0	76.0	79.6	84.4	83.7	81.8	79.7	75.7	68.5	62.2	57.1
5000	62.8	62.5	58.7	58.5	59.9	61.6	63.0	66.2	64.7	71.2	74.0	79.7	79.0	77.0	74.9	70.8	63.4	56.9	51.7
6300	56.4	57.0	53.0	52.9	54.2	55.8	57.3	60.7	59.4	66.1	69.7	76.7	76.8	71.9	69.7	65.6	58.1	51.2	45.6
8000	51.8	52.3	48.3	47.8	49.5	50.9	52.3	55.9	55.1	62.4	65.8	70.3	70.8	67.9	65.6	61.5	53.6	46.3	40.5
10000	46.5	47.2	42.9	42.3	44.4	45.3	46.3	50.4	50.3	58.9	61.2	65.5	65.8	63.6	61.3	57.0	48.4	41.1	34.5
12500	40.6	41.4	36.9	35.8	38.4	39.4	40.8	44.2	44.5	51.8	56.3	60.6	61.1	58.9	56.5	51.9	42.6	34.9	27.9
16000	33.5	34.8	29.3	28.4	31.8	31.9	32.5	37.1	38.3	45.9	50.7	55.2	56.1	53.7	51.1	46.2	36.8	26.7	18.7
20000	25.7	26.4	19.8	18.3	21.8	22.4	22.3	30.0	31.1	38.0	44.5	49.1	50.3	47.8	45.1	39.4	28.2	14.5	9.5
25000	13.1	13.5	10.2	8.1	10.7	9.3	8.8	16.2	20.8	29.9	36.7	41.7	43.5	40.9	37.4	31.3	16.1	2.3	.3

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (WET)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-081
RUN 03
AIRCRAFT CODE 726
OPERATION CODE 81049
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	112.0	112.4	108.8	109.1	110.0	112.1	113.7	114.7	109.6	116.0	118.1	124.0	121.3	120.9	120.0	116.4	110.8	103.3	98.2
250	109.8	110.2	106.5	106.9	107.8	109.9	111.5	112.5	107.4	113.7	115.9	121.8	119.1	118.7	117.8	114.2	108.5	101.1	95.9
315	107.5	107.9	104.2	104.6	105.5	107.6	109.2	110.2	105.1	111.5	113.6	119.5	116.9	116.5	115.5	111.9	106.2	98.8	93.5
400	105.1	105.5	101.8	102.2	103.1	105.2	106.8	107.8	102.8	109.1	111.3	117.2	114.6	114.2	113.2	109.6	103.8	96.5	91.1
500	102.6	103.0	99.3	99.7	100.6	102.7	104.3	105.3	100.4	106.7	108.9	114.8	112.2	111.8	110.7	107.1	101.3	94.8	88.6
630	100.0	100.3	96.7	97.1	98.0	100.0	101.6	102.6	97.8	104.2	106.4	112.3	109.7	109.3	108.2	104.5	98.7	91.5	86.0
800	97.2	97.5	93.9	94.2	95.2	97.2	98.8	99.8	95.0	101.5	103.8	109.7	107.2	106.7	105.5	101.7	95.8	88.8	83.2
1000	94.1	94.5	90.8	91.2	92.2	94.2	95.7	96.8	92.1	98.7	101.0	106.9	104.7	103.9	102.7	98.8	92.9	85.8	80.3
1250	90.9	91.2	87.5	88.0	88.9	90.9	92.4	93.5	88.9	95.6	98.0	103.9	101.9	100.9	99.7	95.6	89.7	82.7	77.3
1600	87.3	87.6	83.9	84.4	85.3	87.3	88.8	89.9	85.5	92.2	94.7	100.6	99.0	97.6	96.4	92.2	86.3	79.3	73.9
2000	83.4	83.7	80.0	80.5	81.4	83.3	84.8	86.0	82.2	88.6	91.5	97.2	95.9	94.4	92.7	88.9	82.7	75.6	70.4
2500	79.0	79.3	75.6	76.1	77.0	78.9	80.4	81.6	78.4	84.6	88.0	93.5	92.2	90.5	89.1	85.4	78.6	71.4	66.4
3150	74.3	74.4	70.6	71.2	72.1	74.0	75.5	77.0	74.3	80.4	84.0	89.4	88.2	86.4	85.0	81.3	74.3	67.1	61.9
4000	68.7	68.9	65.1	65.2	66.6	68.3	69.8	71.8	69.8	76.0	79.6	84.8	83.7	81.8	80.3	76.5	69.3	62.2	57.1
5000	62.9	63.2	59.6	59.6	60.9	62.4	63.7	66.2	64.7	71.2	74.8	80.0	79.0	77.0	75.3	71.4	64.1	56.9	51.7
6300	57.0	57.5	53.6	53.6	54.8	56.4	57.8	60.7	59.4	66.1	69.7	75.0	74.0	71.9	70.0	66.0	58.5	51.2	45.6
8000	52.1	52.6	48.6	48.2	49.9	51.2	52.5	55.9	55.1	61.6	65.6	70.4	70.0	67.9	65.8	61.7	53.9	46.3	40.5
10000	46.5	47.2	42.9	42.3	44.4	45.3	46.3	50.4	50.3	56.9	61.2	65.5	65.8	63.6	61.3	57.0	48.4	41.1	34.5
12500	40.6	41.4	36.9	35.8	38.4	39.4	40.0	44.2	44.5	51.8	56.3	60.6	61.1	58.9	56.5	51.9	42.6	34.9	27.9
16000	33.5	34.8	29.3	28.4	31.0	31.9	32.5	37.1	38.3	45.9	50.7	55.2	56.1	53.7	51.1	46.2	36.0	26.7	18.7
20000	25.7	26.4	19.8	18.3	21.8	22.4	22.3	30.0	31.1	38.8	44.5	49.1	50.3	47.8	45.1	39.4	28.2	14.5	9.5
25000	13.1	13.5	10.2	8.1	10.7	9.3	8.8	16.2	20.0	29.9	36.7	41.7	43.5	40.9	37.4	31.3	16.1	2.3	.3

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (WET)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 03
AIRCRAFT CODE 726
OPERATION CODE 01049
PROFILE VERSION A
28 NOV 79
PAGE F3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.1	94.9	90.8	90.5	91.7	94.3	96.1	98.9	94.5	101.9	104.8	110.3	108.1	106.6	104.6	100.8	94.9	88.1	83.8
250	91.9	92.7	88.6	88.3	89.6	92.0	93.9	96.7	92.4	99.7	102.6	108.1	106.0	104.5	102.5	98.7	92.7	86.8	81.7
315	89.7	90.4	86.4	86.1	87.3	89.8	91.6	94.4	90.3	97.5	100.5	106.0	103.8	102.4	100.3	96.5	90.5	83.8	79.5
400	87.4	88.1	84.1	83.8	85.1	87.4	89.2	92.1	88.1	95.3	98.3	103.8	101.7	100.2	98.1	94.2	88.2	81.6	77.3
500	85.0	85.7	81.7	81.5	82.7	85.0	86.8	89.6	85.8	93.0	96.1	101.5	99.5	97.9	95.8	91.9	85.9	79.4	75.8
630	82.6	83.3	79.3	79.0	80.3	82.5	84.2	87.1	83.5	90.7	93.8	99.2	97.2	95.6	93.5	89.6	83.5	77.0	72.7
800	80.0	80.7	76.7	76.5	77.8	79.9	81.6	84.5	81.1	88.3	91.4	96.8	94.9	93.2	91.1	87.2	81.0	74.5	70.3
1000	77.3	78.0	74.1	73.9	75.1	77.2	78.8	81.8	78.7	85.8	89.0	94.4	92.5	90.8	88.6	84.7	78.5	72.0	67.8
1250	74.5	75.2	71.3	71.1	72.3	74.4	75.9	78.9	76.1	83.2	86.5	91.8	90.0	88.2	86.0	82.2	75.8	69.2	65.2
1600	71.6	72.2	68.3	68.2	69.4	71.3	72.8	75.9	73.4	80.5	83.9	89.2	87.5	85.5	83.3	79.5	73.1	66.4	62.5
2000	68.5	69.2	65.2	65.1	66.3	68.2	69.6	72.7	70.6	77.7	81.2	86.4	84.8	82.8	80.5	76.7	70.2	63.4	59.8
2500	65.1	65.8	61.8	61.8	62.9	64.8	66.1	69.3	67.5	74.7	78.3	83.4	81.8	79.7	77.5	73.7	67.1	60.1	56.7
3150	61.4	62.1	58.1	58.2	59.1	61.1	62.4	65.8	64.2	71.4	75.1	80.1	78.5	76.4	74.1	70.3	63.7	56.5	53.3
4000	57.4	58.2	54.1	54.3	55.0	57.1	58.4	61.9	60.6	67.8	71.5	76.5	74.8	72.7	70.4	66.6	60.0	52.6	49.6
5000	53.1	53.9	49.8	50.0	50.6	52.8	54.1	57.7	56.5	63.8	67.5	72.4	70.6	68.5	66.2	62.5	55.8	48.3	45.5
6300	48.5	49.4	45.2	45.5	46.0	48.3	49.6	53.2	52.1	59.4	63.2	68.1	66.2	64.1	61.8	58.1	51.4	43.8	41.1
8000	44.5	45.4	41.4	41.6	42.2	44.1	45.3	48.9	48.3	55.3	59.1	63.9	62.4	60.1	57.9	54.1	47.2	39.9	37.0
10000	40.4	41.2	37.4	37.5	38.2	39.8	40.8	44.3	44.2	50.8	54.8	59.4	58.2	55.9	53.6	49.9	42.8	35.8	32.7
12500	35.9	36.7	33.1	33.1	34.0	35.2	36.1	39.4	39.7	46.0	50.1	54.5	53.8	51.3	49.1	45.3	38.1	31.4	28.0
16000	31.2	31.9	28.5	28.4	29.5	30.3	31.0	34.1	34.8	40.7	44.9	49.1	48.9	46.4	44.1	40.4	33.8	26.9	22.9
20000	26.1	26.7	23.7	23.5	24.8	25.3	25.8	28.6	29.6	35.0	39.2	43.3	43.6	41.1	38.8	35.0	27.5	22.2	17.5
25000	20.9	21.4	18.8	18.6	19.9	20.2	20.5	23.0	24.1	28.9	33.0	37.1	37.8	35.4	33.1	29.2	21.6	17.5	11.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-726-001
RUN 03
AIRCRAFT CODE 726
OPERATION CODE 01049
PROFILE VERSION A
28 NOV 79
PAGE G3

NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (WET)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.7	96.1	92.2	92.3	93.4	95.6	97.4	98.9	94.5	101.9	104.8	110.8	108.1	106.5	105.3	101.9	96.0	88.1	83.8
250	93.5	93.9	90.0	90.1	91.2	93.4	95.1	96.7	92.4	99.7	102.6	108.7	106.0	104.5	103.2	99.7	93.8	86.0	81.7
315	91.2	91.7	87.8	87.9	89.0	91.1	92.8	94.4	90.3	97.5	100.5	106.5	103.8	102.4	101.0	97.5	91.5	83.8	79.5
400	88.9	89.4	85.5	85.6	86.7	88.8	90.5	92.1	88.1	95.3	98.3	104.3	101.7	100.2	98.8	95.3	89.3	81.6	77.3
500	86.5	87.0	83.2	83.3	84.4	86.4	88.0	89.6	85.8	93.0	96.1	102.0	99.5	97.9	96.5	93.0	86.9	79.4	75.0
630	84.1	84.5	80.7	80.9	81.9	83.9	85.5	87.1	83.5	90.7	93.8	99.7	97.2	95.6	94.2	90.7	84.5	77.0	72.7
800	81.5	81.9	78.2	78.4	79.4	81.3	82.8	84.5	81.1	88.3	91.4	97.3	94.9	93.2	91.8	88.3	82.1	74.5	70.3
1000	78.9	79.3	75.5	75.7	76.8	78.6	80.1	81.8	78.7	85.8	89.0	94.9	92.5	90.8	89.3	85.8	79.5	72.0	67.8
1250	76.0	76.4	72.7	72.9	74.0	75.7	77.1	78.9	76.1	83.2	86.5	92.3	90.0	88.2	86.8	83.2	76.9	69.2	65.2
1600	73.1	73.5	69.8	70.0	71.0	72.7	74.1	75.9	73.4	80.5	83.9	89.7	87.5	85.5	84.1	80.6	74.1	66.4	62.5
2000	70.0	70.4	66.7	67.0	68.0	69.5	70.8	72.7	70.6	77.7	81.2	86.9	84.8	82.8	81.3	77.8	71.3	63.4	59.8
2500	66.6	67.0	63.3	63.6	64.5	66.1	67.4	69.3	67.5	74.7	78.3	83.9	81.8	79.7	78.2	74.8	68.2	60.1	56.7
3150	62.9	63.4	59.6	60.0	60.8	62.4	63.7	65.8	64.2	71.4	75.1	80.6	78.5	76.4	74.8	71.4	64.8	56.5	53.3
4000	58.6	59.2	55.3	55.7	56.4	58.2	59.5	61.9	60.6	67.8	71.5	76.9	74.8	72.7	71.0	67.5	60.8	52.6	49.6
5000	54.8	54.6	50.6	51.1	51.6	53.6	54.9	57.7	56.5	63.8	67.5	72.7	70.6	68.5	66.7	63.1	56.5	48.3	45.5
6300	49.1	49.9	45.8	46.2	46.7	48.8	50.1	53.2	52.1	59.4	63.2	68.3	66.2	64.1	62.1	58.5	51.8	43.8	41.1
8000	44.8	45.6	41.7	42.0	42.6	44.4	45.6	48.9	48.3	55.3	59.1	64.0	62.4	60.1	58.0	54.3	47.4	39.9	37.0
10000	40.4	41.2	37.4	37.5	38.2	39.8	40.8	44.3	44.2	50.8	54.8	59.4	58.2	55.9	53.6	49.9	42.8	35.8	32.7
12500	35.9	36.7	33.1	33.1	34.0	35.2	36.1	39.4	39.7	46.0	50.1	54.5	53.8	51.3	49.1	45.3	38.1	31.4	28.0
16000	31.2	31.9	28.5	28.4	29.5	30.3	31.0	34.1	34.8	40.7	44.9	49.1	48.9	46.4	44.1	40.4	33.0	26.9	22.9
20000	26.1	26.7	23.7	23.5	24.8	25.3	25.8	28.6	29.6	35.0	39.2	43.3	43.6	41.1	38.8	35.0	27.5	22.2	17.5
25000	20.9	21.4	18.8	18.6	19.9	20.2	20.5	23.0	24.1	28.9	33.0	37.1	37.8	35.4	33.1	29.2	21.6	17.5	11.7

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

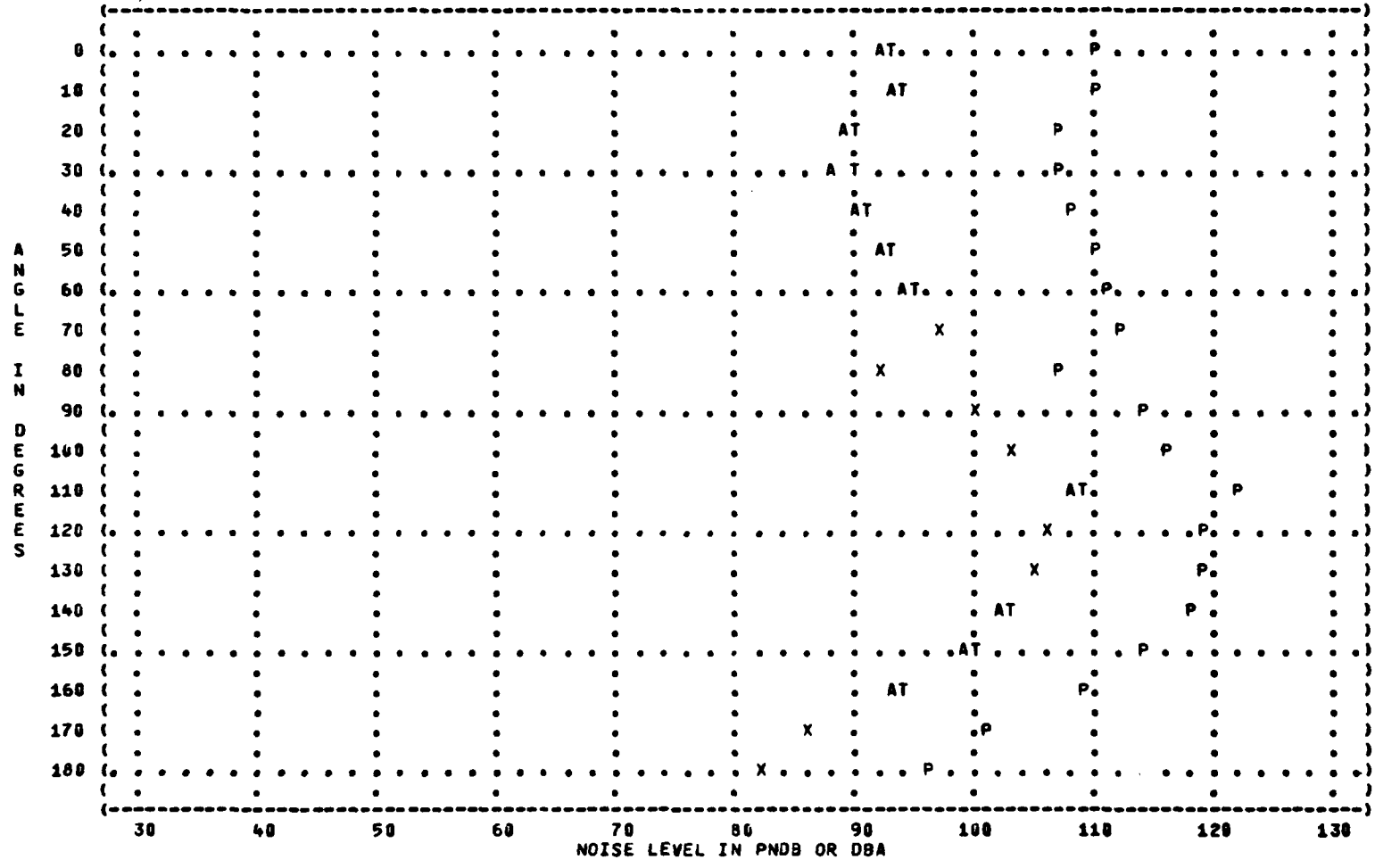
NOISE SOURCE/SUBJECT:
KC-135A NOISE SUPPRESSOR
A/M32-52

OPERATION:
MILITARY POWER (WET)
96% RPM, INBOARD ENGINE
SUPPRESSED GROUND RUNUP

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 0.2
TEST 77-726-001
RUN 03
AIRCRAFT CODE 726
OPERATION CODE 01049
PROFILE VERSION A
28 NOV 79
PAGE J3

P=PNLT A=AL T=ALT



USAF F-4 NOISE SUPPRESSOR F-4 NOISE SUPPRESSOR F-4 NOISE SUPPRESSOR F-4 NOISE SUPPRESSOR

NOISE PRODUCED ON THE GROUND BY

F-4 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-731-001
AIRCRAFT CODE: 731
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Engine Runup, 85% RPM	74-79
Military Power, 98.5% RPM	80-85
Afterburner Power	86-91

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
- NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
- PERCEIVED NOISE LEVEL
- TONE-CORRECTED, PERCEIVED NOISE LEVEL
- A-WEIGHTED OVERALL SOUND LEVEL
- TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

USAF F-4 NOISE SUPPRESSOR F-4 NOISE SUPPRESSOR F-4 NOISE SUPPRESSOR F-4 NOISE SUPPRESSOR

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 01
AIRCRAFT CODE 731
OPERATION CODE 88118
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
ENGINE RUNUP 85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

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

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
ENGINE RUNUP 85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-081
RUN 01
AIRCRAFT CODE 731
OPERATION CODE 00118
PROFILE VERSION A
28 NOV 79
PAGE 01

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	99.9	94.8	95.6	97.3	97.9	99.3	96.1	94.3	93.0	94.0	92.8	92.9	95.8	96.2	98.4	99.3	99.5	99.0	96.4
250	97.5	92.5	93.4	95.0	95.6	97.0	93.8	92.0	90.6	91.6	90.5	90.7	93.5	93.9	96.1	97.1	97.2	96.7	94.1
315	95.2	90.2	91.1	92.6	93.3	94.6	91.5	89.6	88.3	89.2	88.2	88.3	91.1	91.6	93.8	94.7	94.9	94.4	91.7
400	92.8	87.8	88.7	90.3	90.9	92.2	89.1	87.2	85.8	86.8	85.9	85.9	88.7	89.2	91.3	92.3	92.5	91.9	89.3
500	90.2	85.4	86.2	87.8	88.4	89.6	86.6	84.6	83.3	84.1	83.5	83.4	86.1	86.6	88.8	89.7	89.9	89.3	86.7
630	87.6	82.7	83.6	85.1	85.8	86.8	83.9	81.9	80.7	81.4	81.0	80.7	83.5	83.9	86.1	87.1	87.2	86.6	84.0
800	84.8	80.0	80.8	82.4	83.1	84.0	81.1	79.3	78.1	78.4	78.5	78.0	80.7	81.2	83.3	84.2	84.4	83.7	81.1
1000	81.8	77.1	77.9	79.4	80.2	81.3	78.2	76.6	75.4	75.3	75.8	75.3	77.8	78.2	80.4	81.2	81.3	80.6	78.8
1250	78.6	74.0	74.8	76.3	77.0	78.1	75.1	73.4	72.3	72.0	72.6	72.2	74.6	75.1	77.3	77.9	78.0	77.3	74.7
1600	75.2	70.6	71.4	72.9	73.6	74.7	71.7	70.0	68.9	68.6	69.2	68.7	71.2	71.7	73.9	74.3	74.4	73.6	71.0
2000	71.4	66.9	67.7	69.2	69.9	71.0	68.0	66.3	65.1	64.8	65.5	64.9	67.4	67.9	70.2	70.3	70.4	69.6	67.8
2500	67.2	62.7	63.7	65.0	65.8	66.9	63.9	62.0	60.8	60.5	61.2	60.6	63.1	63.6	66.0	66.0	65.9	65.8	62.4
3150	62.4	58.2	59.3	60.2	61.3	62.3	59.5	57.2	56.5	55.6	56.4	55.6	58.2	58.7	61.3	61.1	60.9	59.7	57.3
4000	57.4	53.0	54.3	55.3	56.7	57.7	54.8	51.8	51.4	49.8	50.5	49.5	52.5	53.0	56.1	55.7	55.3	54.0	51.5
5000	51.5	46.8	48.5	49.4	51.5	52.5	48.8	45.9	45.3	43.7	44.2	43.2	46.3	46.6	49.9	49.4	48.7	47.0	44.9
6300	44.7	40.5	42.5	43.2	45.4	46.8	43.0	39.8	39.1	36.9	37.6	36.3	39.8	40.1	43.6	42.2	41.6	40.8	38.8
8000	38.7	35.1	37.1	38.0	39.7	41.4	37.8	33.8	33.3	30.6	31.8	29.6	33.6	34.2	37.6	36.3	36.0	33.9	32.2
10000	31.9	27.6	30.7	31.3	32.6	35.2	31.5	26.2	26.0	22.3	22.7	22.1	26.0	26.0	30.3	28.8	28.6	25.5	23.2
12500	22.5	16.3	22.6	23.6	23.5	29.0	23.7	16.5	16.0	9.2	13.8	12.1	17.8	18.4	22.9	19.8	20.9	17.9	15.4
16000	9.1	7.3	10.8	10.8	7.6	18.9	10.3	6.9	5.9		4.8	2.1	9.6	6.8	11.1	18.3	11.7	10.4	7.7
20000						8.8							1.3			.9	2.5	2.9	.8
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
ENGINE RUNUP 85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-881
RUN 01
AIRCRAFT CODE 731
OPERATION CODE 80118
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	100.6	94.8	96.3	97.3	98.6	100.7	96.8	95.3	93.7	95.6	93.4	93.6	96.5	96.2	98.4	99.3	100.6	99.7	96.9
250	98.3	92.5	94.8	95.0	96.3	98.4	94.6	93.0	91.4	93.2	91.2	91.4	94.2	93.9	96.1	97.1	98.3	97.4	94.6
315	95.9	90.2	91.7	92.6	94.8	96.0	92.2	90.6	89.0	90.8	88.9	89.0	91.8	91.6	93.8	94.7	96.8	95.8	92.3
400	93.5	87.8	89.3	90.3	91.6	93.5	89.8	88.1	86.6	88.3	86.6	86.6	89.4	89.2	91.3	92.3	93.6	92.6	89.8
500	91.0	85.4	86.8	87.8	89.1	90.9	87.3	85.5	84.1	85.7	84.2	84.1	86.9	86.6	88.8	89.7	91.0	90.0	87.2
630	88.3	82.7	84.2	85.1	86.5	88.2	84.6	82.8	81.5	82.9	81.7	81.4	84.2	83.9	86.1	87.1	88.3	87.3	84.5
800	85.5	80.0	81.5	82.4	83.7	85.4	81.8	80.2	78.9	80.0	79.2	78.8	81.4	81.2	83.3	84.2	85.5	84.4	81.6
1000	82.5	77.1	78.6	79.4	80.8	82.6	78.9	77.5	76.1	75.8	76.5	76.0	78.5	78.2	80.4	81.2	82.4	81.3	78.6
1250	79.4	74.0	75.4	76.3	77.7	79.5	75.8	74.4	73.0	73.6	73.3	72.9	75.3	75.1	77.3	77.9	79.1	78.0	75.2
1600	75.9	70.6	72.0	72.9	74.3	76.1	72.4	70.9	69.6	70.1	69.9	69.4	71.9	71.7	73.9	74.3	75.5	74.3	71.6
2000	72.1	66.9	68.4	69.2	70.6	72.4	68.7	67.2	65.9	66.4	66.1	65.6	68.1	67.9	70.2	70.3	71.5	70.2	67.5
2500	67.9	62.7	64.4	65.0	66.5	68.3	64.6	63.0	61.6	62.1	61.9	61.3	63.8	63.6	66.0	66.0	67.0	65.7	62.9
3150	63.2	58.2	59.9	60.2	62.0	63.6	60.2	58.1	57.3	57.2	57.0	56.3	58.9	58.7	61.3	61.1	62.0	60.3	57.9
4000	58.0	53.0	54.8	55.3	57.3	58.8	55.4	52.6	52.0	51.0	51.1	50.1	53.1	53.0	56.1	55.7	56.1	54.6	51.9
5000	52.0	46.8	48.9	49.4	51.9	53.4	49.3	46.5	45.8	44.7	44.6	43.6	46.7	46.5	49.9	49.4	49.3	47.5	45.2
6300	45.0	40.5	42.7	43.2	45.7	47.4	43.3	40.2	39.4	37.6	37.8	36.6	40.1	40.1	43.6	42.2	42.1	40.3	38.2
8000	38.8	35.1	37.2	38.0	39.9	41.7	37.9	33.9	33.5	30.9	31.9	29.8	33.8	34.2	37.6	36.3	36.2	34.1	32.3
10000	31.9	27.6	30.7	31.3	32.6	35.2	31.5	26.2	26.0	22.3	22.7	22.1	26.0	26.0	30.3	28.8	28.6	25.5	23.2
12500	22.5	16.3	22.6	23.6	23.5	29.0	23.7	16.5	16.0	9.2	13.8	12.1	17.8	18.4	22.9	19.8	20.9	17.9	15.4
16000	9.1	7.3	10.8	10.8	7.6	18.9	10.3	6.9	5.9		4.8	2.1	9.6	6.8	11.1	10.3	11.7	10.4	7.7
20000						8.8							1.3			.9	2.5	2.9	.8
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
ENGINE RUNUP 85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-031
RUN 01
AIRCRAFT CODE 731
OPERATION CODE 00118
PROFILE VERSION A
28 NOV 79
PAGE F1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.1	80.4	81.4	82.9	84.0	85.3	82.0	79.8	78.6	78.6	78.7	78.2	80.6	80.9	82.8	83.8	83.7	83.2	80.6
250	82.9	78.2	79.3	80.8	81.9	83.1	79.9	77.7	76.5	76.4	76.6	76.0	78.5	78.7	80.6	81.6	81.5	81.0	78.3
315	80.6	76.0	77.1	78.5	79.7	80.9	77.7	75.5	74.4	74.2	74.5	73.9	76.3	76.5	78.4	79.4	79.2	78.7	76.1
400	78.3	73.8	74.8	76.3	77.4	78.7	75.5	73.3	72.2	71.9	72.3	71.6	74.0	74.2	76.2	77.0	76.9	76.3	73.8
500	75.9	71.5	72.5	73.9	75.1	76.4	73.2	71.0	69.9	69.6	70.0	69.4	71.7	71.9	73.9	74.6	74.5	73.9	71.4
630	73.4	69.1	70.2	71.5	72.7	74.0	70.9	68.6	67.6	67.2	67.7	67.0	69.3	69.4	71.5	72.1	72.0	71.3	68.9
800	70.8	66.7	67.8	69.0	70.3	71.6	68.5	66.2	65.2	64.7	65.3	64.5	66.8	66.9	69.0	69.5	69.4	68.7	66.3
1000	68.1	64.1	65.3	66.4	67.8	69.1	66.0	63.7	62.7	62.0	62.7	62.0	64.2	64.3	66.4	66.8	66.6	65.9	63.6
1250	65.2	61.4	62.6	63.7	65.1	66.5	63.3	61.0	60.1	59.2	60.0	59.2	61.4	61.5	63.7	63.9	63.7	62.9	60.7
1600	62.2	58.5	59.8	60.8	62.3	63.7	60.5	58.2	57.3	56.3	57.1	56.3	58.4	58.5	60.8	60.8	60.6	59.7	57.6
2000	59.1	55.5	56.9	57.9	59.4	60.8	57.6	55.2	54.4	53.3	54.0	53.2	55.3	55.4	57.8	57.6	57.4	56.3	54.4
2500	55.7	52.2	53.7	54.6	56.2	57.7	54.5	52.0	51.3	49.9	50.7	49.8	51.9	51.9	54.5	54.0	53.7	52.6	50.7
3150	52.2	48.7	50.2	51.2	52.9	54.4	51.1	48.5	47.9	46.4	47.1	46.1	48.1	48.0	50.9	50.1	49.8	48.5	46.7
4000	48.3	44.8	46.4	47.4	49.2	50.7	47.3	44.7	44.1	42.5	43.1	42.0	43.9	43.8	47.0	45.9	45.4	44.1	42.4
5000	44.1	40.5	42.1	43.3	45.2	46.7	43.2	40.6	40.0	38.2	38.8	37.6	39.4	39.3	42.8	41.3	40.7	39.3	37.6
6300	39.6	36.0	37.7	38.8	40.9	42.4	38.8	36.1	35.6	33.7	34.3	33.1	34.8	34.6	38.4	36.5	35.8	34.3	32.7
8000	35.2	31.9	33.5	34.6	36.5	38.2	34.7	32.1	31.7	29.7	30.3	29.2	30.9	30.7	34.4	32.4	31.9	30.4	28.9
10000	30.6	27.5	29.2	30.1	31.7	33.7	30.3	27.8	27.5	25.4	26.1	25.2	26.9	26.7	30.1	28.2	28.0	26.5	25.1
12500	25.6	22.8	24.5	25.3	26.6	28.8	25.6	23.1	22.9	20.9	21.6	20.9	22.7	22.5	25.6	23.9	23.9	22.4	21.1
16000	20.3	17.9	19.5	20.1	21.0	23.6	20.6	18.1	18.0	16.0	16.9	16.3	18.2	18.1	20.9	19.4	19.5	18.1	16.9
20000	14.7	12.7	14.2	14.7	15.1	17.9	15.2	12.9	12.7	11.0	12.0	11.5	13.5	13.5	16.1	14.7	14.8	13.5	12.4
25000	9.1	7.2	8.6	8.9	9.2	11.9	9.5	7.4	7.2	5.7	7.0	6.6	8.7	8.7	11.5	9.9	9.9	8.6	7.6

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 01
AIRCRAFT CODE 731
OPERATION CODE 00110
PROFILE VERSION A
28 NOV 79

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
ENGINE RUNUP 85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.9	80.4	82.0	82.9	84.7	86.6	82.7	80.7	79.4	80.2	79.4	78.9	81.3	80.9	82.8	83.8	84.8	83.9	81.1
250	83.6	78.2	79.9	80.8	82.5	84.5	80.6	78.6	77.3	78.0	77.3	76.7	79.2	78.7	80.6	81.6	82.6	81.7	78.9
315	81.4	76.0	77.7	78.5	80.3	82.3	78.4	76.4	75.1	75.8	75.2	74.6	77.0	76.5	78.4	79.4	80.3	79.4	76.6
400	79.0	73.8	75.5	76.3	78.1	80.0	76.2	74.2	72.9	73.5	73.0	72.4	74.7	74.2	76.2	77.0	78.0	77.0	74.3
500	76.6	71.5	73.2	73.9	75.8	77.8	73.9	71.9	70.6	71.2	70.7	70.1	72.4	71.9	73.9	74.6	75.6	74.5	71.9
630	74.1	69.1	70.8	71.5	73.4	75.4	71.6	69.6	68.3	68.7	68.4	67.7	70.0	69.4	71.5	72.1	73.1	72.0	69.5
800	71.5	66.7	68.4	69.0	71.0	73.0	69.2	67.2	65.9	66.2	66.0	65.2	67.5	66.9	69.0	69.5	70.5	69.3	66.9
1000	68.8	64.1	65.9	66.4	68.4	70.5	66.7	64.7	63.5	63.6	63.4	62.7	64.9	64.3	66.4	66.8	67.7	66.6	64.2
1250	65.9	61.4	63.2	63.7	65.7	67.8	64.0	61.9	60.8	60.8	60.7	59.9	62.1	61.5	63.7	63.9	64.8	63.5	61.3
1600	63.0	58.5	60.4	60.8	63.0	65.0	61.2	59.1	58.0	57.9	57.8	57.0	59.1	58.5	60.8	60.8	61.7	60.4	58.2
2000	59.8	55.5	57.5	57.9	60.0	62.1	58.3	56.1	55.1	54.9	54.7	53.9	56.0	55.4	57.8	57.6	58.5	57.0	54.9
2500	56.5	52.2	54.3	54.6	56.9	59.1	55.2	52.9	52.0	51.5	51.4	50.5	52.6	51.9	54.5	54.0	54.8	53.3	51.3
3150	52.9	48.7	50.8	51.2	53.5	55.7	51.8	49.5	48.6	47.9	47.8	46.8	48.8	48.0	50.9	50.1	50.9	49.2	47.3
4000	48.9	44.8	46.9	47.4	49.8	51.8	47.9	45.5	44.7	43.7	43.7	42.6	44.5	43.8	47.0	45.9	46.3	44.7	42.8
5000	44.6	40.5	42.5	43.3	45.6	47.5	43.6	41.1	40.4	39.2	39.2	38.1	39.9	39.3	42.8	41.3	41.3	39.7	37.9
6300	39.9	36.0	37.9	38.8	41.2	42.9	39.1	36.5	35.9	34.3	34.5	33.4	35.0	34.6	38.4	36.5	36.2	34.6	32.9
8000	35.4	31.9	33.7	34.6	36.7	38.5	34.9	32.3	31.8	30.0	30.4	29.4	31.0	30.7	34.4	32.4	32.2	30.6	29.0
10000	30.6	27.5	29.2	30.1	31.7	33.7	30.3	27.8	27.5	25.4	26.1	25.2	26.9	26.7	30.1	28.2	28.0	26.5	25.1
12500	25.6	22.8	24.5	25.3	26.6	28.8	25.6	23.1	22.9	20.9	21.6	20.9	22.7	22.5	25.6	23.9	23.9	22.4	21.1
16000	20.3	17.9	19.5	20.1	21.0	23.6	20.6	18.1	18.0	16.0	16.9	16.3	18.2	18.1	20.9	19.4	19.5	18.1	16.9
20000	14.7	12.7	14.2	14.7	15.1	17.9	15.2	12.9	12.7	11.0	12.0	11.5	13.5	13.5	16.1	14.7	14.8	13.5	12.4
25000	9.1	7.2	8.6	8.9	9.2	11.9	9.5	7.4	7.2	5.7	7.0	6.6	8.7	8.7	11.5	9.9	9.9	8.6	7.6

[illegible] A FUNCTION OF ANGLE AROUND SOURCE

[illegible] 250 FEET

[illegible]
[illegible]PRESSION

(OPERATION:
(ENGINE RUNUP 85% RPM
(SINGLE ENGINE
(GROUND RUNUP (SUPPRESSED)

) METEOROLOGY:
) TEMP = 59 F
) BAR PRESS =29.92 IN HG
) REL HUMID = 70 %
) DELTA N = 0.0 DB

)IDENTIFICATION:
) OMEGA 8.2
) TEST 77-731-001
) RUN 01
) AIRCRAFT CODE 731
) OPERATION CODE 00118
) PROFILE VERSION A
) 28 NOV 79
) PAGE J1

P=PNLT A=AL T=ALT

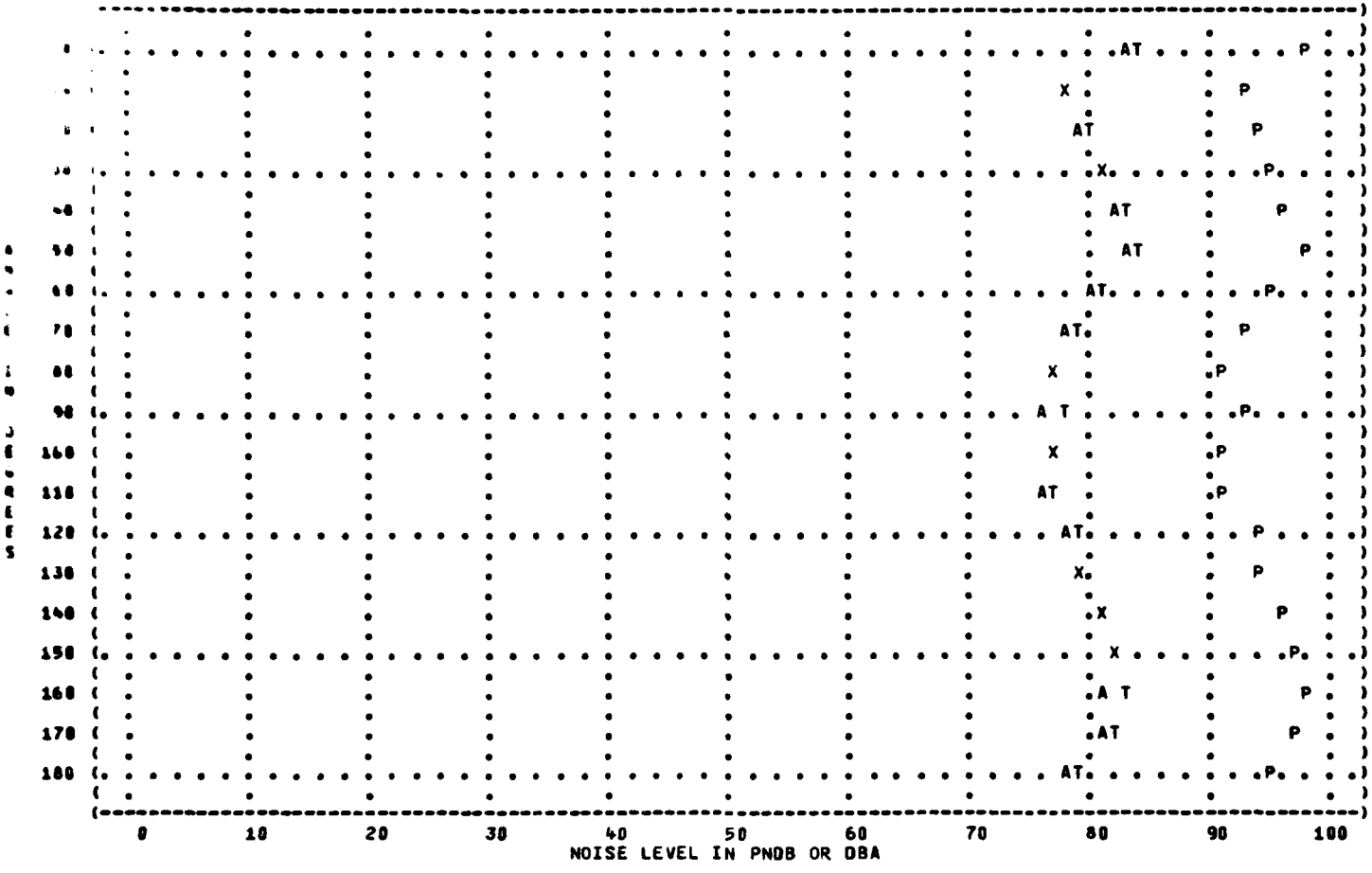


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 02
AIRCRAFT CODE 731
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
MILITARY POWER 98.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	76	76	74	76	76	76	79	79	79	78	79	77	79	81	81	81	82	82	82
63	77	76	73	75	79	79	79	80	81	81	81	80	78	81	82	82	81	82	82
80	79	76	73	78	81	79	81	80	81	80	81	79	80	82	82	82	79	82	81
100	76	75	76	79	80	79	80	81	83	79	79	80	81	84	83	83	83	81	80
125	76	76	76	80	82	84	81	81	82	78	79	79	79	84	82	84	83	79	79
160	78	77	75	76	79	78	77	79	82	80	82	80	79	83	82	82	81	81	79
200	77	77	74	76	80	81	81	78	81	82	81	79	80	82	83	83	81	83	78
250	82	81	75	77	79	79	81	83	80	82	82	83	81	81	83	83	83	83	81
315	81	79	76	78	80	83	83	80	79	81	81	81	80	81	81	82	81	81	78
400	80	79	77	77	79	81	81	80	79	81	80	80	81	80	80	81	82	82	78
500	78	78	77	76	77	78	78	78	77	79	77	76	76	78	78	78	79	78	75
630	76	76	75	75	76	77	76	77	78	77	76	74	75	75	75	74	76	75	72
800	77	79	77	77	79	79	79	78	78	75	75	73	73	74	74	75	74	73	72
1000	77	78	76	77	78	77	77	76	76	74	73	72	72	70	70	71	70	69	68
1250	75	77	75	75	77	77	76	75	76	72	72	71	71	72	71	73	71	70	70
1600	73	77	74	74	75	75	75	75	74	71	71	70	71	71	72	72	73	72	70
2000	75	78	74	75	75	75	75	73	72	69	69	69	71	73	73	73	74	73	72
2500	74	77	73	72	72	72	72	71	69	67	69	71	70	73	74	74	73	74	74
3150	75	77	74	75	73	74	74	72	70	68	70	71	72	73	75	74	74	76	75
4000	74	76	73	72	72	74	72	72	72	72	70	72	72	75	76	75	76	77	74
5000	72	75	69	68	69	71	69	68	68	68	67	68	68	69	70	69	69	71	69
6300	68	71	66	64	65	68	66	65	64	64	63	64	64	66	67	66	66	68	66
8000	66	67	62	61	62	65	62	61	60	60	58	59	59	61	61	61	62	64	64
10000	59	61	56	55	55	57	54	53	53	52	51	51	52	53	51	53	56	61	64
OVERALL	91	91	88	89	91	92	92	91	92	91	91	91	91	93	93	93	93	93	91

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 82
AIRCRAFT CODE 731
OPERATION CODE 80104
PROFILE VERSION A
28 NOV 79
PAGE D2

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
MILITARY POWER 98.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	103.0	104.5	101.4	101.8	102.2	103.1	102.8	101.8	101.6	101.0	100.4	100.6	101.1	102.7	103.3	103.1	103.3	103.9	102.1
250	100.8	102.2	99.2	99.6	99.9	100.9	100.6	99.6	99.3	98.7	98.2	98.5	98.8	100.5	101.0	100.8	101.0	101.6	99.9
315	98.5	99.9	96.9	97.2	97.6	98.6	98.3	97.2	97.0	96.4	95.8	96.2	96.4	98.1	98.7	98.5	98.7	99.2	97.5
400	96.1	97.5	94.4	94.8	95.3	96.2	95.9	94.8	94.6	94.0	93.4	93.8	94.8	95.7	96.2	96.1	96.3	96.8	95.1
500	93.6	95.0	91.9	92.3	92.8	93.7	93.4	92.2	92.0	91.4	91.0	91.2	91.5	93.2	93.7	93.5	93.7	94.3	92.6
630	90.9	92.3	89.3	89.7	90.1	91.1	90.8	89.6	89.3	88.9	88.6	88.5	88.9	90.4	91.0	90.9	91.0	91.6	89.9
800	88.1	89.5	86.5	86.9	87.4	88.3	88.0	86.8	86.5	86.3	86.0	85.9	86.3	87.5	88.2	88.1	88.1	88.8	87.1
1000	85.2	86.5	83.5	84.0	84.5	85.4	85.3	84.2	83.8	83.7	83.3	83.2	83.6	84.5	85.2	85.1	85.2	85.8	84.0
1250	81.9	83.3	80.3	80.8	81.5	82.3	82.4	81.3	81.0	80.9	80.5	80.4	80.8	81.4	82.0	82.2	82.3	82.5	80.8
1600	78.7	80.1	76.9	77.3	78.3	79.3	79.4	78.4	78.0	77.9	77.5	77.4	77.9	78.4	78.8	79.2	79.3	79.3	77.2
2000	75.5	76.6	73.4	73.9	75.0	76.1	76.3	75.2	74.8	74.8	74.4	74.2	74.7	75.1	75.6	76.0	76.2	76.1	73.6
2500	71.5	72.7	69.6	70.0	71.1	72.2	72.4	71.3	70.9	70.9	70.4	70.2	70.7	71.1	71.6	72.0	72.2	72.1	69.5
3150	67.1	68.3	65.3	65.6	67.0	67.8	67.9	66.8	66.7	66.4	66.0	65.7	66.2	66.6	67.8	67.5	67.7	67.5	64.9
4000	62.3	63.5	61.1	61.1	62.7	63.2	63.4	62.4	62.1	61.6	60.9	60.7	61.1	61.8	62.8	62.4	62.6	62.4	59.7
5000	57.2	58.5	56.3	56.3	57.9	58.4	58.6	57.6	57.2	56.5	55.7	54.9	55.5	55.5	56.8	57.0	57.2	56.7	54.0
6300	51.9	53.3	50.8	50.9	52.6	53.1	53.3	52.3	52.0	51.0	50.1	49.2	49.2	50.9	51.1	51.3	51.7	50.8	47.8
8000	46.7	48.0	45.6	45.3	47.7	48.1	48.3	47.2	46.9	46.6	45.2	44.4	44.5	46.1	46.3	46.5	47.0	46.3	42.6
10000	41.5	42.3	39.7	39.5	41.0	42.6	42.7	41.5	41.4	41.4	39.8	38.7	39.2	40.9	40.9	41.1	41.6	40.7	36.8
12500	35.6	36.3	33.6	32.8	34.6	36.1	36.2	35.5	34.8	35.7	33.7	32.8	33.2	34.7	34.7	35.1	35.3	34.8	30.8
16000	28.8	29.1	26.3	24.8	27.6	29.7	29.6	29.1	27.7	28.8	26.6	26.3	26.9	27.6	28.3	28.4	29.4	28.5	22.5
20000	18.0	19.2	15.6	12.4	17.1	20.6	20.6	18.5	16.3	19.1	16.1	15.0	15.5	17.5	16.9	18.0	19.5	17.9	11.6
25000	7.2	9.4	4.9	.1	6.6	11.6	11.7	7.9	4.9	9.4	5.7	3.7	6.1	7.5	5.5	7.6	7.5	7.2	.6

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
MILITARY POWER 98.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 02
AIRCRAFT CODE 731
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE E2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	103.7	104.5	101.4	101.8	102.2	104.1	102.8	102.5	102.6	102.4	100.4	100.8	101.6	103.9	104.4	104.1	104.7	103.9	102.1
250	101.4	102.2	99.2	99.6	99.9	101.8	100.6	100.3	100.3	100.1	98.2	98.5	99.3	101.7	102.1	101.9	102.5	101.6	99.9
315	99.1	99.9	96.9	97.2	97.6	99.5	98.3	97.9	98.0	97.8	95.8	96.2	97.0	99.3	99.8	99.5	100.1	99.2	97.5
400	96.7	97.5	94.4	94.8	95.3	97.1	95.9	95.5	95.6	95.4	93.4	93.8	94.5	96.9	97.3	97.1	97.7	96.8	95.1
500	94.2	95.0	91.9	92.3	92.8	94.6	93.4	92.9	93.0	92.8	91.0	91.2	92.0	94.4	94.8	94.6	95.1	94.3	92.6
630	91.5	92.3	89.3	89.7	90.1	92.0	90.8	90.3	90.3	90.3	88.6	88.5	89.4	91.6	92.1	91.9	92.4	91.6	89.9
800	88.7	89.5	86.5	86.9	87.4	89.2	88.0	87.5	87.5	87.7	86.0	85.9	86.9	88.7	89.3	89.1	89.5	88.8	87.1
1000	85.8	86.5	83.5	84.0	84.5	86.3	85.3	84.9	84.8	85.1	83.3	83.2	84.2	85.7	86.3	86.2	86.6	85.8	84.0
1250	82.5	83.3	80.3	80.8	81.5	83.2	82.4	82.0	82.0	82.3	80.5	80.4	81.4	82.6	83.1	83.3	83.8	82.5	80.8
1600	79.3	80.1	76.9	77.3	78.3	80.2	79.4	79.1	79.0	79.3	77.5	77.4	78.4	79.6	79.9	80.2	80.8	79.3	77.2
2000	76.1	76.6	73.4	73.9	75.0	77.0	76.3	75.9	75.8	76.2	74.4	74.2	75.2	76.3	76.7	77.0	77.6	76.1	73.6
2500	72.2	72.7	69.6	70.0	71.1	73.1	72.4	72.0	71.9	72.3	70.4	70.2	71.3	72.3	72.7	73.0	73.6	72.1	69.5
3150	67.7	68.3	65.3	65.6	67.0	68.7	67.9	67.5	67.7	67.8	66.0	65.7	66.8	67.8	68.1	68.5	69.1	67.5	64.9
4000	62.8	63.5	61.1	61.1	62.7	63.9	63.4	63.0	62.9	62.7	60.9	60.7	61.6	62.8	62.9	63.2	63.7	62.4	59.7
5000	57.5	58.5	56.3	56.3	57.9	58.9	58.6	58.0	57.8	57.3	55.7	54.9	55.9	57.3	57.4	57.6	58.1	56.7	54.0
6300	52.1	53.3	50.8	50.9	52.6	53.5	53.3	52.6	52.4	51.6	50.1	49.2	49.4	51.4	51.6	51.7	52.3	50.8	47.8
8000	46.9	48.0	45.6	45.3	47.7	48.3	48.3	47.3	47.1	46.9	45.2	44.4	44.6	46.3	46.5	46.7	47.3	46.3	42.6
10000	41.5	42.3	39.7	39.5	41.8	42.6	42.7	41.5	41.4	41.4	39.8	38.7	39.2	40.9	40.9	41.1	41.6	40.7	36.8
12500	35.6	36.3	33.6	32.8	34.6	36.1	36.2	35.5	34.8	35.7	33.7	32.8	33.2	34.7	34.7	35.1	35.3	34.8	30.0
16000	28.8	29.1	26.3	24.8	27.6	29.7	29.6	29.1	27.7	28.8	26.6	26.3	26.9	27.6	28.3	28.4	29.4	28.5	22.5
20000	18.0	19.2	15.6	12.4	17.1	20.6	20.6	18.5	16.3	19.1	16.1	15.0	16.5	17.5	16.9	18.0	19.5	17.9	11.6
25000	7.2	9.4	4.9	.1	6.6	11.6	11.7	7.9	4.9	9.4	5.7	3.7	6.1	7.5	5.5	7.6	7.5	7.2	.6

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
MILITARY POWER 98.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 78 %
DELTA N = .8 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 02
AIRCRAFT CODE 731
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE F2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	88.9	90.6	87.7	87.8	88.7	89.4	89.2	88.3	87.9	87.1	86.7	86.5	86.6	87.5	88.1	88.2	88.3	88.6	86.6
250	86.8	88.4	85.5	85.6	86.6	87.3	87.1	86.2	85.8	85.8	84.6	84.3	84.5	85.4	85.9	86.1	86.2	86.4	84.4
315	84.6	86.2	83.4	83.4	84.4	85.1	85.0	84.8	83.7	82.9	82.5	82.2	82.3	83.2	83.7	83.9	84.8	84.2	82.2
400	82.4	83.9	81.1	81.2	82.2	83.8	82.8	81.9	81.5	80.8	80.3	80.8	80.1	81.8	81.5	81.7	81.8	81.9	79.9
500	80.1	81.6	78.9	79.8	80.8	80.7	80.6	79.7	79.3	78.6	78.1	77.8	77.9	78.7	79.2	79.4	79.5	79.6	77.5
630	77.8	79.2	76.5	76.6	77.7	78.4	78.3	77.4	77.0	76.3	75.8	75.5	75.6	76.4	76.8	77.1	77.2	77.2	75.1
800	75.3	76.7	74.1	74.2	75.3	76.1	76.0	75.0	74.7	74.0	73.5	73.1	73.2	73.9	74.4	74.6	74.8	74.7	72.6
1000	72.9	74.2	71.7	71.8	72.9	73.6	73.6	72.6	72.2	71.6	71.1	70.6	70.7	71.4	71.8	72.1	72.3	72.1	70.8
1250	70.3	71.5	69.1	69.2	70.4	71.1	71.0	70.1	69.7	69.1	68.5	68.0	68.1	68.8	69.1	69.5	69.6	69.4	67.2
1600	67.6	68.8	66.4	66.5	67.7	68.4	68.4	67.4	67.1	66.5	65.9	65.3	65.5	66.0	66.3	66.7	66.9	66.6	64.3
2000	64.8	65.9	63.7	63.7	65.0	65.7	65.6	64.7	64.4	63.8	63.1	62.5	62.7	63.2	63.5	63.8	64.1	63.7	61.3
2500	61.7	62.8	60.7	60.7	61.9	62.6	62.5	61.7	61.4	60.7	60.0	59.3	59.5	60.0	60.2	60.5	60.9	60.4	58.0
3150	58.3	59.5	57.4	57.4	58.7	59.3	59.2	58.4	58.2	57.3	56.6	55.7	55.9	56.4	56.6	56.9	57.3	56.7	54.3
4000	54.6	55.8	53.8	53.8	55.1	55.6	55.5	54.8	54.6	53.6	52.8	51.9	52.1	52.5	52.7	53.0	53.3	52.6	50.3
5000	50.5	51.7	49.8	49.8	51.1	51.5	51.5	50.8	50.6	49.4	48.7	47.6	47.8	48.2	48.3	48.6	49.0	48.2	45.9
6300	46.1	47.3	45.5	45.5	46.8	47.2	47.1	46.4	46.2	45.8	44.2	43.1	43.2	43.7	43.8	44.1	44.4	43.5	41.3
8000	42.1	43.2	41.4	41.3	42.7	43.1	43.1	42.4	42.2	41.2	40.4	39.3	39.4	40.0	40.1	40.3	40.7	39.8	37.4
10000	37.7	38.6	37.0	36.8	38.2	38.8	38.8	38.1	37.9	37.2	36.3	35.2	35.4	35.9	36.1	36.2	36.7	36.0	33.3
12500	33.1	33.7	32.1	31.9	33.3	34.0	34.0	33.4	33.2	32.0	31.9	30.9	31.0	31.6	31.8	31.9	32.5	31.0	29.0
16000	28.0	28.4	26.8	26.5	28.0	28.9	28.9	28.3	28.0	28.0	27.1	26.2	26.3	27.0	27.2	27.3	27.9	27.3	24.3
20000	22.5	22.6	21.1	20.8	22.3	23.4	23.5	22.8	22.5	22.8	21.9	21.1	21.2	22.0	22.2	22.4	23.0	22.4	19.4
25000	16.7	16.5	14.0	14.6	16.2	17.6	17.6	16.9	16.6	17.2	16.4	15.7	15.0	16.7	16.9	17.2	17.6	17.2	14.2

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
MILITARY POWER 98.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 02
AIRCRAFT CODE 731
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	89.5	90.6	87.7	87.8	88.7	90.4	89.2	89.0	88.9	88.6	86.7	86.5	87.1	88.7	89.2	89.2	89.7	88.6	86.6
250	87.4	88.4	85.5	85.6	86.6	88.2	87.1	86.9	86.8	86.5	84.6	84.3	85.0	86.6	87.0	87.1	87.6	86.4	84.4
315	85.2	86.2	83.4	83.4	84.4	86.1	85.0	84.7	84.7	84.3	82.5	82.2	82.9	84.4	84.8	84.9	85.4	84.2	82.2
400	83.0	83.9	81.1	81.2	82.2	83.9	82.8	82.6	82.5	82.2	80.3	80.0	80.7	82.2	82.6	82.7	83.2	81.9	79.9
500	80.7	81.6	78.9	79.0	80.0	81.6	80.6	80.4	80.3	80.0	78.1	77.8	78.4	79.9	80.3	80.5	81.0	79.6	77.5
630	78.4	79.2	76.5	76.6	77.7	79.3	78.3	78.1	78.0	77.7	75.8	75.5	76.1	77.6	77.9	78.1	78.6	77.2	75.1
800	76.0	76.7	74.1	74.2	75.3	77.0	76.0	75.7	75.7	75.4	73.5	73.1	73.7	75.1	75.5	75.7	76.2	74.7	72.6
1000	73.5	74.2	71.7	71.8	72.9	74.6	73.6	73.3	73.2	73.0	71.1	70.6	71.3	72.6	72.9	73.2	73.7	72.1	70.0
1250	70.9	71.5	69.1	69.2	70.4	72.0	71.0	70.8	70.7	70.5	68.5	68.0	68.7	70.0	70.2	70.5	71.1	69.4	67.2
1600	68.2	68.8	66.4	66.5	67.7	69.3	68.4	68.1	68.1	67.9	65.9	65.3	66.0	67.2	67.4	67.7	68.3	66.6	64.3
2000	65.4	65.9	63.7	63.7	65.0	66.6	65.6	65.4	65.4	65.2	63.1	62.5	63.3	64.4	64.6	64.9	65.5	63.7	61.3
2500	62.3	62.8	60.7	60.7	61.9	63.5	62.5	62.4	62.4	62.1	60.0	59.3	60.0	61.2	61.3	61.6	62.3	60.4	58.0
3150	58.9	59.5	57.4	57.4	58.7	60.2	59.2	59.1	59.2	58.7	56.6	55.7	56.5	57.6	57.7	58.0	58.7	56.7	54.3
4000	55.1	55.8	53.8	53.8	55.1	56.4	55.5	55.4	55.4	54.7	52.8	51.9	52.5	53.5	53.6	53.8	54.5	52.6	50.3
5000	50.8	51.7	49.8	49.8	51.1	52.1	51.5	51.2	51.2	50.2	48.7	47.6	48.1	49.0	49.0	49.3	49.8	48.2	45.9
6300	46.3	47.3	45.5	45.5	46.8	47.5	47.1	46.7	46.6	45.5	44.2	43.1	43.5	44.2	44.2	44.5	44.9	43.5	41.3
8000	42.2	43.2	41.4	41.3	42.7	43.3	43.1	42.6	42.4	41.5	40.4	39.3	39.5	40.2	40.3	40.5	40.9	39.8	37.4
10000	37.7	38.6	37.0	36.8	38.2	38.8	38.8	38.1	37.9	37.2	36.3	35.2	35.4	35.9	36.1	36.2	36.7	36.0	33.3
12500	33.1	33.7	32.1	31.9	33.3	34.0	34.0	33.4	33.2	32.8	31.9	30.9	31.0	31.6	31.8	31.9	32.5	31.8	29.8
16000	28.0	28.4	26.8	26.5	28.0	28.9	28.9	28.3	28.0	28.0	27.1	26.2	26.3	27.8	27.2	27.3	27.9	27.3	24.3
20000	22.5	22.6	21.1	20.8	22.3	23.4	23.5	22.8	22.5	22.8	21.9	21.1	21.2	22.0	22.2	22.4	23.0	22.4	19.4
25000	16.7	16.5	14.8	14.6	16.2	17.6	17.6	16.9	16.6	17.2	16.4	15.7	15.8	16.7	16.9	17.2	17.6	17.2	14.2

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
MILITARY POWER 98.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 02
AIRCRAFT CODE 731
OPERATION CODE 00104
PROFILE VERSION A
26 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

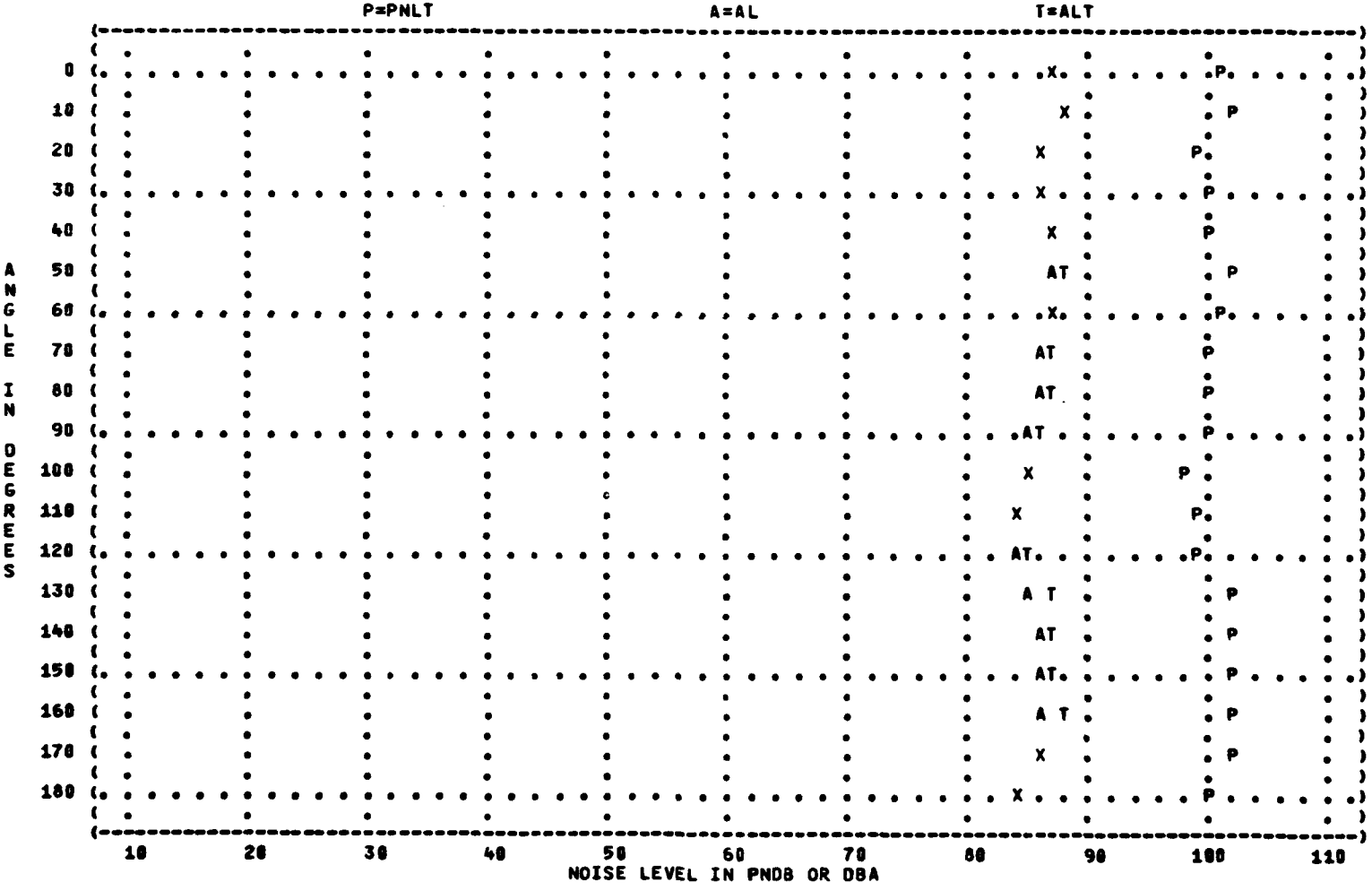


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 03
AIRCRAFT CODE 731
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE C3

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	89	88	88	88	89	90	88	87	86	85	86	88	87	88	88	86	87	84	86
63	83	82	80	82	85	85	87	87	85	84	83	84	85	89	86	85	86	83	85
80	82	81	79	82	85	85	86	89	86	85	85	87	87	89	87	84	83	83	83
100	81	81	78	81	83	85	86	89	88	85	88	89	90	91	88	86	86	83	84
125	80	80	81	84	86	84	84	89	86	82	86	89	89	89	86	84	83	83	84
160	82	79	79	82	87	86	88	89	85	84	84	86	88	87	85	86	86	84	83
200	81	80	80	80	83	83	84	88	85	84	85	84	88	87	88	86	86	84	83
250	86	82	79	82	83	85	89	87	85	84	84	83	86	85	86	85	86	82	83
315	82	78	79	79	82	86	88	87	85	84	84	85	86	84	84	83	85	83	83
400	81	77	77	79	80	83	85	84	83	79	82	82	84	84	85	85	84	84	81
500	82	76	76	77	79	81	83	84	82	79	80	79	81	81	81	80	83	82	79
630	81	76	78	79	81	81	84	83	82	81	80	79	80	81	80	80	81	80	80
800	80	77	79	80	83	82	84	85	82	81	80	79	80	79	80	78	78	78	79
1000	81	77	79	82	83	82	83	82	81	80	78	77	77	77	78	77	77	75	75
1250	77	73	77	79	79	80	80	80	79	77	77	76	76	76	77	77	76	75	74
1600	76	74	77	79	79	79	79	80	78	75	74	73	74	77	78	78	78	78	76
2000	75	75	77	78	78	77	76	78	76	73	73	72	74	76	76	76	76	76	75
2500	74	75	76	76	76	75	74	76	74	72	72	74	74	77	77	76	78	77	75
3150	75	75	77	79	77	77	76	75	74	73	74	75	77	77	77	76	78	76	75
4000	72	72	73	76	75	75	73	75	74	74	73	74	75	76	77	76	78	76	74
5000	70	70	70	73	73	73	71	71	71	70	69	70	72	71	72	72	72	70	70
6300	67	66	68	70	69	70	66	69	68	67	67	68	69	68	69	68	69	66	66
8000	63	62	64	66	65	67	62	63	62	62	61	61	62	63	65	63	65	62	61
10000	58	58	59	60	59	60	56	55	55	54	53	53	54	55	59	57	59	59	59
OVERALL	95	93	93	94	96	97	98	99	96	95	96	97	98	98	97	96	96	95	94

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 03
AIRCRAFT CODE 731
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE 03

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	104.3	103.8	104.5	106.2	106.3	106.6	106.4	106.8	105.3	104.2	104.1	104.8	106.2	106.5	106.5	105.5	106.7	105.1	104.2
250	102.1	100.7	102.2	103.9	104.1	104.4	104.2	104.7	103.0	101.9	101.9	102.6	104.0	104.3	104.2	103.3	104.4	102.8	101.9
315	99.8	98.4	99.9	101.6	101.8	102.1	102.0	102.4	100.8	99.6	99.6	100.3	101.8	102.0	101.9	101.0	102.1	100.5	99.6
400	97.4	96.0	97.5	99.2	99.4	99.7	99.8	100.2	98.4	97.2	97.3	97.9	99.4	99.6	99.5	98.6	99.8	98.2	97.3
500	94.9	93.5	95.8	96.7	96.9	97.3	97.5	97.9	96.0	94.7	94.8	95.5	97.0	97.2	97.1	96.2	97.3	95.7	94.8
630	92.3	90.8	92.3	94.1	94.3	94.7	95.0	95.5	93.5	92.2	92.3	92.9	94.4	94.6	94.5	93.6	94.7	93.2	92.2
800	89.6	88.0	89.6	91.3	91.5	91.9	92.5	93.0	91.0	89.6	89.6	90.4	91.6	91.9	91.8	91.0	91.9	90.5	89.4
1000	86.7	85.1	86.6	88.3	88.6	89.1	89.8	90.3	88.2	86.9	86.8	87.6	88.7	89.1	89.1	88.3	89.8	87.7	86.5
1250	83.8	81.9	83.4	85.1	85.5	86.0	86.8	87.2	85.3	83.8	83.9	84.5	85.7	86.2	86.3	85.5	85.8	84.8	83.4
1600	80.8	78.5	80.8	81.6	82.3	82.9	83.9	84.1	82.3	80.5	80.9	81.2	82.6	83.2	83.3	82.5	82.8	81.9	80.2
2000	77.6	74.9	76.3	77.9	78.8	79.7	80.7	80.8	79.1	77.0	77.7	77.9	79.4	80.0	80.0	79.3	79.6	78.7	77.0
2500	74.1	70.9	72.4	74.2	75.2	75.8	76.9	77.3	75.3	73.5	73.7	74.0	75.4	76.0	76.1	75.4	75.6	74.8	73.1
3150	70.6	66.5	68.2	70.0	71.3	71.4	72.7	73.2	71.3	69.6	69.5	69.5	70.9	71.6	71.7	70.9	71.4	70.4	68.9
4000	65.5	61.8	63.8	65.3	66.9	66.9	68.2	68.9	66.8	65.2	64.9	64.4	66.0	66.5	66.7	66.0	66.7	65.4	64.3
5000	60.4	56.8	58.9	60.4	62.2	62.1	63.5	64.2	62.0	60.4	60.0	59.4	60.8	61.3	61.3	60.5	61.7	60.4	59.3
6300	55.1	51.2	53.6	55.2	56.9	56.8	58.3	59.0	56.9	55.2	54.7	54.0	55.4	55.9	55.8	55.0	56.2	55.0	53.7
8000	50.7	45.7	48.5	50.2	52.2	52.2	53.8	54.6	52.3	50.5	50.1	49.1	51.2	51.5	51.6	50.4	51.9	50.5	49.0
10000	45.8	39.9	42.6	44.2	46.9	46.7	48.7	49.6	47.1	44.9	44.8	43.9	46.1	46.5	46.6	45.8	46.9	45.5	43.5
12500	40.8	33.2	35.6	37.2	40.3	40.8	43.2	44.4	41.3	38.8	38.5	38.4	40.6	41.0	40.7	39.6	41.4	39.6	37.5
16000	33.8	24.9	28.3	29.5	32.7	33.8	36.7	38.1	34.8	31.9	32.1	31.1	34.6	34.2	34.1	33.3	35.8	32.5	30.4
20000	25.2	13.9	16.8	18.5	22.1	25.2	29.8	30.2	26.6	22.3	23.3	22.0	25.9	25.7	26.5	25.6	27.4	25.2	21.7
25000	11.6	3.8	5.3	7.5	7.2	12.1	18.2	19.6	13.3	12.6	10.8	7.5	12.7	13.8	14.9	14.1	15.1	13.9	13.0

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 03
AIRCRAFT CODE 731
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	105.1	103.5	104.5	107.2	106.3	106.6	107.2	106.8	105.3	105.2	104.1	104.8	106.2	106.5	106.5	105.5	107.2	106.1	104.2
250	102.9	101.2	102.2	105.0	104.1	104.4	105.0	104.7	103.0	102.9	101.9	102.6	104.0	104.3	104.2	103.3	104.9	103.8	101.9
315	100.6	98.9	99.9	102.7	101.8	102.1	102.8	102.4	100.8	100.6	99.6	100.3	101.8	102.0	101.9	101.0	102.7	101.5	99.6
400	98.2	96.5	97.5	100.3	99.4	99.7	100.6	100.2	98.4	98.2	97.3	97.9	99.4	99.6	99.5	98.6	100.3	99.2	97.3
500	95.7	94.8	95.0	97.8	96.9	97.3	98.2	97.9	96.0	95.7	94.8	95.5	97.0	97.2	97.1	96.2	97.8	96.7	94.8
630	93.1	91.4	92.3	95.1	94.3	94.7	95.8	95.5	93.5	93.2	92.3	92.9	94.4	94.6	94.5	93.6	95.2	94.2	92.2
800	90.3	88.6	89.6	92.3	91.5	91.9	93.3	93.0	91.0	90.6	89.6	90.4	91.6	91.9	91.8	91.0	92.4	91.5	89.4
1000	87.4	85.6	86.6	89.3	88.6	89.1	90.6	90.3	88.2	87.9	86.8	87.6	88.7	89.1	89.1	88.3	89.5	88.7	86.5
1250	84.5	82.4	83.4	86.1	85.5	86.0	87.6	87.2	85.3	84.8	83.9	84.5	85.7	86.2	86.3	85.5	86.3	85.9	83.4
1600	81.6	79.1	80.0	82.7	82.3	82.9	84.6	84.1	82.3	81.5	80.9	81.2	82.6	83.2	83.3	82.5	83.3	82.9	80.2
2000	78.4	75.4	76.3	79.0	78.8	79.7	81.5	80.8	79.1	78.0	77.7	77.9	79.4	80.0	80.0	79.3	80.1	79.8	77.0
2500	74.9	71.5	72.4	75.2	75.2	75.8	77.7	77.3	75.3	74.5	73.7	74.0	75.4	76.0	76.1	75.4	76.2	75.9	73.1
3150	70.8	67.0	68.2	71.0	71.3	71.4	73.4	73.2	71.3	70.6	69.5	69.5	70.9	71.6	71.7	70.9	71.9	71.4	68.9
4000	66.1	62.2	63.8	66.1	66.9	66.9	68.9	68.9	66.8	66.0	64.9	64.4	66.0	66.5	66.7	66.0	67.1	66.3	64.3
5000	60.9	57.1	58.9	61.1	62.2	62.1	63.9	64.2	62.0	61.0	60.0	59.4	60.8	61.3	61.3	60.5	62.0	61.0	59.3
6300	55.4	51.5	53.6	55.6	56.9	56.8	58.6	59.0	56.9	55.6	54.7	54.0	55.4	55.9	55.8	55.8	56.4	55.4	53.7
8000	50.8	45.9	48.5	50.4	52.2	52.2	53.9	54.6	52.3	50.7	50.1	49.1	51.2	51.5	51.6	50.4	52.0	50.7	49.0
10000	45.8	39.9	42.6	44.2	46.9	46.7	48.7	49.6	47.1	44.9	44.8	43.9	46.1	46.5	46.6	45.0	46.9	45.5	43.5
12500	40.0	33.2	35.6	37.2	40.3	40.8	43.2	44.4	41.3	38.8	38.5	38.4	40.6	41.0	40.7	39.6	41.4	39.6	37.5
16000	33.8	24.9	28.3	29.5	32.7	33.8	36.7	38.1	34.8	31.9	32.1	31.1	34.6	34.2	34.1	33.3	35.0	32.5	30.4
20000	25.2	13.9	16.8	18.5	22.1	25.2	29.8	30.2	26.6	22.3	23.3	22.0	25.9	25.7	26.5	25.6	27.4	25.2	21.7
25000	11.6	3.0	5.3	7.5	7.2	12.1	18.2	19.6	13.3	12.6	10.8	7.5	12.7	13.8	14.9	14.1	15.1	13.9	13.0

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 83
AIRCRAFT CODE 731
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE F3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	90.9	88.2	90.1	91.7	92.5	92.7	93.6	93.8	92.2	90.6	90.2	90.1	91.4	91.7	92.0	91.2	92.0	90.9	89.0
250	88.8	86.0	88.0	89.5	90.4	90.6	91.5	91.7	90.1	88.5	88.1	88.0	89.3	89.6	89.9	89.1	89.9	88.7	87.6
315	86.7	83.8	85.8	87.3	88.3	88.5	89.4	89.6	88.0	86.4	86.0	85.9	87.2	87.4	87.7	87.0	87.7	86.6	85.5
400	84.5	81.6	83.6	85.1	86.1	86.3	87.3	87.5	85.8	84.2	83.9	83.7	85.0	85.2	85.5	84.8	85.5	84.4	83.3
500	82.3	79.3	81.3	82.8	83.8	84.1	85.1	85.3	83.6	82.0	81.7	81.5	82.8	83.0	83.3	82.5	83.3	82.1	81.1
630	80.0	77.0	79.0	80.5	81.5	81.8	82.9	83.0	81.4	79.8	79.4	79.2	80.5	80.7	81.0	80.2	80.9	79.8	78.8
800	77.7	74.6	76.6	78.1	79.2	79.4	80.6	80.7	79.0	77.4	77.1	76.8	78.1	78.3	78.6	77.8	78.5	77.5	76.4
1000	75.3	72.0	74.1	75.6	76.7	77.0	78.2	78.3	76.6	75.0	74.6	74.4	75.6	75.8	76.1	75.4	76.1	75.0	73.9
1250	72.8	69.4	71.5	73.0	74.2	74.5	75.7	75.8	74.1	72.5	72.1	71.7	73.0	73.2	73.5	72.8	73.4	72.5	71.3
1600	70.2	66.7	68.8	70.3	71.5	71.8	73.1	73.2	71.5	69.8	69.5	69.0	70.3	70.5	70.8	70.1	70.7	69.8	68.7
2000	67.5	63.8	66.0	67.4	68.8	69.0	70.4	70.4	68.8	67.1	66.7	66.2	67.4	67.7	68.1	67.4	67.9	67.1	65.9
2500	64.6	60.7	63.0	64.4	65.8	66.0	67.4	67.5	65.8	64.2	63.7	63.0	64.3	64.5	64.9	64.2	64.8	63.9	62.8
3150	61.4	57.4	59.7	61.1	62.6	62.7	64.2	64.2	62.6	61.0	60.4	59.6	60.8	61.1	61.5	60.7	61.4	60.4	59.4
4000	57.8	53.7	56.2	57.6	59.2	59.1	60.6	60.6	59.0	57.5	56.8	55.8	57.0	57.3	57.7	56.9	57.5	56.6	55.0
5000	53.8	49.7	52.2	53.6	55.2	55.1	56.6	56.6	55.0	53.5	52.8	51.7	52.8	53.0	53.5	52.7	53.3	52.3	51.6
6300	49.5	45.3	47.9	49.3	51.0	50.8	52.3	52.3	50.7	49.2	48.4	47.3	48.4	48.6	49.0	48.2	48.8	47.8	47.2
8000	45.6	41.2	43.7	45.1	46.9	46.7	48.3	48.4	46.7	45.3	44.6	43.4	44.6	44.8	45.2	44.3	45.0	44.0	43.3
10000	41.3	36.8	39.2	40.5	42.3	42.3	44.0	44.1	42.4	40.9	40.3	39.3	40.6	40.7	41.0	40.2	41.0	39.9	39.1
12500	36.6	32.0	34.2	35.4	37.4	37.5	39.3	39.5	37.7	36.1	35.7	34.8	36.2	36.3	36.5	35.7	36.6	35.5	34.6
16000	31.5	26.8	28.7	29.9	31.9	32.3	34.2	34.4	32.6	30.9	30.7	30.0	31.5	31.6	31.7	30.9	31.9	30.8	29.7
20000	25.9	21.3	22.8	23.9	26.1	26.7	28.7	28.9	27.0	25.3	25.4	24.9	26.5	26.6	26.6	25.8	26.7	25.7	24.3
25000	20.0	15.5	16.6	17.7	19.9	20.9	22.9	23.2	21.2	19.3	19.7	19.7	21.2	21.4	21.1	20.3	21.2	20.1	18.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-4 NOISE SUPPRESSOR
AF32A-14

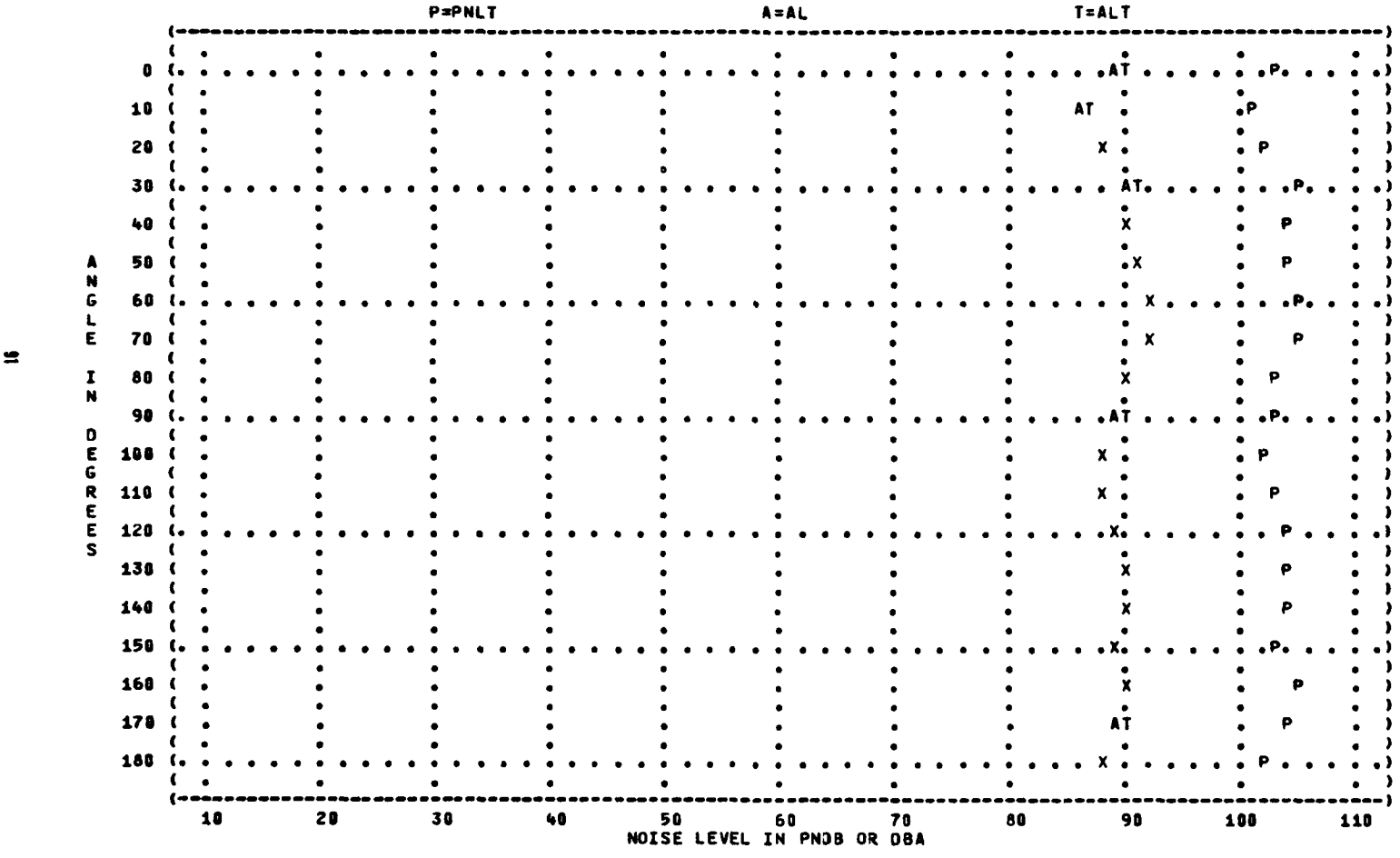
OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-731-001
RUN 03
AIRCRAFT CODE 731
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE G3

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	91.7	88.7	90.1	92.7	92.5	92.7	94.4	93.8	92.2	91.6	90.2	90.1	91.4	91.7	92.0	91.2	92.5	91.9	89.8
250	89.5	86.6	88.0	90.6	90.4	90.6	92.3	91.7	90.1	89.5	88.1	88.0	89.3	89.6	89.9	89.1	90.4	89.8	87.6
315	87.4	84.4	85.8	88.4	88.3	88.5	90.2	89.6	88.0	87.4	86.0	85.9	87.2	87.4	87.7	87.0	88.2	87.6	85.5
400	85.3	82.2	83.6	86.2	86.1	86.3	88.1	87.5	85.8	85.2	83.9	83.7	85.0	85.2	85.5	84.8	86.0	85.4	83.3
500	83.1	79.9	81.3	83.9	83.8	84.1	85.9	85.3	83.6	83.0	81.7	81.5	82.8	83.0	83.3	82.5	83.8	83.2	81.1
630	80.8	77.5	79.0	81.5	81.5	81.8	83.7	83.0	81.4	80.8	79.4	79.2	80.5	80.7	81.0	80.2	81.5	80.9	78.8
800	78.5	75.1	76.6	79.1	79.2	79.4	81.4	80.7	79.0	78.4	77.1	76.8	78.1	78.3	78.6	77.8	79.1	78.5	76.4
1000	76.1	72.6	74.1	76.6	76.7	77.0	79.0	78.3	76.6	76.0	74.6	74.4	75.6	75.8	76.1	75.4	76.6	76.1	73.9
1250	73.5	69.9	71.5	74.0	74.2	74.5	76.5	75.8	74.1	73.5	72.1	71.7	73.0	73.2	73.5	72.8	74.0	73.5	71.3
1600	71.0	67.2	68.8	71.3	71.5	71.8	73.9	73.2	71.5	70.9	69.5	69.0	70.3	70.5	70.8	70.1	71.3	70.8	68.7
2000	68.3	64.4	66.0	68.5	68.8	69.0	71.2	70.4	68.8	68.1	66.7	66.2	67.4	67.7	68.1	67.4	68.5	68.1	65.9
2500	65.3	61.3	63.0	65.4	65.8	66.0	68.2	67.5	65.8	65.2	63.7	63.0	64.3	64.5	64.9	64.2	65.3	65.0	62.8
3150	62.1	57.9	59.7	62.2	62.6	62.7	64.9	64.2	62.6	62.0	60.4	59.6	60.8	61.1	61.5	60.7	61.9	61.5	59.4
4000	58.4	54.2	56.2	58.4	59.2	59.1	61.2	60.6	59.0	58.3	56.8	55.8	57.0	57.3	57.7	56.9	58.0	57.4	55.8
5000	54.3	50.0	52.2	54.3	55.2	55.1	57.0	56.6	55.0	54.1	52.8	51.7	52.8	53.0	53.5	52.7	53.6	52.9	51.6
6300	49.8	45.5	47.9	49.7	51.0	50.8	52.6	52.3	50.7	49.7	48.4	47.3	48.4	48.6	49.0	48.2	49.0	48.2	47.2
8000	45.7	41.3	43.7	45.3	46.9	46.7	48.5	48.4	46.7	45.5	44.6	43.4	44.6	44.8	45.2	44.3	45.1	44.2	43.3
10000	41.3	36.8	39.2	40.5	42.3	42.3	44.0	44.1	42.4	40.9	40.3	39.3	40.6	40.7	41.0	40.2	41.0	39.9	39.1
12500	36.6	32.0	34.2	35.4	37.4	37.5	39.3	39.5	37.7	36.1	35.7	34.8	36.2	36.3	36.5	35.7	36.6	35.5	34.6
16000	31.5	26.8	28.7	29.9	31.9	32.3	34.2	34.4	32.6	30.9	30.7	30.0	31.5	31.6	31.7	30.9	31.9	30.8	29.7
20000	25.9	21.3	22.8	23.9	26.1	26.7	28.7	28.9	27.0	25.3	25.4	24.9	26.5	26.6	26.6	25.8	26.7	25.7	24.3
25000	20.6	15.5	16.6	17.7	19.9	20.9	22.9	23.2	21.2	19.3	19.7	19.7	21.2	21.4	21.1	20.3	21.2	20.1	18.7

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE DISTANCE = 250 FEET			IDENTIFICATION:
NOISE SOURCE/SUBJECT:	OPERATION:	METEOROLOGY:	OMEGA 8.2
F-4 NOISE SUPPRESSOR	AFTERBURNER POWER	TEMP = 59 F	TEST 77-731-001
AF32A-14	SINGLE ENGINE	BAR PRESS =29.92 IN HG	RUN 03
	GROUND RUNUP (SUPPRESSED)	REL HUMID = 70 %	AIRCRAFT CODE 731
		DELTA N = 0.0 DB	OPERATION CODE 00103
			PROFILE VERSION A
			28 NOV 79
			PAGE J3



USAF F-5 NOISE SUPPRESSOR F-5 NOISE SUPPRESSOR F-5 NOISE SUPPRESSOR F-5 NOISE SUPPRESSOR F-5 NOISE SUPPRESSOR USAF

NOISE PRODUCED ON THE GROUND BY

F-5 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-746-001
AIRCRAFT CODE: 746
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Engine Runup, 80% RPM	93-98
Military Power, 101% RPM	99-104
Afterburner Power	105-110

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
- NORMALIZED SPL AT 250 FEET

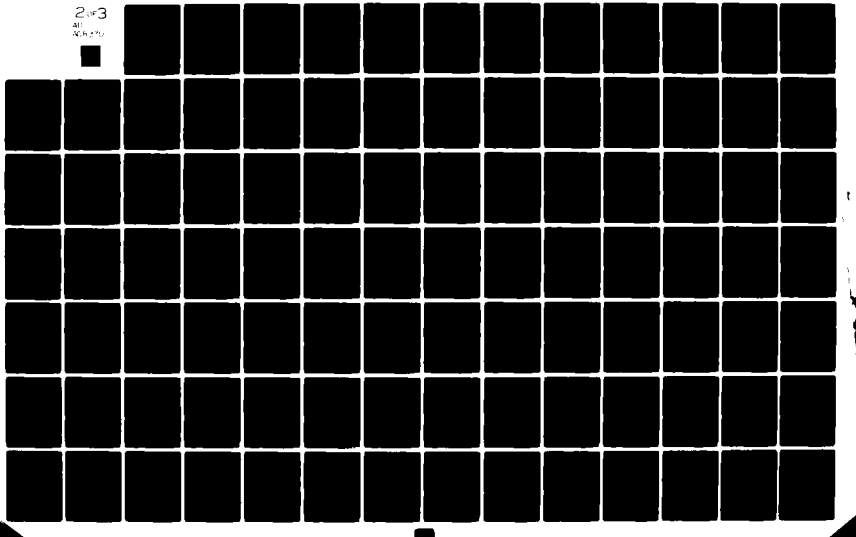
NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
- PERCEIVED NOISE LEVEL
- TONE-CORRECTED, PERCEIVED NOISE LEVEL
- A-WEIGHTED OVERALL SOUND LEVEL
- TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

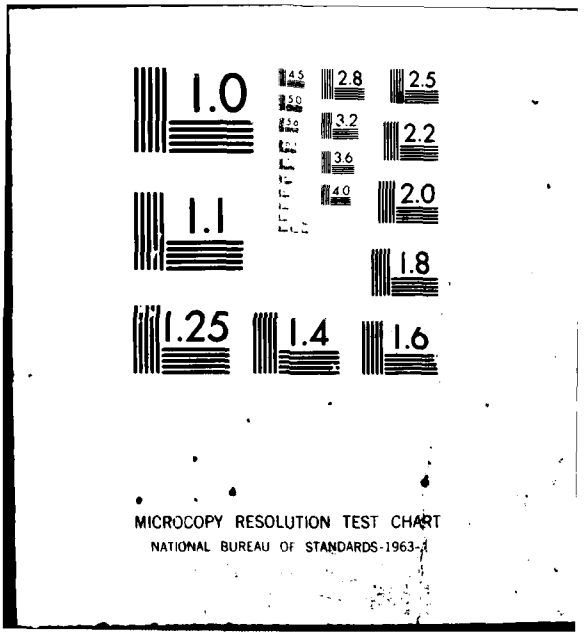
NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

F-5 NOISE SUPPRESSOR F-5 NOISE SUPPRESSOR F-5 NOISE SUPPRESSOR F-5 NOISE SUPPRESSOR F-5 NOISE SUPPRESSOR

AD-A083 701 AIR FORCE AEROSPACE MEDICAL RESEARCH LAB WRIGHT-PATT--ETC F/G 1/2
COMMUNITY NOISE EXPOSURE RESULTING FROM AIRCRAFT OPERATIONS. VO--ETC(U)
DEC 79 R A LEE
UNCLASSIFIED AMRL-TR-73-110-VOL-7 NL

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3.6
4.0
4.5
5.0
5.6
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 01
AIRCRAFT CODE 746
OPERATION CODE 00119
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
ENGINE RUNUP 80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	73	74	72	73	73	73	74	77	78	78	77	76	77	80	80	80	81	81	82
63	71	70	69	71	72	72	69	74	74	73	73	75	80	76	75	75	76	76	77
80	76	74	73	71	72	71	69	72	74	73	74	77	75	77	76	76	77	77	78
100	77	75	73	70	68	67	65	70	69	72	72	70	73	80	74	73	73	77	78
125	71	70	69	71	73	67	67	70	69	65	68	67	68	74	72	71	71	74	77
160	66	68	67	65	67	65	64	68	68	66	66	66	70	73	72	70	70	67	68
200	64	66	64	61	63	61	64	69	68	66	66	64	66	67	68	65	64	64	67
250	64	65	62	60<	61	59	60	65	64	62	62	63	62	62	62	63	61	62	64
315	62	63	62	60	60	59	59	61	62	61	61	62	61	61	61	61	59	59	60
400	63	63	59	62	61	58	58	62	61	60	59	61	60	60	59	58	57	57	57
500	57	57	55	59	60	55	57	59	58	57	57	58	58	57	54	55	53	52	51
630	55	54	52	54	57	52	52	56	54	55	54	54	55	57	56	56	56	54	50
800	56	57	54	54	59	54	52	58	56	56	55	56	59	56	57	55	56	55	50
1000	55	55	55	52	55	50	49	55	52	51	51	53	57	53	54	52	51	51	48
1250	54	55	55	52	53	49	48	53	50	51	50	52	54	53	53	52	50	50	46
1600	58	57	56	51	53	50	47	53	50	52	50	52	54	54	55	53	51	51	49
2000	62	62	59	53	54	52	48	54	53	53	49	53	54	54	58	56	54	53	51
2500	61	61	58	53	54	52	48	57	53	53	50	51	54	55	60	57	56	55	52
3150	57	57	52	51	52	48	48	57	53	53	49	49	54	52	56	56	56	52	50
4000	64	58	55	53	53	47	46	54	53	58	51	50	56	56	57	63	63	53	50
5000	61	59	54	53	52	49	46	53	53	56	47	48	52	53	56	61	60	53	50
6300	56	56	51	47	48	47	44	50	50	48	42	44	45	47	51	54	53	50	48
8000	49	49	45	40	38	41<	38<	40	41	39	47	38<	37<	39	42	43	45	41	39
10000	46	45	42	32<	29<	35<	32<	30<	32<	29<	45	32<	29<	30<	32<	32<	36<	32<	30<
OVERALL	82	81	80	79	80	78	78	81	82	81	81	82	83	86	84	84	84	85	86

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
ENGINE RUNUP 80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-881
RUN 81
AIRCRAFT CODE 746
OPERATION CODE 80119
PROFILE VERSION A
28 NOV 79
PAGE D1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	89.9	88.2	85.4	83.1	84.1	81.0	79.7	85.8	84.1	85.3	83.0	83.6	85.5	88.3	87.3	89.0	88.7	86.1	86.2
250	87.5	85.9	83.1	80.7	81.8	78.7	77.4	83.5	81.8	83.0	80.7	81.2	83.1	86.1	85.0	86.6	86.3	83.7	83.8
315	85.1	83.6	80.7	78.3	79.5	76.3	75.0	81.1	79.4	80.6	78.2	78.8	80.7	83.7	82.7	84.2	83.9	81.3	81.4
400	82.5	81.1	78.3	75.9	77.1	73.9	72.6	78.7	77.0	78.1	75.7	76.4	78.3	81.3	80.3	81.7	81.3	78.8	79.8
500	79.9	78.6	75.8	73.3	74.6	71.4	70.0	76.2	74.4	75.5	73.2	73.9	75.7	78.8	77.8	79.0	78.7	76.3	76.4
630	77.1	76.0	73.2	70.8	71.9	68.8	67.5	73.5	71.7	72.7	70.6	71.3	73.0	76.2	75.2	76.2	75.8	73.7	73.7
800	74.1	73.2	70.4	68.2	69.0	66.0	64.9	70.7	68.9	69.8	67.7	68.7	70.1	73.3	72.4	73.3	72.9	70.8	70.8
1000	70.9	70.3	67.5	65.4	66.0	63.1	62.1	67.8	66.0	66.6	64.7	65.9	67.3	70.2	69.5	70.0	69.7	67.6	67.6
1250	67.3	67.0	64.3	62.4	63.0	59.7	59.0	64.7	63.0	63.2	61.3	62.5	64.3	66.7	66.3	66.5	66.1	64.2	64.1
1600	63.9	63.5	60.8	59.1	59.7	56.0	55.5	61.1	59.6	59.3	57.0	59.0	60.5	62.9	62.8	62.6	62.1	60.3	60.1
2000	60.0	59.6	56.8	55.4	56.0	52.1	51.7	57.2	55.7	55.5	54.0	55.2	56.7	58.4	58.6	57.9	57.4	55.6	55.5
2500	55.5	55.1	52.3	50.9	51.5	47.2	46.6	52.7	51.0	50.8	49.2	50.5	51.9	53.2	53.9	52.5	51.7	50.4	49.9
3150	50.3	49.9	46.5	45.1	46.0	41.8	40.7	47.2	45.3	45.1	43.4	45.0	46.4	46.7	48.3	46.7	45.9	44.4	43.2
4000	43.7	43.6	39.5	38.2	39.6	33.4	33.7	40.5	37.9	37.6	36.1	37.6	40.3	40.2	41.1	39.7	38.5	37.3	35.5
5000	35.8	35.7	31.8	31.2	33.5	24.9	24.9	33.3	30.2	29.7	27.8	30.4	32.9	31.9	33.0	30.5	28.9	26.9	22.5
6300	25.9	26.2	21.1	20.9	24.3	11.5	14.2	22.6	18.7	18.0	17.5	18.8	23.0	19.7	23.2	17.4	15.5	13.8	9.5
8000	11.3	13.0	10.3	13.2	15.8		7.2	15.2	10.4	7.6	7.6	8.6	12.9	9.8	8.8	6.8	6.7	.8	
10000				5.5	7.3		.2	7.8	2.1				2.8						
12500								.3											
16000																			
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
ENGINE RUNUP 80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
ONEGA 8.2
TEST 77-746-881
RUN 01
AIRCRAFT CODE 746
OPERATION CODE 00119
PROFILE VERSION A
26 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	91.4	88.7	85.4	83.6	85.0	81.0	79.7	85.8	85.1	86.6	83.6	83.6	86.0	89.3	87.3	90.6	90.2	86.1	86.2
250	89.0	86.4	83.1	81.3	82.6	78.7	77.4	83.5	82.8	84.2	81.2	81.2	83.7	87.1	85.0	88.2	87.9	83.7	83.8
315	86.6	84.1	80.7	78.9	80.3	76.3	75.0	81.1	80.4	81.8	78.8	78.8	81.3	84.7	82.7	85.8	85.4	81.3	81.4
400	84.1	81.7	78.3	76.4	77.9	73.9	72.6	78.7	78.0	79.3	76.3	76.4	78.8	82.3	80.3	83.3	82.9	78.8	79.8
500	81.4	79.1	75.8	73.8	75.4	71.4	70.0	76.2	75.4	76.7	73.8	73.9	76.2	79.8	77.8	80.6	80.2	76.3	76.4
630	78.6	76.5	73.2	71.3	72.7	68.8	67.5	73.5	72.7	73.9	71.2	71.3	73.5	77.2	75.2	77.8	77.4	73.7	73.7
800	75.6	73.7	70.4	68.7	69.8	66.0	64.9	70.7	69.9	71.0	68.3	68.7	70.7	74.3	72.4	74.9	74.4	70.8	70.8
1000	72.4	70.8	67.5	65.9	66.8	63.1	62.1	67.8	67.0	67.9	65.3	65.9	67.9	71.2	69.5	71.6	71.2	67.6	67.6
1250	68.9	67.5	64.3	63.0	63.8	59.7	59.0	64.7	64.0	64.4	61.9	62.5	64.8	67.7	66.3	68.1	67.7	64.2	64.1
1600	65.4	64.0	60.8	59.6	60.5	56.0	55.5	61.1	60.6	60.6	58.4	59.0	61.0	63.9	62.8	64.2	63.7	60.3	60.1
2000	61.5	60.1	56.8	55.9	56.8	52.1	51.7	57.2	56.7	56.7	54.6	55.2	57.2	59.4	58.6	59.5	58.9	55.6	55.5
2500	57.0	55.6	52.3	51.4	52.3	47.2	46.6	52.7	52.0	52.0	49.8	50.5	52.5	54.2	53.9	54.1	53.3	50.4	49.9
3150	51.8	50.4	46.5	45.7	46.8	41.0	40.7	47.2	46.4	46.3	44.0	45.0	46.9	47.7	48.3	48.3	47.5	44.4	43.2
4000	45.0	44.0	39.5	38.6	40.2	33.4	33.7	40.5	38.8	38.6	36.6	37.6	40.7	41.0	41.1	41.8	39.8	37.3	35.5
5000	36.7	36.0	31.8	31.5	34.0	24.9	24.9	33.3	30.8	30.4	28.2	30.4	33.3	32.5	33.0	31.5	29.8	26.9	22.5
6300	26.5	26.4	21.1	21.1	24.6	11.5	14.2	22.6	19.1	18.5	17.7	18.8	23.2	28.1	23.2	18.8	16.1	13.8	9.5
8000	11.6	13.1	10.3	13.3	16.0		7.2	15.2	10.6	7.8	7.7	8.6	13.0	18.0	8.8	7.2	7.8	.8	
10000				5.5	7.3		.2	7.8	2.1				2.8						
12500								.3											
16000																			
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 01
AIRCRAFT CODE 746
OPERATION CODE 80119
PROFILE VERSION A
28 NOV 79
PAGE F1

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
ENGINE RUNUP 80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	73.7	72.7	70.1	68.3	69.5	66.8	65.4	70.5	69.0	69.2	67.5	68.2	70.1	70.9	71.5	72.1	71.6	69.2	69.1
250	71.4	70.5	68.0	66.2	67.4	63.9	63.3	68.4	66.9	67.0	65.4	66.1	68.0	68.8	69.3	69.8	69.4	67.1	67.8
315	69.2	68.3	65.8	64.8	65.3	61.7	61.2	66.2	64.7	64.8	63.3	64.0	65.8	66.7	67.1	67.5	67.1	64.9	65.0
400	66.8	66.8	63.5	61.8	63.1	59.5	59.1	64.0	62.5	62.5	61.1	61.9	63.6	64.6	64.9	65.1	64.7	62.8	62.8
500	64.4	63.7	61.2	59.6	60.9	57.3	56.9	61.7	60.2	60.2	58.9	59.7	61.4	62.3	62.6	62.7	62.2	60.5	60.6
630	61.9	61.2	58.8	57.3	58.5	55.8	54.6	59.3	57.9	57.8	56.6	57.4	59.1	60.0	60.1	60.1	59.6	58.2	58.3
800	59.3	58.7	56.4	54.9	56.2	52.6	52.2	56.9	55.4	55.3	54.2	55.1	56.7	57.6	57.6	57.4	56.9	55.7	55.8
1000	56.5	56.0	53.8	52.4	53.7	50.1	49.7	54.3	52.9	52.7	51.8	52.6	54.2	54.9	54.9	54.6	54.1	53.1	53.1
1250	53.6	53.2	51.0	49.8	51.1	47.4	47.1	51.6	50.2	49.9	49.1	50.0	51.5	52.1	52.1	51.6	51.1	50.2	50.2
1600	50.5	50.2	48.0	47.0	48.4	44.6	44.3	48.8	47.3	47.0	46.2	47.2	48.7	49.1	49.1	48.4	47.9	47.2	47.1
2000	47.3	47.1	44.9	44.2	45.6	41.7	41.5	45.9	44.3	44.0	43.3	44.3	45.7	45.9	45.9	45.0	44.5	44.0	43.7
2500	43.7	43.6	41.5	40.9	42.5	38.4	38.3	42.5	41.0	40.7	40.0	41.0	42.5	42.4	42.4	41.4	40.9	40.4	39.8
3150	39.9	39.8	37.8	37.3	39.1	34.8	34.7	39.0	37.3	37.0	36.3	37.4	39.0	38.6	38.7	37.6	37.1	36.6	35.6
4000	35.6	35.7	33.8	33.3	35.4	30.9	30.7	35.1	33.3	33.1	32.4	33.4	35.2	34.4	34.6	33.5	33.1	32.5	30.9
5000	31.1	31.2	29.4	29.0	31.3	26.7	26.4	30.8	29.0	28.8	28.1	29.2	31.1	30.1	30.3	29.1	28.7	28.1	26.3
6300	26.3	26.5	24.8	24.5	26.9	22.2	22.0	26.6	24.5	24.3	23.7	24.7	26.7	25.6	25.7	24.5	24.2	23.6	21.6
8000	22.2	22.3	20.6	20.8	23.1	18.4	18.4	22.6	20.8	20.6	20.0	21.0	22.8	22.0	21.8	20.7	20.5	20.8	18.4
10000	17.9	18.1	16.2	16.9	19.1	14.4	14.5	18.6	17.0	16.7	16.2	17.1	18.7	18.3	17.7	16.8	16.7	16.3	15.3
12500	13.7	13.8	11.8	12.8	14.7	10.2	10.5	14.3	13.0	12.6	12.2	13.0	14.4	14.5	13.6	12.8	12.8	12.6	12.3
16000	9.5	9.4	7.4	8.5	10.0	5.9	6.2	9.9	8.8	8.3	8.1	8.8	10.0	10.8	9.5	8.9	8.9	9.8	9.3
20000	5.3	5.1	3.1	4.8	5.1	1.5	1.8	5.4	4.6	4.0	4.0	4.6	5.7	7.2	5.6	5.1	5.2	5.6	6.4
25000	1.3	.9			.3			1.0	.6		.0	.6	1.8	3.8	2.8	1.5	1.8	2.4	3.4

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 01
AIRCRAFT CODE 746
OPERATION CODE 00119
PROFILE VERSION A
28 NOV 79
PAGE G1

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
ENGINE RUNUP 88% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	75.2	73.2	70.1	68.8	70.3	66.8	65.4	70.5	70.8	70.4	68.1	68.2	70.6	71.9	71.5	73.7	73.2	69.2	69.1
250	73.0	71.1	68.0	66.7	68.2	63.9	63.3	68.4	67.9	68.2	66.0	66.1	68.5	69.8	69.3	71.4	70.9	67.1	67.0
315	70.7	68.8	65.8	64.6	66.1	61.7	61.2	66.2	65.7	66.0	63.9	64.0	66.4	67.7	67.1	69.1	68.6	64.9	65.0
400	68.4	66.5	63.5	62.4	63.9	59.5	59.1	64.0	63.5	63.8	61.7	61.9	64.2	65.6	64.9	66.8	66.3	62.8	62.8
500	65.9	64.2	61.2	60.1	61.7	57.3	56.9	61.7	61.2	61.4	59.5	59.7	61.9	63.3	62.6	64.3	63.8	60.5	60.6
630	63.4	61.8	58.8	57.8	59.4	55.0	54.6	59.3	58.9	59.0	57.2	57.4	59.6	61.0	60.1	61.7	61.2	58.2	58.3
800	60.8	59.2	56.4	55.4	57.0	52.6	52.2	56.9	56.4	56.5	54.8	55.1	57.2	58.6	57.6	59.0	58.5	55.7	55.8
1000	58.0	56.6	53.8	52.9	54.5	50.1	49.7	54.3	53.9	53.9	52.3	52.6	54.7	55.9	54.9	56.2	55.7	53.1	53.1
1250	55.1	53.7	51.0	50.3	51.9	47.4	47.1	51.6	51.2	51.1	49.7	50.0	52.0	53.1	52.1	53.2	52.7	50.2	50.2
1600	52.1	50.8	48.0	47.6	49.2	44.6	44.3	48.8	48.3	48.2	46.8	47.2	49.2	50.1	49.1	50.0	49.5	47.2	47.1
2000	48.8	47.7	44.9	44.7	46.4	41.7	41.5	45.9	45.3	45.2	43.9	44.3	46.3	46.9	45.9	46.7	46.1	44.8	43.7
2500	45.3	44.2	41.5	41.5	43.3	38.4	38.3	42.5	42.0	41.9	40.5	41.0	43.0	43.4	42.4	43.1	42.5	40.4	39.8
3150	41.4	40.3	37.8	37.8	39.9	34.8	34.7	39.0	38.3	38.3	36.9	37.4	39.5	39.6	38.7	39.2	38.7	36.6	35.6
4000	36.9	36.1	33.8	33.8	36.1	30.9	30.7	35.1	34.1	34.1	32.8	33.4	35.6	35.2	34.6	34.8	34.3	32.5	30.9
5000	32.8	31.5	29.4	29.3	31.8	26.7	26.4	30.8	29.6	29.5	28.5	29.2	31.4	30.7	30.3	30.0	29.7	28.1	26.3
6300	26.9	26.7	24.8	24.7	27.3	22.2	22.0	26.4	24.9	24.8	23.9	24.7	26.9	26.0	25.7	25.1	24.9	23.6	21.6
8000	22.5	22.4	20.6	20.9	23.3	18.4	18.4	22.6	21.0	20.8	20.1	21.0	22.9	22.2	21.0	21.0	20.8	20.0	18.4
10000	17.9	18.1	16.2	16.9	19.1	14.4	14.5	18.6	17.0	16.7	16.2	17.1	18.7	18.3	17.7	16.8	16.7	16.3	15.3
12500	13.7	13.8	11.8	12.8	14.7	10.2	10.5	14.3	13.0	12.6	12.2	13.8	14.4	14.5	13.6	12.8	12.8	12.6	12.3
16000	9.5	9.4	7.4	8.5	10.0	5.9	6.2	9.9	8.8	8.3	8.1	8.8	10.0	10.0	9.5	8.9	8.9	9.0	9.3
20000	5.3	5.1	3.1	4.0	5.1	1.5	1.8	5.4	4.6	4.0	4.0	4.6	5.7	7.2	5.6	5.1	5.2	5.6	6.4
25000	1.3	.9			.3			1.0	.6		.0	.6	1.0	3.0	2.0	1.5	1.0	2.4	3.4

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
ENGINE RUNUP 80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 01
AIRCRAFT CODE 746
OPERATION CODE 00119
PROFILE VERSION A
28 NOV 79
PAGE J1

P=PNLT A=AL T=ALT

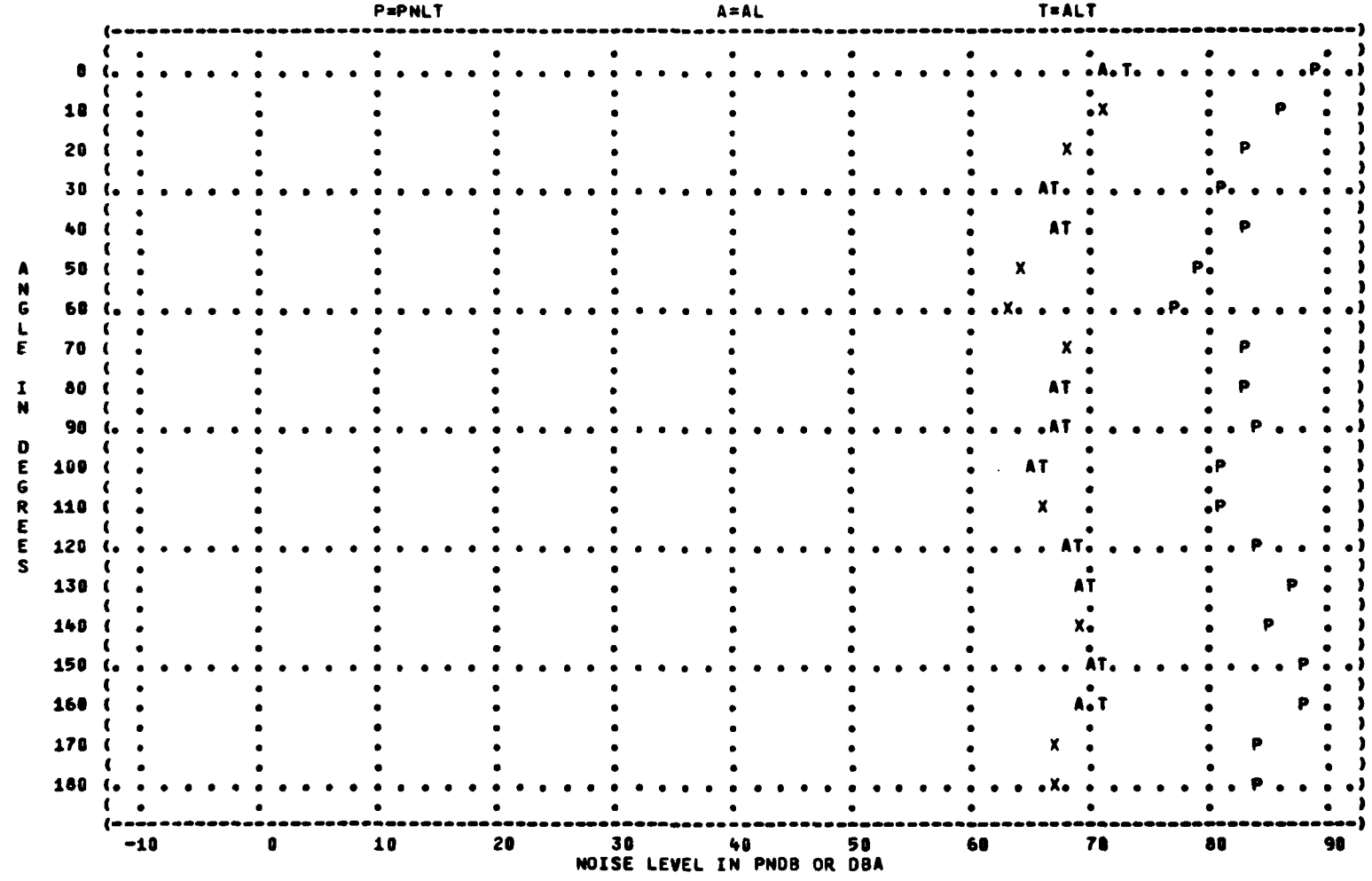


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 02
AIRCRAFT CODE 746
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 101% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	88	88	88	87	89	90	88	93	93	93	91	91	92	93	93	93	93	94	95
63	84	87	88	88	89	88	87	90	90	90	92	91	91	92	92	93	92	93	93
80	88	87	89	87	88	87	86	90	91	90	91	91	92	93	92	91	91	93	93
100	82	81	81	80	79	81	81	84	87	84	84	85	84	86	87	87	86	87	88
125	81	84	81	83	84	83	80	82	81	82	82	82	84	87	88	87	87	89	89
160	80	80	79	80	79	77	77	80	80	79	79	80	80	82	83	82	83	84	84
200	77	76	76	75	73	74	75	77	77	79	79	77	77	79	78	79	79	80	80
250	75	76	74	73	72	73	72	76	76	76	77	76	76	76	76	76	75	77	77
315	74	75	72	72	73	72	71	73	73	74	74	74	72	71	70	70	71	71	72
400	75	77	72	75	73	71	70	72	71	72	74	71	71	71	71	70	70	72	69
500	69	70	67	71	71	70	68	71	70	70	71	70	68	68	69	69	69	69	67
630	66	69	64	67	70	66	66	69	69	69	69	68	65	66	67	66	66	67	65
800	69	70	67	71	72	69	69	70	69	70	69	68	67	68	69	69	70	69	68
1000	70	71	67	70	69	69	69	69	70	70	70	68	70	68	68	69	69	69	68
1250	69	71	67	71	70	70	69	69	71	71	71	70	70	69	69	70	71	70	69
1600	69	70	66	69	69	68	68	70	70	70	70	70	69	67	67	67	68	67	67
2000	71	73	66	71	74	67	68	67	68	68	67	66	66	66	65	68	68	67	65
2500	66	69	64	68	69	63	64	64	65	64	64	63	63	63	63	65	65	64	63
3150	65	67	64	66	67	63	64	64	64	63	63	62	62	61	62	62	63	62	61
4000	64	65	61	62	65	62	62	66	64	62	63	62	61	62	62	63	64	63	62
5000	58	59	56	57	59	56	57	59	57	56	56	55	55	54	55	56	56	55	55
6300	59	56	52	54	56	54	53	56	52	52	51	50	52	54	52	54	55	53	53
8000	58	53	51	50	53	52	50	54	49	50	48	48	52	54	50	52	57	51	50
10000	50	50	50	50	50	50	50	47	47	47	47	47	47	52	52	52	52	52	52
OVERALL	93	94	94	93	94	94	93	97	97	97	97	97	97	98	98	98	98	99	99

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 101% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 02
AIRCRAFT CODE 746
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE 02

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	97.9	99.8	97.1	97.9	99.8	96.7	96.1	98.9	99.2	98.7	98.9	98.7	98.8	99.7	99.6	99.5	99.4	100.2	100.1
250	95.8	96.8	95.0	95.7	96.8	94.5	93.9	96.8	97.1	96.6	96.8	96.6	96.7	97.6	97.5	97.4	97.3	98.1	98.8
315	93.5	94.5	92.7	93.4	94.5	92.2	91.5	94.7	95.0	94.4	94.7	94.5	94.6	95.5	95.4	95.2	95.1	96.0	95.9
400	91.1	92.2	90.3	91.1	92.2	89.8	89.1	92.4	92.8	92.1	92.4	92.2	92.4	93.3	93.2	93.8	92.9	93.9	93.8
500	88.6	89.8	87.8	88.6	89.8	87.3	86.6	89.9	90.3	89.6	90.0	89.8	89.9	91.0	90.9	90.8	90.5	91.6	91.5
630	86.0	87.2	85.2	86.1	87.2	84.7	84.0	87.3	87.7	87.1	87.4	87.2	87.3	88.4	88.3	88.3	87.9	89.0	88.9
800	83.3	84.6	82.6	83.4	84.6	82.0	81.4	84.6	85.1	84.4	84.8	84.6	84.7	85.7	85.7	85.5	85.2	86.4	86.3
1000	80.5	81.8	79.8	80.7	81.8	79.3	78.6	81.9	82.4	81.7	82.1	81.9	82.0	83.0	82.9	82.7	82.4	83.6	83.5
1250	77.3	78.8	76.5	77.7	78.8	76.0	75.4	78.6	79.0	78.4	78.8	78.5	78.6	79.6	79.5	79.7	79.0	80.2	80.1
1600	74.0	75.5	72.9	74.4	75.5	72.4	72.1	74.9	75.4	74.8	75.2	74.9	75.0	75.9	75.9	75.9	75.4	76.5	76.4
2000	70.7	72.1	68.9	71.1	72.0	68.9	68.6	71.0	71.4	70.9	71.2	70.9	70.9	71.8	71.8	71.8	71.3	72.5	72.3
2500	66.6	68.1	64.9	67.1	68.0	64.9	64.6	66.7	67.0	66.8	67.0	66.5	66.5	67.3	67.3	67.2	66.9	68.0	67.8
3150	62.0	63.6	60.2	62.5	63.6	60.5	60.0	62.3	62.6	62.4	62.5	61.8	61.4	62.1	62.2	62.1	62.0	62.9	62.7
4000	56.7	58.4	54.6	57.3	58.4	55.3	54.9	57.1	57.5	57.3	57.3	56.6	56.2	56.1	56.4	56.8	56.9	57.1	56.6
5000	50.6	52.7	48.2	51.8	52.7	49.6	49.1	51.2	51.7	51.6	51.5	50.7	50.4	50.0	50.6	51.0	51.1	51.3	50.6
6300	43.7	45.6	41.3	45.6	46.0	43.0	42.2	44.9	45.2	45.1	45.2	43.9	43.9	43.6	44.3	44.6	44.8	45.0	44.1
8000	38.2	40.5	35.1	39.0	40.3	36.6	35.9	39.7	39.0	39.4	39.9	38.7	37.7	38.4	39.1	38.9	39.5	39.0	38.7
10000	31.3	34.0	27.2	33.0	33.6	30.5	28.0	32.3	32.2	32.5	33.1	31.2	30.0	30.3	31.6	31.4	31.5	33.0	31.4
12500	23.2	26.0	17.3	24.6	24.3	21.6	19.5	23.5	22.1	23.3	23.7	20.0	20.2	21.0	21.0	21.3	21.5	23.1	19.7
16000	13.2	16.3	7.3	14.0	15.5	9.0	10.1	12.4	9.0	11.9	12.7	9.0	10.5	6.7	7.6	7.6	7.6	9.9	7.5
20000	3.3	7.1		3.4	6.0		.7	1.3		.6	1.7		.0						
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 101% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 02
AIRCRAFT CODE 746
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE E2

DISTANCE	ANGLE (DEGREES)																	
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	99.1	100.1	97.1	98.4	100.5	97.4	96.1	100.4	99.2	98.7	98.9	98.7	98.8	101.1	101.0	100.7	100.9	101.7	101.5
250	96.9	97.9	95.0	96.2	98.3	95.2	93.9	98.3	97.1	96.6	96.8	96.6	96.7	99.0	98.9	98.6	98.8	99.6	99.4
315	94.6	95.7	92.7	94.0	96.0	92.8	91.5	96.2	95.0	94.4	94.7	94.5	94.6	96.9	96.8	96.4	96.7	97.5	97.3
400	92.2	93.3	90.3	91.6	93.7	90.4	89.1	93.8	92.8	92.1	92.4	92.2	92.4	94.7	94.6	94.2	94.5	95.3	95.2
500	89.7	90.9	87.8	89.2	91.3	87.9	86.6	91.4	90.3	89.6	90.0	89.8	89.9	92.4	92.3	92.0	92.0	93.0	92.9
630	87.1	88.3	85.2	86.6	88.7	85.3	84.0	88.8	87.7	87.1	87.4	87.2	87.3	89.8	89.7	89.5	89.4	90.5	90.4
800	84.5	85.7	82.6	84.0	86.1	82.7	81.4	86.1	85.1	84.4	84.8	84.6	84.7	87.2	87.0	86.7	86.7	87.8	87.7
1000	81.7	82.9	79.8	81.2	83.3	79.9	78.6	83.4	82.4	81.7	82.1	81.9	82.0	84.4	84.3	83.9	84.0	85.1	84.9
1250	78.5	79.9	76.5	78.2	80.3	76.6	75.4	80.0	79.0	78.4	78.8	78.5	78.6	81.0	80.9	80.9	80.6	81.7	81.5
1600	75.2	76.6	72.9	75.0	77.0	73.0	72.1	76.4	75.4	74.8	75.2	74.9	75.0	77.3	77.2	77.1	76.9	78.0	77.8
2000	71.8	73.2	68.9	71.6	73.5	69.5	68.6	72.4	71.4	70.9	71.2	70.9	70.9	73.2	73.2	73.0	72.9	74.0	73.7
2500	67.8	69.3	64.9	67.6	69.5	65.6	64.6	68.2	67.0	66.8	67.0	66.5	66.5	68.7	68.6	68.4	68.4	69.5	69.2
3150	63.2	64.7	60.2	63.1	65.1	61.1	60.0	63.8	62.6	62.4	62.5	61.8	61.4	63.6	63.6	63.3	63.6	64.4	64.1
4000	57.6	59.3	54.6	57.7	59.6	55.8	54.9	58.3	57.5	57.3	57.3	56.6	56.2	57.3	57.5	57.8	58.1	58.3	57.7
5000	51.3	53.4	48.2	52.1	53.6	50.0	49.1	52.1	51.7	51.6	51.5	50.7	50.4	50.9	51.5	51.7	52.1	52.2	51.4
6300	44.2	46.0	41.3	45.8	46.6	43.3	42.2	45.5	45.2	45.1	45.2	43.9	43.9	44.2	44.9	45.0	45.4	45.6	44.7
8000	38.5	40.7	35.1	39.9	40.6	36.8	35.9	40.0	39.0	39.4	39.9	38.7	37.7	38.7	39.4	39.1	39.8	40.1	38.9
10000	31.3	34.0	27.2	33.0	33.6	30.5	28.8	32.3	32.2	32.5	33.1	31.2	30.0	30.3	31.6	31.4	31.5	33.0	31.4
12500	23.2	26.8	17.3	24.6	24.3	21.6	19.5	23.5	22.1	23.3	23.7	20.8	20.2	21.8	21.8	21.3	21.5	23.1	19.7
16000	13.2	16.3	7.3	14.0	15.5	9.8	10.1	12.4	9.0	11.9	12.7	9.0	10.5	6.7	7.6	7.6	7.6	9.9	7.5
20000	3.3	7.1		3.4	6.8		.7	1.3		.6	1.7		.8						
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 82
AIRCRAFT CODE 746
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE F2

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 101% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.4	83.9	80.5	83.1	83.6	81.3	80.8	82.5	82.7	82.7	82.8	82.0	81.9	82.2	82.5	82.6	82.8	83.2	82.9
250	80.3	81.8	78.4	81.0	81.4	79.2	78.7	80.4	80.6	80.6	80.7	79.9	79.8	80.1	80.5	80.6	80.7	81.1	80.9
315	78.2	79.7	76.3	78.9	79.3	77.1	76.6	78.3	78.5	78.5	78.6	77.8	77.7	78.1	78.4	78.5	78.6	79.0	78.8
400	76.0	77.5	74.2	76.7	77.1	74.9	74.5	76.2	76.4	76.4	76.5	75.7	75.6	75.9	76.3	76.4	76.4	76.9	76.7
500	73.8	75.3	72.0	74.5	74.9	72.7	72.2	74.0	74.2	74.2	74.3	73.5	73.4	73.8	74.1	74.2	74.2	74.7	74.5
630	71.5	73.0	69.7	72.2	72.6	70.4	69.9	71.7	71.9	71.9	72.0	71.2	71.1	71.5	71.8	71.9	71.9	72.4	72.2
800	69.1	70.6	67.3	69.8	70.2	68.1	67.6	69.3	69.6	69.6	69.7	68.9	68.8	69.1	69.4	69.5	69.5	70.0	69.8
1000	66.7	68.1	64.9	67.4	67.7	65.7	65.2	66.9	67.2	67.2	67.3	66.5	66.3	66.6	66.9	67.0	67.0	67.5	67.2
1250	64.0	65.5	62.2	64.8	65.1	63.1	62.5	64.3	64.5	64.6	64.7	63.8	63.7	63.9	64.2	64.3	64.3	64.8	64.5
1600	61.3	62.8	59.4	62.1	62.3	60.3	59.8	61.5	61.7	61.8	61.9	61.0	60.8	61.0	61.3	61.4	61.5	61.9	61.5
2000	58.4	59.9	56.4	59.3	59.4	57.5	56.9	58.6	58.8	58.9	59.0	58.0	57.8	57.9	58.2	58.3	58.4	58.8	58.3
2500	55.1	56.6	53.1	56.1	56.2	54.3	53.8	55.3	55.6	55.7	55.8	54.7	54.5	54.5	54.8	55.0	55.1	55.4	54.8
3150	51.5	53.1	49.4	52.6	52.8	50.9	50.3	51.8	52.1	52.2	52.2	51.2	50.9	50.8	51.1	51.3	51.5	51.7	51.0
4000	47.6	49.2	45.5	48.9	49.0	47.1	46.6	48.0	48.3	48.4	48.4	47.3	47.1	46.7	47.1	47.4	47.7	47.7	46.9
5000	43.3	44.9	41.3	44.7	44.9	43.1	42.6	43.9	44.1	44.3	44.2	43.1	42.9	42.5	42.9	43.3	43.6	43.5	42.7
6300	38.8	40.4	36.8	40.3	40.4	38.7	38.2	39.5	39.7	39.9	39.8	38.6	38.5	38.1	38.5	38.9	39.2	39.1	38.2
8000	34.7	36.3	32.8	36.2	36.3	34.6	34.8	35.5	35.6	35.9	35.8	34.7	34.4	34.3	34.7	34.9	35.2	35.3	34.4
10000	30.4	31.9	28.7	31.8	31.9	30.2	29.6	31.3	31.4	31.6	31.6	30.5	30.2	30.4	30.8	30.8	31.0	31.3	30.6
12500	25.9	27.3	24.4	27.2	27.3	25.7	25.0	27.0	27.0	27.2	27.3	26.3	25.9	26.5	26.9	26.8	26.8	27.4	26.8
16000	21.4	22.6	20.3	22.4	22.6	21.0	20.3	22.7	22.7	22.7	22.9	22.2	21.9	22.6	23.1	22.8	22.7	23.6	23.3
20000	17.0	18.0	16.2	17.6	17.9	16.6	15.7	18.6	18.7	18.5	18.8	18.2	18.1	19.3	19.5	19.3	18.9	20.1	20.0
25000	12.7	13.5	12.5	13.1	13.5	12.5	11.5	14.0	15.1	14.6	15.0	14.6	14.7	16.1	16.2	16.0	15.5	16.0	16.9

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 101% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 02
AIRCRAFT CODE 746
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	83.6	85.0	80.5	83.7	85.1	81.9	80.8	84.0	82.7	82.7	82.8	82.0	81.9	83.6	83.9	83.8	84.3	84.6	84.3
250	81.5	82.9	78.4	81.6	82.9	79.8	78.7	81.9	80.6	80.6	80.7	79.9	79.8	81.6	81.8	81.8	82.2	82.6	82.3
315	79.3	80.8	76.3	79.4	80.8	77.7	76.6	79.8	78.5	78.5	78.6	77.8	77.7	79.5	79.8	79.7	80.2	80.5	80.2
400	77.2	78.6	74.2	77.3	78.6	75.6	74.5	77.7	76.4	76.4	76.5	75.7	75.6	77.4	77.7	77.6	78.0	78.4	78.1
500	74.9	76.4	72.0	75.0	76.4	73.4	72.2	75.4	74.2	74.2	74.3	73.5	73.4	75.2	75.5	75.4	75.8	76.2	75.9
630	72.6	74.1	69.7	72.8	74.1	71.1	69.9	73.2	71.9	71.9	72.0	71.2	71.1	72.9	73.2	73.1	73.5	73.9	73.6
800	70.3	71.7	67.3	70.4	71.7	68.7	67.6	70.8	69.6	69.6	69.7	68.9	68.8	70.5	70.8	70.7	71.1	71.5	71.2
1000	67.8	69.3	64.9	68.0	69.2	66.3	65.2	68.4	67.2	67.2	67.3	66.5	66.3	68.1	68.3	68.2	68.6	69.0	68.7
1250	65.2	66.6	62.2	65.4	66.6	63.7	62.5	65.7	64.5	64.6	64.7	63.8	63.7	65.3	65.6	65.5	65.9	66.3	65.9
1600	62.4	63.9	59.4	62.7	63.8	61.0	59.8	63.0	61.7	61.8	61.9	61.0	63.8	62.4	62.6	62.6	63.0	63.4	62.9
2000	59.5	61.0	56.4	59.8	60.9	58.1	56.9	60.0	58.8	58.9	59.0	58.0	57.8	59.3	59.6	59.5	60.0	60.3	59.7
2500	56.2	57.8	53.1	56.7	57.7	54.9	53.8	56.8	55.6	55.7	55.8	54.7	54.5	55.9	56.1	56.2	56.7	56.9	56.2
3150	52.6	54.2	49.4	53.2	54.3	51.5	50.3	53.3	52.1	52.2	52.2	51.2	50.9	52.2	52.5	52.5	53.1	53.2	52.4
4000	48.5	50.1	45.5	49.3	50.2	47.6	46.6	49.2	48.3	48.4	48.4	47.3	47.1	47.9	48.2	48.4	48.9	48.9	48.0
5000	44.0	45.6	41.3	45.0	45.7	43.4	42.6	44.8	44.1	44.3	44.2	43.1	42.9	43.4	43.8	44.0	44.5	44.4	43.5
6300	39.3	40.9	36.8	40.5	41.0	38.9	38.2	40.0	39.7	39.9	39.8	38.6	38.5	38.7	39.1	39.3	39.8	39.7	38.8
8000	35.0	36.5	32.8	36.3	36.6	34.7	34.0	35.8	35.6	35.9	35.8	34.7	34.4	34.6	35.0	35.2	35.5	35.6	34.7
10000	30.4	31.9	28.7	31.8	31.9	30.2	29.6	31.3	31.4	31.6	31.6	30.5	30.2	30.4	30.8	30.8	31.0	31.3	30.6
12500	25.9	27.3	24.4	27.2	27.3	25.7	25.0	27.0	27.0	27.2	27.3	26.3	25.9	26.5	26.9	26.8	26.8	27.4	26.8
16000	21.4	22.6	20.3	22.4	22.6	21.0	20.3	22.7	22.7	22.7	22.9	22.2	21.9	22.8	23.1	22.8	22.7	23.6	23.3
20000	17.6	18.0	16.2	17.6	17.9	16.6	15.7	18.6	18.7	18.5	18.8	18.2	18.1	19.3	19.5	19.3	18.9	20.1	20.0
25000	12.7	13.5	12.5	13.1	13.5	12.5	11.5	14.8	15.1	14.6	15.0	14.6	14.7	16.1	16.2	16.0	15.5	16.8	16.9

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 101% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 02
AIRCRAFT CODE 746
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

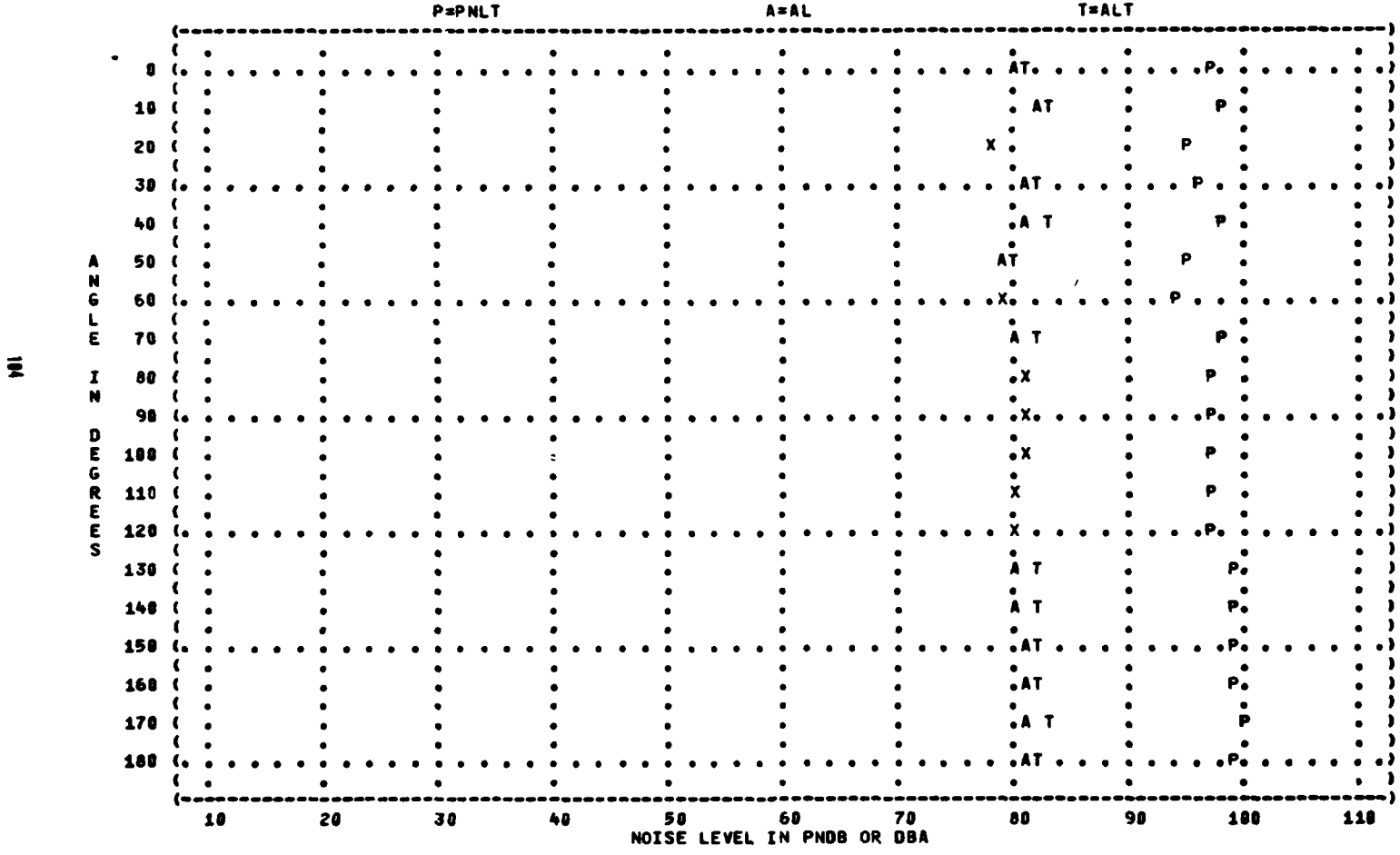


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 03
AIRCRAFT CODE 746
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE C3

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	89	90	91	90	90	92	91	96	96	96	97	95	96	98	98	96	97	98	98
63	91	92	94	93	95	94	94	98	96	96	98	98	99	99	99	100	99	99	99
80	90	90	93	93	93	90	93	96	96	97	98	97	98	97	98	98	98	97	98
100	91	91	91	91	89	92	93	98	97	98	97	98	98	96	98	96	97	97	97
125	83	84	83	84	86	85	86	87	88	88	89	90	90	90	90	90	90	90	91
160	87	89	88	90	87	84	84	86	87	85	87	91	91	93	94	94	93	95	94
200	84	84	84	87	83	83	82	84	81	81	83	84	86	87	88	87	88	89	89
250	81	82	80	81	80	79	80	84	85	84	86	85	86	84	84	84	83	85	85
315	79	79	77	78	78	79	78	80	81	81	82	81	82	81	80	80	78	80	79
400	77	79	76	77	77	78	76	80	81	81	83	80	79	77	77	77	76	77	76
500	72	74	73	75	75	74	72	75	75	76	78	76	76	76	75	74	74	74	72
630	71	73	70	72	73	73	71	74	74	73	76	73	74	73	73	73	73	72	71
800	70	72	70	72	73	73	72	74	75	74	75	73	74	75	73	73	75	75	73
1000	73	73	72	72	74	74	73	74	74	73	75	73	75	74	73	73	74	74	73
1250	72	73	73	73	73	74	72	75	74	73	76	73	74	73	72	73	74	74	72
1600	72	72	72	72	72	73	72	75	73	73	75	73	74	73	71	72	73	74	72
2000	69	70	69	70	69	69	69	71	69	68	71	69	69	70	68	70	71	70	68
2500	65	68	64	67	63	65	66	68	66	64	66	64	65	67	66	67	68	68	66
3150	63	67	62	66	60	63	65	67	63	62	64	62	63	64	62	63	64	64	62
4000	61	63	59	62	57	60	67	67	61	59	63	60	61	64	62	63	64	63	63
5000	57	60	54	57	52	55	62	59	55	53	55	54	55	58	57	57	58	57	57
6300	56	57	52	54	51	53	60	58	54	53	53	53	54	58	58	58	58	58	58
8000	57	55	53	53	53	53	58	56	55	55	55	55	55	60	60	60	60	60	60
10000	55	55	55	55	55	55	55	57	57	57	57	57	57	62	62	62	62	62	62
OVERALL	97	98	99	99	99	99	100	103	103	103	104	104	104	104	105	105	104	105	105

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 03
AIRCRAFT CODE 746
OPERATION CODE 80103
PROFILE VERSION A
28 NOV 79
PAGE 03

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	101.1	102.1	101.4	102.3	101.5	101.7	102.7	105.9	105.1	105.1	105.8	105.7	106.2	105.6	106.0	105.5	105.7	106.2	105.8
250	99.0	100.0	99.3	100.2	99.4	99.7	100.6	103.8	103.1	103.0	103.8	103.7	104.1	103.5	103.9	103.4	103.7	104.1	103.7
315	96.9	97.9	97.1	98.1	97.2	97.5	98.5	101.7	101.0	100.9	101.7	101.6	102.0	101.4	101.8	101.3	101.6	102.0	101.6
400	94.7	95.6	95.0	95.9	95.1	95.3	96.3	99.6	98.8	98.8	99.6	99.5	99.9	99.3	99.7	99.1	99.4	99.8	99.5
500	92.4	93.3	92.7	93.5	92.8	93.1	94.1	97.4	96.7	96.6	97.4	97.2	97.7	97.1	97.5	96.9	97.2	97.6	97.3
630	90.0	90.9	90.4	91.1	90.5	90.7	91.7	95.1	94.4	94.4	95.1	95.0	95.5	94.8	95.2	94.6	94.9	95.3	95.0
800	87.4	88.3	87.8	88.6	88.0	88.2	89.1	92.6	91.9	91.9	92.6	92.5	93.0	92.3	92.7	92.2	92.4	92.8	92.5
1000	84.3	85.3	84.9	85.6	85.2	85.2	86.2	89.8	89.0	89.0	89.8	89.7	90.2	89.6	89.9	89.7	89.6	90.0	89.9
1250	81.0	82.0	81.6	82.2	82.2	81.9	82.8	86.7	85.9	86.0	86.8	86.6	87.1	86.8	86.7	86.9	86.6	87.1	86.8
1600	77.3	78.5	77.9	78.6	78.5	78.2	79.1	83.1	82.3	82.3	83.1	83.0	83.5	83.0	83.1	83.1	82.8	83.3	83.0
2000	73.5	75.3	73.9	74.7	74.4	74.4	75.0	79.0	78.2	78.3	79.1	78.9	79.4	78.9	78.9	78.9	78.6	79.1	78.7
2500	69.5	71.2	69.6	70.5	70.8	70.4	70.5	74.4	73.7	73.7	74.7	74.3	74.8	74.2	74.2	74.2	74.0	74.4	74.1
3150	65.6	66.8	65.0	66.0	65.6	66.0	65.4	69.3	68.7	68.6	70.2	69.1	69.7	69.1	69.1	69.1	68.9	69.4	68.9
4000	59.7	61.6	60.1	61.0	60.6	60.9	60.1	63.5	63.6	63.2	65.1	63.3	63.9	63.4	63.2	63.3	63.2	63.7	63.2
5000	54.2	55.9	54.6	55.7	55.4	55.6	54.6	57.9	58.0	57.7	59.6	57.9	58.5	58.2	57.5	57.5	58.2	58.3	57.5
6300	47.9	49.5	48.1	49.7	49.4	49.6	48.7	51.9	51.9	51.5	53.9	52.0	52.7	52.2	51.5	51.4	52.3	52.4	51.2
8000	42.7	44.9	43.2	45.0	44.8	44.4	43.3	47.2	47.5	47.1	49.6	47.6	48.2	47.9	47.1	47.1	47.6	47.8	46.6
10000	37.0	39.5	37.8	39.8	39.7	39.3	37.7	42.2	42.8	42.4	44.7	42.8	43.5	42.9	42.2	42.1	42.2	42.6	41.8
12500	30.3	33.5	31.2	33.5	34.0	31.8	29.8	36.5	37.1	36.6	39.2	37.1	37.9	37.5	36.8	36.4	36.2	37.3	36.5
16000	19.9	24.8	18.6	24.9	22.6	22.7	19.4	28.6	29.7	29.2	32.8	30.1	31.1	30.2	29.9	29.5	28.3	30.7	29.9
20000	7.1	13.4	6.0	18.9	10.8	10.8	8.9	18.1	18.5	19.1	22.6	20.3	21.5	19.0	19.6	19.9	18.0	22.0	19.7
25000		2.8						9.7	8.3	9.3	14.8	9.7	13.3	7.8	10.7	7.7	6.9	11.5	10.5

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 6.2
TEST 77-746-001
RUN 03
AIRCRAFT CODE 746
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	101.8	102.9	102.2	103.1	101.5	102.5	103.8	107.0	106.8	106.0	106.4	106.5	106.9	106.3	106.7	106.3	106.4	107.1	106.8
250	99.7	100.8	100.1	101.0	99.4	100.4	101.7	104.9	103.9	104.0	104.4	104.4	104.9	104.2	104.7	104.2	104.3	105.0	104.8
315	97.6	98.7	97.9	98.9	97.2	98.3	99.6	102.8	101.8	101.9	102.3	102.3	102.8	102.1	102.6	102.1	102.2	102.9	102.7
400	95.4	96.4	95.8	96.6	95.1	96.1	97.4	100.7	99.7	99.8	100.2	100.2	100.7	100.0	100.4	100.0	100.1	100.7	100.5
500	93.1	94.1	93.5	94.3	92.8	93.8	95.1	98.5	97.5	97.6	98.0	98.0	98.5	97.8	98.3	97.7	97.9	98.5	98.3
630	90.7	91.7	91.2	91.9	90.5	91.5	92.8	96.2	95.2	95.3	95.7	95.7	96.2	95.5	96.0	95.4	95.6	96.2	96.0
800	88.1	89.2	88.6	89.3	88.0	88.9	90.2	93.7	92.7	92.8	93.2	93.2	93.7	93.0	93.5	93.1	93.1	93.7	93.5
1000	85.0	86.1	85.7	86.3	85.2	85.9	87.3	90.9	89.9	90.0	90.4	90.4	91.0	90.3	90.6	90.5	90.3	90.9	90.9
1250	81.7	82.8	82.4	83.0	82.2	82.6	83.9	87.8	86.8	86.9	87.3	87.3	87.9	87.5	87.5	87.8	87.3	88.0	87.8
1600	78.0	79.3	78.7	79.3	78.5	79.0	80.1	84.2	83.2	83.3	83.7	83.7	84.3	83.7	83.9	83.9	83.5	84.2	84.0
2000	74.2	76.1	74.7	75.4	74.4	75.1	76.1	80.1	79.1	79.2	79.7	79.6	80.2	79.6	79.7	79.7	79.3	80.0	79.8
2500	70.2	72.0	70.4	71.3	70.0	71.1	71.5	75.4	74.5	74.6	75.3	75.0	75.6	74.9	75.0	75.1	74.7	75.3	75.1
3150	65.7	67.6	65.8	66.8	65.6	66.7	66.5	70.3	69.6	69.5	70.0	69.9	70.4	69.8	69.9	69.9	69.6	70.3	70.0
4000	60.3	62.2	60.8	61.6	60.6	61.5	61.0	64.4	64.3	64.0	65.6	63.9	64.5	64.0	63.9	63.9	63.7	64.4	64.0
5000	54.6	56.4	55.1	56.1	55.4	56.0	55.2	58.6	58.5	58.2	60.0	58.3	58.9	58.6	58.0	58.0	58.6	58.9	58.1
6300	48.1	49.8	48.5	50.0	49.4	49.9	49.1	52.3	52.2	51.8	54.2	52.3	53.0	52.5	51.8	51.8	52.6	52.8	51.6
8000	42.0	45.1	43.4	45.2	44.0	44.5	43.5	47.4	47.6	47.3	49.7	47.7	48.4	48.0	47.3	47.2	47.6	48.0	46.8
10000	37.0	39.5	37.8	39.8	39.7	39.3	37.7	42.2	42.8	42.4	44.7	42.8	43.5	42.9	42.2	42.1	42.2	42.6	41.8
12500	30.3	33.5	31.2	33.5	34.0	31.8	29.8	36.5	37.1	36.6	39.2	37.1	37.9	37.5	36.8	36.4	36.2	37.3	36.5
16000	19.9	24.8	18.6	24.9	22.6	22.7	19.4	28.6	29.7	29.2	32.8	30.1	31.1	30.2	29.9	29.5	28.3	30.7	29.9
20000	7.1	13.4	6.0	18.9	10.8	18.8	8.9	18.1	18.5	19.1	22.6	20.3	21.5	19.8	19.6	19.9	18.0	22.0	19.7
25000		2.0						9.7	8.3	9.3	10.8	9.7	10.3	7.8	10.7	7.7	6.9	11.5	10.5

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 03
AIRCRAFT CODE 746
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE F3

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.5	86.7	85.6	86.7	86.0	86.2	85.7	88.5	88.2	88.0	89.5	88.8	89.3	89.0	89.0	89.0	89.0	89.0	89.3
250	83.4	84.6	83.6	84.6	84.0	84.1	83.7	86.4	86.2	85.9	87.4	86.7	87.2	86.9	86.9	86.9	86.9	87.7	87.3
315	81.3	82.5	81.5	82.6	81.9	82.0	81.6	84.4	84.1	83.9	85.4	84.7	85.2	84.9	84.9	84.9	84.9	85.7	85.2
400	79.2	80.4	79.4	80.4	79.8	79.9	79.4	82.2	82.0	81.8	83.3	82.6	83.1	82.8	82.8	82.8	82.8	83.5	83.1
500	77.0	78.2	77.2	78.2	77.6	77.7	77.2	80.1	79.9	79.7	81.1	80.4	80.9	80.5	80.6	80.5	80.5	81.3	80.9
630	74.7	75.9	74.9	75.9	75.3	75.5	75.0	77.9	77.7	77.5	78.9	78.2	78.7	78.2	78.3	78.2	78.2	79.0	78.5
800	72.3	73.5	72.5	73.5	73.0	73.2	72.6	75.5	75.4	75.2	76.6	75.8	76.3	75.8	75.8	75.8	75.8	76.5	76.1
1000	69.8	71.0	70.0	70.9	70.6	70.7	70.1	73.0	72.9	72.7	74.2	73.3	73.8	73.3	73.3	73.3	73.3	73.9	73.5
1250	67.1	68.3	67.3	68.2	68.0	68.1	67.4	70.3	70.2	70.0	71.5	70.5	71.0	70.6	70.5	70.5	70.5	71.1	70.6
1600	64.3	65.5	64.5	65.4	65.2	65.4	64.5	67.5	67.4	67.2	68.8	67.5	68.1	67.6	67.4	67.4	67.5	68.0	67.5
2000	61.3	62.6	61.4	62.3	62.3	62.5	61.5	64.4	64.5	64.2	65.9	64.4	64.9	64.4	64.2	64.2	64.3	64.8	64.2
2500	57.9	59.2	58.1	59.0	59.1	59.3	58.2	61.0	61.1	60.8	62.5	60.9	61.5	60.9	60.6	60.6	60.8	61.2	60.5
3150	54.3	55.6	54.4	55.3	55.6	55.8	54.5	57.3	57.4	57.1	58.9	57.1	57.7	57.2	56.7	56.8	57.1	57.3	56.5
4000	50.4	51.6	50.5	51.4	51.8	52.1	50.6	53.3	53.3	53.0	54.9	52.9	53.6	53.1	52.5	52.6	53.0	53.2	52.2
5000	46.1	47.4	46.2	47.2	47.6	47.9	46.5	49.0	49.1	48.7	50.6	48.6	49.4	48.9	48.2	48.3	48.9	48.9	47.9
6300	41.7	42.9	41.8	42.7	43.3	43.5	42.0	44.6	44.6	44.2	46.1	44.1	44.9	44.4	43.7	43.8	44.5	44.4	43.4
8000	37.7	39.0	37.8	38.9	39.4	39.5	38.1	40.8	40.9	40.5	42.4	40.4	41.2	40.8	40.2	40.2	40.7	40.8	39.9
10000	33.6	34.9	33.7	34.9	35.2	35.3	34.0	36.8	37.0	36.7	38.5	36.7	37.4	37.0	36.5	36.6	36.8	37.0	36.3
12500	29.3	30.7	29.6	30.7	30.9	30.8	29.8	32.8	33.0	32.8	34.4	33.0	33.6	33.2	32.9	32.9	33.0	33.3	32.8
16000	25.0	26.4	25.5	26.6	26.6	26.3	25.7	28.9	29.0	28.9	30.4	29.3	29.8	29.5	29.4	29.3	29.3	29.7	29.4
20000	20.9	22.1	21.6	22.5	22.3	21.9	21.8	25.2	25.1	25.2	26.4	25.8	26.2	26.0	26.1	26.0	25.8	26.3	26.2
25000	16.9	18.0	18.0	18.6	18.3	17.8	18.1	21.8	21.5	21.7	22.7	22.4	22.8	22.6	22.9	22.7	22.5	23.0	23.0

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 03
AIRCRAFT CODE 746
OPERATION CODE 88183
PROFILE VERSION A
28 NOV 79
PAGE 63

NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	86.2	87.5	86.4	87.5	86.0	86.9	86.8	89.6	89.1	88.9	90.1	89.5	90.0	89.7	89.8	89.8	89.7	90.7	90.3
250	84.1	85.4	84.4	85.4	84.8	84.8	84.7	87.5	87.0	86.8	88.0	87.5	88.0	87.6	87.7	87.8	87.6	88.6	88.3
315	82.0	83.3	82.3	83.3	81.9	82.7	82.6	85.4	85.0	84.8	86.0	85.4	85.9	85.6	85.7	85.7	85.6	86.6	86.3
400	79.9	81.2	80.2	81.2	79.8	80.6	80.5	83.3	82.9	82.7	83.9	83.3	83.8	83.5	83.6	83.6	83.4	84.4	84.1
500	77.7	79.0	78.0	79.0	77.6	78.5	78.3	81.2	80.8	80.6	81.7	81.2	81.7	81.2	81.4	81.4	81.2	82.2	81.9
630	75.4	76.7	75.7	76.6	75.3	76.2	76.0	79.0	78.5	78.4	79.5	78.9	79.4	78.9	79.1	79.1	78.9	79.9	79.6
800	73.0	74.3	73.3	74.2	73.0	73.9	73.7	76.6	76.2	76.1	77.2	76.5	77.0	76.5	76.6	76.6	76.5	77.4	77.1
1000	70.5	71.8	70.8	71.7	70.6	71.5	71.2	74.1	73.8	73.6	74.8	74.0	74.5	74.0	74.1	74.1	74.0	74.8	74.5
1250	67.0	69.1	68.1	69.0	68.0	68.9	68.5	71.4	71.1	71.0	72.1	71.2	71.8	71.3	71.2	71.3	71.2	72.0	71.7
1600	65.0	66.3	65.3	66.1	65.2	66.1	65.6	68.6	68.3	68.1	69.4	68.3	68.8	68.3	68.2	68.3	68.2	69.0	68.6
2000	62.0	63.4	62.2	63.1	62.3	63.3	62.6	65.5	65.3	65.1	66.5	65.2	65.7	65.1	65.0	65.0	65.0	65.7	65.2
2500	58.6	60.1	58.9	59.7	59.1	60.0	59.2	62.1	61.9	61.7	63.1	61.6	62.2	61.6	61.4	61.5	61.5	62.1	61.5
3150	55.0	56.4	55.2	56.1	55.6	56.6	55.6	58.4	58.2	58.0	59.5	57.8	58.4	57.9	57.5	57.6	57.8	58.2	57.5
4000	50.9	52.3	51.1	52.0	51.0	52.6	51.5	54.2	54.0	53.7	55.4	53.5	54.2	53.6	53.1	53.2	53.6	53.9	53.0
5000	46.6	47.9	46.7	47.6	47.6	48.4	47.1	49.7	49.6	49.2	51.0	49.0	49.8	49.3	48.6	48.0	49.3	49.5	48.5
6300	42.0	43.2	42.1	43.0	43.3	43.0	42.5	45.0	44.9	44.6	46.4	44.3	45.2	44.7	44.0	44.2	44.7	44.0	43.0
8000	37.9	39.2	38.0	39.0	39.4	39.7	38.3	41.0	41.0	40.7	42.5	40.6	41.4	40.9	40.3	40.4	40.0	40.9	40.1
10000	33.6	34.9	33.7	34.9	35.2	35.3	34.0	36.0	37.0	36.7	38.5	36.7	37.4	37.0	36.5	36.6	36.0	37.0	36.3
12500	29.3	30.7	29.6	30.7	30.9	30.0	29.0	32.0	33.0	32.0	34.4	33.0	33.6	33.2	32.9	32.9	33.0	33.3	32.0
16000	25.0	26.4	25.5	26.6	26.6	26.3	25.7	28.9	29.0	28.9	30.4	29.3	29.0	29.5	29.4	29.3	29.3	29.7	29.4
20000	20.9	22.1	21.6	22.5	22.3	21.9	21.0	25.2	25.1	25.2	26.4	25.0	26.2	26.0	26.1	26.0	25.0	26.3	26.2
25000	16.9	18.0	18.0	18.6	18.3	17.0	18.1	21.0	21.5	21.7	22.7	22.4	22.0	22.6	22.9	22.7	22.5	23.0	23.0

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

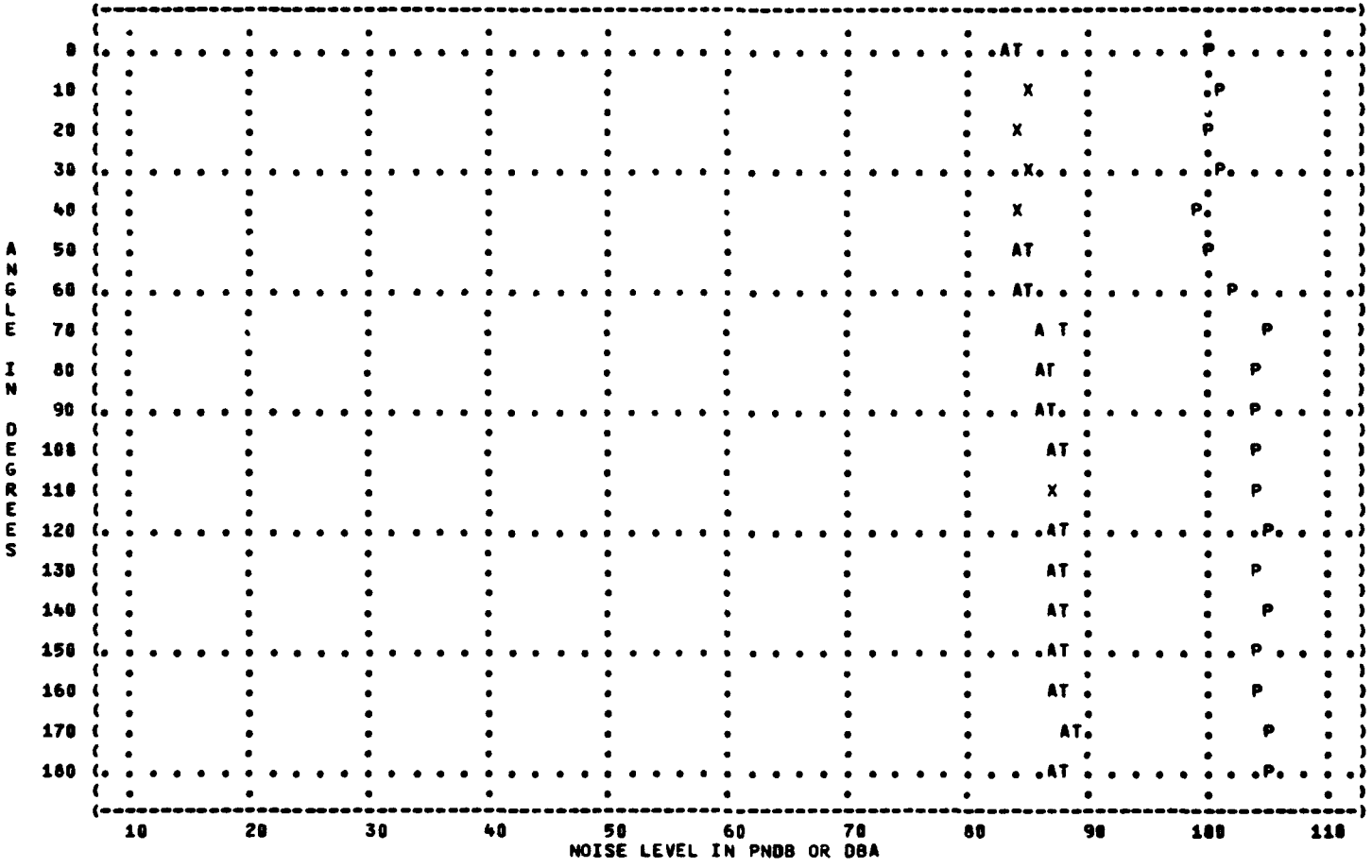
NOISE SOURCE/SUBJECT:
F-5 NOISE SUPPRESSOR
AF32A-18

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-746-001
RUN 03
AIRCRAFT CODE 746
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE J3

P=PNLT A=AL T=ALT



USAF F-15 IN THE

NOISE PRODUCED ON THE GROUND BY

F-15 IN THE

DURING GROUND RUN-UP OPERATIONS

TEST 79-761-001
AIRCRAFT CODE: 761
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting — Page

Idle Power, 65% RPM 112-117
Engine Runup, 80% RPM 118-123
Military Power, 91% RPM 124-129
Afterburner Power 130-135

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
- NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
- PERCEIVED NOISE LEVEL
- TONE-CORRECTED, PERCEIVED NOISE LEVEL
- A-WEIGHTED OVERALL SOUND LEVEL
- TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-901
RUN 01
AIRCRAFT CODE 761
OPERATION CODE 00213
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	64	62	62	62	63	60	59	59	58	57	57	56	58	63	61	62	57	57	56
63	63	63	62	60	61	61	61	61	61	61	61	62	58	65	60	60	60	58	57
80	65	63	63	61	62	61	60	59	59	58	58	57	56	62	57	59	62	57	55
100	67	64	64	67	63	63	62	62	61	61	60	60	59	60	59	64	61	58	57
125	66	63	66	64	64	61	60	60	59	58	58	57	57	57	59	67	62	56	58
160	69	66	64	66	65	62	61	60	59	58	57	57	55	55	55	64	62	55	53
200	67	64	63	60	59	58	57	57	57	56	56	56	55	55	56	60	61	55	52
250	67	64	63	63	61	61	60	59	58	56	55	54	55	56	55	55	62	56	54
315	66	62	62	60	59	60	59	58	57	56	54	53	53	52	51	53	60	51	47
400	69	67	66	67	71	69	67	65	62	60	58	56	55	55	51	55	61	52	48
500	64	67	65	63	60	65	63	62	61	59	58	57	57	58	55	56	60	49	52
630	58	59	60	58	57	55	53	52	51	50	49	48	49	47	46	44	57	44	46
800	61	61	63	62	63	62	61	60	59	58	57	56	52	53	52	49	56	44	41
1000	61	58	61	63	67	64	62	60	58	56	54	52	52	54	52	49	51	41	43
1250	57	57	58	61	59	58	57	56	55	53	52	51	53	50	52	49	46	42	43
1600	58	58	59	59	57	55	55	54	54	54	53	53	54	52	52	49	44	43	42
2000	56	57	59	57	57	56	55	54	53	52	51	50	52	50	51	47	41	39	39
2500	71	72	73	71	72	72	71	70	69	68	67	66	69	68	69	63	57	54	52
3150	68	68	68	66	66	66	65	65	64	63	63	62	64	63	65	58	52	50	48
4000	67	68	68	66	66	65	64	64	63	63	62	62	64	61	64	58	52	48	47
5000	64	64	64	62	62	61	60	60	60	59	59	59	62	58	61	54	49	45	44
6300	58	60	59	56	56	55	54	54	53	53	52	51	54	50	53	46	43	38	37
8000	55	57	56	54	54	52	51	51	51	50	50	49	51	48	49	42	39	35	34
10000	49	53	51	49	48	47	46	45	44	43	42	42	43	40	41	37	34	32	33
OVERALL	79	78	79	78	78	77	76	75	74	73	73	72	73	73	73	73	72	67	66

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 01
AIRCRAFT CODE 761
OPERATION CODE 00213
PROFILE VERSION A
28 NOV 79
PAGE D1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.0	94.0	94.0	93.2	93.4	92.9	92.0	91.1	90.2	89.4	88.5	87.7	89.5	88.5	89.4	85.2	82.0	77.1	75.9
250	91.7	91.7	92.5	91.0	91.2	90.6	89.7	88.9	88.0	87.1	86.2	85.4	87.2	86.2	87.1	82.9	79.7	74.8	73.6
315	89.4	89.4	90.2	88.6	88.8	88.3	87.4	86.5	85.6	84.8	83.9	83.1	84.8	83.9	84.8	80.5	77.4	72.4	71.3
400	87.0	87.0	87.8	86.3	86.4	85.9	85.0	84.1	83.2	82.4	81.5	80.6	82.4	81.5	82.4	78.1	75.0	70.0	68.8
500	84.5	84.4	85.3	83.8	84.0	83.4	82.5	81.6	80.7	79.8	79.0	78.1	79.9	79.0	79.8	75.6	72.5	67.4	66.2
630	81.9	81.8	82.7	81.1	81.3	80.8	79.9	79.0	78.1	77.2	76.3	75.4	77.2	76.3	77.2	72.9	69.9	64.7	63.4
800	79.1	79.0	79.9	78.4	78.6	78.1	77.1	76.2	75.3	74.4	73.5	72.6	74.4	73.5	74.3	70.2	67.1	61.7	60.5
1000	76.1	76.0	76.9	75.4	75.7	75.1	74.2	73.3	72.3	71.4	70.5	69.6	71.4	70.5	71.3	67.1	64.1	58.6	57.4
1250	73.0	72.8	73.8	72.2	72.5	72.0	71.0	70.1	69.1	68.2	67.3	66.3	68.1	67.3	68.0	63.8	60.9	55.1	53.8
1600	69.5	69.3	70.3	68.7	69.0	68.5	67.6	66.6	65.6	64.7	63.7	62.7	64.5	63.7	64.4	60.1	57.2	51.3	50.1
2000	65.7	65.5	66.5	65.0	65.3	64.8	63.8	62.8	61.7	60.7	59.8	58.7	60.6	59.7	60.4	56.0	53.4	47.1	45.5
2500	61.3	61.2	62.2	60.7	61.0	60.5	59.5	58.4	57.3	56.3	55.2	54.1	56.0	55.1	55.9	51.5	48.0	41.3	39.7
3150	56.4	56.2	57.4	55.8	56.2	55.6	54.5	53.4	52.3	51.2	50.1	49.0	50.9	50.1	50.7	45.9	43.6	34.2	32.5
4000	50.7	50.5	51.6	50.1	50.4	50.0	48.0	47.7	46.6	45.4	44.1	42.7	44.9	43.9	44.7	38.5	37.2	26.0	24.3
5000	43.6	43.7	45.1	43.3	43.7	43.1	41.0	40.5	39.2	37.9	36.5	34.9	37.2	36.2	36.6	29.1	30.9	12.6	13.1
6300	35.4	35.3	36.9	35.4	36.4	35.1	33.7	31.0	29.5	27.5	25.5	23.3	25.1	25.9	25.4	17.3	22.0		1.9
8000	26.3	26.5	27.3	25.8	29.2	26.6	24.1	21.6	19.2	15.0	12.7	9.4	12.6	12.0	11.8	5.6	13.9		
10000	17.6	20.7	17.8	16.5	21.3	19.0	15.5	9.9	7.6	2.4			.2				5.8		
12500	8.4	11.7	8.2	7.2	11.4	9.9	6.8												
16000		2.7			1.5	.8													
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 01
AIRCRAFT CODE 761
OPERATION CODE 00213
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	97.2	97.1	96.8	96.5	96.8	96.7	95.7	94.8	93.8	92.9	92.0	91.1	92.9	92.4	93.2	88.7	85.4	80.2	78.8
250	94.9	94.9	95.8	94.3	94.5	94.4	93.4	92.5	91.6	90.6	89.7	88.8	90.7	90.1	90.9	86.4	83.2	77.9	76.5
315	92.6	92.5	93.5	91.9	92.2	92.1	91.1	90.2	89.2	88.3	87.4	86.5	88.3	87.8	88.6	84.0	80.9	75.5	74.1
400	90.2	90.1	91.0	89.5	89.8	89.7	88.7	87.8	86.8	85.9	85.0	84.1	85.9	85.4	86.1	81.6	78.5	73.1	71.7
500	87.7	87.6	88.5	87.8	87.3	87.2	86.2	85.3	84.3	83.4	82.4	81.5	83.4	82.9	83.6	79.1	76.8	70.5	69.1
630	85.0	85.0	85.9	84.4	84.7	84.6	83.6	82.7	81.7	80.7	79.8	78.9	80.7	80.2	80.9	76.5	73.4	67.8	66.3
800	82.2	82.2	83.1	81.6	81.9	81.8	80.9	79.9	78.9	77.9	77.0	76.0	77.8	77.4	78.1	73.7	70.6	64.8	63.4
1000	79.3	79.2	80.2	78.7	79.0	78.9	77.9	76.9	75.9	75.0	74.0	73.0	74.8	74.4	75.1	70.6	67.6	61.7	60.2
1250	76.1	76.0	77.0	75.5	75.8	75.7	74.7	73.7	72.7	71.7	70.7	69.7	71.6	71.1	71.8	67.3	64.4	58.3	56.7
1600	72.6	72.5	73.5	72.0	72.4	72.3	71.3	70.2	69.2	68.2	67.2	66.2	68.0	67.5	68.1	63.6	60.7	54.4	52.9
2000	68.8	68.7	69.8	68.3	68.7	68.5	67.5	66.4	65.3	64.3	63.2	62.2	64.0	63.6	64.2	59.5	56.9	50.2	48.4
2500	64.4	64.3	65.5	64.0	64.4	64.3	63.2	62.1	60.9	59.8	58.7	57.6	59.4	58.9	59.6	55.0	52.2	44.4	42.6
3150	59.5	59.4	60.6	59.1	59.5	59.4	58.2	57.0	55.9	54.8	53.5	52.4	54.4	53.9	54.5	49.4	47.0	37.4	35.3
4000	53.2	53.0	54.2	52.7	53.1	53.0	51.8	50.6	49.5	48.2	46.9	45.5	47.6	47.0	47.7	41.3	39.9	28.4	26.6
5000	45.5	45.6	47.1	45.3	45.7	45.4	44.1	42.7	41.4	40.0	38.6	36.9	39.3	38.5	38.9	31.2	33.0	14.4	14.0
6300	36.7	36.6	38.2	36.7	37.7	36.6	35.2	32.5	30.9	28.9	26.9	24.7	26.5	27.5	26.9	18.7	23.4	.4	3.0
8000	26.9	29.2	27.9	26.4	29.0	27.3	24.9	22.4	20.0	15.7	13.4	10.1	13.3	12.0	12.6	6.3	14.6		
10000	17.6	20.7	17.0	16.5	21.3	19.0	15.5	9.9	7.6	2.4			.2				5.0		
12500	8.4	11.7	8.2	7.2	11.4	9.9	6.0												
16000		2.7			1.5	.0													
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 01
AIRCRAFT CODE 761
OPERATION CODE 00213
PROFILE VERSION A
28 NOV 79
PAGE F1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	79.0	79.2	80.0	78.4	79.0	78.3	77.4	76.5	75.6	74.8	74.0	73.2	75.3	74.0	75.4	69.9	67.7	61.8	60.7
250	76.7	76.9	77.7	76.1	76.8	76.1	75.2	74.3	73.4	72.5	71.7	70.9	73.0	71.7	73.1	67.7	65.6	59.6	58.6
315	74.4	74.6	75.4	73.9	74.5	73.8	72.9	72.0	71.1	70.2	69.4	68.6	70.7	69.4	70.8	65.4	63.4	57.3	56.3
400	72.1	72.2	73.1	71.5	72.2	71.5	70.5	69.6	68.7	67.9	67.0	66.2	68.3	67.1	68.4	63.0	61.2	55.0	54.0
500	69.6	69.8	70.6	69.1	69.8	69.1	68.1	67.2	66.3	65.4	64.5	63.7	65.7	64.6	65.9	60.6	59.0	52.7	51.7
630	67.1	67.2	68.0	66.6	67.3	66.6	65.6	64.6	63.7	62.8	62.0	61.1	63.1	62.0	63.2	58.0	56.7	50.2	49.2
800	64.4	64.5	65.4	63.9	64.8	64.0	63.0	62.0	61.0	60.1	59.2	58.4	60.3	59.3	60.5	55.3	54.3	47.6	46.7
1000	61.7	61.7	62.6	61.2	62.1	61.3	60.2	59.2	58.2	57.3	56.4	55.5	57.4	56.4	57.5	52.5	51.9	44.9	44.0
1250	58.7	58.7	59.6	58.3	59.3	58.5	57.4	56.3	55.3	54.3	53.3	52.4	54.3	53.4	54.4	49.4	49.3	42.0	41.2
1600	55.6	55.6	56.4	55.2	56.4	55.5	54.3	53.2	52.1	51.1	50.1	49.2	50.9	50.1	51.0	46.2	46.6	39.0	38.3
2000	52.4	52.3	53.1	52.0	53.4	52.4	51.1	49.9	48.8	47.7	46.7	45.7	47.3	46.6	47.3	42.8	43.9	35.8	35.2
2500	48.7	48.7	49.5	48.5	49.9	48.8	47.5	46.3	45.1	44.0	42.9	41.9	43.3	42.7	43.3	39.0	40.8	32.2	31.9
3150	44.7	44.8	45.5	44.7	46.1	45.0	43.6	42.4	41.1	40.0	38.9	37.8	39.0	38.5	38.8	34.9	37.3	28.3	28.2
4000	40.4	40.5	41.2	40.6	42.1	40.8	39.5	38.1	36.9	35.7	34.5	33.4	34.3	33.9	34.0	30.4	33.5	24.0	24.2
5000	35.7	35.8	36.5	36.1	37.8	36.3	34.9	33.6	32.2	31.0	29.8	28.6	29.2	28.9	28.7	25.5	29.2	19.3	19.8
6300	30.9	31.0	31.7	31.4	33.3	31.7	30.2	28.8	27.4	26.1	24.8	23.6	23.8	23.7	23.1	20.5	24.7	14.5	15.2
8000	26.8	27.0	27.4	27.1	29.0	27.5	26.0	24.6	23.1	21.8	20.5	19.2	19.0	19.0	17.8	16.3	21.2	10.7	11.4
10000	22.6	22.9	23.0	22.6	24.5	23.2	21.7	20.2	18.7	17.3	16.0	14.7	14.2	14.4	12.9	12.2	17.3	6.7	7.5
12500	18.2	18.6	18.4	17.9	19.6	18.6	17.0	15.5	14.1	12.7	11.3	10.0	9.5	9.8	7.9	7.9	13.1	2.6	3.3
16000	13.5	14.0	13.5	12.7	14.3	13.6	12.0	10.5	9.0	7.6	6.2	4.9	4.5	4.8	2.8	3.5	8.4		
20000	8.5	8.8	8.1	7.2	8.7	8.2	6.6	5.1	3.6	2.2	.8						3.3		
25000	3.1	3.2	2.2	1.4	2.8	2.4	.8												

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %

DELTA N = -3.8 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 01
AIRCRAFT CODE 761
OPERATION CODE 00213
PROFILE VERSION A
28 NOV 79
PAGE G1

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.1	82.4	83.2	81.6	82.3	82.1	81.1	80.1	79.2	78.3	77.5	76.6	78.8	77.9	79.1	73.4	71.2	64.9	63.6
250	79.9	80.1	81.0	79.4	80.1	79.9	78.9	77.9	77.8	76.1	75.2	74.4	76.5	75.6	76.9	71.2	69.1	62.7	61.4
315	77.6	77.8	78.7	77.1	77.8	77.6	76.6	75.6	74.7	73.8	72.9	72.0	74.2	73.3	74.5	68.9	66.9	60.5	59.2
400	75.2	75.4	76.3	74.8	75.5	75.3	74.2	73.3	72.3	71.4	70.5	69.6	71.7	70.9	72.1	66.5	64.7	58.2	56.9
500	72.8	72.9	73.8	72.4	73.1	72.9	71.8	70.8	69.9	68.9	68.0	67.2	69.2	68.5	69.6	64.1	62.5	55.8	54.6
630	70.3	70.4	71.3	69.9	70.7	70.4	69.3	68.3	67.3	66.4	65.4	64.6	66.6	65.9	67.0	61.5	60.2	53.3	52.1
800	67.6	67.7	68.6	67.2	68.1	67.8	66.7	65.7	64.6	63.7	62.7	61.8	63.8	63.2	64.2	58.8	57.8	50.7	49.5
1000	64.8	64.9	65.8	64.5	65.4	65.1	63.9	62.9	61.8	60.8	59.9	58.9	60.9	60.3	61.3	56.0	55.3	48.8	46.9
1250	61.9	61.9	62.8	61.6	62.6	62.2	61.1	59.9	58.9	57.8	56.8	55.9	57.7	57.3	58.1	53.0	52.8	45.1	44.1
1600	58.8	58.8	59.7	58.5	59.7	59.2	58.0	56.8	55.7	54.6	53.6	52.6	54.4	54.0	54.7	49.7	50.1	42.1	41.1
2000	55.6	55.5	56.3	55.3	56.7	56.1	54.8	53.6	52.4	51.3	50.2	49.1	50.7	50.4	51.0	46.3	47.4	39.0	38.1
2500	51.9	51.9	52.7	51.8	53.2	52.6	51.3	50.0	48.7	47.5	46.4	45.3	46.8	46.6	47.0	42.5	44.3	35.4	34.8
3150	47.9	47.9	48.7	47.9	49.5	48.7	47.4	46.0	44.7	43.5	42.3	41.2	42.5	42.4	42.6	38.4	40.8	31.4	31.1
4000	42.9	43.0	43.8	43.2	44.8	43.8	42.4	41.1	39.8	38.5	37.3	36.1	37.1	37.0	37.0	33.2	36.3	26.5	26.5
5000	37.6	37.7	38.5	38.1	39.8	38.6	37.2	35.8	34.4	33.1	31.9	30.7	31.3	31.2	30.9	27.6	31.3	21.2	21.5
6300	32.1	32.2	33.0	32.7	34.6	33.2	31.7	30.3	28.9	27.5	26.2	25.0	25.2	25.2	24.6	21.9	26.1	15.8	16.3
8000	27.4	27.6	28.0	27.0	29.7	28.3	26.8	25.3	23.9	22.5	21.2	19.9	19.6	19.8	18.6	17.0	21.9	11.3	12.0
10000	22.6	22.9	23.0	22.6	24.5	23.2	21.7	20.2	18.7	17.3	16.0	14.7	14.2	14.4	12.9	12.2	17.3	6.7	7.5
12500	18.2	18.6	18.4	17.9	19.6	18.6	17.0	15.5	14.1	12.7	11.3	10.0	9.5	9.8	7.9	7.9	13.1	2.6	3.3
16000	13.5	14.0	13.5	12.7	14.3	13.6	12.0	10.5	9.0	7.6	6.2	4.9	4.5	4.8	2.8	3.5	8.4		
20000	8.5	8.8	8.1	7.2	8.7	8.2	6.6	5.1	3.6	2.2	.8						3.3		
25000	3.1	3.2	2.2	1.4	2.8	2.4	.8												

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 01
AIRCRAFT CODE 761
OPERATION CODE 00213
PROFILE VERSION A
28 NOV 79
PAGE J1

P=PNLT A=AL T=ALT

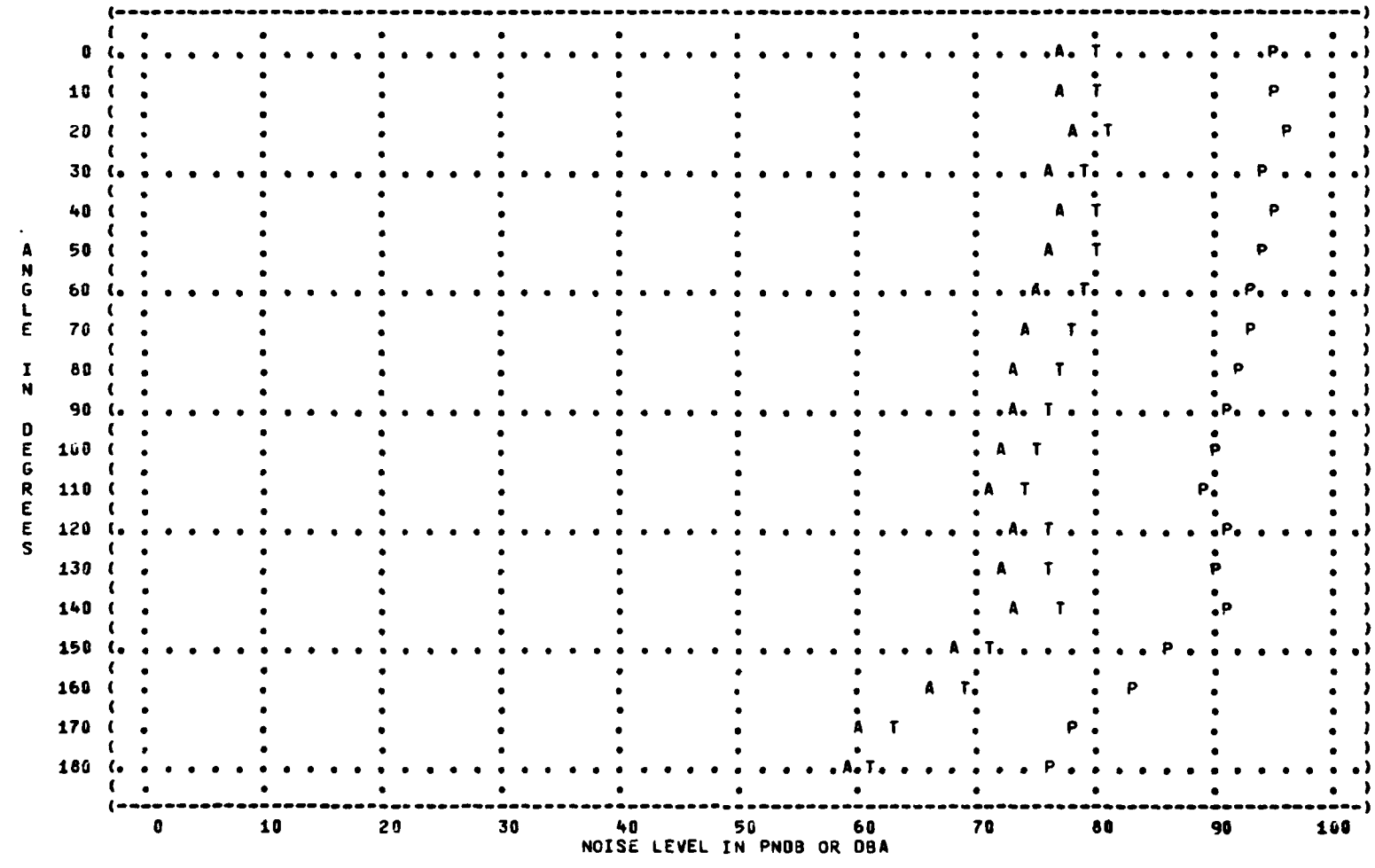


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 02
AIRCRAFT CODE 761
OPERATION CODE 00219
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	75	75	77	76	75	74	73	72	72	71	70	69	71	72	73	73	74	77	76
63	76	76	77	76	75	72	72	72	72	72	72	71	71	70	72	74	75	74	75
80	73	74	75	76	75	74	74	74	73	73	73	73	70	72	73	74	74	74	74
100	74	74	75	76	75	75	74	73	73	72	72	71	72	72	72	74	73	74	74
125	77	77	80	80	79	79	78	77	75	74	73	72	74	74	75	73	72	74	75
160	74	79	77	77	77	75	74	73	72	72	71	70	71	72	72	69	70	70	72
200	75	77	77	75	75	76	75	74	73	72	71	70	70	69	68	68	67	68	69
250	74	76	77	76	75	74	74	73	73	72	72	71	71	68	67	64	63	63	66
315	72	72	74	75	74	73	72	70	69	68	67	66	66	65	63	62	58	57	58
400	74	72	75	74	74	73	72	70	68	67	65	64	64	62	61	58	55	53	54
500	70	70	73	72	73	72	71	70	68	67	66	65	64	62	60	58	56	53	52
630	71	70	73	74	73	73	71	70	68	67	65	64	63	62	61	59	57	53	51
800	69	70	72	74	72	71	70	68	67	66	65	64	61	62	62	59	57	55	52
1000	68	69	72	73	72	70	68	67	66	65	63	62	61	61	61	59	57	54	52
1250	69	68	72	71	71	69	68	67	66	65	64	63	61	62	60	58	56	55	50
1600	67	69	72	72	70	68	67	66	65	64	63	62	61	61	60	57	55	53	51
2000	67	69	73	72	71	69	67	66	65	64	63	62	59	60	59	56	53	51	50
2500	65	68	72	71	71	70	68	67	65	64	62	61	59	58	58	55	51	49	48
3150	66	68	73	71	71	70	69	67	66	64	63	61	58	57	57	55	52	50	49
4000	66	69	75	72	73	71	70	68	67	65	64	62	59	59	58	56	52	50	48
5000	64	68	73	71	71	71	69	68	66	65	63	62	59	58	58	57	51	48	45
6300	62	66	71	69	68	68	66	64	63	61	60	58	54	54	53	51	47	44	42
8000	58	63	69	66	65	66	64	62	60	59	57	55	51	50	49	47	44	41	39
10000	54	59	66	63	61	62	60	58	56	54	52	50	45	45	45	43	40	39	39
OVERALL	86	87	89	88	87	86	85	85	84	83	82	81	81	81	82	82	81	82	83

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 02
AIRCRAFT CODE 761
OPERATION CODE 00219
PROFILE VERSION A
28 NOV 79
PAGE D2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.7	97.6	101.9	100.3	100.1	99.0	97.7	96.4	95.0	93.8	92.4	91.1	89.2	88.8	88.1	86.6	84.6	84.6	84.5
250	93.4	95.3	99.6	98.0	97.8	96.7	95.4	94.1	92.7	91.4	90.1	88.8	86.9	86.5	85.8	84.2	82.2	82.2	82.2
315	91.1	92.9	97.2	95.6	95.4	94.3	93.0	91.7	90.3	89.0	87.7	86.4	84.5	84.1	83.4	81.8	79.8	79.9	79.8
400	88.6	90.4	94.7	93.1	92.9	91.8	90.5	89.2	87.8	86.5	85.2	83.9	82.0	81.6	81.0	79.3	77.4	77.4	77.4
500	86.1	87.9	92.0	90.5	90.3	89.2	87.8	86.5	85.2	83.9	82.6	81.3	79.5	79.0	78.5	76.8	74.9	74.9	74.8
630	83.4	85.2	89.2	87.7	87.5	86.4	85.1	83.7	82.4	81.1	79.8	78.5	76.8	76.3	75.7	74.1	72.1	72.1	72.0
800	80.6	82.3	86.2	84.8	84.5	83.5	82.2	80.9	79.5	78.2	77.0	75.7	74.0	73.5	72.9	71.2	69.2	69.2	69.1
1000	77.8	79.3	83.1	81.8	81.4	80.4	79.1	77.8	76.5	75.2	73.9	72.7	71.1	70.6	70.0	68.1	66.1	66.0	65.9
1250	74.9	76.0	79.8	78.6	78.2	77.1	75.8	74.5	73.2	71.9	70.7	69.4	67.9	67.5	66.8	64.9	62.8	62.6	62.5
1600	71.9	72.6	76.2	75.3	74.8	73.7	72.4	71.1	69.8	68.5	67.1	65.9	64.5	64.2	63.4	61.5	59.3	58.7	58.5
2000	68.6	68.9	72.4	71.6	71.1	69.9	68.6	67.3	66.0	64.7	63.4	62.1	61.0	60.6	59.7	57.5	55.1	54.0	53.9
2500	64.6	64.9	68.3	67.7	66.9	65.8	64.4	63.2	61.8	60.6	59.3	58.0	56.8	56.4	55.4	52.7	50.3	48.6	48.2
3150	60.0	60.3	63.8	63.4	62.4	61.6	60.2	58.9	57.5	56.1	54.8	53.4	52.0	51.4	50.2	47.8	45.1	43.1	41.8
4000	54.9	55.4	58.8	58.7	57.8	56.9	55.5	54.1	52.6	50.9	49.3	47.8	46.4	45.6	44.6	41.7	39.0	36.4	34.0
5000	49.3	49.8	53.5	53.5	52.4	51.5	50.0	48.4	46.7	44.8	43.2	41.7	40.2	39.3	38.6	34.4	31.0	26.8	23.4
6300	43.2	43.6	47.6	47.7	46.3	45.3	43.7	42.0	40.3	38.4	36.8	34.9	33.2	32.5	31.4	25.9	21.8	16.6	12.7
8000	37.4	37.9	42.1	42.1	40.8	40.0	38.3	36.4	34.3	32.2	30.5	28.1	26.0	24.8	22.3	16.6	10.3	6.4	2.1
10000	31.3	31.3	36.1	36.2	34.5	33.8	31.6	29.4	27.3	24.5	22.3	18.4	16.3	14.1	11.2	7.3			
12500	22.7	22.8	28.6	29.1	27.3	26.4	24.0	21.1	18.7	15.5	12.1	8.2	6.6	3.5	.0				
16000	13.9	11.6	19.4	19.4	18.4	16.6	13.1	10.9	6.8	6.6	1.9								
20000	5.1	.4	10.2	9.8	9.6	6.7	2.1	.7											
25000			1.0	.1	.8														

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 02
AIRCRAFT CODE 761
OPERATION CODE 00219
PROFILE VERSION A
28 NOV 79
PAGE E2

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.3	97.6	102.5	100.9	100.7	99.7	98.3	96.9	95.0	93.8	92.4	91.1	89.7	88.8	88.1	86.6	84.6	84.6	84.5
250	94.0	95.3	100.2	98.6	98.4	97.4	96.0	94.6	92.7	91.4	90.1	88.8	87.4	86.5	85.8	84.2	82.2	82.2	82.2
315	91.6	92.9	97.8	96.3	96.0	95.0	93.6	92.2	90.3	89.0	87.7	86.4	85.0	84.1	83.4	81.8	79.8	79.9	79.8
400	89.2	90.4	95.3	93.8	93.5	92.5	91.1	89.7	87.8	86.5	85.2	83.9	82.5	81.6	81.0	79.3	77.4	77.4	77.4
500	86.6	87.9	92.7	91.1	90.9	89.9	88.5	87.1	85.2	83.9	82.6	81.3	80.0	79.0	78.5	76.8	74.9	74.9	74.8
630	84.0	85.2	89.9	88.4	88.1	87.1	85.7	84.3	82.4	81.1	79.8	78.5	77.3	76.3	75.7	74.1	72.1	72.1	72.0
800	81.2	82.3	86.9	85.5	85.2	84.2	82.8	81.4	79.5	78.2	77.0	75.7	74.5	73.5	72.9	71.2	69.2	69.2	69.1
1000	78.3	79.3	83.7	82.4	82.0	81.1	79.7	78.4	76.5	75.2	73.9	72.7	71.6	70.6	70.0	68.1	66.1	66.0	65.9
1250	75.5	76.0	80.4	79.2	78.8	77.8	76.4	75.1	73.2	71.9	70.7	69.4	68.4	67.5	66.8	64.9	62.8	62.6	62.5
1600	72.4	72.6	76.8	75.9	75.4	74.4	73.0	71.6	69.8	68.5	67.1	65.9	65.0	64.2	63.4	61.5	59.3	58.7	58.5
2000	69.2	68.9	73.0	72.3	71.7	70.6	69.2	67.9	66.0	64.7	63.4	62.1	61.6	60.6	59.7	57.5	55.1	54.8	53.9
2500	65.1	64.9	69.0	68.3	67.5	66.5	65.1	63.7	61.8	60.6	59.3	58.0	57.3	56.4	55.4	52.7	50.3	48.6	48.2
3150	60.5	60.3	64.5	64.0	63.0	62.2	60.8	59.4	57.5	56.1	54.8	53.4	52.5	51.4	50.2	47.8	45.1	43.1	41.8
4000	55.4	55.4	59.3	59.2	58.3	57.5	56.0	54.5	52.6	50.9	49.3	47.8	46.8	45.6	44.6	41.7	39.0	36.4	34.0
5000	49.6	49.8	53.9	53.9	52.8	52.0	50.3	48.7	46.7	44.8	43.2	41.7	40.5	39.3	38.6	34.4	31.0	26.8	23.4
6300	43.4	43.6	47.8	48.0	46.6	45.6	44.0	42.2	40.3	38.4	36.8	34.9	33.4	32.5	31.4	25.9	21.8	16.6	12.7
8000	37.5	37.9	42.2	42.3	40.9	40.1	38.4	36.5	34.3	32.2	30.5	28.1	26.1	24.8	22.3	16.6	10.3	6.4	2.1
10000	31.3	31.3	36.1	36.2	34.5	33.8	31.6	29.4	27.3	24.5	22.3	18.4	16.3	14.1	11.2	7.3			
12500	22.7	22.8	28.6	29.1	27.3	26.4	24.8	21.1	18.7	15.5	12.1	8.2	6.6	3.5	.8				
16000	13.9	11.6	19.4	19.4	18.4	16.6	13.1	10.9	6.8	6.6	1.9								
20000	5.1	.4	10.2	9.8	9.6	6.7	2.1	.7											
25000			1.0	.1	.8														

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 02
AIRCRAFT CODE 761
OPERATION CODE 00219
PROFILE VERSION A
28 NOV 79
PAGE F2

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	81.4	82.8	86.6	85.6	85.1	84.0	82.7	81.4	80.1	78.8	77.6	76.3	74.8	74.4	73.6	71.6	69.5	68.6	68.7
250	79.3	80.6	84.4	83.4	82.9	81.8	80.5	79.2	77.9	76.6	75.4	74.2	72.7	72.2	71.5	69.5	67.4	66.5	66.6
315	77.1	78.3	82.1	81.2	80.6	79.6	78.2	77.0	75.7	74.4	73.2	72.0	70.5	70.1	69.3	67.3	65.3	64.4	64.5
400	74.9	76.1	79.7	78.9	78.3	77.2	75.9	74.7	73.4	72.1	70.9	69.7	68.3	67.9	67.1	65.1	63.1	62.3	62.4
500	72.7	73.7	77.3	76.5	76.0	74.9	73.6	72.3	71.0	69.8	68.6	67.4	66.0	65.6	64.8	62.8	60.9	60.0	60.2
630	70.3	71.3	74.8	74.1	73.5	72.4	71.1	69.9	68.6	67.4	66.2	65.0	63.7	63.2	62.5	60.4	58.5	57.7	57.7
800	67.9	68.8	72.3	71.7	71.0	69.9	68.6	67.4	66.1	64.9	63.7	62.5	61.2	60.8	60.0	58.0	56.1	55.2	55.2
1000	65.5	66.2	69.6	69.1	68.4	67.3	66.0	64.8	63.5	62.3	61.1	59.9	58.7	58.3	57.5	55.4	53.5	52.6	52.5
1250	62.9	63.5	66.8	66.4	65.8	64.6	63.3	62.1	60.8	59.6	58.4	57.2	56.0	55.6	54.8	52.7	50.8	49.8	49.6
1600	60.2	60.7	64.0	63.7	63.0	61.8	60.5	59.3	58.1	56.8	55.6	54.4	53.2	52.8	52.0	49.9	48.0	46.8	46.5
2000	57.5	57.8	61.0	60.8	60.1	59.0	57.7	56.5	55.2	54.0	52.7	51.5	50.3	49.9	49.1	46.9	45.0	43.6	43.1
2500	54.4	54.7	57.9	57.8	57.0	55.9	54.6	53.3	52.1	50.9	49.6	48.4	47.1	46.8	45.9	43.7	41.7	40.2	39.4
3150	51.0	51.3	54.4	54.5	53.6	52.5	51.2	50.0	48.7	47.5	46.3	45.0	43.7	43.5	42.6	40.3	38.3	36.5	35.4
4000	47.3	47.5	50.7	50.8	49.9	48.8	47.6	46.3	45.0	43.8	42.6	41.3	39.9	39.8	38.9	36.6	34.6	32.6	31.1
5000	43.1	43.4	46.6	46.8	45.8	44.7	43.4	42.2	40.9	39.7	38.5	37.3	35.8	35.7	34.9	32.5	30.5	28.4	26.8
6300	38.7	39.0	42.1	42.4	41.4	40.3	39.0	37.8	36.5	35.3	34.1	32.9	31.3	31.3	30.5	28.1	26.2	24.0	22.3
8000	34.7	34.9	38.0	38.3	37.4	36.4	35.1	33.8	32.5	31.3	30.1	28.8	27.4	27.2	26.4	24.1	22.2	20.2	18.7
10000	30.5	30.6	33.6	33.9	33.0	32.1	30.8	29.5	28.2	27.0	25.7	24.5	23.2	22.8	22.0	19.8	18.0	16.1	15.1
12500	25.9	25.9	28.8	29.1	28.3	27.5	26.2	24.9	23.6	22.4	21.1	19.9	18.7	18.1	17.3	15.3	13.5	12.0	11.4
16000	21.0	20.9	23.7	23.9	23.1	22.5	21.2	19.9	18.6	17.3	16.1	14.9	13.9	13.2	12.4	10.6	9.0	8.0	7.9
20000	15.7	15.6	18.3	18.3	17.6	17.0	15.7	14.5	13.2	12.0	10.8	9.6	8.9	8.8	7.3	5.9	4.6	4.3	4.5
25000	10.1	10.1	12.5	12.3	11.8	11.2	9.9	8.8	7.5	6.4	5.3	4.2	3.7	2.8	2.5	1.5	.5	.8	1.2

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 02
AIRCRAFT CODE 761
OPERATION CODE 00219
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.0	82.8	87.3	86.2	85.7	84.7	83.3	82.0	80.1	78.8	77.6	76.3	75.3	74.4	73.6	71.6	69.5	68.6	68.7
250	79.8	80.6	85.0	84.0	83.5	82.5	81.1	79.8	77.9	76.6	75.4	74.2	73.2	72.2	71.5	69.5	67.4	66.5	66.6
315	77.7	78.3	82.7	81.8	81.2	80.2	78.9	77.5	75.7	74.4	73.2	72.0	71.0	70.1	69.3	67.3	65.3	64.4	64.5
400	75.5	76.1	80.4	79.5	79.0	77.9	76.6	75.2	73.4	72.1	70.9	69.7	68.8	67.9	67.1	65.1	63.1	62.3	62.4
500	73.2	73.7	78.0	77.2	76.6	75.6	74.2	72.9	71.0	69.8	68.6	67.4	66.6	65.6	64.8	62.8	60.9	60.0	60.2
630	70.9	71.3	75.5	74.8	74.2	73.1	71.7	70.4	68.6	67.4	66.2	65.0	64.2	63.2	62.5	60.4	58.5	57.7	57.7
800	68.5	68.8	72.9	72.3	71.6	70.6	69.2	67.9	66.1	64.9	63.7	62.5	61.7	60.8	60.0	58.0	56.1	55.2	55.2
1000	66.0	66.2	70.2	69.7	69.1	68.0	66.6	65.3	63.5	62.3	61.1	59.9	59.2	58.3	57.5	55.4	53.5	52.6	52.5
1250	63.4	63.5	67.5	67.1	66.4	65.3	63.9	62.6	60.8	59.6	58.4	57.2	56.5	55.6	54.8	52.7	50.8	49.8	49.6
1600	60.8	60.7	64.6	64.3	63.6	62.5	61.2	59.9	58.1	56.8	55.6	54.4	53.7	52.8	52.0	49.9	48.0	46.8	46.5
2000	58.0	57.8	61.7	61.5	60.7	59.6	58.3	57.0	55.2	54.0	52.7	51.5	50.8	49.9	49.1	46.9	45.0	43.6	43.1
2500	54.9	54.7	58.5	58.4	57.6	56.5	55.2	53.9	52.1	50.9	49.6	48.4	47.7	46.8	45.9	43.7	41.7	40.2	39.4
3150	51.5	51.3	55.1	55.1	54.2	53.2	51.9	50.6	48.7	47.5	46.3	45.0	44.2	43.5	42.6	40.3	38.3	36.5	35.4
4000	47.7	47.5	51.2	51.3	50.4	49.4	48.0	46.8	45.0	43.8	42.6	41.3	40.3	39.0	38.9	36.6	34.6	32.6	31.1
5000	43.4	43.4	46.9	47.2	46.2	45.1	43.8	42.5	40.9	39.7	38.5	37.3	36.1	35.7	34.9	32.5	30.5	28.4	26.8
6300	38.9	39.0	42.4	42.6	41.7	40.6	39.3	38.0	36.5	35.3	34.1	32.9	31.5	31.3	30.5	28.1	26.2	24.0	22.3
8000	34.8	34.9	38.1	38.5	37.5	36.5	35.2	33.9	32.5	31.3	30.1	28.8	27.5	27.2	26.4	24.1	22.2	20.2	18.7
10000	30.5	30.6	33.6	33.9	33.0	32.1	30.8	29.5	28.2	27.0	25.7	24.5	23.2	22.8	22.0	19.8	18.0	16.1	15.1
12500	25.9	25.9	28.8	29.1	28.3	27.5	26.2	24.9	23.6	22.4	21.1	19.9	18.7	18.1	17.3	15.3	13.5	12.0	11.4
16000	21.0	20.9	23.7	23.9	23.1	22.5	21.2	19.9	18.6	17.3	16.1	14.9	13.9	13.2	12.4	10.6	9.0	8.0	7.9
20000	15.7	15.6	18.3	18.3	17.6	17.0	15.7	14.5	13.2	12.0	10.8	9.6	8.9	8.0	7.3	5.9	4.6	4.3	4.5
25000	10.1	10.1	12.5	12.3	11.8	11.2	9.9	8.8	7.5	6.4	5.3	4.2	3.7	2.8	2.5	1.5	.5	.8	1.2

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 02
AIRCRAFT CODE 761
OPERATION CODE 00219
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

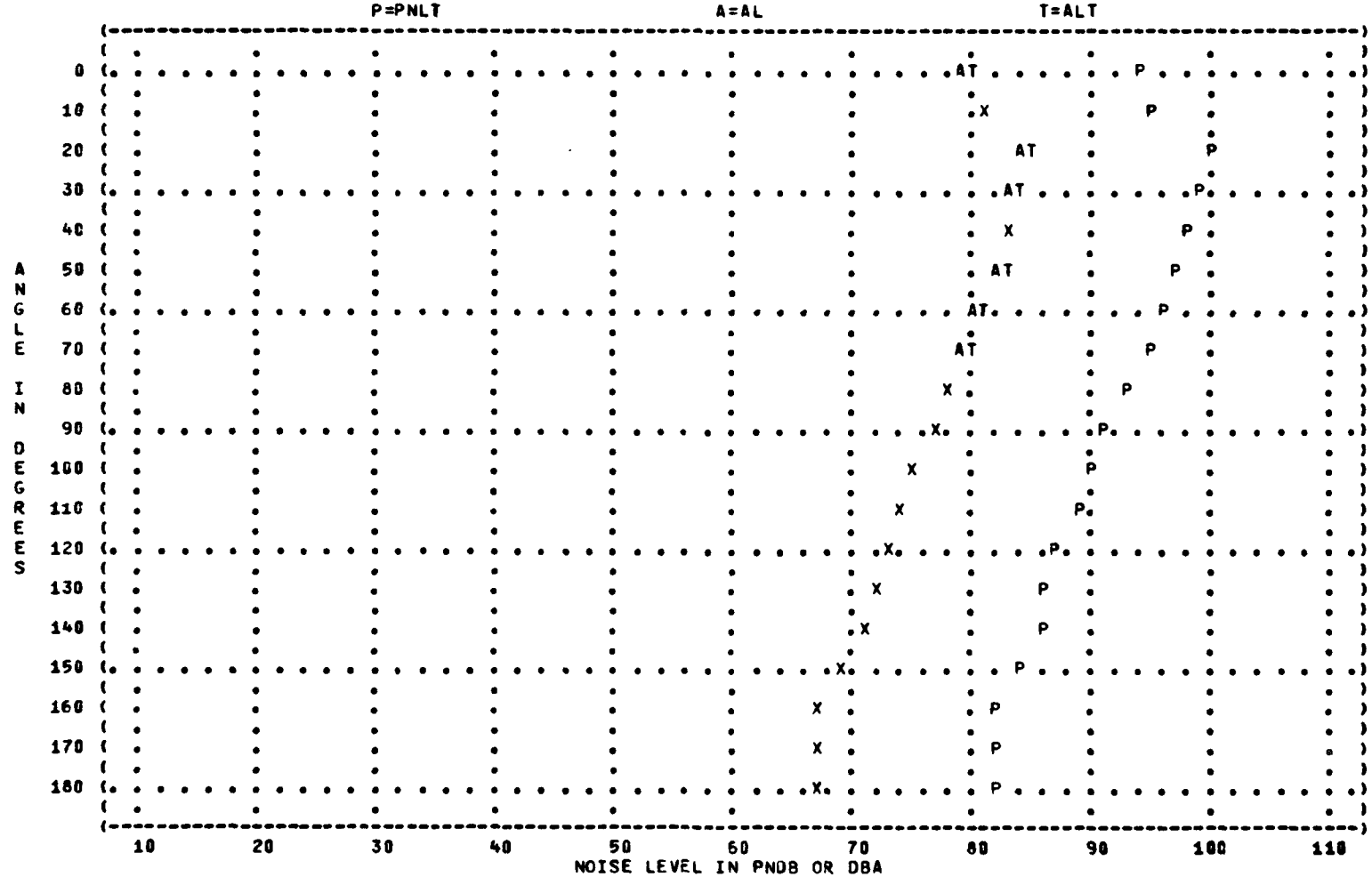


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 03
AIRCRAFT CODE 761
OPERATION CODE 00204
PROFILE VERSION A
28 NOV 79
PAGE C3

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	81	82	83	82	81	79	79	79	78	78	77	77	78	79	80	80	81	82	84
63	84	83	83	81	79	77	77	77	77	77	77	77	76	76	78	80	80	80	81
80	79	79	79	80	79	79	78	78	77	77	76	76	76	77	77	80	80	81	83
100	78	79	79	78	78	77	77	77	77	77	77	77	79	77	77	78	80	81	81
125	83	86	83	82	83	83	82	82	81	80	80	79	82	81	81	79	81	81	81
160	82	86	82	83	84	83	82	82	82	81	81	81	81	80	81	79	79	77	78
200	83	85	83	81	82	83	82	82	81	80	79	78	81	77	78	77	77	77	77
250	82	81	81	83	82	81	81	80	79	79	78	77	78	75	75	76	73	73	77
315	82	81	83	83	83	82	81	80	79	79	78	77	78	73	73	72	70	70	70
400	85	82	85	84	85	83	82	80	79	77	76	75	73	71	69	70	68	66	66
500	84	84	86	85	86	83	81	80	78	77	75	73	73	73	71	71	69	66	66
630	85	84	86	88	87	85	83	81	79	77	75	73	72	72	71	72	70	67	65
800	83	83	85	88	86	83	81	80	78	76	74	73	72	71	72	73	71	69	66
1000	81	81	84	88	85	83	81	79	77	75	73	71	69	69	70	71	68	66	63
1250	81	81	85	84	84	80	78	76	74	73	71	69	68	68	67	68	66	64	63
1600	80	81	86	86	82	80	78	76	74	72	70	68	67	67	67	67	66	64	64
2000	79	82	85	85	84	79	77	76	74	72	70	68	66	66	66	66	64	63	64
2500	79	81	83	84	82	79	77	75	73	70	68	66	64	65	65	64	62	62	63
3150	79	80	85	84	82	80	78	76	74	72	69	67	63	66	64	65	63	64	64
4000	79	81	86	85	84	81	79	76	74	72	70	68	65	66	66	67	65	65	64
5000	76	78	85	82	80	78	76	73	71	69	67	65	62	63	62	64	62	62	62
6300	74	76	83	80	79	76	73	71	69	66	64	62	59	59	59	59	58	58	57
8000	72	74	80	78	76	73	70	67	65	62	60	57	56	57	56	56	54	56	54
10000	70	71	77	76	74	70	67	64	61	58	55	52	52	53	52	52	51	51	51
OVERALL	95	96	98	98	97	95	93	92	91	90	89	88	89	88	88	89	89	89	90

TABLE: PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-081
RUN 03
AIRCRAFT CODE 761
OPERATION CODE 00204
PROFILE VERSION A
28 NOV 79
PAGE 03

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	107.6	109.1	112.7	112.1	110.7	108.3	106.5	104.6	102.8	101.0	99.3	97.6	96.8	96.3	96.1	96.5	95.3	94.8	94.9
250	105.3	106.8	110.3	109.8	108.4	106.8	104.2	102.3	100.5	98.8	97.0	95.3	94.7	94.1	93.8	94.2	93.8	92.5	92.6
315	103.0	104.4	107.9	107.4	106.0	103.7	101.8	100.0	98.2	96.4	94.7	93.0	92.4	91.7	91.4	91.9	90.7	90.2	90.4
400	100.6	101.9	105.4	105.0	103.6	101.2	99.4	97.5	95.7	94.0	92.2	90.6	90.1	89.2	89.0	89.4	88.2	87.7	87.9
500	98.1	99.4	102.8	102.4	101.0	98.6	96.8	95.0	93.2	91.4	89.7	88.0	87.7	86.7	86.5	86.8	85.6	85.2	85.4
630	95.4	96.6	100.0	99.6	98.2	95.9	94.1	92.3	90.5	88.8	87.1	85.4	85.1	84.0	83.8	84.1	82.9	82.4	82.7
800	92.6	93.8	97.2	96.7	95.3	93.1	91.3	89.5	87.7	86.0	84.3	82.7	82.5	81.2	80.9	81.2	80.0	79.6	79.9
1000	89.6	90.9	94.2	93.7	92.3	90.1	88.3	86.5	84.7	83.0	81.3	79.9	79.8	78.3	78.0	78.3	76.9	76.6	76.8
1250	86.5	87.8	90.9	90.5	89.3	86.8	85.1	83.3	81.5	79.8	78.3	76.9	76.7	75.3	74.9	75.4	73.9	73.3	73.6
1600	83.3	84.5	87.5	87.3	86.0	83.5	81.6	79.9	78.3	76.8	75.3	73.8	73.3	72.2	71.7	72.2	70.7	69.7	70.0
2000	80.2	81.0	84.0	83.8	82.6	80.1	78.4	76.7	75.1	73.5	72.0	70.5	69.6	68.9	68.4	68.9	67.4	66.1	66.3
2500	76.5	77.1	80.1	80.0	78.8	76.5	74.8	73.1	71.3	69.7	68.1	66.6	65.9	65.3	64.6	65.2	63.5	62.2	62.1
3150	72.7	73.1	75.8	76.1	75.0	72.8	71.0	69.2	67.4	65.7	64.0	62.3	61.7	61.0	60.6	61.1	59.3	57.8	57.3
4000	68.3	68.6	71.2	71.7	70.6	68.3	66.5	64.7	62.9	61.1	59.3	57.6	56.7	56.1	55.6	56.4	54.5	52.7	51.6
5000	63.4	63.7	66.1	67.0	65.8	63.4	61.7	59.8	57.9	56.1	54.2	52.4	51.4	50.7	50.4	51.3	49.0	46.9	45.5
6300	58.2	58.4	60.8	61.9	60.6	58.3	56.4	54.5	52.6	50.7	48.6	46.5	45.4	44.9	44.5	45.4	42.9	40.4	38.8
8000	53.9	54.0	56.3	57.4	56.3	53.9	52.0	49.9	47.7	45.7	43.5	41.2	40.7	39.3	39.0	39.8	36.9	33.7	32.3
10000	48.9	49.0	51.2	52.3	51.3	48.9	46.8	44.6	42.2	40.1	37.4	35.3	34.7	33.1	32.0	33.1	29.9	25.8	23.3
12500	42.9	43.0	45.6	46.6	45.5	42.9	40.7	38.3	35.6	33.4	30.9	28.9	28.0	26.8	24.4	25.5	20.8	15.6	13.7
16000	36.0	35.9	39.0	40.0	38.7	35.6	33.5	31.3	29.0	26.0	22.5	19.8	19.7	16.2	14.4	14.5	9.2	5.4	4.1
20000	28.3	28.1	31.8	32.1	31.8	27.5	24.7	21.8	18.1	15.4	9.4	6.8	11.3	5.7	4.3	3.5			
25000	17.8	17.7	21.7	21.1	21.4	16.2	13.5	7.4	7.2	4.8			2.9						

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 03
AIRCRAFT CODE 761
OPERATION CODE 00204
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	107.6	109.6	112.7	112.1	110.7	106.3	106.5	104.6	102.8	101.0	99.3	97.6	96.8	96.3	96.1	96.5	95.3	94.8	94.9
250	105.3	107.3	110.3	109.8	108.4	106.0	104.2	102.3	100.5	98.8	97.0	95.3	94.7	94.1	93.8	94.2	93.8	92.5	92.6
315	103.0	105.0	107.9	107.4	106.0	103.7	101.8	100.0	98.2	96.4	94.7	93.0	92.4	91.7	91.4	91.9	90.7	90.2	90.4
400	100.6	102.5	105.4	105.0	103.6	101.2	99.4	97.5	95.7	94.0	92.2	90.6	90.1	89.2	89.0	89.4	88.2	87.7	87.9
500	98.1	99.9	102.8	102.4	101.0	98.6	96.8	95.0	93.2	91.4	89.7	88.0	87.7	86.7	86.5	86.8	85.6	85.2	85.4
630	95.4	97.2	100.0	99.6	98.2	95.9	94.1	92.3	90.5	88.8	87.1	85.4	85.1	84.0	83.8	84.1	82.9	82.4	82.7
800	92.6	94.4	97.2	96.7	95.3	93.1	91.3	89.5	87.7	86.0	84.3	82.7	82.5	81.2	80.9	81.2	80.0	79.6	79.9
1000	89.6	91.5	94.2	93.7	92.3	90.1	88.3	86.5	84.7	83.0	81.3	79.9	79.8	78.3	78.0	78.3	76.9	76.6	76.8
1250	86.5	88.4	90.9	90.5	89.3	86.8	85.1	83.3	81.5	79.8	78.3	76.9	76.7	75.3	74.9	75.4	73.9	73.3	73.6
1600	83.3	85.1	87.5	87.3	86.0	83.5	81.6	79.9	78.3	76.8	75.3	73.8	73.3	72.2	71.7	72.2	70.7	69.7	70.0
2000	80.2	81.6	84.0	83.8	82.6	80.1	78.4	76.7	75.1	73.5	72.0	70.5	69.6	68.9	68.4	68.9	67.4	66.1	66.3
2500	76.5	77.7	80.1	80.0	78.8	76.5	74.8	73.1	71.3	69.7	68.1	66.6	65.9	65.3	64.6	65.2	63.5	62.2	62.1
3150	72.7	73.6	75.8	76.1	75.0	72.8	71.0	69.2	67.4	65.7	64.0	62.3	61.7	61.0	60.6	61.1	59.3	57.8	57.3
4000	68.3	69.1	71.2	71.7	70.6	68.3	66.5	64.7	62.9	61.1	59.3	57.6	56.7	56.1	55.6	56.4	54.5	52.7	51.6
5000	63.4	64.0	66.1	67.0	65.8	63.4	61.7	59.8	57.9	56.1	54.2	52.4	51.4	50.7	50.4	51.3	49.0	46.9	45.5
6300	58.2	58.7	60.8	61.9	60.6	58.3	56.4	54.5	52.6	50.7	48.6	46.5	45.4	44.9	44.5	45.4	42.9	40.4	38.8
8000	53.9	54.1	56.3	57.4	56.3	53.9	52.0	49.9	47.7	45.7	43.5	41.2	40.7	39.3	39.0	39.8	36.9	33.7	32.3
10000	48.9	49.0	51.2	52.3	51.3	48.9	46.8	44.6	42.2	40.1	37.4	35.3	34.7	33.1	32.0	33.1	29.9	25.8	23.3
12500	42.9	43.0	45.6	46.6	45.5	42.9	40.7	38.3	35.6	33.4	30.9	28.9	28.0	26.8	24.4	25.5	20.8	15.6	13.7
16000	36.0	35.9	39.0	40.0	38.7	35.6	33.5	31.3	29.0	26.0	22.5	19.8	19.7	16.2	14.4	14.5	9.2	5.4	4.1
20000	28.3	28.1	31.8	32.1	31.0	27.5	24.7	21.8	18.1	15.4	9.4	6.8	11.3	5.7	4.3	3.5			
25000	17.8	17.7	21.7	21.1	21.4	16.2	13.5	7.4	7.2	4.8			2.9						

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 03
AIRCRAFT CODE 761
OPERATION CODE 00204
PROFILE VERSION A
28 NOV 79
PAGE F3

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	93.9	94.8	98.5	98.5	96.9	94.4	92.5	90.6	88.8	87.0	85.3	83.7	82.9	82.1	81.9	82.2	80.5	79.4	79.3
250	91.7	92.6	96.2	96.3	94.8	92.2	90.3	88.4	86.6	84.9	83.2	81.5	80.8	80.0	79.8	80.1	78.4	77.2	77.2
315	89.6	90.4	93.9	94.1	92.5	90.0	88.1	86.3	84.4	82.7	81.0	79.4	78.7	77.9	77.7	77.9	76.3	75.1	75.0
400	87.3	88.2	91.6	91.9	90.3	87.7	85.9	84.0	82.2	80.5	78.8	77.2	76.6	75.7	75.5	75.7	74.1	72.9	72.8
500	85.1	85.8	89.2	89.5	88.0	85.4	83.6	81.8	80.0	78.3	76.6	75.0	74.4	73.4	73.2	73.5	71.9	70.6	70.6
630	82.7	83.5	86.8	87.2	85.6	83.1	81.2	79.4	77.6	75.9	74.3	72.7	72.1	71.1	70.9	71.2	69.5	68.2	68.1
800	80.4	81.0	84.2	84.7	83.2	80.7	78.8	77.0	75.3	73.6	71.9	70.3	69.7	68.7	68.5	68.8	67.1	65.8	65.6
1000	77.9	78.5	81.6	82.2	80.7	78.2	76.4	74.6	72.8	71.1	69.5	67.9	67.3	66.3	66.1	66.4	64.6	63.2	63.0
1250	75.4	75.9	78.9	79.6	78.2	75.6	73.8	72.0	70.2	68.6	66.9	65.3	64.6	63.7	63.5	63.8	62.0	60.5	60.2
1600	72.8	73.2	76.1	76.9	75.5	73.0	71.2	69.4	67.6	65.9	64.2	62.6	61.9	61.1	60.8	61.2	59.3	57.7	57.2
2000	70.1	70.4	73.3	74.1	72.8	70.2	68.4	66.6	64.9	63.2	61.5	59.9	59.0	58.3	58.0	58.4	56.5	54.7	54.1
2500	67.2	67.4	70.2	71.2	69.8	67.3	65.5	63.7	61.9	60.2	58.5	56.8	55.9	55.3	55.0	55.5	53.5	51.6	50.8
3150	64.0	64.2	66.9	68.0	66.7	64.1	62.3	60.5	58.7	56.9	55.2	53.5	52.5	52.1	51.7	52.3	50.3	48.2	47.2
4000	60.4	60.5	63.2	64.5	63.1	60.6	58.7	56.9	55.1	53.3	51.5	49.8	48.8	48.4	48.1	48.8	46.7	44.5	43.3
5000	56.3	56.5	59.1	60.6	59.1	56.5	54.7	52.9	51.0	49.3	47.5	45.7	44.7	44.4	44.1	44.9	42.8	40.5	39.1
6300	51.9	52.1	54.7	56.3	54.8	52.2	50.4	48.6	46.7	44.9	43.1	41.4	40.3	40.0	39.8	40.6	38.5	36.2	34.6
8000	48.0	48.0	50.5	52.1	50.8	48.2	46.4	44.6	42.8	41.0	39.2	37.5	36.5	36.2	35.9	36.7	34.5	32.2	30.8
10000	43.7	43.7	46.1	47.6	46.4	43.9	42.1	40.3	38.5	36.8	35.0	33.3	32.4	32.0	31.7	32.3	30.3	28.0	26.7
12500	39.1	39.0	41.2	42.6	41.6	39.1	37.3	35.6	33.8	32.1	30.4	28.8	27.9	27.5	27.8	27.6	25.6	23.5	22.5
16000	34.0	33.8	35.9	37.1	36.3	33.9	32.1	30.4	28.7	27.1	25.4	23.8	23.1	22.5	22.8	22.4	20.6	18.7	18.1
20000	28.3	28.1	30.1	31.0	30.4	28.1	26.4	24.7	23.1	21.6	20.0	18.5	18.1	17.2	16.7	16.9	15.3	13.8	13.8
25000	22.1	21.9	23.8	24.3	24.0	21.7	20.1	18.6	17.1	15.6	14.2	12.9	12.8	11.6	11.2	11.2	10.1	9.2	9.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 03
AIRCRAFT CODE 761
OPERATION CODE 00204
PROFILE VERSION A
28 NOV 79
PAGE G3

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = -3.8 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	93.9	95.4	98.5	98.5	96.9	94.4	92.5	90.6	88.8	87.0	85.3	83.7	82.9	82.1	81.9	82.2	80.5	79.4	79.3
250	91.7	93.2	96.2	96.3	94.8	92.2	90.3	88.4	86.6	84.9	83.2	81.5	80.8	80.8	79.8	80.1	78.4	77.2	77.2
315	89.6	91.0	93.9	94.1	92.5	90.0	88.1	86.3	84.4	82.7	81.0	79.4	78.7	77.9	77.7	77.9	76.3	75.1	75.0
400	87.3	88.7	91.6	91.9	90.3	87.7	85.9	84.0	82.2	80.5	78.8	77.2	76.6	75.7	75.5	75.7	74.1	72.9	72.8
500	85.1	86.4	89.2	89.5	88.0	85.4	83.6	81.8	80.0	78.3	76.6	75.0	74.4	73.4	73.2	73.5	71.9	70.6	70.5
630	82.7	84.0	86.8	87.2	85.6	83.1	81.2	79.4	77.6	75.9	74.3	72.7	72.1	71.1	70.9	71.2	69.5	68.2	68.1
800	80.4	81.6	84.2	84.7	83.2	80.7	78.8	77.0	75.3	73.6	71.9	70.3	69.7	68.7	68.5	68.8	67.1	65.8	65.6
1000	77.9	79.1	81.6	82.2	80.7	78.2	76.4	74.6	72.8	71.1	69.5	67.9	67.3	66.3	66.1	66.4	64.6	63.2	63.0
1250	75.4	76.4	78.9	79.6	78.2	75.6	73.8	72.0	70.2	68.6	66.9	65.3	64.6	63.7	63.5	63.8	62.8	60.5	60.2
1600	72.8	73.8	76.1	76.9	75.5	73.0	71.2	69.4	67.6	65.9	64.2	62.6	61.9	61.1	60.8	61.2	59.3	57.7	57.2
2000	70.1	71.0	73.3	74.1	72.8	70.2	68.4	66.6	64.9	63.2	61.5	59.9	59.8	58.3	58.8	58.4	56.5	54.7	54.1
2500	67.2	68.0	70.2	71.2	69.8	67.3	65.5	63.7	61.9	60.2	58.5	56.8	55.9	55.3	55.0	55.5	53.5	51.6	50.8
3150	64.0	64.7	66.9	68.0	66.7	64.1	62.3	60.5	58.7	56.9	55.2	53.5	52.5	52.1	51.7	52.3	50.3	48.2	47.2
4000	60.4	61.0	63.2	64.5	63.1	60.6	58.7	56.9	55.1	53.3	51.5	49.8	48.8	48.4	48.1	48.8	46.7	44.5	43.3
5000	56.3	56.8	59.1	60.6	59.1	56.5	54.7	52.9	51.0	49.3	47.5	45.7	44.7	44.4	44.1	44.9	42.8	40.5	39.1
6300	51.9	52.3	54.7	56.3	54.8	52.2	50.4	48.6	46.7	44.9	43.1	41.4	40.3	40.0	39.8	40.6	38.5	36.2	34.6
8000	48.8	48.2	50.5	52.1	50.8	48.2	46.4	44.6	42.8	41.0	39.2	37.5	36.5	36.2	35.9	36.7	34.5	32.2	30.8
10000	43.7	43.7	46.1	47.6	46.4	43.9	42.1	40.3	38.5	36.8	35.0	33.3	32.4	32.0	31.7	32.3	30.3	28.0	26.7
12500	39.1	39.0	41.2	42.6	41.6	39.1	37.3	35.6	33.8	32.1	30.4	28.8	27.9	27.5	27.0	27.6	25.6	23.5	22.5
16000	34.8	33.8	35.9	37.1	36.3	33.9	32.1	30.4	28.7	27.1	25.4	23.8	23.1	22.5	22.0	22.4	20.6	18.7	18.1
20000	28.3	28.1	30.1	31.8	30.4	28.1	26.4	24.7	23.1	21.6	20.0	18.5	18.1	17.2	16.7	16.9	15.3	13.8	13.8
25000	22.1	21.9	23.8	24.3	24.0	21.7	20.1	18.6	17.1	15.6	14.2	12.9	12.8	11.6	11.2	11.2	10.1	9.2	9.7

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE DISTANCE = 250 FEET			IDENTIFICATION:
NOISE SOURCE/SUBJECT:	OPERATION:	METEOROLOGY:	ONEGA 8.2
F-15 IN THE	MILITARY POWER (91% RPM)	TEMP = 59 F	TEST 79-761-001
AF32A-23 SUPPRESSOR	SINGLE ENGINE	BAR PRESS =29.92 IN HG	RUN 03
FAR-FIELD NOISE	GROUND RUNUP (SUPPRESSED)	REL HUMID = 70 %	AIRCRAFT CODE 761
		DELTA N = -3.0 DB	OPERATION CODE 00204
			PROFILE VERSION A
			28 NOV 79
			PAGE J3

P=PNLT A=AL T=ALT

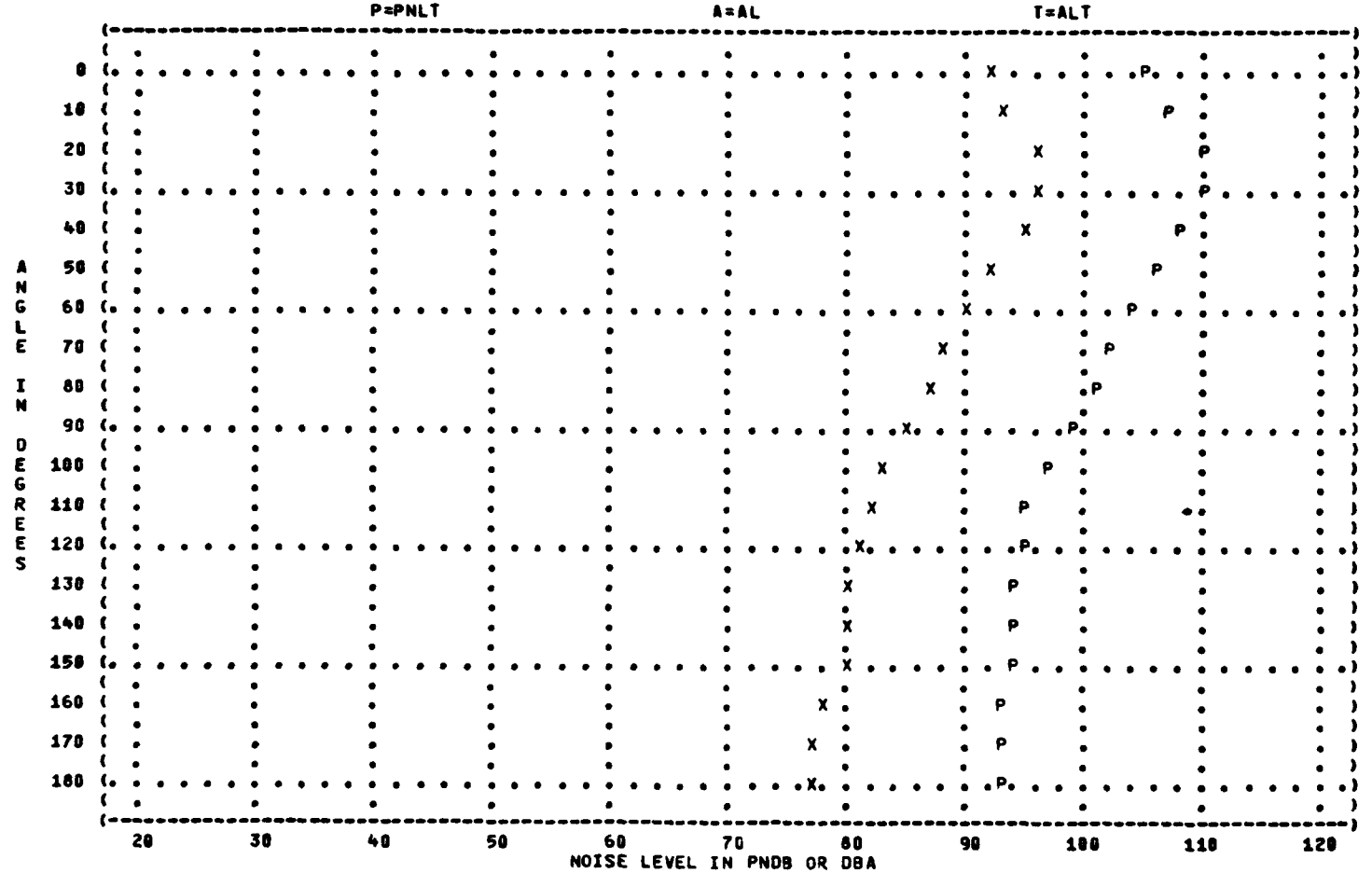


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 04
AIRCRAFT CODE 761
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE C4

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

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

TABLE: PERCEIVED NOISE LEVEL (PND8)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 04
AIRCRAFT CODE 761
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE D4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	113.8	114.9	116.6	117.6	116.8	113.9	111.8	109.7	107.6	105.6	103.6	101.6	104.4	104.1	103.7	105.0	104.5	103.6	104.6
250	111.5	112.6	116.3	115.3	114.6	111.7	109.6	107.5	105.4	103.4	101.3	99.3	102.3	102.0	101.5	102.8	102.4	101.5	102.5
315	109.3	110.3	113.9	113.0	112.3	109.4	107.3	105.2	103.1	101.1	99.0	97.1	100.0	99.7	99.2	100.6	100.2	99.3	100.4
400	106.9	107.9	111.5	110.6	110.8	107.8	104.9	102.8	100.7	98.7	96.7	94.8	97.7	97.3	96.8	98.4	98.0	97.1	98.2
500	104.5	105.4	108.9	108.1	107.5	104.5	102.3	100.3	98.2	96.2	94.3	92.4	95.3	94.8	94.2	96.1	95.6	94.6	95.9
630	101.9	102.7	106.2	105.5	104.9	101.9	99.7	97.6	95.6	93.7	91.7	89.8	92.8	92.2	91.6	93.7	93.8	92.2	93.4
800	99.1	100.0	103.3	102.8	102.1	99.2	97.1	95.1	93.0	91.1	89.1	87.2	90.2	89.5	88.9	91.1	90.3	89.5	90.7
1000	96.2	97.1	100.2	99.9	99.2	96.6	94.5	92.4	90.3	88.4	86.4	84.5	87.4	86.6	86.1	88.1	87.5	86.5	87.7
1250	93.2	94.0	96.9	96.8	96.0	93.7	91.6	89.5	87.5	85.5	83.5	81.7	84.4	83.7	83.0	84.8	84.5	83.3	84.5
1600	90.2	90.8	93.4	93.7	92.8	90.7	88.5	86.5	84.5	82.5	80.5	78.6	81.3	80.7	79.9	81.2	81.2	80.1	81.4
2000	87.0	87.3	89.9	90.4	89.6	87.5	85.3	83.3	81.2	79.3	77.3	75.4	78.1	77.4	76.6	77.7	77.7	76.8	77.3
2500	83.5	83.7	86.3	86.9	86.1	84.0	81.8	79.8	77.7	75.7	73.7	71.7	74.6	73.9	73.8	74.1	73.9	73.2	72.9
3150	79.5	79.6	82.2	83.2	82.2	80.3	78.1	76.0	73.8	71.7	69.6	67.5	70.4	69.8	68.9	69.8	69.9	69.2	68.5
4000	75.0	75.1	77.6	78.8	77.9	75.9	73.7	71.5	69.3	67.2	64.9	62.8	65.8	65.1	64.3	65.2	65.3	64.6	63.7
5000	70.1	70.2	72.7	74.1	73.2	71.1	68.9	66.7	64.4	62.2	59.9	57.7	60.7	60.0	59.4	60.8	60.1	59.5	58.4
6300	64.9	65.0	67.5	69.1	68.2	66.1	63.8	61.5	59.2	56.9	54.5	52.2	55.4	54.7	54.0	54.5	54.8	54.0	52.8
8000	60.8	60.8	63.3	64.7	63.8	61.9	59.6	57.2	54.8	52.5	50.1	47.7	50.9	50.1	49.1	49.9	50.1	49.6	48.1
10000	56.3	56.2	58.8	60.1	59.1	57.2	54.9	52.6	50.8	47.7	45.1	42.6	46.1	44.9	43.7	44.7	44.8	44.2	42.8
12500	51.2	51.1	53.8	55.0	54.1	52.1	49.8	47.4	44.7	42.2	39.3	36.4	40.3	38.5	36.5	39.0	38.5	37.6	36.3
16000	45.7	45.3	48.0	49.2	48.6	46.5	43.9	41.2	38.4	35.6	32.7	29.3	33.5	32.2	30.8	31.7	30.9	29.7	28.8
20000	38.7	38.5	41.4	42.0	41.9	39.7	37.2	34.4	30.7	28.0	24.8	19.7	25.8	24.3	21.5	21.3	20.5	19.1	17.1
25000	30.3	29.5	32.8	33.1	34.2	31.6	28.6	25.1	20.6	16.9	10.4	10.1	12.9	10.7	7.6	7.6	10.1	8.5	5.4

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 04
AIRCRAFT CODE 761
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE E4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	113.8	114.9	116.6	117.6	116.8	113.9	111.8	109.7	107.6	105.6	103.6	101.6	105.0	104.1	103.7	105.0	104.5	103.6	105.1
250	111.5	112.6	116.3	115.3	114.6	111.7	109.6	107.5	105.4	103.4	101.3	99.3	102.8	102.0	101.5	102.8	102.4	101.5	103.8
315	109.3	110.3	113.9	113.0	112.3	109.4	107.3	105.2	103.1	101.1	99.0	97.1	100.5	99.7	99.2	100.6	100.2	99.3	100.9
400	106.9	107.9	111.5	110.6	110.0	107.0	104.9	102.8	100.7	98.7	96.7	94.8	98.2	97.3	96.8	98.4	98.0	97.1	98.7
500	104.5	105.4	108.9	108.1	107.5	104.5	102.3	100.3	98.2	96.2	94.3	92.4	95.8	94.8	94.2	96.1	95.6	94.6	96.5
630	101.9	102.7	106.2	105.5	104.9	101.9	99.7	97.6	95.6	93.7	91.7	89.8	93.3	92.2	91.6	93.7	93.0	92.2	94.0
800	99.1	100.0	103.3	102.8	102.1	99.2	97.1	95.1	93.0	91.1	89.1	87.2	90.7	89.5	88.9	91.1	90.3	89.5	91.2
1000	96.2	97.1	100.2	99.9	99.2	96.6	94.5	92.4	90.3	88.4	86.4	84.5	87.9	86.6	86.1	88.1	87.5	86.5	88.3
1250	93.2	94.0	96.9	96.8	96.0	93.7	91.6	89.5	87.5	85.5	83.5	81.7	84.9	83.7	83.0	84.8	84.5	83.3	85.2
1600	90.2	90.8	93.4	93.7	92.8	90.7	88.5	86.5	84.5	82.5	80.5	78.6	81.8	80.7	79.9	81.2	81.2	80.1	81.9
2000	87.0	87.3	89.9	90.4	89.6	87.5	85.3	83.3	81.2	79.3	77.3	75.4	78.6	77.4	76.6	77.7	77.7	76.8	77.9
2500	83.5	83.7	86.3	86.9	86.1	84.0	81.8	79.8	77.7	75.7	73.7	71.7	75.1	73.9	73.0	74.1	73.9	73.2	73.4
3150	79.5	79.6	82.2	83.2	82.2	80.3	78.1	76.0	73.8	71.7	69.6	67.5	70.9	69.8	68.9	69.8	69.9	69.2	69.0
4000	75.0	75.1	77.6	78.8	77.9	75.9	73.7	71.5	69.3	67.2	64.9	62.8	66.2	65.1	64.3	65.2	65.3	64.6	64.2
5000	70.1	70.2	72.7	74.1	73.2	71.1	68.9	66.7	64.4	62.2	59.9	57.7	61.0	60.0	59.4	60.0	60.1	59.5	58.7
6300	64.9	65.0	67.5	69.1	68.2	66.1	63.8	61.5	59.2	56.9	54.5	52.2	55.6	54.7	54.0	54.5	54.8	54.0	53.0
8000	60.8	60.8	63.3	64.7	63.8	61.9	59.6	57.2	54.8	52.5	50.1	47.7	51.0	50.1	49.1	49.9	50.1	49.6	48.2
10000	56.3	56.2	58.8	60.1	59.1	57.2	54.9	52.6	50.0	47.7	45.1	42.6	46.1	44.9	43.7	44.7	44.8	44.2	42.8
12500	51.2	51.1	53.8	55.0	54.1	52.1	49.8	47.4	44.7	42.2	39.3	36.4	40.3	38.5	36.5	39.0	38.5	37.6	36.3
16000	45.7	45.3	48.0	49.2	48.6	46.5	43.9	41.2	38.4	35.6	32.7	29.3	33.5	32.2	30.0	31.7	30.9	29.7	28.8
20000	38.7	38.5	41.4	42.0	41.9	39.7	37.2	34.4	30.7	28.0	24.8	19.7	25.8	24.3	21.5	21.3	20.5	19.1	17.1
25000	30.3	29.5	32.8	33.1	34.2	31.6	28.6	25.1	20.6	16.9	10.4	10.1	12.9	10.7	7.6	7.6	10.1	8.5	5.4

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 04
AIRCRAFT CODE 761
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE F4

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	99.8	100.4	103.8	104.8	103.2	100.3	98.1	96.0	93.8	91.8	89.7	87.7	90.7	89.9	89.0	89.9	90.0	88.6	88.5
250	97.6	98.3	101.5	101.8	101.0	98.2	96.0	93.9	91.7	89.7	87.6	85.6	88.6	87.8	86.9	87.8	87.8	86.5	86.4
315	95.5	96.1	99.3	99.6	98.8	96.0	93.9	91.7	89.6	87.6	85.5	83.5	86.5	85.7	84.8	85.6	85.7	84.4	84.3
400	93.3	93.8	96.9	97.4	96.6	93.9	91.7	89.6	87.5	85.4	83.4	81.4	84.3	83.5	82.6	83.5	83.6	82.3	82.1
500	91.0	91.5	94.6	95.2	94.4	91.6	89.5	87.4	85.2	83.2	81.2	79.2	82.1	81.2	80.4	81.2	81.3	80.1	79.9
630	88.7	89.2	92.2	92.9	92.1	89.4	87.2	85.1	83.0	81.0	78.9	76.9	79.9	79.8	78.1	78.9	79.0	77.8	77.5
800	86.4	86.8	89.7	90.5	89.7	87.0	84.9	82.8	80.7	78.6	76.6	74.6	77.6	76.6	75.8	76.5	76.7	75.4	75.1
1000	84.0	84.3	87.1	88.1	87.3	84.7	82.5	80.4	78.3	76.2	74.2	72.2	75.2	74.2	73.4	74.1	74.2	73.0	72.6
1250	81.5	81.7	84.5	85.5	84.8	82.2	80.0	77.9	75.8	73.8	71.7	69.7	72.6	71.7	70.9	71.5	71.6	70.5	69.9
1600	78.9	79.0	81.7	82.9	82.2	79.6	77.5	75.4	73.2	71.2	69.1	67.1	70.0	69.2	68.3	68.8	69.0	67.8	67.0
2000	76.2	76.3	78.9	80.2	79.5	77.0	74.9	72.7	70.6	68.5	66.4	64.4	67.3	66.5	65.6	65.9	66.2	65.1	64.1
2500	73.3	73.3	75.9	77.3	76.6	74.1	72.0	69.8	67.6	65.6	63.4	61.4	64.3	63.6	62.6	62.9	63.2	62.1	60.8
3150	70.0	70.0	72.6	74.2	73.5	71.0	68.8	66.6	64.4	62.3	60.2	58.1	61.0	60.4	59.4	59.6	59.9	58.8	57.3
4000	66.4	66.4	68.9	70.7	70.0	67.5	65.2	63.0	60.8	58.7	56.5	54.4	57.4	56.8	55.9	55.9	56.3	55.2	53.5
5000	62.3	62.3	64.8	66.8	66.0	63.4	61.2	59.0	56.8	54.6	52.4	50.3	53.3	52.8	51.9	51.8	52.3	51.1	49.2
6300	57.9	58.0	60.4	62.5	61.7	59.1	56.9	54.6	52.4	50.3	48.1	45.9	48.9	48.4	47.6	47.5	47.9	46.7	44.8
8000	54.0	54.0	56.4	58.4	57.8	55.2	53.0	50.8	48.6	46.5	44.3	42.1	45.1	44.6	43.7	43.6	44.0	43.0	41.0
10000	49.8	49.7	52.0	54.1	53.5	51.1	48.9	46.7	44.5	42.3	40.2	38.0	40.9	40.4	39.5	39.4	39.7	38.9	37.0
12500	45.2	45.0	47.3	49.2	48.8	46.5	44.3	42.1	40.0	37.3	35.7	33.6	36.3	35.8	34.9	34.9	35.1	34.4	32.8
16000	40.2	39.9	42.2	43.9	43.6	41.5	39.3	37.2	35.0	32.9	30.8	28.8	31.4	30.8	29.9	30.2	30.2	29.7	28.5
20000	34.7	34.4	36.6	38.0	37.9	35.9	33.8	31.7	29.6	27.6	25.6	23.6	26.1	25.4	24.6	25.2	25.1	24.7	24.2
25000	28.8	28.4	30.6	31.5	31.6	29.8	27.8	25.8	23.8	21.8	20.0	18.1	20.4	19.7	19.1	20.4	20.1	19.7	20.1

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 04
AIRCRAFT CODE 761
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE G4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	99.8	100.4	103.8	104.8	103.2	100.3	96.1	96.0	93.8	91.8	89.7	87.7	91.2	89.9	89.0	89.9	90.0	88.6	89.0
250	97.6	98.3	101.5	101.8	101.0	98.2	96.0	93.9	91.7	89.7	87.6	85.6	89.1	87.8	86.9	87.8	87.8	86.5	87.0
315	95.5	96.1	99.3	99.6	98.8	96.0	93.9	91.7	89.6	87.6	85.5	83.5	87.0	85.7	84.8	85.6	85.7	84.4	84.8
400	93.3	93.8	96.9	97.4	96.6	93.9	91.7	89.6	87.5	85.4	83.4	81.4	84.9	83.5	82.6	83.5	83.6	82.3	82.7
500	91.0	91.5	94.6	95.2	94.4	91.6	89.5	87.4	85.2	83.2	81.2	79.2	82.6	81.2	80.4	81.2	81.3	80.1	80.4
630	88.7	89.2	92.2	92.9	92.1	89.4	87.2	85.1	83.0	81.0	78.9	76.9	80.4	79.0	78.1	78.9	79.0	77.8	78.1
800	86.4	86.8	89.7	90.5	89.7	87.0	84.9	82.8	80.7	78.6	76.6	74.6	78.1	76.6	75.8	76.5	76.7	75.4	75.6
1000	84.0	84.3	87.1	88.1	87.3	84.7	82.5	80.4	78.3	76.2	74.2	72.2	75.7	74.2	73.4	74.1	74.2	73.0	73.1
1250	81.5	81.7	84.5	85.5	84.8	82.2	80.0	77.9	75.8	73.8	71.7	69.7	73.1	71.7	70.9	71.5	71.6	70.5	70.4
1600	78.9	79.0	81.7	82.9	82.2	79.6	77.5	75.4	73.2	71.2	69.1	67.1	70.5	69.2	68.3	68.8	69.0	67.8	67.6
2000	76.2	76.3	78.9	80.2	79.5	77.0	74.9	72.7	70.6	68.5	66.4	64.4	67.8	66.5	65.6	65.9	66.2	65.1	64.6
2500	73.3	73.3	75.9	77.3	76.6	74.1	72.0	69.8	67.6	65.6	63.4	61.4	64.8	63.6	62.6	62.9	63.2	62.1	61.4
3150	70.0	70.0	72.6	74.2	73.5	71.0	68.8	66.6	64.4	62.3	60.2	58.1	61.5	60.4	59.4	59.6	59.9	58.8	57.9
4000	66.4	66.4	68.9	70.7	70.0	67.5	65.2	63.0	60.8	58.7	56.5	54.4	57.8	56.8	55.9	55.9	56.3	55.2	53.9
5000	62.3	62.3	64.8	66.8	66.0	63.4	61.2	59.0	56.8	54.6	52.4	50.3	53.6	52.8	51.9	51.8	52.3	51.1	49.6
6300	57.9	58.0	60.4	62.5	61.7	59.1	56.9	54.6	52.4	50.3	48.1	45.9	49.1	48.4	47.6	47.5	47.9	46.7	45.0
8000	54.0	54.0	56.4	58.4	57.8	55.2	53.0	50.8	48.6	46.5	44.3	42.1	45.2	44.6	43.7	43.6	44.0	43.0	41.1
10000	49.8	49.7	52.0	54.1	53.5	51.1	48.9	46.7	44.5	42.3	40.2	38.0	40.9	40.4	39.5	39.4	39.7	38.9	37.0
12500	45.2	45.0	47.3	49.2	48.0	46.5	44.3	42.1	40.0	37.8	35.7	33.6	36.3	35.8	34.9	34.9	35.1	34.4	32.8
16000	40.2	39.9	42.2	43.9	43.6	41.5	39.3	37.2	35.0	32.9	30.8	28.8	31.4	30.8	29.9	30.2	30.2	29.7	28.5
20000	34.7	34.4	36.6	38.0	37.9	35.9	33.8	31.7	29.6	27.6	25.6	23.6	26.1	25.4	24.6	25.2	25.1	24.7	24.2
25000	28.8	28.4	30.6	31.5	31.6	29.8	27.8	25.8	23.8	21.8	20.0	18.1	20.4	19.7	19.1	20.4	20.1	19.7	20.1

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

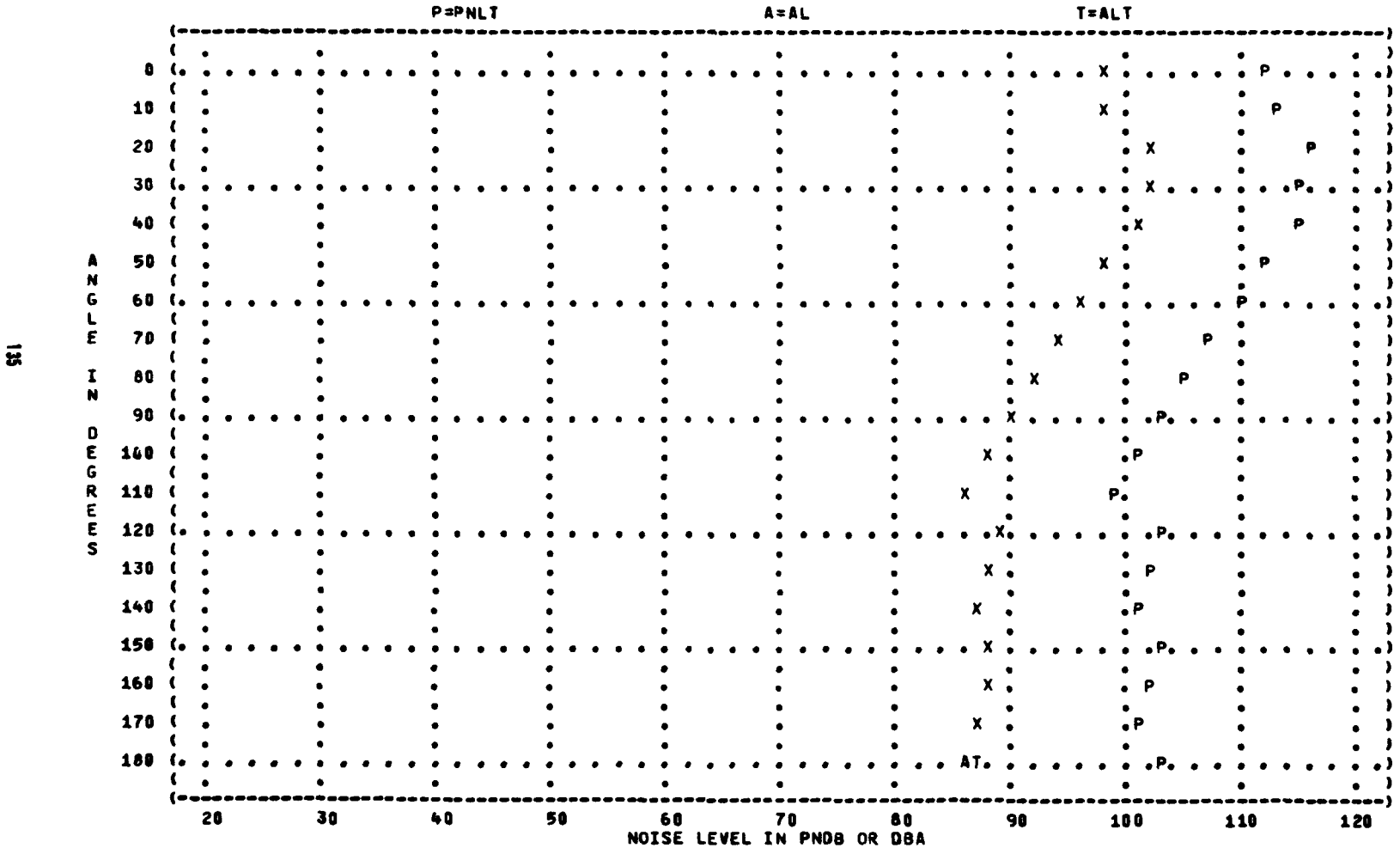
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-15 IN THE
AF32A-23 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-761-001
RUN 04
AIRCRAFT CODE 761
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE J4



NOISE PRODUCED ON THE GROUND BY

F-16 AIRCRAFT IN THE

DURING GROUND RUN-UP OPERATIONS

TEST 79-738-001
AIRCRAFT CODE: 738
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Idle Power, 65% RPM	137-142
Engine Runup, 80% RPM	143-148
Military Power, 91% RPM	149-154
Afterburner Power	155-160

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
- NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
- PERCEIVED NOISE LEVEL
- TONE-CORRECTED, PERCEIVED NOISE LEVEL
- A-WEIGHTED OVERALL SOUND LEVEL
- TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 01
AIRCRAFT CODE 738
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
65 % N2 850 LBS/HR
440 FTIT

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.6 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	64	62	64	62	63	63	65	65	62	70	62	63	60	62	62	59	62	59	61
63	66	64	70	64	64	61	63	62	63	69	64	63	63	60	59	60	59	59	63
80	65	68	69	69	65	63	63	64	64	70	66	63	64	63	60	62	65	60	73
100	66	64	67	67	69	68	69	63	64	69	67	62	63	69	67	69	70	67	67
125	68	66	64	64	66	63	63	63	62	69	64	62	61	61	61	63	61	59	60
160	65	65	63	64	65	65	64	64	63	67	61	61	59	58	56	57	61	57	56
200	65	63	62	58	61	56	56	57	56	62	58	56	54	53	53	51	52	49	51
250	64	61	62	58	61	56	56	56	55	61	54	54	51	52	51	50	50	49	50
315	60	62	62	57	59	56	55	53	54	56	50	50	49	48	46	47	48	46	48
400	58	60	62	56	58	54	53	50	50	53	48	47	48	47	46	48	49	47	50
500	59	61	63	57	58	57	55	51	51	51	48	46	49	48	47	48	49	46	49
630	66	65	74	69	66	67	60	57	59	59	54	50	53	46	46	48	50	47	47
800	61	62	65	59	60	56	55	51	51	51	47	44	50	47	46	49	50	47	45
1000	58	61	63	57	58	57	55	50	51	49	46	43	49	46	45	48	49	47	44
1250	59	63	66	60	60	58	58	52	56	48	49	44	49	43	44	45	49	44	43
1600	59	63	65	60	60	56	54	54	57	47	48	43	46	41	42	42	46	41	39
2000	60	64	65	60	60	55	53	53	54	48	45	41	41	38	39	37	41	38	37
2500	73	75	76	76	73	70	67	70	74	60	56	57	58	55	50	49	55	46	49
3150	67	71	72	71	68	65	62	67	69	59	53	54	55	50	46	45	52	41	46
4000	65	72	71	67	64	61	60	60	63	53	48	45	46	45	44	42	42	40	40
5000	61	66	67	62	60	56	55	56	58	52	46	42	43	42	40	39	38	37	37
6300	59	66	65	59	57	55	52	53	54	46	42	38	38	37	36	35	35	36	33
8000	57	63	62	57	54	51	49	51	50	44	41	37	39	38	37	36	36	38	34
10000	59	65	64	57	55	52	49	51	48	44	41	40	39	39	38	38	37	42	37
OVERALL	78	80	82	80	78	76	75	75	77	77	73	71	71	72	70	72	73	70	75

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 6.2
TEST 79-738-001
RUN 01
PAGE D1

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
65 % N2 850 LBS/HR
440 FTIT

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

AIRCRAFT CODE 738
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.2	96.8	98.1	96.2	94.0	91.3	88.9	90.5	93.0	84.8	80.3	79.6	80.3	77.9	75.1	75.6	78.8	73.7	75.9
250	91.9	94.5	95.9	93.9	91.7	89.1	86.6	88.3	90.7	82.5	78.0	77.3	78.0	75.6	72.8	73.2	76.5	71.3	73.5
315	89.6	92.2	93.5	91.6	89.4	86.7	84.3	85.9	88.4	80.1	75.6	75.0	75.6	73.3	70.4	70.7	74.1	68.8	71.1
400	87.2	89.7	91.1	89.2	87.0	84.3	81.9	83.5	86.0	77.6	73.2	72.5	73.2	70.8	68.0	68.3	71.7	66.3	68.6
500	84.7	87.2	88.6	86.7	84.5	81.8	79.3	80.9	83.5	75.0	70.7	70.0	70.7	68.3	65.4	65.7	69.2	63.6	66.0
630	82.0	84.5	85.9	84.1	81.8	79.2	76.7	78.3	80.8	72.4	68.0	67.3	68.1	65.5	62.6	62.9	66.6	60.8	63.2
800	79.2	81.6	83.1	81.3	79.1	76.4	73.9	75.5	78.1	69.5	65.2	64.4	65.2	62.5	59.5	59.8	63.7	57.5	60.4
1000	76.2	78.6	80.2	78.3	76.1	73.4	70.9	72.5	75.1	66.5	62.0	61.2	62.0	59.4	56.3	56.5	60.6	54.1	57.4
1250	73.0	75.3	77.0	75.1	72.9	70.2	67.6	69.2	71.8	63.2	58.5	57.7	58.7	55.9	52.7	53.0	57.1	50.3	53.6
1600	69.5	71.8	73.5	71.6	69.4	66.7	64.1	65.6	68.3	59.4	54.7	54.0	55.0	52.0	48.7	48.9	53.4	46.2	49.2
2000	65.7	67.9	69.7	67.8	65.6	62.9	60.1	61.6	64.4	55.3	50.6	49.8	50.9	47.8	44.0	44.3	49.2	41.1	44.2
2500	61.2	63.7	65.5	63.6	61.3	58.5	55.7	57.1	60.0	50.6	45.4	44.5	45.8	42.2	38.1	38.7	43.7	35.2	38.2
3150	56.4	58.7	60.7	58.5	56.5	53.5	50.6	52.0	54.8	44.5	38.2	37.6	39.3	34.7	30.7	31.4	37.5	27.3	31.0
4000	50.6	53.0	55.3	52.9	50.5	47.8	44.5	45.9	49.1	36.7	31.5	28.8	32.8	27.1	19.4	21.3	30.4	18.1	20.4
5000	43.8	46.6	49.5	46.5	43.9	40.8	36.8	38.4	42.1	28.9	18.7	18.9	22.7	13.7	8.1	9.0	18.6	8.9	9.8
6300	35.3	38.5	43.6	38.3	35.5	33.8	27.2	27.5	32.4	19.2	9.1	9.0	9.0	.4			6.7		
8000	27.1	29.5	38.0	30.6	28.0	26.5	14.5	15.0	20.2	11.8									
10000	17.9	18.3	30.9	23.0	17.6	19.4	1.9	2.4	7.9	4.4									
12500	9.0	8.1	24.0	15.5	9.9	11.6													
16000	.1		14.8	8.0	2.1	3.9													
20000			5.7	.5															
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
65 % N2 850 LBS/HR
440 FTIT

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 01
AIRCRAFT CODE 738
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	97.2	99.2	101.3	100.0	97.0	94.0	92.1	93.9	96.9	87.5	82.6	82.7	83.4	81.4	77.6	78.1	81.0	75.9	78.5
250	94.9	96.9	99.1	97.7	94.0	92.5	89.9	91.6	94.6	85.1	80.3	80.4	81.1	79.1	75.2	75.7	79.5	73.5	76.1
315	92.6	94.5	96.7	95.4	92.5	90.2	87.5	89.3	92.3	82.7	77.9	78.1	78.0	76.0	72.9	73.2	77.2	71.0	73.7
400	90.2	92.1	94.3	93.0	90.0	87.0	85.1	86.0	89.9	80.3	75.5	75.7	76.4	74.3	70.4	70.0	74.0	68.5	71.2
500	87.7	89.5	91.0	90.5	87.5	85.2	82.5	84.3	87.4	77.7	73.0	73.1	73.9	71.0	67.0	68.2	72.3	65.9	68.6
630	85.0	86.0	89.1	87.0	84.9	82.6	79.9	81.6	84.7	75.0	70.3	70.4	71.2	69.0	65.0	65.4	69.6	63.0	65.9
800	82.2	84.0	86.3	85.1	82.1	79.0	77.1	78.0	82.0	72.2	67.4	67.5	68.3	66.0	61.9	62.3	66.7	59.7	63.0
1000	79.2	81.0	83.4	82.1	79.2	76.9	74.1	75.0	79.0	69.2	64.3	64.3	65.2	62.9	58.0	59.0	63.6	56.3	60.0
1250	76.0	77.7	80.2	78.9	76.0	73.6	70.9	72.5	75.7	65.9	60.0	60.0	61.0	59.4	55.1	55.5	60.2	52.5	56.2
1600	72.5	74.2	76.7	75.4	72.5	70.1	67.3	68.9	72.2	62.1	57.0	57.1	58.1	55.5	51.1	51.4	56.4	48.4	51.0
2000	68.7	70.3	72.9	71.6	68.7	66.3	63.4	65.0	68.3	57.9	52.0	52.9	54.0	51.3	46.4	46.0	52.3	43.3	46.0
2500	64.2	66.0	68.7	67.3	64.3	61.9	58.9	60.5	63.9	53.3	47.7	47.7	49.0	45.7	40.5	41.2	46.0	37.4	40.0
3150	59.4	61.1	63.9	62.3	59.5	57.0	53.0	55.3	58.0	47.2	40.4	40.0	42.5	38.2	33.1	34.0	40.6	29.5	33.6
4000	53.0	54.0	57.9	56.0	53.0	50.5	47.0	48.5	52.2	38.9	33.4	31.3	35.3	29.9	21.4	23.3	32.0	19.0	22.5
5000	45.6	48.0	51.4	48.0	45.7	42.0	38.7	40.4	44.5	30.5	20.0	20.0	24.6	15.0	9.6	10.5	20.4	10.2	11.3
6300	36.5	39.4	44.9	39.0	36.0	35.2	28.5	28.9	34.0	20.2	10.0	10.3	10.3	1.0			0.0	.5	.2
8000	27.7	30.0	36.6	31.4	28.6	27.2	15.2	15.6	21.0	12.3	.0								
10000	17.9	18.3	30.9	23.0	17.6	19.4	1.9	2.4	7.9	4.4									
12500	9.0	8.1	24.0	15.5	9.9	11.6													
16000	.1		14.0	8.0	2.1	3.9													
20000			5.7	.5															
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 01
AIRCRAFT CODE 738
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE F1

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
65 % N2 850 LBS/HR
440 FTIT

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %

DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	79.0	82.3	83.7	81.9	79.1	76.6	73.7	76.2	79.8	69.0	64.6	64.1	65.0	62.2	59.8	60.5	63.5	58.7	60.2
250	76.8	80.0	81.4	79.6	76.8	74.4	71.5	73.9	76.8	66.8	62.4	61.9	62.9	60.0	57.6	58.4	61.3	56.6	58.0
315	74.5	77.6	79.1	77.4	74.6	72.1	69.2	71.6	74.5	64.6	60.2	59.6	60.6	57.8	55.4	56.3	59.1	54.4	55.9
400	72.1	75.1	76.8	75.0	72.2	69.8	66.9	69.3	72.1	62.3	57.9	57.3	58.3	55.5	53.2	54.1	56.9	52.2	53.8
500	69.7	72.6	74.3	72.5	69.8	67.4	64.5	66.8	69.7	59.9	55.6	54.9	56.0	53.2	50.9	51.9	54.6	50.0	51.6
630	67.1	70.0	71.8	70.0	67.3	64.9	61.9	64.2	67.1	57.4	53.1	52.4	53.5	50.7	48.5	49.6	52.2	47.7	49.3
800	64.4	67.2	69.2	67.3	64.6	62.3	59.3	61.5	64.4	54.8	50.6	49.8	51.0	48.2	46.0	47.2	49.7	45.3	47.0
1000	61.7	64.3	66.4	64.5	61.8	59.6	56.5	58.6	61.5	52.1	47.9	47.0	48.3	45.5	43.4	44.6	47.1	42.8	44.5
1250	58.7	61.2	63.6	61.5	58.9	56.7	53.6	55.5	58.4	49.2	45.1	44.1	45.5	42.6	40.6	41.9	44.3	40.1	41.7
1600	55.5	57.9	60.6	58.3	55.7	53.7	50.5	52.1	55.1	46.2	42.1	40.9	42.5	39.5	37.7	39.0	41.3	37.3	38.8
2000	52.2	54.4	57.4	54.9	52.4	50.5	47.2	48.5	51.4	43.0	39.0	37.5	39.3	36.2	34.6	36.1	38.2	34.4	35.7
2500	48.6	50.7	54.1	51.2	48.8	47.2	43.6	44.5	47.4	39.6	35.6	33.8	36.0	32.7	31.2	32.9	34.9	31.3	32.2
3150	44.8	46.7	50.7	47.4	45.1	43.7	39.9	40.1	43.0	36.0	32.1	29.9	32.4	28.9	27.7	29.5	31.3	27.9	28.5
4000	40.7	42.4	46.8	43.0	40.9	39.8	35.8	35.2	38.1	32.0	28.1	25.5	28.5	24.8	23.8	25.8	27.4	24.2	24.4
5000	36.1	37.7	42.5	38.3	36.3	35.3	31.3	29.9	32.6	27.6	23.8	20.9	24.3	20.5	19.7	21.8	23.2	20.2	20.1
6300	31.3	32.8	37.9	33.3	31.5	30.7	26.6	24.3	26.8	23.1	19.3	16.9	19.8	15.9	15.3	17.5	18.8	15.9	15.7
8000	27.1	28.3	33.9	29.0	27.2	26.7	22.3	19.1	21.4	19.3	15.3	12.0	15.7	12.0	11.4	13.6	14.7	12.8	12.1
10000	22.7	23.6	29.6	24.7	22.8	22.5	17.7	14.3	16.3	15.4	11.1	7.9	11.4	7.9	7.2	9.4	10.5	7.8	8.4
12500	18.0	18.7	25.0	20.8	18.1	17.9	12.9	9.4	11.3	11.2	6.7	3.7	6.7	3.6	2.8	5.0	6.8	3.3	4.6
16000	12.8	13.3	19.8	14.9	12.9	12.9	7.7	4.4	6.1	6.6	2.1		1.7			.4	1.3		.8
20000	7.2	7.5	14.0	9.2	7.2	7.1	2.2		.6	2.8									
25000	1.0	1.2	7.3	2.7	.9	.7													

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
65 % N2 850 LBS/HR
440 FTIT

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 01
AIRCRAFT CODE 738
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE G1

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.0	84.6	86.9	85.7	82.1	80.1	77.0	79.5	82.9	71.7	66.9	67.2	68.2	65.7	62.2	63.1	66.5	61.0	62.8
250	79.8	82.3	84.6	83.4	79.9	77.8	74.7	77.3	80.7	69.5	64.7	65.0	66.8	63.5	60.1	60.9	64.4	58.8	60.7
315	77.5	80.0	82.3	81.1	77.6	75.6	72.5	75.0	78.4	67.3	62.5	62.8	63.8	61.3	57.9	58.8	62.2	56.7	58.5
400	75.1	77.5	79.9	78.8	75.3	73.3	70.1	72.6	76.0	65.0	60.2	60.4	61.5	59.8	55.7	56.6	60.0	54.5	56.4
500	72.7	75.0	77.5	76.3	72.8	70.9	67.7	70.1	73.6	62.6	57.9	58.1	59.1	56.7	53.4	54.4	57.7	52.2	54.2
630	70.1	72.3	75.0	73.8	70.3	68.4	65.2	67.5	71.0	60.1	55.4	55.5	56.7	54.2	51.0	52.1	55.3	49.9	51.9
800	67.5	69.6	72.4	71.1	67.7	65.8	62.5	64.8	68.3	57.5	52.9	52.9	54.1	51.7	48.5	49.7	52.8	47.5	49.6
1000	64.7	66.7	69.6	68.3	64.9	63.0	59.7	61.9	65.4	54.8	50.2	50.1	51.4	49.0	45.9	47.1	50.2	45.0	47.1
1250	61.7	63.6	66.8	65.3	61.9	60.2	56.8	58.8	62.3	51.9	47.4	47.2	48.6	46.1	43.1	44.4	47.4	42.3	44.3
1600	58.5	60.3	63.8	62.1	58.8	57.2	53.7	55.5	59.0	48.9	44.4	44.0	45.6	43.0	40.1	41.6	44.4	39.5	41.4
2000	55.2	56.8	60.6	58.7	55.4	54.0	50.4	51.8	55.3	45.6	41.2	40.6	42.5	39.7	37.0	38.6	41.3	36.6	38.3
2500	51.6	53.0	57.3	55.0	51.9	50.6	46.8	47.8	51.3	42.2	37.9	36.9	39.1	36.2	33.7	35.4	38.0	33.5	34.9
3150	47.8	49.1	53.9	51.1	48.1	47.1	43.1	43.4	46.9	38.7	34.4	33.0	35.6	32.4	30.1	32.0	34.4	30.1	31.1
4000	43.1	44.3	49.4	46.1	43.3	42.5	38.4	37.9	41.2	34.1	30.0	28.0	31.0	27.6	25.8	27.8	29.9	26.8	26.5
5000	37.9	39.2	44.4	40.5	38.1	37.4	33.2	31.9	35.0	29.2	25.2	22.7	26.2	22.6	21.2	23.3	25.1	21.5	21.7
6300	32.5	33.8	39.2	34.8	32.7	32.0	27.9	25.6	28.4	24.1	20.2	17.3	21.0	17.3	16.3	18.5	20.8	16.8	16.7
8000	27.7	28.8	34.5	29.7	27.8	27.4	22.9	19.8	22.2	19.9	15.8	12.6	16.3	12.7	11.8	14.1	15.3	12.4	12.6
10000	22.7	23.6	29.6	24.7	22.8	22.5	17.7	14.3	16.3	15.4	11.1	7.9	11.4	7.9	7.2	9.4	10.5	7.8	8.4
12500	18.0	18.7	25.0	20.0	18.1	17.9	12.9	9.4	11.3	11.2	6.7	3.7	6.7	3.6	2.8	5.0	6.0	3.3	4.6
16000	12.8	13.3	19.8	14.9	12.9	12.9	7.7	4.4	6.1	6.6	2.1		1.7			.4	1.3		.8
20000	7.2	7.5	14.0	9.2	7.2	7.1	2.2		.6	2.0									
25000	1.0	1.2	7.3	2.7	.9	.7													

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
IDLE POWER (65% RPM)
65 % N2 850 LBS/HR
440 FTIT

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %

DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 01
AIRCRAFT CODE 738
OPERATION CODE 88113
PROFILE VERSION A
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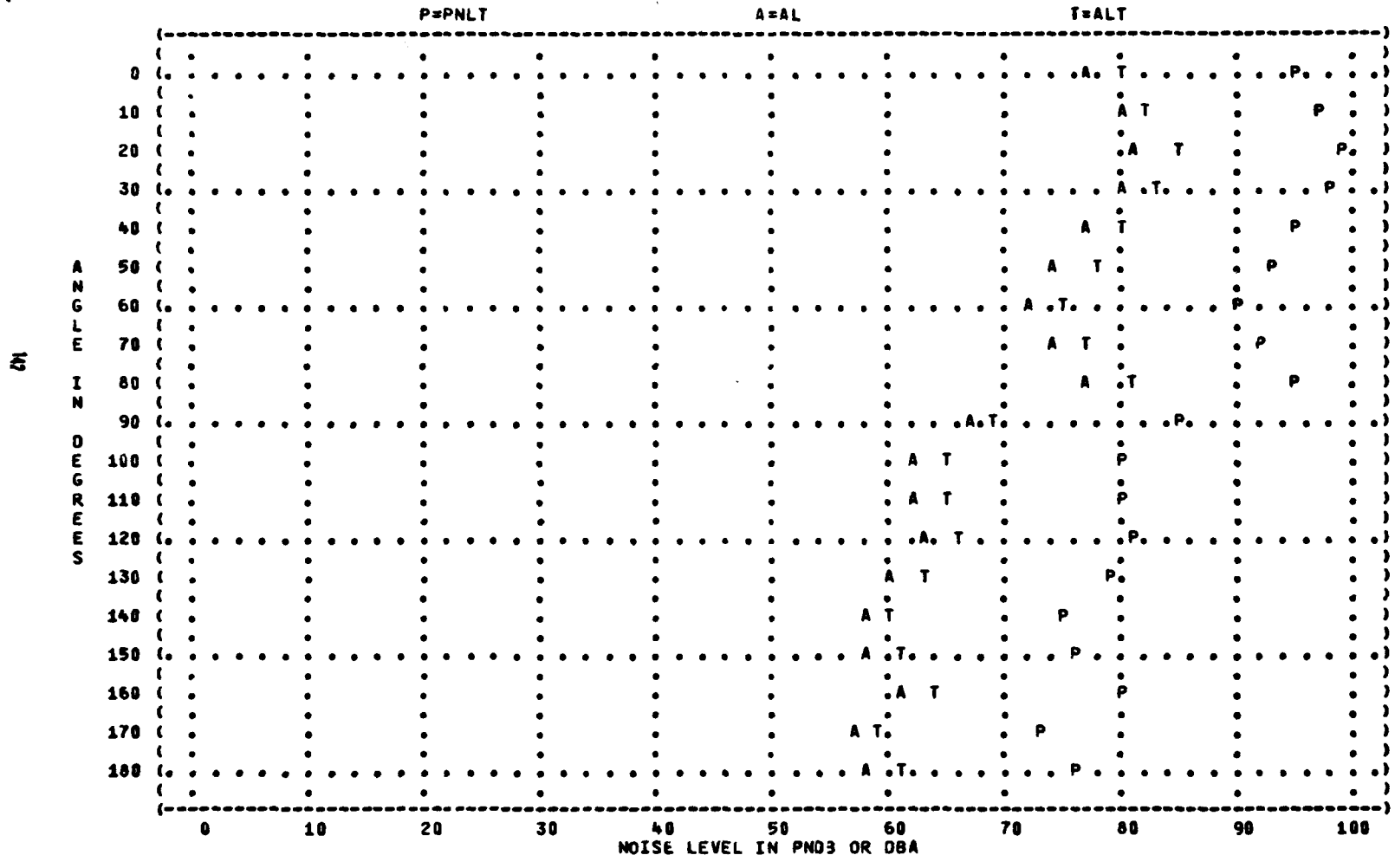

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 02
AIRCRAFT CODE 738
OPERATION CODE 00119
PROFILE VERSION A
28 NOV 79
PAGE C2

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	81	82	76	76	73	73	83	71	75	73	72	73	71	74	71	73	74	78	77
63	84	81	79	76	74	73	81	71	73	74	77	77	79	80	78	78	77	78	78
80	82	81	82	79	78	73	80	69	69	72	75	75	75	78	79	79	79	78	78
100	80	82	78	76	72	72	78	71	70	71	73	76	75	75	77	75	76	76	79
125	80	83	76	75	72	72	75	69	70	71	70	72	74	72	70	77	74	77	79
160	81	84	76	74	71	70	74	67	67	67	69	71	72	70	67	71	70	68	71
200	79	83	77	75	71	70	73	67	66	65	67	68	70	66	64	70	67	65	67
250	77	79	74	73	69	66	72	66	64	63	63	65	64	64	62	67	66	66	66
315	74	76	71	68	65	64	68	62	62	62	62	60	61	62	62	67	63	65	67
400	71	72	68	68	65	62	66	62	61	60	60	58	60	58	61	62	60	60	61
500	69	70	68	67	64	61	66	61	59	58	56	55	57	55	56	61	57	54	55
630	68	68	69	68	64	60	65	61	59	57	55	52	56	52	53	60	54	50	50
800	71	74	76	73	68	65	70	63	61	61	60	56	60	55	54	59	55	51	53
1000	69	72	71	70	64	60	69	64	63	60	60	54	62	63	53	57	54	51	51
1250	65	68	68	67	61	56	66	63	60	59	58	55	60	55	51	54	52	47	47
1600	68	74	71	70	66	59	71	66	65	65	65	58	65	60	53	51	50	47	48
2000	67	70	69	68	63	57	71	66	64	61	59	56	63	57	51	45	46	45	46
2500	64	69	68	67	61	55	69	66	63	60	57	52	60	56	48	42	43	43	44
3150	65	69	67	66	60	55	68	65	63	61	58	52	62	58	48	41	43	42	45
4000	64	69	67	66	60	55	67	63	62	60	56	51	60	57	47	41	43	42	44
5000	65	70	71	69	63	60	70	66	67	63	58	53	66	61	49	42	43	43	46
6300	63	69	66	65	60	57	67	63	63	57	53	48	63	55	45	42	42	42	42
8000	59	65	62	62	56	52	61	58	55	53	50	45	51	47	45	45	45	45	45
10000	61	67	65	64	59	55	63	59	57	54	50	48	51	48	48	48	48	48	48
OVERALL	90	92	88	86	83	81	88	80	81	81	82	82	83	84	84	85	84	85	86

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 02
AIRCRAFT CODE 738
OPERATION CODE 80119
PROFILE VERSION A
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PAGE 02

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.8	100.2	98.5	96.9	92.0	88.4	97.7	92.7	92.4	89.8	88.5	86.0	92.0	88.7	85.4	86.8	85.1	85.6	87.2
250	94.6	97.9	96.2	94.5	89.6	86.0	95.3	90.3	90.1	87.4	86.3	83.6	89.7	86.3	83.0	84.5	82.7	83.2	84.9
315	92.4	95.6	93.7	92.1	87.2	83.6	92.8	87.9	87.6	85.0	83.9	81.2	87.2	83.8	80.5	82.1	80.2	80.8	82.5
400	90.0	93.2	91.2	89.6	84.6	81.0	90.3	85.5	85.0	82.5	81.5	78.7	84.6	81.2	78.1	79.6	77.8	78.3	80.1
500	87.5	90.7	88.5	86.9	82.1	78.3	87.6	83.0	82.3	79.9	79.1	76.2	81.9	78.6	75.5	77.1	75.2	75.8	77.5
630	84.7	88.1	85.7	84.1	79.5	75.5	85.0	80.3	79.4	77.1	76.5	73.6	79.1	75.7	72.9	74.4	72.6	73.0	74.7
800	81.8	85.4	82.7	81.3	76.7	72.5	82.2	77.4	76.3	74.4	73.8	70.7	76.8	72.7	70.1	71.4	69.9	70.8	71.8
1000	78.9	82.5	79.9	78.4	73.9	69.6	79.3	74.5	73.8	71.5	71.0	67.5	72.7	69.6	67.3	68.3	67.1	66.8	68.6
1250	75.8	79.4	76.9	75.3	70.8	66.6	76.2	71.2	69.8	68.5	67.9	64.2	69.4	66.4	63.8	64.9	63.6	63.2	65.0
1600	72.5	76.1	73.7	72.0	67.5	63.3	72.9	67.7	66.4	65.0	64.7	60.8	66.1	63.0	59.9	61.3	59.7	59.3	61.1
2000	68.9	72.6	70.4	68.5	64.0	59.7	69.2	63.9	62.7	61.4	60.9	56.7	62.3	59.2	55.5	57.5	55.3	54.9	56.7
2500	65.0	68.6	66.7	64.6	59.9	55.6	65.1	59.8	58.6	57.1	56.7	52.1	58.0	54.6	50.6	52.9	50.4	49.7	51.6
3150	60.6	64.2	62.6	60.4	55.4	51.1	60.5	55.0	53.8	52.5	52.1	46.5	53.3	49.3	44.9	47.6	44.8	44.0	45.7
4000	55.9	59.3	58.2	55.9	50.1	45.6	55.5	49.7	48.2	46.5	46.0	39.9	47.4	43.3	37.6	41.7	37.9	36.4	38.5
5000	50.5	53.7	53.1	50.6	44.3	39.6	49.6	43.0	41.5	39.8	39.2	31.1	40.2	36.0	28.3	35.8	28.5	25.4	28.5
6300	44.2	48.0	47.5	44.9	37.8	32.8	42.5	35.7	34.0	31.9	31.0	19.8	32.0	28.1	16.7	26.8	18.8	10.9	16.2
8000	38.7	42.6	42.1	38.9	31.9	26.3	36.3	27.7	24.4	21.4	18.4	8.5	21.8	18.1	5.1	18.8	7.5		3.8
10000	31.6	36.0	35.3	32.3	23.8	17.3	29.0	16.3	10.1	7.3	6.8		6.8	8.2		8.1			
12500	22.5	27.8	27.6	23.9	13.8	8.3	18.7	4.9											
16000	9.9	13.7	15.9	10.6			8.3												
20000			4.2																
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 02
AIRCRAFT CODE 738
OPERATION CODE 00119
PROFILE VERSION A
28 NOV 79
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DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	97.7	101.8	100.8	98.4	93.2	90.0	99.1	93.8	94.1	91.4	90.6	87.1	94.2	91.1	86.5	87.5	85.1	86.4	87.8
250	95.5	99.5	98.4	96.1	90.9	87.7	96.7	91.4	91.7	89.0	88.4	84.8	91.8	88.7	84.1	85.1	82.7	84.0	85.5
315	93.3	97.2	96.0	93.6	88.4	85.2	94.3	89.0	89.3	86.6	86.1	82.3	89.3	86.2	81.6	82.7	80.2	81.6	83.1
400	90.9	94.8	93.4	91.1	85.9	82.7	91.7	86.6	86.7	84.0	83.7	79.9	86.8	83.7	79.2	80.3	77.8	79.2	80.7
500	88.4	92.3	90.8	88.4	83.4	80.0	89.1	84.0	84.0	81.5	81.2	77.3	84.0	81.0	76.6	77.8	75.2	76.6	78.1
630	85.6	89.7	87.9	85.6	80.7	77.2	86.4	81.4	81.1	78.7	78.6	74.7	81.2	78.1	74.0	75.0	72.6	73.8	75.3
800	82.7	87.0	84.9	82.8	78.0	74.2	83.6	78.5	78.0	76.0	75.9	71.8	78.1	75.1	71.2	72.1	69.9	70.8	72.4
1000	79.8	84.1	82.1	79.9	75.2	71.3	80.7	75.5	74.7	73.1	73.1	68.7	74.8	72.0	68.4	69.0	67.1	67.6	69.2
1250	76.7	81.0	79.1	76.8	72.1	68.3	77.6	72.3	71.5	70.1	70.1	65.3	71.6	68.8	64.9	65.6	63.6	64.1	65.6
1600	73.4	77.7	76.0	73.6	68.8	65.0	74.3	68.8	68.1	66.6	66.8	61.9	68.2	65.4	61.0	62.0	59.7	60.1	61.7
2000	69.8	74.1	72.6	70.0	65.2	61.4	70.7	65.0	64.4	63.0	63.0	57.9	64.5	61.6	56.6	58.2	55.3	55.7	57.3
2500	65.9	70.2	68.9	66.1	61.1	57.3	66.5	60.8	60.3	58.7	58.9	53.3	60.1	57.0	51.7	53.5	50.4	50.5	52.2
3150	61.5	65.8	64.8	61.9	56.6	52.8	61.9	56.1	55.5	54.1	54.2	47.7	55.4	51.7	46.0	48.3	44.8	44.8	46.3
4000	56.6	60.5	60.0	57.1	51.1	47.0	56.7	50.5	49.6	47.8	47.7	40.8	49.1	45.3	38.5	42.3	37.9	37.1	39.0
5000	51.0	54.7	54.4	51.5	45.1	40.6	50.5	43.7	42.6	40.7	40.4	31.7	41.4	37.5	29.0	35.4	28.5	25.9	28.9
6300	44.5	48.6	48.4	45.5	38.3	33.5	43.0	36.2	34.7	32.6	31.9	20.2	32.9	29.0	17.1	27.1	18.8	11.2	16.4
8000	38.8	42.9	42.5	39.2	32.2	26.6	36.6	27.9	24.7	21.7	18.9	8.7	22.2	18.6	5.3	18.9	7.5		3.9
10000	31.6	36.0	35.3	32.3	23.8	17.3	29.0	16.3	10.1	7.3	6.8		6.8	8.2		8.1			
12500	22.5	27.8	27.6	23.9	10.8	8.3	18.7	4.9											
16000	9.9	13.7	15.9	10.6			8.3												
20000			4.2																
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 02
AIRCRAFT CODE 738
OPERATION CODE 06119
PROFILE VERSION A
28 NOV 79
PAGE F2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.0	85.5	83.9	82.4	77.4	73.5	82.5	78.3	77.2	74.9	73.6	70.2	76.1	72.9	68.6	71.6	69.2	69.1	70.8
250	79.9	83.3	81.8	80.2	75.2	71.3	80.3	76.1	74.9	72.6	71.4	68.1	73.9	70.7	66.5	69.6	67.1	67.1	68.7
315	77.8	81.1	79.5	78.0	73.0	69.1	78.0	73.8	72.6	70.4	69.2	66.0	71.6	68.5	64.4	67.5	65.1	65.0	66.7
400	75.6	78.9	77.3	75.7	70.8	66.9	75.7	71.4	70.2	68.1	67.0	63.8	69.3	66.2	62.3	65.4	63.0	63.0	64.6
500	73.3	76.5	75.0	73.4	68.5	64.6	73.3	69.0	67.8	65.7	64.7	61.5	66.9	63.9	60.1	63.3	60.8	60.8	62.5
630	70.9	74.1	72.6	71.0	66.1	62.3	70.9	66.5	65.2	63.2	62.3	59.2	64.3	61.5	57.9	61.0	58.5	58.5	60.2
800	68.5	71.6	70.1	68.5	63.6	59.8	68.3	63.9	62.6	60.7	59.9	56.7	61.7	59.0	55.6	58.6	56.2	56.1	57.7
1000	66.0	69.0	67.6	66.0	61.1	57.3	65.7	61.2	59.8	58.0	57.3	54.1	59.0	56.4	53.1	56.2	53.7	53.5	55.2
1250	63.3	66.3	65.0	63.4	58.5	54.7	62.9	58.4	57.0	55.2	54.6	51.3	56.1	53.6	50.4	53.5	50.9	50.7	52.3
1600	60.5	63.4	62.3	60.6	55.8	52.0	60.1	55.5	54.0	52.3	51.8	48.4	53.1	50.7	47.5	50.6	48.0	47.6	49.1
2000	57.6	60.4	59.5	57.8	52.9	49.2	57.1	52.4	50.9	49.3	48.8	45.2	50.0	47.5	44.4	47.7	44.9	44.3	45.8
2500	54.4	57.2	56.6	54.8	49.9	46.2	53.9	49.2	47.6	46.0	45.6	41.8	46.6	44.3	40.9	44.4	41.4	40.5	42.0
3150	51.0	53.8	53.4	51.6	46.6	42.9	50.4	45.7	44.1	42.6	42.1	38.1	43.1	40.7	37.1	40.8	37.6	36.4	37.8
4000	47.3	50.1	50.0	48.1	43.1	39.4	46.8	41.9	40.3	38.8	38.3	34.0	39.2	37.0	32.9	36.9	33.5	31.8	33.1
5000	43.3	46.0	46.2	44.2	39.1	35.5	42.7	37.7	36.1	34.6	34.1	29.8	35.1	33.0	28.6	32.7	29.2	27.2	28.5
6300	38.9	41.6	41.9	39.9	34.7	31.2	38.2	33.2	31.5	30.1	29.6	25.2	30.5	28.7	24.0	28.3	24.7	22.6	23.8
8000	35.0	37.5	37.8	35.7	30.6	27.2	33.9	28.6	27.0	25.6	25.1	21.2	26.0	24.4	20.4	24.7	21.2	19.4	20.6
10000	30.7	33.0	33.3	31.2	26.2	23.0	29.2	23.8	22.2	20.8	20.4	17.0	21.3	19.8	16.7	20.8	17.5	16.1	17.4
12500	26.1	28.2	28.3	26.2	21.3	18.3	24.1	18.6	17.0	15.8	15.4	12.9	16.3	15.0	12.9	16.8	13.7	12.8	14.1
16000	21.2	23.1	22.8	20.7	16.1	13.2	18.8	13.1	11.6	10.6	10.3	8.8	11.3	10.2	9.2	12.6	9.9	9.5	10.9
20000	16.3	18.0	16.7	14.7	10.6	7.9	13.3	7.3	6.0	5.3	5.5	4.9	6.6	6.0	5.6	8.4	6.2	6.3	7.6
25000	11.4	13.1	10.5	8.6	4.9	2.5	8.0	1.5	.7	.4	1.1	1.3	2.5	2.3	2.2	4.3	2.6	3.1	4.4

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 02
AIRCRAFT CODE 738
OPERATION CODE 00119
PROFILE VERSION A
28 NOV 79

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	82.9	87.0	86.2	83.9	78.7	75.2	84.0	79.4	78.9	76.5	75.7	71.3	78.3	75.3	69.7	72.3	69.2	70.0	71.4
250	80.8	84.9	84.0	81.7	76.5	73.0	81.7	77.1	76.6	74.2	73.5	69.2	76.0	73.1	67.6	70.2	67.1	67.9	69.3
315	78.7	82.7	81.8	79.5	74.3	70.8	79.5	74.9	74.3	72.0	71.4	67.1	73.7	70.9	65.5	68.2	65.1	65.9	67.3
400	76.5	80.4	79.5	77.2	72.0	68.6	77.1	72.5	71.9	69.7	69.1	64.9	71.4	68.5	63.4	66.1	63.0	63.8	65.2
500	74.2	78.1	77.2	74.9	69.7	66.3	74.8	70.1	69.4	67.3	66.8	62.7	69.0	66.3	61.2	63.9	60.8	61.6	63.1
630	71.8	75.7	74.8	72.5	67.3	63.9	72.3	67.6	66.9	64.8	64.4	60.3	66.5	63.3	59.0	61.6	58.5	59.3	60.8
800	69.4	73.2	72.4	70.0	64.9	61.5	69.7	65.0	64.2	62.3	62.0	57.8	63.8	61.4	56.7	59.3	56.2	56.9	58.3
1000	66.9	70.6	69.9	67.5	62.4	59.0	67.1	62.3	61.5	59.6	59.4	55.2	61.1	58.8	54.2	56.8	53.7	54.4	55.8
1250	64.2	67.8	67.2	64.9	59.8	56.4	64.4	59.5	58.7	56.8	56.7	52.5	58.2	56.0	51.5	54.1	50.9	51.5	52.9
1600	61.4	65.0	64.5	62.1	57.0	53.7	61.5	56.6	55.7	53.9	53.9	49.5	55.2	53.1	48.6	51.3	48.0	48.4	49.7
2000	58.5	62.0	61.7	59.3	54.2	50.9	58.5	53.5	52.6	50.9	50.9	46.4	52.1	50.0	45.5	48.3	44.9	45.1	46.4
2500	55.3	58.8	58.8	56.3	51.2	47.8	55.3	50.3	49.3	47.6	47.7	42.9	48.8	46.7	42.0	45.0	41.4	41.4	42.6
3150	51.9	55.3	55.6	53.1	47.9	44.6	51.9	46.8	45.8	44.2	44.2	39.2	45.2	43.1	38.2	41.4	37.6	37.2	38.4
4000	48.1	51.3	51.8	49.3	44.1	40.8	47.9	42.8	41.6	40.1	40.0	34.9	40.9	38.9	33.8	37.4	33.5	32.5	33.6
5000	43.8	47.0	47.5	45.1	39.8	36.5	43.5	38.4	37.1	35.6	35.4	30.4	36.3	34.4	29.2	33.1	29.2	27.7	28.8
6300	39.3	42.3	42.8	40.5	35.2	31.8	38.8	33.6	32.2	30.7	30.5	25.7	31.4	29.6	24.5	28.6	24.7	22.9	24.0
8000	35.1	37.8	38.3	36.0	30.9	27.6	34.1	28.9	27.3	25.9	25.5	21.4	26.5	24.9	20.7	24.8	21.2	19.5	20.7
10000	30.7	33.0	33.3	31.2	26.2	23.0	29.2	23.8	22.2	20.8	20.4	17.0	21.3	19.8	16.7	20.8	17.5	16.1	17.4
12500	26.1	28.2	28.3	26.2	21.3	18.3	24.1	18.6	17.0	15.8	15.4	12.9	16.3	15.0	12.9	16.8	13.7	12.8	14.1
16000	21.2	23.1	22.8	20.7	16.1	13.2	18.8	13.1	11.6	10.6	10.3	8.8	11.3	10.2	9.2	12.6	9.9	9.5	10.9
20000	16.3	18.8	16.7	14.7	10.6	7.9	13.3	7.3	6.0	5.3	5.5	4.9	6.6	6.0	5.6	8.4	6.2	6.3	7.6
25000	11.4	13.1	10.5	8.6	4.9	2.5	8.0	1.5	.7	.4	1.1	1.3	2.5	2.3	2.2	4.3	2.6	3.1	4.4

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
80% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-736-001
RUN 02
AIRCRAFT CODE 736
OPERATION CODE 00119
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

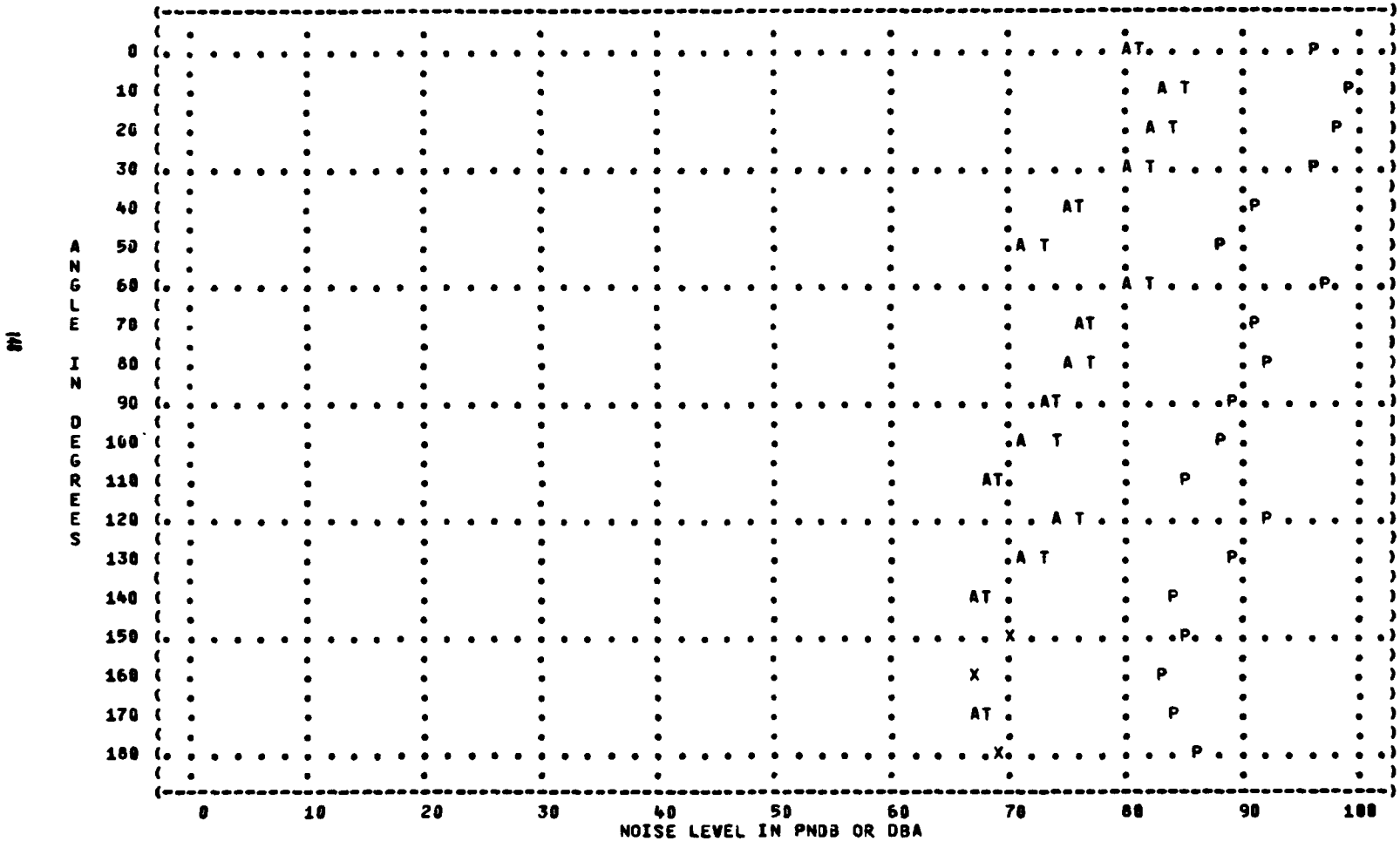


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 03
AIRCRAFT CODE 738
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE C3

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	89	88	85	84	83	82	81	77	82	77	80	78	81	81	80	81	84	87	87
63	83	83	81	81	81	81	81	80	79	81	81	85	85	85	84	81	83	83	86
80	90	88	85	83	81	80	78	76	76	78	81	83	84	85	85	84	86	84	85
100	87	87	85	83	81	80	77	76	77	77	82	86	84	83	86	85	84	87	89
125	84	84	83	81	79	78	76	77	76	76	77	81	84	81	81	83	82	85	87
160	80	80	84	81	79	76	77	77	74	76	79	84	85	83	79	82	81	80	83
200	81	80	83	81	79	77	76	75	72	73	76	79	80	75	75	74	73	74	74
250	81	79	84	82	79	77	76	76	75	73	75	75	73	75	73	76	78	77	77
315	79	78	81	79	78	77	74	75	74	74	74	72	70	72	75	75	75	78	79
400	77	77	81	79	77	75	74	73	72	73	72	70	70	71	73	72	72	75	76
500	73	75	79	77	75	73	72	72	69	67	66	65	65	64	66	65	64	67	69
630	72	76	79	76	73	71	69	70	68	67	64	64	62	61	64	63	63	66	65
800	75	78	78	76	73	70	68	69	68	68	65	65	63	61	62	61	62	63	61
1000	72	75	76	73	70	67	66	66	64	66	62	62	61	59	60	59	61	62	61
1250	70	74	74	71	68	64	65	64	62	64	60	58	56	58	59	58	59	60	57
1600	71	75	74	71	68	64	68	66	63	64	62	59	58	56	58	58	59	60	57
2000	71	74	74	71	68	64	68	68	63	65	61	59	57	57	58	57	59	59	57
2500	70	72	73	69	66	63	67	66	61	64	59	56	54	54	56	55	55	56	54
3150	69	72	72	68	64	61	65	63	59	61	58	55	52	54	55	55	54	55	54
4000	69	73	72	68	64	60	63	62	59	60	58	54	52	52	54	53	52	53	52
5000	66	71	70	66	62	58	61	58	55	56	53	51	48	49	50	50	49	49	48
6300	65	69	70	65	61	57	60	56	53	55	51	49	47	48	48	48	47	47	47
8000	61	66	67	63	59	54	56	53	50	52	50	50	50	50	50	50	50	50	50
10000	63	67	69	64	60	56	58	54	52	53	53	53	53	53	53	53	53	53	53
OVERALL	95	95	94	92	91	89	88	87	87	87	89	92	92	91	91	91	92	93	95

TABLE: PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-736-001
RUN 03
AIRCRAFT CODE 736
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE D3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	100.9	103.2	103.3	100.4	97.8	95.5	95.9	95.1	92.8	93.5	93.5	95.0	95.0	94.0	94.6	94.1	94.1	95.8	96.9
250	98.7	100.9	101.0	98.2	95.6	93.2	93.7	92.8	90.6	91.2	91.3	92.9	92.9	91.9	92.4	92.0	91.8	93.6	94.7
315	96.5	98.5	98.6	96.0	93.4	91.0	91.3	90.5	88.3	88.9	89.1	90.7	90.7	89.7	90.2	89.8	89.6	91.4	92.6
400	94.2	96.1	96.3	93.7	91.1	88.7	89.0	88.2	85.9	86.5	86.6	88.4	88.4	87.3	88.0	87.5	87.3	89.2	90.3
500	91.7	93.5	93.9	91.3	88.6	86.3	86.5	85.7	83.5	84.0	84.1	85.9	85.9	84.8	85.6	85.1	84.8	86.9	88.1
630	89.1	90.8	91.3	88.6	86.1	83.8	83.8	83.1	80.9	81.5	81.5	83.2	83.3	82.1	83.1	82.5	82.2	84.4	85.7
800	86.4	88.0	88.6	86.0	83.5	81.3	81.1	80.4	78.4	78.9	78.7	80.4	80.4	79.2	80.2	79.7	79.4	81.5	83.0
1000	83.6	85.1	85.8	83.2	80.8	78.6	78.2	77.6	75.7	76.2	75.9	77.3	77.3	76.2	77.1	76.5	76.5	78.4	79.8
1250	80.2	82.0	82.9	80.4	77.9	75.5	75.3	74.6	72.7	73.4	72.9	74.0	74.0	72.9	73.7	73.1	73.1	75.0	76.4
1600	77.0	78.7	79.9	77.4	74.9	72.4	72.2	71.6	69.8	70.4	69.9	70.4	70.4	69.2	70.2	69.8	69.7	72.0	72.6
2000	73.7	75.1	76.6	74.1	71.7	69.3	69.0	68.4	66.6	67.2	66.7	66.4	66.4	65.7	66.9	66.4	66.4	68.7	69.1
2500	69.7	71.3	72.7	70.2	67.7	65.2	64.9	64.4	62.4	63.1	62.5	61.9	61.8	61.5	62.8	62.2	62.2	64.6	65.0
3150	65.1	67.0	68.3	65.7	63.2	60.7	60.4	59.9	57.8	58.5	57.7	56.9	56.7	56.5	57.9	57.3	57.3	59.8	60.2
4000	60.2	62.5	63.7	61.0	58.4	55.8	55.5	55.0	52.5	53.1	52.1	51.0	50.8	50.6	52.1	51.6	51.6	54.3	54.6
5000	55.1	57.6	58.5	55.8	53.8	50.3	49.7	49.4	46.4	46.8	45.6	44.6	44.1	43.9	45.7	44.9	44.8	48.1	48.3
6300	49.2	52.8	53.2	50.2	47.1	44.0	43.5	43.2	40.1	40.4	38.5	37.7	36.6	36.5	38.6	37.4	37.5	40.6	41.0
8000	44.1	47.0	48.5	45.3	42.3	39.0	38.4	38.2	35.0	34.5	32.4	31.4	30.8	29.7	31.7	32.1	31.3	35.8	36.0
10000	37.9	40.8	43.1	40.8	36.7	33.4	32.3	31.5	28.7	27.3	25.1	23.5	22.8	23.8	26.1	25.0	24.3	30.7	31.4
12500	34.0	33.1	37.8	33.7	30.6	27.3	24.7	25.1	20.4	19.1	15.6	11.6	13.7	11.8	17.2	16.4	14.1	22.7	24.7
16000	21.1	24.6	30.7	26.8	23.1	17.8	14.8	15.7	8.3	7.6	7.1		4.7	.7	8.9	6.7	3.9	12.4	15.7
20000	7.8	12.8	20.8	16.3	11.4	8.3	5.0	6.3							.6			2.1	6.7
25000		.9	13.9	5.8															

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 03
AIRCRAFT CODE 738
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	100.9	103.2	103.3	100.4	97.8	95.5	95.9	95.1	93.8	93.5	94.3	95.7	95.6	94.8	94.6	94.1	94.7	95.8	97.4
250	98.7	100.9	101.0	98.2	95.6	93.2	93.7	92.8	91.6	91.2	92.1	93.6	93.4	92.7	92.4	92.0	92.4	93.6	95.3
315	96.5	98.5	98.6	96.0	93.4	91.0	91.3	90.5	89.3	88.9	89.9	91.4	91.3	90.5	90.2	89.8	90.2	91.4	93.1
400	94.2	96.1	96.3	93.7	91.1	88.7	89.0	88.2	86.9	86.5	87.5	89.1	89.0	88.1	88.0	87.5	87.9	89.2	90.9
500	91.7	93.5	93.9	91.3	88.6	86.3	86.5	85.7	84.5	84.0	85.0	86.6	86.5	85.6	85.6	85.1	85.4	86.9	88.6
630	89.1	90.8	91.3	88.6	86.1	83.8	83.8	83.1	81.9	81.5	82.4	84.0	83.8	82.9	83.1	82.5	82.8	84.4	86.2
800	86.4	88.0	88.6	86.0	83.5	81.3	81.1	80.4	79.4	78.9	79.6	81.2	81.0	80.0	80.2	79.7	80.0	81.5	83.5
1000	83.6	85.1	85.8	83.2	80.8	78.6	78.2	77.6	76.7	76.2	76.8	78.0	77.9	77.0	77.1	76.5	77.1	78.4	80.3
1250	80.2	82.0	82.9	80.4	77.9	75.5	75.3	74.6	73.7	73.4	73.8	74.7	74.6	73.7	73.7	73.1	73.7	75.0	76.9
1600	77.0	78.7	79.9	77.4	74.9	72.4	72.2	71.6	70.8	70.4	70.8	71.1	70.9	70.0	70.2	69.8	70.3	72.0	73.2
2000	73.7	75.1	76.6	74.1	71.7	69.3	69.0	68.4	67.6	67.2	67.5	67.1	66.9	66.5	66.9	66.4	67.0	68.7	69.6
2500	69.7	71.3	72.7	70.2	67.7	65.2	64.9	64.4	63.4	63.1	63.4	62.7	62.4	62.3	62.8	62.2	62.9	64.6	65.5
3150	65.1	67.0	68.3	65.7	63.2	60.7	60.4	59.9	58.8	58.5	58.5	57.7	57.2	57.3	57.9	57.3	57.9	59.8	60.7
4000	60.2	62.5	63.7	61.0	58.4	55.8	55.5	55.0	53.3	53.1	52.8	51.6	51.2	51.3	52.1	51.6	52.1	54.3	55.0
5000	55.1	57.6	58.5	55.8	53.0	50.3	49.7	49.4	47.0	46.8	46.2	45.0	44.5	44.4	45.7	44.9	45.1	48.1	48.6
6300	49.2	52.0	53.2	50.2	47.1	44.0	43.5	43.2	40.5	40.4	38.9	38.0	36.8	36.9	38.6	37.4	37.8	40.6	41.2
8000	44.1	47.0	48.5	45.3	42.3	39.0	38.4	38.2	35.2	34.5	32.6	31.5	30.9	29.9	31.7	32.1	31.4	35.8	36.1
10000	37.9	40.8	43.1	40.0	36.7	33.4	32.3	31.5	28.7	27.3	25.1	23.5	22.8	23.0	26.1	25.0	24.3	30.7	31.4
12500	30.0	33.1	37.0	33.7	30.6	27.3	24.7	25.1	20.4	19.1	15.6	11.6	13.7	11.8	17.2	16.4	14.1	22.7	24.7
16000	21.1	24.6	30.7	26.8	23.1	17.8	14.8	15.7	8.3	7.6	7.1		4.7	.7	8.9	6.7	3.9	12.4	15.7
20000	7.8	12.8	20.8	16.3	11.4	8.3	5.0	6.3							.6			2.1	6.7
25000		.9	10.9	5.8															

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 13
AIRCRAFT CODE 738
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE F3

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.7	88.2	89.2	86.5	83.9	81.4	81.4	81.0	78.8	79.3	78.4	79.1	79.1	78.0	78.3	78.8	78.6	80.3	81.3
250	83.6	86.0	87.1	84.4	81.8	79.3	79.3	78.9	76.7	77.2	76.3	77.0	77.0	76.0	76.3	76.7	76.6	78.2	79.2
315	81.5	83.8	84.9	82.2	79.7	77.2	77.1	76.8	74.6	75.1	74.3	75.0	75.0	73.9	74.2	74.7	74.5	76.2	77.2
400	79.3	81.6	82.7	80.1	77.5	75.1	74.9	74.6	72.5	72.9	72.1	72.9	72.9	71.8	72.1	72.6	72.4	74.1	75.1
500	77.0	79.3	80.5	77.9	75.3	72.9	72.7	72.4	70.3	70.7	69.9	70.6	70.6	69.6	70.0	70.4	70.3	72.0	73.0
630	74.7	77.0	78.2	75.6	73.1	70.7	70.4	70.1	68.0	68.4	67.6	68.3	68.2	67.3	67.8	68.1	67.9	69.7	70.7
800	72.3	74.5	75.8	73.2	70.8	68.4	68.0	67.8	65.7	66.1	65.3	65.8	65.7	64.8	65.4	65.7	65.5	67.4	68.4
1000	69.9	72.1	73.4	70.8	68.4	66.0	65.5	65.4	63.3	63.7	62.8	63.2	63.1	62.3	63.0	63.2	63.0	65.0	65.9
1250	67.2	69.4	70.8	68.3	65.8	63.5	62.9	62.8	60.8	61.1	60.1	60.4	60.2	59.5	60.3	60.4	60.2	62.2	63.1
1600	64.4	66.7	68.2	65.6	63.2	60.8	60.2	60.1	58.1	58.4	57.3	57.4	57.2	56.5	57.4	57.4	57.3	59.4	60.2
2000	61.6	63.9	65.4	62.9	60.5	58.1	57.4	57.3	55.4	55.6	54.4	54.2	54.0	53.3	54.5	54.3	54.2	56.4	57.1
2530	58.3	60.8	62.4	59.8	57.4	55.0	54.3	54.2	52.2	52.4	51.0	50.7	50.3	49.7	50.9	50.7	50.5	52.8	53.4
3150	54.9	57.5	59.1	56.5	54.0	51.5	50.8	50.7	48.8	48.9	47.3	46.8	46.3	45.6	47.0	46.6	46.6	48.9	49.3
4000	51.1	53.9	55.4	52.8	50.3	47.8	46.9	46.9	45.0	45.1	43.2	42.7	41.9	41.2	42.7	42.2	42.2	44.6	44.8
5000	47.0	49.9	51.3	48.7	46.1	43.5	42.7	42.6	40.8	40.9	38.8	38.3	37.5	36.6	38.1	37.6	37.7	39.9	40.0
6300	42.6	45.5	46.9	44.3	41.7	39.1	38.2	38.2	36.4	36.5	34.2	33.9	33.0	32.0	33.4	32.9	33.0	35.2	35.1
8000	38.7	41.5	43.0	40.4	37.9	35.4	34.4	34.4	32.7	32.6	30.6	30.4	29.6	28.5	30.0	29.6	29.6	31.8	32.0
10000	34.5	37.6	38.9	36.3	33.9	31.5	30.3	30.3	28.6	29.4	26.7	26.7	26.1	25.2	26.5	26.1	26.0	28.3	28.7
12500	29.9	32.2	34.3	31.9	29.5	27.2	25.9	26.0	24.3	23.9	22.6	22.8	22.5	21.6	22.8	22.5	22.4	24.6	25.2
16000	25.2	27.1	29.4	27.0	24.8	22.5	21.2	21.2	19.6	19.2	18.4	19.0	18.9	18.0	19.0	18.7	18.6	20.7	21.7
20000	20.3	21.7	24.1	21.8	19.7	17.5	16.2	16.2	14.6	14.2	14.0	15.1	15.3	14.4	15.1	15.0	14.9	16.8	18.0
25000	15.6	16.2	18.5	16.3	14.3	12.3	11.0	10.8	9.4	9.1	9.6	11.4	11.7	10.8	11.2	11.2	11.1	12.9	14.2

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-881
RUN 03
AIRCRAFT CODE 738
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE G3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.7	88.2	89.2	86.5	83.9	81.4	81.4	81.0	79.8	79.3	79.3	79.8	79.6	78.8	78.3	78.8	79.2	80.3	81.8
250	83.6	86.0	87.1	84.4	81.8	79.3	79.3	78.9	77.7	77.2	77.2	77.8	77.6	76.8	76.3	76.7	77.2	78.2	79.7
315	81.5	83.8	84.9	82.2	79.7	77.2	77.1	76.8	75.6	75.1	75.1	75.7	75.6	74.7	74.2	74.7	75.1	76.2	77.7
400	79.3	81.6	82.7	80.1	77.5	75.1	74.9	74.6	73.5	72.9	73.0	73.6	73.4	72.6	72.1	72.6	73.8	74.1	75.6
500	77.0	79.3	80.5	77.9	75.3	72.9	72.7	72.4	71.3	70.7	70.8	71.4	71.2	70.4	70.0	70.4	70.9	72.0	73.5
630	74.7	77.0	78.2	75.6	73.1	70.7	70.4	70.1	69.0	68.4	68.5	69.0	68.8	68.1	67.8	68.1	68.6	69.7	71.2
800	72.3	74.5	75.8	73.2	70.8	68.4	68.0	67.8	66.7	66.1	66.2	66.5	66.3	65.6	65.4	65.7	66.2	67.4	68.9
1000	69.9	72.1	73.4	70.8	68.4	66.0	65.5	65.4	64.3	63.7	63.7	63.9	63.6	63.1	63.0	63.2	63.6	65.0	66.4
1250	67.2	69.4	70.8	68.3	65.8	63.5	62.9	62.8	61.8	61.1	61.0	61.1	60.8	60.3	60.3	60.4	60.8	62.2	63.6
1600	64.4	66.7	68.2	65.6	63.2	60.8	60.2	60.1	59.1	58.4	58.2	58.1	57.7	57.3	57.4	57.4	57.9	59.4	60.7
2000	61.6	63.9	65.4	62.9	60.5	58.1	57.4	57.3	56.4	55.6	55.3	55.0	54.5	54.1	54.5	54.3	54.8	56.4	57.6
2500	58.3	60.8	62.4	59.8	57.4	55.0	54.3	54.2	53.2	52.4	51.8	51.4	50.9	50.5	50.9	50.7	51.1	52.8	53.9
3150	54.9	57.5	59.1	56.5	54.0	51.5	50.8	50.7	49.8	48.9	48.1	47.6	46.8	46.4	47.0	46.6	47.2	48.9	49.8
4000	51.1	53.9	55.4	52.8	50.3	47.8	46.9	46.9	45.8	45.1	43.9	43.3	42.4	41.8	42.7	42.2	42.7	44.6	45.2
5000	47.0	49.9	51.3	48.7	46.1	43.5	42.7	42.6	41.4	40.9	39.3	38.8	37.9	37.1	38.1	37.6	38.8	39.9	40.3
6300	42.6	45.5	46.9	44.3	41.7	39.1	38.2	38.2	36.8	36.5	34.6	34.2	33.2	32.3	33.4	32.9	33.3	35.2	35.4
8000	38.7	41.5	43.0	40.4	37.9	35.4	34.4	34.4	32.9	32.6	30.7	30.5	29.7	28.8	30.0	29.6	29.7	31.8	32.1
10000	34.5	37.0	38.9	36.3	33.9	31.5	30.3	30.3	28.6	28.4	26.7	26.7	26.1	25.2	26.5	26.1	26.8	28.3	28.7
12500	29.9	32.2	34.3	31.9	29.5	27.2	25.9	26.0	24.3	23.9	22.6	22.8	22.5	21.6	22.8	22.5	22.4	24.6	25.2
16000	25.2	27.1	29.4	27.0	24.8	22.5	21.2	21.2	19.6	19.2	18.4	19.0	18.9	18.0	19.3	18.7	18.6	20.7	21.7
20000	20.3	21.7	24.1	21.8	19.7	17.5	16.2	16.2	14.6	14.2	14.0	15.1	15.3	14.4	15.1	15.8	14.9	16.8	18.0
25000	15.6	16.2	18.5	16.3	14.3	12.3	11.0	10.8	9.4	9.1	9.6	11.4	11.7	10.8	11.2	11.2	11.1	12.9	14.2

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
MILITARY POWER (91% RPM)
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 03
AIRCRAFT CODE 738
OPERATION CODE 00104
PROFILE VERSION A
26 NOV 79
PAGE J3

P=PNLT A=AL T=ALT

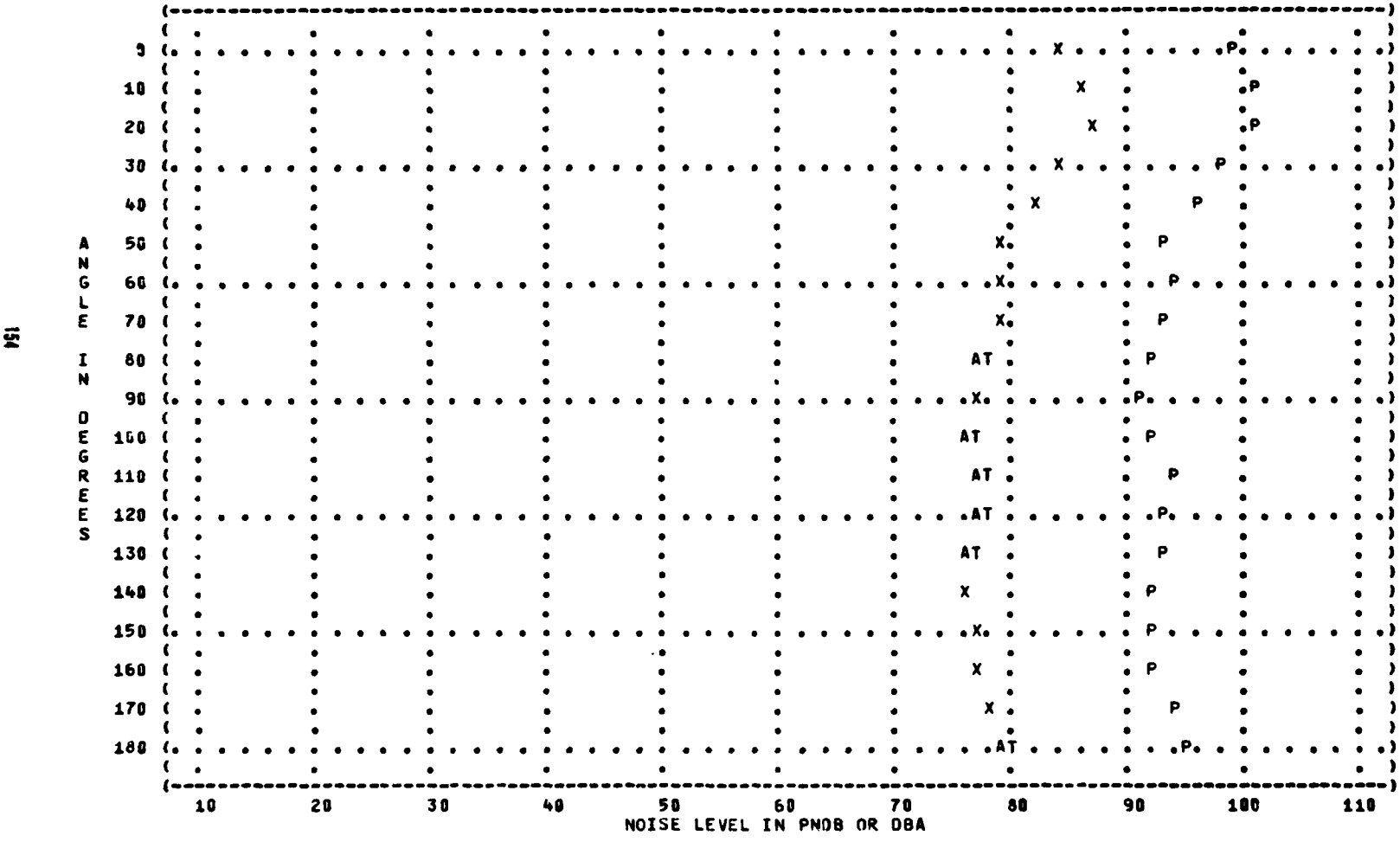


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 76 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 04
AIRCRAFT CODE 738
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE C4

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	93	92	92	91	88	85	85	82	83	83	81	83	82	84	85	88	91	92	93
63	92	89	88	88	86	85	83	84	82	82	81	83	80	83	81	84	85	88	90
80	91	91	90	88	86	84	86	85	83	85	87	88	86	86	87	85	86	88	91
100	93	94	92	87	85	85	83	82	83	85	86	88	88	88	87	86	85	90	92
125	94	91	90	89	85	86	86	82	81	83	86	87	87	85	82	86	88	86	92
160	89	86	86	85	83	82	83	83	82	80	84	86	86	82	80	81	86	83	90
200	86	84	85	86	84	82	81	79	79	82	86	87	85	82	79	79	82	80	83
250	84	82	89	89	85	83	80	80	78	80	85	83	80	78	77	76	77	77	78
315	83	83	85	85	84	84	81	79	79	81	82	79	77	81	77	75	78	79	80
400	86	85	87	85	83	84	83	79	77	78	76	76	77	81	77	76	80	83	86
500	89	86	86	84	82	83	81	78	74	78	73	75	76	79	77	76	79	82	83
630	84	82	83	83	79	79	76	76	73	74	71	72	71	73	72	72	75	75	78
800	82	84	83	82	77	78	75	74	72	73	72	73	71	74	71	71	74	73	76
1000	79	82	82	80	75	75	71	71	69	69	68	69	67	70	67	68	69	69	70
1250	79	83	82	80	73	73	70	70	68	67	66	66	64	65	65	66	67	67	68
1600	79	83	81	79	72	73	70	70	67	68	66	67	65	65	65	66	68	68	67
2000	78	82	80	78	71	72	69	70	68	68	66	67	64	66	64	65	66	66	64
2500	78	81	80	78	71	72	68	69	66	65	64	64	63	65	63	64	64	64	64
3150	76	80	78	76	68	70	66	67	64	64	61	62	61	61	60	63	62	62	62
4000	77	80	79	77	68	70	66	67	64	65	60	60	59	59	58	60	61	61	60
5000	73	76	74	74	65	67	62	62	60	59	56	57	56	55	55	56	57	57	55
6300	71	74	72	71	62	64	60	61	59	59	57	57	57	57	57	57	57	54	52
8000	68	72	69	68	60	61	60	60	60	60	60	60	60	60	60	60	60	55	55
10000	66	70	69	68	59	63	63	63	63	63	63	63	63	63	63	63	63	58	58
OVERALL	101	100	100	98	96	95	94	92	91	93	94	95	94	94	93	94	96	97	100

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-736-001
RUN 04
AIRCRAFT CODE 738
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE 04

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	108.4	109.9	109.1	107.6	102.8	103.1	101.1	99.6	97.9	99.1	99.8	100.7	99.4	99.3	98.1	98.4	100.3	100.9	102.9
250	106.3	107.6	106.9	105.4	100.6	100.9	99.0	97.4	95.7	96.9	97.7	98.6	97.2	97.1	95.9	96.3	98.1	98.8	100.8
315	104.1	105.3	104.7	103.1	98.4	98.7	96.8	95.2	93.5	94.7	95.5	96.4	95.0	94.9	93.7	94.0	95.9	96.7	98.7
400	101.9	102.9	102.4	100.7	96.2	96.5	94.5	92.9	91.2	92.4	93.3	94.1	92.7	92.7	91.4	91.8	93.7	94.4	96.5
500	99.6	100.5	99.9	98.3	93.9	94.2	92.2	90.6	88.8	90.0	91.0	91.7	90.3	90.4	89.1	89.4	91.3	92.1	94.2
630	97.2	98.0	97.4	95.8	91.4	91.7	89.7	88.1	86.3	87.5	88.4	89.1	87.7	87.9	86.6	86.6	88.7	89.7	91.9
800	94.6	95.3	94.7	93.0	88.9	89.2	87.2	85.5	83.7	85.0	85.6	86.4	84.9	85.4	83.8	83.8	85.8	87.2	89.4
1000	92.0	92.4	91.9	90.3	86.3	86.5	84.5	82.8	81.0	82.2	82.6	83.4	81.9	82.7	80.7	80.7	82.9	84.6	86.9
1250	89.2	89.4	88.8	87.4	83.5	83.7	81.8	80.0	78.2	79.1	79.4	80.1	78.6	79.9	77.7	77.7	80.1	81.9	84.1
1600	86.1	86.1	85.8	84.4	80.5	80.8	78.8	77.0	75.1	76.0	76.0	76.5	75.3	76.9	74.7	74.6	77.1	78.9	81.2
2000	82.9	82.7	82.6	81.2	77.4	77.7	75.7	73.8	72.0	72.8	72.3	72.6	72.0	73.8	71.5	71.3	73.9	75.9	78.1
2500	79.5	79.0	78.8	77.3	73.5	73.9	71.8	69.9	67.9	69.2	68.1	68.5	68.0	69.9	67.6	67.7	70.1	72.0	74.1
3150	75.4	74.9	74.7	73.1	69.4	69.8	67.5	65.7	63.4	65.0	63.6	64.3	63.8	65.4	63.4	63.5	66.0	67.8	69.8
4000	70.9	70.3	70.1	68.4	64.7	65.2	62.8	60.9	58.2	60.2	58.3	59.4	58.8	60.5	58.5	58.5	61.2	63.1	64.9
5000	65.9	65.3	65.1	63.4	59.7	60.2	57.7	55.8	52.7	55.0	52.8	53.9	53.5	55.3	53.2	53.3	56.0	58.0	59.7
6300	60.7	60.1	59.9	58.2	54.3	54.9	52.5	50.2	46.8	49.5	46.9	48.2	47.9	49.9	47.7	47.4	50.5	52.5	54.5
8000	56.7	55.7	55.7	53.9	50.1	50.7	48.1	45.5	41.9	44.9	42.1	43.7	43.2	45.4	42.9	42.6	46.0	48.4	50.5
10000	52.2	51.0	51.1	49.2	45.3	46.0	43.2	39.9	36.0	39.5	36.7	38.3	37.9	40.3	36.9	36.4	40.9	43.6	46.0
12500	47.1	45.6	45.6	43.6	39.6	40.1	37.1	33.9	29.9	33.7	30.5	32.6	32.3	34.1	31.0	30.2	35.1	37.9	40.5
16000	41.3	38.7	39.5	37.5	33.5	33.7	31.0	27.4	22.1	27.3	22.6	24.7	23.4	28.1	24.3	23.4	27.9	31.6	34.7
20000	33.9	31.3	31.7	29.8	25.5	27.3	22.9	17.4	10.3	16.4	14.8	10.1	13.0	17.7	13.9	11.5	18.3	24.4	26.3
25000	25.3	21.2	21.5	18.3	13.7	15.4	12.0	7.4		5.5	6.9		2.7	7.3	3.5		8.7	13.7	16.0

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-736-001
RUN 04
AIRCRAFT CODE 736
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE E4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	109.9	110.5	109.7	108.2	102.8	103.1	101.1	99.6	97.9	100.1	99.8	100.7	99.4	99.3	98.1	98.4	100.3	100.9	103.5
250	107.7	108.2	107.5	105.9	100.6	100.9	99.0	97.4	95.7	97.9	97.7	98.6	97.2	97.1	95.9	96.3	98.1	98.8	101.4
315	105.6	105.9	105.3	103.6	98.4	98.7	96.8	95.2	93.5	95.7	95.5	96.4	95.0	94.9	93.7	94.0	95.9	96.7	99.3
400	103.3	103.5	102.9	101.3	96.2	96.5	94.5	92.9	91.2	93.5	93.3	94.1	92.7	92.7	91.4	91.8	93.7	94.4	97.1
500	101.0	101.1	100.5	98.9	93.9	94.2	92.2	90.6	88.8	91.1	91.0	91.7	90.3	90.4	89.1	89.4	91.3	92.1	94.8
630	98.6	98.5	98.0	96.3	91.4	91.7	89.7	88.1	86.3	88.6	88.4	89.1	87.7	87.9	86.6	86.6	88.7	89.7	92.4
800	96.1	95.8	95.3	93.6	88.9	89.2	87.2	85.5	83.7	86.0	85.6	86.4	84.9	85.4	83.8	83.8	85.8	87.2	90.8
1000	93.4	93.0	92.4	90.8	86.3	86.5	84.5	82.8	81.0	83.3	82.6	83.4	81.9	82.7	80.7	80.7	82.9	84.6	87.4
1250	90.6	89.9	89.4	87.9	83.5	83.7	81.8	80.0	78.2	80.2	79.4	80.1	78.6	79.9	77.7	77.7	80.1	81.9	84.6
1600	87.6	86.7	86.3	84.9	80.5	80.8	78.8	77.0	75.1	77.0	76.0	76.5	75.3	76.9	74.7	74.6	77.1	78.9	81.7
2000	84.4	83.3	83.1	81.7	77.4	77.7	75.7	73.8	72.0	73.8	72.3	72.6	72.0	73.8	71.5	71.3	73.9	75.9	78.6
2500	80.9	79.6	79.4	77.8	73.5	73.9	71.8	69.9	67.9	70.3	68.1	68.5	68.0	69.9	67.6	67.7	70.1	72.8	74.7
3150	76.8	75.5	75.3	73.6	69.4	69.8	67.5	65.7	63.4	66.1	63.6	64.3	63.8	65.4	63.4	63.5	66.8	67.8	70.3
4000	72.0	70.8	70.6	68.9	64.7	65.2	62.8	60.9	58.2	61.1	58.3	59.4	58.8	60.5	58.5	58.5	61.2	63.1	65.3
5000	66.8	65.7	65.5	63.8	59.7	60.2	57.7	55.8	52.7	55.6	52.8	53.9	53.5	55.3	53.2	53.3	56.0	58.0	60.1
6300	61.3	60.3	60.1	58.4	54.3	54.9	52.5	50.2	46.8	50.0	46.9	48.2	47.9	49.9	47.7	47.4	50.5	52.5	54.7
8000	57.0	55.9	55.8	54.0	50.1	50.7	48.1	45.5	41.9	45.2	42.1	43.7	43.2	45.4	42.9	42.6	46.0	48.4	50.6
10000	52.2	51.0	51.1	49.2	45.3	46.0	43.2	39.9	36.0	39.5	36.7	38.3	37.9	40.3	36.9	36.4	40.9	43.6	46.0
12500	47.1	45.6	45.6	43.6	39.6	40.1	37.1	33.9	29.9	33.7	30.5	32.6	32.3	34.1	31.0	30.2	35.1	37.9	40.5
16000	41.3	38.7	39.5	37.5	33.5	33.7	31.0	27.4	22.1	27.3	22.6	24.7	23.4	28.1	24.3	23.4	27.9	31.6	34.7
20000	33.9	31.3	31.7	29.8	25.5	27.3	22.9	17.4	10.3	16.4	14.8	10.1	13.0	17.7	13.9	11.5	18.3	24.4	26.3
25000	25.3	21.2	21.5	18.3	13.7	15.4	12.0	7.4		5.5	6.9		2.7	7.3	3.5		8.7	13.7	16.0

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 04
AIRCRAFT CODE 738
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE F4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.2	95.5	95.0	93.6	89.2	89.6	87.1	85.8	83.8	84.9	85.2	85.4	84.3	85.3	83.1	83.1	85.5	86.7	88.9
250	92.1	93.4	92.9	91.5	87.1	87.5	85.1	83.7	81.7	82.9	83.1	83.3	82.3	83.2	81.1	81.0	83.4	84.7	86.8
315	90.0	91.2	90.7	89.4	85.1	85.4	83.0	81.6	79.6	80.8	81.1	81.3	80.2	81.2	79.0	78.9	81.3	82.6	84.8
400	87.8	89.0	88.6	87.2	82.9	83.3	80.9	79.4	77.4	78.7	79.0	79.1	78.1	79.1	76.9	76.8	79.2	80.5	82.7
500	85.6	86.7	86.3	85.0	80.8	81.1	78.7	77.2	75.2	76.5	76.7	76.9	75.9	76.9	74.7	74.6	77.0	78.4	80.6
630	83.3	84.4	84.0	82.7	78.5	78.9	76.5	75.0	73.0	74.2	74.4	74.6	73.5	74.7	72.5	72.3	74.8	76.2	78.4
800	81.0	82.0	81.7	80.3	76.3	76.6	74.2	72.7	70.6	72.0	72.0	72.1	71.1	72.5	70.2	70.0	72.5	74.0	76.1
1000	78.6	79.6	79.2	77.9	73.9	74.3	71.9	70.3	68.2	69.6	69.5	69.6	68.6	70.1	67.9	67.6	70.1	71.7	73.8
1250	76.2	77.0	76.7	75.3	71.4	71.8	69.5	67.8	65.7	67.0	66.7	66.9	66.0	67.5	65.4	65.1	67.6	69.3	71.4
1600	73.6	74.3	74.1	72.7	68.9	69.3	67.0	65.2	63.0	64.4	63.8	64.0	63.2	65.0	62.8	62.4	65.1	66.9	68.9
2000	71.0	71.5	71.3	70.0	66.2	66.7	64.4	62.5	60.3	61.7	60.7	61.0	60.3	62.4	60.1	59.7	62.4	64.3	66.3
2500	68.1	68.5	68.3	66.9	63.1	63.6	61.3	59.4	57.1	58.6	57.3	57.7	57.1	59.2	57.0	56.7	59.3	61.3	63.1
3150	64.8	65.2	64.9	63.6	59.7	60.2	57.8	56.0	53.7	55.1	53.6	54.1	53.4	55.7	53.5	53.3	55.9	57.7	59.6
4000	61.1	61.5	61.2	59.9	56.0	56.5	54.0	52.3	49.9	51.3	49.5	50.1	49.5	51.8	49.7	49.5	52.1	53.8	55.6
5000	56.9	57.5	57.1	55.8	51.8	52.3	49.7	48.1	45.6	47.1	45.2	45.9	45.2	47.5	45.5	45.3	47.9	49.4	51.2
6300	52.5	53.1	52.7	51.4	47.3	47.8	45.2	43.7	41.2	42.7	40.7	41.5	40.8	43.0	41.0	40.9	43.4	44.9	46.7
8000	48.9	49.0	48.8	47.5	43.7	44.2	41.7	40.0	37.5	39.1	37.1	37.9	37.3	39.5	37.5	37.3	39.9	41.5	43.3
10000	45.0	44.6	44.5	43.3	39.7	40.3	37.8	36.0	33.5	35.2	33.3	34.0	33.5	35.7	33.7	33.4	36.1	37.8	39.7
12500	40.7	39.9	40.0	38.8	35.4	36.0	33.7	31.6	29.1	31.0	29.2	30.0	29.5	31.6	29.5	29.2	31.9	33.8	35.7
16000	36.0	34.9	35.0	33.8	30.8	31.3	29.1	26.9	24.5	26.4	24.9	25.6	25.2	27.1	25.1	24.7	27.5	29.5	31.4
20000	30.9	29.5	29.7	28.5	25.7	26.2	24.2	21.8	19.5	21.5	20.5	21.2	20.7	22.3	20.3	19.9	22.7	24.8	26.8
25000	25.4	23.8	24.1	22.8	20.3	20.6	18.8	16.4	14.4	16.3	16.0	16.7	16.1	17.2	15.3	15.1	17.7	19.7	22.0

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-738-001
RUN 04
AIRCRAFT CODE 738
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE G4

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.6	96.1	95.6	94.2	89.2	89.6	87.1	85.8	83.8	86.0	85.2	85.4	84.3	85.3	83.1	83.1	85.5	86.7	89.4
250	93.5	94.0	93.5	92.1	87.1	87.5	85.1	83.7	81.7	83.9	83.1	83.3	82.3	83.2	81.1	81.0	83.4	84.7	87.4
315	91.4	91.8	91.3	89.9	85.1	85.4	83.0	81.6	79.6	81.8	81.1	81.3	80.2	81.2	79.0	78.9	81.3	82.6	85.3
400	89.2	89.6	89.1	87.7	82.9	83.3	80.9	79.4	77.4	79.7	79.0	79.1	78.1	79.1	76.9	76.8	79.2	80.5	83.3
500	87.0	87.3	86.9	85.5	80.8	81.1	78.7	77.2	75.2	77.6	76.7	76.9	75.9	76.9	74.7	74.6	77.0	78.4	81.1
630	84.8	85.0	84.6	83.2	78.5	78.9	76.5	75.0	73.0	75.3	74.4	74.6	73.5	74.7	72.5	72.3	74.8	76.2	78.9
800	82.5	82.6	82.2	80.9	76.3	76.6	74.2	72.7	70.6	73.0	72.0	72.1	71.1	72.5	70.2	70.0	72.5	74.0	76.7
1000	80.1	80.1	79.8	78.4	73.9	74.3	71.9	70.3	68.2	70.7	69.5	69.6	68.6	70.1	67.9	67.6	70.1	71.7	74.3
1250	77.6	77.6	77.3	75.9	71.4	71.8	69.5	67.8	65.7	68.1	66.7	66.9	66.0	67.6	65.4	65.1	67.6	69.3	71.9
1600	75.1	74.9	74.6	73.3	68.9	69.3	67.0	65.2	63.0	65.5	63.8	64.0	63.2	65.0	62.8	62.4	65.1	66.9	69.4
2000	72.4	72.1	71.9	70.5	66.2	66.7	64.4	62.5	60.3	62.7	60.7	61.0	60.3	62.4	60.1	59.7	62.4	64.3	66.8
2500	69.5	69.1	68.9	67.5	63.1	63.6	61.3	59.4	57.1	59.7	57.3	57.7	57.1	59.2	57.0	56.7	59.3	61.3	63.7
3150	66.2	65.8	65.5	64.1	59.7	60.2	57.8	56.0	53.7	56.2	53.6	54.1	53.4	55.7	53.5	53.3	55.9	57.7	60.1
4000	62.2	62.0	61.7	60.4	56.0	56.5	54.0	52.3	49.9	52.2	49.5	50.1	49.5	51.8	49.7	49.5	52.1	53.8	56.0
5000	57.8	57.8	57.5	56.2	51.8	52.3	49.7	48.1	45.6	47.7	45.2	45.9	45.2	47.5	45.5	45.3	47.9	49.4	51.5
6300	53.1	53.3	52.9	51.7	47.3	47.8	45.2	43.7	41.2	43.1	40.7	41.5	40.8	43.0	41.0	40.9	43.4	44.9	46.9
8000	49.2	49.1	48.9	47.6	43.7	44.2	41.7	40.0	37.5	39.3	37.1	37.9	37.3	39.5	37.5	37.3	39.9	41.5	43.4
10000	45.0	44.6	44.5	43.3	39.7	40.3	37.8	36.0	33.5	35.2	33.3	34.0	33.5	35.7	33.7	33.4	36.1	37.8	39.7
12500	40.7	39.9	40.0	38.8	35.4	36.0	33.7	31.6	29.1	31.0	29.2	30.0	29.5	31.6	29.5	29.2	31.9	33.8	35.7
16000	36.0	34.9	35.0	33.8	30.8	31.3	29.1	26.9	24.5	26.4	24.9	25.6	25.2	27.1	25.1	24.7	27.5	29.5	31.4
20000	30.9	29.5	29.7	28.5	25.7	26.2	24.2	21.8	19.5	21.5	20.5	21.2	20.7	22.3	20.3	19.9	22.7	24.8	26.8
25000	25.4	23.8	24.1	22.8	20.3	20.6	18.8	16.4	14.4	16.3	16.0	16.7	16.1	17.2	15.3	15.1	17.7	19.7	22.0

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

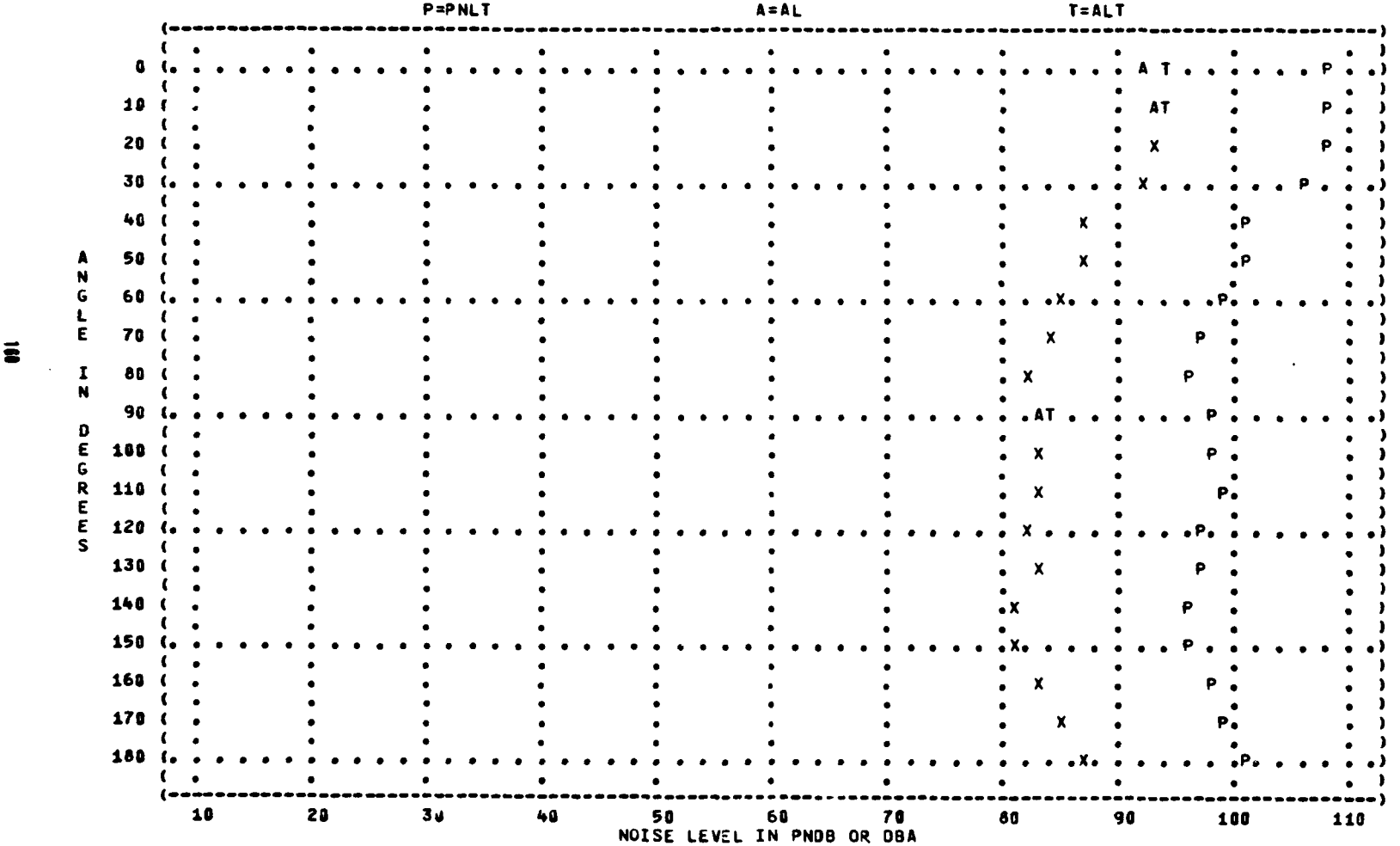
NOISE SOURCE/SUBJECT:
F-16 AIRCRAFT IN THE
AF32A-25 SUPPRESSOR
FAR-FIELD NOISE

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 79-736-001
RUN 04
AIRCRAFT CODE 738
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE J4

P=PNLT A=AL T=ALT



USAF F-100 NOISE SUPPRESSOR F-100 NOISE SUPPRESSOR F-100 NOISE SUPPRESSOR F-100 NOISE SUPPRESSOR USAF

NOISE PRODUCED ON THE GROUND BY

F-100 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-730-001
AIRCRAFT CODE: 730
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Idle Power, 53% RPM	162-167
Engine Runup, 70% RPM	168-173
Military Power, 97% RPM	174-179
Afterburner Power	180-185

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
NORMALIZED SPL AT 250 FEET
NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
PERCEIVED NOISE LEVEL
TONE-CORRECTED, PERCEIVED NOISE LEVEL
A-WEIGHTED OVERALL SOUND LEVEL
TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL
NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

USAF F-100 NOISE SUPPRESSOR F-100 NOISE SUPPRESSOR F-100 NOISE SUPPRESSOR F-100 NOISE SUPPRESSOR USAF

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 01
AIRCRAFT CODE 730
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
IDLE POWER 53% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	68	65	63	65	64	64	63	64	64	65	64	64	64	65	66	69	69	68	67
63	68	68	65	66	67	66	66	67	65	66	68	70	70	68	67	68	70	66	66
80	67	64	65	68	65	67	65	66	67	68	67	69	69	67	67	67	64	64	64
100	62	64	65	68	65	67	70	71	71	69	67	66	67	67	66	66	64	67	60
125	58	57	62	60	59	59	58	61	61	60	64	61	62	63	61	63	60	58	56
160	57	57	61	59	57	57	56	57	56	57	57	58	59	58	58	60	57	55	54
200	58	60	64	60	57	57	55	56	55	58	58	57	59	59	57	58	56	53	50
250	58	56	60	57	56	57	53	56	56	56	58	56	59	58	58	59	56	54	54
315	54	52	59	54	55	56	52	55	54	55	54	52	56	53	55	53	53	55	53
400	57	50	56	52	56	54	49	53	51	51	51	51	50	51	50	53	52	57	55
500	58	51	55	53	56	54	50	54	53	54	55	54	53	55	53	57	55	58	55
630	53	48	55	53	55	55	52	56	55	57	59	58	56	57	55	61	58	59	54
800	55	49	56	56	57	58	56	60	60	60	63	63	61	62	60	63	60	61	57
1000	55	48	57	58	58	58	57	61	61	60	63	63	63	64	63	62	61	61	59
1250	58	52	57	59	58	59	59	63	62	62	62	65	63	63	62	65	64	58	61
1600	52	47	58	57	58	60	58	62	62	62	61	61	63	63	62	64	61	57	57
2000	51	45	55	55	56	59	59	62	62	62	62	63	63	63	64	62	61	58	56
2500	52	46	58	57	58	61	59	61	61	62	62	61	64	63	63	63	61	58	56
3150	49	44	56	56	56	57	56	59	59	62	61	61	62	63	64	64	59	57	52
4000	47	44	55	55	58	59	55	60	60	62	60	61	63	65	65	65	61	56	52
5000	44	42	52	55	54	55	52	57	58	59	57	58	61	62	62	62	58	54	49
6300	41	40	52	54	56	55	52	57	57	59	56	55	59	60	59	60	56	51	47
8000	38	37	48	49	51	50	48	53	54	56	52	52	54	55	53	54	50	45	40
10000	34	35	44	45	47	47	44	50	49	51	49	49	51	51	49	49	45	41	36
OVERALL	74	73	74	75	74	74	74	76	76	76	76	76	77	77	76	77	76	74	73

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
IDLE POWER 53% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 01
AIRCRAFT CODE 730
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE D1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	80.0	75.7	84.5	83.9	84.9	86.0	84.3	87.4	87.0	88.6	88.0	88.0	89.3	90.5	89.8	90.4	87.4	84.7	82.1
250	77.7	73.4	82.2	81.5	82.5	83.7	82.0	85.1	84.7	86.2	85.7	85.7	86.9	88.1	87.4	88.0	85.1	82.4	79.8
315	75.4	71.0	79.8	79.2	80.1	81.4	79.7	82.7	82.4	83.8	83.3	83.3	84.5	85.7	85.0	85.6	82.7	80.1	77.5
400	73.0	68.6	77.4	76.7	77.6	79.0	77.3	80.3	79.9	81.2	80.9	80.9	82.1	83.1	82.4	83.0	80.2	77.7	75.1
500	70.5	66.1	74.9	74.2	75.0	76.4	74.7	77.8	77.4	78.6	78.4	78.3	79.5	80.5	79.8	80.4	77.5	75.2	72.6
630	67.9	63.4	72.2	71.5	72.3	73.8	72.1	75.1	74.7	75.9	75.7	75.6	76.9	77.6	76.9	77.5	74.8	72.6	70.0
800	65.2	60.5	69.4	68.7	69.5	71.0	69.2	72.3	71.9	73.1	72.9	72.7	74.0	74.6	73.9	74.6	71.9	69.8	67.2
1000	62.2	57.3	66.5	65.7	66.5	68.0	66.2	69.2	68.8	70.0	69.9	69.8	71.0	71.3	70.8	71.5	69.0	66.8	64.2
1250	58.9	53.7	63.2	62.3	63.2	64.7	62.8	66.0	65.6	66.8	66.7	66.6	67.7	67.7	67.4	68.1	65.7	63.6	61.1
1600	55.4	49.8	59.6	58.7	59.5	61.1	59.3	62.4	62.1	63.1	63.1	63.1	64.1	64.1	63.8	64.4	62.2	60.2	57.5
2000	51.6	45.6	55.6	54.6	55.6	57.2	55.3	58.7	58.4	59.2	59.3	59.5	60.3	60.2	59.9	60.5	58.3	56.3	53.8
2500	47.0	40.2	50.9	49.7	50.8	52.6	50.5	54.4	54.0	54.7	55.0	55.3	55.8	56.0	55.6	56.3	53.9	51.5	49.3
3150	41.8	34.7	45.0	44.4	45.1	47.1	44.8	49.4	49.0	49.7	49.9	50.3	50.6	51.0	50.6	51.4	49.2	46.2	44.7
4000	36.7	27.0	38.6	38.5	39.2	40.8	38.4	43.4	42.9	43.7	43.9	44.7	44.6	45.0	44.7	45.7	43.9	41.5	39.6
5000	30.3	14.5	31.2	31.8	32.8	34.1	31.9	37.2	36.6	37.1	38.2	39.0	37.8	38.5	37.8	39.9	38.2	36.1	33.9
6300	19.9	2.0	22.0	22.0	24.0	25.4	22.6	30.5	29.7	30.5	31.9	32.8	31.2	32.4	30.7	33.6	31.8	29.1	26.0
8000	8.5		7.1	9.5	9.9	11.6	13.3	18.3	18.0	19.2	23.1	24.5	21.8	23.7	21.3	24.5	21.8	19.4	13.5
10000							3.9	6.2	6.2	7.9	12.2	12.6	9.7	10.9	7.5	14.2	11.9	7.3	1.0
12500											1.3	.7				3.9	1.9		
16000																			
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
IDLE POWER 53% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 01
AIRCRAFT CODE 730
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	81.3	77.3	84.5	83.9	85.4	86.0	85.8	88.7	88.2	89.3	88.0	88.0	89.3	90.5	89.8	91.0	88.6	85.7	82.1
250	79.0	75.0	82.2	81.5	83.0	83.7	83.5	86.4	85.9	87.0	85.7	85.7	86.9	88.1	87.4	88.7	86.3	83.4	79.8
315	76.7	72.6	79.8	79.2	80.6	81.4	81.2	84.1	83.5	84.5	83.3	83.3	84.5	85.7	85.0	86.2	83.8	81.1	77.5
400	74.3	70.2	77.4	76.7	78.1	79.0	78.7	81.6	81.1	82.0	80.9	80.9	82.1	83.1	82.4	83.7	81.3	78.7	75.1
500	71.9	67.7	74.9	74.2	75.6	76.4	76.2	79.1	78.5	79.4	78.4	78.3	79.5	80.5	79.8	81.1	78.7	76.2	72.6
630	69.3	65.0	72.2	71.5	72.9	73.8	73.5	76.4	75.9	76.7	75.7	75.6	76.9	77.6	76.9	78.2	75.9	73.6	70.0
800	66.5	62.1	69.4	68.7	70.1	71.0	70.7	73.6	73.0	73.8	72.9	72.7	74.0	74.6	73.9	75.3	73.1	70.8	67.2
1000	63.5	58.9	66.5	65.7	67.0	68.0	67.7	70.6	70.0	70.8	69.9	69.8	71.0	71.3	70.8	72.1	70.1	67.8	64.2
1250	60.3	55.3	63.2	62.3	63.7	64.7	64.3	67.3	66.8	67.5	66.7	66.6	67.7	67.7	67.4	68.8	66.9	64.6	61.1
1600	56.7	51.4	59.6	58.7	60.1	61.1	60.8	63.7	63.3	63.9	63.1	63.1	64.1	64.1	63.8	65.1	63.3	61.2	57.5
2000	52.9	47.2	55.6	54.6	56.2	57.2	56.8	60.0	59.5	60.0	59.3	59.5	60.3	60.2	59.9	61.2	59.5	57.3	53.8
2500	48.4	41.7	50.9	49.7	51.3	52.6	51.9	55.7	55.2	55.5	55.0	55.3	55.8	56.0	55.6	57.0	55.0	52.5	49.3
3150	43.1	36.3	45.0	44.4	45.6	47.1	46.3	50.7	50.2	50.5	49.9	50.3	50.6	51.0	50.6	52.1	50.3	47.2	44.7
4000	37.7	28.2	38.6	38.5	39.7	40.8	39.6	44.4	43.8	44.3	43.9	44.7	44.6	45.0	44.7	46.2	44.8	42.3	39.6
5000	31.1	15.4	31.2	31.8	33.2	34.1	32.8	38.0	37.3	37.6	38.2	39.0	37.8	38.5	37.8	40.3	38.9	36.7	33.9
6300	20.4	2.6	22.0	22.0	24.3	25.4	23.2	31.0	30.2	30.8	31.9	32.8	31.2	32.4	30.7	33.9	32.3	29.5	26.0
8000	8.8		7.1	9.5	10.0	11.6	13.6	18.6	18.2	19.3	23.1	24.5	21.8	23.7	21.3	24.6	22.1	19.6	13.5
10000							3.9	6.2	6.2	7.9	12.2	12.6	9.7	10.9	7.5	14.2	11.9	7.3	1.0
12500											1.3	.7				3.9	1.9		
16000																			
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 01
AIRCRAFT CODE 730
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE F1

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
IDLE POWER 53% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	66.8	61.9	69.8	69.8	70.5	71.7	70.2	73.8	73.6	74.5	74.3	74.9	75.4	76.1	75.6	76.3	73.9	71.3	69.5
250	64.7	59.8	67.6	67.6	68.3	69.5	68.0	71.6	71.4	72.3	72.1	72.7	73.2	73.9	73.4	74.1	71.7	69.2	67.3
315	62.5	57.6	65.4	65.3	66.0	67.2	65.7	69.3	69.1	70.0	69.9	70.5	70.9	71.6	71.1	71.8	69.4	67.0	65.2
400	60.4	55.5	63.1	63.0	63.7	64.9	63.5	67.0	66.8	67.7	67.6	68.2	68.6	69.2	68.7	69.5	67.1	64.7	62.9
500	58.2	53.2	60.8	60.7	61.3	62.6	61.1	64.6	64.5	65.2	65.3	65.8	66.2	66.8	66.3	67.0	64.8	62.4	60.7
630	55.9	50.9	58.4	58.2	58.9	60.1	58.7	62.2	62.0	62.7	62.9	63.4	63.7	64.3	63.7	64.5	62.4	60.1	58.4
800	53.6	48.5	55.9	55.7	56.4	57.6	56.2	59.7	59.5	60.1	60.4	61.0	61.1	61.6	61.1	62.0	59.9	57.7	56.0
1000	51.2	46.0	53.3	53.1	53.7	54.9	53.6	57.1	56.9	57.5	57.8	58.4	58.4	58.9	58.3	59.3	57.3	55.2	53.5
1250	48.6	43.4	50.6	50.4	51.0	52.2	50.8	54.3	54.2	54.7	55.1	55.7	55.6	56.1	55.4	56.5	54.6	52.6	51.0
1600	46.0	40.6	47.8	47.6	48.2	49.3	47.9	51.5	51.3	51.7	52.3	52.9	52.7	53.2	52.4	53.6	51.8	49.9	48.3
2000	43.3	37.7	44.8	44.7	45.2	46.3	44.9	48.5	48.3	48.6	49.3	50.0	49.6	50.1	49.3	50.6	48.8	47.1	45.5
2500	40.3	34.6	41.6	41.5	42.1	43.0	41.7	45.3	45.1	45.4	46.2	46.9	46.4	46.9	45.9	47.5	45.7	44.1	42.5
3150	37.4	31.2	38.2	38.2	38.7	39.6	38.2	41.9	41.7	42.0	42.9	43.6	43.0	43.5	42.4	44.1	42.4	40.9	39.2
4000	33.4	27.4	34.5	34.6	35.0	35.9	34.5	38.2	38.0	38.2	39.4	40.1	39.3	39.8	38.7	40.5	38.8	37.4	35.6
5000	29.4	23.4	30.4	30.6	31.0	31.8	30.3	34.1	34.0	34.1	35.4	36.1	35.2	35.8	34.6	36.5	34.8	33.5	31.7
6300	25.0	19.0	25.9	26.2	26.6	27.3	25.8	29.7	29.5	29.6	31.1	31.8	30.8	31.4	30.1	32.1	30.3	29.2	27.4
8000	20.9	14.9	21.6	21.8	22.2	22.8	21.2	25.0	24.9	25.8	26.6	27.3	26.2	26.8	25.5	27.6	25.8	25.8	22.9
10000	16.4	10.5	17.0	16.9	17.5	17.9	16.1	20.0	19.8	20.8	21.8	22.3	21.1	21.8	20.4	22.7	20.8	20.4	18.8
12500	11.6	5.9	12.0	11.6	12.3	12.6	10.7	14.5	14.3	14.6	16.5	16.8	15.5	16.3	14.8	17.3	15.3	15.4	12.6
16000	6.5	1.2	6.7	5.9	6.8	7.0	4.9	8.5	8.3	8.7	10.6	10.7	9.5	10.2	8.7	11.4	9.3	9.9	6.7
20000	1.1		1.2	.1	1.0	1.1		2.3	2.0	2.5	4.2	4.1	3.0	3.7	2.2	5.0	2.9	3.9	.5
25000																			

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DdA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
IDLE POWER 53% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 01
AIRCRAFT CODE 730
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE G1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	68.1	63.4	69.8	69.8	71.1	71.7	71.6	75.1	74.8	75.3	74.3	74.9	75.4	76.1	75.6	77.0	75.0	72.3	69.5
250	66.0	61.3	67.6	67.6	68.9	69.5	69.4	72.9	72.6	73.1	72.1	72.7	73.2	73.9	73.4	74.8	72.8	70.2	67.3
315	63.9	59.2	65.4	65.3	66.6	67.2	67.2	70.6	70.3	70.8	69.9	70.5	70.9	71.6	71.1	72.5	70.6	68.0	65.2
400	61.7	57.0	63.1	63.0	64.3	64.9	64.9	68.3	68.0	68.4	67.6	68.2	68.6	69.2	68.7	70.1	68.3	65.7	62.9
500	59.5	54.8	60.8	60.7	61.9	62.6	62.6	66.0	65.6	66.0	65.3	65.8	66.2	66.8	66.3	67.7	65.9	63.4	60.7
630	57.2	52.5	58.4	58.2	59.4	60.1	60.2	63.5	63.2	63.5	62.9	63.4	63.7	64.3	63.7	65.2	63.5	61.1	58.4
800	54.9	50.1	55.9	55.7	56.9	57.6	57.6	61.0	60.7	60.9	60.4	61.0	61.1	61.6	61.1	62.6	61.0	58.7	56.0
1000	52.5	47.6	53.3	53.1	54.3	54.9	55.0	58.4	58.1	58.2	57.8	58.4	58.4	58.9	58.3	60.0	58.4	56.2	53.5
1250	50.0	44.9	50.6	50.4	51.6	52.2	52.3	55.7	55.3	55.4	55.1	55.7	55.6	56.1	55.4	57.2	55.7	53.6	51.0
1600	47.4	42.2	47.8	47.6	48.7	49.3	49.4	52.8	52.5	52.5	52.3	52.9	52.7	53.2	52.4	54.3	52.9	50.9	48.3
2000	44.6	39.3	44.8	44.7	45.8	46.3	46.4	49.8	49.5	49.4	49.3	50.0	49.6	50.1	49.3	51.3	50.0	48.1	45.5
2500	41.7	36.1	41.6	41.5	42.6	43.0	43.1	46.6	46.3	46.2	46.2	46.9	46.4	46.9	45.9	48.1	46.9	45.1	42.5
3150	38.4	32.7	38.2	38.2	39.3	39.6	39.7	43.2	42.9	42.7	42.9	43.6	43.0	43.5	42.4	44.8	43.5	41.9	39.2
4000	34.5	28.7	34.5	34.6	35.5	35.9	35.6	39.3	39.0	38.9	39.4	40.1	39.3	39.8	38.7	41.1	39.7	38.2	35.6
5000	31.2	24.3	30.4	30.6	31.3	31.8	31.2	34.9	34.7	34.6	35.4	36.1	35.2	35.8	34.6	36.9	35.5	34.0	31.7
6300	25.6	19.6	25.9	26.2	26.8	27.3	26.4	30.2	30.0	29.9	31.1	31.8	30.8	31.4	30.1	32.3	30.8	29.6	27.4
8000	21.2	15.2	21.6	21.8	22.3	22.8	21.5	25.3	25.1	25.2	26.6	27.3	26.2	26.8	25.5	27.7	26.0	25.2	22.9
10000	16.4	10.5	17.0	16.9	17.5	17.9	16.1	20.0	19.8	20.0	21.8	22.3	21.1	21.8	20.4	22.7	20.8	20.4	18.0
12500	11.6	5.9	12.0	11.6	12.3	12.6	10.7	14.5	14.3	14.6	16.5	16.8	15.5	16.3	14.8	17.3	15.3	15.4	12.6
16000	6.5	1.2	6.7	5.9	6.8	7.0	4.9	8.5	8.3	8.7	10.6	10.7	9.5	10.2	8.7	11.4	9.3	9.9	6.7
20000	1.1		1.2	.1	1.0	1.1		2.3	2.0	2.5	4.2	4.1	3.0	3.7	2.2	5.0	2.9	3.9	.5
25000																			

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
IDLE POWER 53% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-C01
RUN 01
AIRCRAFT CODE 730
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE J1

P=PNLT A=AL T=ALT

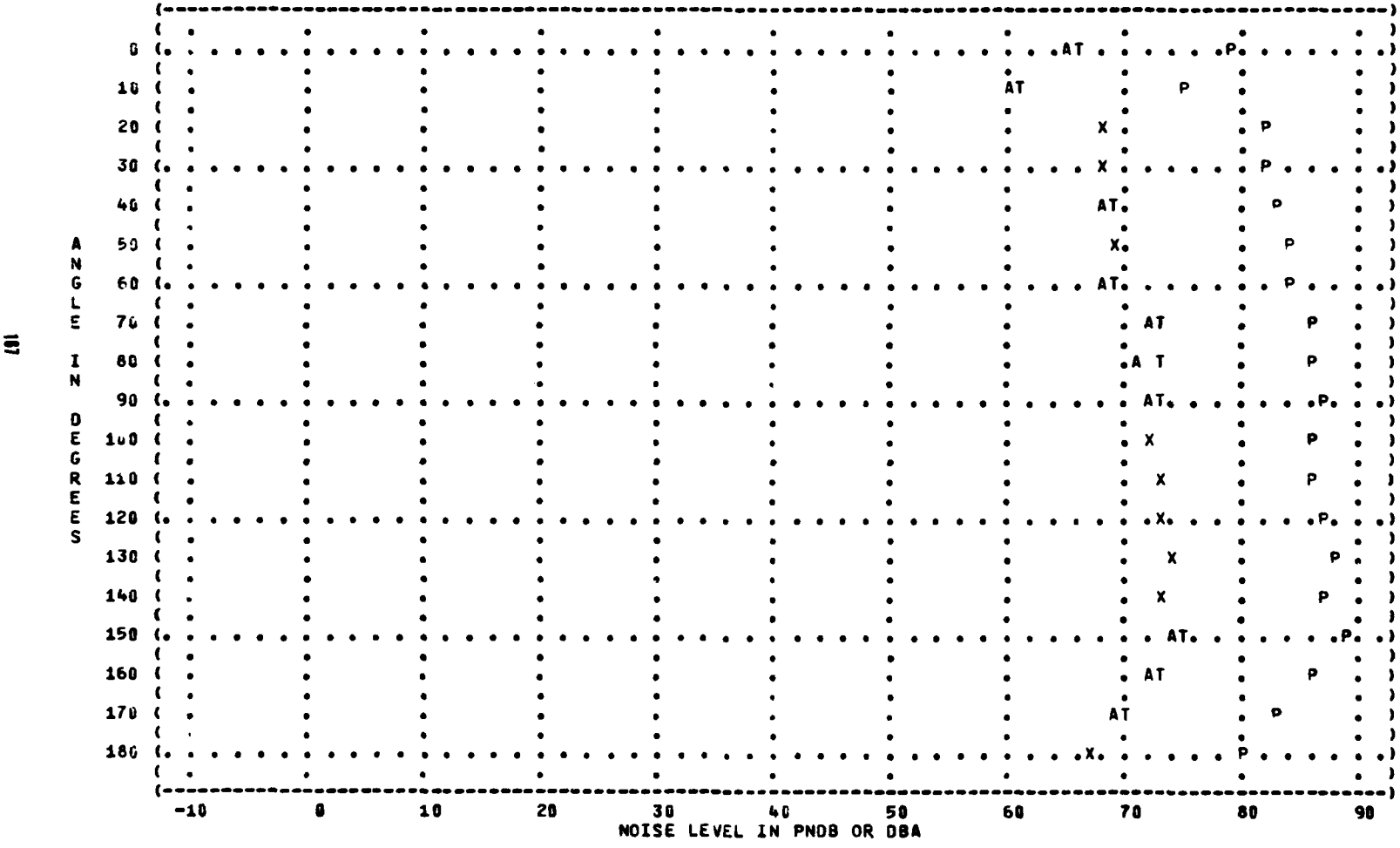


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 02
AIRCRAFT CODE 730
OPERATION CODE 00121
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
F-15C NOISE SUPPRESSOR
AF32A-16

OPERATION:
70% RPM ENG RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	70	67	67	67	67	67	66	69	68	68	67	68	68	69	70	75	75	75	75
63	72	71	71	72	71	67	67	67	68	69	70	72	70	70	72	75	75	76	74
80	68	66	69	70	68	68	66	67	69	72	71	70	69	70	71	72	70	70	70
100	72	70	75	73	71	67	66	69	68	67	66	69	71	73	71	70	73	76	72
125	72	70	75	72	66	67	66	63	66	68	66	68	68	67	68	68	69	69	69
160	64	65	68	67	64	62	61	59	63	61	63	62	63	61	62	64	63	62	63
200	67	67	69	66	64	61	60	58	61	63	64	62	63	63	62	64	62	60	57
250	65	65	68	64	61	61	60	60	61	62	64	61	63	62	60	62	60	60	55
315	63	61	67	63	61	63	62	62	62	63	64	59	60	57	57	59	58	55	57
400	64	59	65	62	62	62	61	60	60	60	59	56	56	55	54	56	57	55	60
500	64	57	63	63	62	63	61	60	59	59	58	57	58	59	60	60	58	58	61
630	61	58	63	63	62	63	63	61	61	61	62	62	63	62	63	65	63	61	61
800	60	59	63	63	62	63	65	64	64	65	66	66	67	66	65	67	65	63	62
1000	60	59	63	63	64	64	65	64	65	66	67	69	68	68	68	67	65	62	62
1250	61	63	65	65	66	69	70	66	68	70	71	72	72	70	70	72	69	67	65
1600	58	61	63	66	66	65	66	65	67	70	72	72	71	69	70	71	65	65	62
2000	54	58	60	64	65	65	68	65	67	69	71	70	72	71	70	71	67	63	62
2500	56	59	58	65	65	67	69	66	68	70	72	70	72	72	73	73	69	66	65
3150	53	57	58	63	61	64	66	64	66	69	70	72	71	74	73	73	68	64	63
4000	57	61	63	65	64	66	66	65	68	70	70	71	73	76	76	75	69	65	65
5000	52	56	57	62	59	63	62	62	64	66	69	70	69	71	73	71	67	63	62
6300	49	57	56	61	59	60	62	63	63	68	68	69	67	68	69	68	64	60	59
8000	47	57	58	63	63	65	68	66	66	69	69	69	68	67	68	66	62	60	59
10000	43	52	54	59	59	62	64	59	62	66	66	67	66	64	63	63	59	56	56
OVERALL	79	78	81	80	79	79	79	78	80	82	82	82	83	83	83	84	82	82	81

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
70% RPM ENG RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 02
AIRCRAFT CODE 730
OPERATION CODE 00121
PROFILE VERSION A
28 NOV 79
PAGE D2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	86.8	88.5	91.1	92.7	91.6	92.8	94.1	92.3	94.3	96.3	97.1	97.0	97.9	99.2	99.5	99.1	94.9	92.2	91.6
250	84.4	86.1	88.8	90.4	89.2	90.5	91.8	89.9	91.9	94.0	94.8	94.6	95.6	96.9	97.1	96.7	92.5	89.9	89.2
315	82.1	83.7	86.4	88.0	86.8	88.2	89.4	87.5	89.5	91.5	92.5	92.2	93.1	94.4	94.7	94.3	90.1	87.5	86.8
400	79.7	81.2	83.8	85.4	84.3	85.7	87.0	84.9	86.9	89.0	90.0	89.6	90.6	91.9	92.1	91.7	87.6	85.1	84.3
500	77.2	78.5	81.2	82.8	81.7	83.2	84.4	82.3	84.3	86.3	87.5	86.9	87.9	89.2	89.4	89.0	84.9	82.5	81.6
630	74.6	75.7	78.4	80.0	79.0	80.5	81.7	79.6	81.5	83.5	84.8	84.0	85.0	86.3	86.5	86.2	82.2	79.8	78.9
800	71.8	72.7	75.5	77.2	76.2	77.7	78.9	76.8	78.7	80.6	81.9	81.0	82.2	83.2	83.4	83.1	79.4	77.0	76.1
1000	69.0	69.4	72.3	74.2	73.2	74.7	75.9	73.8	75.6	77.5	78.9	77.8	79.1	79.9	80.1	80.0	76.4	74.0	73.1
1250	65.8	66.1	68.8	70.9	70.0	71.4	72.6	70.5	72.3	74.2	75.6	74.5	75.9	76.3	76.4	76.7	73.1	70.8	69.9
1600	62.4	62.6	65.3	67.4	66.4	67.9	69.1	67.0	68.8	70.7	72.0	71.1	72.3	72.5	72.6	73.1	69.6	67.2	66.3
2000	58.9	58.9	61.7	63.5	62.6	64.0	65.3	63.1	64.9	66.8	68.2	67.3	68.4	68.5	68.7	69.2	65.6	63.3	62.4
2500	54.8	54.7	57.6	59.4	58.6	59.8	61.1	58.8	60.6	62.5	63.9	63.4	64.3	64.2	64.4	65.0	61.3	58.9	58.1
3150	49.9	49.6	52.9	54.8	54.2	55.1	56.2	53.7	55.7	57.8	59.1	58.9	59.7	59.2	59.4	60.1	56.3	53.8	52.8
4000	44.3	43.9	47.6	49.4	48.6	50.0	51.2	48.1	50.6	52.8	54.1	54.0	54.5	53.3	53.7	54.4	50.7	47.7	46.6
5000	39.0	37.6	41.4	42.7	42.5	44.5	45.8	42.4	44.5	47.2	48.7	48.5	49.8	47.7	47.3	48.6	44.9	41.8	40.9
6300	31.2	30.6	34.8	35.5	36.1	38.3	39.8	36.6	38.1	40.0	41.6	41.7	42.1	40.6	40.8	42.1	38.6	35.5	34.5
8000	24.5	19.6	26.6	28.0	28.5	31.7	32.8	28.4	30.9	32.9	34.6	35.0	35.5	33.7	33.9	35.3	31.8	28.5	25.3
10000	14.1	8.5	18.5	18.2	16.2	20.2	22.2	16.6	19.0	21.7	24.9	25.6	25.4	23.1	23.6	25.9	20.0	15.1	14.7
12500	3.7		6.3	8.4	3.8	8.8	11.6	5.2	7.2	10.5	6.9	11.5	12.7	7.6	7.0	12.3	8.2	1.6	4.1
16000							1.0												
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
70% RPM ENG RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 02
AIRCRAFT CODE 730
OPERATION CODE 00121
PROFILE VERSION A
28 NOV 79
PAGE E2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	88.3	90.8	93.2	93.7	92.9	94.3	95.7	93.3	94.3	97.0	97.1	97.0	97.9	100.3	99.5	100.1	96.3	93.4	92.7
250	86.0	87.7	90.8	91.4	90.6	92.1	93.4	90.9	91.9	94.6	94.8	94.6	95.6	97.9	97.1	97.8	94.0	91.1	90.3
315	83.6	85.2	88.4	89.0	88.2	89.7	91.0	88.5	89.5	92.1	92.5	92.2	93.1	95.5	94.7	95.3	91.5	88.7	87.9
400	81.2	82.7	85.9	86.4	85.6	87.3	88.6	85.9	86.9	89.6	90.0	89.6	90.6	92.9	92.1	92.8	89.0	86.3	85.3
500	78.7	80.0	83.3	83.8	83.0	84.7	86.1	83.3	84.3	86.9	87.5	86.9	87.9	90.2	89.4	90.1	86.3	83.7	82.7
630	76.1	77.2	80.5	81.0	80.4	82.0	83.4	80.6	81.5	84.1	84.8	84.0	85.0	87.3	86.5	87.2	83.6	81.1	80.0
800	73.4	74.2	77.5	78.2	77.6	79.2	80.5	77.8	78.7	81.2	81.9	81.0	82.2	84.3	83.4	84.2	80.8	78.2	77.2
1000	70.5	71.9	74.3	75.2	74.6	76.2	77.5	74.8	75.6	78.2	78.9	77.8	79.1	80.9	80.1	81.0	77.8	75.2	74.2
1250	67.3	67.6	71.9	71.9	71.3	72.8	74.2	71.5	72.3	74.8	75.6	74.5	75.9	77.3	76.4	77.7	74.5	72.8	71.9
1600	63.9	64.1	67.4	68.4	67.8	69.4	70.7	68.0	68.8	71.3	72.0	71.1	72.3	73.6	72.6	74.2	71.0	68.4	67.4
2000	60.5	61.4	63.7	64.5	64.0	65.6	66.9	64.1	64.9	67.4	68.2	67.3	68.4	69.5	68.7	70.3	67.1	64.5	63.5
2500	56.4	56.2	59.6	60.4	60.0	61.3	62.7	59.8	60.6	63.1	63.9	63.4	64.3	65.2	64.4	66.0	62.8	60.2	59.2
3150	51.5	51.2	54.9	55.8	55.5	56.6	57.8	54.7	55.7	58.5	59.0	58.9	59.7	60.2	59.4	61.1	57.8	55.8	53.9
4000	45.5	45.2	48.3	50.3	49.7	51.3	52.5	48.9	50.0	53.3	54.1	54.3	54.5	54.9	53.7	55.2	51.9	48.7	47.5
5000	38.9	38.5	42.6	43.3	43.3	45.3	46.8	43.0	44.5	47.5	48.7	48.5	48.8	48.4	47.3	49.3	45.8	42.6	41.5
6300	31.9	31.3	35.7	36.9	36.0	38.9	40.2	36.4	38.1	41.2	41.6	41.7	42.1	41.2	40.8	42.5	39.2	35.9	35.3
8000	24.6	19.9	27.1	28.2	28.8	32.3	33.1	28.6	31.3	33.2	34.6	35.1	35.5	33.3	33.9	35.5	32.1	28.7	28.5
10000	14.1	8.5	16.5	18.2	16.2	20.2	22.2	16.8	19.2	21.7	24.9	25.6	26.4	23.1	23.0	25.9	20.6	15.1	14.7
12500	3.7		6.3	8.4	3.8	8.8	11.6	5.2	7.2	10.5	6.9	11.5	12.7	7.6	7.0	12.3	8.2	1.6	4.1
16000							1.8												
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
70% RPM ENG RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 02
AIRCRAFT CODE 730
OPERATION CODE 00121
PROFILE VERSION A
28 NOV 79
PAGE F2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	72.6	73.4	75.9	77.9	77.4	78.9	80.3	78.1	80.2	82.4	83.6	83.5	84.2	84.7	85.0	84.8	80.6	77.6	76.7
250	70.5	71.2	73.8	75.6	75.2	76.7	78.1	75.9	77.9	80.1	81.3	81.2	81.9	82.4	82.7	82.5	78.3	75.4	74.5
315	68.3	69.0	71.6	73.3	72.9	74.4	75.7	73.6	75.6	77.7	79.0	78.9	79.5	80.1	80.3	80.2	76.8	73.1	72.2
400	66.2	66.7	69.3	71.0	70.6	72.0	73.4	71.2	73.2	75.3	76.5	76.5	77.1	77.6	77.8	77.8	73.6	70.8	69.9
500	63.9	64.3	67.1	68.6	68.2	69.6	70.9	68.8	70.7	72.8	74.1	74.0	74.7	75.1	75.3	75.3	71.2	68.4	67.5
630	61.6	61.9	64.7	66.1	65.8	67.1	68.4	66.2	68.2	70.2	71.5	71.4	72.1	72.4	72.6	72.6	68.6	65.9	65.0
800	59.3	59.4	62.2	63.5	63.3	64.6	65.9	63.7	65.5	67.5	68.9	68.7	69.5	69.6	69.8	69.9	66.0	63.3	62.4
1000	56.8	56.8	59.7	60.9	60.7	62.0	63.2	61.0	62.8	64.8	66.1	66.0	66.7	66.7	66.8	67.1	63.2	60.6	59.7
1250	54.3	54.0	57.1	58.2	58.0	59.3	60.5	58.2	60.3	61.9	63.2	63.2	63.8	63.6	63.7	64.1	60.4	57.8	56.9
1600	51.6	51.2	54.3	55.3	55.2	56.4	57.6	55.3	57.3	58.9	60.2	60.2	60.8	60.4	60.5	61.0	57.4	54.9	54.0
2000	48.9	48.2	51.4	52.3	52.2	53.4	54.6	52.3	53.9	55.7	57.1	57.1	57.7	57.0	57.1	57.7	54.3	51.9	51.0
2500	45.8	45.0	48.3	49.1	49.0	50.3	51.4	49.1	50.7	52.4	53.7	53.8	54.3	53.4	53.5	54.2	51.0	48.7	47.8
3150	42.4	41.6	44.9	45.7	45.6	46.9	48.0	45.7	47.2	48.8	50.1	50.4	50.8	49.7	49.8	50.6	47.5	45.2	44.4
4000	38.8	37.9	41.2	42.0	41.9	43.2	44.3	42.0	43.4	45.0	46.3	46.6	46.9	45.8	45.9	46.7	43.8	41.5	40.7
5000	34.7	33.9	37.2	37.9	37.8	39.1	40.1	37.9	39.3	40.8	42.0	42.5	42.7	41.5	41.6	42.4	39.7	37.5	36.6
6300	30.3	29.4	32.8	33.4	33.3	34.6	35.8	33.5	34.8	36.1	37.4	38.0	38.1	36.8	37.0	37.8	35.2	33.0	32.2
8000	26.3	25.0	28.6	29.0	28.8	30.0	31.0	29.0	30.1	31.3	32.4	33.1	33.3	32.0	32.2	32.9	30.6	28.4	27.8
10000	22.1	20.2	24.1	24.3	23.9	25.1	25.9	24.0	25.0	26.0	27.0	27.7	27.9	26.8	27.0	27.6	25.5	23.5	23.0
12500	17.5	15.8	19.3	19.3	18.6	19.7	20.3	18.6	19.4	20.2	21.1	21.8	22.1	21.1	21.3	21.9	20.0	18.1	17.8
16000	12.6	9.7	14.2	13.9	12.9	14.0	14.2	12.8	13.4	14.0	14.7	15.2	15.7	14.8	15.1	15.7	14.1	12.5	12.3
20000	7.5	4.3	9.0	8.3	7.0	7.9	7.8	6.5	6.9	7.4	8.0	8.2	8.8	8.1	8.4	9.2	7.8	6.7	6.6
25000	2.2		3.7	2.5	1.0	1.5	1.1	.0	.4	.9	1.1	1.0	1.7	1.3	1.5	2.6	1.6	1.3	.9

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
70% RPM ENG RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 02
AIRCRAFT CODE 730
OPERATION CODE 00121
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	74.1	75.3	78.0	78.9	78.8	80.5	82.0	79.1	80.2	83.0	83.6	83.5	84.2	85.8	85.0	85.8	82.0	78.8	77.8
250	72.0	72.7	75.8	76.6	76.6	78.2	79.7	76.9	77.9	80.7	81.3	81.2	81.9	83.5	82.7	83.6	79.8	76.6	75.6
315	69.9	70.5	73.6	74.3	74.3	75.9	77.4	74.6	75.6	78.3	79.0	78.9	79.5	81.1	80.3	81.2	77.4	74.3	73.3
400	67.7	68.2	71.4	72.0	72.0	73.6	75.0	72.2	73.2	75.9	76.5	76.5	77.1	78.6	77.8	78.8	75.1	72.0	71.0
500	65.5	65.8	69.1	69.6	69.6	71.1	72.6	69.8	70.7	73.4	74.1	74.0	74.7	76.1	75.3	76.3	72.6	69.6	68.5
630	63.2	63.4	66.7	67.1	67.1	68.7	70.1	67.3	68.2	70.8	71.5	71.4	72.1	73.4	72.6	73.7	70.1	67.1	66.1
800	60.8	60.9	64.3	64.6	64.6	66.1	67.5	64.7	65.5	68.1	68.9	68.7	69.5	70.7	69.8	71.0	67.4	64.5	63.5
1000	58.4	58.3	61.8	61.9	62.0	63.5	64.9	62.0	62.8	65.4	66.1	66.0	66.7	67.7	66.8	68.1	64.7	61.8	61.8
1250	55.8	55.6	59.1	59.2	59.3	60.8	62.1	59.2	60.0	62.5	63.2	63.2	63.8	64.7	63.7	65.1	61.8	59.1	58.0
1600	53.1	52.7	56.4	56.3	56.5	57.9	59.3	56.3	57.0	59.5	60.2	60.2	60.8	61.4	60.5	62.0	58.8	56.1	55.1
2000	50.4	49.7	53.5	53.3	53.6	55.0	56.3	53.3	53.9	56.3	57.1	57.1	57.7	58.0	57.1	58.7	55.7	53.1	52.1
2500	47.3	46.5	50.4	50.1	50.4	51.8	53.0	50.1	50.7	53.0	53.7	53.8	54.3	54.5	53.5	55.3	52.4	49.9	48.9
3150	44.0	43.1	47.0	46.7	47.0	48.4	49.6	46.7	47.2	49.4	50.1	50.4	51.8	50.8	49.8	51.6	48.9	46.5	45.5
4000	40.8	39.1	42.9	42.8	43.0	44.4	45.6	42.8	43.4	45.5	46.3	46.6	46.9	46.5	45.9	47.5	44.9	42.5	41.6
5000	35.6	34.8	38.4	38.5	38.6	40.0	41.1	38.5	39.0	41.1	42.0	42.5	42.7	42.1	41.6	43.0	40.5	38.2	37.3
6300	32.9	32.0	35.6	35.8	35.9	37.2	38.3	35.9	36.8	38.4	39.2	39.6	39.8	39.3	38.4	39.9	37.4	35.2	34.2
8000	30.0	29.3	33.0	33.2	33.3	34.7	35.9	33.3	34.2	35.9	36.7	37.0	37.2	36.7	35.8	37.3	34.8	32.6	31.6
10000	26.6	25.3	29.0	29.2	29.0	30.3	31.3	29.2	30.1	31.4	32.4	33.1	33.3	32.2	32.2	33.1	30.9	28.7	28.0
12500	22.1	20.2	24.1	24.3	23.9	25.1	25.9	24.0	25.0	26.0	27.0	27.7	27.9	26.8	27.0	27.6	25.5	23.5	23.0
16000	17.5	15.0	19.3	19.3	18.6	19.7	20.3	18.6	19.4	20.2	21.1	21.8	22.1	21.1	21.3	21.9	20.0	18.1	17.8
20000	12.6	9.7	14.2	13.9	12.9	14.0	14.2	12.8	13.4	14.0	14.7	15.2	15.7	14.8	15.1	15.7	14.1	12.5	12.3
25000	7.5	4.3	9.0	8.3	7.0	7.9	7.8	6.5	6.9	7.4	8.0	8.2	8.8	8.1	8.4	9.2	7.8	6.7	6.6
31500	2.2		3.7	2.5	1.0	1.5	1.1	.0	.4	.9	1.1	1.0	1.7	1.3	1.5	2.6	1.6	1.3	.9

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
70% RPM ENG RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 6.2
TEST 77-730-001
RUN 02
AIRCRAFT CODE 730
OPERATION CODE 00121
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

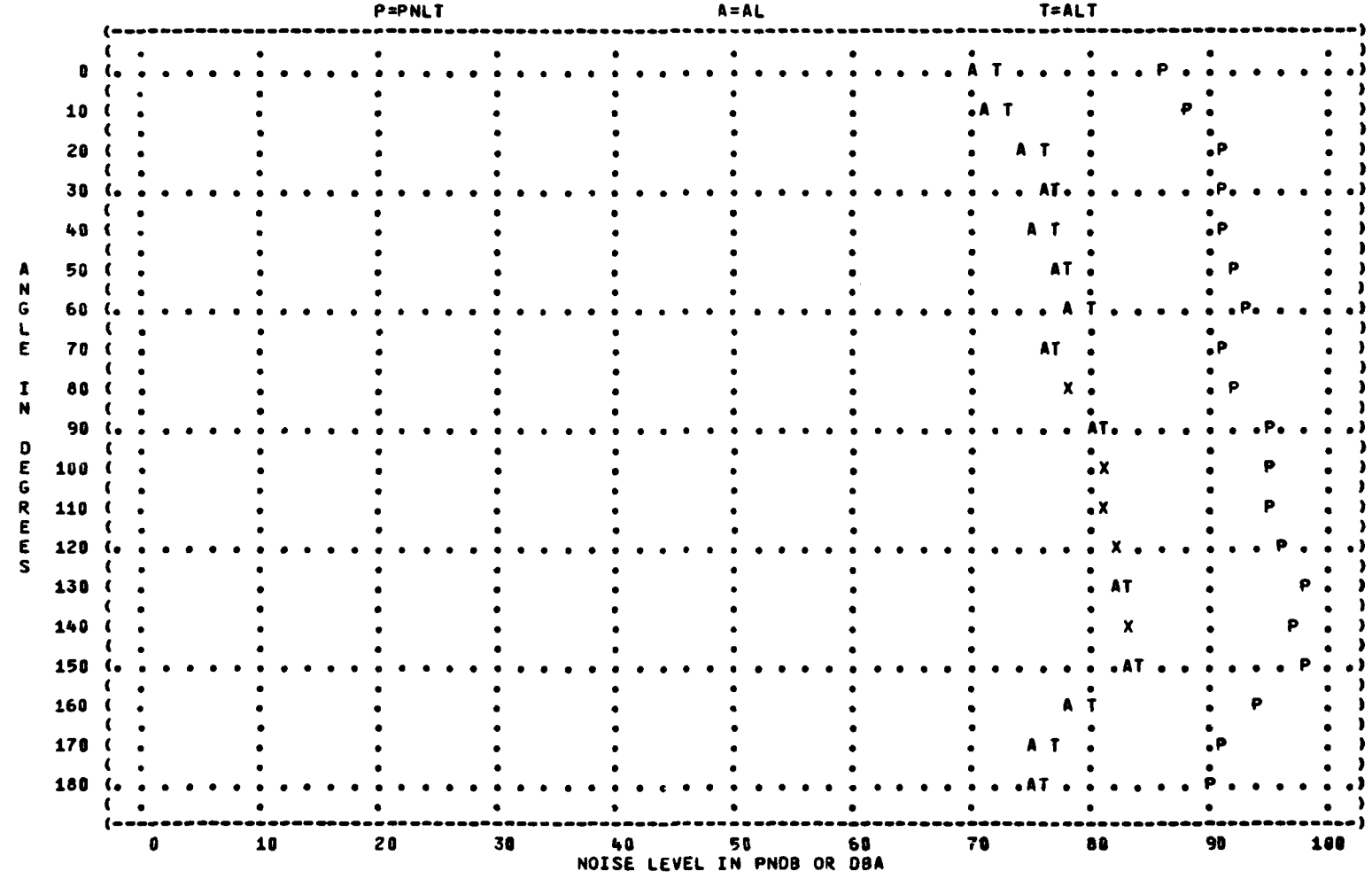


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 03

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
MILITARY POWER 97% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

AIRCRAFT CODE 730
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE C3

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	84	83	84	83	85	84	84	84	85	86	88	89	89	88	87	88	88	88	88
63	85	83	85	82	84	84	83	83	85	85	84	86	86	87	86	90	90	89	89
80	85	84	88	85	84	83	82	81	85	84	83	84	86	86	83	89	87	85	83
100	78	77	81	79	80	79	77	79	81	81	82	82	83	82	80	84	83	81	78
125	79	78	83	83	81	80	77	77	76	76	80	80	83	79	81	82	82	80	81
160	80	79	84	81	80	78	75	74	73	77	78	78	79	75	74	75	80	76	78
200	85	84	87	83	81	79	77	75	77	81	80	80	82	78	77	75	78	75	76
250	85	86	90	81	79	83	80	78	78	79	85	85	84	81	77	79	80	76	79
315	94	90	90	84	85	85	84	82	83	83	84	85	85	86	81	83	82	77	80
400	94	89	90	83	86	87	86	81	83	81	80	85	81	83	82	79	80	78	79
500	86	83	85	81	85	87	86	83	80	78	78	82	80	83	81	78	77	80	77
630	81	80	83	79	83	86	83	83	81	79	80	81	80	83	81	80	78	81	76
800	84	84	87	80	84	88	86	87	83	85	84	83	83	84	83	81	80	84	79
1000	82	83	89	84	85	88	87	88	84	84	86	84	82	82	82	80	80	84	78
1250	75	78	85	81	84	86	85	84	83	84	83	83	81	82	79	79	79	80	75
1600	75	78	84	80	83	87	83	82	84	86	85	85	84	84	80	79	79	79	74
2000	69	75	82	80	81	84	80	79	82	85	88	88	86	85	77	77	75	76	72
2500	68	72	80	79	80	81	79	78	82	84	88	87	88	87	78	77	76	75	71
3150	66	70	79	78	80	80	79	77	82	84	87	89	89	86	78	75	74	73	69
4000	63	69	78	77	80	80	80	80	84	85	87	89	90	86	78	76	73	72	68
5000	61	66	76	74	77	77	77	77	82	84	88	86	87	83	76	74	70	69	66
6300	58	64	73	72	74	75	74	74	83	82	84	86	86	81	75	74	69	68	65
8000	56	63	71	69	73	73	73	74	79	79	81	81	81	75	70	69	64	62	60
10000	50	57	66	64	68	69	68	69	74	76	76	76	76	69	65	64	58	57	54
OVERALL	99	96	99	95	96	98	96	95	96	97	98	99	99	98	94	96	95	95	94

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
MILITARY POWER 97% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 03
AIRCRAFT CODE 730
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE 03

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	107.0	105.6	109.6	106.9	108.5	109.9	108.3	107.8	110.5	111.5	113.6	114.7	115.0	112.2	106.5	105.6	104.3	104.0	101.2
250	104.9	103.4	107.4	104.7	106.3	107.7	106.0	105.5	108.2	109.1	111.3	112.4	112.7	109.9	104.2	103.3	102.1	101.8	98.9
315	102.8	101.2	105.1	102.4	103.9	105.5	103.6	103.1	105.8	106.7	108.9	110.0	110.2	107.6	101.8	101.0	99.8	99.5	96.7
400	100.6	99.0	102.8	100.1	101.5	103.2	101.2	100.7	103.3	104.2	106.4	107.4	107.7	105.2	99.4	98.6	97.5	97.2	94.3
500	98.4	96.7	100.5	97.6	99.1	100.8	98.6	98.1	100.6	101.6	103.9	104.8	105.0	102.6	96.8	96.1	95.0	94.8	91.9
630	96.1	94.3	98.1	95.0	96.5	98.3	95.9	95.4	97.8	98.8	101.2	102.0	102.2	100.0	94.2	93.5	92.4	92.3	89.3
800	93.7	91.9	95.5	92.3	93.8	95.7	93.3	92.6	94.9	96.0	98.4	99.1	99.2	97.2	91.4	90.8	89.8	89.7	85.6
1000	91.3	89.3	92.9	89.5	90.9	92.9	90.5	89.9	91.9	93.0	95.5	96.0	95.9	94.3	88.5	87.9	86.9	87.0	84.0
1250	88.7	86.6	90.1	86.4	87.9	90.0	87.6	87.1	88.7	89.9	92.3	92.7	92.6	91.2	85.4	84.8	83.9	84.1	81.2
1600	86.1	83.8	87.2	83.1	84.7	86.9	84.5	84.0	85.3	86.4	88.8	89.1	88.9	87.8	82.1	81.4	80.8	81.2	78.2
2000	83.3	80.8	84.1	79.6	81.6	83.7	81.4	80.9	81.8	83.0	85.1	85.3	85.1	84.1	78.6	78.0	77.4	78.0	75.0
2500	79.5	77.0	80.3	75.8	77.7	80.0	77.8	77.4	78.0	79.2	80.9	81.4	80.9	80.0	74.9	74.1	73.6	74.6	71.2
3150	75.3	72.7	76.0	71.5	73.6	76.0	74.0	73.7	73.8	75.0	76.4	77.0	76.2	75.5	70.9	70.1	69.4	70.7	66.9
4000	70.5	67.9	71.8	67.1	69.0	71.6	69.8	69.6	69.1	70.3	71.5	72.0	70.9	70.3	66.6	65.6	64.8	66.6	62.5
5000	65.1	62.7	67.2	62.3	64.2	66.9	65.2	65.1	64.0	65.3	66.1	66.6	65.2	65.0	61.9	60.8	60.0	62.0	57.7
6300	59.5	57.7	62.2	57.2	59.0	61.9	60.2	60.0	58.3	59.4	60.0	60.5	59.1	59.4	56.5	55.5	54.8	56.9	52.3
8000	55.8	53.3	57.7	52.3	54.4	57.3	55.6	55.5	53.1	54.2	54.6	54.4	53.7	54.5	51.8	50.5	49.9	52.0	47.0
10000	51.7	48.6	52.3	46.3	49.6	52.2	50.5	50.4	47.4	48.7	49.0	48.7	47.7	48.9	46.4	44.7	43.6	46.6	41.4
12500	47.4	43.5	46.3	40.3	43.7	46.9	44.9	44.2	40.8	41.8	42.2	42.4	40.9	42.4	39.8	38.1	37.4	40.3	34.6
16000	42.5	37.7	40.4	33.5	37.4	40.8	38.6	37.1	33.3	34.4	34.4	35.5	33.4	35.4	32.8	30.5	29.3	32.8	27.6
20000	36.1	31.3	33.8	25.6	30.4	33.5	31.7	28.3	24.8	24.0	24.0	27.8	24.0	27.3	24.0	20.4	18.6	23.2	17.0
25000	28.9	22.0	25.8	12.1	19.3	24.2	21.6	17.0	10.8	13.7	13.6	14.7	8.5	15.8	11.1	10.2	8.0	7.6	6.4

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
MILITARY POWER 97% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 03
AIRCRAFT CODE 730
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	108.6	105.6	110.7	108.8	108.5	109.9	108.3	107.8	110.5	112.0	113.6	114.7	115.0	112.9	107.2	106.2	104.3	104.0	101.2
250	105.8	103.4	108.5	105.8	106.3	107.7	106.0	105.5	108.2	109.7	111.3	112.4	112.7	110.6	104.9	103.9	102.1	101.8	98.9
315	103.7	101.2	106.2	103.5	103.9	105.5	103.6	103.1	105.8	107.3	108.9	110.0	110.2	108.2	102.5	101.6	99.8	99.5	96.7
400	101.5	99.0	103.9	101.2	101.5	103.2	101.2	100.7	103.3	104.8	106.4	107.4	107.7	105.8	100.0	99.2	97.5	97.2	94.3
500	99.3	96.7	101.6	98.7	99.1	100.8	98.6	98.1	100.6	102.1	103.9	104.8	105.0	103.3	97.5	96.8	95.0	94.8	91.9
630	97.0	94.3	99.2	96.1	96.5	98.3	95.9	95.4	97.8	99.3	101.2	102.0	102.2	100.6	94.8	94.1	92.4	92.3	89.3
800	94.6	91.9	96.7	93.4	93.8	95.7	93.3	92.6	94.9	96.5	98.4	99.1	99.2	97.9	92.0	91.4	89.8	89.7	86.6
1000	92.2	89.3	94.1	90.5	90.9	92.9	90.5	89.9	91.9	93.6	95.5	96.0	95.9	95.0	89.2	88.5	86.9	87.0	84.0
1250	89.7	86.6	91.3	87.5	87.9	90.0	87.6	87.1	88.7	90.4	92.3	92.7	92.6	91.8	86.1	85.4	83.9	84.1	81.2
1600	87.0	83.8	88.3	84.2	84.7	86.9	84.5	84.0	85.3	87.0	88.8	89.1	88.9	88.5	82.7	82.1	80.8	81.2	78.2
2000	84.2	80.8	85.3	80.7	81.6	83.7	81.4	80.9	81.8	83.5	85.1	85.3	85.1	84.8	79.2	78.6	77.4	78.0	75.0
2500	80.4	77.0	81.4	76.9	77.7	80.0	77.8	77.4	78.0	79.7	80.9	81.4	80.9	80.7	75.5	74.8	73.6	74.6	71.2
3150	76.2	72.7	77.2	72.6	73.6	76.0	74.0	73.7	73.8	75.5	76.4	77.0	76.2	76.1	71.6	70.7	69.4	70.7	66.9
4000	71.2	67.9	72.7	67.9	69.0	71.6	69.8	69.6	69.1	70.7	71.5	72.0	70.9	70.9	67.2	66.2	64.8	66.6	62.5
5000	65.6	62.7	67.9	62.9	64.2	66.9	65.2	65.1	64.0	65.6	66.1	66.6	65.2	65.4	62.3	61.2	60.0	62.0	57.7
6300	59.9	57.7	62.7	57.6	59.0	61.9	60.2	60.0	58.3	59.6	60.0	60.5	59.1	59.6	56.8	55.8	54.8	56.9	52.3
8000	56.0	53.3	57.9	52.6	54.4	57.3	55.6	55.5	53.1	54.3	54.6	54.4	53.7	54.6	51.9	50.7	49.9	52.0	47.0
10000	51.7	48.6	52.3	46.3	49.6	52.2	50.5	50.4	47.4	48.7	49.0	48.7	47.7	48.9	46.4	44.7	43.6	46.6	41.4
12500	47.4	43.5	46.3	40.3	43.7	46.9	44.9	44.2	40.8	41.8	42.2	42.4	40.9	42.4	39.8	38.1	37.4	40.3	34.6
16000	42.5	37.7	40.4	33.5	37.4	40.8	38.6	37.1	33.3	34.4	34.4	35.5	33.4	35.4	32.8	30.5	29.3	32.8	27.6
20000	36.1	31.3	33.8	25.6	30.4	33.5	31.7	28.3	24.8	24.0	24.0	27.8	24.0	27.9	24.0	20.4	18.6	23.2	17.0
25000	28.9	22.0	25.8	12.1	19.3	24.2	21.6	17.0	10.8	13.7	13.6	14.7	8.5	15.8	11.1	10.2	8.0	7.6	6.4

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 03
AIRCRAFT CODE 730
OPERATION CODE 00104
PROFILE VERSION A
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NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
MILITARY POWER 97% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.2	93.3	97.5	93.4	95.5	97.8	96.1	95.8	96.4	97.6	99.6	100.0	99.9	97.9	92.8	91.5	90.6	92.2	87.9
250	93.2	91.3	95.4	91.2	93.4	95.6	94.0	93.7	94.1	95.4	97.4	97.8	97.6	95.7	90.6	89.4	88.5	90.1	85.8
315	91.1	89.2	93.3	89.0	91.2	93.5	91.8	91.5	91.8	93.1	95.0	95.4	95.2	93.4	88.4	87.2	86.3	88.0	83.7
400	89.1	87.1	91.1	86.8	89.0	91.3	89.7	89.3	89.5	90.7	92.6	93.0	92.8	91.0	86.2	85.0	84.1	85.9	81.5
500	87.0	85.0	88.9	84.5	86.7	89.1	87.4	87.1	87.1	88.3	90.1	90.5	90.2	88.6	83.9	82.7	81.9	83.7	79.3
630	84.9	82.8	86.7	82.2	84.4	86.8	85.2	84.8	84.6	85.8	87.6	87.9	87.5	86.1	81.6	80.4	79.6	81.4	77.1
800	82.7	80.6	84.4	79.8	82.1	84.5	82.8	82.5	82.0	83.3	84.9	85.2	84.7	83.5	79.2	78.0	77.3	79.1	74.8
1000	80.5	78.3	82.0	77.4	79.6	82.1	80.5	80.1	79.4	80.6	82.1	82.4	81.8	80.8	76.8	75.5	74.9	76.8	72.4
1250	78.1	75.8	79.5	74.8	77.1	79.6	78.0	77.6	76.7	77.8	79.2	79.4	78.7	78.0	74.2	73.0	72.3	74.3	69.9
1600	75.6	73.2	76.9	72.1	74.5	77.0	75.4	75.1	73.8	75.0	76.1	76.3	75.5	75.1	71.6	70.3	69.7	71.8	67.4
2000	73.0	70.6	74.2	69.3	71.8	74.3	72.8	72.4	70.9	72.0	72.9	73.1	72.1	72.0	68.8	67.5	66.9	69.2	64.7
2500	69.7	67.4	71.1	66.2	68.7	71.4	69.8	69.5	67.8	68.8	69.5	69.6	68.5	68.7	65.9	64.5	63.9	66.3	61.7
3150	65.9	64.0	67.8	62.9	65.5	68.2	66.7	66.5	64.4	65.4	66.0	66.0	64.8	65.2	62.7	61.3	60.7	63.3	58.5
4000	61.9	60.3	64.3	59.2	61.9	64.6	63.2	63.1	60.7	61.7	62.2	62.0	60.8	61.4	59.2	57.7	57.1	59.9	54.9
5000	57.3	56.2	60.3	55.2	57.9	60.7	59.3	59.3	56.7	57.6	58.0	57.7	56.4	57.2	55.2	53.8	53.2	56.1	51.0
6300	52.7	51.8	56.1	50.9	53.5	56.4	55.1	55.1	52.3	53.2	53.5	53.1	51.8	52.7	50.9	49.4	48.8	51.9	46.7
8000	49.2	47.9	51.9	46.6	49.3	52.2	50.9	51.0	47.9	48.7	48.9	48.6	47.3	48.4	46.8	45.3	44.7	47.8	42.7
10000	45.3	43.7	47.3	42.0	44.8	47.7	46.4	46.3	43.1	43.7	44.0	43.8	42.5	43.8	42.4	40.8	40.1	43.2	38.2
12500	41.2	39.1	42.3	37.8	39.9	42.7	41.4	41.2	38.0	38.3	38.6	38.7	37.4	38.9	37.5	35.8	35.1	38.1	33.4
16000	36.7	34.1	36.9	31.6	34.6	37.3	35.9	35.4	32.3	32.4	32.7	33.3	32.0	33.5	32.1	30.4	29.7	32.4	28.2
20000	31.9	28.8	31.1	25.9	28.9	31.3	29.9	29.0	26.3	26.0	26.4	27.4	26.1	27.7	26.2	24.6	23.9	26.2	22.5
25000	26.6	23.1	25.8	19.8	22.7	24.9	23.4	22.8	19.8	19.2	19.7	21.3	20.0	21.5	19.8	18.6	18.0	19.5	16.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 03
AIRCRAFT CODE 730
OPERATION CODE 00104
PROFILE VERSION A
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NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
MILITARY POWER 97% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.1	93.3	98.7	94.5	95.5	97.8	96.1	95.8	96.4	98.1	99.6	100.0	99.9	98.5	93.5	92.2	90.6	92.2	87.9
250	94.1	91.3	96.6	92.3	93.4	95.6	94.0	93.7	94.1	95.9	97.4	97.8	97.6	96.3	91.3	90.0	88.5	90.1	85.8
315	92.0	89.2	94.4	90.1	91.2	93.5	91.8	91.5	91.8	93.6	95.0	95.4	95.2	94.8	89.1	87.8	86.3	88.0	83.7
400	90.0	87.1	92.3	87.9	89.0	91.3	89.7	89.3	89.5	91.3	92.6	93.9	92.8	91.7	86.9	85.6	84.1	85.9	81.5
500	87.9	85.0	90.1	85.6	86.7	89.1	87.4	87.1	87.1	88.9	90.1	90.5	90.2	89.3	84.6	83.3	81.9	83.7	79.3
630	85.8	82.8	87.8	83.3	84.4	86.8	85.2	84.8	84.6	86.4	87.6	87.9	87.5	86.8	82.3	81.0	79.6	81.4	77.1
800	83.6	80.6	85.5	80.9	82.1	84.5	82.8	82.5	82.0	83.8	84.9	85.2	84.7	84.2	79.9	78.6	77.3	79.1	74.8
1000	81.4	78.3	83.1	78.5	79.6	82.1	80.5	80.1	79.4	81.1	82.1	82.4	81.8	81.5	77.4	76.2	74.9	76.8	72.4
1250	79.0	75.8	80.6	75.9	77.1	79.6	78.0	77.6	76.7	78.4	79.2	79.4	78.7	78.7	74.9	73.6	72.3	74.3	69.9
1600	76.5	73.2	78.0	73.2	74.5	77.0	75.4	75.1	73.8	75.5	76.1	76.3	75.5	75.7	72.2	70.9	69.7	71.8	67.4
2000	73.9	70.6	75.3	70.4	71.8	74.3	72.8	72.4	70.9	72.5	72.9	73.1	72.1	72.6	69.5	68.1	66.9	69.2	64.7
2500	70.6	67.4	72.3	67.3	68.7	71.4	69.8	69.5	67.8	69.3	69.5	69.6	68.5	69.4	66.5	65.1	63.9	66.3	61.7
3150	66.8	64.0	69.0	64.0	65.5	68.2	66.7	66.5	64.4	65.9	66.0	66.0	64.8	65.9	63.4	61.9	60.7	63.3	58.5
4000	62.6	60.3	65.2	60.1	61.9	64.6	63.2	63.1	60.7	62.1	62.2	62.0	60.8	61.9	59.7	58.2	57.1	59.9	54.9
5000	57.9	56.2	61.0	55.9	57.9	60.7	59.3	59.3	56.7	58.0	58.0	57.7	56.4	57.6	55.6	54.1	53.2	56.1	51.0
6300	53.1	51.8	56.5	51.3	53.5	56.4	55.1	55.1	52.3	53.4	53.5	53.1	51.8	52.9	51.2	49.7	48.8	51.9	46.7
8000	49.3	47.9	52.1	46.9	49.3	52.2	50.9	51.0	47.9	48.8	48.9	48.6	47.3	48.5	47.0	45.4	44.7	47.8	42.7
10000	45.3	43.7	47.3	42.0	44.8	47.7	46.4	46.3	43.1	43.7	44.0	43.8	42.5	43.8	42.4	40.8	40.1	43.2	38.2
12500	41.2	39.1	42.3	37.0	39.9	42.7	41.4	41.2	38.0	38.3	38.6	38.7	37.4	38.9	37.5	35.8	35.1	38.1	33.4
16000	36.7	34.1	36.9	31.6	34.6	37.3	35.9	35.4	32.3	32.4	32.7	33.3	32.0	33.5	32.1	30.4	29.7	32.4	28.2
20000	31.9	28.8	31.1	25.9	28.9	31.3	29.9	29.0	26.3	26.0	26.4	27.4	26.1	27.7	26.2	24.6	23.9	26.2	22.5
25000	26.6	23.1	25.0	19.8	22.7	24.9	23.4	22.0	19.8	19.2	19.7	21.3	20.0	21.5	19.8	18.6	18.0	19.5	16.7

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
MILITARY POWER 97% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 03
AIRCRAFT CODE 730
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
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P=PNLT A=AL T=ALT

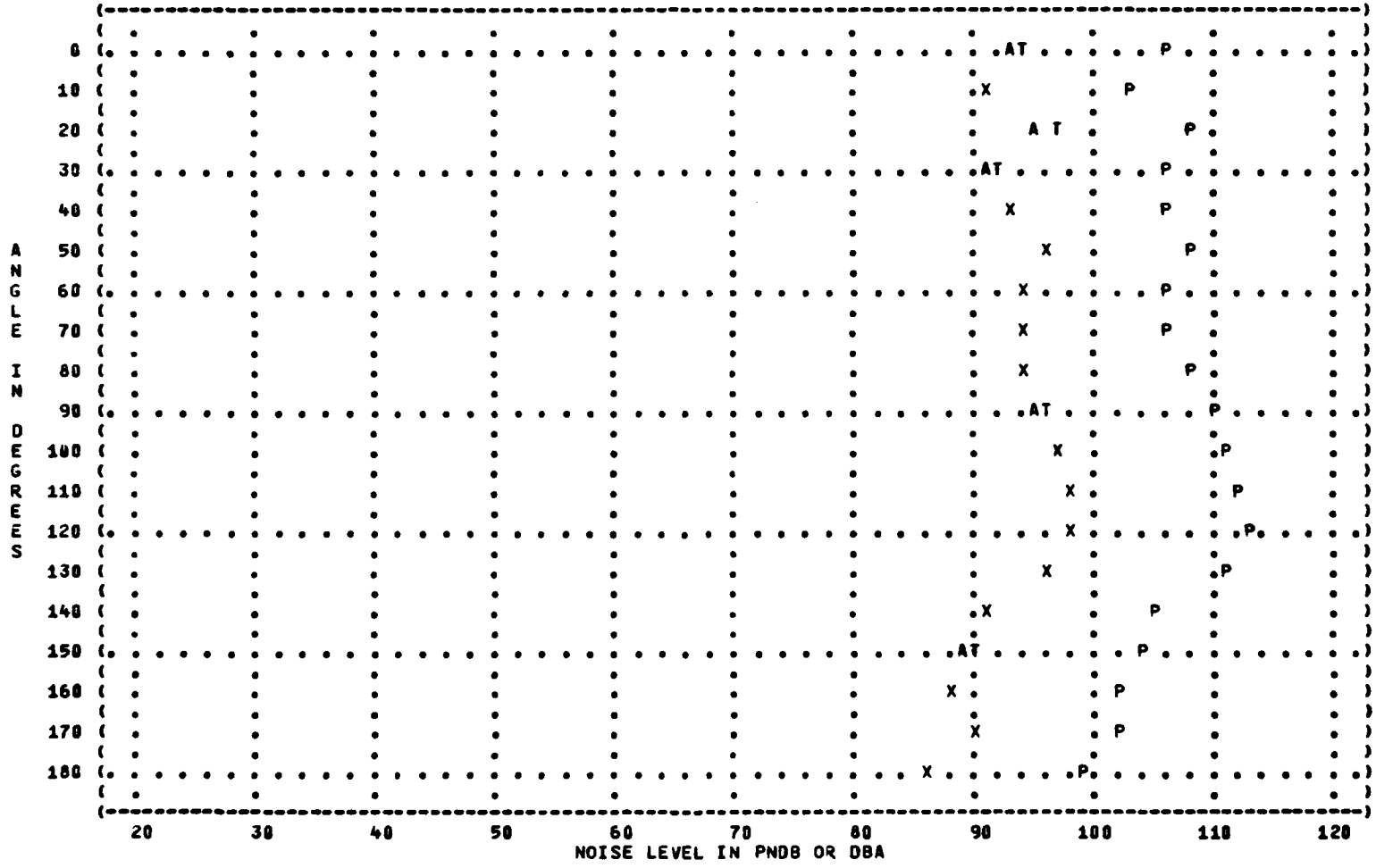


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 04
AIRCRAFT CODE 730
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE C4

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

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.8 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 04
AIRCRAFT CODE 730
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE D4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	110.6	106.5	111.9	111.2	110.4	112.5	110.0	109.3	113.1	113.7	113.4	115.7	116.0	113.8	109.5	109.0	108.6	106.4	106.3
250	108.5	104.4	109.7	109.0	108.2	110.3	107.8	107.0	110.8	111.4	111.1	113.4	113.8	111.6	107.3	106.8	106.4	104.2	104.2
315	106.4	102.2	107.4	106.7	106.0	108.1	105.5	104.7	108.5	109.1	108.8	111.1	111.4	109.2	105.0	104.6	104.2	102.1	102.0
400	104.2	100.0	105.1	104.4	103.6	105.8	103.2	102.3	106.1	106.7	106.3	108.7	109.0	106.9	102.7	102.3	101.9	99.8	99.8
500	102.0	97.7	102.7	102.0	101.2	103.4	100.8	99.9	103.6	104.2	103.8	106.1	106.4	104.4	100.3	99.9	99.6	97.4	97.5
630	99.7	95.3	100.1	99.4	98.6	100.9	98.3	97.4	101.1	101.5	101.1	103.4	103.7	101.7	97.7	97.3	97.1	95.0	95.0
800	97.3	92.9	97.4	96.7	95.9	98.3	95.7	94.8	98.4	98.7	98.3	100.6	100.9	98.9	95.8	94.6	94.6	92.4	92.5
1000	94.9	90.4	94.5	93.8	93.1	95.6	93.0	92.0	95.6	95.7	95.2	97.5	97.8	95.9	92.2	91.8	91.8	89.7	89.9
1250	92.3	87.7	91.6	90.7	90.1	92.7	90.1	89.1	92.6	92.6	92.1	94.2	94.5	92.7	89.2	88.7	89.8	86.9	87.1
1600	89.6	84.9	88.4	87.5	87.0	89.6	87.0	86.0	89.4	89.2	88.7	90.7	90.9	89.3	86.0	85.4	86.0	84.0	84.2
2000	86.7	81.9	85.0	84.0	83.8	86.3	83.7	82.6	85.9	85.6	85.0	87.0	87.0	85.6	82.6	82.0	82.8	80.8	81.0
2500	83.0	78.0	81.3	80.2	80.3	82.7	80.2	79.2	82.3	81.7	80.9	82.9	82.9	81.6	78.9	78.2	79.3	77.4	77.6
3150	78.8	73.7	77.2	76.1	76.6	78.7	76.4	75.5	78.6	77.6	76.7	78.3	78.5	77.4	75.0	74.2	75.5	73.7	73.6
4000	74.0	68.8	72.6	71.6	72.4	74.3	72.2	71.4	74.4	73.4	72.4	73.2	73.6	73.0	70.7	69.8	71.4	69.6	69.1
5000	68.7	63.4	67.7	67.0	67.8	69.8	67.7	66.9	69.9	68.7	67.7	68.2	68.3	68.3	66.0	65.1	66.7	65.0	64.3
6300	63.2	57.7	62.6	62.0	62.8	64.8	62.8	61.9	64.9	63.6	62.5	63.0	63.1	63.1	60.9	59.9	61.8	60.0	59.2
8000	59.4	53.7	57.8	57.2	58.3	60.2	58.1	57.1	60.2	58.9	57.7	58.1	58.2	58.5	56.4	55.4	57.3	55.4	54.8
10000	55.1	49.0	52.4	51.7	53.1	55.1	52.7	51.8	54.9	53.5	52.2	52.5	52.9	53.2	51.2	50.3	52.4	50.1	50.1
12500	50.7	44.3	45.7	44.9	47.2	48.9	46.8	45.9	49.0	47.3	45.9	46.2	46.5	47.2	44.8	44.1	46.0	44.4	44.5
16000	45.9	38.6	38.5	38.6	40.8	42.2	39.5	38.3	42.1	40.0	38.7	38.7	38.8	40.6	38.1	36.5	38.8	37.7	38.0
20000	48.0	32.4	30.6	31.0	33.6	34.6	30.7	29.8	33.3	31.0	29.9	30.5	31.8	33.8	30.7	29.4	31.8	29.8	31.3
25000	33.0	24.7	19.5	19.6	25.2	26.3	20.0	16.5	23.8	18.4	18.7	20.4	21.7	25.4	19.9	17.1	21.5	20.5	21.0

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 04
AIRCRAFT CODE 730
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE E4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	111.6	107.4	111.9	111.2	110.4	112.5	110.0	109.3	113.1	113.7	113.4	115.7	116.0	114.4	109.5	109.0	108.6	106.4	106.3
250	109.5	105.3	109.7	109.0	108.2	110.3	107.8	107.0	110.8	111.4	111.1	113.4	113.8	112.2	107.3	106.8	106.4	104.2	104.2
315	107.4	103.1	107.4	106.7	106.0	108.1	105.5	104.7	108.5	109.1	108.8	111.1	111.4	109.9	105.0	104.6	104.2	102.1	102.0
400	105.2	100.9	105.1	104.4	103.6	105.8	103.2	102.3	106.1	106.7	106.3	108.7	109.0	107.5	102.7	102.3	101.9	99.8	99.8
500	102.9	98.6	102.7	102.0	101.2	103.4	100.8	99.9	103.6	104.2	103.8	106.1	106.4	105.0	100.3	99.9	99.6	97.4	97.5
630	100.6	96.2	100.1	99.4	98.6	100.9	98.3	97.4	101.1	101.5	101.1	103.4	103.7	102.3	97.7	97.3	97.1	95.0	95.0
800	98.3	93.8	97.4	96.7	95.9	98.3	95.7	94.8	98.4	98.7	98.3	100.6	100.9	99.5	95.0	94.6	94.6	92.4	92.5
1000	95.8	91.3	94.5	93.8	93.1	95.6	93.0	92.0	95.6	95.7	95.2	97.5	97.8	96.5	92.2	91.8	91.8	89.7	89.9
1250	93.2	88.6	91.6	90.7	90.1	92.7	90.1	89.1	92.6	92.6	92.1	94.2	94.5	93.3	89.2	88.7	89.0	86.9	87.1
1600	90.5	85.8	88.4	87.5	87.0	89.6	87.0	86.0	89.4	89.2	88.7	90.7	90.9	89.9	86.0	85.4	86.0	84.0	84.2
2000	87.7	82.8	85.0	84.0	83.8	86.3	83.7	82.6	85.9	85.6	85.0	87.0	87.0	86.2	82.6	82.0	82.8	80.8	81.0
2500	83.9	78.9	81.3	80.2	80.3	82.7	80.2	79.2	82.3	81.7	80.9	82.9	82.9	82.2	78.9	78.2	79.3	77.4	77.6
3150	79.7	74.6	77.2	76.1	76.6	78.7	76.4	75.5	78.6	77.6	76.7	78.3	78.5	78.0	75.0	74.2	75.5	73.7	73.6
4000	74.8	69.5	72.6	71.6	72.4	74.3	72.2	71.4	74.4	73.4	72.4	73.2	73.6	73.5	70.7	69.8	71.4	69.6	69.1
5000	69.3	63.9	67.7	67.0	67.8	69.8	67.7	66.9	69.9	68.7	67.7	68.2	68.3	68.7	66.0	65.1	66.7	65.0	64.3
6300	63.6	58.1	62.6	62.0	62.8	64.8	62.8	61.9	64.9	63.6	62.5	63.8	63.1	63.3	60.9	59.9	61.8	60.0	59.2
8000	59.6	53.9	57.8	57.2	58.3	60.2	58.1	57.1	60.2	58.9	57.7	58.1	58.2	58.7	56.4	55.4	57.3	55.4	54.8
10000	55.1	49.0	52.4	51.7	53.1	55.1	52.7	51.8	54.9	53.5	52.2	52.5	52.9	53.2	51.2	50.3	52.4	50.1	50.1
12500	50.7	44.3	45.7	44.9	47.2	48.9	46.8	45.9	49.0	47.3	45.9	46.2	46.5	47.2	44.8	44.1	46.0	44.4	44.5
16000	45.9	38.6	38.5	38.6	40.8	42.2	39.5	38.3	42.1	40.0	38.7	38.7	38.8	40.6	38.1	36.5	38.7	37.7	38.0
20000	40.0	32.4	30.6	31.0	33.6	34.6	30.7	29.8	33.3	31.0	29.9	30.5	31.8	33.8	30.7	29.4	31.8	29.8	31.3
25000	33.0	24.7	19.5	19.6	25.2	26.3	20.0	16.5	23.8	18.4	18.7	20.4	21.7	25.4	19.9	17.1	21.5	20.5	21.0

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 04
AIRCRAFT CODE 730
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE F4

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	98.2	92.8	98.7	97.8	98.8	100.4	98.6	97.6	100.7	100.2	99.5	101.2	101.4	99.4	96.2	95.3	96.2	94.4	93.7
250	96.1	90.8	96.5	95.7	95.9	98.3	96.5	95.5	98.6	98.0	97.3	99.0	99.1	97.2	94.0	93.2	94.1	92.3	91.6
315	94.1	88.7	94.3	93.5	93.7	96.1	94.3	93.3	96.4	95.8	95.0	96.7	96.8	95.0	91.9	91.0	92.0	90.2	89.5
400	92.0	86.6	92.1	91.3	91.5	93.9	92.2	91.1	94.2	93.5	92.7	94.3	94.4	92.7	89.7	88.8	89.8	88.0	87.4
500	89.9	84.5	89.9	89.0	89.3	91.7	89.9	88.9	91.9	91.2	90.3	91.9	91.9	90.4	87.4	86.5	87.7	85.9	85.2
630	87.7	82.3	87.5	86.7	87.1	89.4	87.7	86.6	89.5	88.7	87.9	89.4	89.4	88.0	85.1	84.3	85.4	83.7	83.0
800	85.6	80.1	85.2	84.3	84.7	87.1	85.3	84.3	87.2	86.3	85.3	86.7	86.7	85.5	82.8	81.9	83.1	81.4	80.7
1000	83.4	77.8	82.7	81.9	82.4	84.7	82.9	81.9	84.7	83.7	82.7	84.0	84.0	83.0	80.4	79.5	80.8	79.1	78.4
1250	81.0	75.4	80.1	79.3	79.9	82.1	80.5	79.4	82.1	81.0	80.0	81.2	81.1	80.3	77.9	76.9	78.4	76.7	76.0
1600	78.5	72.8	77.4	76.7	77.3	79.5	77.9	76.8	79.5	78.3	77.2	78.2	78.1	77.5	75.2	74.3	75.8	74.2	73.5
2000	76.0	70.2	74.6	73.9	74.7	76.8	75.2	74.1	76.7	75.4	74.3	75.2	75.0	74.7	72.5	71.6	73.2	71.5	70.9
2500	72.7	66.9	71.5	70.9	71.0	73.9	72.3	71.2	73.0	72.4	71.3	71.9	71.7	71.6	69.6	68.6	70.3	68.8	68.0
3150	69.1	63.2	68.2	67.6	68.7	70.7	69.2	68.1	70.7	69.2	68.0	68.5	68.3	68.3	66.4	65.4	67.2	65.0	64.0
4000	65.2	59.2	64.6	64.1	65.2	67.3	65.9	64.0	67.3	65.7	64.5	64.0	64.6	64.7	62.9	61.0	63.0	62.4	61.3
5000	60.9	54.7	60.6	60.1	61.3	63.4	62.0	61.0	63.4	61.0	60.6	60.0	60.5	60.7	58.9	57.9	59.9	58.5	57.3
6300	56.3	50.2	56.3	55.7	57.0	59.1	57.0	56.7	59.2	57.5	56.3	56.3	56.0	56.3	54.6	53.5	55.6	54.2	53.1
8000	52.6	46.4	51.9	51.4	52.9	54.0	53.5	52.5	54.9	53.2	52.0	52.1	51.7	52.2	50.6	49.4	51.6	50.2	49.1
10000	48.6	42.4	47.0	46.7	48.4	50.2	48.0	47.7	50.3	48.5	47.4	47.5	47.1	47.0	46.1	45.0	47.1	45.9	44.0
12500	44.3	38.1	41.7	41.6	43.5	45.1	43.5	42.4	45.1	43.2	42.3	42.4	42.1	43.0	41.3	40.1	42.2	41.1	40.2
16000	39.6	33.5	35.0	36.0	38.0	39.5	37.6	36.5	39.3	37.4	36.7	36.0	36.6	37.7	36.0	34.0	36.9	35.9	35.1
20000	34.6	28.6	29.6	30.0	32.1	33.3	31.1	30.0	32.9	31.0	30.4	30.7	30.6	31.9	30.1	29.1	31.0	30.0	29.5
25000	29.1	23.4	23.2	23.6	25.6	26.5	24.0	22.0	25.0	24.0	23.5	23.9	24.1	25.5	23.9	23.1	24.7	23.7	23.7

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-801
RUN 04
AIRCRAFT CODE 730
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE G4

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	99.1	93.7	98.7	97.8	98.0	100.4	98.6	97.6	100.7	100.2	99.5	101.2	101.4	100.0	96.2	95.3	96.2	94.4	93.7
250	97.1	91.7	96.5	95.7	95.9	98.3	96.5	95.5	98.6	98.0	97.3	99.0	99.1	97.8	94.8	93.2	94.1	92.3	91.6
315	95.0	89.6	94.3	93.5	93.7	96.1	94.3	93.3	96.4	95.8	95.0	96.7	96.8	95.6	91.9	91.0	92.0	90.2	89.5
400	92.9	87.5	92.1	91.3	91.5	93.9	92.2	91.1	94.2	93.5	92.7	94.3	94.4	93.3	89.7	88.8	89.8	88.0	87.4
500	90.8	85.4	89.9	89.0	89.3	91.7	89.9	88.9	91.9	91.2	90.3	91.9	91.9	91.0	87.4	86.5	87.7	85.9	85.2
630	88.7	83.2	87.5	86.7	87.1	89.4	87.7	86.6	89.5	88.7	87.9	89.4	89.4	88.6	85.1	84.3	85.4	83.7	83.0
800	86.5	81.0	85.2	84.3	84.7	87.1	85.3	84.3	87.2	86.3	85.3	86.7	86.7	86.1	82.8	81.9	83.1	81.4	80.7
1000	84.3	78.7	82.7	81.9	82.4	84.7	82.9	81.9	84.7	83.7	82.7	84.3	84.8	83.6	80.4	79.5	80.8	79.1	78.4
1250	81.9	76.3	80.1	79.3	79.9	82.1	80.5	79.4	82.1	81.0	80.0	81.2	81.1	80.9	77.9	76.9	78.4	76.7	76.0
1600	79.5	73.7	77.4	76.7	77.3	79.5	77.9	76.8	79.5	78.3	77.2	78.2	78.1	78.2	75.2	74.3	75.8	74.2	73.5
2000	77.0	71.1	74.6	73.9	74.7	76.8	75.2	74.1	76.7	75.4	74.3	75.2	75.8	75.3	72.5	71.6	73.2	71.6	70.9
2500	73.7	67.8	71.5	70.9	71.8	73.9	72.3	71.2	73.8	72.4	71.3	71.9	71.7	72.2	69.6	68.6	70.3	68.8	68.0
3150	70.1	64.1	68.2	67.6	68.7	70.7	69.2	68.1	70.7	69.2	68.0	68.5	68.3	68.9	66.4	65.4	67.2	65.8	64.8
4000	66.0	59.9	64.6	64.1	65.2	67.3	65.9	64.8	67.3	65.7	64.5	64.8	64.6	65.2	62.9	61.8	63.8	62.4	61.3
5000	61.4	55.3	60.6	60.1	61.3	63.4	62.0	61.0	63.4	61.8	60.6	60.8	60.5	61.1	58.9	57.9	59.9	58.5	57.3
6300	56.7	50.5	56.3	55.7	57.0	59.1	57.8	56.7	59.2	57.5	56.3	56.3	56.0	56.6	54.6	53.5	55.6	54.2	53.1
8000	52.8	46.6	51.9	51.4	52.9	54.8	53.5	52.5	54.9	53.2	52.0	52.1	51.7	52.4	50.6	49.4	51.6	50.2	49.1
10000	48.6	42.4	47.0	46.7	48.4	50.2	48.8	47.7	50.3	48.5	47.4	47.5	47.1	47.8	46.1	45.0	47.1	45.9	44.8
12500	44.3	38.1	41.7	41.6	43.5	45.1	43.5	42.4	45.1	43.2	42.3	42.4	42.1	43.0	41.3	40.1	42.2	41.1	40.2
16000	39.6	33.5	35.8	36.0	38.0	39.5	37.6	36.5	39.3	37.4	36.7	36.8	36.6	37.7	36.0	34.8	36.9	35.9	35.1
20000	34.6	28.6	29.6	30.0	32.1	33.3	31.1	30.0	32.9	31.0	30.4	30.7	30.6	31.9	30.1	29.1	31.0	30.0	29.5
25000	29.1	23.4	23.2	23.6	25.6	26.5	24.0	22.8	25.8	24.0	23.5	23.9	24.1	25.6	23.9	23.1	24.7	23.7	23.7

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

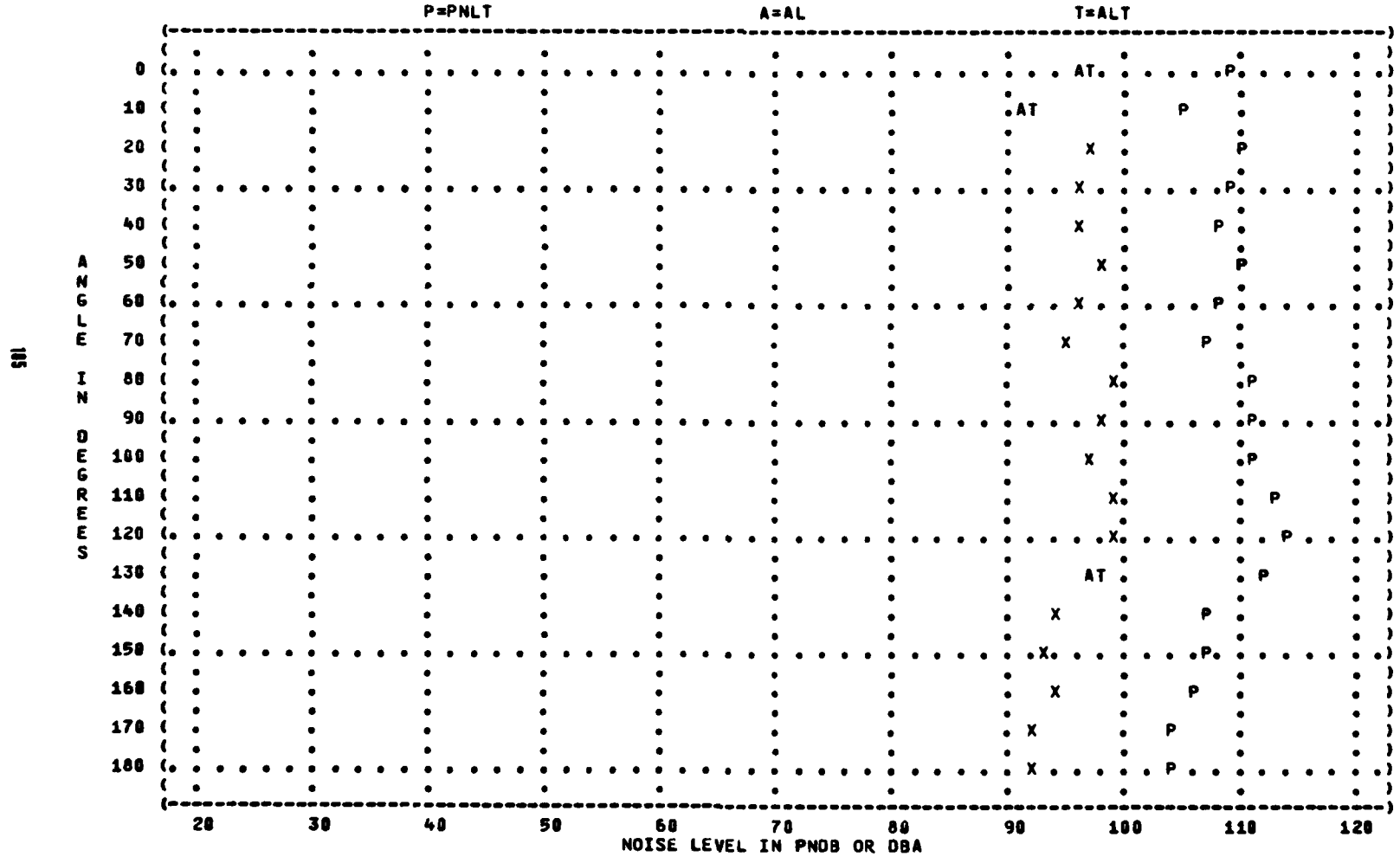
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-100 NOISE SUPPRESSOR
AF32A-16

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-730-001
RUN 04
AIRCRAFT CODE 730
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE J4



NOISE PRODUCED ON THE GROUND BY

F-106 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-778-001
AIRCRAFT CODE: 778
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting — Page

Idle Power, 59% RPM 187-192
Engine Runup, 85% RPM 193-198
Engine Runup, 95% RPM 199-204
Military Power, 100% RPM 205-210
Afterburner Power 211-216

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
NORMALIZED SPL AT 250 FEET
NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
PERCEIVED NOISE LEVEL
TONE-CORRECTED, PERCEIVED NOISE LEVEL
A-WEIGHTED OVERALL SOUND LEVEL
TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL
NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

A E R O S P A C E M E D I C A L R E S E A R C H L A B O R A T O R Y
W R I G H T - P A T T E R S O N A I R F O R C E B A S E , O H I O

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 01

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

AIRCRAFT CODE 778
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE C1

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	68	65	67	68	69	68	67	69	64	63	64	66	69	68	66	67	65	67	66
63	71	67	72	75	78	75	73	72	70	69	71	70	73	72	72	68	66	69	68
80	67	69	70	67	69	67	67	66	67	67	68	68	68	69	69	69	63	64	63
100	65	64	67	65	67	66	66	66	66	67	66	65	66	66	65	64	63<	63	62
125	66	65	69	70	71	69	70	69	68	68	69	67	68	67	68	63	62	66	66
160	65	61	65	65	64	64	65	63	63	64	63	62	63	62	62	60	58	60	60
200	64	64	65	64	64	64	63	64	64	64	64	63	62	62	60	58	57	61	63
250	63	64	65	67	65	63	61	62	64	67	64	62	62	59	58	57	57	59	58
315	68	65	68	67	63	64	63	66	71	68	64	64	61	59	59	56	55	55	57
400	64	61	64	63	63	61	61	62	65	62	62	62	60	58	55	52	50	51	55
500	63	61	64	64	62	62	62	63	67	63	63	61	60	57	55	53	49	52	54
630	66	61	62	63	66	62	63	65	65	64	63	63	60	58	57	58	52	58	60
800	64	60	62	63	67	62	62	63	64	64	61	61	59	61	60	59	54	57	57
1000	68	61	67	68	71	66	62	63	63	66	63	62	61	65	70	65	61	63	56
1250	68	63	68	68	68	63	62	64	63	64	67	63	67	68	75	68	65	63	53
1600	64	63	66	64	68	64	66	66	67	61	68	67	66	71	70	70	65	63	52
2000	63	61	62	61	64	61	67	63	67	60	66	67	66	69	68	68	65	62	49
2500	61	59	60	57	62	59	61	60	65	56	65	62	62	63	63	60	57	56	46
3150	64	62	64	58	64	62	63	62	67	57	68	65	63	63	63	62	57	58	48
4000	63	62	62	59	65	63	63	63	68	57	70	66	63	65	63	62	56	57	47
5000	57	58	56	54	63	61	61	60	64	53	65	63	58	59	57	56	54	54	43
6300	54	54	53	53	63	62	61	61	64	53	65	63	59	58	58	53	53	52	46
8000	49	48	48	46	54	56	54	53	58	48	59	57	52	50	50	47	44	43	41
10000	44	44	44	43	51	52	49	50	54	47	54	53	49	46	46	44	40	39	46
OVERALL	79	77	79	80	82	80	79	79	80	78	80	78	79	79	81	78	75	75	74

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 01
AIRCRAFT CODE 778
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE D1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	90.9	88.7	90.9	88.7	92.8	90.7	90.8	90.7	94.2	87.4	94.7	92.4	90.4	91.9	92.0	90.0	86.8	85.8	79.7
250	88.6	86.4	88.6	86.5	90.4	88.4	88.6	88.4	91.9	85.1	92.3	90.0	88.0	89.6	89.8	87.8	84.6	83.5	77.4
315	86.3	84.0	86.3	84.2	88.0	86.0	86.2	86.0	89.5	82.8	89.9	87.6	85.7	87.4	87.5	85.5	82.3	81.2	75.1
400	83.9	81.6	83.8	81.9	85.5	83.4	83.9	83.5	86.9	80.4	87.3	85.1	83.2	85.3	85.2	83.1	79.9	78.9	72.8
500	81.3	79.1	81.3	79.5	82.9	80.8	81.4	80.9	84.3	78.0	84.7	82.4	80.7	82.6	82.8	80.7	77.5	76.4	70.3
630	78.7	76.4	78.7	77.0	80.3	78.0	78.8	78.1	81.5	75.4	81.9	79.6	78.1	80.0	80.3	78.2	74.9	73.8	67.8
800	75.9	73.6	75.9	74.3	77.6	75.0	76.1	75.3	78.6	72.8	78.8	76.6	75.4	77.4	77.7	75.6	72.2	71.2	65.1
1000	73.6	70.6	73.0	71.6	74.8	71.8	73.2	72.4	75.5	69.9	75.8	73.6	72.5	74.7	75.0	72.8	69.3	68.3	62.3
1250	69.7	67.2	69.7	68.6	71.8	68.8	70.1	69.4	72.2	66.8	72.4	70.5	69.4	71.7	72.1	69.8	66.2	65.2	59.3
1600	66.2	63.8	66.4	65.4	68.5	65.4	66.7	66.0	68.5	63.5	68.7	67.0	66.0	68.4	69.0	66.6	62.8	61.9	55.9
2000	62.6	60.2	62.8	61.9	65.0	61.7	63.0	62.5	64.9	60.1	64.6	63.4	62.4	64.9	65.6	63.1	59.2	58.3	52.2
2500	58.9	56.1	59.0	58.1	61.0	57.7	58.9	58.5	60.9	56.4	60.5	59.4	58.3	61.0	61.9	59.2	55.0	54.2	47.8
3150	54.6	51.4	54.4	53.9	56.7	53.0	54.2	53.9	56.3	51.9	55.9	54.8	53.6	56.6	57.8	54.8	50.2	49.6	43.4
4000	49.6	45.6	49.1	48.8	51.6	47.2	48.6	48.5	51.1	46.7	50.7	49.6	48.4	51.7	53.3	50.2	45.0	43.6	37.6
5000	44.3	39.2	43.6	43.4	46.3	41.3	42.1	42.3	44.8	41.7	44.5	43.3	42.1	46.3	48.4	44.5	38.3	37.2	31.0
6300	38.5	32.2	37.4	37.3	40.5	35.1	34.6	35.6	38.0	35.5	37.5	36.2	35.3	39.1	42.7	37.2	30.6	29.9	22.9
8000	32.2	22.1	30.5	31.0	34.6	27.5	26.0	29.1	31.9	28.9	30.1	27.2	27.4	31.0	36.0	29.2	21.6	21.2	14.7
10000	23.3	9.7	20.9	21.9	27.1	17.3	14.7	19.0	22.8	19.1	18.8	16.7	9.8	18.1	27.5	15.8	12.5	7.3	6.6
12500	11.8		6.9	12.7	14.9	7.1	3.3	7.0	12.8	9.3	7.6	6.2		5.2	15.3	2.3	3.5		
16000	.4			3.6	2.7				2.8						3.1				
20000																			
25000																			

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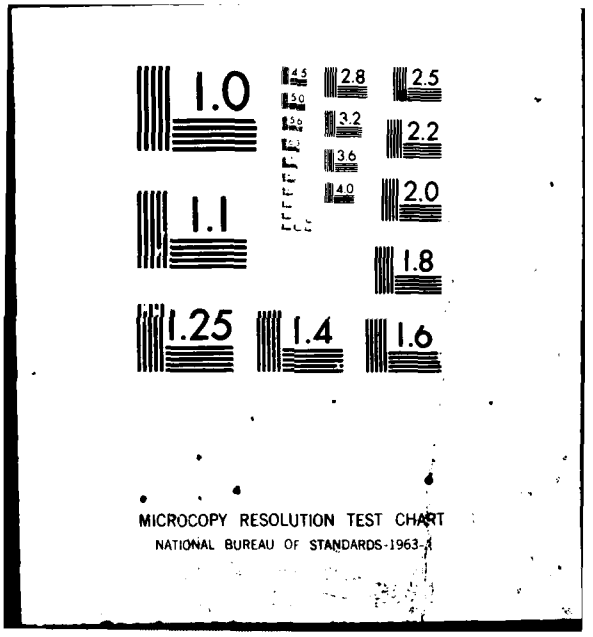
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-881
RUN 01
AIRCRAFT CODE 778
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	91.8	88.7	91.9	89.6	93.9	91.5	91.9	91.5	95.2	87.9	95.7	93.0	91.0	93.8	94.0	90.0	88.3	86.5	81.3
250	89.5	86.4	89.6	87.4	91.6	89.1	89.7	89.2	92.9	85.6	93.4	90.6	88.7	90.7	91.8	87.8	86.0	84.3	79.0
315	87.1	84.0	87.3	85.1	89.2	86.7	87.3	86.8	90.5	83.3	90.9	88.2	86.3	88.4	89.5	85.5	83.7	82.0	76.7
400	84.7	81.6	84.9	82.7	86.7	84.2	84.9	84.3	87.9	81.0	88.4	85.7	83.9	86.1	87.2	83.1	81.4	79.6	74.3
500	82.2	79.1	82.3	80.3	84.1	81.5	82.5	81.7	85.3	78.5	85.7	83.0	81.3	83.7	84.8	80.7	78.9	77.1	71.9
630	79.6	76.4	79.7	77.8	81.4	78.7	79.9	78.9	82.5	76.0	82.9	80.2	78.7	81.1	82.3	78.2	76.4	74.6	69.4
800	76.8	73.6	76.9	75.2	78.7	75.7	77.2	76.1	79.5	73.3	79.9	77.2	76.0	78.5	79.7	75.6	73.7	71.9	66.7
1000	73.9	70.6	74.0	72.4	75.9	72.6	74.3	73.2	76.5	70.5	76.8	74.2	73.2	75.8	77.0	72.8	70.8	69.0	63.8
1250	70.6	67.2	70.7	69.5	72.9	69.5	71.2	70.2	73.2	67.3	73.4	71.1	70.1	72.7	74.1	69.8	67.7	66.0	60.8
1600	67.0	63.8	67.4	66.2	69.7	66.1	67.8	66.8	69.5	64.1	69.7	67.7	66.7	69.5	70.9	66.6	64.3	62.7	57.4
2000	63.5	60.2	63.8	62.8	66.1	62.5	64.1	63.3	65.9	60.7	65.7	64.0	63.0	66.0	67.6	63.1	60.6	59.0	53.7
2500	59.7	56.1	60.0	59.0	62.2	58.4	60.0	59.3	61.9	56.9	61.6	60.0	58.9	62.1	63.9	59.2	56.4	55.0	49.4
3150	55.4	51.4	55.5	54.7	57.8	53.7	55.3	54.7	57.2	52.5	56.9	55.4	54.3	57.7	59.8	54.8	51.6	50.3	44.9
4000	50.3	45.6	50.8	49.5	52.5	47.7	49.4	49.1	51.9	47.2	51.6	50.1	48.9	52.6	54.9	50.2	46.1	44.2	38.9
5000	44.8	39.2	44.2	43.9	47.0	41.7	42.7	42.8	45.4	42.0	45.1	43.7	42.5	47.0	49.6	44.5	39.1	37.6	32.0
6300	38.8	32.2	37.8	37.7	40.9	35.4	35.0	35.9	38.3	35.7	37.9	36.5	35.6	39.5	43.5	37.2	31.2	30.2	23.5
8000	32.4	22.1	30.7	31.2	34.8	27.7	26.3	29.3	32.0	29.0	30.3	27.3	27.5	31.2	36.4	29.2	21.8	21.4	15.0
10000	23.3	9.7	20.9	21.9	27.1	17.3	14.7	19.0	22.8	19.1	18.8	16.7	9.8	18.1	27.5	15.8	12.5	7.3	6.6
12500	11.8		6.9	12.7	14.9	7.1	3.3	7.0	12.8	9.3	7.6	6.2		5.2	15.3	2.3	3.5		
16000	.4			3.6	2.7				2.8						3.1				
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 01
AIRCRAFT CODE 778
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE F1

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	77.8	74.6	77.3	76.6	79.6	76.3	76.8	76.7	79.6	75.1	79.9	78.0	76.8	79.2	81.3	78.0	74.2	73.1	66.9
250	75.6	72.4	75.2	74.5	77.4	74.1	74.6	74.5	77.3	73.0	77.7	75.7	74.6	77.0	79.1	75.9	72.1	71.0	64.8
315	73.4	70.2	73.0	72.4	75.2	71.8	72.3	72.2	75.1	70.9	75.3	73.4	72.4	74.8	77.0	73.7	69.9	68.8	62.7
400	71.2	67.9	70.8	70.2	73.0	69.5	70.0	70.0	72.7	68.7	72.9	71.1	70.1	72.6	74.8	71.4	67.7	66.5	60.5
500	69.0	65.6	68.5	68.0	70.7	67.2	67.7	67.6	70.3	66.5	70.5	68.7	67.7	70.3	72.5	69.2	65.4	64.3	58.3
630	66.7	63.2	66.2	65.7	68.3	64.7	65.2	65.2	67.8	64.3	67.9	66.2	65.3	67.9	70.2	66.8	63.0	61.9	56.1
800	64.3	60.7	63.8	63.4	65.9	62.2	62.7	62.8	65.3	61.9	65.3	63.6	62.8	65.4	67.9	64.4	60.6	59.5	53.8
1000	61.8	58.2	61.4	61.0	63.4	59.7	60.1	60.2	62.6	59.6	62.5	60.9	60.2	62.8	65.4	61.8	58.0	56.9	51.4
1250	59.2	55.5	58.7	58.4	60.8	57.0	57.3	57.6	59.8	57.0	59.6	58.1	57.5	60.1	62.8	59.2	55.4	54.3	48.9
1600	56.6	52.7	56.0	55.8	58.1	54.2	54.5	54.8	56.9	54.4	56.6	55.2	54.7	57.3	60.1	56.4	52.6	51.5	46.3
2000	53.8	49.7	53.2	53.0	55.3	51.4	51.5	51.9	53.9	51.7	53.5	52.1	51.7	54.3	57.3	53.4	49.6	48.6	43.6
2500	50.8	46.6	50.1	50.1	52.4	48.3	48.3	48.8	50.6	48.7	50.1	48.9	48.5	51.1	54.3	50.2	46.4	45.5	40.7
3150	47.6	43.2	46.8	46.8	49.2	45.0	44.9	45.5	47.1	45.6	46.6	45.4	45.0	47.5	51.0	46.8	42.9	42.2	37.7
4000	44.1	39.5	43.2	43.3	45.7	41.5	41.1	41.9	43.3	42.1	42.8	41.5	41.2	43.7	47.4	43.0	39.1	38.6	34.2
5000	40.1	35.4	39.2	39.4	41.8	37.5	36.9	37.8	39.0	38.2	38.5	37.3	37.0	39.5	43.5	38.9	34.9	34.6	30.2
6300	35.9	30.9	34.9	35.1	37.6	33.2	32.3	33.4	34.5	33.9	34.0	32.6	32.4	34.8	39.1	34.2	30.3	30.2	25.9
8000	31.6	26.5	30.5	30.8	33.2	28.9	27.9	29.1	30.2	29.8	29.3	28.1	27.7	29.7	34.2	29.2	25.2	25.5	22.0
10000	26.9	21.8	25.6	26.0	28.3	24.2	23.2	24.5	25.8	25.2	24.3	23.2	22.5	24.2	28.6	23.7	19.6	20.4	17.8
12500	21.7	16.8	20.4	20.8	22.9	19.1	18.2	19.6	21.0	20.3	19.0	18.0	17.0	18.1	22.3	17.5	13.3	14.8	13.1
16000	16.1	11.4	14.8	15.1	17.0	13.6	12.8	14.3	15.9	14.8	13.4	12.6	11.3	11.7	15.1	10.9	6.6	8.7	8.0
20000	10.0	5.8	8.9	9.2	10.6	7.7	7.2	8.5	10.4	9.0	7.6	6.8	5.4	5.1	7.3	3.8		2.3	2.4
25000	3.6		2.9	3.1	4.1	1.7	1.3	2.5	4.5	2.8	1.6	.8							

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 01
AIRCRAFT CODE 778
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE G1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	78.6	74.6	78.4	77.5	80.8	77.0	77.9	77.5	80.6	75.7	81.0	78.6	77.4	80.3	83.2	78.0	75.7	73.9	68.5
250	76.5	72.4	76.2	75.4	78.6	74.8	75.7	75.3	78.4	73.6	78.7	76.3	75.2	78.1	81.1	75.9	73.5	71.7	66.4
315	74.3	70.2	74.0	73.2	76.4	72.5	73.4	73.0	76.1	71.4	76.4	74.1	73.0	75.9	79.0	73.7	71.3	69.5	64.3
400	72.1	67.9	71.8	71.1	74.1	70.2	71.1	70.8	73.7	69.3	74.0	71.7	70.7	73.7	76.8	71.4	69.1	67.3	62.1
500	69.8	65.6	69.6	68.8	71.8	67.9	68.7	68.4	71.3	67.1	71.5	69.3	68.4	71.4	74.5	69.2	66.8	65.0	59.9
630	67.5	63.2	67.2	66.6	69.5	65.4	66.3	66.0	68.8	64.8	69.0	66.8	66.0	69.8	72.2	66.8	64.4	62.6	57.6
800	65.1	60.7	64.9	64.2	67.1	63.0	63.8	63.6	66.3	62.5	66.3	64.2	63.5	66.5	69.8	64.4	62.0	60.2	55.3
1000	62.7	58.2	62.4	61.8	64.6	60.4	61.2	61.0	63.6	60.1	63.5	61.5	60.9	63.9	67.4	61.8	59.5	57.7	52.9
1250	60.1	55.5	59.8	59.3	62.0	57.7	58.4	58.4	60.8	57.6	60.6	58.7	58.2	61.2	64.8	59.2	56.8	55.0	50.4
1600	57.4	52.7	57.1	56.6	59.3	54.9	55.6	55.6	57.9	55.0	57.6	55.8	55.3	58.4	62.1	56.4	54.0	52.3	47.8
2000	54.6	49.7	54.2	53.9	56.5	52.1	52.6	52.7	54.9	52.2	54.5	52.7	52.3	55.4	59.3	53.4	51.0	49.4	45.2
2500	51.7	46.6	51.1	50.9	53.5	49.0	49.4	49.7	51.6	49.3	51.2	49.5	49.1	52.2	56.2	50.2	47.8	46.3	42.3
3150	48.5	43.2	47.8	47.7	50.3	45.8	46.0	46.3	48.1	46.1	47.6	46.0	45.6	48.7	53.0	46.8	44.3	43.0	39.2
4000	44.8	39.5	44.0	44.0	46.6	42.0	42.0	42.5	44.1	42.5	43.6	42.0	41.7	44.6	49.0	43.0	40.3	39.2	35.4
5000	40.7	35.4	39.8	39.9	42.5	37.9	37.6	38.3	39.6	38.5	39.2	37.6	37.4	40.2	44.6	38.9	35.8	35.0	31.1
6300	36.2	30.9	35.3	35.5	38.0	33.5	32.8	33.7	34.9	34.1	34.4	32.9	32.7	35.3	39.8	34.2	30.8	30.5	26.6
8000	31.7	26.5	30.7	31.0	33.4	29.0	28.1	29.3	30.4	29.9	29.5	28.2	27.8	30.8	34.5	29.2	25.5	25.7	22.3
10000	26.9	21.8	25.6	26.0	28.3	24.2	23.2	24.5	25.8	25.2	24.3	23.2	22.5	24.2	28.6	23.7	19.6	20.4	17.8
12500	21.7	16.8	20.4	20.8	22.9	19.1	18.2	19.6	21.0	20.3	19.0	18.0	17.0	18.1	22.3	17.5	13.3	14.8	13.1
16000	16.1	11.4	14.8	15.1	17.0	13.6	12.8	14.3	15.9	14.8	13.4	12.6	11.3	11.7	15.1	10.9	6.6	8.7	8.0
20000	10.0	5.8	8.9	9.2	10.6	7.7	7.2	8.5	10.4	9.0	7.6	6.8	5.4	5.1	7.3	3.8		2.3	2.4
25000	3.6		2.9	3.1	4.1	1.7	1.3	2.5	4.5	2.8	1.6	.8							

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 01
AIRCRAFT CODE 778
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE J1

P=PNLT A=AL T=ALT

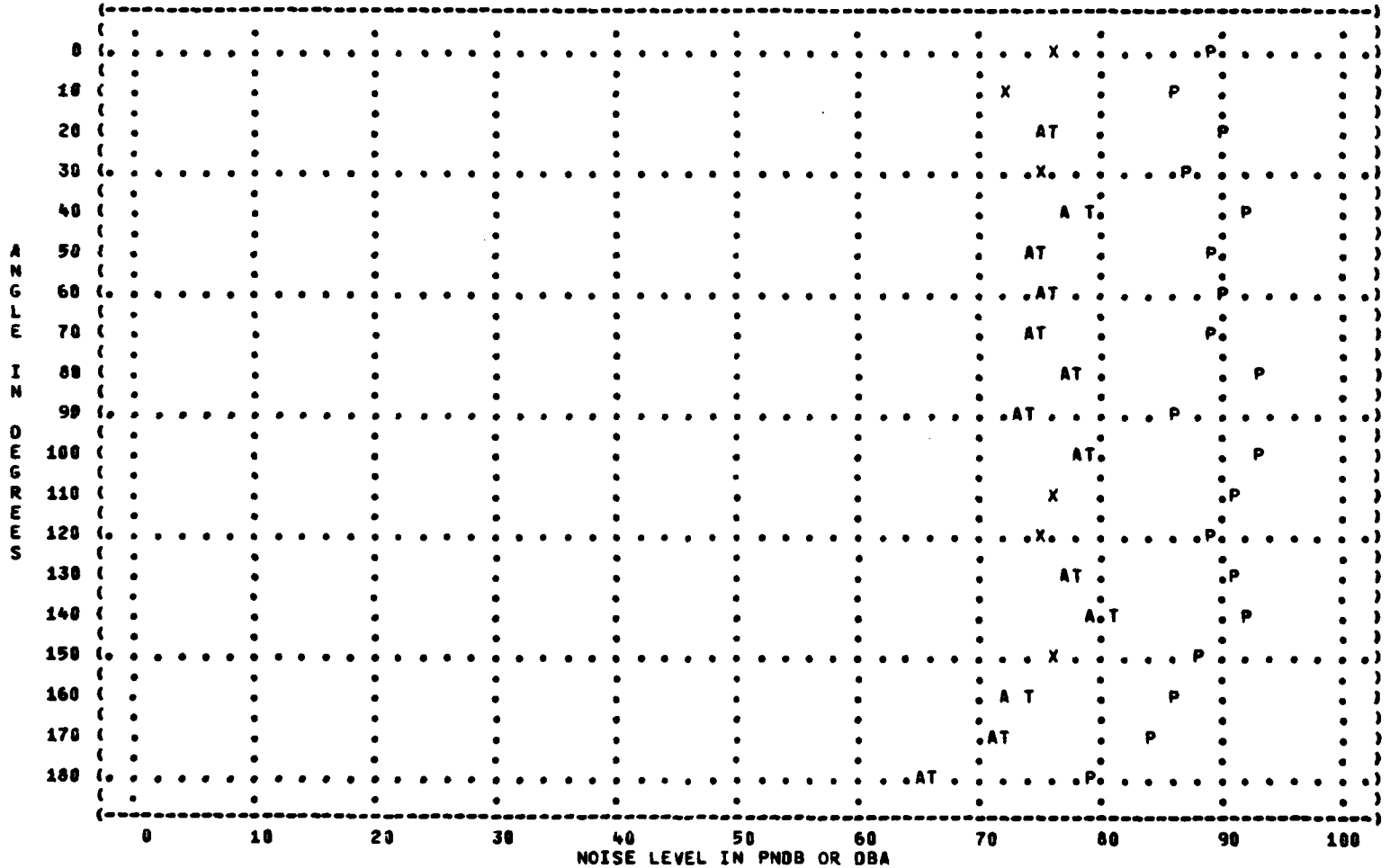


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 02
AIRCRAFT CODE 778
OPERATION CODE 00118
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

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

C81

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-031
RUN 02
AIRCRAFT CODE 778
OPERATION CODE 00118
PROFILE VERSION A
28 NOV 79
PAGE 02

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	101.0	98.9	101.4	100.7	104.1	104.4	102.6	100.9	107.2	106.4	105.6	104.7	104.4	102.6	100.8	98.8	95.9	95.8	91.5
250	98.7	96.6	99.1	98.4	101.8	102.0	100.2	98.5	104.8	104.1	103.3	102.3	102.1	100.4	98.5	95.6	93.6	93.6	89.1
315	96.5	94.2	96.8	96.1	99.4	99.6	97.8	96.1	102.4	101.6	100.8	99.9	99.7	98.1	96.1	93.2	91.2	91.3	86.7
400	94.1	91.7	94.3	93.6	96.9	97.1	95.3	93.6	99.8	99.1	98.3	97.4	97.2	95.7	93.6	90.7	88.7	88.9	84.2
500	91.7	89.1	91.8	91.1	94.2	94.4	92.7	91.0	97.2	96.5	95.7	94.8	94.6	93.3	91.1	88.0	86.1	86.5	81.6
630	89.1	86.5	89.3	88.5	91.4	91.6	89.9	88.3	94.3	93.6	92.8	92.0	91.9	90.7	88.6	85.2	83.6	83.9	79.0
800	86.5	83.8	86.7	85.7	88.4	88.6	86.9	85.3	91.3	90.7	89.8	89.2	89.1	88.1	85.9	82.2	80.9	81.2	76.3
1000	83.7	81.0	83.9	82.8	85.2	85.4	83.7	82.2	88.0	87.7	86.6	86.1	86.1	85.3	83.1	79.0	78.0	78.4	73.5
1250	80.7	77.9	80.9	79.8	81.7	81.9	80.4	79.0	84.4	84.4	83.0	82.9	82.9	82.4	80.1	75.8	75.0	75.4	70.4
1600	77.5	74.7	77.7	76.6	78.2	78.3	76.8	75.8	80.5	80.8	79.5	79.6	79.7	79.3	76.8	72.5	71.7	72.2	67.1
2000	74.0	71.1	74.2	73.1	74.2	74.3	73.1	72.2	76.5	76.8	75.9	76.0	76.2	75.9	73.3	68.8	68.1	68.6	63.4
2500	70.1	67.1	70.3	69.2	70.0	70.0	69.1	68.3	72.0	72.4	71.8	72.1	72.4	72.2	69.4	64.8	64.1	64.5	59.2
3150	65.7	62.7	66.0	64.8	65.6	65.6	64.7	63.9	67.3	67.6	67.6	67.7	68.3	68.1	65.1	60.3	59.8	60.1	54.5
4000	60.8	57.7	61.1	60.1	60.8	60.6	59.7	59.0	62.2	62.7	62.9	62.8	63.8	63.6	60.1	55.8	54.8	54.9	48.5
5000	55.4	51.8	55.7	55.1	55.6	55.1	54.4	53.9	56.8	57.4	57.7	57.3	58.6	58.5	54.5	49.0	49.1	49.0	41.2
6300	49.8	44.7	50.0	49.5	49.7	49.1	48.5	48.1	50.5	51.5	51.8	51.0	53.0	52.8	48.7	41.6	42.2	41.8	34.5
8000	44.6	39.4	44.9	44.2	44.0	43.5	42.9	42.7	44.8	45.9	45.1	44.0	47.2	46.5	41.4	34.6	35.0	34.5	26.8
10000	39.2	33.3	39.4	38.6	37.9	37.1	36.8	36.7	38.6	39.9	36.6	37.3	40.7	38.6	34.7	25.5	26.2	25.5	15.0
12500	32.5	25.0	33.1	32.4	31.0	29.3	29.2	29.1	31.5	33.1	28.9	30.1	33.8	30.9	25.7	13.4	13.6	11.1	3.2
16000	25.7	12.7	25.8	24.4	23.2	19.7	19.5	19.4	23.5	25.7	17.1	19.6	25.1	18.4	12.9	1.2	1.1		
20000	14.5	.4	15.0	11.8	10.1	10.1	9.9	9.7	10.1	12.7	5.3	8.0	12.1	6.0	.2				
25000	3.2		4.1			.4	.2												

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 82
AIRCRAFT CODE 778
OPERATION CODE 00118
PROFILE VERSION A
28 NOV 79
PAGE E2

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	102.4	100.4	103.0	101.7	105.4	106.1	104.1	102.2	108.8	107.7	107.0	105.9	105.7	103.8	102.2	99.8	97.3	97.1	92.8
250	100.1	98.1	100.7	99.4	103.0	103.7	101.8	99.9	106.5	105.4	104.7	103.5	103.3	101.6	99.9	97.4	95.8	94.8	90.4
315	97.8	95.7	98.3	97.1	100.6	101.3	99.4	97.5	104.0	102.9	102.3	101.1	100.9	99.3	97.5	95.8	92.6	92.5	88.8
400	95.5	93.3	95.8	94.7	98.1	98.8	96.8	95.0	101.5	100.4	99.7	98.6	98.5	96.9	95.8	92.5	90.1	90.2	85.5
500	93.0	90.6	93.4	92.1	95.4	96.1	94.2	92.4	98.8	97.8	97.1	96.0	95.8	94.5	92.6	89.8	87.5	87.7	82.9
630	90.5	88.0	90.9	89.5	92.6	93.3	91.4	89.6	96.0	95.0	94.3	93.2	93.1	91.9	90.0	87.0	84.9	85.2	80.3
800	87.8	85.4	88.2	86.7	89.6	90.3	88.4	86.7	92.9	92.1	91.3	90.4	90.3	89.3	87.3	84.0	82.2	82.5	77.6
1000	85.0	82.5	85.4	83.8	86.4	87.1	85.2	83.5	89.7	89.0	88.0	87.3	87.3	86.5	84.5	80.8	79.4	79.7	74.8
1250	82.1	79.5	82.4	80.8	83.0	83.6	81.9	80.4	86.1	85.7	84.5	84.1	84.2	83.6	81.5	77.6	76.4	76.7	71.7
1600	78.9	76.3	79.3	77.6	79.4	80.0	78.3	77.1	82.2	82.1	80.9	80.8	80.9	80.5	78.3	74.3	73.1	73.4	68.4
2000	75.4	72.7	75.8	74.1	75.5	76.0	74.6	73.6	78.2	78.1	77.3	77.2	77.4	77.1	74.7	70.6	69.5	69.8	64.7
2500	71.5	68.7	71.9	70.2	71.3	71.7	70.6	69.6	73.7	73.7	73.3	73.2	73.7	73.4	70.8	66.6	65.5	65.8	60.5
3150	67.1	64.3	67.5	65.8	66.8	67.3	66.2	65.2	68.9	68.9	69.1	68.9	69.6	69.3	66.5	62.1	61.2	61.4	55.7
4000	61.9	59.8	62.3	60.9	61.8	61.9	60.9	60.1	63.5	63.7	64.0	63.7	64.8	64.5	61.3	56.4	55.9	55.9	49.5
5000	56.2	52.8	56.6	55.7	56.3	56.1	55.3	54.8	57.8	58.2	58.6	58.0	59.4	59.2	55.4	50.1	50.0	49.7	42.8
6300	50.3	45.3	50.7	49.9	50.1	49.8	49.1	48.7	51.1	52.0	52.4	51.5	53.5	53.3	49.3	42.3	42.8	42.3	35.0
8000	44.8	39.7	45.3	44.4	44.2	43.8	43.2	42.9	45.1	46.1	45.4	44.2	47.4	46.7	41.7	35.8	35.2	34.7	27.1
10000	39.2	33.3	39.4	38.6	37.9	37.1	36.8	36.7	38.6	39.9	36.6	37.3	40.7	38.6	34.7	25.5	26.2	25.5	15.0
12500	32.5	25.0	33.1	32.4	31.0	29.3	29.2	29.1	31.5	33.1	28.9	30.1	33.8	30.9	25.7	13.4	13.6	11.1	3.2
16000	25.7	12.7	25.8	24.4	23.2	19.7	19.5	19.4	23.5	25.7	17.1	19.6	25.1	18.4	12.9	1.2	1.1		
20000	14.5	.4	15.8	11.8	10.1	10.1	9.9	9.7	10.1	12.7	5.3	8.0	12.1	6.0	.2				
25000	3.2		4.1			.4	.2												

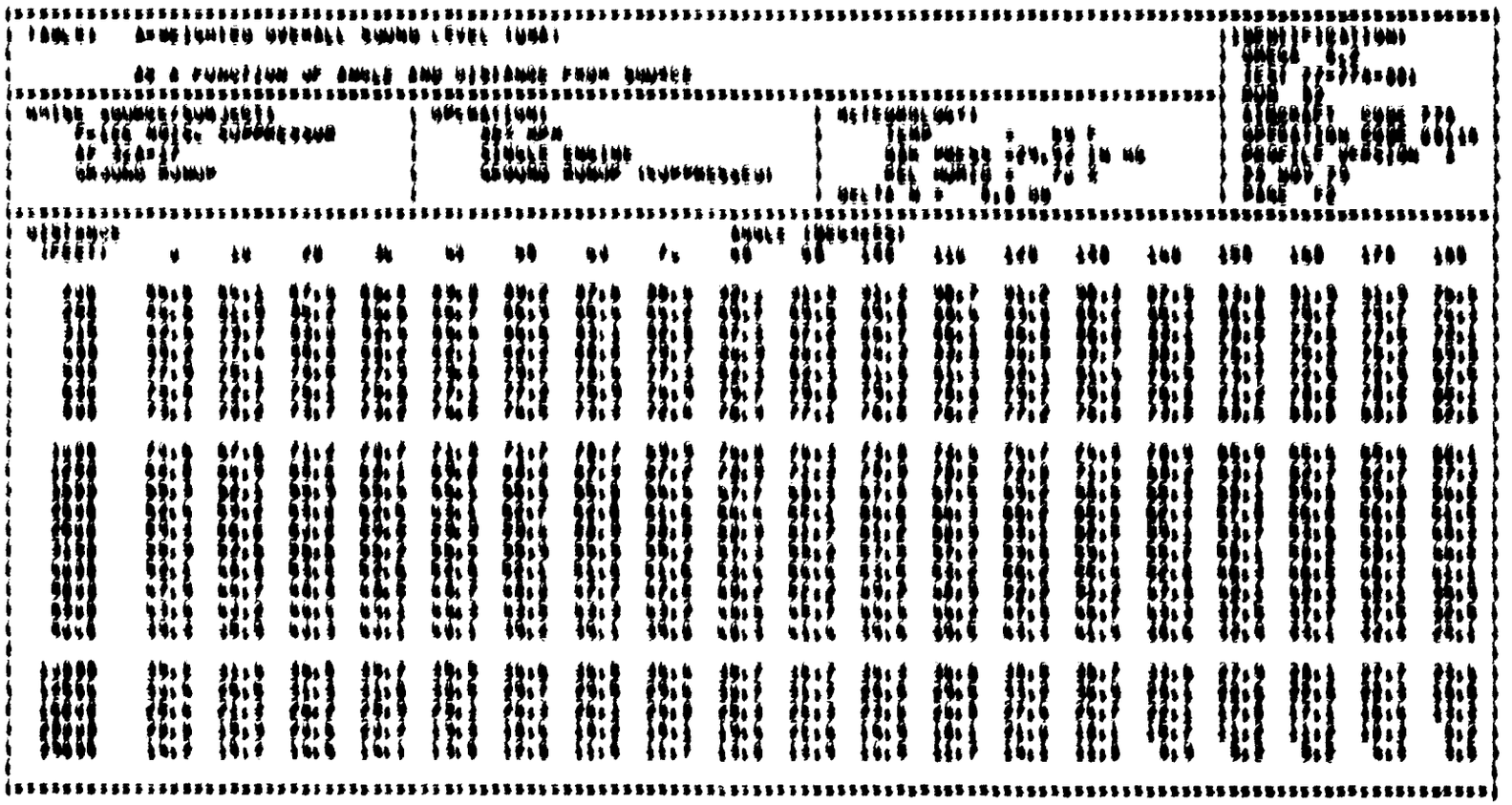


TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 02
AIRCRAFT CODE 778
OPERATION CODE 00118
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	88.1	85.7	88.9	87.8	90.2	90.8	89.2	87.8	93.7	93.1	92.7	91.9	92.4	91.5	88.9	84.8	83.3	83.1	77.8
250	86.0	83.5	86.8	85.6	88.0	88.6	86.9	85.6	91.4	90.9	90.5	89.6	90.2	89.4	86.8	82.5	81.1	81.0	75.6
315	83.8	81.3	84.6	83.4	85.7	86.3	84.7	83.3	89.0	88.5	88.1	87.3	88.0	87.2	84.5	80.3	78.9	78.7	73.4
400	81.6	79.0	82.3	81.2	83.3	83.9	82.3	81.0	86.5	86.1	85.8	85.0	85.7	84.9	82.2	77.9	76.6	76.5	71.1
500	79.3	76.7	80.0	78.9	80.9	81.4	79.9	78.7	84.0	83.6	83.3	82.5	83.4	82.6	79.9	75.5	74.3	74.1	68.8
630	76.9	74.3	77.7	76.6	78.4	78.8	77.4	76.3	81.3	81.1	80.7	80.0	81.0	80.2	77.5	73.0	71.8	71.7	66.4
800	74.5	71.8	75.3	74.2	75.7	76.2	74.9	73.8	78.5	78.4	78.1	77.3	78.5	77.8	75.0	70.4	69.3	69.2	63.9
1000	72.0	69.2	72.8	71.7	73.8	73.4	72.2	71.2	75.6	75.6	75.3	74.6	75.9	75.2	72.3	67.7	66.8	66.6	61.3
1250	69.4	66.5	70.1	69.1	70.2	70.5	69.4	68.6	72.6	72.6	72.3	71.7	73.2	72.6	69.6	64.8	64.0	63.9	58.6
1600	66.6	63.7	67.4	66.4	67.3	67.5	66.5	65.8	69.4	69.6	69.3	68.7	70.4	69.8	66.8	61.9	61.2	61.1	55.8
2000	63.8	60.8	64.6	63.6	64.3	64.3	63.6	62.9	66.1	66.4	66.0	65.5	67.5	66.8	63.7	58.8	58.2	58.0	52.8
2500	60.7	57.6	61.6	60.5	61.1	61.0	60.4	59.8	62.6	63.0	62.6	62.1	64.4	63.7	60.5	55.4	55.0	54.8	49.6
3150	57.3	54.1	58.2	57.2	57.7	57.6	57.0	56.5	58.9	59.5	58.9	58.4	61.1	60.3	57.1	51.9	51.6	51.3	46.1
4000	53.2	50.1	54.2	53.4	53.8	53.5	53.0	52.7	54.7	55.4	54.7	54.2	57.2	56.3	53.1	47.7	47.6	47.3	42.1
5000	48.8	45.6	49.7	49.1	49.5	49.0	48.7	48.4	50.2	51.0	50.0	49.6	52.9	52.0	48.7	43.1	43.1	42.9	37.7
6300	44.8	40.8	45.8	44.5	44.8	44.2	43.9	43.7	45.3	46.2	45.0	44.6	48.3	47.2	43.9	38.2	38.3	38.0	33.0
8000	39.6	36.2	40.6	40.3	40.3	39.6	39.4	39.3	40.6	41.6	39.8	39.8	43.6	42.1	38.9	33.2	33.4	33.1	28.4
10000	35.0	31.4	36.0	35.7	35.5	34.6	34.5	34.4	35.7	36.7	34.3	34.6	38.5	36.7	33.6	27.9	28.1	27.7	23.4
12500	30.4	26.5	31.3	31.0	30.5	29.7	29.5	29.4	30.7	31.7	28.8	29.5	33.2	30.9	28.1	22.6	22.8	22.3	18.5
16000	25.4	21.3	26.2	25.9	25.1	24.3	24.1	24.0	25.3	26.3	23.0	24.0	27.4	24.7	22.1	17.0	17.1	16.4	13.3
20000	20.0	15.9	20.6	20.2	19.3	18.4	18.2	18.1	19.4	20.4	16.9	18.1	21.0	18.1	15.7	11.2	11.2	10.3	8.2
25000	14.2	10.2	14.6	14.1	13.0	12.0	11.8	11.7	13.0	13.9	10.5	11.7	14.1	11.0	8.9	5.2	5.2	4.3	3.5

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
85% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 78 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-881
RUN 02
AIRCRAFT CODE 778
OPERATION CODE 88118
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

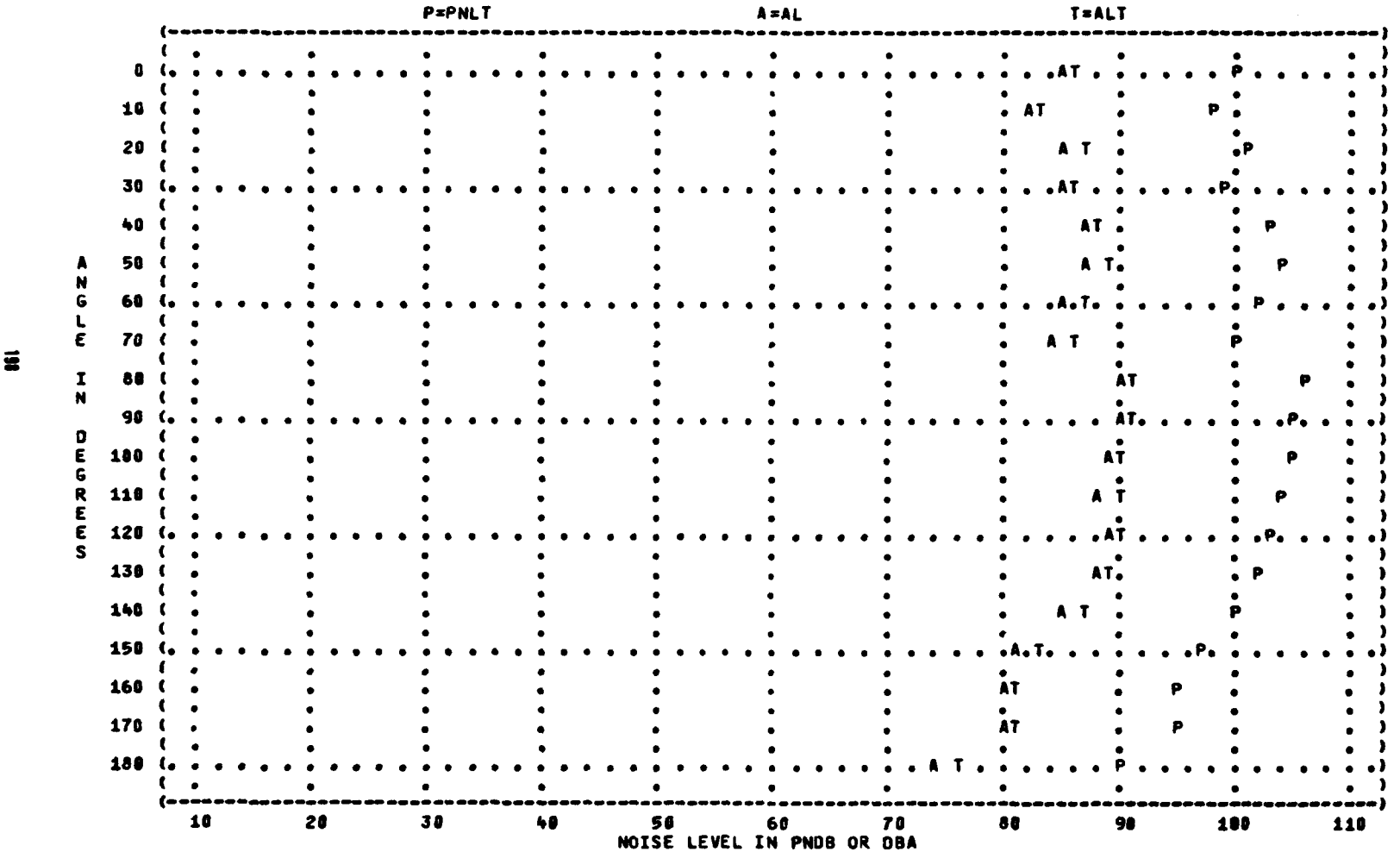


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
95% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 03
AIRCRAFT CODE 778
OPERATION CODE 80116
PROFILE VERSION A
28 NOV 79
PAGE C3

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	85	85	85	82	80	79	79	78	77	76	78	75	78	80	83	83	85	87	87
63	83	83	83	80	79	81	80	79	77	78	77	77	78	77	76	79	81	84	84
80	81	79	78	78	76	77	80	79	81	80	81	77	80	77	76	76	78	80	84
100	79	79	79	81	80	78	81	76	80	82	80	79	77	78	77	76	77	79	82
125	80	79	82	83	83	81	80	78	79	78	78	76	77	76	77	79	74	75	78
160	81	77	79	83	82	81	81	76	77	76	75	75	74	76	76	78	79	75	79
200	83	79	81	81	81	80	81	78	77	77	76	77	76	76	78	80	80	76	80
250	82	79	81	79	79	78	80	77	77	76	75	75	75	74	75	78	78	74	75
315	82	79	81	81	81	80	80	79	79	78	76	75	75	74	74	73	76	72	73
400	80	79	82	83	79	81	82	82	81	79	77	75	74	73	73	71	73	69	71
500	79	78	79	80	79	79	80	79	79	77	75	75	74	72	71	70	69	66	66
630	80	76	77	78	76	77	78	78	77	76	73	74	72	71	72	70	69	68	65
800	77	75	78	79	78	79	80	81	78	76	72	73	72	72	74	73	74	71	67
1000	76	76	76	79	77	79	80	82	77	75	72	72	73	73	75	75	77	73	69
1250	75	72	71	76	73	73	74	74	71	71	72	71	72	71	74	73	74	70	65
1600	77	75	76	79	77	79	77	81	80	78	76	74	74	73	76	77	79	76	70
2000	73	74	75	78	77	80	77	81	81	78	77	75	74	73	74	76	78	76	70
2500	72	73	73	76	76	77	74	74	75	74	77	76	75	74	74	74	75	74	67
3150	71	71	72	76	76	78	75	74	74	71	75	74	73	74	74	72	74	73	66
4000	72	72	74	78	77	79	78	78	78	73	75	75	76	77	78	75	77	75	69
5000	67	66	68	75	72	74	70	71	72	69	72	71	69	70	71	67	70	67	61
6300	63	62	66	70	67	69	66	67	68	65	67	68	69	68	68	65	67	64	57
8000	61	59	63	65	65	66	65	64	66	63	65	64	65	64	66	61	62	59	53
10000	58	56	60	61	62	63	61	60	64	60	59	60	61	59	60	58	58	55	50
OVERALL	93	92	93	93	92	92	92	92	91	90	90	88	89	88	89	90	91	91	92

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 03
AIRCRAFT CODE 778
OPERATION CODE 00115
PROFILE VERSION A
28 NOV 79
PAGE D3

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
95% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 77 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	102.5	101.4	103.0	105.7	104.5	105.8	104.8	105.1	104.6	102.3	102.7	101.9	102.4	102.5	103.3	101.9	103.4	101.5	97.8
250	100.2	99.1	100.7	103.5	102.3	103.5	102.6	102.8	102.4	100.1	100.5	99.6	100.0	100.1	101.0	99.6	101.1	99.2	95.5
315	97.9	96.7	98.4	101.1	99.9	101.1	100.2	100.5	100.1	97.8	98.2	97.2	97.7	97.7	98.6	97.3	98.7	96.8	93.2
400	95.6	94.3	95.9	98.7	97.4	98.7	97.8	98.2	97.7	95.5	95.8	94.8	95.2	95.2	96.1	94.8	96.2	94.3	90.7
500	93.2	91.9	93.4	96.1	94.9	96.1	95.2	95.8	95.3	93.0	93.3	92.3	92.5	92.6	93.4	92.2	93.6	91.7	88.1
630	90.7	89.3	90.6	93.4	92.1	93.3	92.5	93.3	92.7	90.5	90.7	89.7	89.8	89.8	90.7	89.4	90.9	88.9	85.4
800	88.0	86.6	88.0	90.5	89.2	90.5	89.6	90.6	90.1	87.8	87.9	86.9	86.8	86.8	87.7	86.5	88.0	86.1	82.7
1000	85.3	83.9	85.4	87.6	86.2	87.7	86.5	87.8	87.3	85.0	85.0	84.0	83.8	83.6	84.5	83.7	85.1	83.3	79.8
1250	82.3	80.9	82.6	84.5	83.1	84.7	83.5	84.9	84.3	82.0	81.9	80.9	80.7	80.2	81.0	80.7	82.1	80.2	76.8
1600	79.2	77.7	79.6	81.4	79.9	81.5	80.3	81.7	81.1	78.8	78.6	77.5	77.3	76.4	77.3	77.4	78.8	76.9	73.5
2000	75.9	74.4	76.5	78.2	76.3	78.0	77.1	78.3	77.6	75.3	74.9	73.8	73.6	72.7	73.6	73.9	75.3	73.4	69.9
2500	72.1	70.7	72.6	74.2	72.4	74.1	73.3	74.5	73.7	71.5	71.0	69.7	69.4	68.5	69.7	70.1	71.4	69.4	65.8
3150	68.2	66.6	68.1	69.8	68.1	69.7	68.9	70.3	69.4	67.2	66.5	65.1	64.7	63.8	65.4	65.8	67.2	64.8	61.2
4000	63.7	61.9	63.1	65.0	63.4	64.8	64.4	65.8	64.6	62.5	61.5	60.2	59.8	58.8	60.6	61.1	62.5	59.9	55.9
5000	58.7	56.8	58.0	59.8	58.2	59.4	59.6	60.7	59.3	57.4	56.0	54.6	54.4	53.4	55.3	55.7	57.0	54.6	50.1
6300	53.3	51.1	52.7	54.5	52.8	54.0	54.3	55.3	53.5	51.6	49.7	48.4	47.9	46.8	49.0	49.8	51.3	48.0	42.6
8000	48.6	46.4	47.6	49.7	47.8	48.9	49.5	50.6	48.1	45.8	43.7	43.3	42.3	40.6	43.0	42.9	44.4	40.6	36.4
10000	43.2	41.0	42.3	44.3	42.1	43.3	44.1	44.9	42.7	40.0	38.1	37.3	36.4	34.3	36.3	36.4	37.6	32.9	27.0
12500	37.4	34.7	36.3	37.7	35.8	36.7	38.2	38.3	36.3	33.8	31.1	30.5	29.3	26.0	28.4	27.1	28.8	22.4	17.4
16000	30.3	28.4	29.9	31.2	29.1	30.3	31.7	31.2	30.0	26.7	22.6	22.4	20.5	16.9	17.4	14.8	15.4	11.9	7.8
20000	20.2	18.0	20.6	22.4	18.3	20.8	22.7	21.6	20.0	16.3	11.8	10.1	8.0	7.8	6.4	2.5	2.0	1.5	
25000	7.0	7.6	7.9	11.4	7.5	11.2	10.6	10.1	7.0	5.8	.9								

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
95% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-881
RUN 03
AIRCRAFT CODE 778
OPERATION CODE 00116
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	103.5	102.4	104.3	105.7	105.6	106.9	106.4	106.8	106.3	103.5	102.7	101.9	104.1	104.2	105.1	103.7	105.1	103.4	99.6
250	101.2	100.1	102.0	103.5	103.3	104.6	104.2	104.5	104.0	101.3	100.5	99.6	101.8	101.9	102.8	101.4	102.8	101.0	97.3
315	98.9	97.8	99.7	101.1	100.9	102.2	101.8	102.2	101.7	99.0	98.2	97.2	99.4	99.5	100.4	99.1	100.4	98.6	95.0
400	96.6	95.4	97.2	98.7	98.5	99.7	99.4	99.8	99.4	96.7	95.8	94.8	96.9	97.0	97.9	96.6	97.9	96.1	92.5
500	94.2	92.9	94.7	96.1	95.9	97.2	96.8	97.4	96.9	94.2	93.3	92.3	94.3	94.3	95.3	94.0	95.3	93.5	89.9
630	91.7	90.4	92.0	93.4	93.1	94.4	94.1	94.9	94.4	91.7	90.7	89.7	91.5	91.6	92.5	91.2	92.5	90.7	87.2
800	89.1	87.7	89.4	90.5	90.2	91.6	91.2	92.3	91.7	89.0	87.9	86.9	88.5	88.6	89.5	88.3	89.6	87.9	84.5
1000	86.3	84.9	86.7	87.6	87.2	88.8	88.1	89.5	88.9	86.2	85.0	84.0	85.5	85.4	86.3	85.5	86.8	85.1	81.7
1250	83.4	81.9	83.9	84.5	84.2	85.8	85.1	86.5	85.9	83.2	81.9	80.9	82.4	81.9	82.8	82.5	83.8	82.0	78.6
1600	80.2	78.7	80.9	81.4	80.9	82.5	81.9	83.4	82.7	80.0	78.6	77.5	79.0	78.2	79.1	79.2	80.5	78.8	75.3
2000	77.0	75.5	77.8	78.2	77.4	79.0	78.7	79.9	79.2	76.5	74.9	73.8	75.3	74.4	75.4	75.7	77.0	75.2	71.7
2500	73.1	71.8	73.9	74.2	73.5	75.1	74.9	76.1	75.4	72.7	71.8	69.7	71.1	70.2	71.5	71.9	73.1	71.2	67.6
3150	69.2	67.6	69.4	69.8	69.1	70.8	70.5	71.9	71.0	68.4	66.5	65.1	66.5	65.5	67.2	67.6	68.8	66.7	63.0
4000	64.5	62.8	64.2	65.0	64.2	65.7	65.7	67.1	65.9	63.4	61.5	60.2	61.1	60.2	62.0	62.5	63.8	61.4	57.4
5000	59.3	57.4	58.8	59.8	58.8	60.1	60.6	61.7	60.3	58.1	56.0	54.6	55.5	54.4	56.4	56.8	58.0	55.7	51.2
6300	53.7	51.5	53.2	54.5	53.2	54.4	55.0	56.0	54.2	52.0	49.7	48.4	48.6	47.5	49.7	50.5	51.9	48.8	43.3
8000	48.8	46.6	47.9	49.7	48.0	49.2	49.8	50.9	48.4	46.1	43.7	43.3	42.7	40.9	43.3	43.3	44.8	41.0	36.8
10000	43.2	41.0	42.3	44.3	42.1	43.3	44.1	44.9	42.7	40.0	38.1	37.3	36.4	34.3	36.3	36.4	37.6	32.9	27.0
12500	37.4	34.7	36.3	37.7	35.8	36.7	38.2	38.3	36.3	33.8	31.1	30.5	29.3	26.0	28.4	27.1	28.8	22.4	17.4
16000	30.3	28.4	29.9	31.2	29.1	30.3	31.7	31.2	30.0	26.7	22.6	22.4	20.5	16.9	17.4	14.8	15.4	11.9	7.8
20000	20.2	18.0	20.6	22.4	18.3	20.8	22.7	21.6	20.0	16.3	11.8	10.1	8.0	7.8	6.4	2.5	2.0	1.5	
25000	7.0	7.6	7.9	11.4	7.5	11.2	10.6	10.1	7.0	5.8	.9								

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
95% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 03
AIRCRAFT CODE 778
OPERATION CODE 00116
PROFILE VERSION A
28 NOV 79
PAGE F3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	89.0	87.6	88.9	91.4	89.9	91.4	90.7	92.1	90.7	88.4	88.2	87.3	87.2	86.8	88.0	87.5	88.9	86.7	82.2
250	86.9	85.5	86.8	89.3	87.8	89.2	88.6	90.0	88.6	86.2	86.0	85.1	85.0	84.6	85.8	85.3	86.7	84.5	80.0
315	84.8	83.3	84.7	87.1	85.6	87.0	86.4	87.8	86.4	84.1	83.8	82.8	82.7	82.3	83.5	83.1	84.5	82.2	77.9
400	82.6	81.1	82.5	84.8	83.3	84.8	84.2	85.6	84.1	81.8	81.5	80.5	80.4	80.0	81.2	80.9	82.2	79.9	75.6
500	80.4	78.9	80.2	82.5	81.0	82.4	81.9	83.3	81.8	79.6	79.2	78.1	78.0	77.5	78.8	78.5	79.9	77.6	73.3
630	78.1	76.6	77.9	80.2	78.6	80.0	79.6	81.0	79.5	77.3	76.7	75.7	75.6	75.0	76.3	76.1	77.4	75.1	70.9
800	75.8	74.2	75.6	77.8	76.2	77.6	77.2	78.6	77.0	74.9	74.2	73.2	73.0	72.4	73.7	73.6	74.9	72.6	68.5
1000	73.4	71.8	73.2	75.3	73.6	75.0	74.8	76.2	74.5	72.4	71.6	70.6	70.4	69.7	71.0	71.0	72.3	69.9	65.9
1250	70.8	69.3	70.6	72.7	71.0	72.4	72.2	73.6	71.9	69.8	68.8	67.8	67.6	66.9	68.3	68.3	69.5	67.1	63.1
1600	68.2	66.6	68.0	70.0	68.2	69.6	69.6	71.0	69.2	67.1	66.0	64.9	64.7	63.9	65.4	65.4	66.6	64.2	60.2
2000	65.5	63.9	65.3	67.2	65.3	66.7	66.9	68.2	66.3	64.3	62.9	62.0	61.7	60.9	62.3	62.4	63.6	61.0	57.2
2500	62.5	60.8	62.2	64.1	62.2	63.6	63.8	65.1	63.2	61.1	59.7	58.8	58.5	57.6	59.1	59.2	60.3	57.7	53.8
3150	59.2	57.5	58.8	60.7	58.8	60.2	60.6	61.9	59.7	57.7	56.1	55.3	55.0	54.1	55.7	55.7	56.8	54.1	50.2
4000	55.5	53.8	55.1	57.0	55.1	56.4	57.0	58.3	56.0	54.0	52.1	51.5	51.2	50.4	52.1	52.0	53.0	50.3	46.2
5000	51.4	49.7	51.0	52.9	51.0	52.3	52.9	54.3	51.8	49.8	47.8	47.2	47.1	46.2	48.0	47.9	48.9	46.0	42.0
6300	47.0	45.3	46.5	48.4	46.5	47.9	48.6	49.9	47.2	45.3	43.2	42.7	42.6	41.8	43.6	43.4	44.4	41.4	37.4
8000	43.1	41.4	42.6	44.3	42.5	43.7	44.6	45.7	43.0	41.1	38.9	38.5	38.3	37.5	39.2	38.9	39.7	36.7	33.2
10000	38.9	37.1	38.4	39.9	38.1	39.3	40.2	41.1	38.6	36.7	34.4	34.2	33.8	32.9	34.4	33.9	34.6	31.7	28.8
12500	34.3	32.5	33.9	35.2	33.4	34.5	35.5	36.1	33.9	32.0	29.6	29.5	29.0	28.0	29.2	28.6	29.2	26.4	24.2
16000	29.3	27.5	28.9	30.0	28.2	29.3	30.3	30.7	28.8	26.9	24.6	24.4	23.8	22.5	23.6	22.9	23.4	20.8	19.6
20000	23.9	22.1	23.5	24.5	22.7	23.7	24.6	24.7	23.2	21.4	19.3	19.0	18.2	17.0	17.6	17.0	17.5	15.2	15.2
25000	18.1	16.3	17.8	18.6	16.8	17.6	18.6	18.4	17.3	15.5	13.6	13.1	12.4	11.1	11.5	11.2	11.6	10.0	11.0

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
95% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 03
AIRCRAFT CODE 778
OPERATION CODE 00115
PROFILE VERSION A
28 NOV 79
PAGE G3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	90.0	88.6	90.2	91.4	91.0	92.5	92.3	93.7	92.4	89.6	88.2	87.3	88.9	88.6	89.8	89.3	90.6	88.5	84.0
250	87.9	86.5	88.1	89.3	88.8	90.3	90.2	91.6	90.2	87.4	86.0	85.1	86.7	86.4	87.6	87.1	88.4	86.3	81.9
315	85.8	84.3	86.0	87.1	86.6	88.1	88.0	89.4	88.0	85.3	83.8	82.8	84.4	84.1	85.3	84.9	86.2	84.1	79.7
400	83.6	82.2	83.8	84.8	84.3	85.8	85.8	87.2	85.8	83.1	81.5	80.5	82.1	81.7	83.0	82.6	83.9	81.8	77.5
500	81.4	79.9	81.5	82.5	82.0	83.5	83.5	84.9	83.5	80.8	79.2	78.1	79.7	79.3	80.6	80.3	81.5	79.4	75.2
630	79.1	77.6	79.3	80.2	79.6	81.1	81.2	82.6	81.1	78.5	76.7	75.7	77.3	76.8	78.1	77.9	79.1	76.9	72.8
800	76.8	75.3	76.9	77.8	77.2	78.6	78.8	80.3	78.7	76.1	74.2	73.2	74.7	74.2	75.5	75.4	76.6	74.4	70.3
1000	74.4	72.8	74.5	75.3	74.7	76.1	76.4	77.8	76.2	73.6	71.6	70.6	72.1	71.5	72.9	72.8	74.0	71.7	67.7
1250	71.9	70.3	71.9	72.7	72.0	73.4	73.8	75.2	73.5	71.0	68.8	67.8	69.3	68.6	70.1	70.1	71.2	68.9	64.9
1600	69.2	67.7	69.3	70.0	69.2	70.7	71.2	72.6	70.8	68.3	66.0	64.9	66.5	65.7	67.2	67.2	68.3	66.0	62.0
2000	66.5	64.9	66.6	67.2	66.3	67.8	68.5	69.8	68.0	65.5	62.9	62.0	63.5	62.6	64.2	64.2	65.3	62.9	59.0
2500	63.5	61.9	63.5	64.1	63.2	64.6	65.4	66.8	64.8	62.4	59.7	58.8	60.2	59.4	61.0	61.0	62.0	59.5	55.6
3150	60.2	58.5	60.1	60.7	59.8	61.2	62.2	63.5	61.4	58.9	56.1	55.3	56.8	55.9	57.5	57.5	58.5	56.0	52.0
4000	56.4	54.7	56.2	57.0	55.9	57.3	58.2	59.6	57.3	55.0	52.1	51.5	52.6	51.8	53.5	53.4	54.4	51.7	47.7
5000	52.8	50.3	51.7	52.9	51.6	52.9	53.9	55.2	52.7	50.5	47.8	47.2	48.1	47.3	49.1	49.0	49.9	47.1	43.1
6300	47.4	45.7	47.1	48.4	47.0	48.3	49.3	50.5	47.9	45.8	43.2	42.7	43.2	42.5	44.3	44.1	45.0	42.2	38.2
8000	43.3	41.6	42.9	44.3	42.7	43.9	44.9	46.0	43.4	41.4	38.9	38.5	38.7	37.9	39.5	39.2	40.0	37.1	33.6
10000	38.9	37.1	38.4	39.9	38.1	39.3	40.2	41.1	38.6	36.7	34.4	34.2	33.8	32.9	34.4	33.9	34.6	31.7	28.8
12500	34.3	32.5	33.9	35.2	33.4	34.5	35.5	36.1	33.9	32.0	29.6	29.5	29.0	28.0	29.2	28.6	29.2	26.4	24.2
16000	29.3	27.5	28.9	30.0	28.2	29.3	30.3	30.7	28.8	26.9	24.6	24.4	23.8	22.6	23.6	22.9	23.4	20.8	19.6
20000	23.9	22.1	23.5	24.5	22.7	23.7	24.6	24.7	23.2	21.4	19.3	19.0	18.2	17.0	17.6	17.0	17.5	15.2	15.2
25000	18.1	16.3	17.8	18.6	16.8	17.6	18.6	18.4	17.3	15.5	13.6	13.1	12.4	11.1	11.5	11.2	11.6	10.0	11.0

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
95% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 6.2
TEST 77-778-001
RUN 03
AIRCRAFT CODE 778
OPERATION CODE 00116
PROFILE VERSION A
28 NOV 79
PAGE J3

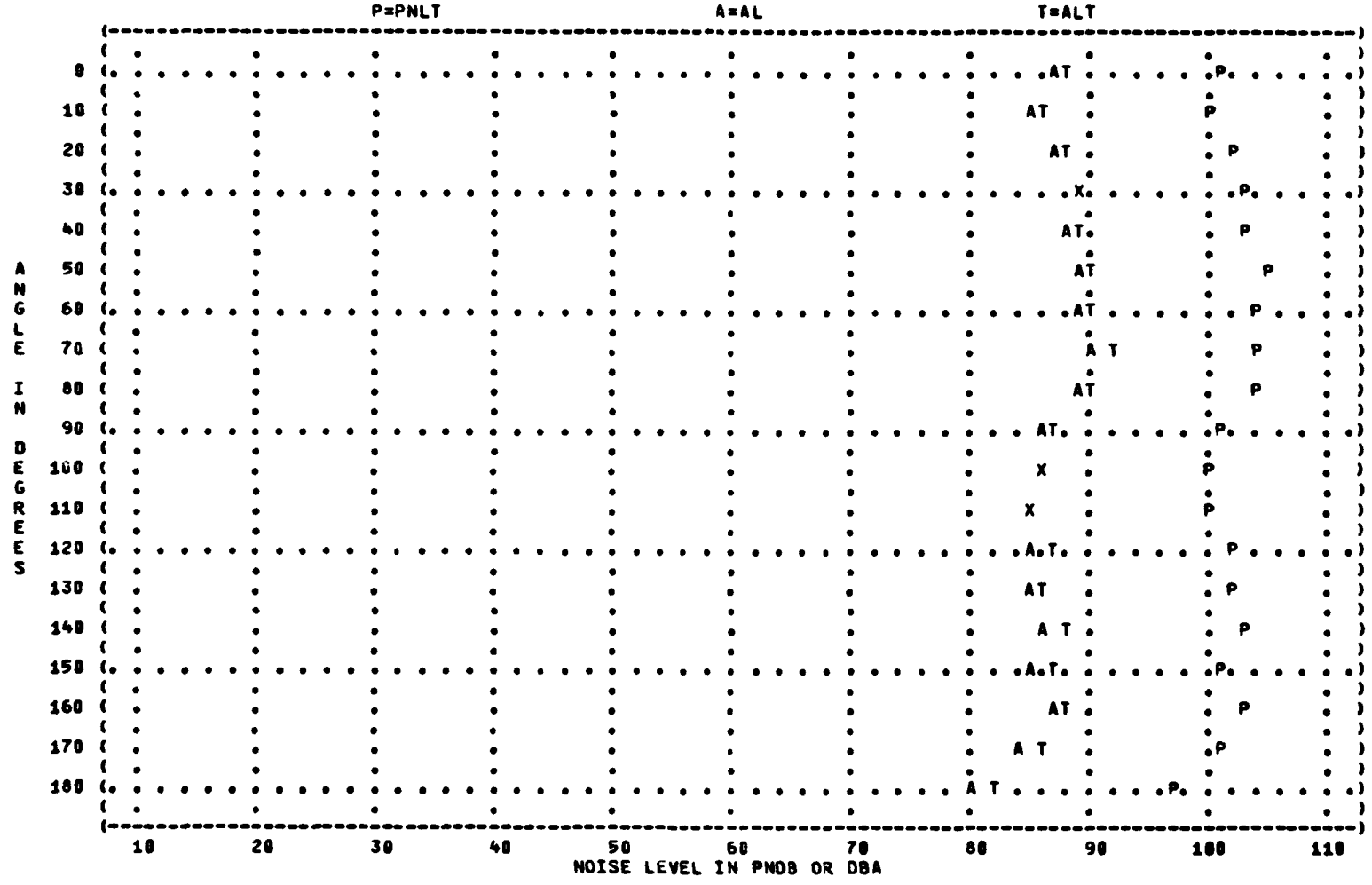


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 04
AIRCRAFT CODE 778
OPERATION CODE 00184
PROFILE VERSION A
28 NOV 79
PAGE C4

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	88	86	85	83	79	80	78	79	78	77	76	77	81	81	84	84	86	89	88
63	86	86	85	83	80	82	81	80	78	80	77	75	79	78	79	80	83	87	87
80	83	81	79	80	77	80	81	79	79	81	79	79	79	77	80	78	79	84	85
100	80	78	79	81	80	81	82	79	77	80	79	79	78	79	79	78	79	82	82
125	81	79	81	81	82	81	80	78	75	76	77	78	79	78	80	81	77	78	78
160	80	77	79	84	84	80	81	80	76	77	78	79	78	79	76	79	79	78	81
200	82	81	81	81	81	78	79	80	78	77	77	79	76	78	77	81	82	78	81
250	82	81	82	80	80	80	81	81	80	78	77	77	76	76	76	79	81	78	78
315	81	81	85	81	83	83	83	82	82	80	79	78	76	76	78	75	78	78	76
400	79	80	83	83	81	84	86	84	84	81	78	76	74	74	75	73	75	74	74
500	78	80	81	81	80	83	83	83	82	79	76	76	72	72	72	70	74	72	72
630	77	79	79	80	80	81	80	80	79	78	73	74	72	72	73	72	75	73	70
800	76	77	80	81	78	82	79	81	76	74	74	73	74	75	76	74	79	77	71
1000	74	77	79	81	79	83	80	81	76	72	75	75	75	77	77	76	82	79	72
1250	72	73	74	77	77	78	77	77	75	71	75	75	75	75	76	75	77	75	69
1600	72	75	76	79	78	81	81	83	81	75	76	76	74	75	76	76	79	79	74
2000	71	75	77	79	80	84	83	87	85	81	79	76	75	76	76	76	80	80	74
2500	68	72	73	78	77	81	79	80	79	78	80	75	75	77	76	74	74	77	72
3150	68	72	74	78	77	81	79	79	78	75	80	74	76	78	76	75	74	75	70
4000	69	73	76	79	79	82	81	82	79	76	79	75	77	81	79	77	78	78	73
5000	64	67	69	74	75	79	76	75	77	73	77	72	70	72	72	69	71	70	66
6300	60	63	67	70	71	74	71	72	71	69	74	70	71	70	69	65	68	67	63
8000	57	60	63	66	68	70	69	69	68	66	71	66	66	67	67	62	64	62	59
10000	55	57	60	61	63	65	64	65	64	61	66	61	62	62	61	57	58	58	54
OVERALL	94	93	94	94	93	95	94	94	93	91	91	90	90	90	91	91	93	94	93

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 04
AIRCRAFT CODE 778
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE 04

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	106.5	102.3	104.3	106.7	106.3	108.7	107.7	108.9	107.3	104.4	106.0	102.8	103.4	105.5	104.6	103.3	104.8	104.7	101.3
250	98.3	100.0	102.8	104.4	104.0	106.4	105.4	106.7	105.3	102.2	103.7	100.5	101.1	103.2	102.3	101.0	102.5	102.4	99.0
315	96.1	97.7	99.7	102.1	101.6	104.1	103.1	104.4	103.0	99.9	101.4	98.1	98.7	100.8	99.9	98.6	100.1	100.0	96.7
400	93.8	95.3	97.2	99.6	99.2	101.7	100.7	102.1	100.7	97.6	98.9	95.7	96.2	98.3	97.4	96.2	97.7	97.5	94.2
500	91.5	92.8	94.7	97.1	96.6	99.3	98.3	99.7	98.2	95.2	96.4	93.1	93.6	95.7	94.8	93.5	95.3	95.0	91.6
630	88.9	90.2	92.8	94.4	93.8	96.7	95.8	97.2	95.7	92.6	93.7	90.3	90.8	92.9	92.0	90.8	92.8	92.4	88.9
800	86.3	87.6	89.4	91.5	91.1	94.0	93.1	94.5	93.0	90.0	90.9	87.6	87.8	89.9	89.0	87.8	90.1	89.6	86.1
1000	83.6	84.8	86.6	88.5	88.3	91.2	90.3	91.7	90.3	87.2	87.9	84.7	84.7	86.7	85.9	84.7	87.3	87.8	83.2
1250	80.8	81.8	83.7	85.5	85.2	88.2	87.3	88.7	87.3	84.1	84.7	81.6	81.4	83.2	82.4	81.4	84.3	83.9	80.2
1600	77.8	78.8	80.8	82.2	82.0	85.0	84.1	85.6	84.1	80.9	81.3	78.3	77.8	79.4	78.8	78.2	81.1	80.7	76.9
2000	74.6	75.6	77.6	78.9	78.5	81.5	80.7	82.1	80.6	77.4	77.6	74.7	74.1	75.5	75.1	74.6	77.6	77.2	73.3
2500	70.8	71.9	73.8	75.0	74.6	77.7	76.8	78.3	76.8	73.6	73.4	70.8	70.1	71.3	71.2	70.6	73.7	73.3	69.3
3150	66.6	67.8	69.3	70.7	70.3	73.4	72.5	74.1	72.5	69.2	68.8	66.4	65.6	66.6	66.7	66.3	69.3	68.8	64.8
4000	61.8	63.2	64.7	66.2	65.4	68.5	67.7	69.3	67.6	64.3	63.6	61.5	60.6	61.5	61.8	61.5	64.5	64.0	59.7
5000	56.8	58.2	59.8	61.3	60.1	63.2	62.4	64.0	62.3	58.9	58.1	56.3	55.0	56.1	56.3	56.1	59.7	58.8	54.3
6300	51.1	52.7	54.6	56.1	54.7	57.6	56.7	58.1	56.2	52.6	51.8	50.3	49.2	50.5	50.8	50.2	54.4	52.6	47.3
8000	46.4	47.9	49.8	51.3	50.1	52.6	52.2	52.4	51.0	47.5	45.7	44.9	43.1	44.6	45.0	43.9	49.2	46.5	41.0
10000	41.1	42.8	44.7	46.0	44.6	47.2	46.9	47.1	45.7	42.2	39.9	39.2	36.8	37.8	38.5	37.6	43.1	40.3	35.0
12500	35.3	36.8	38.9	39.7	38.2	41.4	41.2	41.2	39.9	35.5	33.1	32.8	29.3	30.2	31.7	29.6	35.9	32.6	26.5
16000	28.3	30.4	32.5	33.1	31.4	34.6	34.4	34.1	32.9	29.3	25.4	25.2	19.2	19.6	20.8	18.1	26.7	22.8	15.7
20000	18.3	20.4	24.5	24.7	22.9	27.8	27.4	27.0	25.5	20.1	13.3	11.8	9.2	9.1	9.9	6.5	10.8	12.9	4.9
25000	8.2	7.3	11.6	12.4	7.8	14.5	16.3	14.5	13.8	7.0	1.2							3.1	

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 04
AIRCRAFT CODE 778
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE E4

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	101.6	102.3	105.7	107.9	106.3	110.8	109.0	110.9	109.2	105.9	106.0	102.8	104.8	107.5	106.4	105.0	106.3	106.3	102.9
250	99.4	100.0	103.4	105.6	104.0	107.7	106.7	108.6	107.0	103.7	103.7	100.5	102.5	105.1	104.1	102.7	104.0	104.0	100.6
315	97.2	97.7	101.1	103.2	101.6	105.3	104.4	106.4	104.7	101.4	101.4	98.1	100.1	102.7	101.7	100.3	101.6	101.6	98.3
400	94.9	95.3	98.7	100.8	99.2	102.9	102.0	104.0	102.4	99.1	98.9	95.7	97.6	100.2	99.2	97.8	99.2	99.2	95.8
500	92.5	92.8	96.1	98.2	96.6	100.5	99.6	101.6	100.0	96.6	96.4	93.1	95.0	97.6	96.6	95.2	96.8	96.6	93.2
630	89.9	90.2	93.4	95.5	93.8	97.9	97.1	99.1	97.4	94.1	93.7	90.3	92.2	94.8	93.8	92.5	94.3	94.1	90.5
800	87.4	87.6	90.8	92.6	91.1	95.3	94.4	96.5	94.8	91.4	90.9	87.6	89.2	91.8	90.9	89.5	91.6	91.4	87.7
1000	84.7	84.8	88.0	89.6	88.3	92.4	91.6	93.7	92.0	88.6	87.9	84.7	86.1	88.6	87.7	86.4	88.8	88.6	84.8
1250	81.8	81.8	85.1	86.6	85.2	89.4	88.6	90.7	89.0	85.6	84.7	81.6	82.8	85.1	84.2	83.1	85.8	85.6	81.8
1600	78.8	78.8	82.2	83.4	82.0	86.2	85.4	87.5	85.8	82.4	81.3	78.3	79.3	81.3	80.6	79.8	82.6	82.3	78.5
2000	75.7	75.6	79.1	80.1	78.5	82.7	81.9	84.1	82.4	78.9	77.6	74.7	75.5	77.4	77.8	76.3	79.1	78.8	74.9
2500	71.8	71.9	75.2	76.2	74.6	78.9	78.1	80.2	78.5	75.0	73.4	70.8	71.5	73.2	73.0	72.3	75.2	74.9	70.9
3150	67.6	67.8	70.8	71.8	70.3	74.6	73.8	76.0	74.2	70.6	68.8	66.4	67.8	68.5	68.5	68.8	70.8	70.5	66.4
4000	62.7	63.2	65.8	67.1	65.4	69.5	68.7	70.8	69.0	65.5	63.6	61.5	61.7	63.0	63.2	62.8	65.7	65.3	61.0
5000	57.4	58.2	60.6	62.0	60.1	63.9	63.1	65.1	63.3	59.7	58.1	56.3	55.9	57.2	57.4	57.1	60.6	59.7	55.2
6300	51.5	52.7	55.1	56.6	54.7	58.1	57.2	58.8	56.9	53.2	51.8	50.3	49.7	51.3	51.5	50.9	55.0	53.3	48.8
8000	46.7	47.9	50.1	51.6	50.1	52.8	52.4	52.8	51.3	47.8	45.7	44.9	43.4	45.0	45.4	44.3	49.5	46.8	41.4
10000	41.1	42.8	44.7	46.0	44.6	47.2	46.9	47.1	45.7	42.2	39.9	39.2	36.8	37.8	38.5	37.6	43.1	40.3	35.8
12500	35.3	36.8	38.9	39.7	38.2	41.4	41.2	41.2	39.9	35.5	33.1	32.8	29.3	30.2	31.7	29.6	35.9	32.6	26.5
16000	28.3	30.4	32.5	33.1	31.4	34.6	34.4	34.1	32.9	29.3	25.4	25.2	19.2	19.6	20.8	18.1	26.7	22.8	15.7
20000	18.3	20.4	24.5	24.7	22.9	27.8	27.4	27.0	25.5	20.1	13.3	11.8	9.2	9.1	9.9	6.5	10.8	12.9	4.9
25000	8.2	7.3	11.6	12.4	7.8	14.5	16.3	14.5	13.8	7.0	1.2							3.1	

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.8 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 04
AIRCRAFT CODE 778
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE F4

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	87.0	88.7	90.6	92.5	91.8	94.9	93.7	94.9	93.4	90.1	91.3	88.3	88.2	90.0	89.3	88.3	91.1	90.2	85.7
250	84.9	86.6	88.4	90.3	89.7	92.8	91.6	92.8	91.3	87.9	89.1	86.2	86.0	87.8	87.1	86.1	88.9	88.0	83.6
315	82.8	84.4	86.3	88.1	87.5	90.5	89.4	90.6	89.0	85.7	86.8	83.9	83.7	85.5	84.8	83.9	86.7	85.8	81.4
400	80.7	82.3	84.1	85.9	85.2	88.3	87.1	88.3	86.8	83.5	84.4	81.7	81.4	83.1	82.5	81.6	84.5	83.6	79.1
500	78.5	80.0	81.9	83.6	82.9	85.9	84.8	86.0	84.5	81.1	82.0	79.3	79.0	80.6	80.1	79.3	82.2	81.3	76.8
630	76.2	77.8	79.6	81.3	80.5	83.6	82.5	83.6	82.1	78.8	79.5	76.9	76.5	78.1	77.7	76.8	79.9	78.9	74.4
800	73.9	75.4	77.3	78.9	78.1	81.1	80.0	81.2	79.6	76.3	76.8	74.4	74.0	75.5	75.1	74.3	77.4	76.4	71.9
1000	71.5	73.0	74.9	76.4	75.6	78.5	77.5	78.6	77.1	73.8	74.1	71.8	71.3	72.7	72.5	71.7	74.9	73.8	69.4
1250	69.0	70.5	72.4	73.8	72.9	75.9	74.9	75.9	74.4	71.1	71.2	69.1	68.5	69.8	69.7	68.9	72.3	71.1	66.6
1600	66.4	67.9	69.8	71.1	70.2	73.1	72.2	73.1	71.6	68.3	68.2	66.3	65.7	66.8	66.9	66.0	69.6	68.3	63.7
2000	63.7	65.2	67.0	68.4	67.3	70.2	69.4	70.2	68.6	65.4	65.0	63.4	62.6	63.7	63.9	63.0	66.7	65.3	60.7
2500	60.7	62.2	64.0	65.3	64.2	67.1	66.2	67.0	65.4	62.2	61.6	60.2	59.4	60.3	60.7	59.8	63.6	62.1	57.5
3150	57.4	58.9	60.7	62.0	60.8	63.7	62.6	63.5	61.7	58.6	57.9	56.8	56.0	56.8	57.3	56.4	60.4	58.7	53.9
4000	53.7	55.3	57.0	58.4	57.1	60.0	58.8	59.6	57.7	54.6	53.9	53.0	52.3	53.1	53.6	52.7	56.8	54.9	50.1
5000	49.6	51.2	52.9	54.3	52.9	55.9	54.5	55.4	53.3	50.2	49.6	48.8	48.2	49.0	49.6	48.6	52.9	50.9	45.8
6300	45.2	46.8	48.6	50.0	48.5	51.4	50.0	50.7	48.5	45.5	44.9	44.4	43.8	44.6	45.2	44.2	48.6	46.4	41.3
8000	41.4	42.9	44.6	45.9	44.4	47.3	45.9	46.4	44.2	41.5	40.5	40.1	39.4	40.2	40.9	39.8	44.2	41.9	37.1
10000	37.3	38.7	40.4	41.6	40.0	42.8	41.6	41.9	39.8	37.3	35.9	35.5	34.7	35.4	36.1	35.0	39.4	37.0	32.6
12500	32.8	34.2	35.8	36.8	35.3	37.9	37.0	37.1	35.3	32.9	31.0	30.6	29.6	30.3	31.0	29.8	34.1	31.7	27.9
16000	28.0	29.2	30.7	31.6	30.2	32.6	32.0	31.9	30.4	28.1	25.8	25.5	24.1	24.7	25.4	24.2	28.2	26.1	23.1
20000	22.8	23.7	25.3	26.0	24.7	26.9	26.7	26.4	25.2	22.9	20.3	20.0	18.3	18.8	19.4	18.3	21.9	20.2	18.2
25000	17.2	17.9	19.4	19.9	18.7	20.8	20.8	20.3	19.4	17.1	14.5	14.2	12.3	12.7	13.3	12.6	15.4	14.4	13.4

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 84
AIRCRAFT CODE 778
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE G4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	88.1	88.7	92.0	93.6	91.8	96.2	95.0	96.9	95.2	91.6	91.3	88.3	89.6	91.9	91.1	90.0	92.6	91.8	87.3
250	86.0	86.6	89.9	91.5	89.7	94.0	92.9	94.7	93.0	89.4	89.1	86.2	87.4	89.7	88.9	87.8	90.4	89.7	85.2
315	83.9	84.4	87.7	89.3	87.5	91.8	90.7	92.5	90.8	87.2	86.8	83.9	85.1	87.4	86.6	85.6	88.3	87.5	83.0
400	81.7	82.3	85.6	87.0	85.2	89.5	88.4	90.2	88.5	84.9	84.4	81.7	82.8	85.8	84.3	83.3	86.0	85.2	80.7
500	79.6	80.0	83.3	84.8	82.9	87.2	86.1	87.9	86.2	82.6	82.0	79.3	80.4	82.6	82.0	80.9	83.7	82.9	78.4
630	77.3	77.8	81.1	82.4	80.5	84.8	83.7	85.5	83.8	80.2	79.5	76.9	77.9	80.0	79.5	78.5	81.4	80.5	76.0
800	75.0	75.4	78.7	80.0	78.1	82.3	81.3	83.1	81.4	77.8	76.8	74.4	75.4	77.4	77.0	76.0	79.0	78.0	73.5
1000	72.6	73.0	76.3	77.5	75.6	79.8	78.8	80.5	78.8	75.2	74.1	71.8	72.7	74.6	74.3	73.3	76.4	75.4	71.0
1250	70.1	70.5	73.8	74.9	72.9	77.1	76.2	77.9	76.1	72.6	71.2	69.1	70.0	71.7	71.6	70.6	73.8	72.7	68.2
1600	67.5	67.9	71.2	72.3	70.2	74.3	73.5	75.1	73.3	69.8	68.2	66.3	67.1	68.7	68.7	67.7	71.1	69.9	65.3
2000	64.8	65.2	68.5	69.5	67.3	71.5	70.6	72.2	70.4	66.9	65.0	63.4	64.1	65.5	65.7	64.7	68.2	66.9	62.3
2500	61.7	62.2	65.4	66.5	64.2	68.3	67.4	69.0	67.1	63.6	61.6	60.2	60.8	62.3	62.5	61.5	65.2	63.7	59.0
3150	58.4	58.9	62.1	63.2	60.8	64.9	63.9	65.4	63.5	60.1	57.9	56.8	57.4	58.8	59.1	58.1	61.9	60.3	55.5
4000	54.5	55.3	58.1	59.3	57.1	61.0	59.8	61.2	59.1	55.8	53.9	53.0	53.4	54.6	55.1	54.0	58.1	56.2	51.3
5000	50.2	51.2	53.8	55.0	52.9	56.6	55.3	56.5	54.3	51.1	49.6	48.8	49.0	50.1	50.7	49.6	53.8	51.8	46.8
6300	45.6	46.8	49.1	50.4	48.5	51.9	50.5	51.5	49.2	46.1	44.9	44.4	44.3	45.3	45.9	44.9	49.2	47.0	42.0
8000	41.6	42.9	44.9	46.2	44.4	47.5	46.1	46.8	44.6	41.8	40.5	40.1	39.7	40.6	41.2	40.1	44.5	42.2	37.4
10000	37.3	38.7	40.4	41.6	40.0	42.8	41.6	41.9	39.8	37.3	35.9	35.5	34.7	35.4	36.1	35.0	39.4	37.0	32.6
12500	32.8	34.2	35.8	36.8	35.3	37.9	37.0	37.1	35.3	32.9	31.0	30.6	29.6	30.3	31.0	29.8	34.1	31.7	27.9
16000	28.0	29.2	30.7	31.6	30.2	32.6	32.0	31.9	30.4	28.1	25.8	25.5	24.1	24.7	25.4	24.2	28.2	26.1	23.1
20000	22.8	23.7	25.3	26.0	24.7	26.9	26.7	26.4	25.2	22.9	20.3	20.0	18.3	18.8	19.4	18.3	21.9	20.2	18.2
25000	17.2	17.9	19.4	19.9	18.7	20.8	20.8	20.3	19.4	17.1	14.5	14.2	12.3	12.7	13.3	12.6	15.4	14.4	13.4

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

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

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 04
AIRCRAFT CODE 778
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE J4

P=PNLT A=AL T=ALT

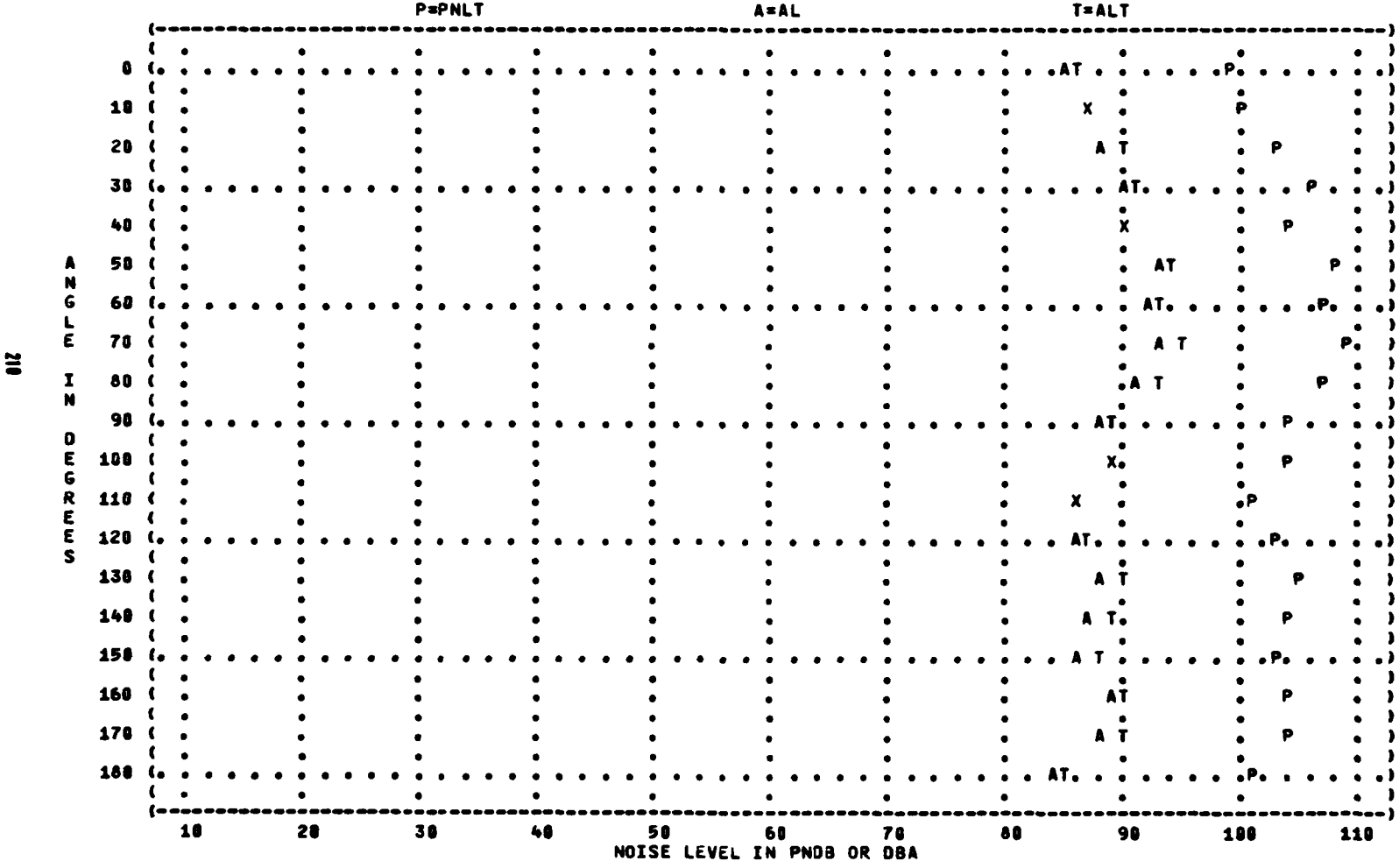


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 05
AIRCRAFT CODE 778
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE C5

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

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

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 05
AIRCRAFT CODE 778
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE D5

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	104.9	105.5	106.8	109.3	110.9	110.4	108.6	104.0	107.3	105.4	105.9	104.3	104.6	105.2	105.8	106.2	106.6	108.8	103.2
250	102.8	103.2	104.5	107.1	108.6	108.1	106.4	101.7	105.0	103.1	103.6	102.1	102.3	102.9	103.5	103.9	104.4	106.6	100.9
315	100.6	100.9	102.2	104.7	106.2	105.8	104.1	99.4	102.7	100.9	101.3	99.8	99.9	100.5	101.1	101.5	102.0	104.3	98.6
400	98.4	98.5	99.8	102.3	103.8	103.3	101.8	97.0	100.4	98.5	99.0	97.4	97.4	98.0	98.6	99.0	99.6	101.9	96.3
500	96.0	96.0	97.3	99.7	101.2	100.8	99.3	94.5	97.9	96.1	96.5	94.9	94.8	95.4	96.0	96.4	97.0	99.3	94.0
630	93.5	93.3	94.6	97.0	98.5	98.1	96.8	92.1	95.4	93.6	93.9	92.3	92.1	92.7	93.3	93.7	94.2	96.7	91.5
800	90.8	90.6	91.9	94.2	95.6	95.2	94.1	89.6	92.8	90.9	91.2	89.6	89.2	89.7	90.3	90.8	91.4	94.0	88.8
1000	87.9	87.7	89.3	91.1	92.4	92.4	91.4	86.9	90.0	88.2	88.3	86.7	86.0	86.6	87.1	87.6	88.5	91.1	85.9
1250	84.7	84.5	86.5	88.0	89.0	89.3	88.6	84.2	87.0	85.2	85.2	83.6	82.9	83.1	83.7	84.4	85.3	88.1	82.9
1600	81.5	81.5	83.5	84.7	85.4	86.0	85.7	81.3	83.8	82.0	81.8	80.3	79.5	79.6	80.1	80.9	81.8	84.7	79.9
2000	78.3	78.3	80.4	81.5	81.9	82.8	82.6	78.2	80.4	78.5	78.1	76.6	75.9	75.9	76.2	77.0	78.0	81.1	76.6
2500	74.6	74.4	76.5	77.6	78.0	79.0	78.8	74.3	76.6	74.7	74.0	72.5	71.8	71.8	71.8	72.9	74.2	77.1	72.7
3150	70.6	70.1	72.1	73.2	73.7	74.9	74.5	70.2	72.2	70.3	69.4	67.9	67.6	67.1	67.1	68.4	69.9	72.8	68.2
4000	66.8	65.5	67.5	68.5	69.1	70.3	69.9	65.7	67.5	65.4	64.3	62.9	62.9	62.3	62.8	63.6	65.2	67.9	63.1
5000	61.8	60.5	62.5	63.6	64.1	65.3	64.9	60.8	62.4	60.2	58.7	57.4	57.7	57.8	56.5	58.3	60.1	62.8	57.4
6300	55.6	55.1	57.2	58.3	58.7	60.1	59.7	55.5	57.1	54.7	52.6	51.4	52.1	51.4	50.6	52.7	54.8	57.5	51.7
8000	51.1	50.5	52.8	53.7	54.2	55.8	55.5	51.2	52.7	50.3	46.6	46.0	47.5	46.5	45.5	47.3	49.8	52.6	46.7
10000	46.8	45.0	48.0	48.9	49.4	51.1	50.9	46.4	48.6	45.3	40.9	40.6	42.0	40.6	39.5	41.4	43.6	47.1	41.4
12500	40.2	39.3	42.3	43.8	43.8	45.9	45.6	40.9	42.3	39.2	34.3	34.2	35.4	34.8	32.7	35.4	37.4	41.3	35.3
16000	33.7	32.7	36.2	36.6	37.3	39.5	39.6	34.6	35.8	32.6	26.7	26.7	28.8	27.1	24.9	28.1	30.2	33.5	28.4
20000	26.1	24.5	28.7	29.0	29.4	32.1	32.2	27.7	29.2	25.6	15.5	15.4	19.4	15.8	13.3	17.0	20.4	25.7	20.1
25000	18.1	11.4	16.3	18.0	19.8	23.6	23.8	15.8	18.4	13.8	4.3	4.1	10.0	4.5	1.7	5.8	10.6	12.8	7.3

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 05
AIRCRAFT CODE 778
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE E5

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	104.9	106.8	108.1	110.5	112.6	111.5	108.6	105.3	108.6	106.6	105.9	104.3	106.4	107.0	107.5	107.6	107.9	110.3	104.5
250	102.8	104.5	105.9	108.2	110.3	109.2	106.4	103.0	106.4	104.4	103.6	102.1	104.1	104.7	105.2	105.3	105.6	108.1	102.3
315	100.6	102.2	103.6	105.8	108.0	106.9	104.1	100.7	104.1	102.2	101.3	99.8	101.8	102.3	102.8	103.0	103.2	105.8	100.0
400	98.4	99.8	101.1	103.4	105.5	104.5	101.8	98.2	101.7	99.8	99.0	97.4	99.3	99.8	100.3	100.5	100.8	103.4	97.7
500	96.0	97.3	98.6	100.9	102.9	101.9	99.3	95.8	99.3	97.4	96.5	94.9	96.7	97.2	97.7	97.9	98.2	100.8	95.3
630	93.5	94.7	95.9	98.1	100.2	99.2	96.8	93.4	96.8	94.9	93.9	92.3	94.0	94.5	94.9	95.1	95.5	98.2	92.9
800	90.8	91.9	93.3	95.3	97.3	96.4	94.1	90.9	94.1	92.2	91.2	89.6	91.1	91.5	92.0	92.2	92.7	95.5	90.2
1000	87.9	89.0	90.6	92.2	94.2	93.5	91.4	88.2	91.3	89.4	88.3	86.7	87.9	88.4	88.8	89.1	89.7	92.7	87.3
1250	84.7	85.9	87.8	89.1	90.7	90.4	88.6	85.5	88.3	86.4	85.2	83.6	84.7	84.9	85.4	85.9	86.5	89.6	84.3
1600	81.5	82.9	84.8	85.8	87.2	87.1	85.7	82.6	85.2	83.3	81.8	80.3	81.4	81.4	81.8	82.3	83.0	86.2	81.2
2000	78.3	79.7	81.7	82.6	83.6	83.9	82.6	79.5	81.7	79.8	78.1	76.6	77.7	77.7	77.9	78.5	79.2	82.6	78.0
2500	74.6	75.7	77.8	78.7	79.7	80.1	78.8	75.6	77.9	75.9	74.0	72.5	73.7	73.5	73.5	74.3	75.4	78.6	74.8
3150	70.6	71.5	73.5	74.3	75.5	76.0	74.5	71.5	73.6	71.6	69.4	67.9	69.5	68.9	68.8	69.8	71.2	74.3	69.5
4000	66.0	66.6	68.5	69.4	70.5	71.2	69.9	66.8	68.6	66.5	64.3	62.9	64.4	63.7	63.4	64.7	66.2	69.1	64.1
5000	61.0	61.3	63.3	64.3	65.1	66.0	64.9	61.5	63.2	61.0	58.7	57.4	58.8	58.1	57.5	59.2	60.9	63.7	58.2
6300	55.6	55.6	57.7	58.7	59.4	60.5	59.7	56.0	57.7	55.2	52.6	51.4	52.8	52.1	51.2	53.2	55.3	58.1	52.2
8000	51.1	50.8	53.0	53.9	54.6	56.1	55.5	51.5	52.9	50.5	46.6	46.0	47.9	46.8	45.9	47.6	50.0	52.9	46.9
10000	46.0	45.0	48.0	48.9	49.4	51.1	50.9	46.4	48.0	45.3	40.9	40.6	42.0	40.6	39.5	41.4	43.6	47.1	41.4
12500	40.2	39.3	42.3	43.0	43.8	45.9	45.6	40.9	42.3	39.2	34.3	34.2	35.4	34.8	32.7	35.4	37.4	41.3	35.3
16000	33.7	32.7	36.2	36.6	37.3	39.5	39.6	34.6	35.8	32.6	26.7	26.7	28.8	27.1	24.9	28.1	30.2	33.5	28.4
20000	26.1	24.5	28.7	29.0	29.4	32.1	32.2	27.7	29.2	25.6	15.5	15.4	19.4	15.8	13.3	17.8	20.4	25.7	20.1
25000	10.1	11.4	16.3	18.0	19.0	23.6	23.8	15.8	18.4	13.8	4.3	4.1	10.0	4.5	1.7	5.8	10.6	12.8	7.3

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 05
AIRCRAFT CODE 778
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE F5

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	91.0	91.0	92.8	94.8	95.6	95.9	95.2	90.8	93.3	91.3	90.9	89.5	89.3	89.5	89.8	90.7	91.6	93.9	88.0
250	88.9	88.9	90.7	92.6	93.4	93.7	93.1	88.6	91.2	89.1	88.7	87.3	87.1	87.3	87.6	88.5	89.7	91.7	85.8
315	86.8	86.7	88.6	90.4	91.2	91.5	90.9	86.5	89.0	86.9	86.5	85.1	84.9	85.0	85.3	86.2	87.5	89.5	83.7
400	84.6	84.5	86.4	88.2	88.9	89.3	88.8	84.4	86.7	84.7	84.2	82.9	82.6	82.7	83.0	83.9	85.2	87.3	81.5
500	82.4	82.3	84.2	85.9	86.5	87.0	86.5	82.2	84.5	82.4	81.8	80.5	80.3	80.3	80.6	81.6	82.9	85.0	79.3
630	80.1	80.0	81.9	83.5	84.1	84.6	84.2	79.9	82.1	80.1	79.4	78.1	77.8	77.9	78.0	79.1	80.5	82.6	77.0
800	77.7	77.6	79.6	81.1	81.6	82.2	81.9	77.6	79.7	77.7	76.8	75.6	75.4	75.3	75.4	76.6	78.0	80.2	74.6
1000	75.3	75.2	77.2	78.6	79.0	79.7	79.5	75.3	77.2	75.2	74.2	73.0	72.8	72.7	72.7	74.0	75.5	77.7	72.2
1250	72.7	72.6	74.6	76.0	76.3	77.1	77.0	72.8	74.6	72.6	71.4	70.3	70.1	69.9	69.9	71.2	72.8	75.1	69.7
1600	70.0	69.9	72.0	73.3	73.5	74.4	74.4	70.2	71.9	69.9	68.5	67.4	67.3	67.0	66.9	68.4	70.1	72.3	67.0
2000	67.2	67.1	69.3	70.5	70.6	71.7	71.7	67.6	69.1	67.1	65.4	64.4	64.4	64.0	63.8	65.4	67.2	69.4	64.2
2500	64.1	64.1	66.2	67.4	67.4	68.6	68.6	64.6	66.3	64.0	62.0	61.1	61.3	60.8	60.5	62.2	64.1	66.3	60.9
3150	60.8	60.7	62.9	64.1	64.0	65.2	65.2	61.2	62.4	60.5	58.2	57.5	57.8	57.2	56.9	58.8	60.8	62.9	57.4
4000	57.1	57.0	59.2	60.4	60.2	61.4	61.4	57.5	58.5	56.6	54.1	53.6	54.0	53.4	53.0	55.0	57.2	59.1	53.4
5000	53.0	52.9	55.1	56.3	56.1	57.2	57.2	53.3	54.1	52.2	49.6	49.2	49.8	49.2	48.7	50.9	53.1	55.0	49.1
6300	48.6	48.5	50.7	51.9	51.6	52.7	52.8	48.9	49.5	47.6	44.8	44.5	45.3	44.7	44.2	46.5	48.7	50.6	44.6
8000	44.7	44.6	46.8	47.9	47.6	48.9	48.9	45.2	45.6	43.8	40.5	40.3	41.4	40.7	40.1	42.3	44.6	46.5	40.8
10000	40.6	40.4	42.7	43.5	43.2	44.7	44.8	41.1	41.6	39.7	36.0	36.0	37.2	36.4	35.7	37.8	40.0	42.1	36.8
12500	36.2	35.8	38.1	38.8	38.6	40.3	40.3	36.7	37.3	35.4	31.4	31.3	32.7	31.8	31.1	33.0	35.1	37.3	32.5
16000	31.3	30.9	33.2	33.8	33.6	35.4	35.5	31.9	32.6	30.7	26.5	26.4	27.9	26.9	26.1	27.9	29.8	32.2	28.0
20000	26.2	25.6	27.8	28.3	28.1	30.1	30.2	26.6	27.4	25.5	21.3	21.2	22.6	21.6	20.9	22.4	24.1	26.9	23.3
25000	20.9	20.8	22.1	22.3	22.3	24.3	24.4	20.8	21.7	19.8	15.7	15.6	16.9	16.1	15.5	16.7	18.2	21.4	18.5

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-001
RUN 05
AIRCRAFT CODE 778
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE G5

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	91.0	92.3	94.2	95.9	97.3	97.0	95.2	92.0	94.7	92.6	90.9	89.5	91.2	91.3	91.5	92.1	93.1	95.4	89.3
250	88.9	90.2	92.1	93.7	95.1	94.8	93.1	89.9	92.5	90.4	88.7	87.3	89.0	89.0	89.3	89.9	90.9	93.2	87.2
315	86.8	88.1	89.9	91.5	92.9	92.6	90.9	87.8	90.3	88.2	86.5	85.1	86.8	86.8	87.0	87.7	88.7	91.0	85.0
400	84.6	85.9	87.7	89.3	90.6	90.4	88.8	85.7	88.1	86.0	84.2	82.9	84.5	84.5	84.7	85.4	86.4	88.8	82.8
500	82.4	83.6	85.5	87.0	88.3	88.1	86.5	83.5	85.8	83.7	81.8	80.5	82.1	82.1	82.3	83.0	84.1	86.5	80.6
630	80.1	81.3	83.2	84.6	85.8	85.7	84.2	81.2	83.5	81.4	79.4	78.1	79.7	79.6	79.7	80.6	81.7	84.2	78.3
800	77.7	78.9	80.9	82.2	83.3	83.3	81.9	78.9	81.1	79.0	76.8	75.6	77.2	77.1	77.1	78.0	79.2	81.7	76.0
1000	75.3	76.5	78.5	79.7	80.7	80.8	79.5	76.6	78.6	76.5	74.2	73.0	74.7	74.5	74.4	75.4	76.7	79.2	73.6
1250	72.7	73.9	76.0	77.1	78.0	78.2	77.0	74.1	76.0	73.9	71.4	70.3	72.0	71.7	71.6	72.7	74.0	76.6	71.0
1600	70.0	71.2	73.3	74.4	75.2	75.6	74.4	71.5	73.3	71.2	68.5	67.4	69.2	68.8	68.6	69.8	71.3	73.8	68.3
2000	67.2	68.5	70.6	71.6	72.3	72.8	71.7	68.9	70.5	68.4	65.4	64.4	66.3	65.8	65.5	66.9	68.4	70.9	65.5
2500	64.1	65.4	67.6	68.5	69.1	69.7	68.6	65.9	67.3	65.3	62.0	61.1	63.1	62.6	62.2	63.6	65.3	67.8	62.3
3150	60.8	62.1	64.2	65.2	65.7	66.3	65.2	62.5	63.8	61.7	58.2	57.5	59.7	59.0	58.6	60.2	62.0	64.4	58.7
4000	57.1	58.1	60.3	61.3	61.6	62.3	61.4	58.5	59.6	57.6	54.1	53.6	55.5	54.8	54.3	56.2	58.1	60.3	54.5
5000	53.0	53.7	55.9	56.9	57.1	57.9	57.2	54.1	54.9	53.0	49.6	49.2	50.9	50.3	49.8	51.8	53.9	55.9	49.9
6300	48.6	49.0	51.2	52.3	52.3	53.2	52.8	49.5	50.0	48.1	44.8	44.5	46.0	45.4	44.9	47.0	49.2	51.2	45.1
8000	44.7	44.9	47.1	48.1	47.9	49.1	48.9	45.4	45.9	44.0	40.5	40.3	41.8	41.0	40.4	42.6	44.8	46.8	41.1
10000	40.6	40.4	42.7	43.5	43.2	44.7	44.8	41.1	41.6	39.7	36.0	36.0	37.2	36.4	35.7	37.8	40.0	42.1	36.8
12500	36.2	35.8	38.1	38.8	38.6	40.3	40.3	36.7	37.3	35.4	31.4	31.3	32.7	31.8	31.1	33.0	35.1	37.3	32.5
16000	31.3	30.9	33.2	33.8	33.6	35.4	35.5	31.9	32.6	30.7	26.5	26.4	27.9	26.9	26.1	27.9	29.8	32.2	28.0
20000	26.2	25.6	27.8	28.3	28.1	30.1	30.2	26.6	27.4	25.5	21.3	21.2	22.6	21.6	20.9	22.4	24.1	26.9	23.3
25000	20.9	20.0	22.1	22.3	22.3	24.3	24.4	20.8	21.7	19.8	15.7	15.6	16.9	16.1	15.5	16.7	18.2	21.4	18.5

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

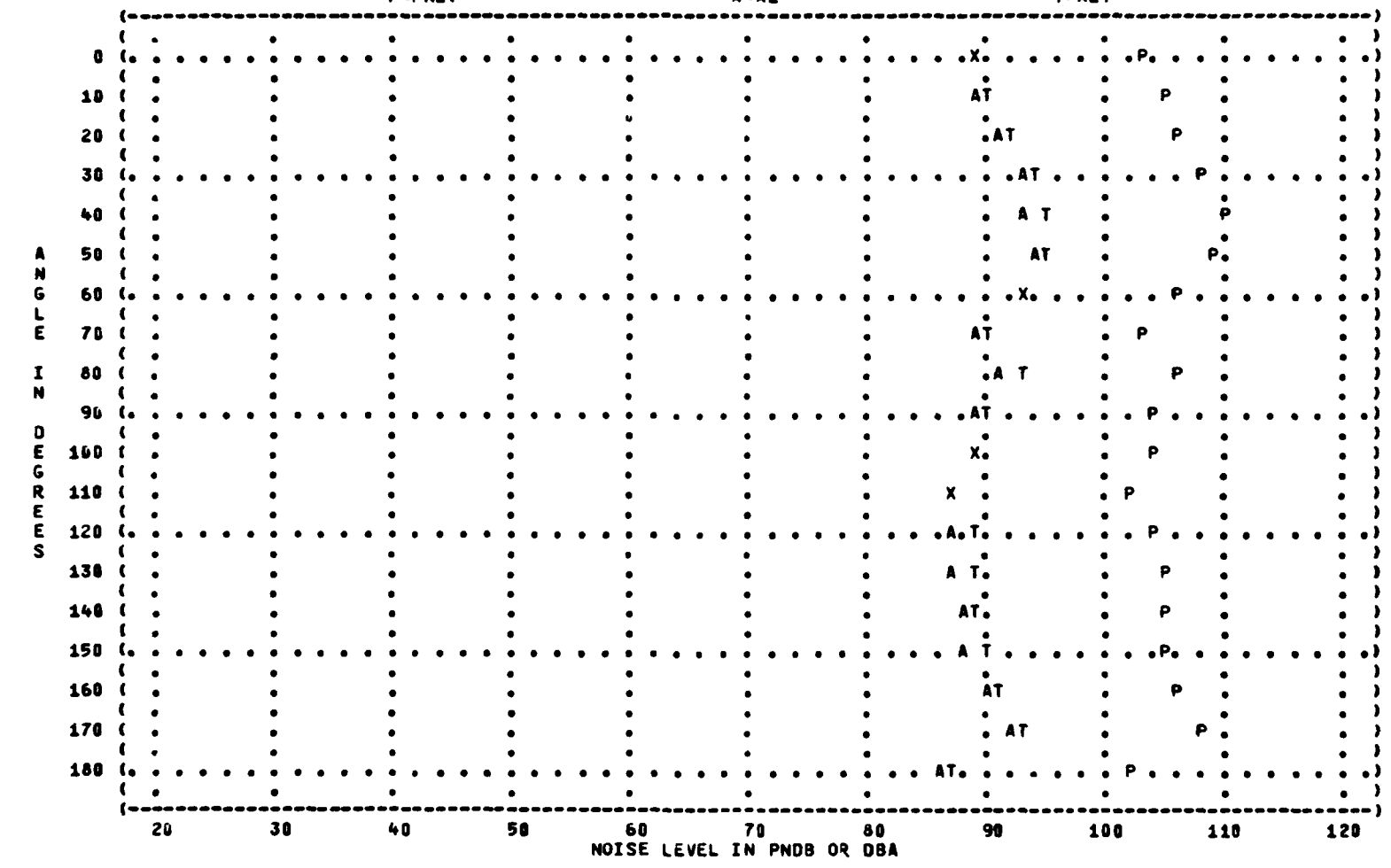
NOISE SOURCE/SUBJECT:
F-106 NOISE SUPPRESSOR
AF 32A-17
GROUND RUNUP

OPERATION:
AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-778-031
RUN 05
AIRCRAFT CODE 778
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE J5

P=PNLT A=AL T=ALT



NOISE PRODUCED ON THE GROUND BY

F-111A NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 78-779-001
AIRCRAFT CODE: 779
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Idle Power, 66.9% RPM	218-223
Engine Runup, 75% RPM	224-229
Military Power, 96.5% RPM	230-235
Zone 3 Afterburner Power	236-241
Zone 5 Afterburner Power	242-247

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
- NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
- PERCEIVED NOISE LEVEL
- TONE-CORRECTED, PERCEIVED NOISE LEVEL
- A-WEIGHTED OVERALL SOUND LEVEL
- TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 01
AIRCRAFT CODE 779
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
IDLE POWER 66.9% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	66	65	67	72	66	66	64	63	63	63	61	60	63	63	61	63	63	63	62
63	73	71	75	75	72	67	69	66	67	68	69	67	66	66	66	67	67	66	65
80	76	75	75	74	76	70<	72	68<	68<	70<	71<	68<	68<	72	74	73	69<	69<	69<
100	77	74	74	76	74	73	70	70	69	72	72	70	70	70	70	72	72	72	73
125	75	74	74	75	71	71	70	67	70	69	71	67	67	67	69	70	69	69	69
160	79	76	75	76	72	75	71	66	67	69	71	66	69	68	68	70	71	71	71
200	72	70	70	74	69	71	70	69	67	71	69	70	72	64	65	67	69	72	74
250	73	73	73	75	70	71	72	72	69	71	70	68	67	67	68	68	71	73	76
315	73	73	71	72	65	66	68	65	66	70	66	65	65	64	64	67	68	69	70
400	71	69	66	69	62	64	65	64	65	63	62	63	61	62	65	65	65	66	66
500	73	69	66	67	65	66	70	65	66	64	66	66	63	64	68	65	65	66	66
630	65	61	63	65	63	64	67	63	64	62	64	64	61	62	65	62	61	61	61
800	63	61	62	65	61	62	59	59	59	62	60	60	59	59	55	58	58	58	58
1000	60	59	61	64	59	60	60	59	58	59	61	62	58	58	55	58	57	56	56
1250	60	59	61	64	59	58	58	58	57	59	60	59	57	55	52	58	56	54	52
1600	69	66	69	68	65	66<	62	62	62<	63<	63<	63	63<	62<	54<	64<	56<	53<	51<
2000	79	76	79	77	76	73	72	71	68	68	67	70	68	69	55<	69	57<	52<	50<
2500	68	65	70	68	67	64	66	66	64	64	63	65	62	61	57	61	57	52<	49<
3150	68	65	70	68	67	65	63	63	63	63	63	64	62	61	55	60	56	51<	47<
4000	74	71	76	75	74	71	71	71	69	68	69	69	66	65	61	65	61	50<	46<
5000	66	65	71	68	67	66	66	65	68	67	68	67	64	60	54	56	53	49	45
6300	66	66	70	68	67	67	66	68	68	67	68	68	64	59	52	54	51	48	44
8000	67	68	69	66	66	65	65	66	64	66	66	64	60	56	48	50	47	43	40
10000	67	67	64	61	60	61	61	66	62	61	63	59	53	52	41	44	40	37	34<
OVERALL	87	85	86	86	84	83	82	81	80	81	81	80	79	79	79	80	80	80	81

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
IDLE POWER 66.9% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-801
RUN 01
AIRCRAFT CODE 779
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE 01

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	100.4	98.0	100.7	99.8	98.3	96.5	96.0	95.7	94.6	94.7	94.9	94.8	92.6	91.7	88.0	91.8	88.3	87.1	87.6
250	98.2	95.7	98.4	97.5	95.9	94.2	93.7	93.3	92.3	92.4	92.5	92.4	90.2	89.4	85.7	89.5	86.0	84.9	85.4
315	95.9	93.4	96.1	95.0	93.5	91.7	91.2	90.9	89.8	89.9	90.0	90.0	87.8	87.1	83.3	87.2	83.6	82.6	83.2
400	93.5	91.0	93.7	92.6	90.9	89.2	88.7	88.3	87.3	87.4	87.5	87.4	85.3	84.7	80.8	84.9	81.2	80.3	80.9
500	91.0	88.5	91.2	90.1	88.2	86.5	86.0	85.6	84.6	84.7	84.8	84.7	82.6	82.2	78.2	82.4	78.6	77.9	78.5
630	88.4	85.8	88.6	87.5	85.5	83.7	83.3	82.7	81.7	81.8	81.9	81.9	79.9	79.6	75.4	79.9	75.8	75.2	75.8
800	85.7	83.1	85.8	84.7	82.8	80.9	80.5	79.6	78.6	78.8	78.8	78.9	77.1	76.9	72.5	77.2	72.9	72.4	73.0
1000	82.8	80.2	82.9	81.8	79.8	78.0	77.6	76.4	75.3	75.5	75.5	75.9	74.2	74.0	69.9	74.4	69.8	69.4	70.0
1250	79.7	77.0	79.7	78.7	76.7	74.8	74.4	73.2	71.7	72.3	72.0	72.7	71.0	70.9	66.9	71.3	66.6	66.1	66.7
1600	76.4	73.7	76.4	75.4	73.3	71.5	71.0	69.7	68.3	68.8	68.5	69.3	67.6	67.5	63.8	68.0	63.5	62.7	63.1
2000	72.8	70.8	72.7	71.7	69.6	67.7	67.3	65.9	64.5	65.0	64.7	65.6	63.9	63.9	60.5	64.4	60.1	59.3	59.2
2500	68.9	65.9	68.6	67.7	65.5	63.6	63.3	61.8	60.3	60.8	60.5	61.4	59.7	59.8	56.6	60.3	56.8	55.4	55.3
3150	64.3	61.3	64.1	63.1	60.8	59.0	58.6	57.0	55.5	56.0	55.7	56.7	54.9	55.1	52.2	55.7	51.4	50.8	50.8
4000	59.3	56.1	58.9	57.9	55.7	53.8	53.3	51.6	50.0	50.5	50.2	51.3	49.5	49.5	46.9	50.3	45.8	45.3	45.4
5000	53.6	50.2	53.0	52.1	49.5	47.8	47.4	45.3	43.2	43.9	43.2	45.1	42.6	43.0	40.5	43.6	39.5	39.3	39.3
6300	47.8	43.1	46.3	45.1	42.8	39.5	39.6	37.3	35.0	35.0	35.2	36.9	34.2	35.8	32.9	35.8	32.6	31.7	32.3
8000	38.8	34.4	37.9	37.2	33.2	30.6	33.0	28.1	28.8	27.5	29.2	29.9	24.4	25.5	28.1	27.3	25.2	26.4	27.6
10000	31.7	27.8	26.6	26.2	20.2	21.2	26.2	17.3	19.2	17.8	18.4	19.2	13.9	14.4	23.3	17.5	18.2	19.8	19.7
12500	23.9	17.2	10.7	14.6	8.9	10.7	18.3	8.9	10.7	7.2	9.8	10.7	3.4	3.3	15.6	8.8	8.9	9.6	10.7
16000	14.4	8.3		2.9		.2	9.1	.5	2.2		1.2	2.2			7.9			.6	1.7
20000	4.9														.3				
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
IDLE POWER 66.9% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 01
AIRCRAFT CODE 779
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	103.9	101.3	103.9	103.8	101.3	99.2	98.4	97.8	96.2	96.2	96.2	96.6	94.5	94.2	90.1	94.1	90.4	87.6	88.2
250	101.6	99.0	101.6	100.6	99.0	96.8	96.0	95.4	93.8	93.8	93.8	94.2	92.1	91.9	87.8	91.8	88.1	85.4	86.1
315	99.3	96.7	99.3	98.2	96.5	94.4	93.6	93.0	91.4	91.3	91.3	91.8	89.7	89.5	85.4	89.6	85.7	83.1	83.8
400	96.9	94.3	96.9	95.7	94.0	91.8	91.1	90.4	88.8	88.8	88.8	89.3	87.2	87.2	82.9	87.2	83.2	80.8	81.6
500	94.5	91.8	94.4	93.3	91.3	89.2	88.4	87.7	86.1	86.1	86.1	86.6	84.5	84.8	80.3	84.8	80.6	78.4	79.2
630	91.9	89.2	91.8	90.6	88.6	86.4	85.7	84.8	83.2	83.2	83.2	83.7	81.8	82.2	77.6	82.2	77.9	75.7	76.5
800	89.1	86.4	89.0	87.9	85.8	83.6	82.9	81.7	80.2	80.2	80.1	80.7	79.0	79.4	74.7	79.5	74.9	72.9	73.7
1000	86.2	83.5	86.1	85.0	82.9	80.6	79.9	78.5	76.8	76.9	76.8	77.7	76.1	76.5	72.8	76.7	71.8	70.8	70.7
1250	83.2	80.4	83.0	81.9	79.7	77.5	76.8	75.3	73.3	73.7	73.3	74.5	72.9	73.5	69.1	73.7	68.6	66.7	67.4
1600	79.9	77.8	79.6	78.5	76.4	74.1	73.4	71.8	69.8	70.2	69.8	71.1	69.5	70.8	66.0	70.4	65.5	63.2	63.8
2000	76.2	73.3	75.9	74.9	72.8	70.4	69.7	68.0	66.0	66.4	66.0	67.4	65.8	66.4	62.6	66.7	62.2	59.8	59.8
2500	72.3	69.3	71.8	70.9	68.7	66.3	65.6	63.9	61.8	62.2	61.8	63.3	61.6	62.3	58.8	62.6	58.1	55.9	56.8
3150	67.8	64.7	67.3	66.3	63.9	61.6	61.0	59.2	57.0	57.4	57.0	58.6	56.8	57.6	54.3	58.1	53.4	51.4	51.5
4000	62.1	58.8	61.5	60.4	58.1	55.9	55.2	53.3	51.3	51.6	51.2	52.8	51.0	51.5	48.6	52.2	47.4	45.7	46.8
5000	55.6	52.2	54.9	54.0	51.4	49.4	48.8	46.6	44.1	44.8	43.9	46.2	43.8	44.6	41.8	45.0	40.7	39.6	39.7
6300	48.3	44.4	47.6	46.4	43.2	40.6	40.5	38.1	35.6	36.5	35.7	37.6	34.9	36.8	33.8	36.8	33.4	32.8	32.6
8000	39.5	35.1	38.5	37.8	33.8	31.1	33.5	28.6	29.2	27.8	29.5	30.3	24.8	26.8	28.5	27.7	25.6	26.5	27.7
10000	31.7	27.8	26.6	26.2	20.2	21.2	26.2	17.3	19.2	17.8	18.4	19.2	13.9	14.4	23.3	17.5	18.2	19.8	19.7
12500	23.9	17.2	10.7	14.6	8.9	10.7	18.3	8.9	10.7	7.2	9.8	10.7	3.4	3.3	15.6	8.0	8.9	9.8	10.7
16000	14.4	8.3		2.9		.2	9.1	.5	2.2		1.2	2.2			7.9			.6	1.7
20000	4.9														.3				
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 01
AIRCRAFT CODE 779
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE F1

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
IDLE POWER 66.9% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	85.5	82.9	86.3	84.7	83.3	81.3	81.0	80.5	79.4	79.5	79.6	79.8	77.5	76.9	73.4	77.0	73.6	73.2	74.0
250	83.3	80.7	84.0	82.4	81.1	79.0	78.7	78.1	77.0	77.1	77.2	77.5	75.3	74.6	71.3	74.8	71.5	71.1	72.0
315	81.0	78.3	81.7	80.1	78.7	76.6	76.3	75.7	74.6	74.8	74.8	75.1	72.9	72.4	69.1	72.6	69.3	69.1	70.0
400	78.7	76.0	79.3	77.8	76.3	74.2	74.0	73.2	72.1	72.3	72.3	72.7	70.6	70.1	66.9	70.4	67.2	67.0	67.9
500	76.3	73.5	76.8	75.3	73.8	71.7	71.5	70.6	69.6	69.7	69.7	70.2	68.1	67.7	64.7	68.0	64.9	64.8	65.7
630	73.8	71.0	74.2	72.8	71.2	69.2	68.9	67.9	66.9	67.1	67.0	67.5	65.5	65.2	62.4	65.6	62.6	62.5	63.4
800	71.3	68.4	71.5	70.1	68.5	66.5	66.3	65.2	64.1	64.4	64.2	64.8	62.9	62.6	60.0	63.1	60.1	60.1	60.9
1000	68.6	65.7	68.7	67.3	65.6	63.7	63.5	62.3	61.2	61.5	61.3	62.0	60.1	59.9	57.6	60.5	57.6	57.6	58.4
1250	65.8	62.8	65.7	64.4	62.6	60.7	60.7	59.3	58.2	58.5	58.3	59.0	57.2	57.1	55.1	57.7	54.9	55.0	55.7
1600	62.8	59.8	62.5	61.3	59.4	57.6	57.7	56.1	55.1	55.4	55.3	56.0	54.1	54.2	52.5	54.8	52.2	52.2	52.8
2000	59.6	56.6	59.2	58.0	56.1	54.4	54.6	52.8	52.0	52.2	52.1	52.8	50.9	51.0	49.9	51.8	49.3	49.4	49.9
2500	56.2	53.1	55.6	54.5	52.5	50.9	51.3	49.3	48.6	48.7	48.8	49.5	47.5	47.7	47.0	48.4	46.1	46.1	46.6
3150	52.3	49.2	51.6	50.6	48.5	47.2	47.7	45.5	44.9	45.0	45.2	45.9	43.8	44.0	43.7	44.7	42.5	42.5	42.8
4000	48.0	44.9	47.2	46.4	44.2	43.0	43.6	41.4	40.9	41.0	41.3	41.9	39.7	39.9	39.9	40.6	38.5	38.5	38.7
5000	43.3	40.2	42.3	41.7	39.4	38.5	39.1	36.8	36.4	36.5	37.0	37.5	35.3	35.4	35.6	36.0	34.2	34.1	34.3
6300	38.1	35.0	36.8	36.7	34.2	33.6	34.4	31.9	31.7	31.8	32.4	32.8	30.5	30.6	31.2	31.2	29.7	29.7	29.8
8000	33.3	30.3	31.3	31.8	29.1	29.8	30.3	27.5	27.7	27.6	28.2	28.5	26.1	26.2	27.8	26.9	26.1	26.2	26.4
10000	28.7	25.8	25.8	26.9	24.0	24.4	26.1	23.0	23.5	23.2	23.9	24.1	21.6	21.7	24.1	22.5	22.2	22.5	22.8
12500	24.3	21.4	20.6	22.1	19.1	19.8	21.8	18.5	19.1	18.6	19.4	19.5	17.1	17.1	20.0	18.0	18.1	18.4	18.9
16000	19.7	16.9	15.7	17.3	14.2	15.0	17.2	13.7	14.4	13.9	14.5	14.6	12.3	12.3	15.4	13.3	13.6	14.1	14.6
20000	14.9	12.2	10.8	12.3	9.2	10.0	12.1	8.6	9.3	8.8	9.4	9.3	7.2	7.1	10.4	8.4	8.8	9.4	10.1
25000	9.6	7.2	5.8	7.3	4.1	4.7	6.4	3.2	3.7	3.6	3.9	3.6	1.9	1.7	4.8	3.3	3.6	4.3	5.2

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
IDLE POWER 66.9% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 01
AIRCRAFT CODE 779
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
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DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	89.0	86.3	89.5	87.8	86.4	83.9	83.3	82.6	80.9	80.9	80.9	81.7	79.4	79.4	75.5	79.3	75.6	73.7	74.7
250	86.7	84.0	87.2	85.6	84.1	81.6	81.0	80.2	78.6	78.6	78.5	79.4	77.2	77.2	73.4	77.2	73.5	71.7	72.6
315	84.5	81.7	84.9	83.3	81.8	79.3	78.7	77.8	76.2	76.2	76.1	77.0	74.9	74.9	71.2	75.0	71.4	69.6	70.6
400	82.1	79.3	82.5	80.9	79.4	76.9	76.3	75.3	73.7	73.7	73.6	74.5	72.5	72.6	69.1	72.7	69.2	67.5	68.5
500	79.7	76.9	80.0	78.5	76.9	74.4	73.9	72.8	71.1	71.2	71.0	72.0	70.0	70.2	66.8	70.4	66.9	65.3	66.3
630	77.3	74.4	77.4	75.9	74.2	71.8	71.3	70.1	68.4	68.5	68.3	69.4	67.4	67.7	64.5	67.9	64.6	63.0	64.0
800	74.7	71.8	74.7	73.3	71.5	69.1	68.7	67.3	65.6	65.8	65.5	66.6	64.8	65.1	62.2	65.4	62.2	60.7	61.6
1000	72.0	69.1	71.9	70.5	68.7	66.3	65.9	64.4	62.8	62.9	62.6	63.8	62.0	62.5	59.0	62.8	59.7	58.2	59.1
1250	69.2	66.2	68.9	67.6	65.7	63.4	63.0	61.4	59.8	59.9	59.6	60.9	59.1	59.6	57.2	60.0	57.0	55.5	56.3
1600	66.2	63.2	65.8	64.5	62.5	60.3	60.1	58.3	56.7	56.8	56.6	57.8	56.0	56.7	54.7	57.1	54.2	52.8	53.5
2000	63.0	60.0	62.4	61.2	59.1	57.1	57.0	55.0	53.5	53.6	53.4	54.7	52.8	53.6	52.0	54.1	51.3	49.9	50.5
2500	59.6	56.5	58.8	57.7	55.5	53.6	53.7	51.5	50.1	50.1	50.1	51.3	49.4	50.2	49.2	50.7	48.1	46.7	47.2
3150	55.7	52.6	54.8	53.8	51.6	49.8	50.0	47.7	46.5	46.4	46.5	47.7	45.7	46.5	45.8	47.0	44.5	43.1	43.5
4000	50.8	47.6	49.7	48.9	46.7	45.2	45.5	43.1	42.1	42.1	42.3	43.3	41.3	42.0	41.6	42.5	40.2	38.9	39.2
5000	45.3	42.2	44.2	43.6	41.3	40.1	40.5	38.1	37.4	37.4	37.8	38.6	36.4	36.9	36.9	37.4	35.4	34.5	34.7
6300	39.5	36.3	38.1	37.9	35.4	34.6	35.3	32.8	32.4	32.4	32.9	33.5	31.2	31.6	32.1	32.1	30.5	29.9	30.1
8000	34.0	31.0	32.0	32.5	29.7	29.6	30.8	27.9	28.0	27.8	28.5	28.9	26.5	26.7	28.2	27.3	26.5	26.3	26.5
10000	28.7	25.8	25.8	26.9	24.0	24.4	26.1	23.0	23.5	23.2	23.9	24.1	21.6	21.7	24.1	22.5	22.2	22.5	22.8
12500	24.3	21.4	20.6	22.1	19.1	19.8	21.8	18.5	19.1	18.6	19.4	19.5	17.1	17.1	20.0	18.0	18.1	18.4	18.9
16000	19.7	16.9	15.7	17.3	14.2	15.0	17.2	13.7	14.4	13.9	14.5	14.6	12.3	12.3	15.4	13.3	13.6	14.1	14.6
20000	14.9	12.2	10.8	12.3	9.2	10.0	12.1	8.6	9.3	8.8	9.4	9.3	7.2	7.1	10.4	8.4	8.8	9.4	10.1
25000	9.6	7.2	5.8	7.3	4.1	4.7	6.4	3.2	3.7	3.6	3.9	3.6	1.9	1.7	4.8	3.3	3.6	4.3	5.2

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
IDLE POWER 66.9% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-881
RUN 01
AIRCRAFT CODE 779
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE J1

P=PNLT A=AL T=ALT

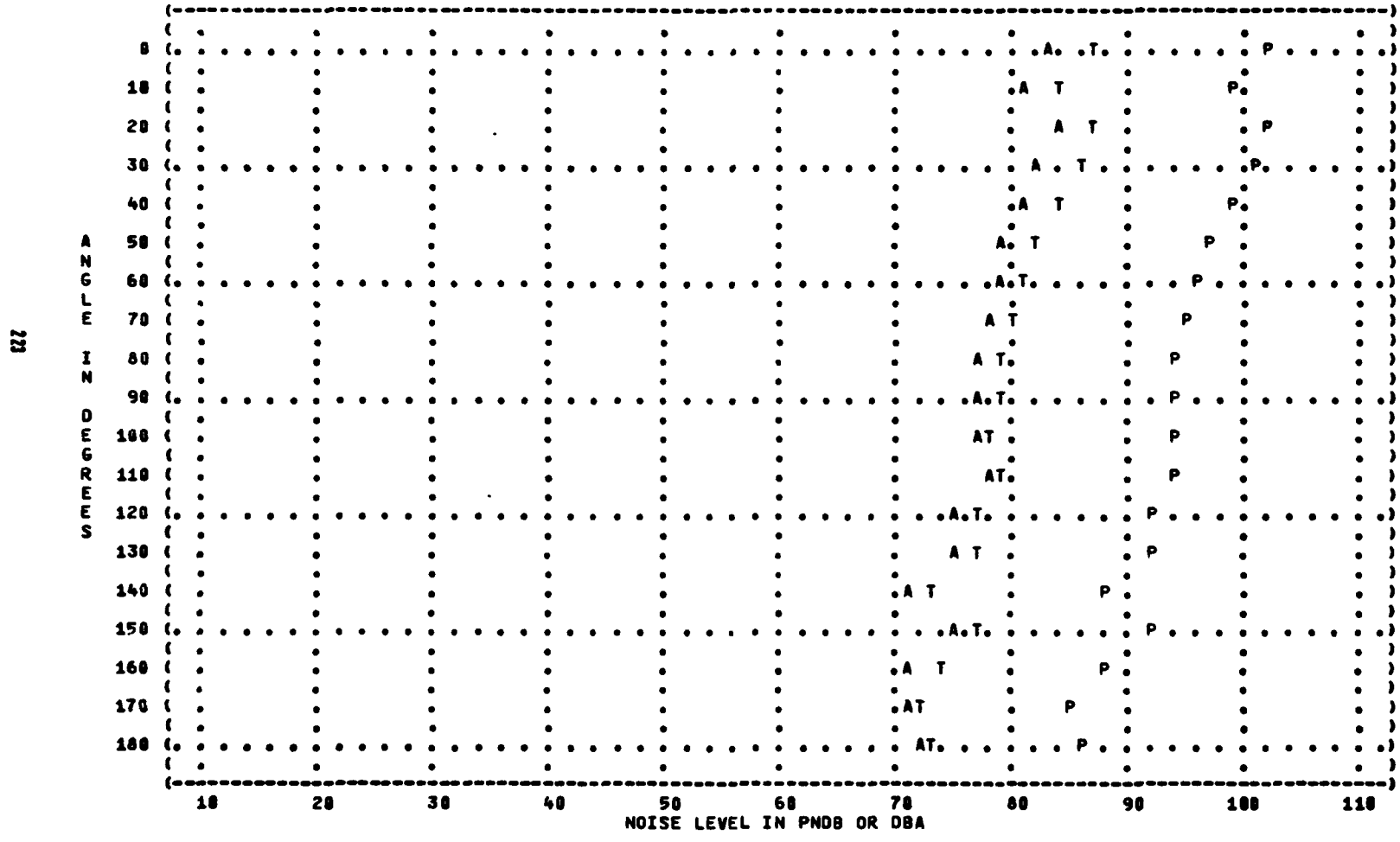


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 02
AIRCRAFT CODE 779
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ENGINE RUNUP 75% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	72	71	69	69	68	70	69	69	68	67	66	65	65	66	66	67	68	68	69
63	75	74	74	75	72	72	71	70	70	69	68	67	67	67	67	67	67	68	68
80	77	75	76	76	75	75	74	73	72	70<	69<	68<	68<	68<	68<	68<	68<	68<	68<
100	80	76	74	73	73	75	74	73	72	71	70	69	70	70	70	70	69	69	69
125	78	76	74	74	74	75	74	73	71	70	69	67	68	68	67	67	66	66	65
160	80	79	75	74	74	75	73	72	70	69	67	65	67	67	67	67	66	66	66
200	76	77	70	71	72	72	71	71	70	69	69	66	68	68	68	68	68	68	69
250	76	79	73	73	72	71	70	70	70	70	69	69	67	68	69	69	70	71	72
315	76	78	71	70	67	69	68	68	67	67	66	66	65	65	65	65	65	65	65
400	75	76	68	67	66	69	68	67	66	66	65	64	64	63	63	63	63	63	63
500	76	75	67	66	66	67	67	66	65	65	64	63	65	64	64	63	63	62	62
630	73	72	68	71	67	68	68	68	68	68	68	68	65	64	62	61	60	59	57
800	73	72	66	65	65	65	64	64	63	63	62	62	61	60	59	58	58	57	56
1000	72	71	64	63	64	63	62	62	62	61	61	60	60	59	57	56	54	53	51
1250	69	72	63	62	62	62	61	61	60	60	60	59	60	58	56	54	52	53<	51<
1600	69	72	64	66	62	66<	65<	64<	63<	63<	62<	61<	63<	60<	58<	56<	54<	54<	50<
2000	77	78	75	76	72	69	68	67	66	66<	65<	64<	65	63<	61<	58<	56<	55<	50<
2500	73	75	76	74	72	72	71	70	69	68	67	66	68	65	63	61	58	55	49<
3150	68	70	69	68	68	67	66	65	65	64	63	63	65	62	59	56	57<	54<	49<
4000	72	72	73	72	71	68	68	68	67	67	67	66	68	65	62	59	56<	53<	48<
5000	68	71	71	70	70	68	68	67	67	67	66	66	67	64	61	58	55	51	48
6300	67	70	69	69	68	67	67	67	67	67	67	67	65	62	59	55	52	49	45
8000	68	69	70	68	68	68	68	67	67	66	66	66	60	57	54	51	48	45	41
10000	67	68	68	67	67	67	66	65	64	63	63	62	52	49	47	44	41	38	35
OVERALL	89	89	85	85	84	84	84	83	82	81	80	80	80	79	78	78	78	78	78

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ENGINE RUNUP 75% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-801
RUN 02
AIRCRAFT CODE 779
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE 02

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	101.0	102.0	100.0	99.3	97.8	97.6	96.9	96.1	95.3	94.6	93.9	93.4	93.8	91.7	89.8	87.9	86.3	85.7	84.7
250	98.8	99.8	97.7	97.0	95.5	95.3	94.6	93.8	93.0	92.3	91.6	91.1	91.4	89.4	87.5	85.6	84.8	83.4	82.5
315	96.5	97.5	95.3	94.7	93.2	93.0	92.2	91.4	90.7	89.9	89.2	88.6	89.0	87.0	85.0	83.3	81.7	81.1	80.2
400	94.1	95.1	92.9	92.3	90.7	90.5	89.8	89.0	88.2	87.4	86.7	86.1	86.5	84.4	82.6	80.9	79.3	78.8	77.9
500	91.7	92.6	90.3	89.8	88.2	88.0	87.2	86.4	85.7	84.9	84.1	83.4	83.8	81.9	80.1	78.3	76.8	76.3	75.5
630	89.1	90.0	87.6	87.2	85.5	85.3	84.5	83.7	82.9	82.2	81.4	80.7	81.1	79.2	77.5	75.7	74.1	73.6	72.8
800	86.4	87.3	84.8	84.4	82.6	82.5	81.7	80.9	80.1	79.3	78.5	77.8	78.3	76.4	74.7	72.9	71.4	70.8	69.9
1000	83.5	84.4	81.8	81.5	79.6	79.5	78.6	77.8	77.0	76.3	75.5	74.7	75.3	73.4	71.7	70.0	68.5	67.8	66.9
1250	80.4	81.4	78.5	78.3	76.3	76.2	75.4	74.6	73.8	73.0	72.2	71.4	72.1	70.2	68.5	66.8	65.2	64.5	63.6
1600	77.1	78.1	75.0	75.0	72.8	72.7	71.9	71.1	70.3	69.4	68.6	67.9	68.5	66.6	64.9	63.2	61.7	60.8	59.8
2000	73.6	74.5	71.2	71.3	68.9	68.9	68.0	67.2	66.3	65.5	64.7	63.9	64.6	62.8	61.1	59.3	58.8	57.3	56.8
2500	69.7	70.6	66.9	67.2	64.6	64.5	63.7	62.9	62.0	61.2	60.4	59.6	60.3	58.4	56.6	54.8	53.8	52.9	51.5
3150	65.3	66.2	62.2	62.7	59.7	59.6	58.8	57.9	57.1	56.2	55.3	54.7	55.3	53.4	51.5	50.8	48.9	48.8	46.4
4000	60.3	61.2	56.9	57.6	54.4	54.1	53.2	52.4	51.4	50.6	50.0	49.6	49.3	47.1	45.4	44.2	43.8	42.2	40.6
5000	54.8	55.8	50.9	51.6	48.3	47.5	46.4	45.4	44.8	44.3	43.9	43.6	42.3	40.5	39.2	37.9	36.8	35.7	34.8
6300	48.6	49.4	43.7	44.7	40.7	39.7	39.3	38.9	38.2	37.8	37.5	36.8	35.2	33.3	31.9	30.1	28.5	25.8	25.4
8000	43.6	43.2	35.6	36.8	33.1	33.9	33.1	32.7	32.3	31.9	31.6	30.8	29.2	25.6	23.2	22.2	21.2	20.8	19.8
10000	37.7	37.4	26.6	29.2	24.7	25.0	24.1	24.0	23.7	23.5	23.4	22.6	18.2	15.9	14.9	13.9	12.9	10.3	9.4
12500	31.3	30.4	16.2	19.3	13.3	15.7	14.3	14.3	14.2	14.1	12.8	12.8	10.0	7.2	6.6	5.6	4.6	.5	
16000	23.8	21.6	5.8	9.2	1.9	6.5	4.5	4.7	4.7	4.6	2.1	3.0	1.7						
20000	11.8	9.1																	
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ENGINE RUNUP 75% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 02
AIRCRAFT CODE 779
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE E2

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	103.1	103.5	102.0	101.6	99.4	99.1	98.3	97.4	96.6	95.9	95.5	95.2	93.8	91.7	90.8	89.0	86.8	86.3	85.5
250	100.9	101.2	99.7	99.3	97.1	96.8	96.0	95.1	94.3	93.6	93.2	92.9	91.4	89.4	88.5	86.7	84.6	84.1	83.3
315	98.6	98.9	97.3	97.0	94.7	94.4	93.6	92.8	92.0	91.3	90.7	90.4	89.0	87.3	86.1	84.4	82.3	81.8	81.0
400	96.2	96.5	94.9	94.6	92.2	92.0	91.1	90.3	89.5	88.8	88.3	87.9	86.5	84.4	83.7	82.0	79.9	79.5	78.7
500	93.7	94.1	92.4	92.1	89.7	89.4	88.6	87.8	86.9	86.3	85.7	85.2	83.8	81.9	81.1	79.5	77.4	77.0	76.3
630	91.1	91.5	89.7	89.5	87.0	86.8	85.9	85.1	84.2	83.5	83.0	82.5	81.1	79.2	78.5	76.8	74.7	74.3	73.6
800	88.4	88.8	86.8	86.7	84.1	83.9	83.1	82.2	81.4	80.7	80.1	79.6	78.3	76.4	75.7	74.0	72.0	71.5	70.7
1000	85.5	85.9	83.8	83.8	81.1	80.9	80.0	79.2	78.3	77.6	77.1	76.5	75.3	73.4	72.7	71.1	69.0	68.5	67.7
1250	82.5	82.8	80.6	80.6	77.8	77.6	76.8	75.9	75.1	74.3	73.8	73.2	72.1	70.2	69.5	67.9	65.8	65.2	64.4
1600	79.2	79.5	77.1	77.3	74.3	74.1	73.3	72.4	71.6	70.8	70.2	69.7	68.5	66.6	66.0	64.3	62.3	61.5	60.6
2000	75.7	76.0	73.2	73.6	70.4	70.3	69.4	68.5	67.6	66.9	66.3	65.7	64.6	62.8	62.1	60.4	58.6	58.0	56.8
2500	71.8	72.0	68.9	69.5	66.1	66.0	65.1	64.2	63.3	62.6	62.0	61.4	60.3	58.4	57.6	55.9	54.4	53.6	52.3
3150	67.3	67.6	64.2	65.0	61.2	61.1	60.2	59.3	58.4	57.6	56.9	56.5	55.3	53.4	52.5	51.1	49.5	48.6	47.2
4000	62.0	62.4	58.6	59.4	55.7	55.2	54.3	53.4	52.4	51.7	51.3	51.1	49.3	47.1	46.2	45.1	43.5	42.7	41.2
5000	56.1	56.6	52.1	53.0	49.2	48.3	47.2	46.2	45.6	45.1	44.9	44.6	42.3	40.5	39.8	38.6	37.2	36.1	34.4
6300	49.4	50.0	44.6	45.6	41.3	40.3	39.8	39.5	38.7	38.4	38.1	37.5	35.2	33.3	32.3	30.6	28.7	26.0	25.7
8000	44.0	43.5	36.0	37.2	33.4	34.2	33.4	33.0	32.5	32.2	31.9	31.2	29.2	25.6	23.4	22.4	21.3	20.2	19.2
10000	37.7	37.4	26.6	29.2	24.7	25.0	24.1	24.0	23.7	23.5	23.4	22.6	18.2	15.9	14.9	13.9	12.9	10.3	9.4
12500	31.3	30.4	16.2	19.3	13.3	15.7	14.3	14.3	14.2	14.1	12.8	12.8	10.0	7.2	6.6	5.6	4.6	.5	
16000	23.8	21.6	5.8	9.2	1.9	6.5	4.5	4.7	4.7	4.6	2.1	3.0	1.7						
20000	11.8	9.1																	
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-0J1
RUN 02
AIRCRAFT CODE 779
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE F2

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ENGINE RUNUP 75% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	86.2	87.4	85.0	84.7	82.9	82.1	81.4	80.8	80.2	79.7	79.2	78.7	78.9	76.7	74.8	73.1	71.9	71.2	70.3
250	84.0	85.2	82.7	82.4	80.6	79.7	79.1	78.5	77.9	77.4	76.9	76.4	76.6	74.4	72.5	70.9	69.8	69.1	68.2
315	81.8	82.9	80.3	80.1	78.2	77.4	76.7	76.1	75.5	75.0	74.5	74.0	74.2	72.1	70.3	68.7	67.7	67.0	66.1
400	79.6	80.6	77.9	77.7	75.8	75.0	74.3	73.7	73.1	72.5	72.0	71.5	71.8	69.7	68.0	66.5	65.5	64.8	64.0
500	77.2	78.3	75.4	75.3	73.2	72.5	71.8	71.2	70.5	70.0	69.5	69.0	69.3	67.3	65.6	64.2	63.2	62.6	61.8
630	74.8	75.9	72.8	72.7	70.6	69.9	69.2	68.6	67.9	67.4	66.8	66.3	66.7	64.8	63.1	61.8	60.8	60.2	59.5
800	72.4	73.4	70.1	70.1	67.9	67.3	66.6	65.9	65.3	64.7	64.2	63.6	64.0	62.1	60.6	59.3	58.4	57.8	57.1
1000	69.9	70.8	67.3	67.3	65.1	64.5	63.8	63.2	62.5	61.9	61.4	60.9	61.2	59.4	57.9	56.7	55.8	55.3	54.6
1250	67.2	68.0	64.3	64.4	62.1	61.6	60.9	60.3	59.6	59.1	58.5	58.0	58.2	56.5	55.2	54.0	53.1	52.6	51.9
1600	64.5	65.2	61.2	61.3	59.0	58.6	57.9	57.3	56.7	56.1	55.6	55.0	55.2	53.6	52.3	51.1	50.3	49.8	49.0
2000	61.6	62.2	57.9	58.1	55.7	55.5	54.8	54.2	53.6	53.0	52.5	52.0	52.0	50.5	49.3	48.2	47.4	46.9	46.1
2500	58.5	58.9	54.3	54.7	52.2	52.1	51.5	50.9	50.3	49.8	49.3	48.8	48.6	47.2	46.1	45.0	44.2	43.6	42.8
3150	55.1	55.3	50.4	51.0	48.5	48.4	47.8	47.3	46.8	46.3	45.9	45.5	45.0	43.7	42.5	41.5	40.6	40.0	39.1
4000	51.2	51.4	46.2	46.8	44.5	44.4	43.8	43.4	42.9	42.4	42.1	41.7	41.1	39.8	38.6	37.6	36.7	36.0	35.1
5000	47.0	47.0	41.6	42.2	40.0	39.9	39.4	39.0	38.5	38.1	37.8	37.4	37.7	35.5	34.3	33.3	32.4	31.7	30.7
6300	42.5	42.3	36.6	37.3	35.3	35.2	34.8	34.4	33.9	33.6	33.3	32.9	33.1	30.9	29.8	28.8	27.9	27.2	26.2
8000	38.5	38.1	32.1	32.8	31.0	31.1	30.7	30.3	29.9	29.6	29.3	29.0	29.0	26.9	26.0	25.1	24.2	23.5	22.7
10000	34.3	33.6	27.5	28.2	26.5	26.8	26.4	26.1	25.7	25.4	25.1	24.8	25.1	22.7	21.9	21.1	20.3	19.7	19.0
12500	29.7	29.0	22.8	23.5	21.9	22.3	21.9	21.6	21.2	20.8	20.6	20.3	20.1	18.3	17.5	16.8	16.2	15.5	15.0
16000	24.8	24.0	17.8	18.5	16.9	17.5	17.0	16.7	16.3	15.9	15.6	15.3	14.2	13.5	12.8	12.2	11.6	11.1	10.7
20000	19.5	18.8	12.6	13.2	11.6	12.3	11.8	11.4	11.0	10.5	10.2	9.9	8.9	8.2	7.7	7.2	6.8	6.4	6.1
25000	13.7	13.2	7.1	7.5	6.1	7.0	6.4	5.8	5.3	4.8	4.3	3.9	3.1	2.7	2.3	1.9	1.6	1.3	1.2

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ENGINE RUNUP 75% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 02
AIRCRAFT CODE 779
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	88.3	88.8	87.0	87.0	84.4	83.5	82.8	82.1	81.5	81.1	80.8	80.5	78.9	76.7	75.8	74.2	72.5	71.8	71.0
250	86.1	86.6	84.7	84.7	82.1	81.2	80.5	79.8	79.2	78.7	78.4	78.1	76.6	74.4	73.6	72.0	70.4	69.8	69.0
315	83.9	84.4	82.3	82.4	79.7	78.8	78.1	77.4	76.8	76.3	76.0	75.7	74.2	72.1	71.3	69.8	68.3	67.6	66.9
400	81.6	82.1	79.9	80.0	77.3	76.4	75.7	75.0	74.4	73.9	73.6	73.3	71.8	69.7	69.0	67.6	66.1	65.5	64.8
500	79.3	79.7	77.4	77.6	74.8	73.9	73.2	72.5	71.8	71.4	71.0	70.7	69.3	67.3	66.6	65.3	63.8	63.3	62.5
630	76.9	77.3	74.8	75.0	72.1	71.4	70.6	69.9	69.2	68.8	68.4	68.1	66.7	64.8	64.2	62.9	61.4	60.9	60.3
800	74.5	74.8	72.1	72.4	69.4	68.7	68.0	67.3	66.6	66.1	65.7	65.4	64.0	62.1	61.6	60.4	59.0	58.5	57.9
1000	71.9	72.2	69.3	69.6	66.6	66.0	65.2	64.5	63.8	63.3	63.0	62.6	61.2	59.4	59.0	57.8	56.4	56.0	55.4
1250	69.3	69.5	66.3	66.7	63.6	63.1	62.3	61.6	60.9	60.4	60.1	59.8	58.2	56.5	56.2	55.1	53.7	53.3	52.7
1600	66.5	66.6	63.2	63.7	60.5	60.1	59.3	58.6	58.0	57.5	57.1	56.8	55.2	53.6	53.3	52.3	50.9	50.5	49.8
2000	63.7	63.6	59.9	60.4	57.2	56.9	56.2	55.5	54.9	54.4	54.1	53.8	52.0	50.5	50.3	49.3	48.0	47.5	46.9
2500	60.5	60.3	56.3	57.0	53.8	53.5	52.8	52.2	51.6	51.1	50.9	50.6	48.6	47.2	47.1	46.1	44.8	44.3	43.6
3150	57.1	56.7	52.5	53.3	50.0	49.9	49.2	48.6	48.1	47.7	47.5	47.3	45.0	43.7	43.6	42.6	41.2	40.7	39.9
4000	52.9	52.5	47.8	48.7	45.7	45.5	44.9	44.4	43.9	43.5	43.3	43.1	41.1	39.8	39.5	38.5	37.1	36.6	35.7
5000	48.3	47.8	42.8	43.6	40.9	40.8	40.3	39.8	39.3	38.9	38.7	38.5	36.7	35.5	35.0	34.0	32.7	32.1	31.2
6300	43.3	42.9	37.4	38.2	35.9	35.8	35.3	34.9	34.5	34.1	33.9	33.6	32.1	30.9	30.2	29.2	28.1	27.4	26.6
8000	38.9	38.3	32.5	33.2	31.3	31.4	30.9	30.6	30.2	29.9	29.6	29.4	28.0	26.9	26.2	25.3	24.3	23.7	22.9
10000	34.3	33.6	27.5	28.2	26.5	26.8	26.4	26.1	25.7	25.4	25.1	24.8	23.7	22.7	21.9	21.1	20.3	19.7	19.0
12500	29.7	29.0	22.8	23.5	21.9	22.3	21.9	21.6	21.2	20.8	20.6	20.3	19.1	18.3	17.5	16.8	16.2	15.5	15.0
16000	24.8	24.0	17.8	18.5	16.9	17.5	17.0	16.7	16.3	15.9	15.6	15.3	14.2	13.5	12.8	12.2	11.6	11.1	10.7
20000	19.5	18.8	12.6	13.2	11.6	12.3	11.8	11.4	11.0	10.5	10.2	9.9	8.9	8.2	7.7	7.2	6.8	6.4	6.1
25000	13.7	13.2	7.1	7.5	6.1	7.0	6.4	5.8	5.3	4.8	4.3	3.9	3.1	2.7	2.3	1.9	1.6	1.3	1.2

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ENGINE RUNUP 75% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 76-779-001
RUN 02
AIRCRAFT CODE 779
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE J2

P=PNLT A=AL T=ALT

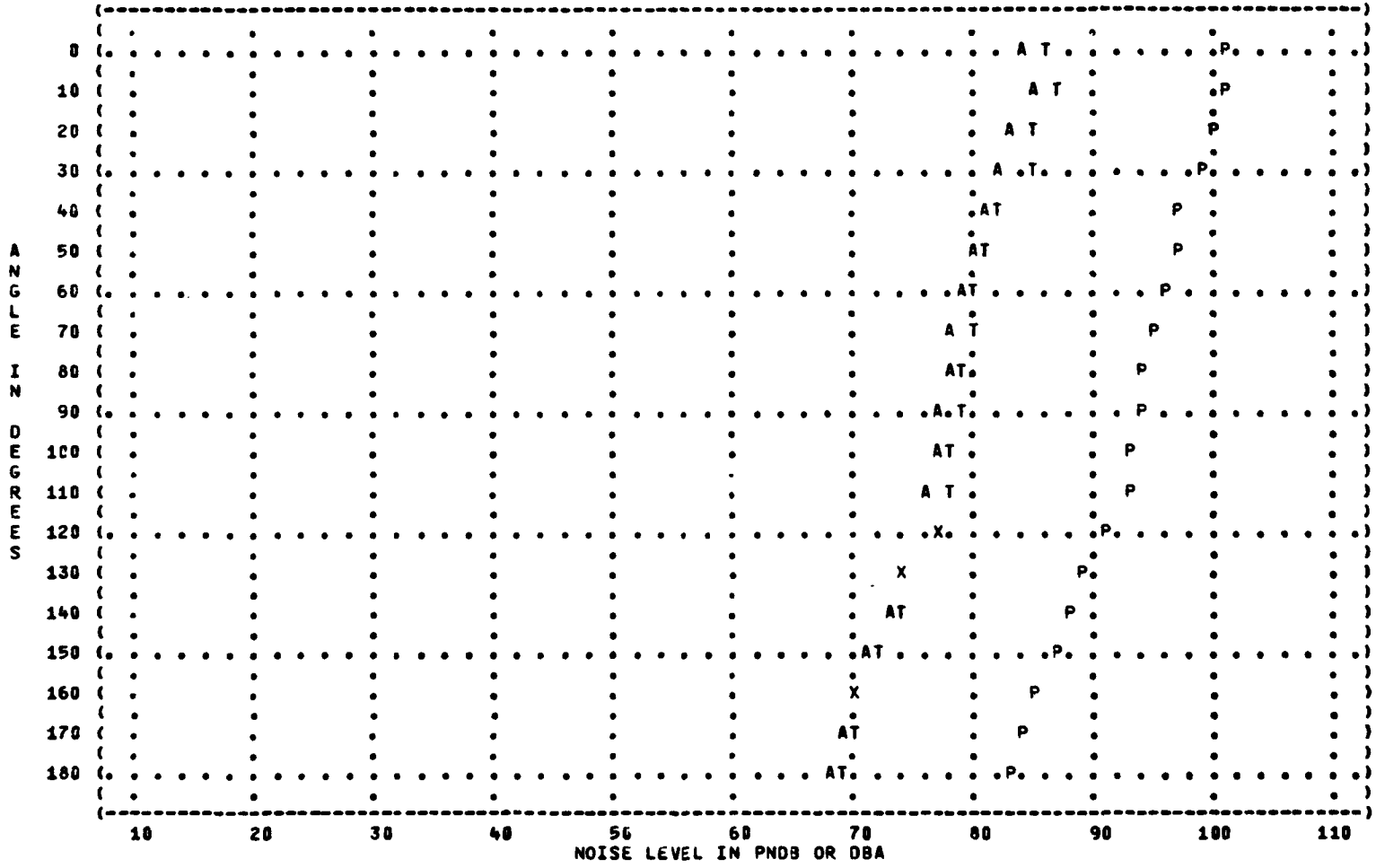


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 03
AIRCRAFT CODE 779
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE C3

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
MILITARY POWER 96.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	76	77	78	77	77	77	77	76	76	75	73	74	76	76	77	77	78	79	79
63	77	78	78	78	78	78	77	77	77	76	75	75	75	75	75	75	75	76	76
80	78	79	80	81	83	83	83	83	83	80	77	78	78	78	78	78	78	77	76
100	80	81	82	82	82	81	81	81	81	80	80	79	79	79	79	78	78	78	79
125	80	80	81	80	80	80	79	79	78	77	75	75	76	76	76	76	76	74	73
160	82	83	84	84	85	83	82	81	80	77	74	75	76	76	76	76	76	73	71
200	86	85	84	86	89	88	87	86	85	82	79	81	82	81	80	79	78	76	75
250	83	84	86	85	85	85	84	84	83	82	80	80	81	80	79	77	76	75	75
315	84	84	85	84	84	83	82	81	81	79	78	78	78	77	76	75	74	73	71
400	82	83	84	83	82	82	81	80	80	79	78	77	77	76	76	75	74	73	72
500	80	81	82	82	83	82	81	81	80	78	76	77	77	77	76	75	75	74	72
630	82	82	83	83	82	82	81	81	80	77	74	76	78	77	76	75	74	72	70
800	84	85	85	85	85	84	83	82	80	78	75	75	76	75	74	73	72	70	68
1000	79	81	83	83	83	82	81	79	78	76	74	73	72	71	70	69	68	66	64
1250	78	79	80	80	80	79	77	76	75	74	73	71	69	69	68	68	68	65	63
1600	76	78	79	79	79	78	77	76	75	74	73	71	70	69	69	68	68	67	66
2000	79	80	81	80	80	80	79	78	78	77	76	75	75	74	73	72	71	72	72
2500	81	81	81	81	80	79	78	77	76	76	76	75	74	76	78	80	82	76	69
3150	76	77	78	78	77	77	76	75	74	74	75	72	70	70	70	71	71	68	66
4000	78	79	80	80	79	78	78	77	76	76	76	74	73	72	71	70	70	69	69
5000	76	77	78	77	76	76	75	74	74	74	74	72	71	69	67	66	64	62	60
6300	74	76	77	76	76	75	75	74	73	74	75	73	71	68	65	62	59	57	56
8000	75	75	76	76	76	75	73	72	71	72	72	69	67	64	61	58	55	53	50
10000	74	74	74	74	74	73	71	70	68	68	67	65	63	59	56	52	48	46	44
OVERALL	94	95	96	96	96	95	94	94	93	91	90	90	90	89	89	89	89	87	86

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
MILITARY POWER 96.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 03
AIRCRAFT CODE 779
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE D3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	107.2	107.9	108.6	108.4	108.3	107.4	106.5	105.7	104.9	104.2	103.6	102.5	101.5	101.7	102.1	102.6	103.3	99.3	96.4
250	105.0	105.7	106.4	106.2	106.0	105.1	104.3	103.4	102.6	101.9	101.3	100.2	99.3	99.5	99.8	100.4	101.1	97.1	94.1
315	102.7	103.4	104.1	103.9	103.7	102.7	101.9	101.0	100.2	99.5	98.9	97.8	97.0	97.2	97.6	98.1	98.8	94.8	91.9
400	100.3	101.0	101.7	101.5	101.3	100.3	99.4	98.6	97.7	97.0	96.4	95.3	94.6	94.8	95.2	95.8	96.5	92.4	89.5
500	97.8	98.5	99.2	99.0	98.8	97.9	96.9	96.0	95.2	94.4	93.8	92.8	92.1	92.3	92.7	93.3	94.0	90.0	87.1
630	95.2	95.9	96.6	96.4	96.2	95.3	94.3	93.4	92.5	91.7	91.0	90.2	89.5	89.7	90.2	90.7	91.5	87.4	84.6
800	92.5	93.2	93.9	93.7	93.5	92.5	91.5	90.6	89.8	88.9	88.2	87.4	86.7	87.0	87.4	88.0	88.8	84.7	81.9
1000	89.5	90.2	91.0	90.7	90.6	89.6	88.6	87.8	87.0	85.9	85.2	84.5	83.8	84.1	84.6	85.2	85.9	81.9	79.1
1250	86.4	87.1	87.8	87.6	87.4	86.4	85.5	84.7	83.9	82.8	82.0	81.3	80.7	81.0	81.5	82.1	82.9	78.8	76.1
1600	83.0	83.7	84.5	84.2	84.1	83.1	82.2	81.4	80.6	79.5	78.6	77.9	77.3	77.6	78.1	78.7	79.5	75.5	72.9
2000	79.4	80.1	80.8	80.6	80.4	79.5	78.7	77.9	77.1	75.9	74.9	74.3	73.8	74.0	74.5	75.1	75.9	71.8	69.3
2500	75.3	76.1	76.9	76.8	76.8	75.8	74.8	74.0	73.2	72.0	70.9	70.3	70.0	69.9	70.4	71.0	71.8	67.6	65.3
3150	71.5	72.2	73.0	72.9	72.9	71.9	70.9	69.9	69.1	67.6	66.5	65.9	66.1	65.4	65.7	66.4	67.2	63.0	60.9
4000	67.2	67.9	68.7	68.6	68.6	67.6	66.5	65.6	64.6	62.6	61.5	61.0	61.6	60.8	60.5	61.1	61.9	57.6	55.7
5000	62.5	63.3	64.0	64.0	64.0	63.0	61.9	60.8	59.8	57.6	56.8	55.9	56.5	55.7	55.0	55.1	55.8	51.5	49.8
6300	57.4	58.2	59.0	58.9	58.9	57.8	56.6	55.5	54.4	52.2	49.9	50.1	50.9	50.1	49.3	48.4	48.8	45.3	43.4
8000	52.7	53.5	54.3	54.3	54.3	53.2	51.9	50.9	49.7	47.0	44.6	45.1	46.2	45.2	44.3	43.3	42.4	40.1	38.1
10000	47.6	48.4	49.2	49.2	49.2	48.0	46.8	45.4	44.2	41.5	38.9	39.6	40.7	39.6	38.7	37.4	36.3	33.6	31.2
12500	41.1	41.9	42.9	42.7	43.0	41.5	40.3	39.4	38.2	35.5	32.7	33.0	34.2	33.0	31.5	30.5	28.7	26.8	24.7
16000	33.9	34.4	35.6	35.8	36.2	35.0	34.0	33.1	32.2	28.5	24.5	25.2	26.6	25.3	24.1	22.8	21.6	18.3	14.9
20000	24.1	25.4	27.4	27.9	28.8	26.7	25.4	23.7	22.4	17.6	12.7	15.3	16.6	14.3	13.1	11.8	9.1	6.8	5.1
25000	9.8	12.9	14.4	15.1	15.8	13.3	10.6	9.5	8.3	6.6	.9	5.4	6.7	3.2	2.1	.9			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
MILITARY POWER 96.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 03
AIRCRAFT CODE 779
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE E3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	108.4	107.9	108.6	108.4	108.9	108.0	107.1	106.3	105.5	104.2	104.2	102.5	102.1	103.0	104.2	105.6	107.2	101.2	98.4
250	106.2	105.7	106.4	106.2	106.6	105.7	104.8	104.0	103.2	101.9	101.8	100.2	99.8	100.8	102.0	103.4	104.9	99.0	96.1
315	103.9	103.4	104.1	103.9	104.3	103.3	102.5	101.6	100.8	99.5	99.4	97.8	97.5	98.5	99.7	101.1	102.7	96.7	93.9
400	101.5	101.0	101.7	101.5	101.9	100.9	100.0	99.1	98.3	97.0	96.9	95.3	95.2	96.1	97.3	98.8	100.3	94.3	91.5
500	99.0	98.5	99.2	99.0	99.5	98.5	97.5	96.5	95.8	94.4	94.3	92.8	92.7	93.6	94.9	96.3	97.9	91.9	89.1
630	96.4	95.9	96.6	96.4	96.9	95.9	94.9	93.9	93.1	91.7	91.5	90.2	90.1	91.0	92.3	93.7	95.3	89.3	86.6
800	93.6	93.2	93.9	93.7	94.1	93.1	92.1	91.2	90.4	88.9	88.7	87.4	87.3	88.3	89.6	91.0	92.6	86.6	83.9
1000	90.7	90.2	91.0	90.7	91.2	90.2	89.2	88.3	87.6	85.9	85.8	84.5	84.4	85.4	86.7	88.2	89.8	83.7	81.1
1250	87.6	87.1	87.8	87.6	88.1	87.1	86.1	85.2	84.5	82.8	82.6	81.3	81.2	82.3	83.6	85.1	86.7	80.7	78.1
1600	84.2	83.7	84.5	84.2	84.7	83.7	82.7	81.9	81.2	79.5	79.1	77.9	77.9	78.9	80.2	81.7	83.4	77.3	74.9
2000	80.6	80.1	80.8	80.6	81.1	80.1	79.2	78.4	77.7	75.9	75.5	74.3	74.4	75.3	76.6	78.1	79.7	73.7	71.3
2500	76.5	76.1	76.9	76.8	77.4	76.4	75.4	74.5	73.8	72.0	71.5	70.3	70.6	71.2	72.5	74.0	75.6	69.5	67.3
3150	72.6	72.2	73.0	72.9	73.6	72.5	71.5	70.5	69.7	67.6	67.0	65.9	66.7	66.7	67.9	69.4	71.8	64.9	62.9
4000	68.1	67.9	68.7	68.6	69.2	68.1	67.0	66.0	65.1	62.6	61.9	61.0	62.0	61.9	62.2	63.5	64.9	59.0	57.3
5000	63.2	63.3	64.0	64.0	64.4	63.3	62.2	61.2	60.1	57.6	56.3	55.9	56.8	56.5	56.3	56.9	58.1	52.6	51.0
6300	57.9	58.2	59.0	58.9	59.2	58.0	56.8	55.8	54.7	52.2	50.1	50.1	51.1	50.6	50.1	49.6	50.3	46.0	44.2
8000	53.0	53.5	54.3	54.3	54.4	53.3	52.1	51.0	49.9	47.0	44.8	45.1	46.3	45.5	44.7	43.9	43.2	40.4	38.5
10000	47.6	48.4	49.2	49.2	49.2	48.0	46.8	45.4	44.2	41.5	38.9	39.6	40.7	39.5	38.7	37.4	36.3	33.6	31.2
12500	41.1	41.9	42.9	42.7	43.0	41.5	40.3	39.4	38.2	35.5	32.7	33.0	34.2	33.0	31.5	30.5	28.7	26.8	24.7
16000	33.9	34.4	35.6	35.8	36.2	35.0	34.0	33.1	32.2	28.5	24.5	25.2	26.6	25.3	24.1	22.8	21.6	18.3	14.9
20000	24.1	25.4	27.4	27.9	28.8	26.7	25.4	23.7	22.4	17.6	12.7	15.3	16.6	14.3	13.1	11.8	9.1	6.8	5.1
25000	9.8	12.9	14.4	15.1	15.8	13.3	10.6	9.5	8.3	6.6	.9	5.4	6.7	3.2	2.1	.9			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
MILITARY POWER 96.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 03
AIRCRAFT CODE 779
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE F3

DISTANCE	ANGLE (DEGREES)																	
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	93.1	93.9	94.8	94.6	94.5	93.5	92.6	91.7	90.7	89.6	88.9	87.9	87.4	86.9	86.7	87.1	87.9	84.8	81.9
250	90.9	91.7	92.6	92.5	92.4	91.4	90.4	89.5	88.6	87.4	86.6	85.7	85.2	84.7	84.6	84.9	85.7	81.8	79.7
315	88.7	89.5	90.4	90.3	90.2	89.2	88.2	87.3	86.4	85.2	84.3	83.5	83.8	82.5	82.4	82.7	83.5	79.6	77.5
400	86.4	87.3	88.2	88.0	87.9	86.9	86.0	85.1	84.1	82.9	82.8	81.2	80.8	80.3	80.2	80.4	81.2	77.4	75.3
500	84.1	85.0	85.9	85.7	85.6	84.6	83.7	82.8	81.8	80.5	79.6	78.8	78.5	78.0	77.9	78.1	78.8	75.1	73.0
630	81.8	82.6	83.5	83.4	83.3	82.3	81.3	80.4	79.5	78.1	77.1	76.4	76.2	75.6	75.5	75.7	76.4	72.7	70.6
800	79.3	80.2	81.1	81.0	80.9	79.9	78.9	78.0	77.1	75.6	74.5	73.9	73.7	73.2	73.0	73.2	73.8	70.2	68.2
1000	76.9	77.7	78.6	78.5	78.4	77.4	76.4	75.5	74.6	73.1	71.9	71.4	71.2	70.7	70.5	70.6	71.2	67.6	65.6
1250	74.3	75.1	76.0	75.9	75.8	74.8	73.8	72.9	72.0	70.4	69.1	68.7	68.6	68.1	67.8	67.8	68.4	64.9	63.0
1600	71.6	72.4	73.3	73.2	73.2	72.2	71.2	70.3	69.3	67.6	66.2	65.9	65.9	65.4	65.0	65.0	65.4	62.1	60.2
2000	68.8	69.7	70.6	70.5	70.4	69.4	68.4	67.5	66.6	64.8	63.3	63.0	63.2	62.5	62.1	62.0	62.2	59.1	57.3
2500	65.8	66.7	67.6	67.5	67.5	66.4	65.4	64.5	63.6	61.7	60.0	59.9	60.2	59.5	59.0	58.7	58.6	55.9	54.1
3150	62.6	63.4	64.3	64.3	64.3	63.2	62.2	61.3	60.4	58.3	56.6	56.5	56.9	56.2	55.6	55.1	55.0	52.4	50.6
4000	59.0	59.9	60.8	60.8	60.8	59.7	58.7	57.7	56.8	54.7	52.8	52.8	53.2	52.4	51.8	51.2	50.9	48.5	46.8
5000	55.8	55.9	56.8	56.8	56.8	55.7	54.7	53.7	52.7	50.5	48.6	48.6	49.1	48.3	47.5	46.9	46.4	44.1	42.4
6300	50.7	51.6	52.5	52.5	52.5	51.4	50.4	49.4	48.4	46.1	44.1	44.2	44.7	43.8	43.0	42.3	41.6	39.6	37.9
8000	46.7	47.6	48.5	48.5	48.5	47.4	46.4	45.5	44.5	42.1	40.0	40.3	40.9	40.0	39.2	38.3	37.6	35.7	34.0
10000	42.4	43.2	44.1	44.0	44.1	43.0	42.1	41.2	40.2	37.8	35.6	36.1	36.8	35.9	35.1	34.2	33.4	31.6	29.9
12500	37.6	38.4	39.2	39.2	39.2	38.2	37.3	36.5	35.6	33.1	30.9	31.5	32.3	31.4	30.6	29.7	28.9	27.1	25.5
16000	32.3	33.0	33.8	33.8	33.9	33.0	32.1	31.3	30.5	28.1	25.8	26.5	27.4	26.5	25.7	24.9	24.0	22.3	20.8
20000	26.5	27.2	27.9	27.9	28.0	27.2	26.4	25.6	24.9	22.5	20.4	21.1	21.9	21.1	20.3	19.5	18.7	17.1	15.6
25000	20.2	20.9	21.6	21.6	21.7	21.0	20.2	19.5	18.8	16.6	14.5	15.2	16.0	15.2	14.5	13.7	12.9	11.5	10.1

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-881
RUN 03
AIRCRAFT CODE 779
OPERATION CODE 80104
PROFILE VERSION A
28 NOV 79
PAGE G3

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
MILITARY POWER 96.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.2	93.9	94.8	94.6	95.2	94.1	93.2	92.2	91.3	89.6	89.4	87.9	88.0	88.2	88.9	90.1	91.7	85.9	83.9
250	92.1	91.7	92.6	92.5	93.0	92.0	91.0	90.0	89.2	87.4	87.2	85.7	85.8	86.0	86.7	87.9	89.5	83.7	81.7
315	89.9	89.5	90.4	90.3	90.8	89.8	88.8	87.9	87.0	85.2	84.9	83.5	83.6	83.8	84.5	85.7	87.3	81.5	79.5
400	87.6	87.3	88.2	88.0	88.6	87.5	86.5	85.6	84.7	82.9	82.5	81.2	81.4	81.6	82.3	83.4	85.8	79.3	77.3
500	85.3	85.0	85.9	85.7	86.3	85.3	84.3	83.3	82.4	80.5	80.1	78.8	79.1	79.3	80.0	81.1	82.7	76.9	75.0
630	82.9	82.6	83.5	83.4	83.9	82.9	81.9	81.0	80.1	78.1	77.6	76.4	76.7	77.0	77.6	78.7	80.2	74.6	72.6
800	80.5	80.2	81.1	81.0	81.5	80.5	79.5	78.6	77.7	75.6	75.1	73.9	74.3	74.5	75.1	76.2	77.7	72.1	70.2
1000	78.0	77.7	78.6	78.5	79.1	78.0	77.0	76.1	75.2	73.1	72.4	71.4	71.8	72.0	72.6	73.6	75.0	69.5	67.6
1250	75.4	75.1	76.0	75.9	76.5	75.4	74.4	73.5	72.6	70.4	69.7	68.7	69.2	69.4	69.9	70.8	72.2	66.8	65.0
1600	72.8	72.4	73.3	73.2	73.8	72.8	71.8	70.8	69.9	67.6	66.8	65.9	66.5	66.7	67.1	68.0	69.2	64.0	62.2
2000	70.0	69.7	70.6	70.5	71.1	70.0	69.0	68.1	67.2	64.8	63.8	63.0	63.7	63.9	64.3	65.0	66.0	61.0	59.3
2500	67.0	66.7	67.6	67.5	68.1	67.0	66.0	65.1	64.2	61.7	60.6	59.9	60.7	60.8	61.1	61.7	62.6	57.8	56.1
3150	63.7	63.4	64.3	64.3	64.9	63.8	62.8	61.9	61.0	58.3	57.1	56.5	57.5	57.5	57.7	58.1	58.9	54.2	52.6
4000	60.0	59.9	60.8	60.8	61.3	60.2	59.1	58.2	57.3	54.7	53.2	52.8	53.7	53.5	53.5	53.6	54.8	50.0	48.4
5000	55.7	55.9	56.8	56.8	57.2	56.1	55.0	54.1	53.1	50.5	48.9	48.6	49.4	49.0	48.8	48.6	48.7	45.3	43.6
6300	51.2	51.6	52.5	52.5	52.8	51.7	50.6	49.6	48.6	46.1	44.3	44.2	44.9	44.4	43.9	43.5	43.2	40.3	38.7
8000	47.0	47.6	48.5	48.5	48.6	47.6	46.5	45.6	44.6	42.1	40.1	40.3	41.0	40.3	39.6	38.9	38.3	36.0	34.4
10000	42.4	43.2	44.1	44.0	44.1	43.0	42.1	41.2	40.2	37.8	35.6	36.1	36.8	35.9	35.1	34.2	33.4	31.6	29.9
12500	37.6	38.4	39.2	39.2	39.2	38.2	37.3	36.5	35.6	33.1	30.9	31.5	32.3	31.4	30.6	29.7	28.9	27.1	25.5
16000	32.3	33.0	33.8	33.8	33.9	33.0	32.1	31.3	30.5	28.1	25.8	26.5	27.4	26.5	25.7	24.9	24.0	22.3	20.8
20000	26.5	27.2	27.9	27.9	28.0	27.2	26.4	25.6	24.9	22.5	20.4	21.1	21.9	21.1	20.3	19.5	18.7	17.1	15.6
25000	20.2	20.9	21.6	21.6	21.7	21.0	20.2	19.5	18.8	16.6	14.5	15.2	16.0	15.2	14.5	13.7	12.9	11.5	10.1

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
MILITARY POWER 96.5% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 03
AIRCRAFT CODE 779
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE J3

P=PNLT A=AL T=ALT

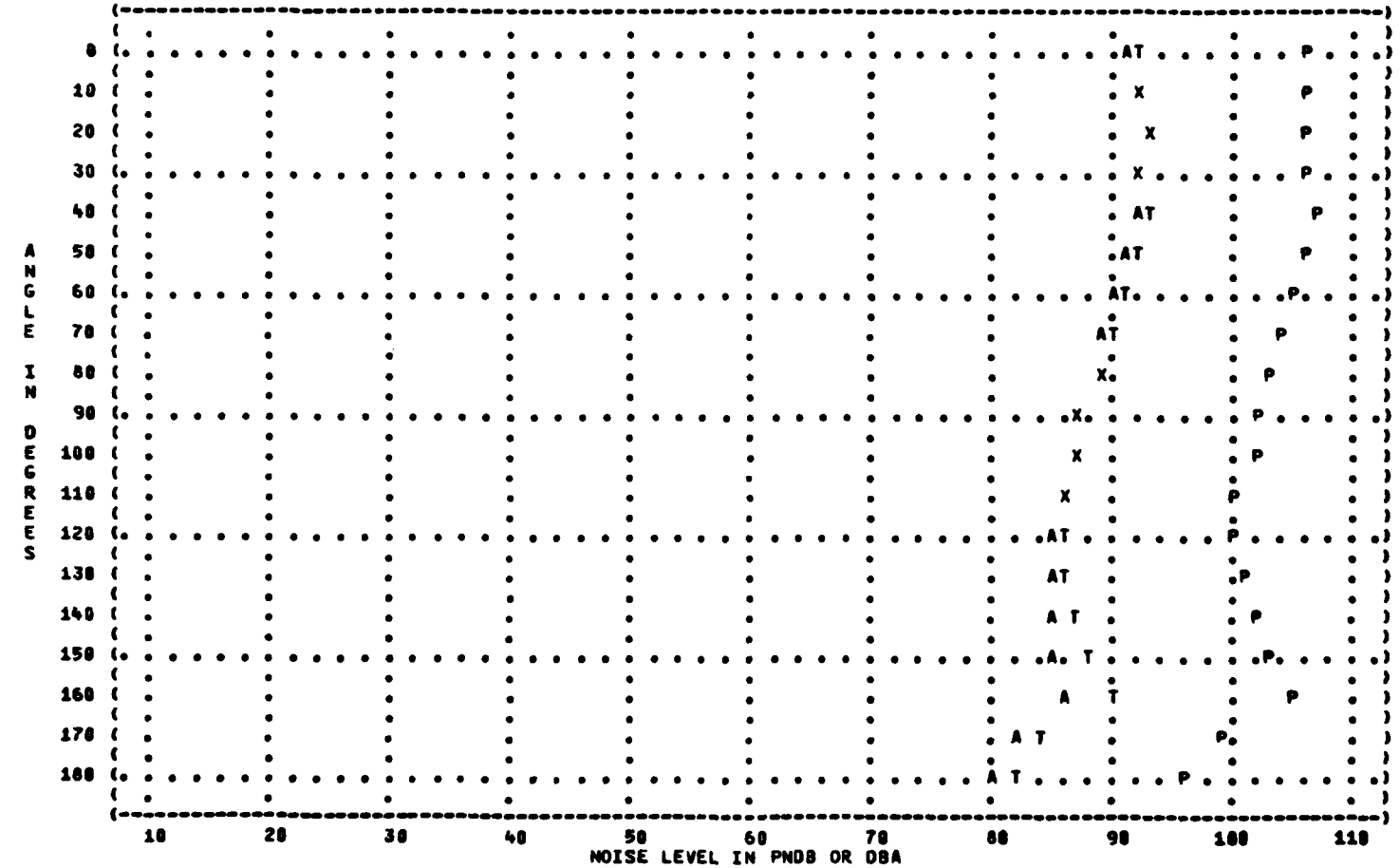


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 84
AIRCRAFT CODE 779
OPERATION CODE 88182
PROFILE VERSION A
28 NOV 79
PAGE C4

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 3 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	83	84	85	84	83	83	81	79	77	77	78	78	78	78	78	80	81	82	79
63	83	83	83	82	81	79	78	78	78	78	78	78	79	79	79	80	81	80	84
80	84	86	88	88	88	84	82	81	80	80	80	80	80	81	81	83	84	81	88
100	83	85	87	86	85	84	85	83	80	82	83	82	82	81	81	83	85	82	89
125	82	83	84	84	83	84	79	78	78	79	80	79	78	78	77	80	83	77	86
160	83	84	85	84	84	82	79	77	76	76	75	76	76	77	78	80	83	77	86
200	83	84	84	85	86	85	82	81	80	80	80	79	78	77	77	79	82	77	84
250	84	86	89	88	87	84	85	84	83	82	81	80	79	78	78	80	83	78	84
315	86	86	86	86	85	85	86	84	82	79	77	77	78	78	78	78	78	74	79
400	84	85	86	86	86	87	87	85	84	81	79	79	79	79	79	78	78	75	78
500	83	84	85	86	87	87	86	84	83	80	78	78	79	79	79	78	77	75	74
630	85	86	86	87	87	84	86	83	81	79	78	78	77	77	77	77	77	74	72
800	87	87	88	88	88	85	85	83	81	79	78	77	77	76	75	75	74	72	69
1000	84	85	87	87	87	85	84	82	80	79	77	76	75	73	72	72	71	70	68
1250	83	84	85	85	85	84	84	82	79	78	76	75	74	73	72	72	72	71	66
1600	81	82	83	83	82	83	84	82	79	77	75	74	73	73	72	72	72	72	65
2000	83	84	84	84	83	83	82	80	78	76	74	74	73	73	72	73	73	78	63<
2500	82	83	84	83	82	82	82	80	78	77	75	75	74	73	73	72	72	72	62
3150	79	80	81	80	80	80	78	76	74	73	73	72	71	70	69	69	68	68	68
4000	80	80	81	81	80	80	79	77	76	76	75	74	73	71	70	70	70	70	61
5000	78	79	79	79	78	77	77	76	74	74	74	72	70	68	66	65	64	62	59
6300	76	76	77	77	76	77	76	76	75	75	74	71	69	66	64	62	60	59	61
8000	76	76	77	77	76	76	73	73	72	72	72	69	66	62	59	57	55	54	59
10000	76	76	76	75	75	76	69	70	70	69	68	64	60	56	53	51	49	49	61
OVERALL	97	98	99	98	98	97	97	95	93	92	91	91	91	90	90	91	93	90	95

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 04
AIRCRAFT CODE 779
OPERATION CODE 00102
PROFILE VERSION A
28 NOV 79
PAGE 04

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 3 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	109.5	110.4	111.2	110.7	110.3	109.7	109.3	107.5	105.8	104.7	104.8	102.9	101.9	101.1	100.4	100.5	100.8	101.1	99.7
250	107.2	108.1	109.0	108.5	108.1	107.4	107.1	105.3	103.6	102.4	101.7	100.6	99.7	98.9	98.1	98.3	98.6	98.9	97.6
315	105.8	105.9	106.7	106.2	105.8	105.1	104.8	103.0	101.2	100.1	99.3	98.2	97.4	96.6	95.9	96.1	96.3	96.7	95.4
400	102.6	103.5	104.4	103.9	103.4	102.8	102.5	100.6	98.9	97.7	96.8	95.8	95.0	94.2	93.5	93.7	94.0	94.3	93.2
500	100.1	101.0	101.9	101.4	101.0	100.3	100.0	98.2	96.4	95.2	94.2	93.3	92.5	91.8	91.0	91.3	91.7	91.9	90.9
630	97.5	98.4	99.3	98.8	98.4	97.7	97.5	95.6	93.8	92.6	91.5	90.7	89.9	89.2	88.5	88.7	89.0	89.4	88.5
800	94.8	95.7	96.6	96.1	95.7	95.0	94.8	92.9	91.1	89.8	88.7	87.9	87.2	86.5	85.8	86.0	86.3	86.8	85.7
1000	91.9	92.8	93.7	93.2	92.8	92.1	91.9	90.0	88.2	86.9	85.8	85.0	84.3	83.6	82.9	83.2	83.5	84.0	82.6
1250	88.8	89.7	90.6	90.1	89.7	89.1	88.9	86.9	85.1	83.8	82.6	81.9	81.2	80.5	79.9	80.1	80.5	81.1	79.2
1600	85.6	86.5	87.3	86.9	86.5	85.8	85.7	83.6	81.9	80.4	79.2	78.5	77.9	77.3	76.9	77.0	77.3	77.9	75.9
2000	82.1	83.0	83.9	83.4	83.0	82.7	82.4	80.5	78.7	77.0	75.5	75.0	74.5	74.1	73.7	73.8	74.0	74.4	72.6
2500	78.3	79.2	80.0	79.8	79.5	79.0	78.7	76.6	74.8	73.1	71.5	71.2	70.8	70.4	70.1	70.1	70.3	70.5	68.6
3150	74.5	75.3	76.2	76.0	75.7	75.0	74.7	72.5	70.7	69.0	67.3	67.0	66.6	66.2	65.9	65.9	66.1	66.2	64.0
4000	70.3	71.1	72.0	71.7	71.5	70.5	70.3	68.0	66.1	64.3	62.7	62.3	62.0	61.6	61.3	61.2	61.4	61.2	58.6
5000	65.6	66.5	67.3	67.1	66.9	65.6	65.5	63.2	61.2	59.3	57.8	57.2	56.9	56.6	56.3	56.1	56.2	55.8	52.9
6300	60.6	61.5	62.3	62.1	61.9	60.4	60.3	58.0	55.9	54.1	52.5	51.8	51.2	51.0	50.7	50.6	50.6	49.4	47.0
8000	56.0	56.9	57.8	57.7	57.5	56.3	56.0	53.6	51.5	49.4	47.2	46.8	46.6	46.2	45.9	45.7	45.9	43.8	42.5
10000	50.8	51.7	52.7	52.4	52.3	51.4	51.1	48.9	46.7	44.3	41.8	41.4	41.1	40.9	40.7	40.2	40.3	37.5	37.1
12500	44.7	45.7	46.8	46.5	46.7	46.1	45.5	43.0	40.8	38.3	35.7	35.5	35.0	34.7	34.6	34.3	33.9	29.9	31.8
16000	37.7	38.6	39.4	39.9	40.5	39.7	39.1	36.9	34.4	31.5	28.5	28.3	27.8	27.7	27.6	27.4	27.2	22.5	21.8
20000	30.0	31.2	32.2	32.8	33.5	32.6	32.8	29.3	26.5	22.8	18.2	18.3	18.5	18.4	18.5	17.4	16.4	10.8	10.9
25000	19.0	20.4	21.8	22.3	23.6	22.8	22.2	18.5	14.5	8.8	8.8	8.3	9.1	9.2	9.4	7.4	5.6		

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 3 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 04
AIRCRAFT CODE 779
OPERATION CODE 00102
PROFILE VERSION A
28 NOV 79
PAGE E4

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	109.5	110.4	111.9	110.7	110.3	109.7	110.1	107.5	105.8	104.7	104.5	102.9	101.9	101.1	100.4	101.6	102.1	103.3	99.7
250	107.2	108.1	109.6	108.5	108.1	107.4	107.8	105.3	103.6	102.4	102.2	100.6	99.7	98.9	98.1	99.4	99.9	101.1	97.6
315	105.0	105.9	107.3	106.2	105.8	105.1	105.6	103.0	101.2	100.1	99.8	98.2	97.4	96.6	95.9	97.1	97.7	98.8	95.4
400	102.6	103.5	105.0	103.9	103.4	102.8	103.2	100.6	98.9	97.7	97.3	95.8	95.8	94.2	93.5	94.8	95.4	96.5	93.2
500	100.1	101.0	102.5	101.4	101.0	100.3	100.8	98.2	96.4	95.2	94.7	93.3	92.5	91.8	91.0	92.3	93.0	94.1	90.9
630	97.5	98.4	99.9	98.8	98.4	97.7	98.2	95.6	93.8	92.6	92.0	90.7	89.9	89.2	88.5	89.8	90.4	91.6	88.5
800	94.8	95.7	97.2	96.1	95.7	95.0	95.5	92.9	91.1	89.8	89.2	87.9	87.2	86.5	85.8	87.1	87.7	89.0	85.7
1000	91.9	92.8	94.3	93.2	92.8	92.1	92.7	90.0	88.2	86.9	86.3	85.0	84.3	83.6	82.9	84.2	84.8	86.2	82.6
1250	88.8	89.7	91.2	90.1	89.7	89.1	89.6	86.9	85.1	83.8	83.1	81.9	81.2	80.5	79.9	81.2	81.8	83.2	79.2
1600	85.6	86.5	88.0	86.9	86.5	85.8	86.4	83.6	81.9	80.4	79.7	78.5	77.9	77.3	76.9	78.1	78.6	80.0	75.9
2000	82.1	83.0	84.5	83.4	83.0	82.7	83.1	80.5	78.7	77.0	76.1	75.0	74.5	74.1	73.7	74.9	75.4	76.6	72.6
2500	78.3	79.2	80.6	79.8	79.5	79.0	79.4	76.6	74.8	73.1	72.1	71.2	70.8	70.4	70.1	71.2	71.6	72.7	68.6
3150	74.5	75.3	76.8	76.0	75.7	75.0	75.4	72.5	70.7	69.0	67.8	67.0	66.6	66.2	65.9	67.0	67.4	68.4	64.0
4000	70.3	71.1	72.5	71.7	71.5	70.5	70.9	68.0	66.1	64.3	63.1	62.3	62.0	61.5	61.3	62.1	62.4	63.8	58.6
5000	65.6	66.5	67.7	67.1	66.9	65.6	65.9	63.2	61.2	59.3	58.1	57.2	56.9	56.6	56.3	56.8	57.0	57.1	52.9
6300	60.6	61.5	62.6	62.1	61.9	60.4	60.6	58.0	55.9	54.1	52.7	51.8	51.2	51.0	50.7	51.1	51.2	50.2	47.0
8000	56.0	56.9	58.0	57.7	57.5	56.3	56.1	53.6	51.5	49.4	47.3	46.8	46.6	46.2	45.9	46.0	46.1	43.5	42.5
10000	50.8	51.7	52.7	52.4	52.3	51.4	51.1	48.9	46.7	44.3	41.8	41.4	41.1	40.9	40.7	40.2	40.3	37.5	37.1
12500	44.7	45.7	46.8	46.5	46.7	46.1	45.5	43.0	40.8	38.3	35.7	35.5	35.8	34.7	34.6	34.3	33.9	29.9	31.8
16000	37.7	38.6	39.4	39.9	40.5	39.7	39.1	36.9	34.4	31.5	28.5	28.3	27.8	27.7	27.6	27.4	27.2	22.5	21.8
20000	30.0	31.2	32.2	32.8	33.5	32.6	32.0	29.3	26.5	22.8	18.2	18.3	18.5	18.4	18.5	17.4	16.4	10.0	10.9
25000	19.0	20.4	21.8	22.3	23.6	22.8	22.2	18.5	14.5	8.8	8.0	8.3	9.1	9.2	9.4	7.4	5.6		

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 3 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 04
AIRCRAFT CODE 779
OPERATION CODE 00102
PROFILE VERSION A
28 NOV 79
PAGE F4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.0	96.9	97.8	97.5	97.3	96.5	96.4	94.3	92.4	90.9	89.5	88.6	87.9	87.2	86.6	86.5	86.7	86.3	84.8
250	93.8	94.7	95.6	95.4	95.1	94.3	94.2	92.2	90.2	88.7	87.3	86.5	85.7	85.0	84.5	84.4	84.6	84.2	82.7
315	91.7	92.5	93.4	93.2	93.0	92.2	92.1	90.0	88.0	86.5	85.1	84.3	83.5	82.9	82.3	82.3	82.5	82.0	80.7
400	89.4	90.3	91.2	91.0	90.8	89.9	89.9	87.8	85.8	84.2	82.8	82.0	81.3	80.7	80.2	80.1	80.4	79.8	78.6
500	87.2	88.1	89.0	88.7	88.5	87.7	87.6	85.5	83.5	82.0	80.5	79.7	79.1	78.5	77.9	77.9	78.1	77.5	76.4
630	84.8	85.7	86.7	86.4	86.2	85.4	85.3	83.2	81.2	79.6	78.1	77.4	76.7	76.2	75.7	75.6	75.8	75.2	74.0
800	82.5	83.4	84.3	84.1	83.9	83.0	83.0	80.9	78.9	77.2	75.6	75.0	74.4	73.8	73.3	73.3	73.4	72.8	71.6
1000	80.6	80.9	81.8	81.6	81.5	80.6	80.6	78.5	76.4	74.7	73.1	72.5	71.9	71.4	71.0	70.9	71.0	70.3	69.1
1250	77.5	78.4	79.3	79.1	79.0	78.1	78.1	75.9	73.9	72.2	70.5	69.9	69.4	68.9	68.4	68.3	68.4	67.6	66.4
1600	74.8	75.7	76.6	76.5	76.4	75.5	75.5	73.3	71.3	69.5	67.8	67.3	66.7	66.3	65.9	65.7	65.7	64.9	63.5
2000	72.1	73.0	73.9	73.8	73.7	72.8	72.7	70.6	68.6	66.8	65.1	64.5	64.0	63.6	63.2	63.0	62.9	62.0	60.5
2500	69.1	70.0	70.9	70.8	70.8	69.8	69.8	67.6	65.6	63.8	62.0	61.5	61.0	60.6	60.2	59.9	59.8	58.8	57.1
3150	66.0	66.8	67.7	67.7	67.7	66.5	66.5	64.4	62.3	60.5	58.8	58.2	57.7	57.3	56.9	56.6	56.4	55.3	53.3
4000	62.5	63.3	64.2	64.2	64.2	62.9	62.9	60.7	58.6	56.9	55.2	54.6	54.1	53.6	53.2	52.9	52.6	51.5	49.2
5000	58.5	59.4	60.3	60.2	60.2	58.9	58.8	56.7	54.5	52.8	51.1	50.6	50.0	49.5	49.0	48.7	48.5	47.2	44.8
6300	54.2	55.1	56.0	56.0	56.0	54.5	54.5	52.3	50.2	48.5	46.8	46.2	45.6	45.1	44.6	44.3	44.0	42.5	40.3
8000	50.1	51.0	51.9	51.9	51.9	50.5	50.4	48.2	46.1	44.4	42.8	42.2	41.7	41.2	40.8	40.5	40.2	38.4	36.8
10000	45.7	46.5	47.3	47.4	47.5	46.1	46.0	43.9	41.8	40.1	38.4	37.9	37.5	37.0	36.7	36.3	36.1	34.0	33.0
12500	40.8	41.6	42.4	42.5	42.6	41.3	41.2	39.1	37.1	35.3	33.6	33.2	32.9	32.5	32.3	31.9	31.7	29.5	29.1
16000	35.4	36.2	37.0	37.1	37.3	36.1	36.0	34.0	32.0	30.2	28.4	28.1	27.9	27.6	27.4	27.1	26.9	24.6	25.0
20000	29.5	30.2	31.0	31.2	31.4	30.4	30.3	28.3	26.4	24.6	22.8	22.6	22.4	22.2	22.0	21.8	21.8	19.3	20.7
25000	23.0	23.8	24.6	24.7	25.0	24.3	24.1	22.2	20.4	18.5	16.8	16.6	16.5	16.3	16.2	16.2	16.5	13.7	16.4

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (OBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 3 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-881
RUN 04
AIRCRAFT CODE 779
OPERATION CODE 88102
PROFILE VERSION A
28 NOV 79
PAGE 64

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.8	96.9	98.4	97.5	97.3	96.5	97.1	94.3	92.4	90.9	90.0	88.6	87.9	87.2	86.6	87.6	88.1	88.5	84.8
250	93.8	94.7	96.2	95.4	95.1	94.3	94.9	92.2	90.2	88.7	87.8	86.5	85.7	85.0	84.5	85.5	86.0	86.3	82.7
315	91.7	92.5	94.1	93.2	93.0	92.2	92.8	90.0	88.0	86.5	85.6	84.3	83.5	82.9	82.3	83.4	83.9	84.2	80.7
400	89.4	90.3	91.8	91.8	90.8	89.9	90.6	87.8	85.8	84.2	83.3	82.0	81.3	80.7	80.2	81.2	81.7	82.0	78.6
500	87.2	88.1	89.6	88.7	88.5	87.7	88.4	85.5	83.5	82.0	81.0	79.7	79.1	78.5	77.9	79.8	79.5	79.7	76.4
630	84.8	85.7	87.3	86.4	86.2	85.4	86.1	83.2	81.2	79.6	78.6	77.4	76.7	76.2	75.7	76.7	77.2	77.4	74.0
800	82.5	83.4	84.9	84.1	83.9	83.0	83.7	80.9	78.9	77.2	76.1	75.0	74.4	73.8	73.3	74.4	74.8	74.9	71.6
1000	80.0	80.9	82.4	81.6	81.5	80.6	81.3	78.5	76.4	74.7	73.6	72.5	71.9	71.4	71.0	71.9	72.3	72.4	69.1
1250	77.5	78.4	79.9	79.1	79.0	78.1	78.8	75.9	73.9	72.2	71.0	69.9	69.4	68.9	68.4	69.4	69.7	69.8	66.4
1600	74.8	75.7	77.2	76.5	76.4	75.5	76.2	73.3	71.3	69.5	68.3	67.3	66.7	66.3	65.9	66.8	67.0	67.0	63.5
2000	72.1	73.0	74.5	73.8	73.7	72.8	73.5	70.6	68.6	66.8	65.6	64.5	64.0	63.6	63.2	64.0	64.2	64.2	60.5
2500	69.1	70.0	71.5	70.8	70.8	69.8	70.5	67.6	65.6	63.8	62.6	61.5	61.0	60.6	60.2	61.0	61.1	61.0	57.1
3150	66.0	66.8	68.3	67.7	67.7	66.5	67.2	64.4	62.3	60.5	59.3	58.2	57.7	57.3	56.9	57.7	57.7	57.5	53.3
4000	62.5	63.3	64.7	64.2	64.2	62.9	63.5	60.7	58.6	56.9	55.6	54.6	54.1	53.6	53.2	53.7	53.7	53.2	49.2
5000	58.5	59.4	60.6	60.2	60.2	58.9	59.3	56.7	54.5	52.8	51.5	50.6	50.0	49.5	49.0	49.3	49.3	48.5	44.8
6300	54.2	55.1	56.2	56.0	56.0	54.5	54.8	52.3	50.2	48.5	47.0	46.2	45.6	45.1	44.6	44.7	44.6	43.4	40.3
8000	50.1	51.0	52.0	51.9	51.9	50.5	50.5	48.2	46.1	44.4	42.9	42.2	41.7	41.2	40.8	40.7	40.5	38.8	36.0
10000	45.7	46.5	47.3	47.4	47.5	46.1	46.0	43.9	41.8	40.1	38.4	37.9	37.5	37.0	36.7	36.3	36.1	34.0	33.0
12500	40.8	41.6	42.4	42.5	42.6	41.3	41.2	39.1	37.1	35.3	33.6	33.2	32.9	32.5	32.3	31.9	31.7	29.5	29.1
16000	35.4	36.2	37.0	37.1	37.3	36.1	36.0	34.0	32.0	30.2	28.4	28.1	27.9	27.6	27.4	27.1	26.9	24.6	25.0
20000	29.5	30.2	31.0	31.2	31.4	30.4	30.3	28.3	26.4	24.6	22.8	22.6	22.4	22.2	22.0	21.8	21.8	19.3	20.7
25000	23.0	23.8	24.6	24.7	25.0	24.3	24.1	22.2	20.4	18.5	16.8	16.6	16.5	16.3	16.2	16.2	16.5	13.7	16.4

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 3 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 04
AIRCRAFT CODE 779
OPERATION CODE 00102
PROFILE VERSION A
28 NOV 79
PAGE J4

P=PNLT A=AL T=ALT

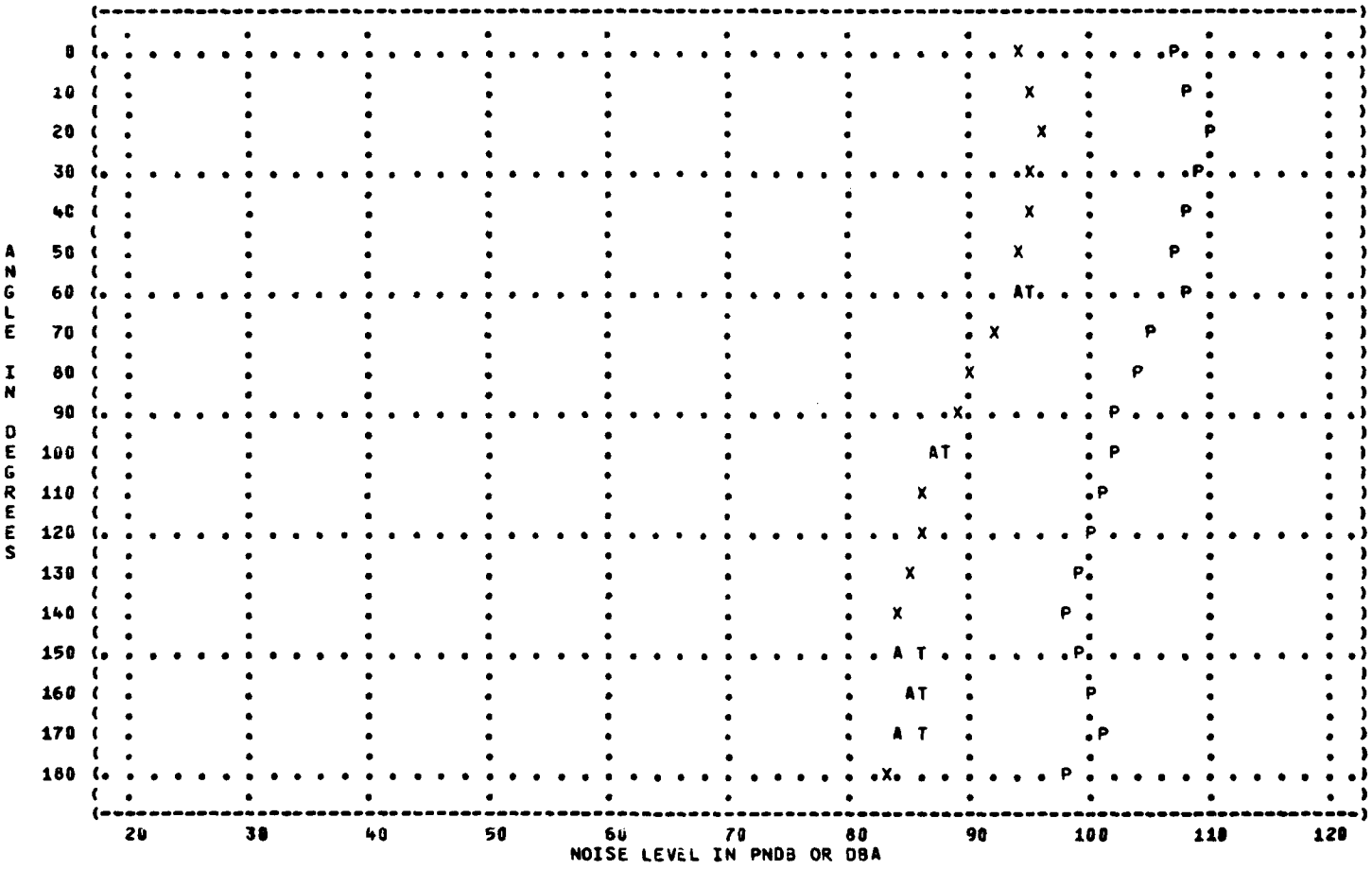


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 05
AIRCRAFT CODE 779
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE C5

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 5 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	84	85	85	85	85	86	84	82	81	80	80	81	82	81	81	81	82	83	84
63	84	85	87	85	84	81	80	80	79	79	79	81	82	83	83	82	81	82	83
80	86	87	87	87	88	84	84	83	82	82	82	84	86	87	88	86	84	83	83
100	86	87	88	87	86	88	88	85	83	84	86	85	85	84	84	84	84	83	82
125	82	83	84	84	84	84	80	78	77	79	82	80	79	79	79	77	76	76	76
160	82	84	86	85	84	81	79	77	76	76	76	76	77	77	76	75	74	74	74
200	81	82	82	83	84	84	82	80	79	78	77	77	77	76	76	75	74	73	73
250	82	83	85	85	85	83	84	83	82	80	78	78	77	77	77	75	73	73	74
315	84	85	86	85	85	84	85	82	80	78	76	77	77	76	75	74	73	72	71
400	84	84	85	85	85	86	87	85	84	80	76	76	76	76	77	75	73	72	72
500	82	83	84	86	88	86	85	84	84	80	77	78	79	78	77	76	76	75	74
630	83	85	86	86	86	85	85	83	81	79	77	77	78	77	76	75	75	73	72
800	87	88	89	89	88	86	85	84	82	80	77	77	77	76	75	75	74	72	70
1000	84	86	87	88	88	86	84	83	81	80	78	77	76	76	75	75	74	72	70
1250	84	86	87	88	88	86	85	84	82	80	78	78	77	76	75	75	74	72	69
1600	81	83	84	85	86	84	84	82	80	78	76	75	75	74	72	72	71	69	67
2000	84	85	85	85	84	82	82	81	80	78	76	75	74	72	69	69	69	67	65
2500	82	83	84	84	84	81	82	80	79	77	75	74	73	71	70	69	69	68	68
3150	78	80	81	81	81	79	78	77	75	74	72	71	69	68	66	67	67	65	63
4000	79	81	83	82	82	79	79	78	77	76	75	73	71	69	68	68	68	66	63
5006	77	79	80	80	79	77	77	77	77	75	72	70	68	66	63	62	61	61	60
6300	74	76	79	78	78	75	76	77	77	75	73	70	67	64	60	59	58	57	56
8000	75	76	78	77	76	75	73	73	73	71	70	66	62	58	55	53	52	52	51
10000	75	75	76	76	75	75	70	70	70	68	66	61	56	53	49	49	48	47	47
OVERALL	97	98	99	99	99	97	97	95	94	93	92	92	92	92	92	91	90	90	90

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 5 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 05
AIRCRAFT CODE 779
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE D5

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	109.2	110.4	111.6	111.5	111.4	109.4	109.3	108.0	106.8	105.0	103.5	102.5	101.7	100.4	99.3	98.6	98.1	97.0	96.1
250	106.9	108.1	109.3	109.3	109.2	107.2	107.1	105.8	104.6	102.8	101.2	100.2	99.5	98.2	97.1	96.3	95.8	94.7	93.9
315	104.7	105.9	107.0	107.0	106.9	104.9	104.8	103.5	102.3	100.5	98.8	97.9	97.2	95.9	94.8	94.0	93.4	92.4	91.6
400	102.3	103.5	104.7	104.6	104.6	102.5	102.5	101.1	99.9	98.1	96.4	95.6	94.8	93.6	92.4	91.7	91.0	90.1	89.2
500	99.9	101.1	102.2	102.1	102.1	100.1	100.0	98.7	97.4	95.6	93.9	93.1	92.4	91.1	90.0	89.3	88.6	87.6	86.7
630	97.3	98.5	99.7	99.6	99.5	97.5	97.5	96.1	94.8	93.0	91.3	90.5	89.8	88.6	87.4	86.7	86.0	85.1	84.2
800	94.7	95.8	97.0	96.8	96.8	94.8	94.7	93.4	92.1	90.2	88.6	87.8	87.1	85.9	84.8	84.0	83.3	82.4	81.5
1000	91.8	93.0	94.1	93.9	93.9	92.0	91.9	90.5	89.2	87.3	85.6	84.9	84.2	83.0	81.9	81.2	80.5	79.6	78.6
1250	88.8	90.0	91.1	90.9	90.8	88.9	88.9	87.4	86.1	84.2	82.5	81.7	81.1	80.0	79.0	78.3	77.6	76.5	75.6
1600	85.6	86.7	87.8	87.7	87.5	85.7	85.7	84.1	82.8	80.8	79.1	78.4	77.9	76.9	76.0	75.3	74.6	73.5	72.5
2000	82.1	83.3	84.4	84.2	84.2	82.4	82.5	80.9	79.4	77.3	75.4	74.9	74.6	73.7	72.8	72.1	71.4	70.3	69.3
2500	78.3	79.4	80.6	80.4	80.5	78.7	78.7	77.1	75.8	73.4	71.5	71.0	71.1	70.2	69.3	68.5	67.8	66.7	65.6
3150	74.3	75.6	76.8	76.6	76.5	74.6	74.7	73.0	71.7	69.2	67.3	66.8	66.9	66.0	65.1	64.4	63.7	62.5	61.3
4000	70.1	71.4	72.6	72.4	72.3	70.3	70.1	68.4	67.2	64.6	62.5	62.3	62.3	61.4	60.4	59.7	59.0	57.7	56.5
5000	65.5	66.8	68.0	67.8	67.7	65.7	65.3	63.7	62.2	59.7	57.5	57.2	57.2	56.3	55.4	54.6	53.9	52.4	51.0
6300	60.4	61.8	63.0	62.8	62.7	60.6	60.2	58.6	57.0	54.5	52.0	51.8	51.8	50.8	49.8	48.9	47.9	46.2	44.7
8000	55.8	57.2	58.5	58.3	58.2	56.1	55.7	54.0	52.5	49.6	46.7	46.5	46.9	45.7	44.7	43.6	42.9	41.1	39.6
10000	50.4	52.0	53.4	53.2	52.9	50.9	50.8	49.1	47.6	44.1	40.6	40.9	41.4	40.3	39.2	38.1	37.3	35.7	33.6
12500	44.2	45.7	47.4	47.2	47.4	45.3	44.8	43.3	41.8	38.2	34.3	34.6	35.2	34.2	32.9	32.8	31.1	29.1	27.6
16000	36.8	38.5	39.9	39.7	41.2	38.5	38.3	37.0	35.4	31.5	26.4	27.4	28.2	27.2	25.9	24.1	22.9	21.1	17.6
20000	28.5	30.0	31.4	32.3	33.7	31.6	31.1	29.3	27.5	22.2	14.3	15.8	17.4	16.9	15.4	13.1	10.6	9.0	7.4
25000	16.7	18.3	19.8	22.2	24.6	20.8	20.3	18.5	16.0	8.5	2.3	4.3	6.5	6.6	4.9	2.2			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 05

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 5 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

AIRCRAFT CODE 779
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE E5

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	110.3	111.4	111.6	111.5	111.4	110.2	110.3	108.8	107.4	105.6	104.1	103.0	101.7	100.4	99.3	99.7	99.4	97.0	97.3
250	108.1	109.2	109.3	109.3	109.2	107.9	108.1	106.6	105.1	103.4	101.8	100.7	99.5	98.2	97.1	97.5	97.1	94.7	95.0
315	105.8	106.9	107.0	107.0	106.9	105.7	105.8	104.3	102.8	101.1	99.4	98.4	97.2	95.9	94.8	95.2	94.8	92.4	92.7
400	103.4	104.5	104.7	104.6	104.6	103.3	103.4	101.9	100.4	98.7	97.1	96.1	94.8	93.6	92.4	92.8	92.3	90.1	90.4
500	101.0	102.1	102.2	102.1	102.1	100.8	101.0	99.4	97.9	96.2	94.6	93.6	92.4	91.1	90.0	90.4	89.9	87.6	87.9
630	98.5	99.6	99.7	99.6	99.5	98.3	98.4	96.9	95.4	93.6	91.9	91.0	89.8	88.6	87.4	87.8	87.3	85.1	85.3
800	95.8	96.9	97.0	96.8	96.8	95.6	95.7	94.1	92.6	90.8	89.2	88.3	87.1	85.9	84.8	85.2	84.7	82.4	82.6
1000	92.9	94.0	94.1	93.9	93.9	92.7	92.9	91.2	89.7	87.9	86.3	85.4	84.2	83.0	81.9	82.3	81.8	79.6	79.8
1250	89.9	91.0	91.1	90.9	90.8	89.7	89.9	88.2	86.6	84.8	83.1	82.2	81.1	80.0	79.0	79.4	78.9	76.5	76.8
1600	86.7	87.8	87.8	87.7	87.5	86.5	86.7	84.9	83.3	81.4	79.7	78.9	77.9	76.9	76.0	76.4	75.9	73.5	73.6
2000	83.2	84.3	84.4	84.2	84.2	83.1	83.5	81.6	79.9	77.9	76.0	75.4	74.6	73.7	72.8	73.2	72.7	70.3	70.4
2500	79.4	80.5	80.6	80.4	80.5	79.4	79.7	77.8	76.3	74.0	72.2	71.5	71.1	70.2	69.3	69.7	69.1	66.7	66.8
3150	75.4	76.6	76.8	76.6	76.5	75.4	75.6	73.7	72.2	69.8	67.9	67.4	66.9	66.0	65.1	65.5	65.0	62.5	62.5
4000	71.6	72.2	72.6	72.4	72.3	70.9	70.9	69.0	67.6	65.0	63.0	62.7	62.3	61.4	60.4	60.6	60.0	57.7	57.5
5000	66.1	67.4	68.0	67.8	67.7	66.1	65.9	64.2	62.5	60.1	57.9	57.5	57.2	56.3	55.4	55.3	54.7	52.4	51.7
6300	60.8	62.2	63.0	62.8	62.7	60.9	60.6	58.9	57.2	54.7	52.3	52.0	51.8	50.8	49.8	49.4	48.4	46.2	45.2
8000	56.1	57.4	58.5	58.3	58.2	56.3	55.9	54.2	52.6	49.7	46.8	46.6	46.9	45.7	44.7	43.9	43.1	41.1	39.9
10000	50.4	52.0	53.4	53.2	52.9	50.9	50.8	49.1	47.6	44.1	40.6	40.9	41.4	40.3	39.2	38.1	37.3	35.7	33.6
12500	44.2	45.7	47.4	47.2	47.4	45.3	44.8	43.3	41.8	38.2	34.3	34.6	35.2	34.2	32.9	32.0	31.1	29.1	27.6
16000	36.8	38.5	39.9	39.7	41.2	38.5	38.3	37.0	35.4	31.5	26.4	27.4	28.2	27.2	25.9	24.1	22.9	21.1	17.6
20000	28.5	30.0	31.4	32.3	33.7	31.6	31.1	29.3	27.5	22.2	14.3	15.8	17.4	16.9	15.4	13.1	10.6	9.0	7.4
25000	16.7	18.3	19.8	22.2	24.6	20.8	20.3	18.5	16.0	8.5	2.3	4.3	6.5	6.6	4.9	2.2			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

OPERATION:
ZONE 5 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-881
RUN 05
AIRCRAFT CODE 779
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE F5

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	95.8	97.1	98.4	98.5	98.6	96.6	96.3	94.9	93.6	91.4	89.4	88.6	88.0	87.0	86.1	85.4	84.8	83.2	81.7
250	93.6	95.0	96.3	96.3	96.4	94.4	94.2	92.7	91.4	89.2	87.2	86.5	85.9	84.9	84.0	83.3	82.7	81.1	79.6
315	91.5	92.8	94.1	94.1	94.3	92.2	92.0	90.6	89.2	87.0	85.0	84.3	83.8	82.8	81.9	81.2	80.6	79.8	77.5
400	89.2	90.6	91.8	91.9	92.1	90.0	89.8	88.3	87.0	84.8	82.7	82.1	81.6	80.6	79.7	79.8	78.4	76.8	75.3
500	87.0	88.3	89.6	89.6	89.8	87.8	87.6	86.1	84.7	82.5	80.4	79.8	79.4	78.4	77.5	76.8	76.2	74.6	73.1
630	84.7	86.0	87.2	87.3	87.5	85.5	85.3	83.8	82.4	80.1	78.0	77.5	77.1	76.1	75.3	74.6	74.8	72.3	70.9
800	82.3	83.6	84.9	85.0	85.2	83.2	82.9	81.4	80.0	77.7	75.6	75.1	74.7	73.8	73.0	72.3	71.6	70.0	68.6
1000	79.8	81.1	82.4	82.5	82.7	80.7	80.5	79.0	77.5	75.2	73.1	72.6	72.3	71.4	70.6	69.9	69.2	67.6	66.2
1250	77.3	78.6	79.9	80.0	80.2	78.2	78.0	76.4	75.0	72.7	70.5	70.1	69.8	68.9	68.2	67.4	66.8	65.1	63.7
1600	74.7	76.0	77.2	77.3	77.6	75.6	75.4	73.8	72.3	70.0	67.8	67.4	67.2	66.3	65.6	64.8	64.2	62.6	61.1
2000	71.9	73.2	74.4	74.6	74.9	72.9	72.7	71.1	69.6	67.2	65.0	64.7	64.5	63.7	62.9	62.2	61.5	59.9	58.4
2500	68.9	70.2	71.5	71.7	71.9	70.0	69.7	68.1	66.6	64.2	62.0	61.7	61.6	60.7	60.8	59.2	58.6	56.9	55.4
3150	65.7	67.1	68.3	68.5	68.7	66.8	66.5	64.9	63.4	61.0	58.7	58.5	58.3	57.5	56.8	56.1	55.4	53.7	52.2
4000	62.3	63.6	64.9	65.0	65.3	63.3	62.9	61.3	59.8	57.4	55.1	54.9	54.8	54.8	53.2	52.5	51.9	50.2	48.6
5000	58.3	59.7	61.0	61.1	61.3	59.3	58.8	57.2	55.7	53.4	51.1	50.9	50.7	50.8	49.2	48.5	47.9	46.1	44.5
6300	54.8	55.4	56.7	56.8	57.0	55.0	54.4	52.9	51.4	49.0	46.8	46.5	46.4	45.5	44.9	44.2	43.6	41.8	40.2
8000	49.8	51.2	52.5	52.6	52.8	50.8	50.3	48.7	47.3	44.8	42.5	42.4	42.4	41.6	40.9	40.2	39.5	37.9	36.3
10000	45.3	46.6	47.9	48.0	48.2	46.3	45.8	44.3	42.8	40.3	38.0	37.9	38.0	37.2	36.5	35.8	35.1	33.6	32.1
12500	40.3	41.6	42.8	42.9	43.2	41.3	41.0	39.4	38.0	35.4	33.0	33.1	33.2	32.5	31.8	31.1	30.4	28.9	27.6
16000	34.8	36.0	37.2	37.3	37.6	35.9	35.7	34.2	32.8	30.1	27.5	27.8	28.1	27.4	26.7	25.9	25.2	23.9	22.7
20000	28.7	29.9	31.0	31.2	31.6	30.0	30.0	28.4	27.1	24.3	21.7	22.1	22.5	21.8	21.2	20.4	19.6	18.5	17.5
25000	22.2	23.2	24.2	24.6	25.1	23.6	23.7	22.2	20.9	18.1	15.7	16.1	16.6	16.0	15.4	14.6	13.8	12.9	12.1

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 78-779-001
RUN 05
AIRCRAFT CODE 779
OPERATION CODE 00101
PROFILE VERSION A
28 NOV 79
PAGE G5

NOISE SOURCE/SUBJECT:
F-111A NOISE SUPPRESSOR
AF32A-13

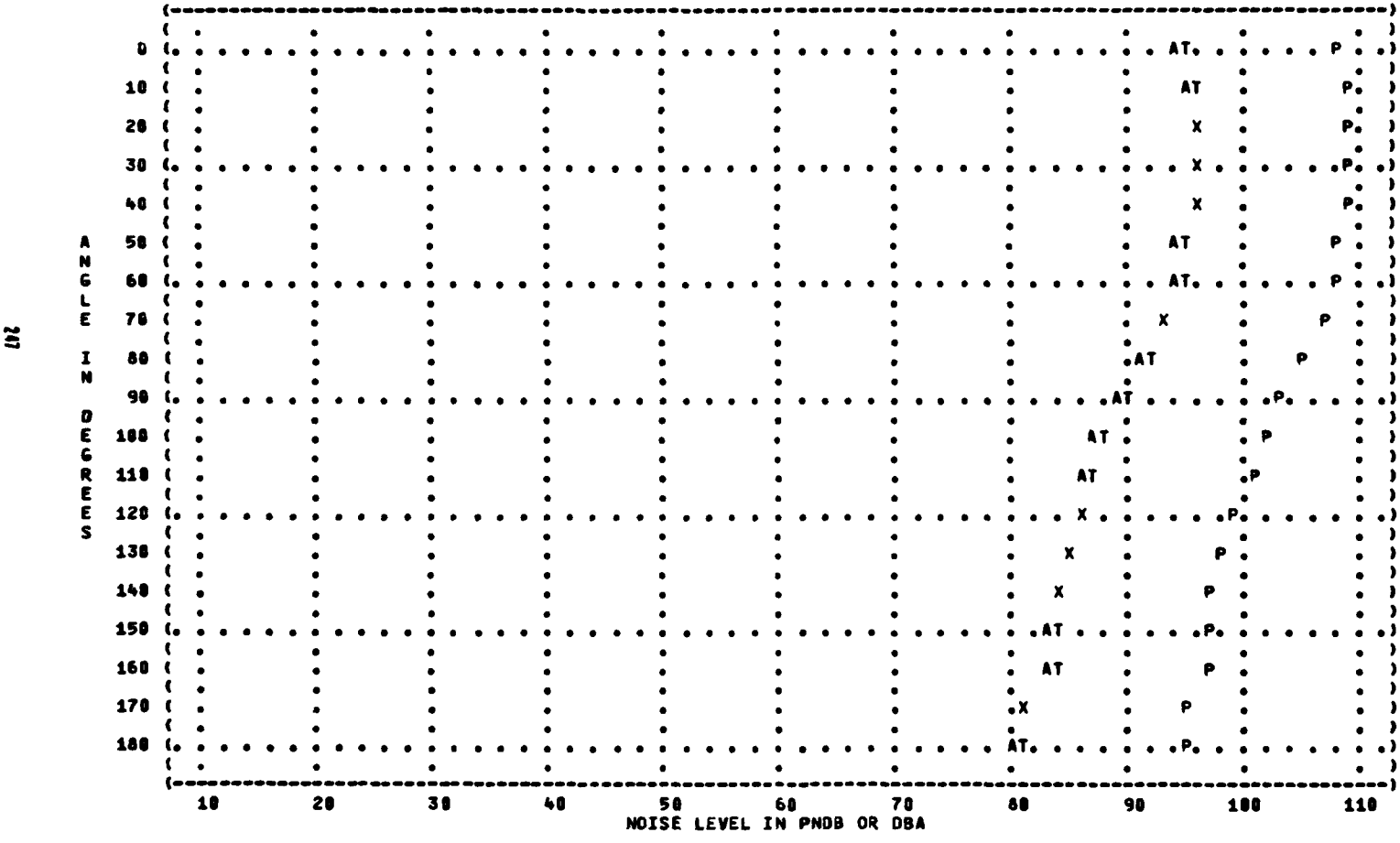
OPERATION:
ZONE 5 AFTERBURNER POWER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.9	96.2	96.4	96.5	96.6	97.3	97.3	95.6	94.1	92.0	90.0	89.1	88.0	87.0	86.1	86.5	86.1	83.2	82.9
250	94.8	96.0	96.3	96.3	96.4	95.2	95.2	93.5	91.9	89.8	87.8	87.0	85.9	84.9	84.0	84.4	84.8	81.1	80.8
315	92.6	93.8	94.1	94.1	94.3	93.0	93.0	91.3	89.7	87.6	85.6	84.8	83.8	82.8	81.9	82.3	81.9	79.0	78.7
400	90.4	91.6	91.8	91.9	92.1	90.8	90.8	89.1	87.5	85.4	83.3	82.6	81.6	80.6	79.7	80.2	79.7	76.8	76.5
500	88.1	89.3	89.6	89.6	89.8	88.6	88.6	86.8	85.2	83.1	81.0	80.3	79.4	78.4	77.5	78.0	77.5	74.6	74.3
630	85.8	87.0	87.2	87.3	87.5	86.3	86.3	84.5	82.9	80.7	78.7	78.0	77.1	76.1	75.3	75.7	75.3	72.3	72.1
800	83.4	84.6	84.9	85.0	85.2	83.9	83.9	82.1	80.5	78.3	76.2	75.6	74.7	73.8	73.0	73.4	73.8	70.8	69.7
1000	81.6	82.2	82.4	82.5	82.7	81.5	81.5	79.7	78.0	75.8	73.7	73.2	72.3	71.4	70.6	71.0	70.6	67.6	67.4
1250	78.4	79.6	79.9	80.0	80.2	79.0	79.0	77.2	75.5	73.2	71.1	70.6	69.8	68.9	68.2	68.5	68.1	65.1	64.9
1600	75.8	77.0	77.2	77.3	77.6	76.4	76.4	74.6	72.9	70.6	68.4	68.0	67.2	66.3	65.6	66.0	65.5	62.6	62.3
2000	73.0	74.2	74.4	74.6	74.9	73.7	73.7	71.9	70.2	67.8	65.6	65.2	64.5	63.7	62.9	63.3	62.8	59.9	59.6
2500	70.1	71.3	71.5	71.7	71.9	70.7	70.7	68.9	67.2	64.8	62.6	62.2	61.6	60.7	60.0	60.4	59.9	56.9	56.6
3150	66.9	68.1	68.3	68.5	68.7	67.5	67.4	65.6	63.9	61.5	59.3	59.0	58.3	57.5	56.8	57.2	56.7	53.7	53.4
4000	63.2	64.4	64.9	65.0	65.3	63.9	63.7	61.9	60.2	57.9	55.6	55.3	54.8	54.0	53.2	53.4	52.9	50.2	49.5
5000	59.0	60.3	61.0	61.1	61.3	59.7	59.4	57.7	56.1	53.7	51.5	51.2	50.7	50.0	49.2	49.2	48.7	46.1	45.2
6300	54.4	55.8	56.7	56.8	57.0	55.3	54.8	53.2	51.6	49.2	47.0	46.7	46.4	45.5	44.9	44.7	44.1	41.8	40.6
8000	50.1	51.4	52.5	52.6	52.8	51.0	50.5	48.9	47.4	45.0	42.7	42.5	42.4	41.6	40.9	40.4	39.8	37.9	36.5
10000	45.3	46.6	47.9	48.0	48.2	46.3	45.8	44.3	42.8	40.3	38.0	37.9	38.0	37.2	36.5	35.8	35.1	33.6	32.1
12500	40.3	41.6	42.8	42.9	43.2	41.3	41.0	39.4	38.0	35.4	33.0	33.1	33.2	32.5	31.8	31.1	30.4	28.9	27.6
16000	34.8	36.0	37.2	37.3	37.6	35.9	35.7	34.2	32.8	30.1	27.5	27.8	28.1	27.4	26.7	25.9	25.2	23.9	22.7
20000	28.7	29.9	31.0	31.2	31.6	30.0	30.0	28.4	27.1	24.3	21.7	22.1	22.5	21.8	21.2	20.4	19.6	18.5	17.5
25000	22.2	23.2	24.2	24.6	25.1	23.6	23.7	22.2	20.9	18.1	15.7	16.1	16.6	16.0	15.4	14.6	13.8	12.9	12.1

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE			IDENTIFICATION:
DISTANCE = 250 FEET			OMEGA 8.2
			TEST 78-779-001
			RUN 05
NOISE SOURCE/SUBJECT:	OPERATION:	METEOROLOGY:	AIRCRAFT CODE 779
F-111A NOISE SUPPRESSOR	ZONE 5 AFTERBURNER POWER	TEMP = 59 F	OPERATION CODE 00101
AF32A-13	SINGLE ENGINE	BAR PRESS =29.92 IN HG	PROFILE VERSION A
	GROUND RUNUP (SUPPRESSED)	REL HUMID = 70 %	28 NOV 79
		DELTA N = 0.0 DB	PAGE J5

P=PNLT A=AL T=ALT



NOISE PRODUCED ON THE GROUND BY

T-38 NOISE SUPPRESSOR

DURING GROUND RUN-UP OPERATIONS

TEST 77-733-001
AIRCRAFT CODE: 733
PROFILE VERSION: A
COMPUTER PROGRAM OMEGA 8.2

Power Setting	Page
Idle Power, 48% RPM	249-254
Engine Runup, 75% RPM	255-260
Engine Runup, 94% RPM	261-266
Military Power, 99.5% RPM	267-272
Afterburner Power	273-278

FOR EACH POWER SETTING, THE FOLLOWING DATA ARE PROVIDED:

NORMALIZED DATA AS A FUNCTION OF ANGLE AND FREQUENCY
- NORMALIZED SPL AT 250 FEET

NOISE LEVELS AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE
- PERCEIVED NOISE LEVEL
- TONE-CORRECTED, PERCEIVED NOISE LEVEL
- A-WEIGHTED OVERALL SOUND LEVEL
- TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL

NOISE LEVELS AS A FUNCTION OF ANGLE AT 250 FEET FROM SOURCE

AEROSPACE MEDICAL RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 01
AIRCRAFT CODE 733
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE C1

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
IDLE POWER 48% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

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

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
IDLE POWER 48% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 01
AIRCRAFT CODE 733
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE 01

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	89.1	95.1	97.1	95.9	95.3	92.6	90.5	87.4	84.6	85.6	86.8	87.0	88.2	90.1	91.8	90.0	89.0	89.2	87.1
250	86.7	92.7	94.7	93.6	92.9	90.2	88.1	85.0	82.3	83.3	84.4	84.6	85.8	87.8	89.5	87.7	86.6	86.8	84.8
315	84.3	90.3	92.3	91.1	90.5	87.7	85.7	82.6	79.8	80.9	82.0	82.1	83.4	85.3	87.0	85.2	84.1	84.4	82.4
400	81.7	87.7	89.7	88.5	87.9	85.2	83.1	80.0	77.3	78.4	79.5	79.5	80.8	82.7	84.5	82.7	81.6	81.8	80.0
500	79.0	85.0	87.0	85.8	85.2	82.5	80.4	77.3	74.7	75.7	76.8	76.9	78.1	80.1	81.8	80.0	78.9	79.2	77.5
630	76.2	82.1	84.1	82.9	82.3	79.6	77.6	74.5	71.9	72.9	74.0	74.0	75.3	77.2	79.0	77.1	76.0	76.4	74.6
800	73.1	79.1	81.0	79.9	79.2	76.5	74.5	71.4	69.0	69.9	71.0	70.9	72.2	74.2	76.0	74.0	73.0	73.4	71.9
1000	69.7	75.8	77.7	76.5	75.9	73.2	71.1	68.1	65.8	66.8	67.7	67.5	68.9	70.9	72.7	70.7	69.6	70.1	68.9
1250	66.1	72.1	74.1	72.8	72.2	69.5	67.5	64.4	62.4	63.4	64.1	63.8	65.3	67.4	69.1	67.0	66.0	66.6	65.7
1600	62.0	68.1	70.1	68.8	68.2	65.5	63.4	60.3	58.6	59.7	60.0	59.6	61.2	63.4	65.2	63.0	62.0	62.6	62.1
2000	57.3	63.8	66.0	64.9	63.8	61.1	58.7	56.1	54.5	55.6	55.5	54.9	56.5	59.2	61.0	58.4	57.4	58.2	58.2
2500	52.1	59.7	61.8	60.6	59.5	56.7	53.6	51.6	49.6	51.0	50.4	49.5	51.3	54.5	56.4	53.5	51.9	53.7	53.9
3150	46.5	55.8	57.1	55.8	54.7	51.8	48.1	46.0	43.9	45.7	45.2	43.5	45.5	49.0	51.0	47.9	46.4	48.6	48.3
4000	39.8	49.5	51.7	50.4	48.9	45.5	41.3	39.6	37.7	39.9	39.2	36.1	39.0	42.4	44.6	41.4	40.2	42.9	42.3
5000	31.5	43.2	45.1	43.6	41.9	38.6	34.0	31.8	29.9	33.4	32.5	26.9	31.1	35.2	37.1	34.0	33.1	36.6	36.2
6300	21.6	35.3	37.8	35.7	33.8	29.7	23.5	21.5	20.0	23.1	21.9	18.0	21.9	25.6	27.9	25.2	24.4	29.0	28.9
8000	11.8	26.3	29.9	25.9	22.6	15.3	12.9	8.8	10.2	14.4	13.2		11.2	16.9	15.8	14.1	14.6	20.5	18.9
10000	2.0	6.8	19.6	12.1	11.4	.8	2.3		.4	5.7	4.5		.5	8.2	9.7	3.1	4.8	18.6	8.9
12500			9.3		.2										3.6			.6	
16000																			
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
IDLE POWER 48% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 01
AIRCRAFT CODE 733
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE E1

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	91.4	97.5	99.0	97.4	96.9	94.7	93.4	90.0	85.9	86.8	88.6	88.4	90.3	91.4	93.4	92.1	91.8	91.7	88.7
250	89.0	95.1	96.6	95.1	94.6	92.3	91.1	87.6	83.5	84.4	86.2	86.0	87.9	89.0	91.0	89.7	89.5	89.3	86.4
315	86.6	92.7	94.1	92.6	92.1	89.8	88.6	85.2	81.1	82.0	83.8	83.5	85.4	86.6	88.6	87.2	87.0	86.9	84.0
400	84.0	90.1	91.6	90.1	89.5	87.3	86.0	82.6	78.6	79.5	81.3	81.0	82.9	84.0	86.0	84.7	84.4	84.3	81.6
500	81.3	87.4	88.9	87.3	86.8	84.6	83.4	80.0	75.9	76.9	78.6	78.3	80.2	81.3	83.4	82.0	81.8	81.7	79.0
630	78.4	84.5	86.0	84.4	83.9	81.7	80.5	77.1	73.1	74.1	75.8	75.4	77.4	78.5	80.5	79.1	78.9	78.9	76.3
800	75.4	81.4	82.9	81.4	80.8	78.6	77.4	74.0	70.2	71.1	72.7	72.3	74.3	75.5	77.5	76.0	75.8	75.9	73.5
1000	72.0	78.1	79.6	78.1	77.5	75.3	74.1	70.7	67.1	68.0	69.5	69.0	71.0	72.2	74.2	72.7	72.5	72.6	70.5
1250	68.4	74.5	76.0	74.3	73.8	71.7	70.4	67.1	63.7	64.6	65.9	65.2	67.4	68.7	70.7	69.0	68.9	69.1	67.3
1600	64.3	70.4	72.0	70.3	69.8	67.6	66.3	63.0	59.9	60.8	61.8	61.0	63.3	64.7	66.7	65.0	64.8	65.1	63.7
2000	59.6	66.2	67.9	66.4	65.4	63.2	61.6	58.7	55.8	56.7	57.3	56.4	58.6	60.5	62.5	60.4	60.2	60.7	59.7
2500	54.3	62.1	63.7	62.1	61.1	58.9	56.5	54.2	50.9	52.1	52.2	51.3	53.3	55.7	58.0	55.5	54.8	56.2	55.5
3150	48.8	57.3	59.0	57.3	56.3	53.9	51.0	48.6	45.1	46.9	47.0	44.9	47.6	50.2	52.6	49.9	49.3	51.1	49.9
4000	41.6	51.4	53.3	51.6	50.1	47.2	43.7	41.7	38.7	40.8	40.7	37.3	40.7	43.4	45.9	43.0	42.5	44.9	43.6
5000	32.8	44.6	46.3	44.5	42.9	39.8	35.8	33.4	30.6	34.0	33.6	27.7	32.3	35.9	38.0	35.2	34.9	38.1	37.1
6300	22.5	36.2	38.6	36.3	34.5	30.6	24.6	22.5	20.5	23.6	22.6	10.6	22.7	26.1	28.5	26.0	25.6	30.8	29.5
8000	12.3	26.7	30.3	26.2	23.0	15.7	13.5	9.3	10.4	14.7	13.5		11.6	17.1	16.1	14.5	15.2	21.0	19.2
10000	2.0	6.8	19.6	12.1	11.4	.8	2.3		.4	5.7	4.5		.5	8.2	9.7	3.1	4.8	10.6	8.9
12500			9.3		.2										3.6			.6	
16000																			
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-801
RUN 01
AIRCRAFT CODE 733
OPERATION CODE 0C113
PROFILE VERSION A
28 NOV 79
PAGE F1

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
IDLE POWER 48% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	72.8	79.5	81.7	80.7	79.7	76.5	74.8	71.3	69.5	70.3	70.7	70.6	71.8	73.9	75.2	73.9	72.6	73.2	72.5
250	70.4	77.1	79.3	78.3	77.3	74.2	71.6	69.0	67.3	68.1	68.4	68.3	69.5	71.5	72.9	71.5	70.3	70.9	70.4
315	68.8	74.7	76.9	75.8	74.9	71.8	69.2	66.7	65.8	65.9	66.1	65.9	67.1	69.2	70.6	69.2	67.9	68.6	68.4
400	65.5	72.1	74.4	73.3	72.4	69.3	66.8	64.3	62.7	63.6	63.8	63.4	64.7	66.8	68.2	66.7	65.5	66.3	65.9
500	63.0	69.5	71.8	70.7	69.8	66.7	64.2	61.8	60.3	61.3	61.3	60.9	62.2	64.3	65.7	64.2	63.8	63.9	63.5
630	60.3	66.8	69.1	68.0	67.0	64.0	61.5	59.2	57.8	58.8	58.8	58.2	59.6	61.7	63.1	61.5	60.4	61.4	61.1
800	57.6	64.0	66.3	65.1	64.2	61.2	58.7	56.6	55.3	56.3	56.2	55.4	56.9	59.1	60.5	58.8	57.7	58.9	58.7
1000	54.8	61.2	63.4	62.2	61.2	58.3	55.8	53.8	52.6	53.8	53.6	52.5	54.1	56.3	57.7	55.9	54.9	56.3	56.1
1250	51.8	58.1	60.4	59.1	58.0	55.2	52.7	50.9	49.9	51.1	50.8	49.5	51.2	53.4	54.8	53.0	52.1	53.6	53.4
1600	48.7	55.8	57.2	55.9	54.8	52.0	49.5	48.0	46.9	48.3	47.9	46.3	48.2	50.5	51.7	49.9	49.1	50.8	50.7
2000	45.5	51.8	53.9	52.5	51.3	48.7	46.2	44.9	43.9	45.4	44.9	42.9	45.1	47.4	48.5	46.7	46.1	47.9	47.8
2500	42.0	48.3	50.4	48.9	47.7	45.1	42.7	41.6	40.7	42.2	41.7	39.4	41.8	44.0	44.9	43.3	42.9	44.8	44.7
3150	38.3	44.6	46.8	45.0	43.9	41.3	39.0	38.1	37.2	38.8	38.2	35.7	38.3	40.3	41.8	39.8	39.5	41.5	41.3
4000	34.3	40.6	42.8	40.8	39.8	37.2	35.0	34.3	33.4	35.0	34.5	31.8	34.5	36.4	36.8	36.0	35.8	37.8	37.6
5000	30.8	36.2	38.4	36.3	35.3	32.8	30.7	30.1	29.3	30.9	30.3	27.6	30.3	32.2	32.4	31.8	31.7	33.7	33.5
6300	25.4	31.5	33.8	31.4	30.5	28.0	26.1	25.5	24.8	26.4	25.9	23.0	25.9	27.7	27.7	27.3	27.3	29.4	29.1
8000	21.3	26.8	29.2	26.8	25.7	23.5	21.7	21.3	20.6	22.5	21.9	18.8	21.8	23.8	23.7	23.1	23.1	25.4	24.9
10000	17.0	21.9	24.4	22.8	20.7	18.7	17.2	16.8	16.0	18.4	17.7	14.3	17.5	19.5	19.7	18.5	18.7	21.1	20.4
12500	12.6	16.8	19.4	17.8	15.6	13.8	12.4	12.1	11.2	13.8	13.2	9.6	12.9	15.3	15.5	13.7	13.9	16.4	15.6
16000	8.0	11.6	14.0	11.9	10.4	8.8	7.6	7.1	6.0	9.0	8.4	4.9	8.2	10.8	11.4	8.6	8.9	11.5	10.5
20000	3.5	6.3	8.4	6.7	5.1	3.8	2.6	1.8	.6	3.8	3.2	.3	3.4	6.3	7.2	3.5	3.8	6.2	5.1
25000		1.1	2.6	1.3	.1									2.8	3.1			.8	

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
IDLE POWER 48% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 01
AIRCRAFT CODE 733
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE G1

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	75.1	81.9	83.6	82.2	81.3	78.6	76.9	74.0	70.8	71.5	72.4	72.0	73.9	75.1	76.7	75.9	75.4	75.7	74.1
250	72.7	79.5	81.2	79.8	78.9	76.3	74.6	71.7	68.6	69.3	70.2	69.7	71.6	72.8	74.4	73.5	73.1	73.4	71.9
315	70.3	77.0	78.8	77.4	76.5	73.9	72.2	69.3	66.3	67.0	67.9	67.3	69.2	70.5	72.1	71.2	70.8	71.1	69.7
400	67.8	74.5	76.3	74.8	74.0	71.4	69.7	66.9	64.0	64.8	65.5	64.8	66.8	68.0	69.7	68.7	68.3	68.8	67.4
500	65.3	71.9	73.7	72.2	71.4	68.8	67.1	64.4	61.6	62.4	63.1	62.3	64.2	65.6	67.2	66.2	65.8	66.4	65.1
630	62.6	69.2	71.0	69.5	68.6	66.2	64.4	61.9	59.1	60.0	60.6	59.6	61.6	63.0	64.7	63.6	63.2	63.9	62.7
800	59.9	66.4	68.2	66.6	65.8	63.4	61.6	59.2	56.5	57.5	58.0	56.8	58.9	60.3	62.0	60.8	60.6	61.4	60.2
1000	57.1	63.5	65.3	63.7	62.8	60.4	58.7	56.4	53.9	54.9	55.3	53.9	56.2	57.6	59.2	58.0	57.8	58.8	57.7
1250	54.1	60.5	62.2	60.6	59.7	57.4	55.7	53.6	51.1	52.2	52.5	50.9	53.2	54.7	56.3	55.0	55.0	56.1	55.0
1600	51.0	57.4	59.1	57.4	56.4	54.2	52.5	50.6	48.2	49.4	49.7	47.7	50.2	51.7	53.2	51.9	52.0	53.3	52.2
2000	47.8	54.1	55.8	54.0	53.0	50.8	49.1	47.5	45.2	46.5	46.7	44.4	47.1	48.6	50.0	48.7	49.0	50.4	49.4
2500	44.3	50.7	52.3	50.4	49.3	47.2	45.6	44.2	41.9	43.4	43.5	40.8	43.8	45.2	46.5	45.3	45.7	47.3	46.2
3150	40.6	47.0	48.6	46.5	45.5	43.4	41.9	40.7	38.5	39.9	40.0	37.2	40.3	41.6	42.6	41.8	42.3	44.8	42.9
4000	36.2	42.5	44.3	42.0	41.1	38.9	37.4	36.4	34.4	35.9	35.9	32.9	36.1	37.4	38.1	37.6	38.1	39.8	38.9
5000	31.4	37.6	39.6	37.2	36.3	34.1	32.5	31.6	30.0	31.5	31.4	28.4	31.6	32.9	33.3	33.0	33.4	35.2	34.5
6300	26.3	32.4	34.5	32.0	31.1	28.9	27.2	26.6	25.3	26.9	26.6	23.6	26.7	28.2	28.3	28.2	28.4	30.4	29.7
8000	21.8	27.3	29.6	27.1	26.0	23.9	22.3	21.8	20.8	22.8	22.3	19.0	22.2	24.0	24.0	23.5	23.7	25.9	25.2
10000	17.6	21.9	24.4	22.0	20.7	18.7	17.2	16.8	16.0	18.4	17.7	14.3	17.5	19.6	19.7	18.5	18.7	21.1	20.4
12500	12.6	16.8	19.4	17.0	15.6	13.8	12.4	12.1	11.2	13.8	13.2	9.6	12.9	15.3	15.5	13.7	13.9	16.4	15.6
16000	8.0	11.6	14.0	11.9	10.4	8.8	7.6	7.1	6.0	9.0	8.4	4.9	8.2	10.8	11.4	8.6	8.9	11.5	10.5
20000	3.5	6.3	8.4	6.7	5.1	3.8	2.6	1.8	.6	3.8	3.2	.3	3.4	6.3	7.2	3.5	3.8	6.2	5.1
25000		1.1	2.6	1.3	.1									2.0	3.1			.8	

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
IDLE POWER 48% RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-801
RUN 01
AIRCRAFT CODE 733
OPERATION CODE 00113
PROFILE VERSION A
28 NOV 79
PAGE J1

P=PNLT A=AL T=ALT

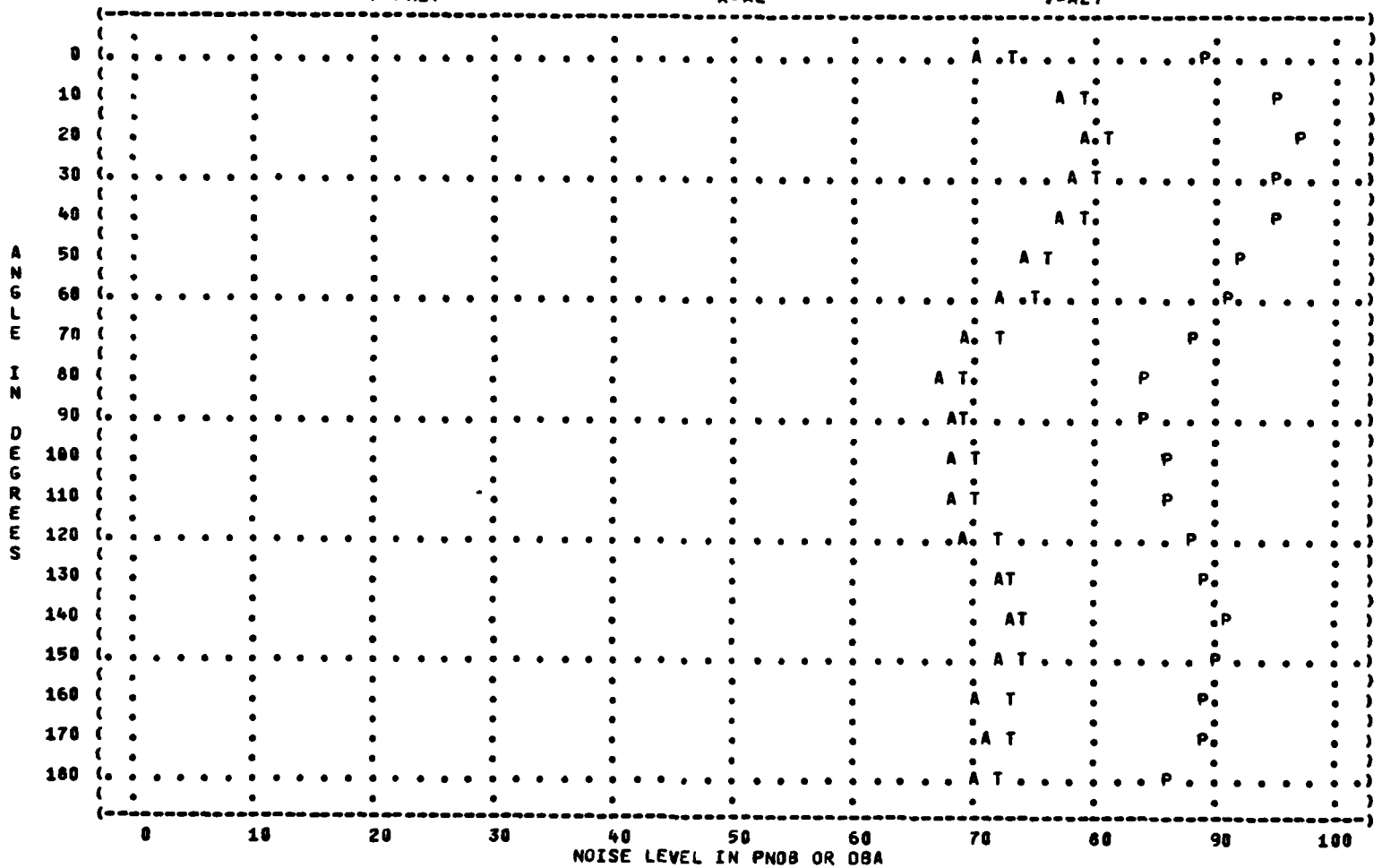


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 02
AIRCRAFT CODE 733
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE C2

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
75% RPM ENGINE RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	73	71	72	72	73	75	73	71	71	72	74	73	72	73	73	74	72	73	70
63	73	71	72	71	73	75	72	69<	69<	70<	73	73	72	72	71	72	69	71	71
80	70	69	70	68	70	73	70	67	67	67	69	69	67	70<	69	70<	68<	70<	70<
100	71	72	74	74	74	73	76	72	72	70	72	74	74	68	71	69	67	69	69
125	72	72	71	71	72	72	70	67	70	69	70	74	75	66	67	65	63	63	64
160	72	74	75	76	75	73	68	69	74	70	72	71	69	67	65	66	65	64	64
200	73	68	68	71	69	68	64	65	68	64	71	72	70	66	64	63	60	58	61
250	71	71	71	71	70	70	63	64	73	68	70	71	70	62	62	62	59	58<	57
315	68	67	70	71	69	68	66	63	71	64	70	65	63	59	60	58	54	58<	57<
400	65	65	68	65	62	60	61	58	60	56	65	62	57	52	56	55	55<	58<	57<
500	64	63	65	65	62	58	60	58	57	55<	60	59	57<	53<	56<	55<	55<	58<	56<
630	64	60	62	61	57	57<	56	57	54	54<	56	55	57<	53<	57<	56<	56<	58<	56<
800	62	58	58	60	55	56<	55	55	53<	53<	55	55	57<	53<	57<	57<	56<	58<	56<
1000	63	59	58	59	55	55<	56	55<	52<	53<	57	56	57<	54<	57<	57<	57<	58<	56<
1250	61	59	56	58	60<	53<	54	55<	51<	52<	55	58	57<	54<	57<	58<	58<	58<	55<
1600	64	64	58	60	65	52<	54<	55<	50<	51<	57	63	57	55<	57	58	58	58	55
2000	63	61	58	61	55	51<	53	55<	48<	51<	57	63	58	55<	58	59	59	60	55
2500	61	60	55	58	53	50<	54<	55<	47<	50<	52	57	54	55<	58	60	60	58	56
3150	61	60	56	58	54<	49<	54<	55<	46<	49<	55<	57	56<	56<	61	63	61	58	55
4000	66	64	59	62	55	48	55	55	45<	49	58	64	58	56	65	68	66	64	58
5000	62	58	53	56	50	43	49	50	44	46	51	55	53	53	62	64	61	57	55
6300	66	59	55	58	52	45	50	52	46	47	49	53	52	52	60	63	62	58	57
8000	62	60	55	57	49	41	49	50	43	44	45	51	50	54	61	63	61	58	53
10000	56	53	48	52	44	35<	43	42	36	37	39	44	43	44	52	54	52	49	47
OVERALL	82	81	82	82	82	82	81	78	81	78	81	82	81	79	79	80	78	78	77

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
75% RPM ENGINE RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 02
AIRCRAFT CODE 733
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE D2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	93.3	91.4	88.8	90.6	88.4	85.2	86.0	84.6	85.4	82.9	87.2	90.3	87.3	84.7	90.3	92.3	90.3	89.2	85.7
250	91.0	89.0	86.4	88.3	86.1	82.9	83.6	82.3	83.1	80.7	84.9	88.0	84.9	82.4	87.9	89.9	87.9	86.8	83.4
315	88.6	86.6	84.0	85.9	83.8	80.6	81.2	79.9	80.8	78.3	82.6	85.6	82.5	79.9	85.5	87.5	85.4	84.4	80.9
400	86.0	84.1	81.6	83.4	81.5	78.3	78.8	77.5	78.5	76.0	80.3	83.1	80.1	77.4	82.9	84.9	82.8	81.8	78.4
500	83.4	81.4	79.0	80.7	79.0	75.8	76.2	74.9	76.1	73.5	77.9	80.5	77.5	74.8	80.2	82.1	80.1	79.2	75.7
630	80.5	78.6	76.4	77.9	76.5	73.3	73.6	72.2	73.4	70.8	75.4	77.7	74.8	72.1	77.3	79.3	77.3	76.3	72.9
800	77.5	75.6	73.8	75.0	73.9	70.7	70.8	69.3	70.9	68.0	72.9	74.7	71.9	69.2	74.3	76.2	74.2	73.3	69.9
1000	74.3	72.4	71.0	72.2	71.1	68.0	67.6	66.3	68.1	64.9	70.2	71.5	68.9	66.1	70.9	72.8	70.8	70.0	66.6
1250	70.8	68.9	68.0	69.0	68.0	64.8	64.1	63.1	64.9	61.6	67.0	68.2	65.5	62.7	67.3	69.1	67.1	66.4	63.0
1600	67.0	65.6	64.9	65.4	64.7	61.3	60.5	59.4	61.3	57.9	63.5	64.7	62.0	58.8	63.1	64.9	63.0	62.3	59.3
2000	63.2	61.9	61.5	61.6	61.1	57.2	56.5	55.3	57.2	53.6	59.5	60.9	58.0	54.6	58.5	60.2	58.3	57.9	55.2
2500	59.1	57.7	57.1	57.3	56.9	52.5	52.0	50.4	52.5	48.5	55.0	56.5	53.3	49.6	53.4	54.9	53.4	53.4	50.0
3150	54.1	52.9	52.0	52.6	52.2	46.8	46.7	45.1	47.1	42.7	49.6	51.5	47.7	43.5	47.4	48.5	47.4	47.6	44.2
4000	48.4	47.0	46.3	47.2	46.7	40.3	40.7	39.1	40.3	35.7	43.5	45.6	41.8	36.3	40.6	41.5	40.8	41.4	37.8
5000	41.7	40.3	39.6	41.0	39.7	32.4	33.2	31.5	32.3	27.0	36.1	38.2	34.6	26.1	32.8	34.1	33.6	34.5	30.4
6300	34.8	32.8	32.4	33.9	31.2	21.2	23.1	20.9	21.5	13.2	26.9	28.6	24.1	12.6	23.7	23.9	23.8	26.0	20.4
8000	27.7	24.0	26.0	26.3	21.5	10.6	13.0	10.6	12.3		16.4	15.8	14.2		9.8	7.6	7.4	15.3	6.8
10000	18.6	14.9	17.7	16.6	9.1		6.8	.3	3.0		7.4	2.9	4.3					4.6	
12500	9.5	5.7	7.8	8.3			.6												
16000	.4			.1															
20000																			
25000																			

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 02
AIRCRAFT CODE 733
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE E2

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
75% RPM ENGINE RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.7	93.0	90.2	92.2	91.0	85.2	87.1	85.4	86.2	83.6	88.8	93.0	88.5	85.7	91.6	94.0	91.8	91.5	86.8
250	92.3	90.6	87.9	89.8	88.7	82.9	84.7	83.0	83.9	81.3	86.5	90.7	86.1	83.3	89.2	91.7	89.4	89.1	84.4
315	89.9	88.2	85.5	87.4	86.5	80.6	82.3	80.7	81.6	79.0	84.2	88.3	83.7	80.9	86.7	89.2	86.9	86.7	81.9
400	87.3	85.7	83.0	84.9	84.1	78.3	79.8	78.2	79.3	76.6	81.9	85.8	81.3	78.4	84.1	86.6	84.4	84.1	79.4
500	84.7	83.0	80.4	82.3	81.7	75.8	77.3	75.7	76.9	74.2	79.5	83.1	78.7	75.8	81.4	83.9	81.7	81.4	76.7
630	81.9	80.2	77.9	79.5	79.1	73.3	74.7	73.0	74.2	71.5	77.0	80.3	76.0	73.0	78.6	81.0	78.8	78.6	73.9
800	78.8	77.2	75.2	76.6	76.5	70.7	71.9	70.1	71.7	68.6	74.5	77.4	73.1	70.1	75.5	77.9	75.7	75.6	70.9
1000	75.6	74.0	72.4	73.7	73.7	68.0	68.7	67.1	68.9	65.5	71.7	74.2	70.1	67.1	72.1	74.5	72.3	72.3	67.7
1250	72.1	70.5	69.5	70.5	70.6	64.8	65.2	63.8	65.7	62.2	68.5	70.8	66.7	63.6	68.5	70.8	68.6	68.7	64.1
1600	68.4	67.2	66.3	67.0	67.4	61.3	61.6	60.2	62.1	58.5	65.0	67.4	63.2	59.8	64.4	66.6	64.5	64.6	60.3
2000	64.5	63.5	62.9	63.2	63.7	57.2	57.6	56.1	58.0	54.2	61.1	63.6	59.2	55.6	59.7	61.9	59.8	60.2	56.2
2500	60.4	59.3	58.6	58.9	59.6	52.5	53.1	51.2	53.3	49.1	56.6	59.2	54.5	50.5	54.7	56.6	54.9	55.7	51.0
3150	55.4	54.5	53.4	54.2	54.8	46.8	47.8	45.9	47.9	43.3	51.2	54.2	48.9	44.5	48.7	50.2	49.0	49.9	45.3
4000	49.4	48.3	47.4	48.4	48.8	40.3	41.6	39.7	40.9	36.2	44.8	47.7	42.8	37.1	41.6	42.9	42.0	43.2	38.7
5000	42.5	41.3	40.4	41.9	41.3	32.4	33.9	32.0	32.8	27.4	37.0	39.8	35.4	26.6	33.6	35.1	34.6	35.8	31.0
6300	35.3	33.5	33.0	34.5	32.3	21.2	23.6	21.2	21.8	13.4	27.5	29.7	24.6	12.9	24.2	24.6	24.4	26.9	20.8
8000	27.9	24.3	26.3	26.6	22.0	10.6	13.2	10.8	12.4		16.7	16.3	14.5		10.0	8.0	7.7	15.7	7.0
10000	18.6	14.9	17.7	16.6	9.1		6.8	.3	3.0		7.4	2.9	4.3					4.6	
12500	9.5	5.7	7.8	8.3			.6												
16000	.4			.1															
20000																			
25000																			

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
75% RPM ENGINE RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 02
AIRCRAFT CODE 733
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE F2

DISTANCE	ANGLE (DEGREES)																		
(FEET)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	77.8	75.7	74.2	75.5	74.0	70.7	70.2	69.7	71.4	68.2	72.8	74.6	72.2	69.1	74.1	76.1	74.4	73.1	70.8
250	75.5	73.5	72.1	73.3	71.9	68.6	68.1	67.6	69.4	66.1	70.7	72.4	70.1	66.9	71.8	73.8	72.1	70.8	67.8
315	73.2	71.3	69.9	71.1	69.8	66.6	65.9	65.4	67.3	64.0	68.6	70.2	68.0	64.7	69.3	71.3	69.6	68.5	65.5
400	70.8	69.0	67.8	68.9	67.6	64.5	63.7	63.2	65.2	61.9	66.4	67.9	65.8	62.4	66.8	68.7	67.1	66.1	63.1
500	68.4	66.6	65.5	66.6	65.4	62.3	61.5	60.9	63.1	59.6	64.2	65.6	63.5	60.0	64.2	66.0	64.5	63.6	60.7
630	65.8	64.1	63.2	64.2	63.0	59.9	59.2	58.5	60.7	57.3	61.9	63.1	61.0	57.5	61.5	63.2	61.8	61.0	58.2
800	63.2	61.6	60.8	61.7	60.6	57.5	56.8	56.0	58.3	54.8	59.5	60.5	58.5	54.9	58.7	60.3	58.9	58.4	55.6
1000	60.5	58.9	58.3	59.2	58.1	55.0	54.3	53.5	55.8	52.2	56.9	57.8	55.9	52.2	55.8	57.2	55.9	55.6	53.0
1250	57.7	56.1	55.7	56.4	55.4	52.2	51.5	50.7	52.9	49.4	54.2	55.0	53.0	49.4	52.7	53.9	52.8	52.7	50.2
1600	54.7	53.2	52.9	53.5	52.5	49.2	48.7	47.9	49.7	46.5	51.2	51.9	50.0	46.4	49.5	50.5	49.6	49.8	47.3
2000	51.7	50.2	50.0	50.5	49.4	46.1	45.7	44.9	46.4	43.3	48.2	48.7	46.9	43.2	46.2	47.0	46.3	46.7	44.3
2500	48.5	46.9	46.7	47.2	46.0	42.6	42.4	41.6	42.7	39.9	44.6	45.2	43.5	39.8	42.7	43.3	42.8	43.5	41.1
3150	44.9	43.2	43.1	43.5	42.4	38.8	38.7	38.1	38.6	36.2	40.8	41.4	39.9	36.2	39.1	39.5	39.2	40.0	37.7
4000	41.1	39.2	39.1	39.6	38.3	34.7	34.8	34.2	34.1	32.2	36.6	37.2	36.0	32.3	35.2	35.5	35.3	36.3	34.0
5000	36.9	34.9	34.7	35.2	33.9	30.3	30.5	30.0	29.4	27.9	32.0	32.7	31.8	28.0	31.0	31.2	31.1	32.2	29.9
6300	32.4	30.3	30.1	30.7	29.2	25.8	26.0	25.5	24.6	23.4	27.4	27.9	27.4	23.5	26.5	26.7	26.5	27.8	25.5
8000	28.3	26.2	26.5	26.9	24.9	22.2	22.2	21.6	21.2	19.6	23.6	23.6	23.4	19.4	22.3	22.3	22.1	23.5	21.4
10000	24.6	22.8	22.6	22.9	20.5	18.3	18.3	17.4	17.7	15.6	19.7	19.2	19.1	15.8	17.8	17.7	17.4	19.8	17.0
12500	19.4	17.5	18.5	18.7	16.1	14.4	14.1	13.0	14.0	11.5	15.6	14.8	14.7	10.5	13.0	12.8	12.4	14.1	12.3
16000	14.5	12.9	14.1	14.2	11.8	10.3	9.8	8.4	10.2	7.2	11.4	10.5	10.2	5.9	8.1	7.7	7.1	8.9	7.4
20000	9.4	8.2	9.5	9.5	7.4	6.2	5.4	3.7	6.2	2.9	7.1	6.3	5.8	1.5	3.1	2.7	1.8	3.6	2.3
25000	4.3	3.3	4.6	4.7	3.0	2.1	1.1		2.1		2.8	2.2	1.5						

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
75% RPM ENGINE RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 3.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-091
RUN 02
AIRCRAFT CODE 733
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE G2

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	79.1	77.3	75.6	77.0	76.6	70.7	71.3	70.5	72.2	68.8	74.4	77.2	73.4	70.1	75.4	77.9	76.0	75.4	71.1
250	76.8	75.1	73.5	74.9	74.5	68.6	69.2	68.3	70.2	66.7	72.3	75.1	71.3	67.9	73.0	75.5	73.6	73.1	68.8
315	74.5	72.9	71.4	72.7	72.4	66.6	67.0	66.2	68.1	64.6	70.2	72.9	69.2	65.6	70.6	73.0	71.2	70.8	66.5
400	72.1	70.6	69.2	70.5	70.2	64.5	64.8	63.9	66.0	62.5	68.0	70.6	67.0	63.3	68.1	70.5	68.6	68.3	64.2
500	69.7	68.2	66.9	68.2	68.0	62.3	62.6	61.7	63.9	60.3	65.8	68.3	64.7	60.9	65.5	67.8	66.0	65.9	61.7
630	67.1	65.7	64.6	65.8	65.6	59.9	60.3	59.3	61.5	57.9	63.4	65.8	62.2	58.4	62.8	65.0	63.3	63.3	59.2
800	64.5	63.2	62.2	63.3	63.2	57.5	57.9	56.8	59.1	55.5	61.0	63.2	59.7	55.9	59.9	62.0	60.4	60.6	56.6
1000	61.8	60.6	59.8	60.7	60.7	55.0	55.4	54.2	56.6	52.9	58.5	60.5	57.1	53.2	57.0	58.9	57.5	57.9	54.0
1250	59.0	57.8	57.1	58.0	58.0	52.2	52.6	51.5	53.7	50.1	55.7	57.6	54.2	50.3	53.9	55.6	54.4	55.0	51.2
1600	56.1	54.8	54.3	55.1	55.1	49.2	49.8	48.6	50.5	47.1	52.8	54.6	51.2	47.3	50.7	52.2	51.1	52.0	48.3
2000	53.0	51.8	51.5	52.1	52.0	46.1	46.8	45.6	47.2	43.9	49.7	51.4	48.1	44.1	47.4	48.7	47.8	49.0	45.4
2500	49.8	48.5	48.2	48.7	48.7	42.6	43.5	42.4	43.5	40.5	46.2	47.9	44.7	40.8	44.0	45.0	44.3	45.8	42.2
3150	46.3	44.8	44.5	45.1	45.0	38.8	39.8	38.8	39.4	36.8	42.4	44.0	41.1	37.1	40.3	41.2	40.7	42.3	38.8
4000	42.2	40.5	40.2	40.8	40.4	34.7	35.6	34.8	34.7	32.7	37.8	39.3	37.0	33.0	36.2	36.9	36.5	38.1	34.8
5000	37.7	35.9	35.5	36.2	35.5	30.3	31.1	30.5	29.8	28.3	33.0	34.3	32.6	28.6	31.8	32.3	32.0	33.6	30.5
6300	33.6	30.9	30.7	31.3	30.2	25.8	26.4	25.8	24.9	23.7	28.0	29.0	27.9	23.9	27.0	27.4	27.2	28.7	25.9
8000	28.6	26.5	26.7	27.2	25.4	22.2	22.5	21.7	21.4	19.7	23.9	24.1	23.6	19.6	22.5	22.6	22.4	24.0	21.6
10000	24.0	22.0	22.6	22.9	20.5	18.3	18.3	17.4	17.7	15.6	19.7	19.2	19.1	15.8	17.8	17.7	17.4	19.0	17.0
12500	19.4	17.5	18.5	18.7	16.1	14.4	14.1	13.0	14.0	11.5	15.6	14.8	14.7	10.5	13.0	12.8	12.4	14.1	12.3
16000	14.5	12.9	14.1	14.2	11.8	18.3	9.8	8.4	10.2	7.2	11.4	10.5	10.2	5.9	8.1	7.7	7.1	8.9	7.4
20000	9.4	8.2	9.5	9.5	7.4	6.2	5.4	3.7	6.2	2.9	7.1	6.3	5.8	1.5	3.1	2.7	1.8	3.6	2.3
25000	4.3	3.3	4.6	4.7	3.8	2.1	1.1		2.1		2.8	2.2	1.5						

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
75% RPM ENGINE RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 02
AIRCRAFT CODE 733
OPERATION CODE 00120
PROFILE VERSION A
28 NOV 79
PAGE J2

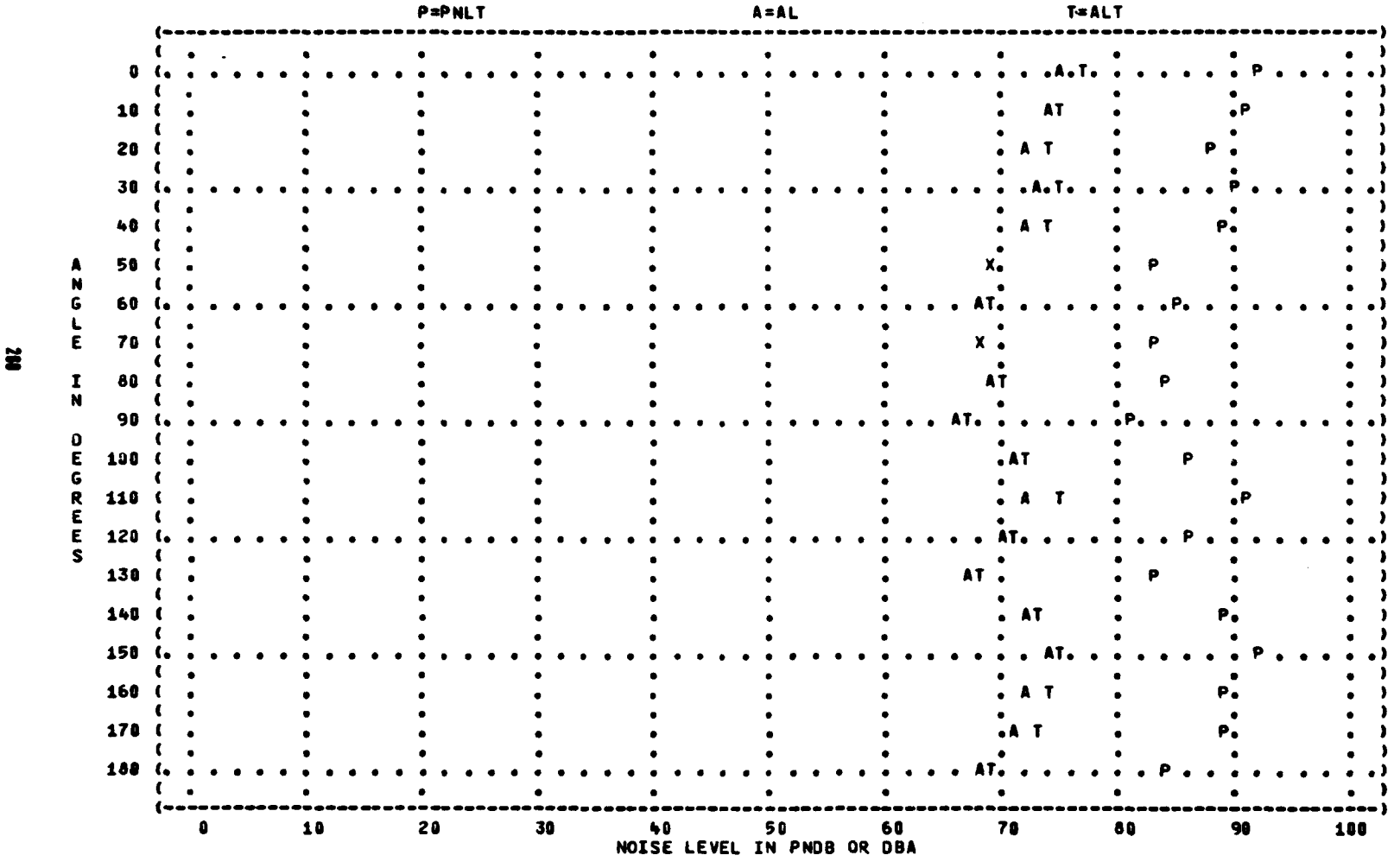


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 03
AIRCRAFT CODE 733
OPERATION CODE 08109
PROFILE VERSION A
28 NOV 79
PAGE C3

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
94% RPM POWER RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	79	80	81	81	80	81	82	79	82	82	81	79	80	82	82	81	82	79	81
63	84	83	83	83	83	83	82	82	82	83	82	83	82	82	82	82	82	82	85
80	80	79	79	79	79	76	78	78	79	79	77	79	78	78	78	78	78	78	78
100	77	78	76	77	75	74	76	76	75	73	74	74	73	75	73	73	72	73	72
125	80	79	79	77	77	75	74	76	71	73	72	69	72	74	71	74	78	72	74
160	78	75	76	75	74	71	71	72	71	71	69	68	71	70	71	70	66	69	78
200	73	73	73	71	69	68	69	68	67	68	65	65	65	67	67	66	64	63	65
250	72	72	74	75	70	71	71	71	70	72	67	67	64	68	65	66	60	60	60
315	69	71	72	70	66	69	68	69	68	68	64	64	62	64	61	62	61	55	55
400	69	72	76	70	67	67	65	64	61	60	57	57	57	59	60	59	70	55<	52
500	66	69	73	70	67	66	64	63	60	57	60	56	57	58	57	58	64	56<	53<
630	67	68	70	67	66	63	61	61	55	54	56	55	56	55	54	55	71	56	54
800	65	66	66	66	63	63	61	60	54	54<	57	56	57	55	56	55	71	58	57
1000	64	66	64	64	63	61	61	57	53<	54<	56	55<	56	55<	55<	55<	63	58	56
1250	61	63	60	62	62	59	59	55<	52<	53<	55	55	55	55<	55	55	66	59	57
1600	63	66	60	64	63	61	59	53	52<	53<	56	56	56	55	59	60	64	61	59
2000	64	65	60	65	63	62	60	53	51<	52<	57	57	56	56	60	60	64	62	59
2500	62	64	58	65	60	58	58	52	51<	52<	55	54	55	56	58	60	62	59	57
3150	61	63	57	64	60	58	57	53<	50<	52<	54	54	55	57	60	61	63	60	57
4000	65	69	62	67	63	65	59	55	49	51	57	57	58	60	63	67	67	64	59
5000	63	64	59	67	61	62	58	54	52	54	61	60	61	61	64	68	66	66	62
6300	60	61	55	64	58	57	55	50	48	50	55	55	56	58	61	63	62	61	57
8000	60	64	58	62	57	56	54	49	46	47	52	52	53	59	61	61	61	59	55
10000	55	56	51	57	52	50	48	44	41	43	47	47	47	50	55	55	54	53	49
OVERALL	89	88	88	88	87	87	87	87	87	87	86	86	86	87	87	86	87	86	87

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
94% RPM POWER RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 8.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 03
AIRCRAFT CODE 733
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE D3

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	94.8	96.7	94.1	96.8	92.8	92.8	90.5	89.2	87.6	88.2	88.8	88.5	88.8	89.7	91.4	93.2	94.5	91.9	89.9
250	92.5	94.4	91.9	93.6	90.5	90.4	88.0	86.8	85.1	85.7	86.4	86.0	86.4	87.3	89.0	90.8	92.1	89.5	87.5
315	90.1	92.0	89.6	91.2	88.1	88.0	85.5	84.4	82.6	83.2	83.9	83.5	83.9	84.8	86.5	88.3	89.7	87.0	85.0
400	87.6	89.5	87.3	88.7	85.6	85.5	83.0	82.0	80.1	80.7	81.3	80.9	81.4	82.2	83.9	85.7	87.1	84.4	82.4
500	85.0	86.8	84.9	86.0	82.9	82.9	80.4	79.5	77.5	78.2	78.6	78.3	78.7	79.6	81.2	83.0	84.5	81.6	79.7
630	82.2	84.0	82.5	83.3	80.2	80.1	77.7	76.8	74.8	75.4	75.8	75.5	75.8	76.8	78.3	80.1	81.7	78.7	77.0
800	79.2	81.1	79.9	80.3	77.2	77.1	75.0	74.8	72.1	72.6	73.0	72.7	72.8	73.7	75.3	77.0	78.8	75.6	74.1
1000	76.1	77.9	77.2	77.1	74.1	74.0	72.1	71.2	69.4	69.7	70.1	69.8	69.7	70.5	72.0	73.7	75.6	72.2	71.1
1250	72.7	74.5	74.5	73.7	71.0	70.6	69.0	68.0	66.2	66.6	67.0	66.6	66.6	67.3	68.5	70.1	72.3	68.7	68.0
1600	69.4	70.9	71.5	70.3	67.6	66.9	65.5	64.5	62.7	62.8	63.1	62.7	62.7	63.4	64.5	66.1	69.1	65.1	64.8
2000	66.0	67.5	68.3	66.9	64.2	63.5	62.0	60.5	58.6	58.7	58.7	58.2	58.2	59.0	60.3	61.5	65.7	61.1	59.5
2500	61.8	63.3	64.2	62.8	60.1	59.1	57.5	56.1	53.8	53.9	53.6	52.9	52.9	53.7	55.6	56.3	62.0	56.6	54.3
3150	57.1	58.5	59.5	58.2	55.5	54.4	52.6	51.1	48.1	48.2	48.4	47.3	47.3	48.1	50.0	50.6	57.9	51.3	48.7
4000	51.7	53.0	54.1	53.0	50.0	48.8	46.8	45.1	41.6	41.4	42.0	40.0	40.5	41.7	43.5	44.1	52.7	44.6	41.5
5000	45.6	46.7	48.2	46.6	43.4	41.9	39.4	38.0	33.0	31.3	33.8	31.1	31.6	32.8	34.0	34.5	46.9	36.3	32.7
6300	38.9	40.0	41.9	40.0	36.7	35.2	32.6	29.8	23.3	20.2	24.3	20.0	22.1	22.6	24.0	24.9	41.2	27.2	22.3
8000	32.6	34.2	36.6	34.7	30.9	29.3	24.2	23.2	12.6	9.0	13.7	10.5	9.6	9.1	8.1	8.7	35.0	14.2	8.7
10000	24.0	27.0	31.6	27.6	23.5	20.9	16.8	13.9	1.9		3.1	.3					29.0	1.2	
12500	15.3	19.1	25.4	20.1	13.7	10.3	9.5	4.7									22.2		
16000	5.0	7.0	17.1	8.0	4.0		2.1										9.0		
20000			8.0																
25000			.4																

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 03
AIRCRAFT CODE 733
OPERATION CODE 0C109
PROFILE VERSION A
28 NOV 79
PAGE E3

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
94% RPM POWER RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	96.0	98.7	95.3	96.6	92.8	94.6	90.5	89.2	88.8	89.3	90.4	89.9	90.2	90.5	91.4	94.3	95.8	93.1	91.2
250	93.6	96.4	93.1	94.3	90.5	92.2	88.0	86.8	86.3	86.9	88.0	87.5	87.8	88.0	89.0	91.9	93.4	90.7	88.8
315	91.2	94.0	90.8	91.9	88.1	89.8	85.5	84.4	83.8	84.4	85.5	84.9	85.3	85.6	86.5	89.4	91.0	88.2	86.3
400	88.7	91.5	88.5	89.4	85.6	87.3	83.0	82.0	81.3	81.8	82.9	82.4	82.7	83.0	83.9	86.7	88.5	85.6	83.7
500	86.1	88.8	86.1	86.7	82.9	84.7	80.4	79.5	78.7	79.3	80.2	79.7	80.0	80.4	81.2	84.0	85.8	82.8	81.0
630	83.3	86.0	83.6	83.9	80.2	81.9	77.7	76.8	76.0	76.6	77.4	77.0	77.1	77.5	78.3	81.1	83.0	79.9	78.2
800	80.4	83.1	81.1	81.0	77.2	78.9	75.0	74.0	73.3	73.8	74.6	74.2	74.1	74.5	75.3	78.1	80.1	76.8	75.4
1000	77.2	79.9	78.4	77.8	74.1	75.8	72.1	71.2	70.6	70.9	71.7	71.3	71.1	71.3	72.0	74.8	76.9	73.5	72.4
1250	73.8	76.4	75.6	74.4	71.0	72.4	69.0	68.0	67.4	67.7	68.6	68.1	67.9	68.1	68.5	71.2	73.6	69.9	69.3
1600	70.5	72.9	72.7	71.8	67.6	68.7	65.5	64.5	63.8	64.0	64.7	64.2	64.0	64.2	64.5	67.2	70.4	66.3	65.3
2000	67.1	69.5	69.5	67.6	64.2	65.3	62.0	60.5	59.8	59.8	60.3	59.7	59.6	59.8	60.3	62.5	67.0	62.3	60.6
2500	62.9	65.3	65.4	63.5	60.1	60.9	57.5	56.1	55.0	55.0	55.2	54.4	54.3	54.5	55.6	57.3	63.3	57.8	55.6
3150	58.2	60.5	60.7	58.9	55.5	56.2	52.6	51.1	49.3	49.3	50.0	48.8	48.7	48.9	50.0	51.6	59.2	52.5	50.0
4000	52.6	54.6	55.0	53.6	50.0	50.2	46.8	45.1	42.6	42.3	43.3	41.2	41.6	42.3	43.5	44.9	53.7	45.5	42.6
5000	46.3	47.9	48.9	47.0	43.4	43.0	39.4	38.0	33.7	32.0	34.8	32.0	32.5	33.3	34.0	35.1	47.7	37.0	33.5
6300	39.3	40.8	42.4	40.2	36.7	35.9	32.6	29.8	23.8	20.6	24.9	21.4	22.6	22.9	24.0	25.3	41.7	27.7	22.8
8000	32.8	34.6	36.9	34.8	30.9	29.6	24.2	23.2	12.9	9.3	14.0	10.8	9.9	9.2	8.1	8.9	36.1	14.4	8.9
10000	24.8	27.0	31.6	27.6	23.5	20.9	16.8	13.9	1.9		3.1	.3					29.8	1.2	
12500	15.3	19.1	25.4	20.1	13.7	10.3	9.5	4.7									22.2		
16000	5.8	7.0	17.1	8.8	4.0		2.1										9.8		
20000			8.8																
25000			.4																

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 03
AIRCRAFT CODE 733
OPERATION CODE 80109
PROFILE VERSION A
28 NOV 79
PAGE F3

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
94% RPM POWER RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	78.7	80.3	79.5	80.8	77.8	76.4	74.7	73.3	71.3	71.7	72.1	71.6	72.8	73.8	74.7	76.6	79.7	75.5	72.9
250	76.6	78.1	77.4	77.8	74.8	74.2	72.5	71.3	69.3	69.6	69.9	69.4	69.8	70.7	72.4	74.3	77.5	73.2	70.7
315	74.4	75.9	75.3	75.6	72.6	72.8	70.4	69.2	67.2	67.5	67.7	67.2	67.5	68.4	70.0	71.9	75.3	70.9	68.4
400	72.2	73.6	73.2	73.3	70.4	69.8	68.2	67.1	65.1	65.4	65.4	64.9	65.2	66.1	67.6	69.3	73.8	68.4	66.1
500	69.9	71.2	71.0	70.9	68.1	67.5	65.9	64.9	62.9	63.2	63.1	62.6	62.8	63.7	65.0	66.7	70.7	65.9	63.7
630	67.5	68.8	68.8	68.5	65.8	65.1	63.6	62.6	60.6	60.8	60.6	60.1	60.3	61.2	62.4	63.9	68.3	63.2	61.1
800	65.0	66.3	66.5	66.0	63.3	62.6	61.2	60.2	58.3	58.4	58.1	57.6	57.8	58.5	59.6	61.8	65.9	60.5	58.5
1000	62.4	63.7	64.2	63.4	60.8	60.0	58.7	57.7	55.8	55.9	55.5	55.0	55.1	55.8	56.8	58.8	63.4	57.6	55.8
1250	59.7	61.1	61.7	60.7	58.2	57.3	56.0	55.0	53.0	53.1	52.7	52.2	52.3	52.9	53.8	54.8	60.9	54.6	53.0
1600	56.9	58.3	59.2	57.8	55.4	54.5	53.2	52.1	50.0	50.0	49.8	49.1	49.2	49.8	50.6	51.4	58.3	51.5	49.9
2000	54.0	55.4	56.6	54.9	52.6	51.6	50.2	49.1	46.8	46.7	46.6	45.9	46.0	46.5	47.2	47.8	55.6	48.2	46.6
2500	50.7	52.2	53.5	51.7	49.5	48.4	47.0	45.8	43.2	43.0	43.2	42.4	42.6	43.8	43.6	44.1	52.7	44.7	43.1
3150	47.3	48.7	50.0	48.3	46.1	44.8	43.4	42.1	39.3	39.0	39.5	38.6	38.9	39.1	39.7	40.1	49.6	41.0	39.4
4000	43.5	44.9	46.0	44.4	42.3	40.9	39.6	38.1	34.9	34.6	35.6	34.5	34.9	34.3	35.6	35.8	46.1	37.0	35.4
5000	39.3	40.7	41.7	40.2	38.1	36.7	35.4	33.8	30.4	30.1	31.3	30.3	30.7	30.5	31.1	31.3	42.1	32.8	31.1
6300	34.9	36.2	37.2	35.6	33.7	32.2	31.0	29.4	25.8	25.4	26.8	25.7	26.3	26.8	26.5	26.6	37.8	28.2	26.6
8000	31.1	32.3	33.7	32.0	29.8	28.4	27.1	25.8	22.4	22.0	23.0	21.9	22.4	22.2	22.5	22.6	33.9	23.9	22.5
10000	27.0	28.1	29.9	27.9	25.7	24.4	23.1	22.1	19.0	18.5	19.1	18.0	18.4	18.4	18.5	18.5	29.6	19.3	18.4
12500	22.7	23.7	25.8	23.5	21.3	20.1	18.8	18.1	15.5	15.8	15.1	14.1	14.4	14.7	14.6	14.5	24.9	14.8	14.4
16000	18.2	19.1	21.4	18.9	16.8	15.7	14.5	14.1	11.9	11.6	11.2	10.3	10.5	11.0	10.8	10.7	19.8	10.4	10.7
20000	13.5	14.2	16.6	14.0	12.0	11.1	10.1	10.0	8.4	8.2	7.5	6.8	6.8	7.5	7.3	7.1	14.2	6.5	7.5
25000	9.0	9.3	11.5	9.1	7.3	6.5	6.0	6.0	5.0	4.9	4.0	3.6	3.5	4.2	3.9	3.8	8.3	3.0	4.5

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-881
RUN 03
AIRCRAFT CODE 733
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE G3

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
94% RPM POWER RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	79.9	82.3	80.7	80.7	77.0	78.2	74.7	73.3	72.5	72.8	73.7	73.1	73.3	73.8	74.7	77.7	81.8	76.8	74.2
250	77.7	80.1	78.6	78.5	74.8	76.0	72.5	71.3	70.5	70.7	71.5	70.9	71.1	71.5	72.4	75.3	78.8	74.4	72.0
315	75.5	77.9	76.5	76.2	72.6	73.8	70.4	69.2	68.4	68.6	69.3	68.7	68.9	69.2	70.0	72.9	76.6	72.1	69.7
400	73.3	75.6	74.4	74.0	70.4	71.6	68.2	67.1	66.3	66.5	67.0	66.4	66.6	66.9	67.6	70.4	74.3	69.6	67.4
500	71.0	73.2	72.2	71.6	68.1	69.2	65.9	64.9	64.1	64.3	64.7	64.1	64.2	64.5	65.0	67.7	72.0	67.1	64.9
630	68.6	70.8	69.9	69.2	65.8	66.8	63.6	62.6	61.8	62.0	62.2	61.6	61.7	61.9	62.4	65.0	69.6	64.4	62.4
800	66.1	68.3	67.7	66.6	63.3	64.4	61.2	60.2	59.4	59.6	59.7	59.1	59.1	59.3	59.6	62.1	67.2	61.7	59.8
1000	63.6	65.7	65.3	64.0	60.8	61.8	58.7	57.7	57.0	57.0	57.1	56.5	56.5	56.6	56.8	59.0	64.8	58.8	57.1
1250	60.9	63.0	62.9	61.3	58.2	59.1	56.0	55.0	54.2	54.2	54.3	53.7	53.6	53.7	53.8	55.8	62.2	55.8	54.3
1600	58.0	60.3	60.4	58.5	55.4	56.3	53.2	52.1	51.2	51.1	51.4	50.6	50.6	50.6	50.6	52.4	59.6	52.7	51.2
2000	55.1	57.4	57.8	55.6	52.6	53.4	50.2	49.1	48.0	47.8	48.2	47.4	47.4	47.3	47.2	48.9	56.9	49.4	47.9
2500	51.9	54.2	54.6	52.4	49.5	50.1	47.0	45.8	44.4	44.2	44.8	43.9	43.9	43.7	43.6	45.1	54.0	45.9	44.4
3150	48.4	50.7	51.1	48.9	46.1	46.6	43.4	42.1	40.5	40.1	41.1	40.1	40.3	39.9	39.7	41.1	50.9	42.2	40.7
4000	44.4	46.5	47.0	45.0	42.3	42.4	39.6	38.1	35.9	35.5	36.8	35.7	36.0	35.5	35.6	36.6	47.2	38.0	36.4
5000	40.0	41.8	42.4	40.6	38.1	37.7	35.4	33.8	31.1	30.7	32.3	31.1	31.5	31.0	31.1	32.0	42.9	33.5	31.9
6300	35.3	37.0	37.6	36.0	33.7	32.9	31.0	29.4	26.3	25.9	27.5	26.3	26.8	26.3	26.5	27.1	38.3	28.7	27.1
8000	31.3	32.7	33.9	32.1	29.8	28.8	27.1	25.8	22.7	22.2	23.4	22.2	22.7	22.4	22.5	22.8	34.1	24.1	22.7
10000	27.0	28.1	29.9	27.9	25.7	24.4	23.1	22.1	19.0	18.5	19.1	18.0	18.4	18.4	18.5	18.5	29.6	19.3	18.4
12500	22.7	23.7	25.8	23.5	21.3	20.1	18.8	18.1	15.5	15.0	15.1	14.1	14.4	14.7	14.6	14.5	24.9	14.8	14.4
16000	18.2	19.1	21.4	18.9	16.8	15.7	14.5	14.1	11.9	11.6	11.2	10.3	10.5	11.0	10.8	10.7	19.8	10.4	10.7
20000	13.5	14.2	16.6	14.0	12.0	11.1	10.1	10.0	8.4	8.2	7.5	6.8	6.8	7.5	7.3	7.1	14.2	6.5	7.5
25000	9.8	9.3	11.5	9.1	7.3	6.5	6.8	6.0	5.0	4.9	4.0	3.6	3.5	4.2	3.9	3.8	8.3	3.0	4.5

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
94% RPM POWER RUNUP
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 03
AIRCRAFT CODE 733
OPERATION CODE 00109
PROFILE VERSION A
28 NOV 79
PAGE J3

P=PNLT A=AL T=ALT

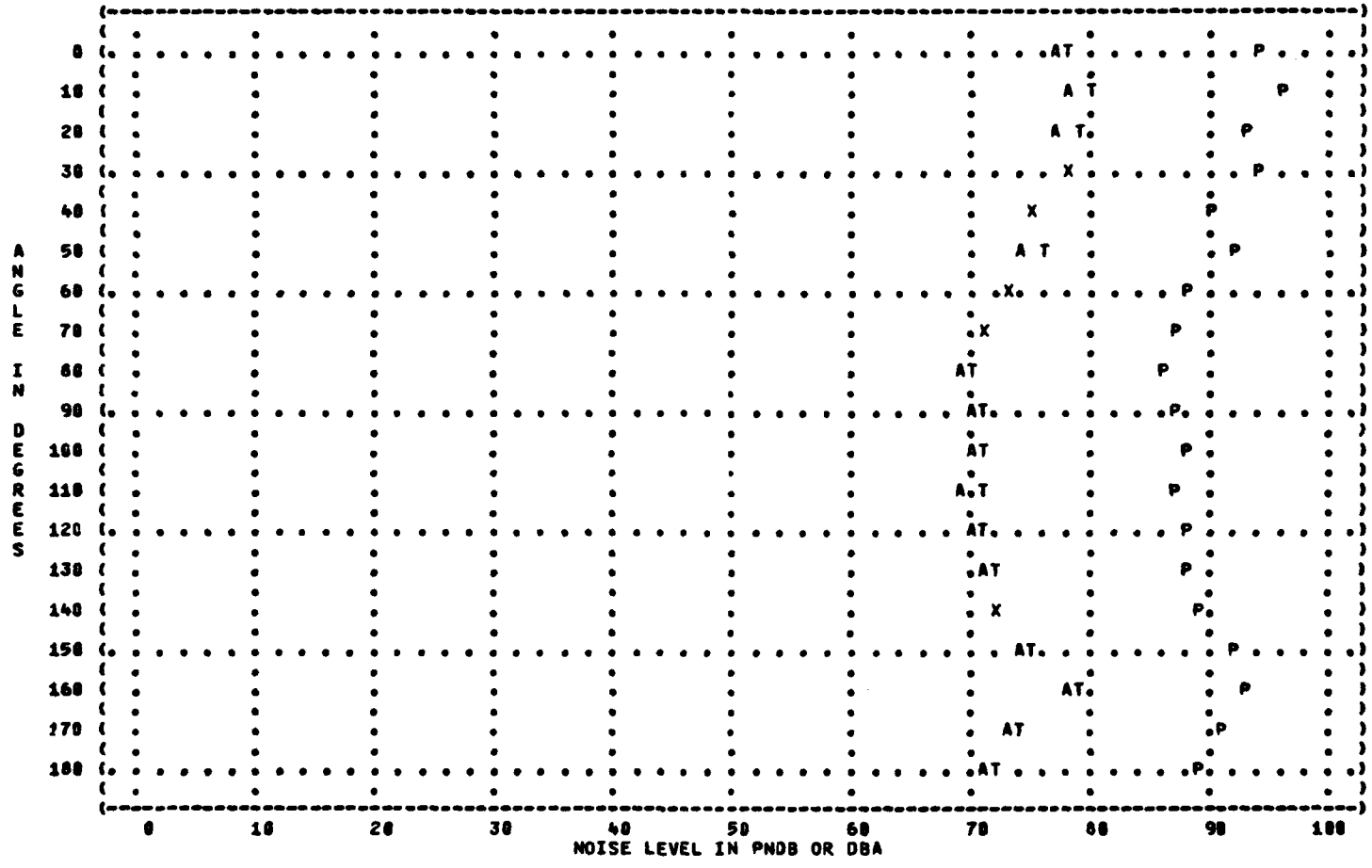


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 99.5 % RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 04
AIRCRAFT CODE 733
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE C4

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	83	85	84	84	83	85	85	84	83	84	84	85	85	86	85	85	84	85	86
63	86	85	87	86	86	86	86	86	85	85	87	87	87	87	88	88	86	87	88
80	84	84	88	83	84	82	84	85	83	83	84	84	84	83	85	85	84	84	84
100	82	83	81	82	83	80	80	81	77	77	78	79	78	81	80	78	79	80	79
125	85	84	85	83	81	79	75	81	76	74	78	77	79	78	79	79	79	78	77
160	83	80	80	81	79	78	78	78	73	69	74	74	76	77	77	77	76	76	74
200	79	75	75	75	72	74	73	72	70	66	69	71	71	73	72	72	69	70	71
250	74	73	73	74	71	70	71	69	69	64	67	67	69	69	68	66	62	63	60
315	74	76	75	75	71	69	70	70	68	61	65	65	66	66	66	65	59	59	57
400	75	78	78	78	75	71	71	70	66	61	63	60	61	62	65	65	58	59	60
500	73	77	77	77	75	69	68	68	66	61	63	58	59	61	63	61	59	61	61
630	72	75	74	73	72	69	68	68	66	62	60	58	59	61	63	61	62	66	63
800	68	72	72	72	71	70	69	68	67	63	61	57	58	61	64	61	66	68	67
1000	70	71	73	75	73	70	69	69	65	62	59	58<	57<	57	60	58	62	65	63
1250	69	72	75	73	74	68	70	71	66	64	58	58	55	58	59	59	62	64	61
1600	68	72	73	72	71	69	69	70	67	65	58	55	55	59	63	61	64	65	62
2000	67	71	72	74	70	68	68	69	66	65	56	55	55	58	64	61	64	65	61
2500	66	71	74	76	69	67	68	68	66	64	54	53	54	58	63	61	62	62	61
3150	65	71	72	73	68	66	66	65	63	60	55<	53<	54<	56	63	61	60	59	59
4000	69	71	72	74	69	67	66	65	63	62	56	53	55	60	68	66	66	64	62
5000	64	68	68	71	66	66	64	63	61	60	54	53	53	58	65	64	62	61	60
6300	69	74	71	72	71	72	70	69	65	64	60	59	59	63	70	68	68	66	65
8000	67	65	65	66	64	63	63	59	56	56	50	48	50	58	62	60	59	58	55
10000	58	58	61	60	58	57	56	53	49	49	45	42	44	50	55	54	52	50	49
OVERALL	93	93	94	92	92	91	91	92	90	90	91	91	91	91	92	92	91	91	92

XXX< = EXTRAPOLATED OR INTERPOLATED SPL

TABLE: PERCEIVED NOISE LEVEL (PNOB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 04
AIRCRAFT CODE 733
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE D4

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 99.5 % RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	99.4	101.5	102.1	102.8	99.6	98.5	97.8	97.4	94.7	92.9	92.2	91.8	92.1	93.2	96.4	95.1	94.7	94.3	94.0
250	97.1	99.2	99.9	100.6	97.4	96.1	95.4	95.1	92.5	90.6	90.0	89.5	89.9	91.0	94.0	92.8	92.4	92.1	91.8
315	94.8	96.7	97.6	98.3	95.0	93.6	92.9	92.6	90.1	88.1	87.6	87.2	87.5	88.6	91.6	90.5	90.0	89.7	89.5
400	92.3	94.2	95.2	95.9	92.5	91.0	90.3	90.2	87.7	85.6	85.1	84.7	85.0	86.0	89.0	87.9	87.4	87.2	86.9
500	89.8	91.7	92.7	93.4	89.9	88.2	87.7	87.7	85.2	83.0	82.4	82.0	82.3	83.3	86.3	85.3	84.7	84.5	84.3
630	87.0	89.0	90.1	90.8	87.1	85.2	85.1	85.1	82.5	80.4	79.7	79.3	79.6	80.6	83.5	82.5	81.9	81.8	81.6
800	84.1	86.2	87.3	88.0	84.3	82.3	82.3	82.3	79.8	77.6	77.0	76.5	76.8	77.8	80.5	79.7	78.9	79.0	78.8
1000	81.0	83.1	84.4	85.1	81.4	79.4	79.4	79.4	76.9	74.7	74.1	73.7	73.9	74.8	77.3	76.7	75.7	76.1	75.8
1250	77.8	80.2	81.3	82.0	78.3	76.2	76.2	76.3	73.7	71.5	71.0	70.6	70.9	71.7	74.1	73.5	72.5	73.0	72.8
1600	74.7	77.1	77.9	78.6	75.1	72.7	72.8	73.0	70.3	68.0	67.2	66.7	67.0	67.8	70.3	69.7	68.7	69.2	68.9
2000	71.3	73.8	74.3	74.9	71.8	69.1	69.1	69.4	66.6	64.3	63.0	62.4	62.7	63.6	66.0	65.4	64.8	65.3	64.7
2500	67.2	69.8	70.3	70.8	68.1	65.1	65.1	65.4	62.4	60.1	58.0	57.2	57.6	58.7	61.4	60.5	60.5	61.1	60.1
3150	62.6	65.2	65.7	66.0	63.7	60.5	60.5	60.8	57.7	55.3	52.5	50.9	51.2	52.6	56.3	54.5	55.3	56.5	55.4
4000	57.6	60.3	60.9	61.0	58.9	55.4	55.5	55.7	52.4	49.6	46.5	43.6	44.2	46.7	50.1	48.1	49.6	51.4	50.0
5000	52.1	55.0	55.6	55.7	53.6	49.4	49.3	49.7	45.8	42.4	39.7	36.6	37.1	40.0	43.7	41.2	42.9	45.3	44.0
6300	45.8	49.2	49.7	49.7	47.5	42.8	42.3	43.0	38.7	34.5	30.7	24.9	24.7	30.1	35.7	32.6	35.2	37.8	36.7
8000	40.6	43.9	44.6	44.4	42.0	37.0	36.7	36.3	32.5	26.5	23.4	14.8	15.1	20.5	27.7	23.5	28.8	31.9	29.7
10000	34.4	38.3	38.8	38.5	36.2	30.1	29.4	28.9	24.0	14.5	15.3	5.6	5.5	12.7	18.2	13.9	17.7	23.7	22.1
12500	26.7	32.3	32.4	32.4	30.1	21.7	19.5	19.9	13.8	2.5	7.1			4.9	8.7	4.3	7.4	13.2	10.2
16000	17.3	24.7	24.6	24.5	21.3	8.4	9.6	10.8	3.6									2.7	
20000	8.0	14.0	14.0	14.0	10.2			1.8											
25000		3.3	3.4	3.5															

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 99.5 % RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 04
AIRCRAFT CODE 733
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE E4

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	100.9	102.7	102.8	103.5	100.6	99.7	98.9	98.7	95.9	94.0	93.5	93.1	93.3	94.3	97.6	96.5	96.5	95.6	95.5
250	98.6	100.4	100.6	101.2	98.3	97.3	96.5	96.4	93.6	91.7	91.3	90.9	91.1	92.1	95.2	94.2	94.2	93.4	93.3
315	96.3	97.9	98.3	98.9	95.9	94.8	94.0	93.9	91.2	89.2	89.0	88.6	88.8	89.6	92.8	91.9	91.7	90.9	91.0
400	93.8	95.4	95.9	96.6	93.4	92.2	91.4	91.5	88.8	86.6	86.4	86.0	86.2	87.1	90.2	89.3	89.1	88.4	88.5
500	91.3	92.9	93.4	94.0	90.8	89.4	88.8	89.0	86.3	84.1	83.8	83.4	83.6	84.4	87.5	86.7	86.5	85.8	85.8
630	88.5	90.2	90.8	91.4	88.1	86.4	86.2	86.4	83.7	81.4	81.1	80.7	80.9	81.7	84.7	83.9	83.7	83.1	83.1
800	85.6	87.4	88.0	88.7	85.3	83.5	83.4	83.6	80.9	78.6	78.3	77.9	78.1	78.9	81.7	81.1	80.7	80.2	80.3
1000	82.5	84.3	85.1	85.7	82.3	80.6	80.4	80.7	78.0	75.7	75.4	75.0	75.2	75.9	78.5	78.1	77.4	77.3	77.4
1250	79.3	81.4	82.0	82.6	79.2	77.4	77.3	77.6	74.9	72.5	72.4	71.9	72.1	72.8	75.3	75.0	74.3	74.2	74.3
1600	76.2	78.3	78.6	79.2	76.0	74.0	73.8	74.3	71.4	69.1	68.5	68.0	68.2	68.9	71.5	71.1	70.4	70.4	70.4
2000	72.8	75.0	75.0	75.5	72.7	70.3	70.2	70.7	67.7	65.3	64.3	63.7	63.9	64.7	67.2	66.8	66.5	66.6	66.2
2500	68.7	71.0	71.0	71.4	69.0	66.3	66.2	66.7	63.5	61.2	59.4	58.5	58.8	59.8	62.6	61.9	62.2	62.4	61.6
3150	64.1	66.4	66.4	66.7	64.7	61.7	61.6	62.1	58.9	56.4	53.8	52.2	52.4	53.7	57.5	55.9	57.1	57.8	56.9
4000	58.8	61.3	61.4	61.5	59.6	56.4	56.3	56.7	53.3	50.5	47.6	44.7	45.2	47.6	51.1	49.2	50.9	52.4	51.2
5000	53.0	55.8	56.1	56.1	54.2	50.2	50.0	50.5	46.5	43.0	40.5	37.4	37.8	40.6	44.5	42.1	44.0	46.1	45.0
6300	46.4	49.7	50.0	50.0	47.8	43.3	42.8	43.5	39.2	35.8	31.3	24.5	25.2	30.6	36.2	33.2	35.9	38.3	37.3
8000	40.9	44.2	44.7	44.5	42.2	37.2	36.9	36.6	32.7	26.7	23.7	15.1	15.3	20.7	27.9	23.7	29.1	32.1	30.0
10000	34.4	38.3	38.8	38.5	36.2	30.1	29.4	28.9	24.0	14.5	15.3	5.6	5.5	12.7	18.2	13.9	17.7	23.7	22.1
12500	26.7	32.3	32.4	32.4	30.1	21.7	19.5	19.9	13.8	2.5	7.1			4.9	8.7	4.3	7.4	13.2	10.2
16000	17.3	24.7	24.6	24.5	21.3	8.4	9.6	10.8	3.6									2.7	
20000	8.0	14.8	14.8	14.8	10.2			1.8											
25000		3.3	3.4	3.5															

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 99.5 % RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 04
AIRCRAFT CODE 733
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE F4

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	83.7	86.3	86.9	87.6	84.9	82.5	82.2	82.2	79.2	77.2	74.5	73.7	74.1	75.7	79.5	78.1	78.3	78.5	77.1
250	81.6	84.1	84.7	85.4	82.7	80.3	80.0	80.0	77.1	75.0	72.4	71.6	72.0	73.5	77.2	75.9	76.1	76.3	75.0
315	79.4	81.9	82.5	83.1	80.5	78.0	77.8	77.8	74.9	72.7	70.2	69.5	69.9	71.3	74.8	73.5	73.8	74.1	72.7
400	77.1	79.6	80.3	80.8	78.2	75.7	75.5	75.5	72.6	70.5	68.1	67.3	67.7	69.1	72.4	71.1	71.4	71.8	70.5
500	74.8	77.3	78.0	78.5	75.9	73.3	73.1	73.2	70.3	68.1	65.8	65.1	65.5	66.8	69.9	68.7	69.0	69.5	68.1
630	72.4	74.9	75.6	76.1	73.6	70.8	70.7	70.8	67.9	65.7	63.5	62.8	63.1	64.4	67.3	66.1	66.5	67.1	65.7
800	69.9	72.5	73.2	73.6	71.1	68.3	68.2	68.4	65.5	63.2	61.2	60.4	60.7	61.9	64.6	63.4	63.9	64.6	63.3
1000	67.4	69.9	70.7	71.0	68.7	65.7	65.7	65.9	62.9	60.7	58.7	57.9	58.2	59.3	61.9	60.7	61.2	62.1	60.8
1250	64.8	67.3	68.1	68.3	66.1	63.1	63.0	63.2	60.3	58.0	56.0	55.2	55.4	56.5	58.9	57.8	58.3	59.4	58.1
1600	62.0	64.7	65.4	65.6	63.4	60.3	60.3	60.4	57.5	55.1	53.1	52.1	52.4	53.5	55.8	54.7	55.3	56.6	55.3
2000	59.1	61.9	62.5	62.7	60.7	57.4	57.4	57.5	54.6	52.0	50.1	48.9	49.1	50.3	52.6	51.4	52.2	53.6	52.3
2500	56.0	58.8	59.4	59.5	57.6	54.3	54.2	54.4	51.4	48.8	46.7	45.3	45.5	46.8	49.1	47.8	48.9	50.5	49.1
3150	52.5	55.4	55.9	56.0	54.3	51.0	50.8	51.0	48.0	45.3	43.1	41.4	41.6	43.0	45.4	44.0	45.4	47.2	45.7
4000	48.7	51.6	52.2	52.2	50.6	47.3	47.1	47.2	44.3	41.5	39.1	37.2	37.3	38.9	41.4	39.9	41.6	43.6	42.1
5000	44.5	47.4	48.0	48.0	46.5	43.2	43.0	43.1	40.2	37.3	34.9	32.9	32.9	34.7	37.1	35.5	37.6	39.7	38.2
6300	40.1	42.9	43.5	43.6	42.2	38.9	38.6	38.7	35.7	32.8	30.5	28.4	28.4	30.2	32.6	31.0	33.1	35.3	33.8
8000	36.3	39.0	39.5	39.5	38.1	34.8	34.4	34.4	31.6	28.5	26.9	24.9	25.0	26.5	28.8	27.2	29.1	31.3	29.9
10000	32.2	34.9	35.2	35.1	33.7	30.4	29.9	29.9	27.2	24.0	23.1	21.3	21.6	22.9	24.9	23.5	24.8	26.9	25.8
12500	27.8	30.5	30.6	30.5	29.0	25.7	25.1	25.1	22.6	19.4	19.3	17.8	18.2	19.2	20.9	19.7	20.4	22.3	21.4
16000	23.2	25.7	25.8	25.6	24.1	20.7	20.2	20.2	17.8	14.9	15.5	14.5	14.8	15.6	16.9	16.1	16.0	17.6	17.0
20000	18.4	20.6	20.7	20.4	18.9	15.7	15.2	15.3	13.0	10.8	11.9	11.4	11.6	12.1	13.2	12.7	12.0	13.1	12.8
25000	13.7	15.3	15.5	15.0	13.6	10.8	10.5	10.8	8.6	7.2	8.6	8.4	8.6	8.9	9.8	9.4	8.5	9.2	9.2

TABLE [illegible] A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

[illegible] SOURCE / SUBJECT:
T-10 WITH SUPPRESSOR
AP 128-10

OPERATION:
MILITARY POWER 99.5 % RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 04
AIRCRAFT CODE 733
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE G4

DISTANCE (FEET)	ANGLE (DEGREES)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
[illegible]	[illegible]	87.5	87.6	86.2	85.8	83.7	83.3	83.5	80.4	78.2	75.8	75.0	75.4	76.8	80.7	79.5	80.1	79.7	78.7
[illegible]	[illegible]	85.3	85.4	86.8	83.6	81.5	81.1	81.3	78.2	76.0	73.7	72.9	73.3	74.6	78.4	77.3	77.8	77.5	76.5
[illegible]	[illegible]	83.1	83.2	83.8	81.4	79.2	78.8	79.1	76.0	73.8	71.6	70.8	71.1	72.4	76.0	74.9	75.5	75.3	74.3
[illegible]	[illegible]	80.8	81.0	81.5	79.2	76.9	76.6	76.8	73.7	71.5	69.4	68.6	69.0	70.2	73.6	72.5	73.2	73.1	72.0
[illegible]	[illegible]	78.5	78.7	79.1	76.9	74.5	74.2	74.5	71.4	69.2	67.2	66.4	66.7	67.9	71.1	70.1	70.7	70.7	69.7
[illegible]	[illegible]	76.1	76.3	76.7	74.5	72.0	71.8	72.1	69.0	66.8	64.9	64.1	64.4	65.4	68.5	67.5	68.2	68.3	67.3
[illegible]	[illegible]	73.7	73.9	74.2	72.1	69.5	69.3	69.7	66.6	64.3	62.5	61.7	62.0	62.9	65.8	64.8	65.6	65.9	64.8
[illegible]	[illegible]	71.1	71.4	71.7	69.6	66.9	66.8	67.2	64.1	61.7	60.0	59.2	59.4	60.3	63.1	62.1	62.9	63.3	62.3
[illegible]	[illegible]	68.5	68.8	69.0	67.0	64.3	64.1	64.5	61.4	59.0	57.4	56.5	56.7	57.6	60.1	59.2	60.1	60.6	59.6
[illegible]	[illegible]	65.9	66.0	66.2	64.4	61.5	61.3	61.7	58.6	56.1	54.5	53.5	53.6	54.6	57.0	56.1	57.1	57.8	56.8
[illegible]	[illegible]	63.1	63.2	63.3	61.6	58.6	58.4	58.8	55.7	53.1	51.4	50.2	50.3	51.3	53.8	52.8	53.9	54.9	53.8
[illegible]	[illegible]	60.0	60.1	60.1	58.6	55.5	55.3	55.7	52.5	49.8	48.1	46.6	46.7	47.9	50.3	49.2	50.6	51.8	50.6
[illegible]	[illegible]	56.6	56.6	56.7	55.2	52.2	51.9	52.3	49.1	46.3	44.4	42.7	42.8	44.1	46.6	45.4	47.1	48.5	47.3
[illegible]	[illegible]	52.6	52.7	52.7	51.4	48.3	48.0	48.3	45.2	42.3	40.2	38.3	38.3	39.8	42.4	41.0	43.0	44.6	43.4
[illegible]	[illegible]	48.1	48.4	48.4	47.1	44.0	43.7	43.9	40.8	37.9	35.7	33.7	33.7	35.3	37.9	36.4	38.6	40.4	39.1
[illegible]	[illegible]	43.4	43.8	43.8	42.5	39.3	39.0	39.2	36.2	33.2	31.0	28.9	28.9	30.6	33.1	31.5	33.8	35.8	34.5
[illegible]	[illegible]	39.3	39.6	39.6	38.3	35.8	34.6	34.7	31.8	28.7	27.1	25.1	25.3	26.8	29.8	27.5	29.4	31.5	30.2
[illegible]	32.2	34.9	35.2	35.1	33.7	30.4	29.9	29.9	27.2	24.0	23.1	21.3	21.6	22.9	24.9	23.5	24.8	26.9	25.8
[illegible]	27.8	30.5	30.6	30.5	29.0	25.7	25.1	25.1	22.6	19.4	19.3	17.8	18.2	19.2	20.9	19.7	20.4	22.3	21.4
[illegible]	23.2	25.7	25.8	25.6	24.1	20.7	20.2	20.2	17.8	14.9	15.5	14.5	14.8	15.6	16.9	16.1	16.0	17.6	17.8
[illegible]	18.4	20.6	20.7	20.4	18.9	15.7	15.2	15.3	13.0	10.8	11.9	11.4	11.6	12.1	13.2	12.7	12.0	13.1	12.8
[illegible]	13.7	15.3	15.5	15.0	13.6	10.8	10.5	10.8	8.6	7.2	8.6	8.4	8.6	8.9	9.8	9.4	8.5	9.2	9.2

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MILITARY POWER 99.5 % RPM
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-081
RUN 04
AIRCRAFT CODE 733
OPERATION CODE 00104
PROFILE VERSION A
28 NOV 79
PAGE J4

P=PNLT A=AL T=ALT

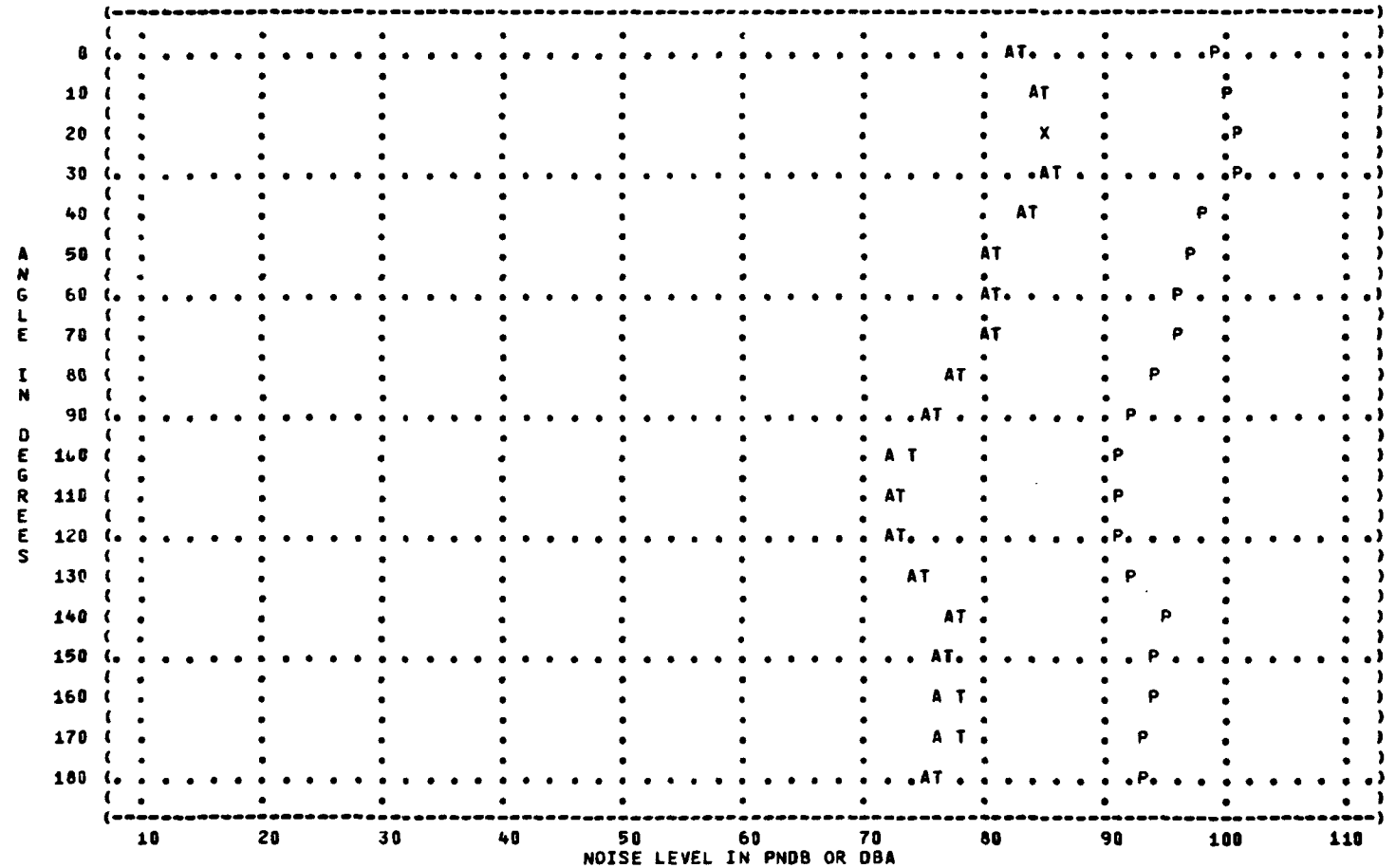


TABLE: NORMALIZED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 250 FEET

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 05

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MAX POWER AFTERBURNER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS = 29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

AIRCRAFT CODE 733
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE C5

BAND CENTER FREQ (HZ)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
50	90	93	90	92	91	92	91	93	94	92	92	92	92	93	93	92	92	93	92
63	93	90	91	91	91	92	92	91	90	92	93	91	92	92	92	93	93	92	92
80	95	93	92	92	93	94	94	95	93	93	94	93	95	93	94	93	95	93	93
100	91	91	91	90	92	91	92	91	89	88	90	89	91	90	92	92	91	91	90
125	90	89	90	90	88	88	85	87	84	84	84	85	84	85	86	86	85	83	83
160	87	85	86	85	83	83	81	80	81	78	84	82	84	85	86	85	83	82	82
200	83	83	83	83	83	84	82	81	81	77	79	80	80	82	83	80	78	79	77
250	78	79	80	78	76	75	76	76	76	74	74	75	75	76	77	73	73	73	71
315	76	80	80	76	73	74	74	74	73	68	70	72	72	72	74	72	69	66	68
400	75	82	82	81	77	73	72	73	71	66	68	68	68	70	71	67	69	66	68
500	75	83	83	84	83	78	76	76	74	68	66	67	69	72	71	67	68	68	69
630	76	80	80	79	79	73	72	71	72	66	65	64	67	68	68	66	68	69	69
800	72	76	81	77	74	73	72	71	71	66	65	65	66	68	69	68	73	72	71
1000	73	78	81	80	76	73	72	72	70	65	64	63	64	65	65	65	69	70	68
1250	72	76	79	78	75	71	71	71	69	67	63	63	64	65	65	64	68	70	67
1600	70	75	77	78	74	71	70	71	70	66	63	63	65	67	67	67	69	70	68
2000	69	74	77	78	73	69	69	71	69	66	62	63	65	67	67	68	69	69	68
2500	67	76	81	80	73	68	69	71	70	66	60	62	64	65	66	67	68	66	67
3150	65	74	79	78	70	66	67	68	67	63	57	58	61	64	65	65	64	63	64
4000	69	73	78	77	70	66	66	66	66	62	58	58	61	66	68	67	68	65	64
5000	63	70	73	75	68	63	64	63	62	59	55	56	59	64	64	63	64	61	61
6300	68	77	74	74	71	69	69	68	65	63	61	61	64	70	69	69	69	66	67
8000	68	68	67	68	64	61	64	59	57	56	51	51	55	63	61	60	61	57	57
10000	59	60	62	61	58	56	54	53	51	50	45	46	49	55	55	54	54	50	50
OVERALL	100	99	99	99	99	99	99	99	99	98	99	98	99	99	99	99	99	99	98

TABLE: PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MAX POWER AFTERBURNER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 05
AIRCRAFT CODE 733
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE 05

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	103.3	105.9	108.0	107.6	103.9	102.5	102.4	102.6	101.5	99.7	99.6	99.1	100.6	101.0	101.8	101.1	101.8	100.7	100.2
250	101.2	103.6	105.8	105.4	101.8	100.4	100.3	100.5	99.3	97.6	97.5	97.0	98.5	98.9	99.7	99.0	99.7	98.6	98.0
315	99.0	101.2	103.6	103.2	99.6	98.3	98.1	98.3	97.2	95.4	95.4	94.9	96.4	96.8	97.6	96.9	97.5	96.4	95.9
400	96.8	98.9	101.2	100.8	97.4	96.1	95.9	96.1	95.0	93.2	93.2	92.7	94.2	94.5	95.4	94.6	95.3	94.2	93.7
500	94.5	96.5	98.8	98.4	95.1	93.8	93.6	93.8	92.7	91.0	90.9	90.5	92.0	92.2	93.1	92.4	93.0	91.9	91.3
630	92.1	94.0	96.3	95.8	92.6	91.3	91.2	91.4	90.1	88.4	88.5	87.9	89.5	89.6	90.7	89.9	90.5	89.4	88.9
800	89.4	91.3	93.6	93.1	90.0	88.6	88.6	88.7	87.5	85.7	85.9	85.2	86.9	87.0	88.0	87.3	87.9	86.8	86.2
1000	86.6	88.3	90.7	90.2	87.0	85.9	85.6	86.0	84.7	82.9	83.1	82.5	84.1	84.0	84.9	84.2	85.1	83.9	83.3
1250	83.2	85.4	87.5	87.1	84.1	82.5	82.2	82.6	81.3	79.5	79.7	79.0	80.7	80.6	81.5	80.8	81.6	80.5	79.9
1600	79.5	82.3	84.1	83.7	81.0	78.8	78.5	78.9	77.6	75.7	75.9	75.3	76.9	76.8	77.7	77.0	77.9	76.8	76.2
2000	75.4	79.0	80.5	80.0	77.7	74.8	74.4	74.9	73.6	71.6	71.7	71.1	72.7	72.7	73.6	72.8	73.7	72.7	72.1
2500	70.9	75.3	76.4	76.2	74.2	70.8	70.0	70.4	69.1	67.0	67.0	66.5	68.1	68.1	69.0	68.2	69.1	68.1	67.5
3150	66.6	71.2	72.3	72.0	70.1	66.4	65.7	65.6	64.2	61.7	61.7	61.2	62.8	62.9	63.8	62.9	64.0	63.0	62.3
4000	61.8	66.4	67.6	67.3	65.4	61.5	60.7	60.6	59.1	55.5	55.3	54.8	56.6	57.7	57.9	56.7	58.4	57.9	57.0
5000	56.5	61.3	62.4	62.2	60.3	56.2	55.2	55.2	53.6	48.5	48.5	47.8	49.8	51.7	51.9	50.1	53.0	52.5	51.4
6300	50.8	56.0	57.1	56.8	54.9	50.6	49.5	49.3	47.5	41.9	40.9	41.2	43.2	45.3	45.5	43.8	46.7	46.2	45.1
8000	46.0	51.6	52.7	52.3	50.6	45.8	44.6	44.5	42.6	35.6	35.2	35.7	37.8	40.4	40.6	37.9	41.3	41.0	39.3
10000	40.6	46.6	47.7	47.4	45.6	40.4	38.8	38.4	35.9	28.5	27.1	28.3	31.5	34.1	34.2	30.5	34.5	33.9	32.3
12500	33.9	40.9	42.1	41.5	39.8	33.7	31.5	31.3	28.6	17.6	17.5	14.4	21.0	26.0	26.7	19.7	25.5	24.5	22.8
16000	24.6	34.2	34.7	34.0	32.9	26.5	24.1	23.7	17.4	6.7	7.9	.6	12.3	13.2	13.0	7.6	11.1	8.8	7.0
20000	12.0	25.7	26.7	26.0	25.4	14.1	11.9	10.5	7.0				3.5	.3					
25000		15.0	15.4	14.5	14.1	1.6													

TABLE: TONE-CORRECTED, PERCEIVED NOISE LEVEL (PNDB)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MAX POWER AFTERBURNER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 05
AIRCRAFT CODE 733
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE E5

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	104.9	107.3	108.7	108.9	105.5	104.0	103.9	103.8	102.3	100.6	100.9	100.3	101.7	102.2	102.9	102.3	103.1	101.8	101.4
250	102.8	105.0	106.5	106.7	103.4	101.9	101.8	101.7	100.2	98.5	98.8	98.2	99.6	100.1	100.8	100.2	101.0	99.7	99.3
315	100.6	102.6	104.2	104.5	101.2	99.8	99.6	99.5	98.0	96.4	96.7	96.1	97.5	97.9	98.7	98.0	98.8	97.6	97.2
400	98.4	100.3	101.9	102.1	99.0	97.6	97.4	97.3	95.8	94.1	94.5	93.9	95.3	95.7	96.4	95.8	96.6	95.4	94.9
500	96.1	97.8	99.5	99.7	96.7	95.3	95.1	95.0	93.5	91.9	92.2	91.6	93.1	93.3	94.1	93.5	94.3	93.1	92.6
630	93.7	95.3	96.9	97.1	94.3	92.8	92.7	92.6	91.0	89.3	89.8	89.1	90.6	90.8	91.7	91.1	91.9	90.6	90.2
800	91.1	92.7	94.2	94.4	91.6	90.1	90.1	89.9	88.3	86.6	87.2	86.4	88.0	88.1	89.1	88.4	89.2	87.9	87.5
1000	88.3	89.7	91.3	91.5	88.7	87.4	87.1	87.2	85.5	83.9	84.4	83.6	85.2	85.2	86.0	85.4	86.4	85.1	84.6
1250	84.8	86.7	88.2	88.4	85.7	84.0	83.7	83.8	82.2	80.4	81.0	80.2	81.8	81.7	82.6	81.9	83.0	81.7	81.2
1600	81.1	83.6	84.8	85.0	82.6	80.3	80.0	80.1	78.5	76.7	77.2	76.4	78.0	78.0	78.8	78.1	79.2	77.9	77.4
2000	77.1	80.3	81.1	81.3	79.4	76.3	75.9	76.1	74.4	72.5	73.0	72.3	73.8	73.8	74.6	73.9	75.1	73.9	73.3
2500	72.6	76.7	77.1	77.5	75.8	72.3	71.5	71.6	70.0	67.9	68.3	67.6	69.2	69.2	70.0	69.3	70.5	69.3	68.8
3150	68.2	72.5	72.9	73.3	71.7	67.9	67.2	66.8	65.1	62.6	63.0	62.4	63.9	64.1	64.8	64.0	65.3	64.2	63.6
4000	63.1	67.5	68.1	68.3	66.7	62.7	61.9	61.6	59.8	56.2	56.4	55.7	57.5	58.6	58.7	57.6	59.5	58.9	58.0
5000	57.5	62.1	62.8	63.0	61.3	57.1	56.2	55.9	54.1	49.1	49.3	48.5	50.5	52.4	52.5	50.8	53.8	53.2	52.2
6300	51.4	56.5	57.4	57.3	55.6	51.2	50.1	49.8	47.8	42.3	41.4	41.7	43.6	45.8	46.0	44.2	47.2	46.7	45.6
8000	46.3	51.9	52.8	52.6	50.9	46.1	44.9	44.8	42.8	35.8	35.5	35.9	38.1	40.6	40.8	38.1	41.6	41.2	39.6
10000	40.6	46.6	47.7	47.4	45.6	40.4	38.8	38.4	35.9	28.5	27.1	28.3	31.5	34.1	34.2	30.5	34.5	33.9	32.3
12500	33.9	40.9	42.1	41.5	39.8	33.7	31.5	31.3	28.6	17.6	17.5	14.4	21.0	26.0	26.7	19.7	25.5	24.5	22.8
16000	24.6	34.2	34.7	34.0	32.9	26.5	24.1	23.7	17.4	6.7	7.9	.6	12.3	13.2	13.0	7.6	11.1	8.8	7.8
20000	12.0	25.7	26.7	26.8	25.4	14.1	11.9	10.5	7.0				3.5	.3					
25000		15.8	15.4	14.5	14.1	1.6													

TABLE: A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MAX POWER AFTERBURNER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 05
AIRCRAFT CODE 733
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE F5

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	86.5	90.8	92.7	92.3	88.9	85.9	85.4	85.5	84.3	81.4	81.3	81.0	82.4	83.6	84.3	83.4	84.1	83.5	82.7
250	84.4	88.6	90.5	90.1	86.8	83.8	83.2	83.4	82.2	79.3	79.2	79.0	80.3	81.4	82.2	81.3	82.0	81.4	80.6
315	82.3	86.4	88.3	87.9	84.7	81.7	81.1	81.3	80.1	77.2	77.2	76.9	78.2	79.3	80.1	79.1	79.8	79.3	78.5
400	80.2	84.2	86.1	85.7	82.5	79.6	78.9	79.1	77.9	75.1	75.1	74.8	76.1	77.1	77.9	76.9	77.6	77.1	76.3
500	77.9	81.9	83.8	83.4	80.3	77.3	76.7	76.9	75.7	72.9	72.9	72.6	73.9	74.8	75.6	74.7	75.4	74.9	74.1
630	75.6	79.6	81.5	81.0	78.0	75.1	74.4	74.6	73.4	70.6	70.7	70.3	71.7	72.4	73.2	72.3	73.1	72.6	71.8
800	73.2	77.2	79.0	78.6	75.7	72.7	72.0	72.2	71.0	68.2	68.3	67.9	69.3	70.0	70.8	69.9	70.6	70.2	69.4
1000	70.7	74.8	76.5	76.1	73.3	70.2	69.6	69.8	68.5	65.7	65.8	65.4	66.8	67.4	68.2	67.3	68.1	67.8	66.9
1250	68.1	72.2	73.9	73.4	70.6	67.6	66.9	67.1	65.8	63.0	63.0	62.6	63.9	64.6	65.3	64.4	65.4	65.0	64.2
1600	65.2	69.6	71.2	70.7	68.2	64.8	64.1	64.2	63.0	60.0	59.9	59.5	60.9	61.6	62.2	61.3	62.4	62.2	61.3
2000	62.3	66.9	68.4	67.9	65.5	61.9	61.1	61.3	60.0	56.8	56.6	56.2	57.6	58.4	59.0	57.9	59.3	59.1	58.2
2500	59.1	63.9	65.4	64.8	62.6	58.8	57.9	58.0	56.8	53.3	52.9	52.6	54.0	54.9	55.4	54.3	55.9	55.8	54.9
3150	55.7	60.5	62.0	61.4	59.3	55.3	54.4	54.5	53.3	49.5	48.9	48.6	50.1	51.2	51.5	50.4	52.3	52.3	51.4
4000	51.9	56.0	58.4	57.7	55.6	51.5	50.6	50.6	49.4	45.4	44.6	44.3	45.8	47.1	47.3	46.1	48.5	48.6	47.5
5000	47.7	52.6	54.3	53.6	51.5	47.4	46.4	46.4	45.3	41.1	40.2	39.9	41.4	42.8	43.0	41.8	44.4	44.6	43.4
6300	43.3	48.3	49.9	49.2	47.1	43.1	42.0	42.0	40.8	36.7	35.7	35.3	36.9	38.3	38.5	37.2	40.0	40.2	39.0
8000	39.6	44.5	46.0	45.2	43.4	39.3	38.3	38.1	37.0	32.9	32.4	32.0	33.5	34.7	35.0	33.6	36.1	36.2	35.2
10000	35.6	40.4	41.7	41.0	39.5	35.3	34.3	34.1	33.0	29.2	29.0	28.6	30.1	31.1	31.4	30.0	32.1	32.1	31.2
12500	31.5	36.0	37.1	36.4	35.2	31.1	30.1	29.9	28.9	25.5	25.7	25.2	26.7	27.3	27.8	26.5	28.0	27.8	27.2
16000	27.2	31.3	32.1	31.6	30.6	26.8	25.9	25.8	24.7	22.0	22.6	21.9	23.3	23.7	24.3	23.1	24.0	23.7	23.2
20000	23.0	26.3	26.9	26.4	25.7	22.5	21.8	21.7	20.6	18.7	19.5	18.8	20.1	20.1	20.8	19.9	20.4	19.9	19.5
25000	18.9	21.2	21.4	21.1	20.6	18.5	17.9	17.9	16.8	15.7	16.6	15.7	17.1	16.8	17.6	16.9	17.1	16.5	16.1

TABLE: TONE-CORRECTED, A-WEIGHTED OVERALL SOUND LEVEL (DBA)

AS A FUNCTION OF ANGLE AND DISTANCE FROM SOURCE

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 05
AIRCRAFT CODE 733
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE G5

NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MAX POWER AFTERBURNER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

DISTANCE (FEET)	ANGLE (DEGREES) 0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
200	88.2	92.1	93.3	93.6	90.5	87.4	86.9	86.7	85.2	82.3	82.6	82.2	83.5	84.7	85.4	84.6	85.4	84.7	84.0
250	86.1	90.8	91.2	91.4	88.4	85.3	84.8	84.6	83.1	80.3	80.5	80.1	81.4	82.6	83.3	82.4	83.3	82.6	81.9
315	84.8	87.8	89.0	89.2	86.3	83.2	82.6	82.5	80.9	78.1	78.5	78.1	79.3	80.4	81.1	80.3	81.1	80.4	79.7
400	81.8	85.6	86.8	87.0	84.1	81.1	80.4	80.3	78.8	76.0	76.4	76.0	77.2	78.2	78.9	78.1	79.0	78.3	77.6
500	79.6	83.3	84.5	84.7	81.9	78.8	78.2	78.1	76.5	73.8	74.2	73.8	75.0	75.9	76.7	75.8	76.7	76.1	75.3
630	77.3	81.0	82.1	82.3	79.7	76.6	75.9	75.8	74.2	71.5	72.0	71.5	72.8	73.6	74.3	73.5	74.4	73.8	73.1
800	74.9	78.6	79.7	79.9	77.3	74.2	73.6	73.4	71.8	69.1	69.6	69.1	70.4	71.1	71.8	71.4	72.0	71.4	70.7
1000	72.4	76.1	77.2	77.3	74.9	71.7	71.1	71.0	69.4	66.7	67.1	66.6	67.9	68.5	69.2	68.4	69.5	68.9	68.2
1250	69.7	73.6	74.6	74.7	72.4	69.1	68.4	68.3	66.7	63.9	64.3	63.8	65.1	65.7	66.4	65.5	66.7	66.2	65.5
1600	66.9	71.8	71.9	72.8	69.8	66.3	65.6	65.4	63.8	60.9	61.2	60.7	62.0	62.7	63.3	62.4	63.7	63.3	62.6
2000	64.0	68.3	69.1	69.2	67.2	63.4	62.6	62.5	60.8	57.7	57.9	57.4	58.7	59.5	60.8	59.1	60.6	60.3	59.5
2500	60.8	65.2	66.0	66.1	64.3	60.3	59.4	59.2	57.6	54.2	54.2	53.8	55.1	56.1	56.5	55.4	57.3	57.0	56.2
3150	57.3	61.9	62.7	62.7	61.0	56.8	55.9	55.7	54.1	50.4	50.2	49.8	51.2	52.3	52.6	51.5	53.7	53.5	52.6
4000	53.2	57.9	58.9	58.7	56.9	52.7	51.8	51.6	50.1	46.1	45.6	45.2	46.7	48.0	48.2	47.0	49.6	49.5	48.5
5000	48.7	53.4	54.7	54.4	52.5	48.3	47.3	47.1	45.8	41.7	41.0	40.6	42.1	43.5	43.6	42.4	45.2	45.3	44.2
6300	44.8	48.8	50.2	49.7	47.8	43.7	42.6	42.5	41.2	37.0	36.2	35.8	37.4	38.7	38.9	37.7	40.6	40.7	39.6
8000	39.9	44.7	46.1	45.5	43.8	39.6	38.6	38.4	37.2	33.1	32.6	32.2	33.8	34.9	35.2	33.8	36.4	36.5	35.5
10000	35.6	40.4	41.7	41.0	39.5	35.3	34.3	34.1	33.0	29.2	29.0	28.6	30.1	31.1	31.4	30.0	32.1	32.1	31.2
12500	31.5	36.0	37.1	36.4	35.2	31.1	30.1	29.9	28.9	25.5	25.7	25.2	26.7	27.3	27.8	26.5	28.0	27.8	27.2
16000	27.2	31.3	32.1	31.6	30.6	26.8	25.9	25.8	24.7	22.0	22.6	21.9	23.3	23.7	24.3	23.1	24.0	23.7	23.2
20000	23.0	26.3	26.9	26.4	25.7	22.5	21.8	21.7	20.6	18.7	19.5	18.8	20.1	20.1	20.8	19.9	20.4	19.9	19.5
25000	18.9	21.2	21.4	21.1	20.6	18.5	17.9	17.9	16.8	15.7	16.6	15.7	17.1	16.8	17.6	16.9	17.1	16.5	16.1

TABLE: NOISE LEVEL AS A FUNCTION OF ANGLE AROUND SOURCE

DISTANCE = 250 FEET

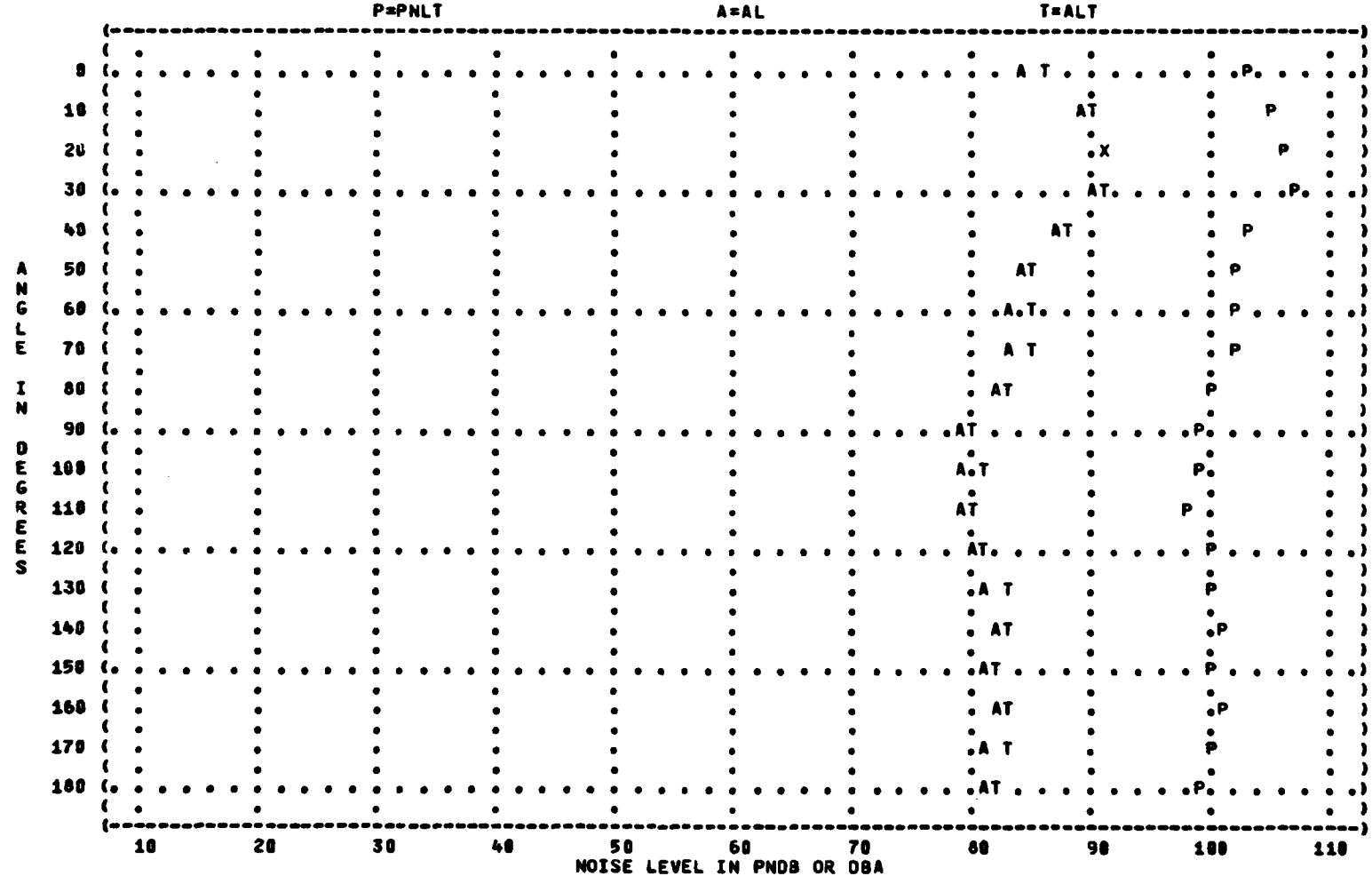
NOISE SOURCE/SUBJECT:
T-38 NOISE SUPPRESSOR
AF32A-18

OPERATION:
MAX POWER AFTERBURNER
SINGLE ENGINE
GROUND RUNUP (SUPPRESSED)

METEOROLOGY:
TEMP = 59 F
BAR PRESS =29.92 IN HG
REL HUMID = 70 %
DELTA N = 0.0 DB

IDENTIFICATION:
OMEGA 8.2
TEST 77-733-001
RUN 05
AIRCRAFT CODE 733
OPERATION CODE 00103
PROFILE VERSION A
28 NOV 79
PAGE J5

P=PNLT A=AL T=ALT



*U.S.Government Printing Office: 1980 — 657-084/888