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(NASA-CR-152329) FORWARD VELOCITY EFFECTS  
ON FAN NOISE AND THE SUPPRESSION  
CHARACTERISTICS OF ADVANCED INLETS AS  
MEASURED IN THE NASA AMES 40 BY 80 FOOT WIND  
TUNNEL: ACOUSTIC DATA REPORT (General

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(M. Falowski)



National Aeronautics and  
Space Administration

**FORWARD VELOCITY EFFECTS ON FAN NOISE  
AND THE  
SUPPRESSION CHARACTERISTICS OF ADVANCED  
INLETS AS MEASURED IN THE  
NASA AMES 40 x 80 FOOT WIND TUNNEL**

ACOUSTIC DATA REPORT

by

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16. Abstract Forward velocity effects on the forward-radiated fan noise and on the suppression characteristics of three advanced inlets relative to a baseline cylindrical inlet were measured in the NASA-Ames Research Center 40 x 80 foot wind tunnel. A modified JT15D turbofan engine in a quiet nacelle was the source of fan noise; the advanced inlets were a CTOL hybrid inlet, an STOL hybrid inlet, and a treated deflector inlet. Also measured were the static-to-flight effects on the baseline inlet noise and the effects on the fan noise of canting the baseline inlet 4° downward to simulate typical wing-mounted turbofan engines. The 1/3-octave-band noise data from these tests are contained in this report along with selected plots of 1/3-octave-band spectra and directivity and full-scale PNL directivities.					
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## FOREWORD

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## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 SUMMARY	1
2.0 INTRODUCTION	2
3.0 TEST DESCRIPTION	3
3.1 Test Facilities	3
3.1.1 NASA ARC Outdoor Test Stand	3
3.1.2 NASA ARC 40 by 80 Foot Wind Tunnel	3
3.2 Test Vehicle	3
3.2.1 JT15D Turbofan Engine	3
3.2.2 Nacelle, Nozzle, and Mount	8
3.3 Inlet Configurations	13
3.3.1 Baseline Inlet	13
3.3.2 CTOL Hybrid Inlet	13
3.3.3 STOL Hybrid Inlet	17
3.3.4 Deflector Inlet	21
3.3.5 Canted Baseline Inlet	28
3.4 Wind Tunnel Tests	28
3.5 Noise Measurements	28
3.6 Test Summary	33
3.7 Traverse Microphone Data Reduction	33
4.0 DATA ANALYSIS	38
4.1 Analysis Techniques	38
4.1.1 Wind Tunnel/Static Transformation	38
4.1.2 Wind Tunnel Background Noise	41
4.1.3 Large-Scale Turbofan Noise	41
APPENDIX A - ABBREVIATIONS AND SYMBOLS	44
APPENDIX B - MODEL AND FULL-SCALE 1/3-OCTAVE-BAND NOISE DATA	45
APPENDIX C - SELECTED 1/3-OCTAVE-BAND AND PERCEIVED NOISE PLOTS	242
REFERENCES	255

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## LIST OF ILLUSTRATIONS

<u>Figure</u>	<u>Page</u>
1. NASA ARC VTOL Test Stand.	4
2. NASA ARC 40 by 80 Wind Tunnel.	5
3. Production JT15D Turbofan Engine.	6
4. JT15D Fan Configuration.	9
5. JT15D in Quiet Nacelle Used for Advanced Inlet Tests.	10
6. JT15D/Quiet Nacelle and Mount Assembly.	11
7. Rear-View Photo of JT15D/Quiet Nacelle Mounted in NASA ARC 40 by 80 Wind Tunnel.	12
8. Sketch of Baseline Inlet.	15
9. Photo of JT15D/Baseline Inlet with Aeroacoustic Lip.	16
10. Photo of JT15D/Baseline Inlet with Flight Lip and Fairings.	16
11. Sketch of Conventional Takeoff/Landing (CTOL) Hybrid Inlet.	18
12. Photo of JT15D/CTOL Hybrid Inlet with Aeroacoustic Lip.	19
13. Photo of JT15D/CTOL Hybrid Inlet with Flight Lip and Fairings.	19
14. CTOL Hybrid Inlet Treatment Details.	20
15. Sketch of Short Takeoff/Landing (STOL) Hybrid Inlet.	22
16. Photo of JT15D/STOL Hybrid Inlet with Aeroacoustic Lip.	23
17. Photo of JT15D/STOL Hybrid Inlet with Flight Lip and Fairings.	23
18. STOL Hybrid Inlet Treatment Details.	24
19. Sketch of Deflector Inlet with Flight Lip and Nacelle.	25
20. Photos of JT15D/Deflector Inlet with Flight Lip and Fairings.	26
21. Deflector-Inlet Treatment Details.	27

LIST OF ILLUSTRATIONS (Continued)

<u>Figure</u>		<u>Page</u>
22.	Sketch of Canted Baseline Inlet.	29
23.	Photos of JT15D/Baseline Inlet and JT15D/Canted Baseline Inlet with Fairings.	30
24.	Test Setup for Second Wind Tunnel Test.	31
25.	Test Setup in NASA ARC 40 by 80 Wind Tunnel (2nd entry).	32
26.	Verification of Traverse Microphone Data Processing.	37
27.	Wind Tunnel Convection-Correction Nomenclature.	39
28.	Background Noise for 40 by 80 Wind Tunnel.	42
C-1.	One-Third-Octave-Band Noise Spectra for Baseline and STOL Inlets at 41 m/s (135 ft/s) Forward Velocity.	243
C-2.	Blade-Passing-Frequency, 1/3-Octave-Band Noise Directivity for Baseline and STOL Inlets at Forward Velocity.	244
C-3.	STOL Noise Directivity (QCSEE Size) at Forward Velocity.	245
C-4.	One-Third-Octave-Band Noise Spectra for Baseline and CTOL Inlets at 41 m/s (135 ft/s) Forward Velocity.	246
C-5.	Blade-Passing-Frequency, 1/3-Octave-Band Noise Directivity for Baseline and CTOL Inlets at Forward Velocity.	247
C-6.	CTOL Noise Directivity (CF6 Size) at Forward Velocity.	248
C-7.	One-Third-Octave-Band Noise Spectra for Baseline and Deflector Inlets at 41 m/s (135 ft/s) Forward Velocity.	249
C-8.	Blade-Passing-Frequency, 1/3-Octave-Band Noise Directivity for Baseline and Deflector Inlets at Forward Velocity.	250
C-9.	Deflector Inlet Noise Directivity (CF6 Size) at Forward Velocity.	251
C-10.	Blade-Passing-Frequency, 1/3-Octave-Band Noise Directivity for Baseline and Canted Baseline Inlets at Forward Velocity.	252
C-11.	One-Third-Octave-Band Noise Spectra for Baseline and Canted Baseline Inlets at 41 m/s (135 ft/s) Forward Velocity.	253
C-12.	Canted Baseline Inlet Noise Directivity (CF6 Size) at Forward Velocity.	254

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1.	Production JT15D Parameters.	7
2.	Inlet Design Parameters.	14
3.	Run Log for Second 40 by 80 Ft Wind Tunnel Test.	34
4.	JT15D Fan and Hybrid Inlet Test Parameters.	35
5.	Measurement Angles Required for Static Equivalent Angles at 10° Increments.	41



## 1.0 SUMMARY

Two hybrid inlets and a deflector inlet were tested along with a baseline inlet in the NASA-Ames Research Center 40-by-80 Foot Wind Tunnel (40 by 80) with a small turbofan engine in a quiet nacelle to determine the forward velocity effects on fan noise and the suppression characteristics of advanced inlets. The effects of canting the baseline inlet to simulate wing-mounted engine inlets were also determined for fan noise.

The noise data were reduced to 1/3-octave-band spectra and then scaled to full-size engines to determine suppression levels. These data are presented in this data report along with selected plots of actual inlet and full-scale inlet spectra and directivity patterns.

## 2.0 INTRODUCTION

Extensive research has been conducted to understand and suppress the forward-radiated noise from the fan of a turbofan engine. However, most of this research has been conducted under static test conditions with no simulation of forward speed or angle of attack. Because the fan noise is related to the inlet flow environment, the forward-radiated noise is expected to be affected by forward speed. Flight effects on fan noise have been observed by investigators who have compared turbofan flyover noise with static noise, but the details are obscured by the mixture of aircraft-noise and other engine-noise sources. Therefore, in order to properly understand the fan-noise suppression characteristics of advanced inlets, the investigation should include actual or simulated flight testing.

The NASA Ames Research Center (ARC) 40-by-80-Foot Wind Tunnel (40 by 80) offered a means of providing controlled, simulated-flight conditions for this type testing. ARC also had a small, high-bypass turbofan available to provide the fan noise. The hybrid inlet and deflector inlet concepts were the advanced inlets chosen to be evaluated for both aerodynamic and acoustic performance. To achieve fan-noise suppression, the hybrid inlet combines the usual acoustic treatment in the diffuser wall with flow acceleration at the throat at moderate Mach numbers ( $0.6 < M_{TH} < 0.8$ ) using a smaller throat area and higher diffuser wall angles than conventional inlets. The deflector inlet utilizes the conventional acoustic treatment in the diffuser walls to achieve suppression and redirects or deflects the remaining sound upward with an asymmetric length that has the lower portion of the lip extended forward of the upper portion. The suppression characteristics of the advanced inlets were to be determined by comparing the acoustic signatures with those from a cylindrical baseline inlet that was designed as a standard reference for the unsuppressed fan noise.

The objectives of the program were to determine the low-speed flight effects as simulated by the 40 by 80 on the forward-radiated fan noise and on the suppression characteristics of two hybrid inlets and a deflector inlet relative to a baseline inlet. In addition, the change in forward-radiated fan noise due to canting the baseline inlet to simulate a typical wing-mounted turbofan inlet was evaluated. A corollary objective was to determine the effect on the fan-noise signature of modifying the engine by increasing the number of core inlet guide vanes to achieve a vane/blade ratio to assure that the interaction mode would not propagate. To investigate the engine/inlet operating characteristics and to supplement the 40 by 80 noise data, outdoor static tests were conducted at ARC.

This report contains a summary of the tests and data-reduction techniques in Section 3.0 along with a description of the test facilities, turbofan engine, inlets, instrumentation, and test setup. Section 4.0 contains a description of the data-analysis techniques and the 1/3-octave-band data reduction format used in Appendix B. Selected model scale 1/3-octave-band spectra and directivity plots and full-scale perceived noise directivity plots are presented in Appendix C.

## 3.0 TEST DESCRIPTION

### 3.1 TEST FACILITIES

#### 3.1.1 NASA ARC Outdoor Test Stand

Outdoor static tests were conducted on the VTOL test stand located in the northeast corner of ARC. Due to the remote location of the static test stand, the ambient noise levels are low. There are no community noise limits on the operation of the turbofan engine. A plan-view sketch of the VTOL test stand is shown in Figure 1. The operations trailer housed the engine operator's console as well as the acquisition systems for the noise data.

#### 3.1.2 NASA ARC 40 by 80 Foot Wind Tunnel

The simulated-flight tests were conducted in the Large Scale Aerodynamics Branch 40-by-80-Foot Wind Tunnel (40 by 80) at ARC. A plan-view sketch of the 40 by 80 is shown in Figure 2. This facility has the capability, with an engine installed in the test section, to simulate flight speeds up to 91 m/s (300 ft/s). However, due to the fact the wind tunnel is a closed-circuit facility, operation of an engine with the wind off circulates airflow around the circuit creating a minimum-forward-velocity range of 4 m/s (13.5 ft/s) to 8 m/s (26.3 ft/s), depending on the fan airflow. The wind-off operation provided quasi-static conditions of a very low-speed flow across the test section.

The use of the 40 by 80 for previous acoustic testing was significantly enhanced by lining the floor and part of the walls of the test section with a 7.62 cm (3 inch) layer of polyurethane foam. The foam mat virtually removed reverberant reflections from the noise data at all frequencies above 500 Hz. To ensure consistency in the noise measurements, the same foam was placed on the ground between the microphone and the engine during the outdoor static tests.

### 3.2 TEST VEHICLE

#### 3.2.1 JT15D Turbofan Engine

The test vehicle supplied by ARC was a JT15D turbofan engine; a cross section is shown in Figure 3. The physical and aerodynamic parameters for the production JT15D fan are listed in Table 1. The JT15D is a moderate-bypass-ratio engine with a single-stage, supersonic-tip-speed fan. With regard to forward-radiated fan noise, the JT15D has many of the design features (Reference 2) that have been incorporated into the approximately

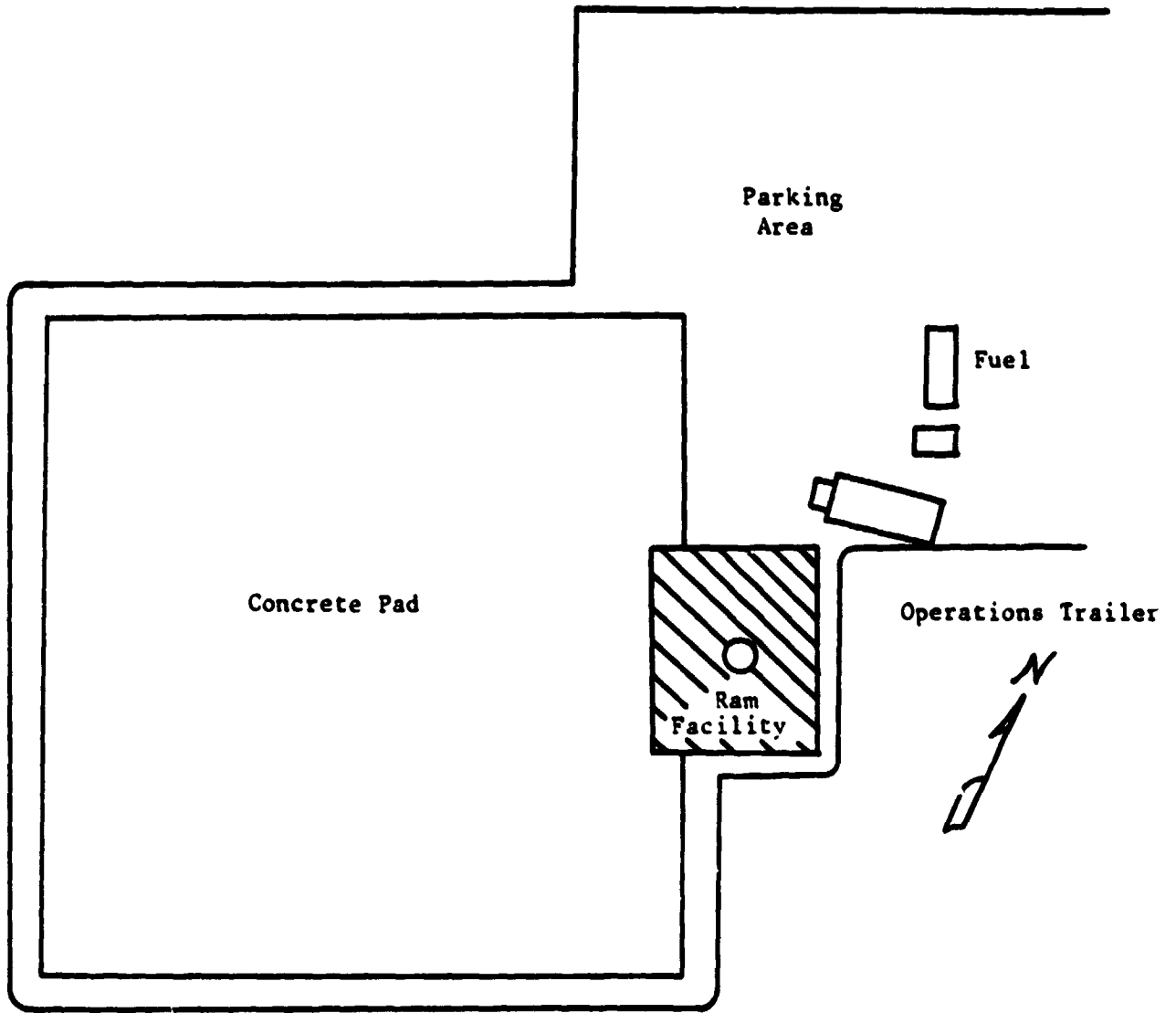


Figure 1. NASA ARC VTOL Test Stand.

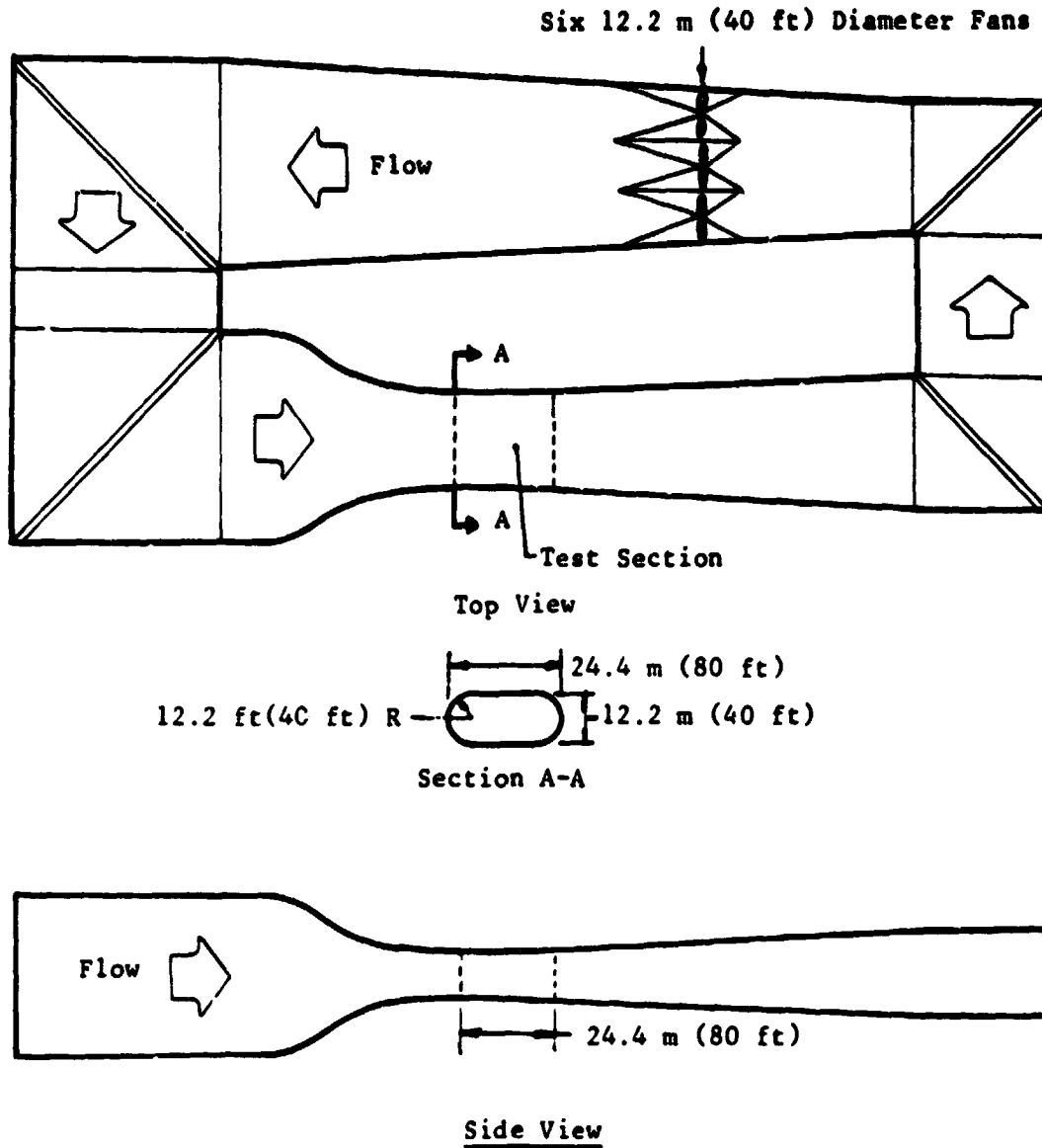


Figure 2. NASA ARC 40 by 80 Wind Tunnel.

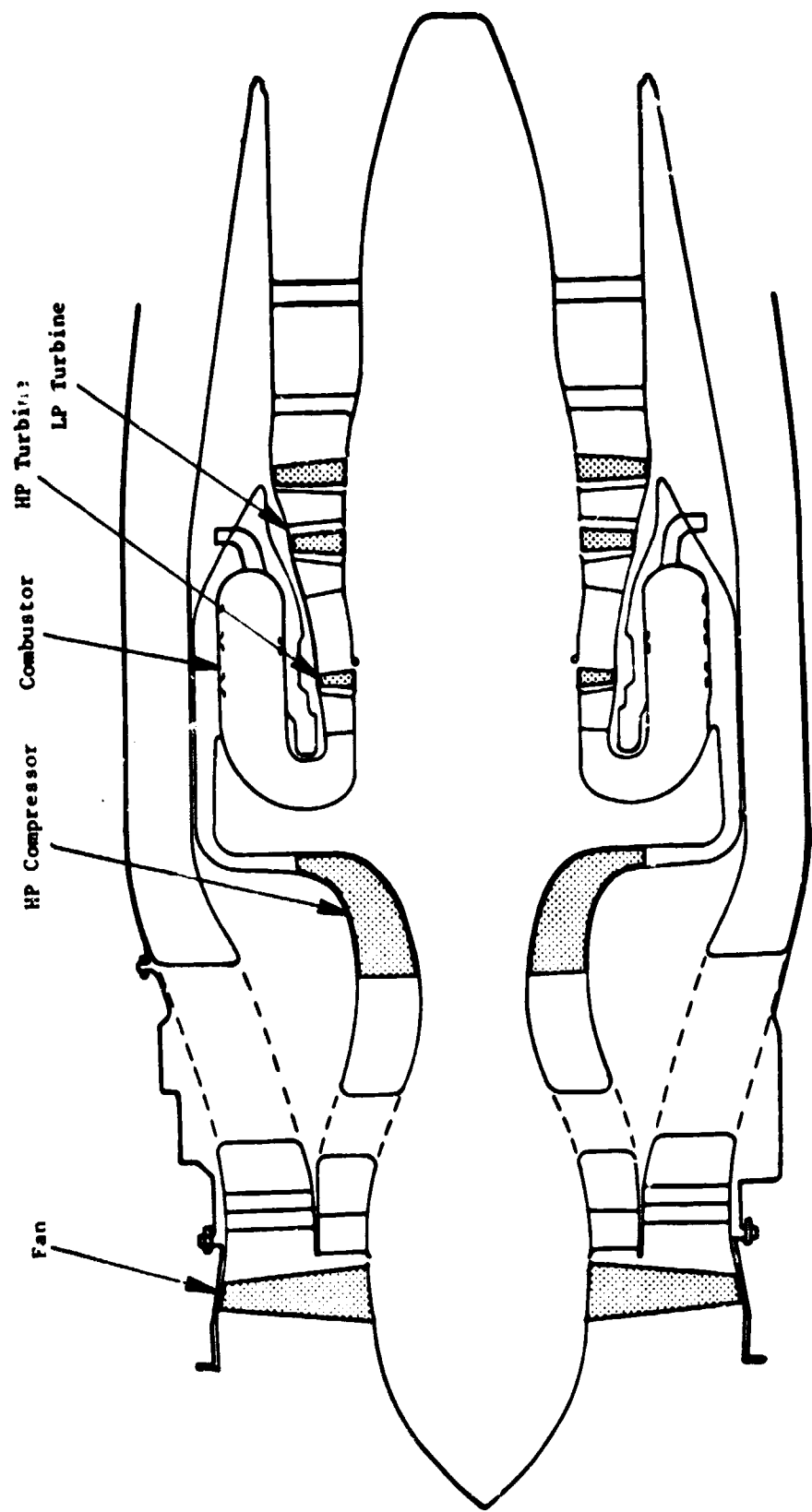


Figure 3. Production JT15D Turbofan Engine.

Table 1. Production JT15D Parameters.

Fan Pressure Ratio	1.5
Bypass Ratio	3.2
Hub/Tip Ratio	0.405
Rotor Diameter, cm (inches)	53 (21)
Maximum Fan RPM	16,000
Rotor Blades	28
Bypass Stator Vanes	66
Core Stator Vanes	33
Bypass Vane/Blade Ratio	2.36
Core Vane/Blade Ratio	1.18
Bypass Rotor-Stator Spacing	1.83
Core Rotor-Stator Spacing	0.50

four-times-larger modern turbofan engines in commercial service. Features such as the absence of inlet guide vanes, large spacing between the fan blades and outlet guide vanes, and at least twice as many outlet guide vanes as fan blades are common design features between the JT15D and the CF6, JT9D, and RB211 turbofan engines. However, during fan noise research testing at ARC, Hodder (Reference 3) determined that considerable noise was being generated by the fan-tip interaction with the inlet temperature sensor wake and by the fan hub wake interaction with the core inlet guide vanes (IGV's). NASA ARC engineers have modified the inlet temperature sensor to eliminate the wake as a noise source. While verifying that the core IGV's are a noise source, ARC engineers have determined that the JT15D will operate at reduced fan speeds with the core IGV's removed. As a result of these tests, NASA ARC had the engine manufacturer redesign the core inlet guide vanes to increase the number to more than twice the number of fan blades and to increase the axial spacing between the vanes and blades without changing the engine aerodynamic performance over the full operating range.

During the outdoor static and wind tunnel testing of the advanced inlets, the same JT15D engine was used throughout but with three variations of the core IGV's. The three variations of the JT15D fan are shown in Figure 4 and are identified as

Standard JT15D = Production JT15D - Temperature Sensor

Modified JT15D = Standard JT15D - Core IGV's

Redesigned JT15D = Standard JT15D + Redesigned Core IGV's

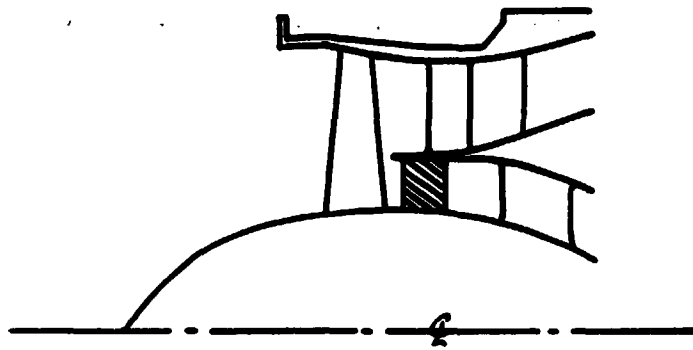
The standard and modified JT15D were used during the first outdoor static and wind tunnel tests. The redesigned JT15D was used exclusively during the second series of wind tunnel and outdoor static tests.

### 3.2.2 Nacelle, Nozzle, and Mount

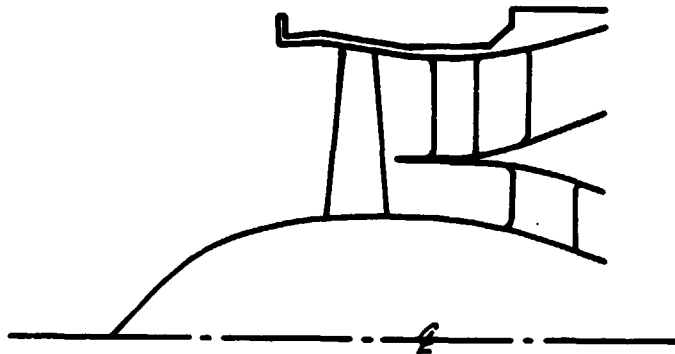
The JT15D engine used during the advanced inlet testing was housed in a special quiet nacelle that was designed by ARC engineers. The nacelle was completely lined with sound-absorbant material to minimize the radiation of engine casing noise to the forward quadrant. A new coannular nozzle system for the JT15D was also designed by ARC engineers. The new, fan nozzle included a larger exit area, to provide the additional flow required by the hybrid inlets, and had both walls lined with acoustic treatment to suppress the aft-radiated fan noise. The JT15D with nacelle and nozzle system is shown in cross section in Figure 5, and the complete assembly is shown on the mount in Figure 6.

The mount is a leaned strut that supports the engine assembly 4.6 m (15 ft) over the wind tunnel floor as shown in Figure 7. The strut carries all the plumbing and instrumentation lines to the engine assembly and is fastened to a turntable. The axis of rotation is through the fan face; this allows angle of attack to be accomplished by rotating the engine assembly about the vertical axis without changing the distances from the fan face to

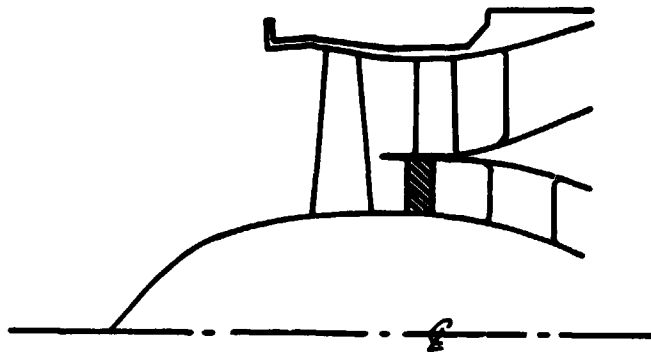




- Standard - 33 Core IGV's



- Modified - No Core IGV's



- Redesigned - 71 Core IGV's
- 28 Fan Blades
- 66 Bypass Vanes

Figure 4. JT15D Fan Configurations.

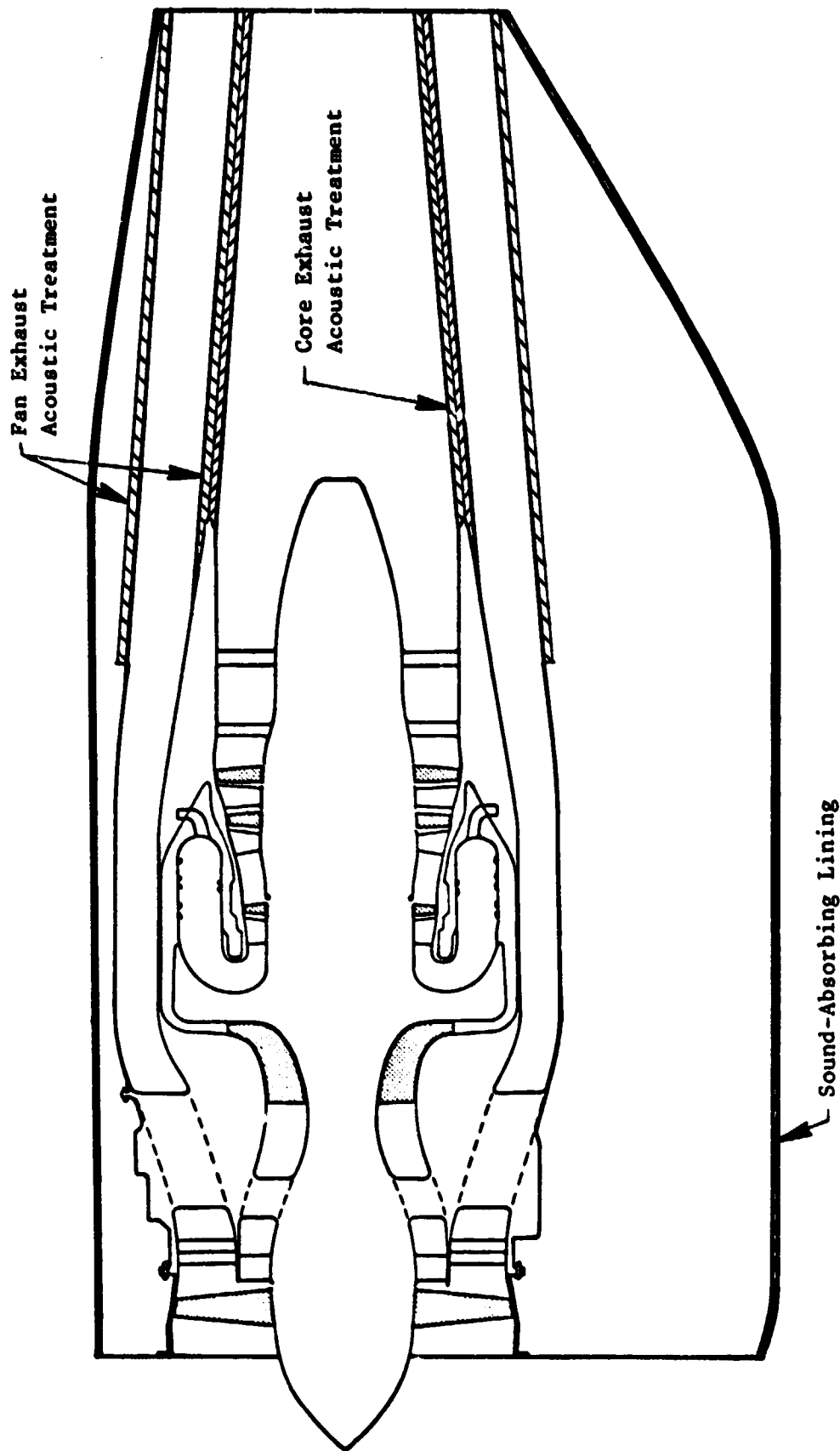


Figure 5. JT15D in Quiet Nacelle Used for Advanced Inlet Tests.

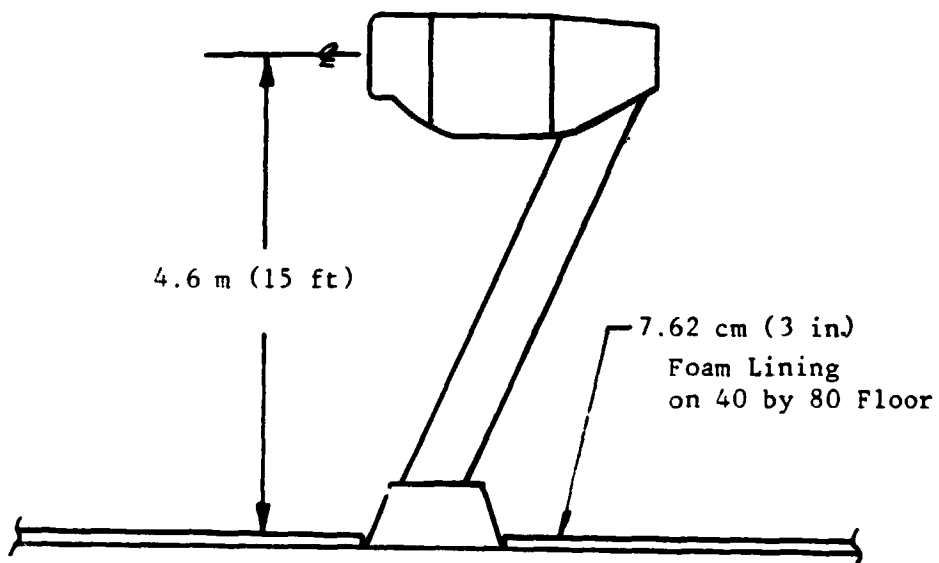
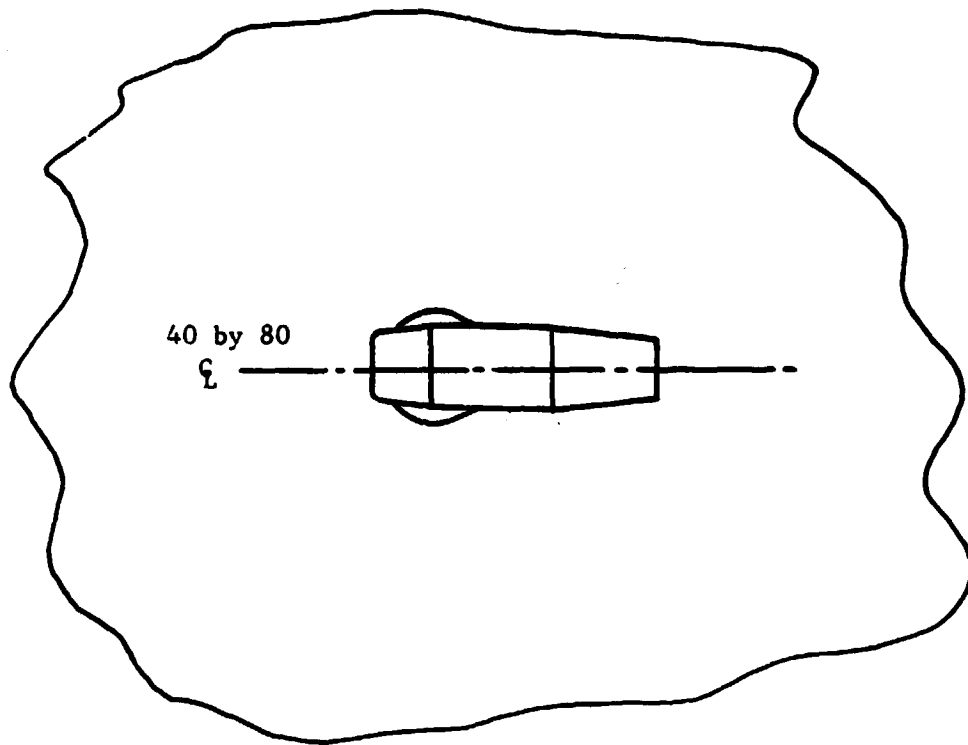


Figure 6. JT15D/Quiet Nacelle and Mount Assembly.

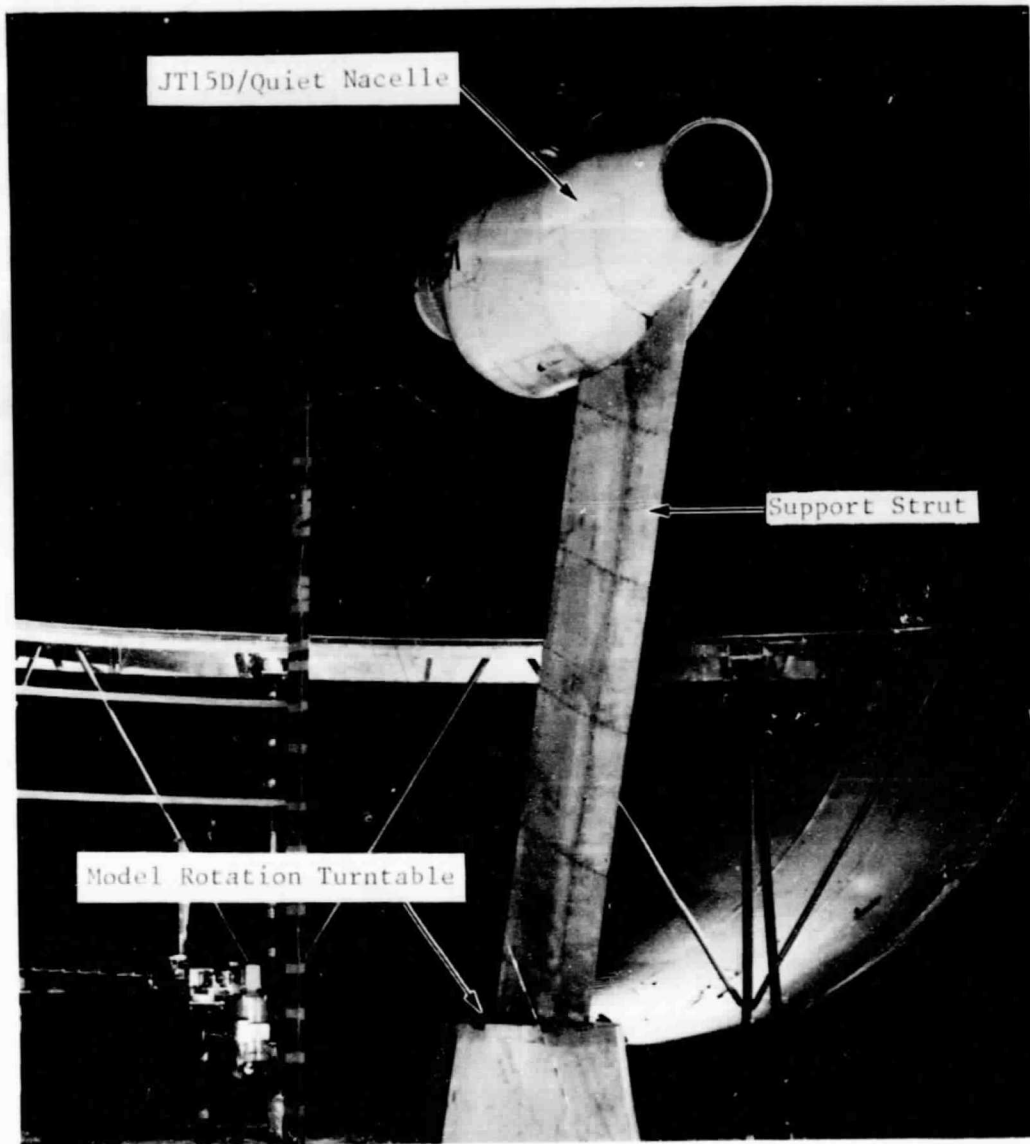


Figure 7. Rear-View Photograph of JT15D/quiet Nacelle Mounted in NASA ARC 40 by 80 Wind Tunnel.

the noise-measurement field. The engine assembly and mount were installed on a nonrotating base at the VTOL test stand to duplicate the wind tunnel setup during outdoor static testing.

### 3.3 INLET CONFIGURATIONS

NASA ARC fabricated all the tested inlets based upon aerodynamic and mechanical designs provided by the General Electric Co. The advanced inlets were designed in both hard-wall and treated versions, and the baseline inlet was designed to be only a hard-wall reference. The conventional takeoff and landing (CTOL) hybrid inlet, the deflector inlet, and the baseline inlet were all designed for high-fan-speed operation; the short takeoff and landing (STOL) hybrid inlet was designed for low-fan-speed operation. The aerodynamic design points for all the inlets are listed in Table 2. Details of the inlet designs, including coordinates of the flow lines, can be found in Reference 3. A flight lip was designed to match the aerodynamic requirement at the respective design point for each of the inlets. Aeroacoustic lips were designed for each of the hybrid inlets and the baseline inlet. These lips provide the same aerodynamic profiles entering the inlet throats at static conditions that exist with the flight lips at the design-point forward velocity. The throat Mach number listed for each inlet is the one-dimensional calculation based on airflow and physical area. The acoustic design goals for the program were to achieve maximum perceived noise level (PNL) suppression when scaled to larger turbofan engines typical of those on modern commercial aircraft. From a practical standpoint, there was also a goal to design as much of the hardware as possible to be common between the inlets.

#### 3.3.1 Baseline Inlet

The baseline inlet is cylindrical and is the same length as the CTOL hybrid inlet. The baseline inlet attaches to the JT15D fan casing with four drag links which compress a rubber seal completely around the circumference to ensure no leaks in the flow path at the interface. There is no provision for total pressure rakes at the fan face in this inlet.

An aeroacoustic bellmouth lip and a flight lip were provided as shown in the cross section sketches in Figure 8. The aeroacoustic lip was used for outdoor static testing and is shown with the baseline inlet attached to the JT15D in the photo in Figure 9. The flight lip was designed to permit angle-of-attack operation up to 20° with minimal flow distortion. The flight lip was mated to the JT15D nacelle with a fairing for the wind tunnel testing. The JT15D engine assembly with the baseline inlet and flight lip attached is shown in the photo in Figure 10.

#### 3.3.2 CTOL Hybrid Inlet

The CTOL hybrid inlet was designed around current, turbofan-powered, commercial-transport, aircraft requirements. The overall inlet is slightly

Table 2. Inlet Design Parameters.

Parameter	Baseline	CTOL	STOL	Deflector
$V_O$ , m/s (ft/s)	82 (270)	82 (270)	41 (135)	82 (270)
$\alpha$ , Degrees	15	20	20	30
$\dot{w}$ , kg/s (lb/s)	34 (75)	28.5 (63)	34 (75)	34 (75)
$M_{th}$	0.4	0.72	0.77	0.6
$V_T$ , m/s (ft/s)	405 (1330)	405 (1330)	344 (1129)	405 (1330)
$N_c$ , rpm	14,500	14,520	12,320	14,520
L/D	1.01	1.01	1.45	0.5/1.01
L/D Treated	-	0.79	0.79	0.79

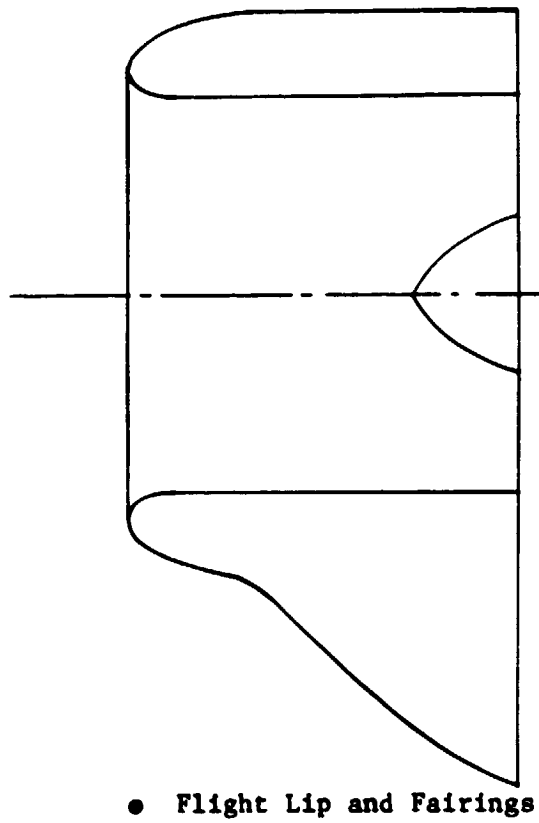
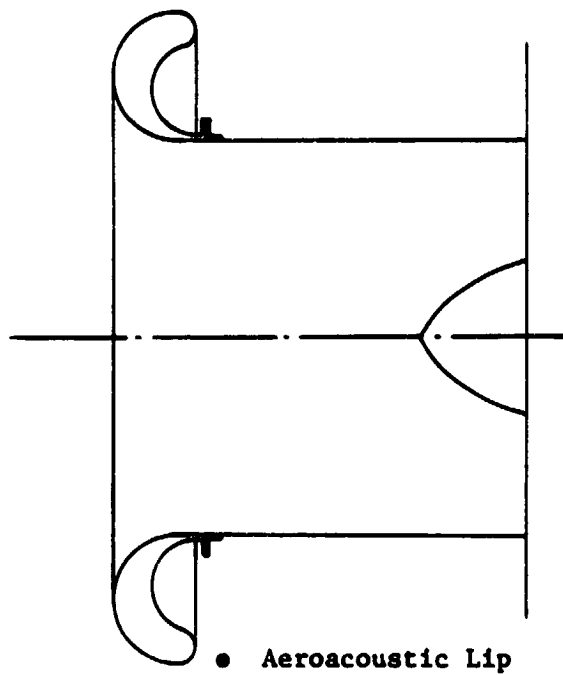


Figure 8. Sketch of Baseline Inlet.

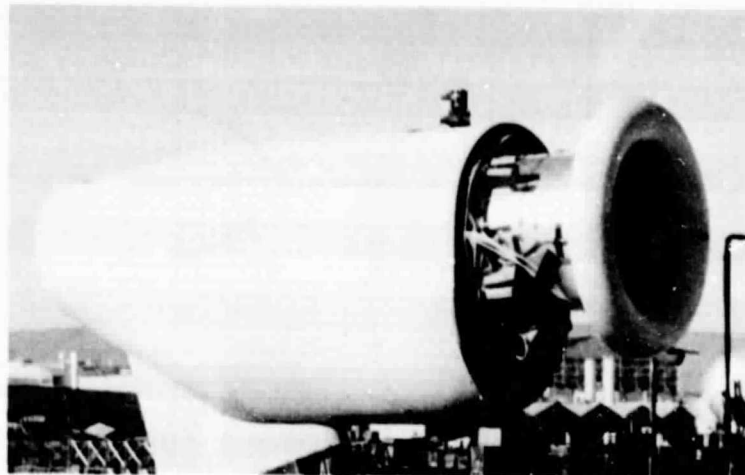


Figure 9. Photograph of JT15D/Baseline inlet with Aeroacoustic Lip.

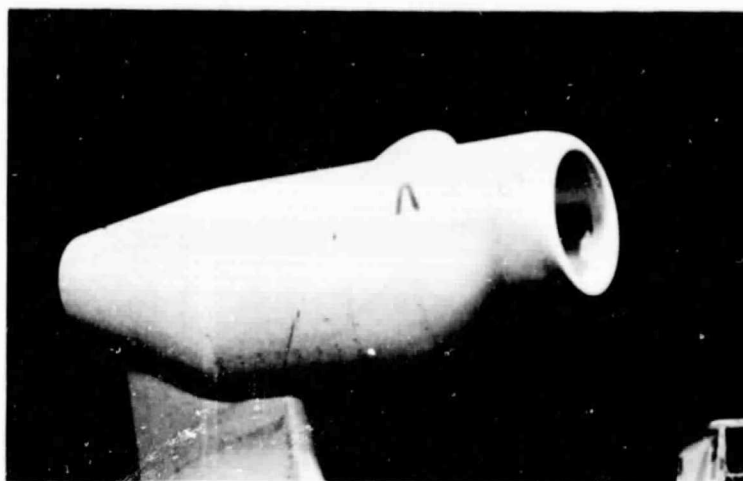


Figure 10. Photograph of JT15D/Baseline Inlet with Flight Lip and Fairings.



longer than desired due to the requirement to keep the diffuser flow attached up to 20° inlet angle of attack with the higher than conventional diffuser wall angles. The diffuser is divided into two sections; the aft diffuser is common with the STOL hybrid inlet. The aft diffuser mates with the JT15D engine and attaches with the same drag links as the baseline inlet. Both diffuser sections were built in treated and hard-wall versions; the hard-wall aft diffuser had provisions for total pressure rakes.

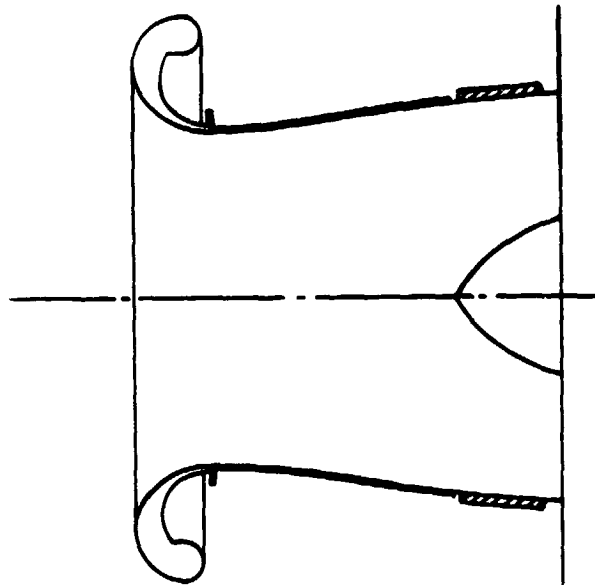
An aeroacoustic lip or a flight lip attaches to the forward diffuser to complete the throat of the inlet as shown in Figure 11. The aeroacoustic lip was used for outdoor static testing and is shown, together with the inlet, attached to the engine assembly in the photo in Figure 12. The flight lip was designed to permit angle-of-attack operation up to 20° and mates to the JT15D with a fairing for wind tunnel testing. The JT15D engine assembly with the CTOL hybrid inlet and flight lip attached is shown in the photo in Figure 13.

To satisfy the suppression requirements, particularly at low throat Mach numbers where acceleration suppression is minimal, the acoustic treatment was designed to attenuate noise over a wide range of frequencies. To accomplish this broadband suppression, a bulk absorber material with two different cavity depths was selected. The forward-diffuser treatment depth was selected to provide maximum suppression of the blade-passing frequency (BPF) noise, which would be in the 6300 Hz 1/3-octave band for most of the fan speeds to be tested. The resulting design, shown in Figure 14, was to compress 0.228 cm (0.090 in.) thickness of bulk absorber into pockets that were 0.127 cm (0.050 in.) deep and cover them with a 28% porosity facesheet.

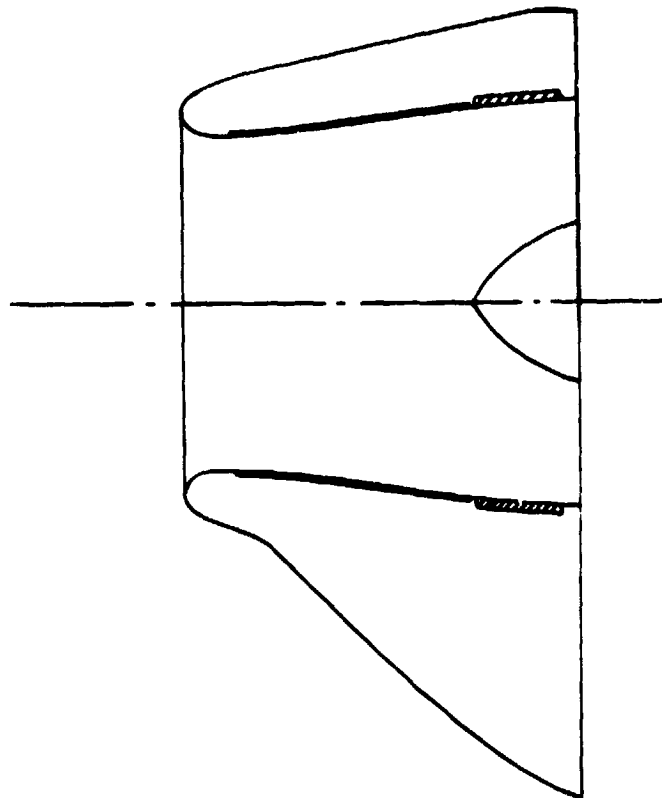
The aft-diffuser treatment depth was chosen to provide maximum suppression of the supersonic rotor "buzz saw" noise. Based upon preliminary JT15D noise data, this type of noise was most severe in the 2000 Hz 1/3-octave band at the design fan speed for the CTOL hybrid inlet. A bulk absorber thickness of 1.6 cm (0.63 in.) covered with the same 28% porosity facesheet was the treatment design chosen for the aft diffuser as shown in Figure 14. The two treatment sections together provided a total treatment length to fan diameter ratio,  $(L/D)_{TR}$ , of 0.79 for the CTOL hybrid inlet.

### 3.3.3 STOL Hybrid Inlet

The STOL hybrid inlet was designed to meet the stringent noise requirements proposed for powered-lift STOL aircraft. The requirement to operate the JT15D at the low fan-tip speeds typical of STOL engines resulted in a low inlet-flow rate. The low flow rate at the design point resulted in a small throat area to achieve the design throat Mach number which, in turn, required a long inlet to maintain diffuser wall angles consistent with the CTOL hybrid inlet. As previously mentioned, the aft diffuser is common with the CTOL hybrid inlet. The forward diffuser was divided into two pieces so that the treated length, which is only about one-half the total length, could be replaced with a hard-wall section.



● Aeroacoustic Lip



● Flight Lip and Fairings

Figure 11. Sketch of Conventional Takeoff/Landing (CTOL) Hybrid Inlet.

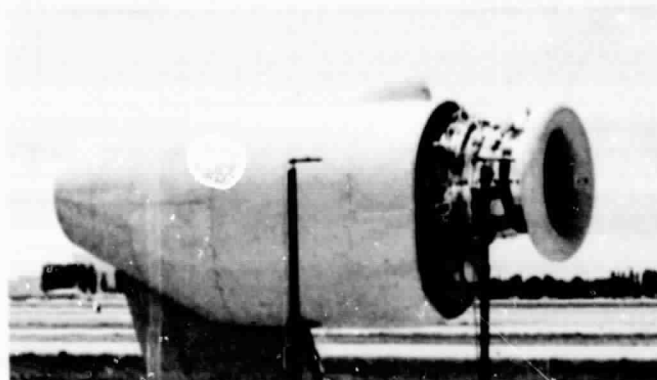


Figure 12. Photograph of JT15D/CTOL Hybrid Inlet with Aeroacoustic Lip.



Figure 13. Photograph of JT15D/CTOL Hybrid Inlet with Flight Lip and Fairings.

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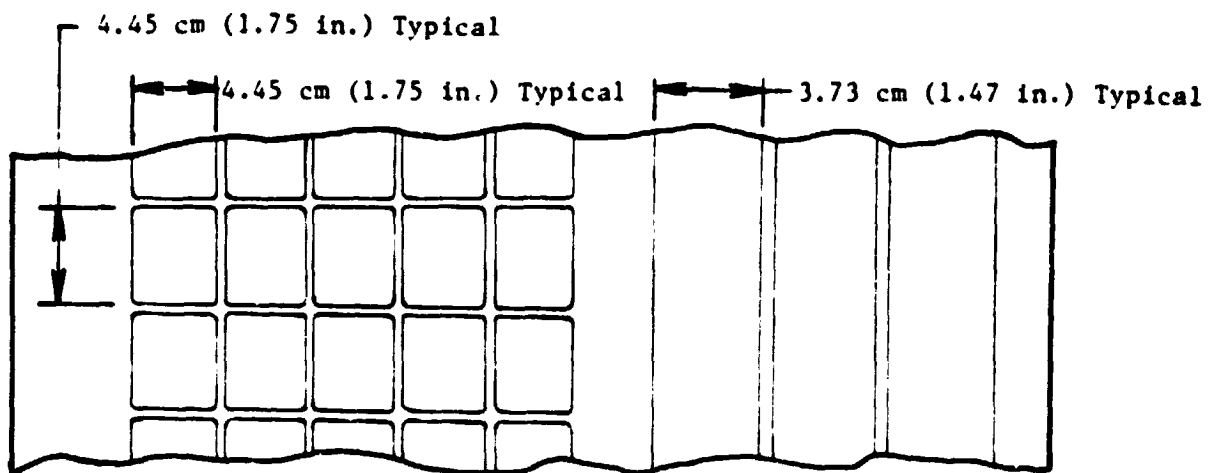
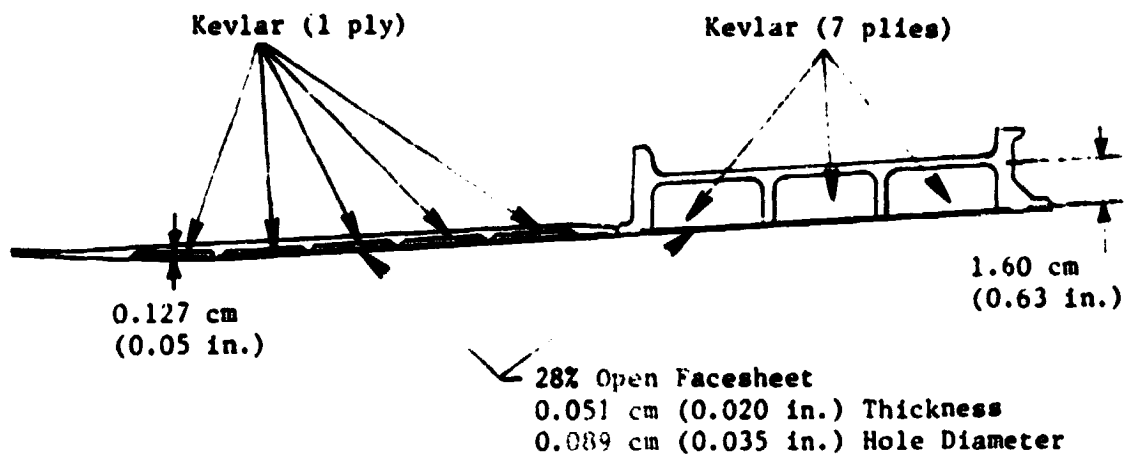


Figure 14. CTOL Hybrid Inlet Treatment Details.

An aeroacoustic lip and a flight lip were built. These attach to the forward diffuser as shown in Figure 15. The aeroacoustic lip was used for outdoor static testing and is shown, together with the inlet, attached to the engine assembly in the photo in Figure 16. The flight lip was designed to permit angle-of-attack operation up to  $30^\circ$  and mates to the JT15D with the same fairing as the CTOL hybrid inlet. The STOL hybrid inlet configuration attached to the JT15D engine assembly in preparation for wind tunnel testing is shown in the photo in Figure 17.

The acoustic treatment for the STOL hybrid inlet was designed using the same criterion of suppression over a wide frequency range that was applied to the CTOL hybrid inlet. The aft-diffuser treatment design that was chosen based on the high-tip-speed noise signature should also provide broadband suppression centered at 2000 Hz at the lower tip speeds associated with STOL engines. The forward-diffuser treatment length was chosen to be the same as the CTOL hybrid inlet for two reasons. The primary reason was to preserve commonality for treatment effectiveness comparisons, and the other reason was that a treatment length in excess of 0.79 fan diameters is impractical for aircraft applications.

The forward-diffuser treatment depth was chosen to provide maximum suppression of the noise at BPF. For most of the fan speeds to be tested with the STOL hybrid inlet, the BPF is in the 6300 Hz 1/3-octave band. Therefore, the forward-diffuser acoustic design turned out to be the same for the STOL hybrid inlet as for the CTOL hybrid inlet. A sketch of the STOL hybrid inlet treatment design is shown in Figure 18.

#### 3.3.4 Deflector Inlet

The deflector inlet was designed around the requirements for current, turbofan-powered, commercial aircraft. Other considerations were to design the inlet as short as possible while using the hybrid inlet aft diffuser. To ensure that the inlet aerodynamic performance would be acceptable, particularly at angle of attack, the forward diffuser was cylindrical, and the flight lip was sized for low forward speeds. Cross-sectional sketches of the deflector inlet with a special fairing to attach it to the JT15D nacelle are shown in Figure 19. The deflector inlet and JT15D engine assembly are shown in two views in the photos in Figure 20. There was no aeroacoustic lip built for the deflector inlet.

The deflector inlet treatment design was based upon the CTOL hybrid inlet; in fact, the aft diffuser was the same hardware. The treatment in the forward diffuser is the same pocket-type design but covers only  $180^\circ$  of the wall because the diffuser is so short. The treatment design for the deflector inlet is shown in Figure 21 with the diffuser projected as a plane for clarity. A hard-wall version of the diffuser was not built, but untreated testing was accomplished by using the hard-wall aft diffuser and applying aluminum foil tape in streamwise overlapping strips to the treated portion of the diffuser.

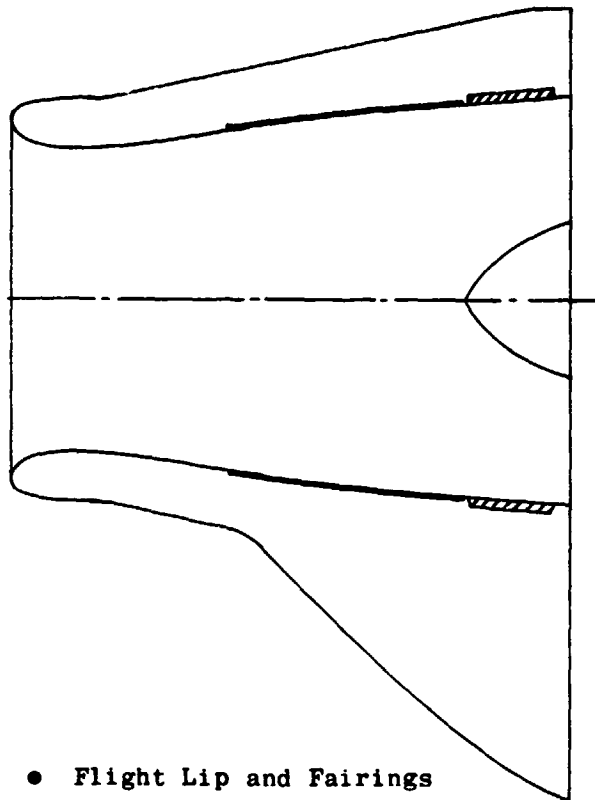
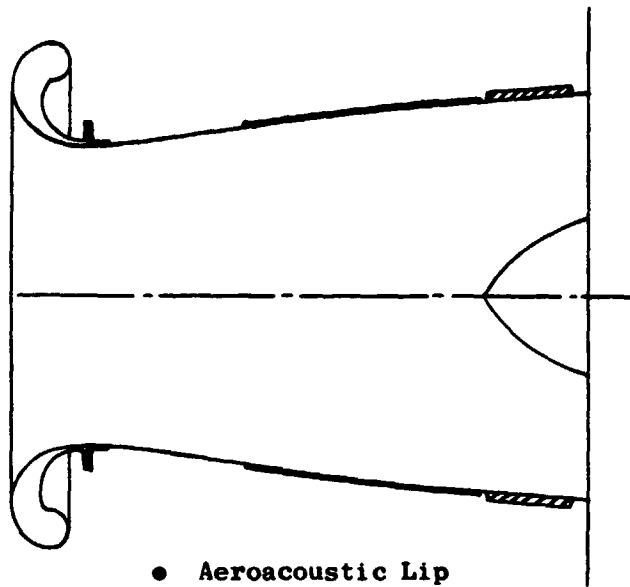


Figure 15. Sketch of Short Takeoff/Landing (STOL) Hybrid Inlet.

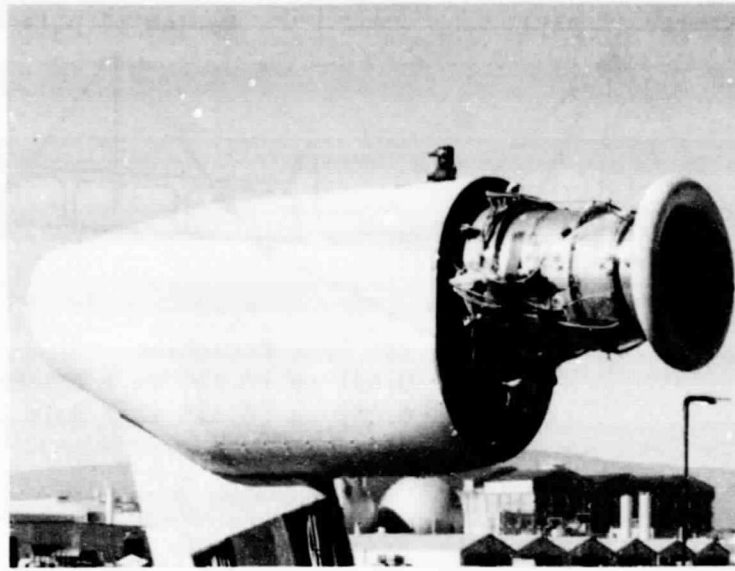


Figure 16. Photograph of JT15D/STOL Hybrid Inlet with Aeroacoustic Lip.



Figure 17. Photograph of JT15D/STOL Hybrid Inlet with Flight Lip and Fairings.

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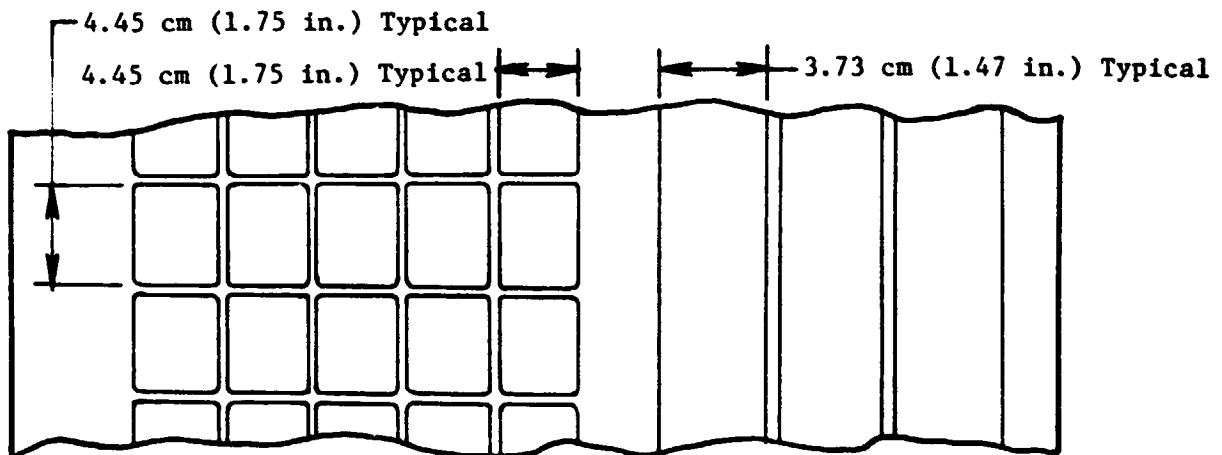
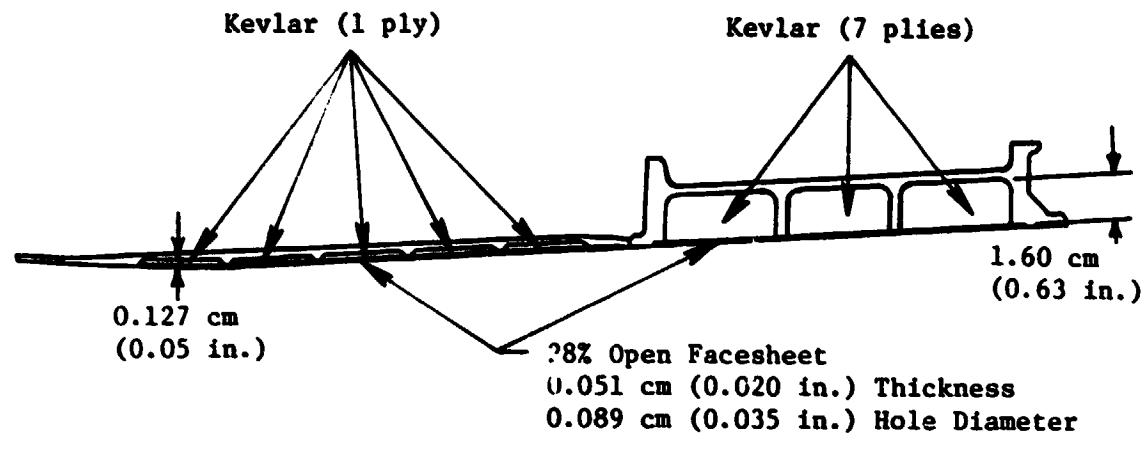
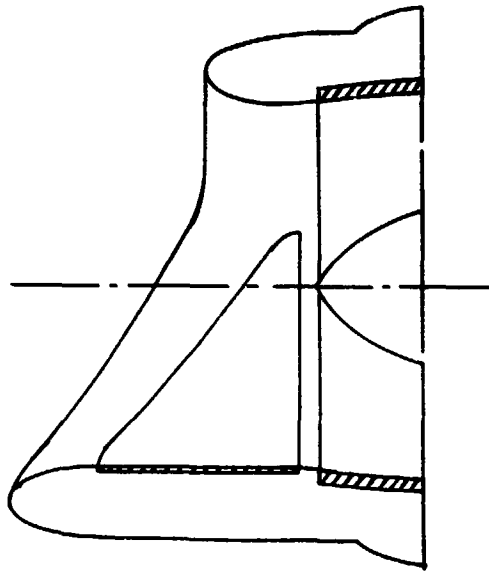
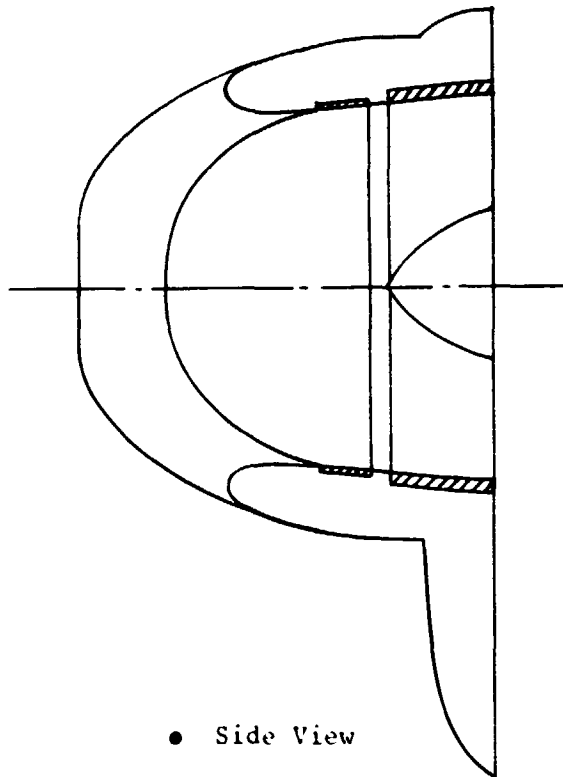


Figure 18. STOL Hybrid Inlet Treatment Details.



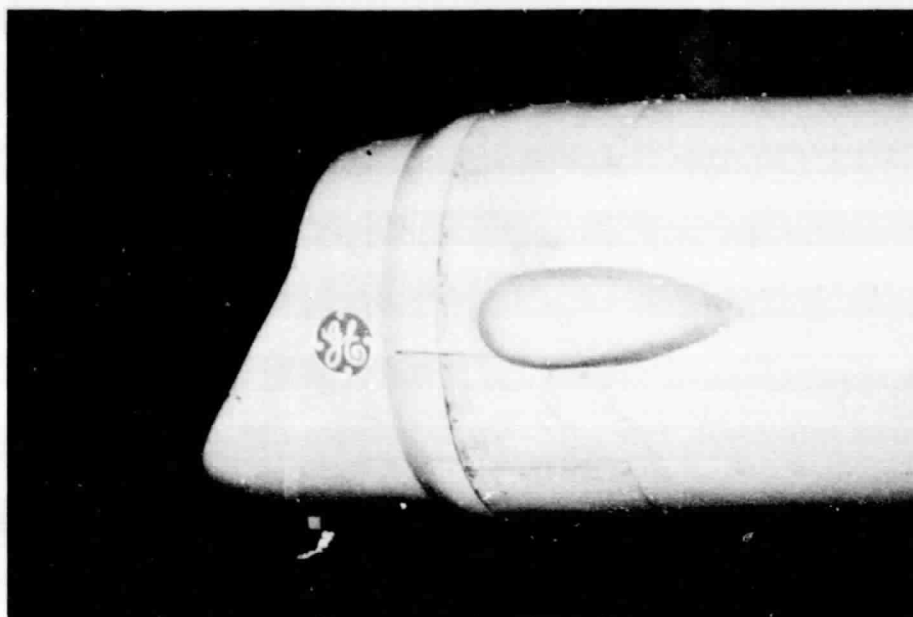


• Top View



• Side View

Figure 19. Sketch of Deflector Inlet with Flight Lip and Fairings.



Top View



Front-Quarter View

Figure 20. Photographs of JT15D/Deflector Inlet with Flight Lip and Fairings.

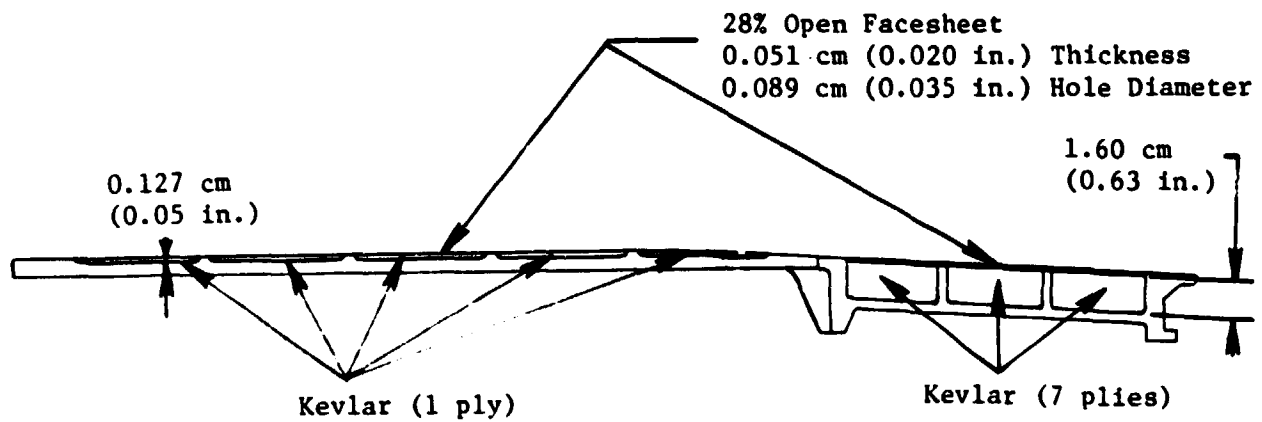
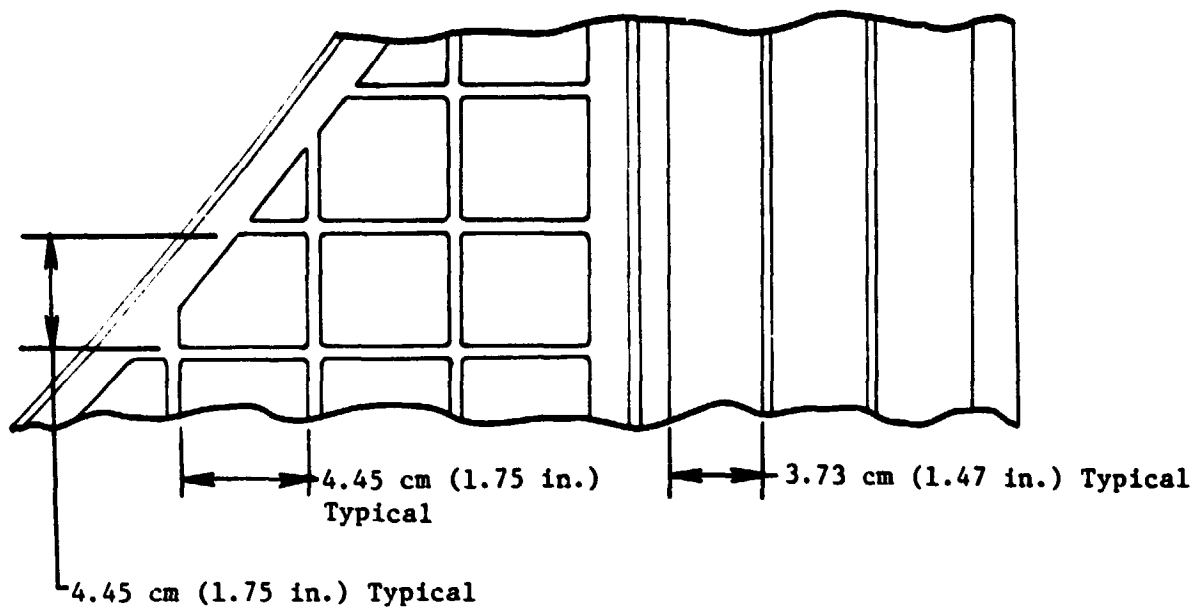


Figure 21. Deflector Inlet Treatment Details.

### 3.3.5 Cantered Baseline Inlet

An actual aircraft inlet design feature that is rarely simulated during inlet noise testing is the downward cant of the inlet centerline relative to the engine centerline. Canted inlets are prevalent on the wing-mounted engines of modern commercial transports. To obtain an assessment of the potential effect of a canted inlet on forward-radiated fan noise, a wedge was built to provide a 4° cant to the baseline inlet. The wedge was inserted between the cylindrical baseline inlet and the JT15D engine as shown in Figure 22. The gap between the external fairing and the nacelle, caused by canting the inlet, was covered with sheet metal for the wind tunnel testing. The canted baseline inlet configuration is shown compared with the straight baseline inlet in the photos in Figure 23. The canted baseline inlet was also tested with the aeroacoustic bellmouth lip during the outdoor static tests.

### 3.4 WIND TUNNEL TESTS

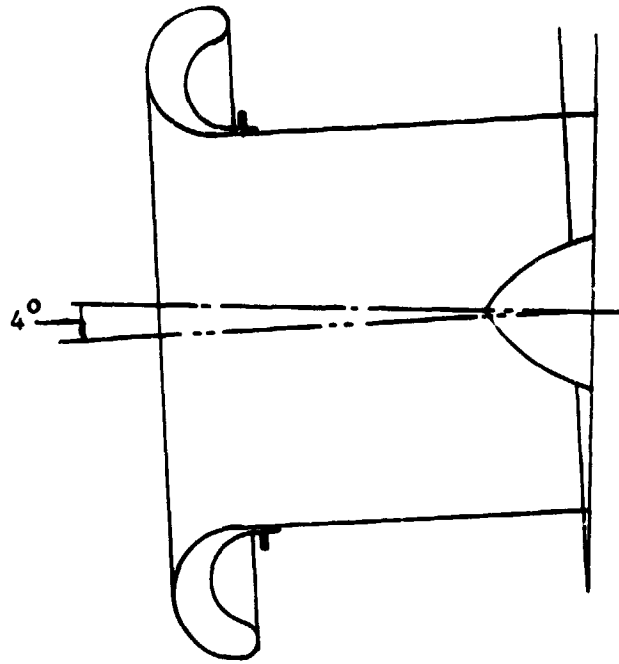
The test vehicle was mounted during the wind tunnel tests by bolting the support strut to a turntable located in the center of the 40 by 80 test section. The engine centerline was 4.6 m (15 ft) above the wind tunnel floor with the turntable capable of yawing the test vehicle up to 40° for angle-of-attack operation. The floor and part of the walls were covered with the foam to minimize reflection interference in the noise data.

In order to obtain a detailed definition of the inlet noise directivity at all angles of attack, the second wind tunnel test used traversing microphones that covered -59° to 82° on the arc and 30° to 90° on the sideline as shown in Figure 24. Two near-field microphones that were 0.6 m (2 ft) from the engine centerline and 0.3 m (1 ft) forward of the inlet lip were used for some configurations. The photo in Figure 25 shows the second wind tunnel test setup.

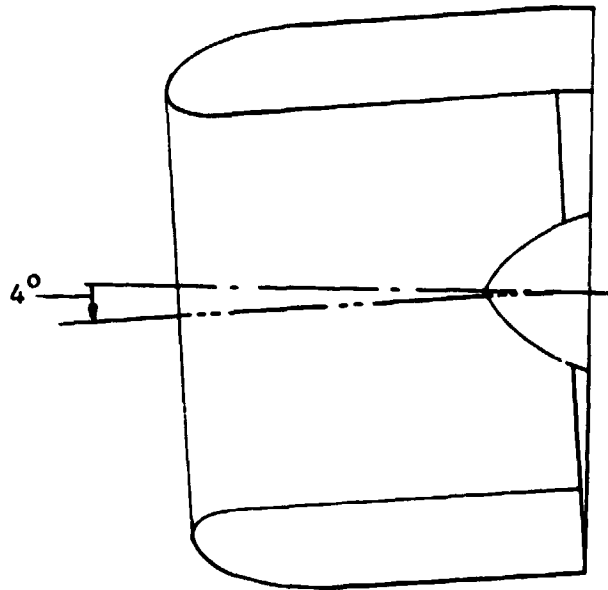
### 3.5 NOISE MEASUREMENTS

All external noise measurements were made with B&K microphones. During all tests the microphones used were the 0.64 cm (0.25 in.) B&K 4135 with B&K UA0385 nose cones attached. B&K provides correction curves for noise arriving at the microphone at incidence angles from 0° to 180° and for the presence of nose cones. These curves were used to correct all the 1/3-octave-band data so that absolute sound pressure levels could be determined.

The circular-traversing microphone used during the second wind tunnel tests was attached to a movable vane that kept the microphone pointed upstream during forward speed testing in the wind tunnel. However, during quasi-static wind tunnel testing, the vane was locked so that the microphones pointed away from the engine at all angles.

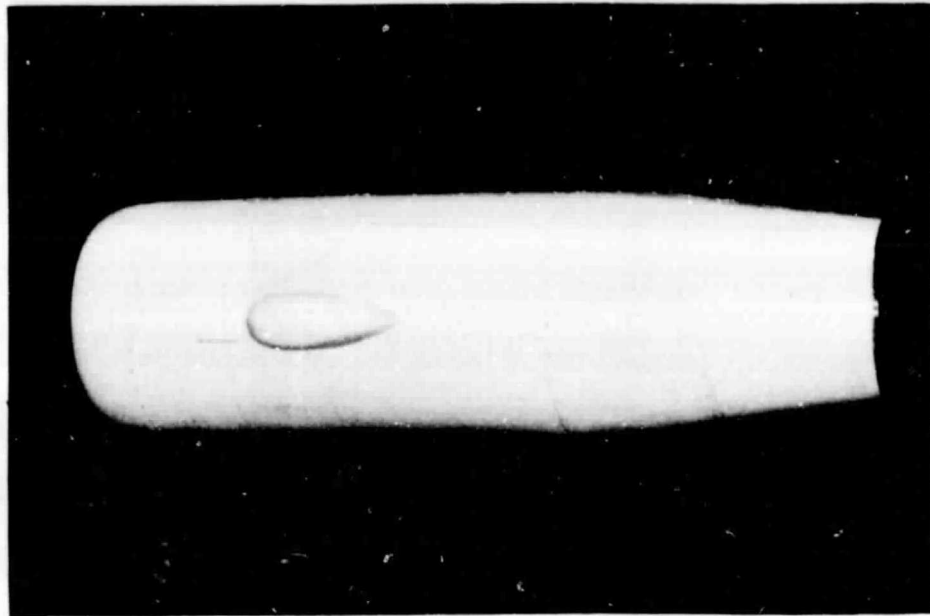


● Aeroacoustic Lip (Top View)

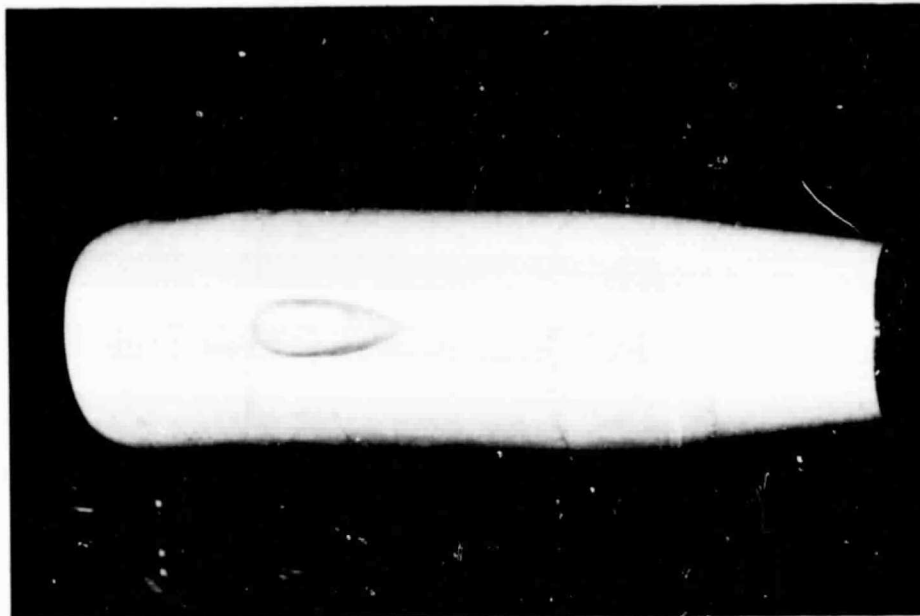


● Flight Lip and Fairings (Top View)

Figure 22. Sketch of Canted Baseline Inlet.



JT15D/Baseline Inlet



JT15D/Canted Baseline Inlet

30 Figure 23. Photographs of JT15D/Baseline Inlet and JT15D/Canted Baseline Inlet with Fairings.

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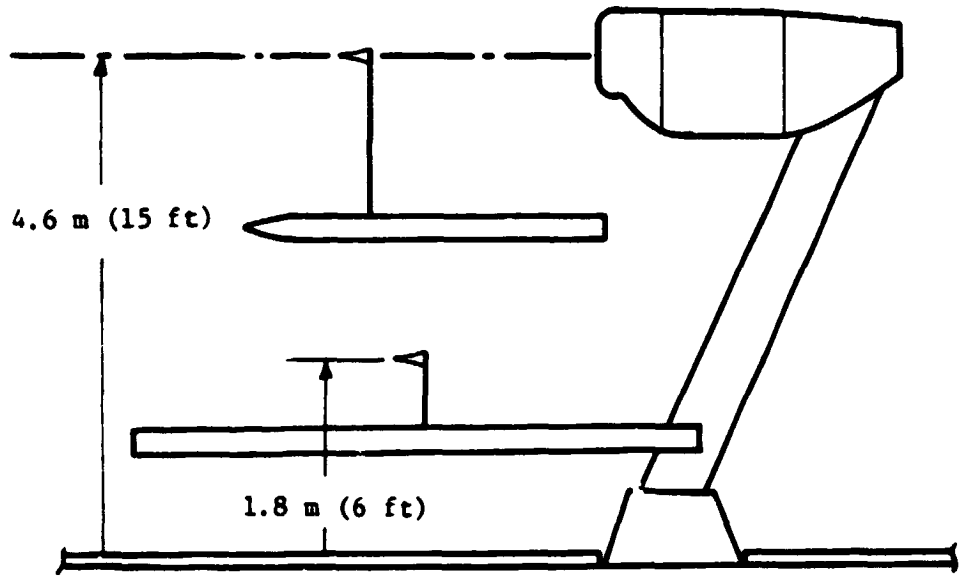
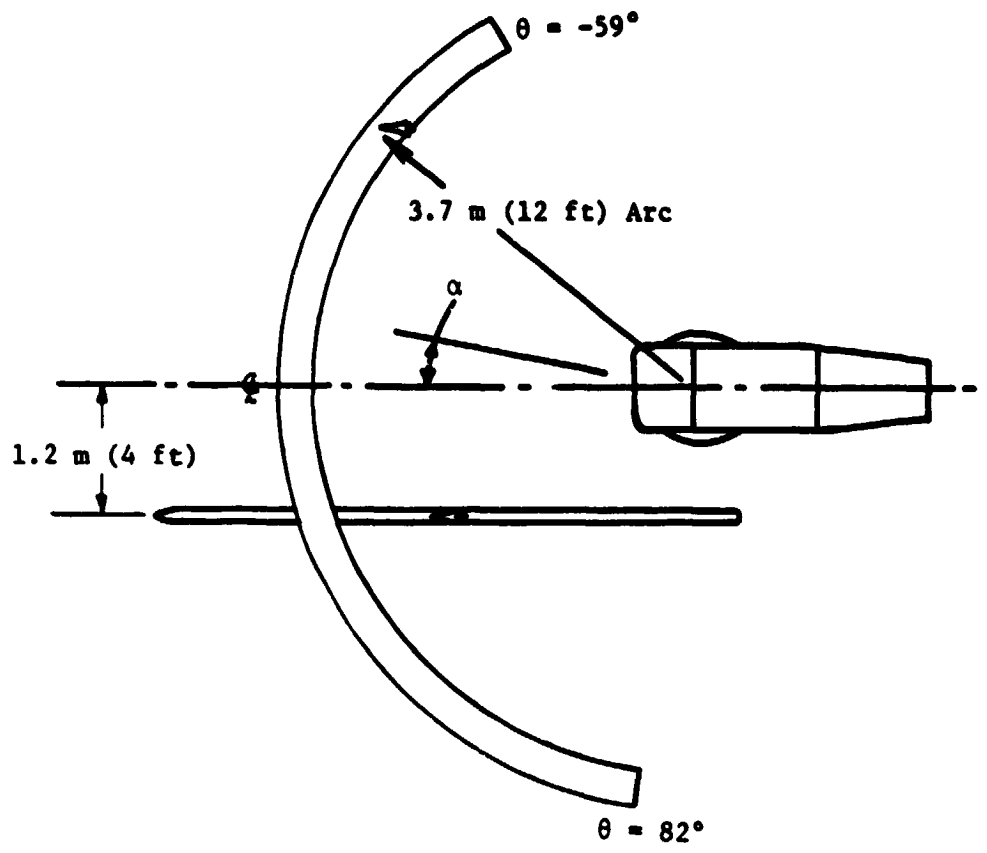


Figure 24. Test Setup for Second Wind Tunnel Test.

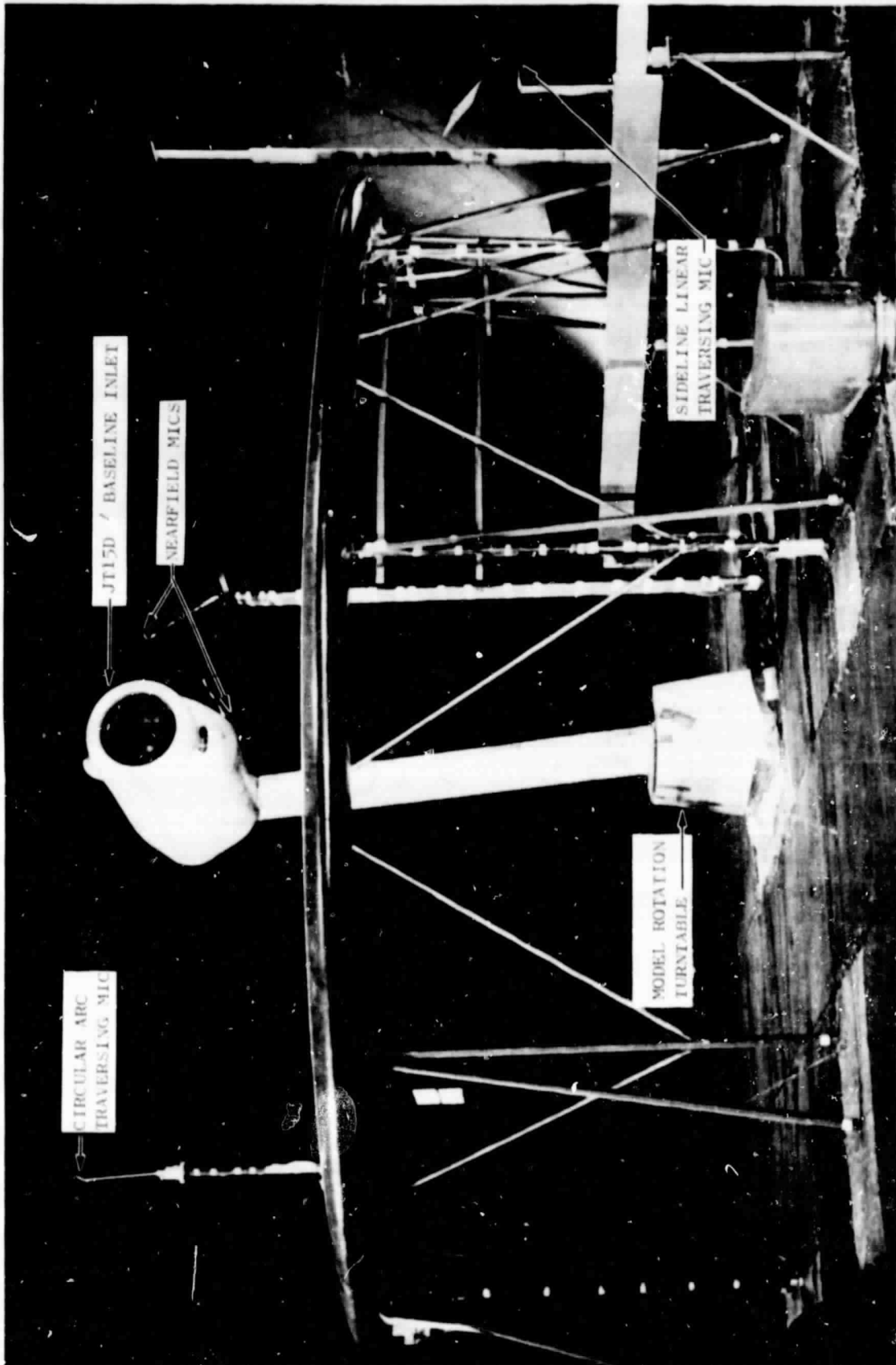


Figure 25. Test Setup in NASA-AEC 40 by 80 Wind Tunnel (2nd Entry).



### 3.6 TEST SUMMARY

The second wind tunnel test was conducted in the 40 by 80 during the period 12 September 1978 to 5 October 1978. The redesigned version of the JT15D was used exclusively during the second wind tunnel test. A complete summary of the wind tunnel test is contained in Table 3 which includes the details of each inlet configuration used with each engine. The primary objectives of the second entry were to determine the acoustic performance of the hybrid inlets, the deflector inlet, and the canted baseline inlet.

The redesigned JT15D engine was installed in the 40 by 80 for the second wind tunnel test. The hybrid and baseline inlets were tested at forward speeds up to 59 m/s (194 ft/s) over the STOL and CTOL corrected-fan-speed ranges corresponding to the throat Mach number range of  $0.6 \leq M_{TH} \leq 0.8$ . The STOL hybrid inlet was tested at angles of attack up to  $30^\circ$ , and the CTOL hybrid and baseline inlets were tested at angle of attack up to  $15^\circ$ .

The canted baseline inlet was then tested over the same corrected-fan-speed ranges as the baseline inlet at forward speeds up to 41 m/s (135 ft/s). The configuration was first tested with the engine axis aligned with the flow,  $-4^\circ$  angle of attack to the inlet, to simulate actual installed operation. The engine axis was then rotated  $4^\circ$  to align the inlet axis with the flow to acquire data at  $0^\circ$  inlet angle of attack for comparison.

The second wind tunnel test was concluded with the testing of the deflector inlet. Noise data for the deflector inlet were acquired at forward speeds up to 59 m/s (194 ft/s) at angle of attack up to  $15^\circ$  over the same corrected-fan-speed range as the baseline inlet. A total of 461 data points were acquired during the second wind tunnel test including 358 microphone-traverse noise points, and 103 fixed-position-microphone noise points.

For all wind tunnel testing the same procedure for setting test conditions and acquiring data was followed for all the noise data points. The forward velocity in the 40 by 80 was set, and then the JT15D was put on point. This was done by setting either throat Mach number from monitored static pressures or corrected fan speed based on fan entrance temperature. Table 4 contains listing of JT15D fan speed, tip speed and throat Mach number correlations used during the test. The turntable was then rotated until the desired angle of attack was obtained. The fan speed was reset, if necessary, and then data was acquired. Steady-state data were recorded on the digital system, and then noise data were tape recorded. For the second wind tunnel test the noise data were recorded continuously until both microphone traverses stopped. For selected conditions the traversing microphones were fixed at  $30^\circ$ ,  $50^\circ$ , and  $70^\circ$  relative to the inlet axis, and 30 seconds of noise data were tape recorded at each angle.

### 3.7 TRAVERSE MICROPHONE DATA REDUCTION

The external noise measurements were monitored on-line during the tests by GE personnel to ensure signal validity. The posttest noise data reduction

Table 3. Run Log for Second 40-by-80-Foot Wind Tunnel Test.

Run	JT15D	Inlet	Lip	Treated	a	Vo	Run	JT15D	Inlet	Lip	Treated	a	Vo
1	Red	STOL	A/A	Yes	0	10	38	Red	CTOL	FL	No	15	80
2	Red	STOL	A/A	Yes	0	10	39	Red	CTOL	FL	No	15	115
3	Red	STOL	FL	Yes	0	10	40	Red	CTOL	FL	No	8	115
4	Red	STOL	FL	Yes	0	40	41	Red	CTOL	FL	No	15	115
5	Red	STOL	FL	Yes	15	40	42	Red	CTOL	FL	No	0	80, 115
6	Red	STOL	FL	Yes	30	40	43	Red	CTOL	FL	No	8	80
7	Red	STOL	FL	Yes	0	80	44	Red	CTOL	FL	No	15	80
8	Red	STOL	FL	Yes	0	80	45	Red	Base	A/A	No	0	13
9	Red	STOL	FL	Yes	15	80	46	Red	Base	A/A	No	0	13
10	Red	STOL	FL	Yes	30	80	47	Red	Base	FL	No	0	14
11	Red	STOL	FL	Yes	0	115	48	Red	Base	FL	No	0	40
12	Red	STOL	FL	Yes	15	115	49	Red	Base	FL	No	15	40
13	Red	STOL	FL	Yes	25	115	50	Red	Base	FL	No	0	80
14	Red	STOL	FL	Yes	0	80, 115	51	Red	Base	FL	No	8	80
15	Red	CTOL	FL	Yes	0	0	52	Red	Base	FL	No	15	80
16	Red	CTOL	FL	Yes	0	80	53	Red	Base	FL	No	0	115
17	Red	CTOL	FL	Yes	8	80	54	Red	Base	FL	No	8	115
18	Red	CTOL	FL	Yes	15	80	55	Red	Base	FL	No	15	115
19	Red	CTOL	FL	Yes	0	115	56	Red	Base	FL	No	15	115
20	Red	CTOL	FL	Yes	0	115	57	Red	Base	FL	No	15	115
21	Red	CTOL	FL	Yes	0	115	58	Red	Cant	FL	No	0	14
22	Red	CTOL	FL	Yes	8	115	59	Red	Cant	FL	No	0	11
23	Red	CTOL	FL	Yes	15	115	60	Red	Cant	FL	No	4	12
24	Red	CTOL	A/A	Yes	0	16	61	Red	Cant	FL	No	1	40
25	Red	CTOL	A/A	Yes	0	16	62	Red	Cant	FL	No	0	80
26	Red	STOL	FL	No	0	10	63	Red	Cant	FL	No	4	80
27	Red	STOL	FL	No	0	10	64	Red	Defl	FL	No	0	11
28	Red	STOL	FL	No	0	80	65	Red	Defl	FL	No	0	80
29	Red	STOL	FL	No	15	80	66	Red	Defl	FL	No	0-30	80
30	Red	STOL	FL	No	25	80	67	Red	Defl	FL	No	0-30	115
31	Red	STOL	FL	No	0	40	68	Red	Defl	FL	No	0	12
32	Red	STOL	FL	No	15	40	69	Red	Defl	FL	No	0	80
33	Red	STOL	FL	No	33	40	70	Red	Defl	FL	Yes	0	10
34	Red	CTOL	FL	No	0	15	71	Red	Defl	FL	Yes	0	80
35	Red	CTOL	FL	No	0	11	72	Red	Defl	FL	Yes	0	115
36	Red	CTOL	FL	No	0	40	73	Red	Defl	FL	Yes	15	115
37	Red	CTOL	FL	No	15	40	74	Red	Defl	FL	Yes	15	80

Note: Run 64-67 had total pressure rakes and no microphones.

Table 4. JT15D Fan and Hybrid Inlet Test Parameters.

Nc, rpm	m/s	V <sub>T</sub> , ft/s	M <sub>TH</sub> Baseline	M <sub>TH</sub> STOL	M <sub>TH</sub> CTOL	ḡ		PR	BPF 1/3-OB kHz
						kg/s	lb/s		
11,140	311	1020	0.29	0.62	0.46	25.4	56.1	1.158	5.0
11,525	322	1056	0.30	0.66	0.49	26.6	58.6	1.171	5.0
11,985	335	1098	0.31	0.72	0.51	27.5	60.7	1.187	5.0
12,320	344	1129	0.33	0.77	0.54	28.4	62.7	1.200	6.3
13,475	376	1235	0.37	---	0.62	31.2	69.1	1.245	6.3
13,953	390	1278	0.38	---	0.66	32.6	71.8	1.266	6.3
14,520	405	1330	0.40	---	0.72	34.0	74.9	1.294	6.3
14,895	416	1365	0.42	---	0.77	34.9	77.0	1.312	6.3

and processing were accomplished at the GE facilities. During most of the second wind tunnel test, high signal levels were observed on the downstream portion of the linear microphone traverse. It was determined that the source of the pressure disturbance was wakes shedding from the circular traverse rail. The fan noise portion of the signal was swamped by this background noise; as a result, data from the traverse rail microphone during the second wind tunnel test was unusable.

The 3.7 m (12 ft) arc microphone data from the second wind tunnel test were reduced to 1/3-octave-band spectra from 400 Hz to 16 kHz by special techniques developed to process moving-microphone data. While the traverse was moving, narrowband spectra were continuously computed with an angular spacing that depended upon the averaging time in the spectral calculations. The averaging time used was 0.2 seconds; this provides the smallest angular resolution between spectra on the 3.7 m (12 ft) arc and keeps the statistical errors below  $\pm 1$  dB in the sound pressure levels. For each data point, the narrowband spectra are computed every 3.3° around the arc and are then converted to 1/3-octave-band spectra corrected to standard-day conditions.

To verify the traverse-microphone data-reduction technique, the data acquired when the traverse was stopped at 30°, 50°, and 70° for selected points were compared to the traverse data at those angles at the same test conditions. Typical comparisons of the spectra computed from fixed-microphone data reduction to spectra computed from traverse-microphone data reduction are shown in Figure 26. The baseline inlet was used because it changes more with frequency and angle than data from the hybrid inlets; therefore, it represents a tougher test case for comparisons of the methods. These comparisons indicate that the traverse-microphone data-reduction method provides spectrum levels within  $\pm 2$  dB of those computed by conventional techniques. In addition, the traverse-microphone data has an advantage over fixed-microphone data in that no errors exist due to calibrating and recovering data from several microphones.

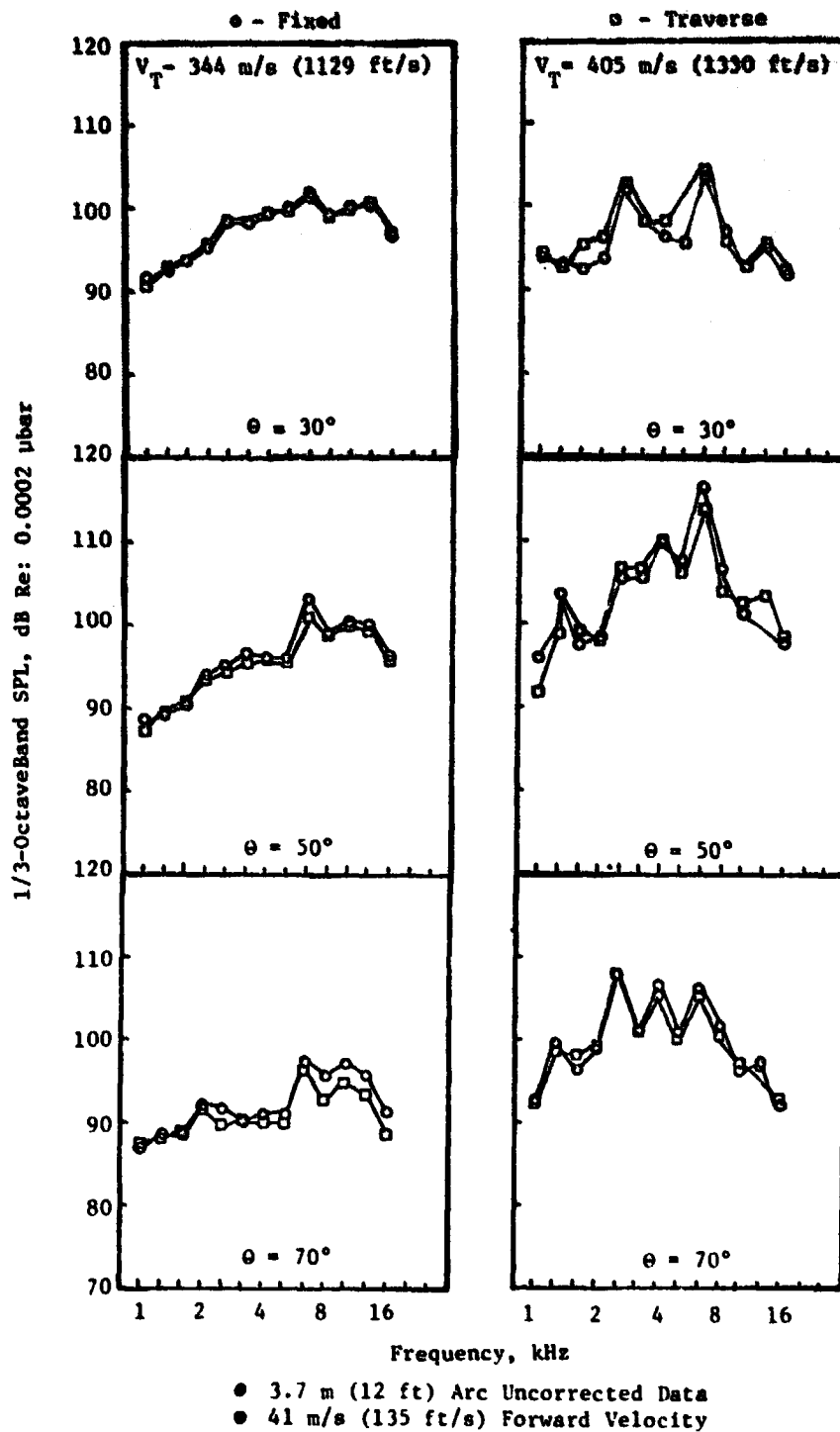


Figure 26. Verification of Traverse Microphone Data Reduction.

## 4.0 DATA ANALYSIS

### 4.1 ANALYSIS TECHNIQUES

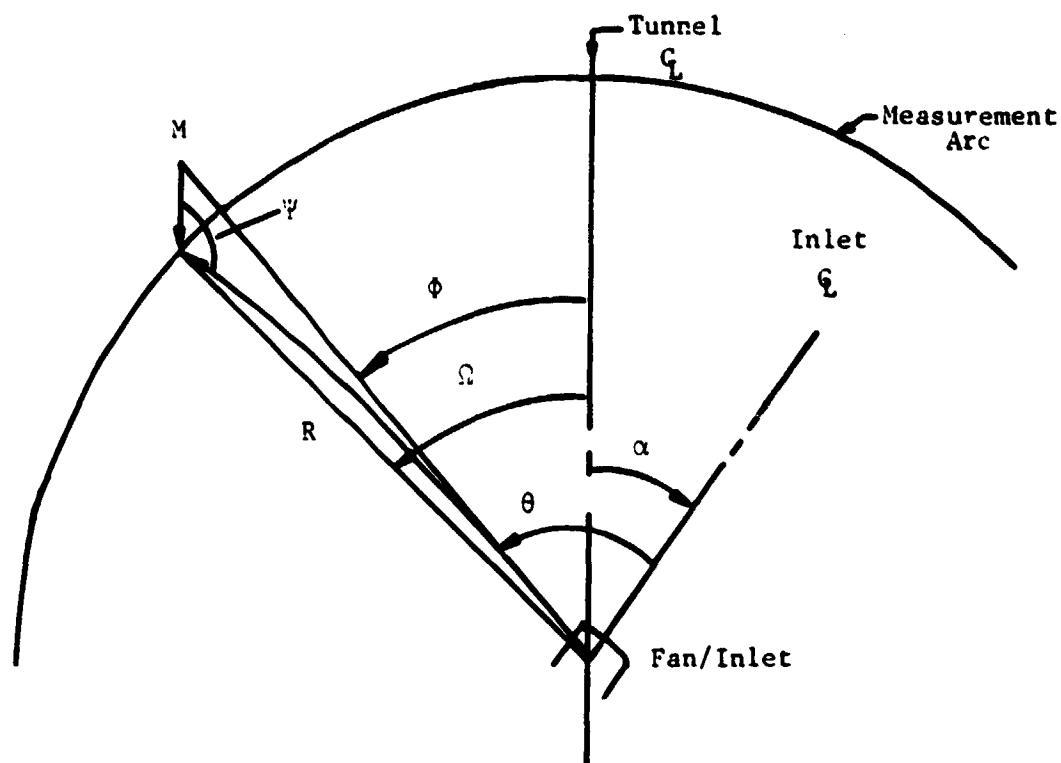
The analysis technique used for the wind tunnel data involves several steps. The first step is to account for convection effects that transform the angles and correct the levels of the traverse-microphone measured spectra to equivalent static conditions. The next steps are to select spectra at forward angles from 10° to 90° from the inlet axis, apply microphone angle-of-incidence corrections, and subtract the wind tunnel background noise from the selected spectra. Finally, the sound-level spectra are corrected to standard-day conditions, scaled to the large turbofan engine, and extrapolated to the 61 m (200 ft) sideline. The spectra are then weighted and summed to obtain perceived noise levels (PNL) at the forward arc angles in 10° increments for use in determining directivity patterns. Appendix B contains tables of 1/3 octave band spectra for the corrected and scaled data from the second wind tunnel test. Selected plots of second wind tunnel test data are in Appendix C. These plots include 1/3 octave band spectra, 1/3 octave band directivity, and PNL directivity.

#### 4.1.1 Wind Tunnel/Static Transformation

As the noise from the fan propagates forward in the wind tunnel the waves are convected downstream by the flow velocity as shown in Figure 27. This convection has the effect of causing the angular location and propagation distance of the wind-on data to change relative to the static data. To properly assess the effects of forward velocity on the fan noise, the convection effects should be removed from the wind-on data to provide a consistent basis for comparisons.

The static equivalent angle,  $\phi$  (see Figure 27), for the 3.7 m (12 ft) arc measurements relative to the wind tunnel axis is given in terms of the measurement angle,  $\Omega$ , by the expression

$$\phi = \tan^{-1} \left( \frac{\sin \Omega}{M_0 + \cos \Omega} \right) \quad (1)$$



- $\psi$  - Microphone Incidence Angle
- $\theta$  - Noise Emission Angle
- $\alpha$  - Inlet Angle of Attack
- $\Omega$  - Measurement Angle
- $\phi$  - Static Equivalent Angle
- R - Measurement Radius
- M - Tunnel Flow Mach Number

Figure 27. Wind Tunnel Convection Correction Nomenclature.

where  $M_0$  is the wind tunnel flow Mach number. The noise emission angle,  $\theta$ , relative to the inlet axis is then given by

$$\theta = \phi + \alpha \quad (2)$$

where  $\alpha$  is the inlet angle of attack. Finally, the noise incidence angle,  $\psi$ , at the microphone to be used for corrections is given by

$$\psi = 180 - \Omega \quad (3)$$

which is applicable at all angles since the microphone always points upstream.

The noise propagation distance during wind-on conditions was effectively lengthened by the convection effects. The ratio of the measured to the static equivalent distance is given by

$$\frac{R + \Delta R}{R} = \frac{\sin \Omega}{\sin \theta} \quad (4)$$

where  $R$  is the actual distance to the traverse arc, 3.7 m (12 ft). Substitution of Equation (1) into Equation (4) provides the expression

$$\frac{R + \Delta R}{R} = \sin \Omega \left[ \left( \frac{M_0 + \cos \Omega}{\sin \Omega} \right)^2 + 1 \right]^{1/2} \quad (5)$$

which relates the distance ratio to the measurement angle and the wind tunnel flow Mach number. The distance ratio is then used to increase the measured sound pressure levels at a specific angle; this corrects the wind-on data to equivalent static conditions. The formula for this level correction is

$$\Delta \text{SPL} = 10 \log \left( \frac{R + \Delta R}{R} \right)^2 \quad (6)$$

where  $\Delta \text{SPL}$  is added to each 1/3-octave band in the spectra.

The application of the convection corrections and the microphone incidence-angle corrections are facilitated by the use of a traversing-microphone system to acquire the fan-noise data. For each data point the traverse-microphone data-reduction program computes 1/3-octave-band spectra at each 3.3° around the arc from -59° to +82° relative to the wind tunnel centerline. The program then computes Equation (1) for each spectrum and selects spectra at 10° increments from  $\theta = 10^\circ$  to  $\theta = 90^\circ$  for further corrections. The spectra are then corrected for microphone incidence angle and frequency response based on the microphone manufacturer's calibrations. The spectra are then ready for wind tunnel background noise and standard-day temperature and humidity conditions.



A graphical solution to Equation (1) was used to determine the measurement angle to use for each 10° static equivalent angle for selection of narrow-band spectra. These values appear in Table 5. Unfortunately, the convection correction was not anticipated when the traverse rail was set up, and the last value of traverse-microphone data usable for zero angle-of-attack data is 70°. This is the reason all the directivity curves presented later end at a noise-emission angle of 70°.

Table 5. Measurement Angles Required for Static Equivalent Angles at 10° Increments.

$V_0$ , m/s	$M_0$	♦								
		10	20	30	40	50	60	70	80	90
20.6	0.059	10.6	21.15	31.7	42.2	52.6	62.9	73.2	83.3	93.4
41.2	0.118	11.2	22.3	33.4	44.3	55.2	65.8	76.3	86.6	96.8
59.2	0.170	11.7	23.4	34.7	46.3	57.5	68.5	79.2	89.6	99.8

#### 4.1.2 Wind Tunnel Background Noise

The wind tunnel background noise was determined by acquiring data with the traverse microphone with the engine off at each of the forward velocities used during the test. Averaging several of these data points, the background noise was found to be essentially constant at all measurement points along the traverse arc. The spectral shape remained basically the same with the level increasing as the wind tunnel velocity was increased. The background-noise spectra for the wind tunnel velocities tested are shown in Figure 28. The background-noise spectra were then logarithmically subtracted from the wind-on data measured along the 3.7 m (12 ft) arc.

The final corrections applied to the spectra were to account for the nonstandard-day test environment. The temperature and humidity measured in the flow at the engine inlet are used along with the tables in Reference 4 to determine corrections to the 3.7 m (12 ft) arc data. The corrections adjust the sound level at each 1/3-octave band for the differences in atmospheric attenuation between the actual test conditions and standard-day, reference conditions.

#### 4.1.3 Large-Scale Turbofan Noise

In order to compare the fan noise and inlet suppression with large, high-bypass-turbofan systems the JT15D noise must be scaled to the large size. The

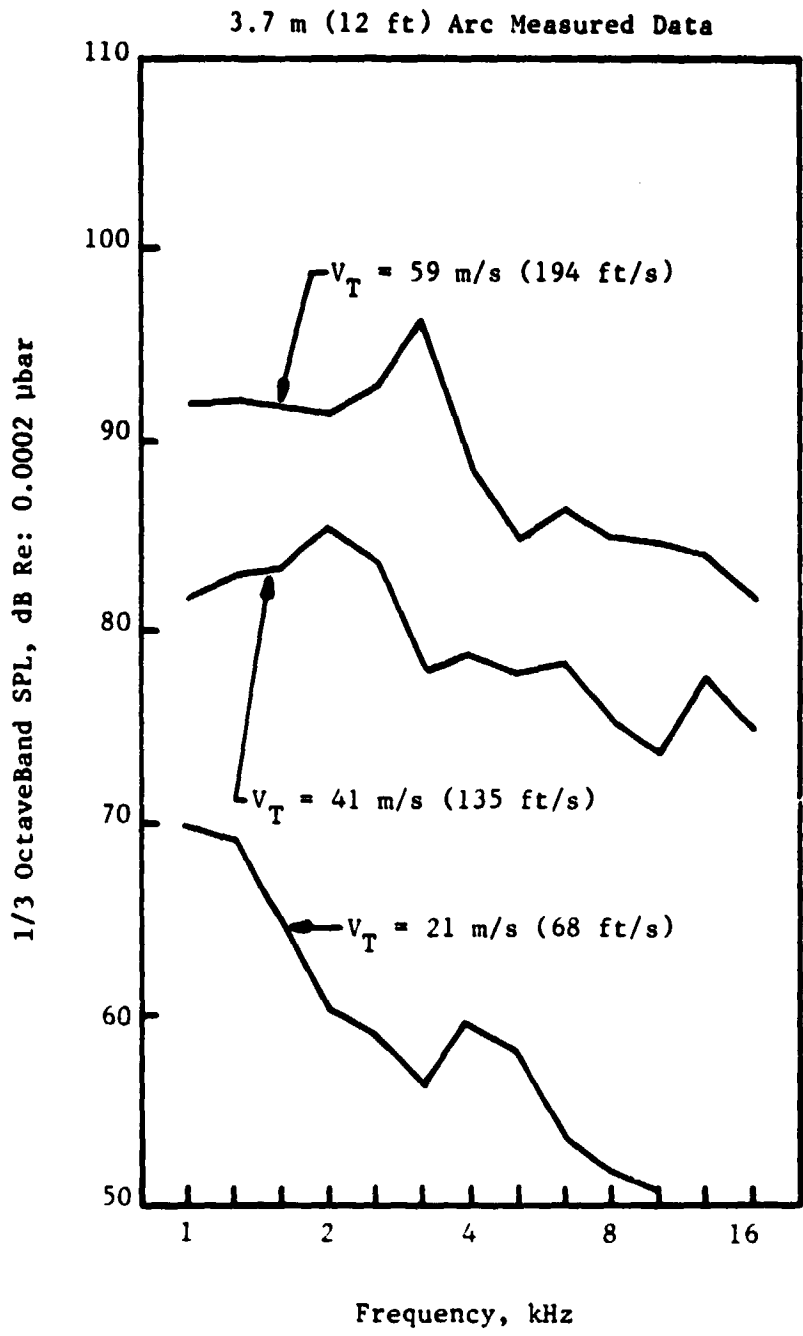


Figure 28. Background Noise for 40-by-80 Wind Tunnel.

systems chosen for the comparisons were the CF6 for the CTOL hybrid-inlet, canted-inlet, and deflector-inlet data and the QCSEE for the STOL hybrid-inlet data. The CF6 fan has an entrance diameter of 219.5 cm (86.4 in.) and 38 blades; the QCSEE fan has an entrance diameter of 180.3 cm (71 in.) and 28 blades.

The scaling procedure involves first transferring the data back to the source at a reference diameter of 0.3 m (1 ft). This is done by removing the standard-day atmospheric attenuation and adding the spherical-divergence factor for the distance from the measurement arc. The 1/3-octave-band sound pressure levels are then increased by the airflow ratio between the engines; this is proportional to the ratio of the square of the engine diameters. The frequency scales are then reduced, by the diameter ratio between the engines, to ensure that the Strouhal number remains constant. In order to place the blade-passing-frequency noise in the proper 1/3-octave band for the large engine the frequency-shift factor is modified by the ratio of the blade number between the engines.

Once the fan noise has been scaled at the source to the large engine, the data is extrapolated to a distance of 61 m (200 ft) parallel to the inlet centerline. This distance can be either to a sideline or overhead as long as no angle of attack is involved. The distances to this line along the rays at 10° increments are computed and used to determine the standard-day atmospheric attenuation, from Reference 4, and the spherical-divergence values to be subtracted from the spectra. The scaled and extrapolated spectra are then summed to obtain the overall sound pressure levels and weighted to obtain the perceived noise levels at each 10° angle.

## APPENDIX A

### ABBREVIATIONS AND SYMBOLS

$\alpha$	- Inlet Angle of Attack
ARC	- Ames Research Center
BPF	- Blade-Passing Frequency
Base	- Baseline Inlet
CTOL	- Conventional Takeoff/Landing Inlet
Defl	- Deflector Inlet
$\Delta$ SPL	- Sound Pressure Level Reduction
APNdB	- Perceived Noise Level Reduction
IGV	- Inlet Guide Vanes
L/D	- Length to Diameter Ratio of Inlet
$(L/D)_{TR}$	- Length to Diameter Ratio of Treatment
Mod	- Modified JT15D
$M_{TH}$	- One-Dimensional Throat Mach Number
$N_c$	- Corrected Fan Speed
OASPL	- Overall Sound Pressure Level
PNL	- Perceived Noise Level
$P_s$	- Inlet Static Pressure
$P_T$	- Wind Tunnel Total Pressure
PR	- Fan Pressure Ratio
QCSEE	- Quiet, Clean, Short-Haul, Experimental Engine
Red	- Redesigned JT15D
SPL	- Sound Pressure Level
Std	- Standard JT15D
STOL	- Short Takeoff/Landing Inlet
$V_T$	- Corrected Fan Tip Speed
$V_o$	- Forward Velocity
$\dot{w}$	- Corrected Inlet Airflow

## APPENDIX B

### MODEL AND FULL-SCALE 1/3-OCTAVE-BAND NOISE DATA

The output of the computer program that processed the traverse microphone data are presented in the form of 1/3-octave-band spectral levels for the model data on the 3.7 m (12 ft) arc and for the full-scale data on the 61 m (200 ft) sideline. The data are in tabular form with the spectral levels listed for all angles at each 1/3-octave-band frequency. Several code or input parameters were used to identify the data; they are listed below, along with explanations of their meanings.

NO EGA - No extra attenuation due to ground proximity  
LOC - VO is forward velocity in knots, A is angle of attack  
DATE - Date of data acquisition  
RUN - Identifies inlet and scaling  
TAPE - Run and reading number  
BAR - Barometric pressure in inches of mercury  
TAMB - Wind tunnel ambient temperature  
TWET - Wind tunnel wet bulb temperature  
HACT - Wind tunnel humidity  
NFA - Physical fan speed of JT15D  
NFK - Corrected fan speed of JT15D  
NFD - Design fan speed of JT15D  
NO. OF BLADES - JT15D fan blade number  
FAN TIP SPEED - JT15D fan tip speed in ft/sec  
OVERALL CALCULATED - Overall sound pressure level in dB  
PNDB - Perceived noise level in PNdB  
PNLT - Tone weighted perceived noise level in PNdB  
NFA - Physical fan speed of full scale fan  
NFK - Corrected fan speed of full scale fan  
NFD - Design fan speed of full scale fan  
NO. OF BLADES - Full-scale fan blade number; 28 = QCSEE, 38 = CF6  
FREQ. SHIFT - Spectral frequency shift for scaled data  
    JET - Broad band scaling  
    FAN - Tone scaling  
CRITICAL FREQ. - Not applicable  
AIRFLOW RATIO - Full size to model size airflow ratio  
FAN TIP SPEED - Full scale fan tip speed

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
RADIAL	12. FT.										
	( 4. M)										
VEHICLE	JT15RD	125									
CONFIG	40X80	180									
LOC	V6=40, A=0,	200									
DATE	9/28/78	250									
RUN	BFH/W/R C/LT	315									
TAPE	048010	400	93.4	92.9	91.1	88.2	90.2	85.3	88.9		
BAR	30.0 HG	500	91.1	90.7	90.2	88.7	88.0	84.0	86.5		
	(***** N/M2)	630	89.5	91.5	88.3	88.9	88.7	83.9	84.7		
TAMB	78. DEG F	800	91.0	88.9	88.8	86.2	87.2	85.0	84.3		
	(299. DEG K)	1000	89.9	91.0	88.5	87.4	85.0	82.9	82.6		
TWET	62. DEG F	1250	93.8	92.5	92.9	89.1	87.1	86.0	84.9		
	(290. DEG K)	1600	95.9	94.8	94.5	94.0	91.0	89.9	87.4		
HACT	9.44 GM/M3	2000	96.9	96.0	97.0	95.6	92.5	91.0	88.5		
	(.00944 KG/M3)	2500	97.8	98.8	99.3	97.1	94.5	92.1	88.7		
NFA	11342. RPM	3150	100.4	100.8	101.3	97.0	94.9	91.4	88.0		
	(1188. RAD/SEC)	4000	100.5	101.0	101.0	97.2	93.8	90.8	87.7		
NFK	11140 RPM	5000	100.1	99.0	98.2	97.9	94.8	91.5	88.2		
	(1166. RAD/SEC)	6300	98.0	98.7	97.8	96.7	93.7	90.9	87.0		
NFD	12320. RPM	8000	98.0	98.3	99.4	99.4	98.5	95.8	91.5		
	(1290. RAD/SEC)	10000	97.2	98.4	100.1	99.7	98.4	97.4	92.7		
NO. OF BLADES	28	12500	98.7	100.0	101.1	101.3	102.0	98.3	92.6		
FAN TIP SPEED	18000	20000	98.8	99.1	99.9	100.5	98.1	97.6	90.8		
	1040. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED	109.1	109.8	110.1	109.0	107.7	105.1	101.1			
	PND8	121.5	122.0	122.1	119.3	117.2	114.2	111.4			
	PNLT	121.5	122.0	122.1	119.3	117.2	114.2	111.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
	100										
	125	64.0	69.6	71.1	70.4	73.9	70.1	74.4			
NFA	3355. RPM	160	61.7	67.3	70.2	68.9	71.7	68.8	72.0		
	( 351. RAD/SEC)	200	60.0	68.1	68.3	68.1	70.4	68.8	70.2		
NFK	3295. RPM	250	61.4	65.5	68.8	68.4	70.9	68.8	69.8		
	( 345. RAD/SEC)	315	60.2	67.5	68.4	69.5	68.7	67.6	68.1		
NFD	3644. RPM	400	63.9	68.9	72.7	71.2	70.7	70.7	70.3		
	( 382. RAD/SEC)	500	65.8	70.9	74.3	76.0	74.6	74.6	72.8		
NO. OF BLADES	28	630	66.5	72.2	76.7	77.5	76.0	75.8	73.9		
FREQ. SHIFT	800	67.1	74.6	78.9	79.0	78.0	78.0	78.7	74.1		
JET	5	1000	61.3	76.8	80.8	78.8	78.3	76.0	73.9		
FAN	5	1250	68.9	76.6	80.3	78.9	77.1	75.3	72.9		
CRITICAL FREQ.	1800	67.8	74.2	77.3	79.4	78.0	78.8	75.8	73.3		
	2000	62.8	73.5	76.6	78.0	76.7	75.1	71.9			
AIRFLOW RATIO	2500	61.7	72.6	77.8	80.4	81.3	79.8	76.3			
WF/WM 11.43	3150	61.5	73.0	78.1	80.4	81.9	81.2	77.3			
FAN TIP SPEED	4000	61.1	72.7	78.5	81.6	84.2	81.8	76.9			
	5000	58.0	71.3	77.0	80.8	80.2	81.0	75.1			
	6300	52.1	66.8	73.0	78.8	78.5	77.4	71.5			
	8000	44.8	61.7	68.5	72.6	72.5	73.5	67.7			
	10000	38.5	55.5	63.4	68.0	68.1	69.3	63.6			
	OVERALL CALCULATED	77.2	85.0	89.1	90.4	90.7	89.5	86.3			
	PND8	87.1	96.7	101.5	103.8	105.0	103.4	99.7			
	PNLT	87.1	96.7	101.5	103.8	105.0	103.4	99.7			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.1)	(0.1)	(0.1)
	NO EGA	50									
	RADIAL 12. FT.	63									
	( 4 M)	80									
		100									
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	V0=40, A=0,	200									
DATE	9/28/78	250									
RUN	BFH/W/R C/LT	315									
TAPE	048020	400	93.1	92.2	88.2	89.1	88.2	88.8	86.3		
BAR	30.0 HG	500	91.8	90.2	87.6	88.2	86.3	86.7	85.1		
	(***** N/M2)	630	91.1	88.8	88.8	88.1	87.4	84.3	85.4		
TAMB	78. DEG F	800	89.7	89.7	90.2	84.9	85.9	83.6	85.1		
	(299. DEG K)	1000	87.8	89.8	88.3	85.4	85.9	83.7	83.1		
TWET	62. DEG F	1250	92.7	92.7	91.1	90.0	88.6	87.3	85.9		
	(290. DEG K)	1600	95.1	94.2	93.9	91.4	88.6	88.5	87.9		
HACT	9.44 GM/M3	2000	95.7	95.9	95.5	95.3	92.4	91.4	89.9		
	(.00944 KG/M3)	2500	97.0	98.0	99.1	98.1	95.0	90.3	88.9		
NFA	11733. RPM	3150	100.6	100.0	99.0	98.5	95.7	90.7	88.7		
	(1228. RAD/SEC)	4000	98.9	98.2	98.1	98.1	93.5	90.3	87.9		
NFK	11524. RPM	5000	99.3	98.6	99.1	98.8	96.4	92.4	88.5		
	(1207. RAD/SEC)	6300	95.8	97.6	99.1	98.9	94.2	90.4	87.2		
NFD	12320. RPM	8000	95.7	97.1	99.0	98.8	98.4	95.9	91.7		
	(1290. RAD/SEC)	10000	96.9	98.2	100.3	99.7	100.2	97.7	92.5		
NO. OF BLADES	28	12500	97.0	99.5	100.7	100.1	101.0	98.0	92.7		
FAN TIP SPEED	16000	18000	96.6	99.0	99.2	99.3	97.9	95.7	90.7		
	1076. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED		108.6	109.1	109.6	108.8	107.6	104.9	101.3		
	PNDB		121.3	121.1	120.8	120.1	117.6	114.3	111.8		
	PNLT		121.3	121.1	120.8	120.1	117.6	114.3	111.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.1)	(0.1)	(0.1)
	NO EGA	50									
		63									
		80									
		100									
NFA	3470. RPM	125	63.7	68.9	68.2	71.3	71.9	73.6	71.8		
	( 363. RAD/SEC)	160	62.4	66.8	67.6	70.4	70.0	71.5	70.6		
NFK	3408. RPM	200	61.8	65.4	69.6	71.3	71.1	69.1	70.9		
	( 357. RAD/SEC)	250	60.1	66.3	70.2	67.1	69.8	68.4	70.6		
NFD	3644. RPM	315	58.1	66.3	68.2	67.5	69.6	68.4	68.6		
	( 382. RAD/SEC)	400	62.8	69.1	70.9	72.1	72.2	72.0	71.3		
NO. OF BLADES	28	500	65.0	70.5	73.7	73.4	72.2	73.2	73.3		
		630	65.3	72.1	75.2	77.2	75.9	78.0	75.3		
FREQ. SHIFT		800	66.3	74.0	78.7	80.0	78.5	74.9	74.3		
JET	5	1000	69.5	75.8	78.5	78.3	79.1	75.3	74.0		
FAN	5	1250	68.3	74.8	78.4	79.8	77.0	74.8	73.1		
CRITICAL FREQ		1600	67.0	73.8	78.2	81.3	79.6	78.7	73.6		
	0.	2000	62.6	72.4	77.9	78.2	77.2	74.6	72.1		
AIRFLOW RATIO		2500	61.4	71.4	77.4	79.8	81.2	79.9	76.5		
WF/WM	11.43	3150	61.2	72.8	78.3	80.4	82.7	81.5	77.1		
FAN TIP SPEED		4000	59.4	72.2	78.1	80.4	83.2	81.5	77.2		
	1076. FT/SEC	5000	58.0	71.2	76.3	79.4	80.0	79.1	75.0		
		6300	52.1	66.7	72.3	75.6	76.3	75.5	71.4		
		8000	44.8	61.6	67.8	71.4	72.3	71.6	67.6		
		10000	35.5	55.4	62.7	66.8	67.9	67.4	63.5		
	OVERALL CALCULATED		76.7	84.2	88.5	90.3	90.7	89.1	86.4		
	PNDB		86.5	96.3	101.2	103.1	104.5	103.0	99.7		
	PNLT		86.5	96.3	101.2	103.1	104.5	103.0	99.7		

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MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0
FREQ		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4 M)	100										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VO=40, A=0,	200									
DATE	9/28/78	250									
RUN	BFH/W/R C/LT	315									
TAPE	046030	400	92.2	91.7	91.2	88.2	89.3	85.9	85.9		
BAR	30.0 MG	500	90.9	89.6	87.7	88.9	86.6	85.7	85.0		
( 3333 N/M2)	630	80.2	89.4	89.8	87.8	86.8	84.2	84.2			
TAMB	78. DEG F	800	88.0	89.5	88.3	87.1	86.6	84.8	86.7		
(299. DEG K)	1000	89.8	89.9	87.7	87.0	86.8	84.1	84.4			
TWET	82. DEG F	1250	92.8	91.9	92.2	89.8	87.3	87.3	85.0		
(290. DEG K)	1600	93.8	92.3	92.8	91.0	88.8	86.8	85.9			
HACT	9.44 GM/M3	2000	94.0	94.3	95.0	95.6	91.7	91.4	88.2		
(.00944 KG/M3)	2500	97.4	97.8	99.0	96.8	93.0	90.6	87.6			
NFA	12202. RPM	3150	98.6	99.5	99.2	96.9	95.0	90.5	88.6		
(1278. RAD/SEC)	4000	99.8	100.1	99.0	97.7	93.2	90.8	87.7			
NFK	11984. RPM	5000	98.8	99.3	98.1	97.7	94.3	90.5	89.4		
(1255. RAD/SEC)	6300	97.0	97.4	97.5	97.4	97.6	93.1	92.2			
NFD	12320. RPM	8000	95.5	97.2	99.6	99.8	97.7	94.7	90.9		
(1290. RAD/SEC)	10000	96.8	99.2	99.5	99.4	99.0	96.8	92.3			
NO. OF BLADES	28	12500	98.5	100.9	101.8	100.4	99.4	99.0	92.5		
FAN TIP SPEED	16000	96.6	98.4	99.2	96.8	98.3	95.5	89.6			
1118. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.2	109.3	109.5	108.6	107.0	104.7	101.2			
PND8		120.6	121.1	120.7	119.5	117.3	114.0	112.4			
PNLT		120.6	121.1	120.7	119.5	117.3	114.0	112.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
NO EGA	50										
	63										
	80										
	100										
NFA	3609. RPM	160	62.8	66.4	71.2	70.4	73.0	70.7	71.4		
( 378. RAD/SEC)	200	60.7	66.0	69.6	69.7	70.5	69.0	69.7			
NFK	3545. RPM	250	58.4	66.1	68.3	69.3	70.3	69.6	72.2		
( 371. RAD/SEC)	315	59.9	66.4	67.6	69.1	70.5	68.6	69.9			
NFD	3644. RPM	400	62.9	66.3	72.0	71.9	70.9	72.0	70.4		
( 382. RAD/SEC)	500	63.7	66.6	72.6	73.0	72.2	71.3	71.3			
NO. OF BLADES	28	630	63.6	70.5	74.7	77.5	75.2	76.0	73.6		
FREQ. SHIFT	800	66.7	73.6	76.6	76.4	76.5	75.2	73.0			
JET	5	1000	67.5	75.3	78.7	78.7	76.4	75.1	73.9		
FAN	6	1250	68.0	75.7	78.3	79.4	77.7	75.3	74.6		
CRITICAL FREQ.	1600	65.3	73.3	76.6	76.9	60.8	77.4	77.3			
0.	2000	62.4	72.0	76.4	81.1	80.7	76.9	75.9			
AIRFLOW RATIO	2500	62.4	73.3	78.0	80.5	81.9	80.7	77.2			
WF/WM 11.43	3150	62.9	74.6	79.9	81.2	82.1	82.9	77.2			
FAN TIP SPEED	4070	59.1	72.2	76.7	79.2	80.6	79.1	74.1			
1119. FT/SEC	5000	55.0	68.6	73.3	75.9	77.4	75.9	70.9			
	6300	49.1	64.1	69.3	72.1	73.7	72.3	67.3			
	8000	41.6	59.0	64.6	67.9	69.7	68.4	63.5			
	10000	32.5	52.8	59.7	63.3	65.3	64.2	59.4			
OVERALL CALCULATED		76.0	84.2	88.3	89.9	90.2	89.1	86.3			
PND8		86.4	96.7	101.4	103.1	103.7	103.4	99.4			
PNLT		86.4	96.7	101.4	103.1	103.7	104.4	99.4			



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4 M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=40,A=0,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 048080	400	91.1	90.4	91.3	89.3	87.2	89.1	88.0			
BAR 30.0 HG	500	91.3	89.2	90.9	88.5	87.2	86.7	88.5			
(***** N/M2)	630	89.4	89.0	89.8	88.0	87.2	85.1	86.6			
TAMB 78. DEG F	800	87.4	88.1	87.4	88.9	88.4	86.6	86.8			
(299. DEG K)	1000	89.3	89.9	88.2	85.4	86.3	86.1	84.7			
TWET 62. DEG F	1250	93.7	92.4	90.8	88.6	87.6	86.6	85.9			
(290 DEG K)	1600	95.4	93.3	90.8	89.1	88.9	87.1	87.2			
HACT 9.44 GM/M3	2000	95.5	94.2	95.0	93.3	92.1	90.7	90.4			
(.00944 KG/M3)	2500	95.0	96.3	98.0	94.3	91.5	89.4	88.9			
NFA 12543. RPM	3150	97.9	99.3	97.0	96.5	95.5	90.7	89.1			
(1313 RAD/SEC)	4000	99.0	99.0	97.9	97.5	93.2	91.2	88.9			
NFK 12319. RPM	5000	98.6	99.0	98.0	96.3	94.2	90.4	88.9			
(1290. RAD/SEC)	6300	97.3	98.5	99.3	100.1	101.6	98.4	96.7			
NFD 12320. RPM	8000	97.2	96.7	97.7	98.7	100.1	98.0	93.9			
(1290 RAD/SEC)	10000	96.0	98.1	99.0	99.9	100.6	100.9	95.8			
NO. OF BLADES 28	12500	98.3	99.6	99.9	99.7	99.7	100.7	94.0			
FAN TIP SPEED 16000	20000	96.2	98.6	98.1	98.3	96.8	96.2	91.2			
1150. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.1	108.7	108.6	108.3	108.2	107.0	103.5			
PNDB		120.3	120.5	119.8	119.4	119.5	117.0	115.3			
PNLT		120.3	120.5	119.8	119.4	120.6	117.7	116.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
	50										
NO EGA	63										
	80										
	100										
NFA 3710. RPM	125	61.7	67.1	71.3	71.5	70.9	73.9	73.5			
( 388. RAD/SEC)	160	61.9	65.8	70.9	70.7	70.9	71.5	74.0			
NEK 3644 RPM	200	59.9	65.6	69.8	70.2	70.9	69.9	72.1			
( 382. RAD/SEC)	250	57.8	64.7	67.4	71.1	72.1	71.4	72.3			
NFD 3644. RPM	315	59.6	66.4	68.1	67.5	70.0	70.8	70.2			
( 382. RAD/SEC)	400	63.8	68.8	70.6	70.7	71.2	71.3	71.3			
NO. OF BLADES 28	500	65.3	69.6	70.6	71.1	72.5	71.8	72.6			
FREQ. SHIFT	630	65.1	70.4	74.7	75.2	75.6	75.3	75.8			
JET 5	800	64.3	72.3	77.6	76.2	75.0	74.0	74.3			
FAN 6	1000	66.8	75.1	76.5	78.3	78.9	75.3	74.4			
CRITICAL FREQ	1250	67.4	74.6	77.3	79.2	77.6	75.7	74.1			
0.	1600	65.0	73.7	78.4	81.6	84.8	82.7	81.8			
AIRFLOW RATIO	2000	64.0	71.5	76.5	80.0	83.1	82.2	78.9			
WF/WM 11.43	2500	61.8	72.5	77.5	81.0	83.5	85.0	80.7			
FAN TIP SPEED	3150	62.7	73.3	78.0	80.5	82.4	84.6	78.7			
1150. FT/SEC	4000	58.7	71.4	75.6	78.7	79.1	79.8	75.7			
	5000	54.6	67.8	72.2	75.4	75.9	76.6	72.5			
	6300	48.7	63.3	68.2	71.6	72.2	73.0	68.9			
	8000	41.4	58.2	63.7	67.4	68.2	69.1	65.1			
	10000	32.1	52.0	58.6	62.8	63.8	64.9	61.0			
OVERALL CALCULATED		75.8	83.5	87.4	89.6	91.3	91.3	88.6			
PNDB		86.2	95.9	100.2	102.6	104.1	105.1	101.5			
PNLT		86.2	95.9	100.2	102.6	105.6	106.4	103.3			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ	10.	20.	30.	40.	50.	60.	70.	80.	0.	0
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	) (0.
	50										
	63										
	80										
	100										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VO=40, A=15,	200									
DATE	9/28/78	250									
RUN	BFH/W/R C/LT	315									
TAPE	049020	400	90.5	90.8	89.2	89.6	89.8	89.2	86.3	86.5	
BAR	29.9 HG	500	92.5	90.4	88.0	89.3	85.6	87.2	84.5	83.3	
	(XXXXX N/M2)	630	92.9	92.0	90.2	89.4	85.8	85.2	84.0	83.9	
TAMB	83. DEG F	800	91.2	89.7	88.5	87.8	84.6	85.4	85.2	85.2	
	(301. DEG K)	1000	90.1	87.9	89.1	86.3	85.7	84.7	82.2	83.8	
TWET	66. DEG F	1250	95.4	91.5	92.8	90.3	88.8	87.5	85.2	84.4	
	(292. DEG K)	1800	96.3	94.5	95.0	92.8	91.1	88.9	87.8	87.6	
HACT	11.15 GM/M3	2000	96.7	96.8	95.9	95.0	93.3	90.7	88.3	86.7	
	(.01115 KG/M3)	2500	97.1	98.2	97.8	96.2	95.1	91.6	89.7	86.9	
NFA	11395. RPM	3150	99.8	101.3	100.4	96.7	95.2	92.4	87.7	86.9	
	(1193. RAD/SEC)	4000	100.0	100.4	100.3	97.0	94.7	92.2	87.7	86.4	
NFK	11140. RPM	5000	100.2	99.2	99.3	97.2	96.8	93.0	89.6	87.4	
	(1166. RAD/SEC)	6300	95.6	98.4	98.0	96.3	94.8	91.6	88.6	85.9	
NFD	12320. RPM	8000	95.2	97.3	99.5	99.5	98.4	96.2	92.2	89.5	
	(1290. RAD/SEC)	10000	96.4	98.5	100.4	100.4	100.2	97.1	93.5	89.2	
NO. OF BLADES	28	12500	97.5	99.7	101.0	101.4	102.2	99.3	94.0	89.7	
FAN TIP SPEED	16000	20000	94.3	98.3	99.8	99.5	98.6	96.7	92.8	88.3	
	1045. FT/SEC	20000									
OVERALL MEASURED											
OVERALL CALCULATED		108.7	109.5	109.9	108.8	108.1	105.5	101.8	99.3		
PNDB		121.2	121.9	121.5	119.2	117.8	115.1	111.8	110.2		
PNLT		121.2	121.9	121.5	119.2	117.8	115.1	111.8	110.2		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	) (0.
	50										
	63										
	80										
	100										
NFA	3370. RPM	125	61.1	67.5	69.2	71.8	73.5	74.0	71.8	72.4	
	( 353. RAD/SEC)	200	67.4	68.0	68.0	71.5	69.3	70.0	69.0	69.2	
NEK	3295. RPM	250	67.6	66.3	68.5	70.0	68.3	70.2	70.7	71.1	
	( 345. RAD/SEC)	315	67.4	64.4	69.0	68.4	69.4	69.4	67.7	69.7	
NFD	3644. RPM	400	65.5	67.9	72.6	72.4	72.2	72.2	70.6	70.2	
	( 382. RAD/SEC)	500	66.2	70.8	74.8	74.8	74.7	73.6	73.2	73.4	
NO. OF BLADES	28	630	66.3	73.0	75.6	77.0	76.8	75.1	73.7	72.5	
FREQ. SHIFT	800	66.4	74.2	77.4	78.1	78.8	76.2	75.1	72.7		
JET	5	1000	68.7	77.1	79.9	78.5	78.6	77.0	73.0	72.6	
FAN	5	1250	68.4	76.0	79.6	78.7	78.0	76.7	72.9	72.1	
CRITICAL FREQ	1600	67.9	74.4	78.4	78.7	80.0	77.3	74.7	72.9		
	0.	2000	62.4	73.2	76.8	77.6	77.8	75.8	73.5	71.3	
AIRFLOW RATIO	2500	60.9	71.5	77.9	80.5	81.1	80.2	76.9	74.7		
WF/WM 11 43	3150	60.7	72.1	78.4	81.1	82.7	80.9	78.1	74.2		
FAN TIP SPEED	4000	59.8	72.3	78.4	81.6	84.3	82.7	78.3	74.5		
	1045. FT/SEC	5000	55.7	70.6	77.0	79.6	80.7	80.1	77.1	73.1	
		6300	49.8	66.1	72.9	75.8	77.0	76.5	73.5	69.5	
		8000	42.5	60.9	68.4	71.7	73.0	72.7	69.7	65.8	
		10000	33.2	54.7	63.3	67.0	68.6	68.4	65.6	61.7	
OVERALL CALCULATED		77.0	84.7	88.8	90.1	91.1	89.8	87.0	84.9		
PNDB		86.8	96.2	101.4	103.7	105.3	104.0	100.6	97.8		
PNLT		86.8	96.2	101.4	103.7	105.3	104.0	100.6	97.8		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )								
		10.	20.	30.	40.	50.	60.	70.	80.	0. 0
NO EGA	50									
	63									
RADIAL 12. FT.	80									
( 4. M)	100									
VEHICLE	JT15RD	125								
CONFIG	40X80	160								
LOC	VO=40,A=15,	200								
DATE	9/28/78	250								
RUN	BFH/W/R C/LT	315								
TAPE	049030	400	94.1	90.4	90.4	87.9	89.3	89.8	90.5	90.7
BAR	29.9 HG	500	92.8	89.0	89.3	88.2	87.3	87.9	88.5	88.1
(***** N/M2)	630		91.1	89.7	90.5	87.9	86.3	87.3	85.8	86.2
TAMB	85. DEG F	800	88.8	87.5	90.5	88.1	86.4	86.9	84.8	84.4
(303. DEG K)	1000		88.9	90.7	88.9	87.9	87.3	85.1	83.6	84.4
TWET	68. DEG F	1250	93.5	93.1	91.6	90.1	89.0	87.2	86.6	86.6
(293. DEG K)	1600		95.2	93.3	92.9	91.3	89.6	88.6	85.5	88.1
HACT	12.23 GM/M3	2000	95.5	94.1	94.2	94.6	92.8	91.8	89.9	89.5
(.01223 KG/M3)	2500		96.7	96.8	98.0	97.5	94.3	90.4	88.6	87.3
NFA	12282. RPM	3150	99.5	100.4	98.9	97.6	96.0	92.6	89.1	87.8
(1288. RAD/SEC)	4000		98.8	99.1	98.5	96.9	94.4	92.5	89.7	87.9
NFK	11985. RPM	5000	98.4	98.6	98.3	96.9	95.3	92.4	90.5	88.3
(1255. RAD/SEC)	6300		95.0	98.4	99.1	96.7	97.6	95.8	91.7	91.7
NFD	12320. RPM	8000	95.4	95.7	99.6	99.2	97.6	95.4	93.3	90.7
(1290. RAD/SEC)	10000		94.7	97.9	100.1	99.1	98.6	96.9	95.3	91.7
NO. OF BLADES	28	12500	96.0	100.4	100.4	100.9	101.0	98.3	96.1	94.2
FAN TIP SPEED	16000		93.9	96.4	98.5	99.1	97.2	95.9	92.6	89.2
1126. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED			107.8	108.7	109.3	108.5	107.5	105.4	103.2	101.7
PNDB			120.5	121.0	120.6	119.3	117.9	115.8	113.0	112.4
PNLT			120.5	121.0	120.6	119.3	117.9	116.9	113.0	112.4

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )								
		10.	20.	30.	40.	50.	60.	70.	80.	0. 0
NO EGA	50									
	63									
	80									
	100									
NFA	3633. RPM	125	64.7	67.1	70.4	70.1	73.0	74.8	76.0	76.6
( 380. RAD/SEC)	200		63.4	65.6	69.3	70.4	71.0	72.7	74.0	74.0
NFK	3545. RPM	250	59.2	64.1	70.5	70.3	70.1	71.7	70.3	70.3
( 371. RAD/SEC)	315		59.2	67.2	68.8	70.0	71.0	69.8	69.1	70.3
NFD	3644. RPM	400	63.6	69.5	71.4	72.2	72.6	71.9	72.0	72.4
( 382. RAD/SEC)	500		65.1	69.6	72.7	73.3	73.2	71.3	70.9	73.9
NO. OF BLADES	28	630	65.1	70.3	73.9	76.6	76.3	76.4	75.3	75.3
FREQ. SHIFT	800		66.0	72.8	77.6	79.4	77.8	75.0	74.0	73.1
JET	5	1000	68.4	76.2	78.4	79.4	79.4	77.2	74.4	73.5
FAN	6	1250	67.0	74.7	77.8	78.6	78.7	77.0	75.7	74.0
CRITICAL FREQ	1600		64.3	73.6	78.2	78.2	80.8	80.1	76.8	77.2
0.	2000		62.3	70.6	78.5	80.6	80.7	79.7	78.3	76.2
AIRFLOW RATIO	2500		60.5	72.2	78.6	80.2	81.4	80.9	80.1	77.0
WF/WM 11.43	3150		60.3	74.0	78.4	81.6	83.6	82.1	80.7	79.3
FAN TIP SPEED	4000		56.4	69.2	76.0	79.5	79.5	79.5	77.0	74.1
1126. FT/SEC	5000		52.3	65.6	72.6	76.2	76.2	76.3	73.8	70.9
	6300		46.3	61.1	68.6	72.4	72.6	72.7	70.3	67.4
	8000		39.0	55.9	64.1	68.2	68.6	68.8	66.5	63.6
	10000		29.8	49.8	58.9	63.5	64.2	64.6	62.3	59.5
OVERALL CALCULATED			76.1	83.6	88.1	89.9	90.5	89.7	88.3	87.2
PNDB			85.0	95.9	100.7	103.3	104.4	103.5	102.0	100.6
PNLT			85.0	97.0	100.7	103.3	105.4	104.6	102.0	101.9

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MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4 M)	80										
	100										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	V0=40, A=15,	200									
DATE	9/28/78	250									
RUN	BFH/W/R C/LT	315									
TAPE	049040	400	91.5	91.2	91.2	86.8	89.4	87.0	89.4	88.0	
BAR	29.9 HG	500	89.9	91.5	90.3	86.0	87.3	87.8	89.2	87.0	
(XXXXX N/M2)	630	88.4	88.3	87.7	86.9	86.4	86.5	85.0	85.8		
TAMB	87. DEG F	800	88.2	88.6	86.3	86.6	87.3	86.1	86.4	86.1	
(304. DEG K)	1000	88.5	90.1	88.0	85.4	84.4	85.9	85.4	84.2		
TWET	69. DEG F	1250	94.0	92.0	90.3	88.2	88.0	87.1	87.2	88.6	
(294. DEG K)	1800	96.8	92.3	91.1	90.1	89.8	87.7	87.2	87.5		
HACT	12.50 GM/M3	2000	95.5	94.7	95.8	93.7	92.8	91.0	91.5	89.1	
(.01250 KG/M3)	2500	95.4	96.4	96.4	93.7	93.1	90.5	88.7	88.7		
NFA	12647. RPM	3150	97.8	99.2	97.2	96.0	93.0	92.2	90.5	88.7	
(1324. RAD/SEC)	4000	98.5	97.9	97.7	96.2	94.8	92.8	90.0	88.5		
NFK	12319. RPM	5000	98.5	98.3	98.0	95.9	94.8	92.0	89.9	88.0	
(1290. RAD/SEC)	6300	97.3	98.1	99.2	98.4	99.4	99.9	96.1	91.2		
NFD	12320. RPM	8000	95.8	96.4	97.4	98.7	97.9	96.2	95.2	92.8	
(1290. RAD/SEC)	10000	94.7	97.4	99.5	99.8	100.7	99.4	96.8	94.8		
NO. OF BLADES	28	12500	96.5	98.5	100.4	100.8	100.0	99.2	99.4	96.5	
FAN TIP SPEED	16000	93.8	97.0	98.2	98.2	97.2	95.1	93.8	90.7		
1159. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.6	108.1	108.6	108.0	107.6	106.5	105.1	102.8		
PNOB		120.0	120.3	119.6	118.3	118.4	117.9	115.4	112.5		
PNLT		120.0	120.3	119.6	118.3	118.9	119.0	116.6	112.5		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100										
NFA	3741. RPM	125	62.1	67.9	71.2	69.0	73.1	71.8	74.9	73.9	
( 392. RAD/SEC)	160	60.5	68.1	70.3	68.2	71.0	72.6	74.7	72.9		
NFK	3644. RPM	250	58.9	64.9	67.7	69.1	70.2	71.3	70.5	71.8	
( 381. RAD/SEC)	315	58.8	66.6	67.9	67.5	68.1	70.6	70.9	70.1		
NFD	3644. RPM	400	64.1	68.4	70.1	70.3	71.8	71.8	72.6	74.4	
( 382. RAD/SEC)	500	66.5	68.6	70.9	72.1	73.2	72.4	72.6	73.3		
NO. OF BLADES	28	630	65.1	70.9	75.5	75.7	76.3	75.6	76.9	74.9	
FREQ. SHIFT	800	64.7	72.4	76.0	75.6	76.6	75.1	74.1	74.5		
JET	5	1000	66.7	75.0	76.7	77.8	76.4	76.8	75.8	74.4	
FAN	6	1250	66.9	73.9	77.3	77.9	78.1	77.3	75.2	74.2	
CRITICAL FREQ	1600	65.0	73.3	78.3	79.9	82.8	84.2	81.2	76.7		
0.	2000	62.5	71.3	76.3	80.1	81.0	80.5	80.2	78.3		
AIRFLOW RATIO	2500	60.5	71.7	78.0	80.7	83.5	83.4	81.6	80.1		
WF/WM 11.43	3150	60.9	72.1	78.4	81.5	82.6	83.0	84.0	81.6		
FAN TIP SPEED	4000	56.3	69.8	75.7	78.8	79.5	78.7	78.2	75.6		
1159. FT/SEC	5000	52.2	66.2	72.3	75.3	76.2	75.5	75.0	72.4		
	6300	48.2	61.7	68.3	71.5	72.6	71.9	71.5	68.9		
	8000	38.9	56.5	63.8	67.3	68.6	68.0	67.7	65.1		
	10000	29.7	50.4	58.6	62.8	64.2	63.8	63.5	61.0		
OVERALL CALCULATED		75.5	83.1	87.4	89.3	90.7	90.8	90.2	88.3		
PNOB		85.0	95.0	100.3	102.8	104.0	104.1	104.3	102.3		
PNLT		85.0	95.0	100.3	102.8	105.0	105.9	105.7	103.5		

MODEL FOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
NO EGA	60									
RADIAL 12. FT.	80									
( 4. M)	100									
VEHICLE	JT15RD	125								
CONFIG	40X00	160								
LOC	VO=00, A=0,	200								
DATE	972578	300								
RUN	DFH/W/R C/LT	313								
TAPE	050013	400	94.0	92.2	87.8	86.2	85.3	67.7	84.9	
BAR	30.0 HG	500	91.5	89.9	90.9	86.8	83.6	68.4	86.8	
(***** N/N2)	630	88.2	88.6	89.8	85.4	78.8	68.6	87.0		
TAMB	91. DEG F	800	87.1	88.8	88.2	84.2	86.1	85.4	80.9	
(306. DEG K)	1000	89.8	91.4	88.0	87.0	84.7	84.9	84.1		
TWET	72. DEG F	1250	94.2	93.5	93.4	89.6	87.9	86.9	84.7	
(295. DEG K)	1600	95.5	92.7	93.5	92.4	91.1	88.6	87.8		
HACT13.98 CM/H3	2000	97.8	94.9	97.1	94.7	92.9	88.2	89.6		
(.01398 KG/H3)	2500	97.0	97.5	97.9	95.6	94.0	89.1	88.6		
NFA 11479. RPM	3150	100.5	101.1	98.2	96.2	95.0	90.0	88.2		
(1202. RAD/SEC)	4000	100.8	100.0	100.4	98.8	94.7	89.5	87.0		
NFK 11140. RPM	5000	100.6	99.0	99.5	97.4	95.2	89.1	86.9		
(1166. RAD/SEC)	6000	97.8	98.4	100.7	96.8	93.8	88.7	85.8		
NFD 12320. RPM	8000	96.1	98.2	98.8	99.9	98.7	94.4	89.9		
(1290. RAD/SEC)	10000	97.9	98.6	99.2	100.5	99.7	95.9	90.9		
NO. OF BLADES	28	12500	98.2	99.8	101.5	101.3	102.5	98.6	90.8	
FAN TIP SPEED	16000	98.5	99.1	98.8	100.1	98.9	94.5	87.6		
1052. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		109.4	108.5	110.0	106.8	107.9	103.0	89.7		
PND8		121.8	121.8	121.6	118.9	117.1	112.2	110.5		
PNL7		121.8	121.8	121.6	118.9	118.4	115.3	112.3		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
NO EGA	60									
	63									
	80									
	100									
NFA 3395. RPM	160	64.6	68.9	67.8	70.4	69.0	52.5	70.4		
( 355. RAD/SEC)	200	62.1	66.5	70.9	69.0	67.3	53.2	54.4		
NFK 3295. RPM	250	58.7	65.2	69.6	67.6	63.6	51.3	52.5		
( 315. RAD/SEC)	315	57.5	60.4	68.2	68.1	69.8	70.2	66.4		
NFD 3034. RPM	400	50.1	67.9	67.9	69.1	68.4	69.6	68.6		
( 382. RAD/SEC)	500	64.3	69.3	73.2	71.7	71.5	71.6	70.1		
NO. OF BLADES	28	600	66.7	68.0	73.6	74.4	74.7	73.3	73.2	
FREQ. SHIFT	300	67.4	71.1	76.8	76.7	76.4	72.8	75.0		
JET	5	1000	66.3	73.5	77.5	78.5	77.5	73.7	74.0	
FAN	5	1250	69.4	77.0	78.7	78.0	78.4	74.6	73.5	
CRITICAL FREQ.	1600	69.2	75.6	79.7	78.5	78.0	74.0	72.2		
0.	2000	65.3	74.2	78.6	75.9	74.4	71.4	72.3		
AIRFLOW RATIO	2300	64.4	74.2	79.5	78.1	76.3	71.9	70.7		
WF/WN 11.13	3150	61.9	73.5	78.3	81.0	81.5	78.4	71.7		
FAN TIP SPEED	16000	62.2	72.1	77.1	81.2	82.2	79.0	73.4		
1052. FT/SEC	3000	57.9	71.4	76.0	80.2	81.0	77.3	71.9		
	6000	52.0	66.9	72.0	76.4	77.3	74.3	68.3		
	8000	44.7	61.7	67.5	72.3	73.4	70.5	64.6		
	10000	35.5	56.5	62.3	67.5	68.9	66.2	60.4		
OVERALL CALCULATED		77.6	84.6	88.9	90.2	90.9	87.3	84.6		
PND3		97.4	96.3	101.6	103.6	103.2	101.0	97.7		
PNL7		87.4	95.3	101.6	103.6	106.3	102.7	88.6		

		MODEL SOUND PRESSURE LEVELS								
		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
		FREQ. (0.17)	(0.35)	(0.62)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
	NO EGA	50								
	PARTIAL 12. FT.	63								
	( 4. M)	80								
	VEHICLE JT 500	100								
	CONFIG 40730	125								
	LOC VORON 1A0	150								
	DATE 9/23/78	250								
	RUN DEF M/D 3/1T	315								
	TAPE 050020	400	96.0	91.7	86.0	89.0	88.4	69.2	84.0	
	BAR 30.0 HG	500	91.8	90.7	87.9	90.5	81.7	68.0	69.0	
	(44444 N/M/D)	630	91.9	90.7	89.9	86.8	83.1	68.3	67.7	
	TAMP 31. DEG F	700	88.6	91.0	88.9	81.7	87.5	82.0	82.8	
	(306. DEG K)	1000	91.1	91.9	87.9	86.5	87.0	83.9	84.4	
	TWET 72. DEG F	1250	94.2	93.4	92.3	89.6	88.6	87.3	84.9	
	(295. DEG K)	1500	95.5	94.3	93.4	89.9	90.5	86.2	86.5	
	HACT 13.92 CM/H3	2000	95.8	95.4	95.4	91.8	92.8	89.6	87.0	
	(.01108 KG/H3)	2500	95.3	98.2	97.8	97.3	93.7	90.2	86.3	
	NFA 11975 RPM	3150	99.9	100.7	99.5	96.9	94.1	89.6	88.0	
	(1243. RAD/SEC)	4000	99.2	100.6	100.2	97.8	92.6	89.7	86.9	
	NFK 11825 RPM	5000	99.3	100.0	99.7	90.7	97.4	90.2	85.6	
	(1207. RAD/SEC)	6100	97.4	98.3	98.6	97.2	93.7	90.0	85.1	
	NFD 12220 RPM	8000	95.6	98.2	100.8	93.0	98.1	93.9	88.2	
	(1290. RAD/SEC)	10000	98.0	99.5	100.9	100.3	99.9	96.8	89.2	
	NO. OF BLADES 33	12500	98.8	100.8	101.1	101.7	100.4	95.7	87.6	
	FAN TIP SPEED	16000	97.3	99.7	99.2	99.6	97.3	94.1	84.3	
	1089. FT/SEC	20000								
	OVERALL MEASURED									
	OVERALL CALCULATED		100.2	110.0	109.9	109.1	107.3	103.2	95.2	
	FNDB		121.4	121.9	121.4	120.0	117.7	112.3	109.9	
	PNLT		121.4	121.9	121.4	120.0	119.1	114.6	112.1	

		FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA								
		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
		FREQ. (0.17)	(0.35)	(0.62)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
	NO EGA	50								
		63								
		80								
		100								
	NFA 3512 RPM	125	66.6	68.4	66.0	71.2	72.1	54.0	69.5	
	( 368. RAD/SEC)	160	65.4	67.3	67.9	72.7	65.4	52.8	54.5	
		200	62.4	67.3	69.9	71.0	66.9	53.1	53.2	
	L/R 3409 RPM	250	69.0	67.6	68.9	63.9	71.2	67.7	68.3	
	( 357. RAD/SEC)	315	61.4	67.1	67.7	68.6	70.7	63.6	69.8	
	NFD 3014 RPM	400	64.5	67.1	72.1	71.7	72.2	72.5	70.3	
	( 302. RAD/SEC)	500	63.4	70.6	73.2	71.9	74.1	72.9	71.9	
	NO. OF BLADES 33	630	63.4	72.6	75.1	75.3	76.3	74.2	73.2	
	INLET SHIFT	800	67.6	74.2	77.4	79.2	77.2	74.8	71.7	
	JET 5	1000	68.8	76.6	79.0	78.7	77.5	74.2	73.3	
	FAN 5	1250	67.6	76.2	79.5	79.5	75.9	74.2	72.1	
	CRITICAL FREQ.	1600	67.0	75.2	78.8	81.2	80.6	74.5	70.7	
	0.	2000	64.2	73.6	77.4	78.5	76.7	74.2	70.0	
	AIRFLOW RATIO	2500	62.4	72.5	79.3	80.0	80.9	77.9	73.0	
	MEAN 11.40	3150	62.3	73.0	78.8	81.2	82.4	80.5	73.7	
	FAN TIP SPEED	4000	61.2	73.5	78.5	82.0	82.6	79.2	71.9	
	1089. FT/SEC	5000	59.7	72.0	76.4	79.7	79.4	77.5	68.6	
		6000	52.8	67.5	72.4	75.9	75.7	73.9	65.0	
		8000	43.5	62.3	67.9	71.8	71.6	70.1	61.3	
		10000	36.3	56.1	62.7	67.1	67.3	65.8	57.1	
	OVERALL CALCULATED		77.3	85.1	86.3	90.5	90.3	87.5	83.4	
	FNDB		87.1	97.1	101.5	103.9	104.0	101.5	96.1	
	PNLT		87.1	97.1	101.5	103.9	105.5	102.6	97.2	

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT5RD	125										
CONFIG 40000	150										
LOC VC-00 ASD,	200										
DATE 9/28/78	250										
RUN BFH/W/R 3/LT	315										
TAPE 050050	400	92.9	91.6	89.4	89.5	91.0	78.1	86.0			
DAR 30.0 HG	500	89.4	89.5	89.8	88.3	86.8	68.4	70.3			
(***** N/M2)	530	90.2	90.8	90.1	85.8	85.5	63.0	68.2			
TAMB 91. DEG F	800	90.4	89.8	86.3	88.1	85.9	84.8	84.7			
(306. DEG K)	1000	90.9	89.4	88.8	85.2	83.2	84.0	81.5			
TWET 72. DEG F	1250	95.4	91.8	90.6	91.2	87.3	86.5	86.7			
(235. DEG K)	1600	97.0	93.1	91.8	91.1	89.7	88.2	86.7			
HACT13.98 GM/H3	2000	95.6	94.1	93.8	95.6	93.5	91.7	89.3			
(.01398 KG/H3)	2500	97.0	97.6	98.6	98.6	94.2	92.0	87.3			
NFA 12349. RPM	3150	98.8	100.8	100.8	98.4	95.2	91.2	88.6			
(1293. RAD/SEC)	4000	100.4	100.0	99.7	97.0	93.4	90.8	87.0			
NFK 11935. RPM	5000	99.2	99.7	98.3	97.6	95.3	91.1	85.4			
(1255. RAD/SEC)	6300	98.5	98.2	99.8	98.2	97.0	94.1	90.8			
NFD 12330. RPM	8000	97.2	97.8	99.5	98.9	97.8	94.0	90.1			
(1290. RAD/SEC)	10000	96.9	99.1	99.9	100.5	99.7	97.0	89.7			
NO. OF BLADES 28	12500	98.2	100.6	101.2	101.0	100.4	98.2	89.3			
FAN TIP SPEED 16000	16000	96.3	98.5	98.9	99.4	98.1	95.0	86.6			
1132. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		109.9	109.4	109.7	109.1	107.5	104.6	99.6			
PNDB		121.5	121.5	121.5	120.0	117.4	114.1	110.9			
PNLT		121.5	121.5	121.5	121.0	117.4	117.0	114.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
	100										
	125	63.5	68.3	69.4	71.7	74.7	62.9	71.5			
NFA 3653. RPM	160	60.0	66.1	69.8	70.5	70.5	53.2	55.8			
( 382. RAD/SEC)	200	60.7	67.4	70.1	68.0	69.3	52.8	53.7			
NFK 3545. RPM	250	60.8	66.4	66.3	70.3	69.6	69.6	70.2			
( 371. RAD/SEC)	315	61.2	65.9	68.7	67.3	66.9	68.7	67.0			
NFD 3644. RPM	400	65.5	68.2	70.4	73.3	71.4	71.2	72.1			
( 382. RAD/SEC)	500	66.9	69.4	71.6	73.1	73.3	72.9	72.1			
NO. OF BLADES 28	630	65.2	70.3	73.5	77.6	77.0	76.3	74.7			
FREQ. SHIFT	800	66.3	73.6	78.2	80.5	77.7	76.6	72.7			
JET 5	1000	67.7	76.7	80.3	80.2	78.6	75.8	73.9			
FAN 6	1250	68.8	75.6	79.0	79.3	78.7	75.6	72.2			
CRITICAL FREQ.	1600	66.2	73.4	78.9	79.7	80.2	78.4	75.9			
0.	2000	64.1	72.7	78.4	80.3	80.9	78.3	75.1			
AIRFLOW RATIO	2500	62.7	73.4	78.4	81.6	82.5	81.0	74.5			
WF/WM 11.43	3150	62.6	74.3	79.3	81.8	83.0	82.1	74.0			
FAN TIP SPEED	4000	58.9	71.3	76.5	79.8	80.4	78.6	71.1			
1132. FT/SEC	5000	54.7	67.8	73.1	76.5	77.2	75.4	67.9			
	6300	48.8	63.3	69.1	72.7	73.5	71.8	64.3			
	8000	41.5	56.1	64.6	68.6	69.6	68.0	50.6			
	10000	32.3	51.9	59.4	63.9	65.1	63.7	56.4			
OVERALL CALCULATED		76.8	84.3	88.6	90.5	90.6	88.9	84.8			
PNDB		86.7	96.6	101.2	103.6	104.3	102.7	96.8			
PNLT		86.7	96.6	101.2	104.1	104.3	104.2	98.5			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LOC VO=80, A=0,	160										
DATE 9/28/78	200										
	250										
RUN BFH/W/R C/LT	315										
TAPE 050080	400	90.3	90.5	89.9	87.1	86.0	69.4	87.9			
BAR 29.9 HG	500	89.0	86.8	89.1	89.2	68.6	83.4	69.7			
( ***** N/M2)	630	88.2	88.1	89.1	87.8	67.4	89.2	88.2			
TAMB 94. DEG F	800	89.7	88.4	88.6	88.9	85.2	85.2	86.5			
(308. DEG K)	1000	89.9	90.8	88.4	87.3	82.9	84.2	85.5			
TWET 75. DEG F	1250	94.8	93.8	92.7	89.9	88.1	86.4	86.9			
(297. DEG K)	1600	95.8	94.9	92.8	89.6	88.7	86.8	86.3			
HACT15.93 GM/M3	2000	95.9	94.3	96.6	93.6	93.0	91.2	90.8			
(.01593 KG/M3)	2500	96.1	96.4	98.0	94.8	93.2	90.1	87.2			
NFA 12729. RPM	3150	98.6	98.9	97.8	97.1	94.8	90.3	89.4			
(1333. RAD/SEC)	4000	100.4	99.1	98.4	96.7	95.0	91.9	88.5			
NFK 12320. RPM	5000	98.5	100.8	99.3	97.2	93.9	90.5	87.4			
(1290. RAD/SEC)	6300	97.9	101.1	100.9	99.6	99.9	99.1	93.2			
NFD 12320. RPM	8000	96.8	98.0	98.3	99.4	99.5	97.8	91.0			
(1290. RAD/SEC)	10000	96.8	98.7	99.5	100.4	101.3	101.1	93.6			
NO. OF BLADES 28	12500	98.4	100.5	100.9	100.1	101.1	100.7	92.7			
FAN TIP SPEED 16000	20000	95.2	98.1	98.6	98.2	96.6	96.1	86.9			
1167. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.5	109.5	109.4	108.5	108.1	107.1	101.5			
PNDB		121.1	121.1	120.7	119.3	118.3	116.9	112.7			
PNLT		121.1	121.1	120.7	119.3	121.7	121.6	116.0			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100										
NFA 3765. RPM	125	60.9 <sup>a</sup>	67.2	69.9	69.3	69.7	54.2	73.4			
( 394. RAD/SEC)	200	58.7	64.7	69.1	70.0	51.2	54.0	53.7			
NEK 3644. RPM	250	60.1	65.0	68.6	71.1	68.9	70.0	72.0			
( 382. RAD/SEC)	315	60.2	67.1	68.3	69.4	66.6	68.9	71.0			
NFD 3644. RPM	400	64.9	70.2	72.5	72.0	71.7	71.1	72.3			
( 382. RAD/SEC)	500	65.7	71.2	72.6	71.6	72.3	71.5	71.7			
NO. OF BLADES 28	630	65.5	70.5	76.3	75.6	76.5	75.8	76.2			
FREQ. SHIFT	800	65.4	72.5	77.6	76.7	76.7	74.7	72.6			
JET 5	1000	67.5	74.8	77.3	78.9	78.2	74.9	74.7			
FAN 6	1250	68.8	76.4	78.6	78.9	78.3	76.4	73.7			
CRITICAL FREQ	1600	66.1	76.3	80.0	81.1	83.1	83.4	78.3			
O.	2000	63.7	72.9	77.2	80.8	82.6	82.1	76.0			
AIRFLOW RATIO	2500	62.6	73.1	78.0	81.5	84.2	85.2	78.5			
WF/WM 11.43	3150	62.8	74.2	79.0	80.9	83.7	84.6	77.4			
FAN TIP SPEED	4000	57.7	70.9	76.1	78.6	78.9	79.7	71.3			
1167. FT/SEC	5000	53.6	67.3	72.7	75.3	75.6	76.5	68.1			
	6300	47.7	62.8	68.7	71.5	72.0	72.9	64.6			
	8000	40.4	57.7	64.2	67.3	68.0	69.0	60.8			
	10000	31.1	51.5	59.1	62.6	63.6	64.8	56.7			
OVERALL CALCULATED		76.4	84.4	88.2	89.8	91.1	91.3	86.6			
PNDB		86.4	96.5	101.0	102.9	104.4	104.8	99.1			
PNLT		86.4	96.5	101.0	102.9	106.0	107.2	100.7			



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
		50									
	NO EGA	63									
	RADIAL 12. FT.	80									
	( 4 M)	100									
<hr/>											
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VO=80, A=15,	200									
DATE	9/28/78	250									
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RUN	BFH/W/R C/LT	315									
TAPE	052010	400	93.7	92.9	92.4	86.6	87.7	83.8	87.9	67.2	
3AR	29.9 HG	500	93.6	92.9	91.6	85.4	80.5	69.4	82.4	71.9	
	(XXXXXX N/M2)	630	93.3	94.0	91.1	87.4	86.3	69.1	66.4	81.7	
<hr/>											
TAMB	99. DEG F	800	92.7	90.2	89.0	87.0	86.7	83.9	84.9	82.6	
	(310. DEG K)	1000	87.8	89.5	89.9	86.8	84.2	84.0	83.0	83.8	
TWET	78. DEG F	1250	93.5	93.8	92.7	91.8	88.9	87.8	83.6	85.0	
	(299. DEG K)	1600	98.3	95.0	94.9	93.3	91.2	88.5	87.2	87.2	
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HACT	17.45 GM/M3	2000	97.5	96.0	96.0	94.4	93.7	91.5	88.0	88.1	
	(.01745 KG/M3)	2500	99.8	97.9	100.1	96.1	96.0	92.7	87.2	85.3	
NFA	11562. RPM	3150	99.5	101.3	101.7	96.4	94.3	92.9	88.2	86.5	
	(1211. RAD/SEC)	4000	98.6	101.2	100.1	97.0	94.3	91.8	88.0	85.7	
NFK	11140. RPM	5000	99.1	98.7	99.2	96.9	96.0	91.5	89.5	84.0	
	(1166. RAD/SEC)	6300	95.2	98.9	98.5	97.2	95.1	91.4	87.1	85.2	
NFD	12320. RPM	8000	95.3	98.6	99.4	99.3	98.2	95.4	91.8	87.7	
	(1290. RAD/SEC)	10000	96.0	98.2	100.3	99.8	99.1	96.8	93.3	88.3	
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NO. OF BLADES	28	12500	94.8	99.3	101.0	100.8	102.2	98.5	92.0	87.9	
FAN TIP SPEED	16000	20000	92.9	98.7	99.1	98.7	98.2	96.6	90.3	84.2	
1060. FT/SEC	20000										
<hr/>											
OVERALL MEASURED											
OVERALL CALCULATED		108.7	109.8	110.3	108.5	107.9	105.0	100.9	97.8		
PNDB		121.2	122.2	122.5	119.0	117.4	114.7	111.3	109.0		
PNLT		122.5	122.2	122.5	119.0	117.4	117.1	114.7	110.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
		50									
	NO EGA	63									
		80									
		100									
<hr/>											
NFA	3420. RPM	160	64.3	69.6	72.4	68.8	71.4	68.6	73.4	53.1	
	( 358. RAD/SEC)	200	64.2	69.5	71.6	67.6	64.2	54.2	67.9	57.8	
NFK	3295. RPM	250	63.8	70.6	71.1	69.6	70.1	53.9	51.9	67.7	
	( 345. RAD/SEC)	315	63.1	66.8	69.0	69.2	70.4	68.7	70.4	68.5	
NFD	3644. RPM	400	58.1	66.0	69.8	68.9	67.9	68.7	68.5	69.7	
	( 382. RAD/SEC)	500	63.6	70.2	72.5	73.9	72.5	72.5	69.0	70.9	
NO. OF BLADES	28	630	68.2	71.3	74.7	75.3	74.8	73.2	72.6	73.0	
		630	67.1	72.2	75.7	76.4	77.2	76.1	73.4	73.9	
<hr/>											
FREQ. SHIFT	800	69.2	74.0	79.7	78.0	79.5	77.3	72.6	71.1		
JET	5	1000	68.4	77.2	81.2	78.2	77.7	77.5	73.5	72.2	
FAN	5	1250	67.0	76.8	79.4	78.7	77.7	76.3	73.2	71.4	
CRITICAL FREQ	1600	66.8	73.9	78.3	78.4	79.2	75.9	74.5	69.5		
0.	2000	62.0	73.7	77.3	78.5	78.1	75.6	72.0	70.6		
AIRFLOW RATIO	2500	61.1	72.9	77.9	80.4	81.0	79.4	76.6	73.0		
WF/WM 11.43	3150	60.3	71.8	78.3	80.5	81.7	80.6	77.9	73.4		
FAN TIP SPEED	4000	57.2	71.9	78.4	81.0	84.4	82.0	76.3	72.7		
1060. FT/SEC	5000	54.3	70.9	76.2	78.8	80.2	80.0	74.5	68.9		
	6300	48.3	66.4	72.2	75.0	76.6	76.4	71.0	65.4		
	8000	41.1	61.2	67.7	70.8	72.6	72.5	67.2	61.7		
	10000	31.8	55.1	62.5	66.1	68.2	68.3	63.0	57.6		
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OVERALL CALCULATED		77.4	85.1	89.3	89.8	90.9	89.3	86.0	83.4		
PNDB		86.3	96.3	101.5	103.2	105.1	103.2	99.6	96.0		
PNLT		87.7	96.3	101.5	103.2	106.2	104.4	101.3	96.7		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=80,A=15,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 052020	400	92.2	92.9	89.8	88.5	89.9	88.3	89.5	85.6		
BAR 29.9 HG	500	91.0	91.0	89.1	89.5	69.4	69.2	83.6	85.0		
(***** N/M2)	630	91.0	91.8	89.5	89.1	75.6	68.9	87.0	78.5		
TAMB 99. DEG F	800	89.8	90.5	87.9	87.5	87.0	84.9	85.8	86.3		
(310. DEG K)	1000	88.9	89.7	88.7	87.7	86.8	82.0	84.6	82.3		
TWET 78. DEG F	1250	94.7	92.9	92.0	88.7	89.7	85.9	85.9	85.2		
(299. DEG K)	1600	96.1	94.6	93.5	91.0	89.1	87.4	87.2	87.0		
HACT17.45 GM/M3	2000	96.1	94.3	96.5	94.9	93.2	90.2	89.6	91.1		
(.01745 KG/M3)	2500	96.8	97.6	98.0	96.3	94.5	88.9	88.0	86.7		
NFA 12439. RPM	3150	98.8	100.9	98.8	97.3	95.6	92.9	88.5	85.8		
(1302. RAD/SEC)	4000	99.2	99.8	99.7	97.7	94.7	91.4	89.1	86.3		
NFK 11985. RPM	5000	97.9	98.5	98.8	97.9	95.5	91.3	86.2	85.6		
(1255. RAD/SEC)	6300	95.5	98.2	99.3	96.8	97.0	96.3	92.3	88.0		
NFD 12320. RPM	8000	95.0	97.1	98.6	99.4	98.2	95.2	91.6	89.1		
(1290. RAD/SEC)	10000	94.0	97.7	99.0	99.4	99.1	96.7	92.5	88.6		
NO. OF BLADES 28	12500	93.4	99.0	100.3	100.3	99.5	97.3	92.9	88.5		
FAN TIP SPEED 16000		92.4	96.7	98.3	98.2	97.3	93.6	90.3	85.6		
1140. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.6	109.0	109.3	108.5	107.2	104.6	101.7	99.2		
PNDB		120.4	121.6	121.0	119.5	117.5	115.2	112.7	110.6		
PNLT		120.4	121.6	121.0	119.5	119.5	118.3	113.2	112.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
NFA 3679. RPM	125	62.8	69.6	69.8	70.7	73.6	73.1	75.0	71.5		
( 385. RAD/SEC)	200	61.5	67.6	69.1	71.7	53.1	54.0	69.1	70.9		
NFK 3545. RPM	250	60.2	67.1	67.9	69.7	70.7	69.7	71.3	72.2		
( 371. RAD/SEC)	315	59.2	66.2	68.6	69.8	70.5	66.7	70.1	68.2		
NFD 3644. RPM	400	64.8	69.3	71.8	70.8	73.3	70.6	71.3	71.1		
( 382. RAD/SEC)	500	66.0	70.9	73.3	73.0	72.7	72.1	72.6	72.8		
NO. OF BLADES 28	630	65.7	70.5	76.2	76.9	76.7	74.8	75.0	76.9		
FREQ. SHIFT	800	66.2	73.7	77.6	78.2	78.0	73.5	73.4	72.5		
JET 5	1000	67.7	76.8	78.3	79.1	79.0	77.5	73.8	71.5		
FAN 6	1250	67.6	75.4	79.0	79.6	78.9	75.9	74.3	72.0		
CRITICAL FREQ.	1600	64.9	73.4	78.4	78.3	80.2	60.6	77.4	73.5		
0.	2000	62.0	72.0	77.5	80.8	81.3	79.5	76.6	74.6		
AIRFLOW RATIO	2500	59.8	72.1	77.5	80.5	82.0	80.8	77.4	74.0		
WF/WM 11.43	3150	57.8	72.7	78.4	81.1	82.1	81.2	77.6	73.7		
FAN TIP SPEED	4000	54.9	69.5	75.8	78.6	79.6	77.2	74.7	70.5		
1140. FT/SEC	5000	50.8	65.9	72.4	75.3	76.3	74.0	71.5	67.3		
	6300	44.8	61.4	68.4	71.5	72.7	70.4	68.0	63.8		
	8000	37.6	56.2	63.9	67.3	68.7	66.5	64.2	60.1		
	10000	28.3	50.1	58.7	62.6	64.3	62.3	60.0	56.0		
OVERALL CALCULATED		76.0	84.1	88.1	89.7	90.3	88.8	86.9	84.9		
PNDB		84.6	95.6	100.6	102.9	103.6	102.2	99.9	96.7		
PNLT		84.6	95.6	100.6	102.9	104.6	103.7	99.9	98.1		

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	150										
LOC VO=80,A=15,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 052030	400	91.4	89.9	90.5	90.5	90.3	90.5	89.7	87.3		
BAR 29.9 HG	500	89.9	86.5	89.3	89.6	81.3	85.8	88.0	83.6		
(***** N/M2)	630	90.2	88.4	87.1	84.4	68.0	80.4	85.5	81.2		
TAMB 99. DEG F	800	89.1	90.0	87.6	90.0	82.0	83.9	85.4	86.6		
(310. DEG K)	1000	90.8	89.5	89.9	86.4	83.4	85.7	83.3	82.8		
TWET 98. DEG F	1250	94.4	91.8	92.7	90.9	89.2	88.1	87.7	87.9		
(310. DEG K)	1600	95.4	93.7	92.3	89.9	89.4	88.0	88.5	85.8		
HACT42.77 GM/M3	2000	95.2	95.2	97.4	94.2	92.3	91.3	88.9	90.5		
(.04277 KG/M3)	2500	96.8	95.9	98.5	95.9	92.7	90.8	87.5	87.5		
NFA 12775. RPM	3150	99.2	100.7	98.5	100.4	98.1	97.4	92.1	91.4		
(1338. RAD/SEC)	4000	96.6	99.6	98.3	96.3	95.1	92.9	88.5	88.2		
NFK 12309. RPM	5000	96.1	99.6	99.6	95.9	96.0	91.5	88.0	86.7		
(1289. RAD/SEC)	6300	98.4	99.4	99.1	100.2	100.2	97.8	95.2	93.4		
NFD 12320. RPM	8000	94.4	96.2	99.1	99.5	98.5	95.8	94.2	91.3		
(1290. RAD/SEC)	10000	94.0	98.0	99.0	98.4	100.0	98.5	95.3	91.4		
NO. OF BLADES 28	12500	95.1	99.7	99.8	99.7	99.9	99.2	95.2	91.1		
FAN TIP SPEED 1171. FT/SEC	20000	92.1	96.1	97.4	97.3	95.6	95.1	91.5	86.2		
OVERALL MEASURED											
OVERALL CALCULATED		107.3	108.9	109.2	108.6	107.9	106.4	103.5	101.3		
PNDP		120.2	121.3	120.6	120.7	118.8	117.7	114.6	113.1		
PNLT		120.7	121.3	120.6	122.3	121.0	119.6	116.0	114.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100										
NFA 3779. RPM	125	62.0	66.6	70.5	72.7	74.0	75.3	75.2	73.2		
( 396. RAD/SEC)	200	60.5	63.1	69.3	71.8	65.0	70.6	73.5	69.5		
NFK 3641. RPM	250	59.5	66.6	67.6	72.2	65.7	68.7	70.9	72.5		
( 381. RAD/SEC)	315	61.1	66.0	69.8	68.5	67.1	70.4	68.8	68.7		
NFD 3644. RPM	400	64.5	68.2	72.5	73.0	72.8	72.8	73.1	73.8		
( 382. RAD/SEC)	500	65.3	70.0	72.1	71.9	73.0	72.7	73.9	71.6		
NO. OF BLADES 28	630	64.8	71.4	77.1	76.2	75.8	75.9	74.3	76.3		
FREQ. SHIFT	800	66.2	72.0	78.1	77.8	76.2	75.4	72.9	73.3		
JET 5	1000	68.1	76.6	78.0	82.2	81.5	82.0	77.4	77.1		
FAN 6	1250	65.0	75.2	78.9	78.0	79.4	77.4	73.7	73.9		
CRITICAL FREQ.	1600	66.1	74.6	78.2	81.7	83.4	82.1	80.3	78.9		
0.	2000	61.3	71.1	78.0	80.9	81.6	80.1	79.2	76.8		
AIRFLOW RATIO	2500	59.8	72.4	77.5	79.5	82.9	82.6	80.2	76.7		
WF/WM 11.43	3150	59.5	73.4	77.9	80.5	82.5	83.0	79.9	76.2		
FAN TIP SPEED	4000	54.6	68.9	74.9	77.7	77.9	78.7	76.0	71.1		
1171. FT/SEC	5000	50.5	65.3	71.5	74.4	74.7	75.5	72.8	67.9		
	6300	44.6	60.8	67.5	70.6	71.0	71.9	69.2	64.4		
	8000	37.3	55.7	63.0	66.4	67.0	68.0	65.4	60.7		
	10000	26.0	49.5	57.9	61.8	62.6	63.8	61.3	56.6		
OVERALL CALCULATED		75.7	83.7	88.0	90.0	90.9	90.7	88.6	86.8		
PNDP		84.9	95.6	100.3	102.6	103.7	104.1	101.7	98.8		
PNLT		84.9	95.6	100.3	104.0	104.9	105.9	103.0	100.1		

		MODEL SOUND PRESSURE LEVELS								
		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	90.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.41)	(1.58)
	NO EGA	50								
	63									
	80									
	100									
	125									
	160									
	200									
	250									
	315									
	400	90.6	76.2	75.7	95.9	88.3	90.3	88.4		
	500	94.1	90.2	74.2	78.5	73.9	91.8	72.7		
	630	95.6	94.3	92.8	90.0	86.5	89.9	88.3		
	800	75.7	93.0	88.6	73.9	83.0	71.8	73.4		
	1000	89.8	87.8	73.6	71.1	72.2	71.0	70.6		
	1250	97.8	95.1	95.2	92.3	88.9	86.1	84.8		
	1600	96.7	96.5	97.2	93.0	91.0	86.4	90.6		
	2000	97.2	96.6	97.6	94.6	92.8	88.5	84.9		
	2500	98.6	99.6	99.8	96.2	94.2	87.3	85.9		
	3150	101.8	102.5	101.0	95.4	84.0	88.1	85.8		
	4000	100.7	101.8	99.4	96.6	92.6	87.7	85.2		
	5000	99.9	100.2	100.5	97.0	94.2	89.7	85.1		
	6300	97.6	99.9	99.1	97.0	91.8	90.1	89.2		
	8000	95.9	98.2	99.9	100.0	97.1	89.1	87.8		
	10000	99.9	100.1	101.2	101.8	99.2	93.7	86.3		
	NO. OF BLADES 28	99.0	102.4	101.3	103.4	100.6	93.6	86.8		
	FAN TIP SPEED									
	16000	96.5	99.9	99.9	100.3	97.8	91.1	82.7		
	20000									
	OVERALL MEASURED									
	OVERALL CALCULATED	110.0	111.0	110.5	109.6	106.5	101.9	98.5		
	PNDB	122.5	123.0	121.9	118.8	115.3	111.8	109.6		
	PNLT	126.1	124.4	125.7	123.4	118.0	114.2	114.7		

		FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA								
		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	90.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.41)	(1.58)
	NO EGA	50								
	63									
	80									
	100									
	125	61.2	52.9	55.7	78.1	72.0	75.1	73.9		
	160	64.7	56.8	54.2	60.7	57.6	76.6	58.2		
	200	66.1	70.9	72.8	72.2	70.3	74.7	73.8		
	250	46.1	69.6	68.6	56.1	66.7	56.6	58.9		
	315	60.1	64.3	53.5	53.2	55.9	55.7	56.1		
	400	67.9	71.5	75.0	74.4	72.5	70.8	70.2		
	500	66.6	72.8	77.0	75.0	74.6	71.1	76.0		
	630	66.8	72.8	77.3	76.6	76.3	73.1	70.3		
	800	67.9	75.6	79.4	78.1	77.7	71.9	71.3		
	1000	70.7	78.3	80.5	77.2	67.4	72.7	71.1		
	1250	69.1	77.4	78.7	78.3	75.9	72.2	70.4		
	1600	67.6	75.4	79.6	78.5	77.4	74.0	70.2		
	2000	64.4	74.7	77.9	76.3	74.8	74.3	74.1		
	2500	61.6	72.4	78.3	81.0	79.8	73.1	72.5		
	3150	64.2	73.7	79.2	82.5	81.7	77.5	70.9		
	4000	61.3	75.0	78.7	83.6	82.7	77.0	71.1		
	5000	57.9	72.2	77.1	80.4	79.9	74.5	67.0		
	6300	52.0	67.7	73.0	76.6	76.2	70.9	63.4		
	8000	44.7	62.5	68.6	72.5	72.2	67.1	59.6		
	10000	35.4	56.3	63.4	67.8	67.8	62.8	55.5		
	OVERALL CALCULATED	78.2	86.0	89.5	90.9	89.6	86.3	83.7		
	PNDB	88.0	98.0	101.8	104.6	103.5	99.4	95.0		
	PNLT	89.8	98.7	103.7	107.0	105.5	100.6	98.5		

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
	50									
	63									
RADIAL	12. FT.									
	( 4, M)									
VEHICLE	JT15RD									
CONFIG	40X80									
LOC	V0=115, A=0,									
DATE	9/28/78									
RUN	BFH/W/R C/LT									
TAPE	053040	400	94.9	77.1	74.7	91.0	87.6	75.1	93.0	
BAR	30.0 HG	500	94.1	88.0	75.3	83.3	74.0	90.1	72.7	
	(***** N/M2)	630	87.6	92.9	74.2	89.0	91.5	88.7	73.0	
TAMB	83. DEG F	800	74.9	94.8	89.0	73.4	92.7	82.4	73.1	
	(301. DEG K)	1000	92.0	93.9	74.3	72.8	84.9	84.5	71.9	
TWET	66. DEG F	1250	92.8	94.7	89.4	89.7	89.2	89.0	86.9	
	(292. DEG K)	1600	96.0	94.2	93.3	86.9	89.6	86.0	83.5	
HACT	11.14 GM/M3	2000	97.5	97.6	97.5	94.5	94.6	91.0	88.5	
	(.01114 KG/M3)	2500	98.7	99.5	100.1	98.4	94.2	88.6	86.4	
NFA	11789. RPM	3150	100.5	102.0	100.8	96.1	91.9	88.5	86.4	
	(1234. RAD/SEC)	4000	101.5	100.8	100.4	96.6	92.7	88.4	85.2	
NFK	11525. RPM	5000	100.2	100.5	99.1	98.0	97.8	92.0	86.5	
	(1207. RAD/SEC)	6300	97.6	98.0	99.5	97.2	92.9	92.6	90.5	
NFD	12320. RPM	8000	97.5	98.6	100.9	99.3	98.6	93.2	83.7	
	(1290. RAD/SEC)	10000	99.2	100.5	101.3	101.3	99.6	95.6	87.1	
NO. OF BLADES	28	12500	99.3	102.8	101.2	102.3	99.9	95.3	86.6	
FAN TIP SPEED	16000		97.4	99.6	99.0	99.4	97.7	93.0	82.3	
	1081. FT/SEC	20000								
OVERALL MEASURED										
OVERALL CALCULATED		109.8	110.8	110.3	109.1	107.4	103.3	99.1		
PNDB		122.2	122.7	121.4	119.0	118.0	113.5	110.2		
PNLT		124.9	122.7	126.4	122.5	122.6	116.2	112.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
	50									
	63									
	80									
	100									
	125	65.5	53.8	54.7	73.2	71.3	59.9	78.5		
NFA	3487. RPM	160	64.7	64.6	55.3	65.5	57.7	74.9	58.2	
	( 365. RAD/SEC)	200	58.1	67.5	54.2	71.2	75.3	73.5	58.5	
NFK	3409. RPM	250	45.3	71.4	69.0	55.6	76.4	67.2	58.6	
	( 357. RAD/SEC)	315	62.3	70.4	54.2	54.9	68.6	69.2	57.4	
NFD	3644. RPM	400	62.9	71.1	69.2	71.8	72.8	73.7	72.3	
	( 380. RAD/SEC)	500	55.9	70.5	73.1	68.9	73.2	70.7	73.9	
NO. OF BLADES	28	630	67.1	73.8	77.2	76.5	78.1	75.6	73.9	
FREQ. SHIFT		800	68.0	75.5	79.7	80.3	77.7	73.4	71.8	
JET	5	1000	69.4	77.8	80.3	77.9	75.3	73.1	71.7	
FAN	5	1250	69.9	76.4	79.7	78.3	76.0	72.9	70.4	
CRITICAL FREQ.		1600	67.9	75.7	78.2	79.5	81.0	76.3	71.6	
	0.	2000	64.4	72.8	78.3	78.5	75.9	76.8	75.4	
AIRFLOW RATIO		2500	63.2	72.8	79.3	80.3	81.3	77.2	68.4	
	WF/WM 11.43	3150	63.5	74.1	79.3	82.0	82.1	79.4	71.7	
FAN TIP SPEED		4000	61.6	75.4	78.6	82.5	82.0	78.7	70.9	
	1081. FT/SEC	5000	58.8	71.9	76.2	79.5	79.8	76.4	66.6	
		6300	52.9	67.4	72.1	75.7	76.1	72.8	63.0	
		8000	45.6	62.2	67.7	71.6	72.1	69.0	59.2	
		10000	36.3	56.0	62.5	66.9	67.7	64.7	55.1	
OVERALL CALCULATED		77.8	85.8	89.2	90.4	90.5	87.6	84.3		
PNDB		87.7	98.1	101.4	103.8	104.0	101.2	95.2		
PNLT		89.0	98.1	103.9	105.6	106.3	102.6	97.0		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=115, A=0,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 053050	400	76.5	75.3	76.4	89.8	90.6	75.9	81.9			
BAR 30.0 HG	500	92.2	84.2	88.4	86.5	74.5	89.8	71.4			
(***** N/(M2)	630	53.4	84.5	90.6	91.9	88.6	79.2	72.7			
TAMB 87. DEG F	800	76.2	89.2	91.1	88.2	90.8	81.1	72.5			
(304. DEG K)	1000	93.0	91.9	72.9	80.2	72.0	83.8	71.0			
TWET 69. DEG F	1250	94.8	91.7	92.3	93.0	82.8	85.6	80.0			
(294. DEG K)	1600	94.2	91.3	92.2	90.8	90.1	70.5	90.0			
HACT12.49 GM/M3	2000	94.3	96.7	96.2	95.4	93.6	90.8	90.9			
(.01249 KG/M3)	2500	98.2	97.6	99.9	97.5	91.1	72.9	87.6			
NFA 12304. RPM	3150	100.1	100.0	100.4	98.5	84.0	89.6	88.8			
(1288. RAD/SEC)	4000	100.4	100.8	99.8	97.6	92.3	88.1	86.3			
NFK 11985. RPM	5000	99.6	100.8	99.5	97.1	94.2	89.6	88.9			
(1255. RAD/SEC)	6300	97.4	98.0	100.7	98.8	98.3	95.4	92.8			
NFD 12320. RPM	8000	96.9	98.6	99.9	100.0	98.2	91.2	89.9			
(1290. RAD/SEC)	10000	96.9	99.6	99.9	100.9	99.6	94.2	92.9			
NO. OF BLADES 28	12500	98.1	102.3	101.4	101.7	100.3	93.9	92.0			
FAN TIP SPEED 16000		95.9	99.6	98.5	99.2	97.4	91.1	94.3			
1128. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.8	109.9	110.1	109.4	107.1	102.2	101.5			
PNDB		121.2	121.4	121.5	120.1	116.9	113.2	111.9			
PNLT		124.3	121.4	124.7	122.6	123.0	119.6	112.8			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
	125	47.1	52.0	56.4	72.0	74.3	60.7	67.4			
NFA 3639. RPM	160	62.8	60.8	68.4	68.7	58.2	74.6	56.9			
( 381. RAD/SEC)	200	63.9	61.1	70.6	74.1	72.4	64.0	58.2			
NFK 3545. RPM	250	46.6	65.8	71.1	70.4	74.5	65.9	59.0			
( 371. RAD/SEC)	315	63.3	68.4	52.8	62.3	55.7	68.5	56.5			
NFD 3644. RPM	400	64.9	68.1	72.1	75.1	66.4	70.3	65.4			
( 382. RAD/SEC)	500	64.1	67.6	72.0	72.8	73.7	55.2	75.4			
NO. OF BLADES 28	630	63.9	72.9	75.9	77.4	77.1	75.4	76.3			
FREQ. SHIFT	800	67.5	73.6	79.5	79.4	74.6	57.5	73.0			
JET 5	1000	69.0	75.8	79.9	80.3	67.4	74.2	74.1			
FAN 6	1250	68.8	76.4	79.1	79.3	77.6	74.1	74.1			
CRITICAL FREQ.	1600	66.1	74.0	79.8	80.3	81.5	79.7	77.9			
0.	2000	63.8	73.5	78.8	81.4	81.3	75.5	74.9			
AIRFLOW RATIO	2500	62.7	73.9	78.4	82.0	82.4	78.2	77.7			
WF/WM 11.43	3150	62.5	75.9	79.4	82.4	82.9	77.7	76.6			
FAN TIP SPEED	4000	58.4	72.4	76.0	79.6	79.7	74.7	78.7			
1128. FT/SEC	5000	54.3	68.8	72.6	76.3	76.4	71.5	75.5			
	6300	48.3	64.3	68.6	72.5	72.8	67.9	72.0			
	8000	41.0	59.1	64.1	68.3	68.8	64.0	68.2			
	10000	31.8	53.0	58.9	63.6	64.4	59.8	64.0			
OVERALL CALCULATED		76.7	84.6	88.8	90.7	90.2	86.5	86.5			
PNDB		86.3	97.4	101.2	104.0	103.7	99.2	100.2			
PNLT		87.8	97.4	102.9	105.2	106.7	105.6	101.3			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA										
	50										
	63										
	80										
	100										
	RADIAL 12. FT.										
	( 4. M)										
	VEHICLE JT15RD										
	125										
	CONFIG 40X80										
	160										
	LOC V0=115, A=0,										
	200										
	DATE 9/28/78										
	250										
	RUN BFH/W/R C/LT										
	315										
	TAPE 053100										
	400	94.4	76.4	75.6	92.6	88.8	76.1	92.1			
	BAR 30.0 HG										
	500	91.0	86.8	73.3	74.6	73.9	88.5	86.6			
	(***** N/M2)										
	630	85.4	93.8	86.1	83.0	90.8	84.2	86.1			
	TAMB 90. DEG F										
	800	76.2	90.8	91.9	73.7	92.8	87.2	73.4			
	(305. DEG K)										
	1000	90.4	89.9	87.2	71.9	84.9	86.0	69.8			
	TWET 73. DEG F										
	1250	96.1	91.7	91.3	88.6	84.3	88.5	88.0			
	(296. DEG K)										
	1600	94.8	93.1	91.3	89.3	87.6	87.4	87.5			
	HACT15.19 GM/M3										
	2000	94.8	95.8	95.3	94.2	91.4	89.1	88.2			
	(.01519 KG/M3)										
	2500	96.6	97.8	98.3	94.2	92.2	88.0	86.8			
	NFA 12683. RPM										
	3150	99.2	100.5	98.9	96.3	85.8	85.9	84.0			
	(1328. RAD/SEC)										
	4000	99.8	99.8	99.5	97.8	91.9	89.4	86.3			
	NFK 12320. RPM										
	5000	98.4	100.1	99.1	97.6	92.7	89.5	87.0			
	(1290. RAD/SEC)										
	6300	97.3	99.3	100.9	102.9	102.0	99.9	95.9			
	NFD 12320. RPM										
	8000	96.2	97.6	98.9	99.4	99.0	93.2	90.2			
	(1290. RAD/SEC)										
	10000	96.5	99.7	99.5	101.5	101.9	97.4	89.8			
	NO. OF BLADES 28										
	12500	97.8	100.9	100.2	101.5	100.3	96.4	89.0			
	FAN TIP SPEED										
	16000	95.0	98.0	97.9	98.5	96.6	91.9	86.3			
	1163. FT/SEC										
	20000										
	OVERALL MEASURED										
	OVERALL CALCULATED	108.3	109.6	109.3	109.5	108.2	104.8	101.2			
	PNDB	120.7	121.4	120.6	120.6	119.1	116.8	113.6			
	PNLT	123.4	123.1	123.8	123.5	123.5	119.5	116.7			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA										
	50										
	63										
	80										
	100										
	125	65.0	53.1	55.6	74.8	72.5	60.9	77.6			
	NFA 3751. RPM										
	160	61.6	63.4	53.3	56.8	57.6	73.3	72.1			
	( 393. RAD/SEC)										
	200	55.9	70.4	66.1	65.2	74.6	69.0	71.6			
	NFK 3644. RPM										
	250	46.6	67.4	71.9	55.9	76.5	72.0	58.9			
	( 382. RAD/SEC)										
	315	60.7	66.4	67.1	54.0	68.6	70.7	55.3			
	NFD 3644. RPM										
	400	66.2	68.1	71.1	70.7	67.9	73.2	73.4			
	( 382. RAD/SEC)										
	500	64.7	69.4	71.1	71.3	71.2	72.1	72.9			
	NO. OF BLADES 28										
	630	64.4	72.0	75.0	76.2	74.9	73.7	73.6			
	FREQ. SHIFT										
	800	65.9	73.8	77.9	76.1	75.7	72.6	72.2			
	JET 5										
	1000	68.1	76.4	78.4	78.1	69.2	70.5	69.3			
	FAN 6										
	1250	68.2	75.7	78.8	79.5	76.1	74.0	72.2			
	CRITICAL FREQ.										
	1600	65.5	74.5	80.0	84.4	85.2	84.2	81.0			
	0.										
	2000	63.1	72.5	77.8	80.8	82.1	77.5	75.2			
	AIRFLOW RATIO										
	2500	62.3	74.1	78.0	82.6	84.8	81.5	74.7			
	WF/WM 11.43										
	3150	62.2	74.6	78.3	82.3	82.9	80.3	73.7			
	FAN TIP SPEED										
	4000	57.5	70.8	75.4	78.9	78.9	75.5	70.7			
	1163. FT/SEC										
	5000	53.4	67.2	72.0	75.6	75.6	72.3	67.5			
	6300	47.5	62.7	68.0	71.8	72.0	68.7	64.0			
	8000	40.2	57.6	63.5	67.6	68.0	64.8	60.2			
	10000	30.9	51.4	58.3	62.9	63.6	60.6	56.1			
	OVERALL CALCULATED	76.3	84.5	88.1	90.7	91.3	89.1	86.3			
	PNDB	85.9	96.7	100.4	103.4	104.5	101.8	98.0			
	PNLT	87.3	97.5	101.9	104.9	106.9	104.8	100.5			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115,A=15,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 055010	400	92.8	87.4	91.3	92.3	89.5	88.4	75.7	73.6		
BAR 30.0 HG	500	90.9	94.2	89.5	91.8	92.3	89.3	71.8	87.2		
(***** N/M2)	630	90.9	94.8	85.2	87.9	73.8	89.3	72.9	89.0		
TAMB 95. DEG F	800	86.1	91.2	90.7	82.4	73.1	87.0	73.5	73.0		
(308. DEG K)	1000	73.6	73.9	90.1	88.9	87.1	89.6	70.2	71.7		
TWET 75. DEG F	1250	95.7	91.1	92.4	93.3	87.7	89.3	82.5	84.4		
(297. DEG K)	1600	97.6	95.9	93.9	92.3	88.4	89.7	83.8	88.6		
HACT15.63 GM/M3	2000	96.9	97.4	96.9	95.6	94.2	82.2	82.2	82.3		
(.01563 KG/M3)	2500	100.1	100.3	100.3	96.8	94.2	87.3	85.3	83.4		
NFA 11520. RPM	3150	99.2	100.2	101.0	96.7	91.8	89.9	87.2	85.6		
(1206. RAD/SEC)	4000	98.9	100.6	101.8	97.6	95.2	90.5	81.5	84.9		
NFK 11140. RPM	5000	98.5	99.1	99.6	97.8	96.1	92.3	86.9	86.6		
(1166. RAD/SEC)	6300	94.3	97.9	98.7	96.7	94.1	91.9	85.7	88.1		
NFD 12320. RPM	8000	94.1	97.0	99.4	99.2	97.6	95.0	89.4	86.9		
(1290. RAD/SEC)	10000	95.6	99.0	100.4	100.2	99.3	97.2	91.2	85.7		
NO. OF BLADES 28	12500	94.5	99.2	101.6	100.4	102.3	97.7	91.9	86.2		
FAN TIP SPEED 16000		91.3	96.2	99.1	98.2	97.6	94.4	87.3	85.6		
1056. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.2	109.6	110.5	108.7	107.6	104.6	98.3	97.9		
PNDB		120.5	121.7	122.5	119.7	117.1	114.1	108.5	108.7		
PNLT		123.9	123.8	123.5	121.1	120.6	115.5	110.3	112.0		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
	125	63.4	64.1	71.3	74.5	73.2	73.2	61.2	59.5		
NFA 3407. RPM	160	61.5	70.8	69.5	74.0	76.0	74.1	57.3	73.1		
( 357. RAD/SEC)	200	61.4	71.4	65.2	70.1	57.6	74.1	58.4	75.0		
NFK 3295. RPM	250	56.5	67.8	70.7	64.6	56.8	71.8	59.0	58.9		
( 345. RAD/SEC)	315	43.9	50.4	70.0	71.0	70.8	74.3	55.7	57.6		
NFD 3644. RPM	400	65.8	67.5	72.2	75.4	71.3	74.0	67.9	70.2		
( 382. RAD/SEC)	500	67.5	72.2	73.7	74.3	72.0	74.4	69.2	74.4		
NO. OF BLADES 28	630	66.5	73.6	76.6	77.6	77.7	66.8	67.6	68.1		
FREQ. SHIFT	800	69.4	76.4	79.9	78.7	77.7	71.9	70.7	69.2		
JET 5	1000	68.1	76.1	80.5	78.5	75.2	74.5	72.5	71.3		
FAN 5	1250	67.3	76.2	81.1	79.3	78.5	75.0	70.4	70.6		
CRITICAL FREQ.	1600	66.2	74.3	78.7	79.3	79.3	76.6	72.0	72.1		
0.	2000	61.1	72.7	77.5	78.0	77.1	76.1	70.6	73.5		
AIRFLOW RATIO	2500	59.9	71.3	77.9	80.3	80.4	79.0	74.2	72.2		
WF/WM 11.43	3150	59.8	72.5	78.3	80.8	81.8	80.9	75.7	70.7		
FAN TIP SPEED	4000	56.9	71.9	79.0	80.7	84.5	81.2	76.2	71.0		
1056. FT/SEC	5000	52.7	68.4	76.2	78.3	79.7	77.8	71.6	70.4		
	6300	46.8	63.9	72.2	74.5	76.0	74.2	68.0	66.8		
	8000	39.5	58.8	67.7	70.4	72.0	70.3	64.2	63.1		
	10000	30.2	52.6	62.6	65.7	67.6	66.1	60.1	59.0		
OVERALL CALCULATED		76.8	84.9	89.4	90.1	90.6	88.9	83.5	83.6		
PNDB		85.4	96.0	101.8	103.3	104.9	102.7	97.2	95.2		
PNLT		87.1	97.1	102.3	104.0	106.6	104.1	98.2	98.5		



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=115, A=15,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 055020	400	76.0	80.2	75.3	89.4	88.3	91.8	75.3	90.3		
BAR 30.0 HG	500	93.3	88.8	86.5	82.9	87.0	88.1	72.3	89.4		
(***** N/M2)	630	92.1	90.3	89.3	92.0	85.4	90.2	72.8	88.1		
TAMB 95. DEG F	800	89.1	73.7	92.9	89.7	92.1	73.0	88.5	73.1		
(308. DEG K)	1000	89.2	73.9	92.9	81.0	87.5	81.7	86.6	72.0		
TWET 75. DEG F	1250	93.7	93.0	90.9	92.6	87.4	87.7	87.9	84.9		
(297. DEG K)	1600	92.8	93.0	94.3	89.3	89.2	87.4	83.1	85.3		
HACT15.63 GM/M3	2000	92.5	94.2	95.1	95.8	94.2	86.0	88.5	85.5		
(.01563 KG/M3)	2500	98.2	98.4	97.7	96.0	92.2	88.6	87.7	85.6		
NFA 12394. RPM	3150	98.8	102.0	100.1	98.1	92.2	89.9	91.2	88.3		
(1298. RAD/SEC)	4000	96.8	101.5	99.8	98.1	95.3	88.7	86.5	87.1		
NFK 11985. RPM	5000	94.7	98.3	99.8	96.6	95.8	92.7	88.8	87.3		
(1255. RAD/SEC)	6300	92.5	98.0	98.5	97.1	98.8	95.9	93.8	91.2		
NFD 12320. RPM	8000	93.1	96.6	100.3	99.9	97.4	93.5	90.7	87.6		
(1290. RAD/SEC)	10000	93.7	99.1	100.6	99.8	99.9	95.9	92.1	86.2		
NO. OF BLADES 28	12500	96.3	99.0	101.0	101.0	99.7	95.8	91.5	87.3		
FAN TIP SPEED 16000		92.2	97.0	98.3	97.6	96.3	92.9	87.9	82.4		
1136. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.6	109.3	109.8	108.7	107.4	104.0	101.2	99.4		
PNDB		119.3	121.7	121.3	119.7	118.2	114.9	112.8	111.0		
PNLT		122.4	124.8	121.3	122.2	120.1	118.2	115.7	113.1		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
	125	46.6	56.9	55.3	71.6	72.0	76.6	60.8	76.2		
NFA 3666. RPM	160	63.9	65.4	66.5	65.1	70.7	72.9	57.8	75.3		
( 384. RAD/SEC)	200	62.6	66.9	69.3	74.2	69.2	75.0	58.3	74.1		
NFK 3545. RPM	250	59.5	50.3	72.9	71.9	75.8	57.8	74.0	59.0		
( 371. RAD/SEC)	315	59.5	50.4	72.8	63.1	71.2	66.4	72.1	57.9		
NFD 3644. RPM	400	63.8	69.4	70.7	74.7	71.0	72.4	73.3	70.7		
( 382. RAD/SEC)	500	62.7	69.3	74.1	71.3	72.8	72.1	68.5	71.1		
NO. OF BLADES 28	630	62.1	70.4	74.8	77.8	77.7	70.6	73.9	71.3		
FREQ. SHIFT	800	67.5	74.5	77.3	77.9	75.7	73.2	73.1	71.4		
JET 5	1000	67.7	77.9	79.6	79.9	75.6	74.5	76.5	74.0		
FAN 6	1250	65.2	77.1	79.1	79.8	79.2	77.2	74.0	73.0		
CRITICAL FREQ.	1600	62.5	74.7	77.6	78.6	82.0	80.2	78.9	76.7		
0.	2000	60.0	72.3	79.2	81.3	80.5	77.8	75.7	73.1		
AIRFLOW RATIO	2500	59.5	73.4	79.1	80.8	82.7	79.9	76.9	71.5		
WF/WM 11.43	3150	60.7	72.7	79.1	81.8	82.3	79.7	76.2	72.5		
FAN TIP SPEED	4000	54.7	69.8	75.8	78.0	78.6	76.5	72.4	67.3		
1136. FT/SEC	5000	50.6	66.2	72.4	74.7	75.4	73.3	69.2	64.2		
	6300	44.7	61.7	68.4	70.9	71.7	69.7	65.6	60.6		
	8000	37.4	56.6	63.9	66.8	67.7	65.8	61.8	56.9		
	10000	28.1	50.4	58.8	62.1	63.3	61.6	57.7	52.8		
OVERALL CALCULATED		75.1	84.5	88.5	90.1	90.4	88.4	86.3	84.9		
PNDB		84.3	95.4	101.1	103.2	103.7	101.4	98.5	95.6		
PNLT		85.9	96.9	101.1	104.5	104.9	103.0	100.0	96.8		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=115, A=15,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 057020	400	92.8	86.3	90.5	92.6	75.5	91.8	74.4	86.2		
BAR 30.0 HG	500	88.7	92.2	86.5	84.2	72.8	88.1	87.4	92.3		
(***** N/M2)	630	92.3	91.3	90.5	89.5	73.6	88.6	83.6	92.5		
TAMB 90. DEG F	800	94.4	89.6	92.4	92.6	87.3	73.5	72.8	86.9		
(305. DEG K)	1000	96.2	87.8	91.2	88.4	88.7	84.3	71.4	84.5		
TWET 73. DEG F	1250	95.2	86.6	94.5	86.8	90.8	84.2	86.5	85.8		
(296. DEG K)	1600	96.1	95.0	92.6	89.3	89.9	90.4	85.0	87.6		
HACT15.19 GM/M3	2000	96.0	95.8	96.6	96.1	93.5	91.3	92.2	89.0		
(.01519 KG/M3)	2500	96.8	98.1	98.9	99.3	95.8	90.3	89.4	88.0		
NFA 12683. RPM	3150	98.1	101.5	98.8	97.1	95.1	86.6	94.3	87.4		
(1328. RAD/SEC)	4000	96.2	99.4	100.4	98.2	94.7	92.0	87.7	87.8		
NFK 12320. RPM	5000	96.3	99.6	100.5	97.6	95.8	92.1	89.8	89.1		
(1290. RAD/SEC)	6300	95.2	98.8	101.3	100.7	99.8	98.5	95.4	93.5		
NFD 12320. RPM	8000	93.9	96.5	100.0	99.0	98.1	96.2	91.5	90.7		
(1290. RAD/SEC)	10000	94.1	97.4	100.8	100.7	100.1	98.8	95.6	89.8		
NO. OF BLADES 28	12500	93.7	100.0	100.4	99.9	100.2	98.0	92.6	88.9		
FAN TIP SPEED	16000	93.0	95.6	99.3	99.4	96.9	94.8	89.6	83.5		
1163. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.4	109.1	110.3	109.4	107.9	105.9	102.9	101.6		
PNDB		119.8	121.8	121.9	120.4	118.6	116.8	114.7	113.4		
PNLT		119.8	123.0	121.9	122.3	120.6	119.4	117.5	114.0		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
	80										
	100										
NFA 3751. RPM	125	63.4	63.0	70.5	74.8	59.2	76.6	59.9	72.1		
( 393. RAD/SEC)	160	59.3	68.8	66.5	66.4	56.5	72.9	72.9	78.2		
NFK 3644. RPM	200	62.8	67.9	70.5	71.7	57.4	73.4	69.1	78.5		
( 382. RAD/SEC)	250	64.8	66.2	72.4	74.8	71.0	58.3	58.3	72.8		
NFD 3644. RPM	315	66.5	64.3	71.1	70.5	72.4	69.0	56.9	70.4		
( 382. RAD/SEC)	400	65.3	63.0	74.3	68.9	74.4	68.9	71.9	71.6		
NO. OF BLADES 28	500	66.0	71.3	72.4	71.3	73.5	75.1	70.4	73.4		
FREQ. SHIFT	630	65.6	72.0	76.3	78.1	77.0	75.9	77.6	74.8		
JET 5	800	66.1	74.1	78.5	81.2	79.3	74.9	74.7	73.7		
FAN 6	1000	67.0	77.4	78.3	78.9	78.5	71.2	79.6	73.1		
CRITICAL FREQ.	1250	64.7	75.2	79.8	79.9	79.2	76.6	75.0	74.8		
0.	1600	62.9	74.0	80.4	82.2	83.0	82.8	80.5	79.0		
AIRFLOW RATIO	2000	60.8	71.4	78.9	80.4	81.2	80.5	76.5	76.2		
WF/WM 11.43	2500	59.9	71.8	79.3	81.8	83.0	82.9	80.5	75.2		
FAN TIP SPEED	3150	58.1	73.7	78.5	80.7	82.8	81.9	77.3	74.0		
1163. FT/SEC	4000	55.5	68.4	76.8	79.8	79.2	78.4	74.0	68.4		
	5000	51.4	64.8	73.4	76.5	75.9	75.2	70.8	65.2		
	6300	45.5	60.3	69.4	72.7	72.3	71.6	67.3	61.7		
	8000	38.2	55.2	64.9	68.5	68.3	67.7	63.5	58.0		
	10000	28.9	49.0	59.7	63.8	63.9	63.5	59.4	53.9		
OVERALL CALCULATED		76.1	84.1	89.0	90.8	90.9	90.2	88.0	87.1		
PNDB		84.4	95.7	101.3	103.4	104.0	103.3	100.6	97.8		
PNLT		84.4	97.0	101.3	104.3	105.1	105.1	102.3	99.0		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)	(0.)
		50									
NO EGA		63									
RADIAL 12. FT.		80									
( 4. M)		100									
VEHICLE JT15RD		125									
CONFIG 40X80		160									
LOC VC=80, A=0,		200									
DATE 9/21/78		250									
RUN SFH/W/R C/LT		315									
TAPE 028020	400	91.8	91.5	83.8	86.4	83.6	87.1	86.3			
BAR 29.9 HG	500	90.8	88.9	84.7	87.1	82.4	81.1	86.9			
(***** N/M2)	630	92.0	89.9	88.6	85.3	82.5	82.9	86.5			
TAMB 89. DEG F	800	91.1	87.4	90.6	87.8	84.9	87.4	83.2			
(305. DEG K)	1000	86.9	88.6	87.7	87.9	85.7	84.8	81.0			
TWET 66. DEG F	1250	93.0	93.0	91.6	90.6	87.9	85.7	85.2			
(292. DEG K)	1600	95.5	94.7	92.7	92.8	89.9	89.3	88.4			
HACT 9.44 GM/M3	2000	92.5	95.9	94.0	94.7	90.8	88.7	87.9			
(.00944 KG/M3)	2500	97.0	99.3	97.5	95.6	93.3	91.0	86.5			
NFA 11457. RPM	3150	100.9	101.0	98.7	97.4	94.3	92.8	89.2			
(1200. RAD/SEC)	4000	101.3	100.6	99.6	98.8	96.5	94.5	90.3			
NFK 11139. RPM	5000	104.6	103.3	102.0	100.7	100.0	97.2	94.0			
(1166. RAD/SEC)	6300	101.1	101.9	100.8	100.0	96.4	94.5	91.3			
NFD 12320. RPM	8000	99.1	99.7	100.6	98.4	96.6	92.8	89.2			
(1290. RAD/SEC)	10000	101.1	101.9	102.4	101.0	99.1	96.0	91.4			
NO. OF BLADES 28	12500	98.9	101.5	101.1	99.6	97.2	94.4	89.2			
FAN TIP SPEED	16000	97.5	99.7	99.0	98.0	96.2	93.7	88.0			
1050. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		110.8	111.2	110.4	109.1	107.0	104.6	101.2			
PNDB		123.6	123.1	121.8	120.7	119.0	116.7	113.9			
PNLT		125.2	123.1	121.8	120.7	120.2	118.0	114.9			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)	(0.)
		50									
NO EGA		63									
		80									
		100									
NFA 3389. RPM	125	62.4	68.2	63.8	68.6	67.3	71.9	71.8			
( 355. RAD/SEC)	160	61.4	65.5	64.7	69.3	66.1	65.9	72.4			
NFK 3295. RPM	200	62.5	66.5	68.6	67.5	66.3	67.7	72.0			
( 345. RAD/SEC)	250	61.5	64.0	70.6	70.0	68.6	72.2	68.7			
NFD 3644. RPM	315	57.2	65.1	67.6	70.0	69.4	69.5	66.5			
( 382. RAD/SEC)	400	63.1	69.4	71.4	72.7	71.5	70.4	70.6			
NO. OF BLADES 28	500	65.4	71.0	72.5	74.8	73.5	74.0	73.8			
FREQ. SHIFT	630	62.1	72.1	73.7	76.7	74.3	73.3	73.3			
JET 5	800	66.3	75.3	77.1	77.5	76.8	75.6	71.9			
FAN 5	1000	69.8	76.9	78.2	79.2	77.7	77.4	74.5			
	1250	69.7	76.2	78.9	80.5	79.9	79.0	75.5			
CRITICAL FREQ.	1600	72.3	78.6	81.1	82.2	83.2	81.6	79.1			
0.	2000	67.9	76.7	79.6	81.3	79.4	78.7	76.3			
AIRFLOW RATIO	2500	64.8	74.0	79.0	79.4	79.4	76.8	74.0			
WF/WM 11.43	3150	65.4	75.4	80.3	81.7	81.6	79.7	75.9			
FAN TIP SPEED	4000	61.2	74.1	78.4	79.8	79.3	77.8	73.5			
1050. FT/SEC	5000	58.9	71.9	76.1	78.1	78.3	77.1	72.3			
	6300	53.0	67.4	72.1	74.3	74.6	73.5	68.7			
	8000	45.7	62.3	67.6	70.1	70.6	69.6	64.9			
	10000	36.4	56.1	62.5	65.5	66.2	65.4	60.8			
OVERALL CALCULATED		78.4	86.1	89.2	90.5	90.1	88.9	86.4			
PNDB		89.6	98.3	102.2	103.7	103.3	102.0	98.9			
PNLT		91.2	98.3	102.2	103.7	104.5	102.7	100.0			

MODEL SOUND PRESSURE LEVEL  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=0,	200										
DATE 9/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 028030	400	89.8	91.0	85.5	90.4	87.3	87.1	84.5			
BAR 29.9 HG	500	90.1	89.2	85.2	88.6	86.0	86.1	86.6			
(***** N/M2)	630	91.0	85.8	89.4	84.8	86.9	79.2	83.9			
TAMB 89. DEG F	800	91.4	89.1	87.9	89.5	88.3	85.1	83.7			
(305. DEG K)	1000	90.7	88.8	88.4	89.3	87.5	84.3	82.1			
TWET 66. DEG F	1250	92.5	93.5	89.9	90.9	88.3	84.6	86.2			
(292. DEG K)	1600	94.1	94.4	93.0	91.4	88.4	85.8	86.7			
HACT 9.44 GM/M3	2000	93.9	95.8	93.8	92.8	92.0	89.3	89.5			
(.00944 KG/M3)	2500	98.1	97.8	97.7	94.0	91.6	88.4	88.2			
NFA 11853. RPM	3150	101.6	98.7	97.0	96.8	93.2	90.3	89.2			
(1241. RAD/SEC)	4000	101.5	100.8	99.2	98.8	95.1	93.7	89.9			
NFK 11524. RPM	5000	102.5	102.3	102.6	100.8	98.9	96.8	94.1			
(1207. RAD/SEC)	6300	100.2	100.1	101.2	98.9	97.2	93.8	90.7			
NFD 12320. RPM	8000	98.6	99.1	99.2	97.1	96.5	93.2	88.9			
(1290. RAD/SEC)	10000	102.9	102.6	101.8	100.8	98.9	95.0	91.1			
NO. OF BLADES 28	12500	100.4	100.7	99.0	98.0	96.4	93.0	88.4			
FAN TIP SPEED 16000		99.1	99.4	97.7	97.0	94.2	90.5	87.0			
1087. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		110.9	110.5	109.8	108.5	106.5	103.6	101.0			
PNDB		122.6	122.2	121.9	120.5	118.5	116.0	113.9			
PNLT		123.6	122.2	121.9	121.4	118.5	117.1	115.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100										
NFA 3506. RPM	125	60.4	67.7	65.5	72.6	71.0	71.9	70.0			
( 367. RAD/SEC)	160	60.7	65.8	65.2	70.8	69.7	70.9	72.1			
NFK 3409. RPM	200	61.5	62.4	69.4	67.0	70.7	64.0	69.4			
( 357. RAD/SEC)	250	61.9	65.7	67.9	71.7	72.0	69.9	69.2			
NFD 3644. RPM	315	61.0	65.3	68.3	71.4	71.2	69.0	67.6			
( 382. RAD/SEC)	400	62.6	69.9	69.7	73.0	71.9	69.3	71.6			
NO. OF BLADES 28	500	64.0	70.7	72.8	73.4	72.0	70.5	72.1			
FREQ. SHIFT	630	63.5	72.0	73.5	74.8	75.5	73.9	74.9			
JET 5	800	67.4	73.8	77.3	75.9	75.1	73.0	73.6			
FAN 5	1000	70.5	74.6	76.5	78.6	76.6	74.9	74.5			
CRITICAL FREQ.	1250	69.9	76.4	78.5	80.5	78.5	78.2	75.1			
0.	1600	70.2	77.6	81.7	82.3	82.1	81.2	79.2			
AIRFLOW RATIO	2000	67.0	74.9	80.0	80.2	80.2	78.0	75.7			
WF/WM 11.43	2500	64.3	73.4	77.6	78.1	79.3	77.2	73.7			
FAN TIP SPEED	3150	67.2	76.1	79.7	81.5	81.4	78.7	75.6			
1087. FT/SEC	4000	62.7	73.3	76.3	78.2	78.5	76.4	72.7			
	5000	60.5	71.6	74.8	77.1	76.3	73.9	71.3			
	6300	54.6	67.1	70.8	73.3	72.6	70.3	67.7			
	8000	47.3	62.0	66.3	69.1	68.6	66.4	63.9			
	10000	38.0	55.8	61.2	64.5	64.2	62.2	59.8			
OVERALL CALCULATED		78.2	85.4	88.7	90.0	89.6	87.9	86.2			
PNDB		89.7	98.2	101.6	103.2	103.0	100.8	98.6			
PNLT		90.9	98.2	101.6	104.3	103.0	101.8	99.8			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=80, A=0,	200										
DATE 9/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 028040	400	91.1	88.8	71.3	86.6	83.9	86.2	86.0			
BAR 29.9 HG	500	92.5	89.8	80.4	88.6	67.2	86.7	86.1			
(***** N/M2)	630	90.0	90.0	87.5	87.3	83.3	86.5	84.8			
TAMB 89. DEG F	800	89.3	87.9	87.7	85.7	87.5	85.1	84.8			
(305. DEG K)	1000	87.3	90.7	86.6	87.1	86.0	85.1	83.5			
TWET 66. DEG F	1250	92.4	91.5	88.8	88.6	88.4	86.7	85.6			
(292. DEG K)	1600	92.9	91.7	92.1	89.6	86.3	87.3	87.8			
HACT 9.44 GM/M3	2000	94.3	94.5	92.5	91.7	91.2	89.2	89.1			
(.00944 KG/M3)	2500	96.4	94.0	95.0	93.6	91.2	88.0	86.5			
NFA 12321. RPM	3150	96.9	96.0	96.0	94.8	91.1	90.0	87.3			
(1290. RAD/SEC)	4000	99.0	98.8	97.2	94.9	93.6	92.4	89.5			
NFK 11979. RPM	5000	100.8	101.8	100.2	98.8	97.7	95.6	92.3			
(1254. RAD/SEC)	6300	98.0	98.9	99.2	96.4	95.2	92.7	90.1			
NFD 12320. RPM	8000	97.8	97.1	96.9	94.2	93.0	91.5	88.3			
(1290. RAD/SEC)	10000	100.1	100.3	99.9	97.3	95.9	93.0	89.8			
NO. OF BLADES 28	12500	98.0	98.2	97.3	95.1	93.9	90.7	87.5			
FAN TIP SPEED 16000		95.9	96.1	94.1	92.8	90.6	87.8	84.5			
1129. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		108.7	108.7	107.8	105.9	104.4	102.5	100.2			
PNDB		120.9	121.1	119.7	118.4	116.8	115.3	112.8			
PNLT		120.9	121.1	120.6	119.5	120.1	116.3	112.8			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
	125	61.7	65.5	51.3	68.8	67.6	71.0	71.5			
NFA 3644. RPM	160	63.1	66.4	60.4	70.8	50.9	71.5	71.6			
( 382. RAD/SEC)	200	60.5	66.6	67.5	69.5	67.1	71.3	70.3			
NFK 3543. RPM	250	59.7	64.5	67.7	67.9	71.2	69.9	70.3			
( 371. RAD/SEC)	315	57.6	67.2	66.5	69.2	69.7	69.8	69.0			
NFD 3644. RPM	400	62.5	67.9	68.6	70.7	72.0	71.4	71.0			
( 382. RAD/SEC)	500	62.8	68.0	71.9	71.6	69.9	72.0	73.2			
NO. OF BLADES 28	630	63.9	70.7	72.2	73.7	74.7	73.8	74.5			
FREQ. SHIFT	800	65.7	70.0	74.6	75.5	74.7	72.6	71.9			
JET 5	1000	65.8	71.9	75.5	76.6	74.5	74.6	72.6			
FAN 6	1250	69.3	77.4	79.6	80.5	81.1	80.1	77.6			
CRITICAL FREQ.	1600	65.7	74.2	78.3	77.9	78.4	77.1	75.2			
0.	2000	64.7	72.0	75.7	75.5	76.1	75.7	73.3			
AIRFLOW RATIO	2500	65.9	74.6	78.4	78.4	78.7	77.0	74.6			
WF/WM 11.43	3150	62.4	71.8	75.3	75.8	76.5	74.5	72.1			
FAN TIP SPEED	4000	58.4	68.9	71.6	73.2	72.9	71.4	69.0			
1129. FT/SEC	5000	54.3	65.3	68.2	69.9	69.7	68.2	65.8			
	6300	48.4	60.8	64.2	66.1	66.0	64.6	62.2			
	8000	41.1	55.7	59.7	61.9	62.0	60.7	58.4			
	10000	31.8	49.5	54.6	57.3	57.6	56.5	54.3			
OVERALL CALCULATED		76.2	83.5	86.5	87.2	87.3	86.6	85.1			
PNDB		87.2	95.6	98.8	99.5	99.6	98.6	96.7			
PNLT		88.4	97.1	98.8	100.6	101.2	100.0	97.9			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=0,	200										
DATE 9/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 028090	400	88.8	87.1	83.8	81.5	82.9	86.0	87.4			
BAR 29.9 HG	500	86.9	86.4	82.7	85.1	82.4	83.0	89.2			
(***** N/M2)	630	84.5	83.4	67.2	75.6	79.2	83.8	85.4			
TAMB 89. DEG F	800	80.7	83.0	84.0	80.8	80.5	85.6	84.1			
(305. DEG K)	1000	84.3	86.8	84.0	84.4	84.1	80.9	82.5			
TWET 66. DEG F	1250	89.7	88.8	87.4	88.0	87.3	87.5	86.2			
(292. DEG K)	1600	90.4	88.9	89.1	87.8	87.5	86.5	85.0			
HACT 9.44 GM/M3	2000	91.1	90.8	90.3	89.6	89.6	88.0	88.5			
(.00944 KG/M3)	2500	93.5	92.3	90.7	88.6	87.1	85.5	83.8			
NFA 12671. RPM	3150	94.5	92.5	91.9	90.5	88.6	87.7	86.7			
(1327. RAD/SEC)	4000	94.8	94.4	94.1	91.0	89.6	88.1	87.4			
NFK 12320. RPM	5000	98.9	99.0	97.6	94.6	93.9	91.1	89.6			
(1290. RAD/SEC)	6300	95.8	94.8	94.6	92.4	91.3	88.9	86.3			
NFD 12320. RPM	8000	93.5	93.4	92.3	90.2	88.5	87.8	85.3			
(1290. RAD/SEC)	10000	95.8	94.5	94.0	92.1	91.1	88.7	86.0			
NO. OF BLADES 28	12500	93.8	93.8	92.1	90.0	88.9	85.1	83.3			
FAN TIP SPEED	16000	92.3	91.4	89.4	87.7	85.5	81.7	80.9			
1161. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		105.4	104.9	103.8	101.8	100.8	99.3	98.6			
PNDB		118.2	117.9	116.6	114.4	113.5	111.8	110.8			
PNLT		119.4	119.3	119.4	116.5	114.7	113.1	112.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
NFA 3748. RPM	125	59.4	63.8	63.8	63.7	66.6	70.8	72.9			
( 392. RAD/SEC)	160	57.5	63.0	62.7	67.3	66.1	67.8	74.7			
NFK 3644. RPM	200	55.0	60.0	47.2	57.8	63.0	68.6	70.9			
( 382. RAD/SEC)	250	51.1	59.6	64.0	63.0	64.2	70.4	69.6			
NFD 3644. RPM	315	54.6	63.3	63.9	66.5	67.8	65.6	68.0			
( 382. RAD/SEC)	400	59.8	65.2	67.2	70.1	70.9	72.2	71.6			
	500	60.3	65.2	68.9	69.8	71.1	71.2	70.4			
NO. OF BLADES 28	630	60.7	67.0	70.0	71.6	73.1	72.6	73.9			
FREQ. SHIFT	800	62.8	68.3	70.3	70.5	70.6	70.1	69.2			
JET 5	1000	63.4	68.4	71.4	72.3	72.0	72.3	72.0			
FAN 6	1250	67.4	74.6	77.0	76.3	77.3	75.6	74.9			
CRITICAL FREQ.	1600	63.5	70.1	73.7	73.9	74.5	73.3	71.4			
0.	2000	60.4	68.3	71.1	71.5	71.6	72.0	70.3			
AIRFLOW RATIO	2500	61.6	68.8	72.5	73.2	73.9	72.7	70.8			
WF/WM 11.43	3150	58.2	67.4	70.1	70.7	71.5	68.9	67.9			
FAN TIP SPEED	4000	54.8	64.2	66.9	68.1	67.8	65.3	65.4			
1162. FT/SEC	5000	50.7	60.6	63.5	64.8	64.6	62.1	62.2			
	6300	44.8	56.1	59.5	61.0	60.9	58.5	58.6			
	8000	37.5	51.0	55.0	56.8	56.9	54.6	54.8			
	10000	28.2	44.8	49.9	52.2	52.5	50.4	50.7			
OVERALL CALCULATED		73.2	79.9	82.5	83.1	83.8	83.5	83.6			
PNDB		83.4	90.9	93.9	94.8	95.5	94.7	93.9			
PNLT		84.7	92.7	95.4	95.9	96.8	95.3	95.3			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA	125										
RADIAL 12. FT.	160										
( 4. M)	200										
VEHICLE JT15RD	250										
CONFIG 40X80	315										
LOC VO=80, A=15,	400										
DATE 9/21/78	500										
RUN SFH/W/R C/LT	630										
TAPE 029010	800	85.2	89.2	87.2	88.4	89.0	88.0	83.5	85.7		
BAR 29.9 HG	1000	84.1	91.3	87.2	88.4	85.9	87.6	82.9	84.5		
(***** N/M2)	1250	86.5	90.5	82.2	85.6	85.7	87.9	81.5	83.7		
TAMB 87. DEG F	1600	84.2	87.2	85.8	83.8	85.5	88.0	88.5	83.0		
(304. DEG K)	2000	87.1	85.2	86.9	83.5	83.9	82.5	84.6	84.8		
TWET 65. DEG F	2500	90.8	91.5	88.5	88.9	87.3	86.5	85.4	85.6		
(291. DEG K)	3150	90.6	90.7	88.5	88.2	86.9	87.4	86.0	85.8		
HACT 8.82 GM/M3	4000	91.9	92.6	92.1	91.3	89.6	89.3	87.8	90.1		
(.00882 KG/M3)	5000	92.8	93.4	93.0	91.7	90.2	88.7	85.7	86.2		
NFA 12647. RPM	6300	93.9	93.9	92.0	92.5	90.4	89.4	86.8	86.9		
(1324. RAD/SEC)	8000	94.5	95.0	94.6	92.4	90.4	88.6	87.4	86.7		
NFK 12319. RPM	10000	98.6	98.3	98.2	96.0	95.4	92.7	91.4	89.5		
(1290. RAD/SEC)	12500	94.3	95.2	94.8	95.0	92.5	89.4	87.8	87.1		
NFD 12320. RPM	16000	92.4	94.3	92.0	91.1	90.4	88.1	86.6	86.2		
(1290. RAD/SEC)	20000	93.3	96.0	93.9	92.4	91.3	90.0	87.9	87.2		
NO. OF BLADES 28	25000	90.4	93.3	93.5	90.8	89.8	88.5	86.6	85.8		
FAN TIP SPEED 16000	30000	86.5	91.6	91.4	88.5	87.5	84.8	80.5	80.0		
1159. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		104.5	105.7	104.6	103.4	102.2	100.9	99.0	98.7		
PNDB		117.8	118.3	117.5	116.1	115.1	113.3	111.7	110.8		
PNLT		119.2	119.5	118.6	117.1	116.4	114.6	113.5	112.2		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
	125										
NFA 3741. RPM	160	55.8	65.9	67.2	70.6	72.7	72.8	69.0	71.6		
( 392. RAD/SEC)	200	54.7	67.9	67.2	70.6	69.6	72.4	68.4	70.4		
NFK 3644. RPM	250	57.0	67.1	62.2	67.8	69.5	72.7	67.0	69.7		
( 381. RAD/SEC)	315	54.6	63.8	65.6	66.0	69.2	72.8	74.0	68.9		
NFD 3644. RPM	400	57.4	61.7	66.8	65.6	67.6	67.2	70.1	70.7		
( 382. RAD/SEC)	500	60.9	67.9	68.3	71.0	70.9	71.2	70.8	71.4		
NO. OF BLADES 28	630	60.5	67.0	68.3	70.2	70.5	72.1	71.4	71.6		
FREQ. SHIFT	800	61.5	68.8	71.8	73.3	73.1	73.9	73.2	75.9		
JET 5	1000	62.1	69.4	72.6	73.6	73.7	73.3	71.1	72.0		
FAN 6	1250	62.8	69.8	71.5	74.3	73.8	74.0	72.1	72.6		
CRITICAL FREQ.	1600	67.1	73.9	77.6	77.7	78.8	77.2	76.7	75.2		
0.	2000	62.0	70.5	73.9	76.6	75.7	73.8	72.9	72.7		
AIRFLOW RATIO	2500	59.3	69.2	70.9	72.5	73.5	72.3	71.6	71.7		
WF/WM 11.43	3150	59.1	70.3	72.4	73.5	74.1	74.1	72.7	72.5		
FAN TIP SPEED 4000	4000	54.8	67.5	71.6	71.6	72.4	72.3	71.3	70.9		
1159. FT/SEC	5000	49.0	64.3	68.9	68.8	69.8	68.4	64.9	64.9		
	6300	44.9	60.8	65.5	65.5	66.5	65.1	61.7	61.7		
	8000	38.9	56.3	61.5	61.7	62.8	61.5	58.2	58.2		
	10000	31.6	51.1	57.0	57.6	58.9	57.7	54.4	54.4		
OVERALL CALCULATED		22.4	44.9	51.8	52.9	54.4	53.4	50.2	50.3		
PNDB		72.6	80.8	83.4	84.8	85.3	85.2	84.0	84.1		
PNLT		81.6	92.1	94.8	95.9	96.6	96.4	94.9	94.9		
		83.1	93.4	96.4	96.4	97.9	97.5	96.3	96.3		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA	125										
RADIAL 12. FT.	160										
( 4. M)	200										
VEHICLE JT15RD	250										
CONFIG 40X80	315										
LOC V0=80, A=15,	400										
DATE 9/21/78	500	91.0	91.3	90.4	90.7	88.9	85.5	87.0	87.9		
RUN SFH/W/R C/LT	630	90.3	92.1	88.4	89.9	84.2	84.1	88.5	86.2		
TAPE 029020	800	90.4	92.6	87.7	88.4	86.2	80.3	85.3	84.9		
BAR 29.9 HG	1000	87.6	89.4	86.7	87.3	86.7	83.1	81.8	86.3		
(***** N/M2)	1250	86.6	86.4	86.0	86.7	83.5	84.9	85.7	84.3		
TAH 87. DEG F	1600	91.4	89.6	89.5	89.3	87.6	85.8	86.4	87.8		
(304. DEG K)	2000	92.9	93.5	91.2	92.4	89.7	87.3	86.8	87.0		
TWET 65. DEG F	2500	93.4	93.7	92.8	92.4	92.0	90.3	88.6	89.2		
(291. DEG K)	3000	95.6	94.9	95.2	94.4	90.8	90.1	88.2	88.2		
HACT 8.82 GM/M3	3150	99.4	96.9	95.6	95.4	94.1	91.4	88.6	89.2		
(.00882 KG/M3)	4000	97.9	97.4	98.7	96.7	94.8	93.3	91.0	90.0		
NFA 12304. RPM	5000	99.8	100.3	100.7	98.2	98.8	96.0	93.9	91.3		
(1288. RAD/SEC)	6300	98.2	98.4	98.4	97.4	95.3	93.5	91.6	88.5		
NFK 11985. RPM	8000	96.7	96.8	96.5	95.3	94.4	92.1	89.6	87.3		
(1255. RAD/SEC)	10000	99.5	99.5	99.2	98.6	96.4	95.1	92.2	89.2		
NFD 12320. RPM	12500	97.1	97.1	97.3	96.1	94.3	92.5	89.8	87.5		
(1290. RAD/SEC)	16000	94.4	95.3	95.8	94.6	93.1	89.5	86.9	82.9		
NO. OF BLADES 28	20000										
FAN TIP SPEED											
1128. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		108.2	108.1	108.0	106.9	105.4	103.3	101.5	100.1		
PNDB		120.5	120.4	120.2	118.8	118.0	115.7	114.1	112.4		
PNLT		120.5	120.4	120.2	119.7	119.3	115.7	114.1	113.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
	125	61.6	68.0	70.4	72.9	72.6	70.3	72.3	73.8		
NFA 3639. RPM	160	60.9	68.7	68.4	72.1	67.9	68.9	74.0	72.1		
( 381. RAD/SEC)	200	60.9	69.2	67.7	70.6	70.0	65.1	70.8	70.9		
NFK 3545. RPM	250	58.0	66.0	66.7	69.5	70.4	67.9	67.3	72.2		
( 371. RAD/SEC)	315	56.9	62.9	65.9	68.8	67.2	69.6	71.2	70.2		
NFD 3644. RPM	400	61.5	66.0	69.3	71.4	71.2	70.5	71.8	73.6		
( 382. RAD/SEC)	500	62.8	69.8	71.0	74.4	73.3	72.0	72.2	72.8		
NO. OF BLADES 28	630	63.0	69.9	72.5	74.4	75.5	74.9	74.0	76.0		
FREQ. SHIFT	800	64.9	70.9	74.8	76.3	74.3	74.7	73.6	71.0		
JET 5	1000	68.3	72.8	75.1	77.2	77.5	76.0	73.9	74.9		
FAN 6	1250	68.3	75.9	80.1	79.9	82.2	80.5	79.2	77.0		
CRITICAL FREQ.	1600	65.9	73.7	77.5	79.0	78.5	77.9	76.7	74.1		
0.	2000	63.6	71.7	75.4	76.7	77.5	76.3	74.6	72.8		
AIRFLOW RATIO	2500	65.3	73.8	77.7	79.7	79.2	79.2	77.0	74.5		
WF/WM 11.43	3150	61.5	70.8	75.4	76.9	76.9	76.3	74.5	72.6		
FAN TIP SPEED	4000	56.9	68.0	73.3	74.9	75.4	73.1	71.3	67.8		
1128. FT/SEC	5000	52.8	64.5	69.9	71.6	72.1	69.8	68.1	64.6		
	6300	46.8	60.0	65.9	67.8	68.4	66.2	64.6	61.1		
	8000	39.5	54.8	61.4	63.7	64.5	62.4	60.8	57.3		
	10000	30.3	48.6	56.2	59.0	60.0	58.1	56.6	53.2		
OVERALL CALCULATED		75.9	83.1	86.6	88.1	88.4	87.4	86.4	85.4		
PNDB		86.6	95.1	98.9	100.8	100.6	99.9	98.5	96.7		
PNLT		86.6	95.1	100.1	100.8	102.0	101.1	99.8	97.7		



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
		50									
	NO EGA	63									
	RADIAL 12. FT.	80									
	( 4. M)	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VO=80, A=15,	200									
	DATE 9/21/78	250									
	RUN SFH/W/R C/LT	315									
	TAPE 029030	400	92.1	89.5	85.3	91.8	87.2	89.9	89.6	89.9	
	BAR 29.9 HG	500	88.1	90.5	85.1	88.4	86.2	87.4	87.9	87.1	
	(***** N/M2)	630	91.0	92.4	85.7	84.3	84.6	85.6	83.4	86.9	
	TAMB 87. DEG F	800	91.5	92.7	88.8	84.4	84.0	85.8	84.7	83.2	
	(304. DEG K)	1000	90.4	89.4	88.3	86.4	86.0	84.9	82.5	84.8	
	TWET 65. DEG F	1250	93.0	92.9	90.8	91.6	89.1	87.7	84.0	86.3	
	(291. DEG K)	1600	96.5	93.9	94.2	93.2	90.2	89.5	88.5	88.6	
	HACT 8.82 GM/M3	2000	93.2	92.7	95.1	95.0	92.0	90.1	89.7	88.1	
	(.00882 KG/M3)	2500	98.6	96.8	96.3	96.2	91.9	91.0	87.0	88.2	
	NFA 11436. RPM	3150	101.3	101.1	99.4	96.1	93.1	91.4	88.6	87.8	
	(1197. RAD/SEC)	4000	99.7	100.7	100.0	98.3	96.9	93.8	90.4	89.0	
	NFK 11139. RPM	5000	103.1	102.9	102.8	101.1	96.7	95.5	93.5	91.6	
	(1166. RAD/SEC)	6300	100.3	100.5	99.8	99.8	96.0	93.0	90.6	89.3	
	NFD 12320. RPM	8000	99.0	99.3	98.2	98.2	94.1	92.4	89.6	87.4	
	(1290. RAD/SEC)	10000	100.3	101.9	100.7	99.6	97.8	95.2	90.4	89.5	
	NO. OF BLADES 28	12500	97.1	100.4	100.5	98.4	95.2	92.9	88.2	86.7	
	FAN TIP SPEED	16000	95.2	98.8	98.6	96.9	94.7	92.4	86.5	85.7	
	1048. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED	110.1	110.6	109.9	108.8	105.7	103.9	101.1	100.2		
	PNDB	122.8	122.7	122.0	120.8	117.7	115.9	113.7	112.3		
	PNLT	123.9	122.7	122.0	120.8	118.7	115.9	114.7	114.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
		50									
	NO EGA	63									
		80									
		100									
		125	62.7	66.2	65.3	74.0	70.9	74.7	75.1	75.8	
	NFA 3383. RPM	160	58.7	67.1	65.1	70.6	69.9	72.2	73.4	73.0	
	( 354. RAD/SEC)	200	61.5	69.0	65.7	66.5	68.4	70.4	68.9	52.9	
	NFK 3295. RPM	250	61.9	69.3	68.8	66.6	67.7	70.6	70.2	69.1	
	( 345. RAD/SEC)	315	60.7	65.9	68.2	68.5	69.7	69.6	68.0	70.7	
	NFD 3644. RPM	400	63.1	69.3	70.6	73.7	72.7	72.4	69.4	72.1	
	( 382. RAD/SEC)	500	66.4	70.2	74.0	75.2	73.8	74.2	73.9	74.4	
	NO. OF BLADES 28	630	62.8	68.9	74.8	77.0	75.5	74.7	75.1	73.9	
	FREQ. SHIFT	800	67.9	72.8	75.9	78.1	75.4	75.6	72.4	74.0	
	JET 5	1000	70.2	77.0	78.9	77.9	76.5	76.0	73.9	73.5	
	FAN 5	1250	68.1	76.3	79.3	80.0	80.3	78.3	75.6	74.7	
	CRITICAL FREQ.	1600	70.8	78.2	81.9	82.6	79.9	79.9	78.6	77.2	
	0.	2000	67.1	75.3	78.6	81.1	79.0	77.2	75.6	74.7	
	AIRFLOW RATIO	2500	64.8	73.6	76.7	79.3	76.9	76.4	74.4	72.7	
	WF/WM 11.43	3150	64.6	75.5	78.7	80.3	80.3	79.0	75.0	74.5	
	FAN TIP SPEED	4000	59.4	73.0	77.9	78.6	77.3	76.3	72.5	71.5	
	1048. FT/SEC	5000	56.6	71.0	75.7	76.9	76.7	75.7	70.7	70.4	
		6300	50.6	66.5	71.7	73.1	73.0	72.1	67.2	66.9	
		8000	43.3	61.3	67.2	69.0	69.1	68.3	63.4	63.1	
		10000	34.1	55.1	62.0	64.3	64.6	64.0	59.2	59.0	
	OVERALL CALCULATED	78.0	85.6	88.8	90.2	88.9	88.3	86.3	85.9		
	PNDB	88.6	98.0	101.2	102.8	102.2	101.4	98.3	97.7		
	PNLT	89.8	98.0	101.2	102.8	103.3	101.4	99.3	99.0		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=25,	200										
DATE 9/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 030010	400	89.0	89.1	88.7	91.2	87.1	89.6	87.5	89.5		
BAR 29.9 HG	500	90.5	89.0	90.9	87.7	85.2	81.1	85.5	89.0		
(***** N/M2)	630	91.2	89.7	88.5	84.8	87.8	82.1	88.8	90.0		
TAMB 87. DEG F	800	87.6	89.8	88.0	89.9	88.5	88.0	88.0	87.8		
(304. DEG K)	1000	87.8	89.7	89.3	89.2	87.7	87.5	84.6	86.7		
TWET 65. DEG F	1250	90.8	90.5	88.8	89.5	88.1	86.7	88.4	88.8		
(291. DEG K)	1600	91.1	92.5	90.8	89.9	86.4	86.8	87.8	87.8		
HACT 8.82 GM/M3	2000	92.4	91.7	93.1	93.1	90.5	91.4	88.6	89.9		
(.00882 KG/M3)	2500	92.1	92.9	91.8	92.0	91.0	89.1	85.7	84.8		
NFA 12648. RPM	3150	93.4	92.5	93.0	93.5	90.5	89.7	87.0	87.3		
(1324. RAD/SEC)	4000	94.8	95.2	94.6	94.7	91.1	91.4	89.2	86.7		
NFK 12320. RPM	5000	100.3	99.5	98.6	97.5	96.2	93.6	90.9	89.6		
(1290. RAD/SEC)	6300	98.6	95.8	95.7	95.0	93.7	91.0	87.6	87.4		
NFD 12320. RPM	8000	94.9	92.0	93.8	92.8	91.2	89.3	85.9	85.9		
(1290. RAD/SEC)	10000	96.9	92.6	95.2	94.2	91.1	90.7	88.0	88.1		
NO. OF BLADES 28	12500	96.0	90.4	93.8	93.2	90.9	88.8	87.6	86.2		
FAN TIP SPEED 16000	16000	92.9	86.1	91.1	90.6	88.3	85.6	82.6	80.9		
1159. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.8	105.3	105.4	105.0	102.9	101.6	100.0	100.2		
PNDB		119.5	118.7	118.3	117.6	115.9	114.1	112.0	111.6		
PNLT		120.7	120.0	119.4	117.6	117.1	115.3	112.0	112.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
	125	59.6	65.8	68.7	73.4	70.8	74.4	73.0	75.4		
NFA 3741. RPM	160	61.1	65.6	70.9	69.9	68.9	65.9	71.0	74.9		
( 392. RAD/SEC)	200	61.7	66.3	68.5	67.0	71.6	66.9	74.3	76.0		
NFK 3644. RPM	250	58.0	66.4	68.0	72.1	72.2	72.8	73.5	73.7		
( 382. RAD/SEC)	315	58.1	66.2	69.2	71.3	71.4	72.2	70.1	72.6		
NFD 3644. RPM	400	60.9	66.9	68.6	71.6	71.7	71.4	73.3	74.6		
( 382. RAD/SEC)	500	61.0	68.8	70.6	71.9	70.0	71.5	73.2	73.6		
NO. OF BLADES 28	630	62.0	67.9	72.8	75.1	74.0	76.0	74.0	75.7		
FREQ. SHIFT	800	61.4	68.9	71.4	73.9	74.5	73.7	71.1	70.6		
JET 5	1000	62.3	68.4	72.5	75.3	73.9	74.3	72.3	73.0		
FAN 6	1250	68.8	75.1	78.0	79.2	79.6	78.1	76.2	75.3		
CRITICAL FREQ.	1600	66.3	71.1	74.8	76.6	76.9	75.4	72.7	73.0		
0.	2000	61.8	66.9	72.7	74.2	74.3	73.5	70.9	71.4		
AIRFLOW RATIO	2500	62.7	66.9	73.7	75.3	73.9	74.8	72.8	73.4		
WF/WM 11.43	3150	60.4	64.1	71.9	74.0	73.5	72.6	72.3	71.3		
FAN TIP SPEED	4000	55.4	58.8	68.6	70.9	70.6	69.2	67.0	65.8		
1159. FT/SEC	5000	51.3	55.3	65.2	67.6	67.3	65.9	63.8	62.6		
	6300	45.3	50.8	61.2	63.8	63.6	62.3	60.3	59.1		
	8000	38.0	45.6	56.7	59.7	59.7	58.5	56.5	55.3		
	10000	28.8	39.4	51.5	55.0	55.2	54.2	52.3	51.2		
OVERALL CALCULATED		74.6	80.5	84.4	86.3	86.0	85.7	84.9	85.8		
PNDB		84.8	90.0	95.8	97.7	97.2	97.0	95.8	96.1		
PNLT		86.3	91.9	97.2	98.8	98.6	98.1	97.0	97.3		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=25,	200										
DATE 9/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 030050	400	90.3	89.8	90.4	90.2	88.6	91.3	87.5	88.7		
BAR 29.9 HG	500	85.6	92.0	75.2	84.7	86.6	89.6	87.2	85.5		
(***** N/M2)	630	89.8	91.4	86.2	86.0	84.0	84.9	86.8	85.6		
TAMB 87. DEG F	800	89.8	88.0	88.5	89.4	82.5	88.0	64.9	86.9		
(304. DEG K)	1000	87.5	89.3	89.3	86.9	86.5	83.3	84.7	83.7		
TWET 65. DEG F	1250	92.3	91.0	90.0	88.1	88.6	85.5	87.0	87.3		
(291. DEG K)	1600	92.1	93.6	91.8	89.4	89.7	87.5	87.1	86.2		
HACT 8.82 GM/M3	2000	94.6	92.8	92.8	93.0	91.0	91.0	89.4	89.5		
(.00882 KG/M3)	2500	95.7	95.4	94.9	93.0	91.3	88.0	87.1	83.9		
NFA 12294. RPM	3150	97.2	97.2	95.0	95.1	93.7	91.4	88.6	88.1		
(1287. RAD/SEC)	4000	99.8	97.2	97.8	96.7	93.4	92.1	89.2	88.9		
NFK 11975. RPM	5000	102.3	99.9	100.8	98.8	97.6	94.7	93.2	91.7		
(1254. RAD/SEC)	6300	93.6	97.7	97.6	97.4	96.3	93.3	89.6	88.2		
NFD 12320. RPM	8000	97.8	95.5	96.2	94.8	93.9	89.8	88.3	86.5		
(1290. RAD/SEC)	10000	101.2	96.5	99.2	97.5	95.9	93.3	91.8	89.7		
NO. OF BLADES 28	12500	98.5	93.9	96.4	95.5	94.6	91.5	89.8	87.9		
FAN TIP SPEED	16000	96.5	90.4	94.4	94.0	91.3	88.8	86.9	82.4		
1127. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		109.3	107.2	107.6	106.5	105.0	102.9	101.1	100.1		
PNDB		121.7	120.0	120.0	118.7	117.3	115.1	113.5	112.4		
PNLT		122.5	120.0	121.5	119.8	117.3	116.4	114.8	113.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
NFA 3636. RPM	160	60.9	66.5	70.4	72.4	72.3	76.1	73.0	75.6		
( 381. RAD/SEC)	200	60.3	68.0	66.2	68.2	67.8	69.7	72.3	71.6		
NFK 3542. RPM	250	60.2	64.6	68.5	71.6	66.2	72.8	70.4	72.8		
( 371. RAD/SEC)	315	57.8	65.8	69.2	69.0	70.2	68.0	70.2	69.6		
NFD 3644. RPM	400	62.4	67.4	69.8	70.2	72.2	70.2	72.4	73.1		
( 382. RAD/SEC)	500	62.0	69.9	71.6	71.4	73.3	72.2	72.5	72.0		
NO. OF BLADES 28	630	64.2	69.0	72.5	75.0	74.5	75.6	74.8	75.3		
FREQ. SHIFT	800	65.0	71.4	74.5	74.9	74.8	72.6	72.5	69.7		
JET 5	1000	66.1	73.1	74.5	76.9	77.1	76.0	73.9	73.8		
FAN 6	1250	70.8	75.5	80.2	80.5	81.0	79.2	78.5	77.4		
CRITICAL FREQ.	1600	67.3	73.0	76.7	79.0	79.5	77.7	74.7	73.8		
0.	2000	64.7	70.4	75.1	76.2	77.0	74.0	73.3	72.0		
AIRFLOW RATIO	2500	67.0	70.8	77.7	78.6	78.7	77.4	76.6	75.0		
WF/WM 11.43	3150	62.9	67.6	74.5	76.3	77.2	75.3	74.5	73.0		
FAN TIP SPEED	4000	59.0	63.1	71.9	74.3	73.6	72.4	71.3	67.3		
1127. FT/SEC	5000	54.9	59.6	68.5	71.0	70.3	69.1	68.1	64.1		
	6300	48.9	55.1	64.5	67.2	66.6	65.5	64.6	60.6		
	8000	41.6	49.9	60.0	63.1	62.7	61.7	60.8	56.8		
	10000	32.4	43.7	54.8	58.4	58.2	57.4	56.6	52.7		
OVERALL CALCULATED		76.6	82.3	86.3	87.7	88.0	87.1	86.1	85.5		
PNDB		87.9	92.9	98.5	99.9	100.1	99.0	98.2	96.8		
PNLT		89.2	92.9	100.0	100.5	100.1	100.1	99.6	98.4		

		MODEL SOUND PRESSURE LEVELS									
		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	NO EGA	50									
		63									
RADIAL	12. FT.	80									
	( 4. M)	100									
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VG=80, A=25,	200									
DATE	9/21/78	250									
RUN	SFH/W/R C/LT	315									
TAPE	030060	400	92.5	91.0	89.9	90.7	88.6	90.2	85.7	90.7	
BAR	29.9 HG	500	92.8	90.3	89.1	90.4	87.9	88.4	77.4	88.8	
	(***** N/M2)	630	92.6	90.8	91.1	87.5	88.7	82.1	85.4	85.6	
TAMB	87. DEG F	800	91.2	92.8	91.9	90.6	85.8	87.1	86.9	88.7	
	(304. DEG K)	1000	90.7	91.2	90.3	89.1	87.3	84.6	84.7	84.9	
TWET	65. DEG F	1250	95.1	93.6	92.4	91.6	91.0	90.0	87.6	87.3	
	(291. DEG K)	1600	96.1	96.6	92.7	91.9	92.6	90.6	90.1	88.9	
HACT	8.82 GM/M3	2000	96.1	96.3	94.5	93.2	91.8	92.5	89.1	88.7	
	(.00882 KG/M3)	2500	99.6	97.2	98.6	96.8	93.9	92.0	91.2	87.5	
NFA	11426. RPM	3150	101.7	100.4	101.4	100.4	97.5	94.6	93.6	90.2	
	(1196. RAD/SEC)	4000	102.2	101.4	100.8	99.7	97.0	95.1	93.0	91.8	
NFK	11130. RPM	5000	104.1	103.7	103.2	102.2	100.3	99.5	96.4	93.5	
	(1165. RAD/SEC)	6300	102.0	100.7	101.0	101.1	99.5	96.0	93.0	91.1	
NFD	12320. RPM	8000	100.8	100.1	98.8	99.0	97.8	95.2	91.7	88.9	
	(1290. RAD/SEC)	10000	102.6	101.6	100.9	100.8	99.3	96.6	94.9	91.3	
NO. OF BLADES	28	12500	101.1	100.2	99.1	99.2	97.5	95.3	93.5	88.4	
FAN TIP SPEED	16000		99.7	98.4	97.7	98.0	96.7	94.5	91.6	86.0	
	1047. FT/SEC	20000									
OVERALL MEASURED											
OVERALL CALCULATED			111.9	111.0	110.5	110.0	108.1	106.2	103.5	101.8	
	PNCB		124.0	123.4	122.9	122.0	120.1	118.8	116.2	114.2	
	PNLT		124.0	123.4	122.9	122.0	120.1	120.1	117.5	114.2	

		FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA									
		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	NO EGA	50									
		63									
		80									
		100									
NFA	3380. RPM	125	63.1	67.7	69.9	72.9	72.3	75.0	71.2	76.6	
	( 354. RAD/SEC)	160	63.4	66.9	69.1	72.6	71.6	73.2	62.9	74.7	
NFK	3292. RPM	200	63.1	67.4	71.1	69.7	72.5	66.9	70.9	71.6	
	( 345. RAD/SEC)	250	61.6	69.4	71.9	72.8	69.5	71.9	72.4	72.6	
NFD	3644. RPM	315	61.0	67.7	70.2	71.2	71.0	69.3	70.2	70.8	
	( 382. RAD/SEC)	400	65.2	70.0	72.2	73.7	74.6	74.7	73.0	73.1	
NO. OF BLADES	28	500	66.0	72.9	72.5	73.9	76.2	75.3	75.5	74.7	
FREQ. SHIFT	800	630	65.7	72.5	74.2	75.2	75.3	77.1	74.5	74.5	
JET	5	800	68.9	73.2	78.2	78.7	77.4	76.6	76.6	73.3	
FAN	5	1000	70.6	76.3	80.9	82.2	80.9	79.2	78.9	75.9	
FAN	5	1250	70.6	77.0	80.1	81.4	80.4	79.6	78.2	77.5	
CRITICAL FREQ.	1600	1600	71.8	79.0	82.3	83.7	83.5	83.9	81.5	79.1	
	0.	2000	68.8	75.5	79.8	82.4	82.5	80.2	78.0	76.5	
AIRFLOW RATIO	2500	2500	66.6	74.4	77.3	80.1	80.6	79.2	76.5	74.2	
WF/WM	11.43	3150	66.9	75.2	78.9	81.5	81.8	80.4	79.5	76.3	
FAN TIP SPEED	4000	4000	63.4	72.8	76.5	79.4	79.6	78.7	77.8	73.2	
	1047. FT/SEC	5000	61.1	70.6	74.8	78.0	78.7	77.8	75.8	70.7	
		6300	55.1	66.1	70.8	74.2	75.0	74.2	72.3	67.2	
		8000	47.8	60.9	66.3	70.1	71.1	70.4	68.5	63.4	
		10000	38.6	54.7	61.1	65.4	66.6	66.1	64.3	59.3	
OVERALL CALCULATED			79.4	86.0	89.5	91.4	91.3	90.5	89.0	87.4	
	PNCB		90.3	98.1	101.7	104.0	104.2	103.2	101.9	99.4	
	PNLT		90.3	98.1	101.7	104.0	104.2	104.0	103.0	99.4	

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0
FREQ.	(0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.										
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LGC V0=40, A=0,	200										
DATE 9/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 031020	400	90.5	88.8	88.5	87.8	86.7	88.4	88.4			
BAR 29.9 HG	500	92.0	87.0	87.1	85.8	85.7	85.9	87.7			
(***** N/M2)	630	91.1	89.3	88.9	87.4	85.5	83.6	84.6			
TAMB 70. DEG F	800	90.5	89.0	89.0	86.5	86.8	85.5	83.3			
(294. DEG K)	1000	87.4	87.2	87.5	86.7	84.9	83.4	82.3			
TWET 57. DEG F	1250	90.9	91.5	90.5	88.1	86.8	85.5	85.1			
(287. DEG K)	1600	93.4	93.3	91.3	90.8	89.5	87.3	87.4			
HACT 8.13 GM/M3	2000	93.6	94.9	93.5	91.5	89.5	89.5	87.4			
(.00813 KG/M3)	2500	98.5	97.2	95.1	94.1	91.0	90.7	88.0			
NFA 11257. RPM	3150	100.8	99.0	97.5	95.5	93.0	91.0	89.9			
(1179. RAD/SEC)	4000	99.9	99.6	99.8	98.0	94.6	92.3	90.0			
NFK 11140. RPM	5000	101.7	102.7	101.3	100.1	97.7	97.4	93.9			
(1166. RAD/SEC)	6300	99.3	100.3	99.5	97.5	95.4	92.1	90.3			
NFD 12320. RPM	8000	99.0	98.3	98.5	96.7	94.8	91.4	89.5			
(1290. RAD/SEC)	10000	101.4	101.4	101.4	99.9	97.7	94.1	91.4			
NO. OF BLADES 28	12500	99.4	101.0	99.6	99.2	95.8	92.1	88.8			
FAN TIP SPEED 16000	20000	98.4	98.7	98.6	97.3	94.7	90.3	87.4			
1032. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		110.0	110.1	109.4	107.9	105.5	103.3	101.2			
PNDB		121.9	122.1	121.0	119.6	117.4	116.3	113.9			
PNLT		121.9	122.9	121.0	119.6	117.4	118.1	115.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.									
	50									
NO EGA	63									
	80									
	100									
	125	61.2	65.6	68.6	70.1	70.5	73.3	74.0		
NFA 3330. RPM	160	62.7	63.7	67.2	68.1	69.5	70.8	73.3		
( 349. RAD/SEC)	200	61.6	65.9	68.9	69.6	69.2	68.4	70.1		
NFK 3295. RPM	250	60.9	65.6	69.0	68.7	70.5	70.3	68.0		
( 345. RAD/SEC)	315	57.8	63.8	67.5	68.9	68.7	68.2	67.9		
NFD 3644. RPM	400	61.1	68.0	70.4	70.3	70.5	70.3	70.6		
( 382. RAD/SEC)	500	63.4	69.7	71.1	72.9	73.2	72.1	72.9		
NO. OF BLADES 28	630	63.3	71.2	73.3	73.5	73.1	74.2	72.9		
FREQ. SHIFT	800	57.6	73.2	74.7	76.0	74.5	75.3	73.4		
JET 5	1000	69.7	74.8	77.0	77.3	76.4	75.6	75.2		
FAN 5	1250	68.3	75.2	79.1	79.7	77.9	76.8	75.2		
CRITICAL FREQ.	1600	69.4	77.9	80.4	81.6	80.9	81.7	79.0		
0.	2000	66.1	75.1	78.3	78.8	78.4	76.3	75.3		
AIRFLOW RATIO	2500	64.7	72.6	76.9	77.7	77.5	75.4	74.3		
WF/WM 11.43	3150	65.6	74.9	79.3	80.5	80.2	77.8	75.9		
FAN TIP SPEED	4000	61.8	73.7	77.0	79.5	78.0	75.6	73.1		
1032. FT/SEC	5000	59.8	70.9	75.7	77.4	76.7	73.6	71.6		
	6300	53.9	66.4	71.7	73.6	73.0	70.1	68.1		
	8000	46.5	61.2	67.2	69.4	69.1	66.2	64.3		
	10000	37.3	55.0	62.0	64.7	64.7	61.9	60.1		
OVERALL CALCULATED		77.5	85.0	88.2	89.3	88.6	87.7	86.4		
PNDB		88.7	97.4	101.3	102.5	102.1	100.3	98.8		
PNLT		88.7	97.4	101.3	102.5	102.1	102.1	100.1		

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.										
	50									
	63									
	80									
	100									
NO EGA	125									
RADIAL 12. FT.	160									
( 4. M)	200									
VEHICLE JT15RD	250									
CONFIG 40X80	315									
L0C V0=40, A=0.	400									
DATE 9/21/78	500	89.7	89.9	88.6	87.2	86.9	85.9	87.5		
RUN SFH/W/R C/LT	630	89.7	89.6	87.2	87.2	84.5	86.0	84.3		
TAPE 031030	800	89.9	90.4	88.0	88.8	85.7	84.0	84.7		
BAR 29.9 HG	1000	89.5	88.5	87.3	87.5	86.8	85.7	84.3		
(***** N/M2)	1250	87.3	87.3	86.9	86.5	86.0	85.3	83.7		
TAMB 70. DEG F	1600	91.1	91.3	89.8	89.6	87.2	85.9	84.7		
(294. DEG K)	2000	91.7	94.1	92.3	90.1	88.6	86.7	86.8		
TWET 57. DEG F	2500	94.0	94.3	92.8	91.4	92.0	90.1	87.9		
(287. DEG K)	3000	98.7	96.0	95.7	94.5	93.1	91.3	89.4		
HACT 8.13 GM/M3	3500	100.5	98.9	96.4	96.7	94.5	91.8	90.4		
(.00813 KG/M3)	4000	101.0	100.3	99.2	99.7	95.2	93.9	90.9		
NFA 11646. RPM	5000	101.4	101.8	101.0	100.5	98.9	96.6	94.8		
(1219. RAD/SEC)	6300	99.9	99.7	100.7	98.9	96.6	95.3	92.2		
NFK 11524. RPM	8000	98.6	97.9	97.5	96.6	95.7	93.1	90.2		
(1207. RAD/SEC)	10000	101.3	101.1	101.6	100.7	99.5	97.8	92.9		
NFD 12320. RPM	12500	99.1	100.2	98.6	97.7	96.6	94.6	91.0		
(1290. RAD/SEC)	16000	98.5	99.0	97.7	97.1	95.1	93.0	88.7		
NO. OF BLADES 28	20000									
FAN TIP SPEED										
1068. FT/SEC										
OVERALL MEASURED										
OVERALL CALCULATED		110.0	109.8	109.1	108.4	106.6	104.8	102.0		
PNDB		122.0	121.6	120.8	120.3	118.5	116.5	114.6		
PNLT		122.0	121.6	122.0	121.4	119.5	117.7	115.7		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.										
	50									
	63									
	80									
	100									
	125	60.4	66.7	68.7	69.5	70.7	70.8	73.1		
NFA 3445. RPM	160	60.4	66.3	67.3	69.5	68.3	70.9	69.9		
( 361. RAD/SEC)	200	60.4	67.0	68.0	71.0	69.4	68.8	70.2		
NFK 3409. RPM	250	59.9	65.1	67.3	69.7	70.5	70.5	69.8		
( 357. RAD/SEC)	315	57.7	63.9	66.9	68.7	69.8	70.1	69.3		
NFD 3644. RPM	400	61.3	67.8	69.7	71.8	70.9	70.7	70.2		
( 382. RAD/SEC)	500	61.7	70.5	72.1	72.2	72.3	71.5	72.3		
NO. OF BLADES 28	630	63.7	70.6	72.6	73.4	75.6	74.8	73.4		
FREQ. SHIFT	800	68.0	72.0	75.3	76.4	76.6	75.9	74.8		
JET 5	1000	69.4	74.7	75.9	78.5	77.9	76.4	75.7		
FAN 5	1250	69.4	75.9	78.5	81.4	78.5	78.4	76.1		
CRITICAL FREQ.	1600	69.1	77.0	80.1	82.0	82.1	80.9	79.9		
0.	2000	66.7	74.5	79.5	80.2	79.6	79.5	77.2		
AIRFLOW RATIO	2500	64.3	72.2	75.9	77.6	78.5	77.1	75.0		
11.43	3150	65.5	74.6	79.5	81.3	82.0	81.5	77.4		
FAN TIP SPEED	4000	61.5	72.9	76.0	78.0	78.8	78.1	75.3		
1068. FT/SEC	5000	59.9	71.2	74.8	77.2	77.1	76.3	72.9		
	6300	53.9	66.7	70.8	73.4	73.4	72.8	69.4		
	8000	46.6	61.5	66.3	69.2	69.5	68.9	65.6		
	10000	37.4	55.3	61.1	64.5	65.1	64.6	61.4		
OVERALL CALCULATED		77.5	84.7	88.0	89.8	89.7	89.1	87.2		
PNDB		88.5	97.2	101.1	103.0	103.3	102.8	99.9		
PNLT		88.5	97.2	102.3	104.2	104.4	104.1	101.0		

MODEL SOUND PRESSURE LEVELS

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50									
	63									
RADIAL 12. FT.	80									
( 4. M)	100									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC V0=40, A=0,	200									
DATE 9/21/78	250									
RUN SFH/W/R C/LT	315									
TAPE 031040	400	89.4	87.3	88.3	88.7	89.2	89.5	90.9		
BAR 29.9 HG	500	88.8	85.5	86.4	86.5	87.5	86.9	88.5		
(***** N/M2)	630	88.8	86.1	88.3	87.2	85.8	86.0	85.0		
TAMB 70. DEG F	800	88.1	87.5	87.6	86.9	86.6	84.3	84.8		
(294. DEG K)	1000	87.8		87.6	86.9	84.6	85.2	83.7		
TWET 57. DEG F	1250	89.6	7	90.0	89.8	89.0	87.3	86.3		
(287. DEG K)	1600	91.3		91.0	88.4	85.7	86.9	86.5		
HACT 8.13 GM/M3	2000	91.9	92.3	92.5	91.5	90.2	90.0	89.1		
(.00813 KG/M3)	2500	95.5	92.9	92.8	92.7	89.5	87.9	86.8		
NFA 12123. RPM	3150	96.9	95.8	94.8	93.9	90.2	87.7	88.0		
(1269. RAD/SEC)	4000	98.7	97.8	97.2	95.7	92.7	90.8	88.8		
NFK 11996. RPM	5000	100.8	100.2	99.6	97.6	94.7	93.9	91.9		
(1256. RAD/SEC)	6300	97.8	97.6	98.1	96.2	93.0	91.0	89.6		
NFD 12320. RPM	8000	96.4	95.9	94.6	93.7	92.5	89.6	88.1		
(1290. RAD/SEC)	10000	100.3	100.2	98.5	97.6	94.9	93.0	89.8		
NO. OF BLADES 28	12500	98.2	97.5	95.6	94.9	92.4	89.3	86.4		
FAN TIP SPEED 16000	16000	96.0	95.5	94.4	92.7	90.5	86.4	84.2		
1111. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		108.3	107.6	106.9	105.7	103.3	101.7	100.5		
PNDB		120.4	119.7	119.2	117.8	115.2	114.1	112.7		
PNLT		121.3	120.7	120.5	118.8	116.5	115.2	112.7		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50									
	63									
	80									
	100									
NFA 3586. RPM	160	60.1	64.1	68.4	71.0	73.0	74.4	76.5		
( 375. RAD/SEC)	200	59.3	62.7	68.3	69.4	69.5	70.8	70.5		
NFK 3548. RPM	250	58.5	64.5	67.6	69.1	70.3	69.1	70.3		
( 372. RAD/SEC)	315	58.2	64.6	67.6	69.1	68.4	70.0	69.3		
NFD 3644. RPM	400	59.8	66.2	69.9	72.0	72.7	72.1	71.8		
( 382. RAD/SEC)	500	61.3	67.1	70.8	70.5	69.4	71.7	72.0		
NO. OF BLADES 28	630	61.6	68.6	72.3	73.5	73.8	74.7	74.6		
FREQ. SHIFT	800	64.8	68.9	72.4	74.6	73.0	72.5	72.2		
JET 5	1000	65.8	71.6	74.3	75.7	73.6	72.3	73.3		
FAN 6	1250	69.3	75.8	78.9	79.3	78.1	78.4	77.2		
CRITICAL FREQ.	1600	65.5	72.8	77.2	77.7	76.2	75.4	74.7		
0.	2000	63.3	70.7	73.4	75.0	75.5	73.8	73.1		
AIRFLOW RATIO	2500	66.1	74.5	77.0	78.6	77.7	77.0	74.6		
WF/WM 11.43	3150	62.6	71.2	73.7	75.7	73.0	73.2	71.1		
FAN TIP SPEED	4000	58.5	68.3	71.9	73.1	72.8	70.0	68.6		
1111. FT/SEC	5000	54.4	64.7	68.5	69.8	69.5	66.7	65.4		
	6300	48.4	60.2	64.5	66.0	65.8	63.2	61.9		
	8000	41.1	55.0	60.0	61.8	61.9	59.3	58.1		
	10000	31.9	48.8	54.8	57.1	57.5	55.0	53.9		
OVERALL CALCULATED		75.5	82.4	85.6	86.8	86.2	85.9	85.5		
PNDB		86.9	94.9	98.0	99.5	98.9	98.1	96.7		
PNLT		88.1	96.1	99.1	100.6	99.9	99.6	97.8		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	NO EGA	63									
	RADIAL 12. FT.	80									
	( 4. M)	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VO=40, A=0,	200									
	DATE 9/21/78	250									
	RUN SFH/W/R C/LT	315									
	TAPE 031090	400	87.2	87.9	86.7	87.0	86.9	86.7	89.2		
	BAR 29.9 HG	500	86.9	86.3	85.2	85.3	86.7	85.3	86.3		
	(***** N/M2)	630	85.5	85.0	83.6	84.8	84.6	83.2	84.9		
	TAMB 73. DEG F	800	84.5	83.7	83.8	85.2	84.7	84.2	86.6		
	(296. DEG K)	1000	85.6	84.4	85.1	84.5	84.2	83.9	83.9		
	TWET 58. DEG F	1250	90.1	87.1	89.4	87.4	87.3	85.0	86.0		
	(288. DEG K)	1600	90.3	87.5	87.9	86.6	87.4	87.6	87.4		
	HACT 8.18 GM/M3	2000	91.7	90.5	89.3	88.4	88.9	87.6	89.2		
	(.00818 KG/M3)	2500	93.6	91.3	90.2	88.3	88.0	87.0	85.3		
	NFA 12462. RPM	3150	94.6	91.9	92.0	90.5	88.3	87.4	86.6		
	(1305. RAD/SEC)	4000	95.1	93.9	92.6	92.1	88.8	87.2	86.1		
	NFK 12297. RPM	5000	98.7	98.0	97.5	94.9	93.4	90.9	89.9		
	(1288. RAD/SEC)	6300	95.4	94.5	93.9	92.3	89.8	88.0	86.1		
	NFD 12320. RPM	8000	93.2	92.4	90.8	90.0	89.4	87.4	86.3		
	(1290. RAD/SEC)	10000	95.9	94.6	93.9	92.2	90.3	88.3	86.6		
	NO. OF BLADES 28	12500	93.6	93.6	91.0	90.1	88.6	85.9	84.5		
	FAN TIP SPEED	16000	92.1	91.0	89.1	87.7	85.3	82.0	81.3		
	1142. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED	105.4	104.3	103.5	102.0	100.8	99.2	99.0			
	PNDP	118.2	117.1	116.6	114.8	113.5	111.7	111.1			
	PNLT	119.3	118.4	118.0	114.8	114.9	112.8	112.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	NO EGA	63									
		80									
		100									
		125	57.9	64.7	66.8	69.3	70.7	71.6	74.8		
	NFA 3686. RPM	160	57.6	63.0	65.3	67.6	70.5	70.2	71.9		
	( 386. RAD/SEC)	200	56.0	61.6	63.6	67.0	68.3	68.0	70.4		
	NFK 3637. RPM	250	54.9	60.3	63.8	67.4	68.4	69.0	72.1		
	( 381. RAD/SEC)	315	56.0	61.0	65.1	66.7	68.0	68.7	69.5		
	NFD 3644. RPM	400	60.3	63.6	69.3	69.6	71.0	69.8	71.5		
	( 382. RAD/SEC)	500	60.3	63.9	67.7	68.7	71.1	72.4	72.9		
	NO. OF BLADES 28	630	61.4	66.8	69.1	70.4	72.5	72.3	74.7		
	FREQ. SHIFT	800	62.9	67.3	69.8	70.2	71.5	71.6	70.7		
	JET 5	1000	63.5	67.7	71.5	72.3	71.7	72.0	71.9		
	FAN 6	1250	67.2	73.6	76.9	76.6	76.8	75.4	75.2		
	CRITICAL FREQ.	1600	63.1	69.8	73.0	73.8	73.0	72.4	71.2		
	0.	2000	60.1	67.2	69.6	71.3	72.4	71.6	71.3		
	AIRFLOW RATIO	2500	61.7	68.9	72.4	73.3	73.1	72.3	71.4		
	WF/WM 11.43	3150	58.0	67.3	69.1	70.9	71.3	69.8	69.2		
	FAN TIP SPEED	4000	54.6	63.8	66.6	68.1	67.6	65.6	65.7		
	1142. FT/SEC	5000	50.5	60.2	63.2	64.8	64.3	62.4	62.5		
		6300	44.5	55.7	59.2	61.0	60.7	58.8	59.0		
		8000	37.3	50.5	54.7	56.8	56.7	54.9	55.2		
		10000	28.0	44.4	49.5	52.1	52.3	50.7	51.0		
	OVERALL CALCULATED	73.2	79.3	82.4	83.3	83.9	83.4	84.2			
	PNDP	83.5	90.6	93.9	95.0	95.3	94.6	94.5			
	PNLT	84.8	92.2	95.4	96.2	96.8	95.6	95.9			



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
	125										
	160										
	200										
	250										
	315										
	400	89.1	89.4	88.8	89.9	87.1	88.5	88.4	88.3		
	500	86.0	88.2	87.1	89.0	87.0	86.2	87.5	88.9		
	630	84.7	86.0	86.1	86.3	85.7	86.0	87.0	85.9		
	800	84.2	84.6	86.4	86.5	85.3	85.4	87.2	86.1		
	1000	84.6	85.7	85.8	85.4	84.2	83.5	85.2	85.6		
	1250	90.0	88.1	89.2	88.0	87.6	85.9	87.7	87.2		
	1600	90.3	88.9	88.2	87.9	86.3	86.4	87.3	86.5		
	2000	93.9	92.5	90.6	88.9	87.6	87.9	89.5	88.2		
	2500	93.9	93.3	91.3	90.8	88.1	88.0	87.0	85.4		
	3150	92.7	91.7	91.7	91.1	89.7	87.4	86.2	86.1		
	4000	93.1	93.8	93.4	92.5	91.6	88.2	87.5	87.4		
	5000	95.9	96.7	97.4	96.3	94.8	91.4	90.0	89.0		
	6300	94.4	94.4	94.2	92.5	91.2	89.1	87.3	87.2		
	8000	92.4	92.0	91.3	90.6	89.1	87.9	87.0	86.5		
	10000	94.3	94.3	93.5	91.9	90.3	89.1	88.8	87.9		
	28	92.1	92.9	92.6	91.1	88.7	88.1	87.2	86.2		
	16000	88.8	90.5	90.6	87.9	86.8	84.2	82.6	80.9		
	20000										
OVERALL MEASURED											
OVERALL CALCULATED		104.2	104.3	104.0	103.0	101.5	100.0	99.9	99.2		
PNDB		116.5	116.8	116.8	116.0	114.5	112.3	111.7	110.9		
PNLT		116.5	116.8	118.0	117.2	115.6	112.3	111.7	110.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
	125	59.8	66.2	68.9	72.2	70.9	73.4	74.0	75.3		
	160	56.7	64.9	67.2	71.3	70.8	71.1	73.1	71.9		
	200	55.2	62.6	66.1	68.5	69.4	70.8	72.5	71.9		
	250	54.6	61.2	66.4	68.7	69.0	70.2	72.7	72.0		
	315	55.0	62.3	65.8	67.6	68.0	68.3	70.8	71.6		
	400	60.2	64.6	69.1	70.2	71.3	70.7	73.2	73.1		
	500	60.3	65.3	68.1	70.0	70.0	71.2	72.8	72.4		
	630	63.6	68.8	70.4	70.9	71.2	72.6	75.0	74.1		
	800	63.2	69.3	70.9	72.7	71.6	72.6	72.4	71.2		
	1000	61.6	67.5	71.2	72.9	73.1	72.0	71.5	71.8		
	1250	64.4	72.3	76.7	78.0	78.2	75.9	75.3	74.7		
	1600	62.1	69.7	73.3	74.0	74.4	73.5	72.4	72.8		
	2000	59.3	66.8	70.1	71.9	72.1	72.1	72.0	71.9		
	2500	60.1	68.6	72.0	73.0	73.1	72.1	73.6	73.2		
	3150	56.5	66.6	70.7	71.9	71.3	72.0	71.9	71.4		
	4000	51.3	63.3	68.1	68.3	69.1	67.8	67.0	65.8		
	5000	47.2	59.7	64.7	65.0	65.8	64.6	63.8	62.6		
	6300	41.2	55.2	60.7	61.2	62.2	61.0	60.3	59.1		
	8000	33.9	50.0	56.2	57.0	58.2	57.1	56.5	55.3		
	10000	24.7	43.9	51.0	52.3	53.8	52.9	52.3	51.2		
OVERALL CALCULATED											
PNDB		82.1	90.6	94.3	95.5	95.7	95.6	96.0	95.5		
PNLT		82.1	91.8	95.8	97.0	97.1	96.6	97.1	95.5		

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MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES										
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.	
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)	(0.	
	50											
NO EGA	63											
RADIAL 12. FT.	80											
( 4. M)	100											
VEHICLE JT15RD	125											
CONFIG 40X80	160											
LOC V0=40, A=15,	200											
DATE 9/21/78	250											
RUN SFH/W/R C/LT	315											
TAPE 032050	400	91.5	88.6	87.5	89.5	87.1	86.8	90.4	88.9			
BAR 29.9 HG	500	90.5	88.8	87.2	88.2	87.0	84.6	87.5	87.4			
(***** N/M2)	630	89.3	87.9	85.5	85.6	86.4	85.9	85.6	85.5			
TAMB 75. DEG F	800	88.7	86.9	86.9	85.8	85.9	86.9	85.8	86.0			
(297. DEG K)	1000	87.7	86.6	86.4	86.7	85.9	84.9	85.8	85.9			
TWET 60. DEG F	1250	91.0	90.0	89.0	88.9	87.5	87.6	86.4	86.2			
(288. DEG K)	1600	93.0	91.9	89.6	87.6	88.5	86.8	86.6	86.5			
HACT 8.46 GM/M3	2000	90.8	92.6	92.2	92.1	90.3	88.9	87.8	88.4			
(.00846 KG/M3)	2500	94.9	95.4	93.5	91.0	89.8	88.1	86.6	86.6			
NFA 12169. RPM	3150	96.7	94.9	94.8	94.6	91.7	89.6	88.1	88.0			
(1274. RAD/SEC)	4000	97.1	98.2	97.1	96.0	94.7	90.4	88.9	88.3			
NFK 11986. RPM	5000	99.7	99.2	99.0	98.8	96.7	93.3	92.0	91.7			
(1255. RAD/SEC)	6300	97.7	97.5	96.9	96.9	94.8	91.4	89.9	89.3			
NFD 12320. RPM	8000	95.3	95.8	94.6	94.3	92.2	89.8	88.6	87.3			
(1290. RAD/SEC)	10000	98.1	99.4	98.4	96.5	95.5	94.1	91.7	89.7			
NO. OF BLADES 28	12500	95.4	96.8	96.6	94.7	93.4	91.0	89.6	87.2			
FAN TIP SPEED 16000	20000	92.9	95.6	95.4	92.8	91.6	88.7	86.3	83.0			
1115. FT/SEC												
OVERALL MEASURED												
OVERALL CALCULATED		107.2	107.4	106.7	105.9	104.2	101.9	100.9	100.2			
PNDB		119.7	119.4	116.7	118.3	116.6	113.9	112.9	112.5			
PNLT		120.6	120.2	119.8	118.3	117.5	114.9	112.9	112.5			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES										
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.	
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)	(0.	
	50											
NO EGA	63											
	80											
	100											
NFA 3599. RPM	125	62.2	65.4	67.6	71.8	70.9	71.7	76.0	74.9			
( 377. RAD/SEC)	160	61.2	65.5	67.3	70.5	70.8	69.5	73.1	73.4			
	200	59.8	64.5	65.5	67.8	70.1	70.7	71.1	71.5			
NFK 3545. RPM	250	59.1	63.5	66.9	68.0	69.6	71.7	71.3	71.9			
( 371. RAD/SEC)	315	58.1	63.2	66.4	68.9	69.7	69.7	71.4	71.9			
NFD 3644. RPM	400	61.2	66.5	68.9	71.1	71.2	72.4	71.9	72.1			
( 382. RAD/SEC)	500	63.0	68.3	69.5	69.7	72.2	71.6	72.1	72.4			
NO. OF BLADES 28	630	60.5	68.9	72.0	74.1	73.9	73.6	73.3	74.3			
FREQ. SHIFT	800	64.2	71.4	73.1	72.9	73.3	72.7	72.0	72.4			
JET 5	1000	65.6	70.7	74.3	76.4	75.1	74.2	73.4	73.7			
FAN 6	1250	68.2	74.8	78.3	80.5	80.1	77.8	77.3	77.4			
CRITICAL FREQ.	1600	65.4	72.8	76.0	78.4	78.0	75.8	75.0	74.9			
0.	2000	62.2	70.6	73.4	75.6	75.2	74.0	73.6	72.7			
AIRFLOW RATIO	2500	63.9	73.7	76.9	77.6	78.3	78.1	76.5	75.0			
WF/WM 11.43	3150	59.8	70.5	74.7	75.5	76.0	74.9	74.3	72.4			
FAN TIP SPEED	4000	55.4	68.4	72.9	73.2	73.9	72.3	70.7	67.9			
1115. FT/SEC	5000	51.3	64.8	69.5	69.9	70.6	69.1	67.5	64.7			
	6300	45.3	60.3	65.5	66.1	67.0	65.5	64.0	61.2			
	8000	38.0	55.1	61.0	61.9	63.0	61.6	60.2	57.4			
	10000	28.8	49.0	55.8	57.2	58.6	57.4	56.0	53.3			
OVERALL CALCULATED		75.0	82.2	85.4	87.0	87.1	86.1	85.9	85.6			
PNDB		85.5	94.6	97.9	99.1	99.6	99.0	98.1	96.9			
PNLT		85.5	95.6	99.0	100.1	100.8	100.2	99.1	96.0			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=40, A=15,	200										
DATE 9/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 032060	400	91.0	89.1	89.0	87.9	88.8	86.0	88.2	88.3		
BAR 29.9 HG	500	89.9	89.6	88.1	87.2	87.8	85.9	86.3	89.1		
(***** N/M2)	630	91.5	90.3	88.0	86.5	86.9	85.6	85.8	84.6		
TAMB 75. DEG F	800	90.2	90.4	89.8	86.1	87.5	85.5	86.7	84.3		
(297. DEG K)	1000	89.0	88.3	88.8	87.7	86.6	82.7	84.5	83.9		
TWET 60. DEG F	1250	91.7	93.0	92.7	88.4	88.6	87.3	85.0	84.1		
(288. DEG K)	1600	92.9	94.2	93.9	90.2	90.0	89.8	87.4	88.5		
HACT 8.46 GM/M3	2000	91.0	92.5	95.7	93.0	91.2	89.7	89.1	88.0		
(.00846 KG/M3)	2500	97.9	97.8	97.1	94.6	93.8	91.2	91.1	87.8		
NFA 11311. RPM	3150	101.1	101.2	98.9	95.5	95.1	93.6	90.3	89.0		
(1184. RAD/SEC)	4000	99.5	100.7	99.6	98.3	96.7	94.8	93.0	91.0		
NFK 11140. RPM	5000	102.9	102.0	101.9	101.0	99.8	96.9	96.1	94.9		
(1166. RAD/SEC)	6300	100.2	99.3	99.9	98.8	97.2	95.0	93.2	90.3		
NFD 12320. RPM	8000	97.7	98.5	98.7	98.3	96.0	94.2	91.8	90.1		
(1290. RAD/SEC)	10000	99.9	101.7	100.5	99.7	99.0	97.2	94.9	91.6		
NO. OF BLADES 28	12500	98.7	99.0	100.8	98.8	96.9	96.4	93.0	89.8		
FAN TIP SPEED	16000	96.9	97.6	98.5	97.3	96.2	94.7	92.1	88.1		
1037. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		109.8	110.1	109.9	108.4	107.2	105.3	103.0	101.7		
PNDB		122.3	122.1	121.8	120.3	119.3	116.9	115.9	114.5		
PNLT		123.3	122.1	121.8	120.3	119.3	116.9	116.9	115.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
	125	61.7	65.9	69.1	70.2	72.6	70.9	73.8	74.3		
NFA 3346. RPM	160	60.6	66.3	68.2	69.5	71.6	70.8	71.9	75.1		
( 350. RAD/SEC)	200	62.0	66.9	68.0	68.7	70.6	70.4	71.3	70.6		
NFK 3295. RPM	250	60.6	67.0	69.8	68.3	71.2	70.3	72.2	70.2		
( 345. RAD/SEC)	315	59.4	64.9	68.8	69.9	70.4	67.5	70.1	69.9		
NFD 3644. RPM	400	61.9	69.5	72.6	70.6	72.3	72.1	70.5	70.0		
( 382. RAD/SEC)	500	62.9	70.6	73.8	72.3	73.7	74.6	72.9	74.4		
NO. OF BLADES 28	630	60.7	68.8	75.5	75.0	74.8	74.4	74.6	73.9		
FREQ. SHIFT	800	67.2	73.8	76.7	76.5	77.3	75.8	76.5	73.6		
JET 5	1000	70.0	77.0	78.4	77.3	78.5	78.2	75.6	74.7		
FAN 5	1250	67.9	76.3	78.9	80.0	80.1	79.3	78.2	76.7		
CRITICAL FREQ.	1600	70.6	77.2	81.0	82.5	83.0	81.3	81.2	80.5		
0.	2000	67.0	74.1	78.7	80.1	80.2	79.2	78.2	75.7		
AIRFLOW RATIO	2500	63.4	72.8	77.1	79.3	78.8	78.2	76.6	75.3		
WF/WM 11.43	3150	64.2	75.2	78.4	80.3	81.5	80.9	79.4	76.6		
FAN TIP SPEED	4000	61.1	71.7	78.2	79.1	79.1	79.9	77.3	74.6		
1037. FT/SEC	5000	58.3	69.8	75.6	77.4	78.2	78.1	76.3	72.8		
	6300	52.3	65.3	71.6	73.6	74.6	74.5	72.8	69.3		
	8000	45.0	60.1	67.1	69.4	70.6	70.6	69.0	65.5		
	10000	35.8	54.0	61.9	64.7	66.2	66.4	64.8	61.4		
OVERALL CALCULATED		77.5	85.1	88.8	89.8	90.3	89.7	88.7	87.3		
PNDB		88.4	97.4	101.3	102.7	103.5	103.0	101.8	99.7		
PNLT		89.4	98.4	101.3	102.7	103.5	103.0	102.8	101.1		

		MODEL SOUND PRESSURE LEVELS									
		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	NO EGA	50									
	RADIAL 12. FT.	63									
	( 4. M)	80									
	VEHICLE JT15RD	100									
	CONFIG 40X80	125									
	LJC VC=40, A=30,	160									
	DATE 9/21/78	200									
	RUN SFH/W/R C/LT	250									
	TAPE 033010	315									
	BAR 30.0 HG	400	91.9	89.7	89.8	88.5	88.9	87.8	87.7	89.6	
	(***** N/M2)	500	91.3	89.6	89.6	88.0	86.3	86.8	85.7	87.5	
	TAMB 75. DEG F	630	91.8	90.6	88.6	87.3	86.5	86.9	85.0	85.5	
	(297. DEG K)	800	90.3	89.5	89.0	85.8	87.1	86.2	84.7	86.3	
	TWET 60. DEG F	1000	89.0	89.6	87.6	86.8	86.3	85.5	84.6	84.6	
	(288. DEG K)	1250	90.6	92.5	92.6	89.7	88.0	88.6	85.4	85.7	
	HACT 8.46 GM/M3	1600	92.5	92.7	93.4	90.9	89.8	88.7	89.2	87.9	
	(.00846 KG/M3)	2000	92.5	92.6	93.8	93.8	92.0	89.9	89.1	87.5	
	NFA 11311. RPM	2500	98.1	98.6	96.1	93.8	92.8	91.3	89.7	88.5	
	(1184. RAD/SEC)	3150	101.6	101.5	99.4	96.2	92.8	92.1	90.3	89.2	
	NFK 11140. RPM	4000	100.2	101.0	100.0	98.5	96.2	92.9	92.7	90.2	
	(1166. RAD/SEC)	5000	102.2	101.7	102.5	101.3	98.4	97.6	94.8	93.5	
	NFD 12320. RPM	6300	100.7	100.3	99.2	98.8	96.6	94.5	91.8	89.6	
	(1290. RAD/SEC)	8000	98.6	98.4	97.6	98.0	96.0	92.5	89.8	88.2	
	NO. OF BLADES 28	10000	100.6	100.9	99.6	99.5	97.9	96.3	93.4	90.6	
	FAN TIP SPEED 16000	12500	99.8	98.8	99.6	97.3	95.7	93.6	91.4	88.9	
	1037. FT/SEC	20000	98.6	97.0	96.8	97.1	95.1	92.9	91.3	86.8	
	OVERALL MEASURED										
	OVERALL CALCULATED	110.3	110.1	109.5	108.3	106.3	104.6	102.6	101.1		
	PNDB	122.4	122.3	121.9	120.6	118.3	117.1	114.9	113.7		
	PNLT	122.4	122.3	121.9	120.6	118.3	118.4	115.8	114.9		

		FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA									
		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	NO EGA	50									
		63									
		80									
		100									
	NFA 3346. RPM	125	62.6	66.5	69.9	70.8	72.7	72.7	73.3	75.6	
	( 350. RAD/SEC)	160	62.0	66.3	69.7	70.3	70.1	71.7	71.3	73.5	
	NFK 3295. RPM	200	62.3	67.2	68.6	69.5	70.2	71.7	70.5	71.5	
	( 345. RAD/SEC)	250	60.7	66.1	69.0	68.0	70.8	71.0	70.2	72.2	
	NFD 3644. RPM	315	59.4	66.2	67.6	69.0	70.1	70.3	70.2	70.6	
	( 382. RAD/SEC)	400	60.8	69.0	72.5	71.9	71.7	73.4	70.9	71.6	
	NO. OF BLADES 28	500	62.5	69.1	73.3	73.0	73.5	73.5	74.7	73.8	
	FREQ. SHIFT	630	62.2	68.9	73.6	75.8	75.6	74.6	74.6	73.4	
	JET 5	800	67.4	74.6	75.7	75.7	76.3	75.9	75.1	74.3	
	FAN 5	1000	70.5	77.3	78.9	78.0	76.2	76.7	75.6	74.9	
	CRITICAL FREQ.	1250	68.6	76.6	79.3	80.2	79.6	77.4	77.9	75.9	
	0.	1600	69.9	76.9	81.6	82.8	81.6	82.0	79.9	79.1	
	AIRFLOW RATIO	2000	67.5	75.1	78.0	80.1	79.6	78.7	76.8	75.0	
	WF/WM 11.43	2500	64.3	72.7	76.0	79.0	78.8	76.5	74.6	73.4	
	FAN TIP SPEED	3150	64.9	74.4	77.5	80.1	80.4	80.0	77.9	75.6	
	1037. FT/SEC	4000	62.2	71.5	77.0	77.6	77.9	77.1	75.7	73.7	
		5000	60.0	69.2	73.9	77.2	77.1	76.3	75.5	71.5	
		6300	54.0	64.7	69.9	73.4	73.5	72.7	72.0	68.0	
		8000	46.7	59.5	65.4	69.2	69.5	68.8	68.2	64.2	
		10000	37.5	53.4	60.2	64.5	65.1	64.6	64.0	60.1	
	OVERALL CALCULATED	77.8	85.2	88.4	89.8	89.4	88.9	87.8	86.3		
	PNDB	88.5	97.1	100.5	102.5	102.6	102.1	100.7	98.9		
	PNLT	89.8	97.1	100.5	102.5	102.6	103.4	100.7	100.1		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=40, A=30,	200										
DATE 9/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 033020	400	91.9	90.4	88.3	87.1	88.9	89.5	90.4	91.9		
BAR 30.0 HG	500	90.6	90.4	87.7	86.6	88.7	88.0	88.8	89.8		
(***** N/M2)	630	90.1	89.9	90.0	88.1	87.2	87.4	86.3	86.9		
TAMB 75. DEG F	800	89.8	88.2	88.0	87.2	86.9	86.7	86.0	84.8		
(297. DEG K)	1000	89.6	87.8	87.4	86.5	86.3	83.9	84.7	85.0		
TWET 60. DEG F	1250	90.8	89.6	91.2	87.8	87.5	86.6	86.0	86.7		
(288. DEG K)	1600	92.4	90.6	91.7	89.2	88.5	88.7	86.7	88.4		
HACT 8.46 GM/M3	2000	92.5	93.1	92.7	92.6	90.8	90.4	90.1	89.0		
(.00846 KG/M3)	2500	96.8	93.5	95.0	92.1	90.7	87.7	88.2	87.7		
NFA 12169. RPM	3150	96.7	94.3	95.1	93.8	93.9	90.1	89.1	87.9		
(1274. RAD/SEC)	4000	98.3	97.7	98.3	96.5	96.1	93.6	91.1	89.6		
NFK 11985. RPM	5000	100.0	100.5	100.5	99.2	98.3	95.9	91.8	90.9		
(1235. RAD/SEC)	6300	98.1	97.8	97.3	96.7	95.3	93.4	90.7	89.0		
NFD 12320. RPM	8000	96.2	95.8	95.8	94.2	93.0	91.3	89.3	88.2		
(1290. RAD/SEC)	10000	100.2	99.4	99.1	98.2	97.1	93.3	93.2	90.8		
NO. OF BLADES 28	12500	98.1	96.1	96.1	95.7	93.8	90.8	90.5	90.6		
FAN TIP SPEED 16000	1115. FT/SEC	96.2	93.7	93.9	93.2	92.0	89.6	87.8	85.4		
OVERALL MEASURED											
OVERALL CALCULATED		108.4	107.5	107.5	106.3	105.4	103.2	101.8	101.2		
PNDB		120.3	120.0	120.0	118.7	117.9	115.8	113.5	112.6		
PNLT		121.3	120.9	120.0	119.7	118.9	115.8	114.3	112.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)	(0.
	50										
NO EGA	63										
	80										
	100										
NFA 3599. RPM	125	62.6	67.2	68.4	69.4	72.7	74.4	76.0	77.9		
( 377. RAD/SEC)	160	61.3	67.1	67.8	68.9	72.5	72.9	74.4	75.8		
NFK 3545. RPM	200	60.6	66.5	70.0	70.3	70.9	72.2	71.8	72.9		
( 371. RAD/SEC)	250	60.2	64.8	68.0	69.4	70.6	71.5	71.5	70.7		
NFD 3644. RPM	315	60.0	64.4	67.4	68.7	70.1	68.7	70.3	71.0		
( 382. RAD/SEC)	400	61.0	66.1	71.1	70.0	71.2	71.4	71.5	72.6		
	500	62.4	67.0	71.6	71.3	72.2	73.5	72.2	74.3		
NO. OF BLADES 28	630	62.2	69.4	72.5	74.6	74.4	75.1	75.6	74.9		
FREQ. SHIFT	800	66.1	69.5	74.6	74.0	74.2	72.3	73.6	73.5		
JET 5	1000	65.6	70.1	74.6	75.6	77.3	74.7	74.4	73.6		
FAN 6	1250	68.5	76.1	79.8	80.9	81.7	80.4	77.1	76.6		
CRITICAL FREQ.	1600	65.8	73.1	76.4	78.2	78.5	77.8	75.8	74.6		
0.	2000	63.1	70.6	74.6	75.5	76.0	75.5	74.3	73.6		
AIRFLOW RATIO	2500	66.0	73.7	77.6	79.3	79.9	77.3	78.0	76.1		
WF/WM 11.43	3150	62.5	69.8	74.2	76.5	76.4	74.7	75.2	75.8		
FAN TIP SPEED	4000	58.7	66.5	71.4	73.6	74.3	73.2	72.2	70.3		
1115. FT/SEC	5000	54.6	62.9	68.0	70.3	71.0	70.0	69.0	67.1		
	6300	48.6	58.4	64.0	66.5	67.4	66.4	65.5	63.6		
	8000	41.3	53.2	59.5	62.3	63.4	62.5	61.7	59.8		
	10000	32.1	47.1	54.3	57.6	59.0	58.3	57.5	55.7		
OVERALL CALCULATED		75.9	82.3	86.2	87.4	88.2	87.2	86.7	86.6		
PNDB		87.1	94.4	98.4	100.0	100.7	99.2	99.2	98.4		
PNLT		88.2	95.9	99.9	101.3	102.0	100.7	100.3	98.4		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	50										
	63										
	80										
	100										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC "Q=40, A=30,	200										
DATE 2/21/78	250										
RUN SFH/W/R C/LT	315										
TAPE 033030	400	88.6	89.4	87.5	89.1	87.8	89.4	88.4	90.1		
BAR 30.0 HG	500	88.9	86.2	88.1	86.9	87.1	88.7	87.4	89.8		
(***** N/M2)	630	88.1	84.9	88.1	86.8	86.4	87.2	87.0	86.5		
TAMB 75. DEG F	800	87.1	86.5	87.0	88.0	87.1	86.8	86.3	85.1		
(297. DEG K)	1000	88.7	86.1	87.9	85.5	85.9	84.3	84.7	85.9		
TWET 60. DEG F	1250	89.5	90.7	88.3	88.8	88.1	86.8	87.5	88.3		
(288. DEG K)	1600	90.7	90.4	89.3	88.9	88.4	86.1	88.5	87.5		
HACT 8.46 GM/M3	2000	91.6	92.9	93.9	92.1	91.1	90.3	90.4	90.1		
(.00846 KG/M3)	2500	90.9	93.7	92.5	90.7	89.5	88.6	86.7	86.8		
NFA 12509. RPM	3150	92.9	92.6	93.8	92.1	89.6	89.0	87.6	86.7		
(1310. RAD/SEC)	4000	97.4	94.2	94.7	93.6	90.6	88.9	88.2	87.9		
NFK 12320. RPM	5000	99.2	97.5	96.9	95.9	96.1	94.0	91.0	89.4		
(1290. RAD/SEC)	6300	95.9	95.9	95.2	94.2	91.0	91.4	88.9	87.6		
NFD 12320. RPM	8000	94.3	93.6	91.6	91.1	89.9	88.2	86.5	86.7		
(1290. RAD/SEC)	10000	95.5	95.3	93.3	92.0	90.8	89.1	88.7	87.6		
NO. OF BLADES 28	12500	94.9	93.5	92.2	91.0	89.2	88.2	88.1	87.8		
FAN TIP SPEED 16000		92.5	90.8	89.8	89.0	86.7	84.7	83.2	82.6		
1147. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		105.9	105.1	104.6	103.5	102.3	101.3	100.3	100.1		
PNDB		118.6	117.6	117.2	116.2	115.5	114.1	112.3	111.5		
PNLT		118.6	117.6	118.2	116.2	117.3	115.4	112.3	111.5		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	50										
	63										
	80										
	100										
	125	59.3	66.2	67.6	71.4	71.6	74.3	74.0	76.1		
NFA 3700. RPM	160	59.6	62.9	68.2	69.2	70.9	73.6	73.0	75.8		
( 387. RAD/SEC)	200	58.6	61.5	68.1	69.0	70.1	72.0	72.5	72.5		
NFK 3644. RPM	250	57.5	63.1	67.0	70.2	70.8	71.6	71.8	71.0		
( 382. RAD/SEC)	315	59.1	62.7	67.9	67.7	69.7	69.1	70.3	71.9		
NFD 3644. RPM	400	59.7	67.2	68.2	71.0	71.8	71.6	73.0	74.2		
( 382. RAD/SEC)	500	60.7	66.8	69.2	71.0	72.1	70.9	74.0	73.4		
NO. OF BLADES 28	630	61.5	69.2	73.7	74.1	74.7	75.0	75.9	76.0		
FREQ. SHIFT	800	60.2	69.7	72.1	72.6	73.0	73.2	72.1	72.6		
JET 5	1000	61.8	68.4	73.3	73.9	73.0	73.6	72.9	72.4		
FAN 6	1200	67.7	73.1	76.2	77.6	79.5	78.5	76.3	75.1		
CRITICAL FREQ.	1600	63.6	71.2	74.3	75.7	74.2	75.8	74.0	73.2		
0.	2000	61.2	68.4	70.4	72.4	72.9	72.4	71.5	72.1		
AIRFLOW RATIO	2500	61.3	69.6	71.8	73.1	73.6	73.1	73.5	72.9		
WF/WM 11.43	3150	59.3	67.2	70.3	71.8	71.8	72.1	72.8	73.0		
FAN TIP SPEED	4000	55.0	63.6	67.3	69.4	69.0	68.3	67.6	67.5		
1147. FT/SEC	5000	50.9	60.0	63.9	66.1	65.7	65.1	64.4	64.3		
	6300	44.9	55.5	59.9	62.3	62.1	61.5	60.9	60.8		
	8000	37.6	50.3	55.4	58.1	58.1	57.6	57.1	57.0		
	10000	28.4	44.2	50.2	53.4	53.7	53.4	52.9	52.9		
OVERALL CALCULATED		73.4	80.2	83.4	84.8	85.4	85.6	85.3	85.6		
PNDB		83.6	81.4	84.4	85.9	86.3	86.2	86.3	86.5		
PNLT		85.3	82.5	85.4	85.9	88.3	87.5	86.3	86.5		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA	125										
RADIAL 12. FT.	160										
( 4. M)	200										
VEHICLE JT15RD	250										
CONFIG 40X80	315										
LOC V0=40, A=0	400										
DATE 9-13/9-15-78	500	90.7	91.0	88.7	91.5	90.4	90.5	92.1			
RUN SFT/W/R C/LT	630	90.1	89.5	89.1	89.4	88.7	88.0	90.9			
TAPE 004010	800	90.1	90.4	90.3	88.2	87.7	84.4	86.1			
BAR 29.8 HG	1000	89.2	89.9	89.1	87.3	87.7	85.2	85.1			
(***** N/M2)	1250	85.7	86.2	86.0	86.2	83.6	82.1	83.4			
TAMB 78. DEG F	1600	91.6	91.3	89.8	91.6	87.4	85.8	85.1			
(299. DEG K)	2000	92.4	94.0	89.6	91.8	91.7	88.4	86.8			
TWET 63. DEG F	2500	90.5	92.2	91.2	94.0	94.1	91.0	88.5			
(290. DEG K)	3150	97.3	97.0	94.2	93.6	92.3	88.8	88.7			
HACT10.23 GM/M3	4000	99.8	100.5	99.0	95.1	92.2	90.3	88.8			
(.01023 KG/M3)	5000	97.9	99.0	97.5	97.3	94.9	94.4	89.6			
NFA 11342. RPM	6300	100.1	100.2	98.4	99.6	98.1	95.0	93.5			
(1188. RAD/SEC)	8000	96.4	96.1	95.3	96.5	95.7	91.8	88.6			
NFK 11140. RPM	10000	94.3	93.0	95.2	94.5	93.8	88.6	87.9			
(1166. RAD/SEC)	12500	96.6	95.7	97.6	97.9	96.3	91.5	90.2			
NFD 12320. RPM	16000	94.8	93.1	96.8	96.7	94.7	91.3	87.2			
(1290. RAD/SEC)	20000	92.4	90.6	94.2	94.3	93.1	88.6	85.9			
NO. OF BLADES 28											
FAN TIP SPEED											
1040. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		107.5	107.6	107.0	107.0	105.6	102.6	101.2			
PNDB		120.3	120.8	119.5	119.4	117.9	115.2	113.7			
PNLT		120.3	121.8	120.5	120.3	117.9	116.3	115.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
	100										
	125	61.3	67.7	68.7	73.7	74.1	75.3	77.6			
NFA 3355. RPM	160	60.7	66.1	69.1	71.6	72.4	72.8	76.4			
( 351. RAD/SEC)	200	60.6	67.0	70.3	70.4	71.4	69.2	71.6			
NFK 3295. RPM	250	59.6	66.5	69.1	69.5	71.4	70.0	70.6			
( 345. RAD/SEC)	315	56.0	62.7	65.9	68.3	67.3	66.8	68.9			
NFD 3644. RPM	400	61.7	67.7	69.6	73.7	71.0	70.5	70.5			
( 382. RAD/SEC)	500	62.3	70.3	69.4	73.8	75.3	73.1	72.2			
NO. OF BLADES 28	630	60.1	68.4	70.9	75.9	77.6	75.6	73.9			
FREQ. SHIFT	800	66.6	73.0	73.8	75.5	75.8	73.4	74.1			
JET 5	1000	68.7	76.3	78.5	76.9	75.6	74.9	74.1			
FAN 5	1250	66.3	74.6	76.8	79.0	78.2	78.9	74.8			
CRITICAL FREQ.	1600	67.8	75.4	77.5	81.1	81.3	79.3	78.6			
0.	2000	63.2	70.9	74.1	77.8	78.7	76.0	73.5			
AIRFLOW RATIO	2500	60.0	67.2	73.6	75.5	76.6	72.6	72.7			
WF/WM 11.43	3150	60.9	69.3	75.6	78.6	78.8	75.3	74.8			
FAN TIP SPEED	4000	57.2	65.7	74.2	76.9	76.9	74.8	71.5			
1040. FT/SEC	5000	53.9	62.9	71.4	74.4	75.2	72.0	70.2			
	6300	47.9	58.4	67.4	70.6	71.5	68.4	66.7			
	8000	40.6	53.2	62.9	65.5	67.6	64.6	62.9			
	10000	31.4	47.0	57.7	61.8	63.1	60.3	58.7			
OVERALL CALCULATED		75.6	83.1	86.0	88.5	88.8	87.1	86.5			
PNDB		85.8	93.6	98.3	101.1	101.5	98.8	98.1			
PNLT		86.8	94.9	99.3	101.1	101.5	98.8	99.6			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD	125										
CONFIG 40X80	130										
LOC VP=40,A=0	200										
DATE 9-13/9-15-76	250										
RUN SFT/W/R C/LT	315										
TAPE 004020	400	91.7	89.5	89.5	89.3	90.4	86.2	86.3			
BAR 29.8 HG	500	90.7	88.0	88.4	88.8	87.9	86.8	84.7			
(***** N/M2)	650	89.9	88.5	88.3	87.0	85.4	85.7	85.7			
TAMB 78. DEG F	800	88.1	87.6	85.5	86.9	86.1	84.5	85.2			
(299. DEG K)	1000	85.2	85.7	84.3	85.3	83.8	83.4	83.5			
TWET 63. DEG F	1250	89.3	90.0	88.8	86.2	85.1	84.0	85.9			
(290. DEG K)	1500	88.9	89.7	90.0	87.8	87.8	86.3	85.9			
HACT10.23 GM/M3	2000	91.8	91.7	91.3	90.0	89.0	88.5	86.0			
(.01023 KG/M3)	2500	96.6	94.3	92.0	90.3	87.6	85.9	84.3			
NFA 11734. RPM	3150	96.4	95.6	91.7	90.4	88.9	86.5	86.1			
(1229. RAD/SEC)	4000	97.8	96.5	95.1	93.5	90.5	88.7	86.4			
NFK 11525. RPM	5000	98.8	97.2	95.9	94.7	92.9	89.8	89.1			
(1207. RAD/SEC)	6300	95.6	94.1	94.1	90.3	89.7	86.5	85.1			
NFD 12320. RPM	8000	93.5	93.9	92.3	88.4	86.8	83.4	81.7			
(1290. RAD/SEC)	10000	97.0	96.7	94.2	93.0	89.9	86.4	84.3			
NO. OF BLADES 28	12500	94.2	94.0	91.9	90.0	87.2	81.7	80.4			
FAN TIP SPEED 16000		92.6	92.2	90.1	88.6	85.1	78.9	77.1			
1076. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		106.6	105.6	104.1	102.5	100.8	98.4	97.5			
PNCB		119.0	117.9	116.5	115.0	113.4	110.9	110.0			
PNLT		119.9	117.9	116.5	116.1	114.4	111.9	111.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA											
NFA 3471. RPM	160	62.3	65.2	69.5	71.5	74.1	71.0	71.8			
( 363. RAD/SEC)	200	61.3	64.6	68.4	71.0	71.6	71.6	70.2			
NFK 3409. RPM	250	60.4	65.1	68.3	69.2	69.1	70.5	71.2			
( 357. RAD/SEC)	315	58.5	64.2	65.5	69.1	69.8	69.3	70.7			
NFD 3644. RPM	400	55.5	62.2	64.2	67.4	67.5	68.1	69.0			
( 382. RAD/SEC)	500	59.4	66.4	68.6	68.3	68.7	68.7	71.3			
NO. OF BLADES 28	630	58.8	66.0	69.8	69.8	71.4	71.0	71.3			
FREQ. SHIFT	800	61.4	67.9	71.0	71.9	72.5	73.1	71.4			
JET 5	1000	65.9	70.3	71.6	72.2	71.1	70.5	69.7			
FAN 5	1250	65.3	71.4	71.2	72.2	72.3	71.1	71.4			
CRITICAL FREQ.	1600	60.2	72.1	74.4	75.2	73.8	73.2	71.6			
0.	2000	66.5	72.4	75.0	76.2	76.1	74.1	74.2			
AIRFLOW RATIO	2500	62.4	68.9	72.9	71.6	72.7	70.7	70.0			
WF/WM 11.43	3150	59.2	68.1	70.7	69.4	69.6	67.4	66.5			
FAN TIP SPEED	4000	61.3	70.3	72.2	73.7	72.4	70.2	68.9			
1076. FT/SEC	5000	56.6	66.6	69.3	70.5	69.4	65.2	64.7			
	6300	54.1	64.5	67.3	68.7	67.2	62.3	61.4			
	8000	48.1	60.0	63.3	64.9	63.5	58.7	57.9			
	10000	40.8	54.8	58.8	60.8	59.6	54.9	54.1			
OVERALL CALCULATED		31.6	48.6	53.6	56.1	55.1	50.6	49.9			
PNCB		74.6	80.8	83.2	84.1	84.2	83.0	82.8			
PNLT		84.9	92.9	95.2	96.4	95.8	93.8	93.2			
		86.0	92.9	95.2	97.6	95.8	95.1	94.3			



MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(0. ) (0. ) (0. )										
	50										
NO EGA	63										
RADIAL 12. FT.	60										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VP=40, A=0	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 004030	400	39.3	38.4	38.7	39.2	38.2	37.5	39.8			
BAR 29.8 HG	500	36.6	36.9	37.6	37.2	37.2	37.0	36.1			
(***** N/M2)	600	35.6	35.5	37.4	36.6	35.7	35.6	35.6			
TAMB 78. DEG F	800	35.3	34.8	34.3	36.9	36.8	36.3	35.1			
(299. DEG K)	1000	33.9	34.6	35.0	33.2	36.5	32.8	33.5			
TWET 63. DEG F	1250	37.8	37.1	35.5	37.9	37.3	36.2	36.3			
(290. DEG K)	1600	39.6	38.8	30.3	37.5	35.8	37.1	37.1			
HACT10.23 GH/M3	2000	38.9	31.4	31.2	30.0	37.8	36.2	39.0			
(.01023 KG/M3)	2500	31.4	32.3	30.3	39.0	37.4	35.8	35.2			
NFA 12202. RPM	3150	31.9	33.1	31.8	30.6	38.5	35.9	34.4			
(1278. RAD/SEC)	4000	35.9	35.1	34.6	32.9	30.4	37.9	37.8			
NFK 11984. RPM	5000	36.5	37.1	35.6	34.2	32.9	30.6	39.3			
(1255. RAD/SEC)	6300	33.7	32.3	34.5	32.4	30.2	37.0	35.8			
NFD 12320. RPM	8000	32.4	31.3	39.7	38.0	36.6	35.1	34.3			
(1290. RAD/SEC)	10000	36.0	35.6	33.7	32.7	30.3	38.0	35.8			
NO. OF BLADES 28	12500	32.4	32.5	30.3	39.5	36.1	34.4	32.8			
FAN TIP SPEED 16000		39.3	38.9	37.0	35.6	32.2	29.0	28.0			
1118. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		104.3	104.3	103.4	102.3	100.6	99.0	98.9			
PNDB		116.8	116.9	113.0	114.7	113.3	111.4	110.7			
PNLT		116.8	118.0	117.5	116.3	114.5	112.5	110.7			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(0. ) (0. ) (0. )										
	50										
NO EGA	63										
	80										
	100										
NFA 3609. RPM	125	59.9	65.1	68.7	71.4	71.9	72.3	75.3			
( 378. RAD/SEC)	160	59.2	65.5	67.8	69.4	70.9	71.8	73.6			
NFK 3543. RPM	200	57.1	65.1	67.4	69.0	69.4	70.4	71.1			
( 371. RAD/SEC)	250	55.7	61.4	64.3	69.1	70.5	71.1	70.5			
NFD 3644. RPM	315	54.2	61.1	64.9	68.3	70.2	67.5	69.0			
( 382. RAD/SEC)	400	57.9	63.5	63.3	70.0	70.9	70.9	71.7			
NO. OF BLADES 28	500	59.5	65.1	70.1	69.5	69.4	71.8	72.5			
FREQ. SHIFT	630	58.5	67.6	70.9	71.9	71.3	72.8	74.4			
JET 5	800	60.7	68.3	69.9	70.9	70.9	70.4	70.6			
FAN 6	1000	60.8	68.9	71.3	72.4	71.9	70.5	69.7			
	1250	64.9	72.7	74.9	75.9	76.3	75.1	74.5			
CRITICAL FREQ.	1600	61.6	68.3	73.6	73.9	73.4	71.3	70.9			
0.	2000	59.2	66.1	69.5	70.2	69.6	69.3	69.3			
AIRFLOW RATIO	2500	61.3	69.9	72.2	73.8	73.2	72.1	70.7			
MF/WM 11.43	3150	56.8	66.2	68.4	70.3	68.7	68.3	67.5			
FAN TIP SPEED	4000	51.9	61.7	64.6	66.0	64.6	63.5	62.5			
1119. FT/SEC	5000	47.8	58.2	61.2	62.7	61.3	60.2	59.3			
	6300	41.8	53.7	57.2	58.9	57.6	56.6	55.8			
	8000	34.5	48.5	52.7	54.8	53.7	52.8	52.0			
	10000	25.3	42.3	47.5	50.1	49.2	48.5	47.8			
OVERALL CALCULATED		71.8	79.3	82.2	83.5	83.6	83.3	83.8			
PNDB		82.7	90.8	93.6	95.2	94.7	94.0	93.5			
PNLT		84.0	92.2	94.7	96.4	96.1	95.4	94.9			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.	
	FREQ	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	)	(0.	)
	50											
NO EGA	63											
RADIAL 12. FT.	80											
( 4. M)	100											
VEHICLE JT15RD	125											
CONFIG 40X80	160											
LOC VP=40, A=0	200											
DATE 9-13/9-15-78	250											
RUN SFT/W/R C/LT	315											
TAPE 004080	400	89.5	86.5	86.7	86.8	88.7	86.5	89.4				
BAR 29. HG	500	86.6	86.1	85.0	85.2	86.8	85.4	87.7				
(***** N/M2)	630	83.5	85.0	84.1	85.1	85.3	83.0	85.6				
TAMB 78. DEG F	800	84.0	84.0	84.6	84.9	84.9	83.3	87.2				
(299. DEG K)	1000	82.7	83.2	82.8	83.3	84.1	84.4	85.2				
TWET 63. DEG F	1250	84.3	85.6	85.3	85.9	86.6	85.0	85.9				
(290. DEG K)	1600	86.2	87.9	87.1	87.1	85.8	87.6	85.7				
HACT10.23 GM/M3	2000	89.7	88.9	89.0	88.3	87.6	86.7	88.1				
(.01023 KG/M3)	2500	90.2	88.8	86.7	87.0	86.2	84.2	85.3				
NFA 12544. RPM	3150	89.6	89.2	88.5	88.3	87.1	86.6	86.4				
(1313. RAD/SEC)	4000	92.0	92.2	91.2	90.1	86.4	86.1	86.4				
NFK 12320. RPM	5000	95.0	96.0	93.8	93.2	90.9	87.9	87.8				
(1290. RAD/SEC)	6300	91.2	91.0	89.4	88.4	85.9	84.8	84.9				
NFD 12320. RPM	8000	89.2	88.3	87.0	86.0	84.5	83.9	82.9				
(1290. RAD/SEC)	10000	91.9	90.0	88.9	86.9	86.9	85.3	84.2				
NO. OF BLADES 28	12500	89.2	88.0	86.3	85.4	82.8	81.6	81.0				
FAN TIP SPEED	16000	85.7	85.1	82.6	80.7	77.8	76.3	75.4				
1150. FT/SEC	20000											
OVERALL MEASURED												
OVERALL CALCULATED		101.8	101.6	100.3	99.8	98.8	97.5	98.3				
PNDB		114.7	115.0	113.5	113.0	111.4	109.6	109.9				
PNLT		115.8	116.5	114.6	114.3	113.0	109.6	109.9				

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.	
	FREQ	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	)	(0.	)
	50											
NO EGA	63											
	80											
	100											
NFA 3710. RPM	125	60.1	63.2	66.7	69.0	72.4	71.3	74.9				
( 388. RAD/SEC)	160	57.2	62.7	65.0	67.4	70.5	70.2	73.2				
NFK 3644. RPM	200	54.0	61.6	64.1	67.3	69.0	67.8	71.1				
( 382. RAD/SEC)	250	54.4	60.6	64.6	67.1	68.6	68.1	72.7				
NFD 3644. RPM	315	53.0	59.7	62.7	65.4	67.8	69.1	70.7				
( 382. RAD/SEC)	400	54.4	62.0	65.1	68.0	70.2	69.7	71.3				
NO. OF BLADES 28	500	56.1	64.2	66.9	69.1	69.4	72.3	71.1				
FREQ. SHIFT	630	59.3	65.1	68.7	70.2	71.1	71.3	73.5				
JET 5	800	59.5	64.8	66.3	68.9	69.7	68.8	70.7				
FAN 6	1000	58.5	65.0	68.0	70.1	70.5	71.2	71.7				
CRITICAL FREQ.	1250	63.4	71.6	73.1	74.9	74.3	72.4	73.0				
0.	1600	58.9	66.2	68.5	69.9	69.1	69.1	70.0				
AIRFLOW RATIO	2000	56.0	63.1	65.3	67.4	67.5	68.1	67.9				
WF/WM 11.43	2500	57.7	64.3	67.4	68.0	69.8	69.4	69.1				
FAN TIP SPEED	3150	53.6	61.7	64.4	66.2	65.4	65.5	65.7				
1150. FT/SEC	4000	48.3	57.9	60.2	61.1	60.2	60.0	60.5				
	5000	44.2	54.4	56.8	57.8	56.9	56.7	57.3				
	6300	38.2	49.9	52.8	54.0	53.2	53.1	53.7				
	8000	30.9	41.7	48.3	49.9	49.3	49.3	49.9				
	10000	21.7	38.5	43.1	45.2	44.8	45.0	45.3				
OVERALL CALCULATED		69.9	76.7	79.2	81.1	82.0	81.8	83.4				
PNDB		79.5	83.8	89.6	91.0	92.0	91.0	92.4				
PNLT		81.1	88.8	91.3	92.7	93.5	91.8	92.4				

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VC=40, A=15	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 005010	400	92.3	90.2	90.6	89.8	88.1	91.6	87.7	89.0		
BAR 29.8 HG	500	99.5	89.8	88.1	87.5	86.0	89.5	88.3	86.4		
(***** N/M2)	630	89.5	90.5	88.0	87.0	85.6	86.8	86.7	84.7		
TAMB 78. DEG F	800	89.4	88.4	87.0	85.9	85.6	85.1	84.7	84.9		
(299. DEG K)	1000	83.6	85.7	85.3	85.5	86.4	84.4	83.5	83.2		
TWET 63. DEG F	1250	90.6	99.3	89.0	88.6	87.5	84.7	84.4	85.4		
(290. DEG K)	1600	91.9	90.0	91.0	90.4	90.7	88.2	88.2	89.1		
HACT 10.23 GM/M3	2000	91.6	91.6	92.3	91.4	89.7	88.4	86.9	87.1		
(.01023 KG/M3)	2500	98.2	95.4	93.7	92.0	88.6	87.7	86.7	84.6		
NFA 11342. RPM	3150	100.1	100.2	93.8	92.7	89.9	87.3	85.7	85.1		
(1188. RAD/SEC)	4000	98.1	96.5	96.8	93.6	92.8	89.2	88.9	86.3		
NFK 11140. RPM	5000	99.6	98.0	98.0	96.4	93.9	92.1	89.9	89.3		
(1166. RAD/SEC)	6300	96.3	94.3	94.1	94.1	90.0	87.3	86.5	85.6		
NFD 12320. RPM	8000	93.8	94.2	92.1	91.4	87.8	85.3	83.8	83.3		
(1290. RAD/SEC)	10000	94.8	96.6	95.9	93.2	89.8	87.8	85.7	83.6		
NO. OF BLADES 28	12500	93.3	94.9	94.2	92.0	88.3	85.6	83.1	80.8		
FAN TIP SPEED 16000		89.2	92.7	91.3	89.4	87.2	83.2	79.8	77.6		
1040. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.3	106.7	105.4	103.9	101.7	100.3	98.8	98.2		
PNDB		120.4	120.0	118.0	116.5	114.3	112.7	111.1	110.4		
PNLT		120.4	121.4	118.9	116.5	114.3	113.9	111.1	111.5		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA											
NFA 3355. RPM	125	62.9	66.9	70.8	72.0	71.8	76.4	73.2	74.9		
( 351. RAD/SEC)	160	60.1	66.4	68.1	69.7	69.7	74.3	73.8	72.3		
NFK 3295. RPM	200	60.0	67.1	68.0	69.2	69.3	71.6	72.2	70.7		
( 345. RAD/SEC)	250	59.8	65.0	67.0	68.1	69.3	69.9	70.2	70.8		
NFD 3644. RPM	315	53.9	62.2	65.2	67.6	70.1	69.1	69.0	69.1		
( 382. RAD/SEC)	400	60.7	65.7	68.8	70.7	71.1	69.4	69.8	71.2		
NO. OF BLADES 28	500	61.8	66.3	70.8	72.4	74.3	72.9	73.6	74.9		
FREQ. SHIFT	630	61.2	67.8	72.0	73.3	73.2	73.0	72.3	72.9		
JET 5	800	67.5	71.4	73.3	73.9	72.1	72.3	72.1	70.4		
FAN 3	1000	69.0	76.0	73.3	74.5	73.3	71.9	71.0	70.8		
CRITICAL FREQ.	1250	66.5	73.8	76.1	75.3	76.1	73.7	74.1	72.0		
0.	1600	67.3	73.2	77.1	77.9	77.1	76.4	75.0	74.8		
AIRFLOW RATIO	2000	63.1	69.1	72.9	75.4	73.0	71.5	71.4	71.0		
WF/WM 11.43	2500	59.5	68.4	70.5	72.4	70.6	69.3	68.6	68.5		
FAN TIP SPEED	3150	59.1	70.2	73.9	73.9	72.3	71.6	70.3	68.6		
1040. FT/SEC	4000	55.7	67.5	71.6	72.2	70.5	69.1	67.4	65.6		
	5000	50.7	65.0	68.5	69.5	69.3	66.6	64.1	62.4		
	6300	44.7	60.5	64.5	65.7	65.6	63.0	60.6	58.9		
	8000	37.4	55.3	60.0	61.6	61.7	59.2	56.8	55.1		
	10000	28.2	49.1	54.8	56.9	57.2	54.9	52.6	51.0		
OVERALL CALCULATED		75.7	82.3	84.5	85.5	85.0	84.8	84.1	83.9		
PNDB		85.2	93.4	96.6	97.3	96.4	95.6	94.6	94.1		
PNLT		85.2	94.5	96.6	97.3	96.4	96.9	94.6	95.2		

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MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
NO EGA	50										
	63										
RADIAL	12. FT.										
(	4. M)										
VEHICLE	JT15RD										
CONFIG	40X80										
LOC	VG=40, A=15										
DATE	9-13/9-15-76										
RUN	SFT/W/R C/LT										
TAPE	005020	400	90.5	90.1	87.3	89.6	87.9	87.5	88.6	90.3	
BAR	29.8 HG	500	89.0	88.9	86.4	88.3	87.8	86.3	86.9	88.1	
(***** N/M2)	830	86.7	88.2	88.8	86.5	85.2	85.6	85.8	85.8	85.9	
TAMB	78. DEG F	800	86.7	86.5	85.4	85.8	85.2	86.4	85.1	86.0	
(299. DEG K)	1000	82.8	84.5	85.4	83.9	85.9	84.2	85.4	84.2		
TWET	83. DEG F	1250	87.0	87.9	86.8	86.2	86.3	85.4	86.7	85.9	
(290. DEG K)	1800	89.6	90.3	87.7	87.3	86.8	87.3	86.4	87.6		
HACT10.23 GM/M3	2000	90.1	89.9	90.8	89.3	88.7	87.7	88.4	87.0		
(.01023 KG/M3)	2500	91.6	91.7	91.5	90.4	87.2	85.8	86.2	85.6		
NFA	12202. RPM	3150	93.3	94.5	92.3	91.2	89.3	87.3	85.0	86.4	
(1278. RAD/SEC)	4000	95.4	95.8	93.7	93.7	92.1	87.9	87.1	86.8		
NFK	11984. RPM	5000	97.1	96.6	96.2	95.6	94.4	90.6	88.5	88.0	
(1255. RAD/SEC)	6300	93.5	93.8	92.7	91.1	91.8	89.2	86.1	85.6		
NFD	12320. RPM	8000	92.6	91.9	90.8	89.7	88.2	86.1	85.1	84.2	
(1290. RAD/SEC)	10000	96.1	95.1	94.8	94.2	92.4	89.9	87.5	86.2		
NO. OF BLADES	28	12500	92.1	91.3	91.1	89.9	87.8	86.6	85.1	82.1	
FAN TIP SPEED	16000	88.5	88.1	87.7	87.1	84.9	81.4	79.9	77.7		
1118. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		104.5	104.4	103.5	102.8	101.6	99.5	98.8	98.7		
PNOB		117.0	116.9	116.1	115.5	114.4	111.7	110.5	110.2		
PNLT		117.0	117.8	117.2	116.6	115.7	112.9	111.5	110.2		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
NO EGA	50										
	63										
	80										
	100										
NFA	3609. RPM	160	61.1	66.8	67.3	71.8	71.6	72.3	74.1	76.2	
(	378. RAD/SEC)	200	57.2	64.8	66.8	68.7	68.9	70.4	71.3	71.9	
NFK	3545. RPM	250	57.1	63.1	65.4	68.0	68.9	71.2	70.6	71.9	
(	371. RAD/SEC)	315	53.1	61.0	65.3	66.0	69.6	68.9	70.9	70.1	
NFD	3644. RPM	400	57.1	64.3	66.6	68.3	69.9	70.1	72.1	71.7	
(	382. RAD/SEC)	500	59.5	66.6	67.5	69.3	70.4	72.0	71.8	73.4	
NO. OF BLADES	28	630	59.7	66.1	70.5	71.2	72.2	72.3	74.8	72.8	
FREQ. SHIFT	800	60.9	67.7	71.1	72.3	70.7	70.4	71.6	71.4		
JET	5	1000	62.2	70.3	71.8	73.0	72.7	71.9	70.3	72.1	
FAN	6	1250	65.5	72.2	75.5	77.3	77.8	75.1	73.7		
CRITICAL FREQ.	1800	61.2	69.0	71.8	73.2	75.0	73.5	71.2	71.1		
0.	2000	59.4	66.7	69.6	71.0	71.2	70.3	70.1	69.6		
AIRFLOW RATIO	2500	61.9	69.4	73.3	75.3	75.3	74.0	72.4	71.5		
WF/WM	11.43	3150	56.5	65.0	69.2	70.7	70.4	70.5	69.8	67.2	
FAN TIP SPEED	4000	51.1	53.9	65.3	67.5	67.3	65.1	64.4	62.7		
1119. FT/SEC	5000	47.0	57.4	61.9	64.2	64.0	61.8	61.2	59.5		
	6300	41.0	52.9	57.9	60.4	60.2	58.2	57.7	56.0		
	8000	33.7	47.7	53.4	56.3	56.4	54.4	53.9	52.2		
	10000	24.5	41.5	48.2	51.6	51.9	50.1	49.7	48.1		
OVERALL CALCULATED		72.2	79.3	82.3	84.0	84.5	83.8	83.9	84.2		
PNOB		82.8	90.6	94.2	96.1	96.3	95.3	94.6	94.0		
PNLT		84.1	91.8	95.5	97.6	97.8	96.5	95.6	95.1		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )	(0. )
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LOC VO=40,A=15	160										
DATE 8-13/9-15-78	200										
RUN SFT/W/R C/LT	250										
TAPE 005030	315										
BAR 29.8 HG	400	87.7	87.4	89.2	89.8	88.0	88.1	87.7	90.4		
(***** N/M2)	500	84.9	85.7	86.7	85.9	85.8	87.2	88.0	87.6		
TAMB 78. DEG F	630	85.5	85.3	86.4	85.8	84.4	85.3	86.5	86.4		
(299. DEG K)	800	85.2	85.7	87.3	85.6	86.0	85.6	86.7	87.2		
TWET 63. DEG F	1000	84.9	82.9	84.9	84.1	84.8	83.8	85.6	86.7		
(290. DEG K)	1250	88.0	85.9	86.1	87.0	86.8	85.8	85.0	87.8		
HACT10.23 GM/M3	1600	87.4	87.1	86.7	86.0	85.5	85.9	85.7	86.0		
(.01023 KG/M3)	2000	93.0	90.9	90.4	89.7	88.4	87.6	87.8	89.3		
NFA 12543. RPM	2500	91.4	91.2	89.7	87.7	86.5	86.0	86.1	86.2		
(1313. RAD/SEC)	3150	90.6	90.7	89.0	89.0	87.0	85.8	85.5	85.9		
NFK 12319. RPM	4000	92.7	91.5	92.1	91.8	89.5	87.4	87.5	88.9		
(1290. RAD/SEC)	5000	94.1	96.3	94.4	95.0	91.9	91.0	87.8	87.5		
NFD 12320. RPM	6300	91.5	91.5	90.5	90.2	87.8	86.3	85.7	86.2		
(1290. RAD/SEC)	8000	89.1	89.2	87.9	86.4	85.6	85.0	84.2	83.7		
NO. OF BLADES 28	10000	91.7	92.3	90.2	89.4	87.3	87.3	86.2	86.3		
FAN TIP SPEED 1150. FT/SEC	12500	88.2	89.0	88.1	85.8	85.0	84.8	84.4	82.4		
OVERALL MEASURED											
OVERALL CALCULATED		102.2	102.4	101.6	101.1	99.5	98.9	98.5	99.0		
PNOB		114.7	115.6	114.4	114.4	112.3	111.5	110.3	110.3		
PNLT		115.9	117.2	115.5	115.8	113.4	112.9	110.3	111.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )	(0. )
NO EGA	50										
	63										
	80										
	100										
NFA 3710. RPM	125	58.3	64.1	69.2	72.0	71.7	72.9	73.2	76.3		
( 388. RAD/SEC)	160	55.5	62.3	66.7	68.1	69.5	72.0	73.5	73.5		
NFK 3644. RPM	200	56.0	61.9	66.4	68.0	68.1	70.1	72.0	72.4		
( 362. RAD/SEC)	250	55.8	62.3	67.3	67.8	69.7	70.4	72.2	73.1		
NFD 3644. RPM	315	55.2	59.4	64.8	66.2	68.5	68.5	71.1	72.6		
( 362. RAD/SEC)	400	58.1	62.3	65.9	69.1	70.4	70.5	70.4	73.6		
NO. OF BLADES 28	500	57.3	63.4	66.5	68.0	70.4	71.6	71.1	71.8		
FREQ. SHIFT	630	62.6	67.1	70.1	71.6	71.9	72.2	73.2	76.1		
JET 5	800	60.7	67.2	69.3	69.6	70.0	70.6	71.5	72.0		
FAN 6	1000	59.5	66.5	68.5	70.8	70.4	70.4	70.8	71.6		
CRITICAL FREQ.	1250	62.5	71.9	73.7	76.7	76.3	75.5	73.6	73.2		
0.	1600	59.2	66.7	69.8	71.7	71.0	70.6	70.8	71.7		
AIRFLOW RATIO	2000	55.9	64.0	66.8	68.9	68.6	69.2	69.2	69.1		
WF/WM 11.43	2500	57.5	66.6	68.7	70.5	70.2	71.4	71.1	70.6		
FAN TIP SPEED 1150. FT/SEC	3150	52.6	62.7	66.2	66.6	67.6	68.7	69.1	67.5		
	4000	46.2	58.3	62.3	62.2	63.2	62.1	61.8	61.4		
	5000	42.1	54.8	58.9	58.9	59.9	58.8	58.4	58.2		
	6300	36.1	50.3	54.9	55.1	56.2	55.2	54.8	54.7		
	8000	28.8	45.1	50.4	51.0	52.3	51.4	51.0	51.0		
	10000	19.6	38.9	45.2	46.3	47.8	47.1	46.9	46.9		
OVERALL CALCULATED		70.4	77.6	80.5	82.5	82.5	83.2	83.5	84.6		
PNOB		79.6	88.2	91.1	92.7	92.9	93.5	93.6	93.8		
PNLT		80.8	90.0	92.7	94.5	94.4	95.2	93.6	94.8		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )										
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	150										
LOC VO=40, A=30	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 006010	400	89.5	88.3	90.0	88.0	91.2	89.3	89.7	89.3		
BAR 29.8 HG	500	87.8	87.1	85.5	86.7	89.1	89.8	88.2	87.4		
(***** N/M2)	630	86.9	87.8	87.8	87.7	86.9	87.7	86.8	86.5		
TAMB 78. DEG F	800	84.2	85.5	86.8	87.5	86.7	87.4	86.9	88.1		
(299. DEG K)	1000	84.4	85.3	85.7	84.3	85.4	85.9	85.2	88.0		
TWET 63. DEG F	1250	86.6	86.8	85.9	86.2	85.8	87.0	86.4	88.1		
(290. DEG K)	1600	87.8	87.8	86.7	86.2	87.5	87.2	85.9	87.8		
HACT10.23 GM/M3	2000	91.4	90.0	91.1	90.0	90.5	89.4	88.7	90.3		
(.01023 KG/M3)	2500	90.1	90.2	90.6	88.4	87.7	86.8	86.6	86.9		
NFA 12543. RPM	3150	89.9	92.0	90.5	89.6	87.6	87.4	86.1	86.5		
(1313. RAD/SEC)	4000	93.5	93.3	91.8	90.2	88.8	88.0	85.8	86.7		
NFK 12319. RPM	5000	96.3	93.9	94.3	94.9	94.2	91.8	89.5	87.6		
(1290. RAD/SEC)	6300	91.8	92.7	91.0	88.3	88.1	86.9	85.8	85.9		
NFD 12320. RPM	8000	89.9	89.1	87.5	87.3	86.5	85.3	84.4	84.2		
(1290. RAD/SEC)	10000	92.8	91.8	89.9	87.9	87.8	86.3	86.2	86.2		
NO. OF BLADES 28	12500	90.7	88.9	87.3	86.1	85.2	84.4	84.0	86.4		
FAN TIP SPEED 16000		87.6	84.5	83.0	82.9	79.9	79.6	77.6	77.4		
1150. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		102.9	102.3	101.7	101.0	100.8	100.0	99.0	99.5		
PNDB		115.8	114.9	114.6	114.3	113.9	112.5	110.9	110.7		
PNLT		117.1	115.9	115.6	116.2	115.8	113.9	112.2	110.7		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )										
	50										
NO EGA	63										
	80										
	100										
	125	60.1	65.0	70.0	70.2	74.9	74.1	75.2	75.2		
NFA 3710. RPM	150	58.4	63.7	65.5	68.9	72.8	74.4	73.7	73.3		
( 388. RAD/SEC)	200	57.4	64.2	67.8	69.9	70.6	72.5	72.3	74.5		
NFK 3644. RPM	250	54.8	62.1	66.8	69.7	70.4	72.2	72.4	74.0		
( 382. RAD/SEC)	315	54.7	61.8	65.6	66.4	69.1	70.6	70.7	71.9		
NFD 3644. RPM	400	56.7	63.2	65.7	68.3	69.4	71.7	71.8	73.9		
( 382. RAD/SEC)	500	57.7	63.9	66.5	68.2	71.1	71.9	71.3	73.6		
NO. OF BLADES 28	630	61.0	66.2	70.8	71.9	74.0	74.0	74.1	76.1		
FREQ. SHIFT	800	59.4	66.2	70.2	70.3	71.2	71.4	72.0	72.7		
JET 5	1000	58.8	67.8	70.0	71.4	71.0	72.0	71.4	72.2		
FAN 6	1250	64.7	69.5	73.6	76.6	77.8	76.3	74.7	73.3		
CRITICAL FREQ.	1800	59.5	67.9	70.1	69.8	71.3	71.2	70.9	71.4		
0.	2000	56.7	64.1	66.3	68.6	69.5	69.5	69.4	69.6		
AIRFLOW RATIO	2500	58.4	65.9	68.4	69.0	70.7	70.4	71.1	70.5		
WF/WM 11.43	3150	55.1	62.8	65.4	66.9	67.8	68.3	68.7	71.5		
FAN TIP SPEED	4000	50.2	57.3	60.8	63.3	62.3	63.3	62.1	62.4		
1150. FT/SEC	5000	46.1	53.8	57.2	60.0	59.0	60.0	58.9	59.2		
	6300	40.1	49.3	53.2	56.2	55.3	56.4	55.4	56.7		
	8000	32.8	44.1	48.7	52.1	51.4	52.6	51.6	51.9		
	10000	23.8	37.9	43.5	47.4	46.9	48.3	47.4	47.8		
OVERALL CALCULATED		70.9	77.4	80.7	82.4	84.0	84.3	84.2	85.0		
PNDB		80.6	87.9	90.8	92.2	93.5	93.8	93.9	95.0		
PNLT		82.4	87.9	92.1	94.2	95.7	95.4	95.1	96.7		

**MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES**

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)	(0.
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=40, A=30	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 006050	400	89.0	91.1	89.8	91.4	90.1	89.1	91.0	90.0		
BAR 29.8 HG	500	87.5	88.5	86.7	89.5	88.7	88.1	88.7	87.3		
(EEEEET N/M2)	630	88.7	87.8	87.5	88.8	88.8	87.0	87.1	88.2		
TAMB 78. DEG F	800	87.0	86.0	86.4	87.0	84.7	87.0	87.7	85.6		
(299. DEG K)	1000	84.6	84.5	85.2	84.2	85.6	85.4	85.0	85.5		
TWET 63. DEG F	1250	85.3	87.9	87.3	86.2	86.6	87.1	85.4	88.3		
(280. DEG K)	1600	87.7	90.7	90.5	88.8	89.0	87.0	88.2	87.8		
HACT 10.23 GM/M3	2000	90.7	90.1	91.2	90.5	89.9	90.2	88.8	89.4		
(.01023 KG/M3)	2500	92.9	91.2	90.9	90.1	88.8	86.1	85.3	85.4		
NFA 12202. RPM	3150	92.9	92.0	93.1	92.1	90.5	87.8	85.9	86.1		
(1278. RAD/SEC)	4000	95.3	96.5	95.4	93.3	92.3	90.9	88.8	87.3		
NFK 11984. RPM	5000	97.3	96.5	95.9	95.3	94.6	91.5	88.8	88.9		
(1255. RAD/SEC)	6300	94.1	94.2	93.3	92.3	90.4	89.0	86.1	85.8		
NFD 12320. RPM	8000	91.5	91.3	91.0	89.4	89.4	86.4	85.5	84.5		
(1280. RAD/SEC)	10000	96.4	95.4	94.2	92.9	91.7	88.2	86.8	87.1		
NO. OF BLADES 28	12500	93.4	90.8	91.1	89.8	88.3	86.4	85.7	87.3		
FAN TIP SPEED	16000	90.1	87.5	87.1	86.9	84.9	82.3	79.9	78.7		
1118. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		104.7	104.3	103.9	103.0	102.0	100.4	99.6	99.4		
PND8		117.1	117.2	116.6	115.8	114.8	112.8	111.2	110.8		
PNLT		118.4	118.4	117.5	116.7	115.9	114.0	112.2	110.8		

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES**

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)	(0.
NO EGA	50										
	63										
	80										
	100										
NFA 3609. RPM	125	59.6	67.8	69.8	73.6	73.8	73.9	76.5	75.9		
( 378. RAD/SEC)	160	58.1	65.1	68.7	71.7	72.4	72.9	74.2	73.2		
NFK 3545. RPM	200	59.2	64.2	67.5	70.8	69.3	71.8	72.6	72.2		
( 371. RAD/SEC)	250	57.4	62.8	65.4	69.2	68.4	71.8	73.2	71.5		
NFD 3644. RPM	315	54.9	61.0	65.1	68.3	69.3	70.1	70.5	71.4		
( 382. RAD/SEC)	400	55.4	64.3	67.1	68.3	70.2	71.8	70.8	74.1		
NO. OF BLADES 28	500	57.6	67.0	70.3	70.8	72.6	71.7	71.6	73.6		
FREQ. SHIFT	630	60.3	68.3	70.9	72.4	73.4	74.8	74.2	76.2		
JET 5	800	62.2	67.2	70.5	72.0	72.3	70.7	70.7	71.2		
FAN 6	1000	61.8	67.8	72.6	73.9	73.9	72.4	71.2	71.8		
CRITICAL FREQ.	1250	65.7	72.1	75.2	77.0	78.0	78.0	74.0	74.6		
0.	1600	61.8	69.7	72.5	73.8	73.8	73.3	71.7	71.3		
AIRFLOW RATIO	2000	58.3	67.3	70.1	70.7	72.4	71.0	70.5	69.9		
MF/MM 11.43	2500	62.2	69.7	72.7	74.0	74.6	72.3	73.4	72.4		
FAN TIP SPEED	3150	57.8	64.5	69.2	70.6	70.9	70.3	70.4	72.4		
1119. FT/SEC	4000	52.7	60.3	64.7	67.3	67.3	66.0	64.4	63.7		
	5000	48.8	56.8	61.3	64.0	64.0	62.7	61.2	60.5		
	6300	42.6	52.3	57.3	60.2	60.3	59.1	57.7	57.0		
	8000	35.3	47.1	52.8	56.1	56.4	55.3	53.9	53.2		
	10000	26.1	40.9	47.8	51.4	51.9	51.0	49.7	49.1		
OVERALL CALCULATED		72.3	79.2	82.6	84.3	84.9	84.5	84.6	84.9		
PND8		83.1	90.6	94.0	95.7	96.2	95.1	95.2	95.4		
PNLT		84.5	91.9	95.0	96.8	97.6	96.3	96.3	96.9		

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )											
	NO EGA	50									
	RADIAL 12. FT.	53									
	( 4. M)	80									
	VEHICLE JT15RD	100									
	CONFIG 40X80	125									
	LJC VC=40, A=30	160									
	DATE 9-1379-15-78	200									
	RUN SFT/W/R C/LT	250									
	TAPE 006060	315									
	BAR 29.8 HG	400	90.9	91.0	90.0	88.1	89.1	89.8	88.7	88.9	
	(***** N/M2)	500	91.2	90.4	89.8	87.8	87.0	86.5	86.9	86.1	
	TAMB 78. DEG F	630	89.3	90.2	88.8	88.8	85.4	85.8	86.6	86.6	
	(299. DEG K)	800	88.3	87.6	87.5	86.8	85.0	85.7	86.6	85.3	
	TWET 63. DEG F	1000	86.4	85.8	85.1	84.7	85.7	85.1	84.9	84.2	
	(290. DEG K)	1250	90.6	91.8	90.8	87.8	87.9	86.8	85.9	84.6	
	HACT10.23 GM/M3	1800	91.0	91.3	90.7	89.8	89.5	88.4	88.0	88.7	
	(.01023 KG/M3)	2000	91.9	92.1	91.1	90.7	90.7	88.7	88.3	87.3	
	NFA 11342. RPM	2500	97.9	97.8	96.3	93.0	90.6	88.6	87.1	85.9	
	(1188. RAD/SEC)	3150	98.4	98.7	97.0	93.8	91.8	90.4	88.4	88.3	
	NFK 11140. RPM	4000	99.0	98.7	96.5	93.8	91.9	90.7	89.8	88.9	
	(1166. RAD/SEC)	5000	98.8	99.1	98.1	96.9	94.7	92.0	91.0	89.1	
	NFD 12320. RPM	6300	98.3	95.9	95.1	93.6	91.7	88.0	85.2	85.3	
	(1290. RAD/SEC)	8000	94.7	94.3	92.6	91.5	89.0	86.4	84.2	83.3	
	NO. OF BLADES 28	10000	97.9	96.4	94.2	94.8	90.6	88.3	86.7	84.4	
	FAN TIP SPEED 16000	12500	94.9	94.7	93.2	93.4	91.0	87.0	83.9	85.3	
	1040. FT/SEC	20000	92.8	91.3	89.4	90.3	88.0	84.9	82.2	77.8	
	OVERALL MEASURED										
	OVERALL CALCULATED		107.8	106.8	105.8	104.3	102.4	100.7	99.5	98.6	
	PND8		120.1	119.3	118.4	116.9	115.0	113.0	111.9	110.7	
	PNLT		121.2	120.4	118.4	118.0	115.0	113.0	113.1	111.7	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )											
	NO EGA	50									
		63									
		80									
		100									
	NFA 3355. RPM	125	61.5	67.7	70.0	70.3	72.8	74.8	74.2	74.8	
	( 351. RAD/SEC)	160	61.8	67.0	69.6	70.0	70.7	73.3	72.4	72.0	
	NFK 3295. RPM	200	59.8	66.8	68.6	70.8	69.1	70.6	71.1	71.6	
	( 345. RAD/SEC)	250	58.7	64.4	67.5	69.0	68.7	70.5	72.1	71.2	
	NFD 3544. RPM	315	56.7	62.3	65.0	66.8	69.4	69.8	70.4	70.1	
	( 382. RAD/SEC)	400	60.7	68.2	70.6	69.9	71.5	71.5	71.3	70.4	
	NO. OF BLADES 28	500	60.9	67.6	70.5	71.8	73.1	73.1	73.4	74.5	
	FAN SHIFT	630	61.5	68.3	70.8	72.6	74.2	73.3	73.7	73.1	
	JET 5	800	67.2	73.8	75.9	74.9	74.1	73.2	72.5	71.7	
	FAN 5	1000	67.3	72.5	76.5	75.6	75.2	75.0	73.7	74.0	
	CRITICAL FREQ. 0.	1250	67.4	72.3	75.8	75.5	75.2	75.2	75.0	72.6	
	2000	1600	66.5	74.3	77.2	78.4	77.9	76.3	76.1	74.6	
	AIRFLOW RATIO WF/WM 11.43	2000	65.1	70.7	73.9	74.9	74.7	72.2	70.1	70.7	
	FAN TIP SPEED 3000	2500	60.4	68.5	71.0	72.5	71.8	70.4	69.0	68.5	
	1040. FT/SEC	3150	62.2	70.0	72.2	75.5	73.1	72.1	70.3	69.4	
		4000	57.3	67.3	70.6	73.6	73.2	70.5	68.2	70.1	
		5000	54.3	63.6	66.6	70.4	70.1	68.3	66.5	62.6	
		6300	48.3	59.1	62.6	66.6	66.4	64.7	63.0	59.1	
		8000	41.0	53.9	58.1	62.5	62.5	60.9	59.2	55.3	
		10000	31.8	47.7	52.9	57.8	58.0	56.6	55.0	51.2	
	OVERALL CALCULATED		75.6	82.1	85.0	85.9	85.7	85.2	84.8	84.3	
	PND8		85.7	93.3	96.0	98.2	97.3	95.3	95.4	94.6	
	PNLT		86.8	94.4	96.0	99.3	97.3	96.3	96.6	95.9	



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)	(1.92)
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=0	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 007020	400	90.9	92.7	88.3	86.6	90.7	88.1	87.7			
BAR 29.8 HG	500	91.3	92.6	89.7	88.3	90.6	90.6	90.3			
(***** N/M2)	630	90.3	90.5	91.4	87.7	89.3	88.7	87.3			
TAMB 85. DEG F	800	89.6	87.2	88.7	85.6	84.2	87.6	84.1			
(303. DEG K)	1000	88.3	86.8	86.5	82.0	83.4	83.3	85.4			
TWET 85. DEG F	1250	92.2	88.9	92.6	86.7	86.2	84.9	84.0			
(291. DEG K)	1600	93.3	90.6	91.4	91.8	89.3	87.3	87.5			
HACT 9.80 GM/M3	2000	91.8	93.2	94.6	93.6	88.4	83.7	86.5			
(.00980 KG/M3)	2500	97.1	95.7	94.1	91.5	90.1	88.9	84.1			
NFA 11416. RPM	3150	100.7	96.5	94.8	92.1	89.2	87.4	85.7			
(1195. RAD/SEC)	4000	98.1	97.2	95.8	94.1	90.7	87.7	85.7			
NFK 11140. RPM	5000	99.1	98.9	98.6	94.4	92.2	89.4	87.4			
(1166. RAD/SEC)	6300	96.9	97.4	95.4	91.7	88.0	86.1	83.3			
NFD 12320. RPM	8000	95.1	93.7	93.9	88.4	86.3	83.9	80.6			
(1290. RAD/SEC)	10000	97.2	96.8	96.2	91.5	89.0	85.3	80.6			
NO. OF BLADES 28	12500	95.5	96.3	94.0	89.7	86.3	82.1	78.7			
FAN TIP SPEED	16000	93.5	93.5	91.1	88.4	83.7	77.2	74.1			
1046. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.9	107.0	106.1	103.0	101.1	99.2	97.9			
PNDB		121.0	119.2	118.7	115.6	113.3	111.0	109.3			
PNLT		122.6	120.4	119.9	116.6	113.3	112.3	109.3			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)	(1.92)
NO EGA	50										
	63										
	80										
	100										
NFA 3377. RPM	125	61.5	69.4	66.3	68.8	74.4	72.9	73.2			
( 354. RAD/SEC)	160	61.9	69.2	69.7	70.5	74.3	75.4	75.8			
NFK 3295. RPM	200	60.8	67.1	71.4	69.9	73.1	73.5	72.8			
( 345. RAD/SEC)	250	60.0	63.8	68.7	67.8	67.9	72.4	69.8			
NFD 3644. RPM	315	58.6	63.3	66.4	64.1	67.1	68.0	70.9			
( 382. RAD/SEC)	400	62.3	65.3	72.4	68.8	69.8	69.6	69.4			
NO. OF BLADES 28	500	63.2	66.9	71.2	73.6	72.9	72.0	72.9			
FREQ. SHIFT	630	61.4	69.4	74.3	75.5	71.9	68.3	71.9			
JET 5	800	66.4	71.7	73.7	73.4	73.6	73.5	69.5			
FAN 5	1000	69.6	72.4	74.3	73.9	72.6	72.0	71.0			
CRITICAL FREQ.	1250	67.1	72.6	75.1	75.8	74.1	72.2	70.9			
0.	1600	66.8	74.1	77.7	75.9	75.4	73.8	72.5			
AIRFLOW RATIO	2000	63.7	72.2	74.2	73.0	71.0	70.3	68.3			
MF/WF 11.43	2500	60.8	68.0	72.3	69.4	69.1	67.9	65.4			
FAN TIP SPEED	3150	61.5	70.4	74.2	72.2	71.6	69.1	65.2			
1046. FT/SEC	4000	57.8	68.9	71.3	69.9	68.4	65.5	61.0			
	5000	54.9	65.8	68.3	68.5	65.8	60.6	58.4			
	6300	49.0	61.3	64.3	64.7	62.1	57.0	54.8			
	8000	41.7	56.1	59.6	60.6	58.2	53.2	51.1			
	10000	32.5	49.9	54.8	55.9	53.7	48.9	46.9			
OVERALL CALCULATED		76.1	82.3	85.2	84.7	84.5	83.8	83.2			
PNDB		85.8	93.8	97.2	96.0	95.4	93.5	92.1			
PNLT		87.3	93.8	96.2	96.0	95.4	94.6	92.1			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=80, A=0	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 007030	400	89.0	87.4	85.8	90.4	88.8	86.7	85.8			
BAR 29.8 HG	500	91.1	88.7	87.9	91.3	88.5	87.4	86.9			
(***** N/M2)	630	90.5	90.4	89.4	88.0	87.3	86.7	84.1			
TAMB 87. DEG F	800	89.2	88.8	87.9	87.8	84.9	86.1	85.7			
(304. DEG K)	1000	83.9	86.1	85.4	85.2	85.0	82.7	85.0			
TWET 88. DEG F	1250	89.9	88.6	87.4	85.9	82.6	84.5	83.5			
(292. DEG K)	1600	90.3	91.4	91.0	89.9	88.9	84.7	87.7			
HACT 9.79 GM/M3	2000	92.4	93.3	92.9	90.2	89.0	88.2	88.9			
(.00979 KG/M3)	2500	95.8	94.0	90.8	89.2	87.0	85.5	83.4			
NFA 11831. RPM	3150	98.0	94.6	92.3	90.6	86.9	85.9	83.8			
(1239. RAD/SEC)	4000	98.9	98.0	95.1	92.5	89.0	85.7	83.8			
NFK 11524. RPM	5000	97.8	99.1	96.9	93.6	91.4	88.7	87.7			
(1207. RAD/SEC)	6300	95.9	94.9	94.3	90.7	87.9	86.0	83.7			
NFD 12320. RPM	8000	94.7	94.6	90.8	87.8	84.6	81.9	81.1			
(1290. RAD/SEC)	10000	97.8	97.1	93.8	91.4	87.3	85.1	81.8			
NO. OF BLADES 28	12500	94.7	95.5	90.8	89.5	82.2	81.2	78.0			
FAN TIP SPEED 16000	16000	92.7	91.8	89.9	87.8	81.2	75.1	75.4			
1084. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.7	106.4	104.1	102.3	99.5	97.9	97.2			
PNDB		119.1	118.9	118.9	114.5	112.1	110.1	109.1			
PNLT		119.1	118.9	118.0	115.8	113.1	111.3	110.9			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
	80										
	100										
NFA 3499. RPM	125	59.8	64.1	65.8	72.6	72.3	71.5	71.3			
( 368. RAD/SEC)	160	61.7	65.3	67.9	73.5	72.2	72.2	72.4			
NFK 3409. RPM	200	61.0	67.0	69.4	70.2	71.1	71.5	69.6			
( 357. RAD/SEC)	250	59.8	65.4	67.9	70.0	68.8	70.9	71.2			
NFD 3644. RPM	315	54.2	62.8	65.3	67.3	68.7	67.4	70.5			
( 382. RAD/SEC)	400	60.0	65.0	67.2	68.0	68.2	69.2	68.9			
NO. OF BLADES 28	500	60.2	67.7	70.8	71.9	70.5	69.4	73.1			
FREQ. SHIFT	630	62.0	69.5	72.5	72.2	72.5	72.8	74.3			
JET 5	800	64.9	70.0	70.4	71.1	70.5	70.1	68.8			
FAN 5	1000	66.9	70.5	71.8	72.4	70.3	70.5	69.1			
CRITICAL FREQ.	1250	65.3	73.6	74.4	74.2	72.4	70.2	68.8			
0.	1600	65.5	74.3	76.0	75.1	74.8	73.1	72.8			
AIRFLOW RATIO	2000	62.7	69.7	73.1	72.0	70.9	70.2	68.7			
WF/WM 11.43	2500	60.4	68.9	69.0	68.3	67.4	65.9	65.9			
FAN TIP SPEED	3150	61.8	70.6	71.5	72.0	69.8	68.8	68.1			
1085. FT/SEC	4000	57.0	68.1	67.9	69.7	64.3	64.8	62.3			
	5000	54.1	64.0	67.0	67.9	63.2	58.4	59.6			
	6300	48.1	59.5	63.0	64.1	59.5	54.8	56.1			
	8000	40.8	54.3	58.5	59.9	55.6	51.0	52.3			
	10000	31.8	48.1	53.3	55.2	51.2	48.7	48.1			
OVERALL CALCULATED		74.6	81.6	83.3	84.0	82.9	82.5	82.6			
PNDB		85.1	93.4	94.9	95.8	93.6	92.6	92.1			
PNLT		86.1	93.4	95.9	95.6	94.9	93.8	94.0			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)	(1.92)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=0	200										
DATE 9-1379-18-78	250										
RUN SFT/W/R C/LT	315										
TAPE 007040	400	90.1	87.2	83.4	89.2	87.7	87.8	88.8			
BAR 29.8 HG	500	88.6	88.3	88.9	88.4	88.0	88.7	88.1			
(88888 N/M2)	630	89.7	90.4	88.9	87.5	85.9	88.4	88.3			
TAMB 87. DEG F	800	89.0	87.4	89.0	87.9	88.0	88.6	88.4			
(304. DEG K)	1000	81.6	87.2	84.7	88.0	83.9	84.0	81.7			
TWET 68. DEG F	1250	87.3	87.1	87.1	88.5	84.1	87.8	84.0			
(282. DEG K)	1500	90.4	89.4	89.5	89.1	88.9	88.8	83.3			
HACT 9.79 GM/M3	2000	91.4	91.3	90.1	89.8	88.3	88.2	89.3			
(.00979 KG/M3)	2500	92.9	91.8	90.9	89.7	87.8	85.7	86.0			
NFA 12304. RPM	3150	92.3	94.4	92.5	91.4	88.8	86.2	85.1			
(1288. RAD/SEC)	4000	98.3	95.1	93.7	92.8	90.0	88.7	88.0			
NPK 11985. RPM	5000	97.6	97.8	96.5	94.8	94.5	90.6	88.8			
(1255. RAD/SEC)	6300	95.0	95.0	94.3	92.5	89.2	86.4	84.7			
NFD 12320. RPM	8000	92.9	93.0	90.5	88.4	86.7	84.7	81.7			
(1290. RAD/SEC)	10000	97.0	95.8	94.5	92.8	90.4	88.8	84.1			
NO. OF BLADES 28	12500	93.6	92.6	90.4	89.0	86.9	82.5	80.1			
FAN TIP SPEED 16000	20000	90.1	89.9	87.5	85.7	83.1	74.3	75.1			
1128. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		105.3	105.0	103.7	102.6	100.7	99.1	98.2			
PNDB		117.7	117.7	116.4	115.2	113.9	111.5	110.1			
PNLT		118.7	117.7	117.7	116.6	115.6	112.5	111.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)	(1.92)
	50										
NO EGA	63										
	80										
	100										
NFA 3839. RPM	125	60.7	63.9	63.4	71.4	71.4	72.6	74.3			
( 381. RAD/SEC)	160	59.2	64.9	66.9	68.6	69.7	71.5	74.6			
	200	60.2	67.0	68.9	69.7	69.7	73.2	71.8			
NPK 3545. RPM	250	59.4	64.0	69.0	70.1	69.7	70.4	71.9			
( 371. RAD/SEC)	315	51.9	63.7	64.6	68.1	67.6	68.7	67.2			
NFD 3644. RPM	400	57.4	63.5	66.9	70.6	67.7	72.2	69.4			
( 382. RAD/SEC)	500	60.3	65.7	69.3	71.1	70.5	70.5	68.7			
NO. OF BLADES 28	630	61.0	67.5	69.8	71.8	71.8	72.8	74.7			
FREQ. SHIFT	800	62.2	67.8	70.5	71.8	71.3	70.3	71.4			
JET 5	1000	61.2	70.3	72.0	73.2	72.2	70.8	70.4			
FAN 6	1250	66.1	73.4	75.9	76.5	77.9	75.1	74.1			
CRITICAL FREQ.	1500	62.7	70.3	73.4	74.0	72.4	71.0	69.8			
0.	2000	59.8	67.8	69.3	70.1	69.7	68.9	68.9			
AIRFLOW RATIO	2500	62.7	70.1	72.9	73.8	73.2	70.8	68.9			
NF/WM 11.43	3150	58.0	66.2	68.5	69.8	69.5	66.3	64.8			
FAN TIP SPEED	4000	52.8	62.7	65.0	66.1	65.4	61.9	60.1			
1128. FT/SEC	5000	48.5	59.1	61.6	62.8	62.1	58.7	56.9			
	6300	42.5	54.6	57.6	59.0	58.4	55.1	53.3			
	8000	35.2	48.4	53.1	54.8	54.5	51.3	49.5			
	10000	28.0	43.2	47.9	50.1	50.1	47.0	45.4			
OVERALL CALCULATED		72.9	80.0	82.5	83.9	83.7	83.3	83.3			
PNDB		83.7	91.4	94.1	95.3	94.8	93.3	92.1			
PNLT		85.0	92.4	95.4	96.6	96.7	94.7	93.7			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	10.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. H)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=0	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 008030	400	89.7	86.5	87.6	87.4	85.5	77.5	88.8			
BAR 28.8 HG	500	88.4	80.2	87.7	84.9	86.2	84.2	88.5			
(3333 N/M2)	630	88.8	77.4	86.0	84.2	83.3	85.8	86.3			
TAMB 87. DEG F	800	83.1	85.4	86.4	86.6	81.9	86.2	85.9			
(304. DEG K)	1000	81.3	83.1	86.6	83.5	85.0	84.7	85.5			
TWET 88. DEG F	1250	85.8	85.5	86.3	84.7	85.9	86.3	85.7			
(292. DEG K)	1600	88.4	89.2	84.2	88.5	85.8	88.8	88.0			
HACT10.03 GM/M3	2000	91.0	90.0	89.3	88.2	88.8	88.7	88.3			
(.01003 KG/M3)	2500	92.9	88.8	88.6	87.2	86.0	85.5	87.3			
NFA 12647. RPM	3150	92.3	91.1	88.1	88.7	86.2	85.7	84.3			
(1324. RAD/SEC)	4000	93.8	91.1	91.8	89.0	87.9	87.1	85.9			
NFK 12319. RPM	5000	96.0	96.5	95.5	92.1	90.9	89.0	87.4			
(1290. RAD/SEC)	6300	92.4	92.3	90.6	89.0	86.7	85.3	83.8			
NFD 12320. RPM	8000	90.5	88.7	87.4	85.7	84.1	83.8	81.6			
(1290. RAD/SEC)	10000	94.2	92.7	90.2	88.4	86.9	85.0	82.4			
NO. OF BLADES 28	12500	91.2	89.7	87.6	85.1	83.3	80.8	78.4			
FAN TIP SPEED 16000	16000	87.3	85.1	83.3	81.3	78.7	70.9	65.7			
1159. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		103.4	102.2	101.5	99.8	98.5	97.8	98.1			
PND8		116.0	115.4	114.8	112.5	111.3	110.2	109.6			
PNLT		116.9	117.1	116.3	113.6	112.5	110.2	109.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	10.
	50										
NO EGA	63										
	80										
	100										
NFA 3741. RPM	125	60.3	63.2	67.6	69.6	69.2	62.3	74.3			
( 392. RAD/SEC)	160	56.0	56.8	67.7	67.1	69.9	69.0	75.0			
NFK 3644. RPM	200	57.3	54.0	66.0	66.4	67.1	70.3	72.0			
( 381. RAD/SEC)	250	53.5	62.0	66.4	68.8	65.8	71.0	71.4			
NFD 3644. RPM	315	51.6	59.6	66.5	65.6	68.7	69.4	71.0			
( 382. RAD/SEC)	400	55.9	61.9	66.1	66.8	69.5	71.0	71.1			
NO. OF BLADES 28	500	58.3	65.5	64.0	70.5	69.4	71.5	70.4			
FREQ. SHIFT	630	60.6	66.2	69.0	70.2	72.3	73.3	73.7			
JET 5	800	62.2	64.8	68.2	69.1	69.5	70.1	72.7			
FAN 6	1000	61.2	67.0	67.6	70.5	69.6	70.3	69.6			
	1250	64.5	72.1	74.8	73.8	74.3	73.5	72.7			
CRITICAL FREQ.	1600	60.1	67.8	69.7	70.5	69.9	69.7	69.0			
0.	2000	57.4	63.5	66.4	67.0	67.1	67.8	66.8			
AIRFLOW RATIO	2500	60.0	67.1	68.7	69.5	69.8	69.1	67.3			
WF/WM 11.43	3150	55.6	63.3	65.6	65.8	65.9	64.6	62.3			
FAN TIP SPEED	4000	49.8	57.9	60.9	61.7	61.0	60.3	60.0			
1159. FT/SEC	5000	45.7	54.4	57.5	58.4	57.8	57.1	56.8			
	6300	39.8	49.9	53.5	54.6	54.1	53.5	53.2			
	8000	32.5	44.7	49.0	50.5	50.2	49.6	49.4			
	10000	23.3	38.5	43.8	45.8	45.7	45.4	45.3			
OVERALL CALCULATED		71.3	77.4	80.5	81.2	81.6	82.1	83.3			
PND8		81.4	88.2	90.8	91.7	92.0	91.8	91.5			
PNLT		82.6	89.8	92.9	92.8	93.5	93.0	92.6			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)
	50										
	63										
	80										
	100										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT18RD	125										
CONFIG 40X80	160										
LOC VG=80, A=15	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 009010	400	86.6	87.5	87.8	85.2	89.8	88.1	91.3	88.9		
BAR 29.8 M3	500	82.9	85.0	78.0	85.4	86.4	80.7	89.0	81.1		
(3333 N/M2)	630	81.9	83.1	78.5	87.1	86.7	77.2	85.1	78.8		
TAMB 89. DEG F	800	83.3	83.8	86.1	83.5	84.0	83.9	87.2	83.9		
(305. DEG K)	1000	80.8	85.4	86.0	80.6	84.5	85.1	85.2	85.8		
TWET 67. DEG F	1250	87.2	86.9	88.4	88.9	85.5	85.2	85.8	89.1		
(293. DEG K)	1500	87.5	87.3	85.1	86.7	86.3	86.5	85.8	87.8		
HACT10.52 GM/M3	2000	90.7	90.8	89.6	90.8	89.9	87.9	90.8	89.9		
(.01052 KG/M3)	2500	90.5	91.9	90.1	89.4	88.0	87.0	86.0	85.2		
NFA 12671. RPM	3150	90.0	90.5	91.8	89.3	87.9	87.9	85.8	86.3		
(1327. RAD/SEC)	4000	93.3	91.1	92.9	90.1	89.3	87.1	85.4	88.3		
NFK 12320. RPM	5000	95.4	95.1	95.1	93.1	91.3	89.8	87.8	87.0		
(1290. RAD/SEC)	6300	92.6	90.8	91.9	89.2	87.8	85.5	84.7	84.8		
NFD 12320. RPM	8000	90.6	89.2	89.3	87.6	85.7	83.8	82.8	83.2		
(1290. RAD/SEC)	10000	92.5	92.2	90.3	88.8	87.2	87.1	85.5	83.8		
NO. OF BLADES 28	12500	89.1	90.2	88.9	86.7	84.3	84.2	81.6	81.7		
FAN TIP SPEED	16000	84.8	86.1	84.7	82.3	80.3	77.8	66.9	64.6		
1161. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		102.4	102.1	102.0	100.6	99.7	98.3	99.0	98.1		
PND8		115.2	114.9	114.8	113.4	112.2	110.7	110.5	109.7		
PNLT		116.2	116.3	116.0	115.2	113.2	111.9	112.1	110.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)
	50										
	63										
	80										
	100										
NO EGA											
NFA 3748. RPM	125	59.2	64.2	67.8	67.4	73.5	72.9	76.8	74.8		
( 392. RAD/SEC)	200	53.5	61.6	56.0	67.6	70.1	65.5	74.5	67.0		
NFK 3644. RPM	250	53.7	60.4	66.1	65.7	67.7	68.7	72.7	69.8		
( 362. RAD/SEC)	315	51.1	61.9	65.9	62.7	68.2	69.8	70.7	71.7		
NFD 3644. RPM	400	57.3	63.3	68.2	71.0	69.1	69.9	71.2	74.9		
( 362. RAD/SEC)	500	57.4	63.6	64.9	68.7	68.9	71.2	71.2	73.6		
NO. OF BLADES 28	630	60.3	67.0	69.3	72.8	73.4	72.5	76.2	76.7		
FREQ. SHIFT	800	58.8	67.9	69.7	71.3	71.5	71.6	71.4	71.0		
JET 5	1000	58.9	66.4	71.3	71.1	71.3	72.5	70.9	72.0		
FAN 6	1250	63.9	70.7	74.4	74.8	74.7	74.3	73.1	72.7		
CRITICAL FREQ.	1500	60.3	62.0	71.0	70.7	71.0	69.9	69.8	70.4		
0.	2000	57.4	64.0	68.1	68.9	68.7	68.0	67.8	68.6		
AIRFLOW RATIO	2500	58.4	66.6	68.6	69.7	70.1	71.2	70.4	68.9		
WF/WM 11.43	3150	53.4	63.8	65.9	67.4	66.9	68.0	65.2	66.8		
FAN TIP SPEED	4000	47.3	58.9	62.2	62.7	62.8	61.4	59.5	60.9		
1162. FT/SEC	5000	43.2	55.3	58.9	59.4	59.4	58.2	56.3	57.7		
	6300	37.3	50.8	54.8	55.8	55.7	54.6	52.7	54.1		
	8000	30.0	45.7	50.3	51.5	51.7	50.7	48.9	50.4		
	10000	20.7	39.5	45.2	46.8	47.3	46.5	44.8	46.3		
OVERALL CALCULATED		70.2	77.3	80.7	82.0	82.7	82.5	84.2	83.7		
PND8		80.0	88.2	91.1	92.3	92.8	93.0	93.1	92.5		
PNLT		81.4	89.7	92.2	93.6	94.0	94.1	94.7	93.6		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(1.0.										
NO EGA	50									
RADIAL 12. FT.	63									
( 4. M)	80									
VEHICLE JT1SRD	100									
CONFIG 40X80	125									
LOC VO=80, A=15	160									
DATE 9-13/9-15-78	200									
RUN SFT/W/R C/LT	315									
TAPE 009050	400	92.4	87.0	87.6	90.5	87.5	85.9	87.5	90.3	
BAR 29.8 HG	500	89.4	87.9	89.1	88.4	86.2	87.2	86.0	88.2	
(***** N/M2)	630	89.8	88.8	87.3	87.8	85.2	87.4	80.0	81.3	
TAMB 89. DEG F	800	87.1	88.5	87.8	85.8	84.5	86.4	88.5	84.4	
(305. DEG K)	1000	80.8	86.3	86.0	82.1	84.6	85.4	84.4	81.9	
TWET 67. DEG F	1250	87.5	87.5	85.5	86.7	85.8	84.5	84.7	85.9	
(293. DEG K)	1600	87.9	88.8	90.2	89.5	88.0	88.8	88.3	86.8	
HACT10.52 GM/M3	2000	92.6	91.2	91.2	89.9	89.7	88.7	88.2	89.6	
(.01052 KG/M3)	2500	95.0	91.1	91.6	91.1	88.2	85.9	84.6	83.1	
NFA 12338. RPM	3150	94.5	91.4	94.1	91.9	90.8	88.6	87.1	85.9	
(1292. RAD/SEC)	4000	95.5	95.2	95.9	92.9	91.4	89.8	87.8	85.9	
NFK 11996. RPM	5000	96.2	96.7	97.7	94.6	93.7	91.5	88.4	87.6	
(1256. RAD/SEC)	6300	95.0	93.3	93.9	92.5	90.3	87.6	86.5	84.7	
NFD 12320. RPM	8000	92.5	92.5	91.9	90.7	88.4	86.5	84.8	84.2	
(1290. RAD/SEC)	10000	95.2	95.9	95.3	92.2	90.8	90.4	88.0	85.4	
NO. OF BLADES 28	12500	92.0	92.9	91.2	89.3	87.6	86.9	83.7	82.8	
FAN TIP SPEED 16000		87.5	89.4	88.8	86.0	85.4	83.1	77.1	73.9	
1131. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		105.0	104.3	104.6	102.8	101.2	100.0	98.5	98.3	
PNDB		117.3	116.8	117.4	115.3	114.0	112.3	110.3	109.6	
PNLT		116.3	116.8	116.4	115.3	114.0	113.2	112.4	111.2	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(1.0.										
NO EGA	50									
	63									
	80									
	100									
NFA 3649. RPM	125	63.0	63.7	67.6	72.7	71.2	70.7	73.0	76.2	
( 382. RAD/SEC)	160	60.0	64.5	69.1	70.6	69.9	72.0	71.5	74.1	
	200	60.3	66.2	67.3	70.0	69.0	72.2	65.5	67.3	
NFK 3648. RPM	250	57.5	65.1	67.8	68.0	68.2	71.2	74.0	70.3	
( 371. RAD/SEC)	315	51.1	62.8	65.9	64.2	68.3	70.1	69.9	67.8	
NFD 3644. RPM	400	57.6	63.9	65.3	68.8	69.4	69.2	70.1	71.7	
( 382. RAD/SEC)	500	57.8	65.1	70.0	71.5	71.6	71.5	70.7	72.4	
NO. OF BLADES 28	630	62.2	67.4	70.9	71.9	73.2	73.3	73.6	75.4	
FREQ. SHIFT	800	64.3	67.1	71.2	73.0	71.7	70.5	70.0	68.9	
JET 5	1000	63.4	67.3	73.6	73.7	74.2	73.2	72.4	71.6	
FAN 6	1250	64.7	72.3	77.0	76.3	77.1	76.0	73.7	73.3	
CRITICAL FREQ.	1600	62.7	68.5	73.0	74.1	73.5	72.0	71.6	70.3	
0.	2000	59.3	67.3	70.7	72.0	71.4	70.7	69.8	69.6	
AIRFLOW RATIO	2500	61.0	70.3	73.8	73.3	73.7	74.5	72.9	70.7	
WF/WM 11.43	3150	56.3	66.5	69.2	70.0	70.2	70.7	68.3	67.9	
FAN TIP SPEED	4000	50.0	62.2	66.3	66.4	67.7	68.7	61.7	60.5	
1131. FT/SEC	5000	45.9	58.6	63.0	63.1	64.5	63.5	58.5	57.3	
	6300	40.0	54.1	58.9	59.3	60.8	59.9	54.9	53.7	
	8000	32.7	49.0	54.4	55.2	56.8	56.0	51.1	50.0	
	10000	23.4	42.8	49.3	50.5	52.4	51.8	47.0	45.9	
OVERALL CALCULATED		73.0	79.2	83.3	84.0	84.2	84.1	83.4	83.8	
PNDB		82.7	91.1	94.9	95.2	95.6	95.8	94.2	93.3	
PNLT		83.7	92.6	96.2	95.2	96.7	97.4	95.5	94.8	

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. H)	100										
VEHICLE JT15R0	125										
CONFIG 40X80	160										
LOC VO=80, A=18	200										
DATE 8-13-78-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 009080	400	91.8	90.9	87.2	88.7	88.4	88.1	88.0	82.1		
BAR 29.8 HG	500	89.9	89.2	79.1	88.8	87.4	87.8	86.2	78.0		
(11777 N/RZ)	630	90.2	89.1	78.3	87.5	85.5	85.9	84.0	80.3		
TAMB 89. DEG F	800	88.0	87.7	85.9	86.9	83.3	84.4	84.2	83.9		
(305. DEG K)	1000	86.3	86.1	86.3	85.0	82.1	84.7	78.9	82.7		
TWET 67. DEG F	1250	92.2	92.7	88.9	89.9	85.2	83.2	80.9	86.6		
(293. DEG K)	1600	94.8	92.5	90.3	88.8	90.2	87.7	88.0	88.9		
HACT10.52 GM/M3	2000	93.6	92.8	92.4	93.1	91.5	88.4	87.5	89.0		
(.01052 KG/M3)	2500	98.0	95.7	93.5	92.7	88.2	86.6	84.8	84.6		
NFA 11488. RPM	3150	99.1	100.1	96.0	93.8	89.8	88.4	86.4	86.5		
(1201. RAD/SEC)	4000	97.7	98.3	96.5	92.7	91.2	89.3	88.6	84.6		
NFK 11150. RPM	5000	99.0	97.7	97.7	95.3	93.3	90.8	87.6	85.8		
(1167. RAD/SEC)	6300	97.3	94.9	94.8	93.7	89.9	86.5	84.1	84.3		
NFD 12320. RPM	8000	94.6	94.5	91.4	91.7	85.5	83.9	81.7	81.4		
(1290. RAD/SEC)	10000	96.1	97.5	95.1	93.3	88.0	86.6	83.6	82.0		
NO. OF BLADES 28	12500	93.5	94.5	93.8	91.2	87.0	83.7	79.6	78.7		
FAN TIP SPEED 16000	16000	89.6	92.4	91.1	88.7	86.1	80.9	87.9	70.2		
1051. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.4	107.2	105.2	103.9	101.0	99.2	97.5	96.9		
PNOS		120.2	120.3	117.5	116.2	113.6	111.7	109.3	108.9		
PNLT		120.2	121.4	119.2	116.2	114.8	112.6	110.5	108.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
	80										
	100										
NFA 3392. RPM	125	92.4	87.6	87.2	70.9	72.1	72.9	73.5	68.0		
( 355. RAD/SEC)	160	60.5	65.8	59.1	71.0	71.1	72.6	73.7	63.9		
	200	60.7	64.7	55.3	69.7	66.3	70.7	69.5	66.3		
NFK 3298. RPM	250	68.4	64.3	60.9	69.1	67.0	69.2	69.7	69.6		
( 345. RAD/SEC)	315	66.6	64.6	66.2	67.1	65.8	69.4	64.4	68.6		
NFD 3644. RPM	400	62.3	69.1	68.7	72.0	68.8	67.9	66.3	72.4		
( 382. RAD/SEC)	500	64.7	68.8	70.1	70.8	73.8	72.4	73.4	74.7		
NO. OF BLADES 28	630	63.2	69.0	72.1	76.1	75.0	73.0	72.9	75.4		
FREQ. SHIFT	900	67.3	71.7	73.1	74.6	71.7	71.2	70.2	70.4		
JET 5	1000	68.0	76.0	75.5	75.6	73.2	73.0	71.7	72.2		
FAN 5	1250	68.1	73.9	75.8	74.4	74.6	73.6	71.8	70.3		
CRITICAL FREQ.	1600	66.7	72.9	76.8	76.8	75.5	76.2	72.7	71.3		
0.	2000	64.1	69.7	73.8	75.0	72.9	70.7	69.1	69.7		
AIRFLOW RATIO	2500	60.3	68.8	69.8	72.7	68.3	67.9	66.5	66.6		
WF/WM 11.43	3150	60.4	71.1	73.1	74.5	70.5	70.4	68.2	67.1		
FAN TIP SPEED	4000	55.1	67.1	71.1	71.4	69.1	67.1	63.8	63.4		
1051. FT/SEC	5000	51.0	64.6	68.3	68.8	68.2	64.3	58.2	56.8		
	6300	45.1	60.1	64.2	65.0	64.5	60.7	52.7	53.3		
	8000	37.8	55.0	59.7	60.9	60.5	56.8	48.9	49.6		
	10000	28.8	48.8	54.6	56.2	56.1	52.6	44.7	45.4		
OVERALL CALCULATED		75.8	82.5	84.3	85.5	84.3	83.8	82.9	82.7		
PNOS		85.3	93.9	95.9	97.5	95.4	94.4	92.3	91.8		
PNLT		85.3	95.0	96.8	98.0	95.4	94.4	93.4	91.8		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. FT)	100										
VEHICLE JT1SRD	125										
CONFIG 40X80	160										
LJC VG=80, A=30	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 010010	400	87.5	87.9	88.6	93.2	89.9	86.5	89.9	85.8		
BAR 29.8 HG	500	88.5	89.0	89.8	92.1	88.1	88.6	85.8	86.2		
(XXXXX N/M2)	630	91.6	91.3	91.9	89.4	84.1	86.2	83.9	84.9		
TAMB 89. DEG F	800	90.4	89.0	90.8	88.0	84.3	85.3	86.3	84.5		
(305. DEG K)	1000	88.0	87.0	86.0	85.4	83.8	83.8	84.8	83.3		
TWET 67. DEG F	1250	90.9	92.0	89.2	88.3	88.9	88.1	86.6	84.8		
(293. DEG K)	1600	92.4	93.9	91.4	91.1	90.5	88.6	88.5	87.3		
HACT10.52 GM/M3	2000	94.6	92.4	91.5	92.5	91.6	88.9	87.8	88.1		
(.01052 KG/M3)	2500	95.3	96.3	95.3	92.9	90.6	89.0	87.4	84.3		
NFA 11457. RPM	3150	96.9	96.8	97.2	95.3	92.1	88.9	88.0	87.7		
(1200. RAD/SEC)	4000	98.0	98.4	95.7	95.3	93.1	89.5	87.3	86.8		
NFK 11139. RPM	5000	100.0	99.6	98.1	98.8	95.9	92.2	88.8	87.7		
(1166. RAD/SEC)	6300	98.4	98.5	96.2	93.5	92.8	91.4	86.9	85.1		
NFD 12320. RPM	8000	97.2	96.2	91.7	92.5	89.8	87.4	83.1	83.5		
(1290. RAD/SEC)	10000	98.6	98.5	93.0	94.4	91.6	90.1	85.4	84.7		
NO. OF BLADES 28	12500	97.0	95.9	91.3	93.4	90.2	86.7	84.0	82.3		
FAN TIP SPEED 16000	16000	95.1	93.4	87.7	90.2	88.2	85.3	82.7	80.2		
1050. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.0	107.9	105.7	105.1	103.1	100.9	99.0	97.9		
PND8		120.2	120.2	118.5	117.4	115.9	113.2	110.8	110.1		
PNLT		120.2	120.2	119.4	117.4	115.9	114.3	111.9	110.1		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
	80										
	100										
NFA 3389. RPM	125	58.1	64.6	69.6	75.4	73.6	71.3	75.4	71.7		
( 355. RAD/SEC)	160	59.1	65.6	69.8	74.3	71.8	73.4	71.3	72.1		
	200	62.1	67.9	71.9	71.6	67.9	71.0	69.4	70.9		
NFK 3295. RPM	250	60.8	65.6	70.8	70.2	68.0	70.1	71.8	70.4		
( 345. RAD/SEC)	315	58.3	63.5	65.9	67.5	67.5	68.5	70.3	69.2		
NFD 3644. RPM	400	61.0	68.4	69.0	70.4	72.5	72.8	72.0	70.6		
( 382. RAD/SEC)	500	62.3	70.2	71.2	73.1	74.1	73.3	73.9	73.1		
NO. OF BLADES 28	630	64.2	68.6	71.2	74.5	75.1	73.5	73.2	73.9		
FREQ. SHIFT	800	64.6	72.3	74.9	74.8	74.1	73.6	72.8	70.1		
JET 5	1000	65.8	74.7	76.7	77.1	75.5	73.5	73.3	73.4		
FAN 5	1250	66.4	74.0	75.0	77.0	76.5	74.0	72.5	72.5		
CRITICAL FREQ.	1600	67.7	74.8	77.2	78.1	79.1	76.6	73.9	73.2		
0.	2000	65.2	73.3	75.0	74.8	75.8	75.6	71.9	70.5		
AIRFLOW RATIO	2500	62.9	70.5	70.1	73.5	72.6	71.4	67.9	68.7		
WF/WM 11.43	3150	62.9	72.1	71.0	75.1	74.1	73.9	70.0	69.8		
FAN TIP SPEED	4000	59.3	68.5	68.6	73.6	72.3	70.1	68.2	66.9		
1050. FT/SEC	5000	56.5	65.6	64.9	70.3	70.3	68.7	67.0	65.0		
	6300	50.6	61.1	60.8	66.5	66.6	65.1	63.4	61.4		
	8000	43.3	56.0	56.3	62.4	62.6	61.2	59.6	57.7		
	10000	34.0	49.8	51.2	57.7	58.2	57.0	55.5	53.6		
OVERALL CALCULATED		75.6	83.1	84.9	86.8	86.4	85.3	84.4	83.6		
PND8		86.4	94.9	95.7	98.5	97.9	97.2	94.9	94.2		
PNLT		86.4	94.9	95.7	98.5	97.9	98.3	94.9	94.2		



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)	(1.92)
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80,A=30	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 010020	400	91.0	89.0	91.9	91.0	89.9	89.1	89.9	89.7		
BAR 29.8 HG	500	89.7	88.3	90.6	89.1	85.0	86.4	87.7	89.4		
( 3000 N/M2)	630	88.2	83.2	90.2	87.4	85.8	82.7	85.8	88.8		
TAMB 89. DEG F	800	87.7	86.9	86.9	87.7	87.4	86.6	87.1	85.8		
(305. DEG K)	1000	86.0	85.1	84.2	85.8	84.5	85.2	85.7	85.0		
TWET 67. DEG F	1250	86.4	89.1	87.2	86.2	86.5	86.6	86.3	86.8		
(293. DEG K)	1600	88.3	89.8	89.9	88.7	87.8	87.1	87.3	86.2		
HACT10.52 GM/M3	2000	90.6	90.4	90.2	92.1	88.9	87.4	89.4	90.2		
(.01052 KG/M3)	2500	93.8	92.4	92.6	89.6	87.3	86.5	85.5	82.3		
NFA 12326. RPM	3150	95.1	92.8	92.8	90.3	89.4	87.9	85.9	86.9		
(1291. RAD/SEC)	4000	96.8	94.5	94.1	94.9	91.8	89.2	86.4	86.8		
NFK 11984. RPM	5000	99.4	96.8	96.0	96.1	93.3	91.9	88.3	88.2		
(1255. RAD/SEC)	6300	96.1	95.1	94.2	91.5	91.1	90.9	86.3	84.4		
NFD 12320. RPM	8000	94.5	92.4	90.0	90.7	89.4	85.7	83.7	84.3		
(1290. RAD/SEC)	10000	97.8	95.7	95.7	94.7	92.5	89.8	86.9	85.1		
NO. OF BLADES 28	12500	94.9	93.0	91.5	90.1	87.6	86.4	85.2	84.5		
FAN TIP SPEED 1130. FT/SEC	16000	91.3	89.3	87.5	86.7	84.4	82.1	78.9	75.4		
	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.3	104.5	104.3	103.5	101.5	100.2	99.1	99.1		
PND8		118.9	116.9	116.6	116.2	113.9	112.6	110.5	110.3		
PNT1		119.9	117.9	118.2	116.2	113.9	114.2	111.5	112.3		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)	(1.92)
NO EGA	50										
	63										
	80										
	100										
NFA 3646. RPM	125	61.6	65.7	71.9	73.2	73.6	73.9	75.4	75.6		
( 362. RAD/SEC)	160	60.3	64.9	70.6	71.3	68.7	73.2	73.2	75.3		
	200	58.7	59.8	70.2	69.6	69.6	67.5	71.3	74.6		
NFK 3545. RPM	250	58.1	63.5	68.9	69.9	71.1	71.4	72.6	71.7		
( 371. RAD/SEC)	315	56.3	61.6	64.1	67.9	68.2	69.9	71.2	70.9		
NFD 3644. RPM	400	58.5	65.5	67.0	68.3	70.1	71.3	71.7	72.6		
( 382. RAD/SEC)	500	58.2	66.1	69.7	70.7	71.2	71.8	72.7	72.0		
NO. OF BLADES 28	630	60.2	66.8	69.9	74.1	72.4	72.0	74.6	76.0		
FREQ. SHIFT	800	63.1	68.4	72.2	71.5	70.8	71.1	70.9	68.1		
JET 5	1000	64.0	68.7	72.3	72.1	72.8	72.5	71.2	72.6		
FAN 6	1250	67.9	72.4	75.3	77.8	76.7	76.4	73.6	73.9		
CRITICAL FREQ. 0.	1600	63.8	70.3	73.3	74.4	74.3	75.3	71.4	70.0		
	2000	61.3	67.2	68.9	72.2	72.4	69.9	68.7	69.7		
AIRFLOW RATIO WF/WM 11.43	2500	63.3	70.1	74.2	75.8	75.4	73.9	71.8	70.4		
	3150	59.2	66.6	69.5	70.8	70.2	70.2	69.8	69.6		
FAN TIP SPEED 1130. FT/SEC	4000	53.8	62.1	65.0	67.1	66.7	65.7	63.4	61.1		
	5000	49.7	56.5	61.7	63.8	63.5	62.5	60.2	57.9		
	6300	43.8	54.0	57.6	60.0	59.8	58.9	56.6	54.3		
	8000	36.5	48.9	53.1	55.9	55.8	55.0	52.8	50.6		
	10000	27.2	42.7	48.0	51.2	51.4	50.8	48.7	46.8		
OVERALL CALCULATED		73.9	79.5	83.1	84.7	84.4	84.5	84.2	84.6		
PND8		84.5	91.1	94.9	96.6	96.3	95.6	94.3	93.8		
PNT1		85.8	92.2	96.6	98.1	97.7	96.9	94.3	95.7		



MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE	100										
CONFIG	125										
LOC	160										
DATE	180										
RUN	200										
TAPE	250										
BAR 29.9 HG	315										
(***** N/M2)	400	95.0	91.6	96.6	95.7	91.1	90.0	77.4			
TAMB 77. DEG F	500	78.8	89.9	85.2	94.4	93.1	78.7	90.5			
(298. DEG K)	630	92.0	91.2	74.6	85.3	90.1	71.8	88.2			
TWET 64. DEG F	800	89.6	85.0	89.0	85.4	73.7	71.9	88.0			
(291. DEG K)	1000	89.3	91.4	85.1	86.8	88.4	83.0	88.0			
HACT11.28 GM/M3	1250	97.6	92.1	93.3	90.8	88.3	83.8	89.9			
(.01128 KG/M3)	1600	93.0	89.2	93.0	88.9	90.0	89.3	90.7			
NFA 11331. RPM	2000	91.6	93.9	93.2	90.4	91.2	89.7	89.5			
(1186. RAD/SEC)	2500	96.6	97.9	94.6	92.1	92.4	90.0	88.1			
NFK 11139. RPM	3150	98.3	96.4	90.1	92.7	89.2	89.4	94.3			
(1166. RAD/SEC)	4000	98.0	97.7	95.4	92.5	91.3	83.3	86.6			
NFD 12320. RPM	5000	99.3	98.2	97.3	95.6	91.6	86.6	87.4			
(1290. RAD/SEC)	6300	96.3	95.8	94.3	91.4	90.0	87.5	67.4			
NO. OF BLADES 28	8000	95.4	93.4	92.4	88.8	87.4	86.1	83.5			
FAN TIP SPEED	10000	100.2	99.1	97.1	92.5	89.7	85.1	85.8			
1039. FT/SEC	12500	97.1	97.5	94.0	90.9	87.0	85.7	82.2			
OVERALL MEASURED	16000	94.8	94.9	93.1	91.3	89.0	86.1	85.7			
OVERALL CALCULATED	20000										
PND8		106.3	107.5	105.9	104.1	102.3	99.0	100.6			
PNLT		120.0	119.3	117.7	116.1	113.9	110.8	113.7			
		122.6	120.6	120.7	117.4	116.4	111.9	117.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100										
NFA 3351. RPM	125	65.6	68.3	76.6	77.9	74.8	74.8	62.9			
( 351. RAD/SEC)	160	49.4	66.5	65.2	76.6	76.8	61.5	76.0			
NFK 3295. RPM	200	62.5	67.8	54.6	67.5	73.8	56.4	73.7			
( 345. RAD/SEC)	250	60.0	61.6	69.0	67.6	57.4	56.7	73.5			
NFD 3644. RPM	315	59.6	67.9	65.0	68.9	72.1	67.7	73.5			
( 382. RAD/SEC)	400	67.7	68.5	73.1	72.9	71.9	68.5	75.3			
NO. OF BLADES 28	500	62.9	65.5	72.8	70.9	73.6	74.0	76.1			
FREQ. SHIFT	630	61.2	70.1	72.9	72.3	74.7	74.3	74.9			
JET 5	800	66.1	73.9	74.4	74.0	75.9	74.6	73.5			
FAN 5	1000	67.2	72.2	69.6	74.5	72.8	73.9	79.6			
CRITICAL FREQ.	1250	66.4	73.3	74.7	74.2	74.6	71.8	77.5			
0.	1600	67.0	73.4	76.4	77.1	74.8	70.9	75.4			
AIRFLOW RATIO	2000	63.1	70.6	73.0	72.7	73.0	71.6	73.2			
WF/WM 11.43	2500	61.2	67.7	70.9	69.9	70.2	70.1	71.0			
FAN TIP SPEED	3150	64.5	72.6	75.0	73.2	72.2	68.8	70.3			
1039. FT/SEC	4000	59.4	70.1	71.3	71.1	69.1	69.1	66.5			
	5000	56.2	67.1	70.2	71.4	71.0	69.5	69.9			
	6300	50.2	62.6	66.2	67.6	67.4	65.9	66.4			
	8000	42.9	57.4	61.7	63.4	63.4	62.0	62.6			
	10000	33.7	51.3	56.5	58.7	59.0	57.8	58.4			
OVERALL CALCULATED		76.3	82.6	85.1	85.9	85.8	83.7	86.9			
PND8		87.1	95.0	97.3	97.1	96.7	94.2	96.4			
PNLT		88.5	96.3	98.9	98.3	97.9	94.7	97.8			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LOC VO=115,A=0,	160										
DATE 9-13/9-15-78	200										
RUN SFT/W/R C/LT	250										
TAPE 011040	315										
BAR 29.9 HG	400	94.6	92.4	94.0	82.6	75.3	94.3	74.3			
(***** N/M2)	500	81.8	92.0	79.1	83.9	89.7	86.6	88.5			
TAMB 79. DEG F	630	89.7	92.3	74.9	90.1	88.0	88.0	86.5			
(299. DEG K)	800	75.4	92.9	84.9	74.3	89.5	77.9	81.5			
TWET 65. DEG F	1000	87.4	74.0	73.0	73.0	88.7	89.4	87.5			
(291. DEG K)	1250	90.8	88.8	93.3	90.5	89.8	89.3	89.8			
HACT11.49 GM/M3	1600	92.6	90.8	87.8	81.2	84.2	87.0	86.8			
(.01149 KG/M3)	2000	90.0	92.9	91.9	86.6	92.1	90.2	90.8			
NFA 12213. RPM	2500	93.9	93.5	93.1	90.7	91.2	87.9	87.8			
(1279. RAD/SEC)	3150	89.9	93.5	90.5	93.0	75.4	91.1	91.6			
NFK 11984. RPM	4000	96.8	94.8	94.3	90.6	90.6	85.4	87.9			
(1255. RAD/SEC)	5000	97.0	97.6	96.5	94.6	91.9	90.3	87.1			
NFD 12320. RPM	6300	94.4	93.1	93.6	89.5	89.0	86.8	86.8			
(1290. RAD/SEC)	8000	93.3	91.1	90.8	88.3	86.4	83.6	82.0			
NO. OF BLADES 28	10000	99.1	97.4	97.0	93.8	91.7	89.1	86.9			
FAN TIP SPEED 16000	11200	94.1	94.8	90.5	89.4	85.8	83.8	82.5			
1120. FT/SEC 20000		92.8	92.0	90.1	88.3	86.6	84.2	84.1			
OVERALL MEASURED											
OVERALL CALCULATED		105.9	105.7	104.5	102.6	101.3	100.9	99.4			
PNOB		117.7	117.8	116.4	114.5	112.8	112.8	111.9			
PFLT		121.4	121.1	120.7	118.9	115.5	114.7	114.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100										
NFA 3612. RPM	125	65.2	69.1	74.0	64.8	59.0	79.1	59.8			
( 378. RAD/SEC)	160	52.4	68.6	59.1	78.1	73.4	71.4	74.0			
NFK 3545. RPM	200	60.2	68.9	54.9	72.3	71.8	72.8	72.0			
( 371. RAD/SEC)	250	45.8	69.5	64.9	56.5	73.2	62.7	67.0			
NFD 3644. RPM	315	57.7	50.5	52.9	55.1	72.4	74.1	73.0			
( 382. RAD/SEC)	400	60.7	65.2	73.1	72.8	73.4	74.0	75.2			
NO. OF BLADES 28	500	62.5	67.1	67.6	63.2	67.8	71.7	72.0			
FREQ. SHIFT	630	59.8	69.1	71.6	68.5	75.6	74.8	76.2			
JET 5	800	63.2	69.5	72.7	72.6	74.7	72.5	73.2			
FAN 6	1000	58.8	69.3	70.0	74.8	58.8	75.7	76.9			
CRITICAL FREQ. 0.	1250	65.4	73.2	75.8	76.3	75.2	74.8	73.1			
	1600	62.3	68.3	72.7	71.0	72.2	71.1	69.3			
	2000	60.2	66.0	69.7	69.7	69.6	67.9	67.0			
AIRFLOW RATIO	2500	64.9	71.7	75.5	74.9	74.5	73.1	71.7			
WF/WB 11.43	3150	58.4	68.4	68.5	70.1	68.4	67.6	67.1			
FAN TIP SPEED	4000	55.3	64.8	67.6	68.7	68.9	67.8	68.5			
1120. FT/SEC	5000	51.2	61.2	64.2	65.4	65.8	64.6	65.3			
	6300	45.2	58.7	60.2	61.6	62.0	61.0	61.8			
	8000	37.9	51.5	55.7	57.4	58.0	57.1	58.0			
	10000	28.7	45.4	50.5	52.7	53.6	52.9	53.8			
OVERALL CALCULATED		73.5	81.0	83.4	84.1	84.5	85.5	84.7			
PNOB		84.9	92.6	95.4	95.6	95.9	95.5	94.8			
PFLT		86.8	94.3	97.6	97.8	99.1	97.3	96.3			

**MODEL SOUND PRESSURE LEVELS**  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LOC VG=115, A=0,	160										
DATE 9-13/9-15-78	200										
RUN SFT/W/R C/LT	250										
TAPE 011050	315										
BAR 29.9 HG	400	93.3	90.3	95.3	90.0	93.6	93.1	76.1			
(***** N/M2)	500	90.5	90.9	88.5	87.3	77.2	91.4	85.9			
TAMB 80. DEG F	630	86.7	90.9	74.7	74.9	90.1	84.7	87.0			
(300. DEG K)	800	75.2	86.9	82.5	89.1	90.5	73.5	87.6			
TWET 65. DEG F	1000	74.0	74.0	73.5	83.9	83.6	81.4	87.3			
(292. DEG K)	1250	88.0	80.9	92.4	91.8	90.0	88.2	87.6			
HACT11.45 GM/M3	1600	91.2	81.9	83.0	87.7	89.7	81.4	88.5			
(.01145 KG/M3)	2000	86.0	83.2	90.8	90.9	90.1	91.4	92.8			
NFA 12587. RPM	2500	92.8	92.1	89.3	84.7	87.4	86.6	86.8			
(1318. RAD/SEC)	3150	92.5	84.9	84.9	88.0	88.5	92.7	93.3			
NFK 12320. RPM	4000	93.6	92.9	91.0	91.1	87.6	80.0	87.9			
(1290. RAD/SEC)	5000	96.6	96.6	95.0	92.2	90.1	88.5	86.5			
NFD 12320. RPM	6300	92.5	92.3	92.0	89.5	90.3	89.1	81.9			
(1290. RAD/SEC)	8000	90.2	88.8	87.7	85.7	87.1	82.2	83.5			
NO. OF BLADES 28	10000	95.5	94.2	91.9	90.0	88.0	86.4	86.6			
FAN TIP SPEED 16000	12500	91.6	90.9	87.7	85.8	83.1	82.1	82.0			
1152. FT/SEC	20000	89.6	89.1	87.6	87.1	86.3	87.6	85.5			
OVERALL MEASURED											
OVERALL CALCULATED		104.0	103.0	102.5	101.1	101.2	100.6	100.1			
PND8		116.3	115.4	114.5	113.0	112.3	112.9	113.3			
PNTL		119.7	118.1	119.2	116.3	115.9	116.0	115.3			

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100										
NFA 3717. RPM	125	63.9	67.0	75.3	72.2	77.3	77.9	61.6			
( 389. RAD/SEC)	160	61.1	67.5	68.5	69.5	60.9	76.2	71.4			
NFK 3644. RPM	200	57.2	67.5	54.7	57.1	73.9	69.5	72.5			
( 382. RAD/SEC)	250	45.6	63.5	62.5	71.3	74.2	58.3	73.1			
NFD 3644. RPM	315	44.3	50.5	53.4	66.0	67.3	66.1	72.8			
( 382. RAD/SEC)	400	56.1	57.3	72.2	73.9	73.6	72.9	73.0			
NO. OF BLADES 28	500	61.1	58.2	62.8	69.7	73.3	66.1	73.9			
FREQ. SHIFT	630	55.6	59.4	70.5	72.8	73.6	76.0	78.2			
JET 5	800	62.1	68.1	68.9	66.6	70.9	73.2	72.2			
FAN 6	1000	61.4	60.7	64.4	69.8	71.9	77.3	78.6			
CRITICAL FREQ.	1250	65.0	72.2	74.3	73.9	73.5	73.0	73.1			
0.	1600	60.2	67.5	71.1	71.0	73.5	73.4	67.6			
AIRFLOW RATIO	2000	57.1	63.7	66.6	68.4	70.2	66.5	68.5			
WF/W 11.43	2500	61.3	68.5	70.4	71.1	70.8	70.4	71.4			
FAN TIP SPEED	3150	56.0	64.5	65.7	66.5	65.7	65.9	66.6			
1152. FT/SEC	4000	52.1	61.9	65.1	67.5	68.6	71.2	69.9			
	5000	48.0	58.3	61.7	64.2	65.3	68.0	66.7			
	6300	42.0	53.8	57.7	60.4	61.7	64.4	63.2			
	8000	34.8	48.6	53.2	56.2	57.7	60.5	59.4			
	10000	25.5	42.5	48.0	51.5	53.3	56.3	55.2			
OVERALL CALCULATED		72.1	78.2	81.7	82.6	84.6	85.3	85.3			
PND8		82.2	89.3	92.0	93.5	94.5	95.2	95.1			
PNTL		85.3	92.0	94.4	95.1	96.3	97.3	97.1			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115, A=0.	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 011140	400	94.3	93.3	78.8	86.8	88.1	91.9	77.2			
BAR: 29.9 HG	500	84.9	88.7	73.8	73.0	91.7	86.6	86.4			
(***** N/M2)	630	90.1	91.5	74.4	73.6	89.3	72.4	84.8			
TAMB 85. DEG F	800	87.2	75.2	73.7	83.0	90.2	73.1	72.9			
(303. DEG K)	1000	84.1	89.5	91.5	90.3	88.4	82.2	83.7			
TWET 87. DEG F	1250	92.3	91.6	92.4	91.1	89.5	88.2	85.4			
(292. DEG K)	1600	88.4	89.9	93.2	91.1	89.5	86.6	87.2			
HACT11.14 GM/M3	2000	89.1	94.3	91.9	90.2	91.2	93.4	89.3			
(.01114 KG/M3)	2500	97.7	95.0	90.9	90.7	89.3	90.0	88.7			
NFA 11811. RPM	3150	99.1	94.9	94.0	92.1	91.9	89.4	91.6			
(1237. RAD/SEC)	4000	96.8	98.4	96.3	93.9	91.3	88.3	87.9			
NFK 11526. RPM	5000	98.5	98.8	96.8	95.0	92.9	89.1	88.3			
(1207. RAD/SEC)	6300	95.4	95.3	96.2	92.7	92.3	89.6	86.9			
NFD 12320. RPM	8000	94.5	93.2	92.3	90.2	89.2	87.5	88.0			
(1290. RAD/SEC)	10000	99.2	98.5	96.2	94.8	91.5	89.4	88.6			
NO. OF BLADES 28	12500	96.7	95.4	93.0	91.4	88.2	86.1	85.6			
FAN TIP SPEED	16000	94.7	94.4	92.8	91.0	89.3	87.0	87.0			
1083. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.5	107.0	105.3	103.5	102.8	100.8	99.5			
PND8		119.7	119.3	117.1	115.4	114.8	112.4	112.4			
PNLT		121.7	122.4	119.9	116.6	115.5	114.5	114.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100										
	125	64.9	70.0	58.8	69.0	71.8	76.7	62.7			
NFA 3493. RPM	160	55.5	65.3	53.8	55.2	75.4	71.4	71.9			
( 366. RAD/SEC)	200	60.6	68.1	54.4	55.8	73.1	57.2	70.3			
NFK 3409. RPM	250	57.6	51.8	53.7	65.2	73.9	57.9	58.4			
( 357. RAD/SEC)	315	54.4	66.0	71.4	72.4	72.1	66.9	69.2			
NFD 3644. RPM	400	62.4	68.0	72.2	73.2	73.1	72.9	70.8			
( 382. RAD/SEC)	500	58.3	66.2	73.0	73.1	73.1	71.3	72.6			
NO. OF BLADES 28	630	58.7	70.5	71.6	72.2	74.7	78.0	74.7			
FREQ. SHIFT	800	67.0	71.0	70.5	72.6	72.8	74.6	74.1			
JET 5	1000	68.0	70.7	73.5	73.9	75.3	74.0	76.9			
FAN 5	1250	65.5	74.0	75.6	75.6	74.6	72.8	74.8			
CRITICAL FREQ.	1600	66.2	74.0	75.9	76.5	76.1	73.4	73.4			
0.	2000	62.2	70.1	75.0	74.0	75.3	73.8	71.8			
AIRFLOW RATIO	2500	60.2	67.4	70.7	71.2	72.0	71.5	72.8			
WF/WM 11.43	3150	63.5	72.1	74.2	75.5	74.0	73.2	73.2			
FAN TIP SPEED	4000	59.1	68.0	70.4	71.6	70.3	69.5	69.9			
1083. FT/SEC	5000	56.1	66.7	70.0	71.1	71.4	70.4	71.3			
	6300	50.2	62.2	66.0	67.3	67.7	66.8	67.7			
	8000	42.9	57.0	61.5	63.2	63.8	63.0	64.0			
	10000	33.7	50.8	56.3	58.5	59.3	58.7	59.8			
OVERALL CALCULATED		75.3	82.2	84.3	85.1	86.2	85.4	84.9			
PND8		86.1	94.3	96.5	97.7	97.9	96.6	96.7			
PNLT		87.4	95.9	97.9	99.0	97.9	98.3	97.6			







MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	) (0.
	50										
	63										
	80										
	100										
NO EGA	125										
RADIAL 12. FT.	160										
( 4. M)	200										
VEHICLE JT15RD	250										
CONFIG 40X80	315										
LOC VG=115,A=15	400										
DATE 9-13/9-15-78	500										
RUN SFT/W/R C/LT	630										
TAPE 012030	800	94.3	95.6	77.2	77.9	76.3	76.5	76.1	75.6		
BAR 29.9 HG	1000	93.2	91.4	90.0	74.1	81.6	87.4	89.7	91.1		
(***** N/M2)	1250	93.0	90.1	89.5	73.9	81.1	87.7	92.0	73.2		
TAMB 86. DEG F	1500	79.3	90.1	75.6	73.4	89.1	88.7	86.3	89.2		
(303. DEG K)	1800	74.8	93.2	91.6	85.0	73.4	83.9	88.9	70.3		
TWET 87. DEG F	2100	82.3	92.0	88.8	82.8	82.6	82.5	85.4	82.6		
(292. DEG K)	2400	89.7	89.6	91.0	90.9	85.4	86.5	86.1	89.3		
HACT10.86 GM/M3	2700	90.9	89.2	93.0	91.6	91.2	90.0	91.2	91.1		
(.01086 KG/M3)	3000	89.5	90.9	90.2	90.3	90.8	87.0	86.7	86.4		
NFA 12637. RPM	3300	91.1	87.4	90.1	91.7	88.2	86.5	85.6	84.8		
(1323. RAD/SEC)	3600	94.6	93.9	92.9	91.6	91.4	88.4	87.2	87.0		
NFK 12320. RPM	3900	95.6	95.4	96.7	95.9	95.3	90.6	88.3	87.6		
(1290. RAD/SEC)	4200	92.3	92.1	93.6	91.5	89.4	88.7	87.4	82.6		
NFD 12320. RPM	4500	88.2	90.0	89.4	89.0	86.1	84.6	82.9	85.3		
(1290. RAD/SEC)	4800	92.8	93.3	92.3	91.1	89.4	87.3	85.7	84.0		
NO. OF BLADES 28	5100	88.3	90.5	90.1	88.8	88.1	85.9	83.2	81.2		
FAN TIP SPEED 18000	5400	84.1	86.8	87.1	85.1	83.8	81.9	81.4	81.0		
1158. FT/SEC	5700										
OVERALL MEASURED											
OVERALL CALCULATED		105.6	104.2	103.5	102.0	101.4	99.8	99.8	98.7		
PND8		115.8	116.2	116.3	114.9	114.4	111.7	111.0	110.0		
PNLT		117.3	117.1	119.4	117.2	116.5	113.2	112.7	115.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	) (0.
	50										
	63										
	80										
	100										
	125										
NFA 3738. RPM	160	64.9	72.3	57.2	60.1	60.0	61.3	61.6	61.7		
( 391. RAD/SEC)	200	63.8	68.0	70.0	56.3	65.3	72.2	75.2	77.0		
NFK 3644. RPM	250	63.5	66.7	69.5	56.1	74.9	76.5	77.5	59.2		
( 382. RAD/SEC)	315	49.7	68.7	55.8	55.6	72.8	73.5	71.8	75.1		
NFD 3644. RPM	360	45.1	69.7	71.5	67.1	57.1	68.6	74.4	58.2		
( 382. RAD/SEC)	400	52.4	68.4	68.6	64.9	68.2	67.2	70.8	68.4		
	500	59.6	65.9	70.8	72.9	69.0	71.2	73.5	75.1		
NO. OF BLADES 28	630	60.5	65.4	72.7	73.6	74.7	74.6	76.6	76.9		
FREQ. SHIFT	800	58.8	66.9	69.8	72.2	74.3	71.6	72.1	72.2		
JET 5	1000	60.0	63.2	69.6	73.5	71.6	71.1	70.9	70.5		
FAN 6	1250	64.0	71.0	76.0	77.6	78.7	75.1	73.5	73.3		
CRITICAL FREQ.	1500	60.3	67.3	72.9	73.0	72.8	73.0	72.5	70.5		
0.	2000	57.4	64.8	68.2	70.3	70.4	68.8	68.1	70.7		
AIRFLOW RATIO	2500	58.6	67.6	70.8	72.2	72.3	71.4	70.6	69.3		
WF/WM 11.43	3150	52.7	64.2	68.2	69.6	70.7	69.8	67.9	66.4		
FAN TIP SPEED	4000	48.7	59.8	64.6	65.5	65.9	65.5	65.8	65.9		
1158. FT/SEC	5000	42.6	56.0	61.2	62.2	62.6	62.2	62.6	62.7		
	6300	36.7	51.5	57.2	58.4	59.0	58.7	59.1	59.2		
	8000	29.4	46.3	52.7	54.2	55.0	54.8	55.3	55.4		
	10000	20.1	40.2	47.5	49.5	50.8	50.5	51.1	51.3		
OVERALL CALCULATED		72.3	79.7	82.5	83.3	84.4	84.1	85.0	84.2		
PND8		80.4	89.8	93.0	93.8	94.6	94.2	94.2	93.1		
PNLT		81.7	91.7	94.6	95.2	96.7	95.7	95.9	96.0		

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
	63										
	80										
	100										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD	125										
CONFIG 40X80	180										
LOC VG=115.A=25	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 013010	400	92.7	95.4	95.2	75.6	77.9	75.9	77.5	91.2		
BAR 29.9 HQ	500	90.6	93.7	94.8	74.6	74.8	87.3	90.3	88.9		
(***** N/M2)	630	93.1	90.4	81.8	89.9	88.1	91.1	73.5	77.3		
TAMB 88. DEG F	800	93.7	75.1	93.9	88.7	93.5	92.8	73.1	90.1		
(304. DEG K)	1000	91.8	78.8	89.4	94.5	73.5	87.7	78.7	89.8		
TWET 68. DEG F	1250	88.7	82.3	92.2	87.8	88.9	91.5	90.1	87.8		
(293. DEG K)	1800	88.1	85.8	92.2	81.8	90.1	89.8	88.7	91.0		
HACT11.03 GM/M3	2000	91.9	89.5	90.9	87.8	88.1	89.2	92.0	92.5		
(.01103 KG/M3)	2500	84.5	83.9	90.9	90.7	89.7	88.6	88.9	88.8		
NFA 12659. RPM	3150	91.4	92.6	90.3	93.4	94.9	86.3	89.2	90.8		
(1325. RAD/SEC)	4000	95.7	93.8	94.4	94.4	91.0	90.2	90.3	88.0		
NFK 12319. RPM	5000	99.8	98.5	98.3	95.5	94.7	91.7	90.2	87.2		
(1290. RAD/SEC)	6300	95.8	93.2	94.0	93.5	93.6	91.7	89.5	89.4		
NFD 12320. RPM	8000	91.9	87.5	91.6	89.3	88.5	84.1	82.1	82.0		
(1290. RAD/SEC)	10000	94.8	88.7	93.4	92.2	89.8	88.4	85.2	84.8		
NO. OF BLADES 28	12500	91.8	86.0	90.5	89.5	87.3	85.0	84.0	82.8		
FAN TIP SPEED 16000		88.2	87.2	87.3	85.2	82.1	80.9	81.2	81.1		
1160. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		105.6	103.4	105.3	103.3	102.6	101.8	100.0	100.9		
PNDB		118.6	115.7	118.0	115.5	115.3	113.1	112.0	112.8		
PNLT		120.8	117.3	120.8	118.3	121.8	115.1	116.9	115.0		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
	63										
	80										
	100										
	125										
NFA 3744. RPM	180	63.3	72.1	75.2	57.8	61.6	60.7	63.0	77.1		
( 392. RAD/SEC)	200	61.2	70.3	74.8	58.8	58.5	72.1	75.8	74.8		
NFK 3644. RPM	250	63.6	67.0	61.8	72.1	71.9	75.9	59.0	63.3		
( 382. RAD/SEC)	315	64.1	51.7	73.9	70.9	77.2	77.6	58.8	78.0		
NFD 3644. RPM	400	62.1	55.3	69.3	76.6	57.2	72.4	62.2	75.7		
( 382. RAD/SEC)	500	58.8	58.7	72.0	69.9	72.5	76.2	75.5	73.8		
NO. OF BLADES 28	630	56.0	62.1	72.0	63.8	73.7	74.5	74.1	76.8		
FREQ. SHIFT	800	61.5	65.7	70.8	69.8	71.8	73.8	77.4	78.3		
JET 5	1000	53.8	59.9	70.5	72.8	73.2	73.2	74.3	74.6		
FAN 6	1250	60.3	68.4	69.8	75.2	78.3	70.9	74.5	76.5		
CRITICAL FREQ.	1600	68.0	72.1	77.6	77.2	78.1	76.2	75.5	72.9		
0.	2000	63.5	68.4	73.1	75.0	78.8	76.0	74.8	74.9		
AIRFLOW RATIO	2500	58.7	64.6	70.4	71.7	69.5	70.4	71.2	67.4		
WF/WM 11.43	3150	60.4	63.0	71.9	73.3	72.5	72.5	70.1	69.9		
FAN TIP SPEED	4000	56.2	59.7	68.6	70.3	69.9	68.9	68.7	68.0		
1160. FT/SEC	5000	50.7	60.0	64.8	65.8	64.4	64.5	65.8	68.0		
	6300	46.6	56.4	61.4	62.3	61.1	61.3	62.4	62.8		
	8000	40.8	51.9	57.4	58.5	57.5	57.7	58.9	59.3		
	10000	33.3	46.7	52.9	54.3	53.5	53.8	55.1	55.5		
OVERALL CALCULATED		74.0	78.9	84.4	84.6	85.7	85.8	85.0	86.6		
PNDB		82.7	87.4	94.4	95.1	95.1	95.4	94.1	95.1		
PNLT		85.3	89.8	96.5	96.5	98.4	96.0	96.6	96.7		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	NO EGA	50									
	63										
	80										
	RADIAL 12. FT.	100									
	( 4. M)	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VO=115 A=25	200									
	DATE 9-13/9-15-78	250									
	RUN SFT/W/R C/LT	315									
	TAPE 013050	400	87.9	85.4	83.9	80.9	75.5	75.5	75.3	75.6	
	BAR 29.9 HG	500	84.6	80.1	83.3	73.5	73.3	73.7	80.0	81.0	
	( N/M2)	630	88.5	88.2	84.5	74.0	81.8	89.8	82.4	84.5	
	TAMB 88. DEG F	800	74.0	86.5	88.9	74.3	80.8	85.0	82.0	86.8	
	(304. DEG K)	1000	86.0	74.0	86.3	83.2	85.8	72.2	82.8	80.2	
	TWET 67. DEG F	1250	86.3	88.0	80.0	82.4	85.2	87.2	80.6	86.3	
	(293. DEG K)	1600	89.0	88.1	81.0	89.8	87.2	86.7	86.0	86.8	
	HACT10.53 GM/M3	2000	91.5	90.7	88.0	90.5	86.8	88.6	90.2	91.0	
	(.01053 KG/M3)	2500	92.6	91.7	85.5	90.4	90.0	85.5	80.9	79.4	
	NFA 12315. RPM	3150	93.6	93.6	86.0	90.9	85.5	88.2	82.3	82.3	
	(1289. RAD/SEC)	4000	85.2	86.9	84.9	83.8	81.9	80.1	87.1	84.3	
	NFK 11985. RPM	5000	100.2	98.1	97.0	96.9	94.8	91.8	89.7	86.9	
	(1255. RAD/SEC)	6300	95.7	94.5	95.4	94.8	91.8	90.4	88.7	89.3	
	NFD 12320. RPM	8000	93.4	90.5	91.2	89.9	89.0	85.8	83.8	84.7	
	(1290. RAD/SEC)	10000	89.6	84.0	86.2	84.7	82.9	80.8	88.9	85.3	
	NO. OF BLADES 28	12500	91.2	88.7	91.9	92.0	89.9	86.8	85.7	83.0	
	FAN TIP SPEED 16000	20000	81.3	84.9	90.0	89.5	86.5	83.9	82.4	80.6	
	1129. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED		106.0	104.9	105.9	103.7	102.1	100.0	100.5	98.4	
	PND8		118.8	117.7	117.9	116.0	114.4	112.1	111.2	109.9	
	PNLT		121.9	119.9	119.5	118.6	117.6	115.5	113.4	112.5	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	NO EGA	50									
	63										
	80										
	100										
	125	58.5	72.1	73.9	63.1	59.2	60.3	60.8	61.5		
	NFA 3643. RPM	160	55.2	66.7	73.3	55.7	57.0	58.5	75.5	66.9	
	( 381. RAD/SEC)	200	59.0	65.8	74.5	56.2	75.4	74.4	77.9	70.5	
	NFK 3545. RPM	250	44.4	63.1	68.9	56.5	74.5	68.8	77.5	72.7	
	( 371. RAD/SEC)	315	56.3	50.5	66.2	65.3	69.5	58.9	68.3	76.1	
	NFD 3644. RPM	400	56.4	64.4	69.8	74.5	68.8	71.9	76.0	72.1	
	( 382. RAD/SEC)	500	58.9	65.4	70.8	71.8	70.8	71.4	71.4	72.6	
	NO. OF BLADES 28	630	61.1	66.9	67.7	72.5	70.3	73.2	75.6	76.8	
	FREQ. SHIFT	800	61.9	67.7	75.1	72.3	73.5	70.1	66.3	65.2	
	JET 5	1000	62.5	69.5	75.5	72.7	68.9	72.8	67.6	68.0	
	FAN 6	1250	68.7	73.7	76.3	78.6	78.2	76.3	75.0	72.6	
	CRITICAL FREQ.	1600	63.4	70.1	74.5	76.3	75.0	74.8	73.8	74.8	
	0.	2000	60.2	67.7	70.0	71.2	72.0	70.3	68.8	70.1	
	AIRFLOW RATIO	2500	64.4	68.4	74.7	75.8	75.8	74.7	73.8	70.6	
	WF/WM 11.43	3150	58.6	62.4	70.0	72.8	72.6	70.7	70.4	68.2	
	FAN TIP SPEED	4000	53.8	59.3	67.5	69.9	68.8	67.5	66.9	65.5	
	1129. FT/SEC	5000	49.7	55.7	64.1	66.6	65.6	64.3	63.7	62.3	
	6300	43.8	51.2	60.1	62.6	61.9	60.7	60.1	58.8		
	8000	38.5	46.1	55.6	58.6	57.9	56.8	56.3	55.1		
	10000	27.2	39.9	50.5	54.0	53.5	52.6	52.2	51.0		
	OVERALL CALCULATED		73.5	80.1	84.9	84.9	85.0	84.0	85.7	84.0	
	PND8		84.5	90.0	96.1	96.6	96.8	95.7	95.8	93.9	
	PNLT		86.4	91.3	97.7	98.0	98.9	97.4	98.1	96.6	

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	180										
LOC VG=115.A=25	200										
DATE 9-13/9-15-78	250										
RUN SFT/W/R C/LT	315										
TAPE 013060	400	92.0	90.1	97.4	78.8	75.7	77.1	77.8	87.8		
BAR 29.9 HG	500	87.9	91.2	93.5	82.1	75.9	73.4	64.7	72.7		
(***** N/M2)	630	74.8	66.3	74.9	68.8	66.8	73.0	62.0	72.0		
TAMB 48. DEG F	800	85.0	85.4	89.3	78.2	91.4	87.2	73.9	71.2		
(304 DEG K)	1000	88.0	74.2	90.3	85.1	88.2	73.8	72.1	86.3		
TWET 67. DEG F	1250	89.8	92.1	94.4	90.7	90.5	84.0	82.5	79.8		
(293. DEG K)	1600	91.8	88.7	92.0	91.0	73.3	89.8	82.1	82.1		
MACT 12.83 GM/M3	2000	95.0	90.0	92.4	94.0	83.6	90.0	88.4	88.7		
(.01089 KG/M3)	2500	98.1	95.4	94.8	94.1	89.7	87.8	83.3	82.8		
NFA 11447. RPM	3150	96.6	96.5	96.5	94.2	92.5	88.7	84.1	86.7		
(1199. RAD/SEC)	4000	97.8	97.8	98.0	95.1	92.0	85.7	87.1	86.0		
NFK 11140. RPM	5000	100.5	98.9	98.3	98.8	94.9	90.1	86.5	83.7		
(1166. RAD/SEC)	6300	97.3	95.3	95.4	93.7	91.8	88.4	87.7	85.2		
NFD 12320. RPM	8000	94.9	92.3	91.8	91.2	87.4	82.2	81.7	81.2		
(1290. RAD/SEC)	10000	98.2	93.2	95.7	94.3	92.3	88.1	85.4	83.1		
NO. OF BLADES 28	12500	98.3	90.4	93.8	92.2	88.8	86.9	83.1	81.9		
FAN TIP SPEED	16000	93.4	86.9	92.1	91.4	87.8	84.7	83.9	82.6		
1049. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.5	105.7	106.7	104.5	102.2	99.0	97.8	97.6		
PNDB		120.0	118.5	118.8	116.7	114.5	110.7	108.2	108.9		
PNLT		121.5	122.1	121.0	119.4	117.7	115.3	112.2	112.5		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.	(0.
	50										
NO EGA	63										
	80										
	100										
	125	62.6	66.8	77.4	58.8	59.4	61.9	63.3	73.8		
NFA 3386. RPM	160	58.5	67.8	73.5	64.3	59.6	58.2	70.2	58.8		
( 354. RAD/SEC)	200	45.3	62.9	54.9	68.8	72.4	57.8	67.5	58.0		
NFK 3295. RPM	250	58.4	62.0	69.3	67.4	76.1	72.0	59.4	57.1		
( 345. RAD/SEC)	315	56.3	50.7	70.2	67.2	71.9	58.5	57.6	72.2		
NFD 3644. RPM	400	59.7	68.5	74.2	72.8	74.1	68.7	67.9	65.6		
( 382. RAD/SEC)	500	61.4	65.0	71.8	73.0	56.9	74.5	77.5	77.9		
NO. OF BLADES 28	630	64.6	68.2	72.1	76.0	67.1	74.6	73.8	74.5		
FREQ. SHIFT	800	65.4	71.4	74.4	76.0	73.2	72.4	68.7	68.6		
JET 5	1000	65.5	72.4	76.0	76.0	75.9	73.3	69.4	72.4		
FAN 5	1250	66.2	73.4	73.3	76.8	75.3	71.2	72.3	71.7		
CRITICAL FREQ.	1600	68.7	74.1	77.4	78.1	78.1	74.4	71.8	69.2		
0.	2000	64.1	70.1	74.2	75.0	74.8	72.6	72.7	70.6		
AIRFLOW RATIO	2500	60.6	66.8	70.2	72.2	70.2	66.2	66.5	66.4		
WF/WM 11.43	3150	62.5	66.8	73.7	75.0	74.8	71.9	70.0	68.2		
FAN TIP SPEED	4000	58.7	63.1	71.2	72.5	71.0	70.4	67.4	66.7		
1049. FT/SEC	5000	54.8	59.1	69.2	71.5	69.9	66.1	68.2	67.3		
	6300	48.9	54.6	65.2	67.7	66.2	64.5	64.6	63.8		
	8000	41.6	49.5	60.7	63.5	62.2	60.6	60.8	60.1		
	10000	32.3	43.3	55.6	58.9	57.8	56.4	58.7	56.0		
OVERALL CALCULATED		78.2	81.2	86.0	86.1	85.5	83.5	83.1	83.4		
PNDB		85.9	91.7	97.2	98.0	97.4	95.0	93.9	93.0		
PNLT		86.9	93.5	98.3	99.3	99.0	97.3	97.0	95.7		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
NO EGA	50									
RADIAL 12. FT.	63									
( 4. M)	80									
VEHICLE JT15RD	100									
CONFIG 40X80	125									
LOC V0=40, A=0,	160									
DATE 9/28/78	200									
RUN BFH/CTS C/LT	250									
TAPE 048010	315									
BAR 30.0 HG	400	93.4	92.9	91.1	89.2	86.2	85.3	86.9		
(***** N/M2)	500	91.1	90.7	90.2	88.7	86.0	84.0	86.5		
TAMB 78. DEG F	630	89.5	81.5	88.3	86.9	85.7	83.9	84.7		
(299. DEG K)	800	91.0	88.9	88.8	86.2	87.2	85.0	84.3		
THET 62. DEG F	1000	89.9	91.0	88.9	87.4	85.0	82.9	82.8		
(290. DEG K)	1250	89.8	92.5	88.9	89.1	87.1	86.0	84.9		
HACT 9.44 GM/M3	1600	95.9	94.5	94.5	94.0	91.0	89.9	87.4		
(.00944 KG/M3)	2000	96.9	96.0	97.0	95.6	92.5	91.0	88.5		
NFA 11342. RPM	2500	97.8	98.6	99.3	97.1	94.5	92.1	88.7		
(1188. RAD/SEC)	3150	100.4	100.8	101.3	97.0	94.6	91.4	88.0		
NFK 11140. RPM	4000	100.5	101.0	101.0	97.2	93.8	90.8	87.7		
(1166. RAD/SEC)	5000	100.1	99.0	98.2	97.9	94.8	91.5	88.2		
NFD 14895. RPM	6300	96.0	98.7	97.8	96.7	93.7	90.9	87.0		
(1560. RAD/SEC)	8000	96.0	98.3	98.4	99.4	96.5	95.8	91.5		
NO. OF BLADES 26	10000	97.2	99.4	100.1	99.7	99.4	97.4	92.7		
FAN TIP SPEED	12500	98.7	100.0	101.1	101.3	102.0	98.3	92.6		
1040. FT/SEC	16000	96.6	99.1	99.9	100.5	98.1	97.6	90.8		
OVERALL MEASURED										
OVERALL CALCULATED		109.1	109.6	110.1	109.0	107.7	105.1	101.1		
PND8		121.5	122.0	122.1	119.3	117.2	114.2	111.4		
PMLT		121.5	122.0	122.1	119.3	117.2	114.2	111.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
NO EGA	50									
	63									
	80									
	100	65.6	71.3	72.8	72.1	75.6	71.6	76.1		
	125	63.4	69.1	71.9	70.6	73.4	70.5	73.7		
NFA 2756. RPM	160	61.8	69.9	70.0	70.6	72.2	70.4	72.0		
( 289. RAD/SEC)	200	63.3	67.2	70.5	70.1	72.7	71.5	71.6		
NFK 2707. RPM	250	62.0	69.2	70.1	71.2	70.4	69.4	69.8		
( 283. RAD/SEC)	315	65.6	70.7	74.5	72.9	72.5	72.4	72.1		
NFD 3620. RPM	400	67.7	72.7	76.0	77.8	76.3	76.3	74.5		
( 379. RAD/SEC)	500	68.5	74.0	78.5	79.3	77.6	77.4	75.6		
NO. OF BLADES 38	630	69.2	76.5	80.7	80.8	79.8	78.5	75.6		
FREQ. SHIFT	800	71.5	76.6	82.6	80.6	80.1	77.7	75.1		
JET 6	1000	69.0	76.4	80.5	78.5	78.0	75.7	73.0		
FAN 5	1250	70.6	76.3	82.0	80.6	78.9	77.0	74.6		
CRITICAL FREQ.	1600	69.5	75.9	79.0	81.1	79.7	77.6	75.0		
0.	2000	64.5	75.2	78.3	79.7	78.4	76.8	73.7		
AIRFLOW RATIO	2500	63.4	74.3	79.5	82.1	83.0	81.5	78.0		
WF/WM 16.93	3150	63.2	74.7	79.6	82.1	83.6	82.9	79.0		
FAN TIP SPEED	4000	62.8	74.4	80.2	83.3	85.6	83.5	78.6		
1040. FT/SEC	5000	59.7	73.0	78.8	82.3	81.9	82.7	76.8		
	6300	53.6	68.6	74.7	78.5	78.2	79.1	73.2		
	8000	46.5	63.4	70.2	74.4	74.2	75.2	69.4		
	10000	37.2	57.2	65.1	69.7	69.8	71.0	65.3		
OVERALL CALCULATED		79.5	87.1	91.2	92.3	92.6	91.4	88.2		
PND8		89.2	98.8	103.6	106.7	106.9	105.3	101.6		
PMLT		89.2	98.8	103.6	105.7	107.9	105.3	101.6		

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA		50									
RADIAL 12. FT.		63									
( 4. M)		80									
VEHICLE JT15RD		100									
CONFIG 40X80		125									
LOC VG=40, A=0,		160									
DATE 9/28/78		200									
RUN BFH/CTS C/LT		250									
TAPE 048020		315									
BAR 30.0 HG		400	93.1	92.2	88.2	89.1	88.2	88.8	86.3		
(***** N/M2)		500	91.8	90.2	87.6	88.2	86.3	86.7	85.1		
TAMB 78. DEG F		630	91.1	88.8	89.8	89.1	87.4	84.3	85.4		
(299. DEG K)		800	89.7	89.7	90.2	84.9	85.9	83.6	85.1		
TWET 62. DEG F		1000	87.8	89.8	88.3	85.4	85.9	83.7	83.1		
(290. DEG K)		1250	92.7	92.7	91.1	90.0	88.6	87.3	85.9		
HACT 9.44 GM/M3		1600	95.1	94.2	93.9	91.4	88.6	88.5	87.9		
(.00944 KG/M3)		2000	95.7	95.9	95.5	95.3	92.4	91.4	89.9		
NFA 11733. RPM		2500	97.0	98.0	99.1	98.1	95.0	90.3	88.9		
(1228. RAD/SEC)		3150	100.6	100.0	99.0	96.5	95.7	90.7	88.7		
NFK 11524. RPM		4000	99.9	99.2	99.1	98.1	93.6	90.3	87.9		
(1207. RAD/SEC)		5000	99.3	98.6	99.1	99.8	96.4	92.4	88.5		
NFD 14895. RPM		6300	95.8	97.6	99.1	98.9	94.2	90.4	87.2		
(1580. RAD/SEC)		8000	95.7	97.1	99.0	98.8	98.4	95.9	91.7		
NO. OF BLADES 28		10000	98.9	99.2	100.3	99.7	100.2	97.7	92.5		
FAN TIP SPEED 16000		12500	97.0	99.5	100.7	100.1	101.0	98.0	92.8		
1076. FT/SEC		20000	96.6	99.0	99.2	99.3	97.9	95.7	90.7		
OVERALL MEASURED											
OVERALL CALCULATED		108.6	109.1	109.6	108.8	107.6	104.9	101.3			
PNDB		121.3	121.1	120.8	120.1	117.6	114.3	111.8			
PNLT		121.3	121.1	120.8	120.1	117.6	114.3	111.8			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA		50									
		63									
		80									
NFA 2852. RPM		100	65.5	70.8	69.9	73.0	73.6	75.3	73.5		
( 299. RAD/SEC)		125	64.1	68.8	69.3	72.1	71.7	73.2	72.3		
NFK 2801. RPM		160	63.4	67.2	71.3	73.0	72.9	70.8	72.7		
( 293. RAD/SEC)		200	62.0	68.0	71.9	68.8	71.4	70.1	72.4		
NFD 3620. RPM		250	59.9	68.0	69.9	69.2	71.3	70.2	70.3		
( 379. RAD/SEC)		315	64.7	70.9	72.7	73.8	74.0	73.7	73.1		
NO. OF BLADES 38		400	66.9	72.3	75.4	75.2	73.9	74.9	75.0		
FREQ. SHIFT		500	67.3	73.9	77.0	79.0	77.7	77.8	77.0		
JET 6		630	68.4	75.9	80.5	81.8	80.3	78.7	78.0		
FAN 4		800	71.7	77.8	80.3	80.1	80.9	77.0	75.8		
CRITICAL FREQ. 0.		1000	69.2	75.8	78.2	78.0	78.8	75.0	73.7		
AIRFLOW RATIO WF/MM 16.93		1250	66.7	73.3	78.1	77.5	76.7	72.9	71.6		
FAN TIP SPEED 1075. FT/SEC		1600	69.3	76.1	79.8	81.3	78.4	78.3	74.7		
		2000	67.8	75.1	79.8	82.8	81.1	78.3	75.1		
		2500	63.2	73.5	79.2	79.6	78.6	76.1	73.6		
		3150	61.8	72.3	78.6	81.1	82.5	81.3	77.9		
		4000	60.9	73.5	79.3	81.6	84.0	82.8	78.4		
		5000	60.0	73.3	79.4	81.8	84.6	83.0	78.7		
		6300	56.8	71.5	77.0	80.3	81.0	80.2	76.1		
		8000	49.5	66.3	72.5	76.2	77.0	76.3	72.3		
		10000	40.2	60.1	67.4	71.5	72.8	72.1	68.2		
OVERALL CALCULATED											
PNDB		79.0	86.3	90.3	92.0	92.4	90.7	88.2			
PNLT		89.2	98.0	103.0	105.0	106.1	104.6	101.5			
		89.2	98.0	103.0	105.0	106.1	104.6	101.5			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
	50										
	63										
	80										
	100										
	125										
	160										
	200										
	250										
	315										
	400	92.2	91.7	91.2	88.2	89.3	85.9	85.9			
	500	90.9	89.6	87.7	88.9	86.6	85.7	85.0			
	630	90.2	89.4	89.6	87.5	86.6	84.2	84.2			
	800	88.0	89.5	88.3	87.1	86.6	84.8	86.7			
	1000	89.6	89.9	87.7	87.0	86.8	84.1	84.4			
	1250	92.8	91.9	92.2	89.8	87.3	87.3	85.0			
	1600	93.8	92.3	92.8	91.0	88.6	86.6	85.9			
	2000	94.0	94.3	95.0	95.6	91.7	91.4	88.2			
	2500	97.4	97.8	99.0	96.5	93.0	90.6	87.6			
	3150	98.6	99.5	99.2	96.9	95.0	90.5	88.6			
	4000	99.6	100.1	99.0	97.7	93.2	90.8	87.7			
	5000	98.6	99.3	98.1	97.7	94.3	90.5	89.4			
	6300	97.0	97.4	97.5	97.4	97.6	93.1	92.2			
	8000	95.5	97.2	98.6	99.8	97.7	94.7	90.9			
	10000	96.8	99.2	99.8	99.4	99.0	96.8	92.3			
	12500	98.5	100.9	101.8	100.4	99.4	99.0	92.5			
	16000	96.8	99.4	99.2	98.8	98.3	95.5	88.6			
	20000										
	OVERALL MEASURED										
	OVERALL CALCULATED	108.2	109.3	109.5	108.6	107.0	104.7	101.2			
	PND8	120.6	121.1	120.7	119.5	117.3	114.0	112.4			
	PNLT	120.6	121.1	120.7	119.5	117.3	114.0	112.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
	50										
	63										
	80										
	100	64.6	70.1	72.9	72.1	74.7	72.4	73.1			
	125	63.2	68.0	69.4	72.8	72.0	72.2	72.2			
	160	62.5	67.8	71.3	71.4	72.3	70.7	71.5			
	200	60.3	67.8	70.0	71.0	72.1	71.3	74.0			
	250	61.7	68.1	69.3	70.8	72.2	70.6	71.6			
	315	64.8	70.1	73.8	73.6	72.7	73.7	72.2			
	400	65.6	70.4	74.3	74.8	73.9	73.0	73.0			
	500	65.6	72.3	76.5	79.3	77.0	77.8	75.3			
	630	68.8	75.7	80.4	80.2	78.3	77.0	74.7			
	800	69.7	77.3	80.5	80.5	80.2	76.8	75.7			
	1000	70.3	77.7	80.2	81.3	78.4	77.1	74.7			
	1250	67.7	75.4	78.0	79.1	76.3	75.0	72.6			
	1600	68.0	76.2	78.9	80.9	79.2	76.6	76.2			
	2000	65.5	73.9	78.0	80.4	82.3	79.0	78.9			
	2500	62.9	73.2	79.7	82.5	82.2	80.4	77.4			
	3150	62.6	74.5	79.2	81.8	83.2	82.1	78.6			
	4000	62.6	75.3	80.9	82.4	83.3	84.2	78.5			
	5000	59.7	73.3	78.1	80.6	82.1	80.6	75.6			
	6300	53.8	68.9	74.0	76.8	78.4	77.0	72.0			
	8000	46.5	63.7	69.5	72.7	74.4	73.1	68.2			
	10000	37.2	57.5	64.4	68.0	70.0	68.9	64.1			
	OVERALL CALCULATED	78.4	86.4	90.4	92.0	92.0	90.8	88.2			
	PND8	88.2	98.6	103.4	105.1	105.6	105.2	101.4			
	PNLT	88.2	98.6	103.4	105.1	105.6	105.2	101.4			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LCC VO=40, A=0,	200										
DATE 9/28/78	250										
RUN BFH/CTS C/LT	315										
TAPE 048080	400	91.1	90.4	91.3	89.3	87.2	89.1	88.0			
BAR 30.0 HG	500	91.3	89.2	90.9	88.5	87.2	86.7	88.5			
(***** N/M2)	630	89.4	89.0	89.8	88.0	87.2	85.1	88.8			
TAMB 78. DEG F	800	87.4	88.1	87.4	88.9	88.4	86.6	86.8			
(299. DEG K)	1000	89.3	89.9	88.2	85.4	86.3	86.1	84.7			
TWET 82. DEG F	1250	93.7	92.4	90.8	88.6	87.6	86.6	85.9			
(290. DEG K)	1600	95.4	93.3	90.8	89.1	88.9	87.1	87.2			
HACT 9.44 GM/M3	2000	95.5	94.2	95.0	93.3	92.1	90.7	90.4			
(.00944 KG/M3)	2500	95.0	96.3	98.0	94.3	91.5	89.4	88.9			
NFA 12543. RPM	3150	97.9	99.3	97.0	96.5	95.5	90.7	89.1			
(1313. RAD/SEC)	4000	99.0	99.0	97.9	97.5	93.2	91.2	88.9			
NFK 12319. RPM	5000	98.6	99.0	98.0	96.3	94.2	90.4	88.9			
(1290. RAD/SEC)	6300	97.3	98.5	99.3	100.1	101.6	98.4	96.7			
NFD 14895. RPM	8000	97.2	98.7	97.7	98.7	100.1	98.0	93.9			
(1580. RAD/SEC)	10000	98.0	98.1	99.0	99.9	100.6	100.9	95.8			
NO. OF BLADES 28	12500	98.3	99.6	99.9	99.7	99.7	100.7	94.0			
FAN TIP SPEED 16000	16000	98.2	98.6	98.1	98.3	98.6	98.2	91.2			
1150. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.1	108.7	108.6	108.3	108.2	107.0	103.5			
PNDB		120.3	120.5	119.8	119.4	119.5	117.0	115.3			
PNLT		120.3	120.5	119.8	119.4	120.6	117.7	116.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	63.5	68.8	73.0	73.2	72.8	75.8	75.2			
	125	63.6	67.6	72.6	72.4	72.6	73.2	75.7			
NFA 3048. RPM	160	61.7	67.4	71.5	71.9	72.7	71.8	73.9			
( 319. RAD/SEC)	200	59.7	66.4	69.1	72.8	73.9	73.1	74.1			
NFK 2994. RPM	250	61.4	68.1	69.8	69.2	71.7	72.8	71.9			
( 313. RAD/SEC)	315	65.7	70.6	72.4	72.4	73.0	73.0	73.1			
NFD 3620. RPM	400	67.2	71.4	72.3	72.9	74.2	73.5	74.3			
( 379. RAD/SEC)	500	67.1	72.2	76.5	77.0	77.4	77.1	77.5			
NO. OF BLADES 38	630	68.4	74.2	79.4	78.0	78.8	78.8	78.0			
FREQ. SHIFT	800	69.0	77.1	78.3	80.1	80.7	77.0	76.2			
JET 6	1000	69.7	76.6	79.1	81.1	78.4	77.5	75.9			
FAN 5	1250	67.1	74.3	76.9	78.9	76.0	75.4	73.8			
CRITICAL FREQ.	1600	68.0	75.9	78.8	79.5	79.1	76.5	75.7			
0.	2000	65.8	75.0	79.8	83.1	86.3	84.3	83.4			
AIRFLOW RATIO	2500	64.6	72.7	77.8	81.4	84.6	83.7	80.4			
WF/WP 16.93	3150	62.0	73.4	78.7	82.3	84.8	86.4	82.1			
FAN TIP SPEED	4000	62.4	74.0	79.0	81.7	83.8	85.9	80.0			
1150. FT/SEC	5000	59.3	72.5	77.0	80.1	80.6	81.3	77.2			
	6300	53.4	68.1	72.9	76.3	76.9	77.7	73.0			
	8000	46.1	62.9	68.4	72.2	72.9	73.8	69.8			
	10000	38.8	58.7	63.3	67.5	68.5	69.8	65.7			
OVERALL CALCULATED		78.2	85.8	89.5	91.6	93.0	93.0	90.4			
PNDB		88.4	97.8	102.2	104.9	106.5	107.1	104.0			
PNLT		88.4	97.8	102.2	104.9	108.0	108.6	105.7			



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )											
NO EGA		50									
RADIAL 12. FT. ( 4. M)		63									
		80									
VEHICLE JT15RD		100									
CONFIG 40X80		125									
LOC VG=40, A=15,		160									
DATE 9/25/78		200									
RUN BFH/CTS C/LT		250									
TAPE 049020		315									
BAR 29.9 HG		400	90.5	90.8	89.2	89.6	89.8	89.2	86.3	86.5	
(***** N/M2)		500	92.5	90.4	88.0	89.3	85.8	87.2	84.5	83.3	
TAMB 83. DEG F		630	92.9	92.0	90.2	89.4	85.8	85.2	84.0	83.9	
(301. DEG F)		800	91.2	89.7	88.5	87.8	84.8	85.4	85.2	85.2	
TWET 66. DEG F		1000	90.1	87.9	89.1	86.3	85.7	84.7	82.2	83.8	
(292. DEG F)		1250	95.4	91.5	92.8	90.3	88.6	87.5	85.2	84.4	
HACT 11.15 GM/M3		1600	96.3	94.5	95.0	92.8	91.1	88.9	87.8	87.6	
(.01115 KG/M3)		2000	96.7	96.8	95.9	95.0	93.3	90.7	88.3	86.7	
NFA 11395. RPM		2500	97.1	98.2	97.8	96.2	95.1	91.6	89.7	86.9	
(1193. RAD/SEC)		3150	99.8	101.3	100.4	96.7	95.2	92.4	87.7	86.9	
NFK 11140. RPM		4000	100.0	100.4	100.3	97.0	94.7	92.2	87.7	86.4	
(1166. RAD/SEC)		5000	100.2	99.2	99.3	97.2	96.8	93.0	89.6	87.4	
NFD 14895. RPM		6300	95.6	98.4	98.0	96.3	94.8	91.6	88.6	85.9	
(1860. RAD/SEC)		8000	95.2	97.3	99.5	99.5	98.4	96.2	92.2	89.5	
NO. OF BLADES 28		10000	96.4	98.5	100.4	100.4	100.2	97.1	93.5	89.2	
FAN TIP SPEED 1045. FT/SEC		12500	97.5	99.7	101.0	101.4	102.2	99.3	94.0	89.7	
1045. FT/SEC		20000	94.3	98.3	99.8	99.5	98.6	96.7	92.8	88.3	
OVERALL MEASURED											
OVERALL CALCULATED											
PNDB		108.7	109.5	109.9	108.8	108.1	105.5	101.8	99.3		
PNLT		121.2	121.9	121.5	119.2	117.8	115.1	111.8	110.2		
		121.2	121.9	121.5	119.2	117.8	115.1	111.8	110.2		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )											
NO EGA		50									
		63									
		80									
NFA 2769. RPM		100	62.9	69.2	70.9	73.5	75.2	75.7	73.5	74.1	
(290. RAD/SEC)		125	64.8	68.8	69.7	73.2	71.0	73.7	71.7	70.9	
NFK 2707. RPM		160	65.2	70.4	71.9	73.3	71.3	71.7	71.3	71.6	
(283. RAD/SEC)		200	63.5	68.0	70.2	71.7	70.1	71.9	72.5	72.9	
NFD 3620. RPM		250	62.2	68.1	70.7	70.1	71.1	71.2	69.4	71.4	
(379. RAD/SEC)		315	67.4	69.7	74.4	74.1	74.0	74.0	72.4	72.0	
NO. OF BLADES 38		400	68.1	72.8	76.5	76.6	76.4	78.3	74.9	75.2	
FREQ. SHIFT		500	68.3	74.8	77.4	78.7	78.6	77.1	75.4	74.2	
JET "		630	68.5	78.1	79.2	79.9	80.4	78.0	76.8	74.4	
FAN 5		800	70.9	79.1	81.7	80.3	80.4	78.7	74.8	74.4	
CRITICAL FREQ. O.		1000	68.4	76.9	79.6	78.2	78.3	76.7	72.7	72.3	
AIRFLOW RATIO WF/WF 18.93		1250	70.1	77.7	81.3	80.4	79.7	78.4	74.6	73.8	
FAN TIP SPEED 1044. FT/SEC		1600	69.8	78.1	80.1	80.4	81.7	79.0	76.4	74.8	
1044. FT/SEC		2000	64.1	74.9	78.5	79.3	79.5	77.5	75.2	73.0	
		2500	62.6	73.2	79.6	82.2	82.9	81.9	78.7	76.4	
		3150	62.4	73.8	80.1	82.8	84.4	82.6	79.8	75.9	
		4000	61.8	74.0	80.1	83.3	86.0	84.4	80.0	78.2	
		5000	57.4	72.3	78.7	81.3	82.4	81.8	78.8	74.8	
		6300	51.5	67.8	74.6	77.5	78.7	78.2	75.2	71.3	
		8000	44.2	62.6	70.2	73.4	74.7	74.4	71.4	67.5	
		10000	35.0	56.4	65.0	68.7	70.3	70.1	67.3	63.4	
OVERALL CALCULATED											
PNDB		79.3	86.9	90.9	92.1	93.0	91.7	88.8	86.8		
PNLT		88.9	98.3	103.4	105.6	107.2	105.9	102.4	99.7		
		88.9	98.3	103.4	105.6	107.2	105.9	102.4	99.7		







MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100										
NO EGA	125										
RADIAL 12. FT.	160										
( 4. M)	200										
VEHICLE JT15RD	315										
CONFIG 40X80	400										
LOC VO=80, A=0,	500										
DATE 9/28/78	630										
RUN BFH/CTS C/LT	800	96.0	91.7	86.0	89.0	88.4	89.2	84.0			
TAPE 050020	1000	94.8	90.7	87.9	90.5	81.7	68.0	69.0			
BAR 29.9 HG	1250	91.9	90.7	89.9	88.8	83.1	68.3	67.7			
(***** N/M2)	1600	88.6	91.0	86.9	81.7	87.5	82.9	82.6			
TAMB 91. DEG F	2000	91.1	91.9	87.8	86.5	87.0	83.9	84.4			
(306. DEG K)	2500	94.2	93.4	92.3	89.6	88.8	87.3	84.9			
TWET 72. DEG F	3150	95.5	94.3	93.4	89.9	90.5	88.2	86.5			
(295. DEG K)	4000	95.8	96.4	95.4	94.6	92.8	89.6	87.6			
HACT14.00 GM/M3	5000	98.3	98.2	97.8	97.3	93.7	90.2	88.3			
(.01400 KG/M3)	6300	99.9	100.7	99.5	96.9	94.1	89.6	88.0			
NFA 11875. RPM	8000	99.2	100.6	100.2	97.8	92.6	89.7	88.9			
(1243. RAD/SEC)	10000	99.3	100.0	99.7	99.7	97.4	90.2	85.6			
NFK 11525. RPM	12500	97.4	98.8	98.6	97.2	93.7	90.0	85.1			
(1207. RAD/SEC)	15000	96.6	98.2	100.8	98.9	98.1	93.9	88.2			
NFD 14895. RPM	20000	98.0	99.5	100.9	100.5	99.9	96.8	89.2			
(1560. RAD/SEC)	2812500	98.8	100.8	101.1	101.7	100.4	95.7	87.6			
NO. OF BLADES 28	16000	97.3	99.7	99.2	99.6	97.3	94.1	84.3			
FAN TIP SPEED	20000										
1089. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		109.2	110.0	109.9	109.1	107.3	103.2	98.2			
PNDB		121.4	121.9	121.4	120.0	117.7	112.3	109.9			
PNLT		121.4	121.9	121.4	120.0	119.1	114.6	112.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
	100	68.4	70.1	67.7	72.9	73.8	55.7	71.2			
	125	67.2	69.1	69.6	74.4	67.1	54.5	56.2			
NFA 2886. RPM	160	64.2	63.1	71.6	72.7	68.6	54.9	55.0			
( 302. RAD/SEC)	200	60.9	69.3	70.6	65.6	73.0	69.4	70.1			
NFK 2801. RPM	250	63.2	70.1	69.4	70.3	72.4	70.4	71.6			
( 293. RAD/SEC)	315	66.2	71.6	73.9	73.4	74.0	73.8	72.1			
NFD 3620. RPM	400	67.3	72.4	74.9	73.7	75.8	74.6	73.6			
( 379. RAD/SEC)	500	67.4	74.4	76.9	76.5	78.1	76.0	74.9			
NO. OF BLADES 38	630	69.7	76.1	79.2	81.0	79.0	76.6	73.4			
FREQ. SHIFT	800	71.0	78.5	80.8	80.5	79.3	76.0	75.1			
JET 6	1000	68.5	76.3	78.7	78.4	77.2	73.9	73.0			
FAN 4	1250	66.0	74.0	77.2	77.2	75.1	71.9	70.9			
CRITICAL FREQ.	1600	68.3	77.5	81.0	81.0	77.5	75.7	73.7			
0.	2000	67.8	76.5	80.2	82.7	82.1	76.1	72.2			
AIRFLOW RATIO	2500	64.8	74.7	78.7	79.9	78.1	75.6	71.5			
WF/WM 16.93	3150	62.6	73.5	80.5	81.3	82.3	78.3	74.5			
FAN TIP SPEED	4000	61.9	73.7	79.8	82.3	83.8	81.8	75.1			
1088. FT/SEC	5000	61.8	74.6	79.8	83.4	84.0	80.7	73.4			
	6300	57.5	72.2	77.1	80.6	80.4	78.6	69.7			
	8000	50.2	67.0	72.6	76.5	76.5	74.8	66.0			
	10000	41.0	60.8	67.4	71.8	72.0	70.5	61.8			
OVERALL CALCULATED		79.4	87.1	90.7	92.2	91.9	89.1	85.4			
PNDB		89.6	98.7	103.6	105.4	105.7	103.2	98.1			
PNLT		89.6	98.7	103.6	105.4	107.1	104.3	99.2			

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )											
	50										
	63										
NO EGA	63										
RADIAL 12. FT.	80										
(4. M)	100										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	V0=80, A=0,	200									
DATE	9/28/78	250									
RUN	BFH/CTS C/LT	315									
TAPE	080030	400	92.9	91.6	89.4	89.5	91.0	78.1	88.0		
BAR	29.9 HG	500	89.4	89.5	89.8	88.3	88.8	88.4	70.3		
(***** N/M <sup>2</sup> )	830	90.2	90.5	90.1	85.8	85.5	88.0	88.2			
TAMB	91. DEG F	800	90.4	89.8	86.3	88.1	85.9	84.8	84.7		
(308. DEG F)	1000	90.9	89.4	88.8	85.2	83.2	84.0	81.5			
TWET	72. DEG F	1250	95.4	91.8	90.6	91.2	87.8	88.5	86.7		
(295. DEG K)	1600	97.0	93.1	91.8	91.8	91.1	89.7	88.7			
HACT	14.00 GM/M <sup>3</sup>	2000	95.6	94.1	93.8	95.6	93.5	91.7	89.3		
(.01400 KG/M <sup>3</sup> )	2500	97.0	97.6	98.6	98.6	94.2	92.0	87.3			
NFA	12349. RPM	3150	98.8	100.8	100.8	96.4	95.2	91.2	88.6		
(1293. RAD/SEC)	4000	100.4	100.0	99.7	97.0	93.4	90.8	87.0			
NFK	11985. RPM	5000	99.2	99.7	98.3	97.8	95.3	91.1	85.4		
(1255. RAD/SEC)	6300	98.5	98.2	99.8	98.2	97.0	94.1	90.8			
NFD	14895. RPM	8000	97.2	97.8	99.5	98.9	97.8	94.0	90.1		
(1560. RAD/SEC)	10000	98.9	99.1	99.9	100.5	99.7	97.0	89.7			
NO. OF BLADES	28	12500	98.2	100.6	101.2	101.0	100.4	98.2	89.3		
FAN TIP SPEED	16000	98.3	98.5	98.9	99.4	98.1	95.0	86.6			
1132. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.9	109.4	109.7	109.1	107.5	104.6	99.6			
PNDB		121.5	121.5	121.5	120.0	117.4	114.1	110.9			
PNLT		121.5	121.5	121.5	121.0	117.4	117.0	114.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )											
	50										
	63										
	80										
	100	65.3	70.0	71.1	73.4	76.4	84.6	73.2			
	125	61.8	67.9	71.5	72.2	72.2	54.9	57.5			
NFA	3001. RPM	160	62.5	69.2	71.8	69.7	71.0	54.6	55.5		
(314. RAD/SEC)	200	62.7	68.1	68.0	72.0	71.4	71.3	72.0			
NFK	2913. RPM	250	63.0	67.8	70.4	69.0	68.8	70.5	68.7		
(305. RAD/SEC)	315	67.4	70.0	72.2	75.0	73.2	73.0	73.9			
NFD	3620. RPM	400	68.8	71.2	73.3	74.9	75.0	74.6	73.8		
(379. RAD/SEC)	500	67.2	72.1	75.3	79.3	78.8	78.1	76.4			
NO. OF BLADES	38	630	68.4	75.5	80.0	82.3	79.5	78.4	74.4		
FREQ. SHIFT	800	69.9	78.6	82.1	82.0	80.4	77.6	75.7			
JET	6	1000	71.1	77.6	80.9	80.6	78.6	77.1	74.0		
FAN	5	1250	68.5	75.3	78.7	78.4	76.5	75.0	71.9		
CRITICAL FREQ.	1800	88.8	76.8	79.1	80.8	80.2	77.1	72.2			
0.	2000	87.0	74.7	80.3	81.2	81.7	80.0	77.4			
AIRFLOW RATIO	2500	64.7	73.8	79.7	81.7	82.3	79.7	76.6			
WF/W <sub>M</sub> 16.93	3150	62.9	74.3	79.5	82.9	83.9	82.4	75.9			
FAN TIP SPEED	4000	82.3	75.0	80.3	83.0	84.3	83.4	75.3			
1132. FT/SEC	5000	59.4	72.5	77.8	81.2	81.9	80.1	72.6			
	6300	53.5	68.0	73.8	77.4	78.2	76.5	69.0			
	8000	46.2	62.8	69.3	73.3	74.3	72.7	65.3			
	10000	37.0	56.8	64.1	68.8	69.8	68.4	61.1			
OVERALL CALCULATED		79.3	86.6	90.7	92.4	92.4	90.7	86.7			
PNDB		89.1	98.5	103.3	105.6	106.2	104.6	99.1			
PNLT		89.1	98.5	103.3	106.1	106.2	106.1	100.8			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	ANGLES FROM INLET IN DEGREES										
	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.	
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)(0.	
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. H)	100										
VEHICLE JT15RD	125										
CONFIG 40X60	160										
LOC VG=60, A=0,	200										
DATE 9/28/78	250										
RUN BFH/CTS C/LT	315										
TAPE 050080	400	90.3	90.5	89.9	87.1	86.0	89.4	87.9			
BAR 29.9 HG	500	89.0	86.8	89.1	89.2	88.6	83.4	69.7			
(***** N/M2)	630	88.2	88.1	89.1	87.8	87.4	89.2	88.2			
TAMB 94. DEG F	800	89.7	88.4	88.6	88.9	85.2	85.2	86.5			
(308. DEG K)	1000	89.9	90.6	88.4	87.3	82.9	84.2	85.5			
TWET 75. DEG F	1250	94.8	93.8	92.7	89.9	88.1	86.4	88.9			
(287. DEG K)	1800	95.8	94.8	92.8	89.8	88.7	86.8	88.3			
HACT15.93 GM/M3	2000	95.9	94.3	96.6	93.6	93.0	91.2	90.8			
(.01593 KG/M3)	2500	96.1	96.4	98.0	94.8	93.2	90.1	87.2			
NFA 12729. RPM	3150	96.8	96.9	97.8	97.1	94.8	90.3	89.4			
(1333. RAD/SEC)	4000	100.4	99.1	98.4	96.7	95.0	91.9	88.5			
NFK 12320. RPM	5000	98.5	100.8	99.3	97.2	93.9	90.5	87.4			
(1290. RAD/SEC)	6300	97.9	101.1	100.9	99.8	99.9	99.1	83.2			
NFD 14895. RPM	8000	96.8	98.0	98.3	99.4	99.5	97.8	91.0			
(1880. RAD/SEC)	10000	98.8	98.7	99.8	100.4	101.3	101.1	83.8			
NO. OF BLADES 28	12500	98.4	100.5	100.9	100.1	101.1	100.7	92.7			
FAN TIP SPEED 16000	16000	95.2	98.1	98.6	98.2	96.8	96.1	86.9			
1167. FT/SEC 20000	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.5	109.5	109.4	108.5	108.1	107.1	101.5			
PNDB		121.1	121.1	120.7	119.3	118.3	116.9	112.7			
PFLT		121.1	121.1	120.7	119.3	121.7	121.8	118.0			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	ANGLES FROM INLET IN DEGREES										
	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.	
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)(0.	
	50										
NO EGA	63										
	80										
	100	62.7	68.8	71.6	71.0	71.4	68.9	78.1			
	125	61.4	65.2	70.8	73.1	54.0	69.9	56.9			
NFA 3094. RPM	160	60.5	66.5	70.8	71.7	52.9	55.8	55.5			
( 324. RAD/SEC)	200	62.0	66.7	70.3	72.8	70.7	71.7	73.8			
NFK 2994. RPM	250	62.0	68.8	70.0	71.1	68.3	70.7	72.7			
( 313. RAD/SEC)	315	68.8	72.0	74.3	73.7	73.5	72.9	74.1			
NFD 3620. RPM	400	67.6	73.0	74.3	73.4	74.0	73.2	73.5			
( 379. RAD/SEC)	500	67.5	72.3	76.1	77.3	78.3	77.6	77.9			
NO. OF BLADES 38	630	67.5	74.3	79.4	78.5	78.5	76.5	74.3			
FREQ. SHIFT 600	800	69.7	76.7	79.1	80.8	80.0	76.7	76.5			
JET 6 1000	1000	71.1	76.7	79.6	80.3	80.2	78.2	75.5			
FAN 5 1250	1250	68.5	74.4	77.4	78.1	78.1	76.1	73.4			
CRITICAL FREQ. 1800	1800	67.9	77.7	80.1	80.4	78.8	76.5	74.2			
0. 2000	2000	68.4	77.6	81.4	82.6	84.6	85.0	79.8			
AIRFLOW RATIO 2500	2500	64.3	74.0	78.5	82.2	84.0	83.5	77.5			
WF/WM 16.93 3150	3150	62.8	74.0	79.2	82.8	85.6	86.6	79.9			
FAN TIP SPEED 4000	4000	62.5	74.9	80.0	82.1	85.0	85.9	78.7			
1167. FT/SEC 5000	5000	58.3	72.0	77.4	80.0	80.4	81.2	72.9			
	6300	52.4	67.5	73.4	76.2	76.7	77.6	69.3			
	8000	45.1	62.4	68.9	72.0	72.7	73.7	65.5			
	10000	35.8	58.2	63.8	67.4	68.3	69.5	61.4			
OVERALL CALCULATED		78.8	86.5	90.3	91.8	92.9	93.0	88.4			
PNDB		88.5	96.5	103.0	105.2	106.6	107.0	101.7			
PFLT		88.5	96.5	103.0	105.2	108.3	109.4	103.3			

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
NO EGA	50									
RADIAL 12. FT.	63									
( 4. M)	80									
VEHICLE JT15RD	125									
CONFIG 40X80	180									
LOC VG=0, A=0,	200									
DATE 9/28/78	250									
RUN BFH/W/R C/LT	315									
TAPE 050130	400	89.5	89.1	87.1	85.7	93.1	83.7	89.7		
BAR 29.9 HG	500	83.7	76.9	66.5	85.1	94.9	83.4	89.7		
(***** N/M2)	630	80.3	62.1	69.2	81.7	88.7	84.2	87.8		
TAMB 95. DEG F	800	85.7	89.2	86.6	85.4	93.2	89.9	87.1		
(308. DEG K)	1000	85.8	88.8	86.7	85.8	95.9	89.8	88.3		
TWET 75. DEG F	1250	88.7	89.4	87.5	89.6	96.1	89.3	89.2		
(297. DEG K)	1600	89.7	89.2	88.7	90.6	93.9	90.3	89.0		
HACT15.64 (M/M3)	2000	96.1	97.9	94.7	100.3	98.3	104.0	101.3		
(.01564 KG/M3)	2500	104.7	105.4	101.8	108.9	108.3	111.8	108.9		
NFA 13935. RPM	3150	105.7	108.1	107.6	112.2	114.8	112.7	110.9		
(1459. RAD/SEC)	4000	98.5	101.3	100.4	104.1	107.3	104.8	104.9		
NFK 13475. RPM	5000	98.5	98.1	97.3	101.9	106.0	104.1	101.7		
(1411. RAD/SEC)	6300	105.8	102.4	103.1	106.1	113.4	109.5	108.5		
NFD 14895. RPM	8000	96.9	97.8	97.4	99.9	108.3	102.7	99.2		
(1580. RAD/SEC)	10000	98.3	97.5	97.7	101.0	108.7	106.0	101.1		
NO. OF BLADES 28	12500	96.3	97.4	97.5	98.9	104.3	101.8	95.9		
FAN TIP SPEED 16000	16000	94.7	96.1	96.1	97.7	100.9	98.9	92.0		
1277. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED	111.8	112.3	111.4	115.4	119.5	117.7	115.3			
PNDB	124.4	126.0	125.4	129.3	132.6	130.7	126.6			
PNLT	125.8	127.6	127.5	131.8	136.8	132.4	132.0			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
NO EGA	50									
	63									
	80									
	100	61.9	67.5	68.8	69.6	78.5	70.2	78.9		
	125	56.1	55.3	70.2	69.0	80.3	69.9	56.9		
NFA 3387. RPM	160	52.6	60.5	70.9	65.6	74.2	70.6	55.1		
( 355. RAD/SEC)	200	58.0	67.5	70.3	69.3	78.7	76.4	74.4		
NFK 3275. RPM	250	57.9	66.8	68.3	69.6	81.3	76.1	73.5		
( 343. RAD/SEC)	315	60.7	67.6	69.1	73.4	81.5	75.8	76.4		
NFD 3520. RPM	400	61.5	67.3	70.2	74.4	79.2	78.7	76.2		
( 379. RAD/SEC)	500	67.7	75.9	76.2	84.0	83.6	90.4	86.4		
NO. OF BLADES 38	630	78.1	83.3	83.2	90.6	93.6	98.2	96.0		
FREQ. SHIFT 800	800	78.8	85.9	88.9	95.9	100.0	99.1	96.0		
JET 6	1000	69.2	78.9	81.6	87.7	92.5	90.9	91.9		
FAN 5	1250	64.7	71.8	74.3	81.3	87.1	86.3	85.9		
CRITICAL FREQ. 1800	1800	67.9	75.0	76.1	85.1	90.9	90.2	85.5		
0.	2000	74.1	78.9	83.6	89.1	98.1	95.4	93.1		
AIRFLOW RATIO 2500	2500	64.4	73.8	77.6	82.7	92.8	88.4	85.7		
WF/WM 16.93	3150	67.3	72.7	77.3	83.3	92.9	91.4	87.3		
FAN TIP SPEED 4000	4000	60.4	71.8	76.6	80.9	86.2	86.8	81.9		
1277. FT/SEC 5000	5000	57.8	70.0	75.0	79.5	84.7	84.0	78.0		
	6300	51.9	65.6	70.9	75.7	81.0	80.4	74.4		
	8000	44.8	60.4	66.4	71.6	77.0	76.5	70.6		
	10000	35.3	54.2	61.3	68.9	72.5	72.3	68.5		
OVERALL CALCULATED	81.8	89.8	92.5	99.0	104.5	104.0	102.3			
PNDB	91.7	98.9	102.9	108.3	116.0	114.1	111.6			
PNLT	94.9	100.8	105.3	110.6	120.0	116.6	114.1			



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	) (0.	) (0.
		50									
	NO EGA	63									
	RADIAL 12. FT.	80									
	( 4. M)	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VO=90, A=0.	200									
	DATE 9/28/78	250									
	RUN BFH/W/R C/LT	315									
	TAPE 080140	400	88.1	90.1	88.0	87.5	85.3	82.0	81.8		
	BAR 29.9 HG	500	88.5	89.7	90.0	87.5	88.2	81.0	85.3		
	(***** N/M2)	630	81.7	88.8	89.2	87.1	87.0	88.9	86.5		
	TAMB 98. DEG F	800	87.3	87.9	90.0	87.8	87.6	87.2	89.4		
	(309. DEG K)	1000	88.8	88.2	90.9	88.3	89.6	87.0	88.1		
	THET 75. DEG F	1250	92.5	91.5	89.2	91.0	91.6	91.4	90.5		
	(297. DEG K)	1600	93.0	94.1	92.2	94.4	94.4	97.5	93.7		
	MACT15.35 GM/M3	2000	97.6	98.9	101.5	104.7	107.7	106.9	106.3		
	(.01535 KG/M3)	2500	98.2	100.0	104.7	109.5	110.3	112.3	110.0		
	NFA 14439. RPM	3150	99.3	103.0	103.3	107.9	112.7	109.2	108.3		
	(1512. RAD/SEC)	4000	97.5	100.9	101.4	104.1	108.1	102.9	99.8		
	NFK 13950. RPM	5000	98.3	97.2	95.8	106.0	108.2	104.3	98.6		
	(1461. RAD/SEC)	6300	102.4	102.1	106.0	111.3	116.3	109.4	103.6		
	NFD 14695. RPM	8000	97.0	94.9	95.0	100.2	104.0	98.8	94.1		
	(1560. RAD/SEC)	10000	95.8	96.3	95.8	99.9	106.4	102.7	95.7		
	NO. OF BLADES 28	12500	96.4	97.3	96.3	97.8	103.9	100.7	93.1		
	FAN TIP SPEED	16000	92.9	93.5	94.3	94.6	99.7	96.6	88.4		
	1324. FT/SEC	20000									
OVERALL MEASURED											
OVERALL CALCULATED			108.6	109.8	111.6	116.2	120.0	116.9	114.3		
PNDB			121.1	122.9	124.0	126.6	132.5	129.6	127.3		
PNLT			121.9	124.3	125.8	130.6	134.9	132.7	129.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	) (0.	) (0.
		50									
	NO EGA	63									
		80									
		100	61.5	68.5	69.7	71.4	70.7	68.5	79.0		
		125	60.9	68.1	71.7	71.4	73.6	67.5	72.5		
	NFA 3509. RPM	160	54.0	67.0	70.9	71.0	72.5	55.5	73.6		
	( 367. RAD/SEC)	200	59.6	66.2	71.7	71.7	73.1	73.7	76.7		
	NFK 3390. RPM	250	60.9	66.4	72.5	72.1	75.0	73.5	76.3		
	( 355. RAD/SEC)	315	64.5	69.7	69.8	74.8	77.0	77.9	77.7		
	NFD 3620. RPM	400	64.6	72.2	73.7	76.2	79.7	63.9	80.9		
	( 379. RAD/SEC)	500	69.2	76.9	83.0	88.4	93.0	93.3	93.4		
	NO. OF BLADES 38	630	69.6	77.9	86.1	93.2	95.4	98.7	97.1		
	FREQ. SHIFT	800	70.4	80.8	84.6	91.6	97.9	95.6	95.4		
	JET 6	1000	68.2	78.5	82.6	87.7	91.3	89.2	86.8		
	FAN 5	1250	65.6	76.1	80.4	85.4	89.3	86.5	81.6		
	CRITICAL FREQ.	1600	67.7	74.1	78.2	89.2	93.1	90.4	85.4		
	0.	2000	70.9	78.6	86.5	94.3	101.0	95.3	90.2		
	AIRFLOW RATIO	2500	64.5	70.9	76.2	83.0	88.5	84.5	80.6		
	4.44 WM 16.93	3150	61.6	71.5	76.4	82.3	90.6	88.1	81.9		
	FAN TIP SPEED	4000	60.5	71.7	75.4	79.8	87.8	85.9	79.1		
	1323. FT/SEC	5000	56.0	67.5	73.2	76.4	83.5	81.7	74.4		
		6300	50.1	63.0	69.1	72.6	79.8	76.1	70.8		
		8000	42.8	57.8	64.7	68.5	75.6	74.3	67.0		
		10000	33.6	51.6	59.5	63.8	71.4	70.0	62.9		
OVERALL CALCULATED			78.7	87.4	92.9	99.7	105.0	103.2	101.4		
PNDB			89.7	98.2	104.5	111.1	117.1	113.4	109.4		
PNLT			91.3	100.2	107.6	114.6	121.1	116.7	112.5		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	50	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=90, A=0.	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 050160	400	89.8	89.4	89.2	88.4	89.7	82.7	91.5			
BAR 29.9 HG	500	88.5	87.5	85.9	86.4	87.0	77.8	87.7			
(***** N/M2)	630	84.8	87.3	87.0	88.3	84.9	72.9	84.8			
TAMB 97. DEG F	800	88.2	87.9	87.7	91.7	89.1	89.1	90.0			
(309. DEG K)	1000	90.6	93.4	92.7	90.1	91.8	90.9	90.6			
THWT 78. DEG F	1250	91.4	91.8	93.1	99.0	100.3	101.7	97.6			
(298. DEG K)	1500	93.4	95.4	94.5	98.0	100.4	99.8	94.8			
HACT18.02 GM/M3	2000	95.7	97.2	97.2	97.6	102.1	101.7	103.5			
(.01602 KG/M3)	2500	99.9	99.1	102.9	105.1	108.0	107.8	106.0			
NFA 15042. RPM	3150	98.4	101.4	99.3	106.6	107.6	103.0	95.9			
(1575. RAD/SEC)	4000	98.8	100.5	98.1	109.0	111.4	107.3	103.8			
NFK 14520. RPM	5000	94.8	93.8	94.8	106.6	107.1	99.7	96.5			
(1520. RAD/SEC)	6300	102.5	107.2	102.5	118.0	112.4	107.0	106.2			
NFD 14895. RPM	8000	97.8	98.8	97.7	107.8	106.8	105.1	100.7			
(1560. RAD/SEC)	10000	91.9	92.9	92.5	101.2	102.1	100.3	94.3			
NO. OF BLADES 28	12500	95.5	96.1	96.3	104.1	103.1	101.9	94.7			
FAN TIP SPEED 16000	15000	92.2	93.1	93.0	98.8	98.2	97.3	90.6			
1379. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.4	110.6	109.2	118.1	117.9	114.8	112.0			
PND8		121.0	124.0	122.0	131.0	130.7	127.1	124.4			
PNLT		122.0	125.6	123.6	132.7	132.1	127.5	127.5			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	50	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
NO EGA	63										
	80										
	100	62.2	67.8	70.9	72.3	75.1	69.2	78.7			
	125	60.9	65.9	67.3	72.3	72.4	64.3	74.9			
NFA 3656. RPM	160	57.1	65.7	68.7	72.2	70.4	59.5	71.9			
( 383. RAD/SEC)	200	60.5	66.2	69.4	75.6	74.6	75.6	77.3			
NFK 3529. RPM	250	62.7	71.6	74.3	74.0	77.2	77.4	78.0			
( 369. RAD/SEC)	315	63.4	70.0	74.7	82.8	85.7	86.2	84.8			
NFD 3620. RPM	400	65.2	73.5	76.0	81.8	85.7	86.0	81.8			
( 379. RAD/SEC)	500	67.3	75.2	78.7	81.3	87.4	86.1	90.6			
NO. OF BLADES 38	630	71.3	77.0	84.3	88.8	93.3	94.2	92.1			
FREQ. SHIFT	800	69.5	79.2	80.6	90.3	92.8	89.4	83.0			
JET 6	1000	69.5	78.1	79.3	92.0	96.6	93.6	90.6			
FAN 4	1250	68.9	75.8	77.1	90.4	94.5	91.5	88.5			
CRITICAL FREQ.	1800	64.2	73.4	74.9	88.2	92.3	89.3	85.4			
0.	2000	63.1	71.0	75.3	89.3	91.8	87.2	84.2			
AIRFLOW RATIO	2500	69.9	83.1	82.8	97.7	96.8	92.6	92.6			
WF/WM 18.93	3150	63.8	75.1	77.4	90.2	91.0	90.5	87.0			
FAN TIP SPEED 4000	5000	58.9	67.2	71.5	83.1	85.9	85.4	80.2			
1379. FT/SEC	6000	58.5	69.9	75.0	85.7	86.7	86.8	80.5			
	8000	52.3	65.5	70.8	79.8	81.3	81.8	76.0			
	10000	45.0	60.3	66.3	75.6	77.3	77.9	72.2			
	10000	35.8	54.2	61.1	70.9	72.9	73.7	66.0			
OVERALL CALCULATED		78.5	88.0	90.4	101.6	103.7	101.6	99.5			
PND8		90.1	101.5	102.9	115.5	116.2	113.6	112.0			
PNLT		92.2	104.8	105.0	118.1	118.0	115.4	115.2			

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10	20	30	40	50	60	70	0	0	0
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
	50										
	63										
	80										
NO EGA	83										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	180										
LOC VG=80, A=0.	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	318										
TAPE 050220	400	83.5	82.0	88.5	80.8	89.7	88.9	81.2			
BAR 29.9 HG	500	87.2	85.2	88.3	87.3	84.4	85.7	86.8			
(***** N/M2)	630	86.5	87.7	85.2	80.8	84.6	85.0	85.2			
TAMB 98. DEG F	600	88.2	87.9	80.1	87.0	88.5	88.8	80.0			
(310. DEG K)	1000	84.9	85.5	88.0	101.5	100.0	86.4	86.7			
TWET 78. DEG F	1250	87.2	84.9	86.5	87.3	101.1	88.5	84.6			
(288. DEG K)	1600	88.0	88.8	86.4	100.8	98.9	100.9	87.4			
HACT17.73 GM/M3	2000	82.5	85.5	88.9	101.5	103.2	103.9	101.1			
(.01773 KG/M3)	2500	87.1	87.2	102.4	103.9	105.0	105.5	101.8			
NFA 15448. RPM	3150	87.5	100.3	106.4	108.6	110.1	106.3	104.6			
(1817. RAD/SEC)	4000	89.0	87.3	102.0	110.5	112.6	108.7	108.3			
NFK 14895. RPM	5000	83.8	83.9	85.1	105.7	107.2	102.0	88.6			
(1580. RAD/SEC)	6300	86.3	87.1	87.6	107.5	107.6	100.6	89.2			
NFD 14895. RPM	8000	103.2	103.0	102.9	112.3	108.4	111.6	106.9			
(1580. RAD/SEC)	10000	82.2	82.3	83.7	102.0	101.9	101.1	88.9			
NO. OF BLADES 28	12500	83.6	84.3	84.8	101.8	100.2	89.3	83.9			
FAN TIP SPEED 16000	1416. FT/SEC	82.7	84.4	83.4	101.8	89.0	87.5	84.8			
OVERALL MEASURED											
OVERALL CALCULATED		108.4	108.7	111.4	117.6	117.5	115.8	112.6			
PNDB		120.3	121.1	125.2	130.0	131.2	127.3	125.4			
PNLT		122.1	122.8	127.3	133.1	132.7	129.1	126.9			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10	20	30	40	50	60	70	0	0	0
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
	50										
	63										
	80										
NO EGA	83										
	100	65.9	70.4	71.2	74.7	75.1	55.4	78.4			
	125	59.6	66.6	74.0	71.2	69.8	73.2	74.0			
NFA 3754. RPM	160	58.8	66.1	70.9	74.5	70.1	78.5	75.5			
( 393. RAD/SEC)	200	60.5	66.2	71.6	70.9	75.0	76.3	77.3			
NFK 3620. RPM	250	67.0	73.7	75.6	85.4	85.4	82.9	83.9			
( 379. RAD/SEC)	315	69.2	73.1	78.1	81.1	86.5	85.0	81.8			
NFD 3620. RPM	400	66.8	73.9	77.9	84.4	85.2	87.0	84.6			
( 379. RAD/SEC)	500	64.1	73.5	78.4	85.2	88.5	80.3	88.2			
NO. OF BLADES 38	630	68.5	75.1	83.8	87.8	90.3	91.9	85.4			
FREQ. SHIFT	800	68.6	78.1	87.7	92.3	95.3	92.7	91.0			
JET 6	1000	69.7	74.9	83.2	84.1	97.8	93.0	92.3			
FAN 5	1250	64.0	71.2	76.2	89.1	92.3	88.2	85.6			
CRITICAL FREQ.	1600	61.7	70.0	74.4	86.7	88.5	83.4	82.0			
0.	2000	64.8	73.6	78.1	90.5	92.3	86.5	85.8			
AIRFLOW RATIO	2500	70.7	79.0	83.1	95.1	90.9	97.3	93.4			
WF/WM 16.93	3150	58.2	67.6	73.4	84.4	86.2	86.6	83.2			
FAN TIP SPEED 4000	5000	57.7	68.6	73.9	83.8	84.1	84.5	75.9			
1416. FT/SEC	6300	55.8	68.3	72.2	83.6	82.7	82.6	80.8			
	8000	46.8	60.8	65.2	76.8	76.1	76.0	74.3			
	10000	39.6	55.6	60.7	72.6	72.1	72.1	70.5			
OVERALL CALCULATED		30.3	49.5	55.5	67.9	67.7	67.9	66.3			
PNDB		78.5	83.9	92.6	100.9	102.7	101.9	99.6			
PNLT		90.1	98.6	103.5	113.8	112.7	115.1	112.2			
		93.9	101.4	106.6	117.1	114.0	119.1	115.8			



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
RADIAL	12. FT.										
(	4. M)										
VEHICLE	JT15RD	125									
CONFIG	40X80	180									
LGC	VO=80, A=8,	200									
DATE	9/28/78	250									
RUN	BFH/W/R C/LT	315									
TAPE	051020	400	91.0	91.5	89.8	88.7	90.6	90.2	92.7	91.8	
BAR	29.9 HG	500	90.1	88.0	87.3	88.5	90.8	85.6	89.9	88.2	
(*****	N/M2)	630	87.7	85.2	88.3	89.1	89.7	87.6	84.6	88.3	
TAMB	99. DEG F	800	88.9	88.4	91.0	87.0	89.3	90.2	92.6	89.7	
(310.	DEG K)	1000	89.0	91.9	96.2	94.1	96.0	90.6	93.2	93.7	
TWET	78. DEG F	1250	93.0	89.3	92.2	100.9	101.0	98.7	95.5	98.6	
(299.	DEG K)	1600	88.7	94.6	95.3	96.6	102.2	99.2	96.2	96.4	
HACT	17.45 GM/M3	2000	92.6	94.5	96.9	96.8	100.1	97.1	101.6	101.4	
(.01745	KG/M3)	2500	97.1	96.7	104.2	105.9	108.9	106.3	107.0	102.9	
NFA	15070. RPM	3150	99.6	97.1	97.9	105.4	107.5	104.0	96.8	100.2	
(1578.	RAD/SEC)	4000	96.2	98.3	97.8	107.0	111.3	108.6	103.0	101.6	
NFK	14521. RPM	5000	92.8	94.8	94.1	101.2	107.3	105.0	100.5	97.9	
(1520.	RAD/SEC)	6300	99.0	103.9	102.4	108.4	113.4	106.0	105.1	102.3	
NFD	14895. RPM	8000	95.1	98.2	96.8	102.0	107.3	105.6	102.1	98.8	
(1560.	RAD/SEC)	10000	90.5	93.2	92.6	96.3	102.3	97.6	95.9	94.1	
NO. OF	BLADES	28	12500	92.3	96.1	95.1	96.8	103.7	101.0	97.8	94.4
FAN	TIP SPEED	16000	88.6	92.2	92.9	93.2	98.3	96.5	94.6	89.1	
1381.	FT/SEC	20000									
OVERALL MEASURED											
OVERALL	CALCULATED		106.4	108.4	109.4	114.2	118.4	114.7	112.5	110.5	
	PNDB		119.7	121.5	122.7	126.9	130.9	127.9	125.6	123.1	
	PNLT		121.1	122.8	125.0	129.4	132.6	129.8	128.2	124.3	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NFA	3663. RPM	100	63.4	69.9	71.5	72.8	76.0	76.7	79.9	79.4	
(	383. RAD/SEC)	125	62.5	66.4	69.0	72.4	76.2	72.1	77.1	75.8	
NFK	3529. RPM	160	60.0	63.6	70.0	73.0	75.2	74.2	71.9	78.0	
(	369. RAD/SEC)	200	61.2	66.7	72.7	70.9	74.8	76.7	79.9	77.4	
NFD	3620. RPM	250	61.1	70.1	77.8	78.0	81.4	77.1	80.4	81.3	
(	379. RAD/SEC)	315	65.0	67.5	73.8	84.7	86.4	85.2	82.7	86.2	
NFD	3620. RPM	400	60.5	72.7	76.8	80.4	87.5	85.6	83.4	84.0	
(	379. RAD/SEC)	500	64.2	72.5	78.4	82.5	85.4	83.5	88.7	88.9	
NO. OF	BLADES	38	630	68.5	74.6	85.6	89.6	94.2	92.7	94.1	90.5
FREQ.	SHIFT	800	70.7	74.9	79.2	89.1	92.8	90.4	83.9	87.7	
JET	6	1000	66.9	75.9	79.0	90.6	96.5	94.9	90.0	89.1	
FAN	4	1250	63.0	73.6	76.8	88.4	94.4	92.8	87.9	87.0	
CRITICAL	FREQ.	1600	58.8	71.2	74.6	86.2	92.2	90.6	85.8	84.8	
0.		2000	61.3	71.3	74.6	84.2	92.0	90.9	87.2	85.0	
AIRFLOW	RATIO	2500	66.4	79.8	82.5	91.1	97.8	91.6	91.5	89.2	
WF/WM	16.93	3150	61.1	73.5	76.5	84.4	91.5	91.0	88.4	85.5	
FAN	TIP SPEED	4000	54.5	67.5	71.6	78.2	86.1	82.7	81.9	80.5	
1381.	FT/SEC	5000	55.3	69.9	73.8	78.5	87.3	85.9	83.6	80.7	
		6300	48.8	64.6	70.7	74.2	81.4	81.0	80.0	75.0	
		8000	41.5	59.5	66.2	70.0	77.4	77.1	76.2	71.3	
		10000	32.2	53.3	61.1	65.3	73.0	72.9	72.1	67.2	
OVERALL	CALCULATED		76.9	85.6	90.7	98.3	104.0	101.7	99.8	98.4	
	PNDB		87.4	99.1	102.8	110.5	116.9	113.4	112.1	110.3	
	PNLT		89.4	101.5	105.2	112.8	119.0	115.3	114.8	111.6	

**MODEL SOUND PRESSURE LEVELS**

**ANGLES FROM INLET IN DEGREES**

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)	(0.
NO EGA	50										
RADIAL 12. FT.	63										
(4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LOC VO=80, A=8.	160										
DATE 9/28/78	200										
RUN BFH/W/R C/LT	250										
TAPE 051060	315										
BAR 29.9 HG	400	87.6	83.6	88.8	85.5	87.3	88.1	85.0	89.6		
(***** N/M2)	500	66.5	75.3	84.6	85.9	86.6	83.2	78.0	69.8		
TAMB 99. DEG F	630	78.4	83.8	84.6	86.5	85.5	81.1	69.0	79.6		
(310. DEG K)	800	85.9	88.3	89.1	87.5	87.4	86.7	87.6	87.9		
TWET 78. DEG F	1000	85.7	89.4	87.5	85.0	85.7	87.4	86.8	89.4		
(299. DEG K)	1250	90.1	90.7	89.7	87.8	88.3	86.2	89.9	88.6		
HACT17.45 GM/M3	1600	90.0	93.0	90.8	90.8	88.5	87.2	87.5	89.8		
(.01745 KG/M3)	2000	96.8	96.3	96.9	103.1	102.7	103.4	102.4	100.3		
NFA 13985. RPM	2500	104.5	100.0	105.0	108.1	112.5	111.5	109.9	107.6		
(1464. RAD/SEC)	3150	105.0	103.7	109.1	111.7	115.4	115.4	111.8	112.3		
NFK 13475. RPM	4000	99.7	100.5	101.8	103.1	107.9	107.5	103.1	103.5		
(1411. RAD/SEC)	5000	97.2	98.6	99.6	99.9	104.9	106.5	102.7	99.2		
NFD 14895. RPM	6300	102.0	103.4	102.7	103.7	115.1	114.0	107.9	105.7		
(1560. RAD/SEC)	8000	95.5	97.8	97.1	97.0	104.1	104.4	102.1	97.0		
NO. OF BLADES 28	10000	93.5	98.0	97.3	97.8	105.4	106.1	104.2	99.0		
FAN TIP SPEED 16000	12500	94.0	96.4	97.6	97.4	100.2	101.7	100.1	94.7		
1232. FT/SEC	20000	92.9	94.2	97.8	97.0	96.8	98.6	97.1	91.4		
<b>OVERALL MEASURED</b>											
<b>OVERALL CALCULATED</b>		110.4	110.1	112.8	115.0	120.2	119.8	116.3	115.2		
PNDB		123.7	123.1	126.8	128.9	133.0	132.9	129.5	129.1		
PNLT		125.0	124.3	128.7	130.9	135.0	134.8	132.7	131.4		

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**

**ANGLES FROM INLET IN DEGREES**

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)	(0.
NO EGA	50										
	63										
	80										
NFA 3399. RPM	100	60.0	62.0	70.5	69.4	72.7	74.6	72.2	77.2		
(356. RAD/SEC)	125	58.9	53.7	66.3	69.8	72.0	67.7	63.2	57.4		
NFK 3275. RPM	160	50.7	62.2	66.3	70.4	71.0	67.7	56.3	67.3		
(343. RAD/SEC)	200	58.2	66.6	70.8	71.4	72.9	73.2	74.9	75.6		
NFD 3620. RPM	250	57.8	67.6	69.1	71.9	71.1	73.9	74.0	77.0		
(379. RAD/SEC)	315	62.1	68.9	71.3	71.6	73.7	73.4	77.1	76.2		
NO. OF BLADES 38	400	61.8	71.1	72.3	74.6	73.8	73.6	74.7	77.4		
FREQ. SHIFT	500	68.4	74.3	80.4	86.2	88.0	89.8	89.5	87.8		
JET 6	630	75.9	77.9	86.4	91.8	97.8	97.9	97.0	95.2		
FAN 5	800	76.1	81.5	90.4	95.4	100.7	101.8	98.9	99.8		
CRITICAL FREQ.	1000	70.4	78.1	83.0	86.7	93.1	93.8	90.1	91.0		
0.	1250	64.6	74.6	76.7	79.3	86.0	88.7	85.7	82.6		
AIRFLOW RATIO	1600	66.6	75.5	80.4	83.1	89.8	92.6	89.5	86.5		
WF/WM 16.93	2000	70.5	79.9	83.2	86.7	99.8	99.9	94.5	92.8		
FAN TIP SPEED	2500	63.0	73.8	77.3	79.8	88.6	90.1	86.6	84.0		
1282. FT/SEC	3150	59.5	73.3	77.0	80.2	89.7	91.6	90.5	85.8		
	4000	58.1	70.8	76.7	79.4	84.1	86.9	86.1	81.2		
	5000	56.0	68.1	76.6	78.8	80.5	83.7	83.0	77.8		
	6300	50.1	63.6	72.6	75.0	76.9	80.1	79.5	74.3		
	8000	42.8	58.5	68.1	70.8	72.9	76.2	75.7	70.6		
	10000	33.5	52.3	63.0	66.1	68.5	72.0	71.8	66.5		
<b>OVERALL CALCULATED</b>		81.0	87.5	94.0	98.6	105.2	106.1	103.3	102.6		
PNDB		89.5	98.8	103.5	107.2	115.8	116.7	113.3	111.2		
PNLT		91.9	100.5	105.5	109.6	119.9	120.1	115.6	114.3		

**MODEL SOUND PRESSURE LEVELS**

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		FREQ. (0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
		50									
NO EGA		63									
RADIAL 12. FT.		80									
(4. H)		100									
VEHICLE JT15RD		125									
CONFIG 40X60		160									
LOC VO=80, A=15,		200									
DATE 9/28/78		250									
RUN BFH/CTS C/LT		315									
TAPE 052010		400	93.7	92.9	92.4	88.6	87.7	83.8	87.9	67.2	
BAR 29.9 HG		500	93.6	92.9	91.6	85.4	80.5	69.4	82.4	71.9	
(0.44 N/M2)		630	93.3	94.0	91.1	87.4	86.3	69.1	86.4	81.7	
TAMB 99. DEG F		800	92.7	90.2	89.0	87.0	86.7	83.9	84.9	82.6	
(316. DEG K)		1000	87.8	89.5	88.9	86.8	84.2	84.0	83.0	83.8	
TWET 78. DEG F		1250	93.5	93.8	92.7	91.8	88.9	87.6	83.6	85.0	
(299. DEG K)		1600	98.3	95.0	94.8	93.3	91.2	88.5	87.2	87.2	
HACT 17.45 GM/M3		2000	97.5	96.0	98.0	94.4	93.7	91.5	88.0	88.1	
(0.01745 KG/M3)		2500	99.8	97.9	100.1	96.1	96.0	92.7	87.2	85.3	
NFA 11562. RPM		3150	99.5	101.3	101.7	96.4	94.3	92.9	88.2	86.5	
(1211. RAD/SEC)		4000	98.8	101.2	100.1	97.0	94.3	91.8	88.0	85.7	
NFK 11140. RPM		5000	99.1	98.7	99.2	96.9	96.0	91.5	89.5	84.0	
(1186. RAD/SEC)		6300	95.2	96.9	98.5	97.2	95.1	91.4	87.1	85.2	
NFD 14895. RPM		8000	95.3	96.6	99.4	99.3	96.2	95.4	91.8	87.7	
(1580. RAD/SEC)		10000	98.0	98.2	100.3	99.8	99.1	96.8	93.3	85.3	
NO. OF BLADES 28		12500	94.8	99.3	101.0	100.8	102.2	98.5	92.0	87.9	
FAN TIP SPEED 16000		16000	92.9	96.7	99.1	98.7	98.2	96.6	90.3	84.2	
1060. FT/SEC		20000									
<b>OVERALL MEASURED</b>											
OVERALL CALCULATED			108.7	109.8	110.3	108.5	107.9	105.0	100.9	97.8	
PNDB			121.2	122.2	122.5	119.0	117.4	114.7	111.3	109.0	
PNLT			122.5	122.2	122.5	119.0	117.4	117.1	114.7	110.4	

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		FREQ. (0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
		50									
NO EGA		63									
		80									
		100	68.1	71.3	74.1	70.5	73.1	70.3	75.1	54.8	
		125	68.0	71.3	73.3	69.3	65.9	55.9	69.6	59.5	
NFA 2810. RPM		160	65.6	72.4	72.8	71.3	71.8	55.7	53.7	69.4	
(294. RAD/SEC)		200	65.0	68.5	70.7	70.9	72.2	70.4	72.2	70.3	
NFK 2708. RPM		250	59.9	67.7	71.5	70.7	69.6	70.5	70.2	71.4	
(283. RAD/SEC)		315	65.5	72.0	74.3	75.6	74.3	74.3	70.8	72.6	
NFD 3620. RPM		400	70.1	73.1	76.4	77.1	76.5	74.9	74.4	74.8	
(379. RAD/SEC)		500	69.1	74.0	77.5	78.1	79.0	77.9	75.1	75.6	
NO. OF BLADES 38		630	71.2	75.8	81.5	79.8	81.3	79.1	74.3	72.9	
FREQ. SHIFT		800	70.6	79.1	83.0	80.1	79.6	79.3	75.3	74.0	
JET 6		1000	68.2	76.9	80.9	77.9	77.5	77.2	73.2	71.9	
FAN 5		1250	68.7	78.5	81.1	80.4	79.4	78.0	74.9	73.1	
CRITICAL FREQ. 1800		1800	68.5	75.6	80.0	80.1	80.9	77.6	76.3	71.3	
0.		2000	63.7	75.4	79.0	80.2	79.6	77.3	73.7	72.3	
AIRFLOW RATIO 2500		2500	62.8	74.6	79.6	82.1	82.7	81.1	78.3	74.7	
WF/WM 16.93		3150	62.0	73.5	80.0	82.2	83.4	82.3	79.6	75.1	
FAN TIP SPEED 4000		4000	58.9	73.7	80.1	82.8	88.1	83.7	78.0	74.4	
1060. FT/SEC		5000	58.0	72.6	77.9	80.5	81.9	81.7	76.2	70.6	
		6300	50.1	68.1	73.9	76.7	78.3	78.1	72.7	67.1	
		8000	42.8	63.0	69.4	72.5	74.3	74.2	68.9	63.4	
		10000	33.5	58.8	64.3	67.8	69.9	70.0	64.8	59.3	
<b>OVERALL CALCULATED</b>											
OVERALL CALCULATED			79.6	87.3	91.4	91.7	92.7	91.2	87.9	85.3	
PNDB			88.4	98.4	103.6	105.1	107.0	105.1	101.6	97.9	
PNLT			89.1	98.4	103.6	105.1	108.1	106.3	103.3	98.7	

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VO=80, A=15,	200									
DATE	9/28/78	250									
RUN	BFH/CTS C/LT	315									
TAPE	052020	400	92.2	92.9	89.8	88.5	89.9	88.3	89.5	85.6	
BAR	29.9 HG	500	91.0	91.0	89.1	89.5	89.4	89.2	83.6	85.0	
(***** N/M2)	630	91.0	91.8	89.5	89.1	78.8	68.9	87.0	78.5		
TAMB	99. DEG F	800	89.8	90.5	87.9	87.5	87.0	84.9	85.8	86.3	
(310. DEG K)	1000	88.9	89.7	88.7	87.7	86.8	82.0	84.6	82.3		
TWET	78. DEG F	1250	94.7	92.9	92.0	88.7	89.7	85.9	85.9	85.2	
(299. DEG K)	1600	98.1	94.8	93.5	91.0	89.1	87.4	87.2	87.0		
HACT	17.45 GM/M3	2000	96.1	94.3	96.5	94.9	93.2	90.2	89.6	91.1	
(.01745 KG/M3)	2500	96.8	97.6	98.0	96.3	94.8	88.9	88.0	86.7		
NFA	12439. RPM	3150	98.8	100.9	98.8	97.3	95.6	92.9	88.5	85.8	
(1302. RAD/SEC)	4000	99.2	99.8	99.7	97.7	94.7	91.4	89.1	86.3		
NFK	11985. RPM	5000	97.9	98.5	98.8	97.9	95.5	91.3	86.2	85.6	
(1255. RAD/SEC)	6300	95.5	96.2	99.3	96.8	97.0	96.3	92.3	88.0		
NFD	14895. RPM	8000	95.0	97.1	98.6	99.4	98.2	95.2	91.6	89.1	
(1660. RAD/SEC)	10000	94.0	97.7	99.0	99.4	99.1	98.7	92.5	88.6		
NO. OF BLADES	28	12500	93.4	99.0	100.3	100.3	99.5	97.3	92.9	88.5	
FAN TIP SPEED	16000	92.4	96.7	98.3	98.2	97.3	93.6	90.3	85.6		
1140. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.6	109.0	109.3	108.8	107.2	104.6	101.7	99.2		
	PNOB	120.4	121.6	121.0	119.5	117.5	115.2	112.7	110.6		
	PNLT	120.4	121.6	121.0	119.5	119.5	118.3	113.2	112.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
NO EGA	50										
	63										
	80										
	100	64.8	71.3	71.5	72.4	75.3	74.8	76.7	73.2		
	125	63.4	69.4	70.8	73.4	54.8	55.7	70.8	72.6		
NFA	3023. RPM	160	63.3	70.2	71.2	73.0	61.1	55.5	74.3	66.2	
( 317. RAD/SEC)	200	62.1	68.8	69.6	71.4	72.5	71.4	73.1	74.0		
NFK	2913. RPM	250	61.0	67.9	70.3	71.8	72.2	68.5	71.8	69.9	
( 305. RAD/SEC)	315	66.7	71.1	73.6	72.5	75.1	72.4	73.1	72.8		
NFD	3620. RPM	400	67.9	72.7	75.0	74.8	74.4	73.8	74.4	74.6	
( 379. RAD/SEC)	500	67.7	72.3	78.0	78.6	78.5	76.6	76.7	78.6		
NO. OF BLADES	38	630	68.2	75.5	79.4	80.0	79.8	75.3	75.1	74.3	
FREQ. SHIFT	800	69.9	78.7	80.1	81.0	81.0	80.9	79.3	75.6	73.3	
JET	6	1000	69.9	77.4	80.9	81.3	79.9	77.7	76.1	73.8	
FAN	5	1250	67.3	75.1	78.7	79.1	77.8	75.6	74.0	71.7	
CRITICAL FREQ.	1600	67.3	75.4	79.8	81.1	80.4	77.4	73.0	72.9		
0.	2000	64.0	74.7	79.8	79.8	81.7	82.2	78.9	75.1		
AIRFLOW RATIO	2500	62.5	73.1	78.8	82.2	82.7	80.9	78.1	76.1		
WF/WM 18.93	3150	60.0	73.0	78.7	81.8	83.4	82.2	78.8	75.4		
FAN TIP SPEED	4000	57.5	73.4	79.4	82.3	83.4	82.5	78.9	75.0		
1140. FT/SEC	5000	55.5	70.6	77.1	80.0	81.0	78.7	76.2	72.0		
	6300	49.8	66.1	73.1	76.2	77.4	75.1	72.7	68.6		
	8000	42.3	61.0	68.6	72.0	73.4	71.2	68.9	64.8		
	10000	33.0	54.8	63.5	67.3	69.0	67.0	64.8	60.7		
OVERALL CALCULATED		78.5	86.4	90.3	91.8	92.2	90.7	88.7	86.7		
	PNOB	87.4	97.7	102.7	105.0	105.6	104.2	101.8	99.0		
	PNLT	87.4	97.7	102.7	105.0	106.6	105.9	102.9	100.4		



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA		50									
RADIAL 12. FT.		63									
( 4. M)		80									
VEHICLE JT15RD		100									
CONFIG 40X80		125									
LOC VO=80,A=15,		160									
DATE 9/28/78		200									
RUN BFH/CTS C/LT		250									
TAPE 052030		315									
BAR 29.9 HG		400	91.4	89.9	90.5	90.5	90.3	90.5	89.7	87.3	
(***** N/M2)		500	89.9	86.5	89.3	89.6	81.3	85.8	88.0	83.6	
TAMB 99. DEG F		630	90.2	88.4	87.1	84.4	88.0	80.4	85.5	81.2	
(310. DEG K)		800	89.1	90.0	87.6	90.0	82.0	83.9	85.4	86.6	
TWET 98. DEG F		1000	90.8	89.5	89.9	86.4	83.4	85.7	83.3	82.8	
(310. DEG K)		1250	94.4	91.8	92.7	90.9	89.2	88.1	87.7	87.9	
MACT42.77 GM/M3		1600	95.4	93.7	92.3	89.9	89.4	88.0	88.5	85.8	
( .04277 KG/M3)		2000	95.2	95.2	97.4	94.2	92.3	91.3	89.9	90.5	
NFA 12775. RPM		2500	96.8	95.9	96.5	95.9	92.7	90.8	87.5	87.5	
(1338. RAD/SEC)		3150	99.2	100.7	98.3	100.4	98.1	97.4	92.1	91.4	
NFK 12309. RPM		4000	98.6	99.6	98.3	96.3	95.1	92.9	89.5	88.2	
(1289. RAD/SEC)		5000	96.1	99.6	99.5	95.9	96.0	91.5	88.0	86.7	
NFD 14895. RPM		6300	98.4	99.4	99.1	100.2	100.2	97.8	95.2	93.4	
(1560. RAD/SEC)		8000	94.4	96.2	99.1	99.5	98.5	95.8	94.2	91.3	
NO. OF BLADES 28		10000	94.0	98.0	98.0	98.4	100.0	98.5	95.3	91.4	
FAN TIP SPEED 16000		12500	95.1	99.7	99.7	99.7	99.9	99.2	95.2	91.1	
1171. FT/SEC		20000	92.1	96.1	97.4	97.3	95.6	95.1	91.5	86.2	
OVERALL MEASURED											
OVERALL CALCULATED			107.3	108.9	109.2	108.6	107.9	106.4	103.5	101.3	
PNDB			120.2	121.3	120.6	120.7	118.8	117.7	114.6	113.1	
PNLT			120.7	121.3	120.6	122.3	121.0	119.6	116.0	114.6	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA		50									
RADIAL 12. FT.		63									
( 4. M)		80									
VEHICLE JT15RD		100	83.8	88.3	72.2	74.4	75.7	77.0	76.9	74.9	
CONFIG 40X80		125	62.3	64.9	71.0	73.5	66.7	72.3	75.2	71.2	
LOC VO=80,A=15,		160	62.5	66.8	68.8	68.3	53.5	67.0	72.8	68.9	
DATE 9/28/78		200	61.4	68.3	69.3	73.9	67.5	70.4	72.7	74.3	
RUN BFH/CTS C/LT		250	62.9	67.7	71.5	70.3	68.8	72.2	70.5	70.4	
TAPE 052030		315	66.4	70.0	74.3	74.7	74.6	74.6	74.9	75.5	
BAR 29.9 HG		400	67.2	71.8	73.8	73.7	74.7	74.4	75.7	73.4	
(***** N/M2)		500	66.8	73.2	78.9	77.9	77.6	77.7	76.0	78.0	
TAMB 99. DEG F		630	68.2	73.8	79.9	79.8	78.0	77.2	74.6	75.1	
(310. DEG K)		800	70.3	78.5	79.8	84.1	83.4	83.8	79.2	78.9	
TWET 98. DEG F		1000	67.3	77.2	79.5	79.9	80.3	79.2	75.5	75.7	
(310. DEG K)		1250	64.2	74.9	77.3	75.6	77.2	74.6	71.9	72.4	
MACT42.77 GM/M3		1600	65.5	76.5	80.4	79.1	80.9	77.8	74.8	74.0	
( .04277 KG/M3)		2000	66.9	75.9	79.6	83.2	84.9	83.7	81.8	80.5	
NFA 12775. RPM		2500	61.9	72.2	79.3	82.3	83.0	81.5	80.7	78.3	
(1338. RAD/SEC)		3150	60.0	73.3	78.7	80.8	84.3	84.0	81.6	78.2	
NFK 12309. RPM		4000	59.1	74.0	78.9	81.6	83.7	84.3	81.2	77.6	
(1289. RAD/SEC)		5000	55.2	70.0	76.3	79.1	79.4	80.2	77.5	72.7	
NFD 14895. RPM		6300	49.3	65.5	72.2	75.3	75.7	76.6	73.9	69.1	
(1560. RAD/SEC)		8000	42.0	60.4	67.7	71.2	71.7	72.7	70.1	65.4	
NO. OF BLADES 28		10000	32.7	54.2	62.5	66.5	67.3	68.5	68.0	61.3	
FAN TIP SPEED 16000		12500	77.9	86.2	90.1	91.9	92.8	92.4	90.3	88.7	
1171. FT/SEC		20000	87.7	97.7	102.4	104.6	106.0	106.0	103.7	101.1	
OVERALL MEASURED			88.7	97.7	102.4	106.0	107.4	107.8	105.1	102.6	
OVERALL CALCULATED			77.9	86.2	90.1	91.9	92.8	92.4	90.3	88.7	
PNDB			87.7	97.7	102.4	104.6	106.0	106.0	103.7	101.1	
PNLT			88.7	97.7	102.4	106.0	107.4	107.8	105.1	102.6	

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA		50									
RADIAL 12. FT.		63									
( 4. M)		80									
VEHICLE JT15RD		100									
CONFIG 40X80		125									
LOC VG=80, A=15,		160									
DATE 9/28/78		200									
RUN BFH/W/R C/LT		250									
TAPE 052070		315									
BAR 29.9 HG		400	91.6	91.5	90.6	88.5	86.8	89.4	91.4	87.3	
***** N/M2)		500	88.6	90.6	74.5	90.1	86.4	78.1	88.1	84.7	
TAMB 97. DEG F		630	86.8	89.0	82.5	86.7	86.3	78.0	88.8	88.3	
(309. DEG K)		800	88.3	88.6	89.4	89.6	89.6	90.1	90.7	88.4	
TWET 78. DEG F		1000	87.6	87.9	88.3	87.6	86.4	87.1	89.5	88.8	
(299. DEG K)		1250	90.6	89.2	89.4	87.4	89.1	87.0	89.3	89.3	
HACT18.03 GM/M3		1600	90.2	91.1	91.3	91.0	89.7	87.1	89.1	88.4	
(.01803 KG/M3)		2000	96.7	94.7	96.6	101.1	103.6	105.3	99.8	101.1	
NFA 13959. RPM		2500	103.8	101.4	104.3	102.5	111.9	110.7	108.2	107.6	
(1462. RAD/SEC)		3150	105.7	102.9	108.1	109.2	114.4	114.8	111.4	112.2	
NFK 13474. RPM		4000	98.5	99.3	99.6	99.6	106.4	107.5	103.5	101.4	
(1411. RAD/SEC)		5000	96.0	96.9	98.6	97.3	105.3	105.0	104.7	100.8	
NFD 14895. RPM		6300	102.2	101.8	102.1	101.8	112.9	115.3	113.8	106.7	
(1560. RAD/SEC)		8000	94.9	96.4	98.5	97.4	103.5	105.1	103.0	99.3	
NO. OF BLADES 28		10000	94.5	96.7	97.5	97.4	103.8	105.1	104.4	100.1	
FAN TIP SPEED 16000		12500	93.2	96.1	97.7	98.3	98.3	101.2	100.2	95.8	
1280. FT/SEC		20000	91.7	95.3	96.7	98.6	95.3	98.1	97.1	93.2	
OVERALL MEASURED											
OVERALL CALCULATED		110.4	109.5	112.0	112.4	119.0	119.9	117.6	115.3		
PNDB		124.2	122.6	125.8	126.6	132.1	132.5	130.1	129.3		
PNLT		125.7	123.5	128.2	129.3	133.8	135.1	132.1	131.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA		50									
		63									
		80									
		100	64.0	69.9	72.3	72.4	72.2	75.9	78.6	74.9	
		125	61.0	69.0	56.2	74.0	71.8	64.6	75.3	72.3	
NFA 3393. RPM		160	59.1	67.4	64.2	70.6	71.8	64.6	75.9	76.0	
( 355. RAD/SEC)		200	60.6	66.9	71.1	73.5	75.1	76.6	78.0	76.1	
NFK 3275. RPM		250	59.7	66.1	67.9	71.5	71.8	73.6	76.7	76.4	
( 343. RAD/SEC)		315	62.6	67.4	71.0	71.2	74.5	73.5	76.5	76.9	
NFD 3620. RPM		400	62.0	69.2	72.8	74.8	75.0	73.5	76.3	76.0	
( 379. RAD/SEC)		500	68.3	72.7	78.1	84.8	88.9	91.7	86.9	88.6	
NO. OF BLADES 38		630	75.2	79.3	85.7	86.2	97.2	97.1	95.3	95.2	
FREQ. SHIFT		800	76.8	80.7	89.4	92.9	99.6	101.2	98.5	99.7	
JET 6		1000	69.2	76.9	80.8	83.2	91.6	93.8	90.5	88.9	
FAN 5		1250	62.2	73.0	75.7	76.7	86.4	87.2	87.7	84.2	
CRITICAL FREQ.		1600	65.4	73.8	79.4	80.5	90.2	91.1	91.5	88.1	
0.		2000	70.7	78.3	82.6	84.8	97.6	101.2	100.4	93.8	
AIRFLOW RATIO		2500	62.4	72.4	78.7	80.2	88.0	90.8	89.5	86.3	
WF/WM 16.93		3150	60.5	72.0	77.2	79.8	88.1	90.6	90.7	86.9	
FAN TIP SPEED		4000	57.3	70.4	76.8	80.2	82.2	86.4	86.2	82.3	
1279. FT/SEC		5000	54.8	69.2	75.5	80.4	79.0	83.2	83.0	79.6	
		6300	48.8	64.7	71.5	76.6	75.4	79.6	79.5	76.1	
		8000	41.5	59.5	67.0	72.4	71.4	75.7	75.7	72.3	
		10000	32.3	53.4	61.8	67.7	67.0	71.5	71.5	68.2	
OVERALL CALCULATED		81.0	85.9	93.1	96.0	104.1	106.0	104.5	102.8		
PNDB		89.6	98.0	102.8	105.7	114.3	117.2	116.6	112.1		
PNLT		92.4	99.7	104.9	108.4	117.7	121.0	120.4	114.9		

**MODEL SOUND PRESSURE LEVELS**

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VO=60, A=15,	200									
DATE	9/28/78	250									
RUN	BFH/W/R C/LT	315									
TAPE	05208	400	91.2	93.4	90.6	92.3	90.6	92.5	93.0	91.7	
BAR	29.9 HG	500	89.7	91.9	91.1	92.7	90.5	87.8	90.7	90.0	
(***** N/M2)	630	87.5	90.1	88.2	88.9	88.9	82.6	87.9	90.2		
TAMB	97. DEG F	800	88.9	87.3	89.0	90.8	90.6	91.9	89.0	92.0	
(309. DEG K)	1000	93.0	94.3	95.2	96.4	93.9	93.1	91.2	94.5		
TWET	78. DEG F	1250	92.1	93.0	93.8	100.0	101.2	99.9	94.8	97.9	
(299. DEG K)	1600	94.6	94.4	93.1	98.3	98.4	99.9	96.4	98.0		
HACT	18.03 GM/M3	2000	96.0	93.1	94.3	95.8	99.5	100.8	100.3	99.1	
(.01803 KG/M3)	2500	98.8	98.2	102.5	103.3	106.9	107.9	105.9	103.7		
NFA	15042. RPM	3150	98.2	98.6	97.6	102.9	102.9	104.5	100.0	101.1	
(1575. RAD/SEC)	4000	97.5	96.8	100.4	104.8	107.8	110.5	105.2	102.0		
NFK	14520. RPM	5000	92.8	93.6	94.9	98.2	106.6	105.9	104.2	100.2	
(1520. RAD/SEC)	6300	101.9	105.2	103.3	105.0	114.5	111.6	106.9	100.9		
NFD	14895. RPM	8000	96.2	97.3	96.8	99.5	106.0	105.4	103.5	99.9	
(1560. RAD/SEC)	10000	92.5	92.7	92.5	94.4	100.1	102.6	98.3	94.7		
NO. OF BLADES	28	12500	93.5	95.2	96.8	96.2	101.6	103.2	99.9	96.6	
FAN TIP SPEED	16000	89.1	91.1	93.2	92.6	96.1	98.6	94.7	91.6		
1379. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.8	109.1	109.4	112.0	117.5	117.0	113.5	110.9		
PND8		120.6	122.4	121.9	125.0	130.6	129.8	125.8	123.7		
PNTL		121.8	124.0	124.1	126.4	132.6	131.6	127.7	124.9		

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	63.6	71.8	72.5	76.2	76.0	79.0	80.2	79.3		
	125	62.1	70.3	72.8	76.6	75.9	74.3	77.9	77.6		
NFA	3656. RPM	160	59.8	68.5	69.9	72.8	74.4	69.2	75.2	77.9	
( 383. RAD/SEC)	200	61.2	65.6	70.7	74.7	76.1	78.4	76.3	79.7		
NFK	3529. RPM	250	65.1	72.5	76.8	80.3	79.3	79.6	78.4	82.1	
( 369. RAD/SEC)	315	64.1	71.2	75.4	83.8	86.6	86.4	81.8	85.5		
NFD	3620. RPM	400	66.4	72.5	74.6	82.1	83.7	86.3	83.6	85.6	
( 379. RAD/SEC)	500	67.6	71.1	75.8	79.5	84.8	87.2	87.4	86.6		
NO. OF BLADES	38	630	70.2	76.1	83.9	87.0	92.2	94.3	93.0	91.3	
FREQ. SHIFT	800	69.3	76.4	78.9	86.6	86.1	90.9	87.1	88.6		
JET	6	1000	68.2	74.4	81.6	88.4	93.0	96.8	92.2	89.5	
FAN	4	1250	65.6	72.1	79.4	86.2	90.9	94.7	90.1	87.4	
CRITICAL FREQ.	1600	62.9	69.7	77.2	84.0	88.7	92.5	88.0	85.2		
0.	2000	61.3	70.1	75.4	81.8	91.3	91.8	90.9	87.3		
AIRFLOW RATIO	2500	69.3	81.1	83.4	87.7	98.9	97.2	93.3	87.8		
WF/WM 16.93	3150	62.2	72.6	76.5	81.9	93.2	90.8	89.8	86.6		
FAN TIP SPEED	4000	56.5	67.0	71.5	76.3	83.9	87.7	84.2	81.1		
1379. FT/SEC	5000	56.5	69.0	75.6	77.8	85.2	88.1	85.7	82.9		
	6300	49.2	63.5	71.0	73.6	79.2	83.1	80.1	77.5		
	8000	41.9	58.3	66.5	69.4	75.2	79.2	76.3	73.7		
	10000	32.7	52.2	61.3	64.7	70.8	75.0	72.1	69.6		
OVERALL CALCULATED		78.2	86.1	90.7	96.1	102.6	103.9	100.9	98.7		
PND8		89.5	99.7	103.5	108.2	116.8	116.8	113.6	110.3		
PNTL		92.0	103.0	106.0	110.2	119.3	118.7	115.5	111.5		

**MODEL SOUND PRESSURE LEVELS**  
**ANGLES FROM INLET IN DEGREES**

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	<b>FREQ.</b>	<b>(0.17)</b>	<b>(0.35)</b>	<b>(0.52)</b>	<b>(0.70)</b>	<b>(0.87)</b>	<b>(1.05)</b>	<b>(1.22)</b>	<b>(1.40)</b>	<b>(0.</b>	<b>)</b> (0.
	50										
	63										
	80										
<b>NO EGA</b>	100										
<b>RADIAL 12. FT.</b>	125										
<b>(4. M)</b>	160										
<b>VEHICLE JT15RD</b>	200										
<b>CONFIG 40X80</b>	250										
<b>LOC VO=80, A=15,</b>	315										
<b>DATE 9/28/78</b>	400	91.2	93.1	91.6	93.5	93.5	90.6	91.9	93.1		
<b>RUN BFH/W/R C/LT</b>	500	90.7	92.1	92.8	89.0	89.8	89.6	91.5	93.7		
<b>TAPE 052120</b>	630	89.2	89.2	91.0	88.9	87.6	87.4	90.9	90.9		
<b>BAR 29.9 HG</b>	800	90.8	88.3	91.2	91.4	90.8	90.1	91.6	91.7		
<b>(***** N/M2)</b>	1000	90.4	92.6	96.3	96.3	96.9	96.9	94.9	100.3		
<b>TAMB 97. DEG F</b>	1250	93.8	95.2	96.4	95.7	101.3	102.7	96.8	99.9		
<b>(309. DEG K)</b>	1600	92.3	93.9	96.0	93.8	95.9	102.3	98.8	97.1		
<b>THWET 78. DEG F</b>	2000	94.1	93.1	93.6	100.8	103.4	102.9	102.4	101.2		
<b>(299. DEG K)</b>	2500	96.4	96.7	96.4	100.2	104.8	105.1	104.7	100.8		
<b>HACT18.03 GM/M3</b>	3150	99.4	96.1	96.6	102.7	109.4	109.8	104.0	101.5		
<b>(.01803 KG/M3)</b>	4000	96.6	96.2	96.4	105.0	108.7	110.5	108.3	103.1		
<b>NFA 15430. RPM</b>	5000	93.6	93.2	93.7	96.5	105.3	104.9	105.0	96.6		
<b>(1816. RAD/SEC)</b>	6300	94.7	96.1	96.1	100.2	108.3	106.2	103.3	97.7		
<b>NFK 14894. RPM</b>	8000	99.3	100.5	97.3	103.8	114.4	107.0	101.3	103.1		
<b>(1559. RAD/SEC)</b>	10000	91.4	91.6	92.4	93.7	98.7	100.3	97.7	95.9		
<b>NFD 14895. RPM</b>	12500	91.0	93.1	95.0	95.0	100.9	100.2	96.0	93.6		
<b>(1560. RAD/SEC)</b>	16000	91.0	94.3	93.1	94.4	103.7	97.4	94.3	90.5		
<b>NO. OF BLADES 28</b>	20000										
<b>FAN TIP SPEED</b>											
<b>1414. FT/SEC</b>											
<b>OVERALL MEASURED</b>											
<b>OVERALL CALCULATED</b>		107.2	107.3	107.6	111.4	118.2	116.6	113.8	111.3		
<b>PNDB</b>		120.2	119.6	120.2	124.7	129.6	129.9	127.6	124.1		
<b>PNLT</b>		121.4	121.0	121.6	126.5	131.9	131.0	128.9	125.6		

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**  
**ANGLES FROM INLET IN DEGREES**

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	<b>FREQ.</b>	<b>(0.17)</b>	<b>(0.35)</b>	<b>(0.52)</b>	<b>(0.70)</b>	<b>(0.87)</b>	<b>(1.05)</b>	<b>(1.22)</b>	<b>(1.40)</b>	<b>(0.</b>	<b>)</b> (0.
	50										
	63										
	80										
<b>NO EGA</b>	100	63.6	71.5	73.5	77.4	76.9	77.1	79.1	80.7		
	125	63.1	70.5	74.5	72.9	75.2	76.1	78.7	81.3		
<b>NFA 3750. RPM</b>	160	61.5	67.6	72.7	72.8	73.1	74.0	78.2	76.6		
<b>(393. RAD/SEC)</b>	200	63.1	64.6	72.9	75.3	76.3	76.6	78.9	79.4		
<b>NFK 3620. RPM</b>	250	62.5	70.8	79.9	82.2	82.3	85.4	82.1	87.9		
<b>(379. RAD/SEC)</b>	315	65.8	73.4	78.0	79.5	86.7	89.2	84.0	87.5		
<b>NFD 3620. RPM</b>	400	64.1	72.0	77.5	77.6	81.2	88.7	86.0	84.7		
<b>(379. RAD/SEC)</b>	500	65.7	71.1	75.1	84.5	88.7	89.3	89.5	88.7		
<b>NO. OF BLADES 38</b>	630	69.8	74.6	77.8	83.9	90.1	91.5	91.8	88.4		
<b>FREQ. SHIFT</b>	800	70.5	73.9	79.9	86.4	94.6	96.2	91.1	89.0		
<b>JET 6</b>	1000	69.3	75.8	79.6	88.6	93.9	96.8	95.3	90.6		
<b>FAN 5</b>	1250	63.8	70.5	74.8	79.9	90.4	91.1	92.0	86.2		
<b>CRITICAL FREQ.</b>	1600	60.1	69.0	72.9	79.4	89.2	88.2	88.5	81.8		
<b>0.</b>	2000	63.2	72.6	76.6	83.2	93.0	92.1	89.9	84.8		
<b>AIRFLOW RATIO</b>	2500	66.8	76.8	77.5	86.6	98.9	92.7	87.8	90.1		
<b>WF/WM 16.93</b>	3150	57.4	66.9	72.1	76.1	83.0	85.8	84.0	82.7		
<b>FAN TIP SPEED</b>	4000	55.1	67.4	74.1	76.9	84.8	85.4	82.0	80.3		
<b>1414. FT/SEC</b>	5000	54.1	68.2	71.9	76.2	87.4	82.5	80.2	76.9		
	6300	45.1	60.7	64.9	69.4	80.8	75.9	73.7	70.4		
	8000	37.8	55.5	60.4	65.2	76.8	72.0	69.9	66.6		
	10000	28.6	49.4	55.2	60.5	72.4	67.8	65.7	62.5		
<b>OVERALL CALCULATED</b>		77.8	84.7	89.0	94.9	103.2	102.9	101.0	98.7		
<b>PNDB</b>		87.8	97.1	100.1	106.8	116.8	113.8	110.8	110.5		
<b>PNLT</b>		90.6	100.1	101.8	109.1	120.4	115.8	112.1	113.0		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT16RD	125										
CONFIG 40X80	160										
LOC VO=115, A=0.	200										
DATE 9/26/78	250										
RUN BFH/CTS C/LT	315										
TAPE 053030	400	90.8	78.2	75.7	95.9	88.3	90.3	88.4			
BAR 30.0 HG	500	94.1	90.2	74.2	78.5	73.9	91.8	72.7			
(***** N/M2)	630	95.8	94.3	92.8	90.0	88.5	89.9	88.3			
TAMB 83. DEG F	800	75.7	93.0	88.6	73.9	83.0	71.8	73.4			
(301. DEG K)	1000	89.8	87.8	73.6	71.1	72.2	71.0	70.6			
TWET 66. DEG F	1250	97.8	95.1	95.2	92.3	88.9	86.1	84.8			
(292. DEG K)	1600	98.7	98.5	97.2	93.0	91.0	88.4	90.6			
HACT11.14 GM/M3	2000	97.2	98.6	97.6	94.6	92.8	88.6	84.9			
(.0114 KG/M3)	2500	98.6	99.6	99.8	96.2	94.2	87.3	85.9			
NFA 11395. RPM	3150	101.8	102.5	101.0	95.4	84.0	88.1	85.8			
(1193. RAD/SEC)	4000	100.7	101.8	99.4	96.8	92.8	87.7	85.2			
NFK 11140. RPM	5000	99.9	100.2	100.5	97.0	94.2	89.7	85.1			
(1166. RAD/SEC)	6300	97.6	99.9	99.1	97.0	91.8	90.1	89.2			
NFD 14895. RPM	8000	95.9	98.2	99.9	100.0	97.1	89.1	87.8			
(1660. RAD/SEC)	10000	99.9	100.1	101.2	101.8	99.2	93.7	88.3			
NO. OF BLADES 28	12500	99.0	102.4	101.3	103.4	100.6	93.6	88.8			
FAN TIP SPEED 16000		96.5	99.9	99.9	100.3	97.8	91.1	82.7			
1045. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		110.0	111.0	110.8	109.6	106.5	101.9	98.5			
PND8		122.5	123.0	121.9	118.8	115.3	111.8	109.6			
PNLT		126.1	124.4	125.7	123.4	118.0	114.2	114.7			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	63.0	54.8	57.4	78.8	73.7	78.8	75.8			
NFA 2769. RPM	125	66.4	68.8	55.9	62.4	59.3	78.3	59.9			
( 290. RAD/SEC)	200	87.9	72.7	74.5	73.9	72.0	76.4	75.6			
NFK 2707. RPM	250	48.0	71.3	70.3	57.8	68.5	58.3	60.7			
( 283. RAD/SEC)	315	61.9	66.0	55.2	54.9	57.6	57.5	57.8			
NFD 3620. RPM	400	69.8	73.3	76.8	76.1	74.3	72.6	72.0			
( 379. RAD/SEC)	500	68.5	74.8	78.7	76.8	76.3	72.8	77.7			
NO. OF BLADES 38	630	68.8	74.6	79.1	78.3	78.1	74.9	72.0			
FREQ. SHIFT 800		70.0	77.5	81.2	79.9	79.5	73.7	73.0			
JET 6	1000	72.9	80.3	82.3	79.0	69.9	74.4	72.9			
FAN 5	1250	70.4	78.1	80.2	76.9	73.8	72.4	70.8			
CRITICAL FREQ. 1600		70.8	79.1	80.4	80.0	77.6	73.9	72.1			
0.	2000	69.3	77.1	81.3	80.2	79.1	75.7	71.9			
AIRFLOW RATIO 2500		66.1	76.4	79.6	80.0	76.5	76.0	75.8			
WF/WM 16.93	3150	63.3	74.1	80.0	82.7	81.8	74.8	74.3			
FAN TIP SPEED 4000		65.9	75.4	80.9	84.2	83.4	79.2	72.8			
1044. FT/SEC	5000	63.1	76.7	80.4	85.3	84.4	78.7	72.8			
	6300	59.6	73.9	78.8	82.1	81.6	76.2	68.7			
	8000	53.7	69.4	74.7	78.3	77.9	72.6	65.1			
	10000	46.4	64.2	70.3	74.2	73.9	68.8	61.3			
OVERALL CALCULATED		37.2	58.0	65.1	69.5	69.5	64.8	57.2			
PND8		80.5	88.3	91.6	92.7	91.4	86.2	85.6			
PNLT		90.2	100.1	103.9	106.6	105.4	101.3	96.9			

## MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

FREQ.	ANGLES FROM INLET IN DEGREES									
	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
NO EGA	50									
RADIAL 12. FT.	63									
( 4. M )	80									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC VO=115, A+C.	200									
DATE 9/28/78	250									
RUN BFH/CTS C/LT	315									
TAPE 053040	400	94.9	77.1	74.7	91.0	87.6	75.1	93.0		
BAR 30.0 HG	500	94.1	68.0	75.3	83.3	74.0	90.1	72.7		
(***** N/M2)	630	87.6	92.9	74.2	89.0	91.6	88.7	73.0		
TAMB 83. DEG F	800	74.9	94.8	89.0	73.4	92.7	82.4	73.1		
(301. DEG K)	1000	92.0	93.9	74.3	72.8	84.9	84.9	71.9		
TWET 66. DEG F	1250	92.6	94.7	89.4	89.7	89.2	89.0	86.9		
(292. DEG K)	1600	96.0	94.2	93.3	86.9	89.6	86.0	86.6		
HACT 11.14 GM/M3	2000	97.8	97.6	97.5	94.5	94.6	91.0	86.6		
(.01114 KG/M3)	2500	98.7	99.5	100.1	98.4	94.2	86.8	86.4		
NFA 11789. RPM	3150	100.6	102.0	100.8	96.1	91.9	86.5	86.4		
(1234. RAD/SEC)	4000	101.5	100.8	100.4	96.6	92.7	88.4	85.2		
NFK 11525. RPM	5000	100.2	100.5	99.1	98.0	97.8	92.0	86.6		
(1207. RAD/SEC)	6300	97.6	98.0	99.5	97.2	92.9	92.6	90.6		
NFD 14895. RPM	8000	97.5	98.6	100.9	99.3	96.6	93.2	83.7		
(1560. RAD/SEC)	10000	99.2	100.5	101.3	101.3	99.6	95.6	87.1		
NO. OF BLADES 28	12500	99.3	102.8	101.2	102.3	99.9	95.3	86.6		
FAN TIP SPEED	16000	97.4	99.6	99.0	99.4	97.7	93.0	82.3		
1081. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		109.6	110.8	110.3	109.1	107.4	103.3	99.1		
PNCB		122.2	122.7	121.4	119.0	118.0	113.5	110.2		
PFLT		124.9	122.7	126.4	122.6	122.6	116.2	112.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

FREQ.	ANGLES FROM INLET IN DEGREES									
	10	20.	30.	40.	50.	60.	70.	0.	0.	0.
NO EGA	50									
	63									
	80									
NFA 2865. RPM	100	87.3	55.5	56.4	74.9	73.0	61.6	80.2		
( 300. RAD/SEC)	125	66.4	66.4	57.0	67.2	59.4	76.6	59.9		
NFK 2801. RPM	160	59.9	71.3	56.9	72.9	77.0	75.2	60.3		
( 293. RAD/SEC)	200	47.2	73.1	70.7	57.3	78.2	68.9	60.4		
NFD 3620. RPM	250	64.1	72.1	55.9	56.6	70.3	71.0	59.1		
( 379. RAD/SEC)	315	64.6	72.9	71.0	73.6	74.6	75.5	74.1		
NO. OF BLADES 38	400	67.8	72.3	74.8	70.7	74.9	72.4	75.6		
FREQ. SHIFT	500	69.1	75.6	79.0	78.2	79.9	77.4	75.6		
JET 6	630	70.1	77.4	81.5	82.1	79.5	75.2	73.5		
FAN 4	800	71.6	79.8	82.1	79.7	77.1	74.6	73.5		
CRITICAL FREQ.	1000	69.1	77.6	80.0	77.3	74.8	72.8	71.4		
0.	1250	67.6	75.3	77.8	76.0	73.7	70.7	69.3		
AIRFLOW RATIO	1600	70.9	77.7	81.2	79.8	77.6	74.4	72.0		
WF/WF 16.93	2000	68.7	77.0	79.6	81.0	82.5	77.9	73.1		
FAN TIP SPEED	2500	65.0	73.9	79.6	79.9	77.3	76.2	76.9		
1081. FT/SEC	3150	63.4	73.8	80.5	81.6	82.7	78.6	69.9		
	4000	63.2	74.7	80.3	83.1	83.3	80.6	73.0		
	5000	62.2	76.6	79.9	83.9	83.5	80.2	72.4		
	6300	57.6	72.1	76.8	80.4	80.8	77.5	67.7		
	8000	50.3	66.9	72.4	76.3	76.8	73.7	63.9		
	10000	41.1	60.7	67.2	71.6	72.4	69.4	59.8		
OVERALL CALCULATED		79.9	87.9	91.1	92.0	92.0	89.2	86.2		
PNCB		90.2	99.7	103.5	105.3	105.6	102.9	98.1		
PFLT		91.5	100.8	105.9	107.1	107.9	104.3	99.9		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA										
	50										
	63										
	80										
RADIAL	12. FT.										
	( 4. M)										
	100										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VG=115 A=0.	200									
DATE	9/28/78	250									
RUN	BFH/CTS C/LT	315									
TAPE	063050	400	76.5	75.3	76.4	89.8	90.6	75.9	81.9		
BAR	30.0 HG	500	92.2	84.2	88.4	86.5	74.5	88.8	71.4		
	(***** N/M2)	630	93.4	84.5	90.6	91.9	88.6	79.2	72.7		
TAMB	87. DEG F	800	76.2	89.2	91.1	88.2	90.8	81.1	72.6		
	(304. DEG K)	1000	93.0	91.9	72.9	80.2	72.0	83.8	71.0		
TWET	69. DEG F	1250	94.8	91.7	92.3	93.0	82.8	85.6	80.0		
	(254. DEG K)	1600	94.2	91.3	92.2	90.8	90.1	70.5	90.0		
MACT	12.49 GM/M3	2000	94.3	96.7	96.2	95.4	93.6	90.8	90.9		
	(.01249 KG/M3)	2500	96.2	97.6	99.9	97.5	91.1	72.9	87.6		
NFA	12304. RPM	3150	100.1	100.0	100.4	98.5	84.0	89.6	86.6		
	(1288. RAD/SEC)	4000	100.4	100.8	99.8	97.6	92.3	88.1	85.3		
NFK	11965. RPM	5000	99.6	100.8	99.5	97.1	94.2	89.6	86.9		
	(1255. RAD/SEC)	6300	97.4	98.0	100.7	98.8	98.3	95.4	92.8		
NFD	14695. RPM	8000	96.9	96.6	99.9	100.0	98.2	91.2	89.9		
	(1660. RAD/SEC)	10000	96.9	96.6	99.9	100.9	99.6	94.2	92.9		
NO. OF BLADES	28	12500	98.1	102.3	101.4	101.7	100.3	93.9	92.0		
FAN TIP SPEED	16000	20000	95.9	99.6	98.5	99.2	97.4	91.1	94.3		
	1126. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED	106.6	109.9	110.1	109.4	107.1	102.2	101.5			
	PND5	121.2	121.4	121.5	120.1	116.9	113.2	111.9			
	PNLT	124.3	121.4	124.7	122.6	123.0	119.6	112.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA										
	50										
	63										
	80										
	100	48.9	53.7	58.1	73.7	76.0	62.4	69.1			
	125	64.6	62.6	70.1	70.4	59.9	76.3	56.6			
NFA	2990. RPM	160	65.7	62.9	72.3	75.8	74.1	65.7	60.0		
	( 313. RAD/SEC)	200	48.5	67.5	72.8	72.1	76.3	67.6	59.6		
NFK	2913. RPM	250	65.1	70.1	54.5	64.0	57.4	70.3	58.2		
	( 305. RAD/SEC)	315	66.8	69.9	73.9	76.8	68.2	72.1	67.2		
NFD	3620. RPM	400	66.0	69.4	73.7	74.8	75.4	56.9	77.1		
	( 379. RAD/SEC)	500	65.9	74.7	77.7	79.1	76.9	77.2	76.0		
NO. OF BLADES	38	630	69.6	75.5	81.3	81.2	76.4	59.3	74.7		
FREQ. SHIFT	800	71.2	77.8	81.7	82.1	69.2	75.9	75.9			
JET	6	1000	71.1	76.4	81.0	81.2	77.5	74.4	73.3		
FAN	5	1250	68.5	76.1	76.8	79.0	75.3	72.3	71.6		
CRITICAL FREQ.	1600	69.0	77.7	80.3	80.3	79.1	75.6	75.7			
	0.	2000	65.9	74.5	81.2	81.8	83.0	81.3	79.4		
AIRFLOW RATIO	2500	64.4	74.6	80.1	82.8	82.7	76.9	76.4			
WF/WM	16.93	3150	62.9	74.9	79.6	83.3	83.8	79.6	79.2		
FAN TIP SPEED	4000	62.1	76.6	80.4	83.6	84.1	79.0	78.0			
	1126. FT/SEC	5000	59.0	73.5	77.3	81.0	81.1	76.2	80.2		
	6300	53.0	69.0	73.3	77.2	77.5	72.6	76.7			
	8000	45.6	63.8	68.8	73.0	73.5	68.7	72.9			
	10000	38.6	57.7	63.6	68.3	69.1	64.5	68.7			
	OVERALL CALCULATED	79.2	87.0	91.0	92.7	91.9	88.3	86.6			
	PND5	86.7	99.3	103.3	106.0	105.6	101.5	101.7			
	PNLT	90.3	99.3	105.0	107.2	106.6	107.8	103.2			

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA	50									
		63									
	RADIAL 12. FT.	80									
	( 4. M)	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VG=115,A=0,	200									
	DATE 9/28/78	250									
	RUN BFH/CTS C/LT	315									
	TAPE 053100	400	94.4	78.4	75.6	92.6	88.8	76.1	92.1		
	BAR 30.0 HG	500	91.0	86.8	73.3	74.6	73.9	88.5	86.8		
	(***** N/M2)	630	88.4	93.8	86.1	83.0	90.8	84.2	86.1		
	TAMB 90. DEG F	800	76.2	90.8	91.9	73.7	92.8	87.2	73.4		
	(305. DEG K)	1000	90.4	89.9	87.2	71.9	84.9	86.0	89.8		
	THET 73. DEG F	1250	96.1	91.7	91.3	88.6	84.3	88.5	88.0		
	(296. DEG K)	1500	94.8	93.1	91.3	89.3	87.8	87.4	87.5		
	HACT15.19 GM/M3	2000	94.8	95.8	95.3	94.2	91.4	89.1	88.2		
	(.01819 KG/M3)	2500	96.6	97.8	98.3	94.2	92.2	88.0	86.8		
	NFA 12683. RPM	3150	99.2	100.5	98.9	96.3	85.8	85.9	84.0		
	(1328. RAD/SEC)	4000	99.8	99.8	99.5	97.8	91.9	89.4	88.3		
	NFK 12320. RPM	5000	98.4	100.1	99.1	97.6	92.7	89.5	87.0		
	(1290. RAD/SEC)	6300	97.3	99.3	100.9	102.9	102.0	99.9	95.9		
	NFD 4895. RPM	6000	96.2	97.6	98.9	99.4	99.0	93.2	90.2		
	(1560. RAD/SEC)	10000	96.5	99.7	99.5	101.5	101.9	97.4	89.8		
	NO. OF BLADES 28	12500	97.8	100.9	100.2	101.9	100.3	98.4	89.0		
	FAN TIP SPEED	16000	95.0	98.0	97.9	96.5	96.6	91.9	86.3		
	1163. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED		108.3	109.6	109.3	109.5	108.2	104.8	101.2		
	PNOB		120.7	121.4	120.6	120.6	119.1	116.8	113.6		
	PFLT		123.4	123.1	123.8	123.5	123.5	119.5	116.7		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA	50									
		63									
		80									
	103	66.8	64.8	57.3	75.5	74.2	62.6	79.3			
	125	63.4	65.2	55.0	58.5	59.3	75.0	73.8			
	NFA 3082. RPM	160	57.7	72.2	67.8	66.9	76.3	70.8	73.4		
	( 323. RAD/SEC)	200	48.5	69.1	73.6	67.6	76.3	73.7	60.7		
	NFK 2994. RPM	250	62.5	68.1	68.5	55.7	70.3	72.5	57.0		
	( 313. RAD/SEC)	315	68.1	69.9	72.9	72.4	69.7	75.0	75.2		
	NFD 3620. RPM	400	66.6	71.2	72.8	73.1	72.9	73.8	74.6		
	( 379. RAD/SEC)	500	66.4	73.8	76.8	77.9	76.7	75.3	75.3		
	NO. OF BLADES 38	630	68.0	75.7	78.7	77.9	77.5	74.4	73.9		
	FREQ. SHIFT	800	70.3	78.3	80.2	79.9	71.0	72.3	71.1		
	JET 6	1000	70.5	77.4	80.7	81.4	77.1	75.7	73.3		
	FAN 5	1250	67.9	75.1	78.5	79.2	74.9	73.6	71.2		
	CRITICAL FREQ.	1600	67.8	77.0	78.9	80.8	77.6	75.5	73.8		
	0.	2000	65.8	75.8	81.4	85.9	86.7	85.8	82.5		
	AIRFLOW RATIO	2500	63.7	73.6	79.1	82.2	83.5	78.9	76.7		
	WF/WM 16 93	3150	62.5	75.0	79.2	83.9	86.2	82.9	76.1		
	FAN TIP SPEED	4000	61.9	75.3	79.3	83.5	84.2	81.6	73.0		
	1162. FT/SEC	5000	58.1	71.9	76.7	80.3	80.4	77.0	72.2		
		6300	52.2	67.4	72.7	76.5	76.7	73.4	68.7		
		8000	44.9	62.3	68.2	72.3	72.7	69.5	64.9		
		10000	35.8	56.1	63.1	67.7	68.3	65.5	60.8		
	OVERALL CALCULATED		78.8	86.8	90.3	92.7	93.0	90.8	88.1		
	PNOB		88.0	98.7	102.5	105.7	106.8	104.2	100.9		
	PFLT		89.4	99.5	104.1	107.2	109.0	107.0	103.3		



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	(0.	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X60	160										
LOC VO=115, A=0,	200										
DATE 9/28/78	250										
RUN BFH/W/R 12/M	315										
TAPE 063150	400	76.2	73.9	75.8	87.8	75.1	78.0	81.1			
BAR 29.9 HG	500	73.9	73.1	74.8	74.7	81.3	88.8	71.9			
(***** N/M2)	530	73.0	73.8	73.4	89.0	90.3	88.8	73.3			
TAMB 92. DEG F	600	76.2	74.6	84.0	74.1	88.8	88.4	73.8			
(306. DEG K)	1000	84.3	87.1	88.2	84.3	94.4	88.1	84.8			
TWET 73. DEG F	1250	88.7	82.6	82.3	88.4	93.5	88.4	81.3			
(295. DEG K)	1500	88.1	82.7	80.3	88.8	90.1	87.7	88.4			
HACT14.62 GM/M3	2000	96.7	93.7	89.7	101.3	103.4	103.4	102.8			
(.01462 KG/M3)	2500	102.3	103.8	104.4	109.4	111.3	110.8	110.9			
NFA 13897. RPM	3150	103.8	107.0	108.1	114.9	115.4	112.8	109.7			
(1455. RAD/SEC)	4000	99.4	100.8	101.0	107.1	108.2	108.2	101.5			
NFK 13475. RPM	5000	97.4	98.8	97.8	102.8	107.3	102.8	98.8			
(1411. RAD/SEC)	6300	104.1	102.4	104.8	109.3	116.2	108.5	100.7			
NFD 14895. RPM	8000	97.8	98.4	97.7	102.8	106.0	100.9	93.5			
(1560. RAD/SEC)	10000	98.0	87.8	98.7	103.0	108.4	104.4	84.8			
NO. OF BLADES 28	12500	98.2	89.4	99.7	101.1	102.2	98.7	92.3			
FAN TIP SPEED	16000	92.5	94.7	95.4	95.7	98.8	93.3	90.0			
1274. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		110.1	111.4	112.4	118.0	120.8	117.1	114.5			
PNOB		122.7	124.7	125.9	131.7	133.4	130.4	127.2			
PNLT		124.7	128.9	130.8	136.6	135.3	133.4	130.8			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	(0.	(0.
	50										
NO EGA	63										
	80										
	100	48.8	52.3	57.2	71.5	60.5	62.5	78.3			
	125	46.3	51.8	56.2	58.8	66.7	78.3	58.1			
NFA 3377. RPM	160	45.8	52.2	55.1	72.9	75.8	72.2	60.6			
( 354. RAD/SEC)	200	48.5	52.9	75.7	58.0	73.3	74.9	61.1			
NPK 3275. RPM	250	55.5	65.4	68.9	65.2	79.8	74.5	72.0			
( 343. RAD/SEC)	315	60.7	70.8	73.9	73.2	78.9	72.9	68.5			
NFD 3620. RPM	400	57.9	60.8	71.8	73.4	75.4	74.1	76.5			
( 379. RAD/SEC)	500	63.3	71.7	77.2	85.0	88.7	89.8	89.9			
NO. OF BLADES 38	630	73.7	81.5	85.8	93.1	98.8	97.2	98.0			
FREQ. SHIFT	800	74.9	84.8	89.4	98.8	100.8	99.2	98.8			
JET 6	1000	70.1	78.2	82.2	90.7	93.4	91.5	88.5			
FAN 5	1250	65.2	72.1	75.0	82.7	88.4	84.7	81.7			
CRITICAL FREQ.	1500	68.3	75.7	78.3	88.0	92.2	88.5	85.5			
0.	2000	72.6	78.9	85.1	92.3	100.9	94.4	87.3			
AIRFLOW RATIO	2500	65.1	74.4	77.9	85.8	92.5	86.6	80.0			
WF/WM 16.93	3150	62.0	73.1	78.3	85.4	92.6	89.8	80.8			
FAN TIP SPEED	4000	60.3	73.8	78.8	83.1	85.1	83.9	78.3			
1274. FT/SEC	5000	55.6	68.7	74.3	77.5	83.6	78.4	76.0			
	6300	49.7	64.2	70.2	73.7	79.9	74.8	72.4			
	8000	42.4	59.0	65.8	69.6	75.9	71.0	68.6			
	10000	33.2	52.8	60.8	64.9	71.5	68.7	64.5			
OVERALL CALCULATED		80.3	88.8	93.5	101.5	108.8	103.3	101.6			
PNOB		90.2	98.3	103.8	113.5	117.3	112.6	108.8			
PNLT		92.7	100.4	106.6	113.0	120.5	115.4	112.4			

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=115, A=0,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 053160	400	76.6	76.2	76.9	88.8	90.2	89.8	91.8			
BAR 29.9 HG	500	73.7	73.5	73.5	88.4	73.8	86.3	72.9			
(***** N/M2)	630	86.2	87.1	89.4	89.7	83.3	79.2	71.5			
TAMB 92. DEG F	800	75.8	84.4	73.8	74.4	90.0	72.0	72.5			
(306. DEG K)	1000	88.2	92.4	92.1	91.4	90.2	86.8	78.8			
TWET 73. DEG F	1250	93.1	89.9	88.8	87.0	90.3	93.2	83.2			
(296. DEG K)	1600	88.5	80.9	89.4	91.7	95.0	96.8	94.9			
HACT14.62 GM/M3	2000	95.6	100.0	103.8	108.6	107.6	109.0	104.9			
(.01462 KG/M3)	2500	103.5	102.4	103.3	108.6	109.9	110.7	108.1			
NFA 14387. RPM	3150	101.6	101.9	103.8	111.1	113.1	109.9	106.0			
(1506. RAD/SEC)	4000	99.6	101.8	102.6	106.1	108.6	104.1	99.5			
NFK 13950. RPM	5000	96.0	98.5	97.5	106.5	108.6	102.3	97.7			
(1461. RAD/SEC)	6300	101.6	101.3	106.0	116.1	115.4	107.4	102.7			
NFD 14895. RPM	8000	96.2	94.6	95.4	102.4	104.6	97.7	91.2			
(1560. RAD/SEC)	10000	95.5	97.0	97.0	105.0	106.4	101.7	93.3			
NO. OF BLADES 28	12500	96.0	97.9	96.7	101.0	105.5	100.5	91.6			
FAN TIP SPEED 16000	16000	93.2	93.4	93.9	96.3	100.0	95.9	87.2			
1319. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		109.3	109.9	111.8	119.2	119.9	116.4	112.5			
PNDB		122.0	122.0	123.8	132.0	132.2	128.8	125.3			
PNLT		125.8	124.8	129.1	135.5	134.2	131.1	127.5			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	49.0	54.6	58.6	72.7	75.6	76.3	79.0			
	125	46.1	51.9	55.2	72.3	59.2	72.8	60.1			
NFA 3497. RPM	160	58.5	65.5	71.1	73.6	68.8	65.8	58.8			
( 366. RAD/SEC)	200	48.1	62.7	55.5	58.3	75.5	58.5	59.8			
NFK 3390. RPM	250	60.3	70.6	73.7	75.2	75.6	73.3	66.0			
( 355. RAD/SEC)	315	65.1	68.1	70.4	71.1	75.7	79.7	70.4			
NFD 3620. RPM	400	60.3	59.0	70.9	75.5	80.3	83.2	82.0			
( 379. RAD/SEC)	500	67.2	78.0	85.3	92.3	92.9	95.4	92.0			
NO. OF BLADES 38	630	74.9	80.3	84.7	92.3	95.2	97.1	95.2			
FREQ. SHIFT	800	72.7	79.7	85.1	94.7	98.3	96.3	93.1			
JET 6	1000	70.3	79.4	83.8	89.7	93.8	90.4	86.5			
FAN 5	1250	67.7	77.1	81.6	85.9	89.7	84.5	80.6			
CRITICAL FREQ.	1600	65.4	75.4	79.4	89.7	93.5	88.3	84.5			
0.	2000	70.1	77.8	86.5	99.1	100.1	93.3	89.3			
AIRFLOW RATIO	2500	63.7	70.6	75.6	85.2	89.1	83.4	77.7			
WF/WM 16.93	3150	61.5	72.2	76.6	87.4	90.6	87.1	79.5			
FAN TIP SPEED	4000	60.1	72.3	75.8	83.0	89.4	85.7	77.6			
1319. FT/SEC	5000	56.3	67.4	72.8	78.1	83.8	81.0	73.2			
	6300	50.4	62.9	68.7	74.3	80.1	77.4	69.6			
	8000	43.1	57.7	64.3	70.2	76.1	73.6	65.8			
	10000	33.9	51.5	59.1	65.5	71.7	69.3	61.7			
OVERALL CALCULATED		79.8	87.6	93.2	102.6	105.0	102.7	99.6			
PNDB		89.2	97.7	104.3	114.5	116.8	112.2	107.8			
PNLT		91.3	100.5	107.3	119.1	120.4	115.4	111.3			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA	50									
	63										
	80										
	RADIAL 12. FT.	100									
	( 4. M)	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VG=115, A=0,	200									
	DATE 9/28/78	250									
	RUN BFH/W/R C/LT	315									
	TAPE 053180	400	75.3	77.2	77.0	93.4	88.3	85.2	89.8		
	BAR 29.9 HG	500	74.4	73.8	82.0	73.8	74.2	91.4	83.9		
	(***** N/M2)	630	89.5	74.7	89.4	90.3	92.6	91.2	90.8		
	TAMB 92. DEG F	800	75.8	88.2	87.6	89.2	93.2	87.6	91.5		
	(306. DEG K)	1000	89.4	95.5	90.5	91.2	91.9	92.5	91.7		
	TWET 73. DEG F	1250	93.1	93.3	98.0	100.5	100.3	101.0	95.0		
	(296. DEG K)	1600	94.4	94.9	98.0	100.4	100.3	101.1	99.1		
	HACT14.62 GM/M3	2000	94.0	97.5	94.0	101.7	101.3	104.1	98.9		
	(.01462 KG/M3)	2500	97.7	99.5	103.2	107.5	107.8	108.4	104.2		
	NFA 14975. RPM	3150	98.5	98.4	104.4	106.9	105.4	101.9	99.2		
	(1568. RAD/SEC)	4000	99.1	98.9	100.1	110.3	110.3	106.6	99.8		
	NFK 14520. RPM	5000	94.8	95.2	98.9	106.6	106.5	101.0	96.3		
	(1520. RAD/SEC)	6300	100.1	103.1	107.9	118.5	113.0	104.7	100.8		
	NFD 14895. RPM	8000	95.9	95.9	98.0	105.9	107.1	102.2	96.3		
	(1560. RAD/SEC)	10000	93.7	93.8	95.6	104.3	103.5	99.0	92.2		
	NO. OF BLADES 28	12500	96.7	96.4	97.0	104.3	103.4	99.5	91.2		
	FAN TIP SPEED 16000	16000	91.6	93.0	92.7	98.5	98.9	94.4	86.8		
	1373. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED	107.5	108.8	112.1	120.4	117.7	114.2	109.7			
	PNDB	119.7	121.2	125.0	133.6	130.3	127.2	123.1			
	PNLT	124.5	124.0	127.4	136.5	133.3	129.0	124.8			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA	50									
	63										
	80										
	100	47.7	55.6	58.7	77.3	73.7	71.7	76.8			
	125	46.8	52.2	63.7	57.7	59.6	77.9	71.1			
	NFA 3639. RPM	160	61.8	53.1	71.1	74.2	78.1	77.8	78.1		
	( 381. RAD/SEC)	200	48.1	66.5	69.3	73.1	78.7	74.1	78.8		
	NFK 3529. RPM	250	61.5	73.7	72.1	75.0	77.3	79.0	78.9		
	( 369. RAD/SEC)	315	65.1	71.5	79.6	84.3	85.7	87.5	82.2		
	NFD 3620. RPM	400	66.2	73.0	79.5	84.2	85.6	87.5	86.2		
	( 379. RAD/SEC)	500	65.6	75.5	75.5	85.4	86.6	90.5	86.0		
	NO. OF BLADES 38	630	69.1	77.4	84.6	91.2	93.1	94.8	91.3		
	FREQ. SHIFT	800	69.6	76.2	85.7	90.5	90.6	88.3	86.3		
	JET 6	1000	69.8	76.5	81.3	93.9	95.5	92.9	86.8		
	FAN 4	1250	67.2	74.2	76.9	91.7	93.4	90.8	84.7		
	CRITICAL FREQ.	1600	64.5	71.8	75.7	89.5	91.2	88.6	82.6		
	0.	2000	63.3	71.7	79.4	89.6	91.2	86.9	82.9		
	AIRFLOW RATIO	2500	67.5	79.0	88.0	101.2	97.4	90.3	87.2		
	WF/WM 16.93	3150	61.9	71.2	77.7	88.3	91.3	87.6	82.6		
	FAN TIP SPEED	4000	57.6	68.0	74.5	86.1	87.2	84.0	78.1		
	1373. FT/SEC	5000	59.7	70.2	75.7	86.0	87.0	84.5	77.0		
		6300	51.8	65.5	70.5	79.5	82.0	78.9	72.2		
		8000	44.5	60.3	66.1	75.4	78.0	75.1	68.4		
		10000	35.3	54.1	60.9	70.7	73.6	70.8	64.3		
	OVERALL CALCULATED	77.8	86.1	93.0	103.8	103.2	101.1	97.0			
	PNDB	89.6	98.8	106.2	117.8	116.5	112.2	108.4			
	PNLT	91.0	101.3	109.4	121.9	118.5	114.0	110.1			

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=115,A=0,	200										
DATE 9/26/78	250										
RUN BFH/W/R C/LT	315										
TAPE 053230	400	90.1	75.6	75.5	90.2	90.6	73.4	83.2			
BAR 29.9 HG	500	73.7	88.5	75.2	73.5	87.0	72.6	72.7			
(***** N/M2)	630	72.8	74.1	86.1	81.7	90.6	90.7	73.2			
TAMB 94. DEG F	800	74.4	88.2	89.8	74.5	90.8	92.2	73.7			
(308. DEG K)	1000	96.5	96.1	91.6	96.1	99.1	98.3	95.0			
TWET 75. DEG F	1250	92.6	93.3	95.7	102.2	97.3	101.1	99.2			
(297. DEG K)	1600	90.6	91.0	93.3	100.5	101.5	98.9	100.7			
HACT15.93 GM/M3	2000	93.6	96.0	100.2	102.2	104.2	104.2	99.7			
(.01593 KG/M3)	2500	98.3	94.2	102.5	105.0	106.5	105.0	101.5			
NFA 15389. RPM	3150	96.2	102.0	105.5	110.1	109.5	104.9	103.0			
(1611. RAD/SEC)	4000	99.0	97.4	104.1	111.1	112.0	108.1	102.5			
NFK 14895. RPM	5000	93.8	94.5	96.4	107.3	107.9	101.8	97.5			
(1559. RAD/SEC)	6300	97.3	96.3	98.7	108.0	104.1	102.5	98.0			
NFD 14895. RPM	8000	101.8	102.1	104.4	112.6	112.2	111.5	105.6			
(1560. RAD/SEC)	10000	92.3	93.3	93.8	104.2	102.5	101.4	93.6			
NO. OF BLADES 28	12500	92.8	94.3	94.4	103.1	101.0	98.6	91.3			
FAN TIP SPEED 16000		90.4	93.5	93.7	102.9	100.6	98.3	89.3			
1411. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		107.6	108.3	111.6	118.3	118.1	116.0	111.4			
PNDB		119.6	121.3	124.7	130.5	131.1	128.0	123.4			
PNLT		123.9	125.8	126.3	134.8	132.8	130.8	126.3			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
NO EGA											
100		62.5	54.0	57.2	74.1	76.0	59.9	70.4			
125		46.1	66.9	56.9	57.4	72.4	59.1	59.9			
NFA 3740. RPM	160	45.1	52.5	67.8	65.6	76.1	77.3	60.5			
( 392. RAD/SEC)	200	46.7	66.5	71.5	58.4	76.3	78.7	61.0			
NFK 3620. RPM	250	68.6	74.3	73.2	79.9	84.5	84.8	82.2			
( 379. RAD/SEC)	315	64.6	71.5	77.3	86.0	82.7	87.6	86.4			
NFD 3620. RPM	400	62.4	69.1	74.8	84.3	86.8	85.3	87.9			
( 379. RAD/SEC)	500	65.2	74.0	81.7	85.9	89.5	91.6	86.8			
NO. OF BLADES 38	630	69.7	72.1	83.9	88.7	91.8	91.4	88.6			
FREQ. SHIFT 800		67.3	79.8	86.8	93.8	94.7	91.3	90.1			
JET 6 1000		69.7	75.0	85.3	94.7	97.2	94.4	89.5			
FAN 5 1250		64.0	71.8	77.4	90.7	93.0	88.0	84.5			
CRITICAL FREQ. 1600		62.7	69.2	75.5	87.2	88.7	84.5	80.8			
0. 2000		65.8	72.8	79.2	91.0	88.8	83.4	84.6			
AIRFLOW RATIO 2500		69.3	78.1	84.6	95.4	96.7	97.2	92.1			
WF/WM 16.93 3150		58.3	68.6	73.5	86.6	86.8	86.9	79.9			
FAN TIP SPEED 4000		56.9	68.7	73.5	85.1	84.9	83.8	77.3			
1411. FT/SEC 5000		53.5	67.4	72.5	84.7	84.4	83.4	75.3			
6300		44.6	59.9	65.5	77.9	77.7	76.8	68.7			
8000		37.3	54.8	61.0	73.7	73.7	72.9	64.9			
10000		28.0	48.6	55.9	69.1	69.3	68.7	60.8			
OVERALL CALCULATED		77.7	85.5	92.7	101.7	103.2	102.1	98.4			
PNDB		88.7	97.7	104.0	114.3	115.6	115.3	110.5			
PNLT		91.1	100.8	107.5	117.1	118.6	119.0	114.4			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50									
RADIAL 12. FT.	63									
( 4. M)	80									
VEHICLE JT15RD	100									
CONFIG 40X80	125									
LOC VO=115, A=8,	160									
DATE 9/28/78	200									
RUN BFH/W/R C/LT	250									
TAPE 054010	315									
BAR 29.9 HG	400	95.5	76.4	75.7	76.9	83.2	94.6	74.9	90.5	
(***** N/M2)	500	75.7	73.9	86.2	92.4	79.8	93.4	90.8	87.9	
TAMB 95. DEG F	630	73.8	75.3	89.6	81.1	93.5	87.9	91.6	89.5	
(308. DEG K)	800	86.6	90.4	77.9	91.4	90.8	72.7	89.9	87.5	
TWET 75. DEG F	1000	92.0	93.4	95.5	97.9	98.8	100.5	94.2	96.7	
(297. DEG K)	1250	90.9	84.4	98.5	101.4	95.9	102.0	99.9	98.4	
HACT15.64 GM/M3	1600	94.4	95.6	96.4	102.0	100.8	97.9	100.5	98.6	
(.01564 KG/M3)	2000	95.2	95.9	99.6	103.3	104.9	103.1	102.0	100.0	
NFA 15403. RPM	2500	94.9	93.6	100.3	105.6	107.0	105.0	102.9	99.3	
(1613. RAD/SEC)	3150	98.3	100.1	104.3	108.9	110.7	108.6	105.8	102.8	
NFK 14895. RPM	4000	97.9	99.4	102.1	109.9	112.8	108.9	104.4	100.0	
(1559. RAD/SEC)	5000	93.0	94.4	95.9	105.7	107.1	106.0	100.9	99.1	
NFD 14895. RPM	6300	94.5	96.4	97.4	106.9	107.3	103.2	98.4	96.7	
(1560. RAD/SEC)	8000	99.1	103.0	100.6	111.9	109.2	108.8	106.4	104.3	
NO. OF BLADES 28	10000	91.2	93.3	93.0	100.7	102.6	99.8	96.9	93.8	
FAN TIP SPEED 16000	12500	91.2	94.0	94.4	99.9	100.6	96.9	95.3	91.1	
1412. FT/SEC	20000	89.3	92.6	92.6	101.7	99.0	95.3	92.7	88.3	
OVERALL MEASURED										
OVERALL CALCULATED		106.6	108.2	110.3	117.4	118.1	116.0	113.0	110.6	
PNDB		119.1	120.2	123.7	129.8	131.5	128.8	125.7	123.4	
PNLT		121.4	124.3	127.5	134.2	134.3	135.3	127.4	124.9	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50									
	63									
	80									
	100	67.9	54.8	57.4	60.8	68.6	81.1	62.1	78.1	
	125	48.1	52.3	67.9	76.3	65.2	79.9	78.0	75.5	
NFA 3743. RPM	160	46.1	53.7	71.3	65.0	79.0	74.5	78.9	77.2	
( 392. RAD/SEC)	200	58.9	68.7	59.6	75.3	76.3	59.2	77.2	75.2	
NFK 3620. RPM	250	64.1	71.6	77.1	81.7	84.2	87.0	81.4	84.3	
( 379. RAD/SEC)	315	62.9	62.6	80.1	85.2	81.3	88.5	87.1	86.0	
NFD 3620. RPM	400	66.2	73.7	77.9	85.8	86.1	84.3	87.7	86.2	
( 379. RAD/SEC)	500	66.8	73.9	81.1	87.0	90.2	89.5	89.1	87.5	
NO. OF BLADES 38	630	66.3	71.5	81.7	89.3	92.3	91.4	90.0	85.9	
FREQ. SHIFT	800	69.4	77.9	85.6	92.6	95.9	95.0	92.6	90.3	
JET 6	1000	68.6	77.0	83.3	93.5	98.0	95.2	91.4	87.5	
FAN 5	1250	63.2	71.7	76.9	89.1	92.2	92.2	87.9	86.5	
CRITICAL FREQ.	1600	59.9	69.3	74.2	86.1	88.2	89.2	84.2	84.3	
0.	2000	63.0	72.9	77.9	89.9	92.0	89.1	85.0	83.8	
AIRFLOW RATIO	2500	66.6	79.0	80.8	94.7	93.7	94.5	92.9	91.3	
WF/WM 16.93	3150	57.2	68.5	72.6	83.0	86.8	85.2	83.1	80.5	
FAN TIP SPEED	4000	55.3	68.4	73.5	81.9	84.5	82.1	81.3	77.6	
1412. FT/SEC	5000	52.4	66.5	71.5	83.5	82.8	80.4	78.7	74.8	
	6300	43.5	59.1	64.4	76.7	76.1	73.8	72.1	68.2	
	8000	36.2	53.9	59.9	72.6	72.1	69.9	68.3	64.5	
	10000	26.9	47.7	54.8	67.9	67.7	65.7	64.2	60.4	
OVERALL CALCULATED		77.1	85.3	91.5	100.8	103.3	102.4	100.0	98.1	
PNDB		87.1	97.9	101.9	113.5	114.1	114.0	112.2	110.4	
PNLT		90.0	101.3	104.5	117.0	116.2	117.3	115.1	113.5	

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ. (0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )	(0. )
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LOC VO=115,A=8,	160										
DATE 9/28/78	200										
RUN BFH/W/R C/LT	250										
TAI'E 054020	315										
BAR 29.9 HG	400	74.0	76.6	77.9	76.8	75.7	79.2	74.2	92.1		
(***** N/M2)	500	74.8	74.8	88.1	74.2	90.2	86.3	89.4	91.6		
TAMB 95. DEG F	630	84.5	75.0	88.3	73.5	91.3	88.4	88.3	86.8		
(308. DEG K)	800	91.9	89.6	77.9	73.4	85.8	80.6	91.2	73.8		
TWET 75. DEG F	1000	92.5	88.6	96.0	90.6	93.9	92.3	89.2	91.5		
(297. DEG K)	1250	92.4	86.8	90.4	100.2	101.1	99.2	96.4	92.6		
HACT15.64 GM/M3	1500	97.5	95.9	97.1	98.3	97.1	100.5	97.4	100.7		
(.01564 KG/M3)	2000	94.9	96.9	95.8	101.2	101.4	102.2	101.0	97.2		
NFA 15015. RPM	2500	97.7	100.8	100.3	103.7	108.9	108.4	105.2	102.4		
(1572. RAD/SEC)	3150	97.6	97.6	99.0	102.6	108.5	104.8	101.3	97.4		
NFK 14520. RPM	4000	97.7	98.7	98.7	106.3	110.9	108.6	103.8	100.0		
(1520. RAD/SEC)	5000	92.9	94.4	95.1	100.2	105.9	105.7	100.9	97.2		
NFD 14995. RPM	6300	98.4	101.4	101.9	108.3	115.8	110.3	100.4	98.7		
(1560. RAD/SEC)	8000	94.4	95.9	96.0	100.4	105.4	105.3	98.5	95.8		
NO. OF BLADES 28	10000	90.2	93.3	92.8	95.3	104.5	101.2	95.6	91.4		
FAN TIP SPEED 16000	12500	91.3	95.1	96.0	97.1	105.0	102.2	97.3	91.3		
1376. FT/SEC	20000	86.5	91.5	93.1	92.5	99.0	97.0	91.9	86.3		
OVERALL MEASURED											
OVERALL CALCULATED		106.6	108.0	108.4	113.3	119.2	116.3	111.4	108.9		
PND8		118.9	120.2	120.6	125.8	132.0	128.6	124.3	121.8		
PNLT		120.2	122.9	124.6	129.2	134.6	130.2	127.0	124.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ. (0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )	(0. )
NO EGA	50										
	63										
	80										
NFA 3649. RPM	100	46.4	55.0	59.6	60.7	61.1	65.7	61.4	79.7		
( 382. RAD/SEC)	125	47.2	53.2	69.8	58.1	75.6	72.8	76.6	79.2		
NFK 3529. RPM	160	56.8	53.4	70.0	57.4	76.8	75.0	75.6	74.5		
( 369. RAD/SEC)	200	64.2	67.9	59.6	57.3	71.3	67.1	78.5	61.5		
NFD 3620. RPM	250	64.6	66.8	77.6	74.4	79.3	78.8	76.4	79.1		
( 379. RAD/SEC)	315	64.4	65.0	72.0	84.0	86.5	85.7	83.6	80.2		
NO. OF BLADES 38	400	69.3	74.0	78.6	82.1	82.4	86.9	84.6	88.3		
FREQ. SHIFT	500	56.5	74.9	77.3	84.9	86.7	88.6	88.1	84.7		
JET 6	630	69.1	78.7	81.7	87.4	94.2	94.8	92.3	90.0		
FAN 4	800	68.7	75.4	80.3	86.3	93.7	91.2	88.4	84.9		
CRITICAL FREQ.	1000	68.4	76.3	77.9	89.9	96.1	94.9	90.8	87.5		
0.	1250	65.8	74.0	75.5	87.7	94.0	92.8	88.7	85.4		
AIRFLOW RATIO	1600	63.1	71.6	72.9	85.5	91.8	90.6	86.6	83.2		
WF/WM 16.93	2000	61.4	70.9	75.6	83.3	90.6	91.6	87.5	84.3		
FAN TIP SPEED	2500	55.8	77.3	82.0	91.0	100.2	95.9	86.8	86.6		
1376. FT/SEC	3150	60.4	71.2	75.7	82.8	89.6	90.7	84.8	82.5		
	4000	54.1	67.5	71.7	77.1	88.2	86.2	81.5	77.7		
	5000	54.3	68.9	74.7	78.8	88.6	87.2	83.1	77.6		
	6300	46.7	64.0	70.9	73.5	82.1	81.5	77.3	72.2		
	8000	39.4	58.8	66.4	69.4	78.1	77.6	73.5	68.5		
	10000	30.1	52.6	61.3	64.7	73.7	73.4	69.4	64.4		
OVERALL CALCULATED		77.6	85.5	89.5	97.4	104.6	103.0	99.0	96.8		
PND8		87.3	97.6	102.2	109.8	118.1	115.6	109.7	108.0		
PNLT		89.0	99.5	104.6	112.5	121.5	117.3	111.1	109.7		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	128										
CONFIG 40X80	180										
LOC VO=115, A=8,	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	318										
TAPE 054060	400	93.2	78.8	77.0	74.7	76.2	75.4	84.8	91.3		
BAR 29.9 HG	500	74.2	74.5	74.3	73.8	90.2	83.0	88.4	72.4		
(***** N/M2)	630	73.6	74.8	92.1	73.9	89.4	86.2	82.2	83.5		
TAMB 96. DEG F	800	73.6	74.6	91.3	86.4	73.4	88.9	84.5	74.2		
(309. DEG K)	1000	85.2	82.1	80.6	73.8	72.9	90.6	89.2	84.5		
TWET 75. DEG F	1250	89.4	91.0	90.0	90.6	91.3	92.1	90.0	88.7		
(297. DEG K)	1600	92.0	91.7	91.5	90.5	90.0	89.5	90.5	88.3		
HACT15.35 GM/M3	2000	95.1	97.7	99.0	101.3	103.6	103.5	104.4	99.1		
(.01535 KG/M3)	2500	103.0	103.6	102.6	110.8	109.7	111.2	108.9	105.4		
NFA 13948. RPM	3150	104.6	106.1	108.3	111.5	115.8	113.2	112.1	109.9		
(1460. RAD/SEC)	4000	98.0	100.8	100.4	104.1	107.5	106.8	103.5	102.4		
NFK 13476. RPM	5000	95.4	98.9	97.9	102.8	105.9	106.4	101.1	97.2		
(1411. RAD/SEC)	6300	102.1	101.4	101.6	108.3	116.6	114.9	106.2	104.9		
NFD 14895. RPM	8000	95.8	97.4	96.8	100.1	105.5	104.3	98.8	94.4		
(1560. RAD/SEC)	10000	93.4	97.4	97.8	99.8	106.4	105.4	101.7	96.2		
NO. OF BLADES 28	12500	93.0	97.6	99.1	98.7	101.3	100.9	97.0	91.5		
FAN TIP SPEED	16000	88.6	94.2	97.7	96.5	98.2	98.1	92.8	87.7		
1279. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		109.6	111.0	111.9	116.3	120.6	119.3	115.8	113.2		
PND8		123.0	124.3	125.8	129.2	133.2	131.6	129.5	127.0		
PNLT		124.4	125.6	128.9	133.4	136.5	133.5	131.5	130.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	
NO EGA	50										
	63										
	80										
NFA 3390. RPM	100	65.6	55.2	58.7	58.6	61.6	61.9	72.0	78.9		
( 355. RAD/SEC)	125	46.6	52.9	56.0	57.7	75.6	69.5	75.6	60.0		
	160	45.9	53.2	73.8	57.8	74.9	72.8	69.5	71.2		
NFK 3275. RPM	200	45.9	52.9	73.0	70.3	58.9	75.4	71.8	61.9		
( 343. RAD/SEC)	250	57.3	60.3	62.2	57.6	58.3	77.1	76.4	72.1		
	315	61.4	69.2	71.6	74.4	76.7	78.6	77.2	76.3		
NFD 3620. RPM	400	63.8	69.8	73.0	74.3	75.3	75.9	77.7	75.9		
( 372. RAD/SEC)	500	66.7	75.7	80.5	85.0	88.9	89.9	91.5	86.6		
NO. OF BLADES 38	630	74.4	81.5	84.0	94.5	95.0	97.6	96.0	93.0		
FREQ. SHIFT	800	75.7	83.9	89.6	95.2	101.0	99.6	99.2	97.4		
JET 6	1000	68.7	78.4	81.6	87.7	92.7	93.1	90.5	89.9		
FAN 5	1250	61.6	72.8	74.9	82.2	87.0	88.6	84.1	82.3		
CRITICAL FREQ.	1600	64.8	75.8	78.7	86.0	90.8	92.5	87.9	84.5		
0.	2000	70.6	77.9	82.1	91.3	101.3	100.8	92.8	92.0		
AIRFLOW RATIO	2500	63.3	73.4	77.0	82.9	90.0	90.0	85.3	81.4		
WF/WM 16.93	3150	59.4	72.6	77.4	82.2	90.6	90.8	87.9	82.9		
FAN TIP SPEED	4000	57.1	72.0	78.2	80.7	85.2	86.1	83.0	78.0		
1278. FT/SEC	5000	51.7	68.2	76.6	78.3	82.0	83.2	78.8	74.2		
	6300	45.8	63.7	72.5	74.5	78.3	79.6	75.2	70.7		
	8000	38.5	58.5	68.1	70.4	74.3	75.8	71.4	66.9		
	10000	29.3	52.3	62.9	65.7	69.9	71.5	67.3	62.8		
OVERALL CALCULATED		80.2	88.4	93.1	99.8	105.6	105.5	102.8	100.6		
PND8		88.8	97.8	102.7	109.3	116.8	117.0	111.8	109.6		
PNLT		91.4	99.4	105.0	112.1	120.3	120.7	114.4	113.0		

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115, A=15,	200										
DATE 9/28/78	250										
RUN BFH/CTS C/LT	315										
TAPE 055010	400	92.8	87.4	91.3	92.3	89.5	88.4	75.7	73.6		
BAR 30.0 HG	500	90.9	94.2	89.5	91.8	92.3	89.3	71.8	87.2		
(***** N/M2)	630	90.9	94.8	85.2	87.9	73.8	89.3	72.9	89.0		
TAMB 95. DEG F	800	86.1	91.2	90.7	82.4	73.1	87.0	73.5	73.0		
(308. DEG K)	1000	73.6	73.9	90.1	88.9	87.1	89.6	70.2	71.7		
TWET 75. DEG F	1250	95.7	91.1	92.4	93.3	87.7	89.3	82.5	84.4		
(297. DEG K)	1600	97.6	95.9	93.9	92.3	88.4	89.7	83.8	88.6		
HACT15.63 GM/M3	2000	96.9	97.4	96.9	95.6	94.2	82.2	82.2	82.3		
(.01563 KG/M3)	2500	100.1	100.3	100.3	96.8	94.2	87.3	85.3	83.4		
NFA 11520. RPM	3150	99.2	100.2	101.0	96.7	91.8	89.9	87.2	85.6		
(1206. RAD/SEC)	4000	98.9	100.6	101.8	97.6	95.2	90.5	81.5	84.9		
NFK 11140. RPM	5000	98.5	99.1	99.8	97.8	96.1	92.3	86.3	86.6		
(1168. RAD/SEC)	6300	94.3	97.9	98.7	96.7	94.1	91.9	85.7	88.1		
NFD 14895. RPM	8000	94.1	97.0	99.4	99.2	97.6	95.0	89.4	86.9		
(1560. RAD/SEC)	10000	95.6	99.0	100.4	100.2	99.3	97.2	91.2	85.7		
NO. OF BLADES 28	12500	94.5	99.2	101.6	100.4	102.3	97.7	91.9	86.2		
FAN TIP SPEED 16000	16000	91.3	96.2	99.1	98.2	97.6	94.4	87.3	85.6		
1056. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.2	109.6	110.5	108.7	107.6	104.6	98.3	97.9		
PNDB		120.5	121.7	122.5	119.7	117.1	114.1	108.5	108.7		
PNLT		123.9	123.8	123.5	121.1	120.6	115.5	110.3	112.0		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	65.2	65.8	73.0	76.2	74.9	74.9	62.9	61.2		
	125	63.3	72.6	71.2	75.7	77.7	75.8	59.0	74.8		
NFA 2800. RPM	160	63.2	73.2	66.9	71.8	59.3	75.9	60.2	76.7		
( 293. RAD/SEC)	200	58.4	69.5	72.4	66.3	58.6	73.5	60.8	60.7		
NFK 2707. RPM	250	45.7	52.1	71.7	72.7	72.5	76.1	57.4	59.3		
( 283. RAD/SEC)	315	67.7	69.3	74.0	77.1	73.1	75.8	69.7	72.0		
NFD 3620. RPM	400	69.4	74.0	75.4	76.1	73.7	76.1	71.0	76.2		
( 379. RAD/SEC)	500	68.5	75.4	78.4	79.3	79.5	68.6	69.3	69.8		
NO. OF BLADES 38	630	71.5	78.2	81.7	80.5	79.5	73.7	72.4	71.0		
FREQ. SHIFT	800	70.3	78.0	82.3	80.4	77.0	76.3	74.3	73.1		
JET 6	1000	67.9	75.8	80.2	78.2	76.4	74.2	72.2	71.0		
FAN 5	1250	69.0	77.9	82.8	81.0	80.3	76.7	70.1	72.3		
CRITICAL FREQ.	1600	67.9	76.0	80.4	81.0	81.0	78.4	73.7	73.8		
0.	2000	62.8	74.4	79.2	79.7	78.8	77.8	72.3	75.2		
AIRFLOW RATIO	2500	61.6	73.0	79.6	82.0	82.1	80.7	75.9	73.9		
WF/WM 16.93	3150	61.6	74.2	80.0	82.5	83.5	82.6	77.4	72.4		
FAN TIP SPEED	4000	58.6	73.6	80.7	82.4	86.2	82.9	77.9	72.7		
1056. FT/SEC	5000	54.4	70.1	78.0	80.0	81.4	79.5	73.3	72.1		
	6300	48.5	65.7	73.9	76.2	77.7	75.9	69.7	68.5		
	8000	41.2	60.5	69.4	72.1	73.7	72.0	65.9	64.8		
	10000	31.9	54.3	64.3	67.4	69.3	67.8	61.8	60.7		
OVERALL CALCULATED		79.1	87.0	91.5	92.0	92.5	90.7	85.3	85.5		
PNDB		87.6	98.1	103.8	105.2	106.8	104.6	99.1	97.1		
PNLT		89.2	99.1	104.4	105.9	108.5	105.3	100.1	98.7		



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)(0.	
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=115,A=15,	200										
DATE 9/28/78	250										
RUN BFH/CTS C/LT	315										
TAPE 055020	400	78.0	80.2	75.3	89.4	88.3	91.8	75.3	90.3		
BAR 30.0 HG	500	93.3	88.8	86.5	82.9	87.0	88.1	72.3	89.4		
(***** N/M2)	630	92.1	90.3	89.3	92.0	85.4	90.2	72.8	88.1		
TAMB 95. DEG F	800	89.1	73.7	92.9	89.7	92.1	73.0	88.5	73.1		
(308. DEG K)	1000	89.2	73.9	92.9	81.0	87.5	81.7	86.6	72.0		
TWET 75. DEG F	1250	93.7	93.0	90.9	92.6	87.4	87.7	87.9	84.9		
(297. DEG K)	1600	92.8	93.0	94.3	89.3	89.2	87.4	83.1	85.3		
HACT15.63 GM/M3	2000	92.5	94.2	95.1	95.8	94.2	86.0	86.5	85.5		
(.01563 KG/M3)	2500	98.2	98.4	97.7	96.0	92.2	88.6	87.7	85.6		
NFA 12394. RPM	3150	98.8	102.0	100.1	98.1	92.2	89.9	91.2	88.3		
(1298. RAD/SEC)	4000	96.8	101.5	99.8	98.1	95.3	88.7	88.5	87.1		
NFK 11985. RPM	5000	94.7	98.3	99.8	96.6	95.8	92.7	88.8	87.3		
(1255. RAD/SEC)	6300	92.5	98.0	98.5	97.1	98.8	95.9	93.8	91.2		
NFD 14895. RPM	8000	93.1	96.6	100.3	99.9	97.4	93.5	90.7	87.6		
(1560. RAD/SEC)	10000	93.7	99.1	100.6	99.8	99.9	95.9	92.1	86.2		
NO. OF BLADES 28	12500	96.3	99.0	101.0	101.0	99.7	95.8	91.5	87.3		
FAN TIP SPEED	16000	92.2	97.0	98.3	97.6	96.3	92.9	87.9	82.4		
1136. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.6	109.3	109.8	108.7	107.4	104.0	101.2	99.4		
PNDB		119.3	121.7	121.3	119.7	118.2	114.9	112.8	111.0		
PNLT		122.4	124.8	121.3	122.2	120.1	118.2	115.7	113.1		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	)(0.	
	50										
NO EGA	63										
	80										
	100	48.4	58.6	57.0	73.3	73.7	78.3	62.5	77.9		
	125	65.7	67.2	68.2	66.8	72.4	74.6	59.5	77.0		
NFA 3012. RPM	160	64.4	68.7	71.0	75.9	70.9	76.8	60.1	75.8		
( 315. RAD/SEC)	200	61.4	52.0	74.6	73.6	77.6	59.5	75.8	60.8		
NFK 2913. RPM	250	61.3	52.1	74.5	64.8	72.9	68.2	73.8	59.8		
( 305. RAD/SEC)	315	65.7	71.2	72.5	76.4	72.8	74.2	75.1	72.5		
NFD 3620. RPM	400	64.6	71.1	75.8	73.1	74.5	73.8	70.3	72.9		
( 379. RAD/SEC)	500	64.1	72.2	76.6	79.5	79.5	72.4	75.6	73.0		
NO. OF BLADES 38	630	69.6	76.3	79.1	79.7	77.5	75.0	74.8	73.2		
FREQ. SHIFT	800	69.9	79.8	81.4	81.8	77.4	78.3	78.3	75.8		
JET 6	1000	67.5	79.1	81.0	81.7	80.5	75.0	73.5	74.5		
FAN 5	1250	64.9	76.8	78.8	79.5	78.4	74.9	71.8	72.5		
CRITICAL FREQ.	1600	64.1	75.2	80.6	79.8	80.7	78.8	75.6	74.5		
0.	2000	61.0	74.5	79.0	80.1	83.5	81.8	80.4	78.3		
AIRFLOW RATIO	2500	60.6	72.6	80.5	82.7	81.9	79.2	77.2	74.6		
WF/WM 16.93	3150	59.7	74.3	80.2	82.1	84.1	81.3	78.3	72.9		
FAN TIP SPEED	4000	60.4	73.4	80.1	83.0	83.6	81.0	77.5	73.8		
1136. FT/SEC	5000	55.3	70.9	77.2	79.4	80.1	78.0	73.9	68.9		
	6300	49.4	66.5	73.1	75.6	76.4	74.4	70.3	65.3		
	8000	42.1	61.3	68.6	71.5	72.4	70.5	66.5	61.6		
	10000	32.8	55.1	63.5	66.8	68.0	66.3	62.4	57.5		
OVERALL CALCULATED		77.3	86.7	90.8	92.1	92.3	90.1	88.1	87.0		
PNDB		85.9	97.7	103.3	105.3	106.0	103.5	100.9	98.4		
PNLT		87.5	99.2	103.3	106.5	107.1	105.1	102.6	99.7		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=115, A=15,	200										
DATE 9/28/78	250										
RUN BFH/CTS C/LT	315										
TAPE 057020	400	92.8	88.3	90.5	92.8	78.5	91.8	74.4	88.2		
BAR 30.0 HG	500	88.7	92.2	86.5	84.2	72.8	88.1	87.4	92.3		
(***** N/M2)	630	92.3	91.3	90.5	89.5	73.6	88.6	83.6	92.5		
TAMB 90. DEG F	800	94.4	89.6	92.4	92.6	87.3	73.5	72.8	86.9		
(305. DEG K)	1000	96.2	87.8	91.2	88.4	88.7	84.3	71.4	84.5		
TWET 73. DEG F	1250	95.2	86.6	94.5	88.8	90.8	84.2	86.5	85.8		
(296. DEG K)	1600	96.1	95.0	92.8	89.3	89.9	90.4	85.0	87.8		
HACT15.19 GM/M3	2000	96.0	95.8	96.6	96.1	93.5	91.3	92.2	89.0		
(.01519 KG/M3)	2500	96.8	98.1	98.9	99.3	95.8	90.3	89.4	88.0		
NFA 12683. RPM	3150	96.1	101.5	98.8	97.1	95.1	86.6	84.3	87.4		
(1328. RAD/SEC)	4000	96.2	99.4	100.4	98.2	94.7	92.0	87.7	87.8		
NFK 12320. RPM	5000	96.3	99.8	100.5	97.8	95.8	92.1	89.8	89.1		
(1290. RAD/SEC)	6300	95.2	98.8	101.3	100.7	99.8	98.5	95.4	93.5		
NFD 14895. RPM	8000	93.9	96.5	100.0	99.0	98.1	96.2	91.5	90.7		
(1560. RAD/SEC)	10000	94.1	97.4	100.8	100.7	100.1	98.8	95.6	89.8		
NO. OF BLADES 28	12500	93.7	100.0	100.4	99.9	100.2	96.0	92.8	88.9		
FAN TIP SPEED	16000	93.0	95.6	99.3	99.4	96.9	94.8	89.6	83.5		
1163. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.4	109.1	110.3	109.4	107.9	105.9	102.9	101.6		
PNDB		119.8	121.8	121.9	120.4	118.6	116.8	114.7	113.4		
PNLT		119.8	123.0	121.9	122.3	120.6	119.4	117.5	114.0		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
NO EGA	50										
	63										
	80										
	100	65.2	64.7	72.2	78.5	60.9	78.3	61.6	73.8		
	125	61.1	70.6	68.2	68.1	58.2	74.6	74.6	79.9		
NFA 3082. RPM	160	64.6	69.7	72.2	73.4	59.1	75.2	70.9	80.2		
( 323. RAD/SEC)	200	66.7	67.9	74.1	76.5	72.8	60.0	60.1	74.6		
NFK 2994. RPM	250	68.3	66.0	72.8	72.2	74.1	70.8	58.6	72.1		
( 313. RAD/SEC)	315	67.2	64.8	76.1	70.6	76.2	70.7	73.7	73.4		
NFD 3620. RPM	400	67.9	73.1	74.1	73.1	75.2	76.8	72.1	78.2		
( 379. RAD/SEC)	500	67.6	73.8	78.1	79.8	78.8	77.7	79.3	76.5		
NO. OF BLADES 38	630	68.2	76.0	80.3	83.0	81.1	76.7	76.5	76.5		
FREQ. SHIFT	800	69.2	79.3	80.1	80.7	80.3	73.0	81.4	74.9		
JET 6	1000	66.9	77.0	81.6	81.6	79.9	78.3	74.7	78.3		
FAN 5	1250	64.3	74.6	79.4	79.6	77.7	76.2	72.7	73.2		
CRITICAL FREQ.	1600	65.7	76.5	81.3	80.8	80.7	78.1	78.6	78.3		
0.	2000	63.7	75.3	81.8	83.7	84.5	84.4	82.0	80.6		
AIRFLOW RATIO	2500	61.4	72.5	80.2	81.8	82.6	81.9	78.0	77.7		
WF/WM 16.93	3150	60.1	72.7	80.5	83.1	84.4	84.3	81.9	76.6		
FAN TIP SPEED	4000	57.8	74.4	79.5	81.9	84.1	83.2	78.6	75.4		
1162. FT/SEC	5000	56.1	69.5	78.1	81.2	80.7	79.9	75.5	69.9		
	6300	50.2	65.0	74.1	77.4	77.0	78.3	72.0	66.4		
	8000	42.9	59.9	69.6	73.2	73.0	72.4	68.2	62.7		
	10000	33.6	53.7	64.5	68.6	68.6	68.2	64.1	58.6		
OVERALL CALCULATED		78.3	86.4	91.3	92.8	92.8	92.0	89.8	89.1		
PNDB		86.8	97.8	103.8	105.8	106.2	105.7	103.1	100.8		
PNLT		86.8	98.9	103.8	106.8	107.3	107.1	105.0	102.2		





MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

	FREQ.	10	20	30	40	50	60	70	80	0	0
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIO 40X80	160										
LOC VO=115.A=15.	200										
DATE 9/28/78	250										
RUN BFH/W/R C/LT	315										
TAPE 097080	400	78.2	87.4	85.7	92.3	78.7	91.5	78.9	74.5		
BAR 29.9 HG	500	75.1	91.7	94.5	93.1	93.6	91.4	74.3	89.6		
(***** N/M2)	630	93.5	94.4	92.8	95.4	95.8	92.2	80.5	89.8		
TAMB 92. DEG F	800	95.7	93.2	94.9	94.3	93.9	91.6	91.9	73.7		
(306. DEG K)	1000	95.8	90.0	94.4	99.6	99.1	98.5	93.4	96.7		
THET 73. DEG F	1250	91.6	93.6	94.1	97.3	95.2	99.5	100.6	98.3		
(296. DEG K)	1600	96.0	96.1	95.8	98.5	100.4	98.5	101.9	97.5		
HACT14.62 GM/M3	2000	96.8	94.7	95.2	100.7	102.3	104.0	102.9	100.8		
(.01462 KG/M3)	2500	99.0	99.0	98.2	101.2	108.6	105.5	103.5	103.4		
NFA 15382. RPM	3150	97.1	97.8	98.2	103.1	108.4	109.9	104.6	103.8		
(1608. RAD/SEC)	4000	97.8	98.4	99.2	104.1	110.3	110.2	105.0	103.5		
NFK 14895. RPM	5000	95.0	95.2	93.9	98.0	107.0	105.9	103.3	100.5		
(1560. RAD/SEC)	6300	96.1	97.3	99.0	100.4	108.4	107.8	103.6	100.8		
NFD 14895. RPM	8000	102.3	99.2	102.5	107.9	114.6	110.9	101.5	102.6		
(1560. RAD/SEC)	10000	93.4	93.8	94.4	95.3	100.8	101.6	99.7	97.4		
NO. OF BLADES 28	12500	93.4	92.2	94.0	95.3	100.9	102.3	96.4	94.7		
FAN TIP SPEED	16000	92.7	91.8	94.0	95.0	102.6	102.4	94.9	92.0		
1408. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.3	107.8	108.9	112.8	118.7	117.5	113.2	111.8		
PNDB		119.9	120.2	120.9	125.1	130.4	130.1	125.7	124.4		
PNLT		122.6	121.0	122.7	127.0	132.2	131.4	127.3	126.0		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

	FREQ.	10	20	30	40	50	60	70	80	0	0
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	48.6	65.8	67.4	76.2	61.1	78.0	63.1	62.1		
	125	47.5	70.1	76.2	77.0	79.0	77.9	61.5	77.2		
NFA 3733. RPM	160	65.8	72.8	74.2	79.3	81.1	78.8	67.8	77.5		
( 391. RAD/SEC)	200	69.0	71.5	76.6	78.2	79.4	78.1	79.2	61.4		
NFK 3620. RPM	250	67.9	68.2	76.0	83.4	84.5	85.0	80.8	84.3		
( 379. RAD/SEC)	315	63.6	71.8	75.7	81.1	80.6	86.0	87.8	85.9		
NFD 3620. RPM	400	67.8	74.2	77.3	82.3	85.7	84.9	89.0	85.1		
( 379. RAD/SEC)	500	67.4	72.7	76.7	84.4	87.6	90.4	90.0	88.3		
NO. OF BLADES 38	630	70.4	76.9	79.6	84.9	93.9	91.9	90.8	90.9		
FREQ. SHIFT	800	68.2	75.6	79.5	86.7	93.6	96.3	91.7	91.3		
JET 6	1000	68.3	76.0	80.4	87.7	95.5	96.5	92.0	91.0		
FAN 5	1250	65.2	72.5	74.9	81.4	92.1	92.1	90.2	87.9		
CRITICAL FREQ.	1600	61.8	70.2	75.8	79.6	89.3	89.8	86.1	84.8		
0.	2000	64.6	73.8	79.5	83.4	93.1	93.7	90.2	87.9		
AIRFLOW RATIO	2500	69.8	75.2	82.7	90.7	99.1	96.6	88.0	89.6		
WF/WM 16.93	3150	59.4	69.0	74.0	77.7	85.0	87.0	85.9	84.1		
FAN TIP SPEED	4000	57.5	66.6	73.1	77.3	84.8	87.5	82.4	81.2		
1408. FT/SEC	5000	55.8	65.8	72.9	76.8	86.6	87.5	80.9	78.5		
	6300	46.9	58.3	65.8	70.0	79.9	80.9	74.3	71.9		
	8000	39.6	53.1	61.4	65.9	75.9	77.1	70.5	68.2		
	10000	30.4	46.9	56.2	61.2	71.5	72.8	66.4	64.1		
OVERALL CALCULATED		78.7	85.3	90.0	96.2	103.8	103.8	100.4	99.3		
PNDB		89.7	96.6	102.8	109.3	117.1	116.3	110.7	110.5		
PNLT		92.9	98.6	104.8	113.5	121.3	119.2	111.6	112.2		

MODEL SOUND PRESSURE LEVELS

	ANGLES FROM INLET IN DEGREES								
	10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	)(0.
NO EGA	50								
RADIAL 12. FT.	63								
( 4. M)	80								
VEHICLE JT15RD	125								
CONFIG 40X80	160								
LOC VO=80, A=0,	200								
DATE 9/22/78	250								
RUN CFM/W/R C/LT	315								
TAPE 038170	400	84.3	86.9	85.8	80.8	87.8	84.8	89.3	
BAR 29.8 HG	500	67.5	68.3	67.5	64.2	68.4	67.7	69.2	
(***** N/M2)	630	68.1	77.3	68.2	68.0	69.6	64.2	67.0	
TAMB 89. DEG F	800	65.7	68.5	68.5	67.2	66.3	65.4	68.0	
(305. DEG K)	1000	64.7	68.8	68.5	67.8	66.4	65.8	68.2	
THET 68. DEG F	1250	69.3	68.0	68.5	67.3	66.2	65.0	69.0	
(292. DEG K)	1600	67.1	68.0	68.8	67.3	67.9	66.9	69.2	
HACT 9.48 GM/M3	2000	66.3	67.1	68.3	69.1	68.2	69.2	61.1	
(.00948 KG/M3)	2500	61.0	61.3	61.9	60.4	60.8	68.8	60.4	
NFA 13846. RPM	3150	94.1	94.9	95.4	93.8	93.2	91.7	93.1	
(1450. RAD/SEC)	4000	98.8	98.4	98.7	93.0	94.8	98.0	98.2	
NFK 13482. RPM	5000	100.4	100.1	97.7	97.1	96.3	94.2	98.0	
(1408. RAD/SEC)	6300	100.8	101.0	98.0	98.4	97.3	99.4	98.1	
NFD 14695. RPM	8000	95.8	98.0	98.9	96.0	94.8	95.4	93.0	
(1560. RAD/SEC)	10000	98.8	98.8	99.8	97.8	96.9	98.9	93.9	
NO. OF BLADES 28	12000	99.4	100.4	100.0	98.2	98.4	98.4	92.7	
FAN TIP SPEED	16000	97.7	98.8	98.1	97.4	95.8	93.8	88.8	
1269. FT/SEC	20000								
OVERALL MEASURED									
OVERALL CALCULATED		107.8	108.8	107.7	106.8	108.8	108.8	108.1	
PNDB		118.8	119.2	118.3	117.8	116.8	117.8	117.8	
PNLT		121.2	119.2	118.3	117.8	116.8	118.7	119.0	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

	ANGLES FROM INLET IN DEGREES								
	10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	)(0.
NO EGA	50								
	63								
	80								
	100	68.7	68.3	67.8	64.8	73.2	71.1	76.8	
	125	38.8	46.7	69.3	68.1	73.8	74.2	76.4	
NFA 3365. RPM	160	40.4	55.7	67.9	71.9	75.1	70.8	74.3	
( 352. RAD/SEC)	200	58.0	64.8	70.2	71.1	71.8	71.9	76.3	
NFK J272. RPM	250	58.8	65.0	68.1	71.8	71.8	72.3	73.4	
( 343. RAD/SEC)	315	61.3	66.2	70.1	71.1	71.6	74.5	76.2	
NFD 3620. RPM	400	58.9	66.1	70.1	71.1	73.2	73.3	77.3	
( 378. RAD/SEC)	500	67.9	65.1	70.8	73.8	74.9	75.6	78.2	
NO. OF ELADES 38	630	62.4	69.2	73.3	74.1	78.9	78.0	77.8	
FREQ. SHIFT	800	65.2	72.7	76.7	77.8	78.4	78.1	80.2	
JET 6	1000	66.2	74.0	77.9	78.8	80.0	82.3	83.3	
FAN 5	1250	66.8	73.4	78.7	78.8	77.9	80.2	81.2	
CRITICAL FREQ.	1600	68.8	77.1	78.8	80.3	80.2	80.3	81.8	
0.	2000	69.4	77.5	79.5	82.4	82.0	85.3	88.8	
AIRFLOW RATIO	2500	64.2	78.0	77.1	78.7	79.1	81.1	78.8	
WF/WB 18.93	3150	64.9	74.9	79.3	79.9	81.1	82.3	80.2	
FAN TIP SPEED	4000	63.4	74.7	78.0	80.1	82.2	81.8	78.7	
	5000	60.8	72.8	78.9	79.2	79.4	78.8	74.6	
	6300	64.8	68.3	72.9	75.4	78.7	78.0	71.0	
	8000	47.6	63.2	68.4	71.3	71.7	71.1	67.2	
	10000	38.3	57.0	63.3	68.8	67.3	66.8	63.1	
OVERALL CALCULATED		78.6	85.1	88.4	89.9	90.9	91.9	92.3	
PNDB		88.8	97.8	101.6	102.8	104.4	104.8	104.8	
PNLT		89.6	97.6	101.6	102.9	104.4	106.4	106.6	



MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	(0.
	50									
	63									
	80									
	100									
	125									
	160									
	200									
	250									
	315									
	400	88.8	87.9	90.6	88.6	91.9	89.6	91.5		
	500	87.4	89.9	85.9	86.6	88.0	88.9	84.9		
	630	88.5	88.4	86.8	87.6	89.2	87.6	83.4		
	800	84.1	88.3	88.2	88.3	89.7	91.7	90.7		
	1000	91.0	89.2	89.6	87.8	89.2	89.4	91.8		
	1250	89.5	87.5	88.1	89.1	89.7	90.6	91.3		
	1600	89.9	89.7	87.9	90.4	90.3	91.4	91.0		
	2000	88.5	88.9	89.3	88.7	89.5	90.5	91.1		
	2500	91.0	91.4	91.9	90.1	90.7	91.7	92.2		
	3150	91.2	89.9	92.6	90.8	90.6	89.9	91.5		
	4000	90.4	90.7	91.6	90.4	90.4	91.3	92.1		
	5000	91.5	92.7	91.2	91.7	90.5	92.9	92.9		
	6300	98.1	98.7	97.9	96.4	94.0	95.3	93.5		
	8000	94.8	95.0	94.9	93.8	92.6	91.2	91.6		
	10000	94.1	94.8	93.3	92.6	91.9	91.5	90.7		
	12500	99.5	99.1	98.2	96.9	95.9	94.0	92.1		
	16000	94.6	96.2	94.3	93.3	91.3	89.3	87.1		
	20000									
OVERALL MEASURED										
OVERALL CALCULATED		105.4	105.7	105.1	104.2	103.7	103.7	103.5		
PNDB		116.4	117.1	116.7	115.6	114.7	115.5	115.0		
PNLT		119.3	117.9	117.5	116.2	114.7	116.6	116.1		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	(0.
	50									
	63									
	80									
	100	61.2	66.3	72.3	72.5	77.3	76.1	78.7		
	125	59.8	68.3	67.6	70.5	73.4	75.4	72.1		
	160	40.8	66.8	68.5	71.5	74.7	74.2	70.7		
	200	56.4	66.6	69.9	72.2	75.2	76.2	78.0		
	250	63.1	67.4	71.2	71.6	74.6	75.9	79.0		
	315	61.5	65.7	69.7	72.9	75.1	77.1	78.5		
	400	61.7	67.8	69.4	74.2	75.6	77.8	78.1		
	500	60.1	66.9	70.8	72.4	74.8	76.9	78.2		
	630	62.4	69.3	73.3	73.8	76.0	78.1	79.3		
	800	62.3	67.7	73.9	74.5	75.8	76.3	78.6		
	1000	61.1	68.3	72.8	74.0	75.6	77.6	79.2		
	1250	58.6	66.0	70.6	71.8	73.5	75.5	77.1		
	1600	56.9	65.7	68.4	70.9	71.4	75.0	78.7		
	2000	60.0	69.2	71.7	74.7	75.2	78.8	79.6		
	2500	65.5	74.7	78.0	79.1	78.5	81.0	80.0		
	3150	60.8	70.2	74.5	76.2	76.8	76.6	77.8		
	4000	58.1	69.0	72.3	74.4	75.6	76.5	78.6		
	5000	62.4	72.9	76.9	78.5	79.5	78.9	77.9		
	6300	54.8	68.7	72.2	74.3	74.4	73.8	72.6		
	8000	47.5	63.5	67.7	70.2	70.5	70.0	68.8		
	10000	38.3	57.3	62.5	65.5	66.0	65.7	64.3		
OVERALL CALCULATED		73.6	81.9	85.6	87.3	88.7	90.0	90.6		
PNDB		86.2	95.6	99.1	100.7	101.6	102.9	102.8		
PNLT		88.3	97.2	101.0	102.1	103.1	104.2	103.9		



MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50									
RADIAL 12. FT.	63									
( 4. M)	80									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC VG=60, A=0,	200									
DATE 9/22/78	250									
RUN CFH/W/R C/LT	315									
TAPE O38250	400	90.8	90.3	89.1	90.7	92.7	89.4	91.6		
BAR 29.6 HG	500	85.1	83.4	82.6	83.1	81.7	89.3	86.6		
(***** N/M2)	630	82.2	88.1	83.9	90.3	90.1	86.0	91.2		
TAMB 90. DEG F	800	85.0	88.8	88.2	87.8	88.5	89.4	91.6		
(305. DEG K)	1000	89.1	88.0	88.8	89.6	87.3	89.7	91.2		
TWET 66. DEG F	1250	85.6	87.8	88.1	89.4	89.7	90.0	90.9		
(292. DEG K)	1600	86.6	89.9	88.3	87.9	90.8	91.4	91.0		
HACT 9.18 GM/M3	2000	88.1	88.6	87.8	88.5	87.0	89.3	91.2		
(.00918 KG/M3)	2500	91.6	91.7	89.9	90.0	90.7	92.3	92.6		
NFA 15333. RPM	3150	89.5	90.2	89.8	89.3	89.4	89.9	91.0		
(1605. RAD/SEC)	4000	90.0	88.7	89.1	89.9	89.6	89.2	91.8		
NFK 14894. RPM	5000	90.4	89.3	89.5	88.4	89.1	89.0	93.0		
(1559. RAD/SEC)	6300	96.3	96.1	96.0	94.2	92.1	91.8	92.6		
NFD 14895. RPM	8000	94.8	93.7	93.4	92.3	91.9	91.0	91.5		
(1560. RAD/SEC)	10000	92.6	91.5	90.4	89.6	90.2	90.2	90.4		
NO. OF BLADES 28	12500	96.6	96.2	93.4	93.2	92.1	91.0	90.6		
FAN TIP SPEED 16000		92.4	92.5	90.9	90.3	86.2	86.6	86.6		
1405. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		103.8	103.7	102.7	103.0	102.7	102.3	103.5		
PNDB		116.2	115.2	114.8	114.4	113.6	114.0	115.1		
PNLT		116.7	116.0	115.5	115.0	113.6	114.0	115.1		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50									
	63									
	80									
	100	63.2	68.7	70.8	74.6	78.1	75.9	78.8		
	125	57.5	61.8	64.3	77.0	77.1	75.8	74.0		
NFA 3726. RPM	160	54.5	66.5	65.6	74.2	75.6	72.8	78.5		
( 390. RAD/SEC)	200	57.3	66.9	69.9	71.7	74.0	75.9	78.9		
NFK 3620. RPM	250	61.2	66.2	70.4	73.4	72.7	76.2	78.4		
( 379. RAD/SEC)	315	57.6	65.8	67.7	73.2	75.1	76.5	78.1		
NFD 3620. RPM	400	58.4	68.0	69.8	71.7	76.1	77.8	78.1		
( 379. RAD/SEC)	500	59.7	66.6	69.3	72.2	72.3	75.7	78.3		
NO. OF BLADES 38	630	63.0	69.8	71.3	73.7	76.0	78.7	79.7		
FREQ. SHIFT	800	60.6	68.0	71.1	73.0	74.6	76.3	78.1		
JET 6	1000	60.7	66.3	70.3	73.5	74.8	75.5	78.9		
FAN 5	1250	60.8	66.7	70.6	71.9	74.2	75.2	80.0		
CRITICAL FREQ.	1600	61.7	69.1	72.8	73.5	73.0	73.9	77.8		
0.	2000	64.8	72.8	76.5	77.2	76.8	77.7	79.3		
AIRFLOW RATIO	2500	62.3	69.7	73.6	75.1	76.4	76.7	78.0		
WF/WM 16.93	3150	58.6	66.8	70.1	72.0	74.4	75.7	76.7		
FAN TIP SPEED	4000	60.8	70.5	72.5	75.1	75.9	76.1	76.6		
1405. FT/SEC	5000	58.8	66.5	69.8	72.1	72.0	71.7	72.8		
	6300	48.8	59.0	62.8	65.3	65.3	65.1	66.3		
	8000	39.3	53.8	58.3	61.2	61.4	61.3	62.5		
	10000	30.1	47.6	53.1	56.5	56.9	57.0	58.3		
OVERALL CALCULATED		73.2	80.8	83.8	86.6	87.9	88.6	90.7		
PNDB		84.7	93.2	96.3	98.6	99.6	100.1	101.7		
PNLT		85.9	94.5	97.4	99.6	99.6	100.1	101.7		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	160										
VEHICLE JT15RD	200										
CONFIG 40X80	250										
LOC VO=115, A=0,	315										
DATE 9/22/78	400	95.7	76.8	75.6	94.8	90.2	76.6	66.4			
RUN CFH/W/R C/LT	500	94.1	88.0	74.8	91.6	78.3	85.0	90.9			
TAPE 039020	630	91.6	84.3	89.8	94.5	91.8	94.0	88.7			
(***** N/M2)	800	74.6	93.5	93.1	81.3	88.9	93.7	91.2			
TAMB 77. DEG F	1000	91.8	88.7	74.5	90.0	89.3	85.0	91.0			
(298. DEG K)	1250	91.9	90.7	89.4	91.1	91.3	90.8	90.4			
TWET 62. DEG F	1600	73.8	82.7	87.2	93.2	90.8	92.8	92.8			
(290. DEG K)	2000	89.9	91.3	89.7	92.3	91.4	88.8	91.6			
HACT 9.74 GM/M3	2500	92.5	93.2	87.4	91.0	94.8	87.8	93.1			
(.00974 KG/M3)	3150	87.7	92.4	92.1	80.4	88.2	90.0	92.9			
NFA 15151. RPM	4000	91.3	90.0	89.4	90.7	87.9	89.9	92.9			
(1586. RAD/SEC)	5000	91.3	91.4	90.8	89.0	89.6	89.8	92.1			
NFK 14895. RPM	6300	97.5	96.9	96.3	95.5	92.9	91.5	94.6			
(1559. RAD/SEC)	8000	93.0	92.8	92.8	90.9	90.8	89.3	95.8			
NFD 14895. RPM	10000	92.5	92.4	91.4	90.4	90.6	89.5	95.9			
(1560. RAD/SEC)	12500	97.3	97.8	96.5	94.4	92.7	91.5	97.4			
NO. OF BLADES 28	16000	92.5	93.1	91.7	90.2	88.9	86.5	98.0			
FAN TIP SPEED	20000										
1389. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		105.2	105.0	103.6	104.2	103.1	102.5	105.9			
PND8		116.3	116.1	114.9	115.2	115.1	113.2	116.1			
PNLT		122.2	117.8	121.1	117.9	117.9	114.9	116.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100	68.1	55.2	57.3	78.7	75.6	63.1	75.6			
	125	66.4	66.4	56.5	75.5	63.7	71.5	78.1			
NFA 3682. RPM	160	63.9	72.7	71.5	78.4	77.3	80.5	76.0			
( 386. RAD/SEC)	200	46.9	71.8	74.8	65.2	74.4	80.2	78.5			
NFK 3620. RPM	250	63.9	66.9	56.1	73.8	74.7	71.5	78.2			
( 379. RAD/SEC)	315	63.9	68.9	71.0	74.9	76.7	77.2	77.6			
NFD 3620. RPM	400	45.4	60.8	66.7	77.0	76.1	79.0	79.9			
( 379. RAD/SEC)	500	61.5	69.3	71.2	76.0	76.7	75.2	78.7			
NO. OF BLADES 38	630	63.9	71.1	68.8	74.7	80.1	74.2	80.2			
FREQ. SHIFT	800	58.8	70.2	73.4	64.0	73.4	76.3	80.0			
JET 6	1000	62.0	67.8	70.8	74.3	73.1	76.2	79.9			
FAN 4	1250	59.4	64.9	67.8	72.1	70.9	74.1	77.8			
CRITICAL FREQ.	1800	56.7	64.3	67.6	69.9	70.5	71.9	75.7			
0.	2000	59.8	67.9	71.3	72.0	74.3	75.7	78.7			
AIRFLOW RATIO	2500	64.9	72.8	76.4	78.2	77.3	77.1	81.0			
WF/WM 16.93	3150	58.9	68.0	72.4	73.2	74.9	74.7	81.8			
FAN TIP SPEED	4000	56.5	66.7	70.4	72.3	74.4	74.6	81.8			
1389. FT/SEC	5000	60.2	71.8	75.2	76.0	76.3	76.4	83.2			
	6300	52.6	65.5	69.5	71.2	72.0	71.0	83.4			
	8000	45.4	60.3	65.0	67.0	68.0	67.1	79.6			
	10000	36.1	54.2	59.8	62.3	63.6	62.9	75.4			
OVERALL CALCULATED		75.1	81.8	84.2	87.7	88.2	88.9	92.9			
PND8		85.8	94.3	97.3	99.8	100.1	100.3	105.9			
PNLT		89.7	96.1	100.4	101.9	101.8	101.5	105.9			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VC=115, A=0,	200										
DATE 9/22/78	250										
RUN CFH/W/R C/LT	315										
TAPE 039070	400	76.2	76.7	87.3	91.0	91.4	76.7	73.4			
BAR 29.9 HG	500	90.3	92.3	91.8	84.6	88.7	91.1	90.4			
(***** N/M2)	630	94.5	89.7	91.5	90.9	91.3	93.8	88.8			
TAMB 83. DEG F	800	86.3	92.3	92.9	93.0	92.7	94.6	89.4			
(301. DEG K)	1000	95.7	89.9	93.0	91.4	87.1	93.8	83.8			
TWET 64. DEG F	1250	93.5	85.8	88.5	91.8	91.3	92.9	88.8			
(291. DEG K)	1600	84.2	85.9	88.4	91.5	90.1	92.2	91.4			
HACT 9.56 GM/M3	2000	88.7	88.8	89.1	91.8	92.3	90.1	89.4			
(.00956 KG/M3)	2500	91.0	94.8	91.0	92.2	92.8	92.1	92.7			
NFA 14853. RPM	3150	90.9	91.3	94.8	92.5	91.4	90.4	90.4			
(1555. RAD/SEC)	4000	91.1	92.2	92.4	91.5	90.7	90.8	89.7			
NFK 14521. RPM	5000	92.5	93.5	91.2	91.4	90.9	90.7	90.0			
(1520. RAD/SEC)	6300	98.3	98.9	99.1	98.0	96.1	94.9	94.0			
NFD 14895. RPM	8000	94.4	94.4	95.1	92.1	91.9	89.3	83.0			
(1560. RAD/SEC)	10000	94.4	95.1	94.7	93.6	92.7	90.3	88.1			
NO. OF BLADES 28	12500	99.8	99.7	98.8	97.7	95.4	93.7	90.7			
FAN TIP SPEED	16000	94.4	96.8	94.2	93.3	91.6	88.3	84.6			
1362. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.2	106.3	106.2	105.4	104.5	104.3	101.8			
PNOB		117.0	117.4	117.8	117.1	116.1	115.4	113.7			
PNLT		119.1	120.4	118.8	118.4	117.8	116.7	117.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	48.6	55.1	69.0	74.9	76.8	63.2	60.6			
	125	62.6	70.7	73.5	68.5	74.1	77.6	77.6			
NFA 3610. RPM	160	66.8	68.1	73.2	74.8	76.8	80.3	74.1			
( 378. RAD/SEC)	200	58.6	70.6	74.6	76.9	78.2	81.1	76.7			
NFK 3529. RPM	250	67.8	68.1	74.6	75.2	72.5	80.3	71.0			
( 369. RAD/SEC)	315	65.5	64.0	68.1	75.4	76.7	79.4	72.8			
NFD 3620. RPM	400	56.0	64.0	69.9	75.3	75.4	78.6	78.5			
( 379. RAD/SEC)	500	60.3	66.8	70.6	75.5	77.6	76.5	76.5			
NO. OF BLADES 38	630	62.4	72.7	72.4	75.9	78.1	78.5	79.8			
FREQ. SHIFT	800	62.0	69.1	76.1	76.1	76.6	76.7	77.5			
JET 6	1000	61.8	69.8	73.6	75.1	75.9	77.1	76.7			
FAN 4	1250	59.2	67.5	71.1	72.9	73.8	75.0	74.6			
CRITICAL FREQ.	1600	57.9	66.5	68.4	70.7	71.8	72.8	72.8			
0.	2000	61.0	70.0	71.7	74.4	75.6	76.6	76.7			
AIRFLOW RATIO	2500	65.7	74.8	79.2	80.7	80.6	80.6	80.5			
WF/WM 16.93	3150	60.3	69.6	74.7	74.4	76.0	74.7	69.2			
FAN TIP SPEED	4000	58.4	69.4	73.7	75.5	76.5	75.4	74.0			
1361. FT/SEC	5000	62.8	73.5	77.5	79.4	79.0	78.6	76.5			
	6300	54.6	69.1	72.1	74.3	74.7	72.8	70.1			
	8000	47.3	63.9	67.6	70.2	70.8	69.0	66.3			
	10000	38.1	57.7	62.4	65.5	66.3	64.7	62.1			
OVERALL CALCULATED		75.3	82.7	86.7	88.7	89.5	90.6	88.9			
PNOB		86.8	95.9	100.1	101.9	102.4	102.6	101.5			
PNLT		88.9	97.6	102.3	104.4	104.4	104.8	104.8			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=115, A=0,	200										
DATE 9/22/78	250										
RUN CFH/W/R C/LT	315										
TAPE 039120	400	76.4	75.3	76.9	89.3	83.7	74.4	92.8			
BAR 29.9 HG	500	85.4	89.8	82.0	83.3	72.7	79.4	76.7			
(***** N/M2)	630	89.9	90.5	90.2	87.8	88.6	90.7	86.8			
TAMB 86. DEG F	800	80.2	74.5	87.8	78.3	90.5	90.3	74.3			
(303. DEG K)	1000	90.1	91.6	74.1	72.9	89.9	91.2	83.0			
TWET 65. DEG F	1250	93.1	89.9	93.5	86.3	91.3	91.5	88.3			
(291. DEG K)	1600	85.3	77.9	91.0	89.8	89.3	88.5	89.6			
HACT 9.50 GM/M3	2000	86.7	92.3	91.1	93.2	93.7	93.8	94.8			
(.00950 KG/M3)	2500	92.3	93.7	92.9	95.3	98.3	96.4	96.3			
NFA 14309. RPM	3150	95.9	94.9	93.4	92.5	93.5	92.4	94.8			
(1498. RAD/SEC)	4000	92.9	93.8	94.4	92.3	92.1	92.1	90.0			
NFK 13951. RPM	5000	96.6	95.0	95.7	93.1	96.6	93.9	92.5			
(1461. RAD/SEC)	6300	99.7	99.6	99.7	99.1	98.9	96.6	94.7			
NFD 14895. RPM	8000	95.3	95.6	96.6	93.1	94.6	90.7	87.8			
(1560. RAD/SEC)	10000	97.7	98.1	97.8	96.3	95.1	93.9	90.8			
NO. OF BLADES 28	12500	101.5	101.2	100.1	98.9	97.2	95.0	90.8			
FAN TIP SPEED 16000	16000	97.1	98.4	96.6	95.9	93.9	90.7	86.6			
1312. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.5	107.5	107.1	106.0	106.5	104.9	103.7			
PNDB		118.1	118.0	118.2	117.4	118.3	116.8	116.2			
PNLT		121.3	121.2	121.9	119.7	120.6	118.7	119.9			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	48.8	53.7	58.6	73.2	69.1	60.9	80.0			
	125	57.7	68.2	63.7	67.2	58.1	65.9	63.9			
NFA 3478. RPM	160	62.2	68.9	71.9	71.7	74.1	77.2	74.1			
( 364. RAD/SEC)	200	52.5	52.8	69.3	62.2	76.0	76.8	61.6			
NFK 3390. RPM	250	62.2	69.8	55.7	56.7	75.3	77.7	70.2			
( 355. RAD/SEC)	315	65.1	68.1	75.1	70.1	76.7	78.0	75.5			
NFD 3620. RPM	400	57.1	56.0	72.5	73.6	74.6	74.9	76.7			
( 379. RAD/SEC)	500	60.3	70.3	72.6	76.9	79.0	80.2	81.9			
NO. OF BLADES 38	630	63.7	71.6	74.3	79.0	83.6	82.8	83.4			
FREQ. SHIFT	800	67.0	72.7	74.7	76.1	78.7	78.8	81.9			
JET 6	1000	63.6	71.4	75.6	75.9	77.3	78.4	77.0			
FAN 5	1250	62.8	69.1	73.4	73.7	77.7	76.3	75.5			
CRITICAL FREQ.	1600	66.0	72.0	76.5	76.3	81.5	80.0	79.3			
0.	2000	68.2	76.1	80.2	82.1	83.6	82.5	81.4			
AIRFLOW RATIO	2500	62.7	71.6	76.7	75.8	79.1	76.4	74.3			
WF WM 16.93	3150	63.7	73.3	77.2	78.7	79.3	79.3	77.0			
FAN TIP SPEED 4000	4000	65.6	75.6	79.2	80.9	81.1	80.2	76.8			
1312. FT/SEC	5000	60.2	72.3	75.4	77.7	77.6	75.8	72.5			
	6300	54.2	67.8	71.4	73.9	74.0	72.2	69.0			
	8000	47.0	62.6	66.9	69.7	70.0	68.3	65.2			
	10000	37.7	56.5	61.7	65.0	65.6	64.1	61.0			
OVERALL CALCULATED		76.1	84.0	87.8	89.3	91.6	91.2	90.9			
PNDB		88.1	97.3	101.1	102.6	104.1	103.4	101.8			
PNLT		89.7	99.5	102.9	104.6	106.1	105.4	104.0			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

FREQ.	10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	0. (0.)	0. (0.)	0. (0.)
NO EGA	50									
RADIAL 12. FT. ( 4. M)	63									
VEHICLE JT15RD	80									
CONFIG 115 40X80	100									
LOC VO=0, A=0,	125									
DATE 9/22/78	160									
RUN CFH/W/R 12/M	200									
TAPE 039130	250									
BAR 29.8 HG (***** N/M2)	400	76.0	76.1	75.5	88.3	74.7	74.5	91.3		
TAMB 86. DEG F (303. DEG K)	500	91.0	85.3	73.5	74.8	71.7	72.0	90.9		
TWET 66. DEG F (292. DEG K)	630	92.4	85.6	86.5	86.8	87.8	83.4	84.2		
HACT10.31 GM/M3 (.01031 KG/M3)	800	76.2	89.2	89.8	81.3	90.0	85.7	86.5		
NFA 13822. RPM (1447. RAD/SEC)	1000	92.0	92.4	84.6	84.6	89.9	86.0	85.5		
NFK 13476. RPM (1411. RAD/SEC)	1250	90.8	90.3	84.6	88.6	90.3	86.3	91.1		
NFD 14895. RPM (1560. RAD/SEC)	1600	86.1	89.7	91.5	88.1	91.6	90.2	90.0		
NO. OF BLADES 28	2000	90.2	91.9	88.7	92.8	90.4	89.4	89.7		
FAN TIP SPEED 16000 1267. FT/SEC	2500	92.5	93.5	93.1	89.1	92.2	85.6	91.2		
OVERALL MEASURED	3150	94.8	94.8	94.4	94.1	90.9	94.4	91.0		
OVERALL CALCULATED	4000	96.6	95.4	96.3	95.1	94.9	92.8	92.7		
PNOB	5000	101.4	100.1	98.6	96.6	94.4	92.2	92.1		
PNLT	6300	100.4	100.4	99.9	99.8	100.2	96.1	96.3		
	8000	96.5	98.5	95.8	95.2	94.4	92.9	90.2		
	10000	99.3	99.9	99.3	97.7	95.8	94.7	91.5		
	12500	101.0	100.9	99.0	99.4	97.5	94.2	91.7		
	16000	97.8	96.7	97.2	96.5	94.3	90.6	87.7		
	20000									

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

FREQ.	10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	0. (0.)	0. (0.)	0. (0.)
NO EGA	50									
	63									
	80									
	100	48.4	54.5	57.2	72.2	60.1	61.0	78.5		
NFA 3359. RPM ( 352. RAD/SEC)	125	63.3	63.7	55.2	58.7	57.1	58.5	78.1		
NFK 3275. RPM ( 343. RAD/SEC)	160	64.7	64.0	70.2	70.7	73.3	69.9	71.5		
NFD 3620. RPM ( 379. RAD/SEC)	200	48.5	67.5	71.5	65.2	75.5	72.2	73.8		
NO. OF BLADES 38	250	64.1	70.6	68.2	74.1	75.3	72.5	72.7		
FREQ. SHIFT	315	62.8	68.5	66.2	72.4	75.7	74.8	78.3		
JET 6	400	57.9	67.8	73.0	71.9	76.9	76.6	77.1		
FAN 5	500	61.8	69.9	70.2	76.3	75.7	75.8	76.8		
CRITICAL FREQ.	630	63.9	71.4	74.5	72.8	77.5	72.0	78.3		
0.	800	65.9	72.4	75.7	77.7	76.1	80.7	78.1		
AIRFLOW RATIO	1000	67.3	73.0	77.5	78.7	80.1	79.1	79.7		
WF/WM 16.93	1250	67.6	73.4	75.7	76.5	78.0	77.0	77.6		
FAN TIP SPEED	1600	70.8	77.0	79.4	79.8	79.3	78.3	78.9		
1267. FT/SEC	2000	68.9	76.9	80.4	82.8	84.9	84.0	85.0		
	2500	63.9	74.5	75.9	77.9	78.9	78.8	76.7		
	3150	65.3	75.2	79.0	80.1	80.0	80.2	77.8		
	4000	65.1	75.2	78.1	81.3	81.3	79.3	77.7		
	5000	60.9	72.8	78.0	78.3	78.1	75.7	73.7		
	6300	55.0	68.1	72.0	74.5	74.4	72.1	70.1		
	8000	47.7	63.0	67.5	70.4	70.4	68.2	66.3		
	10000	38.4	56.8	62.4	65.7	66.0	64.0	62.2		
OVERALL CALCULATED		77.8	85.3	88.2	90.1	91.1	90.3	90.9		
PNOB		89.1	98.1	101.2	103.4	104.2	103.1	103.7		
PNLT		90.5	98.1	103.1	105.2	106.1	105.0	106.1		

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115, A=8.	200										
DATE 9/22/78	250										
RUN CFH/W/R C/LT	315										
TAPE 040010	400	82.0	75.7	76.5	76.4	74.9	74.9	74.9	90.8		
BAR 29.9 HG	500	75.5	73.9	78.2	74.1	68.5	65.6	90.5	84.6		
(***** N/M2)	630	74.2	74.8	90.2	74.3	93.0	87.4	87.3	72.6		
TAMB 87. DEG F	800	84.0	88.8	94.2	73.1	91.3	87.0	79.5	72.7		
(304. DEG K)	1000	62.8	87.7	89.3	73.0	83.3	71.4	80.8	70.0		
TWET 64. DEG F	1250	82.8	86.3	91.2	72.5	85.1	87.6	72.8	88.6		
(291. DEG K)	1600	89.7	88.7	87.8	88.0	80.5	85.1	88.8	91.4		
HACT 8.44 GM/M3	2000	90.7	89.7	88.9	89.0	88.1	89.2	91.8	88.6		
(.00844 KG/M3)	2500	90.4	90.9	93.6	90.9	90.2	90.4	89.3	89.7		
NFA 13833 RPM	3150	94.0	95.4	94.6	96.0	91.8	88.9	91.3	88.8		
(1448. RAD/SEC)	4000	93.1	95.0	95.8	95.2	93.5	89.9	88.9	89.3		
NFK 13474. RPM	5000	97.7	101.0	99.5	96.8	94.7	92.5	90.8	90.8		
(1411. RAD/SEC)	6300	99.1	100.3	101.1	99.5	97.2	94.6	94.3	94.5		
NFD 14895 RPM	8000	94.0	95.9	98.4	95.1	93.7	90.8	88.2	84.9		
(1560. RAD/SEC)	10000	97.2	101.5	99.6	97.7	96.3	93.8	90.5	88.4		
NO. OF BLADES 28	12500	97.2	100.4	99.9	98.5	97.0	93.7	90.6	89.6		
FAN TIP SPEED 16000		93.2	97.8	98.4	96.4	95.4	91.2	86.5	85.3		
1268. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		105.8	108.5	108.5	106.5	105.3	102.5	101.6	101.2		
PND8		117.3	119.6	119.6	117.2	116.2	113.8	113.5	113.4		
PNLT		119.1	122.0	122.5	119.7	117.5	116.9	117.0	117.5		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	54.4	54.1	58.2	60.3	60.3	61.4	62.1	78.4		
	125	47.9	52.3	59.9	58.0	73.9	72.1	77.7	72.2		
NFA 3362. RPM	160	46.5	53.2	71.9	58.2	78.5	73.9	74.6	60.3		
( 352. RAD/SEC)	200	56.3	66.9	75.9	57.0	76.8	73.5	66.8	60.4		
NFK 3275. RPM	250	54.9	65.9	70.9	56.8	68.7	67.9	68.0	57.8		
( 343. RAD/SEC)	315	54.6	66.5	72.8	56.3	70.5	74.1	60.0	76.2		
NFD 3620. RPM	400	61.5	66.8	69.3	71.8	65.8	71.5	75.9	79.0		
( 379. RAD/SEC)	500	62.3	67.7	70.4	72.7	73.4	76.6	78.7	78.1		
NO. OF BLADES 38	630	61.8	68.8	75.0	74.6	75.5	76.8	76.4	77.3		
FREQ. SHIFT	800	65.1	73.2	76.1	79.7	77.1	73.3	78.4	77.3		
JET 6	1000	63.8	72.8	77.0	78.8	78.7	76.2	76.0	76.8		
FAN 5	1250	63.9	74.4	76.6	76.6	76.6	74.7	73.8	74.7		
CRITICAL FREQ.	1600	67.1	76.0	80.3	80.1	79.6	78.8	77.6	77.8		
0.	2000	67.7	76.8	81.8	82.5	81.9	80.5	81.0	81.6		
AIRFLOW RATIO	2500	61.5	72.9	78.8	77.9	78.2	76.5	74.7	71.9		
WF/WM 16.93	3150	63.2	76.8	79.3	80.1	80.5	79.3	76.8	75.2		
FAN TIP SPEED	4000	61.3	74.8	79.0	80.5	80.9	78.9	76.8	76.1		
1268. FT/SEC	5000	56.3	71.7	77.2	78.2	79.2	76.3	72.4	71.7		
	6300	50.4	67.2	73.2	74.4	75.5	72.7	68.9	68.2		
	8000	43.1	62.1	68.7	70.2	71.5	68.8	65.1	64.5		
	10000	33.8	55.9	63.8	65.8	67.1	64.6	61.0	60.4		
OVERALL CALCULATED		74.8	85.2	89.3	89.7	90.3	88.7	88.6	88.8		
PND8		86.6	98.3	102.1	102.4	103.4	101.8	100.7	100.8		
PNLT		87.7	99.5	103.5	104.1	104.9	103.4	103.3	103.7		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115, A=8.	200										
DATE 9/22/78	250										
RUN CFH/W/R C/LT	315										
TAPE 040020	400	89.9	76.5	76.7	77.0	75.0	94.4	74.3	94.0		
BAR 29.9 HG	500	88.8	73.9	86.1	74.4	79.8	89.7	67.2	87.5		
(***** N/M2)	630	92.1	87.9	87.1	88.0	92.1	90.9	91.6	77.4		
TAMB 87. DEG F	800	93.3	91.8	77.9	89.8	92.1	80.6	91.5	81.1		
(304. DEG K)	1000	90.8	87.7	90.4	90.1	88.5	91.5	92.1	88.2		
TWET 64. DEG F	1250	91.2	89.4	89.6	91.6	93.4	89.1	85.2	89.2		
(291. DEG K)	1600	89.7	88.1	88.6	92.4	88.9	89.2	90.8	92.1		
HACT 8.44 GM/M3	2000	90.0	86.2	91.3	89.3	87.3	84.9	92.9	90.4		
(.00844 KG/M3)	2500	91.1	91.2	92.8	91.1	91.0	93.0	93.3	90.7		
NFA 14906. RPM	3150	93.2	89.1	89.8	93.1	80.9	86.9	90.7	90.0		
(1561. RAD/SEC)	4000	90.2	89.8	90.0	91.3	90.1	90.3	89.6	90.3		
NFK 14519. RPM	5000	91.2	92.5	91.8	92.2	90.0	90.7	90.3	90.8		
(1520. RAD/SEC)	6300	97.4	96.2	98.3	97.1	96.1	95.6	95.3	94.0		
NFD 14895. RPM	8000	92.4	94.8	92.7	92.2	91.5	91.0	88.2	89.7		
(1560. RAD/SEC)	10000	92.4	94.9	95.4	92.7	93.2	90.8	89.8	89.6		
NO. OF BLADES 28	12500	95.0	99.6	99.3	96.4	96.2	93.7	92.5	90.9		
FAN TIP SPEED 16000	1366. FT/SEC	89.6	94.8	95.5	93.4	92.3	89.6	86.9	85.7		
OVERALL MEASURED											
OVERALL CALCULATED		104.6	105.4	105.4	104.5	103.8	103.5	103.2	102.5		
PNDB		116.7	116.2	116.5	116.1	114.8	115.1	115.1	114.2		
PNLT		117.6	119.4	118.7	118.1	117.5	117.4	116.5	114.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	50										
NO EGA	63										
	80										
	100	62.3	54.9	58.4	60.9	60.4	60.9	61.5	61.6		
	125	61.2	52.3	59.8	58.3	65.2	76.2	74.4	75.1		
NFA 3623. RPM	160	64.4	66.3	68.8	71.9	77.6	77.4	78.9	65.1		
( 379. RAD/SEC)	200	65.6	70.1	59.8	73.7	77.6	67.1	78.8	68.8		
NFK 3529. RPM	250	62.9	65.9	72.0	73.9	73.9	78.0	79.3	74.3		
( 369. RAD/SEC)	315	63.2	67.6	71.2	75.4	78.8	75.6	72.4	78.8		
NFD 3620. RPM	400	61.5	66.2	70.1	76.2	72.2	75.6	77.9	79.7		
( 379. RAD/SEC)	500	61.6	64.2	72.8	73.0	72.6	71.3	80.0	77.9		
NO. OF BLADES 38	630	62.5	69.1	74.2	74.8	76.3	79.4	80.4	78.3		
FREQ. SHIFT	800	64.3	66.9	71.1	78.8	66.2	73.3	77.8	77.5		
JET 6	1000	60.9	67.4	71.2	74.9	75.3	76.6	76.7	77.8		
FAN 4	1250	57.4	65.1	69.1	72.7	73.2	74.5	74.6	75.7		
CRITICAL FREQ.	1600	56.6	65.5	68.6	71.5	71.0	72.8	73.1	74.1		
0.	2000	59.7	69.0	72.3	75.2	74.7	76.6	77.0	77.9		
AIRFLOW RATIO	2500	64.8	74.2	78.4	79.8	80.6	81.3	81.8	80.9		
WF/WM 16.93	3150	58.4	70.1	72.4	74.6	75.7	76.4	74.5	76.4		
FAN TIP SPEED 4000	5000	56.4	69.2	74.4	74.6	77.0	75.9	75.7	78.0		
1366. FT/SEC	6300	58.0	73.4	78.0	78.1	79.8	78.7	78.3	77.2		
	8000	49.8	67.2	73.3	74.4	75.4	74.1	72.3	71.6		
	10000	42.5	62.1	68.8	70.2	71.4	70.0	68.5	67.9		
OVERALL CALCULATED		33.2	55.9	63.7	65.6	67.0	66.0	64.4	63.8		
PNDB		74.6	81.4	85.7	87.8	88.7	89.8	90.3	90.0		
PNLT		85.9	94.9	99.3	101.1	101.8	102.6	103.0	102.5		
		87.8	96.7	101.3	103.2	104.6	105.0	105.5	104.3		





MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=115,A=15,	200										
DATE 9/22/78	250										
RUN CFH/W/R C/LT	315										
TAPE 041010	400	90.7	91.9	88.6	92.0	78.2	92.7	93.5	92.2		
BAR 29.9 HG	500	90.1	87.9	88.5	89.4	91.1	92.9	93.2	92.0		
(***** N/M2)	630	94.0	94.8	88.0	88.4	88.1	94.1	94.4	90.8		
TAMB 89. DEG F	800	92.6	95.1	93.8	73.9	92.8	93.5	92.2	87.9		
(305. DEG K)	1000	96.4	83.9	93.5	88.9	89.8	90.8	92.5	91.2		
TWET 66. DEG F	1250	94.2	82.4	90.1	88.5	84.1	88.3	93.1	92.1		
(292. DEG K)	1600	90.2	89.2	90.0	90.1	87.0	94.0	91.6	93.5		
HACT 9.05 GM/M3	2000	89.7	88.9	90.4	90.2	89.9	89.2	88.5	89.6		
(.00906 KG/M3)	2500	92.5	93.2	92.6	91.8	84.4	90.6	91.2	90.2		
NFA 15319. RPM	3150	91.3	87.4	92.0	88.2	88.9	90.6	92.6	75.0		
(1604. RAD/SEC)	4000	91.9	90.0	89.5	90.3	89.5	90.1	91.1	90.3		
NFK 14894. RPM	5000	92.4	92.2	91.7	91.0	89.4	90.2	90.9	92.5		
(1559. RAD/SEC)	6300	96.1	96.1	97.5	96.3	95.5	95.4	94.0	95.2		
NFD 14895. RPM	8000	94.4	95.6	96.5	94.1	91.5	89.4	90.2	88.8		
(1560. RAD/SEC)	10000	91.3	93.4	93.1	91.8	90.1	90.5	90.0	90.5		
NO. OF BLADES 28	12500	95.4	96.5	96.2	95.1	93.1	92.7	91.0	91.2		
FAN TIP SPEED 16000	16000	89.6	92.3	93.0	91.9	90.3	87.8	85.4	86.6		
1404. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		105.4	105.0	105.2	103.8	102.6	104.2	104.2	103.4		
PNDB		116.6	115.9	116.6	115.5	114.3	115.6	115.6	114.9		
PNLT		116.6	119.2	118.1	118.0	117.4	117.4	116.1	117.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	63.1	70.3	68.3	75.9	60.6	79.2	80.7	79.8		
	125	62.5	66.3	68.2	73.3	76.5	79.4	80.4	78.6		
NFA 3723. RPM	160	66.3	73.2	67.7	70.3	73.6	80.7	81.7	78.5		
( 390. RAD/SEC)	200	64.9	73.4	75.5	57.6	78.3	80.0	79.5	75.6		
NFK 3620. RPM	250	68.5	82.1	75.1	72.7	75.0	77.1	79.7	78.8		
( 379. RAD/SEC)	315	66.2	60.6	71.7	72.3	69.5	74.8	80.3	78.7		
NFD 3620. RPM	400	62.0	67.3	71.5	73.9	72.3	80.4	76.7	81.1		
( 379. RAD/SEC)	500	61.3	66.9	71.9	73.9	75.2	75.6	75.6	77.1		
NO. OF BLADES 30	630	63.9	71.1	74.0	75.5	69.7	77.0	78.3	77.8		
FREQ. SHIFT	800	62.4	65.2	73.3	71.9	72.1	77.0	79.7	82.5		
JET 6	1000	62.6	67.6	70.7	73.9	74.7	76.4	76.2	77.8		
FAN 5	1250	62.6	69.6	72.8	74.5	74.5	76.4	77.9	79.9		
CRITICAL FREQ.	1600	61.5	69.1	74.3	75.6	76.4	77.5	76.8	78.5		
0.	2000	64.6	72.6	76.0	79.3	80.2	81.3	80.7	82.3		
AIRFLOW RATIO	2500	61.9	71.6	76.7	76.9	76.0	75.1	76.7	75.8		
WF/WM 16.93	3150	57.3	68.7	72.8	74.2	74.3	76.0	76.3	77.2		
FAN TIP SPEED	4000	59.5	70.8	75.3	77.0	76.9	77.8	77.0	77.7		
1404. FT/SEC	5000	52.8	66.3	71.9	73.7	74.1	72.9	71.4	73.1		
	6300	43.8	58.8	64.9	67.0	67.4	66.3	64.9	66.6		
	8000	36.5	53.6	60.4	62.6	63.5	62.5	61.1	62.8		
	10000	27.3	47.4	55.2	58.1	59.1	56.2	56.9	58.7		
OVERALL CALCULATED		76.1	82.2	86.2	87.3	87.9	90.6	91.4	91.1		
PNDB		85.6	93.9	96.8	99.8	100.1	101.9	102.0	102.5		
PNLT		87.0	95.6	99.3	101.1	102.0	103.6	103.3	105.1		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115,A=18,	200										
DATE 9/22/78	250										
RUN CFH/W/R C/LT	315										
TAPE 041050	400	90.2	86.3	87.6	93.5	92.1	85.1	86.8	84.3		
BAR 29.9 HG	500	81.6	91.2	83.9	91.6	91.3	72.7	73.2	67.2		
(***** N/M2)	630	90.6	93.9	90.5	92.9	81.2	86.9	87.4	88.9		
TAMB 90. DEG F	800	94.3	93.2	92.4	93.5	90.6	87.5	92.4	88.4		
(305. DEG K)	1000	86.2	93.3	91.0	89.7	95.1	87.3	87.0	87.1		
TWET 68. DEG F	1250	95.2	93.9	87.1	82.9	92.5	86.8	91.3	91.0		
(292. DEG K)	1600	94.6	90.7	88.3	87.5	80.1	91.5	93.5	93.4		
HACT 8.77 GM/M3	2000	93.2	91.7	89.0	83.2	86.7	88.2	89.8	90.1		
(.00877 KG/M3)	2500	95.1	92.8	90.5	94.0	87.5	92.3	85.0	90.8		
NFA 14947. RPM	3150	93.6	86.2	80.8	90.8	86.9	91.2	87.8	91.0		
(1565. RAD/SEC)	4000	93.6	91.7	90.2	90.5	89.9	89.2	89.3	90.8		
NFK 14519. RPM	5000	93.8	92.2	91.5	91.6	92.1	91.0	90.6	91.6		
(1520. RAD/SEC)	6300	96.1	97.9	97.6	97.7	98.1	95.1	94.4	93.9		
NFD 14895. RPM	8000	94.7	94.4	94.8	93.9	92.0	89.6	89.5	86.3		
(1560. RAD/SEC)	10000	94.1	94.9	94.9	93.8	93.7	91.9	90.6	90.1		
NO. OF BLADES 28	12500	97.7	96.5	96.8	97.5	96.6	95.4	92.5	91.8		
FAN TIP SPEED	16000	91.8	94.2	94.9	94.1	92.7	89.9	87.2	86.3		
1370. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.4	106.1	105.2	105.5	104.9	103.0	102.6	102.6		
PNDB		116.0	117.3	116.0	116.7	116.3	114.5	114.1	114.3		
PNLT		121.2	116.6	117.9	119.0	116.4	116.8	117.4	116.2		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
NFA 3633. RPM	100	62.6	64.7	69.3	77.4	77.5	71.6	76.0	71.9		
( 380. RAD/SEC)	125	54.2	69.6	65.6	75.7	76.7	59.2	60.4	74.6		
NFK 3529. RPM	160	62.9	72.3	72.2	76.8	66.7	73.5	74.7	74.6		
( 369. RAD/SEC)	200	66.6	71.5	74.1	77.4	76.1	74.0	79.7	76.1		
NFD 3520. RPM	250	58.3	71.5	72.6	73.5	80.5	73.8	74.2	74.7		
( 379. RAD/SEC)	315	67.2	72.1	66.7	66.7	77.9	73.4	78.5	78.6		
( 379. RAD/SEC)	400	66.4	66.6	69.8	71.3	65.4	77.9	80.6	81.0		
( 379. RAD/SEC)	500	64.6	69.7	70.5	66.9	74.0	74.6	76.9	77.6		
NO. OF BLADES 38	630	66.5	70.7	71.9	77.7	72.8	78.7	72.1	78.4		
FREQ. SHIFT	800	64.7	64.0	62.1	74.5	72.2	77.6	74.9	78.5		
JET 6	1000	64.3	69.3	71.4	74.1	75.1	75.5	76.4	78.3		
FAN 4	1250	61.8	67.0	69.3	71.9	73.0	73.4	74.3	76.2		
CRITICAL FREQ.	1600	59.2	65.2	66.3	70.9	73.0	73.1	73.4	74.9		
0.	2000	62.3	66.7	72.0	74.6	76.8	76.9	77.3	78.7		
AIRFLOW RATIO	2500	65.5	73.9	77.7	80.4	82.6	80.8	80.9	80.8		
WF/WM 16.93	3150	60.7	69.7	74.5	76.3	76.2	75.0	75.8	73.0		
FAN TIP SPEED	4000	66.1	69.2	73.9	75.7	77.5	77.0	76.5	76.5		
1370. FT/SEC	5000	60.7	72.3	77.5	79.2	80.2	80.3	78.3	78.1		
	6300	62.0	66.6	72.7	75.1	75.6	74.4	72.6	71.2		
	8000	44.7	61.5	66.2	70.9	71.6	70.5	68.8	65.5		
	10000	35.4	55.3	63.0	66.2	67.4	66.3	64.6	64.4		
OVERALL CALCULATED		76.3	82.9	85.5	88.6	89.6	89.1	89.6	90.1		
PNDB		87.3	95.5	98.9	101.7	103.2	102.3	102.4	102.7		
PNLT		89.2	97.4	100.8	104.1	105.2	104.2	104.1	105.1		

MODEL SOUND PRESSURE LEVELS

		10	20	30	40	50	60	70	80	0	0
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
		50									
	NO EGA	53									
	RADIAL 12. FT.	60									
	( 4. M )	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VO=115, A=15.	200									
	DATE 9/22/78	250									
	RUN CFH/W/R C/LT	315									
	TAPE 041060	400	76.4	91.5	102.7	75.8	93.3	78.0	84.9	89.9	
	BAR 29.9 HG	500	92.2	80.5	96.2	87.5	93.5	90.9	74.6	92.5	
	(***** N/M2)	630	92.1	91.6	96.1	87.9	91.3	88.2	90.3	89.3	
	TAMB 90. DEG F	800	88.3	88.4	102.8	91.3	93.2	73.6	91.4	83.6	
	(305. DEG K)	1000	88.2	88.1	102.8	87.6	89.6	85.0	88.1	81.9	
	THET 66. DEG F	1250	93.3	89.8	101.2	86.1	73.6	87.4	82.8	89.7	
	(292. DEG K)	1600	90.8	90.1	98.2	85.7	80.1	91.5	83.8	85.3	
	HACT 8.77 GM/M3	2000	86.4	87.5	89.0	85.9	86.7	86.5	89.6	90.1	
	(.00877 KG/M3)	2500	93.1	87.7	100.4	91.4	83.3	89.7	89.1	87.6	
	NFA 13872. RPM	3150	93.6	92.2	98.0	93.7	88.4	90.9	87.1	88.4	
	(1482. RAD/SEC)	4000	94.2	94.0	99.6	95.7	92.2	91.1	89.7	88.2	
	NFK 13475. RPM	5000	99.1	99.5	103.7	98.4	95.5	93.2	91.2	89.9	
	(1411. RAD/SEC)	6300	98.5	99.4	103.7	100.0	98.0	96.9	95.3	94.2	
	NFD 14895. RPM	8000	95.2	93.7	100.1	97.2	93.9	92.3	89.1	85.5	
	(1560. RAD/SEC)	10000	97.8	99.2	101.9	98.3	95.2	94.9	91.2	90.3	
	NO. OF BLADES 28	12500	98.9	98.5	104.2	99.2	98.1	98.1	92.6	90.2	
	FAN TIP SPEED 16000		95.3	95.0	102.8	97.3	94.9	92.7	89.1	88.1	
	1272. FT/SEC 20000										
	OVERALL MEASURED										
	OVERALL CALCULATED	108.9	107.0	113.6	107.4	105.7	104.1	102.2	101.7		
	PND8	118.5	118.6	124.5	118.4	116.5	115.6	114.1	113.6		
	PFLT	121.1	121.1	126.8	119.7	119.4	118.7	116.6	115.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10	20	30	40	50	60	70	80	0	0
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
		50									
	NO EGA	53									
		60									
		100	48.8	69.9	84.4	59.7	78.7	61.6	72.1	77.6	
		125	64.6	58.9	77.9	71.4	78.9	77.4	61.8	80.1	
	NFA 3371. RPM	160	64.4	70.2	77.8	71.6	76.8	74.8	77.6	77.0	
	( 353. RAD/SEC)	200	60.6	66.7	84.5	75.2	78.7	80.1	78.7	71.3	
	NFK 3275. RPM	250	58.3	66.3	84.2	71.4	75.0	71.8	75.3	69.6	
	( 343. RAD/SEC)	315	55.3	68.0	82.8	69.9	59.0	73.9	70.0	77.3	
	NFD 3620. RPM	400	62.6	68.2	79.7	69.5	65.4	77.9	70.9	75.9	
	( 379. RAD/SEC)	500	56.0	65.5	70.8	69.6	74.0	72.9	76.7	77.6	
	NO. OF BLADES 38	630	64.8	65.8	81.8	75.1	68.6	76.1	76.2	75.2	
	FREQ. SHIFT 800	64.7	70.0	79.3	77.4	73.7	77.3	74.2	73.9		
	JET 6 1000	64.9	71.8	80.8	79.3	77.4	77.4	76.8	75.7		
	FAN 5 1250	65.3	72.9	80.8	77.9	76.6	75.4	74.7	73.6		
	CRITICAL FREQ. 1600	68.5	76.5	84.5	81.7	80.4	79.3	78.0	77.2		
	0. 2000	67.1	75.9	84.2	83.0	82.7	82.8	82.0	81.3		
	AIRFLOW RATIO 2500	62.7	69.7	80.3	80.0	78.4	78.0	75.8	72.5		
	WF/WM 16.93 3150	63.8	74.5	81.6	80.7	79.4	80.4	77.5	77.1		
	FAN TIP SPEED 4000	63.0	72.9	83.3	81.2	82.0	81.3	78.8	76.7		
	1271. FT/SEC 5000	58.4	68.9	81.8	79.1	78.6	77.8	75.0	72.5		
	6300	52.5	64.4	77.6	75.3	75.0	74.2	71.5	69.0		
	8000	45.2	59.3	73.1	71.1	71.0	70.3	67.7	65.3		
	10000	35.9	53.1	67.9	66.4	66.6	66.1	63.5	61.2		
	OVERALL CALCULATED	76.2	83.9	94.7	90.7	90.8	90.3	89.2	89.2		
	PND8	87.4	96.6	106.8	103.7	103.9	103.5	101.8	101.2		
	PFLT	88.7	97.9	109.1	104.3	105.8	105.4	104.0	104.0		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10	20	30	40	50	60	70	80	90
	FREQ. (0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.58)	(1.76)
		50								
		63								
		80								
NO EGA										
RADIAL 12. FT.										
( 4. M)										
VEHICLE JT15RD	126									
CONFIG 40X80	160									
LOC VG=80, A=8	200									
DATE 9/22/78	250									
RUN CFM/W/R C/LT	318									
TAPE 043010	400	88.0	88.5	90.2	86.9	87.4	87.1	81.3	88.3	
BAR 30.0 HG	600	84.5	85.7	89.5	89.2	87.9	88.5	88.1	77.0	
( ***** N/M2)	630	82.7	88.4	84.6	89.1	88.2	84.9	88.0	88.8	
TAMB 77. DEG F	800	85.9	89.8	89.4	87.2	88.9	88.2	87.2	87.9	
(288. DEG K)	1000	84.8	88.8	87.3	87.1	88.7	87.0	88.1	88.9	
TWET 60. DEG F	1250	90.4	89.5	88.7	88.1	87.8	88.1	87.9	87.9	
(288. DEG K)	1600	89.4	89.9	88.1	89.8	89.7	88.5	87.8	88.3	
HACT 8.25 GM/M3	2000	89.4	88.8	89.4	90.9	90.1	89.1	88.9	90.9	
(.00825 KG/M3)	2500	90.2	91.4	91.2	90.9	89.4	87.0	87.8	88.9	
NFA 13707, RPM	3150	92.7	94.7	95.7	94.0	91.7	90.4	89.5	90.2	
(1435. RAD/SEC)	4000	93.9	96.8	98.8	94.2	91.8	91.2	89.7	88.8	
NFK 13478, RPM	5000	100.3	100.2	98.9	98.3	94.9	92.6	90.4	90.9	
(1411. RAD/SEC)	6300	98.4	100.2	100.6	100.6	97.7	95.8	94.3	92.4	
NFD 14895, RPM	8000	95.4	97.8	94.8	95.8	95.1	92.7	91.1	90.5	
(1560. RAD/SEC)	10000	99.0	100.1	99.8	97.3	96.9	94.6	92.3	91.2	
NO. OF BLADES 28	12500	97.9	100.1	100.8	97.8	98.7	96.4	94.1	91.3	
FAN TIP SPEED	16000	96.9	99.0	98.1	98.4	95.9	92.9	90.3	87.2	
1256. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		107.2	108.4	108.5	106.9	105.8	103.8	102.2	101.9	
		PND8	119.0	119.6	119.2	118.8	116.8	113.8	113.3	
		PNLT	120.3	120.9	122.2	119.9	116.8	115.0	114.4	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10	20	30	40	50	60	70	80	90
	FREQ. (0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.58)	(1.76)
		50								
		63								
		80								
NO EGA										
		100	61.4	66.9	71.9	70.8	72.8	73.8	68.5	78.9
		125	56.8	64.1	61.2	73.1	73.3	73.0	73.3	64.6
NFA 3331, RPM	160	55.0	66.8	68.3	73.0	73.7	71.4	72.3	73.5	
( 349. RAD/SEC)	200	56.2	67.9	71.1	71.1	72.4	74.7	74.5	78.6	
NFK 3278, RPM	250	58.9	64.0	68.9	70.9	74.1	73.8	73.3	78.5	
( 343. RAD/SEC)	315	62.4	67.7	70.3	71.9	73.2	74.5	74.5	78.5	
NFD 3620, RPM	400	61.2	68.0	69.8	73.8	75.0	74.9	74.7	78.9	
( 379. RAD/SEC)	500	61.0	66.8	70.9	74.8	75.4	78.5	78.0	77.9	
NO. OF BLADES 38	630	61.6	69.3	72.6	74.6	74.7	73.4	74.9	77.4	
FREQ. SHIFT	800	63.8	72.5	77.0	77.6	78.9	78.8	76.6	77.7	
JET 6	1000	64.8	73.4	77.8	77.8	78.8	77.5	78.7	77.3	
FAN 5	1250	66.5	73.5	76.0	77.7	78.0	78.4	74.8	78.2	
CRITICAL FREQ.	1600	69.7	77.2	79.7	81.5	78.8	78.7	77.2	78.2	
0.	2000	67.9	76.7	81.1	83.5	82.4	81.5	81.0	78.5	
AIRFLOW RATIO	2500	62.9	73.8	78.8	78.4	79.6	78.4	77.6	77.5	
WF/WM 16.93	3150	68.0	75.4	79.5	79.7	81.1	80.0	78.8	77.9	
FAN TIP SPEED	4000	61.9	74.4	78.8	79.5	82.6	81.5	80.1	77.8	
1256. FT/SEC	5000	60.0	73.0	78.0	78.2	79.7	78.0	78.3	73.7	
	6300	54.1	68.5	73.9	74.4	76.0	74.4	72.7	70.1	
	8000	46.8	63.3	69.4	70.3	72.0	70.6	68.9	66.4	
	10000	37.5	57.1	64.3	65.6	67.8	66.3	64.8	62.3	
OVERALL CALCULATED		76.3	85.1	89.2	90.3	90.7	90.0	89.2	89.4	
		PND8	87.9	98.0	102.3	103.3	104.5	103.7	102.5	101.6
		PNLT	88.5	98.6	103.8	104.5	104.5	105.0	103.7	102.2

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

FREQ.	10	20	30	40	50	60	70	80	90	0.	0.
NO EGA	50										
RADIAL 12. FT.	50										
( 4. M)	100										
VEHICLE JT18RD	128										
CONFIG 40X80	180										
LOC VQ=80, A=8.	200										
DATE 9/22/78	250										
RUN CFM/W/R C/LT	318										
TAPE 043020	400	91.5	91.8	90.5	92.6	92.1	91.9	89.0	91.3		
BAR 30.0 HG	500	92.2	89.3	87.8	92.0	88.0	87.3	91.5	90.9		
(***** N/M2)	630	88.7	88.1	83.9	88.3	88.0	89.8	87.5	90.2		
TAMB 80. DEG F	800	88.9	88.1	88.1	90.7	88.3	90.0	91.1	91.5		
(300. DEG K)	1000	88.6	89.4	88.2	91.4	90.9	89.2	88.5	88.8		
THET 82. DEG F	1250	90.7	92.0	90.1	88.8	87.8	89.7	90.0	90.9		
(290. DEG K)	1800	87.9	90.8	90.0	88.8	88.7	90.9	90.6	90.3		
HACT 8.87 GM/M3	2000	90.5	89.8	91.1	88.1	90.1	89.3	91.2	91.4		
(.00387 KG/M3)	2500	91.5	91.4	92.8	91.1	90.2	93.4	92.6	91.8		
NFA 14812. RPM	3150	91.9	90.8	90.8	90.4	90.9	90.9	90.7	91.5		
(1851. RAD/SEC)	4000	90.8	90.7	91.1	90.1	90.8	91.1	90.1	90.8		
NFK 14521. RPM	5000	92.8	92.1	92.5	91.8	91.1	89.7	89.8	90.8		
(1820. RAD/SEC)	6300	97.7	98.7	97.7	97.6	96.7	94.8	93.2	92.5		
NFD 14996. RPM	8000	95.1	95.0	94.9	94.3	93.5	92.0	90.9	91.7		
(1860. RAD/SEC)	10000	93.1	94.7	94.8	94.0	92.7	91.7	91.2	90.8		
NO. OF BLADES 28	12500	97.8	99.8	98.1	97.2	96.7	95.2	93.9	92.0		
FAN TIP SPEED 16000	18000	93.0	85.3	84.8	93.8	92.6	90.4	88.2	86.5		
1358. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		105.3	106.1	105.6	105.1	104.4	103.8	103.2	103.3		
PND8		116.9	117.3	116.7	116.7	115.9	115.2	114.5	114.7		
PMLT		117.5	118.1	117.4	117.4	116.7	116.3	115.6	114.7		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

FREQ.	10	20	30	40	50	60	70	80	90	0.	0.
NO EGA	50										
	63										
	80										
	100	63.9	70.3	72.2	78.5	77.8	78.4	78.2	78.9		
	125	64.5	67.7	68.8	75.8	73.4	73.8	78.8	78.5		
NFA 3600. RPM	160	62.0	64.5	65.6	72.2	70.8	76.1	74.8	77.9		
( 377. RAD/SEC)	200	61.2	67.4	68.8	74.6	74.8	78.5	78.4	79.2		
NFK 3529. RPM	250	60.7	67.8	69.8	75.2	78.3	75.7	78.7	77.4		
( 369. RAD/SEC)	315	62.7	70.2	71.7	72.4	73.2	76.1	77.2	78.4		
NFD 3620. RPM	400	59.7	68.7	71.8	73.6	78.0	77.3	77.7	77.9		
( 373. RAD/SEC)	500	62.1	67.8	72.8	72.6	75.4	75.7	78.3	78.9		
NO. OF BLADES 38	630	62.9	69.3	74.3	74.8	78.5	79.8	79.7	78.1		
FREQ. SHIFT	800	63.0	68.8	72.1	74.0	76.1	77.3	77.8	78.0		
JET 8	1000	61.5	68.3	72.3	73.7	78.0	77.4	77.1	78.0		
FAN 4	1250	58.9	66.0	70.1	71.5	73.9	75.3	75.0	75.8		
CRITICAL FREQ.	1600	58.2	65.1	69.3	71.0	72.0	73.1	72.9	74.1		
0.	2000	61.3	68.6	73.0	74.6	75.8	75.6	78.3	77.9		
AIRFLOW RATIO	2500	65.1	74.6	77.8	80.3	81.2	80.5	79.7	79.4		
WF/WM 16.93	3150	61.0	71.2	74.5	76.6	77.7	77.4	77.1	78.4		
FAN TIP SPEED 4000	57.0	68.9	73.7	75.8	78.4	76.7	77.1	77.1			
1358. FT/SEC	5000	60.8	73.8	77.8	78.9	80.3	80.2	79.7	78.3		
	6300	63.1	67.7	72.7	74.9	78.7	74.9	73.8	72.4		
	8000	45.9	62.5	68.2	70.7	71.7	71.0	69.8	68.7		
	10000	38.6	58.4	63.0	66.0	67.3	66.8	65.8	64.5		
OVERALL CALCULATED		74.5	82.4	88.0	88.3	89.3	90.0	90.3	93.8		
PND8		86.4	95.7	99.3	101.7	102.8	102.7	102.5	102.7		
PMLT		88.3	97.5	100.9	103.2	104.4	104.2	104.0	103.9		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	80. (1.40)	90. (0. )
NO EGA	50									
	63									
RADIAL 12. FT.	80									
( 4. M)	100									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC VG=80, A=8,	200									
DATE 9/22/78	250									
RUN CFH/W/R C/LT	315									
TAPE 043060	400	93.2	92.7	90.1	92.5	92.3	91.9	92.0	93.1	
BAR 30.0 HG	500	91.4	88.2	86.1	90.3	90.4	89.7	90.9	91.8	
(***** N/M2)	630	85.4	87.1	87.2	88.3	88.9	88.7	90.7	90.7	
TAMB 83. DEG F	800	89.2	86.8	90.0	89.9	87.9	87.6	94.1	91.8	
(301. DEG K)	1000	88.4	88.0	87.5	87.0	89.0	89.0	90.1	89.9	
TWET 63. DEG F	1250	87.2	89.0	89.6	88.6	91.5	90.9	90.7	91.4	
(290. DEG K)	1600	87.8	88.7	90.0	88.4	90.0	91.9	90.7	92.0	
HACT 8.78 GM/M3	2000	88.3	87.8	90.0	89.8	89.7	90.5	91.3	91.6	
(.00878 KG/M3)	2500	90.4	89.9	91.6	90.5	92.0	91.9	91.4	93.3	
NFA 15238. RPM	3150	90.3	91.0	90.9	90.7	89.9	90.2	90.5	90.9	
(1595. RAD/SEC)	4000	88.8	89.5	89.2	89.2	89.6	90.1	90.9	91.7	
NFK 14895. RPM	5000	89.9	90.0	90.2	91.0	88.6	89.2	89.4	91.6	
(1560. RAD/SEC)	6300	95.8	95.8	96.3	94.6	94.5	92.9	92.0	91.9	
NFD 14895. RPM	8000	94.7	94.2	94.9	94.4	91.8	91.8	91.5	90.9	
(1560. RAD/SEC)	10000	90.3	91.9	91.1	90.3	89.9	90.6	89.8	91.0	
NO. OF BLADES 28	12500	94.0	95.4	96.3	93.9	93.8	92.7	92.4	91.4	
FAN TIP SPEED 16000	20000	89.8	93.0	92.9	90.2	89.7	88.2	87.0	86.4	
1397. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		103.5	103.8	104.1	103.4	103.2	103.0	103.4	103.7	
PNOB		115.2	115.2	115.6	114.8	114.7	114.2	114.5	115.3	
PNLT		115.8	115.8	116.6	114.8	115.5	114.2	115.7	115.3	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	80. (1.40)	90. (0. )
NO EGA	50									
	63									
	80									
	100	65.6	71.1	71.8	76.4	77.7	78.4	79.2	80.7	
	125	63.7	66.8	67.8	74.2	75.8	76.2	78.1	78.4	
NFA 3703. RPM	160	57.7	65.5	68.9	72.2	74.4	75.2	78.0	78.4	
( 388. RAD/SEC)	200	61.5	64.9	71.7	73.8	73.4	74.1	81.4	79.5	
NFK 3620. RPM	250	60.5	66.2	69.1	70.8	74.4	75.5	77.3	77.5	
( 379. RAD/SEC)	315	59.2	67.2	71.2	72.4	76.9	77.4	77.9	79.0	
NFD 3620. RPM	400	59.6	66.8	71.5	72.2	75.3	78.3	77.8	79.6	
( 379. RAD/SEC)	500	59.9	65.8	71.5	73.5	75.0	76.9	78.4	79.1	
NO. OF BLADES 38	630	61.8	67.8	73.0	74.2	77.3	78.3	78.5	80.9	
FREQ. SHIFT	800	61.4	68.8	72.2	74.3	75.1	76.6	77.6	78.4	
JET 6	1000	59.5	67.1	70.4	72.8	74.8	76.4	77.9	79.2	
FAN 4	1250	56.9	64.8	68.2	70.6	72.7	74.3	75.8	77.1	
CRITICAL FREQ.	1600	55.3	63.0	67.0	70.2	70.5	72.1	73.7	74.9	
0.	2000	58.4	66.5	70.7	74.0	73.3	75.1	76.1	78.7	
AIRFLOW RATIO	2500	63.2	71.7	76.4	77.3	79.0	78.6	78.5	78.8	
WF/WM 18.93	3150	60.6	69.4	74.5	76.7	76.0	77.2	77.7	77.6	
FAN TIP SPEED	4000	51.2	68.1	70.1	72.1	73.8	75.8	75.7	77.4	
1396. FT/SEC	5000	56.9	69.1	75.0	75.5	77.4	77.6	78.2	77.7	
	6300	50.0	65.5	70.7	71.2	72.8	72.7	72.4	72.3	
	8000	42.7	60.3	66.2	67.1	68.8	68.9	68.6	68.6	
	10000	33.4	54.1	61.1	62.4	64.4	64.6	64.5	64.5	
OVERALL CALCULATED		73.3	80.5	84.7	86.7	88.3	89.3	90.6	91.4	
PNOB		84.5	93.3	97.9	99.6	101.0	101.5	102.1	102.7	
PNLT		86.1	94.8	99.4	100.9	102.4	102.6	103.5	102.7	

### MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )
	50									
	63									
	80									
	100									
VEHICLE	JT15RD	125								
CONFIG	40X80	160								
LOC	V0=80,A=15,	200								
DATE	9/22/78	250								
RUN	CFH/W/R C/LT	315								
TAPE	044010	400	92.9	94.2	92.9	94.3	91.4	93.3	94.0	95.0
BAR	30.0 HG	500	92.2	92.1	92.4	90.0	91.7	90.3	93.1	92.7
	(XXXXX N/M2)	630	90.0	90.7	91.8	88.0	90.5	89.3	91.2	89.6
TAMB	84. DEG F	800	90.5	92.0	91.8	90.6	90.9	90.2	90.8	90.4
	(302. DEG K)	1000	91.1	89.8	88.3	90.4	90.0	90.2	90.3	91.9
TWET	64. DEG F	1250	89.7	89.2	90.5	89.3	91.1	90.8	90.5	92.9
	(291. DEG K)	1800	89.3	90.6	89.7	89.9	91.1	90.0	91.0	92.3
HACT	9.26 GM/M3	2000	90.8	87.6	91.0	91.9	91.0	91.4	91.5	92.3
	(.00926 KG/M3)	2500	91.1	90.2	91.8	91.7	90.7	90.8	92.2	92.1
NFA	15250. RPM	3150	90.8	90.7	90.6	91.1	90.9	91.0	91.5	92.5
	(1597. RAD/SEC)	4000	90.8	90.5	90.4	90.3	90.1	89.7	91.3	91.8
NFK	14895. RPM	5000	90.2	91.0	90.2	90.6	90.2	90.3	91.2	91.2
	(1580. RAD/SEC)	6300	97.0	97.7	96.1	95.3	95.3	92.7	92.7	92.2
NFD	14895. RPM	6000	95.9	96.6	95.1	94.0	94.3	92.6	92.9	91.1
	(1580. RAD/SEC)	10000	89.3	92.4	92.0	91.8	90.1	89.8	91.3	91.0
NO. OF BLADES	28	12500	93.3	95.2	95.8	94.9	93.8	93.0	92.0	92.0
FAN TIP SPEED	16000	1398. FT/SEC	88.5	92.0	92.5	91.4	90.0	87.8	86.4	86.7
	OVERALL MEASURED									
	OVERALL CALCULATED		104.3	105.1	104.7	104.2	104.0	103.3	103.9	104.2
	PNDB		116.4	116.8	116.1	115.6	115.6	114.4	115.1	115.6
	PNLT		117.0	117.5	116.7	115.6	116.1	114.4	115.1	115.6

### FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )
	50									
	63									
	80									
	100	85.3	72.6	74.6	78.2	76.8	79.8	81.2	82.6	
	125	64.5	70.5	74.1	73.9	77.1	78.8	80.3	80.3	
NFA	3708. RPM	160	62.3	69.1	73.3	69.9	76.0	75.8	78.5	77.3
	( 388. RAD/SEC)	200	62.8	70.3	73.5	74.5	76.4	76.7	78.1	78.1
NFK	3620. RPM	250	63.2	68.0	69.9	74.2	75.4	76.7	77.5	79.5
	( 379. RAD/SEC)	315	61.7	67.4	72.1	73.1	76.5	77.3	77.7	80.5
NFD	3620. RPM	400	61.1	68.7	71.2	73.7	76.4	76.4	78.1	79.9
	( 379. RAD/SEC)	500	62.4	65.6	72.5	75.6	76.3	77.8	78.6	79.8
NO. OF BLADES	38	630	62.5	68.1	73.2	75.4	76.0	77.2	79.3	79.8
FREQ. SHIFT	800	61.9	68.3	71.9	74.7	76.1	77.4	78.6	80.0	
JET	6	1000	61.3	68.1	71.6	73.9	75.3	76.0	78.3	79.1
FAN	4	1250	58.7	65.8	69.4	71.7	73.2	73.9	76.2	77.0
CRITICAL FREQ	1600	56.0	64.0	67.2	69.8	71.1	72.4	74.1	74.8	
	0.	2000	56.7	67.5	70.7	73.6	74.9	76.2	77.9	78.3
AIRFLOW RATIO	2500	64.4	73.6	76.2	78.0	79.8	78.4	79.2	79.1	
WF/WM	16.93	3150	61.8	71.8	74.7	76.3	78.5	78.0	79.1	77.8
FAN TIP SPEED	4000	53.2	66.6	70.9	73.6	73.8	74.8	77.2	77.3	
	1398. FT/SEC	5000	56.2	69.0	74.5	76.5	77.4	77.9	77.8	78.3
		6300	48.6	64.4	70.3	72.4	73.1	72.3	71.8	72.6
		8000	41.4	59.2	65.8	68.2	69.1	68.4	68.0	68.8
		10000	32.1	53.1	60.6	63.5	64.7	64.2	63.8	64.7
	OVERALL CALCULATED		74.5	82.0	85.6	87.6	89.0	89.6	91.1	91.8
	PNDB		85.5	94.7	98.2	100.2	101.8	101.7	102.9	103.0
	PNLT		87.3	96.2	99.5	101.5	103.1	103.2	104.0	104.1

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0
FREQ		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
NO EGA	50										
	63										
RADIAL 12. FT.	80										
(4. M)	100										
-----											
VEHICLE	JT15RD	125									
CONFIG	40X80	180									
LOC	VG=80,A=15,	200									
DATE	9/22/78	250									
-----											
RUN CFM/W/R C/LT	315										
TAPE	044020	400	91.2	93.1	92.2	92.3	91.0	94.0	93.4	91.0	
BAR	30.0 HG	500	89.2	92.1	89.1	90.4	83.7	89.8	90.7	90.5	
(..... N/M2)	630	86.6	91.6	90.4	89.6	88.8	85.3	85.3	90.5	88.2	
-----											
TAMB	85. DE3 F	800	89.6	89.0	91.4	86.2	90.5	89.4	91.6	91.5	
(303 . E. K)	1000	91.4	91.6	89.9	90.0	90.9	89.8	90.5	92.2		
TWET	64 . E F	1250	93.5	91.2	91.2	90.3	88.3	88.7	90.4	90.8	
(29. . K)	1800	90.6	89.2	90.3	91.1	89.4	89.5	91.6	90.1		
-----											
HACT	8.9 . 1/M3	2000	90.9	90.3	90.8	90.6	90.0	89.7	90.8	91.1	
(.00898 KG/M3)	2500	92.6	92.3	92.7	93.6	92.3	92.7	91.3	91.7		
NFA	14866. RPM	3150	92.0	91.1	91.0	90.2	89.7	90.1	89.7	91.3	
(1556 . RAD/SEC)	4000	91.4	90.4	90.3	90.1	90.2	90.1	90.7	91.2		
-----											
NFK	14507. RPM	5000	93.1	92.3	92.3	91.9	91.9	90.0	90.4	90.4	
(1519. RAD/SEC)	6300	98.9	98.7	99.3	97.2	96.1	96.9	95.1	93.2		
NFD	14895. RPM	8000	95.0	95.1	95.4	93.9	93.5	92.9	91.9	92.6	
(1560 . RAD/SEC)	10000	94.7	94.9	95.1	94.9	92.4	92.5	92.0	91.4		
-----											
NO. OF BLADES	28	12500	98.2	98.7	98.8	98.0	97.1	95.7	94.4	93.4	
FAN TIP SPEED	16000	20000	93.6	94.7	94.9	94.2	92.8	90.6	89.0	87.8	
1363. FT/SEC	20000										
-----											
OVERALL MEASURED											
OVERALL CALCULATED		105.9	106.1	106.2	105.3	104.3	104.2	104.0	103.6		
PNDB		117.7	117.6	117.8	118.6	115.6	116.1	115.5	114.7		
PNLT		118.5	118.4	118.8	117.7	116.2	117.0	116.1	114.7		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0
FREQ		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
NO EGA	50										
	63										
	80										
	100	63.6	71.5	73.9	76.2	76.4	80.5	80.6	78.6		
-----											
NFA	3613. RPM	125	61.5	70.5	70.8	74.3	69.1	76.3	77.9	78.1	
( 378. RAD/SEC)	200	58.9	70.0	72.1	73.5	72.3	71.8	77.8	75.9		
NFK	3526. RPM	250	61.9	67.3	73.1	70.1	76.0	75.9	78.9	79.2	
( 369. RAD/SEC)	315	63.5	69.8	71.5	73.8	76.3	76.3	77.7	79.8		
NFD	3620. RPM	400	65.5	69.4	72.8	74.1	73.7	75.2	77.6	78.4	
( 379. RAD/SEC)	500	62.4	67.3	71.8	74.9	74.7	75.9	78.7	77.7		
NO. OF BLADES	38	630	62.5	68.3	72.3	74.3	75.3	76.1	77.9	78.6	
FREQ. SHIFT	800	64.0	70.2	74.1	77.3	77.6	79.1	78.4	79.3		
JET	6	1000	63.1	68.9	72.3	73.9	74.9	76.5	76.8	78.8	
FAN	4	1250	62.1	68.0	71.5	73.7	75.4	76.4	77.7	78.7	
CRITICAL FREQ	1600	59.5	65.7	69.3	71.5	73.3	74.3	75.5	76.6		
0.	2000	58.5	65.3	69.1	71.1	72.8	72.1	73.5	74.4		
-----											
AIRFLOW RATIO	2500	61.6	68.8	72.8	74.9	76.6	75.9	77.1	77.5		
WF/WM 18.93	3150	66.3	74.8	79.4	79.9	80.6	82.6	81.6	80.1		
FAN TIP SPEED	4000	60.9	70.3	75.0	76.2	77.7	78.3	78.1	79.3		
1363. FT/SEC	5000	58.6	68.1	74.1	76.7	76.1	77.5	77.9	77.8		
	6300	61.2	72.5	77.5	79.7	80.7	80.6	80.2	79.7		
	8000	53.8	67.2	72.7	75.2	75.9	75.1	74.4	73.7		
	10000	46.5	62.0	68.2	71.1	71.9	71.3	70.6	70.0		
OVERALL CALCULATED		37.2	55.8	63.1	68.4	67.5	67.0	66.5	65.9		
PNDB		75.1	82.8	86.6	88.4	89.2	90.4	91.0	91.1		
PNLT		87.3	95.8	100.3	101.7	102.5	103.7	103.7	103.3		
		89.0	97.5	102.1	103.1	104.1	105.8	105.3	104.6		



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	NO EGA	50									
	63										
RADIAL	12. FT.	80									
	( 4. M)	100									
VEHICLE	JT15RD	125									
CONFIG	40X80	180									
LOC	V0=80,A=15,	200									
DATE	9/22/78	250									
RUN	CFH/W/R C/LT	315									
TAPE	044060	400	88.8	87.8	90.2	93.2	90.8	90.2	89.2	90.6	
BAR	30.0 HG	500	87.9	83.6	87.4	88.5	87.3	86.7	88.9	86.9	
	(XXXXX N/M2)	630	88.3	88.7	84.3	86.5	87.1	79.3	88.7	81.7	
TAMB	86. DEG F	800	87.3	88.5	89.5	90.1	89.2	87.1	87.6	89.4	
	(303. DEG K)	1000	87.0	86.4	85.4	88.4	86.5	86.6	88.6	86.4	
TWET	65. DEG F	1250	88.0	89.6	89.5	89.1	87.0	87.3	88.9	88.9	
	(291. DEG K)	1600	88.1	87.5	88.8	88.9	89.7	88.5	89.4	88.2	
HACT	9.48 GM/M3	2000	89.6	88.6	89.5	88.2	90.9	88.7	89.9	89.8	
	(.00948 KG/M3)	2500	92.2	89.6	91.0	91.6	89.5	89.0	88.4	89.0	
NFA	13822. RPM	3150	94.3	92.9	95.3	94.6	92.0	90.5	90.5	89.6	
	(1447. RAD/SEC)	4000	93.6	95.0	95.1	95.9	93.5	91.6	91.1	89.9	
NFK	13476. RPM	5000	98.2	100.2	100.3	96.9	96.7	93.9	91.5	90.6	
	(1411. RAD/SEC)	6300	99.8	101.1	100.9	98.0	97.0	96.4	95.7	93.6	
NFD	14895. RPM	8000	96.3	97.7	97.6	97.3	95.5	94.0	91.6	90.8	
	(1560. RAD/SEC)	10000	98.9	100.4	98.6	99.6	95.9	95.1	92.9	91.1	
NO. OF BLADES	28	12500	100.0	100.3	100.4	100.6	97.3	96.9	94.1	91.7	
FAN TIP SPEED	16000		97.1	97.9	98.7	98.0	95.2	93.8	90.6	87.5	
	1267. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED	107.4	108.3	108.3	107.7	105.6	104.4	103.3	102.1		
	PND8	118.5	119.3	119.3	117.9	117.0	115.6	115.2	113.8		
	PNLT	119.7	120.3	123.0	117.9	117.0	117.0	116.1	115.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	NO EGA	50									
	63										
	80										
	100	61.2	66.0	71.9	77.1	78.2	76.7	76.4	78.2		
	125	60.2	62.0	49.1	72.4	72.7	73.2	76.1	74.5		
NFA	3359. RPM	180	58.6	67.1	66.0	70.4	72.6	65.8	76.0	69.4	
	( 352. RAD/SEC)	200	59.6	66.8	69.2	74.0	74.7	73.6	74.9	77.1	
NFK	3275. RPM	250	59.1	64.6	67.0	72.2	71.9	73.1	75.8	74.0	
	( 343. RAD/SEC)	315	60.0	67.8	71.1	72.9	72.4	73.8	76.1	76.5	
NFD	3620. RPM	400	59.9	65.6	70.3	72.7	75.0	74.9	76.5	75.8	
	( 379. RAD/SEC)	500	61.2	66.6	71.0	71.9	76.2	75.1	77.0	77.3	
NO. OF BLADES	38	630	63.6	67.5	72.4	75.3	74.8	75.4	75.5	76.6	
FREQ. SHIFT	800	65.4	70.7	76.6	78.2	77.2	76.9	77.6	77.1		
JET	6	1000	64.3	72.6	76.3	79.5	78.7	77.9	78.1	77.4	
FAN	5	1250	64.4	73.5	77.4	77.3	77.8	76.1	76.0	75.3	
CRITICAL FREQ.	1800	67.6	77.2	81.1	80.1	81.6	80.0	78.3	77.9		
	0.	2000	68.3	77.6	81.4	81.0	81.7	82.3	82.4	80.7	
AIRFLOW RATIO	2500	65.7	73.7	77.7	80.0	80.0	79.7	78.1	77.8		
WF/WM 18.93	3150	64.9	75.6	78.2	82.0	80.1	80.5	79.1	77.8		
FAN TIP SPEED	4000	64.1	74.6	79.5	82.5	81.1	82.0	80.1	78.2		
	1267. FT/SEC	5000	60.2	71.8	77.5	79.8	78.9	78.9	76.5	73.9	
		6300	54.2	67.3	73.5	76.0	75.3	75.3	73.0	70.4	
		8000	47.0	62.1	69.0	71.8	71.3	71.4	69.2	66.6	
		10000	37.7	56.0	63.8	67.1	66.9	67.2	65.0	62.5	
	OVERALL CALCULATED	76.1	84.9	89.0	90.9	90.7	90.6	90.4	89.6		
	PND8	85.2	97.9	101.9	104.6	104.0	104.2	103.2	101.8		
	PNLT	88.2	97.9	103.8	104.6	104.0	104.9	104.6	102.7		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA	50									
		63									
		80									
	RADIAL 12. FT.	100									
	( 4. M)	125									
	VEHICLE JT15RD	160									
	CONFIG 40X80	200									
	LOC V0=80, A=0,	250									
	DATE 9/18/78	315									
	RUN CFT/W/R C/LT	400	86.5	90.3	88.3	89.8	87.1	86.2	84.3		
	TAPE 016010	500	84.0	86.7	87.7	86.9	86.2	90.6	87.9		
	BAR 30.0 HG	630	87.6	81.2	83.5	85.3	84.9	87.2	86.8		
	(***** N/M2)	800	86.6	86.5	88.2	88.3	87.4	88.1	88.4		
	TAMB 85. DEG F	1000	85.6	85.8	85.7	88.3	87.6	87.7	87.9		
	(303. DEG K)	1250	87.0	86.8	86.6	88.0	88.0	87.1	87.0		
	TWET 59. DEG F	1600	88.2	87.5	85.2	87.3	89.2	87.1	87.5		
	(288. DEG K)	2000	87.7	88.0	88.0	88.0	88.5	88.1	88.2	89.1	
	HACT 5.56 GM/M3	2500	90.1	91.2	88.5	89.5	89.0	88.6	87.6		
	(.00356 KG/M3)	3150	92.7	92.4	90.2	89.0	89.4	87.3	86.8		
	NFA 13809. RPM	4000	92.0	92.6	91.2	90.7	88.9	87.8	87.1		
	(1446. RAD/SEC)	5000	101.0	98.4	97.7	95.6	92.0	90.2	88.4		
	NFK 13475. RPM	6300	98.6	97.4	96.9	95.2	93.4	89.6	89.1		
	(1411. RAD/SEC)	8000	95.1	94.4	93.0	90.9	88.7	85.7	85.6		
	NFD 14895. RPM	10000	98.3	97.7	95.1	92.3	89.8	86.8	85.3		
	(1560. RAD/SEC)	12500	97.5	97.4	95.4	93.8	90.6	85.6	83.8		
	NO. OF BLADES 28	16000	96.1	96.1	93.4	92.3	88.2	82.4	79.4		
	FAN TIP SPEED	20000									
	1266. FT/SEC										
	OVERALL MEASURED										
	OVERALL CALCULATED	106.8	106.0	104.6	103.4	101.5	100.1	99.4			
	PNDB	119.1	117.6	116.7	115.5	113.5	111.9	110.9			
	PNLT	121.0	118.7	117.9	116.5	114.5	113.2	110.9			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA	50									
		63									
		80									
		100	58.9	68.7	70.0	73.7	72.5	72.7	71.5		
		125	56.3	65.1	69.4	70.8	71.6	77.1	75.1		
	NFA 3356. RPM	160	59.9	39.6	65.2	69.2	70.4	73.7	74.1		
	( 351. RAD/SEC)	200	58.9	64.8	69.9	72.2	72.9	74.6	75.7		
	NFK 3275. RPM	250	57.7	64.0	67.3	72.1	73.0	74.2	75.1		
	( 343. RAD/SEC)	315	59.0	65.0	68.2	71.8	73.4	73.6	74.2		
	NFD 3620. RPM	400	60.0	65.6	66.7	71.1	74.5	73.5	74.7		
	( 379. RAD/SEC)	500	59.3	66.0	69.5	72.2	73.4	74.6	76.2		
	NO. OF BLADES 38	630	61.5	69.2	70.0	73.3	74.3	75.0	74.8		
	FREQ. SHIFT	800	63.7	70.1	71.5	72.6	74.6	73.6	73.8		
	JET 6	1000	63.7	70.2	72.4	74.2	74.1	74.1	74.1		
	FAN 5	1250	67.2	71.7	74.8	75.0	73.1	72.4	72.0		
	CRITICAL FREQ.	1600	70.4	75.3	78.5	78.8	76.9	76.3	75.2		
	0.	2000	67.2	74.0	77.4	78.2	78.2	75.5	75.8		
	AIRFLOW RATIO	2500	62.5	70.4	73.1	73.6	73.2	71.4	72.1		
	WF/WM 16.93	3150	64.3	73.0	74.8	74.7	74.1	72.3	71.6		
	FAN TIP SPEED	4000	61.5	71.7	74.5	75.7	74.4	70.7	69.8		
	1266. FT/SEC	5000	59.2	70.0	72.2	74.1	72.0	67.5	65.4		
		6300	53.3	65.5	68.2	70.3	68.3	63.9	61.8		
		8000	46.0	60.4	63.7	66.1	64.3	60.0	58.0		
		10000	36.7	54.2	58.6	61.5	59.9	55.8	53.9		
	OVERALL CALCULATED	76.1	82.8	85.6	86.9	86.7	86.5	86.6			
	PNDB	87.8	95.6	98.0	99.4	98.9	97.3	97.2			
	PNLT	88.9	96.1	98.6	99.4	100.0	97.9	97.2			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 10X90	160										
LOC VO:90, A=0,	200										
DATE 9/18/73	250										
RUN CFT/WAR C/LT	315										
TAPE 010020	400	85.0	88.8	91.2	89.6	85.5	87.8	90.1			
BAR 30.0 HG	500	86.9	84.3	87.9	89.0	88.4	85.6	90.6			
(33000 N/M2)	630	88.5	78.5	85.7	85.3	86.9	85.9	88.5			
TAMB 84. DEG F	800	86.8	88.0	87.5	87.3	86.0	87.7	88.8			
(302. DEG K)	1000	87.4	91.0	89.3	87.3	88.7	88.4	88.9			
TWET 59. DEG F	1250	87.7	87.4	88.2	87.2	87.1	88.8	89.5			
(283. DEG K)	1600	86.9	87.6	88.3	88.5	88.8	90.2	90.7			
HACT 5.84 GM/M3	2000	88.9	88.9	87.7	89.3	88.8	89.0	90.4			
(.00584 KG/M3)	2500	88.1	89.7	89.2	88.9	88.1	89.7	88.2			
NFA 14283. RPM	3150	88.3	88.9	90.5	89.1	88.9	88.8	88.3			
(1495. RAD/SEC)	4000	90.2	88.5	90.7	89.9	88.2	87.1	88.7			
NFK 13951. RPM	5000	95.0	95.5	94.6	92.7	90.9	90.1	88.8			
(1461. RAD/SEC)	6300	99.2	97.7	99.4	96.1	94.2	93.6	90.3			
NFD 14895. RPM	8000	92.3	93.4	92.6	90.8	89.4	88.0	86.3			
(1560. RAD/SEC)	10000	95.7	94.6	93.8	92.0	90.7	88.4	85.9			
NO. OF BLADES 28	12500	99.3	98.9	96.3	94.7	92.9	89.6	85.1			
FAN TIP SPEED 16000	16000	95.2	94.7	92.5	91.0	88.5	85.4	80.5			
1309. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		105.5	105.1	104.9	103.2	101.9	101.2	101.0			
PNOB		116.9	116.1	117.2	115.1	113.8	113.4	112.3			
PNLT		118.6	118.3	118.5	116.2	114.8	114.4	112.3			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	57.4	67.2	72.9	73.5	70.9	74.3	77.3			
	125	59.2	62.7	69.6	72.9	73.8	72.1	77.8			
NFA 3471. RPM	160	60.8	66.9	67.4	69.2	72.4	72.4	75.8			
( 363. RAD/SEC)	200	59.1	66.3	69.2	71.2	71.5	74.2	75.9			
NFK 3391. RPM	250	59.5	69.2	70.9	71.1	74.1	74.9	76.1			
( 355. RAD/SEC)	315	59.7	65.6	69.8	71.0	72.5	75.3	76.7			
NFD 3600. RPM	400	58.7	65.7	69.8	72.3	74.1	76.6	77.9			
( 379. RAD/SEC)	500	60.5	66.9	69.2	73.0	74.1	75.4	77.5			
NO. OF BLADES 38	630	59.5	67.7	70.7	72.6	73.4	76.1	75.4			
FREQ. SHIFT	800	59.3	66.6	71.8	72.7	74.1	75.1	75.3			
JET 6	1000	60.8	66.1	71.9	73.4	73.3	73.4	75.7			
FAN 5	1250	61.1	68.8	71.6	72.1	72.0	72.3	73.6			
CRITICAL FREQ.	1600	64.4	72.4	75.4	75.9	75.8	76.1	75.6			
0.	2000	67.7	74.2	79.9	79.1	78.9	79.5	77.0			
AIRFLOW RATIO	2500	59.7	69.4	72.7	73.5	73.9	73.7	72.8			
WF/WI 16.93	3150	61.7	69.9	73.5	74.4	74.9	73.9	72.2			
FAN TIP SPEED	4000	63.4	73.3	75.4	76.7	76.8	74.8	71.1			
1309. FT/SEC	5000	58.3	68.7	71.4	72.8	72.3	70.5	66.5			
	6300	52.4	64.2	67.4	69.0	68.6	66.9	62.9			
	8000	45.1	59.0	62.9	64.9	64.7	63.1	59.2			
	10000	35.9	52.8	57.7	60.2	60.2	58.8	55.0			
OVERALL CALCULATED		74.1	81.7	85.7	86.5	86.9	87.6	88.2			
PNOB		86.6	95.1	98.8	99.4	99.7	99.7	98.5			
PNLT		88.5	96.5	100.7	101.5	101.6	101.2	98.5			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA	50									
		63									
	RADIAL 12. FT.	80									
	( 4. M)	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VO=80, A=0,	200									
	DATE 9/18/78	250									
	RUN CFT/W/R C/LT	315									
	TAPE 016040	400	91.6	91.8	89.6	89.4	92.0	90.8	90.3		
	BAR 30.0 HG	500	87.7	90.1	88.8	88.2	86.7	89.3	92.9		
	(***** N/M2)	630	87.6	87.4	86.2	88.2	84.0	90.4	91.0		
	TAMB 84. DEG F	800	86.4	88.7	87.9	89.2	86.6	88.4	88.7		
	(302. DEG K)	1000	87.3	88.0	87.3	90.6	88.4	91.3	90.7		
	TWET 59. DEG F	1250	85.8	89.3	85.7	86.3	90.6	90.9	90.2		
	(288. DEG K)	1600	87.2	86.7	87.4	87.8	90.7	89.6	90.5		
	HACT 5.84 GM/M3	2000	87.3	87.7	88.0	88.2	89.1	89.5	89.1		
	(.00584 KG/M3)	2500	87.9	87.8	88.5	85.0	89.4	88.6	90.7		
	NFA 14866. RPM	3150	88.3	88.8	89.7	87.7	88.3	88.4	88.8		
	(1556. RAD/SEC)	4000	87.1	88.6	88.1	87.7	88.8	88.3	89.1		
	NFK 14520. RPM	5000	91.3	91.7	91.1	89.8	89.5	88.9	89.9		
	(1520. RAD/SEC)	6300	98.0	98.7	99.1	95.9	93.9	93.9	90.8		
	NFD 14835. RPM	8000	90.6	93.4	92.6	90.1	89.3	88.5	87.9		
	(1560. RAD/SEC)	10000	91.8	91.5	90.3	90.0	88.3	87.2	86.3		
	NO. OF BLADES 28	12500	98.2	98.1	97.2	94.9	92.5	91.2	87.7		
	FAN TIP SPEED 16000		90.9	92.0	89.5	88.3	85.9	84.2	80.5		
	1363. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED	104.0	104.6	104.1	102.6	102.0	102.1	102.0			
	PND8	115.7	116.5	116.4	114.6	113.8	113.9	113.2			
	PNLT	117.1	117.5	117.6	115.6	114.6	114.8	113.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	NO EGA	50									
		63									
		80									
		100	64.0	70.2	71.3	73.3	77.4	77.3	77.3		
		125	60.0	68.5	70.5	72.1	72.1	75.8	80.1		
	NFA 3613. RPM	160	59.9	65.8	67.9	72.1	69.5	76.9	78.3		
	( 378. RAD/SEC)	200	58.7	67.0	69.6	73.1	72.1	74.9	76.0		
	NFK 3529. RPM	250	59.4	66.2	68.9	74.4	73.8	77.8	77.9		
	( 369. RAD/SEC)	315	57.8	67.5	67.3	70.1	76.0	77.4	77.4		
	NFD 3620. RPM	400	59.0	64.8	68.9	71.6	76.0	76.0	77.7		
	( 379. RAD/SEC)	500	58.9	65.7	69.5	69.9	74.4	75.9	76.2		
	NO. OF BLADES 33	630	59.3	65.8	70.0	72.7	74.7	75.0	77.9		
	FREQ. SHIFT	800	59.3	66.5	71.0	71.3	73.5	74.7	75.8		
	JET 6	1000	57.7	66.2	69.3	71.2	73.9	74.6	76.1		
	FAN 4	1250	55.2	63.9	67.1	69.1	71.8	72.5	74.0		
	CRITICAL FREQ.	1600	56.7	64.6	67.9	69.0	70.4	70.9	72.7		
	0.	2000	59.8	68.2	71.6	72.8	74.2	74.8	76.5		
	AIRFLOW RATIO	2500	65.4	74.7	79.2	78.6	78.4	79.6	77.3		
	WE/WM 16.93	3150	56.5	68.6	72.2	72.4	73.4	73.9	74.1		
	FAN TIP SPEED	4000	55.8	65.8	69.3	71.9	72.1	72.3	72.2		
	1363. FT/SEC	5000	61.2	71.9	75.9	76.6	76.1	76.2	73.5		
		6300	51.1	64.5	67.4	69.3	69.0	68.7	65.9		
		8000	43.8	59.3	62.9	65.2	65.1	64.9	62.2		
		10000	34.6	53.1	57.7	60.5	60.6	60.6	58.0		
	OVERALL CALCULATED	72.6	81.0	84.5	85.8	87.1	88.5	89.2			
	PND8	85.3	94.7	98.6	99.3	99.8	100.9	100.2			
	PNLT	87.9	96.9	101.1	101.3	101.8	103.2	101.7			

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	100										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=80, A=0.	200										
DATE 9/18/78	250										
RUN CFT/W/R C/LT	315										
TAPE 016090	400	88.7	90.2	90.4	91.2	89.1	91.1	90.7			
BAR 30.0 HG	500	87.5	90.1	90.2	90.9	88.5	88.9	91.9			
(**** N/M2)	630	88.1	90.4	89.3	85.8	88.4	87.6	90.1			
TAMB 85. DEG F	800	88.8	88.4	88.9	85.6	87.7	88.4	87.9			
(303. DEG K)	1000	86.9	87.4	89.2	87.1	87.6	86.8	87.9			
TWET 59. DEG F	1250	87.7	88.4	87.9	85.5	88.7	87.6	89.8			
(288. DEG K)	1600	88.4	87.2	86.8	88.3	90.2	90.1	90.5			
HACT 5.28 GM/M3	2000	88.5	88.3	83.6	86.7	88.4	90.0	91.3			
(.00528 KG/M3)	2500	88.3	87.9	88.4	88.0	88.1	91.1	90.9			
NFA 15264. RPM	3150	86.7	87.3	87.5	89.0	88.0	88.3	88.8			
(1598. RAD/SEC)	4000	87.2	86.2	85.7	87.6	87.3	88.4	88.9			
NFK 14895. RPM	5000	87.7	89.0	88.7	88.7	88.1	88.2	88.9			
(1560. RAD/SEC)	6300	95.3	95.7	96.9	96.1	92.9	91.7	89.6			
NFD 14895. RPM	8000	90.8	93.1	92.4	92.7	92.9	91.5	88.0			
(1560. RAD/SEC)	10000	86.8	88.5	88.7	88.8	86.0	86.4	85.3			
NO. OF BLADES 28	12500	92.0	92.5	93.1	93.1	90.8	89.1	85.7			
FAN TIP SPEED 16000		86.2	87.8	87.6	86.9	85.0	81.6	79.8			
1399. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		101.6	102.4	102.6	102.4	101.5	101.5	101.5			
PND8		114.0	114.5	114.9	114.6	113.1	113.1	113.1			
PNLT		115.0	115.3	116.0	115.5	113.7	113.1	113.1			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100	61.1	68.8	72.1	75.1	74.5	77.6	77.9			
	125	59.8	68.5	71.9	74.8	73.9	75.4	79.1			
NFA 3710. RPM	160	60.4	68.8	71.0	69.7	73.9	74.1	77.4			
( 388. RAD/SEC)	200	61.1	66.7	70.6	69.5	73.2	74.9	75.2			
NFK 3620. RPM	250	59.0	65.6	70.8	70.9	73.0	73.3	75.1			
( 379. RAD/SEC)	315	59.7	66.6	69.5	69.3	74.1	74.1	77.0			
NFD 3620. RPM	400	60.2	65.3	68.3	72.1	75.5	76.5	77.7			
( 379. RAD/SEC)	500	60.1	66.3	65.1	70.5	73.7	76.4	78.4			
NO. OF BLADES 38	630	59.7	65.9	69.9	71.3	73.4	77.5	78.1			
FREQ. SHIFT	800	57.7	65.0	68.8	72.6	73.2	74.6	75.8			
JET 6	1000	57.9	63.8	66.9	71.2	72.5	74.7	75.9			
FAN 5	1250	57.9	66.3	69.9	72.1	73.2	74.4	75.9			
CRITICAL FREQ.	1600	60.7	68.6	73.7	75.0	73.8	73.7	73.7			
0.	2000	63.8	72.2	77.4	79.1	77.6	77.5	76.2			
AIRFLOW RATIO	2500	58.3	69.1	72.6	75.5	77.4	77.2	74.5			
WF/WM 16.93	3150	52.8	63.8	68.4	71.2	70.2	71.8	71.6			
FAN TIP SPEED	4000	56.1	66.9	72.2	75.1	74.7	74.3	71.7			
1399. FT/SEC	5000	49.7	61.7	66.4	68.7	68.7	66.6	65.7			
	6300	40.3	54.2	59.4	61.9	62.1	60.1	59.2			
	8000	33.0	49.0	54.9	57.7	58.1	56.2	55.4			
	10000	23.8	42.9	49.7	53.0	53.7	51.9	51.2			
OVERALL CALCULATED		72.1	79.9	83.9	86.0	86.7	87.8	88.7			
PND8		82.9	91.6	96.2	98.3	98.9	99.2	98.4			
PNLT		84.6	93.0	97.8	100.0	100.7	100.9	99.5			

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=8,	200										
DATE 9/18/78	250										
RUN CFT/W/R C/LT	315										
TAPE 017020	400	88.0	88.7	88.1	88.8	89.5	86.1	90.2	88.3		
BAR 30.0 HG	500	84.1	85.1	87.1	87.1	87.6	89.2	91.7	91.3		
(***** N/M2)	630	84.7	87.4	86.3	81.1	85.8	88.0	89.7	89.9		
TAMB 71. DEG F	800	84.2	87.0	86.2	87.8	88.4	88.0	86.9	88.9		
(295. DEG K)	1000	85.1	85.8	87.8	87.3	87.1	87.6	85.6	86.9		
TWET 52. DEG F	1250	87.6	87.7	85.7	87.6	86.9	86.6	87.6	88.7		
(284. DEG K)	1600	88.1	88.7	85.8	85.8	87.5	88.1	87.5	88.5		
HACT 4.70 GM/M3	2000	89.4	88.6	87.7	89.0	89.1	88.4	86.3	89.5		
( 00470 KG/M3)	2500	90.5	90.1	89.9	89.4	87.1	87.7	87.1	89.6		
NFA 13630. RPM	3150	93.8	91.6	91.6	90.1	90.1	88.2	88.5	87.6		
(1427. RAD/SEC)	4000	92.4	93.4	91.7	91.0	88.9	88.5	86.8	88.1		
NFK 13475. RPM	5000	100.3	101.9	98.4	95.4	94.6	92.6	89.9	89.5		
(1411. RAD/SEC)	6300	98.1	97.9	96.3	96.2	92.8	90.7	87.7	87.8		
NFD 14035. RPM	8000	94.9	95.4	93.8	92.2	87.6	86.8	86.2	86.3		
(1560. RAD/SEC)	10000	95.8	97.2	97.1	94.0	90.6	88.5	87.1	85.8		
NO. OF BLADES 28	12500	93.4	97.0	97.7	94.1	91.3	88.3	85.6	84.2		
FAN TIP SPEED 16000	16000	92.6	95.9	95.6	92.1	90.4	86.3	82.2	79.7		
1249. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		105.7	106.9	105.5	103.7	102.1	100.7	100.3	100.6		
PNOB		118.6	119.6	117.3	115.5	114.5	113.2	111.7	112.0		
PNLT		120.3	121.7	118.8	118.7	115.9	114.2	111.7	112.0		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	60.5	67.2	67.9	72.8	75.0	72.7	77.5	76.0		
	125	56.5	63.6	68.9	71.1	73.1	75.8	79.0	79.0		
NFA 3313. RPM	160	57.0	65.8	68.0	65.0	71.3	74.5	77.0	77.6		
( 347. RAD/SEC)	200	56.5	65.3	67.9	71.7	73.9	72.5	74.2	76.6		
NFK 3275. RPM	250	57.2	64.0	69.2	71.1	72.5	74.1	72.8	74.8		
( 343. RAD/SEC)	315	59.6	65.9	67.3	71.4	72.3	73.1	74.8	76.3		
NFD 3626. RPM	400	59.9	66.8	67.3	69.6	72.8	74.5	74.7	76.1		
( 379. RAD/SEC)	500	61.0	66.6	69.2	72.7	74.4	74.8	73.4	77.1		
NO. OF BLADES 38	630	61.9	68.1	71.4	73.2	72.4	74.1	74.3	77.2		
FREQ. SHIFT	800	64.8	69.3	72.9	73.7	75.3	74.5	75.5	75.1		
JET 6	1000	63.1	71.5	72.9	74.5	74.1	74.8	73.8	75.5		
FAN 5	1250	66.5	75.2	75.5	74.8	75.7	74.8	72.9	73.5		
CRITICAL FREQ.	1600	69.7	78.9	79.2	78.6	79.5	78.7	76.7	78.3		
0.	2000	66.6	74.4	76.7	79.1	77.5	76.5	74.3	74.4		
AIRFLOW RATIO	2500	62.3	71.4	73.9	74.9	72.1	72.5	72.7	73.7		
WF/WM 16.93	3150	61.8	72.5	76.8	76.4	74.9	74.0	73.4	72.6		
FAN TIP SPEED	4000	57.4	71.3	76.7	76.0	75.1	73.4	71.6	70.6		
1249. FT/SEC	5000	55.7	69.8	74.4	73.9	74.1	71.3	68.1	66.1		
	6300	49.7	65.3	70.4	70.1	70.4	67.8	64.6	62.6		
	8000	42.4	60.1	65.9	65.9	66.5	63.9	60.8	58.8		
	10000	33.2	53.9	60.7	61.2	62.1	59.6	56.6	54.7		
OVERALL CALCULATED		75.5	84.1	86.4	87.1	87.4	87.2	87.5	88.2		
PNOB		86.8	96.3	99.4	99.8	99.4	98.7	98.0	98.0		
PNLT		88.3	97.7	100.4	100.4	99.4	98.7	99.1	98.0		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=8,	200										
DATE 9/18/78	250										
RUN CFT/W/R C/LT	315										
TAPE 017030	400	91.7	89.3	91.8	88.5	90.3	91.5	92.0	91.5		
BAR 30.0 HG	500	91.0	87.4	87.8	82.8	89.9	89.7	91.9	91.5		
(***** N/M2)	630	89.3	88.7	88.0	84.9	89.5	88.1	91.6	89.2		
TAMB 73. DEG F	800	88.7	88.7	90.6	89.3	90.4	87.9	91.4	88.5		
(296. DEG K)	1000	87.1	89.2	88.2	88.0	87.8	87.3	90.3	90.2		
TWET 52. DEG F	1250	86.1	85.6	88.2	89.2	89.1	90.8	89.1	91.3		
(284. DEG K)	1600	87.4	86.2	87.5	87.8	89.8	91.1	89.4	91.3		
HACT 4.14 GM/M3	2000	88.9	87.0	88.1	89.9	89.1	89.4	90.1	89.6		
(.00414 KG/M3)	2500	88.1	89.5	89.6	89.3	91.4	91.0	92.0	92.8		
NFA 14714. RPM	3150	87.8	89.3	89.6	88.2	88.7	89.5	89.2	89.4		
(1541. RAD/SEC)	4000	86.9	87.9	88.7	88.7	88.5	89.4	89.3	90.2		
NFK 14519. RPM	5000	92.8	91.5	92.2	90.6	91.1	89.9	90.0	89.7		
(1520. RAD/SEC)	6300	98.2	99.1	97.9	98.8	95.2	92.7	91.5	89.4		
NFD 14895. RPM	8000	91.3	92.7	91.5	90.2	89.7	89.0	87.8	89.3		
(1560. RAD/SEC)	10000	91.9	92.9	91.6	90.5	90.7	88.1	88.5	88.4		
NO. OF BLADES 28	12500	97.0	96.2	96.4	95.1	94.0	91.9	90.1	87.7		
FAN TIP SPEED 18000	16000	90.4	91.6	91.0	88.9	87.7	85.4	81.7	81.2		
1349. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED	104.1	104.6	104.0	103.5	103.0	102.2	102.5	102.3			
PNDB	116.1	116.5	116.1	116.2	114.8	113.7	114.0	114.2			
PNLT	117.5	117.7	117.2	117.7	115.9	114.2	114.0	115.3			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
	80										
NFA 3576. RPM	100	64.2	67.8	73.6	72.5	75.8	78.1	79.3	79.2		
	125	63.4	65.9	69.6	68.8	75.4	76.3	79.2	79.2		
( 374. RAD/SEC)	160	61.6	67.1	69.7	68.8	75.0	74.6	78.9	76.9		
NFK 3529. RPM	200	61.0	67.0	72.3	73.2	75.9	74.4	78.7	76.2		
( 363. RAD/SEC)	250	59.2	67.4	69.8	71.8	73.2	73.8	77.5	77.8		
	315	58.1	63.8	69.8	73.0	74.5	77.1	76.3	78.9		
NFD 3620. RPM	400	59.2	64.3	69.0	71.6	75.2	77.5	76.6	78.9		
( 379. RAD/SEC)	500	60.5	65.0	69.6	73.7	74.4	75.8	77.2	77.2		
NO. OF BLADES 33	630	59.5	67.4	71.0	73.0	76.7	77.3	79.1	80.3		
FREQ. SHIFT	800	58.6	67.0	70.9	71.8	73.9	75.8	76.3	76.9		
JET 6	1000	57.6	65.5	69.9	72.3	73.7	75.7	76.4	77.7		
FAN 4	1250	55.1	63.2	67.8	70.1	71.6	73.6	74.3	75.6		
CRITICAL FREQ.	1600	58.1	64.4	68.9	69.8	71.9	71.9	72.8	73.5		
0.	2000	61.3	67.9	72.5	73.5	75.7	75.7	76.6	76.7		
AIRFLOW RATIO	2500	65.6	75.0	78.0	81.5	79.7	78.4	78.0	78.3		
WF/WM 16.93	3150	57.2	67.9	71.1	72.5	73.8	74.4	74.0	76.0		
FAN TIP SPEED 4000	4000	55.9	67.2	70.6	72.4	74.5	73.2	74.4	74.8		
1349. FT/SEC	5000	59.9	72.0	75.1	76.7	77.6	76.8	75.9	74.0		
	6300	50.6	64.0	68.8	69.9	70.8	69.9	67.1	67.1		
	8000	43.3	58.9	64.3	65.7	66.8	66.0	63.3	63.4		
OVERALL CALCULATED	10000	34.0	52.7	59.2	61.1	62.4	61.8	59.2	59.3		
PNDB	73.3	80.8	84.7	86.6	88.0	88.6	89.7	90.0			
PNLT	85.6	94.7	98.3	100.8	101.0	100.7	100.9	100.7			
	87.9	97.1	100.4	103.6	103.0	102.5	102.6	101.8			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VC=80, A=8,	200										
DATE 9/18/73	250										
RUN CFT/W/R C/LT	315										
TAPE 017070	400	91.5	91.2	90.9	90.1	91.5	91.2	92.1	91.0		
BAR 30.0 HG	500	83.7	90.1	91.6	88.7	90.6	91.2	91.0	92.2		
(**** N/M2)	630	86.9	87.9	88.2	87.4	88.8	87.0	89.3	90.6		
TAMB 76. DEG F	800	88.1	86.5	89.2	89.3	89.3	88.7	91.4	91.0		
(200. DEG K)	1000	86.6	88.3	89.2	89.8	87.7	88.6	88.9	91.2		
TWET 52. DEG F	1250	86.4	88.3	88.2	90.6	91.4	89.8	90.1	90.8		
(200. DEG K)	1600	89.3	88.7	88.9	88.7	90.9	88.8	89.4	90.9		
MACT 3.30 GM/M3	2000	87.0	87.7	88.7	89.2	89.4	90.0	88.9	90.9		
(.00330 KG/M3)	2500	89.5	88.2	90.2	89.8	90.2	91.6	91.4	91.8		
NFA 15137. RPM	3150	86.7	88.9	89.2	89.9	88.9	88.8	90.2	90.6		
(1585. RAD/SEC)	4000	85.5	87.4	88.5	86.4	88.8	89.0	89.5	89.0		
NFK 14895. RPM	5000	89.2	89.5	88.7	88.8	89.6	89.1	88.8	90.4		
(1559. RAD/SEC)	6300	95.9	95.7	96.4	95.3	92.5	92.7	91.3	90.3		
NFD 14895. RPM	8000	91.4	92.0	92.2	90.4	89.1	88.8	89.2	89.8		
(1560. RAD/SEC)	10000	87.5	89.3	89.0	87.2	85.9	87.2	87.4	87.1		
NO. OF BLADES 28	12500	90.5	93.8	93.0	91.4	89.9	89.1	88.0	88.5		
FAN TIP SPEED 16000	1388. FT/SEC	84.0	87.5	86.7	85.0	83.9	82.3	80.3	80.6		
1388. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		101.8	102.5	102.9	102.2	102.0	101.8	102.1	102.5		
PNCB		114.4	114.5	115.2	114.5	113.5	113.5	113.6	114.1		
PNLT		115.3	115.3	116.2	115.6	114.0	114.1	113.6	114.1		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	63.9	69.6	72.6	74.0	76.9	77.7	79.3	78.6		
	125	61.1	68.5	73.3	72.6	76.0	77.7	78.2	78.8		
NFA 3679. RPM	160	59.2	66.3	69.9	71.3	74.3	73.6	76.6	76.3		
( 385. RAD/SEC)	200	60.4	64.8	70.9	73.2	74.8	75.2	78.7	78.7		
NFK 3620. RPM	250	58.7	66.6	70.8	73.7	73.1	75.1	76.1	78.8		
( 379. RAD/SEC)	315	58.4	66.5	69.8	74.4	76.8	76.3	77.3	76.4		
NFD 3620. RPM	400	61.1	66.8	68.5	72.5	76.3	75.3	76.6	78.5		
( 379. RAD/SEC)	500	58.7	65.8	70.2	73.0	74.8	76.4	76.1	78.5		
NO. OF BLADES 38	630	60.9	66.1	71.6	73.5	75.5	78.0	78.5	79.3		
FREQ. SHIFT	800	57.8	64.7	70.6	73.6	74.2	75.2	77.3	78.1		
JET 6	1000	56.2	65.0	69.7	69.9	74.0	75.3	76.5	76.4		
FAN 4	1250	53.6	62.7	67.5	66.3	71.8	73.2	74.4	74.4		
CRITICAL FREQ.	1600	54.6	62.5	65.5	68.1	70.5	71.1	72.3	73.7		
0.	2000	57.7	66.0	69.2	71.8	74.3	74.9	75.5	77.5		
AIRFLOW RATIO	2500	63.3	71.6	76.5	78.0	77.0	78.4	77.8	77.2		
WF/WM 16.93	3150	57.3	67.2	71.8	72.7	73.3	74.2	75.4	76.5		
FAN TIP SPEED	4000	51.5	63.5	68.0	69.0	69.6	72.2	73.3	73.5		
1387. FT/SEC	5000	53.5	67.6	71.7	73.1	73.5	74.1	73.8	72.8		
	6300	44.2	59.9	64.5	66.0	67.0	66.8	65.7	66.5		
	8000	36.9	54.8	60.0	61.8	63.0	62.9	61.9	62.8		
	10000	27.6	48.6	54.8	57.1	58.6	58.7	57.7	58.7		
OVERALL CALCULATED		71.9	79.4	83.8	85.6	87.3	88.2	89.3	90.2		
PNCB		83.4	92.3	96.9	96.6	99.1	100.2	100.5	100.9		
PNLT		95.3	94.2	99.2	100.5	100.9	102.0	101.9	100.9		



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	160										
VEHICLE JT15RD	180										
CONFIG 40X80	200										
LOC VO=80, A=15,	250										
DATE 9/18/78	315										
RUN CFT/W/R C/LT	400	92.9	92.5	92.1	94.0	93.5	93.5	91.3	94.7		
TAPE 018010	500	90.0	93.1	90.4	92.0	92.5	94.5	91.9	90.1		
BAR 30.0 HG	630	90.0	89.4	89.9	91.9	92.0	91.7	91.0	87.9		
(***** N/M2)	800	88.1	90.1	87.8	89.3	90.8	89.1	88.9	91.4		
TAMB 77. DEG F	1000	91.6	87.2	89.3	89.0	89.0	90.2	90.7	89.6		
(298. DEG K)	1250	88.2	87.9	89.2	89.0	88.4	90.7	90.7	92.1		
TWET 56. DEG F	1600	88.6	88.7	90.6	90.1	89.5	90.7	91.0	92.0		
(268. DEG K)	2000	88.0	89.0	88.8	88.3	90.0	88.2	91.1	92.2		
HACT 5.10 GM/M3	2500	88.9	89.1	90.6	88.1	90.9	90.6	91.7	92.1		
(.00510 KG/M3)	3150	88.3	88.9	88.1	88.9	87.8	89.3	90.0	91.3		
NFA 15151. RPM	4000	88.5	88.6	88.1	88.2	88.5	87.7	89.4	89.7		
(1588. RAD/SEC)	5000	89.7	88.7	89.2	88.1	89.0	89.1	90.2	90.1		
NFK 14895. RPM	6300	97.0	96.3	95.9	95.7	94.5	92.8	90.3	91.3		
(1559. RAD/SEC)	8000	91.1	90.5	91.9	92.1	89.8	88.5	88.9	89.3		
NFD 14895. RPM	10000	88.5	88.0	88.5	87.5	88.7	86.7	87.7	88.7		
(1560. RAD/SEC)	12500	91.8	93.6	93.3	92.4	90.8	89.2	88.8	87.9		
NO. OF BLADES 28	16000	83.7	88.1	87.2	85.3	85.5	81.8	80.1	81.3		
FAN TIP SPEED	20000										
1389. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		102.7	103.0	103.0	103.1	102.8	102.8	102.4	103.1		
PNDB		115.2	115.0	115.1	115.0	114.5	113.9	113.9	114.5		
PNLT		116.3	116.1	116.0	115.9	115.4	114.6	113.9	114.5		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100	85.3	70.9	73.8	77.9	78.9	80.0	78.5	82.3		
	125	62.3	71.5	72.1	75.9	77.9	81.0	79.1	77.7		
NFA 3682. RPM	160	62.3	67.8	71.6	75.8	77.5	78.2	78.3	75.6		
( 386. RAD/SEC)	200	60.4	68.4	69.5	73.2	76.3	75.6	78.2	79.1		
NFK 3620. RPM	250	63.7	65.4	70.9	72.8	74.4	76.7	77.9	77.2		
( 379. RAD/SEC)	315	60.2	66.1	70.8	72.8	73.8	77.2	77.9	79.7		
NFD 3620. RPM	400	60.4	68.8	72.1	73.9	74.8	77.1	78.2	79.6		
( 379. RAD/SEC)	500	59.6	67.0	70.3	72.0	75.3	75.3	78.2	79.8		
NO. OF BLADES 38	630	58.3	67.1	72.1	71.9	76.2	77.2	78.9	70.7		
FREQ. SHIFT	800	57.3	64.6	69.4	72.5	73.0	75.6	77.0	78.8		
JET 6	1000	57.2	64.2	69.3	71.7	73.7	74.0	76.4	77.1		
FAN 4	1250	54.6	61.9	67.1	69.6	71.5	71.9	74.3	75.1		
CRITICAL FREQ.	1600	55.1	61.6	68.0	67.4	69.9	71.2	73.0	73.4		
0.	2000	58.2	65.2	69.7	71.1	73.7	75.0	76.9	77.2		
AIRFLOW RATIO	2500	64.4	72.3	76.0	78.4	79.0	78.5	77.0	78.3		
WE/WI 16.93	3150	57.0	65.7	71.5	74.4	74.0	73.9	75.1	76.0		
FAN TIP SPEED	4000	50.5	62.3	67.5	69.4	70.5	71.8	73.8	76.1		
1389. FT/SEC	5000	54.7	67.3	71.9	74.0	74.4	74.1	74.6	74.2		
	6300	43.8	60.5	65.0	66.3	68.6	66.3	65.5	67.2		
	8000	36.5	55.3	60.5	62.1	64.6	62.4	61.7	63.4		
	10000	27.3	49.2	55.3	57.4	60.2	58.2	57.5	59.3		
OVERALL CALCULATED		73.0	80.1	83.9	86.6	88.1	89.2	89.7	90.7		
PNDB		84.2	92.6	96.8	99.1	100.3	100.5	100.5	101.5		
PNLT		86.8	94.9	98.7	101.2	102.4	102.2	102.1	101.5		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )	(0. )
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LOC VO=80, A=15.	160										
DATE 9/18/78	200										
RUN CFT/W/R C/LT	250										
TAPE 018020	315										
BAR 30.0 HQ	400	92.9	91.3	88.5	91.2	92.1	89.8	90.2	91.8		
(***** N/M2)	500	89.7	90.8	87.7	90.8	90.8	90.2	89.6	91.8		
TAMB 78. DEG F	630	89.3	88.9	89.3	89.7	88.2	87.8	88.2	91.8		
(299. DEG K)	800	88.9	88.8	91.2	88.8	88.3	89.3	89.9	90.8		
THET 56. DEG F	1000	86.3	91.2	89.3	90.2	86.8	90.0	87.8	90.8		
(286. DEG K)	1250	89.1	88.0	87.9	89.4	90.3	89.8	89.6	90.3		
HACT 4.82 GM/M3	1600	88.6	88.3	88.5	90.0	90.2	89.7	90.6	92.4		
(.00482 KG/M3)	2000	88.5	89.1	88.8	90.2	89.8	90.9	91.2	91.2		
NFA 14783. RPM	2500	89.5	89.2	89.2	90.1	90.7	89.4	89.7	91.2		
(1548. RAD/SEC)	3150	87.2	87.2	87.8	88.6	88.7	89.9	89.9	89.7		
NFK 14519. RPM	4000	87.5	87.8	88.7	87.6	89.3	89.0	88.9	90.1		
(1520. RAD/SEC)	5000	90.2	92.3	90.2	92.2	91.3	90.8	89.5	90.6		
NFD 14895. RPM	6300	98.9	99.5	98.3	99.6	98.8	96.0	93.8	91.9		
(1560. RAD/SEC)	8000	91.5	91.6	91.4	90.9	90.4	89.0	88.4	88.3		
NO. OF BLADES 28	10000	91.3	91.4	91.3	90.9	89.8	89.0	88.4	88.5		
FAN TIP SPEED 16000	12500	96.2	97.1	96.5	96.3	94.0	92.8	90.8	89.8		
1355. FT/SEC	20000	88.4	89.9	91.2	89.9	88.2	85.7	82.3	82.2		
OVERALL MEASURED											
OVERALL CALCULATED		104.0	104.6	103.9	104.6	103.4	102.8	102.1	102.8		
PNOB		116.4	116.9	116.0	117.2	115.6	115.2	114.1	114.0		
PNLT		117.7	118.2	117.2	118.8	116.8	116.2	114.9	114.0		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )	(0. )
NO EGA	50										
	63										
	80										
	100	65.3	69.7	70.2	75.1	77.5	76.1	77.4	79.4		
	125	62.0	69.2	69.4	74.7	76.2	76.7	76.6	79.2		
NFA 3093. RPM	160	61.6	64.3	71.0	73.6	73.7	74.3	75.5	79.5		
( 376. RAD/SEC)	200	61.2	67.1	72.9	72.7	73.6	75.8	77.2	78.3		
NFK 3529. RPM	250	58.4	69.4	70.9	74.0	72.2	76.5	78.0	78.1		
( 369. RAD/SEC)	315	61.1	66.2	69.5	73.2	75.7	76.3	76.8	77.9		
NFD 3620. RPM	400	58.4	66.4	71.1	73.8	75.5	76.1	77.8	80.0		
( 379. RAD/SEC)	500	60.1	67.1	68.3	74.0	74.9	77.3	78.3	78.8		
NO OF BLADES 38	630	60.9	67.2	70.7	73.9	76.0	75.8	76.9	78.8		
FREQ. SHIFT	300	58.2	64.9	69.1	72.2	73.9	76.2	76.9	77.2		
JET 6	1000	58.2	65.4	67.9	71.2	74.5	75.3	75.9	77.6		
FAN 4	1250	55.6	63.1	65.7	69.0	72.4	73.2	73.8	75.5		
CRITICAL FREQ.	1600	55.6	65.3	67.0	71.4	72.2	72.9	72.3	73.9		
0.	2000	58.7	68.8	70.7	75.2	76.0	76.7	76.2	77.7		
AIRFLOW RATIO	2500	66.3	75.4	78.4	82.3	81.2	81.6	80.2	78.8		
WF WM 15.53	3150	57.5	66.9	71.1	73.3	74.6	74.4	74.7	75.0		
FAN TIP SPEED	4000	55.2	65.6	70.3	72.7	73.3	74.0	74.3	74.9		
1355. FT/SEC	5000	59.2	70.9	75.2	76.0	77.6	77.7	76.6	75.9		
	6300	48.6	62.4	69.1	70.9	71.3	70.2	67.8	68.2		
	8000	41.3	57.2	64.6	66.8	67.4	66.4	64.0	64.4		
	10000	32.1	51.0	59.4	62.1	62.9	62.1	59.8	60.3		
OVERALL CALCULATED		73.3	81.2	84.4	87.8	88.4	89.1	89.2	90.5		
PNOB		85.7	94.9	98.3	101.8	101.8	102.3	101.7	101.7		
PNLT		88.4	97.4	100.8	104.5	103.8	104.3	103.8	103.2		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10	20	30	40	50	60	70	80	90	0
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT19RD	125										
CONFIG 40X80	160										
LOC VG=80, A=15,	200										
DATE 9/19/78	250										
RUN CFT/W/R C/L*	315										
TAPE 018080	400	88.8	90.4	84.7	88.7	91.2	88.0	92.6	88.8		
BAR 30.0 M2	500	85.0	88.2	88.8	87.3	87.8	89.1	90.6	88.4		
(***** N/M2)	630	88.9	83.1	78.4	85.3	88.9	88.1	90.7	87.0		
TAMB 79. DEG F	800	86.3	87.1	88.4	87.4	88.3	88.8	89.8	87.9		
(299. DEG K)	1000	86.3	86.1	87.5	87.0	88.0	87.2	85.5	85.8		
TWET 56. DEG F	1250	88.1	88.0	86.8	89.0	89.1	87.3	88.8	89.1		
(286. DEG K)	1600	88.8	88.1	88.1	87.3	88.8	87.1	88.0	88.7		
HACT 4.54 GM/M3	2000	88.3	88.7	87.3	88.3	89.6	90.3	87.7	88.7		
(.00454 KG/M3)	2500	89.8	89.5	89.1	89.6	88.8	87.1	88.1	89.0		
NFA 13732. RPM	3150	91.2	92.2	92.1	90.0	89.8	89.9	89.0	88.0		
(1439. RAD/SEC)	4000	92.0	91.9	91.5	90.2	90.0	87.9	88.0	87.6		
NFK 13475. RPM	5000	100.3	101.3	99.0	94.3	94.0	92.4	89.9	89.8		
(1411. RAD/SEC)	6300	97.8	98.6	97.2	97.1	94.3	90.9	89.0	88.7		
NFD 14895. RPM	8000	94.1	95.5	93.3	92.8	89.6	87.3	86.6	86.2		
(1560. RAD/SEC)	10000	98.5	97.9	98.4	95.4	90.8	89.0	87.1	88.4		
NO. OF BLADES 28	12500	97.1	98.0	96.1	95.4	91.1	89.4	86.6	85.1		
FAN TIP SPEED 16000	16000	94.4	95.1	96.2	93.6	90.3	88.1	83.8	81.3		
1259. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.0	106.9	105.4	104.2	102.8	101.2	101.0	100.2		
PNOB		118.4	119.3	117.3	115.9	114.5	113.2	112.2	111.9		
PNLT		120.2	121.3	119.7	117.1	115.5	114.3	112.2	111.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10	20	30	40	50	60	70	80	90	0
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	50										
NO EGA	63										
	80										
	100	61.2	68.8	66.4	72.6	76.6	74.5	79.8	76.4		
	125	57.3	64.6	50.5	71.2	73.2	75.6	77.8	76.0		
NFA 3337. RPM	160	61.2	61.5	60.1	69.2	72.4	72.6	78.0	74.7		
( 343. RAD/SEC)	200	58.6	65.4	70.1	71.3	73.8	75.3	77.1	75.6		
NFK 5275. RPM	250	58.4	64.3	69.1	70.8	71.4	73.7	72.7	75.4		
( 343. RAD/SEC)	315	60.1	66.2	68.2	72.8	74.5	73.8	76.0	76.7		
NFD 3620. RPM	400	57.6	66.2	69.8	71.1	74.0	73.5	75.2	77.3		
( 373. RAD/SEC)	500	59.9	66.7	68.8	72.1	74.9	76.7	74.8	73.3		
NO. OF BLADES 38	630	61.1	67.4	70.5	73.3	71.8	73.4	75.5	76.5		
FREQ. SHIFT	800	62.2	69.9	73.4	73.6	74.8	75.8	75.1	75.5		
JET 6	1000	62.9	70.8	72.7	73.8	75.2	74.2	75.1	75.1		
FAN 5	1250	66.4	74.6	76.0	73.7	75.0	74.5	73.0	73.1		
CRITICAL FREQ.	1600	69.6	78.2	79.7	77.5	76.8	78.4	76.7	77.0		
0.	2000	66.3	75.1	77.7	80.1	79.0	76.8	75.7	76.8		
AIRFLOW RATIO	2500	61.5	72.4	73.6	73.5	74.1	73.0	73.1	73.1		
WF/WM 16.9%	3150	62.5	73.2	76.1	77.8	75.0	74.5	73.4	73.2		
FAN TIP SPEED	4000	61.1	72.3	75.1	77.3	74.9	74.5	72.6	71.6		
1259. FT/SEC	5000	57.5	69.1	75.1	75.4	74.1	73.2	69.8	67.8		
	6300	51.6	64.6	71.0	71.6	70.4	69.6	66.2	64.2		
	8000	44.3	59.4	66.5	67.5	66.4	65.8	62.4	60.5		
	10000	35.0	53.2	61.4	62.0	62.0	61.5	58.3	56.4		
OVERALL CALCULATED		75.5	84.0	86.4	87.6	87.8	87.6	88.2	87.8		
PNOB		87.1	96.1	99.0	100.7	99.9	99.2	98.6	98.2		
PNLT		88.2	97.2	100.2	101.9	99.9	100.3	98.6	98.2		

MODEL SOUND PRESSURE LEVELS

	ANGLES FROM INLET IN DEGREES								
FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
NO EGA	50								
RADIAL 12. FT.	63								
( 4. M)	100								
VEHICLE JT15RD	125								
CONFIG 40X80	160								
LOC VO=115, A=0,	200								
DATE 9/18/78	250								
RUN CFT/W/R 12/M	315								
TAPE 019010	400	75.3	74.6	81.8	90.0	74.0	74.4	74.8	
BAR 30.0 HG	500	73.1	83.9	87.8	91.4	73.3	72.9	85.4	
(***** N/M2)	630	73.8	87.5	75.0	74.6	73.8	79.7	87.0	
TAMB 80. DEG F	800	74.7	75.1	73.9	85.4	72.8	77.9	83.9	
(300. DEG K)	1000	88.3	83.2	85.4	85.8	85.7	87.9	90.2	
TWET 57. DEG F	1250	90.9	82.7	89.1	86.8	83.0	90.5	90.7	
(287. DEG K)	1600	91.2	83.2	88.0	86.3	88.9	84.0	88.9	
HACT 5.28 GM/M3	2000	91.1	86.9	87.5	86.1	85.5	89.5	90.8	
(.00528 KG/M3)	2500	90.1	90.8	89.6	86.1	91.9	85.2	91.0	
NFA 13746. RPM	3150	91.9	92.3	90.6	92.5	90.8	90.2	91.9	
(1439. RAD/SEC)	4000	94.9	92.9	90.1	89.6	86.2	83.8	89.5	
NFK 13478. RPM	6000	101.7	96.3	97.0	93.8	89.5	88.1	89.9	
(1411. RAD/SEC)	8300	100.4	94.0	96.2	94.3	91.4	87.3	89.2	
NFD 14895. RPM	8000	95.8	93.7	93.0	87.4	86.7	83.1	86.5	
(1560. RAD/SEC)	10000	97.2	98.3	94.6	90.8	85.4	84.5	84.5	
NO. OF BLADES 28	12500	98.6	97.1	94.0	92.0	85.1	81.9	85.0	
FAN TIP SPEED 16000	20000	96.0	94.5	93.1	89.8	82.3	82.5	83.8	
1260. FT/SEC	20000								
OVERALL MEASURED									
OVERALL CALCULATED	107.5	104.9	104.0	102.3	99.3	98.2	100.8		
PND8	119.5	115.7	116.0	114.1	111.7	110.8	113.4		
PNLT	121.3	118.4	119.1	117.1	114.3	113.6	114.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

	ANGLES FROM INLET IN DEGREES								
FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
NO EGA	50								
	63								
	80								
	100	47.7	53.0	63.5	73.9	59.4	60.9	61.8	
	125	45.4	62.3	69.5	75.3	58.7	59.4	72.8	
NFA 3341. RPM	160	46.1	65.9	56.7	58.5	59.3	66.2	74.3	
( 350. RAD/SEC)	200	47.0	53.4	55.6	69.3	58.3	64.4	71.2	
NFK 3275. RPM	250	60.4	61.4	67.0	69.4	71.1	74.4	77.4	
( 343. RAD/SEC)	315	62.9	60.9	70.7	70.6	68.4	77.0	77.9	
NFD 3620. RPM	400	63.0	61.3	69.5	70.1	74.2	70.4	76.1	
( 379. RAD/SEC)	500	62.7	64.9	69.0	69.8	70.8	75.9	77.9	
NO. OF BLADES 38	630	61.5	68.8	71.1	69.9	77.2	71.6	78.2	
FREQ. SHIFT	800	62.9	70.0	71.9	76.1	76.0	76.5	78.9	
JET 6	1000	65.8	70.5	71.3	73.1	71.4	70.1	76.5	
FAN 5	1250	67.9	69.6	74.1	73.2	70.6	70.3	74.1	
CRITICAL FREQ.	1600	71.1	73.2	77.8	77.0	74.4	74.2	76.7	
0.	2000	69.0	70.8	78.7	77.3	76.2	73.2	75.9	
AIRFLOW RATIO	2500	63.2	69.7	73.1	70.1	71.2	68.8	73.0	
WF/W1 16.93	3150	63.2	73.6	74.3	73.2	69.7	70.0	70.8	
FAN TIP SPEED	4000	62.6	71.4	73.0	73.9	68.9	67.0	71.0	
1260. FT/SEC	5000	59.1	68.4	71.9	71.6	66.0	67.6	69.7	
	6300	53.1	63.9	67.9	67.8	62.4	64.0	66.2	
	8000	45.9	58.7	63.4	63.6	58.4	60.1	62.4	
	10000	36.6	52.6	58.2	58.9	54.0	55.9	58.2	
OVERALL CALCULATED	76.8	81.5	84.9	85.8	84.5	84.7	88.1		
PND8	88.2	94.9	97.4	97.8	95.9	95.0	98.2		
PNLT	89.1	96.2	98.9	99.3	97.2	96.9	98.7		

C-3

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NO EGA											
RADIAL 12. FT.											
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	163										
LOC VO=115, A=0,	200										
DATE 9/18/78	250										
RUN CFT/W/R C/LT	315										
TAPE 019020	400	75.6	75.5	90.5	75.2	75.7	75.1	75.8			
BAR 30.0 HG	500	74.1	85.0	75.4	73.4	87.1	83.9	90.2			
(***** N/M2)	630	78.0	87.5	85.3	75.0	73.3	88.4	92.4			
TAMB 82. DEG F	800	74.5	75.0	91.1	90.7	90.8	74.2	90.1			
(301. DEG K)	1000	82.8	85.4	80.9	85.0	86.5	87.9	88.0			
TWET 57. DEG F	1250	86.8	87.8	92.6	86.6	90.5	88.8	86.9			
(287. DEG K)	1600	90.9	86.9	87.3	87.3	90.9	84.7	88.9			
HACT 4.71 GM/M3	2000	92.1	86.4	88.8	90.4	88.8	89.7	90.1			
(.00471 KG/M3)	2500	92.3	91.8	86.8	86.6	90.7	90.5	92.5			
NFA 14256. RPM	3150	88.1	86.1	90.6	91.9	87.1	83.9	93.1			
(1493. RAD/SEC)	4000	89.9	91.1	90.9	90.5	87.7	87.8	89.6			
NFK 13950. RPM	5000	96.6	95.1	96.7	92.4	91.2	89.0	88.5			
(1461. RAD/SEC)	6300	99.3	97.8	97.9	95.1	95.1	92.5	89.5			
NFD 14895. RPM	8000	93.4	94.0	92.7	91.2	89.4	86.5	86.1			
(1560. RAD/SEC)	10000	96.4	96.6	94.6	92.0	90.2	87.8	86.2			
NO. OF BLADES 28	12500	100.5	100.0	97.3	95.8	92.2	88.8	85.1			
FAN TIP SPEED 16000		95.4	95.3	93.3	91.1	87.7	84.2	79.4			
1307. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.2	105.5	105.0	103.0	102.1	100.1	101.6			
PNDB		116.8	115.9	116.4	114.1	114.1	112.0	114.2			
PNLT		118.3	118.4	120.4	117.7	118.3	115.1	115.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NO EGA											
NFA 3485. RPM	100	48.0	53.9	72.2	59.1	61.1	61.6	63.0			
( 363. RAD/SEC)	125	46.4	63.4	57.1	57.3	72.5	70.4	77.4			
NFK 3390. RPM	160	50.3	65.9	67.0	58.9	58.8	74.9	79.7			
( 355. RAD/SEC)	200	46.8	53.3	72.8	74.6	76.3	60.7	77.4			
NFD 3620. RPM	250	54.9	63.6	62.5	68.8	71.9	74.4	75.2			
( 379. RAD/SEC)	315	58.8	66.0	74.2	70.4	75.9	75.3	74.1			
NO. OF BLADES 38	400	62.7	65.0	68.8	71.1	76.3	71.1	76.1			
FREQ. SHIFT	500	63.7	64.4	70.3	74.2	74.1	76.1	77.2			
JET 6	630	63.7	69.8	68.1	70.4	76.0	76.9	79.7			
FAN 5	800	59.1	63.8	71.9	75.5	72.3	70.2	80.2			
CRITICAL FREQ. 0.	1000	60.6	68.7	72.1	74.1	72.9	74.1	76.6			
AIRFLOW RATIO WF/WM 16.93	1250	62.7	68.4	73.7	71.9	72.2	72.0	73.1			
FAN TIP SPEED 4000	1600	65.9	72.0	77.4	75.6	76.0	75.0	75.3			
1307. FT/SEC	2000	67.8	74.3	78.4	78.1	79.8	78.4	76.2			
OVERALL CALCULATED	2500	60.8	69.9	72.8	73.9	73.9	72.2	72.6			
PNDB	3150	62.4	71.9	74.3	74.4	74.4	73.3	72.5			
PNLT	4000	64.5	74.3	76.4	77.7	76.0	73.9	71.1			
OVERALL CALCULATED	5000	58.5	69.3	72.2	72.9	71.5	69.3	65.4			
PNDB	6300	52.6	64.8	68.1	69.1	67.8	65.7	61.8			
PNLT	8000	45.3	59.6	63.7	65.0	63.8	61.9	58.0			
OVERALL CALCULATED	10000	36.1	53.4	58.5	60.3	59.4	57.6	53.9			
PNDB		74.5	81.8	85.9	86.2	87.2	86.4	88.7			
PNLT		86.7	95.5	98.7	99.5	99.6	98.3	98.2			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	NO=115, A=0,	200									
DATE	5/18/78	250									
RUN	CFT/W/R C/LT	315									
TAPE	019050	400	74.9	75.7	92.8	75.5	74.8	75.1	75.1		
BAR	30.0 HG	500	74.1	74.0	85.2	89.1	87.1	76.7	76.9		
(***** N/M2)	630	90.1	86.8	85.3	75.2	86.3	91.4	91.0			
TAMB	81. DEG F	800	74.3	89.8	89.4	74.2	88.7	89.6	88.7		
(300. DEG F)	1000	92.5	88.5	90.1	87.2	88.7	90.3	90.7			
TWET	57. DEG F	1250	90.6	88.8	92.4	78.9	88.3	90.3	90.2		
(287. DEG K)	1600	88.0	89.2	86.4	85.1	87.2	91.2	90.5			
HACT	4.99 GM/M3	2000	88.6	84.7	84.8	88.7	88.5	91.9	89.1		
(.00499 KG/M3)	2500	88.4	91.8	86.1	82.8	88.2	88.9	90.7			
NFA	14825. RPM	3150	85.9	89.8	88.3	90.7	91.2	86.9	88.8		
(1552. RAD/SEC)	4000	87.2	87.5	84.9	87.9	89.6	84.6	89.1			
NFK	14520. RPM	5000	92.1	91.3	90.5	88.6	88.2	88.6	89.9		
(1520. RAD/SEC)	6300	99.0	97.9	98.2	95.5	94.3	91.5	90.9			
NFD	14895. RPM	8000	92.7	90.1	91.5	89.1	87.7	86.8	87.9		
(1560. RAD/SEC)	10000	92.8	92.5	91.4	88.7	86.4	86.1	86.4			
NO. OF BLADES	28	12500	99.0	98.9	96.8	95.1	90.8	89.2	87.8		
FAN TIP SPEED	16000	91.8	91.7	89.6	88.3	84.0	82.6	80.7			
1359. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		104.7	104.3	103.9	101.5	101.2	101.1	101.1			
	PNDB	116.0	115.6	115.7	113.2	113.5	112.1	112.6			
	PNLT	121.3	117.2	117.2	117.8	115.7	114.9	115.3			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	47.3	54.1	74.5	59.4	60.2	61.6	62.3			
	125	46.4	52.4	66.9	73.0	72.5	63.2	64.1			
NFA	3603. RPM	160	62.4	65.2	67.0	59.1	71.8	77.9	78.3		
( 377. RAD/SEC)	200	46.6	66.1	71.1	58.1	74.2	76.1	76.0			
NFK	3529. RPM	250	64.6	66.7	71.7	71.0	74.1	76.8	77.9		
( 369. RAD/SEC)	315	62.6	67.0	74.0	62.7	73.7	76.8	77.4			
NFD	3620. RPM	400	59.8	67.3	67.9	68.9	72.5	77.6	77.7		
( 379. RAD/SEC)	500	60.2	62.7	66.3	72.5	73.8	78.3	76.2			
NO. OF BLADES	38	630	59.8	69.8	67.6	66.6	73.5	75.3	77.9		
FREQ. SHIFT	800	56.9	67.5	69.6	74.3	76.4	73.2	75.8			
JET	6	1000	57.9	65.1	66.1	71.5	74.8	70.9	76.1		
FAN	4	1250	55.3	62.6	63.6	68.6	72.7	68.6	74.0		
CRITICAL FREQ.	1600	57.5	64.3	67.3	67.8	70.5	70.7	72.7			
0.	2000	60.6	67.8	71.0	71.6	72.9	74.5	76.6			
AIRFLOW RATIO	2500	66.4	73.8	78.3	78.2	78.7	77.1	77.3			
WF/WM 16.93	3150	58.7	65.4	71.2	71.5	71.9	72.2	74.2			
FAN TIP SPEED	4000	56.7	66.7	70.4	70.5	70.1	71.1	72.3			
1359. FT/SEC	5000	62.0	72.7	75.5	76.8	74.4	74.2	73.6			
	6300	51.9	64.1	67.4	69.3	67.0	67.1	66.1			
	8000	44.6	58.9	62.9	65.1	63.1	63.2	62.3			
	10000	35.4	52.7	57.7	60.4	58.7	58.9	58.1			
OVERALL CALCULATED		73.0	80.4	84.4	84.6	86.4	87.5	88.3			
	PNDB	85.9	93.9	98.0	98.1	99.4	99.1	99.8			
	PNLT	88.6	96.6	100.4	100.5	101.5	100.8	101.3			

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	160										
VEHICLE JT15RD	200										
CONFIG 40X80	250										
LOC VO=115, A=0,	315										
DATE 9/18/78	400	97.4	75.9	92.8	95.5	97.0	95.8	75.9			
RUN CFT/W/R C/LT	500	89.7	73.5	74.1	91.6	92.9	90.1	93.8			
TAPE 021030	630	92.7	86.1	87.2	74.6	90.1	91.9	89.2			
BAR 30.0 HG	800	74.8	86.1	91.9	85.4	89.9	92.6	91.2			
(***** N/M2)	1000	72.7	73.6	74.0	73.7	88.4	92.1	90.5			
TAMB 79. DEG F	1250	85.3	88.3	90.5	87.6	92.1	90.8	93.0			
(299. DEG K)	1600	89.2	91.1	90.8	87.7	88.3	90.7	90.2			
THET 53. DEG F	2000	86.0	89.1	89.1	88.7	90.3	89.2	92.6			
(285. DEG K)	2500	86.1	92.2	92.0	86.7	93.1	92.6	93.5			
HACT 3.04 GM/M3	3150	85.3	87.7	90.7	89.9	89.4	92.9	94.7			
(.00304 KG/M3)	4000	89.6	87.4	88.8	88.9	86.6	89.8	91.4			
NFA 15179. RPM	5000	91.6	90.3	90.5	90.0	88.6	89.7	90.3			
(1589. RAD/SEC)	6300	98.4	98.3	96.7	95.4	93.0	91.5	89.3			
NFK 14895. RPM	8000	95.1	94.1	93.7	93.3	91.8	92.4	92.2			
(1559. RAD/SEC)	10000	93.8	93.4	92.2	90.1	90.2	90.2	90.0			
NFD 14895. RPM	12500	97.5	98.1	96.0	94.9	92.7	91.3	90.1			
(1560. RAD/SEC)	16000	94.4	93.6	91.8	92.1	91.0	88.9	89.1			
NO. OF BLADES 28	20000										
FAN TIP SPEED 1391. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		105.3	104.4	104.1	103.4	103.9	104.0	103.7			
PNOB		116.1	115.7	115.6	114.4	114.7	115.4	116.0			
PNLT		119.6	119.9	121.5	118.1	116.1	115.4	119.8			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100	69.8	54.3	74.5	79.4	82.4	82.3	63.1			
NFA 3689. RPM	125	62.1	51.9	55.8	75.5	78.3	76.6	81.0			
( 386. RAD/SEC)	160	65.0	64.5	68.9	58.5	75.6	78.5	76.5			
NFK 3620. RPM	200	47.1	64.5	73.6	69.3	75.4	79.1	78.5			
( 379. RAD/SEC)	250	44.8	51.9	55.6	57.6	73.8	78.6	77.7			
NFD 3620. RPM	315	57.3	66.5	72.1	71.4	77.5	77.3	80.2			
( 379. RAD/SEC)	400	61.1	69.2	72.2	71.5	73.7	77.2	77.4			
NO. OF BLADES 38	500	57.7	67.2	70.6	72.5	75.7	75.7	79.8			
FREQ. SHIFT	630	57.5	70.1	73.4	70.4	78.4	79.0	80.6			
JET 6	800	56.3	65.4	72.0	73.5	74.6	79.2	81.7			
FAN 4	1000	60.3	65.0	70.0	72.5	71.8	76.1	78.5			
CRITICAL FREQ.	1250	57.8	62.7	67.9	70.3	69.0	73.0	75.2			
0.	1600	57.0	63.2	67.2	69.2	69.5	71.7	73.1			
AIRFLOW RATIO	2000	60.1	66.8	70.9	72.9	73.3	75.5	76.9			
WF/WM 16.93	2500	65.7	74.2	76.7	78.0	77.4	77.1	75.7			
FAN TIP SPEED 1391. FT/SEC	3150	61.0	69.3	73.3	75.6	75.9	77.8	78.4			
	4000	57.7	67.6	71.1	71.9	73.9	75.2	75.9			
	5000	60.4	71.8	74.7	76.5	76.3	76.2	75.9			
	6300	54.6	66.1	69.6	73.1	74.1	73.4	74.5			
	8000	47.3	60.9	65.2	69.0	70.1	69.6	70.7			
OVERALL CALCULATED	10000	38.1	54.7	60.0	64.3	65.7	65.3	66.6			
PNOB		74.5	80.5	84.8	86.6	89.1	90.3	90.9			
PNLT		85.9	94.2	97.8	99.4	100.5	101.8	102.4			
		87.7	96.2	100.8	101.2	101.8	101.8	104.3			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	160										
VEHICLE JT15RD	180										
CONFIG 40X80	200										
LSC V0=115, A=8.	250										
DATE 9/18/78	315										
RUN CFT/W/R C/LT	400	89.7	97.6	75.9	93.0	95.9	91.1	91.9	77.4		
TAPE 022040	500	90.3	92.9	90.8	73.7	91.1	91.1	91.1	92.4		
BAR 30.0 HG	630	93.8	76.1	85.4	79.2	92.7	80.8	92.6	91.2		
(***** N/M2)	800	91.1	88.7	84.6	92.2	86.6	73.7	91.8	89.1		
TAMB 86. DEG F	1000	91.3	90.9	73.7	80.9	92.6	82.7	89.9	90.0		
(303. DEG K)	1250	84.4	88.5	91.0	92.4	86.7	88.6	88.2	92.5		
TWET 57. DEG F	1600	89.7	89.3	92.2	89.3	94.2	93.9	93.2	91.6		
(287. DEG K)	2000	85.0	88.6	86.0	92.3	90.3	92.5	89.6	93.1		
HACT 3.61 GM/M3	2500	85.9	88.4	92.8	91.3	94.3	95.1	93.9	94.2		
(.00361 KG/M3)	3150	83.0	87.2	89.1	89.7	90.1	92.6	91.2	94.8		
NFA 15278. RPM	4000	87.1	86.9	89.9	87.7	90.2	87.5	89.4	91.5		
(1600. RAD/SEC)	5000	90.1	90.8	90.3	89.6	89.8	89.2	90.8	91.7		
NFK 14895. RPM	6300	95.9	96.6	96.1	96.1	94.0	92.7	92.8	91.4		
(1560. RAD/SEC)	8000	94.1	95.1	94.0	93.7	92.2	92.5	90.9	92.1		
NFD 14895. RPM	10000	92.2	92.5	91.7	91.5	90.1	90.1	90.6	91.0		
(1560. RAD/SEC)	12500	95.3	97.4	96.7	95.0	93.9	92.6	90.6	91.2		
NO OF BLADES 28	16000	92.8	93.5	93.0	92.9	91.9	91.6	90.9	90.8		
FAN TIP SPEED	20000										
1400. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		103.8	105.1	103.9	104.0	104.5	103.5	103.7	104.1		
		PNDB	114.8	115.6	115.0	115.2	115.7	115.3	115.3	116.4	
		PNLT	116.4	117.4	119.4	119.8	117.7	117.1	116.8	119.1	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
	63										
	80										
NO EGA	100	62.1	76.0	57.6	76.9	81.3	77.6	79.1	65.0		
	125	62.7	71.3	72.5	57.6	76.5	77.6	78.3	80.0		
NFA 3713. RPM	160	66.1	54.5	67.1	63.1	78.2	67.2	79.9	78.9		
( 389. RAD/SEC)	200	63.4	67.0	66.3	76.1	72.1	60.2	79.1	76.8		
NFK 3620. RPM	250	63.4	69.2	55.3	64.8	78.0	69.2	77.1	77.6		
( 379. RAD/SEC)	315	56.4	66.7	72.6	76.2	72.1	75.1	75.4	80.1		
NFD 3620. RPM	400	61.5	67.4	73.8	73.1	79.6	80.4	80.4	79.2		
( 379. RAD/SEC)	500	56.7	66.7	67.5	76.1	75.7	78.9	76.8	80.7		
NO. OF BLADES 38	630	57.3	66.3	74.2	75.0	79.6	81.5	81.0	81.7		
FREQ. SHIFT	800	54.1	65.0	70.5	73.4	75.4	79.2	78.3	82.3		
JET 6	1000	57.8	64.5	71.1	71.3	75.4	73.8	76.4	79.0		
FAN 5	1250	60.2	68.1	71.3	73.0	74.8	75.3	77.7	79.0		
CRITICAL FREQ.	1600	61.3	69.6	72.9	75.4	74.9	74.8	75.6	76.9		
0.	2000	64.4	73.1	76.6	79.1	78.7	78.6	79.5	78.5		
AIRFLOW RATIO	2500	61.6	71.1	74.2	76.5	76.7	78.2	77.4	79.1		
WF/WM 16.93	3150	58.2	67.8	71.4	73.9	74.4	75.6	76.9	77.8		
FAN TIP SPEED	4000	59.4	71.7	75.8	76.9	77.8	77.8	76.6	77.7		
1400. FT/SEC	5000	55.9	67.4	71.8	74.7	75.6	76.7	76.8	77.2		
	6300	46.9	59.9	64.8	67.9	69.0	70.1	70.3	70.7		
	8000	39.7	54.7	60.3	63.7	65.0	66.2	66.5	66.9		
	10000	30.4	48.6	55.1	59.0	60.6	62.0	62.3	62.8		
OVERALL CALCULATED		73.8	82.3	84.8	87.5	89.8	89.8	90.8	91.6		
		PNDB	84.5	94.1	97.7	99.8	101.4	101.4	101.9	102.8	
		PNLT	85.3	95.5	99.9	102.1	102.7	102.0	103.1	104.1	



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	160										
VEHICLE JT15RD	200										
CONFIG 40X80	250										
LOC V0=115, A=8,	315										
DATE 9/18/78	400	75.6	90.6	91.7	94.7	93.7	91.1	92.7	75.4		
RUN CFT/W/R C/LT	500	87.4	87.4	85.2	74.7	89.9	90.5	87.7	87.6		
TAPE 022050	630	88.7	87.8	74.3	75.3	77.3	73.3	72.8	92.5		
BAR 30.0 HG	800	91.7	84.8	87.9	88.1	74.0	88.7	87.0	92.9		
(***** N/M2)	1000	90.0	86.9	74.8	90.4	86.0	89.5	87.9	90.5		
TAMB 87. DEG F	1250	88.2	84.3	90.5	92.6	68.9	88.3	92.2	93.5		
(304. DEG K)	1600	88.2	88.1	89.7	89.9	90.9	87.8	90.4	91.1		
TWET 58. DEG F	2000	86.7	92.4	86.5	91.5	91.2	89.8	90.8	92.7		
(283. DEG K)	2500	89.9	89.9	90.8	92.8	89.2	91.7	93.2	94.7		
HACT 4.02 GM/M3	3150	90.9	92.0	89.9	93.6	93.3	89.9	89.5	94.1		
(.00402 KG/M3)	4000	88.4	86.8	88.3	88.8	89.9	89.0	89.4	90.4		
NFA 14206. RPM	5000	92.1	92.9	91.8	92.0	91.1	91.4	90.4	92.1		
(1561. RAD/SEC)	6300	100.6	99.8	99.1	99.0	98.3	94.9	92.4	91.2		
NFK 14519. RPM	8000	93.0	95.0	94.6	93.0	92.1	92.1	91.5	92.1		
(1520. RAD/SEC)	10000	93.1	96.4	95.7	94.0	92.2	91.7	90.7	91.4		
NFD 14895. RPM	12500	96.1	101.2	101.4	98.7	97.2	95.3	93.3	92.0		
(1560. RAD/SEC)	16000	93.8	97.0	96.4	95.0	94.5	92.8	91.4	91.5		
NO. OF BLADES 28	20000										
FAN TIP SPEED											
1366. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		105.1	106.7	106.3	105.9	104.8	103.5	103.1	104.2		
PNDB		117.5	117.5	116.7	117.3	116.5	114.7	114.4	116.1		
PNLT		119.0	119.0	121.1	118.5	118.0	117.1	116.6	116.1		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
	63										
	80										
NO EGA	100	48.0	69.0	73.4	78.6	79.1	77.6	79.9	63.0		
	125	59.8	65.8	66.9	58.6	75.3	77.0	74.9	75.2		
NFA 3623. RPM	160	61.0	66.2	56.0	59.2	62.8	59.9	60.1	80.2		
( 379. RAD/SEC)	200	64.0	63.1	69.6	72.0	59.5	75.2	74.3	80.6		
NFK 3529. RPM	250	62.1	65.2	56.4	74.3	71.4	76.0	75.1	78.1		
( 369. RAD/SEC)	315	60.2	62.5	72.1	76.4	74.3	74.8	79.4	81.1		
NFD 3620. RPM	400	60.0	66.2	71.3	73.7	76.3	74.1	77.6	78.7		
( 379. RAD/SEC)	500	58.4	70.5	68.0	75.3	76.5	76.2	78.0	80.3		
NO. OF BLADES 38	630	61.3	67.8	72.2	76.5	74.5	78.1	80.3	82.2		
FREQ. SHIFT	800	62.0	69.8	71.2	77.3	78.8	76.3	76.6	81.6		
JET 6	1000	59.0	66.4	69.5	72.3	75.0	75.3	76.4	77.8		
FAN 4	1250	56.0	62.9	67.3	67.4	71.5	73.2	74.3	74.0		
CRITICAL FREQ.	1600	57.5	65.8	68.6	71.2	72.0	73.5	73.2	75.4		
0.	2000	60.6	69.4	72.3	75.0	75.8	77.3	77.1	79.2		
AIRFLOW RATIO	2500	68.0	75.7	79.2	81.7	82.7	80.5	78.8	78.1		
WF/WM 16.93	3150	58.9	70.2	74.2	75.3	76.2	77.5	77.7	78.8		
FAN TIP SPEED	4000	57.0	70.6	74.7	75.8	75.9	76.7	76.6	77.8		
1366. FT/SEC	5000	59.1	75.0	80.1	80.4	80.8	80.3	79.1	78.3		
	6300	53.9	69.4	74.2	76.0	77.6	77.3	76.8	77.4		
	8000	46.7	64.2	69.7	71.8	73.6	73.4	73.0	73.7		
	10000	37.4	58.1	64.5	67.1	69.2	69.2	68.8	69.6		
OVERALL CALCULATED		73.7	82.4	86.2	88.9	89.7	89.6	90.1	91.8		
PNDB		87.1	96.2	100.1	102.3	103.2	102.7	102.3	103.4		
PNLT		89.8	98.1	102.3	104.5	105.5	103.9	103.4	103.4		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=115, A=8,	200										
DATE 9/18/78	250										
RUN CFT/W/R C/LT	315										
TAPE 022090	400	75.4	95.2	76.5	95.1	79.2	89.8	93.2	76.7		
BAR 30.0 HG	500	73.2	90.1	72.7	74.9	85.1	77.1	90.6	88.4		
(***** N/M2)	630	74.2	74.6	74.2	74.0	92.7	86.3	84.5	90.0		
TAMB 89. DEG F	800	84.4	74.7	74.8	90.5	90.4	88.7	72.4	89.1		
(305. DEG K)	1000	87.3	80.5	70.9	85.3	88.6	88.0	79.7	83.2		
TWET 58. DEG F	1250	91.1	88.2	84.5	91.5	90.4	87.9	88.8	91.3		
(288. DEG K)	1600	83.0	87.1	91.2	89.1	91.3	86.4	88.8	88.8		
HACT 3.47 GM/M3	2000	81.1	86.4	90.3	87.1	89.3	88.8	89.1	92.8		
(.00247 KG/M3)	2500	89.9	88.8	87.5	89.7	89.8	89.9	90.7	91.7		
NFA 14895. RPM	3150	93.9	93.0	95.3	89.6	93.1	91.0	82.2	94.2		
(1451. RAD/SEC)	4000	94.1	92.9	93.2	90.5	89.9	89.1	87.0	90.1		
NFK 13475. RPM	5000	99.3	101.8	96.8	96.5	95.2	92.6	90.2	91.4		
(1411. RAD/SEC)	6300	99.9	100.6	98.1	96.2	94.7	92.7	90.9	89.7		
NFD 14895. RPM	8000	96.9	97.7	94.9	93.6	91.7	91.0	91.0	91.7		
(1560. RAD/SEC)	10000	99.3	101.1	99.6	96.8	92.5	91.5	91.5	92.9		
NO. OF BLADES 28	12500	99.3	101.1	99.9	96.9	95.3	92.4	92.2	91.0		
FAN TIP SPEED 16000		97.9	99.4	99.2	96.5	94.7	92.8	91.5	91.6		
1270. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		107.4	106.9	107.0	105.5	104.3	102.5	102.0	103.1		
PNDB		117.9	119.7	116.6	116.3	115.7	113.8	112.3	115.3		
PNLT		119.9	121.4	118.2	119.9	117.4	114.9	114.0	117.2		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
	63										
	80										
NO EGA											
100		47.8	73.6	58.2	79.0	64.6	76.3	80.4	64.3		
125		45.6	68.5	54.4	58.8	70.5	63.6	77.8	76.0		
NFA 3368. RPM	160	46.5	53.0	55.9	57.9	78.2	72.9	71.8	77.7		
( 353. RAD/SEC)	200	56.7	53.1	56.5	74.4	75.9	75.2	59.7	76.8		
NFK 3275. RPM	250	59.4	58.8	62.5	69.2	74.0	74.5	66.9	70.8		
( 343. RAD/SEC)	315	63.1	66.4	66.1	75.3	75.8	74.4	75.8	78.9		
NFD 3620. RPM	400	54.9	65.2	72.8	72.9	76.7	72.9	76.0	78.1		
( 379. RAD/SEC)	500	52.8	64.5	71.8	70.9	74.7	75.3	76.3	80.4		
NO. OF BLADES 38	630	61.3	66.7	68.9	73.4	75.1	76.3	77.8	79.2		
FREQ. SHIFT	800	64.9	70.7	76.6	73.2	78.3	77.3	69.2	81.7		
JET 6	1000	64.8	71.2	74.4	74.1	75.1	75.4	74.1	77.8		
FAN 5	1250	65.4	74.9	73.8	75.9	76.2	74.8	73.1	74.7		
CRITICAL FREQ.	1600	68.7	78.5	77.5	79.7	80.1	78.6	77.0	78.8		
0.	2000	68.4	77.1	78.5	79.2	79.4	78.5	77.5	78.8		
AIRFLOW RATIO	2500	64.3	73.7	75.0	76.3	76.2	76.7	77.5	78.8		
WF/WM 16.93	3150	65.3	76.4	79.3	79.2	76.7	77.0	77.8	79.6		
FAN TIP SPEED	4000	63.3	75.4	78.9	78.8	79.1	77.5	78.2	77.5		
1270. FT/SEC	5000	61.0	73.4	78.1	78.3	78.5	77.9	77.5	78.1		
	6300	55.1	68.9	74.1	74.5	74.8	74.3	73.9	74.6		
	8000	47.8	63.7	69.6	70.4	70.9	70.5	70.2	70.8		
	10000	38.6	57.5	64.4	65.7	66.4	66.2	66.0	66.7		
OVERALL CALCULATED		75.9	85.5	87.6	88.9	89.6	88.9	89.1	90.6		
PNDB		87.8	98.3	101.0	101.9	102.4	101.5	101.5	103.1		
PNLT		88.8	99.2	102.6	103.7	103.5	102.0	103.2	104.1		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115, A=15,	200										
DATE 9/18/78	250										
RUN CFT/W/R C/LT	315										
TAPE 023010	400	94.9	95.0	76.0	76.6	77.4	75.2	66.6	62.7		
BAR 30.0 H9	500	66.4	90.8	74.7	74.8	63.4	66.2	61.0	61.1		
(***** N/M2)	630	73.6	66.2	76.6	91.6	92.3	67.6	90.1	66.4		
TAMB 90. DEG F	800	69.2	91.1	75.2	92.6	90.3	77.8	69.6	66.6		
(305. DEG K)	1000	67.1	92.3	69.2	66.1	69.6	69.5	66.9	65.3		
TWET 59. DEG F	1250	66.5	93.6	90.7	65.2	90.5	91.7	66.7	62.6		
(288. DEG K)	1600	67.7	69.6	68.7	67.0	66.4	90.3	67.5	67.6		
HACT 3.89 GM/M3	2000	69.2	66.0	66.5	69.2	66.4	92.0	90.7	91.1		
(.00369 KG/M3)	2500	66.9	91.9	66.2	90.6	91.6	90.7	65.5	90.0		
NFA 13872. RPM	3150	92.7	92.1	90.4	92.5	92.3	91.3	79.6	75.3		
(1452. RAD/SEC)	4000	93.7	93.9	94.1	91.2	90.0	66.6	90.0	66.9		
NFK 13475. RPM	5000	101.0	101.6	101.2	97.0	94.2	92.4	91.5	90.6		
(1411. RAD/SEC)	6300	97.3	96.2	101.7	97.6	94.6	92.5	91.7	91.1		
NFD 14895. RPM	6000	94.9	96.9	96.6	93.7	91.6	69.7	91.6	91.1		
(1560. RAD/SEC)	10000	98.7	101.5	99.6	97.7	94.1	91.9	92.4	92.6		
NO. OF BLADES 28	12500	99.0	101.1	99.4	99.4	95.5	92.9	91.3	91.0		
FAN TIP SPEED	16000	97.5	100.6	99.6	97.3	95.6	93.5	90.7	90.4		
1272. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.3	109.3	106.3	106.3	104.4	102.9	102.0	101.7		
PND8		119.2	120.5	119.2	116.6	115.2	113.9	112.9	112.3		
PNLT		122.2	122.4	121.2	121.0	117.0	115.6	114.5	114.5		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	67.3	73.4	57.7	60.7	62.6	61.7	75.8	70.3		
	125	60.6	69.2	56.4	56.7	66.6	72.7	66.2	76.7		
NFA 3371. RPM	160	46.1	66.6	60.3	75.5	77.6	74.2	77.4	74.1		
( 353. RAD/SEC)	200	61.5	69.4	56.9	76.5	75.8	64.3	76.9	76.3		
NFK 3275. RPM	250	59.2	70.6	70.8	72.0	75.2	76.0	76.1	72.9		
( 343. RAD/SEC)	315	56.5	71.6	72.3	69.0	76.2	76.2	73.9	70.2		
NFD 3620. RPM	400	59.5	67.7	70.3	70.6	73.6	76.6	74.7	76.4		
( 379. RAD/SEC)	500	60.9	66.1	70.0	73.0	71.6	76.4	77.9	76.7		
NO. OF BLADES 38	630	60.3	69.6	67.6	74.3	76.9	77.1	72.6	77.5		
FREQ. SHIFT	800	63.6	69.9	71.6	76.2	77.6	77.7	66.9	62.6		
JET 6	1000	64.4	71.5	75.3	74.7	75.2	75.1	77.0	76.4		
FAN 5	1250	67.2	75.0	76.3	76.5	75.3	74.6	74.9	74.3		
CRITICAL FREQ.	1600	70.4	76.6	62.0	60.3	76.1	76.5	76.3	77.9		
0.	2000	65.6	74.7	62.2	60.6	79.3	76.4	76.4	79.2		
AIRFLOW RATIO	2500	62.4	74.9	77.0	76.5	76.3	75.4	76.3	76.1		
WF WM 16.93	3150	64.7	76.6	79.3	60.1	76.4	77.4	76.7	79.4		
FAN TIP SPEED	4000	63.1	75.4	76.5	61.3	79.3	76.0	77.3	77.5		
1271. FT/SEC	5000	60.6	74.5	76.4	79.1	79.3	76.6	76.6	76.6		
	6300	54.6	70.0	74.4	75.3	75.7	75.0	73.1	73.3		
	8000	47.4	64.6	69.9	71.1	71.7	71.1	69.3	69.5		
	10000	38.1	56.7	64.7	66.4	67.3	66.9	65.1	65.4		
OVERALL CALCULATED		76.6	66.0	69.1	69.6	69.5	69.3	69.1	69.2		
PND8		66.1	99.2	101.7	103.2	102.6	101.6	101.9	102.2		
PNLT		69.6	100.4	102.7	105.3	103.5	102.6	103.9	104.6		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)		
NO EGA	50											
RADIAL 12. FT.	63											
( 4. M)	80											
VEHICLE JT15RD	100											
CONFIG 40X80	125											
LOC VO=115, A=15,	160											
DATE 9/18/78	200											
RUN CFT/W/R C/LT	250											
TAPE 023020	315											
BAR 30.0 HG	400	92.2	96.4	76.9	76.8	84.2	93.4	90.3	96.0			
(***** N/M2)	500	92.1	91.9	73.8	75.9	86.6	94.4	89.3	96.5			
TAMB 90. DEG F	630	74.4	92.5	74.2	86.2	91.6	90.6	73.5	92.0			
(305. DEG K)	800	75.4	91.4	82.3	89.1	92.0	82.6	91.6	94.4			
TWET 59. DEG F	1000	87.5	91.4	85.8	89.9	90.9	88.6	90.9	89.8			
(286. DEG K)	1250	79.3	96.2	86.3	86.9	91.5	92.3	92.6	90.1			
HACT 3.89 GM/M3	1600	91.8	92.0	90.7	90.1	89.2	89.8	93.1	91.3			
(.00389 KG/M3)	2000	91.2	73.0	91.8	86.3	85.4	91.3	91.8	92.3			
NFA 14947. RPM	2500	89.6	90.5	93.7	88.9	89.6	92.5	92.0	94.0			
(1565. RAD/SEC)	3150	90.0	88.9	93.7	92.0	92.6	93.3	93.2	92.1			
NFK 14519. RPM	4000	90.4	90.7	90.6	89.9	89.1	89.7	90.4	90.9			
(1520. RAD/SEC)	5000	91.8	93.2	92.5	92.7	91.6	91.3	91.2	92.2			
NFD 14695. RPM	6300	96.4	100.5	99.5	99.0	97.1	95.7	94.1	93.2			
(1560. RAD/SEC)	8000	93.0	92.9	93.8	93.1	92.5	91.9	92.2	92.0			
NO. OF BLADES 28	10000	93.8	95.5	94.8	93.6	92.7	92.4	91.4	93.4			
FAN TIP SPEED 16000	12500	98.2	100.6	100.5	99.2	97.1	96.0	93.9	93.1			
1370. FT/SEC	16000	92.9	96.4	96.3	95.0	93.5	92.4	91.3	90.6			
20000												
OVERALL MEASURED												
OVERALL CALCULATED		104.9	107.3	106.2	105.3	104.6	104.8	104.1	105.3			
PNDB		116.4	118.3	117.2	116.6	116.0	115.9	115.6	116.2			
PNLT		119.7	121.5	118.3	117.9	117.6	117.6	116.7	117.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)		
NO EGA	50											
	63											
	80											
	100	64.6	74.8	58.6	60.7	69.6	79.9	77.5	83.6			
	125	64.5	70.3	55.5	59.8	72.0	80.9	76.5	84.1			
NFA 3633. RPM	160	46.7	70.9	55.9	70.1	77.1	77.2	80.8	79.7			
( 360. RAD/SEC)	200	47.7	69.7	64.0	73.0	77.5	69.1	78.9	82.1			
NFK 3529. RPM	250	59.6	69.7	67.4	73.8	76.3	75.3	78.1	77.4			
( 369. RAD/SEC)	315	51.3	74.4	69.9	72.7	76.9	76.8	80.0	77.7			
NFD 3620. RPM	400	63.6	70.1	72.3	73.9	74.6	76.3	80.3	78.9			
( 379. RAD/SEC)	500	62.9	51.1	73.3	70.1	70.8	77.7	79.0	79.9			
NO. OF BLADES 38	630	61.0	58.4	75.1	72.6	74.9	78.9	79.1	81.5			
FREQ. SHIFT	800	61.1	66.7	75.1	75.7	77.9	79.7	80.3	79.6			
JET 6	1000	61.1	66.3	71.8	73.4	74.3	76.0	77.4	78.4			
FAN 4	1250	58.5	66.0	68.5	71.2	70.6	72.3	74.5	76.3			
CRITICAL FREQ.	1600	57.2	66.2	69.3	72.0	72.5	73.4	74.0	75.8			
0.	2000	60.3	69.7	73.0	75.7	76.3	77.2	77.9	79.3			
AIRFLOW RATIO	2500	65.8	76.4	79.6	81.7	81.6	81.4	80.6	80.1			
WF WM 16.93	3150	59.0	68.1	73.4	75.5	76.7	77.3	78.4	78.7			
FAN TIP SPEED	4000	57.6	69.6	73.8	75.5	76.5	77.5	77.3	79.8			
1370. FT/SEC	5000	61.2	74.4	79.2	80.8	80.7	80.9	79.7	79.4			
	6300	53.0	68.6	74.1	76.0	76.6	76.9	76.7	76.5			
	8000	45.6	63.6	69.6	71.6	72.6	73.0	72.9	72.7			
	10000	36.5	57.5	64.4	67.1	68.2	68.8	68.7	68.6			
OVERALL CALCULATED		73.8	83.9	86.3	88.2	89.4	90.9	91.1	92.9			
PNDB		86.0	96.8	99.9	102.1	102.8	103.5	103.4	104.3			
PNLT		88.1	100.0	102.1	104.1	104.5	104.9	105.0	104.9			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)	(1.92)
NO EGA	50										
RADIAL 12 FT.	63										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LGC VQ=115, A=15,	200										
DATE 9/18/78	250										
RUN CFT/W/R C/LT	315										
TAPE 023060	400	94.5	92.8	94.6	77.3	81.2	89.7	87.9	94.7		
BAR 30.0 HG	500	92.1	88.7	88.5	75.9	74.6	84.2	86.7	91.6		
(***** N/M2)	630	81.3	75.1	74.8	69.1	95.0	91.7	85.3	98.2		
TAMB 92. DEG F	800	74.6	81.0	82.3	89.1	91.2	89.1	89.3	93.7		
(306. DEG K)	1000	89.1	92.6	91.6	89.5	83.9	92.8	92.2	89.8		
TWET 80. DEG F	1250	90.8	93.6	88.6	89.7	88.1	89.5	92.2	91.5		
(289. DEG K)	1600	90.3	90.8	88.7	87.7	83.9	88.7	89.4	93.0		
HACT 4.06 GM/M3	2000	89.7	87.1	88.8	89.2	84.9	91.7	92.9	93.3		
(.00406 KG/M3)	2500	87.2	90.0	89.7	90.4	90.7	94.1	92.2	92.0		
NFA 15362. RPM	3150	88.4	88.9	90.7	91.6	93.8	93.0	87.6	86.4		
(1808. RAD/SEC)	4000	88.8	89.8	89.3	88.3	88.7	89.5	91.3	91.9		
NFK 14895. RPM	5000	89.8	90.4	91.3	91.3	89.7	90.6	90.9	91.3		
(1560. RAD/SEC)	6300	97.0	97.8	97.7	95.4	93.4	93.1	93.0	93.2		
NFD 14895. RPM	8000	97.7	94.8	94.2	93.6	93.4	92.5	92.7	93.8		
(1560. RAD/SEC)	10000	91.3	92.0	92.0	90.9	90.9	90.6	91.9	92.5		
NO. OF BLADES 28	12500	95.7	96.4	96.5	95.8	93.8	92.5	92.2	93.3		
FAN TIP SPEED 16000	16000	92.1	93.4	94.0	92.7	92.1	91.9	90.9	91.0		
1408. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		104.6	104.7	104.6	103.5	103.3	104.1	103.3	104.7		
PND8		115.7	116.2	116.1	114.7	114.8	115.6	114.4	115.5		
PNLT		117.8	117.9	119.0	116.9	116.9	116.7	114.4	115.5		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)	(1.92)
NO EGA	50										
	63										
	80										
	100	66.9	71.2	76.3	61.2	68.6	76.2	75.1	82.3		
	125	64.5	67.1	70.2	59.8	60.0	60.7	73.9	78.2		
NFA 3733. RPM	160	53.6	53.5	56.5	73.0	80.5	78.3	72.6	78.9		
( 391. RAD/SEC)	200	46.9	59.3	64.0	73.0	76.7	75.6	76.6	81.4		
NFK 3620. RPM	250	61.2	70.9	73.2	73.4	69.3	79.3	70.4	77.4		
( 379. RAD/SEC)	315	62.8	71.8	68.2	73.5	73.5	76.0	79.4	79.1		
NFD 3620. RPM	400	62.1	68.9	70.3	71.5	69.3	75.2	76.6	80.6		
( 379. RAD/SEC)	500	61.4	65.2	70.3	73.0	74.2	78.1	80.1	80.9		
NO. OF BLADES 38	630	58.6	67.9	71.1	74.1	76.0	80.5	79.3	79.5		
FREQ. SHIFT	800	57.5	66.7	72.1	75.5	79.1	79.4	74.9	75.9		
JET 6	1000	59.2	67.2	70.5	71.8	73.9	75.8	78.3	79.3		
FAN 5	1250	60.0	67.8	72.4	74.6	74.6	76.8	77.9	78.7		
CRITICAL FREQ.	1600	62.4	70.8	73.5	74.6	74.3	75.2	75.8	78.6		
0.	2000	65.5	74.3	78.2	78.4	78.1	79.0	79.7	80.3		
AIRFLOW RATIO	2500	65.2	70.8	74.4	76.4	77.9	78.2	79.2	80.8		
WF/WM 16.93	3150	57.3	67.3	71.7	73.3	75.1	76.1	76.2	79.3		
FAN TIP SPEED	4000	59.8	70.7	75.6	77.7	77.3	77.6	78.2	79.8		
1408. FT/SEC	5000	55.2	67.3	72.8	74.5	75.8	77.0	76.8	77.4		
	6300	46.2	59.8	65.8	67.7	69.2	70.4	70.3	70.9		
	8000	39.0	54.6	61.3	63.5	65.2	66.5	66.5	67.1		
	10000	29.7	48.5	56.1	58.8	60.8	62.3	62.3	63.0		
OVERALL CALCULATED		74.4	81.9	85.8	86.9	86.4	90.5	90.4	92.2		
PND8		85.8	93.9	98.1	99.9	100.5	102.0	102.3	103.9		
PNLT		86.9	95.1	99.6	101.2	102.5	102.6	102.3	103.9		

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	80										
	83										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	150										
VEHICLE JT15RD	125										
CONFIG 40X80	150										
LOC VG=80, A=0,	200										
DATE 10/4/78	250										
RUN DPH/CFS C/LT	315										
TAPE 069010	400	92.9	92.6	87.5	81.6	87.6	88.6	91.5			
BAR 29.8 HG	500	91.5	91.6	75.2	74.4	76.4	67.4	83.9			
(***** N/M2)	630	80.4	80.1	85.5	81.3	87.6	86.9	85.1			
TAMB 85. DEG F	800	88.9	88.4	85.0	80.9	82.0	84.6	84.1			
(303. DEG K)	1000	84.5	83.5	84.1	76.3	84.4	81.8	80.4			
THET 66. DEG F	1250	92.7	91.6	89.1	87.1	88.4	84.4	83.7			
(292. DEG K)	1600	84.7	84.0	90.5	87.1	88.5	86.8	86.0			
HACT10.60 GM/M3	2000	84.6	83.7	91.9	90.5	85.5	86.2	86.4			
(.01080 KG/M3)	2500	96.0	95.3	97.0	91.9	88.2	85.3	84.1			
NFA 11416. RPM	3150	99.6	99.5	97.2	91.7	89.3	86.2	86.5			
(1195. RAD/SEC)	4000	89.2	88.3	97.2	93.2	88.6	85.8	83.4			
NFK 11140. RPM	5000	98.7	97.1	97.3	92.9	88.1	84.4	82.4			
(1166. RAD/SEC)	6300	97.7	100.0	97.3	92.2	87.1	84.1	82.5			
NFD 14895. RPM	8000	97.0	96.7	97.5	93.5	87.9	84.5	84.1			
(1560. RAD/SEC)	10000	89.8	88.4	97.5	94.6	89.5	84.5	84.9			
NO. OF BLADES 28	12500	98.4	98.8	98.4	94.7	88.8	83.2	83.4			
FAN TIP SPEED	16000	97.4	96.0	97.6	94.6	87.4	81.0	81.5			
1046. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.8	108.5	107.4	103.5	99.3	96.2	97.2			
PND8		120.8	120.5	118.6	114.5	111.0	108.1	108.5			
PNLT		121.8	121.3	120.4	116.3	113.0	111.5	111.8			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0. )
	80										
	83										
	80										
NO EGA	100	85.3	71.0	69.2	65.5	73.0	55.1	78.7			
	125	63.8	70.0	66.9	58.3	63.8	53.9	71.1			
NFA 2774. RPM	150	62.7	67.5	67.2	65.2	53.1	53.4	55.4			
( 290. RAD/SEC)	200	61.2	66.7	66.7	64.8	67.5	71.1	71.4			
NFK 2707. RPM	250	66.6	61.7	65.7	60.1	59.8	68.3	67.6			
( 283. RAD/SEC)	315	64.7	69.8	70.7	71.1	71.8	70.9	70.9			
NFD 3620. RPM	400	66.5	72.1	72.0	71.4	73.6	73.2	73.1			
( 379. RAD/SEC)	500	66.2	71.7	73.4	74.2	70.8	72.6	73.5			
NO. OF BLADES 38	630	67.4	73.2	76.4	75.6	73.5	71.7	71.2			
FREQ. SHIFT	800	70.7	77.3	76.5	75.3	74.5	72.5	73.6			
JET 6	1000	68.2	75.1	76.4	73.2	72.4	70.5	71.5			
FAN 5	1250	69.3	75.6	76.2	76.6	71.7	72.0	70.3			
CRITICAL FREQ.	1800	68.1	74.0	78.1	76.1	73.0	70.5	69.2			
0.	2000	66.2	76.5	77.8	75.2	71.8	70.0	69.1			
AIRFLOW RATIO	2500	64.4	72.7	77.6	76.2	72.4	70.2	70.6			
WF/WB 16.93	3150	65.9	73.7	77.2	77.0	73.7	70.0	71.2			
FAN TIP SPEED	4000	62.5	73.2	77.5	76.7	72.7	68.4	69.4			
1046. FT/SEC	5000	60.5	71.9	76.4	76.4	71.1	66.1	67.4			
	6300	54.5	67.4	72.4	72.6	67.5	62.5	63.9			
	8000	47.3	62.2	67.9	68.4	63.5	56.6	60.1			
	10000	38.0	55.1	62.7	63.7	59.1	54.4	55.9			
OVERALL CALCULATED		78.7	85.7	88.3	86.9	84.6	82.7	84.5			
PND8		89.5	97.5	100.8	99.9	97.0	94.0	95.2			
PNLT		90.0	96.6	101.7	100.7	96.0	95.7	96.8			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	160										
VEHICLE JT16RD	200										
CONFIG 40X80	250										
LOC VO=80, A=0,	315										
DATE 10/4/78	400	92.5	88.9	89.4	85.9	80.0	83.7	86.2			
RUN DFH/CFS C/LT	500	91.2	89.3	87.9	86.4	86.6	89.1	89.9			
TAPE 089020	630	90.2	88.1	90.0	88.9	81.2	87.5	88.4			
BAR 29.8 HG	800	87.7	85.7	86.5	85.0	86.8	82.3	85.3			
(***** N/M2)	1000	86.7	87.9	83.3	85.0	83.4	83.2	83.1			
TAMB 84. DEG F	1250	84.5	82.8	88.7	87.7	83.8	85.4	82.9			
(302. DEG K)	1600	85.7	81.8	90.8	87.0	86.7	87.4	87.0			
THET 66. DEG F	2000	84.7	83.4	82.3	89.7	87.3	87.9	89.3			
(292. DEG K)	2500	87.7	86.7	86.9	84.9	86.5	86.7	84.9			
HACT10.88 GM/M3	3150	88.9	88.9	86.8	84.5	88.7	86.0	85.6			
(.01088 KG/M3)	4000	88.8	88.8	88.8	84.5	86.7	85.1	84.1			
NFA 11800. RPM	5000	88.8	88.8	88.9	84.8	88.0	84.1	83.8			
(1235. RAD/SEC)	6300	86.8	85.8	86.6	82.4	85.9	84.5	82.8			
NFK 11526. RPM	8000	87.1	86.7	87.9	84.8	89.3	85.3	84.4			
(1207. RAD/SEC)	10000	89.8	87.0	88.0	85.1	89.0	86.4	84.9			
NFD 14895. RPM	12500	87.2	87.3	87.6	85.4	88.4	84.6	83.5			
(1560. RAD/SEC)	16000	86.8	87.8	87.5	85.7	86.1	82.1	80.4			
NO. OF BLADES 26	20000										
FAN TIP SPEED 16000											
1082. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		108.6	107.9	107.8	104.9	98.9	97.2	96.6			
PNDS		120.6	119.9	119.6	116.2	110.7	109.5	108.4			
PNLT		121.7	119.9	119.6	116.2	113.5	111.6	111.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(1.57)	(1.75)
	50										
	63										
	80										
NO EGA	100	64.9	67.3	71.1	69.8	65.4	70.2	73.4			
	125	63.5	67.7	69.6	70.3	64.0	65.6	57.1			
NFA 2888. RPM	160	62.5	67.5	71.7	70.8	66.7	64.0	55.7			
( 300. RAD/SEC)	200	60.0	64.0	68.2	68.9	72.3	68.8	72.6			
NFK 2851. RPM	250	58.8	68.1	64.9	68.8	68.8	69.7	70.5			
( 293. RAD/SEC)	315	66.5	70.8	70.3	71.5	69.0	71.9	70.1			
NFD 3820. RPM	400	67.5	69.9	72.1	70.8	72.0	73.8	74.1			
( 378. RAD/SEC)	500	66.3	71.4	73.8	73.4	72.6	74.3	76.4			
NO. OF BLADES 38	630	69.1	74.6	78.3	78.2	73.8	73.1	72.0			
FREQ. SHIFT	800	70.0	76.7	78.1	78.1	73.9	74.3	72.7			
JET 6	1000	67.5	74.5	76.0	76.0	71.8	72.3	70.6			
FAN 4	1250	65.0	72.2	75.6	73.9	69.7	70.2	68.5			
CRITICAL FREQ.	1600	68.2	75.5	78.4	77.7	71.8	71.1	70.9			
0.	2000	67.3	75.4	79.4	77.8	72.7	70.0	70.4			
AIRFLOW RATIO	2500	64.2	71.7	76.7	75.1	70.3	70.1	69.2			
UF/WF 18.93	3150	63.0	71.9	77.5	77.1	73.4	70.7	70.6			
FAN TIP SPEED	4000	63.8	71.2	77.0	76.9	72.8	71.5	70.8			
1082. FT/SEC	5000	60.2	71.1	76.3	77.0	72.0	69.5	69.3			
	6300	57.0	70.3	75.4	76.8	69.2	66.6	65.9			
	8000	49.7	65.1	70.9	72.6	65.3	62.8	62.1			
	10000	40.5	58.8	65.7	67.3	60.9	58.5	57.9			
OVERALL CALCULATED		78.5	85.1	88.6	88.3	84.2	83.9	84.1			
PNDS		89.0	96.8	101.2	101.0	96.8	95.5	95.2			
PNLT		89.5	96.8	101.2	101.0	98.2	96.7	96.8			

MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT18RD	125										
CONFIG 40X80	160										
LOC V0=80, A=0.	200										
DATE 10/4/78	250										
RUN DFH/CFS C/LT	315										
TAPE 089030	400	90.7	90.3	89.9	81.8	83.7	69.0	87.9			
BAR 29.8 HG	500	89.8	80.0	85.0	87.8	81.7	68.7	69.5			
(***** N/M2)	630	89.9	89.5	88.1	83.5	83.1	68.4	87.8			
TAMB 84. DEG F	800	88.2	89.2	85.4	78.7	88.0	65.8	85.8			
(302. DEG K)	1000	85.8	88.3	85.7	83.0	82.7	62.9	82.2			
TVET 86. DEG F	1250	92.2	81.2	90.1	85.0	86.2	65.1	84.0			
(292. DEG K)	1600	91.9	90.2	90.1	89.1	85.8	68.2	85.5			
HACT10.88 GM/M3	2000	94.7	94.4	92.4	90.1	87.7	68.0	89.8			
(.01088 KG/M3)	2500	96.3	96.5	96.7	93.8	89.0	69.4	86.2			
NFA 12271. RPM	3150	96.4	98.0	96.8	92.5	88.5	66.8	86.1			
(1285. RAD/SEC)	4000	98.7	97.5	96.4	92.4	88.5	66.9	86.3			
NFK 11886. RPM	5000	98.3	97.2	96.0	92.8	87.2	63.7	84.9			
(1255. RAD/SEC)	6300	97.0	98.2	97.5	91.4	88.7	65.8	84.4			
NFD 14895. RPM	8000	96.1	96.3	97.3	93.5	89.9	66.1	85.9			
(1560. RAD/SEC)	10000	97.5	98.7	97.4	94.4	89.4	68.0	85.4			
NO. OF BLADES 28	12500	98.8	97.1	99.4	98.0	90.0	65.0	84.4			
FAN TIP SPEED	18000	97.0	97.2	97.2	94.3	87.8	61.7	80.0			
1125. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.0	107.6	107.3	103.7	99.9	97.5	97.5			
PNDB		119.9	119.5	118.3	114.3	111.2	109.7	109.1			
PNLT		121.1	119.5	118.3	117.8	112.9	113.1	112.7			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
NO EGA	63										
	80										
	100	83.1	88.7	85.8	85.5	89.1	55.5	75.1			
	125	82.1	88.4	88.7	81.5	87.1	55.2	56.7			
NFA 2982. RPM	160	82.2	87.9	89.8	87.4	88.8	54.9	55.1			
( 312. RAD/SEC)	200	80.5	87.5	87.1	82.8	73.5	72.3	73.1			
NFK 2913. RPM	250	87.7	88.5	87.3	88.8	88.1	69.4	89.4			
( 308. RAD/SEC)	315	84.2	89.4	71.7	88.8	71.8	71.8	71.2			
NFD 3620. RPM	400	83.7	88.3	71.8	72.9	70.9	72.6	72.6			
( 379. RAD/SEC)	500	86.3	72.4	73.9	73.8	73.0	74.4	76.9			
NO. OF BLADES 38	630	87.7	74.4	78.1	77.3	74.3	75.8	73.3			
FREQ. SHIFT	800	89.5	75.8	77.9	76.1	73.7	73.1	73.2			
JET 6	1000	89.4	75.1	77.8	76.0	73.7	73.2	73.3			
FAN 5	1250	86.8	72.8	75.4	73.8	71.5	71.1	71.2			
CRITICAL FREQ.	1600	87.7	74.1	76.8	76.0	72.1	69.7	71.7			
0.	2000	85.5	74.7	78.0	74.4	73.4	71.5	71.0			
AIRFLOW RATIO	2500	83.5	72.2	77.4	76.2	74.4	71.8	72.4			
WF/WM 16.93	3150	83.5	72.0	77.1	76.8	73.6	71.5	71.7			
FAN TIP SPEED	4000	82.9	71.4	78.5	77.9	73.9	70.2	70.4			
1125. FT/SEC	5000	80.2	71.2	78.1	76.1	71.8	66.8	66.0			
	6300	84.2	66.7	72.1	72.4	67.9	63.2	62.5			
	8000	86.9	61.5	67.6	68.2	64.0	59.4	58.7			
	10000	87.7	65.3	62.4	63.5	59.8	55.1	54.5			
OVERALL CALCULATED		77.9	84.8	88.1	87.1	85.1	84.0	84.7			
PNDB		88.2	96.4	101.1	100.3	97.5	95.2	95.6			
PNLT		88.8	96.4	101.1	102.0	98.4	96.9	97.4			



MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	53										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LGC VG=80, A=0,	200										
DATE 10/4/78	250										
RUN DFH/CFS C/LT	315										
TAPE 069040	400	89.6	88.2	84.8	86.9	81.5	67.3	86.2			
BAR 29.8 HG	500	83.3	86.1	85.3	79.4	85.1	66.2	69.0			
(***** N/M2)	630	83.6	87.1	86.4	80.8	83.5	67.1	68.7			
TAMB 84. DEG F	800	87.9	88.1	86.3	78.7	82.0	86.5	86.5			
(302. DEG K)	1000	87.1	88.6	86.2	83.0	81.7	83.5	83.3			
TWET 66. DEG F	1250	91.8	90.4	89.2	84.6	84.5	83.0	85.4			
(292. DEG K)	1600	91.7	91.3	89.0	88.8	87.0	82.7	85.0			
HACT10.88 GM/M3	2000	93.3	94.0	92.1	90.7	89.2	88.0	87.4			
(.01088 KG/M3)	2500	96.4	97.0	96.9	93.4	87.8	86.4	87.5			
NFA 12614. RPM	3150	98.1	96.2	95.3	92.0	87.7	86.3	86.5			
(1321. RAD/SEC)	4000	98.4	96.3	94.8	91.7	87.4	86.1	86.5			
NFK 12321. RPM	5000	97.6	95.8	96.0	93.9	87.1	82.1	85.6			
(1290. RAD/SEC)	6300	97.7	97.9	98.3	95.8	93.8	91.0	89.3			
NFD 14895. RPM	8000	95.7	97.4	97.8	95.5	89.4	86.6	86.0			
(1560. RAD/SEC)	10000	96.7	95.8	96.7	95.2	89.0	86.4	86.6			
NO. OF BLADES 28	12500	97.1	98.4	98.8	95.8	88.9	86.5	84.4			
FAN TIP SPEED 18000		96.5	97.1	97.2	94.2	86.6	81.8	80.7			
1156. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.4	107.2	107.0	104.5	100.1	97.7	97.9			
PNDB		119.4	118.4	118.0	115.4	112.6	109.7	109.7			
PNLT		119.4	118.4	119.0	115.4	113.5	113.5	113.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	53										
	80										
	100	82.0	66.6	66.5	70.8	66.9	53.8	73.4			
	125	55.6	64.5	67.0	63.3	70.5	52.7	56.2			
NFA 3066. RPM	160	55.9	65.5	68.1	64.7	69.0	53.6	56.0			
( 321. RAD/SEC)	200	60.2	66.4	68.0	62.6	67.5	73.0	73.8			
NFK 2994. RPM	250	59.2	66.8	67.8	66.8	67.1	70.0	70.5			
( 314. RAD/SEC)	315	63.8	68.6	70.8	68.4	69.9	69.5	72.6			
NFD 3620. RPM	400	63.5	69.4	70.5	72.6	72.3	69.1	72.1			
( 379. RAD/SEC)	500	64.9	72.0	73.6	74.4	74.5	74.4	74.5			
NO. OF BLADES 36	630	67.8	74.9	78.3	77.1	73.1	72.8	74.6			
FREQ. SHIFT	800	69.2	74.0	76.6	75.6	72.9	72.6	73.6			
JET 6	1000	69.1	73.9	76.0	75.3	72.6	72.4	73.5			
FAN 5	1250	66.5	71.8	73.8	73.3	70.4	70.3	71.4			
CRITICAL FREQ.	1600	67.0	72.7	76.8	77.1	72.0	68.1	72.4			
0.	2000	66.2	74.4	78.8	78.8	78.5	76.9	75.9			
AIRFLOW RATIO	2500	63.1	73.3	77.9	78.2	73.9	72.3	72.5			
WF/WM 16.93	3150	62.7	71.1	76.4	77.6	73.2	71.9	72.9			
FAN TIP SPEED	4000	61.2	72.7	77.9	77.7	72.8	71.7	70.4			
1156. FT/SEC	5000	59.7	71.1	76.1	76.0	70.4	66.9	66.7			
	6300	53.7	68.6	72.1	72.3	66.7	63.3	63.2			
	8000	46.4	61.4	67.6	68.1	62.8	59.5	59.4			
	10000	37.2	55.2	62.4	63.4	58.4	55.2	55.2			
OVERALL CALCULATED		77.3	84.2	87.8	87.7	85.2	84.0	85.1			
PNDB		87.6	96.4	100.7	100.6	98.0	96.2	96.5			
PNLT		87.6	96.4	101.8	100.6	99.8	98.4	98.3			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
	63										
	80										
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VC=80, A=0,	200										
DATE 10/4/78	250										
RUN DFH/CFS C/LT	315										
TAPE 069080	400	91.5	86.7	82.9	87.9	86.7	68.6	89.3			
BAR 29.8 HG	500	87.7	72.1	82.1	87.7	67.4	66.9	84.4			
(***** N/M2)	630	85.4	85.4	86.2	85.1	68.1	67.6	85.0			
TAMB 83. DEG F	800	90.1	88.4	87.5	83.1	86.3	85.2	87.9			
(301. DEG K)	1000	88.0	87.3	84.8	86.0	86.6	87.5	85.9			
TWET 65. DEG F	1250	85.6	88.0	87.5	87.7	87.0	87.9	88.4			
(291. DEG K)	1600	89.5	89.4	88.7	87.9	88.7	85.7	87.5			
HACT10.38 GM/M3	2000	96.2	94.7	93.4	94.0	93.2	93.1	92.4			
(.01036 KG/M3)	2500	103.3	103.4	101.6	103.2	100.9	100.8	97.0			
NFA 13784. RPM	3150	103.1	113.1	114.7	112.9	108.9	105.3	101.8			
(1443. RAD/SEC)	4000	96.6	108.1	111.4	108.8	103.1	100.5	96.1			
NFK 13476. RPM	5000	94.5	105.8	107.6	105.8	100.2	94.2	92.0			
(1411. RAD/SEC)	6300	101.3	113.6	115.5	113.3	107.4	103.6	100.9			
NFD 14895. RPM	8000	95.8	100.4	105.4	101.6	97.3	94.1	91.2			
(1560. RAD/SEC)	10000	95.8	99.0	103.0	100.4	97.6	94.2	92.8			
NO. OF BLADES 28	12500	95.5	97.2	103.3	99.4	93.9	91.4	89.8			
FAN TIP SPEED	16000	94.4	96.5	101.9	98.0	90.4	86.5	87.0			
1264. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		109.3	117.7	119.8	117.7	112.9	109.7	106.8			
PNOB		122.4	130.4	132.1	130.4	126.3	123.1	120.6			
PNLT		123.6	132.9	134.8	132.7	128.6	125.6	122.5			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	50										
	63										
	80										
NO EGA											
	100	83.9	85.1	84.8	71.8	72.1	55.1	76.5			
	125	80.0	50.5	83.8	71.8	52.8	53.4	71.6			
NFA 3350. RPM	160	57.7	83.8	67.9	69.0	53.6	54.1	72.3			
( 351. RAD/SEC)	200	82.4	66.7	69.2	67.0	71.8	71.7	75.2			
NFK 3275. RPM	250	60.1	65.5	66.2	69.8	72.0	74.0	73.1			
( 343. RAD/SEC)	315	57.6	66.2	69.1	71.5	72.4	74.4	75.6			
NFD 3620. RPM	400	61.3	67.5	70.2	71.7	72.0	72.1	74.6			
( 379. RAD/SEC)	500	67.8	72.7	74.9	77.7	78.5	79.5	79.5			
NO. OF BLADES 38	630	74.7	81.3	83.0	86.9	86.2	87.1	84.1			
FREQ. SHIFT	800	74.2	90.9	96.0	96.5	94.1	91.6	88.9			
JET 6	1000	67.3	85.7	92.6	92.4	88.3	86.8	83.1			
FAN 5	1250	60.7	80.4	89.2	88.1	82.4	81.9	77.4			
CRITICAL FREQ.	1600	63.9	82.7	88.6	89.0	85.1	80.2	78.8			
0.	2000	69.8	90.1	96.0	96.3	92.1	89.5	87.5			
AIRFLOW RATIO	2500	63.2	76.3	85.5	84.3	81.8	79.8	77.7			
WF/WM 16.93	3150	61.8	74.3	82.7	82.8	81.8	79.7	79.1			
FAN TIP SPEED	4000	59.6	71.6	82.4	81.4	77.8	76.6	75.8			
1263. FT/SEC	5000	57.5	70.4	80.7	79.8	74.1	71.6	72.9			
	6300	51.5	65.9	76.7	76.0	70.5	68.0	69.4			
	8000	44.3	60.7	72.2	71.8	66.5	64.1	65.6			
	10000	38.0	54.8	67.0	67.1	62.1	59.9	61.4			
OVERALL CALCULATED		79.7	95.0	101.0	101.2	98.0	96.1	93.9			
PNOB		89.1	105.7	112.1	112.4	108.7	106.6	105.4			
PNLT		91.6	109.8	115.1	115.9	112.1	109.7	108.8			

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
NO EGA		50									
RADIAL 12. FT.		63									
( 4. M)		80									
VEHICLE JT15RD		100									
CONFIG 40X80		125									
LOC VO=80, A=0,		160									
DATE 10/4/78		200									
RUN DFH/CFS C/LT		250									
TAPE 069090		315									
BAR 29.8 HG		400	91.3	89.3	86.9	88.8	88.0	88.0	92.1		
(***** N/M2)		500	89.0	89.9	86.4	88.8	84.0	88.9	78.8		
TAMB 84. DEG F		630	77.1	87.9	84.7	87.8	83.5	84.8	86.2		
(302. DEG K)		800	86.9	89.9	89.0	84.2	89.5	90.2	89.7		
TWET 65. DEG F		1000	95.8	99.7	99.3	93.8	91.3	90.2	90.7		
(291. DEG K)		1250	97.1	98.9	97.7	96.0	95.6	99.0	93.4		
HACT10.08 GM/M3		1600	99.4	102.8	102.9	100.8	101.0	102.1	93.8		
(.01008 KG/M3)		2000	103.5	108.5	108.7	105.0	103.1	103.2	98.1		
NFA 14866. RPM		2500	109.0	113.6	112.6	110.9	108.6	107.5	103.7		
(1556. RAD/SEC)		3150	107.1	111.8	111.6	108.8	105.2	103.0	101.4		
NFK 14520. RPM		4000	105.2	112.4	111.3	108.7	105.1	100.1	100.4		
(1520. RAD/SEC)		5000	97.8	104.3	100.2	95.2	94.6	94.3	94.2		
NFD 14895. RPM		6300	107.5	107.1	105.5	103.6	100.1	98.0	95.8		
(1560. RAD/SEC)		8000	98.9	103.5	102.1	100.0	97.4	95.4	93.2		
NO. OF BLADES 28		10000	94.8	103.4	103.6	100.8	95.5	94.7	91.5		
FAN TIP SPEED 16000		12500	97.5	102.0	101.7	97.0	93.3	90.3	88.5		
1363. FT/SEC		20000	94.4	101.7	100.3	94.7	90.9	86.6	86.4		
OVERALL MEASURED											
OVERALL CALCULATED		114.6	119.1	118.3	115.8	113.1	111.8	108.7			
PNDB		127.4	131.9	130.9	128.7	126.4	125.3	122.1			
PNLT		128.9	133.6	132.8	130.2	127.8	126.7	123.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
NO EGA		50									
RADIAL 12. FT.		63									
( 4. M)		80									
NFA 3813. RPM		100	83.7	87.7	88.6	72.7	73.4	74.5	79.3		
( 378. RAD/SEC)		125	61.3	68.3	68.1	72.7	69.4	75.4	66.0		
NFK 3529. RPM		160	49.4	66.3	66.4	71.5	69.0	71.1	73.5		
( 369. RAD/SEC)		200	59.2	68.2	70.7	68.1	75.0	76.7	77.0		
NFD 3820. RPM		250	67.9	77.9	80.9	77.8	76.7	78.7	77.9		
( 379. RAD/SEC)		315	69.1	77.1	79.3	78.8	81.0	85.5	80.6		
NO. OF BLADES 38		400	71.2	80.9	84.4	84.3	86.3	88.5	80.7		
FREQ. SHIFT		500	75.1	86.5	90.2	88.7	88.4	89.6	85.2		
JET 6		630	80.4	91.5	94.0	94.6	93.9	93.9	90.8		
FAN 4		800	78.2	89.6	92.9	92.4	90.4	89.3	88.5		
CRITICAL FREQ. 0.		1000	75.9	90.0	92.5	92.3	30.3	86.4	87.4		
AIRFLOW RATIO WF/WM 16.93		1250	73.3	87.7	90.3	90.1	88.2	83.4	85.3		
FAN TIP SPEED 1363. FT/SEC		1600	70.6	85.3	88.1	87.9	86.0	80.4	83.2		
		2000	67.7	82.9	85.8	85.7	83.8	80.2	81.0		
		2500	74.9	83.0	85.6	86.3	84.5	83.7	82.2		
		3150	64.8	78.7	81.7	82.3	81.5	80.8	79.4		
		4000	58.6	77.7	82.6	82.5	79.3	79.8	77.4		
		5000	60.5	75.8	80.4	78.7	76.9	75.3	74.3		
		6300	54.6	74.1	78.1	75.7	74.0	71.1	71.8		
		8000	47.3	69.0	73.6	71.6	70.0	67.2	68.0		
		10000	38.0	62.8	68.5	66.9	65.6	63.0	63.9		
OVERALL CALCULATED		85.5	97.4	100.3	100.2	98.9	98.3	96.3			
PNDB		95.1	106.3	109.3	109.3	107.9	107.1	105.7			
PNLT		98.0	107.4	110.2	110.6	109.4	108.5	107.0			

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA		50									
RADIAL 12. FT.		63									
( 4. M)		80									
VEHICLE JT15RD		125									
CONFIG 40X80		160									
LOC V0=80, A=0		200									
DATE 10/4/78		250									
RUN DFH/CFS C/LT		315									
TAPE 069130		400	90.9	90.4	89.1	89.9	90.4	89.8	90.9		
BAR 29.8 HG		500	89.0	89.5	85.3	92.4	90.7	89.3	83.9		
(***** N/M2)		630	88.8	88.1	89.4	90.0	89.7	88.0	86.7		
TAMB 84. DEG F		800	87.5	91.3	92.8	89.8	89.7	88.0	91.6		
(302. DEG K)		1000	98.3	97.2	97.2	100.5	94.2	97.4	95.5		
TWET 65. DEG F		1250	101.8	104.1	107.1	104.7	104.6	98.9	104.9		
(291. DEG K)		1600	100.4	103.1	102.5	102.0	103.6	98.0	93.8		
HACT10.08 GM/M3		2000	105.3	106.3	105.0	103.1	102.2	102.1	99.1		
(.01008 KG/M3)		2500	110.7	113.0	112.7	109.2	107.8	108.8	104.9		
NFA 15250. RPM		3150	109.2	110.5	107.9	104.3	102.2	102.9	100.3		
(1597. RAD/SEC)		4000	108.8	110.3	105.4	98.5	98.5	98.1	100.2		
NFK 14895. RPM		5000	101.0	103.8	98.6	97.9	96.1	91.9	93.2		
(1560. RAD/SEC)		6300	105.2	105.9	106.0	102.7	99.5	95.4	93.5		
NFD 14895. RPM		8000	106.3	103.6	103.3	101.3	97.3	94.1	94.5		
(1560. RAD/SEC)		10000	95.7	107.4	100.3	100.4	97.1	92.3	91.9		
NO. OF BLADES 28		12500	96.8	104.0	100.4	95.9	92.9	89.7	88.3		
FAN TIP SPEED 16000			96.8	102.7	97.1	97.5	91.5	85.7	85.2		
1398. FT/SEC		20000									
OVERALL MEASURED											
OVERALL CALCULATED			116.2	118.4	116.9	114.1	112.7	110.9	110.4		
PNDB			129.2	131.3	130.2	127.4	125.9	124.4	123.2		
PNLT			130.6	132.8	132.7	129.6	127.8	126.3	126.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA		50									
		63									
		80									
		100	63.3	68.8	70.8	73.8	75.8	76.3	78.1		
		125	61.3	67.9	67.0	76.3	76.1	75.8	71.1		
NFA 3706. RPM		160	58.8	66.5	71.1	73.9	75.2	72.5	74.0		
( 388. RAD/SEC)		200	59.8	69.6	74.5	73.5	75.2	74.5	78.9		
NFK 3620. RPM		250	70.4	75.4	78.8	84.3	79.6	83.9	82.7		
( 379. RAD/SEC)		315	73.6	82.3	88.7	88.5	90.0	85.4	82.1		
NFD 3620. RPM		400	72.2	81.2	84.0	85.8	88.9	84.4	80.7		
( 379. RAD/SEC)		500	76.9	84.3	86.5	86.8	87.5	88.5	86.2		
NO. OF BLADES 38		630	82.1	90.9	94.1	92.9	93.1	93.2	92.0		
FREQ. SHIFT		800	80.3	88.3	89.2	87.9	87.4	89.2	87.4		
JET 6		1000	77.5	87.9	86.6	82.1	83.7	84.4	87.2		
FAN 4		1250	74.6	85.6	84.0	76.1	79.9	79.5	85.1		
CRITICAL FREQ.		1600	71.4	83.2	81.2	77.1	77.0	74.6	83.0		
0.		2000	69.5	80.8	79.1	80.9	80.8	77.8	80.8		
AIRFLOW RATIO		2500	72.6	81.8	86.1	85.4	83.9	81.1	79.9		
WF/WM 16.93		3150	72.2	78.8	82.9	83.6	81.4	79.5	80.7		
FAN TIP SPEED		4000	59.7	81.7	79.3	82.3	80.9	77.4	77.8		
1398. FT/SEC		5000	59.8	77.8	79.1	77.6	76.5	74.7	74.1		
		6300	57.0	75.1	74.9	78.5	74.6	70.2	70.6		
		8000	49.7	70.0	70.4	74.4	70.6	66.3	66.8		
		10000	40.4	63.8	65.3	69.7	66.2	62.1	62.7		
OVERALL CALCULATED			87.1	96.4	98.3	97.6	98.0	97.3	97.9		
PNDB			95.5	106.0	108.1	107.9	107.1	105.9	106.2		
PNLT			97.0	107.5	110.3	109.7	109.0	107.3	108.5		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LCC VG=80, A=0,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 071010	400	95.6	95.9	90.2	88.2	89.0	69.3	88.2			
BAR 29.9 HG	500	91.5	94.1	89.6	87.3	86.8	83.9	70.3			
(***** N/M2)	630	90.1	87.1	90.1	86.7	80.5	68.3	72.5			
TAMB 80. DEG F	800	88.8	84.2	87.5	79.4	85.0	81.4	83.2			
(300. DEG K)	1000	79.2	84.3	81.0	76.3	81.7	83.5	81.9			
TWET 63. DEG F	1250	89.8	88.6	87.0	82.4	82.8	82.2	83.6			
(290. DEG K)	1600	93.8	90.5	89.4	87.2	88.7	86.9	86.7			
HACT 9.64 GM/M3	2000	94.2	92.3	89.7	89.7	85.0	87.1	87.6			
(.00964 KG/M3)	2500	98.0	93.7	92.7	89.7	84.6	83.1	81.6			
NFA 11364. RPM	3150	99.8	97.0	93.7	90.0	87.3	84.3	84.6			
(1190. RAD/SEC)	4000	98.9	95.7	93.1	89.6	85.3	82.8	82.3			
NFK 11141. RPM	5000	98.4	97.3	95.7	90.2	85.0	68.7	80.9			
(1166. RAD/SEC)	6300	95.6	97.8	92.7	89.0	82.9	82.0	80.0			
NFD 14895. RPM	8000	95.1	95.2	93.2	88.8	83.9	82.7	81.4			
(1560. RAD/SEC)	10000	97.7	96.0	93.8	90.5	84.9	81.9	82.0			
NO. OF BLADES 28	12500	96.6	97.3	94.8	90.1	84.1	80.6	79.1			
FAN TIP SPEED 16000		96.3	97.1	94.8	90.9	84.1	82.5	84.3			
1042. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.1	107.1	104.3	100.9	97.6	95.1	95.8			
PNDB		120.6	118.6	115.7	112.3	109.4	106.3	106.9			
PNLT		121.7	118.6	115.7	112.3	111.0	111.3	108.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	68.0	74.3	71.9	72.1	74.4	55.8	75.4			
	125	63.8	72.5	71.3	71.2	72.2	70.4	57.5			
NFA 2762. RPM	160	62.4	65.5	71.8	70.5	66.0	54.8	59.8			
( 289. RAD/SEC)	200	61.1	62.5	69.2	63.5	70.5	67.9	70.5			
NFK 2708. RPM	250	51.3	62.5	62.6	60.1	67.1	70.0	69.1			
( 283. RAD/SEC)	315	61.8	66.8	68.6	66.2	68.2	68.6	70.8			
NFD 3620. RPM	400	65.6	68.6	70.9	71.0	74.0	73.3	73.8			
( 379. RAD/SEC)	500	65.8	70.3	71.2	73.4	70.3	73.5	74.7			
NO. OF BLADES 38	630	69.4	71.6	74.1	73.4	69.8	69.4	68.7			
FREQ. SHIFT	800	70.9	74.8	75.0	73.6	72.5	70.6	71.7			
JET 6	1000	68.4	72.6	72.9	71.5	70.4	63.6	69.6			
FAN 5	1250	69.0	73.0	74.1	73.0	70.4	69.0	69.2			
CRITICAL FREQ.	1600	67.8	74.2	74.5	73.4	69.9	64.3	67.7			
0.	2000	64.1	74.3	73.2	72.0	67.6	67.9	66.7			
AIRFLOW RATIO	2500	62.5	71.2	73.3	71.5	68.4	68.4	67.9			
WF/WM 16.93	3150	63.7	71.3	73.5	72.9	69.1	67.4	68.3			
FAN TIP SPEED	4000	60.7	71.7	73.9	72.1	68.0	65.8	65.1			
1042. FT/SEC	5000	59.4	71.0	73.7	72.7	67.9	67.6	70.3			
	6300	53.5	66.6	69.6	68.9	64.2	64.0	66.7			
	8000	46.2	61.4	65.1	64.8	60.2	60.1	62.9			
	10000	38.9	55.2	60.0	60.1	55.8	53.9	58.8			
OVERALL CALCULATED		78.6	84.3	85.4	84.5	83.1	81.7	83.1			
PNDB		88.2	95.9	97.7	96.7	93.9	92.4	93.8			
PNLT		88.8	95.9	97.7	96.7	94.7	94.9	95.3			

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.											
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VG=80, A=0,	200									
DATE	10/5/78	250									
RUN	DFT/CFS C/LT	315									
TAPE	071020	400	94.3	89.4	87.7	90.4	87.5	89.6	90.5		
BAR	29.9 HG	500	91.6	89.9	83.5	89.2	87.5	89.5	89.4		
(***** N/M2)	630	89.7	87.9	88.8	85.8	85.2	79.0	68.7			
TAMB	80. DEG F	800	89.7	86.9	86.1	81.7	81.7	85.2	87.9		
(300. DEG K)	1000	83.5	80.5	83.0	77.8	81.7	82.2	83.4			
TWET	63. DEG F	1250	89.6	88.4	85.0	83.9	83.2	85.0	84.8		
(290. DEG K)	1600	92.1	88.8	89.0	86.1	85.3	85.7	85.5			
HACT	9.64 GM/M3	2000	93.7	90.7	90.3	88.7	87.9	88.2	87.7		
(.00964 KG/M3)	2500	95.8	92.3	92.7	88.8	85.6	86.3	84.3			
NFA	11757. RPM	3150	96.3	96.4	92.9	88.5	85.8	85.1	84.2		
(1231. RAD/SEC)	4000	98.7	94.6	93.1	89.4	85.0	84.6	83.5			
NFK	11526. RPM	5000	97.2	96.5	93.5	90.0	83.2	80.0	79.3		
(1207. RAD/SEC)	6300	95.7	95.6	92.7	88.0	82.6	81.4	82.2			
NFD	14895. RPM	8000	94.7	95.3	92.8	88.7	83.7	82.0	82.7		
(1560. RAD/SEC)	10000	96.7	96.2	94.7	91.5	86.5	82.8	83.0			
NO. OF BLADES	28	12500	96.2	95.6	94.0	90.6	84.9	80.4	80.2		
FAN TIP SPEED	16000	95.9	96.8	94.7	90.7	83.7	83.9	79.2			
1078. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED	107.3	105.9	103.9	100.9	97.5	97.5	96.8				
	PND8	119.7	117.6	115.2	112.0	108.7	108.3	107.4			
	PNLT	120.7	118.8	116.5	112.0	108.7	109.9	111.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.											
NO EGA	50										
	63										
	80										
	100	66.7	67.8	69.4	74.3	72.9	76.1	77.7			
	125	63.9	68.3	65.2	73.1	72.9	76.0	56.6			
NFA	2857. RPM	160	62.0	66.3	70.5	69.7	70.7	65.5	56.0		
( 299. RAD/SEC)	200	62.0	65.2	67.8	65.6	67.2	71.7	75.2			
NFK	2801. RPM	250	55.6	58.7	64.8	61.8	67.1	68.7	70.6		
( 293. RAD/SEC)	315	61.6	66.6	66.6	67.7	68.6	71.4	72.0			
NFD	3620. RPM	400	63.9	66.9	70.5	69.9	70.6	72.1	72.6		
( 379. RAD/SEC)	500	65.3	68.7	71.8	72.4	73.2	74.6	74.8			
NO. OF BLADES	38	630	67.2	70.2	74.1	72.5	70.8	72.6	71.4		
FREQ. SHIFT	800	69.4	74.2	74.2	72.1	71.0	71.4	71.3			
JET	6	1000	66.9	72.0	72.1	70.0	68.9	69.4	69.2		
FAN	4	1250	64.8	69.7	70.1	68.8	66.8	67.3	67.1		
CRITICAL FREQ.	1600	68.1	71.5	73.9	72.6	69.9	70.6	70.3			
0.	2000	65.7	73.0	74.0	73.0	67.9	65.9	66.0			
AIRFLOW RATIO	2500	63.1	71.5	72.8	70.7	67.0	67.1	68.6			
WF/WM 16.93	3150	60.6	70.5	72.4	71.0	67.8	67.4	68.9			
FAN TIP SPEED	4000	60.7	70.5	73.7	73.4	70.3	67.9	63.9			
1078. FT/SEC	5000	59.2	69.4	72.7	72.3	68.5	65.4	66.0			
	6300	56.1	69.3	72.5	71.7	66.8	68.4	64.6			
	8000	48.8	64.1	68.0	67.6	62.8	64.5	60.8			
	10000	39.5	57.9	62.9	62.9	58.4	60.3	56.7			
OVERALL CALCULATED	77.5	82.8	84.7	84.3	82.8	84.1	84.1				
	PND8	87.7	94.9	97.4	96.9	94.4	93.9	93.9			
	PNLT	87.7	95.9	98.1	96.9	94.4	95.2	95.9			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	) (0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=80, A=0,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 071030	400	91.5	90.7	85.8	87.7	86.5	78.1	87.4			
BAR 29.9 HG	500	87.7	89.1	88.1	89.5	82.2	88.2	70.0			
(***** N/M2)	630	89.5	88.1	87.9	88.0	84.3	82.8	72.5			
TAMB 80. DEG F	800	88.9	84.7	84.5	81.7	86.3	80.2	86.5			
(300. DEG K)	1000	83.8	85.0	83.0	83.6	83.2	83.2	85.4			
TWET 83. DEG F	1250	89.6	87.2	81.4	84.2	84.2	85.8	85.2			
(290. DEG K)	1600	91.3	88.8	87.1	85.4	87.2	84.8	83.3			
HACT 9.64 GM/M3	2000	93.3	91.3	90.5	86.4	87.9	87.6	89.4			
(.00984 KG/M3)	2500	95.4	92.3	92.3	90.4	87.2	85.1	86.9			
NFA 12226. RPM	3150	98.5	95.3	92.1	88.7	86.4	85.1	84.3			
(1260. RAD/SEC)	4000	98.8	94.8	93.2	88.7	84.6	84.3	84.1			
NFK 11986. RPM	5000	96.0	95.8	91.1	88.7	85.1	88.7	83.8			
(1255. RAD/SEC)	6300	94.5	96.2	93.1	90.5	85.2	83.9	84.6			
NFD 14895. RPM	8000	94.3	94.1	92.8	88.5	84.6	82.6	83.4			
(1560. RAD/SEC)	10000	95.4	95.7	93.7	89.8	84.5	83.2	83.7			
NO. OF BLADES 28	12500	95.9	96.7	94.5	90.3	84.1	81.6	80.8			
FAN TIP SPEED	16000	95.8	95.9	94.3	89.9	82.9	80.8	85.2			
1121. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.7	105.7	103.5	100.7	97.7	96.3	97.2			
PNDB		119.2	117.0	114.9	111.9	109.3	107.5	108.6			
PNLT		119.2	117.0	114.9	111.9	110.5	110.1	110.7			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	) (0.
	50										
NO EGA	63										
	80										
	100	63.9	69.1	67.5	71.8	71.9	64.6	74.6			
	125	60.0	67.5	69.8	73.4	67.8	74.7	57.2			
NFA 2971. RPM	160	61.8	66.5	69.6	71.9	69.8	69.3	59.8			
( 311. RAD/SEC)	200	61.2	63.0	66.2	65.6	71.8	66.7	73.8			
NFK 2913. RPM	250	55.9	63.2	64.6	67.4	68.8	69.7	72.6			
( 305. RAD/SEC)	315	61.6	65.4	63.0	68.0	69.6	72.2	72.4			
NFD 3620. RPM	400	63.1	66.9	68.6	69.2	72.5	71.2	70.4			
( 379. RAD/SEC)	500	64.9	69.3	72.0	70.1	73.2	74.0	76.5			
NO. OF BLADES 38	630	66.8	70.2	73.7	74.1	72.4	71.4	74.0			
FREQ. SHIFT	800	69.6	73.1	73.4	72.3	71.6	71.4	71.4			
JET 6	1000	69.3	72.4	74.4	72.3	69.8	70.6	71.1			
FAN 5	1250	66.7	70.1	72.2	70.1	67.7	68.5	69.0			
CRITICAL FREQ.	1600	65.4	72.7	71.9	71.9	70.0	66.3	70.6			
0.	2000	63.0	72.7	73.6	73.5	69.9	69.8	71.3			
AIRFLOW RATIO	2500	61.7	70.1	72.9	71.2	69.1	68.3	69.9			
WF/WM 16.93	3150	61.4	71.0	73.4	72.0	68.7	68.7	70.0			
FAN TIP SPEED	4000	60.0	71.1	73.6	72.3	68.0	66.8	66.8			
1121. FT/SEC	5000	58.9	69.8	73.2	71.7	66.7	65.9	71.2			
	6300	53.0	65.4	69.1	67.9	63.0	62.3	67.6			
	8000	45.7	60.2	64.6	63.8	59.0	58.4	63.8			
	10000	36.4	54.0	59.5	59.1	54.6	54.2	59.7			
OVERALL CALCULATED		77.0	82.7	84.5	84.2	83.0	82.9	84.4			
PNDB		86.6	94.8	97.1	96.3	93.8	93.5	95.2			
PNLT		86.6	94.8	97.1	96.3	94.4	94.7	95.6			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=80, A=0,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 071050	400	90.9	89.6	89.2	87.1	83.1	68.1	85.8			
BAR 29.9 HG	500	85.1	90.2	90.0	89.2	68.6	79.1	69.2			
(***** N/M2)	630	84.4	90.3	88.6	87.6	79.0	68.6	72.5			
TAMB 80. DEG F	800	84.1	85.9	83.3	86.3	86.7	83.6	87.3			
(300. DEG K)	1000	80.6	84.6	80.4	83.2	83.8	85.6	81.5			
TWET 63. DEG F	1250	89.1	88.6	85.2	84.9	86.4	86.0	84.5			
(290. DEG K)	1600	90.8	87.9	89.0	88.0	85.2	86.5	83.9			
HACT 9.64 GM/M3	2000	92.2	90.8	90.7	88.4	89.2	88.9	88.6			
(.00964 KG/M3)	2500	94.8	90.9	91.4	87.9	82.9	83.5	85.0			
NFA 12567. RPM	3150	97.8	95.1	91.4	87.9	85.4	86.5	85.9			
(1316. RAD/SEC)	4000	97.0	94.1	91.9	88.7	85.2	85.2	85.3			
NFK 12320. RPM	5000	96.2	95.7	91.3	89.6	84.1	80.0	83.6			
(1290. RAD/SEC)	6300	96.4	96.3	96.5	91.9	87.0	85.6	84.0			
NFD 14895. RPM	8000	96.4	95.1	92.2	88.0	84.3	83.8	83.7			
(1560. RAD/SEC)	10000	94.7	95.3	93.2	89.4	85.6	84.7	84.0			
NO. OF BLADES 28	12500	95.3	96.8	94.4	91.6	84.6	82.2	81.7			
FAN TIP SPEED 16000		96.3	96.5	95.3	90.8	84.4	80.9	86.0			
1152. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		106.4	105.7	104.4	101.1	97.3	96.6	96.9			
PND8		118.5	116.9	116.6	112.3	108.7	108.4	108.3			
PNLT		119.7	116.9	117.8	113.2	111.4	111.9	111.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	63.3	68.0	70.9	71.0	68.5	54.6	73.0			
	125	57.4	68.6	71.7	73.1	64.0	65.6	56.4			
NFA 3054. RPM	160	56.7	68.7	70.3	71.5	64.5	55.1	59.8			
( 320. RAD/SEC)	200	56.4	64.2	65.0	70.2	72.2	70.1	74.6			
NFK 2994. RPM	250	62.7	62.8	62.0	67.0	69.2	72.1	68.7			
( 313. RAD/SEC)	315	61.1	66.8	66.8	68.7	71.8	72.4	71.7			
NFD 3620. RPM	400	62.4	66.0	70.5	71.8	70.5	72.9	71.0			
( 379. RAD/SEC)	500	63.8	68.8	72.2	72.1	74.5	75.3	75.7			
NO. OF BLADES 38	630	66.0	68.8	72.8	71.8	68.1	69.8	72.1			
FREQ. SHIFT	800	68.9	72.9	72.7	71.5	70.6	72.8	73.0			
JET 6	1000	67.7	71.7	73.1	72.3	70.4	71.5	72.3			
FAN 5	1250	65.1	69.4	70.9	70.1	68.3	69.4	70.2			
CRITICAL FREQ.	1600	65.8	72.6	72.1	72.8	69.0	67.2	70.4			
0.	2000	64.9	72.8	79.0	74.9	71.7	71.5	70.7			
AIRFLOW RATIO	2500	63.8	71.1	72.3	70.7	68.8	69.5	70.2			
WF/WM 16.93	3150	60.7	70.8	72.9	71.8	69.8	70.2	70.3			
FAN TIP SPEED	4000	59.4	71.2	73.5	73.6	68.5	67.4	67.7			
1152. FT/SEC	5000	59.4	70.4	74.2	72.8	68.2	66.0	72.0			
	6300	53.5	66.0	70.1	68.8	64.5	62.4	68.4			
	8000	46.2	60.8	65.6	64.7	60.5	58.5	64.6			
	10000	36.9	54.6	60.5	60.0	56.1	54.3	60.5			
OVERALL CALCULATED		76.3	82.8	85.3	84.6	82.6	83.1	84.2			
PND8		86.8	94.9	98.4	97.1	94.1	94.1	95.5			
PNLT		87.3	94.9	100.6	96.2	95.8	95.9	97.2			



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
		50									
	NO EGA	63									
	RADIAL 12. FT.	80									
	( 4. M)	100									
	VEHICLE JT15RD	125									
	CONFIG 40X80	160									
	LOC VG=80, A=0.	200									
	DATE 10/5/78	250									
	RUN DFT/CFS C/LT	315									
	TAPE 071100	400	88.4	88.6	79.5	88.6	89.6	89.6	88.4		
	BAR 29.9 HG	500	85.7	84.2	84.3	88.8	85.1	87.0	78.8		
	(***** N/M2)	630	84.4	86.9	83.3	87.1	77.9	85.7	81.2		
	TAMB 79. DEG F	800	83.8	85.9	83.8	83.4	86.5	86.7	88.2		
	(299. DEG K)	1000	82.1	84.6	84.6	85.2	86.6	86.4	85.4		
	TWET 62. DEG F	1250	86.4	86.2	85.7	86.9	87.1	87.5	86.2		
	(290. DEG K)	1600	85.2	85.8	84.5	85.7	87.9	87.9	88.1		
	HACT 9.16 GM/M3	2000	91.2	89.8	87.5	89.1	87.5	87.6	87.7		
	(.00916 KG/M3)	2500	95.0	95.0	92.9	90.7	88.9	88.9	89.2		
	NFA 13732. RPM	3150	97.0	100.6	99.6	97.4	95.5	93.7	89.3		
	(1438. RAD/SEC)	4000	92.9	97.0	96.5	96.2	91.5	90.5	87.6		
	NFK 13475. RPM	5000	93.8	96.4	97.0	95.3	91.5	88.8	87.6		
	(1411. RAD/SEC)	6300	101.1	110.2	111.3	107.4	100.6	96.2	94.7		
	NFD 14895. RPM	8000	96.4	102.5	105.1	99.9	95.9	94.2	93.8		
	(1560. RAD/SEC)	10000	96.3	101.6	104.1	94.4	93.6	93.4	94.4		
	NO. OF BLADES 28	12500	95.2	100.6	101.1	97.6	93.3	92.9	91.6		
	FAN TIP SPEED	16000	95.4	99.9	97.5	94.6	90.2	86.4	87.0		
	1259. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED	108.5	112.7	113.8	109.8	105.1	103.0	102.2			
	PNDB	118.8	125.2	125.9	122.7	117.9	115.0	113.9			
	PNLT	119.8	127.0	127.6	124.3	119.7	118.1	115.6			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
		50									
	NO EGA	63									
		80									
		100	60.8	67.0	61.2	72.5	75.2	56.1	73.8		
		125	58.0	62.6	66.0	72.7	70.5	73.5	66.0		
	NFA 3337. RPM	160	56.7	65.3	65.0	71.0	63.4	72.2	68.5		
	( 349. RAD/SEC)	200	56.1	64.2	65.5	67.3	72.0	73.2	75.5		
	NFK 3275. RPM	250	54.2	62.8	66.2	69.0	72.2	74.9	72.6		
	( 343. RAD/SEC)	315	56.4	64.4	67.3	70.7	72.5	73.9	75.4		
	NFD 3620. RPM	400	57.0	63.9	66.0	69.5	73.2	74.3	75.2		
	( 379. RAD/SEC)	500	62.8	67.8	69.0	72.8	72.8	74.0	74.8		
	NO. OF BLADES 38	630	66.4	72.9	74.3	74.4	74.1	75.2	76.3		
	FREQ. SHIFT	800	66.1	76.4	80.9	81.0	80.7	80.0	76.4		
	JET 6	1000	63.6	74.6	79.7	79.8	76.7	76.8	74.6		
	FAN 5	1250	60.0	70.7	77.5	77.6	72.6	73.5	72.5		
	CRITICAL FREQ.	1600	63.2	73.3	77.8	76.5	76.4	72.9	74.4		
	0.	2000	69.8	86.7	91.8	90.4	85.5	82.1	81.4		
	AIRFLOW RATIO	2500	63.8	78.5	85.2	82.8	80.4	79.9	80.3		
	WF/WM 16.93	3150	62.3	76.9	83.8	76.8	77.9	78.9	80.7		
	FAN TIP SPEED	4000	59.2	74.9	80.1	79.5	77.1	78.0	77.6		
	1259. FT/SEC	5000	58.6	73.9	76.4	76.4	74.0	71.5	73.0		
		6300	52.6	69.4	72.4	72.6	70.3	67.9	69.5		
		8000	45.3	64.2	67.9	68.5	66.4	64.1	65.7		
		10000	36.1	58.0	62.7	63.8	61.9	59.8	61.5		
	OVERALL CALCULATED	75.7	89.2	94.2	92.9	90.0	89.1	89.0			
	PNDB	87.8	102.6	107.4	106.4	103.3	101.6	102.4			
	PNLT	90.2	106.2	110.8	109.7	105.9	103.5	103.7			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	(0.)
		50									
	NO EGA	63									
RADIAL	12. FT.	80									
	( 4. M)	100									
VEHICLE	JT15RD	125									
CONFIG	40X80	150									
LGC	VO=80, A=0.	200									
DATE	10/5/78	250									
RUN	DFT/CFS C/LT	315									
TAPE	071110	400	90.0	91.3	88.6	89.5	89.5	90.3	88.7		
BAR	29.9 HG	500	88.3	89.3	88.5	84.5	88.2	88.7	87.4		
	(***** N/M2)	630	87.3	85.9	89.2	88.7	88.8	81.6	72.5		
TAMB	79. DEG F	800	88.2	86.1	89.6	89.5	88.5	87.2	89.1		
	(299. DEG K)	1000	84.7	86.1	87.1	86.0	88.9	88.2	87.9		
TWET	82. DEG F	1250	88.5	86.6	85.9	88.8	89.2	89.5	90.5		
	(290. DEG K)	1500	88.6	88.3	89.4	88.9	90.0	88.6	89.2		
HACT	9.18 GM/M3	2000	92.0	94.8	94.1	93.5	91.1	92.5	91.2		
	(.00916 KG/M3)	2500	95.8	98.8	98.9	96.4	96.9	94.0	93.4		
NFA	14216. RPM	3150	98.5	101.3	102.1	100.4	98.3	95.6	93.1		
	(1488. RAD/SEC)	4000	94.8	101.3	100.9	98.5	95.1	92.8	90.7		
NFK	13950. RPM	5000	93.3	101.6	101.2	98.6	95.4	92.0	91.1		
	(1461. RAD/SEC)	6300	103.2	109.5	109.8	104.3	95.9	97.3	98.6		
NFD	14895. RPM	8000	96.2	106.0	96.6	97.3	93.7	91.4	90.7		
	(1580. RAD/SEC)	10000	96.9	106.2	100.3	97.6	97.1	93.5	91.0		
NO. OF BLADES	28	12500	97.2	97.9	98.3	95.3	91.4	88.3	86.8		
FAN TIP SPEED	18000	16000	95.9	97.1	98.1	98.0	92.0	86.0	86.3		
	1303. FT/SEC	20000									
OVERALL MEASURED											
OVERALL CALCULATED		107.9	113.8	112.6	109.3	106.0	104.2	103.7			
PNDB		120.5	126.0	125.7	121.8	118.9	116.9	116.8			
PNLT		121.8	127.0	128.5	123.1	119.9	118.2	119.7			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	(0.)
		50									
	NO EGA	63									
		80									
		100	62.4	69.7	70.3	73.4	74.9	76.8	75.9		
		125	60.6	67.7	70.2	68.4	73.6	75.2	74.6		
NFA	3455. RPM	160	59.6	64.3	70.9	72.6	74.3	68.1	59.8		
	( 362. RAD/SEC)	200	60.5	64.4	71.3	73.4	74.0	73.7	76.4		
NFK	3390. RPM	250	58.8	64.3	68.7	69.8	74.3	74.7	75.1		
	( 355. RAD/SEC)	315	60.5	64.8	67.5	72.4	74.6	75.9	77.7		
NFD	3620. RPM	400	60.4	66.4	70.9	70.7	75.3	75.0	76.3		
	( 379. RAD/SEC)	500	63.6	72.8	75.6	77.2	78.4	78.9	78.3		
NO. OF BLADES	38	630	67.2	76.7	80.3	80.1	82.1	80.3	80.5		
FREQ. SHIFT		800	69.6	79.1	83.4	84.0	83.5	81.9	80.2		
JET	6	1000	65.5	78.9	82.1	82.1	80.3	79.1	77.7		
FAN	5	1250	61.3	76.6	79.9	79.9	77.0	76.2	75.3		
CRITICAL FREQ.		1600	62.7	78.5	82.0	81.8	80.3	78.1	77.9		
	0.	2000	71.7	86.0	90.3	87.3	80.6	83.2	85.3		
AIRFLOW RATIO		2500	63.6	82.0	76.7	80.0	78.2	77.1	77.2		
WF/WM	16.93	3150	62.9	81.5	80.0	80.0	81.4	79.0	77.3		
FAN TIP SPEED		4000	61.2	72.2	77.3	77.2	75.2	73.4	72.8		
	1303. FT/SEC	5000	59.1	71.1	77.0	79.8	75.8	71.1	72.3		
		6300	53.1	66.6	73.0	76.0	72.1	67.5	68.8		
		8000	45.6	61.4	68.5	71.9	68.2	63.7	65.0		
		10000	38.6	55.2	63.3	67.2	63.7	59.4	60.8		
OVERALL CALCULATED		77.2	90.4	93.4	92.7	91.2	90.5	90.7			
PNDB		89.5	103.1	106.6	105.7	103.7	102.5	103.4			
PNLT		92.4	105.0	110.3	107.6	105.3	104.4	106.3			

**MODEL SOUND PRESSURE LEVELS**  
**ANGLES FROM INLET IN DEGREES**

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	NO EGA	50									
	63										
	80										
RADIAL	12. FT.										
	( 4. M)										
	100										
VEHICLE	JT15RD										
CONFIG	40X80										
LGC	VG=80, A=0,										
	200										
DATE	10/5/78										
	250										
RUN	DFT/CFS C/LT										
	315										
TAPE	071130	400	90.9	88.9	87.7	89.8	90.8	89.4	88.2		
BAR	29.9 HG	500	88.7	88.8	88.1	90.8	90.6	91.1	81.2		
	(***** N/M2)	630	80.3	87.3	88.8	89.8	88.7	87.9	87.9		
TAMB	80. DEG F	800	86.4	89.6	90.3	89.2	88.0	90.3	90.8		
	(300. DEG K)	1000	86.5	87.9	90.5	89.8	91.6	88.7	89.3		
TWET	62. DEG F	1250	89.9	93.0	91.7	89.2	91.8	89.3	91.3		
	(290. DEG K)	1600	89.8	92.8	93.4	93.8	92.0	91.1	91.2		
HACT	8.87 GM/M3	2000	93.4	95.8	94.2	94.3	91.3	93.3	92.2		
	(.00887 KG/M3)	2500	96.1	98.7	98.4	97.5	94.5	93.4	91.9		
NFA	14812. RPM	3150	97.8	102.2	101.3	97.7	95.1	93.5	93.1		
	(1881. RAD/SEC)	4000	97.0	100.9	100.8	97.2	91.2	93.1	90.8		
NFK	14821. RPM	5000	93.9	99.5	94.8	90.2	89.3	90.8	90.6		
	(1520. RAD/SEC)	6300	108.8	108.6	110.2	107.5	101.6	96.3	94.2		
NFD	14895. RPM	8000	101.1	104.0	104.7	103.2	98.9	95.0	91.0		
	(1880. RAD/SEC)	10000	95.8	99.0	100.8	92.7	89.9	91.1	89.8		
NO. OF BLADES	28	12500	98.5	102.8	99.9	95.6	88.6	87.5	87.7		
FAN TIP SPEED	16000		94.5	101.4	97.2	94.9	87.7	85.2	84.8		
	1358. FT/SEC	20000									
	OVERALL MEASURED										
	OVERALL CALCULATED		111.0	112.2	113.2	110.8	106.3	104.2	102.9		
	PNOB		124.1	124.2	126.1	123.8	119.3	116.5	115.2		
	PFLT		126.0	125.0	127.8	125.4	120.5	117.0	115.8		

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**  
**ANGLES FROM INLET IN DEGREES**

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	NO EGA	50									
	63										
	80										
	100	83.3	87.3	89.4	73.7	76.2	75.9	75.4			
	125	81.0	87.2	89.8	74.5	78.0	77.6	68.4			
NFA	3600. RPM	160	52.6	65.7	70.5	73.7	74.2	74.4	75.2		
	( 377. RAD/SEC)	200	58.7	67.9	72.0	73.1	73.5	76.8	78.1		
NFK	3529. RPM	250	58.6	68.1	72.1	73.8	77.0	75.2	78.5		
	( 369. RAD/SEC)	315	61.9	71.2	73.3	73.0	77.2	75.7	78.5		
NFD	3620. RPM	400	61.6	70.7	74.9	77.8	77.3	77.5	78.3		
	( 379. RAD/SEC)	500	65.0	73.8	75.7	78.0	78.6	79.7	79.3		
NO. OF BLADES	38	630	67.5	76.8	79.8	81.2	79.8	79.7	79.0		
FREQ. SHIFT		800	68.9	80.0	82.6	81.3	80.3	79.9	80.2		
JET	6	1000	67.7	78.5	81.8	80.8	78.4	79.4	77.8		
FAN	4	1250	65.1	76.2	79.8	78.8	72.4	77.3	75.5		
CRITICAL FREQ.		1600	62.4	73.8	77.4	76.4	70.2	75.1	73.4		
	0.	2000	62.4	76.0	75.3	74.2	74.0	76.7	77.3		
AIRFLOW RATIO		2500	76.2	82.5	90.3	90.2	86.1	82.0	80.7		
	WF/WM 16.93	3150	67.0	79.2	84.3	85.5	83.1	80.4	77.2		
FAN TIP SPEED		4000	59.5	73.2	79.7	74.5	73.8	76.1	75.5		
	1358. FT/SEC	5000	61.4	76.4	78.6	77.2	72.2	72.4	73.5		
		6300	54.6	73.8	75.0	75.9	70.8	69.7	70.2		
		8000	47.4	68.6	70.5	71.7	66.8	65.8	68.4		
		10000	38.1	62.5	65.3	67.0	62.4	61.6	62.2		
	OVERALL CALCULATED		79.4	86.8	93.6	93.7	91.1	90.6	90.0		
	PNOB		93.4	102.4	108.1	108.0	104.8	103.2	102.4		
	PFLT		97.2	104.1	111.6	111.5	107.3	104.4	103.9		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. ) (0. )
NO EGA	50									
RADIAL 12. FT.	53									
( 4. M)	80									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LGC VG=80, A=0.	200									
DATE 10/5/78	250									
RUN DFT/CFS C/LT	315									
TAPE 071180	400	91.3	90.4	87.8	91.4	89.3	92.4	92.3		
BAR 29.9 HG	500	87.9	89.9	92.1	90.6	90.9	88.9	82.7		
(***** N/M2)	630	88.6	89.3	90.9	88.9	90.4	88.3	87.0		
TAMB 80. DEG F	800	90.2	90.9	92.9	87.0	92.1	91.6	90.5		
(300. DEG K)	1000	89.2	89.0	94.1	94.3	90.9	92.8	91.1		
TWET 82. DEG F	1250	94.1	97.2	96.7	97.5	95.7	95.2	96.3		
(280. DEG K)	1600	89.8	91.7	93.0	91.8	93.7	91.7	92.2		
HACT 8.87 GM/M3	2000	95.6	95.2	93.4	94.0	93.4	92.4	92.6		
(.00887 KG/M3)	2500	97.7	98.9	98.6	95.3	95.8	92.9	93.8		
NFA 15194. RPM	3150	99.9	101.5	99.9	95.5	93.5	95.4	93.7		
(1591. RAD/SEC)	4000	97.5	99.1	95.8	90.6	90.5	90.9	93.2		
NFK 14895. RPM	5000	96.7	97.9	95.9	95.4	92.8	89.1	91.8		
(1560. RAD/SEC)	6300	109.0	102.4	109.0	104.4	100.0	94.9	94.4		
NFD 14895. RPM	8000	109.1	103.4	108.7	103.2	98.5	94.6	95.2		
(1560. RAD/SEC)	10000	94.5	106.4	94.1	92.9	91.4	90.4	90.0		
NO. OF BLADES 28	12500	98.7	102.7	97.0	95.0	90.9	88.4	88.1		
FAN TIP SPEED 18000	18000	98.3	101.1	98.1	97.3	92.0	85.4	87.6		
1393. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		113.3	112.0	113.2	109.4	106.6	104.5	104.6		
		PND8	125.3	122.7	125.4	121.7	118.9	117.0	116.4	
		PNLT	127.6	125.0	128.6	124.2	120.0	118.1	117.9	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. ) (0. )
NO EGA	50									
	63									
	80									
	100	63.7	66.8	68.5	75.3	74.7	78.9	79.5		
	125	61.2	66.3	73.8	74.5	76.3	75.4	69.9		
NFA 3693. RPM	160	60.9	67.7	72.8	70.8	75.9	72.8	74.3		
( 387. RAD/SEC)	200	62.5	69.2	74.6	70.9	77.6	78.1	77.8		
NFK 3620. RPM	250	61.3	67.2	75.7	78.1	76.3	78.3	78.3		
( 379. RAD/SEC)	315	66.1	75.4	78.3	81.3	81.1	81.6	83.5		
NFD 3620. RPM	400	61.6	69.6	74.5	75.4	79.0	78.1	79.3		
( 379. RAD/SEC)	500	67.2	73.2	74.9	77.7	78.7	78.8	79.7		
NO. OF BLADES 38	630	69.1	76.8	80.0	79.0	80.8	79.2	80.9		
FREG. SHIFT	800	71.0	79.3	81.2	79.1	78.7	81.8	80.8		
JET 8	1000	68.2	76.7	76.8	74.2	75.7	77.2	80.2		
FAN 4	1250	65.3	74.1	72.4	70.8	72.6	72.6	78.1		
CRITICAL FREQ.	1800	62.2	71.3	72.7	74.6	73.7	71.2	76.0		
0.	2000	65.2	74.4	76.4	76.4	77.5	75.0	78.5		
AIRFLOW RATIO	2500	76.4	78.3	89.1	87.1	84.5	80.6	80.9		
WF/WM 16.93	3150	75.0	78.6	88.3	85.5	82.7	80.0	81.4		
FAN TIP SPEED	4000	58.4	79.6	73.0	74.7	75.1	75.4	75.9		
1393. FT/SEC	5000	61.6	76.5	75.7	76.6	74.5	73.3	73.9		
	6300	58.4	73.8	75.9	78.3	75.1	69.9	73.0		
	8000	49.2	68.6	71.4	74.1	71.1	66.0	69.2		
	10000	39.9	62.5	66.2	69.4	64.7	61.8	65.0		
OVERALL CALCULATED		81.2	86.2	93.4	92.4	91.4	90.8	91.9		
		PND8	94.5	101.6	107.3	106.4	104.8	102.7	104.1	
		PNLT	97.1	102.7	109.7	106.1	106.3	103.9	105.1	

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	90.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. ) (0. )
NO EGA	50									
	63									
RADIAL 12. FT.	80									
( 4. M)	100									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC YO=115.A=0.	200									
DATE 10/5/78	250									
RUN DFT/CFS C/LT	315									
TAPE 072020	400	93.1	77.9	77.2	97.1	89.2	74.8	90.4		
BAR 29.9 MG	500	95.1	95.4	92.0	74.1	73.6	88.6	84.6		
( ***** N/M2)	630	99.1	98.7	94.8	92.1	86.5	93.1	83.7		
TAMB 71. DEG F	800	91.5	93.7	82.5	90.4	87.5	87.2	74.4		
(295. DEG K)	1000	85.9	77.3	74.1	77.1	90.3	84.9	71.6		
TWET 60. DEG F	1250	93.4	91.5	90.7	89.8	89.2	91.6	87.9		
(289. DEG K)	1600	95.1	88.5	93.2	90.5	87.5	89.9	86.6		
HACT 9.98 GM/M3	2000	95.2	92.7	90.4	90.6	88.3	83.5	87.5		
(.00998 KG/M3)	2500	97.9	93.8	92.9	88.9	85.7	84.3	80.5		
NFA 11288. RPM	3150	100.2	96.0	94.3	86.7	84.2	89.6	86.8		
(1180. RAD/SEC)	4000	99.2	95.2	93.5	89.9	84.2	84.5	80.3		
NFK 11140. RPM	5000	99.6	95.8	94.5	88.9	85.1	81.6	85.3		
(1166. RAD/SEC)	6300	95.1	96.7	91.4	88.1	84.9	80.1	81.9		
NFD 14895. RPM	8000	95.6	95.1	94.3	87.1	85.5	81.5	80.9		
(1560. RAD/SEC)	10000	99.1	98.0	94.7	89.8	84.5	82.8	82.1		
NO. OF BLADES 28	12500	97.2	97.9	94.1	90.3	83.3	82.0	84.4		
FAN TIP SPEED	16000	96.5	98.0	95.2	92.3	87.6	86.2	88.2		
1033. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		109.3	107.4	105.0	102.8	99.0	99.6	96.0		
PNOB		121.5	118.0	116.2	112.8	109.2	110.7	108.6		
PNLT		123.5	121.2	119.9	116.0	111.2	112.6	111.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	90.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. ) (0. )
NO EGA	50									
	63									
	80									
	100	65.6	56.4	59.0	81.1	74.7	61.2	77.7		
	125	67.5	73.9	73.8	58.1	59.1	75.4	71.9		
NFA 2739. RPM	160	71.4	75.1	76.3	76.0	72.0	79.6	76.0		
( 297. RAD/SEC)	200	63.6	72.0	64.2	74.3	73.0	73.7	61.6		
NFK 2707. RPM	250	58.1	55.6	55.8	61.0	75.8	71.5	58.8		
( 283. RAD/SEC)	315	65.5	69.8	72.4	73.7	74.7	78.3	75.2		
NFD 3620. RPM	400	68.0	64.7	74.8	74.4	72.9	76.4	73.8		
( 379. RAD/SEC)	500	67.9	70.8	72.0	74.4	73.7	70.0	74.7		
NO. OF BLADES 38	630	69.3	71.8	74.4	72.7	71.0	70.7	67.7		
FREQ. SHIFT	800	71.3	73.8	75.6	70.3	69.4	76.1	73.9		
JET 6	1000	68.8	71.5	73.5	69.4	67.3	74.1	71.8		
FAN 5	1250	69.3	72.5	74.6	73.3	69.2	71.9	69.7		
CRITICAL FREQ.	1600	69.0	72.7	75.3	72.1	70.0	69.8	72.1		
0.	2000	63.6	73.2	71.9	71.0	69.6	67.6	68.5		
AIRFLOW RATIO	2500	63.0	71.0	74.4	69.8	69.9	67.2	67.3		
WF/WH 16.93	3150	65.1	73.3	74.4	72.2	68.7	68.2	68.4		
FAN TIP SPEED	4000	61.2	72.2	73.2	72.2	67.1	67.1	70.4		
1033. FT/SEC	5000	59.6	71.9	74.1	74.1	71.4	71.3	74.2		
	6300	53.7	67.5	70.0	70.3	67.7	67.7	70.6		
	8000	46.4	62.3	65.5	66.2	63.7	63.9	66.6		
	10000	37.1	55.1	60.4	61.5	59.3	59.5	62.7		
OVERALL CALCULATED		79.9	84.5	86.2	86.5	84.4	80.4	85.4		
PNOB		89.5	96.6	98.1	97.3	95.2	93.7	96.7		
PNLT		90.5	98.2	100.0	99.0	96.5	97.0	98.2		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LGC VG=115, A=0.	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 072030	400	94.3	92.0	77.2	92.0	86.8	89.0	94.2			
BAR 29.9 HG	500	94.0	93.2	90.2	92.0	86.2	87.6	89.7			
(***** N/M2)	630	94.3	95.3	89.4	91.4	89.2	88.3	88.7			
TAMB 72. DEG F	800	78.2	83.9	83.8	78.3	89.8	89.7	73.8			
(298. DEG K)	1000	88.5	80.3	74.5	81.9	86.0	84.9	71.6			
TWET 60. DEG F	1250	93.6	91.5	89.3	86.2	88.3	87.9	83.1			
(289. DEG K)	1600	93.4	83.9	90.4	91.4	86.3	84.8	90.5			
HACT 9.89 GM/M3	2000	94.6	92.0	93.0	91.0	90.5	82.7	91.0			
(.00969 KG/M3)	2500	97.0	92.7	91.7	88.5	89.1	85.1	86.1			
NFA 11668. RPM	3150	99.4	98.9	92.0	91.9	92.3	92.6	88.5			
(1222. RAD/SEC)	4000	98.8	95.0	94.8	89.5	82.4	85.7	84.4			
NFK 11524. RPM	5000	98.4	98.5	93.9	88.5	85.1	84.8	84.0			
(1207. RAD/SEC)	6300	95.8	95.3	92.7	88.3	85.5	83.3	83.8			
NFD 14895. RPM	8000	95.9	94.8	93.8	89.0	86.7	82.6	83.0			
(1580. RAD/SEC)	10000	99.1	97.0	98.1	89.3	85.5	82.8	82.7			
NO. OF BLADES 28	12500	96.5	96.2	93.9	88.5	84.3	82.0	82.2			
FAN TIP SPEED 18000		96.6	97.6	95.8	90.3	88.5	86.9	87.9			
1070. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.4	106.8	104.7	102.2	100.2	99.3	100.0			
PNOB		120.8	117.9	116.0	113.8	112.9	112.3	110.5			
PNLT		123.6	121.0	118.4	115.1	115.0	114.7	112.0			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	
NO EGA	50										
	63										
	80										
	100	68.8	70.5	59.0	77.0	72.3	78.8	81.5			
	125	66.4	71.7	72.0	78.4	71.7	74.2	77.0			
NFA 2836. RPM	160	66.6	73.7	71.1	75.3	74.7	74.8	78.0			
( 297. RAD/SEC)	200	48.5	71.8	65.5	62.2	75.3	76.2	61.1			
NFK 2801. RPM	250	60.7	58.8	58.2	65.8	71.5	71.5	58.9			
( 293. RAD/SEC)	315	65.7	69.8	71.0	70.1	73.8	74.4	70.4			
NFD 3620. RPM	400	65.3	62.1	72.0	75.3	71.7	71.1	77.7			
( 379. RAD/SEC)	500	66.3	70.1	74.6	74.8	75.9	69.2	78.2			
NO. OF BLADES 38	630	68.4	70.7	73.2	72.3	74.4	71.5	73.3			
FREQ. SHIFT	800	70.5	73.7	73.3	75.5	77.5	78.9	75.6			
JET 6	1000	68.0	71.4	71.2	73.4	75.4	76.9	73.5			
FAN 4	1250	65.5	69.2	71.6	71.3	73.3	74.7	71.4			
CRITICAL FREQ.	1800	68.0	71.9	75.4	72.7	71.1	72.6	71.2			
0.	2000	66.9	73.0	74.4	71.5	69.8	70.7	70.6			
AIRFLOW RATIO	2500	63.0	71.2	72.8	71.0	69.9	68.9	69.9			
WF/WM 16.93	3150	61.8	70.0	73.4	71.3	70.8	68.0	69.2			
FAN TIP SPEED	4000	63.1	71.2	75.1	71.1	69.3	67.9	68.6			
1069. FT/SEC	5000	59.5	70.0	72.6	70.1	67.9	66.9	68.0			
	6300	56.8	70.1	73.7	71.3	71.6	71.4	73.4			
	8000	49.5	64.8	69.2	67.2	67.7	67.6	69.6			
	10000	40.3	56.7	62.0	62.5	63.2	63.3	65.4			
OVERALL CALCULATED		78.6	83.8	85.4	86.0	86.1	86.5	87.4			
PNOB		88.6	95.6	98.3	95.7	95.6	95.1	96.8			
PNLT		90.1	97.2	99.4	97.4	97.3	97.6	97.6			

MODEL SOUND PPFESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LGC VO=115, A=0,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 072040	400	97.1	76.3	85.9	91.3	90.1	85.1	90.7			
BAR 29.9 HG	500	96.4	91.1	85.0	86.4	86.2	94.2	90.8			
(***** N/M2)	630	90.7	93.4	90.2	92.6	93.0	93.6	87.8			
TAMB 73. DEG F	800	75.2	83.1	73.9	74.4	90.0	90.0	73.2			
(296. DEG K)	1000	90.9	72.8	84.5	86.5	71.5	88.1	71.9			
TWET 60. DEG F	1250	92.0	90.6	87.8	89.3	86.8	88.9	71.4			
(289. DEG K)	1600	92.7	89.5	89.3	88.3	85.9	88.2	89.3			
HACT 9.40 GM/M3	2000	94.1	94.2	89.2	91.1	88.8	86.8	90.6			
(.00940 KG/M3)	2500	97.9	93.9	94.1	87.6	90.0	86.5	87.4			
NFA 12145. RPM	3150	98.8	93.8	92.3	89.4	93.7	94.3	93.1			
(1272. RAD/SEC)	4000	98.6	94.0	93.2	89.7	85.3	86.4	85.1			
NFK 11984. RPM	5000	97.5	95.0	93.3	88.2	86.2	84.6	86.2			
(1255. RAD/SEC)	6300	94.6	94.3	94.7	89.7	85.3	84.9	84.6			
NFD 14895. RPM	8000	95.1	93.7	93.8	84.4	85.1	84.6	82.8			
(1560. RAD/SEC)	10000	97.1	96.6	94.7	89.1	84.6	84.6	81.7			
NO. OF BLADES 28	12500	96.2	97.4	94.4	88.4	84.3	81.2	81.8			
FAN TIP SPEED	16000	96.5	97.5	95.8	90.2	87.6	86.5	87.3			
1113. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.1	106.0	104.4	101.4	100.8	101.5	99.9			
PNDB		120.1	116.4	115.4	112.4	113.6	114.1	112.6			
PNLT		122.6	119.5	118.9	116.5	116.3	116.7	115.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	69.6	54.8	67.7	75.3	75.6	71.7	78.0			
	125	68.8	69.6	66.8	70.4	71.7	80.8	78.1			
NFA 2952. RPM	160	63.0	71.8	71.9	76.5	78.5	80.1	75.1			
( 309. RAD/SEC)	200	47.5	61.4	55.6	58.3	75.5	76.5	60.5			
NFK 2913. RPM	250	63.1	51.1	66.2	70.4	57.0	74.7	59.2			
( 305. RAD/SEC)	315	64.1	68.9	69.5	73.2	72.3	75.4	58.7			
NFD 3620. RPM	400	64.6	67.7	70.9	72.2	71.3	74.7	76.5			
( 379. RAD/SEC)	500	65.8	72.3	70.8	74.9	74.2	70.3	77.8			
NO. OF BLADES 38	630	69.3	71.9	75.6	71.4	75.3	72.9	74.6			
FREQ. SHIFT	800	69.9	71.6	73.6	73.0	78.9	80.6	80.2			
JET 6	1000	69.3	71.6	74.4	73.3	70.5	72.7	72.1			
FAN 5	1250	66.7	69.3	72.2	71.1	67.3	66.8	69.1			
CRITICAL FREQ.	1600	66.9	71.9	74.1	71.4	71.1	70.6	73.0			
0.	2000	63.1	70.8	75.2	72.7	70.0	70.8	71.2			
AIRFLOW RATIO	2500	62.5	69.6	73.9	67.1	69.6	70.3	69.3			
WF/WM 16.93	3150	63.1	71.9	74.4	71.5	68.8	70.1	68.0			
FAN TIP SPEED	4000	60.3	71.8	73.5	70.4	68.2	66.4	67.8			
1113. FT/SEC	5000	59.6	71.4	74.6	72.0	71.3	71.6	73.2			
	6300	53.6	66.9	70.6	68.2	67.7	68.0	69.7			
	8000	46.4	61.7	66.1	64.0	63.7	64.1	65.9			
	10000	37.1	55.6	60.9	59.3	59.3	59.9	61.7			
OVERALL CALCULATED		78.7	82.9	85.4	85.1	86.1	88.0	87.1			
PNDB		88.0	95.2	97.9	96.2	95.7	96.7	96.8			
PNLT		89.2	96.8	99.7	98.2	97.8	99.3	99.0			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	80.	0.	0
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	) (0.
NO EGA										
RADIAL 12. FT.										
( 4. M)										
VEHICLE JT15RD										
CONFIG 40X80										
LGC VO=115,A=0.										
DATE 10/5/78										
RUN DFT/CFS C/LT										
TAPE 072050	400	93.7	77.7	88.3	88.7	92.2	76.0	95.1		
BAR 29.9 HG	500	96.4	96.1	91.0	89.3	91.0	76.3	92.7		
(***** N/M2)	630	96.8	96.3	91.2	96.3	93.0	91.6	82.2		
TAMB 74. DEG F	800	88.2	92.8	73.9	88.7	89.2	92.6	74.3		
(298. DEG K)	1000	91.2	72.9	83.2	88.4	80.9	85.9	82.9		
TWET 60. DEG F	1250	94.0	91.8	89.3	86.2	87.6	83.6	81.2		
(289. DEG K)	1600	91.1	91.8	86.6	88.9	88.4	83.6	89.1		
HACT 9.11 GM/M3	2000	92.0	92.2	89.8	91.1	88.6	88.0	89.8		
(.00911 KG/M3)	2500	95.4	95.6	94.6	90.6	89.4	88.3	97.4		
NFA 12497. RPM	3150	96.4	95.3	92.3	90.0	88.0	89.3	90.2		
(1308. RAD/SEC)	4000	98.1	94.4	93.2	89.1	86.1	87.0	85.8		
NFK 12320. RPM	5000	97.4	94.7	93.2	88.2	85.8	85.5	85.9		
(1290. RAD/SEC)	6300	95.0	94.3	98.0	88.6	85.7	84.4	84.6		
NFD 14895. RPM	8000	96.2	93.4	92.2	83.4	84.3	83.4	83.2		
(1560. RAD/SEC)	10000	96.6	95.7	93.8	88.1	86.0	84.0	82.1		
NO. OF BLADES 28	12500	96.6	96.3	95.4	88.5	83.7	82.2	81.2		
FAN TIP SPEED 16000		96.9	97.2	95.6	90.3	87.4	86.8	87.7		
1146. FT/SEC 20000										
OVERALL MEASURED										
OVERALL CALCULATED		107.8	106.6	105.1	102.3	100.8	99.4	100.5		
PNOB		119.7	117.5	116.8	113.0	111.5	110.8	111.5		
PFLT		121.2	120.7	119.7	115.4	111.5	114.9	113.3		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	) (0.
NO EGA										
NFA 3037. RPM										
( 318. RAD/SEC)										
NFK 2994. RPM										
( 313. RAD/SEC)										
NFD 3620. RPM										
( 379. RAD/SEC)										
NO. OF BLADES 38										
FREQ. SHIFT 800										
JET 6										
FAN 5										
CRITICAL FREQ. 1600										
0. 2000										
AIRFLOW RATIO 2500										
WF/WM 16.93										
FAN TIP SPEED 4000										
1145. FT/SEC 5000										
OVERALL CALCULATED		78.3	84.0	86.0	86.1	86.2	85.9	87.8		
PNOB		87.9	95.2	98.5	96.3	95.9	96.0	97.2		
PFLT		88.6	96.8	100.3	97.5	97.1	98.0	96.8		



MODEL SOUND PRESSURE LEVELS  
 ANGLES FROM INLET IN DEGREES

		FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	NO EGA	50									
		63									
RADIAL	12. FT.	80									
	( 4. M)	100									
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VG=115, A=0,	200									
DATE	10/5/78	250									
RUN	DFT/CFS C/LT	315									
TAPE	072090	400	90.1	78.0	77.3	78.9	72.6	75.6	91.6		
BAR	29.9 HG	500	86.2	82.8	73.9	81.5	85.5	94.2	92.8		
	(***** N/M2)	630	92.9	88.3	87.5	88.2	94.2	93.8	90.5		
TAMB	77. DEG F	800	78.3	73.2	90.8	84.4	92.5	89.7	73.3		
	(298. DEG K)	1000	89.4	88.7	74.2	72.9	89.0	75.1	71.8		
TWET	63. DEG F	1250	93.5	90.3	88.0	85.6	90.3	87.7	83.9		
	(290. DEG K)	1600	84.2	91.3	91.3	82.8	84.5	88.3	92.3		
MACT	10.50 GM/M3	2000	91.8	91.9	91.0	92.1	91.9	86.0	92.0		
	(.01050 KG/M3)	2500	95.8	93.8	92.5	91.3	91.6	91.7	91.0		
NFA	13707. RPM	3150	97.2	98.9	98.5	94.8	97.3	93.1	90.9		
	(1435. RAD/SEC)	4000	94.6	95.3	95.0	93.7	90.5	88.1	88.3		
NFK	13475. RPM	5000	94.2	94.6	95.3	92.3	90.7	87.9	88.2		
	(1411. RAD/SEC)	6300	97.2	104.8	111.2	107.1	98.9	89.1	91.9		
NFD	14895. RPM	8000	96.3	97.8	107.2	103.6	99.1	91.6	87.8		
	(1560. RAD/SEC)	10000	96.5	102.1	109.2	105.7	102.1	92.2	89.5		
NO. OF BLADES	28	12500	96.2	99.5	108.3	103.5	98.6	89.1	86.7		
FAN TIP SPEED	16000	20000	95.5	97.4	104.2	98.6	95.4	87.9	88.7		
	1256. FT/SEC										
OVERALL MEASURED											
OVERALL CALCULATED			106.5	109.6	115.8	111.8	107.8	102.5	102.0		
			PNDB	118.3	121.6	126.1	122.6	118.2	114.2	113.3	
			PNLT	122.2	124.9	131.7	125.1	120.3	117.4	115.6	

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
 ANGLES FROM INLET IN DEGREES

		FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0. )									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	NO EGA	50									
		63									
		80									
		100	62.5	56.4	59.0	62.8	58.0	62.1	78.8		
		125	58.5	71.2	55.6	65.4	70.9	80.7	80.0		
NFA	3331. RPM	160	65.2	66.7	69.2	72.1	79.7	80.3	77.8		
	( 349. RAD/SEC)	200	48.6	51.5	72.5	68.3	78.0	76.2	60.6		
NFK	3275. RPM	250	61.5	66.9	55.8	56.7	74.4	61.6	59.0		
	( 343. RAD/SEC)	315	65.5	68.5	69.6	69.4	75.7	74.1	71.1		
NFD	3620. RPM	400	56.0	69.4	72.8	66.6	69.8	74.7	79.4		
	( 379. RAD/SEC)	500	63.2	69.9	72.5	75.8	77.2	72.4	79.1		
NO. OF BLADES	38	630	67.1	71.7	73.9	75.0	76.8	78.0	78.1		
FREQ. SHIFT		800	68.3	76.7	79.8	78.4	82.5	79.4	78.0		
JET	6	1000	65.3	72.9	76.2	77.2	75.7	74.4	75.3		
FAN	5	1250	62.2	69.0	72.5	75.1	71.8	70.1	72.7		
CRITICAL FREQ.	1600	63.6	71.5	76.1	75.7	75.6	73.9	75.0	75.0		
	0.	2000	65.7	81.3	91.7	90.1	83.6	75.0	78.5		
AIRFLOW RATIO	2500	63.7	73.7	87.3	86.3	83.5	77.3	74.2	74.2		
WF/WM	16.93	3150	62.5	77.4	88.9	88.1	86.3	77.7	75.8		
FAN TIP SPEED	4000	60.2	73.8	87.4	85.4	82.4	74.2	72.7	72.7		
	1256. FT/SEC	5000	58.6	71.4	83.1	80.4	79.2	73.0	74.7		
		6300	52.7	66.9	79.0	76.6	75.5	69.4	71.1		
		8000	45.4	61.7	74.6	72.5	71.5	65.6	67.3		
		10000	36.2	55.5	69.4	67.8	67.1	61.3	63.2		
OVERALL CALCULATED			76.3	86.1	95.9	94.7	92.6	88.8	89.2		
			PNDB	86.7	99.2	108.9	107.9	106.7	100.5	100.1	
			PNLT	88.7	102.2	112.0	110.9	108.8	102.4	101.7	

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC V0=115, A=0,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 072100	400	92.4	76.0	76.3	74.8	90.6	74.7	95.4			
BAR 29.9 HG	500	92.9	91.5	75.1	74.5	86.3	87.3	89.2			
(***** N/M2)	630	95.6	91.2	93.1	85.6	92.6	92.1	93.5			
TAMB 78. DEG F	800	75.6	88.2	88.1	87.0	91.0	90.5	87.5			
(299. DEG K)	1000	89.4	88.7	74.4	87.1	84.9	92.9	88.3			
TWET 63. DEG F	1250	92.8	92.3	92.8	93.0	89.8	88.3	89.9			
(290. DEG K)	1600	90.6	87.3	93.2	93.9	90.5	88.3	90.3			
HACT10.21 GM/M3	2000	94.8	93.2	92.2	94.0	92.6	90.3	92.1			
(.01021 KG/M3)	2500	96.2	97.9	98.5	94.9	96.0	93.1	94.7			
NFA 14783. RPM	3150	96.7	101.9	102.0	99.5	96.4	94.3	92.1			
(1548. RAD/SEC)	4000	95.7	102.8	102.6	99.7	93.7	93.7	91.3			
NFK 14519. RPM	5000	91.2	104.3	102.4	94.9	93.7	92.9	92.5			
(1520. RAD/SEC)	6300	100.1	113.2	108.7	102.6	94.5	97.9	99.6			
NFD 14895. RPM	8000	97.2	107.7	102.6	95.8	93.2	94.1	94.6			
(1560. RAD/SEC)	10000	94.9	104.9	97.0	98.0	97.2	91.7	91.4			
NO. OF BLADES 28	12500	96.1	98.9	98.1	95.1	90.0	86.1	86.8			
FAN TIP SPEED	16000	94.4	100.1	97.6	94.6	89.3	87.3	88.6			
1355. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		107.3	115.9	112.5	108.3	105.3	104.4	105.3			
PNDB		119.3	128.5	125.1	120.6	117.8	117.0	118.1			
PNLT		123.1	131.2	129.0	122.2	119.1	118.2	119.8			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	64.8	54.4	58.0	58.7	76.0	61.2	82.6			
	125	65.2	69.9	56.8	58.4	71.7	73.8	76.4			
NFA 3593. RPM	160	67.9	69.6	74.8	69.5	78.1	78.6	80.8			
( 376. RAD/SEC)	200	47.9	66.5	69.8	70.9	76.5	77.0	74.8			
NFK 3529. RPM	250	61.5	66.9	56.0	70.9	70.3	79.4	75.5			
( 369. RAD/SEC)	315	64.8	70.5	74.4	76.8	75.2	74.7	77.1			
NFD 3620. RPM	400	62.4	65.4	74.7	77.7	75.8	74.7	77.4			
( 379. RAD/SEC)	500	66.4	71.2	73.7	77.7	77.9	76.7	79.2			
NO. OF BLADES 38	630	67.6	75.8	79.9	78.6	81.2	79.4	81.8			
FREQ. SHIFT	800	67.8	79.7	83.3	83.1	81.6	80.6	79.2			
JET 6	1000	66.4	80.4	83.8	83.3	78.9	80.0	78.3			
FAN 4	1250	63.8	78.1	81.6	81.1	76.1	77.9	76.2			
CRITICAL FREQ.	1600	61.1	77.2	79.4	78.9	74.6	75.7	75.3			
0.	2000	59.7	80.8	82.9	77.9	78.4	78.8	79.1			
AIRFLOW RATIO	2500	67.5	89.1	88.8	85.3	78.9	83.5	86.0			
WF/WM 16.93	3150	63.1	82.9	82.2	78.1	77.3	79.5	80.8			
FAN TIP SPEED	4000	58.9	79.1	76.0	79.8	81.0	76.8	77.3			
1355. FT/SEC	5000	59.1	72.7	76.8	76.7	73.6	71.0	72.6			
	6300	54.6	72.6	75.5	75.7	72.4	71.8	74.1			
	8000	47.3	67.4	71.0	71.5	68.5	68.0	70.3			
	10000	38.1	61.2	65.8	66.8	64.1	63.7	66.1			
OVERALL CALCULATED		77.3	92.2	93.3	91.9	90.4	90.9	92.3			
PNDB		88.5	106.5	107.2	105.3	103.2	104.0	105.8			
PNLT		90.6	109.0	109.7	107.7	105.1	105.7	107.8			

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )
NO EGA	50									
	63									
RADIAL 12. FT.	80									
( 4. M)	100									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC VG=115, A=0,	200									
DATE 10/5/78	250									
RUN DFT/CFS C/LT	315									
TAPE 072140	400	94.4	76.5	76.8	81.9	94.8	76.2	93.2		
BAR 29.9 HG	500	92.4	94.4	88.9	74.4	94.2	93.4	93.2		
(***** N/M2)	630	89.5	94.5	88.0	94.1	95.3	87.9	91.9		
TAMB 79. DEG F	800	76.2	91.4	77.7	86.3	92.1	88.0	84.2		
(299. DEG K)	1000	93.2	91.9	88.9	85.2	88.7	89.1	88.9		
TWET 82. DEG F	1250	93.9	91.7	95.5	96.0	97.6	94.2	92.1		
(290. DEG K)	1600	93.5	91.3	91.5	93.5	93.5	91.9	94.3		
HACT 9.16 GM/M3	2000	92.7	94.8	94.4	93.8	92.6	91.7	92.0		
(.00916 KG/M3)	2500	97.9	101.1	99.6	97.8	95.3	95.1	94.4		
NFA 15179. RPM	3150	97.8	103.6	103.5	99.5	95.9	96.8	92.3		
(1589. RAD/SEC)	4000	98.0	102.9	102.9	99.8	93.3	94.9	90.8		
NFK 14895. RPM	5000	94.8	102.6	97.2	91.5	91.1	91.1	91.3		
(1559. RAD/SEC)	6300	103.1	106.9	102.8	97.0	95.7	91.7	92.8		
NFD 14895. RPM	8000	103.4	108.2	104.7	101.9	99.1	93.8	92.2		
(1560. RAD/SEC)	10000	95.4	99.1	98.8	91.8	90.8	91.9	90.0		
NO. OF BLADES 28	12500	95.5	100.1	97.5	92.7	89.1	87.9	87.9		
FAN TIP SPEED 16000	15000	93.3	102.7	98.4	95.0	89.4	88.4	89.4		
1391. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		109.4	113.8	111.3	108.1	106.7	104.6	104.1		
PNDB		121.6	125.2	123.4	120.2	118.3	117.6	115.9		
PNLT		124.3	127.2	126.3	124.8	120.5	121.4	115.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )
NO EGA	50									
	63									
	80									
	100	66.8	54.9	58.5	65.8	80.2	52.7	80.4		
	125	64.7	72.8	70.6	58.3	79.6	79.9	80.4		
NFA 3689. RPM	160	61.8	72.9	69.7	78.0	80.8	74.4	79.2		
( 386. RAD/SEC)	200	48.5	69.7	59.4	70.2	77.6	74.5	71.5		
NFK 3620. RPM	250	65.3	70.1	70.5	69.0	74.1	75.6	76.1		
( 379. RAD/SEC)	315	65.9	69.9	77.1	79.8	83.0	80.6	79.3		
NFD 3620. RPM	400	65.3	69.4	73.0	77.3	78.8	78.3	81.4		
( 379. RAD/SEC)	500	64.3	72.8	75.9	77.3	77.9	78.1	79.1		
NO. OF BLADES 38	630	69.3	79.0	81.0	81.5	80.5	81.4	81.5		
FREQ. SHIFT	800	68.9	81.4	84.8	83.1	81.1	83.1	79.4		
JET 6	1000	68.7	80.5	84.1	83.2	78.5	81.2	77.8		
FAN 4	1250	66.1	78.2	81.9	81.0	75.8	79.1	75.7		
CRITICAL FREQ.	1600	63.4	75.8	79.7	78.8	73.0	76.9	74.1		
0.	2000	63.1	79.1	77.7	76.6	75.8	77.0	78.0		
AIRFLOW RATIO	2500	70.5	82.8	82.9	79.7	80.2	77.4	79.3		
WF/WM 16.93	3150	69.3	83.4	84.3	84.2	83.2	79.2	78.4		
FAN TIP SPEED	4000	59.4	73.4	77.8	73.7	74.6	77.0	75.9		
1391. FT/SEC	5000	58.4	73.8	76.2	74.3	72.7	72.8	73.7		
	6300	53.5	75.2	76.3	76.0	72.5	72.9	74.9		
	8000	46.2	70.0	71.8	71.9	68.6	69.1	71.1		
	10000	37.0	63.8	66.6	67.2	64.1	64.8	65.9		
OVERALL CALCULATED		78.8	90.5	92.5	91.9	91.9	91.3	91.3		
PNDB		90.8	104.0	105.4	105.1	104.6	102.8	102.7		
PNLT		92.2	105.8	107.6	108.3	106.6	104.7	102.7		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115, A=15,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 073010	400	93.4	76.5	95.0	90.4	94.6	93.0	87.3	96.0		
BAR 29.9 HG	500	91.6	87.9	95.2	90.9	96.4	94.6	95.0	92.0		
(***** N/M2)	630	96.0	92.6	91.7	95.4	92.9	93.7	95.3	90.8		
TAMB 81. DEG F	800	93.5	83.6	92.6	93.7	91.1	90.7	90.0	87.9		
(300. DEG K)	1000	91.5	74.8	91.2	92.2	91.6	90.3	89.8	91.7		
TWET 63. DEG F	1250	92.5	89.3	86.4	95.7	97.1	91.2	94.7	94.1		
(290. DEG K)	1600	91.6	93.2	92.8	92.8	90.8	92.6	93.4	92.3		
HACT 9.35 GM/M3	2000	89.6	93.6	91.8	93.1	89.2	93.5	91.4	93.6		
(.00935 KG/M3)	2500	91.9	97.1	96.2	97.2	95.1	93.9	94.3	94.7		
NFA 15208. RPM	3150	93.6	98.6	101.9	100.8	94.4	91.2	92.8	93.1		
(1892. RAD/SEC)	4000	91.7	98.1	100.9	100.9	97.7	94.7	91.7	92.8		
NFK 14895. RPM	5000	91.8	94.8	102.8	101.6	96.2	94.0	92.0	93.2		
(1500. RAD/SEC)	6300	99.5	107.1	108.7	108.4	104.9	99.6	94.3	95.3		
NFD 14895. RPM	8000	100.9	108.5	109.4	108.6	105.6	100.7	94.8	93.8		
(1560. RAD/SEC)	10000	91.4	100.0	101.4	96.3	92.2	92.0	91.0	91.7		
NO. OF BLADES 28	12500	92.2	95.1	96.4	97.1	94.0	91.6	88.3	90.1		
FAN TIP SPEED 16000	16000	90.2	94.4	97.5	99.4	93.2	92.2	87.7	89.4		
1394. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.8	112.2	114.1	113.4	110.4	106.9	105.0	105.2		
PNDB		118.6	123.8	126.0	125.6	122.6	119.0	116.4	116.8		
PNLT		120.2	126.1	127.3	127.4	124.6	120.3	117.5	116.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
	50										
NO EGA	63										
	80										
	100	65.8	54.9	76.7	74.3	80.0	79.5	74.5	83.6		
	125	63.9	66.3	76.9	74.8	81.8	81.1	82.2	79.6		
NFA 3696. RPM	160	68.3	71.0	73.4	79.3	78.4	80.2	82.6	78.5		
( 387. RAD/SEC)	200	65.8	61.9	74.3	77.6	76.6	77.2	77.3	75.6		
NFK 3620. RPM	250	63.6	53.0	72.8	78.0	77.0	76.8	77.0	79.3		
( 379. RAD/SEC)	315	64.5	67.5	68.0	79.5	82.5	77.6	81.9	81.7		
NFD 3620. RPM	400	63.4	71.3	74.3	78.8	76.1	79.0	80.5	79.9		
( 379. RAD/SEC)	500	61.2	71.6	73.3	76.8	74.5	79.9	78.5	81.1		
NO. OF BLADES 38	630	63.3	75.0	79.6	80.9	80.3	80.2	81.4	82.2		
FREQ. SHIFT	800	64.7	76.4	83.2	84.4	79.6	77.5	79.9	80.6		
JET 6	1000	62.4	75.7	82.1	84.5	82.9	81.0	78.7	80.3		
FAN 4	1250	59.8	73.4	79.9	82.3	80.8	78.9	76.6	78.2		
CRITICAL FREQ.	1600	57.2	71.0	79.6	80.8	79.1	76.7	74.8	76.5		
0.	2000	60.3	71.3	83.3	84.6	82.9	79.9	78.7	80.3		
AIRFLOW RATIO	2500	66.9	83.0	88.8	91.1	89.4	85.3	80.8	82.2		
WF/WM 16.93	3150	66.8	83.7	89.0	90.9	89.7	86.1	81.0	80.5		
FAN TIP SPEED	4000	55.4	74.3	80.4	78.2	76.0	77.1	76.9	78.1		
1394. FT/SEC	5000	55.1	68.8	77.1	78.7	77.6	76.5	74.3	76.4		
	6300	50.4	66.9	75.4	80.4	76.3	76.7	73.2	75.4		
	8000	43.1	61.7	70.9	76.3	72.4	72.9	69.4	71.6		
	10000	33.9	55.5	65.7	71.6	67.9	68.6	65.2	67.5		
OVERALL CALCULATED		76.6	88.4	94.5	96.5	95.3	93.2	92.1	92.9		
PNDB		88.1	102.4	108.6	110.7	109.4	107.0	104.1	104.8		
PNLT		89.9	106.0	110.1	112.6	111.8	108.7	104.6	104.8		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0.
	50										
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VO=115, A=15,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 073020	400										
BAR 29.9 HG	500	93.1	76.5	94.6	95.6	91.7	92.4	90.0	90.7		
(***** N/M2)	630	95.0	93.1	85.2	93.3	91.6	92.2	88.8	91.0		
TAMB 81. DEG F	800	90.8	84.7	91.3	94.6	93.6	87.0	82.0	73.8		
(300. DEG K)	1000	88.4	83.9	93.3	82.8	89.3	89.3	84.0	91.2		
TWET 63. DEG F	1250	85.7	92.2	84.5	90.9	92.5	86.4	91.3	93.6		
(290. DEG K)	1600	88.7	93.9	83.5	90.7	89.9	94.3	89.3	94.8		
HACT 9.35 GM/M3	2000	88.3	91.2	93.0	89.6	91.8	91.3	88.7	92.3		
(.00935 KG/M3)	2500	94.2	94.3	97.1	97.1	92.0	93.5	92.5	90.5		
NFA 14825. RPM	3150	91.3	96.8	99.2	99.4	93.0	78.1	93.3	91.9		
(1552. RAD/SEC)	4000	93.2	93.8	99.8	100.2	95.9	91.9	91.8	92.3		
NFK 14520. RPM	5000	91.1	92.1	102.2	101.5	97.5	92.7	90.9	91.9		
(1520. RAD/SEC)	6300	100.3	108.3	111.6	112.4	108.3	102.0	94.3	93.3		
NFD 14895. RPM	8000	91.8	101.1	107.4	107.8	103.2	97.9	91.6	90.7		
(1560. RAD/SEC)	10000	92.2	96.2	104.4	103.2	98.0	92.4	90.5	91.4		
NO. OF BLADES 28	12500	91.9	95.1	101.6	98.3	95.0	89.7	87.4	88.6		
FAN TIP SPEED 16000		88.3	91.8	100.5	99.0	96.2	89.8	85.7	89.0		
1359. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		105.3	110.4	114.8	115.1	111.1	106.2	103.0	103.8		
PNDB		118.2	123.6	127.2	127.8	124.1	119.1	115.2	115.2		
PNLT		119.7	125.7	130.1	130.1	125.4	122.0	116.7	118.3		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	90.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0. )	(0.
	50										
NO EGA	63										
	80										
	100	65.5	54.9	76.5	79.5	77.1	78.9	77.2	78.3		
	125	65.1	70.4	76.4	77.9	79.6	78.7	80.1	77.7		
NFA 3603. RPM	160	67.3	71.5	66.9	77.2	77.1	78.7	76.1	78.7		
( 377. RAD/SEC)	200	63.1	63.0	73.0	78.7	79.1	73.5	69.3	61.5		
NFK 3529. RPM	250	60.5	62.1	74.9	68.6	74.7	75.8	71.2	72.8		
( 369. RAD/SEC)	315	57.7	70.4	66.1	74.7	77.9	72.8	78.5	81.2		
NFD 3620. RPM	400	60.5	72.0	65.0	74.5	75.2	80.7	76.4	82.4		
( 379. RAD/SEC)	500	59.9	69.2	74.5	73.3	77.1	77.7	75.8	79.8		
NO. OF BLADES 38	630	65.6	72.2	78.5	80.8	77.2	79.8	79.6	78.0		
FREQ. SHIFT 800		62.4	74.8	80.5	83.0	78.2	84.4	80.4	79.4		
JET 6	1000	63.9	71.4	81.0	83.8	81.1	78.2	78.8	79.8		
FAN 4	1250	61.3	68.1	78.8	81.6	79.0	76.1	76.7	77.7		
CRITICAL FREQ. 1600		58.6	65.0	79.0	80.7	78.4	74.8	74.6	75.5		
0.	2000	59.6	68.8	82.7	84.5	82.2	78.6	77.6	79.0		
AIRFLOW RATIO 2500		67.7	84.2	91.7	95.1	92.8	87.7	80.8	80.2		
WF/WM 18.93	3150	57.7	76.3	87.0	89.9	87.3	83.3	77.8	77.4		
FAN TIP SPEED 4000		56.2	70.5	83.4	85.1	81.8	77.5	76.4	77.8		
1359. FT/SEC	5000	54.8	68.8	80.3	79.9	78.6	74.6	73.2	74.9		
	6300	48.5	64.3	78.4	80.0	79.3	74.3	71.2	75.0		
	8000	41.2	59.1	73.9	75.9	75.4	70.5	67.4	71.2		
	10000	32.0	52.9	68.7	71.2	70.9	66.2	63.2	67.1		
OVERALL CALCULATED		75.6	86.7	95.1	98.0	95.8	92.3	90.2	91.5		
PNDB		87.2	101.1	109.6	112.5	110.5	106.4	102.5	103.2		
PNLT		89.2	105.0	111.9	115.1	113.2	109.3	102.8	104.7		



MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.											
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LOC VG=115, A=15,	160										
DATE 10/5/78	200										
RUN DFT/CFS C/LT	250										
TAPE 073070	315										
BAR 29.9 MG	400	94.8	87.4	95.0	90.4	82.6	75.3	80.1	81.2		
(***** N/M2)	500	90.1	73.6	88.2	93.5	90.0	73.5	81.7	86.1		
TAMB 82. DEG F	630	85.3	95.0	92.0	95.6	87.6	91.0	84.7	85.5		
(301. DEG K)	800	86.8	93.8	92.1	92.1	90.3	90.1	77.2	73.7		
TWET 63. DEG F	1000	90.9	83.9	80.0	73.6	90.2	88.1	71.5	78.8		
(290. DEG K)	1250	86.5	91.9	90.1	86.1	81.0	89.8	80.9	85.8		
HACT 9.06 GM/M3	1600	91.1	91.4	87.8	85.7	84.3	90.6	88.2	89.0		
(.00908 KG/M3)	2000	94.0	92.9	90.6	88.1	88.2	86.2	89.8	88.7		
NFA 12591. RPM	2500	95.8	95.1	90.3	91.3	86.9	86.2	83.4	83.8		
(1318. RAD/SEC)	3150	96.8	96.4	92.7	81.5	86.0	85.9	92.0	82.4		
NFK 12321. RPM	4000	97.2	96.3	94.8	92.9	86.4	85.6	85.5	85.3		
(1290. RAD/SEC)	5000	97.7	95.6	94.2	92.0	88.1	85.0	86.3	87.8		
NFD 14895. RPM	6300	94.5	93.9	95.4	97.6	89.7	88.3	83.6	85.7		
(1560. RAD/SEC)	8000	93.2	93.2	93.0	90.4	82.5	69.2	84.9	84.8		
NO. OF BLADES 28	10000	94.0	94.2	94.4	93.4	87.0	85.3	84.6	85.3		
FAN TIP SPEED 16000	12500	94.3	93.7	93.6	92.9	85.5	83.1	82.3	84.3		
1154. FT/SEC	20000	92.8	93.6	95.4	94.7	88.0	84.8	86.0	86.6		
OVERALL MEASURED											
OVERALL CALCULATED	106.2	105.8	105.1	104.6	99.9	99.3	98.0	97.8			
PND8	118.6	117.9	116.5	116.0	111.1	109.5	111.5	109.2			
PNLT	120.2	121.7	119.6	118.5	113.0	112.8	114.0	110.7			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.											
NO EGA	50										
	63										
	80										
	100	67.2	65.8	78.7	74.3	68.0	61.8	67.3	68.8		
	125	62.4	52.0	69.9	77.4	75.4	60.0	68.9	73.7		
NFA 3060. RPM	160	57.6	73.4	73.7	79.5	73.1	77.5	72.0	73.2		
( 320. RAD/SEC)	200	59.1	71.9	73.8	76.0	75.8	76.6	64.5	61.4		
NFK 2994. RPM	250	63.0	62.1	61.6	57.4	75.6	74.6	58.7	66.4		
( 314. RAD/SEC)	315	58.5	70.1	71.7	69.9	66.4	76.2	66.1	73.4		
NFD 3620. RPM	400	62.9	69.5	69.3	69.5	69.6	77.0	75.3	76.6		
( 379. RAD/SEC)	500	65.6	70.9	72.1	69.8	73.5	72.6	76.9	76.2		
NO. OF BLADES 38	630	67.2	73.0	71.7	75.0	72.2	72.6	70.5	71.3		
FREQ. SHIFT	800	67.9	74.2	74.0	65.1	71.2	72.3	79.1	69.9		
JET 6	1000	67.9	73.9	75.8	76.5	73.5	71.9	72.5	72.8		
FAN 5	1250	65.3	71.6	73.6	74.3	71.5	69.8	69.3	71.2		
CRITICAL FREQ.	1600	67.1	72.6	75.0	75.2	73.0	71.1	73.1	75.1		
0.	2000	63.0	70.4	75.9	80.6	74.4	74.2	70.3	72.8		
AIRFLOW RATIO	2500	60.6	69.2	73.1	73.1	67.0	63.2	71.4	71.8		
WF/WM 18.93	3150	60.0	69.4	74.0	75.8	71.2	70.7	70.8	72.0		
FAN TIP SPEED	4000	58.4	68.0	72.7	74.8	69.3	68.2	68.3	70.8		
1154. FT/SEC	5000	55.9	67.5	74.2	76.5	71.7	69.9	71.9	73.0		
	6300	49.9	63.0	70.2	72.7	68.1	66.3	68.4	69.5		
	8000	42.7	57.8	65.7	68.5	64.1	62.4	64.6	65.7		
	10000	33.4	51.7	60.5	63.8	59.7	58.2	60.4	61.8		
OVERALL CALCULATED	76.8	83.4	86.3	88.2	85.3	85.8	85.2	85.4			
PND8	86.4	94.1	98.2	100.4	96.3	95.9	95.8	96.9			
PNLT	87.2	96.0	99.8	102.9	97.7	98.2	98.3	97.9			

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0. 0
FREQ.	(0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.									
NO EGA	50									
	63									
RADIAL 12. FT.	80									
( 4. M)	100									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LGC VO=60, A=15,	200									
DATE 10/8/78	250									
RUN DFT/CFS C/LT	315									
TAPE 074010	400	91.3	90.2	89.6	93.3	91.0	86.8	87.3	88.2	
BAR 29.9 HG	500	90.7	87.5	88.4	91.3	85.4	86.4	84.8	87.8	
(***** N/M2)	630	85.0	89.7	88.4	88.7	77.4	83.6	87.0	87.8	
TAMB 62. DEG F	800	89.2	88.2	88.7	87.8	87.7	84.9	87.3	87.6	
(301. DEG K)	1000	85.1	86.0	83.9	88.8	86.2	82.9	84.9	84.8	
TWET 63. DEG F	1250	89.9	88.1	86.1	85.0	85.6	83.7	86.5	87.4	
(290. DEG K)	1600	91.5	89.8	88.9	88.2	86.6	85.3	86.7	85.5	
HACT 9.06 GM/M3	2000	94.2	91.2	90.7	91.5	89.5	89.2	89.4	90.1	
(.00906 KG/M3)	2500	94.7	92.2	91.0	90.0	87.9	84.4	82.3	85.6	
NFA 12591. RPM	3150	97.3	96.3	91.3	89.7	87.3	86.7	85.3	88.7	
(1318. RAD/SEC)	4000	97.4	95.7	93.5	90.5	88.1	85.3	86.0	86.1	
NFK 12321. RPM	5000	95.6	95.2	92.5	91.3	86.2	81.9	85.1	85.1	
(1290. RAD/SEC)	6300	96.9	97.9	98.9	95.1	90.9	86.6	86.1	87.0	
NFD 14895. RPM	8000	93.1	94.4	92.8	89.6	86.2	83.8	83.7	85.1	
(1560. RAD/SEC)	10000	93.3	94.0	93.8	91.3	87.2	84.3	86.0	86.3	
NO. OF BLADES 28	12500	96.9	97.0	94.5	92.9	87.4	83.1	83.7	84.2	
FAN TIP SPEED 16000	20000	92.5	93.2	94.4	92.4	87.8	81.3	90.4	82.7	
1154. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED	106.2	105.8	104.7	103.2	99.8	97.5	96.2	99.0		
PNDB	118.6	117.7	117.1	114.8	111.3	109.3	109.5	110.3		
PNLT	120.0	118.2	118.2	116.0	113.3	110.7	111.1	111.8		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	80.	0. 0.
FREQ.	(0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(1.40)(0. ) (0.									
NO EGA	50									
	63									
	80									
	100	63.7	68.6	71.3	77.2	76.4	73.3	74.5	75.8	
	125	63.0	65.9	70.1	75.2	70.8	72.9	72.0	75.4	
NFA 3060. RPM	160	57.3	68.1	70.1	70.6	62.9	70.1	74.3	75.3	
( 320. RAD/SEC)	200	61.5	66.5	70.4	71.5	73.2	71.4	74.6	75.3	
NFK 2994. RPM	250	57.2	64.2	65.5	70.6	71.6	69.4	72.1	72.2	
( 314. RAD/SEC)	315	61.9	66.3	67.7	68.8	71.0	70.1	73.7	75.0	
NFD 3620. RPM	400	63.3	67.9	68.4	70.0	71.9	71.7	73.8	73.1	
( 379. RAD/SEC)	500	65.8	69.2	72.2	75.2	74.8	75.6	76.5	77.6	
NO. OF BLADES 38	630	66.1	70.1	72.4	73.7	73.2	70.8	69.4	73.1	
FREQ. SHIFT	800	68.4	74.1	72.6	73.3	72.5	73.1	72.4	74.2	
JET 6	1000	68.1	73.3	74.7	74.1	71.3	71.6	73.0	73.6	
FAN 5	1250	65.5	71.0	72.5	71.9	69.2	69.5	70.9	71.5	
CRITICAL FREQ.	1600	65.0	72.2	73.3	74.5	71.1	68.0	71.9	72.4	
0.	2000	65.4	74.4	79.4	78.1	75.6	72.5	72.8	74.1	
AIRFLOW RATIO	2500	60.5	70.4	72.9	72.3	70.7	69.5	70.2	72.1	
WF/WM 16.93	3150	59.3	69.2	73.4	73.7	71.4	69.7	72.2	73.0	
FAN TIP SPEED	4000	61.0	71.3	73.6	74.8	71.2	68.2	69.7	70.7	
1154. FT/SEC	5000	55.6	67.1	73.2	74.2	71.5	66.4	66.3	69.1	
	6300	49.6	62.6	69.2	70.4	67.9	62.8	62.8	65.6	
	8000	42.4	57.4	64.7	66.2	63.9	58.9	59.0	61.8	
	10000	33.1	51.3	59.5	61.5	59.5	54.7	54.8	57.7	
OVERALL CALCULATED	76.6	83.0	85.6	86.7	85.1	83.9	85.4	86.6		
PNDB	86.5	94.8	96.7	98.9	96.8	94.6	96.3	97.5		
PNLT	87.7	95.9	100.8	100.4	96.3	96.0	97.9	99.0		



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	50	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT18RD	125										
CONFIG 40X80	160										
LOC VO=60, A=15,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 074020	400	89.4	91.3	88.2	90.1	90.7	89.1	90.3	88.6		
BAR 29.9 HG	500	87.0	89.5	83.2	88.8	87.8	86.1	89.7	88.4		
(***** N/M2)	630	89.4	87.5	87.5	84.4	88.0	89.5	88.4	88.7		
TAMB 82. DEG F	800	88.9	87.5	89.4	88.1	88.9	90.2	87.7	90.1		
(301. DEG K)	1000	87.0	88.8	84.7	87.0	88.5	88.3	88.8	87.1		
TWET 63. DEG F	1250	87.2	87.4	88.0	88.7	87.3	88.7	88.5	89.0		
(290. DEG K)	1600	88.8	87.3	88.9	88.5	87.9	87.9	88.3	88.9		
HACT 9.06 GM/M3	2000	90.0	91.2	88.8	89.8	89.3	87.3	89.8	89.2		
(.00906 KG/M3)	2500	94.0	94.8	91.7	92.0	90.3	88.3	89.1	90.1		
NFA 13771. RPM	3150	95.9	97.3	97.0	97.1	94.6	91.2	89.7	90.1		
(1442. RAD/SEC)	4000	93.3	92.7	96.4	94.5	92.0	88.8	87.8	89.1		
NFK 13475. RPM	5000	93.0	93.0	94.4	94.2	91.2	87.1	87.8	88.0		
(1411. RAD/SEC)	6300	97.1	97.4	105.9	110.0	106.8	97.6	93.8	92.2		
NFD 14895. RPM	8000	94.9	98.7	103.8	105.0	101.6	95.1	88.5	89.1		
(1560. RAD/SEC)	10000	92.9	95.6	108.8	108.0	105.7	98.9	89.7	89.8		
NO. OF BLADES 28	12500	92.7	96.1	106.8	106.7	104.0	96.8	87.3	87.6		
FAN TIP SPEED 16000	16000	91.0	94.4	101.8	100.8	99.6	92.5	81.1	82.8		
1262. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		104.7	106.2	112.8	114.6	111.7	104.8	101.4	101.2		
PNDB		117.1	118.2	122.5	125.2	122.5	116.0	113.6	113.0		
PNLT		117.6	119.4	124.2	126.9	124.3	117.5	114.7	113.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	50	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.)	(0.)
NO EGA	63										
	80										
	100	61.8	69.7	69.9	74.0	76.1	75.6	77.5	74.2		
	125	59.3	67.9	64.9	70.7	73.2	72.6	76.9	76.0		
NFA 3347. RPM	160	61.7	65.9	69.2	68.3	71.5	76.0	75.7	76.4		
( 350. RAD/SEC)	200	61.2	65.8	71.1	72.0	72.4	78.7	75.0	77.8		
NFK 3275. RPM	250	59.1	65.0	66.3	70.8	71.9	71.8	74.0	74.7		
( 343. RAD/SEC)	315	59.2	65.6	66.6	70.5	72.7	75.1	75.7	76.6		
NFD 3620. RPM	400	58.6	65.4	68.4	72.3	73.2	74.3	75.4	74.5		
( 379. RAD/SEC)	500	61.6	69.2	70.3	73.3	74.6	73.7	76.9	76.7		
NO. OF BLADES 38	630	65.4	72.7	73.1	75.7	75.6	74.7	76.2	77.6		
FREQ. SHIFT	800	67.0	75.1	78.3	80.7	79.8	77.6	76.8	77.6		
JET 6	1000	64.0	70.3	77.6	78.1	77.2	74.9	74.8	76.6		
FAN 5	1250	60.9	66.3	75.4	75.4	74.5	72.2	72.7	74.5		
CRITICAL FREQ.	1600	62.4	70.0	75.2	77.4	76.1	73.2	74.4	75.3		
0.	2000	65.6	73.9	86.4	93.0	91.6	83.5	80.5	79.3		
AIRFLOW RATIO	2500	62.3	74.7	83.9	87.7	86.1	80.8	75.0	76.1		
WF/WM 16.93	3150	58.5	70.8	86.4	91.4	89.9	82.3	75.9	76.5		
FAN TIP SPEED	4000	58.8	70.4	85.9	88.8	87.8	81.9	73.3	74.1		
1262. FT/SEC	5000	54.1	68.3	80.4	82.4	83.3	77.6	67.0	69.2		
	6300	48.1	63.8	78.4	78.8	79.7	74.0	63.5	65.7		
	8000	40.9	58.6	71.9	74.4	75.7	70.1	59.7	61.9		
	10000	31.8	52.5	68.7	69.7	71.3	65.9	55.5	57.8		
OVERALL CALCULATED		74.7	83.1	92.7	97.3	96.3	90.7	88.4	88.6		
PNDB		85.5	95.8	106.6	110.7	109.8	104.1	100.2	100.3		
PNLT		86.6	97.0	108.9	114.2	113.3	106.3	102.1	101.5		

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MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	80. (1.40)	0. (0. )	0. (0. )
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VG=80, A=15,	200										
DATE 10/5/78	250										
RUN DFT/CFS C/LT	315										
TAPE 074030	400	94.2	91.9	92.6	93.9	93.4	92.8	89.9	93.7		
BAR 29.9 HG	500	92.5	90.4	93.5	94.8	92.4	93.1	91.6	90.3		
(***** N/M2)	630	90.8	91.2	90.4	91.1	90.4	90.1	91.7	88.3		
TAMB 81. DEG F	800	90.0	90.4	91.0	89.3	90.8	90.8	88.8	90.3		
(300. DEG K)	1000	88.6	88.5	89.2	89.7	90.0	90.8	90.7	87.8		
TWET 63. DEG F	1250	87.8	90.3	89.6	88.7	93.2	89.9	93.2	91.6		
(290. DEG K)	1600	87.5	89.7	91.7	91.4	88.8	89.3	92.8	91.2		
HACT 9.35 GM/M3	2000	91.9	93.4	93.9	95.1	94.6	92.0	92.3	92.5		
(.00935 KG/M3)	2500	92.5	98.5	100.2	98.2	98.1	94.5	94.0	92.9		
NFA 14825. RPM	3150	95.3	101.6	102.8	101.0	99.6	95.9	92.7	91.6		
(1552. RAD/SEC)	4000	93.9	100.5	103.1	101.1	99.5	96.3	92.8	92.2		
NFK 14520. RPM	5000	93.0	100.3	102.6	99.2	97.2	94.5	92.8	90.6		
(1520. RAD/SEC)	6300	101.3	112.3	108.5	101.9	100.2	102.9	102.5	94.1		
NFD 14895. RPM	8000	94.5	105.6	101.9	99.2	96.9	93.6	95.5	91.6		
(1660. RAD/SEC)	10000	92.3	99.7	101.8	98.8	95.9	92.8	93.8	91.4		
NO. OF BLADES 28	12500	93.4	97.1	98.1	98.9	95.2	90.9	89.8	89.5		
FAN TIP SPEED	16000	90.7	94.5	97.9	95.7	92.9	89.0	85.8	84.8		
1359. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.1	114.4	112.6	109.6	108.1	107.0	106.5	103.6		
PNDB		119.1	127.6	125.7	122.1	120.7	120.4	119.9	115.3		
PNLT		120.4	129.1	126.8	122.1	122.0	121.9	121.3	115.3		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	80. (1.40)	0. (0. )	0. (0. )
NO EGA	50										
	63										
	80										
	100	66.6	70.3	74.3	77.8	78.8	78.3	77.1	81.3		
	125	64.8	68.8	75.2	78.7	77.8	79.6	78.8	77.9		
NFA 3603. RPM	160	62.8	69.6	72.1	75.0	75.9	76.6	79.0	76.0		
( 377. RAD/SEC)	200	62.3	68.7	72.7	73.2	76.3	77.3	76.1	78.0		
NFK 3529. RPM	250	60.7	66.7	70.8	73.5	75.4	77.3	77.9	75.2		
( 369. RAD/SEC)	315	59.6	68.5	71.2	72.5	78.6	76.3	80.4	79.2		
NFD 3620. RPM	400	59.3	67.8	73.2	75.2	74.1	75.7	79.7	78.8		
( 379. RAD/SEC)	500	63.5	71.4	75.4	78.8	79.9	78.4	79.4	80.0		
NO. OF BLADES 38	630	63.9	76.4	81.8	81.9	81.3	80.8	81.1	80.4		
FREQ. SHIFT	800	66.4	79.4	84.1	84.6	84.8	82.2	79.8	79.1		
JET 6	1000	64.6	78.1	84.3	84.7	84.7	82.6	79.6	79.7		
FAN 4	1250	62.0	75.8	82.1	82.5	82.6	80.5	77.5	77.6		
CRITICAL FREQ.	1600	59.3	73.4	79.9	80.3	80.4	78.3	75.6	75.4		
0.	2000	61.5	76.8	83.1	82.2	81.9	80.4	79.5	77.7		
AIRFLOW RATIO	2500	68.7	86.2	88.6	84.6	84.7	86.6	89.0	81.0		
WF/WM 16.93	3150	60.4	80.6	81.5	81.5	81.0	79.0	81.7	78.3		
FAN TIP SPEED	4000	58.3	74.0	80.8	78.7	79.7	77.9	79.7	77.8		
1359. FT/SEC	5000	56.3	70.8	78.8	78.5	78.8	75.8	75.6	75.8		
	6300	50.9	67.0	75.6	76.7	76.0	73.5	71.3	70.6		
	8000	43.6	61.9	71.3	72.6	72.1	69.7	67.5	67.0		
	10000	34.4	55.5	66.1	67.9	67.6	65.4	63.3	62.9		
OVERALL CALCULATED		76.0	90.8	93.8	93.4	93.6	93.4	93.4	91.3		
PNDB		88.2	105.1	107.6	106.1	106.3	107.4	107.5	103.3		
PNLT		90.8	108.4	110.2	106.1	107.3	110.4	110.6	104.3		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	NO EGA										
	63										
	80										
RADIAL	12. FT.										
( 4. M)	100										
VEHICLE	JT15RD										
CONFIG	40X80										
LOC	Y0=90, A=15,										
DATE	10/5/78										
RUN	OFT/CFS C/LT										
TAPE	074070	400	92.9	92.5	91.6	91.0	93.6	91.7	91.9	93.9	
BAR	29.9 HG	500	90.7	91.7	91.0	91.4	92.4	90.9	91.3	91.7	
(##### N/M2)	630	90.3	91.1	91.8	90.5	88.3	91.3	92.0	91.5		
TAMB	81. DEG F	800	89.6	90.9	92.2	91.7	90.9	91.9	92.1	92.5	
(300. DEG K)	1000	89.1	90.6	92.0	92.7	91.4	89.9	91.8	91.8	90.5	
TWET	63. DEG F	1250	90.0	97.0	94.2	94.4	94.9	93.2	92.7	97.0	
(290. DEG K)	1800	90.6	91.6	93.3	92.8	93.9	92.0	91.7	93.4		
HACT	9.35 GM/M3	2000	93.0	94.7	93.1	94.3	91.0	92.4	92.6	91.6	
(.00935 KG/M3)	2500	93.7	99.6	100.3	98.7	97.4	95.1	95.0	93.3		
NFA	15208. RPM	3150	95.7	101.7	103.9	100.6	100.0	95.5	96.2	94.5	
(1592. RAD/SEC)	4000	92.6	102.1	102.8	100.2	98.3	97.6	94.7	91.3		
NFK	14895. RPM	5000	92.0	99.7	97.8	95.0	92.1	91.4	93.2	92.1	
(1560. RAD/SEC)	6300	97.6	107.9	99.9	104.6	103.3	92.6	95.5	95.6		
NFD	14895. RPM	8000	100.4	110.3	103.8	107.3	106.0	97.2	96.7	96.1	
(1580. RAD/SEC)	10000	92.3	99.5	98.3	94.4	89.5	92.2	92.7	91.5		
NO. OF BLADES	28	12500	93.6	100.5	101.4	95.4	91.2	90.9	89.6	90.5	
FAN TIP SPEED	16000	90.6	98.9	100.3	97.1	91.7	89.6	83.5	86.5		
1394. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		106.2	114.2	111.4	111.7	110.0	105.6	105.3	105.5		
PNDB		117.8	125.6	123.9	123.2	121.7	118.6	116.1	117.2		
PNLT		119.2	127.6	124.6	125.4	124.3	120.0	118.1	118.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	80.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(1.40)	(0.	(0.
	NO EGA										
	50										
	63										
	80										
	100	65.3	70.9	73.3	74.9	79.0	78.2	79.1	81.5		
	125	63.0	70.1	72.7	75.3	77.6	77.4	78.5	79.3		
NFA	3696. RPM	160	62.6	69.5	73.5	74.4	73.6	77.6	79.3	79.2	
( 387. RAD/SEC)	200	61.9	69.2	74.9	75.6	76.4	76.4	79.4	80.2		
NFK	3620. RPM	250	61.2	68.8	73.6	75.5	76.	76.4	79.0	78.1	
( 379. RAD/SEC)	315	62.0	75.2	75.8	78.2	80.3	79.6	79.9	84.6		
NFD	3620. RPM	400	62.4	69.7	74.8	76.6	79.2	78.4	78.8	81.0	
( 379. RAD/SEC)	500	64.6	72.7	74.6	78.0	76.3	78.6	79.9	79.1		
NO. OF BLADES	38	630	65.1	77.5	81.7	82.4	82.6	81.4	82.1	80.8	
FREQ. SHIFT	800	66.8	79.5	85.2	84.4	85.2	81.6	83.3	82.0		
JET	6	1000	63.3	79.7	83.8	83.8	81.5	83.9	81.7	78.6	
FAN	4	1250	59.7	77.4	81.6	81.6	77.7	81.6	79.3	75.5	
CRITICAL FREQ.	1800	57.4	75.0	79.4	79.4	73.8	79.6	77.5	75.4		
0.	2000	60.5	76.2	78.3	78.0	76.6	77.5	79.9	79.2		
AIRFLOW RATIO	2500	65.2	83.8	80.0	87.3	17.6	76.3	82.0	82.7		
WF/WP 16.93	3150	66.3	85.5	83.4	90.1	90.1	82.6	82.9	82.6		
FAN TIP SPEED	4000	56.3	73.8	77.3	76.3	73.3	77.3	78.6	77.9		
1394. FT/SEC	5000	56.7	74.2	80.1	77.0	74.8	75.6	75.6	76.6		
	6300	51.0	71.4	76.2	76.1	74.6	74.1	71.0	72.5		
	8000	43.7	66.2	73.7	74.0	70.9	70.3	67.2	68.7		
	10000	34.5	60.0	68.5	69.3	66.4	66.0	63.0	54.6		
OVERALL CALCULATED		75.8	90.6	92.6	94.9	94.6	92.4	92.8	93.0		
PNDB		87.7	104.8	105.5	109.4	108.9	105.0	105.3	105.3		
PNLT		69.6	106.5	107.1	113.8	114.5	106.6	105.3	106.1		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(0. ) (0. ) (0. )										
NO EGA	50										
63											
80											
RADIAL 12. FT. ( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LOC VQ=80, A=0.	200										
DATE 10/2/78	250										
RUN SFD/CFS C/LT	315										
TAPE 062020	400	92.6	92.4	89.8	89.3	91.8	88.0	88.9			
BAR 29.9 M3 (***** N/M2)	500	92.6	92.9	89.1	85.4	89.8	88.8	88.2			
TAMB 93. DEG F (307. DEG K)	600	91.4	89.5	89.1	84.1	79.0	87.9	87.8			
THET 82. DEG F (290. DEG K)	1000	89.4	88.3	89.2	84.7	84.6	81.7	88.2			
HACT 4.92 GM/M3 (.00492 KG/M3)	1250	89.5	89.4	88.1	87.1	83.8	84.3	82.8			
NFA 11500. RPM (1204. RAD/SEC)	1500	92.9	94.1	91.6	91.2	88.2	89.1	86.6			
NFK 11141. RPM (1186. RAD/SEC)	2000	96.2	95.5	93.5	92.9	89.9	89.9	88.1			
NFD 14995. RPM (1560. RAD/SEC)	2500	96.3	95.8	96.6	95.8	92.1	88.7	87.6			
NO. OF BLADES 28	3150	98.8	99.1	99.3	97.6	94.6	92.5	87.2			
FAN TIP SPEED 1054. FT/SEC	4000	100.7	100.1	100.8	98.5	94.4	91.8	88.4			
OVERALL MEASURED											
OVERALL CALCULATED		109.4	109.7	109.8	108.9	107.5	105.4	99.9			
PNDB		121.8	121.6	121.8	119.6	117.2	113.8	110.7			
PNLT		121.6	121.6	121.6	119.6	116.3	115.7	114.0			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(0. ) (0. ) (0. )										
NO EGA	50										
63											
80											
100		65.0	70.8	65.3	73.2	77.2	64.5	76.1			
125		65.0	71.3	69.8	69.3	74.2	65.1	65.4			
160		63.7	67.9	70.8	68.0	64.5	64.5	65.1			
NFA 2795. RPM ( 293. RAD/SEC)	200	61.7	66.6	70.9	66.6	70.1	66.2	72.5			
NFK 2708. RPM ( 283. RAD/SEC)	250	61.6	67.7	69.7	71.0	69.0	70.8	70.0			
NFD 3620. RPM ( 379. RAD/SEC)	315	65.9	72.3	73.2	75.0	71.7	74.6	73.8			
NO. OF BLADES 38	400	68.0	73.8	75.1	73.7	75.3	76.3	75.3			
FREQ. SHIFT JET 6 FAN 5	500	67.9	73.6	76.1	79.6	77.4	75.1	74.7			
CRITICAL FREQ. 0.	630	70.2	77.0	80.7	81.3	79.9	78.9	74.3			
AIRFLOW RATIO WF/WM 16.93	800	71.8	77.9	82.1	80.1	79.6	78.1	75.5			
FAN TIP SPEED 1054. FT/SEC	1000	69.3	75.6	80.0	78.0	77.5	76.0	73.4			
CRITICAL FREQ. 0.	1250	69.4	77.4	80.9	81.3	80.2	77.7	73.4			
AIRFLOW RATIO WF/WM 16.93	1600	69.7	76.8	80.2	81.0	80.8	76.3	74.8			
FAN TIP SPEED 1054. FT/SEC	2000	65.7	75.0	78.9	80.5	78.5	77.0	72.9			
CRITICAL FREQ. 0.	2500	64.6	74.5	79.5	81.4	82.3	82.4	76.6			
AIRFLOW RATIO WF/WM 16.93	3150	64.7	74.6	79.4	82.4	84.1	82.9	77.1			
FAN TIP SPEED 1054. FT/SEC	4000	62.1	73.6	79.4	82.9	84.2	84.4	75.9			
CRITICAL FREQ. 0.	5000	60.9	72.9	78.4	81.9	82.9	83.2	74.7			
AIRFLOW RATIO WF/WM 16.93	6300	54.9	66.4	74.4	78.1	79.3	79.6	71.2			
FAN TIP SPEED 1054. FT/SEC	8000	47.7	63.2	69.9	73.9	75.3	75.7	67.4			
OVERALL CALCULATED	10000	38.4	57.1	64.7	69.2	70.9	71.5	63.2			
PNDB		79.7	87.0	90.9	92.2	92.5	91.6	87.0			
PNLT		69.6	98.7	103.0	105.5	106.2	105.6	99.9			
PNLT		69.6	98.7	103.0	105.5	106.7	106.5	101.5			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	0. ( )	0. ( )	0. ( )
NO EGA	50										
	63										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	160										
LGC V0=00, A=0,	200										
DATE 10/2/78	250										
RUN BFD/CFS C/LT	315										
TAPE 062030	400	93.2	89.3	88.0	90.4	87.6	86.1	86.5			
BAR 29.8 HG	500	91.4	89.3	88.5	86.6	78.4	87.5	89.4			
(***** N/M2)	630	90.1	87.9	88.9	84.6	84.9	77.7	68.4			
TAMB 93. DEG F	800	88.9	87.9	87.7	82.1	84.8	82.6	86.4			
(307. DEG K)	1000	85.0	89.5	87.2	86.0	84.6	86.6	85.8			
TWET 62. DEG F	1250	94.3	91.5	90.4	89.4	87.9	86.8	87.1			
(290. DEG K)	1500	94.9	92.8	92.4	90.9	89.2	87.9	86.0			
HACT 4.92 GM/M3	2000	95.7	94.7	94.7	94.1	91.5	91.9	88.9			
(.00492 KG/M3)	2500	97.2	97.0	98.9	97.6	96.7	92.8	89.9			
NFA 11897. RPM	3130	99.5	99.4	99.0	97.8	96.2	92.1	88.3			
(1246. RAD/SEC)	4000	98.9	99.8	98.7	97.7	93.0	91.4	87.9			
NFK 11525. RPM	5000	98.5	99.2	98.9	97.4	95.7	93.2	88.4			
(1207. RAD/SEC)	6300	95.8	97.5	97.8	96.7	94.9	91.3	87.0			
NFD 14895. RPM	8000	96.5	98.0	99.1	98.6	98.4	98.2	90.8			
(1560. RAD/SEC)	10000	97.2	98.2	100.1	99.0	100.2	98.6	91.5			
NO. OF BLADES 28	12500	96.6	99.2	100.3	100.0	99.3	97.9	90.8			
FAN TIP SPEED 16000		96.5	99.8	99.4	100.1	98.5	97.2	89.4			
1091. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		108.2	108.9	109.2	108.5	107.4	105.8	100.5			
PNDB		120.7	120.8	120.5	119.3	117.7	115.4	111.3			
PFLT		122.1	120.8	120.5	119.3	118.8	117.3	114.4			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	0. ( )	0. ( )	0. ( )
NO EGA	50										
	63										
	80										
	100	65.6	67.7	69.7	74.3	73.0	72.6	73.7			
	125	63.8	67.7	70.2	70.5	63.8	74.0	56.6			
NFA 2891. RPM	160	62.4	66.3	70.6	68.5	70.4	64.3	55.7			
( 303. RAD/SEC)	200	61.2	66.2	69.4	66.0	70.3	69.1	73.7			
NFK 2801. RPM	250	57.1	67.8	68.8	69.9	70.0	73.1	73.0			
( 293. RAD/SEC)	315	66.3	69.7	72.0	73.2	73.3	73.3	74.3			
NFD 3620. RPM	400	66.7	70.9	74.0	74.7	74.6	74.3	73.2			
( 379. RAD/SEC)	500	67.3	72.7	76.2	77.9	76.8	78.3	76.0			
NO. OF BLADES 38	630	68.6	74.9	80.3	81.3	82.0	79.2	77.0			
FREQ. SHIFT	800	70.6	77.2	80.3	81.4	81.4	78.4	75.4			
JET 6	1000	68.1	74.9	78.2	79.3	79.3	76.3	73.3			
FAN 4	1250	65.6	73.1	76.0	77.2	77.2	74.2	71.2			
CRITICAL FREQ.	1600	68.3	76.8	79.5	80.9	77.9	77.5	74.7			
0.	2000	67.0	75.7	79.3	80.3	80.4	79.0	75.0			
AIRFLOW RATIO	2500	63.2	73.5	77.9	79.4	79.4	77.0	73.5			
WF/WM 16.93	3150	62.5	73.2	78.7	81.0	82.6	83.6	77.0			
FAN TIP SPEED	4000	61.2	72.4	79.1	80.8	84.0	83.7	77.4			
1090. FT/SEC	5000	59.5	73.0	79.0	81.6	82.9	82.8	76.6			
	6300	56.6	72.2	77.2	81.1	81.6	81.7	74.8			
	8000	49.4	67.0	72.7	76.9	77.6	77.8	71.0			
	10000	40.1	60.9	67.5	72.2	73.2	73.6	66.8			
OVERALL CALCULATED		78.5	85.9	90.0	91.7	92.3	91.7	87.5			
PNDB		88.6	97.8	102.7	104.5	106.0	105.5	100.5			
PFLT		89.4	97.8	102.7	104.5	106.5	106.6	102.0			

MODEL SOUND PRESSURE LEVELS

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
NO EGA		50								
RADIAL 12. FT.		63								
( 4. M)		80								
VEHICLE JT15RD		125								
CONFIG 40X80		160								
LOC V0=80, A=0.		200								
DATE 10/2/78		250								
RUN BFD/CFS C/LT		315								
TAPE 062040		400	92.3	90.4	89.2	88.9	82.7	69.5	66.7	
BAR 29.8 HG		500	88.5	90.2	87.2	85.1	68.2	68.5	82.7	
(***** N/M2)		630	86.8	90.8	86.6	85.1	77.9	67.6	68.7	
TAMB 94. DEG F		800	87.3	88.1	86.9	87.4	83.6	84.1	84.8	
(308. DEG K)		1000	89.2	89.1	87.2	86.7	86.2	84.4	83.4	
TWET 62. DEG F		1250	92.5	90.5	88.2	89.7	88.1	85.3	85.5	
(290. DEG K)		1600	95.0	90.9	91.1	90.1	89.1	85.7	86.5	
HACT 4.65 GM/M3		2000	95.5	93.0	93.3	93.3	92.4	91.8	91.0	
(.00465 KG/M3)		2500	96.3	94.7	96.6	99.3	95.4	91.6	88.3	
NFA 12382. RPM		3150	98.5	98.7	96.9	97.5	94.9	91.1	88.8	
(1296. RAD/SEC)		4000	98.2	99.1	97.6	98.1	93.0	92.0	85.8	
NFK 11984. RPM		5000	97.9	99.6	98.6	97.3	93.8	90.9	86.5	
(1255. RAD/SEC)		6300	96.9	99.1	100.2	98.4	106.0	101.5	94.7	
NFD 14895. RPM		8000	96.8	97.0	98.7	98.4	97.6	95.3	90.4	
(1560. RAD/SEC)		10000	95.9	98.0	99.1	99.0	99.0	97.3	90.1	
NO. OF BLADES 28		12500	96.0	98.2	101.0	99.4	99.3	99.5	89.9	
FAN TIP SPEED 16000		16000	96.0	99.0	99.1	99.3	97.9	96.5	87.3	
1135. FT/SEC		20000								
OVERALL MEASURED										
OVERALL CALCULATED		107.7	108.5	109.0	108.5	109.2	106.5	100.9		
PNDB		119.9	120.2	119.8	119.6	121.6	117.8	113.2		
PNLT		119.9	120.2	121.0	120.9	123.3	120.5	116.1		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

		ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
FREQ.		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)
NO EGA		50								
		63								
		80								
		100	64.7	68.8	70.9	69.8	68.1	56.0	75.9	
		125	60.9	68.8	68.9	69.0	53.6	55.0	69.9	
NFA 3009. RPM		160	59.1	69.2	68.3	69.0	63.4	54.2	56.0	
( 315. RAD/SEC)		200	59.6	66.4	68.6	71.3	69.1	70.6	72.1	
NFK 2913. RPM		250	61.3	67.4	68.8	70.6	71.6	70.9	70.6	
( 305. RAD/SEC)		315	64.5	68.7	69.8	73.5	73.5	71.8	72.7	
NFD 3620. RPM		400	66.8	69.0	72.7	73.9	74.5	72.1	73.7	
( 379. RAD/SEC)		500	67.2	71.0	74.8	77.1	77.7	78.2	78.2	
NO. OF BLADES 38		630	67.7	72.6	80.1	83.0	80.7	78.0	75.4	
FREQ. SHIFT		800	69.6	76.5	78.2	81.1	80.1	77.4	75.9	
JET 6		1000	68.8	76.6	78.8	81.6	78.1	78.2	72.8	
FAN 5		1250	66.3	74.4	76.6	79.5	76.0	76.1	69.7	
CRITICAL FREQ.		1600	67.3	76.5	79.4	80.5	78.7	76.9	73.3	
0.		2000	65.4	75.8	80.6	81.4	90.7	87.3	81.3	
AIRFLOW RATIO		2500	64.2	72.9	78.8	81.1	82.1	81.0	76.9	
WF/WM 16.93		3150	61.9	73.3	78.8	81.4	83.3	82.8	76.4	
FAN TIP SPEED		4000	60.1	72.6	80.1	81.4	83.2	84.7	75.9	
1135. FT/SEC		5000	59.1	72.9	77.9	81.1	81.6	81.5	73.2	
		6300	53.1	68.4	73.9	77.3	78.0	78.0	69.7	
		8000	45.8	63.2	69.4	73.1	74.0	74.1	65.9	
		10000	36.6	57.1	64.2	68.4	69.6	69.8	61.7	
OVERALL CALCULATED										
PNDB		77.9	85.8	89.7	92.0	94.0	92.5	87.9		
PNLT		87.9	97.5	102.7	104.7	107.7	105.9	100.6		
		87.9	97.5	103.9	106.0	111.1	108.7	102.9		

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	160										
VEHICLE JT15RD	200										
CONFIG 40X80	250										
LCC V0=80, A=C,	315										
DATE 10/2/78	400										
RUN BFD/CFS C/LT	500	92.9	90.3	92.5	89.5	86.7	82.0	87.8			
TAPE 062050	630	87.9	87.8	90.3	87.9	83.6	79.1	69.4			
BAR 29.8 HG	800	85.4	87.1	85.7	86.9	79.0	69.2	67.4			
(***** N/M2)	1000	87.1	89.5	89.2	86.5	86.1	84.1	86.4			
TAMB 93. DEG F	1250	87.4	90.8	90.3	86.8	85.8	87.5	82.3			
(308. DEG K)	1600	93.9	91.8	90.3	88.9	88.6	87.9	84.7			
TWET 62. DEG F	2000	97.7	93.8	92.6	89.5	88.7	88.2	86.2			
(290. DEG K)	2500	96.2	94.4	95.9	96.9	95.8	93.8	92.9			
HACT 4.38 GM/M3	3150	97.2	96.9	99.0	97.9	99.3	100.1	97.5			
(.00438 KG/M3)	4000	99.7	100.9	97.9	98.5	101.8	98.1	99.5			
NFA 12740. RPM	5000	98.2	99.3	98.0	98.1	99.6	96.2	93.5			
(1334. RAD/SEC)	6000	98.9	99.5	100.6	96.7	96.2	92.9	90.7			
NFK 12320. RPM	6300	102.6	104.4	102.8	103.2	112.0	112.0	107.2			
(1290. RAD/SEC)	8000	95.8	98.5	98.6	98.5	98.4	99.1	92.3			
NFD 14895. RPM	10000	96.3	98.7	100.3	99.6	99.5	98.3	94.1			
(1560. RAD/SEC)	12500	97.8	99.8	101.0	100.8	105.3	104.8	97.8			
NO. OF BLADES 28	16000	96.3	98.9	98.2	99.1	97.2	98.5	91.7			
FAN TIP SPEED	20000										
1168. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		109.1	110.2	110.0	109.6	114.1	113.7	109.3			
PND8		121.4	122.5	121.7	121.4	126.6	126.0	122.2			
PNLT		122.9	123.5	122.7	122.5	129.1	128.7	126.0			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
	50										
	63										
	80										
NO EGA	100	65.3	68.7	74.2	73.4	72.1	68.5	75.0			
	125	60.3	66.2	72.0	71.8	69.0	65.6	56.8			
NFA 3096. RPM	160	57.7	65.5	67.4	70.8	64.5	55.8	54.7			
( 324. RAD/SEC)	200	59.4	67.8	70.9	70.4	71.6	70.6	73.7			
NFK 2994. RPM	250	59.5	68.9	71.9	70.7	71.2	74.0	70.0			
( 313. RAD/SEC)	315	65.9	70.0	71.9	72.7	74.0	74.4	71.9			
NFD 3620. RPM	400	69.5	71.9	74.2	73.3	74.1	74.7	73.4			
( 379. RAD/SEC)	500	67.9	72.5	77.4	80.7	81.1	80.2	80.1			
NO. OF BLADES 38	630	68.6	74.9	80.5	81.6	84.6	86.5	84.7			
FREQ. SHIFT	800	70.8	78.7	79.2	82.2	87.1	84.5	86.6			
JET 6	1000	68.8	76.9	79.2	81.6	84.7	82.5	80.5			
FAN 5	1250	66.3	74.6	77.7	79.5	82.4	80.4	74.4			
CRITICAL FREQ.	1600	68.3	76.4	81.4	79.9	81.1	79.0	77.5			
0.	2000	71.1	80.9	83.3	86.2	96.7	97.9	93.8			
AIRFLOW RATIO	2500	63.2	74.5	78.7	81.2	82.9	84.8	78.8			
WF/WM 16.93	3150	62.3	74.0	80.0	82.0	83.7	83.8	80.4			
FAN TIP SPEED	4000	61.7	74.0	80.1	82.8	89.2	89.8	83.6			
1168. FT/SEC	5000	59.5	72.9	77.1	80.9	81.0	83.6	77.7			
	6300	53.5	68.4	73.1	77.2	77.3	80.0	74.2			
	8000	46.2	63.2	68.6	73.0	73.4	76.2	70.4			
	10000	37.0	57.0	63.4	68.3	69.0	71.9	66.2			
OVERALL CALCULATED		79.2	87.2	90.9	92.9	98.9	99.7	96.1			
PND8		90.3	99.9	103.4	105.8	112.1	113.0	109.1			
PNLT		92.1	101.7	105.0	107.7	117.0	118.3	114.7			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(0. ) (0. ) (0. )									
	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
NO EGA	50									
63										
RADIAL 12. FT.	80									
( 4. M)	100									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC VQ=80, A=0,	200									
DATE 10/2/78	250									
RUN BFD/CFS C/LT	315									
TAPE C62090	400	90.4	90.4	88.7	88.6	88.7	85.8	90.5		
BAR 29.8 HG	500	88.7	90.2	87.4	89.7	88.8	83.9	86.8		
(***** N/M2)	630	81.0	85.7	86.8	87.4	82.2	68.0	85.6		
TAMB 96. DEG F	800	83.8	87.2	87.8	87.9	85.9	86.5	89.2		
(309. DEG K)	1000	84.7	85.7	87.0	89.2	90.8	91.5	90.4		
TWET 64. DEG F	1250	90.7	91.3	90.1	91.5	92.3	90.8	91.5		
(291. DEG K)	1600	91.9	89.1	90.6	90.9	91.6	89.8	90.1		
HACT 5.59 GM/M3	2000	95.3	94.6	95.2	95.5	99.8	102.3	101.1		
(.00559 KG/M3)	2500	104.0	103.5	103.3	104.8	111.3	113.4	110.9		
NFA 13948. RPM	3150	104.7	107.2	107.4	110.7	117.4	113.8	113.7		
(1460. RAD/SEC)	4000	98.3	100.5	99.2	102.9	111.1	108.0	105.0		
NFK 13476. RPM	5000	98.1	97.9	98.6	100.8	107.9	105.1	100.2		
(1411. RAD/SEC)	6300	103.5	102.3	102.3	104.8	111.4	107.8	101.8		
NFD 14895. RPM	8000	95.9	98.3	98.4	98.8	106.7	106.8	101.1		
(1360. RAD/SEC)	10000	94.9	97.0	98.1	99.0	105.3	106.6	100.0		
NO. OF BLADES 28	12500	95.9	96.9	98.3	97.1	102.1	102.0	97.5		
FAN TIP SPEED 16000		94.7	96.2	98.0	96.8	99.4	101.5	96.7		
1279. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		110.5	111.4	111.6	113.9	120.5	118.8	118.7		
PNDB		123.6	125.2	125.3	128.0	134.3	131.7	130.5		
PNLT		126.2	127.0	127.4	130.3	136.3	134.6	132.4		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ. (0.17)(0.35)(0.52)(0.70)(0.87)(1.05)(1.22)(0. ) (0. ) (0. )									
	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
NO EGA	50									
63										
80										
100	62.8	68.8	70.4	72.5	74.1	72.3	77.7			
125	61.1	68.8	69.1	73.6	74.2	70.4	74.0			
NFA 3390. RPM	160	53.3	64.1	68.5	71.3	67.7	54.6	72.9		
( 355. RAD/SEC)	200	56.1	65.5	69.5	71.8	71.4	75.0	76.5		
NFK 3275. RPM	250	56.8	63.9	68.6	73.1	76.2	78.0	77.6		
( 343. RAD/SEC)	315	62.7	69.5	71.7	75.3	77.7	77.3	78.7		
NFD 3620. RPM	400	63.7	67.2	72.1	74.7	77.0	76.2	77.3		
( 379. RAD/SEC)	500	66.9	72.6	76.7	79.3	85.1	88.7	88.2		
NO. OF BLADES 38	630	75.4	81.4	84.7	88.5	96.6	99.8	98.0		
FREQ. SHIFT	800	75.7	84.9	88.7	94.3	102.6	100.1	100.8		
JET 6	1000	69.0	78.1	80.4	86.5	96.3	94.3	92.0		
FAN 5	1250	64.2	71.2	75.6	80.2	89.9	88.5	83.3		
CRITICAL FREQ.	1600	67.4	74.8	79.3	84.0	92.7	91.1	86.9		
0.	2000	72.0	78.8	82.8	87.9	96.1	93.7	88.4		
AIRFLOW RATIO	2500	63.3	74.2	78.5	81.5	91.2	92.5	87.6		
WF/WM 16.93	3150	60.9	72.3	77.8	81.4	89.5	92.0	86.3		
FAN TIP SPEED	4000	60.0	71.2	77.4	79.0	86.0	87.2	83.5		
1278. FT/SEC	5000	57.8	70.1	76.8	78.4	83.1	86.8	82.6		
	6300	51.8	65.6	72.8	74.6	79.5	83.0	79.1		
	8000	44.6	60.4	68.3	70.4	75.5	79.1	75.3		
	10000	35.3	54.3	63.1	65.7	71.1	74.9	71.1		
OVERALL CALCULATED		80.9	88.8	92.7	97.4	105.7	105.1	103.8		
PNDB		90.5	98.6	103.0	107.2	114.8	114.6	112.2		
PNLT		93.3	100.5	105.1	109.5	116.8	116.3	114.1		



**MODEL SOUND PRESSURE LEVELS**

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
RADIAL 12. FT.	63										
( 4. M)	80										
VEHICLE JT15RD	100										
CONFIG 40X80	125										
LGC V0=80, A=0.	160										
DATE 10/2/78	200										
RUN BFD/CFS C/LT	250										
TAPE 062100	315										
BAR 29.8 HG	400	90.3	90.4	87.8	88.6	90.0	86.4	89.3			
(***** N/M2)	500	88.7	88.4	86.2	90.1	87.7	86.4	85.3			
TAMB 96. DEG F	630	88.2	86.2	88.6	89.0	85.5	83.8	85.6			
(309. DEG K)	800	83.1	85.0	88.2	89.8	89.7	89.4	89.2			
TWET 64. DEG F	1000	88.8	92.7	95.1	94.4	95.2	94.8	91.9			
(291. DEG K)	1250	92.0	94.9	98.2	102.4	103.7	103.5	99.9			
HACT 5.59 GM/M3	1600	91.8	94.0	94.1	97.0	102.1	97.5	101.5			
(.00559 KG/M3)	2000	93.9	95.0	99.0	102.0	102.9	102.6	101.9			
NFA 15029. RPM	2500	100.9	98.3	100.8	105.1	107.7	107.9	104.7			
(1574. RAD/SEC)	3150	97.3	96.8	98.4	100.9	100.1	95.3	97.0			
NFK 14520. RPM	4000	97.5	100.4	99.0	105.2	107.6	104.6	102.4			
(1520. RAD/SEC)	5000	95.6	95.0	93.4	100.8	103.7	99.2	95.5			
NFD 14895. RPM	6300	104.3	101.9	103.7	110.0	115.1	105.6	102.3			
(1560. RAD/SEC)	8000	97.7	96.9	96.9	103.9	105.6	101.4	97.3			
NO. OF BLADES 28	10000	93.1	95.0	94.4	99.4	103.2	102.4	95.0			
FAN TIP SPEED 16000	12500	96.4	97.6	97.9	97.7	103.1	97.0	91.5			
1378. FT/SEC	20000	93.2	94.7	95.7	96.8	100.9	95.0	90.1			
OVERALL MEASURED											
OVERALL CALCULATED		108.9	108.5	109.7	114.4	118.0	113.6	111.0			
PNOB		121.8	121.0	122.1	127.4	131.1	126.4	123.8			
PNLT		123.6	122.5	124.1	129.6	133.1	130.3	125.9			

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**

ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	63										
	80										
	100	62.7	68.8	69.5	72.5	75.4	72.9	76.5			
	125	61.1	66.8	67.9	74.0	73.1	72.9	72.5			
NFA 3653. RPM	160	60.5	64.6	70.3	72.9	71.0	70.4	72.9			
( 382. RAD/SEC)	200	55.4	63.3	69.9	73.7	75.2	75.9	76.5			
NFK 3529. RPM	250	60.9	70.9	76.7	78.3	80.6	81.3	79.1			
( 369. RAD/SEC)	315	64.0	73.1	79.8	86.2	89.1	90.0	87.1			
NFD 3620. RPM	400	63.6	72.1	75.6	80.8	87.5	83.9	88.7			
( 379. RAD/SEC)	500	65.5	73.0	80.5	85.8	88.2	89.0	89.0			
NO. OF BLADES 38	630	72.3	76.2	82.2	88.8	93.0	94.3	91.8			
FREQ. SHIFT	800	68.3	74.5	79.7	84.5	85.3	81.6	84.1			
JET 6	1000	68.2	78.0	80.2	88.8	92.8	90.9	89.4			
FAN 4	1250	65.6	75.7	78.0	86.6	90.7	88.8	87.3			
CRITICAL FREQ.	1600	62.9	73.3	75.8	84.4	88.5	86.6	85.2			
0.	2000	64.0	71.4	73.8	83.7	88.3	85.0	83.0			
AIRFLOW RATIO	2500	71.7	77.8	83.8	92.7	99.5	91.2	88.7			
WF/WM 16.93	3150	63.6	72.1	76.5	86.2	89.7	86.8	83.5			
FAN TIP SPEED	4000	57.1	69.3	73.4	81.3	87.0	87.5	80.9			
1378. FT/SEC	5000	59.4	71.4	76.6	79.3	86.7	81.9	77.3			
	6300	53.3	67.1	73.5	77.8	84.0	79.5	75.5			
	8000	46.1	61.9	69.0	73.6	80.0	75.6	71.7			
	10000	36.8	55.8	63.8	68.9	75.6	71.4	67.5			
OVERALL CALCULATED		78.5	86.0	90.8	98.1	103.1	100.2	98.6			
PNOB		90.9	98.6	103.9	111.6	117.3	112.1	109.9			
PNLT		93.5	100.6	106.7	114.2	120.8	116.1	111.7			

**MODEL SOUND PRESSURE LEVELS**  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)	(0.)
NO EGA		50									
	63										
RADIAL 12. FT.		80									
( 4. M)		100									
VEHICLE	JT15RD	125									
CONFIG	40X80	160									
LOC	VG=80, A=0.	200									
DATE	10/2/78	250									
RUN	BFD/CFS C/LT	315									
TAPE	062140	400	90.9	89.1	88.0	92.6	91.1	86.1	92.4		
BAR	29.8 HG	500	90.9	87.3	89.2	87.3	89.2	87.2	86.2		
(***** N/M2)		630	90.6	88.8	90.0	89.8	87.9	84.6	85.3		
TAMB	97. DEG F	800	89.6	90.6	92.5	94.5	93.4	94.0	92.9		
(309. DEG K)		1000	91.4	93.1	96.9	99.8	99.7	97.2	93.1		
TWET	65. DEG F	1250	94.8	93.6	99.0	102.4	103.4	102.7	100.9		
(291. DEG K)		1600	94.6	95.4	96.5	102.3	100.8	99.9	100.6		
HACT	6.08 GM/M3	2000	94.2	98.7	100.7	100.7	104.1	103.1	102.0		
(.00608 KG/M3)		2500	95.6	95.5	98.5	101.6	101.5	98.1	97.4		
NFA	15430. RPM	3150	96.3	97.8	97.4	104.8	105.9	103.1	101.5		
(1616. RAD/SEC)		4000	98.3	98.4	100.2	105.5	109.4	106.9	102.5		
NFK	14894. RPM	5000	93.5	95.1	93.8	101.2	105.8	103.8	99.4		
(1559. RAD/SEC)		6300	96.3	96.7	96.8	99.7	104.2	104.7	99.5		
NFD	14895. RPM	8000	96.9	100.9	100.7	107.6	114.2	113.3	104.1		
(1560. RAD/SEC)		10000	92.9	93.6	93.5	98.2	103.0	102.9	95.8		
NO. OF BLADES	28	12500	93.9	95.1	95.5	99.8	99.8	100.0	92.2		
FAN TIP SPEED		16000	93.6	95.6	98.0	101.4	99.6	101.8	94.5		
1414. FT/SEC		20000									
OVERALL MEASURED											
OVERALL CALCULATED			107.2	108.1	109.4	114.2	117.6	116.5	111.3		
PNDB			119.7	120.1	121.5	126.7	129.4	128.0	123.7		
PNLT			120.6	121.1	123.0	128.2	131.2	129.7	125.0		

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**  
ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)	(0.)
NO EGA		50									
	63										
	80										
	100	63.3	67.5	69.7	76.5	76.5	72.6	79.6			
	125	63.3	69.7	70.9	71.2	74.6	73.7	75.4			
NFA	3750. RPM	160	62.9	67.2	71.7	73.7	73.4	71.2	72.6		
( 393. RAD/SEC)		200	61.9	68.9	74.2	78.4	78.9	80.5	80.2		
NFK	3620. RPM	250	63.5	71.3	78.5	83.7	85.1	83.7	80.3		
( 379. RAD/SEC)		315	66.8	71.8	80.6	86.2	88.8	89.2	88.1		
NFD	3620. RPM	400	66.4	73.5	78.0	86.1	86.1	86.3	87.8		
( 379. RAD/SEC)		500	65.8	76.7	82.2	84.5	89.4	89.5	89.1		
NO. OF BLADES	38	630	67.0	73.4	79.9	85.3	86.8	84.5	84.5		
FREQ. SHIFT		800	69.3	75.5	78.7	88.4	91.1	89.4	88.5		
JET	6	1000	69.0	76.0	81.4	90.0	94.6	93.2	89.3		
FAN	5	1250	63.7	72.4	74.9	84.6	90.9	90.0	86.4		
CRITICAL FREQ.		1600	61.7	69.6	73.6	79.2	87.1	86.8	83.2		
0.		2000	64.8	73.2	77.2	82.7	88.9	90.5	86.1		
AIRFLOW RATIO		2500	66.4	76.9	80.9	90.4	98.7	99.0	90.6		
WF/WM 16.93		3150	58.9	68.9	73.2	80.6	87.2	88.3	82.1		
FAN TIP SPEED		4000	58.0	69.5	74.6	81.8	83.7	85.2	78.2		
1414. FT/SEC		5000	56.7	69.5	76.8	83.2	83.3	86.9	80.4		
		6300	47.8	62.0	69.8	76.4	76.7	80.3	73.9		
		8000	40.5	56.9	65.3	72.2	72.7	76.4	70.1		
		10000	31.2	50.7	60.2	67.5	68.3	72.2	66.0		
OVERALL CALCULATED			77.6	85.3	90.5	97.6	102.6	102.6	98.4		
PNDB			88.0	97.6	102.4	110.3	116.3	116.7	110.7		
PNLT			90.2	100.2	104.4	113.7	120.1	120.4	113.4		

**MODEL SOUND PRESSURE LEVELS**  
**ANGLES FROM INLET IN DEGREES**

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
		50									
		63									
		80									
NO EGA											
RADIAL 12. FT.											
( 4. M)											
VEHICLE JT15RD											
CONFIG 40X80											
LQC VQ=80, A=4,											
DATE 10/2/78											
RUN BFD/CFS C/LT											
TAPE 063010		400	92.5	89.6	90.0	92.0	92.7	91.4	90.8		
BAR 29.8 HG		500	91.5	90.6	90.8	89.0	86.1	86.5	92.4		
(***** N/M2)		630	88.0	88.4	85.9	89.2	85.3	89.8	87.6		
TAMB 98. DEG F		800	88.8	88.3	88.7	94.1	92.5	91.6	91.0		
(310. DEG K)		1000	89.5	91.5	98.3	101.4	101.4	95.9	95.4		
TWET 65. DEG F		1250	95.6	93.9	99.3	102.8	100.0	103.8	100.2		
(291. DEG K)		1600	93.7	94.2	94.2	101.0	101.1	100.7	99.7		
HACT 6.20 GM/M3		2000	93.9	94.6	98.7	102.3	105.5	102.5	102.3		
(.00620 KG/M3)		2500	95.9	96.5	96.5	102.1	102.3	98.1	98.8		
NFA 15445. RPM		3150	94.5	101.0	96.8	104.6	106.2	101.9	101.2		
(1617. RAD/SEC)		4000	96.4	101.2	101.3	103.4	111.0	105.9	104.5		
NFK 14895. RPM		5000	93.6	95.4	94.3	100.3	105.6	104.0	99.1		
(1560. RAD/SEC)		6300	95.2	96.2	96.3	98.5	103.9	105.5	100.2		
NFD 14395. RPM		8000	99.5	100.0	100.9	106.4	114.3	114.5	106.0		
(1560. RAD/SEC)		10000	91.6	93.2	92.7	95.9	101.7	101.5	97.0		
NO. OF BLADES 28		12500	92.4	94.5	95.6	96.8	97.4	99.3	94.2		
FAN TIP SPEED 16000			93.5	94.5	97.4	98.3	98.5	100.4	94.6		
1416. FT/SEC 20000											
OVERALL MEASURED											
OVERALL CALCULATED		106.5	108.3	109.2	113.3	117.9	117.0	112.1			
PNDB		118.4	121.4	121.8	125.5	130.2	128.6	124.9			
PMLT		119.8	122.4	124.5	127.1	132.4	130.5	126.7			

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA**  
**ANGLES FROM INLET IN DEGREES**

	FREQ.	ANGLES FROM INLET IN DEGREES									
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0. )	(0. )	(0. )
		50									
		63									
		80									
NO EGA											
NFA 3754. RPM		100	64.9	68.0	71.7	75.9	78.1	77.9	78.0		
( 393. RAD/SEC)		125	63.9	69.0	72.5	72.9	71.5	73.0	79.6		
NFK 3620. RPM		160	60.3	66.8	67.6	73.1	70.8	76.4	74.9		
( 379. RAD/SEC)		200	61.1	66.6	70.4	78.0	78.0	78.1	78.3		
NFD 3620. RPM		250	61.6	69.7	79.9	85.3	86.8	82.4	82.6		
( 379. RAD/SEC)		315	67.6	72.1	80.9	86.6	85.4	90.3	87.4		
NO. OF BLADES 38		400	65.5	72.3	75.7	84.8	86.4	87.1	86.9		
FREQ. SHIFT		500	65.5	72.6	80.2	86.1	90.8	88.9	89.4		
JET 6		630	67.3	74.4	79.9	85.8	87.6	84.5	85.9		
FAN 5		800	65.5	78.7	78.1	88.2	91.4	88.2	88.2		
CRITICAL FREQ.		1000	67.1	78.8	82.5	86.9	96.2	92.2	91.5		
0.		1250	63.8	72.7	75.4	83.7	90.7	90.2	86.1		
AIRFLOW RATIO		1600	60.6	69.1	73.0	80.5	85.1	88.1	83.0		
WF/WM 16.93		2000	63.7	72.7	76.7	81.5	88.6	91.3	86.8		
FAN TIP SPEED 1416. FT/SEC		2500	67.0	76.0	81.1	89.2	98.8	100.2	92.5		
		3150	57.6	68.4	72.4	78.3	85.9	86.9	83.3		
		4000	56.5	68.9	74.7	78.8	81.3	84.5	80.2		
		5000	56.6	68.4	76.2	80.1	82.2	85.5	80.5		
		6300	47.6	60.9	69.2	73.3	75.6	78.9	74.0		
		8000	40.4	55.7	64.7	69.1	71.6	75.0	70.2		
		10000	31.1	49.6	59.5	64.4	67.2	70.8	66.0		
OVERALL CALCULATED		76.9	85.7	90.3	96.8	102.9	103.0	99.1			
PNDB		87.8	97.1	102.2	109.1	116.1	117.3	111.9			
PMLT		90.6	99.5	105.1	112.2	120.5	121.6	115.0			

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	50										
	63										
	80										
NO EGA	100										
RADIAL 12. FT.	125										
( 4. M)	160										
VEHICLE JT15RD	200										
CONFIG 40X80	250										
LOC VG=80, A=4,	315										
DATE 10/2/78	400	92.2	88.3	92.5	89.8	87.9	89.9	88.9			
RUN BFD/CFS C/LT	500	90.1	87.8	91.4	87.3	88.0	88.1	84.4			
TAPE 063020	630	89.3	86.2	88.9	85.1	78.2	88.8	82.2			
BAR 29.8 HG	800	91.0	88.4	88.4	91.0	89.3	89.8	88.1			
(***** N/M2)	1000	91.0	91.8	94.4	98.4	96.1	94.8	91.1			
TAMB 98. DEG F	1250	94.9	95.9	97.2	103.9	108.1	105.6	101.7			
(310. DEG K)	1600	94.9	93.1	96.2	99.8	101.8	103.8	99.0			
TWET 65. DEG F	2000	93.9	93.8	97.1	102.9	102.9	104.3	99.8			
(291. DEG K)	2500	97.5	99.0	100.2	106.8	109.5	107.4	107.4			
HACT 6.20 GM/M3	3150	96.1	96.4	99.9	100.8	99.8	95.9	98.0			
(.00820 KG/M3)	4000	97.7	97.8	97.3	104.9	108.9	106.9	101.2			
NFA 15056. RPM	5000	94.8	95.5	95.8	101.8	104.3	100.8	97.2			
(1578. RAD/SEC)	6300	100.0	100.4	101.4	109.5	116.3	107.2	101.9			
NFK 14520. RPM	8000	96.4	96.8	97.0	103.7	107.5	101.2	97.4			
(1520. RAD/SEC)	10000	93.5	94.3	93.9	99.1	101.9	101.2	96.0			
NFD 14995. RPM	12500	94.9	96.4	97.8	98.3	103.8	99.1	93.1			
(1560. RAD/SEC)	16000	92.6	94.7	95.2	96.0	100.7	96.8	89.8			
NO. OF BLADES 28	20000										
FAN TIP SPEED 1380. FT/SEC											
OVERALL MEASURED											
OVERALL CALCULATED		107.4	107.7	109.1	114.7	119.1	114.8	111.7			
PNDB		119.6	119.8	121.2	127.4	132.0	127.1	125.2			
PNLT		120.4	121.1	122.1	129.5	135.1	130.0	128.3			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	50										
	63										
	80										
NO EGA	100	64.8	66.7	74.2	73.7	73.3	76.4	76.1			
	125	62.5	66.2	73.1	71.2	73.4	74.8	71.6			
NFA 3659. RPM	160	61.8	64.8	67.8	69.0	61.7	75.2	69.5			
( 383. RAD/SEC)	200	63.3	66.7	68.1	74.9	74.8	76.1	75.4			
NFK 3529. RPM	250	63.1	70.0	76.0	82.3	81.5	81.1	78.3			
( 369. RAD/SEC)	315	66.9	74.1	78.8	87.7	91.5	92.1	88.9			
NFD 3620. RPM	400	66.7	71.2	77.7	83.8	86.8	90.2	86.2			
( 379. RAD/SEC)	500	65.5	71.8	78.8	86.7	88.2	90.7	88.9			
NO. OF BLADES 38	630	68.9	76.9	81.8	90.3	94.8	93.8	94.5			
FREQ. SHIFT	800	67.1	74.1	81.2	84.2	84.8	82.2	85.0			
JET 6	1000	68.4	75.2	78.5	88.4	94.1	93.2	88.2			
FAN 4	1250	65.8	72.9	75.8	86.3	91.9	91.1	86.1			
CRITICAL FREQ.	1600	63.1	70.5	73.0	84.1	89.8	88.9	84.0			
0.	2000	63.1	72.0	76.1	84.8	89.0	86.7	83.9			
AIRFLOW RATIO	2500	67.3	76.3	81.5	92.1	100.7	92.8	83.3			
WF/WM 16.93	3150	62.4	72.0	76.6	86.1	91.7	86.6	83.6			
FAN TIP SPEED	4000	57.4	68.5	72.8	80.9	85.6	86.2	81.9			
1380. FT/SEC	5000	57.9	70.2	76.3	78.0	87.4	84.1	78.9			
	6300	52.7	67.1	73.0	77.0	83.8	81.1	75.0			
	8000	45.5	61.9	68.5	72.8	79.8	77.2	71.2			
	10000	36.2	55.8	63.3	68.1	75.4	73.0	67.0			
OVERALL CALCULATED		77.8	85.0	90.1	98.4	104.2	101.6	99.1			
PNDB		88.8	97.5	102.8	111.4	118.2	113.8	109.7			
PNLT		90.4	99.0	104.8	113.8	121.8	116.0	112.7			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	83										
RADIAL 12. FT.	80										
( 4. M)	100										
VEHICLE JT15RD	125										
CONFIG 40X80	180										
LOC VG=80 A=4.	200										
DATE 10/2/78	250										
RUN BFD/CFS C/LT	315										
TAPE 063060	400	90.6	87.8	87.4	91.2	86.4	87.9	86.1			
BAR 29.8 HG	500	88.2	83.2	89.3	86.3	89.5	87.4	85.9			
(***** N/M2)	630	83.7	81.6	85.4	88.0	88.4	85.7	85.3			
TAMB 98. DEG F	800	88.0	87.0	89.1	90.4	89.3	88.0	88.8			
(310. DEG K)	1000	89.2	87.4	89.6	92.3	88.3	91.1	90.6			
TWET 65. DEG F	1250	90.3	90.6	88.8	91.4	92.5	90.7	88.5			
(291. DEG K)	1600	91.4	88.4	88.1	90.4	89.1	89.3	87.8			
HACT 6.20 GM/M3	2000	96.3	97.0	96.3	97.2	101.3	100.7	101.0			
(.00620 KG/M3)	2500	104.9	105.1	103.5	106.0	112.2	111.4	112.2			
NFA 13972. RPM	3150	106.0	107.5	106.2	112.3	117.4	116.1	113.8			
(1463. RAD/SEC)	4000	99.8	101.0	100.1	103.5	109.5	110.0	104.7			
NFK 13475. RPM	5000	97.2	97.5	97.9	101.4	105.1	106.9	100.4			
(1411. RAD/SEC)	6300	102.6	99.5	101.1	104.8	112.8	112.7	104.6			
NFD 14895. RPM	8000	95.8	96.9	96.5	99.2	105.9	107.0	100.8			
(1560. RAD/SEC)	10000	95.4	97.6	97.9	98.1	106.2	106.8	101.7			
NO. OF BLADES 28	12500	95.4	96.7	96.4	97.6	101.9	101.2	96.4			
FAN TIP SPEED	16000	93.7	96.4	97.7	97.5	99.1	100.0	93.8			
1281. FT/SEC	20000										
OVERALL MEASURED											
OVERALL CALCULATED		111.0	111.8	111.0	115.0	120.6	120.1	117.2			
PNDB		124.6	125.3	124.5	129.1	134.1	133.5	130.7			
PNLT		125.8	126.8	126.0	132.6	137.8	135.3	132.5			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

	FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
		(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50										
	83										
	80										
	100	63.0	66.2	69.1	75.1	71.8	74.4	73.3			
	125	60.6	61.6	71.0	70.2	54.9	73.9	73.1			
NFA 3396. RPM	180	58.0	60.0	67.1	51.9	53.9	72.3	72.6			
( 356. RAD/SEC)	200	60.3	65.3	70.8	74.3	74.8	74.5	76.1			
NFK 3275. RPM	250	61.3	65.6	71.2	76.2	73.7	77.6	77.8			
( 343. RAD/SEC)	315	62.3	68.8	70.2	75.2	77.9	77.2	75.7			
NFD 3620. RPM	400	63.2	66.5	69.6	74.2	74.4	75.7	75.0			
( 379. RAD/SEC)	500	67.9	75.0	77.8	81.0	86.8	87.1	88.1			
NO. OF BLADES 38	630	76.3	83.0	84.9	89.7	97.5	97.8	99.3			
FREQ. SHIFT	800	77.0	85.2	87.5	95.9	102.6	102.4	100.8			
JET 8	1000	70.5	78.6	81.3	87.0	94.7	96.3	91.7			
FAN 5	1250	63.8	71.9	75.1	80.8	86.7	90.1	83.4			
CRITICAL FREQ.	1600	66.6	74.5	78.7	84.6	90.0	93.0	87.2			
0.	2000	71.1	76.0	81.5	87.8	97.5	98.5	91.2			
AIRFLOW RATIO	2500	63.3	72.9	76.7	82.0	90.4	92.7	87.3			
WF/WM 16.93	3150	61.4	72.8	77.6	80.5	90.4	92.2	88.0			
FAN TIP SPEED	4000	59.5	71.1	77.5	79.8	85.8	86.4	82.4			
1281. FT/SEC	5000	56.8	70.3	76.5	79.3	82.8	85.1	79.7			
	6300	50.8	65.8	72.5	75.5	79.2	81.5	76.2			
	8000	43.6	60.6	68.0	71.3	75.2	77.6	72.4			
	10000	34.3	54.5	62.8	66.6	70.8	73.4	68.2			
OVERALL CALCULATED		81.6	89.1	92.1	98.5	105.7	106.3	104.3			
PNDB		90.3	98.0	102.3	107.6	115.1	116.5	112.1			
PNLT		92.8	99.5	104.2	110.1	117.8	118.7	113.9			

MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	) (0.	) (0.
NO EGA	50									
83										
100										
VEHICLE JT15RD	125									
CONFIG 40x80	160									
LOC VO=80, A=4,	200									
DATE 10/2/78	250									
RUN BFD/CFS C/LT	315									
TAPE 063070	400	92.6	90.2	88.5	89.7	86.4	89.2	86.6		
BAR 29.8 HG	500	91.2	90.6	88.5	88.0	76.3	83.2	86.9		
(***** N/M2)	630	90.4	89.0	88.6	77.1	88.9	85.0	84.4		
TAMB 97. DEG F	800	88.6	89.3	89.4	89.6	87.9	89.9	87.1		
(309. DEG K)	1000	89.8	90.6	87.5	87.2	86.4	87.2	85.5		
TWET 65. DEG F	1250	93.6	92.6	91.0	90.1	87.4	86.9	86.4		
(291. DEG K)	1600	95.9	93.5	91.3	90.8	88.5	87.6	86.0		
HACT 6.47 GM/M3	2000	94.8	94.7	97.5	97.0	99.7	97.4	98.7		
(.00647 KG/M3)	2500	97.0	96.5	96.9	99.6	101.6	100.6	99.2		
NFA 12763. RPM	3150	98.2	100.7	98.4	100.2	104.8	101.9	102.2		
(1336. RAD/SEC)	4000	95.5	98.7	99.2	98.2	98.6	96.2	93.3		
NFK 12320. RPM	5000	97.0	99.0	100.0	98.0	95.0	93.0	90.1		
(1290. RAD/SEC)	6300	102.2	102.6	101.5	103.0	113.3	114.1	109.9		
NFD 14895. RPM	8000	94.6	97.9	96.6	98.9	101.6	104.0	97.5		
(1560. RAD/SEC)	10000	95.9	98.9	100.1	99.9	101.9	102.9	96.9		
NO. OF BLADES 26	12500	95.7	99.3	100.8	100.7	105.5	103.5	98.1		
FAN TIP SPEED 16000	18000	95.2	96.3	98.6	98.9	99.5	99.1	93.3		
1170. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		108.2	109.6	109.8	110.0	115.5	115.6	111.9		
PNDB		120.9	121.6	121.1	121.6	127.9	126.3	124.9		
PNLT		122.4	122.6	121.1	124.1	131.4	130.9	127.6		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

FREQ.	10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	) (0.	) (0.
NO EGA	50									
83										
100										
NFA 3102. RPM	125	65.0	68.6	70.2	73.6	71.6	75.7	73.6		
(325. RAD/SEC)	160	63.6	69.0	70.2	69.9	61.7	69.7	74.1		
NFK 2994. RPM	200	62.7	67.4	70.3	61.0	54.4	71.6	71.7		
(313. RAD/SEC)	250	60.9	67.6	71.1	73.5	73.4	76.4	74.4		
NFD 3620. RPM	315	61.9	69.0	69.1	71.1	71.6	73.7	72.7		
(379. RAD/SEC)	315	65.6	70.8	72.6	73.9	72.6	73.4	73.6		
NO. OF BLADES 38	400	67.7	71.6	72.6	74.6	73.6	74.0	73.2		
FREQ. SHIFT	500	66.4	72.7	79.0	80.7	85.0	83.8	85.8		
JET 6	630	68.4	74.4	80.3	83.3	86.9	87.0	86.3		
FAN 5	800	69.2	76.4	79.7	83.8	90.0	86.2	89.2		
CRITICAL FREQ.	1000	66.2	76.3	80.4	81.7	83.6	82.5	80.3		
O.	1250	63.1	74.0	78.2	79.6	77.5	76.7	73.0		
AIRFLOW RATIO	1600	66.4	75.9	80.8	81.2	79.9	79.0	76.9		
WF/WM 16.93	2000	70.8	79.1	82.0	86.0	98.0	100.0	96.6		
FAN TIP SPEED 4000	2500	62.0	73.9	78.7	81.6	86.1	89.7	84.0		
1170. FT/SEC	3150	61.9	74.2	79.8	82.3	86.2	86.4	83.2		
	4000	59.7	73.6	78.8	82.6	89.3	88.6	84.1		
	5000	58.3	72.3	77.5	80.7	83.3	84.2	79.3		
	6300	52.4	67.8	73.4	76.9	79.6	80.6	75.7		
	8000	45.1	62.6	66.9	72.8	75.6	76.6	71.9		
	10000	35.6	56.4	63.8	66.1	71.2	72.5	67.8		
OVERALL CALCULATED		78.2	86.7	90.7	93.3	100.3	101.7	98.7		
PNDB		89.6	99.0	103.1	105.9	113.4	114.9	111.7		
PNLT		92.4	100.4	103.1	107.4	116.3	119.8	117.1		

**MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES**

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	0. (0.)	0. (0.)
NO EGA	50									
RADIAL 12. FT. ( 4. M)	80									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC VO=80, A=4,	200									
DATE 10/2/78	250									
RUN BFD/CFS C/LT	315									
TAPE 063110	400	90.7	90.5	92.1	88.9	89.0	87.0	84.0		
BAR 29.8 HG	500	89.2	88.0	89.0	88.4	88.9	83.6	78.7		
(***** N/M2)	630	89.8	88.9	89.3	88.0	89.4	86.2	71.3		
TAMB 98. DEG F	800	90.6	88.6	88.4	89.3	88.6	86.8	85.0		
(309. DEG K)	1000	88.1	90.8	89.3	87.0	84.9	85.6	83.8		
TWET 64. DEG F	1250	92.4	92.8	92.3	89.9	89.6	85.8	87.0		
(291. DEG K)	1600	95.6	93.6	92.1	91.1	87.1	86.7	86.6		
HACT 5.97 GM/M3	2000	95.3	95.2	95.7	93.6	91.9	91.6	90.4		
(.00597 KG/M3)	2500	97.2	97.3	100.3	101.6	96.2	91.5	87.3		
NFA 12405. RPM	3150	98.6	100.9	98.6	98.5	98.4	92.6	88.1		
(1299. RAD/SEC)	4000	99.1	99.9	100.2	98.1	94.0	90.8	87.4		
NFK 11985. RPM	5000	99.0	100.0	100.2	98.2	95.0	92.2	88.3		
(1255. RAD/SEC)	6300	98.0	99.1	98.9	100.0	106.5	103.8	97.3		
NFD 14895. RPM	8000	97.3	97.9	99.0	99.1	99.2	97.8	91.4		
(1580. RAD/SEC)	10000	97.4	98.8	100.2	99.7	100.2	98.8	91.8		
NO. OF BLADES 28	12500	98.5	99.0	100.5	100.3	100.7	100.5	92.8		
FAN TIP SPEED 16000	16000	96.3	99.1	99.9	100.0	98.9	97.2	89.2		
1137. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		108.3	109.4	109.9	109.6	110.1	108.1	102.1		
PNDB		120.6	121.6	121.5	121.3	122.3	120.0	114.6		
PNLT		120.6	121.6	122.5	123.2	125.4	121.4	117.1		

**FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES**

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10. (0.17)	20. (0.35)	30. (0.52)	40. (0.70)	50. (0.87)	60. (1.05)	70. (1.22)	0. (0.)	0. (0.)
NO EGA	50									
	80									
	100	63.1	68.9	73.8	72.8	74.4	73.5	71.2		
	125	61.6	66.4	70.7	72.3	74.3	70.1	63.9		
NFA 3015. RPM	160	62.1	65.3	71.0	69.9	71.9	72.8	58.6		
( 316. RAD/SEC)	200	62.9	66.9	70.1	73.2	74.3	73.3	72.3		
NFK 2913. RPM	250	60.2	69.0	70.9	70.9	70.3	72.1	70.7		
( 305. RAD/SEC)	315	64.4	71.0	73.9	73.7	75.2	72.3	74.2		
NFD 3620. RPM	400	67.4	71.7	73.6	74.9	72.4	73.1	73.8		
( 379. RAD/SEC)	500	66.9	73.2	77.2	77.4	77.2	78.0	77.5		
NO. OF BLADES 38	630	68.6	75.2	81.7	85.5	81.5	77.9	74.4		
FREQ. SHIFT	800	69.6	78.6	80.1	82.1	81.6	78.9	75.1		
JET 6	1000	69.8	77.5	81.4	81.7	79.2	77.1	74.4		
FAN 5	1250	67.2	75.2	79.2	79.5	76.7	75.0	72.3		
CRITICAL FREQ. 0.	1600	68.4	77.0	81.0	81.4	79.9	78.3	75.1		
	2000	66.5	75.6	79.3	83.0	91.2	89.6	83.9		
AIRFLOW RATIO WF/WM 16.93	2500	64.8	73.9	79.2	81.9	83.7	83.5	77.9		
	3150	63.4	74.1	79.9	82.1	84.4	84.2	77.8		
FAN TIP SPEED 1137. FT/SEC	4000	60.6	73.4	79.6	82.3	84.6	85.7	78.8		
	5000	59.4	73.0	78.7	81.8	82.7	82.3	76.2		
	6300	53.5	68.5	74.7	78.0	79.0	78.7	71.6		
	8000	48.2	63.4	70.2	73.8	75.0	74.8	67.8		
	10000	36.9	57.2	65.1	69.2	70.6	70.6	63.7		
OVERALL CALCULATED		78.5	86.6	91.0	93.0	94.9	94.1	89.0		
PNDB		88.5	96.2	103.3	105.6	108.5	107.6	102.3		
PNLT		88.5	98.2	104.4	107.5	111.7	110.6	104.6		

MODEL SOUND PRESSURE LEVELS  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50									
RADIAL 12. FT.	63									
( 4. M)	80									
VEHICLE JT15RD	125									
CONFIG 40X80	160									
LOC VO=80, A=4,	200									
DATE 10/2/78	250									
RUN SFD/CFS C/LT	315									
TAPE 063120	400	93.7	93.8	94.3	91.3	88.8	90.8	82.3		
BAR 29.8 HG	500	90.8	93.1	92.2	89.9	86.1	86.8	81.3		
(***** N/M2)	630	90.0	91.4	88.4	87.0	82.6	85.8	83.0		
TAMB 98. DEG F	800	92.1	89.4	88.3	87.7	85.7	81.0	86.7		
(310. DEG K)	1000	89.4	89.8	88.5	88.1	84.6	83.0	86.8		
TWET 88. DEG F	1250	95.2	93.8	91.5	91.1	86.1	86.2	85.8		
(292. DEG K)	1800	97.0	94.5	91.2	91.3	90.0	87.9	87.3		
HACT 6.59 GM/M3	2000	98.2	96.3	95.9	94.7	93.1	90.8	90.9		
(.00659 KG/M3)	2500	98.8	98.0	99.4	98.2	94.0	90.1	88.2		
NFA 11950. RPM	3150	100.4	100.7	100.6	97.2	95.8	92.2	87.8		
(1251. RAD/SEC)	4000	99.8	101.4	100.4	98.3	94.6	91.1	88.0		
NFK 11525. RPM	5000	98.7	100.3	99.9	98.9	95.1	93.8	89.8		
(1207. RAD/SEC)	6300	98.8	97.7	98.0	98.2	96.1	91.3	88.8		
NFD 14895. RPM	8000	96.2	99.3	99.4	99.4	98.4	97.6	91.7		
(1560. RAD/SEC)	10000	98.7	100.4	101.7	100.2	100.4	99.1	93.1		
NO. OF BLADES 28	12500	98.1	99.0	101.2	99.8	100.1	97.6	92.0		
FAN TIP SPEED 16500	16500	96.1	99.4	100.6	100.6	99.7	97.5	91.0		
1095. FT/SEC	20000									
OVERALL MEASURED										
OVERALL CALCULATED		108.8	110.1	110.4	109.0	107.7	105.7	101.3		
PND8		121.5	122.3	121.8	120.0	117.5	115.2	111.9		
PNLT		121.5	122.3	121.8	120.0	117.5	115.2	111.9		

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA  
ANGLES FROM INLET IN DEGREES

	FREQ.	ANGLES FROM INLET IN DEGREES								
		10.	20.	30.	40.	50.	60.	70.	0.	0.
	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.)	(0.)	(0.)
NO EGA	50									
	63									
	80									
	100	66.1	72.2	76.0	75.2	73.9	77.3	69.8		
	125	63.0	71.5	74.9	73.8	71.5	73.3	68.8		
NFA 2904. RPM	160	62.3	69.8	70.1	70.9	68.1	72.1	70.3		
( 304. RAD/SEC)	200	64.4	67.7	70.0	71.6	71.2	67.5	74.0		
NFK 2801. RPM	250	61.5	67.6	70.1	72.0	70.0	69.5	73.8		
( 293. RAD/SEC)	315	67.2	72.0	73.1	74.9	71.5	72.7	72.7		
NFD 3620. RPM	400	68.8	72.6	72.7	75.1	75.3	74.3	74.5		
( 379. RAD/SEC)	500	67.8	74.3	77.4	76.4	76.4	77.2	76.0		
NO. OF BLADES 38	630	70.0	75.9	80.8	79.9	79.3	76.5	76.3		
FREQ. SHIFT	800	71.4	78.4	81.8	80.8	80.7	78.5	74.8		
JET 6	1000	69.0	76.2	79.6	78.7	78.6	76.4	72.8		
FAN 4	1250	66.5	74.7	77.4	77.7	76.5	74.3	70.9		
CRITICAL FREQ.	1600	69.2	76.3	81.1	81.5	79.4	77.1	74.8		
0.	2000	67.2	76.8	80.4	81.9	79.8	79.7	76.4		
AIRFLOW RATIO	2500	64.0	73.7	78.1	80.9	80.6	77.0	75.1		
WF/WM 18.93	3150	62.1	74.5	79.0	81.7	82.5	82.9	77.9		
FAN TIP SPEED	4000	60.7	74.7	80.7	82.1	84.2	84.2	79.0		
1095. FT/SEC	5000	59.0	72.7	79.9	81.1	83.7	82.5	77.8		
	6300	56.3	71.8	78.4	81.6	82.8	82.0	76.4		
	8000	49.0	68.7	73.9	77.5	78.8	76.1	72.6		
	10000	39.7	60.5	68.8	72.8	74.4	73.9	68.5		
OVERALL CALCULATED		79.4	87.2	91.2	92.2	92.5	91.7	86.2		
PND8		89.1	99.1	104.0	105.4	106.3	105.7	101.7		
PNLT		89.1	99.1	104.0	105.4	106.3	105.7	101.7		



MODEL SOUND PRESSURE LEVELS

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	(0.	(0.	(0.
NO EGA	50										
RADIAL	63										
( 4. M)	80										
VEHICLE	100										
CONFIG	125										
LOC	160										
DATE	160										
RUN	200										
TAPE	250										
BAR	315										
(***** N/M2)	400	91.8	91.7	93.3	92.1	92.0	88.8	85.0			
TAMB	500	92.2	92.1	92.1	91.7	88.5	89.2	87.8			
(310. DEG F)	630	92.7	92.4	91.3	88.3	85.3	87.0	83.0			
WTWT	800	91.7	92.0	90.8	88.5	85.5	84.3	81.7			
(292. DEG K)	1000	89.4	92.8	87.1	86.3	82.7	83.2	79.6			
HACT	1250	86.6	94.9	84.1	80.4	86.5	87.2	85.7			
(.00859 KG/M3)	1600	88.4	94.4	84.5	81.3	80.7	88.2	88.5			
NFA	2000	86.6	96.5	86.1	84.3	83.8	90.6	89.5			
(1209. RAD/SEC)	2500	89.2	98.4	89.8	87.1	85.6	92.1	88.4			
NFK	3150	102.5	100.2	100.7	96.2	95.9	92.1	87.3			
(1166. RAD/SEC)	4000	99.5	101.0	101.3	98.5	95.7	91.3	87.0			
NFD	5000	100.3	99.5	100.8	98.6	95.3	94.2	88.7			
(1560. RAD/SEC)	6300	96.7	100.0	98.4	97.7	96.2	92.6	88.8			
NO. OF BLADES	8000	96.4	99.1	99.4	100.3	96.8	96.0	91.1			
FAN TIP SPEED	10000	98.7	99.8	101.1	100.5	100.3	99.3	91.1			
1059. FT/SEC	12500	97.7	100.7	102.9	100.8	101.3	99.7	91.2			
OVERALL MEASURED	16000	97.1	99.8	101.1	100.3	100.0	98.5	89.8			
OVERALL CALCULATED	20000	109.8	110.3	110.9	109.2	108.3	106.5	100.4			
PNDP		122.9	122.3	122.4	120.1	118.1	115.7	110.9			
PNT		123.9	122.3	122.4	120.1	118.1	115.7	112.2			

FULL SIZE SOUND PRESSURE LEVELS SCALED FROM MODEL DATA

ANGLES FROM INLET IN DEGREES

		10.	20.	30.	40.	50.	60.	70.	0.	0.	0.
FREQ.	(0.17)	(0.35)	(0.52)	(0.70)	(0.87)	(1.05)	(1.22)	(0.	(0.	(0.	(0.
NO EGA	50										
	63										
	80										
	100	64.2	70.1	75.0	78.0	77.4	78.4	72.2			
	125	64.6	70.5	73.8	75.8	73.9	75.7	75.0			
NFA	160	65.0	70.8	73.0	72.7	70.8	73.8	70.3			
( 294. RAD/SEC)	200	64.0	70.3	72.3	72.4	71.0	70.8	89.0			
NFK	250	61.5	71.0	69.3	70.2	68.1	69.7	66.8			
( 283. RAD/SEC)	315	66.8	73.1	75.7	74.2	73.9	73.7	72.9			
NFD	400	70.2	72.5	76.0	75.1	76.0	74.6	73.7			
( 379. RAD/SEC)	500	68.2	74.5	77.6	78.0	78.8	77.0	76.6			
NO. OF BLADES	630	70.6	76.3	81.2	80.8	80.9	76.5	75.5			
FREQ. SHIFT	800	73.5	77.9	82.0	79.8	81.1	78.4	74.3			
JET	1000	71.1	76.7	79.8	78.0	79.0	76.3	72.3			
FAN	1250	69.6	76.3	82.3	81.9	80.7	77.5	73.9			
CRITICAL FREQ.	1600	69.7	76.4	81.4	81.8	80.2	80.2	75.5			
0.	2000	65.3	76.5	78.9	80.7	80.9	78.5	73.5			
AIRFLOW RATIO	2500	63.8	75.1	79.5	83.0	83.3	83.7	77.6			
WF/WM	3150	64.7	75.1	80.8	82.9	84.5	84.8	77.4			
FAN TIP SPEED	4000	61.7	75.0	81.9	82.5	85.1	84.8	77.2			
1059. FT/SEC	5000	60.2	73.7	80.0	82.1	83.8	83.6	75.8			
	6300	54.3	69.2	75.9	78.3	80.1	80.0	72.2			
	8000	47.0	64.1	71.4	74.2	76.1	76.1	68.4			
	10000	37.7	57.9	66.3	68.5	71.7	71.9	64.3			
OVERALL CALCULATED	6300	80.6	87.4	91.8	92.5	93.3	92.7	87.4			
PNDP	8000	89.8	99.3	104.7	105.8	107.1	106.6	100.4			
PNT	8000	89.8	99.3	105.2	105.8	107.1	106.6	101.1			

## APPENDIX C

### SELECTED 1/3 OCTAVE BAND AND PERCEIVED NOISE PLOTS

Plots showing the advanced inlet 1/3 octave band noise along with the baseline inlet 1/3 octave band noise at 41 m/s (135 ft/s) forward velocity were selected as samples of the data for this appendix. The 1/3 octave band noise at three forward angles on the 3.7 m (12 ft) arc as a function of 1/3 octave band frequency for the actual inlets, the 1/3 octave band noise at blade passing frequency on the 3.7 m (12 ft) arc as a function of forward angle for the actual inlets, and the perceived noise levels along the 61 m (200 ft) sideline as a function of forward angle for the full-scale inlets are shown in the plots. These plots are presented for the STOL, CTOL, Deflector, and Canted Baseline inlets.

1/3-Octave-Band SPL, dB Re: 0.0002  $\mu$ Bar

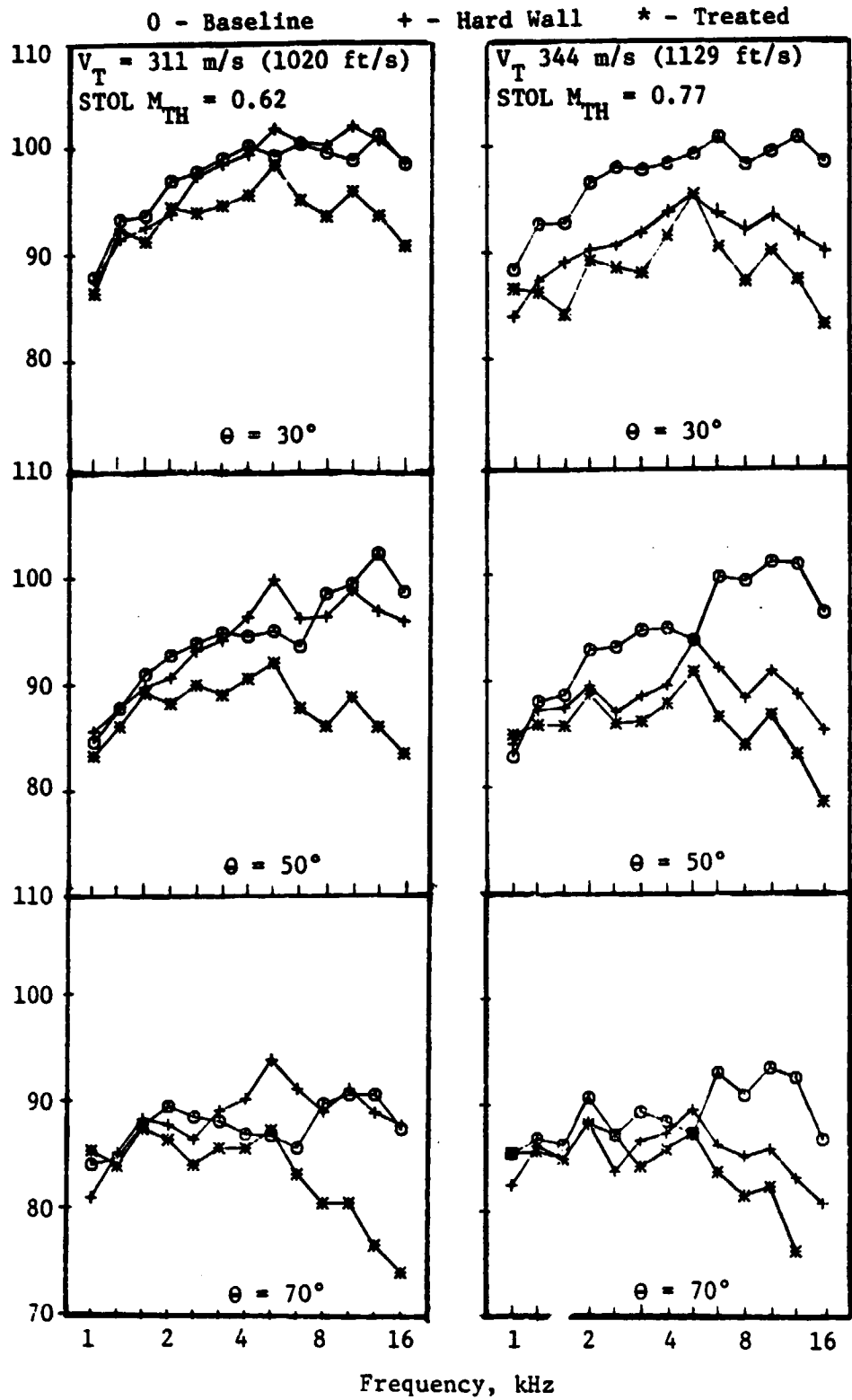


Figure C-1. One-Third-Octave-Band Noise Spectra for Baseline and STOL Inlets at 41 m/s (135 ft/s) Forward Velocity.

BPF 1/3-Octave-Band SPL, dB Re: 0.0002  $\mu$ Bar

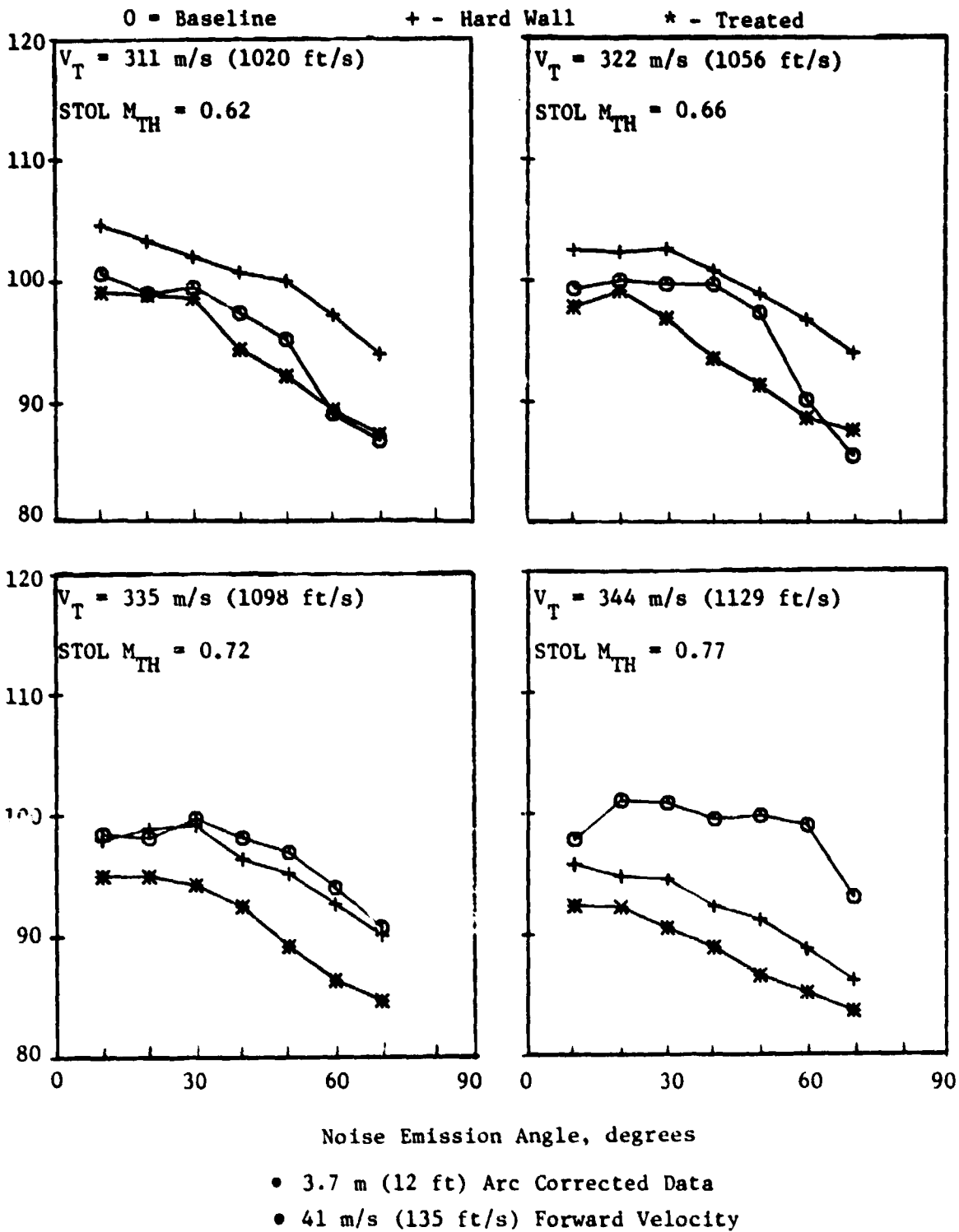


Figure C-2. Blade-Passing-Frequency, 1/3-Octave-Band Noise Directivity for Baseline and STOL Inlet at Forward Velocity.

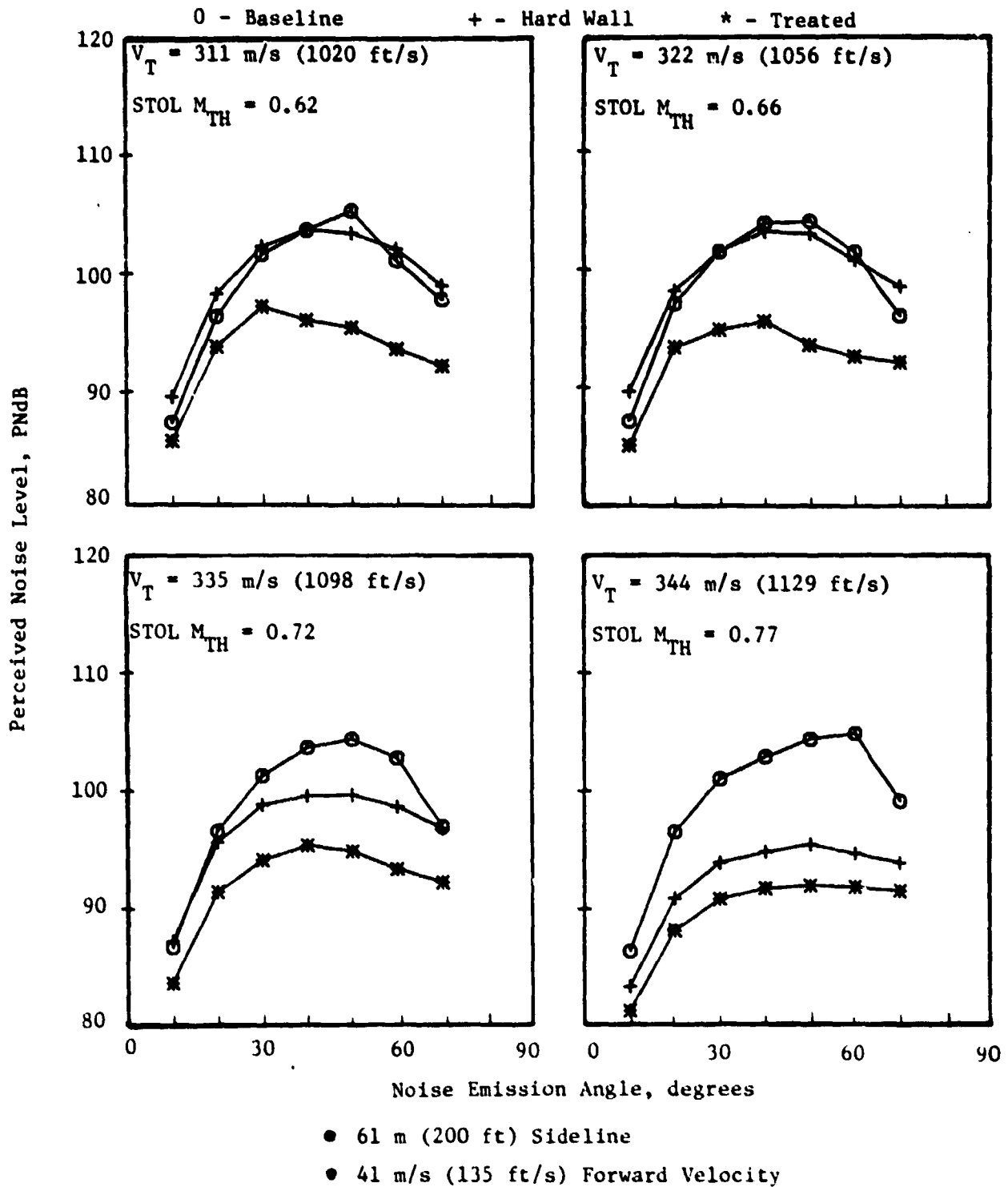


Figure C-3. STOL Noise Directivity (QCSEE Size) at Forward Velocity.

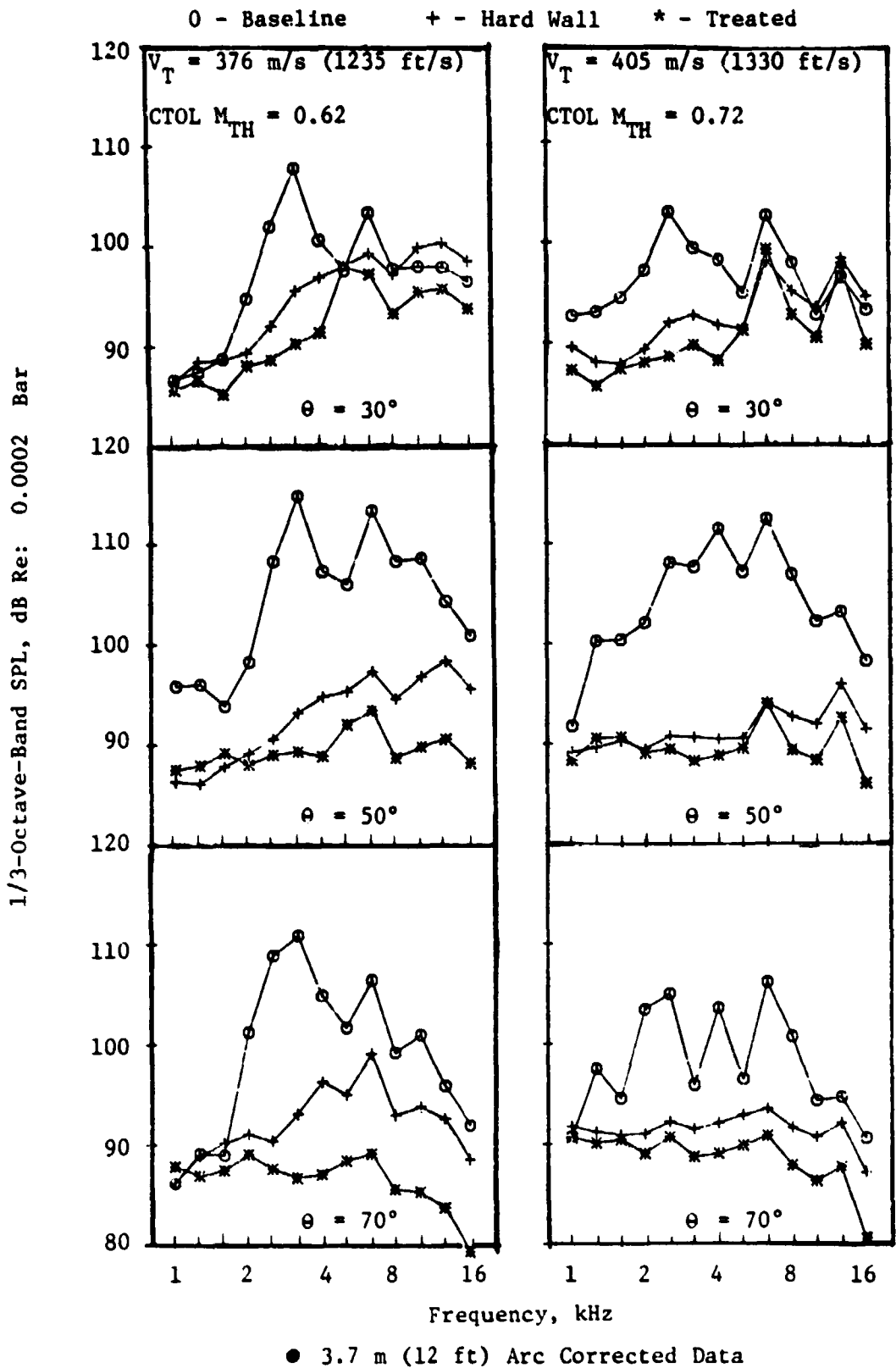
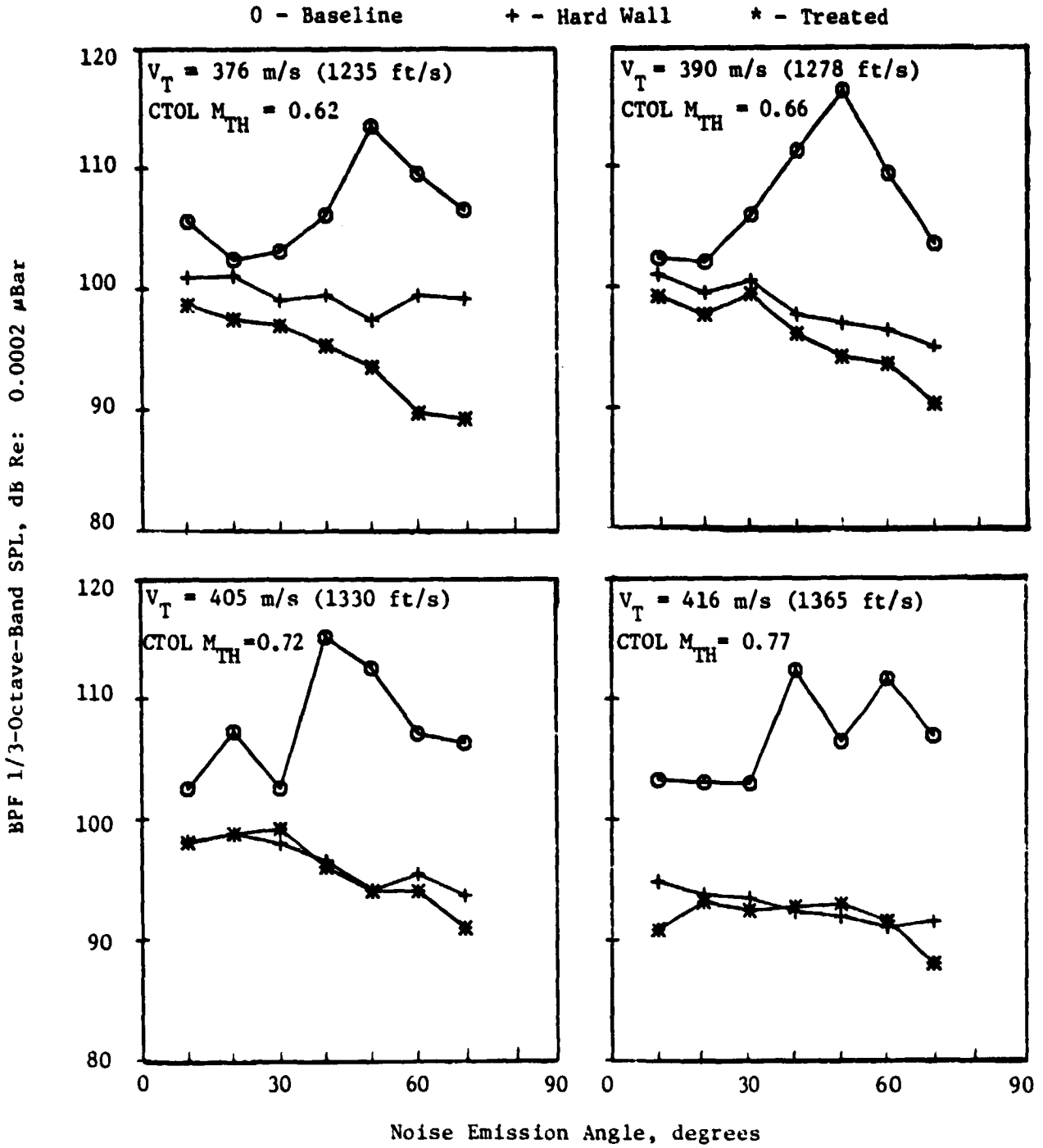


Figure C-4. One-Third-Octave-Band Spectra for Baseline and CTOL Inlets at 41 m/s (135 ft/s) Forward Velocity.



- 3.7 m (12 ft) Arc Corrected Data
- 41 m/s (135 ft/s) Forward Velocity

Figure C-5. Blade-Passing Frequency, 1/3-Octave-Band Noise Directivity for Baseline and CTOL Inlets at Forward Velocity.

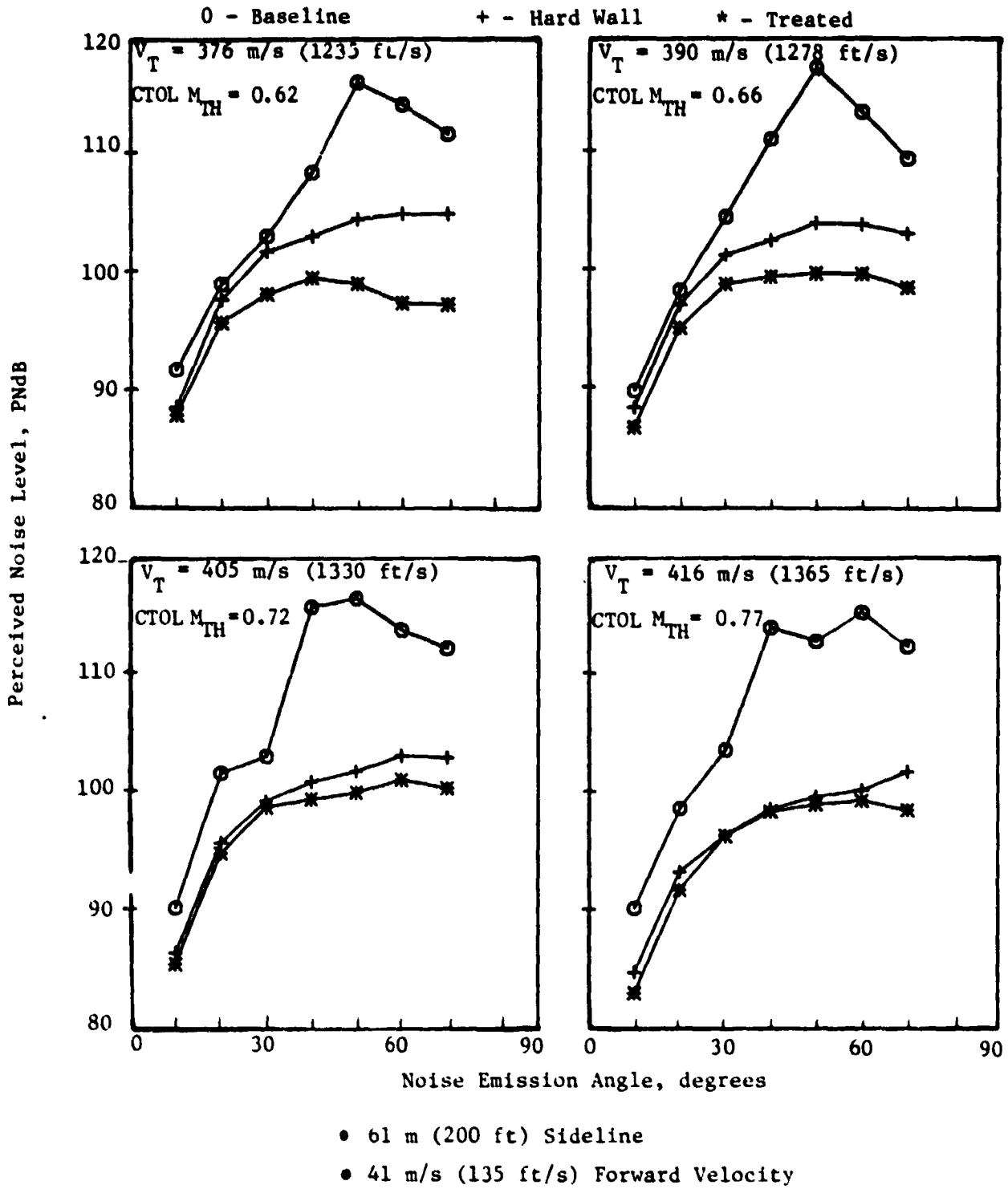


Figure C-6. CTOL Noise Directivity (CF6 Size) at Forward Velocity.



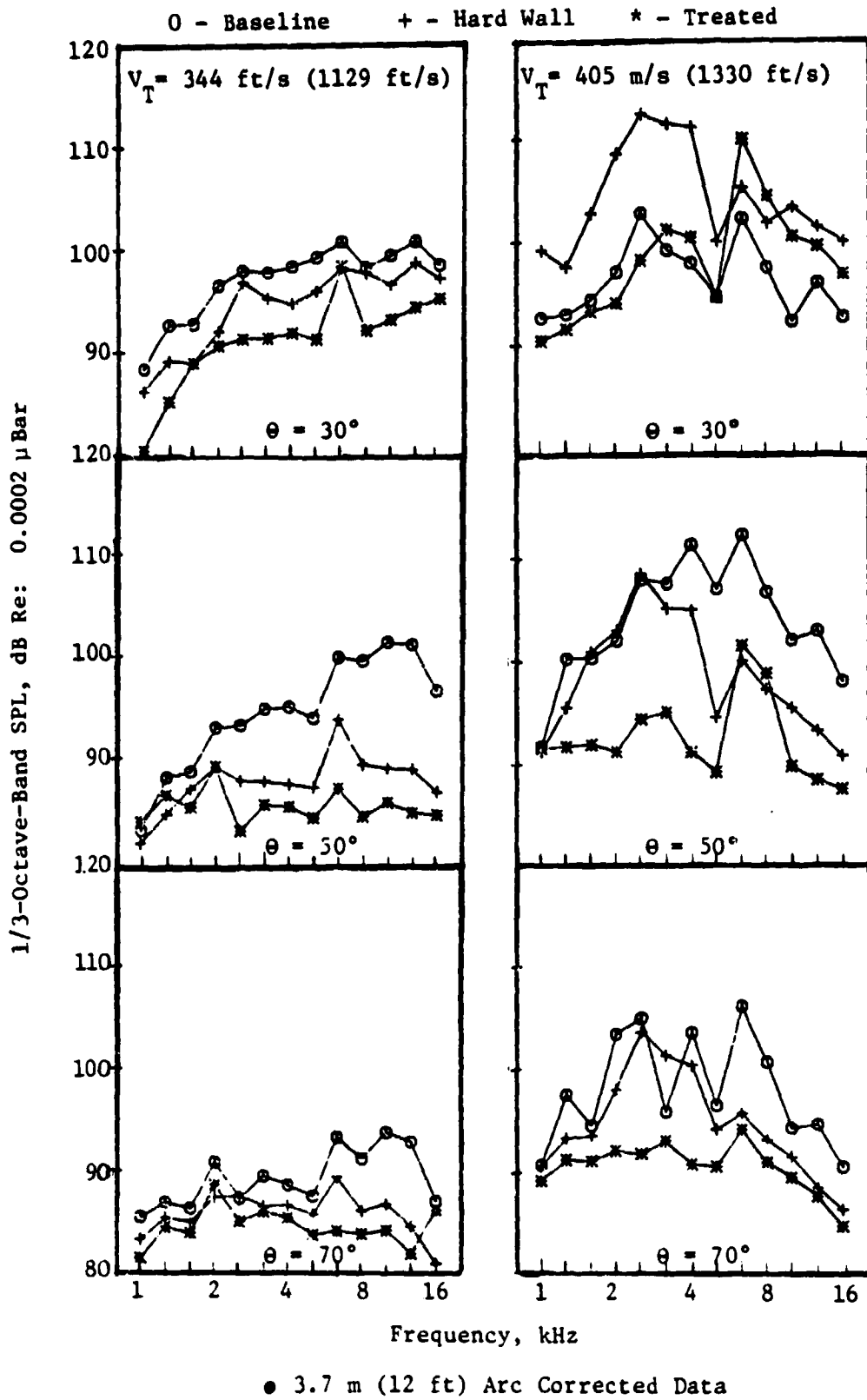


Figure C-7. One-Third-Octave-Band Noise Spectra for Baseline and Deflector Inlets at 41 m/s (135 ft/s) Forward Velocity.

BPF 1/3-Octave-Band SPL, dB Re: 0.0002  $\mu$ Bar

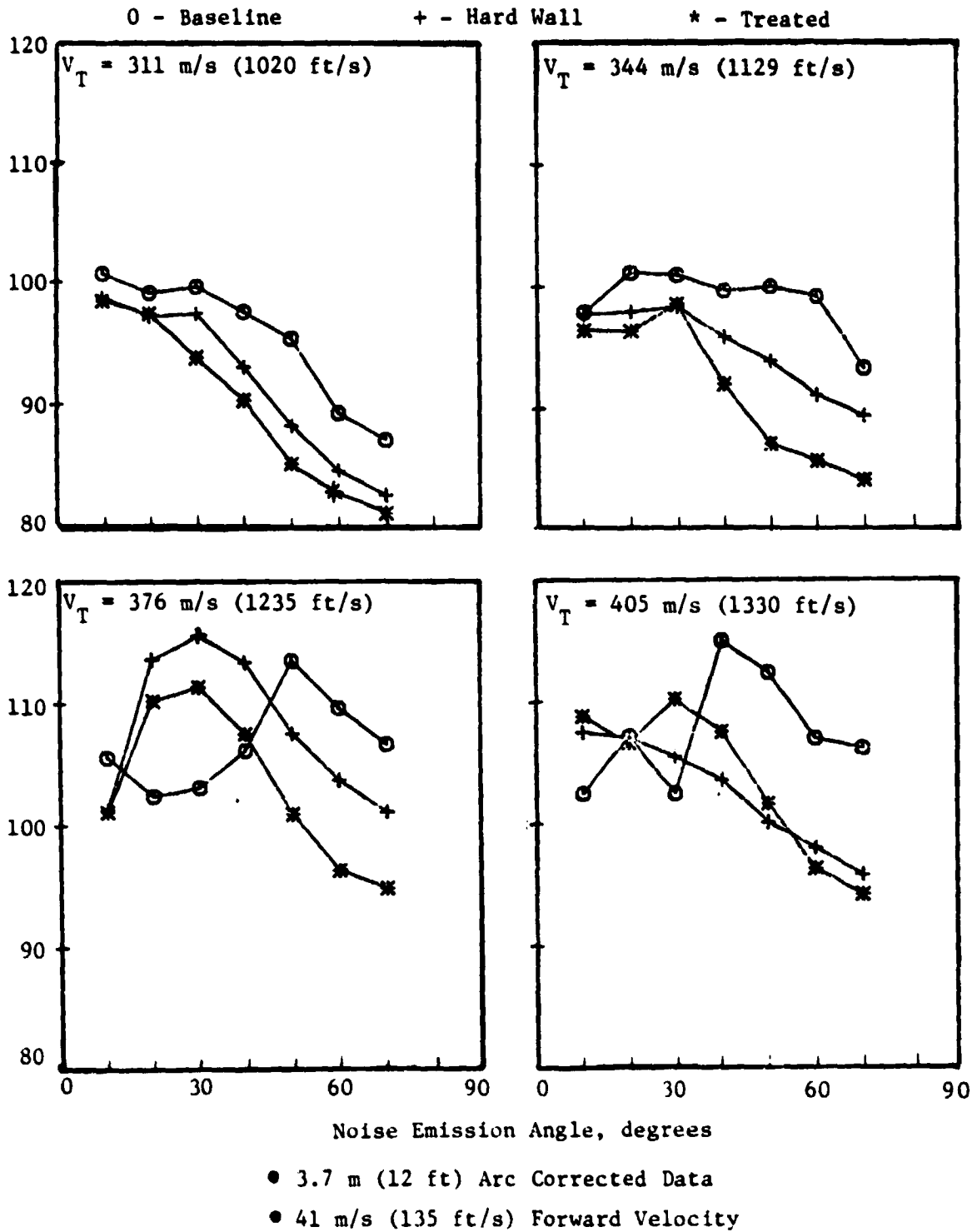


Figure C-8. Blade-Passing-Frequency, 1/3-Octave-Band Noise Directivity for Baseline and Deflector Inlets at Forward Velocity.

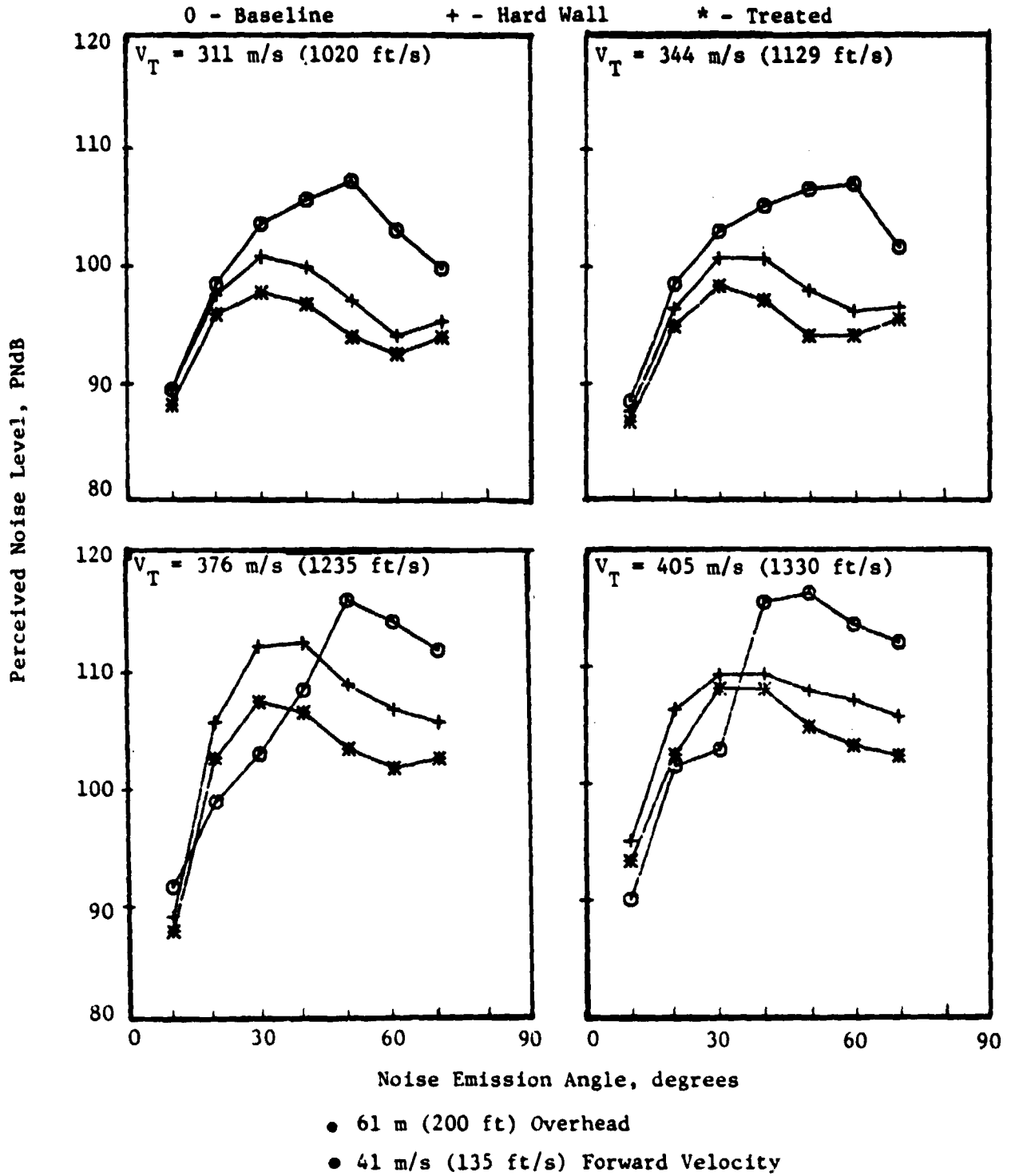


Figure C-9. Deflector Inlet Noise Directivity (CF6 Size) at Forward Velocity.

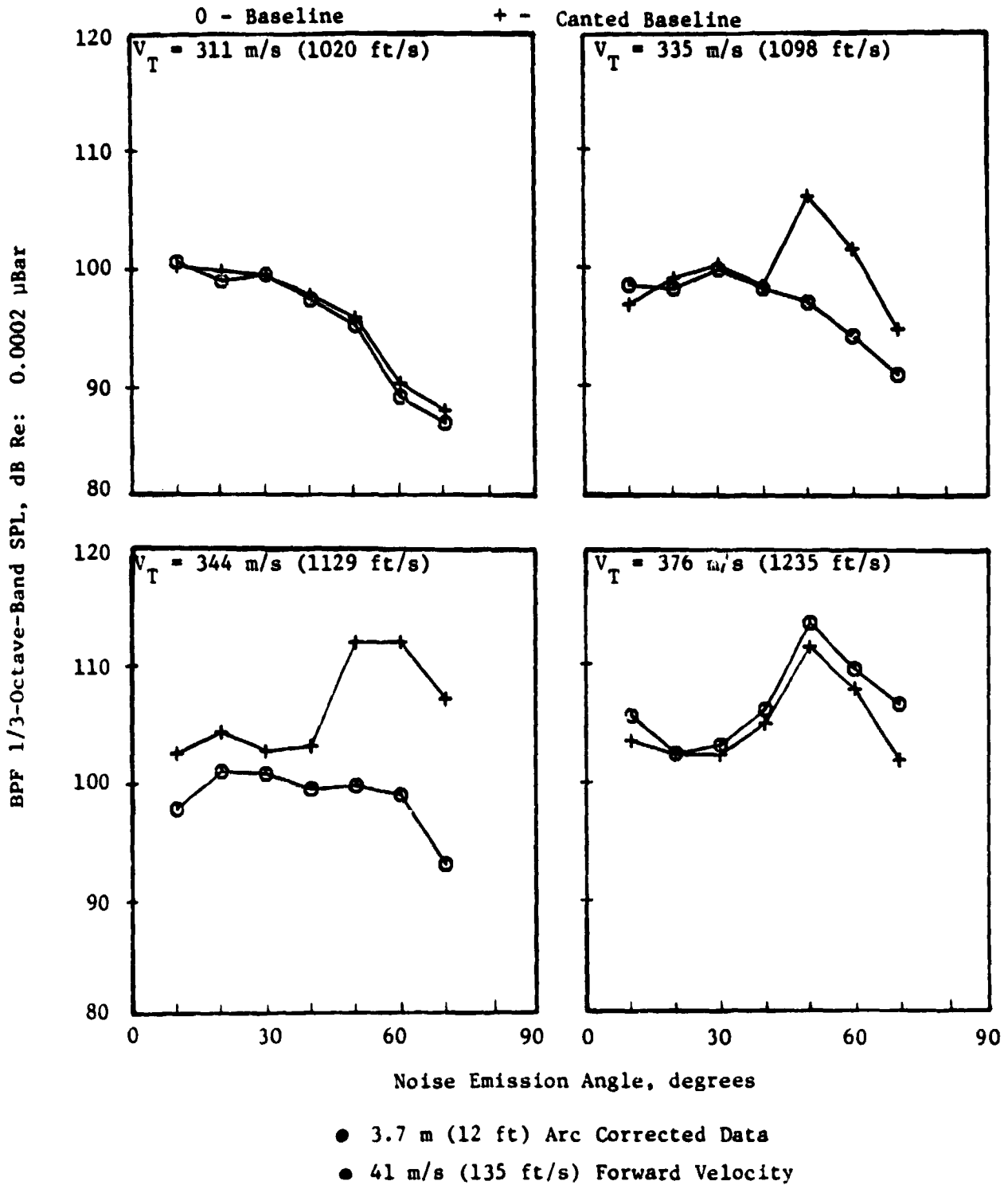


Figure C-10. Blade-Passing-Frequency, 1/3-Octave-Band Noise Directivity for Baseline and Canted Baseline Inlets at Forward Velocity.

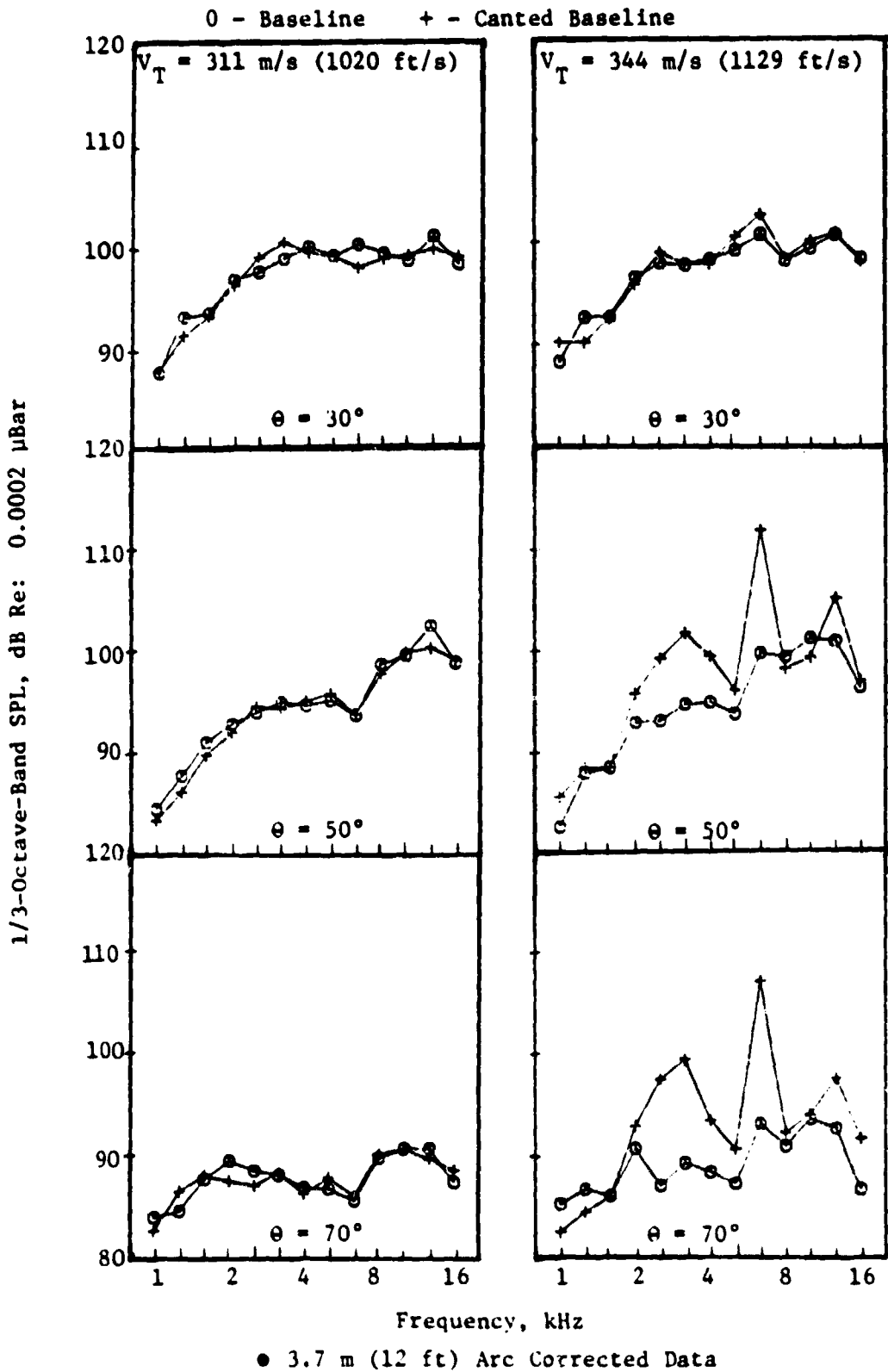


Figure C-11. One-Third-Octave-Band Noise Spectra for Baseline and Canted Baseline Inlets at 41 m/s (135 ft/s Forward Velocity).

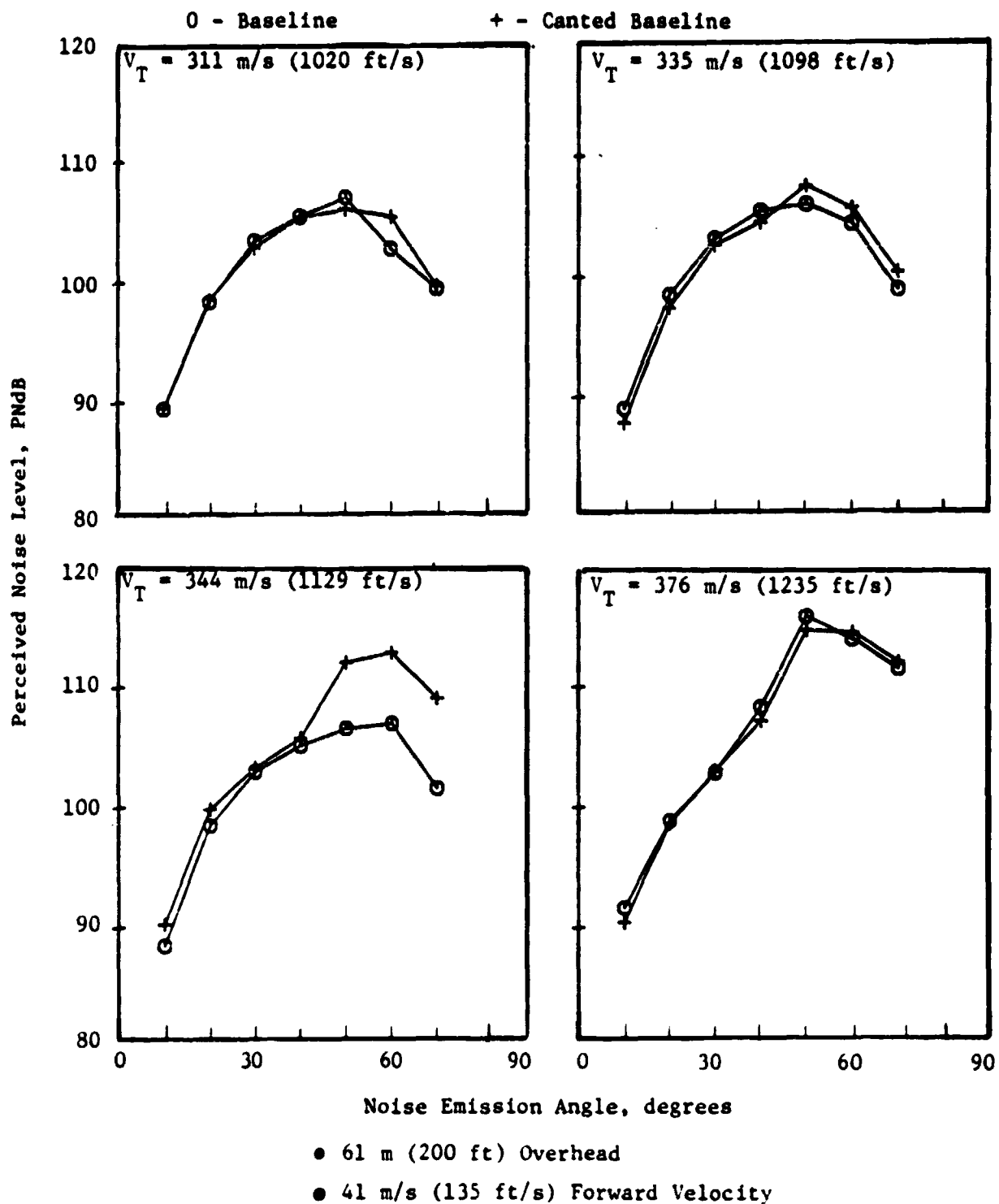


Figure C-12. Canted-Baseline-Inlet Noise Directivity (CF6 Size) at Forward Velocity.

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