

REFERENCE USE ONLY

REPORT NO. DOT-TSC-OST-74-42.II

EVALUATION OF DIESEL ENGINE PERFORMANCE  
WITH INTAKE AND EXHAUST SYSTEM  
THROTTLING

Volume II: Appendix I

R. Hern  
B. Eccleston  
W. Marshall



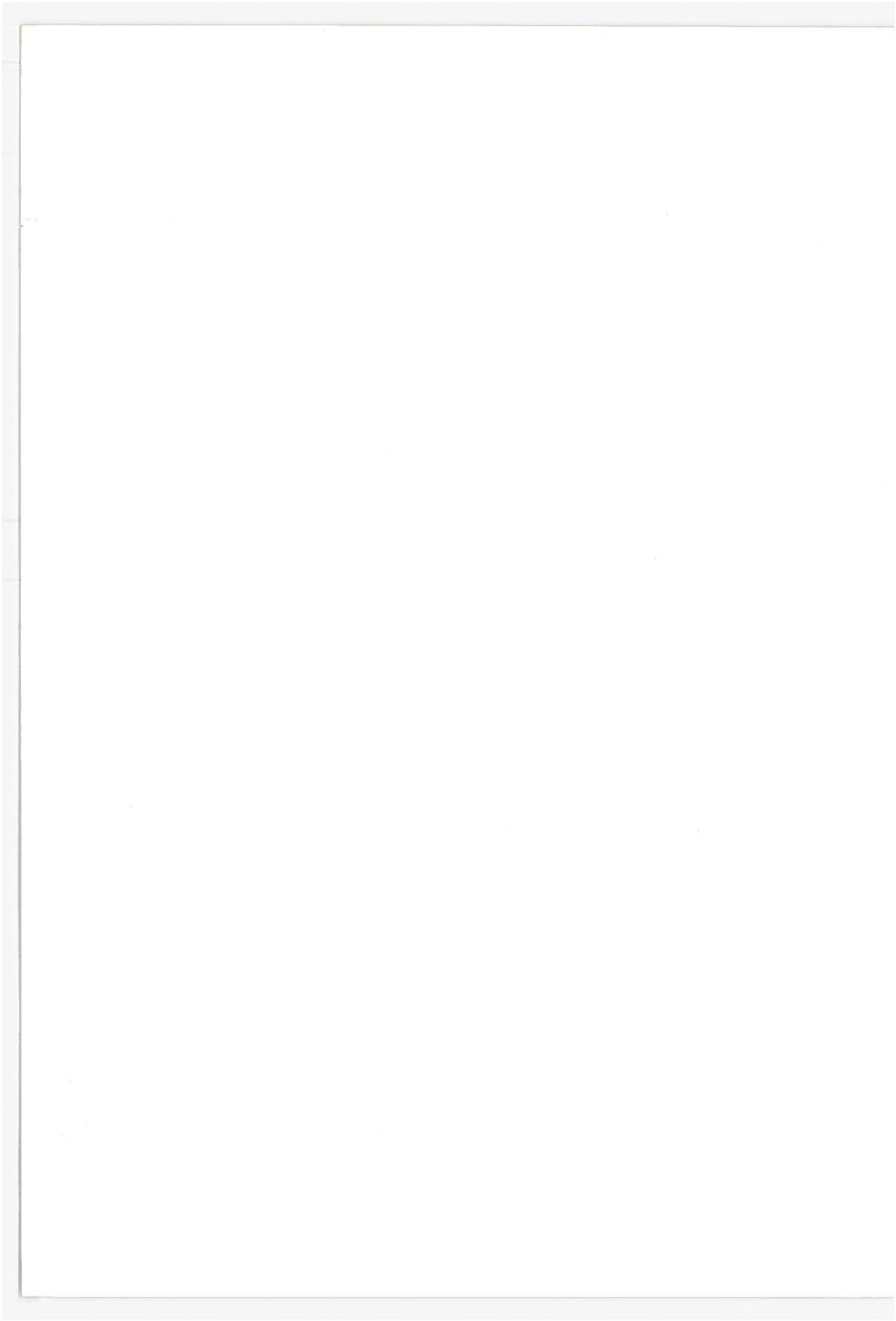
NOVEMBER 1975  
FINAL REPORT

DOCUMENT IS AVAILABLE TO THE PUBLIC  
THROUGH THE NATIONAL TECHNICAL  
INFORMATION SERVICE, SPRINGFIELD,  
VIRGINIA 22161

Prepared for  
U.S. DEPARTMENT OF TRANSPORTATION  
OFFICE OF THE SECRETARY  
Office of the Assistant Secretary for Systems  
Development and Technology  
Office of Noise Abatement  
Washington DC 20590

Technical Report Documentation Page

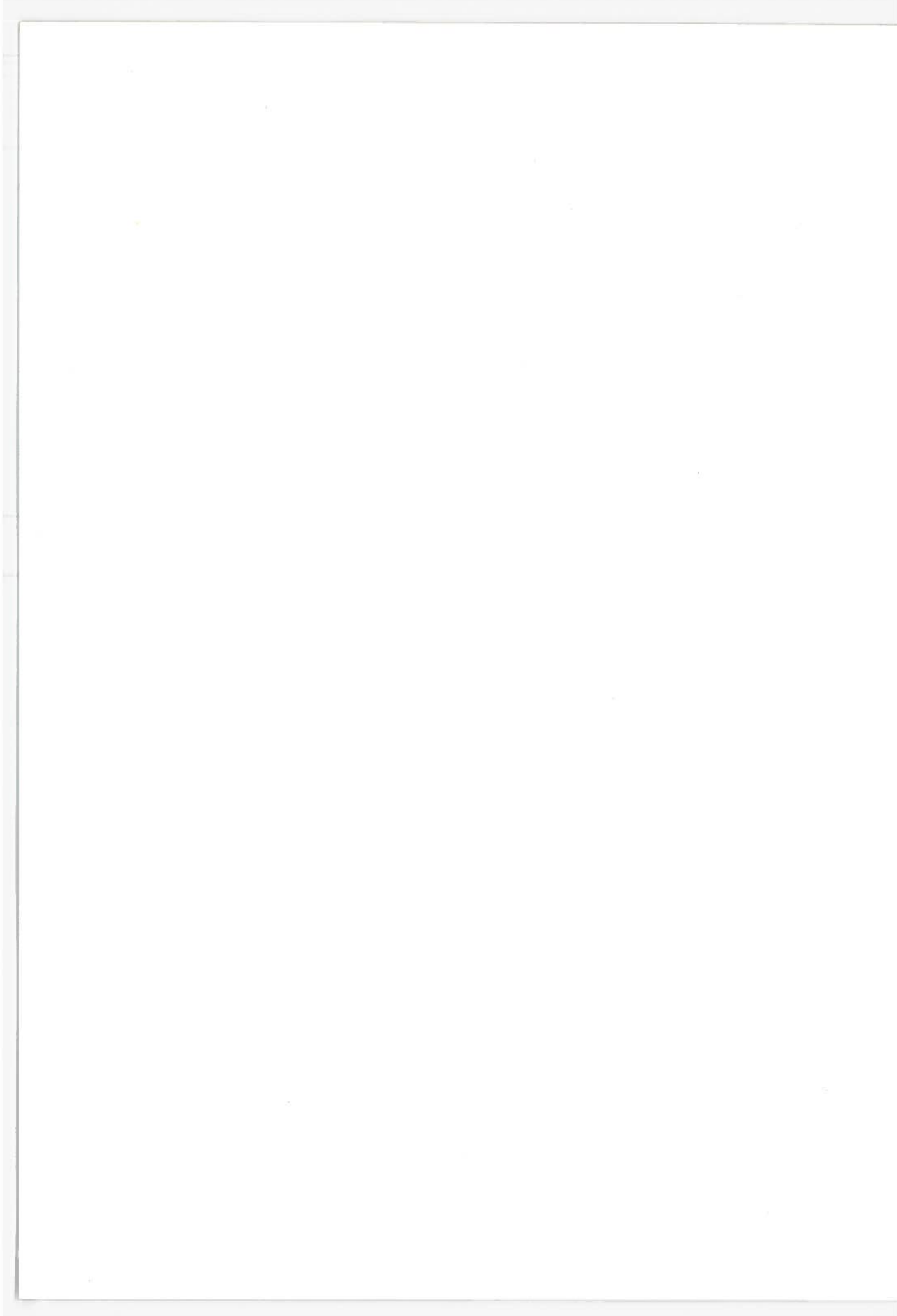
1. Report No. DOT-TSC-OST-74-42.II		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle EVALUATION OF DIESEL ENGINE PERFORMANCE WITH INTAKE AND EXHAUST SYSTEM THROTTLING Volume II: Appendix I				5. Report Date November 1975	
				6. Performing Organization Code	
7. Author(s) R. Hern, B. Eccleston and W. Marshall*				8. Performing Organization Report No. DOT-TSC-OST-74-42.II	
9. Performing Organization Name and Address U.S. Energy Research and Development Administration Bartlesville Energy Research Center P.O. Box 1398 Bartlesville OK 74003				10. Work Unit No. (TRAIS) OS507/R6506	
				11. Contract or Grant No. RA-73-2	
12. Sponsoring Agency Name and Address U.S. Department of Transportation Office of the Secretary Office of the Asst. Sec. for Sys. Dev. & Tech. Office of Noise Abatement Washington DC 20590				13. Type of Report and Period Covered Final Report November 1972 - May 1974	
				14. Sponsoring Agency Code	
15. Supplementary Notes *Under contract to: U.S. Department of Transportation Transportation Systems Center Kendall Square Cambridge MA 20142					
16. Abstract The diesel engine itself is an important source of diesel powered vehicle noise, and becomes dominant after proper treatment of intake/exhaust and cooling system noise at vehicle speeds below fifty miles per hour. An investigation was conducted to quantify the effects of intake and exhaust restrictions, and load-speed scheduling on the radiated noise from four diesel truck engines, produced by different manufacturers. Sound power measurements were made in an acoustically modified engine performance test cell. The noise associated with intake, exhaust, cooling and their respective ducting systems were appropriately abated to permit quantification of engine radiated noise. Exhaust emission data including temperature and performance data were also monitored. Engine radiated noise was not significantly affected by intake pressure restrictions up to 60 inches H <sub>2</sub> O or exhaust restrictions up to 90 inches H <sub>2</sub> O. The precombustion chamber turbocharged engine exhibited lower sound output than the naturally aspirated engine with respect to the mechanical power available under various load-speed conditions. Calculated engine sound pressure levels projected to fifty feet, gave noise levels ranging from 77 to 83 dB (A) at rated engine speed.					
17. Key Words Diesel Engine Noise, Diesel Exhaust Emission, Engine Performance, Noise Transportation Noise			18. Distribution Statement  DOCUMENT IS AVAILABLE TO THE PUBLIC THROUGH THE NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 190	22. Price



## TABLE OF CONTENTS

### VOLUME II

<u>Section</u>		<u>Page</u>
APPENDIX I - NOISE ANALYSIS DATA.....		139
I.1	NHC-250 Engine Sound Power Level and 50-ft. SPL Spectrums (Effect of Intake and Exhaust Restriction).....	139
I.2	ENDT-675 Engine Sound Power Level and 50-ft. SPL Spectrums (Effect of Intake and Exhaust Restriction).....	157
I.3	ENDT-675 Load-Speed Engine Radiated Sound Power Level Spectrums.....	193
I.4	1673C Engine Sound Power Level and 50-ft. SPL Spectrums (Effect of Intake and Exhaust Restriction).....	215
I.5	1673C Load Speed Engine Radiated Sound Power Level Spectrums.....	247
I.6	6-71 Engine Sound Power Level 50-ft. SPL Spectrums (Effect of Intake and Exhaust Restriction).....	269
I.7	6-71 Load-Speed Engine Radiated Sound Power Level Spectrums.....	309



APPENDIX I - NOISE ANALYSIS DATA

I-1 NHC-250 Engine Sound Power Level  
and 50-ft. SPL Spectrums (Effect of  
Intake and Exhaust Restriction)

ENGINE PERFORMANCE

ENGINE SPEED= 2100.0  
 HORSEPOWER 238.0  
 EXHAUST BACK PRESSURE (IN-WATER), 29.0  
 INTAKE RESTRICTION (IN-WATER) 20.0  
 ENGINE NOISE EFFICIENCY(DB)= -56.0  
 ENGINE NCISE EFFICIENCY(DBA)= -57.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.C	85.4	50.8	56.9	22.3
50.C	88.4	58.2	59.9	29.7
63.C	87.4	61.2	58.8	32.6
80.C	95.3	73.1	66.7	44.5
100.0	88.3	69.2	59.6	40.5
125.0	92.8	76.7	64.0	47.9
160.0	96.7	83.3	67.7	54.3
200.0	104.8	93.9	75.4	64.5
250.C	103.2	94.6	73.3	64.7
315.0	99.7	93.1	68.9	62.3
400.C	100.8	96.0	68.3	63.5
500.C	102.4	99.2	66.9	63.7
630.0	106.1	104.2	63.2	61.3
800.0	111.9	111.1	70.6	69.8
1000.0	105.4	105.4	72.7	72.7
1250.0	104.6	105.2	75.5	76.1
1600.C	106.0	107.0	76.6	77.6
2000.0	102.0	103.2	65.2	66.4
2500.C	99.0	100.3	68.1	69.4
3150.0	95.5	97.1	64.6	65.8
4000.0	99.3	100.3	68.5	69.5
5000.C	93.8	94.3	61.4	61.9
6300.0	91.9	91.8	60.6	60.5
8000.0	93.4	92.3	62.5	61.4
	UNWEIGHTED= 116.5	UNWEIGHTED= 83.6		
	A-WEIGHTED= 115.4	A-WEIGHTED= 82.3		

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 223.1  
 EXHAUST BACK PRESSURE (IN-WATER), 30.0  
 INTAKE RESTRICTION (IN-WATER) 40.3  
 ENGINE NOISE EFFICIENCY(DB)= -55.7  
 ENGINE NOISE EFFICIENCY(DBA)= -57.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PNL	A-WEIGHTED PNL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	85.1	50.5	56.6	22.0
50.0	93.9	63.7	65.4	35.2
63.0	89.2	63.0	60.6	34.4
81.0	97.1	74.9	68.5	46.3
100.0	93.9	74.8	65.2	46.1
125.0	89.5	73.4	60.7	44.6
160.0	95.1	81.7	66.1	52.7
200.0	94.0	87.1	68.6	57.7
250.0	103.9	95.3	74.0	65.4
315.0	106.0	99.4	75.2	68.6
400.0	104.3	99.5	71.8	67.0
500.0	105.6	102.4	70.2	67.0
630.0	107.8	105.9	65.1	63.2
800.0	104.9	108.1	67.2	66.4
1000.0	106.0	106.0	73.3	73.3
1250.0	105.9	106.5	76.8	77.4
1500.0	107.3	103.3	77.9	78.9
2000.0	90.5	100.7	62.8	64.0
2500.0	98.0	99.3	67.0	66.3
3150.0	95.1	96.3	63.7	64.9
4000.0	94.3	99.3	67.5	68.5
5000.0	92.4	92.9	60.0	60.5
6300.0	89.6	89.5	58.2	58.1
8000.0	89.8	88.7	58.9	57.8
	UNWEIGHTED= 116.5	UNWEIGHTED= 84.3		
	A-WEIGHTED= 115.2	A-WEIGHTED= 83.1		

NOTE  
 PNL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 212.3  
 EXHAUST BACK PRESSURE (IN-WATER), 28.0  
 INTAKE RESTRICTION (IN-WATER) 59.7  
 ENGINE NOISE EFFICIENCY(DB)= -54.4  
 ENGINE NOISE EFFICIENCY(DBA)= -55.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.1	51.5	57.6	23.0
50.0	94.4	64.2	65.9	35.7
63.0	88.7	62.5	60.1	33.9
80.0	97.4	75.2	68.8	46.6
100.0	93.9	74.9	65.2	46.1
125.0	90.3	74.2	61.5	45.4
160.0	95.3	81.9	66.3	52.9
200.0	98.2	87.3	68.8	57.9
250.0	103.7	95.1	73.8	65.2
315.0	106.5	99.9	75.7	69.1
400.0	106.0	101.2	73.5	68.7
500.0	106.6	103.4	71.2	68.0
630.0	108.8	106.9	66.1	64.2
800.0	109.6	108.8	67.9	67.1
1000.0	108.5	108.5	75.8	75.8
1250.0	106.4	107.0	77.3	77.9
1600.0	109.3	110.3	79.9	80.9
2000.0	102.2	101.4	63.5	64.7
2500.0	98.0	99.3	67.0	68.3
3150.0	95.6	96.8	64.2	65.4
4000.0	98.8	99.8	68.0	69.0
5000.0	92.4	92.9	60.0	60.5
6300.0	89.9	89.8	58.5	58.4
8000.0	91.5	89.4	59.6	58.5
	UNWEIGHTED= 117.6		UNWEIGHTED=	85.4
	A-WEIGHTED= 116.5		A-WEIGHTED=	84.5

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 230.6  
 EXHAUST BACK PRESSURE (IN-WATER), 59.0  
 INTAKE RESTRICTION (IN-WATER) 20.3  
 ENGINE NOISE EFFICIENCY(DB)= -56.3  
 ENGINE NOISE EFFICIENCY(DBA)= -57.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.1	51.5	57.6	23.0
50.0	94.9	64.7	66.4	36.2
63.0	88.7	62.5	60.1	30.9
80.0	98.1	75.9	69.5	47.3
100.0	92.4	73.3	63.7	44.5
125.0	87.8	71.7	59.0	42.9
160.0	95.8	82.4	66.6	53.4
200.0	98.0	87.1	68.6	57.7
250.0	103.4	94.8	73.5	64.9
315.0	105.7	99.1	74.9	68.3
400.0	105.3	100.5	72.8	68.0
500.0	105.1	101.9	69.7	56.5
630.0	108.1	106.2	65.4	63.5
800.0	105.9	105.1	64.2	63.4
1000.0	106.5	106.5	73.8	73.8
1250.0	106.1	106.7	77.0	77.6
1600.0	105.3	106.3	75.9	76.9
2000.0	99.5	100.7	62.8	64.0
2500.0	98.5	99.8	67.5	68.8
3150.0	95.9	97.1	64.5	65.7
4000.0	98.8	99.8	68.0	69.0
5000.0	92.9	93.4	60.5	61.0
6300.0	90.1	92.0	58.7	58.6
8000.0	90.0	88.9	59.1	58.0
	UNWEIGHTED= 116.0		UNWEIGHTED= 84.7	
	A-WEIGHTED= 114.6		A-WEIGHTED= 82.6	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSE POWER 220.4  
 EXHAUST BACK PRESSURE (IN-WATER), 59.0  
 INTAKE RESTRICTION (IN-WATER) 40.3  
 ENGINE NOISE EFFICIENCY(DB)= -55.8  
 ENGINE NOISE EFFICIENCY(DBA)= -57.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	94.4	49.8	55.9	21.3
50.0	97.9	63.7	65.4	35.2
63.0	98.2	62.0	59.6	33.4
80.0	97.9	75.7	69.3	47.1
100.0	90.7	71.6	62.0	42.9
125.0	80.0	72.9	60.2	44.1
160.0	95.8	82.4	66.8	53.4
200.0	97.2	86.3	67.8	56.9
250.0	103.4	94.8	73.5	64.9
315.0	106.0	99.4	75.2	68.6
400.0	104.0	101.2	73.5	68.7
500.0	105.9	102.7	70.5	67.3
630.0	107.3	105.4	64.6	62.7
800.0	104.9	106.1	65.2	64.4
1000.0	107.2	107.2	74.5	74.5
1250.0	106.1	106.7	77.0	77.6
1500.0	104.3	107.3	76.9	77.9
2000.0	102.2	101.4	63.5	64.7
3150.0	99.3	100.6	68.3	69.6
4000.0	96.1	97.3	64.7	65.9
5000.0	98.8	99.8	68.0	69.0
6300.0	92.4	92.9	60.0	60.5
8000.0	89.9	89.8	58.5	58.4
8000.0	89.8	88.7	58.9	57.3
	UNWEIGHTED= 116.4		UNWEIGHTED=	84.3
	A-WEIGHTED= 115.0		A-WEIGHTED=	83.1

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 202.5  
 EXHAUST BACK PRESSURE (IN-WATER), 59.0  
 INTAKE RESTRICTION (IN-WATER) 59.5  
 ENGINE NOISE EFFICIENCY(DB)= -55.4  
 ENGINE NOISE EFFICIENCY(DBA)= -56.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	83.9	49.3	55.4	20.8
50.0	91.4	61.2	62.7	32.7
63.0	85.4	59.2	56.8	30.6
80.0	96.4	74.2	67.8	45.0
100.0	86.2	67.1	57.5	38.4
125.0	90.5	74.4	61.7	45.6
160.0	95.3	81.9	66.3	52.9
200.0	99.0	87.1	68.6	57.7
250.0	103.9	95.3	74.0	65.4
315.0	105.7	99.1	74.9	68.5
400.0	105.3	100.5	72.8	68.0
500.0	105.4	102.2	70.0	66.8
630.0	107.6	105.7	64.9	63.0
800.0	107.6	106.8	65.9	65.1
1000.0	104.0	108.0	75.3	75.3
1250.0	105.9	106.5	76.8	77.4
1500.0	106.0	107.0	76.6	77.6
2000.0	100.2	101.4	63.5	64.7
2500.0	99.0	100.3	68.0	69.3
3150.0	95.6	96.8	64.2	65.4
4000.0	98.1	99.1	67.3	68.3
5000.0	92.1	92.6	59.7	60.2
6300.0	89.1	89.0	57.7	57.6
8000.0	89.5	88.4	58.6	57.5
	UNWEIGHTED= 116.4		UNWEIGHTED= 84.2	
	A-WEIGHTED= 115.1		A-WEIGHTED= 83.8	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 2100.0  
 HORSEPOWER = 727.3  
 EXHAUST BACK PRESSURE (IN-WATER), 90.0  
 INTAKE RESTRICTION (IN-WATER) 20.3  
 ENGINE NOISE EFFICIENCY (DB) = -56.3  
 ENGINE NOISE EFFICIENCY (DBA) = -57.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.9	52.3	58.4	23.8
50.0	95.4	65.2	66.9	36.7
63.0	87.4	61.2	58.8	32.6
80.0	97.4	75.2	68.8	46.6
100.0	90.9	71.8	62.2	43.1
125.0	89.0	72.9	60.2	44.1
160.0	97.3	83.9	68.3	54.9
200.0	98.2	87.1	68.6	57.7
250.0	102.7	94.1	72.8	64.2
315.0	105.2	98.6	74.4	67.8
400.0	104.3	99.5	71.8	67.0
500.0	105.4	102.2	70.0	66.8
630.0	107.8	105.9	65.1	63.2
800.0	106.9	106.1	65.2	64.4
1000.0	105.7	105.7	73.0	73.0
1250.0	105.7	106.7	77.0	77.6
1600.0	106.1	106.8	76.4	77.4
2000.0	105.8	106.8	63.5	64.7
2500.0	100.2	101.4	68.3	69.6
3150.0	99.3	100.6	64.7	65.9
4000.0	96.1	97.3	67.3	68.3
5000.0	95.1	99.1	60.0	60.5
6300.0	92.4	92.9	57.7	57.6
8000.0	89.1	89.0	58.1	57.0
	89.0	87.9		
	UNWEIGHTED = 116.0		UNWEIGHTED = 83.8	
	A-WEIGHTED = 114.6		A-WEIGHTED = 82.6	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.7  
 HORSEPOWER 216.3  
 EXHAUST BACK PRESSURE (IN-WATER), 90.0  
 INTAKE RESTRICTION (IN-WATER) 40.1  
 ENGINE NOISE EFFICIENCY(DB)= -55.8  
 ENGINE NOISE EFFICIENCY(DBA)= -57.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.9	52.3	58.4	23.6
50.0	95.4	65.2	66.9	36.7
63.0	86.7	60.5	58.1	31.9
80.0	97.4	75.2	68.8	46.6
100.0	89.2	70.1	60.5	41.4
125.0	88.8	72.7	60.0	43.9
160.0	97.1	83.7	68.1	54.7
200.0	97.2	86.3	67.8	56.9
250.0	103.9	95.3	74.0	65.4
315.0	106.0	99.4	75.2	68.6
400.0	106.0	100.2	72.5	67.7
500.0	106.1	102.9	70.7	67.5
630.0	107.3	105.4	64.6	62.7
800.0	106.6	105.8	64.9	64.1
1000.0	106.2	106.2	73.5	73.5
1250.0	106.6	107.2	77.5	78.1
1600.0	106.5	107.5	77.1	78.1
2000.0	101.2	102.4	64.5	65.7
2500.0	99.0	100.3	68.0	69.3
3150.0	96.4	97.6	65.0	66.2
4000.0	98.8	99.8	68.0	69.0
5000.0	92.1	92.6	59.7	60.2
6300.0	89.1	89.0	57.7	57.6
8000.0	89.8	88.7	58.9	57.8
	UNWEIGHTED=	116.3	UNWEIGHTED=	84.4
	A-WEIGHTED=	115.0	A-WEIGHTED=	83.1

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 198.7  
 EXHAUST BACK PRESSURE (IN-WATER), 84.0  
 INTAKE RESTRICTION (IN-WATER) 60.3  
 ENGINE NOISE EFFICIENCY(DB)= -55.1  
 ENGINE NOISE EFFICIENCY(DBA)= -57.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.9	53.3	59.4	34.8
50.0	92.1	61.9	63.6	33.4
63.0	89.7	62.5	60.1	33.9
80.0	97.1	74.9	68.5	46.3
100.0	89.7	70.6	61.0	41.9
125.0	89.3	73.2	60.5	44.4
160.0	94.6	81.2	65.6	52.2
200.0	99.0	88.1	69.6	58.7
250.0	102.7	94.1	72.8	64.2
315.0	104.5	97.9	73.7	67.1
400.0	101.8	97.0	69.3	64.5
500.0	104.1	100.9	68.7	65.5
630.0	109.1	107.2	66.4	64.5
800.0	107.4	106.6	65.7	64.9
1000.0	106.2	106.2	73.5	73.5
1250.0	103.6	104.2	74.5	75.1
1600.0	105.0	106.0	75.6	76.6
2000.0	97.2	98.4	60.5	41.7
2500.0	97.3	95.6	66.3	57.6
3150.0	94.4	95.6	63.0	64.2
4000.0	95.8	97.8	66.0	67.0
5000.0	90.9	91.4	58.5	59.0
6300.0	87.4	87.3	56.0	55.9
8000.0	87.3	86.2	55.4	55.3
	UNWEIGHTED= 115.6		UNWEIGHTED= 82.8	
	A-WEIGHTED= 114.1		A-WEIGHTED= 81.4	

NOTE (DB (RE 10-12 WATTS))  
 PWL (DB (RE 0.0002 MICRO BARS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1407.0  
 HORSEPOWER 166.5  
 EXHAUST BACK PRESSURE (IN-WATER), 26.3  
 INTAKE RESTRICTION (IN-WATER) 19.9  
 ENGINE NOISE EFFICIENCY(OB)= -57.6  
 ENGINE NOISE EFFICIENCY(OBA)= -59.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
42.0	82.6	48.8	54.1	19.5
50.0	85.1	57.9	59.6	29.4
63.0	91.9	65.7	63.3	37.1
80.0	99.1	76.9	70.5	48.3
100.0	85.0	66.8	57.2	38.1
125.0	80.3	73.2	60.5	44.4
160.0	92.6	79.2	63.6	50.2
200.0	95.0	84.1	65.6	54.7
250.0	103.4	94.8	73.5	64.9
315.0	107.7	97.1	72.9	66.3
400.0	95.8	94.0	66.3	61.5
500.0	94.1	94.9	62.7	59.5
630.0	107.1	101.2	60.4	58.5
800.0	104.6	105.8	64.9	64.1
1000.0	104.7	104.7	72.0	72.0
1250.0	101.6	102.2	72.5	73.1
1600.0	101.8	102.8	72.4	73.4
2000.0	95.0	96.2	59.3	59.5
2500.0	93.8	95.1	62.8	64.1
3150.0	92.4	93.6	61.0	62.2
4000.0	93.6	99.6	67.8	68.8
5000.0	89.6	90.1	57.2	57.7
6300.0	84.1	86.0	54.7	54.6
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED= 113.4		UNWEIGHTED= 81.3	
	A-WEIGHTED= 111.2		A-WEIGHTED= 79.3	

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 155.9  
 EXHAUST BACK PRESSURE (IN-WATER), 25.0  
 INTAKE RESTRICTION (IN-WATER) 40.1  
 ENGINE NOISE EFFICIENCY(DB)= -57.2  
 ENGINE NOISE EFFICIENCY(DBA)= -58.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	85.4	50.8	56.9	22.3
50.0	85.6	55.4	57.1	26.9
63.0	84.4	62.2	59.8	33.6
80.0	97.1	74.9	68.5	46.3
100.0	86.2	67.1	57.5	38.4
125.0	89.0	72.9	60.2	44.1
160.0	92.8	79.4	63.8	50.4
200.0	94.2	83.3	64.8	53.9
250.0	102.7	94.1	72.8	44.2
315.0	103.2	96.6	72.4	45.8
400.0	98.5	93.7	66.0	41.2
500.0	90.9	95.7	63.5	40.3
630.0	102.6	100.7	59.9	58.0
800.0	106.9	106.1	65.2	44.4
1000.0	105.7	105.7	73.0	73.0
1250.0	102.4	103.0	73.3	73.9
1600.0	123.2	104.0	73.6	74.6
2000.0	94.2	95.4	57.5	58.7
2500.0	97.8	95.1	62.8	64.1
3150.0	91.1	92.3	59.7	60.9
4000.0	97.6	98.6	66.8	47.8
5000.0	89.9	90.4	57.5	58.0
6300.0	86.1	86.8	54.7	54.6
8000.0	88.3	87.2	57.4	56.3
	UNWEIGHTED= 113.5		UNWEIGHTED= 81.4	
	A-WEIGHTED= 112.2		A-WEIGHTED= 79.9	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (PPHM) =	1402.7				
HORSEPOWER	137.9				
EXHAUST BACK PRESSURE (IN-WATERF),	25.0				
INTAKE RESTRICTION (IN-WATERF)	60.7				
ENGINE NOISE EFFICIENCY (DR) =	-54.6				
ENGINE NOISE EFFICIENCY (DRA) =	-58.8				

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	84.9	50.3	56.4	21.8
50.0	80.9	59.7	61.4	31.2
63.0	94.2	64.0	61.6	35.4
80.0	97.4	75.2	68.8	46.6
100.0	85.9	66.8	57.2	38.1
125.0	85.5	72.4	59.7	43.6
160.0	91.8	78.4	62.8	49.4
200.0	93.7	82.8	64.3	53.4
250.0	103.2	94.6	73.3	64.7
315.0	103.5	96.9	72.7	66.1
400.0	95.5	93.7	66.0	61.2
500.0	100.9	97.7	65.5	62.3
630.0	102.1	100.2	59.4	57.5
800.0	107.1	106.3	65.4	64.6
1000.0	104.5	104.5	71.8	71.8
1250.0	104.4	104.0	74.3	74.9
1600.0	102.8	103.8	73.4	74.4
2000.0	94.7	95.9	58.0	59.2
2500.0	93.0	94.3	62.0	63.3
3150.0	91.9	92.1	59.5	60.7
4000.0	97.1	98.1	66.3	67.3
5000.0	91.1	90.6	57.7	58.2
6300.0	84.6	86.5	55.2	55.1
8000.0	84.8	87.7	57.9	56.8
	UNWEIGHTED =	113.5	UNWEIGHTED =	81.5
	A-WEIGHTED =	112.1	A-WEIGHTED =	79.9

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 162.3  
 EXHAUST BACK PRESSURE (IN-WATER), 56.0  
 INTAKE RESTRICTION (IN-WATER) 20.2  
 ENGINE NOISE EFFICIENCY(DB)= -58.1  
 ENGINE NOISE EFFICIENCY(DBA)= -59.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
47.0	85.4	50.8	56.9	22.3
50.0	87.1	56.9	58.6	28.4
63.0	89.4	63.2	60.8	34.6
80.0	92.9	76.7	70.3	48.1
100.0	95.7	66.6	57.0	37.9
125.0	87.3	71.2	58.5	42.4
160.0	88.2	76.4	60.8	47.4
200.0	94.2	83.3	64.8	53.9
250.0	101.9	93.3	72.0	63.4
315.0	103.5	96.9	72.7	66.1
400.0	99.7	93.2	65.5	60.7
500.0	97.9	94.7	62.5	59.3
630.0	102.9	100.9	60.1	58.2
800.0	105.5	104.8	63.9	63.1
1000.0	104.5	104.5	71.8	71.8
1250.0	101.4	102.0	72.3	72.9
1600.0	107.3	101.3	70.9	71.9
2000.0	94.7	95.9	58.0	59.2
2500.0	93.7	94.3	62.0	63.3
3150.0	91.6	92.8	60.2	61.4
4000.0	97.1	98.1	66.3	67.3
5000.0	89.1	89.6	56.7	57.2
6300.0	84.6	86.5	55.2	55.1
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED= 112.7		UNWEIGHTED=	80.5
	A-WEIGHTED= 111.1		A-WEIGHTED=	78.6

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICROS BAR))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 152.7  
 EXHAUST BACK PRESSURE (IN-WATER), 55.0  
 INTAKE RESTRICTION (IN-WATER) 40.0  
 ENGINE NOISE EFFICIENCY(DB)= -57.9  
 ENGINE NOISE EFFICIENCY(DBA)= -59.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	74.6	44.0	50.1	15.5
50.0	84.9	56.7	58.4	28.2
63.0	90.2	63.0	60.6	34.4
80.0	97.1	74.9	68.5	46.3
100.0	86.7	67.6	58.0	38.9
125.0	97.0	70.9	58.2	42.1
160.0	90.3	76.9	61.3	47.9
200.0	94.5	83.6	65.1	54.2
250.0	101.2	92.6	71.3	62.7
315.0	102.2	95.6	71.4	64.8
400.0	97.3	92.5	64.8	60.0
500.0	99.1	93.9	63.7	60.5
630.0	101.1	99.2	58.4	56.5
800.0	106.1	105.3	64.4	63.6
1000.0	105.2	105.2	72.5	72.5
1250.0	102.6	103.2	73.5	74.1
1600.0	101.3	102.3	71.9	72.9
2000.0	94.5	95.7	57.8	59.0
2500.0	92.5	93.8	61.5	62.8
3150.0	91.1	92.3	59.7	60.9
4000.0	97.3	98.3	66.5	67.5
5000.0	89.4	89.9	57.0	57.5
6300.0	85.6	85.5	54.2	54.1
8000.0	97.3	86.2	56.4	55.3
	UNWEIGHTED= 112.7		UNWEIGHTED= 80.6	
	A-WEIGHTED= 111.9		A-WEIGHTED= 79.2	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 2.0002 MICPO BAPS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 139.0  
 EXHAUST BACK PRESSURE (IN-WATER), 56.0  
 INTAKE RESTRICTION (IN-WATER) 59.3  
 ENGINE NOISE EFFICIENCY(DB)= -57.2  
 ENGINE NOISE EFFICIENCY(DBA)= -58.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.6	46.0	52.1	17.5
50.0	87.9	57.7	59.4	29.2
63.0	90.7	64.5	62.1	35.9
80.0	90.1	75.9	69.5	47.3
100.0	84.4	65.3	55.7	36.6
125.0	85.7	68.9	56.2	40.1
160.0	91.1	77.7	62.1	48.7
200.0	95.0	84.1	65.6	54.7
250.0	101.2	92.6	71.3	62.7
315.0	102.2	95.6	71.4	64.8
400.0	97.8	93.0	65.3	60.5
500.0	100.1	96.9	64.7	61.5
630.0	100.6	98.7	57.9	56.0
800.0	106.1	105.3	64.4	63.6
1000.0	105.2	105.2	72.5	72.5
1250.0	103.9	104.5	74.8	75.4
1600.0	102.5	103.5	73.1	74.1
2000.0	94.2	95.4	57.5	58.7
2500.0	92.5	93.8	61.5	62.8
3150.0	92.1	91.3	58.7	59.9
4000.0	96.6	97.6	65.8	66.8
5000.0	89.9	90.4	57.5	58.0
6300.0	85.4	85.3	54.0	53.9
8000.0	87.8	86.7	56.9	55.6
	UNWEIGHTED= 113.0	UNWEIGHTED= 81.2		
	A-WEIGHTED= 111.8	A-WEIGHTED= 79.9		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.7  
 HORSEPOWER 159.5  
 EXHAUST BACK PRESSURE (IN-WATER), 85.7  
 INTAKE RESTRICTION (IN-WATER) 20.2  
 ENGINE NOISE EFFICIENCY(DB)= -57.9  
 ENGINE NOISE EFFICIENCY(DBA)= -59.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PwL	A-WEIGHTED PwL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	97.9	56.3	62.4	27.8
50.0	85.9	55.7	57.4	27.2
63.0	89.7	63.5	61.1	34.9
80.0	98.6	76.4	70.0	47.8
102.0	85.4	67.3	57.7	38.6
125.0	87.0	70.9	58.2	42.1
160.0	91.1	77.7	62.1	48.7
200.0	96.7	85.8	67.3	56.4
250.0	100.7	92.1	70.8	62.2
315.0	101.7	95.1	70.9	64.3
400.0	99.3	94.5	66.8	62.0
500.0	99.1	95.0	63.7	60.5
630.0	101.6	99.7	58.9	57.0
800.0	107.1	106.3	65.4	64.6
1000.0	104.0	124.0	71.3	71.3
1250.0	102.4	103.0	73.3	73.9
1600.0	101.2	102.0	71.6	72.6
2000.0	94.2	95.4	57.5	58.7
2500.0	93.0	94.3	62.0	63.3
3150.0	91.9	93.1	60.5	61.7
4000.0	97.6	98.6	66.8	67.8
5000.0	89.4	89.9	57.0	57.5
6300.0	85.9	85.8	54.5	54.4
8000.0	86.5	85.4	55.6	54.5
	UNWEIGHTED= 112.9		UNWEIGHTED= 80.6	
	A-WEIGHTED= 111.5		A-WEIGHTED= 79.0	

NOTE  
 PwL (DB (RE 12-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.  
 HORSEPOWER 149.2  
 EXHAUST BACK PRESSURE (IN-WATER), 84.0  
 INTAKE RESTRICTION (IN-WATER) 39.8  
 ENGINE NOISE EFFICIENCY(DB)= -57.8  
 ENGINE NOISE EFFICIENCY(DBA)= -59.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.4	45.8	51.9	17.3
50.0	87.1	56.9	58.6	28.4
63.0	82.4	63.2	60.8	34.6
80.0	92.4	73.2	66.8	44.6
100.0	85.2	66.1	56.5	37.4
125.0	85.5	69.4	56.7	40.6
160.0	92.1	78.7	63.1	49.7
200.0	95.0	84.1	65.6	54.7
250.0	122.2	93.6	72.3	63.7
315.0	122.2	95.4	71.2	64.6
400.0	98.3	93.5	65.8	61.0
500.0	94.9	93.7	61.5	58.3
630.0	122.6	101.7	60.9	59.0
800.0	124.6	105.8	64.9	64.1
1000.0	123.5	103.5	70.8	70.8
1250.0	101.4	102.0	72.3	72.9
1600.0	101.5	102.5	72.1	73.1
2000.0	92.5	94.7	56.8	58.0
2500.0	92.3	93.6	61.3	62.6
3150.0	90.6	91.8	59.2	60.4
4000.0	97.3	98.3	66.5	67.5
5000.0	89.1	89.6	56.7	57.2
6300.0	84.9	86.8	55.5	55.4
8000.0	84.3	87.2	57.4	56.3
	UNWEIGHTED= 112.7	UNWEIGHTED= 80.3		
	A-WEIGHTED= 111.3	A-WEIGHTED= 78.7		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

I.2 ENDT-675 Engine Sound Power Level  
and 50-ft. SPL Spectrums (Effect of  
Intake and Exhaust Restriction)



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 203.7  
 EXHAUST BACK PRESSURE (IN-WATER), 35.0  
 INTAKE RESTRICTION (IN-WATER) 20.1  
 ENGINE NOISE EFFICIENCY(DB)= -58.7  
 ENGINE NOISE EFFICIENCY(DBA)= -61.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	88.1	53.5	59.6	25.0
50.0	100.4	70.2	71.9	41.7
63.0	88.7	62.5	60.1	33.9
80.0	95.6	73.4	67.0	44.8
100.0	82.7	63.6	54.0	34.9
125.0	93.8	77.7	65.0	48.9
160.0	104.8	91.4	75.8	62.4
200.0	103.2	92.3	73.8	62.9
250.0	100.4	91.8	70.5	61.9
315.0	98.7	92.1	67.9	61.3
400.0	100.0	95.2	67.5	62.7
500.0	100.9	97.7	65.5	62.3
630.0	101.3	99.4	58.6	56.7
800.0	102.1	101.3	60.4	59.6
1000.0	99.2	99.2	66.5	66.5
1250.0	102.1	102.7	73.0	73.6
1600.0	99.3	100.5	70.1	71.1
2000.0	98.2	99.4	61.3	62.7
2500.0	98.0	99.3	67.0	68.3
3150.0	96.4	97.6	65.0	66.2
4000.0	97.8	98.8	67.0	68.0
5000.0	96.6	97.1	64.2	64.7
6300.0	92.6	92.5	61.2	61.1
8000.0	93.0	91.9	62.1	61.0
	UNWEIGHTED= 113.1	UNWEIGHTED= 82.3		
	A-WEIGHTED= 110.6	A-WEIGHTED= 78.8		

NOTE (DB (RE 10-12 WATTS))  
 PWL (DB (RE 0.0002 MICRO BARS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 199.8  
 EXHAUST BACK PRESSURE (IN-WATER), 32.6  
 INTAKE RESTRICTION (IN-WATER) 40.0  
 ENGINE NOISE EFFICIENCY(OB)= -58.4  
 ENGINE NOISE EFFICIENCY(OBA)= -61.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	88.9	54.3	60.4	25.8
50.0	99.4	69.2	70.9	40.7
63.0	88.2	62.0	59.6	33.4
80.0	94.6	72.4	66.0	43.8
100.0	82.7	63.6	54.0	34.9
125.0	93.0	76.9	64.2	48.1
160.0	105.3	91.9	76.3	62.9
200.0	106.2	95.3	76.8	65.9
250.0	100.9	92.3	71.0	62.4
315.0	98.7	92.1	67.9	61.3
400.0	99.8	95.0	67.3	62.5
500.0	99.6	96.4	64.2	61.0
630.0	101.3	99.4	58.6	56.7
800.0	101.1	100.3	59.4	58.6
1000.0	99.2	99.2	66.5	66.5
1250.0	100.9	101.5	71.8	72.4
1600.0	99.3	100.5	70.1	71.1
2000.0	98.0	99.2	61.3	62.5
2500.0	98.0	99.3	67.0	68.3
3150.0	95.9	97.1	64.5	65.7
4000.0	98.1	99.1	67.3	68.3
5000.0	95.9	96.4	63.5	64.0
6300.0	92.6	92.5	61.2	61.1
8000.0	92.3	91.2	61.4	60.3
	UNWEIGHTED= 113.3		UNWEIGHTED=	82.8
	A-WEIGHTED= 110.3		A-WEIGHTED=	78.6

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 196.6  
 EXHAUST BACK PRESSURE (IN-WATER), 31.2  
 INTAKE RESTRICTION (IN-WATER) 60.2  
 ENGINE NOISE EFFICIENCY(DB)= -58.0  
 ENGINE NOISE EFFICIENCY(DBA)= -61.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.9	57.3	63.4	28.8
50.0	95.4	65.2	66.9	36.7
63.0	85.7	59.5	57.1	30.9
80.0	92.9	70.7	64.3	42.1
100.0	82.4	63.3	53.7	34.6
125.0	92.5	76.4	63.7	47.6
160.0	104.8	91.4	75.8	62.4
200.0	106.7	95.8	77.3	66.4
250.0	100.2	91.6	70.3	41.7
315.0	96.2	89.6	65.4	58.8
400.0	98.8	94.0	66.3	61.5
500.0	99.1	95.9	63.7	60.5
630.0	100.3	98.4	57.6	55.7
800.0	101.4	100.6	59.7	58.9
1000.0	97.7	97.7	65.0	65.0
1250.0	100.6	101.2	71.5	72.1
1600.0	98.3	99.3	68.9	69.9
2000.0	97.7	98.9	61.0	62.2
2500.0	98.5	99.8	67.5	68.8
3150.0	96.1	97.3	64.7	65.9
4000.0	97.3	98.3	66.5	67.5
5000.0	95.4	95.9	63.0	63.5
6300.0	92.4	92.3	61.0	60.9
8000.0	92.5	91.4	61.6	60.5
	UNWEIGHTED= 112.9		UNWEIGHTED= 82.3	
	A-WEIGHTED= 109.8		A-WEIGHTED= 78.1	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 198.4  
 EXHAUST BACK PRESSURE (IN-WATER), 30.7  
 INTAKE RESTRICTION (IN-WATER) 81.1  
 ENGINE NOISE EFFICIENCY(DB)= -59.0  
 ENGINE NOISE EFFICIENCY(DBA)= -62.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	90.6	56.0	62.1	27.5
50.0	94.4	64.2	65.9	35.7
63.0	84.7	58.5	56.1	29.9
80.0	91.1	68.9	62.5	40.3
100.0	78.9	59.8	50.2	31.1
125.0	90.3	74.2	61.5	45.4
160.0	105.3	91.9	76.3	62.9
200.0	106.5	95.6	77.1	66.2
250.0	100.4	91.8	70.5	61.9
315.0	97.7	91.1	66.9	60.3
400.0	97.5	92.7	65.0	60.2
500.0	99.9	96.7	64.5	61.3
630.0	98.0	96.9	56.1	44.2
800.0	101.4	100.6	59.7	58.9
1000.0	98.7	98.7	66.0	66.0
1250.0	100.1	100.7	71.0	71.6
1600.0	99.0	100.0	69.6	70.6
2000.0	96.5	97.7	59.8	61.0
2500.0	96.5	97.8	65.5	66.8
3150.0	94.9	96.1	63.5	64.7
4000.0	96.1	97.1	65.3	66.3
5000.0	94.6	95.1	62.2	62.7
6300.0	91.9	91.8	60.5	60.4
8000.0	92.3	91.2	61.4	60.3
	UNWEIGHTED=	112.7	UNWEIGHTED=	82.2
	A-WEIGHTED=	109.4	A-WEIGHTED=	77.7

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 2.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 200.2  
 EXHAUST BACK PRESSURE (IN-WATER), 51.0  
 INTAKE RESTRICTION (IN-WATER) 20.1  
 ENGINE NOISE EFFICIENCY(DB)= -58.2  
 ENGINE NOISE EFFICIENCY(DBA)= -61.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	92.1	57.5	63.6	29.0
50.0	96.1	65.9	67.6	37.4
63.0	90.7	64.5	62.1	35.9
80.0	96.6	74.4	68.0	45.8
100.0	84.2	65.1	55.5	36.4
125.0	92.0	75.9	63.2	47.1
160.0	106.1	92.7	77.1	63.7
200.0	107.7	96.8	78.3	67.4
250.0	100.4	91.8	70.5	61.9
315.0	96.5	89.9	65.7	59.1
400.0	99.0	94.2	66.5	61.7
500.0	98.4	95.2	63.0	59.8
630.0	100.1	98.2	57.4	55.5
800.0	100.6	99.8	58.9	58.1
1000.0	99.0	99.0	66.3	66.3
1250.0	101.9	102.5	72.8	73.4
1600.0	99.0	100.8	70.4	71.4
2000.0	98.0	99.2	61.3	62.5
2500.0	98.0	99.3	67.0	68.3
3150.0	96.1	97.3	64.7	65.9
4000.0	98.1	99.1	67.3	68.3
5000.0	95.9	96.4	63.5	64.0
6300.0	92.1	92.0	60.7	60.6
8000.0	92.8	91.7	61.9	60.8
	UNWEIGHTED=	113.6	UNWEIGHTED=	83.3
	A-WEIGHTED=	110.3	A-WEIGHTED=	78.9

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 198.8  
 EXHAUST BACK PRESSURE (IN-WATER), 50.3  
 INTAKE RESTRICTION (IN-WATER) 40.2  
 ENGINE NOISE EFFICIENCY(DB)= -58.2  
 ENGINE NOISE EFFICIENCY(DBA)= -61.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.1	56.5	62.6	28.0
50.0	97.1	66.9	68.6	38.4
63.0	89.9	63.7	61.3	35.1
80.0	95.4	73.2	66.8	44.6
100.0	84.7	65.6	56.0	36.9
125.0	91.8	75.7	63.0	46.9
160.0	106.1	92.7	77.1	63.7
200.0	107.7	96.8	78.3	67.4
250.0	101.4	92.8	71.5	62.9
315.0	98.0	91.4	67.2	60.6
400.0	98.5	93.7	66.0	61.2
500.0	97.6	94.4	62.2	59.0
630.0	99.8	97.9	57.1	55.2
800.0	101.4	100.6	59.7	58.9
1000.0	99.0	99.0	66.3	66.3
1250.0	101.4	102.0	72.3	72.9
1600.0	100.0	101.0	70.6	71.6
2000.0	97.0	98.2	60.3	61.5
2500.0	98.0	99.3	67.0	68.3
3150.0	95.1	96.3	63.7	64.9
4000.0	96.6	97.6	65.8	66.8
5000.0	95.1	95.6	62.7	63.2
6300.0	92.1	92.0	60.7	60.6
8000.0	91.8	90.7	60.9	59.8
	UNWEIGHTED= 113.5		UNWEIGHTED=	83.3
	A-WEIGHTED= 110.0		A-WEIGHTED=	78.6

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 196.3  
 EXHAUST BACK PRESSURE (IN-WATER), 50.6  
 INTAKE RESTRICTION (IN-WATER) 60.2  
 ENGINE NOISE EFFICIENCY(DB)= -58.3  
 ENGINE NOISE EFFICIENCY(DBA)= -61.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	89.9	55.3	61.4	26.8
50.0	94.6	64.4	66.1	35.9
63.0	89.2	63.0	60.6	34.4
80.0	93.9	71.7	65.3	43.1
100.0	81.4	62.3	52.7	33.6
125.0	90.8	74.7	62.0	45.9
160.0	105.0	92.4	76.8	63.4
200.0	108.0	97.1	78.6	67.7
250.0	100.7	92.1	70.8	62.2
315.0	97.5	90.9	66.7	60.1
400.0	99.3	94.5	66.8	62.0
500.0	98.9	95.7	63.5	60.3
630.0	97.8	95.9	55.1	53.2
800.0	101.4	100.6	59.7	58.9
1000.0	99.7	99.7	67.0	67.0
1250.0	100.9	101.5	71.8	72.4
1600.0	99.0	100.0	69.6	70.6
2000.0	97.2	98.4	60.5	61.7
2500.0	97.3	98.6	66.3	67.6
3150.0	95.4	96.6	64.0	65.2
4000.0	96.6	97.6	65.8	66.8
5000.0	95.6	96.1	63.2	63.7
6300.0	92.4	92.3	61.0	60.9
8000.0	92.3	91.2	61.4	60.3
	UNWEIGHTED=	113.4	UNWEIGHTED=	83.1
	A-WEIGHTED=	109.9	A-WEIGHTED=	78.3

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 189.9  
 EXHAUST BACK PRESSURE (IN-WATER), 51.2  
 INTAKE RESTRICTION (IN-WATER) 82.2  
 ENGINE NOISE EFFICIENCY(DB)= -59.2  
 ENGINE NOISE EFFICIENCY(DBA)= -62.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.6	57.0	63.1	28.5
50.0	92.6	62.4	64.1	33.9
63.0	88.4	62.2	59.8	33.6
80.0	91.9	69.7	63.3	41.1
100.0	80.4	61.3	51.7	32.6
125.0	90.5	74.4	61.7	45.6
160.0	104.8	91.4	75.8	42.4
200.0	106.2	95.3	76.8	45.9
250.0	100.2	91.6	70.3	61.7
315.0	97.7	91.1	66.9	40.3
400.0	96.3	91.5	63.8	59.0
500.0	98.9	95.7	63.5	50.3
630.0	98.3	96.4	55.6	53.7
800.0	99.6	98.8	57.9	57.1
1000.0	99.0	99.0	66.3	66.3
1250.0	100.6	101.2	71.5	72.1
1600.0	98.3	99.3	68.9	49.9
2000.0	96.5	97.7	59.8	61.0
2500.0	96.5	97.8	65.5	66.8
3150.0	94.6	95.8	63.2	64.4
4000.0	95.8	96.8	65.0	66.2
5000.0	95.4	95.9	63.0	63.5
6300.0	92.6	92.5	61.2	61.1
8000.0	92.5	91.4	61.6	60.5
	UNWEIGHTED= 112.3		UNWEIGHTED= 82.7	
	A-WEIGHTED= 109.1		A-WEIGHTED= 77.7	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 200.1  
 EXHAUST BACK PRESSURE (IN-WATER), 70.3  
 INTAKE RESTRICTION (IN-WATER) 20.2  
 ENGINE NOISE EFFICIENCY(DB)= -57.5  
 ENGINE NOISE EFFICIENCY(DBA)= -61.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	93.1	58.5	64.6	30.0
50.0	96.6	66.4	68.1	37.9
63.0	90.7	64.5	62.1	35.9
80.0	97.4	75.2	68.8	46.6
100.0	85.4	66.3	56.7	37.6
125.0	89.3	73.2	60.5	44.4
160.0	106.1	92.7	77.1	63.7
200.0	109.0	98.1	79.6	68.7
250.0	101.4	92.8	71.5	62.9
315.0	97.7	91.1	66.9	60.3
400.0	99.3	94.5	66.8	62.0
500.0	98.4	95.2	63.0	59.8
630.0	98.8	96.9	56.1	54.2
800.0	102.4	101.6	60.7	59.9
1000.0	101.2	101.2	68.5	68.5
1250.0	101.9	102.5	72.8	73.4
1600.0	100.5	101.5	71.1	72.1
2000.0	98.5	99.7	61.8	63.0
2500.0	97.0	98.3	66.0	67.3
3150.0	95.6	96.8	64.2	65.4
4000.0	97.1	98.1	66.3	67.3
5000.0	95.6	96.1	63.2	63.7
6300.0	92.6	92.5	61.2	61.1
8000.0	93.0	91.9	62.1	61.0
	UNWEIGHTED=	114.2	UNWEIGHTED=	83.9
	A-WEIGHTED=	110.7	A-WEIGHTED=	79.2

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 200.7  
 EXHAUST BACK PRESSURE (IN-WATER), 70.4  
 INTAKE RESTRICTION (IN-WATER) 40.0  
 ENGINE NOISE EFFICIENCY(DB)= -57.8  
 ENGINE NOISE EFFICIENCY(DBA)= -61.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	94.6	60.0	66.1	31.5
50.0	96.1	65.9	67.6	37.4
63.0	88.4	62.2	58.8	33.6
80.0	94.9	72.7	66.3	44.1
100.0	80.4	61.3	51.7	32.6
125.0	90.8	74.7	62.0	45.9
160.0	106.3	92.9	77.3	63.9
200.0	108.5	97.6	79.1	68.2
250.0	101.4	92.8	71.5	62.9
315.0	98.2	91.6	67.4	50.8
400.0	99.3	94.5	66.8	62.0
500.0	97.9	94.7	62.5	59.3
630.0	97.8	95.9	55.1	53.2
800.0	100.6	99.8	58.9	58.1
1000.0	100.7	100.7	68.0	48.0
1250.0	102.4	103.0	73.3	73.9
1600.0	99.5	100.5	70.1	71.1
2000.0	98.7	99.9	62.0	63.2
2500.0	97.8	99.1	66.8	68.1
3150.0	95.9	97.1	64.5	65.7
4000.0	97.3	98.3	66.5	67.5
5000.0	95.6	96.1	63.2	63.7
6300.0	92.4	92.3	61.0	60.9
8000.0	93.3	92.2	62.4	61.3
	UNWEIGHTED=	113.9	UNWEIGHTED=	83.7
	A-WEIGHTED=	110.4	A-WEIGHTED=	79.1

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 101.5  
 EXHAUST BACK PRESSURE (IN-WATER), 70.4  
 INTAKE RESTRICTION (IN-WATER) 60.1  
 ENGINE NOISE EFFICIENCY(DB)= -58.1  
 ENGINE NOISE EFFICIENCY(OBA)= -61.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	90.9	56.3	62.4	27.8
50.0	94.6	64.4	66.1	35.9
63.0	85.9	59.7	57.3	31.1
80.0	91.6	69.4	63.0	40.8
100.0	80.4	61.3	51.7	32.6
125.0	90.5	74.4	61.7	45.6
160.0	106.1	92.7	77.1	63.7
200.0	108.0	97.1	78.6	67.7
250.0	101.2	92.6	71.3	52.7
315.0	99.9	92.9	68.7	62.1
400.0	98.5	93.7	66.0	61.2
500.0	99.1	95.9	63.7	60.5
630.0	98.3	96.4	55.6	53.7
800.0	99.9	99.1	58.2	57.4
1000.0	99.5	99.5	66.8	66.8
1250.0	102.1	102.7	73.0	73.6
1600.0	99.3	100.3	69.9	70.9
2000.0	97.0	98.2	60.3	61.5
2500.0	97.5	98.8	66.5	67.8
3150.0	94.9	96.1	63.5	64.7
4000.0	96.6	97.6	65.8	66.3
5000.0	95.1	95.6	62.7	63.2
6300.0	92.1	92.0	60.7	60.6
8000.0	92.8	91.7	61.9	60.8
	UNWEIGHTED=	113.5	UNWEIGHTED=	83.3
	A-WEIGHTED=	109.9	A-WEIGHTED=	78.7

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 211.2  
 EXHAUST BACK PRESSURE (IN-WATER), 30.7  
 INTAKE RESTRICTION (IN-WATER) 21.1  
 ENGINE NOISE EFFICIENCY(DB)= -59.8  
 ENGINE NOISE EFFICIENCY(DBA)= -62.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	90.9	56.3	62.4	27.8
50.0	94.9	64.7	66.4	36.2
63.0	89.7	63.5	61.1	34.9
80.0	102.6	80.4	74.0	51.8
100.0	94.9	75.8	66.2	47.1
125.0	97.0	80.9	68.2	52.1
160.0	100.1	86.7	71.1	57.7
200.0	100.5	89.6	71.1	50.2
250.0	98.9	90.3	69.0	50.4
315.0	101.2	94.6	70.4	63.8
400.0	102.0	97.2	69.5	64.7
500.0	100.1	96.9	64.7	41.5
630.0	99.1	97.2	56.4	54.5
800.0	99.6	98.8	57.9	57.1
1000.0	97.7	97.7	65.0	65.0
1250.0	100.6	101.2	71.5	72.1
1500.0	99.3	100.3	69.9	70.9
2000.0	97.2	98.4	60.5	61.7
2500.0	97.0	98.3	66.0	67.3
3150.0	94.1	95.3	62.7	63.9
4000.0	94.8	95.8	64.0	65.0
5000.0	93.6	94.1	61.2	61.7
6300.0	90.9	90.8	59.5	59.4
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED= 112.1		UNWEIGHTED= 81.5	
	A-WEIGHTED= 109.2		A-WEIGHTED= 77.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 207.2  
 EXHAUST BACK PRESSURE (IN-WATER), 30.4  
 INTAKE RESTRICTION (IN-WATER) 41.0  
 ENGINE NOISE EFFICIENCY(DB)= -60.2  
 ENGINE NOISE EFFICIENCY(DBA)= -62.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	90.4	55.9	61.9	27.3
50.0	94.4	64.2	65.9	35.7
63.0	87.4	61.2	58.8	32.6
80.0	101.6	79.4	73.0	50.8
100.0	94.9	75.8	66.2	47.1
125.0	96.5	80.4	67.7	51.6
160.0	99.3	85.9	70.3	56.9
200.0	98.7	87.8	69.3	58.4
250.0	98.4	89.8	68.5	59.9
315.0	101.2	94.6	70.4	63.8
400.0	102.3	97.5	69.8	65.0
500.0	99.4	96.2	64.0	60.8
630.0	99.3	97.4	56.6	54.7
800.0	98.9	98.1	57.2	56.4
1000.0	97.2	97.2	64.5	64.5
1250.0	100.6	101.2	71.5	72.1
1600.0	99.3	100.3	69.9	70.9
2000.0	96.7	97.9	60.0	61.2
2500.0	96.3	97.6	65.3	66.6
3150.0	93.6	94.8	62.2	63.4
4000.0	94.6	95.6	63.8	64.8
5000.0	93.1	93.6	60.7	61.2
6300.0	90.4	90.3	59.0	58.9
8000.0	91.3	90.2	60.4	59.3
	UNWEIGHTED= 111.7		UNWEIGHTED= 81.0	
	A-WEIGHTED= 109.0		A-WEIGHTED= 77.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 204.5  
 EXHAUST BACK PRESSURE (IN-WATER), 30.4  
 INTAKE RESTRICTION (IN-WATER) 60.3  
 ENGINE NOISE EFFICIENCY(DB)= -60.4  
 ENGINE NOISE EFFICIENCY(DBA)= -63.3

FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PWL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	83.4	48.8	54.9	20.3
50.0	87.6	57.4	59.1	28.9
63.0	87.4	61.2	58.8	32.6
80.0	102.6	80.4	74.0	51.8
100.0	93.9	74.8	65.2	46.1
125.0	96.5	80.4	67.7	51.6
160.0	98.8	85.4	69.8	56.4
200.0	99.0	88.1	69.6	58.7
250.0	97.4	88.8	67.5	58.9
315.0	100.5	93.9	69.7	63.1
400.0	102.8	98.0	70.3	65.5
500.0	100.1	96.9	64.7	61.5
630.0	97.0	95.9	55.1	53.2
800.0	97.1	96.3	55.4	54.6
1000.0	97.2	97.2	64.5	64.5
1250.0	100.6	101.2	71.5	72.1
1600.0	98.0	99.0	68.6	69.6
2000.0	95.7	96.9	59.0	60.2
2500.0	96.0	97.3	65.0	66.3
3150.0	93.6	94.8	62.2	63.4
4000.0	94.3	95.3	63.5	64.5
5000.0	93.1	93.6	60.7	61.2
6300.0	90.6	90.5	59.2	59.1
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED=	111.4	UNWEIGHTED=	80.8
	A-WEIGHTED=	108.5	A-WEIGHTED=	77.1

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1800.7  
 HORSEPOWER 200.3  
 EXHAUST BACK PRESSURE (IN-WATER), 30.7  
 INTAKE RESTRICTION (IN-WATER) 80.3  
 ENGINE NOISE EFFICIENCY (DB) = -61.0  
 ENGINE NOISE EFFICIENCY (DBA) = -63.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.1	51.5	57.6	23.0
50.0	91.6	61.4	63.1	32.9
63.0	87.4	61.2	58.8	32.6
80.0	101.4	79.2	72.8	50.6
100.0	93.4	74.3	64.7	45.6
125.0	95.5	79.4	66.7	50.6
160.0	96.8	83.4	67.8	54.4
200.0	98.2	87.3	68.8	57.9
250.0	96.2	87.6	66.3	57.7
315.0	98.0	91.4	67.2	60.6
400.0	102.3	97.5	69.8	65.0
500.0	99.6	96.4	64.2	61.0
630.0	99.3	97.4	56.6	54.7
800.0	98.4	97.6	56.7	55.9
1000.0	98.2	98.2	65.5	65.5
1250.0	98.6	99.2	69.5	70.1
1600.0	97.5	98.5	68.1	69.1
2000.0	95.0	96.2	58.3	59.5
2500.0	96.0	97.3	65.0	66.3
3150.0	92.4	93.6	61.0	62.2
4000.0	93.6	94.6	62.8	63.8
5000.0	92.9	93.4	60.5	61.0
6300.0	89.9	89.8	58.5	58.4
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED = 110.8		UNWEIGHTED = 79.8	
	A-WEIGHTED = 108.1		A-WEIGHTED = 76.2	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 210.1  
 EXHAUST BACK PRESSURE (IN-WATER), 50.4  
 INTAKE RESTRICTION (IN-WATER) 21.1  
 ENGINE NOISE EFFICIENCY(DB)= -60.2  
 ENGINE NOISE EFFICIENCY(DBA)= -63.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.1	56.5	62.6	28.0
50.0	96.6	66.4	68.1	17.9
63.0	88.9	62.7	60.3	34.1
80.0	102.4	80.2	73.8	51.6
100.0	94.4	75.3	65.7	46.6
125.0	95.0	78.9	66.2	50.1
160.0	98.6	85.2	69.6	56.2
200.0	98.5	87.6	69.1	58.2
250.0	97.4	88.8	67.5	58.9
315.0	100.7	94.1	69.9	43.3
400.0	102.8	98.0	70.3	65.5
500.0	99.9	96.7	64.5	61.3
630.0	99.8	97.9	57.1	55.2
800.0	98.4	97.6	56.7	53.9
1000.0	96.7	96.7	64.0	64.0
1250.0	100.4	101.0	71.3	71.9
1600.0	99.0	100.0	69.6	70.6
2000.0	96.5	97.7	59.8	61.0
2500.0	96.3	97.6	65.3	66.6
3150.0	93.6	94.8	62.2	63.4
4000.0	94.3	95.3	63.5	64.5
5000.0	93.1	93.6	60.7	61.2
6300.0	90.1	90.0	58.7	58.6
8000.0	91.0	89.9	60.1	59.0
	UNWEIGHTED= 111.7		UNWEIGHTED= 80.9	
	A-WEIGHTED= 108.9		A-WEIGHTED= 77.2	

NOTE  
 PWL (DB (RE 10<sup>-12</sup> WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 206.8  
 EXHAUST BACK PRESSURE (IN-WATER), 50.4  
 INTAKE RESTRICTION (IN-WATER) 40.8  
 ENGINE NOISE EFFICIENCY(DB)= -60.2  
 ENGINE NOISE EFFICIENCY(DBA)= -63.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	89.6	55.0	61.1	26.5
50.0	95.6	65.4	67.1	36.9
63.0	89.7	63.5	61.1	34.9
80.0	101.9	79.7	73.3	51.1
100.0	94.4	75.3	65.7	46.6
125.0	96.3	80.2	67.5	51.4
160.0	98.6	85.2	69.6	56.2
200.0	99.2	87.3	68.8	57.9
250.0	99.2	90.6	69.3	60.7
315.0	101.5	94.9	70.7	64.1
400.0	102.5	97.7	70.0	65.2
500.0	100.4	97.2	65.0	61.8
630.0	99.1	97.8	56.4	54.5
800.0	98.6	97.8	56.9	56.1
1000.0	96.7	96.7	64.0	64.0
1250.0	99.9	100.5	70.8	71.4
1600.0	97.8	98.8	68.4	69.4
2000.0	96.2	97.4	59.5	60.7
2500.0	96.3	97.6	65.3	66.6
3150.0	93.9	95.1	62.5	63.7
4000.0	94.3	95.3	63.5	64.5
5000.0	93.4	93.9	61.0	61.5
6300.0	90.9	90.8	59.5	59.4
8000.0	90.8	89.7	59.9	58.8
	UNWEIGHTED= 111.7		UNWEIGHTED= 80.9	
	A-WEIGHTED= 100.7		A-WEIGHTED= 77.0	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 243.9  
 EXHAUST BACK PRESSURE (IN-WATER), 50.4  
 INTAKE RESTRICTION (IN-WATER) 60.3  
 ENGINE NOISE EFFICIENCY(DB)= -60.5  
 ENGINE NOISE EFFICIENCY(DBA)= -53.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	89.9	55.3	61.4	26.8
50.0	95.1	64.9	66.6	36.4
63.0	89.7	62.5	60.1	33.9
80.0	101.6	79.4	73.0	50.8
100.0	93.4	74.3	64.7	45.6
125.0	97.0	80.9	68.2	52.1
160.0	96.8	83.4	67.8	54.4
200.0	98.0	87.1	68.6	57.7
250.0	96.9	88.3	67.2	58.4
315.0	99.5	92.9	68.7	62.1
400.0	102.3	97.5	69.8	65.0
500.0	99.6	96.4	64.2	61.0
630.0	98.8	96.9	56.1	54.2
800.0	99.4	98.6	57.7	56.9
1000.0	97.5	97.5	64.8	64.8
1250.0	99.9	99.5	69.8	70.4
1500.0	99.5	100.5	70.1	71.1
2000.0	96.0	97.2	59.3	60.5
2500.0	96.3	97.6	65.3	66.6
3150.0	93.9	95.1	62.5	63.7
4000.0	94.8	95.8	64.0	65.0
5000.0	93.4	93.9	61.0	61.5
6300.0	90.4	90.3	59.0	58.9
8000.0	91.8	90.7	60.9	59.8
	UNWEIGHTED= 111.3		UNWEIGHTED= 80.4	
	A-WEIGHTED= 108.7		A-WEIGHTED= 77.0	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0		HORSEPOWER 193.5		EXHAUST BACK PRESSURE (IN-WATER), 50.3		INTAKE RESTRICTION (IN-WATER) 00.1		ENGINE NOISE EFFICIENCY(OB)= -60.0		ENGINE NOISE EFFICIENCY(OBA)= -62.7	
FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PWL	CALCULATED 50-FT UNWEIGHTED SPL	NOISE LEVELS A-WEIGHTED SPL							
40.0	91.9	57.3	63.4	28.8							
50.0	96.9	66.7	68.4	38.2							
63.0	88.4	62.2	59.8	33.6							
80.0	100.1	77.9	71.9	49.3							
100.0	93.9	74.8	65.2	46.1							
125.0	98.0	81.9	69.2	53.1							
160.0	97.3	83.9	68.3	54.9							
200.0	100.0	89.1	70.6	59.7							
250.0	98.7	90.1	68.0	60.2							
315.0	101.7	95.1	70.9	64.3							
400.0	102.0	97.2	69.5	64.7							
500.0	98.1	94.9	62.7	59.5							
630.0	99.8	96.9	56.1	54.2							
800.0	99.6	98.6	57.9	57.1							
1000.0	99.6	98.0	65.3	65.3							
1250.0	99.6	100.2	70.5	71.1							
1500.0	100.0	101.0	70.6	71.6							
2000.0	96.7	97.9	60.0	61.2							
2500.0	95.0	96.3	64.0	65.3							
3150.0	93.4	94.6	62.0	63.2							
4000.0	94.1	95.1	63.3	64.3							
5000.0	93.4	93.9	61.0	61.5							
6300.0	91.9	90.8	59.5	59.4							
8000.0	91.8	90.7	60.9	59.8							
	UNWEIGHTED= 111.6		UNWEIGHTED= 80.0								
	A-WEIGHTED= 108.9		A-WEIGHTED= 77.3								

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 210.1  
 EXHAUST BACK PRESSURE (IN-WATER), 70.4  
 INTAKE RESTRICTION (IN-WATER) 21.3  
 ENGINE NOISE EFFICIENCY(OB)= -60.5  
 ENGINE NOISE EFFICIENCY(OBA)= -63.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.6	57.0	63.1	28.5
50.0	96.1	65.9	67.6	27.4
63.0	87.2	61.0	58.6	32.4
80.0	102.1	79.9	73.5	51.3
100.0	93.9	74.8	65.2	46.1
125.0	96.3	80.2	67.5	51.4
160.0	96.6	83.2	67.6	54.2
200.0	98.2	87.3	68.8	57.9
250.0	97.2	88.6	67.3	50.7
315.0	94.7	92.1	67.9	61.3
400.0	101.0	96.2	68.5	63.7
500.0	100.1	96.9	64.7	61.5
630.0	99.8	97.9	57.1	55.2
800.0	99.4	98.6	57.7	56.9
1000.0	98.0	98.0	65.3	65.3
1250.0	99.6	100.2	70.5	71.1
1600.0	99.5	100.5	70.1	71.1
2000.0	96.7	97.9	60.0	61.2
2500.0	97.0	98.3	66.0	67.3
3150.0	94.1	95.3	62.7	63.9
4000.0	95.1	96.1	64.3	65.3
5000.0	93.4	93.9	61.0	61.5
6300.0	91.1	91.0	59.7	59.6
8000.0	92.3	91.2	61.4	60.3
	UNWEIGHTED= 111.4		UNWEIGHTED= 80.6	
	A-WEIGHTED= 109.0		A-WEIGHTED= 77.2	

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 207.7  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 40.0  
 ENGINE NOISE EFFICIENCY(DB)= -60.5  
 ENGINE NOISE EFFICIENCY(DBA)= -63.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	88.1	53.5	59.6	25.0
50.0	91.4	61.2	62.9	32.7
63.0	87.4	61.2	58.8	32.6
80.0	101.4	79.2	72.8	50.6
100.0	93.4	74.3	64.7	45.6
125.0	96.0	79.9	67.2	51.1
160.0	96.8	83.4	67.8	54.4
200.0	100.7	89.8	71.3	60.4
250.0	98.9	90.3	69.0	60.4
315.0	99.5	92.9	68.7	62.1
400.0	101.5	96.7	69.0	64.2
500.0	99.1	95.9	63.7	60.5
630.0	100.1	98.2	57.4	55.5
800.0	98.4	97.6	56.7	55.9
1000.0	98.0	98.0	65.3	65.3
1250.0	100.1	100.7	71.0	71.6
1500.0	99.8	100.8	70.4	71.4
2000.0	95.5	96.7	58.8	60.0
2500.0	96.3	97.6	65.3	66.6
3150.0	93.9	95.1	62.5	63.7
4000.0	94.6	95.6	63.8	64.8
5000.0	93.1	93.6	60.7	61.2
6300.0	90.9	90.8	59.4	59.4
8000.0	92.3	91.2	61.4	60.3
	UNWEIGHTED= 111.4		UNWEIGHTED= 80.6	
	A-WEIGHTED= 108.9		A-WEIGHTED= 77.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 202.7  
 EXHAUST BACK PRESSURE (IN-WATER), 70.2  
 INTAKE RESTRICTION (IN-WATER) 60.1  
 ENGINE NOISE EFFICIENCY(DB)= -60.3  
 ENGINE NOISE EFFICIENCY(DBA)= -62.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.6	57.0	63.1	28.5
50.0	95.4	65.2	66.9	36.7
63.0	85.9	59.7	57.3	31.1
80.0	102.6	80.4	74.0	51.8
100.0	93.2	74.1	64.5	45.4
125.0	96.0	79.9	67.2	51.1
160.0	96.1	82.7	67.1	53.7
200.0	99.0	88.1	69.6	58.7
250.0	98.2	89.6	68.3	59.7
315.0	99.0	92.4	68.2	61.6
400.0	102.0	97.2	69.5	64.7
500.0	98.4	95.2	63.0	59.8
630.0	98.8	96.9	56.1	54.2
800.0	100.4	99.6	58.7	57.9
1000.0	97.5	97.5	64.8	64.8
1250.0	99.6	100.2	70.5	71.1
1500.0	100.3	101.3	70.9	71.9
2000.0	95.7	96.9	59.0	60.2
2500.0	96.3	97.6	65.3	66.6
3150.0	94.1	95.3	62.7	63.9
4000.0	94.3	95.3	63.5	64.5
5000.0	93.9	94.4	61.5	62.0
6300.0	91.1	91.0	59.7	59.6
8000.0	92.5	91.4	61.6	60.5
	UNWEIGHTED= 111.5		UNWEIGHTED= 80.7	
	A-WEIGHTED= 109.0		A-WEIGHTED= 77.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1800.0  
 HORSEPOWER 171.5  
 EXHAUST BACK PRESSURE (IN-WATER), 70.1  
 INTAKE RESTRICTION (IN-WATER) 30.0  
 ENGINE NOISE EFFICIENCY(DB)= -60.7  
 ENGINE NOISE EFFICIENCY(DBA)= -62.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.6	53.0	59.1	24.5
50.0	91.4	61.2	62.9	32.7
63.0	85.2	59.0	56.6	30.4
80.0	99.4	77.2	70.8	48.6
100.0	90.4	71.3	61.7	42.6
125.0	95.8	79.7	67.0	50.9
160.0	93.3	79.9	64.3	50.9
200.0	98.5	87.6	69.1	58.2
250.0	96.9	88.3	67.0	58.4
315.0	96.2	89.6	65.4	58.8
400.0	100.5	95.7	68.0	63.2
500.0	99.4	96.2	64.0	60.8
630.0	97.3	95.4	54.6	52.7
800.0	99.1	98.3	57.4	56.6
1000.0	97.5	97.5	64.8	64.8
1250.0	100.1	100.7	71.0	71.6
1500.0	99.0	100.0	69.6	70.6
2000.0	97.0	98.2	60.3	61.5
2500.0	94.8	96.1	63.8	65.1
3150.0	93.9	95.1	62.5	63.7
4000.0	94.3	95.3	63.5	64.5
5000.0	93.1	93.6	60.7	61.2
6300.0	91.1	91.0	59.7	59.6
8000.0	92.3	91.2	61.4	60.3
	UNWEIGHTED= 110.4		UNWEIGHTED= 79.4	
	A-WEIGHTED= 100.5		A-WEIGHTED= 76.9	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 208.0  
 EXHAUST BACK PRESSURE (IN-WATER), 30.8  
 INTAKE RESTRICTION (IN-WATER) 20.0  
 ENGINE NOISE EFFICIENCY(DB)= -55.1  
 ENGINE NOISE EFFICIENCY(DBA)= -64.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.9	52.3	58.4	23.0
50.0	91.9	61.7	63.4	33.2
63.0	93.9	67.7	65.3	39.1
80.0	115.9	93.7	87.3	45.1
100.0	92.9	71.8	62.2	43.1
125.0	91.0	74.9	62.2	46.1
160.0	98.1	84.7	69.1	55.7
200.0	96.2	85.3	66.8	55.9
250.0	96.9	88.3	67.0	58.4
315.0	99.0	92.4	68.2	41.6
400.0	99.0	93.2	65.5	40.7
500.0	97.9	94.7	62.5	59.3
630.0	97.6	95.7	54.9	53.0
800.0	97.4	96.6	55.7	54.9
1000.0	98.2	98.2	65.5	65.5
1250.0	97.9	98.5	68.8	69.4
1600.0	97.8	98.8	68.4	69.4
2000.0	96.7	97.9	60.0	61.2
2500.0	95.5	96.8	64.5	45.8
3150.0	92.1	93.3	60.7	61.9
4000.0	93.1	94.1	62.3	63.3
5000.0	91.4	91.9	59.0	59.5
6300.0	89.1	89.0	57.7	57.6
8000.0	88.8	87.7	57.9	56.8
	UNWEIGHTED= 116.8		UNWEIGHTED= 87.8	
	A-WEIGHTED= 107.7		A-WEIGHTED= 76.1	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 202.2  
 EXHAUST BACK PRESSURE (IN-WATER), 30.8  
 INTAKE RESTRICTION (IN-WATER) 41.1  
 ENGINE NOISE EFFICIENCY(DB)= -55.2  
 ENGINE NOISE EFFICIENCY(DBA)= -64.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.1	51.5	57.6	23.0
50.0	91.4	61.2	62.9	32.7
63.0	93.4	67.2	64.8	38.6
80.0	115.6	93.4	87.0	44.8
100.0	90.2	71.1	61.5	42.4
125.0	91.0	74.9	62.2	46.1
160.0	97.6	84.2	68.6	55.2
200.0	94.7	83.8	65.3	54.4
250.0	95.9	87.3	66.0	57.4
315.0	98.2	91.6	67.4	42.8
400.0	100.3	95.5	67.8	43.0
500.0	97.1	93.9	61.7	58.5
630.0	99.6	97.7	56.9	55.0
800.0	97.1	96.3	55.4	54.6
1000.0	95.7	95.7	63.0	43.0
1250.0	99.1	99.7	70.0	70.6
1600.0	98.0	99.8	69.4	70.4
2000.0	96.2	97.4	59.5	60.7
2500.0	94.8	96.1	63.8	45.1
3150.0	92.1	93.3	60.7	61.9
4000.0	92.6	93.6	61.8	62.8
5000.0	90.9	91.4	58.5	59.0
6300.0	88.9	88.8	57.5	57.4
8000.0	88.8	87.7	57.9	56.8
	UNWEIGHTED= 116.5	UNWEIGHTED= 87.5		
	A-WEIGHTED= 107.8	A-WEIGHTED= 76.3		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 197.7  
 EXHAUST BACK PRESSURE (IN-WATER), 30.8  
 INTAKE RESTRICTION (IN-WATER) 60.0  
 ENGINE NOISE EFFICIENCY(DB)= -57.6  
 ENGINE NOISE EFFICIENCY(DBA)= -65.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.6	53.0	59.1	74.5
50.0	89.6	59.4	61.1	70.9
63.0	91.7	65.5	63.1	76.9
80.0	112.9	90.7	94.3	82.1
100.0	84.9	65.8	56.2	77.1
125.0	90.3	74.2	61.5	45.4
160.0	97.6	84.2	68.6	55.2
200.0	94.7	83.8	65.3	54.4
250.0	94.9	86.3	65.0	56.4
315.0	96.5	89.9	65.7	59.1
400.0	97.5	92.7	65.0	60.2
500.0	95.1	91.9	59.7	56.5
630.0	95.6	93.7	52.9	51.0
800.0	96.6	95.8	54.9	54.1
1000.0	95.2	95.2	62.5	62.5
1250.0	98.4	99.0	69.3	69.9
1600.0	97.5	98.5	68.1	49.1
2000.0	94.2	95.4	57.5	58.7
2500.0	93.3	94.6	62.3	43.6
3150.0	90.9	92.1	59.5	60.7
4000.0	91.1	92.1	60.3	61.3
5000.0	89.6	90.1	57.2	57.7
6300.0	87.6	87.5	56.2	56.1
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED= 114.1		UNWEIGHTED= 85.7	
	A-WEIGHTED= 106.3		A-WEIGHTED= 75.1	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 154.0  
 EXHAUST BACK PRESSURE (IN-WATER), 30.8  
 INTAKE RESTRICTION (IN-WATER) 90.8  
 ENGINE NOISE EFFICIENCY(OB)=-59.3  
 ENGINE NOISE EFFICIENCY(OBA)=-64.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	89.1	54.5	60.6	26.0
50.0	87.1	56.9	58.6	28.4
63.0	89.2	63.0	60.6	34.4
80.0	100.9	63.0	80.3	58.1
100.0	88.2	69.1	59.5	40.4
125.0	90.0	73.9	61.2	45.1
160.0	95.3	81.9	66.3	52.9
200.0	93.7	82.8	64.3	53.4
250.0	94.4	85.8	64.5	55.9
315.0	95.0	88.4	64.2	57.6
400.0	98.5	93.7	66.0	61.2
500.0	96.4	93.2	61.0	57.8
630.0	96.1	94.2	53.4	51.5
800.0	96.6	95.8	54.9	54.1
1000.0	96.2	96.2	63.5	63.5
1250.0	96.9	97.5	67.8	68.4
1500.0	96.3	97.3	66.9	67.9
2000.0	93.5	94.7	56.8	58.0
2500.0	91.5	92.8	60.5	61.8
3150.0	89.9	91.1	58.5	59.7
4000.0	90.3	91.3	59.5	60.5
5000.0	93.1	90.6	57.7	58.2
6300.0	86.4	86.3	55.0	54.9
8000.0	87.3	86.2	56.4	55.3
	UNWEIGHTED= 111.3		UNWEIGHTED=	81.7
	A-WEIGHTED= 105.7		A-WEIGHTED=	74.0

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 203.0  
 EXHAUST BACK PRESSURE (IN-WATER), 50.4  
 INTAKE RESTRICTION (IN-WATER) 19.9  
 ENGINE NOISE EFFICIENCY(DB)= -56.3  
 ENGINE NOISE EFFICIENCY(DBA)= -65.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED FWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.6	52.0	58.1	23.5
50.0	87.4	57.2	58.9	28.7
63.0	92.9	66.7	64.3	38.1
80.0	114.6	92.4	86.0	63.8
100.0	86.9	67.8	58.2	39.1
125.0	92.3	76.2	63.5	47.4
160.0	97.3	83.9	68.3	54.9
200.0	94.7	83.8	65.3	54.4
250.0	94.7	86.1	64.8	56.2
315.0	96.7	90.1	65.9	59.3
400.0	98.0	93.2	65.5	60.7
500.0	95.9	92.7	60.5	57.3
630.0	95.8	93.9	53.1	51.2
800.0	96.1	95.3	54.4	53.6
1000.0	96.2	96.2	63.5	63.5
1250.0	97.6	98.2	68.5	69.1
1600.0	97.8	98.8	68.4	69.4
2000.0	94.5	95.7	57.8	59.0
2500.0	93.8	95.1	62.8	64.1
3150.0	91.1	92.3	59.7	60.9
4000.0	91.8	92.8	61.0	62.0
5000.0	89.6	90.1	57.2	57.7
6300.0	87.9	87.8	56.5	56.4
8000.0	87.8	86.7	56.9	55.8
	UNWEIGHTED= 115.5		UNWEIGHTED= 86.5	
	A-WEIGHTED= 106.5		A-WEIGHTED= 75.2	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 198.  
 EXHAUST BACK PRESSURE (IN-WATER), 50.7  
 INTAKE RESTRICTION (IN-WATER) 40.7  
 ENGINE NOISE EFFICIENCY(OB)= -56.8  
 ENGINE NOISE EFFICIENCY(OBA)= -65.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	88.6	54.0	60.1	25.5
50.0	85.9	56.7	58.4	28.2
63.0	92.4	66.2	63.8	37.6
80.0	113.9	91.7	95.3	63.1
100.0	86.9	67.8	58.2	39.1
125.0	92.3	76.2	63.5	47.4
160.0	97.1	83.7	68.1	54.7
200.0	94.7	83.8	65.3	54.4
250.0	94.9	86.3	65.0	56.4
315.0	96.2	89.6	65.4	58.8
400.0	97.5	92.7	65.0	60.2
500.0	94.6	91.4	59.2	56.0
630.0	95.1	93.2	52.4	50.5
800.0	96.6	95.8	54.9	54.1
1000.0	96.5	96.5	63.8	63.8
1250.0	98.1	98.7	69.0	69.6
1500.0	97.5	98.5	68.1	69.1
2000.0	94.2	95.4	57.5	58.7
2500.0	93.5	94.8	52.5	53.8
3150.0	91.1	92.3	59.7	60.9
4000.0	91.6	92.6	60.8	61.8
5000.0	89.9	90.4	57.5	58.0
6300.0	87.4	87.3	56.0	55.9
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED= 114.9		UNWEIGHTED= 85.0	
	A-WEIGHTED= 106.4		A-WEIGHTED= 75.1	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRU BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)=	1500.0				
HORSEPOWER	179.1				
EXHAUST BACK PRESSURE (IN-WATER),	50.7				
INTAKE RESTRICTION (IN-WATER)	59.5				
ENGINE NOISE EFFICIENCY(DB)=	-59.4				
ENGINE NOISE EFFICIENCY(OBA)=	-65.7				

FREQUENCY	ENGINE RADIATED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PHL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	90.9	56.3	62.4	27.8
50.0	90.1	59.9	61.6	31.4
63.0	89.9	63.7	61.3	35.1
80.0	109.9	87.7	81.3	59.1
100.0	85.4	66.3	56.7	37.6
125.0	93.3	77.2	64.5	48.4
160.0	95.3	81.9	66.3	52.9
200.0	94.7	83.8	65.3	54.4
250.0	94.4	85.8	64.5	55.9
315.0	96.5	89.9	65.7	59.1
400.0	98.3	93.5	65.8	61.0
500.0	95.1	91.9	59.7	56.5
630.0	94.3	92.4	51.6	49.7
800.0	94.6	93.8	52.9	52.1
1000.0	96.2	96.2	63.5	63.5
1250.0	97.4	98.0	68.3	68.9
1600.0	96.0	97.0	66.6	67.6
2000.0	93.7	94.9	57.0	58.2
2500.0	92.0	94.1	61.8	63.1
3150.0	89.9	91.1	58.5	59.7
4000.0	90.6	91.6	59.8	60.8
5000.0	89.4	89.9	57.0	57.5
6300.0	86.4	86.3	55.0	54.9
8000.0	87.3	86.2	56.4	55.3
	UNWEIGHTED=	111.9	UNWEIGHTED=	82.5
	A-WEIGHTED=	105.6	A-WEIGHTED=	74.2

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 135.1  
 EXHAUST BACK PRESSURE (IN-WATER), 50.4  
 INTAKE RESTRICTION (IN-WATER) 80.4  
 ENGINE NOISE EFFICIENCY(DB)= -61.2  
 ENGINE NOISE EFFICIENCY(DBA)= -65.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.9	52.3	58.4	23.9
50.0	86.9	56.7	58.4	28.2
63.0	86.2	60.0	57.6	31.4
80.0	105.4	83.2	75.6	54.6
100.0	87.4	68.3	58.7	39.6
125.0	89.5	73.4	60.7	44.6
160.0	92.3	78.9	63.3	49.9
200.0	93.0	82.1	63.6	52.7
250.0	95.2	86.6	65.3	56.7
315.0	94.0	87.4	64.0	56.6
400.0	96.5	91.7	63.2	59.2
500.0	96.4	93.2	61.0	57.3
630.0	94.3	92.4	51.6	49.7
800.0	94.9	94.1	53.2	52.4
1000.0	94.7	94.7	62.0	62.0
1250.0	94.9	95.5	65.8	66.4
1600.0	95.0	96.0	65.6	66.6
2000.0	92.5	93.7	55.8	57.2
2500.0	90.8	92.1	59.8	61.1
3150.0	88.4	89.6	57.0	58.2
4000.0	89.3	90.3	58.5	59.5
5000.0	90.1	90.6	57.7	58.2
6300.0	86.4	86.3	55.0	54.9
8000.0	86.5	85.4	55.6	54.5
	UNWEIGHTED= 108.9		UNWEIGHTED= 78.9	
	A-WEIGHTED= 104.4		A-WEIGHTED= 72.5	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 199.5  
 EXHAUST BACK PRESSURE (IN-WATER), 70.7  
 INTAKE RESTRICTION (IN-WATER) 19.7  
 ENGINE NOISE EFFICIENCY(OB)= -57.8  
 ENGINE NOISE EFFICIENCY(OBA)= -65.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	84.6	50.0	56.1	21.5
50.0	90.6	60.4	62.1	31.9
63.0	91.4	65.2	62.8	36.6
80.0	112.4	90.2	83.8	41.6
100.0	86.2	67.1	57.5	38.4
125.0	94.5	78.4	65.7	49.6
160.0	95.3	81.9	66.3	52.9
200.0	96.5	85.6	67.1	56.2
250.0	95.7	87.1	65.8	57.2
315.0	99.2	92.6	68.4	61.8
400.0	98.5	93.7	66.0	61.2
500.0	94.9	91.7	59.5	56.3
630.0	96.6	94.7	53.9	52.0
800.0	97.9	97.1	56.2	55.4
1000.0	98.0	98.0	65.3	65.3
1250.0	97.9	98.5	69.8	69.4
1600.0	96.0	97.0	66.6	67.6
2000.0	94.2	95.4	57.5	58.7
2500.0	93.0	94.3	62.0	63.3
3150.0	90.6	91.8	59.2	60.4
4000.0	91.3	92.3	60.5	61.5
5000.0	89.6	90.1	57.2	57.7
6300.0	87.6	87.5	56.2	56.1
8000.0	89.0	86.9	57.1	56.0
	UNWEIGHTED= 113.9	UNWEIGHTED= 84.7		
	A-WEIGHTED= 106.6	A-WEIGHTED= 74.9		

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 194.1  
 EXHAUST BACK PRESSURE (IN-WATER), 70.4  
 INTAKE RESTRICTION (IN-WATER) 41.0  
 ENGINE NOISE EFFICIENCY(DB)= -58.6  
 ENGINE NOISE EFFICIENCY(DBA)= -65.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.9	53.3	59.4	24.8
50.0	90.9	60.7	62.4	32.2
63.0	90.2	64.0	61.6	35.4
80.0	111.4	89.2	82.8	60.6
100.0	86.7	67.6	58.0	38.9
125.0	92.8	76.7	64.0	47.9
160.0	96.3	82.9	67.3	53.9
200.0	93.5	82.6	64.1	53.2
250.0	95.9	87.3	66.0	57.4
315.0	96.7	90.1	65.9	59.3
400.0	98.0	93.2	65.5	60.7
500.0	95.6	92.4	60.2	57.0
630.0	93.8	91.9	51.1	49.2
800.0	96.9	96.1	55.2	54.4
1000.0	97.2	97.2	64.5	64.5
1250.0	97.9	98.5	68.8	69.4
1600.0	95.5	96.5	66.1	67.1
2000.0	94.2	95.4	57.5	58.7
2500.0	93.5	94.8	62.5	63.8
3150.0	91.4	92.6	60.0	61.2
4000.0	91.1	92.1	60.3	61.3
5000.0	90.4	90.9	58.0	58.5
6300.0	87.4	87.3	56.0	55.9
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED= 113.0		UNWEIGHTED= 83.8	
	A-WEIGHTED= 106.2		A-WEIGHTED= 74.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0022 MICRO BARS)))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 155.1  
 EXHAUST BACK PRESSURE (IN-WATER), 70.2  
 INTAKE RESTRICTION (IN-WATER) 60.7  
 ENGINE NOISE EFFICIENCY(DB)= -60.4  
 ENGINE NOISE EFFICIENCY(DBA)= -65.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.4	52.8	58.9	24.3
50.0	92.4	62.2	61.9	31.7
63.0	89.2	62.0	59.6	33.4
80.0	107.1	84.9	78.5	56.3
100.0	88.2	69.1	59.5	40.4
125.0	92.0	76.7	64.0	47.9
160.0	94.1	80.7	55.1	51.7
200.0	93.2	82.3	63.8	52.9
250.0	95.4	85.8	65.5	56.9
315.0	96.2	89.6	65.4	58.6
400.0	97.3	92.5	64.8	60.7
500.0	95.4	92.2	62.0	56.8
630.0	95.3	93.4	52.6	50.7
800.0	94.6	93.8	52.9	52.1
1000.0	95.0	95.0	52.3	62.3
1250.0	97.4	98.0	58.3	68.9
1600.0	96.8	97.8	67.4	68.4
2000.0	93.7	94.9	57.0	58.2
2500.0	91.8	93.1	60.8	62.1
3150.0	89.9	91.1	58.5	59.7
4000.0	89.6	90.6	58.8	59.9
5000.0	89.9	90.4	57.5	58.7
6300.0	84.4	86.3	55.0	54.9
8000.0	87.3	86.2	55.4	55.3
	UNWEIGHTED= 110.2		UNWEIGHTED= 80.5	
	A-WEIGHTED= 105.4		A-WEIGHTED= 74.1	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 124.7  
 EXHAUST BACK PRESSURE (IN-WATER), 70.4  
 INTAKE RESTRICTION (IN-WATER) 30.9  
 ENGINE NOISE EFFICIENCY(DB)= -61.5  
 ENGINE NOISE EFFICIENCY(DBA)= -64.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.6	52.2	58.1	23.5
50.0	89.6	59.4	61.1	30.9
63.0	85.9	59.7	57.3	31.1
80.0	104.9	82.7	76.3	54.1
100.0	86.7	67.6	58.0	36.9
125.0	91.5	75.4	62.7	46.6
160.0	91.6	78.2	62.6	49.2
200.0	90.2	79.3	60.8	49.9
250.0	95.4	86.8	65.5	56.9
315.0	93.5	86.9	62.7	56.1
400.0	97.0	92.2	64.5	59.7
500.0	96.4	93.2	61.0	57.8
630.0	93.1	91.2	57.4	48.5
800.0	95.1	95.3	54.4	53.6
1000.0	95.7	95.7	63.0	63.0
1250.0	97.1	97.7	66.0	68.6
1600.0	95.0	96.0	65.6	66.6
2000.0	93.0	94.2	56.3	77.5
2500.0	92.0	91.3	59.0	60.3
3150.0	87.9	89.1	54.5	57.7
4000.0	89.0	90.6	59.0	60.0
5000.0	91.1	91.6	58.7	59.2
6300.0	87.1	87.0	55.7	55.6
8000.0	86.8	85.7	55.9	54.8
	UNWEIGHTED= 108.9		UNWEIGHTED= 78.6	
	A-WEIGHTED= 105.0		A-WEIGHTED= 73.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO PARS))

I.3 ENDT-675 Load-Speed

Engine Radiated

Sound Power Level

Spectrums

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 2100.0  
 HORSEPOWER 203.0  
 EXHAUST BACK PRESSURE (IN-WATER), 30.0  
 INTAKE RESTRICTION (IN-WATER) 13.1  
 ENGINE NOISE EFFICIENCY (DB) = -56.9  
 ENGINE NOISE EFFICIENCY (DBA) = -60.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	92.4	57.8	63.9	29.3
50.0	88.6	58.4	60.1	29.9
63.0	83.7	57.5	55.1	28.9
80.0	86.9	64.7	58.3	36.1
100.0	92.4	73.3	63.7	44.6
125.0	85.2	69.7	57.0	40.9
160.0	108.6	95.2	79.6	66.2
200.0	109.5	98.6	80.1	69.2
250.0	99.7	91.1	69.8	61.2
315.0	103.5	96.9	72.7	66.1
400.0	96.0	91.2	63.5	58.7
500.0	99.6	96.4	64.2	61.0
630.0	98.8	96.9	56.1	54.2
800.0	100.4	99.6	58.7	57.9
1000.0	100.7	100.7	68.0	68.0
1250.0	103.6	104.2	74.5	75.1
1600.0	100.8	101.8	71.4	72.4
2000.0	98.2	99.4	61.5	62.7
2500.0	99.0	100.3	68.0	69.3
3150.0	97.1	98.3	65.7	66.9
4000.0	98.8	99.8	68.0	69.0
5000.0	96.1	96.6	63.7	64.2
6300.0	93.1	93.0	61.7	61.6
8000.0	92.9	91.4	61.6	60.5
	UNWEIGHTED = 114.9	UNWEIGHTED = 84.9		
	A-WEIGHTED = 111.2	A-WEIGHTED = 80.2		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 97.8  
 EXHAUST BACK PRESSURE (IN-WATER), 16.3  
 INTAKE RESTRICTION (IN-WATER) 9.0  
 ENGINE NOISE EFFICIENCY(DB)= -56.0  
 ENGINE NOISE EFFICIENCY(DBA)= -59.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	94.4	59.8	65.9	31.3
50.0	84.6	54.4	56.1	25.9
63.0	81.9	55.7	53.3	27.1
80.0	86.9	64.7	58.3	36.1
100.0	90.4	71.3	61.7	42.6
125.0	84.0	67.9	55.2	39.1
160.0	105.0	92.4	76.8	63.4
200.0	106.2	95.3	76.8	65.9
250.0	97.4	88.8	67.5	58.9
315.0	100.5	93.9	69.7	63.1
400.0	96.0	91.2	63.5	58.7
500.0	97.1	93.9	61.7	58.5
630.0	99.3	97.4	56.6	54.7
800.0	100.6	99.8	58.9	58.1
1000.0	99.2	99.2	66.5	66.5
1250.0	100.9	101.5	71.8	72.4
1600.0	98.3	99.3	68.9	69.9
2000.0	97.5	98.7	60.8	62.0
2500.0	96.8	98.1	65.8	67.1
3150.0	94.9	96.1	63.5	64.7
4000.0	96.3	97.3	65.5	66.5
5000.0	95.1	95.6	62.7	63.2
6300.0	91.6	91.5	60.2	60.1
8000.0	91.0	89.9	60.1	59.0
	UNWEIGHTED= 112.6	UNWEIGHTED= 82.2	UNWEIGHTED= 60.1	UNWEIGHTED= 60.1
	A-WEIGHTED= 109.4	A-WEIGHTED= 77.8	A-WEIGHTED= 60.1	A-WEIGHTED= 60.1

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 2100.0  
 HORSEPOWER 4.4  
 EXHAUST BACK PRESSURE (IN-WATER), 9.5  
 INTAKE RESTRICTION (IN-WATER) 6.0  
 ENGINE NOISE EFFICIENCY (DB) = -44.9  
 ENGINE NOISE EFFICIENCY (DBA) = -48.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	92.9	58.3	54.4	29.8
50.0	83.1	52.9	54.6	24.4
63.0	81.2	55.0	52.6	26.4
80.0	84.4	62.2	55.8	33.6
100.0	93.9	74.8	65.2	46.1
125.0	83.8	67.7	55.0	38.9
160.0	100.3	86.9	71.3	57.9
200.0	105.2	94.3	75.6	64.9
250.0	96.2	87.6	66.3	57.7
315.0	96.5	89.9	65.7	59.1
400.0	97.5	92.7	65.0	60.2
500.0	95.9	92.7	60.5	57.3
630.0	98.8	96.9	56.1	54.2
800.0	98.1	97.3	56.4	55.6
1000.0	97.5	97.5	64.8	64.8
1250.0	96.6	97.2	67.5	68.1
1600.0	93.8	94.8	64.4	65.4
2000.0	93.0	94.2	56.3	57.5
2500.0	94.0	95.3	63.0	64.3
3150.0	92.4	93.6	61.0	62.2
4000.0	94.3	95.3	63.5	64.5
5000.0	91.9	92.4	59.5	60.0
6300.0	88.6	88.5	57.2	57.1
8000.0	88.3	87.2	57.4	56.3
	UNWEIGHTED = 110.2		UNWEIGHTED = 79.6	
	A-WEIGHTED = 106.8		A-WEIGHTED = 74.8	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 204.0  
 EXHAUST BACK PRESSURE (IN-WATER), 25.8  
 INTAKE RESTRICTION (IN-WATER) 11.5  
 ENGINE NOISE EFFICIENCY(DB)= -59.7  
 ENGINE NOISE EFFICIENCY(DBA)= -62.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	80.6	46.0	52.1	17.5
50.0	84.9	56.7	58.4	28.2
63.0	83.7	57.5	55.1	28.9
80.0	91.4	69.2	62.8	40.6
100.0	86.9	67.8	58.2	39.1
125.0	88.0	71.9	59.2	43.1
160.0	108.3	94.9	79.3	65.9
200.0	104.2	93.3	74.8	63.9
250.0	101.4	92.8	71.5	62.9
315.0	99.7	93.1	68.9	62.3
400.0	98.3	93.5	65.8	61.0
500.0	97.4	94.2	62.0	58.8
630.0	99.1	97.2	56.4	54.5
800.0	99.9	99.1	58.2	57.4
1000.0	98.5	98.5	65.8	65.8
1250.0	101.9	102.5	72.8	73.4
1600.0	99.5	100.5	70.1	71.1
2000.0	97.0	98.2	60.3	61.5
2500.0	97.0	98.3	60.0	67.3
3150.0	95.1	96.3	63.7	64.9
4000.0	95.8	96.8	65.0	66.0
5000.0	94.6	95.1	62.2	62.7
6300.0	91.4	91.3	60.0	59.9
8000.0	91.3	90.2	60.4	59.3
	UNWEIGHTED= 113.1		UNWEIGHTED= 60.4	
	A-WEIGHTED= 109.6		A-WEIGHTED= 62.9	
				78.4

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1900.0  
 HORSEPOWER = 99.5  
 EXHAUST BACK PRESSURE (IN-WATER), 13.6  
 INTAKE RESTRICTION (IN-WATER) 7.1  
 ENGINE NOISE EFFICIENCY (DB) = -58.8  
 ENGINE NOISE EFFICIENCY (DBA) = -60.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	87.6	57.4	59.1	28.9
63.0	83.9	57.7	55.3	29.1
80.0	92.9	70.7	64.3	42.1
100.0	82.4	63.3	53.7	34.6
125.0	84.8	68.7	56.0	39.9
160.0	101.8	88.4	72.8	59.4
200.0	98.5	87.6	69.1	58.2
250.0	99.4	90.8	69.5	60.9
315.0	98.0	91.4	67.2	60.6
400.0	95.8	91.0	63.3	58.5
500.0	98.1	94.9	62.7	59.5
630.0	95.8	93.9	53.1	51.2
800.0	97.6	96.8	55.9	55.1
1000.0	96.7	96.7	64.0	64.2
1250.0	99.9	100.5	70.8	71.4
1600.0	98.3	99.3	68.9	69.9
2000.0	96.0	97.2	59.3	60.5
2500.0	95.0	96.3	64.0	65.3
3150.0	93.1	94.3	61.7	62.9
4000.0	94.6	95.6	63.8	64.8
5000.0	93.1	93.6	60.7	61.2
6300.0	90.4	90.3	59.0	58.9
8000.0	90.5	89.4	59.6	58.5
	UNWEIGHTED = 109.9	UNWEIGHTED = 79.2		
	A-WEIGHTED = 107.8	A-WEIGHTED = 76.5		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 4.4  
 EXHAUST BACK PRESSURE (IN-WATER), 8.1  
 INTAKE RESTRICTION (IN-WATER) 4.7  
 ENGINE NOISE EFFICIENCY(DB)= -48.1  
 ENGINE NOISE EFFICIENCY(DRA)= -50.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 32-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.9	48.3	54.4	19.8
50.0	81.9	51.7	53.4	23.2
63.0	81.4	55.2	52.8	26.6
80.0	80.9	66.7	60.3	38.1
100.0	82.7	61.6	52.0	22.9
125.0	84.3	68.2	55.5	29.4
160.0	99.1	85.7	72.1	56.7
200.0	94.7	83.8	55.3	54.4
250.0	96.2	87.6	66.3	57.7
315.0	91.2	84.6	60.4	53.8
400.0	95.3	90.5	62.8	58.0
500.0	95.9	92.7	62.5	57.3
630.0	95.6	93.7	52.9	51.4
800.0	96.4	95.6	54.7	52.9
1000.0	94.7	94.7	62.0	42.1
1250.0	96.9	97.5	67.8	48.4
1600.0	94.3	95.3	64.9	45.9
2000.0	91.2	92.4	54.5	55.7
2500.0	91.8	93.1	60.8	42.1
3150.0	89.4	90.6	58.2	59.2
4000.0	91.8	92.8	61.0	42.8
5000.0	92.4	90.9	58.0	56.5
6300.0	86.4	85.3	55.0	54.9
8000.0	87.0	85.9	56.1	55.0
	UNWEIGHTED= 107.1		UNWEIGHTED= 76.1	
	A-WEIGHTED= 105.0		A-WEIGHTED= 73.3	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 204.2  
 EXHAUST BACK PRESSURE (IN-WATER), 21.8  
 INTAKE RESTRICTION (IN-WATER) 9.5  
 ENGINE NOISE EFFICIENCY(DB)= -62.6  
 ENGINE NOISE EFFICIENCY(OBA)= -64.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	84.9	50.3	56.4	21.8
50.0	87.9	57.7	59.4	29.2
63.0	84.9	58.7	56.3	30.1
80.0	89.6	67.4	61.0	38.8
100.0	88.9	69.8	60.2	41.1
125.0	85.5	69.4	56.7	40.6
160.0	98.1	84.7	69.1	55.7
200.0	96.0	85.1	66.6	55.7
250.0	93.9	85.3	64.0	55.4
315.0	97.7	91.1	66.9	60.3
400.0	99.3	94.5	66.8	62.0
500.0	98.1	94.9	62.7	59.5
530.0	96.6	94.7	53.9	52.0
800.0	95.1	94.3	93.4	52.6
1000.0	97.7	97.7	65.0	55.0
1250.0	99.1	99.7	70.0	70.6
1500.0	90.0	100.0	59.6	70.6
2000.0	95.7	96.9	59.0	60.2
2500.0	96.0	97.3	65.0	66.3
3150.0	93.9	95.1	62.5	63.7
4000.0	94.8	95.8	64.0	65.0
5000.0	92.4	92.9	60.0	60.5
6300.0	89.6	89.5	58.2	58.1
8000.0	90.0	88.9	59.1	58.0
	UNWEIGHTED=	109.2	UNWEIGHTED=	78.1
	A-WEIGHTED=	107.8	A-WEIGHTED=	76.5

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 104.0  
 EXHAUST BACK PRESSURE (IN-WATER), 10.9  
 INTAKE RESTRICTION (IN-WATER) 5.7  
 ENGINE NOISE EFFICIENCY(DB)= -61.0  
 ENGINE NOISE EFFICIENCY(DBA)= -62.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	85.4	50.9	56.9	22.3
50.0	84.4	54.2	55.9	25.7
63.0	83.9	57.7	55.3	29.1
80.0	89.6	67.4	61.0	38.8
100.0	83.7	64.6	55.0	35.9
125.0	84.8	68.7	56.0	39.9
160.0	95.1	81.7	66.1	52.7
200.0	92.5	81.6	63.1	52.2
250.0	94.2	85.6	64.3	55.7
315.0	95.5	88.9	64.7	58.1
400.0	95.3	90.5	62.8	58.0
500.0	96.6	93.4	61.2	58.0
630.0	95.1	93.2	52.4	50.5
800.0	96.4	95.6	54.7	53.9
1000.0	99.0	99.0	66.3	66.3
1250.0	98.6	99.2	69.5	70.1
1500.0	96.8	97.8	67.4	68.4
2000.0	94.7	95.9	58.0	59.2
2500.0	93.8	95.1	62.8	64.1
3150.0	91.4	92.6	60.0	61.2
4000.0	93.6	94.6	62.8	63.8
5000.0	91.9	92.4	59.5	60.0
6300.0	88.9	88.8	57.5	57.4
8000.0	88.5	87.4	57.6	56.5
	UNWEIGHTED= 107.9	UNWEIGHTED= 76.5		
	A-WEIGHTED= 106.8	A-WEIGHTED= 75.3		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 4.4  
 EXHAUST BACK PRESSURE (IN-WATER), 5.4  
 INTAKE RESTRICTION (IN-WATER) 3.8  
 ENGINE NOISE EFFICIENCY(DB)= -48.7  
 ENGINE NOISE EFFICIENCY(DBA)= -50.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	83.4	48.8	54.9	20.3
50.0	81.4	51.2	52.9	22.7
63.0	81.4	55.2	52.8	26.6
80.0	90.9	68.7	62.3	40.1
100.0	82.2	63.1	53.5	34.4
125.0	83.8	67.7	55.0	38.9
160.0	94.6	81.2	65.6	52.2
200.0	92.5	81.6	63.1	52.2
250.0	95.4	86.8	65.5	56.9
315.0	91.7	85.1	60.9	54.3
400.0	93.8	89.0	61.3	56.5
500.0	94.4	91.2	59.0	55.8
630.0	95.1	93.2	52.4	50.5
800.0	97.4	96.6	55.7	54.9
1000.0	96.0	96.0	63.3	63.3
1250.0	96.9	97.5	67.8	68.4
1600.0	93.5	94.5	64.1	65.1
2000.0	93.5	94.7	56.8	58.0
2500.0	90.6	92.1	59.8	61.1
3150.0	88.6	89.8	57.2	58.4
4000.0	90.8	91.8	60.0	61.0
5000.0	89.9	90.4	57.5	58.0
6300.0	85.9	85.8	54.5	54.4
8000.0	85.3	84.2	54.4	53.3
	UNWEIGHTED= 106.4		UNWEIGHTED= 74.9	
	A-WEIGHTED= 104.9		A-WEIGHTED= 72.9	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 203.3  
 EXHAUST BACK PRESSURE (IN-WATER), 19.8  
 INTAKE RESTRICTION (IN-WATER) 8.4  
 ENGINE NOISE EFFICIENCY(DB)= -62.7  
 ENGINE NOISE EFFICIENCY(DBA)= -64.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PHL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.4	52.8	58.9	24.3
50.0	85.9	55.7	57.4	27.2
63.0	83.9	57.7	55.3	29.1
80.0	93.6	71.4	65.0	42.8
100.0	84.4	65.3	55.7	36.6
125.0	92.0	76.7	64.0	47.9
160.0	97.1	83.7	68.1	54.7
200.0	94.2	87.3	68.8	57.9
250.0	94.2	85.6	64.3	55.7
315.0	97.2	90.6	66.4	59.8
400.0	98.0	93.2	65.5	60.7
500.0	97.1	93.9	61.7	58.5
630.0	96.3	94.4	53.6	51.7
800.0	97.9	97.1	56.2	55.4
1000.0	97.7	97.7	65.0	65.0
1250.0	98.1	98.7	69.0	69.6
1600.0	98.5	99.5	69.1	70.1
2000.0	95.7	96.9	59.0	60.2
2500.0	95.5	96.8	64.5	65.8
3150.0	93.4	94.6	62.0	63.2
4000.0	93.0	94.8	63.0	64.0
5000.0	91.9	92.4	59.5	60.0
6300.0	89.1	89.0	57.7	57.6
8000.0	89.5	88.4	58.6	57.5
	UNWEIGHTED= 109.1		UNWEIGHTED= 78.0	
	A-WEIGHTED= 107.5		A-WEIGHTED= 75.9	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 102.0  
 EXHAUST BACK PRESSURE (IN-WATER), 8.8  
 INTAKE RESTRICTION (IN-WATER) 4.9  
 ENGINE NOISE EFFICIENCY(DB)= -60.6  
 ENGINE NOISE EFFICIENCY(DBA)= -62.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.6	53.0	59.1	24.5
50.0	85.9	55.7	57.4	27.2
63.0	83.4	57.2	54.8	28.6
80.0	84.1	71.9	65.5	43.3
100.0	84.4	65.3	55.7	36.6
125.0	90.8	74.7	62.0	45.9
160.0	99.1	85.7	70.1	56.7
200.0	96.0	85.1	66.6	55.7
250.0	89.4	80.8	59.5	50.9
315.0	94.7	88.1	63.9	57.3
400.0	95.8	91.0	63.3	58.5
500.0	94.6	91.4	59.2	56.0
630.0	93.1	91.2	50.4	48.5
800.0	98.1	97.3	56.4	55.6
1000.0	98.0	98.0	65.3	45.3
1250.0	98.9	99.5	69.8	70.4
1600.0	96.8	97.8	67.4	68.4
2000.0	95.2	96.4	58.5	59.7
2500.0	92.5	93.8	61.5	62.8
3150.0	90.4	91.6	59.0	60.2
4000.0	93.1	94.1	62.3	63.3
5000.0	92.6	93.1	60.2	60.7
6300.0	88.6	88.5	57.2	57.1
8000.0	88.8	87.7	57.9	56.8
	UNWEIGHTED= 108.2		UNWEIGHTED=	77.3
	A-WEIGHTED= 106.6		A-WEIGHTED=	75.1

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 4.4  
 EXHAUST BACK PRESSURE (IN-WATER), 4.8  
 INTAKE RESTRICTION (IN-WATER) 3.3  
 ENGINE NOISE EFFICIENCY(DB)= -48.9  
 ENGINE NOISE EFFICIENCY(DBA)= -51.2

FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PWL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	83.9	49.3	55.4	20.8
50.0	82.9	52.7	54.4	24.2
63.0	81.7	55.5	53.1	26.9
80.0	98.4	76.2	69.8	47.6
100.0	79.7	60.6	51.0	31.9
125.0	85.0	68.9	56.2	40.1
160.0	94.1	80.7	65.1	51.7
200.0	93.7	82.8	64.3	53.4
250.0	90.2	81.6	60.3	51.7
315.0	92.0	85.4	61.2	54.6
400.0	96.0	91.2	63.5	58.7
500.0	93.4	90.2	58.0	54.8
630.0	92.6	90.7	49.9	48.0
800.0	95.4	94.6	53.7	52.9
1000.0	94.7	94.7	62.0	62.0
1250.0	95.6	96.2	66.5	67.1
1600.0	94.3	95.3	64.9	65.9
2000.0	92.2	93.4	55.5	56.7
2500.0	90.0	91.3	50.0	50.3
3150.0	87.9	89.1	56.5	57.7
4000.0	90.0	91.8	60.0	61.0
5000.0	88.6	89.1	56.2	56.7
6300.0	84.4	84.3	53.0	52.9
8000.0	84.0	82.9	53.1	52.0
	UNWEIGHTED=	106.2	UNWEIGHTED=	75.4
	A-WEIGHTED=	104.0	A-WEIGHTED=	72.3

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 205.0  
 EXHAUST BACK PRESSURE (IN-WATER), 17.6  
 INTAKE RESTRICTION (IN-WATER) 7.6  
 ENGINE NOISE EFFICIENCY(DB)= -56.9  
 ENGINE NOISE EFFICIENCY(DBA)= -64.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	85.6	51.0	57.1	22.5
50.0	85.1	54.9	56.6	26.4
63.0	91.4	65.2	62.8	36.6
80.0	113.9	91.7	85.3	63.1
100.0	83.7	64.6	55.0	35.9
125.0	90.0	73.9	61.2	45.1
160.0	96.6	83.2	67.6	34.2
200.0	94.7	83.8	65.3	54.4
250.0	95.4	86.8	65.5	56.9
315.0	95.7	89.1	64.9	58.3
400.0	98.0	94.0	66.3	61.5
500.0	94.1	90.9	58.7	55.5
630.0	98.3	96.4	55.6	53.7
800.0	95.4	94.6	53.7	52.9
1000.0	95.7	95.7	63.0	63.0
1250.0	97.6	98.2	68.5	69.1
1600.0	98.3	99.3	68.9	69.7
2000.0	95.2	96.4	58.5	59.7
2500.0	95.5	96.8	64.5	65.8
3150.0	93.4	94.6	62.0	63.2
4000.0	93.6	94.6	62.0	63.6
5000.0	92.1	92.6	59.7	60.2
6300.0	89.4	89.3	58.0	57.9
8000.0	90.3	89.2	59.4	58.3
	UNWEIGHTED= 119.0		UNWEIGHTED=	85.9
	A-WEIGHTED= 107.1		A-WEIGHTED=	75.7

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	84.6	54.4	56.1	25.9
63.0	87.7	61.5	59.1	32.9
80.0	106.9	84.7	78.3	56.1
100.0	80.4	61.3	51.7	32.6
125.0	83.3	67.2	54.5	38.4
160.0	93.3	79.9	64.3	50.9
200.0	89.7	78.8	60.3	49.4
250.0	93.7	85.1	63.8	55.2
315.0	94.2	87.6	63.4	56.8
400.0	98.0	93.2	65.5	60.7
500.0	94.9	91.7	59.5	56.3
630.0	96.1	94.2	53.4	51.5
800.0	98.6	97.8	56.9	56.1
1000.0	100.2	100.2	67.5	67.5
1250.0	98.4	99.0	69.3	69.9
1600.0	96.5	97.5	67.1	68.1
2000.0	96.0	97.2	59.3	60.5
2500.0	92.0	93.3	61.0	62.3
3150.0	89.9	91.1	58.5	59.7
4000.0	92.1	93.1	61.3	62.3
5000.0	91.1	91.6	58.7	59.2
6300.0	87.9	87.8	56.5	56.4
8000.0	88.3	87.2	57.4	56.3
	UNWEIGHTED= 110.5	UNWEIGHTED= 80.3		
	A-WEIGHTED= 107.1	A-WEIGHTED= 75.1		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 4.4  
 EXHAUST BACK PRESSURE (IN-WATER), 4.1  
 INTAKE RESTRICTION (IN-WATER) 3.0  
 ENGINE NOISE EFFICIENCY(DB)= -49.5  
 ENGINE NOISE EFFICIENCY(OBA)= -51.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	83.4	48.8	54.9	20.3
50.0	80.9	50.7	52.4	22.2
63.0	81.4	55.2	52.8	26.6
80.0	81.4	77.9	71.5	49.3
100.0	81.4	62.3	52.7	33.6
125.0	81.3	65.2	52.5	36.4
160.0	89.1	75.7	60.1	46.7
200.0	90.7	79.8	61.3	50.4
250.0	90.7	82.1	60.8	52.2
315.0	90.2	83.6	59.4	52.5
400.0	89.3	84.5	56.8	52.3
500.0	92.6	89.4	57.2	54.2
630.0	92.8	90.9	50.1	48.2
800.0	94.6	93.8	52.9	52.1
1000.0	95.0	95.0	62.3	52.3
1250.0	94.9	95.5	65.8	46.4
1600.0	92.8	93.8	63.4	44.4
2000.0	93.0	94.2	56.3	47.5
2500.0	89.5	90.8	58.5	59.8
3150.0	87.1	88.3	55.7	56.9
4000.0	90.6	91.6	59.8	60.8
5000.0	88.4	88.9	56.0	56.5
6300.0	83.1	83.0	51.7	51.6
8000.0	83.0	81.9	52.1	51.6
	UNWEIGHTED= 105.6		UNWEIGHTED= 75.2	
	A-WEIGHTED= 103.3		A-WEIGHTED= 71.5	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1300.0  
 HORSEPOWER 198.0  
 EXHAUST BACK PRESSURE (IN-WATER), 15.0  
 INTAKE RESTRICTION (IN-WATER) 5.4  
 ENGINE NOISE EFFICIENCY(DB)= -62.6  
 ENGINE NOISE EFFICIENCY(DBA)= -65.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	48.0	54.1	19.5
50.0	86.9	56.7	58.4	28.2
63.0	88.9	62.7	60.3	34.1
80.0	93.4	73.2	66.8	44.6
100.0	91.2	72.1	62.5	43.4
125.0	89.5	73.4	60.7	44.6
160.0	102.6	89.2	73.6	60.2
200.0	100.7	89.8	71.3	60.4
250.0	91.9	83.3	62.0	53.4
315.0	95.2	88.6	64.4	57.8
400.0	97.3	92.5	64.8	60.0
500.0	93.4	90.2	58.0	54.8
630.0	94.3	92.4	51.6	49.7
800.0	96.1	95.3	54.4	53.6
1000.0	95.5	95.5	62.8	62.8
1250.0	96.9	97.5	67.8	68.4
1500.0	95.8	96.8	66.4	67.4
2000.0	95.0	96.2	58.3	59.5
2500.0	95.3	96.6	64.3	65.6
3150.0	93.1	94.3	61.7	62.9
4000.0	93.1	94.1	62.3	63.3
5000.0	91.1	91.6	58.7	59.2
6300.0	87.9	87.8	56.5	56.4
8000.0	89.8	87.7	57.9	56.8
	UNWEIGHTED= 109.1		UNWEIGHTED= 78.8	
	A-WEIGHTED= 106.2		A-WEIGHTED= 74.7	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM)=	1300.0			
HORSEPOWER	97.2			
EXHAUST BACK PRESSURE (IN-WATER),	8.1			
INTAKE RESTRICTION (IN-WATER)	2.9			
ENGINE NOISE EFFICIENCY (DB)=	-61.7			
ENGINE NOISE EFFICIENCY (DBA)=	-63.5			

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	80.6	46.0	52.1	17.5
50.0	85.1	54.9	56.6	26.4
63.0	92.9	66.7	64.3	38.1
80.0	92.1	69.9	63.5	41.3
100.0	89.9	70.8	61.2	42.1
125.0	86.8	70.7	58.0	41.9
160.0	98.1	84.7	69.1	55.7
200.0	94.5	83.6	65.1	54.2
250.0	80.9	81.3	60.0	51.4
315.0	91.0	84.4	60.2	53.0
400.0	93.3	88.5	60.8	56.0
500.0	94.1	90.9	58.7	55.5
630.0	92.8	90.9	50.1	48.2
800.0	95.9	95.1	54.2	53.4
1000.0	97.5	97.5	64.8	64.8
1250.0	96.4	97.0	67.3	67.9
1600.0	95.5	96.5	66.1	67.1
2000.0	93.5	94.7	56.8	58.0
2500.0	91.3	92.6	60.3	61.6
3150.0	89.1	90.3	57.7	58.9
4000.0	91.3	92.3	60.5	61.5
5000.0	91.4	91.9	59.0	59.5
6300.0	86.4	86.3	55.0	54.9
8000.0	85.0	83.9	54.1	53.0
	UNWEIGHTED=	106.9	UNWEIGHTED=	76.0
	A-WEIGHTED=	105.1	A-WEIGHTED=	73.4

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1300.0  
 HORSEPOWER 4.4  
 EXHAUST BACK PRESSURE (IN-WATER), 2.7  
 INTAKE RESTRICTION (IN-WATER) 2.2  
 ENGINE NOISE EFFICIENCY(DB)= -51.0  
 ENGINE NOISE EFFICIENCY(DBA)= -53.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	81.6	47.0	53.1	18.5
50.0	81.9	51.7	53.4	23.2
63.0	84.7	58.5	56.1	29.9
80.0	91.4	69.2	62.8	40.6
100.0	83.9	64.8	55.2	36.1
125.0	85.0	69.7	57.0	40.9
160.0	96.3	82.9	67.3	53.9
200.0	92.0	81.1	62.6	51.7
250.0	85.4	76.8	55.5	46.9
315.0	90.0	83.4	59.2	52.6
400.0	89.5	84.7	57.0	53.5
500.0	92.1	88.9	56.7	47.5
630.0	92.1	90.2	49.4	49.6
800.0	92.1	91.3	50.4	61.8
1000.0	94.5	94.5	61.8	64.4
1250.0	92.9	93.5	63.8	53.4
1600.0	91.8	92.8	62.4	56.7
2000.0	92.2	93.4	55.5	58.3
2500.0	88.0	89.3	57.0	55.2
3150.0	85.4	86.6	54.0	40.0
4000.0	89.8	90.8	59.0	55.2
5000.0	87.1	87.6	54.7	50.4
6300.0	81.9	81.8	50.5	49.3
8000.0	81.3	80.2	50.4	73.2
	UNWEIGHTED=	104.2	UNWEIGHTED=	70.3
	A-WEIGHTED=	102.2	A-WEIGHTED=	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1200.0  
 HORSEPOWER 187.0  
 EXHAUST BACK PRESSURE (IN-WATER), 10.9  
 INTAKE RESTRICTION (IN-WATER) 4.4  
 ENGINE NOISE EFFICIENCY (DB) = -62.3  
 ENGINE NOISE EFFICIENCY (DBA) = -65.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	89.9	55.3	61.4	26.8
50.0	98.4	68.2	69.9	39.7
63.0	102.9	76.7	74.3	48.1
80.0	92.4	70.2	63.8	41.6
100.0	88.4	69.3	59.7	40.6
125.0	93.0	76.9	64.2	48.1
160.0	97.6	84.2	68.6	55.2
200.0	94.2	83.3	64.8	53.9
250.0	92.2	83.6	62.3	53.7
315.0	93.0	86.4	62.2	55.6
400.0	95.5	90.7	63.0	58.2
500.0	93.9	90.7	58.5	55.3
630.0	96.3	94.4	53.6	51.7
800.0	94.9	94.1	53.2	52.4
1000.0	96.0	96.0	63.3	63.3
1250.0	98.4	99.0	69.9	69.9
1600.0	95.5	96.5	66.1	67.1
2000.0	94.0	95.2	57.3	58.5
2500.0	94.8	96.1	63.8	65.1
3150.0	91.9	93.1	60.5	61.7
4000.0	92.3	93.3	61.5	62.5
5000.0	90.6	91.1	58.2	58.7
6300.0	88.1	88.0	56.7	56.6
8000.0	89.0	87.9	58.1	57.0
	UNWEIGHTED = 109.2		UNWEIGHTED = 79.2	
	A-WEIGHTED = 106.0		A-WEIGHTED = 74.6	

NOTE (DB (RE 10-12 WATTS))  
 PWL (DB (RE 0.0002 MICRO BARS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)=	1200.0				
HORSEPOWER	93.5				
EXHAUST BACK PRESSURE (IN-WATER),		2.4			6.8
INTAKE RESTRICTION (IN-WATER)		-61.6			
ENGINE NOISE EFFICIENCY(DBA)=		-63.8			

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	86.1	51.5	57.6	23.0
50.0	93.4	63.2	64.9	34.7
63.0	97.7	71.5	69.1	42.9
80.0	86.6	66.4	60.0	37.8
100.0	85.4	66.3	56.7	37.6
125.0	90.5	74.4	61.7	45.6
160.0	94.1	80.7	65.1	51.7
200.0	94.2	83.3	64.8	53.9
250.0	91.2	82.6	61.3	52.7
315.0	94.7	88.1	63.9	57.3
400.0	94.0	89.2	61.5	56.7
500.0	92.4	89.2	57.0	53.8
630.0	92.8	90.9	50.1	48.2
800.0	95.9	95.1	54.2	53.4
1000.0	95.7	95.7	63.0	63.0
1250.0	96.1	96.7	67.0	67.6
1500.0	95.0	96.0	65.6	66.6
2000.0	93.5	94.7	56.8	58.0
2500.0	90.0	91.3	59.0	60.3
3150.0	88.9	90.1	57.5	58.7
4000.0	90.8	91.8	60.0	61.0
5000.0	91.4	91.9	59.0	59.5
6300.0	86.1	86.0	54.7	54.6
8000.0	85.3	84.2	54.4	53.3
	UNWEIGHTED=	106.9	UNWEIGHTED=	76.2
	A-WEIGHTED=	104.6	A-WEIGHTED=	72.9

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM) = 1200.0  
 HORSEPOWER 4.4  
 EXHAUST BACK PRESSURE (IN-WATER), 2.7  
 INTAKE RESTRICTION (IN-WATER) 1.0  
 ENGINE NOISE EFFICIENCY(DB) = -52.2  
 ENGINE NOISE EFFICIENCY(DBA) = -53.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	84.9	50.3	56.4	21.9
50.0	82.1	51.9	53.6	23.4
63.0	82.2	56.0	53.6	27.4
80.0	85.4	63.2	56.8	34.6
100.0	79.7	60.6	51.0	31.9
125.0	87.3	71.2	58.5	42.4
160.0	94.6	81.2	65.6	52.2
200.0	87.2	76.3	57.8	46.9
250.0	85.9	77.3	56.0	47.4
315.0	88.5	81.9	57.7	51.1
400.0	89.8	85.0	57.3	52.5
500.0	90.6	87.4	55.2	52.0
630.0	92.3	90.4	49.6	47.7
800.0	92.4	91.6	50.7	49.9
1000.0	91.5	91.5	58.8	58.8
1250.0	93.1	93.7	64.0	64.6
1500.0	91.3	92.3	61.9	62.9
2000.0	90.7	91.9	54.0	55.2
2500.0	87.5	88.8	56.5	57.8
3150.0	85.1	86.3	53.7	54.9
4000.0	88.1	89.1	57.3	58.3
5000.0	86.1	86.6	53.7	54.2
6300.0	80.9	80.8	49.5	49.4
8000.0	79.5	78.4	48.6	47.5
	UNWEIGHTED= 103.0		UNWEIGHTED=	71.8
	A-WEIGHTED= 101.3		A-WEIGHTED=	69.5

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

I.4 1673C Engine Sound Power Level and  
50-ft. SPL Spectrums (Effect of  
Intake and Exhaust Restriction)

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 2200.0  
 HORSEPOWER = 234.5  
 EXHAUST BACK PRESSURE (IN-WATER), 30.8  
 INTAKE RESTRICTION (IN-WATER) 12.6  
 ENGINE NOISE EFFICIENCY (DB) = -63.9  
 ENGINE NOISE EFFICIENCY (DBA) = -63.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	84.6	54.0	60.1	25.5
50.0	84.1	53.9	55.6	25.4
63.0	86.4	60.2	57.8	31.6
80.0	99.6	77.4	71.0	48.8
100.0	84.9	65.8	56.2	37.1
125.0	93.0	76.9	64.2	48.1
160.0	104.8	91.4	75.8	62.4
200.0	98.2	87.3	68.8	57.9
250.0	99.4	90.8	69.5	60.9
315.0	97.7	91.1	66.9	60.3
400.0	99.0	94.2	66.5	61.7
500.0	100.1	96.9	64.7	61.5
630.0	97.8	95.9	55.1	53.2
800.0	98.1	97.3	56.4	55.6
1000.0	97.7	97.7	55.0	65.0
1250.0	101.6	102.2	72.5	73.1
1500.0	98.0	99.0	68.6	69.6
2000.0	97.2	98.4	60.5	61.7
2500.0	97.0	98.3	66.0	67.3
3150.0	95.1	96.3	63.7	64.9
4000.0	94.3	95.3	63.5	64.5
5000.0	94.1	94.6	61.7	62.2
6300.0	90.1	90.0	58.7	58.6
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED= 111.5		UNWEIGHTED=	81.0
	A-WEIGHTED= 108.9		A-WEIGHTED=	77.6

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0  
 HORSEPOWER 229.1  
 EXHAUST BACK PRESSURE (IN-WATER), 30.8  
 INTAKE RESTRICTION (IN-WATER) 20.5  
 ENGINE NOISE EFFICIENCY(DB)= -61.5  
 ENGINE NOISE EFFICIENCY(DBA)= -63.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	89.6	55.0	61.1	26.5
50.0	81.1	50.9	52.6	22.4
63.0	83.4	57.2	54.8	28.6
80.0	98.6	76.4	70.0	47.8
100.0	85.9	66.8	57.2	38.1
125.0	91.0	74.9	62.2	46.1
160.0	103.8	90.4	74.8	61.4
200.0	97.2	86.3	67.8	56.9
250.0	98.4	89.8	68.5	59.9
315.0	96.7	90.1	65.9	59.3
400.0	98.0	93.2	65.5	60.7
500.0	99.1	95.9	63.7	60.5
630.0	97.8	95.9	55.1	53.2
800.0	97.1	96.3	55.4	54.6
1000.0	96.7	96.7	64.0	64.0
1250.0	100.6	101.2	71.5	72.1
1600.0	98.0	99.0	68.6	69.6
2000.0	98.2	99.4	61.5	62.7
2500.0	97.0	98.3	66.0	67.3
3150.0	95.1	96.3	63.7	64.9
4000.0	94.3	95.3	63.5	64.5
5000.0	93.1	93.6	60.7	61.2
6300.0	89.1	89.0	57.7	57.6
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED= 110.8		UNWEIGHTED= 80.2	
	A-WEIGHTED= 108.5		A-WEIGHTED= 77.0	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 2200.0  
 HORSEPOWER 221.2  
 EXHAUST BACK PRESSURE (IN-WATER), 30.8  
 INTAKE RESTRICTION (IN-WATER) 40.5  
 ENGINE NOISE EFFICIENCY (DB) = -61.6  
 ENGINE NOISE EFFICIENCY (DBA) = -64.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	88.6	54.0	60.1	25.5
50.0	83.1	52.9	54.6	24.4
63.0	84.4	58.2	55.8	29.6
80.0	97.6	75.4	69.0	46.8
100.0	84.9	65.8	56.2	37.1
125.0	90.0	73.9	61.2	45.1
160.0	103.8	90.4	74.8	61.4
200.0	96.2	85.3	66.8	55.9
250.0	97.4	88.8	67.5	58.9
315.0	95.7	89.1	64.9	58.3
400.0	99.0	94.2	66.5	61.7
500.0	99.1	95.9	63.7	60.5
630.0	97.8	95.9	55.1	53.2
800.0	97.1	96.3	55.4	54.6
1000.0	97.7	97.7	65.0	65.0
1250.0	99.6	100.2	70.5	71.1
1500.0	99.0	100.0	69.6	70.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.0	97.3	65.0	66.3
3150.0	94.1	95.3	62.7	63.9
4000.0	93.3	94.3	62.5	63.5
5000.0	93.1	93.6	60.7	61.2
6300.0	90.1	90.0	58.7	58.6
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED = 110.5	UNWEIGHTED = 79.8		
	A-WEIGHTED = 108.2	A-WEIGHTED = 76.7		

NOTE (DB (RE 10-12 WATTS))  
 PWL (DB (RE 0.0002 MICRO BARS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0		HORSEPOWER 208.6		EXHAUST BACK PRESSURE (IN-WATER), 30.0		INTAKE RESTRICTION (IN-WATER) 60.3		ENGINE NOISE EFFICIENCY(DB)= -61.0		ENGINE NOISE EFFICIENCY(DBA)= -63.8	
FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PHL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL							
40.0	92.6	58.0	64.1	29.5							
50.0	82.1	51.9	53.6	23.4							
63.0	83.4	57.2	54.8	28.6							
80.0	97.6	75.4	69.0	46.8							
100.0	84.9	65.8	56.2	37.1							
125.0	89.0	72.9	60.2	44.1							
160.0	101.0	88.4	72.8	59.4							
200.0	95.2	84.3	65.8	54.9							
250.0	95.4	86.8	65.5	56.9							
315.0	95.7	89.1	64.9	58.3							
400.0	100.0	95.2	67.5	62.7							
500.0	98.1	94.9	62.7	59.5							
630.0	98.0	96.9	56.1	54.2							
800.0	97.1	96.3	55.4	54.6							
1000.0	96.7	96.7	64.0	64.0							
1250.0	99.6	100.2	70.5	71.1							
1600.0	98.0	99.0	68.6	69.6							
2000.0	97.2	98.4	60.5	61.7							
2500.0	97.0	98.3	66.0	67.3							
3150.0	94.1	95.3	62.7	63.9							
4000.0	92.3	93.3	61.5	62.5							
5000.0	93.1	93.6	60.7	61.2							
6300.0	89.1	89.0	57.7	57.6							
8000.0	90.5	89.4	59.6	58.5							
	UNWEIGHTED= 110.1	UNWEIGHTED=	UNWEIGHTED=	UNWEIGHTED=							
	A-WEIGHTED= 108.1	A-WEIGHTED=	A-WEIGHTED=	A-WEIGHTED=							

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0  
 HORSEPOWER 226.9  
 EXHAUST BACK PRESSURE (IN-WATER), 50.5  
 INTAKE RESTRICTION (IN-WATER) 12.1  
 ENGINE NOISE EFFICIENCY(DB)= -61.2  
 ENGINE NOISE EFFICIENCY(DBA)= -63.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PHL	A-WEIGHTED PHL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.6	57.0	63.1	28.5
50.0	82.1	51.9	53.6	23.4
63.0	84.4	58.2	55.8	29.6
80.0	99.6	77.4	71.0	48.8
100.0	84.9	65.8	56.2	37.1
125.0	91.0	74.9	62.2	46.1
160.0	104.0	91.4	75.0	62.4
200.0	95.2	84.3	65.8	54.9
250.0	95.4	86.8	65.5	56.9
315.0	96.7	90.1	65.9	59.3
400.0	99.0	94.2	66.5	61.7
500.0	100.1	96.9	64.7	61.5
630.0	97.8	95.9	55.1	53.2
800.0	99.1	98.3	57.4	56.6
1000.0	97.7	97.7	65.0	65.0
1250.0	99.6	100.2	70.5	71.1
1600.0	99.0	100.0	69.6	70.6
2000.0	97.2	98.4	60.5	61.7
2500.0	97.0	98.3	66.0	67.3
3150.0	94.1	95.3	62.7	63.9
4000.0	93.3	94.3	62.5	63.5
5000.0	93.1	93.6	60.7	61.2
6300.0	90.1	90.0	58.7	58.6
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED= 111.1		UNWEIGHTED= 80.4	
	A-WEIGHTED= 108.6		A-WEIGHTED= 76.9	

NOTE  
 PHL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0  
 HORSEPOWER 225.9  
 EXHAUST BACK PRESSURE (IN-WATER), 50.5  
 INTAKE RESTRICTION (IN-WATER) 20.5  
 ENGINE NOISE EFFICIENCY(OB)= -61.2  
 ENGINE NOISE EFFICIENCY(OBA)= -63.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.6	57.0	63.1	28.5
50.0	82.1	51.9	53.6	23.4
63.0	84.4	58.2	55.8	29.6
80.0	99.6	77.4	71.0	48.8
100.0	84.9	65.8	56.2	37.1
125.0	91.0	74.9	62.2	46.1
160.0	104.8	91.4	75.8	62.4
200.0	95.2	84.3	65.8	54.9
250.0	95.4	86.8	65.5	56.9
315.0	96.7	90.1	65.9	59.3
400.0	98.0	93.2	65.5	60.7
500.0	100.1	96.9	64.7	61.5
630.0	97.8	95.9	55.1	53.2
800.0	98.1	97.3	56.4	55.6
1000.0	97.7	97.7	65.0	65.0
1250.0	100.6	101.2	71.5	72.1
1600.0	99.0	100.0	69.6	70.6
2000.0	97.2	98.4	60.5	61.7
2500.0	97.0	98.3	66.0	67.3
3150.0	94.1	95.3	62.7	63.9
4000.0	93.3	94.3	62.5	63.5
5000.0	93.1	93.6	60.7	61.2
6300.0	89.1	89.0	57.7	57.6
8000.0	90.5	89.4	59.6	58.5
	UNWEIGHTED= 111.1		UNWEIGHTED= 80.5	
	A-WEIGHTED= 108.6		A-WEIGHTED= 77.1	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0  
 HORSEPOWER 218.7  
 EXHAUST BACK PRESSURE (IN-WATER), 50.5  
 INTAKE RESTRICTION (IN-WATER) 40.5  
 ENGINE NOISE EFFICIENCY(DB)= -61.7  
 ENGINE NOISE EFFICIENCY(OBA)= -64.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.6	57.0	63.1	28.5
50.0	80.1	49.9	51.6	21.4
63.0	82.4	56.2	53.8	27.6
80.0	98.6	76.4	70.0	47.8
100.0	83.9	64.8	55.2	36.1
125.0	91.0	74.9	62.2	46.1
160.0	103.8	90.4	74.8	61.4
200.0	95.2	84.3	65.8	54.9
250.0	95.4	86.8	65.5	56.9
315.0	95.7	89.1	64.9	58.3
400.0	99.0	94.2	66.5	61.7
500.0	100.1	96.9	64.7	61.5
630.0	97.8	95.9	55.1	53.2
800.0	97.1	96.3	55.4	54.6
1000.0	96.7	96.7	64.0	64.0
1250.0	98.6	99.2	69.5	70.1
1600.0	99.0	100.0	69.6	70.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	93.3	94.3	62.5	63.5
5000.0	93.1	93.6	60.7	61.2
6300.0	89.1	89.0	57.7	57.6
8000.0	90.5	89.4	59.6	58.5
	UNWEIGHTED= 110.4		UNWEIGHTED= 79.7	
	A-WEIGHTED= 107.9		A-WEIGHTED= 76.3	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0  
 HORSEPOWER 207.6  
 EXHAUST BACK PRESSURE (IN-WATER), 50.5  
 INTAKE RESTRICTION (IN-WATER) 60.3  
 ENGINE NOISE EFFICIENCY(DB)= -61.8  
 ENGINE NOISE EFFICIENCY(OBA)= -64.1

FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PWL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	92.6	58.0	64.1	29.5
50.0	81.1	50.9	52.6	22.4
63.0	84.4	58.2	55.8	29.6
80.0	98.6	76.4	70.0	47.8
100.0	82.9	63.8	54.2	35.1
125.0	90.0	73.9	61.2	45.1
160.0	101.8	88.4	72.8	59.4
200.0	94.2	83.3	64.8	53.9
250.0	94.4	85.8	64.5	55.9
315.0	94.7	88.1	63.9	57.3
400.0	100.0	95.2	67.5	62.7
500.0	100.1	96.9	64.7	61.5
630.0	99.8	97.9	57.1	55.2
800.0	98.1	97.3	56.4	55.6
1000.0	96.7	96.7	64.0	64.0
1250.0	98.6	99.2	69.5	70.1
1600.0	97.0	98.0	67.6	68.6
2000.0	95.2	96.4	58.5	59.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	93.3	94.3	62.5	63.5
5000.0	93.1	93.6	60.7	61.2
6300.0	89.1	89.0	57.7	57.6
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED= 110.1		UNWEIGHTED= 79.0	
	A-WEIGHTED= 107.8		A-WEIGHTED= 75.8	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0  
 HORSEPOWER 226.8  
 EXHAUST BACK PRESSURE (IN-WATER), 70.2  
 INTAKE RESTRICTION (IN-WATER) 11.8  
 ENGINE NOISE EFFICIENCY(DB)= -60.9  
 ENGINE NOISE EFFICIENCY(DBA)= -63.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	94.6	60.0	66.1	31.5
50.0	81.1	50.9	52.4	22.4
63.0	83.4	57.2	54.8	28.6
80.0	100.6	78.4	72.0	49.8
100.0	83.9	64.8	55.2	36.1
125.0	92.0	75.9	63.2	47.1
160.0	105.8	92.4	76.8	63.4
200.0	95.2	84.3	65.8	54.9
250.0	94.4	85.8	64.5	53.9
315.0	96.7	90.1	65.9	59.3
400.0	99.0	94.2	66.5	61.7
500.0	100.1	96.9	64.7	61.5
630.0	97.8	95.9	55.1	53.2
800.0	99.1	98.3	57.4	56.6
1000.0	96.7	96.7	64.0	64.0
1250.0	99.6	100.2	70.5	71.1
1600.0	98.0	99.0	68.6	69.6
2000.0	96.2	97.4	59.5	60.7
2500.0	97.0	98.3	66.0	67.3
3150.0	95.1	96.3	63.7	64.9
4000.0	93.3	94.3	62.5	63.5
5000.0	94.1	94.6	61.7	62.2
6300.0	90.1	90.0	58.7	58.6
8000.0	91.5	90.4	60.6	59.5
	UNWEIGHTED= 111.4	UNWEIGHTED= 80.9	UNWEIGHTED= 80.9	UNWEIGHTED= 80.9
	A-WEIGHTED= 108.4	A-WEIGHTED= 76.7	A-WEIGHTED= 76.7	A-WEIGHTED= 76.7

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0  
 HORSEPOWER 225.4  
 EXHAUST BACK PRESSURE (IN-WATER), 70.2  
 INTAKE RESTRICTION (IN-WATER) 20.5  
 ENGINE NOISE EFFICIENCY(DB)= -61.5  
 ENGINE NOISE EFFICIENCY(DBA)= -64.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	92.6	58.0	64.1	29.5
50.0	80.1	49.9	51.6	21.4
63.0	82.4	56.2	53.8	27.6
80.0	98.6	76.4	70.0	47.8
100.0	82.9	63.8	54.2	35.1
125.0	91.0	74.9	62.2	46.1
160.0	104.8	91.4	75.8	62.4
200.0	95.2	84.3	65.8	54.9
250.0	94.4	85.8	64.5	55.9
315.0	95.7	89.1	64.9	58.3
400.0	99.0	94.2	66.5	61.7
500.0	101.1	97.9	65.7	62.5
630.0	97.8	95.9	55.1	53.2
800.0	97.1	96.3	55.4	54.6
1000.0	96.7	96.7	64.0	64.0
1250.0	99.6	100.2	70.5	71.1
1600.0	97.0	98.0	67.6	68.6
2000.0	97.2	98.4	60.5	61.7
2500.0	96.0	97.3	65.0	66.3
3150.0	94.1	95.3	62.7	63.9
4000.0	93.3	94.3	62.5	63.5
5000.0	93.1	93.6	60.7	61.2
6300.0	89.1	89.0	57.7	57.6
8000.0	90.5	89.4	59.6	58.5
	UNWEIGHTED= 110.8		UNWEIGHTED= 80.0	
	A-WEIGHTED= 100.0		A-WEIGHTED= 76.3	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2200.0  
 HORSEPOWER 214.7  
 EXHAUST BACK PRESSURE (IN-WATER), 70.2  
 INTAKE RESTRICTION (IN-WATER) 40.5  
 ENGINE NOISE EFFICIENCY(DB)= -61.7  
 ENGINE NOISE EFFICIENCY(DBA)= -64.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	90.6	56.0	62.1	27.5
50.0	81.1	50.9	52.6	22.4
63.0	81.4	55.2	52.0	26.6
80.0	98.6	76.4	70.0	47.8
100.0	82.9	63.8	54.2	35.1
125.0	91.0	74.9	62.2	46.1
160.0	103.8	90.4	74.8	61.4
200.0	94.2	83.3	64.8	53.9
250.0	94.4	85.8	64.5	55.9
315.0	99.7	89.1	64.9	58.3
400.0	100.0	95.2	67.5	62.7
500.0	101.1	97.9	65.7	62.5
630.0	98.8	96.9	56.1	54.2
800.0	96.1	95.3	54.4	53.6
1000.0	96.7	96.7	64.0	64.0
1250.0	97.6	98.2	68.5	69.1
1600.0	96.0	97.0	66.6	67.6
2000.0	96.2	97.4	59.5	60.7
2500.0	95.0	96.3	64.0	65.3
3150.0	94.1	95.3	62.7	63.9
4000.0	93.3	94.3	62.5	63.5
5000.0	92.1	92.6	59.7	60.2
6300.0	88.1	88.0	56.7	56.6
8000.0	90.5	89.4	59.6	58.5
	UNWEIGHTED= 110.3		UNWEIGHTED= 79.4	
	A-WEIGHTED= 107.5		A-WEIGHTED= 75.4	

NOTE  
 PWL (JOB (RE 10-12 WATTS))  
 SPL (JOB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 215.7  
 EXHAUST BACK PRESSURE (IN-WATER), 30.3  
 INTAKE RESTRICTION (IN-WATER) 12.5  
 ENGINE NOISE EFFICIENCY(DB)= -62.7  
 ENGINE NOISE EFFICIENCY(DBA)= -64.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.6	42.0	48.1	13.5
50.0	87.1	56.9	58.6	28.4
63.0	82.4	56.2	53.8	27.6
80.0	94.6	72.4	66.0	43.8
100.0	83.9	64.8	55.2	36.1
125.0	87.0	70.9	58.2	42.1
160.0	99.8	86.4	70.8	57.4
200.0	98.2	87.3	68.8	57.9
250.0	97.4	88.8	67.5	58.9
315.0	98.7	92.1	67.9	61.3
400.0	96.0	91.2	63.5	58.7
500.0	98.1	94.9	62.7	59.5
630.0	97.8	95.9	55.1	53.2
800.0	97.1	96.3	55.4	54.6
1000.0	95.7	95.7	63.0	63.0
1250.0	99.6	100.2	70.5	71.1
1600.0	96.0	97.0	66.6	67.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	93.3	94.3	62.5	63.5
5000.0	90.1	90.6	57.7	58.2
6300.0	87.1	87.0	55.7	55.6
8000.0	88.5	87.4	57.6	56.5
	UNWEIGHTED= 109.4		UNWEIGHTED= 78.4	
	A-WEIGHTED= 107.3		A-WEIGHTED= 75.7	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 215.3  
 EXHAUST BACK PRESSURE (IN-WATER), 30.3  
 INTAKE RESTRICTION (IN-WATER) 20.4  
 ENGINE NOISE EFFICIENCY(DB)= -62.4  
 ENGINE NOISE EFFICIENCY(DBA)= -64.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	86.1	55.9	57.6	27.4
63.0	82.4	56.2	53.8	27.6
80.0	94.6	72.4	66.0	43.8
100.0	83.9	64.8	55.2	36.1
125.0	86.0	69.9	57.2	41.1
160.0	98.8	85.4	69.8	56.4
200.0	99.2	88.3	69.8	58.9
250.0	98.4	89.8	68.5	59.9
315.0	99.7	93.1	68.9	62.3
400.0	97.0	92.2	64.5	59.7
500.0	99.1	95.9	63.7	50.5
630.0	97.8	95.9	55.1	53.2
800.0	97.1	96.3	55.4	54.6
1000.0	96.7	96.7	64.0	64.0
1250.0	99.6	100.2	70.5	71.1
1500.0	96.0	97.0	66.6	67.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	92.3	93.3	61.5	62.5
5000.0	90.1	90.6	57.7	58.2
6300.0	87.1	87.0	55.7	55.6
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED= 109.7		UNWEIGHTED=	78.6
	A-WEIGHTED= 107.5		A-WEIGHTED=	75.8

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1900.0  
 HORSEPOWER = 277.2  
 EXHAUST BACK PRESSURE (IN-WATER), 30.3  
 INTAKE RESTRICTION (IN-WATER), 40.4  
 ENGINE NOISE EFFICIENCY (DB) = -62.5  
 ENGINE NOISE EFFICIENCY (DBA) = -64.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED SPL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	75.6	44.0	50.1	15.5
50.0	85.1	54.9	56.6	26.4
63.0	84.4	58.2	55.8	29.6
80.0	96.6	74.4	68.0	45.8
100.0	84.9	65.8	56.2	37.1
125.0	84.0	67.9	55.2	39.1
160.0	96.8	83.4	67.8	54.4
200.0	96.2	85.3	66.8	55.9
250.0	97.4	88.8	67.5	58.9
315.0	102.7	94.1	69.9	63.3
400.0	97.4	92.2	64.5	59.7
500.0	96.1	92.9	60.7	57.5
630.0	96.3	94.9	54.1	52.2
800.0	98.1	97.3	56.4	55.6
1000.0	96.7	96.7	64.0	64.0
1250.0	100.6	101.2	71.5	72.1
1600.0	95.0	97.0	66.6	67.6
2000.0	97.2	98.4	60.5	61.7
2500.0	95.0	96.3	64.0	65.3
3150.0	93.1	94.3	61.7	62.9
4000.0	92.3	93.3	61.5	62.5
5000.0	92.1	90.6	57.7	58.2
6300.0	87.1	87.0	55.7	55.6
8000.0	87.5	86.4	56.6	55.6
	UNWEIGHTED = 109.4	UNWEIGHTED = 78.3		
	A-WEIGHTED = 147.6	A-WEIGHTED = 76.0		

NOT  
 P.W. (JB (PL 10-12 W-TTS))  
 SPL (DB (RE 0.002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0		ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
FREQUENCY	UNWEIGHTED PwL	A-WEIGHTED PwL	UNWEIGHTED SPL	A-WEIGHTED SPL	
40.0	81.6	47.0	53.1	18.5	
50.0	81.1	52.9	52.6	22.4	
63.0	82.4	56.2	53.8	27.6	
80.0	95.6	73.4	67.0	44.8	
100.0	88.9	68.8	60.2	41.1	
125.0	85.0	68.9	56.2	40.1	
160.0	94.8	81.4	65.8	52.4	
200.0	97.2	86.3	67.8	56.9	
250.0	96.4	87.8	66.5	57.9	
315.0	100.7	94.1	69.9	63.3	
400.0	99.0	93.2	65.5	60.7	
500.0	96.1	92.9	60.7	57.5	
630.0	96.8	94.9	54.1	52.2	
800.0	97.1	96.3	55.4	54.6	
1000.0	95.7	95.7	63.0	63.0	
1250.0	97.6	98.2	68.5	69.1	
1600.0	97.0	98.0	67.6	68.6	
2000.0	95.2	96.4	58.5	59.7	
2500.0	96.0	96.3	64.0	65.3	
3150.0	93.1	94.3	61.7	62.9	
4000.0	91.3	92.3	60.5	61.5	
5000.0	89.1	89.6	56.7	57.2	
6300.0	86.1	86.0	54.7	54.6	
8000.0	87.5	86.4	56.6	55.5	
	UNWEIGHTED=	108.8	UNWEIGHTED=	77.7	
	A-WEIGHTED=	176.7	A-WEIGHTED=	75.0	

HORSEPOWER 193.7  
 EXHAUST BACK PRESSURE (IN-WATER), 30.3  
 INTAKE RESTRICTION (IN-WATER) 50.4  
 ENGINE NOISE EFFICIENCY(DB) = -62.8  
 ENGINE NOISE EFFICIENCY(DBA) = -64.9

NOTE:  
 PwL (DB (RE 10-12 W-TTS))  
 SPL (DB (RE 2.0002 ICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 215.6  
 EXHAUST BACK PRESSURE (IN-WATER), 50.7  
 INTAKE RESTRICTION (IN-WATER) 12.2  
 ENGINE NOISE EFFICIENCY(DB)= -63.0  
 ENGINE NOISE EFFICIENCY(DBA)= -64.4

F-FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	85.1	54.9	56.6	26.4
63.0	82.4	56.2	53.8	27.6
80.0	93.6	71.4	65.0	42.8
100.0	86.9	67.8	58.2	39.1
125.0	85.0	68.9	56.2	40.1
160.0	97.8	84.4	68.8	55.4
200.0	97.2	86.3	67.8	56.9
250.0	94.4	85.8	64.5	55.9
315.0	97.7	91.1	66.9	60.3
400.0	98.0	93.2	65.5	60.7
500.0	95.1	91.9	59.7	56.5
630.0	96.8	94.9	54.1	52.2
800.0	98.1	97.3	56.4	55.6
1000.0	97.7	97.7	65.0	65.0
1250.0	99.6	100.2	70.5	71.1
1500.0	96.0	97.0	66.6	67.6
2000.0	97.2	98.4	60.5	61.7
2500.0	97.0	98.3	66.0	67.3
3150.0	94.1	95.3	62.7	63.9
4000.0	93.3	94.3	62.5	63.5
5000.0	90.1	90.6	57.7	58.2
6300.0	88.1	88.0	56.7	56.6
8000.0	88.5	87.4	57.6	56.5
	UNWEIGHTED= 109.1	UNWEIGHTED= 77.8		
	A-WEIGHTED= 107.6	A-WEIGHTED= 76.0		

NOTE:  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1900.3		HORSEPOWER = 213.0		EXHAUST BACK PRESSURE (IN-WATER) = 50.7		INTAKE RESTRICTION (IN-WATER) = 20.4		ENGINE NOISE EFFICIENCY (DB) = -63.3		ENGINE NOISE EFFICIENCY (DBA) = -64.9	
FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PWL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL							
40.0	83.6	49.0	55.1	20.5							
50.0	85.1	54.9	56.6	26.4							
63.0	82.4	56.2	53.8	27.6							
80.0	93.6	71.4	65.0	42.8							
100.0	87.9	68.8	59.2	40.1							
125.0	86.0	69.9	57.2	41.1							
160.0	96.8	83.4	67.8	54.4							
200.0	97.2	86.3	67.8	56.9							
250.0	95.4	86.8	65.5	56.9							
315.0	96.7	90.1	65.9	59.3							
400.0	98.7	93.2	65.5	60.7							
500.0	97.1	93.9	61.7	58.5							
630.0	96.8	94.9	54.1	52.2							
800.0	98.1	97.3	56.4	55.6							
1000.0	96.7	96.7	64.0	64.0							
1250.0	98.6	99.2	69.5	70.1							
1600.0	95.0	96.0	65.6	66.6							
2000.0	96.2	97.4	59.5	60.7							
2500.0	96.0	97.4	65.0	66.3							
3150.0	94.1	97.3	62.7	63.9							
4000.0	93.3	95.3	62.5	63.5							
5000.0	90.1	94.3	57.7	58.2							
6300.0	87.1	90.6	55.7	55.6							
8000.0	87.1	87.0	57.6	56.5							
10000.0	88.5	87.4	57.6	56.5							
	UNWEIGHTED = 108.8	UNWEIGHTED =	UNWEIGHTED =	77.4							
	A-WEIGHTED = 107.1	A-WEIGHTED =	A-WEIGHTED =	75.2							

NOTE:  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1900.0  
 HORSEPOWER 203.4  
 EXHAUST BACK PRESSURE (IN-WATER), 50.7  
 IMRKT RESTRICTION (IN-WATER) 40.4  
 ENGINE NOISE EFFICIENCY (DB) = -63.3  
 ENGINE NOISE EFFICIENCY (DBA) = -65.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	85.6	51.0	57.1	22.5
50.0	83.1	52.9	54.6	24.4
63.0	83.4	57.2	54.8	28.6
80.0	93.6	71.4	65.0	42.8
100.0	86.9	67.8	58.2	39.1
125.0	87.0	70.9	58.2	42.1
160.0	96.8	83.4	67.8	54.4
200.0	98.2	87.3	68.8	57.9
250.0	95.4	86.8	65.5	56.9
315.0	97.7	91.1	66.9	60.3
400.0	97.0	92.2	64.5	59.7
500.0	97.1	93.9	61.7	58.5
630.0	96.8	94.9	64.1	52.2
800.0	97.1	96.3	55.4	54.6
1000.0	95.7	95.7	63.0	63.0
1250.0	97.6	98.2	68.5	69.1
1600.0	96.0	97.0	66.6	67.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.3	97.3	65.0	66.3
3150.0	97.1	94.3	61.7	62.9
4000.0	91.3	92.3	60.5	61.5
5000.0	89.1	89.6	56.7	57.2
6300.0	85.1	86.0	54.7	54.6
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED = 108.6		UNWEIGHTED = 77.3	
	A-WEIGHTED = 106.7		A-WEIGHTED = 74.6	

NOTE:  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 2.0002 MICRO BARS))

ENGINE PERFORMANCE

FUELS SPEED(RPM)= 1900.7  
 HORSEPOWER 187.1  
 EXHAUST BACK PRESSURE (IN-WATER)= 50.7  
 INTAKE RESTRICTION (IN-WATER) 60.4  
 ENGINE NOISE EFFICIENCY(DB)= -62.8  
 ENGINE NOISE EFFICIENCY(DBA)= -64.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	80.6	45.0	52.1	17.5
50.0	83.1	52.9	54.6	24.4
63.0	87.4	54.2	51.0	23.6
80.0	93.6	71.4	65.0	42.8
100.0	88.9	69.8	60.2	41.1
125.0	86.0	69.9	57.2	41.1
160.0	94.8	83.4	67.8	54.4
200.0	97.2	86.3	67.8	56.9
250.0	96.4	87.8	66.9	57.9
315.0	97.7	91.1	66.9	60.3
400.0	97.2	92.2	64.5	59.7
500.0	98.1	94.9	62.7	59.5
630.0	96.8	94.9	54.1	52.2
800.0	98.1	97.3	56.4	55.6
1000.0	95.7	95.7	63.0	63.0
1250.0	98.6	99.2	69.5	70.1
1600.0	95.0	96.0	65.6	66.6
2000.0	95.2	96.4	58.5	59.7
2500.0	95.7	96.3	64.0	65.3
3150.0	93.1	94.3	61.7	62.9
4000.0	91.3	92.3	60.5	61.5
5000.0	89.1	89.6	56.7	57.2
6300.0	86.1	86.0	54.7	54.6
8000.0	87.5	86.4	56.6	55.5
UNWEIGHTED= 108.6		UNWEIGHTED= 77.3		
A-WEIGHTED= 106.7		A-WEIGHTED= 74.8		

NOTE:  
 PWL (DB (RE 17-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PWL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.6	42.0	48.1	13.5
50.0	83.1	52.9	54.6	24.4
63.0	87.4	54.2	51.8	25.6
80.0	91.6	69.4	63.0	40.8
100.0	86.9	67.8	58.2	39.1
125.0	85.0	68.9	56.2	40.1
160.0	94.8	85.4	69.8	56.4
200.0	96.2	87.3	68.8	57.9
250.0	95.4	86.8	65.5	56.9
315.0	96.7	90.1	65.9	59.3
400.0	97.0	92.2	64.5	59.7
500.0	98.1	94.9	62.7	59.5
630.0	96.8	94.9	54.1	52.2
800.0	98.1	97.3	56.4	55.6
1000.0	95.7	95.7	63.0	63.0
1250.0	94.6	99.2	69.5	70.1
1500.0	96.0	97.0	66.6	67.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	92.3	93.3	61.5	62.5
5000.0	89.1	89.6	56.7	57.2
6300.0	86.1	86.0	54.7	54.6
8000.0	88.5	87.4	57.6	56.5
	UNWEIGHTED=	108.8	UNWEIGHTED=	77.6
	A-WEIGHTED=	107.0	A-WEIGHTED=	75.2

NOTE  
 PWL (DB (RE 10-12 W-TTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 211.2  
 EXHAUST BACK PRESSURE (IN-WATER), 70.4  
 INTAKE RESTRICTION (IN-WATER) 20.4  
 ENGINE NOISE EFFICIENCY(DB)= -62.6  
 ENGINE NOISE EFFICIENCY(DBA)= -64.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	81.6	47.0	53.1	18.5
50.0	83.1	52.9	54.6	24.4
63.0	77.4	51.2	48.8	22.6
80.0	92.6	70.4	64.0	41.8
100.0	85.9	66.8	57.2	38.1
125.0	84.0	67.9	55.2	39.1
160.0	99.8	86.4	70.8	57.4
200.0	98.2	87.3	68.8	57.9
250.0	95.4	86.8	65.5	56.9
315.0	96.7	90.1	65.9	59.3
400.0	98.0	93.2	65.5	60.7
500.0	99.1	95.9	63.7	60.5
630.0	97.8	95.9	55.1	53.2
800.0	98.1	97.3	56.4	55.6
1000.0	95.7	96.7	64.0	64.0
1250.0	99.6	100.2	70.5	71.1
1600.0	96.0	97.0	66.6	67.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	92.3	93.3	61.5	62.5
5000.0	90.1	90.6	57.7	58.2
6300.0	86.1	86.0	54.7	54.6
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED=	109.3	UNWEIGHTED=	78.1
	A-WEIGHTED=	107.4	A-WEIGHTED=	75.7

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1900.0  
 HORSEPOWER = 200.0  
 EXHAUST BACK PRESSURE (IN-WATER) = 70.4  
 INTAKE RESTRICTION (IN-WATER) = 40.4  
 ENGINE NOISE EFFICIENCY (DB) = -62.4  
 ENGINE NOISE EFFICIENCY (DBA) = -64.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	80.6	46.0	52.1	17.5
50.0	81.1	50.9	52.6	22.4
63.0	82.4	54.2	51.8	25.6
80.0	82.6	66.4	60.0	37.8
100.0	86.9	67.8	58.2	39.1
125.0	84.0	67.9	55.2	39.1
160.0	98.8	85.4	69.8	56.4
200.0	92.2	87.3	68.8	57.9
250.0	97.4	88.8	67.5	58.9
315.0	97.7	91.1	66.9	60.3
400.0	98.0	93.2	65.5	60.7
500.0	100.1	96.9	64.7	61.5
630.0	96.8	94.9	54.1	52.2
800.0	98.1	97.3	56.4	55.6
1000.0	97.7	97.7	65.0	65.0
1250.0	90.6	100.2	70.5	71.1
1500.0	95.0	96.0	65.6	66.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	91.3	92.3	60.5	61.5
5000.0	90.1	90.6	57.7	58.2
6300.0	87.1	87.0	55.7	55.6
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED = 109.4		UNWEIGHTED = 78.0	
	A-WEIGHTED = 107.5		A-WEIGHTED = 75.7	

NOTE:  
 PWL (7B (RE 10-12 WATTS))  
 SPL (7B (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 180.3  
 EXHAUST BACK PRESSURE (IN-WATER), 30.4  
 INTAKE RESTRICTION (IN-WATER) 10.1  
 ENGINE NOISE EFFICIENCY(DB)= -62.3  
 ENGINE NOISE EFFICIENCY(DBA)= -66.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	49.0	54.1	19.5
50.0	89.1	58.9	60.6	30.4
63.0	83.4	57.2	54.8	28.6
80.0	105.6	83.4	77.0	54.8
100.0	84.9	65.8	56.2	37.1
125.0	92.0	75.9	63.2	47.1
160.0	92.8	77.4	61.8	48.4
200.0	93.2	82.3	63.8	52.9
250.0	91.4	82.8	61.5	52.9
315.0	90.7	84.1	59.9	53.3
400.0	94.0	89.2	61.5	56.7
500.0	99.1	94.9	62.7	59.5
630.0	92.8	92.9	50.1	48.2
800.0	94.1	93.3	52.4	51.6
1000.0	94.7	94.7	62.0	62.0
1250.0	96.6	97.2	67.5	68.1
1500.0	95.0	96.0	65.6	66.6
2000.0	93.2	94.4	56.5	57.7
2500.0	95.0	96.3	64.0	65.3
3150.0	92.1	93.3	60.7	61.9
4000.0	97.3	91.3	59.5	60.5
5000.0	87.1	87.6	54.7	55.2
6300.0	85.1	85.0	53.7	53.6
8000.0	86.5	85.4	55.6	54.5
	UNWEIGHTED=	109.0	UNWEIGHTED=	79.1
	A-WEIGHTED=	105.1	A-WEIGHTED=	73.6

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 2.0002 MICRO BARS))

ENGINE PERFORMANCE

FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED P-WL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	48.4	54.1	19.5
50.0	87.1	56.9	58.6	28.4
63.0	83.4	57.2	54.8	28.6
80.0	104.6	82.4	76.0	53.8
100.0	93.9	64.8	55.2	36.1
125.0	91.0	74.9	62.2	46.1
160.0	88.8	75.4	59.8	46.4
200.0	93.2	62.3	63.8	52.9
250.0	92.4	83.8	62.5	53.9
315.0	90.7	84.1	59.9	53.3
400.0	93.0	88.2	60.5	55.7
500.0	96.1	92.9	60.7	57.5
630.0	93.8	91.0	51.1	49.2
800.0	94.1	93.3	52.4	51.6
1000.0	93.7	93.7	61.0	61.0
1250.0	95.6	96.2	66.5	67.1
1600.0	95.2	96.0	65.6	66.6
2000.0	94.2	95.4	57.5	58.7
2500.0	94.0	95.3	63.0	64.3
3150.0	91.1	92.3	59.7	60.9
4000.0	89.3	90.3	58.5	59.5
5000.0	87.1	87.6	54.7	55.2
6300.0	84.1	84.0	52.7	52.6
8000.0	85.5	84.4	54.6	53.5
	UNWEIGHTED= 108.2		UNWEIGHTED= 78.2	
	A-WEIGHTED= 104.5		A-WEIGHTED= 72.9	

NOTE  
 PWL (DB (RE 1<sup>-12</sup> WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1600.0  
 HP @ POWER 160.1  
 EXHAUST BACK PRESSURE (IN-WATER), 32.4  
 INTAKE RESTRICTION (IN-WATER) 50.1  
 ENGINE NOISE EFFICIENCY (DB) = -61.6  
 ENGINE NOISE EFFICIENCY (DBA) = -56.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	80.1	57.9	59.6	29.4
63.0	84.4	58.2	55.8	29.6
80.0	106.6	84.4	78.0	55.8
100.0	85.9	66.8	57.2	38.1
125.0	93.0	76.9	64.2	48.1
160.0	88.9	75.4	59.8	46.4
200.0	93.2	82.3	63.8	52.9
250.0	92.4	83.8	62.5	53.9
315.0	91.7	85.1	60.9	54.3
400.0	92.0	87.2	59.5	54.7
500.0	97.1	93.9	61.7	58.5
630.0	94.8	92.9	52.1	50.2
800.0	93.1	92.7	51.4	50.6
1000.0	92.7	92.7	60.0	60.0
1250.0	95.6	96.2	66.5	67.1
1500.0	93.0	94.0	63.6	64.6
2000.0	93.2	94.4	56.5	57.7
2500.0	94.0	95.3	63.0	64.3
3150.0	91.1	92.3	59.7	60.9
4000.0	89.3	90.3	58.5	59.5
5000.0	86.1	86.6	53.7	54.2
6300.0	84.1	84.0	52.7	52.6
8000.0	85.5	84.4	54.6	53.5
	UNWEIGHTED = 109.1		UNWEIGHTED = 79.5	
	A-WEIGHTED = 104.2		A-WEIGHTED = 72.4	

NOT  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1600.0  
 HP POWER 160.2  
 EXHAUST BACK PRESSURE (IN-WATER) 50.8  
 THROTTLE RESTRICTION (IN-WATER) 10.1  
 ENGINE NOISE EFFICIENCY (DB) = -63.3  
 ENGINE NOISE EFFICIENCY (DBA) = -56.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL UNWEIGHTED PWL	A-WEIGHTED PWL	SOUND POWER LEVEL A-WEIGHTED SPL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.4	42.0	48.1	48.1	13.5
50.0	86.1	55.9	53.8	53.8	27.4
63.0	82.4	56.2	53.8	53.8	27.6
80.0	103.6	81.4	75.0	75.0	52.8
100.0	93.9	64.8	64.8	64.8	36.1
125.0	93.2	76.9	64.2	64.2	48.1
160.0	89.8	75.4	60.8	60.8	47.4
200.0	92.2	81.3	62.8	62.8	51.9
250.0	91.4	82.8	61.5	61.5	52.9
315.0	80.7	83.1	58.9	58.9	52.3
400.0	95.0	90.2	62.5	62.5	57.7
500.0	97.1	93.9	61.7	61.7	58.5
630.0	94.8	92.9	52.1	52.1	50.2
800.0	94.1	93.3	52.4	52.4	51.6
1000.0	94.7	94.7	62.0	62.0	62.0
1250.0	95.6	96.2	66.5	66.5	67.1
1600.0	95.0	96.0	65.6	65.6	66.6
2000.0	95.2	96.4	58.5	58.5	59.7
2500.0	94.0	95.3	63.0	63.0	64.3
3150.0	91.1	92.3	59.7	59.7	60.9
4000.0	90.3	91.3	59.5	59.5	60.5
5000.0	86.1	86.6	53.7	53.7	54.2
6300.0	84.1	84.0	52.7	52.7	52.6
8000.0	85.5	84.4	54.6	54.6	53.5
	UNWEIGHTED = 128.0	UNWEIGHTED = 77.7			
	A-WEIGHTED = 104.9	A-WEIGHTED = 73.1			

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BAFS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1600.0  
 HORSEPOWER 179.7  
 EXHAUST BACK PRESSURE (IN-WATER), 50.9  
 INTAKE RESTRICTION (IN-WATER) 20.1  
 ENGINE NOISE EFFICIENCY (DB) = -63.9  
 ENGINE NOISE EFFICIENCY (DBA) = -55.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.6	42.0	48.1	13.5
50.0	87.1	56.9	58.6	28.4
63.0	88.4	54.2	51.8	25.6
80.0	102.6	80.4	74.8	51.8
100.0	82.9	63.8	54.2	35.1
125.0	92.0	75.9	63.2	47.1
160.0	88.8	75.4	59.8	46.4
200.0	92.2	81.3	62.8	51.9
250.0	91.4	82.8	61.5	52.9
315.0	91.7	84.1	59.9	53.3
400.0	94.2	89.2	61.5	56.7
500.0	97.1	93.9	61.7	58.5
630.0	92.8	90.9	50.1	48.2
800.0	93.1	92.3	51.4	50.6
1000.0	93.7	93.7	61.0	61.0
1250.0	95.6	96.2	66.5	67.1
1600.0	95.0	96.0	65.6	66.6
2000.0	94.2	95.4	57.5	58.7
2500.0	94.0	95.3	63.0	64.3
3150.0	91.1	92.3	59.7	60.9
4000.0	92.3	91.3	59.5	60.5
5000.0	86.1	86.6	53.7	54.2
6300.0	84.1	84.0	52.7	52.6
8000.0	84.5	83.4	53.6	52.5
	UNWEIGHTED= 107.4		UNWEIGHTED= 77.1	
	A-WEIGHTED= 104.5		A-WEIGHTED= 72.9	

NOTE: DB (RE 10-12 WATTS)  
 PWL (DB (RE 0.0002 MICRO BARS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 169.9  
 EXHAUST BACK PRESSURE (IN-WATER), 50.8  
 INTAKE RESTRICTION (IN-WATER) 40.3  
 ENGINE NOISE EFFICIENCY(DB)= -63.7  
 ENGINE NOISE EFFICIENCY(DBA)= -66.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	83.6	49.0	55.1	20.5
50.0	89.1	58.9	60.6	30.4
63.0	82.4	56.2	53.8	27.6
80.0	102.6	80.4	74.0	51.8
100.0	83.9	64.8	55.2	36.1
125.0	91.0	74.9	62.2	46.1
160.0	89.0	76.4	60.8	47.4
200.0	91.2	80.3	61.8	50.9
250.0	92.4	83.8	62.5	53.9
315.0	91.7	85.1	60.9	54.3
400.0	93.0	88.2	60.5	55.7
500.0	97.1	93.9	61.7	58.5
630.0	94.8	92.9	52.1	50.2
800.0	94.1	93.3	52.4	51.6
1000.0	93.7	93.7	61.0	61.0
1250.0	95.6	96.2	66.5	67.1
1600.0	94.0	95.0	64.6	65.6
2000.0	93.2	94.4	56.5	57.7
2500.0	93.0	94.3	62.0	63.3
3150.0	90.1	91.3	58.7	59.9
4000.0	89.3	90.3	58.5	59.5
5000.0	86.1	86.6	53.7	54.2
6300.0	84.1	84.0	52.7	52.6
8000.0	85.5	84.4	54.6	53.5
	UNWEIGHTED= 107.4		UNWEIGHTED= 77.0	
	A-WEIGHTED= 104.2		A-WEIGHTED= 72.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.2  
 HORSEPOWER 180.3  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 10.1  
 ENGINE NOISE EFFICIENCY(DB)= -64.1  
 ENGINE NOISE EFFICIENCY(DBA)= -56.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	94.6	50.0	56.1	21.5
50.0	97.1	56.9	58.6	28.6
63.0	87.4	54.2	51.8	25.6
80.0	100.6	78.4	72.0	49.8
100.0	81.9	62.8	53.2	34.1
125.0	97.0	73.0	61.2	45.1
160.0	80.8	76.4	60.8	47.4
200.0	93.2	82.3	63.8	52.9
250.0	93.4	84.8	63.5	54.9
315.0	91.7	85.1	60.9	54.3
400.0	94.0	89.2	61.5	56.7
500.0	97.1	93.9	61.7	58.5
630.0	94.8	92.9	52.1	50.2
800.0	94.1	93.3	52.4	51.6
1000.0	93.7	93.7	61.0	61.0
1250.0	96.6	97.2	67.5	68.1
1600.0	94.0	95.0	64.6	65.6
2000.0	95.2	96.4	58.5	59.7
2500.0	94.0	95.3	63.0	64.3
3150.0	91.1	92.3	59.7	60.9
4000.0	92.3	91.3	59.5	60.5
5000.0	84.1	86.5	53.7	54.2
6300.0	83.1	83.0	51.7	51.6
8000.0	84.5	83.4	57.6	52.5
	UNWEIGHTED= 107.2	UNWEIGHTED=	UNWEIGHTED=	UNWEIGHTED=
	A-WEIGHTED= 104.9	A-WEIGHTED=	A-WEIGHTED=	A-WEIGHTED=
				76.4
				73.1

NOTE  
 PWL (DB (RE 11-12 4 ITS))  
 SPL (DB (RE 3-2022 ICR0 BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 177.0  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 20.1  
 ENGINE NOISE EFFICIENCY(DB)= -67.9  
 ENGINE NOISE EFFICIENCY(DBA)= -66.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	48.0	54.1	19.5
50.0	87.1	56.9	58.6	28.4
63.0	82.4	54.2	51.8	25.6
80.0	100.6	78.4	72.0	49.8
100.0	81.9	62.8	53.2	34.1
125.0	91.0	74.9	62.2	46.1
150.0	89.8	76.4	60.8	47.4
200.0	94.2	83.3	64.8	53.9
250.0	94.4	85.8	64.5	55.9
315.0	92.7	86.1	61.9	55.3
400.0	94.0	89.2	61.5	56.7
500.0	97.1	93.9	61.7	58.5
630.0	94.8	92.9	52.1	50.2
800.0	95.1	94.3	53.4	52.6
1000.0	93.7	93.7	61.0	61.0
1250.0	96.6	97.2	67.5	68.1
1600.0	94.0	95.0	64.6	65.6
2000.0	95.2	96.4	58.5	59.7
2500.0	94.0	95.3	63.0	64.3
3150.0	91.1	92.3	59.7	60.9
4000.0	97.3	91.3	59.5	60.5
5000.0	85.1	86.6	53.7	54.2
6300.0	83.1	83.0	51.7	51.6
8000.0	84.5	83.4	53.6	52.5
	UNWEIGHTED= 107.3		UNWEIGHTED= 76.6	
	A-WEIGHTED= 105.0		A-WEIGHTED= 73.1	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.7  
 HOR POWER 164.  
 EXHAUST BACK PRESSURE (IN-WATER), 77.5  
 INTAKE RESTRICTION IN-WATER 42.3  
 ENGINE NOISE EFFICIENCY(DB)= -63.7  
 ENGINE NOISE EFFICIENCY(DEX)= -45.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	48.2	54.1	19.5
50.0	85.1	58.9	60.6	30.4
63.7	80.4	54.2	51.8	25.6
80.0	101.6	79.4	73.0	50.8
100.0	93.9	64.8	55.2	36.1
125.0	92.0	75.9	63.2	47.1
160.0	89.8	76.4	60.8	47.4
200.0	87.2	82.3	63.8	52.9
250.0	93.4	84.8	63.5	54.9
315.0	91.7	85.1	60.9	54.3
400.0	93.0	89.2	60.5	55.7
500.0	90.1	94.9	62.7	59.5
630.0	94.8	93.9	53.1	51.2
800.0	95.1	94.3	53.4	52.6
1000.0	94.7	94.7	62.0	62.0
1250.0	95.6	96.2	66.5	67.1
1600.0	95.3	96.0	65.6	66.6
2000.0	94.2	95.4	57.5	58.7
2500.0	94.0	95.3	63.0	64.3
3150.0	91.1	92.3	59.7	60.9
4000.0	97.3	91.3	59.5	60.5
5000.0	84.1	86.6	53.7	54.2
6300.0	84.1	84.0	52.7	52.6
8000.0	84.5	83.4	53.6	52.5
	UNWEIGHTED= 107.6		UNWEIGHTED= 76.9	
	A-WEIGHTED= 105.0		A-WEIGHTED= 73.1	

NOTE  
 PWL (DB (PC 10-12 WATTS))  
 SPL (DB (PC 0.0002 MICRO BARS))

I.5 1673C Load Speed  
Engine Radiated  
Sound Power Level  
Spectrums

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 2100.0  
 HORSEPOWER 234.9  
 EXHAUST BACK PRESSURE (IN-WATER), 13.6  
 INTAKE RESTRICTION (IN-WATER) 14.2  
 ENGINE NOISE EFFICIENCY (DB) = -62.3  
 ENGINE NOISE EFFICIENCY (DBA) = -63.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	81.6	47.0	53.1	18.5
50.0	87.1	56.9	58.6	28.4
63.0	85.4	59.2	56.8	30.6
80.0	90.6	68.4	62.0	39.8
100.0	89.9	70.8	61.2	42.1
125.0	86.0	69.9	57.2	41.1
160.0	101.8	88.4	72.8	59.4
200.0	97.2	86.3	67.8	56.9
250.0	95.4	86.8	65.5	56.9
315.0	95.7	89.1	64.9	58.3
400.0	98.0	93.2	65.5	60.7
500.0	99.1	95.9	63.7	60.5
630.0	96.0	94.9	54.1	52.2
800.0	98.1	96.4	56.4	55.6
1000.0	97.7	97.3	65.0	65.0
1250.0	101.6	102.2	72.5	73.1
1600.0	98.0	99.0	68.6	69.6
2000.0	97.2	98.4	60.5	61.7
2500.0	98.0	99.3	67.0	68.3
3150.0	95.1	96.3	63.7	64.9
4000.0	94.3	95.3	63.5	64.5
5000.0	92.1	92.6	59.7	60.2
6300.0	89.1	89.0	57.7	57.6
8000.0	89.5	88.4	58.6	57.5
	UNWEIGHTED = 110.2		UNWEIGHTED =	79.2
	A-WEIGHTED = 100.7		A-WEIGHTED =	77.4

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 121.6  
 EXHAUST BACK PRESSURE (IN-WATER), 8.2  
 INTAKE RESTRICTION (IN-WATER) 10.1  
 ENGINE NOISE EFFICIENCY(DB)= -60.2  
 ENGINE NOISE EFFICIENCY(OBA)= -61.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	87.1	56.9	58.6	28.4
63.0	85.4	59.2	56.8	30.6
80.0	89.6	67.4	61.0	38.8
100.0	81.9	62.8	53.2	34.1
125.0	87.0	70.9	58.2	42.1
160.0	94.8	81.4	65.8	52.4
200.0	96.2	85.3	66.8	55.9
250.0	95.4	86.8	65.5	56.9
315.0	95.7	89.1	64.9	58.3
400.0	100.0	95.2	67.5	62.7
500.0	101.1	97.9	65.7	62.5
630.0	96.8	94.9	54.1	52.2
800.0	96.1	97.3	56.4	55.6
1000.0	96.7	96.7	64.0	64.0
1250.0	99.6	100.2	70.5	71.1
1600.0	97.0	98.0	67.6	68.6
2000.0	96.2	97.4	59.5	60.7
2500.0	97.0	98.3	66.0	67.3
3150.0	94.1	95.3	62.7	63.9
4000.0	93.3	94.3	62.5	63.5
5000.0	91.1	91.6	58.7	59.2
6300.0	87.1	87.0	55.7	55.6
8000.0	88.5	87.4	57.6	56.5
	UNWEIGHTED= 109.4		UNWEIGHTED=	77.7
	A-WEIGHTED= 107.9		A-WEIGHTED=	76.2

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 4.1  
 EXHAUST BACK PRESSURE (IN-WATER), 9.2  
 INTAKE RESTRICTION (IN-WATER) 0.1  
 ENGINE NOISE EFFICIENCY(DB)= -45.7  
 ENGINE NOISE EFFICIENCY(DBA)= -47.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	81.6	47.0	53.1	18.5
50.0	87.1	56.9	58.6	28.4
63.0	85.4	59.2	56.0	30.6
80.0	89.6	67.4	61.0	38.8
100.0	94.9	75.8	66.2	47.1
125.0	92.0	75.9	63.2	47.1
160.0	97.8	84.4	68.8	53.4
200.0	94.2	83.3	64.8	53.9
250.0	97.4	88.8	67.5	58.9
315.0	95.7	89.1	64.9	58.3
400.0	100.0	95.2	67.5	62.7
500.0	98.1	94.9	62.7	59.5
630.0	96.0	94.9	54.1	52.2
800.0	98.1	97.3	56.4	55.6
1000.0	96.7	96.7	64.0	64.0
1250.0	96.6	97.2	67.5	68.1
1600.0	96.0	97.0	66.6	67.6
2000.0	96.2	97.4	59.5	60.7
2500.0	97.0	98.3	66.0	67.3
3150.0	94.1	95.3	62.7	63.9
4000.0	93.3	94.3	62.5	63.5
5000.0	91.1	91.6	58.7	59.2
6300.0	88.1	88.0	56.7	56.6
8000.0	89.5	88.4	58.6	57.5
	UNWEIGHTED= 109.1		UNWEIGHTED= 77.7	
	A-WEIGHTED= 107.2		A-WEIGHTED= 75.2	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 220.4  
 EXHAUST BACK PRESSURE (IN-WATER), 12.0  
 INTAKE RESTRICTION (IN-WATER) 11.7  
 ENGINE NOISE EFFICIENCY(OB)= -61.9  
 ENGINE NOISE EFFICIENCY(OBA)= -64.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.6	42.0	48.1	13.5
50.0	81.1	50.9	52.4	22.4
63.0	85.4	59.2	56.6	30.6
80.0	98.6	76.4	70.0	47.8
100.0	90.9	71.8	62.2	43.1
125.0	85.0	68.9	56.2	40.1
160.0	100.8	87.4	71.8	58.4
200.0	98.2	87.3	68.8	57.9
250.0	97.4	88.8	67.5	58.9
315.0	96.7	90.1	65.9	59.3
400.0	98.0	93.2	65.5	60.7
500.0	101.1	97.9	65.7	62.5
630.0	96.8	94.9	54.1	52.2
800.0	96.1	95.3	54.4	53.6
1000.0	96.7	96.7	64.0	64.0
1250.0	99.6	100.2	70.5	71.1
1600.0	98.0	99.0	68.6	69.6
2000.0	97.2	98.4	60.5	61.7
2500.0	97.0	98.3	66.0	67.3
3150.0	95.1	96.3	63.7	64.9
4000.0	94.3	95.3	63.5	64.5
5000.0	91.1	91.6	58.7	59.2
6300.0	88.1	88.0	56.7	56.6
8000.0	89.5	88.4	58.6	57.5
	UNWEIGHTED= 110.2		UNWEIGHTED= 58.6	
	A-WEIGHTED= 100.1		A-WEIGHTED= 79.3	
				76.6

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)=	1900.0				
HORSEPOWER	109.8				
EXHAUST BACK PRESSURE (IN-WATER),	6.6				
INTAKE RESTRICTION (IN-WATER)	8.6				
ENGINE NOISE EFFICIENCY(DB)=	-60.3				
ENGINE NOISE EFFICIENCY(DBA)=	-61.8				
		ENGINE RADIATED SOUND POWER LEVEL	CALCULATED 50-FT NOISE LEVEL		
FREQUENCY		UNWEIGHTED PNL	UNWEIGHTED SPL	A-WEIGHTED SPL	
40.0	76.6	42.0	48.1	13.5	
50.0	81.1	50.9	52.6	22.4	
63.0	85.4	59.2	56.8	30.6	
80.0	94.6	72.4	66.0	43.8	
100.0	87.9	68.8	59.2	40.1	
125.0	83.0	66.9	54.2	38.1	
160.0	93.8	80.4	64.8	51.4	
200.0	98.2	87.3	68.8	57.9	
250.0	94.4	85.8	64.5	55.9	
315.0	94.7	88.1	63.9	57.3	
400.0	99.0	94.2	66.5	61.7	
500.0	99.1	95.9	63.7	60.5	
630.0	96.8	94.9	54.1	52.2	
800.0	96.1	95.3	54.4	53.6	
1000.0	96.7	96.7	64.0	64.0	
1250.0	99.6	100.2	70.5	71.1	
1500.0	95.0	96.0	65.6	66.6	
2000.0	96.2	97.4	59.5	60.7	
2500.0	97.0	98.3	66.0	67.3	
3150.0	94.1	95.3	62.7	63.9	
4000.0	93.3	94.3	62.5	63.5	
5000.0	90.1	90.6	57.7	58.2	
6300.0	87.1	87.0	55.7	55.6	
8000.0	87.5	86.4	56.6	55.5	
	UNWEIGHTED=	108.9	UNWEIGHTED=	77.5	
	A-WEIGHTED=	107.3	A-WEIGHTED=	75.7	

NOTE  
 PNL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 3.2  
 EXHAUST BACK PRESSURE (IN-WATER), 4.5  
 INTAKE RESTRICTION (IN-WATER) 7.7  
 ENGINE NOISE EFFICIENCY(DB)= -45.8  
 ENGINE NOISE EFFICIENCY(DBA)= -47.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	75.6	41.0	47.1	12.5
50.0	80.1	49.9	51.6	21.4
63.0	83.4	57.2	54.8	28.6
80.0	92.6	70.4	64.0	41.8
100.0	84.9	65.8	56.2	37.1
125.0	83.0	66.9	54.2	38.1
160.0	94.8	81.4	65.8	52.4
200.0	95.2	84.3	65.8	54.9
250.0	96.4	87.8	66.5	57.9
315.0	96.7	90.1	65.9	59.3
400.0	98.0	93.2	65.5	60.7
500.0	98.1	94.9	62.7	59.5
630.0	96.0	94.9	54.1	52.2
800.0	95.1	94.3	53.4	52.6
1000.0	94.7	94.7	62.0	62.0
1250.0	96.6	97.2	67.5	68.1
1600.0	95.0	96.0	65.6	66.6
2000.0	96.2	97.4	59.5	60.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	91.3	92.3	60.5	61.5
5000.0	89.1	89.6	56.7	57.2
6300.0	86.1	86.0	54.7	54.6
8000.0	86.5	85.4	55.6	54.5
	UNWEIGHTED= 108.0	UNWEIGHTED= 76.4	UNWEIGHTED= 76.4	
	A-WEIGHTED= 106.2	A-WEIGHTED= 74.3	A-WEIGHTED= 74.3	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 199.7  
 EXHAUST BACK PRESSURE (IN-WATER), 10.6  
 INTAKE RESTRICTION (IN-WATER) 9.8  
 ENGINE NOISE EFFICIENCY(DB)= -63.6  
 ENGINE NOISE EFFICIENCY(DBA)= -65.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	81.1	50.9	52.6	22.4
63.0	82.4	56.2	53.8	27.6
80.0	91.6	69.4	63.0	40.8
100.0	86.9	67.8	58.2	39.1
125.0	85.0	68.9	56.2	40.1
160.0	98.8	85.4	69.8	56.4
200.0	93.2	82.3	63.8	52.9
250.0	93.4	84.8	63.5	54.9
315.0	94.7	88.1	63.9	57.3
400.0	97.0	92.2	64.5	59.7
500.0	99.1	95.9	63.7	60.5
630.0	95.0	93.9	53.1	51.2
800.0	97.1	96.3	55.4	54.6
1000.0	95.7	95.7	63.0	63.0
1250.0	97.6	98.2	68.5	69.1
1600.0	95.0	96.0	65.6	66.6
2000.0	95.2	96.4	58.5	59.7
2500.0	96.0	97.3	65.0	66.3
3150.0	93.1	94.3	61.7	62.9
4000.0	91.3	92.3	60.5	61.5
5000.0	89.1	89.6	56.7	57.2
6300.0	86.1	86.0	54.7	54.6
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED=	108.1	UNWEIGHTED=	76.7
	A-WEIGHTED=	106.4	A-WEIGHTED=	74.5

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 101.5  
 EXHAUST BACK PRESSURE (IN-WATER), 5.6  
 INTAKE RESTRICTION (IN-WATER) 7.5  
 ENGINE NOISE EFFICIENCY(DB)= -61.9  
 ENGINE NOISE EFFICIENCY(DBA)= -63.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	87.1	56.9	58.6	28.4
63.0	84.4	58.2	55.8	29.6
80.0	87.6	65.4	59.0	36.8
100.0	83.9	64.8	55.2	36.1
125.0	83.0	66.9	54.2	38.1
160.0	97.8	84.4	68.8	55.4
200.0	91.2	80.3	61.8	50.9
250.0	93.4	84.8	63.5	54.9
315.0	91.7	85.1	60.9	54.3
400.0	94.0	89.2	61.5	56.7
500.0	98.1	94.9	62.7	59.5
630.0	94.8	92.9	52.1	50.2
800.0	94.1	93.3	52.4	51.6
1000.0	94.7	94.7	62.0	62.0
1250.0	97.6	98.2	68.5	69.1
1600.0	94.0	95.0	64.6	65.6
2000.0	94.2	95.4	57.5	58.7
2500.0	95.0	96.3	64.0	65.3
3150.0	92.1	93.3	60.7	61.9
4000.0	91.3	92.3	60.5	61.5
5000.0	88.1	88.6	55.7	56.2
6300.0	85.1	85.0	53.7	53.6
8000.0	85.5	84.4	54.6	53.5
	UNWEIGHTED= 106.9		UNWEIGHTED= 75.6	
	A-WEIGHTED= 105.4		A-WEIGHTED= 73.8	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM) = 1700.0  
 HORSEPOWER = 2.9  
 EXHAUST BACK PRESSURE (IN-WATER), 3.0  
 INTAKE RESTRICTION (IN-WATER) 7.0  
 ENGINE NOISE EFFICIENCY(DB) = -46.9  
 ENGINE NOISE EFFICIENCY(DBA) = -48.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	48.0	54.1	19.5
50.0	85.1	54.9	56.6	26.4
63.0	82.4	56.2	53.8	27.6
80.0	86.6	64.4	58.0	35.8
100.0	81.9	62.8	54.2	34.1
125.0	83.0	66.9	58.1	38.1
160.0	95.0	82.4	66.8	53.4
200.0	91.2	80.3	61.8	50.9
250.0	93.4	84.8	63.5	54.9
315.0	91.7	85.1	60.9	54.3
400.0	96.0	91.2	63.5	58.7
500.0	98.1	94.9	62.7	59.5
630.0	93.8	91.9	51.1	49.2
800.0	93.1	92.3	51.4	50.6
1000.0	93.7	93.7	61.0	61.0
1250.0	96.6	97.2	67.5	68.1
1600.0	94.0	95.0	64.6	65.6
2000.0	94.2	95.4	57.5	58.7
2500.0	95.0	96.3	64.0	65.3
3150.0	92.1	93.3	60.7	61.9
4000.0	90.3	91.3	59.5	60.5
5000.0	87.1	87.6	54.7	55.2
6300.0	84.1	84.0	52.7	52.6
8000.0	84.5	83.4	53.6	52.5
	UNWEIGHTED = 106.4		UNWEIGHTED = 75.0	
	A-WEIGHTED = 105.0		A-WEIGHTED = 73.3	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 104.9  
 EXHAUST BACK PRESSURE (IN-WATER), 12.8  
 INTAKE RESTRICTION (IN-WATER) 6.6  
 ENGINE NOISE EFFICIENCY(DB)= -60.8  
 ENGINE NOISE EFFICIENCY(OBA)= -66.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	91.6	57.0	63.1	28.5
50.0	88.1	57.9	59.6	29.4
63.0	84.4	58.2	55.8	29.6
80.0	108.6	86.4	80.0	57.8
100.0	85.9	66.8	57.2	38.1
125.0	94.0	77.9	65.2	49.1
160.0	92.8	79.4	63.8	50.4
200.0	92.2	81.3	62.8	51.9
250.0	91.4	82.8	61.5	52.9
315.0	92.7	86.1	61.9	55.3
400.0	94.0	89.2	61.5	56.7
500.0	96.1	92.9	60.7	57.5
630.0	91.0	89.9	49.1	47.2
800.0	93.1	92.3	51.4	50.6
1000.0	94.7	94.7	62.0	62.0
1250.0	96.6	97.2	67.5	68.1
1600.0	94.0	95.0	64.6	65.6
2000.0	95.2	96.4	58.5	59.7
2500.0	95.0	96.3	64.0	65.3
3150.0	92.1	93.3	60.7	61.9
4000.0	91.3	92.3	60.5	61.5
5000.0	87.1	87.6	54.7	55.2
6300.0	85.1	85.0	53.7	53.6
8000.0	85.5	84.4	54.6	53.5
	UNWEIGHTED= 110.6	UNWEIGHTED=	UNWEIGHTED=	81.2
	A-WEIGHTED= 109.0	A-WEIGHTED=	A-WEIGHTED=	73.5

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 95.8  
 EXHAUST BACK PRESSURE (IN-WATER), 7.7  
 INTAKE RESTRICTION (IN-WATER) 4.6  
 ENGINE NOISE EFFICIENCY(DB)= -60.6  
 ENGINE NOISE EFFICIENCY(DBA)= -62.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PHL	A-WEIGHTED PHL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	80.6	46.0	52.1	17.5
50.0	88.1	57.9	59.6	29.4
63.0	84.4	58.2	55.8	29.6
80.0	102.6	60.4	74.0	51.8
100.0	82.9	63.8	54.2	35.1
125.0	88.0	71.9	59.2	43.1
160.0	92.0	79.4	63.8	50.4
200.0	93.2	82.3	63.8	52.9
250.0	93.4	84.8	63.5	54.9
315.0	90.7	84.1	59.9	53.3
400.0	91.0	86.2	58.5	53.7
500.0	95.1	91.9	59.7	56.5
630.0	93.0	91.9	51.1	49.2
800.0	96.1	95.3	54.4	53.6
1000.0	96.7	96.7	64.0	64.0
1250.0	97.6	98.2	68.5	69.1
1600.0	95.0	96.0	65.6	66.6
2000.0	95.2	96.4	58.5	59.7
2500.0	95.0	96.3	64.0	65.3
3150.0	92.1	93.3	60.7	61.9
4000.0	91.3	92.3	60.5	61.5
5000.0	87.1	87.6	54.7	55.2
6300.0	86.1	86.0	54.7	54.6
8000.0	85.5	84.4	54.6	53.5
	UNWEIGHTED= 108.0		UNWEIGHTED= 77.6	
	A-WEIGHTED= 109.7		A-WEIGHTED= 74.0	

NOTE  
 PHL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1600.0  
 HORSEPOWER 2.7  
 EXHAUST BACK PRESSURE (IN-WATER), 6.0  
 INTAKE RESTRICTION (IN-WATER) 4.5  
 ENGINE NOISE EFFICIENCY(DB)= -47.6  
 ENGINE NOISE EFFICIENCY(DBA)= -48.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	48.0	54.1	19.5
50.0	85.1	54.9	56.6	26.4
63.0	82.4	56.2	53.8	27.6
80.0	93.6	71.4	65.0	42.0
100.0	80.9	61.8	52.2	33.1
125.0	90.0	73.9	61.2	45.1
160.0	89.8	76.4	60.8	47.4
200.0	92.2	81.3	62.8	51.9
250.0	90.4	81.8	60.5	51.9
315.0	89.7	83.1	58.9	52.3
400.0	93.0	88.2	60.5	55.7
500.0	95.1	91.9	59.7	56.5
630.0	92.8	90.9	50.1	48.2
800.0	93.1	92.3	51.4	50.6
1000.0	93.7	93.7	61.0	61.0
1250.0	95.6	96.2	66.5	67.1
1600.0	94.0	95.0	64.6	65.6
2000.0	94.2	95.4	57.5	58.7
2500.0	94.0	95.3	63.0	64.3
3150.0	92.1	93.3	60.7	61.9
4000.0	90.3	91.3	59.5	60.5
5000.0	86.1	86.6	53.7	54.2
6300.0	85.1	85.0	53.7	53.6
8000.0	84.5	83.4	53.6	52.5
	UNWEIGHTED= 109.5		UNWEIGHTED= 74.3	
	A-WEIGHTED= 104.3		A-WEIGHTED= 72.6	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1500.0  
 HORSEPOWER 173.8  
 EXHAUST BACK PRESSURE (IN-WATER), 11.4  
 INTAKE RESTRICTION (IN-WATER) 6.2  
 ENGINE NOISE EFFICIENCY (DB) = -56.0  
 ENGINE NOISE EFFICIENCY (DBA) = -66.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	84.6	50.0	56.1	21.5
50.0	87.1	56.9	58.6	28.4
63.0	92.4	66.2	63.8	37.6
80.0	114.6	92.4	86.0	63.8
100.0	85.9	66.8	57.2	38.1
125.0	88.0	71.9	59.2	43.1
160.0	92.8	79.4	63.8	50.4
200.0	90.2	79.3	60.8	49.9
250.0	92.4	83.8	62.5	53.9
315.0	92.7	86.1	61.9	53.3
400.0	93.0	88.2	60.5	55.7
500.0	95.1	91.9	59.7	56.5
630.0	92.8	90.9	50.1	48.2
800.0	93.1	92.3	51.4	50.6
1000.0	94.7	94.7	62.0	62.0
1250.0	95.6	96.2	66.5	67.1
1600.0	94.0	95.0	64.6	65.6
2000.0	94.2	95.4	57.5	58.7
2500.0	94.0	95.3	63.0	64.3
3150.0	92.1	93.3	60.7	61.9
4000.0	90.3	91.3	59.5	60.5
5000.0	86.1	86.6	53.7	54.2
6300.0	84.1	84.0	52.7	52.6
8000.0	85.5	84.4	54.6	53.5
	UNWEIGHTED = 115.1		UNWEIGHTED =	86.3
	A-WEIGHTED = 104.7		A-WEIGHTED =	73.3

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 87.7  
 EXHAUST BACK PRESSURE (IN-WATER), 7.4  
 INTAKE RESTRICTION (IN-WATER) 4.8  
 ENGINE NOISE EFFICIENCY(DB)= -55.6  
 ENGINE NOISE EFFICIENCY(DBA)= -63.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6		51.1	16.5
50.0	84.1		55.6	25.4
63.0	90.4		61.8	35.6
80.0	111.6		83.0	60.8
100.0	85.9		57.2	38.1
125.0	83.0		54.2	38.1
160.0	90.8		61.8	48.4
200.0	87.2		57.8	46.9
250.0	90.4		60.5	51.9
315.0	90.7		59.9	53.3
400.0	90.0		57.5	52.7
500.0	94.1		58.7	55.5
630.0	93.8		51.1	49.2
800.0	94.1		52.4	51.6
1000.0	96.7		64.0	64.0
1250.0	95.6		66.5	67.1
1600.0	94.0		64.6	65.6
2000.0	95.2		58.5	59.7
2500.0	94.0		63.0	64.3
3150.0	92.1		60.7	61.9
4000.0	91.3		60.5	61.5
5000.0	87.1		54.7	55.2
6300.0	85.1		53.7	53.6
8000.0	85.5		54.6	53.5
	UNWEIGHTED= 112.6		UNWEIGHTED=	83.5
	A-WEIGHTED= 105.0		A-WEIGHTED=	73.2

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 2.8  
 EXHAUST BACK PRESSURE (IN-WATER), 5.3  
 INTAKE RESTRICTION (IN-WATER) 4.6  
 ENGINE NOISE EFFICIENCY(DB)= -47.5  
 ENGINE NOISE EFFICIENCY(DBA)= -49.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL <sup>B</sup>	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	78.6	44.0	50.1	15.5
50.0	83.1	52.9	54.6	24.4
63.0	84.4	58.2	55.8	29.6
80.0	98.6	76.4	70.0	47.8
100.0	84.9	65.8	56.2	37.1
125.0	83.0	66.9	54.2	38.1
160.0	89.8	76.4	60.8	47.4
200.0	87.2	76.3	57.8	46.9
250.0	89.4	80.8	59.5	50.9
315.0	85.7	79.1	54.9	48.3
400.0	92.0	87.2	59.5	54.7
500.0	96.1	92.9	60.7	57.5
630.0	92.8	90.9	50.1	48.2
800.0	93.1	92.3	51.4	50.6
1000.0	93.7	93.7	61.0	61.0
1250.0	96.6	97.2	67.5	68.1
1600.0	92.0	93.0	62.6	63.6
2000.0	93.2	94.4	56.5	57.7
2500.0	94.0	95.3	63.0	64.3
3150.0	91.1	92.3	59.7	60.9
4000.0	90.3	91.3	59.5	60.5
5000.0	86.1	86.6	53.7	54.2
6300.0	83.1	83.0	51.7	51.6
8000.0	83.5	82.4	52.6	51.5
	UNWEIGHTED= 105.7		UNWEIGHTED=	74.8
	A-WEIGHTED= 104.0		A-WEIGHTED=	72.4

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1300.0  
 HORSEPOWER 151.0  
 EXHAUST BACK PRESSURE (IN-WATER), 8.7  
 INTAKE RESTRICTION (IN-WATER) 5.9  
 ENGINE NOISE EFFICIENCY(OB)= -65.0  
 ENGINE NOISE EFFICIENCY(OBA)= -67.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	78.6	44.0	50.1	15.5
50.0	84.1	53.9	55.6	25.4
63.0	93.4	67.2	64.8	38.6
80.0	93.6	71.4	65.0	42.8
100.0	85.9	66.8	57.2	38.1
125.0	86.0	69.9	57.2	41.1
160.0	97.8	84.4	68.8	55.4
200.0	91.2	80.3	61.8	50.9
250.0	88.4	79.8	58.5	49.9
315.0	91.7	85.1	60.9	54.3
400.0	92.0	87.2	59.5	54.7
500.0	95.1	91.9	59.7	56.5
630.0	90.8	88.9	48.1	46.2
800.0	95.1	94.3	53.4	52.6
1000.0	91.7	91.7	59.0	59.0
1250.0	93.6	94.2	64.5	65.1
1600.0	93.0	94.0	63.6	64.6
2000.0	92.2	93.4	55.5	56.7
2500.0	92.0	93.3	61.0	62.3
3150.0	90.1	91.3	58.7	59.9
4000.0	89.3	90.3	58.5	59.5
5000.0	84.1	84.6	51.7	52.2
6300.0	81.1	81.0	49.7	49.6
8000.0	83.5	82.4	52.6	51.5
	UNWEIGHTED= 105.5		UNWEIGHTED= 74.8	
	A-WEIGHTED= 103.1		A-WEIGHTED= 71.2	

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM) = 1300.0  
 HORSEPOWER 77.7  
 EXHAUST BACK PRESSURE (IN-WATER), 6.7  
 INTAKE RESTRICTION (IN-WATER) 5.1  
 ENGINE NOISE EFFICIENCY(DB) = -62.0  
 ENGINE NOISE EFFICIENCY(DBA) = -63.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL <sup>8</sup>	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	78.6	44.0	50.1	15.5
50.0	84.1	53.9	55.6	25.4
63.0	89.4	63.2	60.8	34.6
80.0	87.6	65.4	59.0	36.8
100.0	84.9	65.8	56.2	37.1
125.0	85.0	68.9	56.2	40.1
160.0	96.8	83.4	67.8	54.4
200.0	89.2	78.3	59.8	48.9
250.0	86.4	77.8	56.5	47.9
315.0	90.7	84.1	59.9	53.3
400.0	91.0	86.2	58.5	53.7
500.0	95.1	91.9	59.7	56.5
630.0	93.8	91.9	51.1	49.2
800.0	96.1	95.3	54.4	53.6
1000.0	94.7	94.7	62.0	62.0
1250.0	95.6	96.2	66.5	67.1
1600.0	93.0	94.0	63.6	64.6
2000.0	94.2	95.4	57.5	58.7
2500.0	93.0	94.3	62.0	63.3
3150.0	90.1	91.3	58.7	59.9
4000.0	89.3	90.3	58.5	59.5
5000.0	85.1	85.6	52.7	53.2
6300.0	83.1	83.0	51.7	51.6
8000.0	83.5	82.4	52.6	51.5
	UNWEIGHTED = 105.6		UNWEIGHTED = 74.2	
	A-WEIGHTED = 104.2		A-WEIGHTED = 72.2	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1300.0  
 HORSEPOWER 2.5  
 EXHAUST BACK PRESSURE (IN-WATER), 5.0  
 INTAKE RESTRICTION (IN-WATER) 4.9  
 ENGINE NOISE EFFICIENCY(DB)= -49.4  
 ENGINE NOISE EFFICIENCY(DBA)= -50.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL UNWEIGHTED PWL	SOUND POWER LEVEL A-WEIGHTED PWL	CALCULATED 50-FT NOISE LEVELS UNWEIGHTED SPL	NOISE LEVELS A-WEIGHTED SPL
40.0	77.6	43.0	49.1	14.5
50.0	81.1	50.9	52.6	22.4
63.0	83.4	57.2	54.8	28.6
80.0	86.6	64.4	58.0	35.8
100.0	85.9	66.8	57.2	38.1
125.0	82.0	65.9	53.2	37.1
160.0	92.8	79.4	63.8	50.4
200.0	86.2	75.3	56.8	45.9
250.0	84.4	75.8	54.5	45.9
315.0	89.7	83.1	58.9	52.3
400.0	90.0	85.2	57.5	52.7
500.0	94.1	90.9	58.7	55.5
630.0	90.8	88.9	48.1	46.2
800.0	91.1	90.3	49.4	48.6
1000.0	92.7	92.7	60.0	60.0
1250.0	93.6	94.2	64.5	65.1
1500.0	90.0	91.0	60.6	61.6
2000.0	92.2	93.4	55.5	56.7
2500.0	92.0	93.3	61.0	62.3
3150.0	90.1	91.3	58.7	59.9
4000.0	88.3	89.3	57.5	58.5
5000.0	83.1	83.6	50.7	51.2
6300.0	80.1	80.0	48.7	48.6
8000.0	81.5	80.4	50.6	49.5
	UNWEIGHTED= 103.3		UNWEIGHTED= 71.9	
	A-WEIGHTED= 102.2		A-WEIGHTED= 70.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1200.0  
 HORSEPOWER 137.9  
 EXHAUST BACK PRESSURE (IN-WATER), 7.4  
 INTAKE RESTRICTION (IN-WATER) 5.7  
 ENGINE NOISE EFFICIENCY(DB)= -65.6  
 ENGINE NOISE EFFICIENCY(DBA)= -67.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	48.0	54.1	19.5
50.0	85.1	54.9	56.6	26.4
63.0	87.4	61.2	58.0	32.6
80.0	96.6	74.4	68.0	45.8
100.0	84.9	65.8	56.2	37.1
125.0	90.0	73.9	61.2	45.1
160.0	91.8	78.4	62.8	49.4
200.0	87.2	76.3	57.8	46.9
250.0	88.4	79.8	58.5	49.9
315.0	89.7	83.1	58.9	52.3
400.0	91.0	86.2	58.5	53.7
500.0	94.1	90.9	58.7	55.5
630.0	90.0	88.9	48.1	46.2
800.0	94.1	93.3	52.4	51.6
1000.0	91.7	91.7	59.0	59.0
1250.0	92.6	93.2	63.5	64.1
1600.0	92.0	93.0	62.6	63.6
2000.0	91.2	92.4	54.5	55.7
2500.0	93.0	94.3	62.0	63.3
3150.0	89.1	90.3	57.7	58.9
4000.0	87.3	88.3	56.5	57.5
5000.0	83.1	83.6	50.7	51.2
6300.0	82.1	82.0	50.7	50.6
8000.0	83.9	82.4	52.6	51.5
	UNWEIGHTED= 104.5		UNWEIGHTED= 73.7	
	A-WEIGHTED= 102.4		A-WEIGHTED= 70.5	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1200.0  
 HORSEPOWER 68.4  
 EXHAUST BACK PRESSURE (IN-WATER), 5.7  
 INTAKE RESTRICTION (IN-WATER) 4.9  
 ENGINE NOISE EFFICIENCY(OB)= -61.6  
 ENGINE NOISE EFFICIENCY(OBA)= -63.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	81.6	47.0	53.1	18.5
50.0	89.1	58.9	60.6	30.4
63.0	91.4	65.2	62.8	36.6
80.0	92.6	70.4	64.0	41.8
100.0	82.9	63.8	54.2	35.1
125.0	85.0	68.9	56.2	40.1
160.0	91.8	78.4	62.8	49.4
200.0	86.2	75.3	56.8	45.9
250.0	86.4	77.8	56.5	47.9
315.0	89.7	83.1	58.9	52.3
400.0	92.0	87.2	59.5	54.7
500.0	95.1	91.9	59.7	56.5
630.0	93.8	91.9	51.1	49.2
800.0	98.1	97.3	56.4	55.6
1000.0	93.7	93.7	61.0	61.0
1250.0	94.6	95.2	65.5	66.1
1600.0	93.0	94.0	63.6	64.6
2000.0	93.2	94.4	56.5	57.7
2500.0	93.0	94.3	62.0	63.3
3150.0	90.1	91.3	58.7	59.9
4000.0	88.3	89.3	57.5	58.5
5000.0	84.1	84.6	51.7	52.2
6300.0	82.1	82.0	50.7	50.6
8000.0	82.5	81.4	51.6	50.5
	UNWEIGHTED=	105.5	UNWEIGHTED=	73.7
	A-WEIGHTED=	104.1	A-WEIGHTED=	71.6

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1200.0  
 HORSEPOWER 2.3  
 EXHAUST BACK PRESSURE (IN-WATER), 5.0  
 INTAKE RESTRICTION (IN-WATER) 4.8  
 ENGINE NOISE EFFICIENCY(DB)= -48.6  
 ENGINE NOISE EFFICIENCY(DBA)= -50.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.6	45.0	51.1	16.5
50.0	88.1	57.9	59.6	29.4
63.0	89.4	63.2	60.8	34.6
80.0	89.6	67.4	61.0	38.8
100.0	79.9	60.8	51.2	32.1
125.0	84.0	67.9	55.2	39.1
160.0	93.8	80.4	64.8	51.4
200.0	85.2	74.3	55.8	44.9
250.0	84.4	75.8	54.5	45.9
315.0	89.7	83.1	58.9	52.3
400.0	90.0	85.2	57.5	52.7
500.0	95.1	91.9	59.7	56.5
630.0	90.8	88.9	48.1	46.2
800.0	93.1	92.3	51.4	50.6
1000.0	92.7	92.7	60.0	60.0
1250.0	92.6	93.2	63.5	64.1
1600.0	90.0	91.0	60.6	61.6
2000.0	91.2	92.4	54.5	55.7
2500.0	92.0	93.3	61.0	62.3
3150.0	90.1	91.3	58.7	59.9
4000.0	87.3	88.3	56.5	57.5
5000.0	83.1	83.6	50.7	51.2
6300.0	80.1	80.0	48.7	48.6
8000.0	81.5	80.4	50.6	49.5
	UNWEIGHTED= 103.8		UNWEIGHTED=	72.4
	A-WEIGHTED= 102.1		A-WEIGHTED=	70.0

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

I.6 6-71 Engine  
Sound Power Level  
50-ft SPL Spectrums  
(Effect of Intake and  
Exhaust Restriction)



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 148.3  
 EXHAUST BACK PRESSURE (IN-WATER), 50.1  
 INTAKE RESTRICTION (IN-WATER) 7.8  
 ENGINE NOISE EFFICIENCY(DB)= -55.7  
 ENGINE NOISE EFFICIENCY(DBA)= -58.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	75.6	41.0	47.1	12.5
50.0	84.1	53.9	55.6	25.4
63.0	89.7	63.5	61.1	34.9
80.0	96.4	74.2	67.8	45.6
100.0	93.7	74.6	65.0	45.9
125.0	101.0	84.9	72.2	56.1
160.0	100.1	86.7	71.1	57.7
200.0	93.0	82.1	63.6	52.7
250.0	108.9	100.3	79.0	70.4
315.0	107.7	101.1	76.9	70.3
400.0	101.5	96.7	69.0	64.2
500.0	96.6	93.4	61.2	58.0
630.0	99.8	97.9	57.1	55.2
800.0	103.9	103.1	62.2	61.4
1000.0	104.5	104.5	71.8	71.8
1250.0	102.9	103.5	73.8	74.4
1500.0	98.5	99.5	69.1	70.1
2000.0	97.2	98.4	60.5	61.7
2500.0	96.5	97.8	65.5	66.8
3150.0	95.1	96.3	63.7	64.9
4000.0	95.1	96.1	64.3	65.3
5000.0	95.1	95.6	62.7	63.2
6300.0	90.6	90.5	59.2	59.1
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED= 114.7	UNWEIGHTED= 83.8		
	A-WEIGHTED= 111.6	A-WEIGHTED= 79.9		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1400.0  
 HORSEPOWER 138.7  
 EXHAUST BACK PRESSURE (IN-WATER), 50.1  
 INTAKE RESTRICTION (IN-WATER) 19.9  
 ENGINE NOISE EFFICIENCY (DB) = -55.7  
 ENGINE NOISE EFFICIENCY (DBA) = -58.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.4	41.8	47.9	13.3
50.0	83.9	53.7	55.4	25.2
63.0	88.9	62.7	60.3	34.1
80.0	95.6	73.4	67.0	44.8
100.0	93.2	74.1	64.5	45.4
125.0	100.5	84.4	71.7	55.6
160.0	99.8	86.4	70.8	57.4
200.0	93.2	82.3	63.8	52.9
250.0	108.4	99.8	78.5	69.9
315.0	108.0	101.4	77.2	70.6
400.0	99.0	94.2	66.5	61.7
500.0	95.6	92.4	60.2	57.0
630.0	99.6	97.7	56.9	55.0
800.0	103.9	103.1	62.2	61.4
1000.0	103.5	103.5	70.8	70.8
1250.0	102.9	103.5	73.8	74.4
1600.0	99.8	100.8	70.4	71.4
2000.0	97.5	98.7	60.8	62.0
2500.0	96.0	97.3	65.0	66.3
3150.0	94.9	96.1	63.5	64.7
4000.0	95.1	96.1	64.3	65.3
5000.0	94.1	94.6	61.7	62.2
6300.0	89.9	89.8	58.5	58.4
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED = 114.5		UNWEIGHTED = 83.6	
	A-WEIGHTED = 111.4		A-WEIGHTED = 79.7	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 127.8  
 EXHAUST BACK PRESSURE (IN-WATER), 50.1  
 INTAKE RESTRICTION (IN-WATER) 29.8  
 ENGINE NOISE EFFICIENCY(DB)= -55.7  
 ENGINE NOISE EFFICIENCY(DBA)= -58.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.1	41.5	47.6	13.0
50.0	80.6	50.4	52.1	21.9
63.0	85.9	59.7	57.3	31.1
80.0	95.4	73.2	66.8	44.6
100.0	91.2	72.1	62.5	43.4
125.0	100.0	83.9	71.2	55.1
160.0	99.8	86.4	70.0	57.4
200.0	92.2	81.3	62.8	51.9
250.0	107.4	98.8	77.5	68.9
315.0	108.7	102.1	77.9	71.3
400.0	99.0	94.2	66.5	61.7
500.0	94.6	91.4	59.2	56.0
630.0	98.6	96.7	55.9	54.0
800.0	102.6	101.8	60.9	60.1
1000.0	103.0	103.0	70.3	70.3
1250.0	101.6	102.2	72.5	73.1
1500.0	101.0	102.0	71.6	72.6
2000.0	97.0	98.2	60.3	61.5
2500.0	94.8	96.1	63.8	65.1
3150.0	94.9	96.1	63.5	64.7
4000.0	95.1	96.1	64.3	65.3
5000.0	94.4	94.9	62.0	62.5
6300.0	89.4	89.3	58.0	57.9
8000.0	86.8	85.7	55.9	54.8
	UNWEIGHTED= 114.1		UNWEIGHTED=	83.3
	A-WEIGHTED= 110.9		A-WEIGHTED=	79.5

NOTE  
 PWL (DB (RE 1W-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 119.6  
 EXHAUST BACK PRESSURE (IN-WATER), 50.1  
 INTAKE RESTRICTION (IN-WATER) 40.2  
 ENGINE NOISE EFFICIENCY(DB)= -55.2  
 ENGINE NOISE EFFICIENCY(DBA)= -58.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	75.6	41.0	47.1	12.5
50.0	80.9	50.7	52.4	22.2
63.0	87.4	61.2	58.8	32.6
80.0	95.6	73.4	67.0	44.8
100.0	91.2	72.1	62.5	43.4
125.0	99.8	83.7	71.0	54.9
160.0	100.1	86.7	71.1	57.7
200.0	93.0	82.1	63.6	52.7
250.0	107.2	98.6	77.3	68.7
315.0	108.7	102.1	77.9	71.3
400.0	98.8	94.0	66.3	61.5
500.0	94.6	91.4	59.2	56.0
630.0	98.1	96.2	55.4	53.5
800.0	103.6	102.8	61.9	61.1
1000.0	103.7	103.7	71.0	71.0
1250.0	102.4	103.0	73.3	73.9
1600.0	101.5	102.5	72.1	73.1
2000.0	96.2	97.4	59.5	60.7
2500.0	95.5	96.8	64.5	65.8
3150.0	94.1	95.3	62.7	63.9
4000.0	94.8	95.8	64.0	65.0
5000.0	94.1	94.6	61.7	62.2
6300.0	90.1	90.0	58.7	58.6
8000.0	87.3	86.2	56.4	55.3
	UNWEIGHTED= 114.3		UNWEIGHTED= 83.4	
	A-WEIGHTED= 111.3		A-WEIGHTED= 79.8	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 146.0  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 7.6  
 ENGINE NOISE EFFICIENCY(DB)= -58.0  
 ENGINE NOISE EFFICIENCY(DBA)= -59.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	77.1	42.5	48.6	14.0
50.0	82.9	52.7	54.4	24.2
63.0	86.9	60.7	58.3	32.1
80.0	94.9	72.7	66.3	44.1
100.0	89.2	70.1	60.5	41.4
125.0	96.8	80.7	68.0	51.9
160.0	98.3	84.9	69.3	55.9
200.0	91.7	80.8	62.3	51.4
250.0	101.2	92.6	71.3	62.7
315.0	104.2	97.6	73.4	66.8
400.0	96.5	91.7	64.0	59.2
500.0	92.4	89.2	57.0	53.8
630.0	95.6	93.7	52.9	51.0
800.0	101.4	100.6	59.7	58.9
1000.0	105.7	105.7	73.0	73.0
1250.0	103.6	104.2	74.5	75.1
1600.0	100.8	101.8	71.4	72.4
2000.0	98.0	99.2	61.3	62.5
2500.0	96.0	97.3	65.0	66.3
3150.0	94.6	95.8	63.2	64.4
4000.0	96.1	97.1	65.3	66.3
5000.0	94.1	94.6	61.7	62.2
6300.0	89.6	89.5	58.2	58.1
8000.0	87.8	86.7	56.9	55.8
	UNWEIGHTED=	112.4	UNWEIGHTED=	81.4
	A-WEIGHTED=	111.1	A-WEIGHTED=	79.8

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 135.9  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 19.9  
 ENGINE NOISE EFFICIENCY(DB)= -57.5  
 ENGINE NOISE EFFICIENCY(DBA)= -58.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	74.9	40.3	46.4	11.8
50.0	82.1	51.9	53.6	23.4
63.0	86.2	60.0	57.6	31.4
80.0	95.4	73.2	66.8	44.6
100.0	89.7	70.6	61.0	41.9
125.0	96.3	80.2	67.5	51.4
160.0	98.1	84.7	69.1	55.7
200.0	91.5	80.6	62.1	51.2
250.0	101.2	92.6	71.3	62.7
315.0	105.0	98.4	74.2	67.6
400.0	96.8	92.0	64.3	59.5
500.0	91.4	88.2	56.0	52.8
630.0	95.3	93.4	52.6	50.7
800.0	102.6	101.8	60.9	60.1
1000.0	105.2	105.2	72.5	72.5
1250.0	104.1	104.7	75.0	75.6
1600.0	99.8	100.8	70.4	71.4
2000.0	98.2	99.4	61.5	62.7
2500.0	96.5	97.8	65.5	66.8
3150.0	94.1	95.3	62.7	63.9
4000.0	96.1	97.1	65.3	66.3
5000.0	93.9	94.4	61.5	62.0
6300.0	89.6	89.5	58.2	58.1
8000.0	88.3	87.2	57.4	56.3
	UNWEIGHTED= 112.5		UNWEIGHTED=	81.4
	A-WEIGHTED= 111.2		A-WEIGHTED=	79.7

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 126.1  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 29.7  
 ENGINE NOISE EFFICIENCY(DBB)= -58.2  
 ENGINE NOISE EFFICIENCY(OBBA)= -59.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	78.6	44.0	50.1	15.5
50.0	82.9	52.7	54.4	24.2
63.0	85.7	59.5	57.1	30.9
80.0	94.4	72.2	65.8	43.6
100.0	90.4	71.3	61.7	42.6
125.0	96.8	80.7	68.0	51.9
160.0	98.3	84.9	69.3	55.9
200.0	91.2	80.3	61.8	50.9
250.0	101.7	93.1	71.8	63.2
315.0	104.2	97.6	73.4	66.8
400.0	95.3	90.5	62.8	58.0
500.0	91.4	88.2	56.0	52.8
630.0	93.6	91.7	50.9	49.0
800.0	101.1	100.3	59.4	58.6
1000.0	102.0	102.0	69.3	69.3
1250.0	102.9	103.5	73.8	74.4
1500.0	100.5	101.5	71.1	72.1
2000.0	96.5	97.7	59.8	61.0
2500.0	96.3	97.6	65.3	66.6
3150.0	94.6	95.8	63.2	64.4
4000.0	94.6	95.6	63.8	64.8
5000.0	93.4	93.9	61.0	61.5
6300.0	89.1	89.0	57.7	57.6
8000.0	87.5	86.4	56.6	55.5
	UNWEIGHTED= 111.6		UNWEIGHTED= 80.8	
	A-WEIGHTED= 109.9		A-WEIGHTED= 78.8	

NOTE:  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 114.7  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 40.2  
 ENGINE NOISE EFFICIENCY(DB)= -57.9  
 ENGINE NOISE EFFICIENCY(DBA)= -59.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	78.6	44.0	50.1	15.5
50.0	84.1	53.9	55.6	25.4
63.0	86.2	60.0	57.6	31.4
80.0	94.9	72.7	66.3	44.1
100.0	90.2	71.1	61.5	42.4
125.0	96.5	80.4	67.7	51.6
160.0	98.1	84.7	69.1	55.7
200.0	91.0	80.1	61.6	50.7
250.0	101.4	92.8	71.5	62.9
315.0	104.0	97.4	73.2	66.6
400.0	95.5	90.7	63.0	58.2
500.0	91.1	87.9	55.7	52.5
630.0	94.6	92.7	51.9	50.0
800.0	99.6	98.8	57.9	57.1
1200.0	100.7	100.7	68.0	68.0
1250.0	102.6	103.2	73.5	74.1
1600.0	102.3	103.3	72.9	73.9
2000.0	97.0	98.2	60.3	61.5
2500.0	96.3	97.6	65.3	66.6
3150.0	95.6	96.8	64.2	65.4
4700.0	94.3	95.3	63.5	64.5
5000.0	93.6	94.1	61.2	61.7
6300.0	88.9	88.8	57.5	57.4
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED= 111.4	UNWEIGHTED= 80.8		
	A-WEIGHTED= 109.9	A-WEIGHTED= 79.0		

NOTE  
 PWL (JB (RE 10-12 WATTS))  
 SPL (JB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 148.7  
 EXHAUST BACK PRESSURE (IN-WATER), 9.4  
 INTAKE RESTRICTION (IN-WATER) 8.3  
 ENGINE NOISE EFFICIENCY(OB)= -55.2  
 ENGINE NOISE EFFICIENCY(OBA)= -56.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	74.9	40.3	46.4	11.8
50.0	85.4	55.2	56.9	26.7
63.0	90.4	64.2	61.8	35.6
80.0	96.1	73.9	67.5	45.3
100.0	93.9	74.8	65.2	46.1
125.0	100.3	84.2	71.5	55.4
160.0	100.3	86.9	71.3	57.9
200.0	91.2	80.3	61.8	50.9
250.0	105.9	97.3	76.0	67.4
315.0	104.2	97.6	73.4	66.8
400.0	100.8	96.0	68.3	63.5
500.0	95.4	92.2	60.0	56.8
630.0	101.3	99.4	58.6	56.7
800.0	108.1	107.3	66.4	65.6
1000.0	109.5	109.5	76.8	76.8
1250.0	103.6	104.2	74.5	75.1
1600.0	99.5	100.5	70.1	71.1
2000.0	97.5	100.5	60.8	62.0
2500.0	97.0	98.7	66.0	67.3
3150.0	94.4	98.3	63.0	64.2
4200.0	95.6	95.6	64.8	65.8
5200.0	95.9	96.4	63.5	64.0
6300.0	91.4	91.3	60.0	59.9
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED= 115.2		UNWEIGHTED= 83.3	
	A-WEIGHTED= 113.7		A-WEIGHTED= 81.1	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 140.2  
 EXHAUST BACK PRESSURE (IN-WATER), 30.4  
 INTAKE RESTRICTION (IN-WATER) 19.9  
 ENGINE NOISE EFFICIENCY(DB)= -55.9  
 ENGINE NOISE EFFICIENCY(DBA)= -58.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	77.4	42.8	48.9	14.3
50.0	85.6	55.4	57.1	26.9
63.0	89.2	63.0	60.6	34.4
80.0	94.4	72.2	65.8	43.6
100.0	94.2	75.1	65.5	46.4
125.0	100.5	84.4	71.7	55.6
160.0	99.8	86.4	70.8	57.4
200.0	91.2	80.3	61.8	50.9
250.0	107.7	99.1	77.8	69.2
315.0	106.0	99.4	75.2	68.6
400.0	99.8	95.0	67.3	62.5
500.0	96.4	93.2	61.0	57.8
630.0	98.0	96.9	56.1	54.2
800.0	104.6	103.8	62.9	62.1
1000.0	105.7	105.7	73.0	73.0
1250.0	103.4	104.0	74.3	74.9
1600.0	99.0	100.0	69.6	70.6
2000.0	97.7	98.9	61.0	62.2
2500.0	97.3	98.6	66.3	67.6
3150.0	93.9	95.1	62.5	63.7
4000.0	94.8	95.8	64.0	65.0
5000.0	94.9	95.4	62.5	63.0
6300.0	90.4	90.3	59.0	58.9
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED= 114.3		UNWEIGHTED= 83.2	
	A-WEIGHTED= 114.8		A-WEIGHTED= 80.0	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 122.2  
 EXHAUST BACK PRESSURE (IN-WATER), 30.4  
 INTAKE RESTRICTION (IN-WATER) 40.2  
 ENGINE NOISE EFFICIENCY(DB)= -56.1  
 ENGINE NOISE EFFICIENCY(OBA)= -58.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	77.9	43.3	49.4	14.0
50.0	83.6	53.4	55.1	24.9
63.0	87.4	61.2	58.8	32.6
80.0	93.1	70.9	64.5	42.3
100.0	93.2	74.1	64.5	45.4
125.0	100.5	84.4	71.7	55.6
160.0	100.3	86.9	71.3	57.9
200.0	92.2	81.3	62.8	51.9
250.0	106.4	97.8	76.5	67.9
315.0	106.0	99.4	75.2	68.6
400.0	100.0	95.2	67.5	62.7
500.0	95.6	92.4	60.2	57.0
630.0	97.8	95.9	55.1	53.2
800.0	103.1	102.3	61.4	60.6
1000.0	103.7	103.7	71.0	71.0
1250.0	102.6	103.2	73.5	74.1
1600.0	100.0	101.0	70.6	71.6
2000.0	96.7	97.9	60.0	61.2
2500.0	95.8	97.1	64.8	66.1
3150.0	94.1	95.3	62.7	63.9
4000.0	94.8	95.8	64.0	65.0
5000.0	94.6	95.1	62.2	62.7
6300.0	90.1	90.0	58.7	58.6
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED= 113.5	UNWEIGHTED=	UNWEIGHTED= 82.6	
	A-WEIGHTED= 110.9	A-WEIGHTED=	A-WEIGHTED= 79.3	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 99.9  
 EXHAUST BACK PRESSURE (IN-WATER), 30.4  
 INTAKE RESTRICTION (IN-WATER) 60.0  
 ENGINE NOISE EFFICIENCY(DB)= -55.3  
 ENGINE NOISE EFFICIENCY(DBA)= -58.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.9	42.3	48.4	13.8
50.0	84.9	54.7	56.4	26.2
63.0	89.2	63.0	60.6	34.4
80.0	94.9	72.7	66.3	44.1
100.0	93.2	74.1	64.5	45.4
125.0	100.5	84.4	71.7	55.6
160.0	100.6	87.2	71.6	58.2
200.0	92.7	81.8	63.3	52.4
250.0	107.2	98.6	77.3	68.7
315.0	106.5	99.9	75.7	69.1
400.0	100.0	95.2	67.5	62.7
500.0	94.4	91.2	59.0	55.8
630.0	97.1	95.2	54.4	52.5
800.0	101.1	100.3	59.4	58.6
1000.0	102.2	102.2	69.5	69.5
1250.0	101.4	102.0	72.3	72.9
1600.0	100.8	101.8	71.4	72.4
2000.0	97.2	98.4	60.5	61.7
2500.0	96.0	97.3	65.0	66.3
3150.0	95.6	96.8	64.2	65.4
4000.0	95.3	96.3	64.5	65.5
5000.0	93.9	94.4	61.5	62.0
6300.0	89.9	89.8	58.5	58.4
8000.0	88.3	87.2	57.4	56.3
	UNWEIGHTED= 113.5		UNWEIGHTED=	82.8
	A-WEIGHTED= 110.4		A-WEIGHTED=	79.1

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1400.0  
 HORSEPOWER 70.3  
 EXHAUST BACK PRESSURE (IN-WATER), 30.4  
 INTAKE RESTRICTION (IN-WATER) 80.1  
 ENGINE NOISE EFFICIENCY(OB)= -55.8  
 ENGINE NOISE EFFICIENCY(OBA)= -59.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.6	42.0	48.1	13.5
50.0	81.1	50.9	52.6	22.6
63.0	86.2	60.0	57.6	31.4
80.0	92.6	70.4	64.0	41.8
100.0	92.9	73.8	64.2	45.1
125.0	99.0	82.9	70.2	54.1
160.0	98.6	85.2	69.6	56.2
200.0	92.0	81.1	62.6	51.7
250.0	104.9	96.3	75.0	66.4
315.0	105.0	98.4	74.2	67.6
400.0	97.8	93.0	65.3	60.5
500.0	92.9	89.7	57.5	54.3
630.0	94.1	92.2	51.4	49.5
800.0	99.9	99.1	58.2	57.4
1000.0	97.2	97.2	64.5	64.5
1250.0	99.4	100.0	70.3	70.9
1500.0	98.0	99.0	68.6	69.6
2000.0	95.7	96.9	59.0	60.2
2500.0	95.0	96.3	64.0	65.3
3150.0	93.9	95.1	62.5	63.7
4000.0	93.1	94.1	62.3	63.3
5000.0	92.1	92.6	59.7	60.2
6300.0	88.6	88.5	57.2	57.1
8000.0	90.3	89.2	59.4	58.3
	UNWEIGHTED= 111.4		UNWEIGHTED= 80.8	
	A-WEIGHTED= 108.2		A-WEIGHTED= 76.8	

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 181.1  
 EXHAUST BACK PRESSURE (IN-WATER), 12.8  
 INTAKE RESTRICTION (IN-WATER) 8.2  
 ENGINE NOISE EFFICIENCY(DB)= -56.0  
 ENGINE NOISE EFFICIENCY(DBA)= -57.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	81.6	47.0	53.1	18.5
50.0	86.9	56.7	58.4	28.2
63.0	87.2	61.0	58.6	32.4
80.0	90.9	68.7	62.3	40.1
100.0	87.9	68.8	59.2	40.1
125.0	90.8	74.7	62.0	45.9
160.0	106.1	92.7	77.1	63.7
200.0	101.2	90.3	71.8	60.9
250.0	104.4	95.8	74.5	65.9
315.0	105.2	98.6	74.4	67.8
400.0	101.0	96.2	68.5	63.7
500.0	94.9	91.7	59.5	56.3
630.0	101.3	99.4	58.6	56.7
800.0	105.1	104.3	63.4	62.6
1000.0	109.0	109.0	76.3	76.3
1250.0	105.1	105.7	76.0	76.6
1600.0	103.0	104.0	73.6	74.6
2000.0	98.7	99.9	62.0	63.2
2500.0	99.8	101.1	68.8	70.1
3150.0	97.1	98.3	65.7	66.9
4000.0	95.1	96.1	64.3	65.3
5000.0	94.6	95.1	62.2	62.7
6300.0	90.9	90.8	59.5	59.4
8000.0	88.5	87.4	57.6	56.5
	UNWEIGHTED# 115.3	UNWEIGHTED# 84.2		
	A-WEIGHTED# 113.7	A-WEIGHTED# 82.0		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 181.7  
 EXHAUST BACK PRESSURE (IN-WATER), 31.1  
 INTAKE RESTRICTION (IN-WATER) 7.9  
 ENGINE NOISE EFFICIENCY(OB)= -57.0  
 ENGINE NOISE EFFICIENCY(DBA)= -59.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	78.9	44.3	50.4	15.8
50.0	85.1	54.9	56.6	26.4
63.0	85.7	59.5	57.1	30.9
80.0	89.1	66.9	60.5	38.3
100.0	88.9	69.8	60.2	41.1
125.0	93.5	77.4	64.7	48.6
160.0	107.3	93.9	78.3	64.9
200.0	102.5	91.6	73.1	62.2
250.0	103.9	95.3	74.0	65.4
315.0	105.7	99.1	74.9	68.3
400.0	101.0	96.2	68.5	63.7
500.0	97.1	93.9	61.7	58.5
630.0	100.3	98.4	57.6	55.7
800.0	100.4	99.6	58.7	57.9
1000.0	101.7	101.7	69.0	69.0
1250.0	101.9	102.5	72.6	73.4
1600.0	105.5	106.5	76.1	77.1
2000.0	98.7	99.9	62.0	63.2
2500.0	99.5	100.8	68.5	69.8
3150.0	94.6	95.8	63.2	64.4
4000.0	95.1	96.1	64.3	65.3
5000.0	93.6	94.1	61.2	61.7
6300.0	89.6	89.5	58.2	58.1
8000.0	87.8	86.7	56.9	55.8
	UNWEIGHTED= 114.3	UNWEIGHTED=	UNWEIGHTED= 83.9	
	A-WEIGHTED= 111.7	A-WEIGHTED=	A-WEIGHTED= 80.8	

NOTE  
 PWL (JB (RE 10-12 WATTS))  
 SPL (JB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 174.3  
 EXHAUST BACK PRESSURE (IN-WATER), 31.1  
 INTAKE RESTRICTION (IN-WATER) 20.1  
 ENGINE NOISE EFFICIENCY(DB)= -56.7  
 ENGINE NOISE EFFICIENCY(DBA)= -58.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	81.6	47.0	53.1	18.5
50.0	85.9	55.7	57.4	27.2
63.0	86.9	60.7	58.3	32.1
80.0	91.4	69.2	62.8	40.6
100.0	88.7	69.6	60.0	40.9
125.0	92.5	76.4	63.7	47.6
160.0	105.3	91.9	76.3	62.9
200.0	101.5	90.6	72.1	61.2
250.0	103.9	95.3	74.0	65.4
315.0	106.0	99.4	75.2	68.6
400.0	101.0	96.2	68.5	63.7
500.0	94.9	91.7	59.5	56.3
630.0	99.6	97.7	56.9	55.0
800.0	103.4	102.6	61.7	60.9
1000.0	107.0	107.0	74.3	74.3
1250.0	104.6	105.2	75.5	76.1
1600.0	101.3	102.3	71.9	72.9
2000.0	98.2	99.4	61.5	62.7
2500.0	97.5	98.8	66.5	67.8
3150.0	95.4	96.6	64.0	65.2
4000.0	94.8	95.8	64.0	65.0
5000.0	93.9	94.4	61.5	62.0
6300.0	90.4	90.3	59.0	58.9
8000.0	88.3	87.2	57.4	56.3
	UNWEIGHTED= 114.5		UNWEIGHTED= 83.5	
	A-WEIGHTED= 112.4		A-WEIGHTED= 80.9	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 168.7  
 EXHAUST BACK PRESSURE (IN-WATER), 31.1  
 INTAKE RESTRICTION (IN-WATER) 29.1  
 ENGINE NOISE EFFICIENCY(DB)= -56.6  
 ENGINE NOISE EFFICIENCY(DBA)= -58.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	82.6	48.0	54.1	19.5
50.0	85.1	54.9	56.6	26.4
63.0	85.4	59.2	56.8	30.6
80.0	90.9	68.7	62.3	40.1
100.0	88.7	69.6	60.0	40.9
125.0	92.3	76.2	63.5	47.4
160.0	105.3	91.9	76.3	62.9
200.0	101.7	90.8	72.3	61.4
250.0	103.9	95.3	74.0	65.4
315.0	106.7	100.1	75.9	69.3
400.0	101.0	96.2	68.5	63.7
500.0	95.1	91.9	59.7	56.5
630.0	98.0	96.9	56.1	54.2
800.0	102.4	101.6	60.7	59.9
1000.0	106.2	106.2	73.5	73.5
1250.0	104.9	105.5	75.0	76.4
1500.0	101.3	102.3	71.9	72.9
2000.0	98.0	99.2	61.3	62.5
2500.0	97.5	98.8	66.5	67.8
3150.0	95.6	96.8	64.2	65.4
4000.0	94.8	95.8	64.0	65.0
5000.0	93.9	94.4	61.5	63.0
6300.0	89.4	89.3	58.0	57.9
8000.0	87.8	86.7	56.9	55.8
	UNWEIGHTED= 114.4		UNWEIGHTED= 83.6	
	A-WEIGHTED= 112.2		A-WEIGHTED= 80.9	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 195.2  
 EXHAUST BACK PRESSURE (IN-WATER), 50.1  
 INTAKE RESTRICTION (IN-WATER) 40.3  
 ENGINE NOISE EFFICIENCY(DB)= -58.2  
 ENGINE NOISE EFFICIENCY(OBA)= -59.6

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	88.6	54.0	60.1	25.5
50.0	79.9	49.7	51.4	21.2
63.0	88.7	62.5	60.1	33.9
80.0	98.1	75.9	69.5	47.3
100.0	98.9	79.8	70.2	51.1
125.0	91.0	74.9	62.2	46.1
160.0	98.6	85.2	69.6	56.2
200.0	100.2	89.3	70.8	59.9
250.0	100.4	91.8	70.5	61.9
315.0	102.5	95.9	71.7	65.1
400.0	101.0	96.2	68.5	63.7
500.0	98.9	95.7	63.5	60.3
630.0	103.8	101.9	61.1	59.2
800.0	100.9	100.1	59.2	58.4
1000.0	104.7	104.7	72.0	72.0
1250.0	102.9	103.5	73.8	74.4
1600.0	102.0	103.0	72.6	73.6
2000.0	98.5	99.7	61.0	63.0
2500.0	101.0	102.3	70.0	71.3
3150.0	97.6	98.8	66.2	67.4
4000.0	97.6	98.6	66.0	67.8
5000.0	95.4	95.9	63.0	63.5
6300.0	91.6	91.5	60.2	60.1
8000.0	91.8	90.7	60.9	59.8
	UNWEIGHTED= 113.5	UNWEIGHTED= 82.2		
	A-WEIGHTED= 112.0	A-WEIGHTED= 80.4		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 177.3  
 EXHAUST BACK PRESSURE (IN-WATER), 50.1  
 INTAKE RESTRICTION (IN-WATER) 60.5  
 ENGINE NOISE EFFICIENCY(DB)= -57.5  
 ENGINE NOISE EFFICIENCY(DBA)= -58.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	90.9	56.3	62.4	27.8
50.0	80.6	50.4	52.1	21.9
63.0	87.4	61.2	58.0	32.6
80.0	96.4	74.2	67.0	45.6
100.0	98.7	79.6	70.0	50.9
125.0	88.3	72.2	59.5	43.4
160.0	96.8	83.4	67.8	54.4
200.0	100.2	89.3	70.8	59.9
250.0	102.2	93.6	72.3	63.7
315.0	102.7	96.1	71.9	65.3
400.0	101.8	97.0	69.3	64.5
500.0	100.1	96.9	64.7	61.5
630.0	103.6	101.7	60.9	59.0
800.0	101.1	100.3	59.4	58.6
1000.0	103.7	103.7	71.0	71.0
1250.0	104.4	105.0	75.3	75.9
1600.0	102.0	103.8	73.4	74.4
2000.0	97.7	98.9	61.0	62.2
2500.0	100.5	101.8	69.5	70.8
3150.0	99.4	100.6	68.0	69.2
4000.0	97.3	98.3	66.5	67.5
5000.0	95.9	96.4	63.5	64.0
6300.0	92.9	92.8	61.5	61.4
8000.0	92.5	91.4	61.6	60.5
	UNWEIGHTED= 113.7		UNWEIGHTED=	82.5
	A-WEIGHTED= 112.3		A-WEIGHTED=	81.0

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 207.8  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 17.1  
 ENGINE NOISE EFFICIENCY(DB)= -58.5  
 ENGINE NOISE EFFICIENCY(DBA)= -59.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	88.4	53.8	59.9	25.3
50.0	79.9	49.7	51.4	21.2
63.0	87.7	61.5	59.1	32.9
80.0	96.6	74.4	68.0	45.0
100.0	98.9	79.8	70.2	51.1
125.0	89.0	72.9	60.2	44.1
160.0	97.3	83.9	68.3	54.9
200.0	99.7	88.8	70.3	59.4
250.0	100.9	92.3	71.0	62.4
315.0	101.2	94.6	70.4	63.8
400.0	101.8	97.0	69.3	64.5
500.0	99.9	96.7	64.5	61.3
630.0	102.8	100.9	60.1	50.2
800.0	99.6	98.8	57.9	57.1
1000.0	106.0	106.0	73.3	73.3
1250.0	102.9	103.5	73.8	74.4
1500.0	102.3	103.3	72.9	73.9
2000.0	96.5	97.7	59.8	61.0
2500.0	100.5	101.8	69.5	70.8
3150.0	98.1	99.3	66.7	67.9
4000.0	97.8	98.0	67.0	68.0
5000.0	95.9	96.4	63.5	64.0
6300.0	92.4	92.3	61.0	60.9
8000.0	92.8	91.7	61.9	60.8
	UNWEIGHTED= 113.4		UNWEIGHTED=	82.1
	A-WEIGHTED= 112.1		A-WEIGHTED=	80.6

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM) = 2100.0  
 HORSEPOWER 205.2  
 EXHAUST BACK PRESSURE (IN-WATER), 70.5  
 INTAKE RESTRICTION (IN-WATER) 20.3  
 ENGINE NOISE EFFICIENCY(DB) = -58.9  
 ENGINE NOISE EFFICIENCY(DBA) = -60.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	88.1	53.5	59.6	25.0
50.0	78.9	48.7	50.4	20.2
63.0	87.7	61.5	59.1	32.9
80.0	97.9	75.7	69.3	47.1
100.0	99.4	80.3	70.7	51.6
125.0	90.3	74.2	61.5	45.4
160.0	97.3	83.9	68.3	54.9
200.0	100.2	89.3	70.8	59.9
250.0	100.9	92.3	71.0	62.4
315.0	101.5	94.9	70.7	64.1
400.0	101.0	96.2	68.5	63.7
500.0	100.1	96.9	64.7	61.5
630.0	102.1	100.2	59.4	57.5
800.0	101.1	100.3	59.4	58.6
1000.0	105.7	105.7	73.0	73.0
1250.0	102.4	103.0	73.3	73.9
1600.0	102.0	103.0	72.6	73.6
2000.0	97.0	98.2	60.3	61.5
2500.0	99.5	100.8	68.5	69.8
3150.0	98.1	99.3	66.7	67.9
4000.0	97.3	98.3	66.5	67.5
5000.0	95.6	96.1	63.2	63.7
6300.0	92.1	92.0	60.7	60.6
8000.0	92.5	91.4	61.6	60.5
	UNWEIGHTED = 113.3	UNWEIGHTED =	UNWEIGHTED =	UNWEIGHTED =
	A-WEIGHTED = 111.9	A-WEIGHTED =	A-WEIGHTED =	A-WEIGHTED =

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0		HORSEPOWER 199.9		EXHAUST BACK PRESSURE (IN-WATER), 70.5		INTAKE RESTRICTION (IN-WATER) 29.6		ENGINE NOISE EFFICIENCY(DB)= -58.9		ENGINE NOISE EFFICIENCY(DBA)= -60.4	
FREQUENCY	UNWEIGHTED PWL	ENGINE RADIATED SOUND POWER LEVEL A-WEIGHTED PWL	CALCULATED 50-FT UNWEIGHTED SPL	UNWEIGHTED SPL	A-WEIGHTED SPL	CALCULATED 50-FT UNWEIGHTED SPL	UNWEIGHTED SPL	A-WEIGHTED SPL			
40.0	87.9	53.3	59.4	59.4	24.8	59.4	59.4	24.8			
50.0	78.9	48.7	50.4	50.4	20.2	50.4	50.4	20.2			
63.0	87.2	61.0	58.6	58.6	32.4	58.6	58.6	32.4			
80.0	97.4	75.2	68.8	68.8	46.6	68.8	68.8	46.6			
125.0	99.2	80.1	70.5	70.5	51.4	70.5	70.5	51.4			
160.0	90.5	74.4	61.7	61.7	45.6	61.7	61.7	45.6			
200.0	98.1	84.7	69.1	69.1	55.7	69.1	69.1	55.7			
250.0	100.2	89.3	70.8	70.8	59.9	70.8	70.8	59.9			
315.0	100.4	91.8	70.9	70.9	61.9	70.9	70.9	61.9			
400.0	100.5	93.9	69.7	69.7	63.1	69.7	69.7	63.1			
500.0	101.0	96.2	68.5	68.5	63.7	68.5	68.5	63.7			
630.0	100.4	97.2	65.0	65.0	61.8	65.0	65.0	61.8			
800.0	101.8	99.9	59.1	59.1	57.2	59.1	59.1	57.2			
1000.0	101.6	100.8	59.9	59.9	59.1	59.9	59.9	59.1			
1250.0	104.0	104.0	71.3	71.3	71.3	71.3	71.3	71.3			
1600.0	101.9	102.5	72.8	72.8	73.4	72.8	72.8	73.4			
2000.0	101.0	102.0	71.6	71.6	72.6	71.6	71.6	72.6			
2500.0	97.0	98.2	60.3	60.3	61.5	60.3	60.3	61.5			
3150.0	99.5	100.8	68.5	68.5	69.8	68.5	68.5	69.8			
4000.0	98.1	99.3	66.7	66.7	67.9	66.7	66.7	67.9			
5000.0	97.3	98.3	66.5	66.5	67.5	66.5	66.5	67.5			
6300.0	95.4	95.9	63.0	63.0	63.5	63.0	63.0	63.5			
8000.0	91.9	91.8	60.5	60.5	60.4	60.5	60.5	60.4			
	91.8	90.7	60.9	60.9	59.8	60.9	60.9	59.8			
	UNWEIGHTED=	112.9	UNWEIGHTED=	UNWEIGHTED=	81.6	UNWEIGHTED=	UNWEIGHTED=	81.6			
	A-WEIGHTED=	111.3	A-WEIGHTED=	A-WEIGHTED=	79.6	A-WEIGHTED=	A-WEIGHTED=	79.6			

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 2100.0  
 HORSEPOWER 190.1  
 EXHAUST BACK PRESSURE (IN-WATER), 70.3  
 INTAKE RESTRICTION (IN-WATER) 40.3  
 ENGINE NOISE EFFICIENCY (DB) = -58.0  
 ENGINE NOISE EFFICIENCY (DBA) = -60.4

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	87.4	52.8	58.9	24.3
50.0	78.9	48.7	50.4	20.2
63.0	88.2	62.0	59.6	33.4
80.0	97.9	75.7	69.3	47.1
100.0	99.9	80.8	71.2	52.1
125.0	91.0	74.9	62.2	46.1
160.0	98.1	84.7	69.1	55.7
200.0	100.2	89.3	70.8	59.9
250.0	99.7	91.1	69.8	61.2
315.0	100.2	93.6	69.4	62.8
400.0	100.0	95.2	67.5	62.7
500.0	100.6	97.4	65.2	62.0
630.0	102.1	100.2	59.4	57.5
800.0	101.1	100.3	59.4	58.6
1000.0	102.0	102.0	69.3	69.3
1250.0	102.6	103.2	73.5	74.1
1600.0	101.3	102.3	71.9	72.9
2000.0	97.7	98.9	61.0	62.2
2500.0	95.8	101.1	68.8	70.1
3150.0	98.1	99.3	66.7	67.9
4000.0	97.1	98.1	66.3	67.3
5000.0	95.1	95.6	62.7	63.2
6300.0	92.1	92.0	60.7	60.6
8000.0	92.0	90.9	61.1	60.0
	UNWEIGHTED = 112.7		UNWEIGHTED = 81.5	
	A-WEIGHTED = 111.2		A-WEIGHTED = 79.6	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

I.7 6-71 Load-Speed Engine  
Radiated Sound Power Level  
Spectrums



ENGINE PERFORMANCE

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	83.6	49.0	55.1	20.5
50.0	82.6	52.4	54.1	23.9
63.0	90.4	64.2	61.8	35.6
80.0	98.9	76.7	70.3	48.1
100.0	95.9	76.8	67.2	48.1
125.0	91.0	74.9	62.2	46.1
160.0	96.3	82.9	67.3	53.9
200.0	98.7	87.8	69.3	50.4
250.0	101.9	93.3	72.0	63.4
315.0	108.2	101.6	77.4	70.8
400.0	96.8	92.0	64.3	59.5
500.0	99.1	95.9	63.7	60.5
630.0	99.6	97.7	60.9	55.0
800.0	102.4	101.6	56.7	59.9
1000.0	104.2	104.2	71.5	71.5
1250.0	107.1	107.7	78.0	78.6
1600.0	104.5	105.5	75.1	76.1
2000.0	100.2	101.4	63.5	64.7
2500.0	102.0	103.3	71.0	72.3
3150.0	98.4	99.6	67.0	68.2
4000.0	97.3	98.3	66.5	67.5
5000.0	95.1	95.6	62.7	63.2
6300.0	91.9	91.8	60.5	60.4
8000.0	90.8	89.7	59.9	58.8
	UNWEIGHTED=	114.7	UNWEIGHTED=	84.0
	A-WEIGHTED=	113.4	A-WEIGHTED=	82.6

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 210.0  
 EXHAUST BACK PRESSURE (IN-WATER), 12.7  
 INTAKE RESTRICTION (IN-WATER) 21.8  
 ENGINE NOISE EFFICIENCY(DB)= -57.2  
 ENGINE NOISE EFFICIENCY(DBA)= -58.5

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 2100.0  
 HORSEPOWER 7.1  
 EXHAUST BACK PRESSURE (IN-WATER), 7.3  
 INTAKE RESTRICTION (IN-WATER) 22.1  
 ENGINE NOISE EFFICIENCY(DB)= -43.7  
 ENGINE NOISE EFFICIENCY(DBA)= -45.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL <sup>B</sup>	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	78.6	44.0	50.1	15.5
50.0	82.4	52.2	53.9	23.7
63.0	86.9	60.7	58.3	32.1
80.0	93.6	71.4	65.0	42.8
100.0	97.2	78.1	68.5	49.4
125.0	89.3	73.2	60.5	44.4
160.0	96.8	83.4	67.8	54.4
200.0	101.9	90.6	72.1	61.2
250.0	97.9	89.3	68.0	59.4
315.0	108.5	101.9	77.7	71.1
400.0	98.3	93.5	65.8	61.0
500.0	97.4	94.2	62.0	58.0
630.0	96.8	94.9	54.1	52.2
800.0	102.1	101.3	60.4	59.6
1000.0	104.7	104.7	72.0	72.0
1250.0	103.6	104.2	74.5	75.1
1600.0	100.3	101.3	70.9	71.9
2000.0	98.2	99.4	61.5	62.7
2500.0	99.3	100.6	68.3	69.6
3150.0	96.6	97.8	65.2	66.4
4000.0	94.6	95.6	63.8	64.8
5000.0	93.1	93.6	60.7	61.2
6300.0	89.1	89.0	57.7	57.6
8000.0	89.0	87.9	58.1	57.0
	UNWEIGHTED= 113.6	UNWEIGHTED= 82.5		
	A-WEIGHTED= 111.5	A-WEIGHTED= 80.1		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 197.5  
 EXHAUST BACK PRESSURE (IN-WATER), 11.3  
 INTAKE RESTRICTION (IN-WATER) 19.1  
 ENGINE NOISE EFFICIENCY(DB)= -56.5  
 ENGINE NOISE EFFICIENCY(DBA)= -57.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
42.0	77.1	42.5	48.6	14.0
50.0	83.1	52.9	54.6	24.4
63.0	89.9	63.7	61.3	35.1
80.0	89.4	67.2	60.8	38.6
100.0	87.7	68.6	59.0	39.9
125.0	87.5	71.4	58.7	42.6
160.0	96.6	83.2	67.6	54.2
200.0	97.2	86.3	67.8	56.9
250.0	100.7	92.1	70.8	62.2
315.0	107.0	100.4	76.2	69.6
400.0	102.8	98.0	70.3	65.5
500.0	102.4	99.2	67.0	63.8
630.0	100.3	98.4	57.6	55.7
800.0	103.4	102.6	61.7	60.9
1000.0	109.2	109.2	76.5	76.5
1250.0	107.4	108.0	78.3	78.9
1600.0	103.3	104.3	73.9	74.9
2000.0	94.5	99.7	61.8	63.0
2500.0	98.5	99.8	67.5	68.8
3150.0	96.9	98.1	65.5	66.7
4000.0	96.6	97.6	65.8	66.8
5000.0	94.6	95.1	62.2	62.7
6300.0	91.1	91.0	59.7	59.6
8000.0	90.0	88.9	59.1	58.0
	UNWEIGHTED= 115.2		UNWEIGHTED= 83.8	
	A-WEIGHTED= 114.2		A-WEIGHTED= 82.9	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1900.0  
 HORSEPOWER 101.5  
 EXHAUST BACK PRESSURE (IN-WATER), 8.3  
 INTAKE RESTRICTION (IN-WATER) 19.6  
 ENGINE NOISE EFFICIENCY(DB)= -54.2  
 ENGINE NOISE EFFICIENCY(DBA)= -54.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.1	41.5	47.6	13.0
50.0	83.6	53.4	55.1	24.9
63.0	88.9	62.7	60.3	34.1
80.0	89.1	66.9	60.5	38.3
100.0	86.9	67.8	58.2	39.1
125.0	91.3	75.2	62.5	46.4
160.0	95.1	81.7	66.1	52.7
200.0	96.0	85.1	66.6	55.7
250.0	97.7	89.1	67.8	59.2
315.0	102.0	95.4	71.2	64.6
400.0	99.3	94.5	66.8	62.0
500.0	101.4	98.2	66.0	62.8
630.0	99.1	97.2	56.4	54.5
800.0	104.4	103.6	62.7	61.9
1000.0	109.5	109.5	76.8	76.8
1250.0	107.4	108.0	78.3	78.9
1500.0	103.3	104.3	73.9	74.9
2000.0	97.5	98.7	68.8	62.0
2500.0	99.5	100.8	68.5	69.8
3150.0	96.4	97.6	65.0	66.2
4000.0	95.3	96.3	64.5	65.5
5000.0	96.4	96.9	64.0	64.5
6300.0	90.9	90.8	59.5	59.4
8000.0	89.5	88.4	58.6	57.5
	UNWEIGHTED= 114.5		UNWEIGHTED=	83.1
	A-WEIGHTED= 114.1		A-WEIGHTED=	82.8

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED (RPM) = 1900.0  
 HORSEPOWER = 4.0  
 EXHAUST BACK PRESSURE (IN-WATER), 6.6  
 INTAKE RESTRICTION (IN-WATER) 19.7  
 ENGINE NOISE EFFICIENCY (DB) = -44.6  
 ENGINE NOISE EFFICIENCY (DBA) = -45.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	75.6	41.0	47.1	12.5
50.0	82.1	51.9	53.6	23.4
63.0	87.7	61.5	59.1	32.9
80.0	87.4	65.2	58.8	36.6
100.0	84.7	65.6	56.0	36.9
125.0	92.3	76.2	63.5	47.4
160.0	88.1	74.7	59.1	45.7
200.0	88.7	77.8	59.3	48.4
250.0	90.9	82.3	61.0	52.4
315.0	96.0	89.4	65.2	58.6
400.0	95.8	91.0	63.3	58.5
500.0	99.6	96.4	64.2	61.0
630.0	95.1	93.2	52.4	50.5
800.0	101.6	100.8	59.9	59.1
1000.0	104.5	104.5	71.8	71.8
1250.0	101.6	102.2	72.5	73.1
1600.0	98.0	99.0	68.6	69.6
2000.0	94.0	95.2	57.3	58.5
2500.0	96.3	97.6	65.3	66.6
3150.0	94.1	95.3	62.7	63.9
4000.0	94.3	95.3	63.5	64.5
5000.0	91.1	91.6	58.7	59.2
6300.0	87.6	87.5	56.2	56.1
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED = 110.2	UNWEIGHTED = 78.2		
	A-WEIGHTED = 109.6	A-WEIGHTED = 77.8		

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 101.3  
 EXHAUST BACK PRESSURE (IN-WATER), 9.3  
 INTAKE RESTRICTION (IN-WATER) 17.7  
 ENGINE NOISE EFFICIENCY(DB)= -56.0  
 ENGINE NOISE EFFICIENCY(DBA)= -58.7

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.9	45.3	51.4	16.8
50.0	82.1	51.9	53.6	23.4
63.0	84.2	58.0	55.6	29.4
80.0	90.9	68.7	62.3	40.1
100.0	88.7	69.6	60.0	40.9
125.0	92.5	76.4	63.7	47.6
160.0	109.8	96.4	80.8	67.4
200.0	102.0	91.1	72.6	61.7
250.0	98.4	89.8	68.5	59.9
315.0	107.2	100.6	76.4	69.8
400.0	101.5	96.7	69.0	64.2
500.0	95.6	92.4	60.2	57.0
630.0	99.8	97.9	57.1	55.2
800.0	100.6	99.8	58.9	58.1
1000.0	108.0	108.0	75.3	75.3
1250.0	103.6	104.2	74.5	75.1
1600.0	100.5	101.5	71.1	72.1
2000.0	99.2	100.4	62.5	63.7
2500.0	100.0	101.3	69.0	70.3
3150.0	95.9	97.1	64.5	65.7
4000.0	94.8	95.8	64.0	65.0
5000.0	93.6	94.1	61.2	61.7
6300.0	90.6	90.5	59.2	59.1
8000.0	88.8	87.7	57.9	56.8
	UNWEIGHTED= 115.3		UNWEIGHTED= 84.7	
	A-WEIGHTED= 112.6		A-WEIGHTED= 81.0	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 90.1  
 EXHAUST BACK PRESSURE (IN-WATER), 6.9  
 INTAKE RESTRICTION (IN-WATER) 17.2  
 ENGINE NOISE EFFICIENCY(DB)= -53.0  
 ENGINE NOISE EFFICIENCY(DBA)= -54.9

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	77.6	43.0	49.1	14.5
50.0	82.1	51.9	53.6	23.4
63.0	84.2	58.0	55.6	29.4
80.0	90.9	68.7	62.3	40.1
100.0	86.2	67.1	57.5	38.4
125.0	89.9	73.7	61.0	44.9
160.0	108.1	94.7	79.1	65.7
200.0	100.2	89.3	70.8	59.9
250.0	100.2	91.6	70.3	61.7
315.0	106.2	99.6	75.4	68.8
400.0	99.8	95.0	67.3	62.5
500.0	93.4	90.2	58.0	54.8
630.0	101.1	99.2	58.4	56.5
800.0	103.4	102.6	61.7	60.9
1000.0	109.5	109.5	76.8	76.8
1250.0	103.1	103.7	74.0	74.6
1500.0	103.0	104.0	73.6	74.6
2000.0	99.2	100.4	62.5	63.7
2500.0	99.3	100.6	68.3	69.6
3150.0	94.6	95.8	63.2	64.4
4000.0	94.3	95.3	63.5	64.5
5000.0	96.4	96.9	64.0	64.5
6300.0	89.9	89.8	58.5	58.4
8000.0	89.0	87.9	58.1	57.0
	UNWEIGHTED=	115.2	UNWEIGHTED=	84.2
	A-WEIGHTED=	113.4	A-WEIGHTED=	81.6

NOT:  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))



ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1700.0  
 HORSEPOWER 3.2  
 EXHAUST BACK PRESSURE (IN-WATER), 5.2  
 INTAKE RESTRICTION (IN-WATER) 17.2  
 ENGINE NOISE EFFICIENCY(DB)= -43.0  
 ENGINE NOISE EFFICIENCY(DBA)= -45.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED FWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	73.6	39.0	45.1	10.5
50.0	81.6	51.4	53.1	22.9
63.0	83.4	57.2	54.8	28.6
80.0	88.1	65.9	59.5	37.3
100.0	82.7	63.6	54.0	34.9
125.0	87.0	70.9	58.2	42.1
160.0	104.3	90.9	75.3	61.9
200.0	95.2	84.3	65.8	54.9
250.0	92.2	83.6	62.3	53.7
315.0	102.7	96.1	71.9	65.3
400.0	96.0	91.2	63.5	58.7
500.0	93.6	90.4	58.2	55.0
630.0	95.1	93.2	52.4	50.5
800.0	97.6	96.8	55.9	55.1
1000.0	104.0	104.0	71.3	71.3
1250.0	99.2	99.2	69.5	70.1
1600.0	98.3	99.3	68.9	69.9
2000.0	96.5	97.7	59.8	61.0
2500.0	96.5	97.8	65.5	66.8
3150.0	92.6	93.8	61.2	62.4
4000.0	91.6	92.6	60.8	61.8
5000.0	89.6	90.1	57.2	57.7
6300.0	85.9	85.8	54.5	54.4
8000.0	85.3	84.2	54.4	53.3
	UNWEIGHTED= 110.8		UNWEIGHTED= 79.9	
	A-WEIGHTED= 108.7		A-WEIGHTED= 77.1	

NOTE  
 PWL (JB (RE 10-12 WATTS))  
 SPL (JB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 157.4  
 EXHAUST BACK PRESSURE (IN-WATER), 7.9  
 INTAKE RESTRICTION (IN-WATER) 14.9  
 ENGINE NOISE EFFICIENCY(OB)= -56.4  
 ENGINE NOISE EFFICIENCY(DBA)= -58.1

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.6	42.0	48.1	13.5
50.0	82.1	51.9	53.6	23.4
63.0	86.9	60.7	58.3	32.1
80.0	107.4	85.2	78.8	56.6
100.0	87.2	68.1	58.5	39.4
125.0	89.3	73.2	60.5	44.4
160.0	102.8	89.4	73.8	60.4
200.0	95.7	84.8	66.3	55.4
250.0	94.9	86.3	65.0	56.4
315.0	98.7	92.1	67.9	61.3
400.0	97.8	93.0	65.3	60.5
500.0	95.9	92.7	60.5	57.3
630.0	96.8	94.9	54.1	52.2
800.0	107.1	106.3	65.4	64.6
1000.0	107.2	107.2	74.5	74.5
1250.0	103.4	104.0	74.3	74.9
1600.0	101.3	102.3	71.9	72.9
2000.0	98.2	99.4	61.5	62.7
2500.0	98.8	100.1	67.8	69.1
3150.0	95.4	96.6	64.0	65.2
4000.0	94.8	95.8	64.0	65.0
5000.0	94.4	94.9	62.0	62.5
6300.0	90.9	90.8	59.5	59.4
8000.0	87.8	86.7	56.9	55.8
	UNWEIGHTED= 114.3		UNWEIGHTED= 83.2	
	A-WEIGHTED= 112.5		A-WEIGHTED= 80.3	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 77.8  
 EXHAUST BACK PRESSURE (IN-WATER), 5.2  
 INTAKE RESTRICTION (IN-WATER) 15.1  
 ENGINE NOISE EFFICIENCY(DB)= -53.3  
 ENGINE NOISE EFFICIENCY(DBA)= -54.8

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVEL	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	75.1	40.5	46.6	12.0
50.0	83.1	52.9	54.6	24.4
63.0	87.2	61.0	58.6	32.4
80.0	106.1	83.9	77.5	55.3
100.0	87.2	68.1	58.5	39.4
125.0	89.5	73.4	60.7	44.6
160.0	102.6	89.2	73.6	60.2
200.0	94.5	83.6	65.1	54.2
250.0	90.4	81.8	60.5	51.9
315.0	101.2	94.6	70.4	63.8
400.0	94.0	89.2	61.5	56.7
500.0	96.6	93.4	61.2	58.0
630.0	97.3	95.4	64.6	52.7
800.0	107.6	106.8	65.9	65.1
1000.0	108.0	108.0	75.3	75.3
1250.0	103.6	104.2	74.5	75.1
1600.0	100.5	101.5	71.1	72.1
2000.0	98.2	99.4	61.5	62.7
2500.0	98.5	99.8	67.5	68.8
3150.0	94.4	95.6	63.0	64.2
4000.0	94.3	95.3	63.5	64.5
5000.0	96.6	97.1	64.2	64.7
6300.0	89.1	89.0	57.7	57.6
8000.0	88.0	86.9	57.1	56.0
	UNWEIGHTED= 114.3	UNWEIGHTED= 82.9	UNWEIGHTED= 82.9	
	A-WEIGHTED= 112.9	A-WEIGHTED= 80.4	A-WEIGHTED= 80.4	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1500.0  
 HORSEPOWER 2.3  
 EXHAUST BACK PRESSURE (IN-WATER), 4.5  
 INTAKE RESTRICTION (IN-WATER) 15.1  
 ENGINE NOISE EFFICIENCY(DB)= -43.5  
 ENGINE NOISE EFFICIENCY(DBA)= -46.0

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	76.9	42.3	48.4	13.8
50.0	81.4	51.2	52.9	22.7
63.0	83.4	57.2	54.8	28.6
80.0	101.1	78.9	72.5	50.3
100.0	81.2	62.1	52.5	33.4
125.0	86.8	70.7	58.0	41.9
160.0	100.3	86.9	71.3	57.9
200.0	93.7	82.8	64.3	53.4
250.0	91.9	83.3	62.0	53.4
315.0	97.5	90.9	66.7	60.1
400.0	93.5	88.7	61.0	56.2
500.0	94.6	91.4	59.2	56.0
630.0	94.3	92.4	51.6	49.7
800.0	99.6	98.8	57.9	57.1
1000.0	98.0	98.0	65.3	55.3
1250.0	96.1	96.7	67.0	67.6
1500.0	99.0	100.0	69.6	70.6
2000.0	92.7	93.9	56.0	57.2
2500.0	92.0	93.3	61.0	62.3
3150.0	91.4	92.6	60.0	61.2
4000.0	90.3	91.3	59.5	60.5
5000.0	87.6	88.1	55.2	55.7
6300.0	84.1	84.0	52.7	52.6
8000.0	83.3	82.2	52.4	51.3
	UNWEIGHTED= 100.8		UNWEIGHTED= 78.2	
	A-WEIGHTED= 106.4		A-WEIGHTED= 74.7	

NOTE  
 PWL (JB (RE 10-12 WATTS))  
 SPL (JB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1300.0  
 HORSEPOWER 134.8  
 EXHAUST BACK PRESSURE (IN-WATER), 6.6  
 INTAKE RESTRICTION (IN-WATER) 13.1  
 ENGINE NOISE EFFICIENCY(OB)= -97.6  
 ENGINE NOISE EFFICIENCY(OBA)= -58.5

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PHL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.9	45.3	51.4	16.8
50.0	82.4	52.2	53.9	23.7
63.0	90.2	64.0	61.6	35.4
80.0	88.4	66.2	59.8	37.6
100.0	93.2	74.1	64.5	45.4
125.0	99.5	83.4	70.7	54.6
160.0	95.8	82.4	66.8	53.4
200.0	89.5	78.6	60.1	49.2
250.0	98.2	89.6	68.3	59.7
315.0	97.2	90.6	66.4	59.8
400.0	96.8	92.0	64.3	59.5
500.0	94.6	91.4	59.2	56.0
630.0	97.1	95.2	54.4	52.5
800.0	107.4	106.6	65.7	64.9
1000.0	104.0	104.0	71.3	71.3
1250.0	102.9	103.5	73.8	74.4
1600.0	99.5	100.5	70.1	71.1
2000.0	98.5	99.7	61.8	63.0
2500.0	97.3	98.6	66.3	67.6
3150.0	94.4	95.6	63.0	64.2
4000.0	93.6	94.6	62.8	63.8
5000.0	94.4	94.9	62.0	62.5
6300.0	90.6	90.5	59.2	59.1
8000.0	86.5	85.4	55.6	54.5
	UNWEIGHTED= 112.4		UNWEIGHTED= 80.1	
	A-WEIGHTED= 111.5		A-WEIGHTED= 78.8	

NOTE  
 PWL (OB (RE 10-12 WATTS))  
 SPL (OB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1300.0  
 HORSEPOWER 69.3  
 EXHAUST BACK PRESSURE (IN-WATER), 5.2  
 INTAKE RESTRICTION (IN-WATER) 13.3  
 ENGINE NOISE EFFICIENCY(DB)= -55.8  
 ENGINE NOISE EFFICIENCY(DBA)= -56.2

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	79.1	44.5	50.6	16.0
50.0	80.9	50.7	52.4	22.2
63.0	87.4	61.2	58.0	32.6
80.0	86.4	64.2	57.8	35.6
100.0	91.9	72.8	63.2	44.1
125.0	88.0	71.9	59.2	43.1
160.0	93.1	79.7	64.1	50.7
200.0	89.0	78.1	59.6	48.7
250.0	93.4	84.8	63.5	54.9
315.0	96.7	90.1	65.9	59.3
400.0	95.5	90.7	63.0	58.2
500.0	94.9	91.7	59.5	56.3
630.0	96.6	94.7	53.9	52.0
800.0	105.1	104.3	63.4	62.6
1000.0	104.7	104.7	72.0	72.0
1250.0	103.4	104.0	74.3	74.9
1600.0	99.0	100.0	69.6	70.6
2000.0	98.2	99.4	61.5	62.7
2500.0	96.8	98.1	65.8	67.1
3150.0	93.6	94.8	62.2	63.4
4000.0	93.1	94.1	63.3	63.3
5000.0	95.4	95.9	63.0	63.5
6300.0	87.4	87.3	56.0	55.9
8000.0	86.5	85.4	55.6	54.5
	UNWEIGHTED= 111.3		UNWEIGHTED= 79.2	
	A-WEIGHTED= 110.9		A-WEIGHTED= 78.9	

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))

ENGINE PERFORMANCE

ENGINE SPEED(RPM)= 1300.0  
 HORSEPOWER 2.7  
 EXHAUST BACK PRESSURE (IN-WATER), 3.9  
 INTAKE RESTRICTION (IN-WATER) 13.2  
 ENGINE NOISE EFFICIENCY(DB)= -41.9  
 ENGINE NOISE EFFICIENCY(DBA)= -42.3

FREQUENCY	ENGINE RADIATED SOUND POWER LEVEL		CALCULATED 50-FT NOISE LEVELS	
	UNWEIGHTED PWL	A-WEIGHTED PWL	UNWEIGHTED SPL	A-WEIGHTED SPL
40.0	77.4	42.8	48.9	14.3
50.0	79.1	48.9	50.6	20.4
63.0	86.2	60.0	57.6	31.4
80.0	86.6	64.4	58.0	35.8
100.0	91.9	72.8	63.2	44.1
125.0	87.8	71.7	59.0	42.9
160.0	92.8	79.4	63.8	50.4
200.0	89.2	78.3	59.8	48.9
250.0	93.7	85.1	63.8	55.2
315.0	97.2	90.6	66.4	59.8
400.0	95.0	90.2	62.5	57.7
500.0	94.9	91.7	59.5	56.3
630.0	96.1	94.2	53.4	51.5
800.0	104.6	103.0	62.9	62.1
1000.0	104.5	104.5	71.8	71.8
1250.0	103.1	103.7	74.0	74.6
1500.0	99.5	100.5	70.1	71.1
2000.0	97.7	98.9	61.0	62.2
2500.0	96.8	98.1	65.8	67.1
3150.0	93.6	94.8	62.2	63.4
4000.0	93.3	94.3	62.5	63.5
5000.0	94.9	95.4	62.5	63.0
6300.0	87.1	87.0	55.7	55.6
8000.0	86.5	85.4	55.6	54.5
	UNWEIGHTED= 111.1		UNWEIGHTED=	79.1
	A-WEIGHTED= 110.7		A-WEIGHTED=	78.7

NOTE  
 PWL (DB (RE 10-12 WATTS))  
 SPL (DB (RE 0.0002 MICRO BARS))