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MICROCOPY RESOLUTION TEST CHART
NBS 1963-A

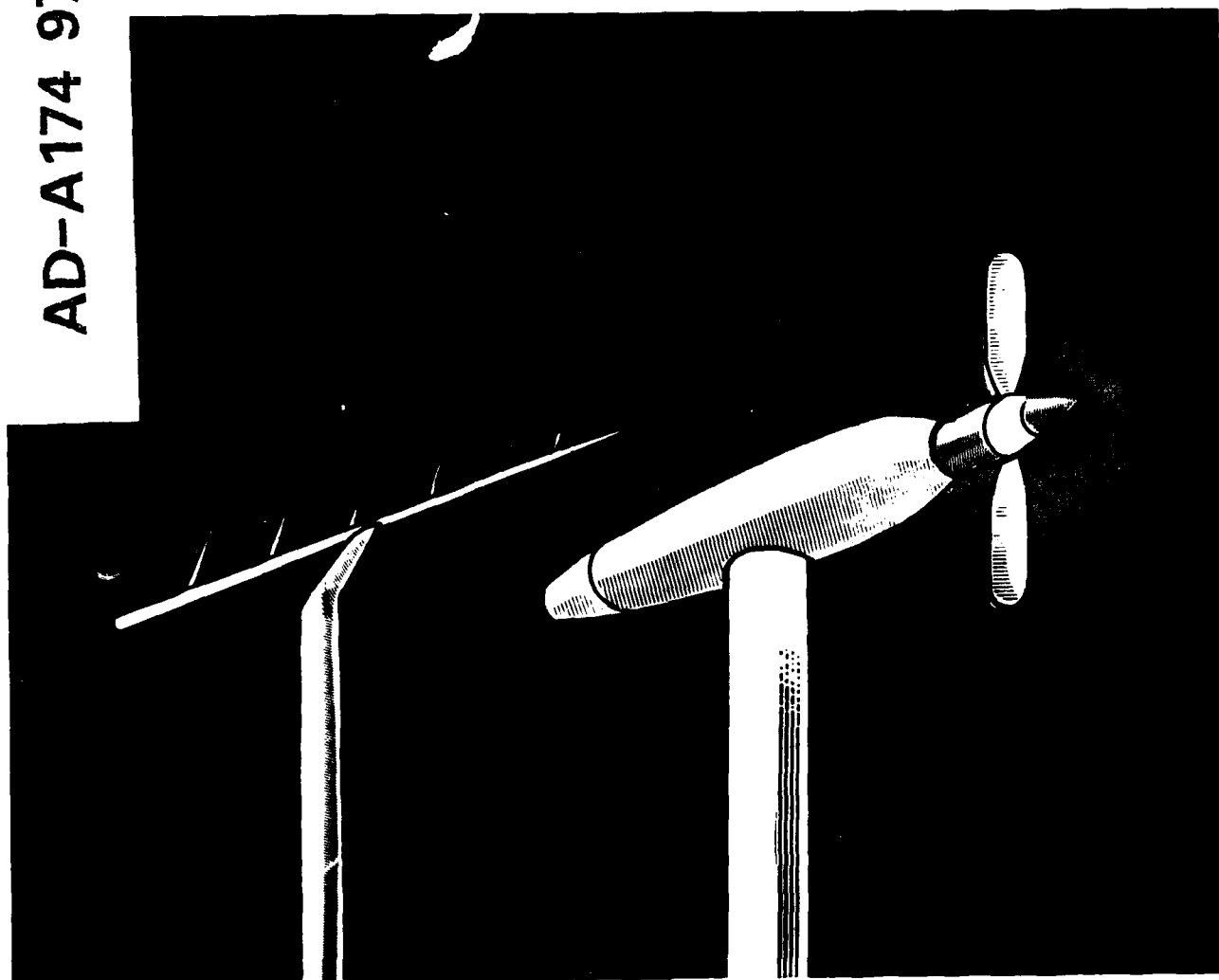
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DFVLR/FAA Propeller Noise Tests in the German-Dutch Wind Tunnel DNW

Appendix III: The Effect of Flow Temperature

DFVLR-IB 129-86/3
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Deutsche Forschungs- und
Versuchsanstalt für
Luft- und Raumfahrt e.V.

Inst. für Entwurfsaerodynamik
Abteilung Technische Akustik

DEC 10 1986

by Werner M. Dobrzynski
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DATA REPORT ON PROPELLER NOISE TESTS
IN THE GERMAN-DUTCH WIND TUNNEL

APPENDIX III
TEST RESULTS ON THE EFFECT OF FLOW TEMPERATURE

by

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1. Introduction

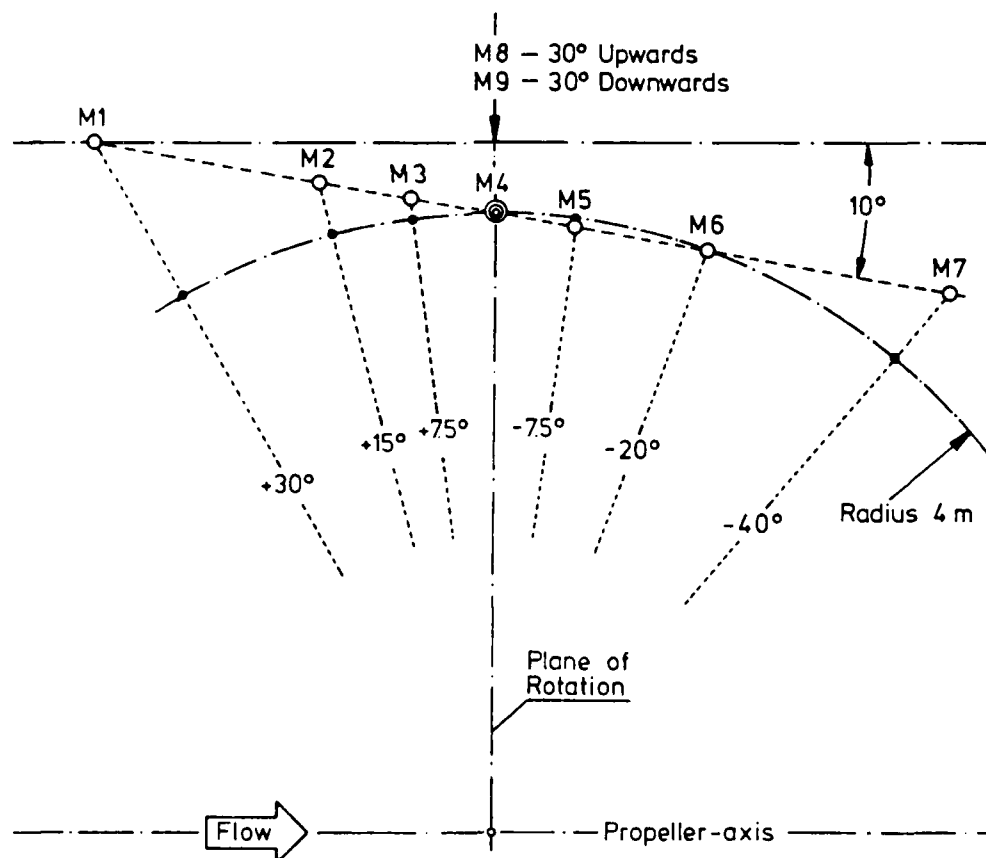
Within a joint effort (and supported by the German Ministry of Research and Technology/BMFT) between the Deutsche Forschungs- und Versuchsanstalt für Luft- und Raumfahrt (DFVLR), the US Federal Aviation Administration (FAA), and the German Ministry of Transportation (BMV), propeller noise tests were conducted in the "Deutsch-Niederländischer Windkanal/German Dutch Wind Tunnel (DNW)" to develop high quality propeller-acoustics data, which could be used by manufacturers for acoustic design purposes, and by researchers to validate established or newly developed theoretical noise prediction methods.

Specifically, the program addressed propeller Mach-number and disc-plane attitude effects as related to noise certification test and evaluation procedures. Changes in Mach-number, as they affect acoustic data adjustments, were explored through independent variation of tunnel flow velocity, propeller rotational speed and ambient air temperature. The tests on the effect of in-flow angle on propeller noise also incorporated the influence of a typical engine nacelle on the flow field and, hence, on the propeller noise.

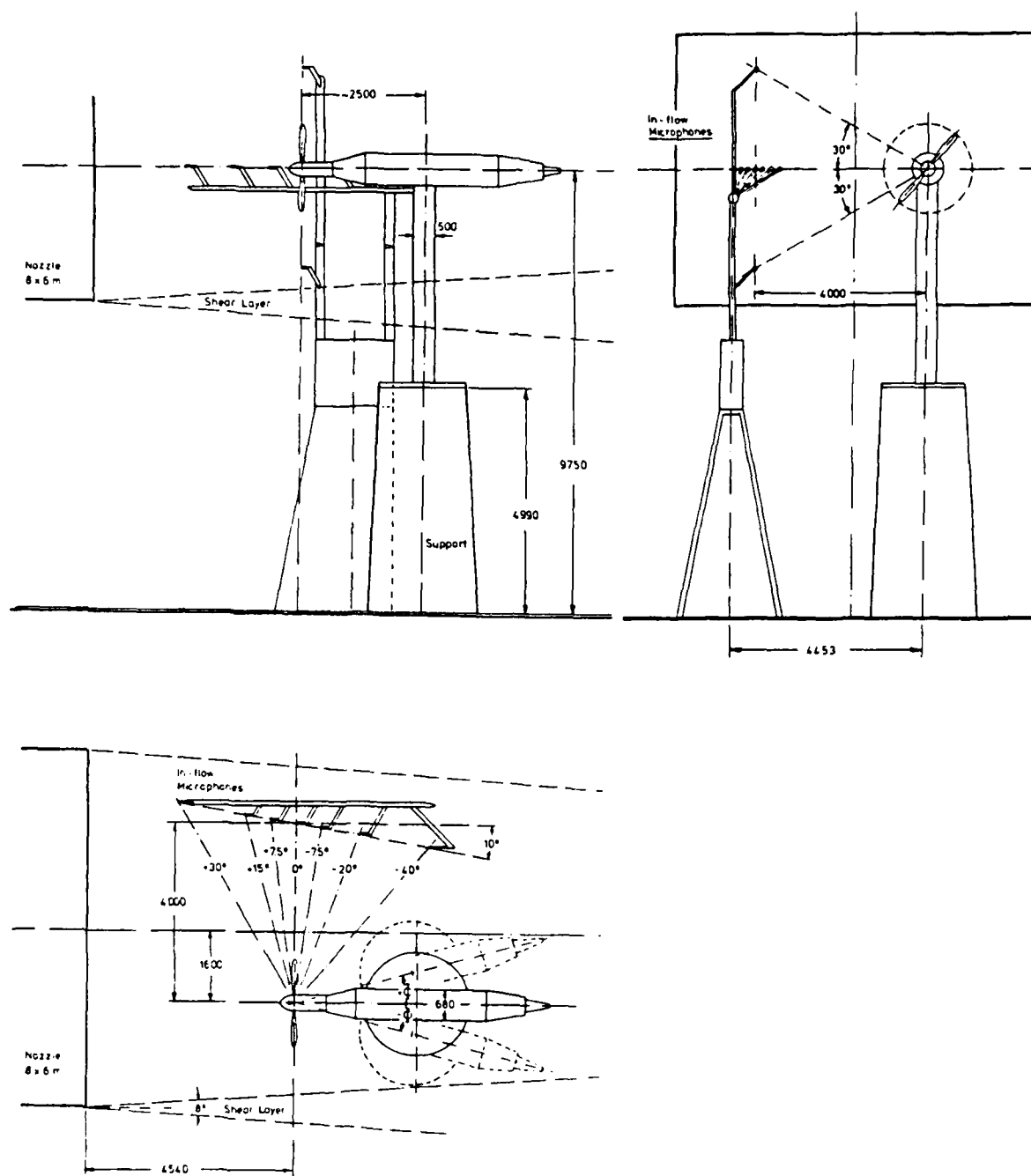
→ In this Appendix the test results on the effect of flow temperature are documented in terms of pressure-time histories, narrow-band spectra and unweighted as well as A-weighted overall sound pressure levels, together with supplementary information necessary for further data interpretation. A detailed description of data-acquisition and -reduction techniques is provided by the "Executive Report" to this Appendix.

2. Microphone Array

A total of seven in-flow microphones were positioned in the horizontal plane at different streamwise locations corresponding to particular geometric radiation angles from the propeller center. Two additional microphones were positioned in the plane of rotation (4 m lateral distance to the propeller axis) at angles of ± 30 deg respectively above and below the horizontal plane with reference to the propeller center.



In-flow Microphone Positioning



Schematic Representation of Test-rig Arrangement within the Core-flow Regime of the DNW 8x6m² Open Test Section

3. Environmental and Operational Test-data

In the following table(s) the data-point matrix is documented. These table(s) summarise the as-measured data and characteristic propeller operational parameters as calculated from measured data.

RUN NO.	DATA POINT	PITCH ANGLE		ROT. SPEED	FLOW VEL.	POWER KW	THRUST NEWTON	ATTITUDE ANGLE		FLOW TEMP. KELVIN	FLOW PRES. PASCAL	FLOW DENS. KG/CM	ADV. RATIO	ATTACK ANGLE DEG	POWER COEF.	THRUST COEF.	HEL. MACHN.
		DEG	DEG	RPM	M/S			DEG	DEG								
33	HN-1	20.8		2400.	77.2	78.2	647.	0.0		279.5	98930.	1.232	0.3023	-1.155	0.0286	0.0193	0.7959
34	HN-2	20.8		2700.	77.2	191.4	1927.	0.0		279.5	98926.	1.232	0.2687	1.086	0.0492	0.0453	0.8875
35	HN-3	20.8		2753.	78.0	213.0	2153.	0.0		279.2	98924.	1.233	0.2663	1.252	0.0516	0.0487	0.9048
36	IN-1	19.9		2100.	51.1	101.8	1589.	0.0		277.8	98700.	1.236	0.2287	2.941	0.0554	0.0615	0.6859
37	IN-2	19.9		2400.	51.2	183.5	2736.	0.0		278.3	98720.	1.234	0.2005	4.932	0.0670	0.0813	0.7787
38	IN-3	19.9		2700.	77.0	159.5	1559.	0.0		279.1	98768.	1.231	0.2680	0.234	0.0410	0.0367	0.8880
67	AN-4	20.8		2400.	77.2	73.6	642.	0.0		290.3	99441.	1.189	0.3023	-1.155	0.0279	0.0198	0.7809
66	AN-5	20.8		2700.	77.0	184.6	1907.	0.0		289.4	99480.	1.194	0.2680	1.134	0.0490	0.0463	0.8720
54	BN-4	19.9		2100.	51.2	95.9	1520.	0.0		288.7	99262.	1.194	0.2292	2.910	0.0541	0.0609	0.6729
53	BN-5	19.9		2400.	51.5	171.9	2599.	0.0		289.3	99090.	1.190	0.2017	4.848	0.0652	0.0801	0.7639
51	BN-6	19.9		2700.	77.2	152.1	1500.	0.0		287.0	98625.	1.194	0.2687	0.186	0.0404	0.0364	0.8758
188	JN-1	20.8		2400.	76.9	73.9	593.	0.0		297.6	99530.	1.158	0.3012	-1.078	0.0288	0.0188	0.7711
189	JN-2	20.8		2700.	77.3	175.3	1770.	0.0		298.2	99570.	1.155	0.2691	1.063	0.0481	0.0444	0.8593
187	KN-1	19.9		2100.	51.6	90.2	1402.	0.0		298.2	99450.	1.154	0.2309	2.785	0.0526	0.0582	0.6624
186	KN-2	19.9		2400.	51.6	164.6	2447.	0.0		298.9	99450.	1.151	0.2021	4.821	0.0645	0.0779	0.7516
185	KN-3	19.9		2700.	76.7	140.2	1397.	0.0		298.6	99460.	1.152	0.2670	0.304	0.0385	0.0351	0.8582

RUN NO.	DATA POINT	PITCH ANGLE		ROT. SPEED	FLOW VEL.	POWER	THRUST	ATTITUDE ANGLE		FLOW TEMP.	FLOW PRES.	FLOW DENS.	ADV. RATIO	ATTACK ANGLE	POWER COEF.	THRUST COEF.	HEL. MACHN.
		DEG	RPM					DEG	KELVIN								
39 40	HC-1	21.6	2400.	77.2	84.0	706.		0.0	278.6	98397.	1.229		0.3023	-0.355	0.0308	0.0211	0.7972
	HC-2	21.6	2700.	77.6	206.7	2050.		0.0	280.2	98355.	1.221		0.2701	1.792	0.0536	0.0486	0.8867
41 42 43	IC-1	20.7	2100.	51.2	103.8	1638.		0.0	277.7	98291.	1.232		0.2292	3.710	0.0567	0.0637	0.6861
	IC-2	20.7	2400.	51.9	195.5	2913.		0.0	278.3	98324.	1.229		0.2033	5.537	0.0717	0.0869	0.7791
	IC-3	20.7	2700.	77.6	169.4	1638.		0.0	279.3	98344.	1.225		0.2701	0.892	0.0438	0.0387	0.8881
80 81	AC-4	21.6	2400.	77.0	79.9	686.		0.0	287.2	99412.	1.203		0.3015	-0.303	0.0300	0.0209	0.7850
	AC-5	21.6	2700.	76.8	199.1	1986.		0.0	288.0	99412.	1.199		0.2673	1.981	0.0526	0.0480	0.8740
73 72 70	BC-4	20.7	2100.	51.2	99.0	1579.		0.0	285.9	99124.	1.205		0.2292	3.710	0.0553	0.0627	0.6762
	BC-5	20.7	2400.	51.5	187.0	2844.		0.0	286.9	99134.	1.201		0.2017	5.648	0.0702	0.0868	0.7671
	BC-6	20.7	2700.	77.0	161.7	1574.		0.0	285.8	99154.	1.206		0.2680	1.034	0.0425	0.0378	0.8775
193 194	JC-1	21.6	2400.	77.3	71.6	564.		0.0	297.9	99532.	1.156		0.3027	-0.381	0.0279	0.0179	0.7710
	JC-2	21.6	2700.	77.4	181.0	1790.		0.0	298.3	99573.	1.155		0.2694	1.839	0.0496	0.0449	0.8592
192 191 190	KC-1	20.7	2100.	51.4	91.9	1442.		0.0	297.9	99450.	1.155		0.2300	3.647	0.0536	0.0598	0.6626
	KC-2	20.7	2400.	51.9	175.7	2628.		0.0	298.4	99453.	1.153		0.2033	5.537	0.0687	0.0835	0.7524
	KC-3	20.7	2700.	77.5	146.5	1412.		0.0	298.1	99456.	1.154		0.2698	0.916	0.0402	0.0354	0.8596

4. Overall Noise Levels from Direct Analog Analysis

The following tables provide unweighted (OASPL) and A-weighted (L_A) overall sound pressure levels from quick-look analog data-analysis of measured data for all data-points and microphone positions respectively. Level-numbers which are identified with an asterix are "disturbed data" and should not be interpreted.

TEMPERATURE EFFECT, ROUND-TIP PROP.

DNW PROPELLER NOISE TEST

Run No.	Data Point		In-Flow Noise Level								
			M1	M2	M3	M4	M5	M6	M7	M8	M9
33	HN-1	L -dB(A)	112.5*	110.8*	108.1	109.8*	108.5	110.8*	125.0*	111.1	--
		OASPL-dB	122.4*	127.6*	117.2	121.7*	118.4	119.6	137.3*	127.2	--
34	HN-2	L -dB(A)	116.0*	120.7	122.0	122.3	120.7	118.1	124.2	121.2	--
		OASPL-dB	123.3*	130.0*	125.0	126.6	125.6	126.3	137.3*	128.6	--
35	HN-3	L -dB(A)	118.9*	123.3	125.8	126.0	124.1	--	124.4*	124.4	--
		OASPL-dB	126.5*	129.6*	128.0	129.3	127.9	--	136.6*	129.9	--
36	IN-1	L -dB(A)	91.4	94.7	96.8	97.8	98.8	--	115.0*	102.7*	--
		OASPL-dB	104.5	108.8	110.0	111.6	112.7	--	130.3*	117.2*	--
37	IN-2	L -dB(A)	100.0	105.5	108.1	109.2	109.5	--	114.3*	109.2	--
		OASPL-dB	110.2	114.1	116.6	118.8	120.1	--	128.7*	119.4*	--
38	IN-3	L -dB(A)	116.9*	119.8	121.7	122.3	120.3	--	124.2*	121.1	--
		OASPL-dB	125.6*	129.1*	124.9	126.9*	124.9	--	137.0*	128.2	--
67	AN-4	L -dB(A)	107.3*	107.4*	106.4	107.0	107.6	--	124.9*	108.3*	107.1
		OASPL-dB	116.6*	121.0*	116.7	118.2*	118.4	--	138.0*	126.1	124.8*
66	AN-5	L -dB(A)	111.5*	119.1*	119.2	119.8	118.7	--	123.5*	118.3	118.6
		OASPL-dB	120.1*	127.9*	123.2	124.7	124.2	--	137.3*	126.0*	126.5*
54	BN-4	L -dB(A)	90.2	93.5	94.8	96.0	96.5	--	97.9*	101.0*	97.2
		OASPL-dB	103.6	109.3*	109.2	110.1	111.8	--	111.9*	115.2	111.3
53	BN-5	L -dB(A)	97.3	103.4	106.3	106.5	107.8	--	101.9*	106.4*	106.1
		OASPL-dB	108.6	113.9*	115.4	116.6	118.6	--	117.1*	117.4	116.6
51	BN-6	L -dB(A)	111.1*	119.3*	119.3	119.4	118.4	--	114.5*	117.4	118.0
		OASPL-dB	120.1*	127.6*	123.3	123.9	123.5	--	138.0*	125.2*	126.6
188	JN-1	L -dB(A)	100.1	107.0*	105.7	110.6	113.2*	--	123.5*	106.3	111.4*
		OASPL-dB	112.3	121.2	116.4	119.9*	123.0	--	126.5*	123.3	126.0*
189	JN-2	L -dB(A)	107.5	116.3	117.3	118.6	118.6	--	124.3*	116.7	117.7
		OASPL-dB	116.5	125.0*	121.9	124.1	125.7	--	137.4*	124.9*	126.8*
187	KN-1	L -dB(A)	90.5	93.8	94.0	95.2*	96.4	--	101.0*	98.3*	96.6
		OASPL-dB	102.3	112.8*	107.6	109.6	111.6*	--	114.9*	112.1*	111.3*
186	KN-2	L -dB(A)	96.5	102.1	104.4	105.7	106.4	97.3	105.6*	105.1	104.9
		OASPL-dB	108.8	114.2*	114.7	116.4	118.0	110.0	119.5*	115.5	116.1*
185	KN-3	L -dB(A)	107.1	116.8*	117.0	118.0	117.8*	111.2	125.5*	116.3	117.0
		OASPL-dB	116.0	125.4*	121.4	123.6	125.4*	120.1	136.9*	123.4	126.6*

*Higher "R" values

Linear- and A-weighted Overall Noise Levels from Analog Data-analysis

TEMPERATURE EFFECT, SQUARE-TIP PROP.

DNW PROPELLER NOISE TEST

Run No.	Data Point		In-Flow Noise Level								
			M1	M2	M3	M4	M5	M6	M7	M8	M9
39	HC-1	L _A -dB(A)	116.7*	114.1*	112.4	113.2	111.7	--	124.3*	112.4	--
		OASPL-dB	126.2*	124.5*	118.7	122.1*	120.0	--	137.0*	126.8	--
40	HC-2	L _A -dB(A)	119.2*	126.2	128.5	128.8	126.5	--	123.0*	127.2	--
		OASPL-dB	126.7*	132.6*	130.2	130.9	129.3	--	135.5*	130.8	--
41	IC-1	L _A -dB(A)	93.0	97.4	99.3	99.7	100.5	--	115.8*	103.8	--
		OASPL-dB	105.8	110.3	111.5	112.7	113.6	--	130.3*	117.4*	--
42	IC-2	L _A -dB(A)	102.9	109.0	111.6	112.7	112.6	--	114.4*	111.8	--
		OASPL-dB	112.9	116.4	118.6	120.5	121.5	--	128.9*	120.7	--
43	IC-3	L _A -dB(A)	119.2*	125.9	128.3	128.6	126.0	--	123.9*	127.0	--
		OASPL-dB	127.7*	130.9*	130.0	130.5	128.6	--	136.1	130.6	--
80	AC-4	L _A -dB(A)	110.6*	109.9*	110.5	111.2	111.0	116.6*	121.0*	110.4	110.6
		OASPL-dB	119.0*	121.7*	118.3	119.5	120.0	125.5*	134.6*	125.7*	125.7*
81	AC-5	L _A -dB(A)	115.2*	124.4	126.0	126.3	124.5	121.9	121.6*	124.5	125.3
		OASPL-dB	122.5*	130.7*	128.1	128.5	127.9	128.8	134.5*	129.0	129.4
73	BC-4	L _A -dB(A)	91.7	96.9	--	98.7	99.1	--	95.7*	100.9*	99.6
		OASPL-dB	104.8	111.6*	--	111.8	113.0	--	109.7*	115.1*	112.4
72	BC-5	L _A -dB(A)	101.3	107.7	--	110.7	111.4	--	100.2*	109.9	109.9
		OASPL-dB	111.8	116.1	--	118.8	120.4	--	115.6*	119.2	118.2
70	BC-6	L _A -dB(A)	116.0*	124.1	125.9	126.2	124.5	--	121.5*	124.5	125.3
		OASPL-dB	124.2*	129.2*	128.0	128.5	127.3	--	134.6*	128.5	129.2
193	JC-1	L _A -dB(A)	101.5	109.0*	109.0	112.3	115.2*	--	124.2	108.5	112.1*
		OASPL-dB	113.0	121.9	117.3*	120.6	125.0*	--	137.1*	123.4*	125.8*
194	JC-2	L _A -dB(A)	111.5	121.6*	122.6	123.2	122.4	--	123.8*	121.8	121.8
		OASPL-dB	118.7	127.1*	125.5	126.9	128.1*	--	136.2*	127.0	128.0
192	KC-1	L _A -dB(A)	91.5	95.5	95.8	97.2	97.7	94.8	99.0*	99.0*	97.5
		OASPL-dB	103.6	111.5*	108.9	110.6	112.2	111.4	110.8*	111.8	111.6
191	KC-2	L _A -dB(A)	99.6	105.8	108.0	108.7	109.1	106.0	102.2*	108.0	108.1
		OASPL-dB	111.1	115.5*	116.4	117.9	119.1	118.6	115.9*	116.7	117.2
190	KC-3	L _A -dB(A)	111.5	120.6	122.5	122.9	122.1	114.9	124.5*	121.4	121.5
		OASPL-dB	118.5	126.9*	125.3	126.6	127.7	121.8	136.5*	126.5	127.7*

*Higher "R" values

Linear- and A-weighted Overall Noise Levels from Analog Data-analysis

5. Acoustic Pressure-time Histories and Narrow-band Spectra

Acoustic data as presented in this section have been derived from a computer analysis of digitized analog tape-readings. For each data-point and microphone position respectively the data were processed and are presented in two different ways:

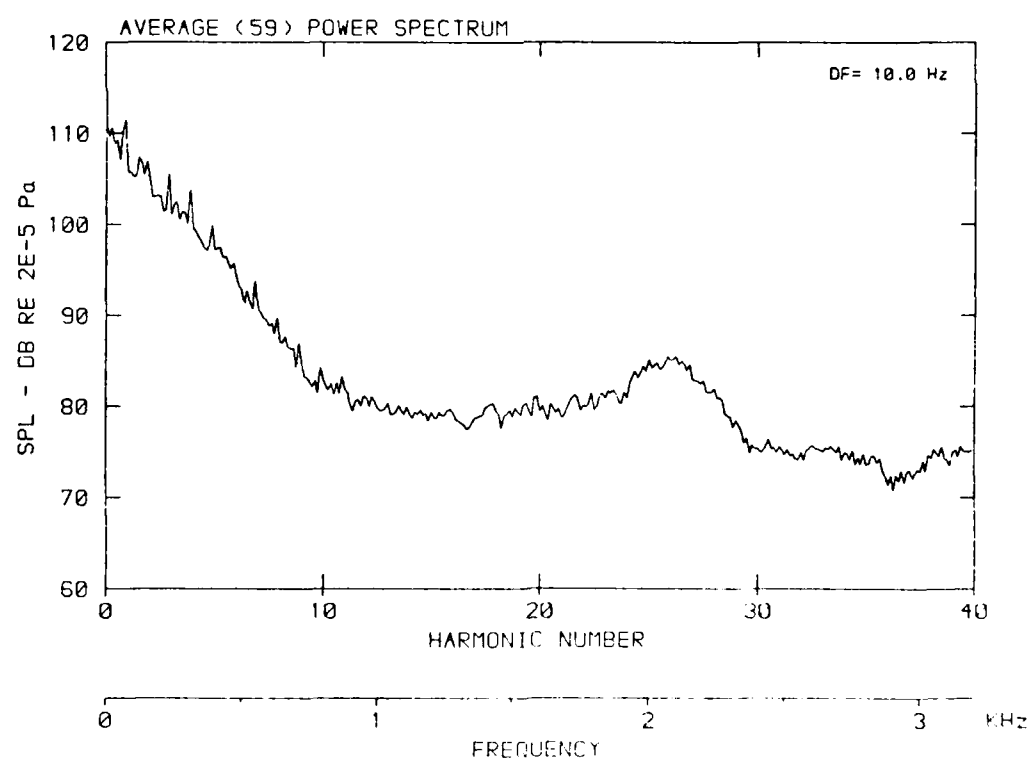
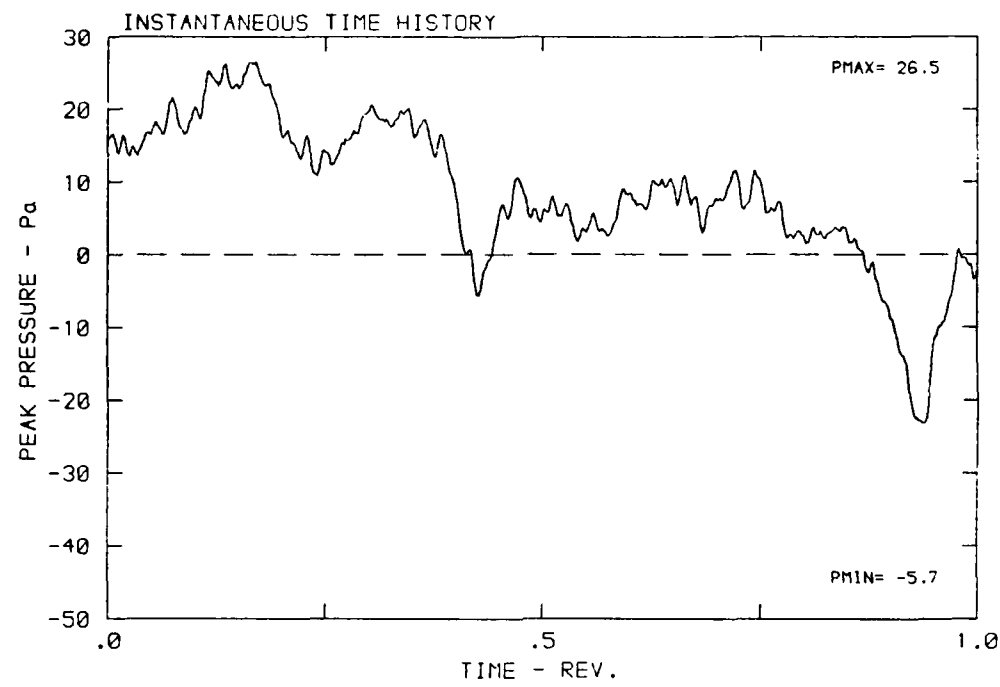
- a) A single instantaneous pressure-time history is presented and labeled "Instantaneous Time History" together with a power spectrum which had been calculated as an energy average of individual power spectra corresponding to a certain number of instantaneous pressure-time histories. This spectrum is labeled "Average (xx) Power Spectrum". The "xx" in the label denotes the number of time histories averaged in that particular spectrum.
- b) A certain number of instantaneous pressure-time histories is averaged in the time-domain and the resulting pressure averaged time-history is labeled "Average (xx) Time History". The "xx" in the label denotes the number of averaged instantaneous time-histories.

The value of ΔP in the brackets behind this label denotes the maximum peak-to-peak pressure amplitude difference in %, when referenced to the minimum peak-to-peak pressure amplitude difference as detected in the "xx" instantaneous time histories. The magnitude of ΔP can be taken as indicator to judge the stationarity (quality) of the respective data-record. If the value of ΔP is in excess of 496% respective data are marked with a triple star (***) to indicate that the data are heavily distorted.

From the pressure-averaged time-history a pressure level spectrum is calculated and labeled "Power Spectrum of Averaged Time History".

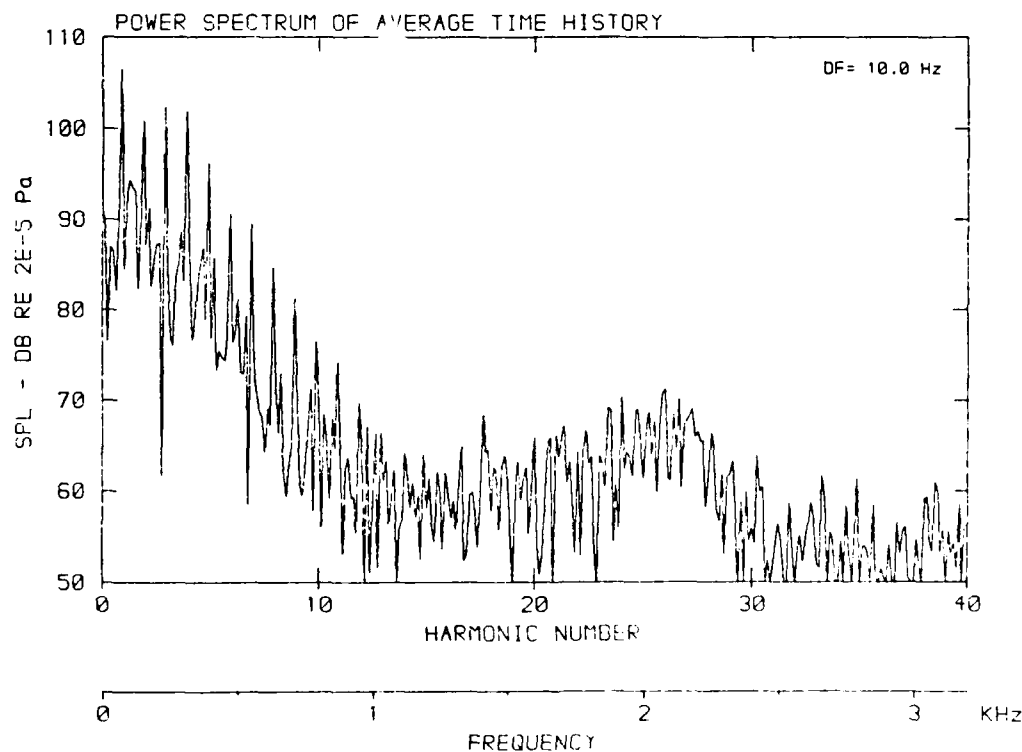
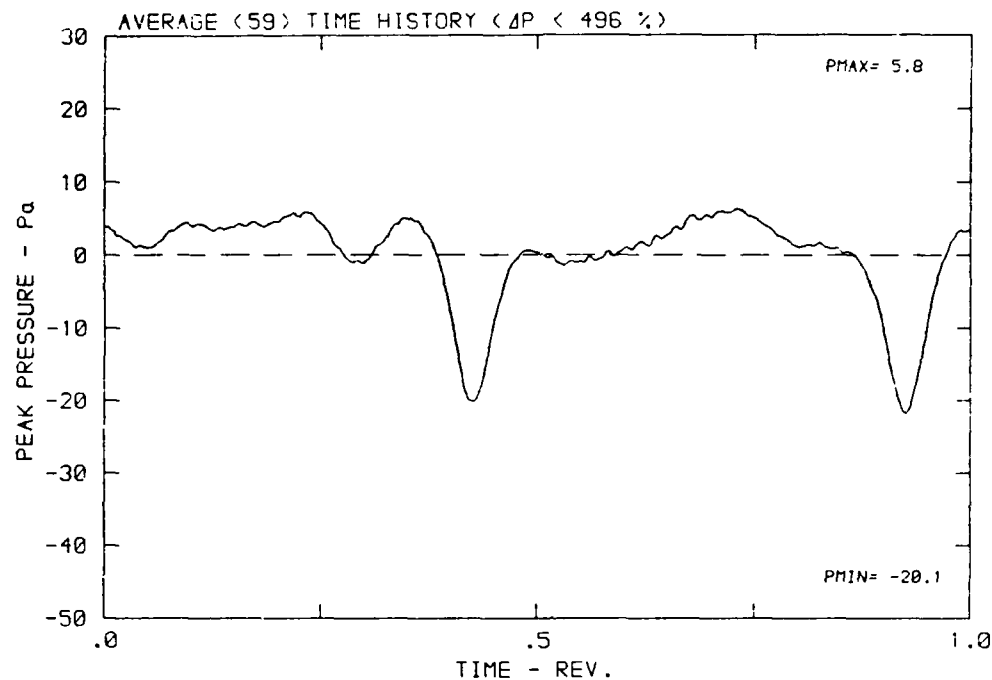
DATA POINT: HN-1 RUN: 33 MP: 1

β : 20.8° MH: .7959 n: 2400 rpm vru: .302 ϕ : .0° T: 279.5 K



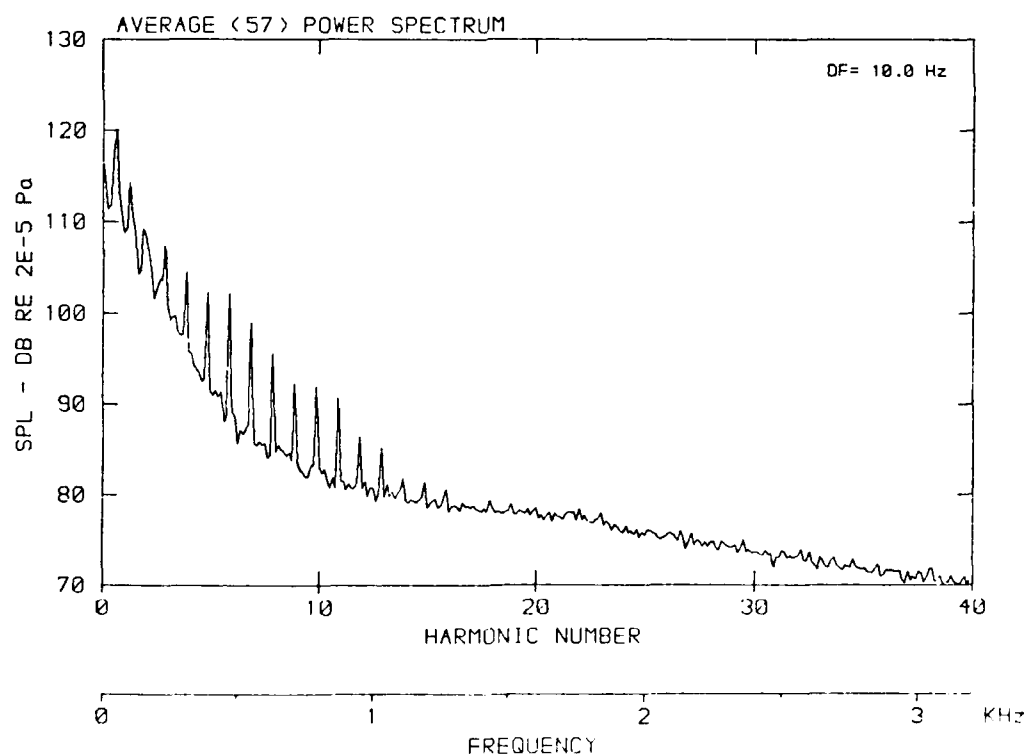
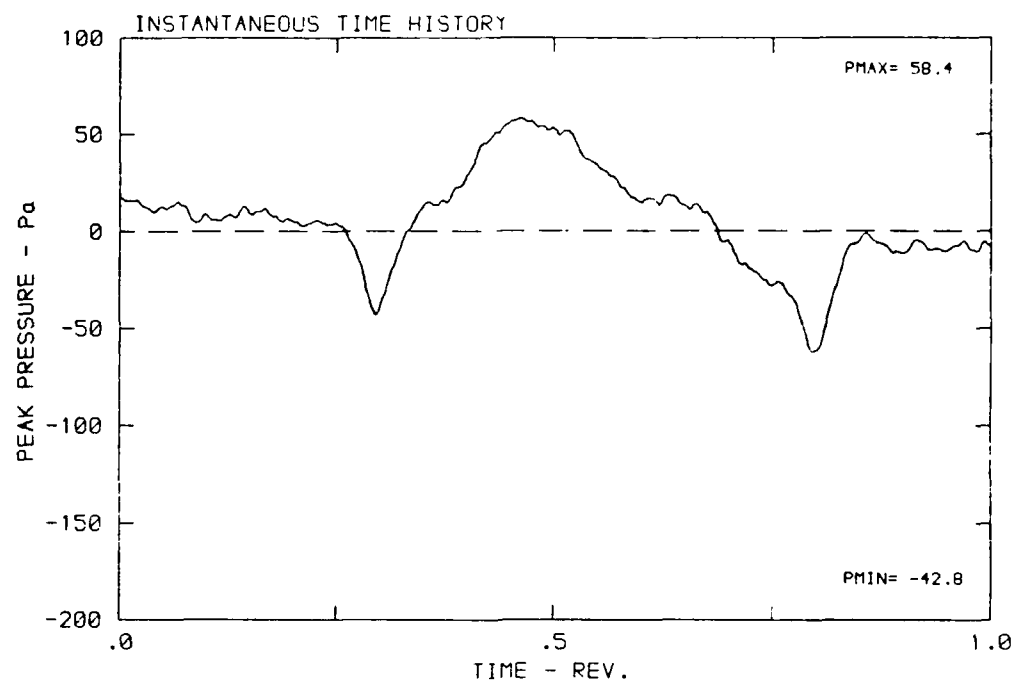
DATA POINT: HN-1 RUN: 33 MP: 1

β : 20.8° MH: .7959 n: 2400 rpm v/u : .302 ϕ : $.0^\circ$ T: 279.5 K



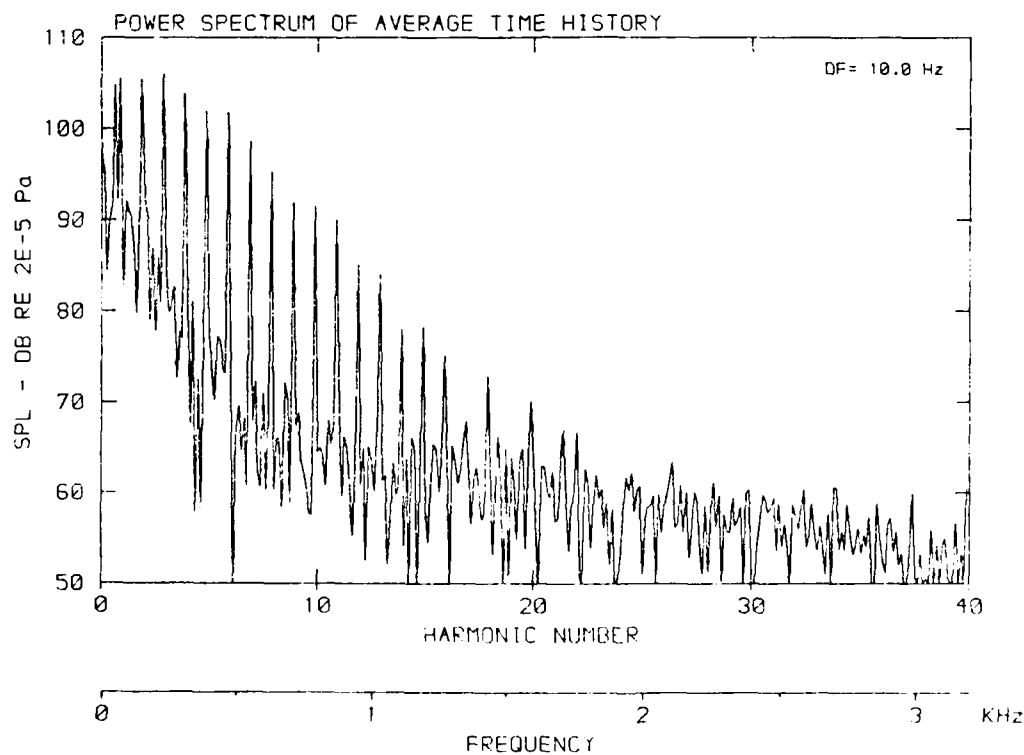
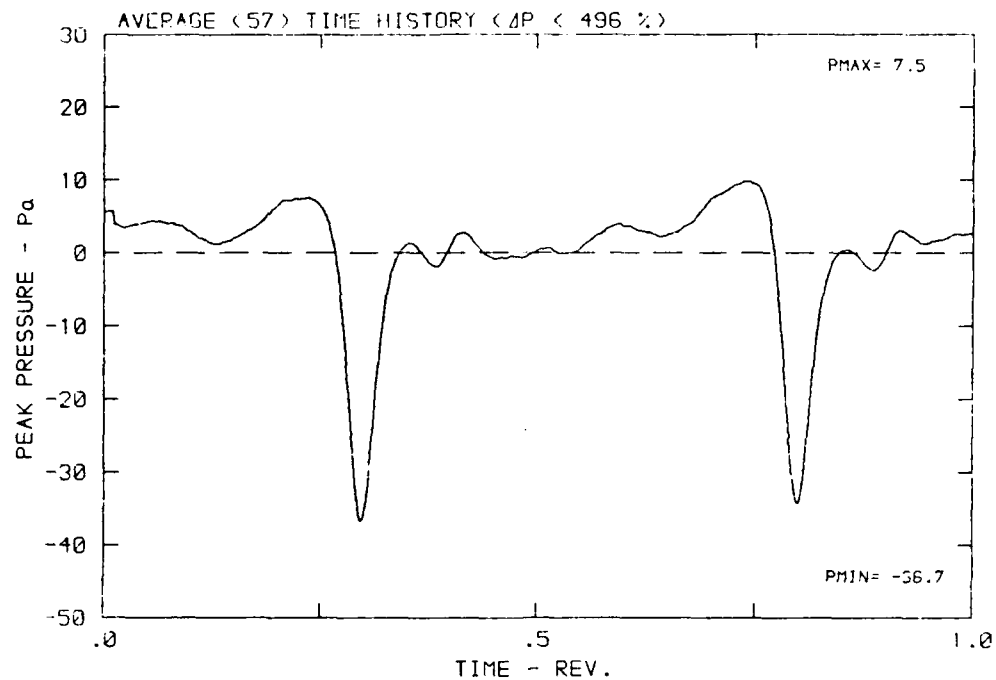
DATA POINT: HN-1 RUN: 33 MP: 2

β : 20.8° MH: .7959 n: 2400 rpm v/u : .302 ϕ : .0° T: 279.5 K



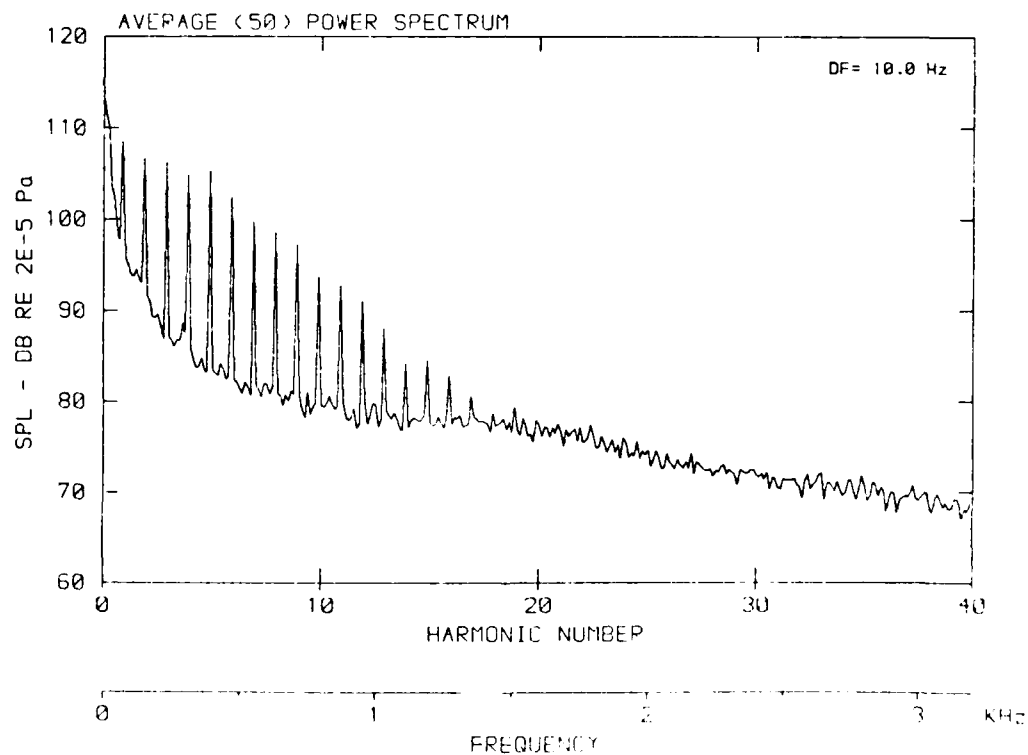
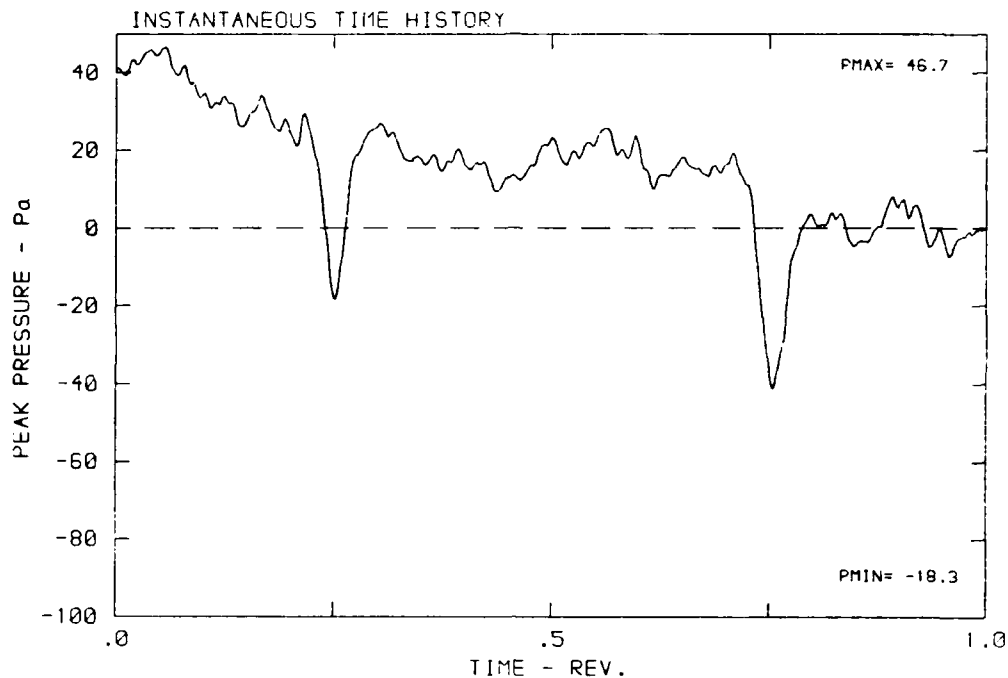
DATA POINT: HN-1 RUN: 33 NP: 2

β : 20.8° MH: .7959 n: 2400 rpm v/u : .302 ϕ : .0° T: 279.5 K



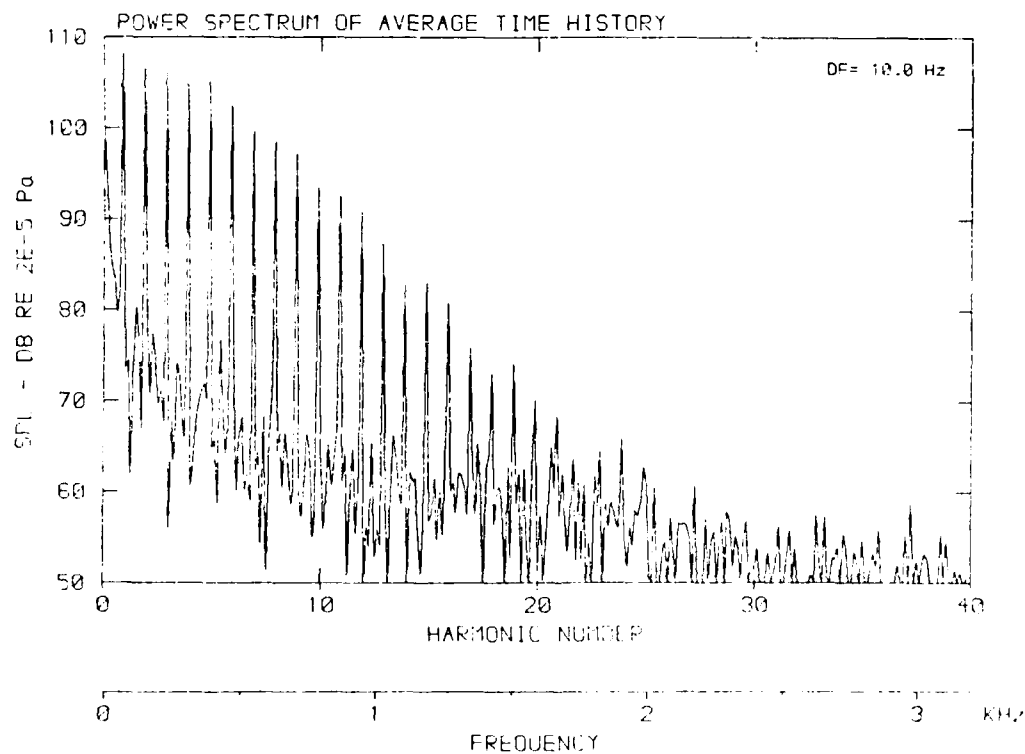
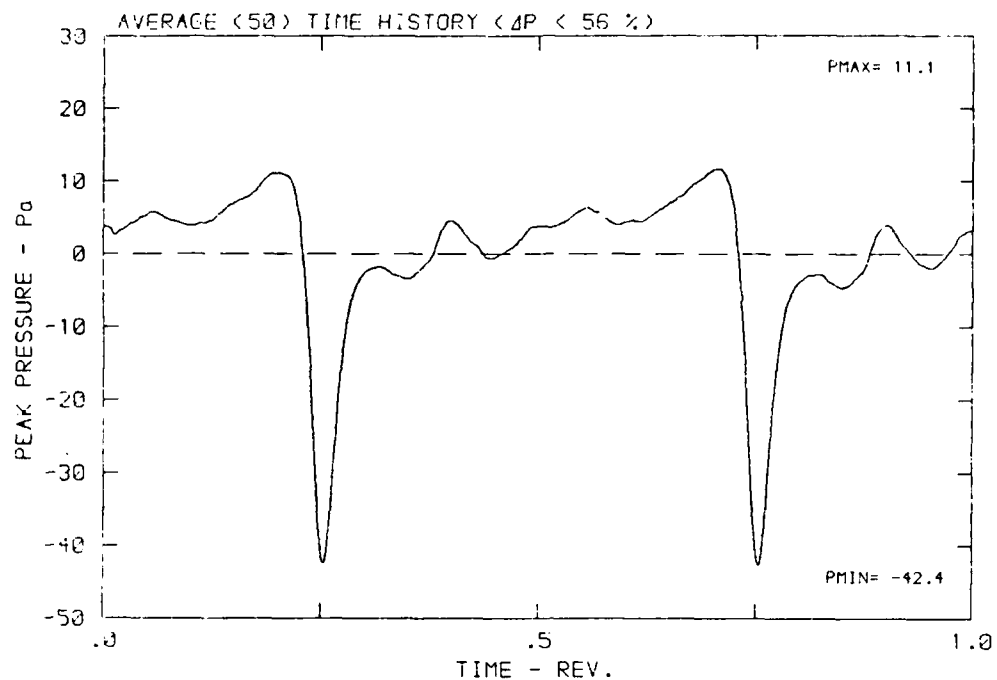
DATA POINT: HN-1 RUN: 33 MP: 3

β : 20.8° MH: .7959 n: 2400 rpm v/u : .332 ϕ : .0° T: 273.5 K



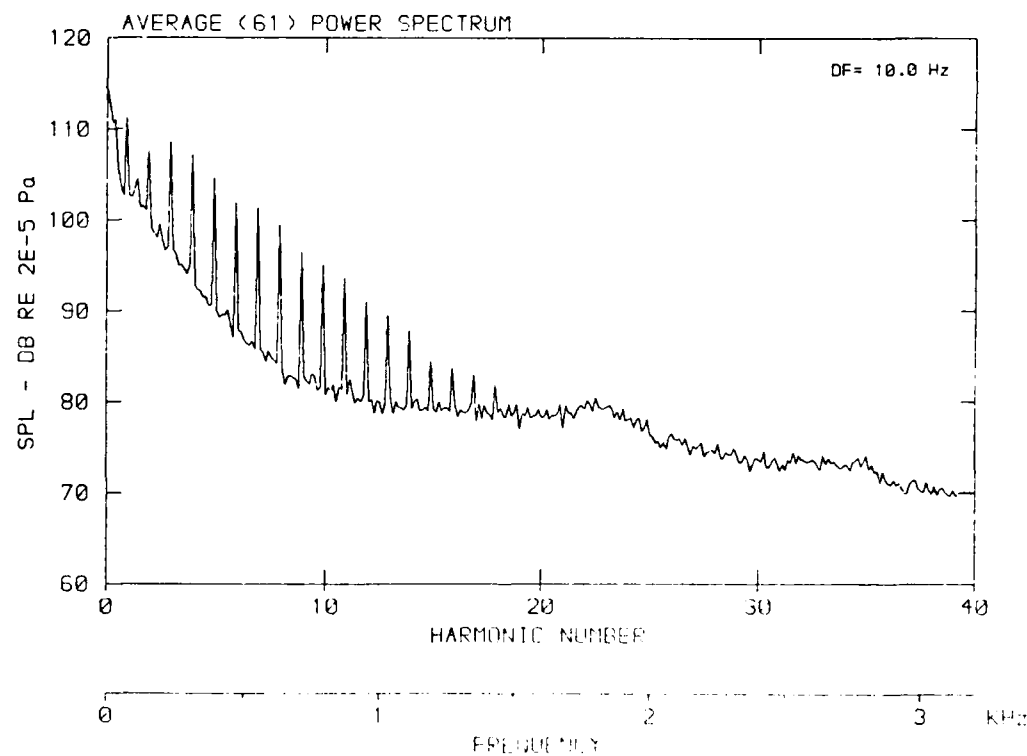
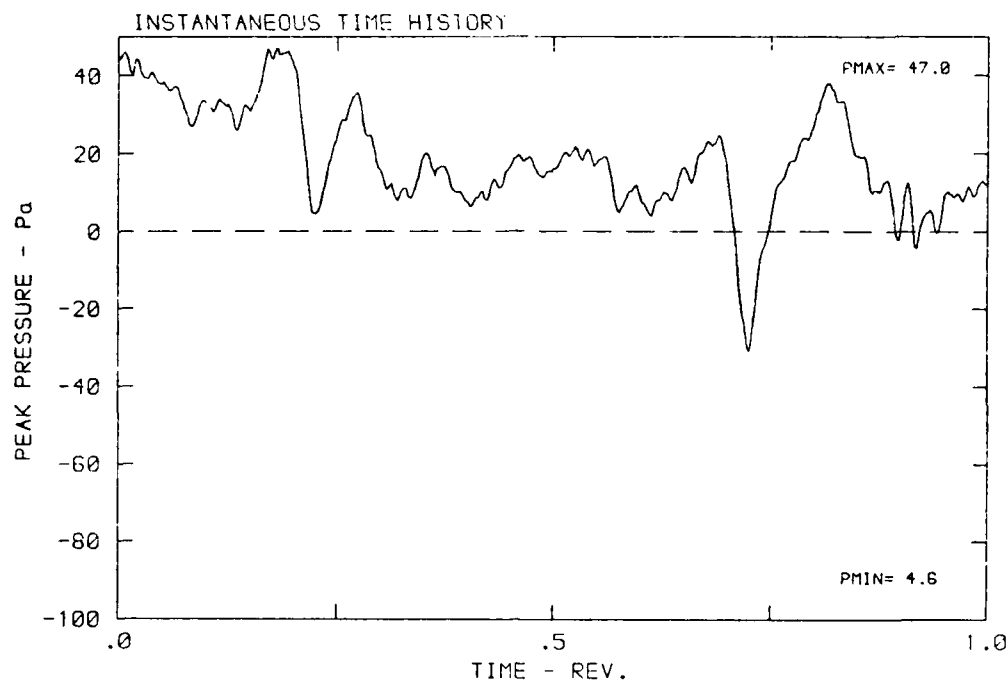
DATA POINT: HN-1 RUN: 33 MP: 3

β : 20.8° MH: .7959 n: 2400 rpm v/u : .302 ϕ : .0° T: 279.5 K



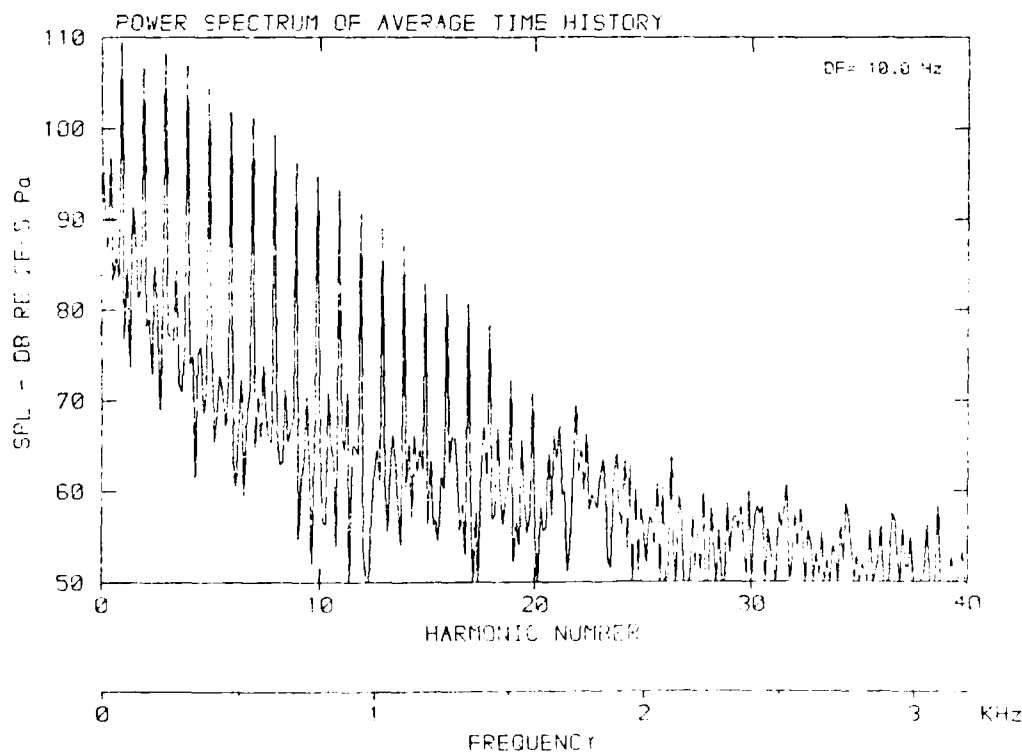
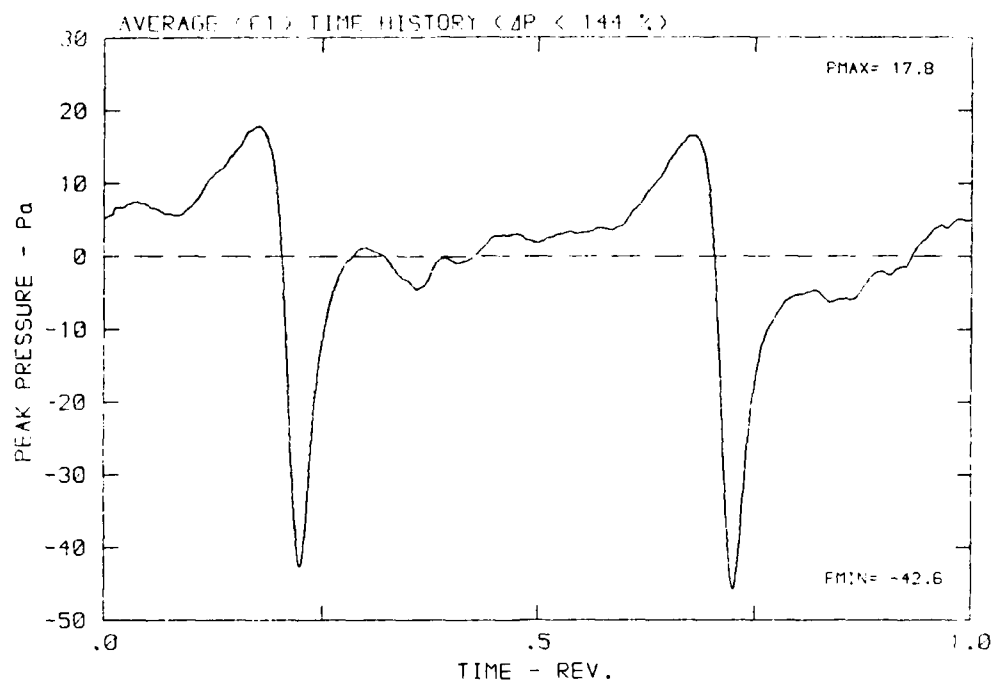
DATA POINT: HN-1 RUN: 33 MP: 4

β : 23.8° MH: .7959 n: 2400 rpm v/u: .302 ϕ : .0° T: 279.5 K



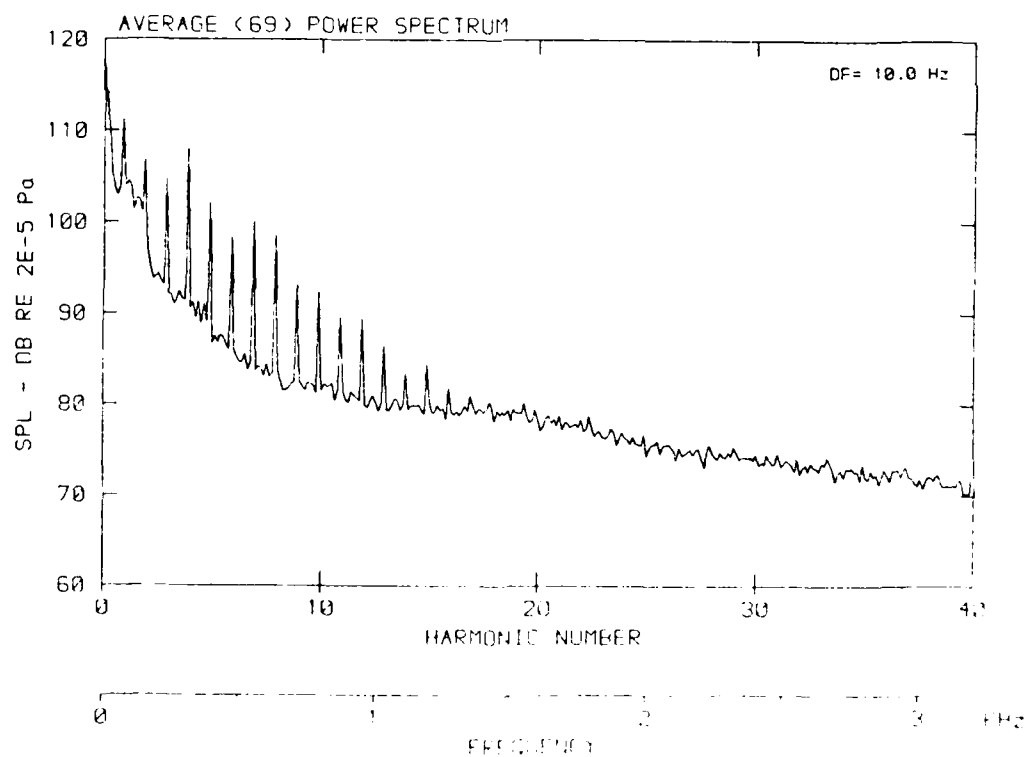
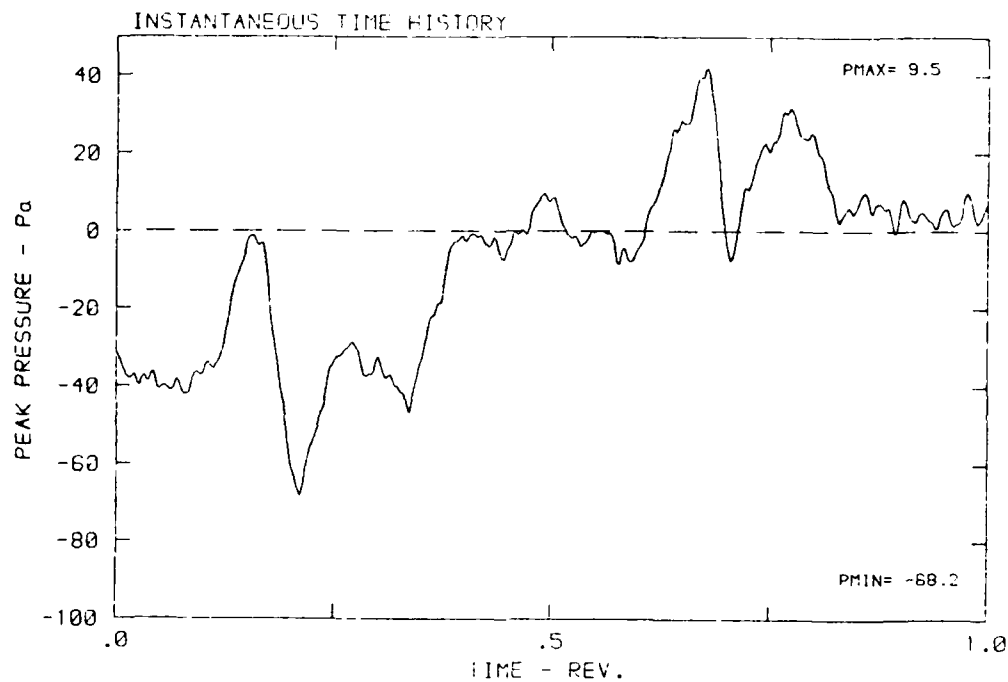
DATA POINT: HN-1 RUN: 33 MP: 4

β : 20.8° MH: .7959 n: 2400 rpm v/u : .302 ϕ : .0° T: 279.5 K



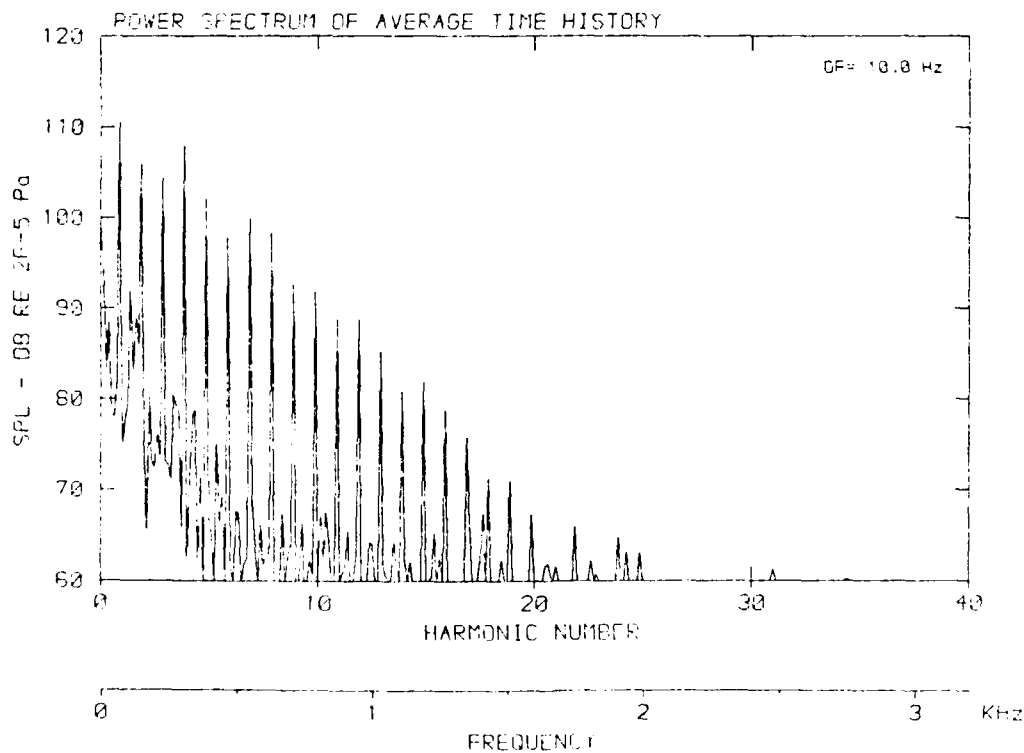
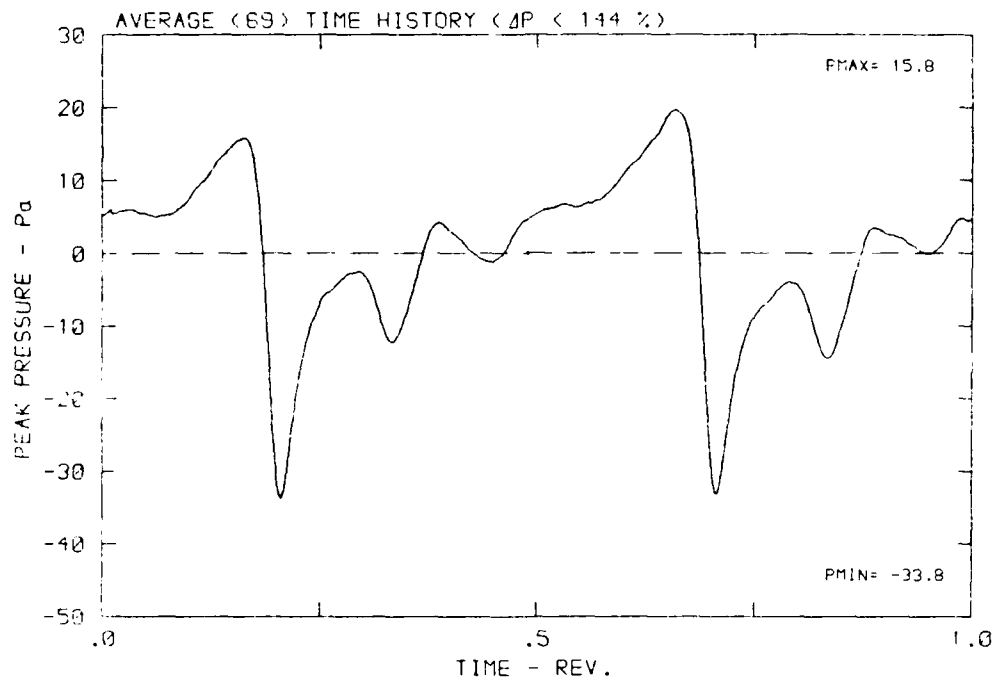
DATA POINT: HN-1 RUN: 33 NF: 5

β : 20.8° MH: .7959 n: 2400 rpm vzu: .342 ϕ : .0° T: 179.5 s



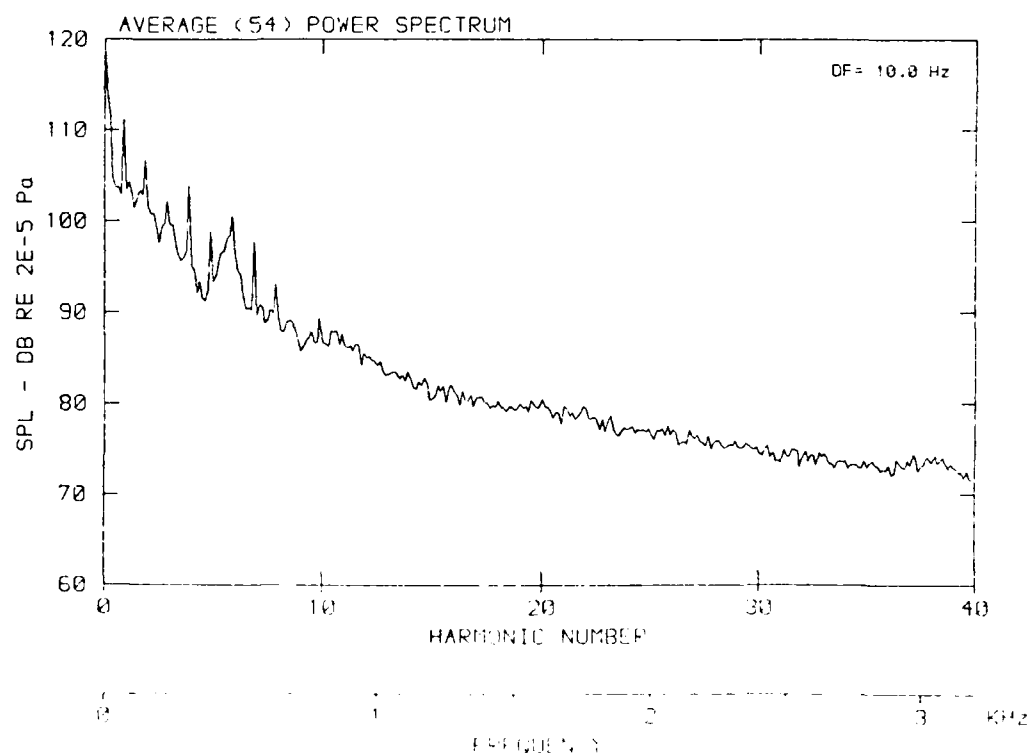
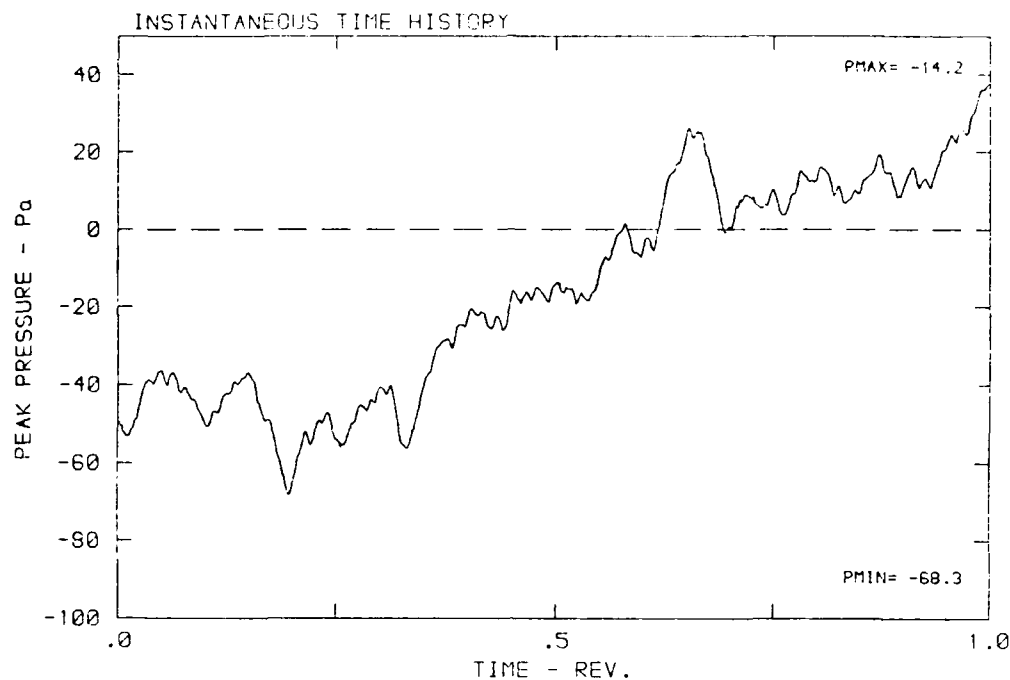
DATA POINT: HN-1 RUN: 33 IIP: 5

β : 20.8° MH: .7959 n: 2400 rpm v/u : .302 ϕ : .0° T: 279.5 K



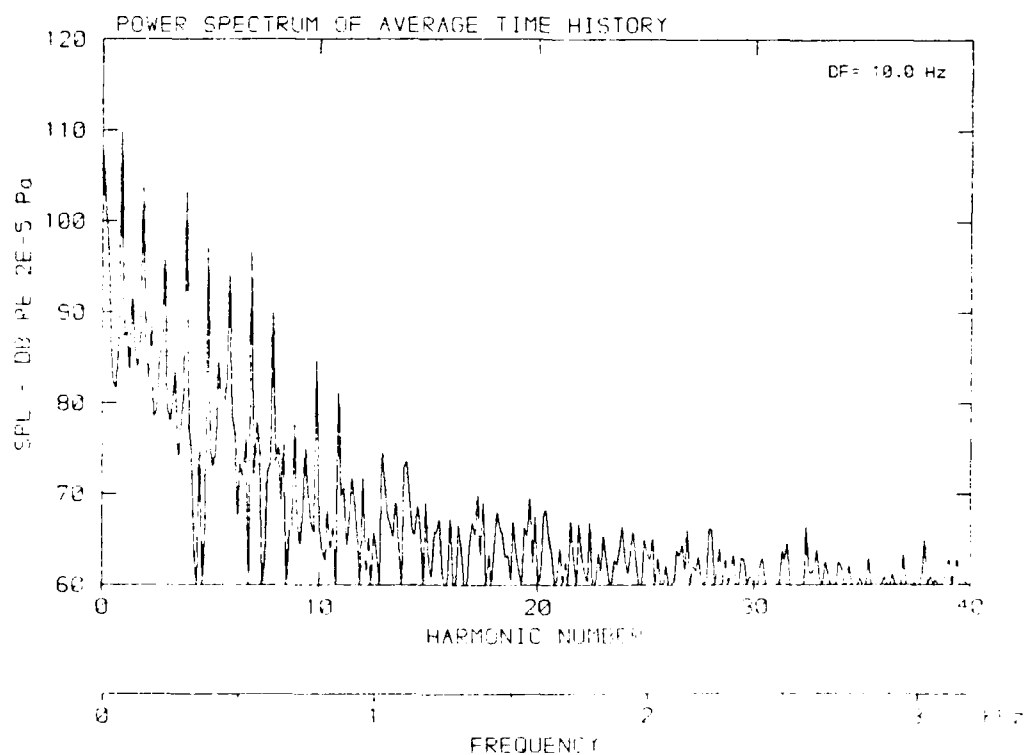
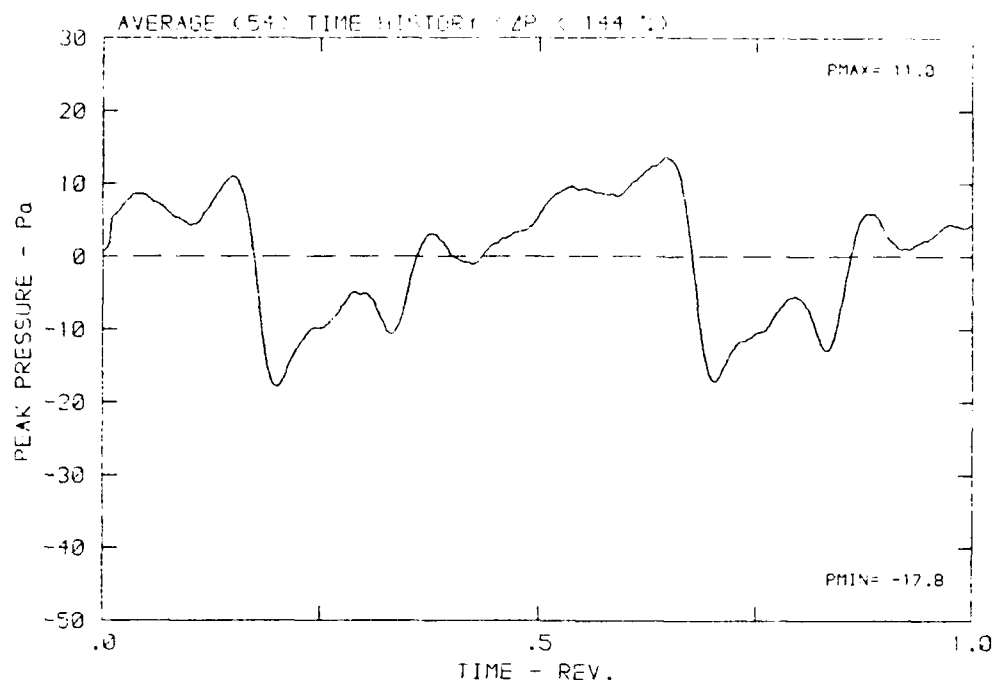
DATA POINT: HN-1 RUN: 55 MD: 5

β : 20.8° MH: .7959 n: 2400 rpm vu: .300 ϕ : .0° T: 279.0



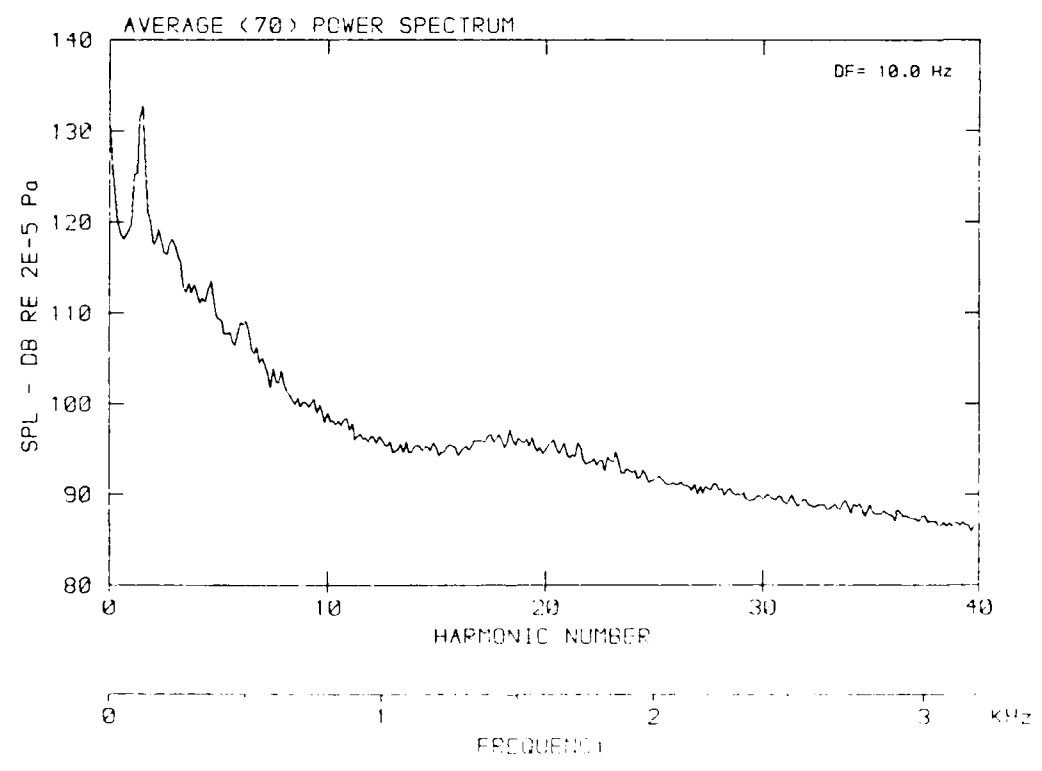
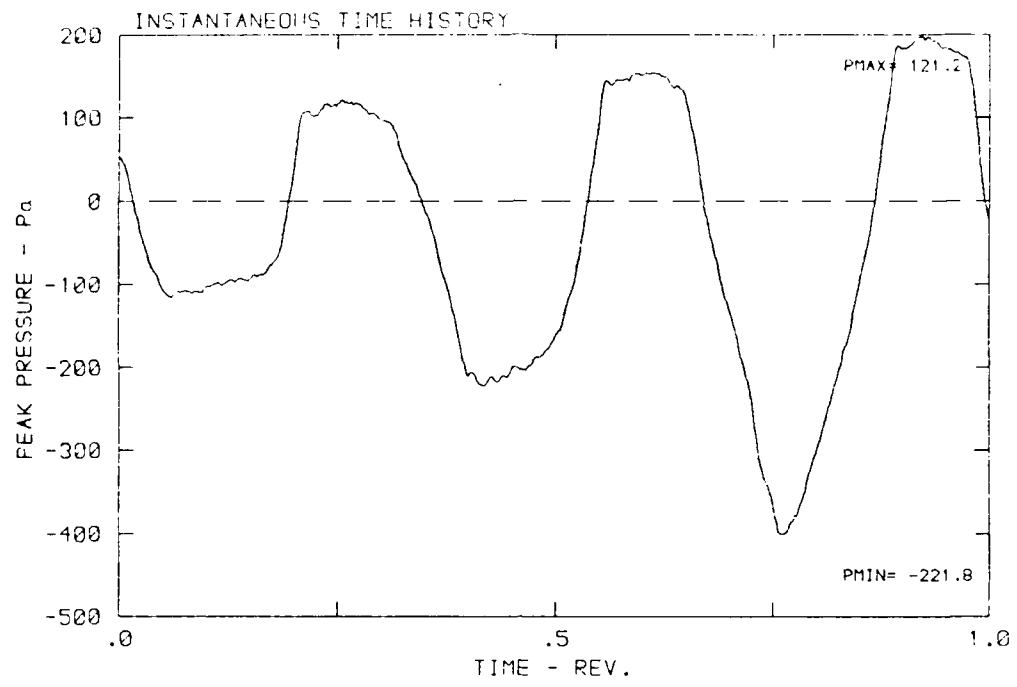
DATA POINT: IN 1 RUN: 33 MP: 5

β : 20.8° MH: .7959 n: 2400 rpm v/u : .302 ϕ : .0° T: 279.5



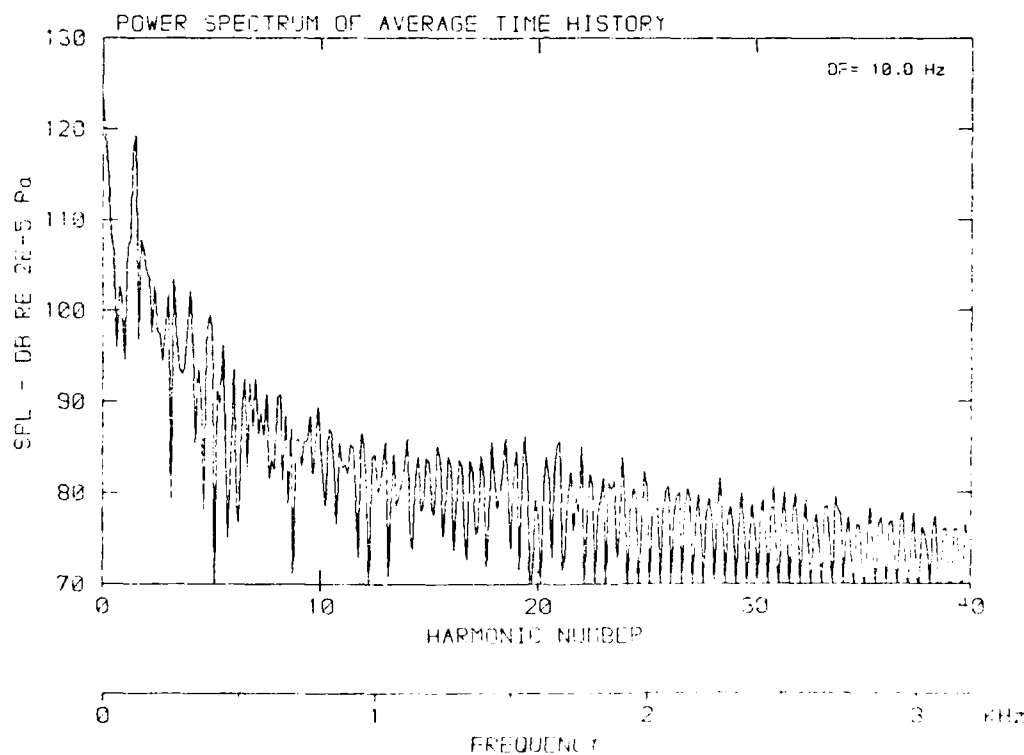
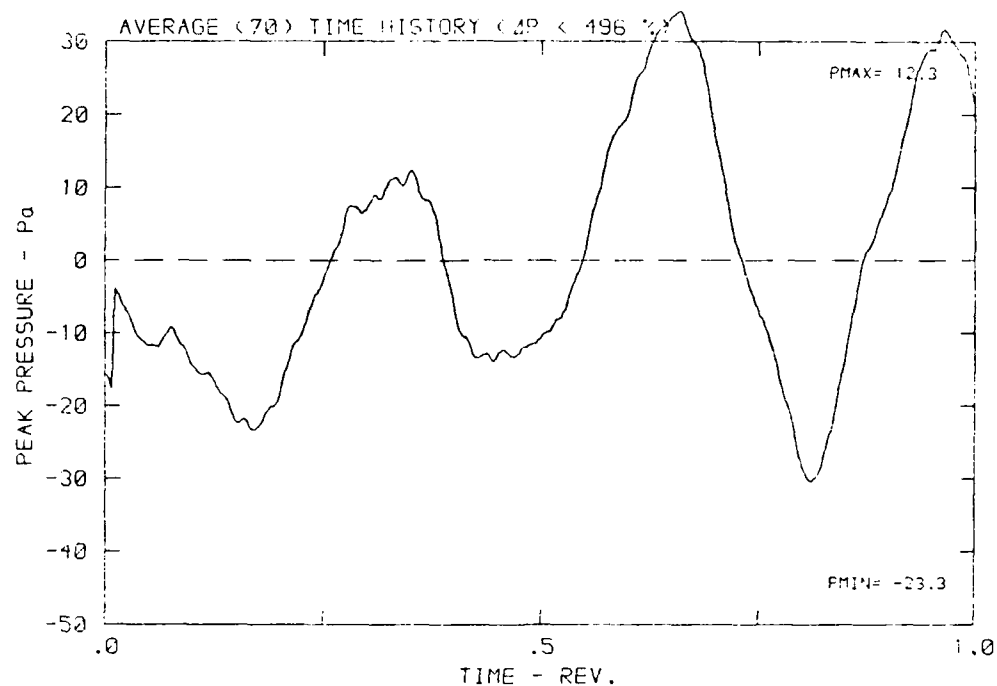
DATA POINT: HN-1 RUN: 11

β : 20.8° RH: .7959 n: 2400 rpm vru: .10 ϕ : .0° T: 273.5 K

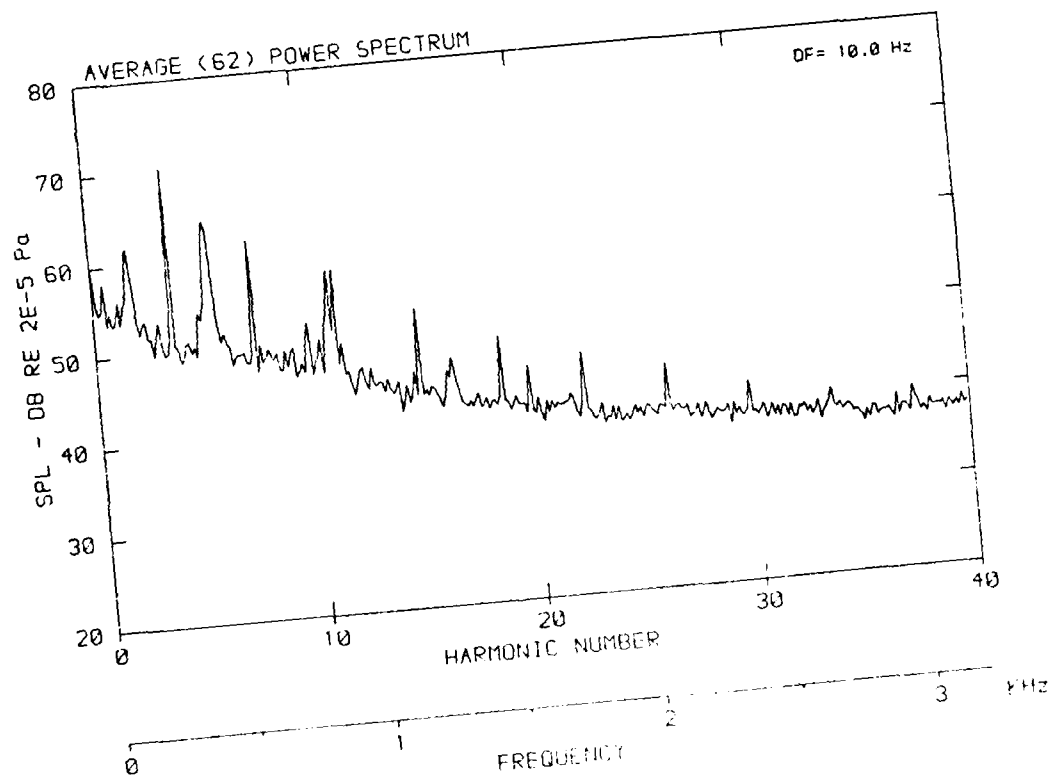
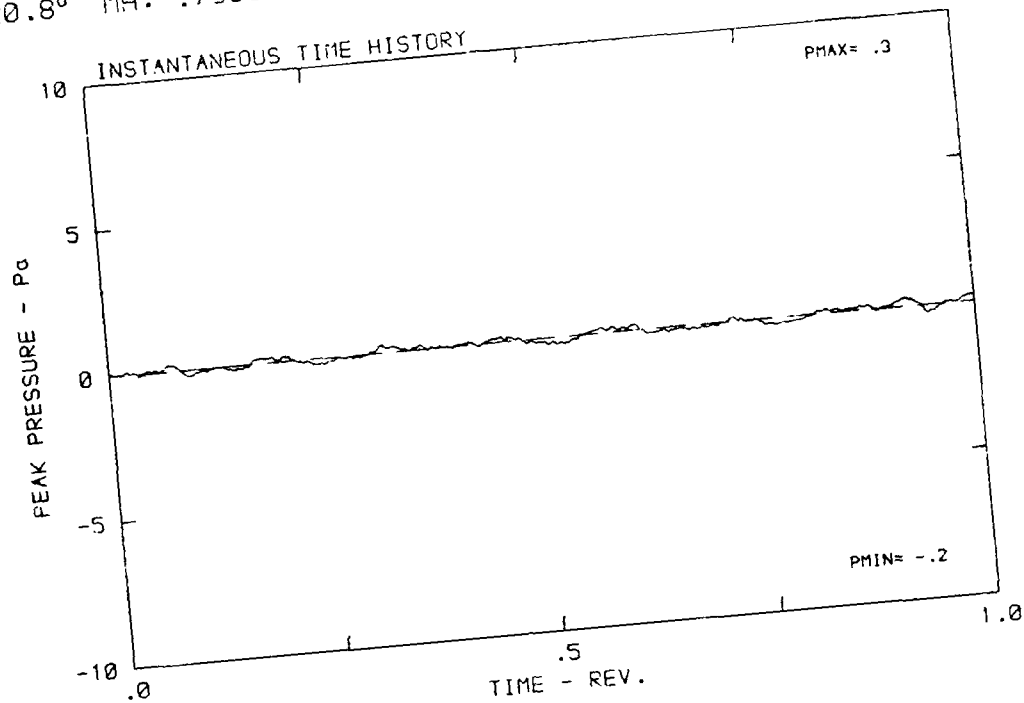


DATA POINT: HN-1 RUN: 33 MF: 7

β : 20.8° MH: .7959 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.5 K

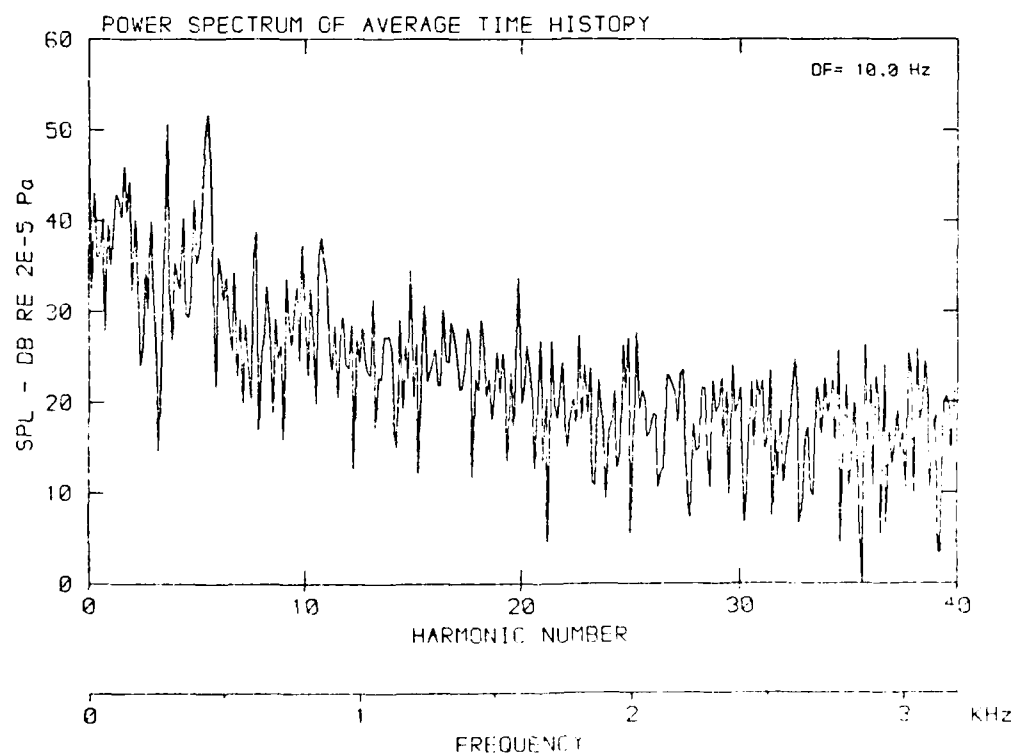
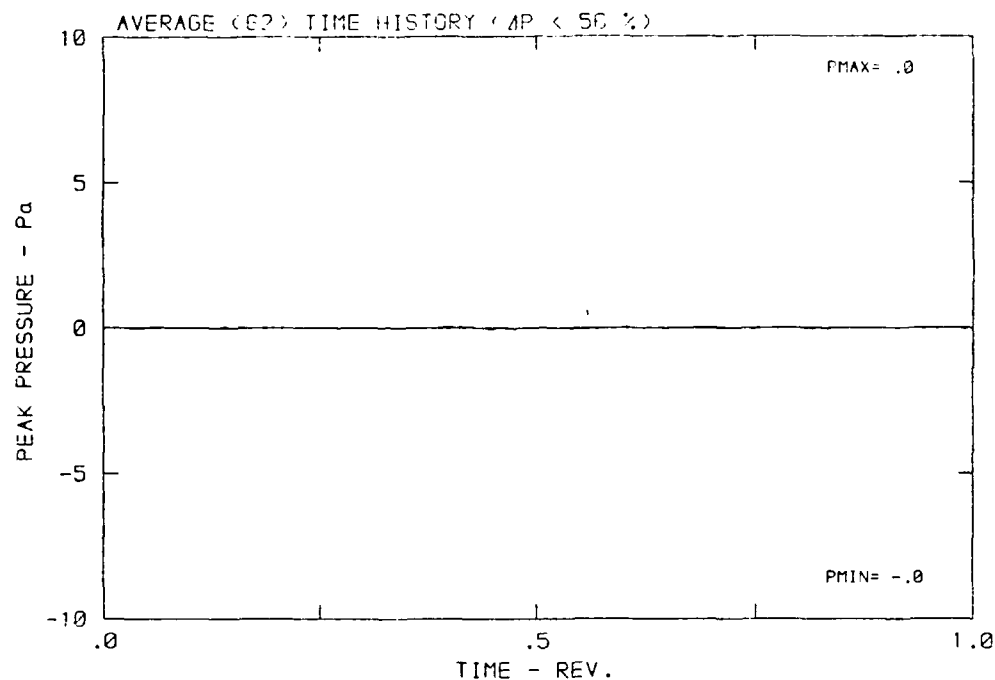


DATA POINT: HN-1 RUN: 33 MP: 8
 β : 20.8° MH: .7959 n: 2480 rpm v/a : .302 ϕ : .0° r : 279.5 K



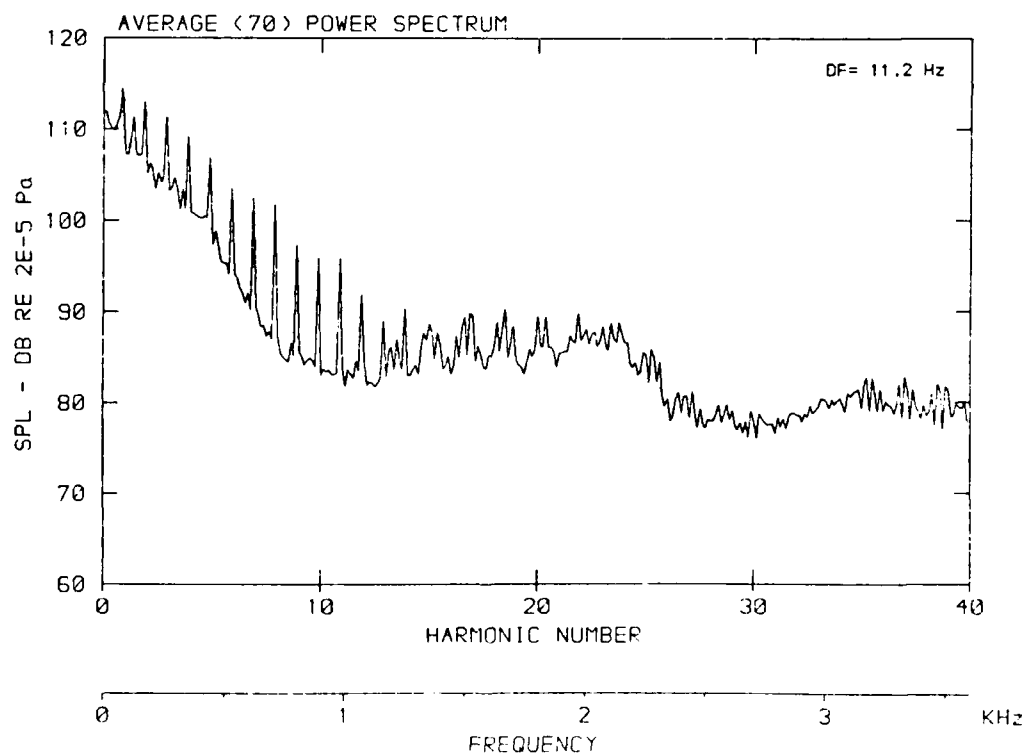
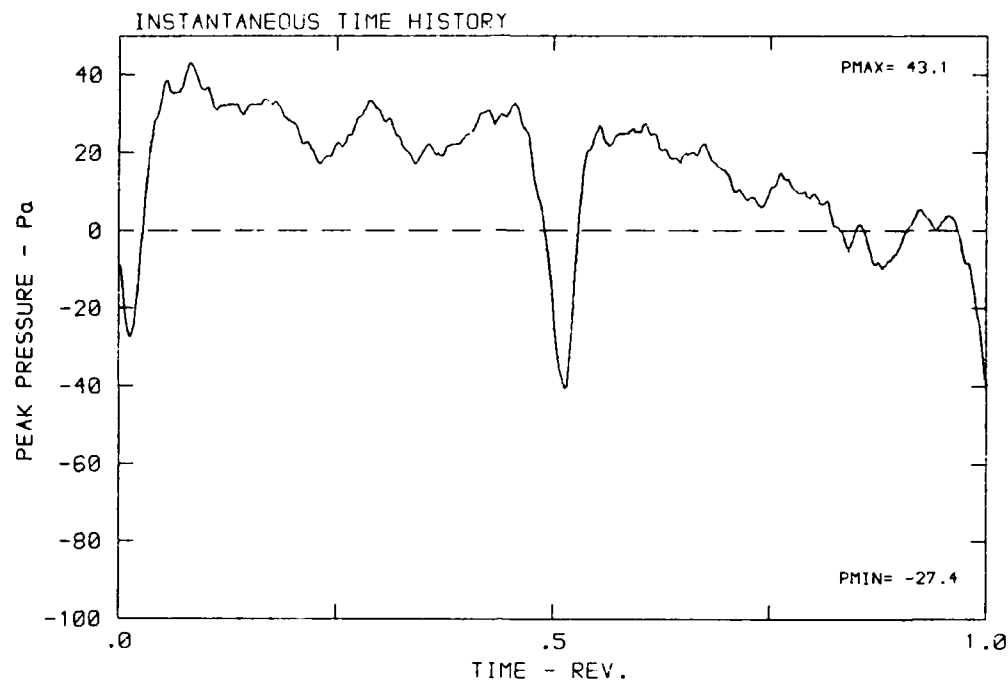
DATA POINT: HN-1 RUN: 33 MP: 9

β : 20.8° MH: .795S n: 2400 rpm v/u: .302 ϕ : .0° T: 279.5 K



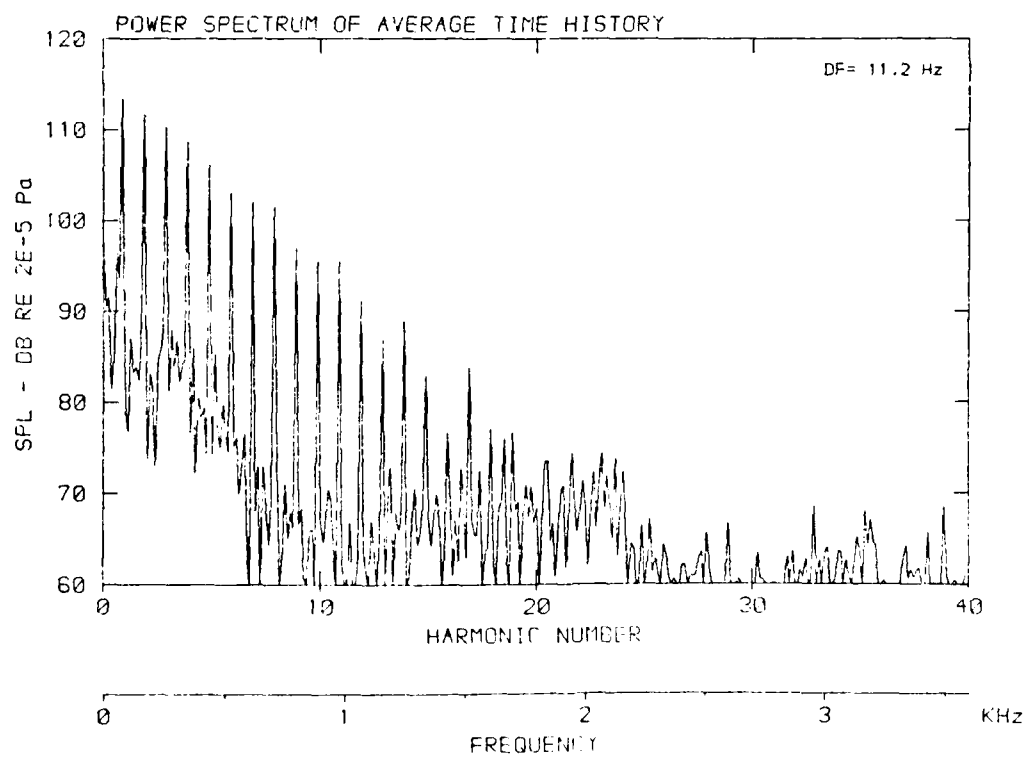
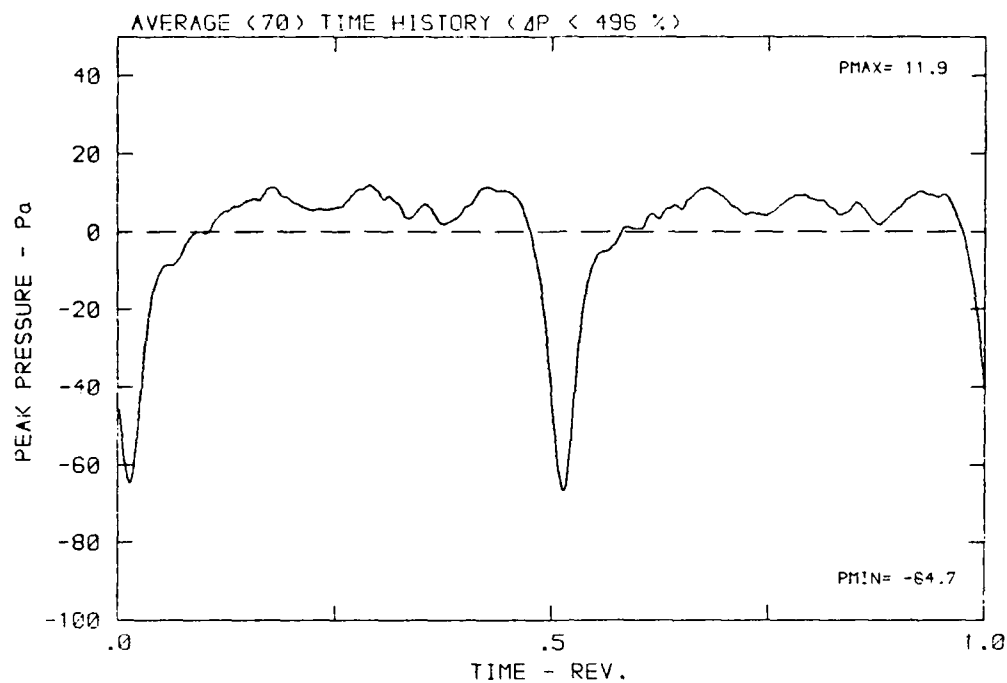
DATA POINT: HN-2 RUN: 34 MP: 1

β : 20.8° MH: .8875 n: 2700 rpm v/u: .269 ϕ : .0° T: 279.5 K



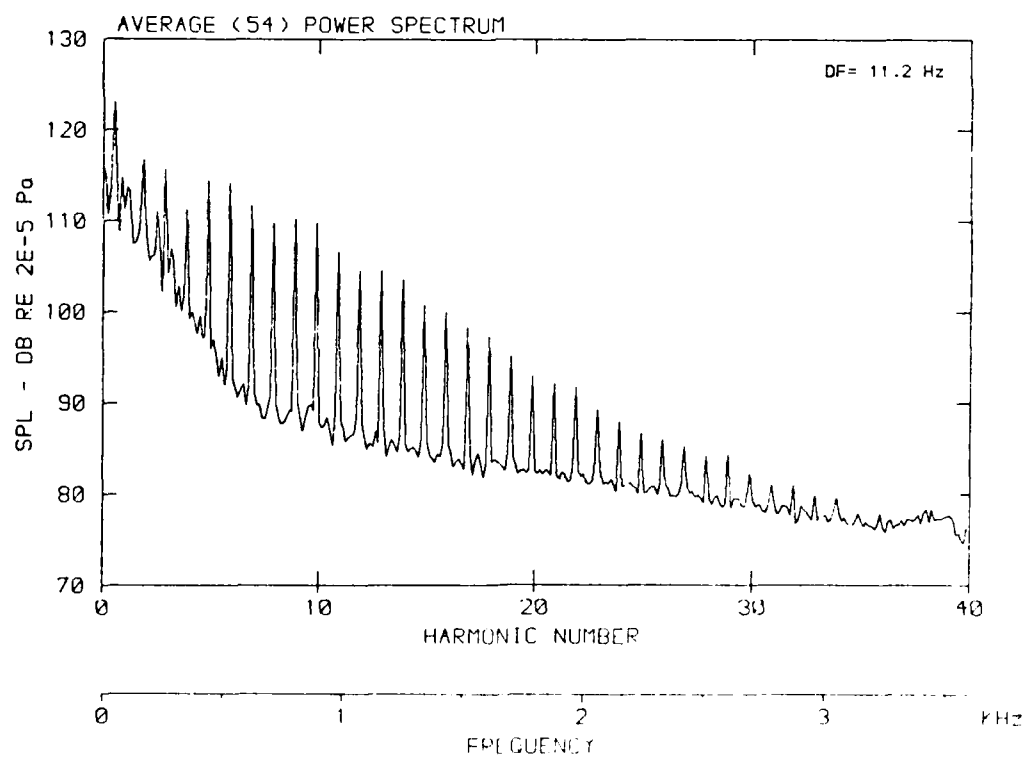
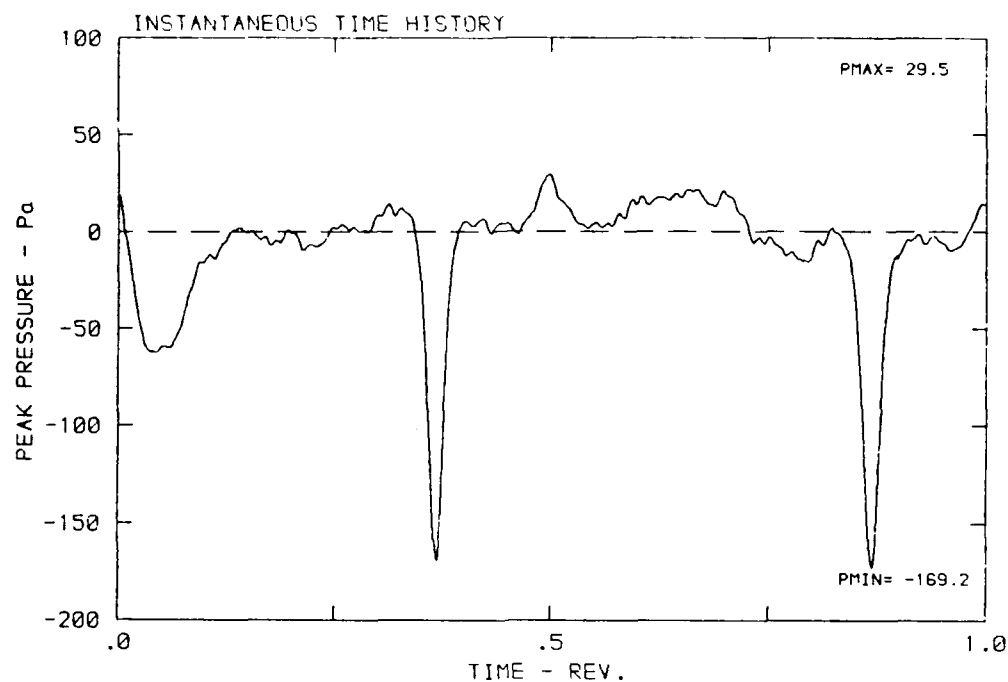
DATA POINT: HN-2 RUN: 34 MP: 1

β : 20.8° MH: .8875 n: 2700 rpm v/u: .269 ϕ : .0° T: 279.5 K



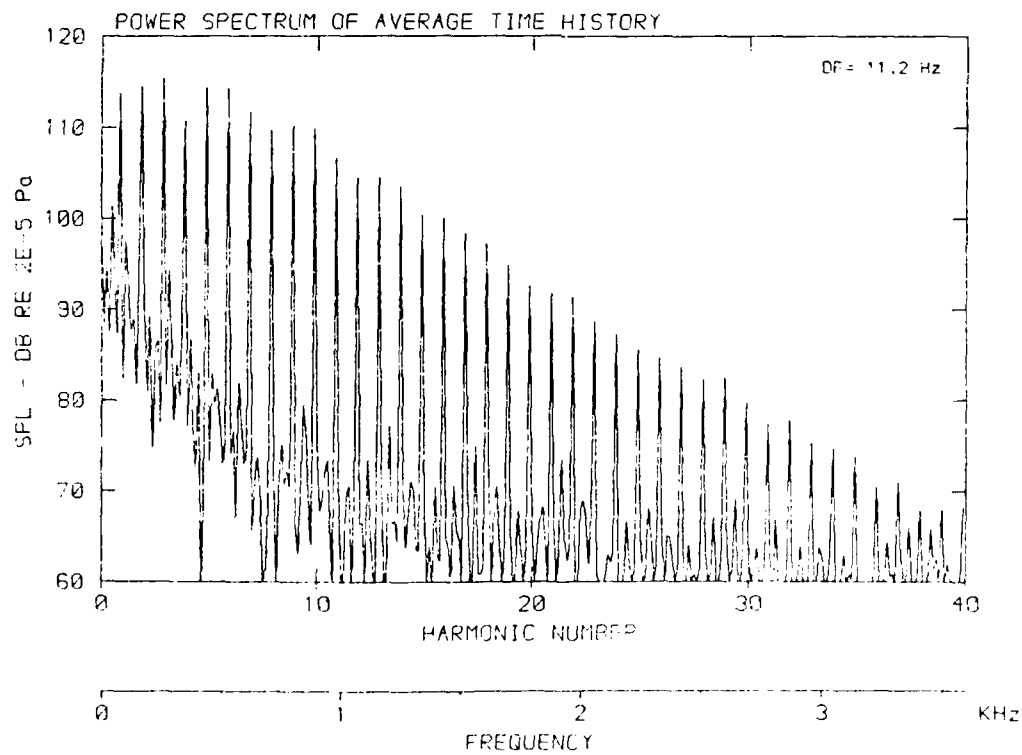
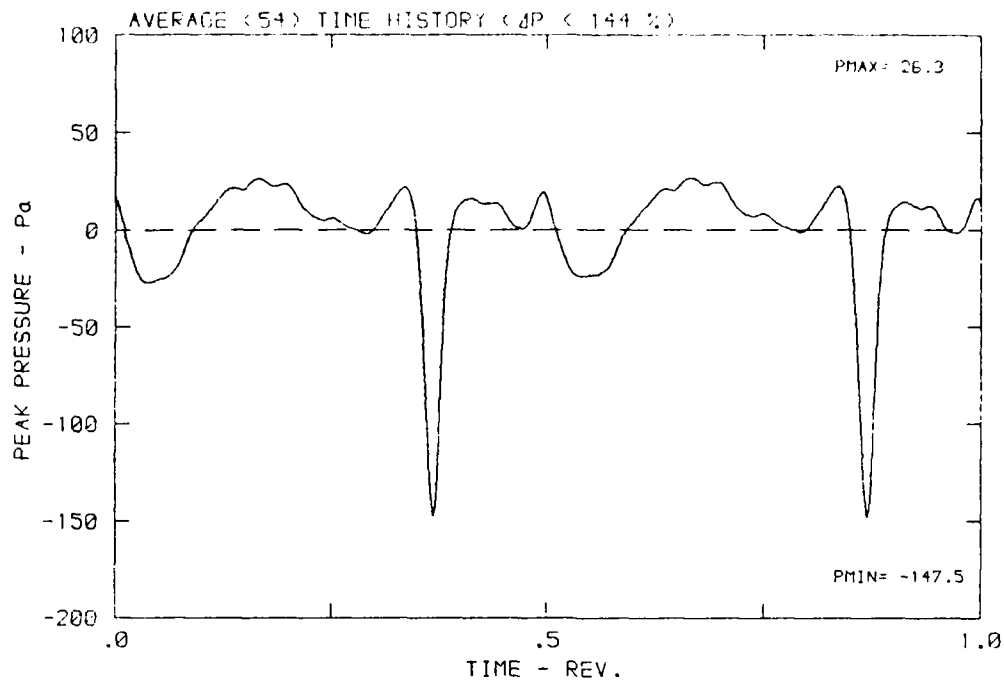
DATA POINT: HN-2 RUN: 34 MP: 2

β : 20.8° MH: .8875 n: 2700 rpm v/u: .269 ϕ : .0° T: 279.5 K



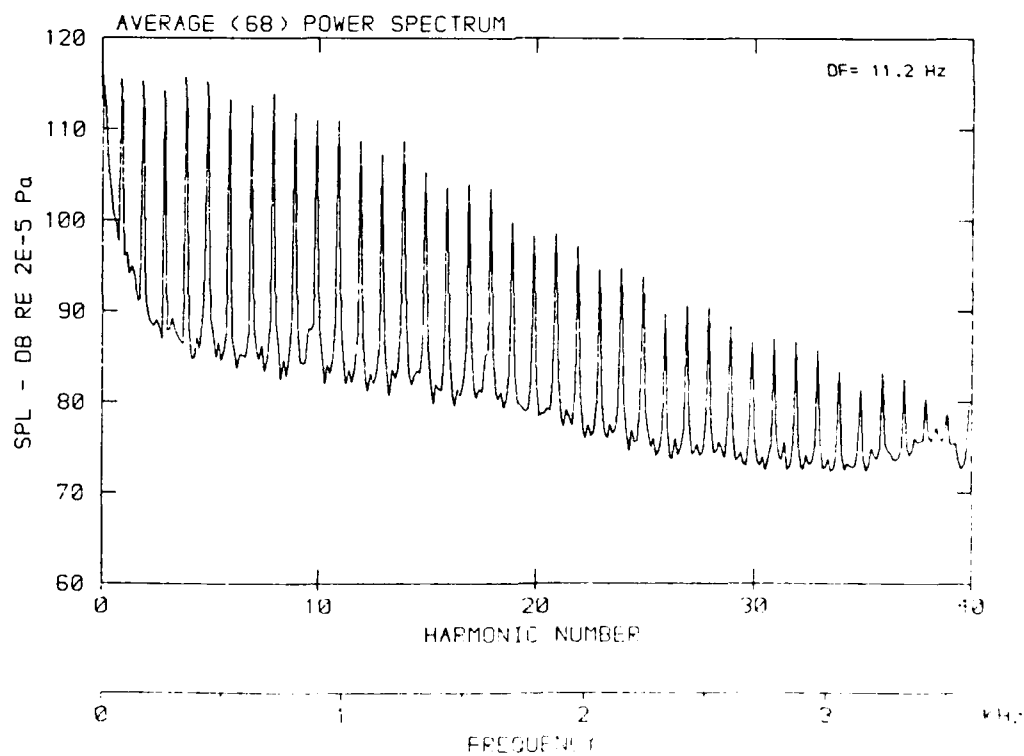
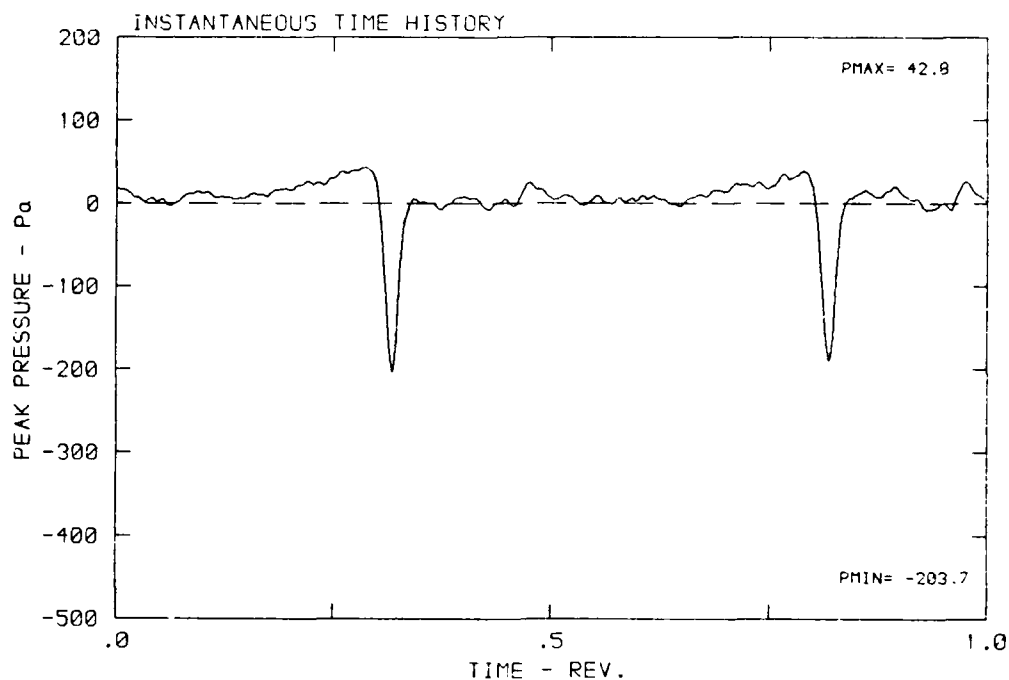
DATA POINT: HN-2 RUN: 34 MP: 2

β : 20.8° MH: .8875 n: 2700 rpm v/u : .269 ϕ : .0° T: 279.5 K



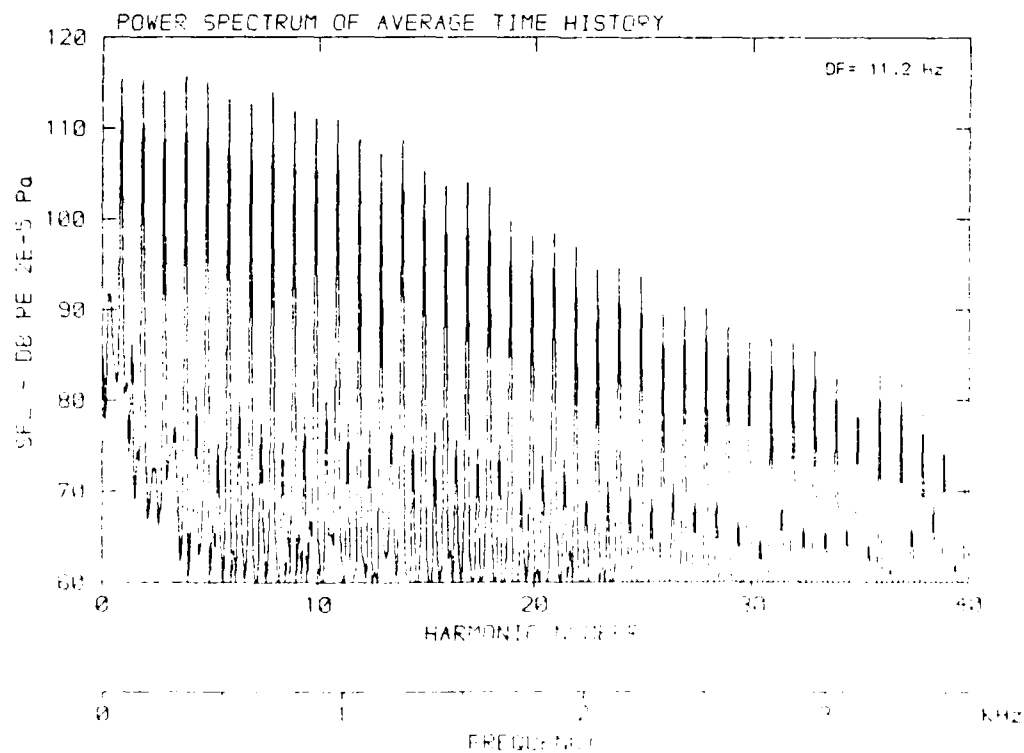
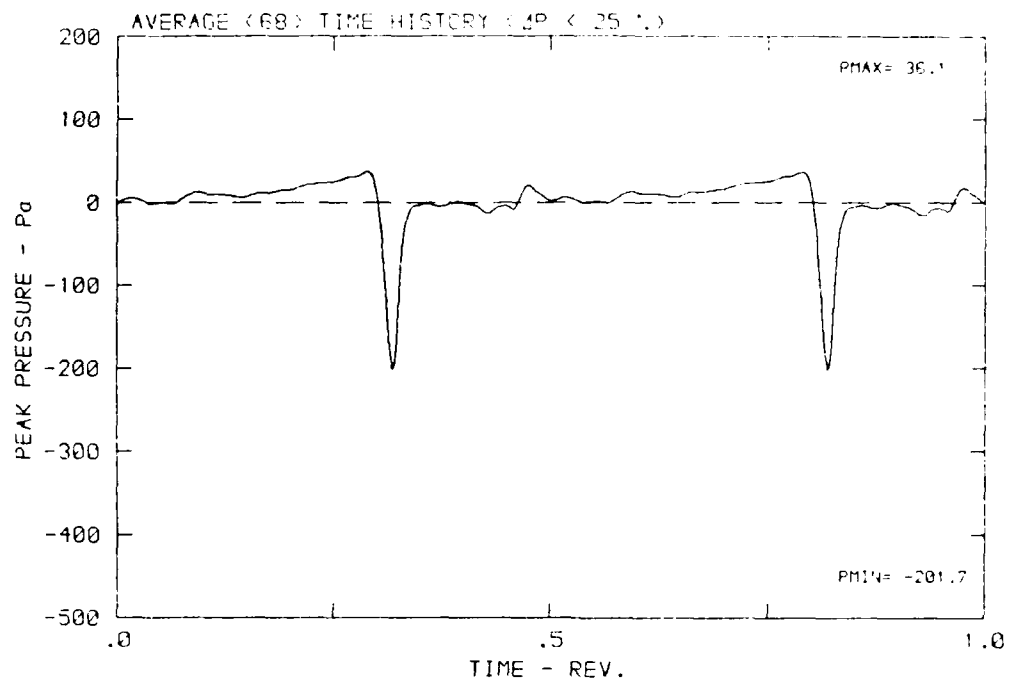
DATA POINT: HN-2 RUN: 34 NP: 1

β : 20.8° MH: .8875 n: 2700 rpm v/u : .269 ϕ : .0° I: 175.5



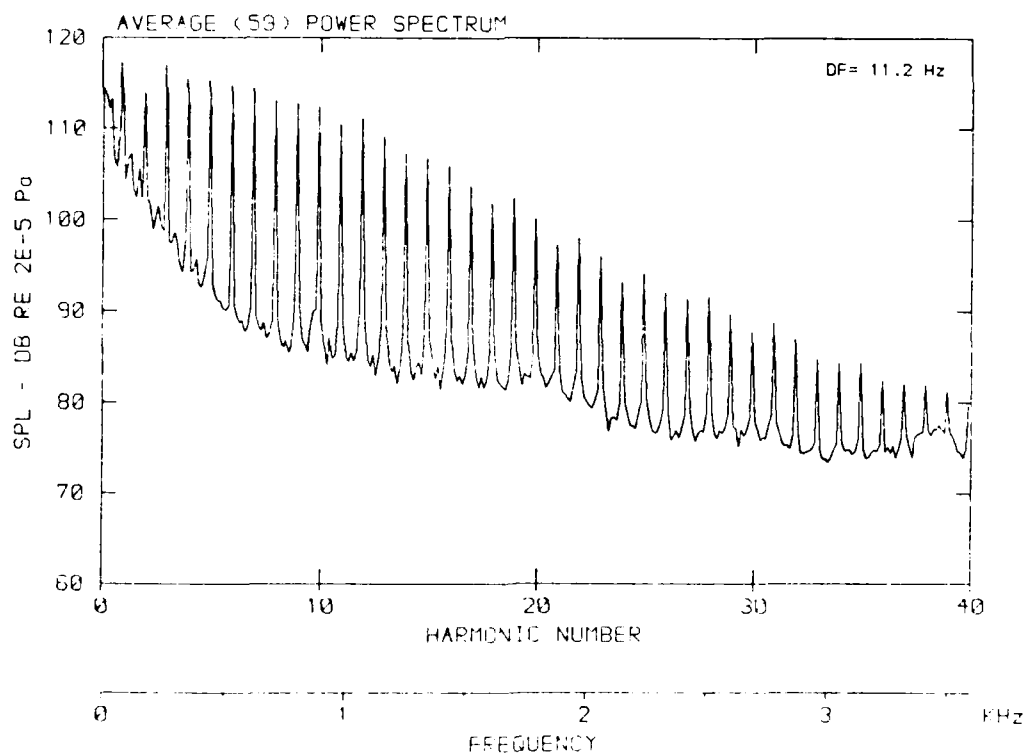
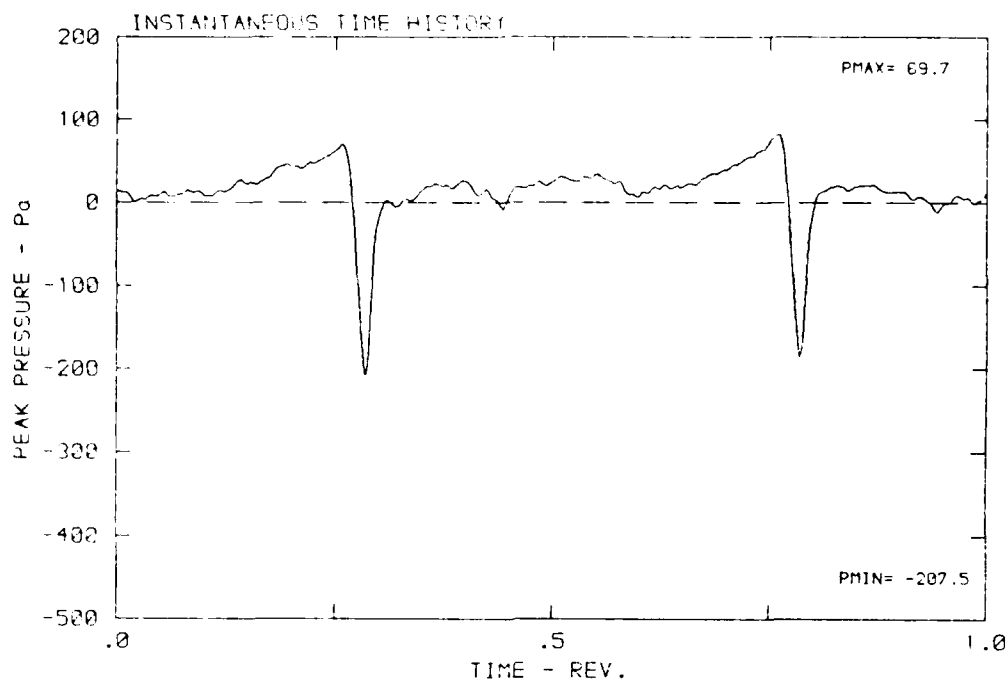
DATA POINT: HN-2 RUN: 34 MP: 3

β : 20.8° MH: .8875 n: 2700 rpm ν : .269 ϕ : .0° T: 279.5



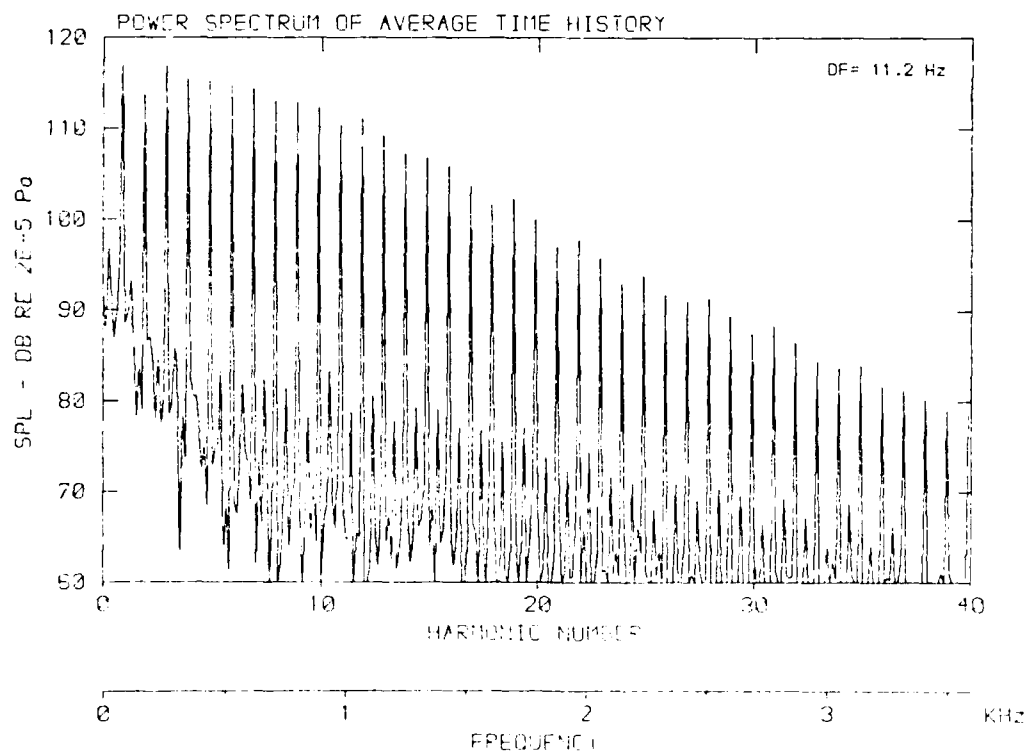
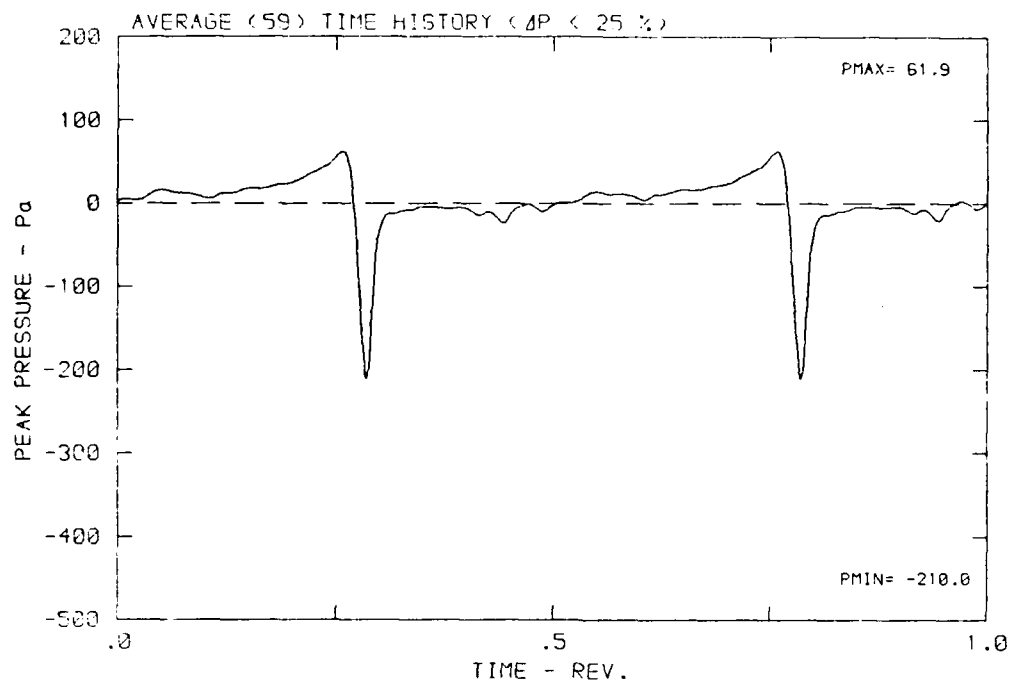
DATA POINT: HN-2 RUN: 34 NF: 4

β : 20.6° NH: .9875 n: 1700 rpm v_{ro}: .100 ϕ : .00 θ : 178.0°



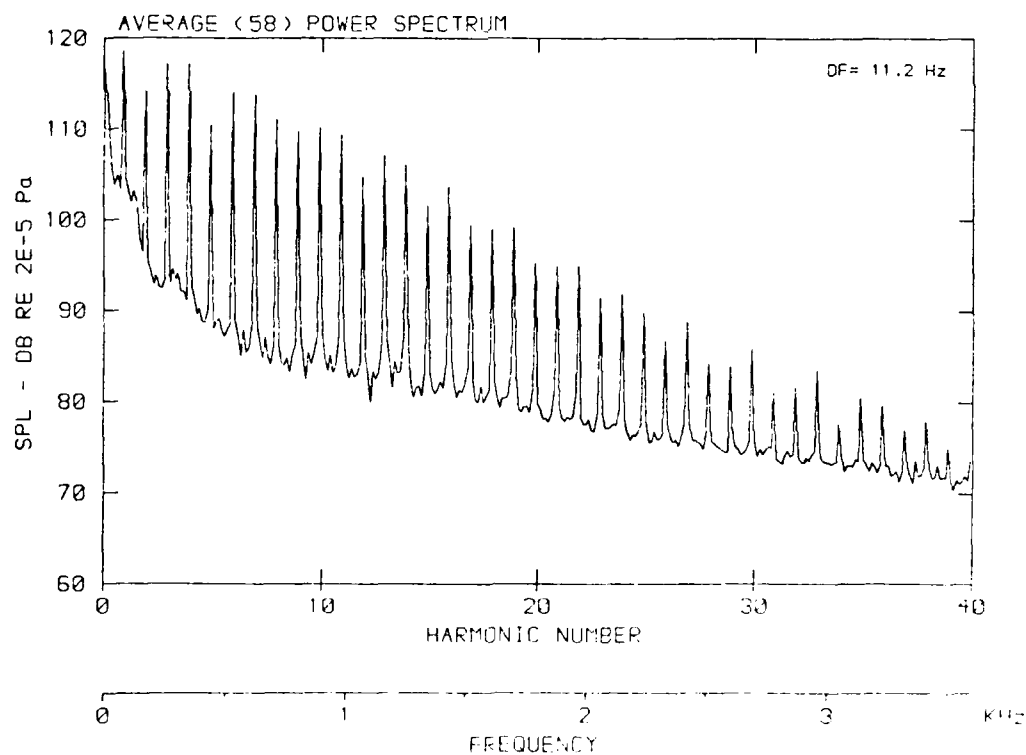
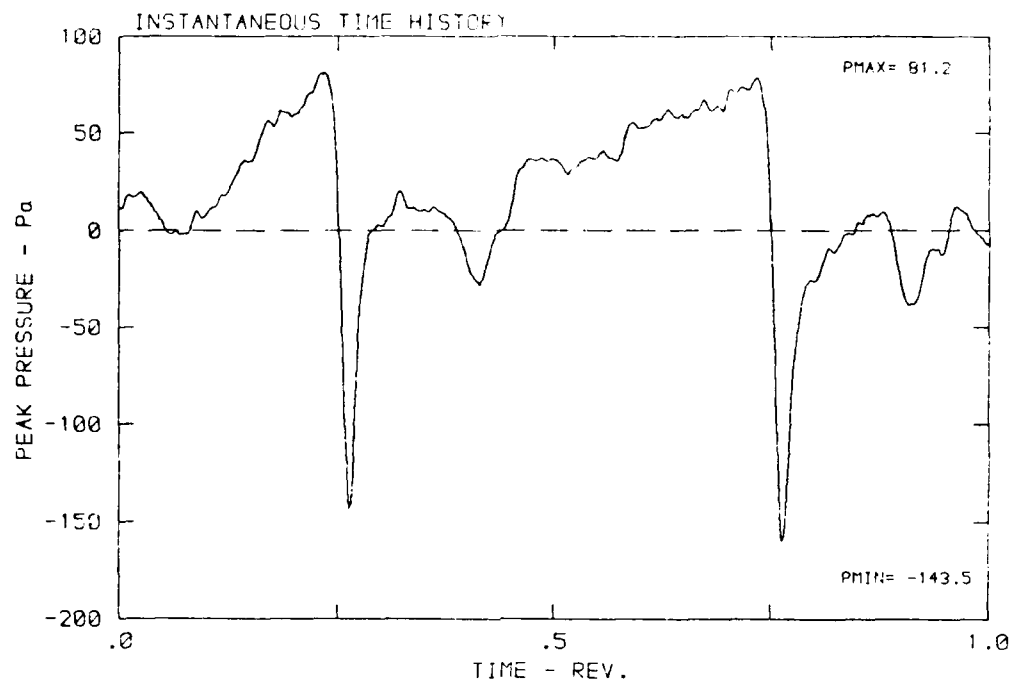
DATA POINT: HN-2 RUN: 34 MP: 4

β : 20.5° MH: .8875 n: 2700 rpm v/u : .269 ϕ : .0° T: 279.5 L



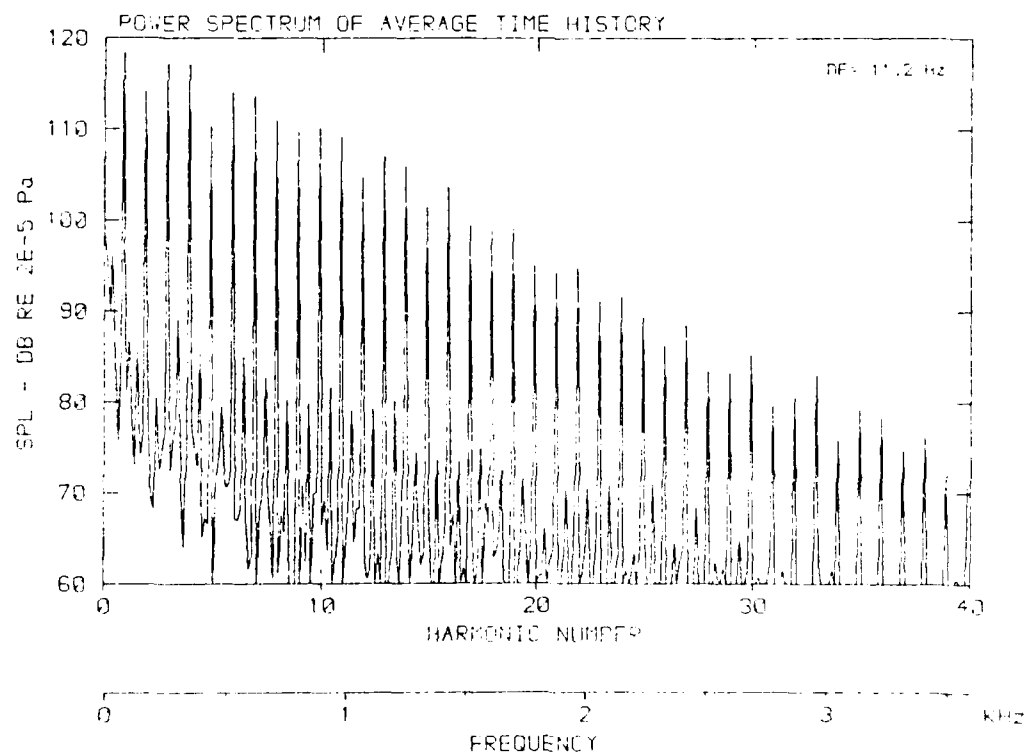
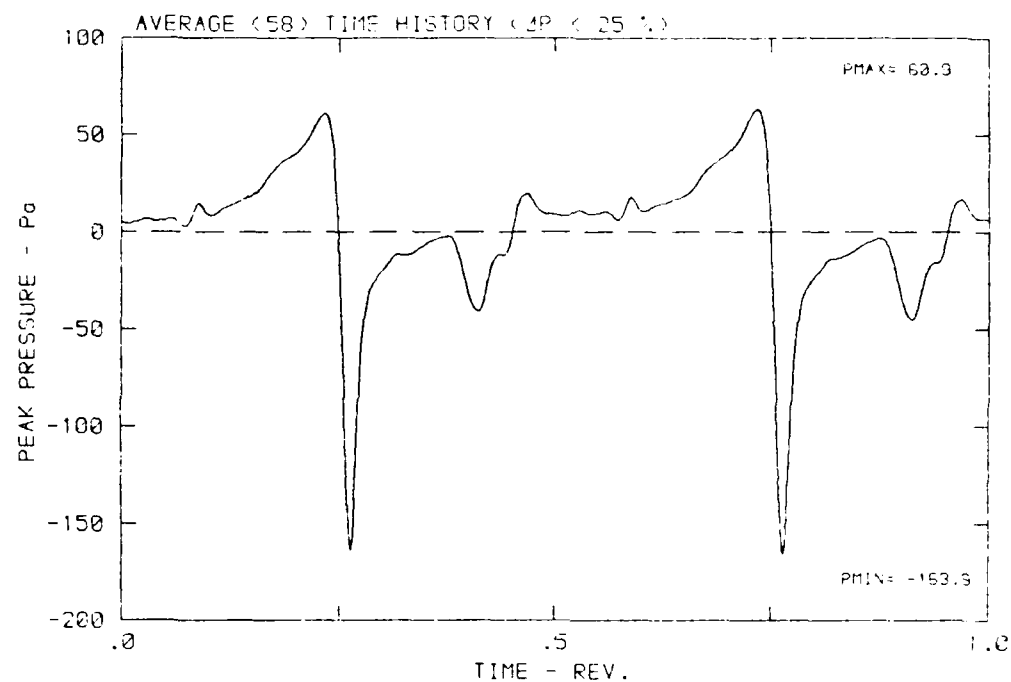
DATA POINT: HN-1 RUN: 10 MP: 5

β : 20.8° MH: .8875 n: 2000 rpm ν/ω : .26 ϕ : .0° T: 279.0°



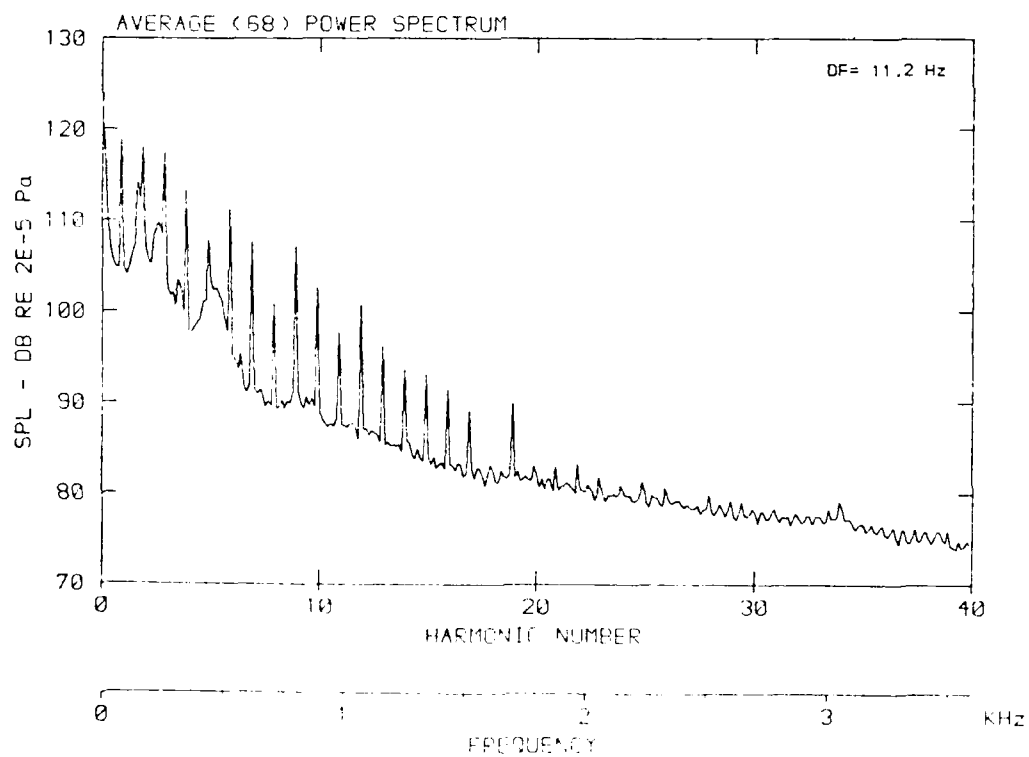
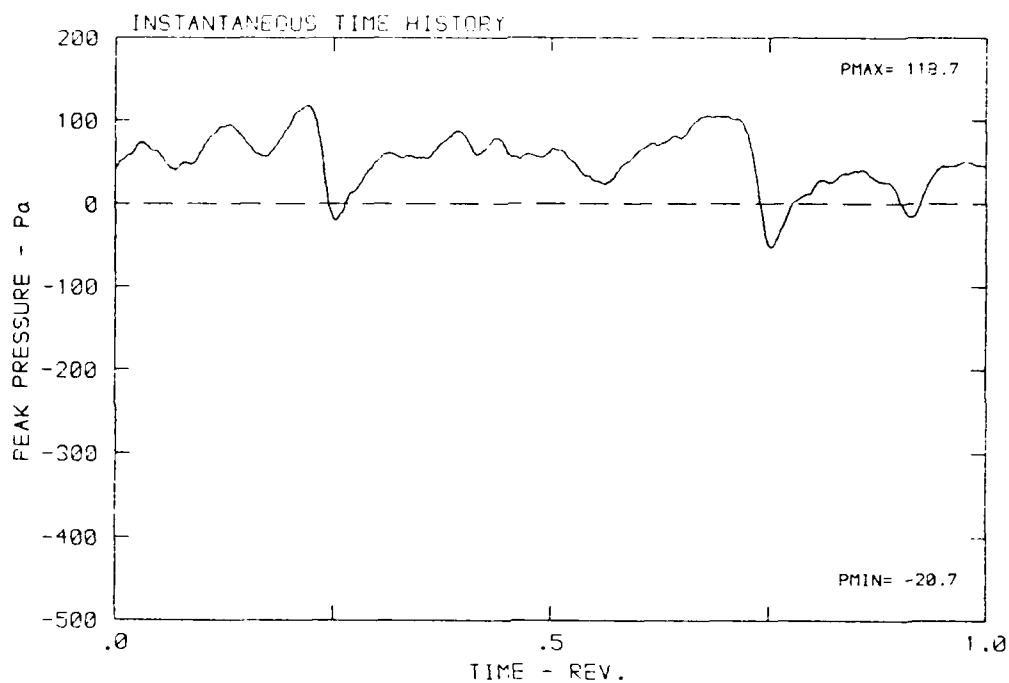
DATA POINT: HN-2 RUN: 34 MP: 5

β : 20.8° MH: .8875 n: 2700 rpm v/u : .269 ϕ : .0° T: 279.5 K



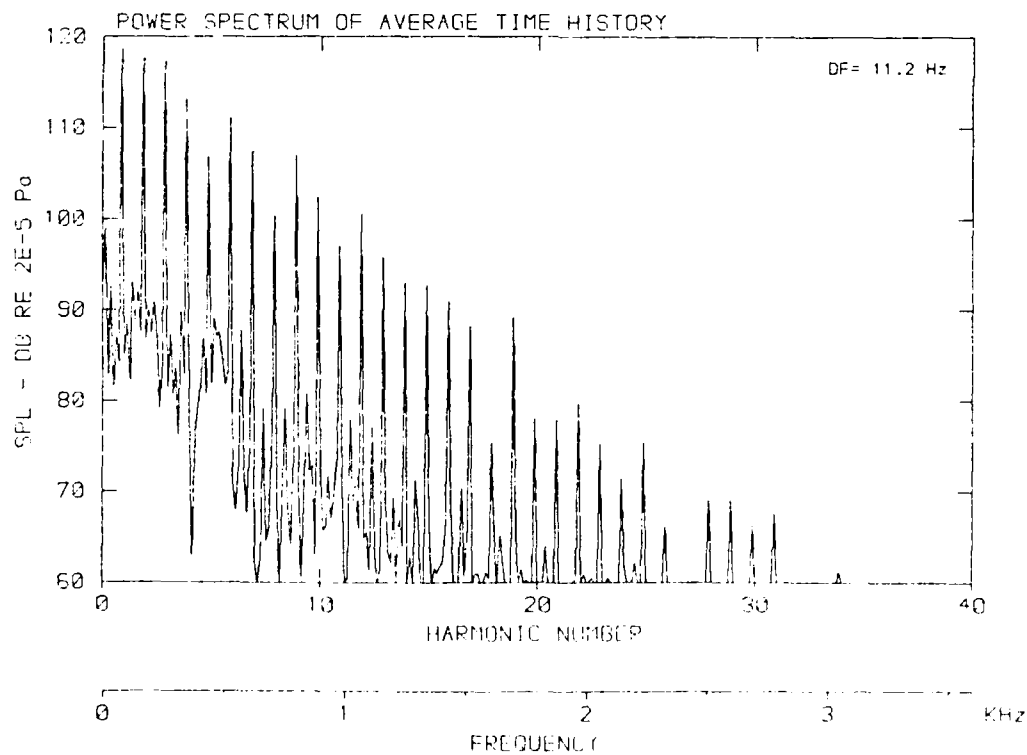
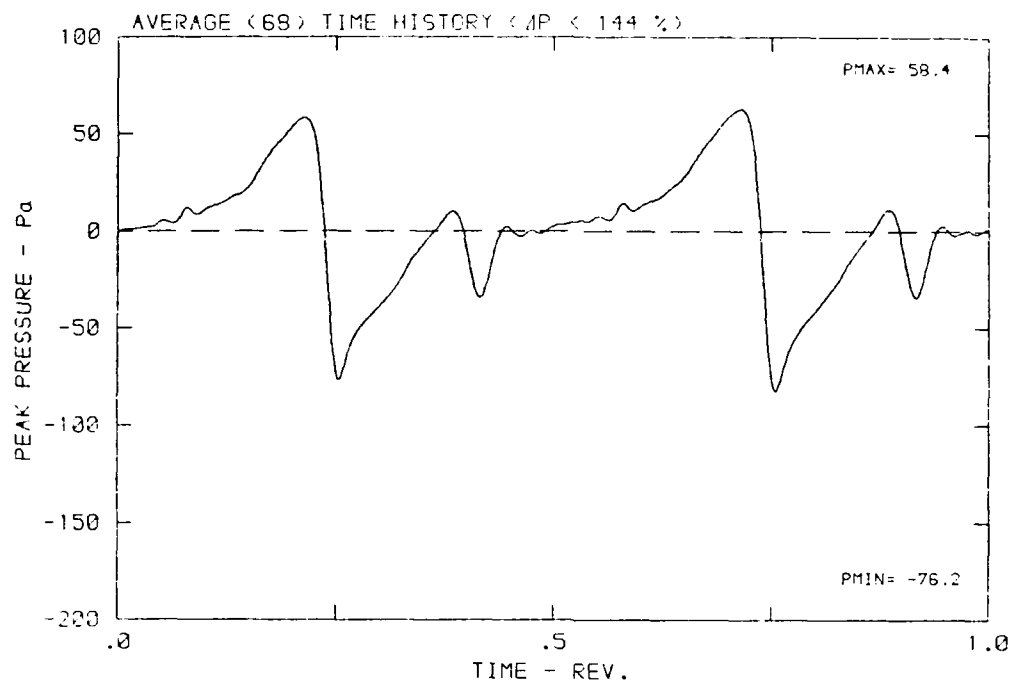
DATA POINT: HN-2 RUN: 34 MP: 5

β : 20.8° MH: .9875 n: 2700 rpm vru: .259 ϕ : .0° T: 279.5 K



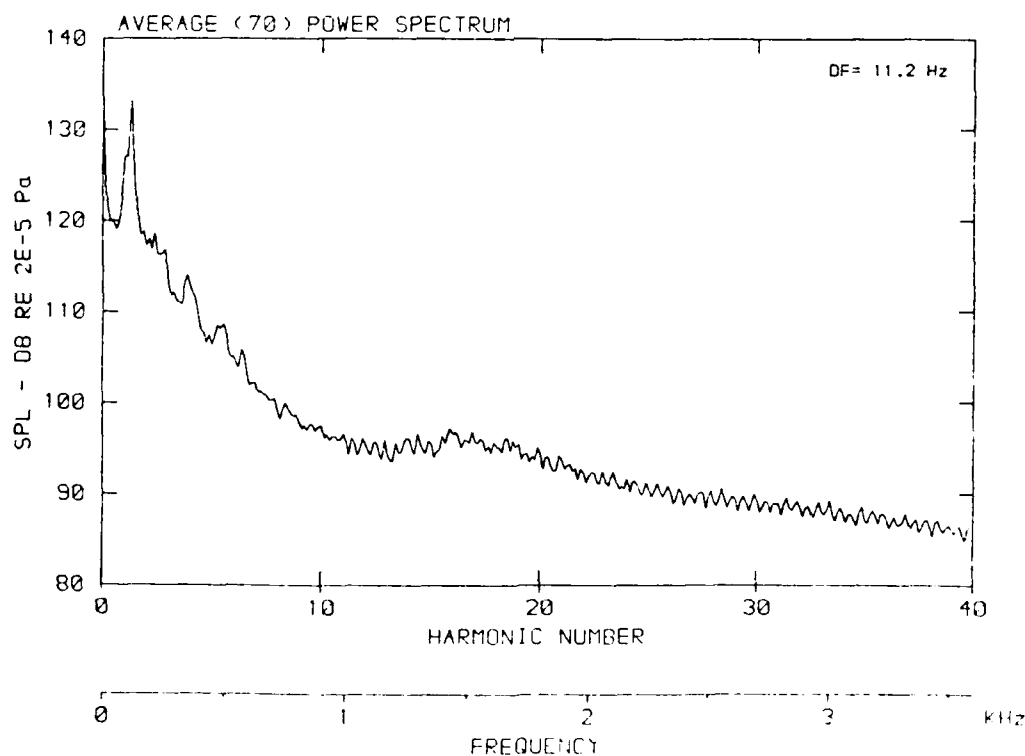
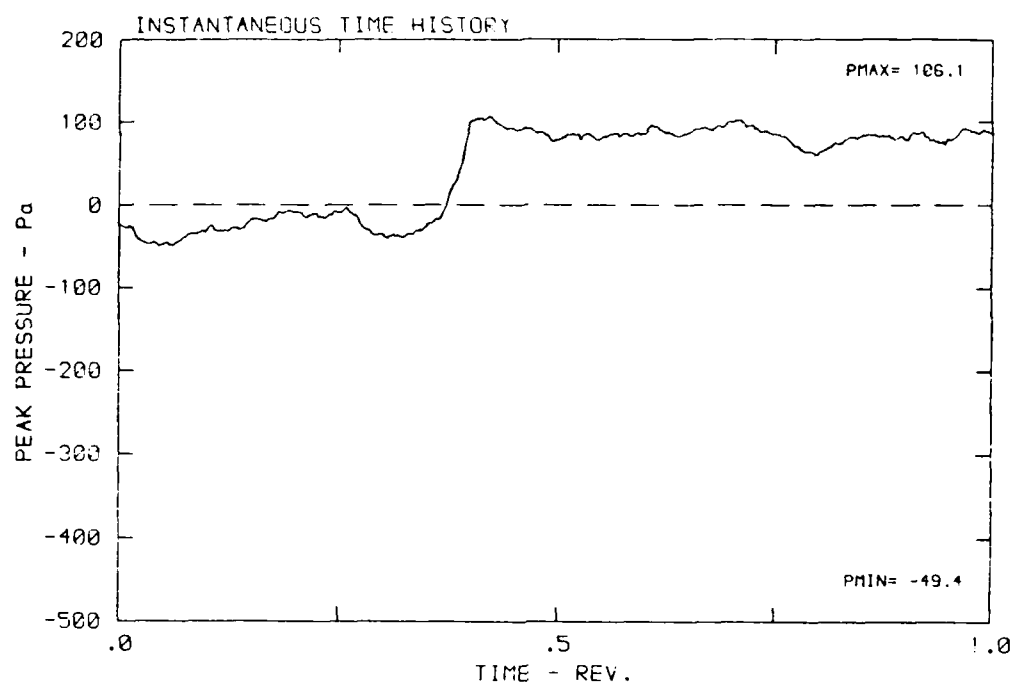
DATA POINT: HN-2 RUN: 34 MP: 6

β : 20.8° MH: .8875 n: 2700 rpm v/u: .269 ϕ : .0° T: 279.5 K



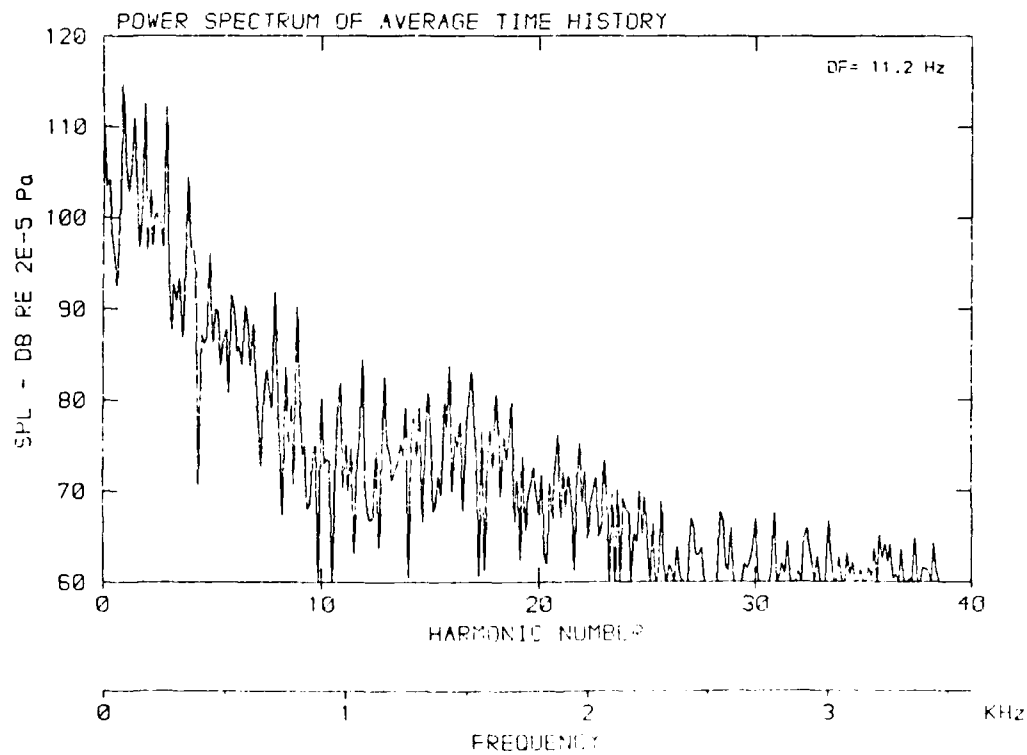
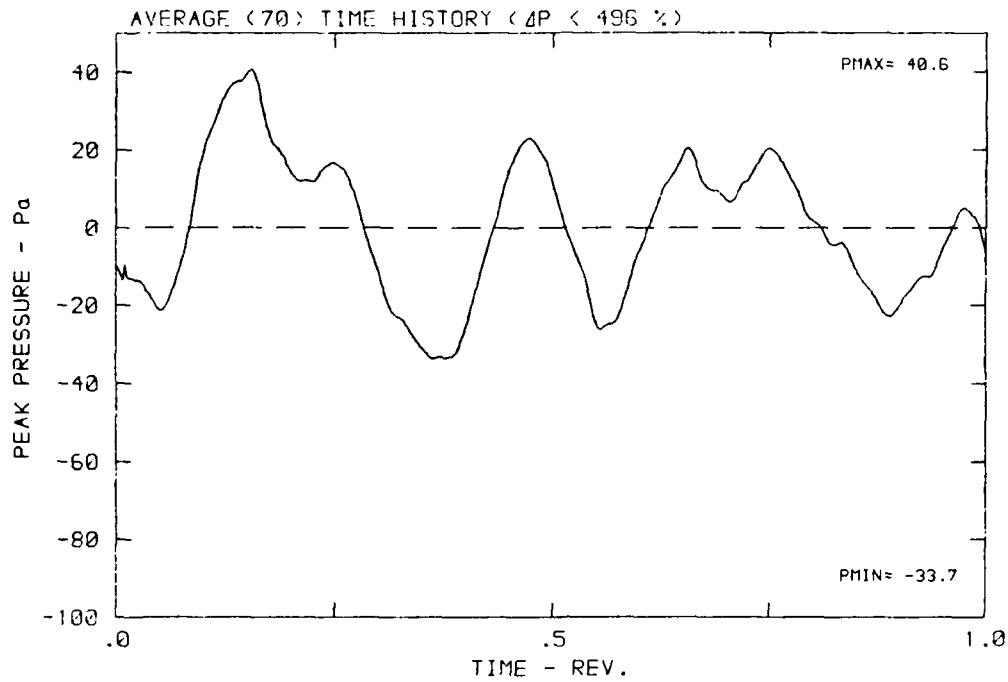
DATA POINT: HN-2 RUN: 34 MP: 7

β : 20.8° MH: .6875 n: 2703 rpm vzu: .269 ϕ : .0° T: 279.5 K



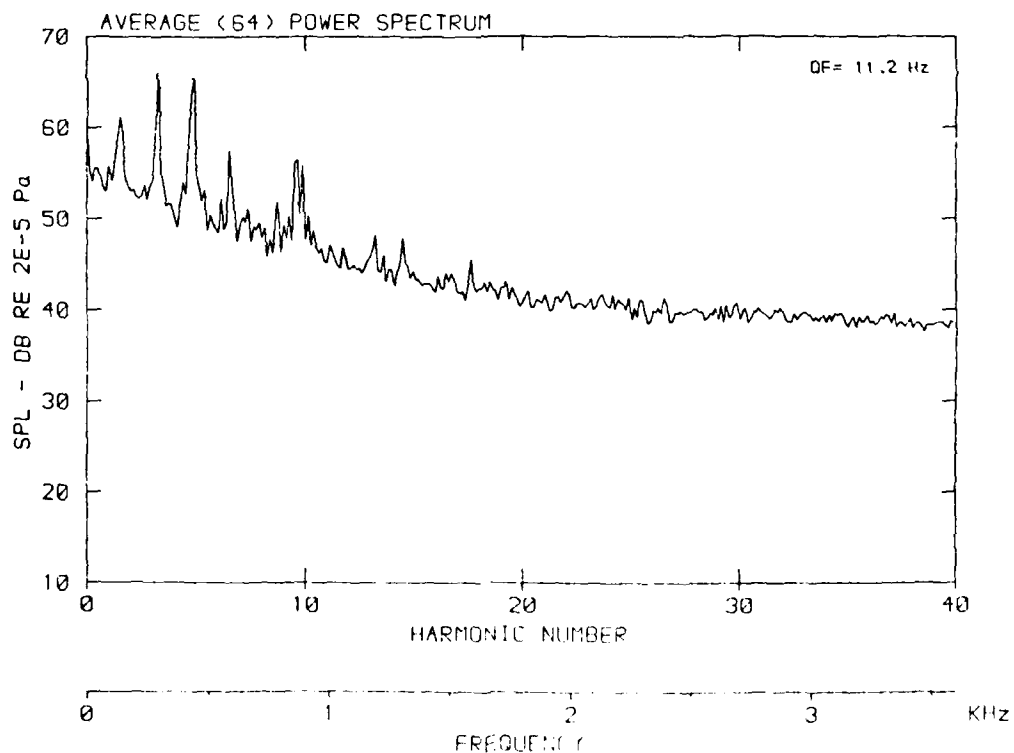
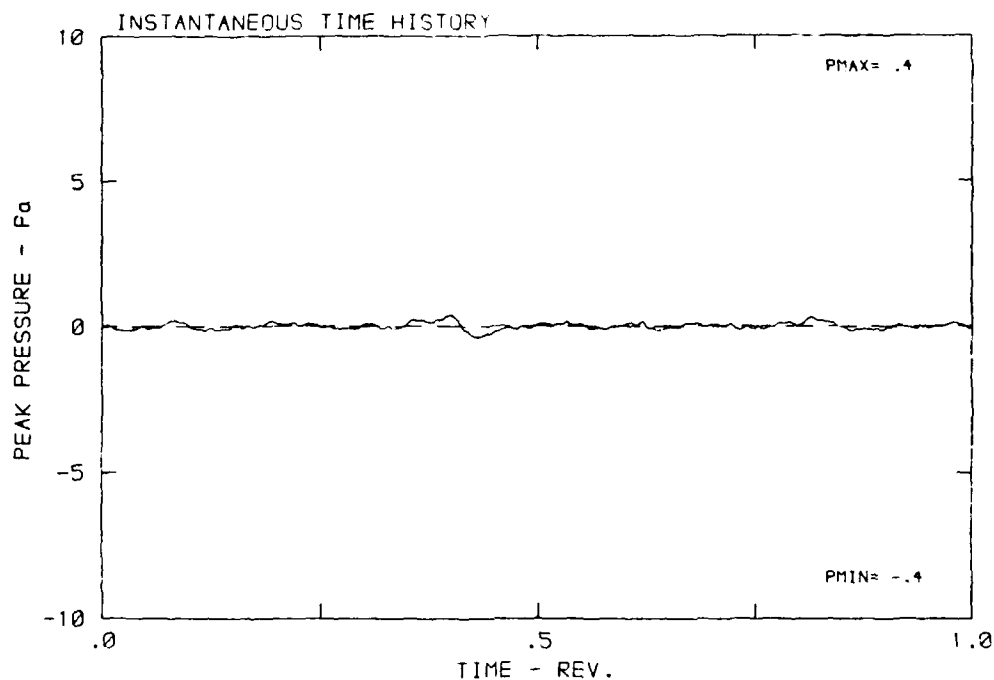
DATA POINT: HN-2 RUN: 34 MP: 7

β : 20.8° MH: .8875 n: 2700 rpm v/u: .269 ϕ : .0° T: 279.5 K



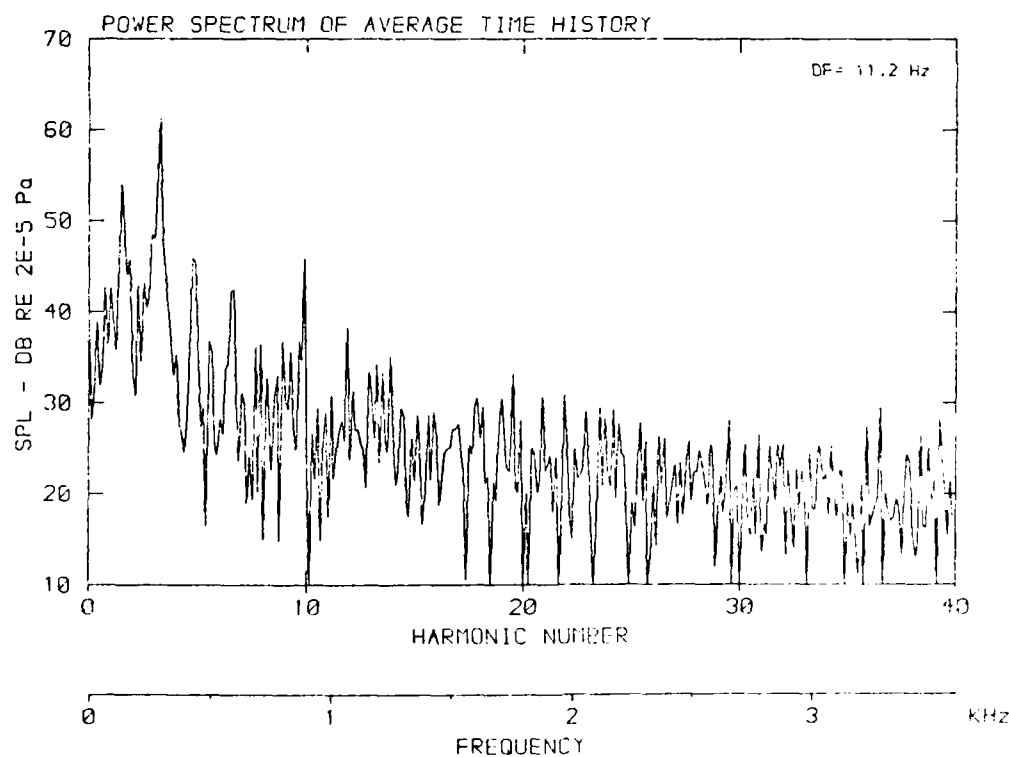
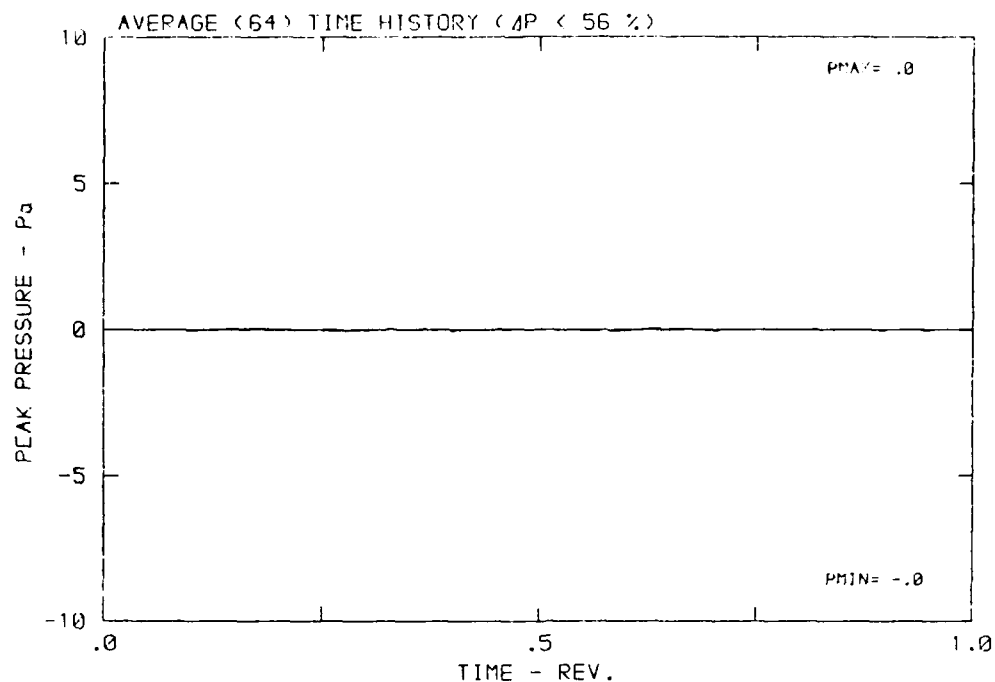
DATA POINT: HN-2 RUN: 34 MP: 9

β : 20.8° MH: .8875 n: 2700 rpm v/u : .269 ϕ : .0° T: 279.5 K



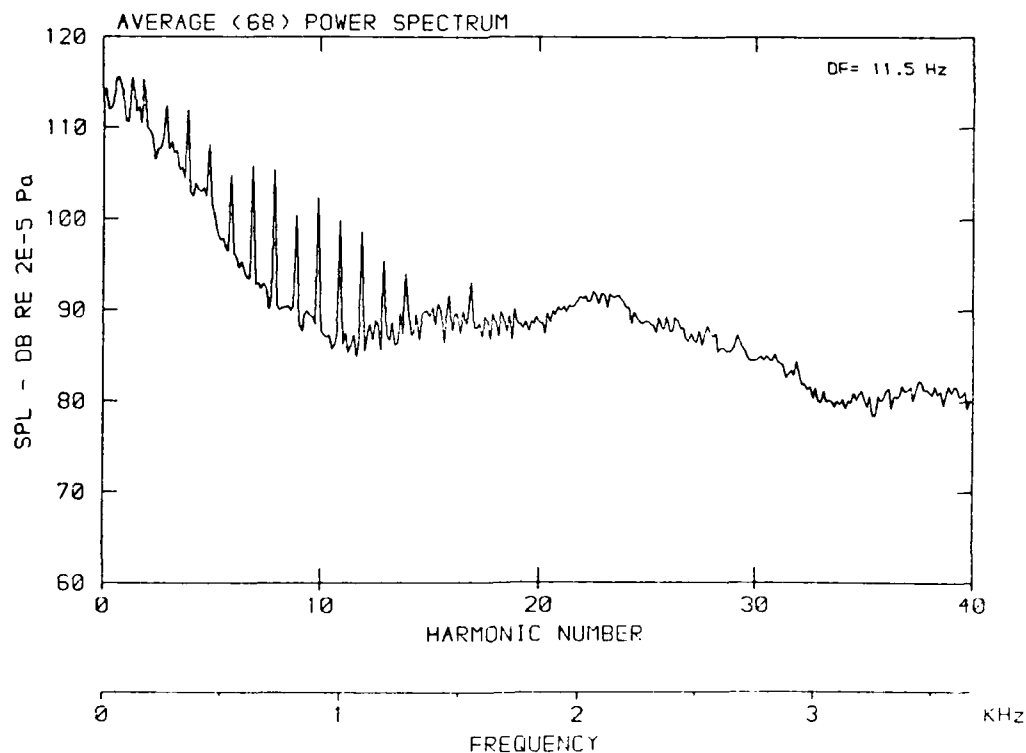
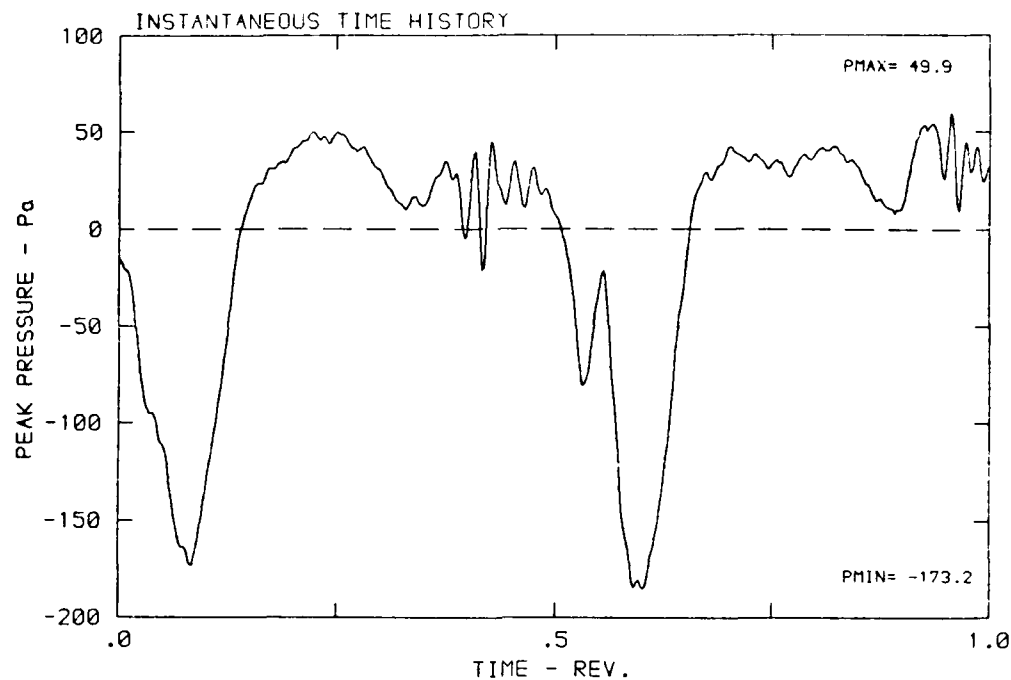
DATA POINT: HN-2 RUN: 34 MP: 9

β : 20.8° MH: .8875 n: 2700 rpm v/u : .269 ϕ : .0° T: 279.5 K



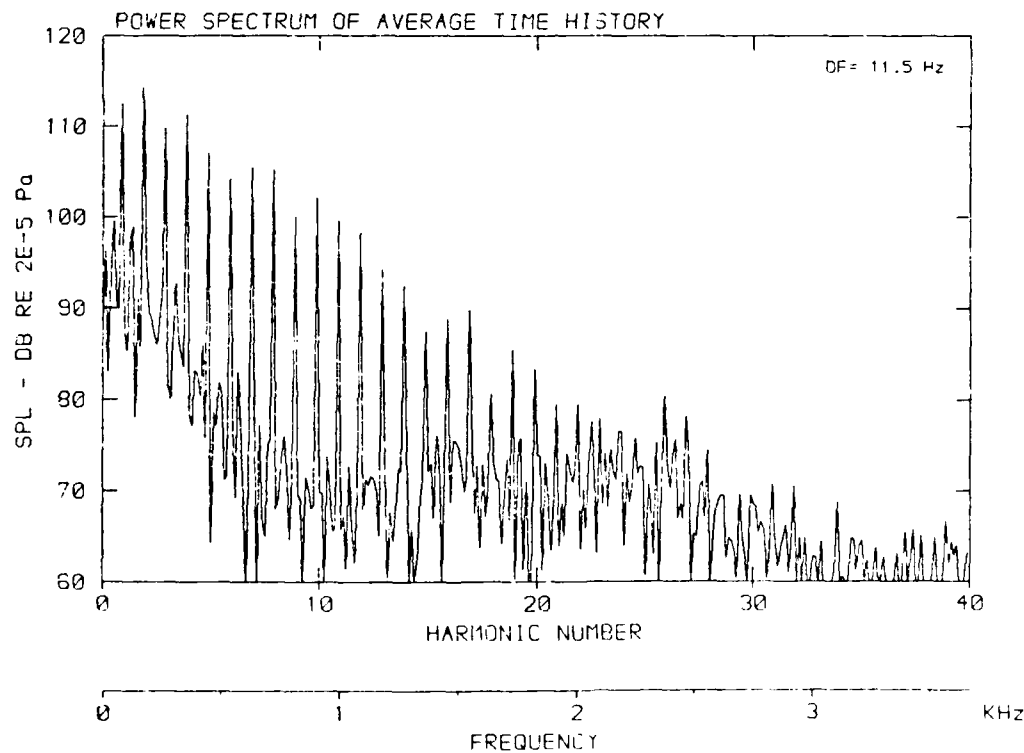
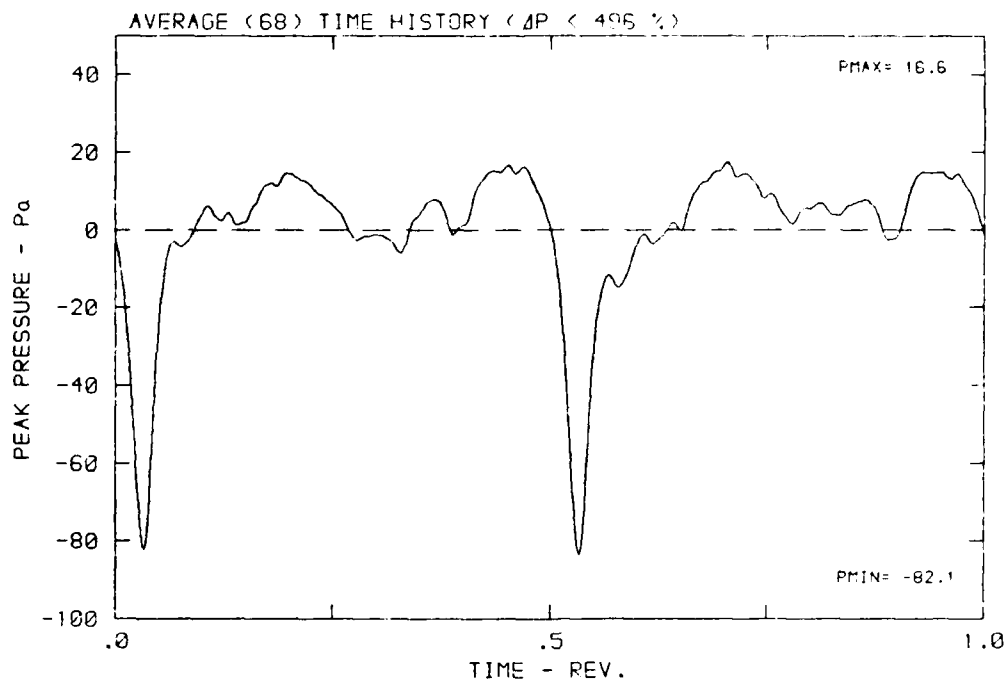
DATA POINT: HN-3 RUN: 35 MP: 1

β : 20.8° MH: .9048 n: 2753 rpm v/u : .266 ϕ : .0° T: 279.2 K



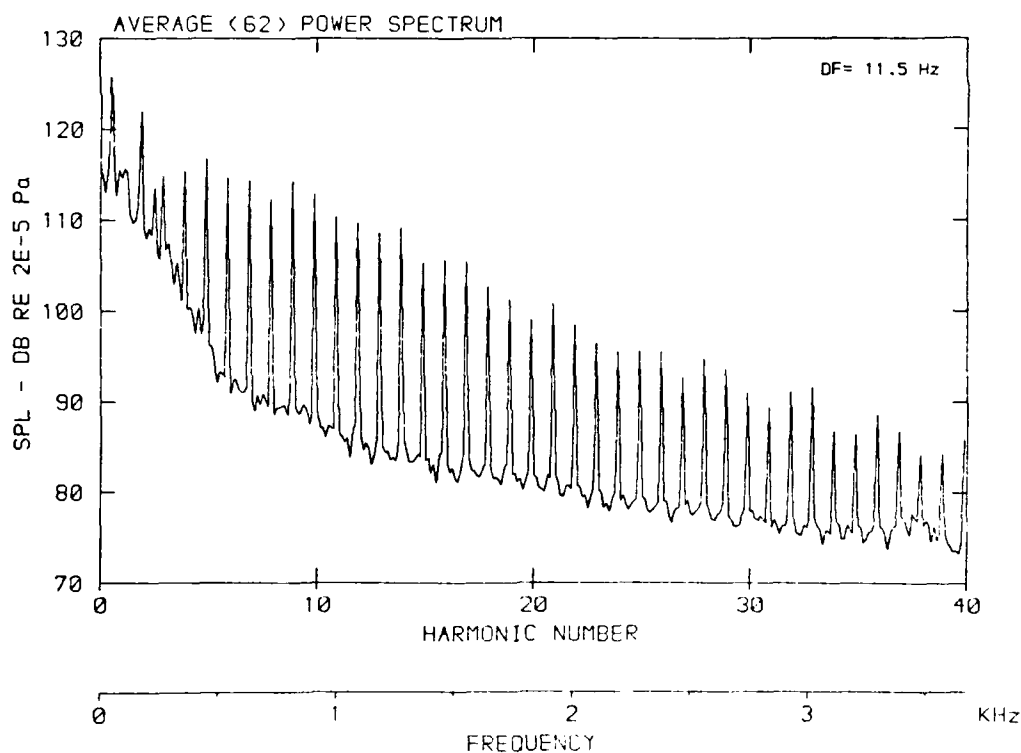
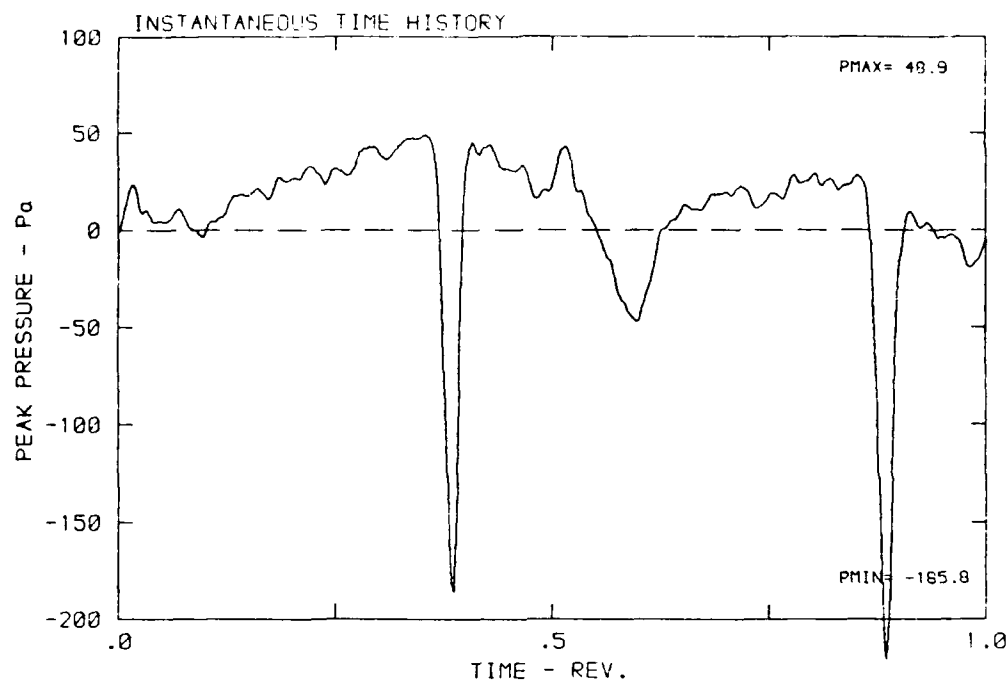
DATA POINT: HN-3 RUN: 35 MP: 1

β : 20.8° MH: .9048 n: 2753 rpm v/u: .266 ϕ : .0° T: 279.2 K



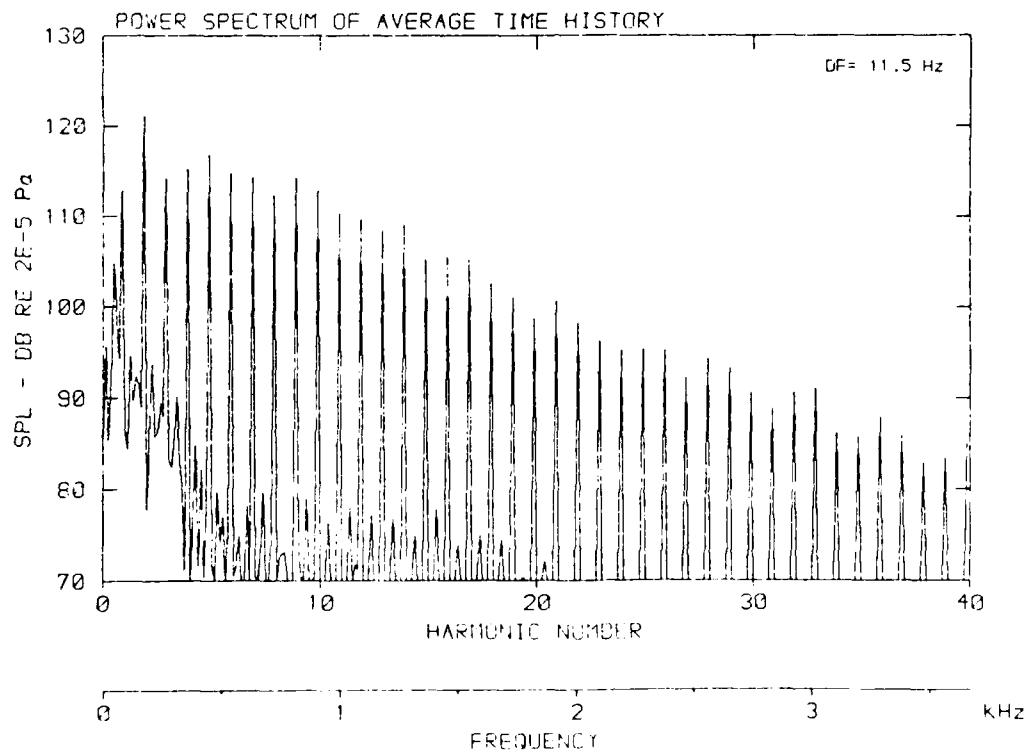
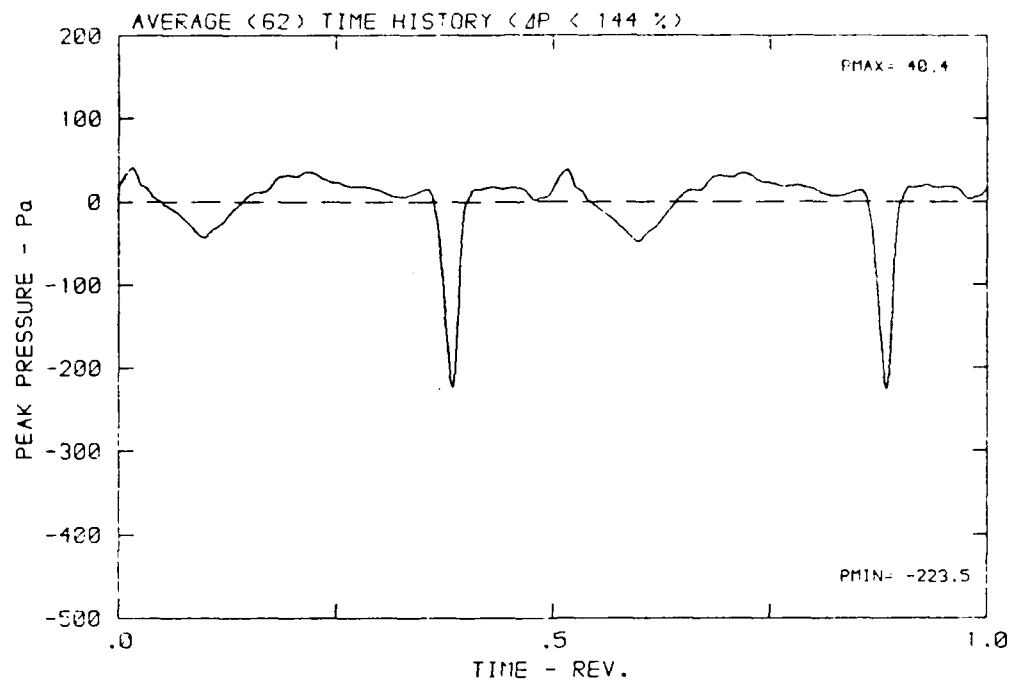
DATA POINT: HN-3 RUN: 35 MP: 2

β : 20.8° MH: .9048 n: 2753 rpm v/u: .266 ϕ : .0° T: 279.2



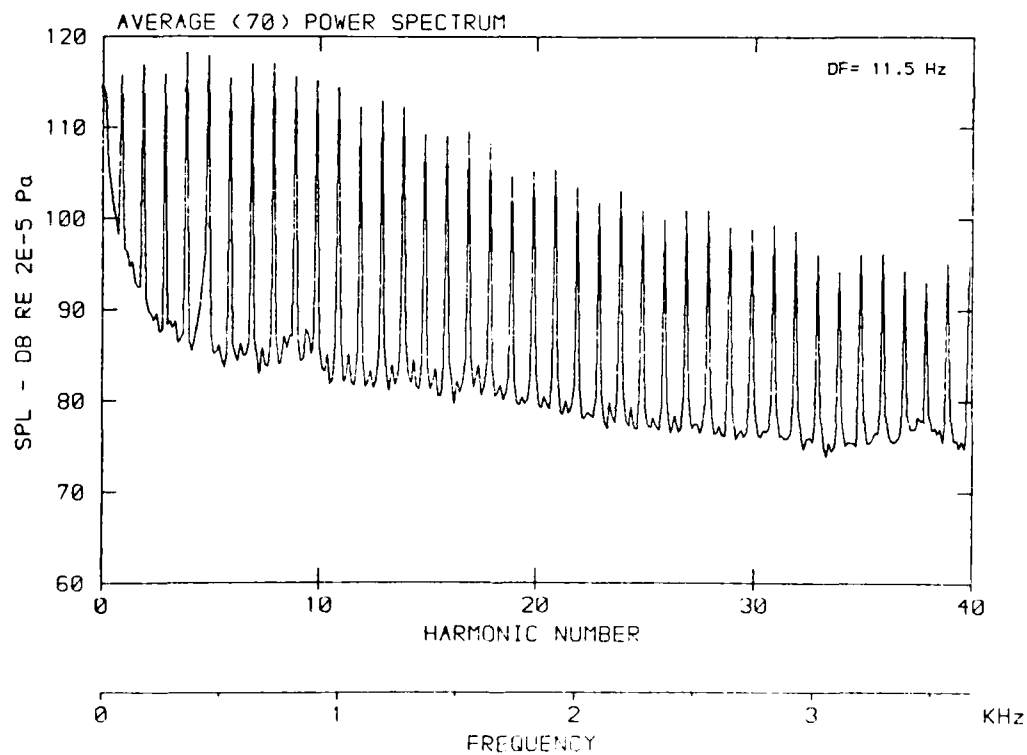
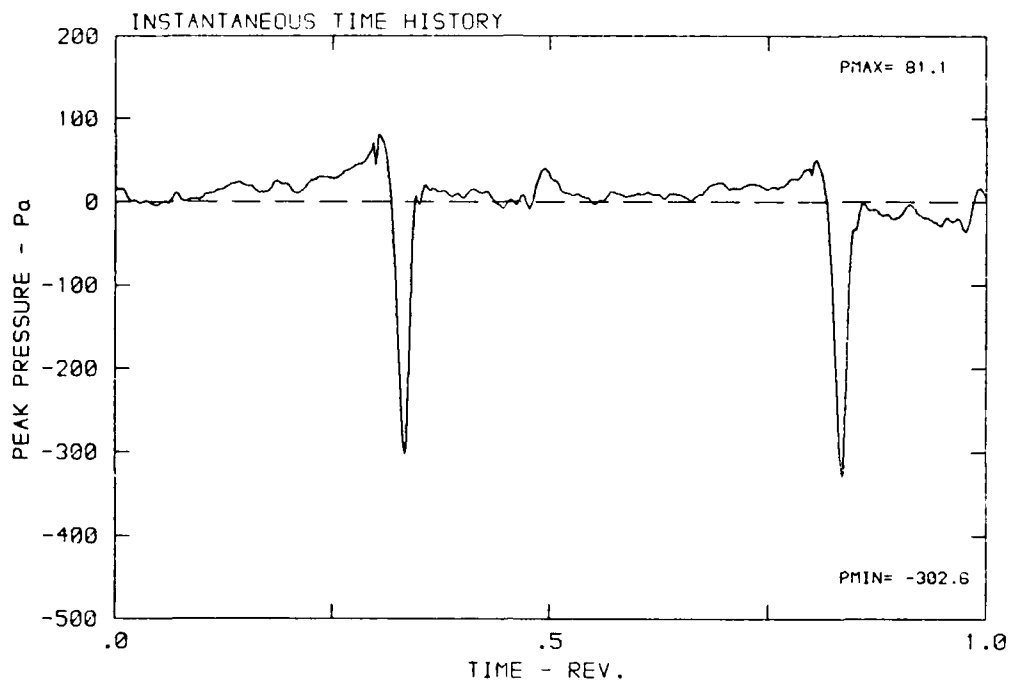
DATA POINT: HN-3 RUN: 35 MP: 2

β : 20.8° MH: .9048 n: 2753 rpm v/u: .266 ϕ : $.0^\circ$ T: 279.2 K



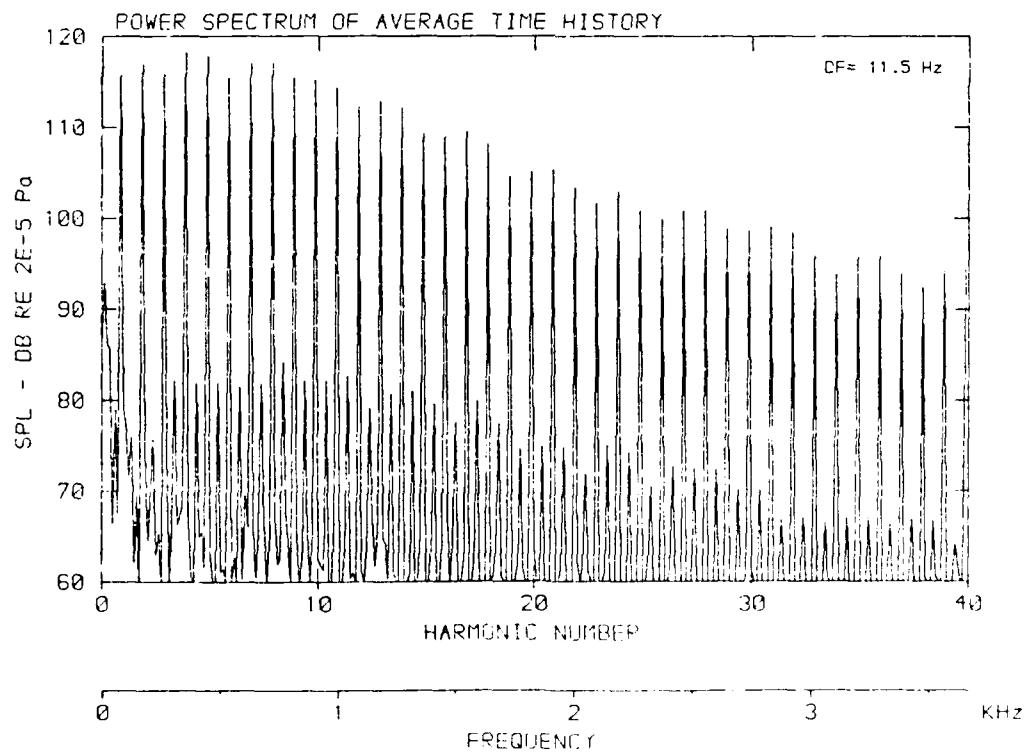
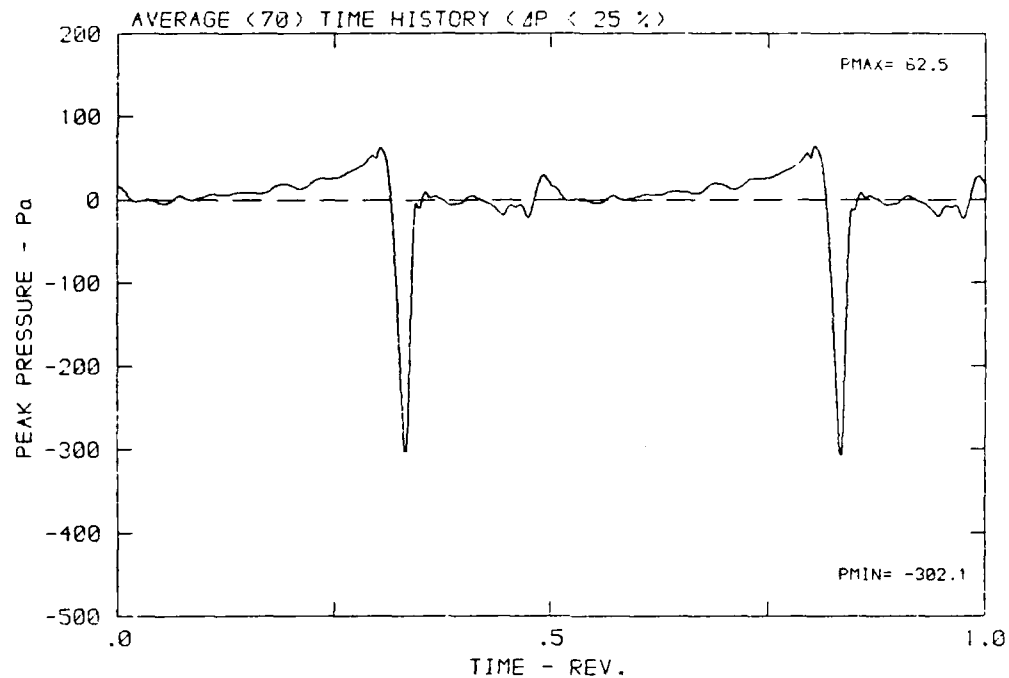
DATA POINT: HN-3 RUN: 35 MP: 3

β : 20.8° MH: .9048 n: 2753 rpm v/u: .266 ϕ : .0° T: 279.2 K



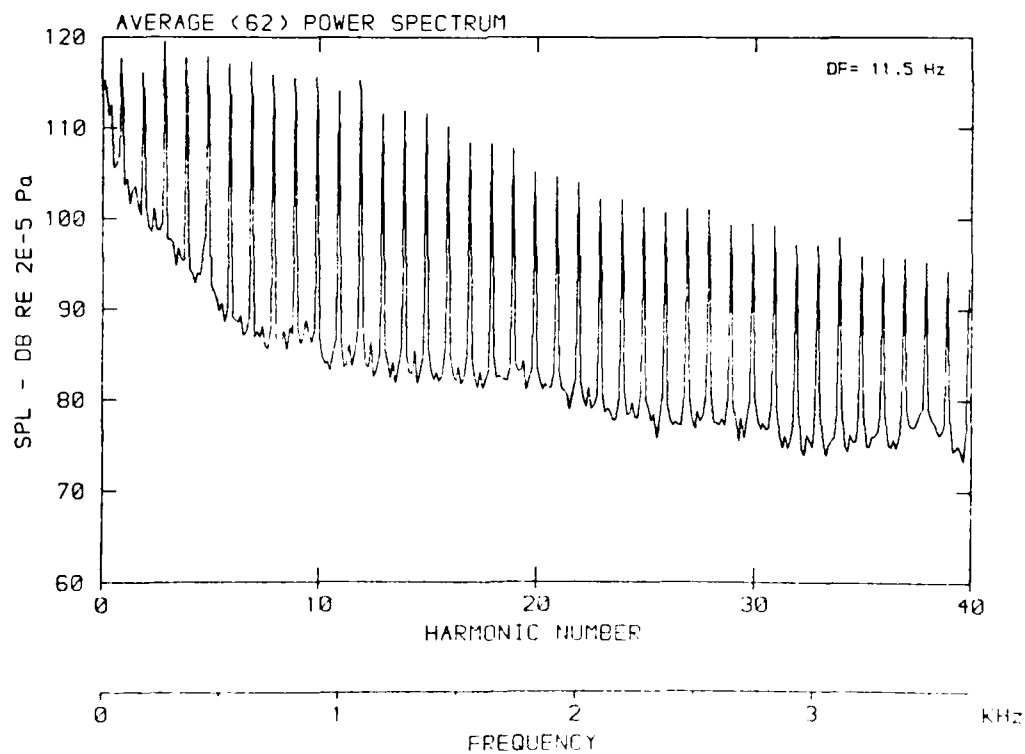
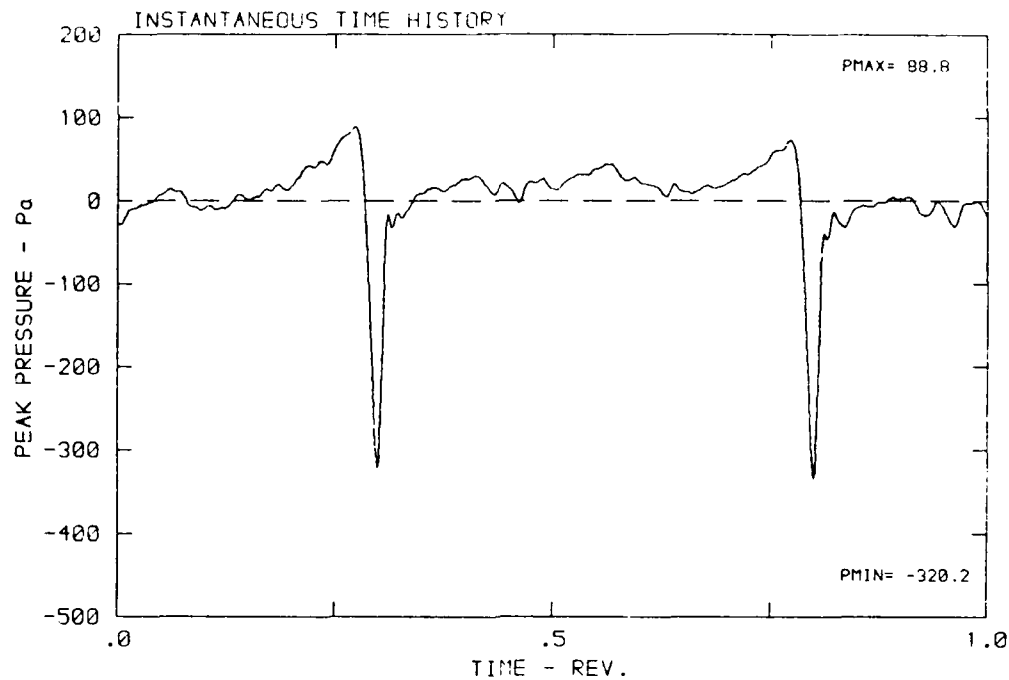
DATA POINT: HN-3 RUN: 35 MP: 3

β : 20.8° MH: .9048 n: 2753 rpm v/u : .266 ϕ : .0° T: 279.2 K



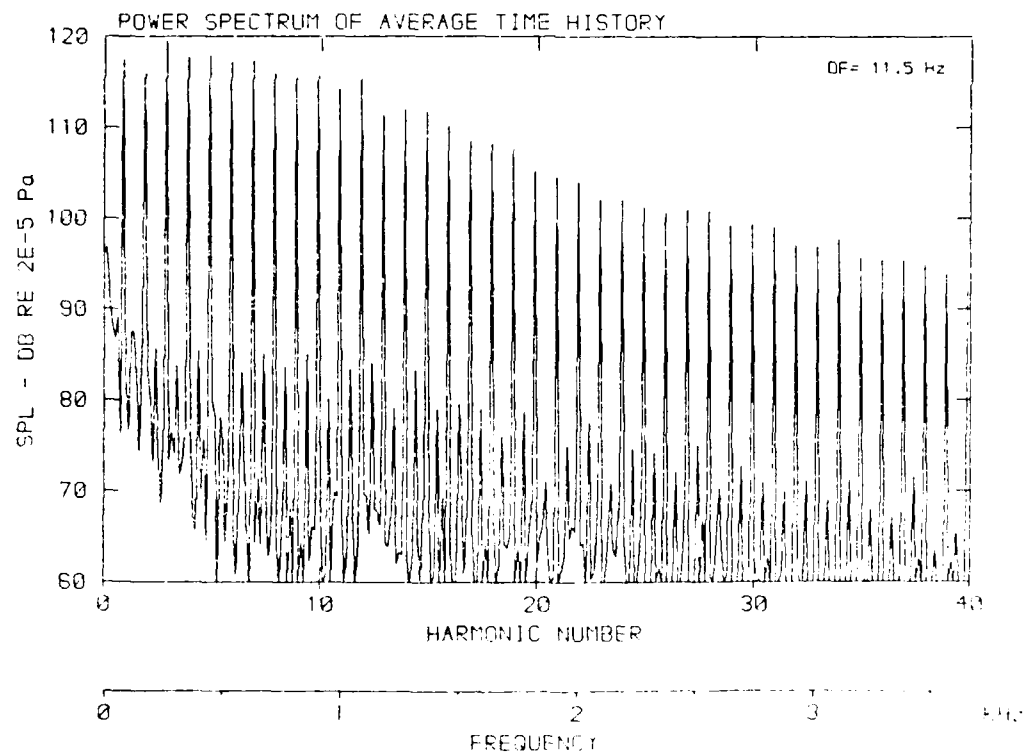
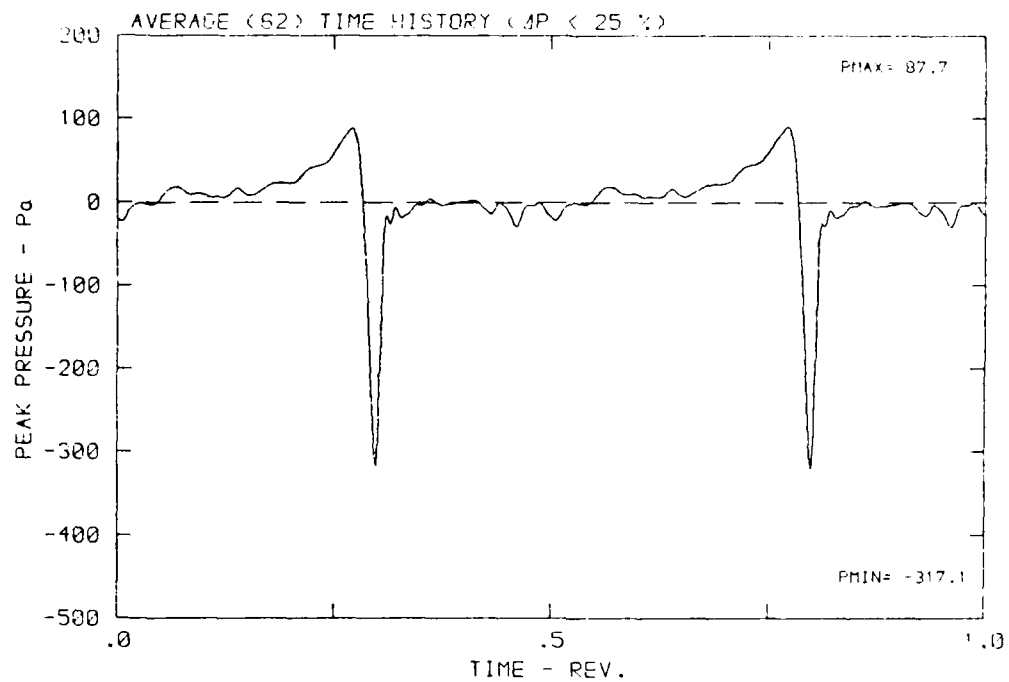
DATA POINT: HN-3 RUN: 35 MP: 4

β : 20.8° MH: .9048 n: 2753 rpm v/u : .256 ϕ : .0° T: 279.2 K



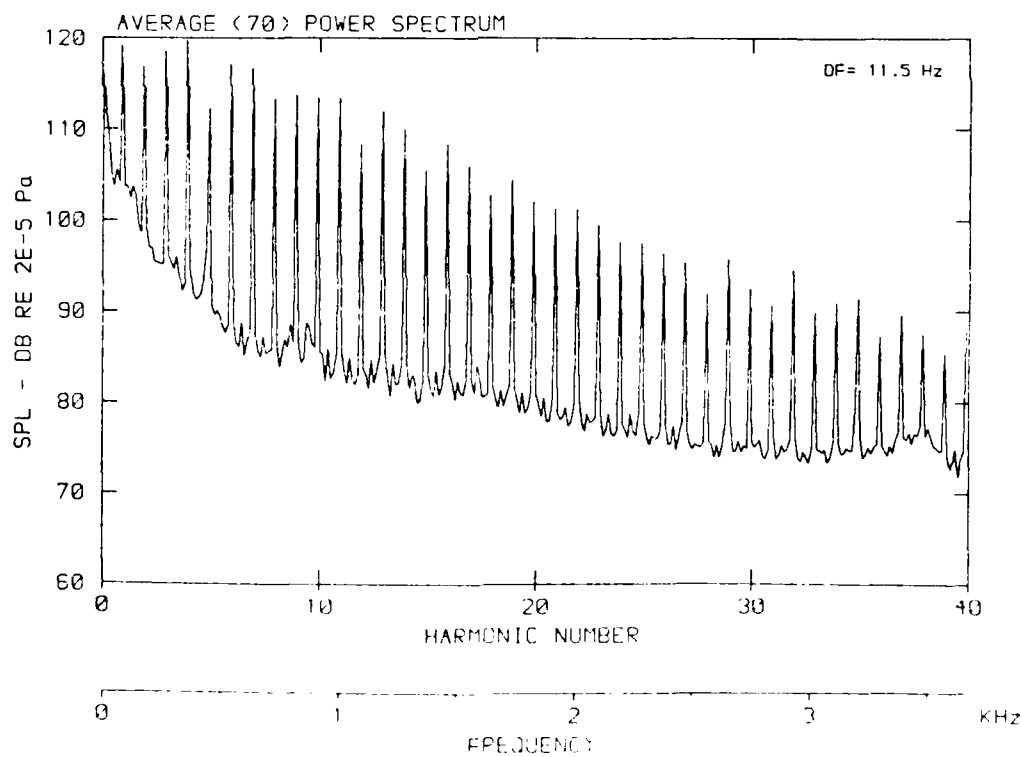
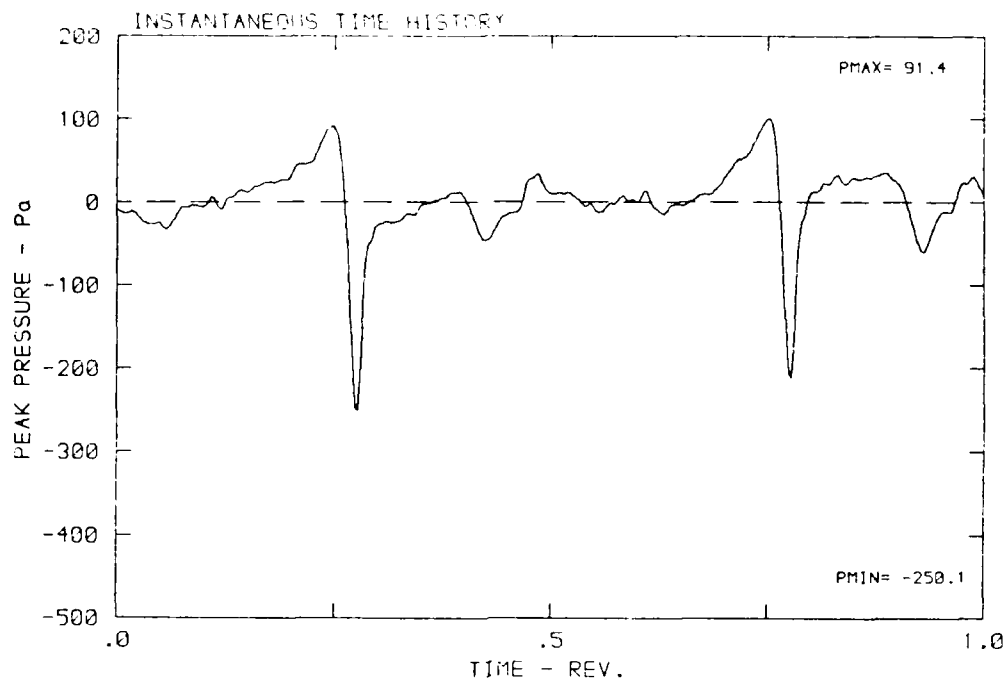
DATA POINT: HN-3 RUN: 35 MP: 4

β : 20.8° MH: .9048 n: 2753 rpm v/u : .266 ϕ : .0° T: 279.2 K



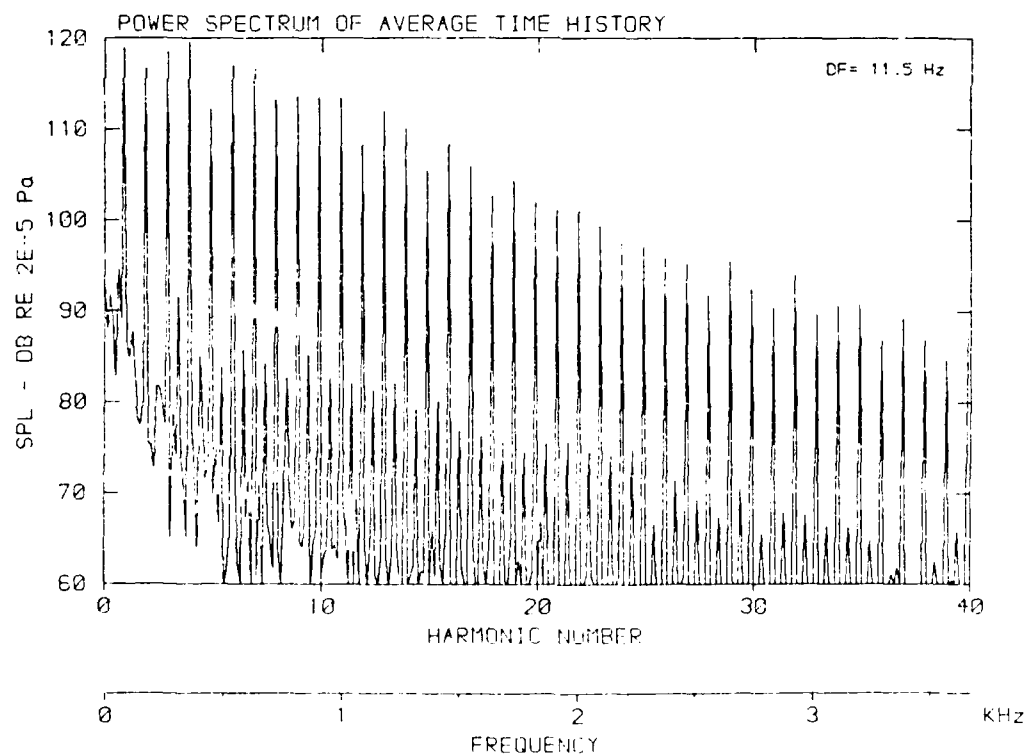
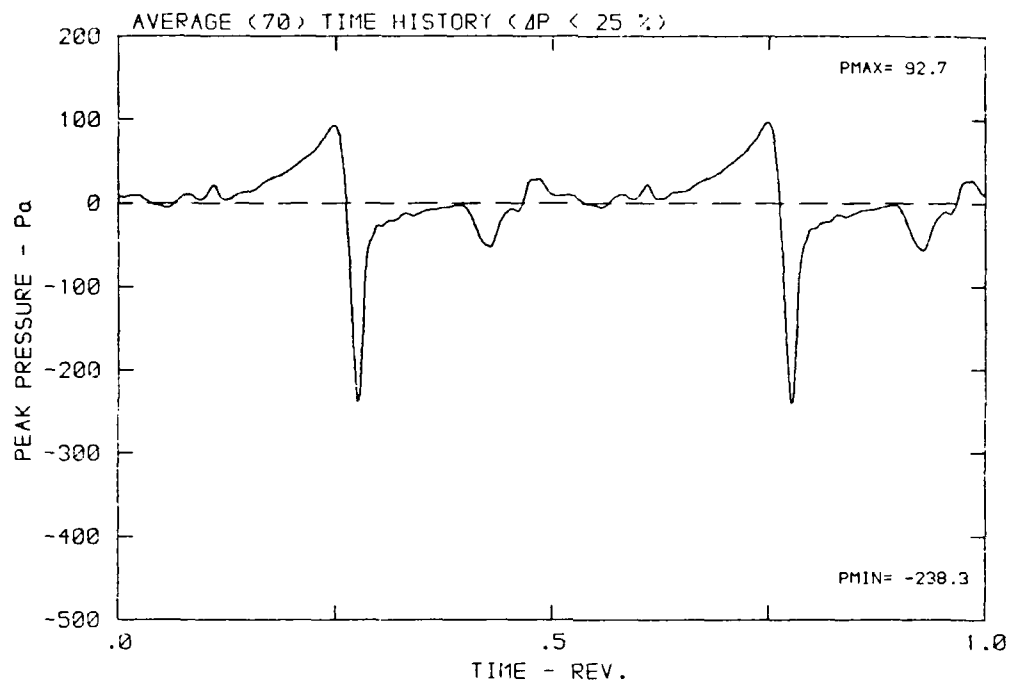
DATA POINT: HN-3 RUN: 35 MP: 5

β : 20.8° TH: .9848 n: 2756 rpm v/a: .226 ϕ : .0° f: 279.2 Hz



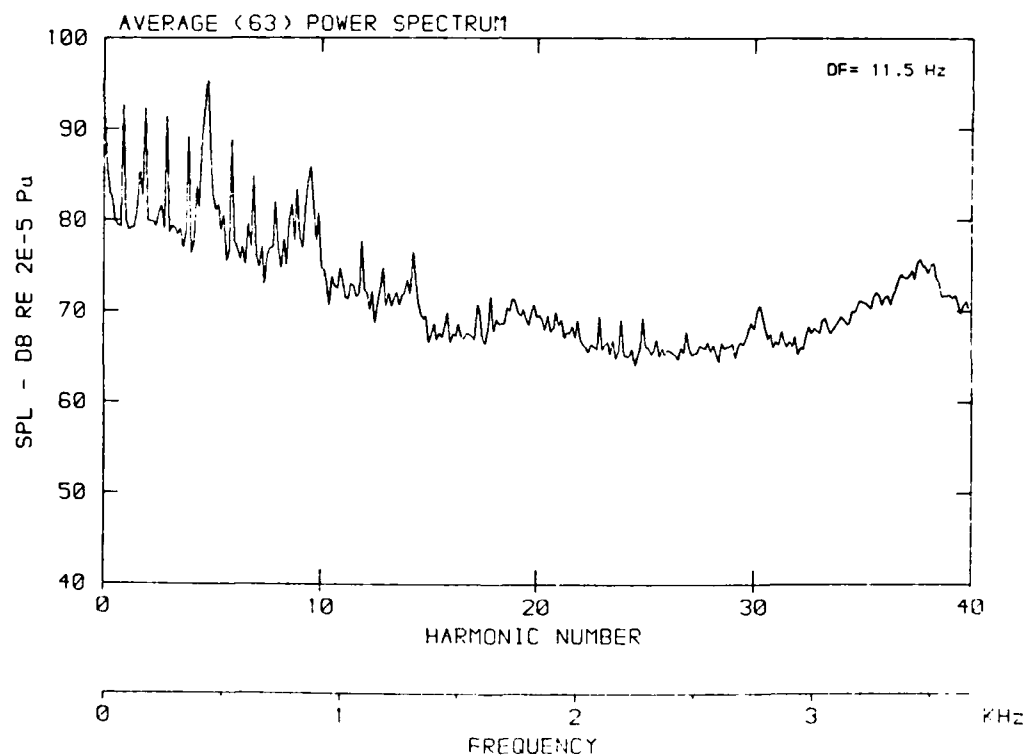
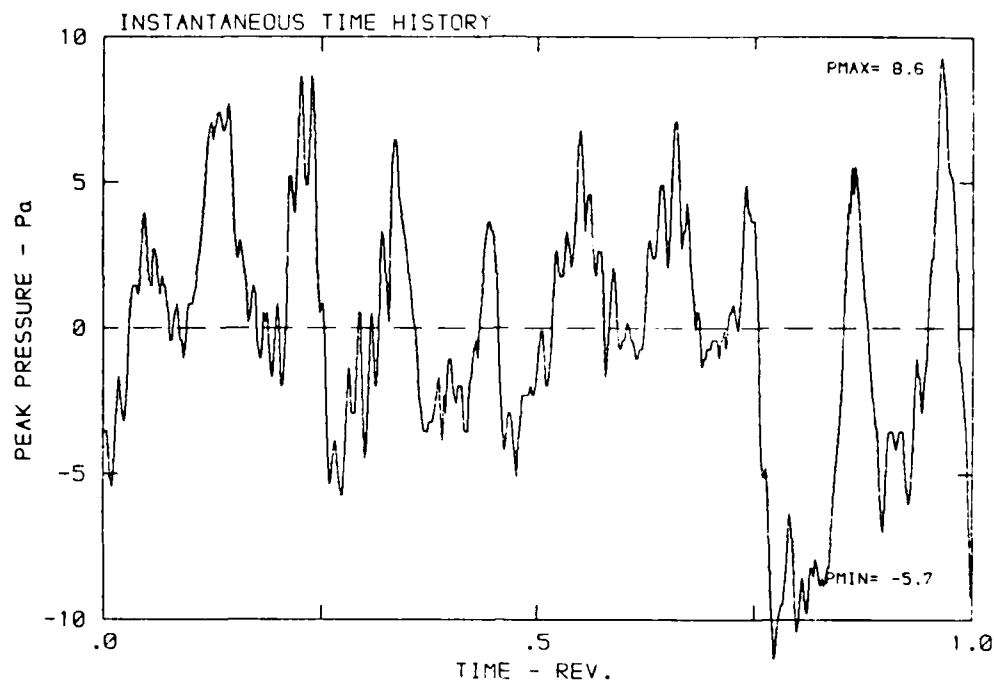
DATA POINT: HN-3 RUN: 35 MP: 5

β : 20.8° MH: .9048 n: 2753 rpm v/u: .266 ϕ : .0° T: 279.2 K



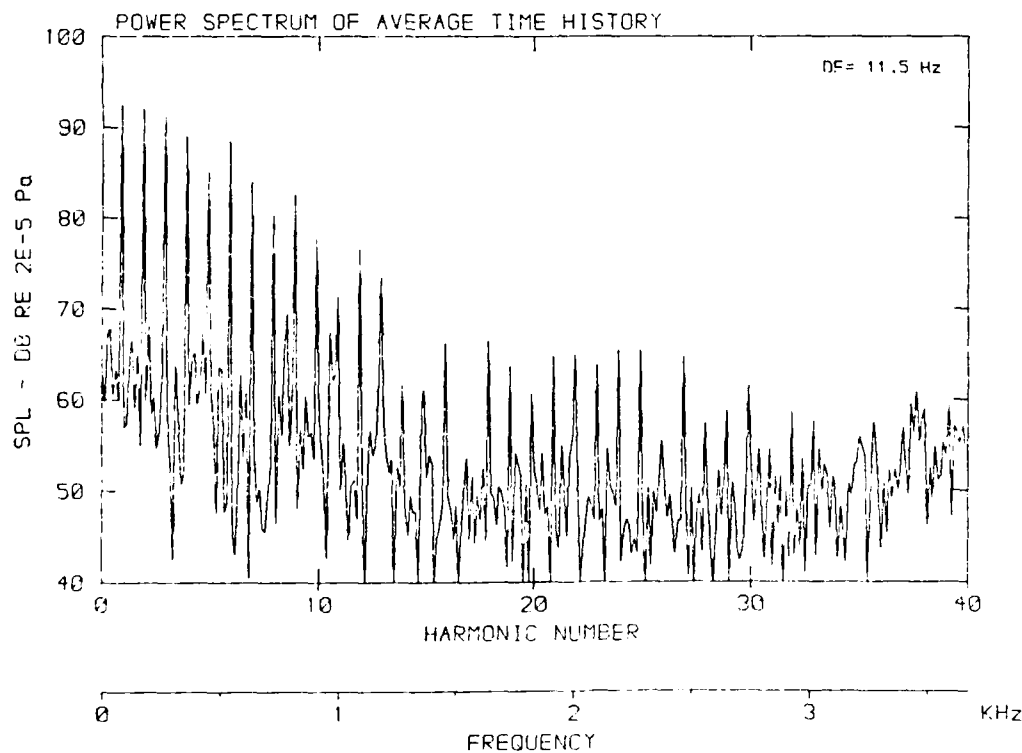
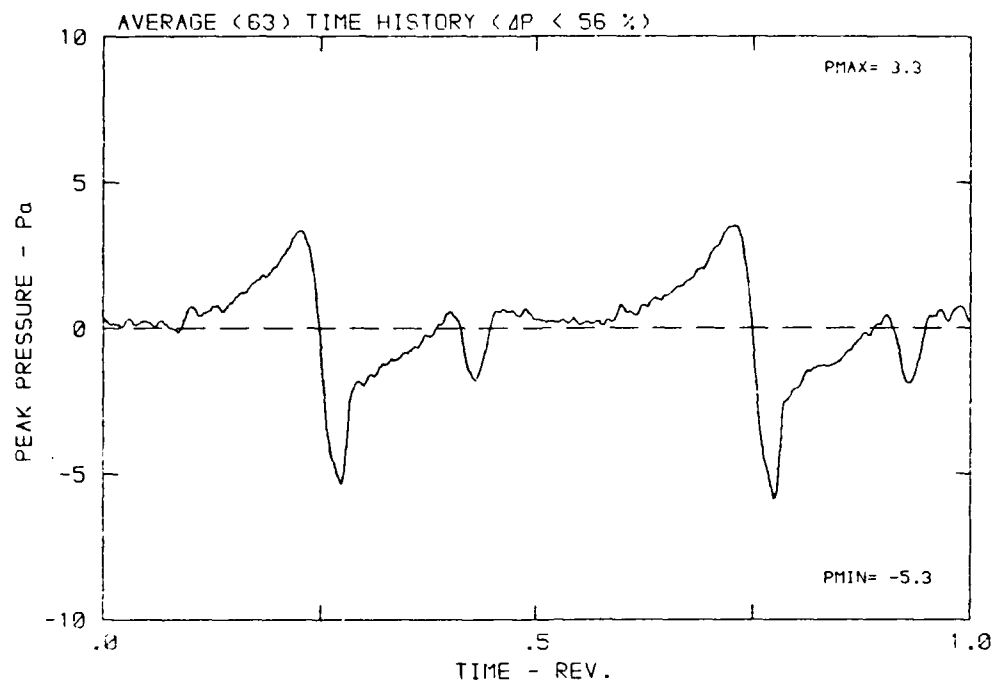
DATA POINT: HN-3 RUN: 35 MP: 6

β : 20.8° MH: .9048 n: 2753 rpm v/u : .266 ϕ : .0° T: 279.2 K



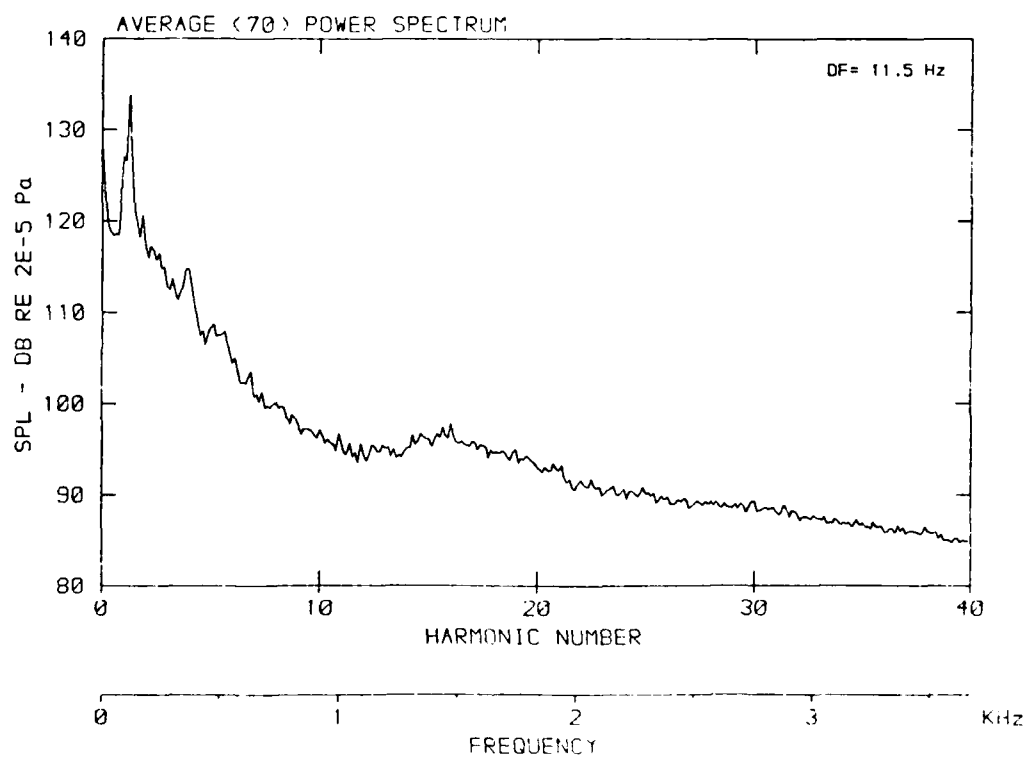
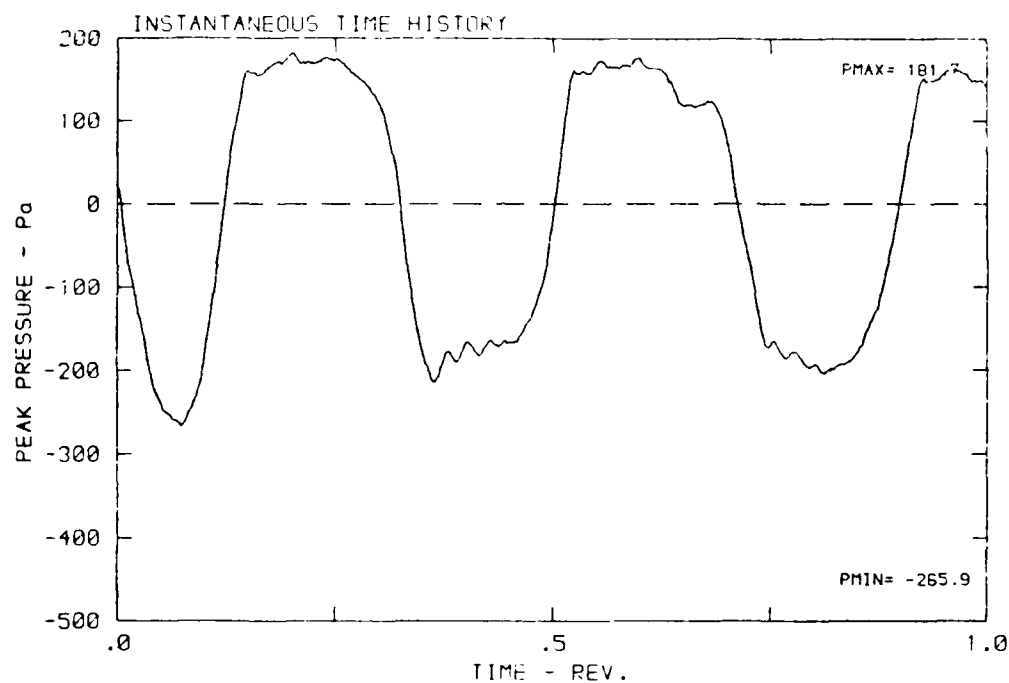
DATA POINT: HN-3 RUN: 35 MP: 6

β : 20.8° MH: .9048 n: 2753 rpm v/u: .266 ϕ : .0° T: 279.2 K



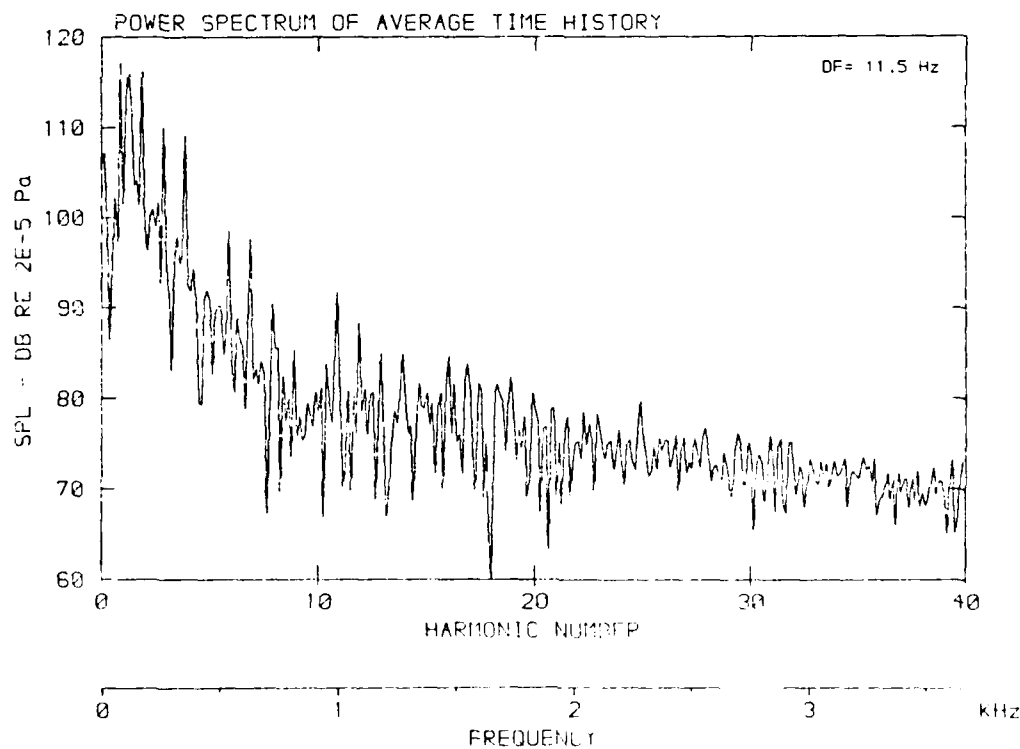
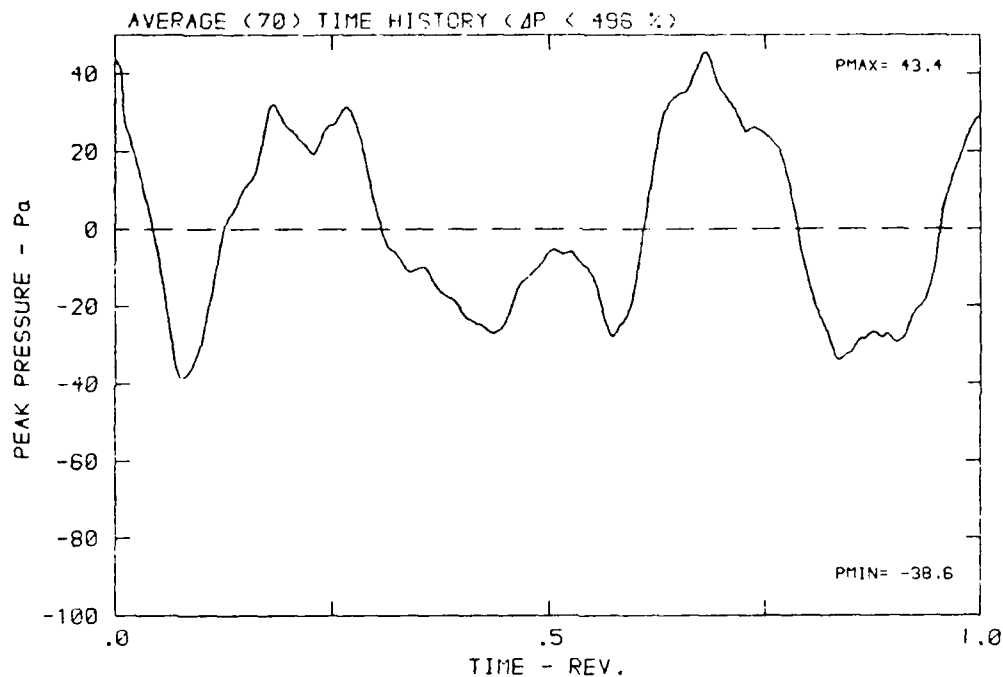
DATA POINT: HN-3 RUN: 35 MP: 7

β : 20.8° MH: .9048 n: 2753 rpm vru: .286 ϕ : .0° T: 279.2 K



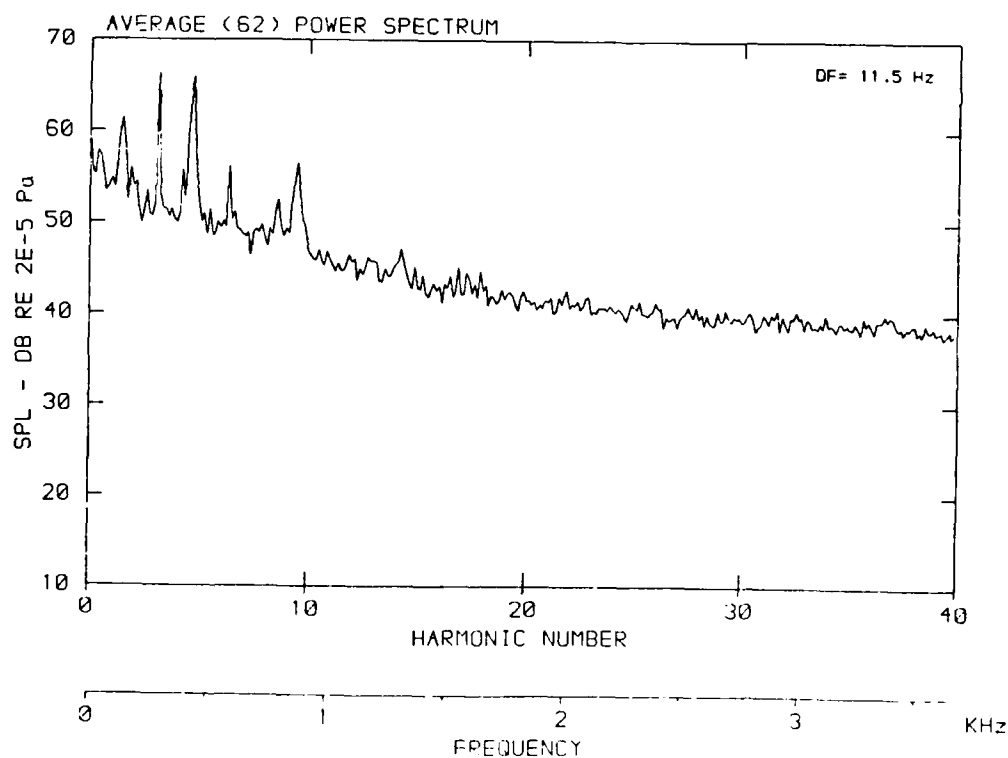
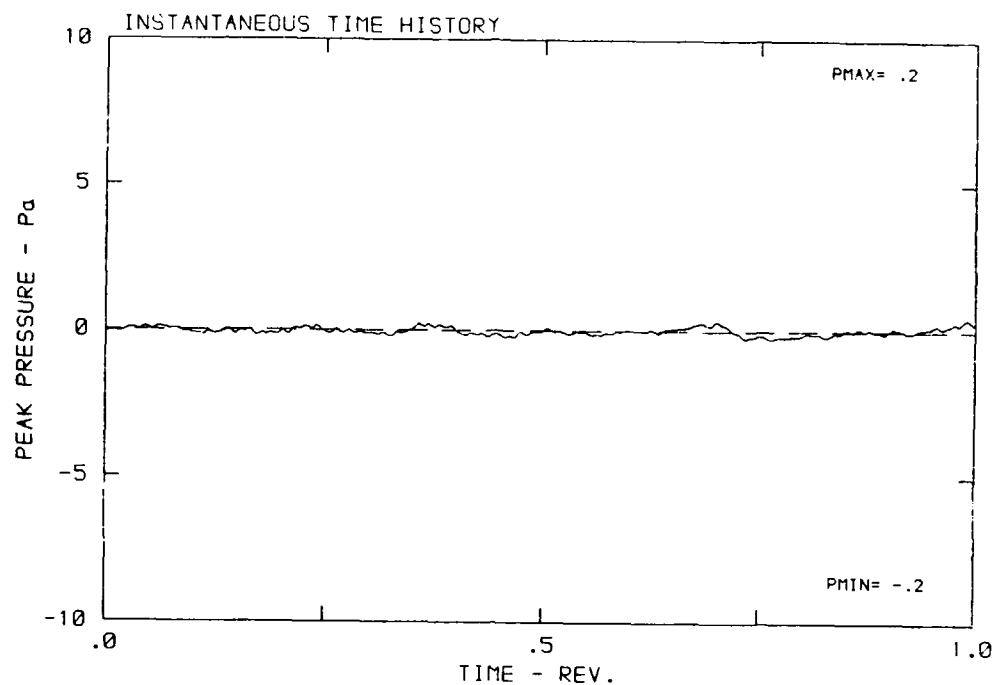
DATA POINT: HN-3 RUN: 35 MP: 7

β : 20.8° MH: .9048 n: 2753 rpm v/u : .266 ϕ : $.0^\circ$ T: 279.2 K



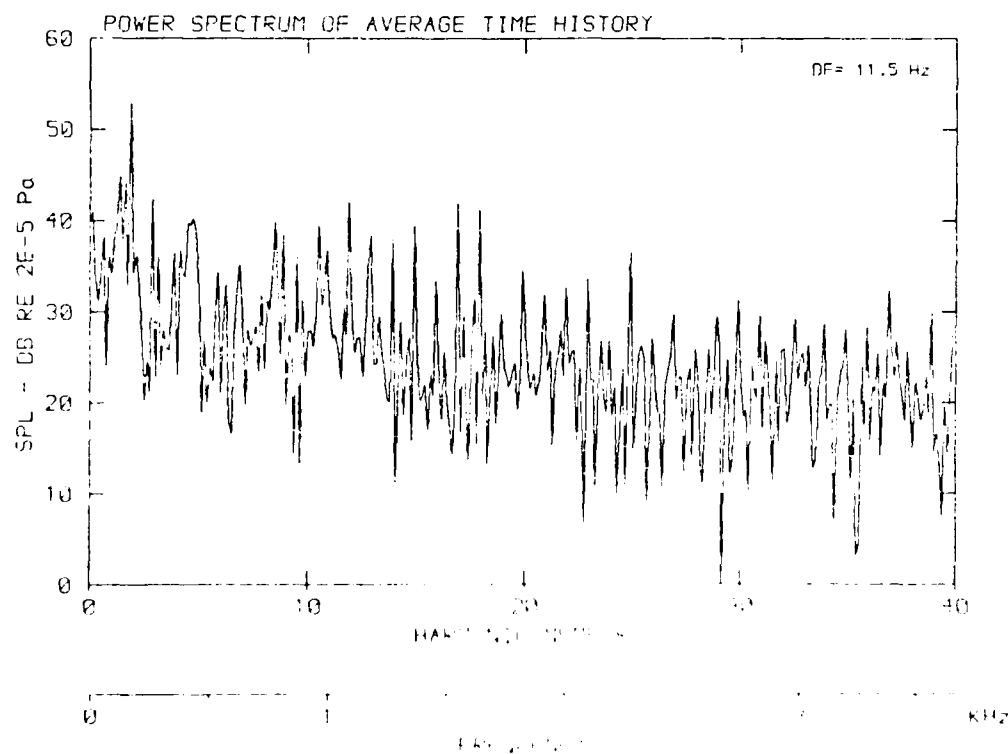
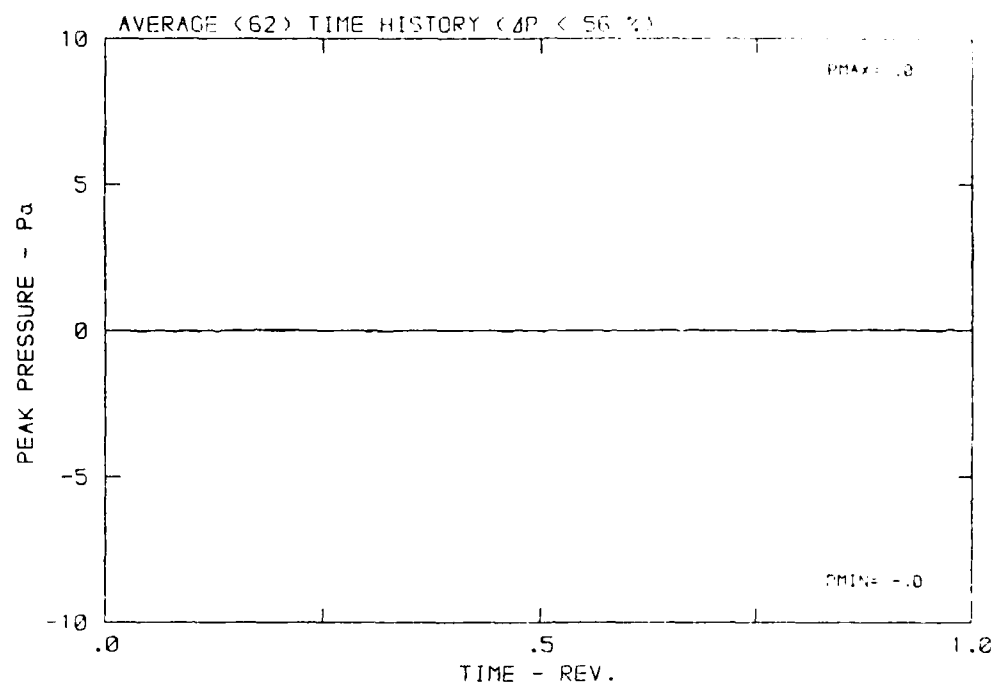
DATA POINT: HN-3 RUN: 35 MP: 9

β : 20.8° MH: .9048 n: 2753 rpm v/u: .266 ϕ : $.0^\circ$ T: 279.2 K



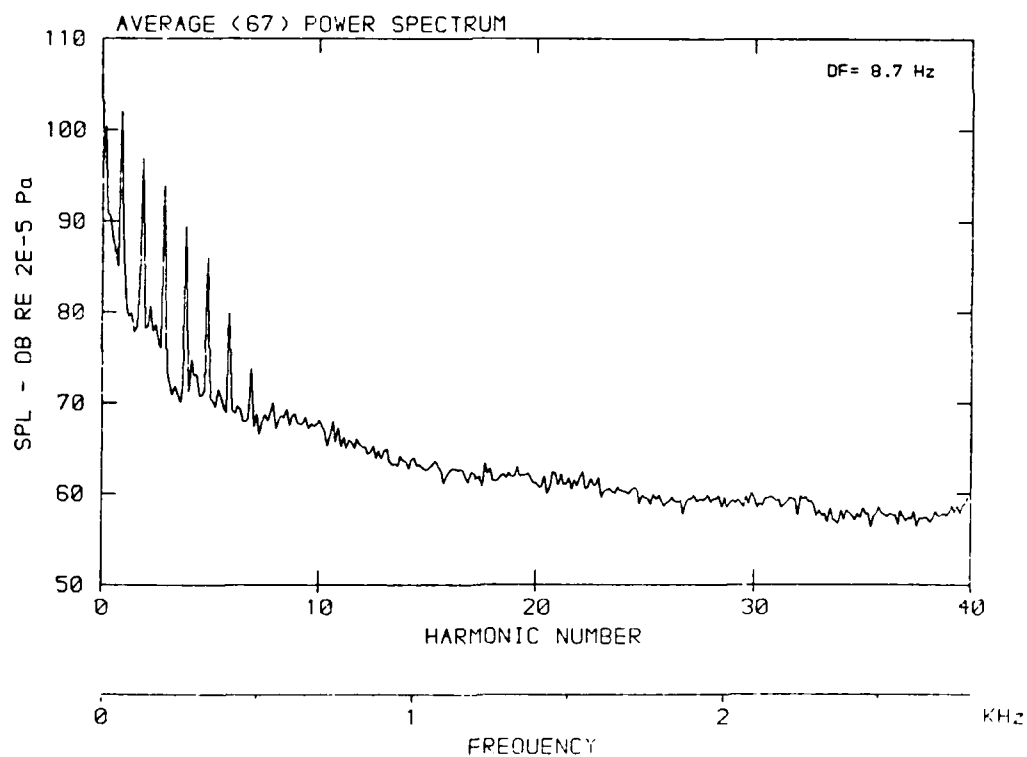
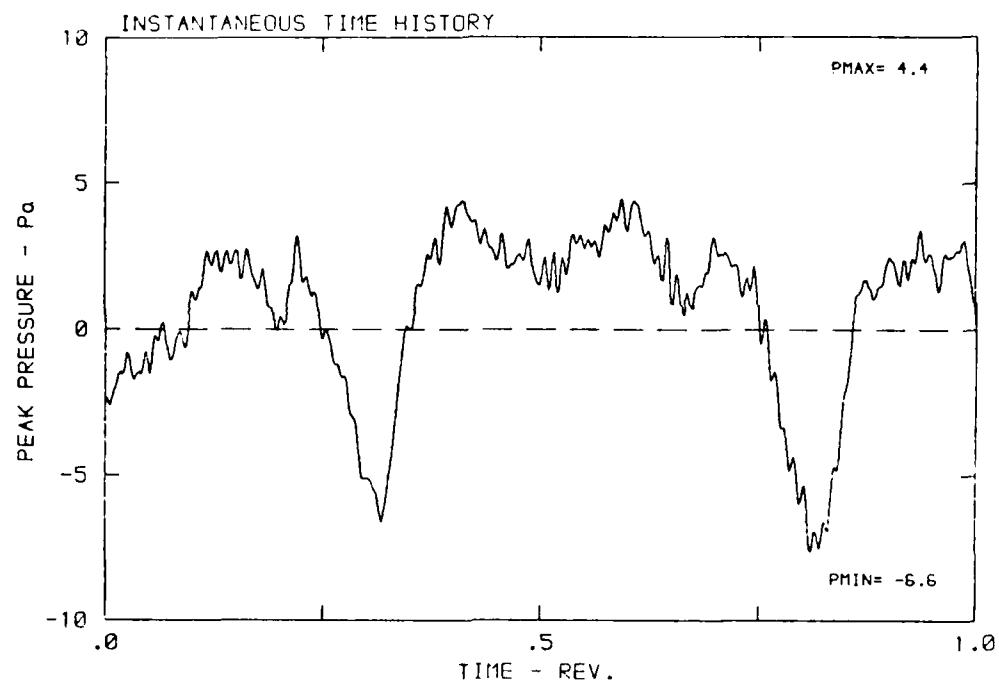
DATA POINT: HN-3 RUN: 35 MP: 9

β : 20.8° MH: .9048 n: 2753 rpm v_{zu} : .266 ϕ : 1.0° γ : 1.2012



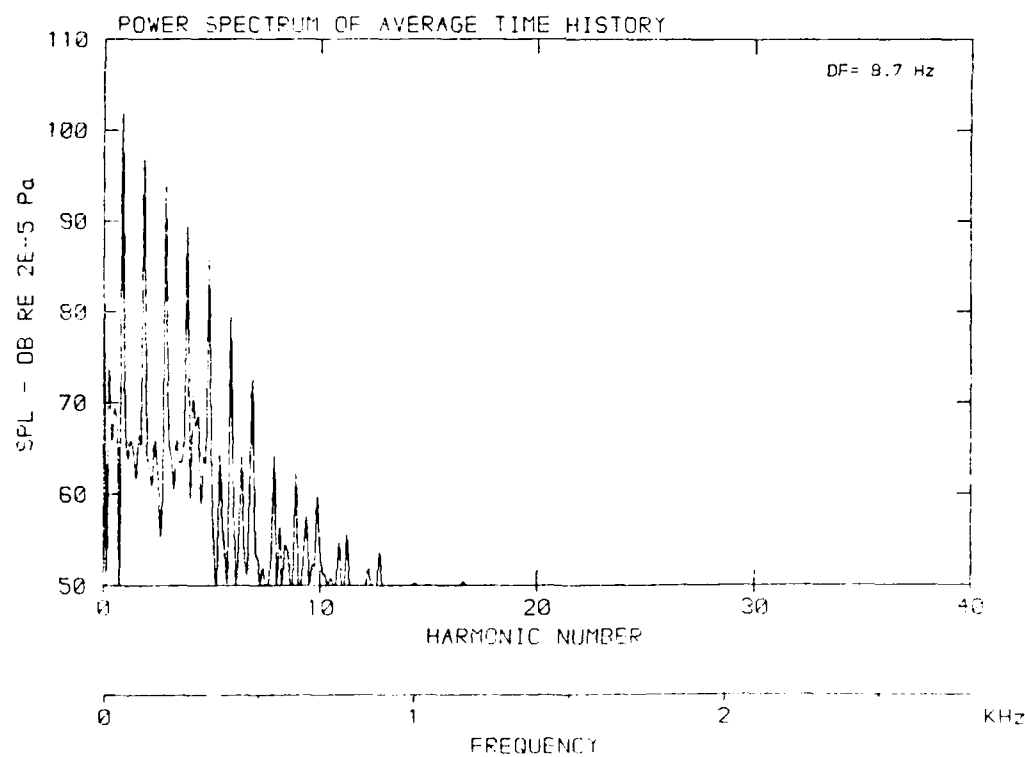
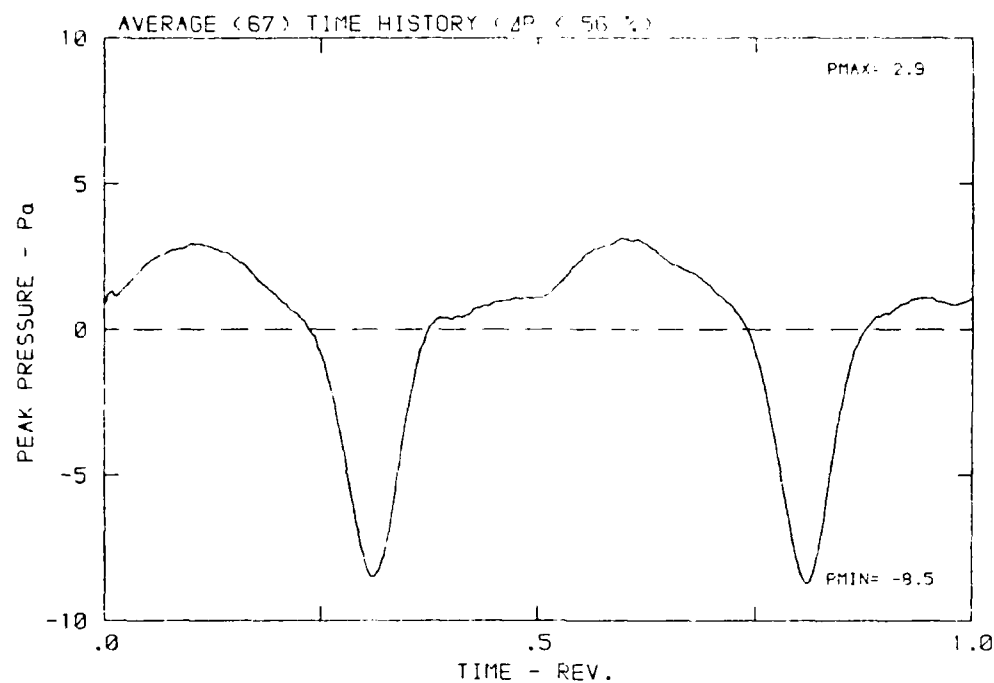
DATA POINT: IN-1 RUN: 36 MP: 1

β : 19.9° MH: .6859 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.8 K



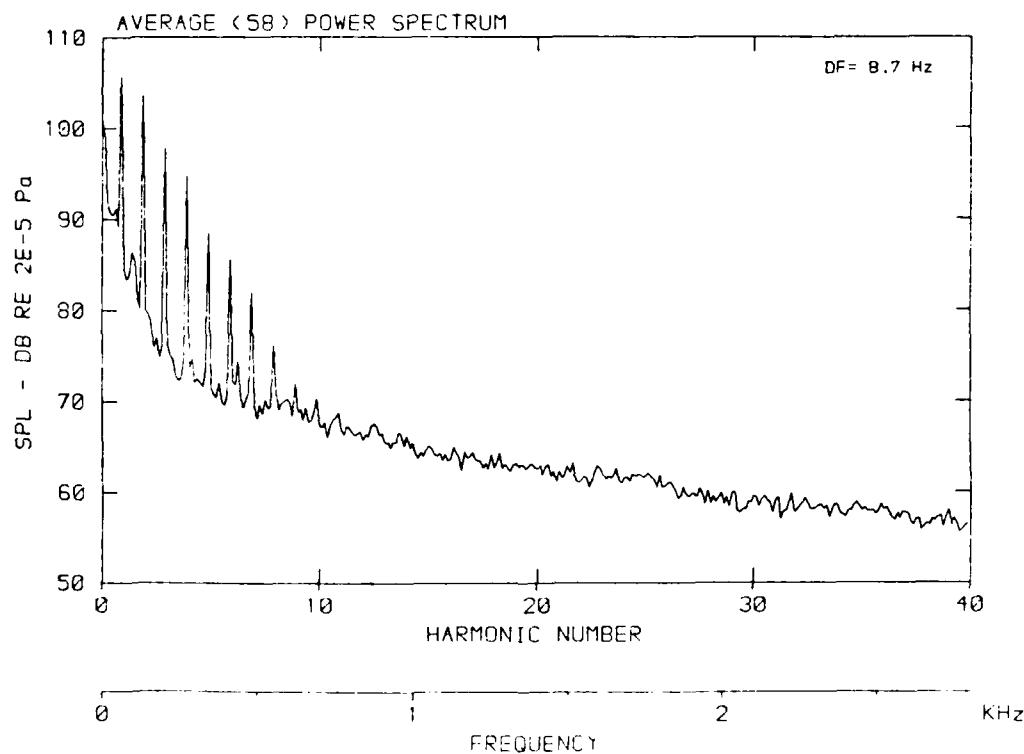
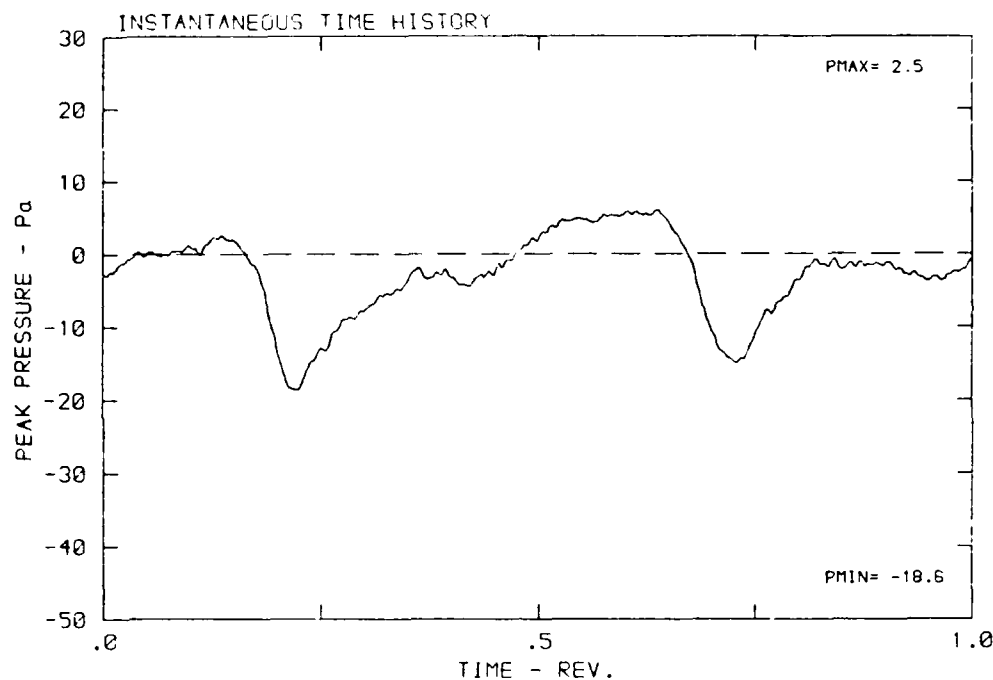
DATA POINT: IN-1 RUN: 36 MP: 1

β : 19.9° MH: .6859 n: 2100 rpm v_{tu} : .229 ϕ : .0° T: 277.8 K



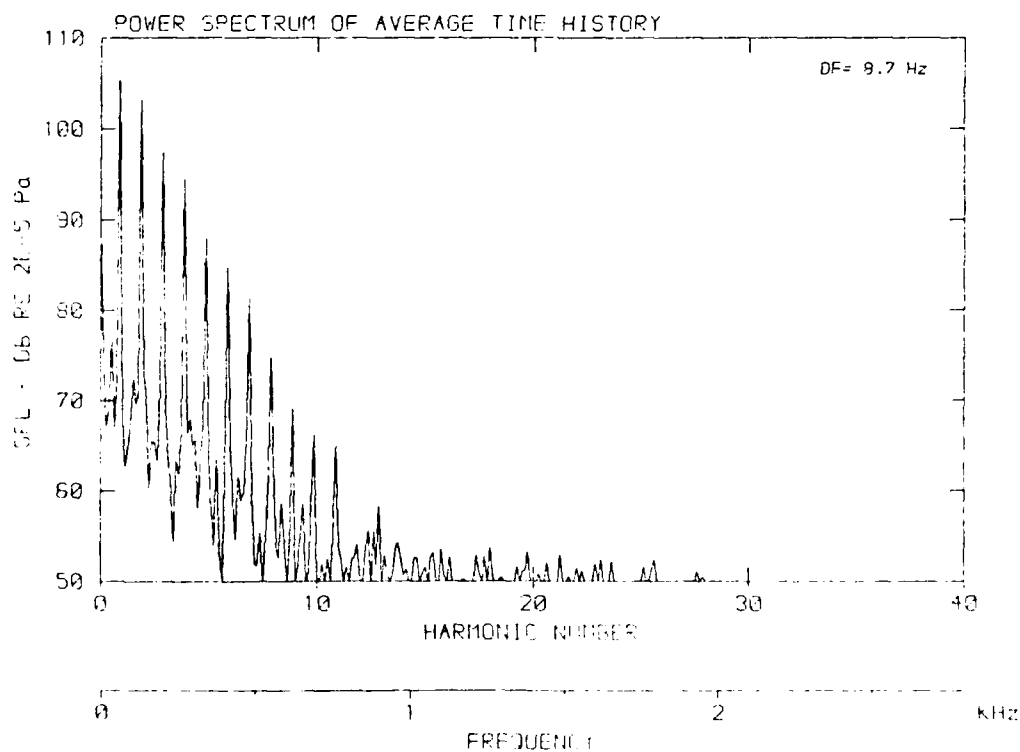
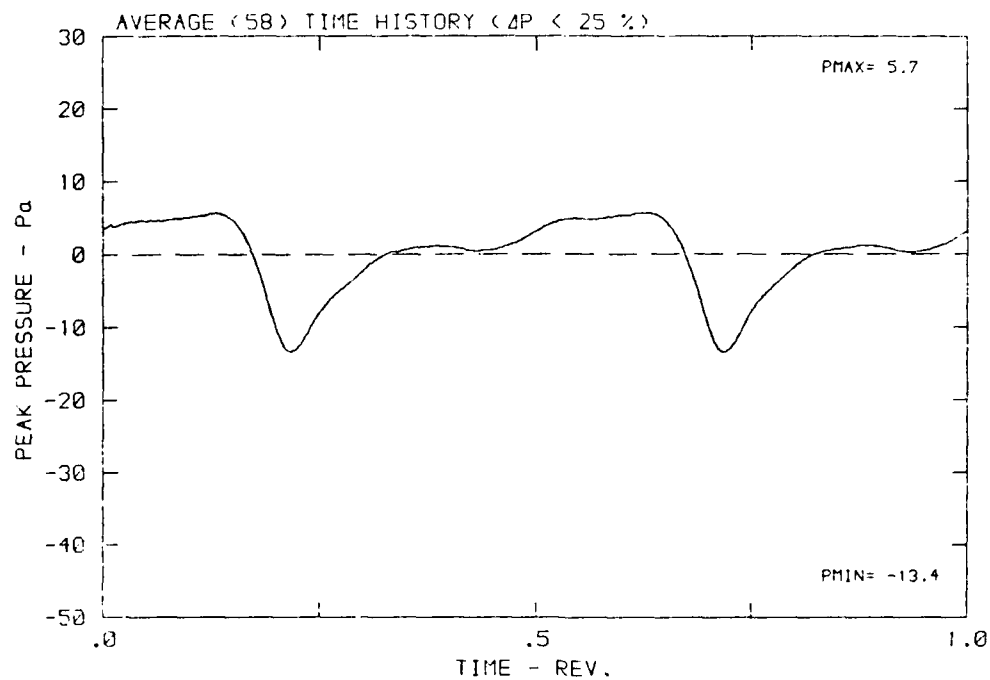
DATA POINT: IN-1 RUN: 36 MP: 2

β : 19.9° MH: .6859 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.8 K



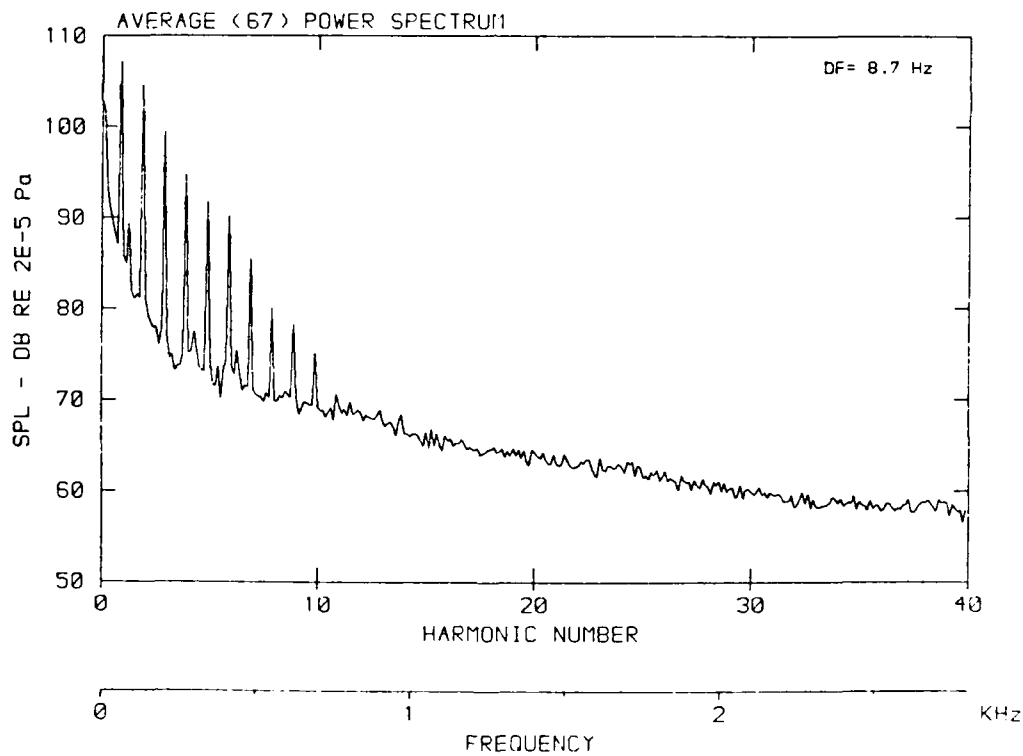
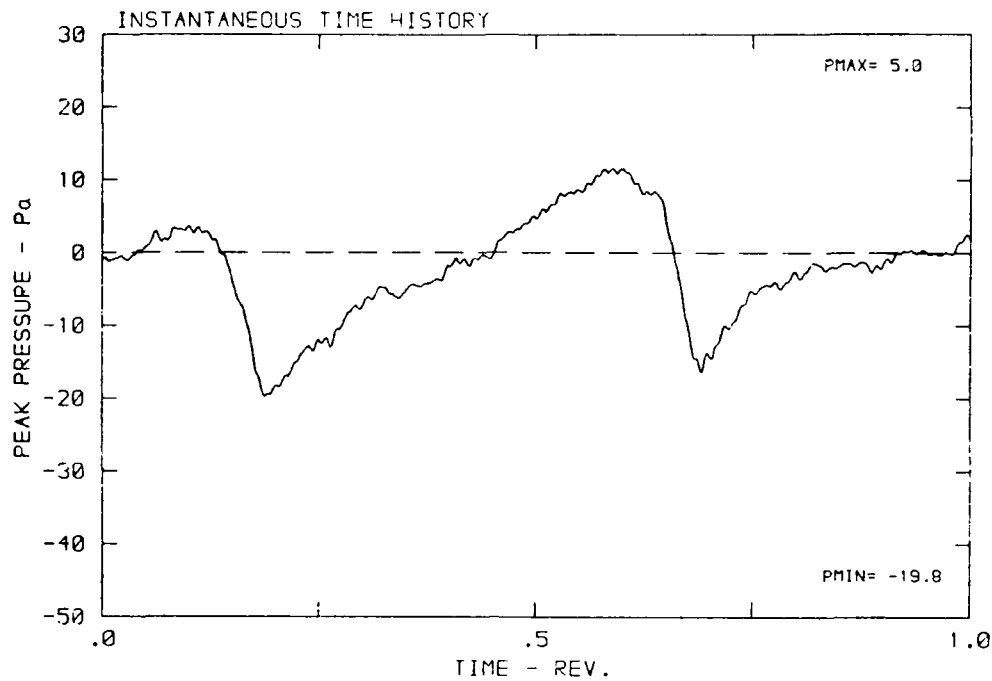
DATA POINT: IN-1 RUN: 36 MP: 2

β : 19.9° MH: .6859 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.8 K



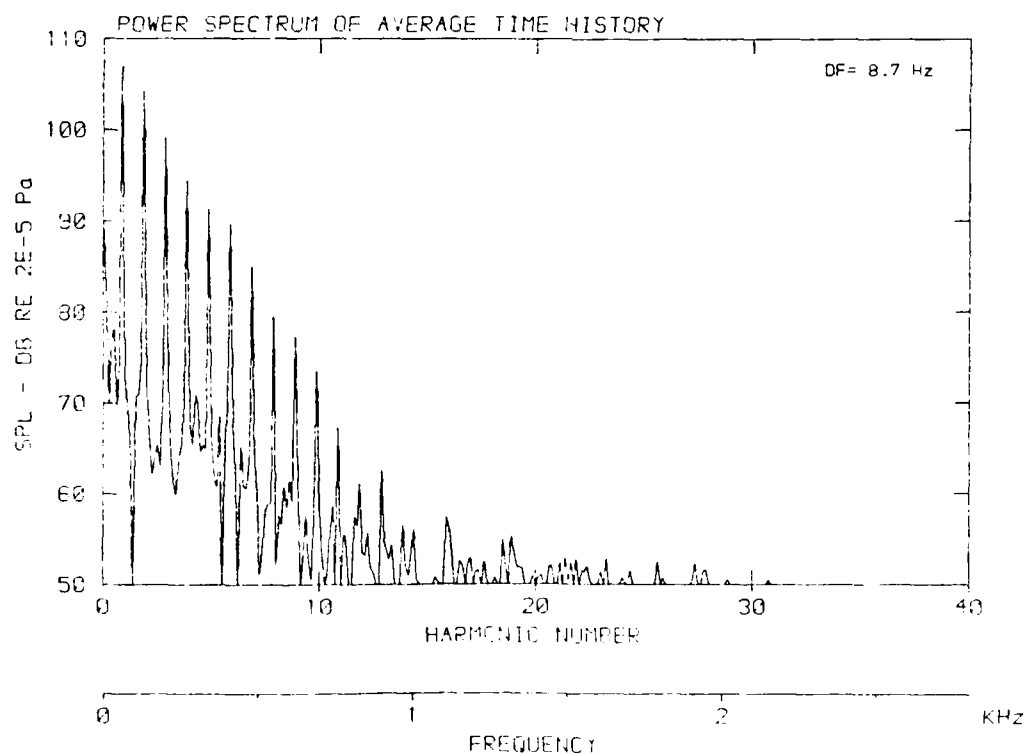
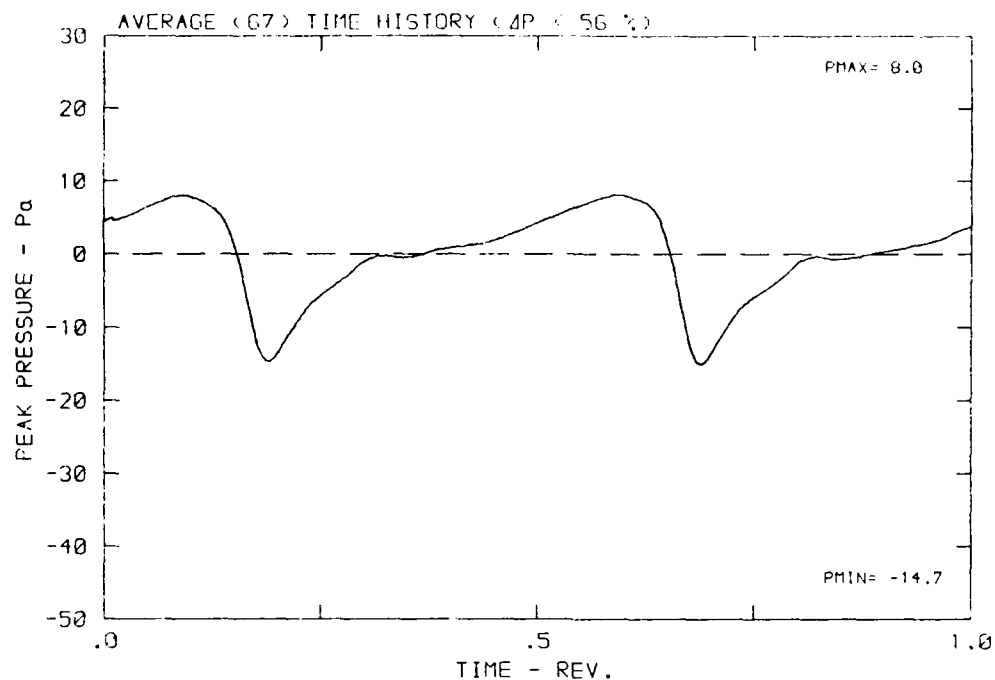
DATA POINT: IN-1 RUN: 36 MP: 3

β : 19.9° MH: .6859 n: 2100 rpm v-u: .229 ϕ : .0° T: 277.8 K



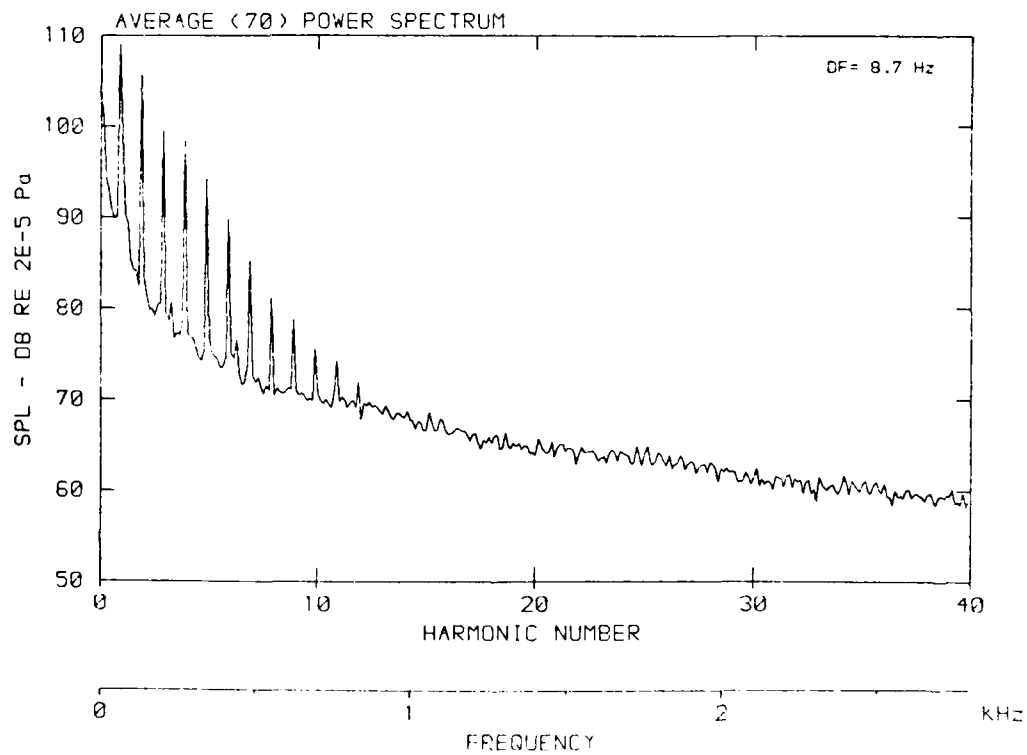
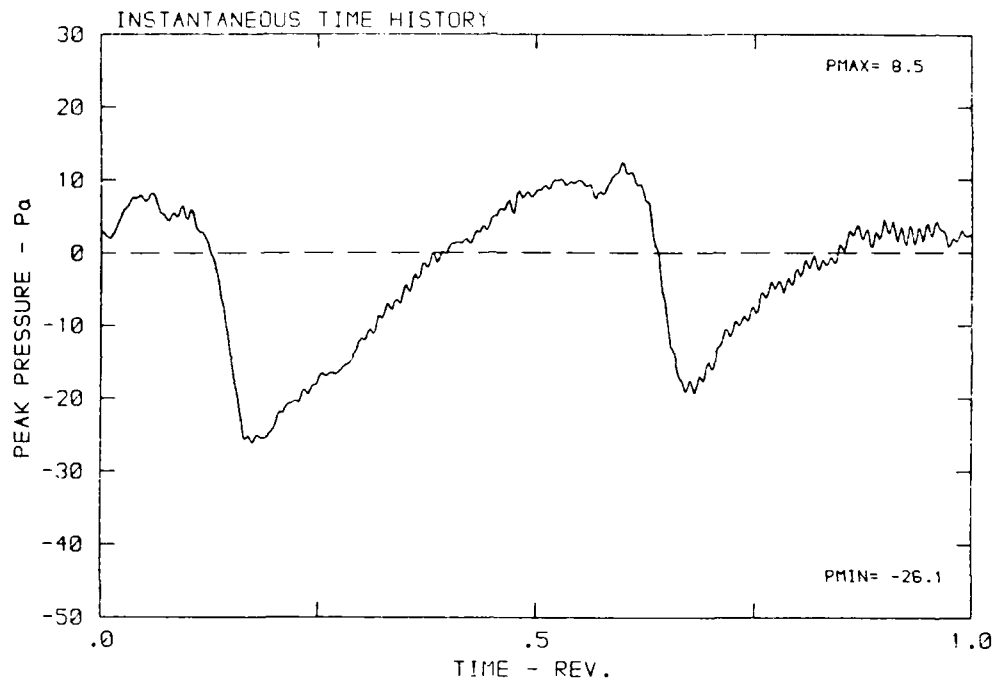
DATA POINT: IN-1 RUN: 36 MP: E

β : 19.9° MH: .6859 n: 2100 rpm ν : .229 ϕ : .0° T: 277.8 s



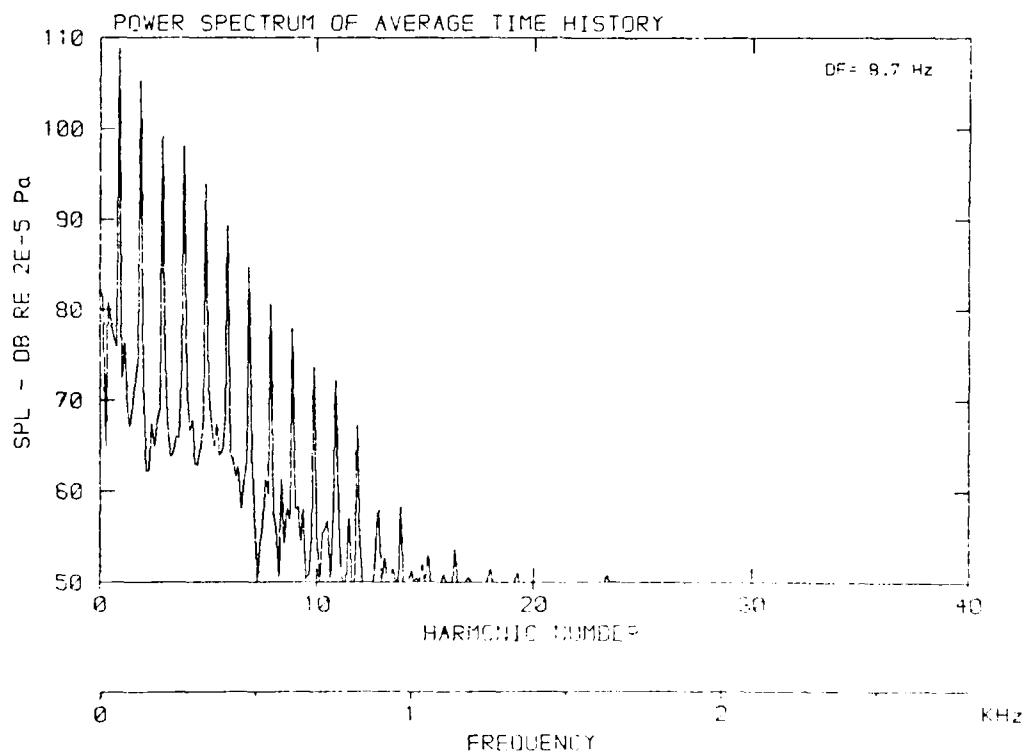
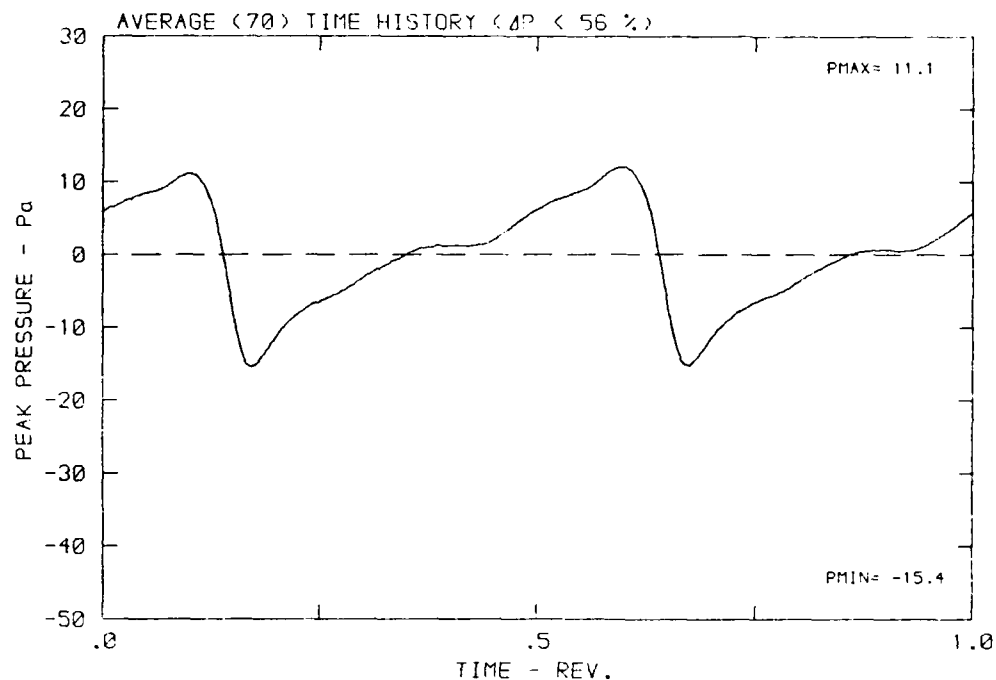
DATA POINT: IN-1 RUN: 36 MP: 4

β : 19.9° MH: .6859 n: 2100 rpm v/u : .228 ϕ : .0° T: 277.8 s



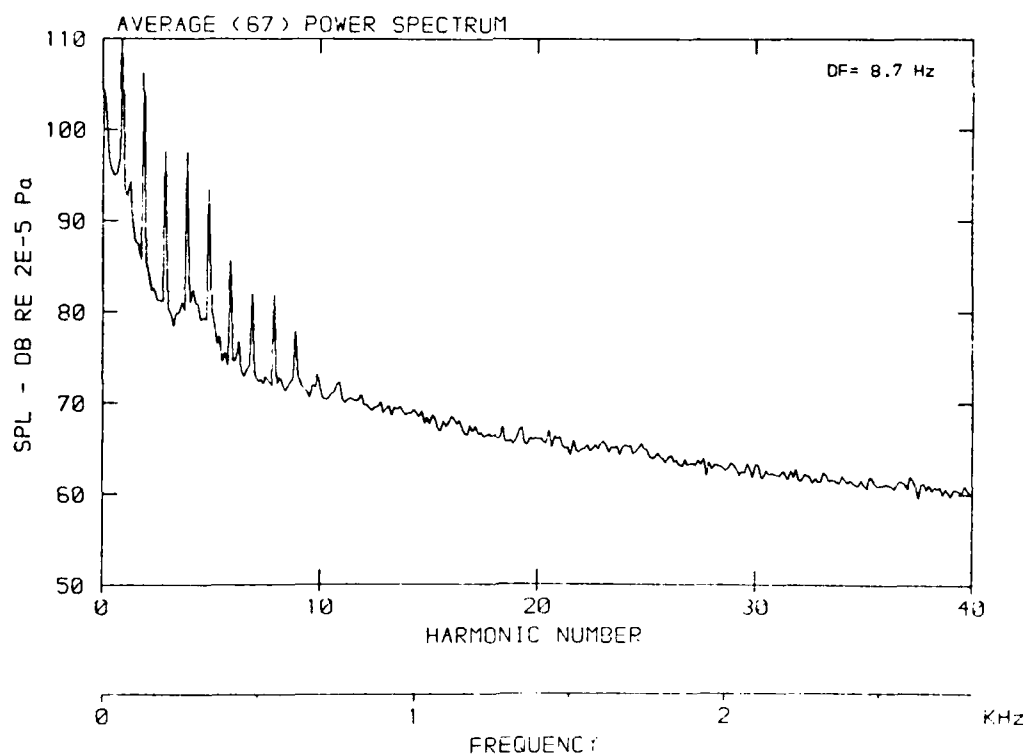
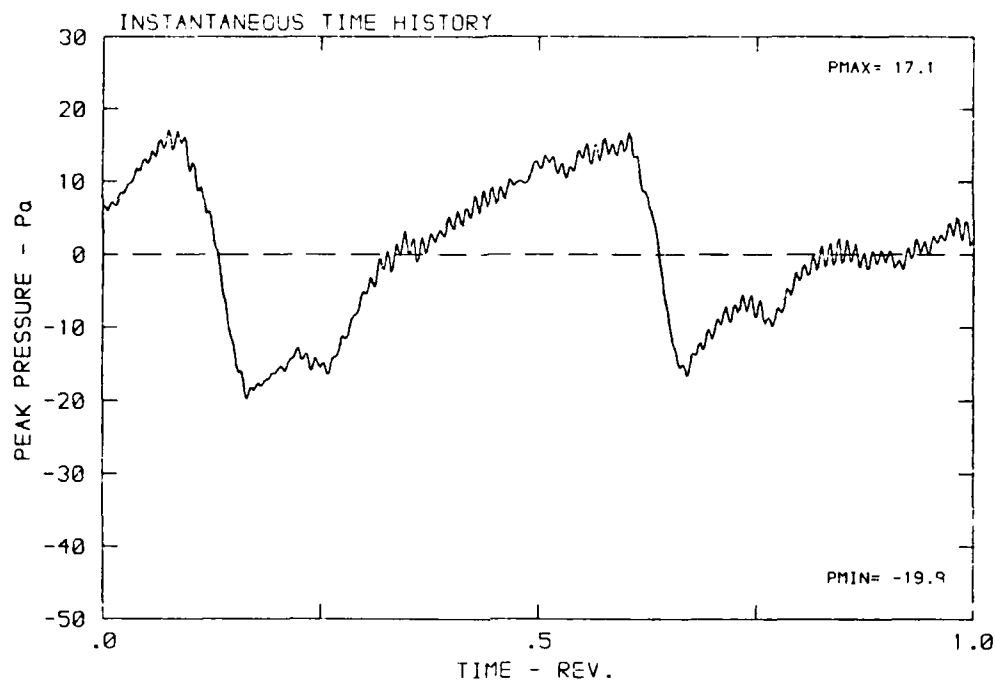
DATA POINT: IN-1 RUN: 36 MP: 4

β : 19.9° MH: .6859 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.8 K



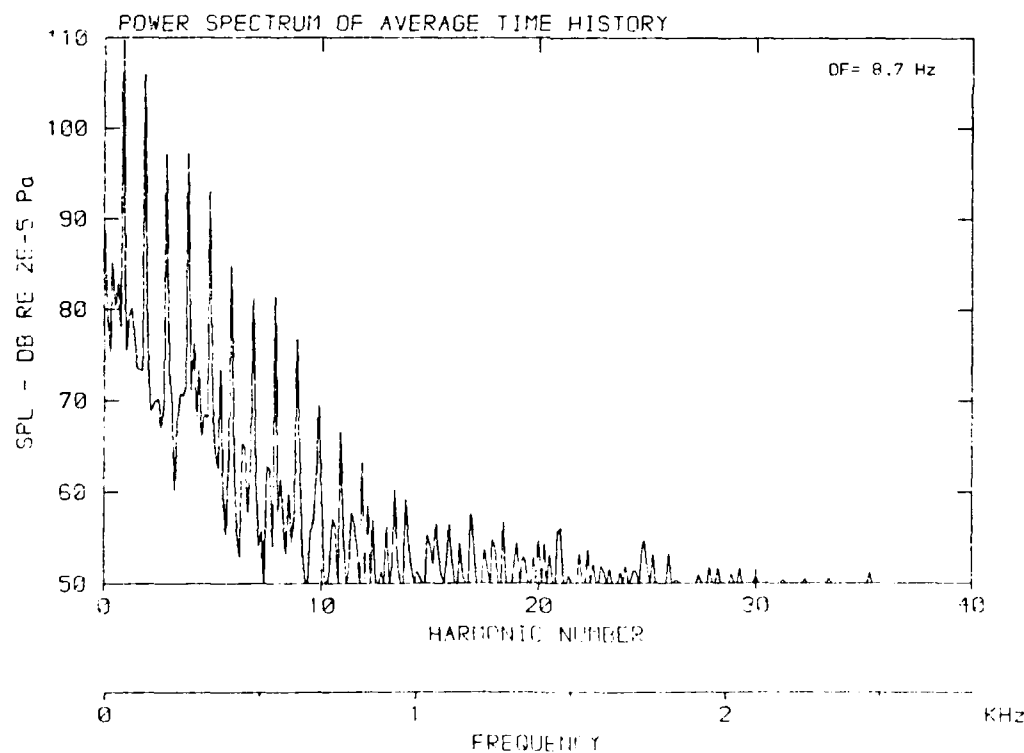
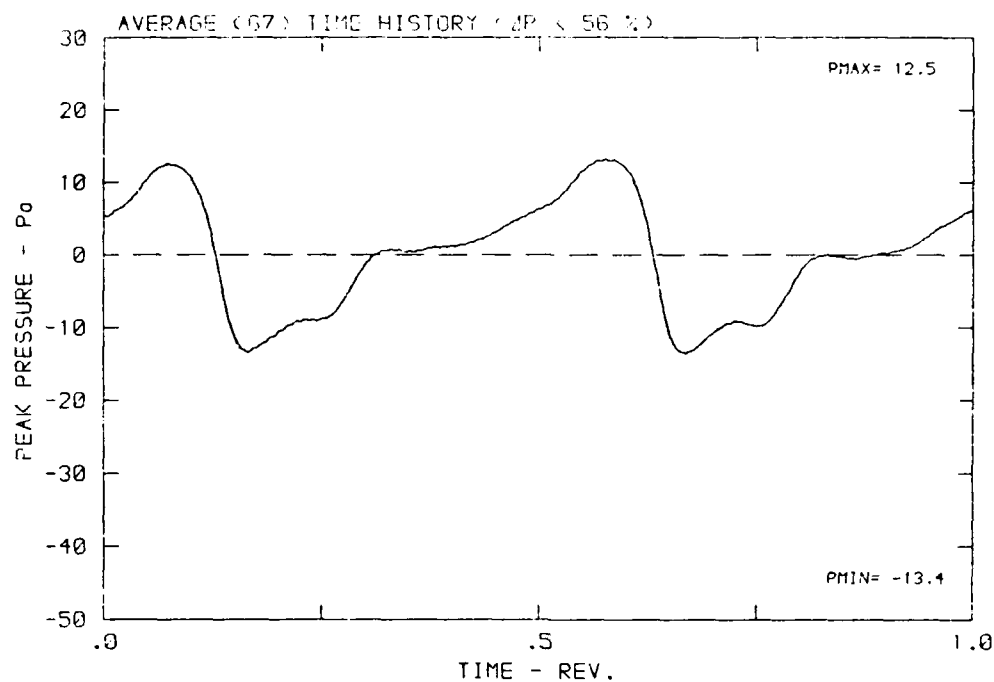
DATA POINT: IN-1 RUN: 36 MP: 5

β : 19.9° MH: .6859 n: 2100 rpm v u: .229 ϕ : .0° T: 277.6 K

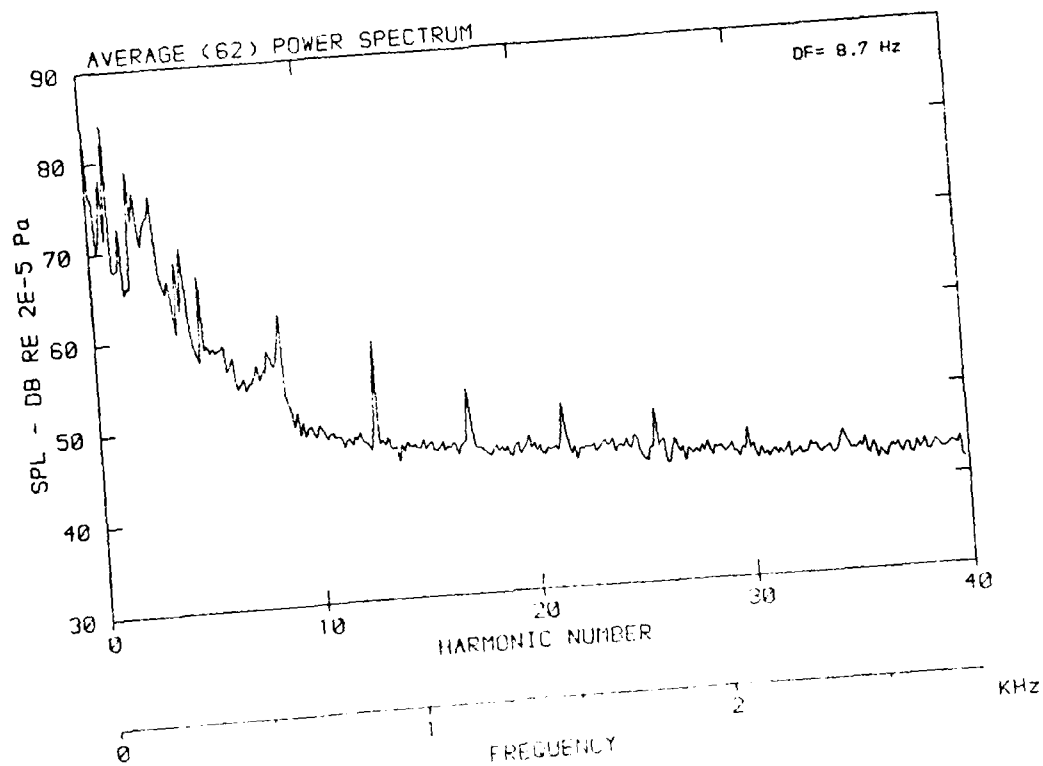
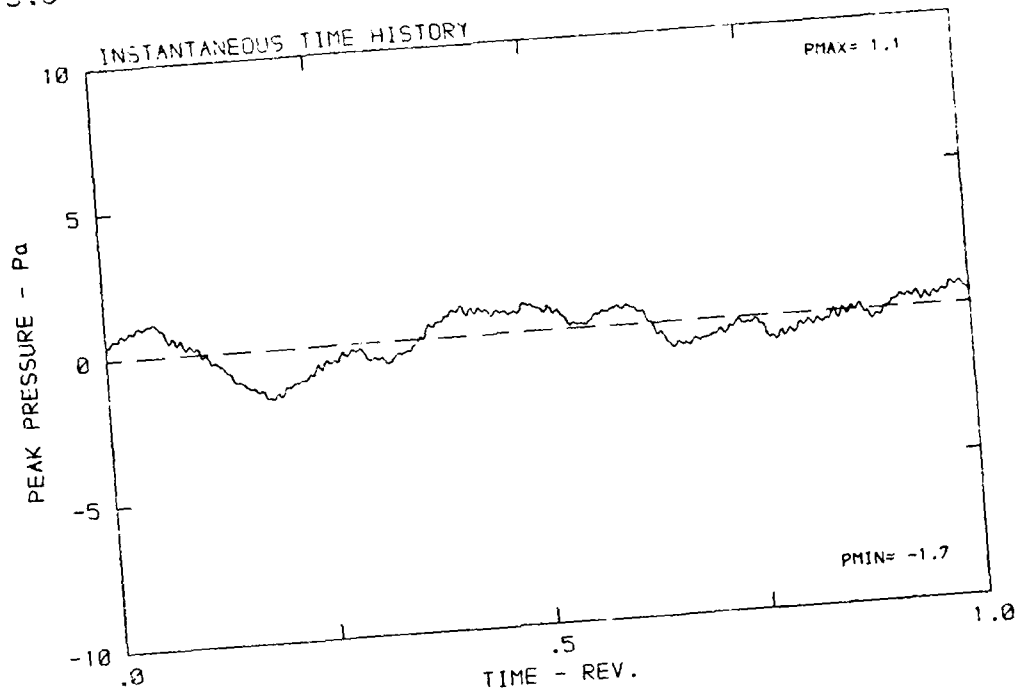


DATA POINT: IN-1 RUN: 36 MP: 5

β : 19.9° MH: .6859 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.8 K

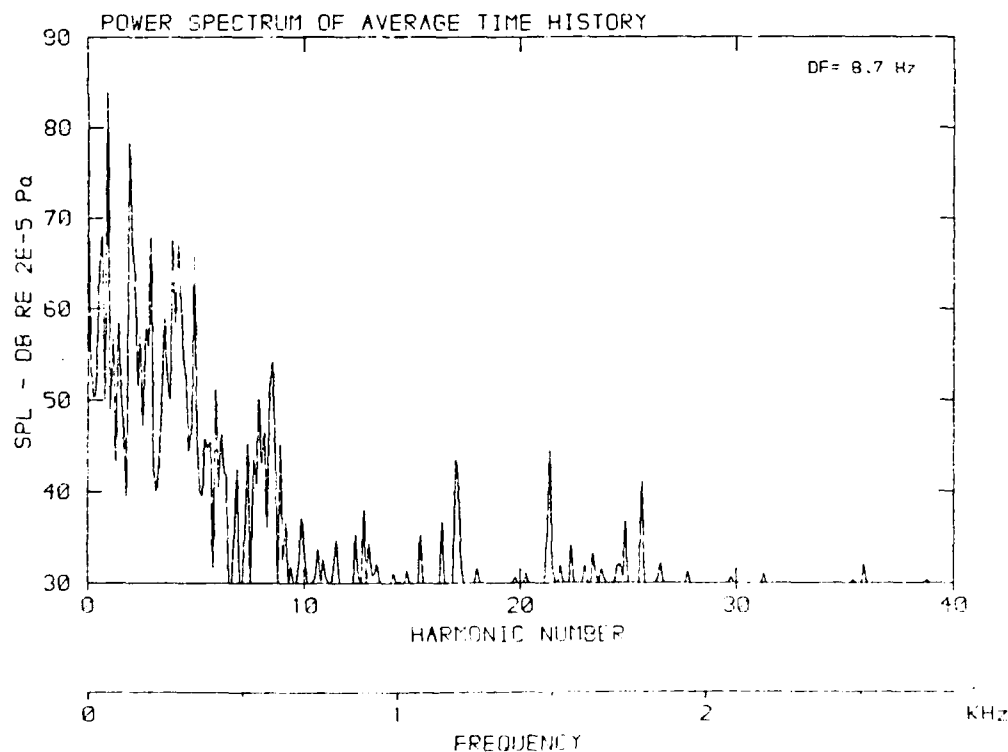
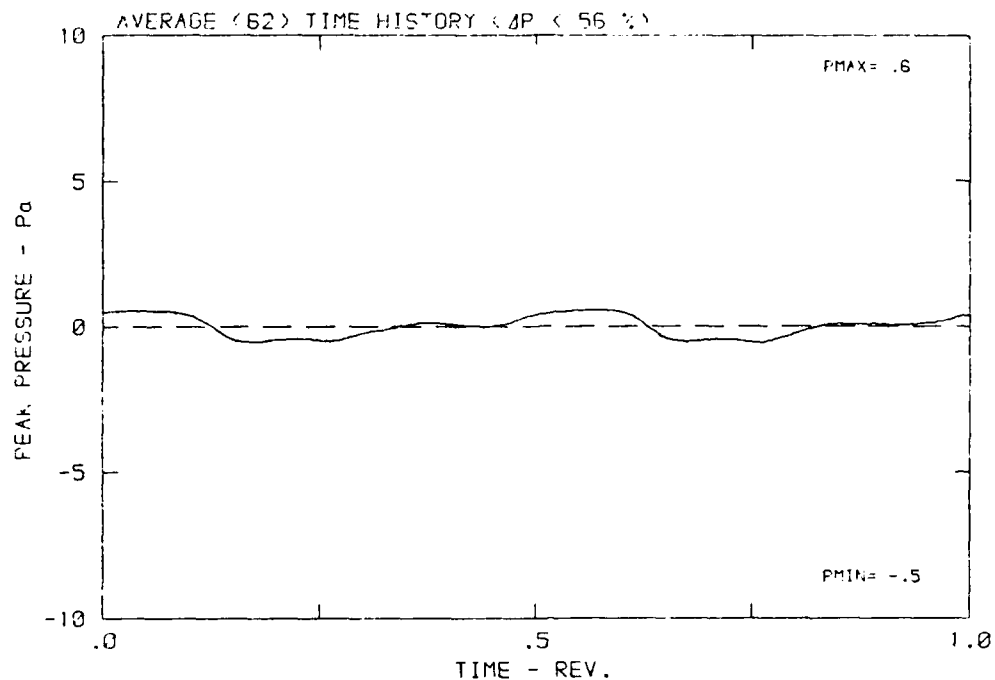


DATA POINT: IN-1 RUN: 36 MP: E
 β : 19.9° MH: .6859 n: 2100 rpm v/u : .223 ϕ : .0° T: 277.8 K



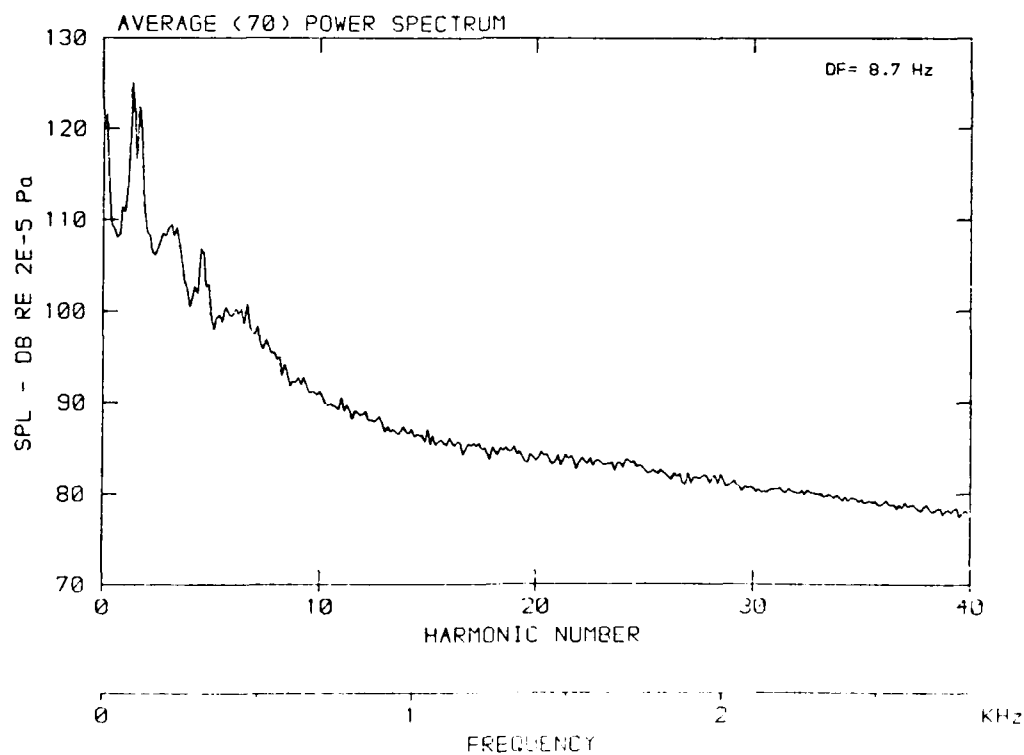
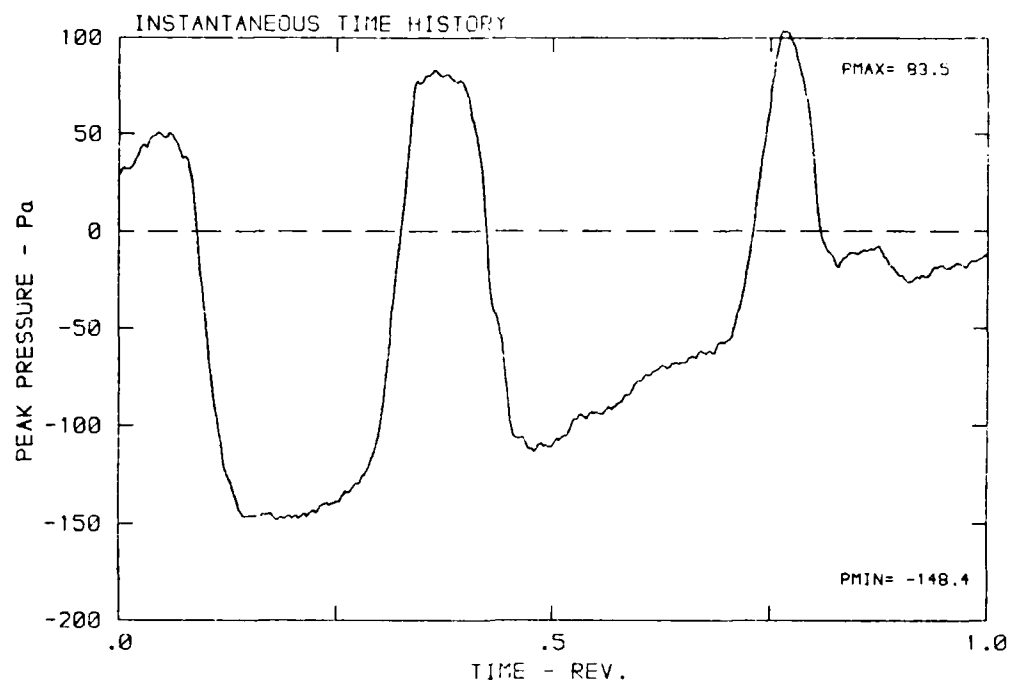
DATA POINT: IN-1 RUN: 36 MP: 6

β : 19.9° MH: .6859 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.8 K



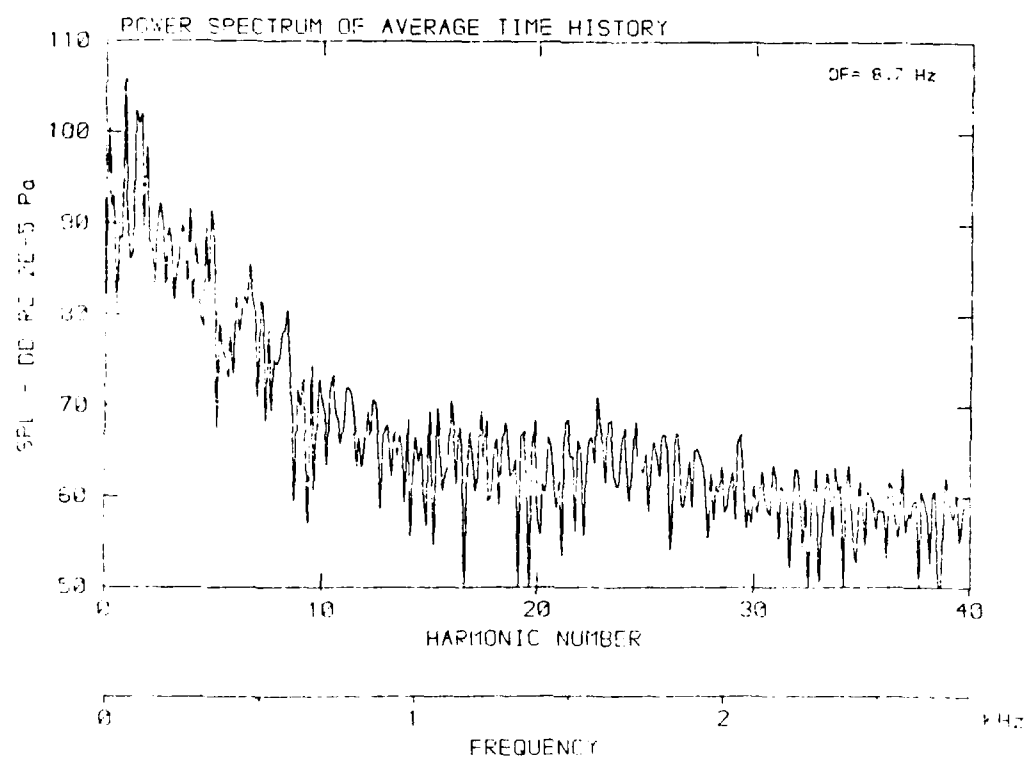
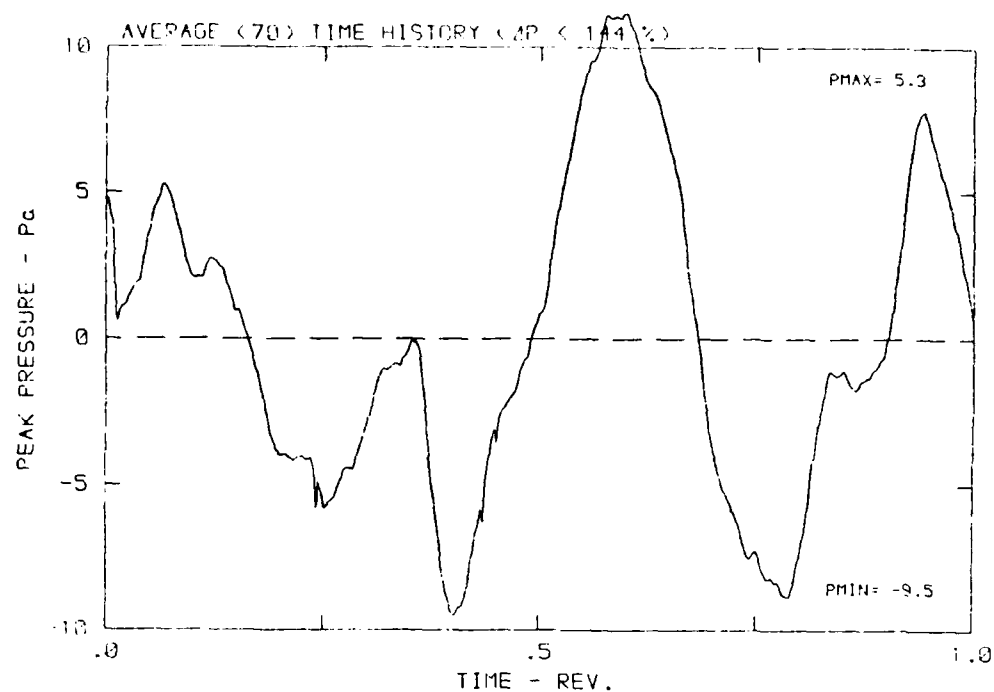
DATA POINT: IN-1 RUN: 36 MP: 7

β : 19.9° MH: .6859 n: 2100 rpm ν : .229 ϕ : .6° T: 1.019 K



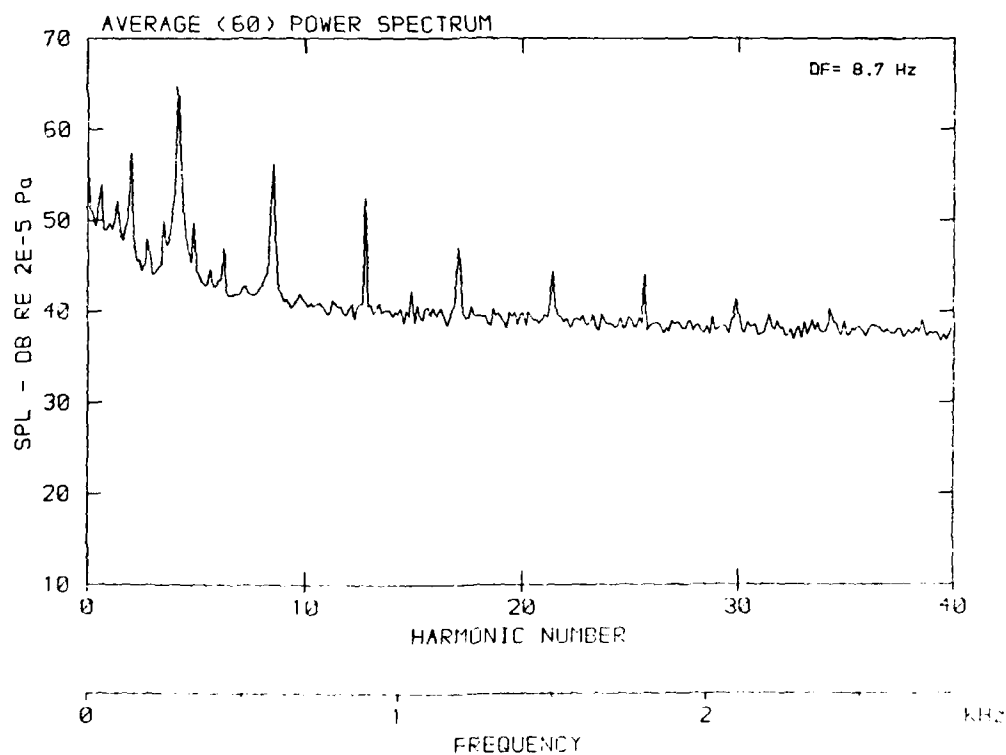
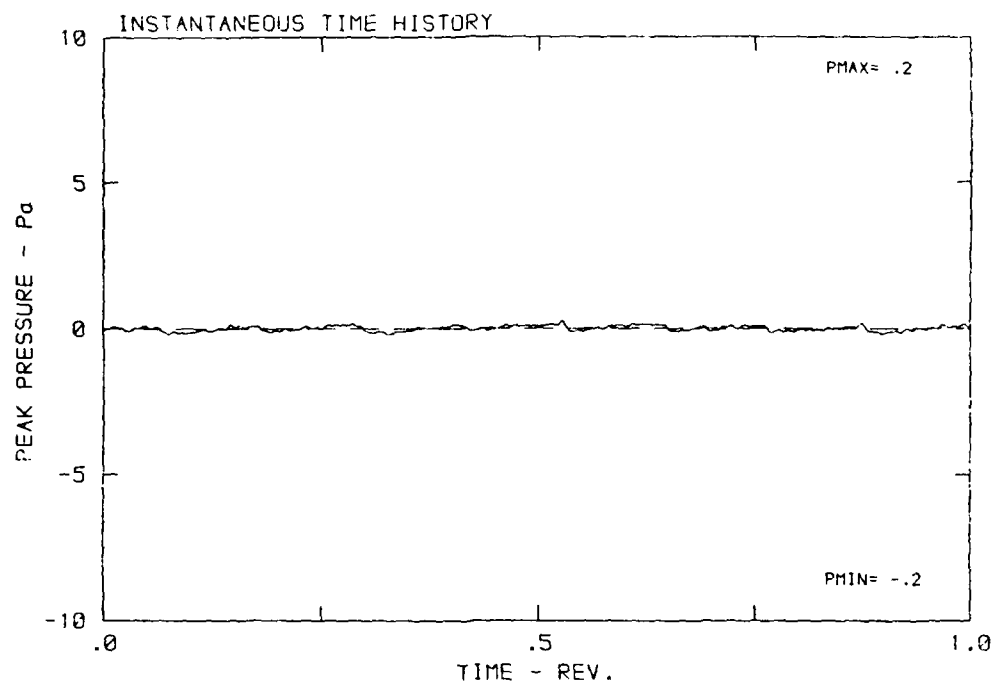
DATA POINT: IN 1 RUN: 36 MP: 7

β : 19.9° MH: .6859 n: 2100 rpm v_{tu} : .229 ϕ : .0° T: 277.5 K



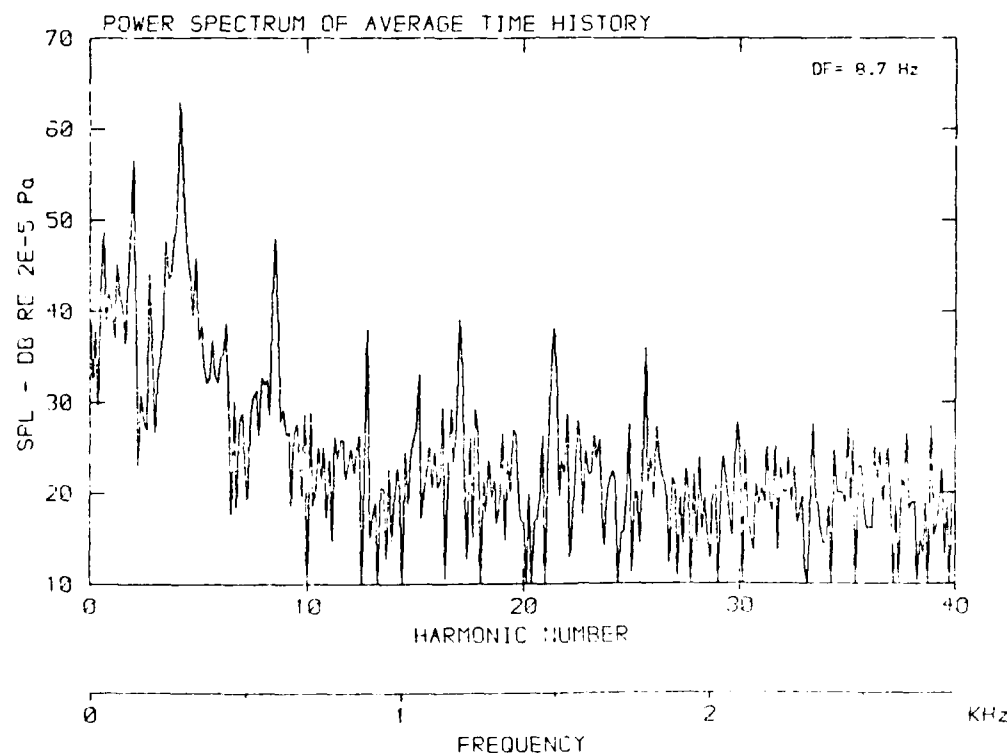
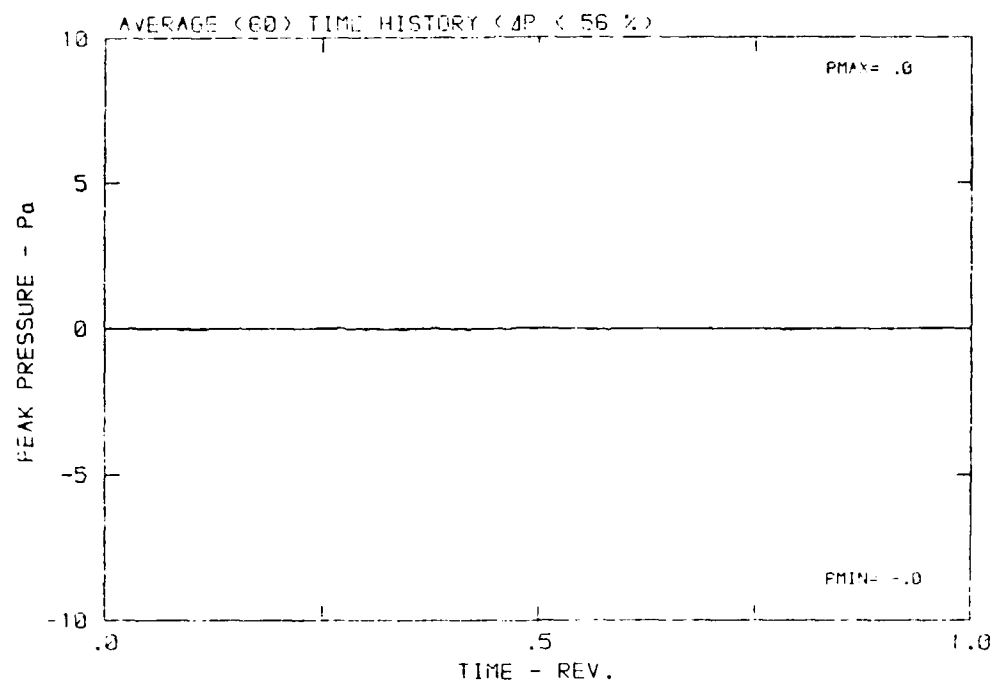
DATA POINT: IN-1 RUN: 36 MP: 3

β : 19.9° MH: .6853 n: 2100 rpm v/u : .225 ϕ : .0° T: 277.6 K



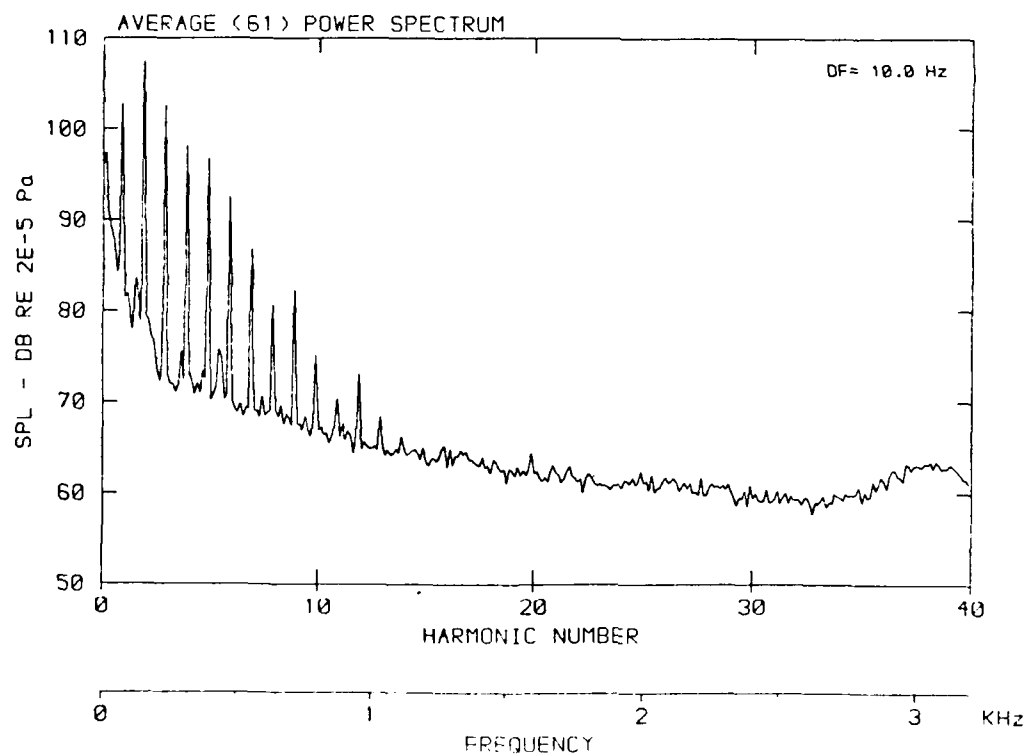
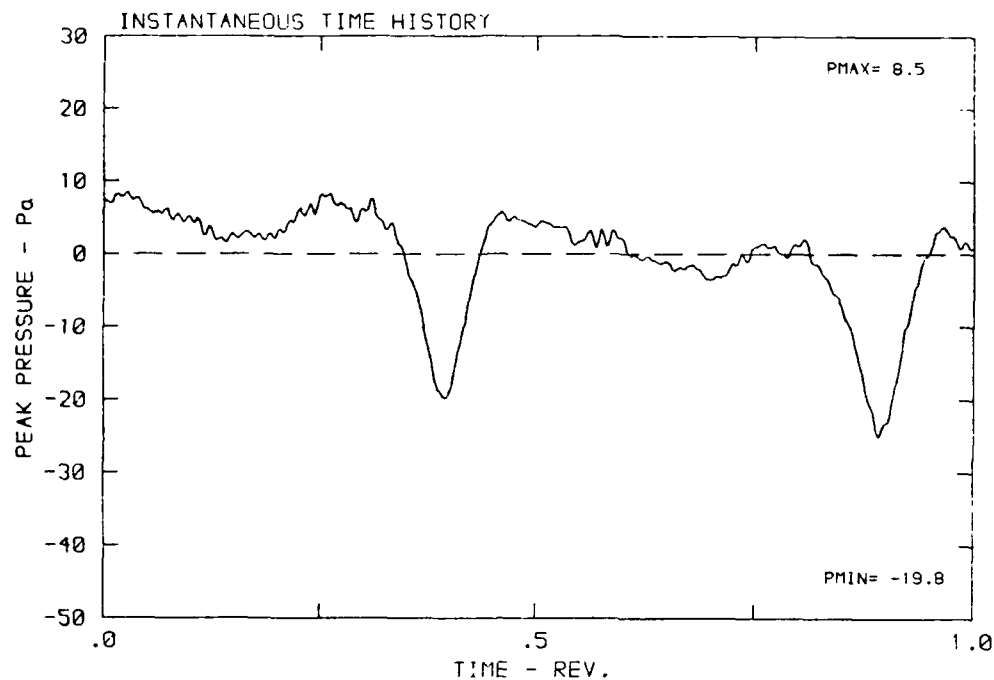
DATA POINT: IN-1 RUN: 36 MP: 9

β : 19.9° MH: .6859 n: 2100 rpm v_{ru} : .229 ϕ : .0° T: 277.6 K



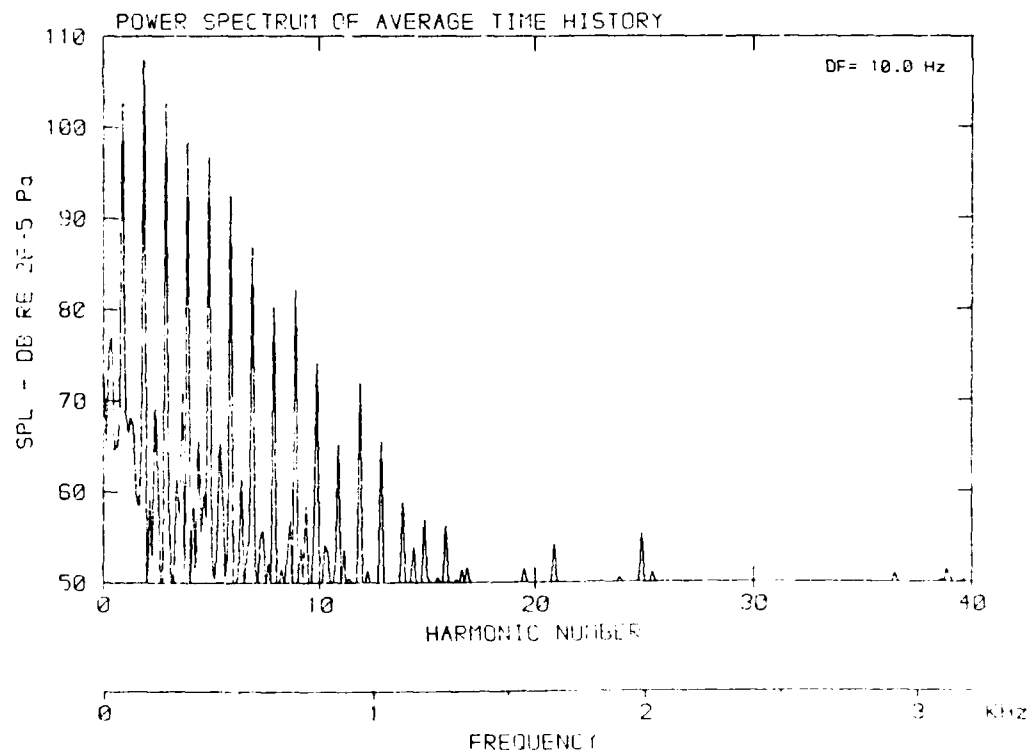
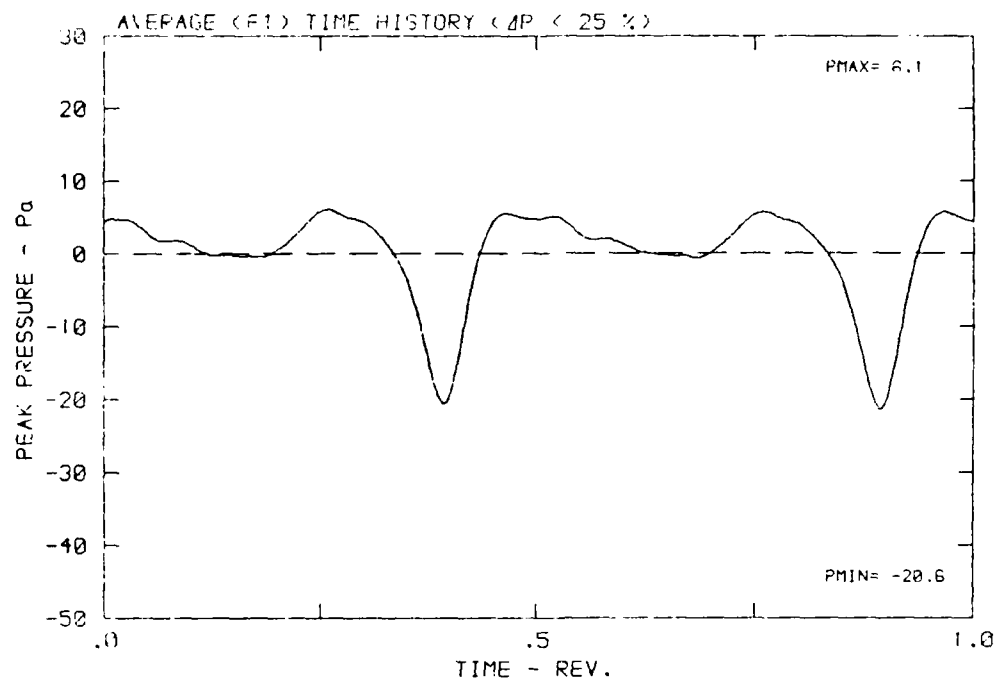
DATA POINT: IN-2 RUN: 37 MP: 1

β : 15.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



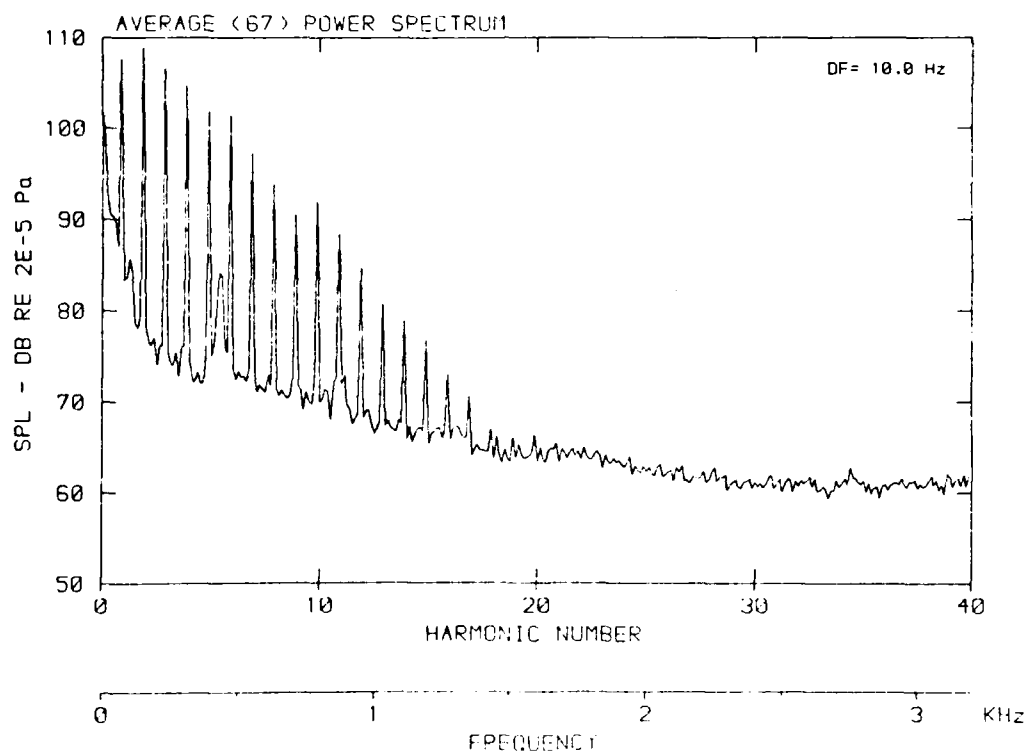
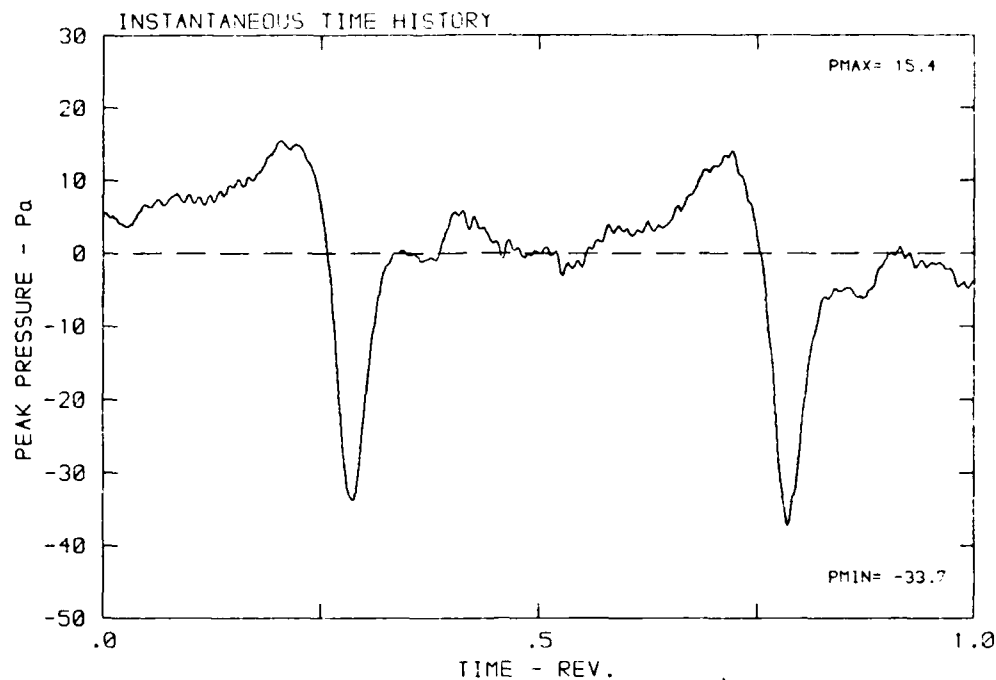
DATA POINT: IN-2 RUN: 37 MP: 1

β : 19.9° MH: .7787 n: 2400 rpm v/u : .201 ϕ : .0° T: 278.3 K



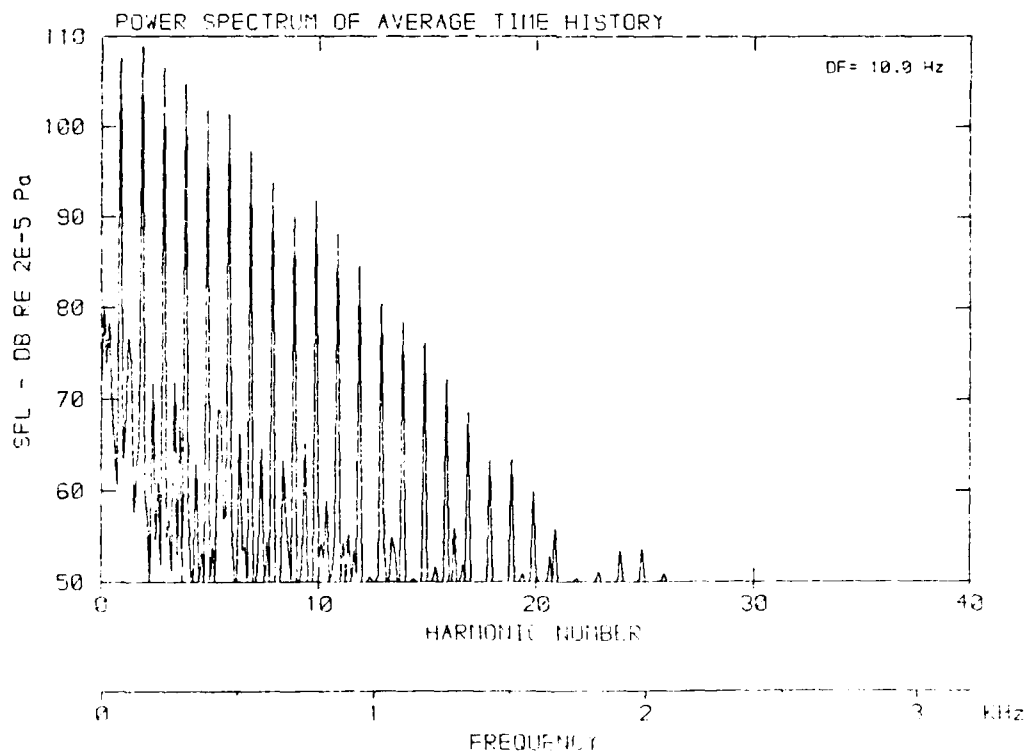
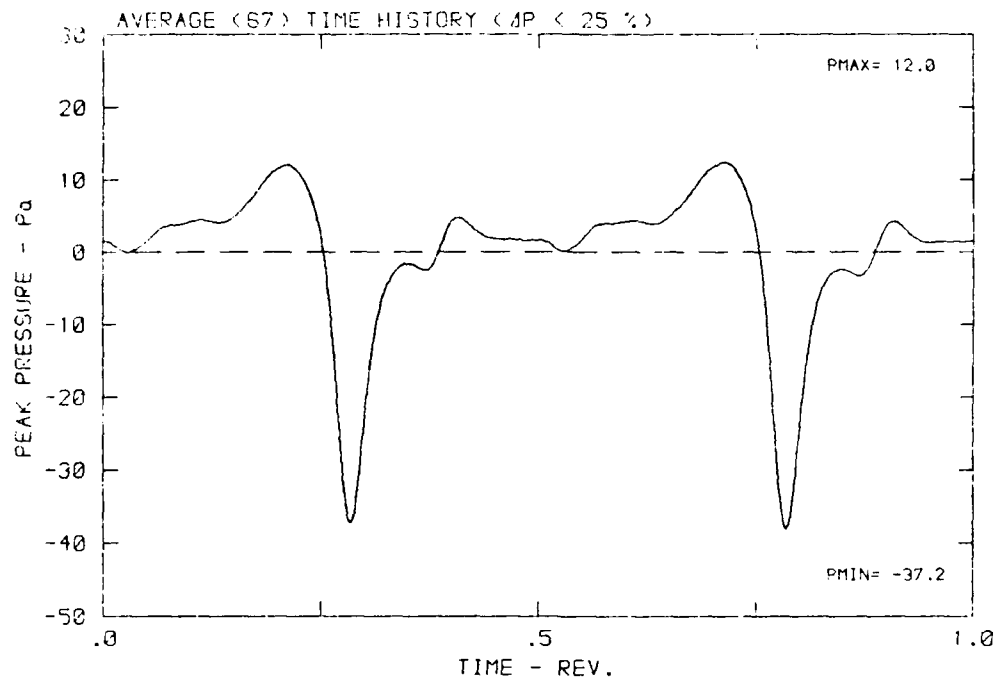
DATA POINT: IN-2 RUN: 37 ME: 2

β : 19.9° MH: .7787 n: 2400 rpm v/u : .201 ϕ : .0° Γ : 276.3



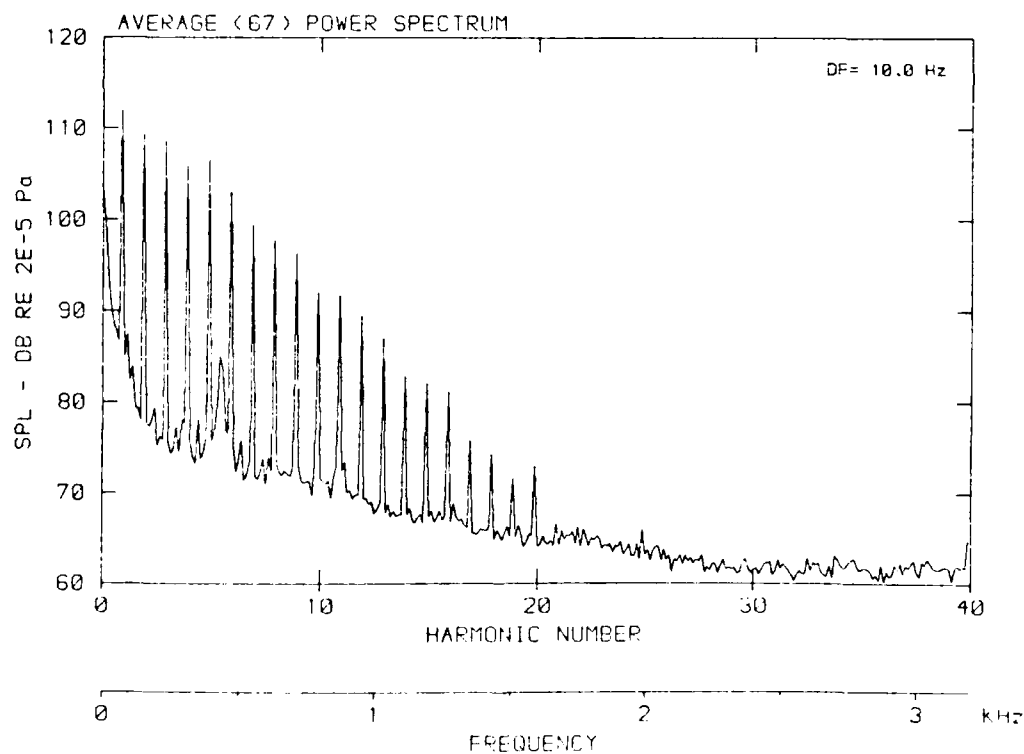
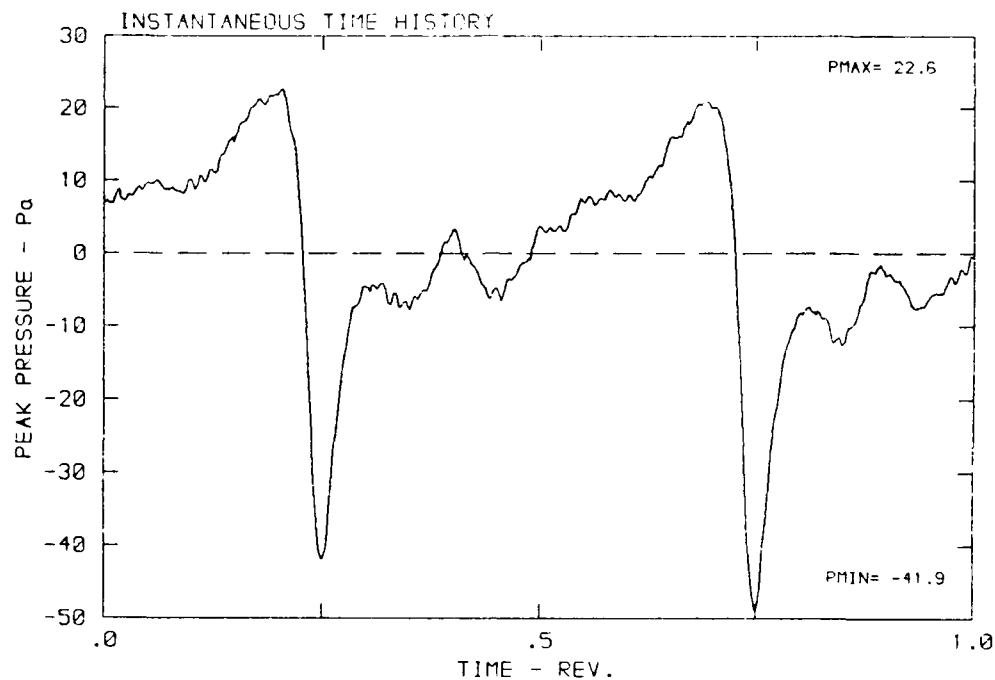
DATA POINT: IN-2 RUN: 37 MP: 2

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



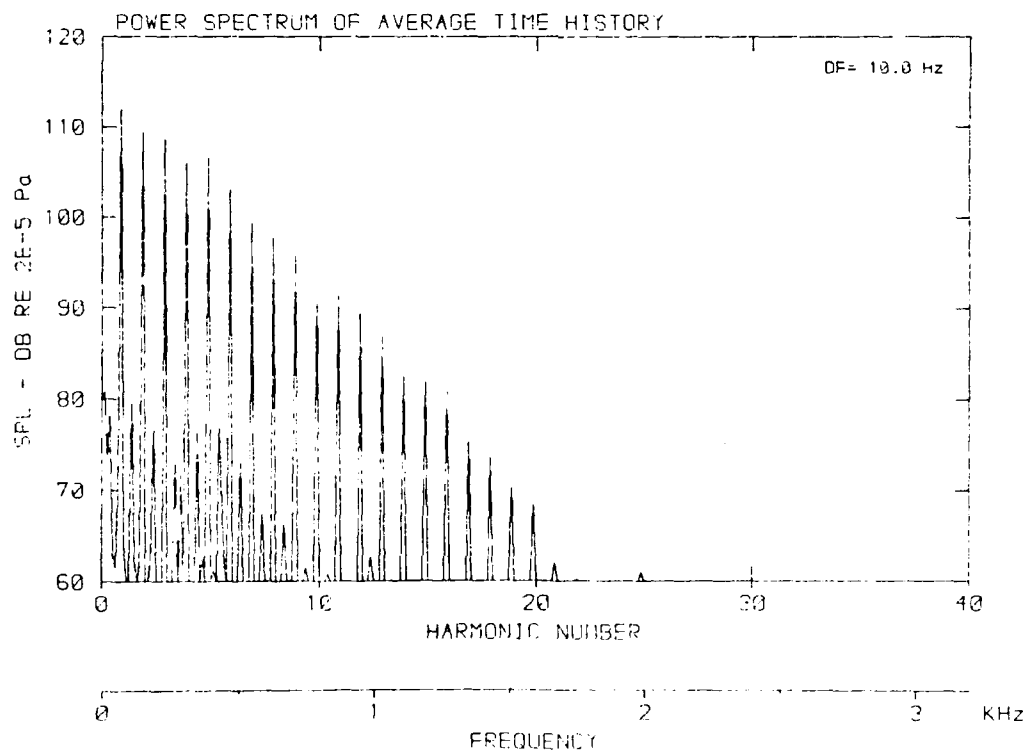
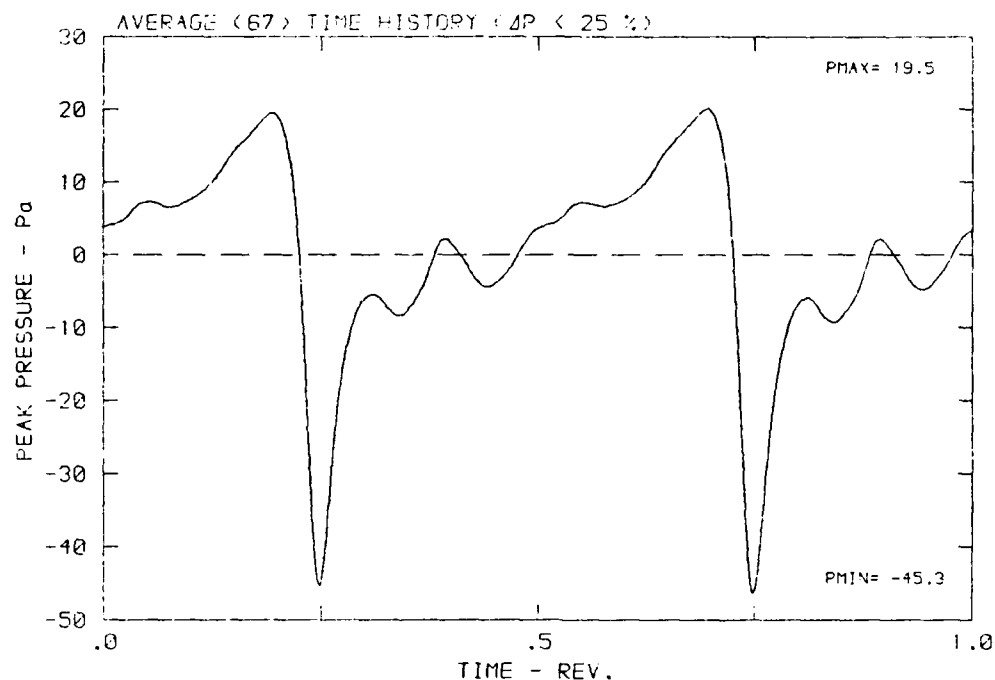
DATA POINT: IN-2 RUN: 37 MP: 3

β : 19.9° MH: .7787 n: 2400 rpm vzu: .201 ϕ : .0° T: 278.3 K



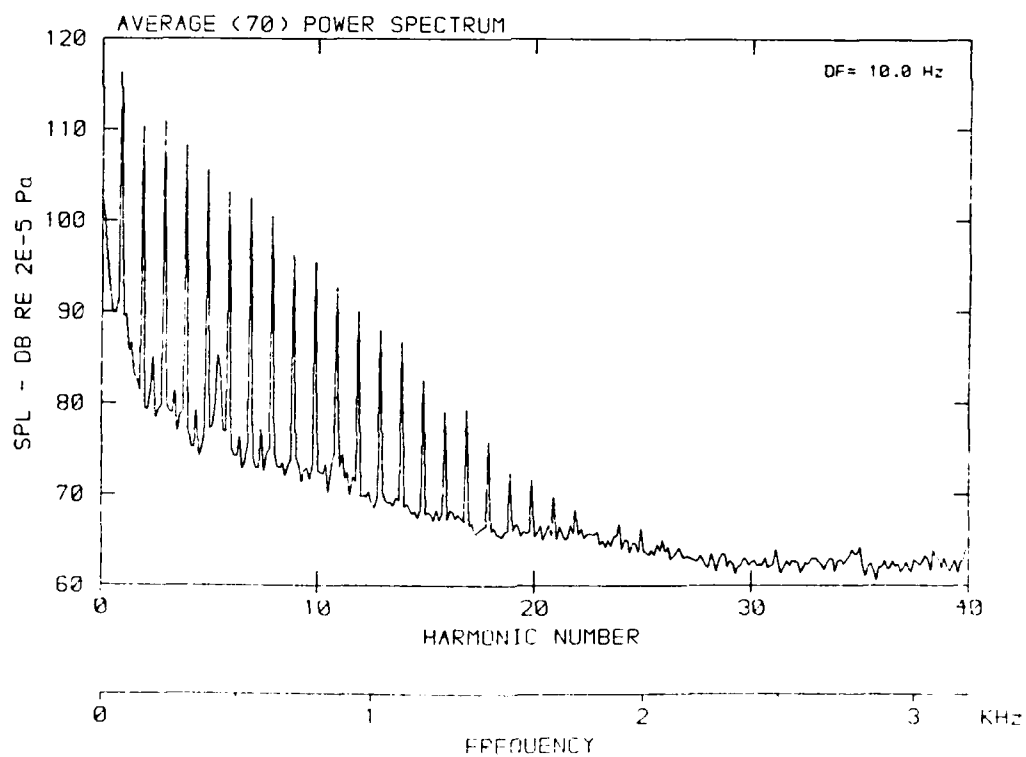
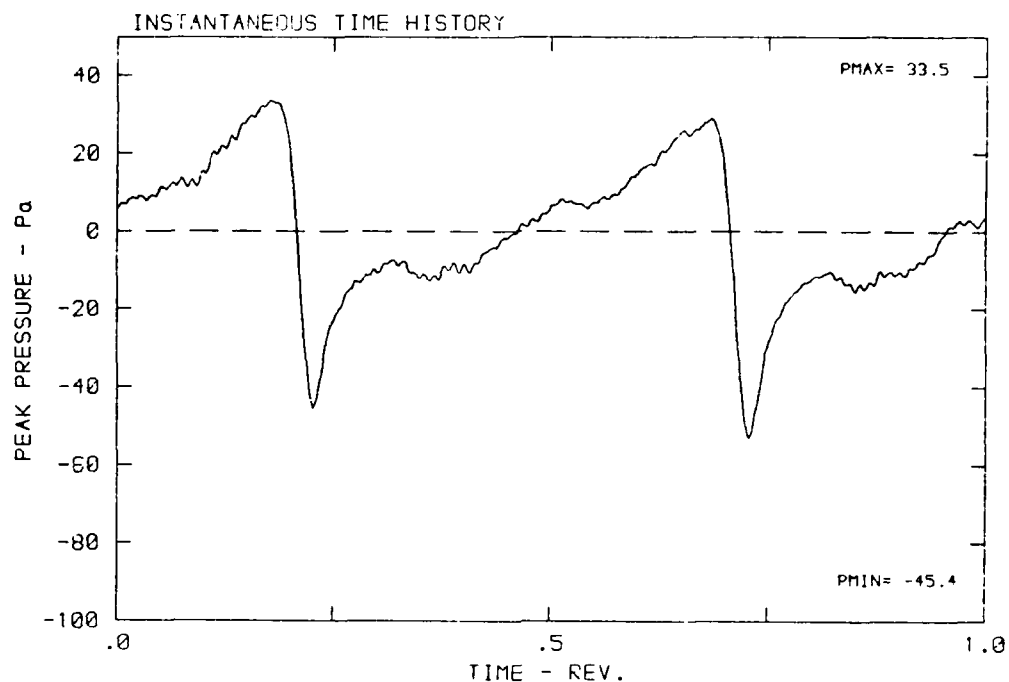
DATA POINT: IN-2 RUN: 37 MP: 3

β : 19.9° MH: .7787 n: 2400 rpm v/u : .201 ϕ : .0° T: 278.3 K



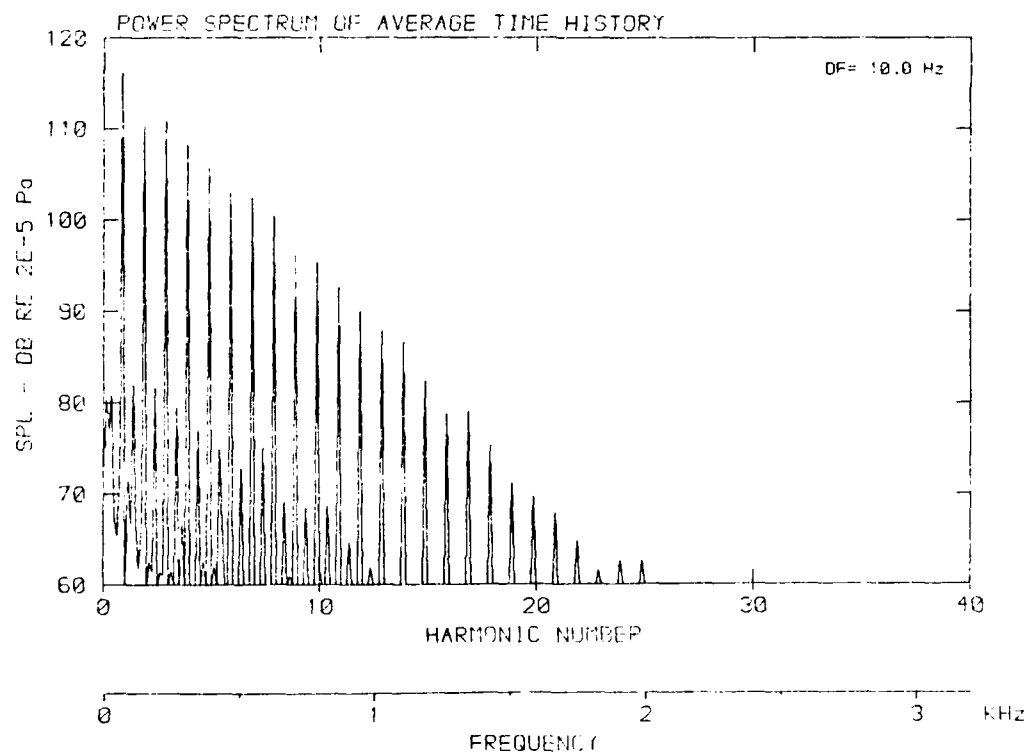
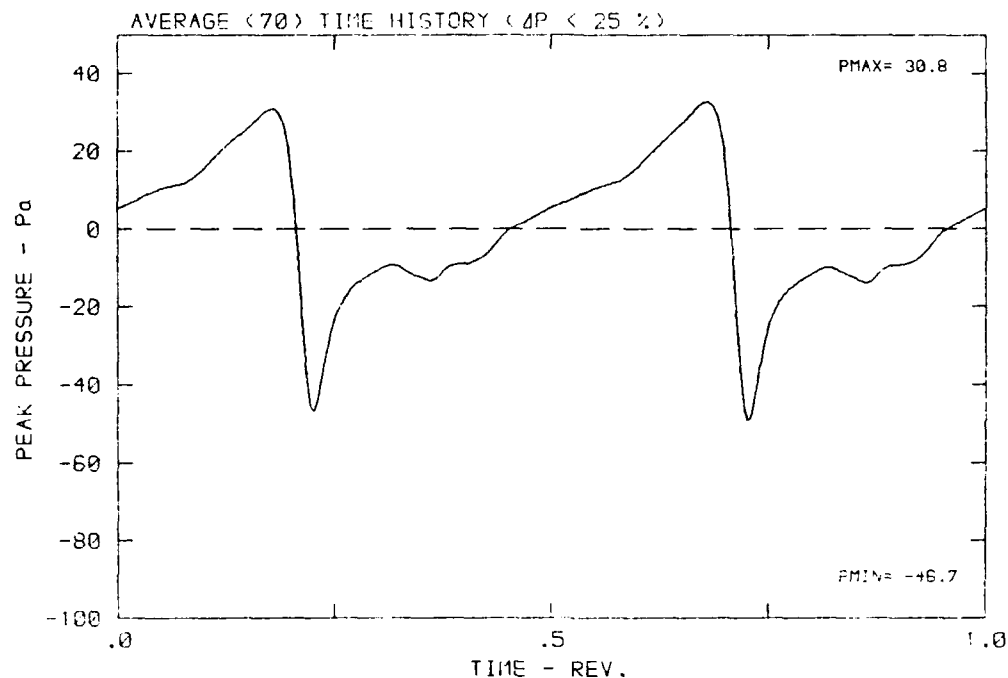
DATA POINT: IN-2 RUN: 37 MP: 4

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



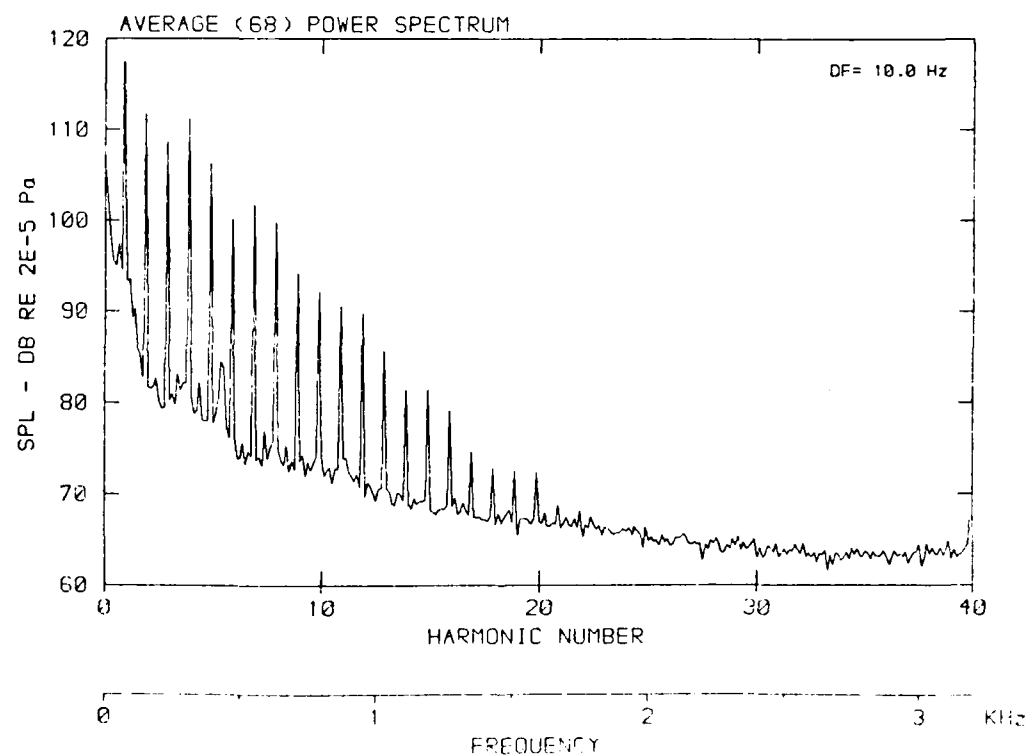
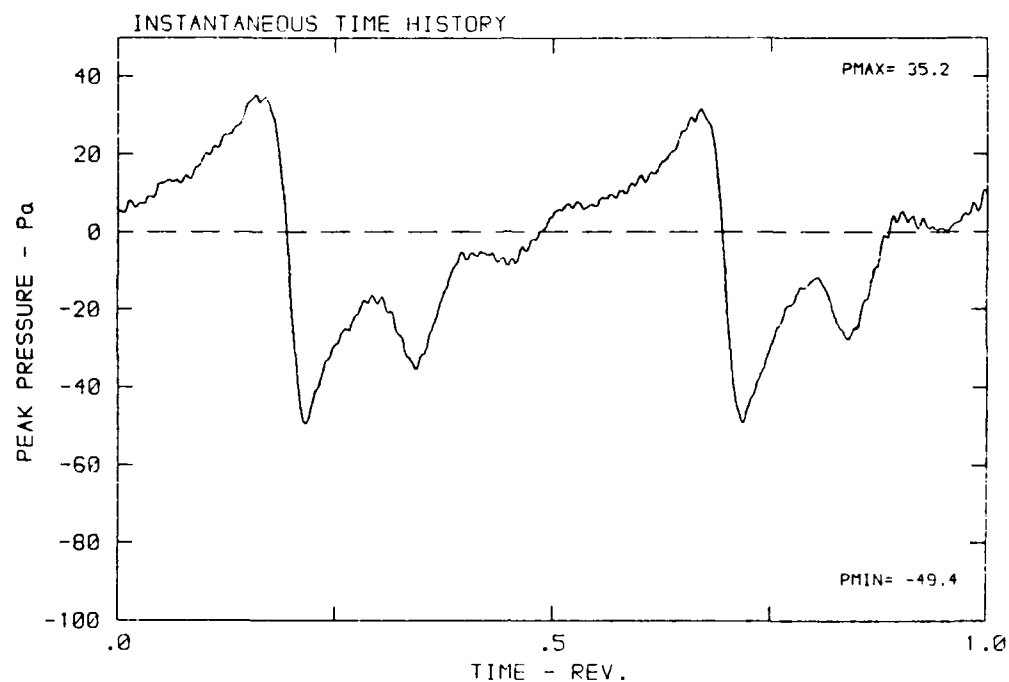
DATA POINT: IN-2 RUN: 37 MP: 4

β : 19.9° MH: .7787 n: 2400 rpm v/u : .201 ϕ : .0° T: 278.3 K



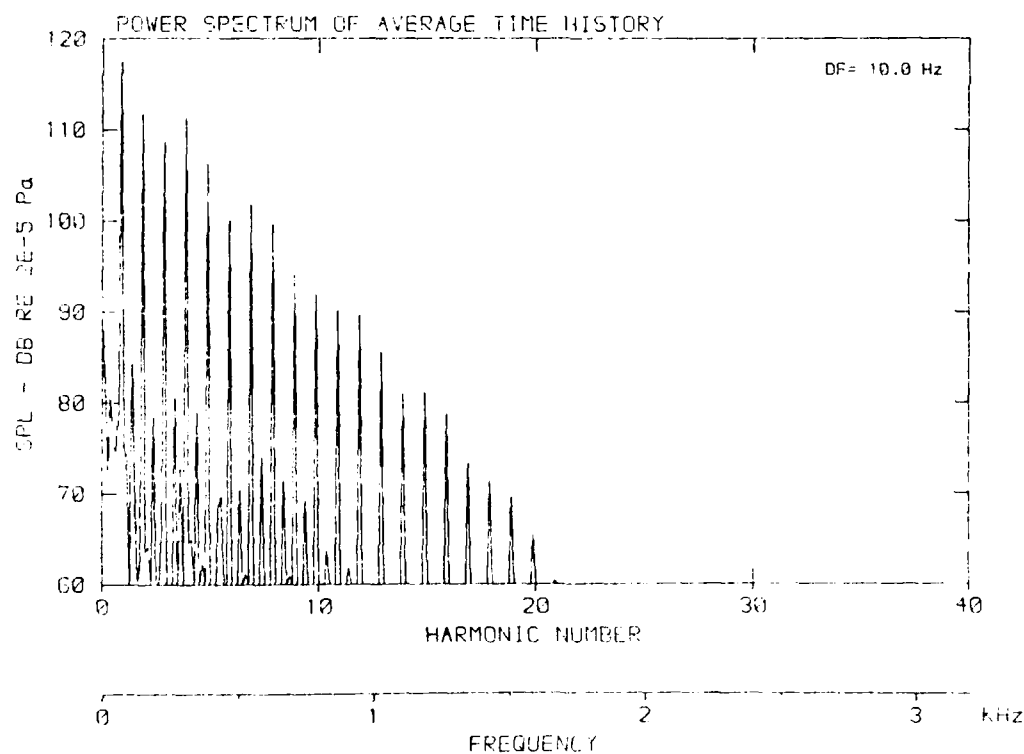
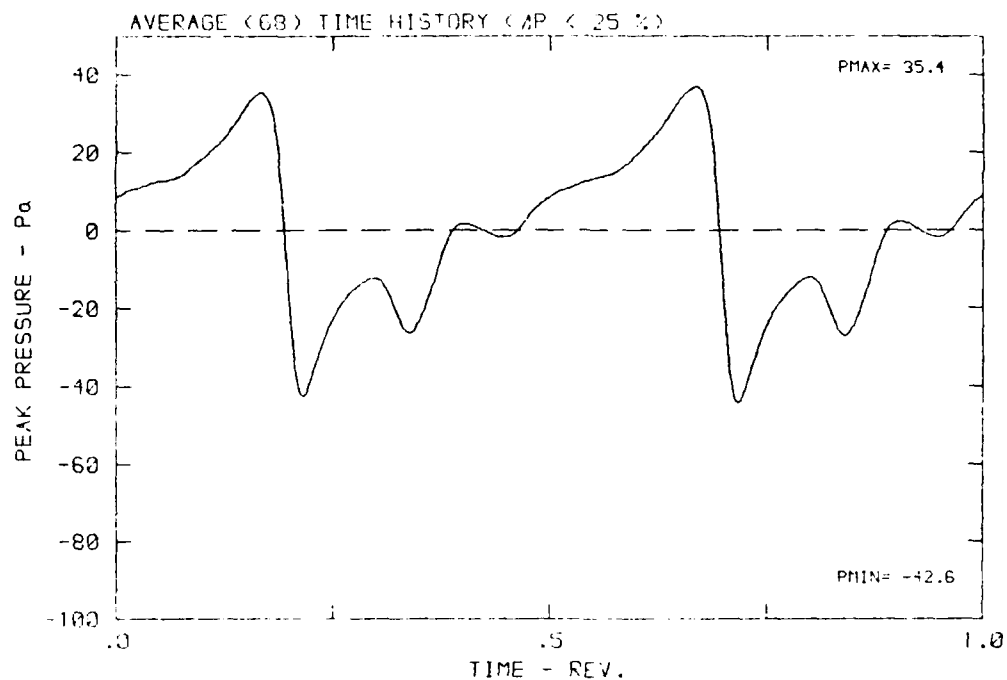
DATA POINT: IN-2 RUN: 37 MP: 5

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



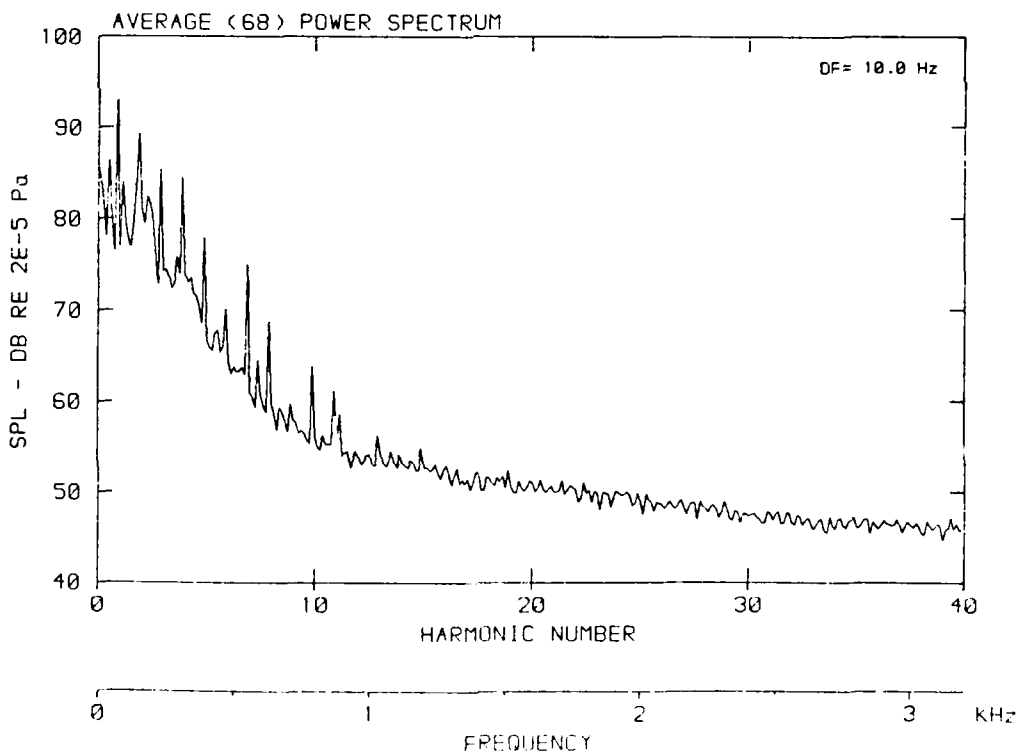
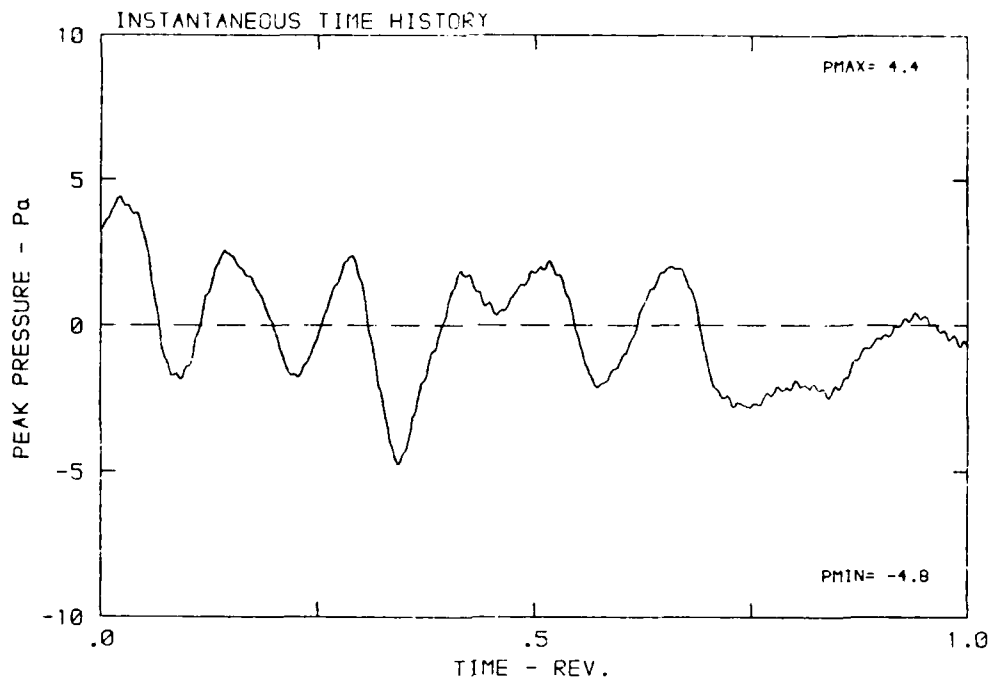
DATA POINT: IN-2 RUN: 37 MP: 5

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



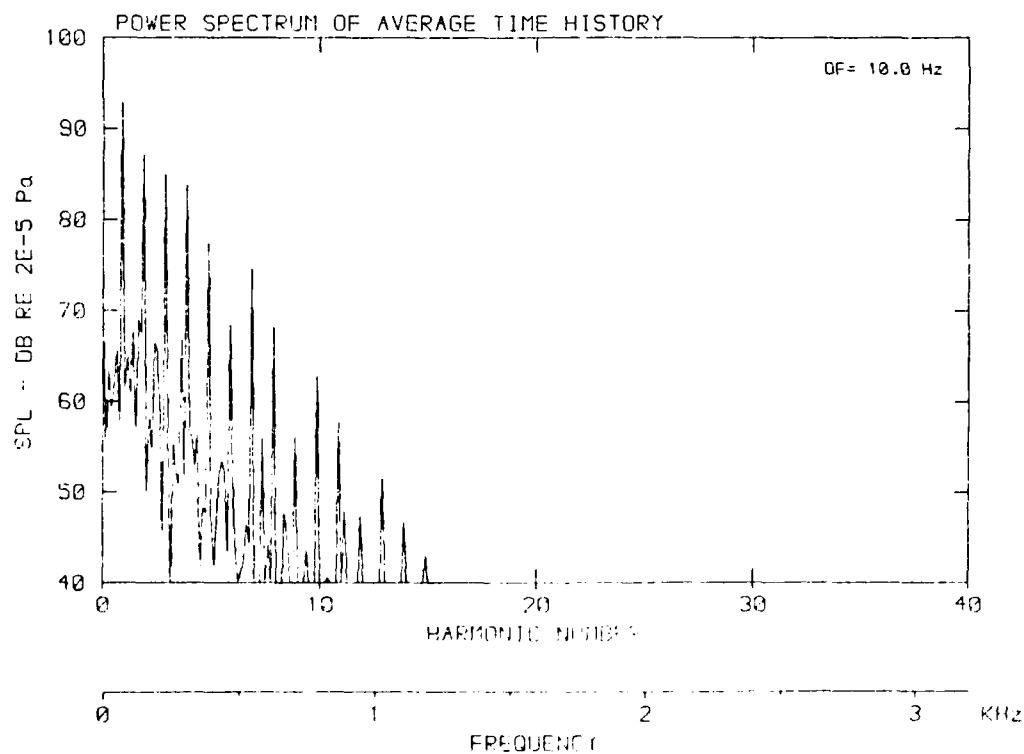
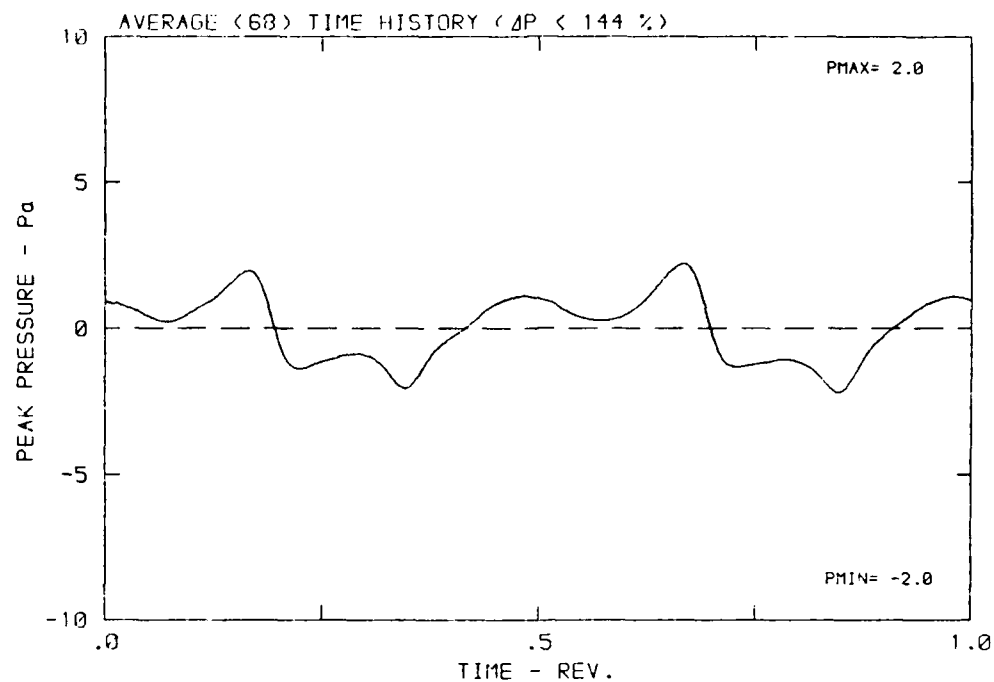
DATA POINT: IN-2 RUN: 37 MP: 6

β : 19.9° MH: .7787 n: 2400 rpm v/u : .201 ϕ : .0° T: 278.3 K



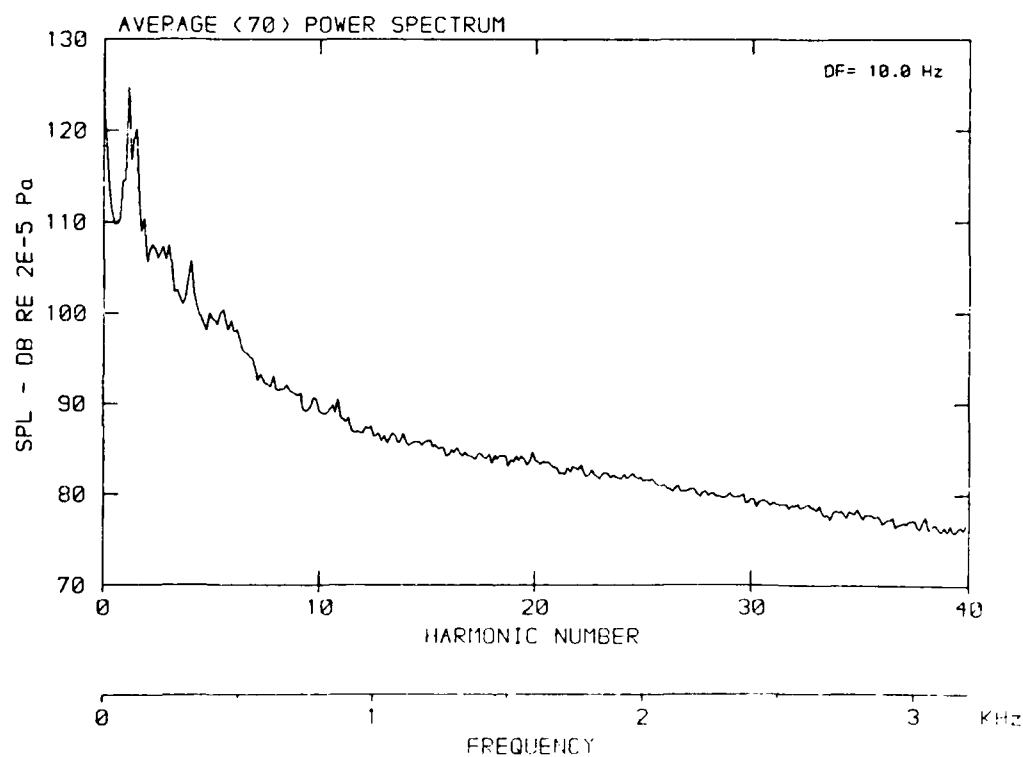
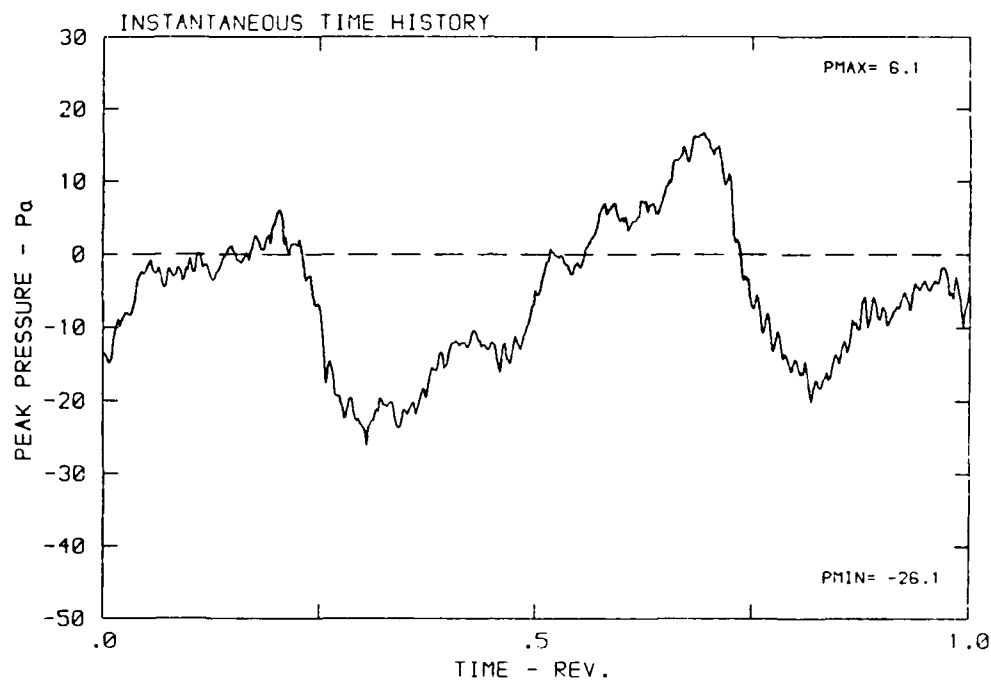
DATA POINT: IN-2 RUN: 37 MP: 6

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



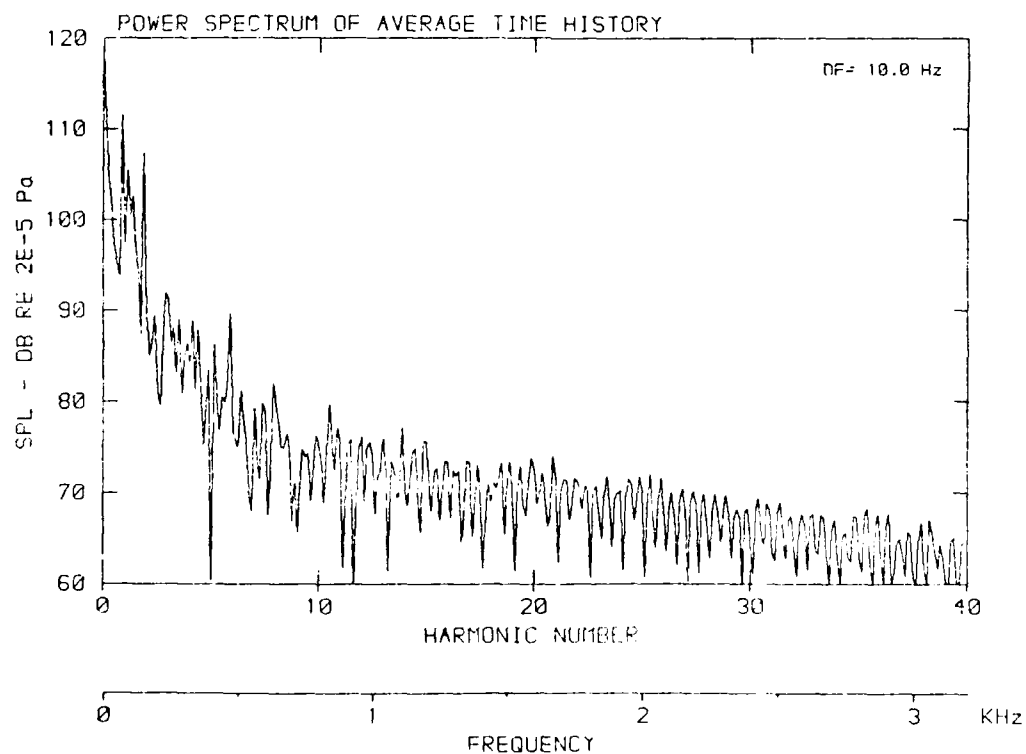
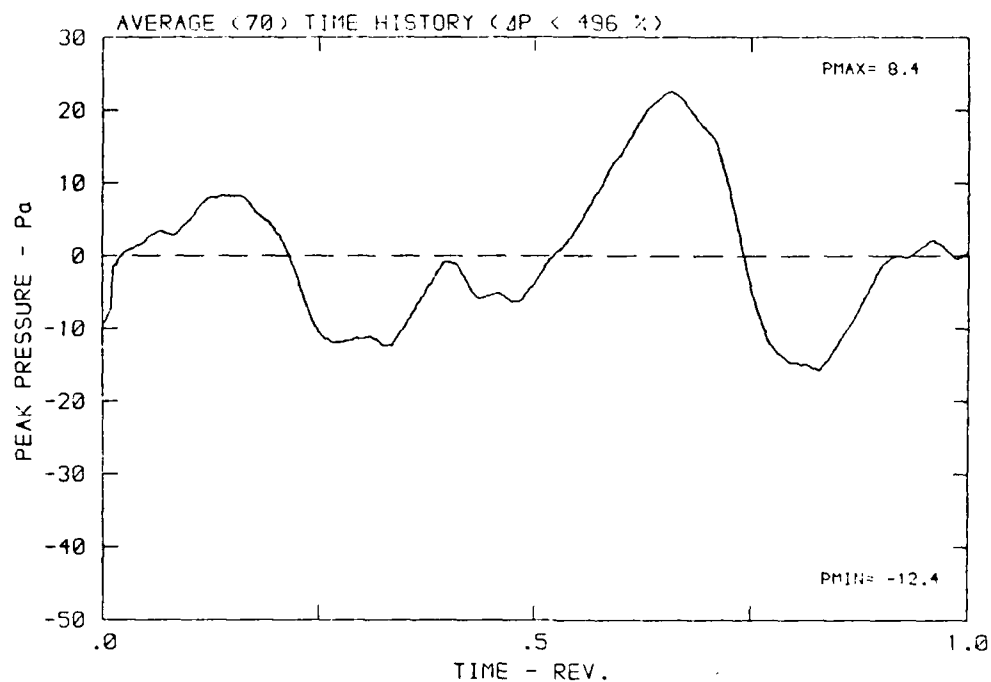
DATA POINT: IN-2 RUN: 37 MP: 7

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



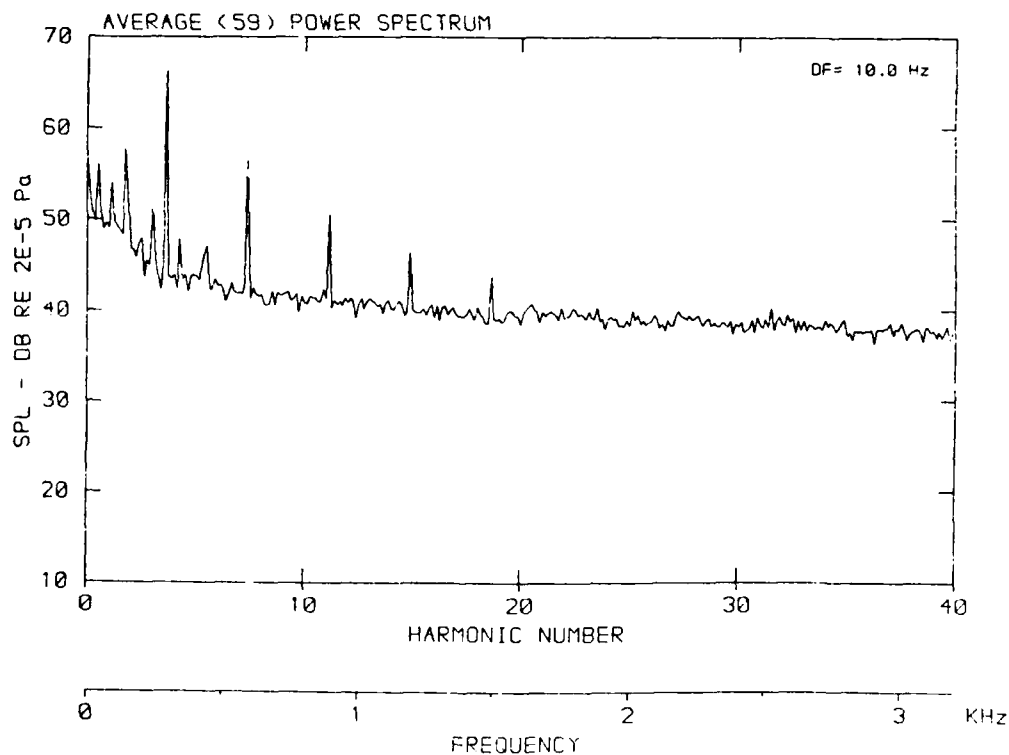
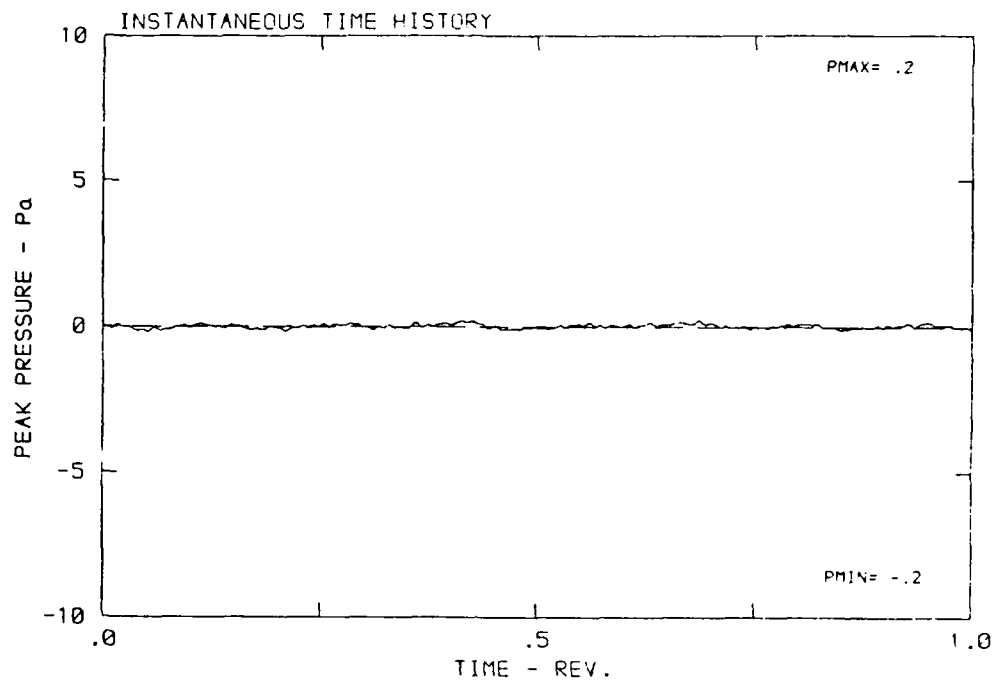
DATA POINT: IN-2 RUN: 37 MP: 7

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



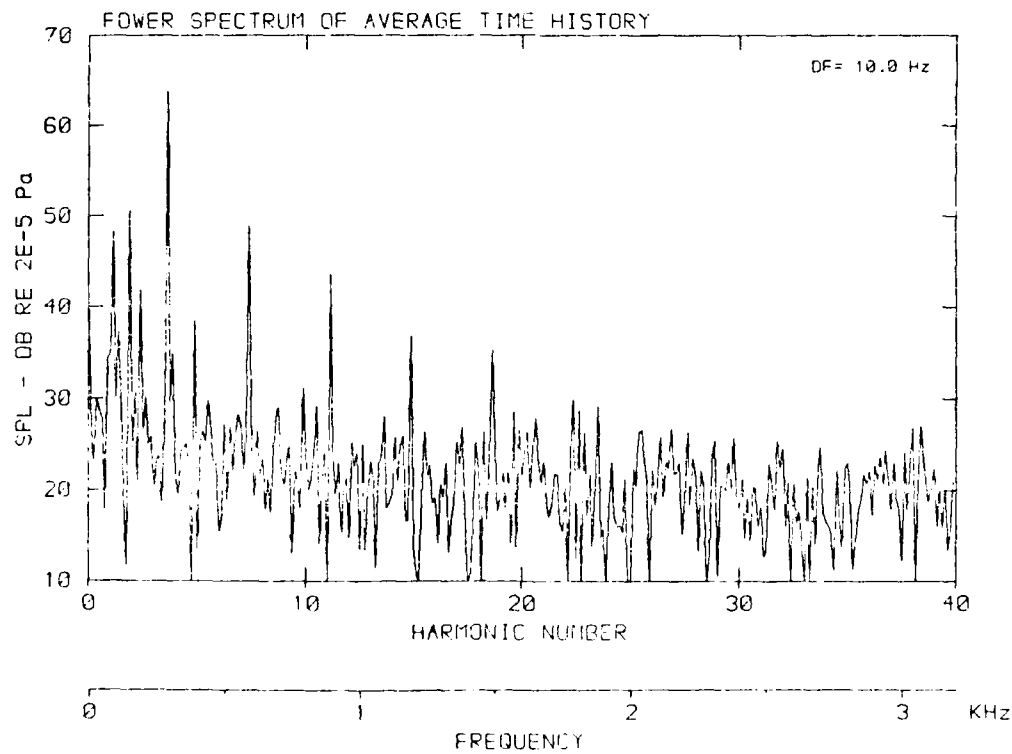
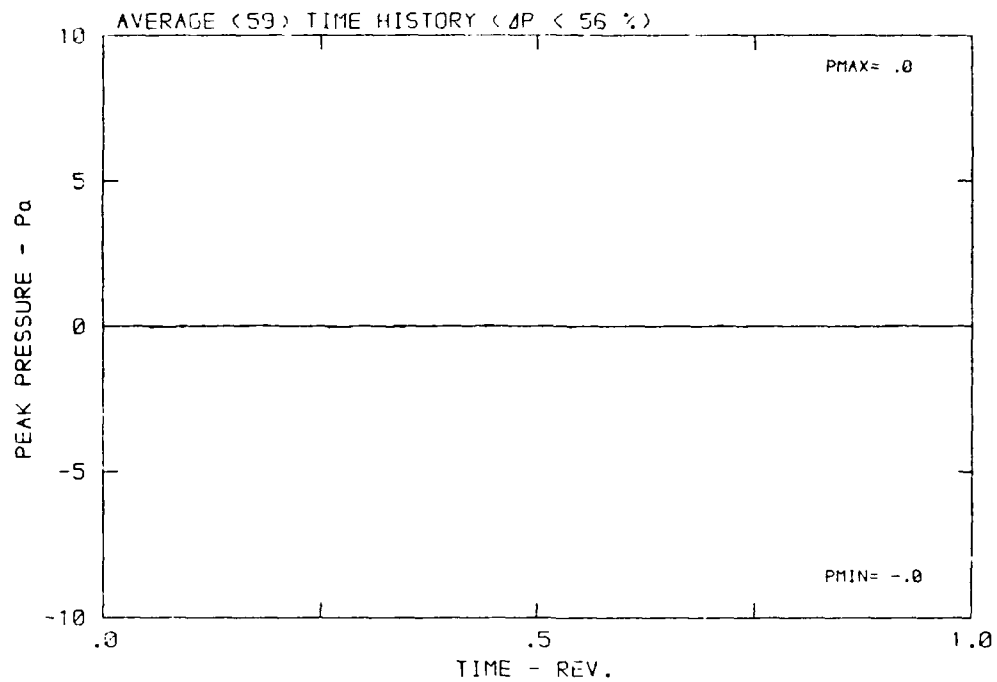
DATA POINT: IN-2 RUN: 37 MP: 9

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



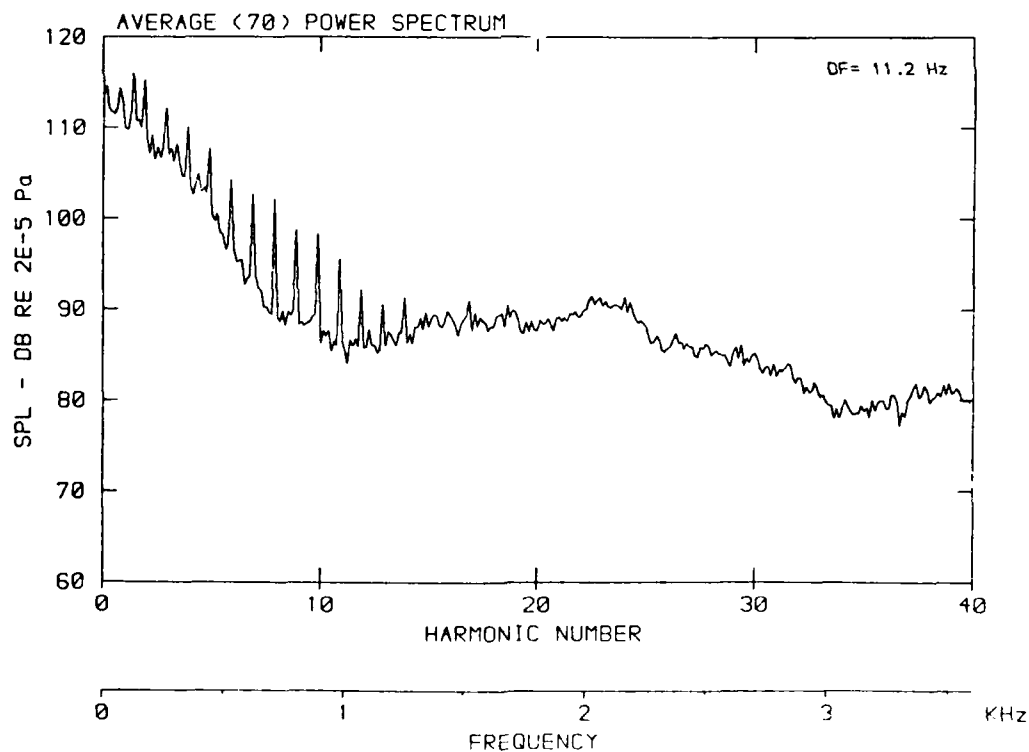
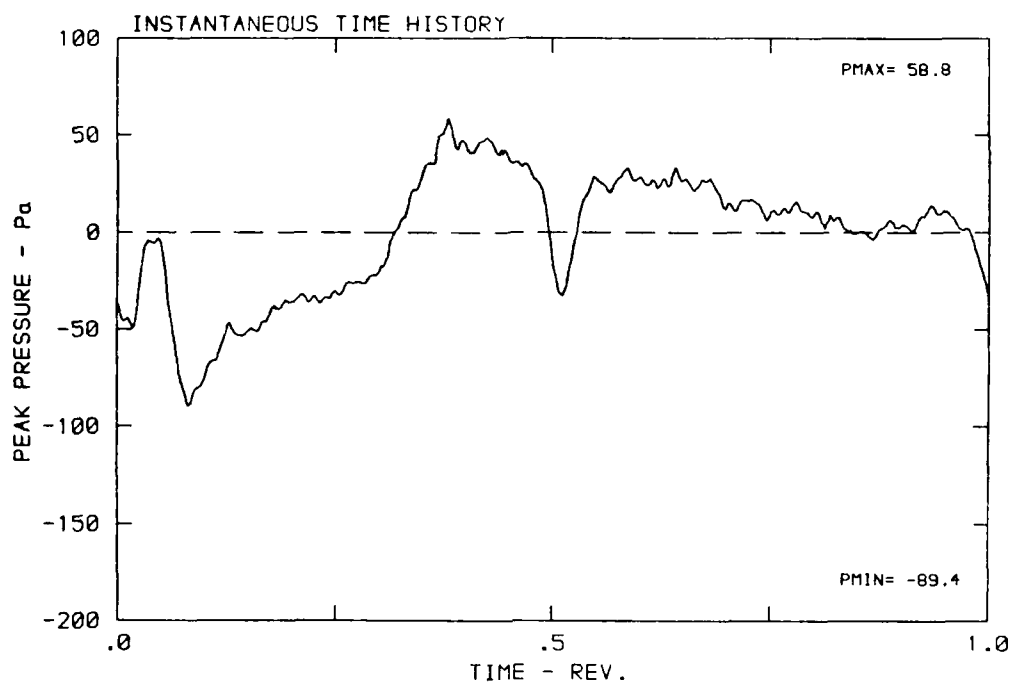
DATA POINT: IN-2 RUN: 37 1P: 9

β : 19.9° MH: .7787 n: 2400 rpm v/u: .201 ϕ : .0° T: 278.3 K



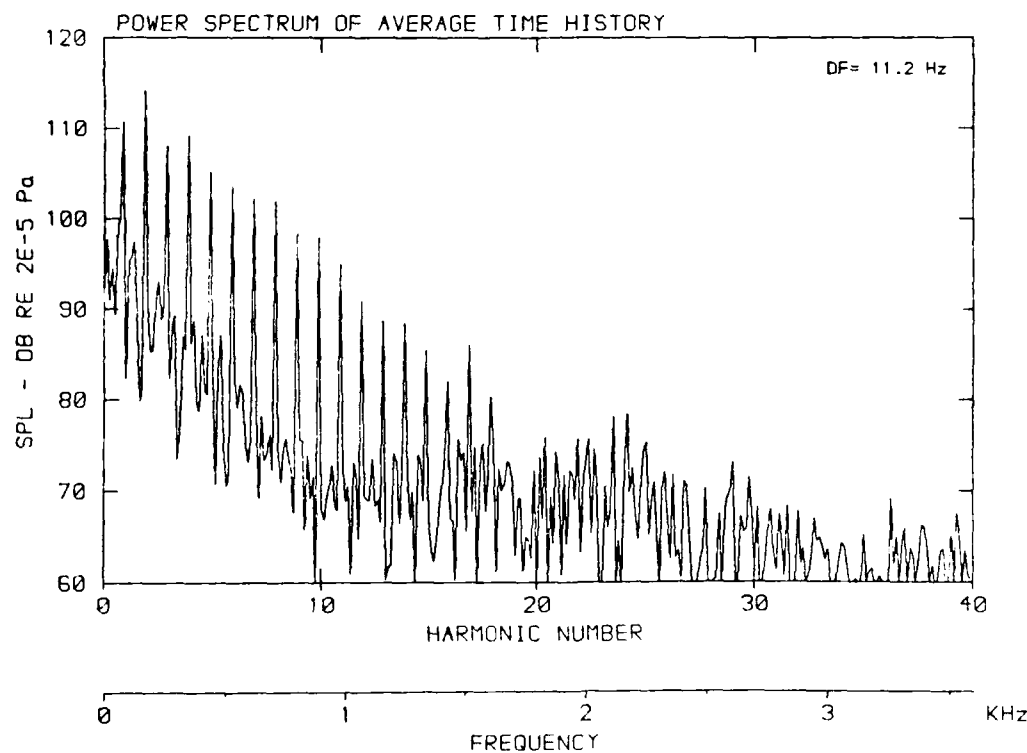
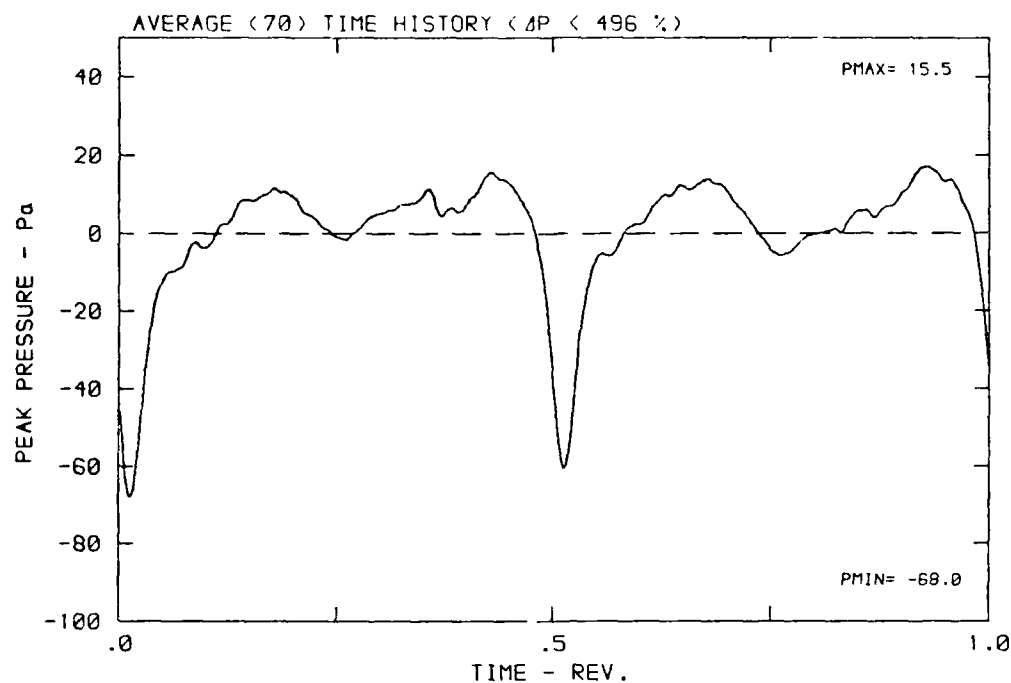
DATA POINT: IN-3 RUN: 38 MP: 1

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



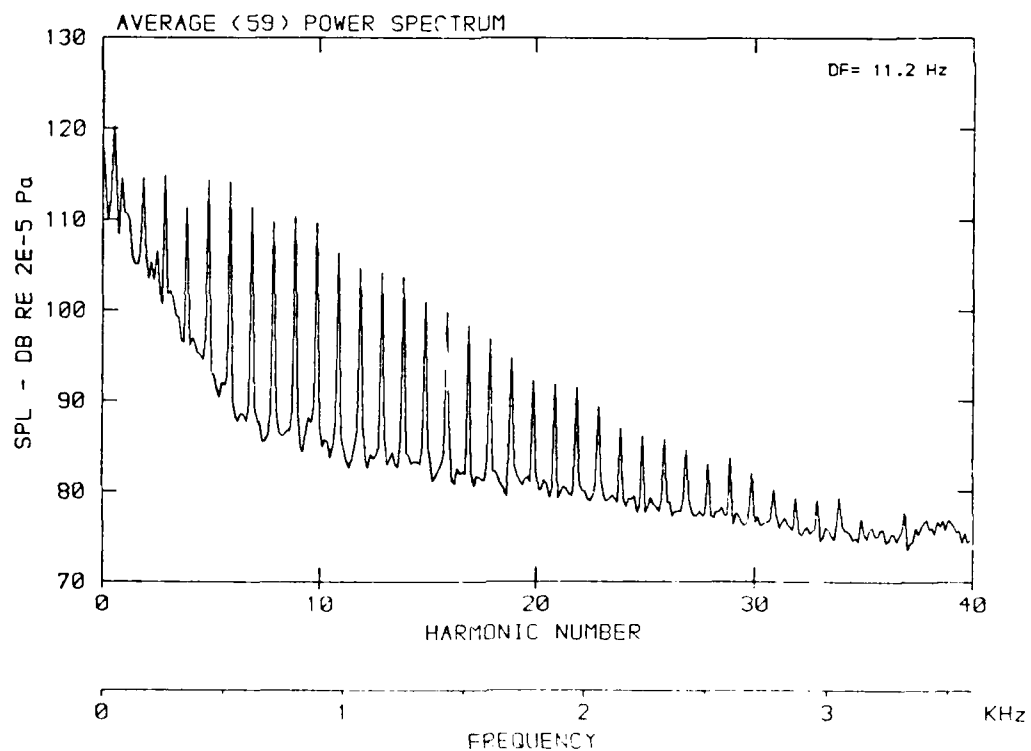
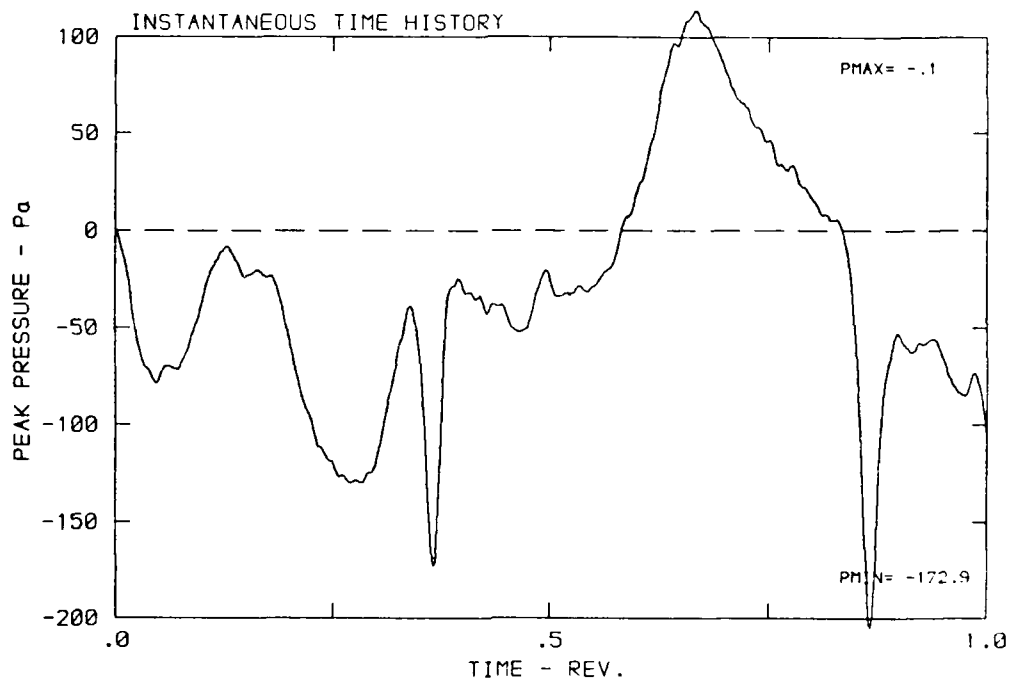
DATA POINT: IN-3 RUN: 38 MP: 1

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



DATA POINT: IN-3 RUN: 38 MP: 2

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



AD-A174 979

DFVLR/FAR (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER LUFT UND RAUMFAHR. (U) DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMF. .

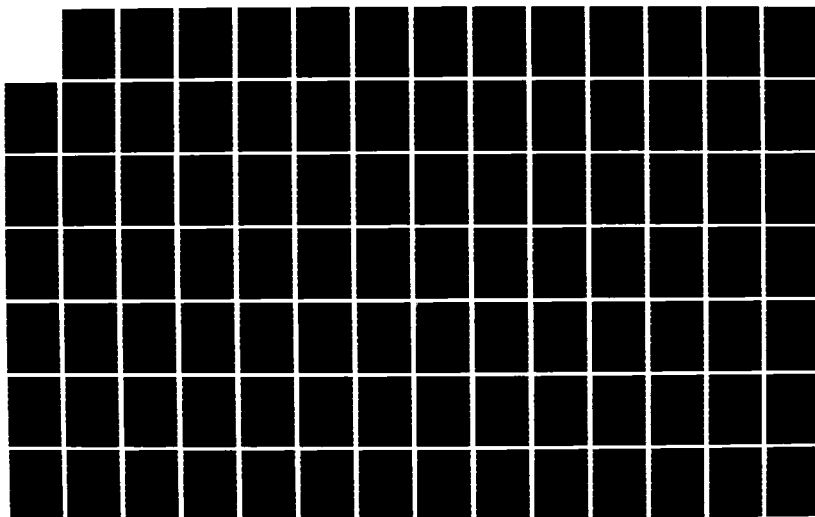
2/3

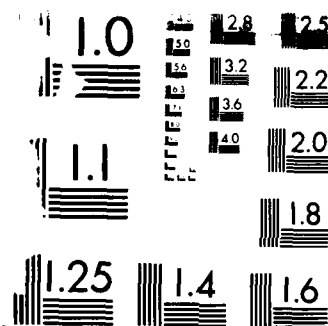
UNCLASSIFIED

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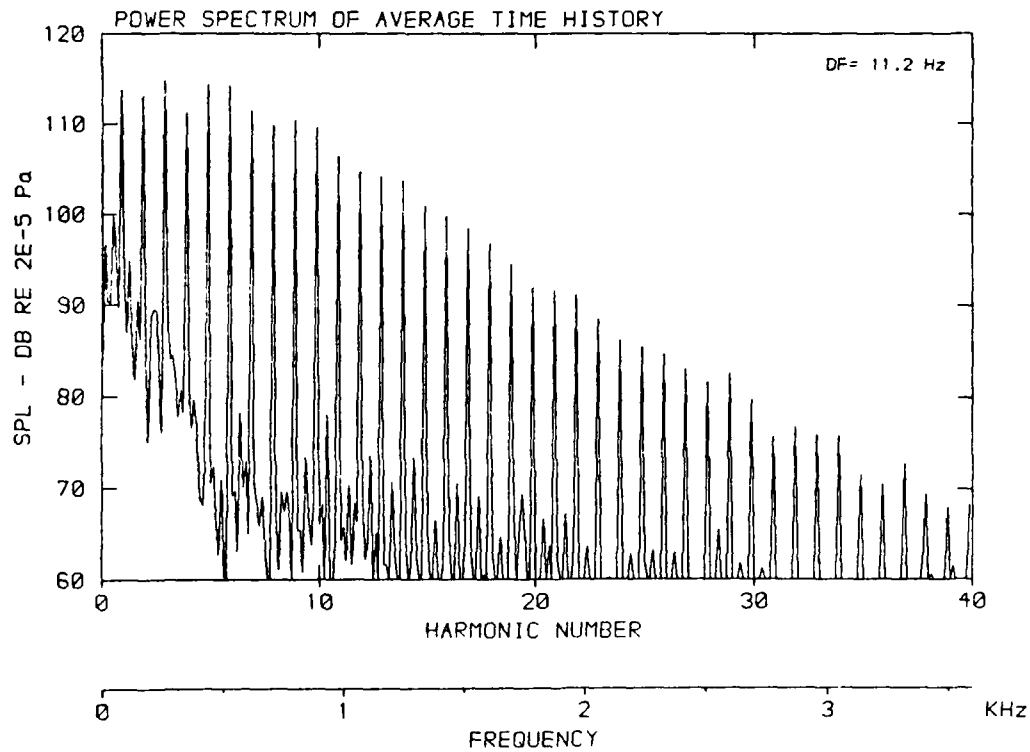
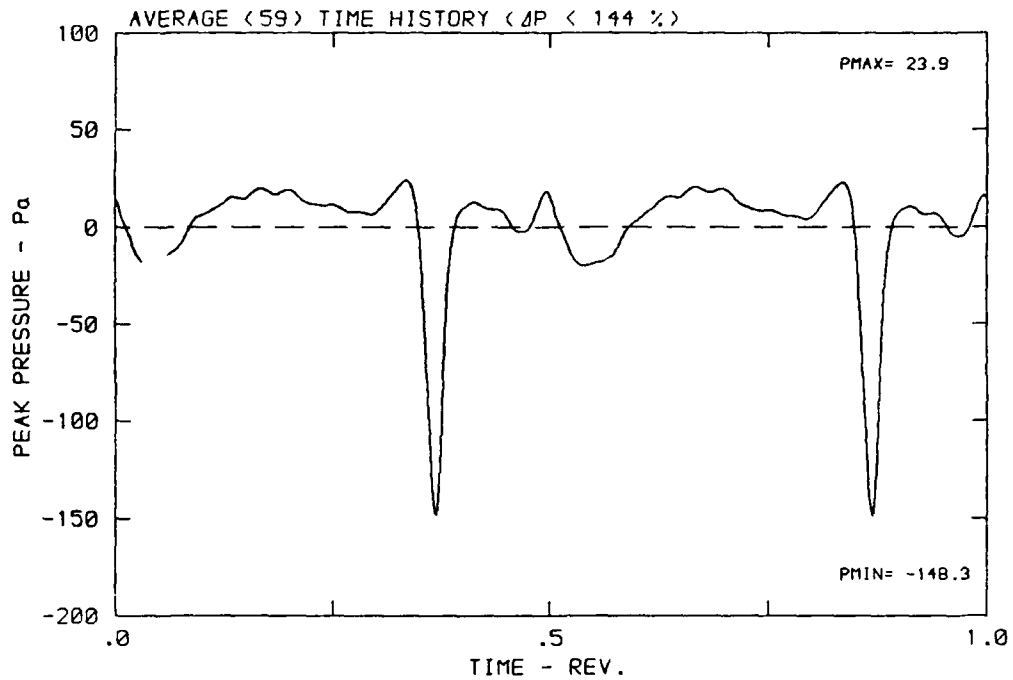




NBS 1963-RESOLUTION TEST CHART
 U.S. GOVERNMENT PRINTING OFFICE: 1963

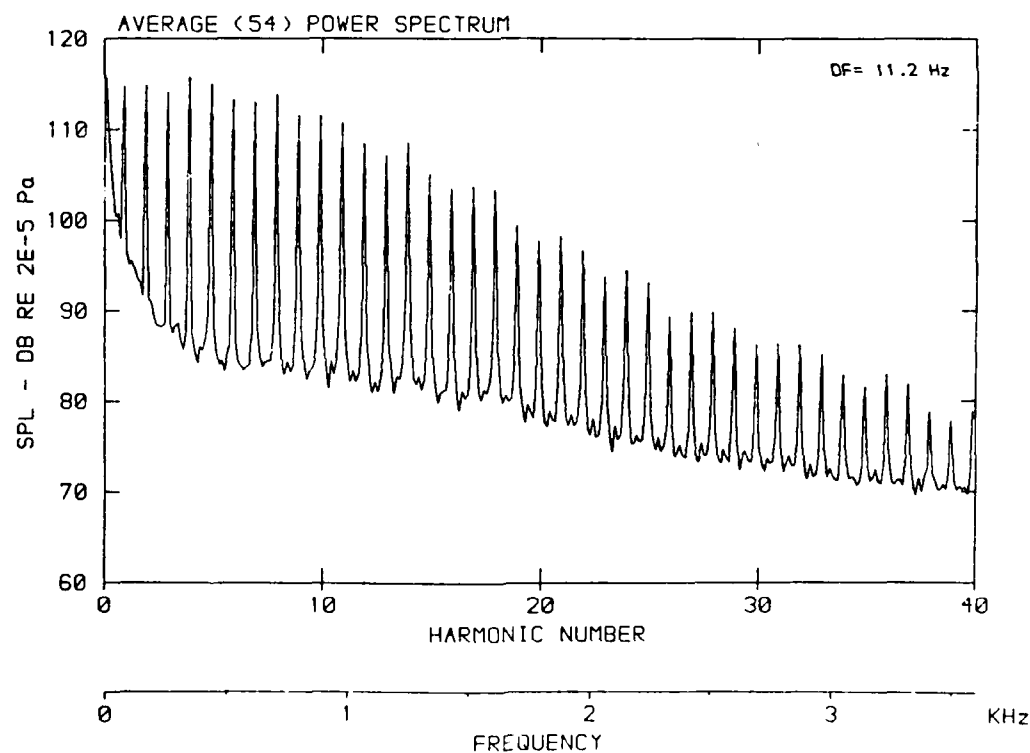
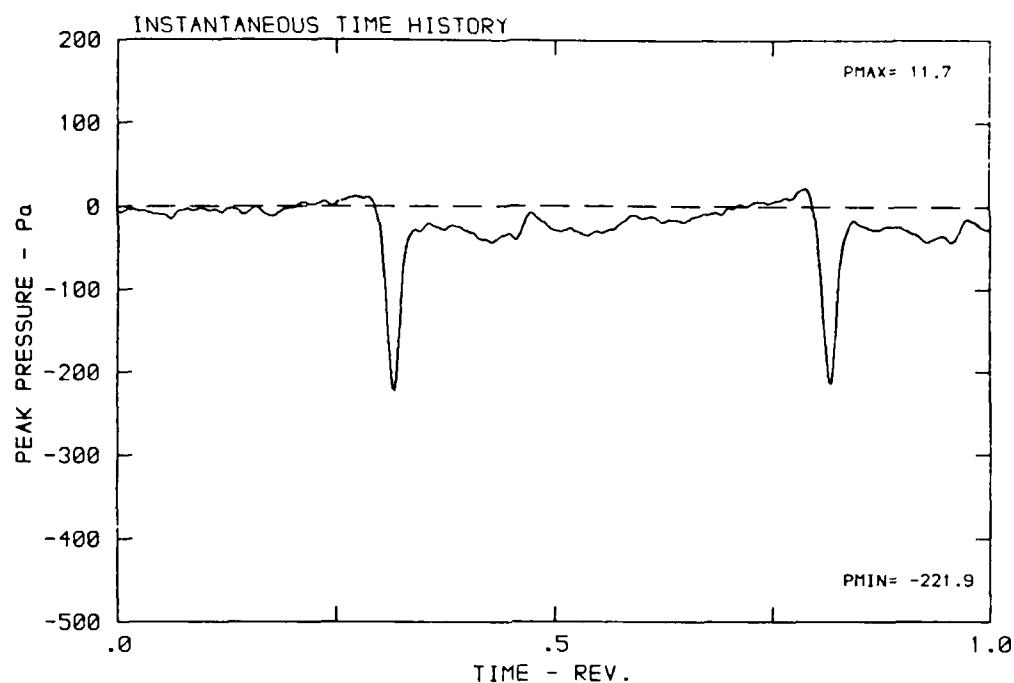
DATA POINT: IN-3 RUN: 38 MP: 2

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



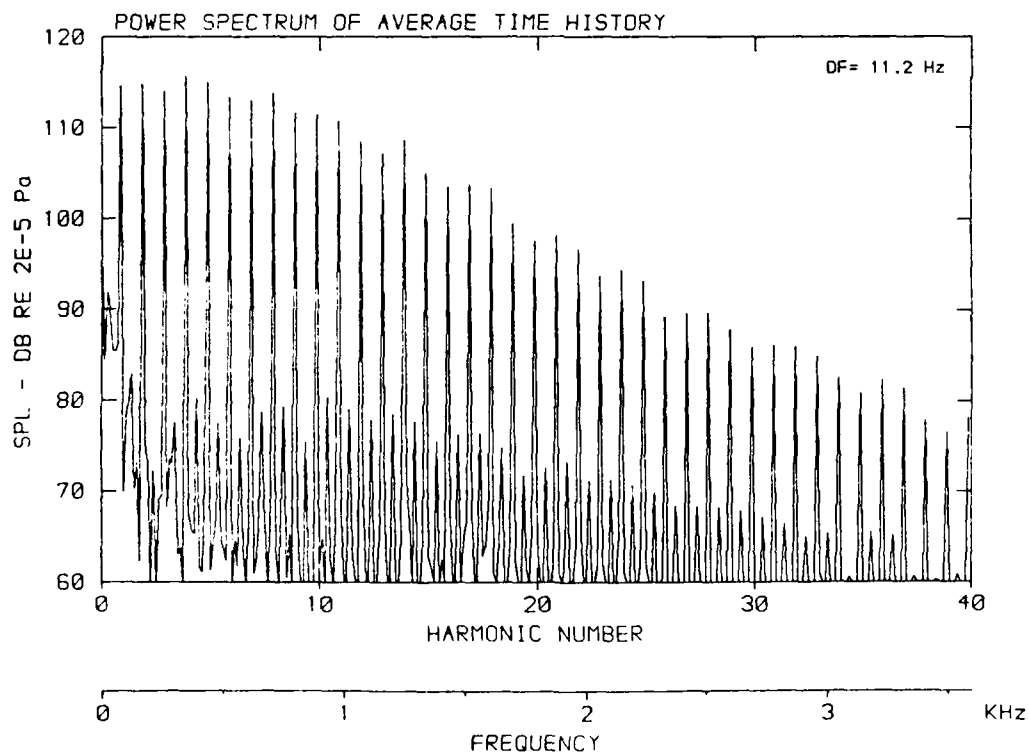
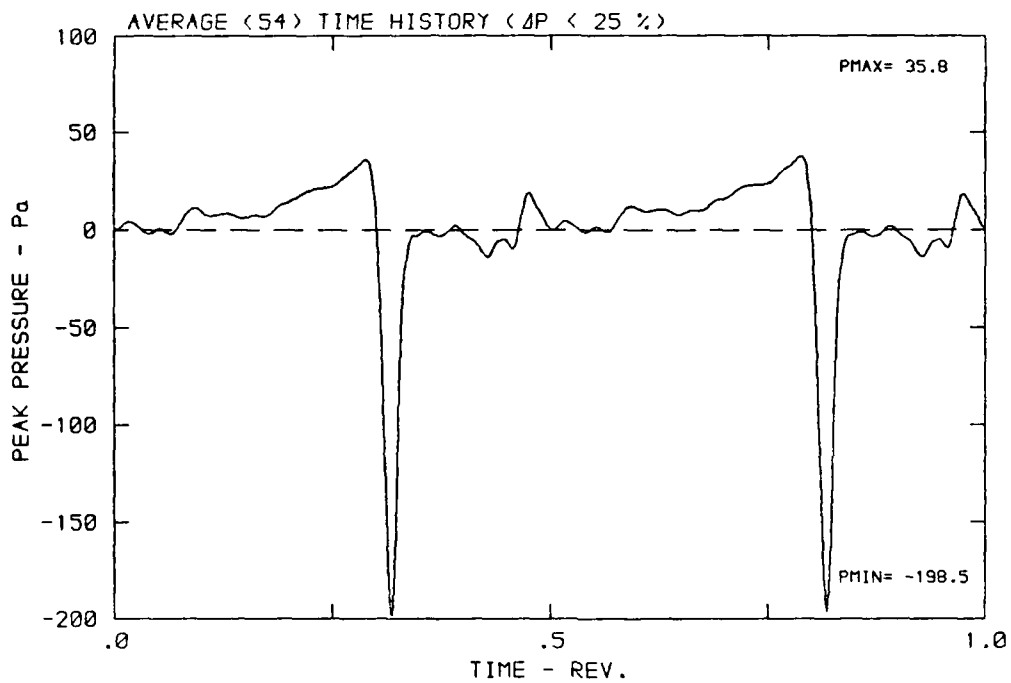
DATA POINT: IN-3 RUN: 38 MP: 3

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



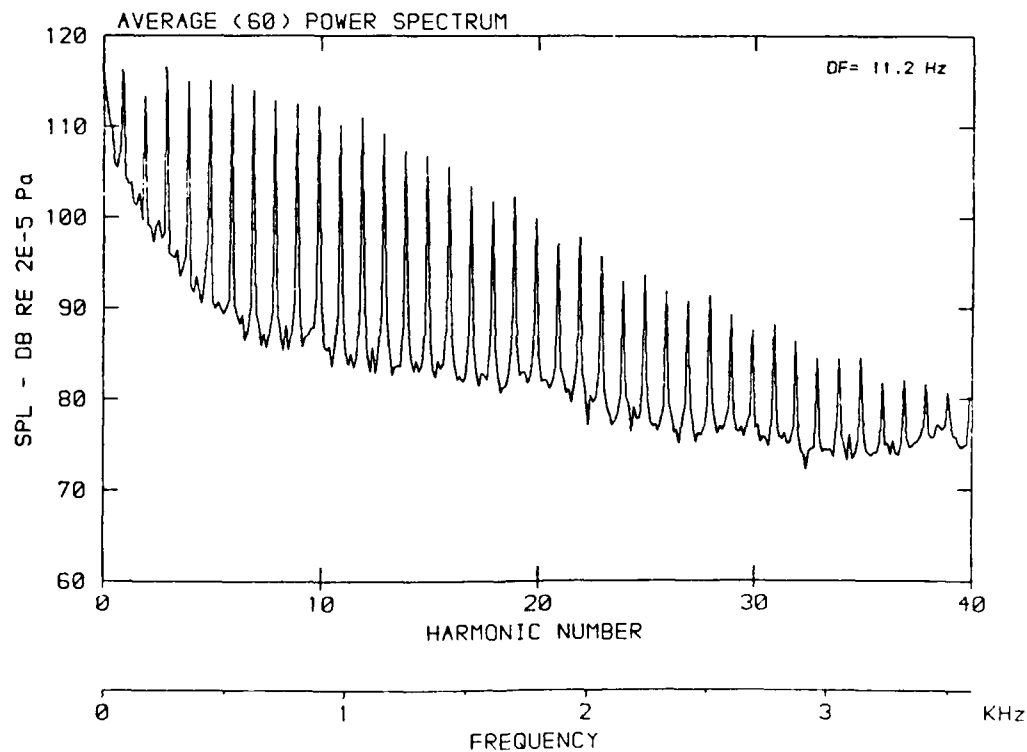
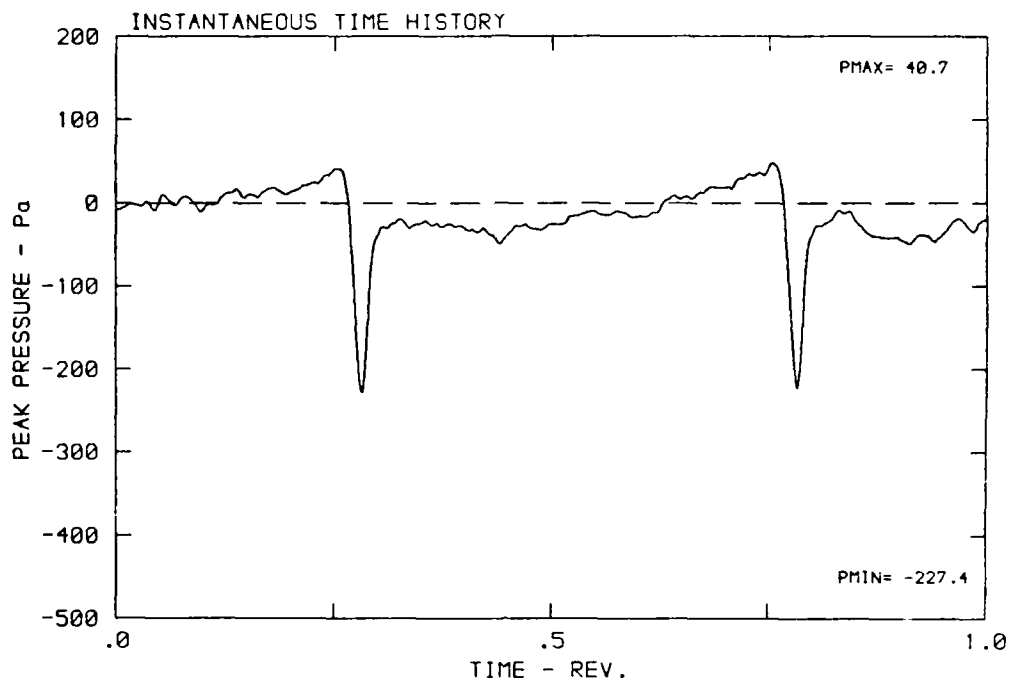
DATA POINT: IN-3 RUN: 38 MP: 3

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



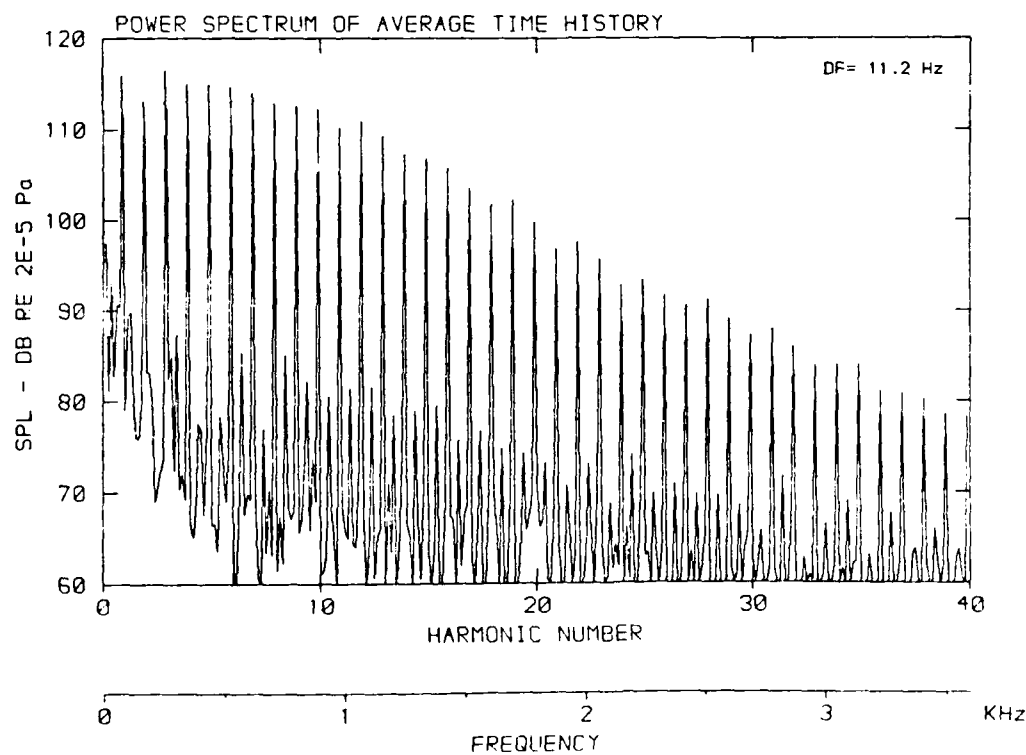
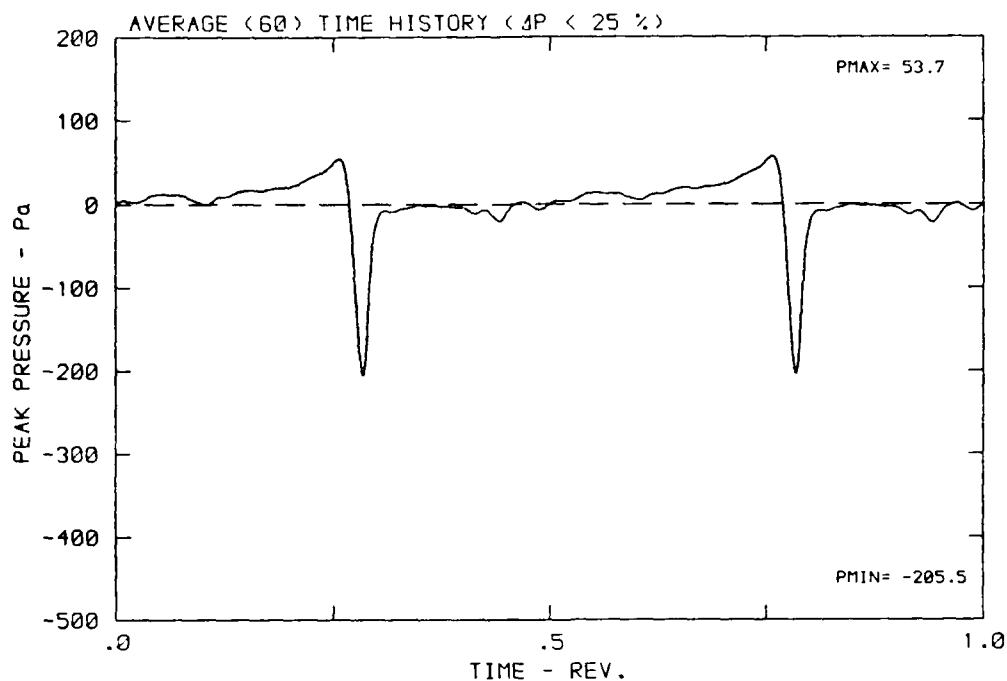
DATA POINT: IN-3 RUN: 38 MP: 4

β : 19.9° MH: .8879 r: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



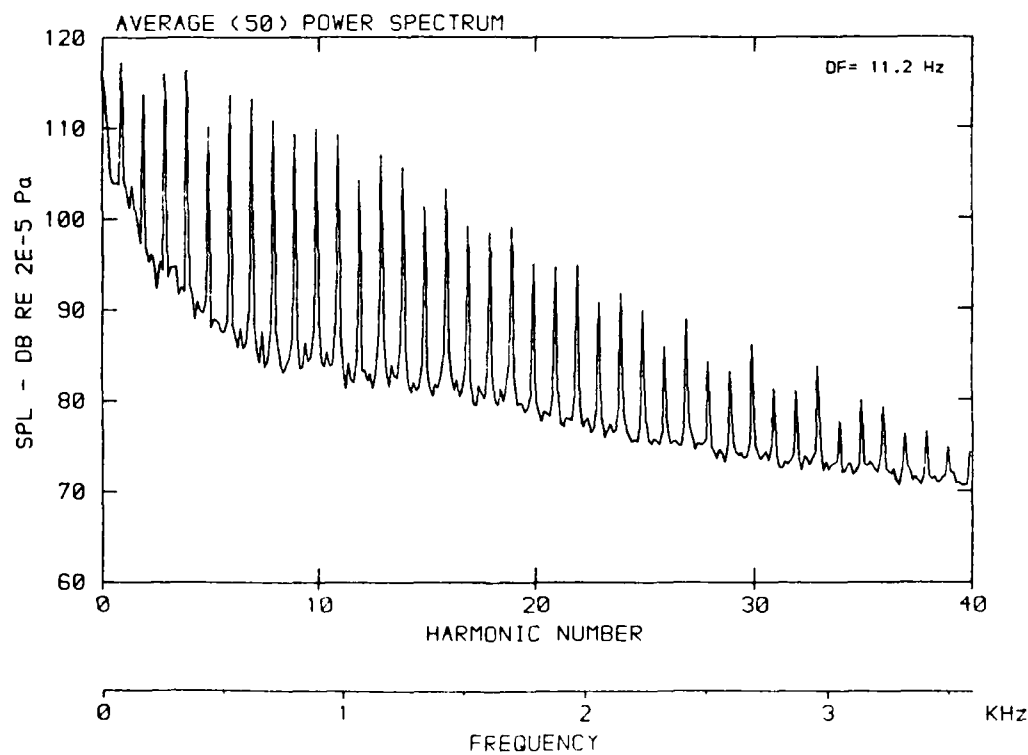
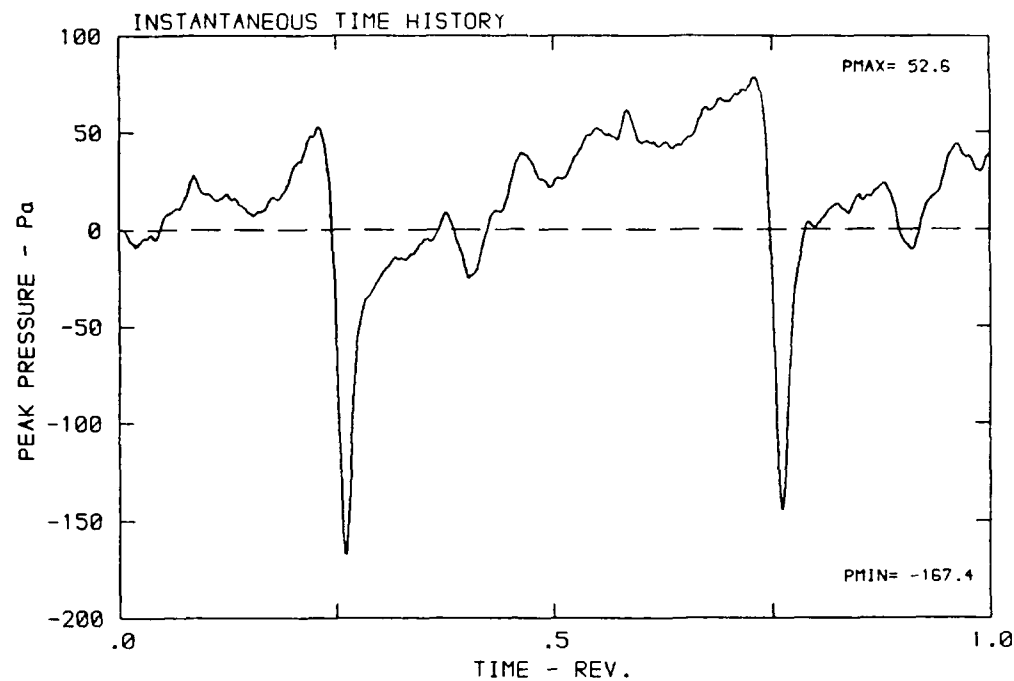
DATA POINT: IN-3 RUN: 38 MP: 4

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



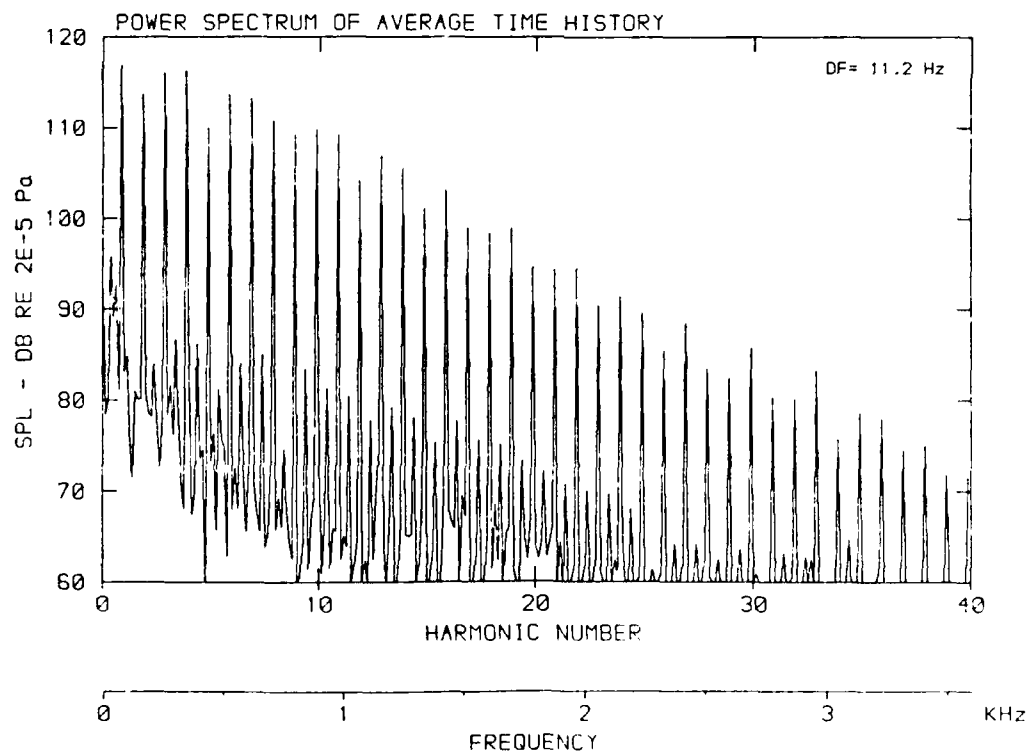
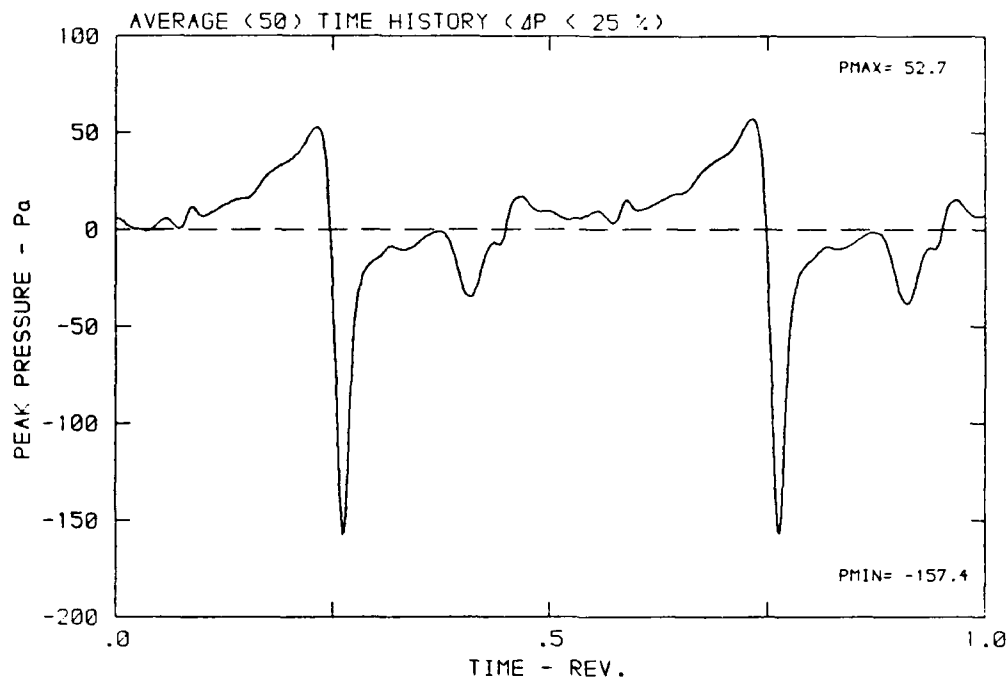
DATA POINT: IN-3 RUN: 38 MP: 5

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



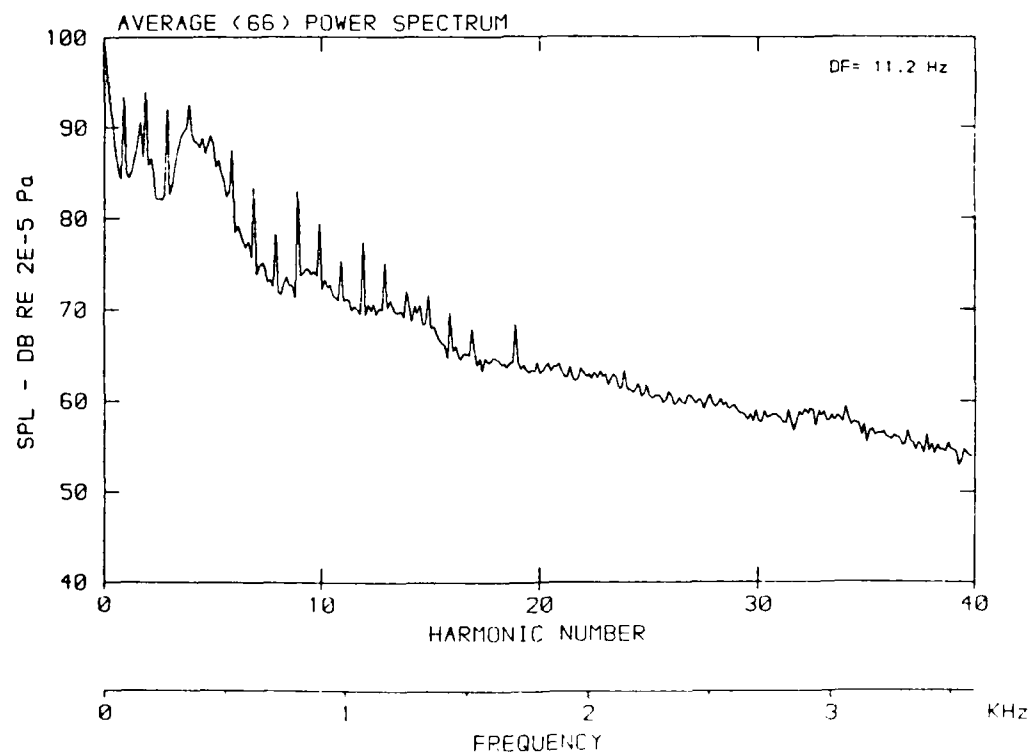
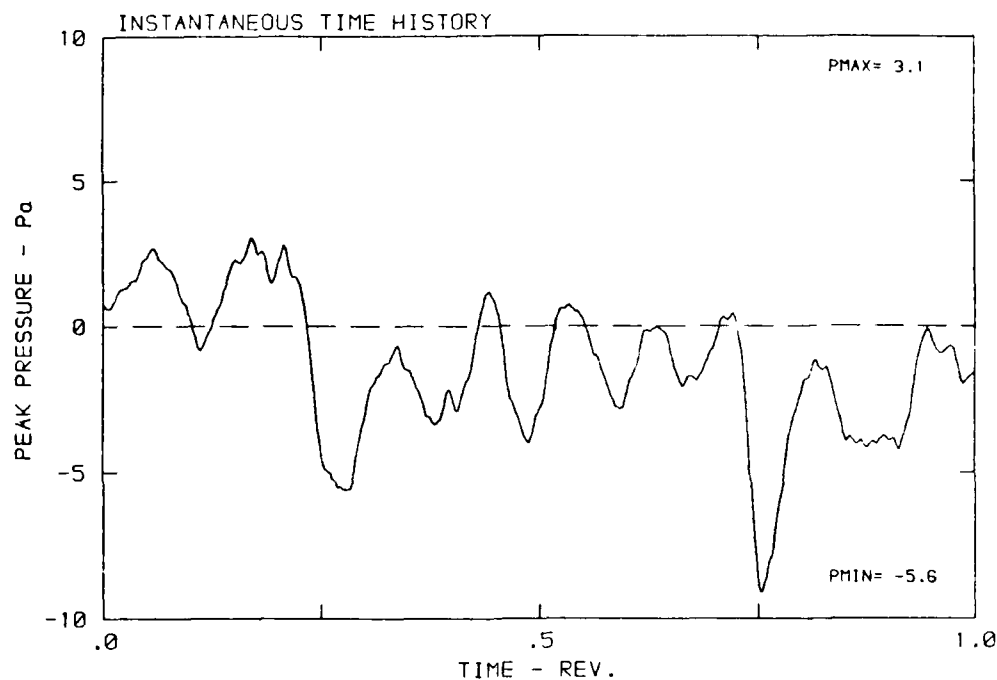
DATA POINT: IN-3 RUN: 38 MP: 5

β : 19.9° MH: .8879 n: 2700 rpm v/u : .268 ϕ : .0° T: 279.1 K



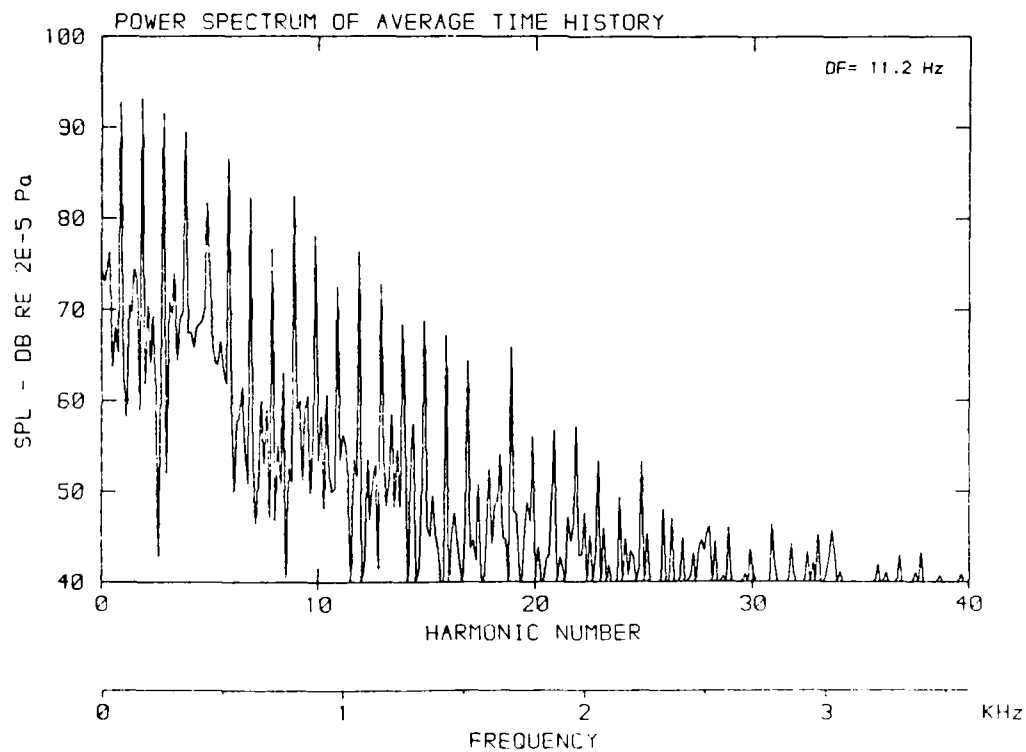
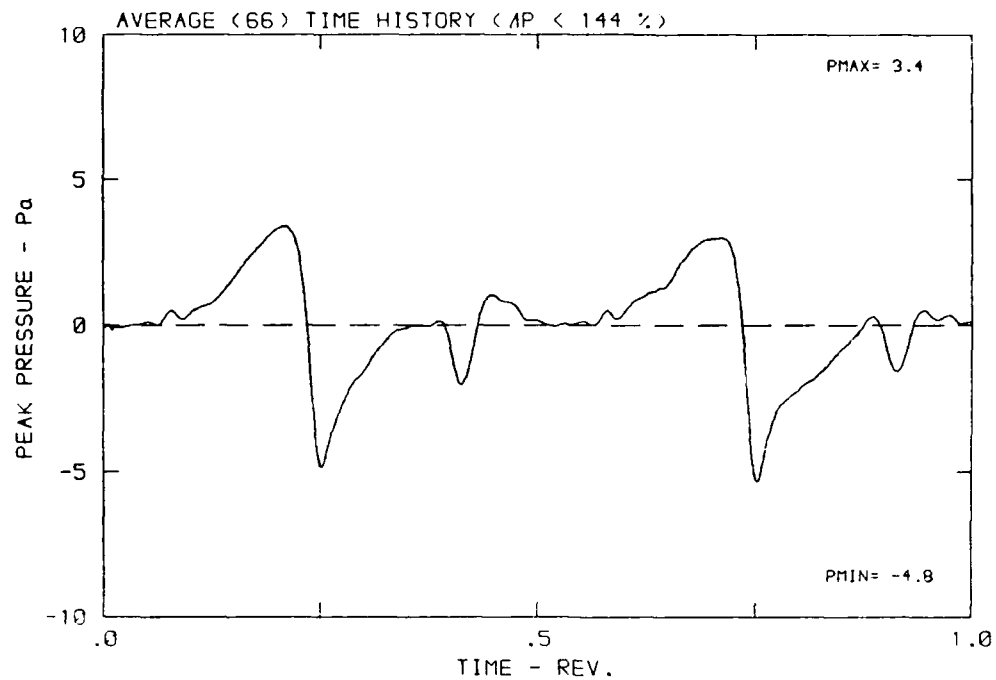
DATA POINT: IN-3 RUN: 38 MP: 6

β : 19.9° MH: .8879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



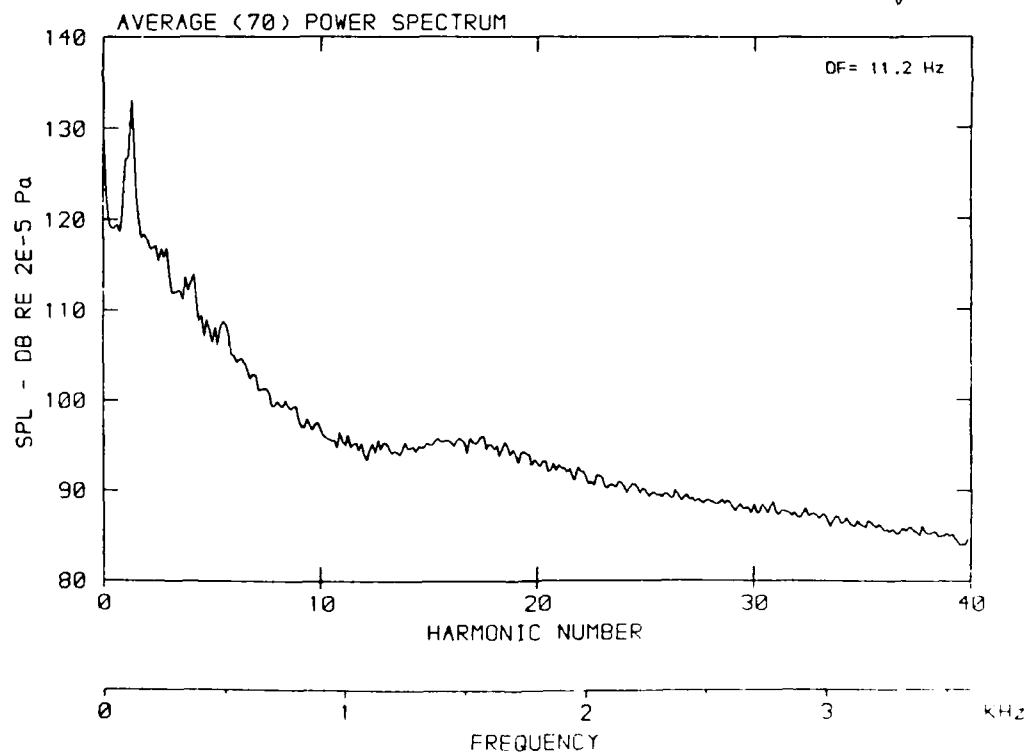
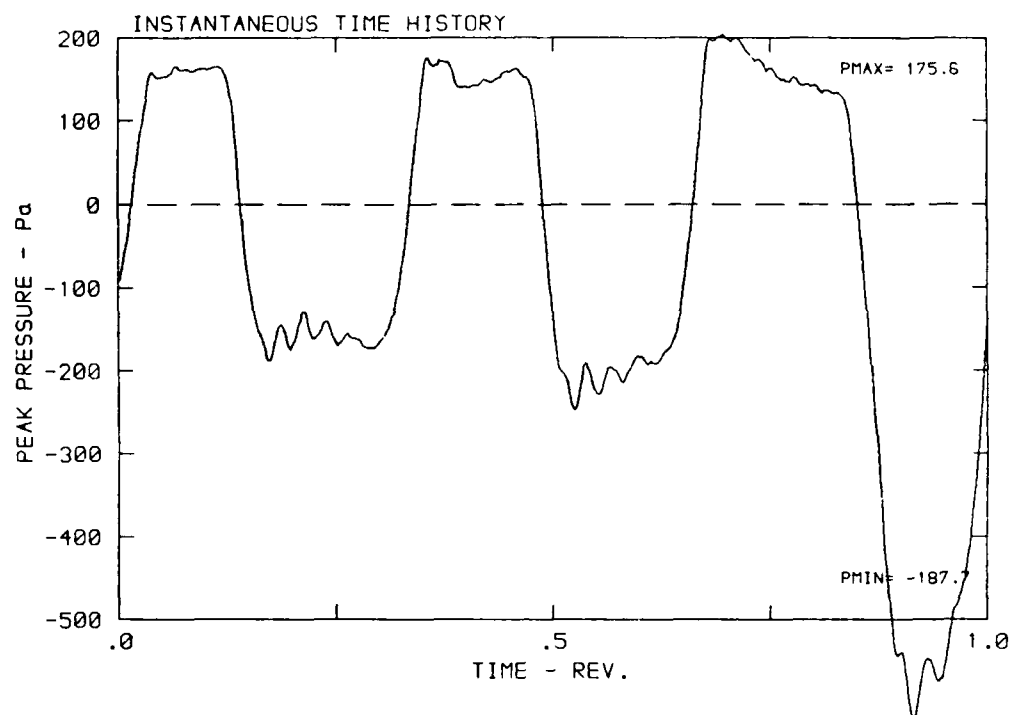
DATA POINT: IN-3 RUN: 38 MP: 6

β : 19.9° MH: .8879 n: 2700 rpm v/u : .268 ϕ : .0° T: 279.1 K



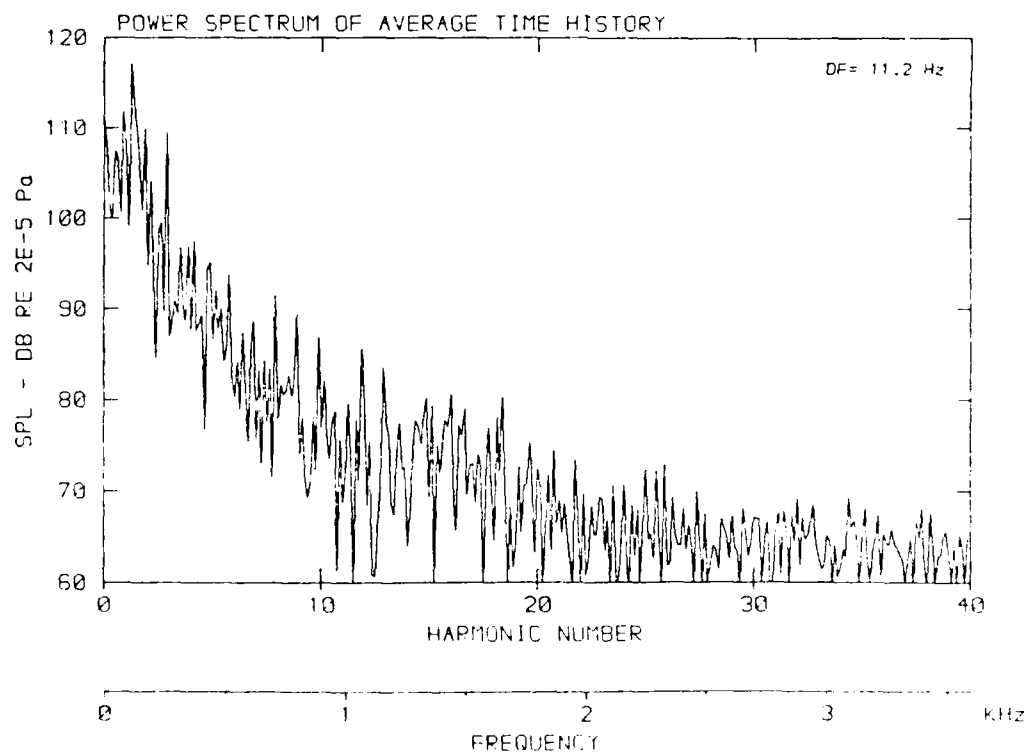
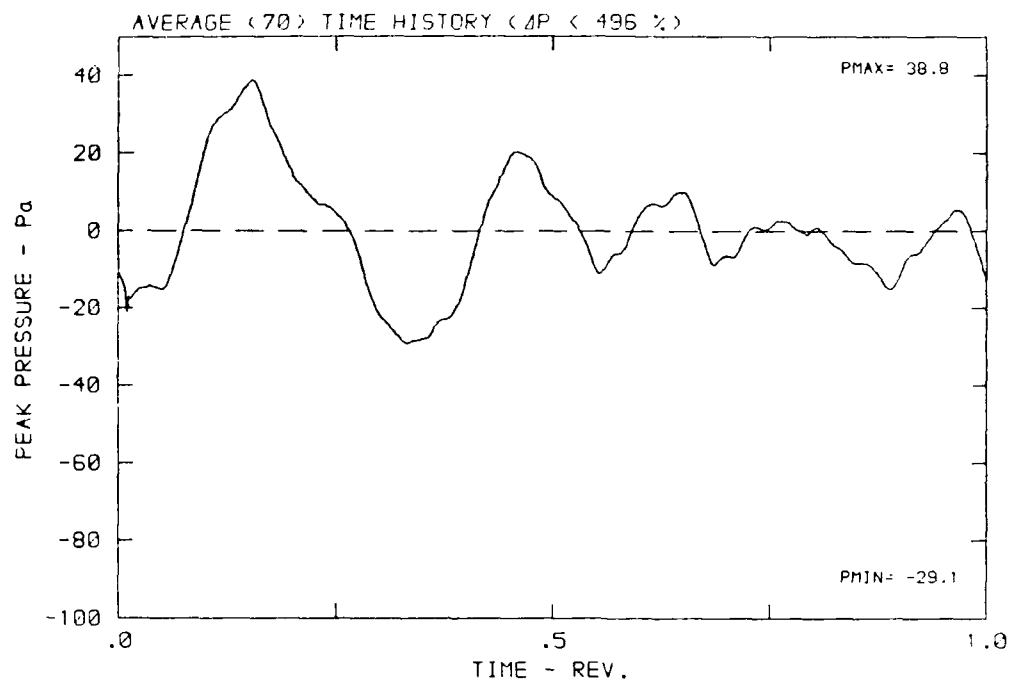
DATA POINT: IN-3 RUN: 38 MP: 7

β : 19.9° MH: .8879 n: 2700 rpm v/u : .268 ϕ : .0° T: 279.1 K



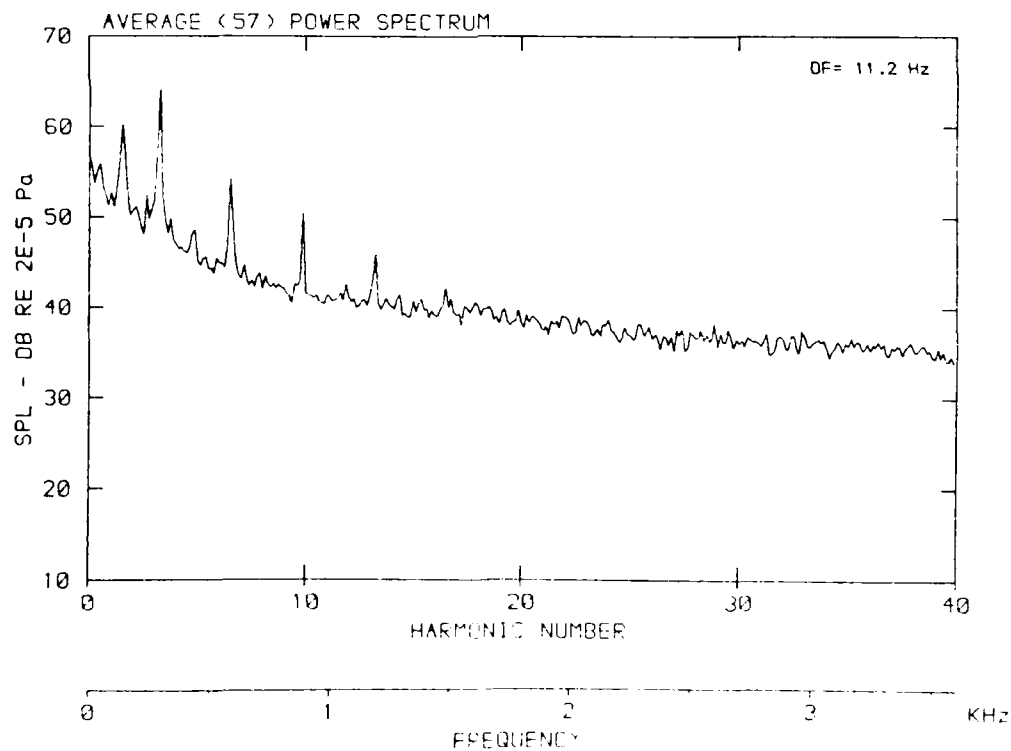
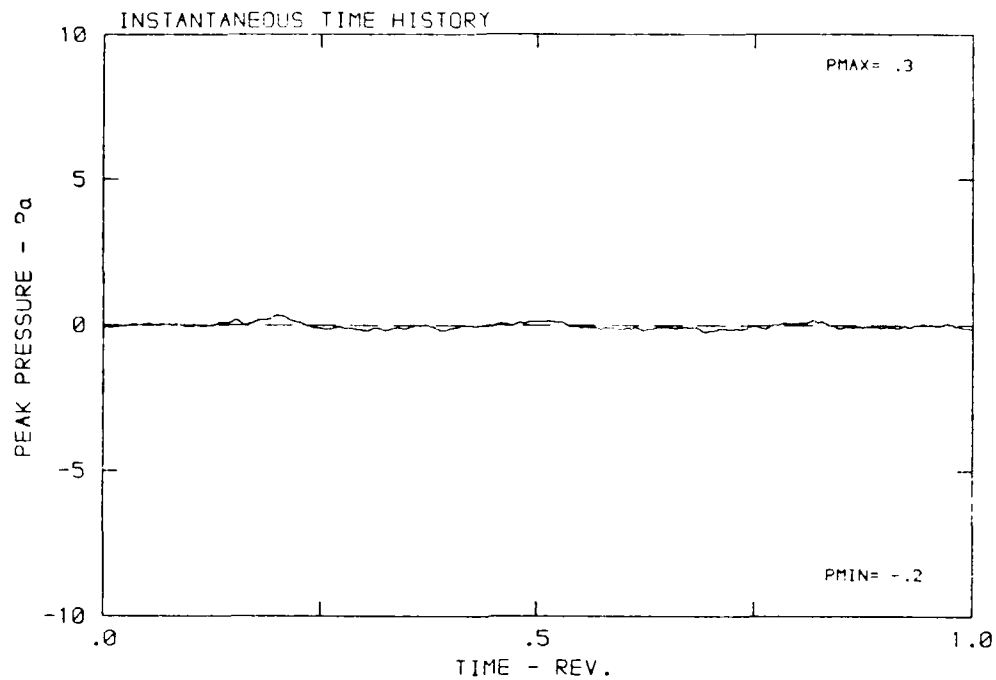
DATA POINT: IN-3 RUN: 38 MP: 7

β : 19.9° MH: .8879 n: 2700 rpm v/u : .268 ϕ : .0° T: 279.1 K



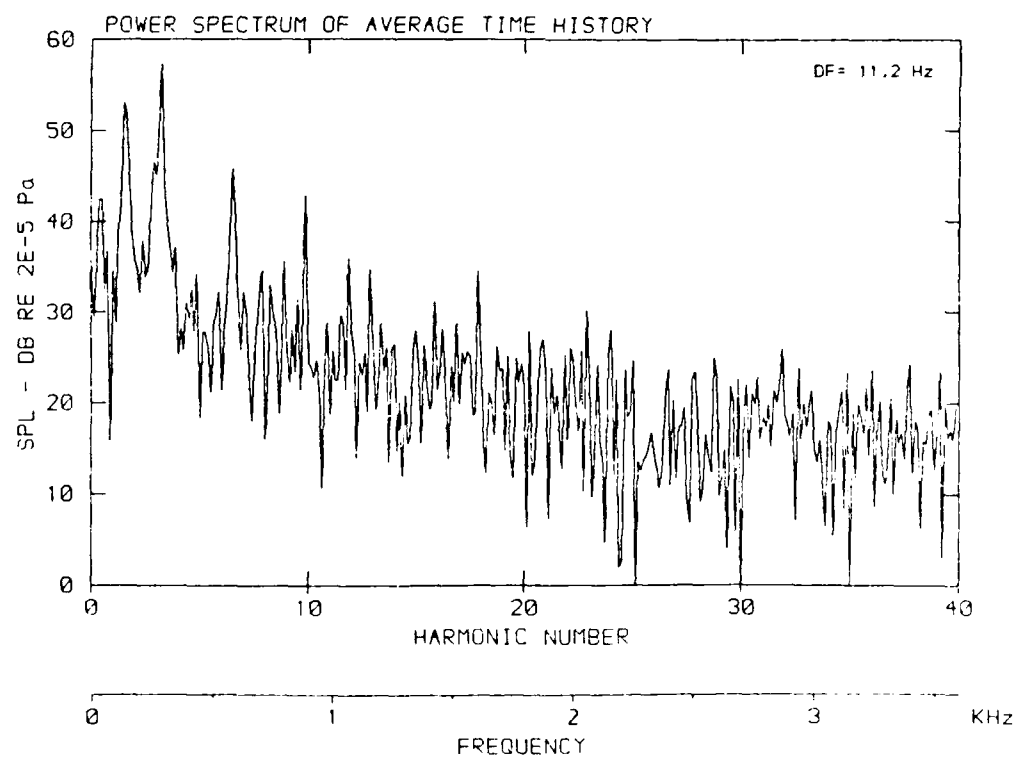
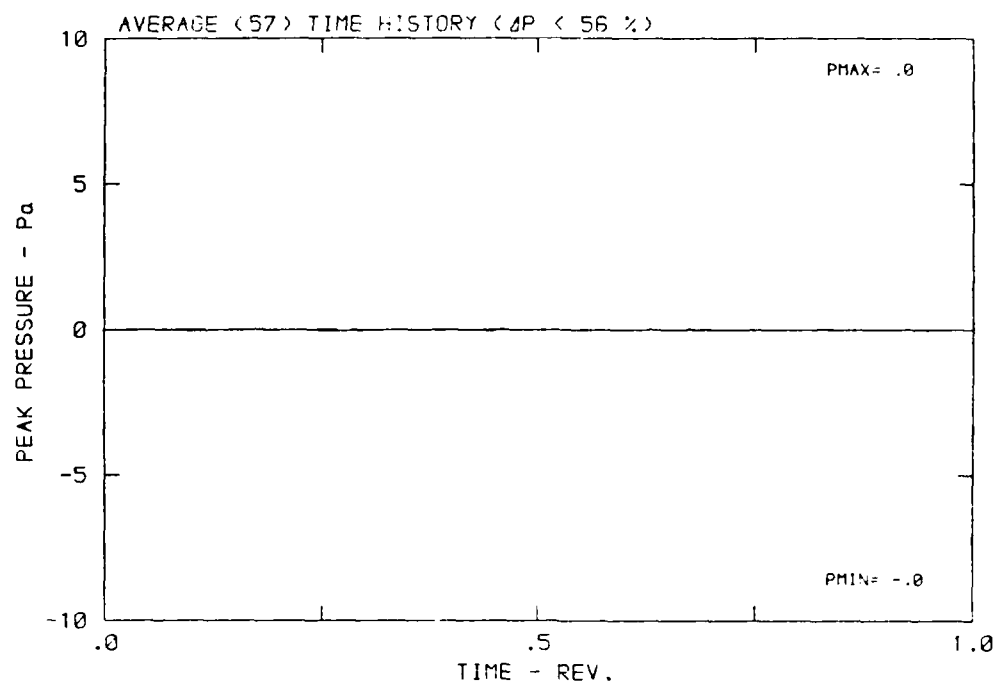
DATA POINT: IN-3 RUN: 38 MP: 9

β : 19.9° MH: .8879 n: 2700 rpm v/u : .258 ϕ : .0° T: 279.1 K



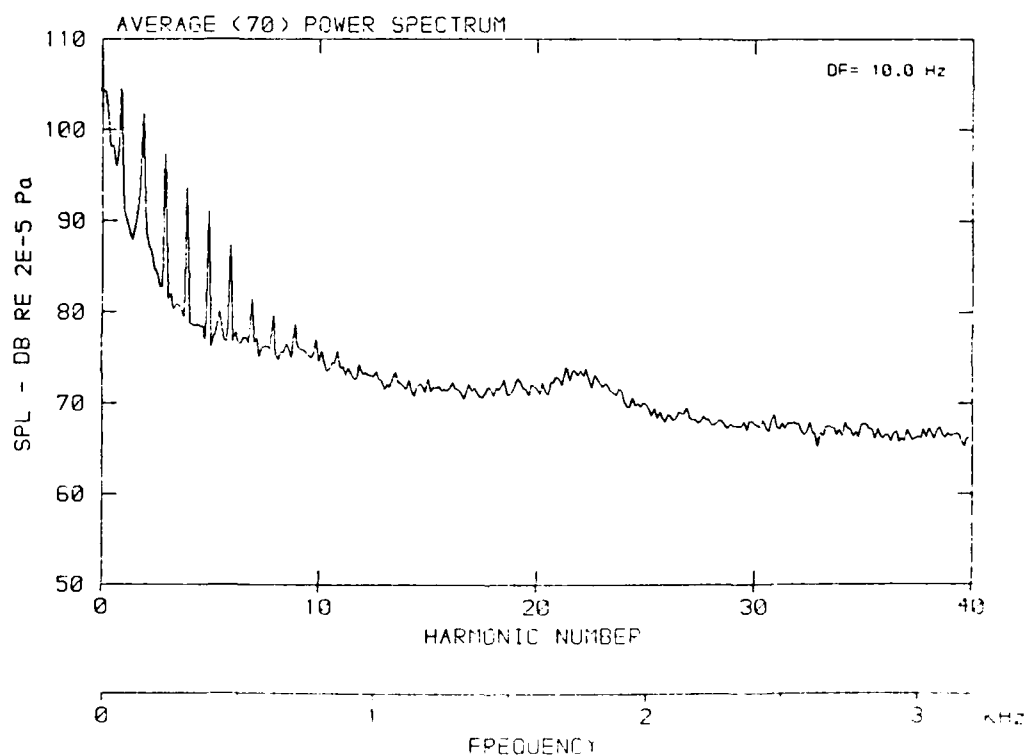
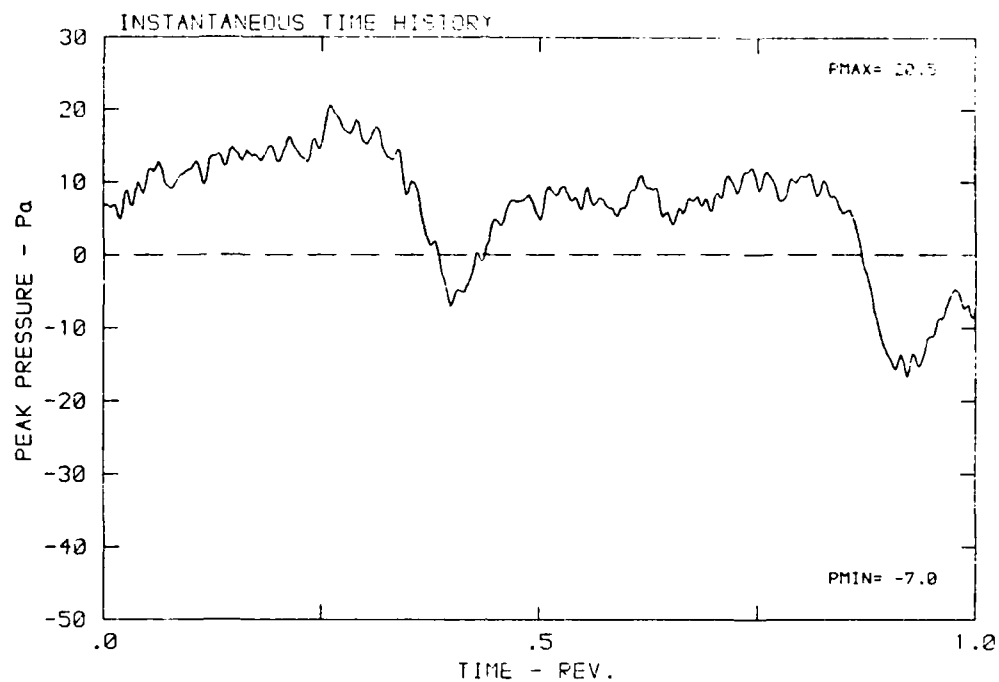
DATA POINT: IN-3 RUN: 38 MP: 9

β : 19.9° MH: .6879 n: 2700 rpm v/u: .268 ϕ : .0° T: 279.1 K



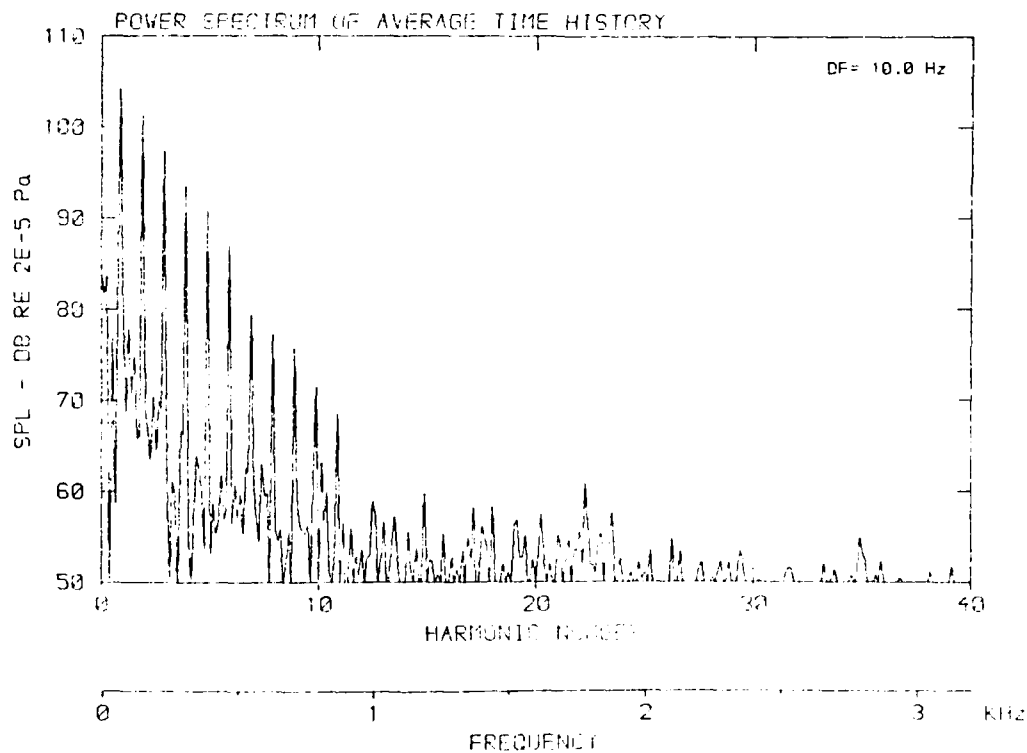
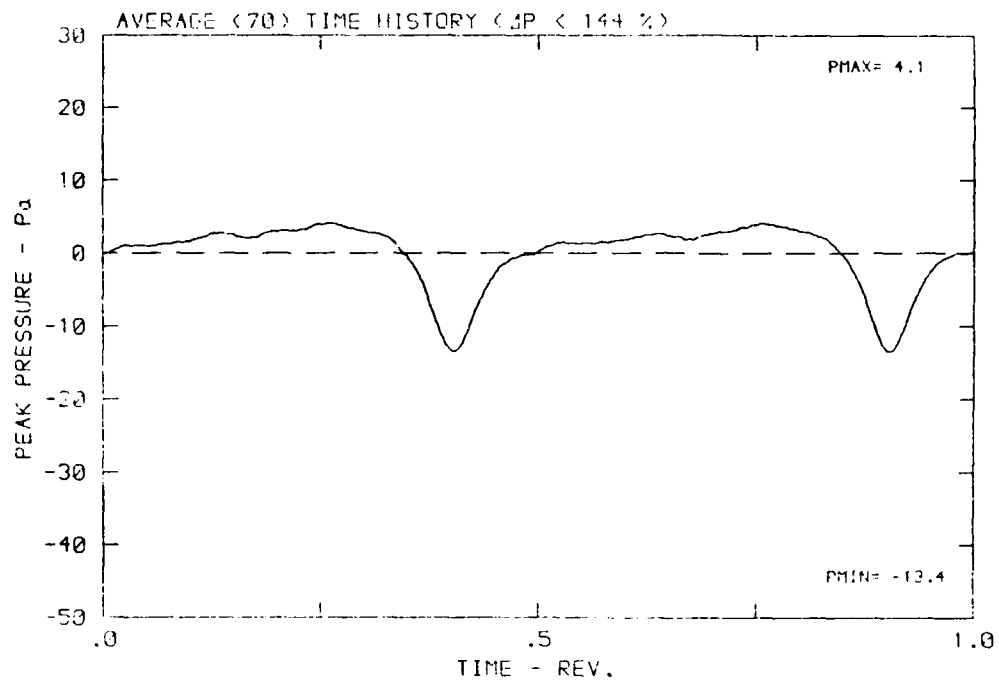
DATA POINT: JN-1 RUN: 187 MP: 1

β : 20.8° MH: .7710 n: 2400 rpm v-u: .001 ϕ : .0° T: 207.0 s

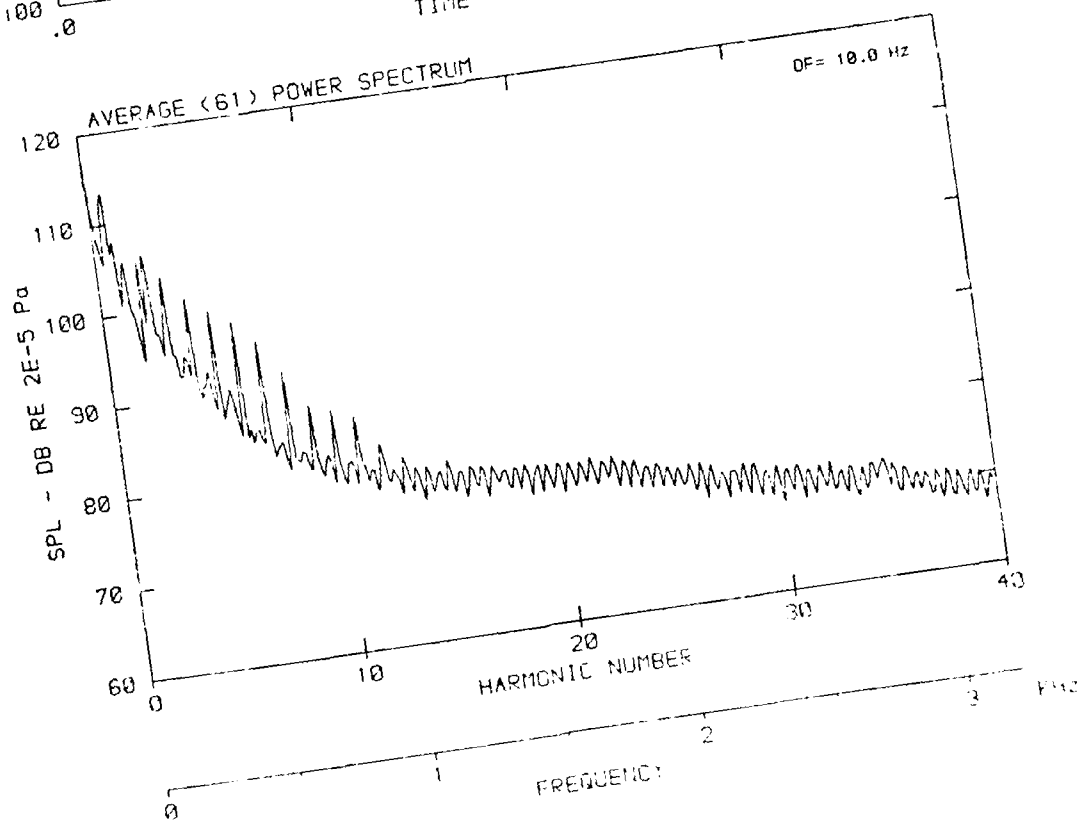
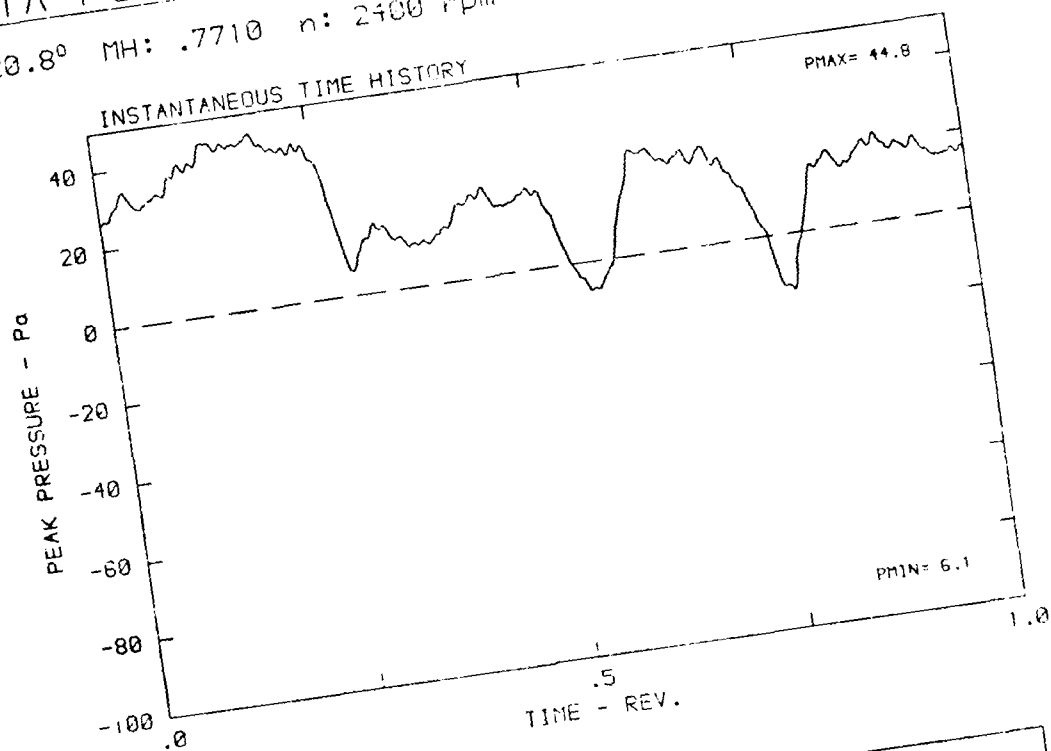


DATA POINT: JN-1 RUN: 188 MP: 1

β : 20.8° MH: .7710 n: 2400 rpm v/u : .301 ϕ : .0° T: 297.6 K

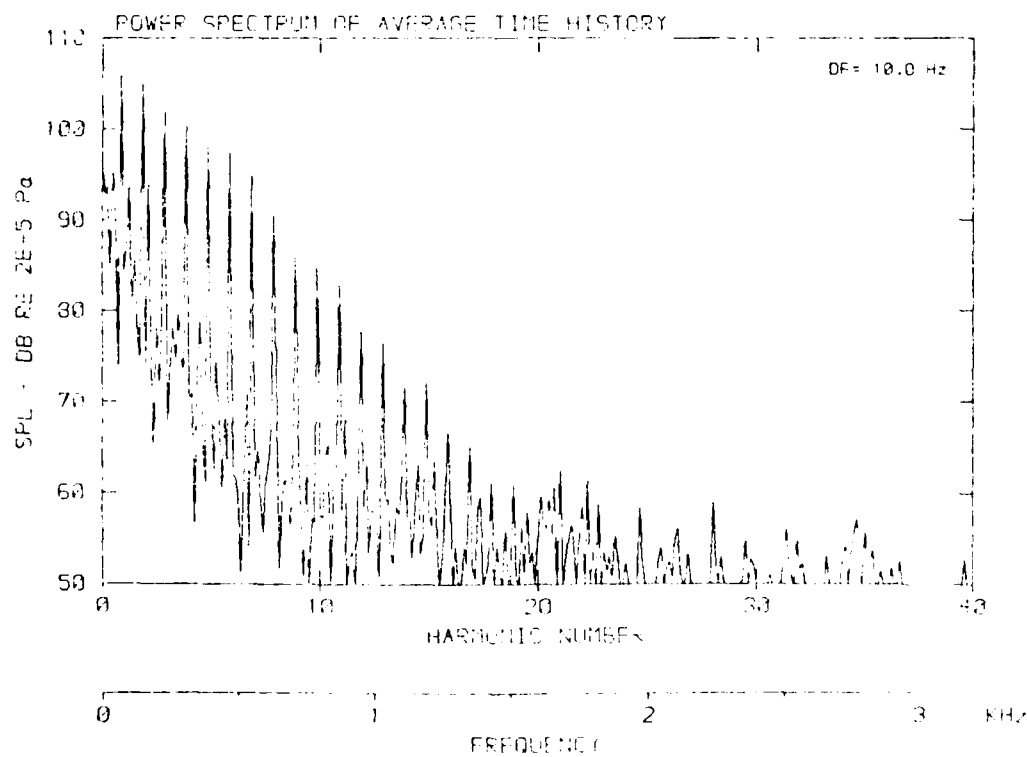
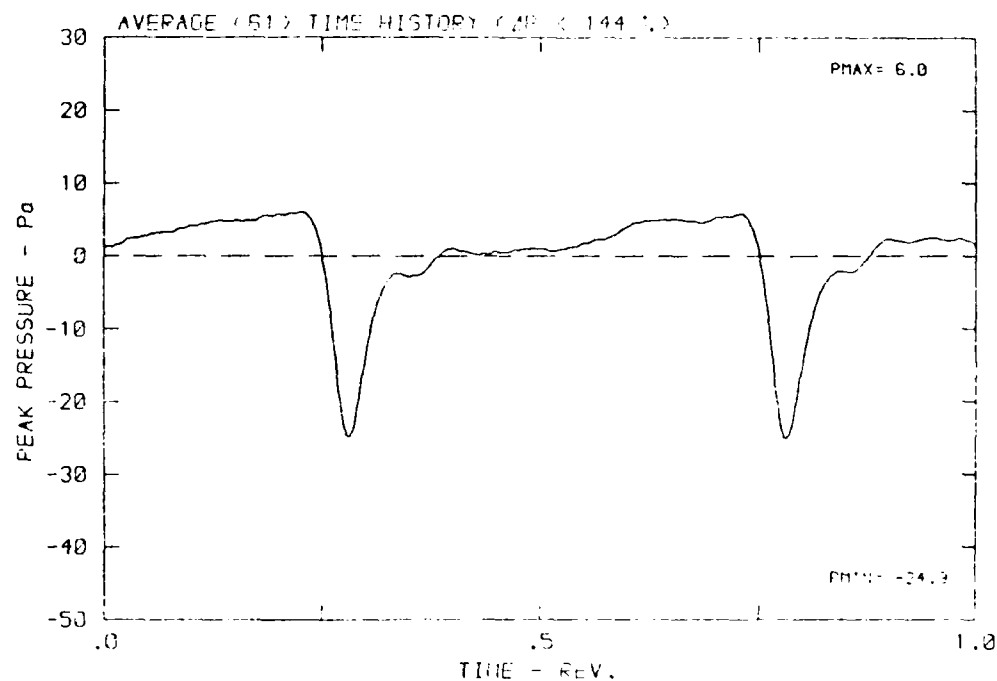


DATA POINT: JN-1 RUN: 16 MP: 2
 β : 20.8° MH: .7710 n: 2400 rpm v/u : .301 ϕ : .0° Γ : 297.6



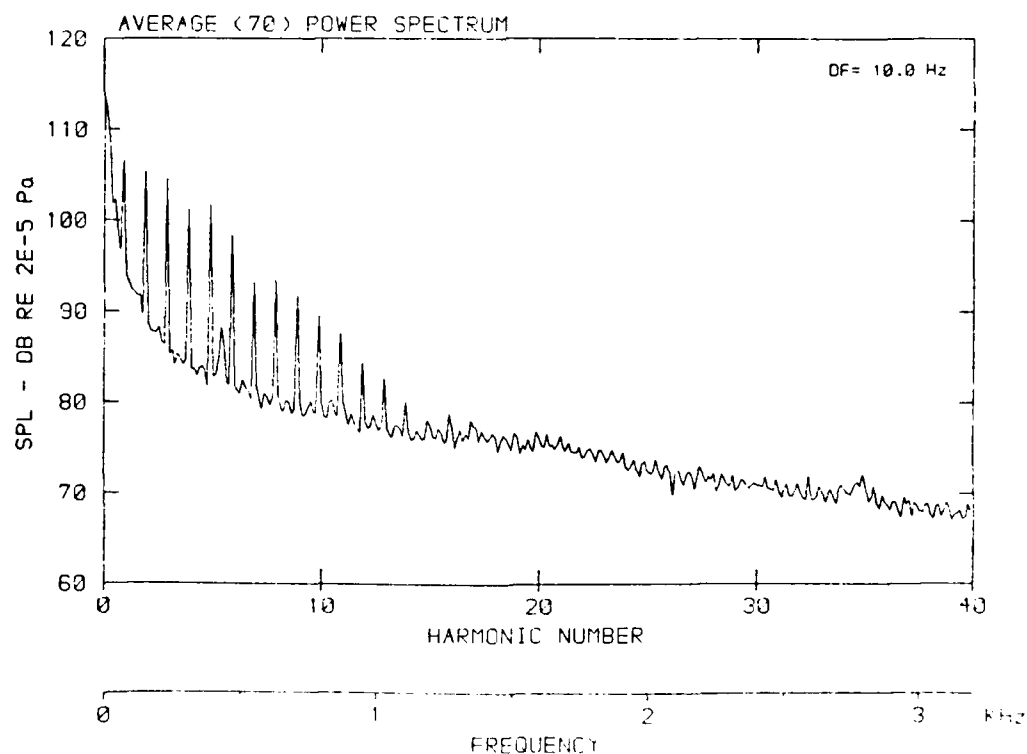
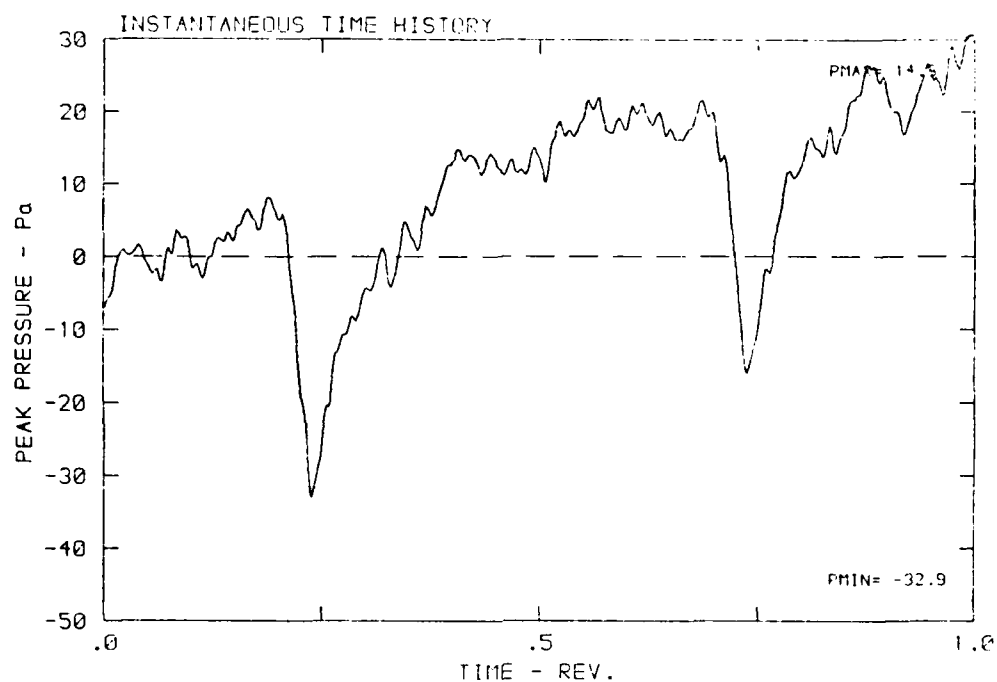
DATA POINT: JN-1 RUN: 188 MP: 2

β : 20.8° MH: .7710 n: 2400 rpm v/u : .301 ϕ : .0° T: 297.6 K



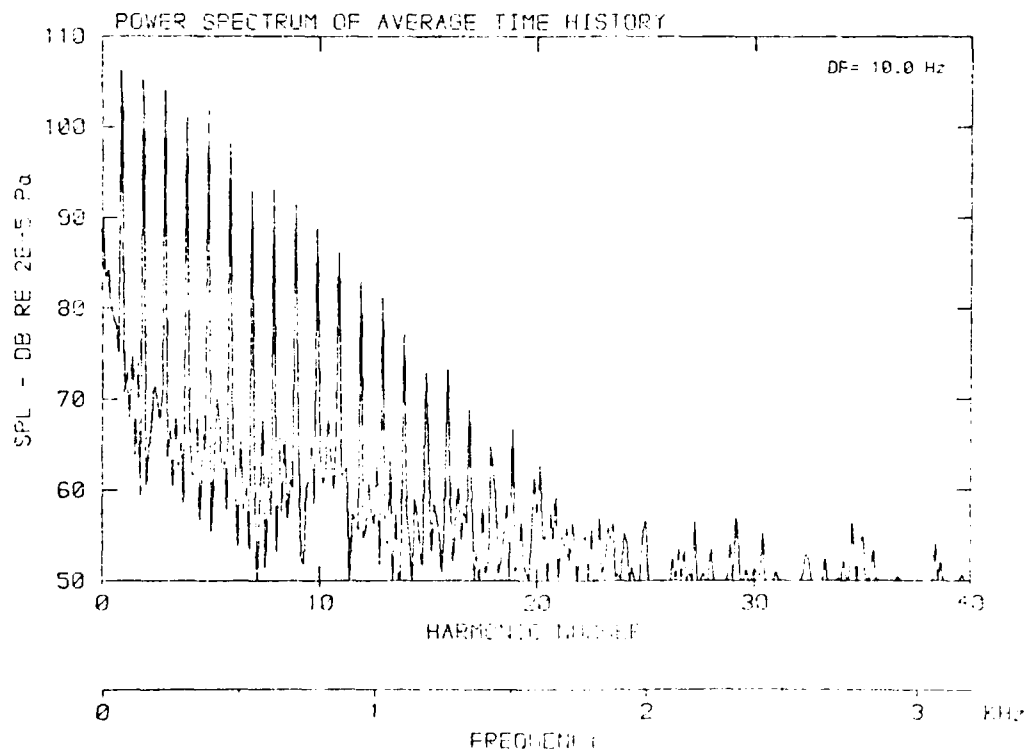
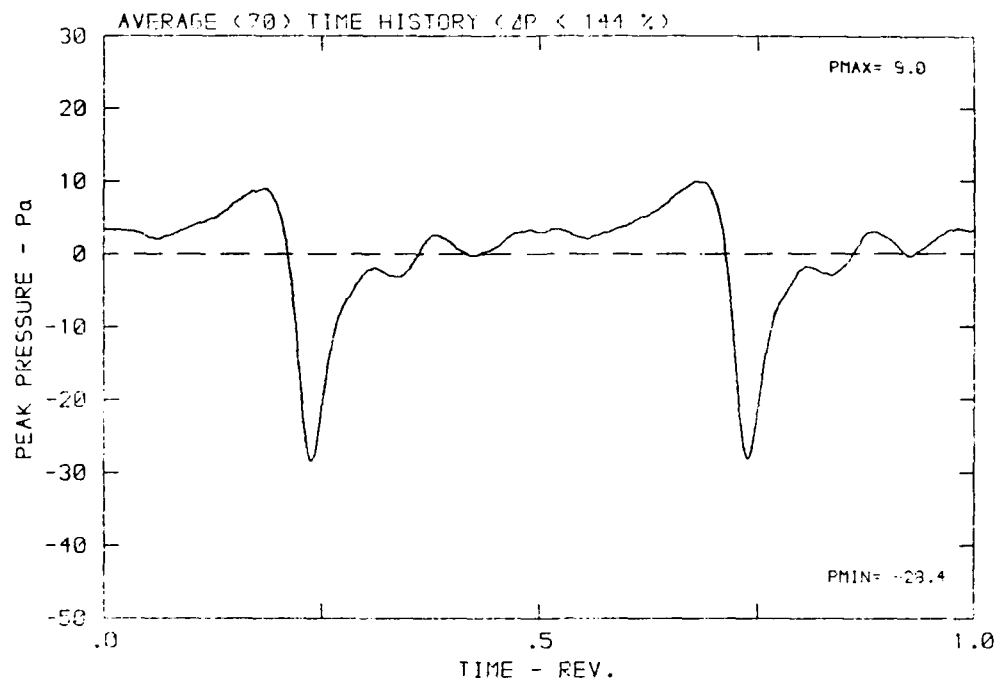
DATA POINT: JN-1 RUN: 15P NP: 3

β : 20.8° MH: .7710 n: 2400 rpm vru: .331 ϕ : .0° T: 207.6



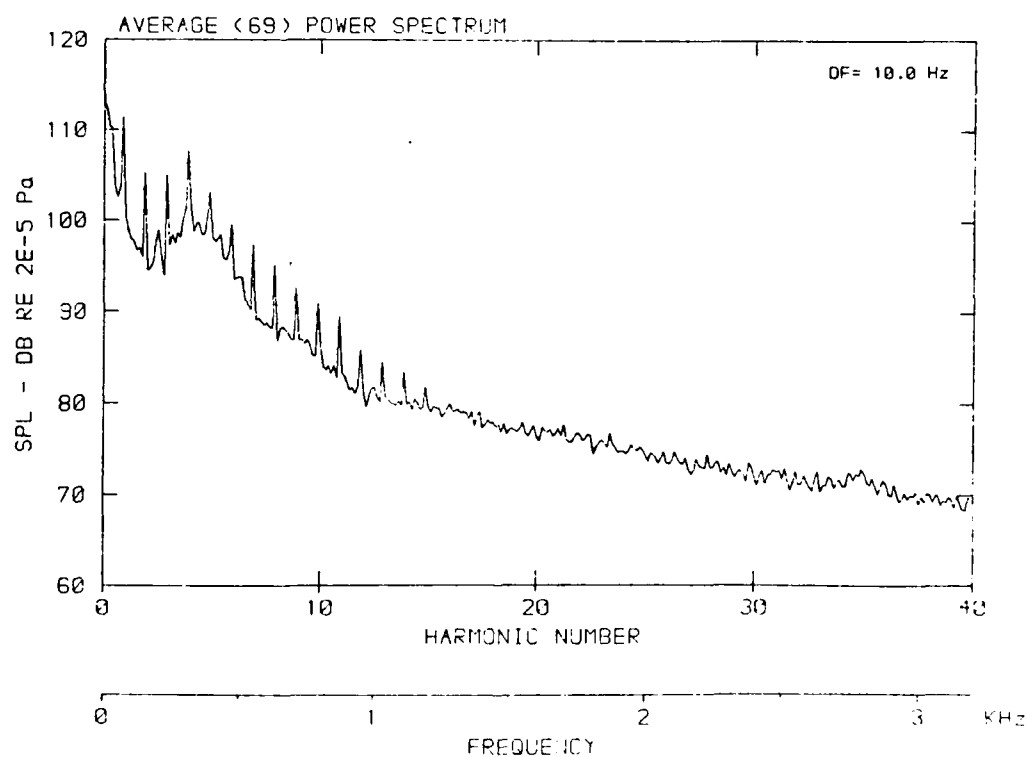
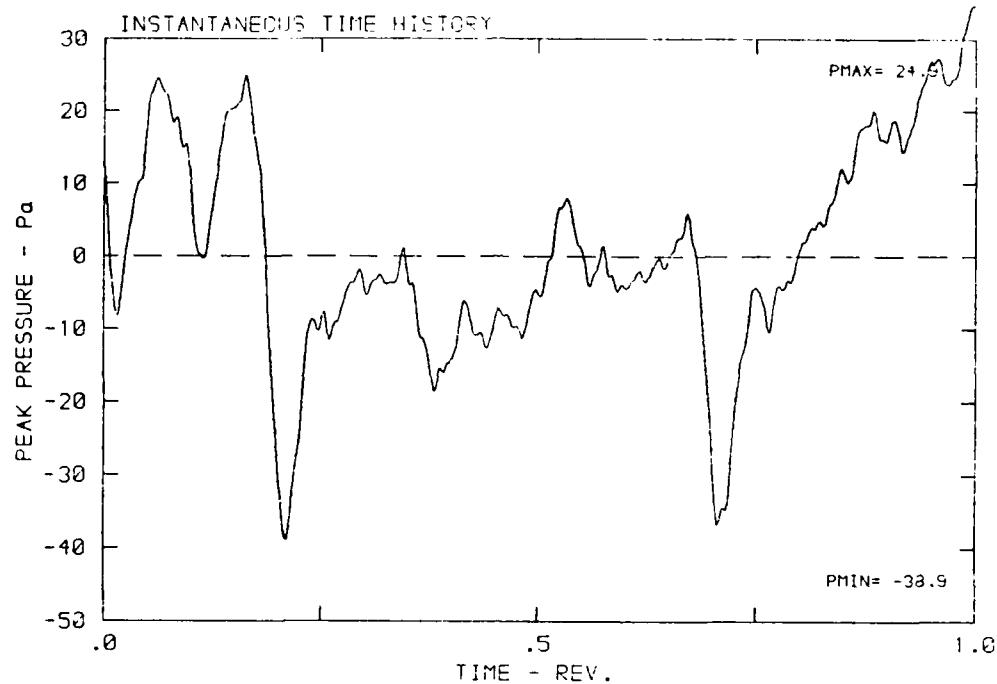
DATA POINT: JN-1 RUN: 188 MP: 3

β : 20.8° MH: .7710 n: 2400 rpm vzu: .301 ϕ : .0° T: 297.6 K



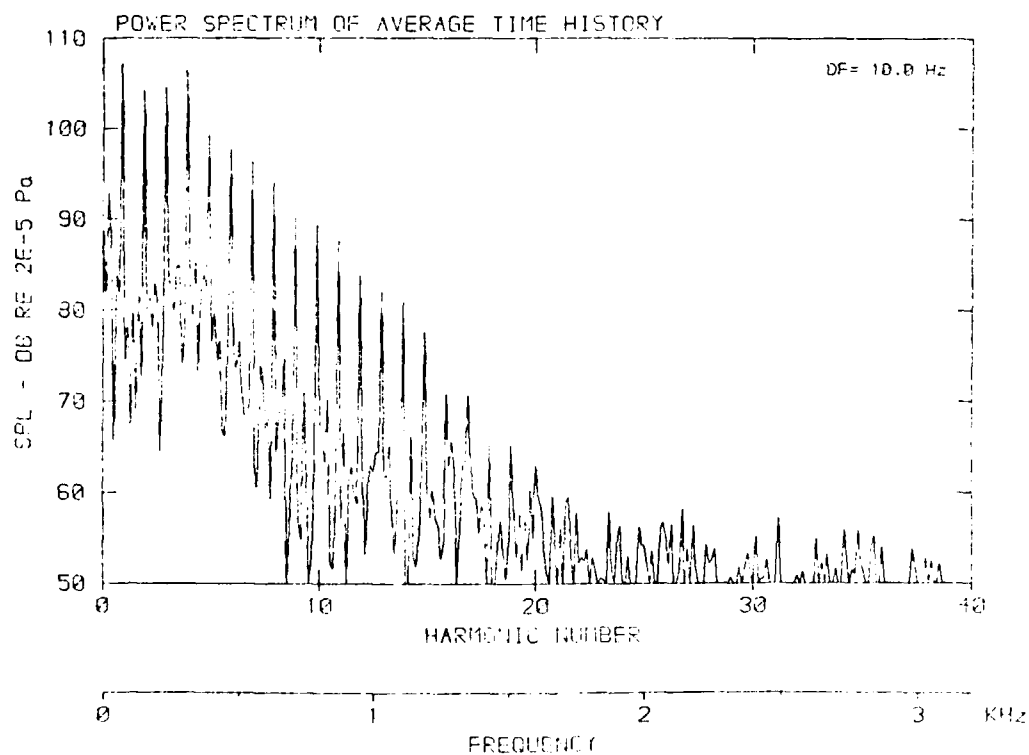
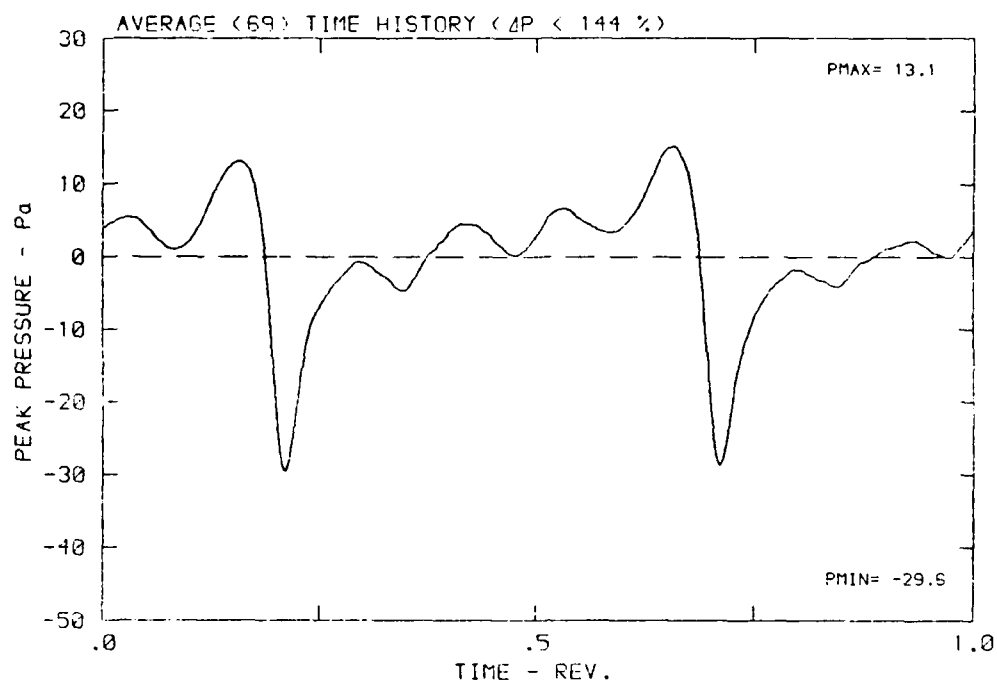
DATA POINT: JN-1 RUN: 100 MP: 100

β : 20.8° MH: .7710 n: 2400 rpm v/a: .001 ϕ : .0° T: 297.6 K



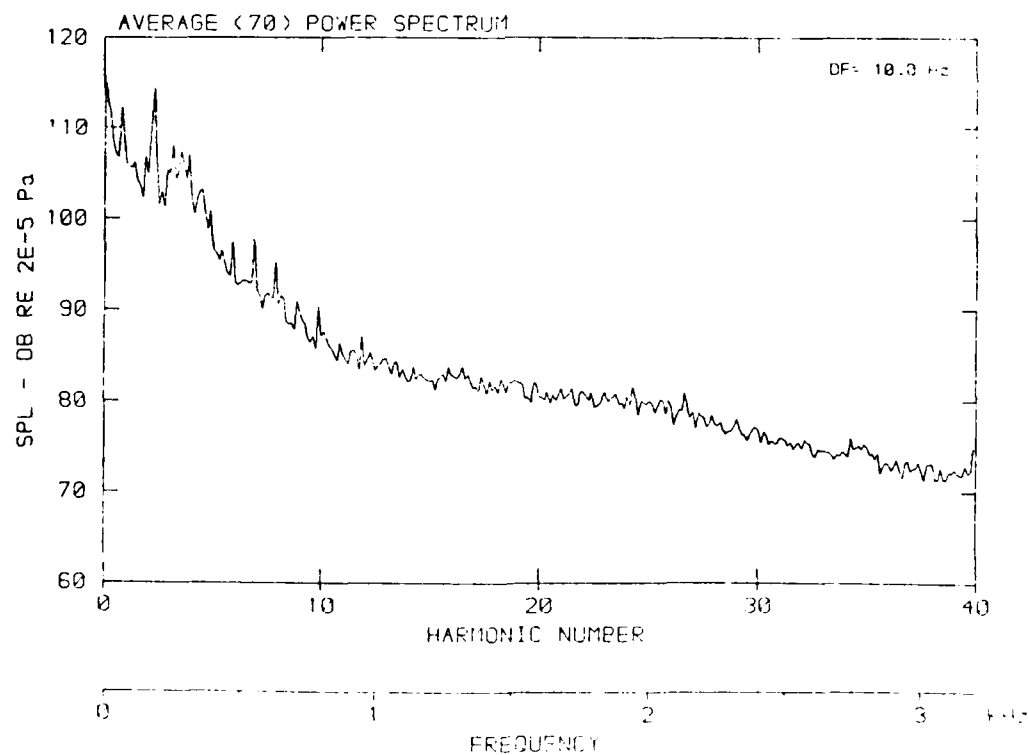
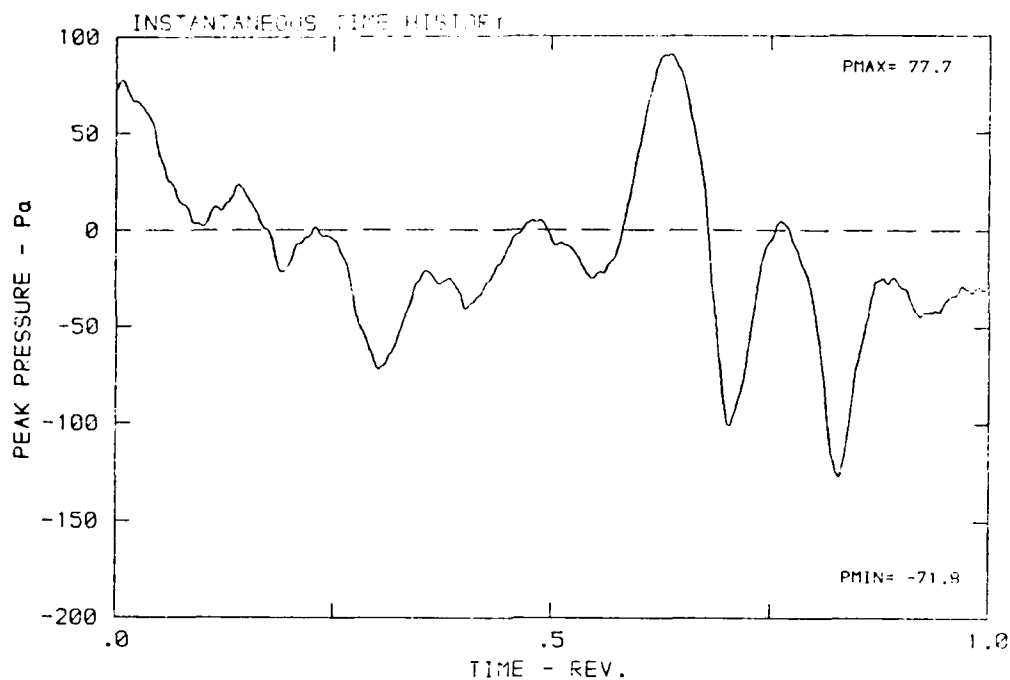
DATA POINT: JN-1 RUN: 188 MP: 4

β : 20.8° MH: .7710 n: 2400 rpm v/u: .301 ϕ : .0° T: 297.6 K



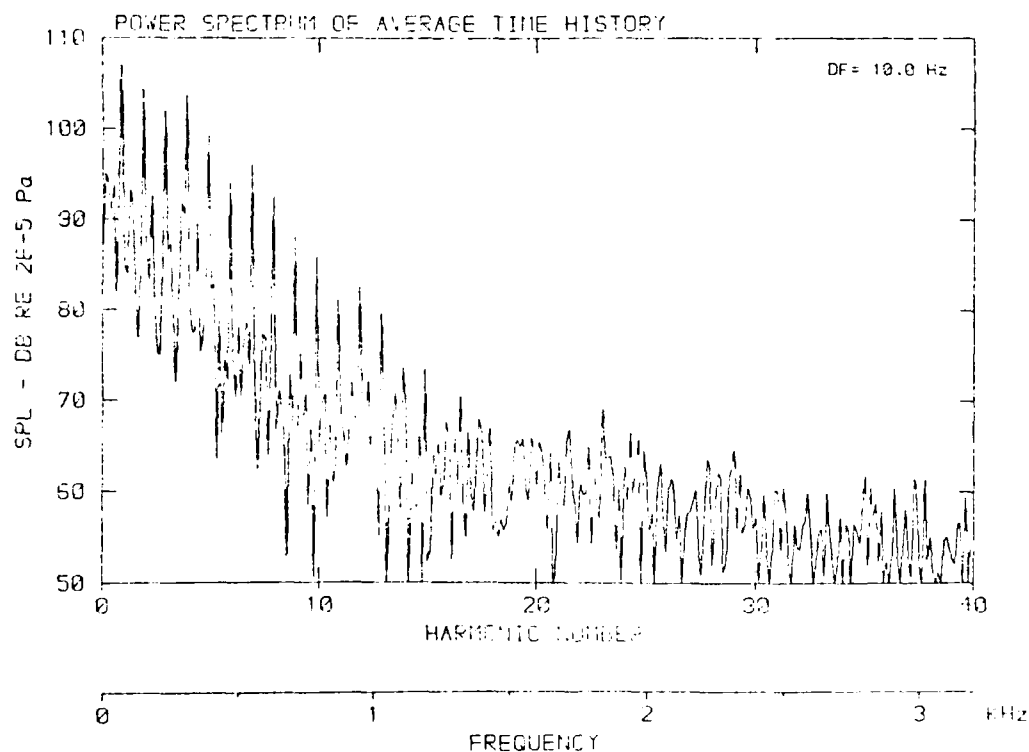
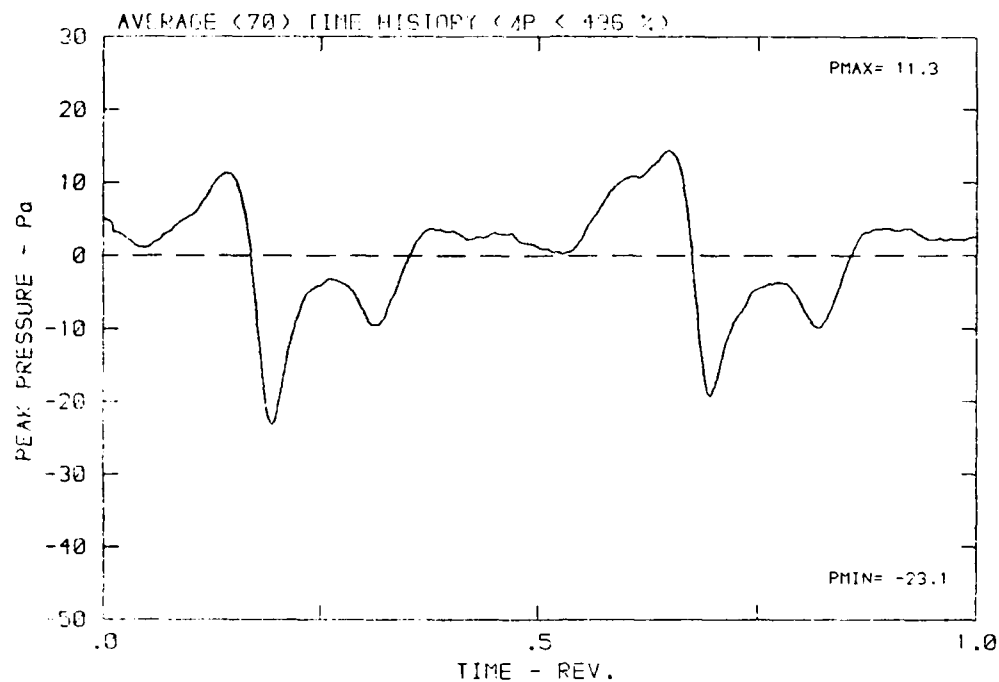
DATA POINT: JN-1 RUN: 188 MP: 5

β : 20.8° MH: .7710 n: 2400 rpm ν/α : .301 ϕ : .0° T: 297.6 K



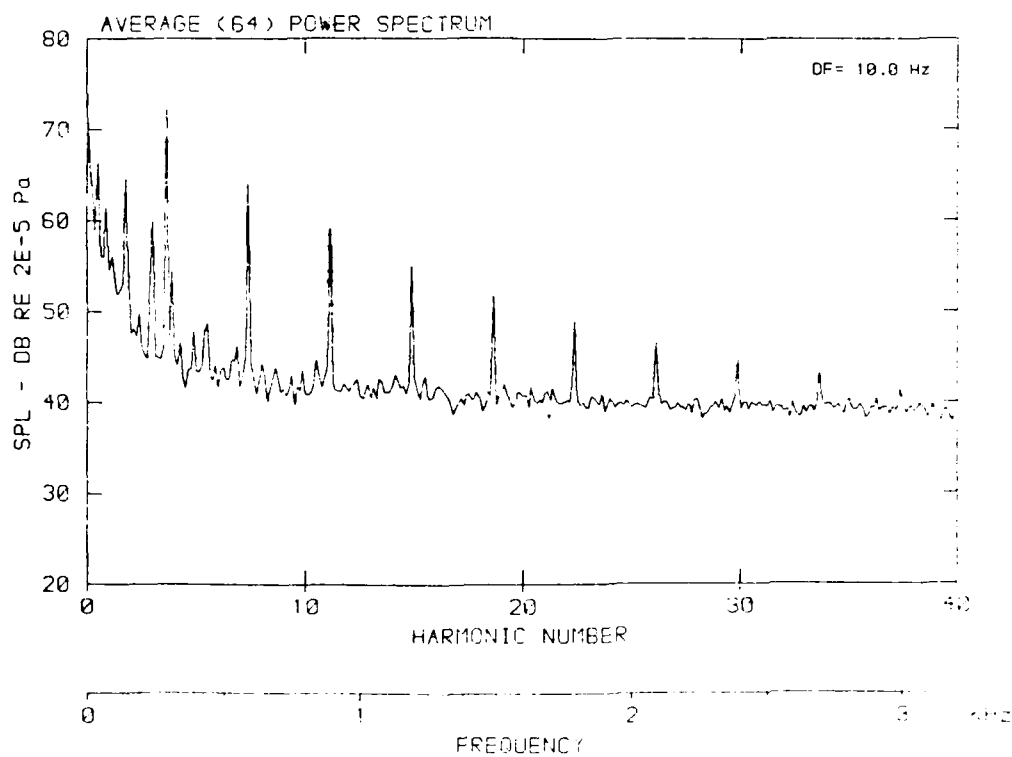
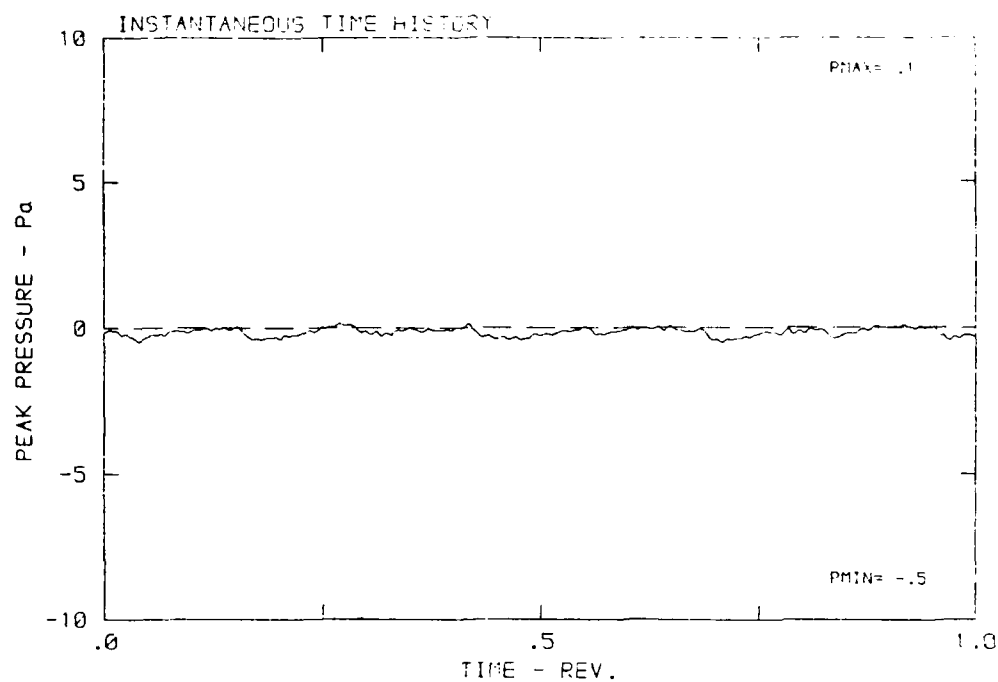
DATA POINT: JN-1 RUN: 188 MP: 5

β : 20.8° MH: .7710 n: 2400 rpm v/u: .301 ϕ : .0° T: 297.6 K



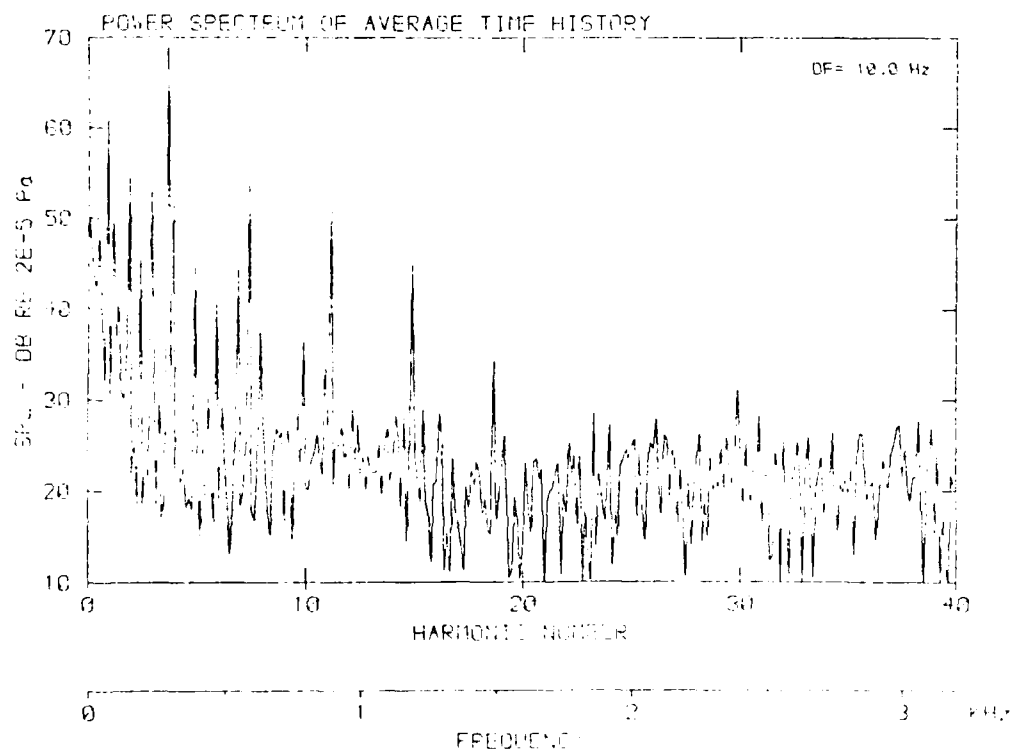
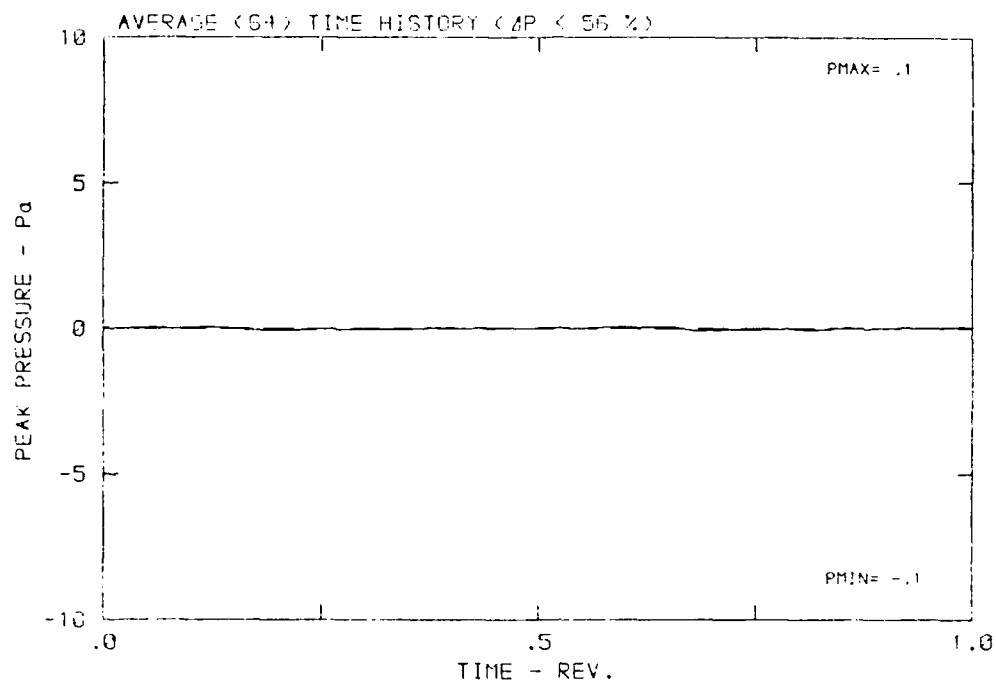
DATA POINT: JN-1 RUN: 128 REF: 1

β : 20.6° MH: .7710 n: 2420 rpm v: 0.001 ϕ : .001 τ : 1.00



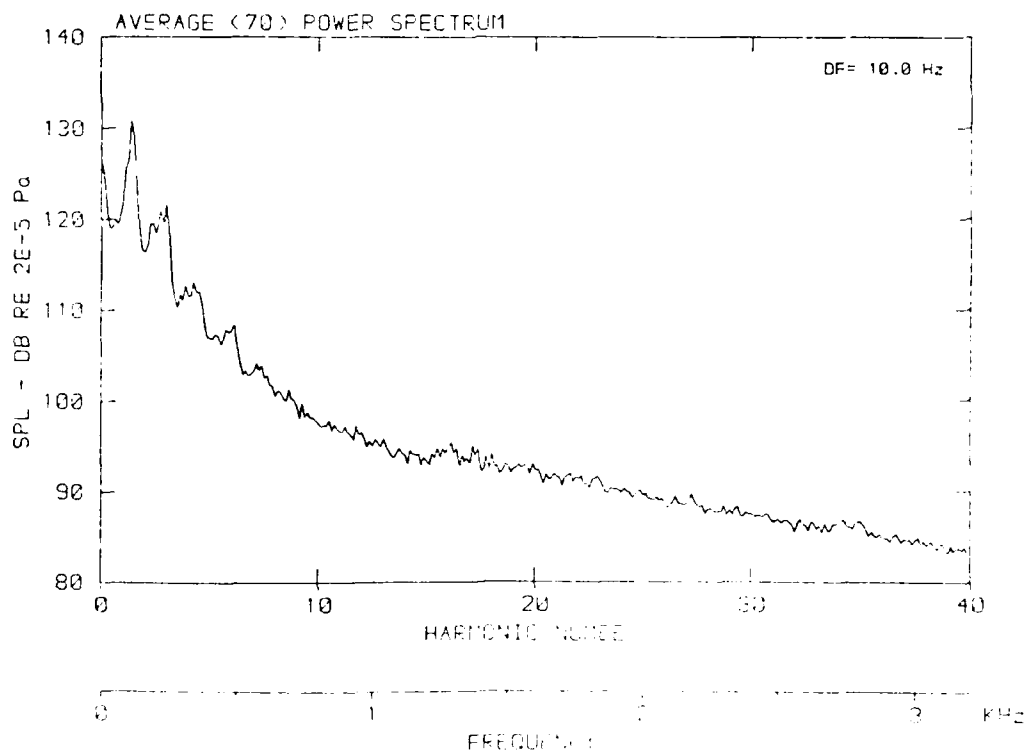
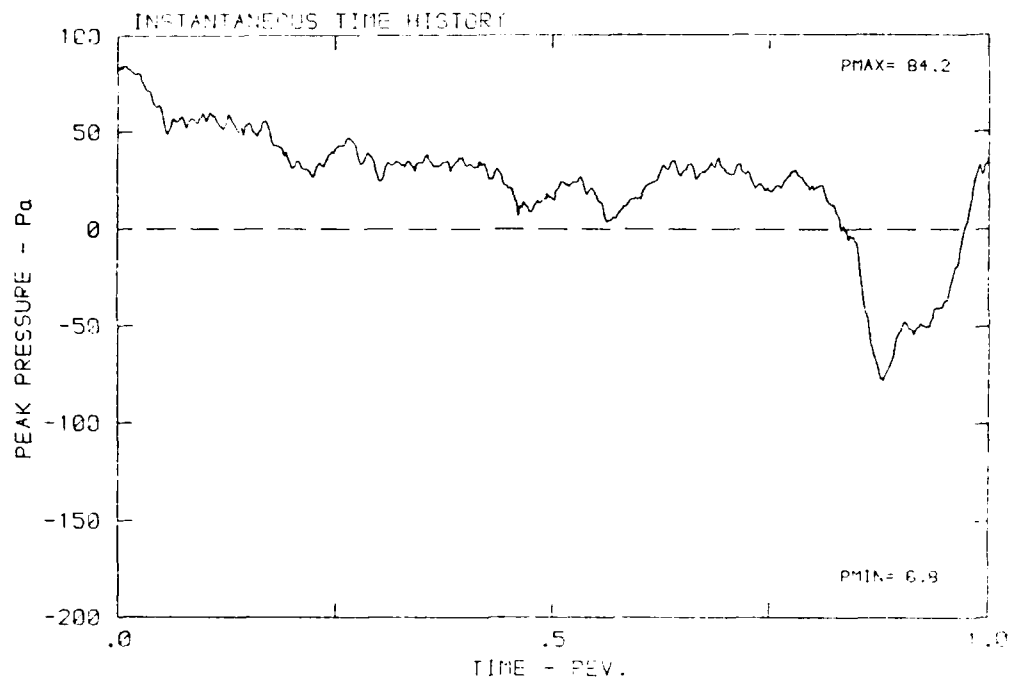
DATA POINT: JN-1 RUN: 188 MP: 6

β : 20.6° MH: .7710 n: 2400 rpm v/u : .301 ϕ : .0° T: 297.6 K



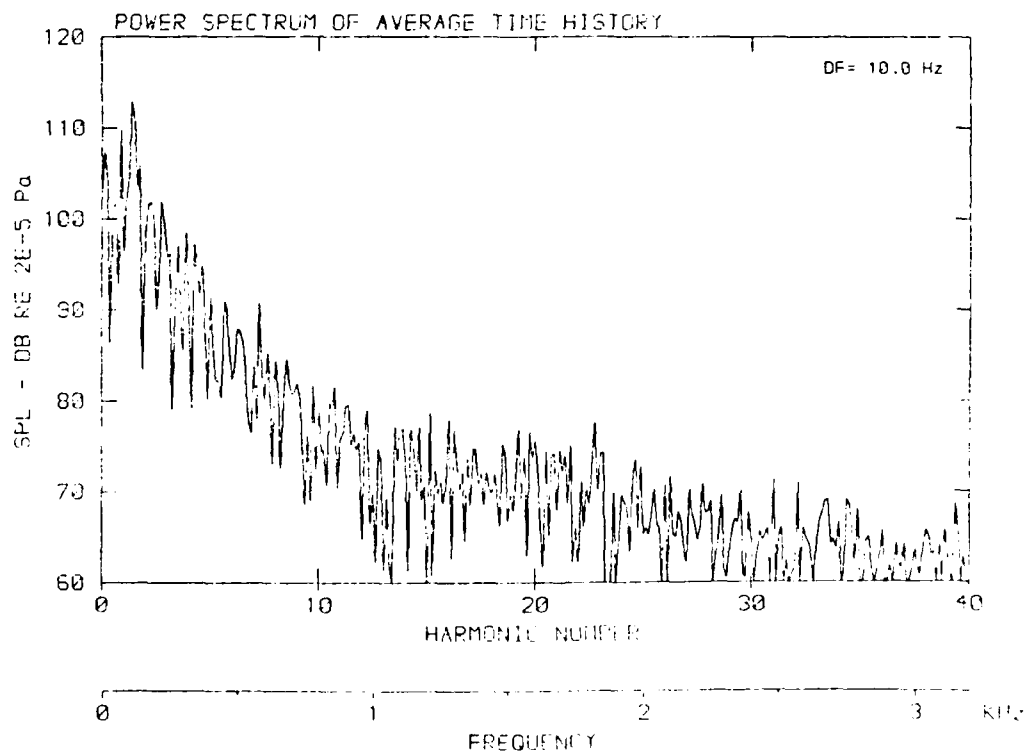
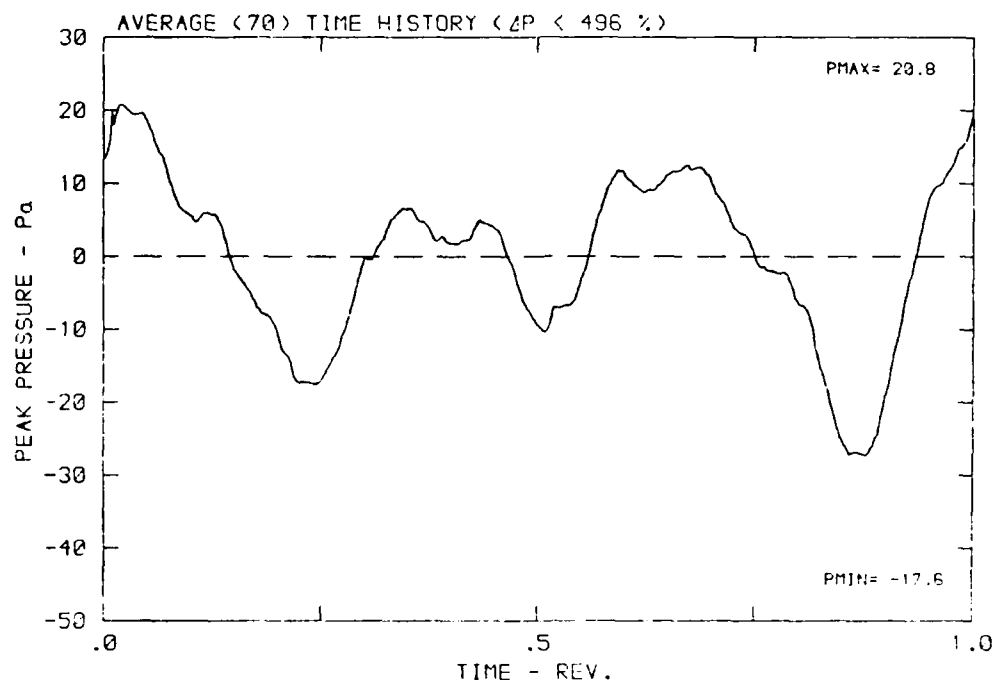
DATA POINT: JN-1 RUN: 158 MF: 7

β : 20.6° TH: .7710 n: 2400 rpm v: .201 ϕ : .0° T: 207.6 s



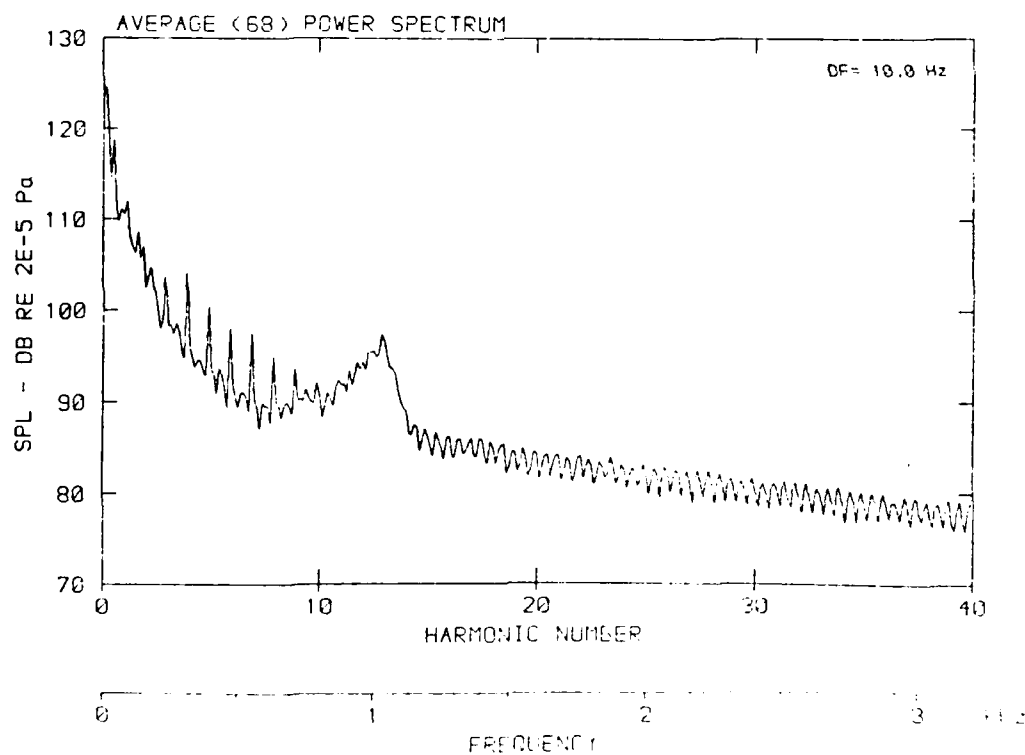
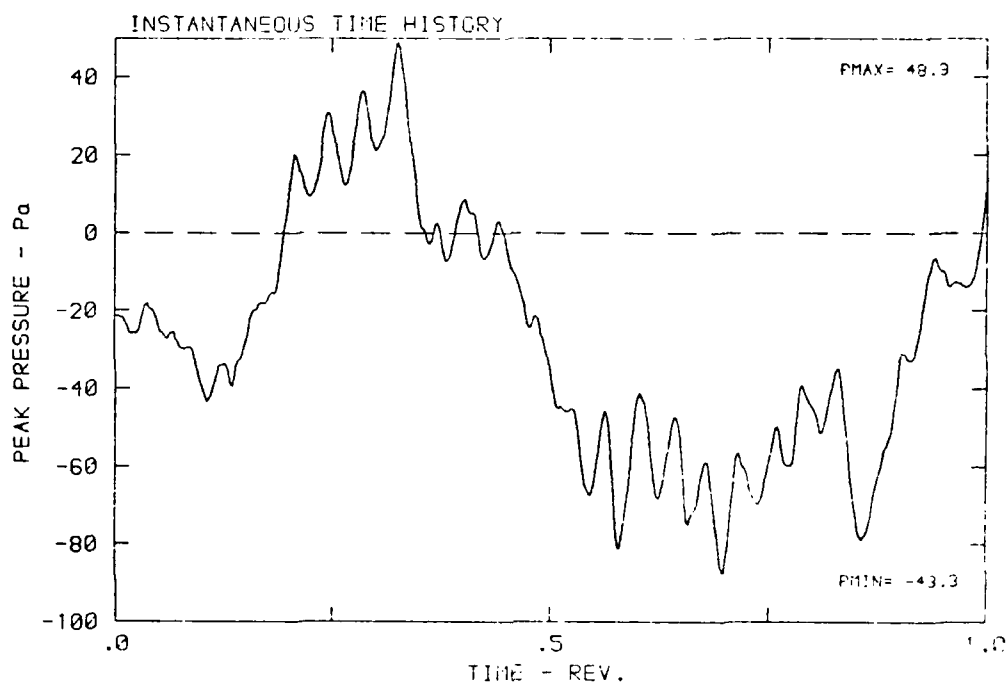
DATA POINT: JN-1 RUN: 188 MP: 7

β : 20.8° MH: .7710 n: 2400 rpm v/u: .301 ϕ : .0° T: 297.6 K



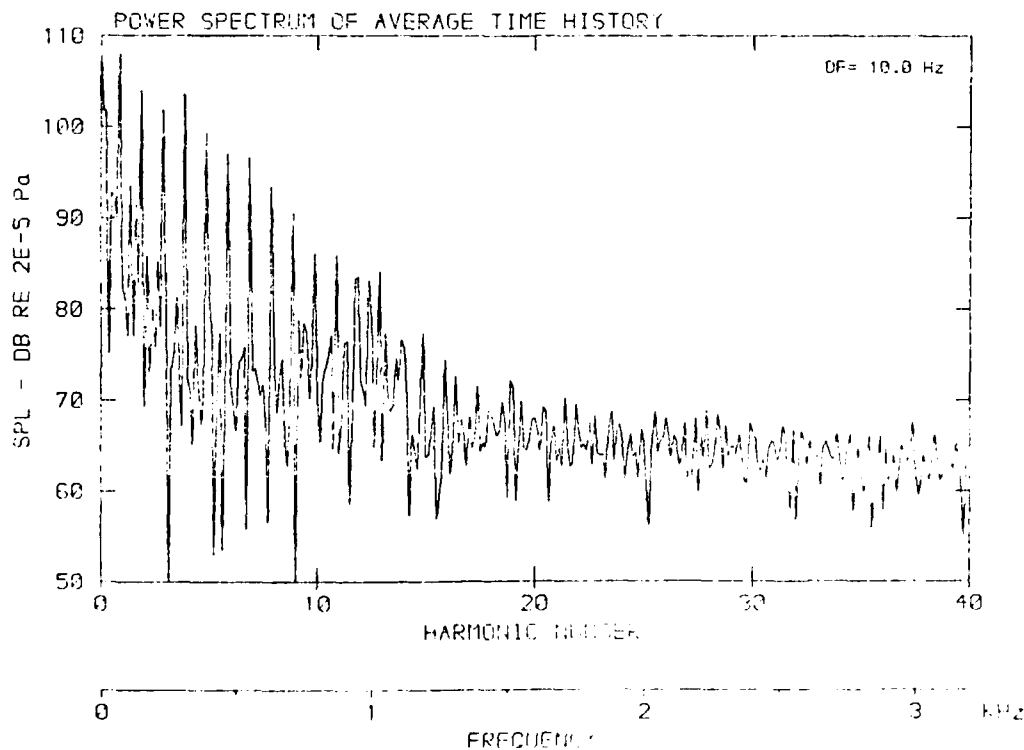
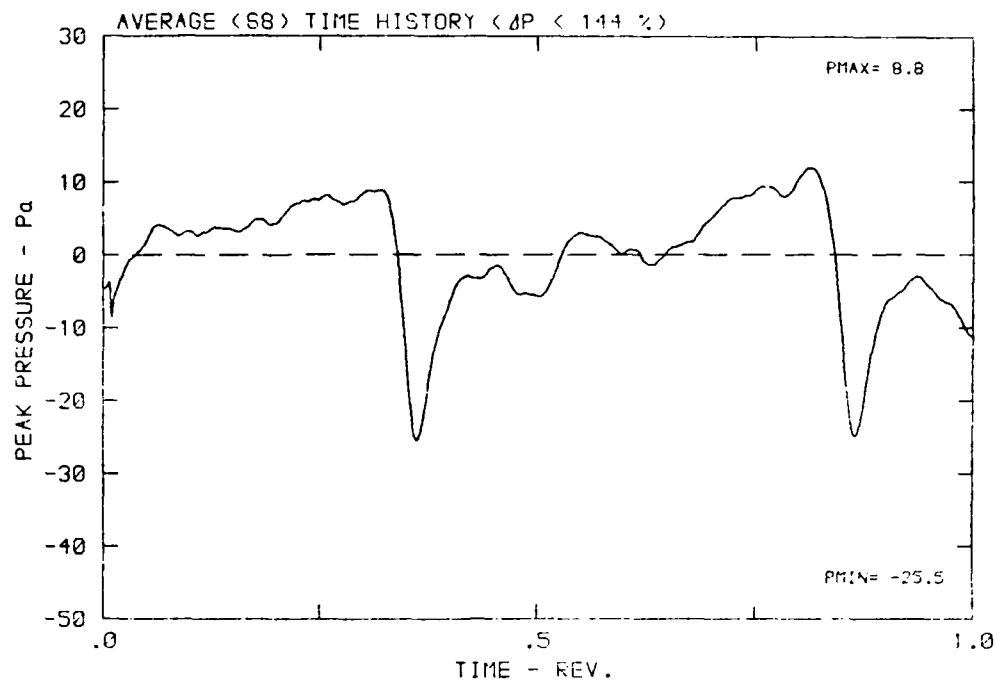
DATA POINT: JN-1 RUN: 188 MP: 9

β : 20.8° MH: .7710 n: 2400 rpm v/u : .301 ϕ : .6° T: 297.6 K



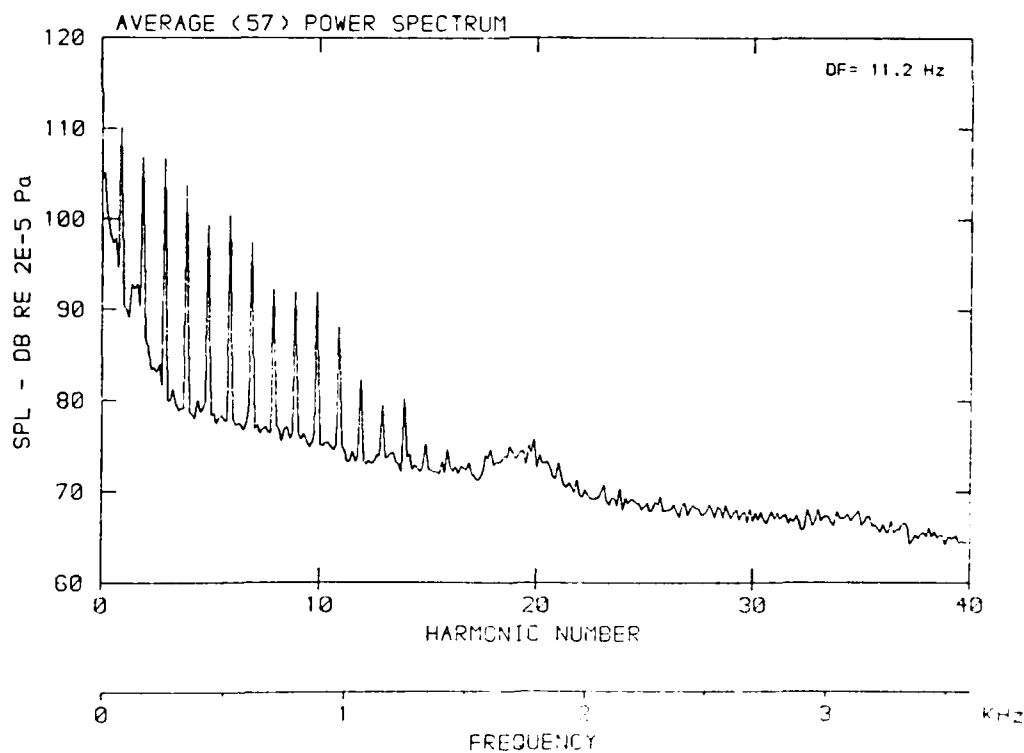
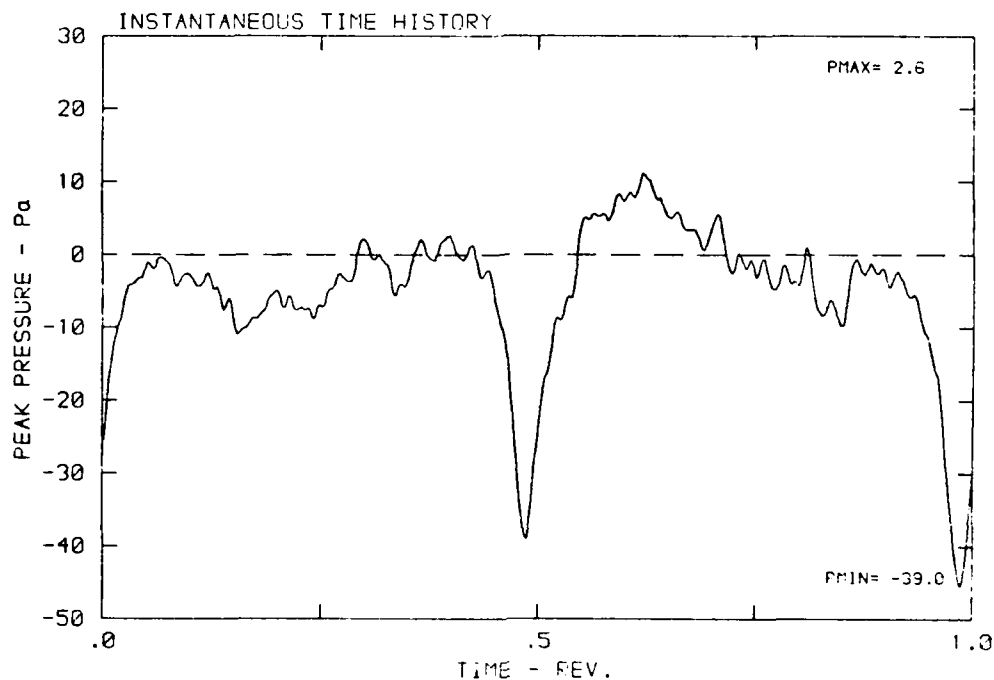
DATA POINT: JN-1 RUN: 188 MP: 9

β : 20.8° MH: .7710 n: 2400 rpm v/u : .301 ϕ : .0° T: 297.6 K



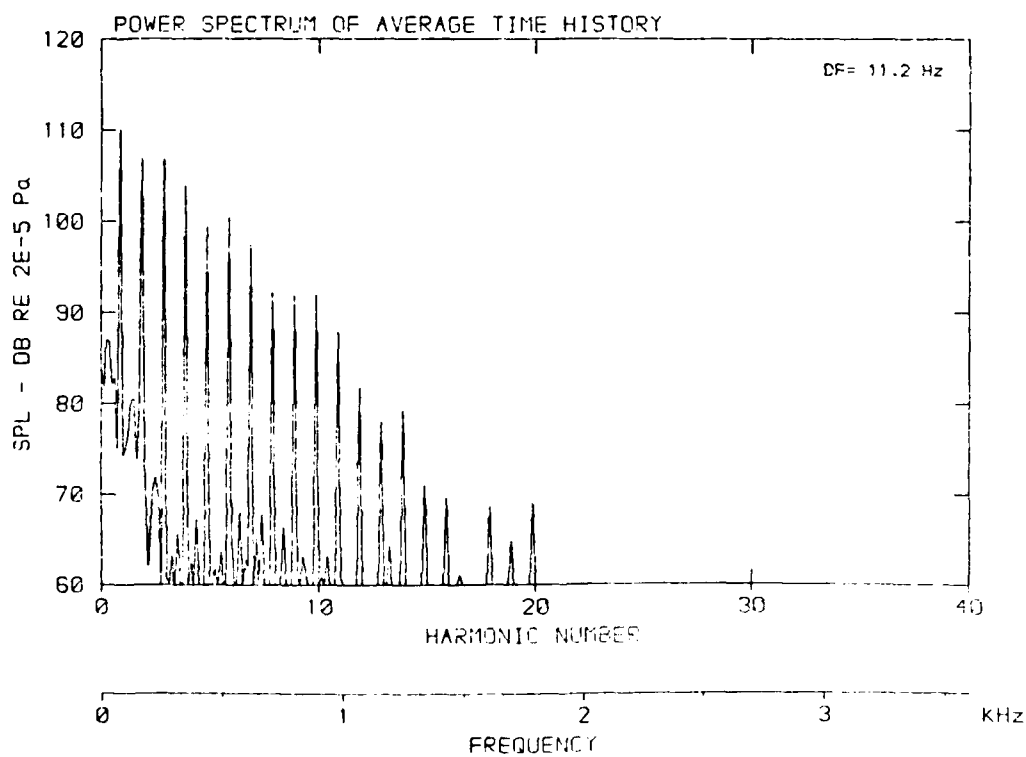
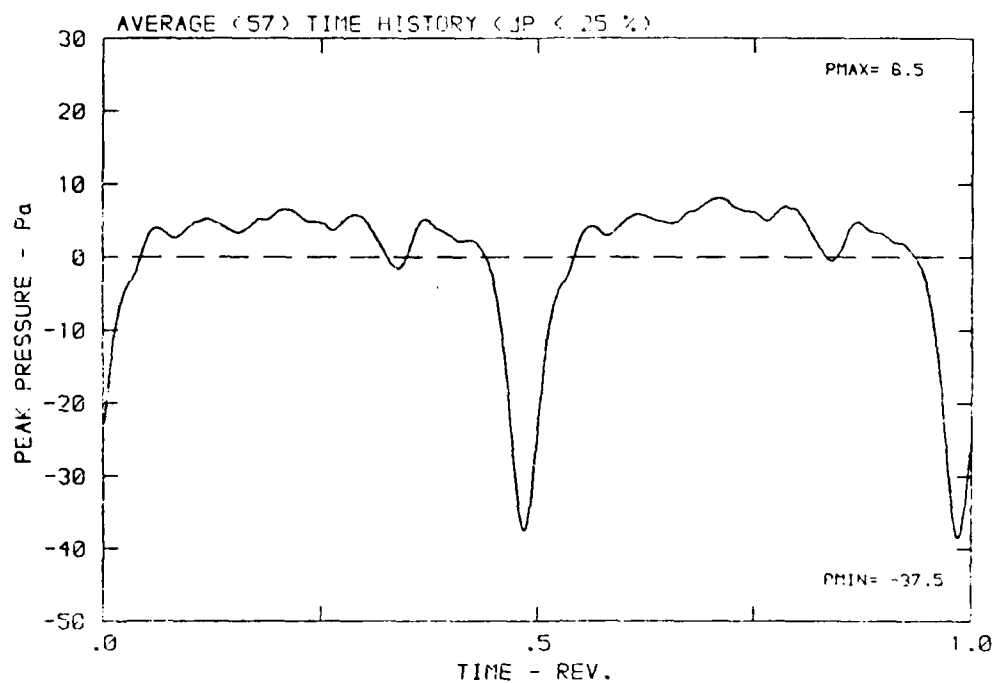
DATA POINT: JN-2 RUN: 189 MP: 1

β : 20.8° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 299.2 K



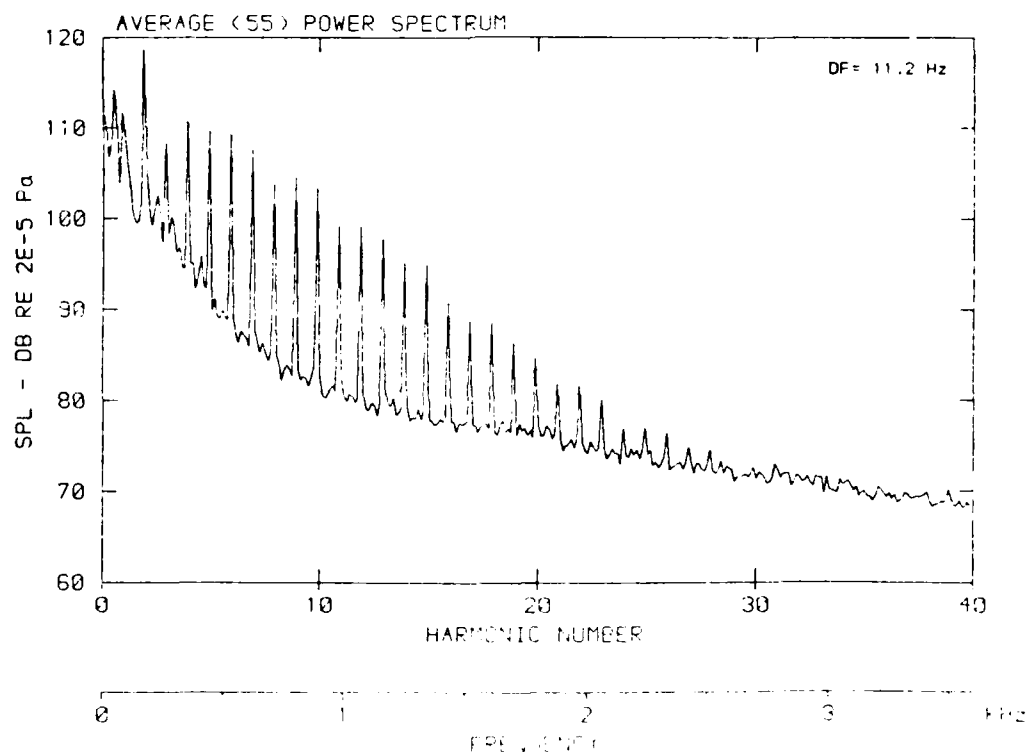
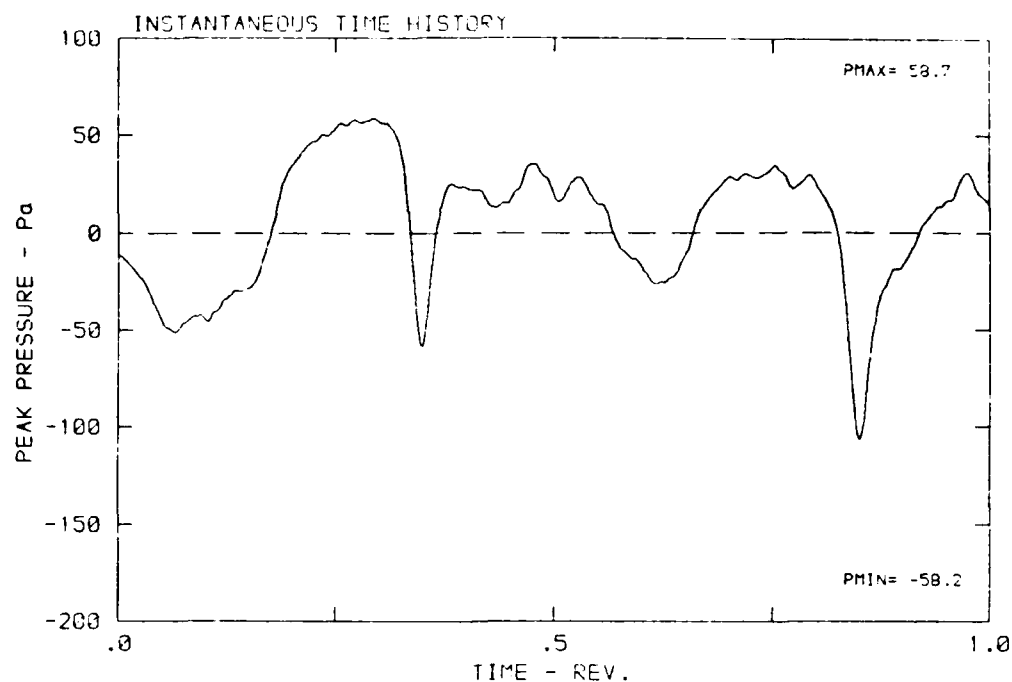
DATA POINT: JN-2 RUN: 189 MP: 1

β : 20.8° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 298.2 K



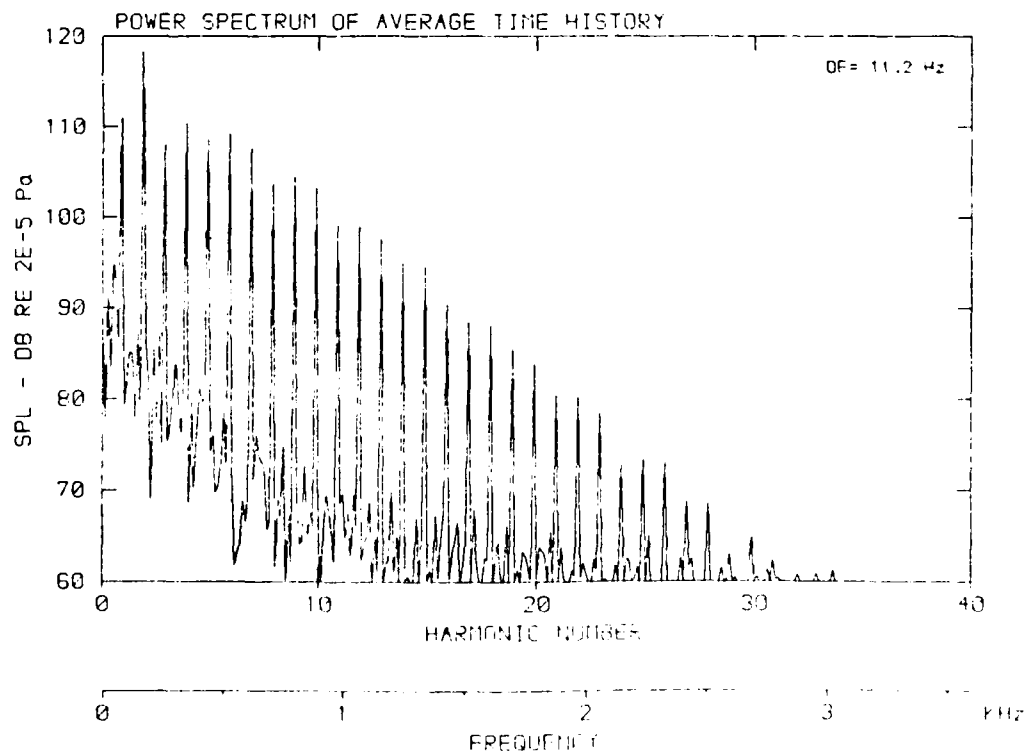
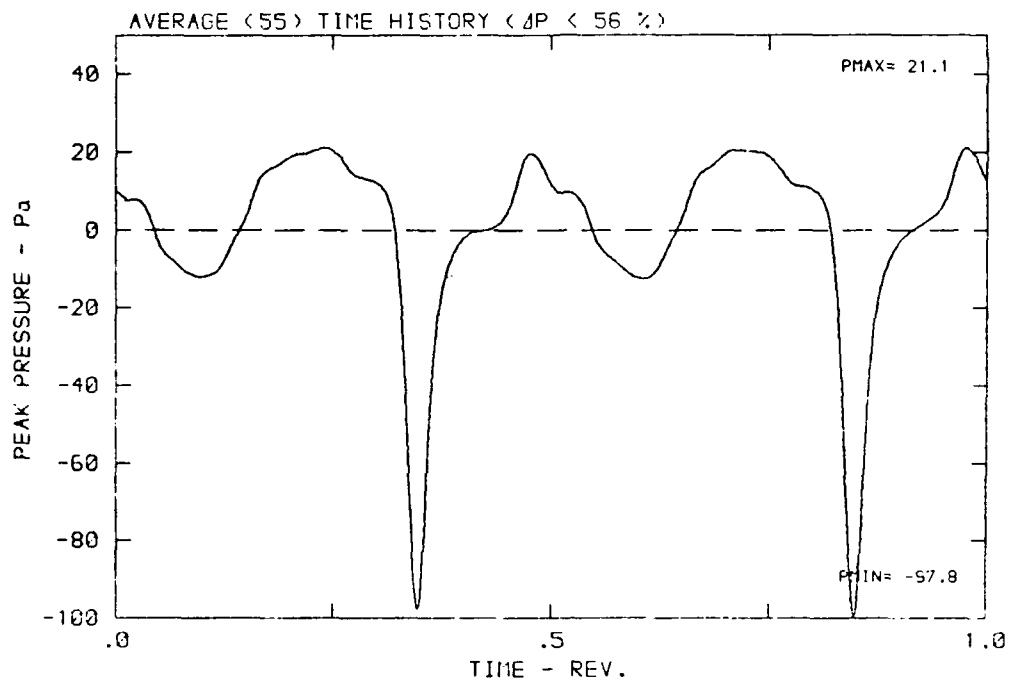
DATA POINT: JN-2 RUN: 189 MP: 2

β : 20.8° MH: .8592 n: 2700 rpm v/u : .263 ϕ : .0° I: 130.2 A



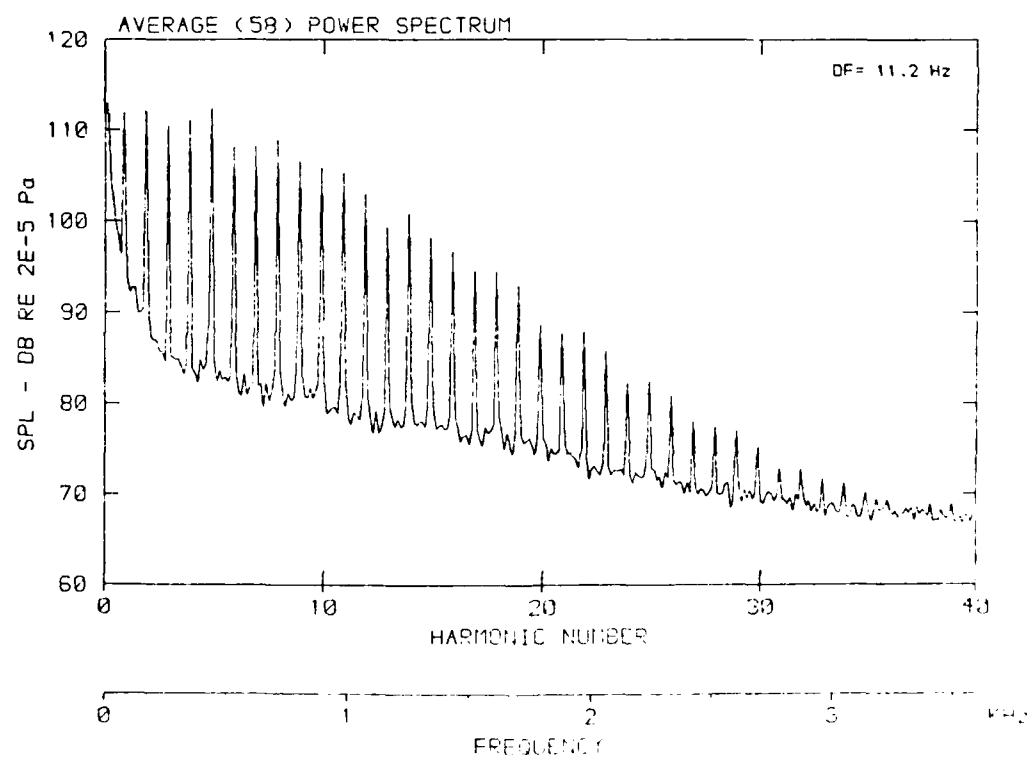
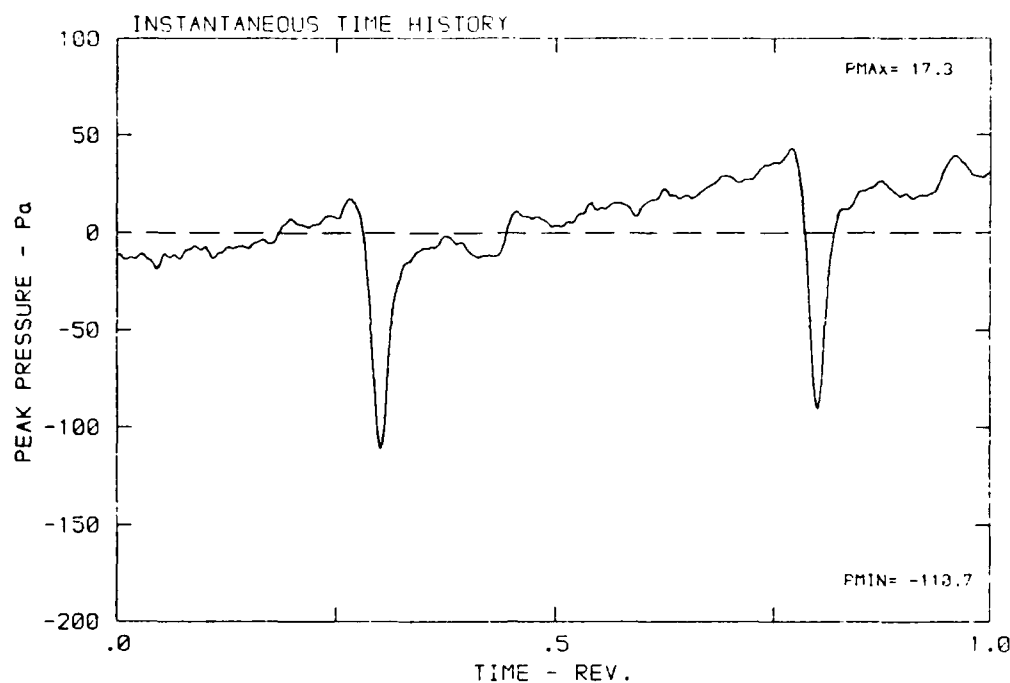
DATA POINT: JN-2 RUN: 189 MP: 2

β : 20.8° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 298.2 K



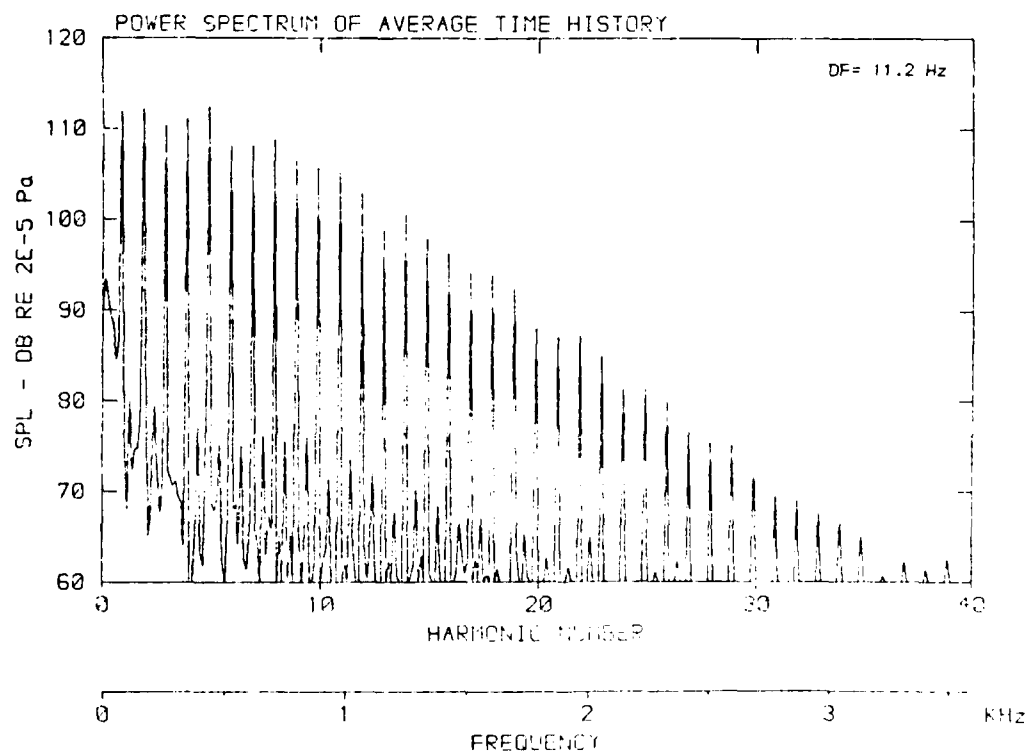
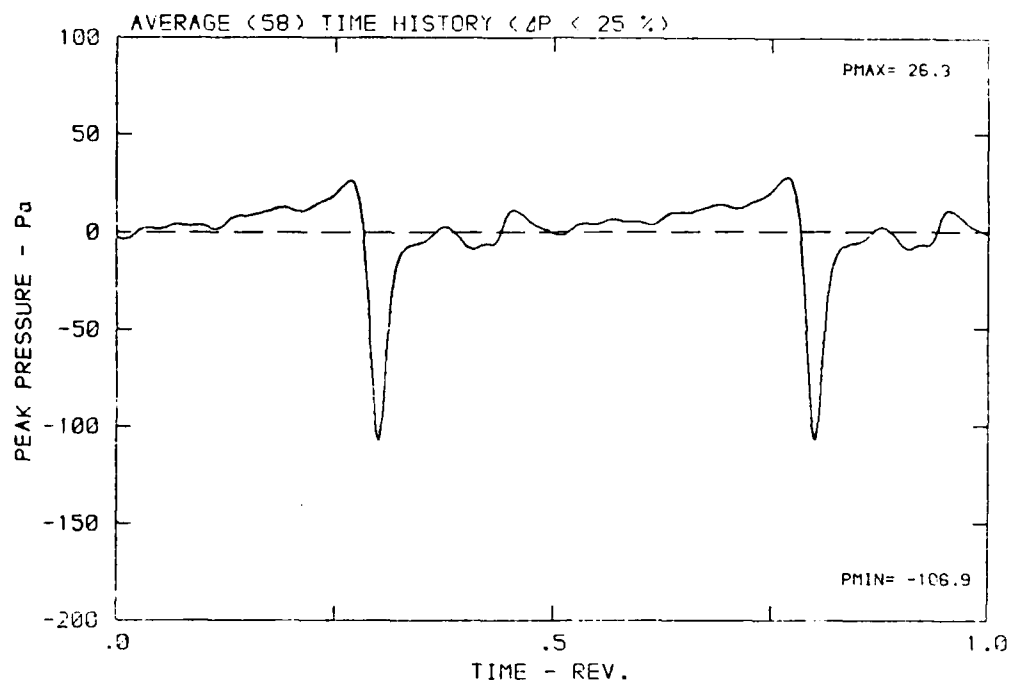
DATA POINT: JN-2 RUN: 189 MP: 3

β : 20.8° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 238.2 s



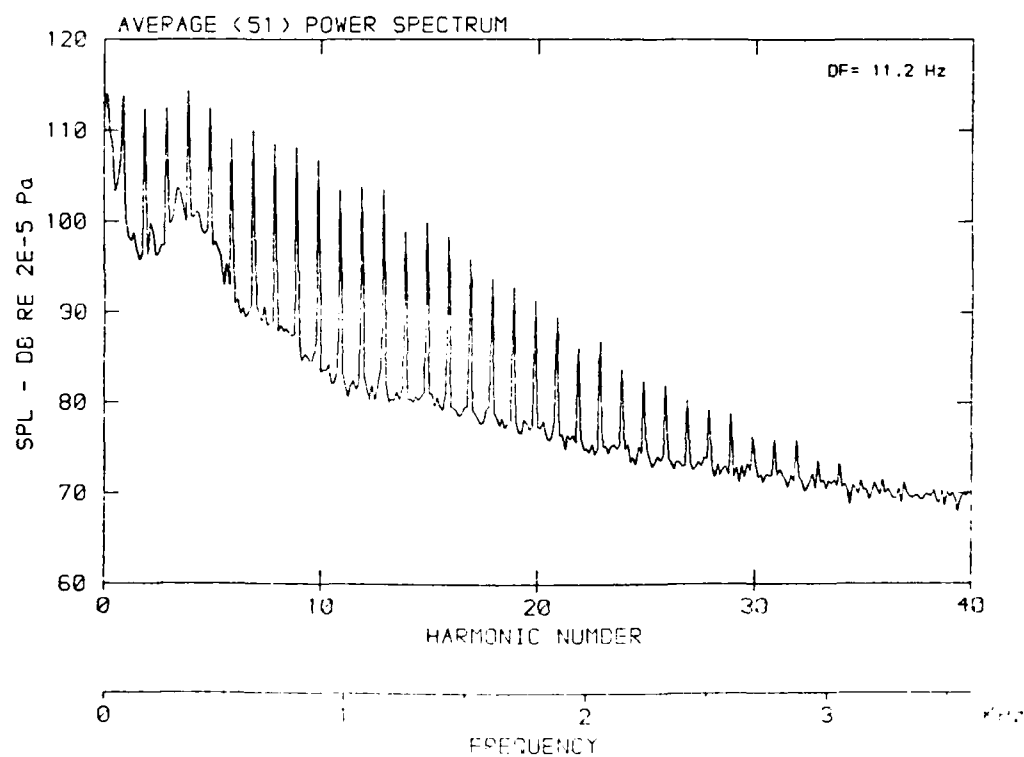
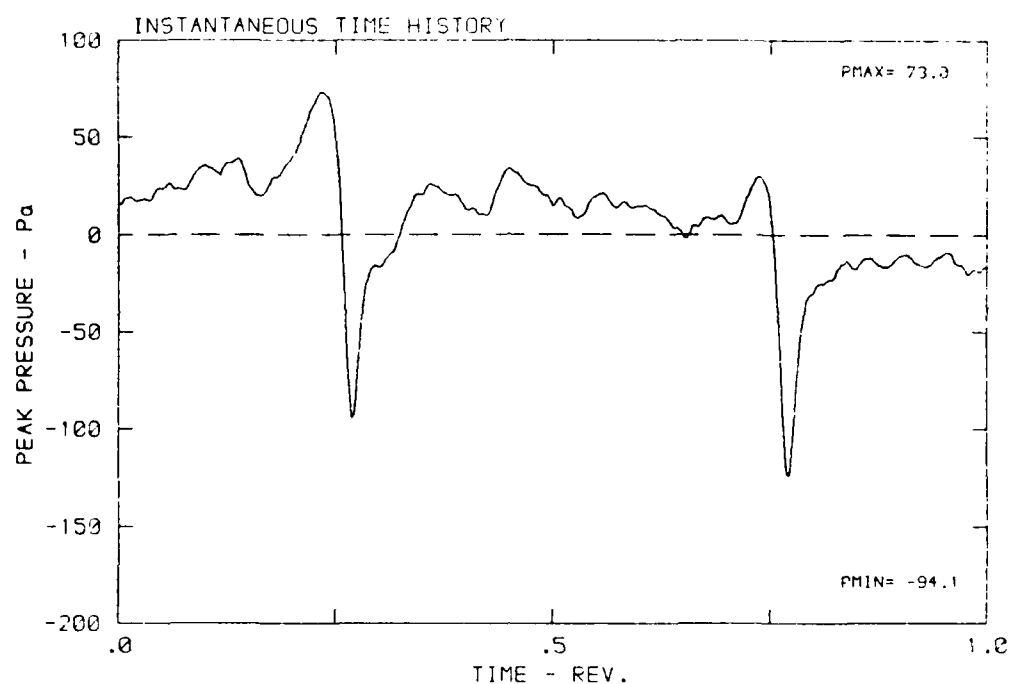
DATA POINT: JN-2 RUN: 189 MP: 3

β : 20.8° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 293.2 K



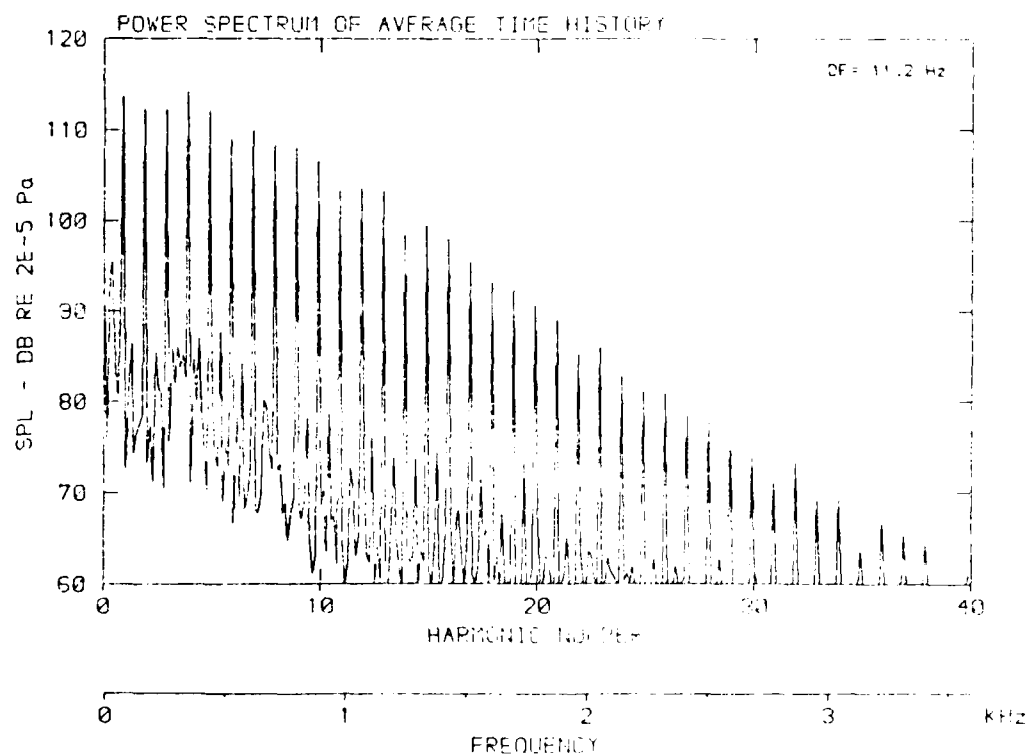
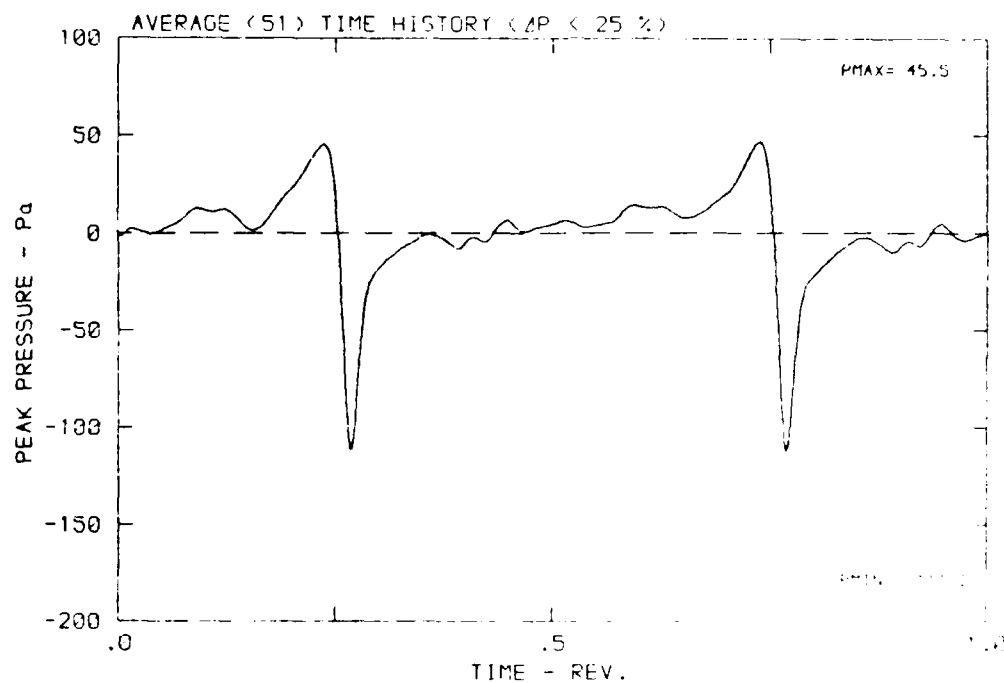
DATA POINT: JN-2 RUN: 189 NF: 4

β : 20.8° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 20.2



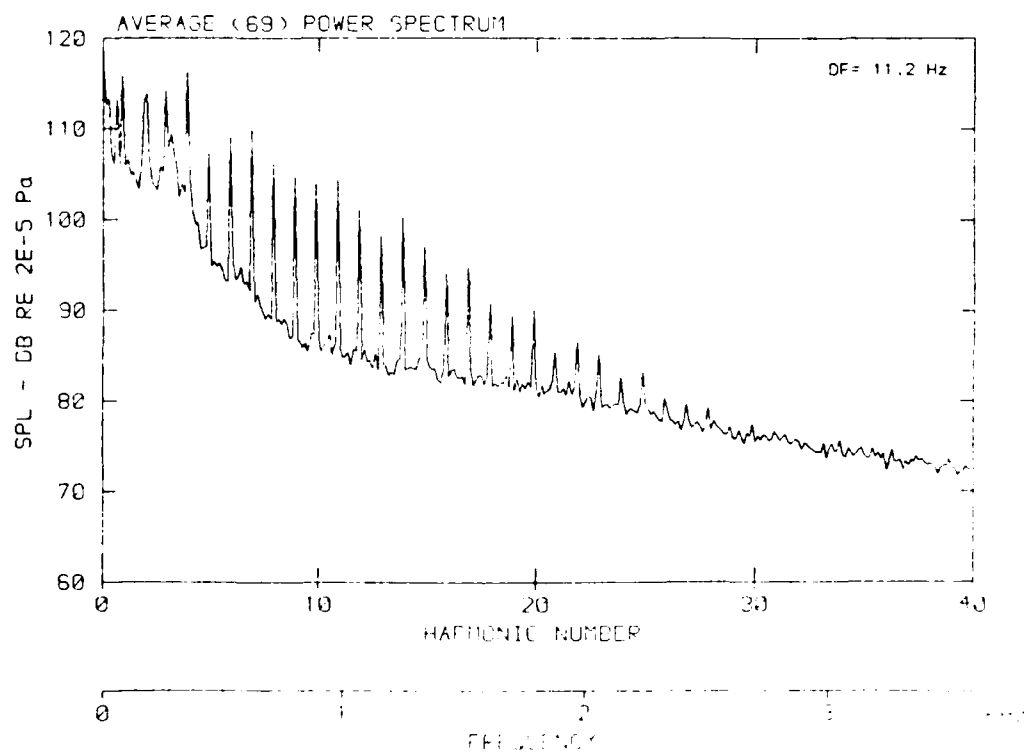
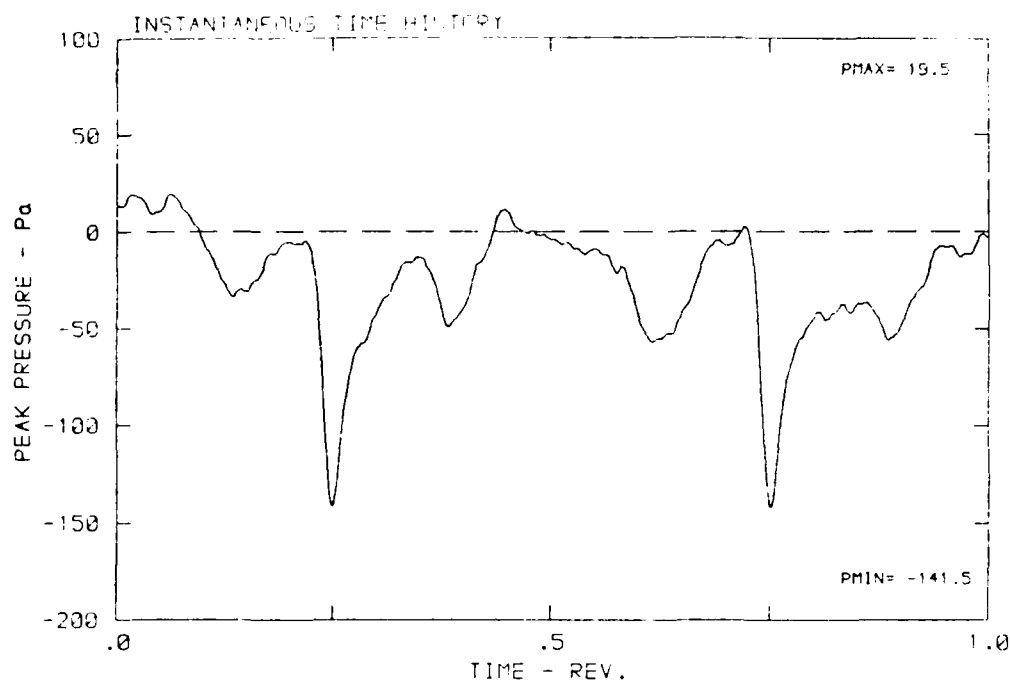
DATA POINT: JN-2 RUN: 189 MP: 4

β : 20.8° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 299.2 K



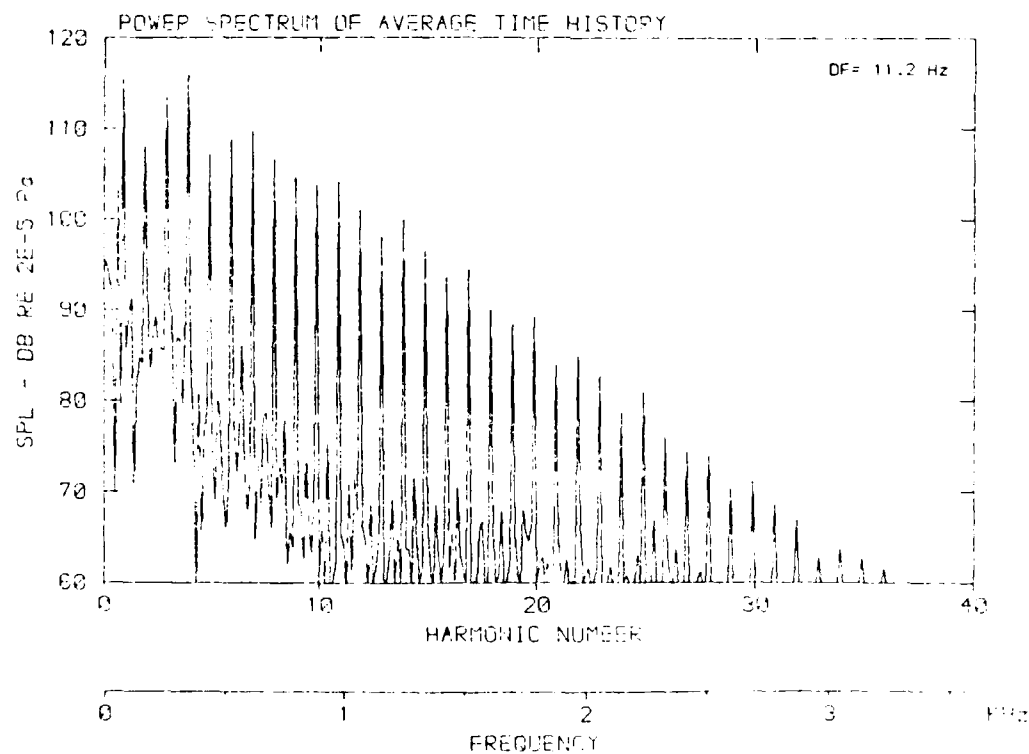
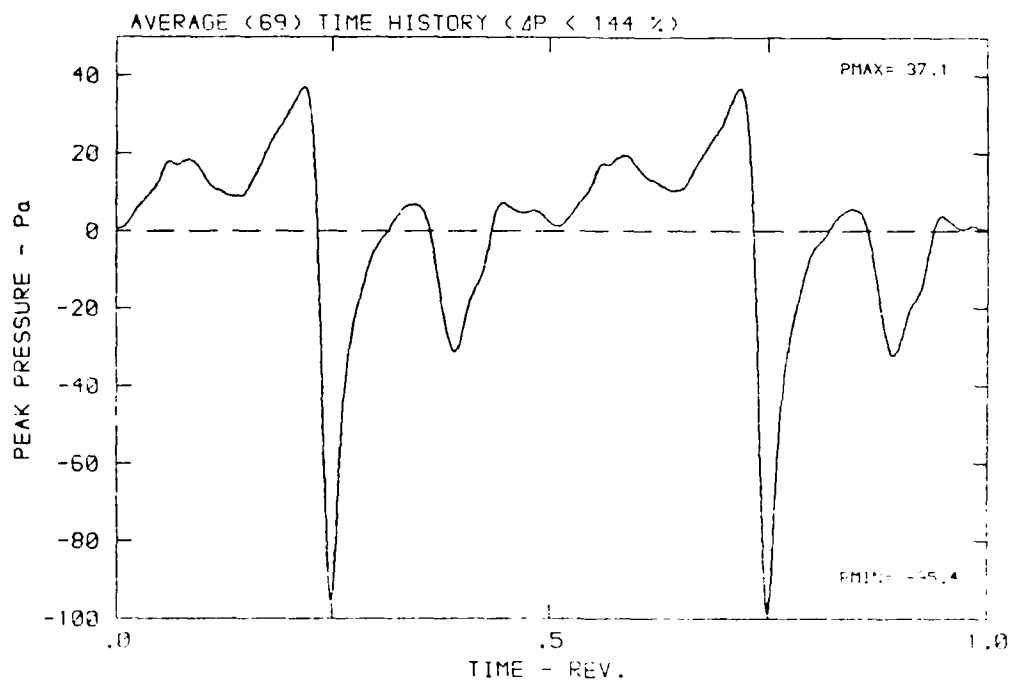
DATA POINT: 01 2 RUN: 189 NP: 5

β : 20.8° MH: .5532 n: 2.00 rpm v_{tu} : .265 ϕ : .0° T: 235.2 s



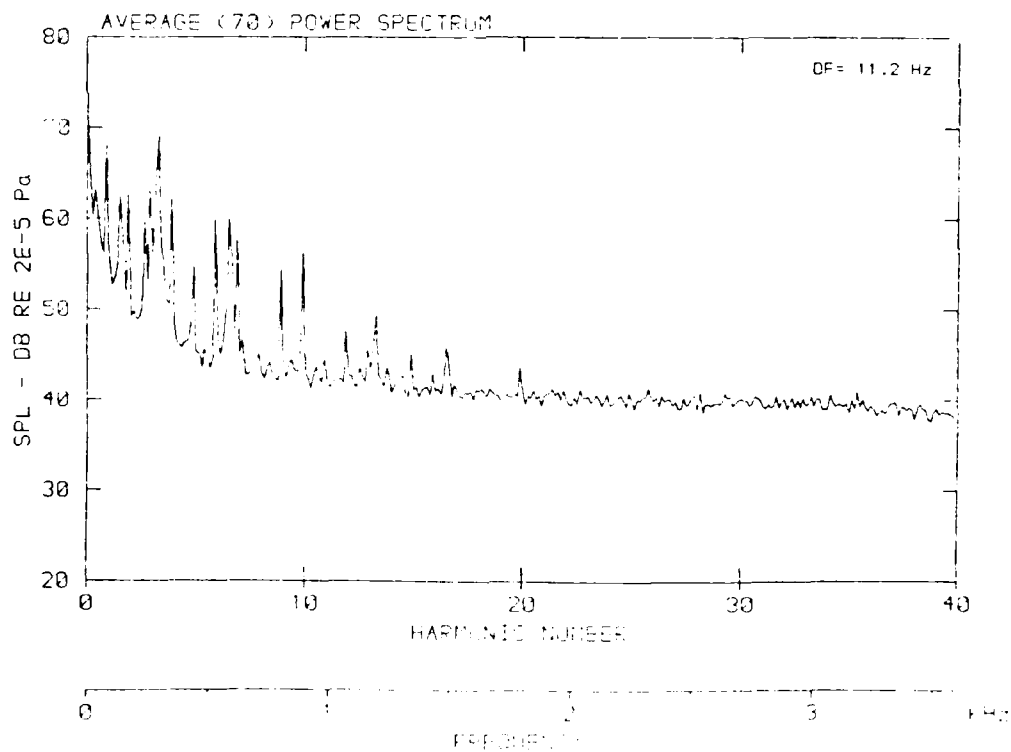
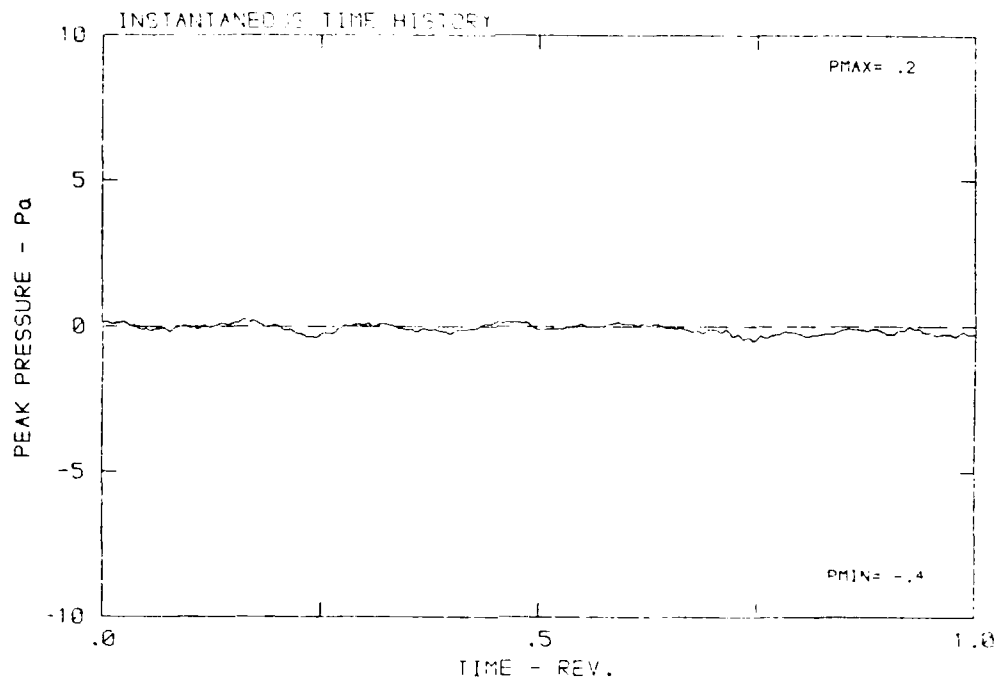
DATA POINT: JN-2 RUN: 189 MP: 5

β : 20.8° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 298.2 K



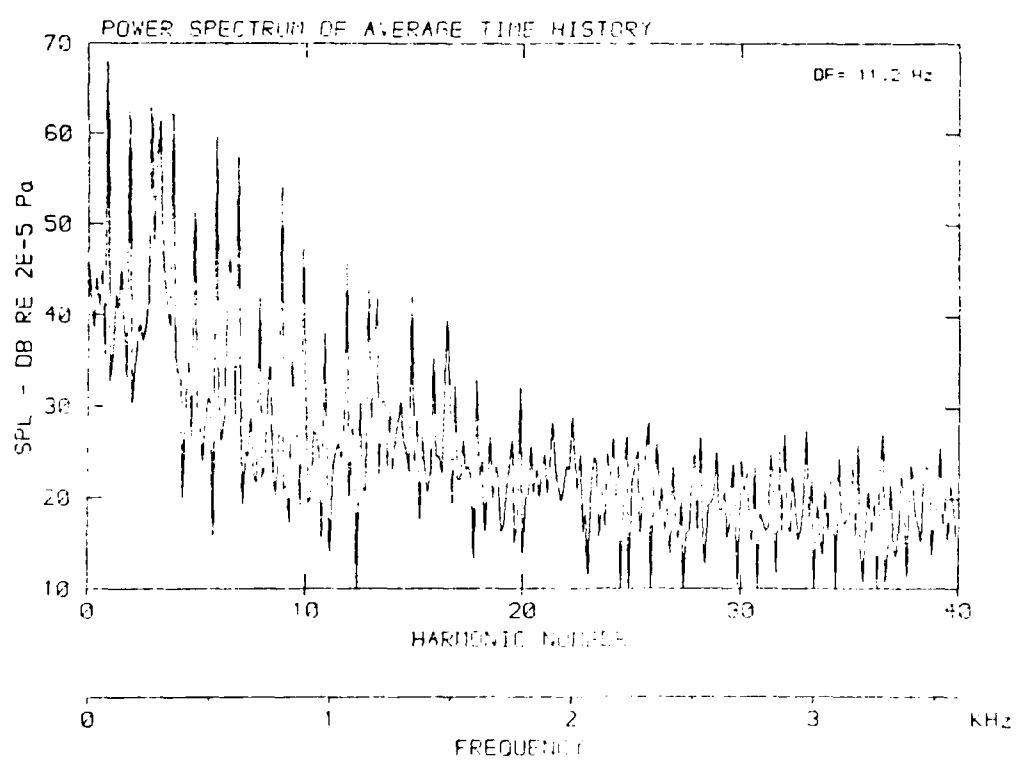
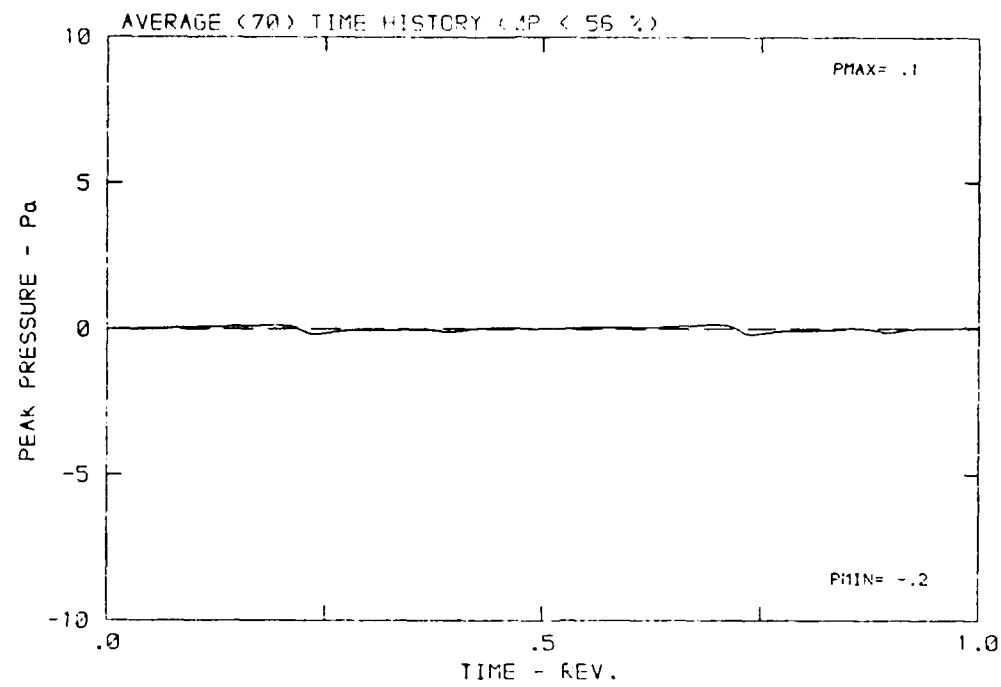
DATA POINT: IN-2 RUN: 189 MP: 5

β : 28.8° MH: .8592 n: 2700 rpm v₄₀: .285 ϕ : .0° T: 2.75.1



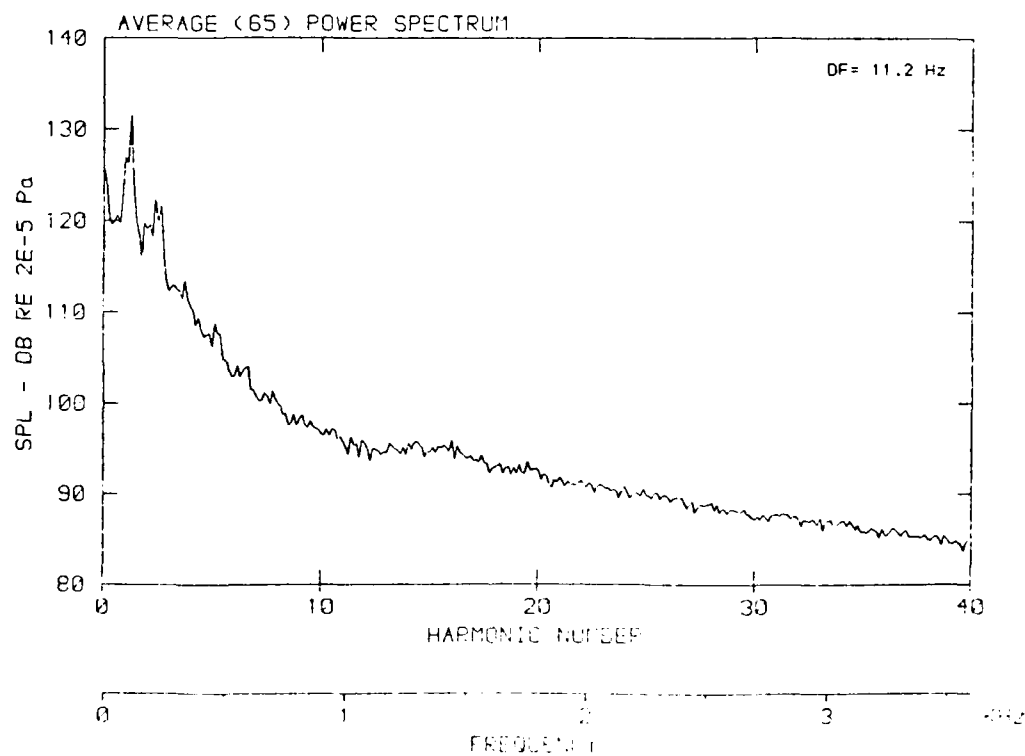
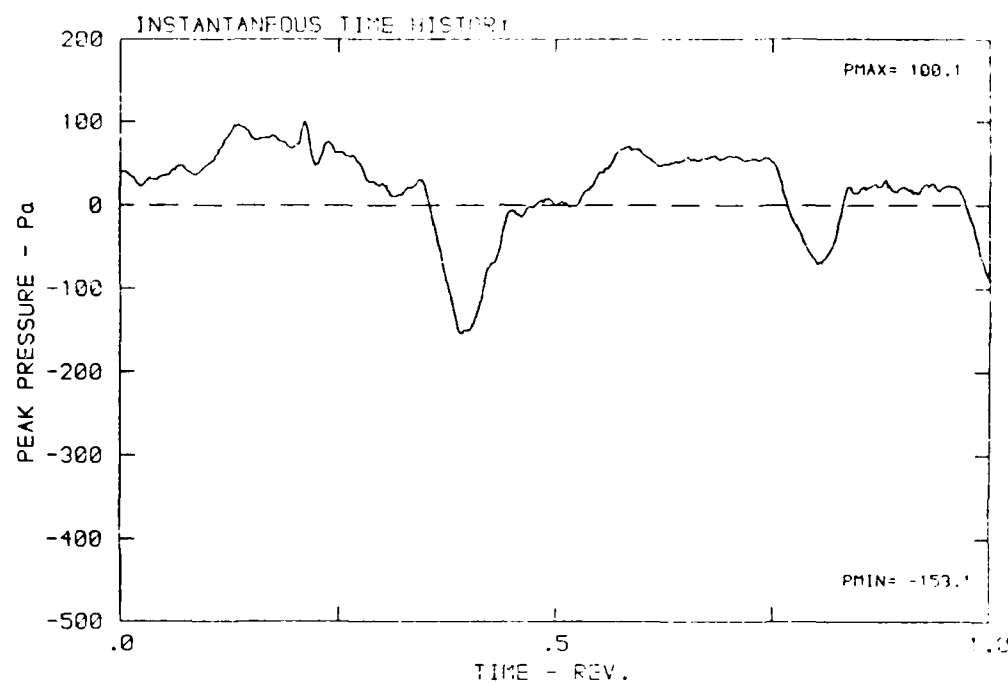
DATA POINT: JN-2 RUN: 189 MP: 6

β : 20.8° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 299.2 K



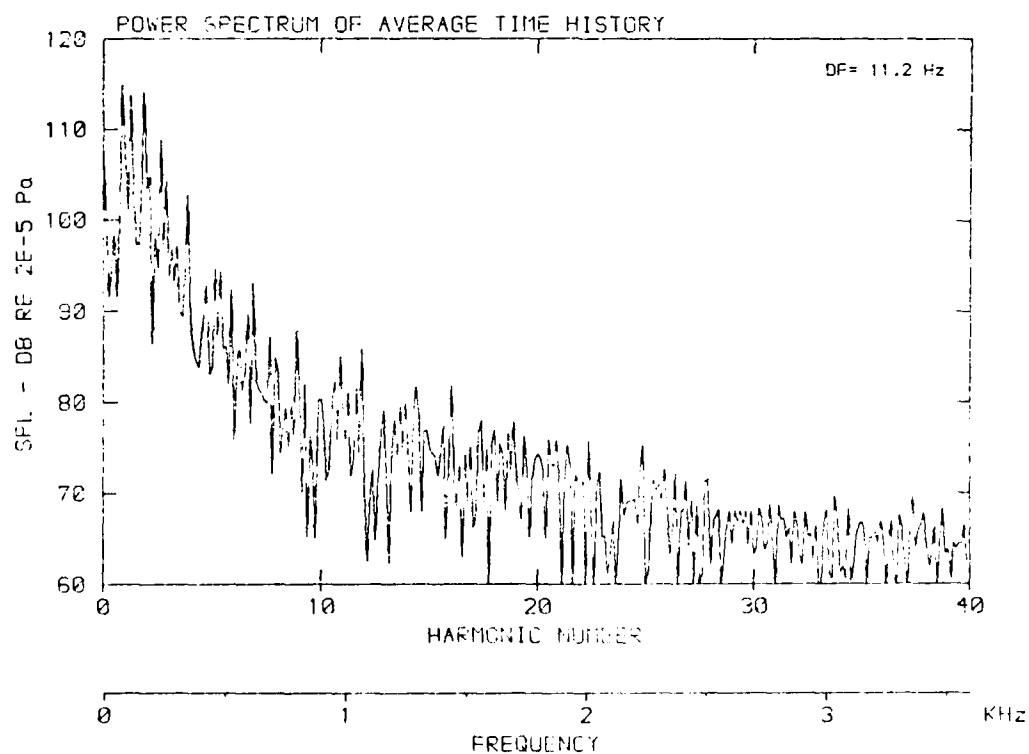
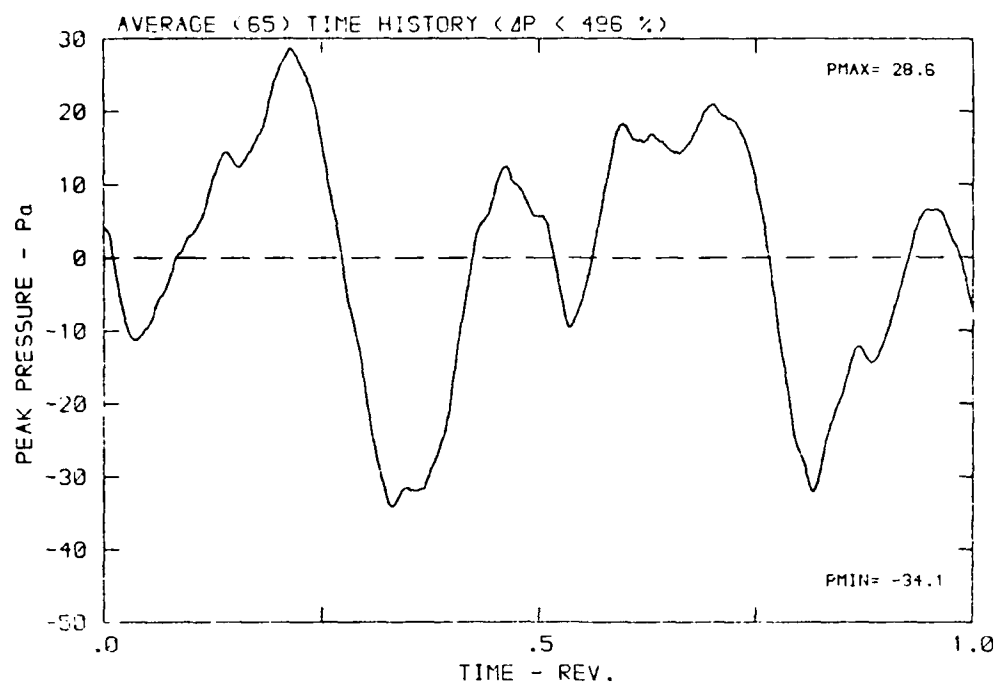
DATA POINT: UN-1 RUN: 15 MP: 17

β : 20.8° DH: .9532 n: 2700 rpm VZU: .11 ϕ : .0° T: 1.12



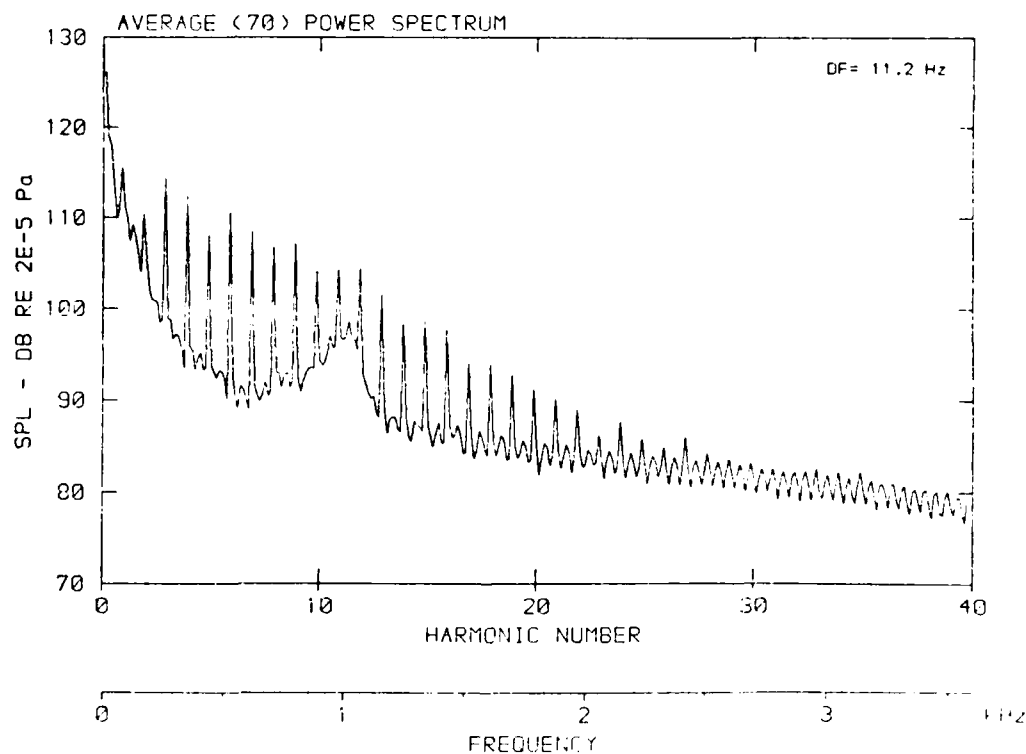
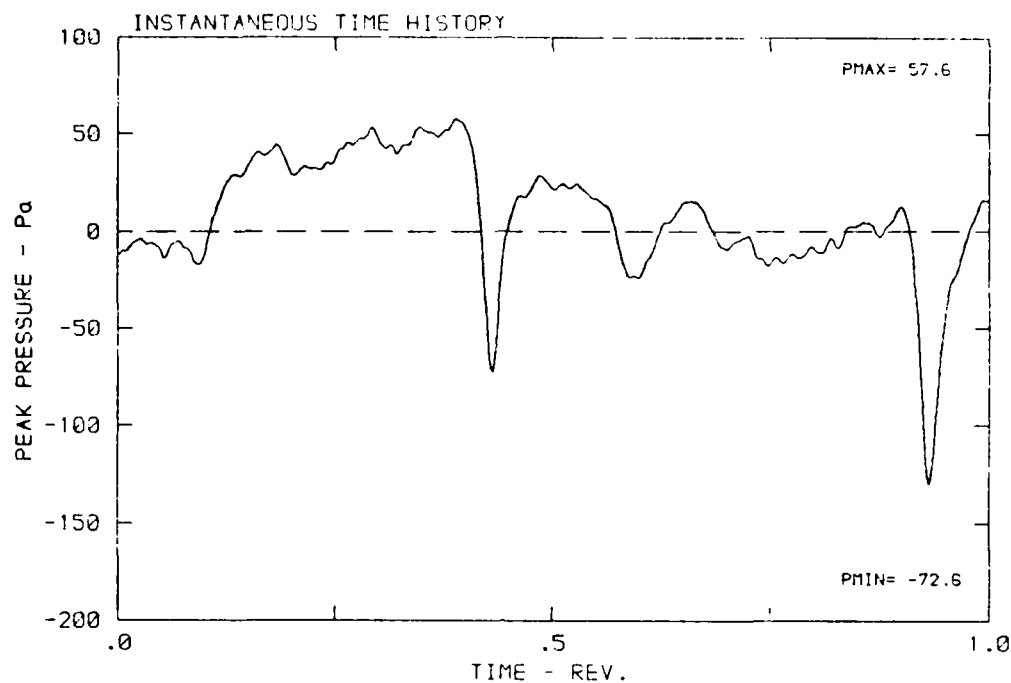
DATA POINT: JN-2 RUN: 189 MP: 7

β : 20.8° MH: .8592 n: 2700 rpm v/u: .269 ψ : .0° T: 298.2 K



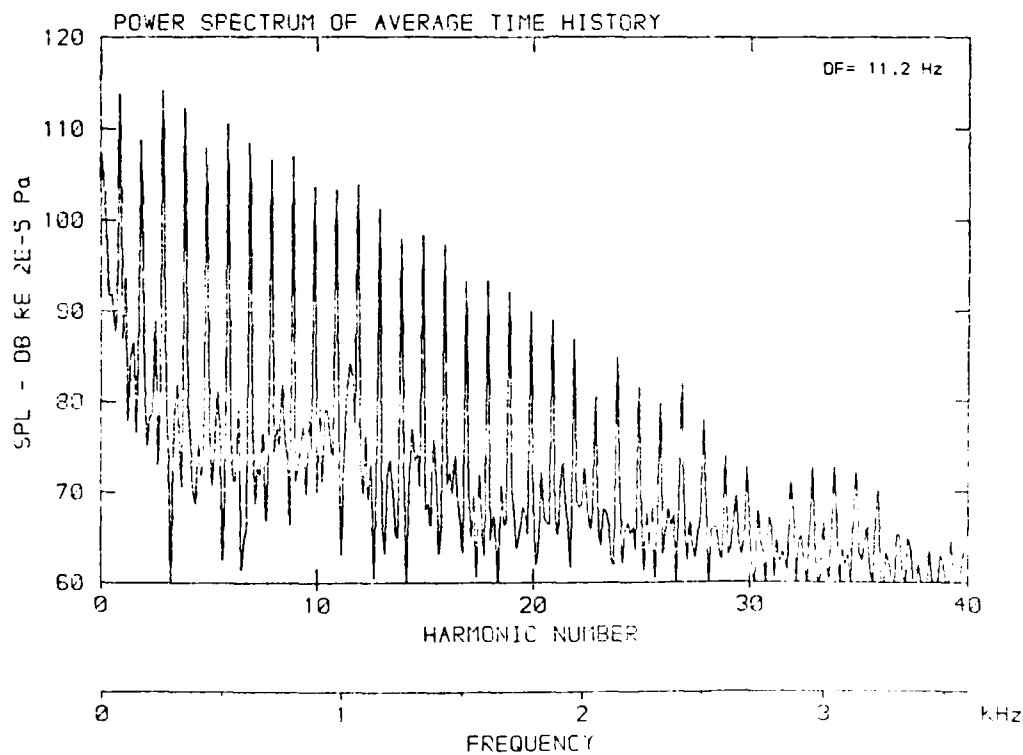
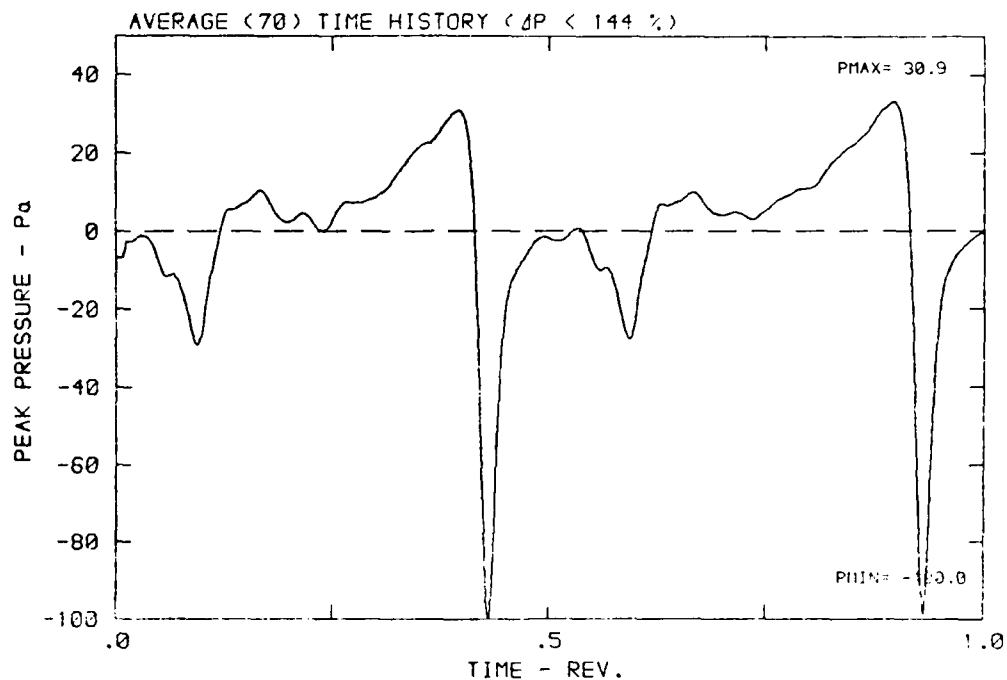
DATA POINT: JN-2 RUN: 109 MP: 9

β : 20.8° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 205.2 K



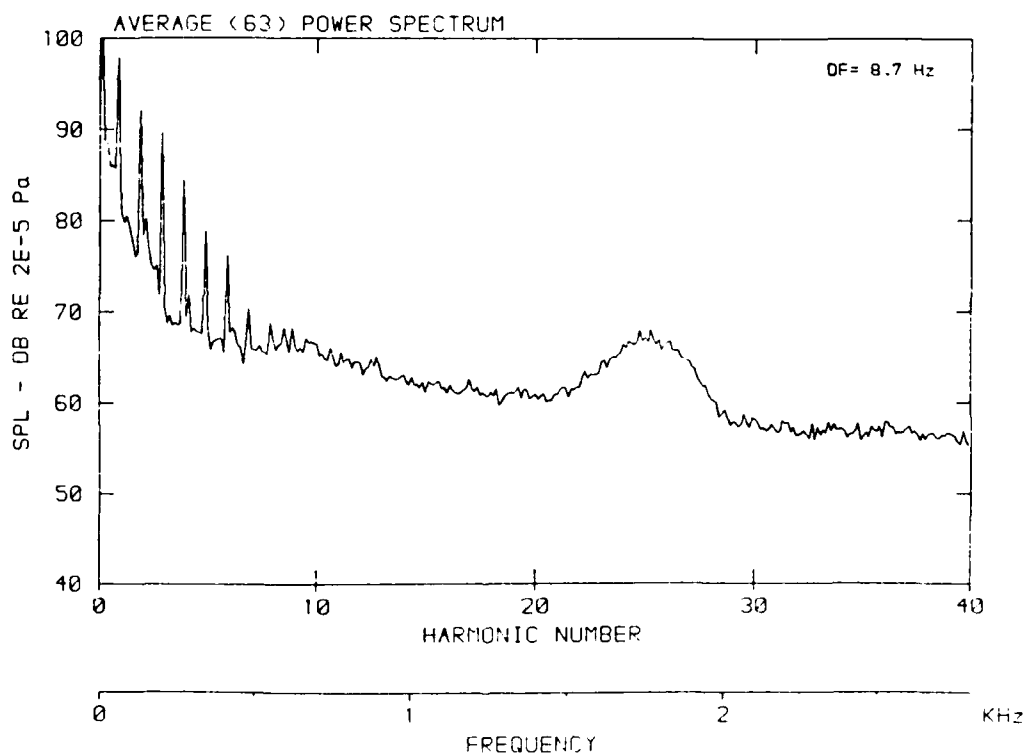
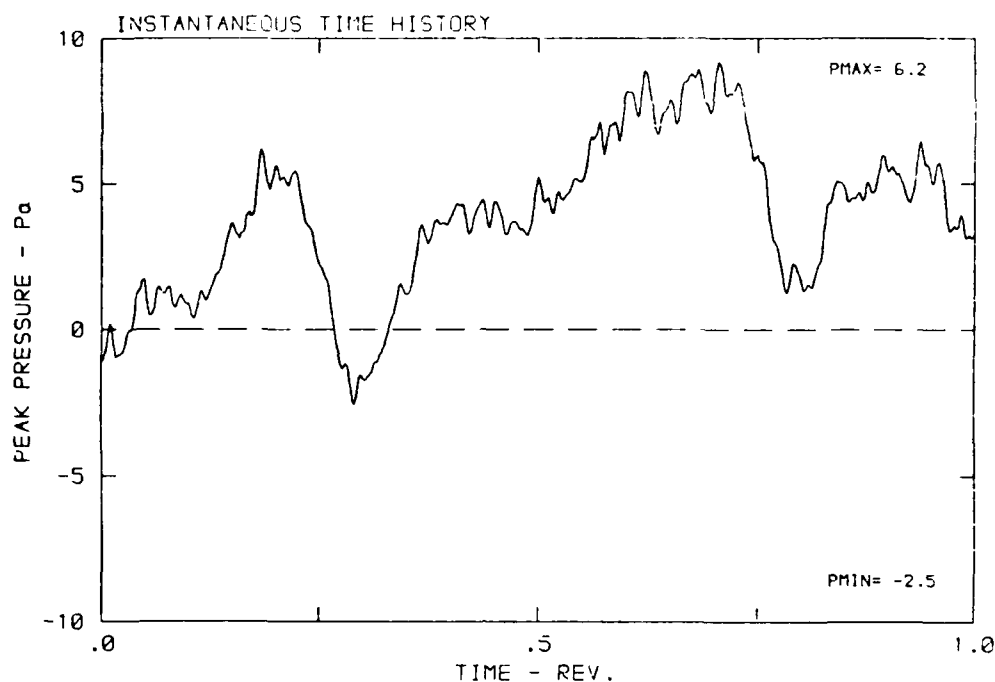
DATA POINT: JN-2 RUN: 189 MP: 9

β : 20.8° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 293.2 K



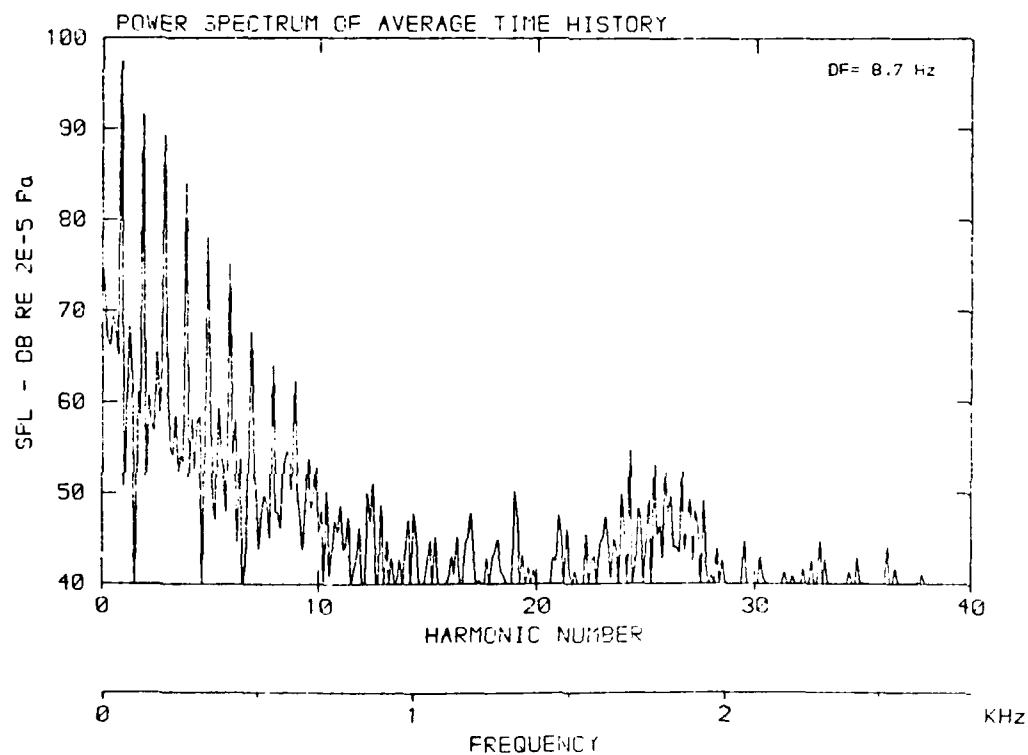
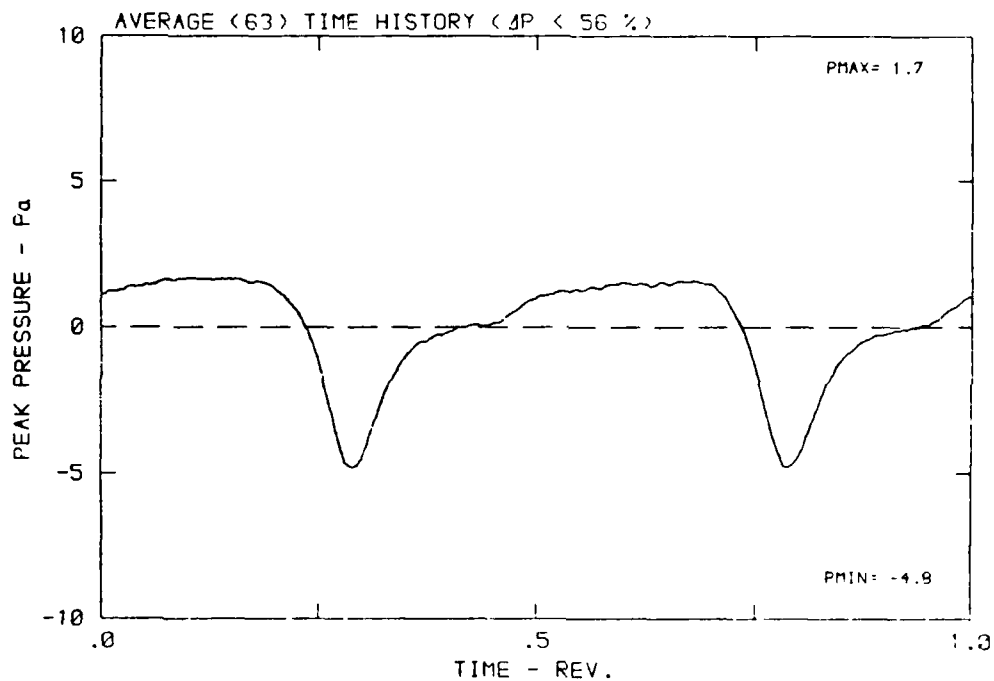
DATA POINT: KN-1 RUN: 187 MP: 1

β : 19.9° MH: .6623 n: 2100 rpm v/u: .231 ϕ : .0° T: 298.2 K



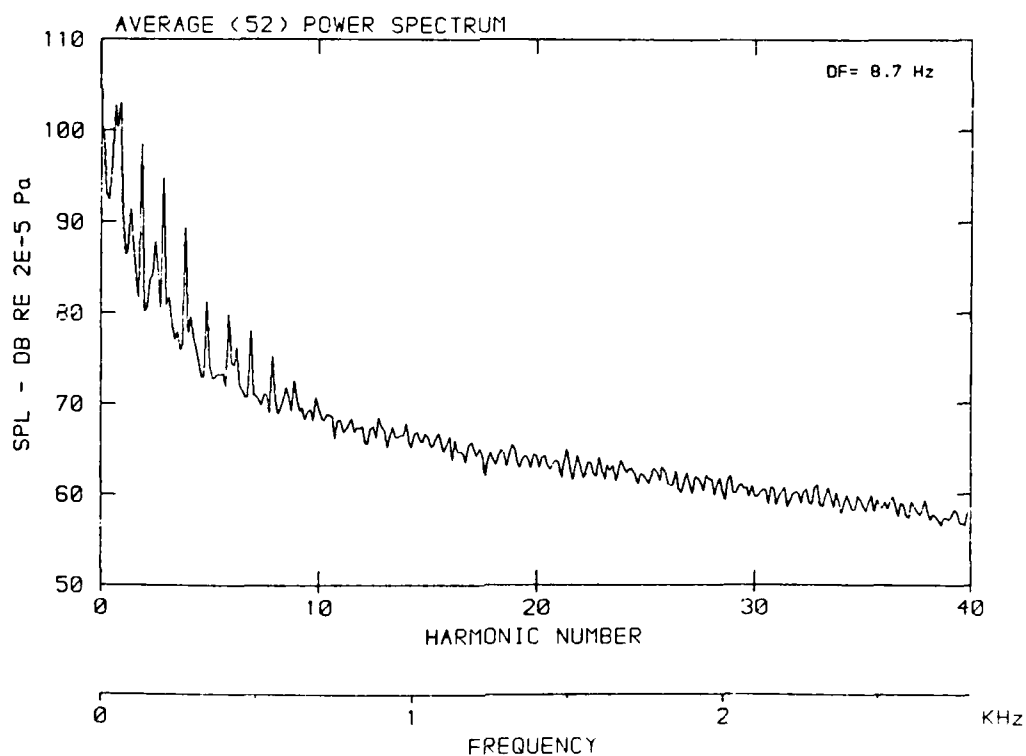
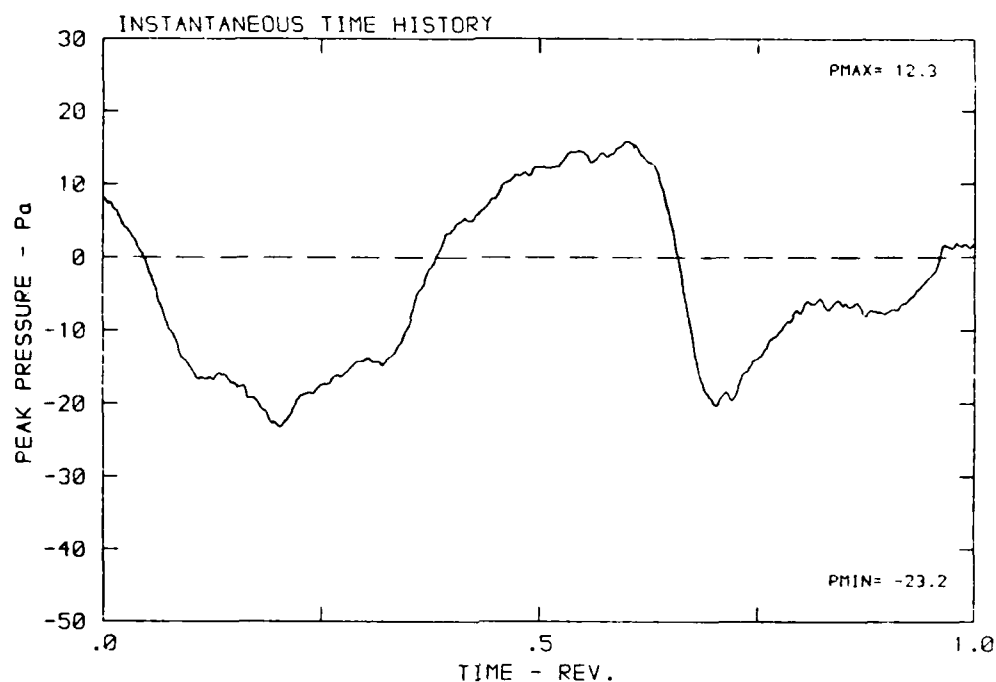
DATA POINT: KN-1 RUN: 187 MP: 1

β : 19.9° MH: .6623 n: 2100 rpm v/u : .231 ϕ : .0° T: 298.2 K



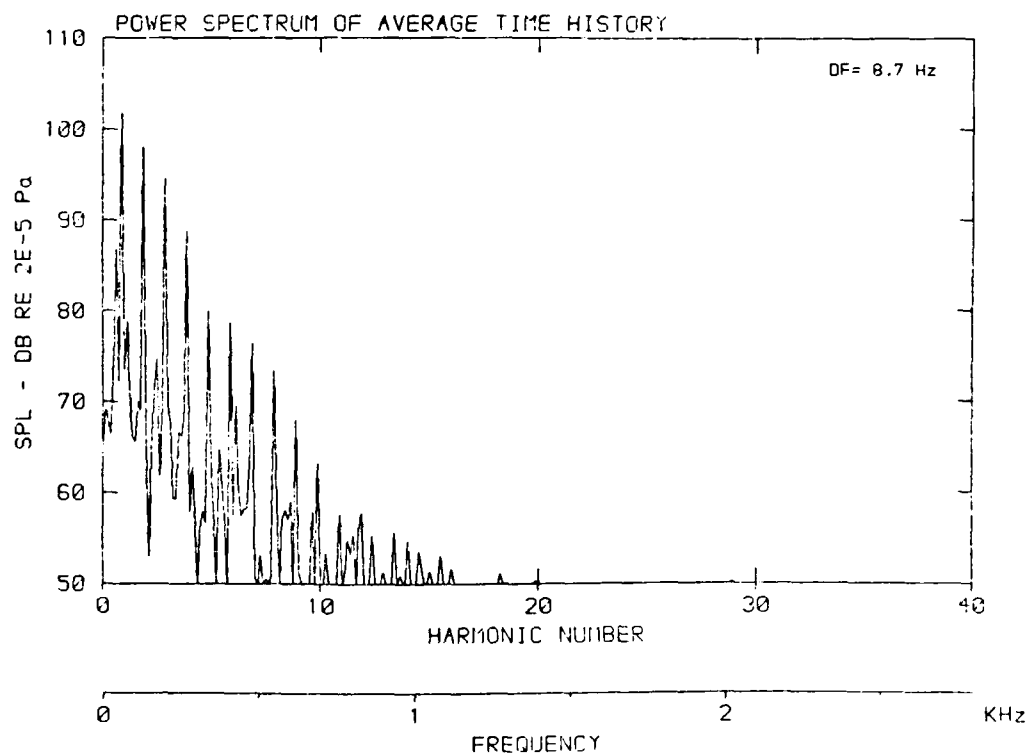
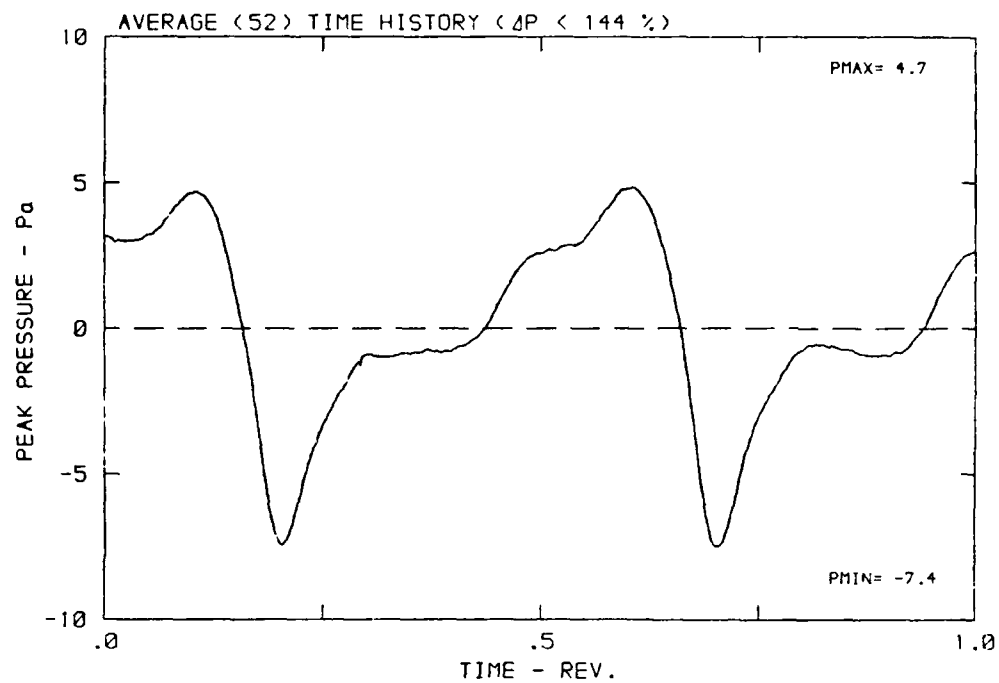
DATA POINT: KN-1 RUN: 187 MP: 2

β : 19.9° MH: .6623 n: 2100 rpm v/u: .231 ϕ : .0° T: 293.2 K



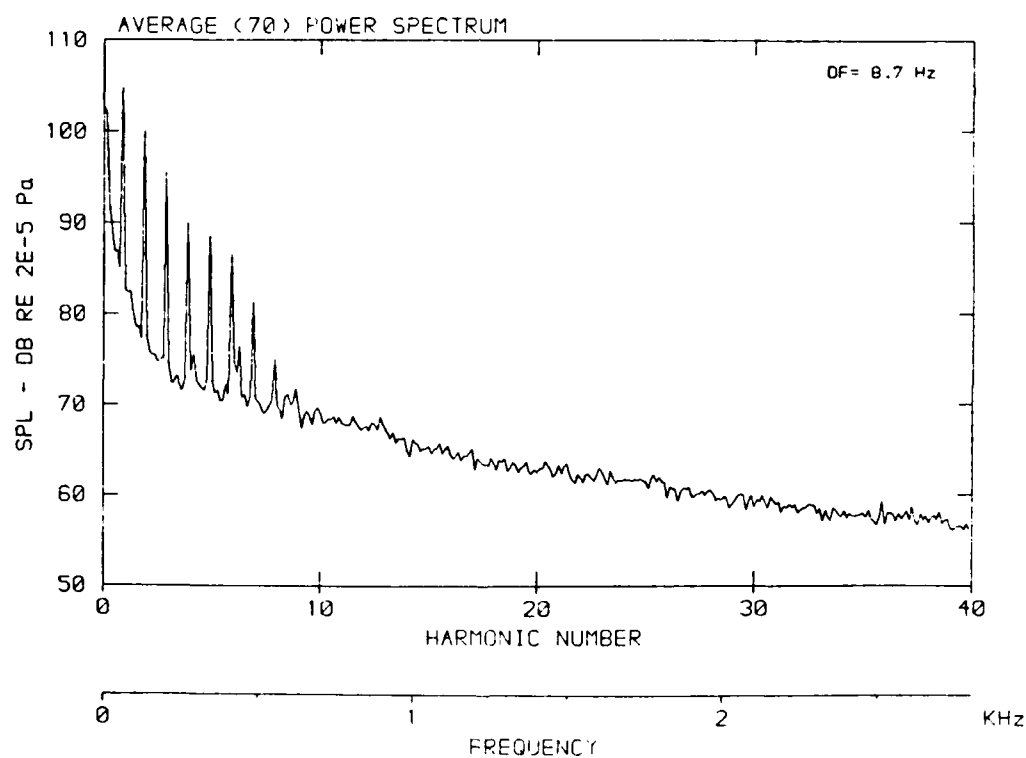
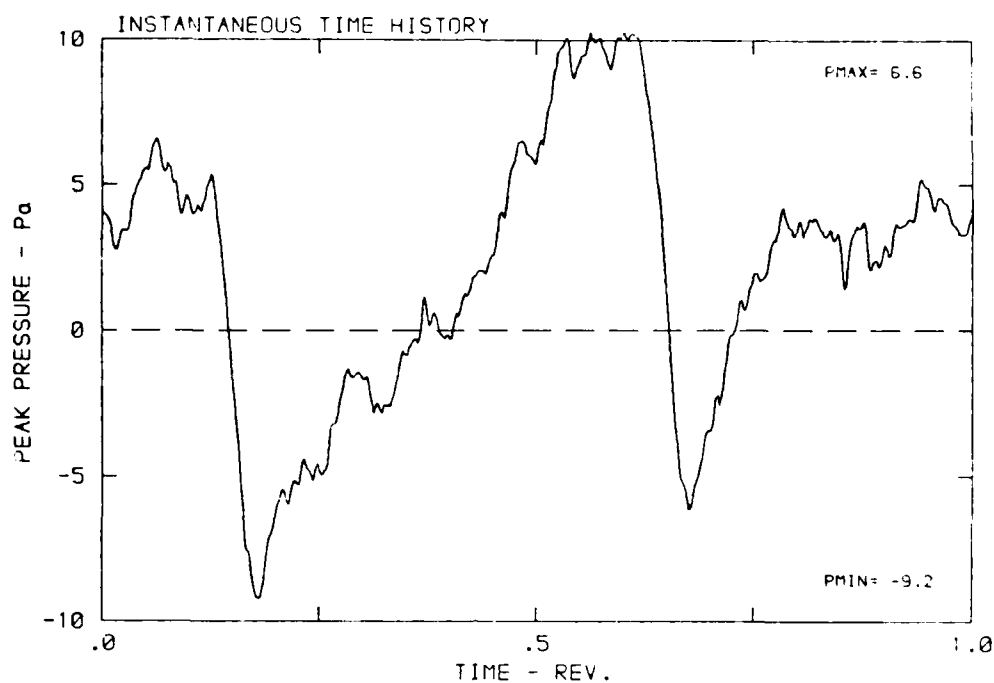
DATA POINT: KN-1 RUN: 187 MP: 2

β : 19.9° MH: .6623 n: 2100 rpm v/u: .231 ϕ : .0° T: 298.2 K



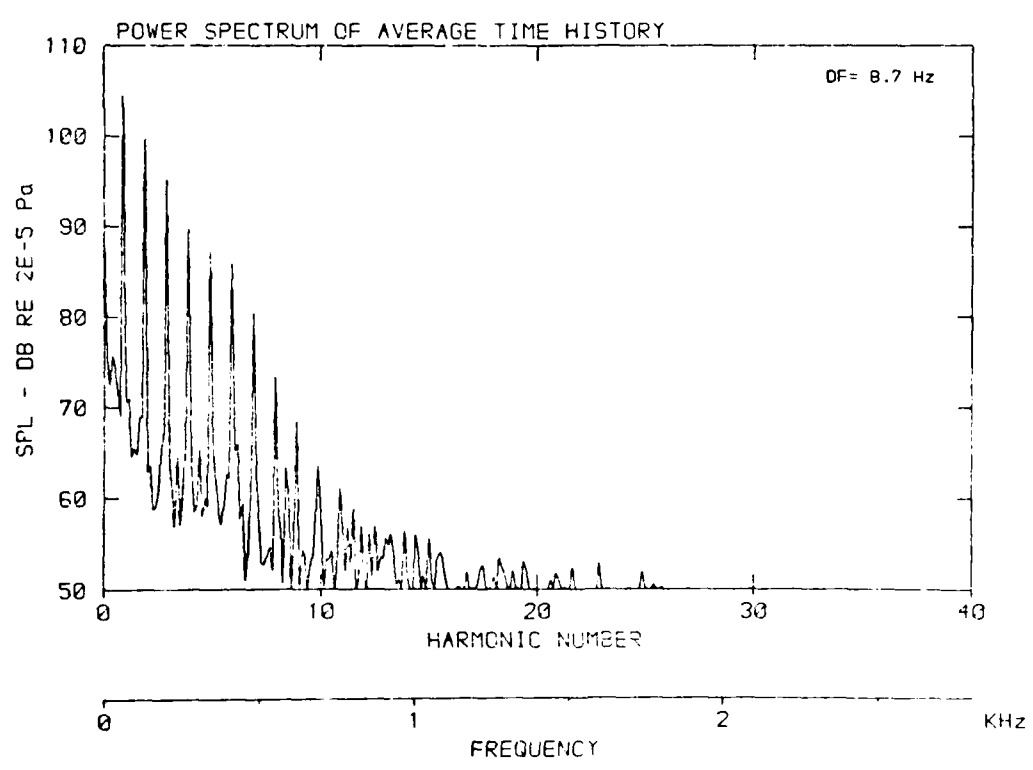
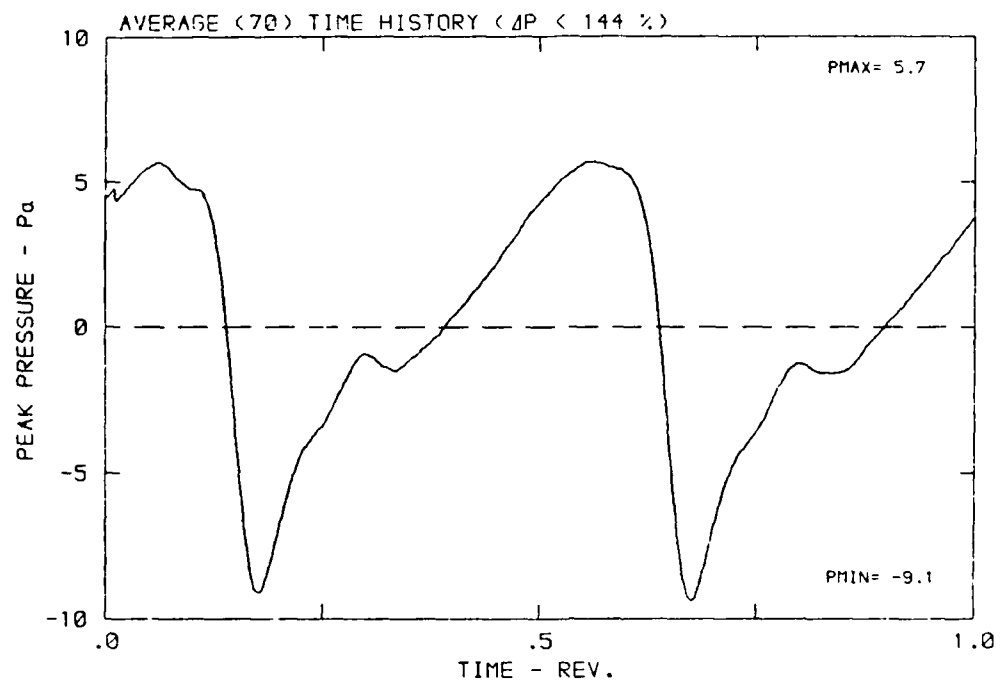
DATA POINT: KN-1 RUN: 187 MP: 3

β : 19.9° MH: .6623 n: 2100 rpm v/u : .231 ϕ : .0° T: 29±.2 °



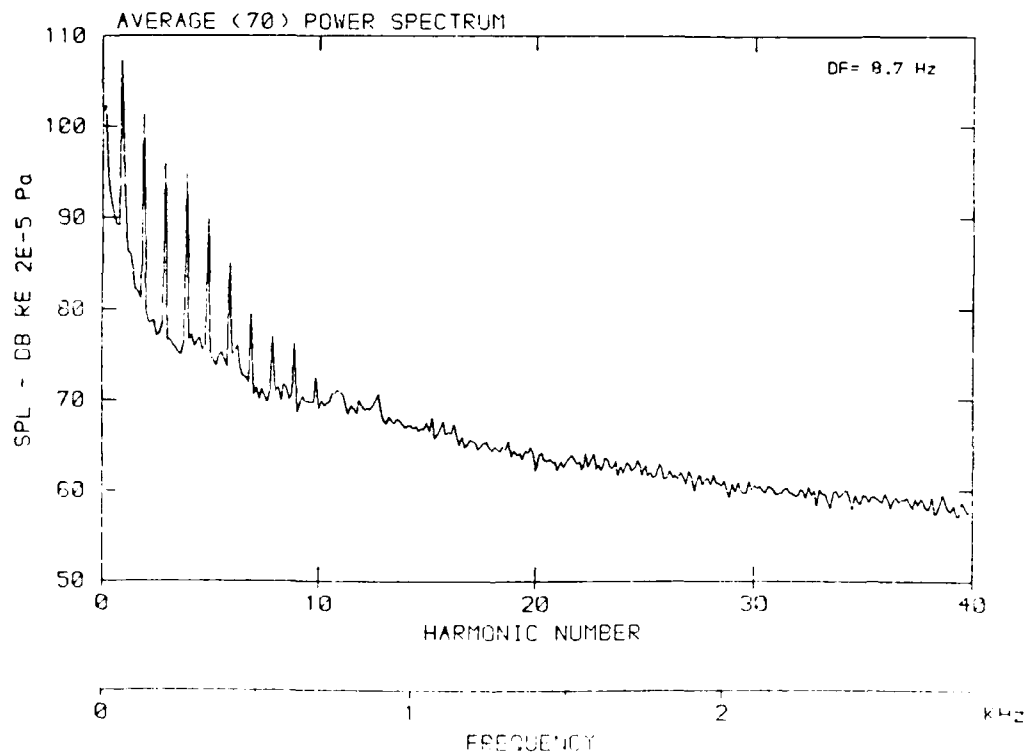
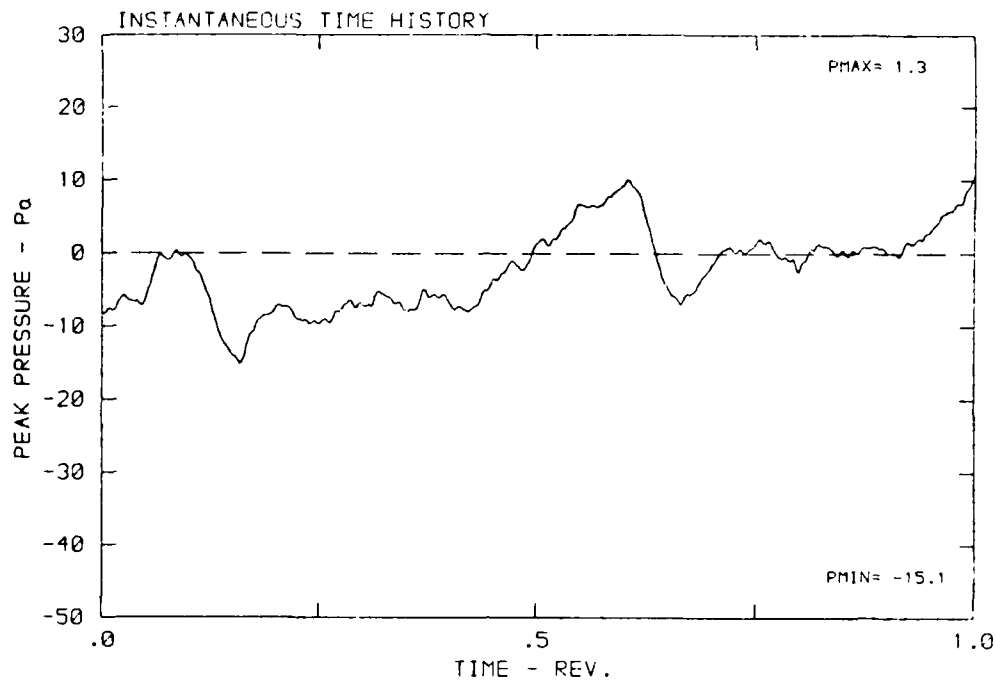
DATA POINT: KN-1 RUN: 187 MP: 3

β : 19.9° MH: .6623 n: 2100 rpm v/u : .231 ϕ : .0° T: 298.2 K



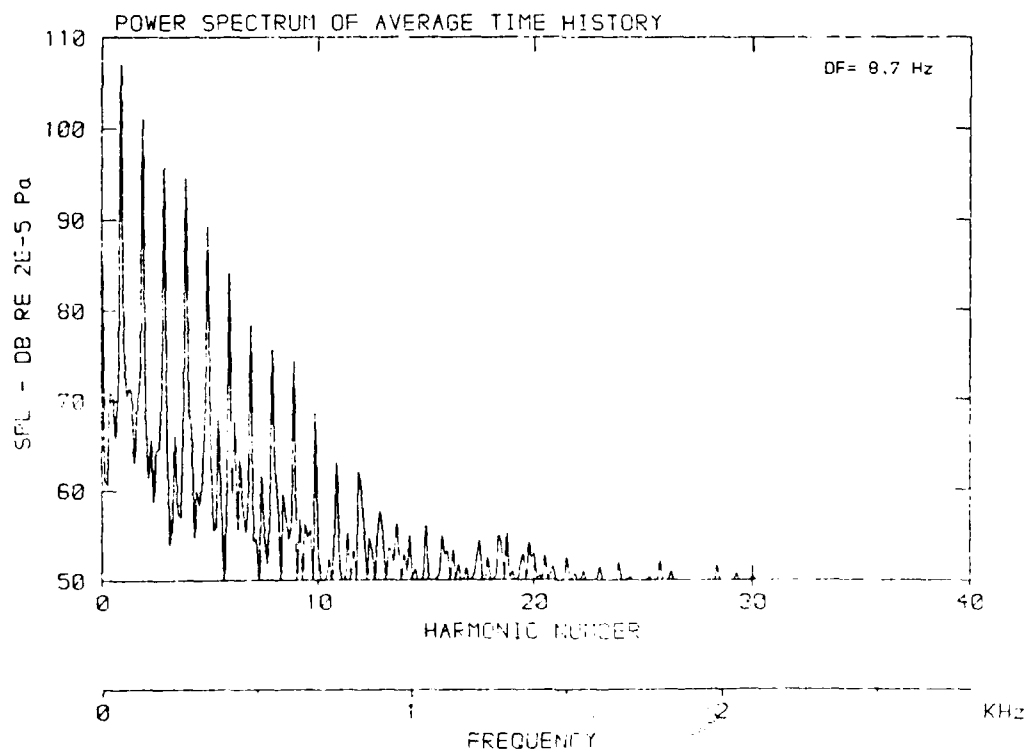
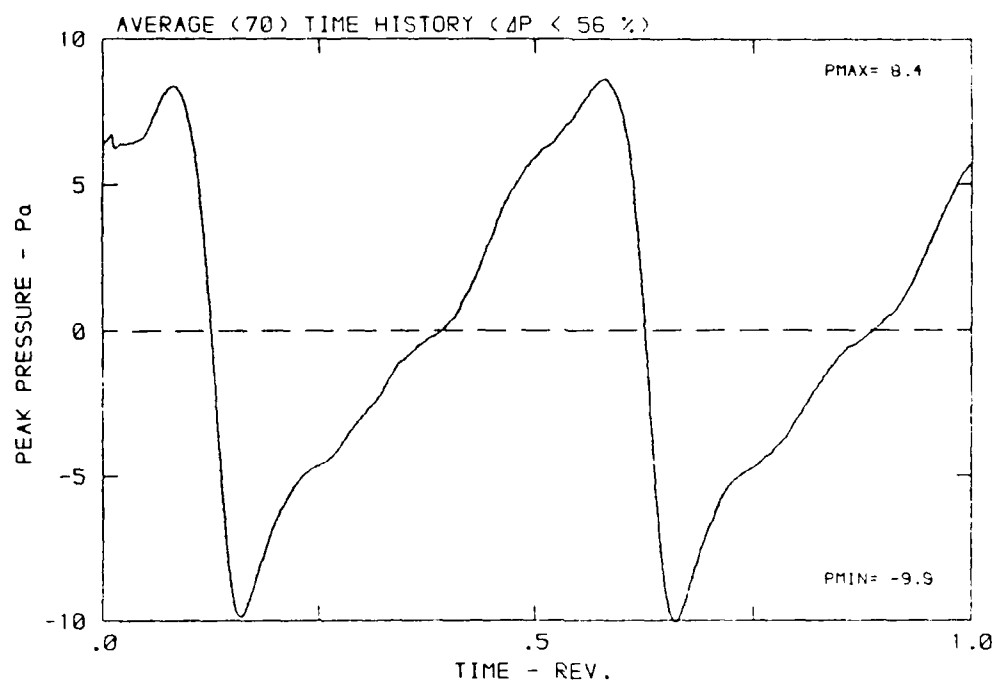
DATA POINT: KN-1 RUN: 187 MP: 4

β : 19.9° MH: .6623 n: 2100 rpm v/u : .231 ϕ : .0° T: 298.2 K



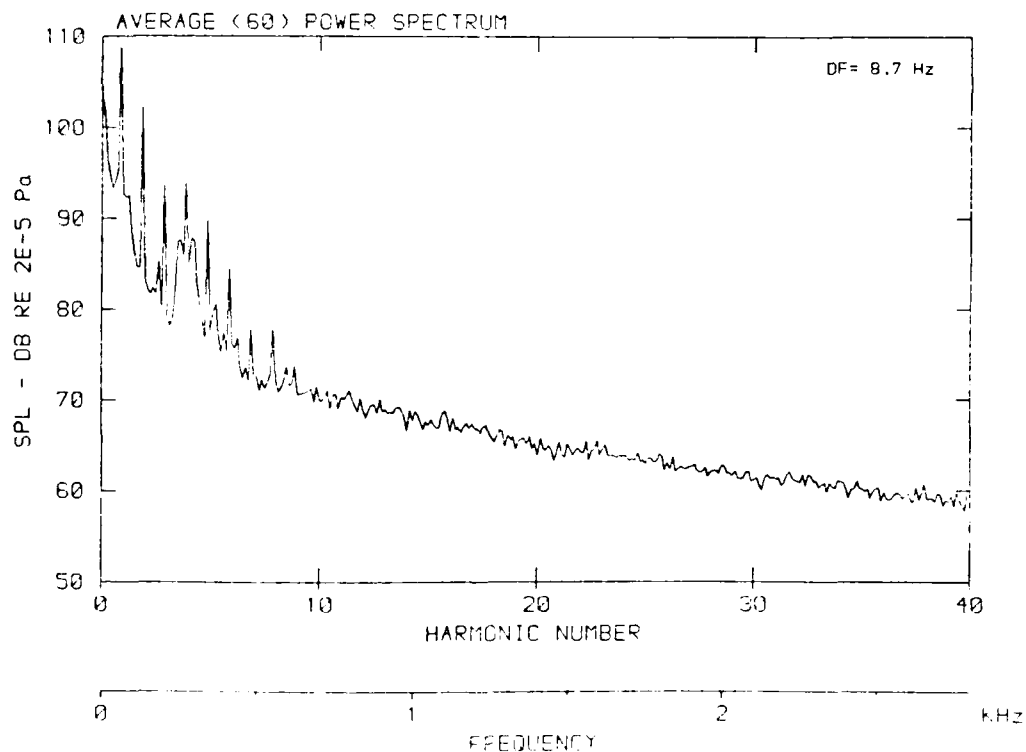
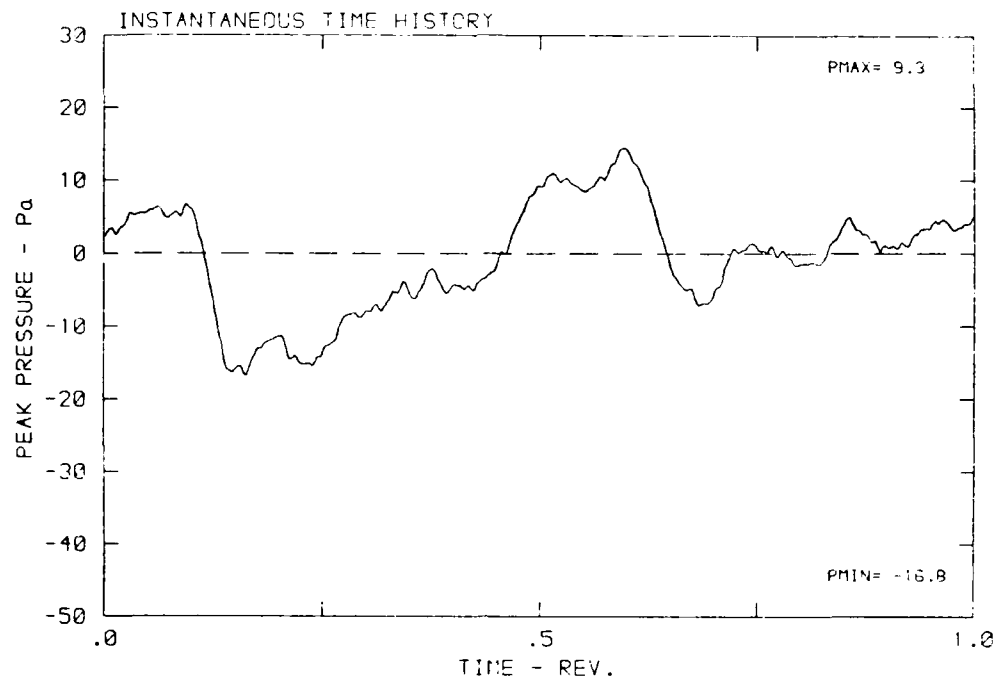
DATA POINT: KN-1 RUN: 187 MP: 4

β : 19.9° MH: .6623 n: 2100 rpm v/u: .231 ϕ : .0° T: 298.2 K



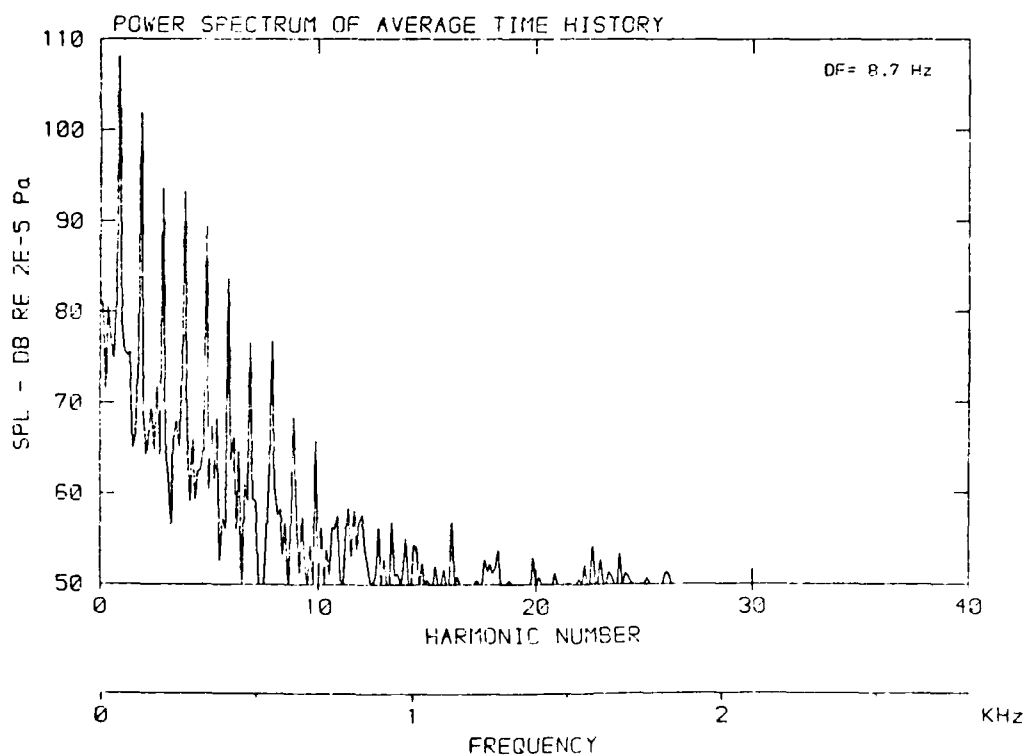
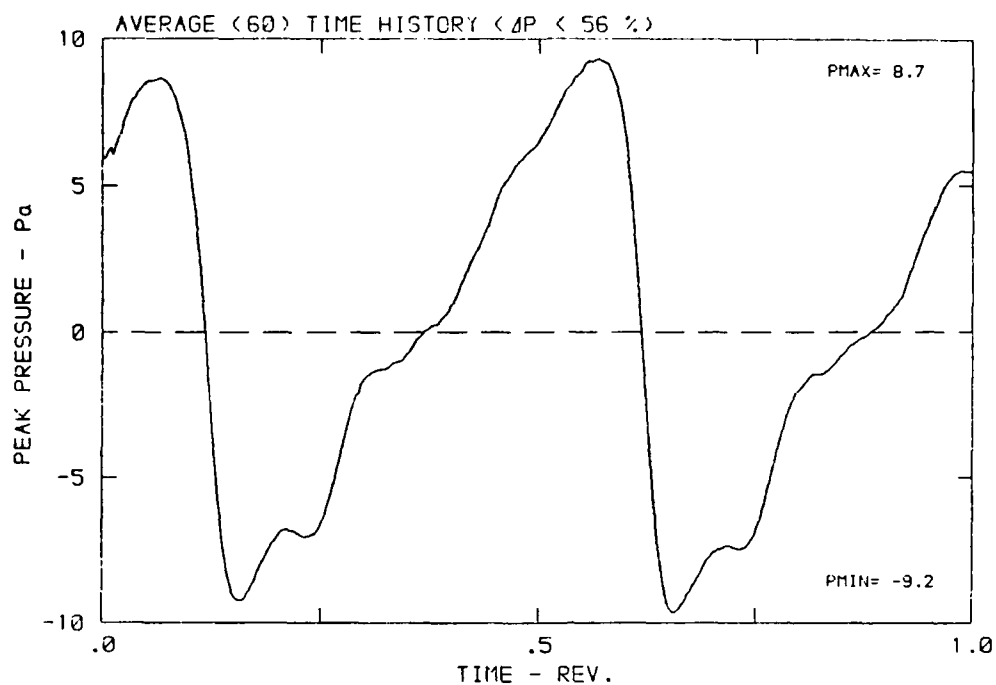
DATA POINT: KN-1 RUN: 187 MP: 5

β : 19.9° MH: .6623 n: 2100 rpm v/u : .231 ϕ : .0° T: 299.2 K



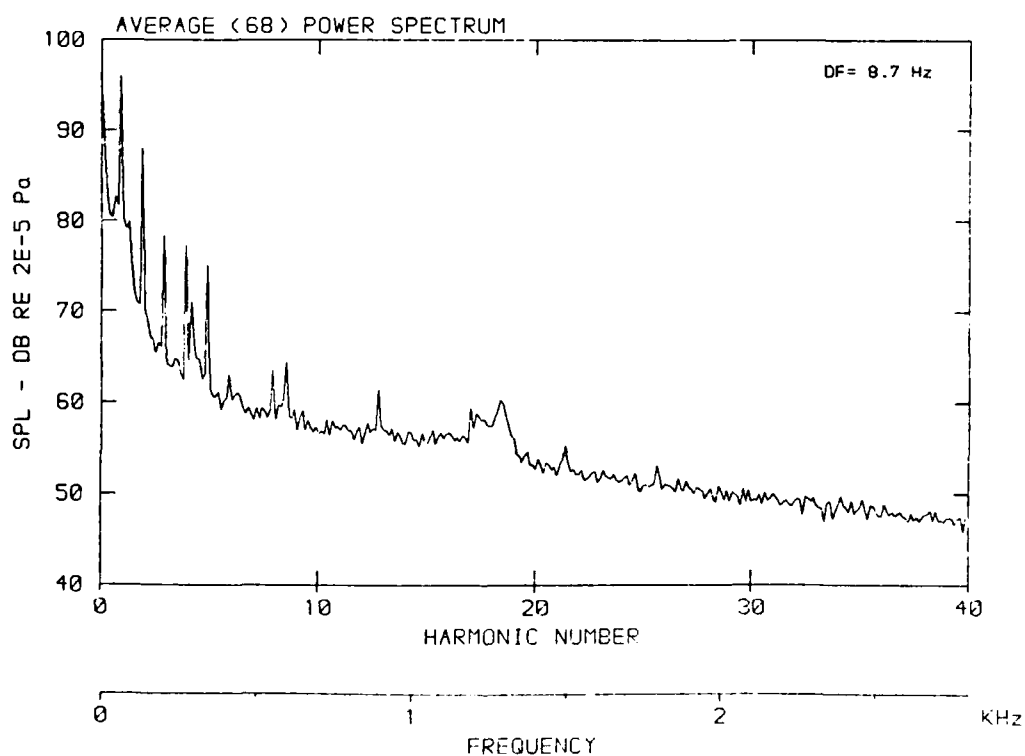
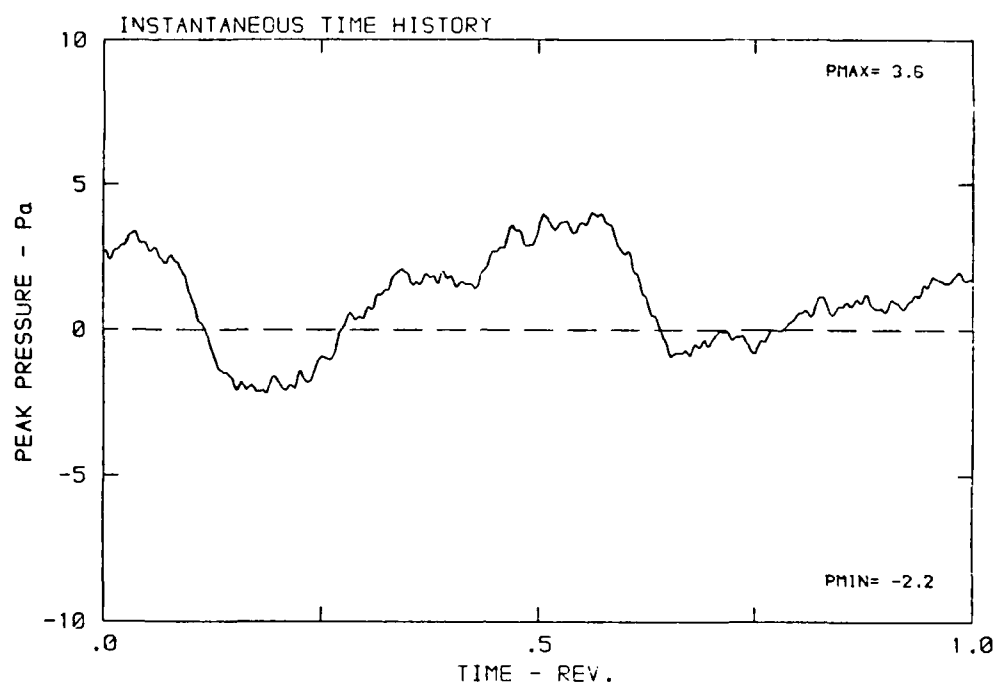
DATA POINT: KN-1 RUN: 187 MP: 5

β : 19.9° MH: .6623 n: 2100 rpm v/u: .231 ϕ : .0° T: 298.2 K



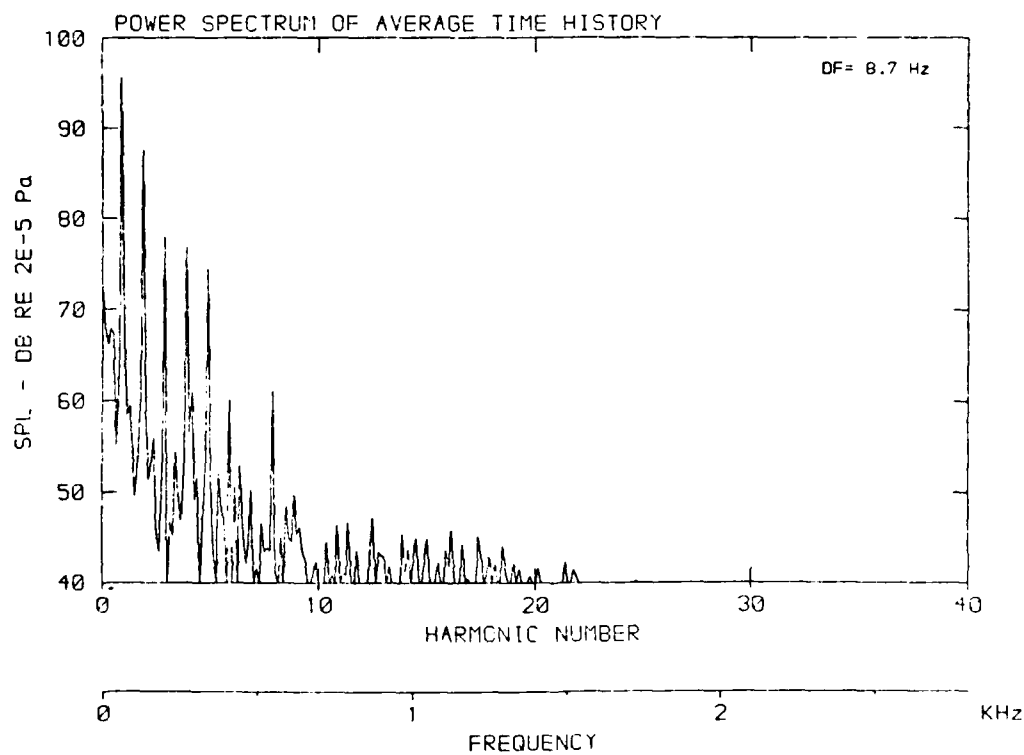
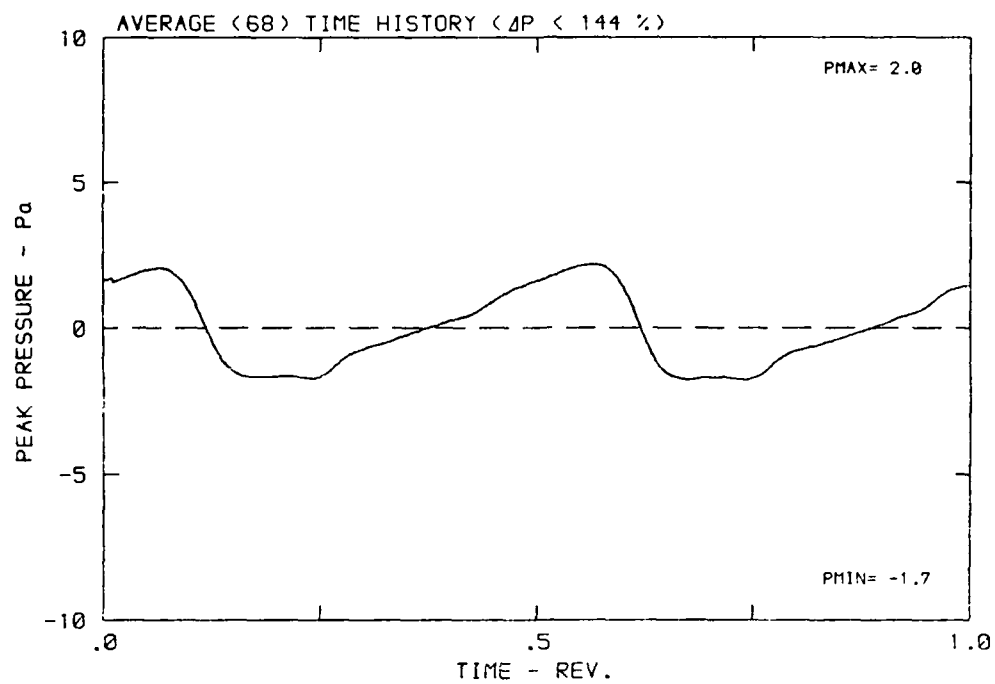
DATA POINT: KN-1 RUN: 187 MP: 6

β : 19.9° MH: .6523 n: 2100 rpm v/u : .231 ϕ : .0° T: 293.2 K



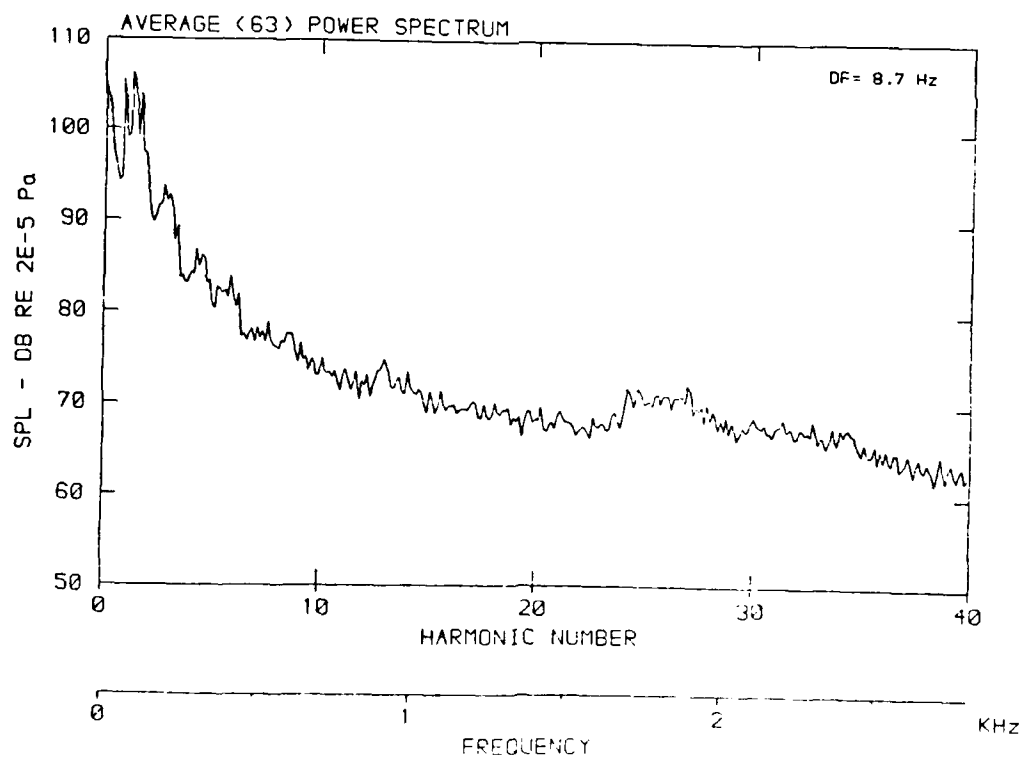
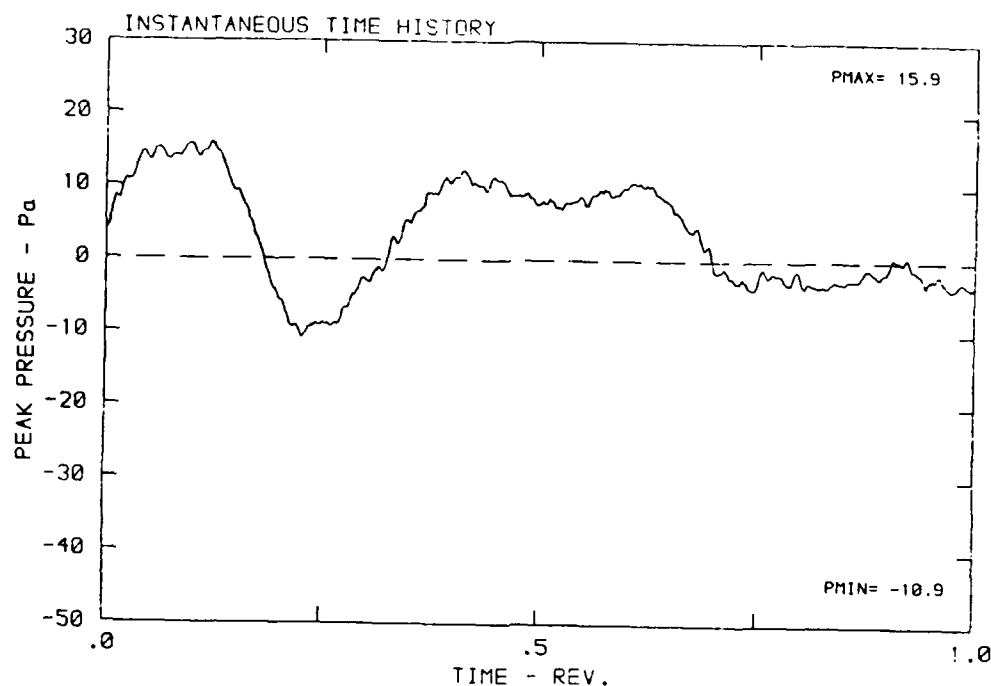
DATA POINT: KN-1 RUN: 187 MP: 6

β : 19.9° MH: .6623 n: 2100 rpm v/u: .231 ϕ : .0° T: 298.2 K



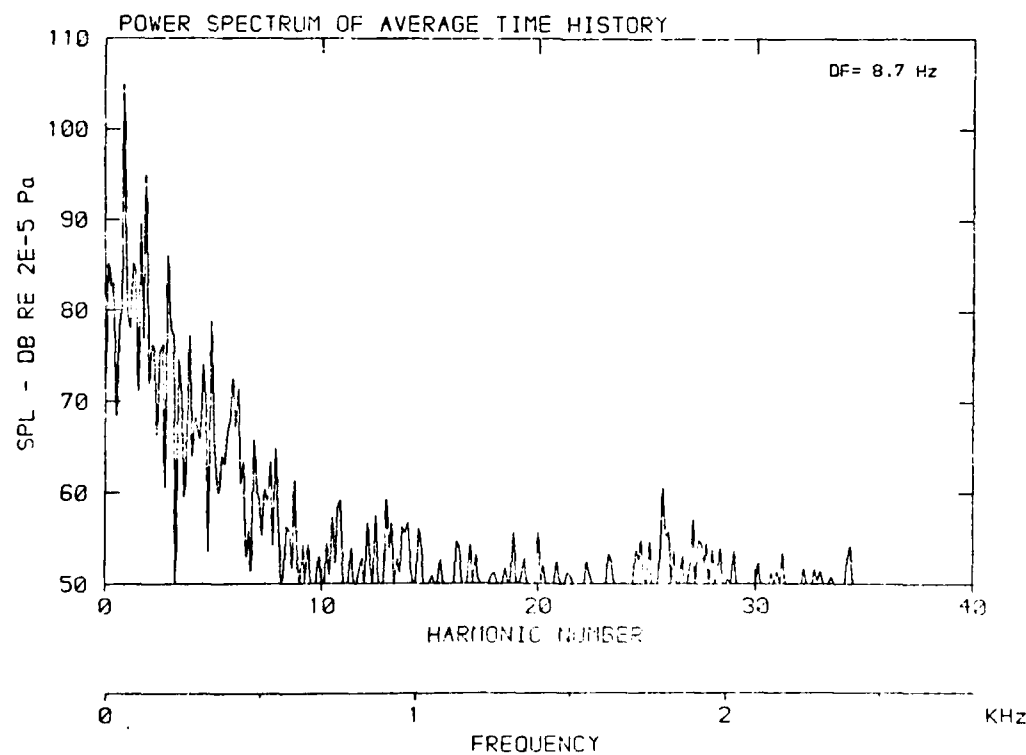
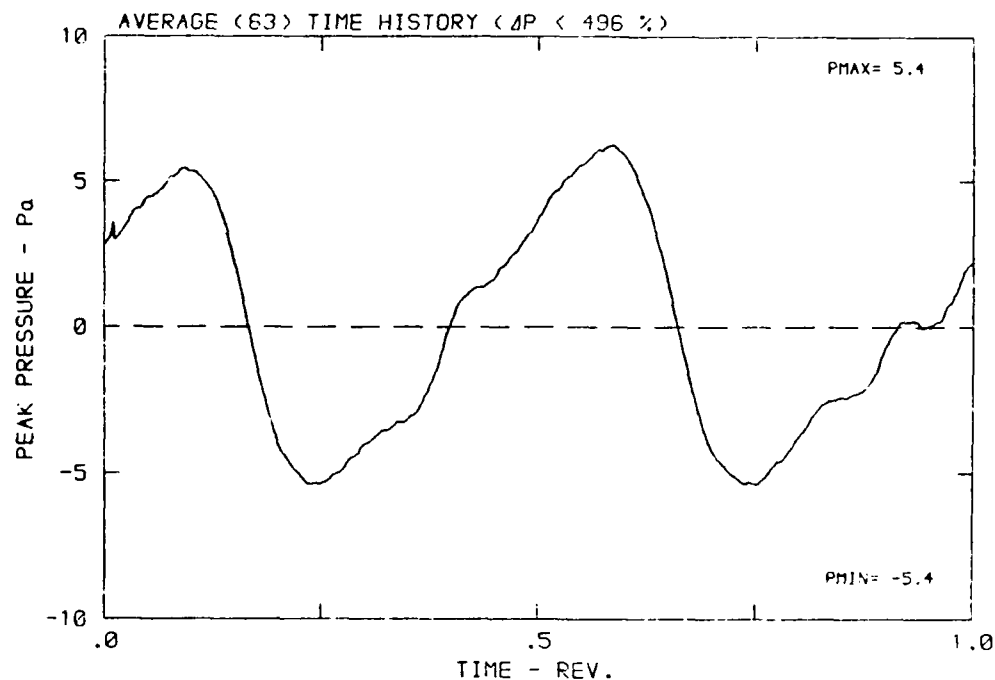
DATA POINT: KN-1 RUN: 187 MP: 7

β : 19.9° MH: .6623 n: 2100 rpm v/u: .231 ϕ : .0° T: 295.2 K



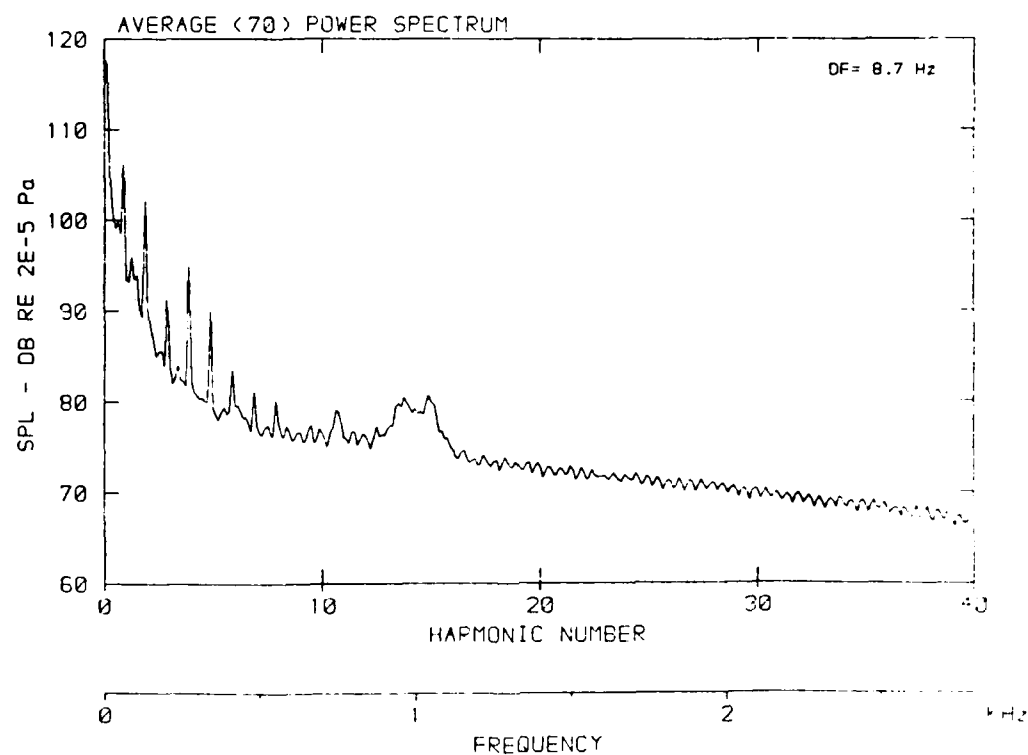
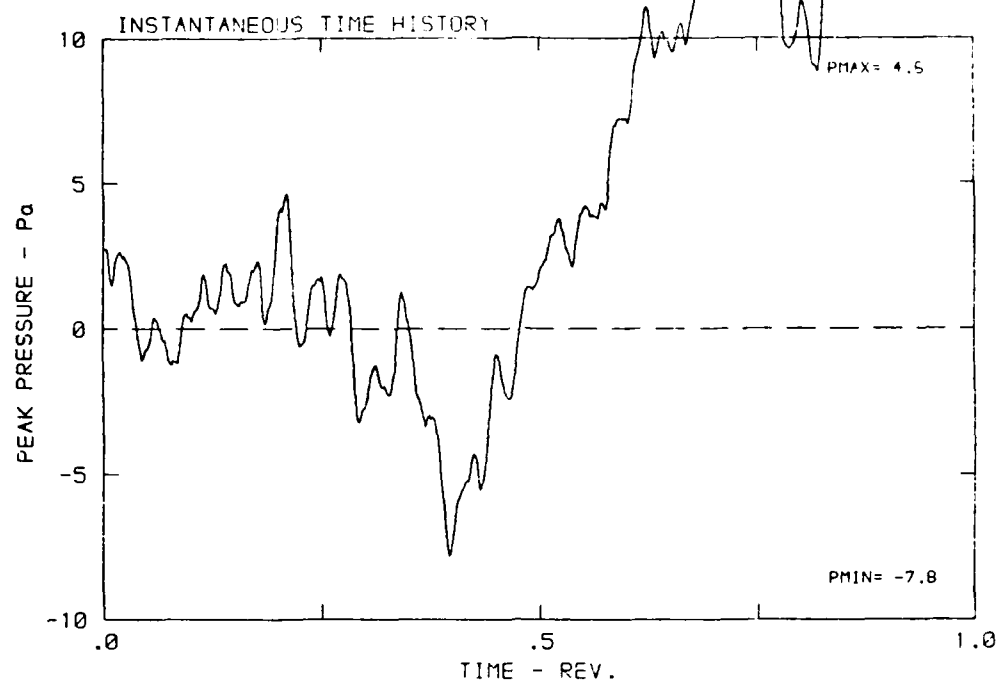
DATA POINT: KN-1 RUN: 187 MP: 7

β : 19.9° MH: .6623 n: 2100 rpm v/u : .231 ϕ : .0° T: 298.2 K



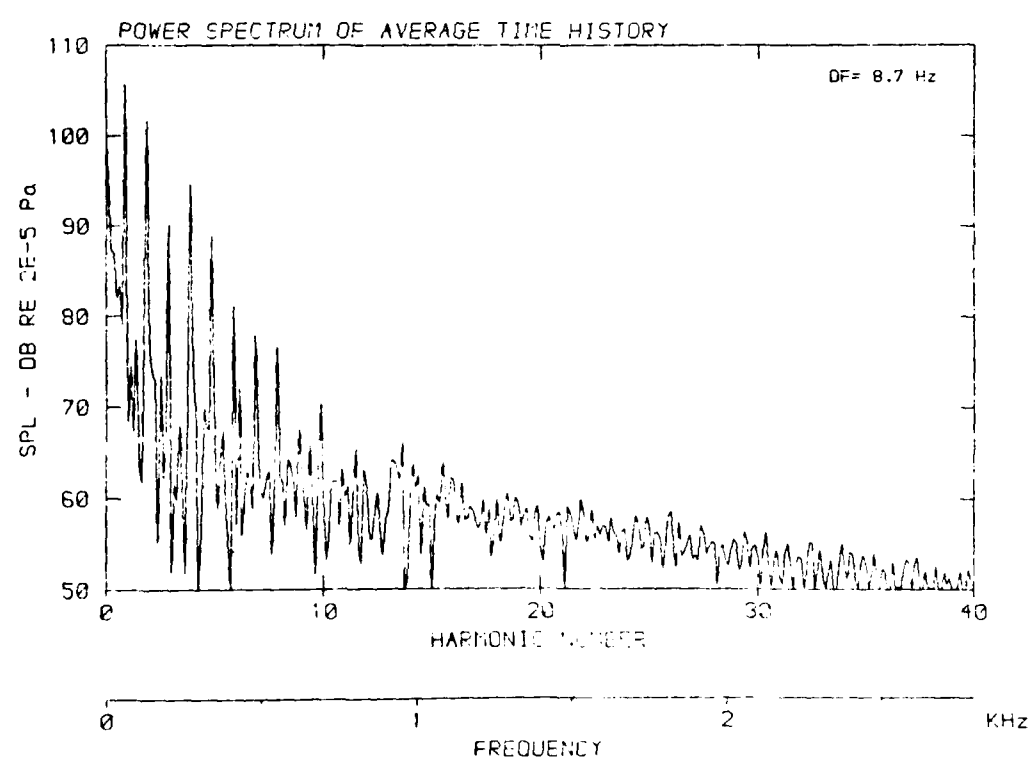
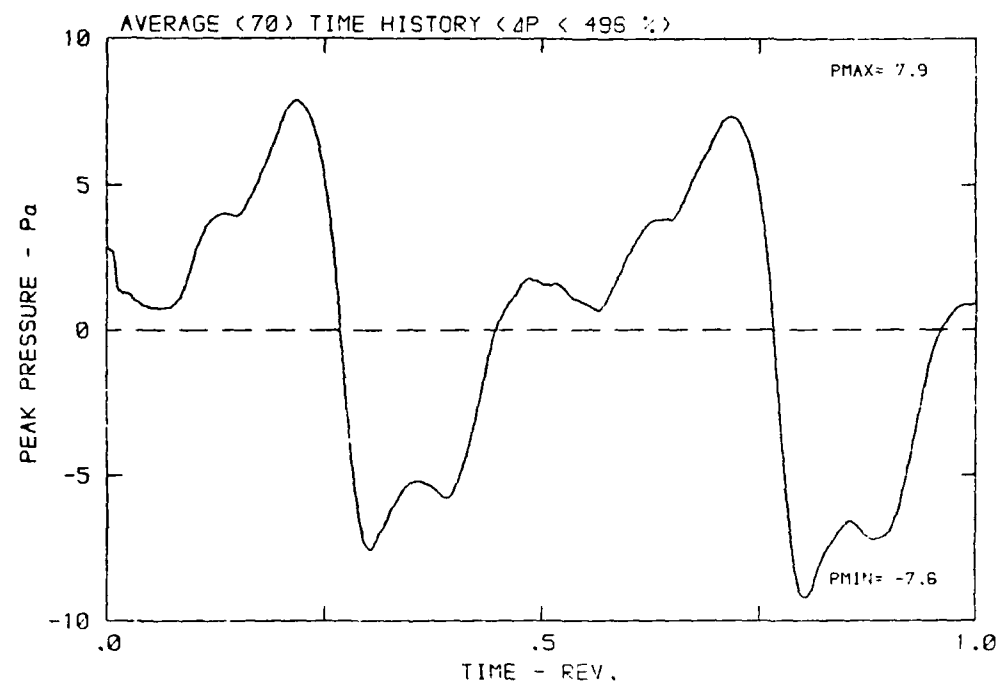
DATA POINT: KN-1 RUN: 187

β : 19.9° MH: .9623 n: 2100 rpm v: .23



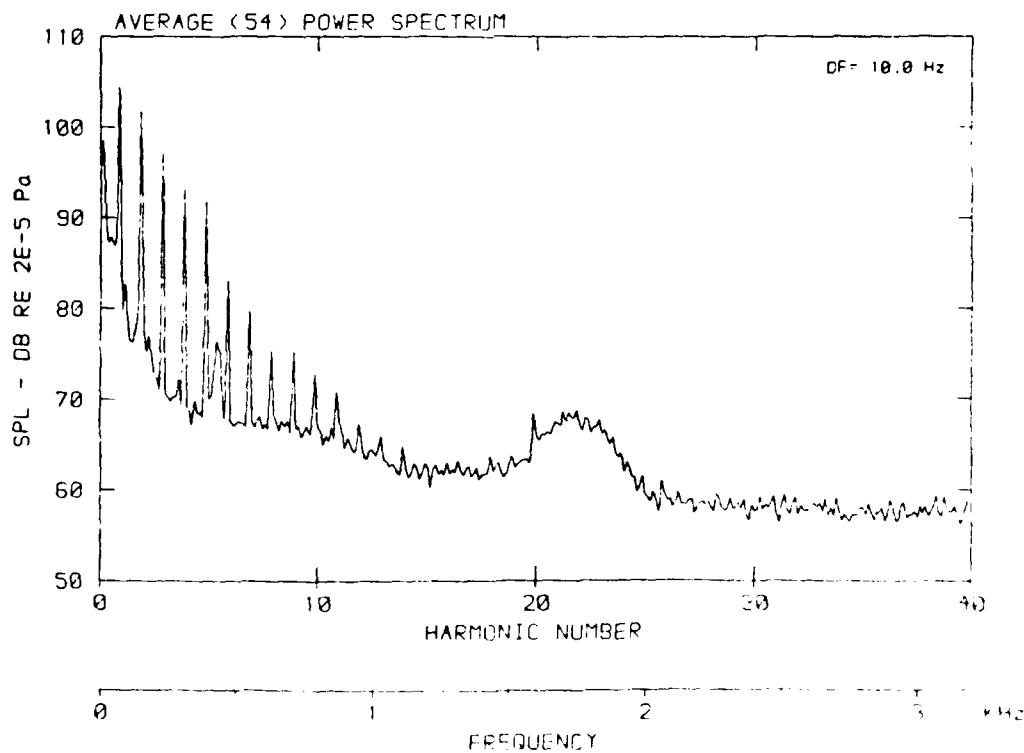
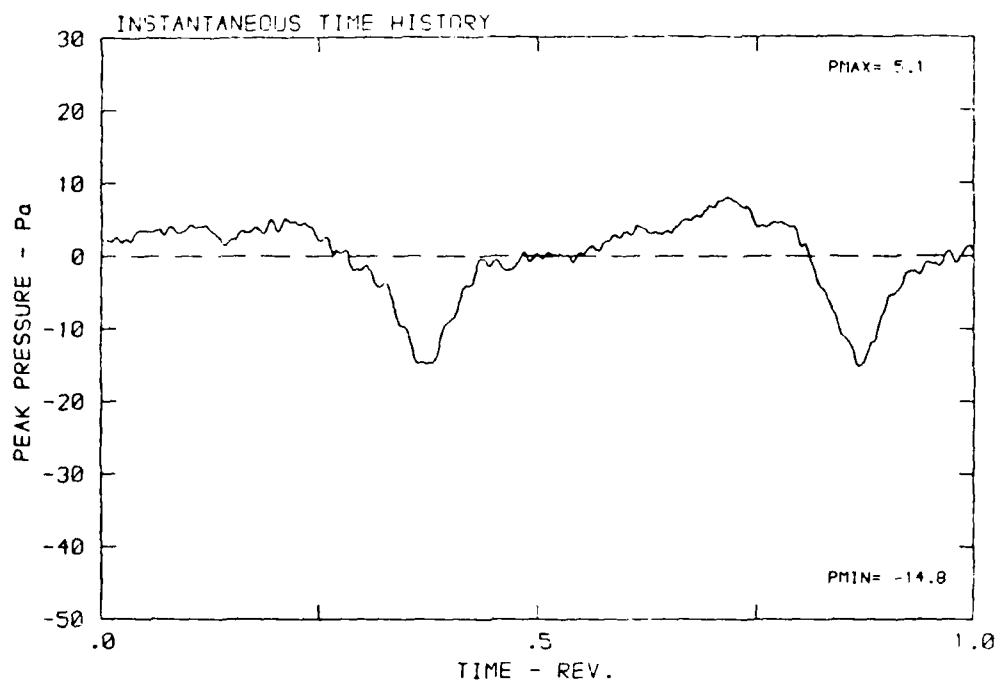
DATA POINT: KN-1 RUN: 187 MP: 9

β : 19.9° MH: .6623 n: 2100 rpm v/u: .231 ϕ : .0° T: 298.2 K



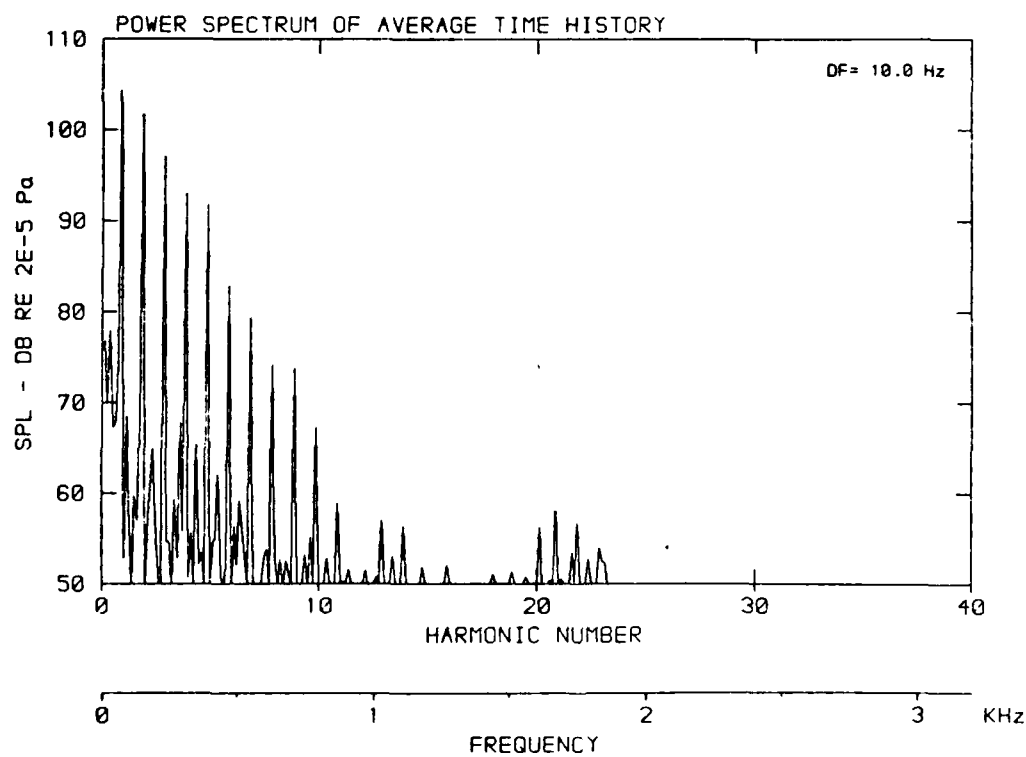
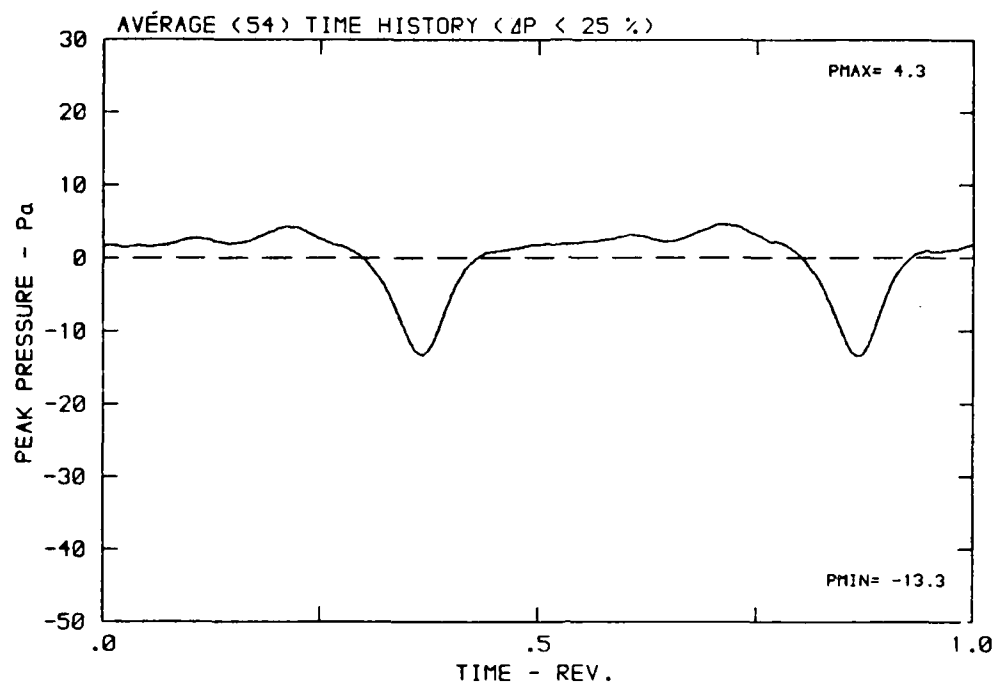
DATA POINT: KN-2 RUN: 186 MP: 1

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



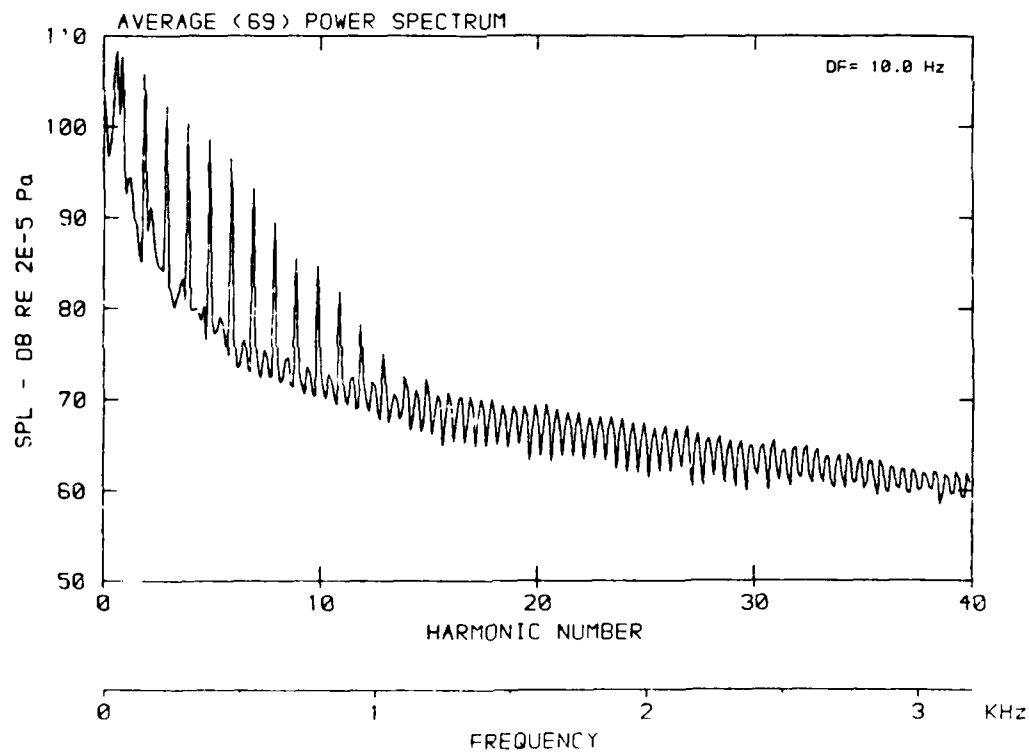
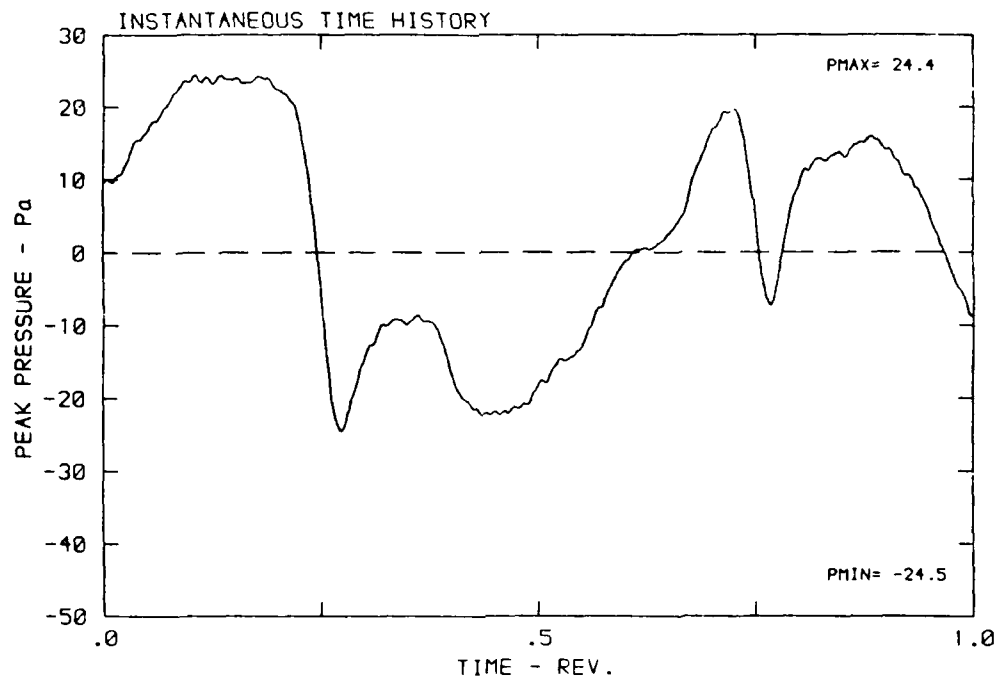
DATA POINT: KN-2 RUN: 186 MP: ,

β : 19.9° MH: .7516 n: 2400 rpm v/u: .202 ϕ : .0° T: 298.9 K



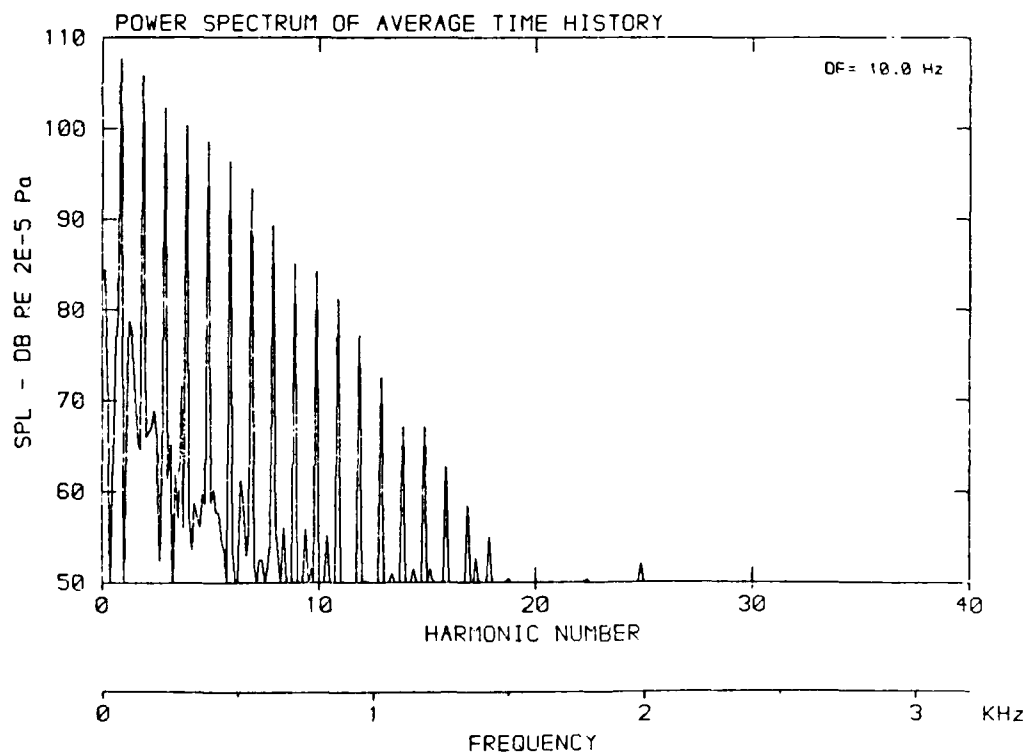
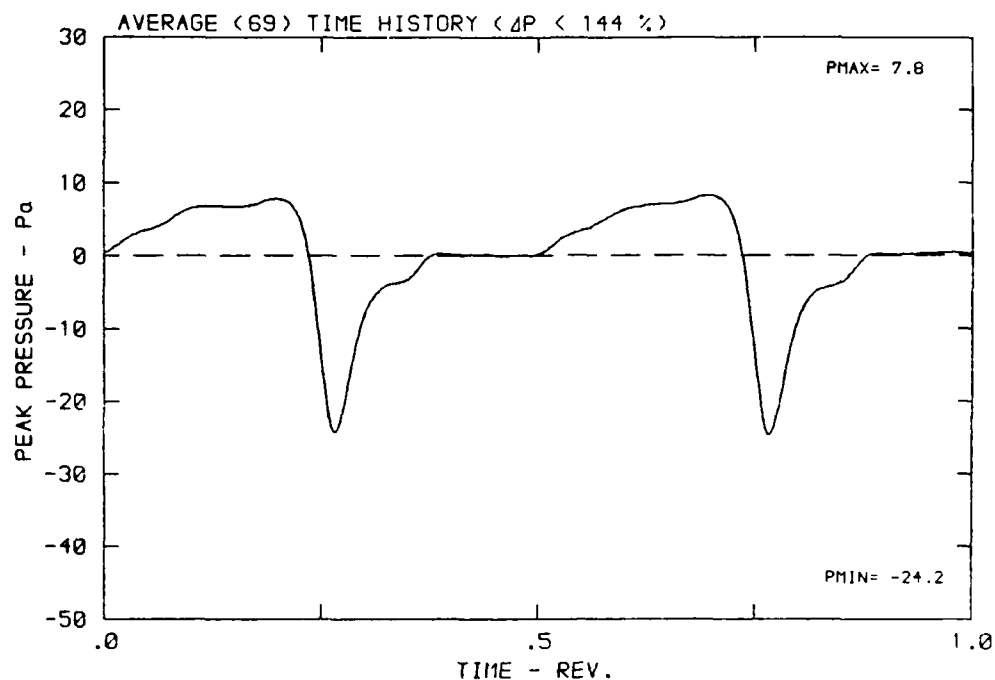
DATA POINT: KN-2 RUN: 186 MP: 2

β : 19.9° MH: .7516 n: 2400 rpm v/u: .202 ϕ : .0° T: 298.9 K



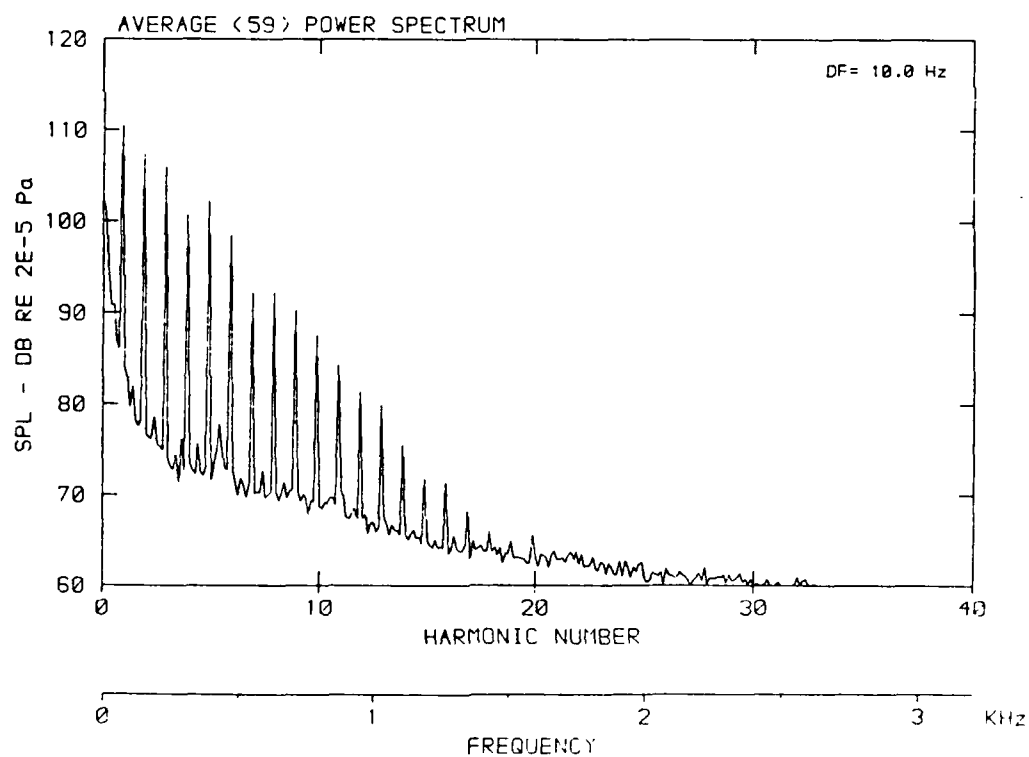
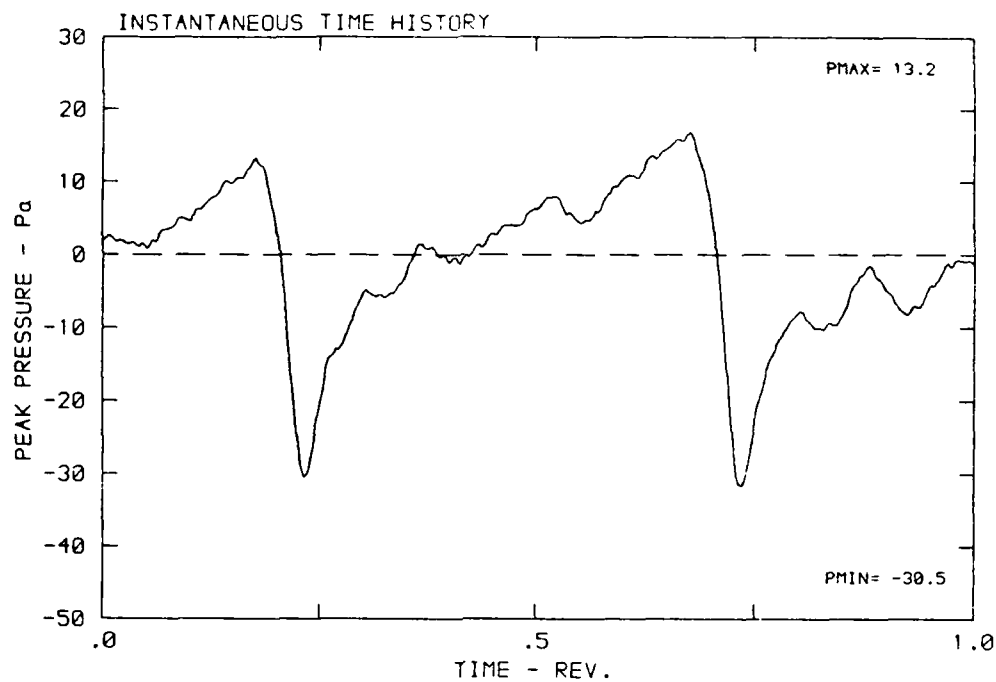
DATA POINT: KN-2 RUN: 186 MP: 2

β : 19.9° MH: .7516 n: 2400 rpm v/u: .202 ϕ : .0° T: 298.9 K



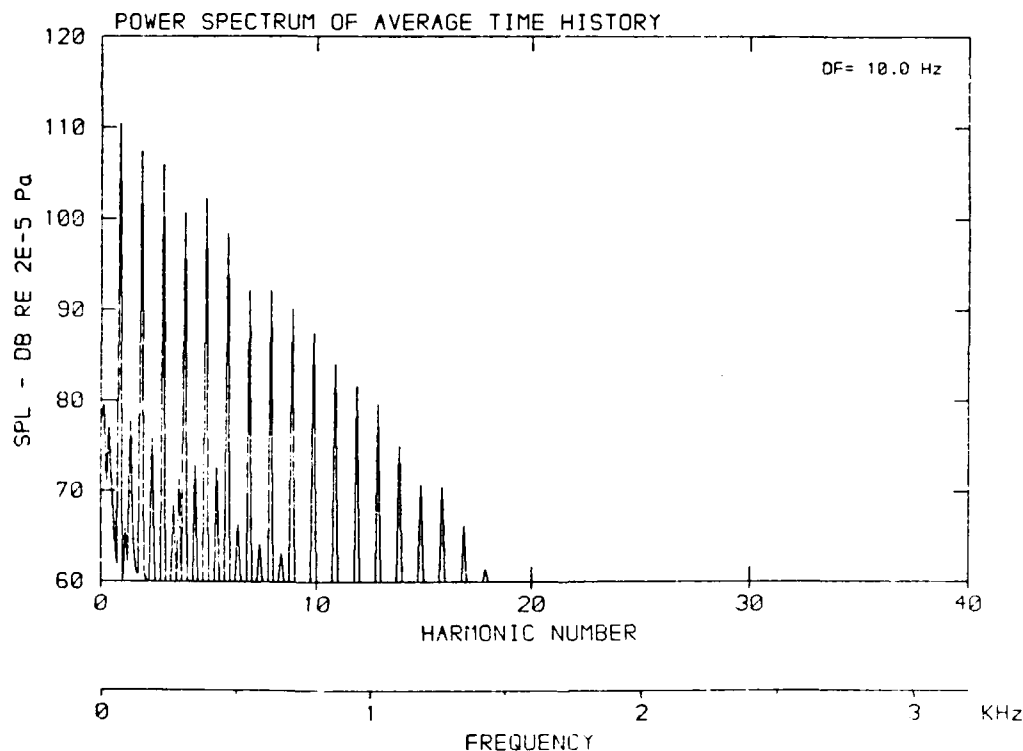
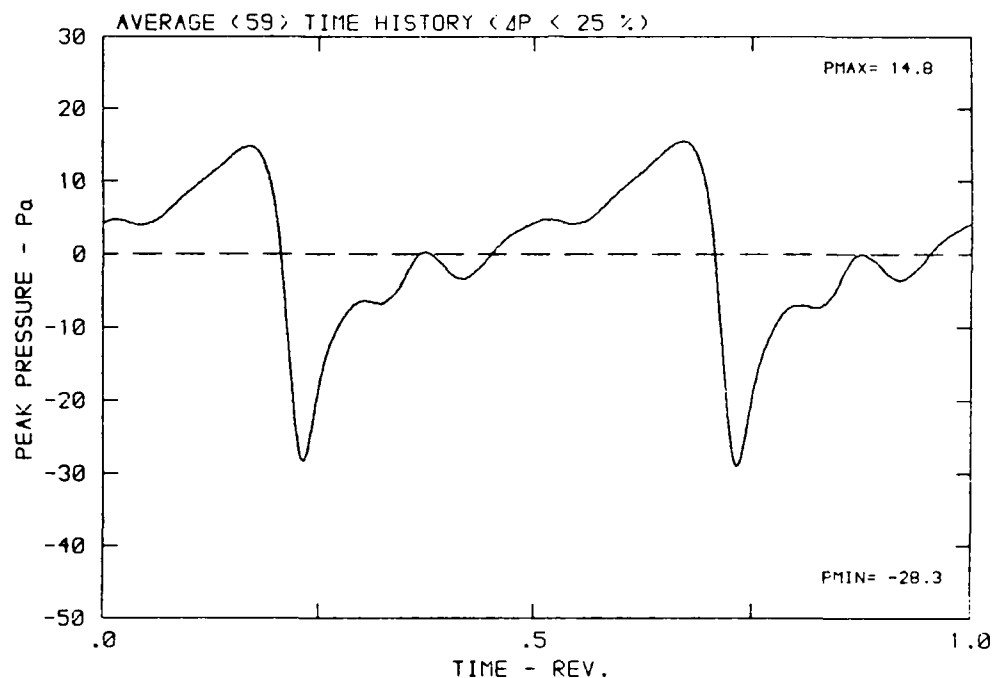
DATA POINT: KN-2 RUN: 186 MP: 3

β : 19.9° MH: .7516 n: 2400 rpm v/u: .202 ϕ : .0° T: 298.9 K



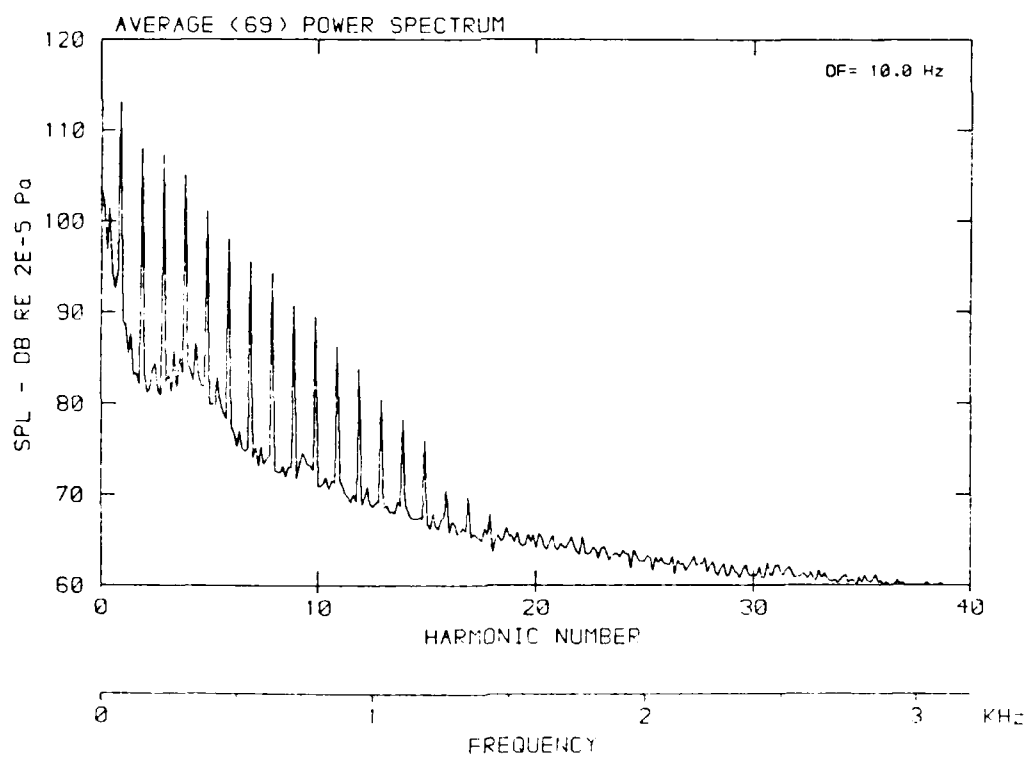
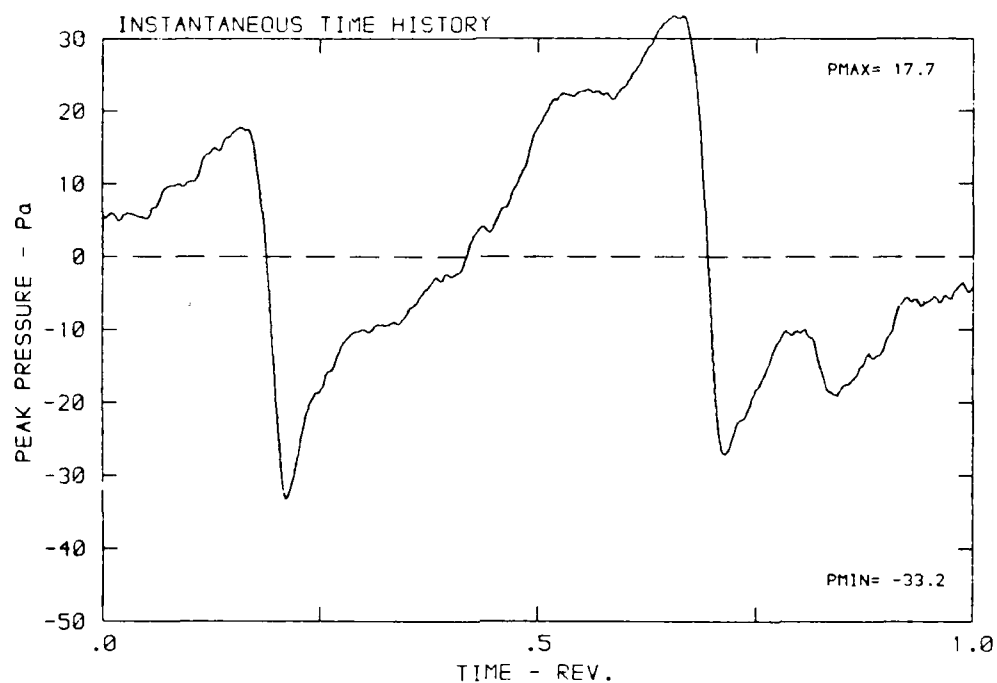
DATA POINT: KN-2 RUN: 186 MP: 3

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



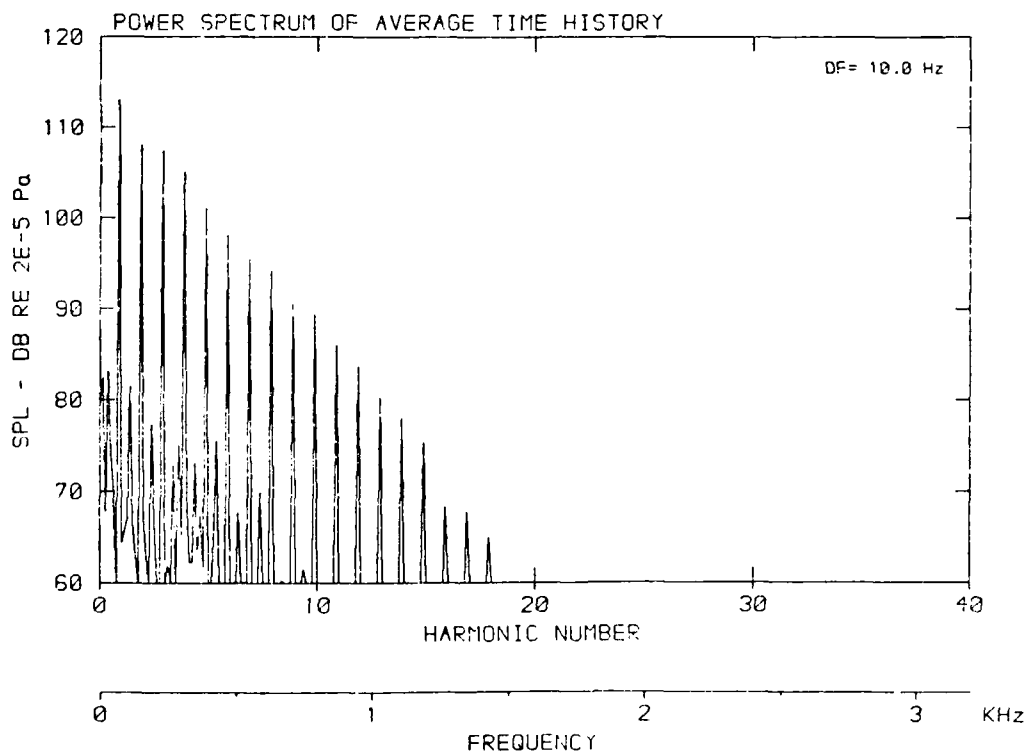
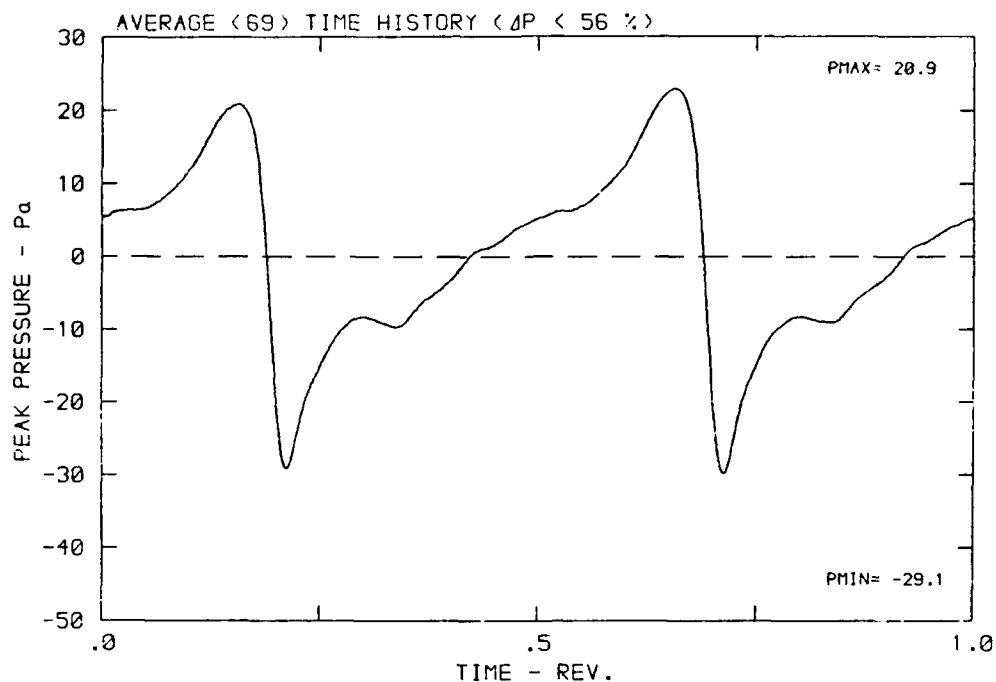
DATA POINT: KN-2 RUN: 186 MP: 4

β : 19.9° MH: .7516 n: 2400 rpm v/u: .202 ϕ : .0° T: 298.3



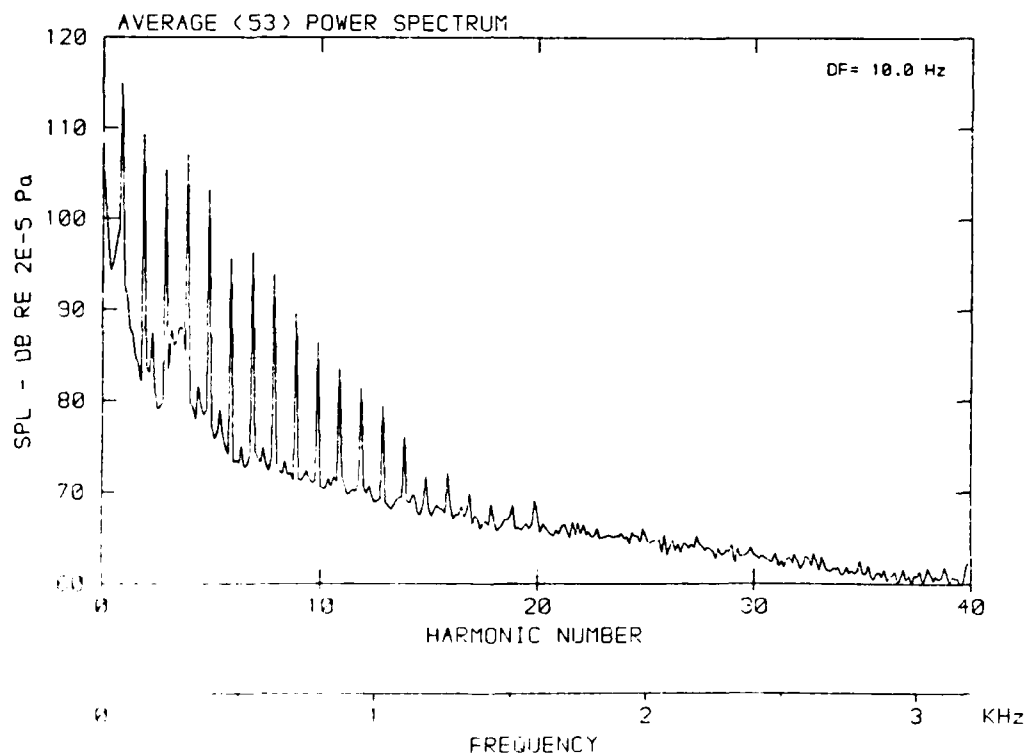
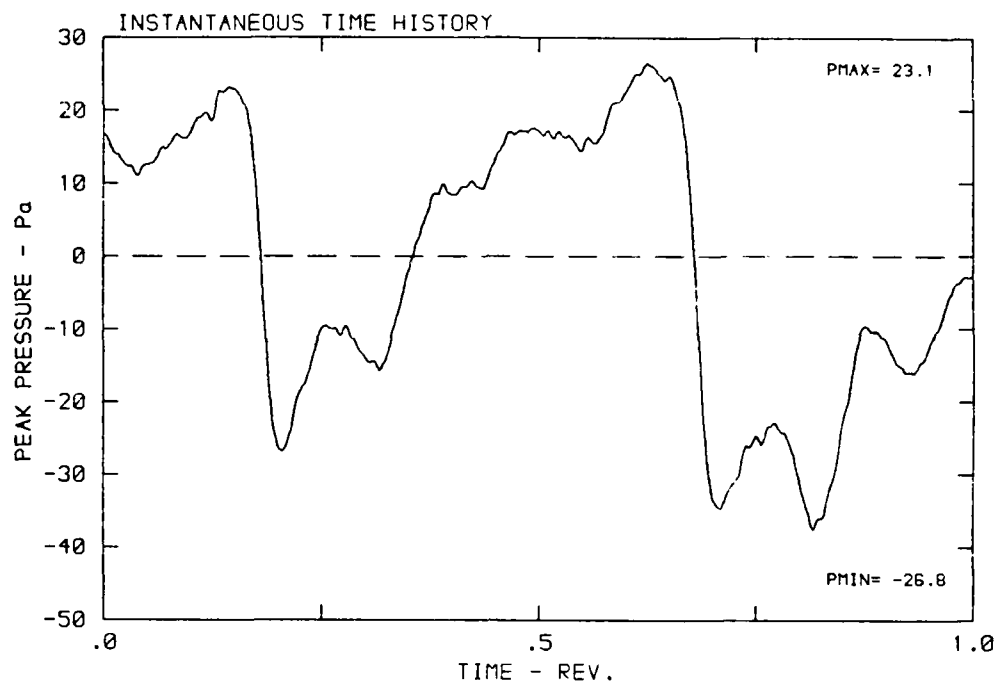
DATA POINT: KN-2 RUN: 186 MP: 4

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



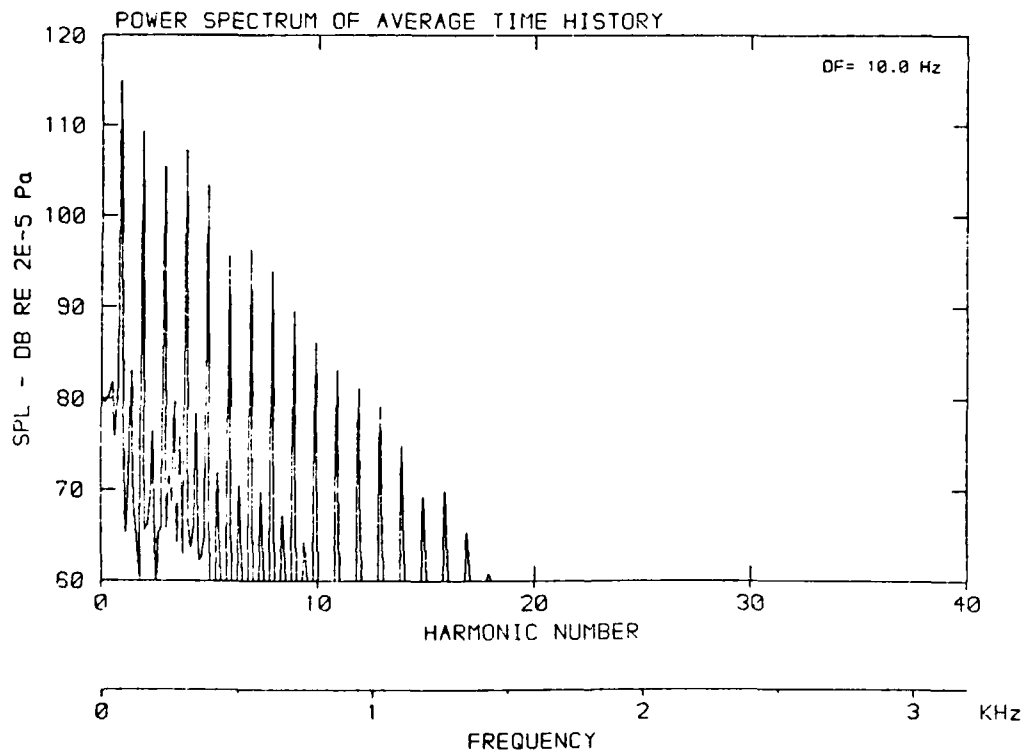
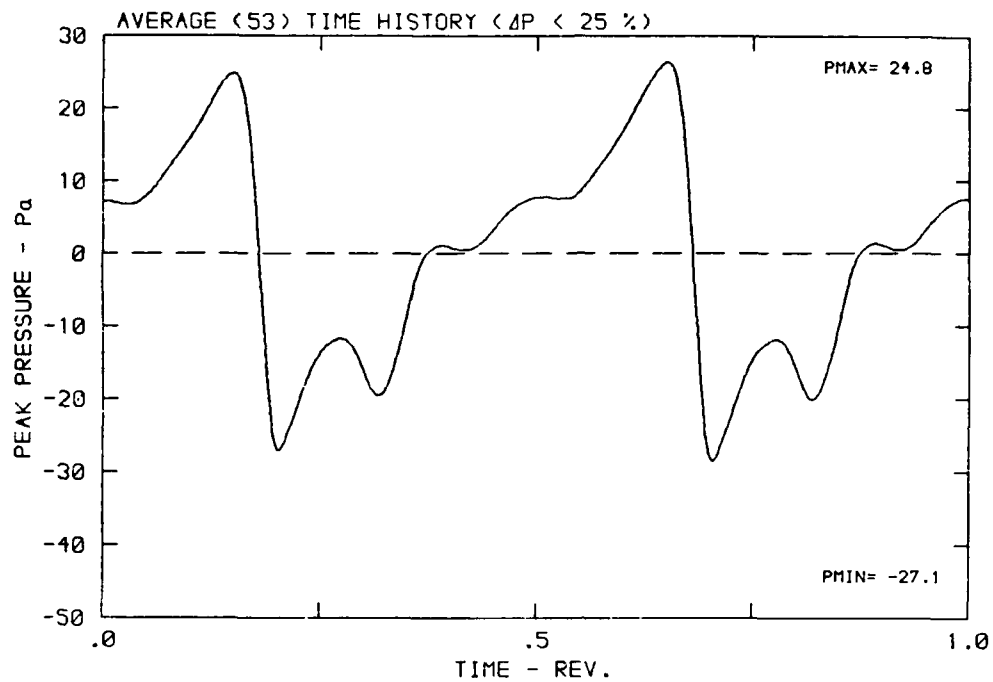
DATA POINT: KN-2 RUN: 186 MP: 5

β : 19.9° MH: .7516 n: 2400 rpm v/u: .202 ϕ : .0° T: 298.9 K



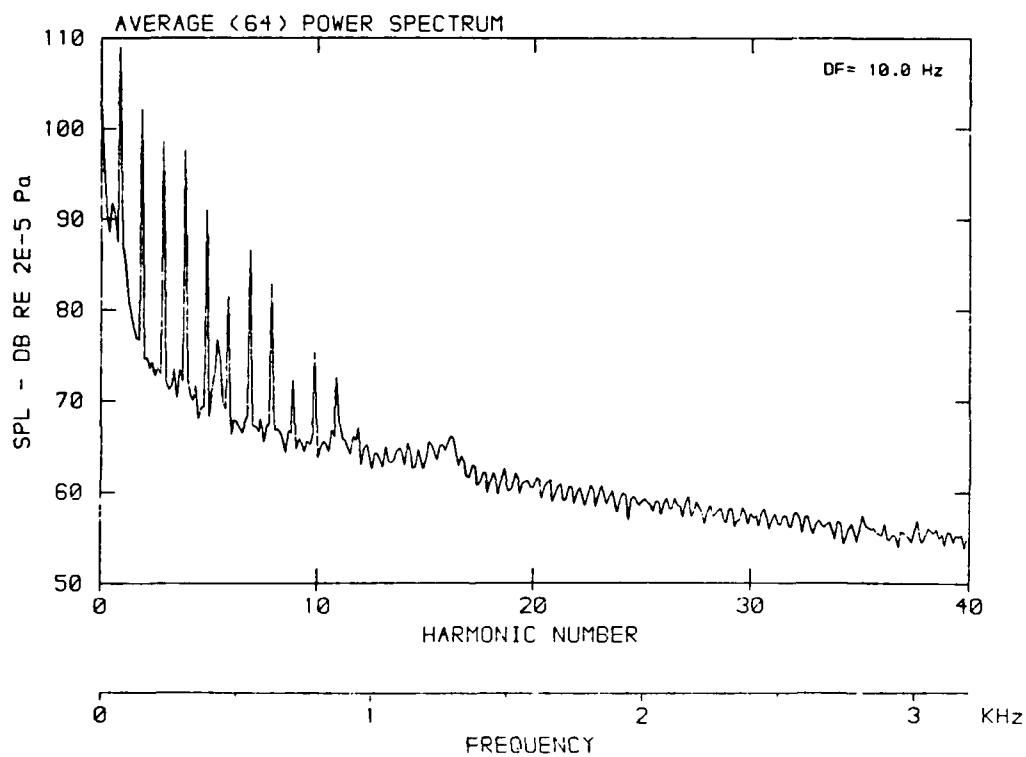
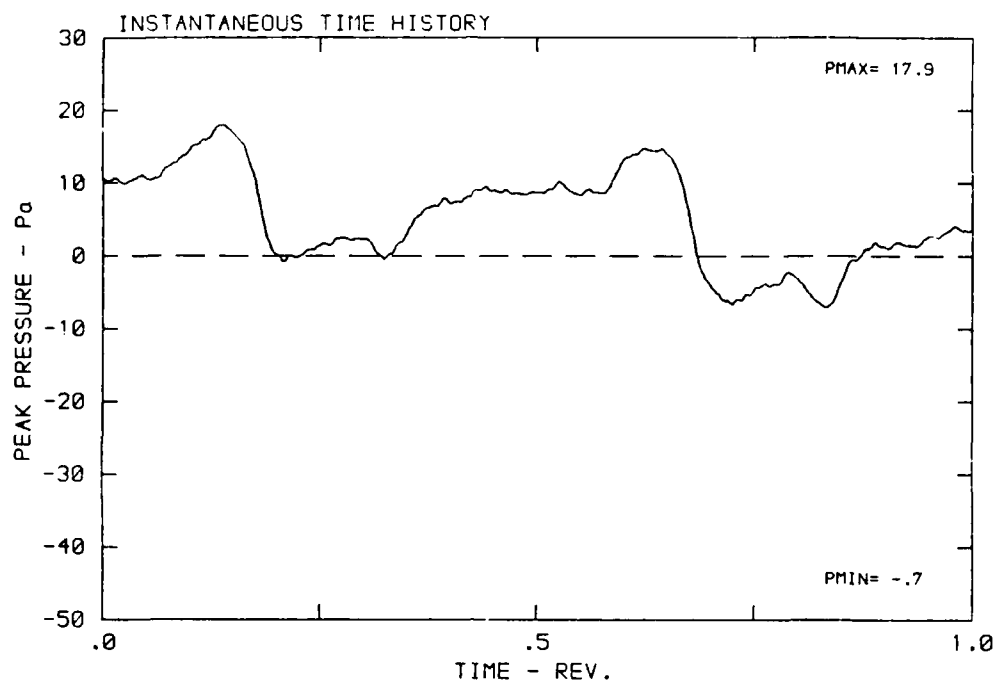
DATA POINT: KN-2 RUN: 186 MP: 5

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



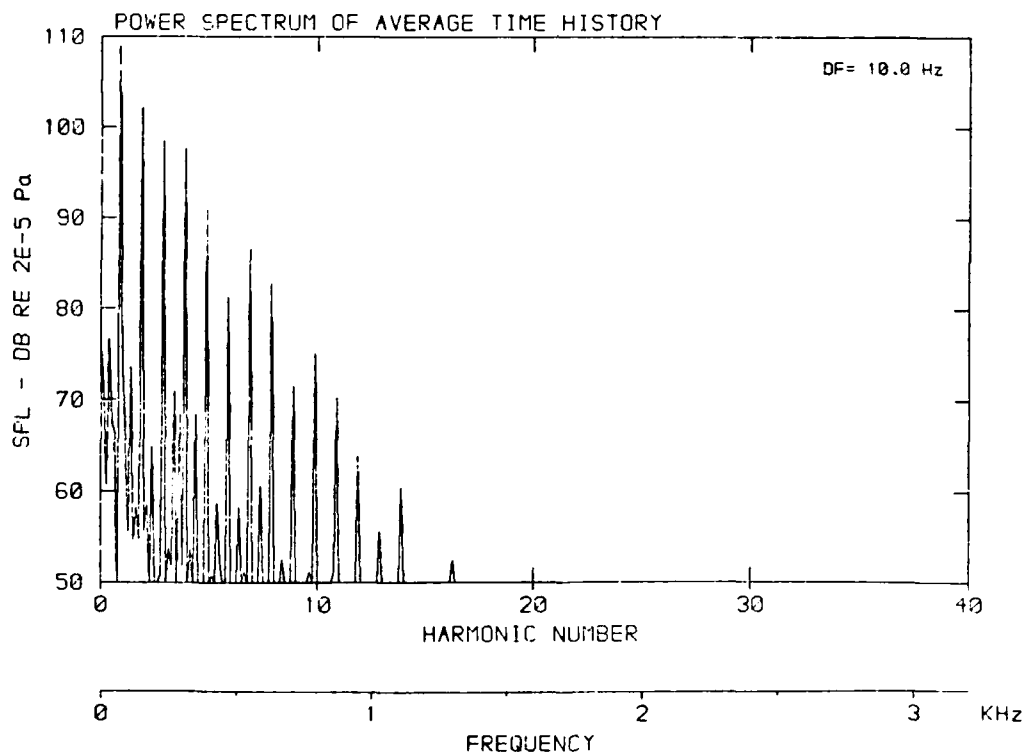
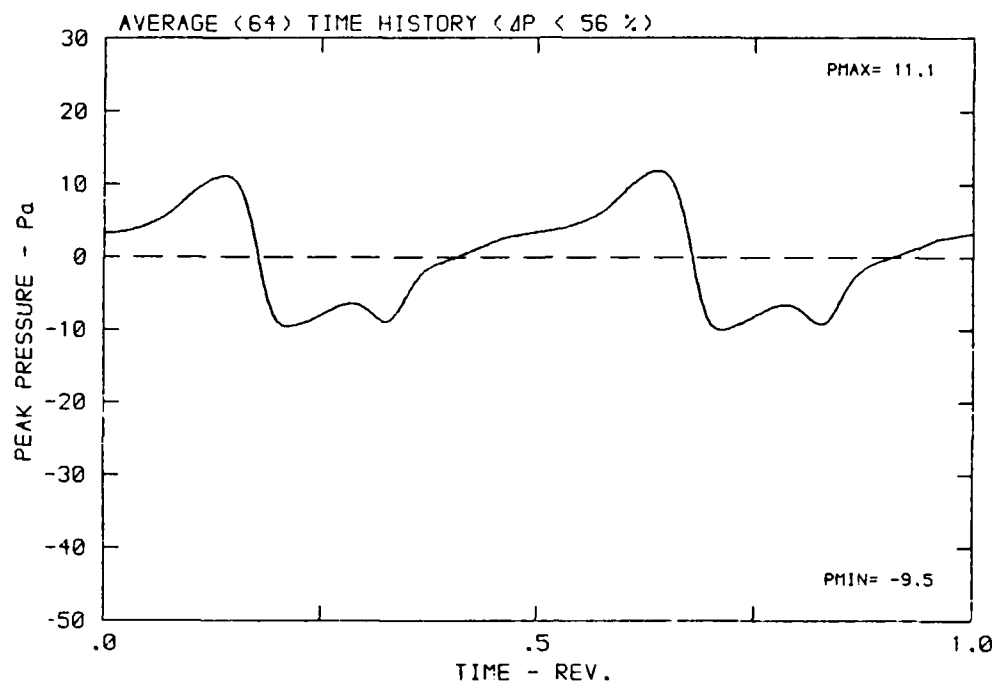
DATA POINT: KN-2 RUN: 186 MP: 6

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



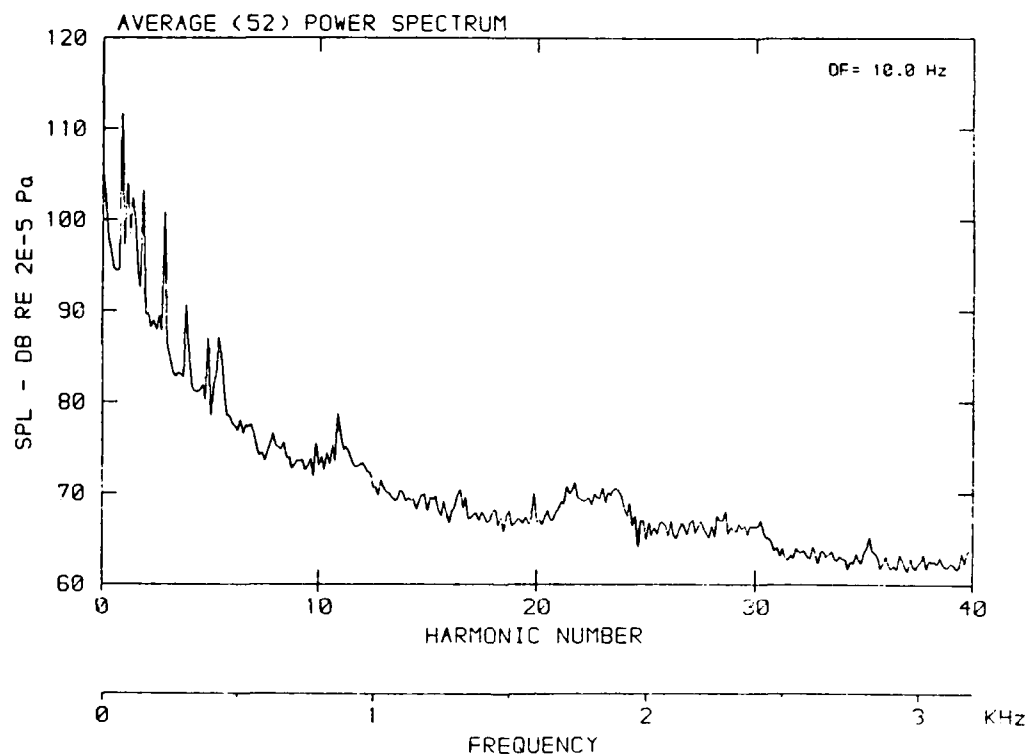
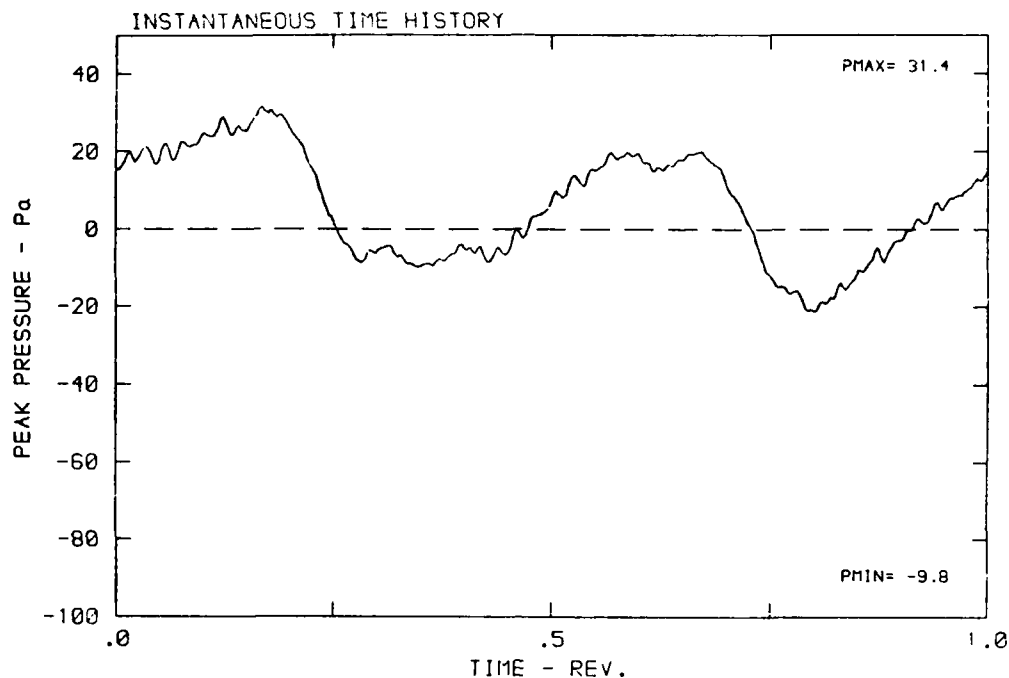
DATA POINT: KN-2 RUN: 186 MP: 6

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



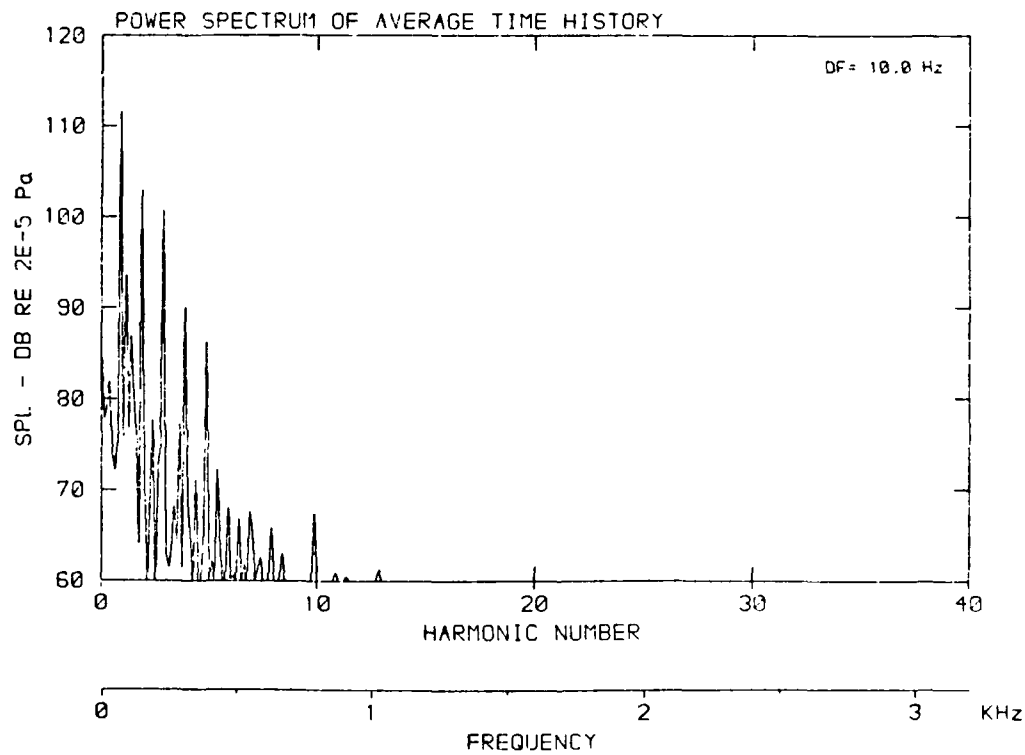
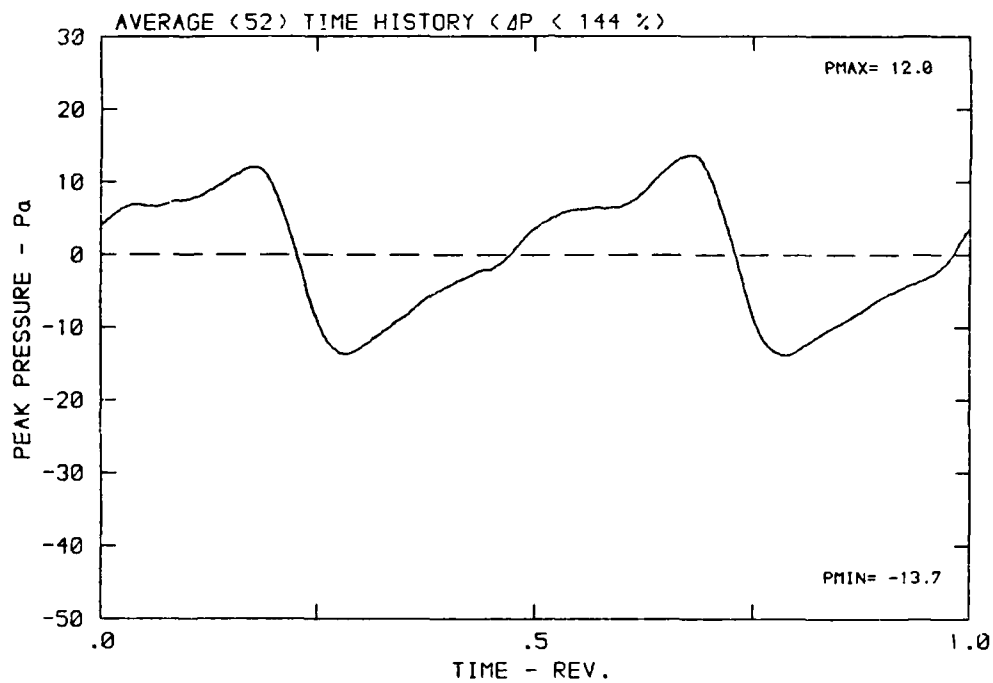
DATA POINT: KN-2 RUN: 186 MP: 7

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



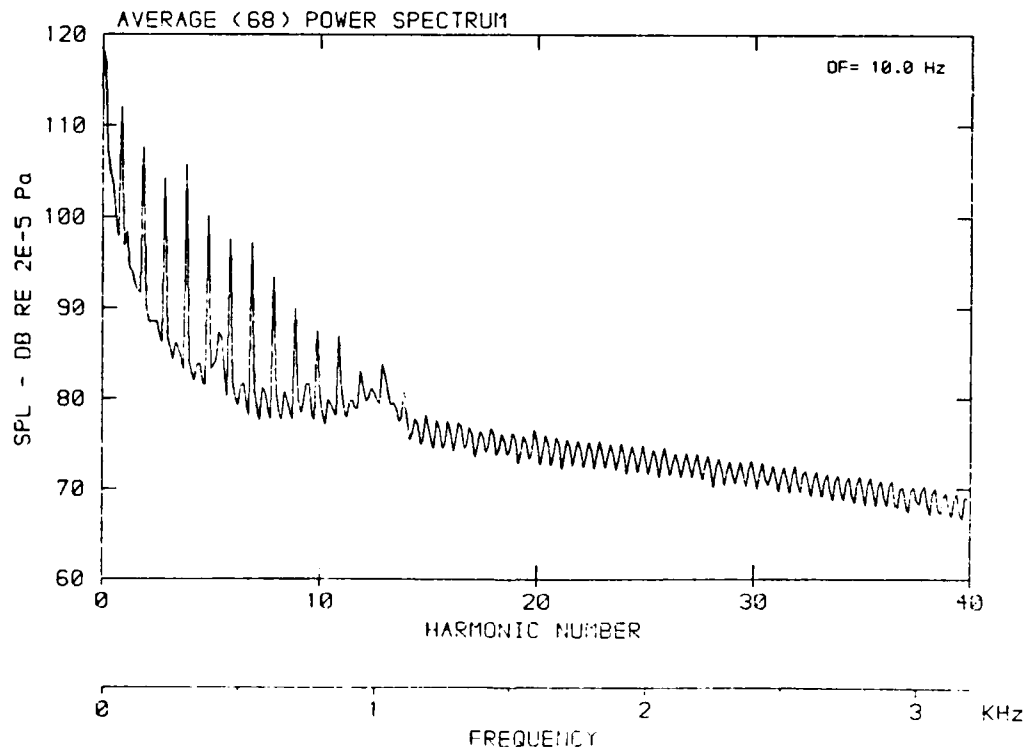
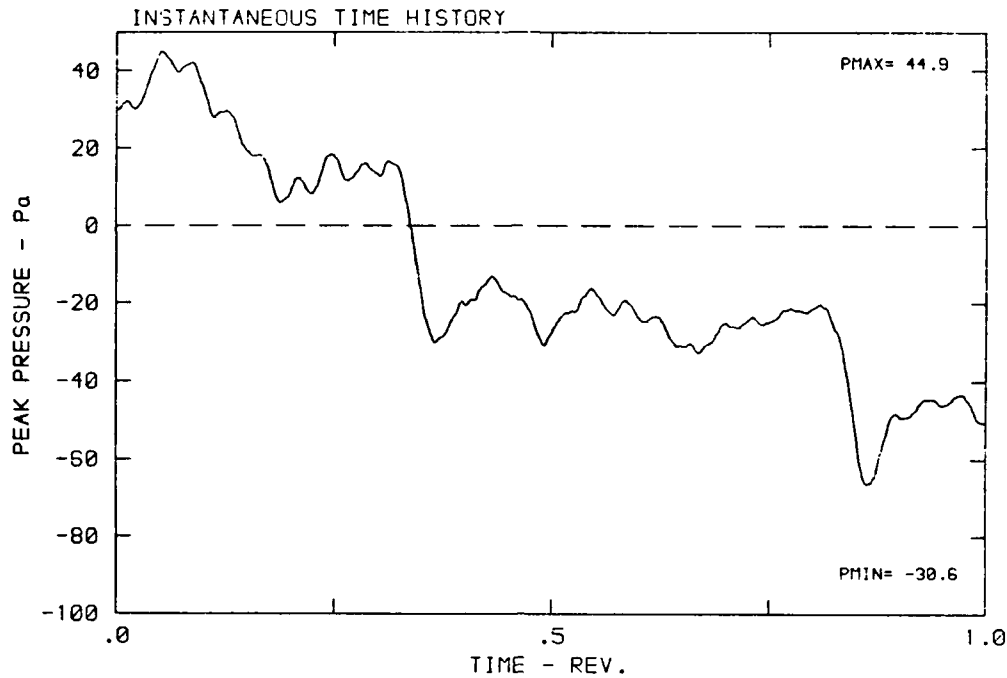
DATA POINT: KN-2 RUN: 186 MP: 7

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



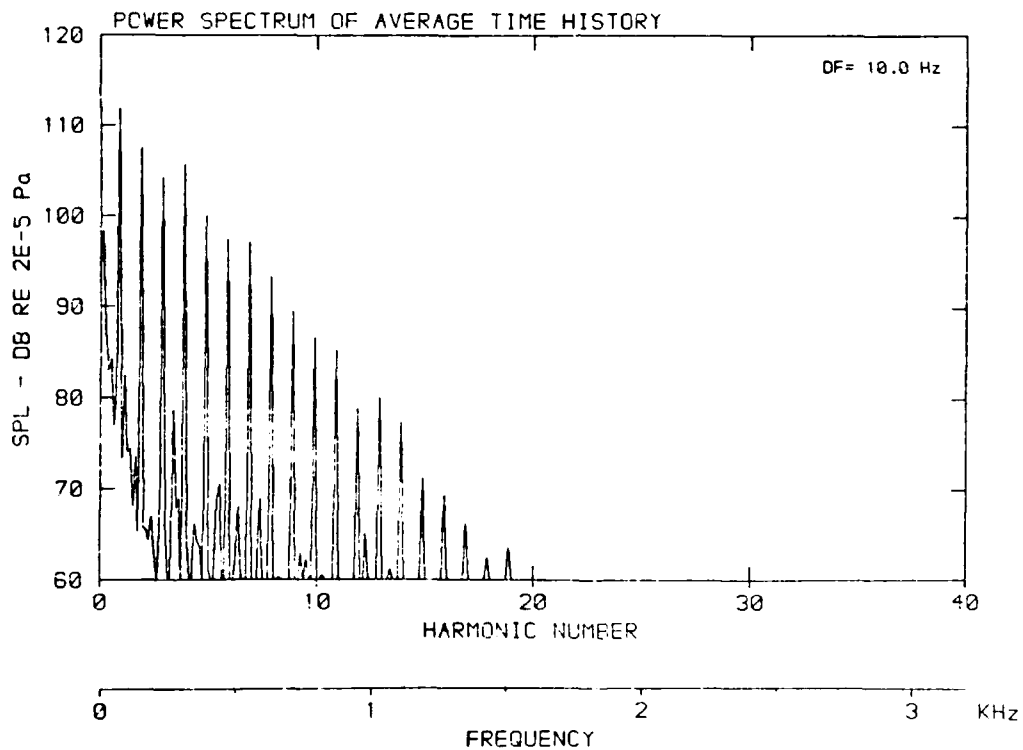
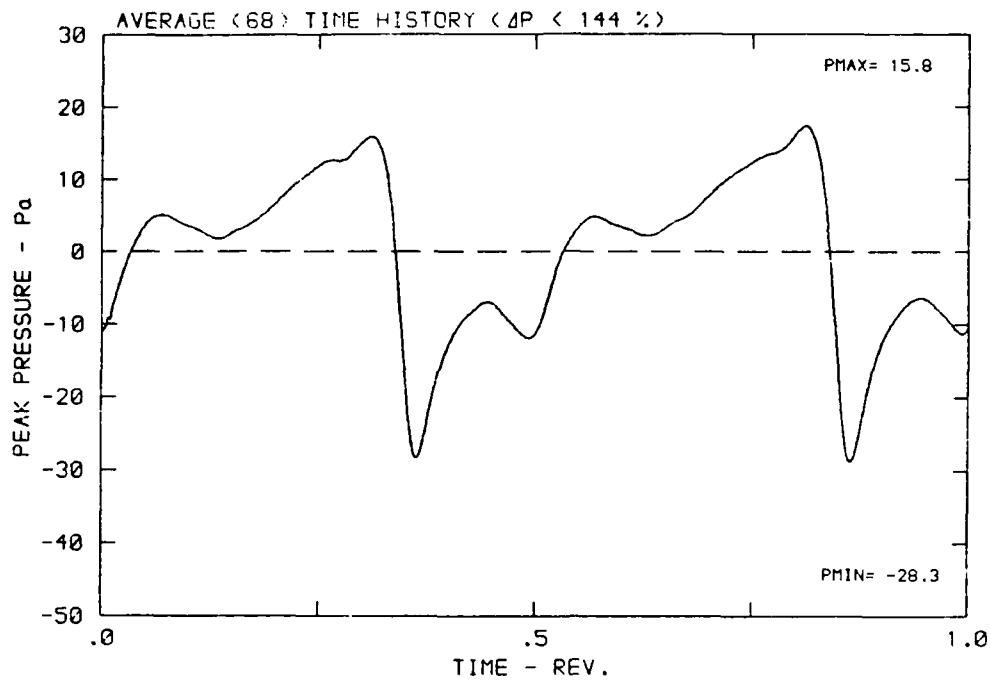
DATA POINT: KN-2 RUN: 186 MP: 9

β : 19.9° η H: .7516 n : 2400 rpm v/u : .202 ϕ : .0° T : 298.9 K



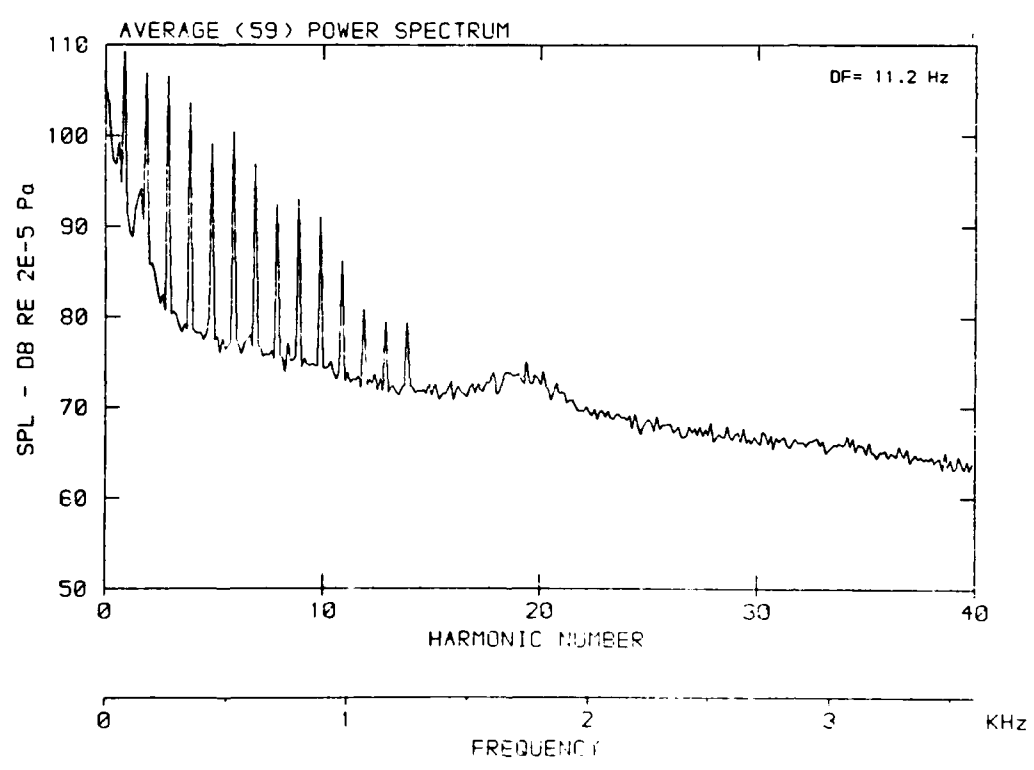
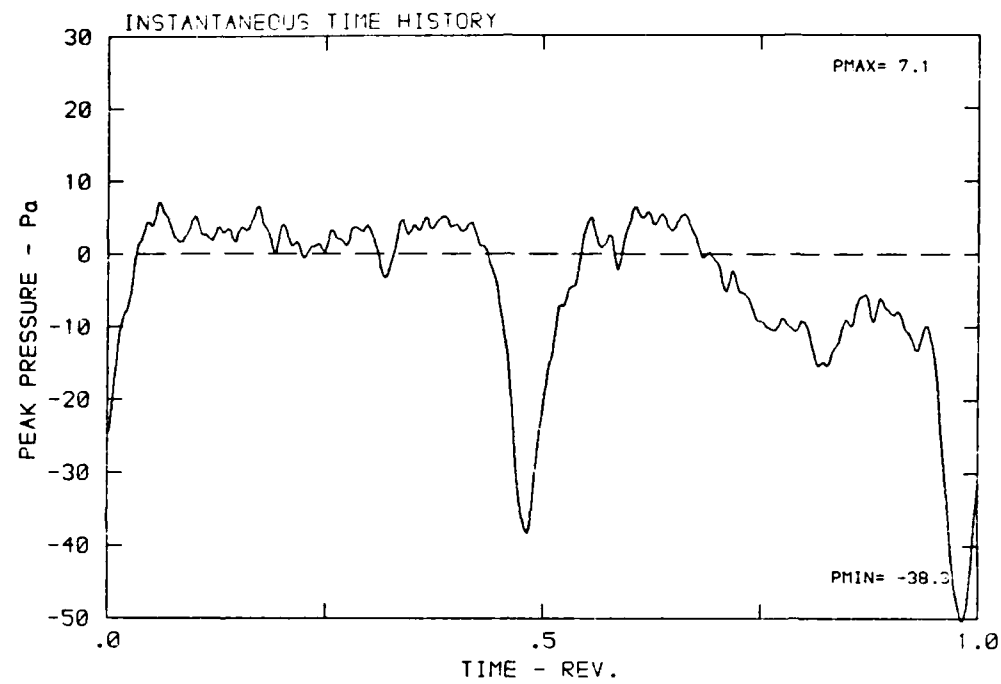
DATA POINT: KN-2 RUN: 186 MP: 9

β : 19.9° MH: .7516 n: 2400 rpm v/u : .202 ϕ : .0° T: 298.9 K



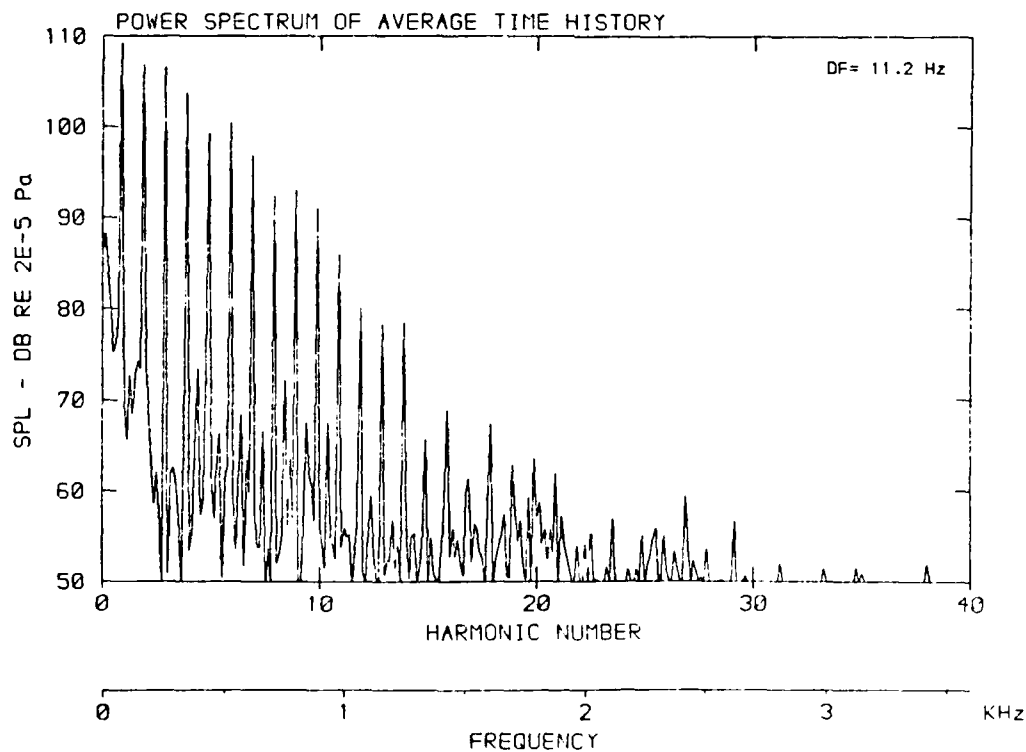
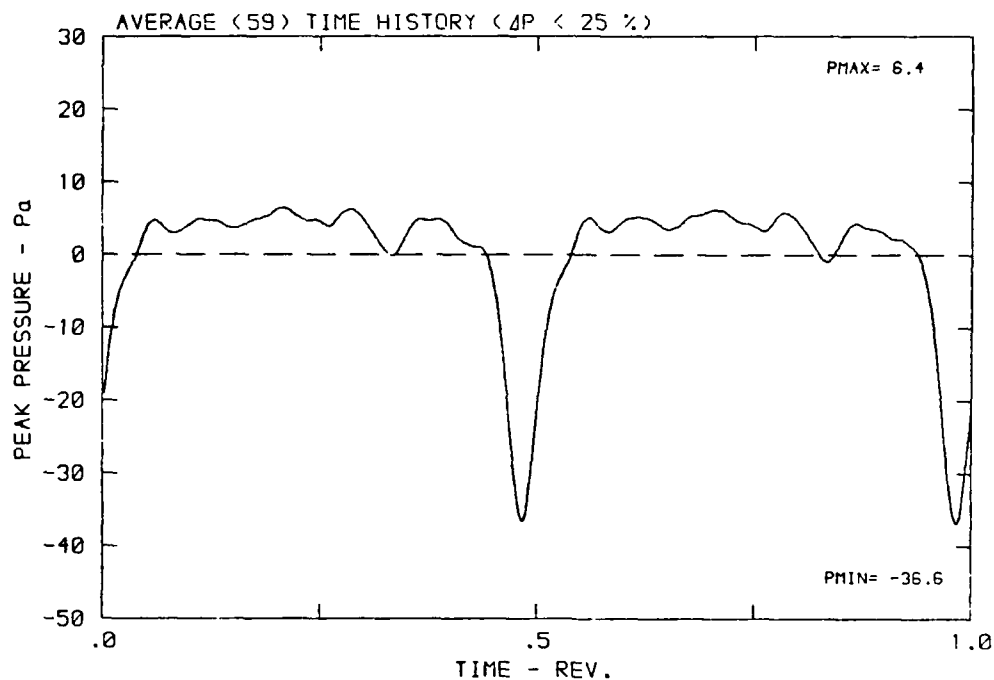
DATA POINT: KN-3 RUN: 185 MP: 1

β : 19.9° MH: .8582 n: 2700 rpm v/u: .267 ϕ : .0° T: 298.6 K



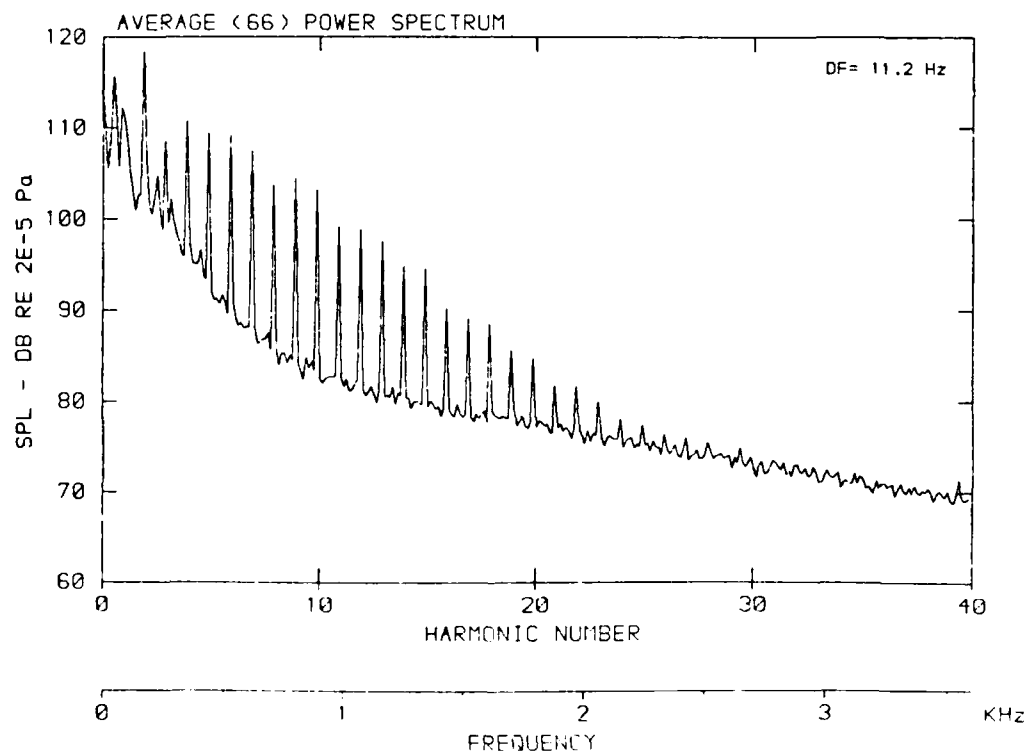
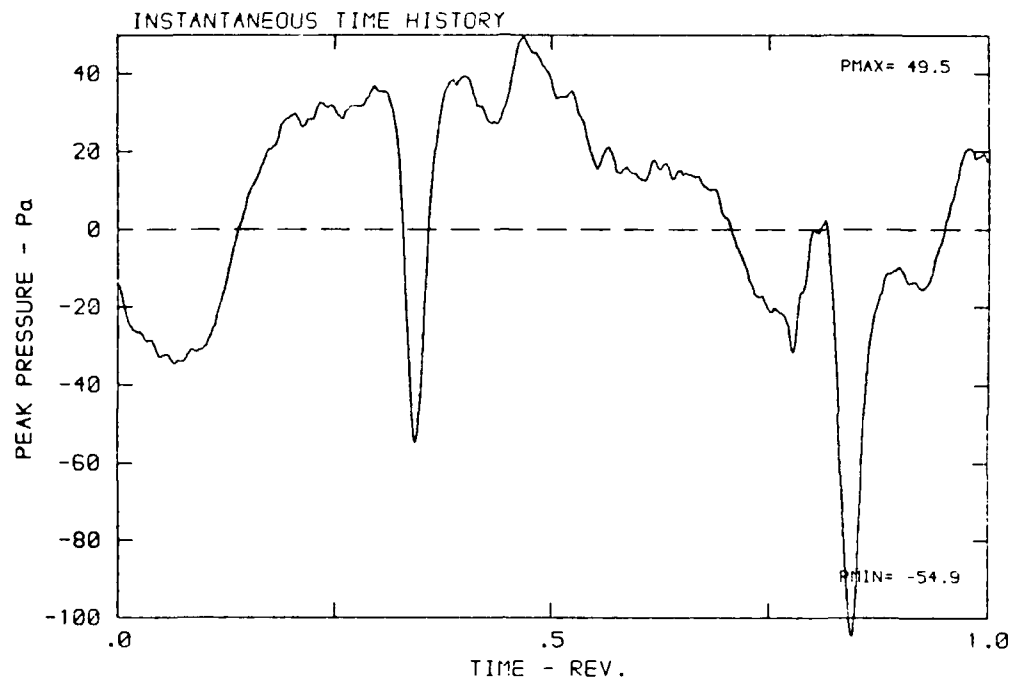
DATA POINT: KN-3 RUN: 185 MP: 1

β : 19.9° MH: .8582 n: 2700 rpm v/u : .267 ϕ : .0° T: 298.6 K



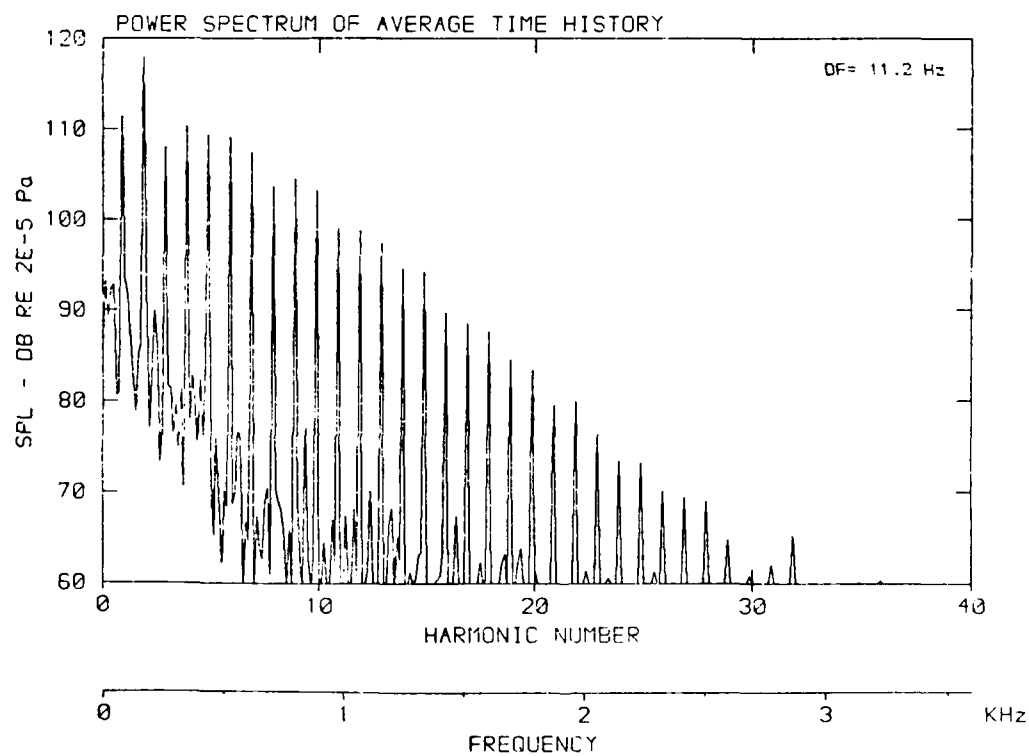
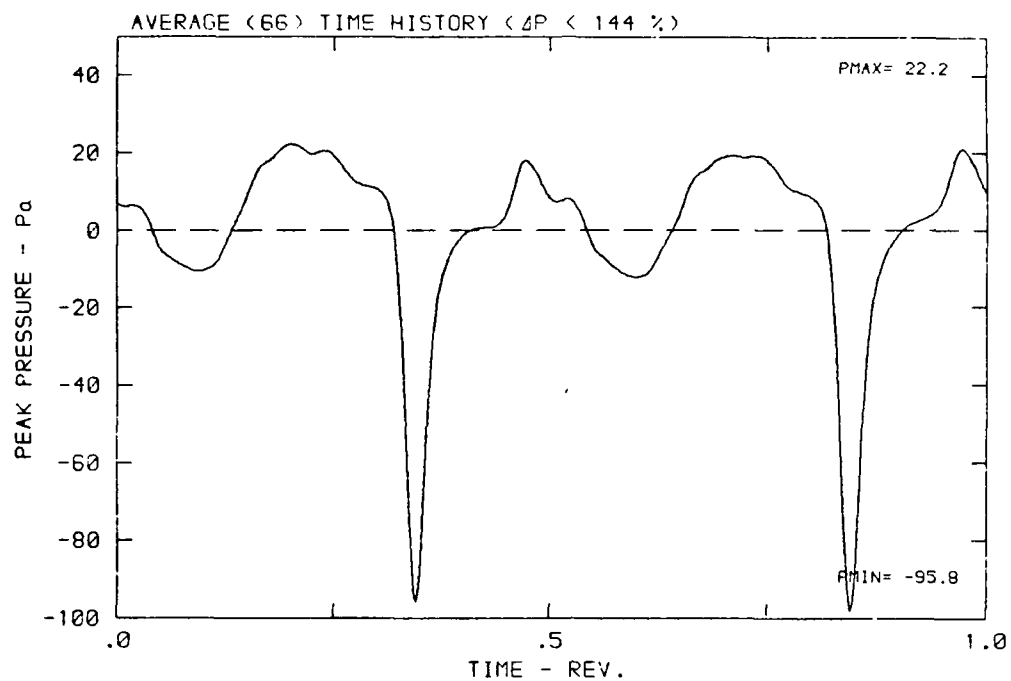
DATA POINT: KN-3 RUN: 185 MP: 2

β : 19.9° MH: .8582 n: 2700 rpm v/u: .267 ϕ : .0° T: 298.6 K



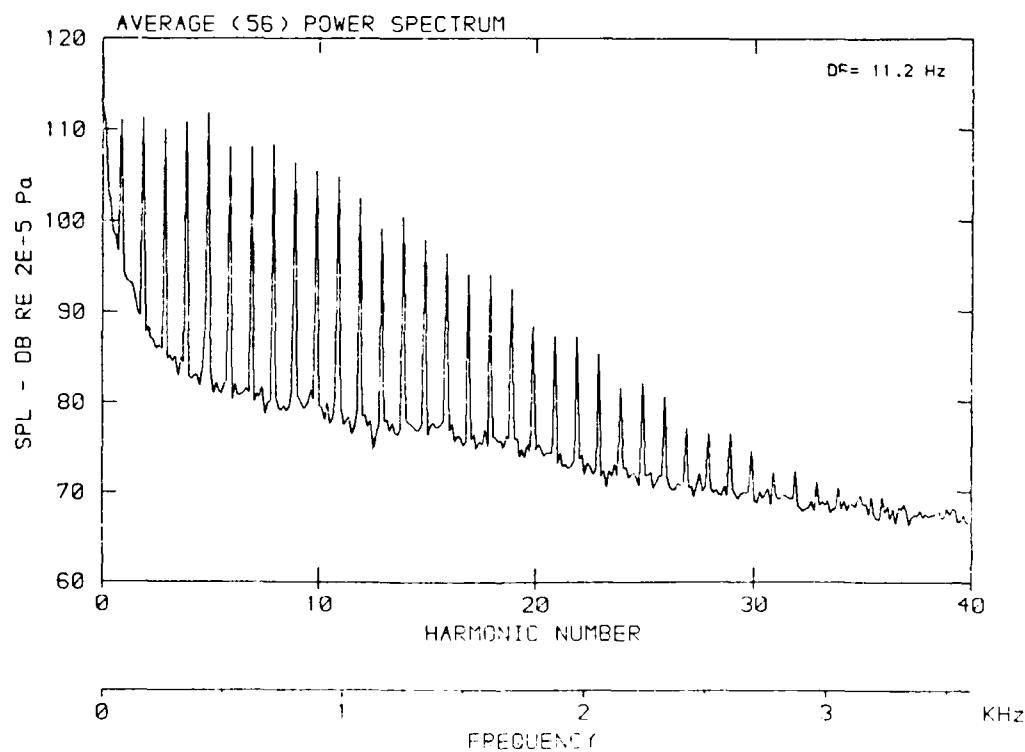
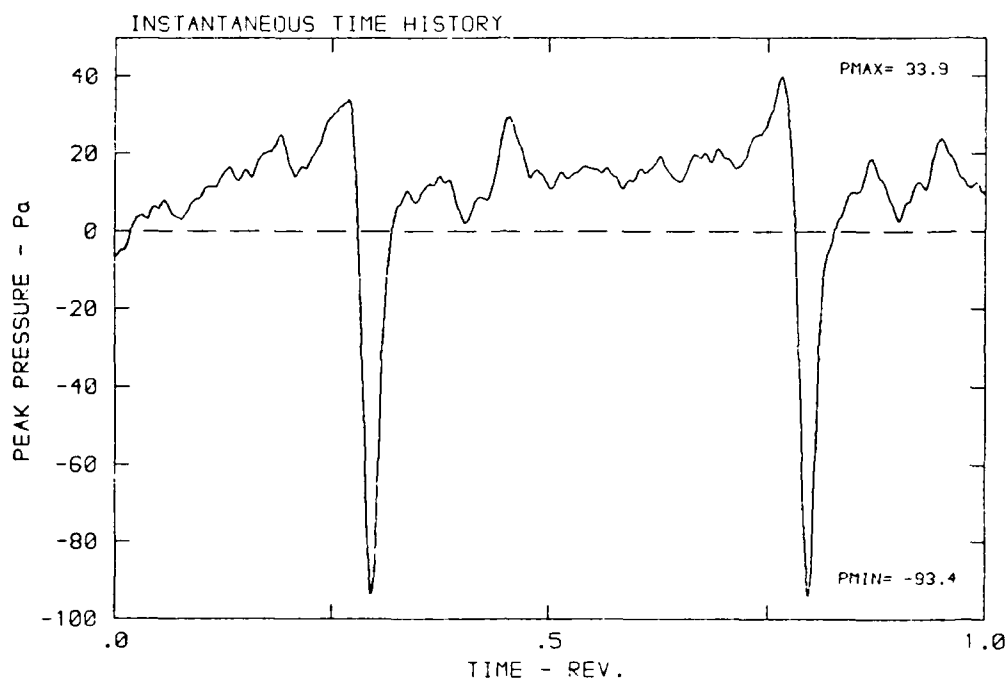
DATA POINT : KN-3 RUN : 185 MP : 2

β : 19.9° MH : .8582 n : 2700 rpm v/u : .267 ϕ : .0° T : 298.6 K



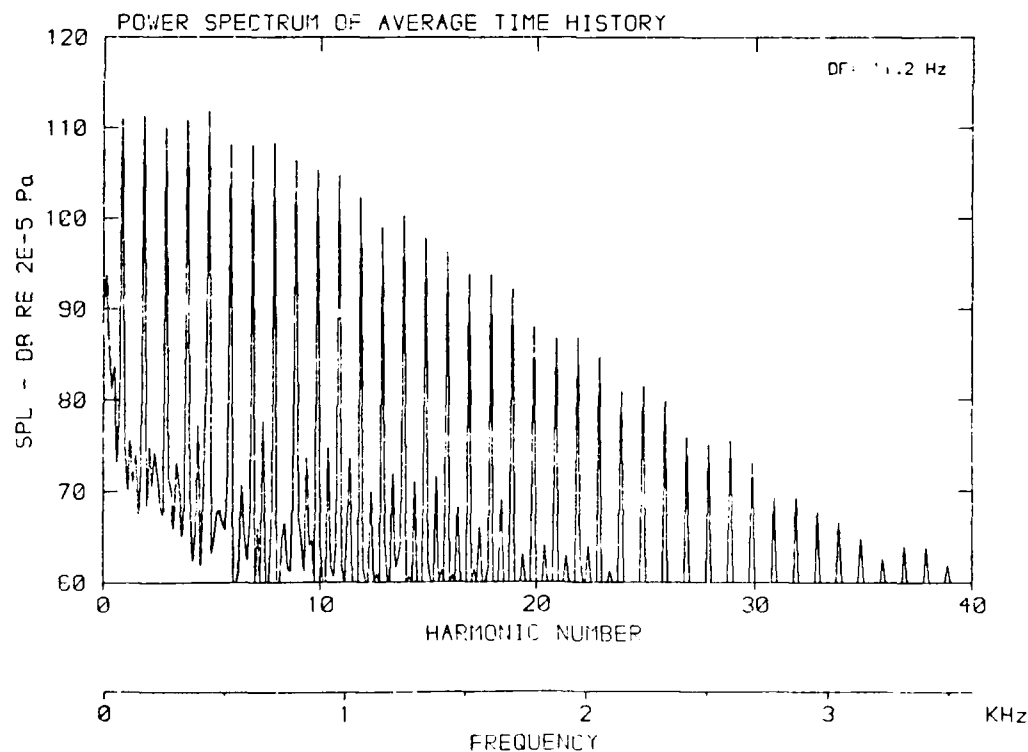
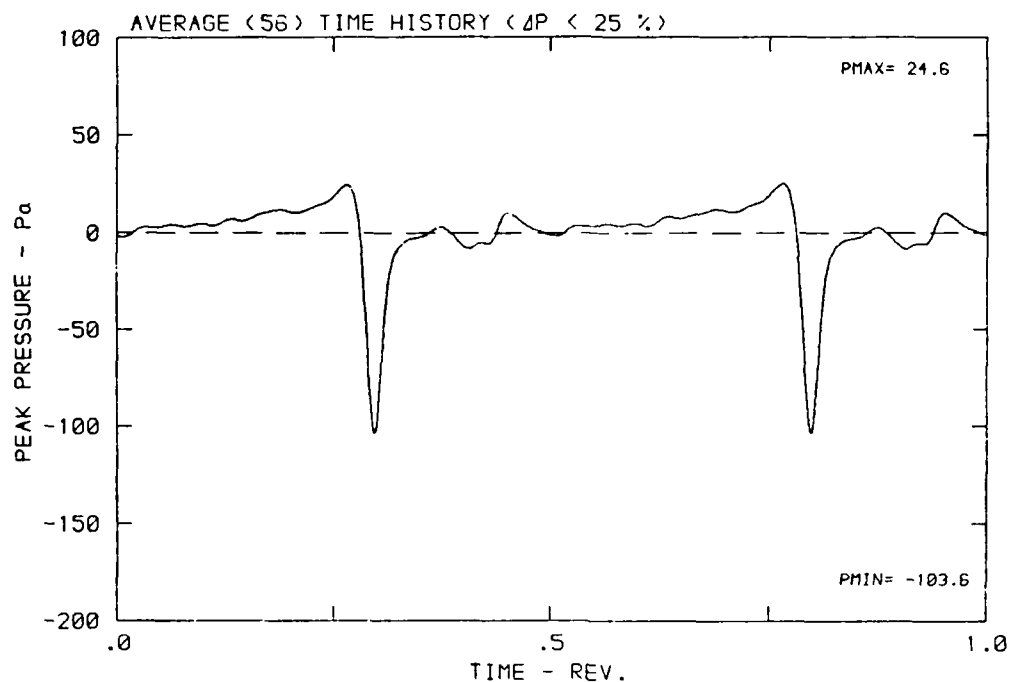
DATA POINT: KN-3 RUN: 185 MP: 3

β : 19.9° MH: .8582 n: 2700 rpm v/u : .267 ϕ : .0° T: 298.6 K



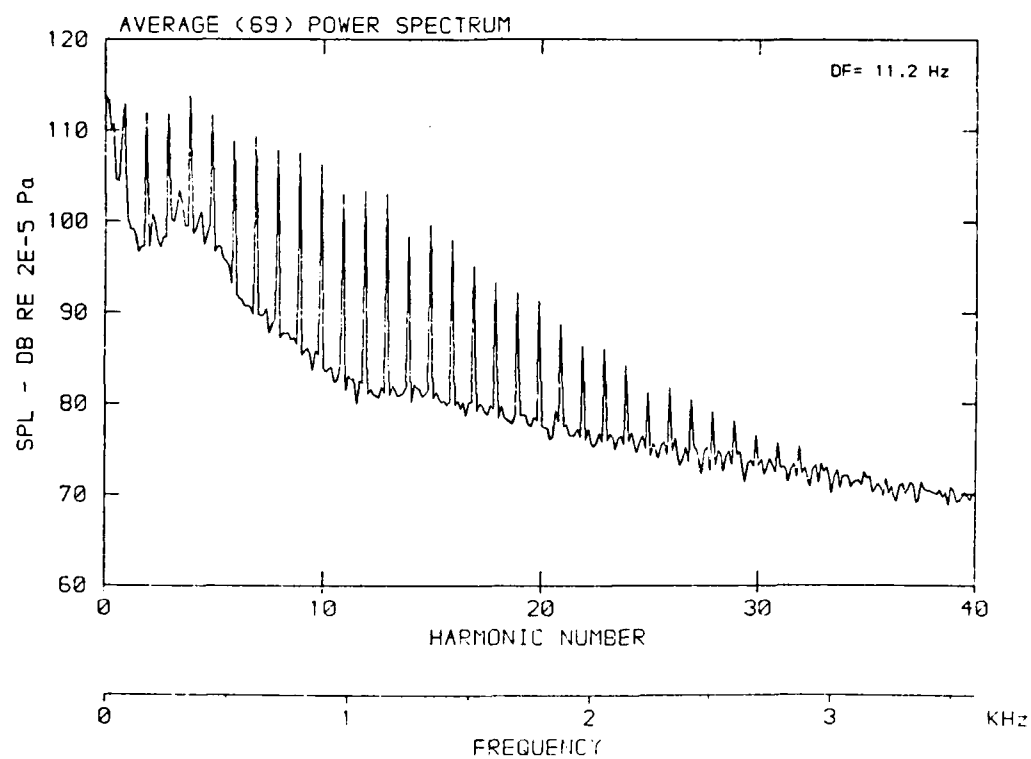
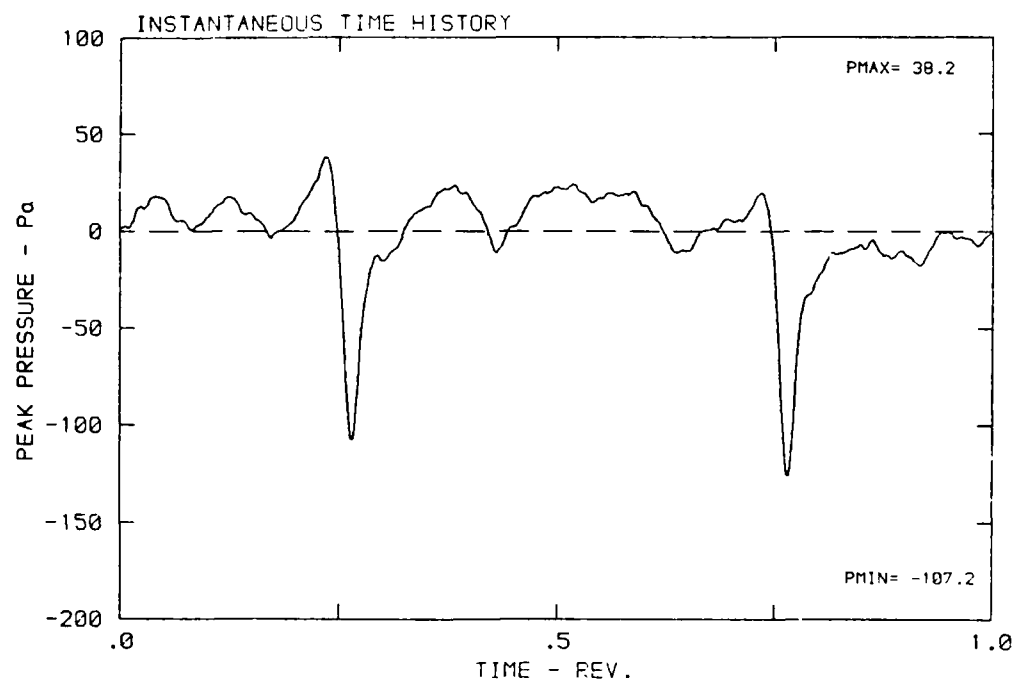
DATA POINT: KN-3 RUN: 185 MP: 3

β : 19.9° MH: .8582 n: 2700 rpm v/u : .267 ϕ : .0° T: 298.6 K



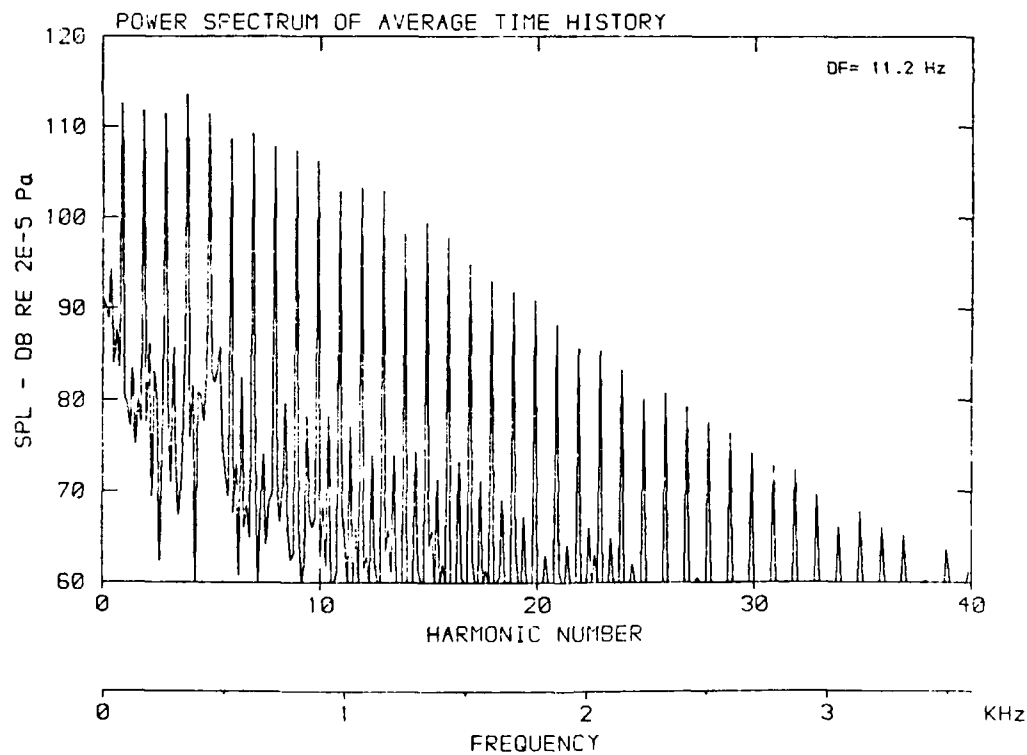
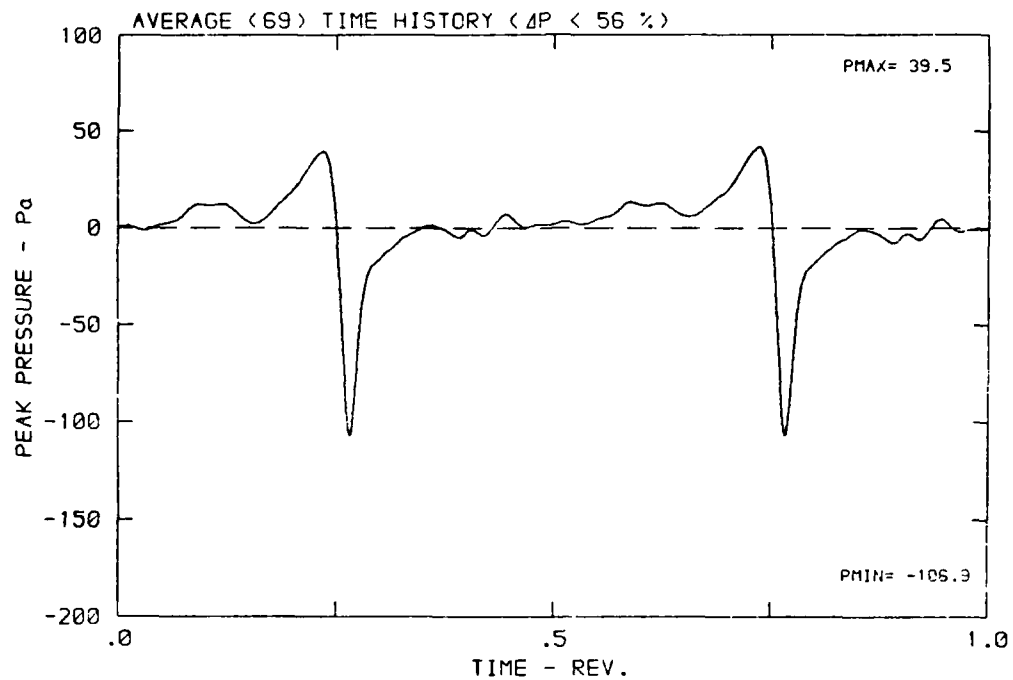
DATA POINT: KN-3 RUN: 185 MP: 4

β : 19.9° MH: .8582 n: 2700 rpm v/u : .267 ϕ : .0° T: 298.6 K



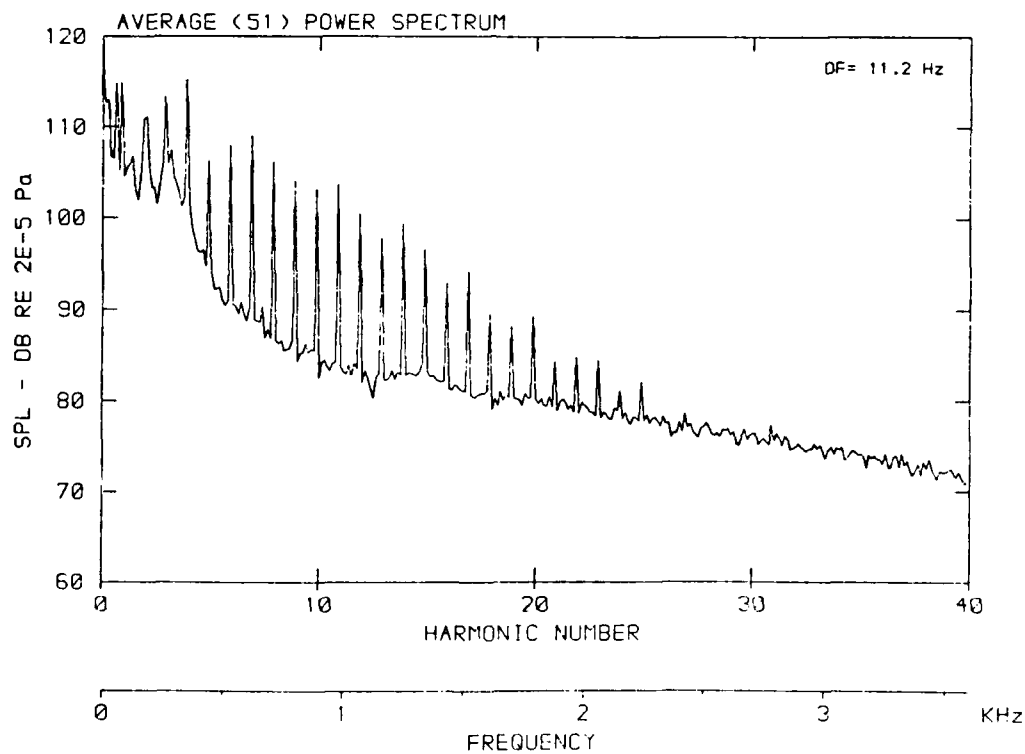
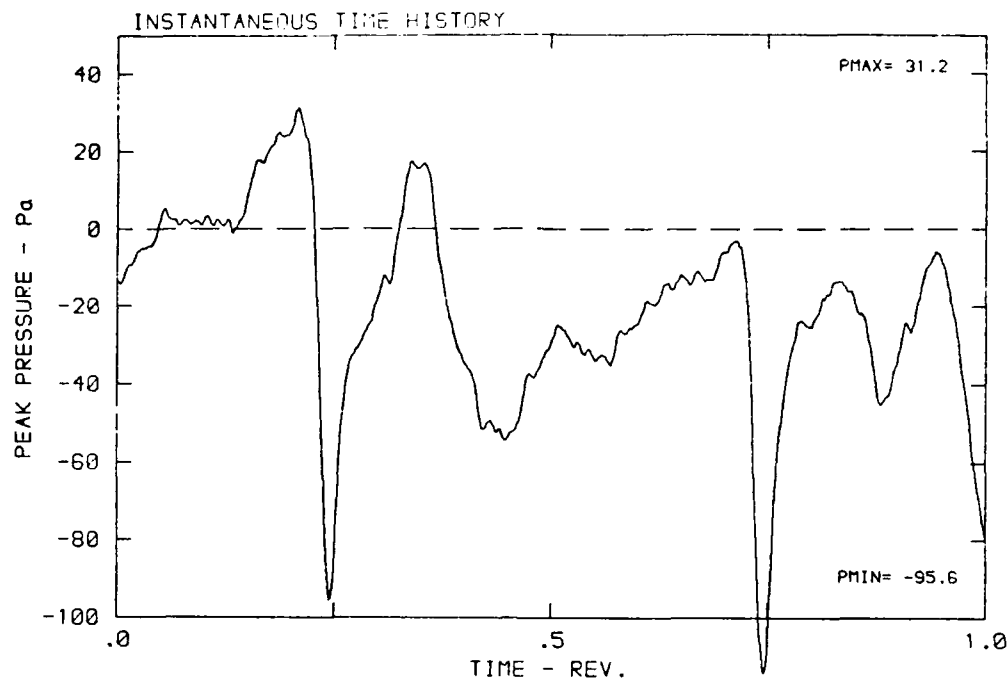
DATA POINT: KN-3 RUN: 185 MP: 4

β : 19.9° MH: .8582 n: 2700 rpm v/u: .267 ϕ : .0° T: 298.6 K



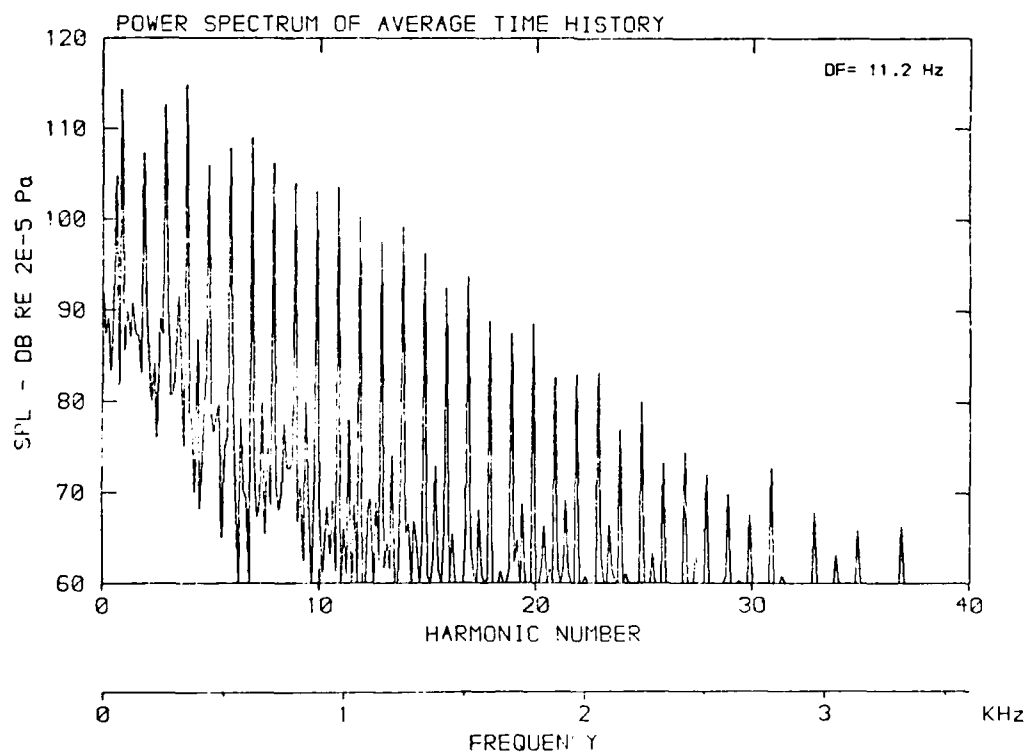
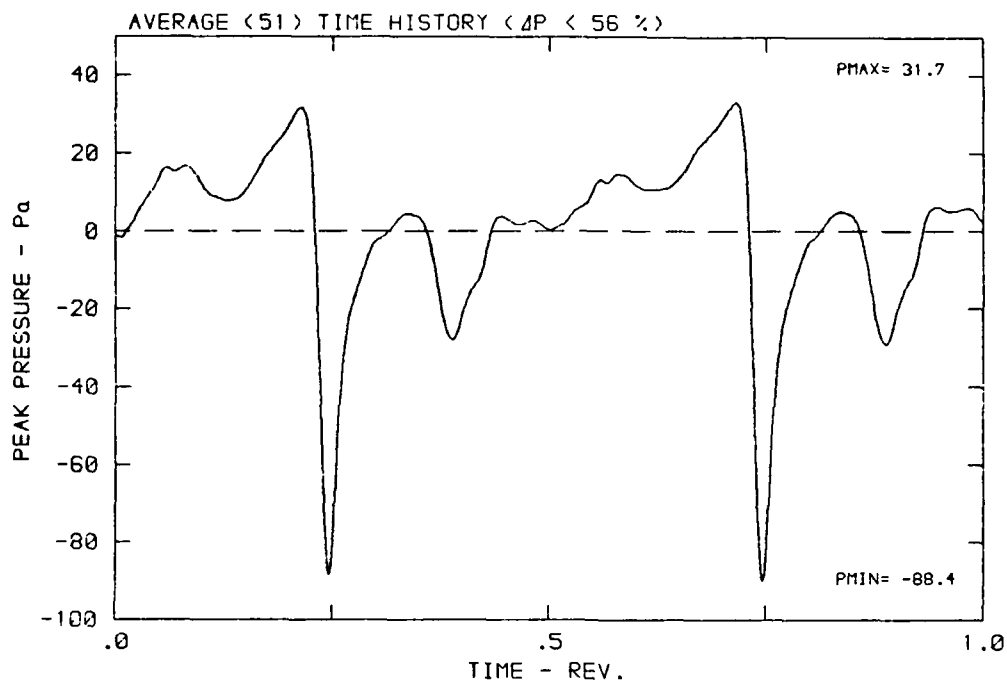
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β : 19.9° MH: .6582 n: 2700 rpm v/u : .267 ϕ : .0° T: 298.6 K



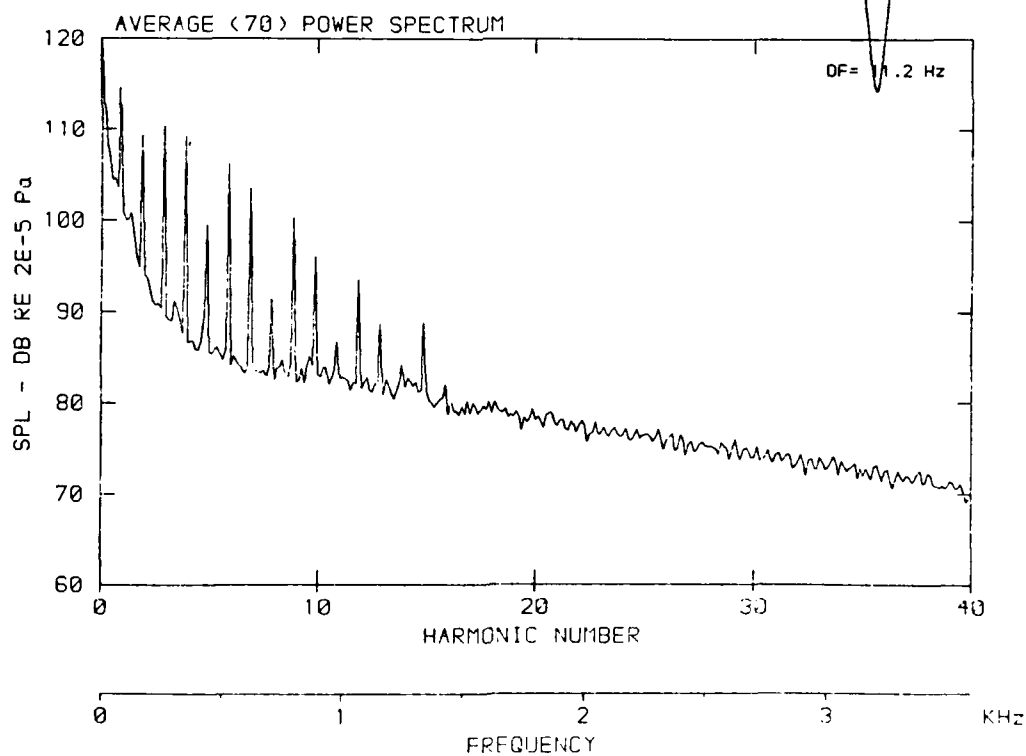
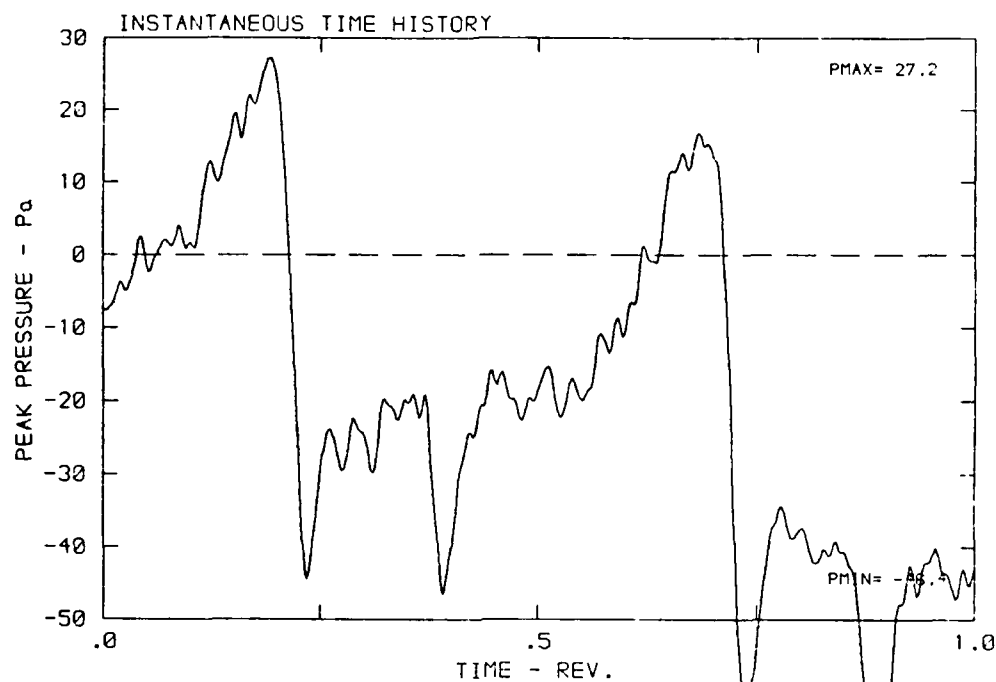
DATA POINT: KN-3 RUN: 185 MP: 5

β : 19.9° MH: .8582 n: 2700 rpm v/u : .267 ϕ : .0° T: 298.6 K



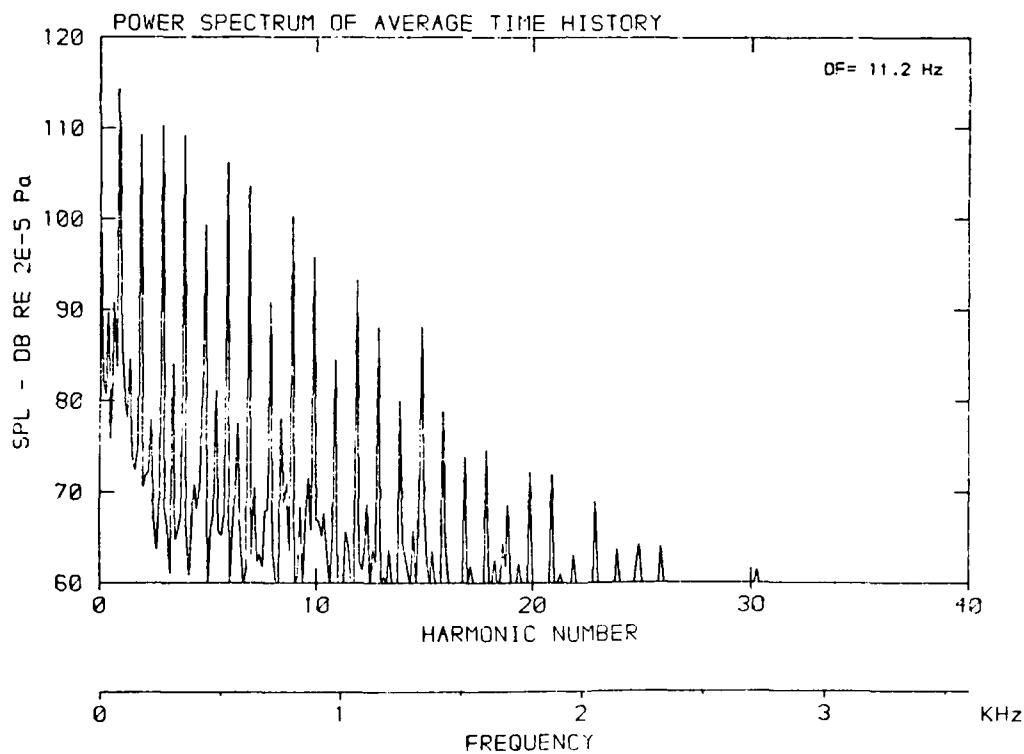
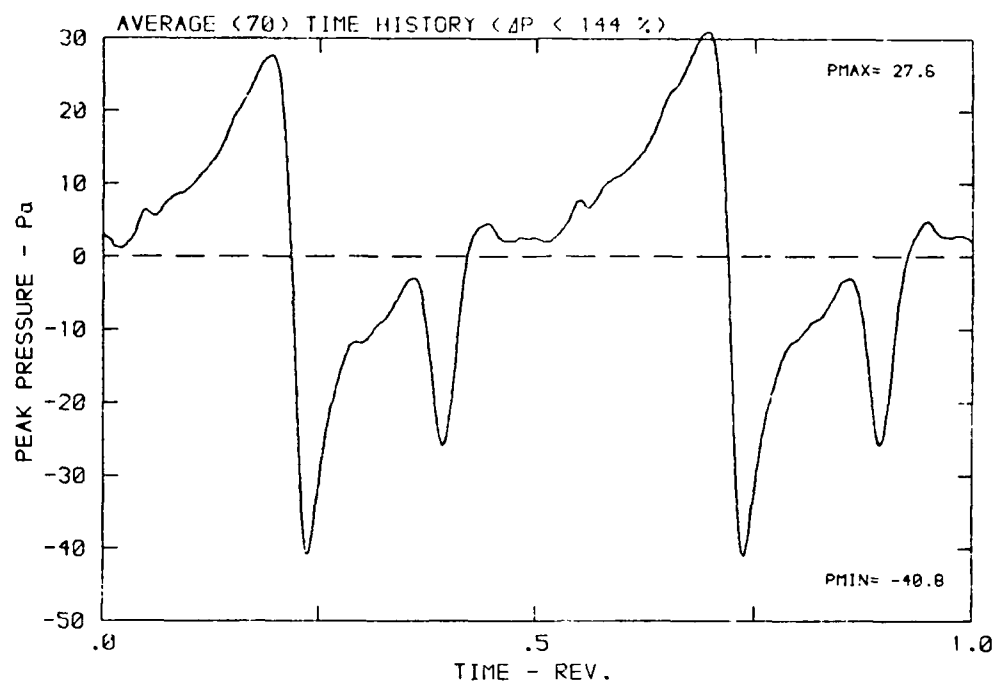
DATA POINT: KN-3 RUN: 185 MP: 6

β : 19.9° MH: .8582 n: 2700 rpm v/u : .267 ϕ : .0° T: 293.5 K



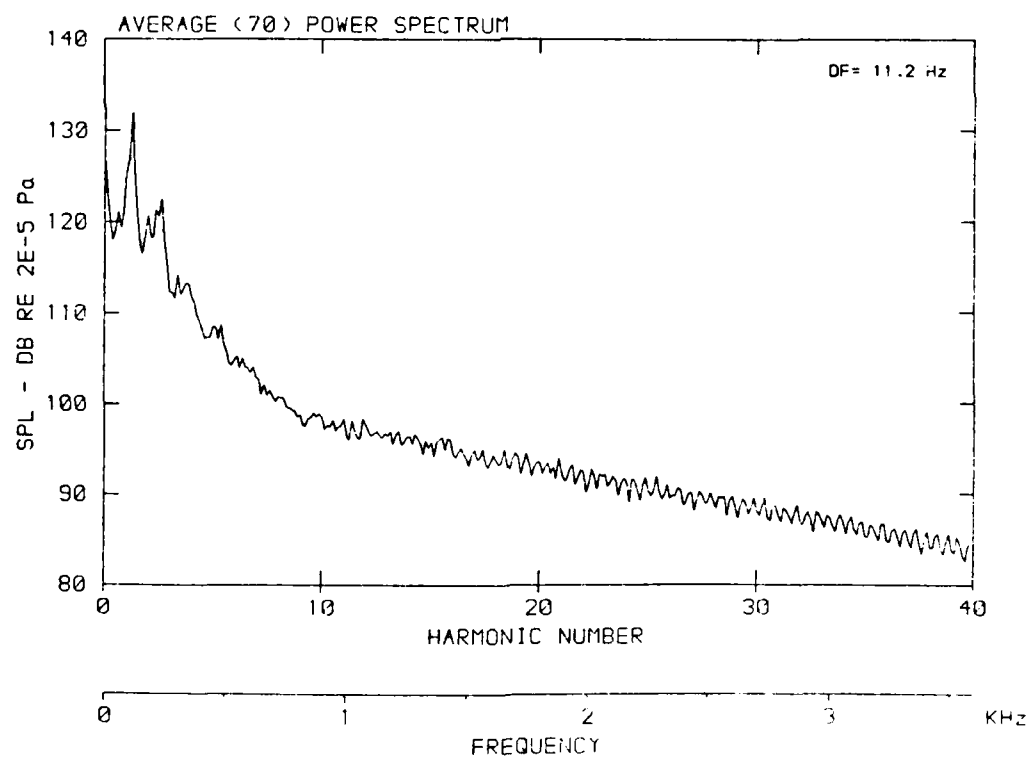
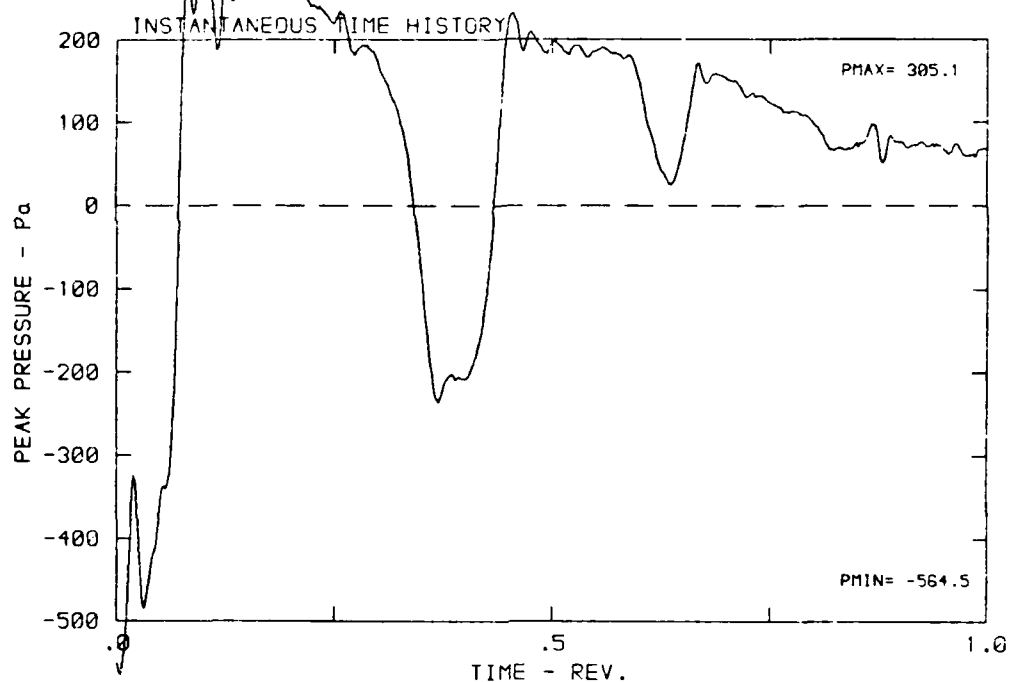
DATA POINT: KN-3 RUN: 185 MP: 6

β : 19.9° MH: .8582 n: 2700 rpm v/u : .267 ϕ : .0° T: 298.6 K



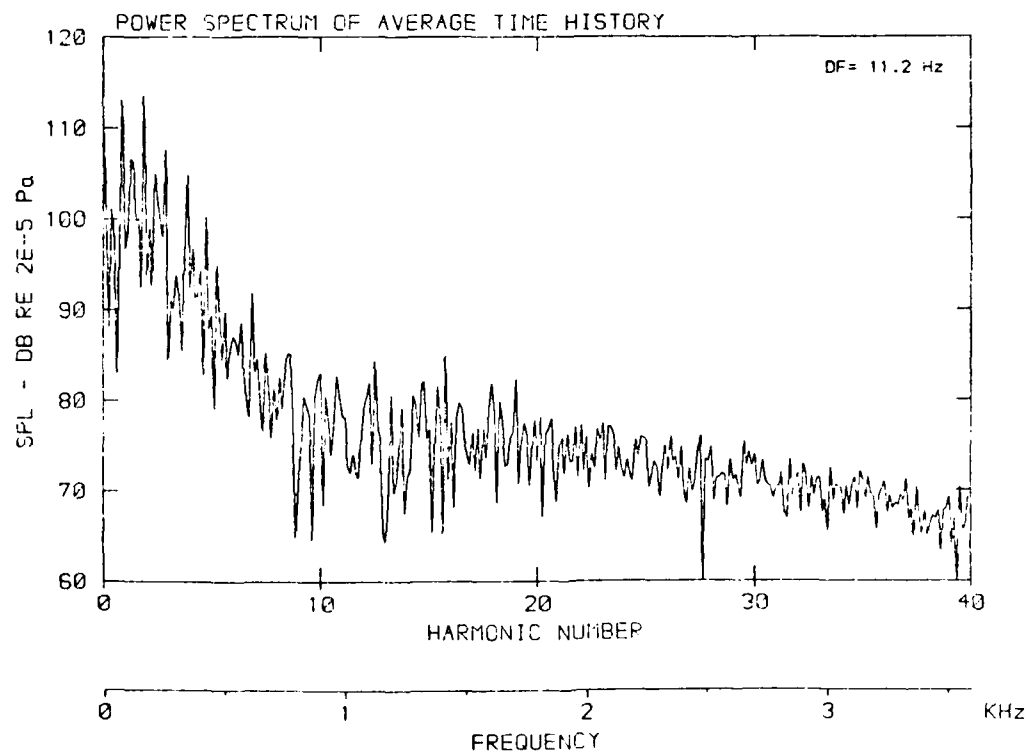
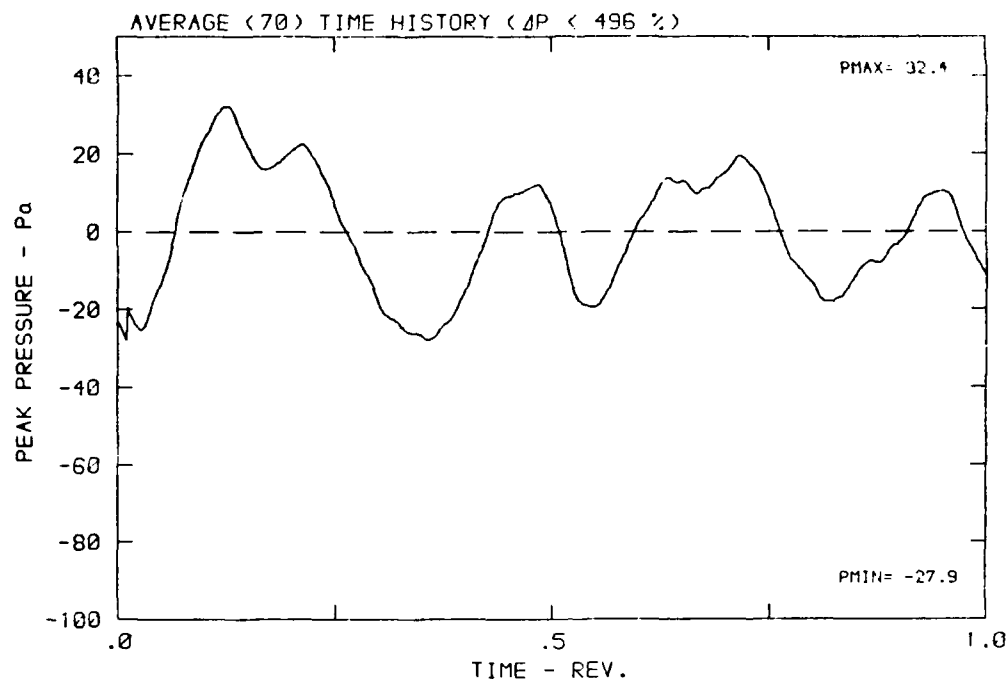
DATA POINT: KN-3 RUN: 185 MP: 7

β : 19.9° MH: .8582 n: 2700 rpm v_{tu} : .267 ϕ : .0° T: 298.6 k



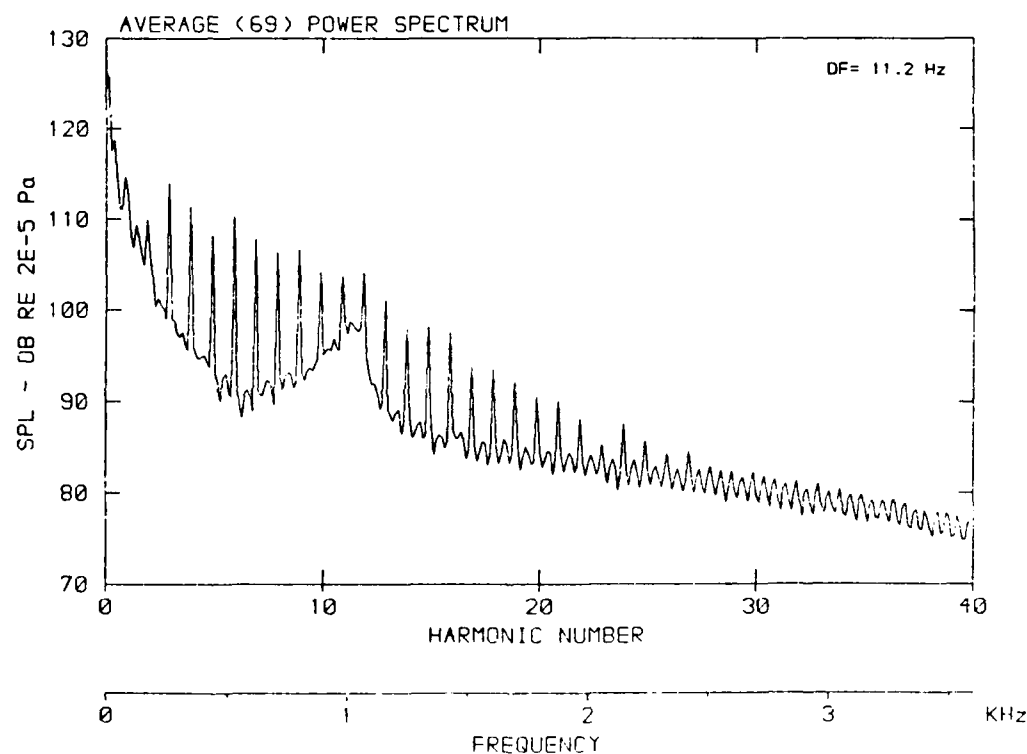
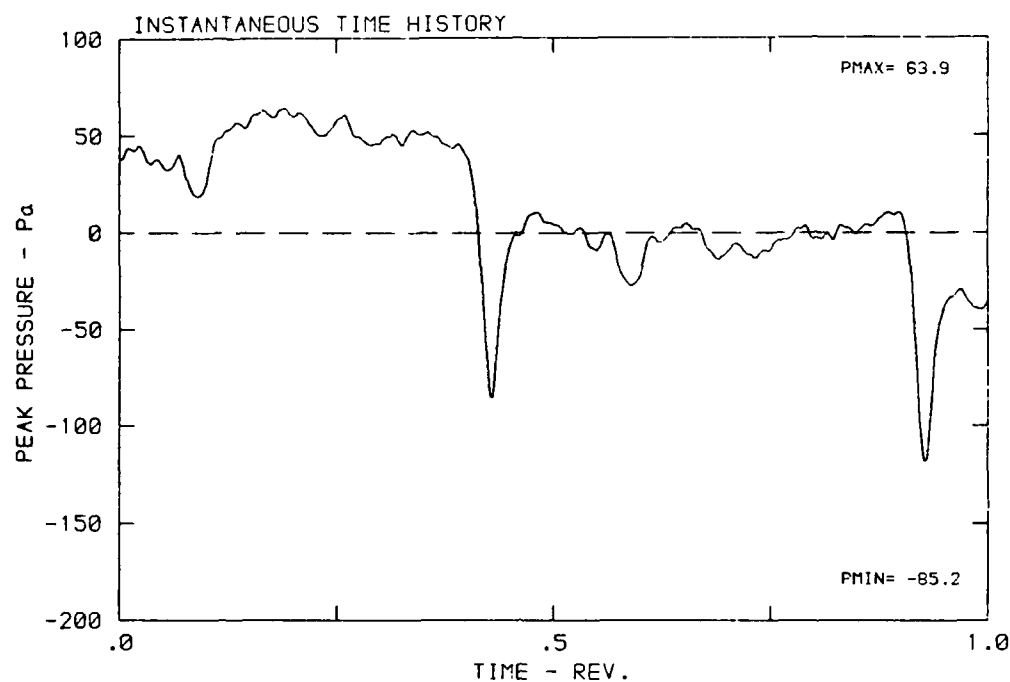
DATA POINT: KN-3 RUN: 185 MP: 7

β : 19.9° MH: .8582 n: 2700 rpm v/u : .267 ϕ : .0° T: 299.6 K



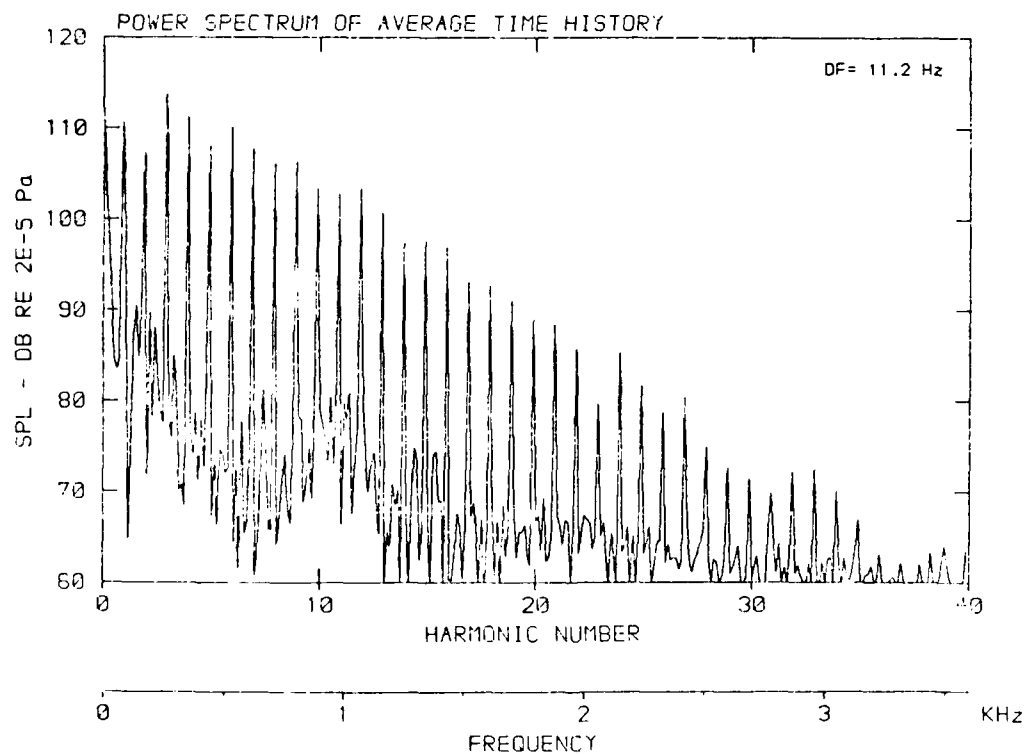
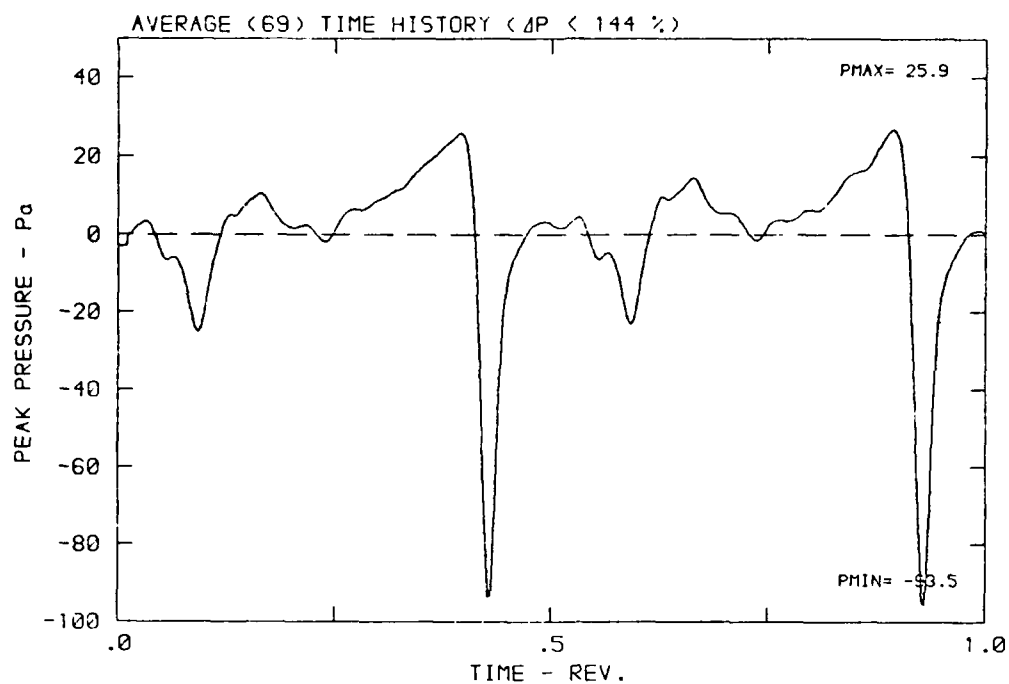
DATA POINT: KN-3 RUN: 185 MP: 9

β : 19.9° MH: .8582 n: 2700 rpm v/u: .267 ϕ : .0° T: 298.6 K



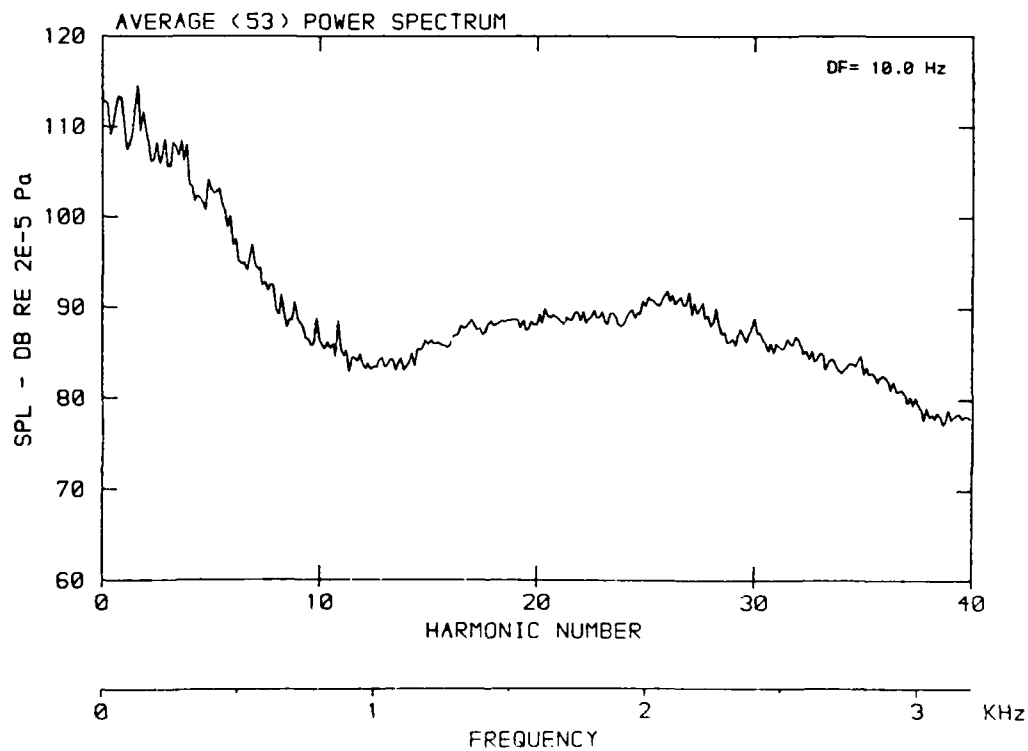
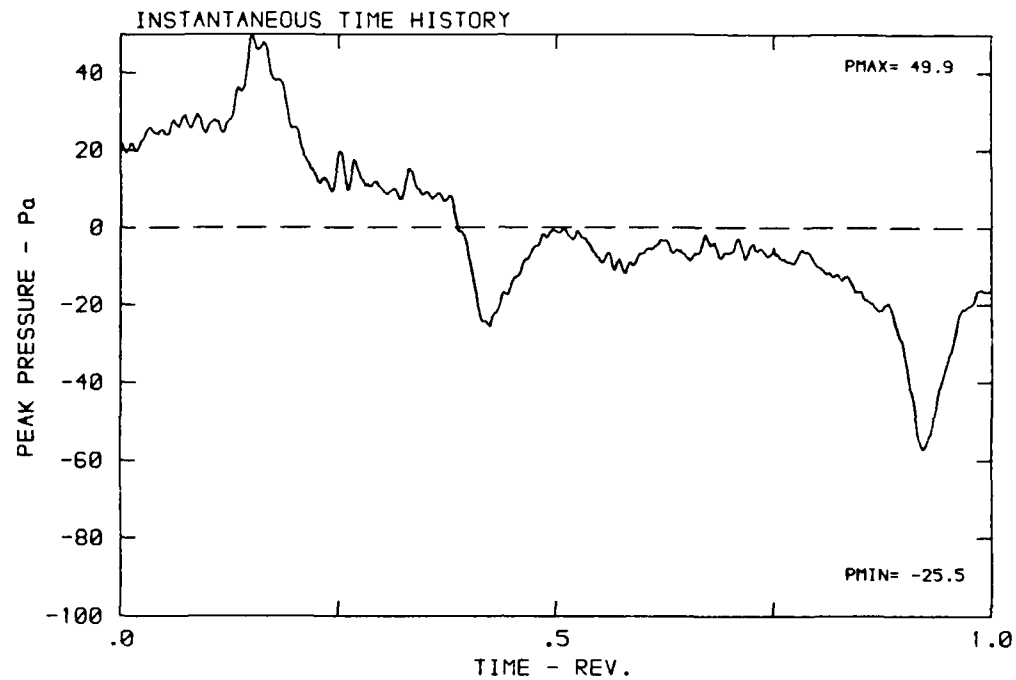
DATA POINT: KN-3 RUN: 185 MP: 9

β : 19.9° MH: .8582 n: 2700 rpm v/u: .267 ϕ : .0° T: 298.6 K



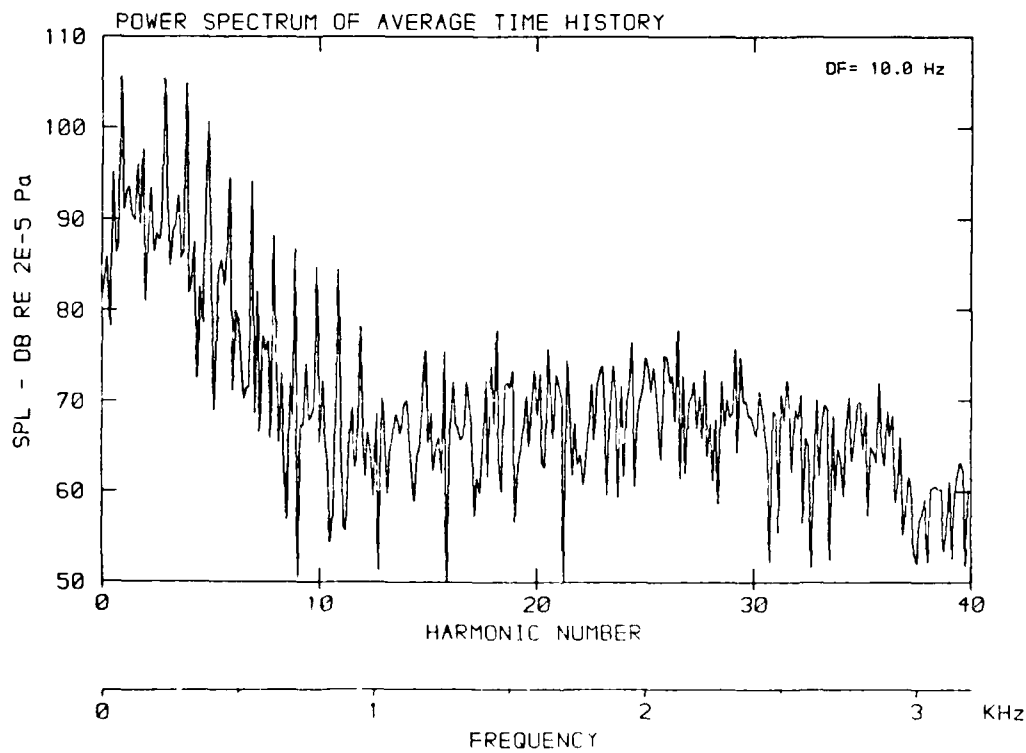
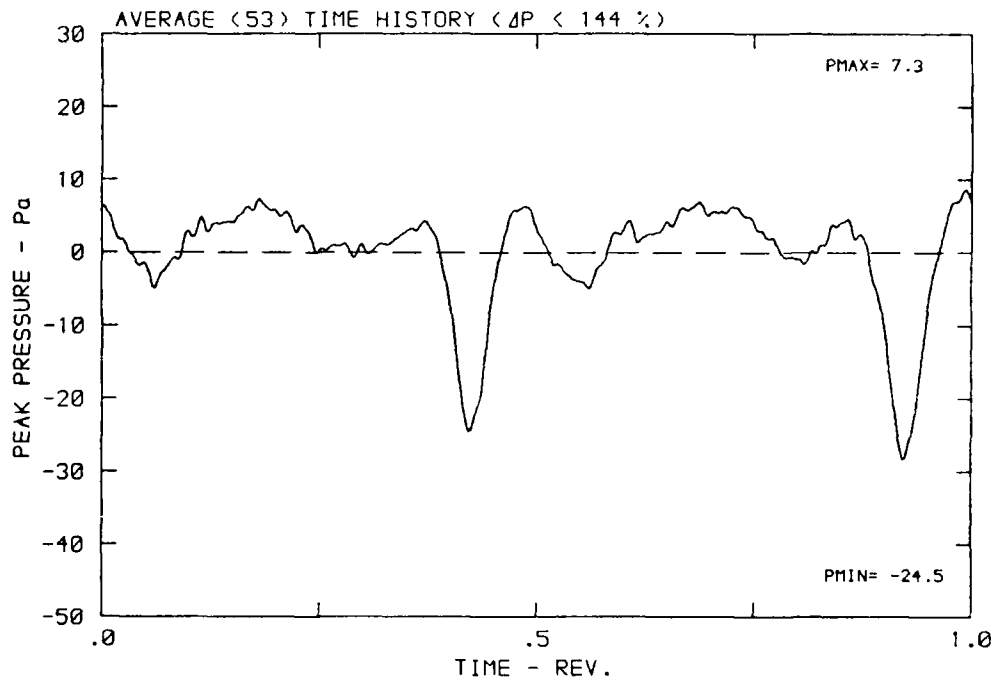
DATA POINT: HC-1 RUN: 39 MP: 1

β : 21.6° MH: .7972 n: 2400 rpm v/u : .302 ϕ : .0° T: 278.6 K



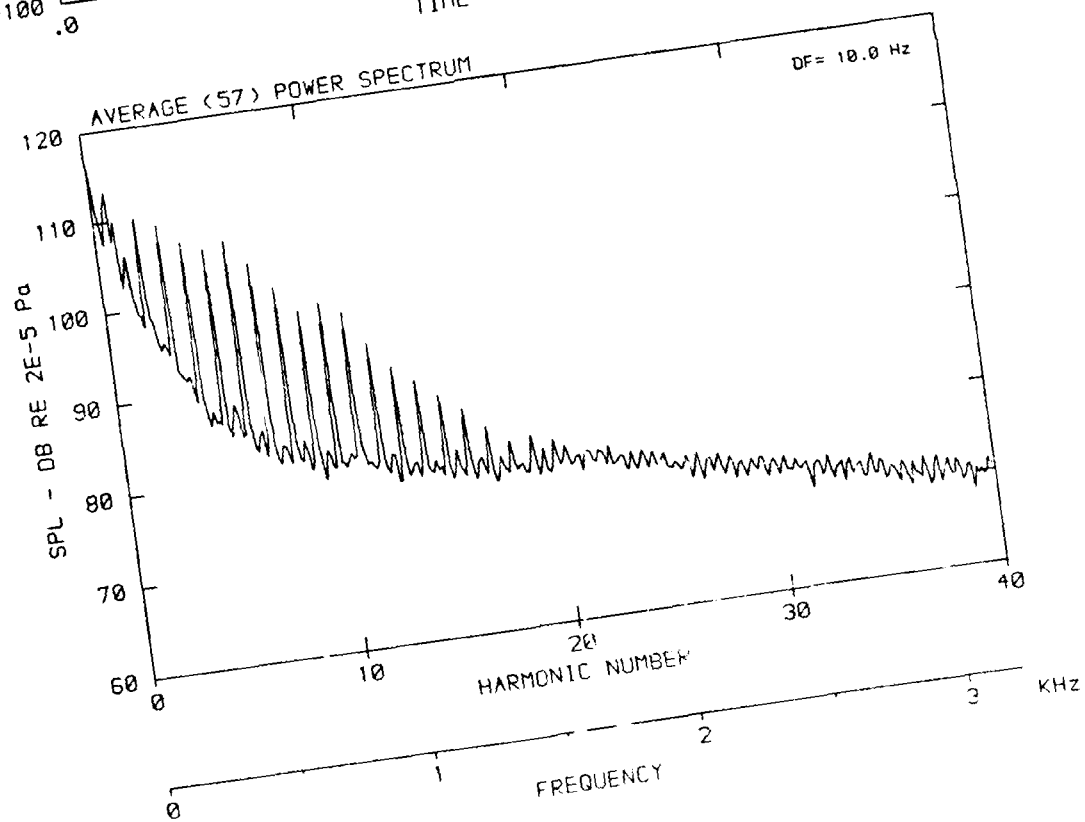
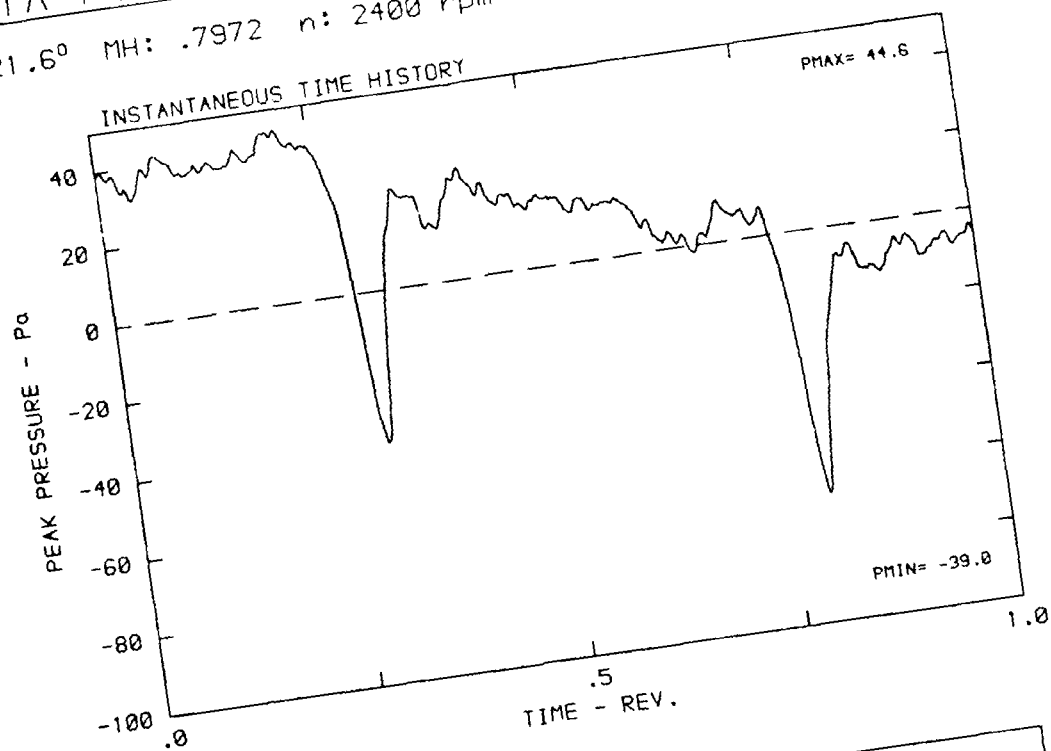
DATA POINT: HC-1 RUN: 39 MP: 1

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



DATA POINT: HC-1 RUN: 39 MP: 2

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



AD-A174 979

DFVLR/FAR (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER LUFT UND RAUMFAHR. (U) DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMF..

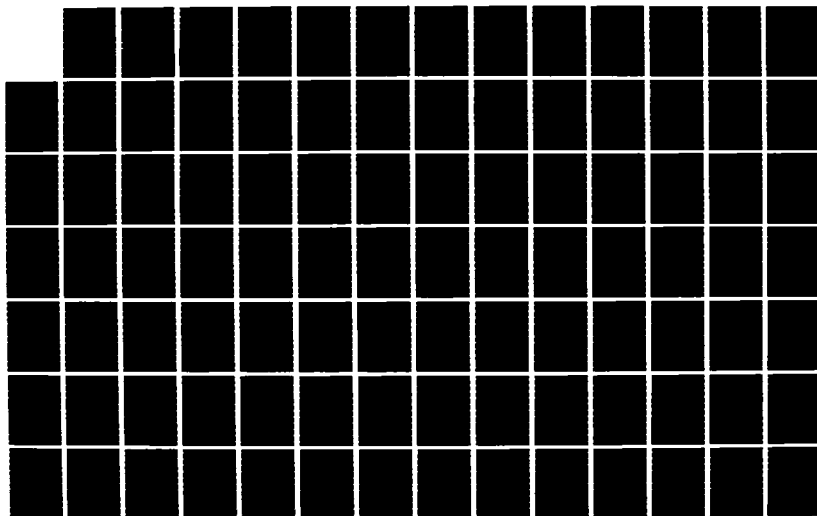
3/5

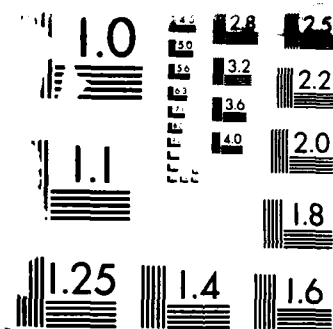
UNCLASSIFIED

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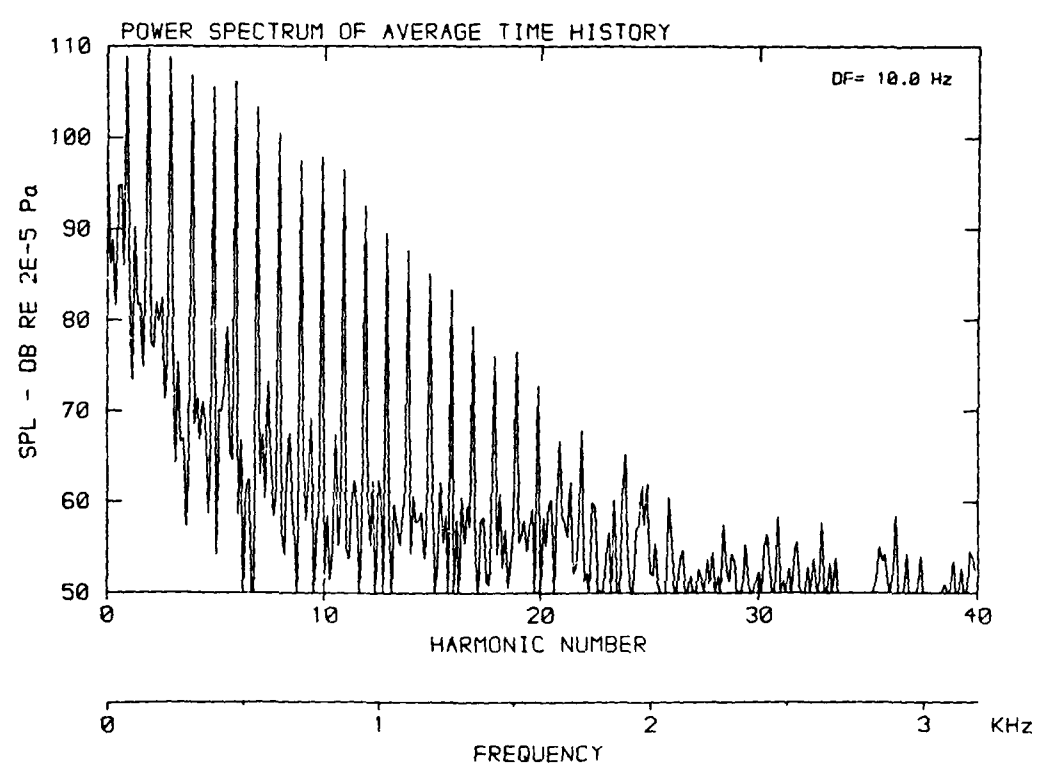
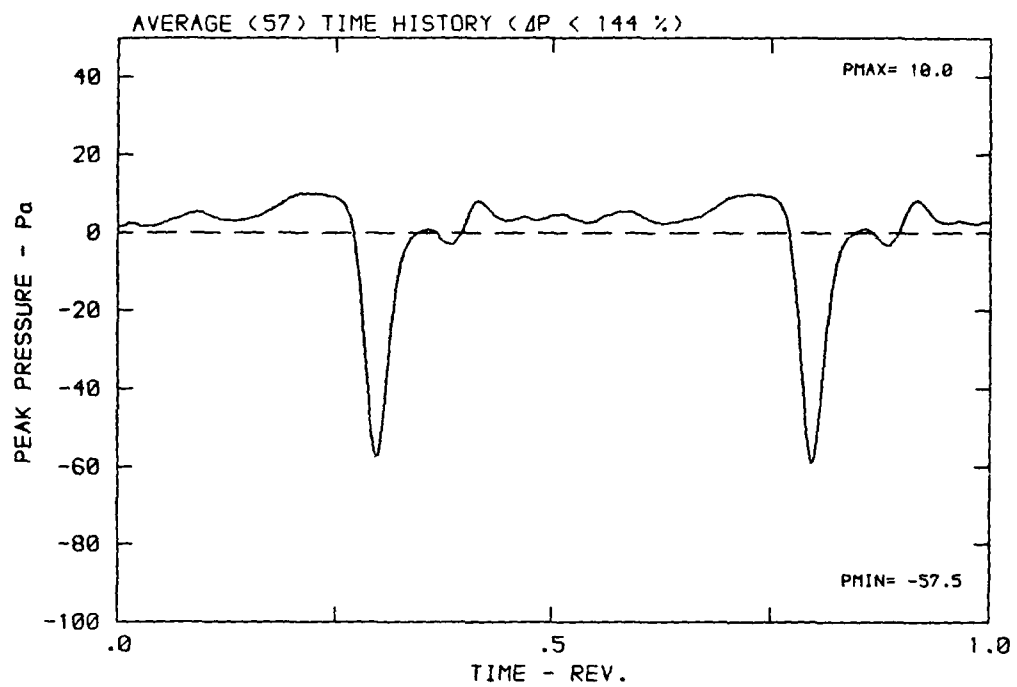




MICROCOPY RESOLUTION TEST CHART
 NATIONAL BUREAU OF STANDARDS-1963-A

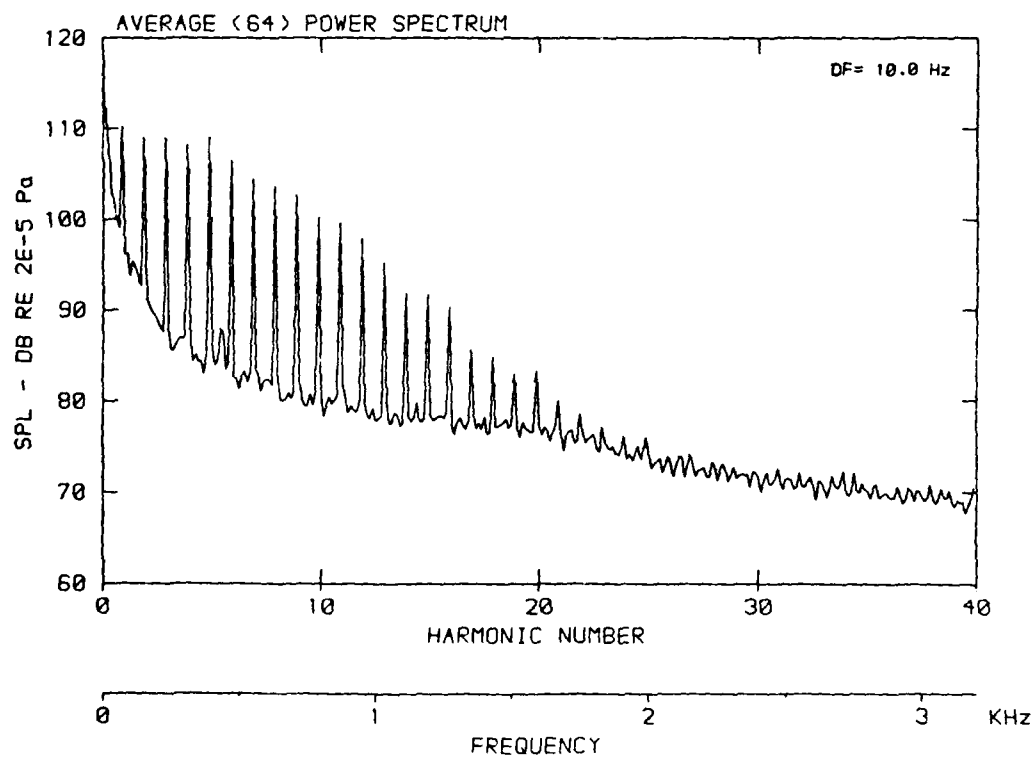
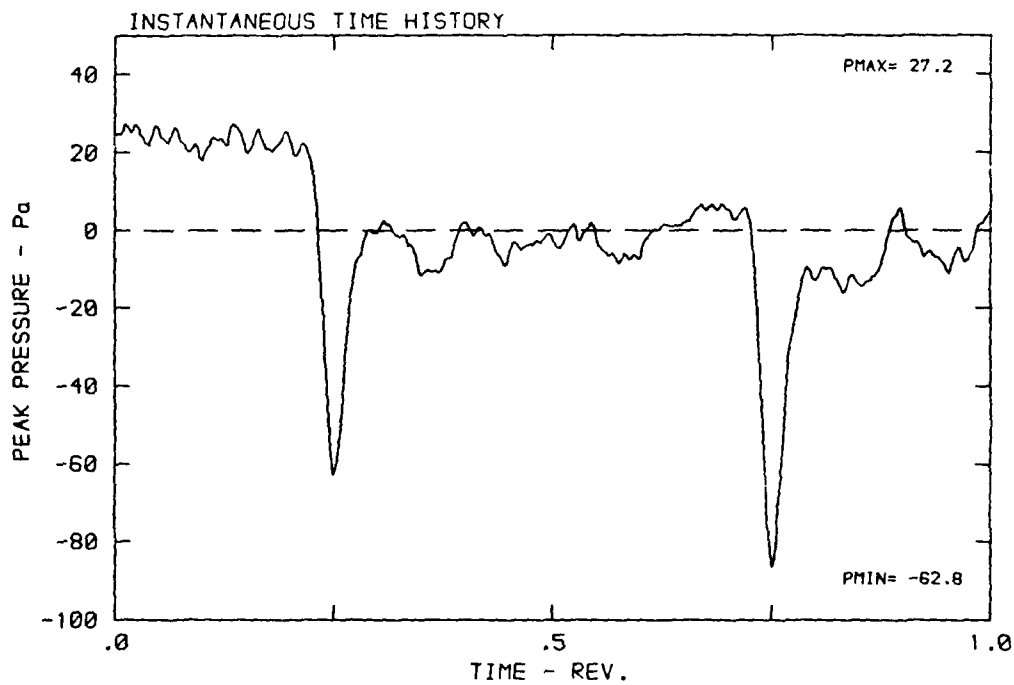
DATA POINT: HC-1 RUN: 39 MP: 2

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



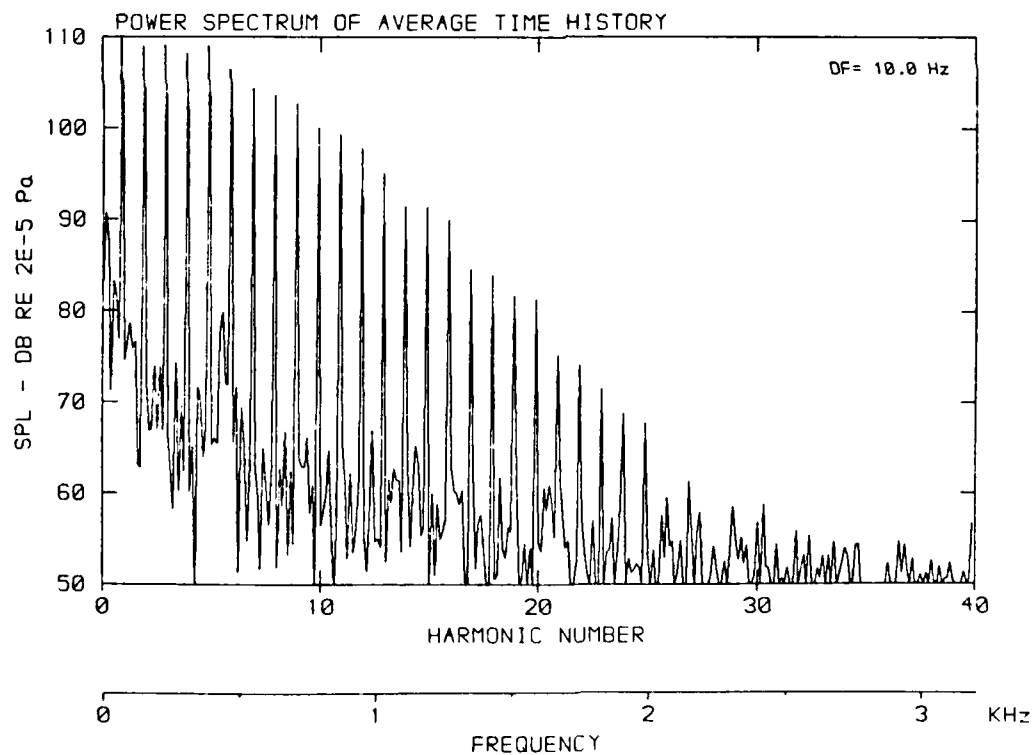
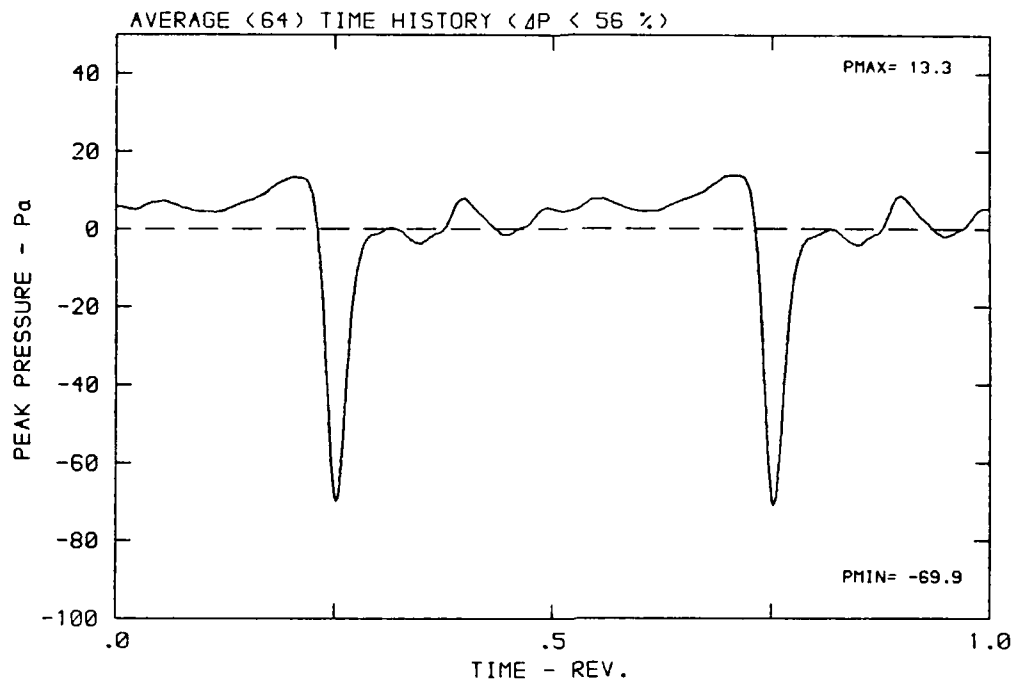
DATA POINT: HC-1 RUN: 39 MP: 3

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



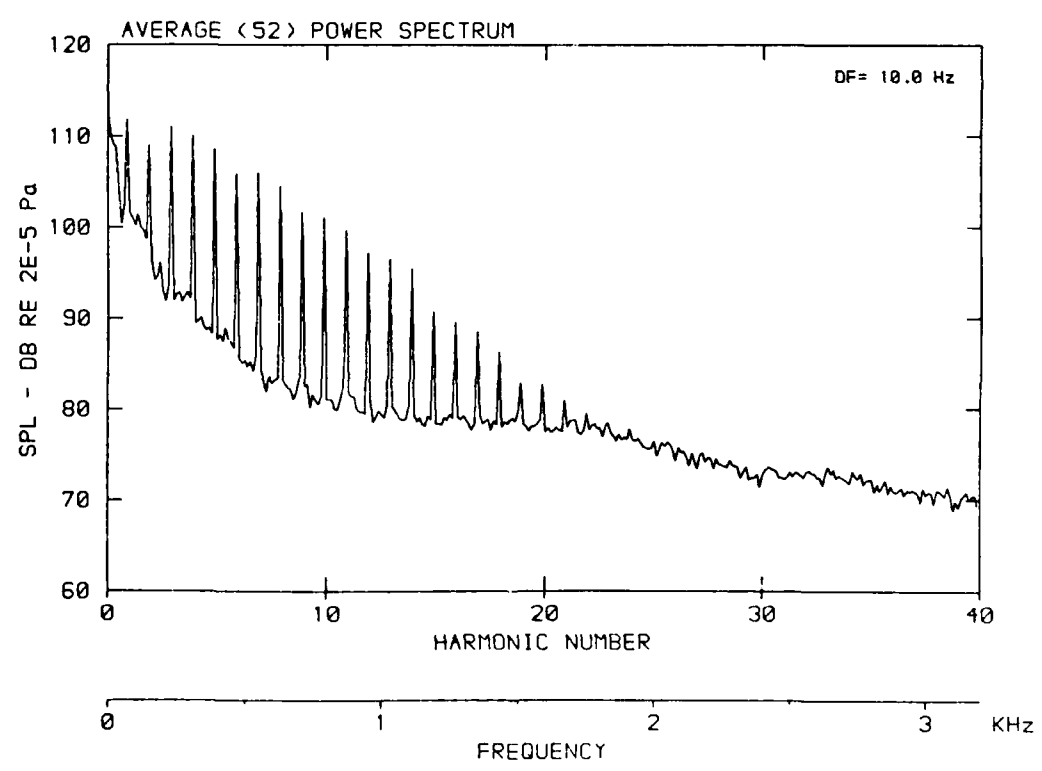
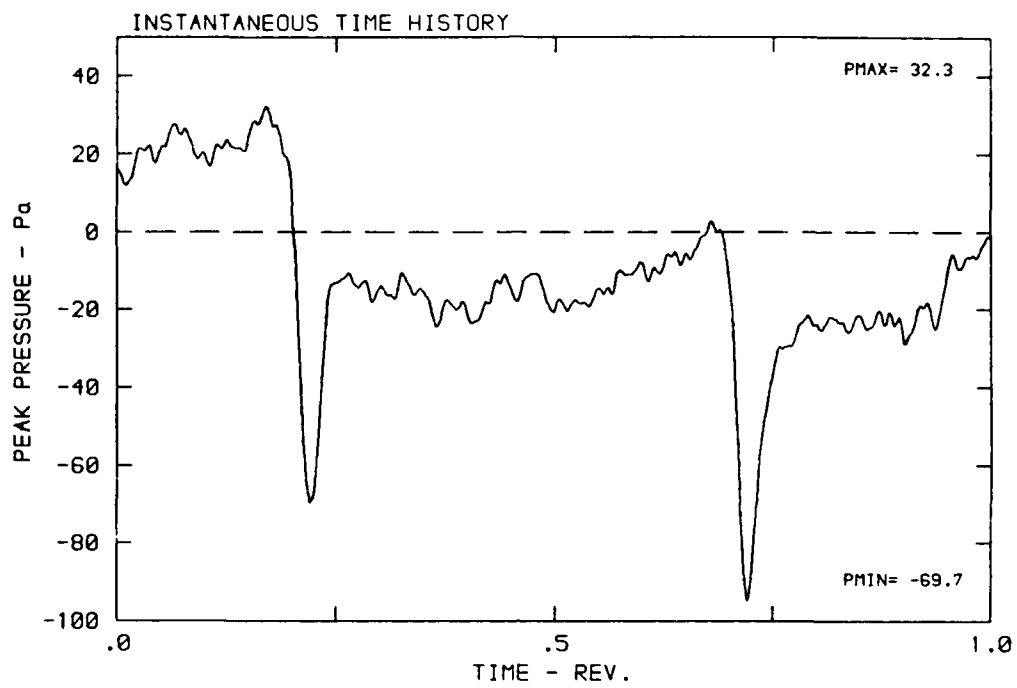
DATA POINT: HC-1 RUN: 39 MP: 3

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



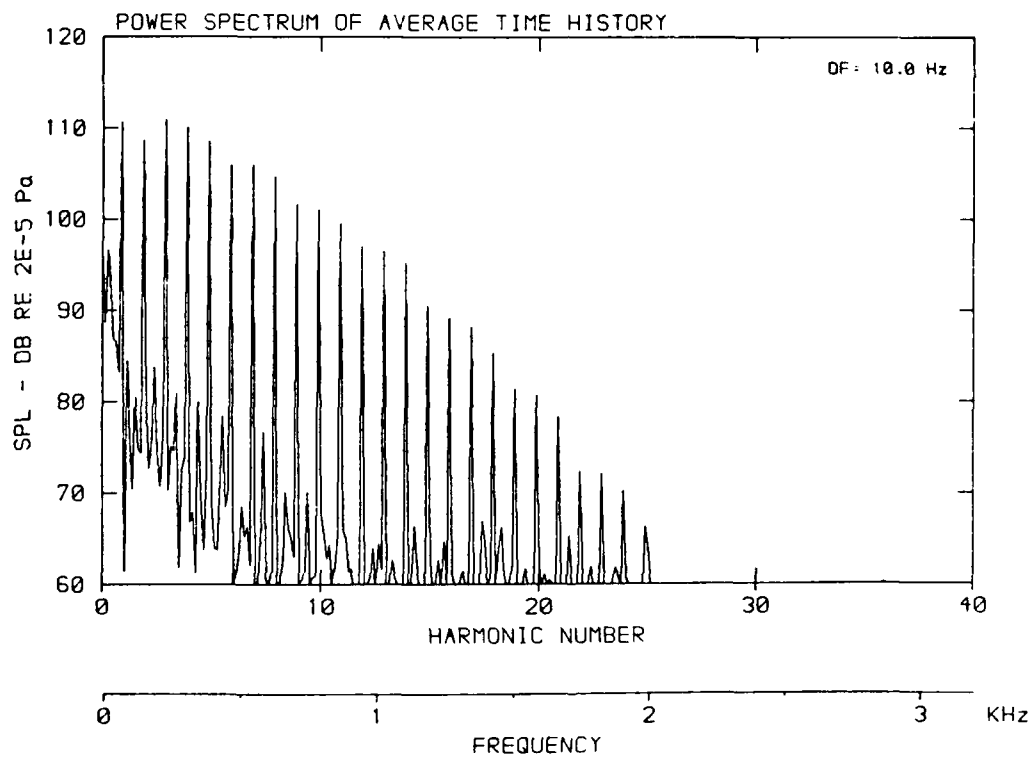
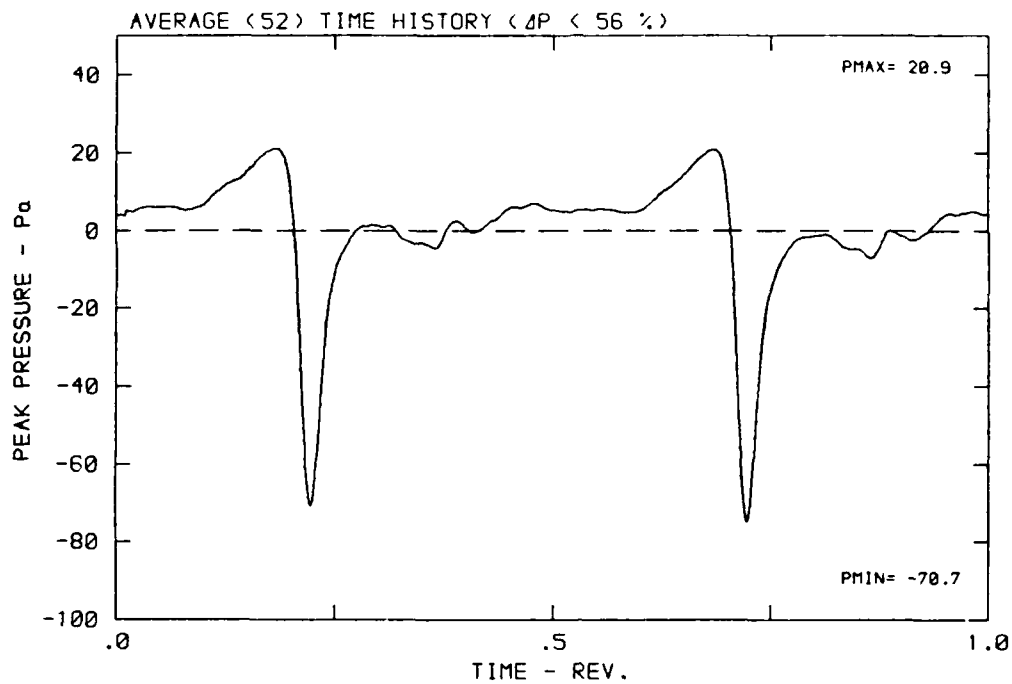
DATA POINT: HC-1 RUN: 39 MP: 4

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



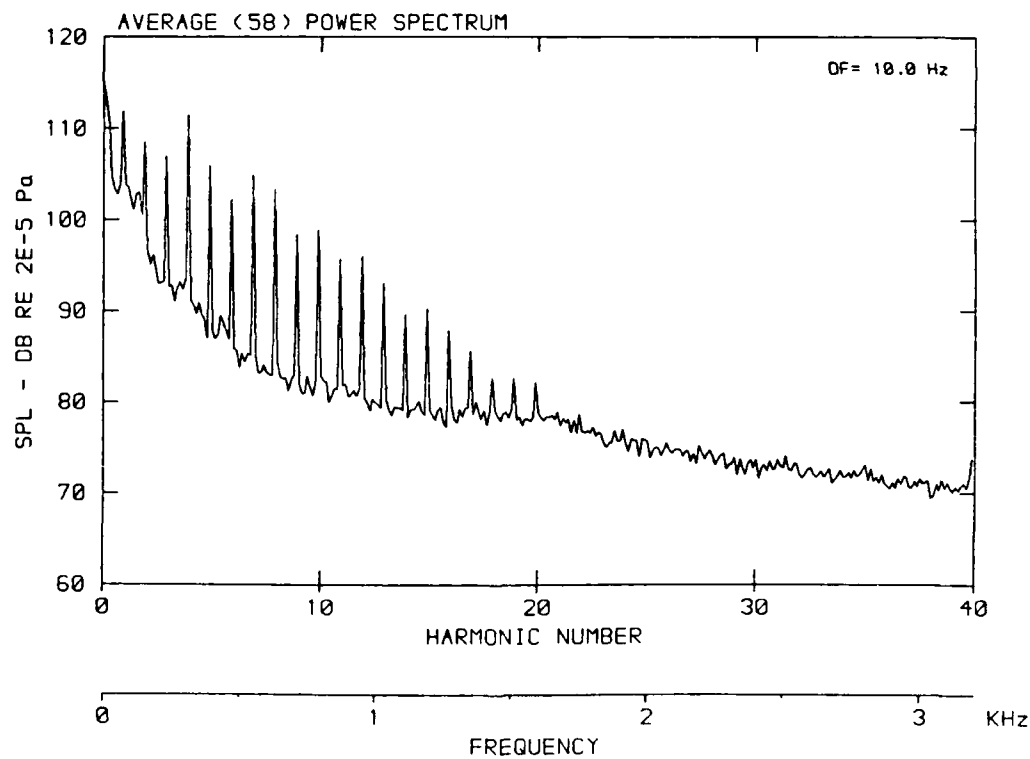
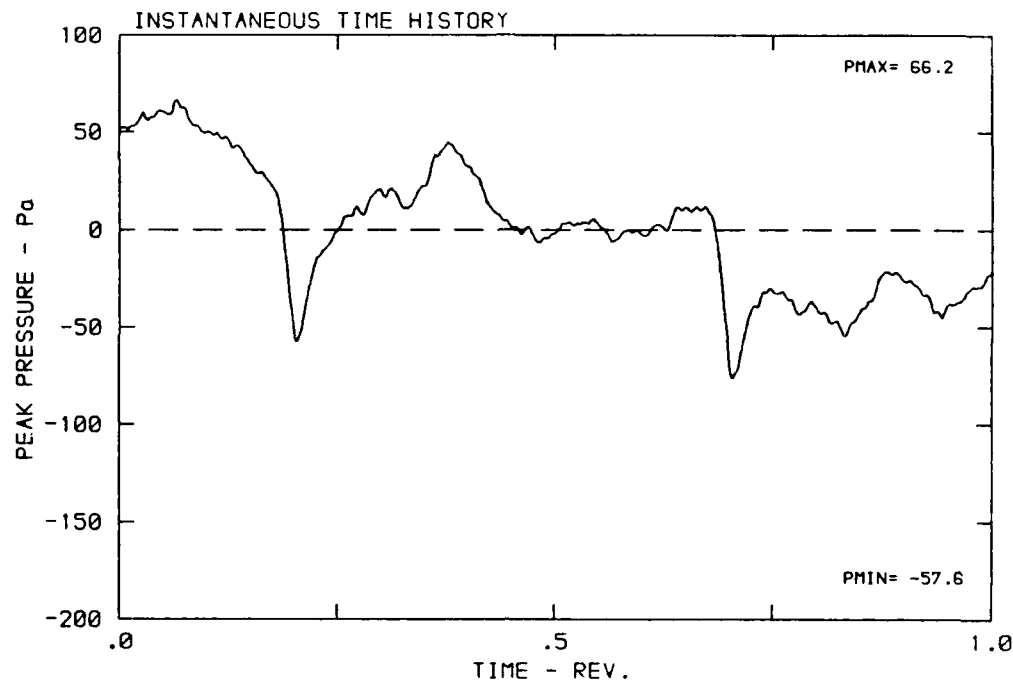
DATA POINT: HC-1 RUN: 39 MP: 4

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



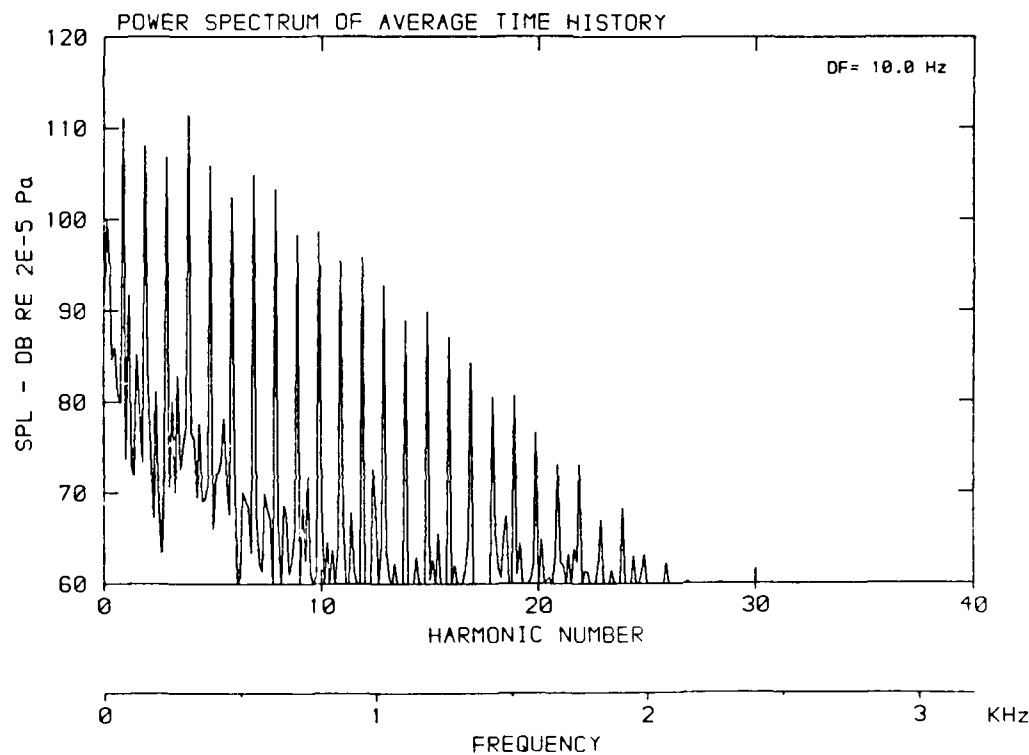
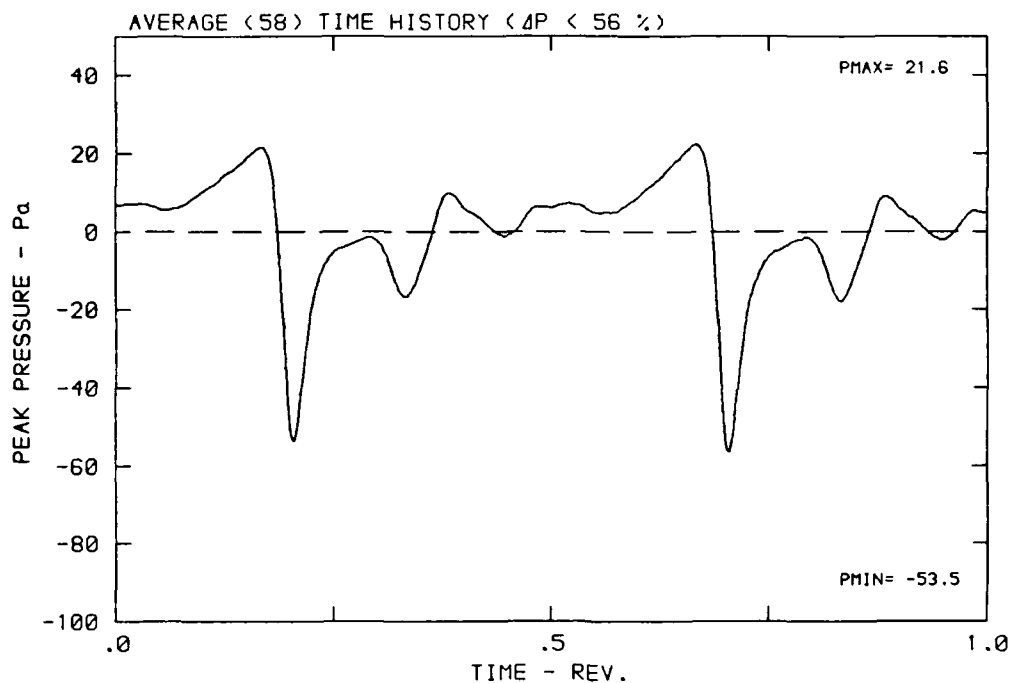
DATA POINT: HC-1 RUN: 39 MP: 5

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



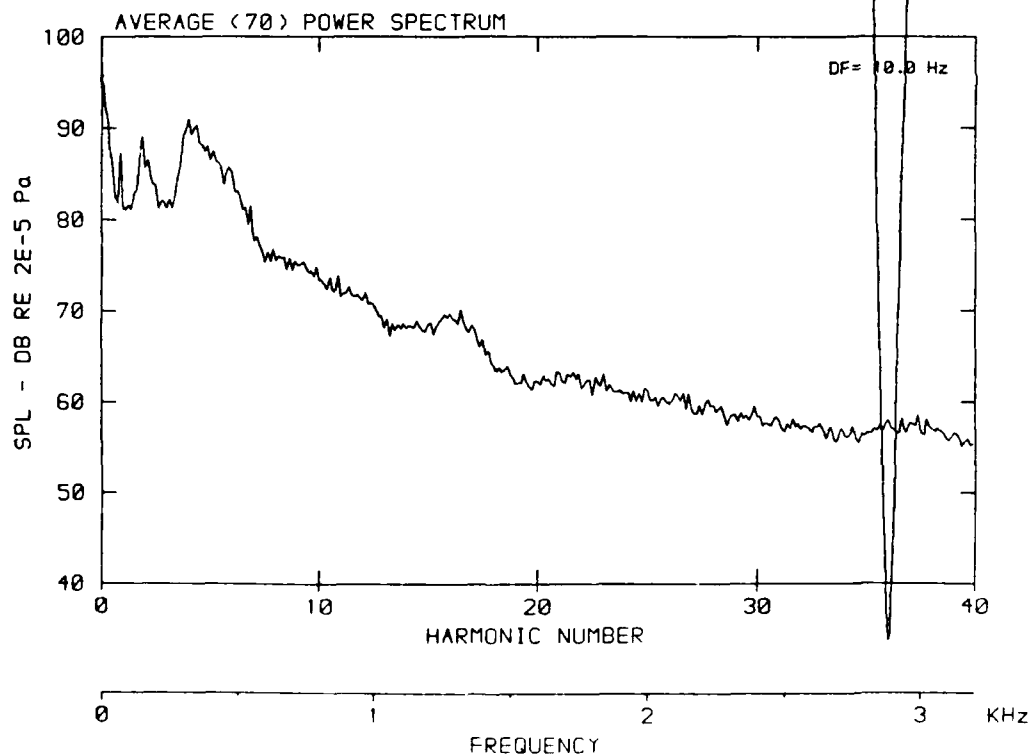
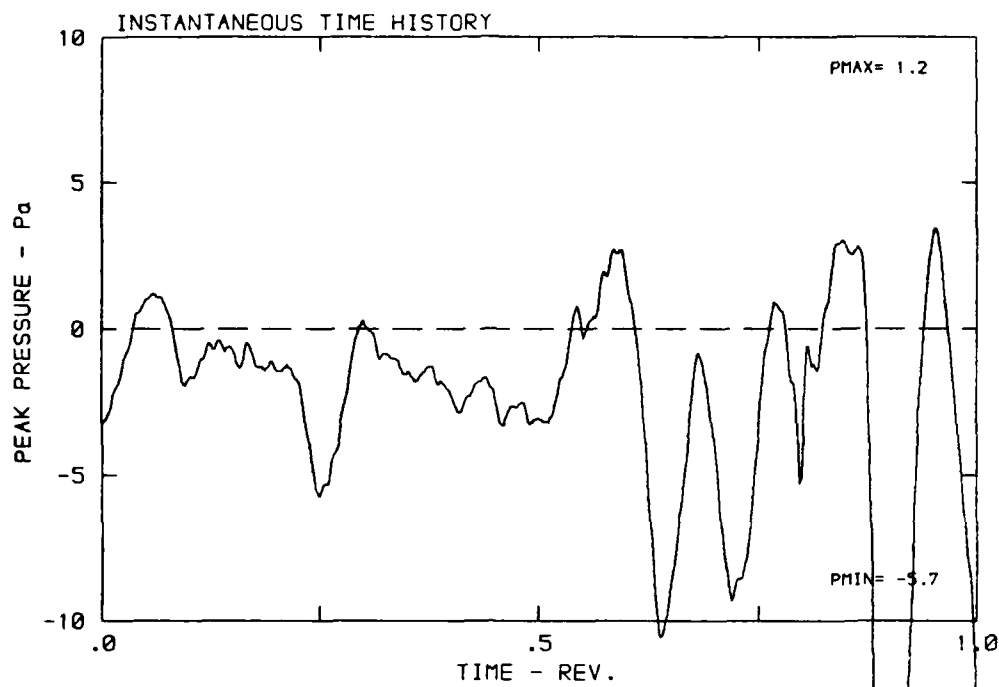
DATA POINT: HC-1 RUN: 39 MP: 5

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



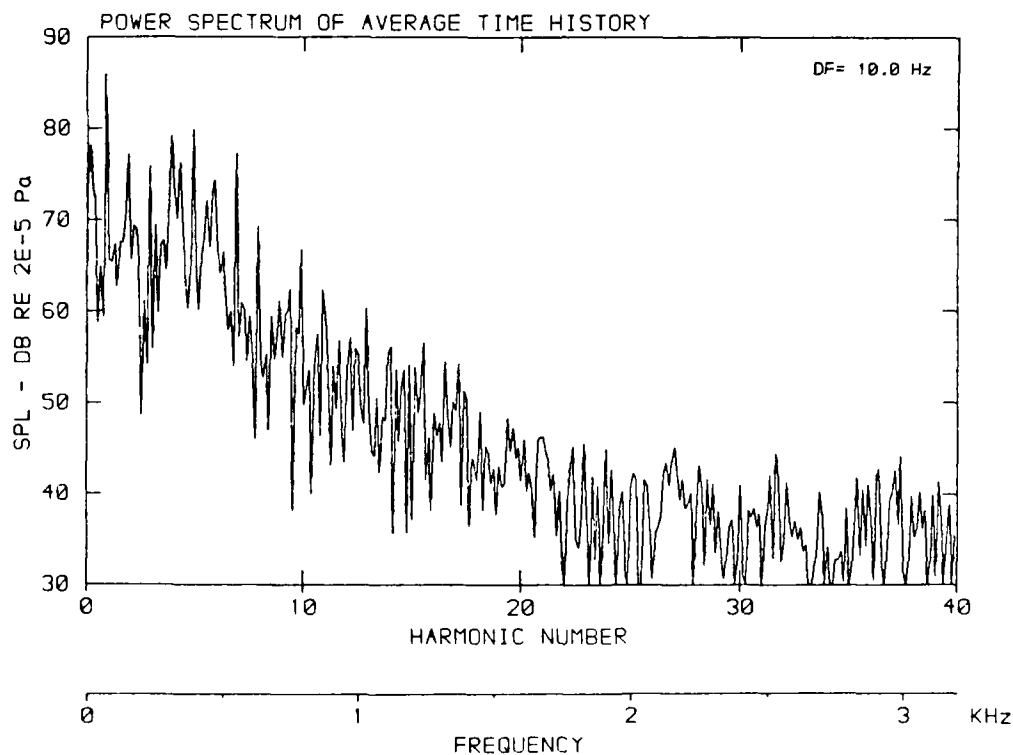
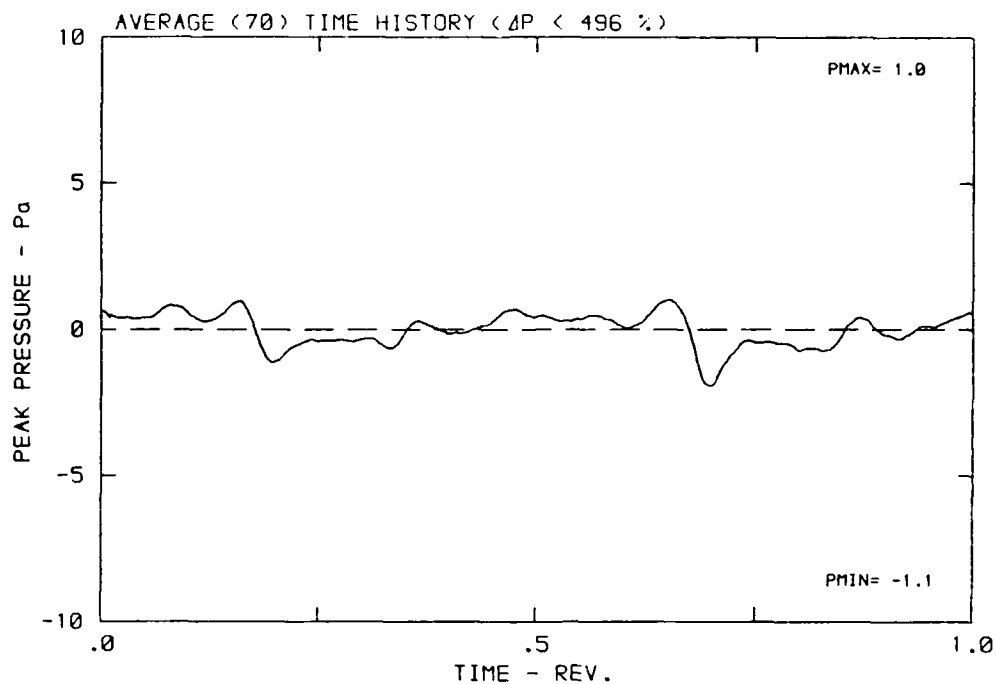
DATA POINT: HC-1 RUN: 39 MP: 6

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



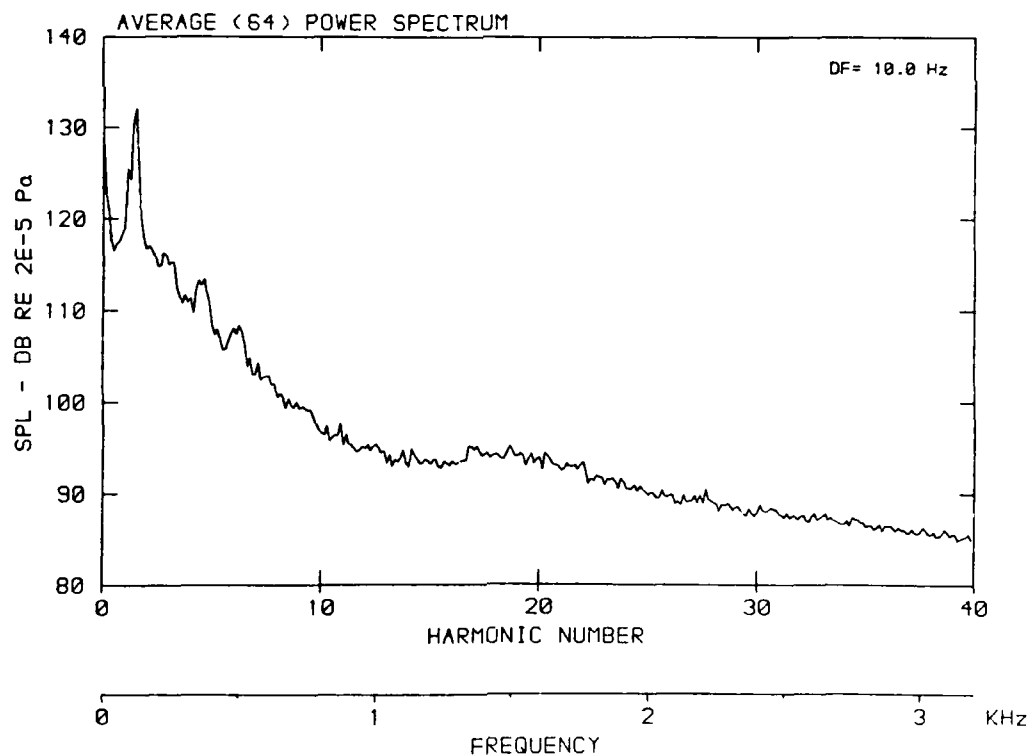
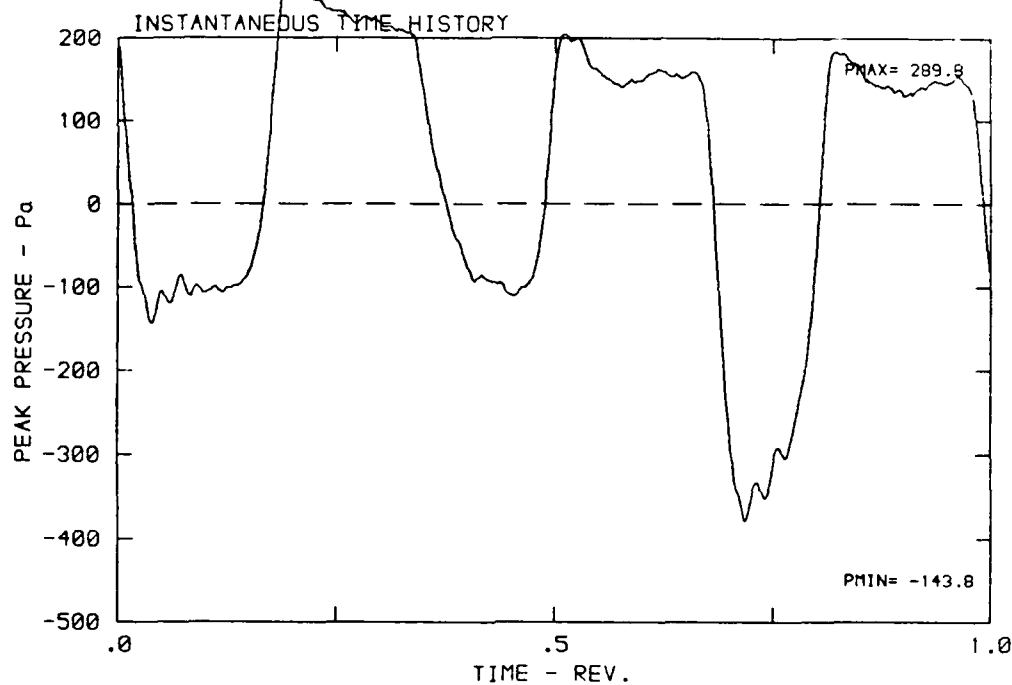
DATA POINT: HC-1 RUN: 39 MP: 6

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



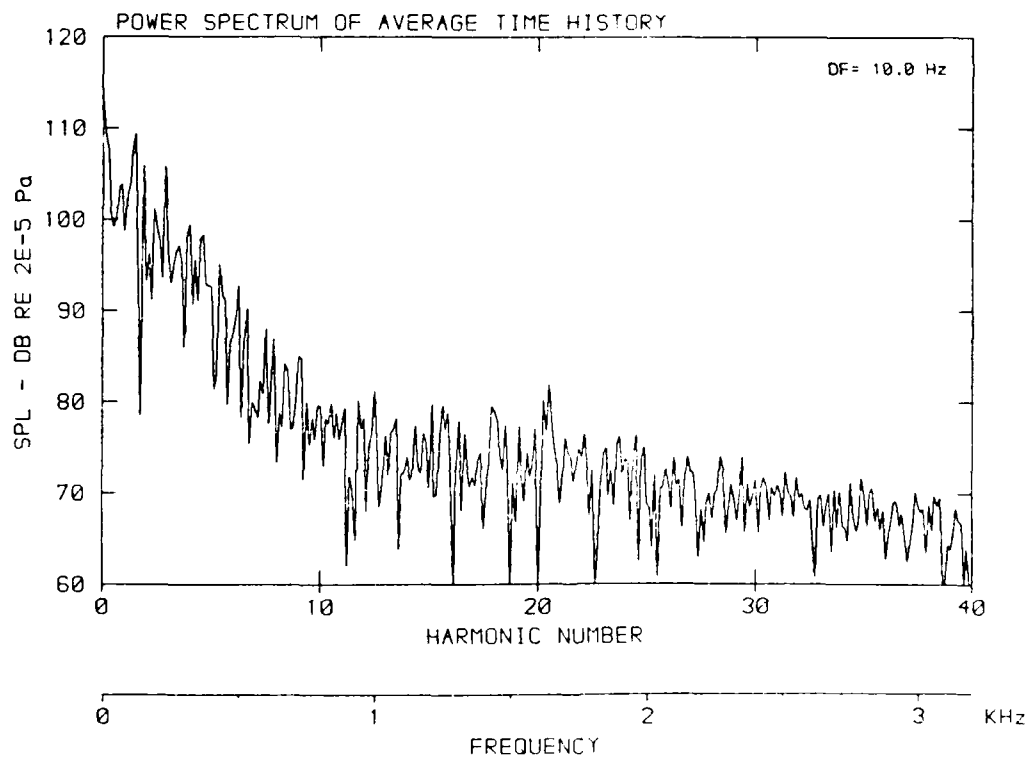
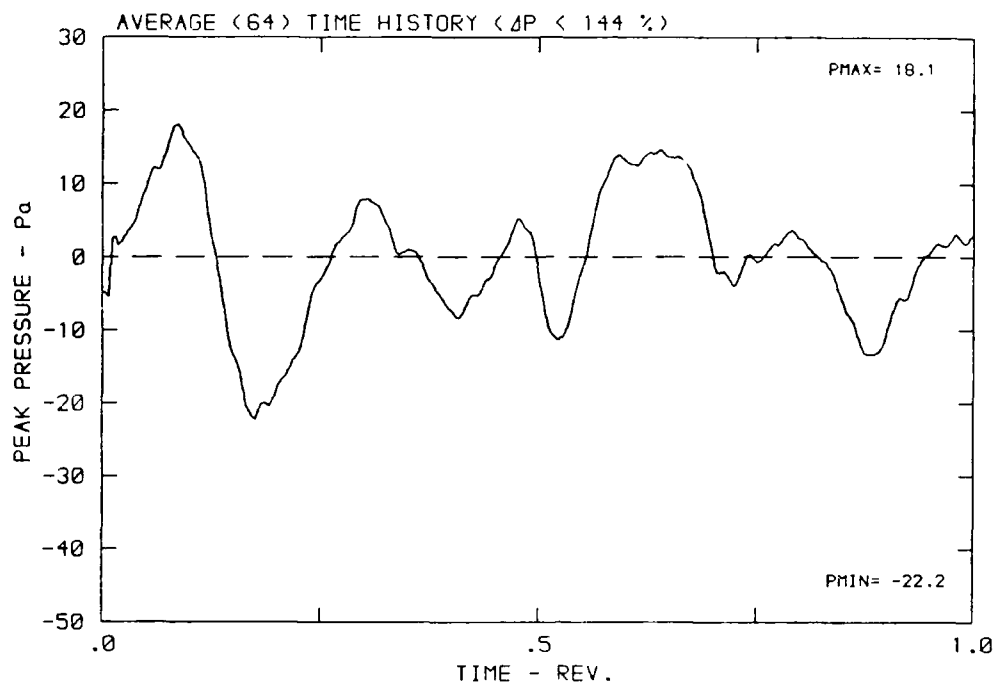
DATA POINT: HC-1 RUN: 39 MP: 7

β : 21.6° MH: .7972 n: 2400 rpm v/u: .302 ϕ : .0° T: 278.6 K



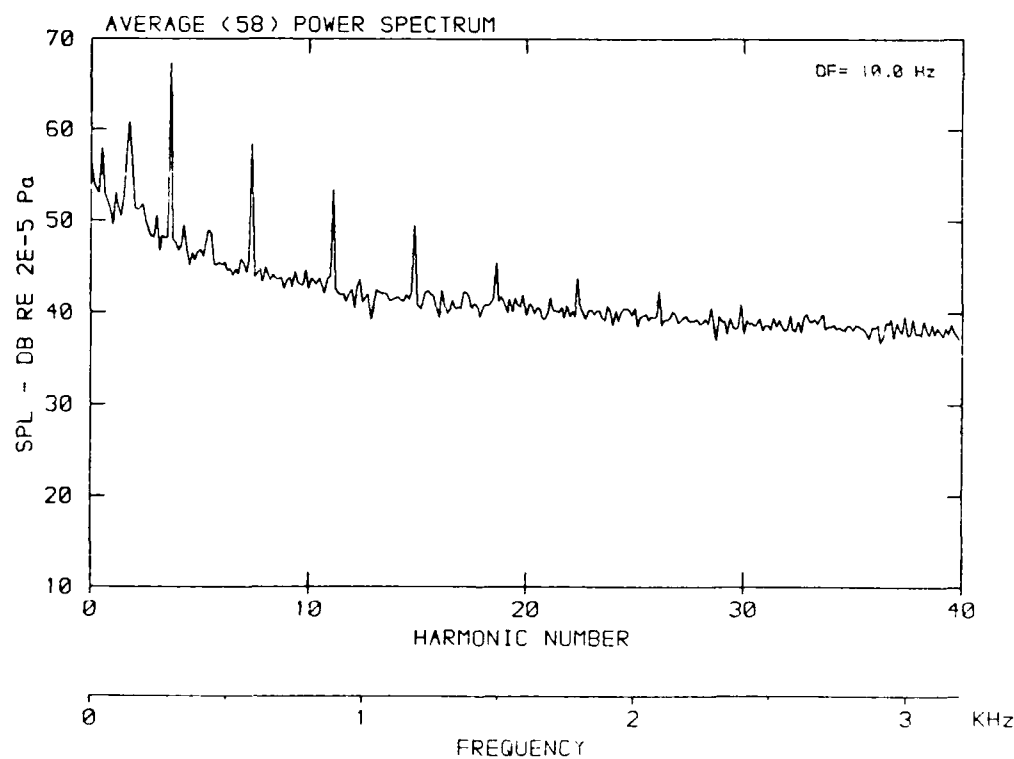
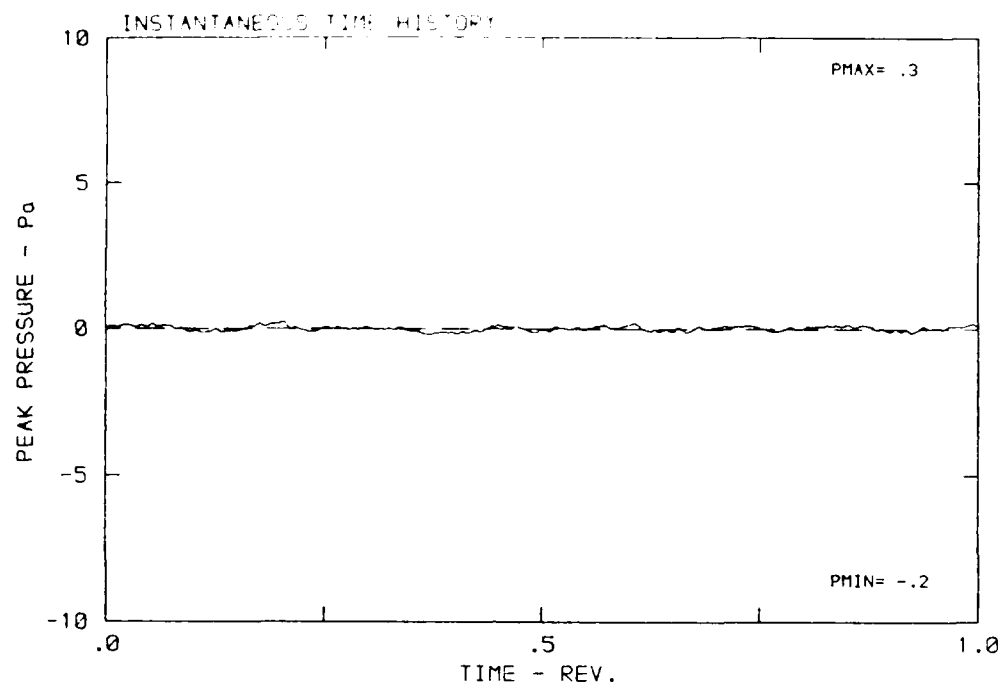
DATA POINT: HC-1 RUN: 39 MP: 7

β : 21.6° MH: .7972 n: 2400 rpm v/u : .302 ϕ : .0° T: 278.6 K



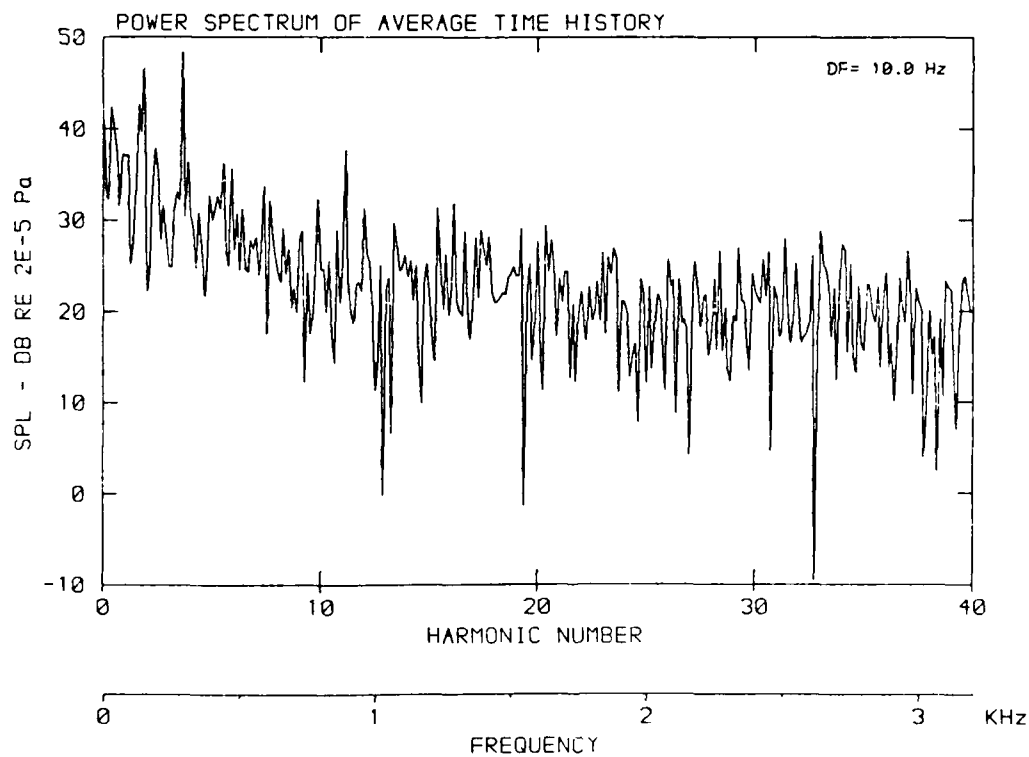
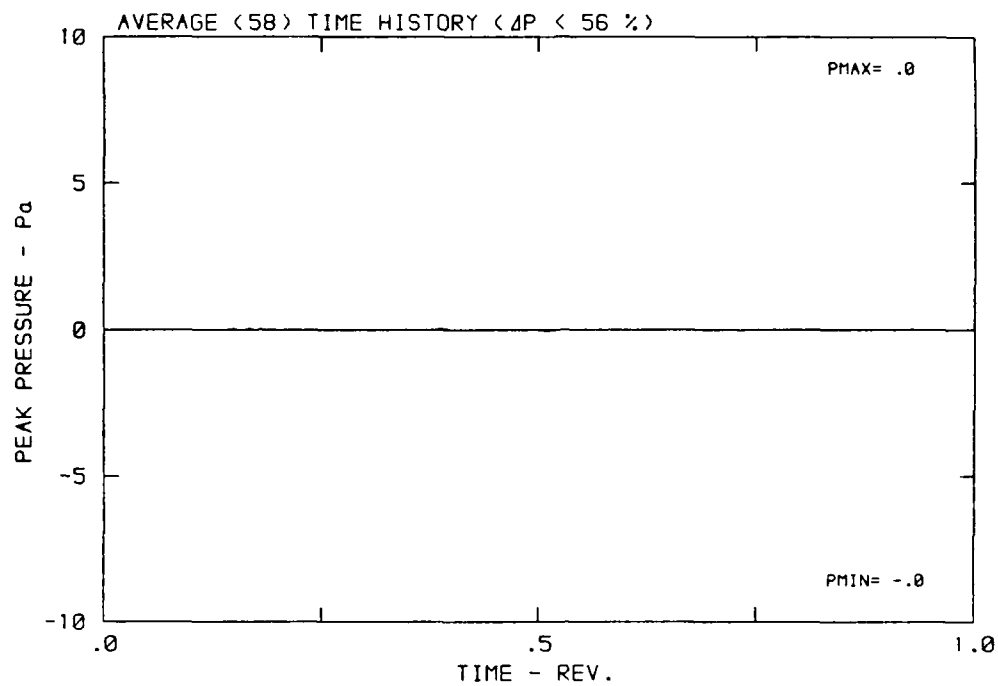
DATA POINT: HC-1 RUN: 39 MP: 9

β : 21.6° MH: .7972 R: 2400 RPM V/U: .302 ϕ : .0° T: 278.6 K



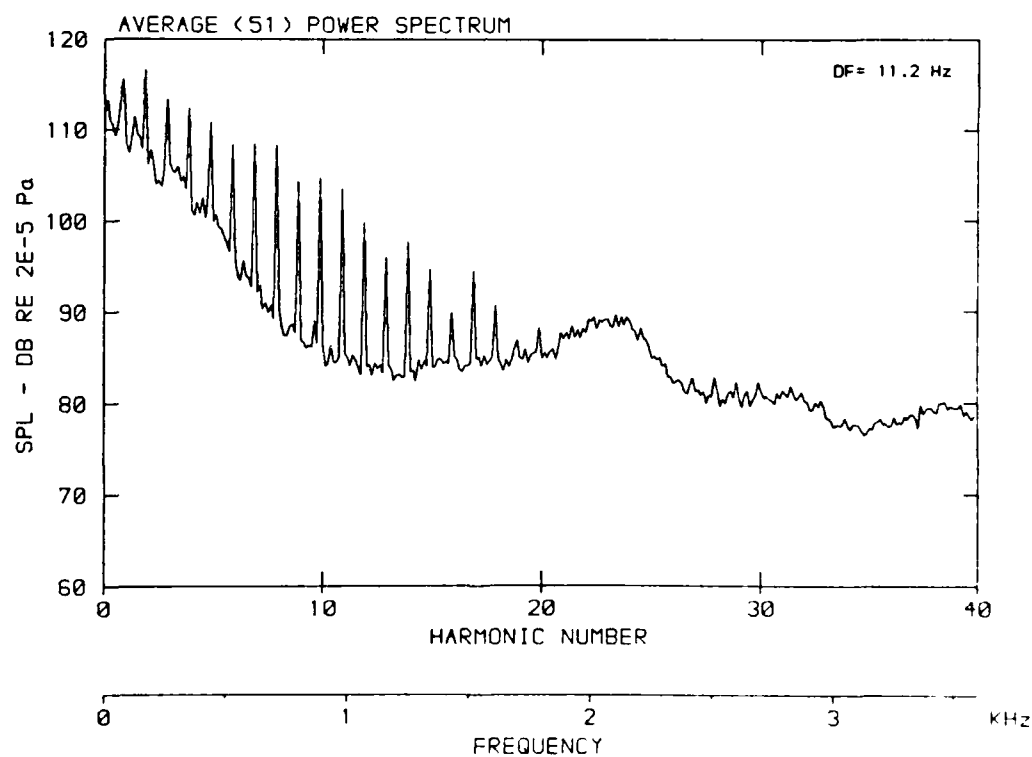
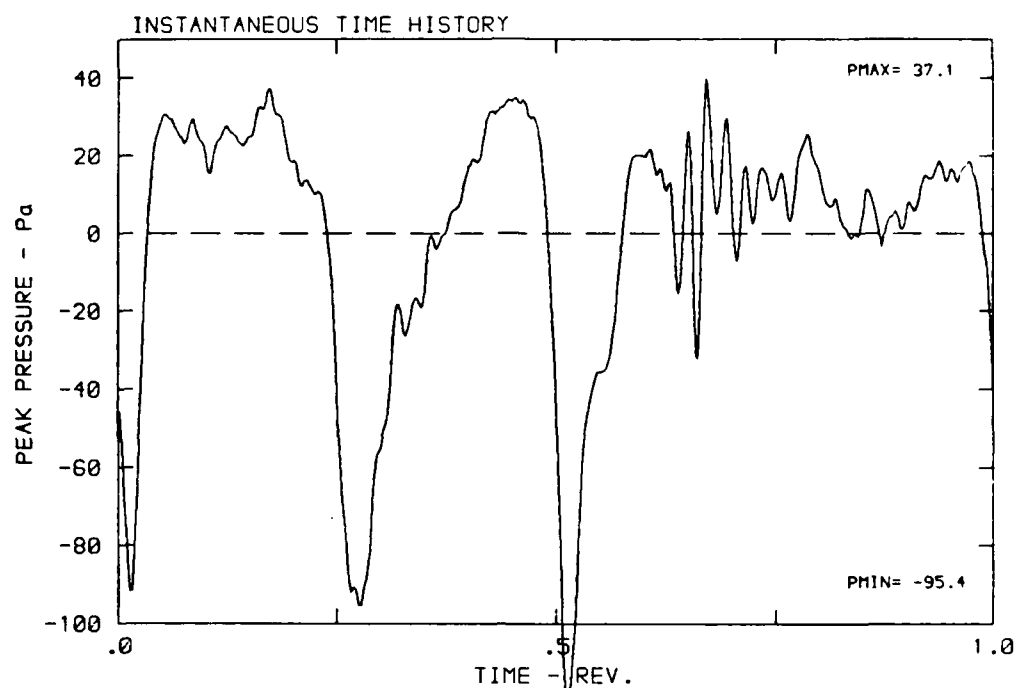
DATA POINT: HC-1 RUN: 39 MP: 9

β : 21.6° MH: .7972 n: 2400 rpm v/u : .302 ϕ : .0° T: 278.6 K



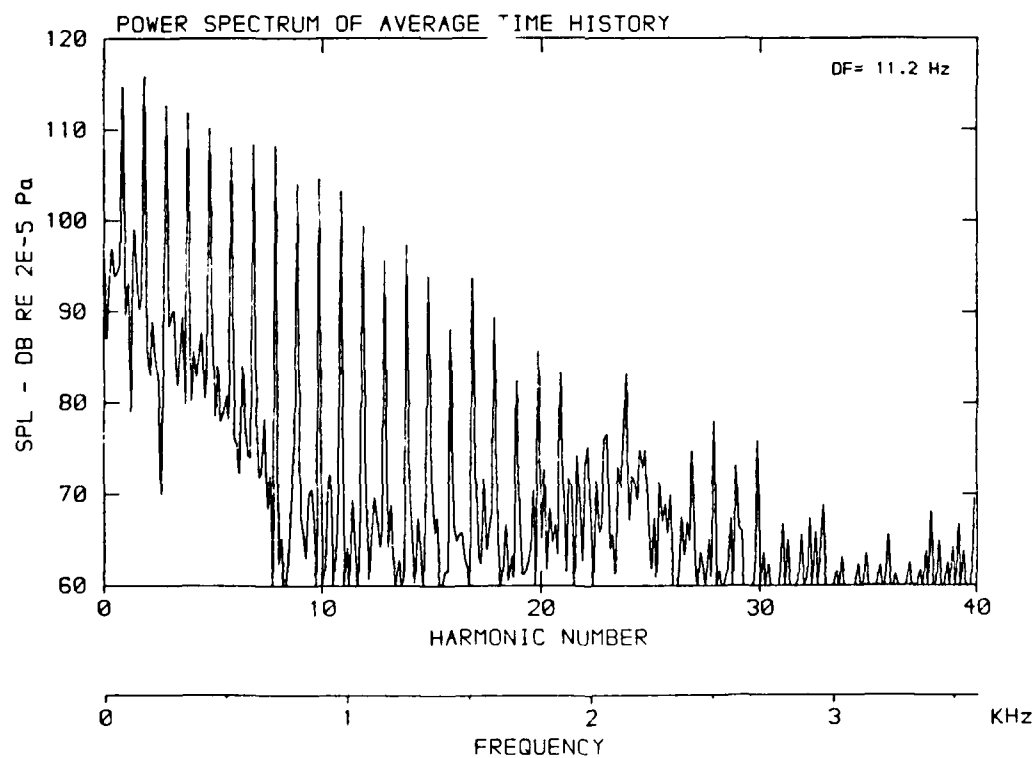
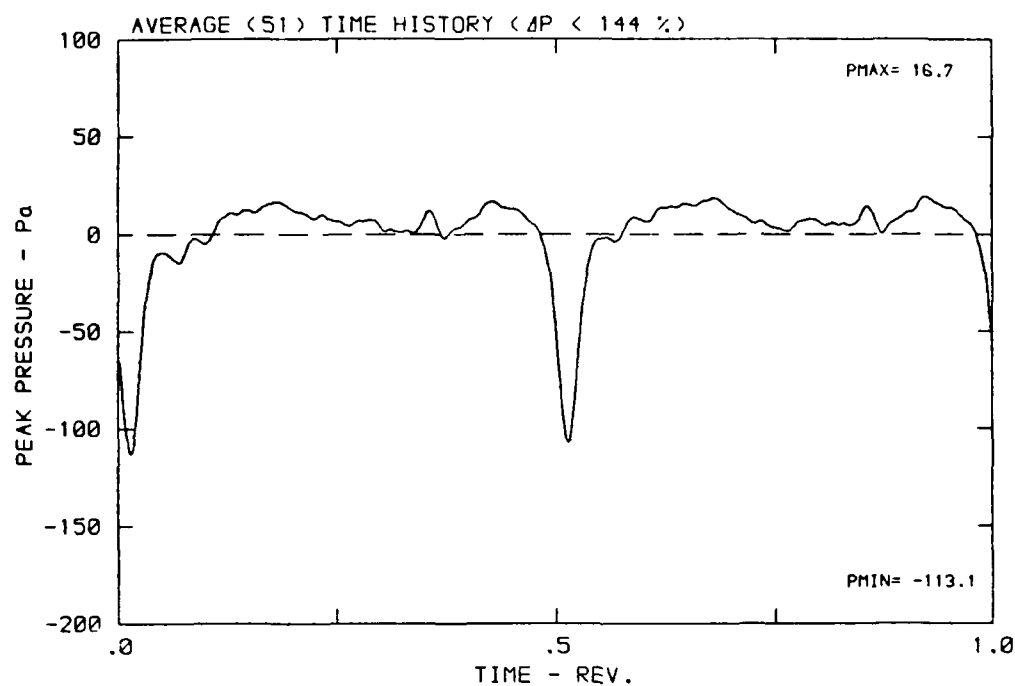
DATA POINT: HC-2 RUN: 40 MP: 1

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 260.2 K



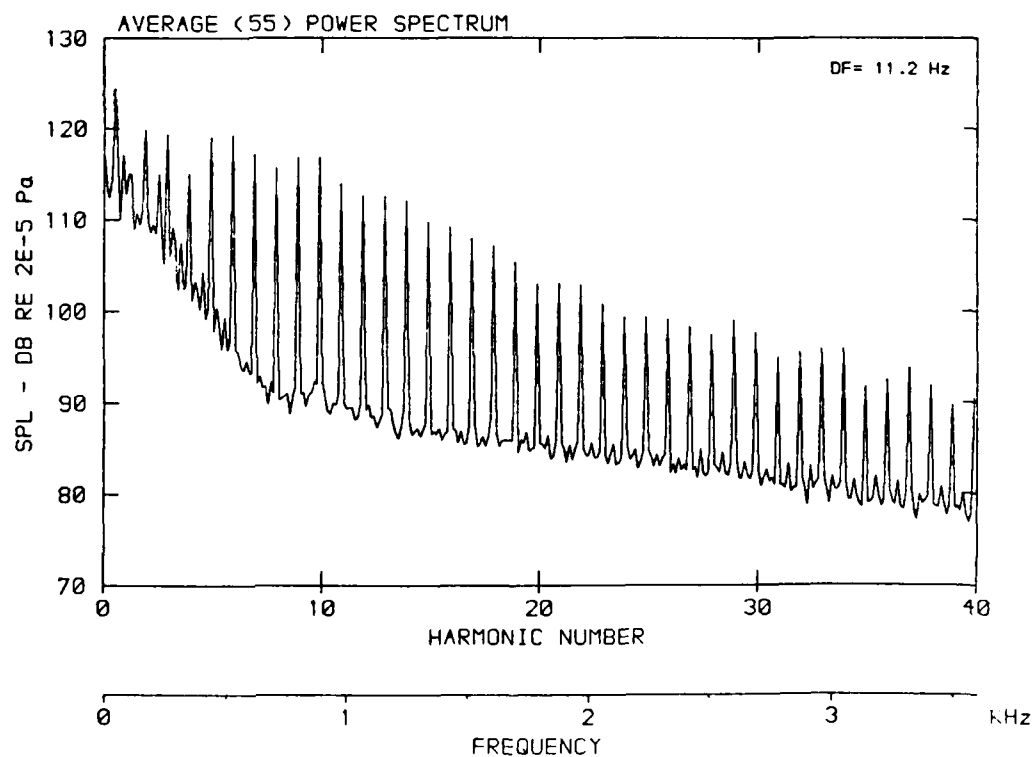
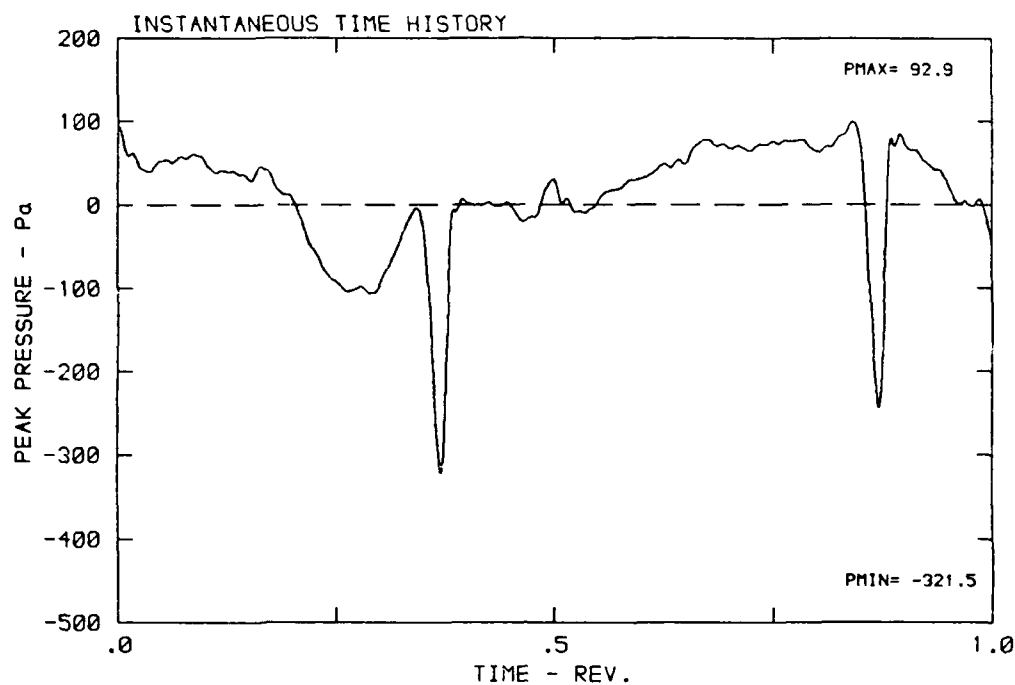
DATA POINT: HC-2 RUN: 40 MP: 1

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 280.2 K



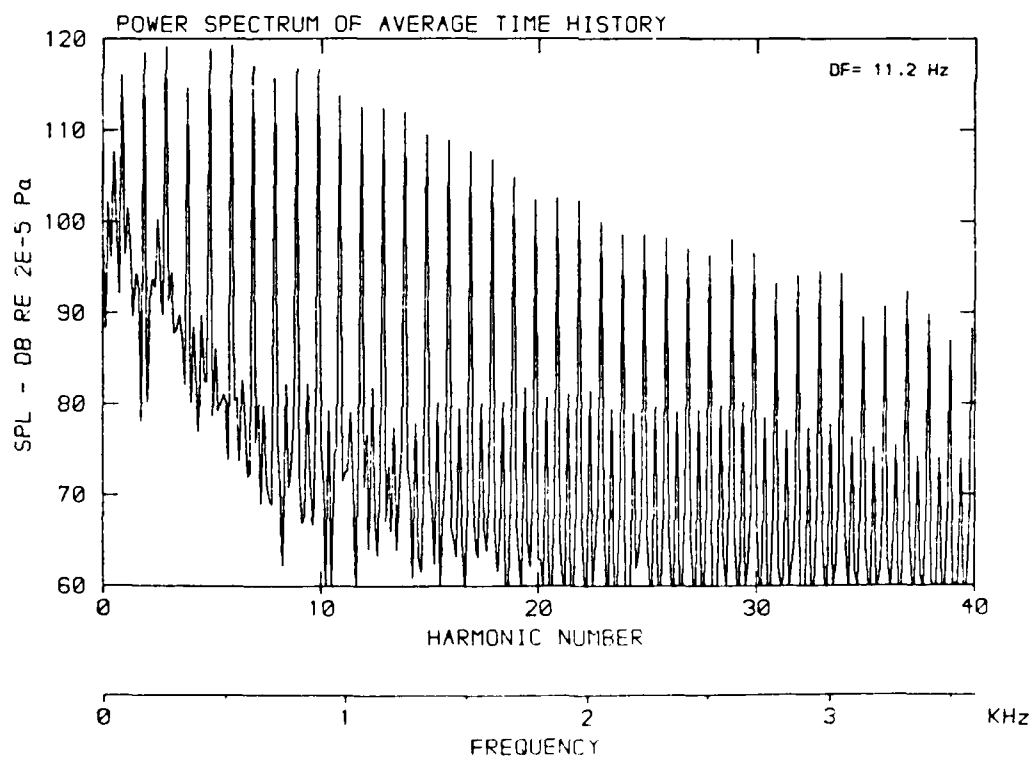
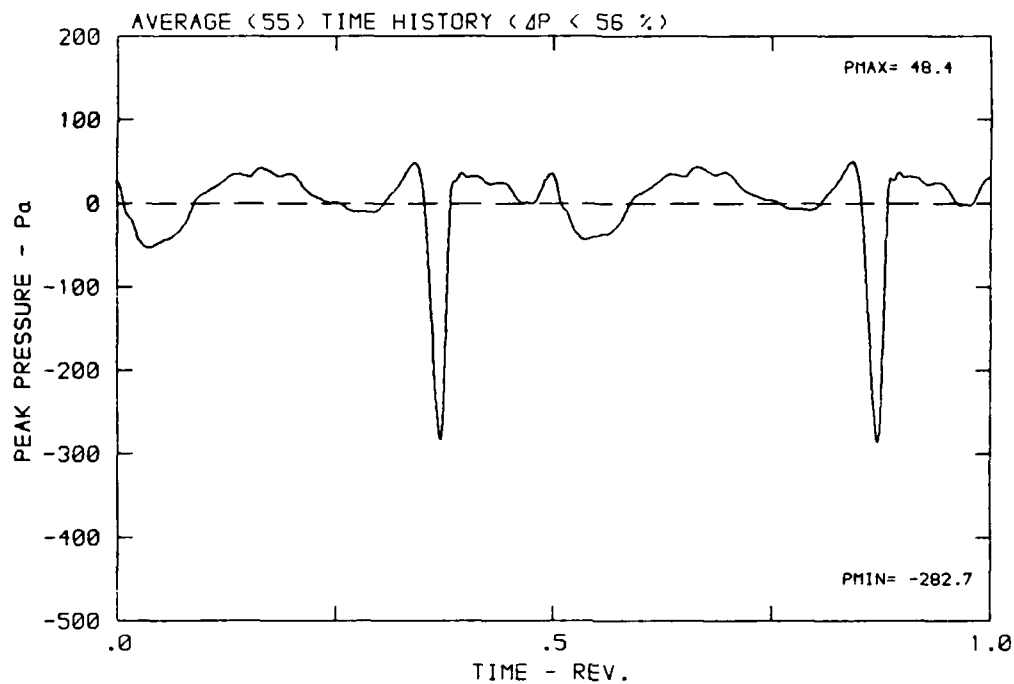
DATA POINT: HC-2 RUN: 40 MP: 2

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 280.2 K



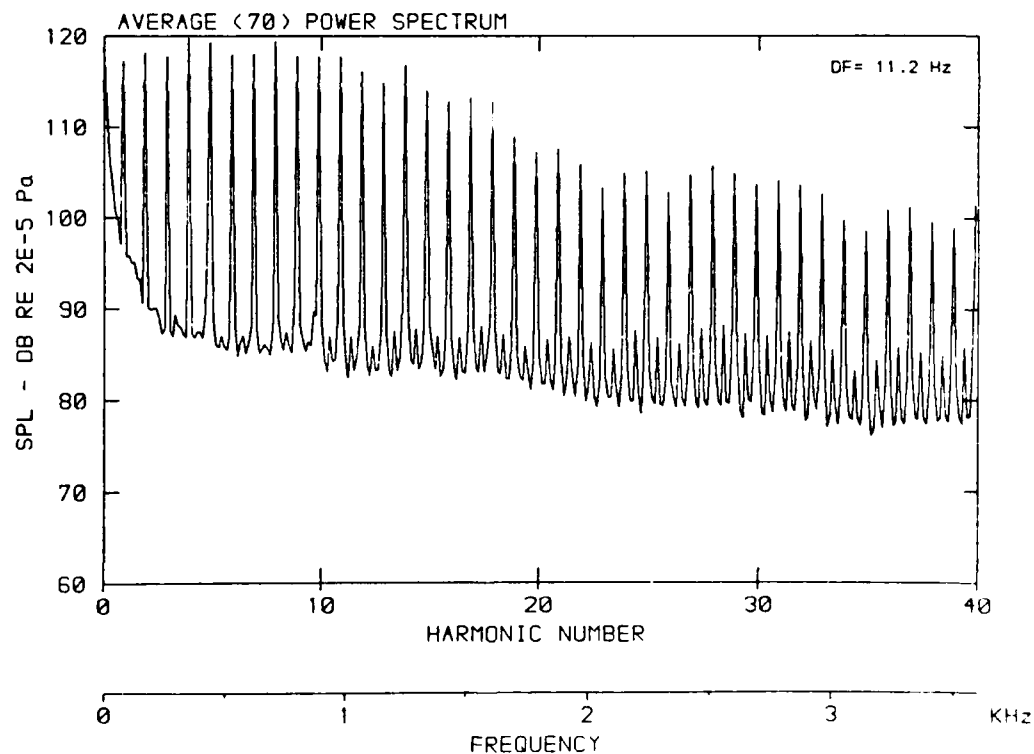
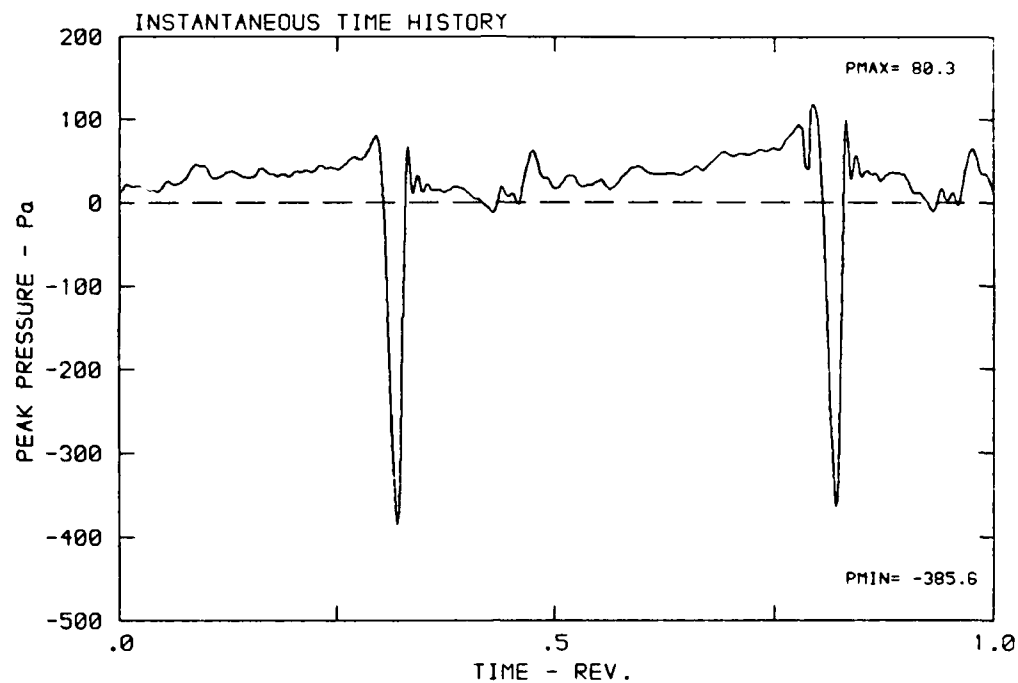
DATA POINT: HC-2 RUN: 40 MP: 2

β : 21.6° MH: .8867 n: 2700 rpm v/u : .270 ϕ : .0° T: 280.2 K



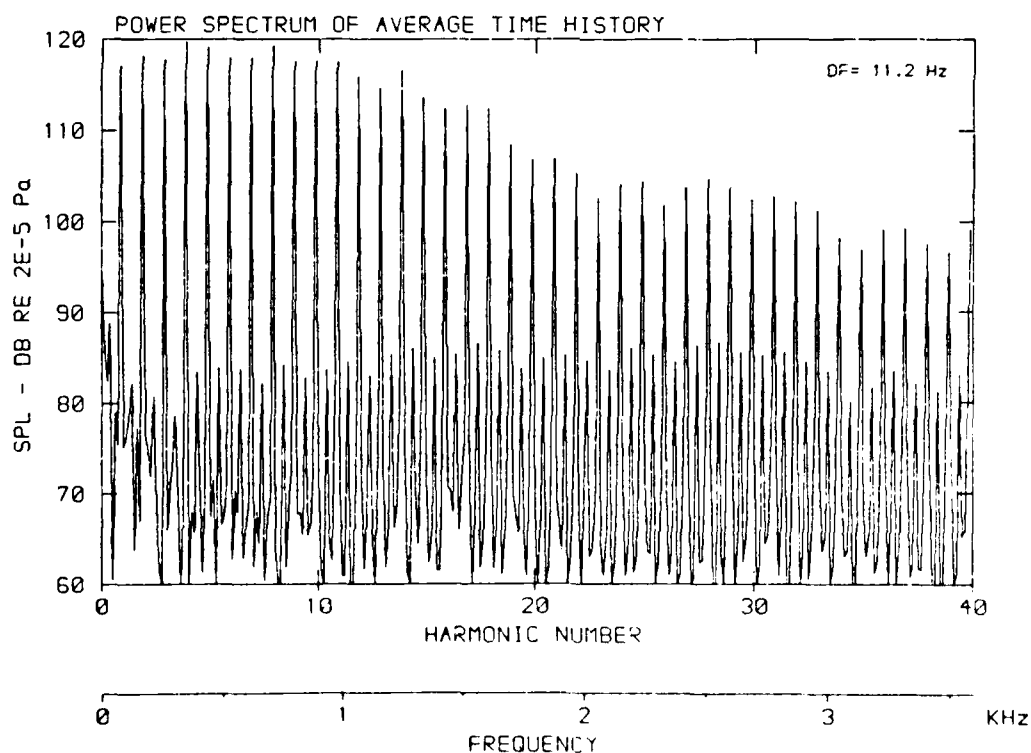
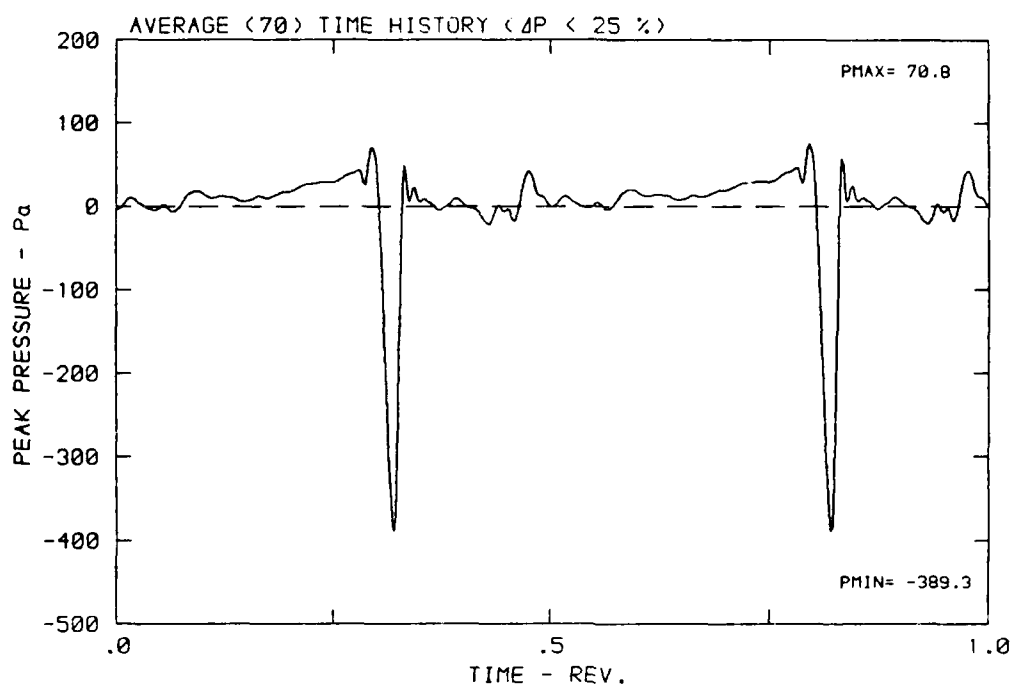
DATA POINT: HC-2 RUN: 40 MP: 3

β : 21.6° MH: .8867 n: 2700 rpm v/u : .270 ϕ : .0° T: 280.2 K



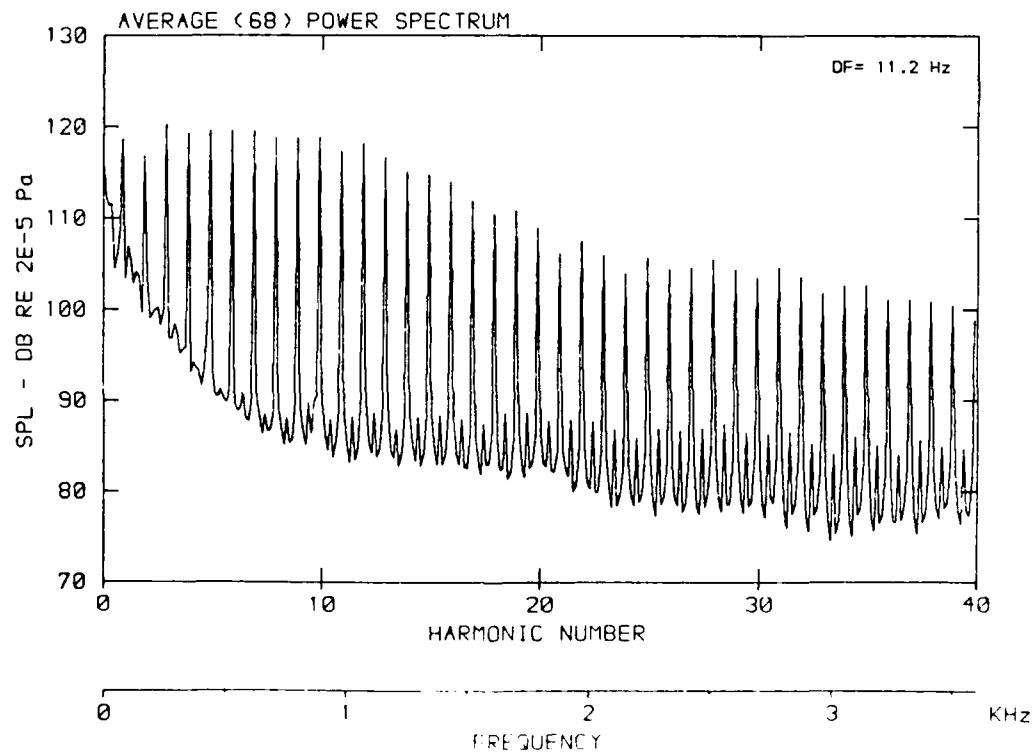
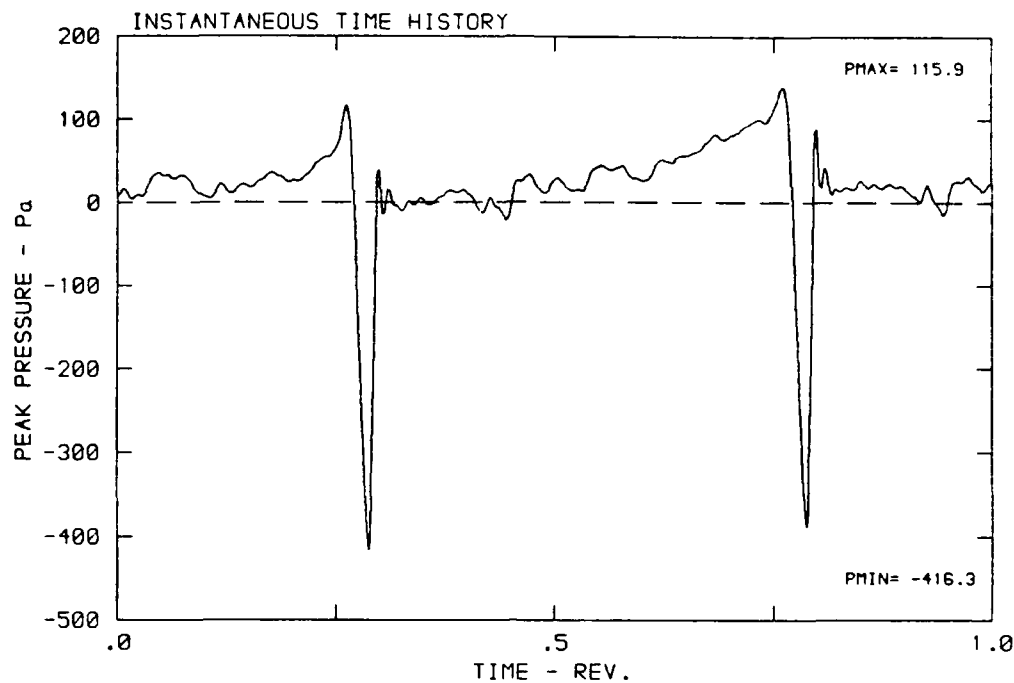
DATA POINT: HC-2 RUN: 40 MP: 3

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 280.2 K



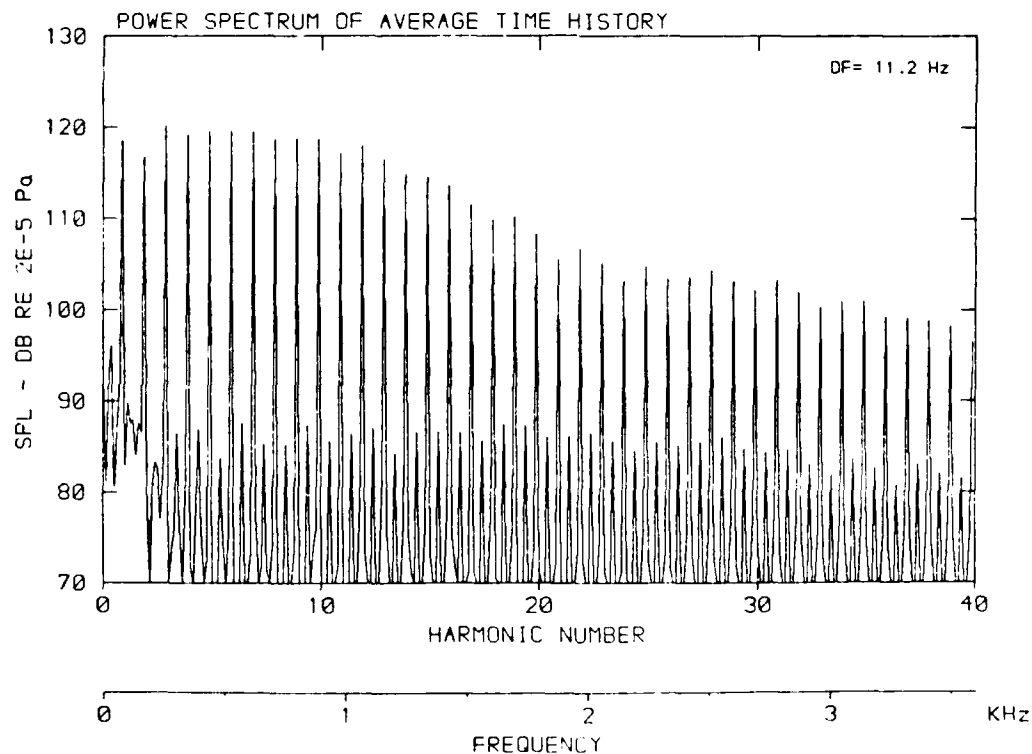
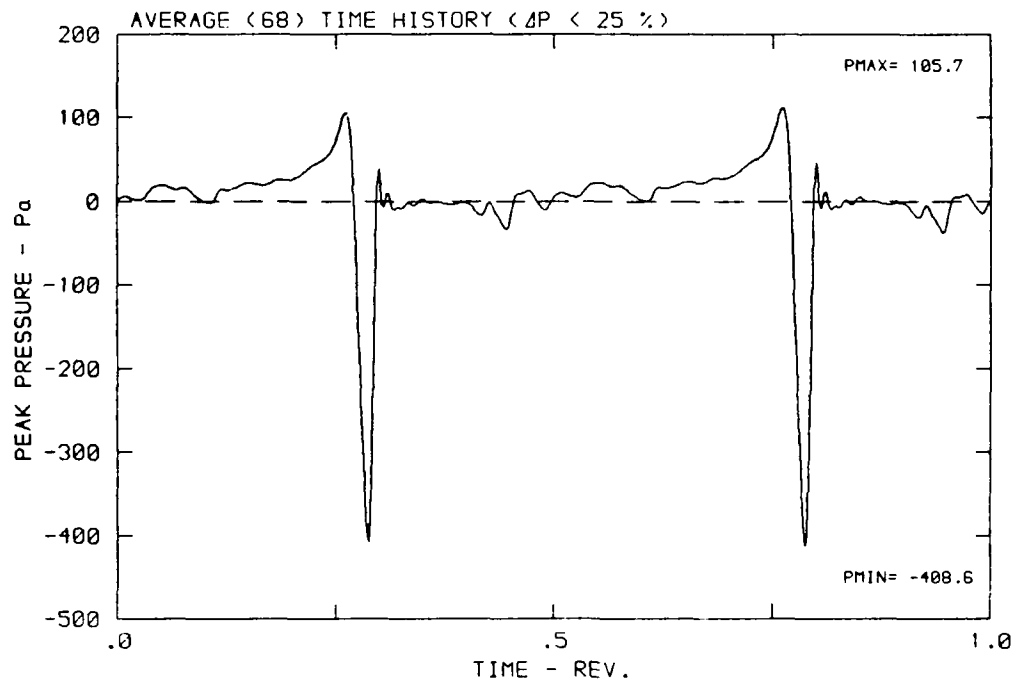
DATA POINT: HC-2 RUN: 40 MP: 4

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 280.2 K



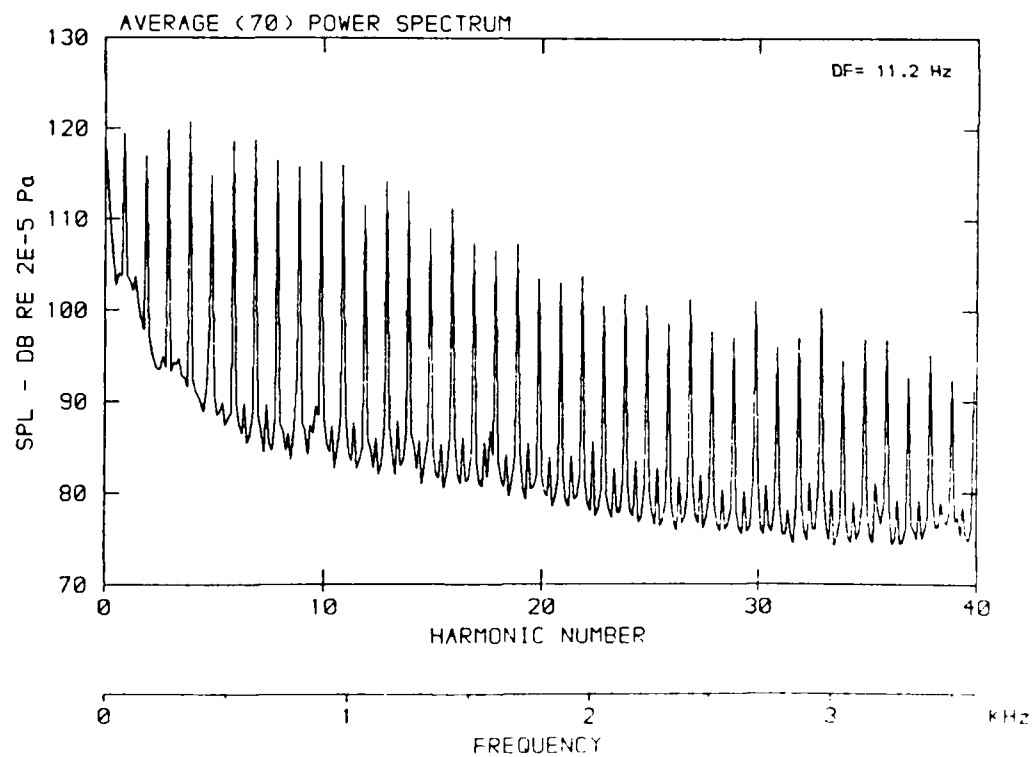
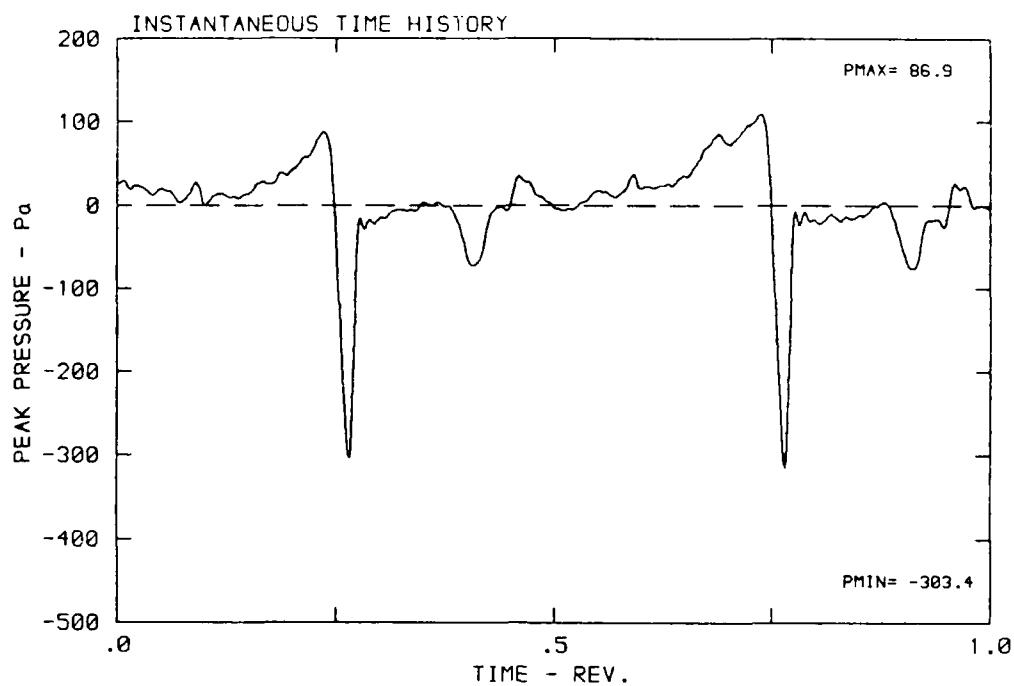
DATA POINT: HC-2 RUN: 40 MP: 4

β : 21.6° MH: .8867 n: 2700 rpm v/u : .270 ϕ : .0° T: 280.2 K



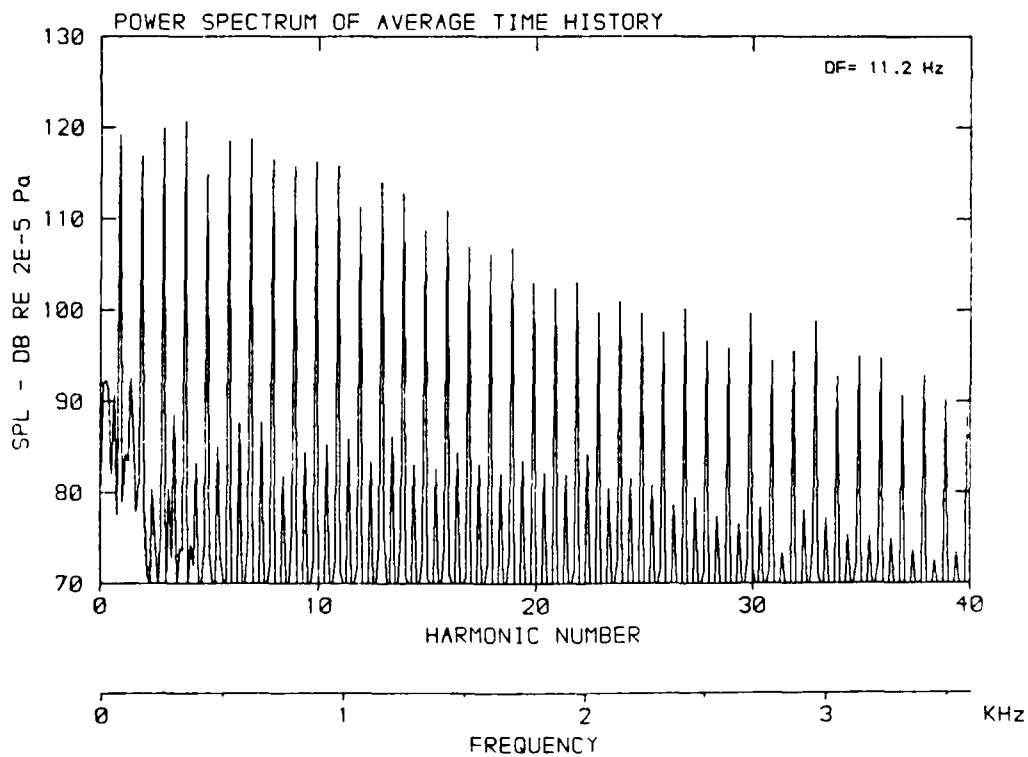
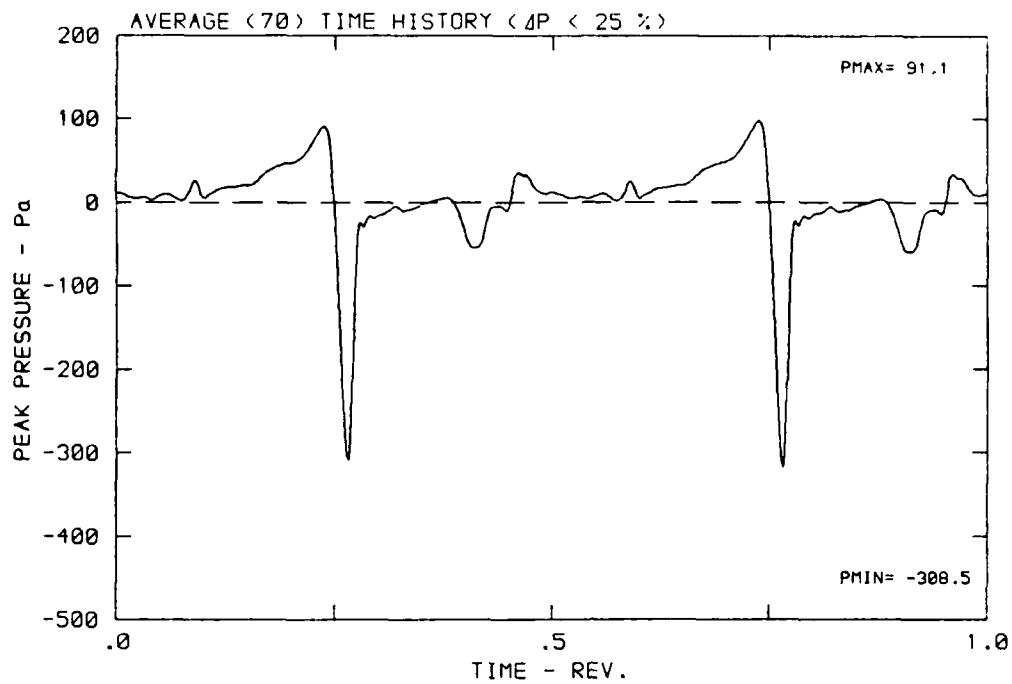
DATA POINT: HC-2 RUN: 40 MP: 5

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 280.2 K



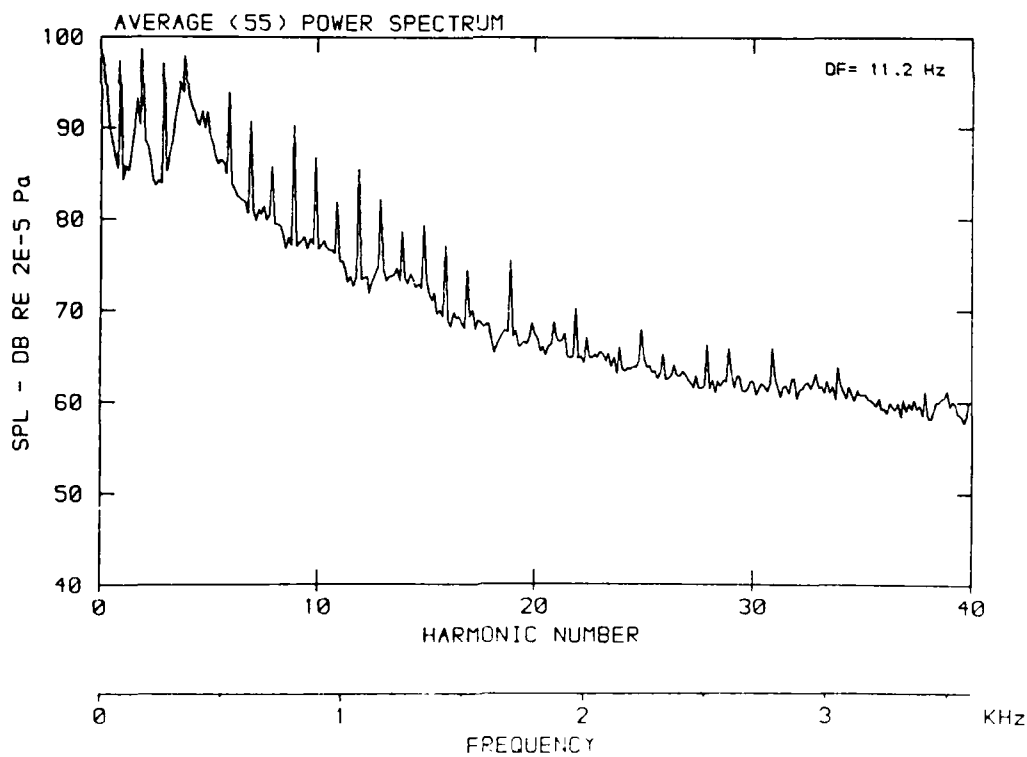
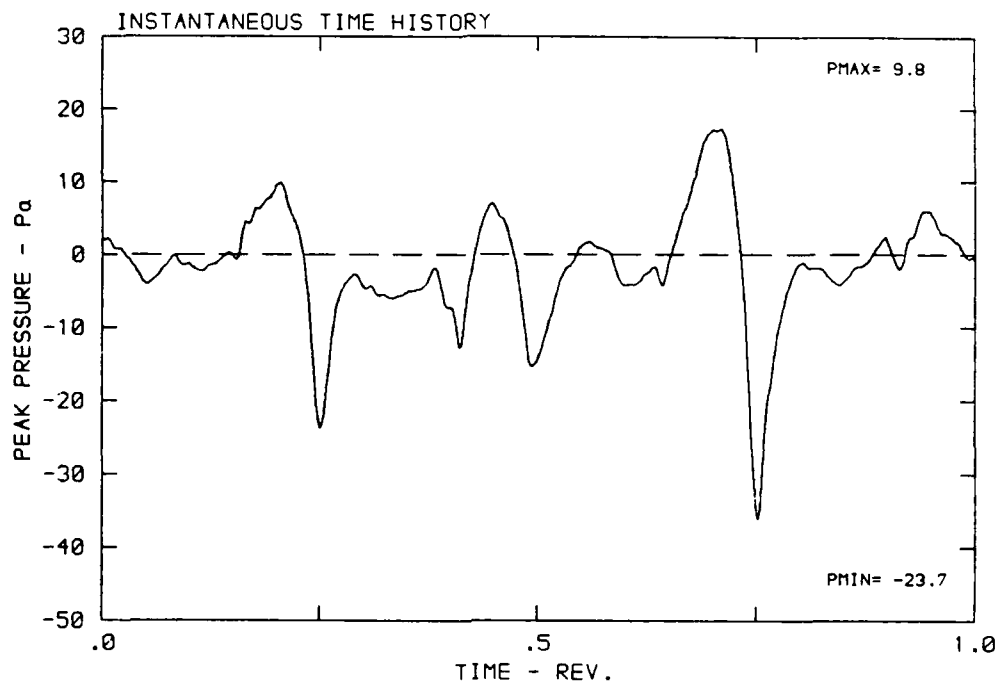
DATA POINT: HC-2 RUN: 40 MP: 5

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° τ : 280.2 K



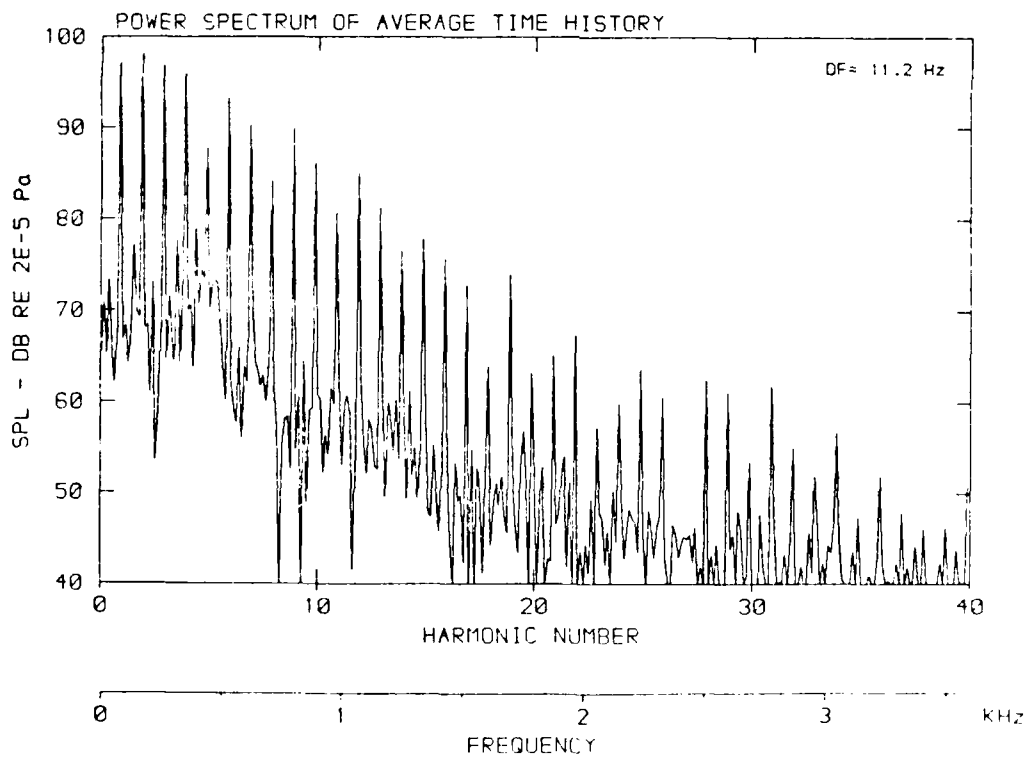
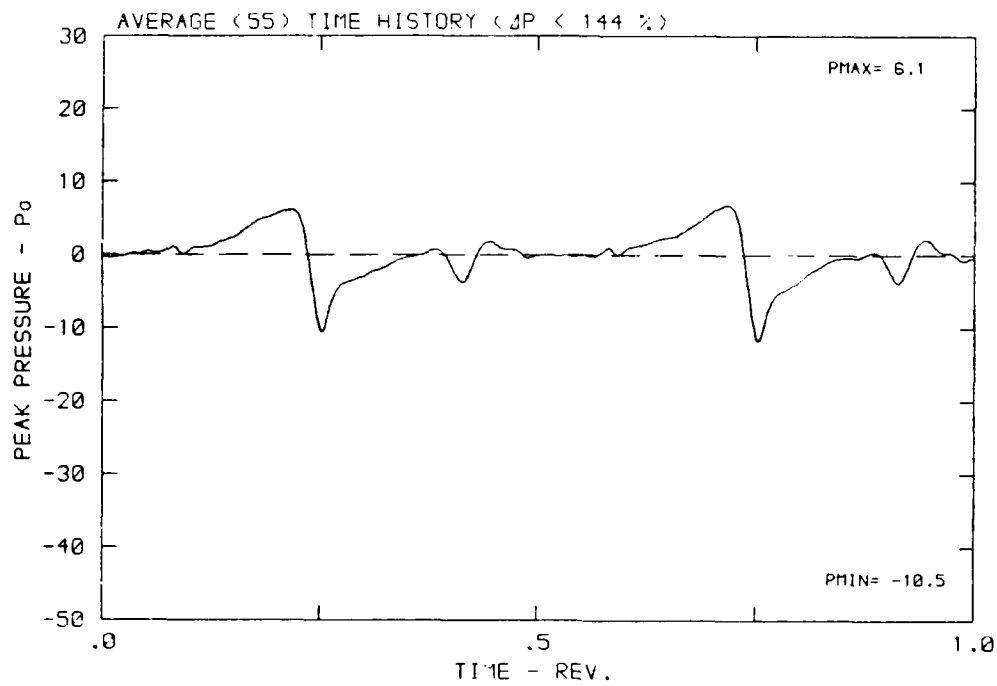
DATA POINT: HC-2 RUN: 40 MP: 6

β : 21.6° MH: .8867 n: 2700 rpm v/u : .270 ϕ : .0° T: 280.2 K



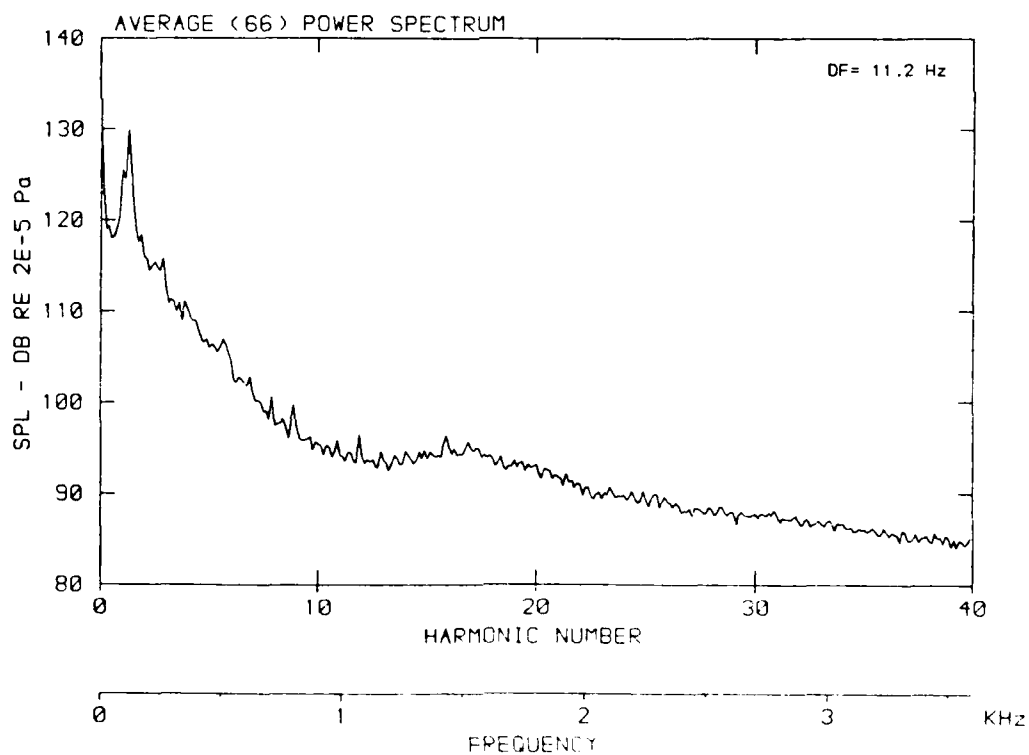
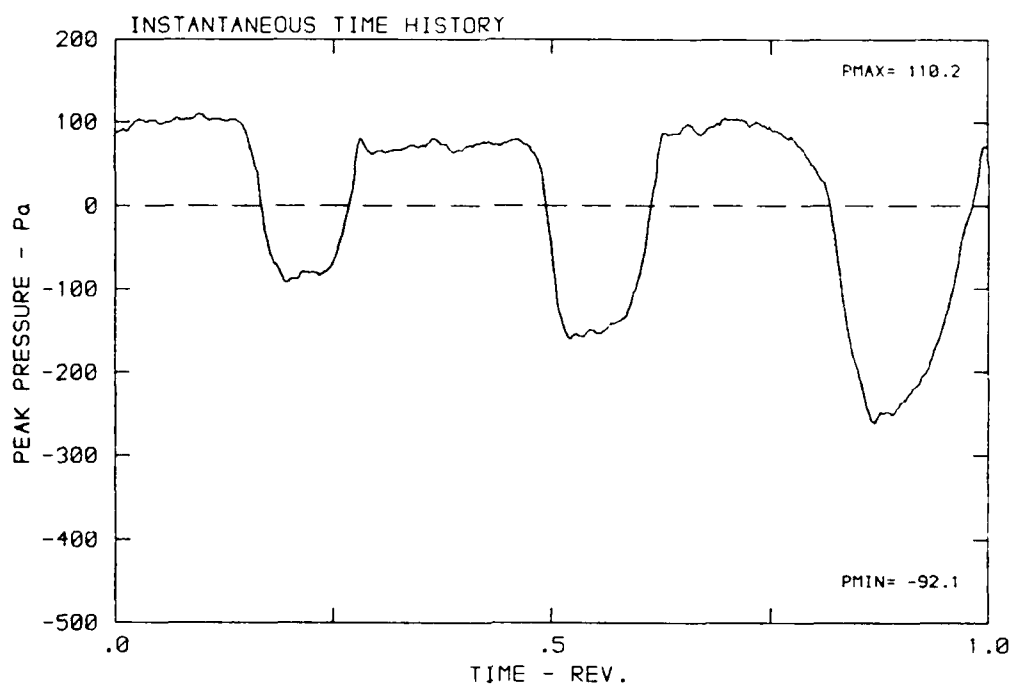
DATA POINT: HC-2 RUN: 40 MP: 6

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 280.2 K



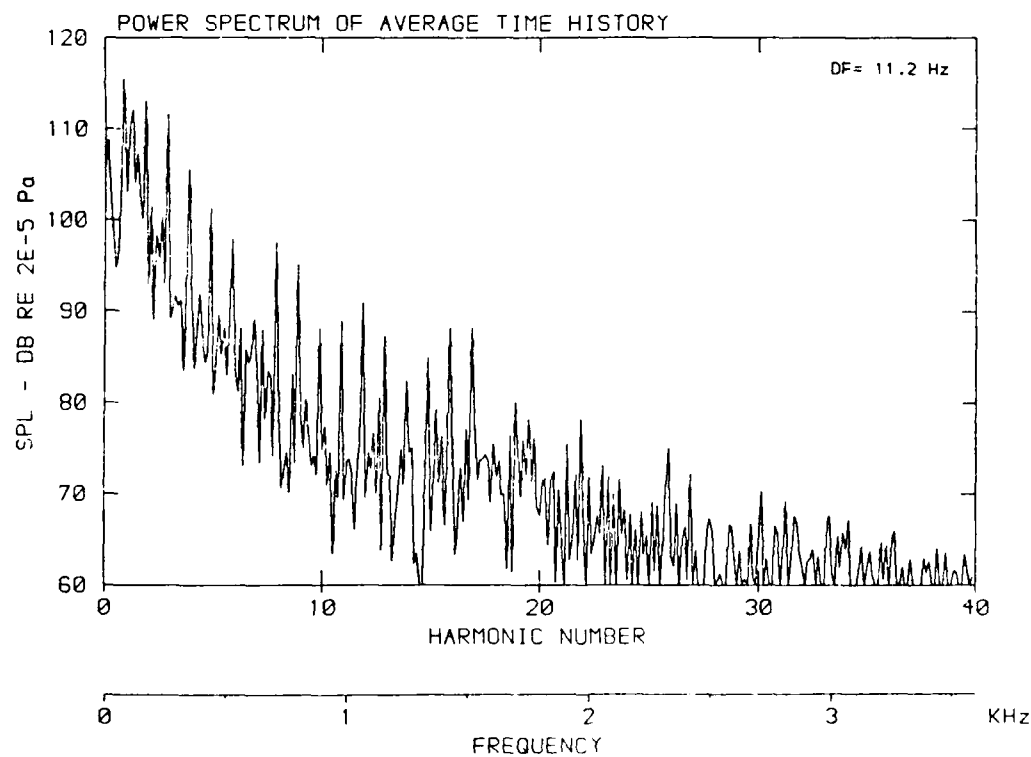
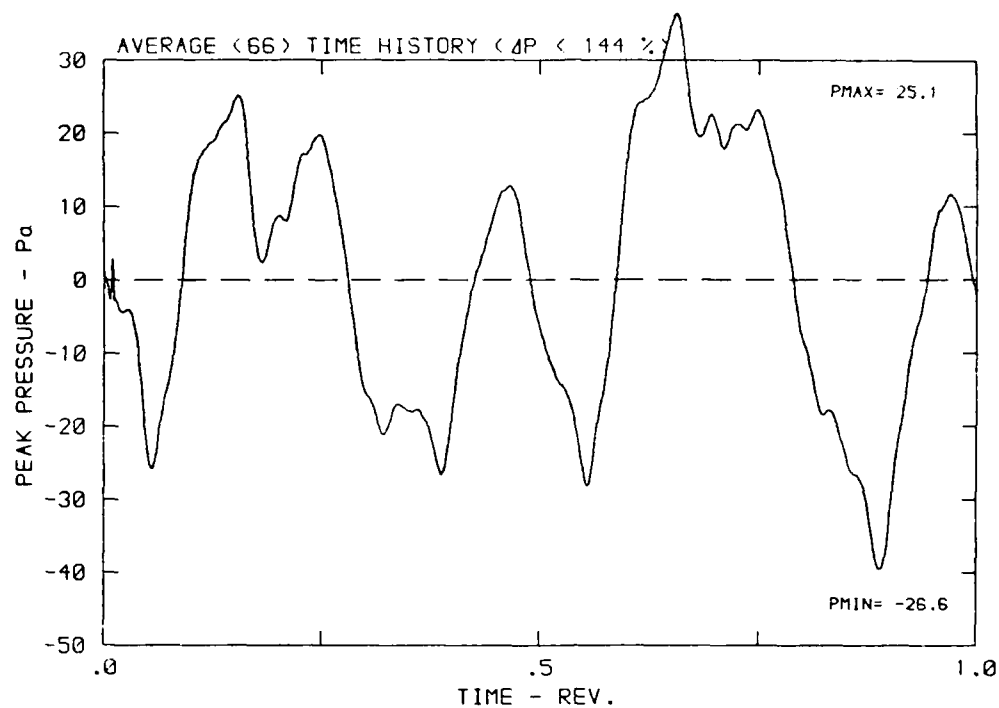
DATA POINT: HC-2 RUN: 40 MP: 7

β : 21.6° MH: .8867 n: 2700 rpm v/u : .270 ϕ : .0° T: 230.2 K



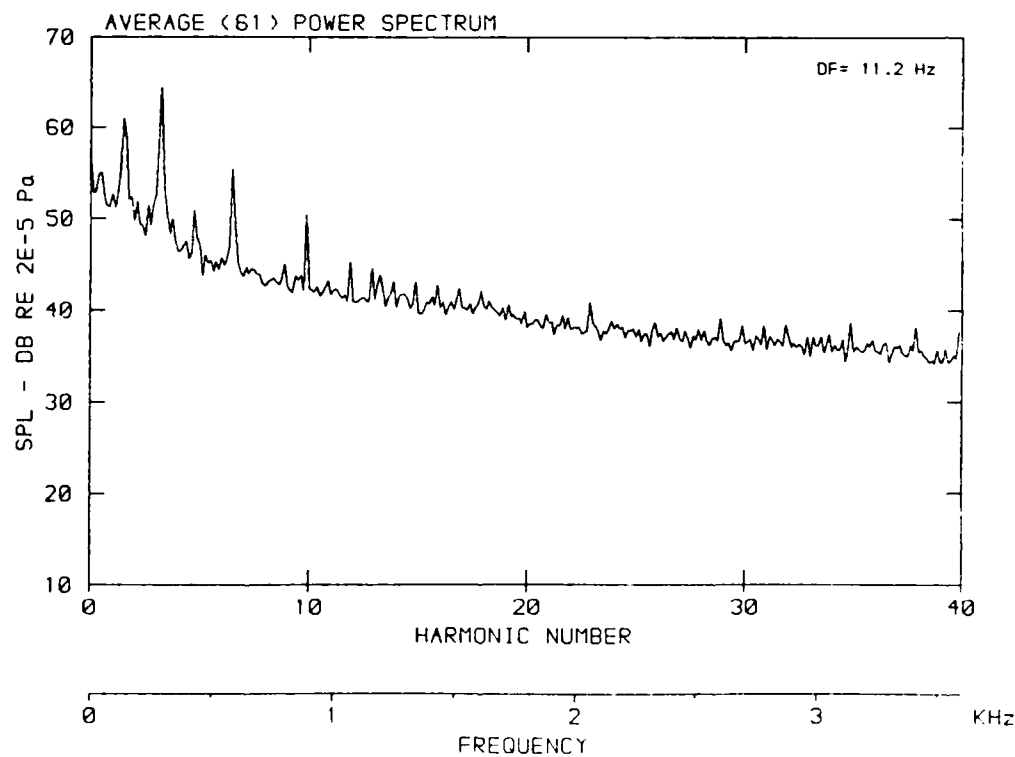
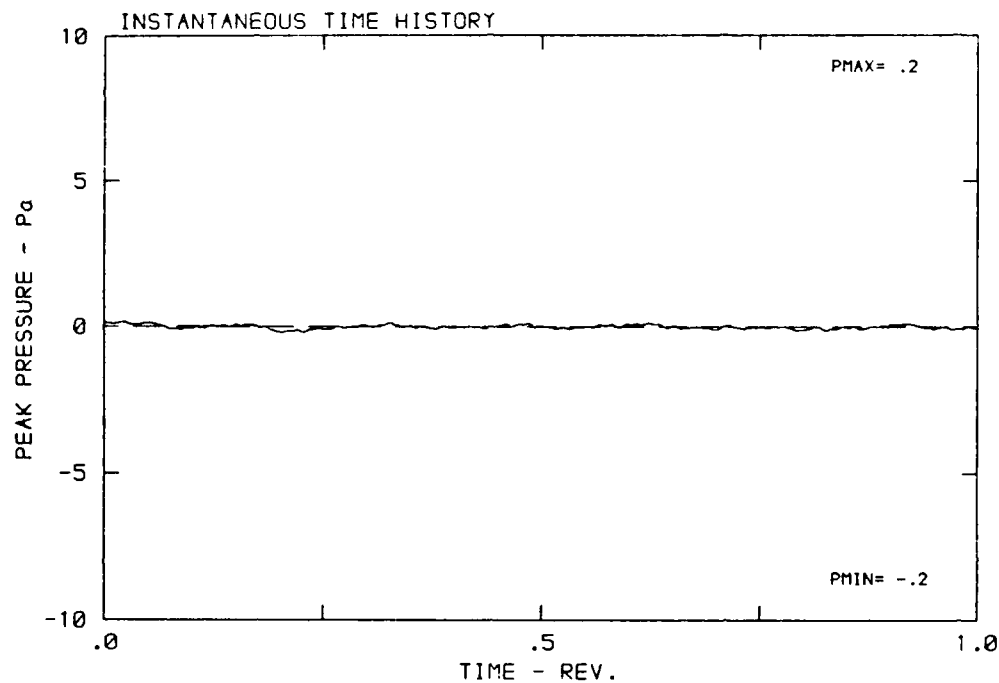
DATA POINT: HC-2 RUN: 40 MP: 7

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 280.2 K



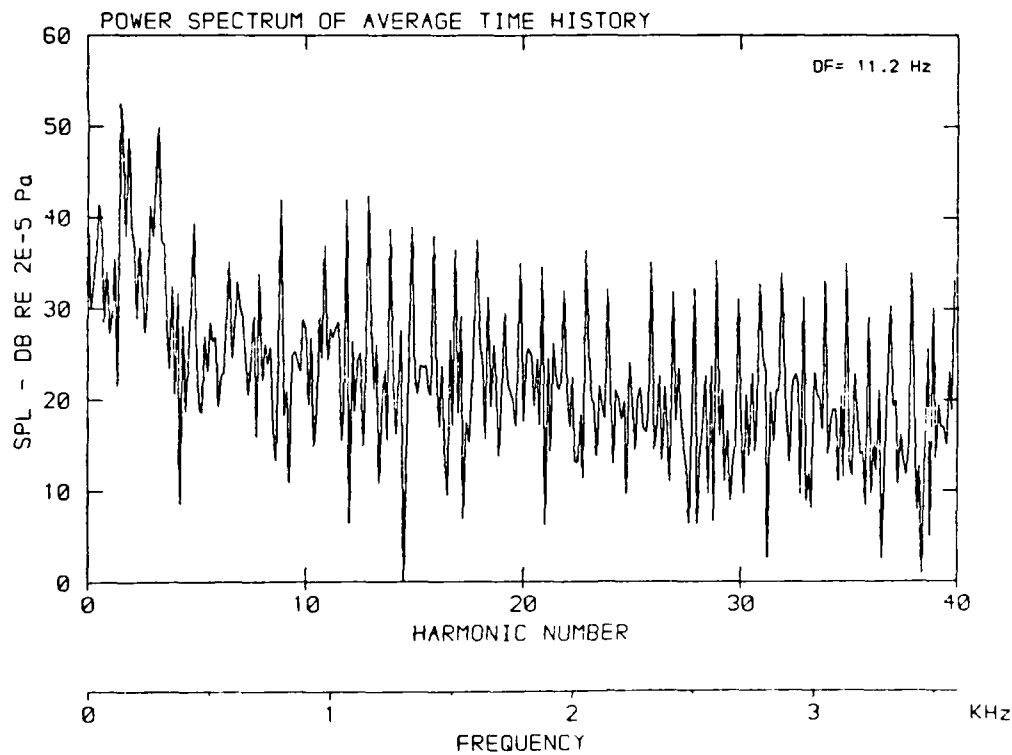
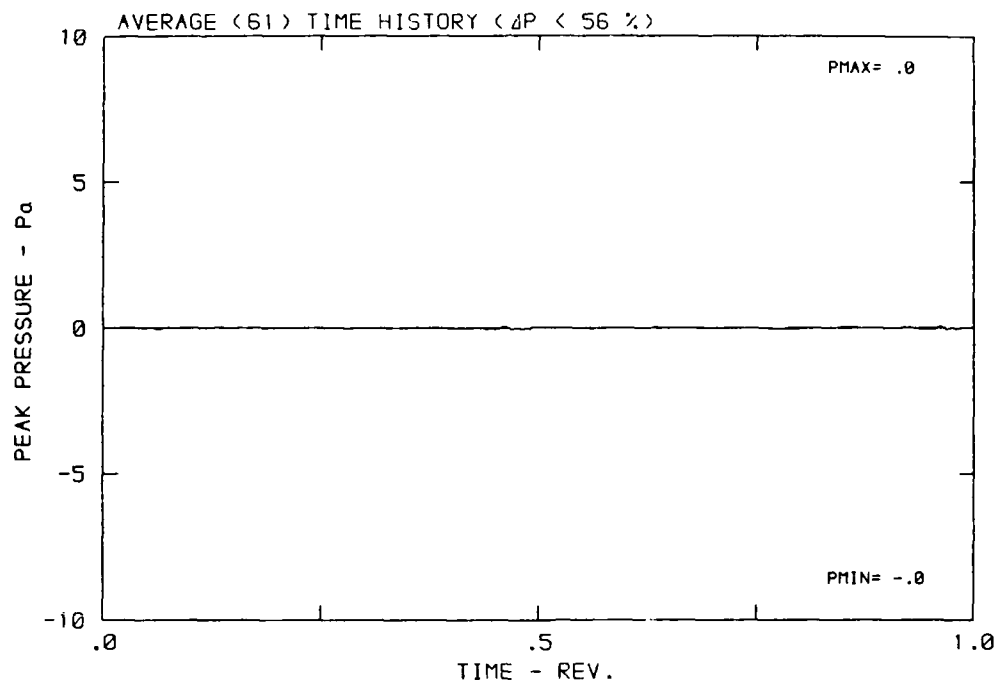
DATA POINT: HC-2 RUN: 40 MP: 9

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 200.2 K



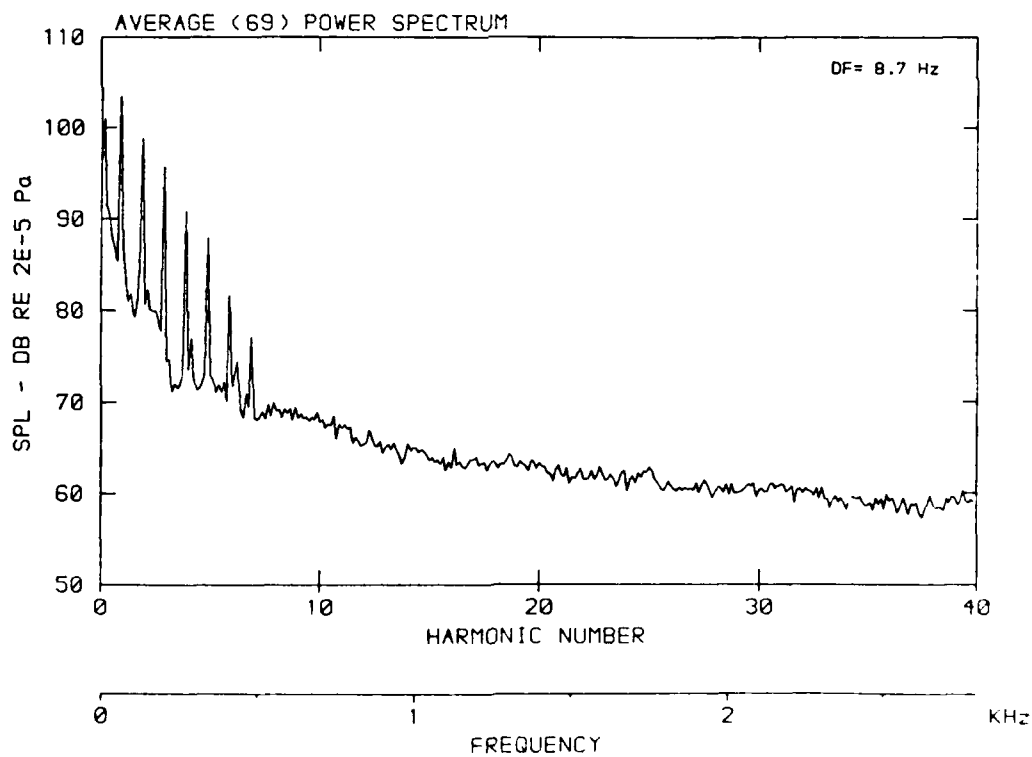
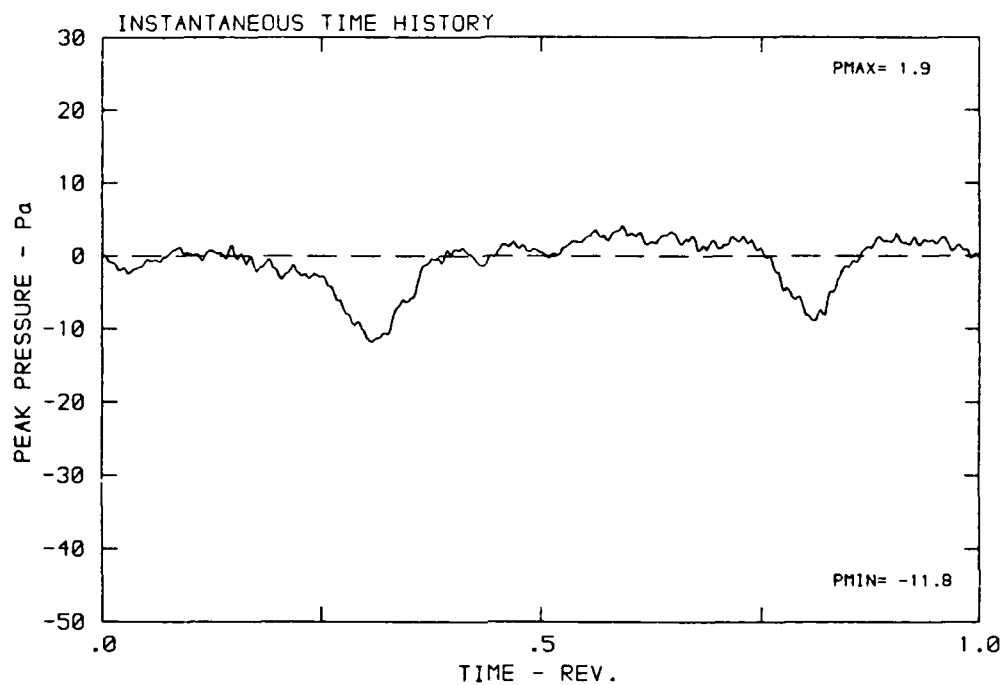
DATA POINT: HC-2 RUN: 40 MP: 9

β : 21.6° MH: .8867 n: 2700 rpm v/u: .270 ϕ : .0° T: 280.2 K



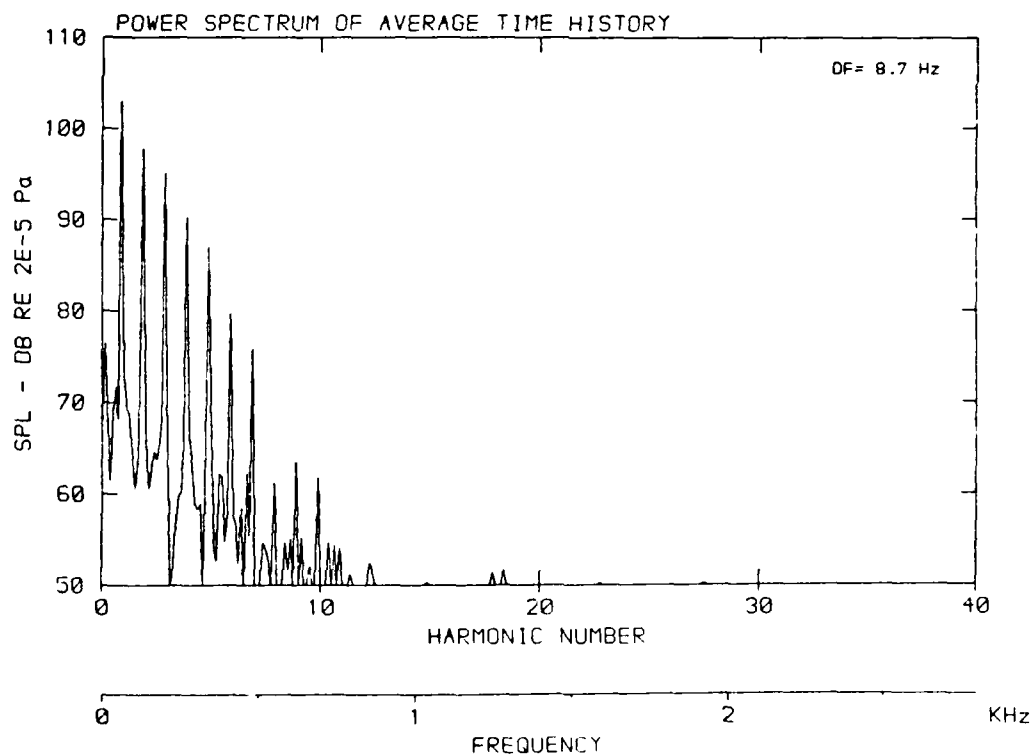
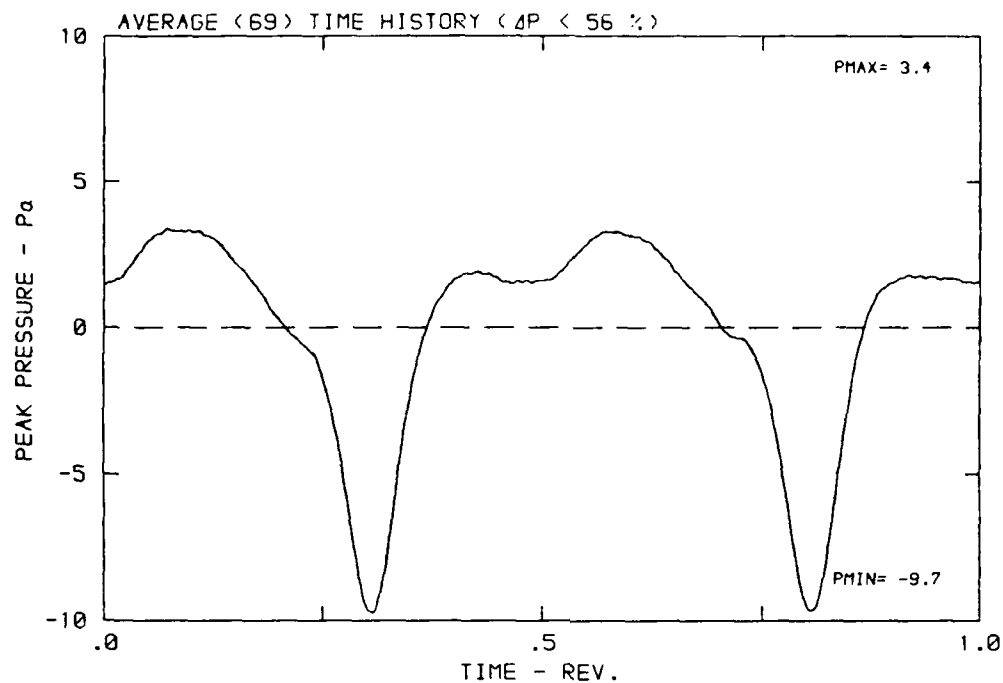
DATA POINT: IC-1 RUN: 41 MP: 1

β : 20.7° MH: .6861 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.7 K



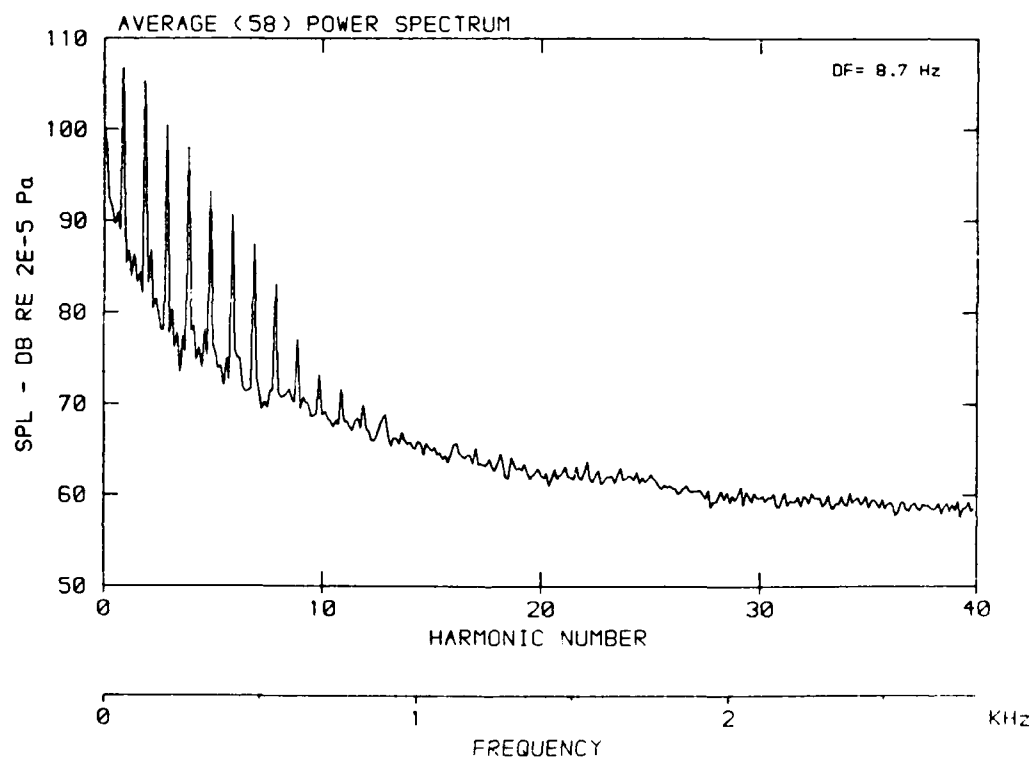
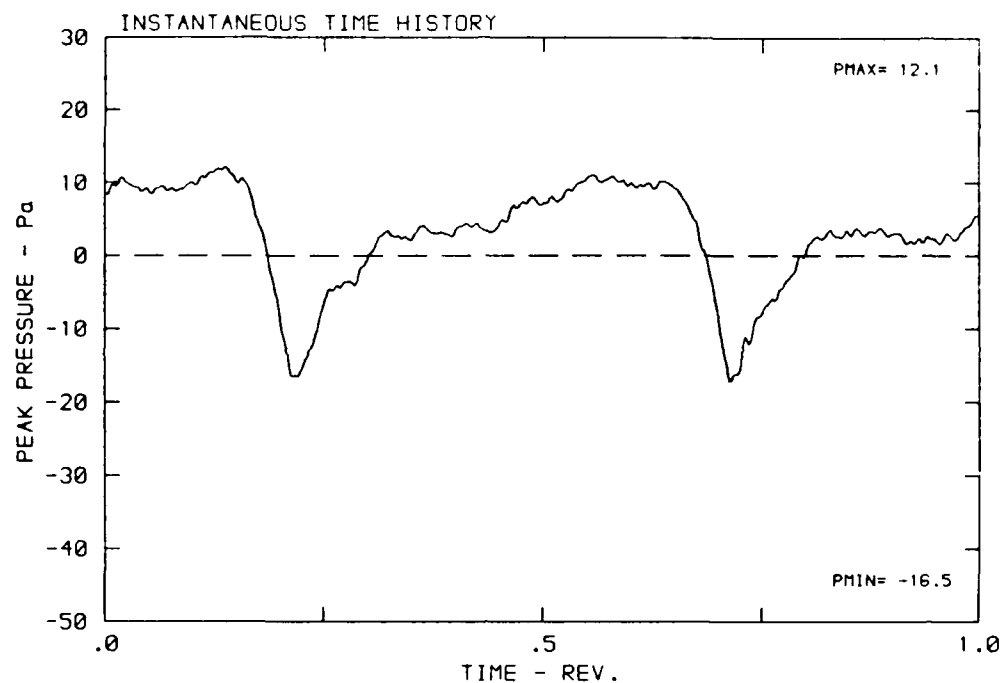
DATA POINT: IC-1 RUN: 41 MP: 1

β : 20.7° MH: .6861 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.7 K



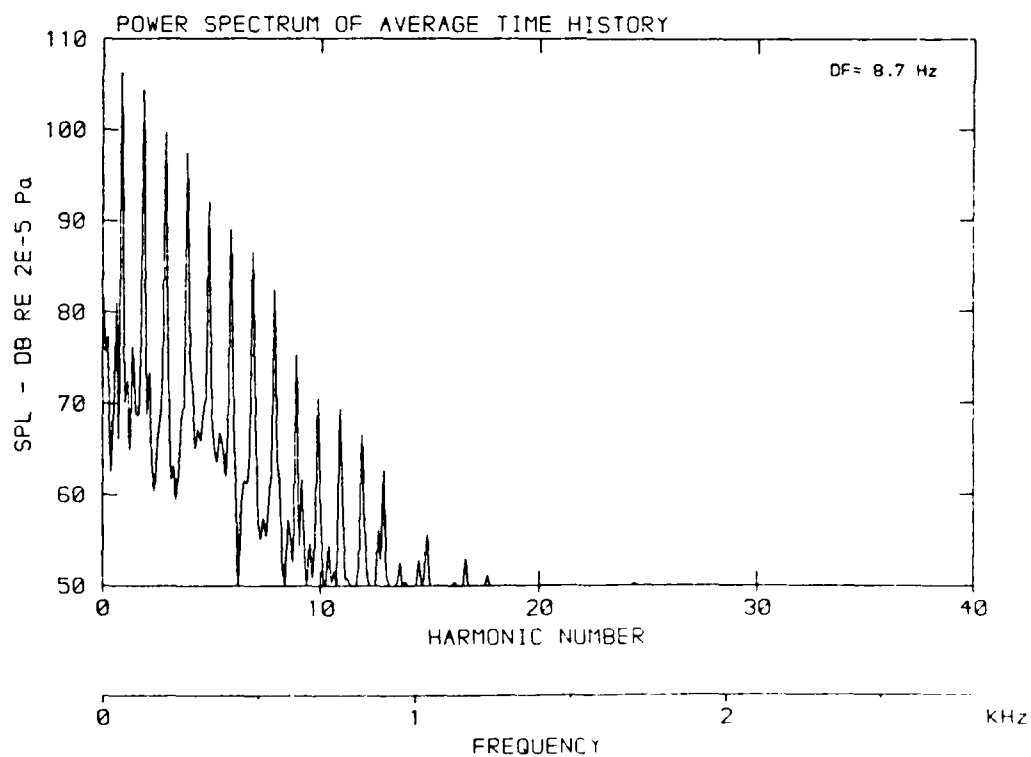
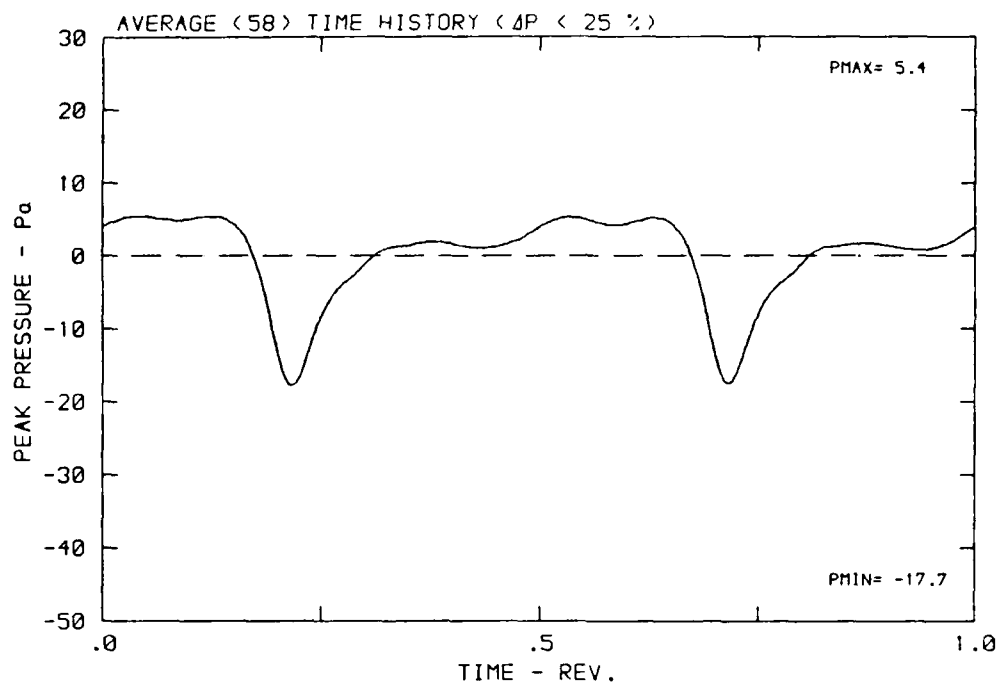
DATA POINT: IC-1 RUN: 41 MP: 2

β : 20.7° MH: .6861 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.7 K



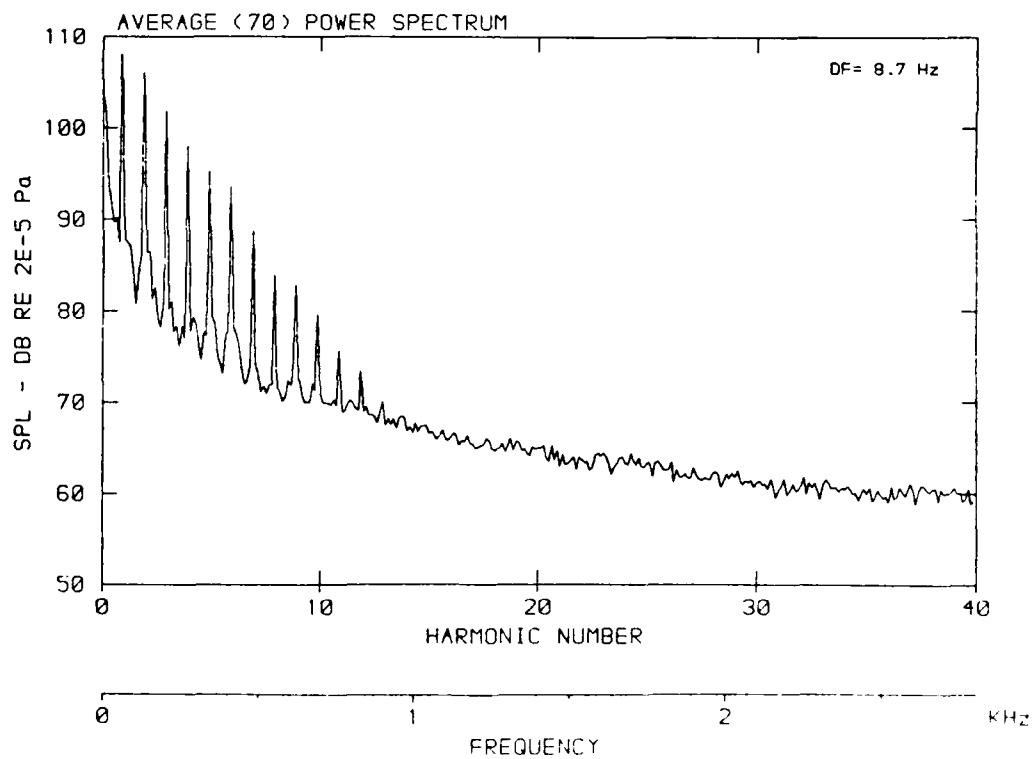
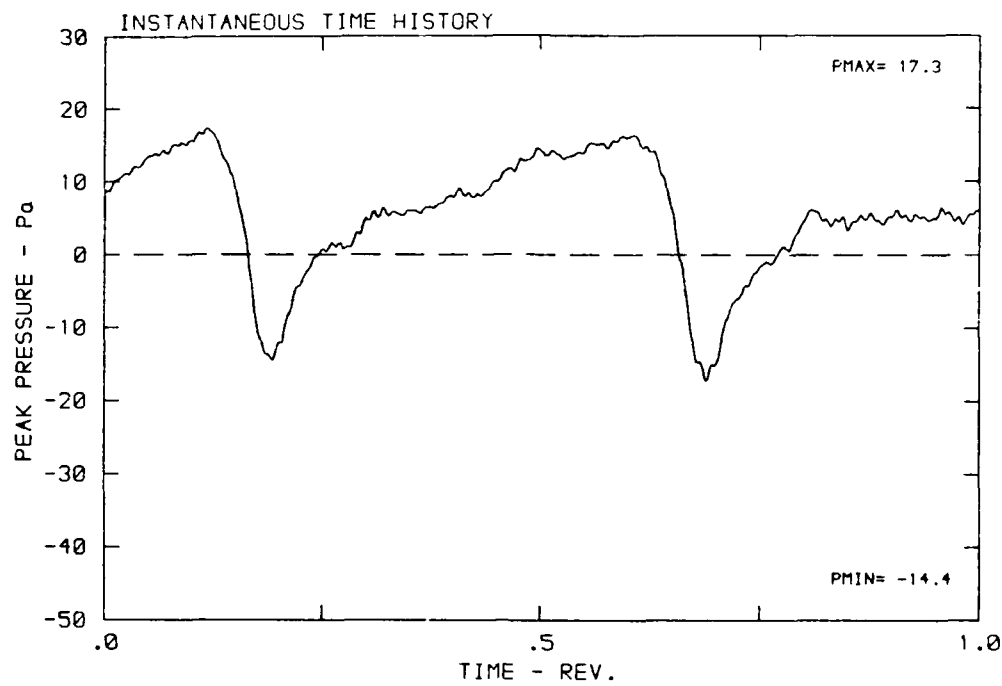
DATA POINT: IC-1 RUN: 41 MP: 2

β : 20.7° MH: .6861 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.7 K



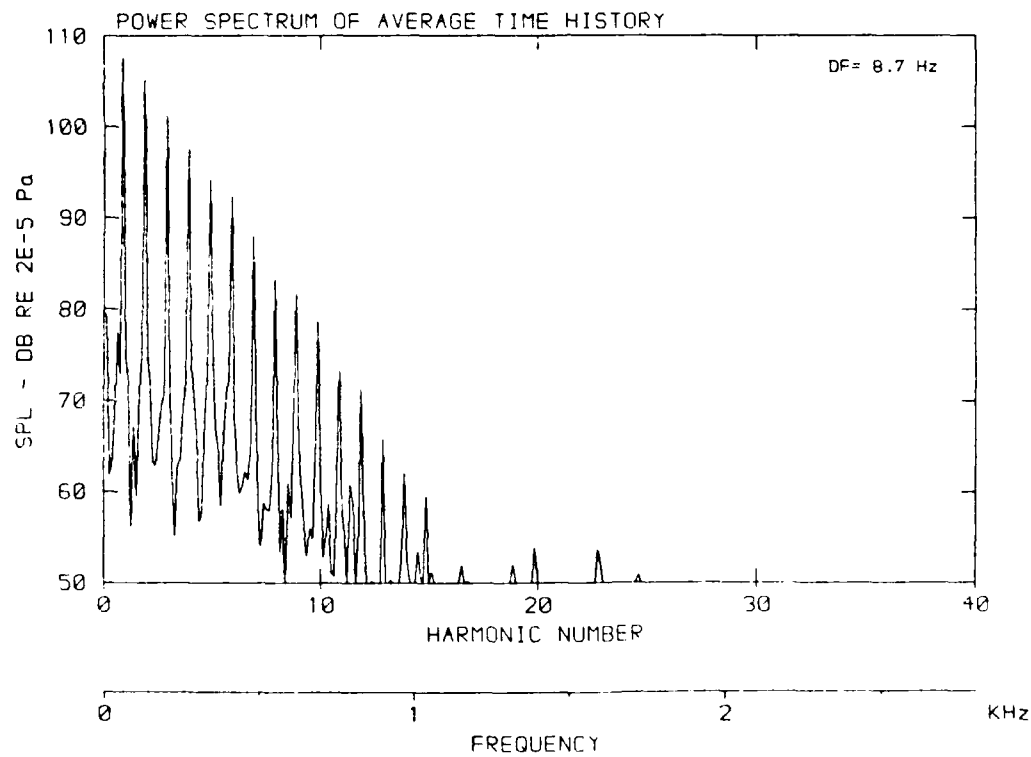
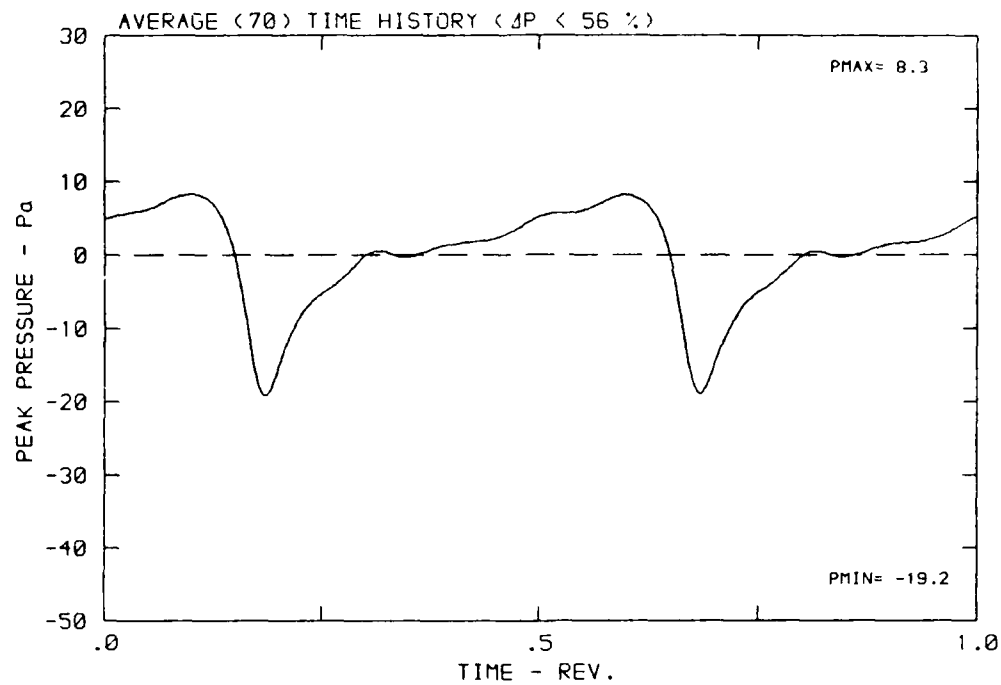
DATA POINT: IC-1 RUN: 41 MP: 3

β : 20.7° MH: .6861 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.7 K



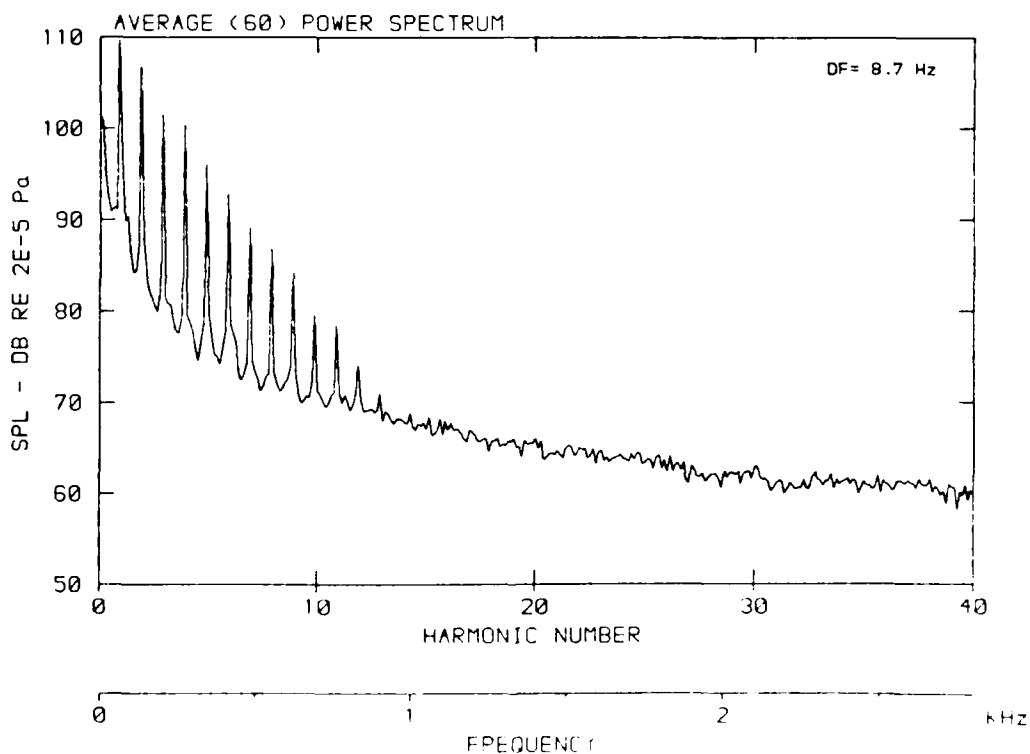
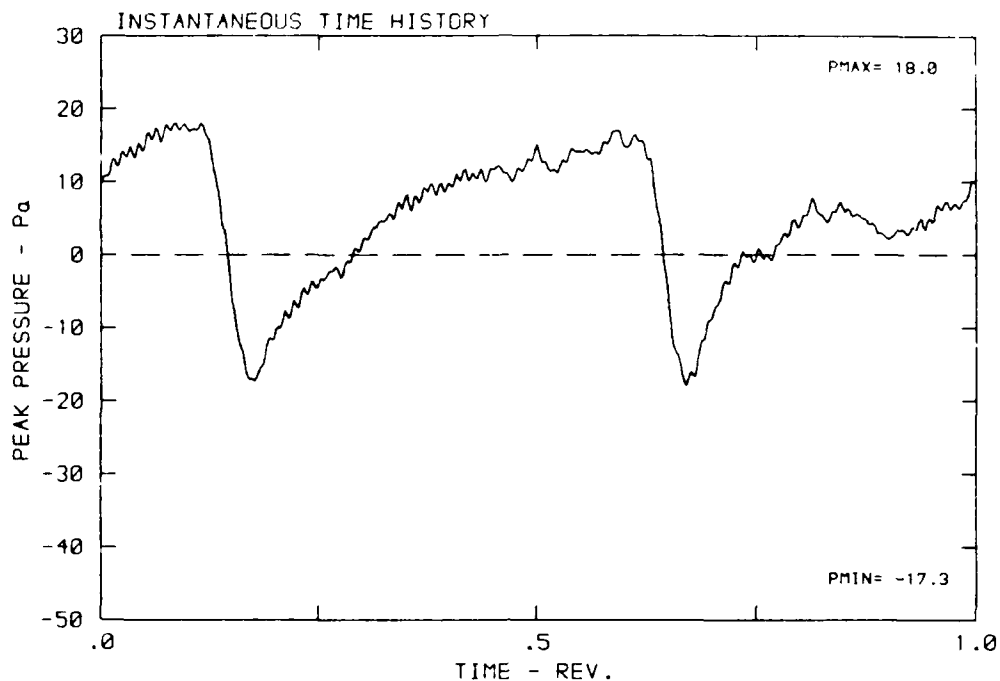
DATA POINT: IC-1 RUN: 41 MP: 3

β : 20.7° MH: .6861 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.7 K



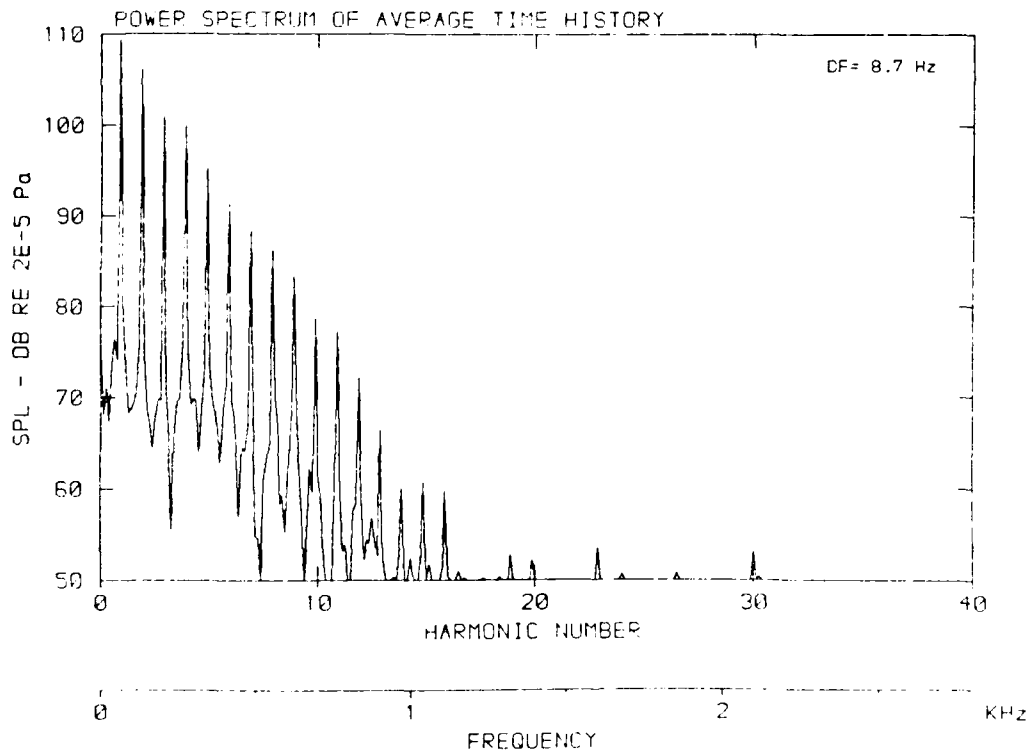
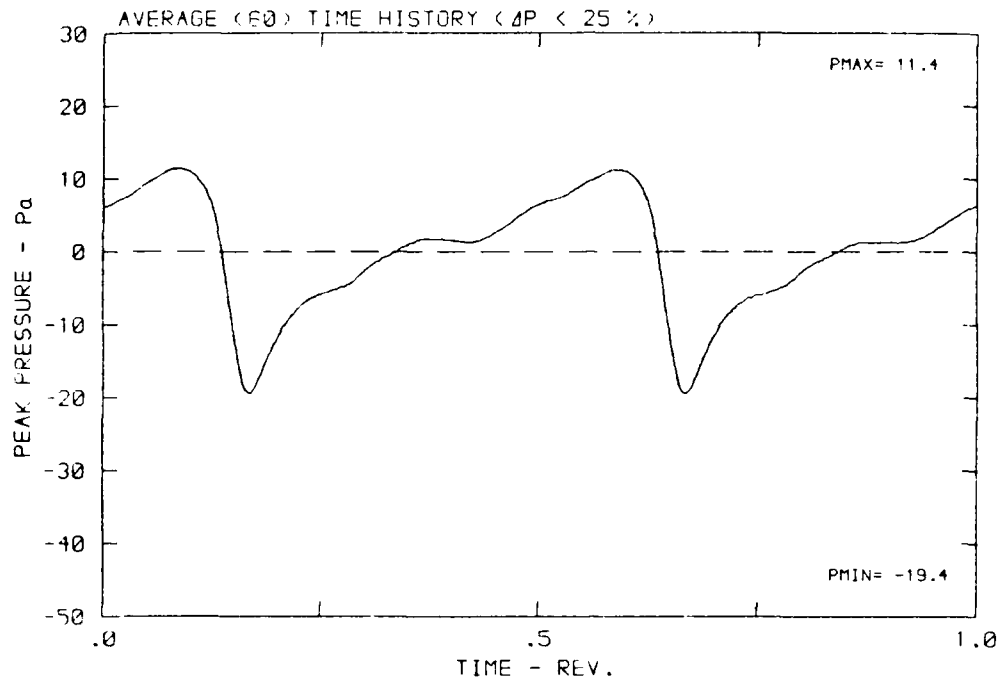
DATA POINT: IC-1 RUN: 41 MP: 4

β : 20.7° MH: .6861 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.7 K



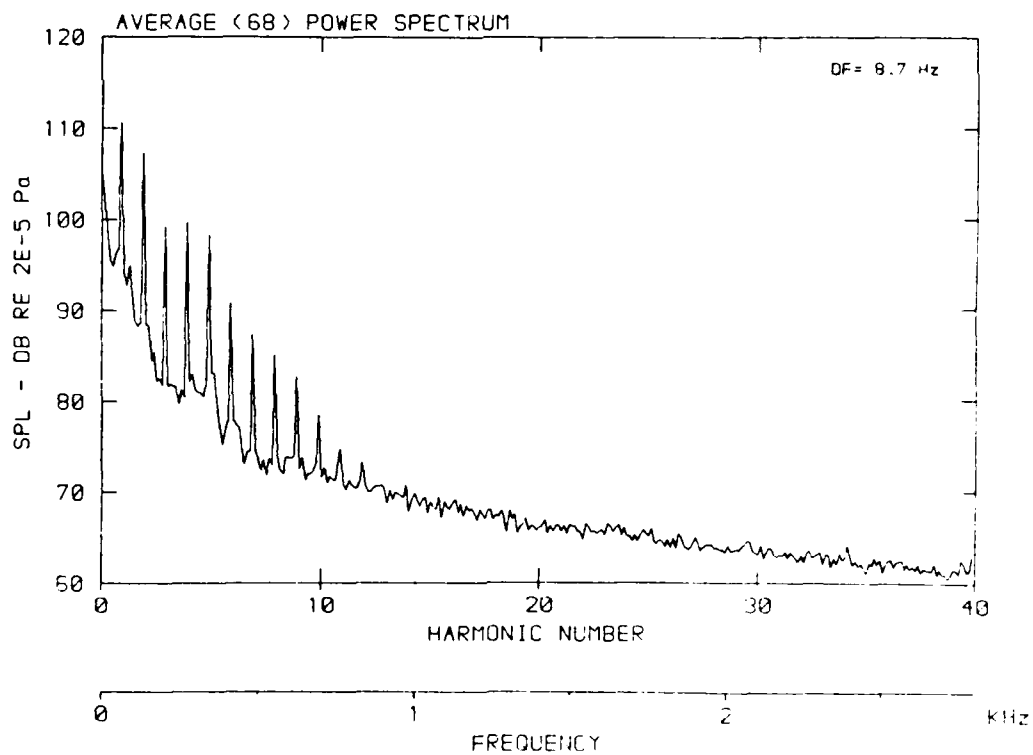
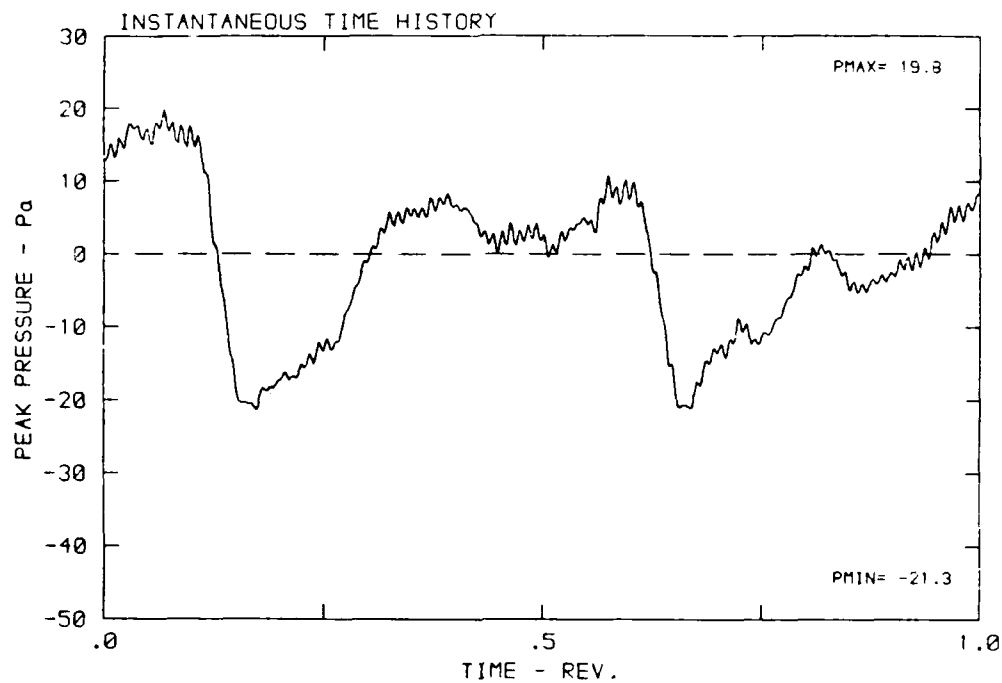
DATA POINT: IC-1 RUN: 41 MP: 4

β : 20.7° MH: .6861 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.7 K



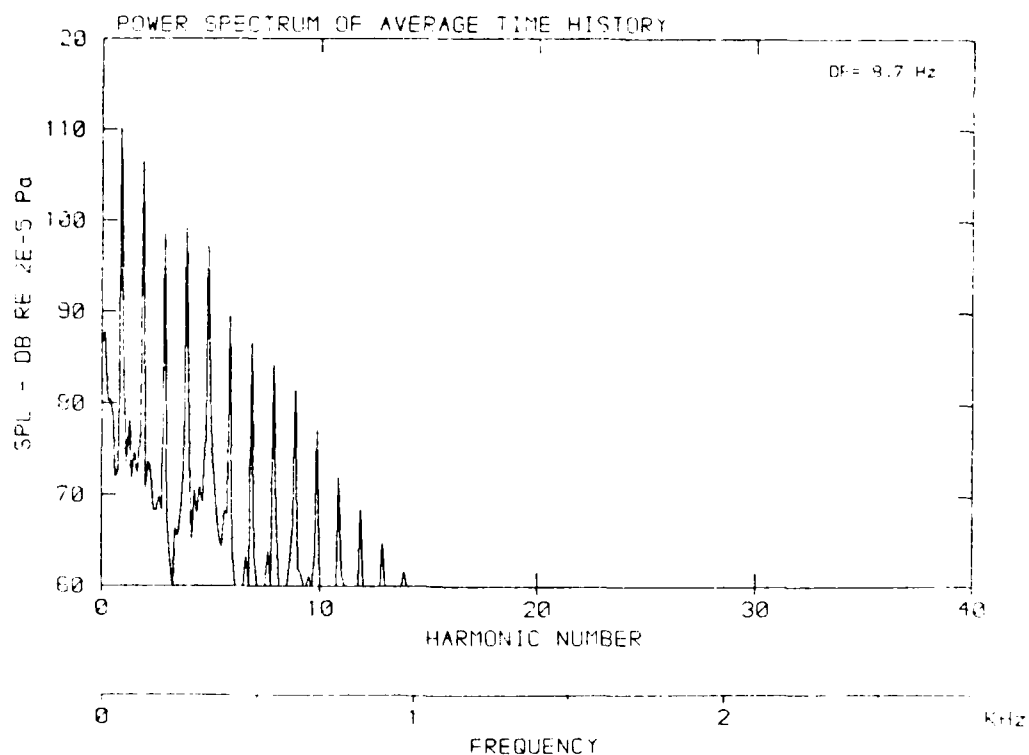
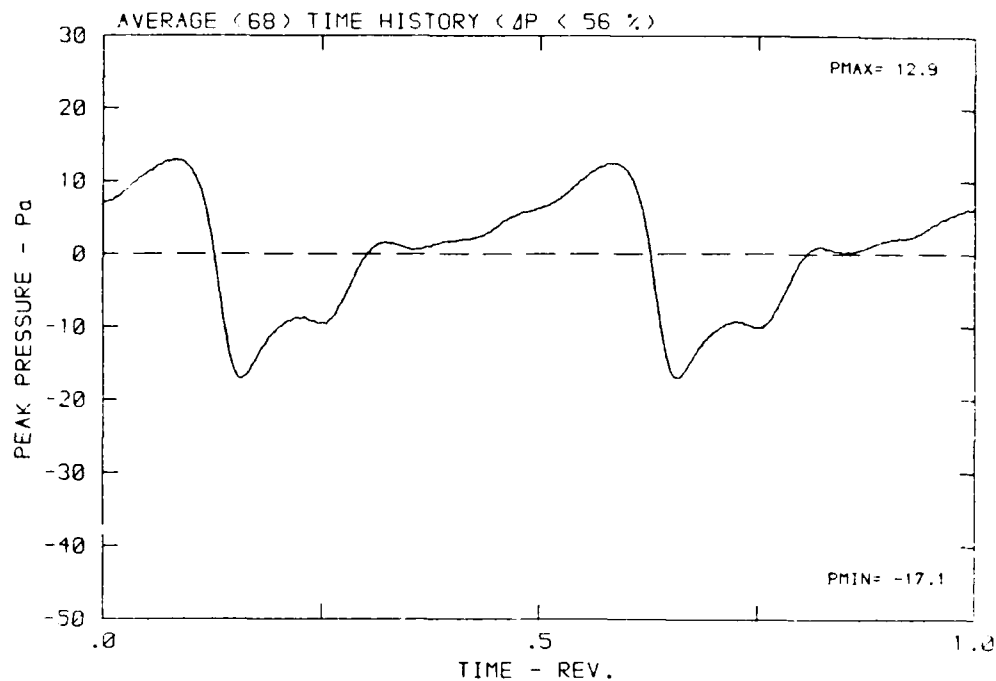
DATA POINT: IC-1 RUN: 41 MP: 5

β : 20.7° MH: .6861 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.7 K



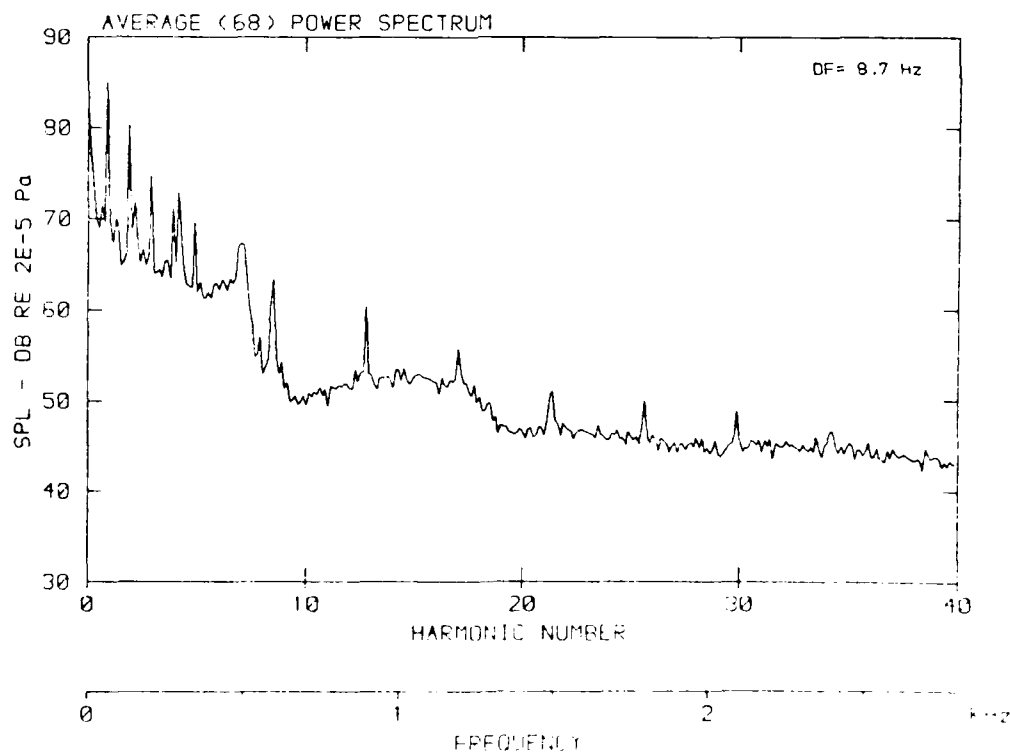
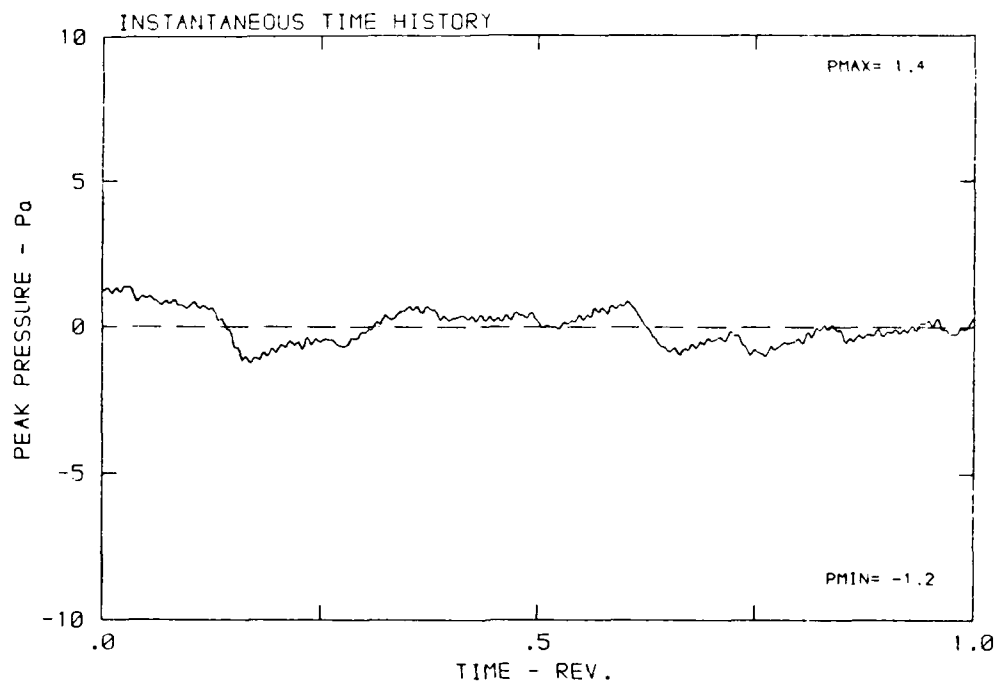
DATA POINT: IC-1 RUN: 41 MP: 5

β : 20.7° MH: .6861 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.7 K



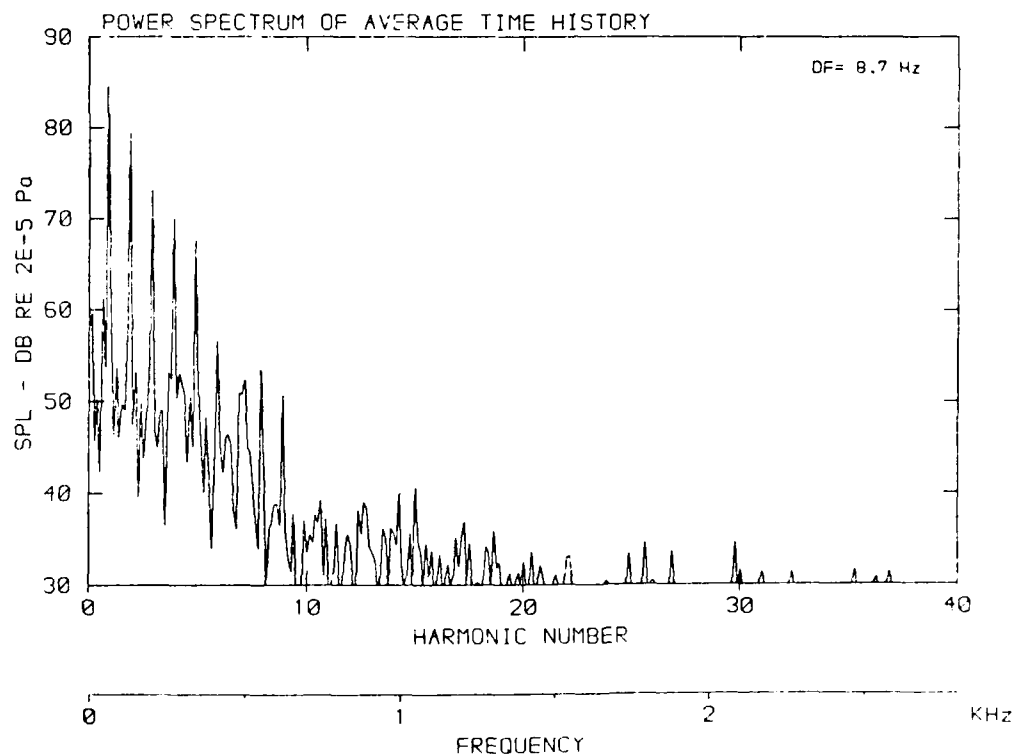
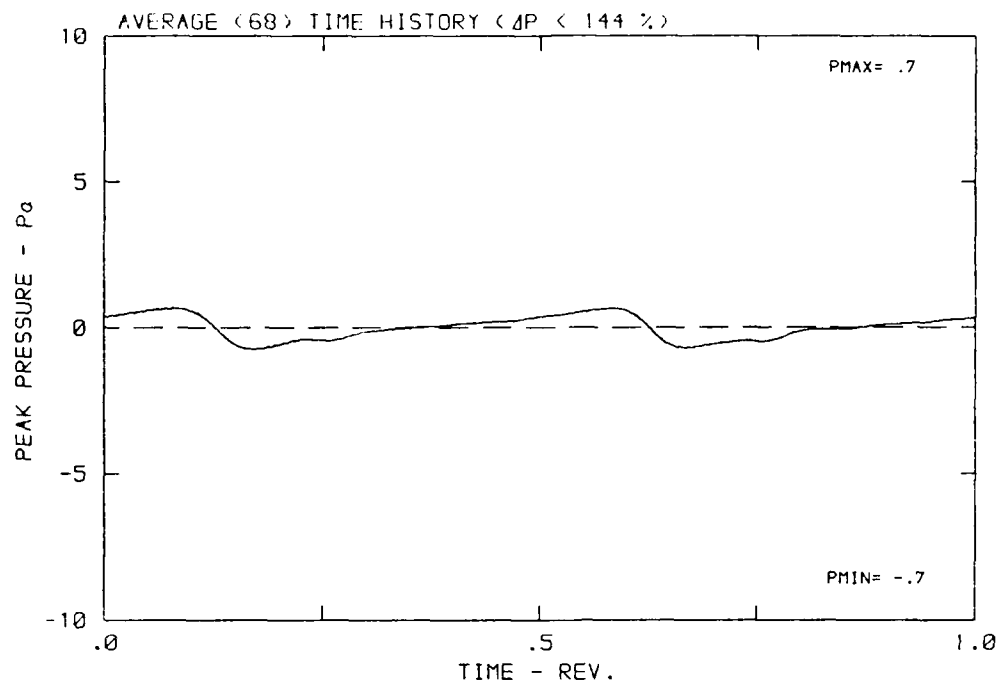
DATA POINT: IC-1 RUN: 41 MP: E

β : 20.7° MH: .6861 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.7 K



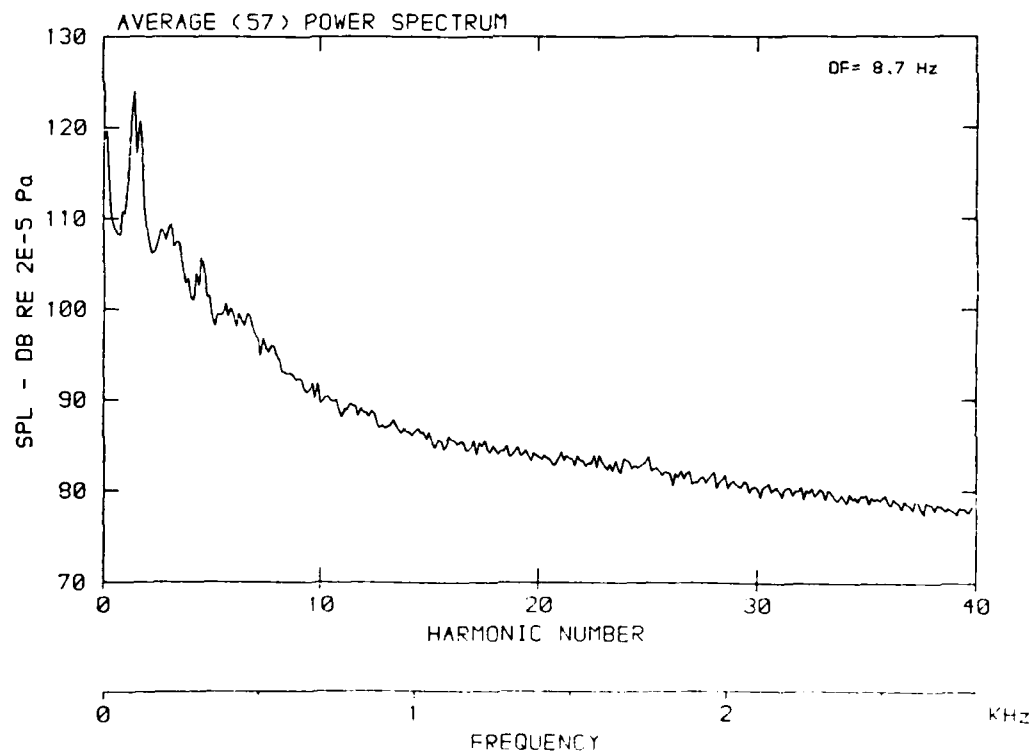
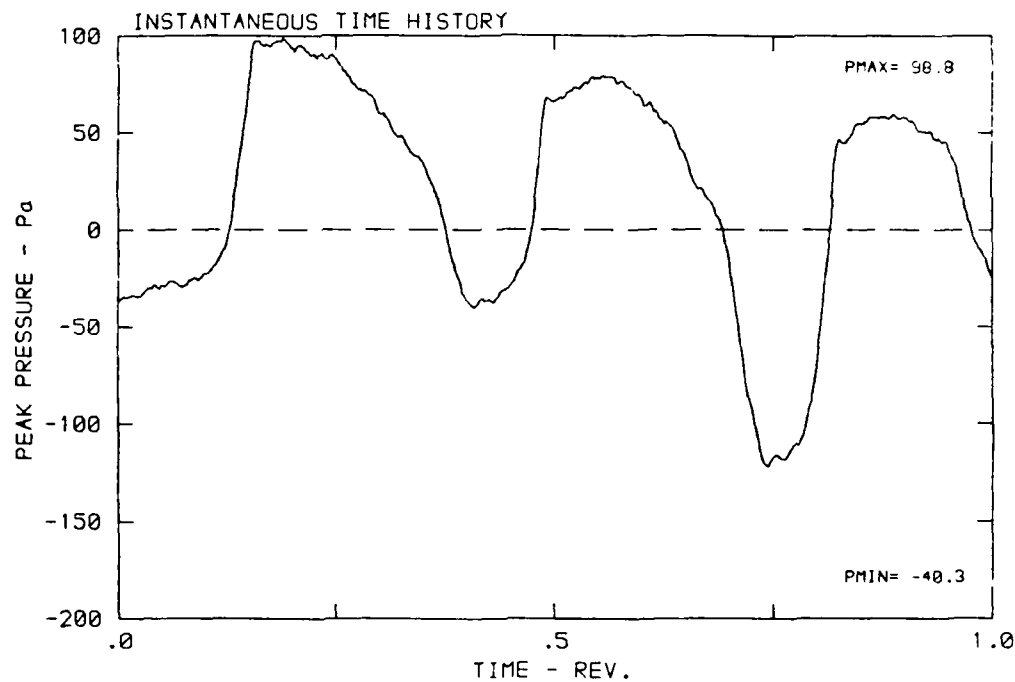
DATA POINT: IC-1 RUN: 41 MP: 6

β : 20.7° MH: .6861 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.7 K



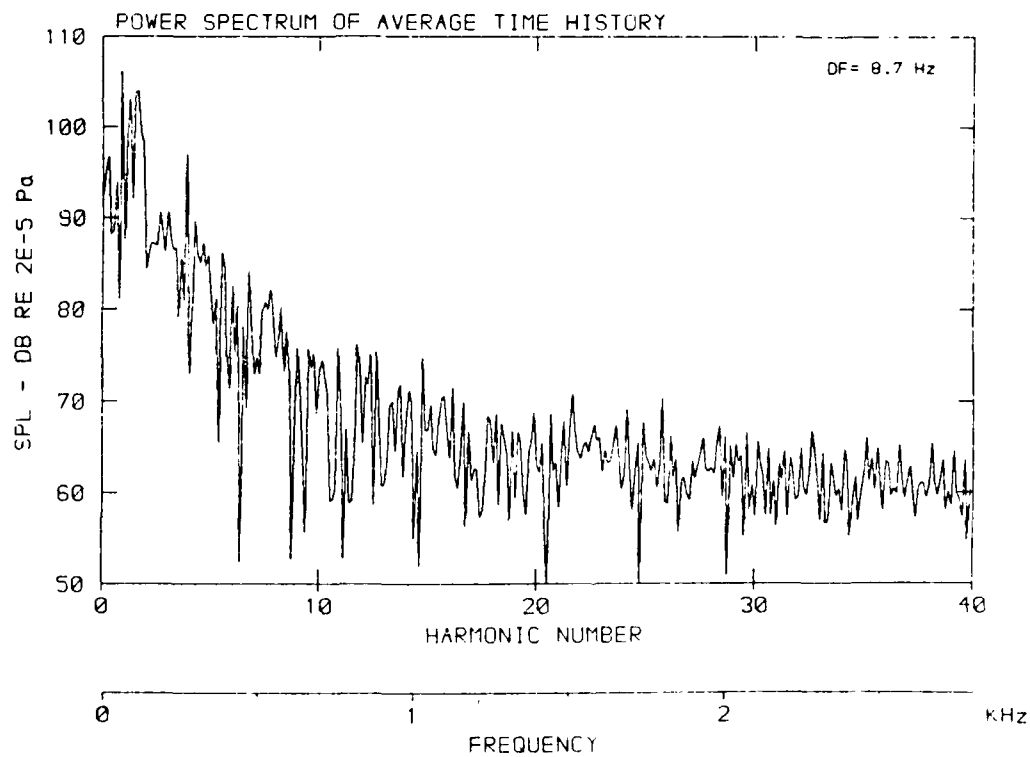
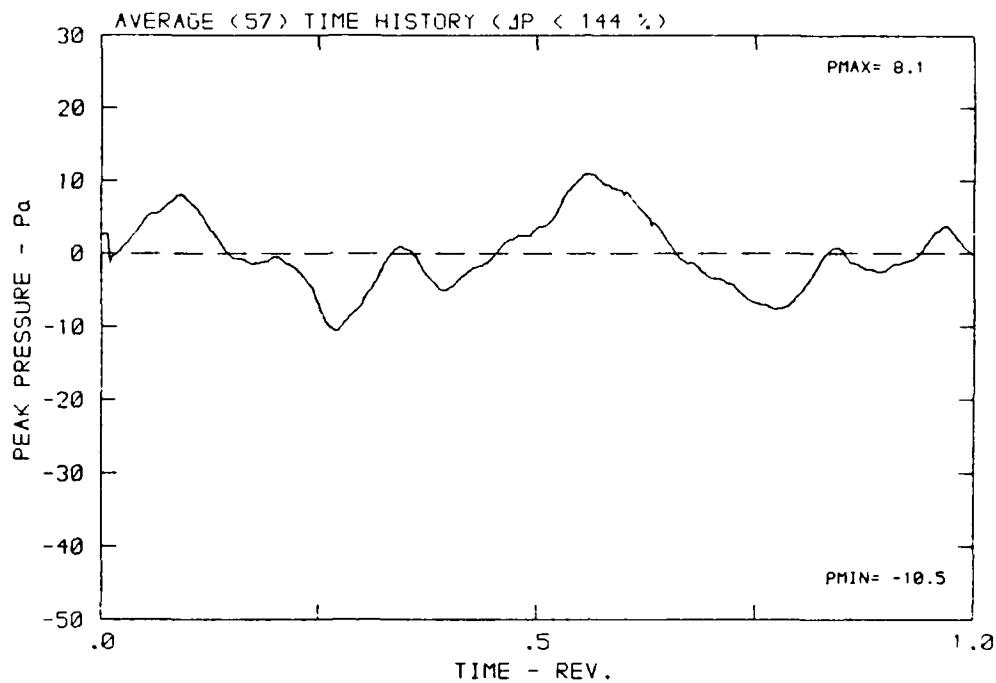
DATA POINT: IC-1 RUN: 41 MP: 7

β : 20.7° MH: .6861 n: 2100 rpm v/u: .229 ϕ : .0° T: 277.7 K



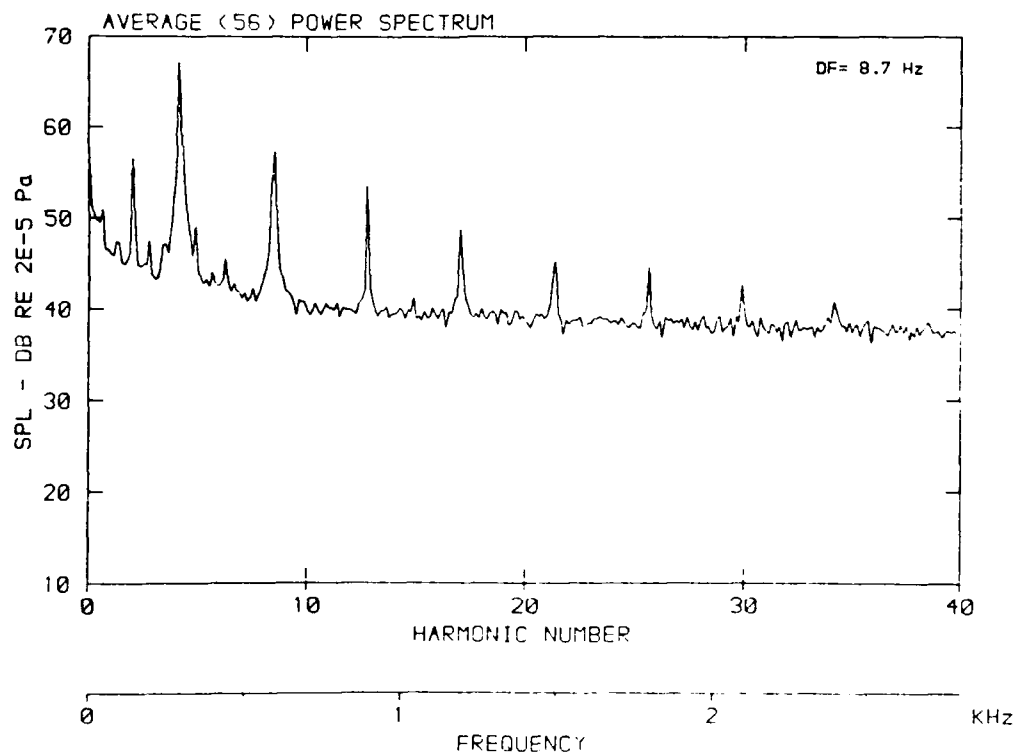
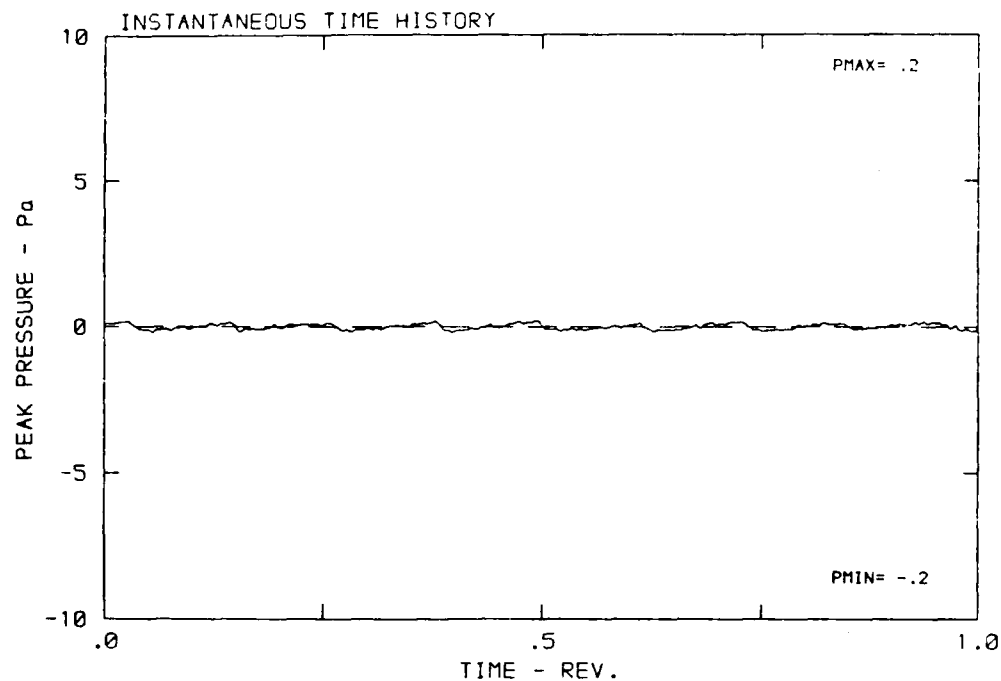
DATA POINT: IC-1 RUN: 41 MP: 7

β : 20.7° MH: .6861 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.7 K



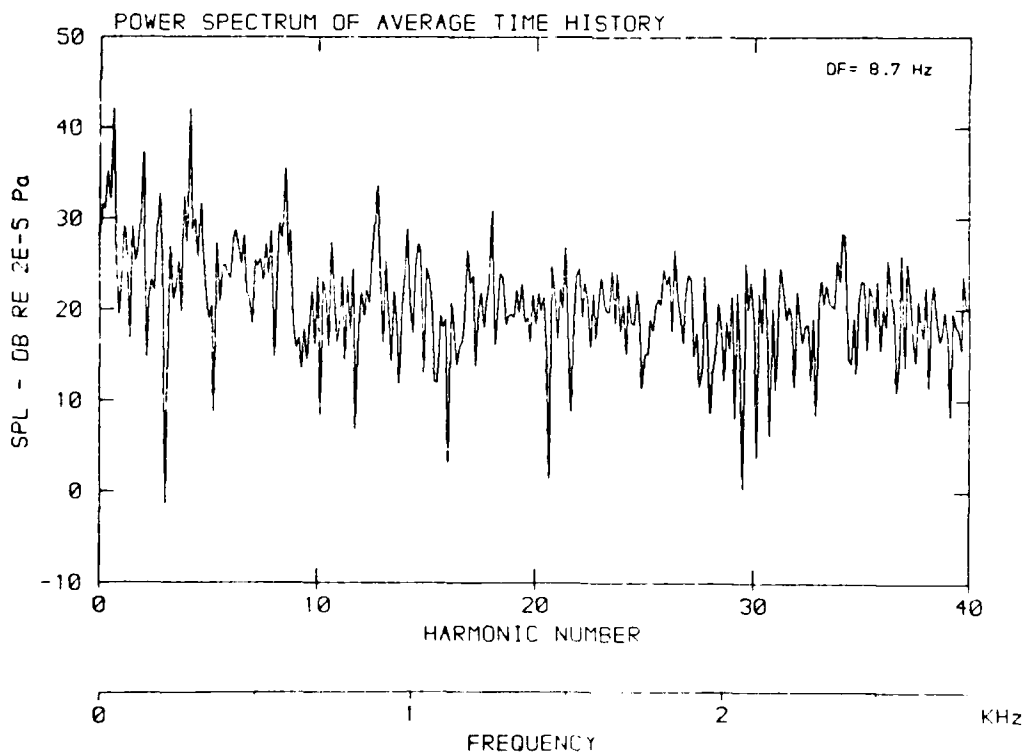
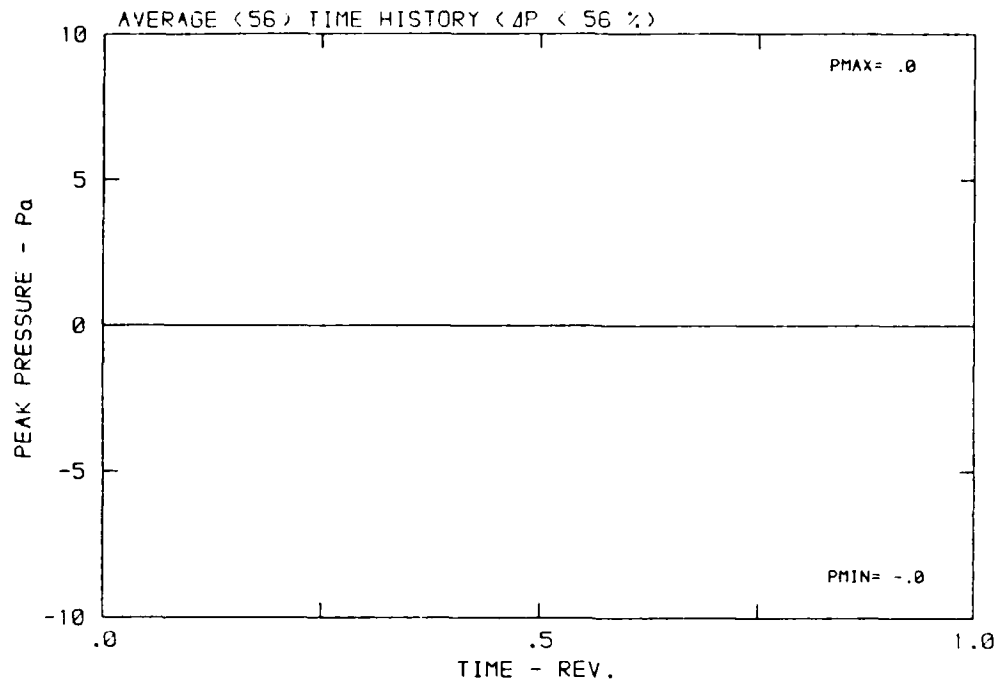
DATA POINT: IC-1 RUN: 41 MP: 9

β : 20.7° MH: .6361 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.7 K



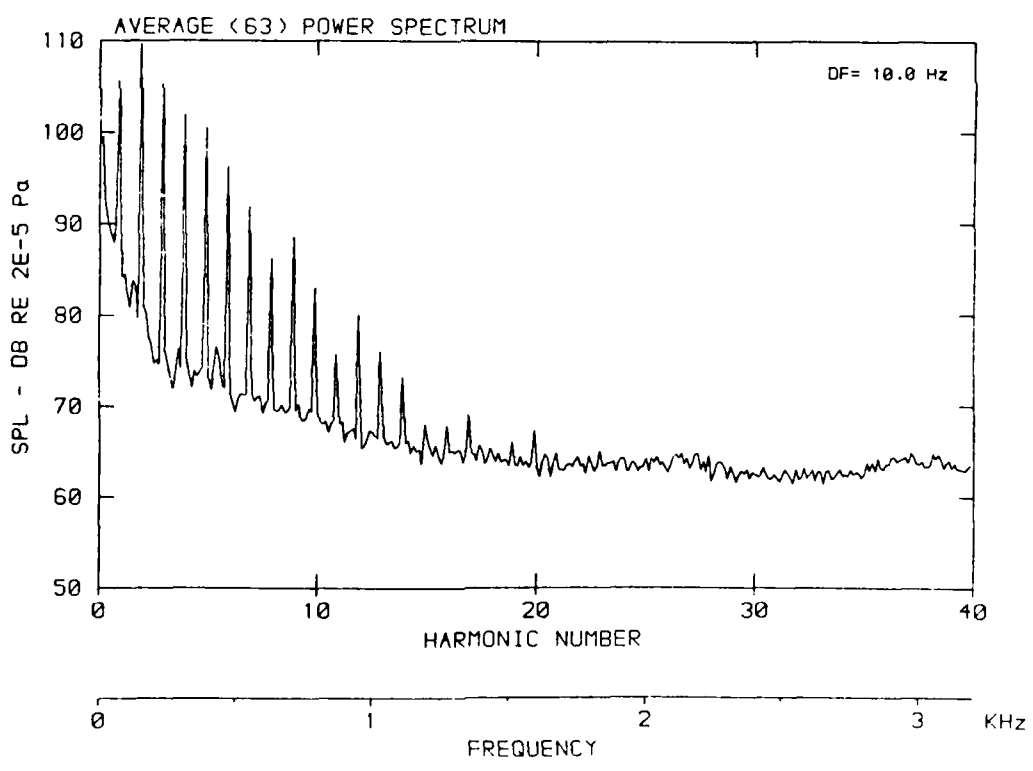
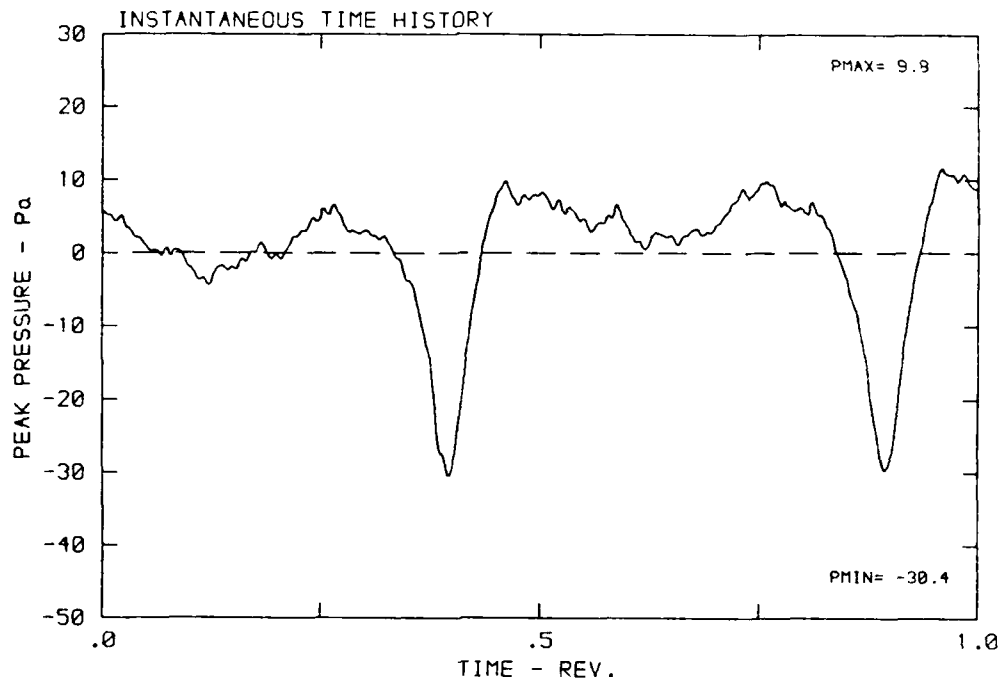
DATA POINT: IC-1 RUN: 41 MP: 9

β : 20.7° MH: .6861 n: 2100 rpm v/u : .229 ϕ : .0° T: 277.7 K



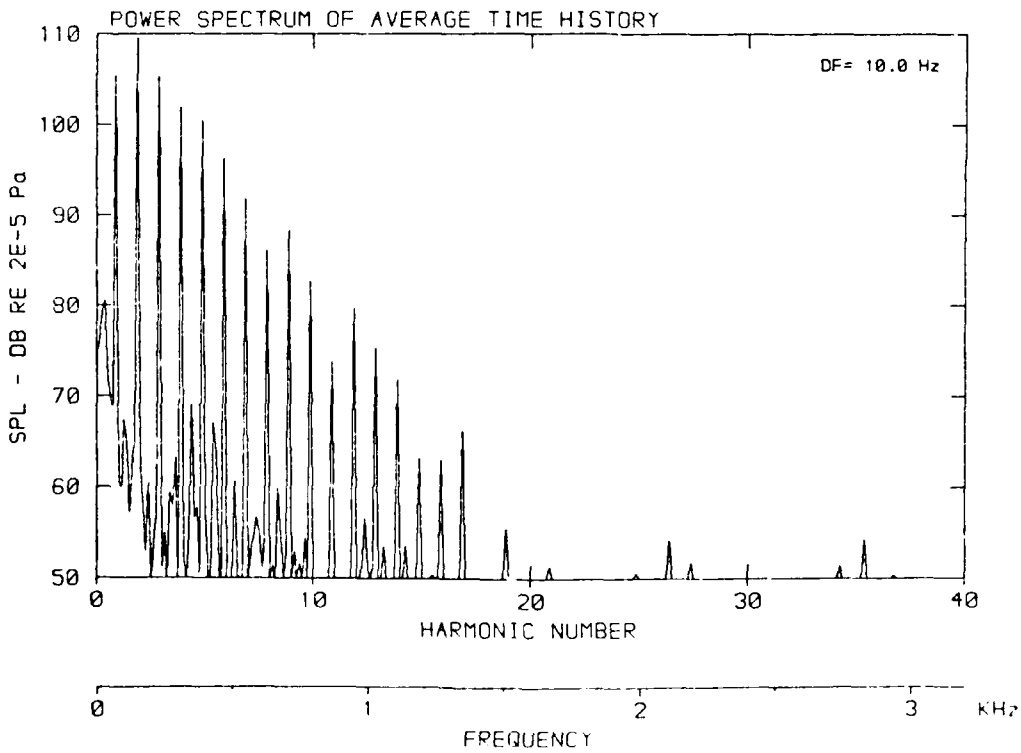
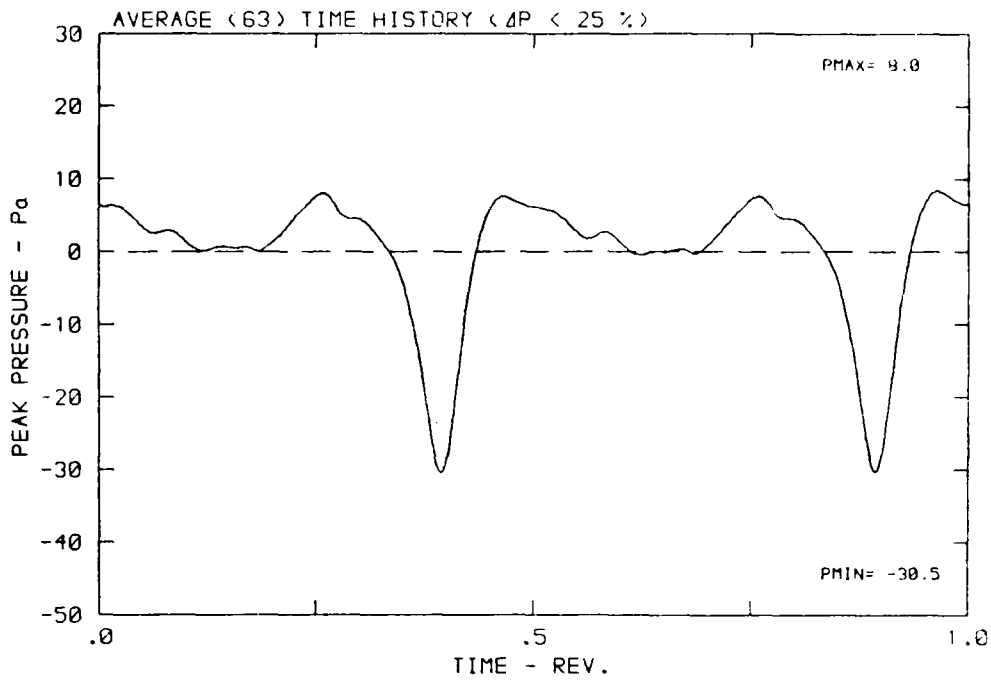
DATA POINT: IC-2 RUN: 42 MF: 1

β : 20.7° MH: .7791 n: 2400 rpm v/u : .203 ϕ : .0° T: 279.3 K



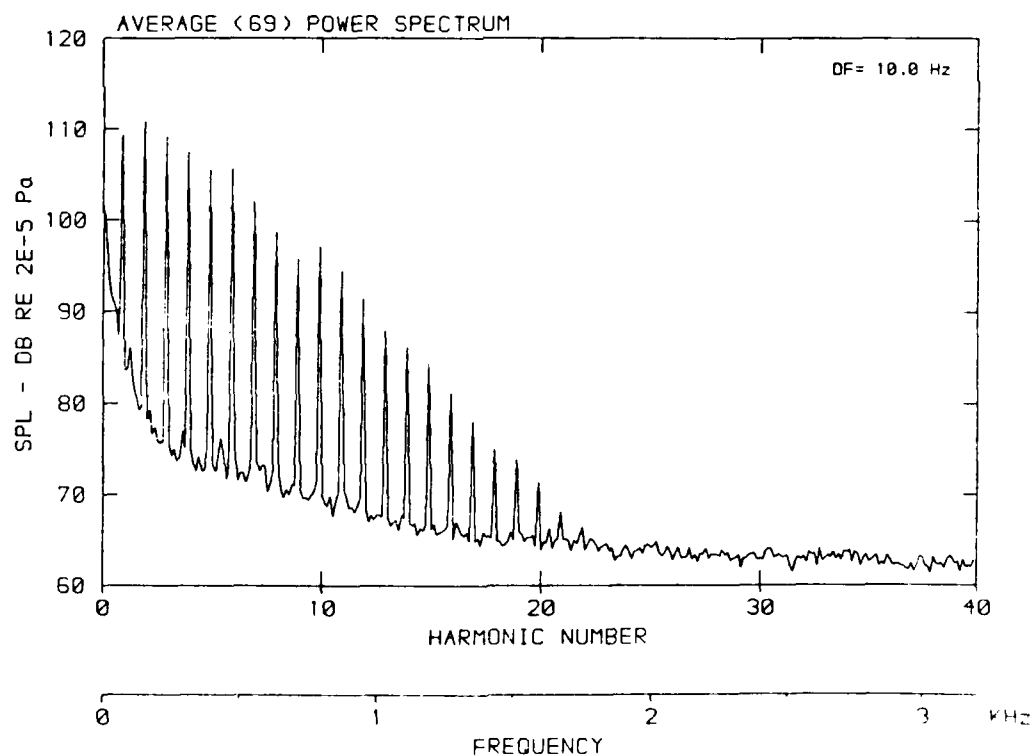
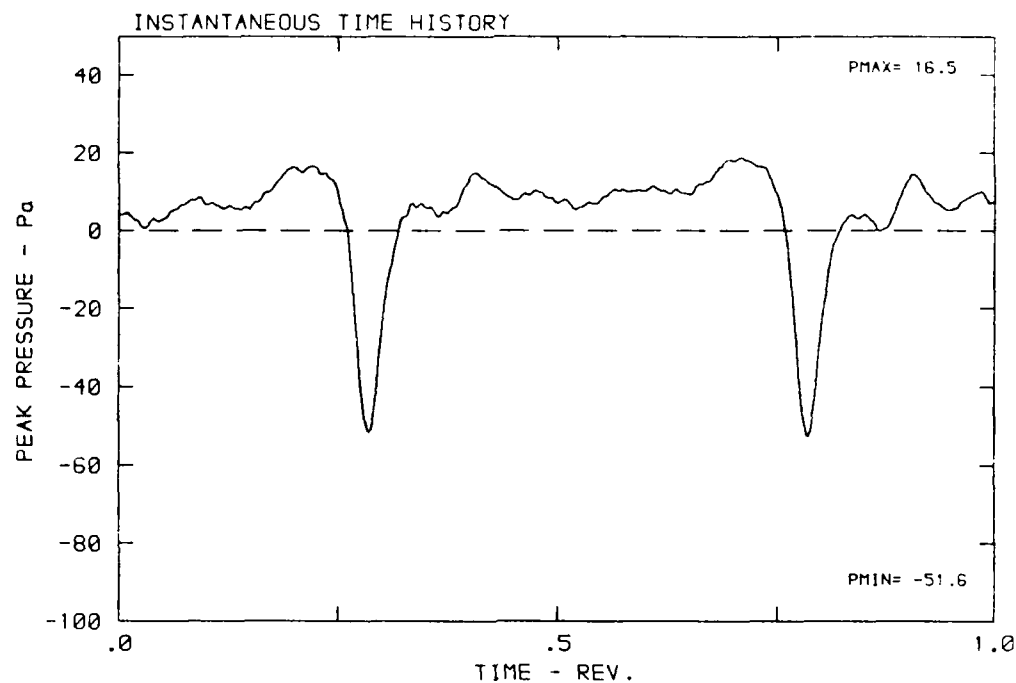
DATA POINT: IC-2 RUN: 42 MP: 1

β : 20.7° MH: .7791 n: 2400 rpm v/u: .203 ϕ : .0° T: 279.3 K



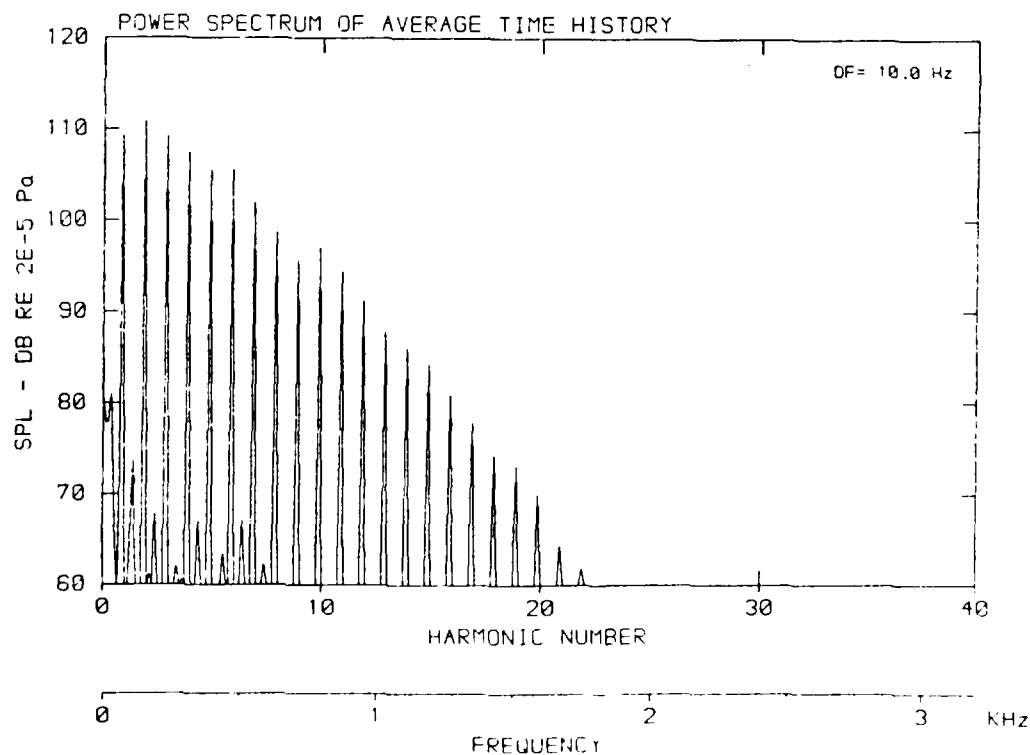
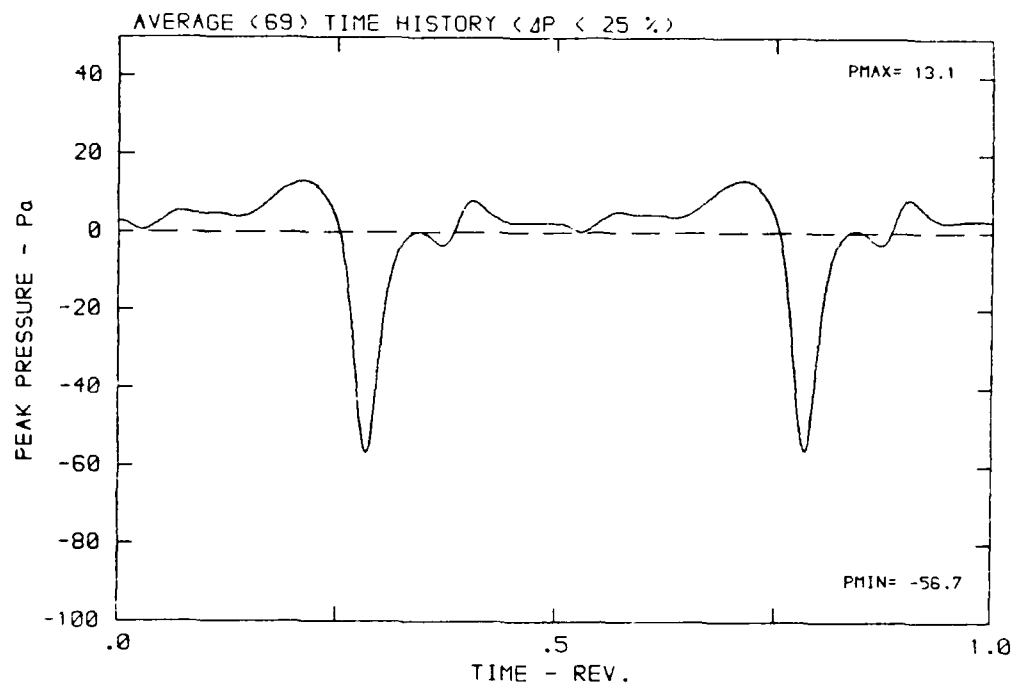
DATA POINT: IC-2 RUN: 42 MP: 2

β : 20.7° MH: .7791 n: 2400 rpm v/u : .203 ϕ : .0° r : 179.3



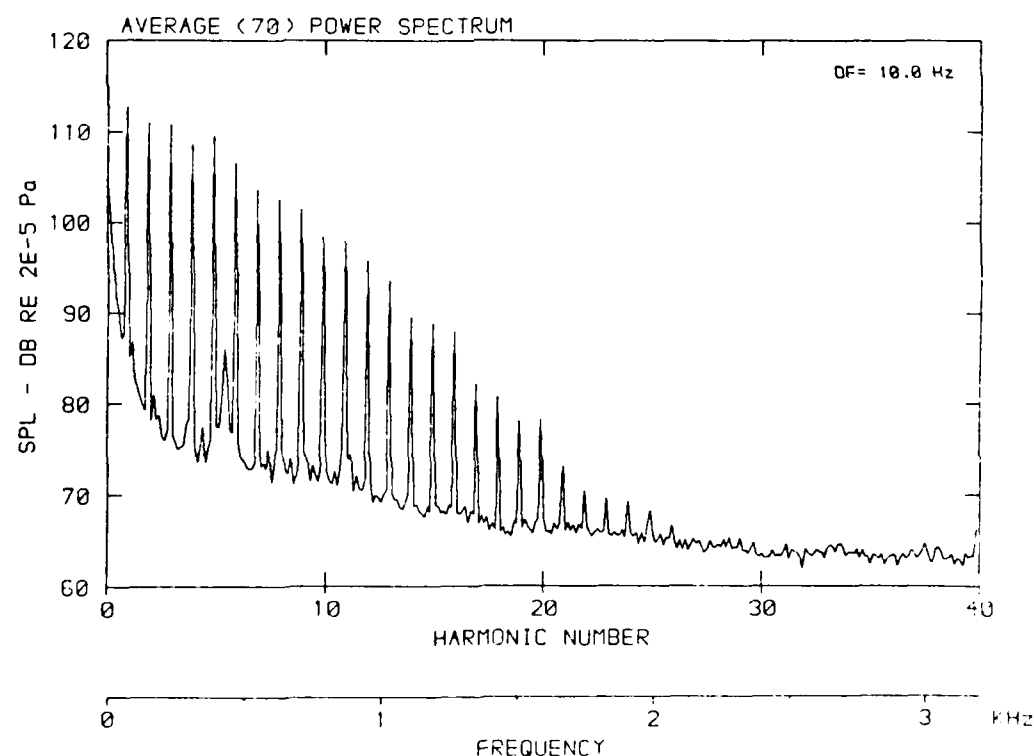
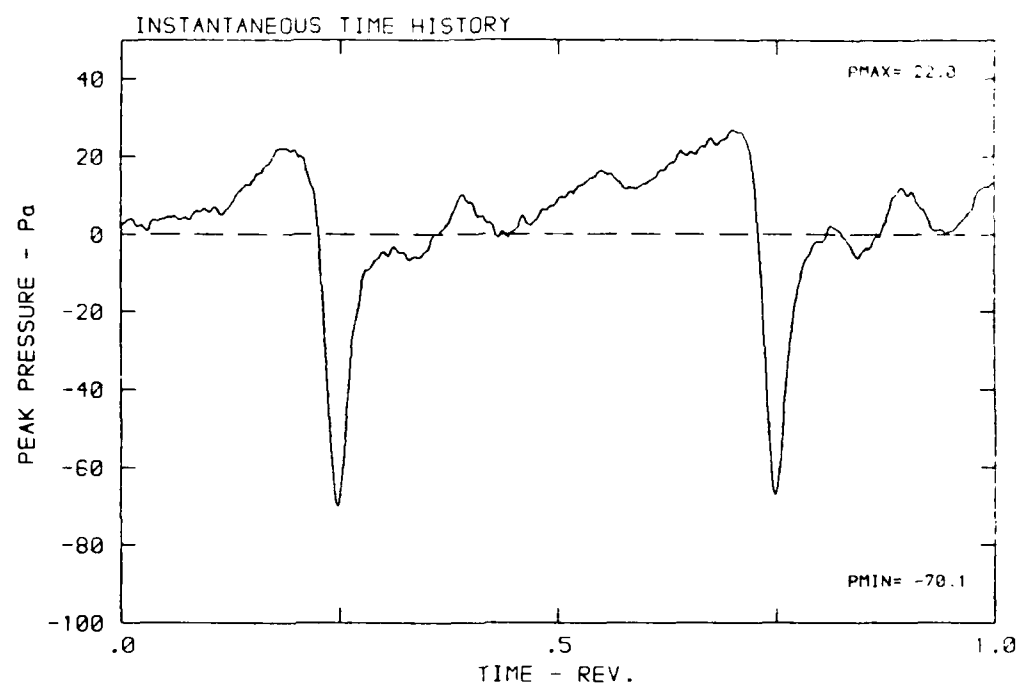
DATA POINT: IC-2 RUN: 42 MP: 2

β : 20.7° MH: .7791 n: 2400 rpm v/u : .203 ϕ : .0° T: 278.3 K



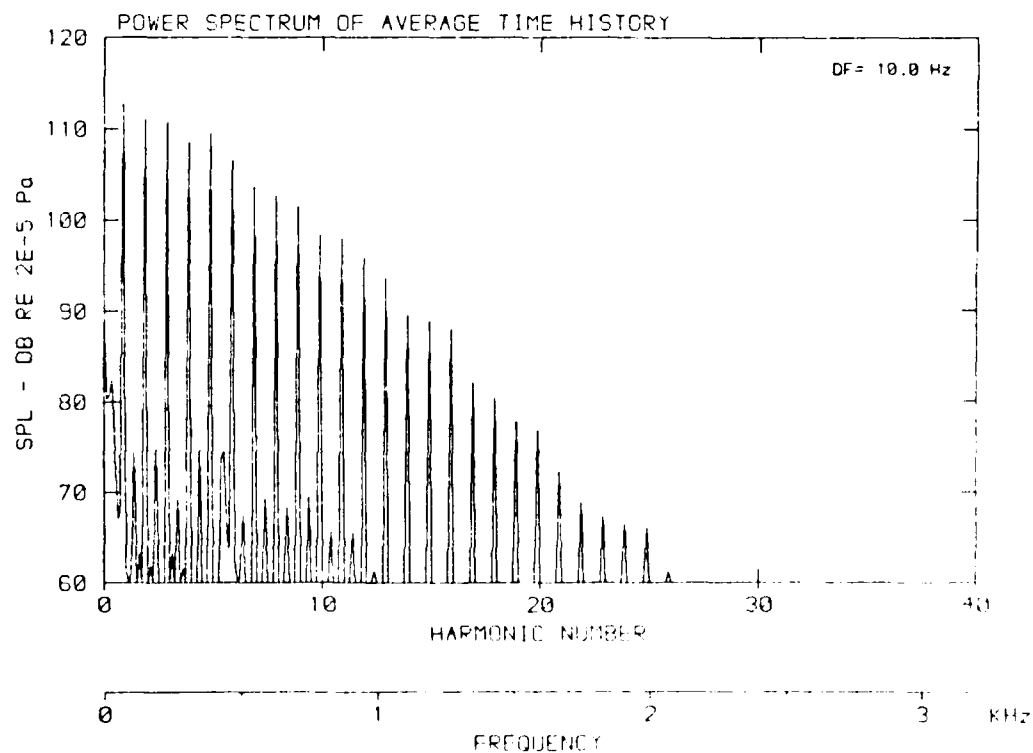
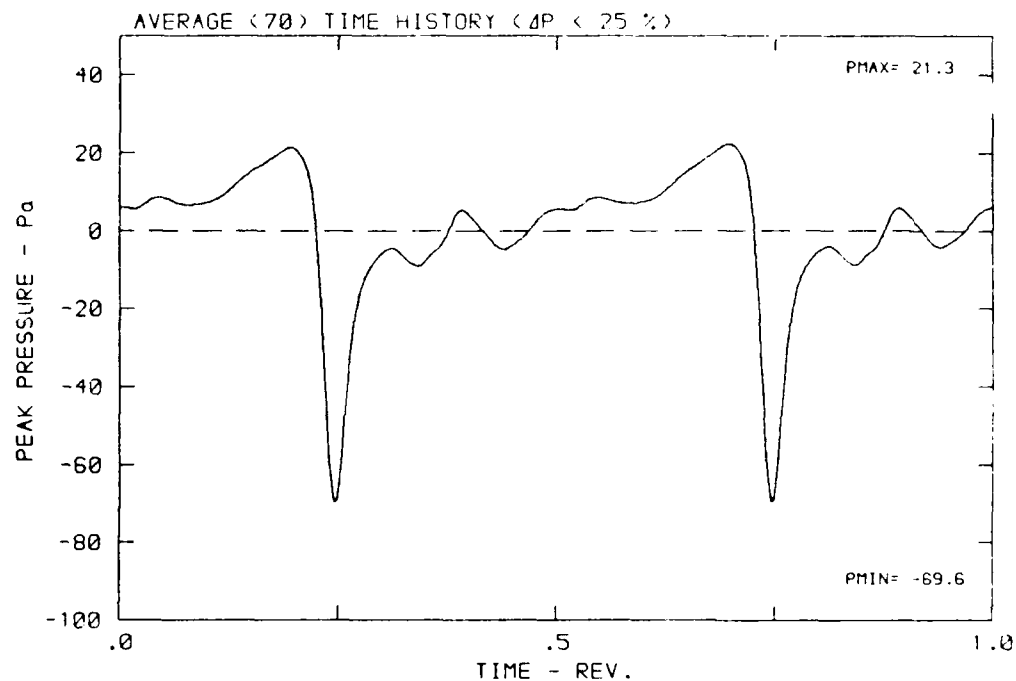
DATA POINT: IC-2 RUN: 42 ME: 3

β : 20.7° MH: .7791 n: 2400 rpm v/u: .203 ϕ : .0° T: 273.3 K



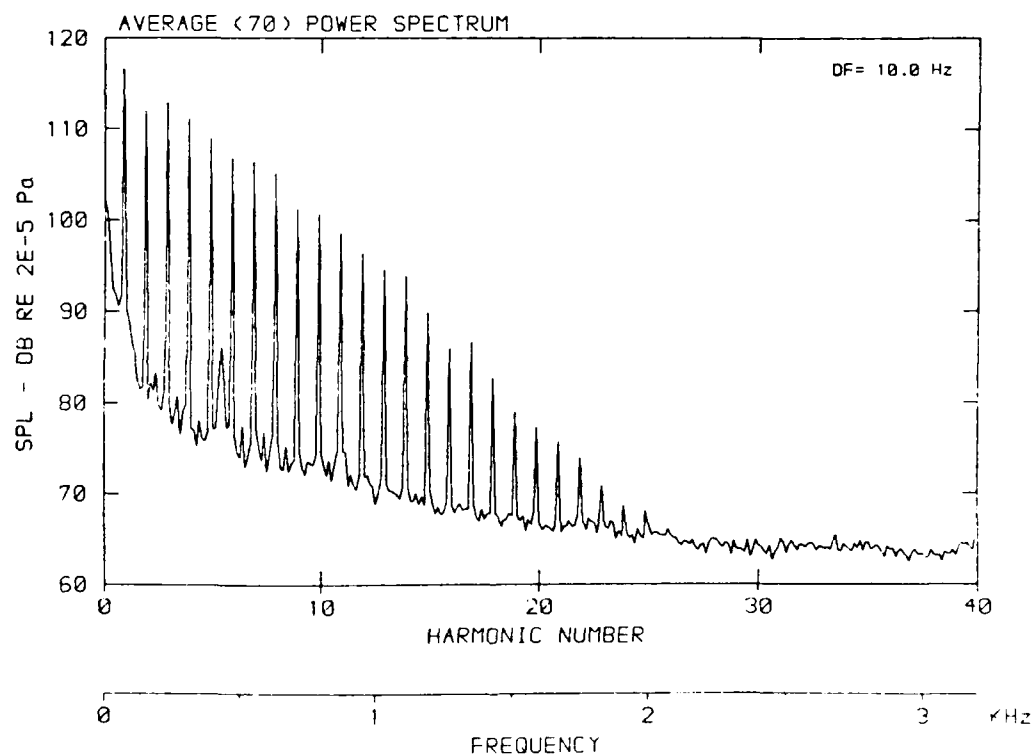
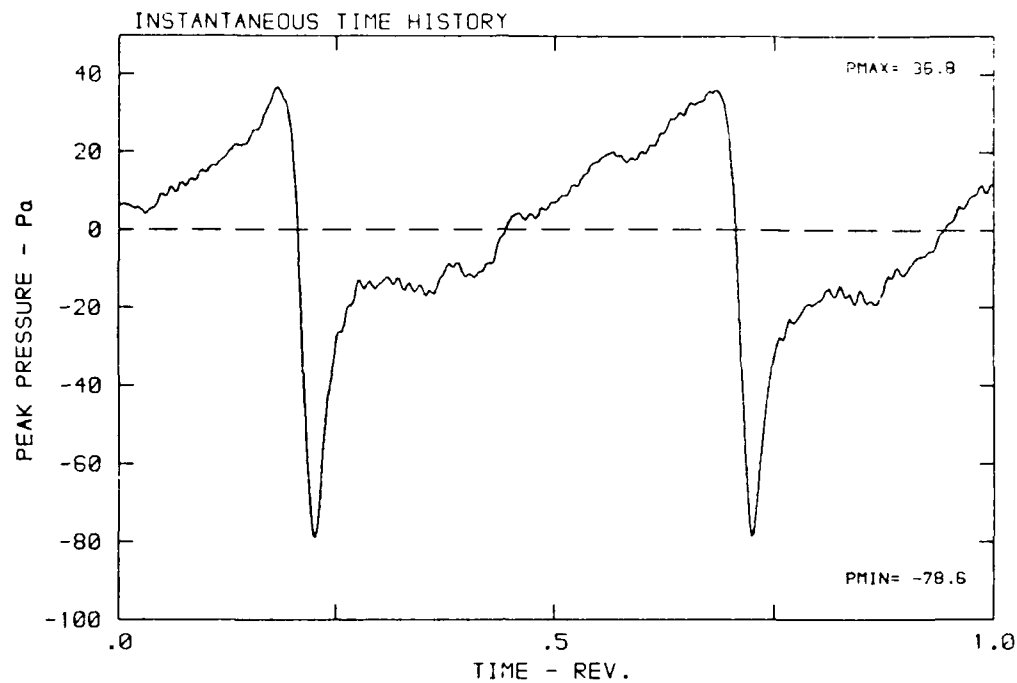
DATA POINT: IC-2 RUN: 42 MP: 3

β : 20.7° MH: .7791 n: 2400 rpm v/u: .203 ϕ : .0° T: 278.3 K



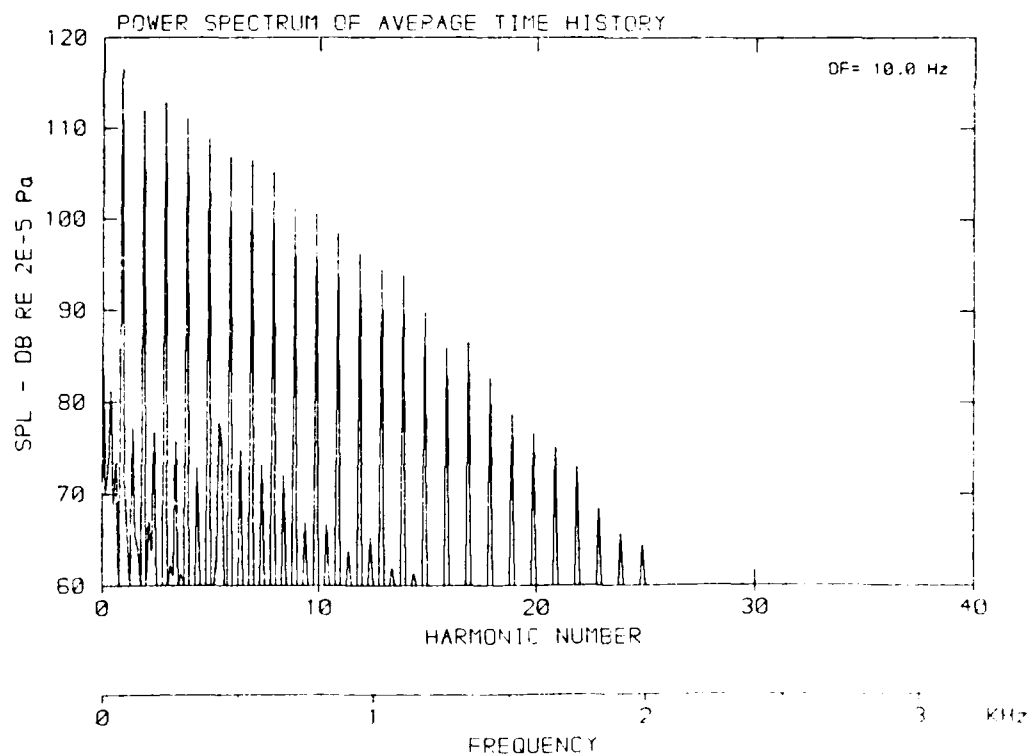
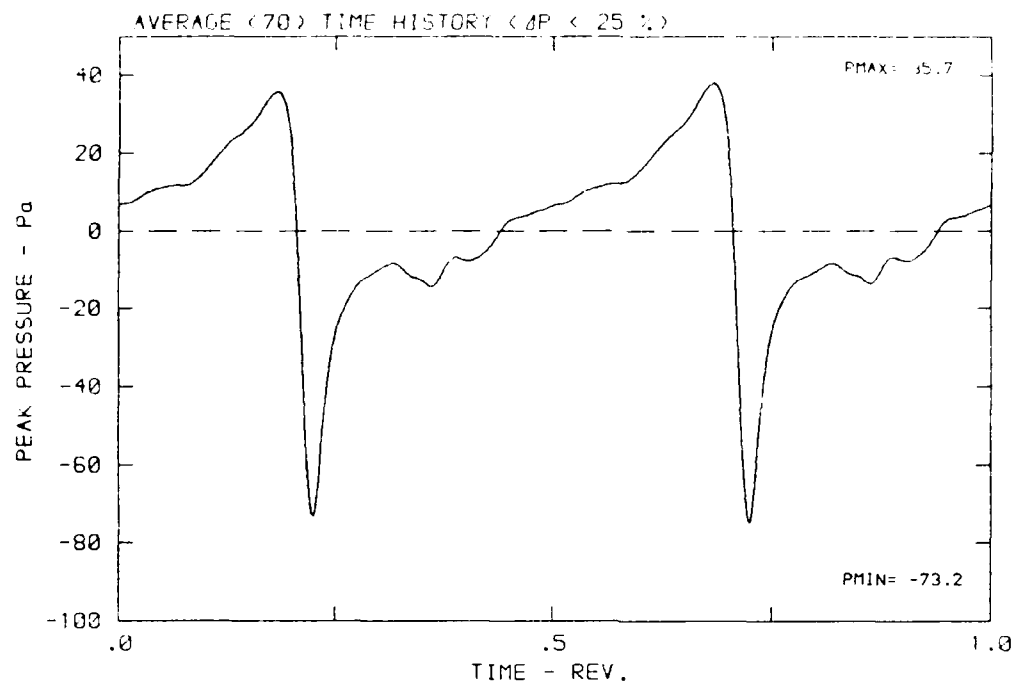
DATA POINT: IC-2 RUN: 42 MP: 4

β : 20.7° MH: .7791 n: 2400 rpm v_{θ} : .203 ϕ : .0° T: 278.8 K



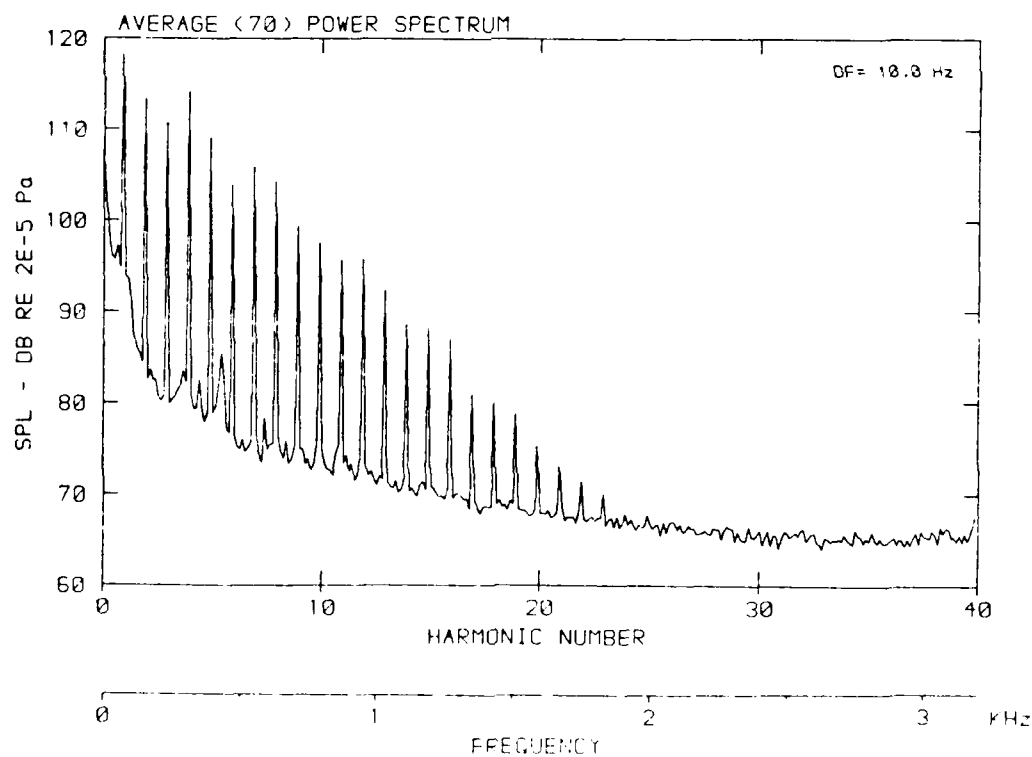
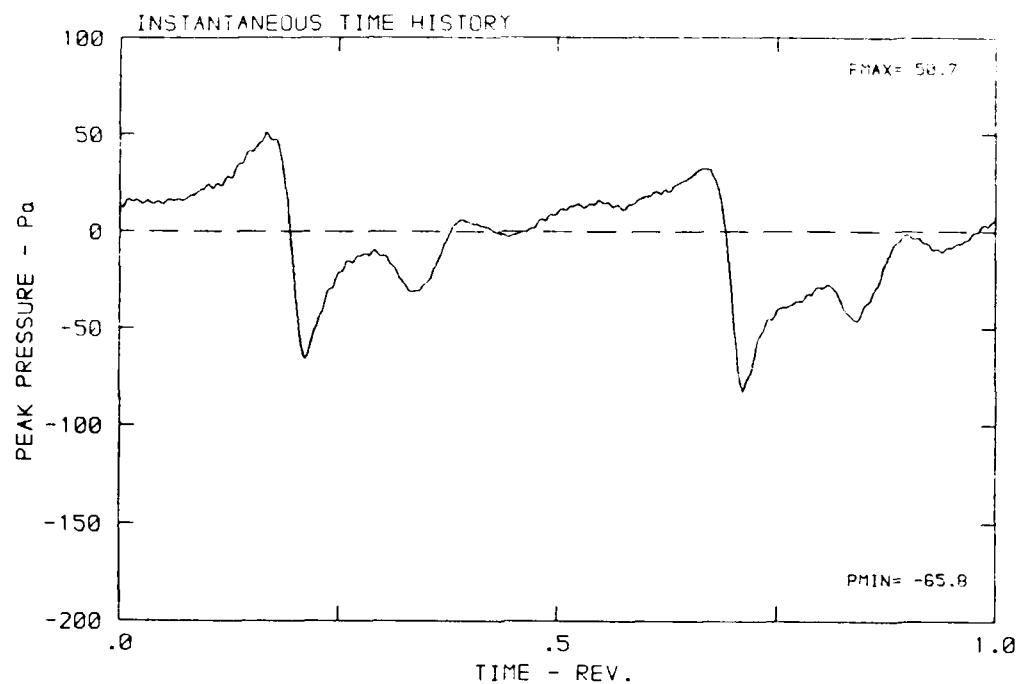
[DATA POINT: 10 2] RUN: 40 MP: 9

β : 20.7° MH: .7791 n: 2400 rpm v/u : .203 ϕ : .0° T: 298.3 K



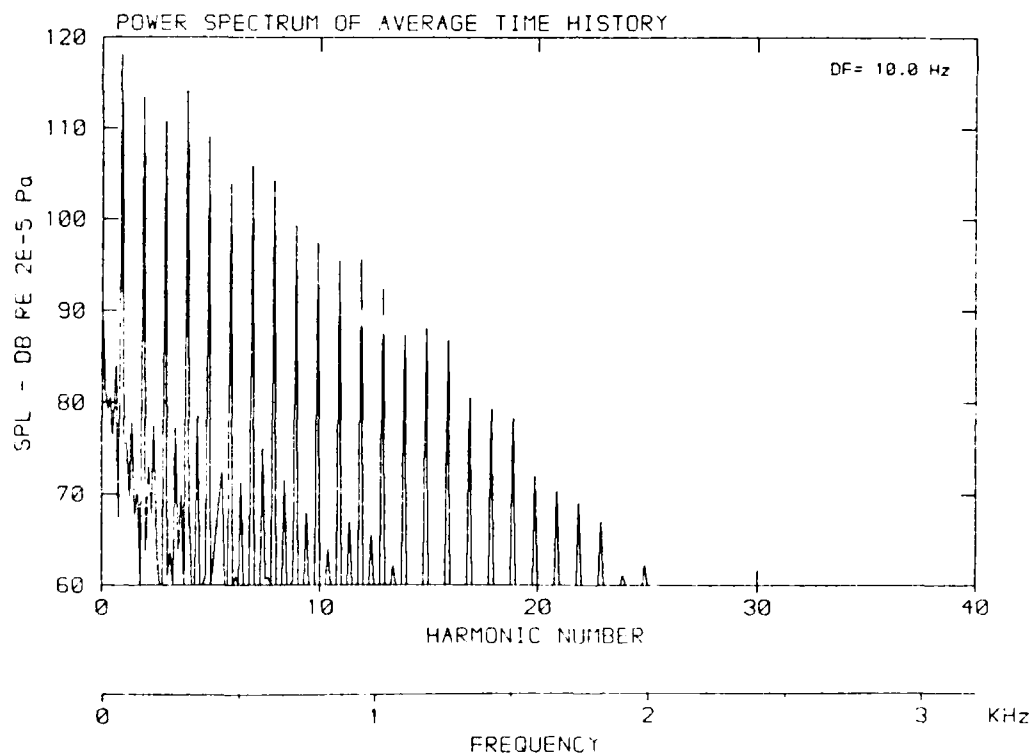
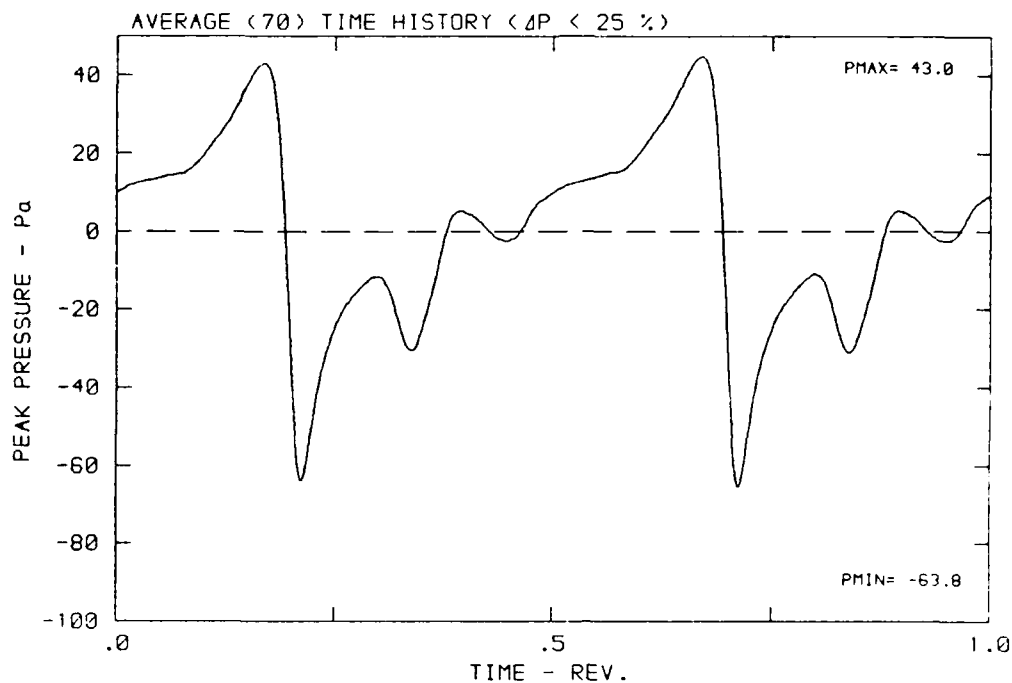
DATA POINT: IC-2 RUN: 42 MP: 5

β : 20.7° MH: .7791 n: 2400 rpm v/u: .203 ϕ : .0° τ : 270.3



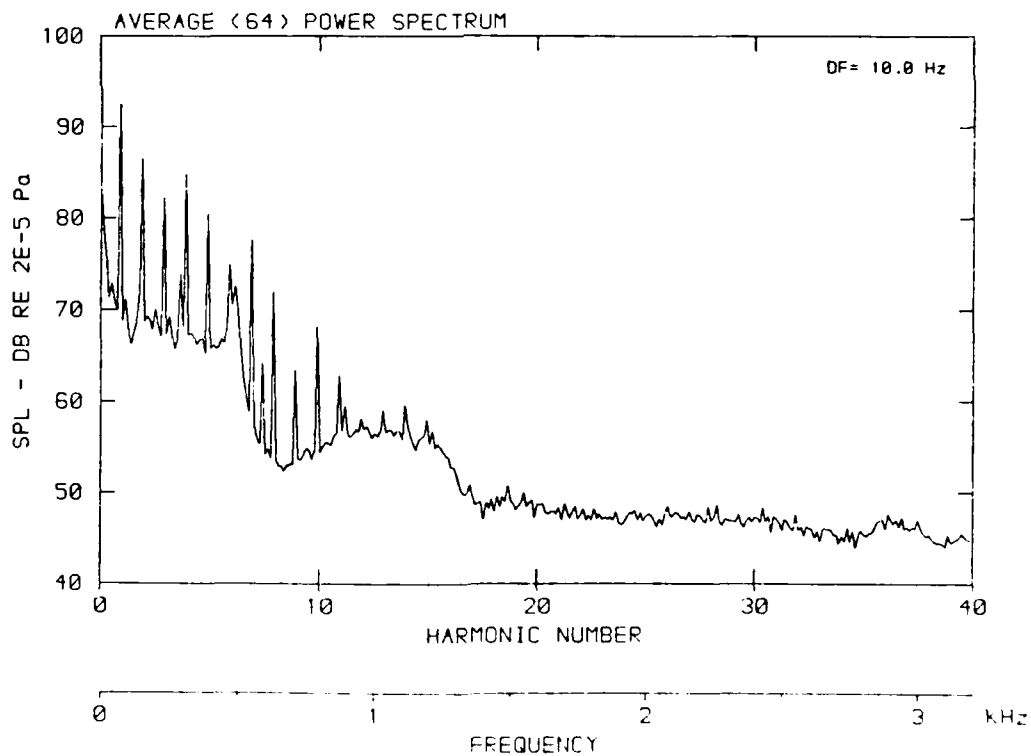
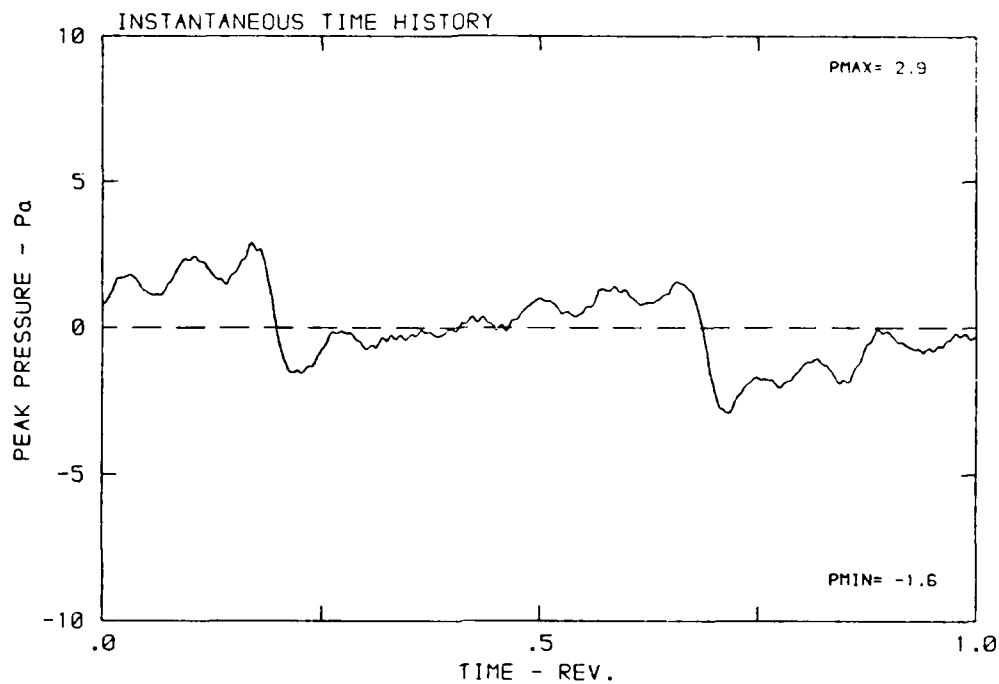
DATA POINT: IC-2 RUN: 42 MP: 5

β : 20.7° MH: .7791 n: 2400 rpm v/u: .203 ϕ : .0° T: 278.3 K



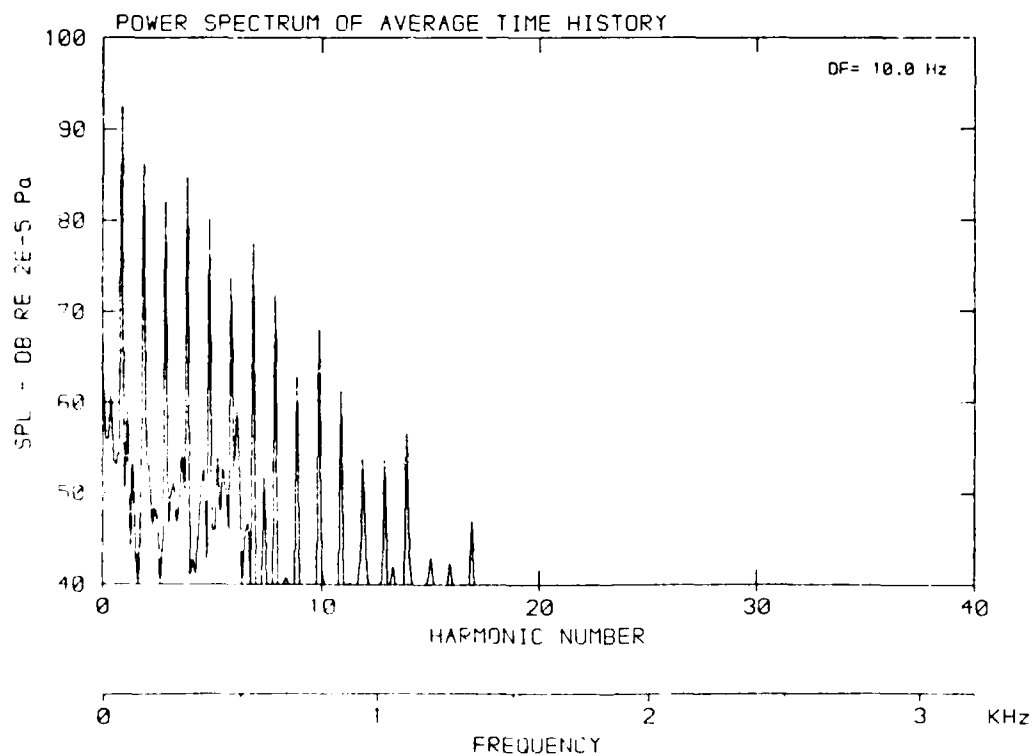
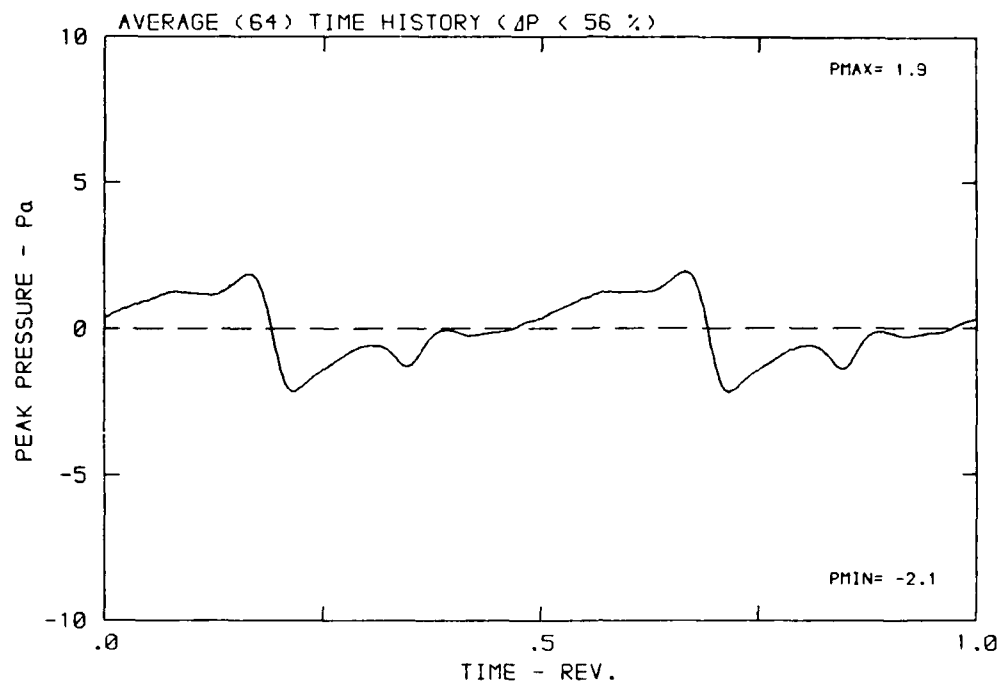
DATA POINT: IC-2 RUN: 42 MP: 6

β : 20.7° MH: .7791 n: 2400 rpm v/u : .203 ϕ : .0° T: 273.3



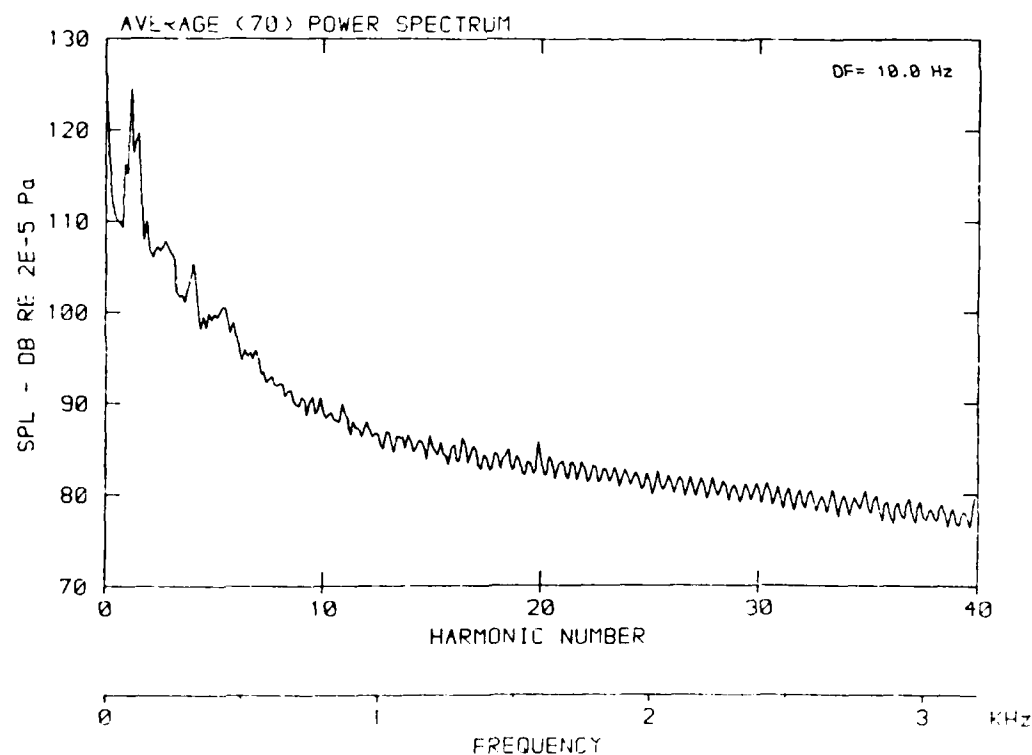
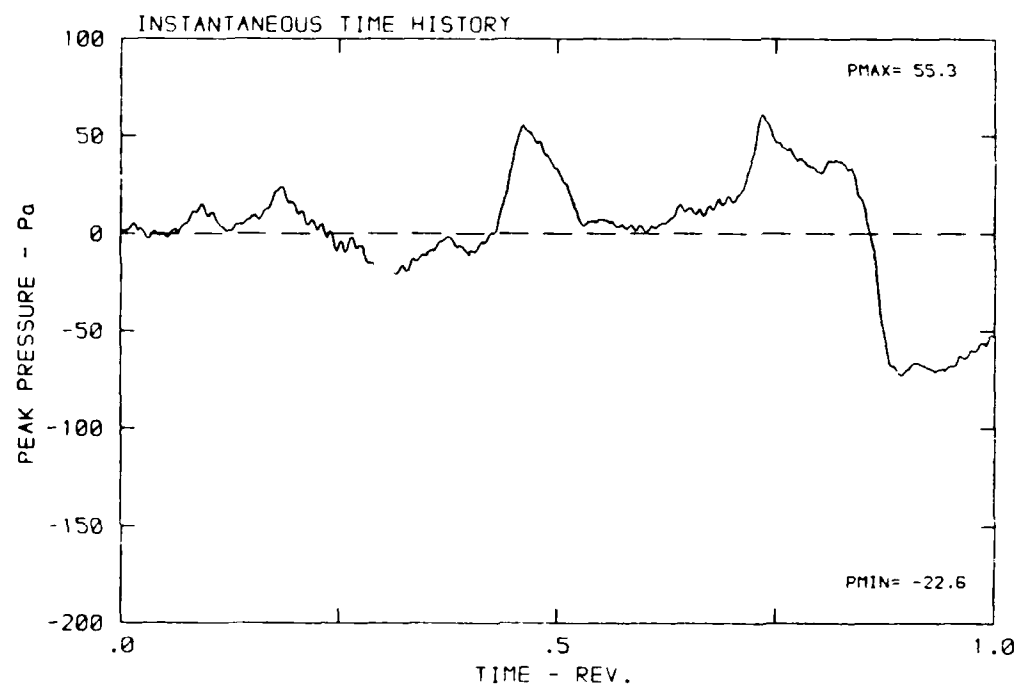
DATA POINT: IC-2 RUN: 42 MP: 6

β : 20.7° MH: .7791 n: 2400 rpm v/u: .203 ϕ : .0° T: 278.3 K



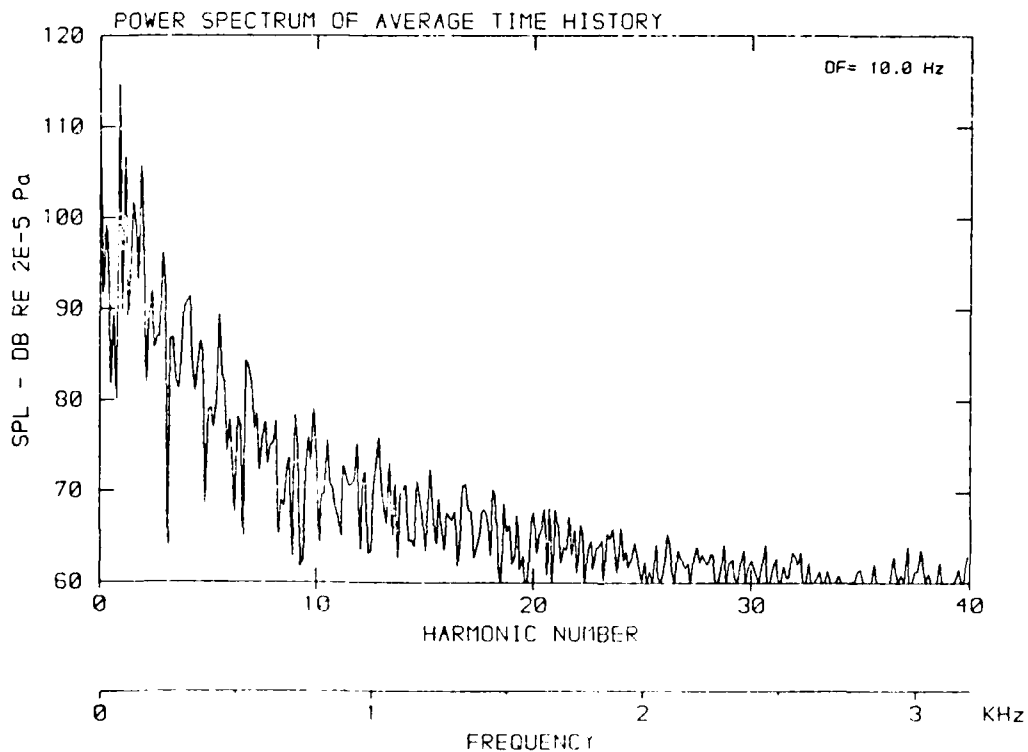
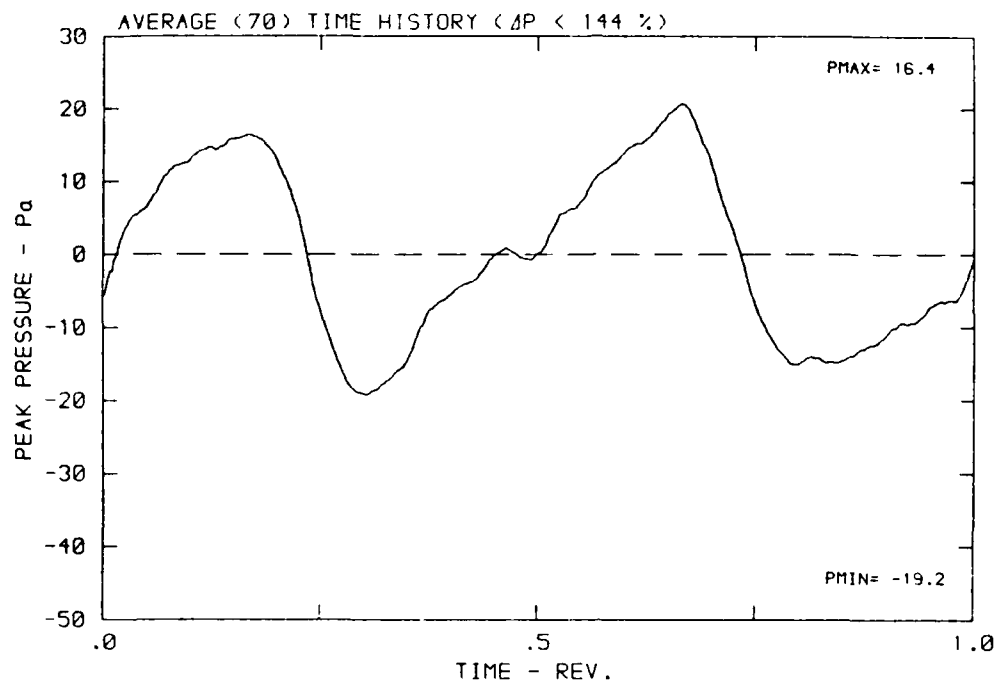
DATA POINT: IC-2 RUN: 42 MP: 7

β : 20.7° MH: .7791 n: 2400 rpm v/u : .203 ϕ : .0° T: 278.3 K



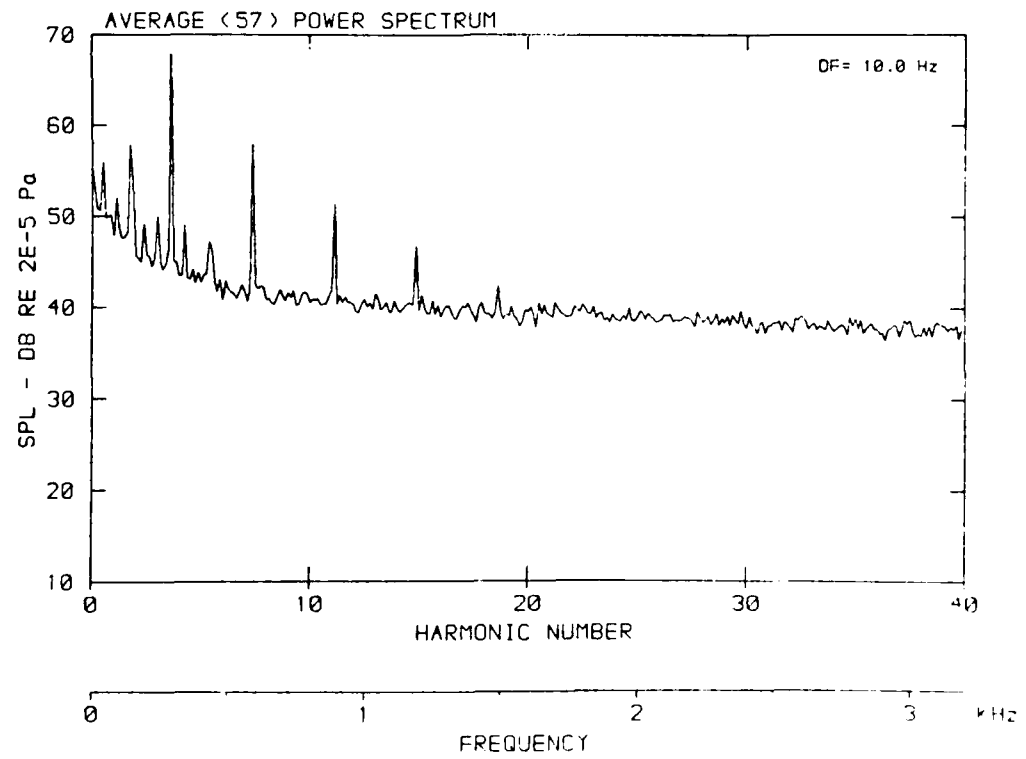
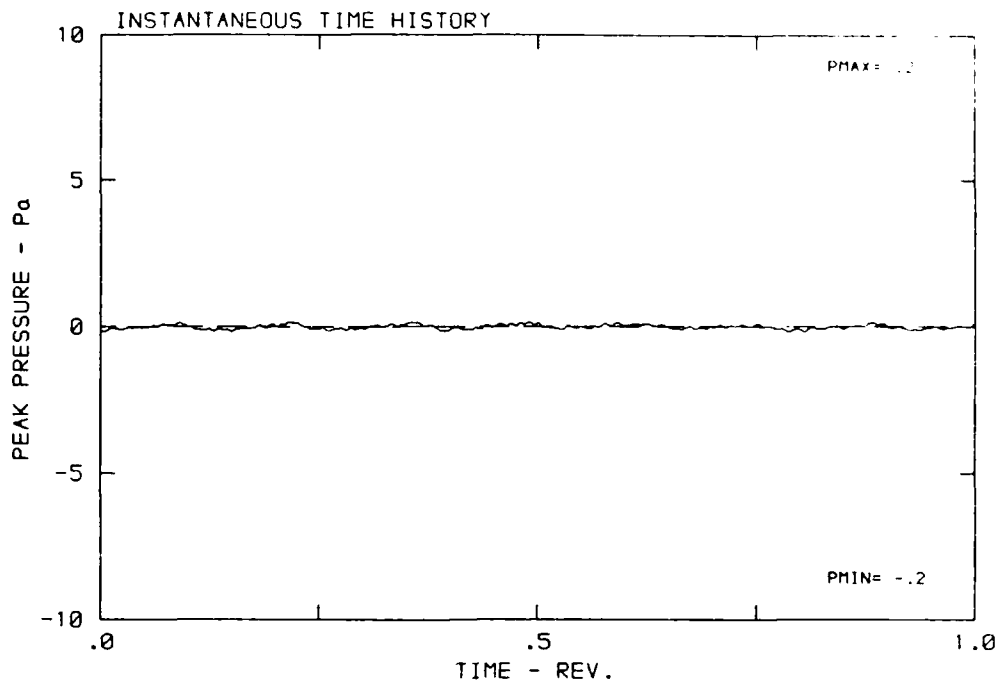
DATA POINT: IC-2 RUN: 42 MP: 7

β : 20.7° MH: .7791 n: 2400 rpm v/u: .203 ϕ : .0° T: 278.3 K



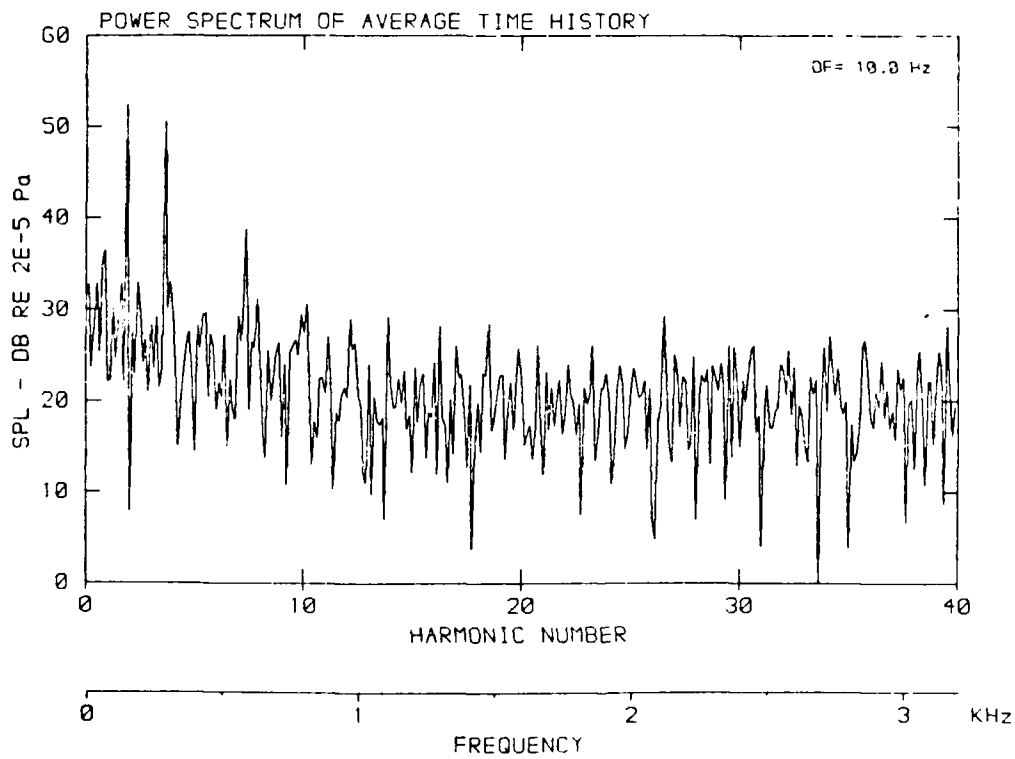
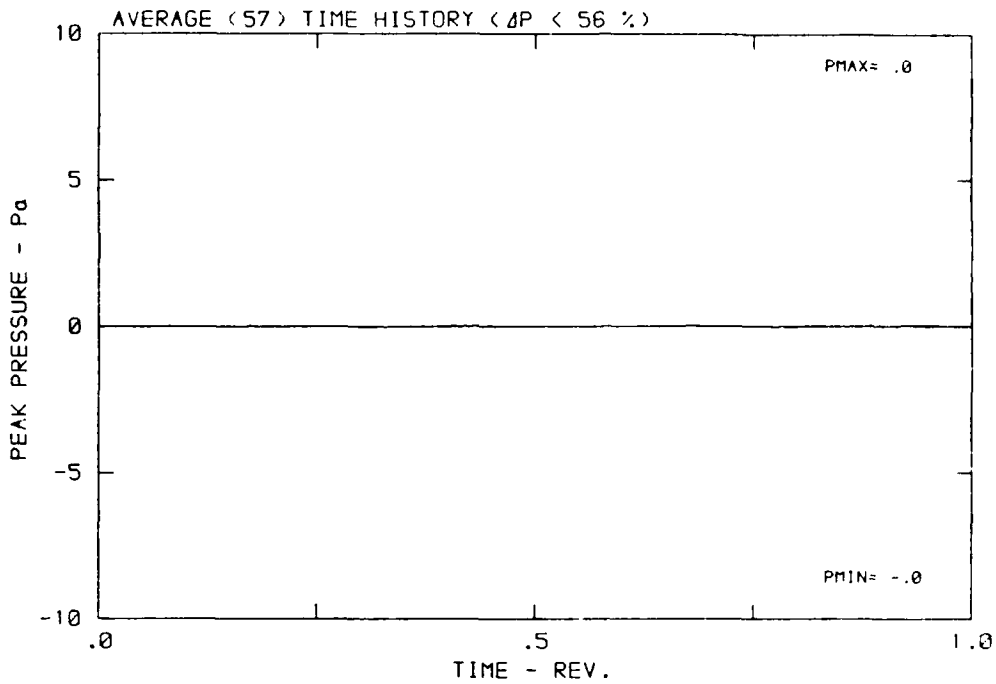
DATA POINT: IC-2 RUN: 42 ME: 3

β : 20.7° MH: .7791 n: 2400 rpm v/u : .203 ϕ : .0° r : 275.3 K



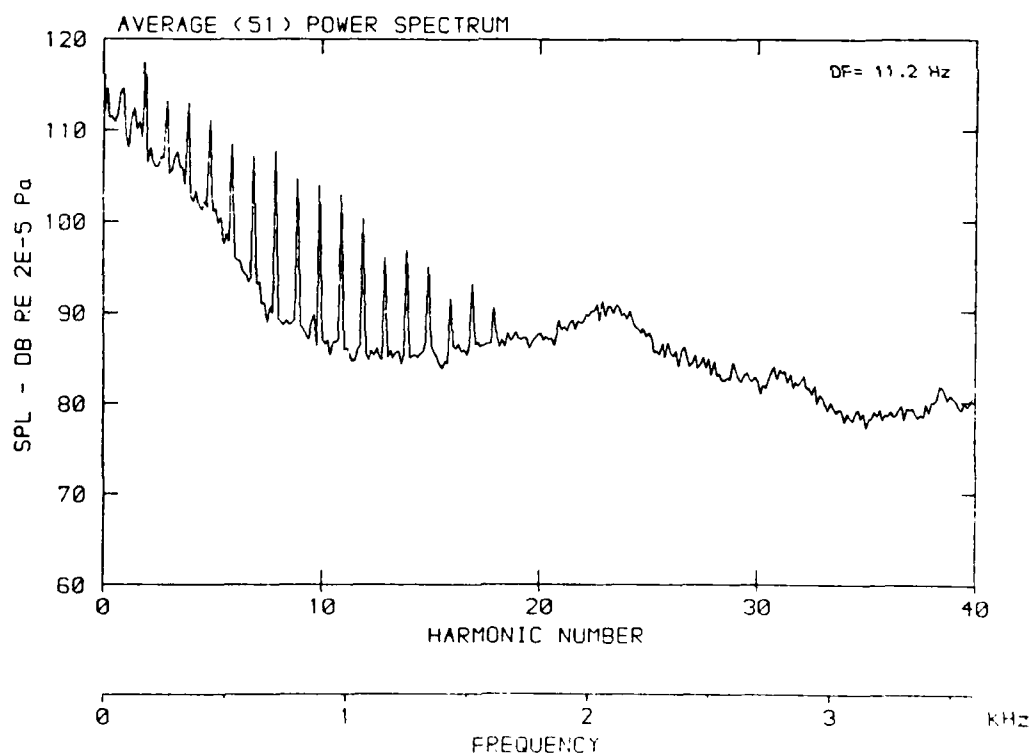
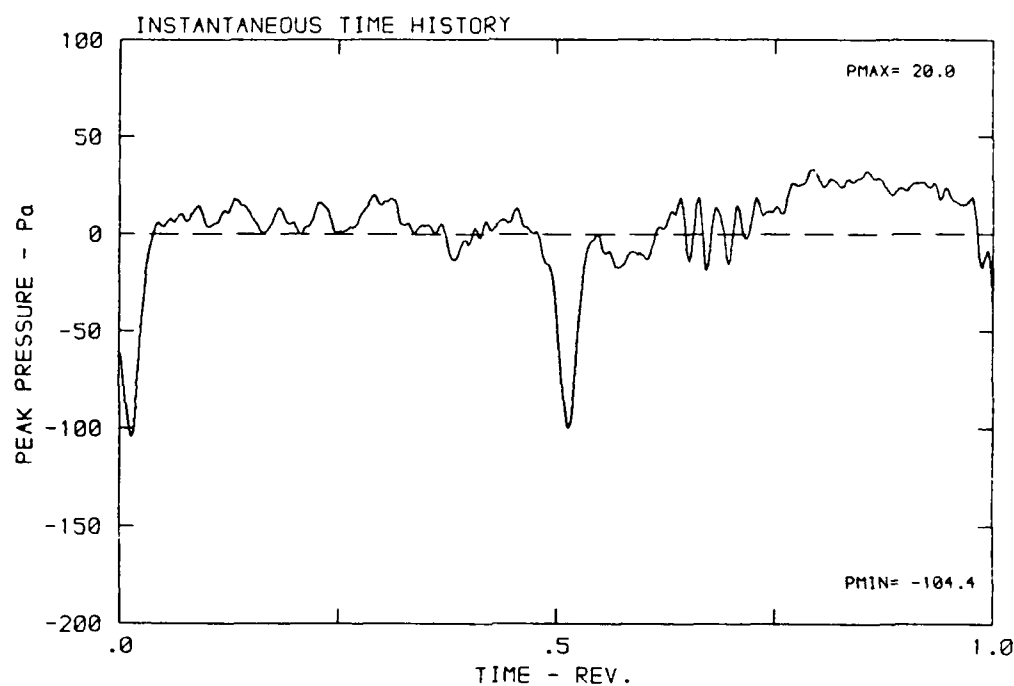
DATA POINT: IC-2 RUN: 42 MP: 9

β : 20.7° MH: .7791 n: 2400 rpm v/u : .203 ϕ : .0° T: 278.3 K



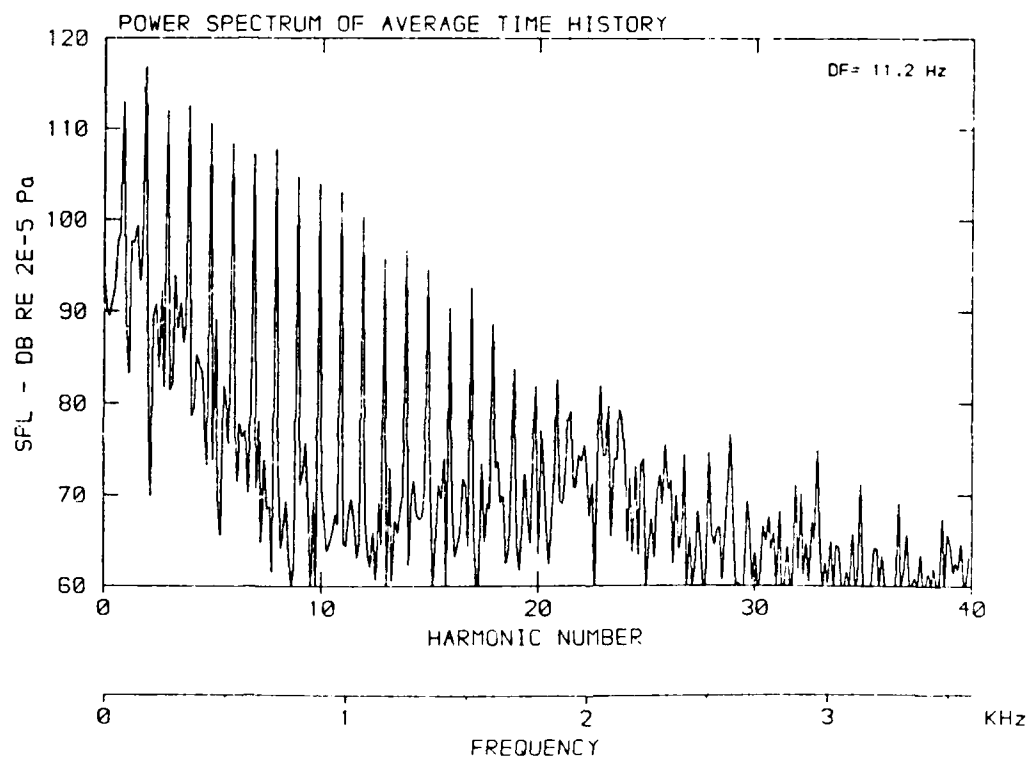
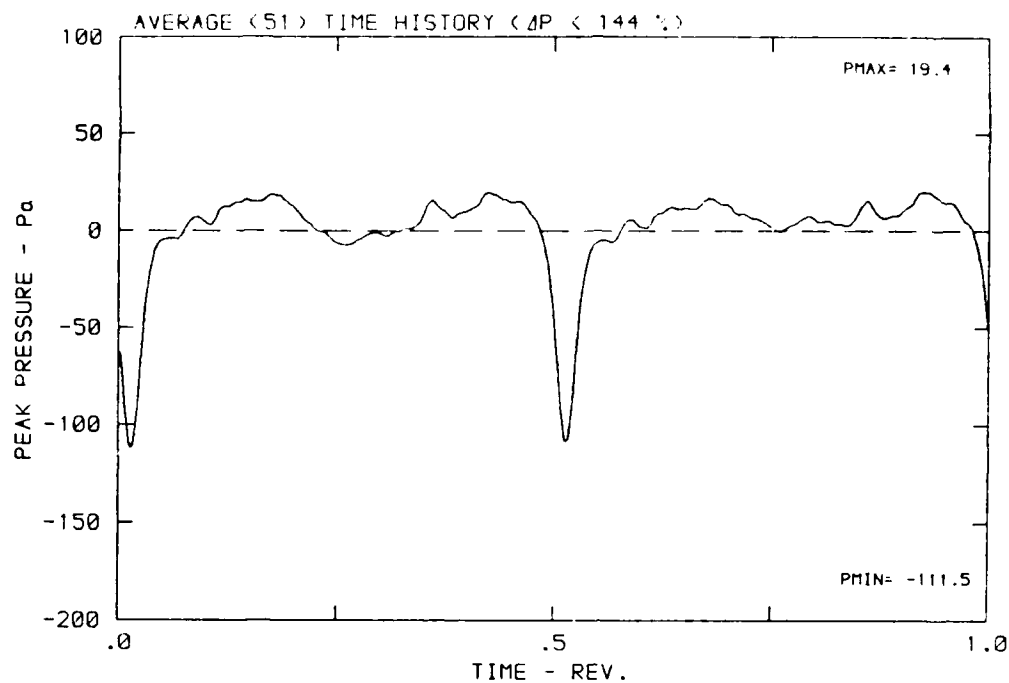
DATA POINT: IC-3 RUN: 43 MP: 1

β : 20.7° MH: .8881 n: 2700 rpm v/u : .270 ϕ : .0° T: 273.3 K



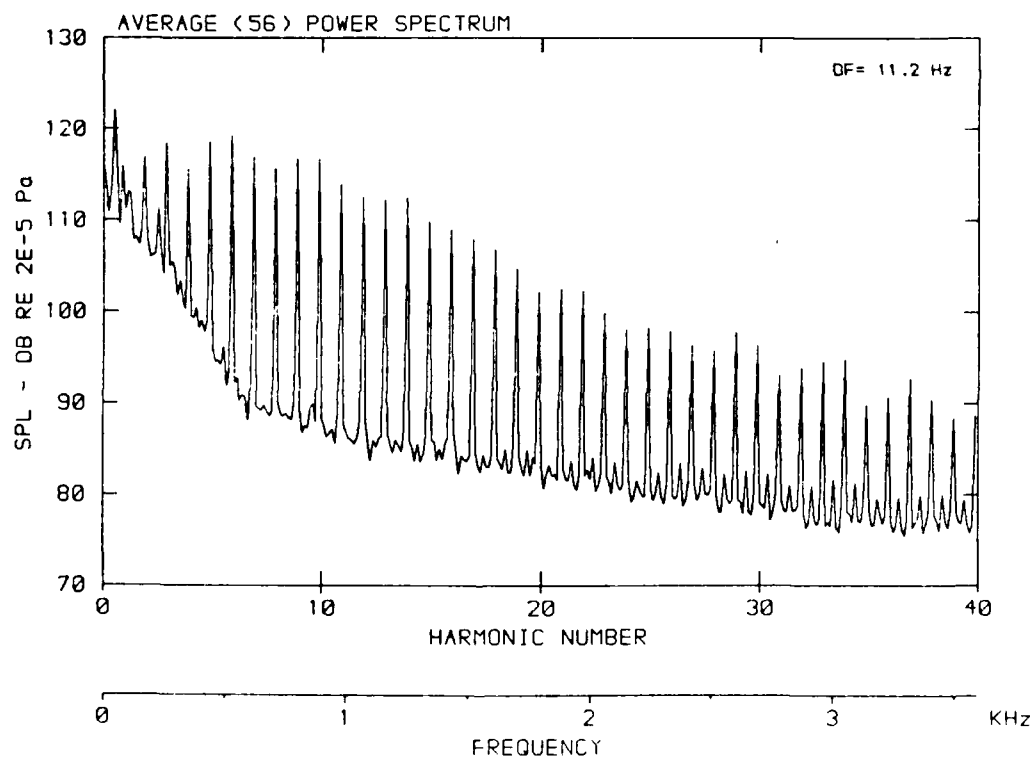
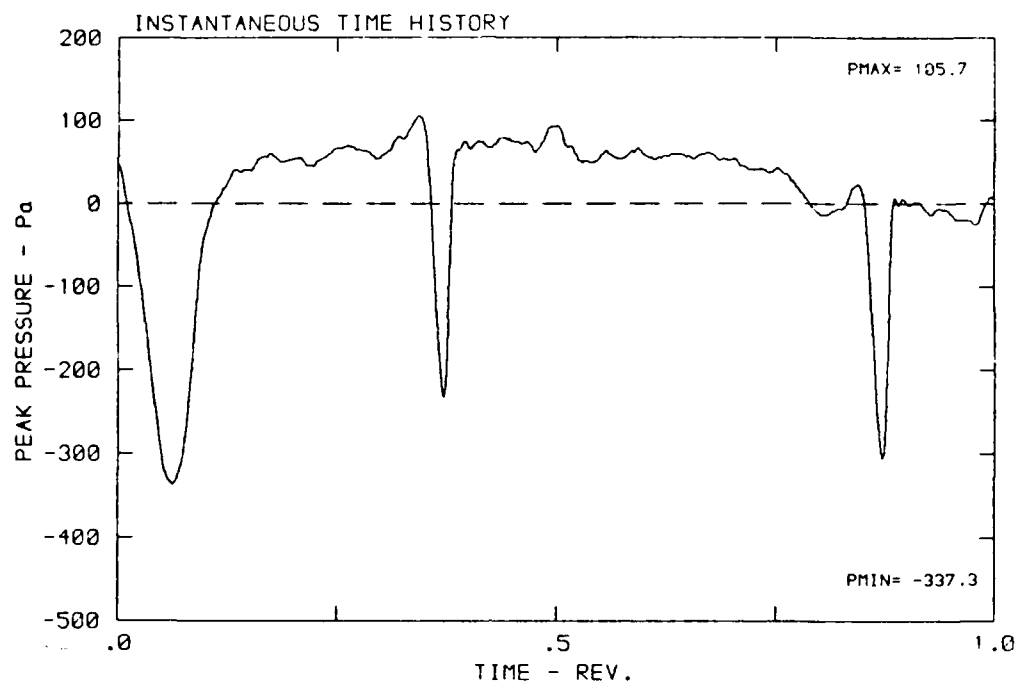
DATA POINT: IC-3 RUN: 43 MP: 1

β : 20.7° MH: .8881 n: 2700 rpm v/u : .270 ϕ : .0° T: 279.3 K



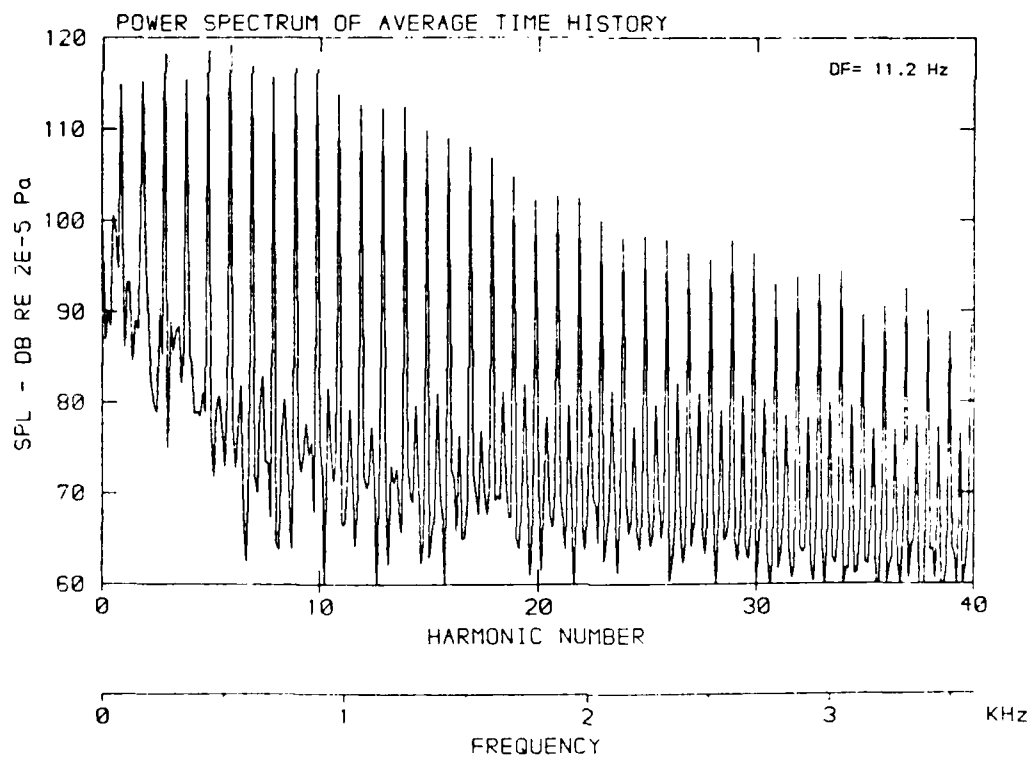
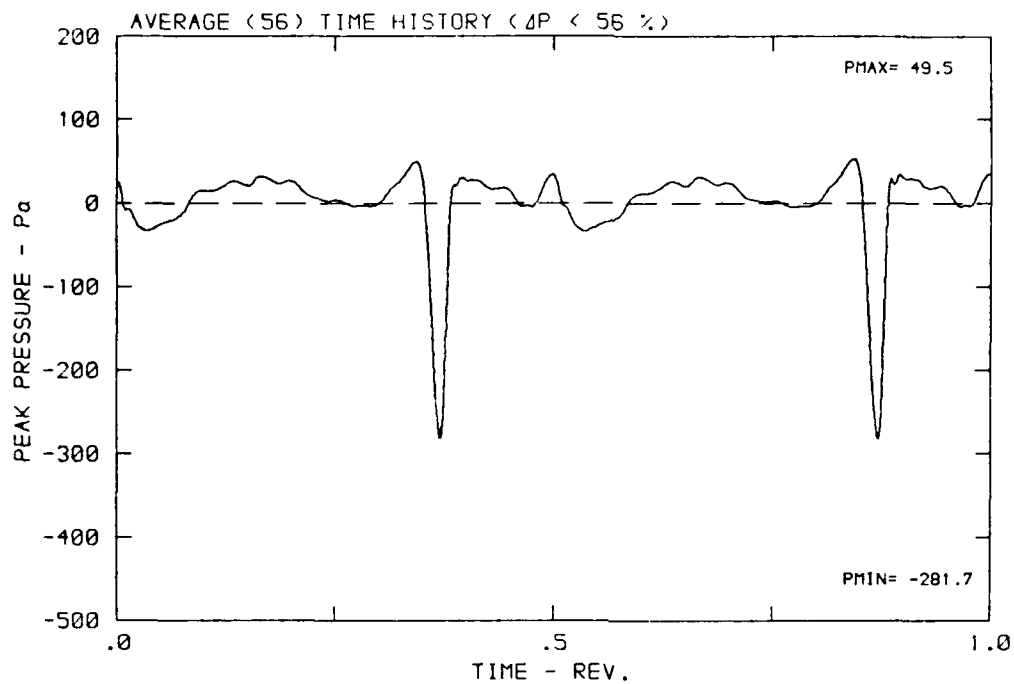
DATA POINT: IC-3 RUN: 43 MP: 2

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



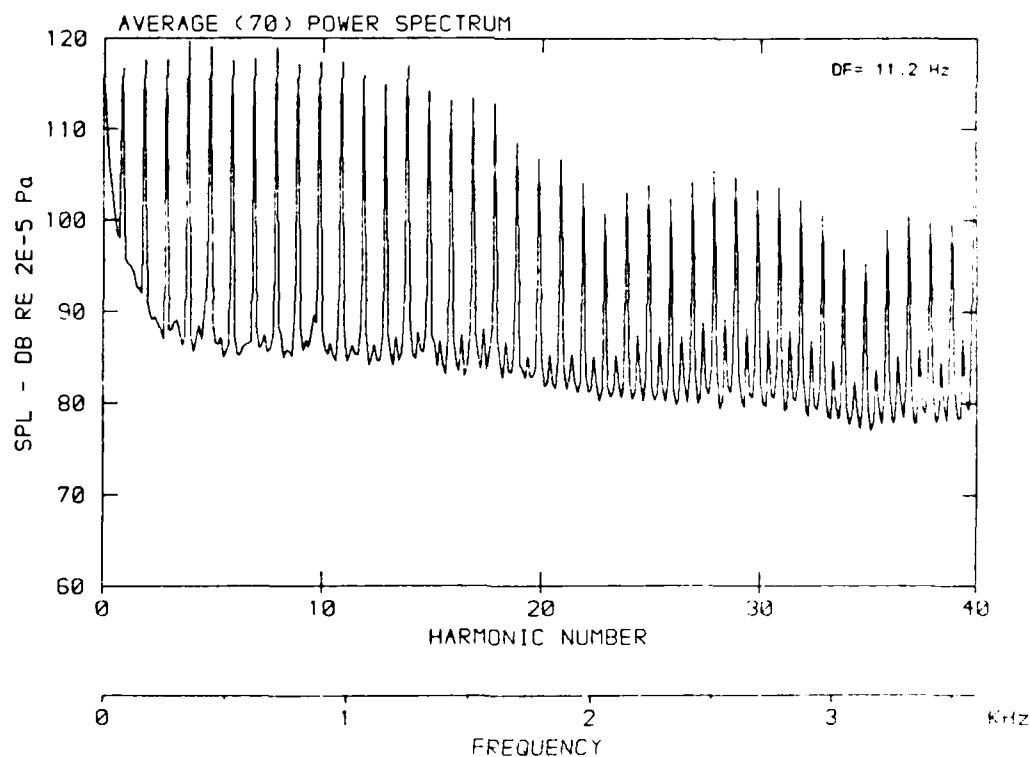
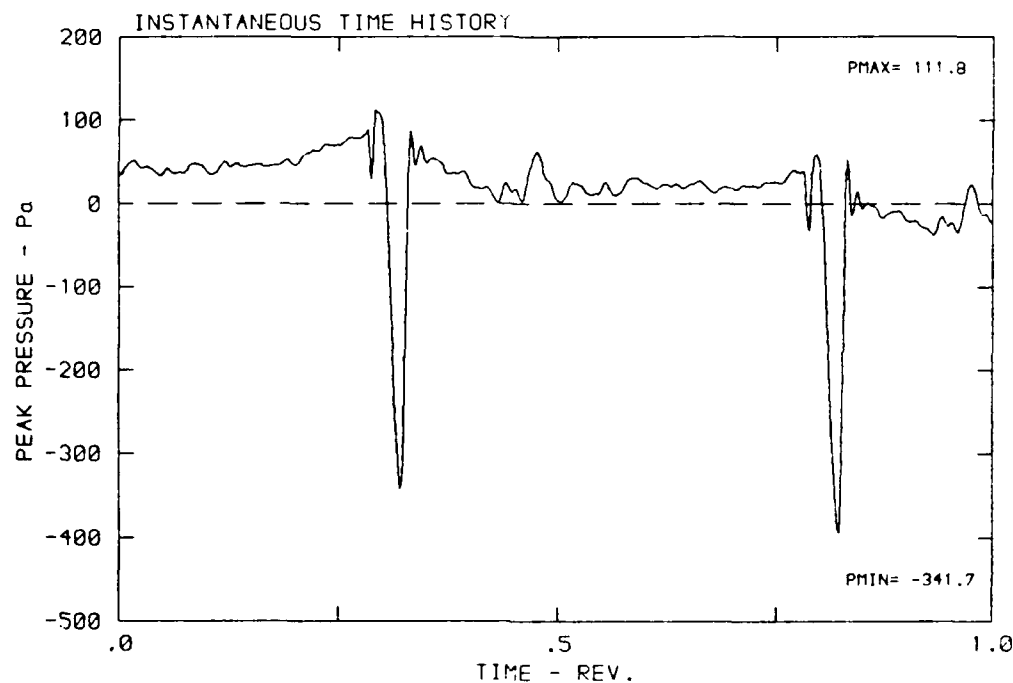
DATA POINT: IC-3 RUN: 43 MP: 2

β : 20.7° MH: .8881 n: 2700 rpm v/u : .270 ϕ : .0° T: 279.3 K



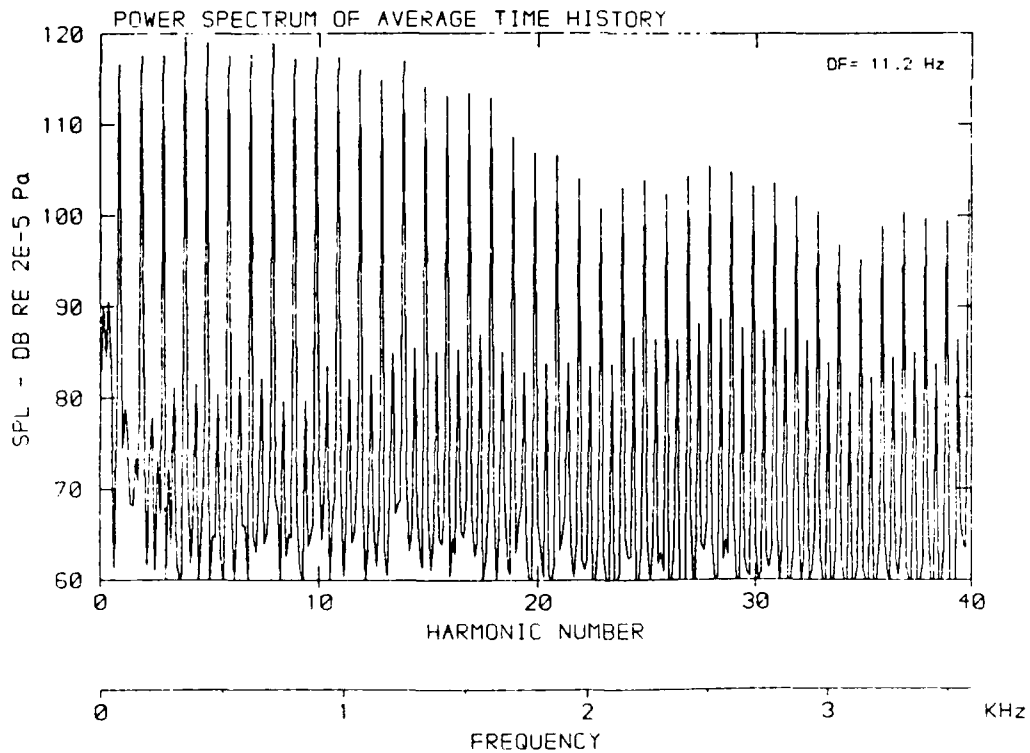
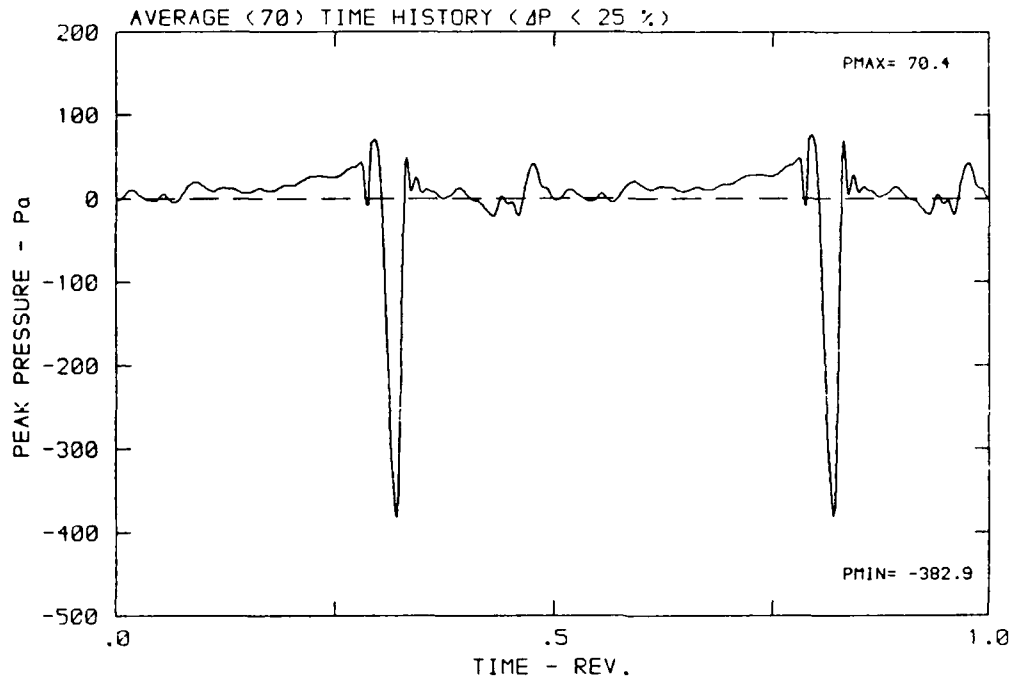
DATA POINT: IC-3 RUN: 43 MP: 3

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



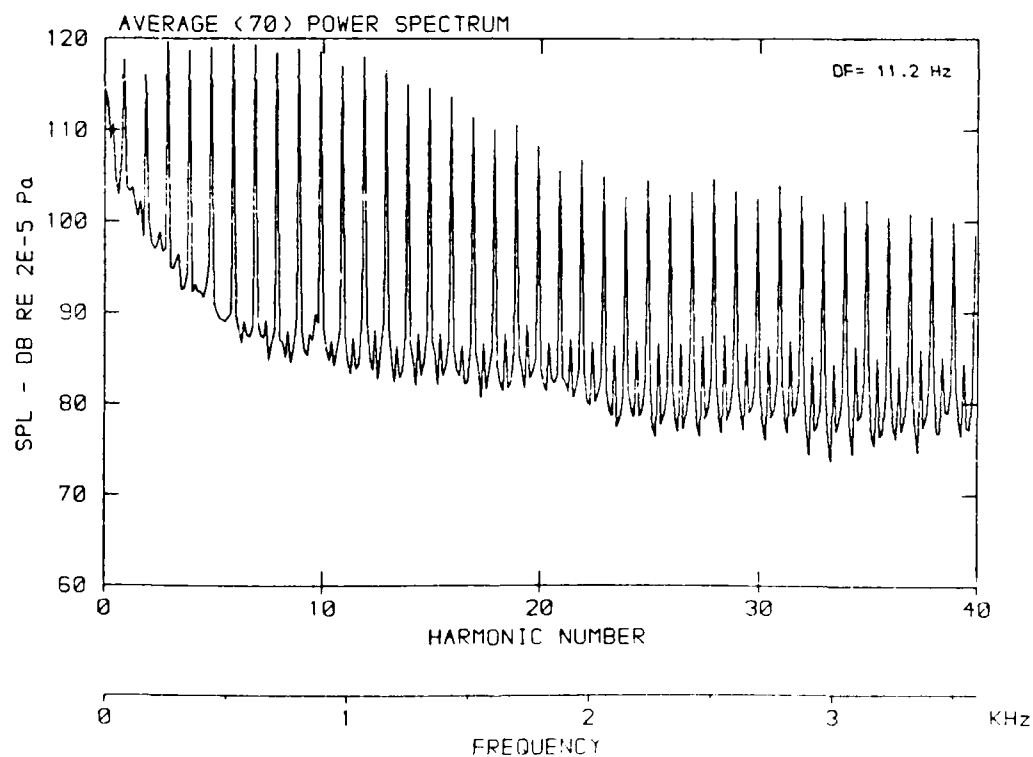
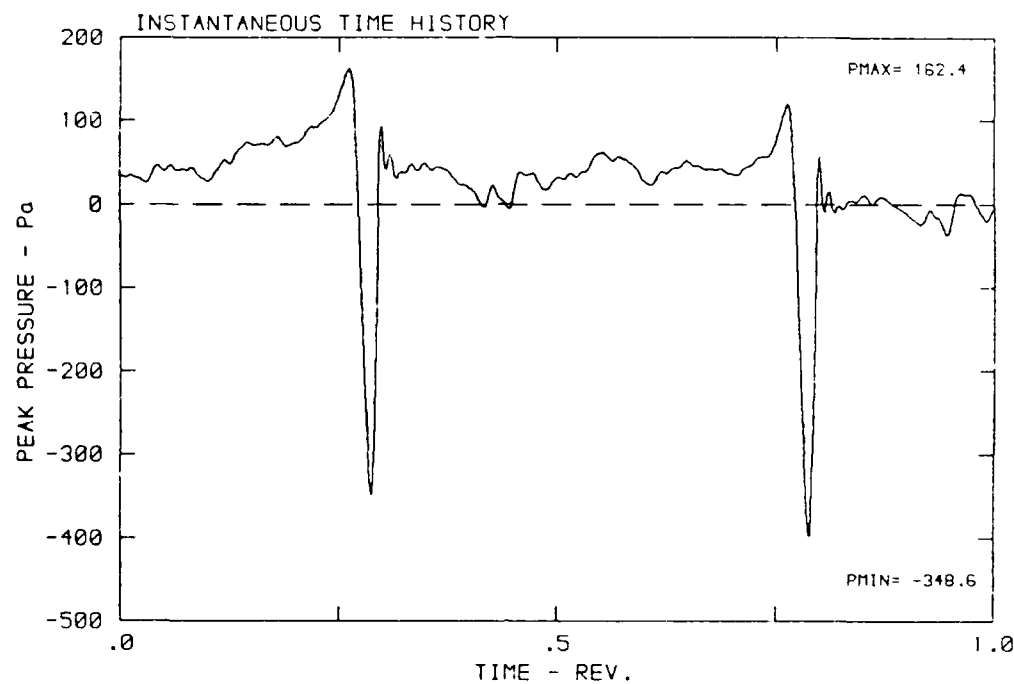
DATA POINT: IC-3 RUN: 43 MP: 3

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



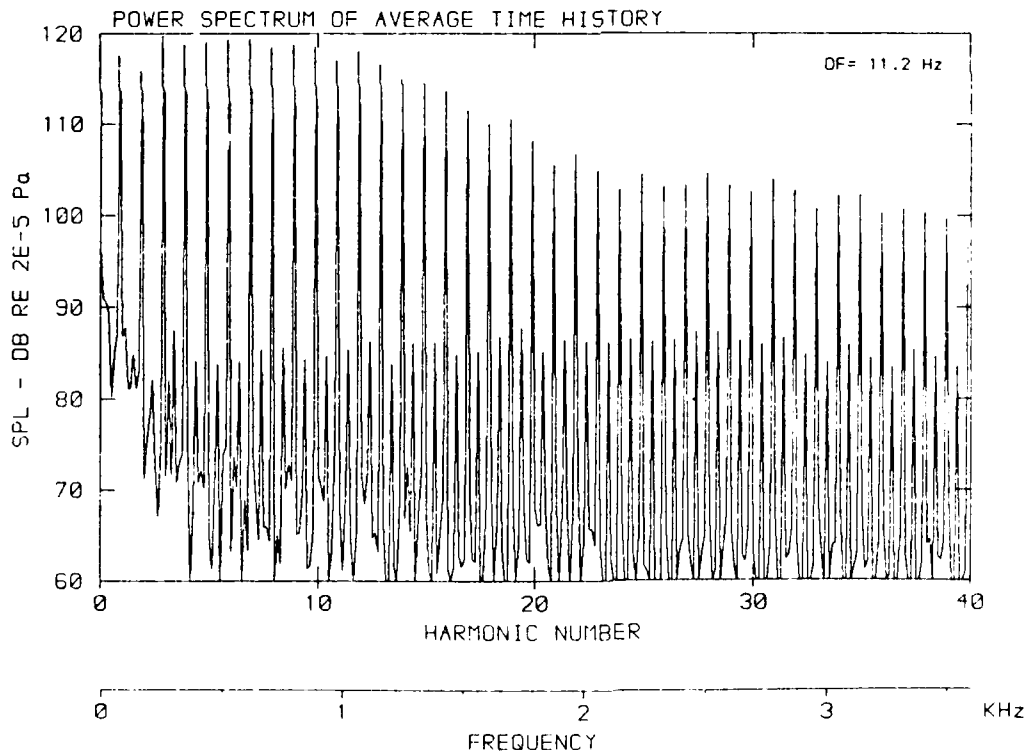
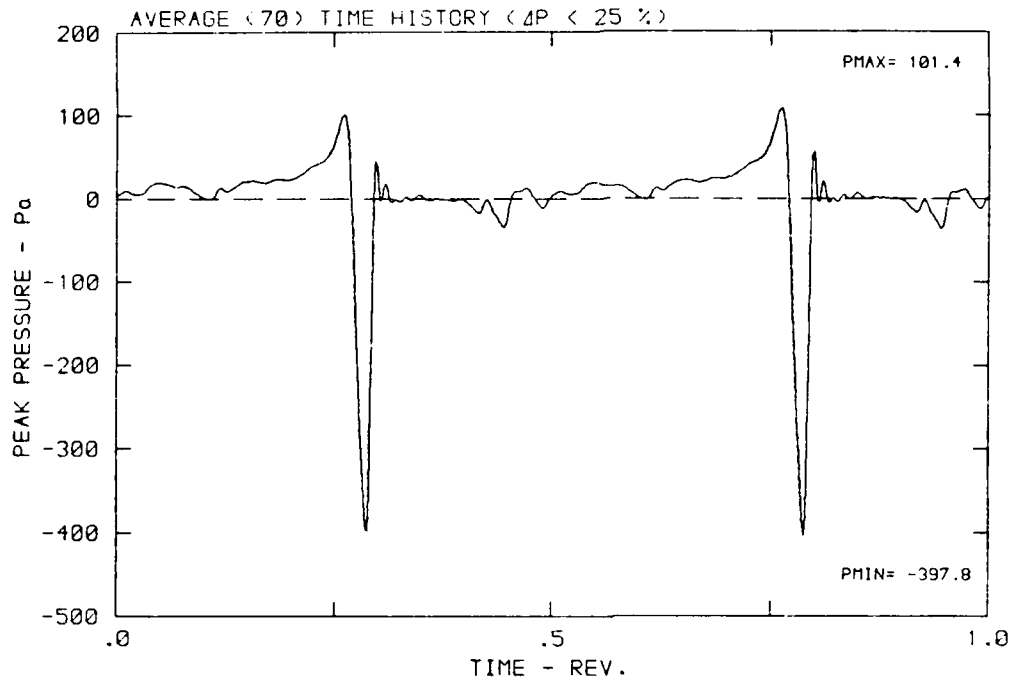
DATA POINT: IC-3 RUN: 43 MP: 4

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



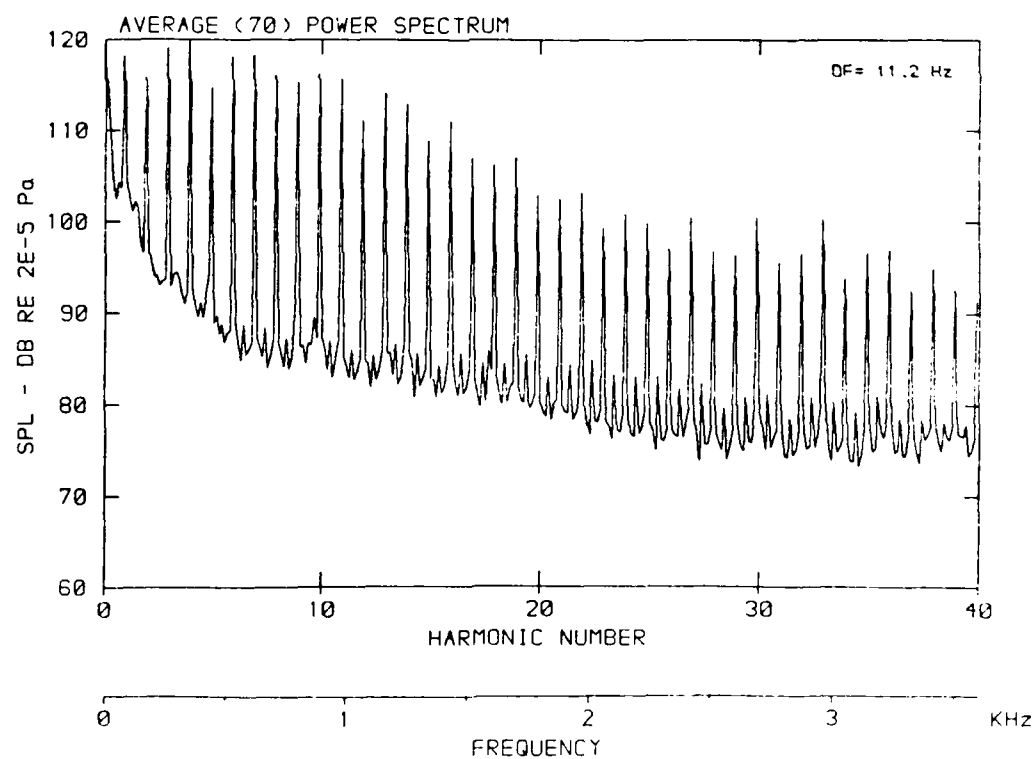
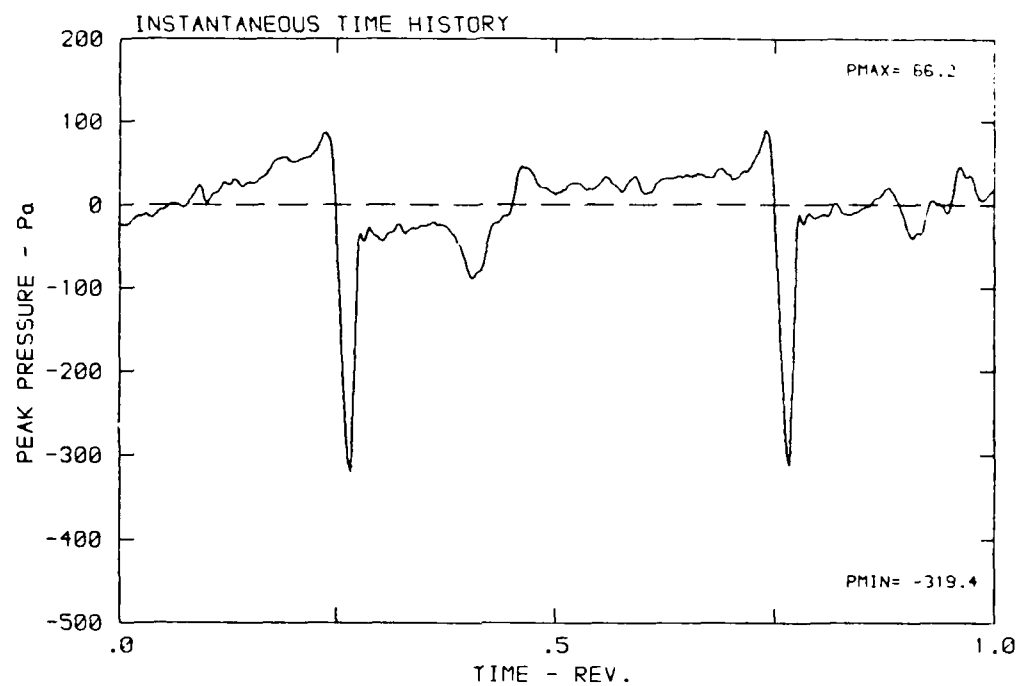
DATA POINT: IC-3 RUN: 43 MP: 4

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



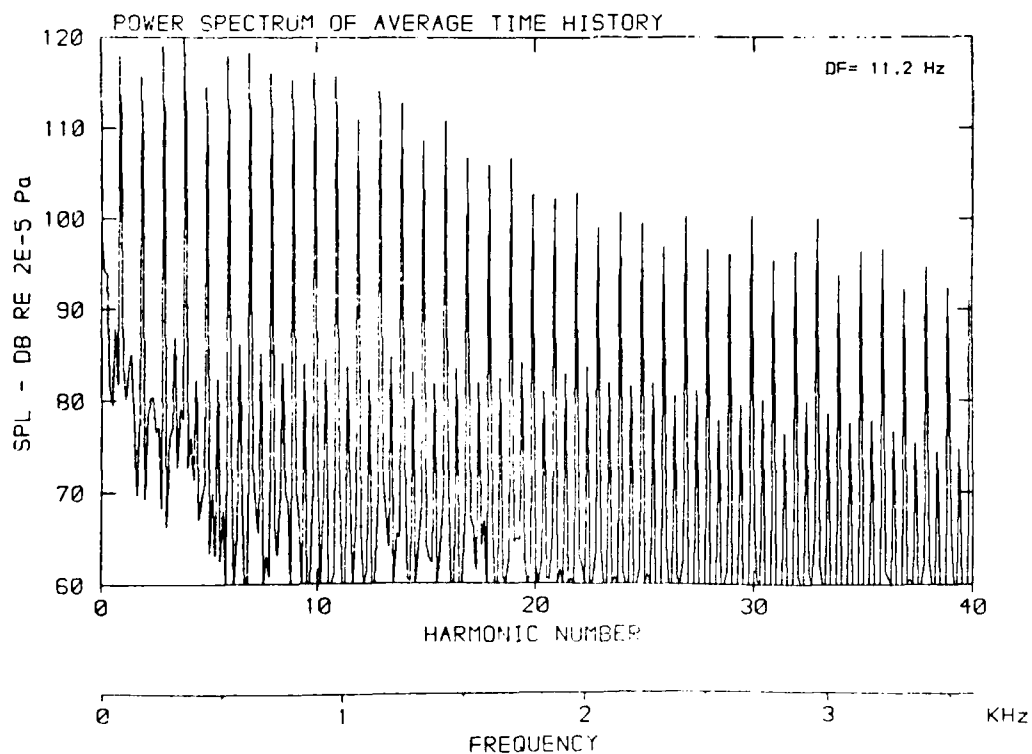
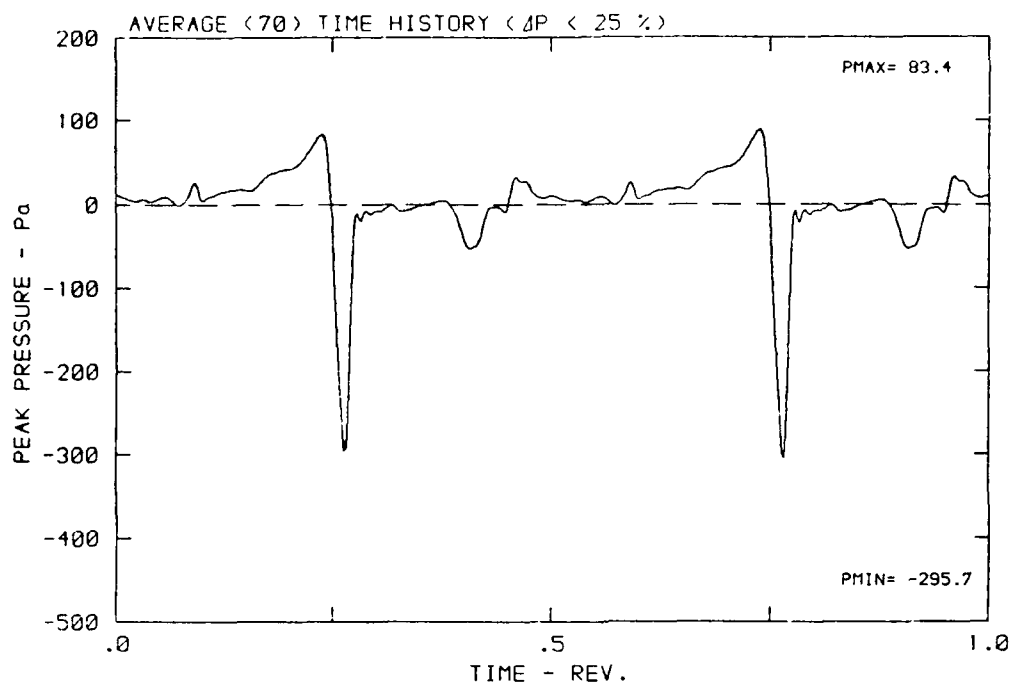
DATA POINT: IC-3 RUN: 43 MP: 5

β : 20.7° MH: .8381 n: 2700 rpm v/u : .270 ϕ : .0° T : 279.3 K



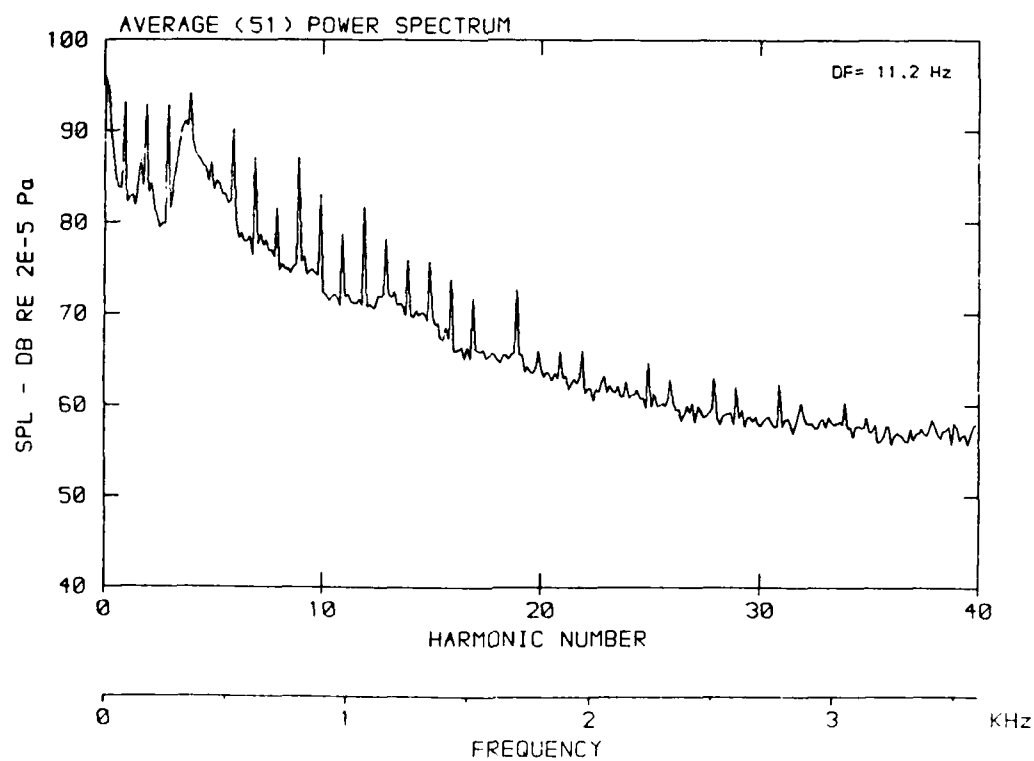
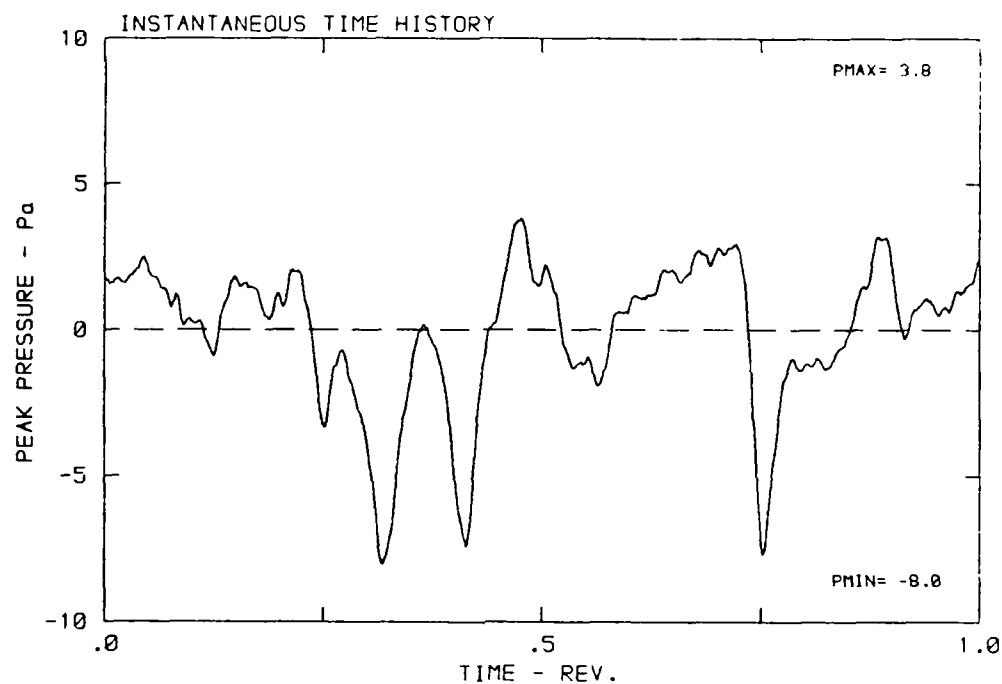
DATA POINT: IC-3 RUN: 43 MP: 5

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



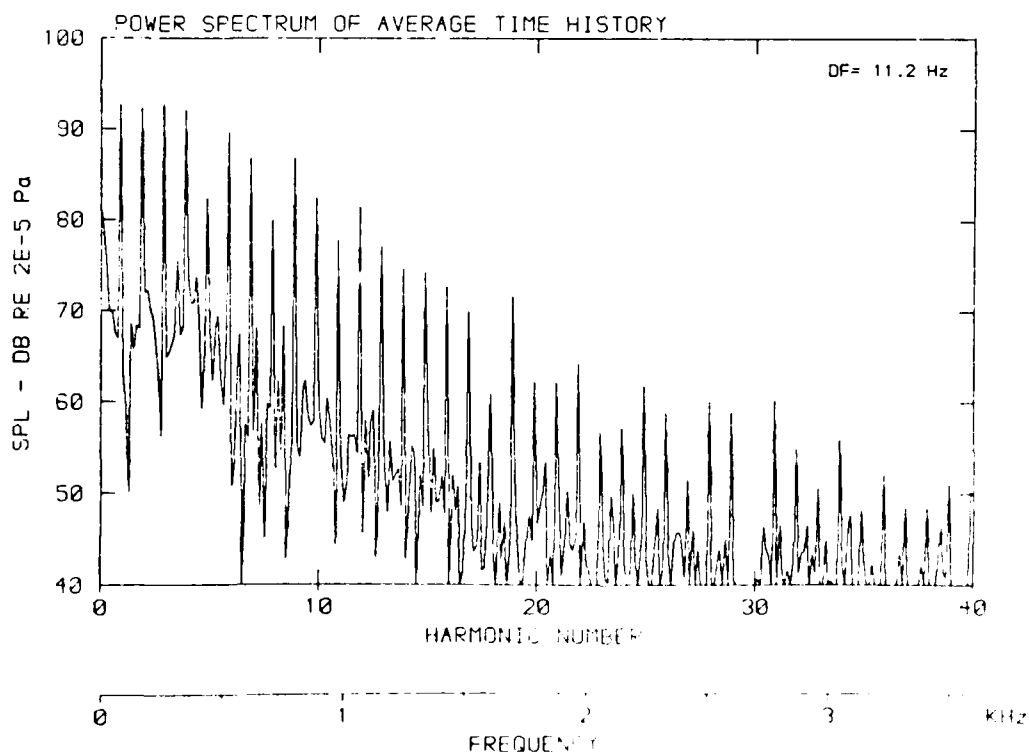
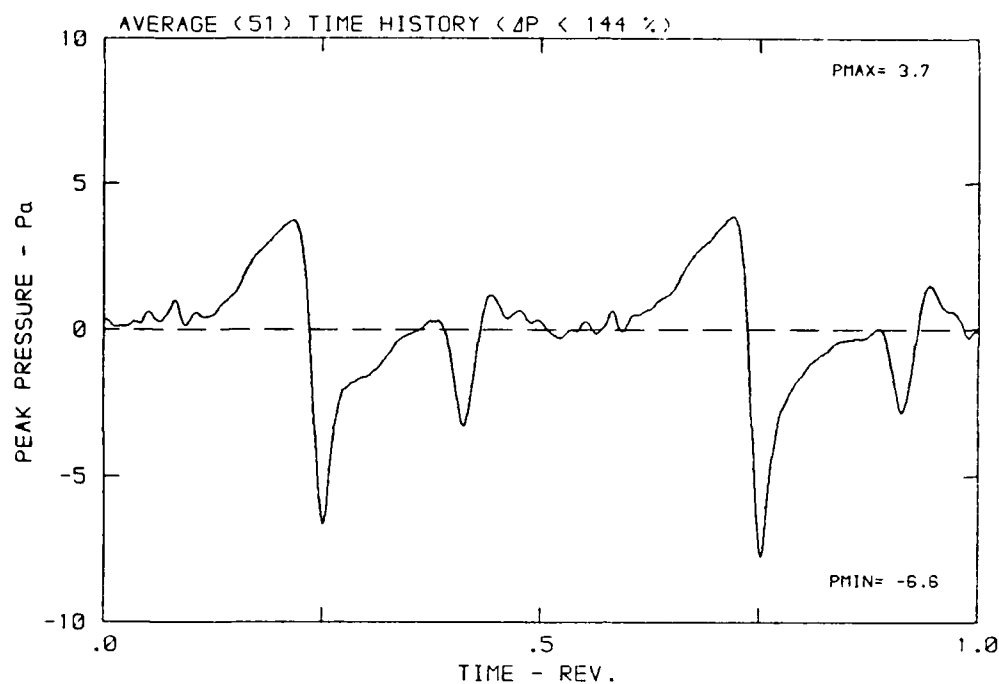
DATA POINT: IC-3 RUN: 43 MP: 6

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



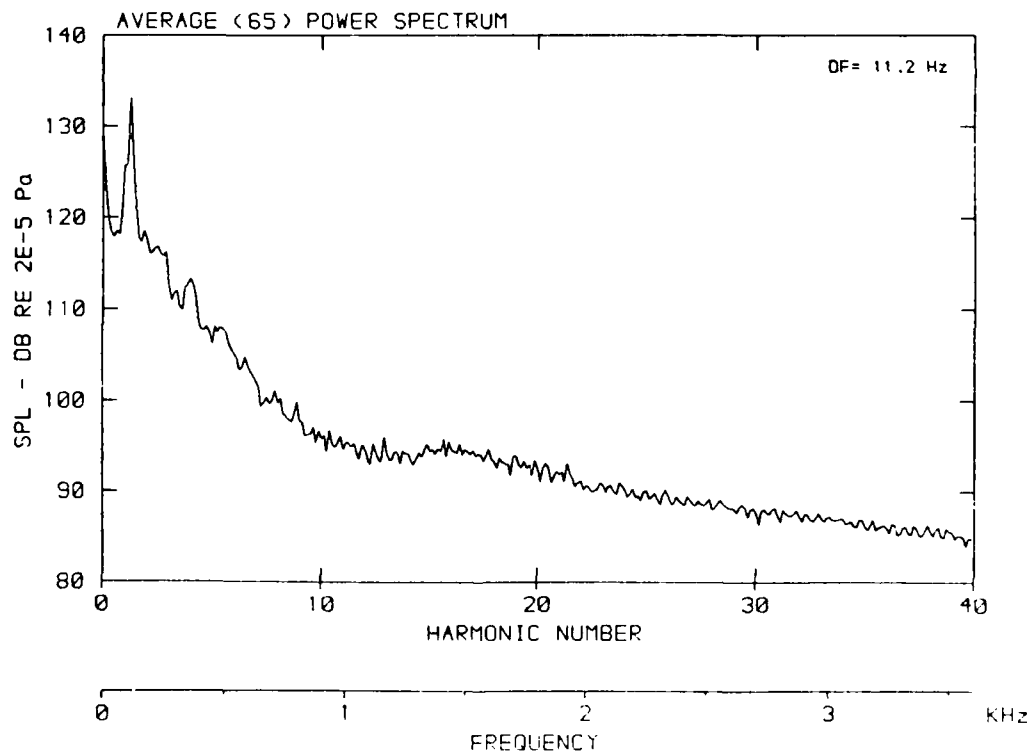
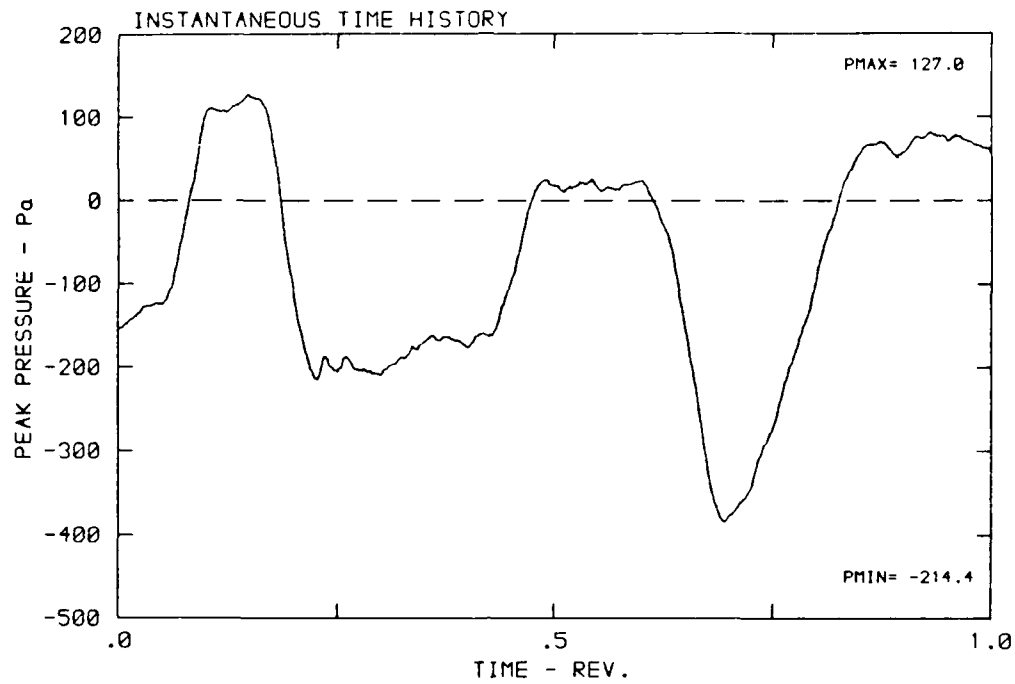
DATA POINT: IC-3 RUN: 43 MP: 6

β : 20.7° MH: .8881 n: 2700 rpm v/u : .270 ϕ : .0° T: 279.3 K



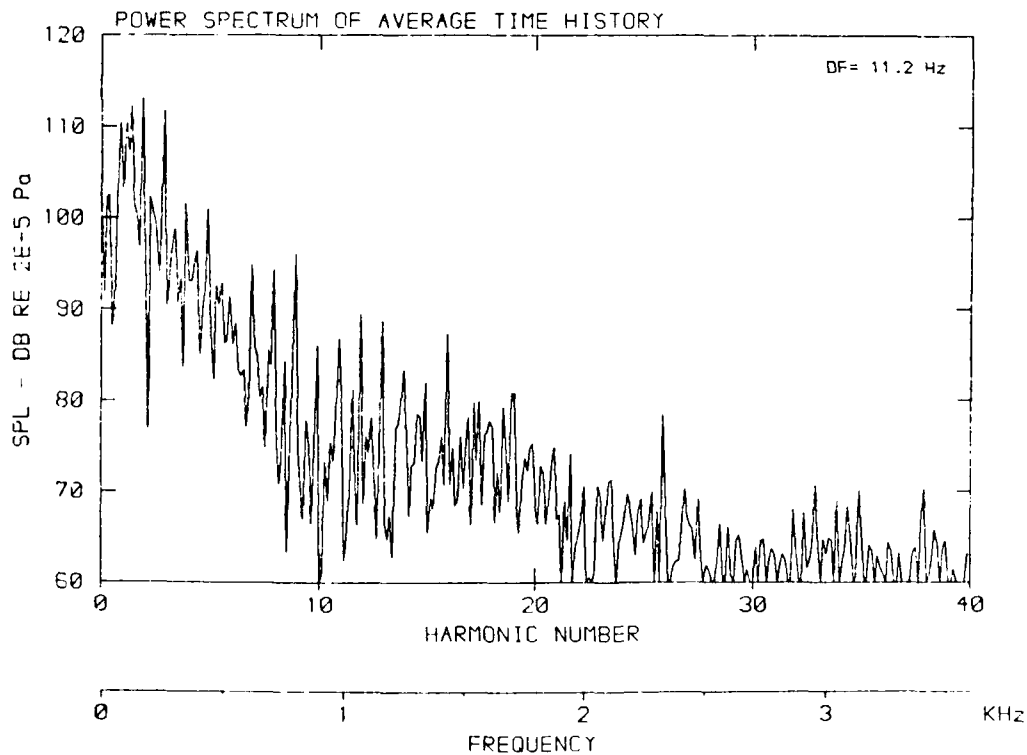
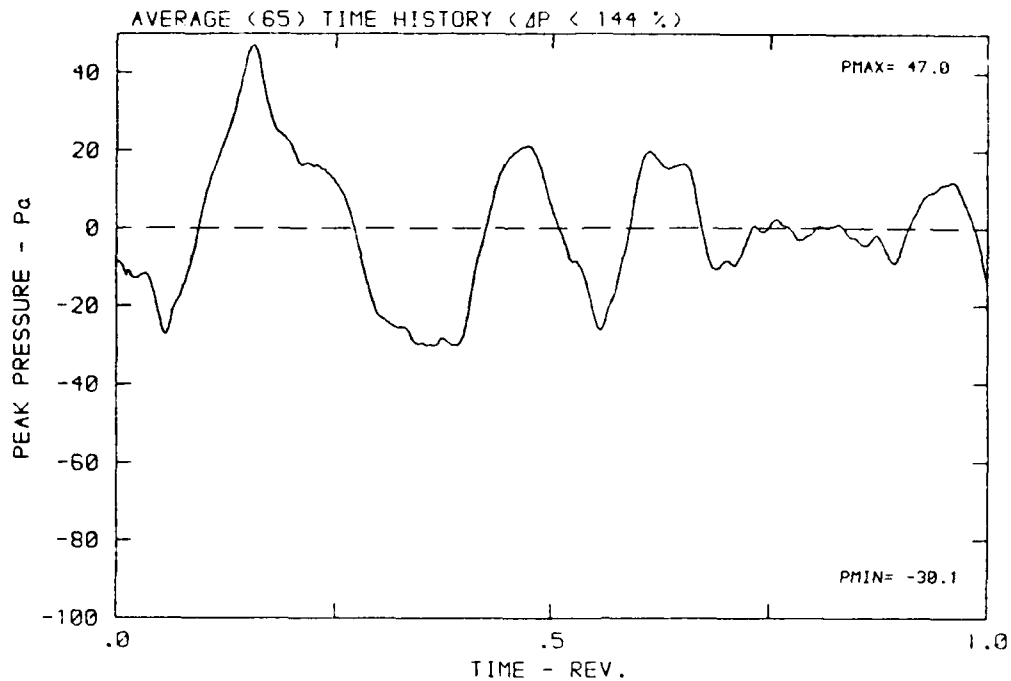
DATA POINT: IC-3 RUN: 43 MP: 7

β : 20.7° MH: .8881 n: 2700 rpm v/u : .270 ϕ : .0° T: 279.3 K



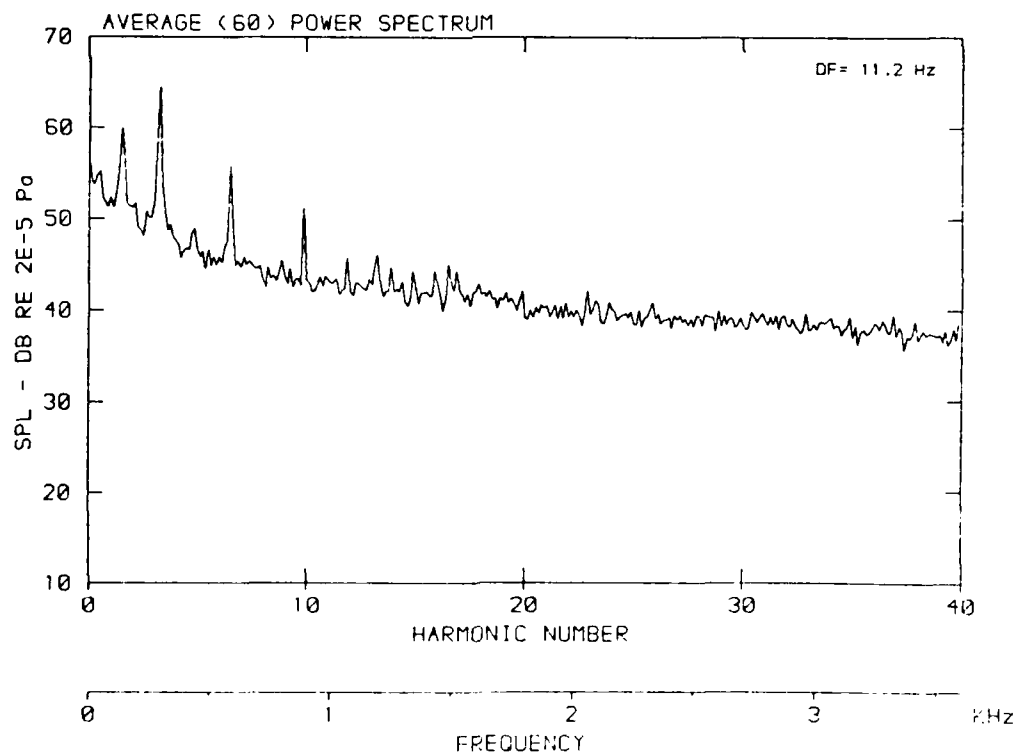
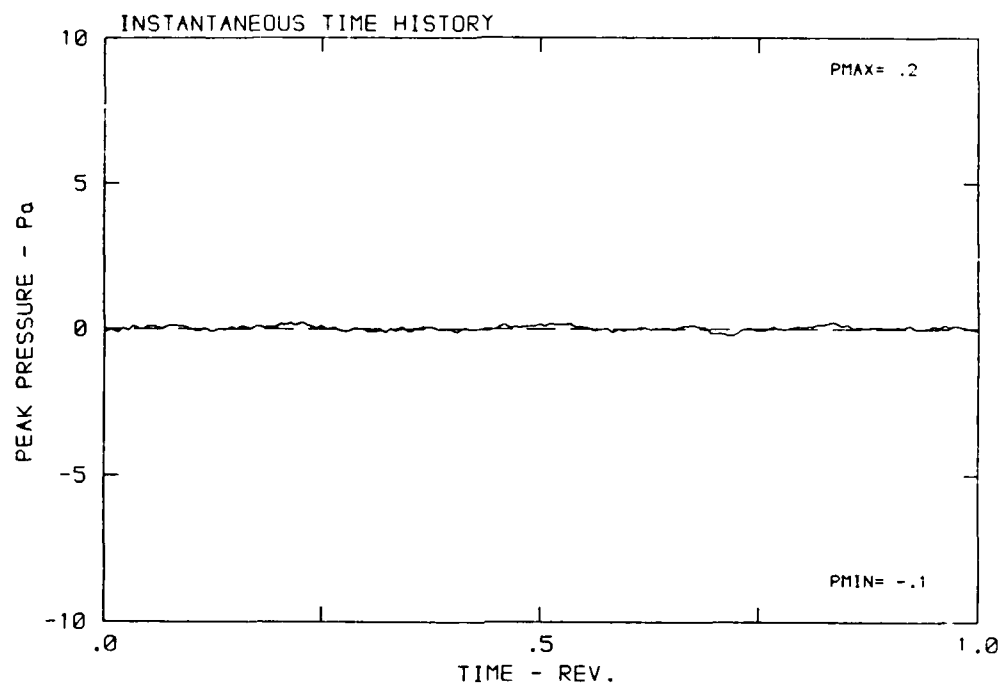
DATA POINT: IC-3 RUN: 43 MP: 7

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



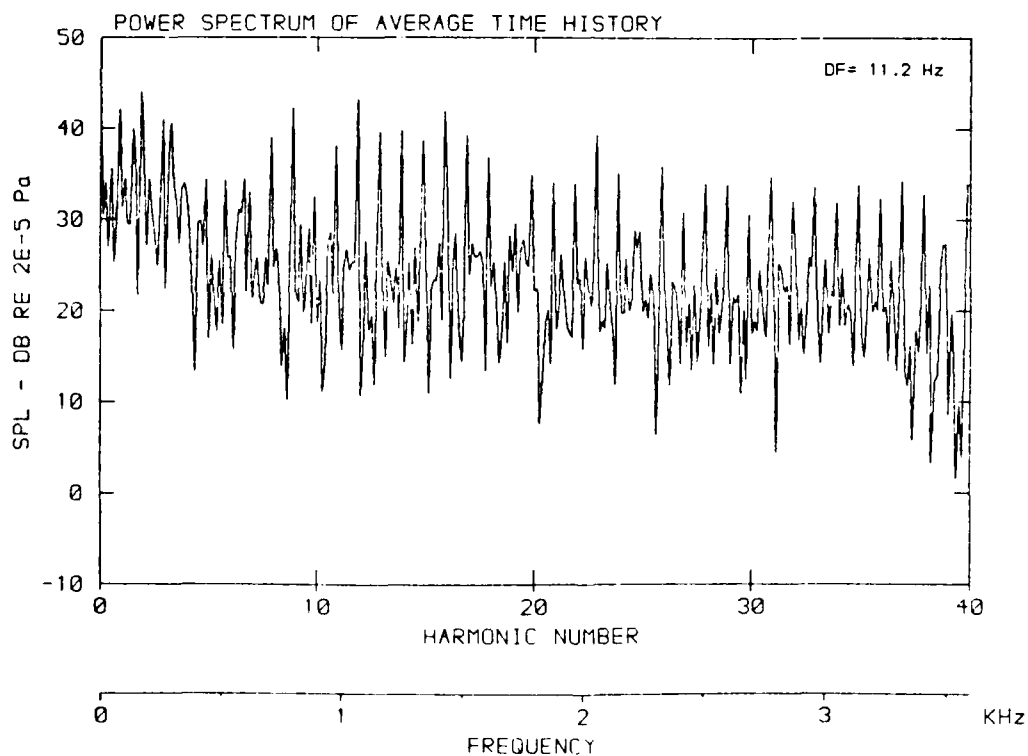
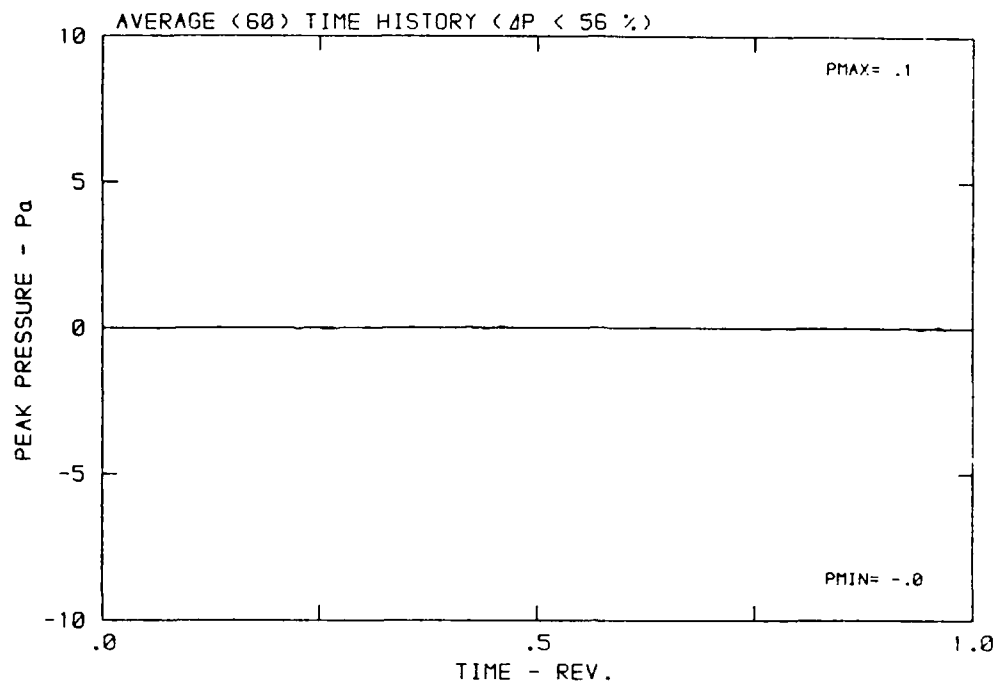
DATA POINT: IC-3 RUN: 43 MP: 9

β : 20.7° MH: .8881 n: 2700 rpm v/u: .270 ϕ : .0° T: 279.3 K



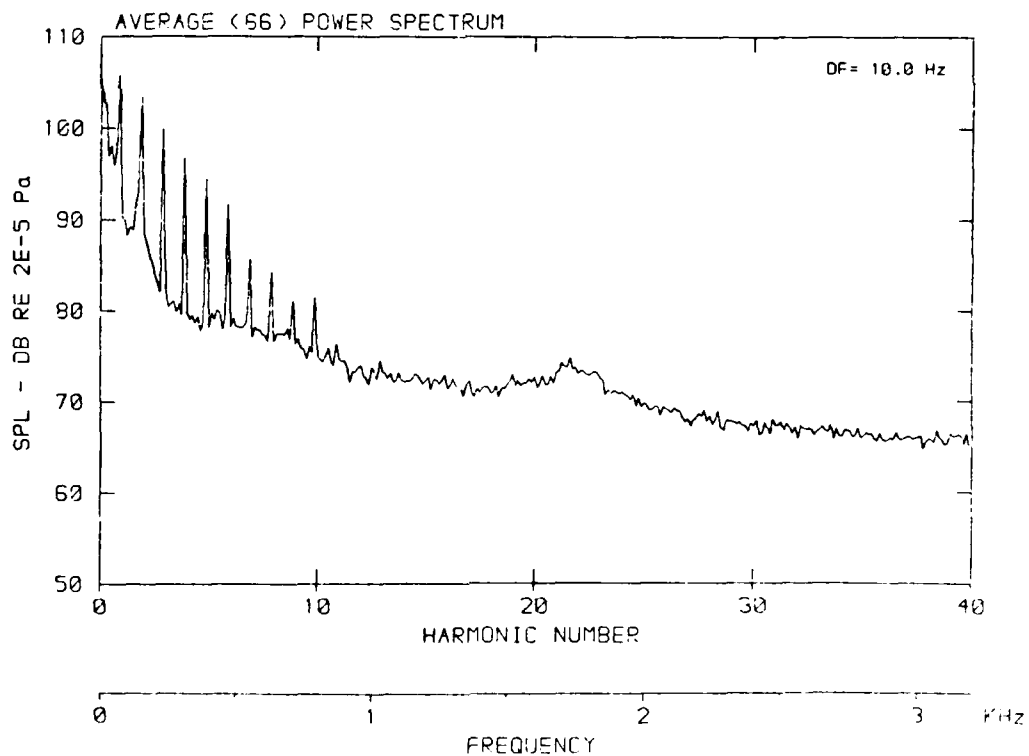
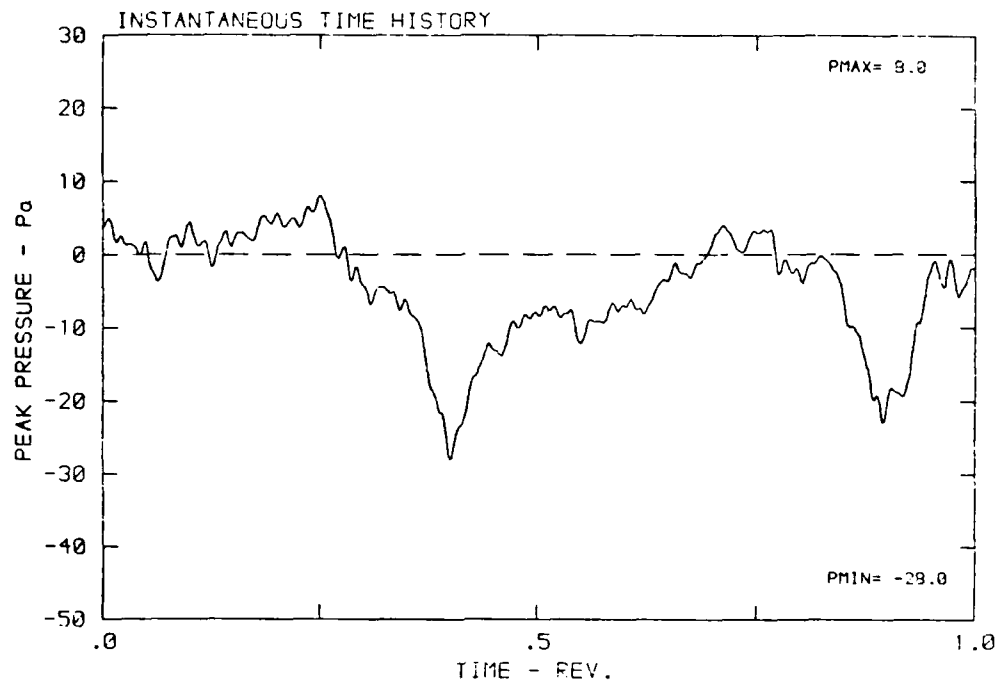
DATA POINT: IC-3 RUN: 43 MP: 9

β : 20.7° MH: .8881 n: 2700 rpm v/u : .270 ϕ : .0° T: 279.3 K



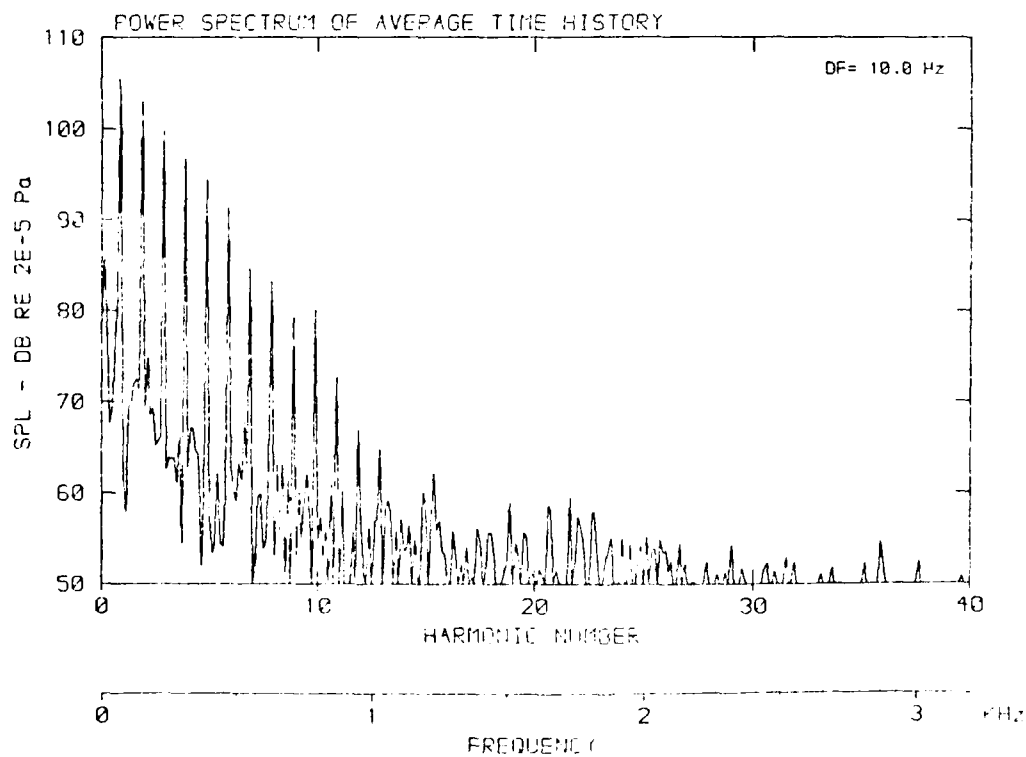
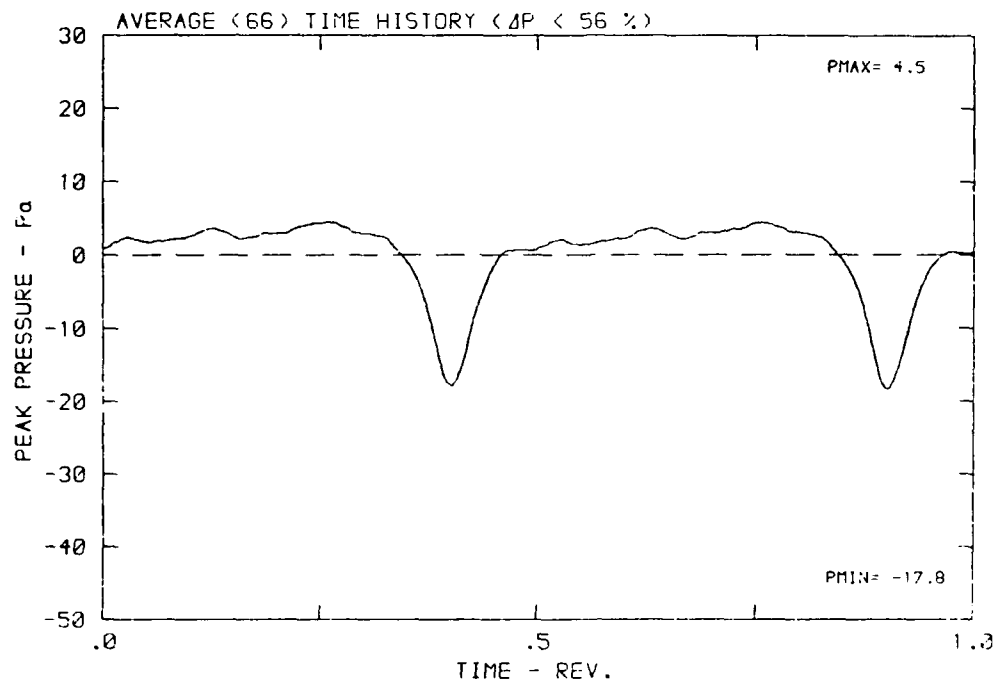
DATA POINT: JC-1 RUN: 193 MP: 1

β : 21.6° MH: .7710 n: 2400 rpm v_{tu} : .303 ϕ : .0° T: 297.9 K

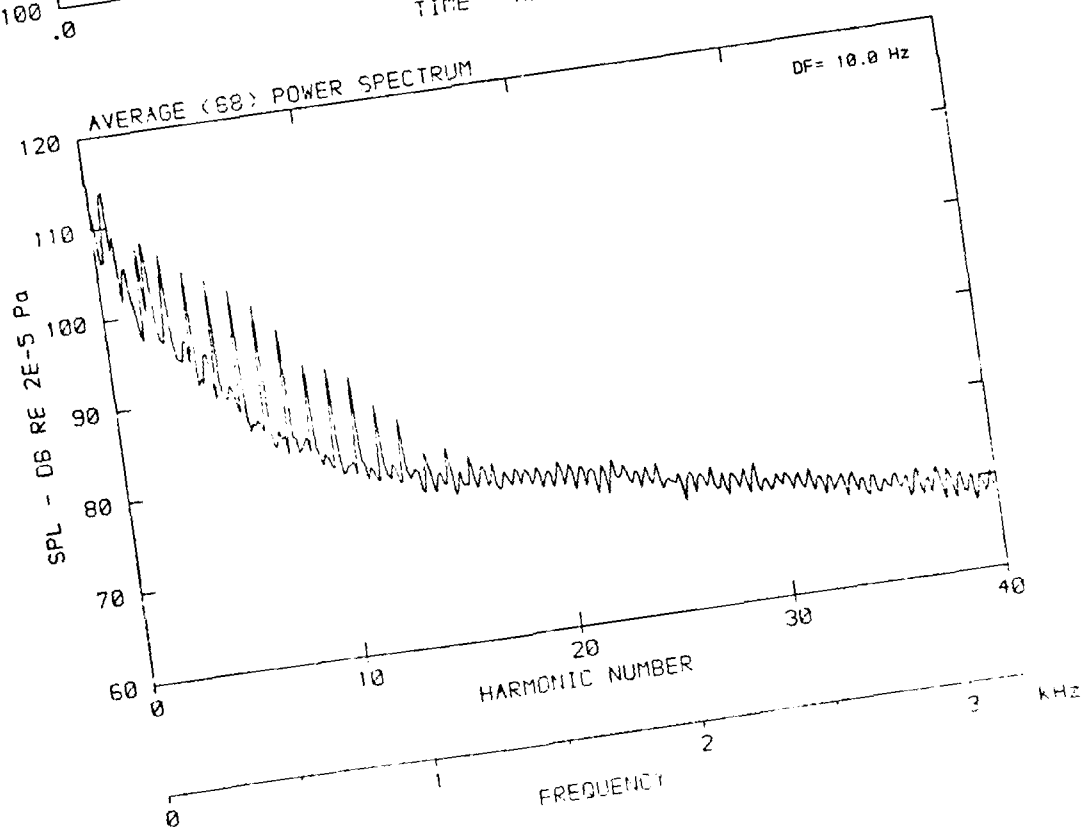
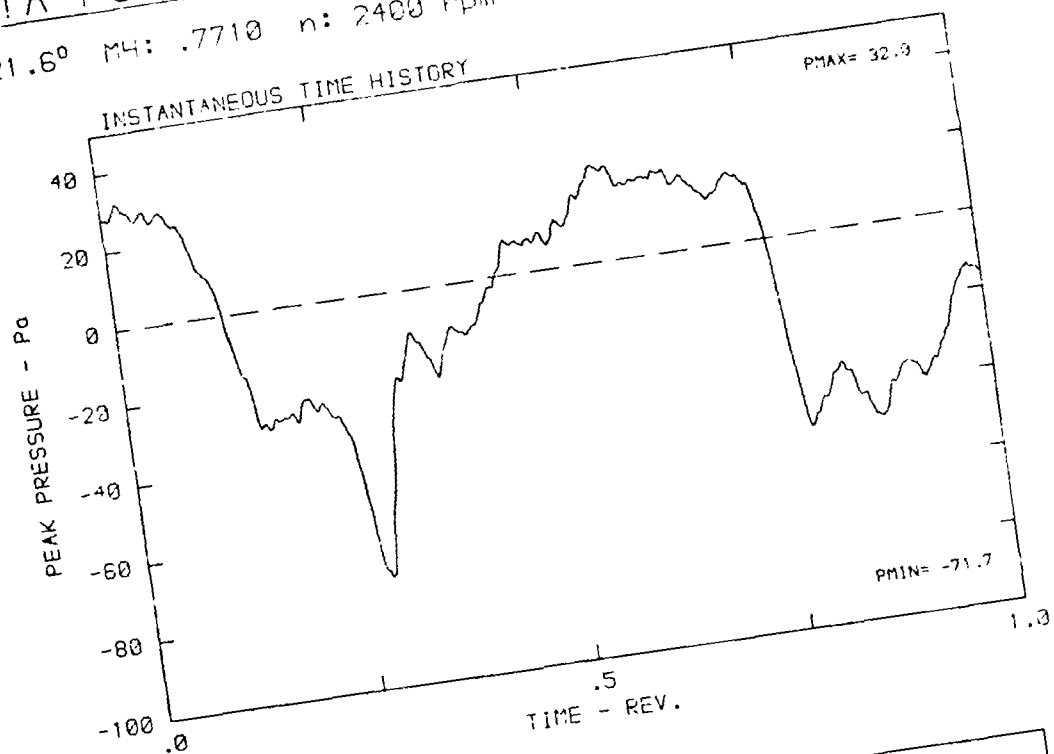


DATA POINT: JC-1 RUN: 193 MP: 1

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K

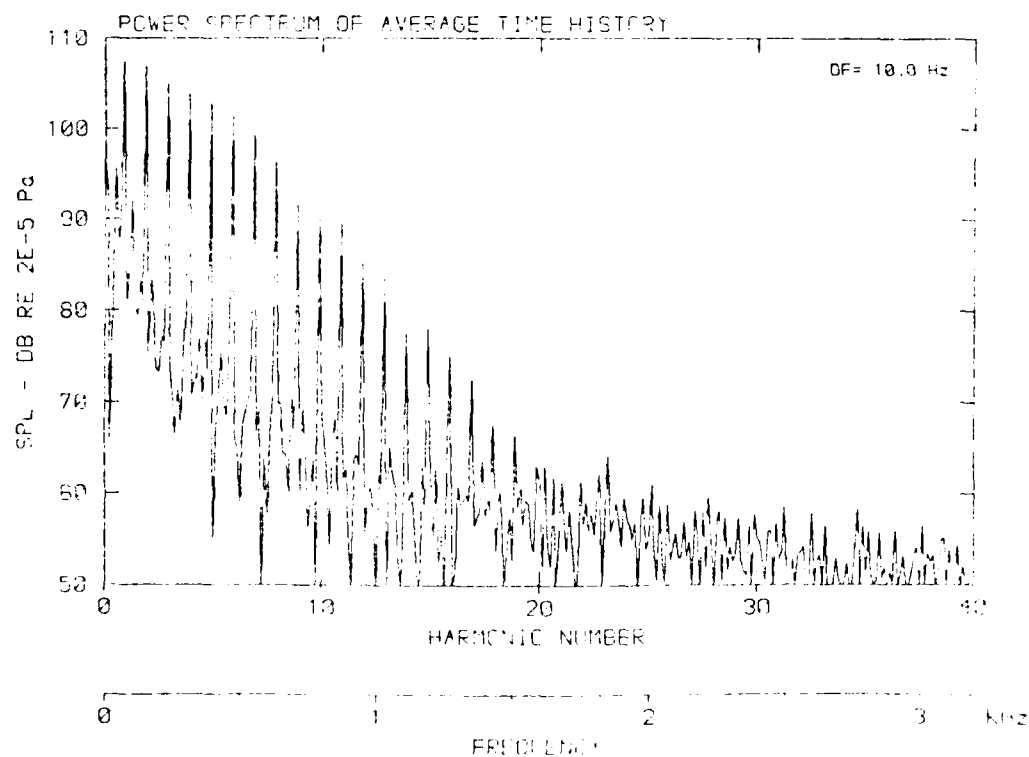
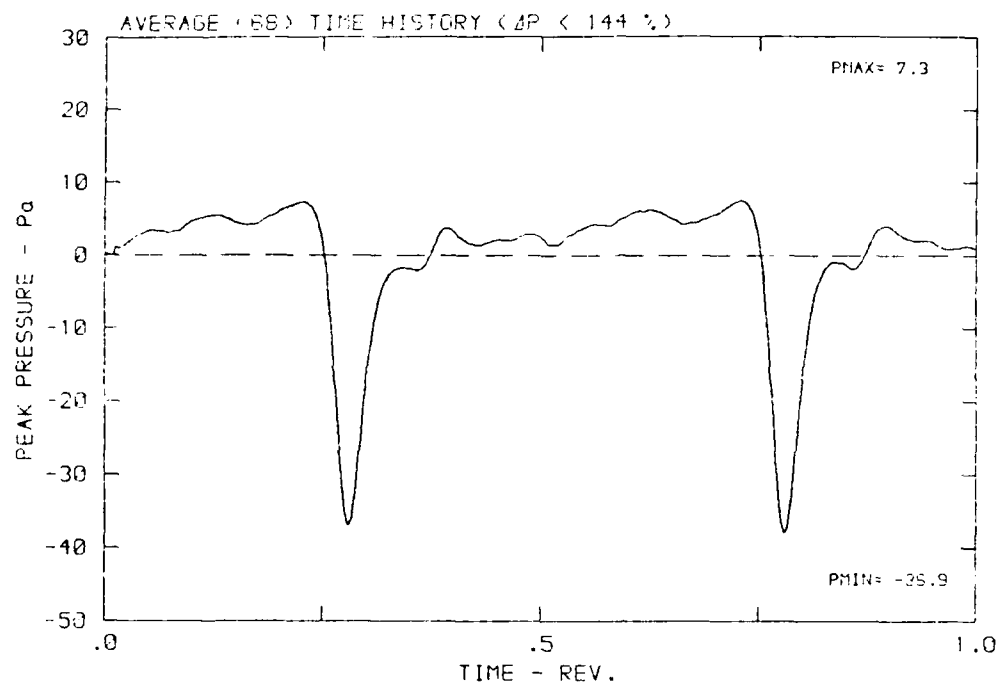


DATA POINT: JC-1 RUN: 193 MP: 2
 β : 21.6° MH: .7710 n: 2400 rpm v/u: .303 ϕ : .0° T: 297.9 K



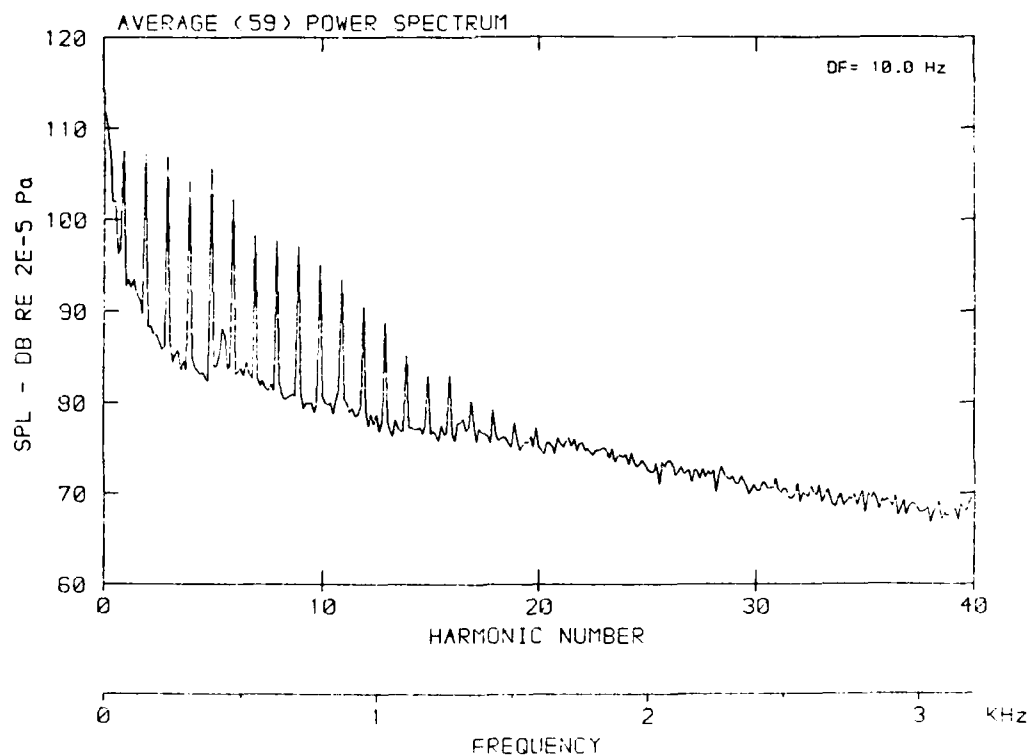
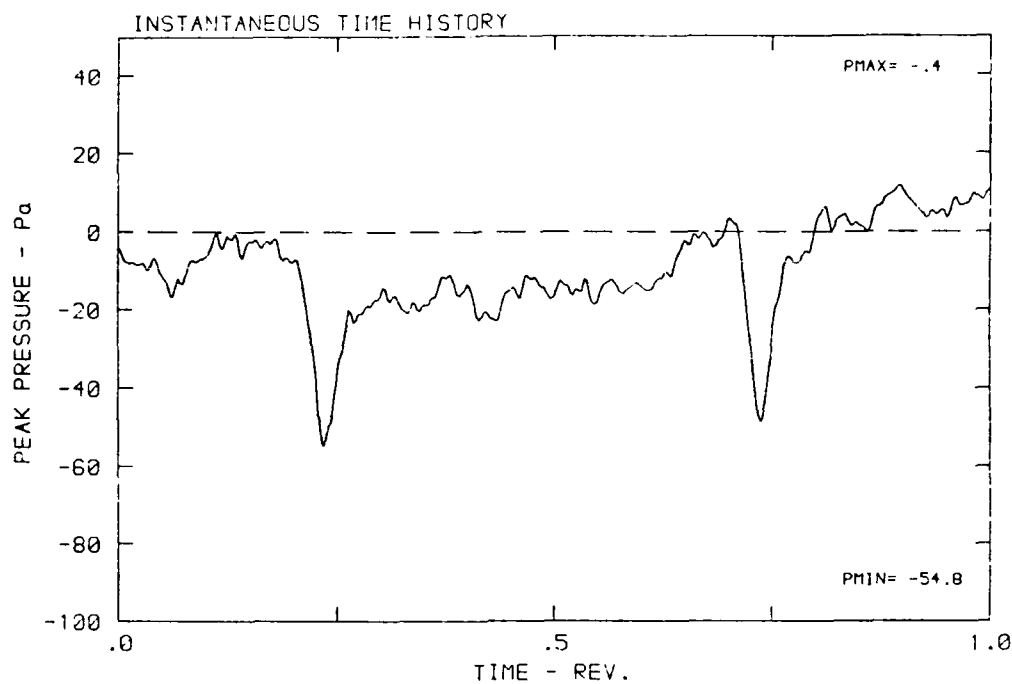
DATA POINT: JC-1 RUN: 193 MP: 2

β : 21.6° MH: .7710 n: 2400 rpm v/u: .303 ϕ : .0° T: 297.9 K



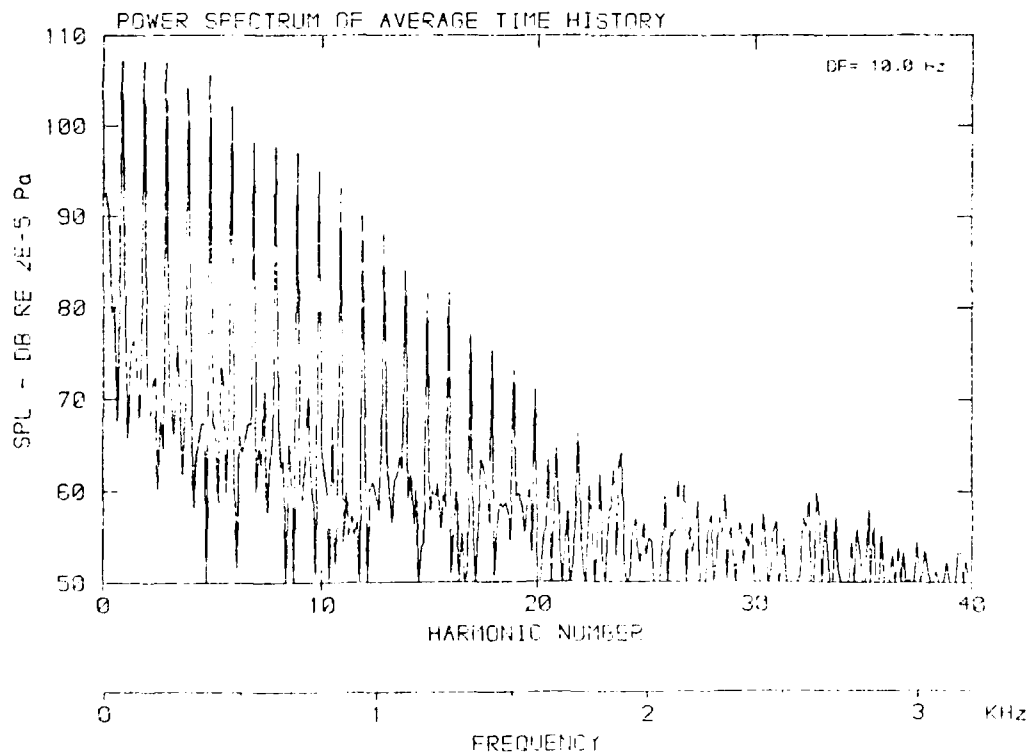
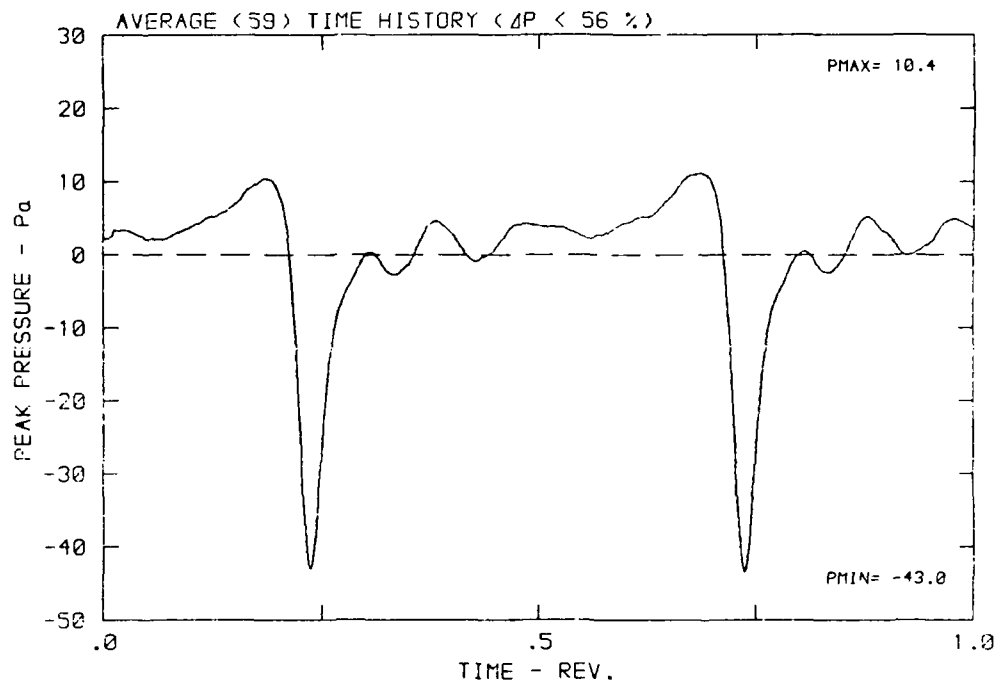
DATA POINT: JC-1 RUN: 193 MF: 3

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



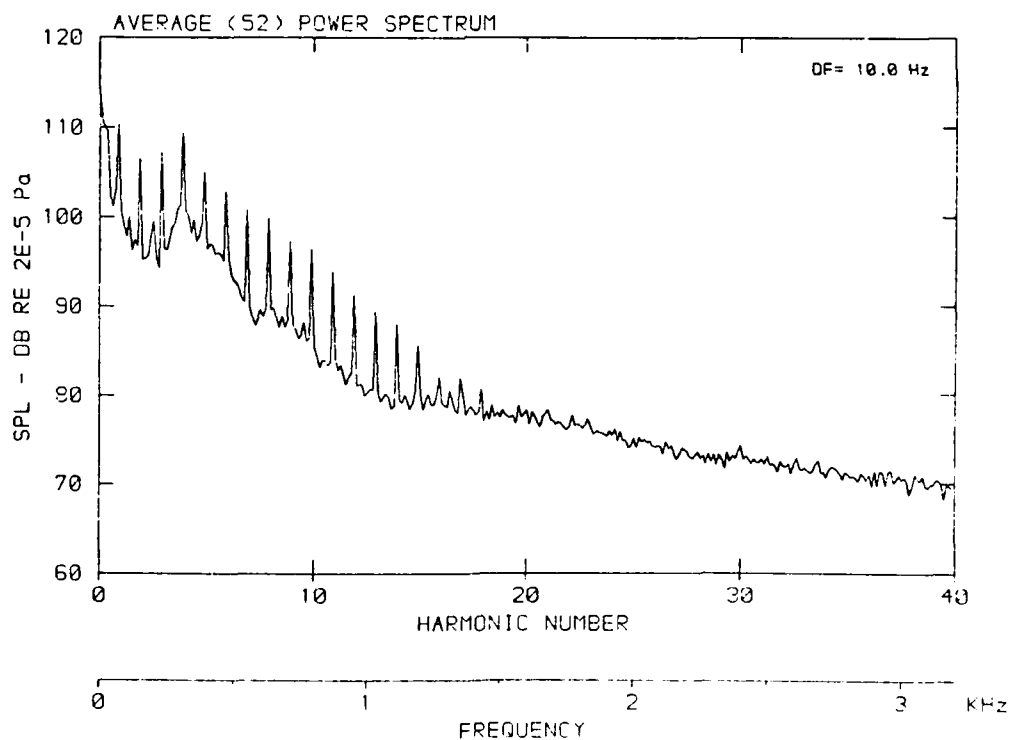
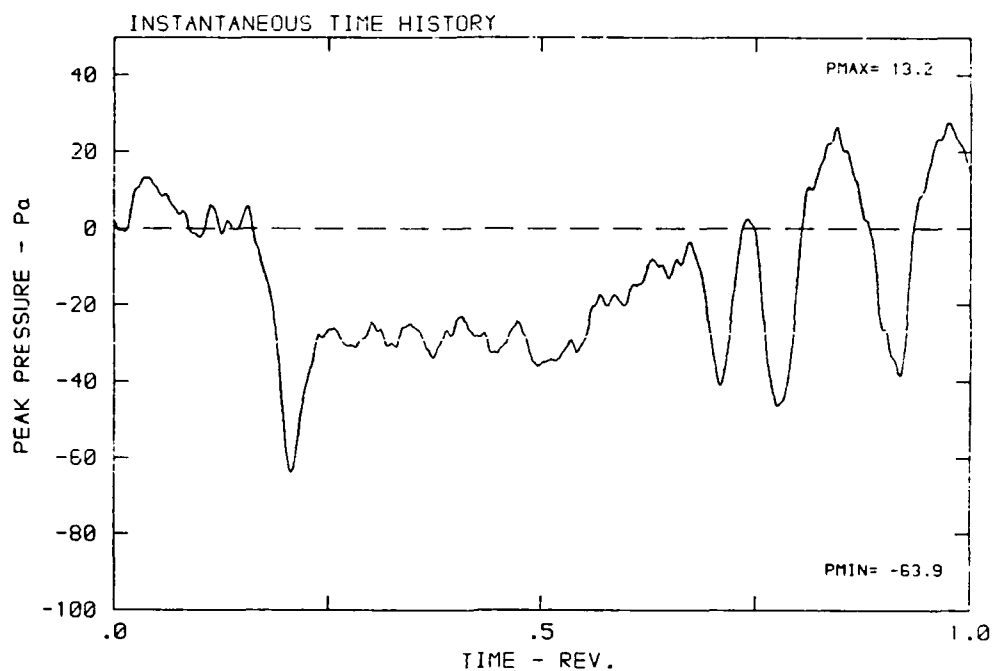
DATA POINT: JC-1 RUN: 193 MP: 3

β : 21.6° MH: .7710 n: 2400 rpm v/u: .303 ϕ : .0° T: 297.9 K



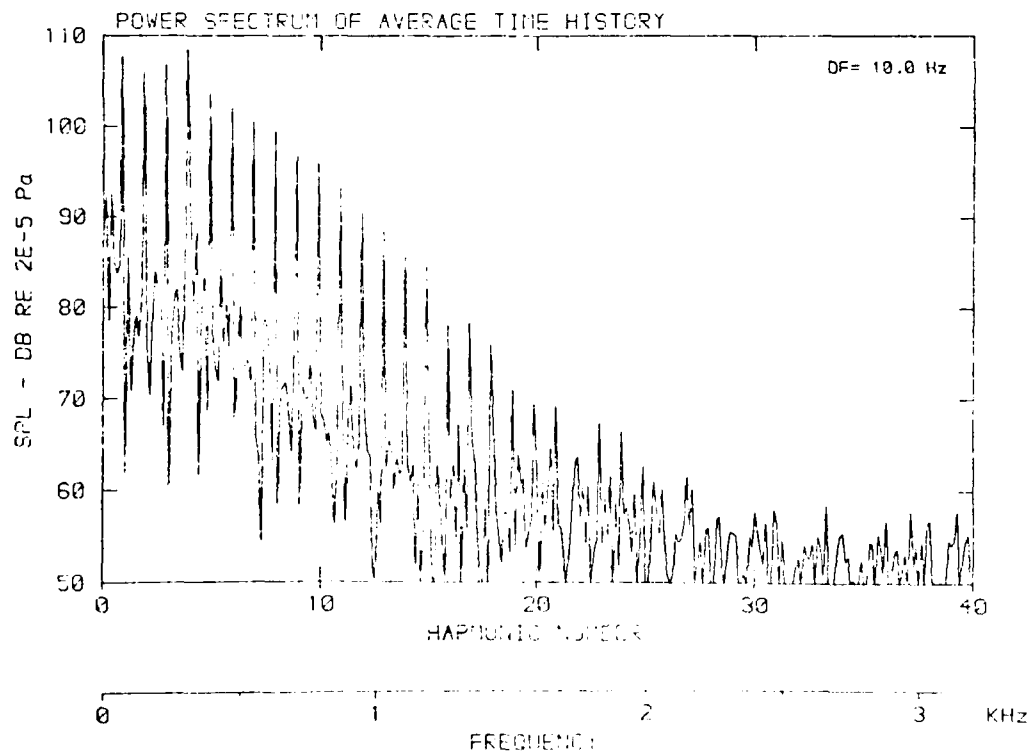
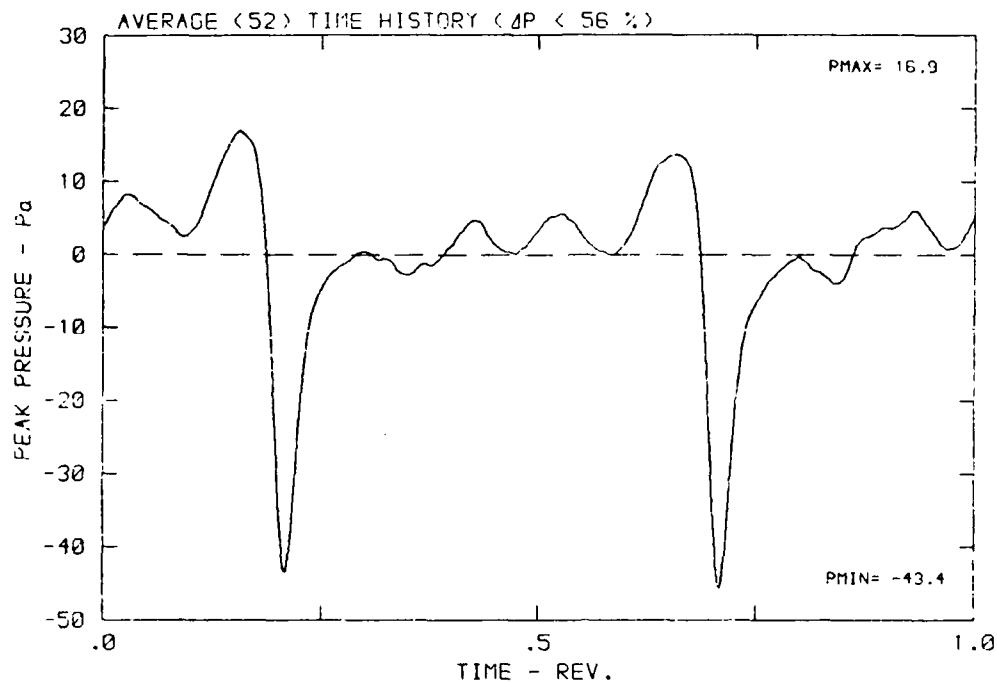
DATA POINT: JC-1 RUN: 193 MP: 4

β : 21.6° NH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



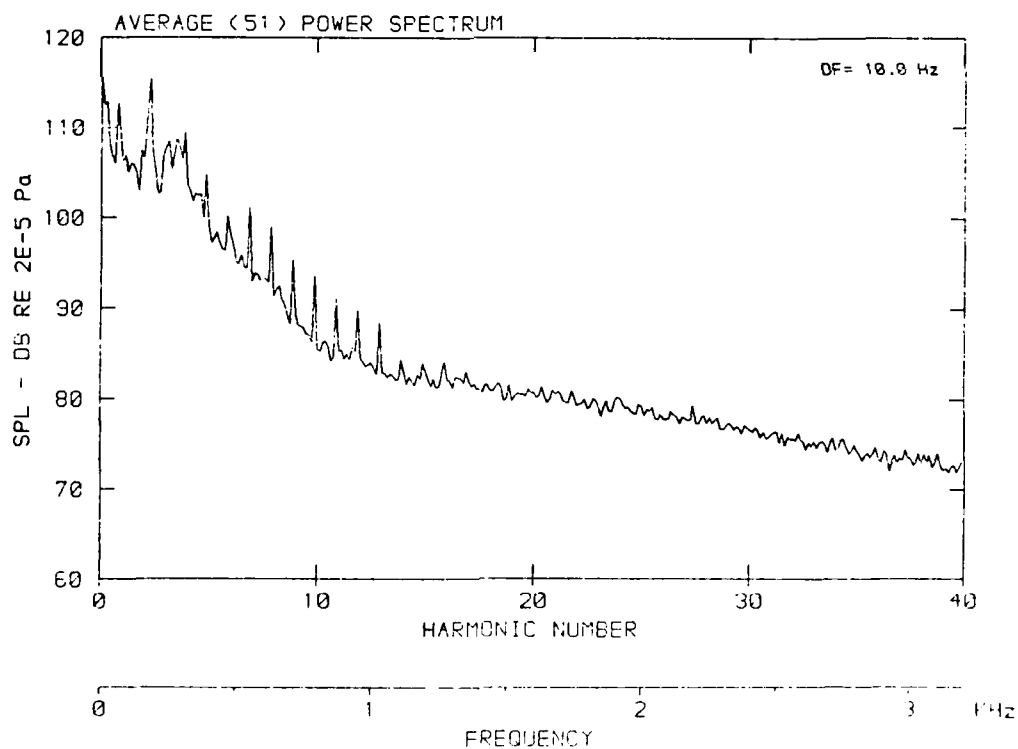
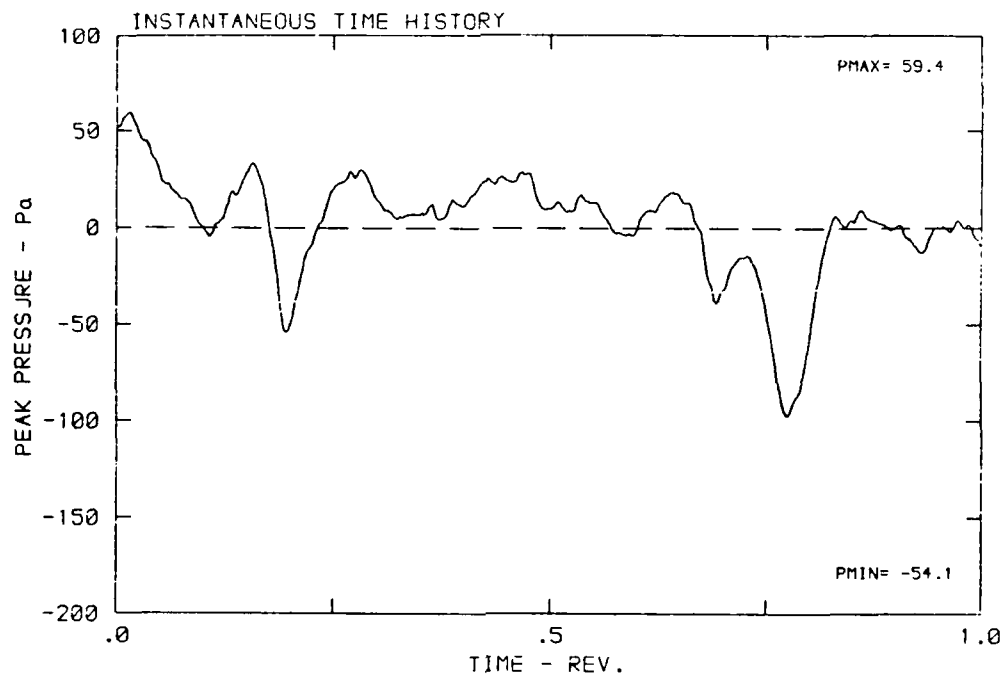
DATA POINT: JC-1 RUN: 193 MP: 4

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



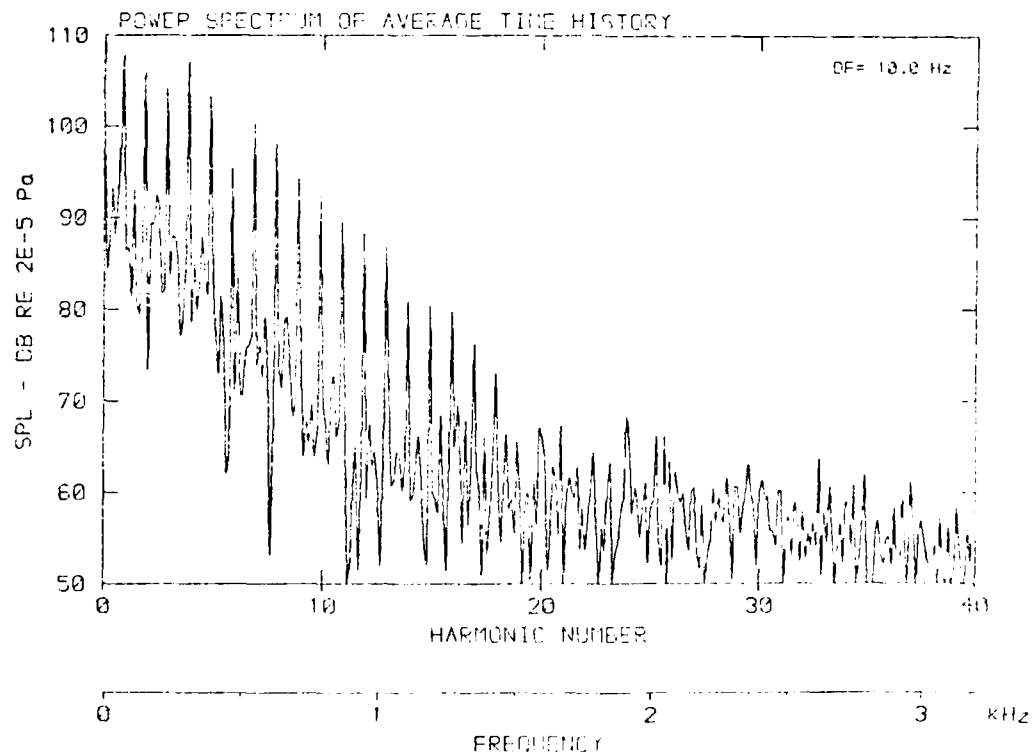
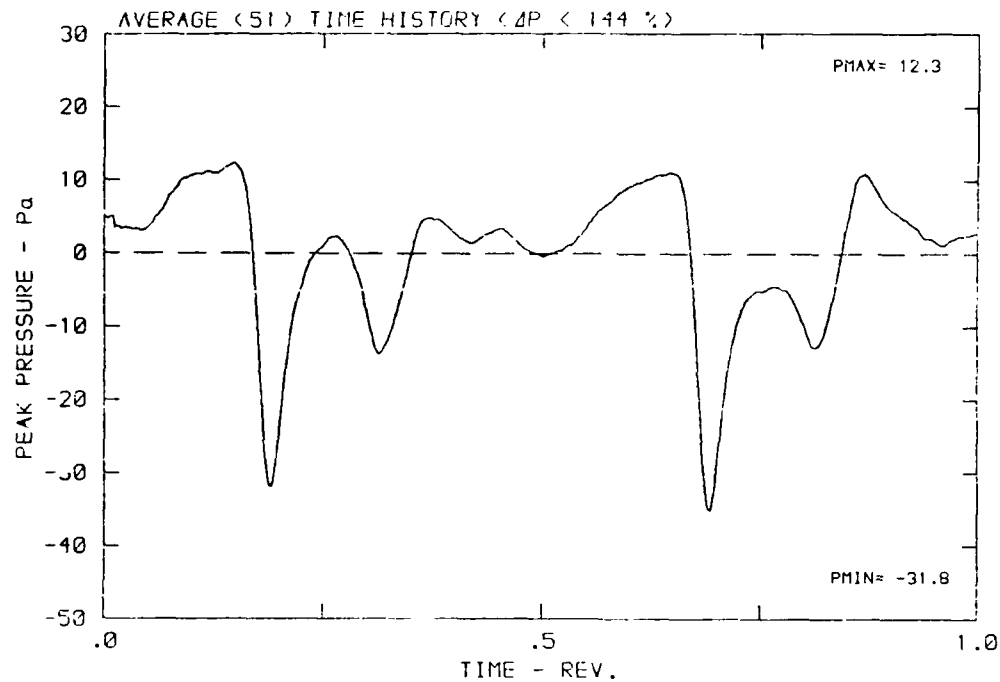
DATA POINT: JC-1 RUN: 193 MP: 5

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



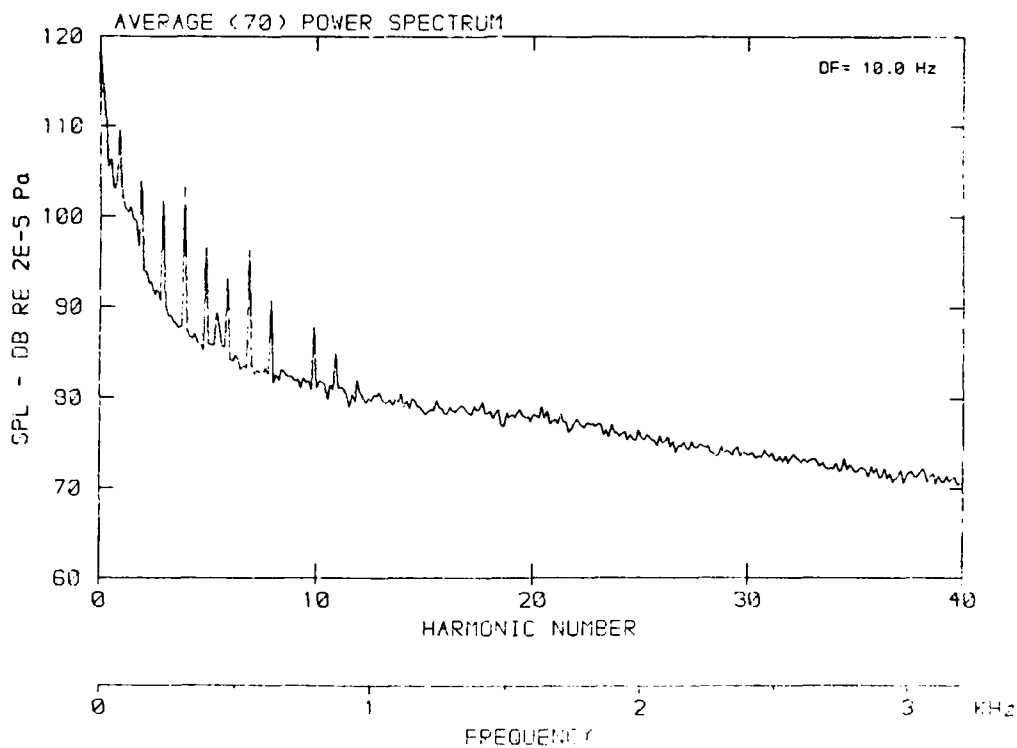
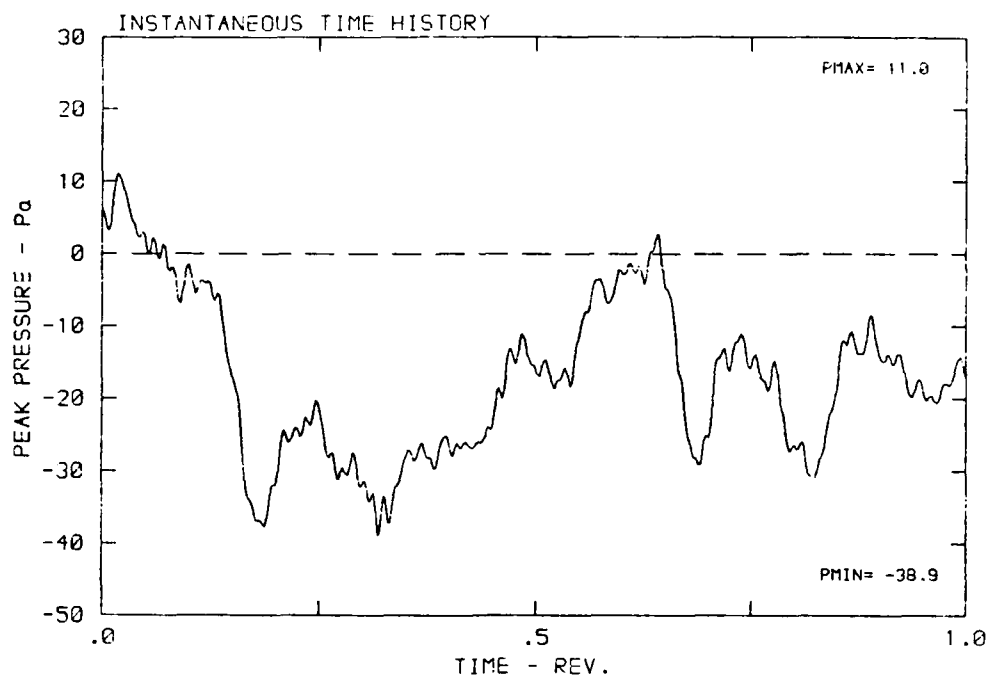
DATA POINT: JC-1 RUN: 193 MP: 5

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



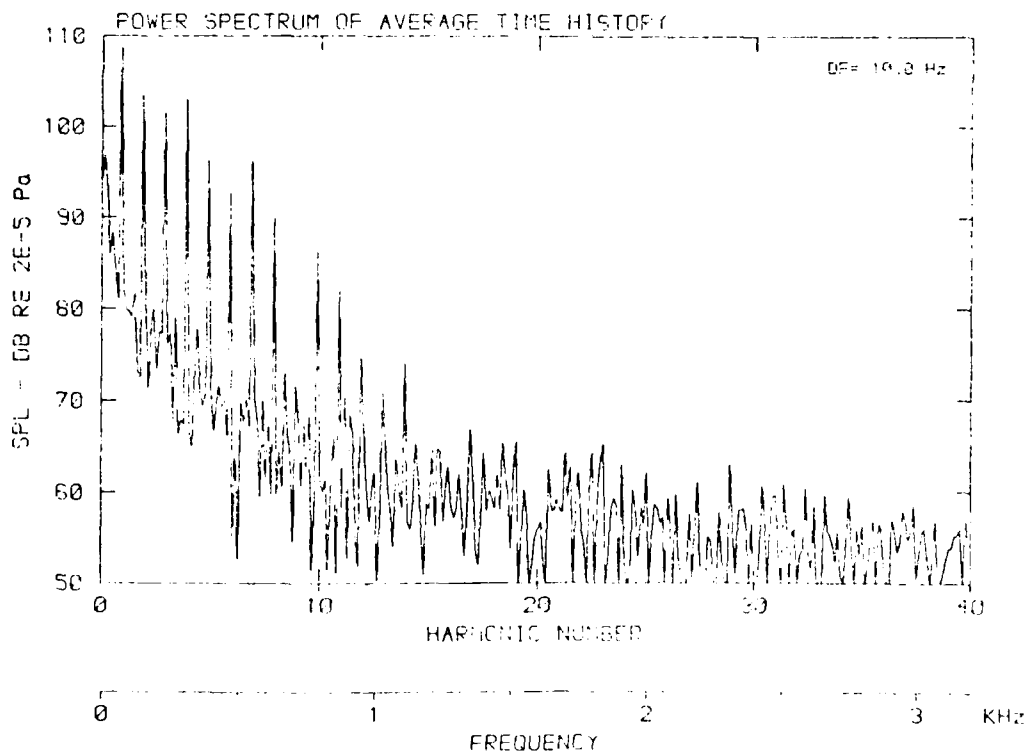
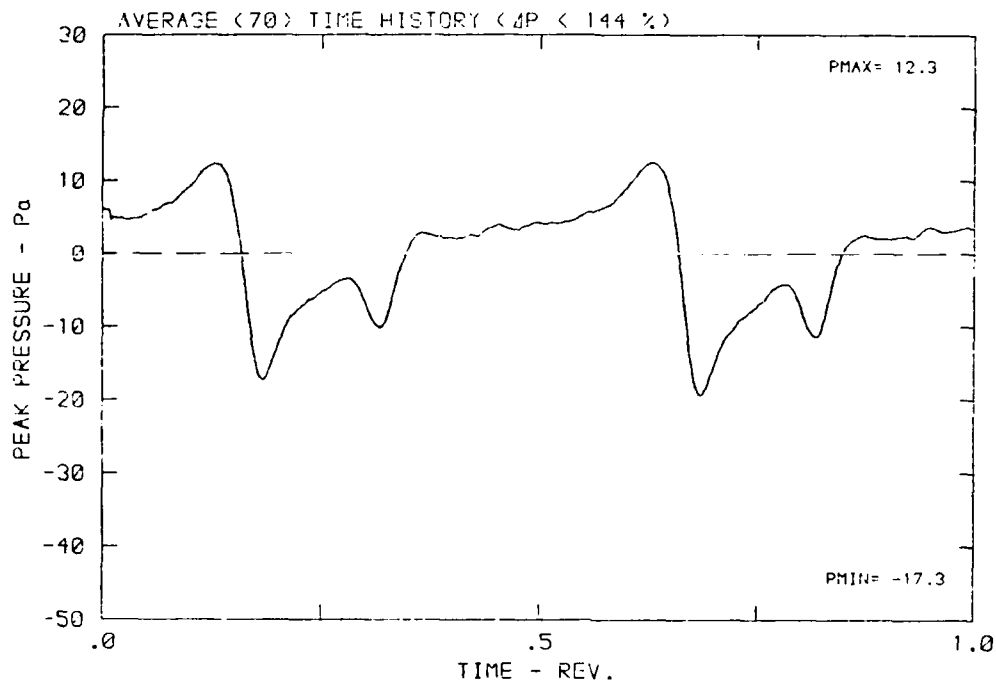
DATA POINT: JC-1 RUN: 193 MP: 6

β : 21.6° MH: .7710 n: 2400 rpm v/u: .303 ϕ : .0° T: 297.9 K



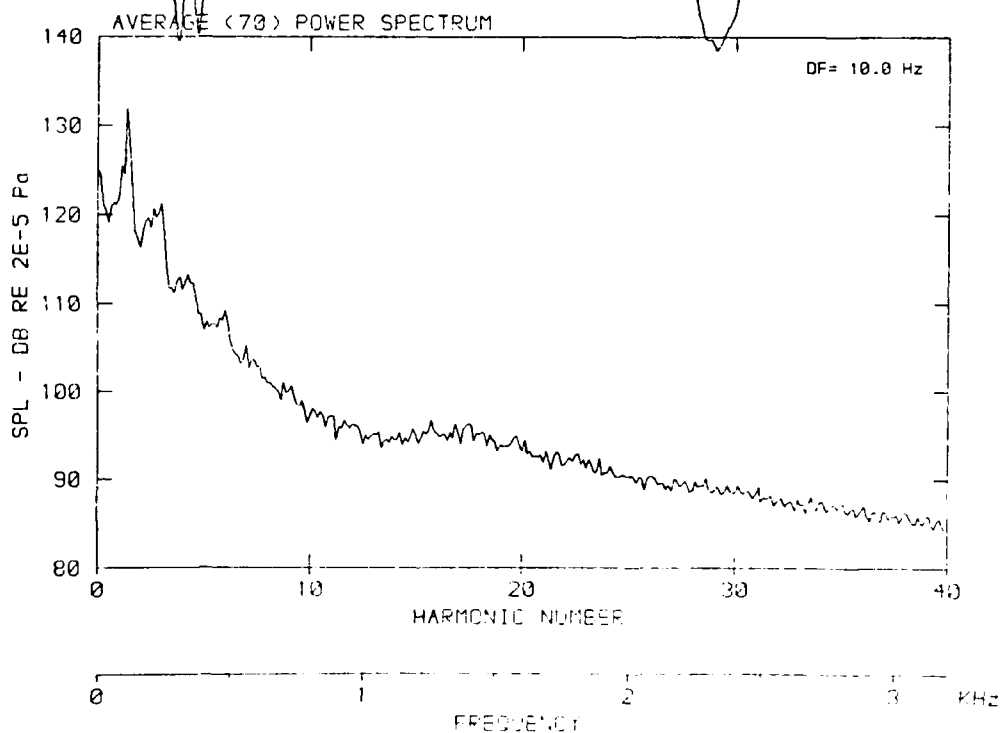
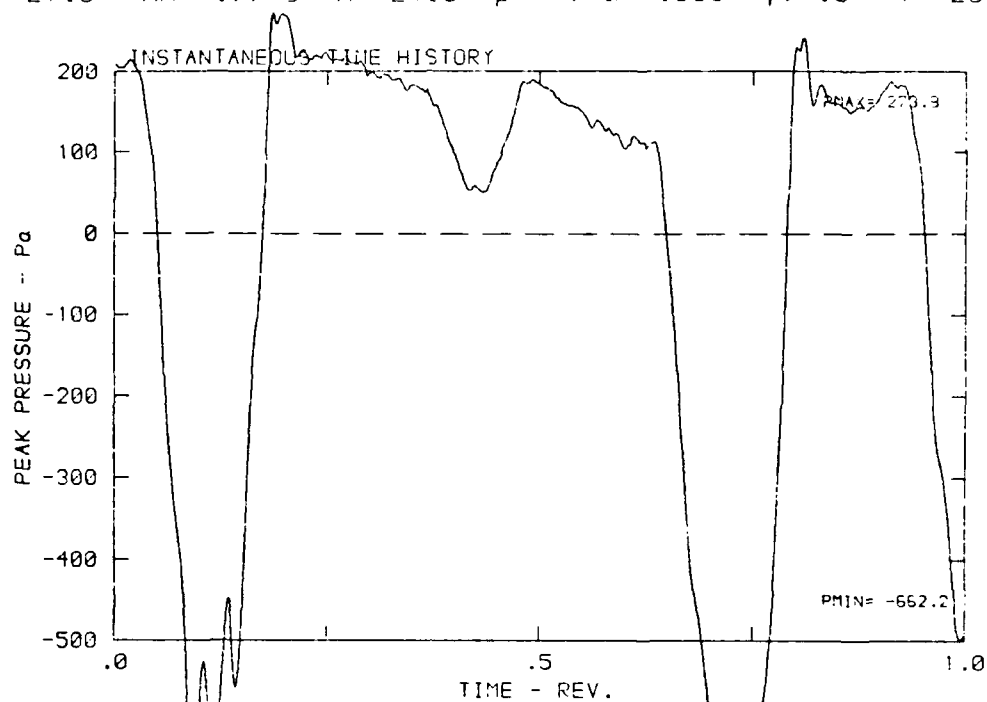
DATA POINT: JC-1 RUN: 193 MP: 6

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



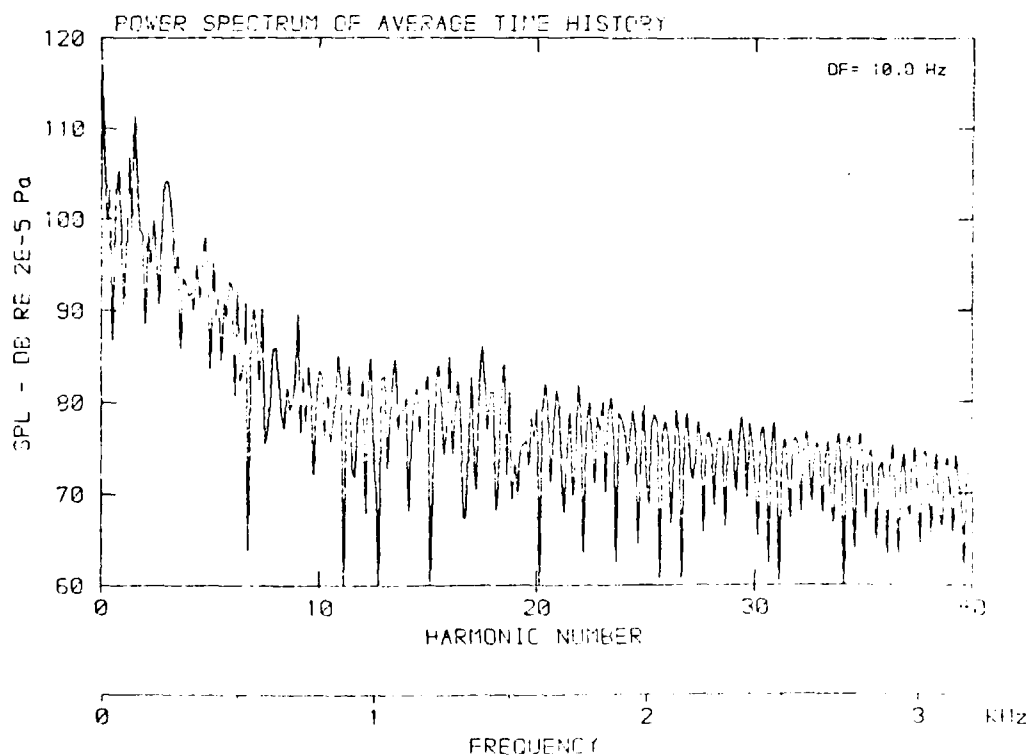
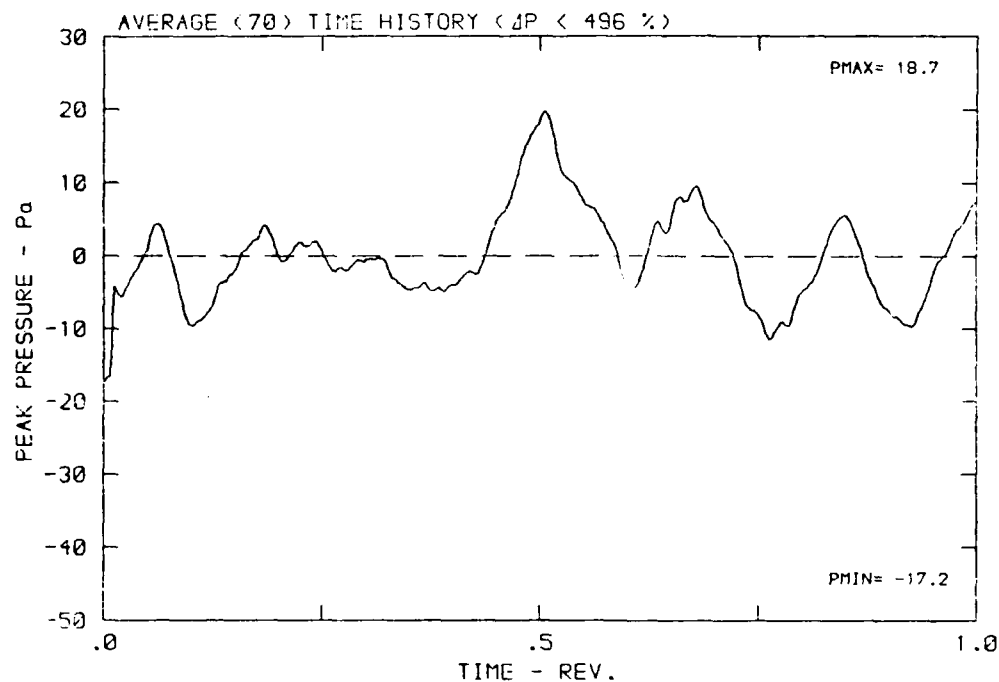
DATA POINT: JC-1 RUN: 193 MP: 7

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



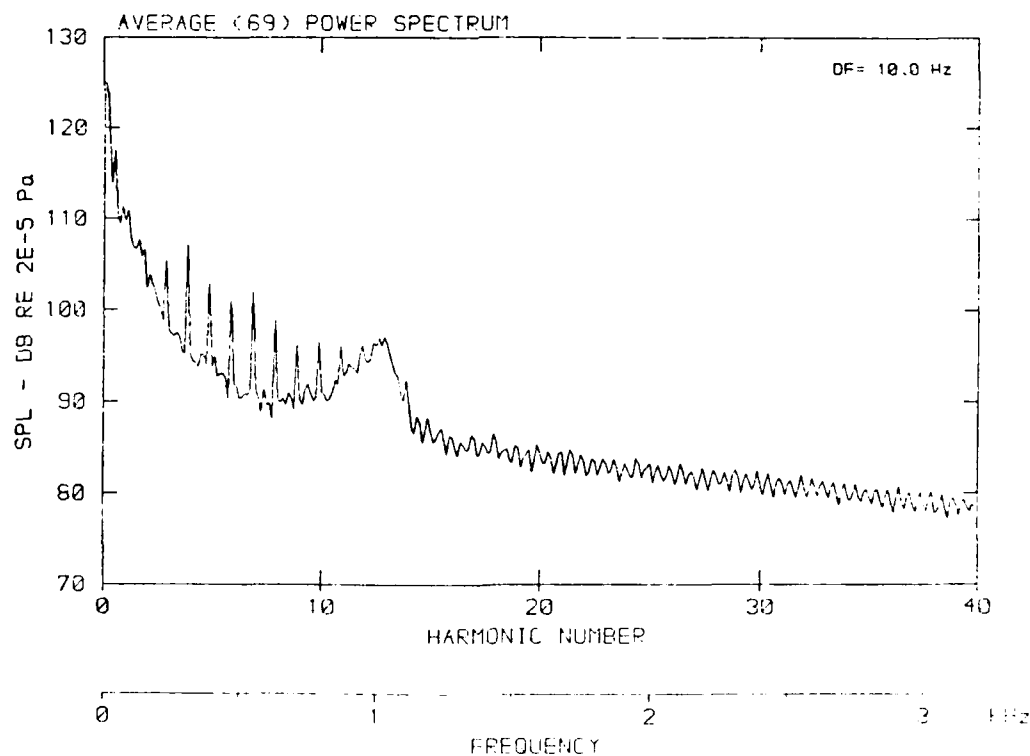
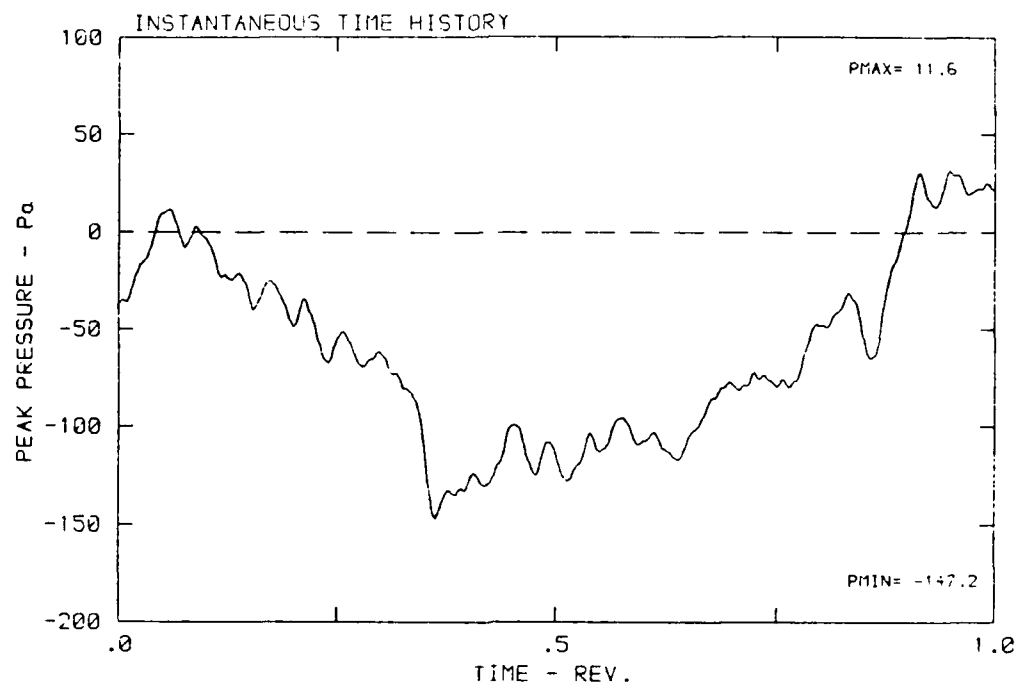
DATA POINT: JC-1 RUN: 193 MP: 7

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



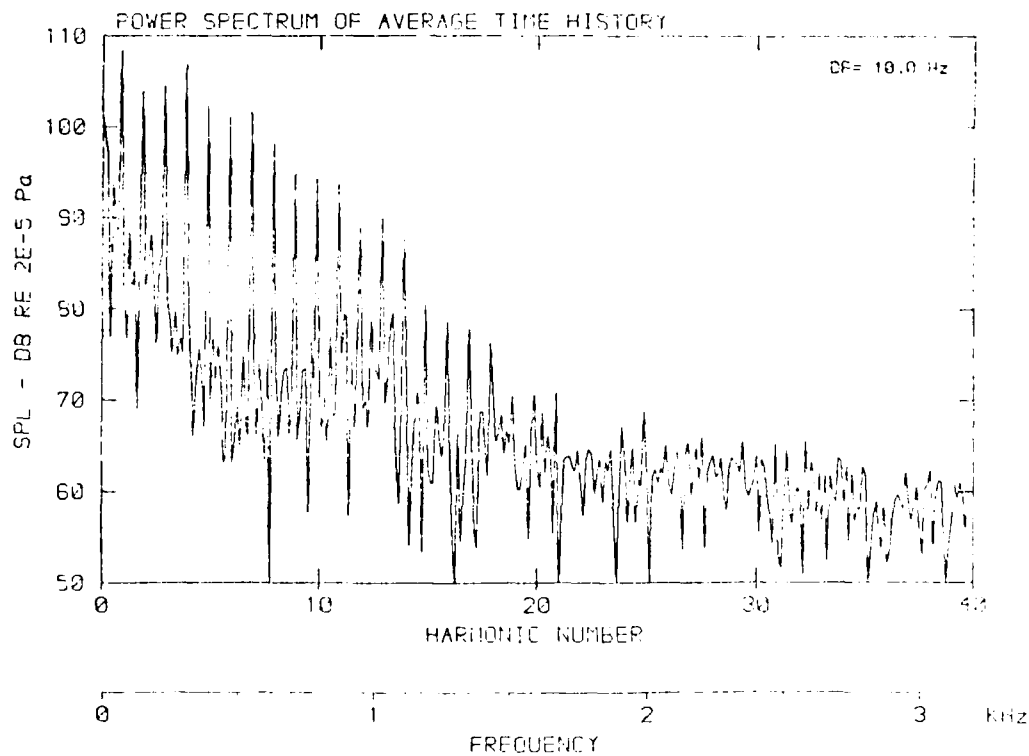
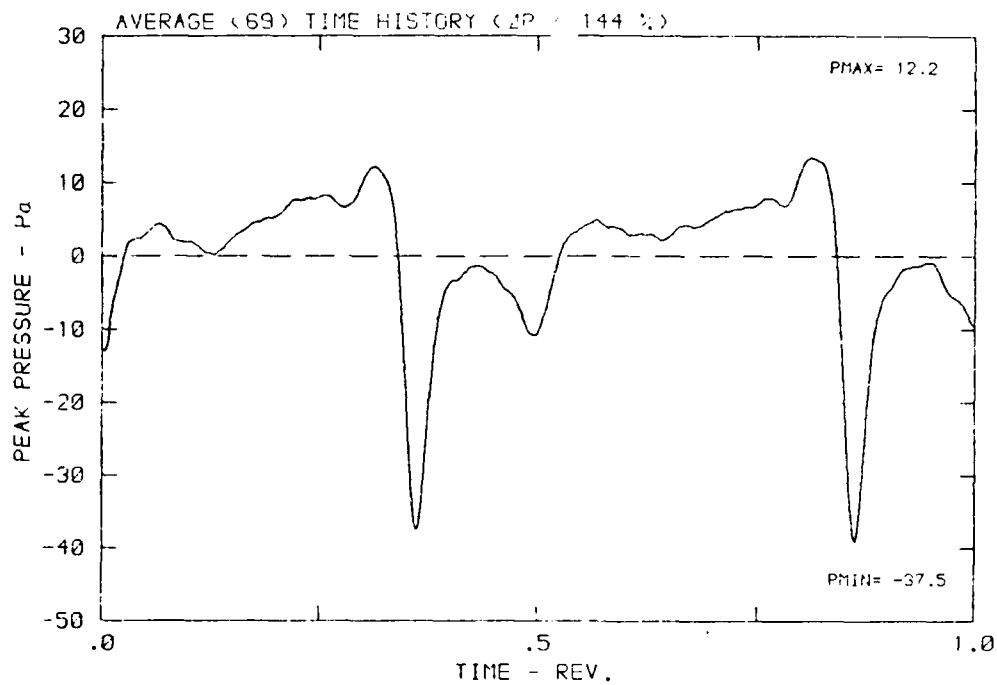
DATA POINT: JC-1 RUN: 193 MP: 9

β : 21.6° MH: .7710 n: 2400 rpm v/u: .303 ϕ : .0° T: 297.9 K



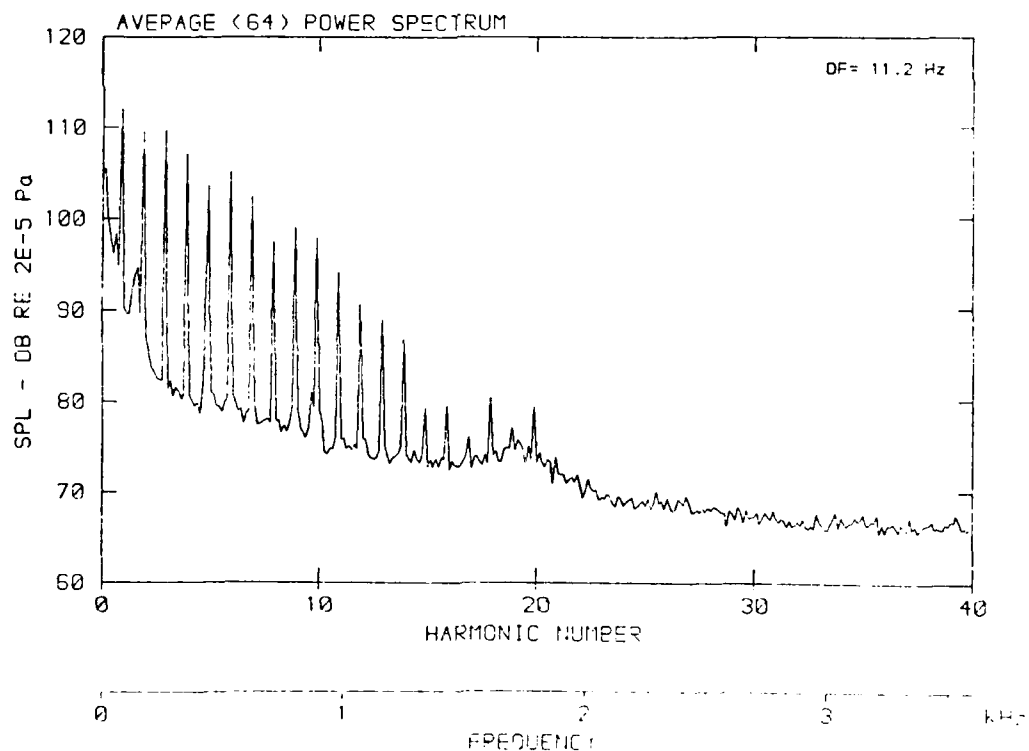
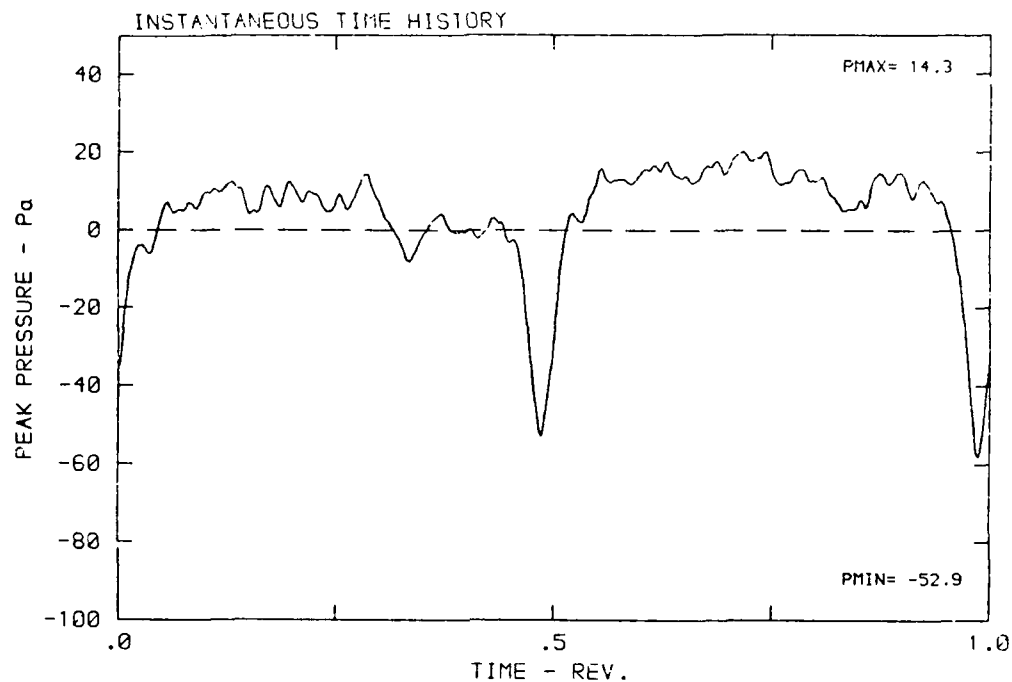
DATA POINT: JC-1 RUN: 193 MP: 9

β : 21.6° MH: .7710 n: 2400 rpm v/u : .303 ϕ : .0° T: 297.9 K



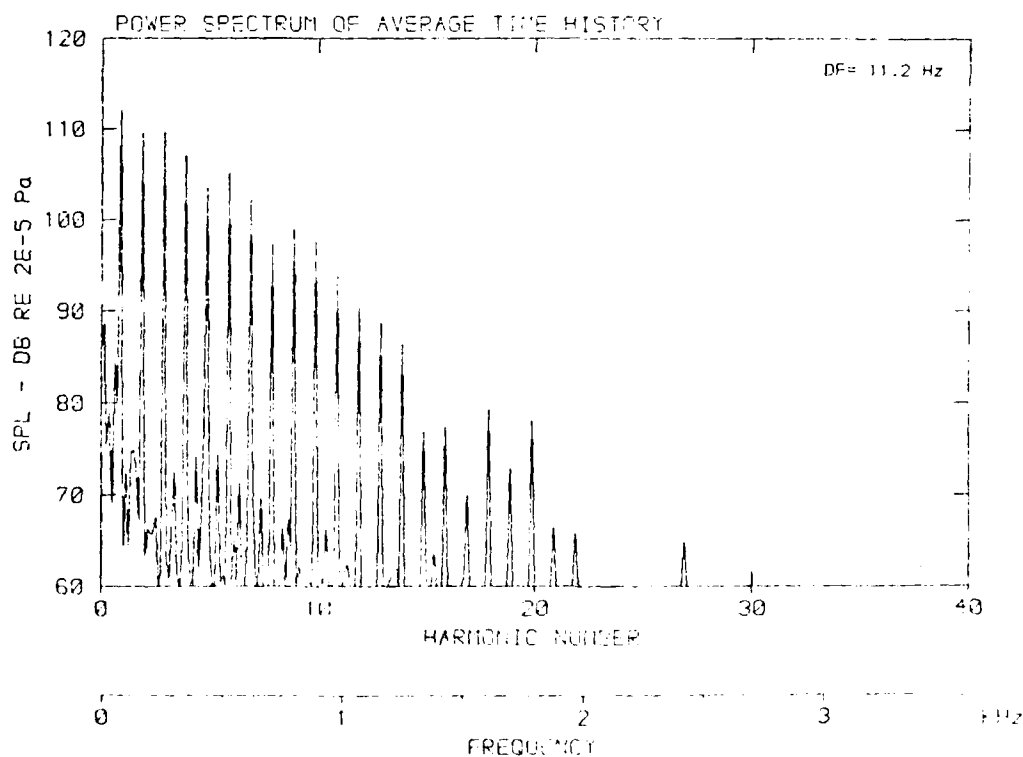
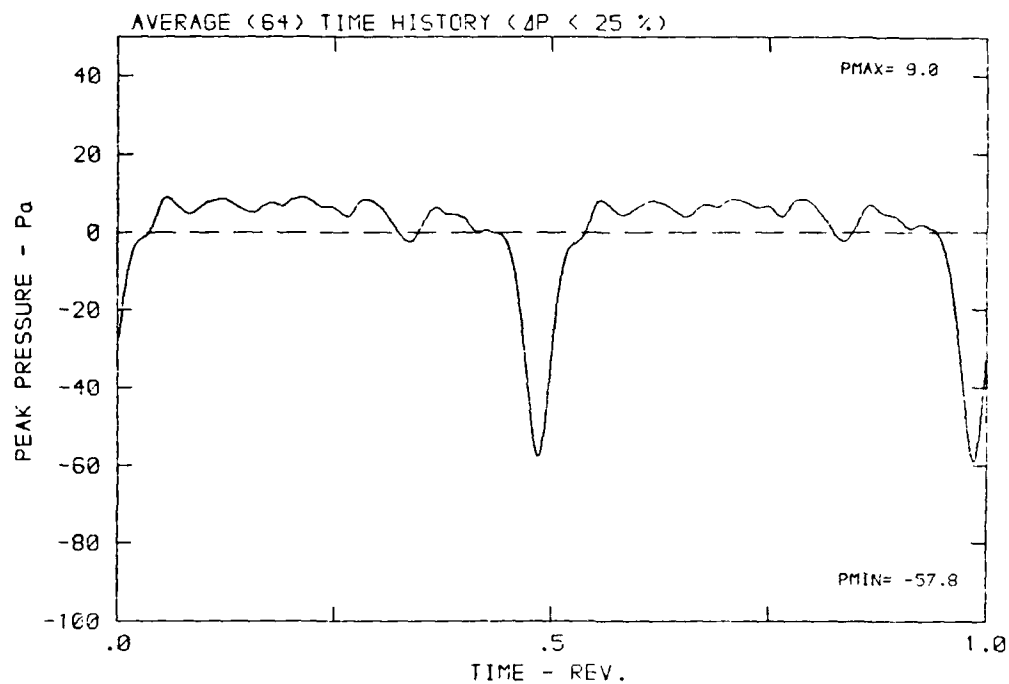
DATA POINT: JC-2 RUN: 194 MP: 1

β : 21.6° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 298.3 K



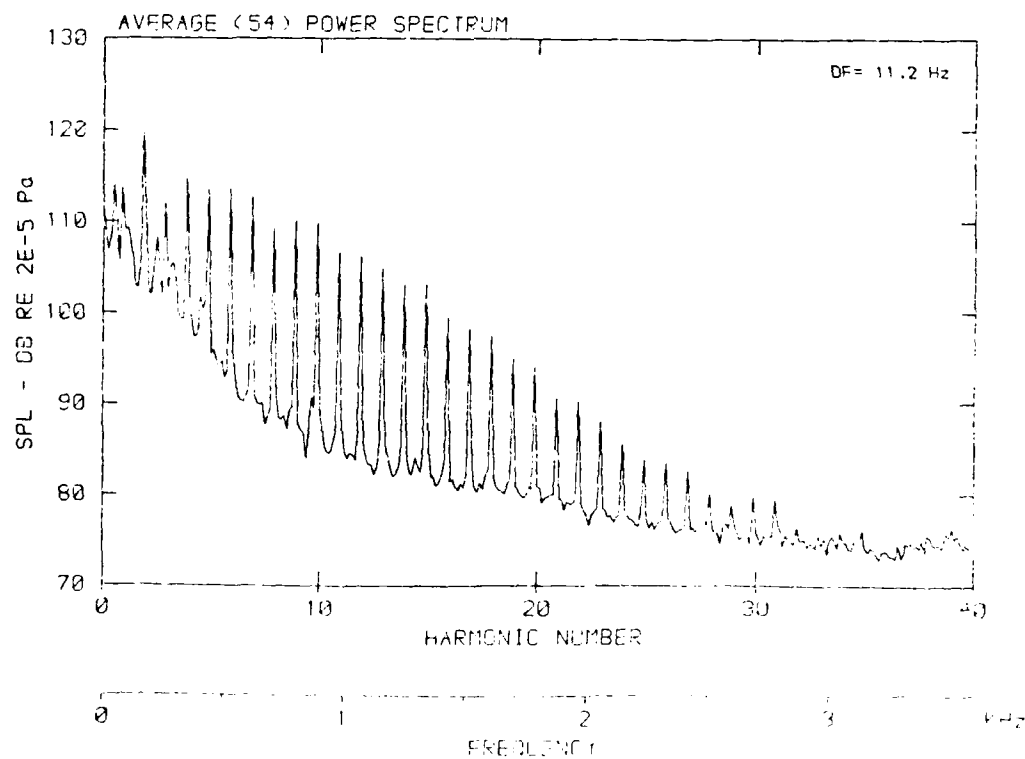
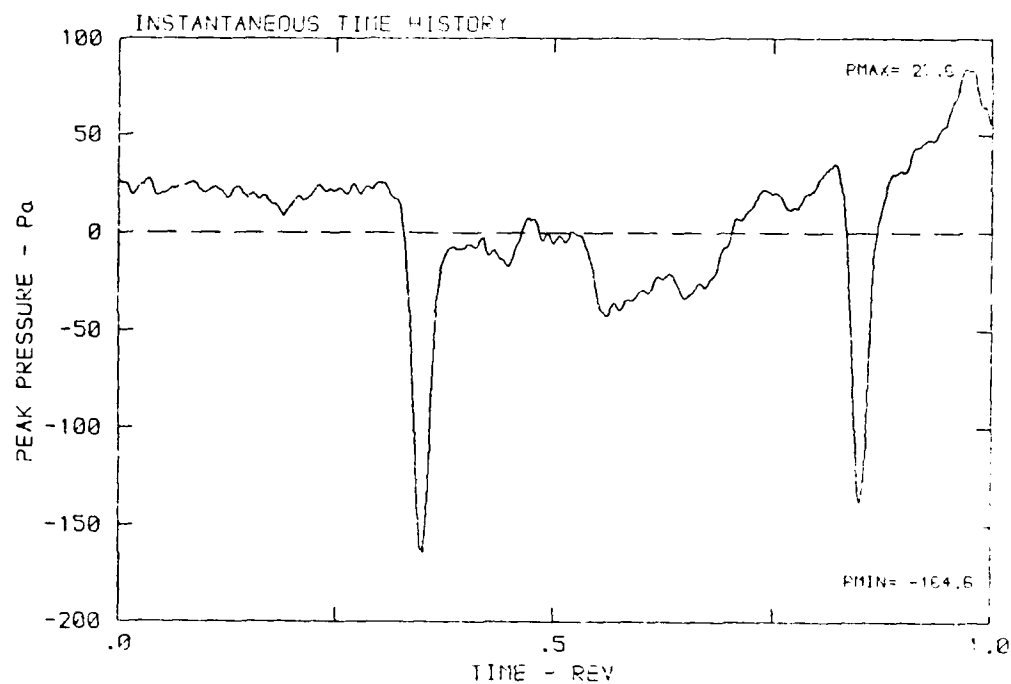
DATA POINT: JC-2 RUN: 194 MP: 1

β : 21.6° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 298.3 K



DATA POINT: JC-2 RUN: 154 MP: 1

β : 21.6° MH: .8592 n: 2700 rpm v/c: .269 ϕ : .0° T: 299.3 K



AD-A174 979

DFVLR/FAA (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER
LUFT UND RAUMFAHR. (U) DEUTSCHE FORSCHUNGS- UND
VERSUCHSANSTALT FUER LUFT- UND RAUMF. .

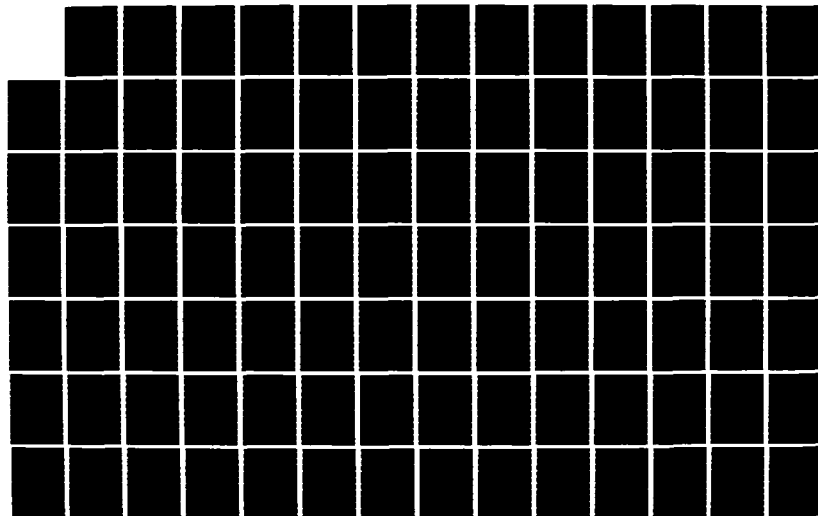
4/3

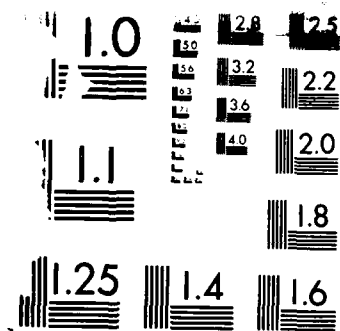
UNCLASSIFIED

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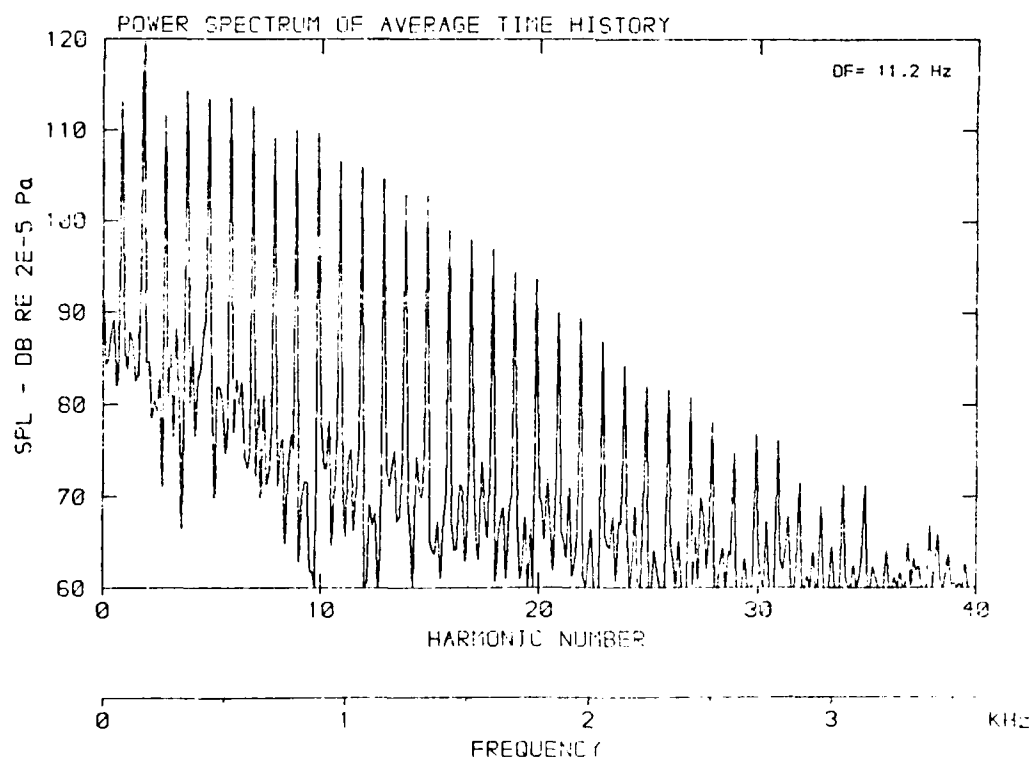
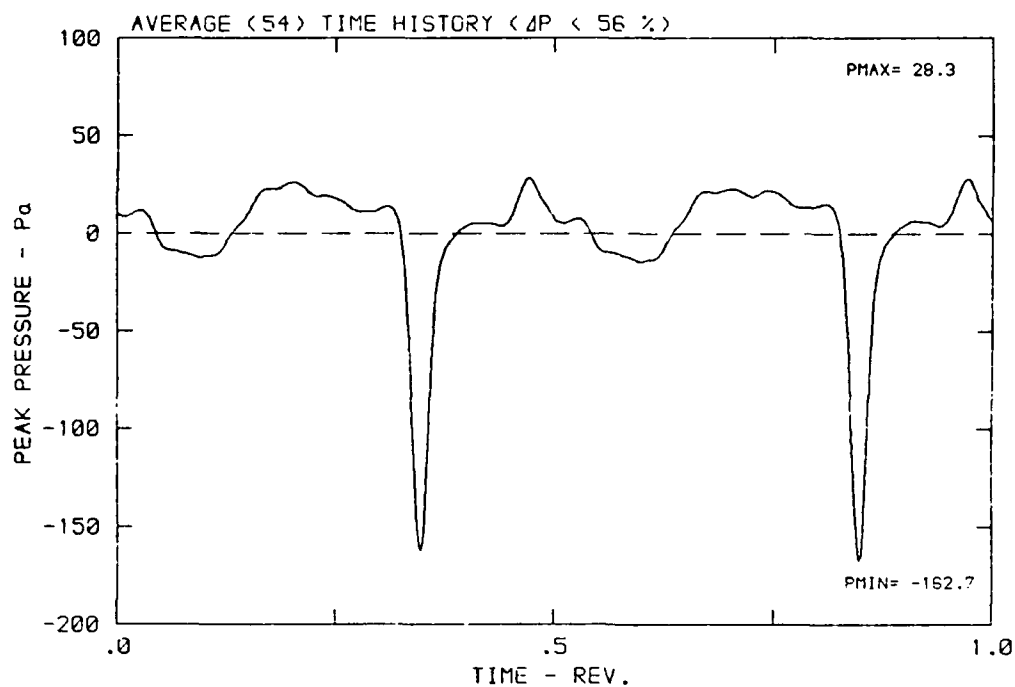




VIEW COPY RESOLUTION TEST CHART
 (CONTAINS 10 LINES)

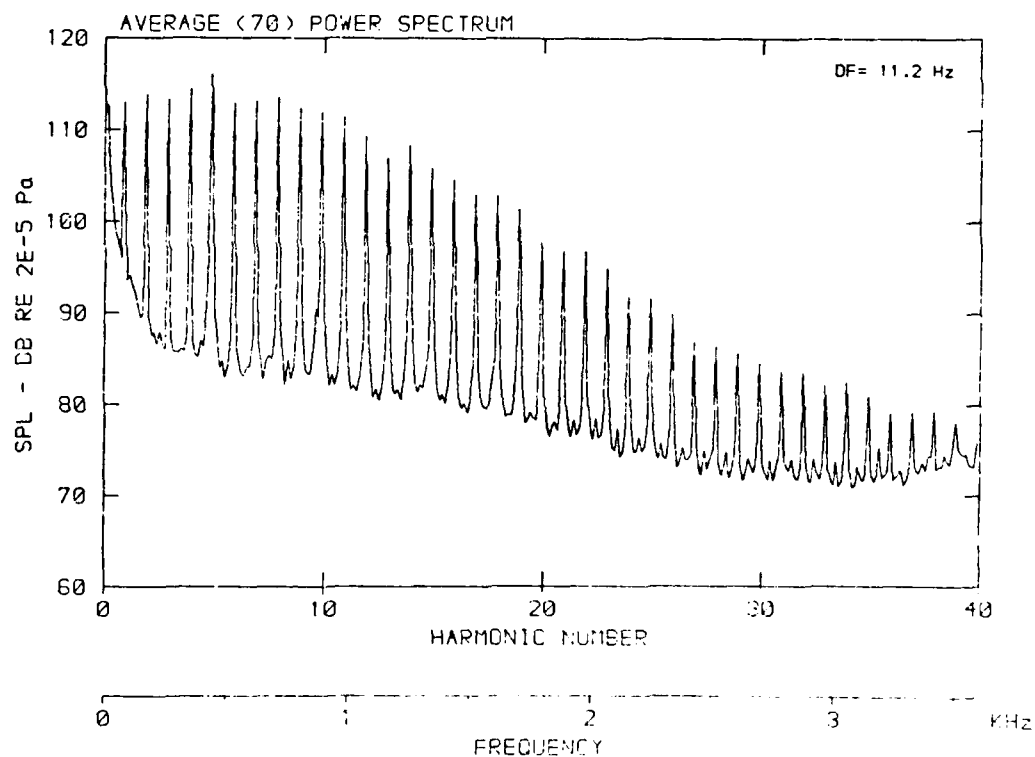
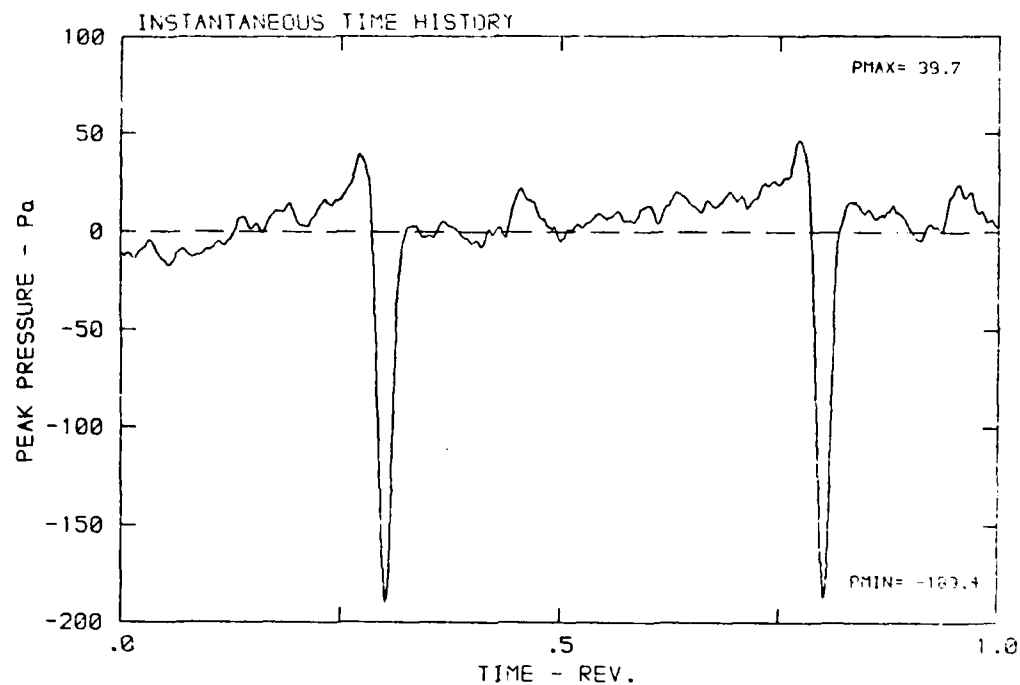
DATA POINT: JC-2 RUN: 194 MP: 2

β : 21.6° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 298.3 K



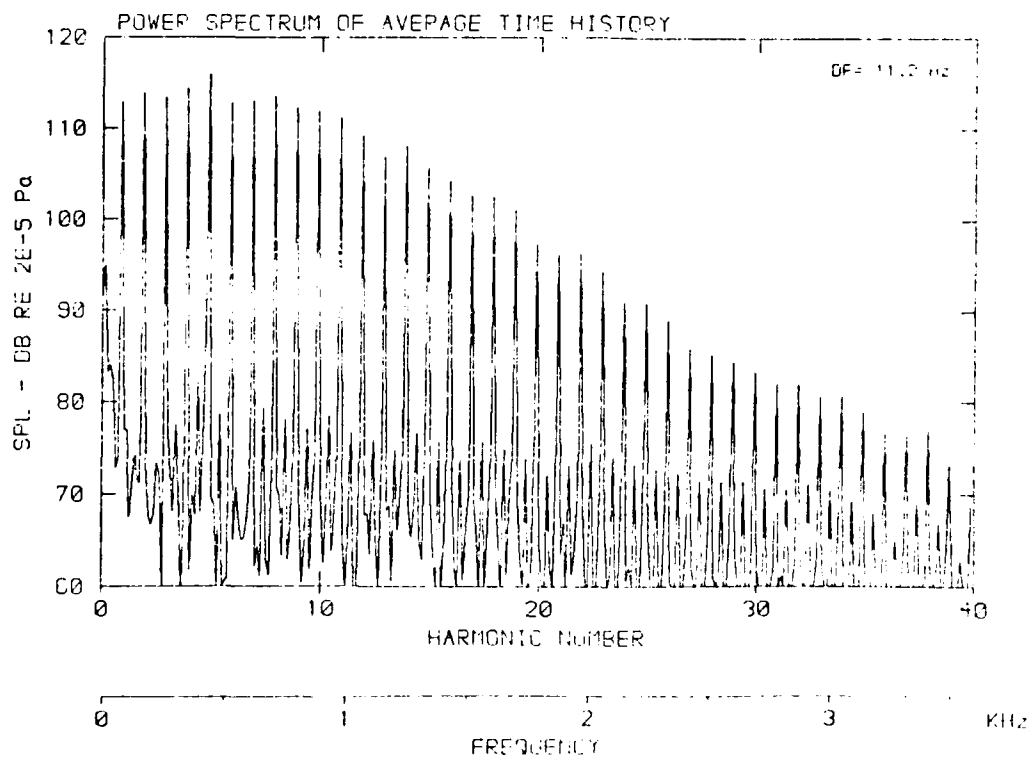
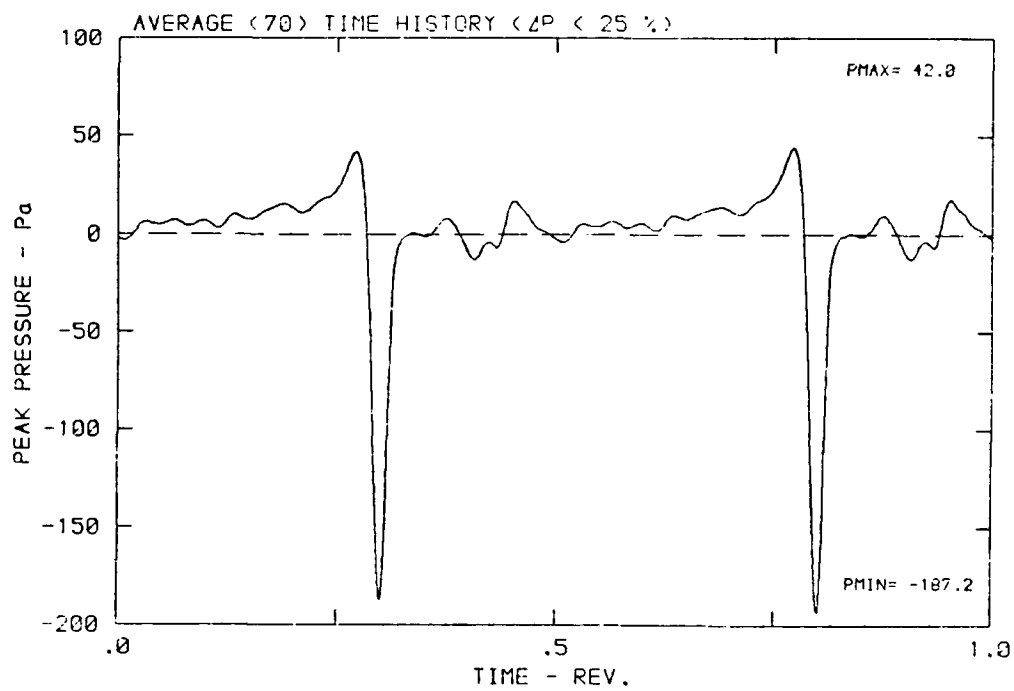
DATA POINT: JC-2 RUN: 194 MP: 3

β : 21.6° MH: .9592 n: 2700 rpm v/u: .269 ϕ : .0° T: 293.3 K



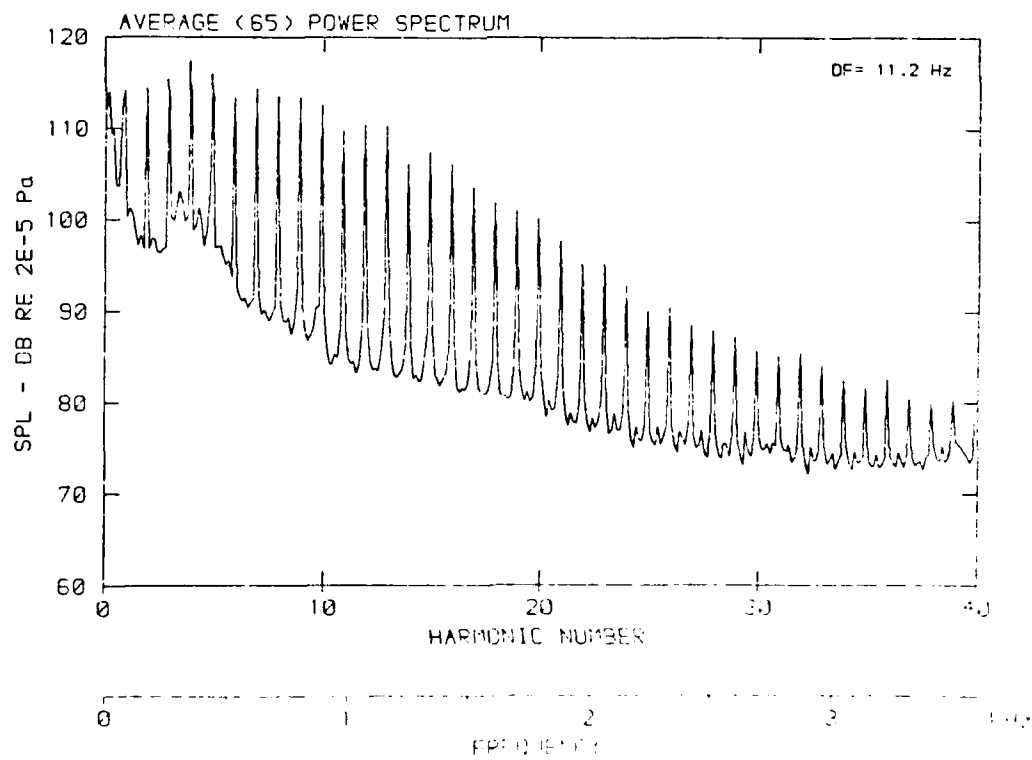
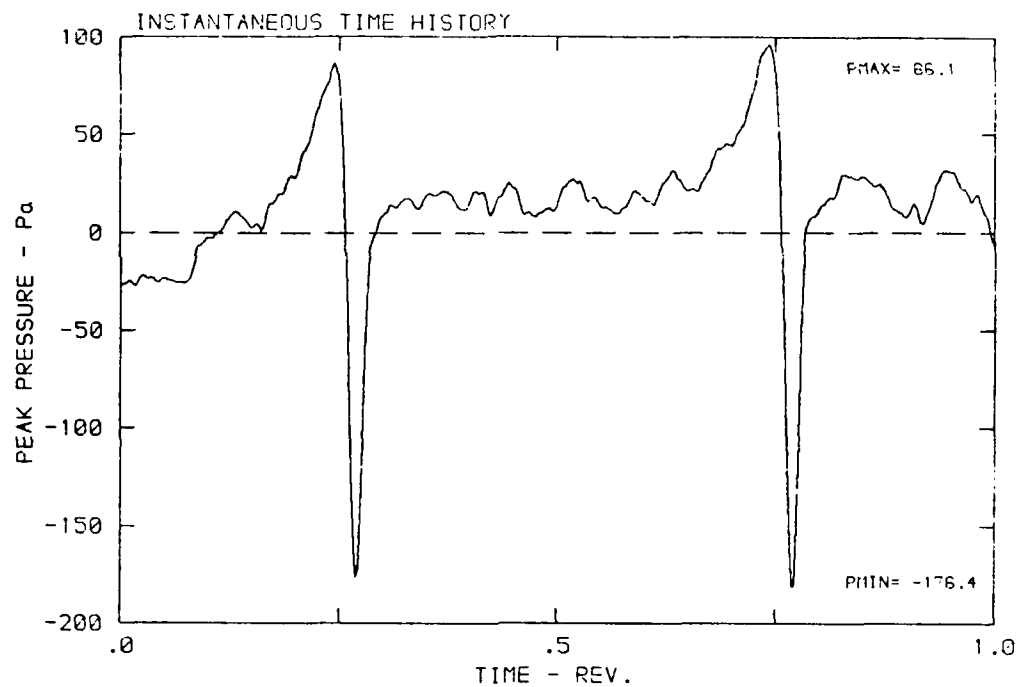
DATA POINT: JC-2 RUN: 194 MP: 3

β : 21.6° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 298.3 K



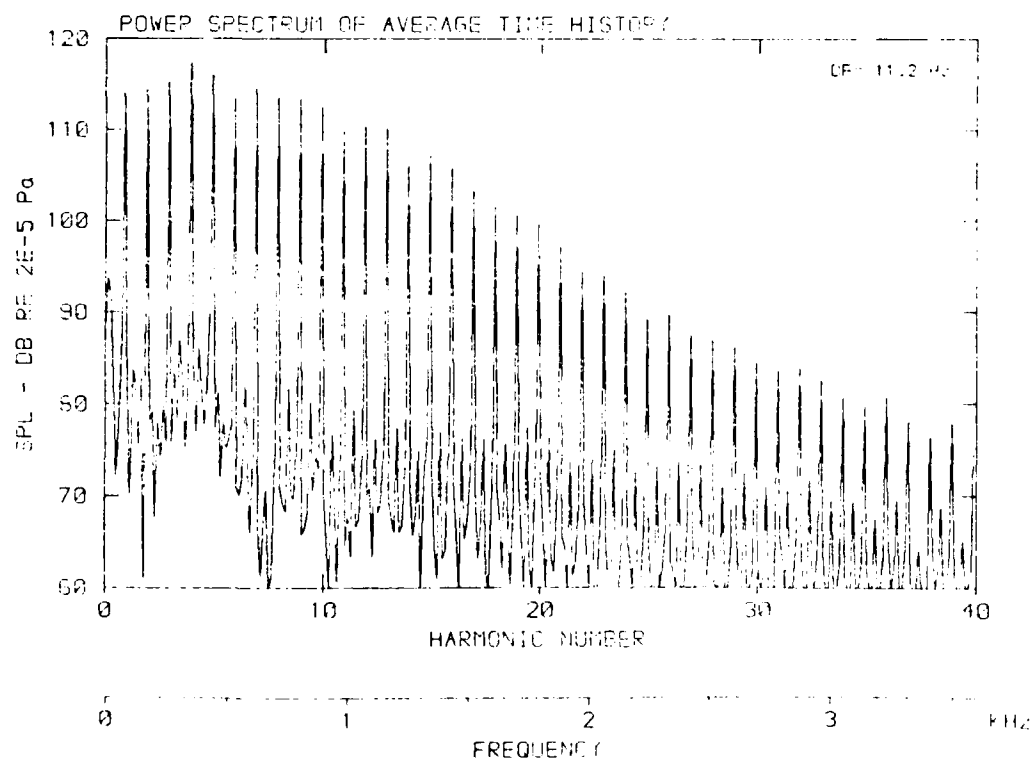
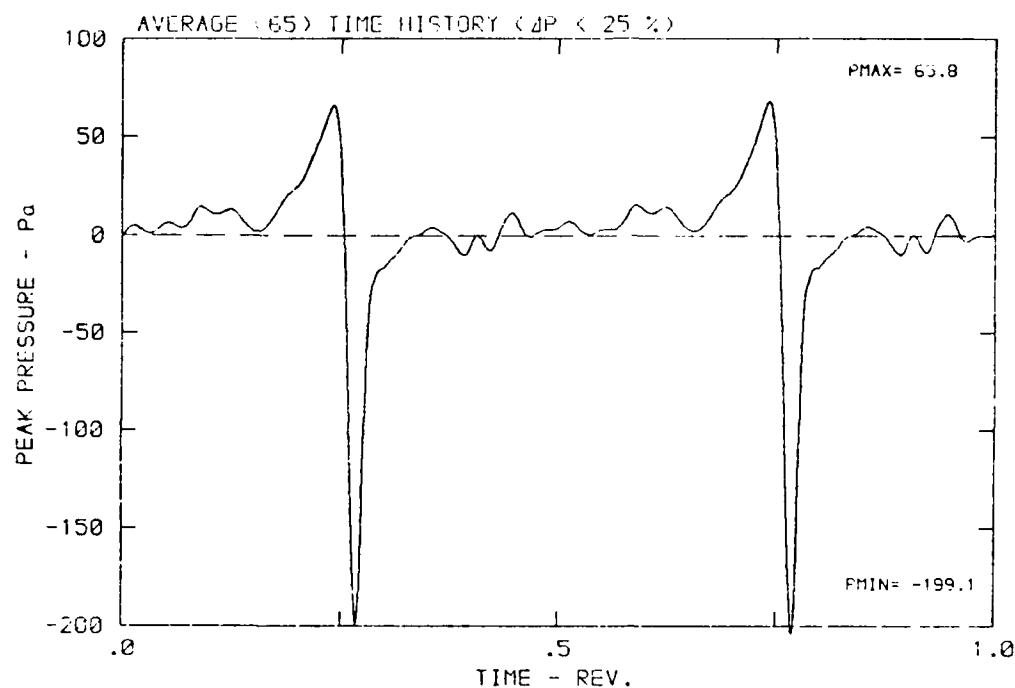
DATA POINT: JC-2 RUN: 194 MP: 4

β : 21.6° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 203.3 s



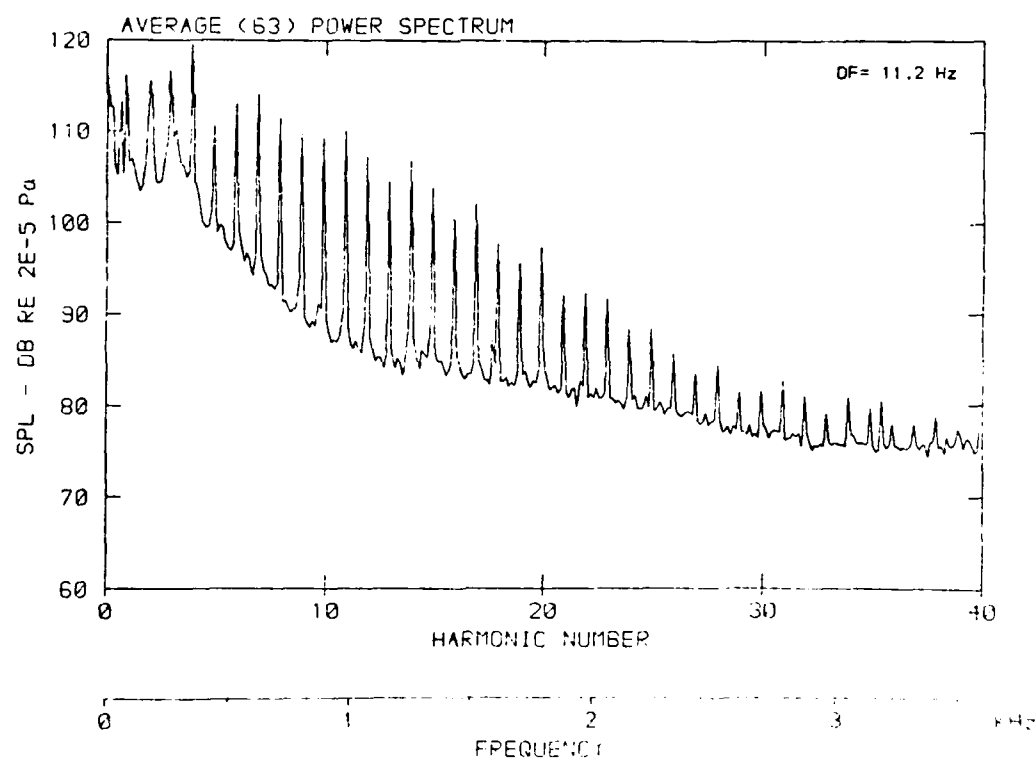
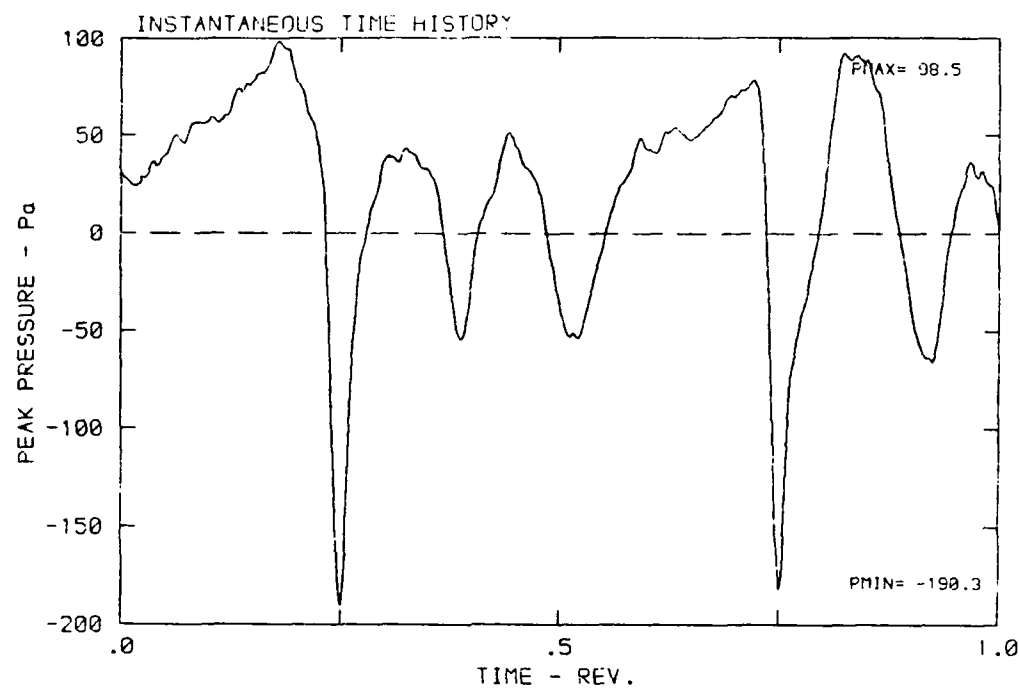
DATA POINT: JC-2 RUN: 194 MP: 4

β : 21.6° MH: .3592 n: 2700 rpm v/u: .269 ϕ : .0° T: 298.3 K



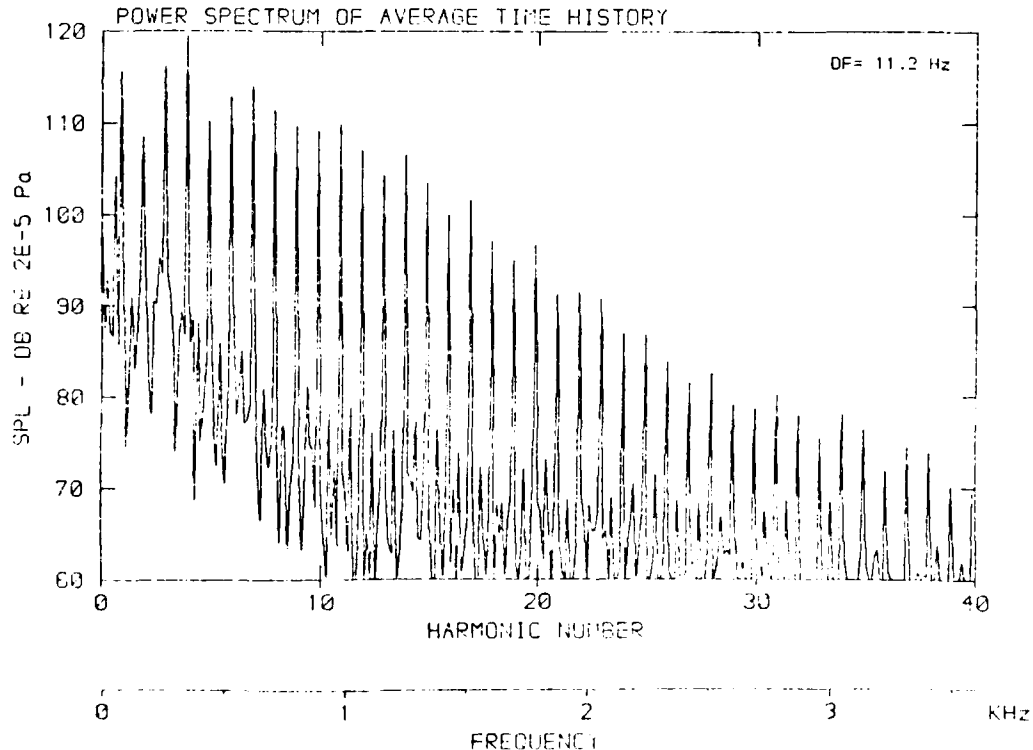
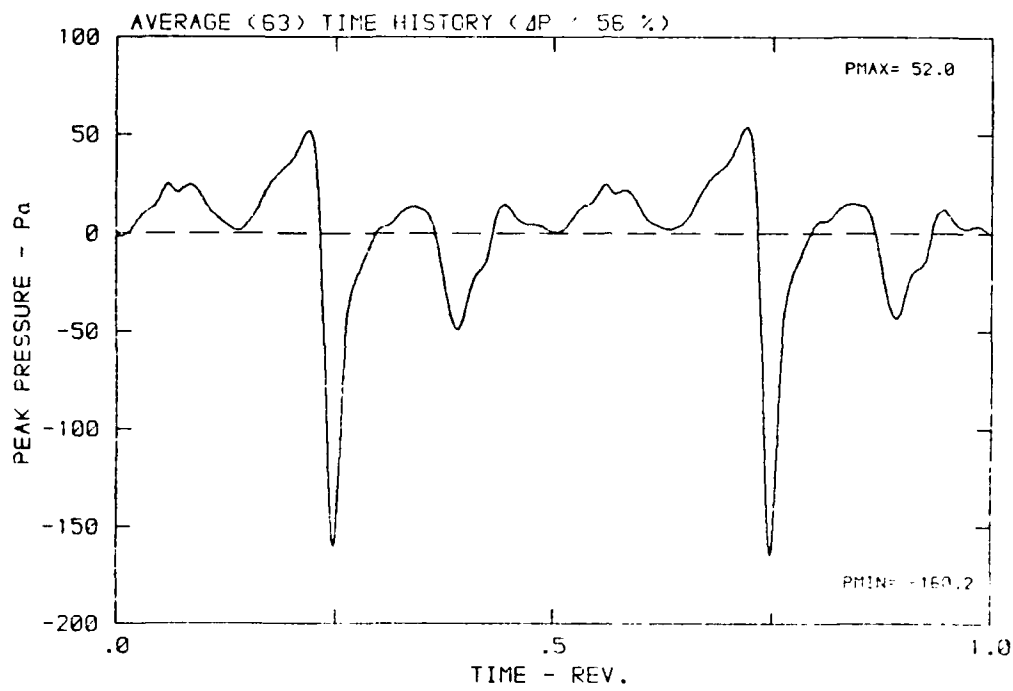
DATA POINT: JC-2 RUN: 194 MP: 5

β : 21.6° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 298.3 K



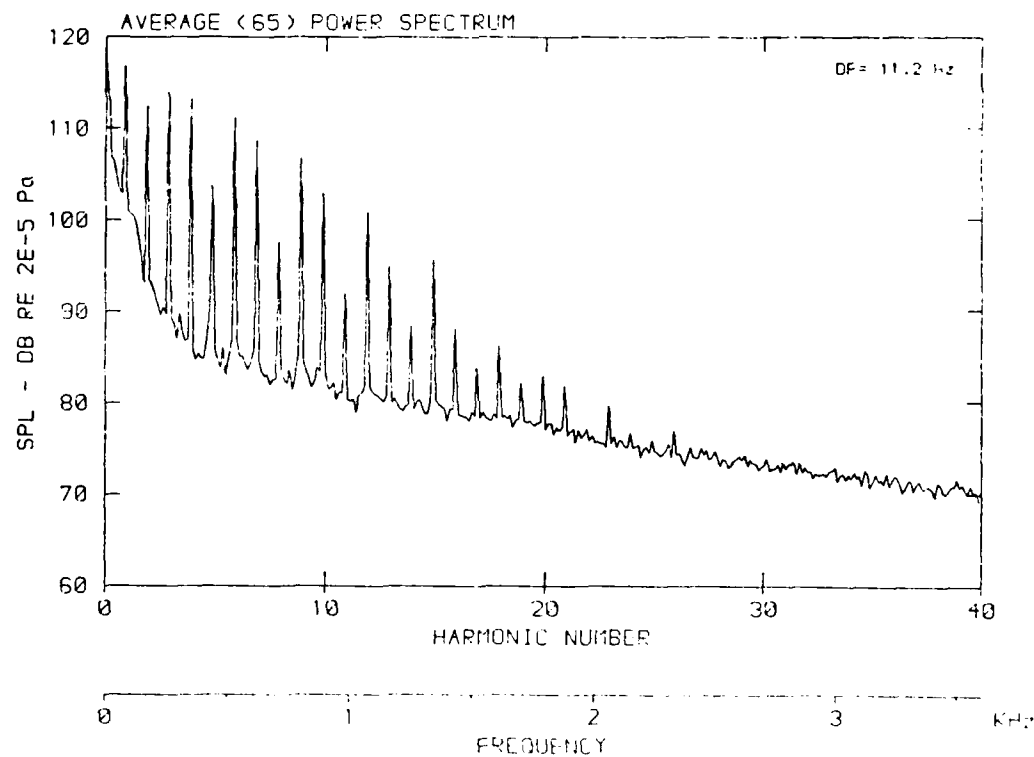
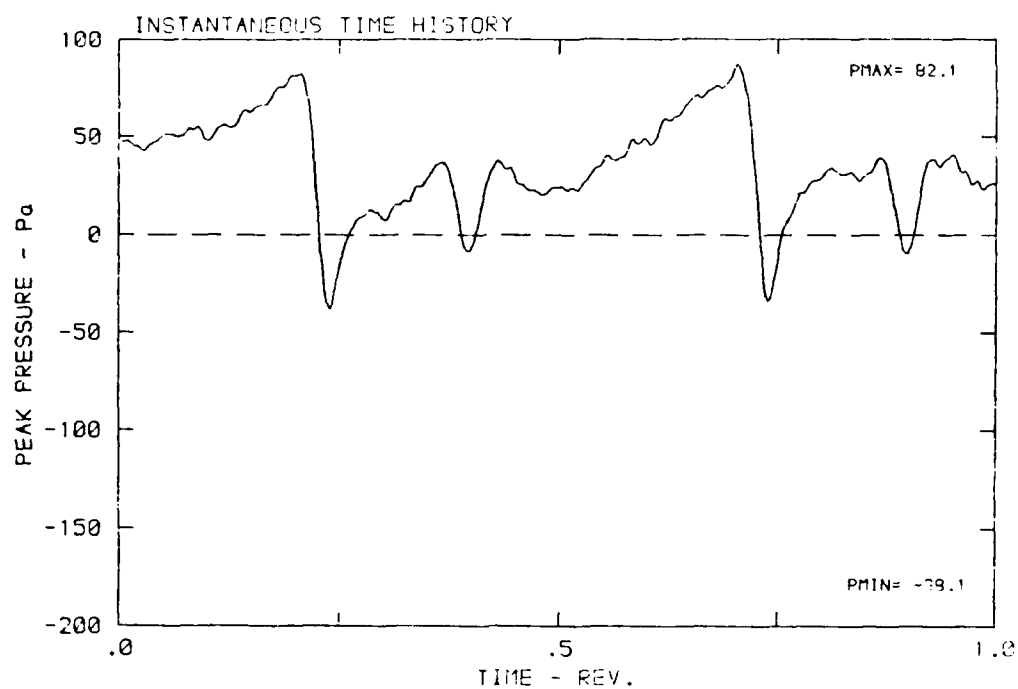
DATA POINT: JC-2 RUN: 194 MP: 5

β : 21.6° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 293.3 K



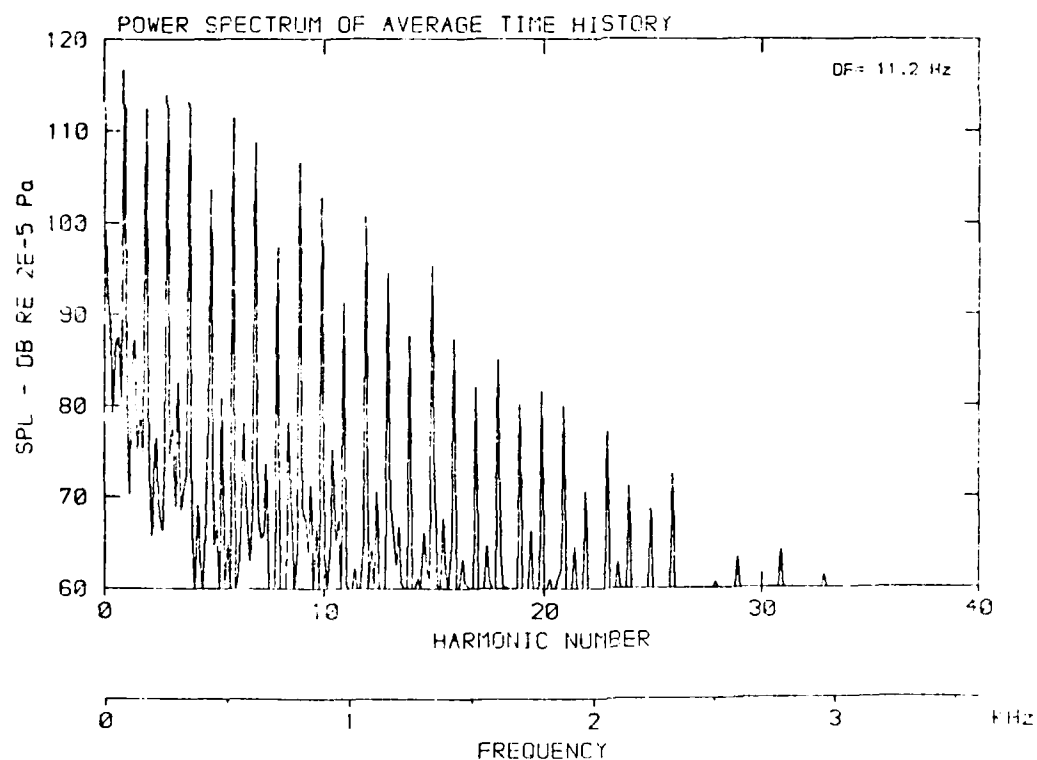
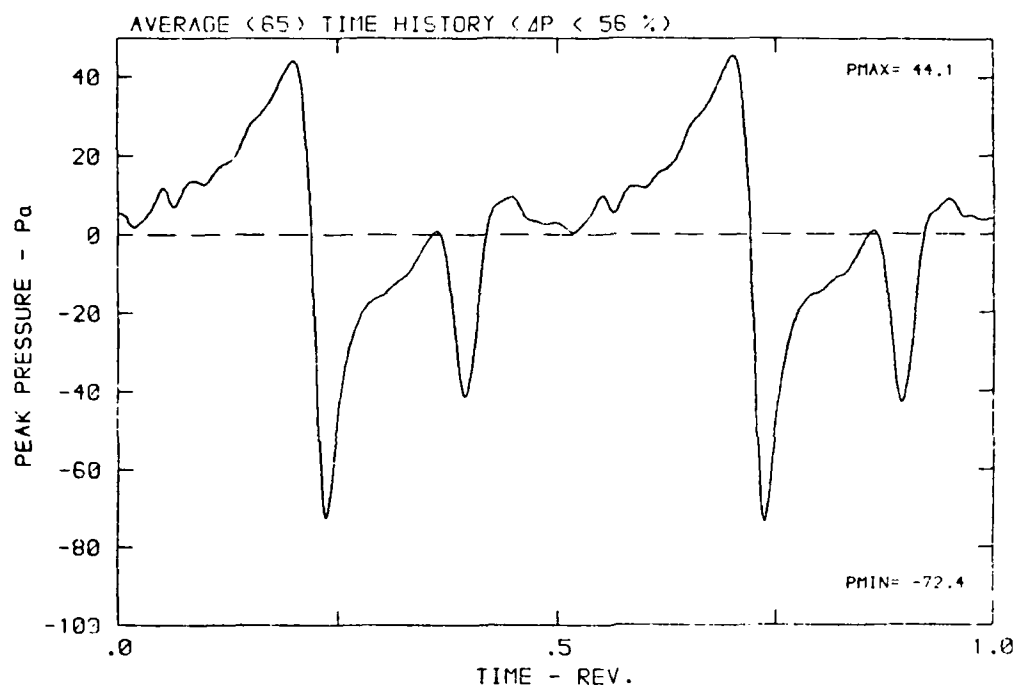
DATA POINT: JC-2 RUN: 194 MP: 6

β : 21.6° MH: .8592 n: 2700 rpm v/u : .200 ϕ : .0° T: 298.3 K



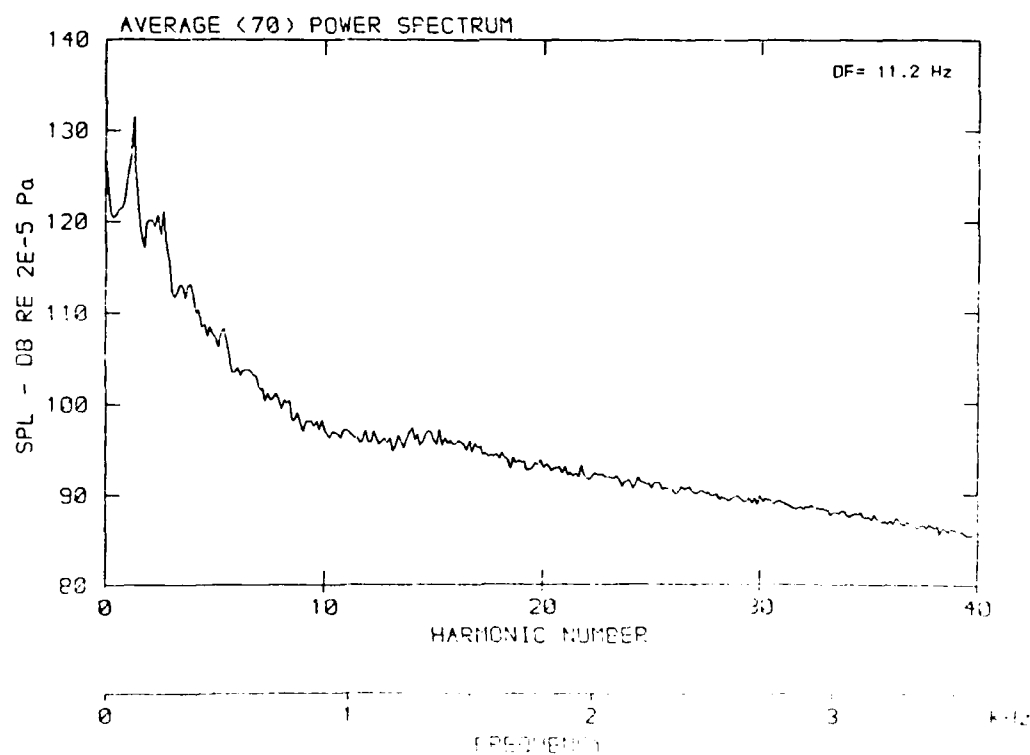
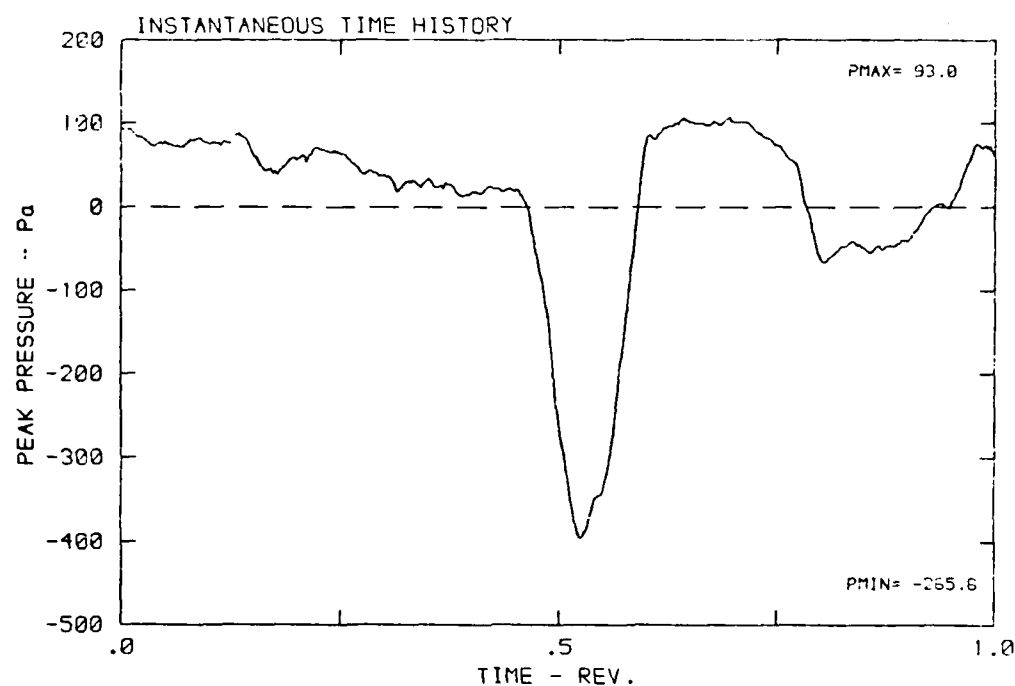
DATA POINT: JC-2 RUN: 194 MP: 6

β : 21.6° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 298.3 K



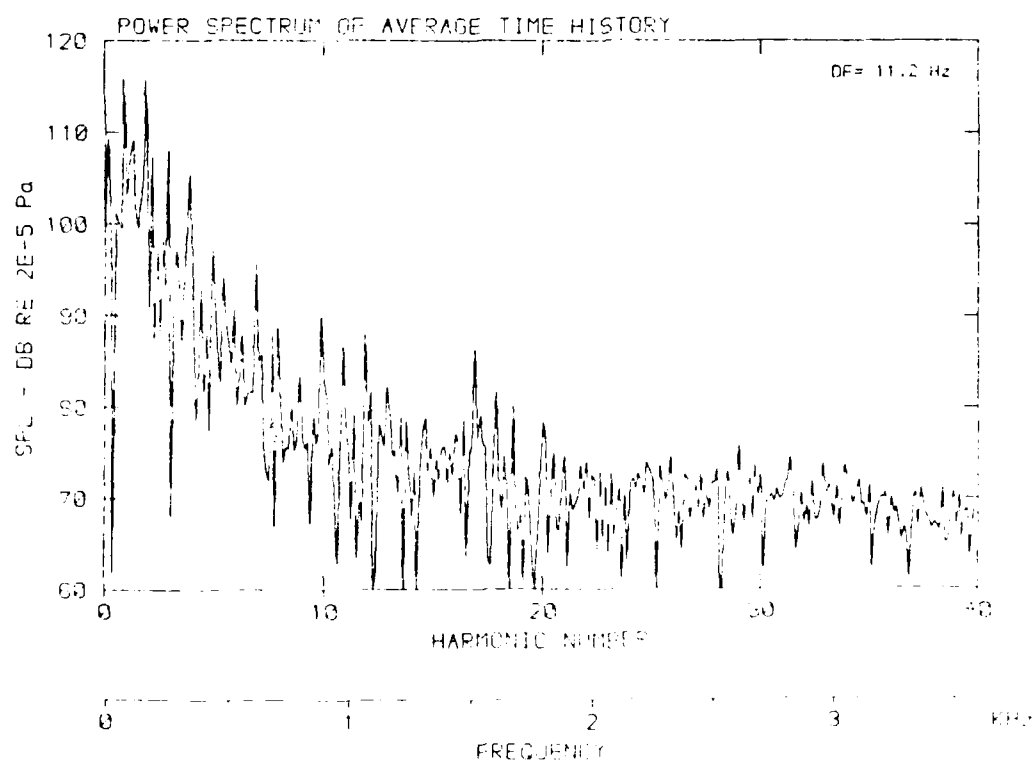
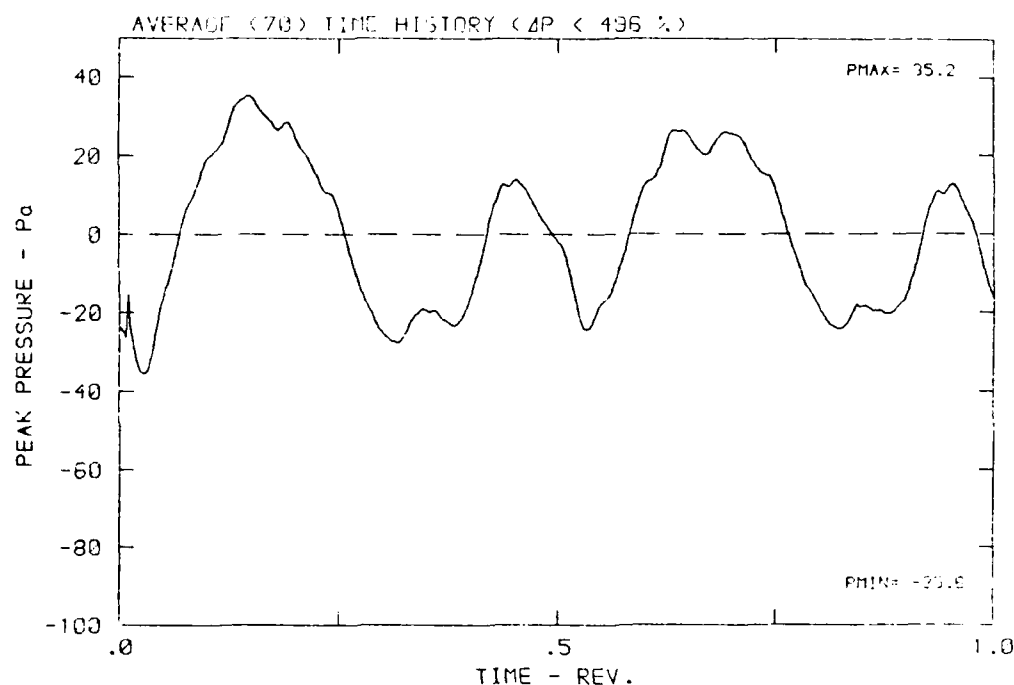
DATA POINT: JC-2 RUN: 194 MP: 7

β : 21.6° MH: .8592 n: 2700 rpm v/u : .269 ϕ : .0° T: 298.3 K



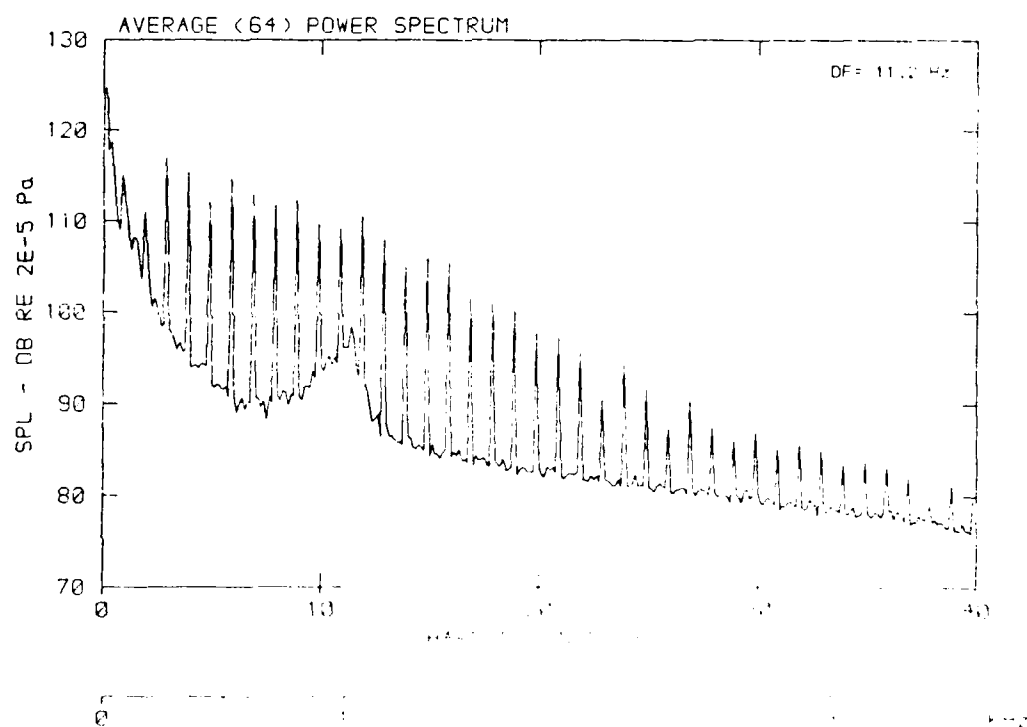
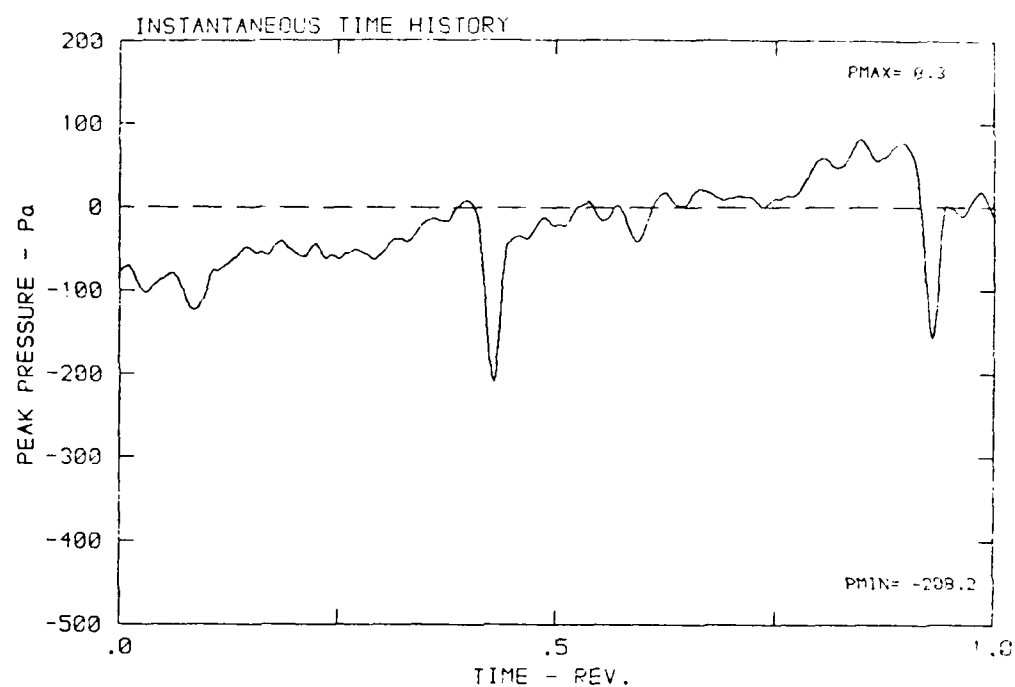
DATA POINT: JC-2 RUN: 194 MP: 7

β : 21.6° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 298.3 K



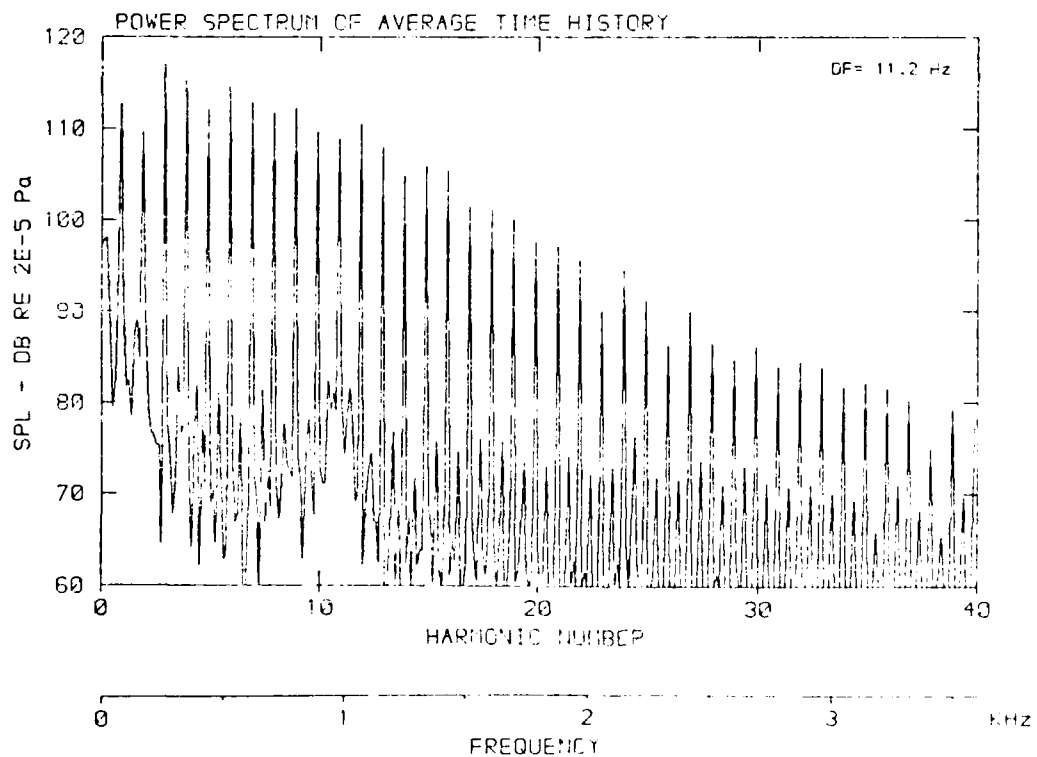
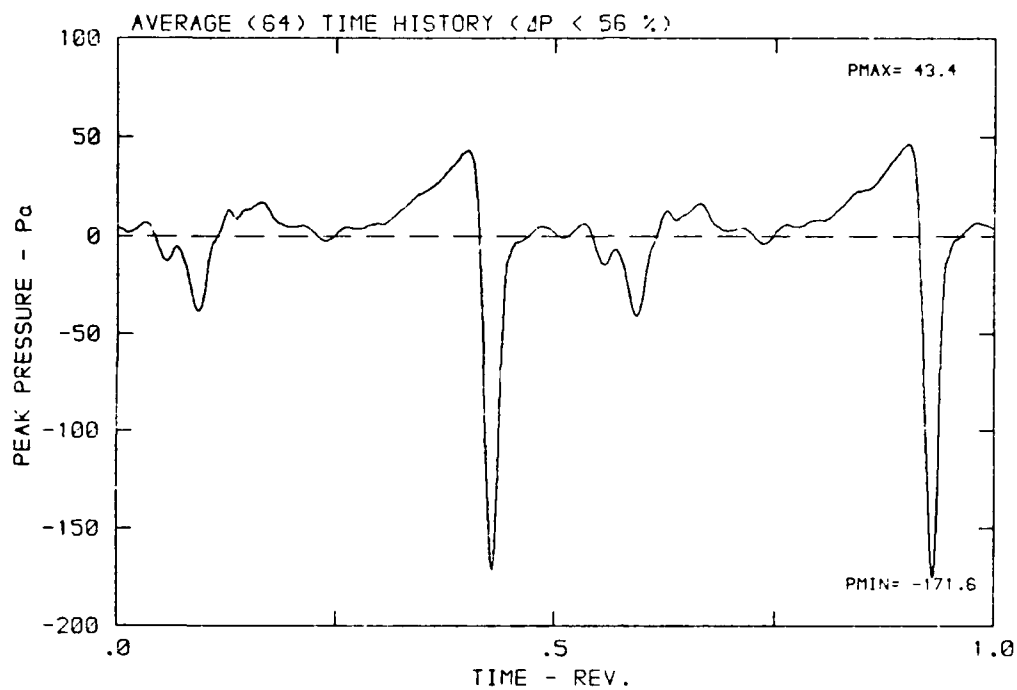
DATA POINT: JC-2 RUN: 194 NF: 5

β : 21.6° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° I: 298.3



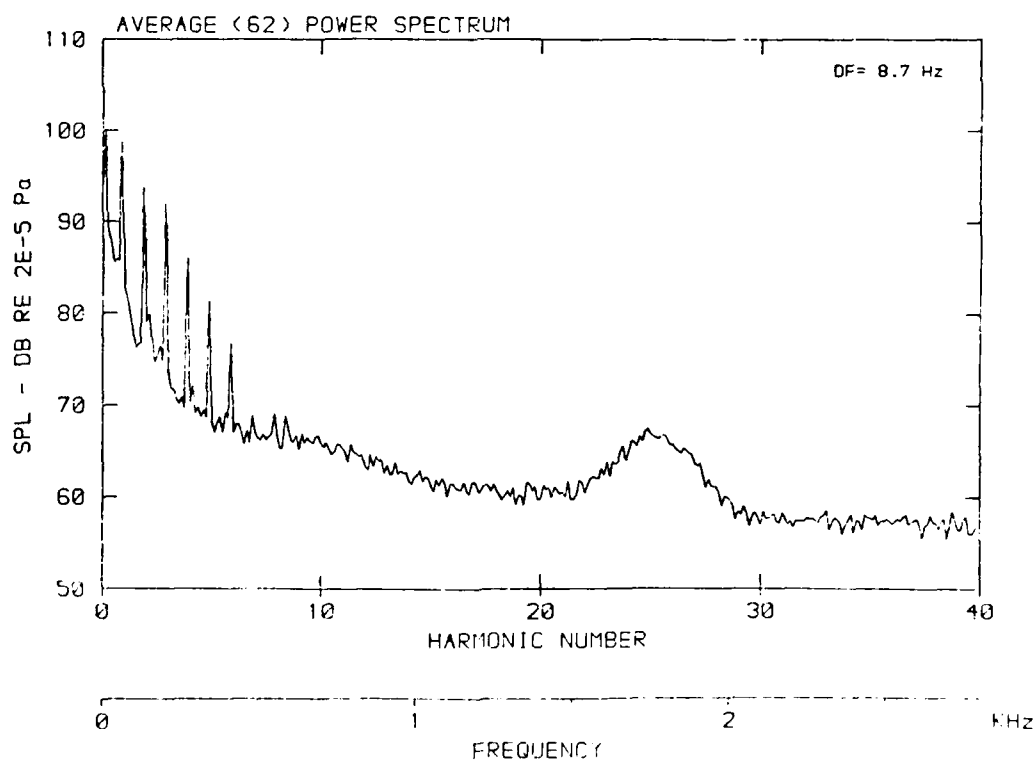
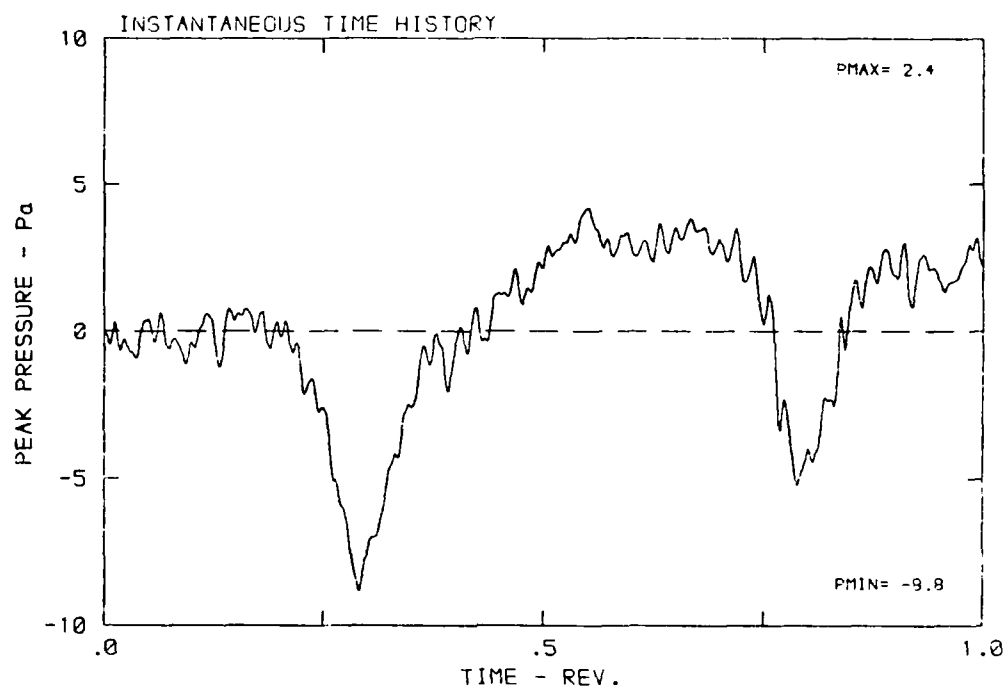
DATA POINT: JC-2 RUN: 194 MP: 9

β : 21.6° MH: .8592 n: 2700 rpm v/u: .269 ϕ : .0° T: 298.3 K



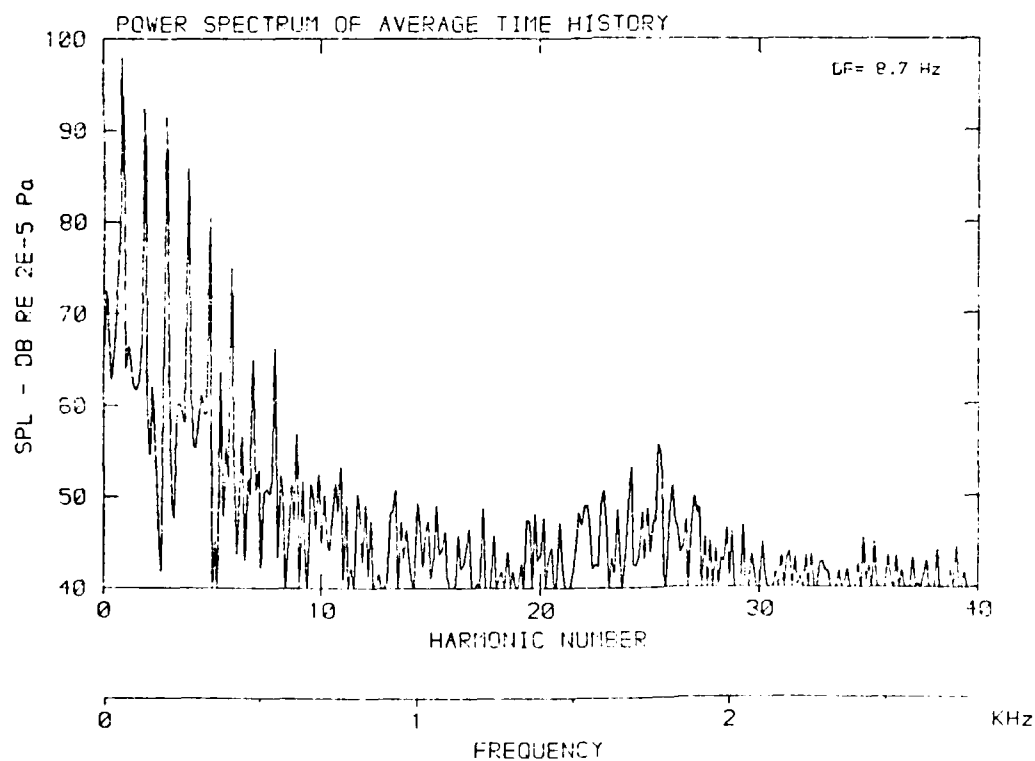
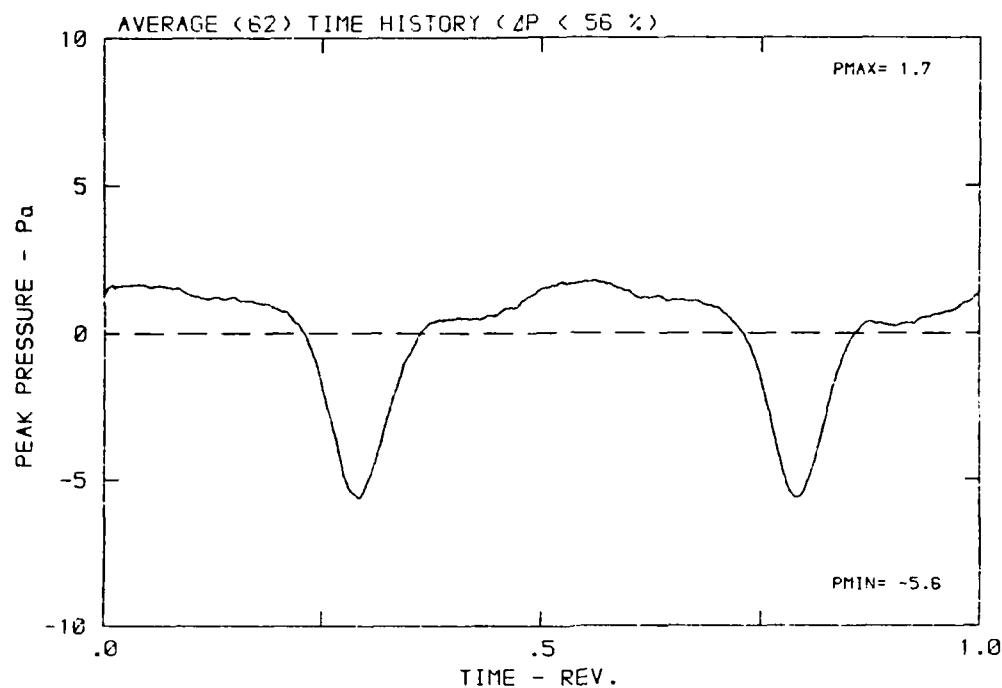
DATA POINT: KC-1 RUN: 132 MF: 1

β : 20.7° MH: .5625 n: 2100 rpm v/u: .230 ϕ : .0° T: 297.9 K



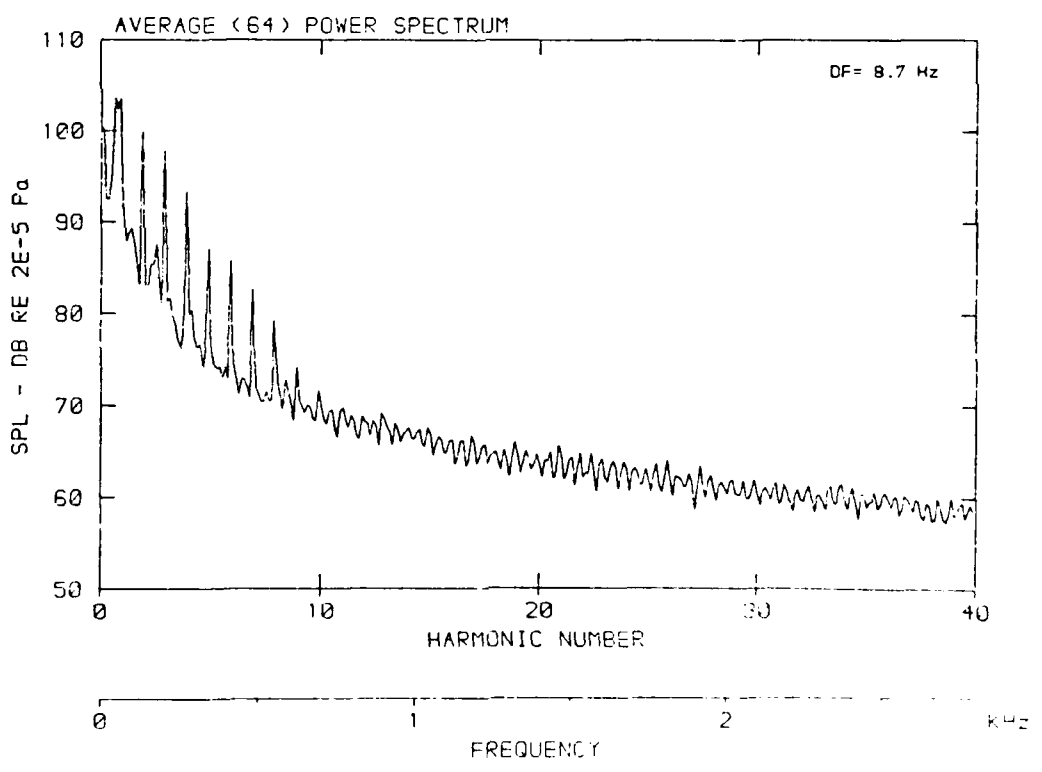
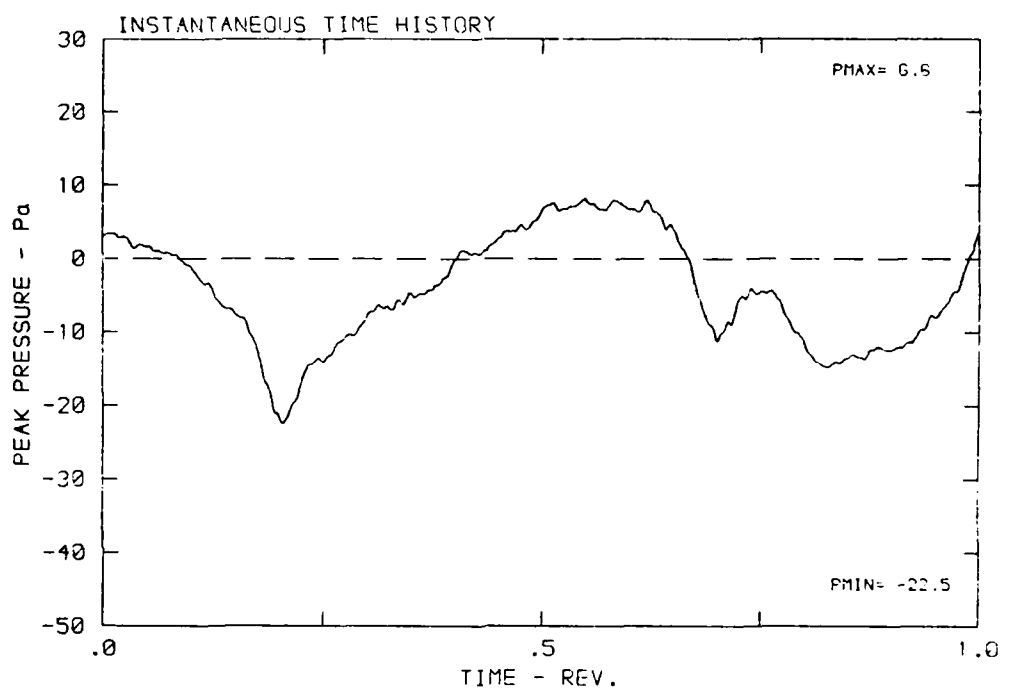
DATA POINT: KC-1 RUN: 192 MP: 1

β : 20.7° MH: .6625 n: 2100 rpm v/u: .230 ϕ : .0° T: 297.9 K



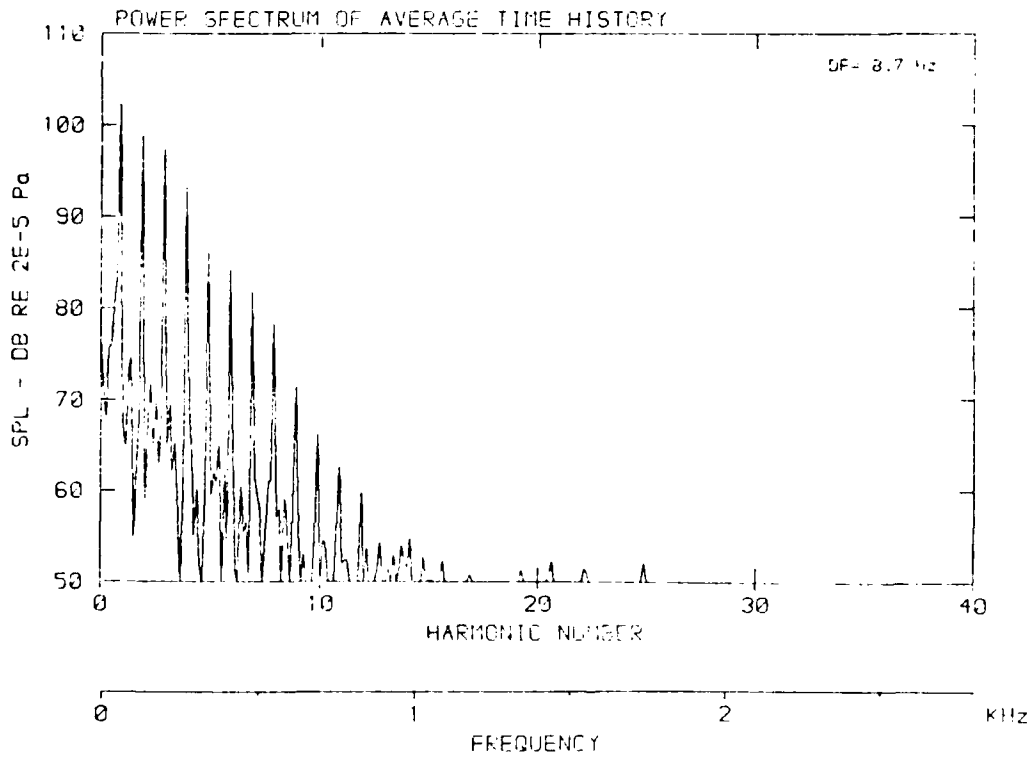
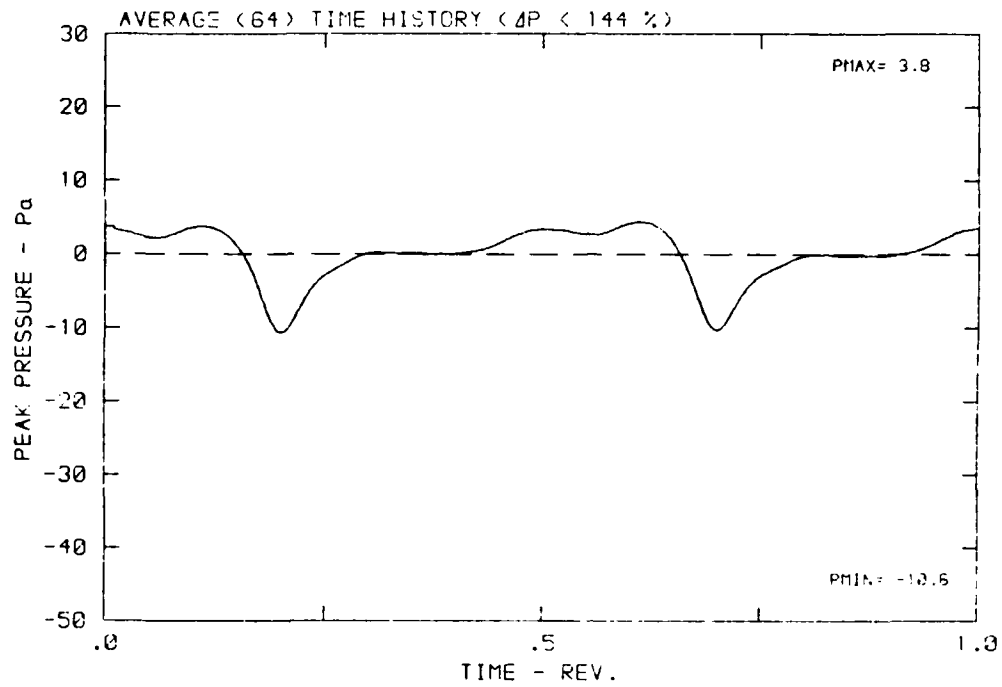
DATA POINT: KC-1 RUN: 192 MP: 2

β : 20.7° MH: .6625 n: 2100 rpm v/u: .230 ϕ : .0° T: 297.9 K



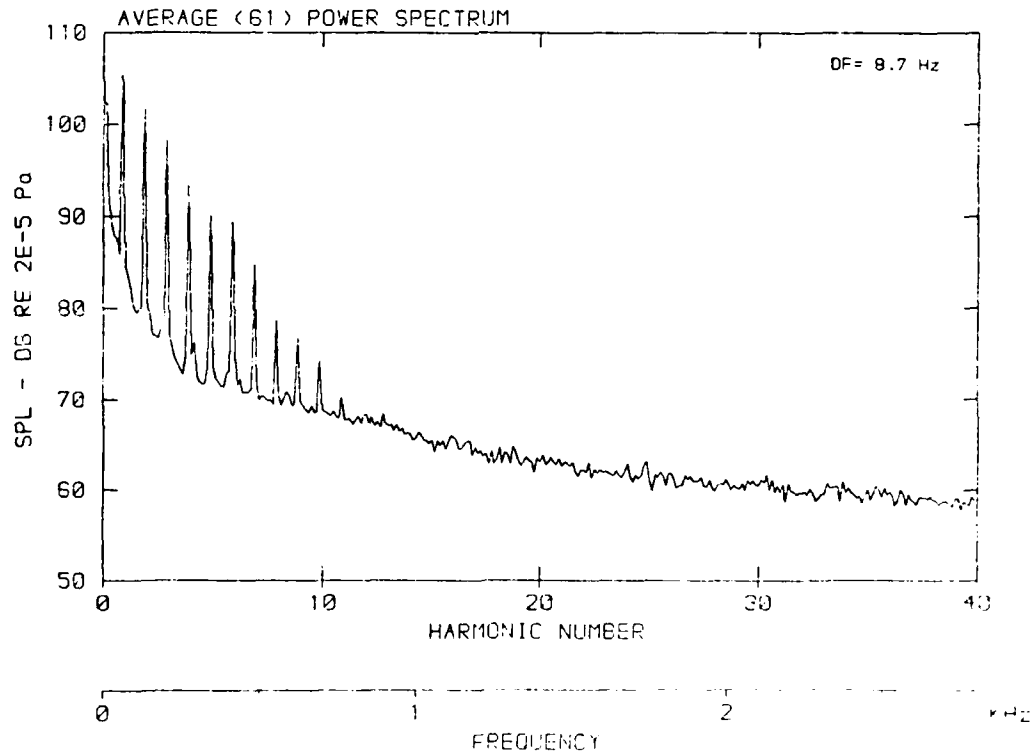
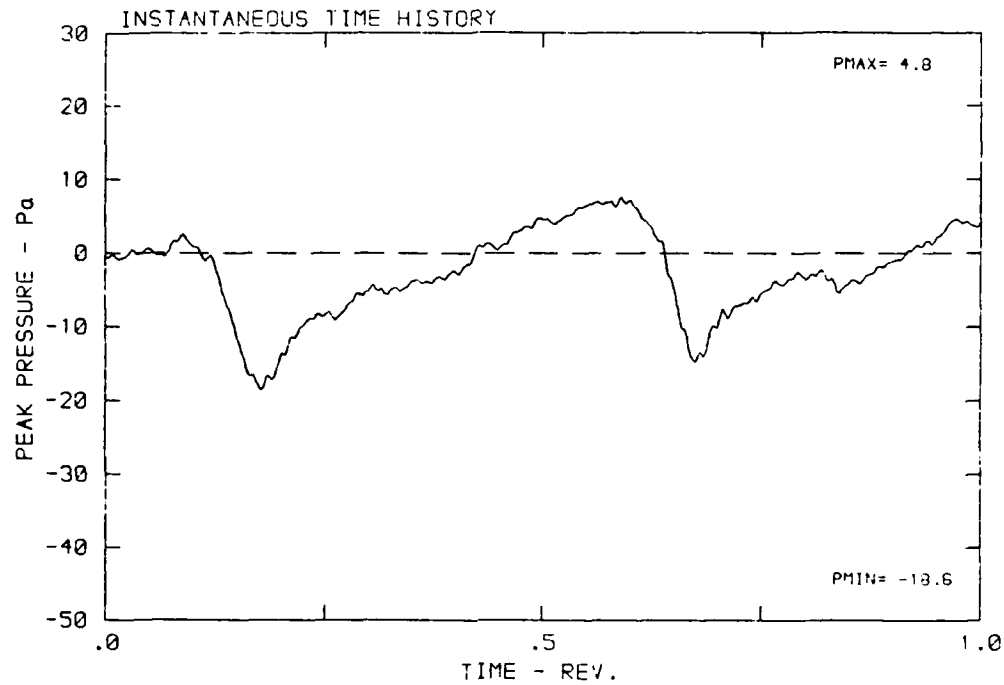
DATA POINT: KC-1 RUN: 192 MP: 2

β : 20.7° MH: .6625 n: 2100 rpm v/u : .230 ϕ : .0° T: 297.9 K



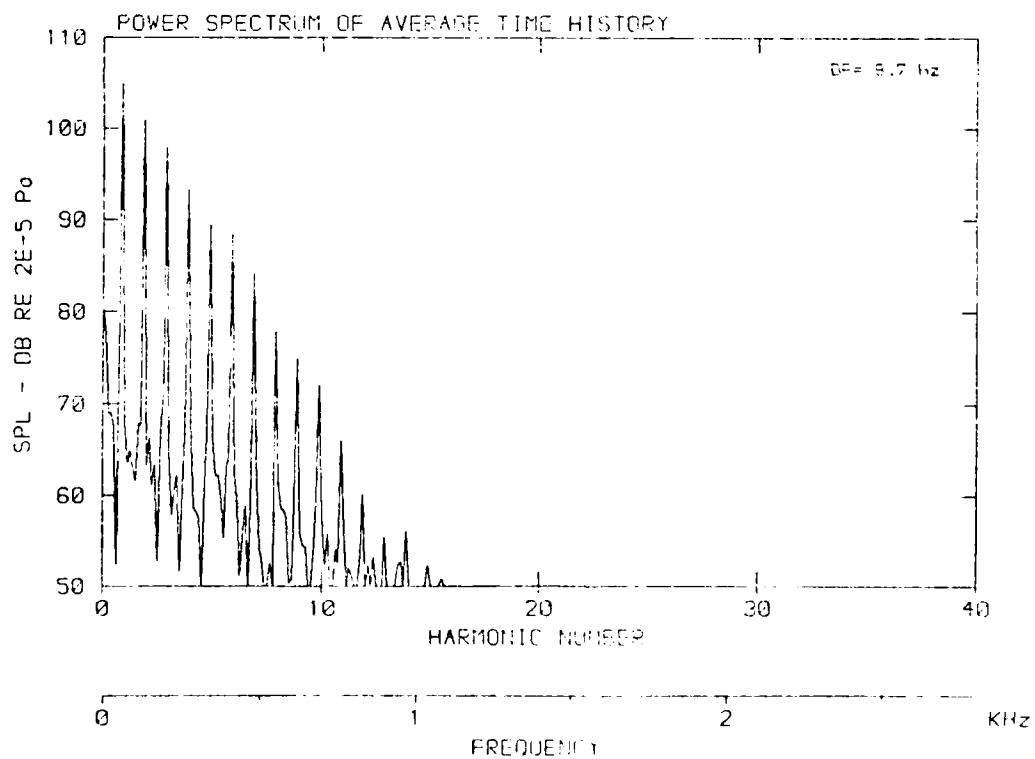
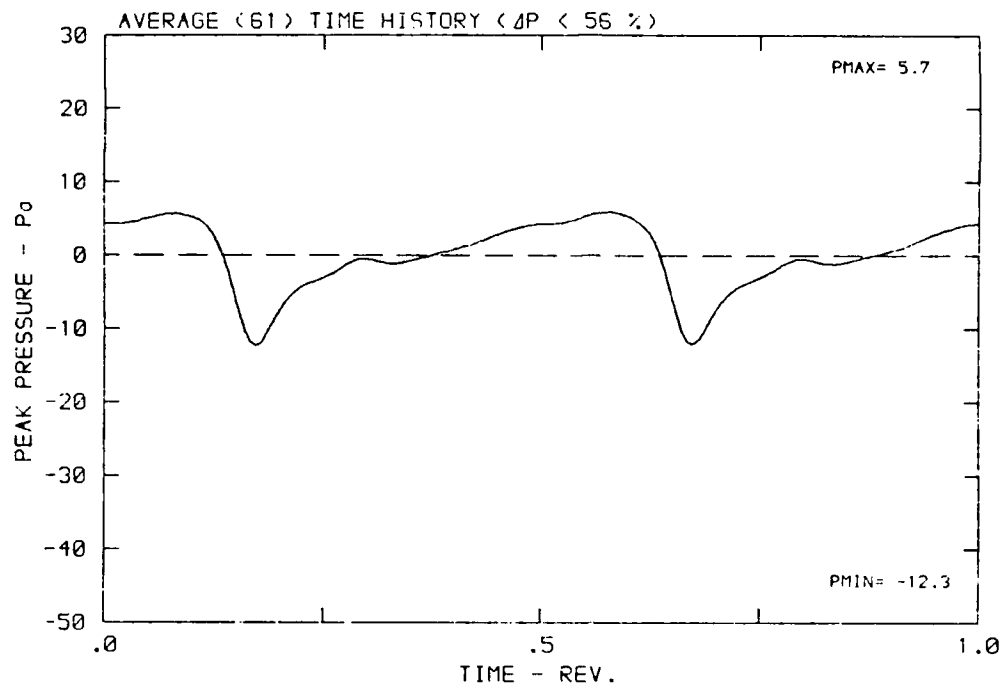
DATA POINT: KC-1 RUN: 192 MP: 3

β : 20.7° MH: .6625 n: 2100 rpm v/u: .230 ϕ : .0° T: 297.9 K



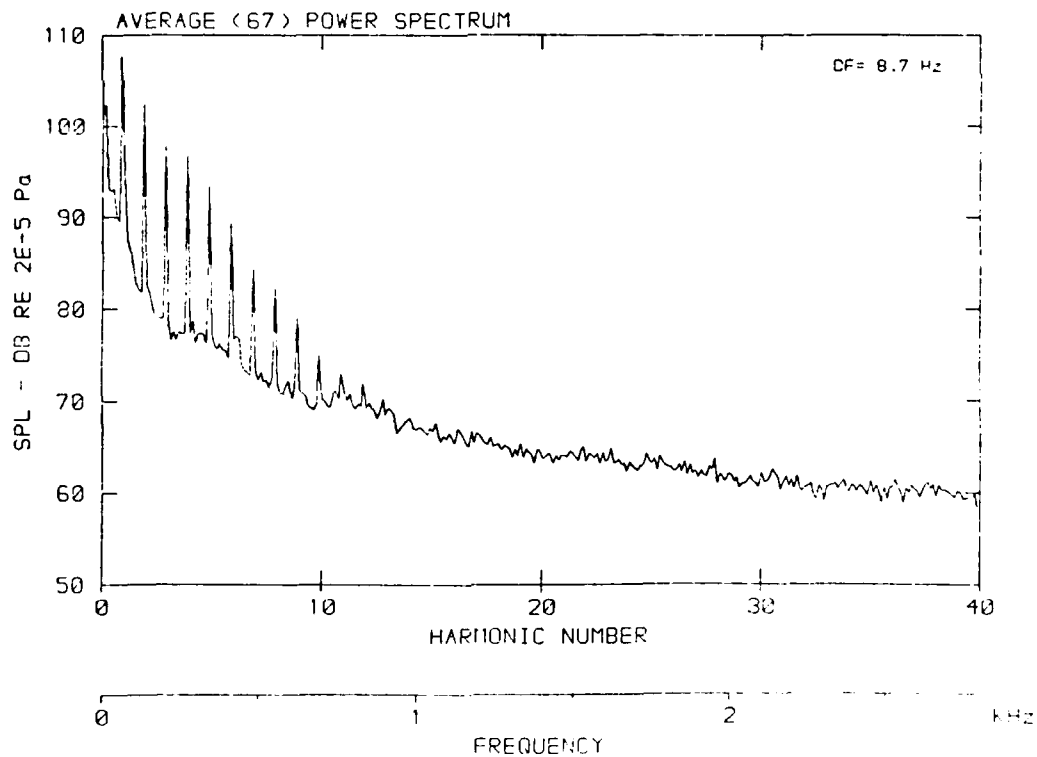
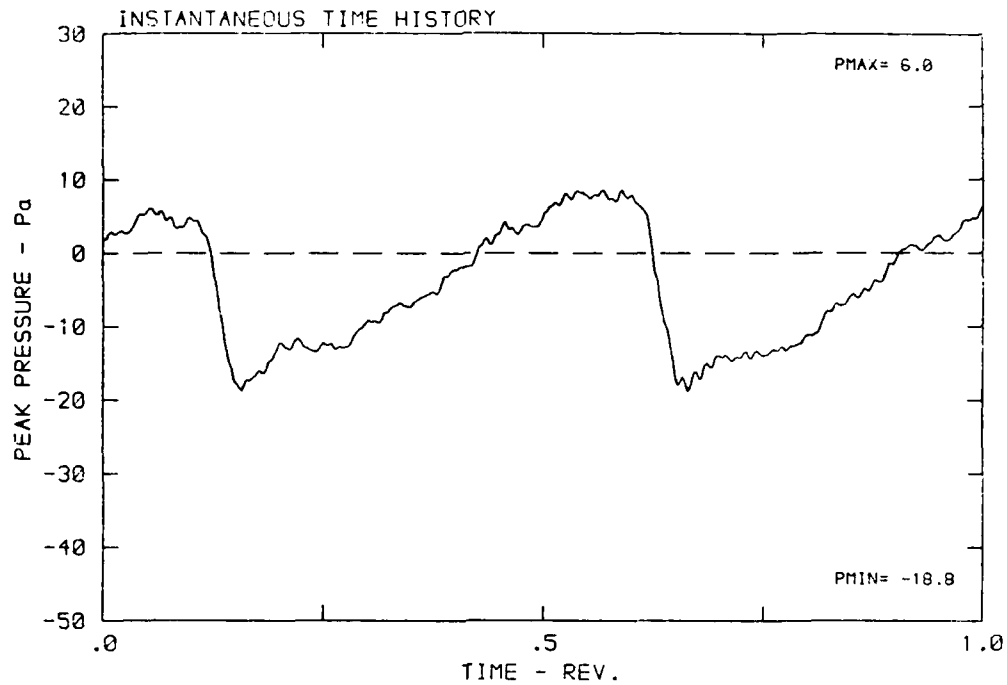
DATA POINT: KC-1 RUN: 192 MP: 3

β : 20.7° MH: .6625 n: 2100 rpm v/u : .230 ϕ : .0° T: 297.9 K



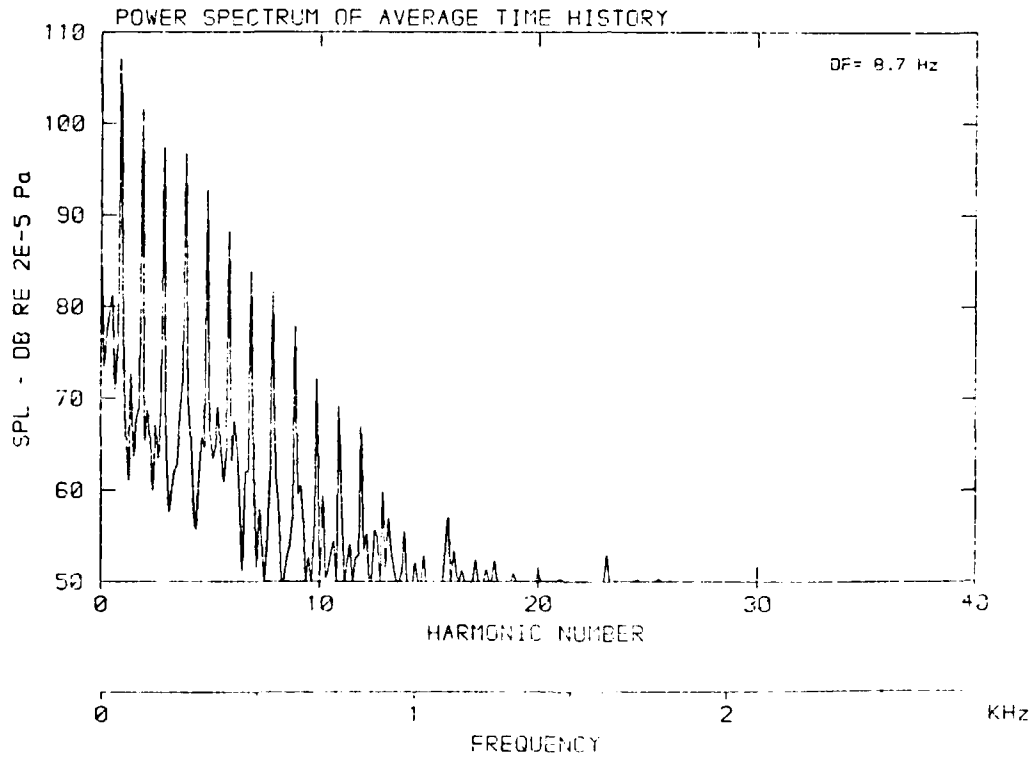
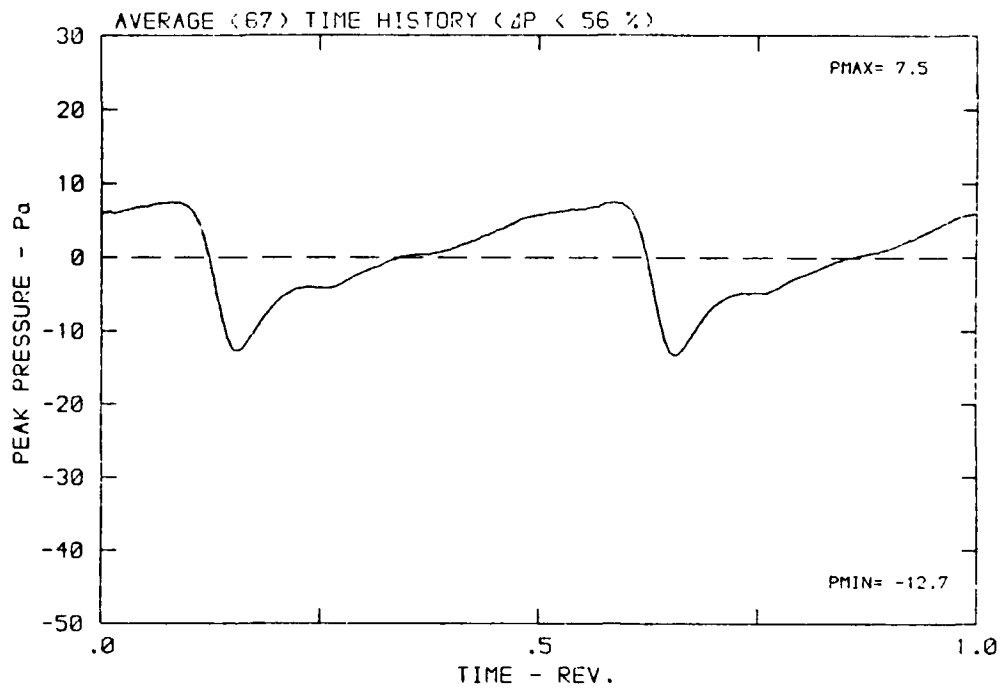
DATA POINT: KC-1 RUN: 192 MP: 4

β : 20.7° MH: .6625 n: 2100 rpm v/u : .230 ϕ : .0° T: 297.9



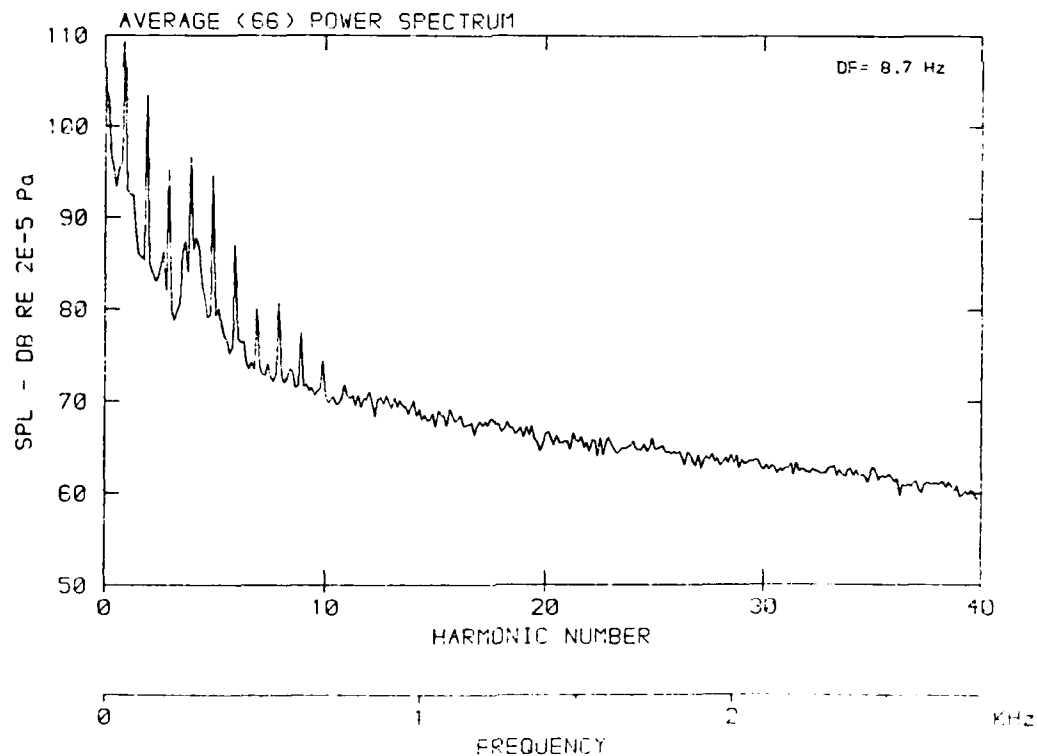
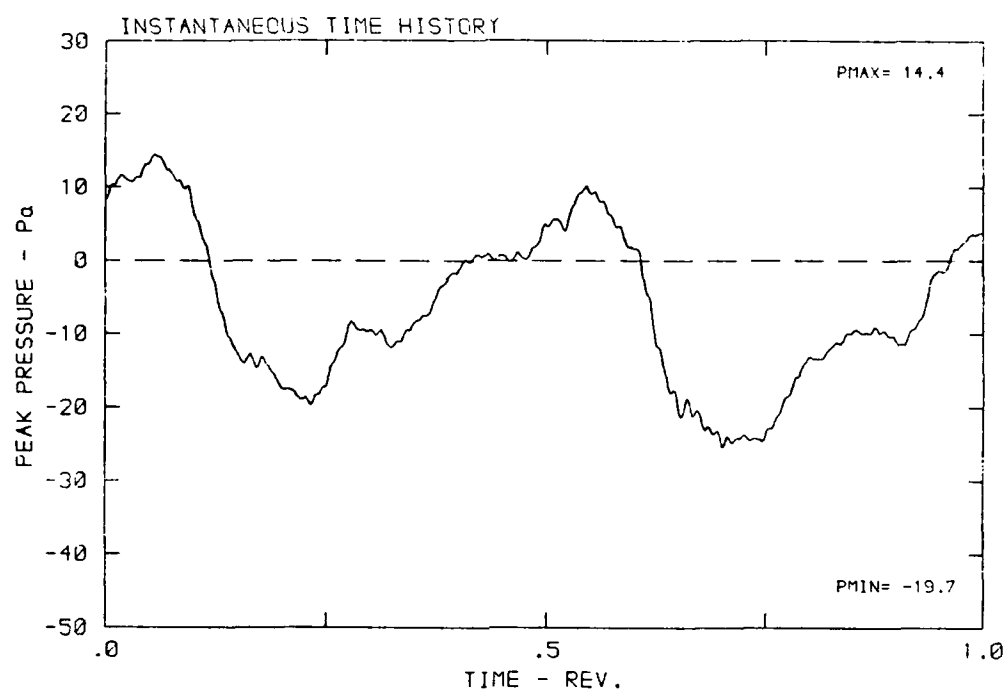
DATA POINT: KC-1 RUN: 192 MP: 4

β : 20.7° MH: .6625 n: 2100 rpm v/u: .230 ϕ : .0° T: 297.9 K



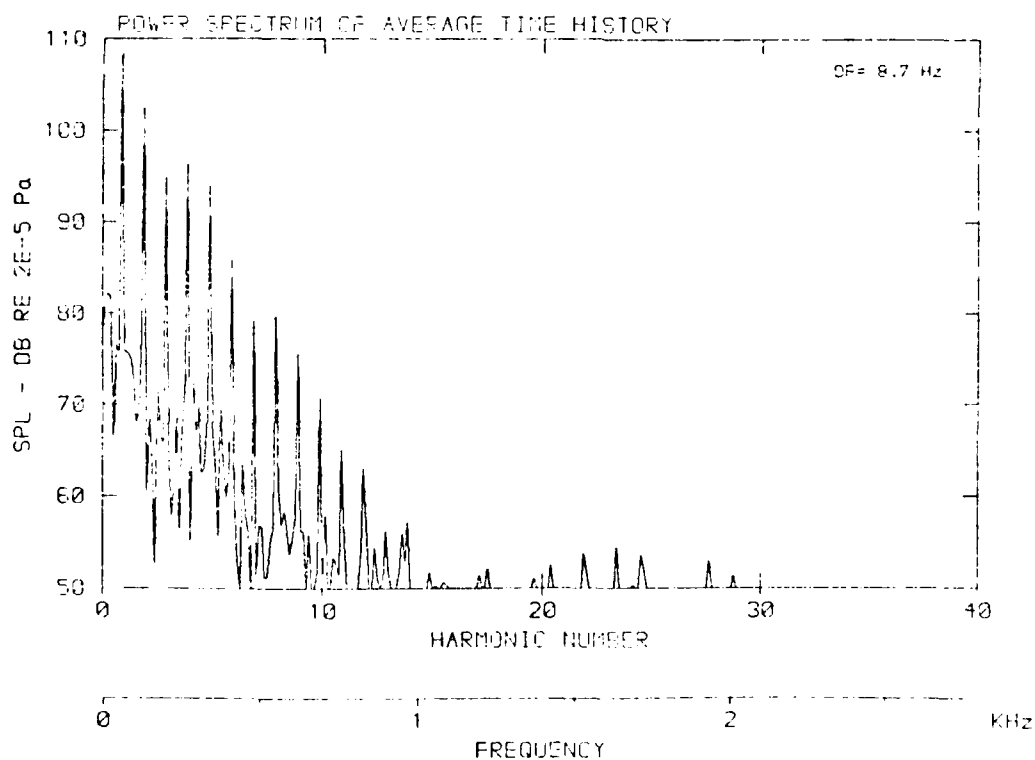
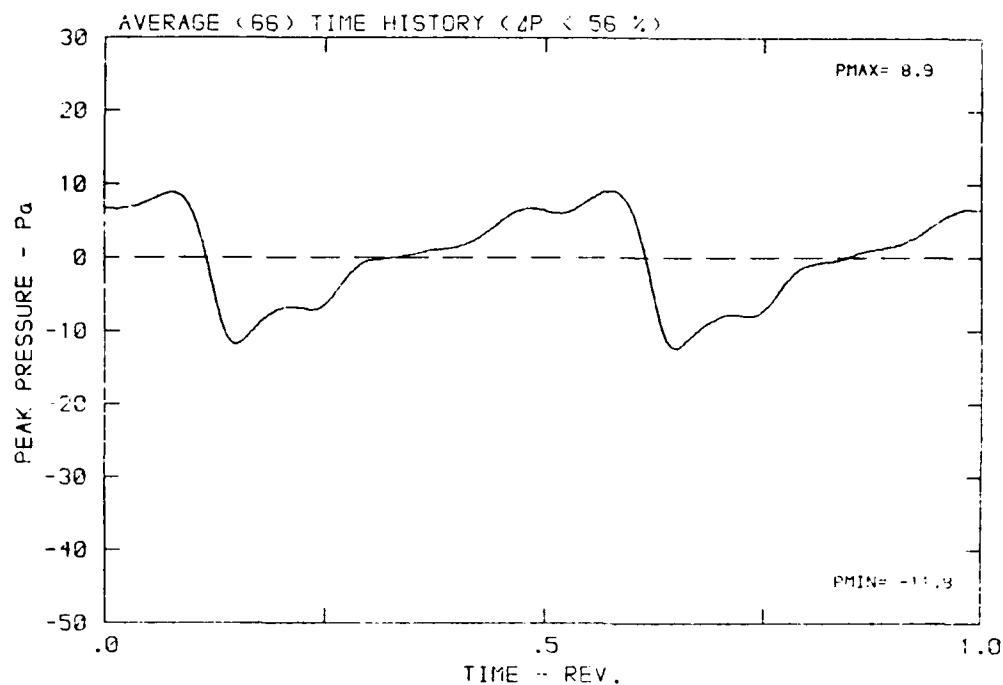
DATA POINT: KC-1 RUN: 192 MP: 5

β : 20.7° MH: .6625 n: 2100 rpm v/u : .230 ϕ : .0° T: 297.6 K



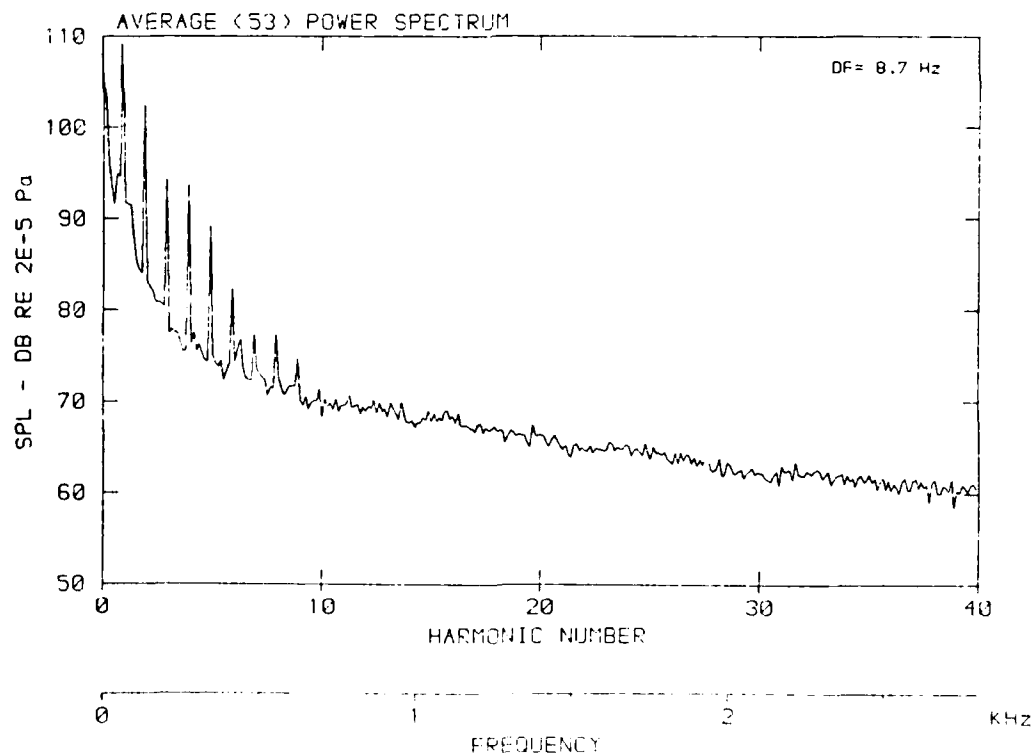
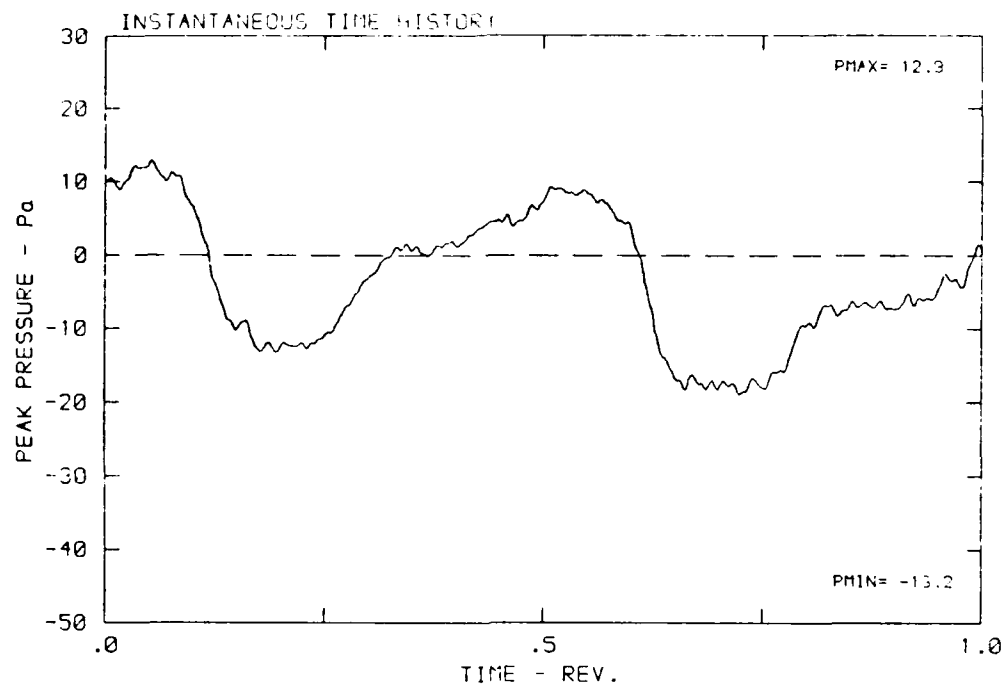
DATA POINT: KC-1 RUN: 192 MP: 5

β : 20.7° MH: .6625 n: 2100 rpm v/u : .230 ϕ : .0° T: 297.9 k



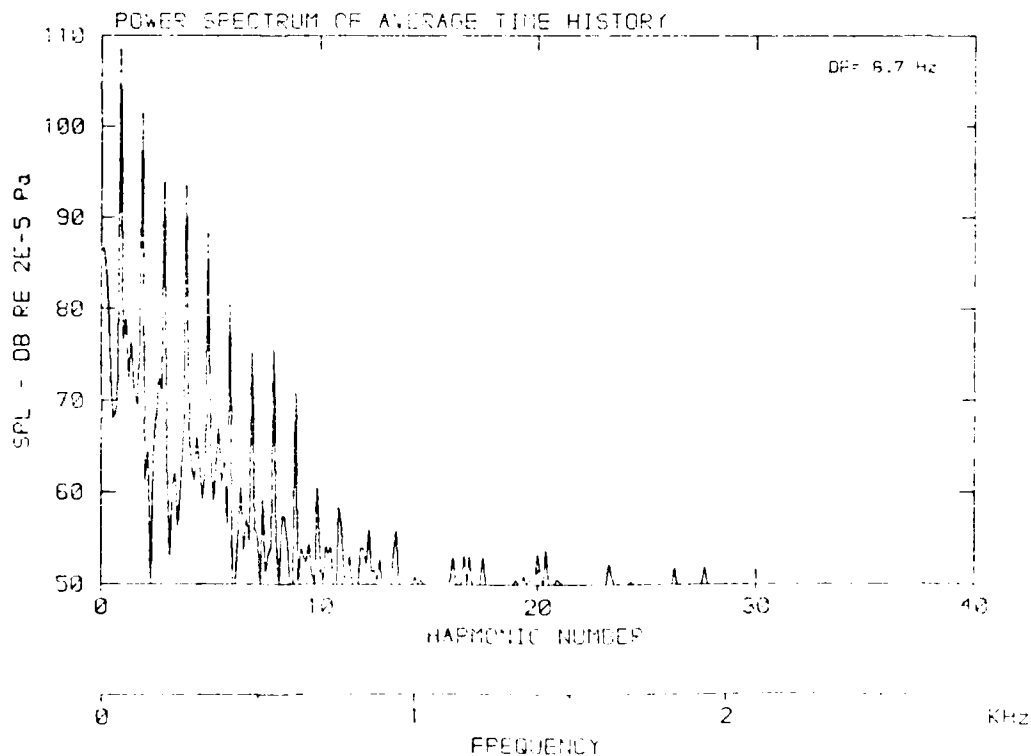
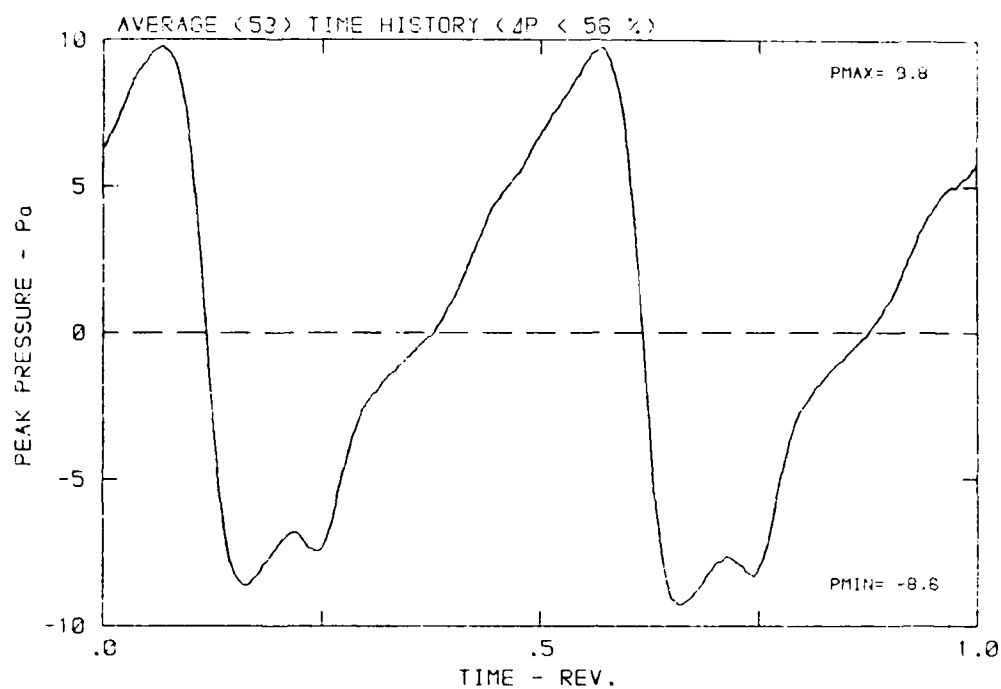
DATA POINT: KC-1 RUN: 192 MP: 5

β : 20.7° MH: .6625 n: 2100 rpm vcu: .230 ϕ : .0° T: 257.5 s



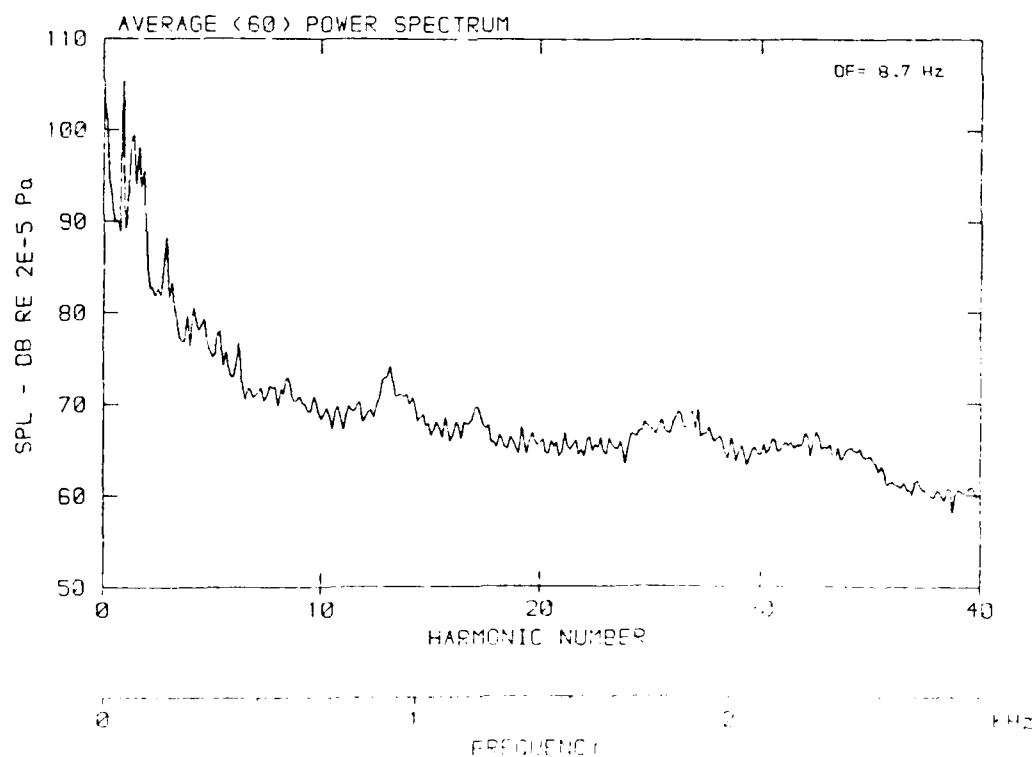
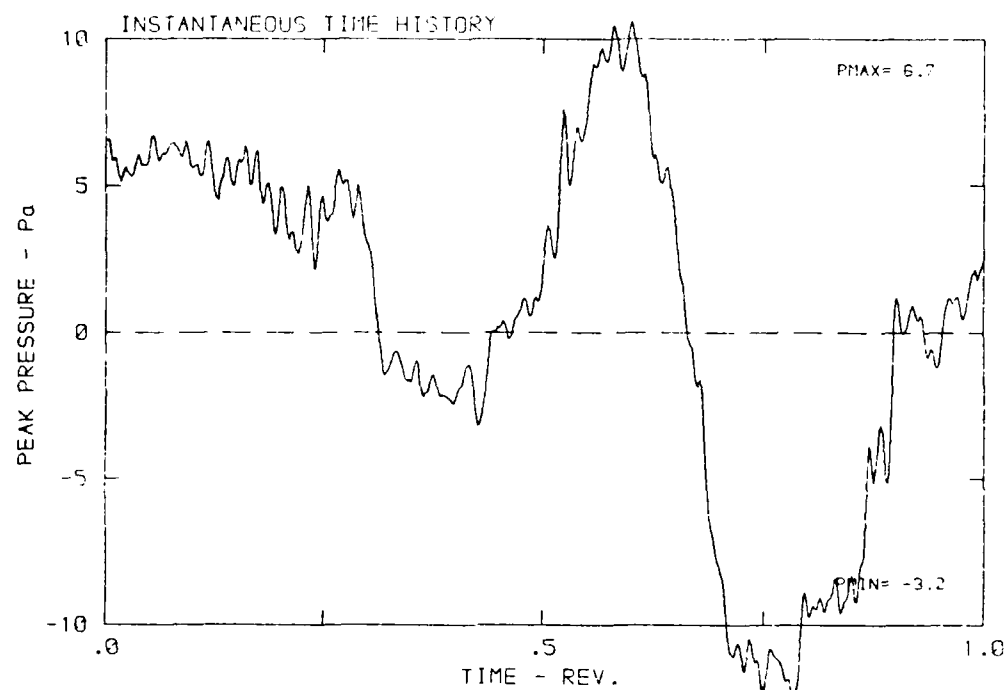
DATA POINT: KC-1 RUN: 192 MP: 6

β : 20.7° MH: .6625 n: 2100 rpm v/u: .230 ϕ : .0° T: 297.9 K



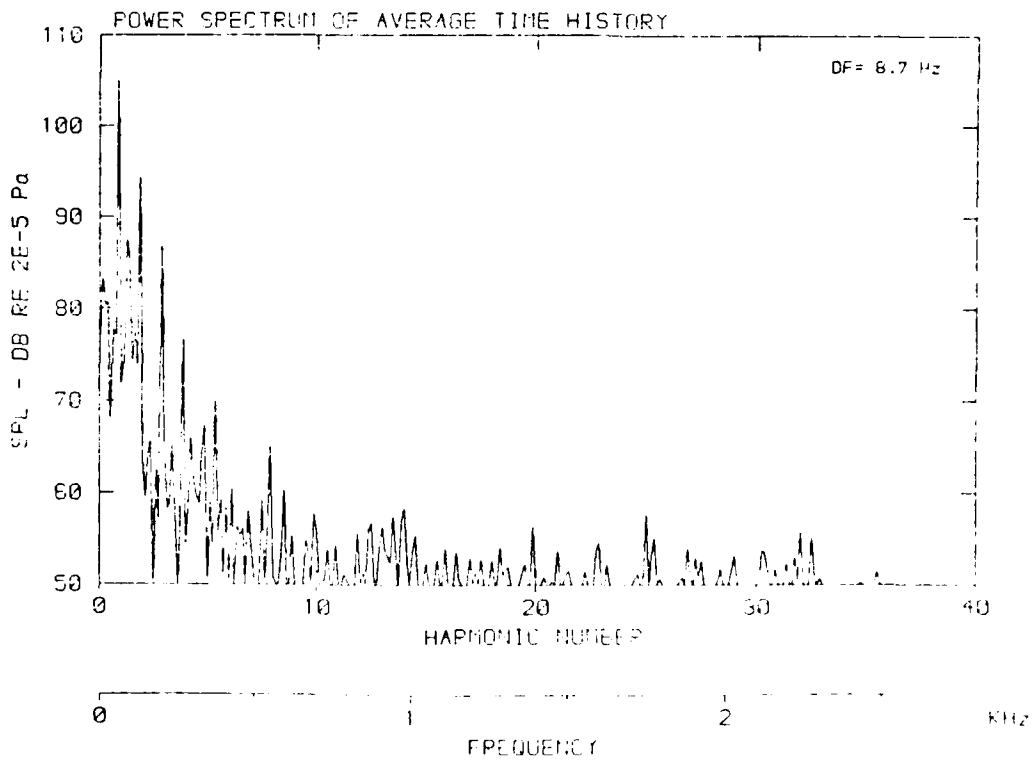
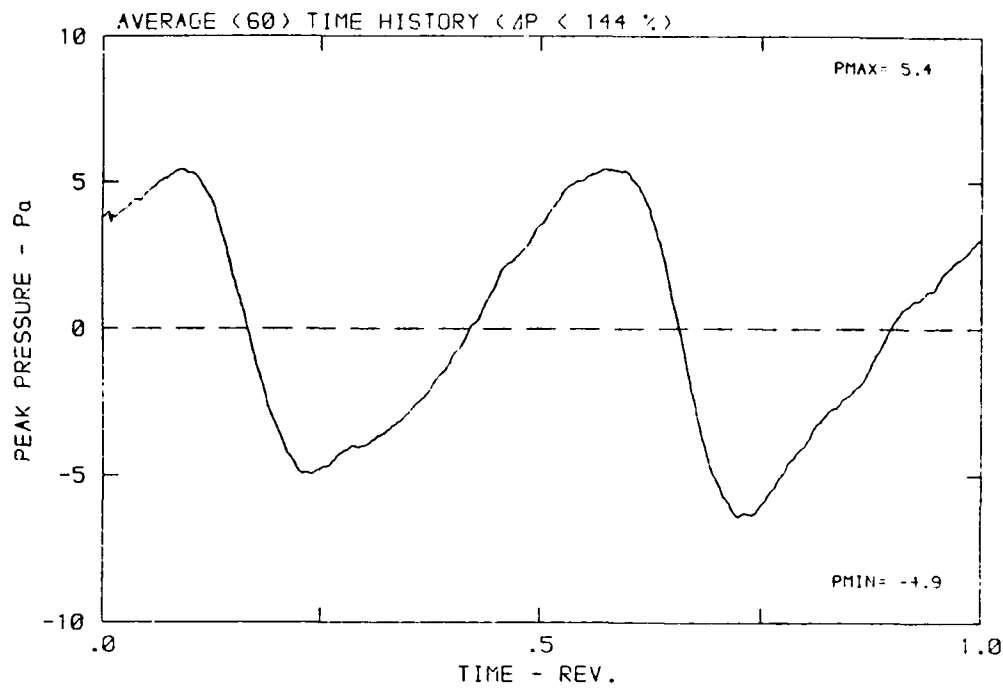
DATA POINT: KC-1 RUN: 132 NP: 7

β : 20.7° MH: .6625 n: 2100 rpm v/u : .230 ψ : .0° T: 297.9 K



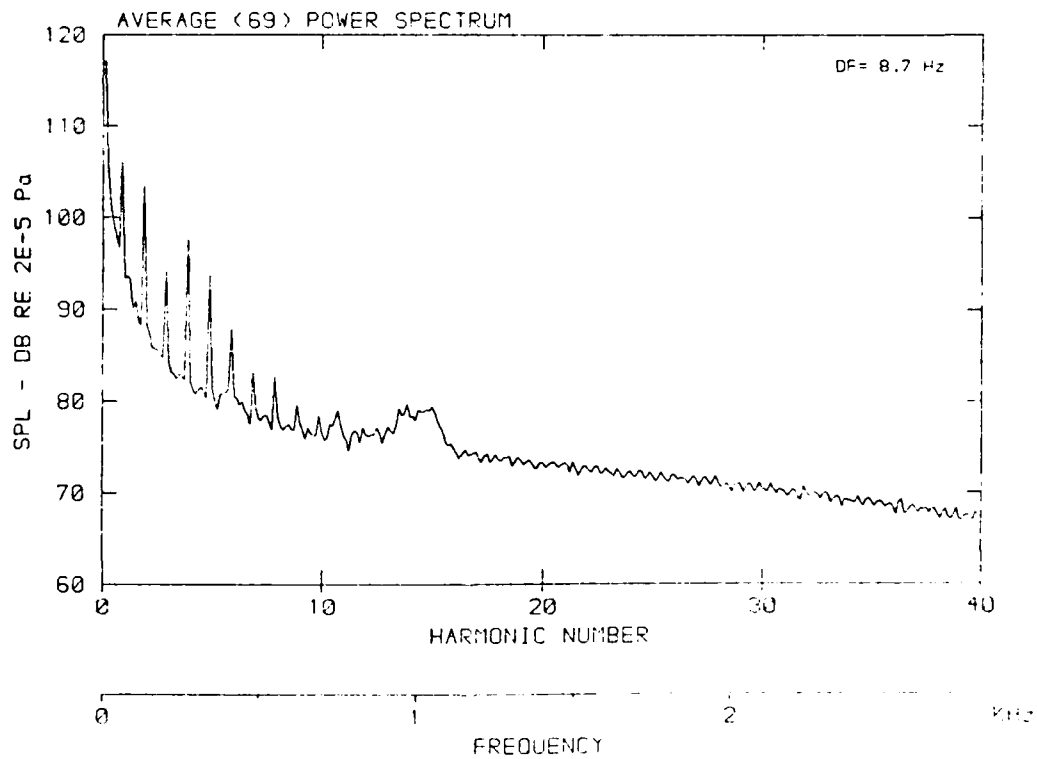
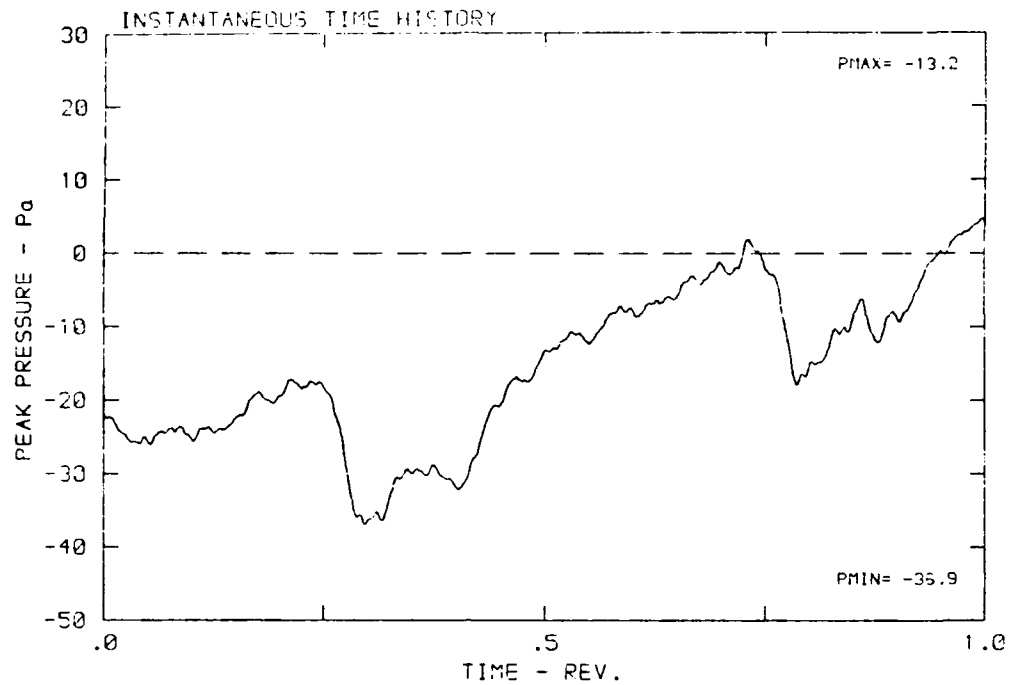
DATA POINT: KC-1 RUN: 192 MP: 7

β : 20.7° MH: .6625 n: 2100 rpm v/u: .230 ϕ : .0° T: 297.9 K



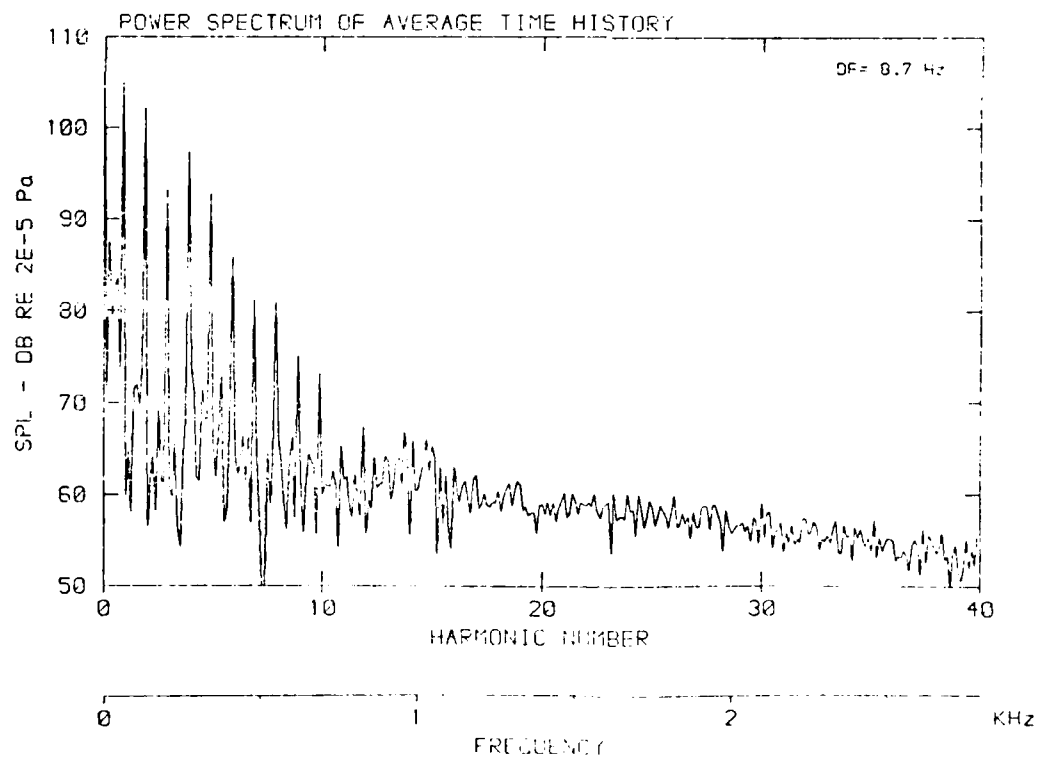
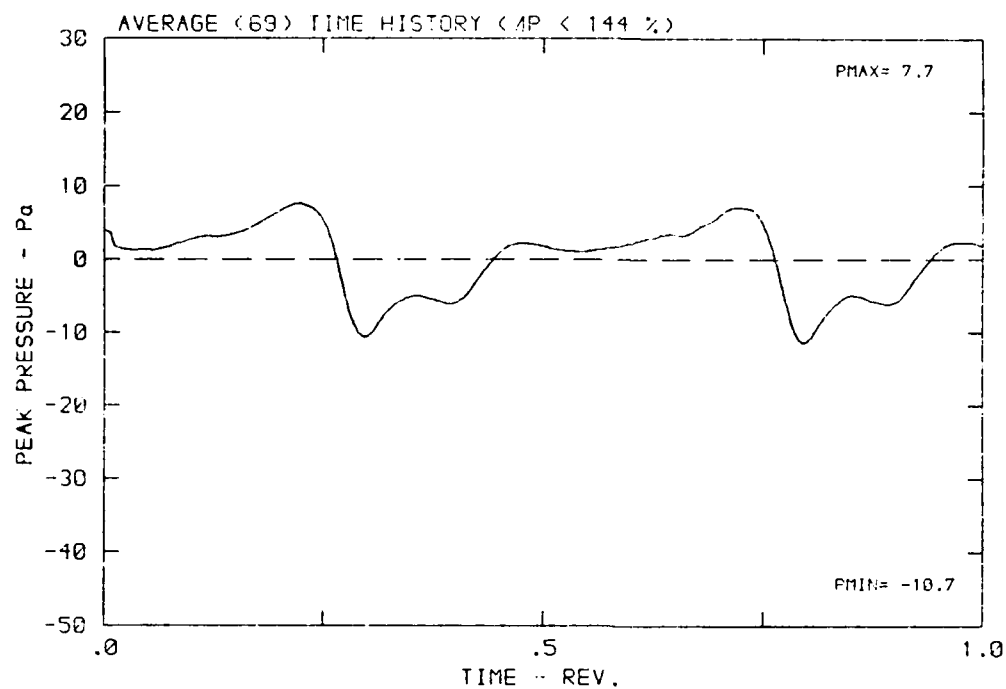
DATA POINT: KC-1 RUN: 192 MP: 9

β : 20.7° MH: .6625 n: 2100 rpm v/u : .230 ϕ : .0° T: 237.9 K



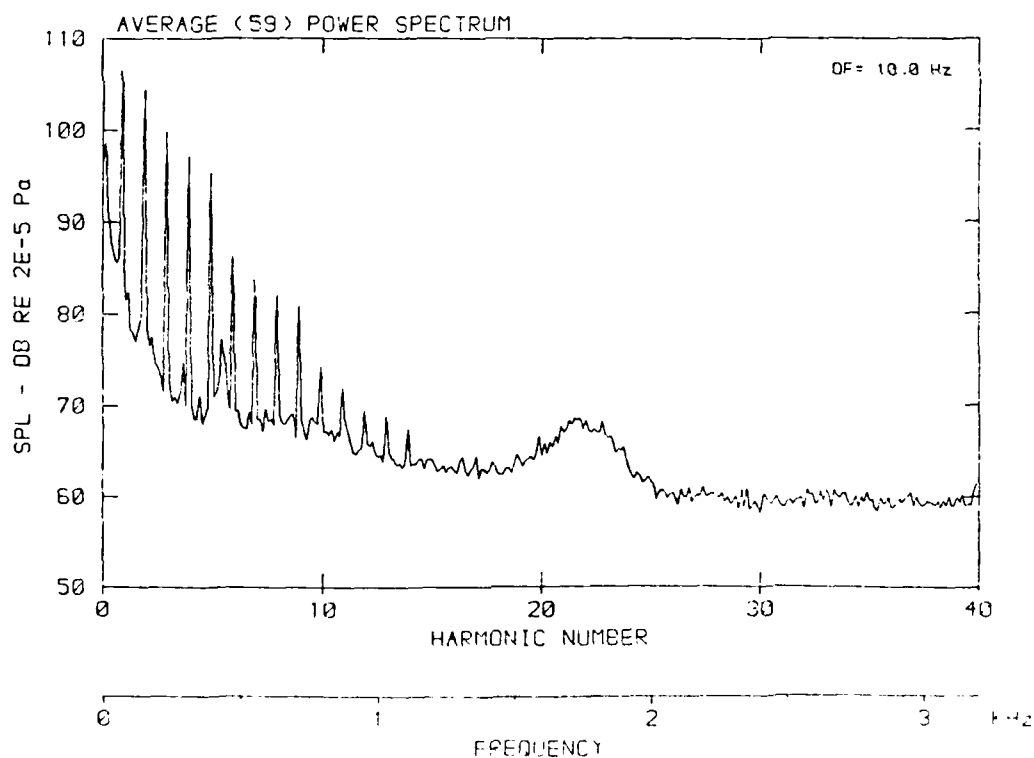
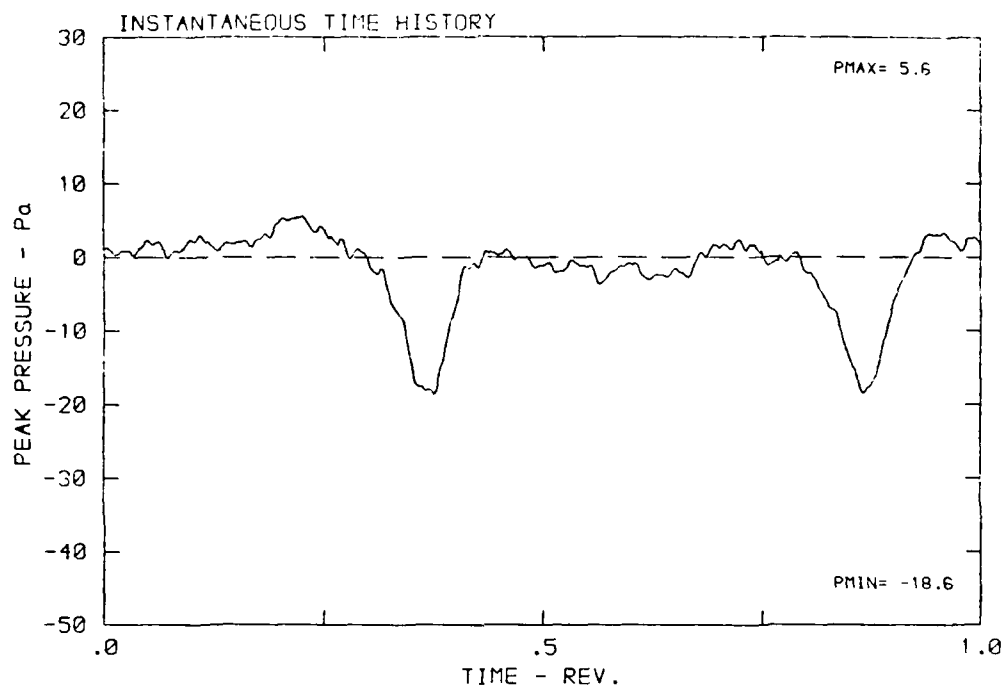
DATA POINT: KC-1 RUN: 192 MP: 9

β : 20.7° MH: .6625 n: 2100 rpm v/u : .230 ϕ : .0° T: 297.9 K



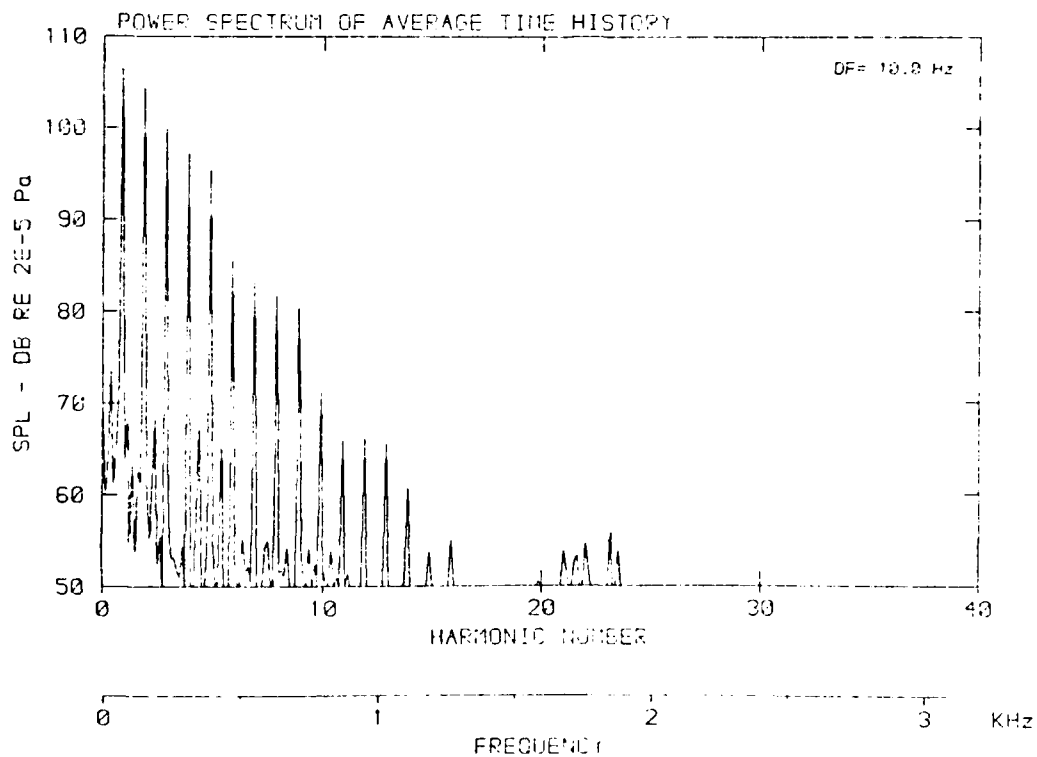
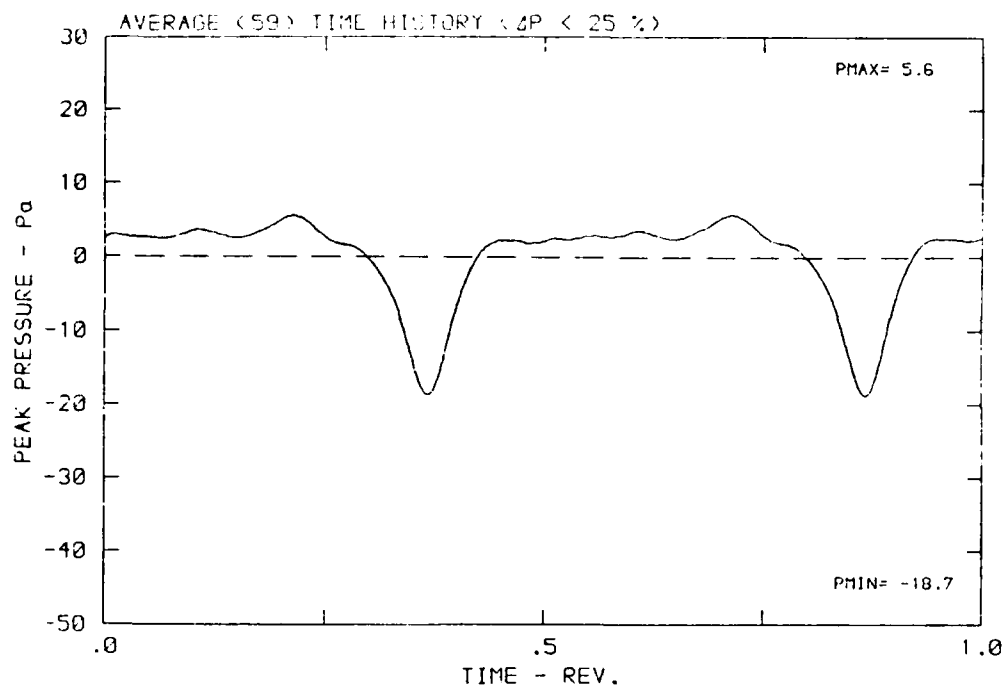
DATA POINT: KC-2 RUN: 191 MP: 1

β : 20.7° MH: .7524 n: 2400 rpm v/u : .203 ϕ : .0° T: 200.4

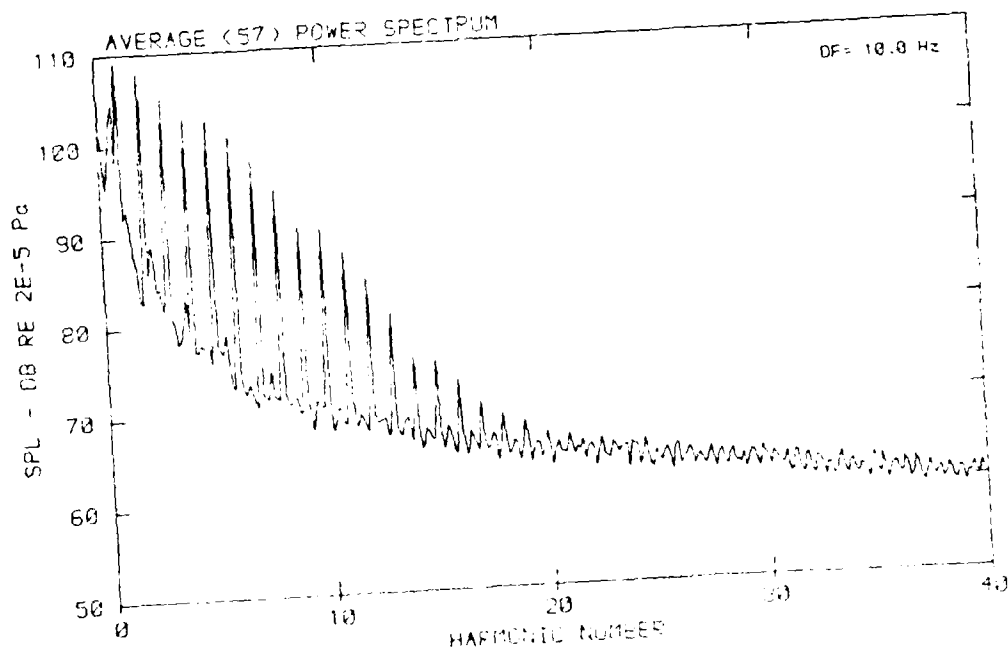
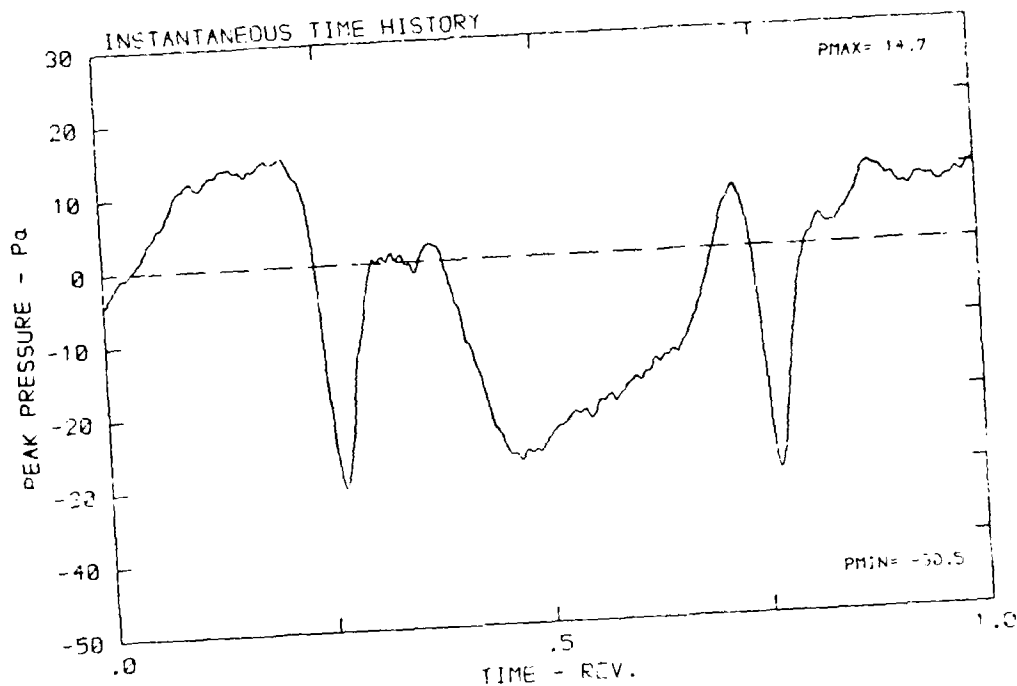


DATA POINT: KC-7 RUN: 191 MP: 1

β : 20.7° MH: .7524 n: 2400 rpm v/u : .203 ϕ : .0° T: 298.4 K



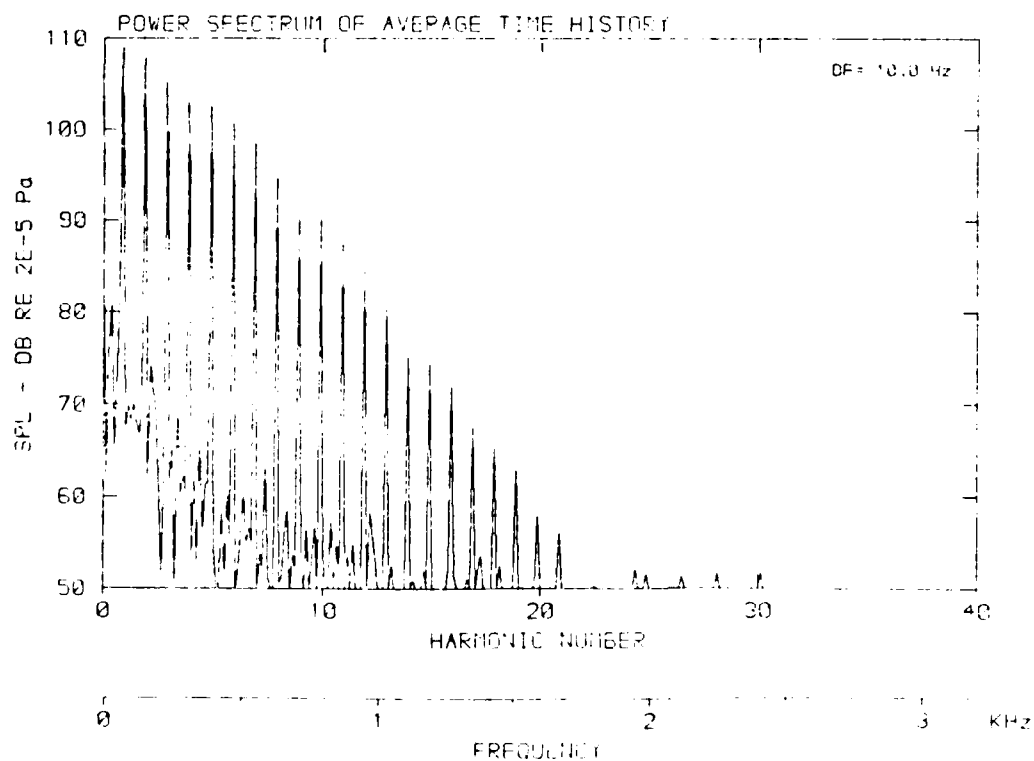
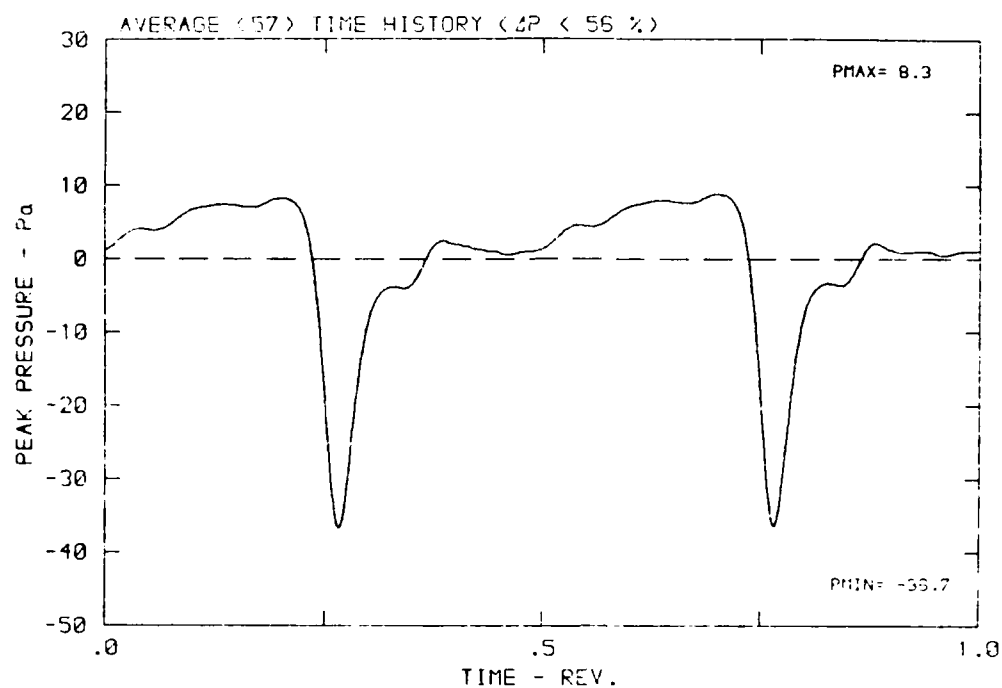
DATA POINT: KC-2 RUN: 191 MP: 5
 β : 20.7° MH: .7524 n: 2400 rpm v/u : .203 ϕ : .8° τ : 100.4



FREQ. (Hz)

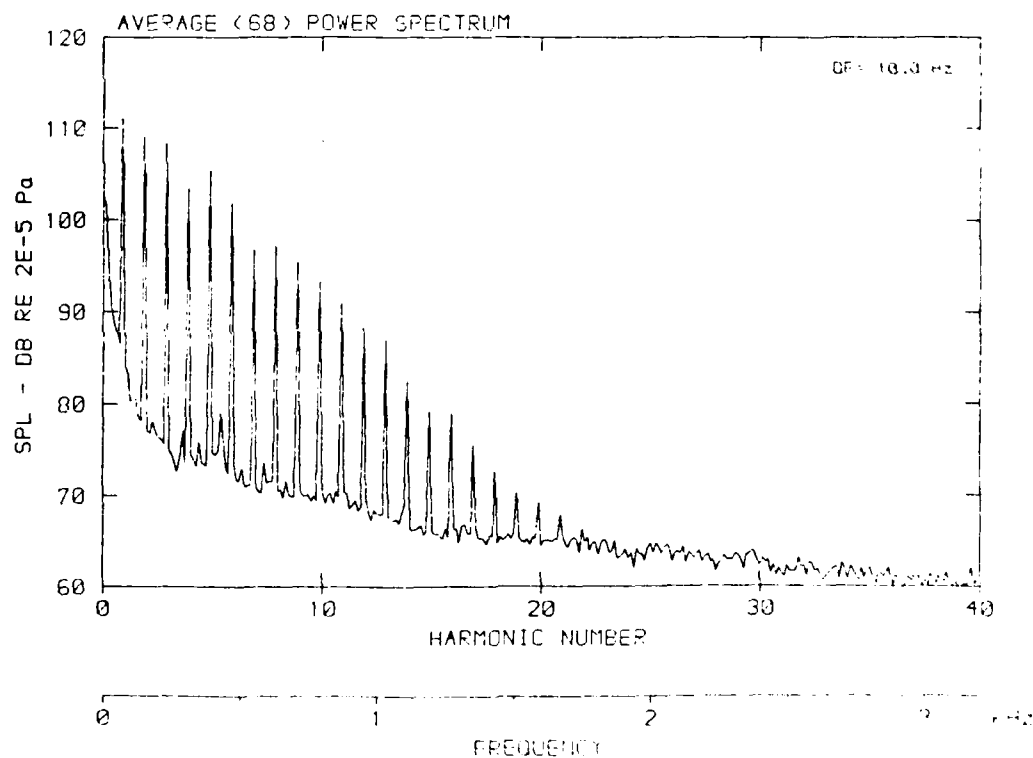
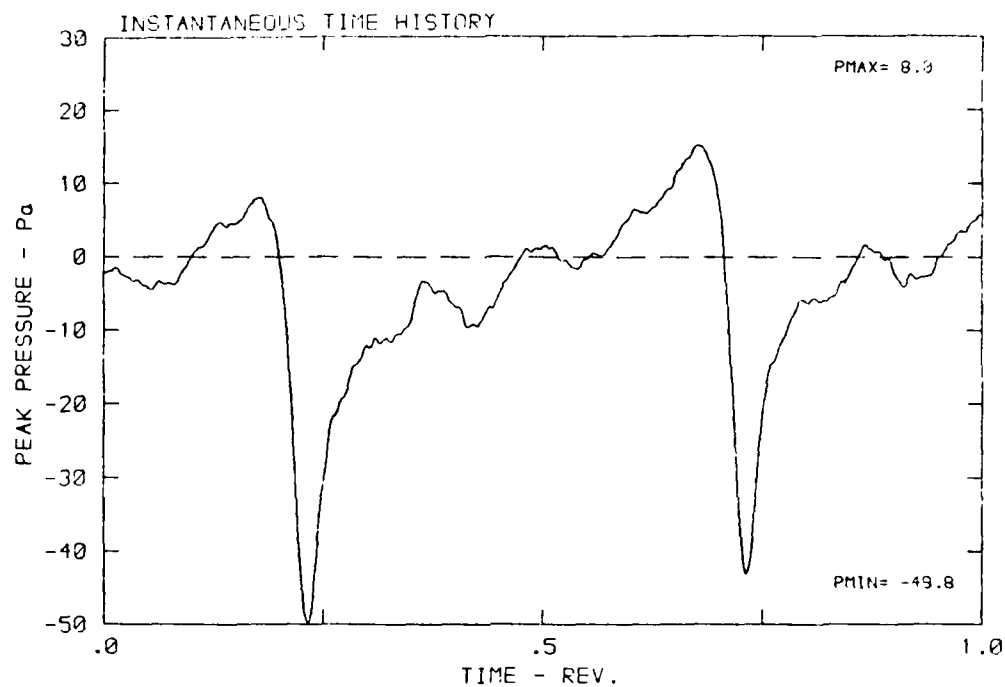
DATA POINT : KC-2 RUN : 191 MP : 2

β : 20.7° MH : .7524 n : 2400 rpm v/u : .203 ϕ : .0° T : 298.4 K



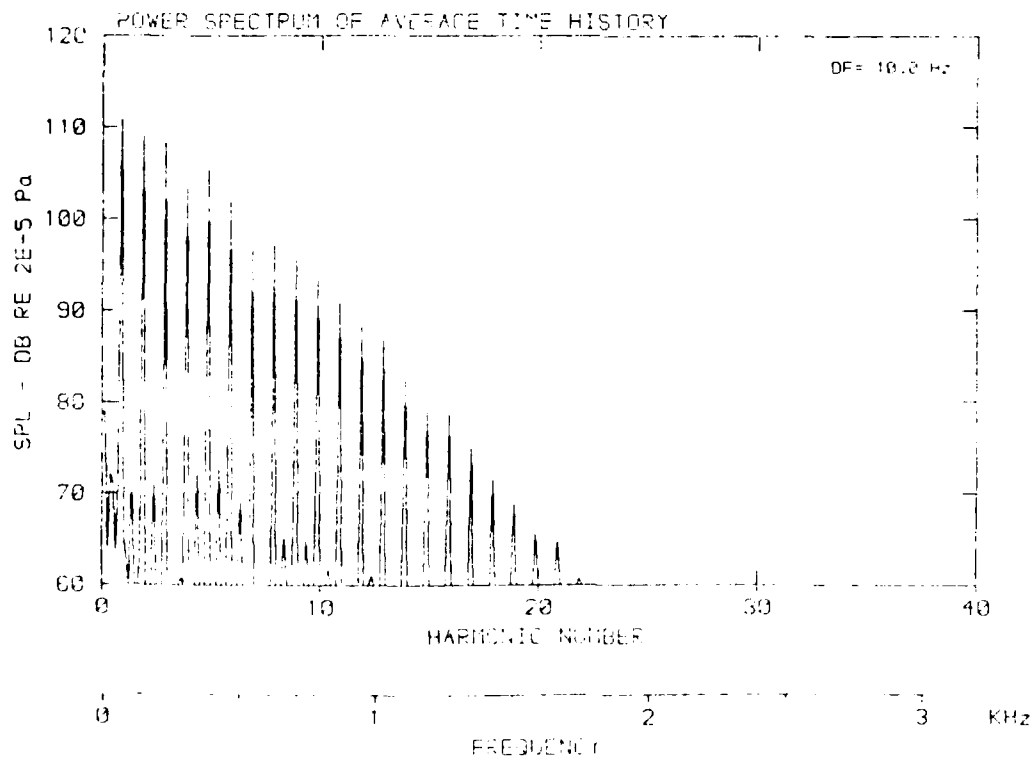
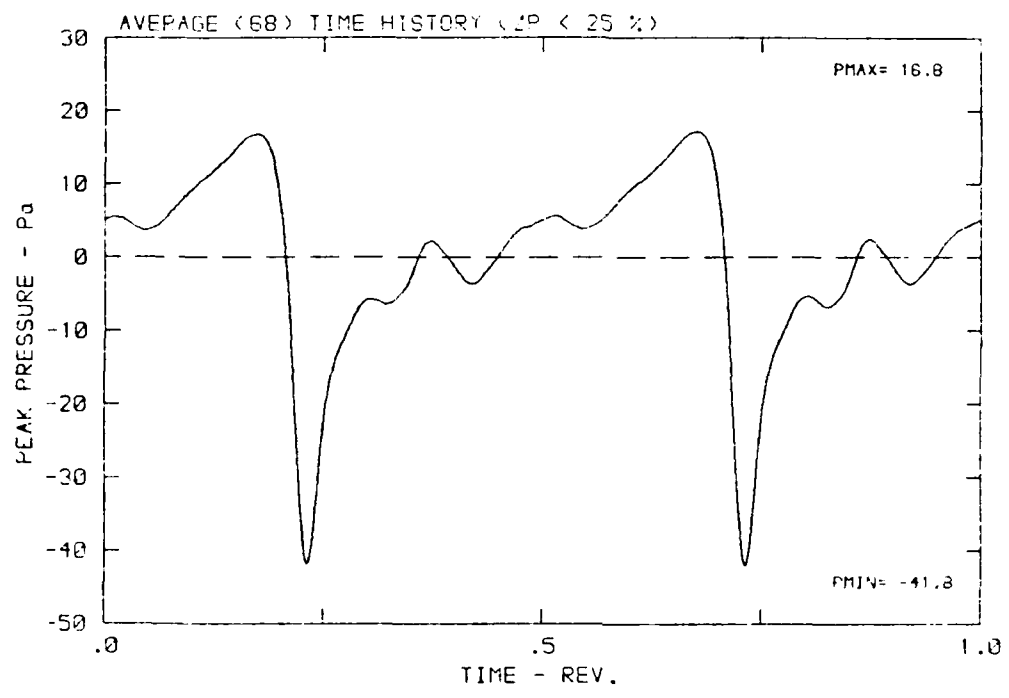
DATA POINT: KC-2 RUN: 191 MP: 3

β : 20.7° MH: .7524 n: 2400 rpm v/u : .203 ϕ : .0° T: 298.4 K



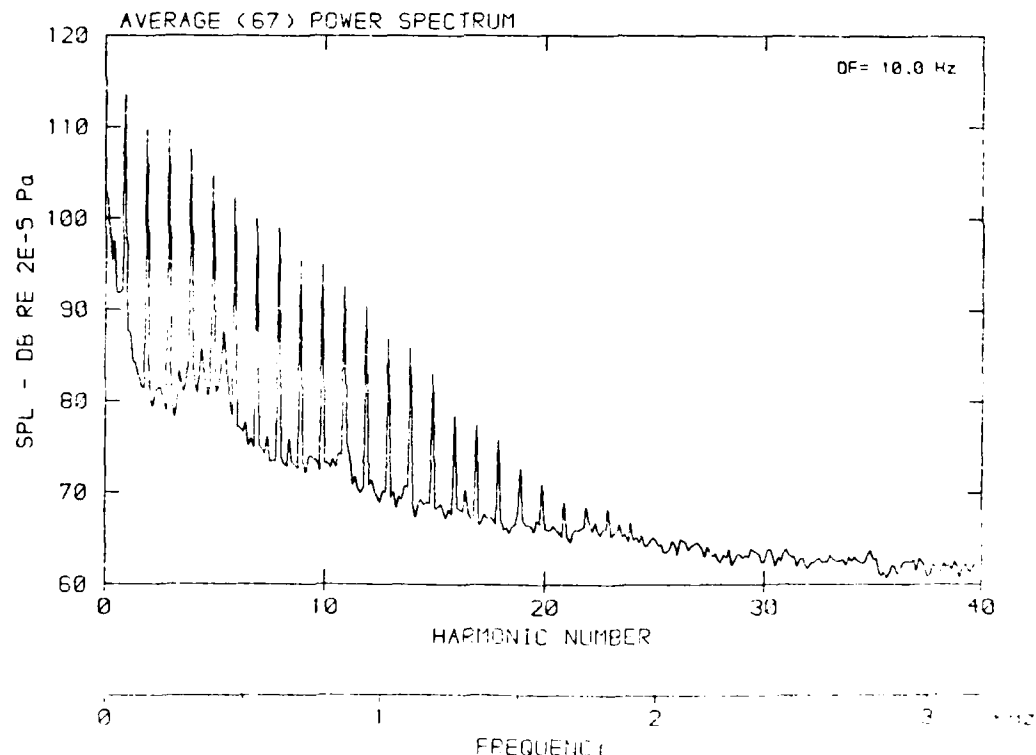
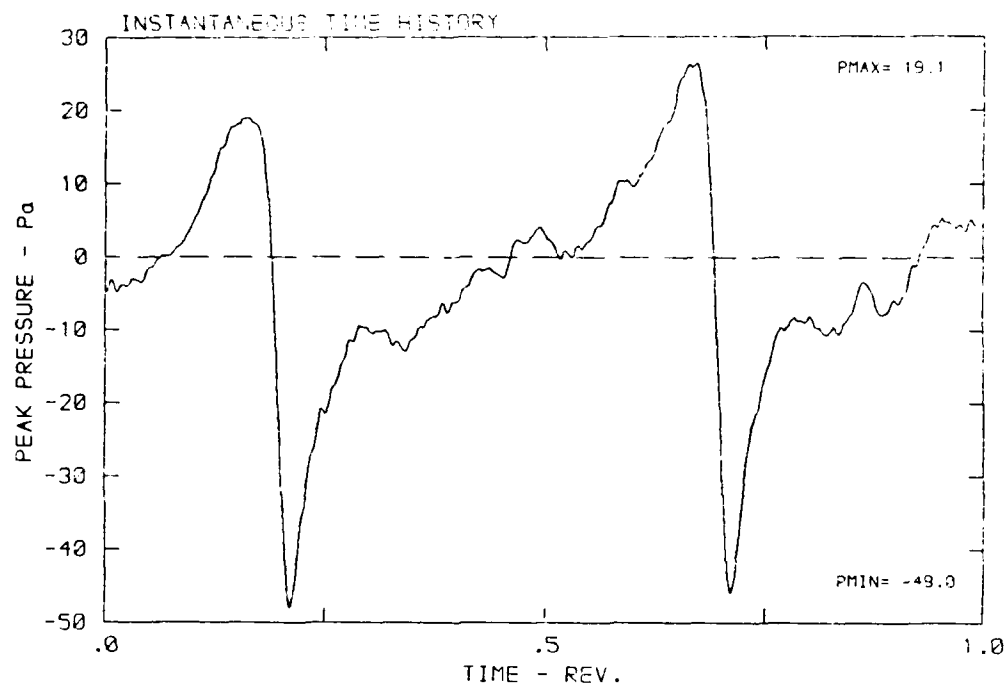
DATA POINT: KC-2 RUN: 191 MP: 3

β : 20.7° MH: .7524 n: 2400 rpm v u: .203 ϕ : .0° T: 293.4 K



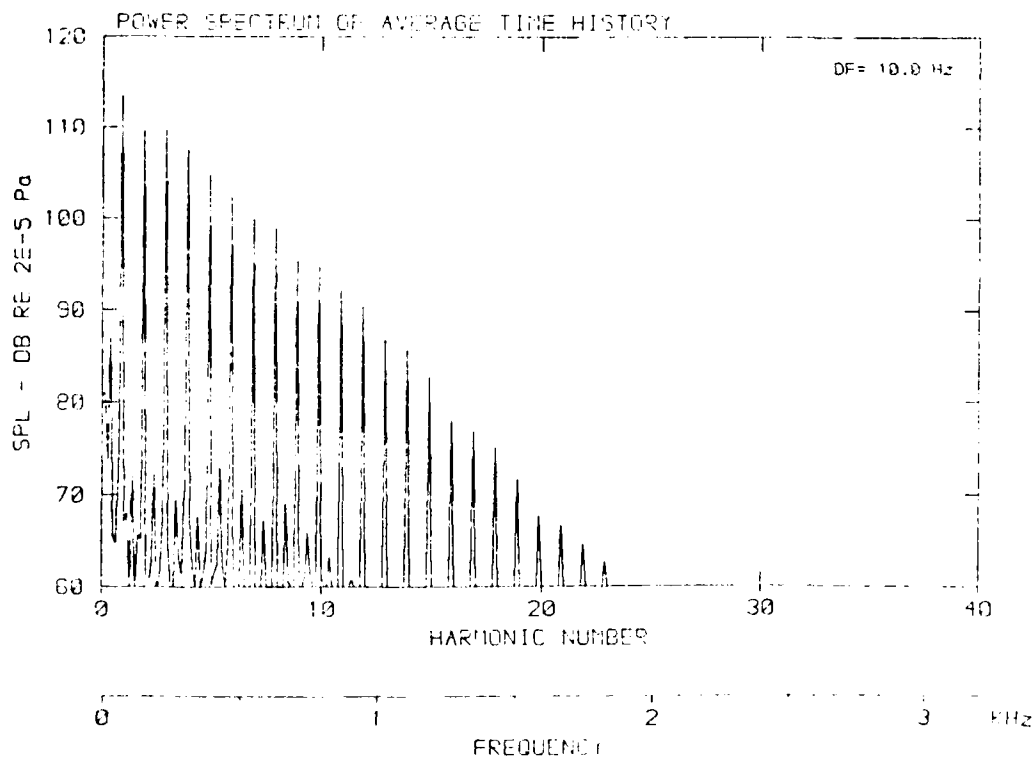
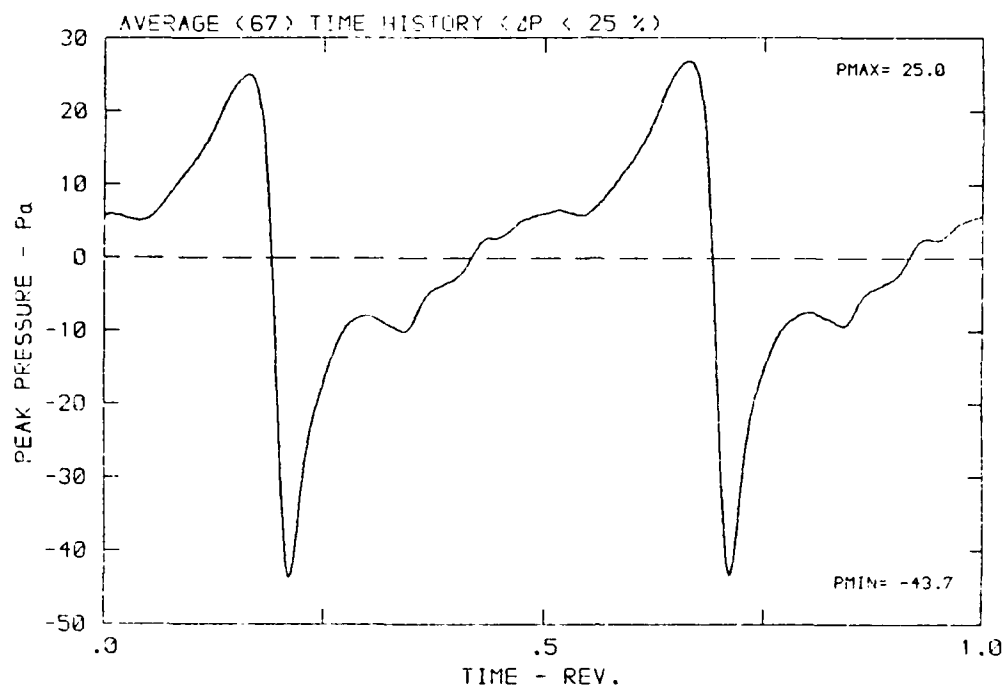
DATA POINT: KC-2 RUN: 191 MP: 5

β : 20.7° MH: .7524 n: 2400 rpm vzu: .203 ϕ : .0° T: 299.4 K



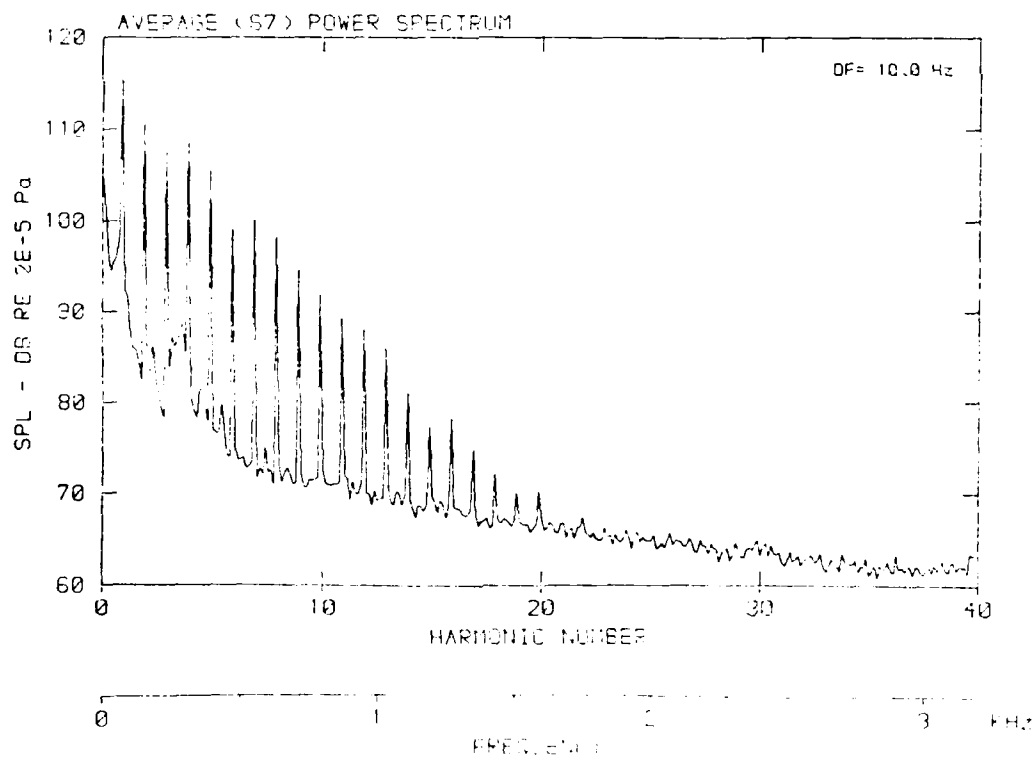
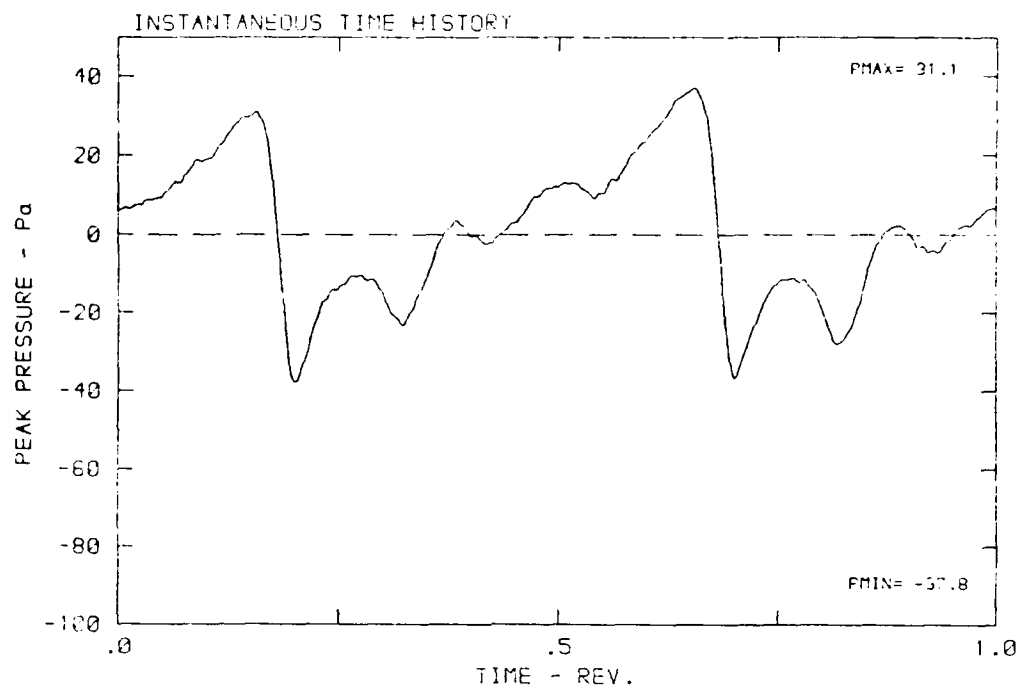
DATA POINT: KC-2 RUN: 191 MP: 4

β : 20.7° MH: .7524 n: 2400 rpm v/u: .203 ϕ : .0° T: 298.4 K



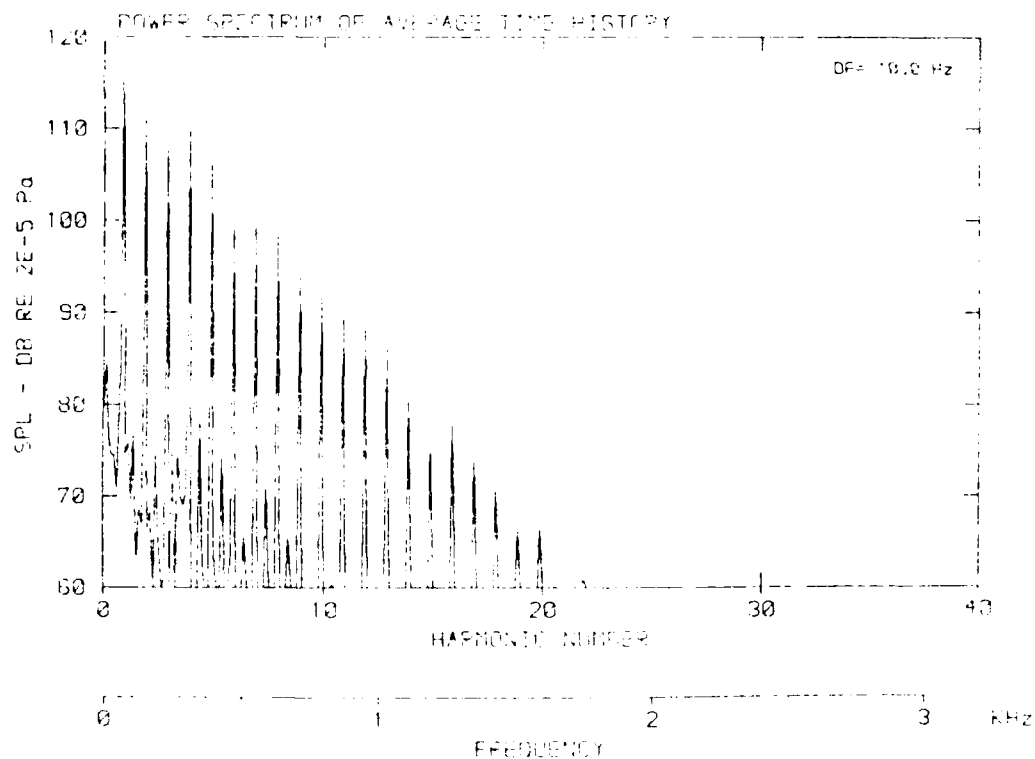
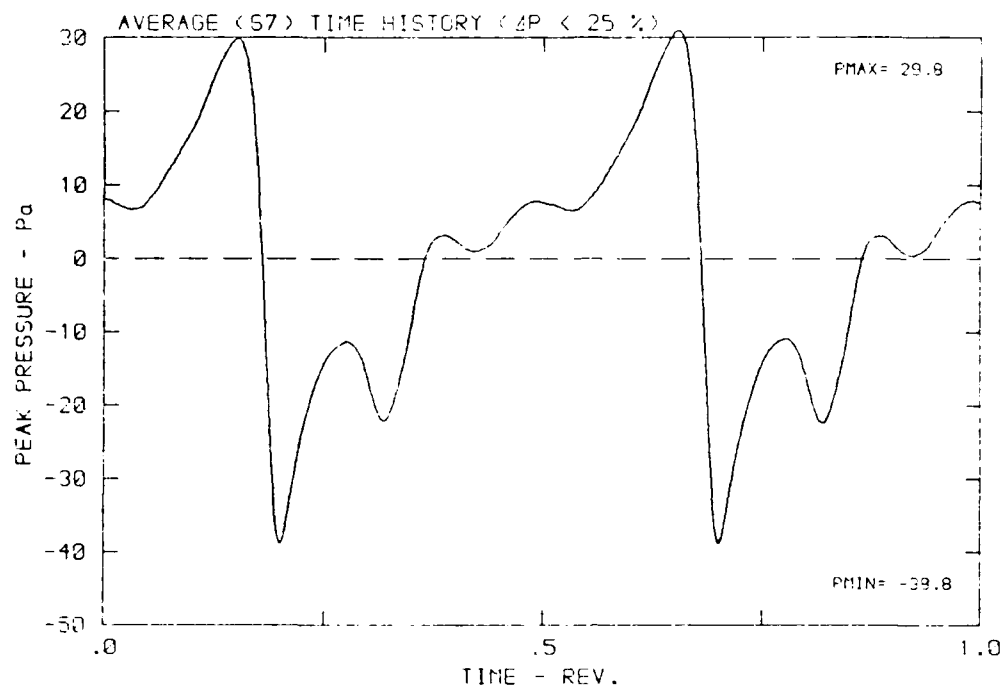
DATA POINT: KC-2 RUN: 191 MP: 5

β : 20.7° RH: .7524 n: 2400 rpm v/u : .203 ϕ : .0° T: 299.4 K



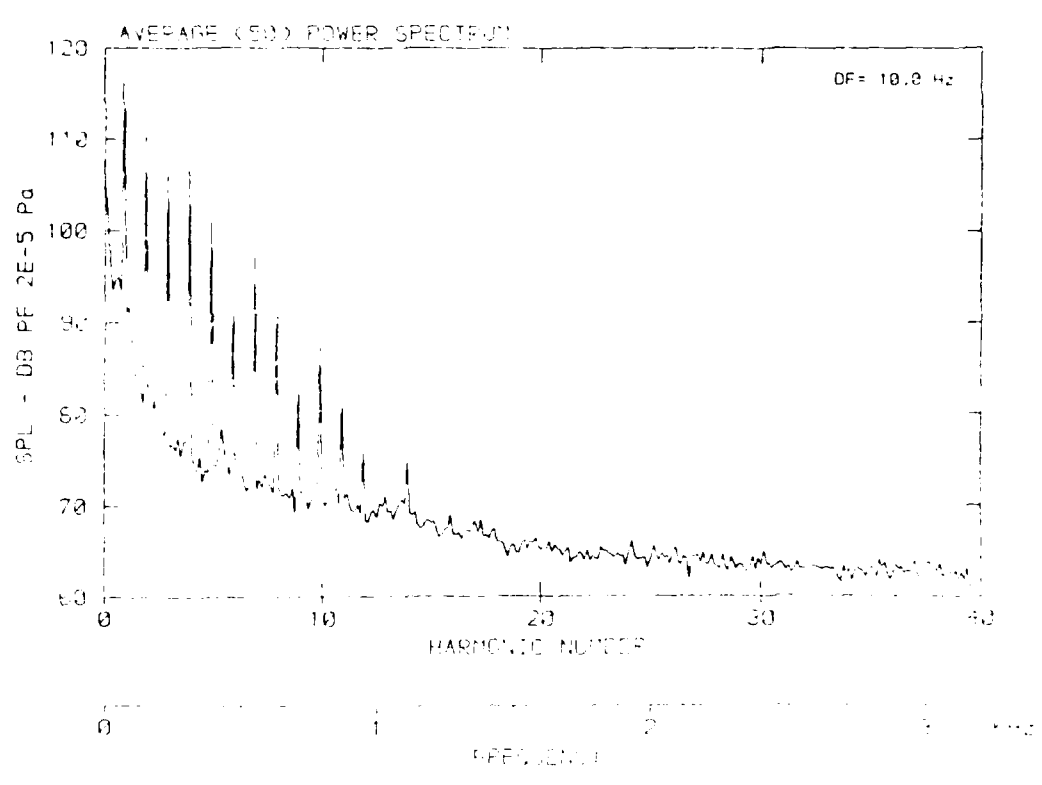
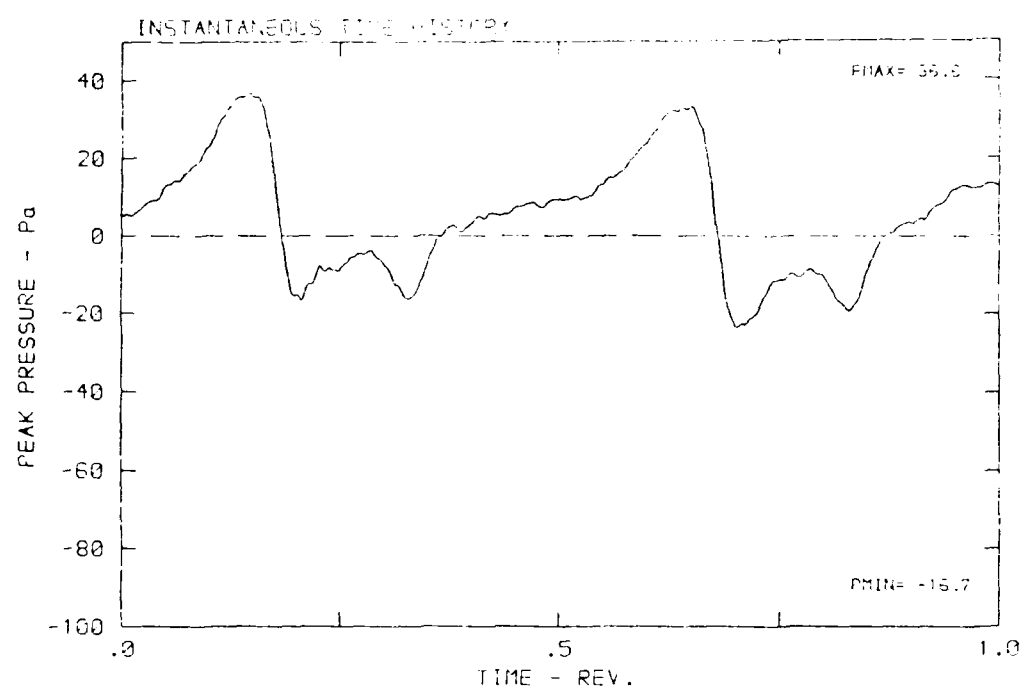
DATA POINT: KC-2 RUN: 191 MP: 5

β : 20.7° μ : .7524 n : 2400 rpm v : .203 ϕ : .0° t : 298.4 K



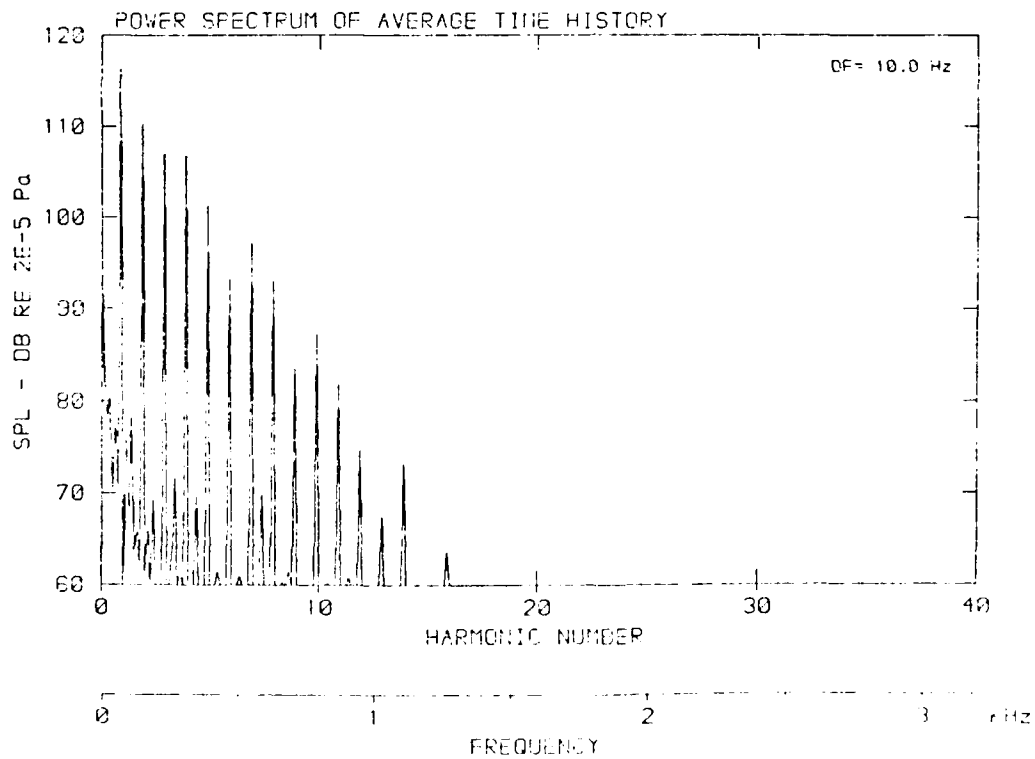
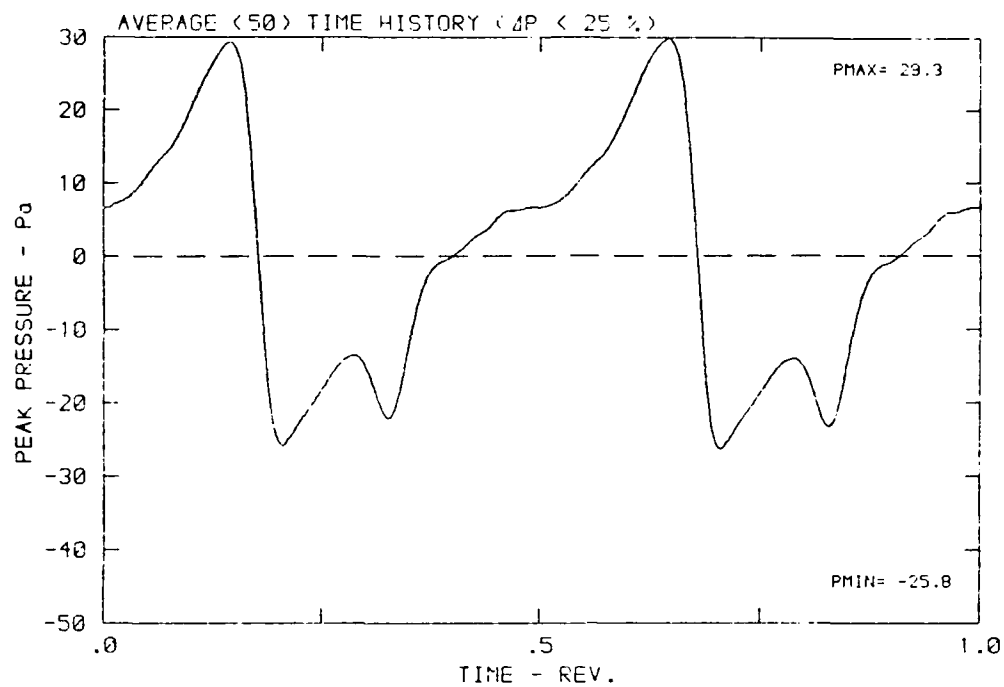
DATA POINT: KL-2 RUN: 191 MP: 6

β : 20.7° NH: .7524 α : 0.00 ϕ : .00 ϕ : .00° T: 299.4 °



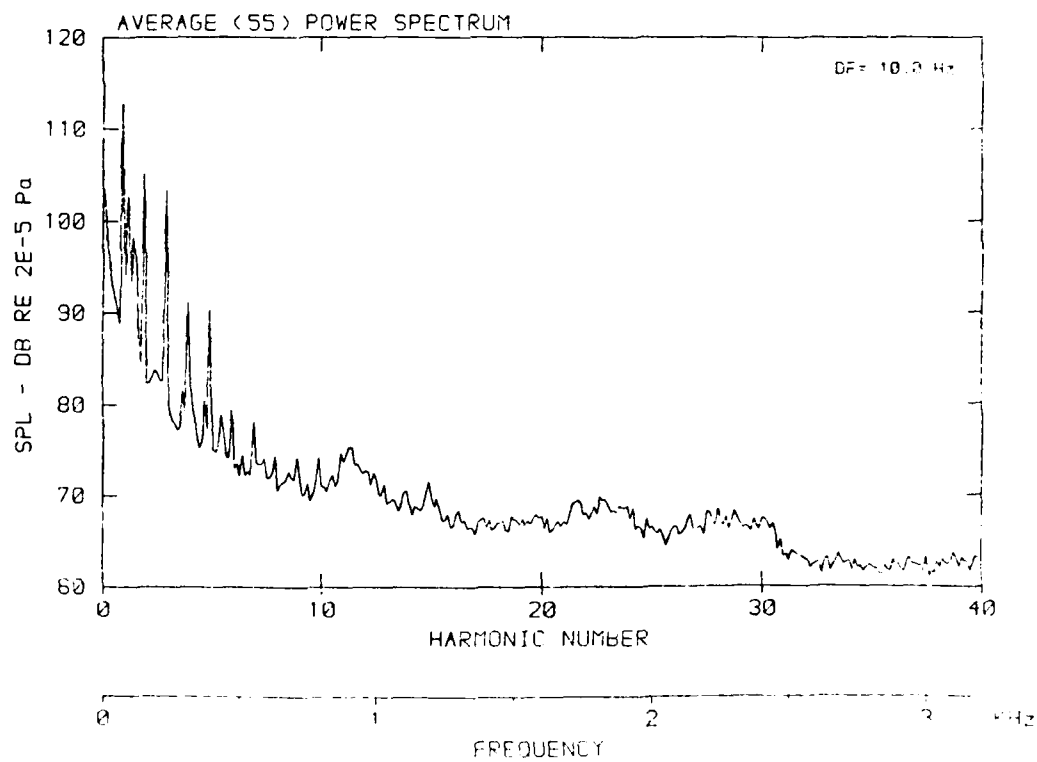
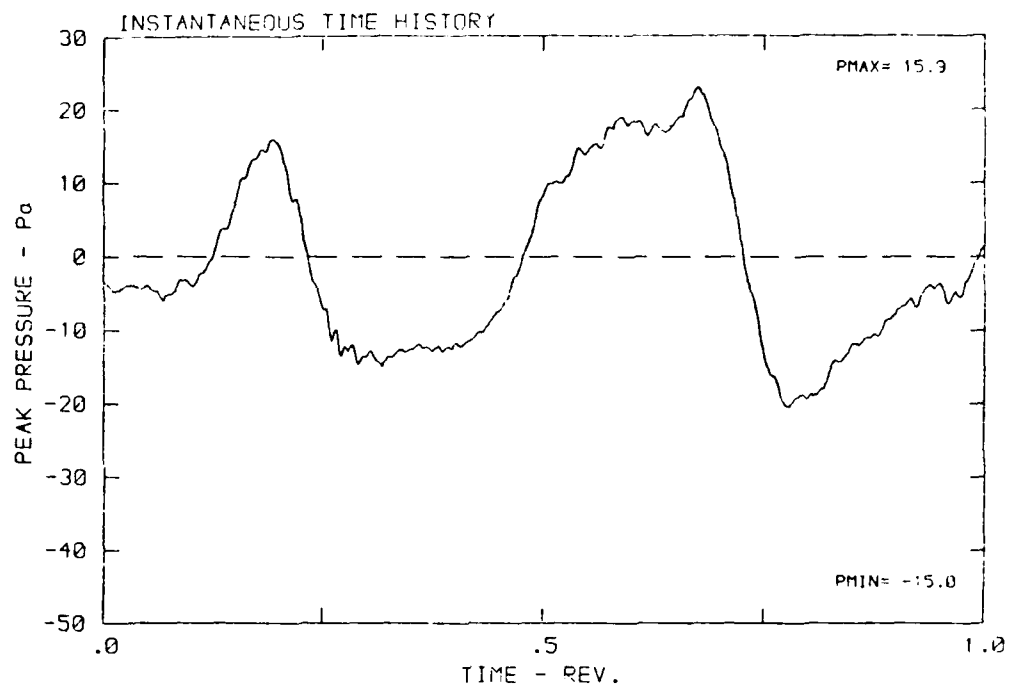
DATA POINT: KC-2 RUN: 191 MP: 6

β : 20.7° MH: .7524 n: 2400 rpm v/u: .203 ϕ : .0° T: 298.4 K



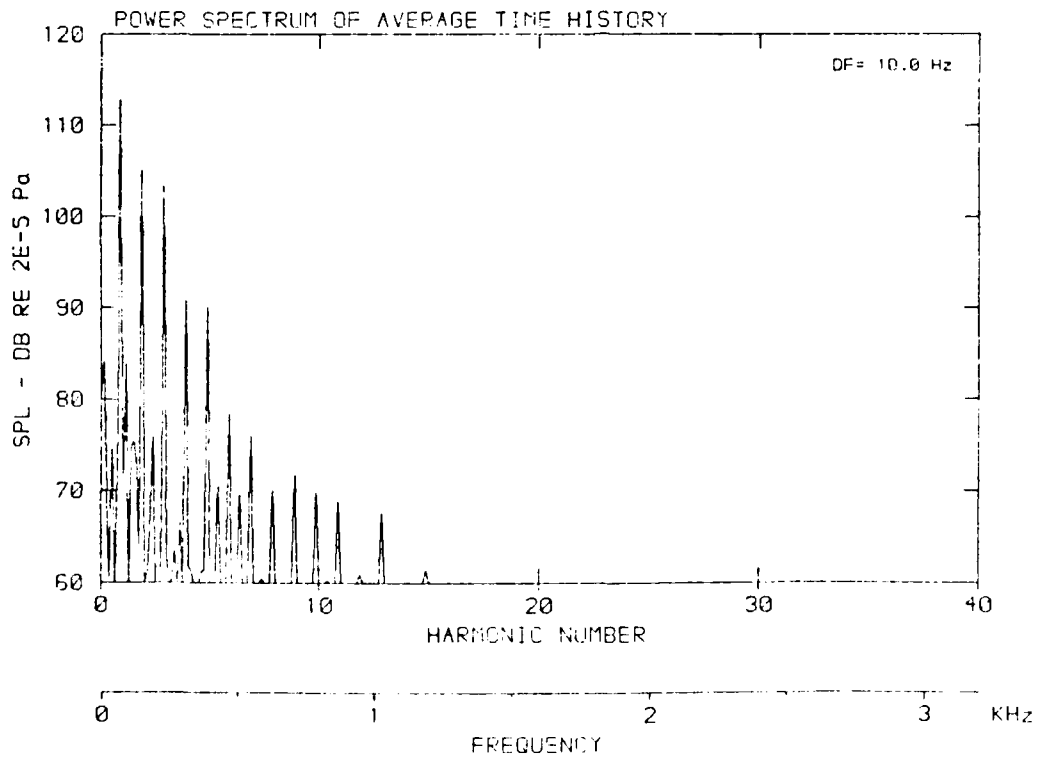
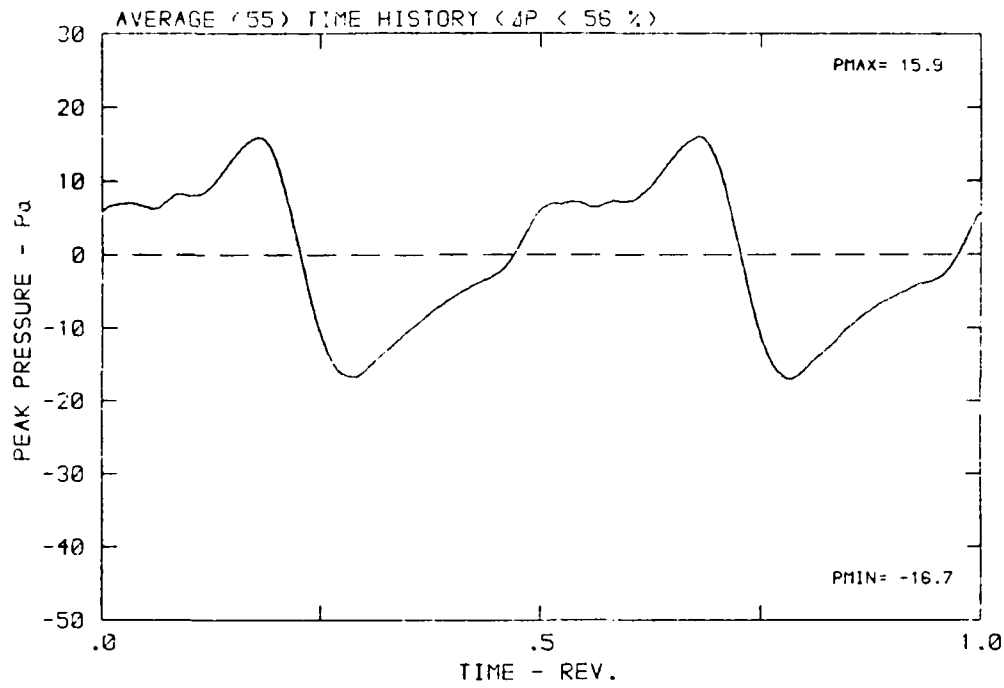
DATA POINT: KC-2 RUN: 191 MP: 7

β : 20.7° MH: .7524 n: 2420 rpm v/u : .203 ϕ : .0° T: 298.4 K



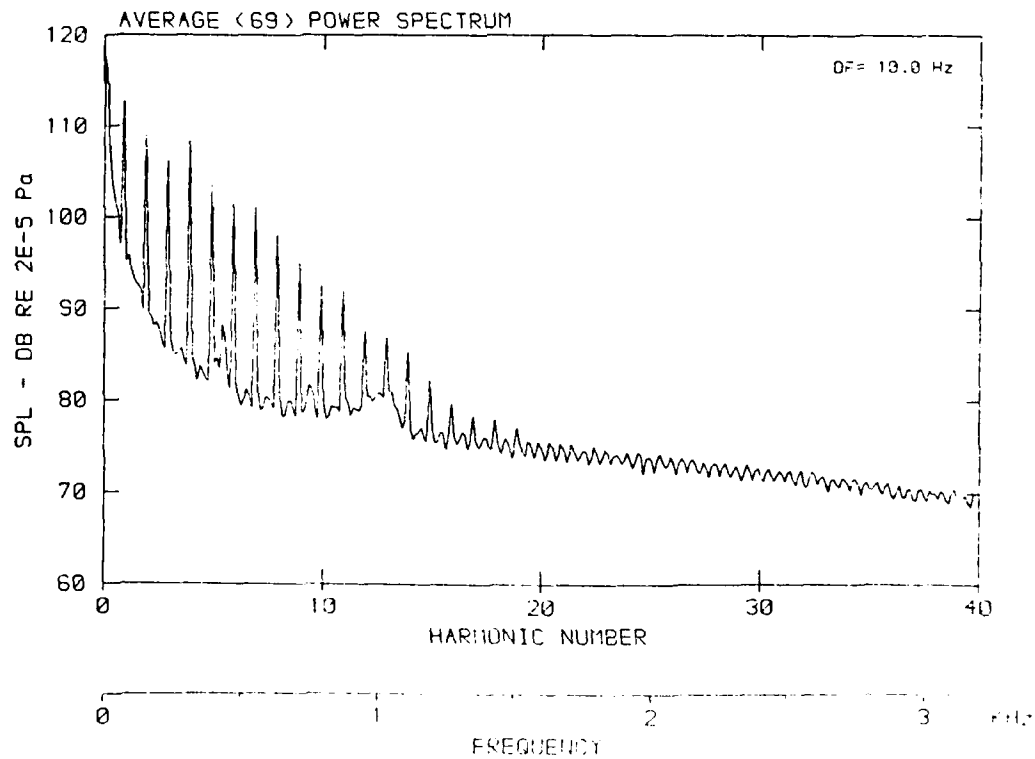
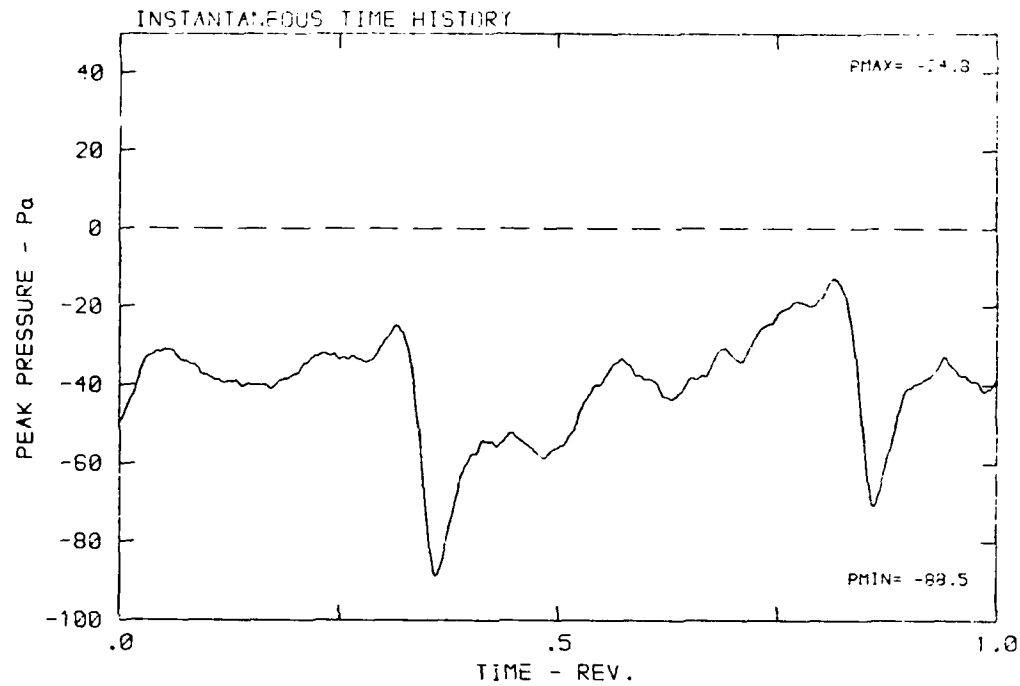
DATA POINT: KC-2 RUN: 191 MP: 7

β : 20.7° MH: .7524 n: 2400 rpm v/u: .203 ϕ : .0° T: 298.4 K



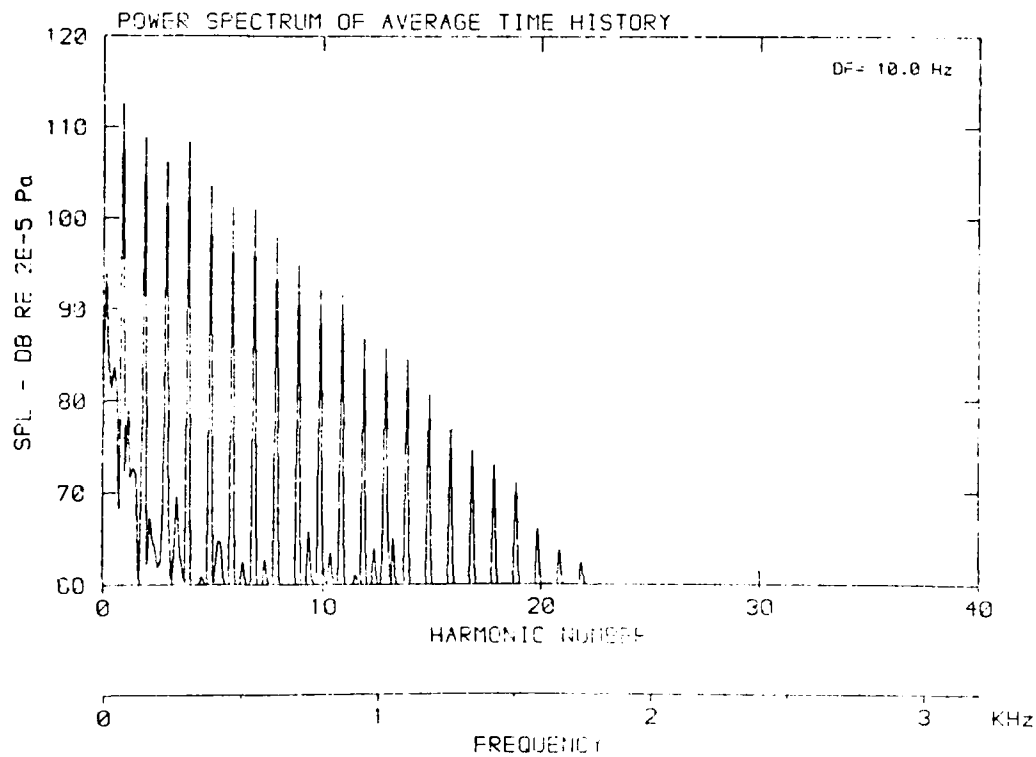
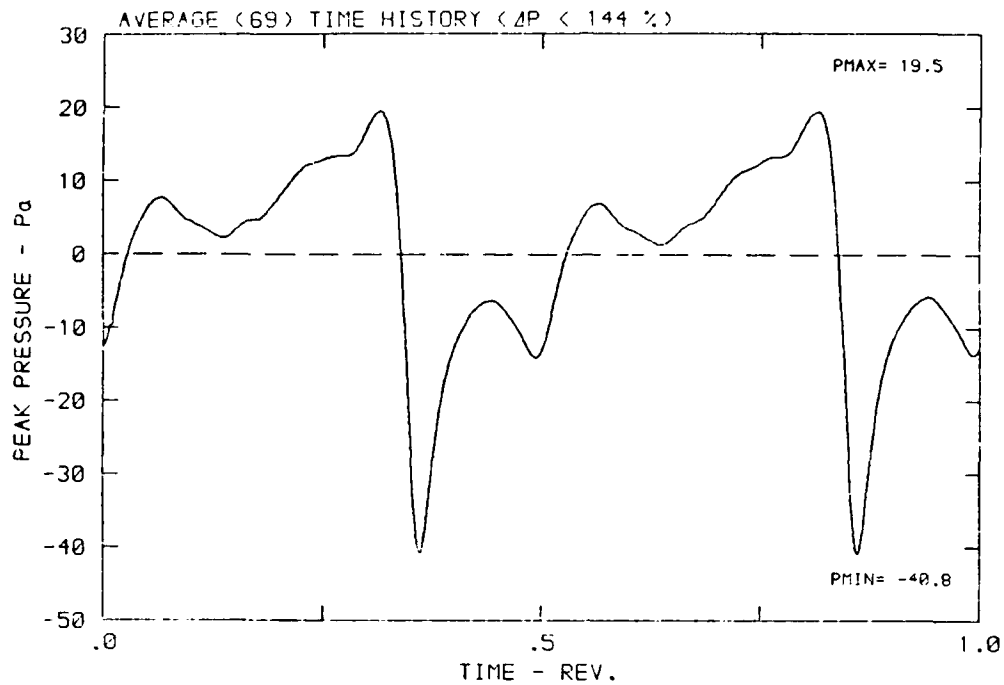
DATA POINT: KC-2 RUN: 191 MP: 9

β : 20.7° MH: .7524 n: 2400 rpm vu: .203 ϕ : .0° τ : 103.4



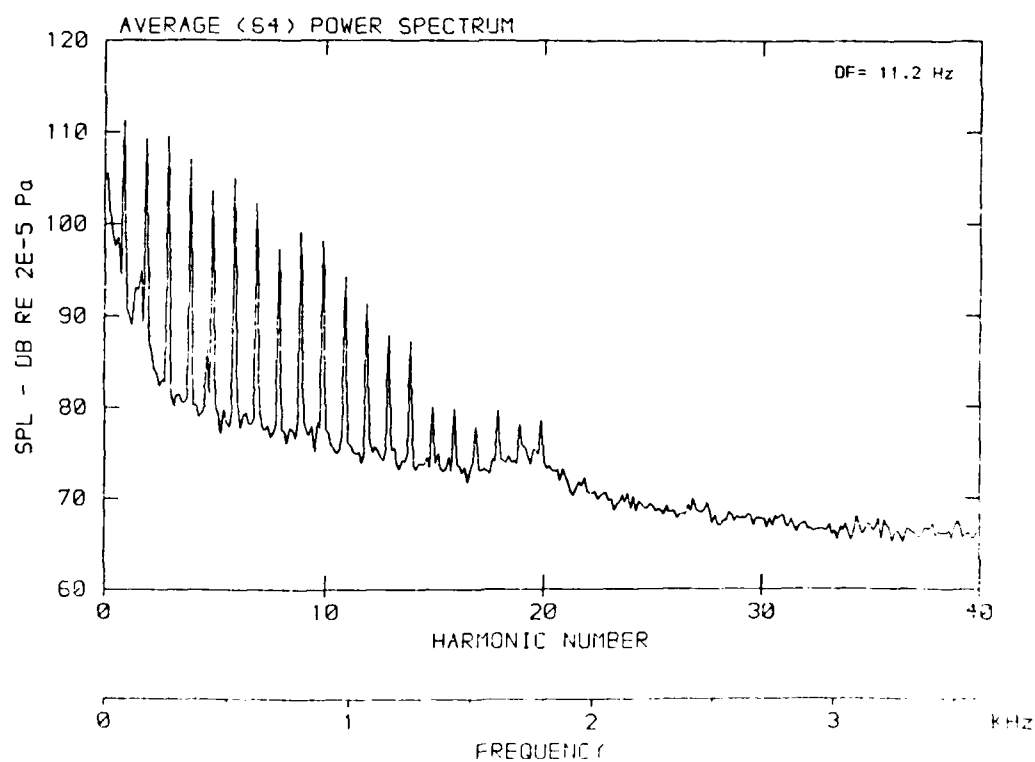
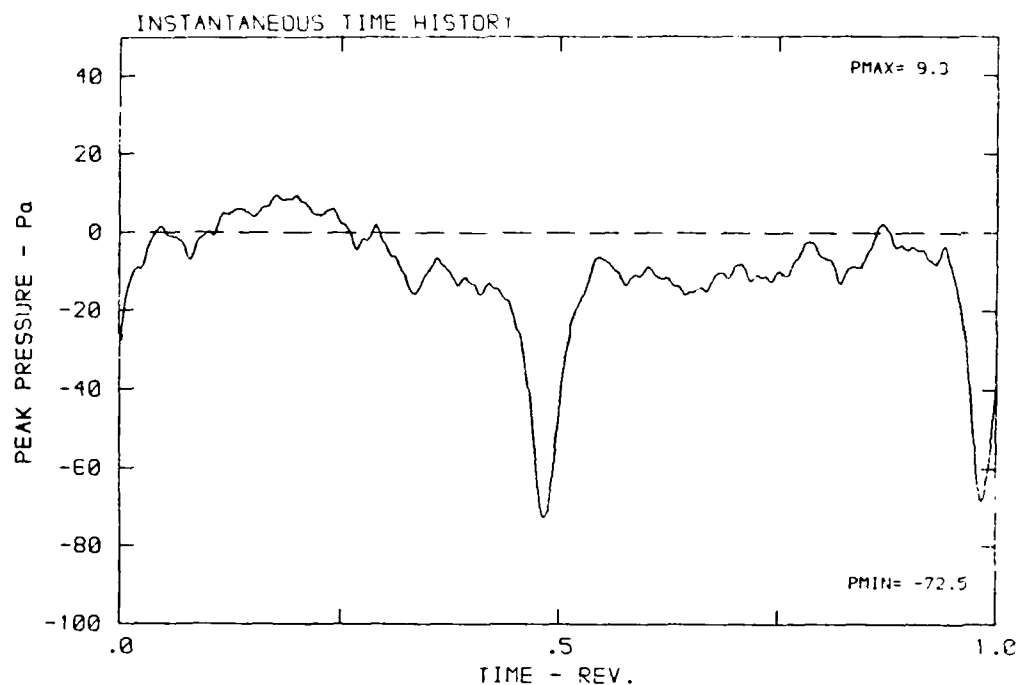
DATA POINT: KC-2 RUN: 191 MP: 9

β : 20.7° MH: .7524 n: 2400 rpm v/u: .203 ϕ : .0° T: 298.4 K



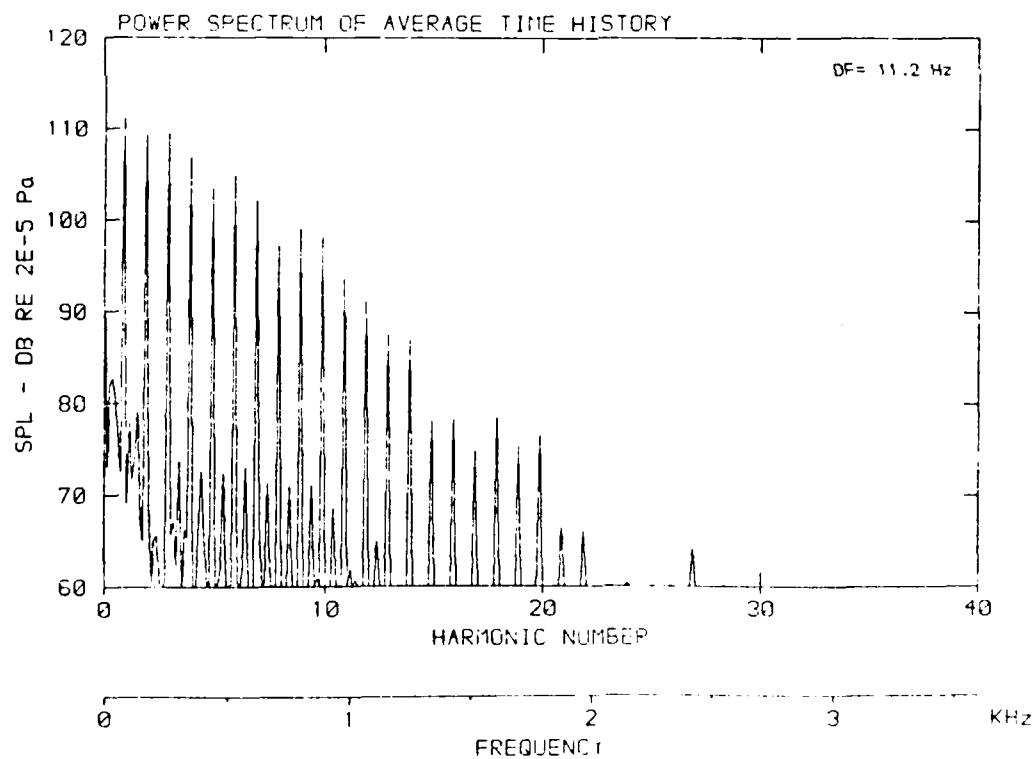
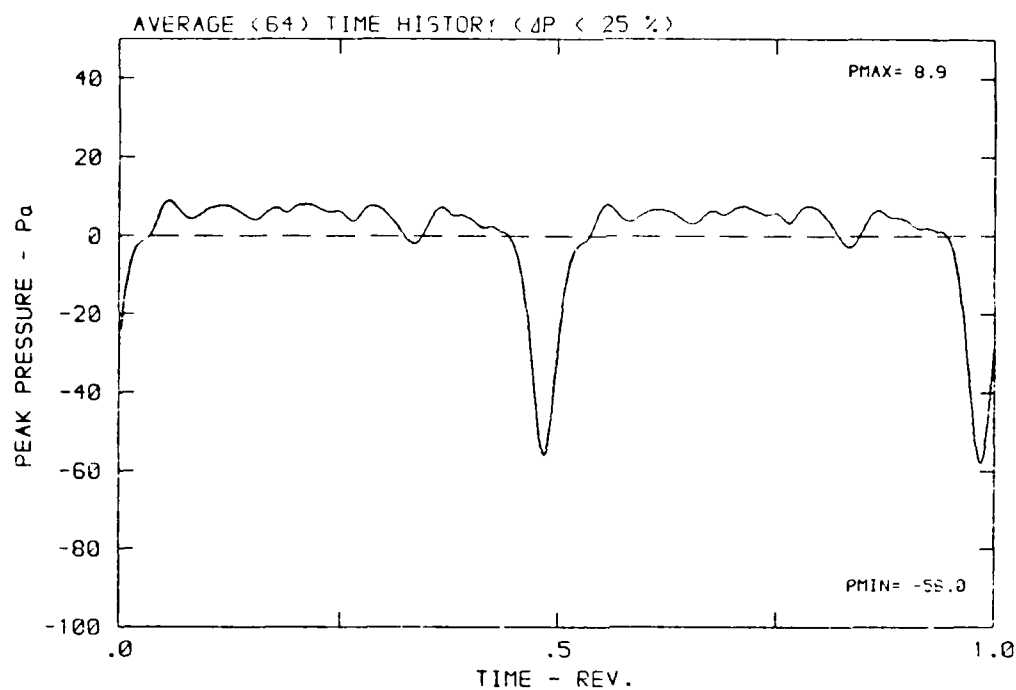
DATA POINT: KC-3 RUN: 190 MP: 1

β : 20.7° MH: .8595 n: 2700 rpm v/u : .270 ϕ : .0° T: 299.1 K



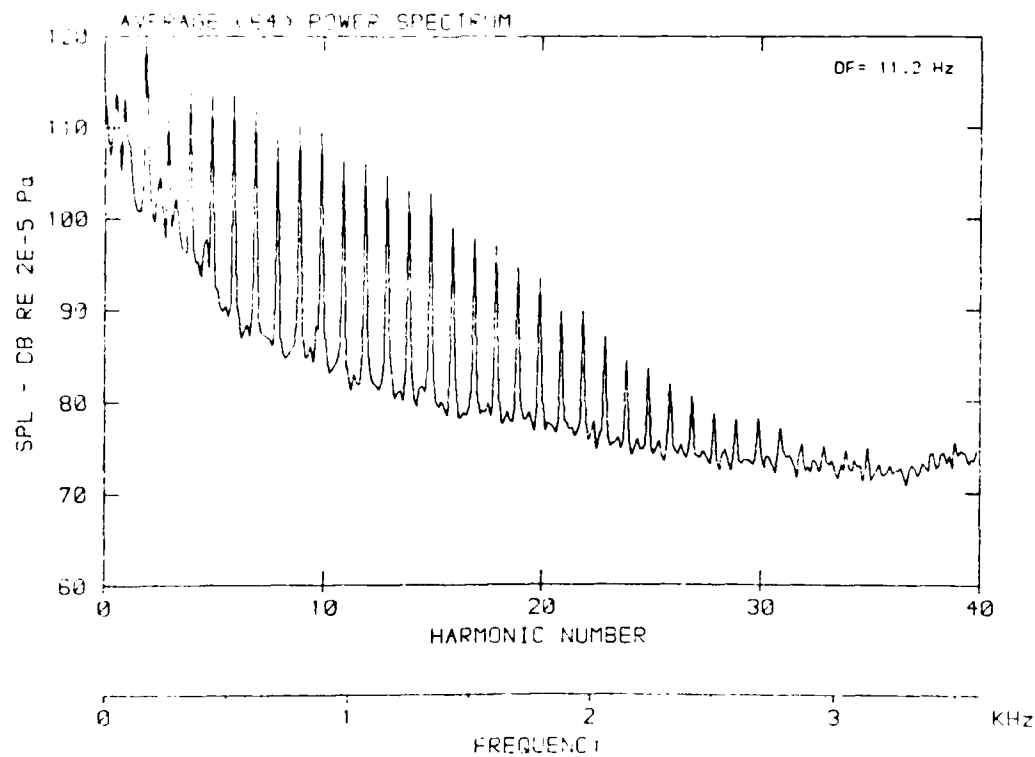
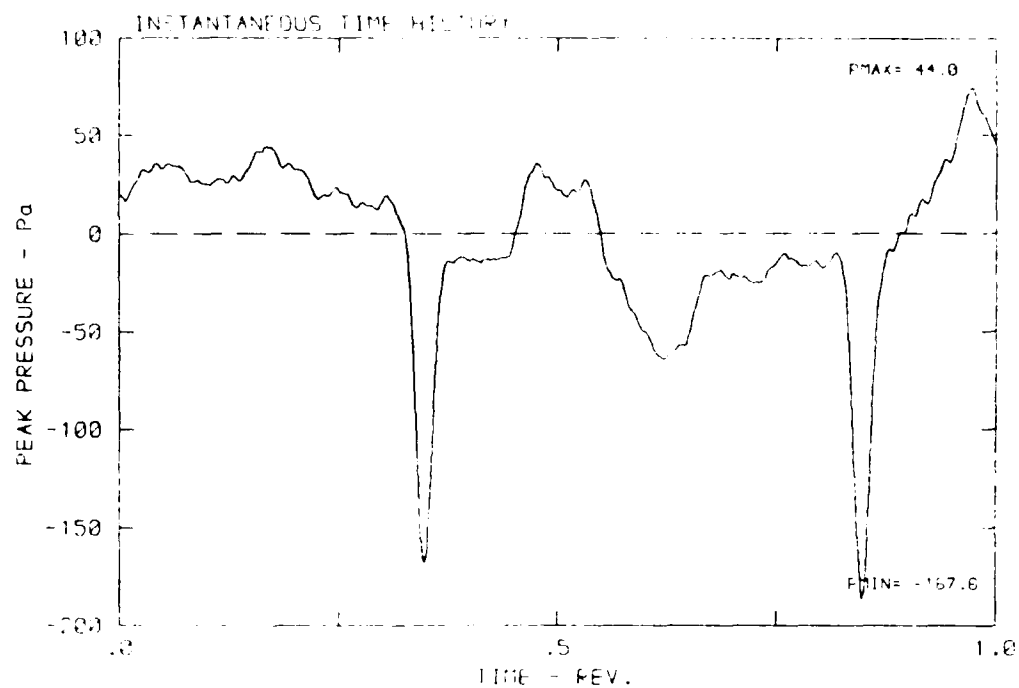
DATA POINT: KC-3 RUN: 190 MP: 1

β : 20.7° MH: .8595 n: 2700 rpm v/u : .270 ϕ : .0° T: 298.1 K



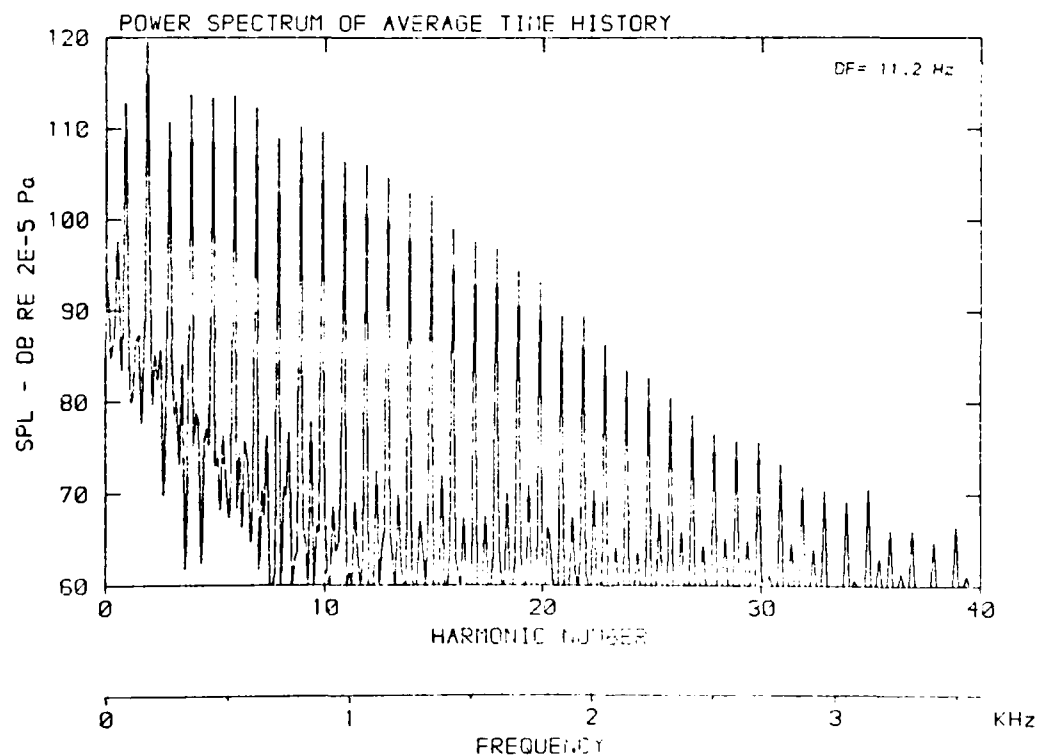
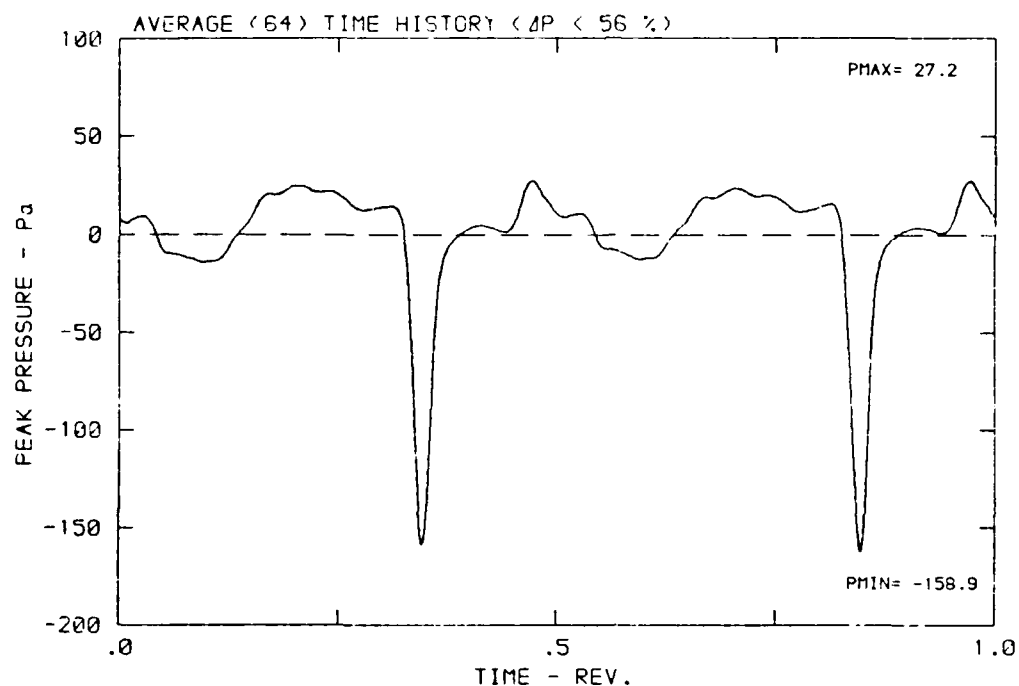
[DATA POINT: KC-3 REV: 1.00 MP: 2]

B: 20.7° NH: .6545 R: .7000 V: 1.10 Q: 1.00 I: 175.1



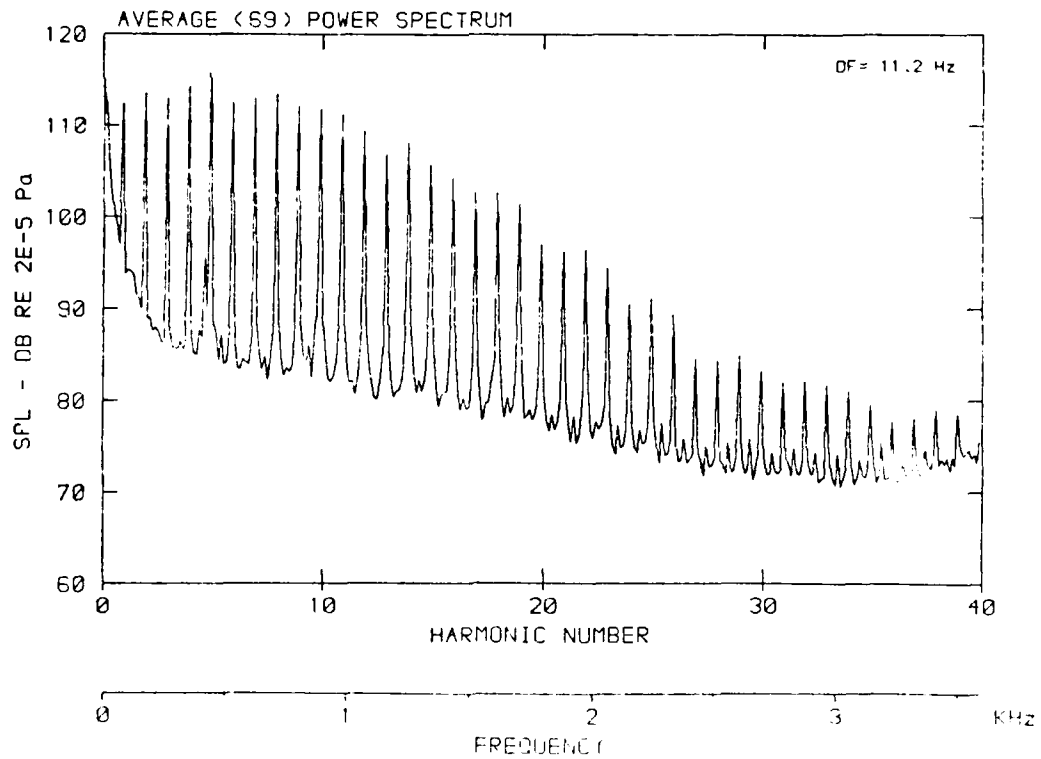
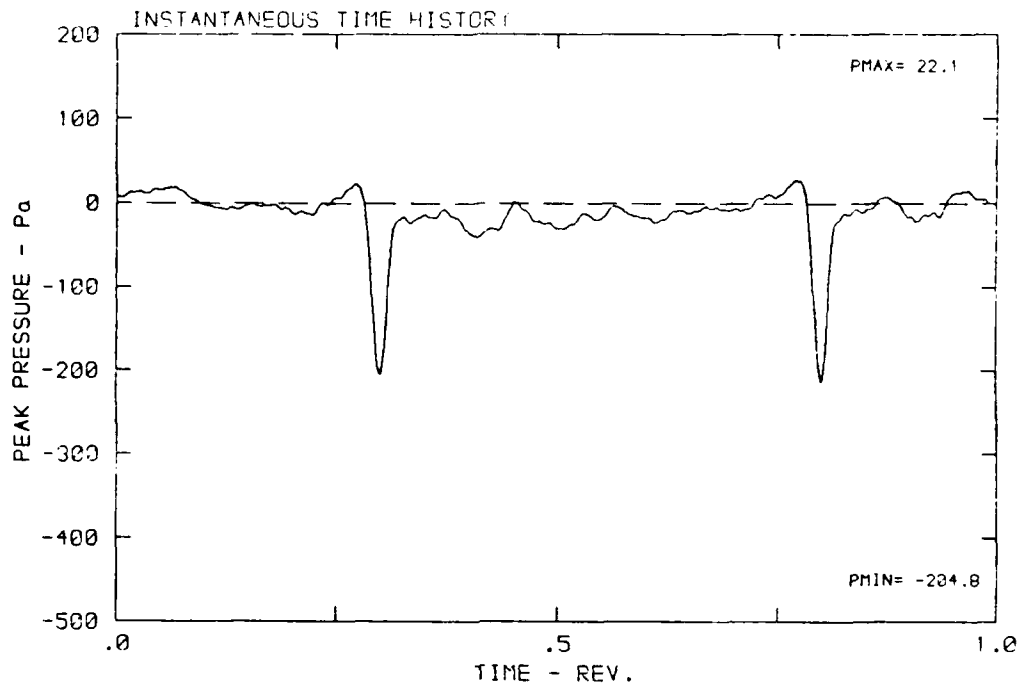
DATA POINT: KC-3 RUN: 190 MP: 2

β : 20.7° MH: .8595 n: 2700 rpm v/u: .270 ϕ : .0° T: 298.1 K



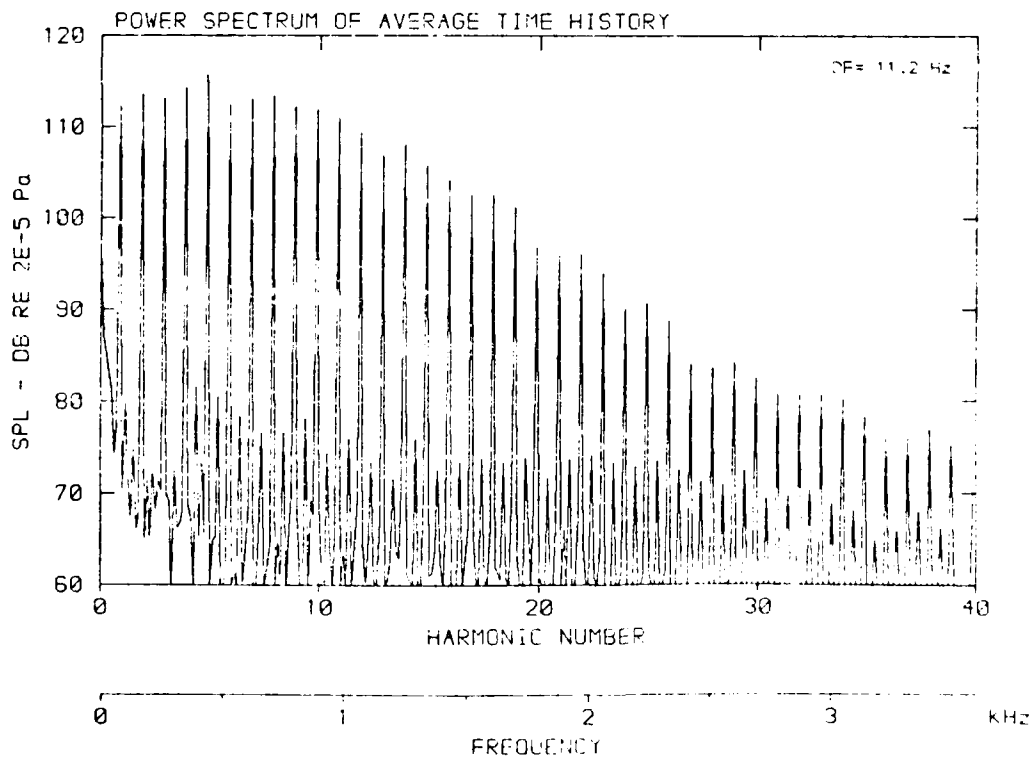
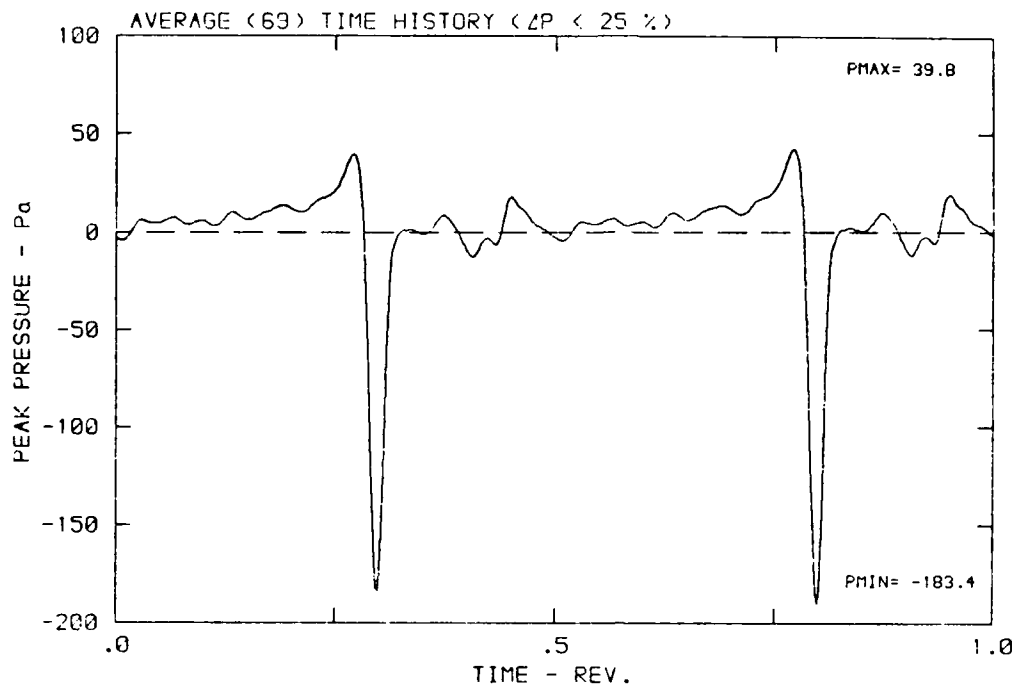
DATA POINT: KC-3 RUN: 190 MP: 3

β : 20.7° MP : .8595 n : 2700 rpm v/u : .270 ϕ : .0° T : 299.1 K



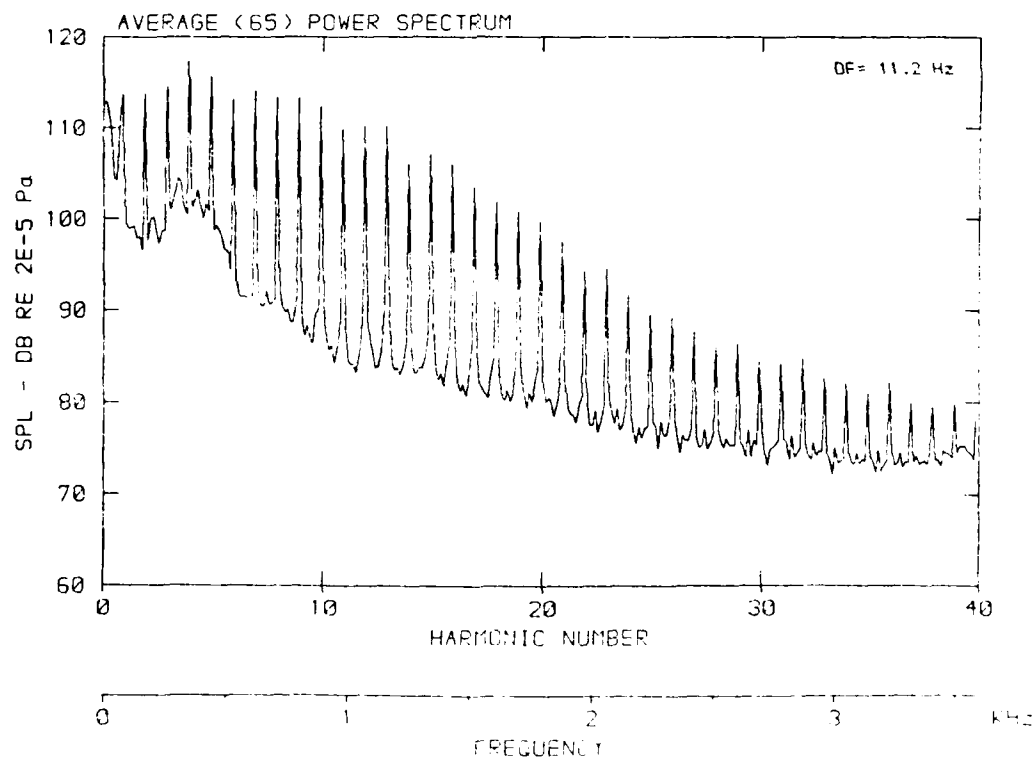
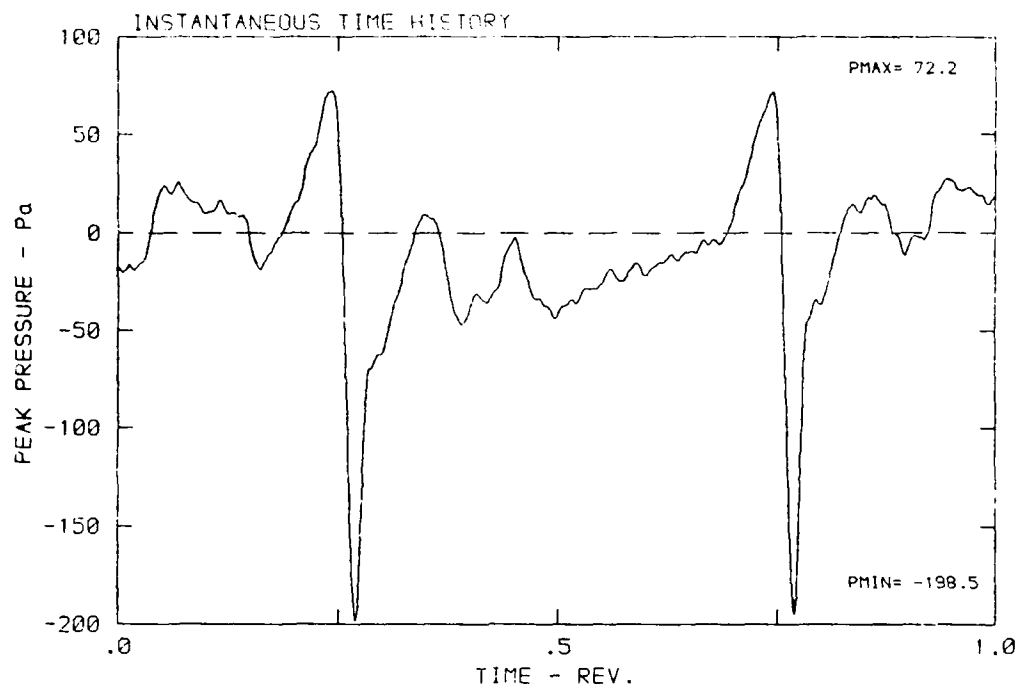
DATA POINT: KC-3 RUN: 190 MP: 3

β : 20.7° MH: .8595 n: 2700 rpm v/u: .270 ϕ : .0° T: 298.1 K



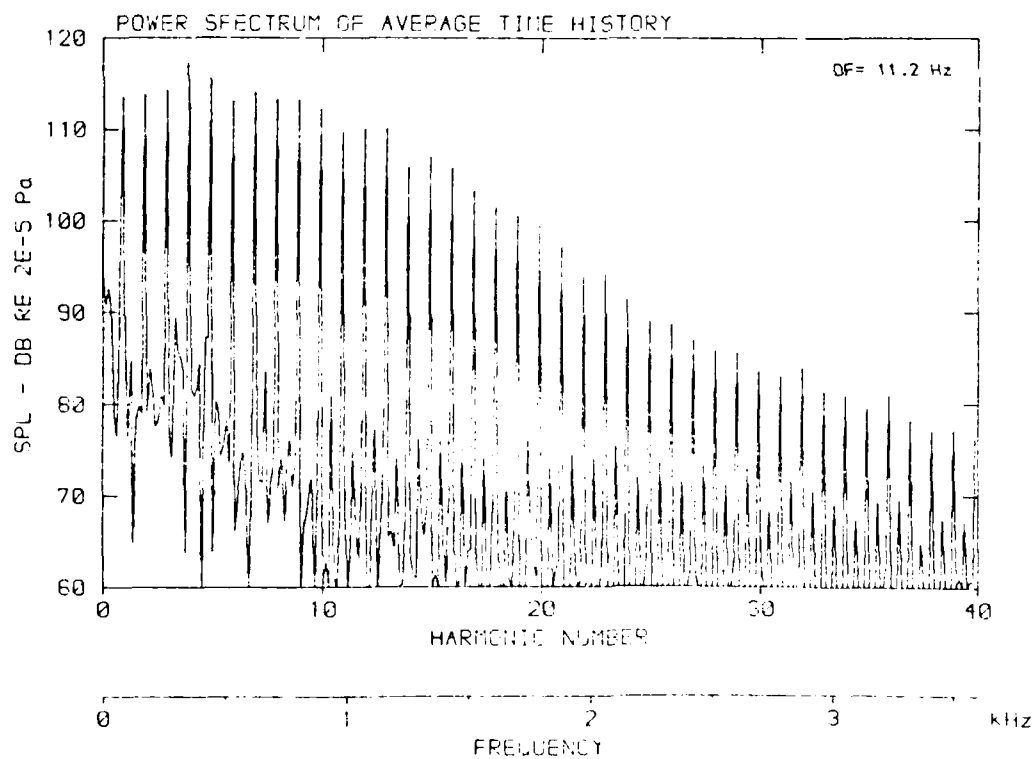
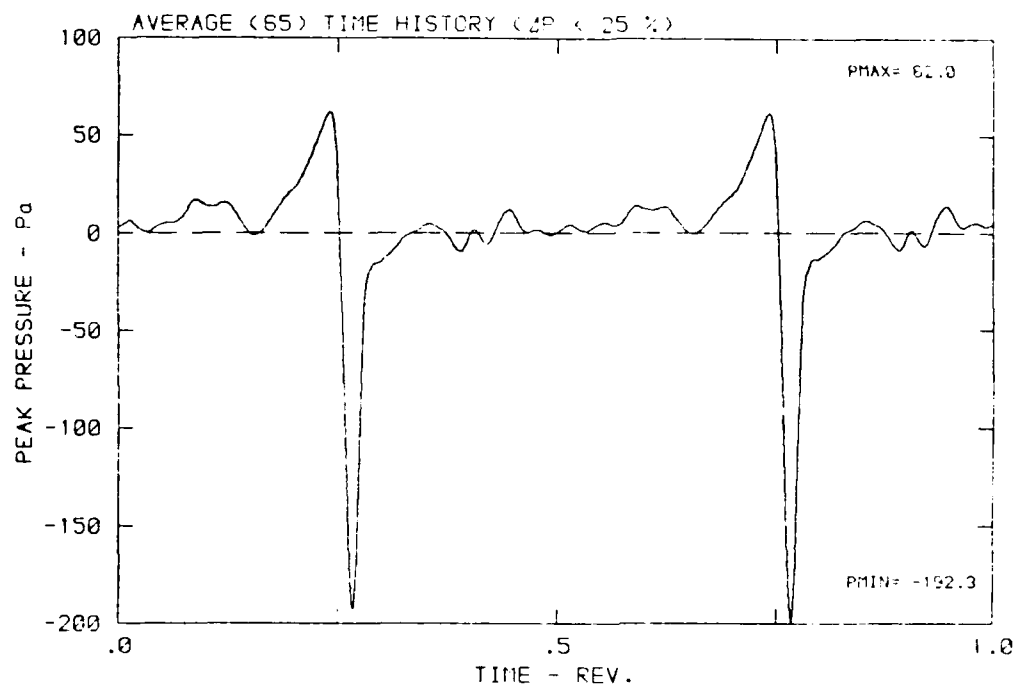
DATA POINT: KC-3 RUN: 190 MP: 4

β : 20.7° MH: .8595 n: 2700 rpm v/u: .270 ϕ : .0° T: 293.1 K



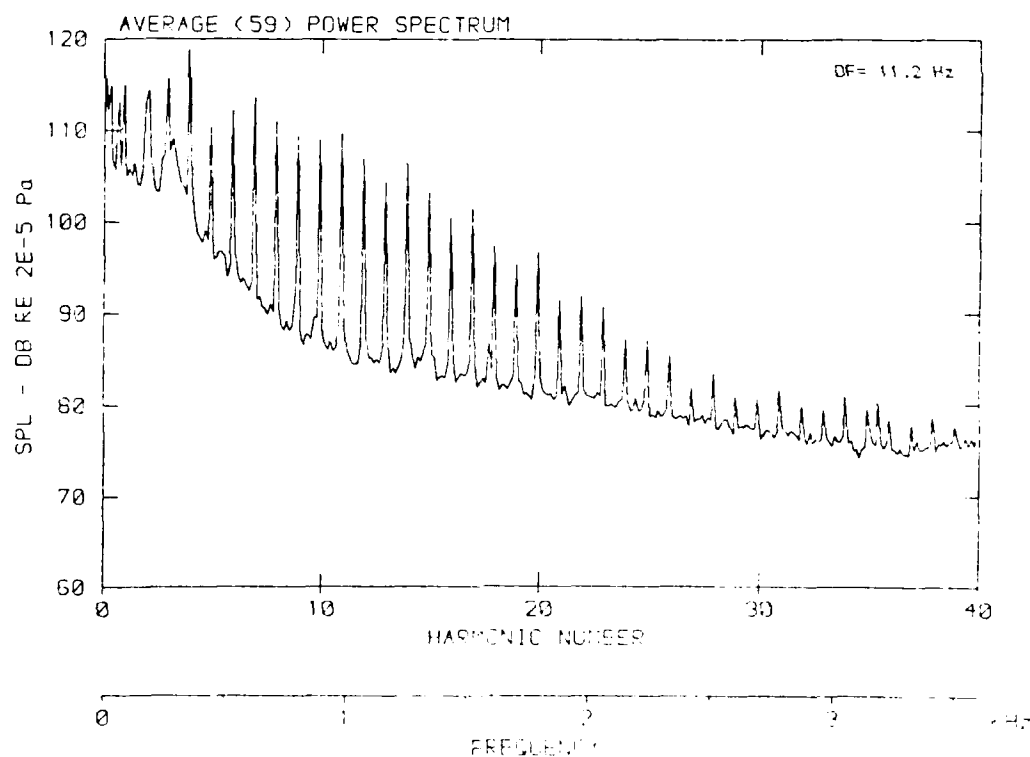
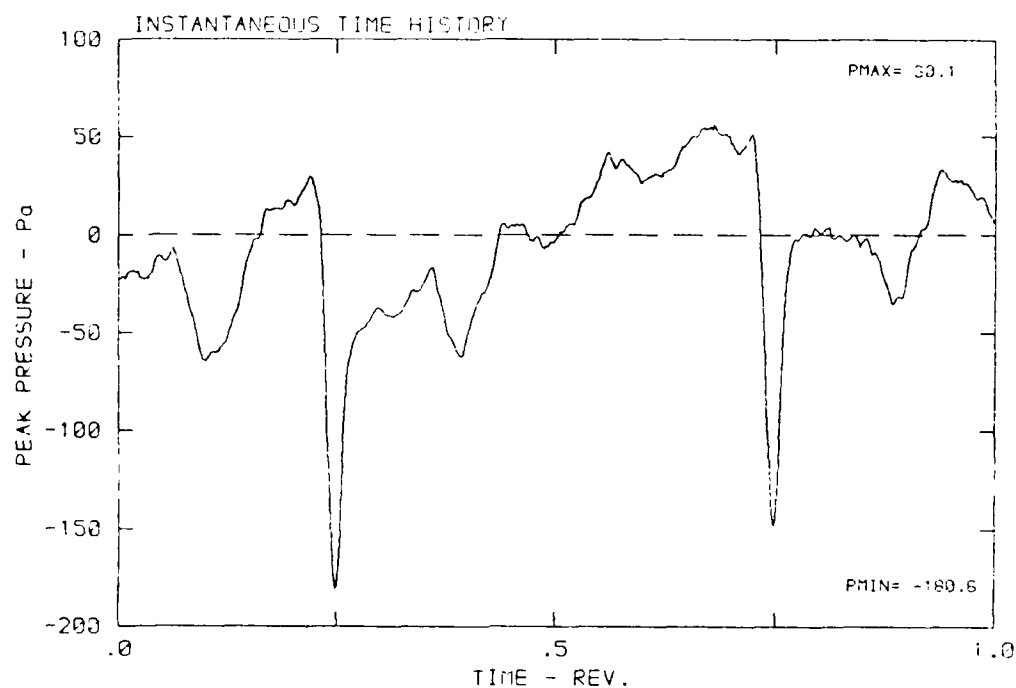
DATA POINT: KC-3 RUN: 190 MP: 4

β : 20.7° MH: .8595 n: 2700 rpm v/u : .270 ϕ : .0° T: 239.1 K



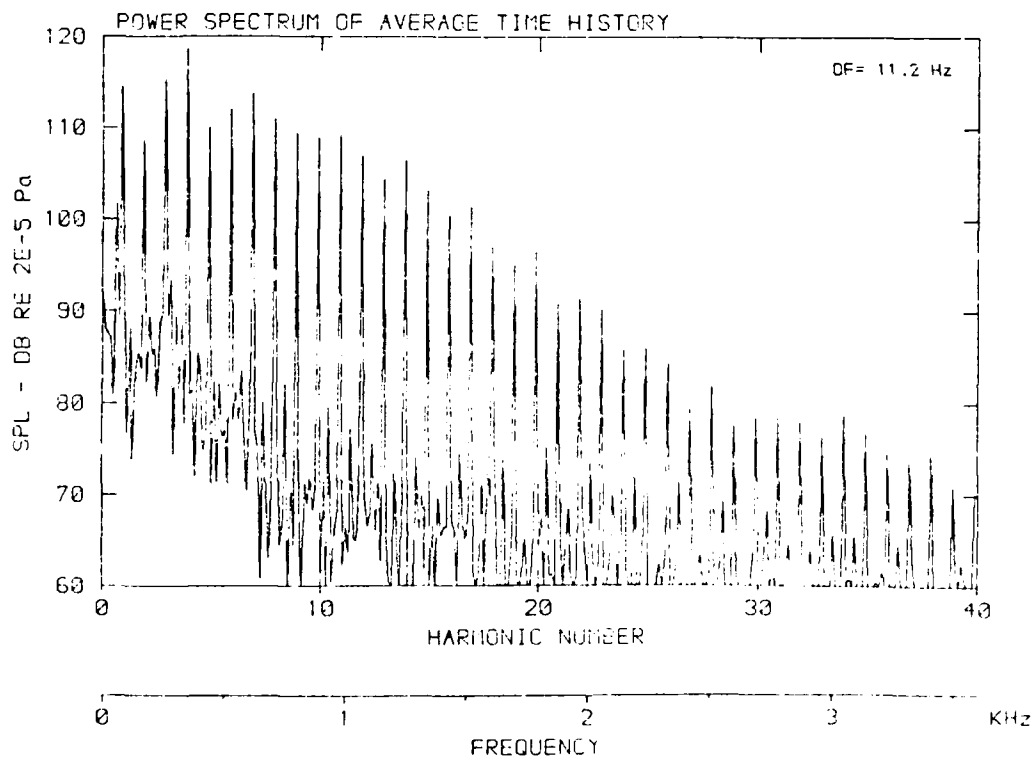
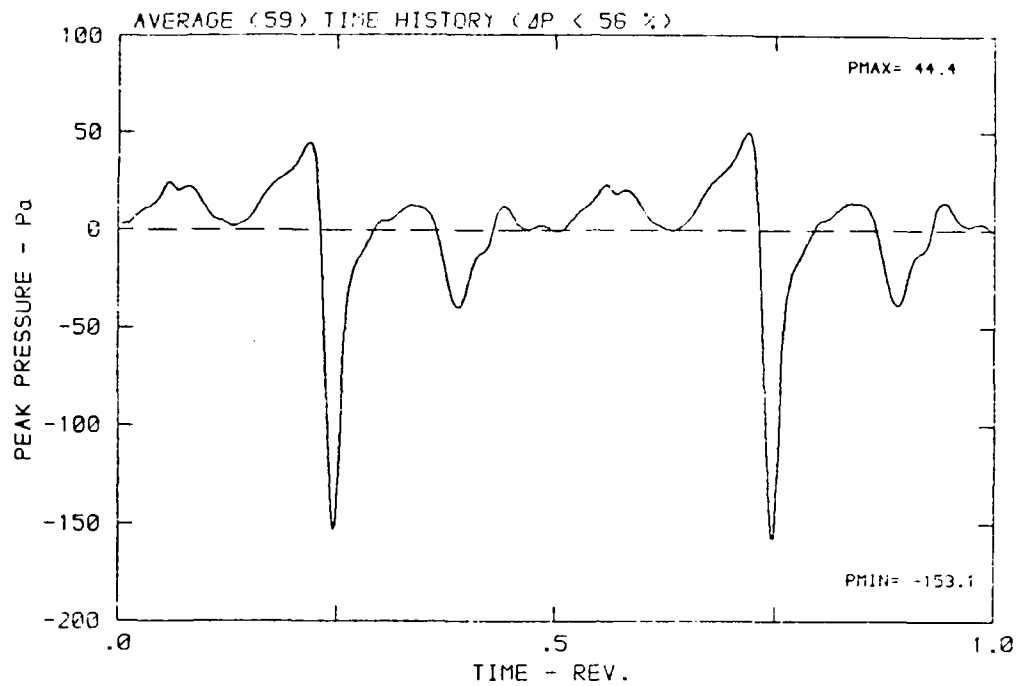
DATA POINT: KC-3 RUN: 190 MF: 5

β : 20.7° MH: .8595 n: 2700 rpm v/u : .273 ϕ : .0° T: 3.13.1



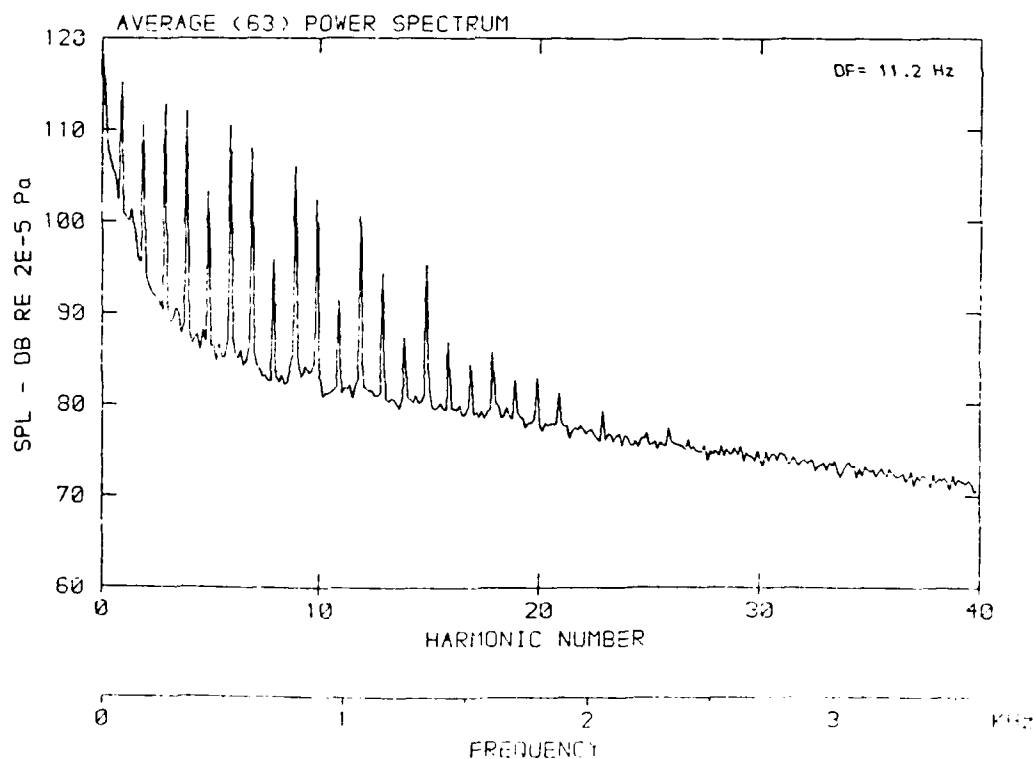
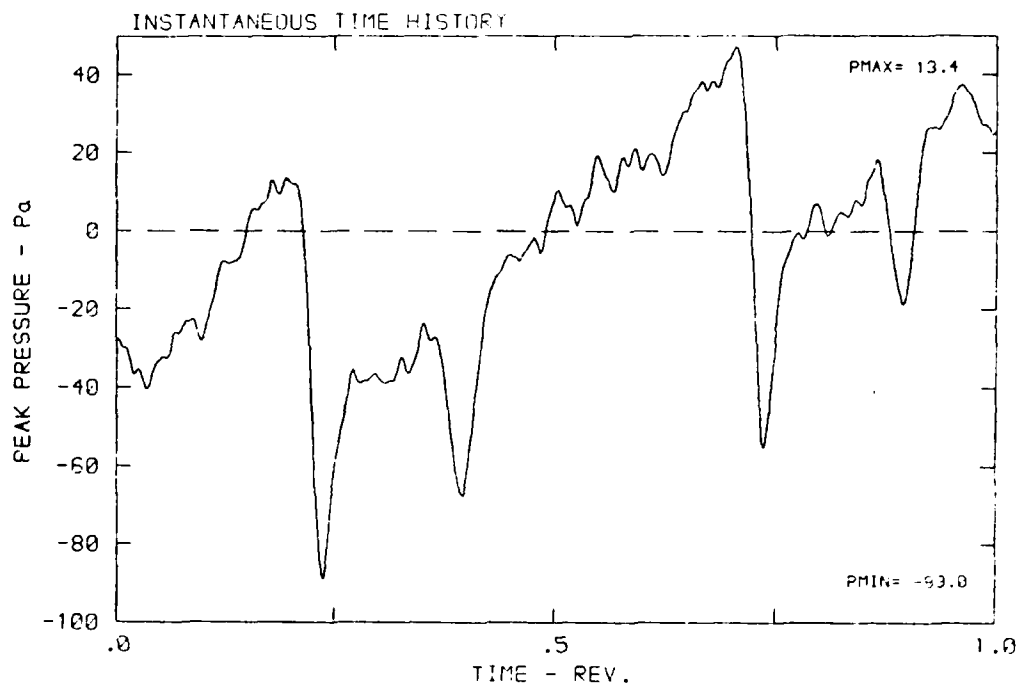
DATA POINT: KC-3 RUN: 190 MP: 5

β : 20.7° MH: .8595 n: 2700 rpm v/u : .270 ϕ : .0° T: 293.1 K



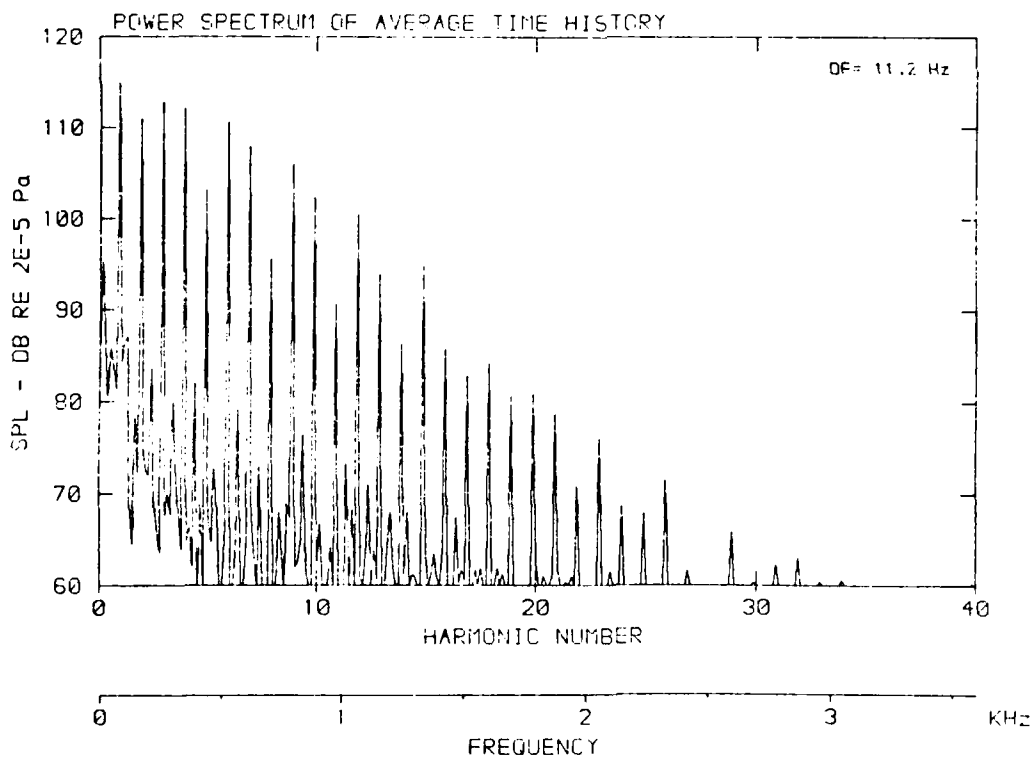
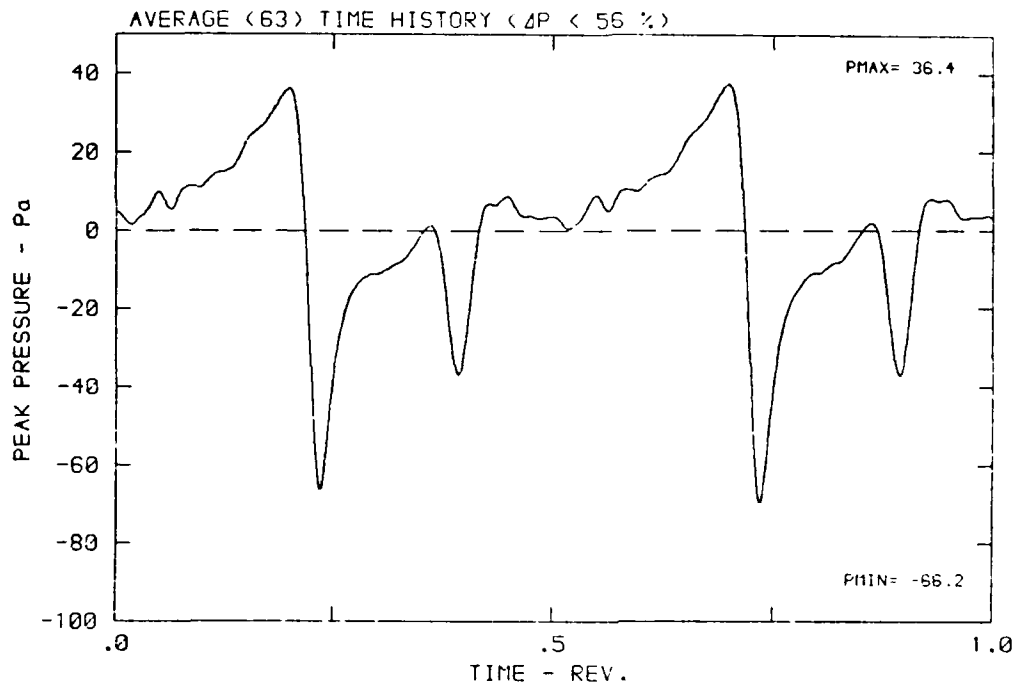
DATA POINT: KC-3 RUN: 190 MP: 6

β : 20.7° MH: .8595 n: 2700 rpm v/u : .270 ϕ : .0° T: 293.1 K



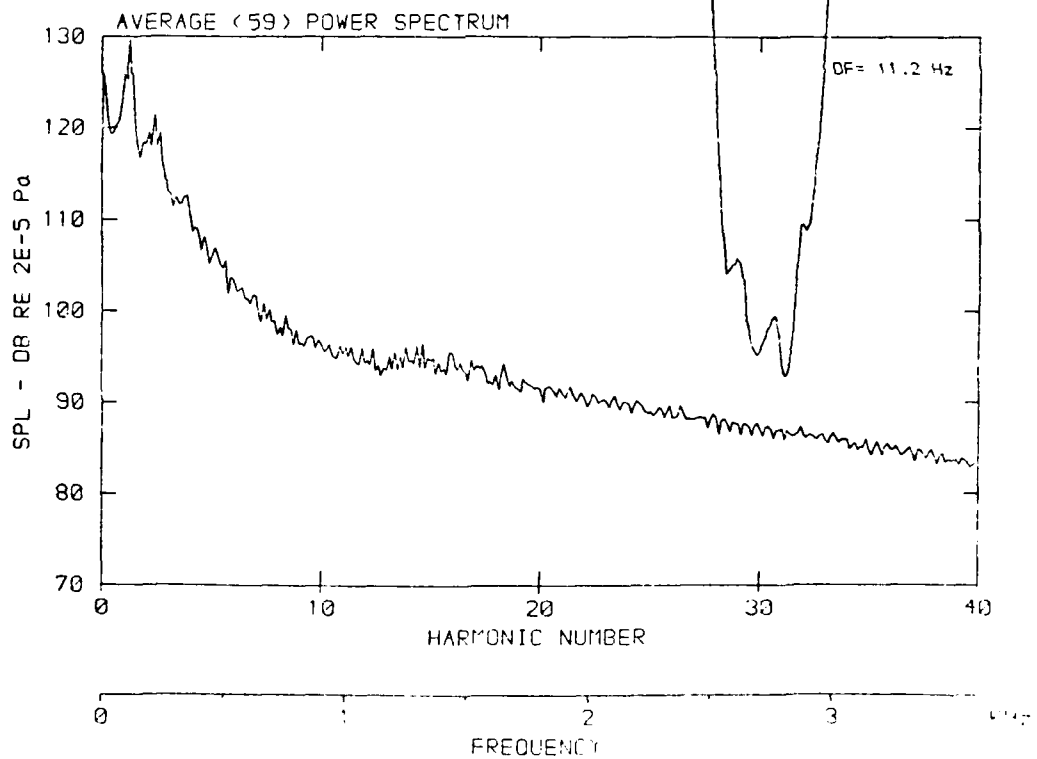
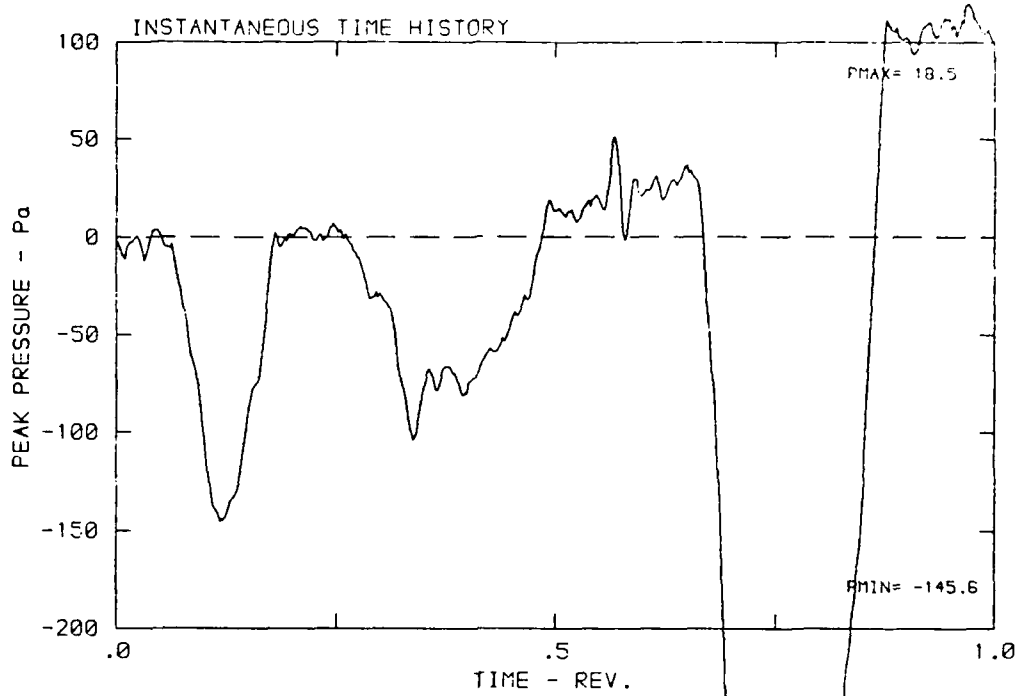
DATA POINT: KC-3 RUN: 190 MP: 6

β : 20.7° MH: .8595 n: 2700 rpm v/u : .270 ϕ : .0° T: 299.1 K



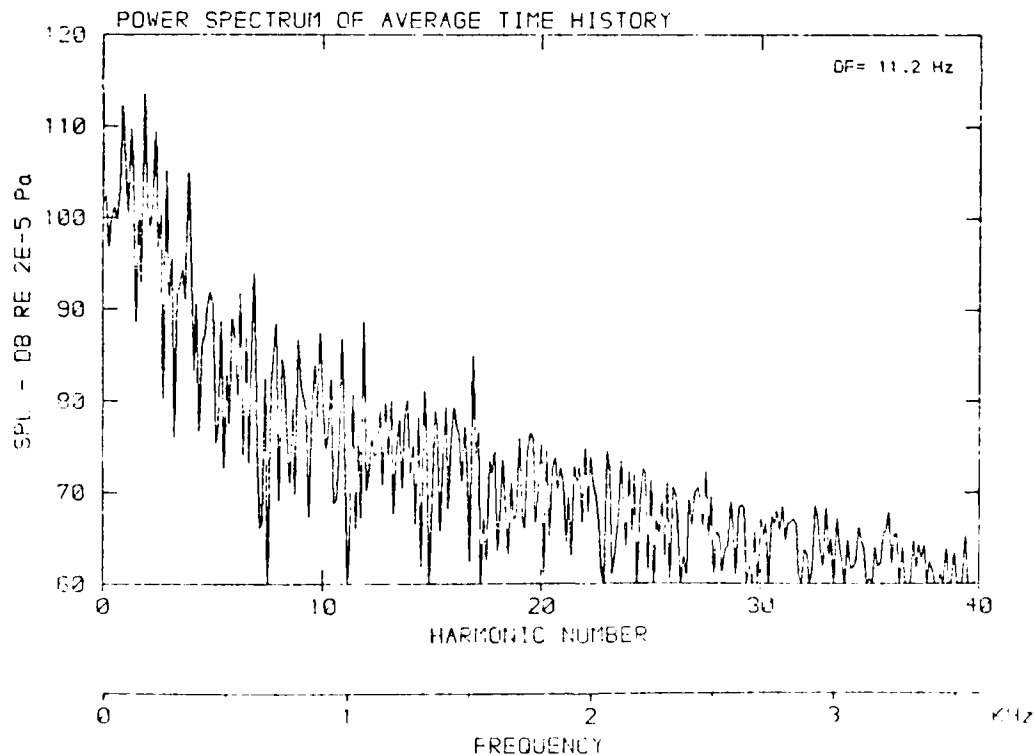
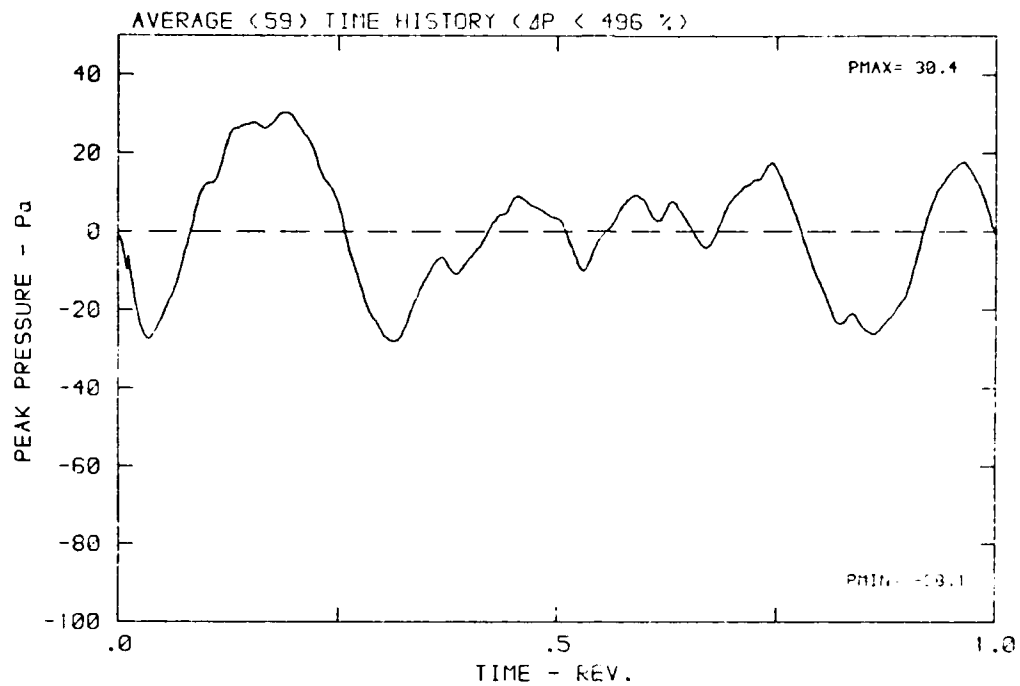
DATA POINT: KC-3 RUN: 190 MP: 7

β : 20.7° MH: .8595 n: 2700 rpm vtu: .273 ϕ : .0° I: 258.1 %



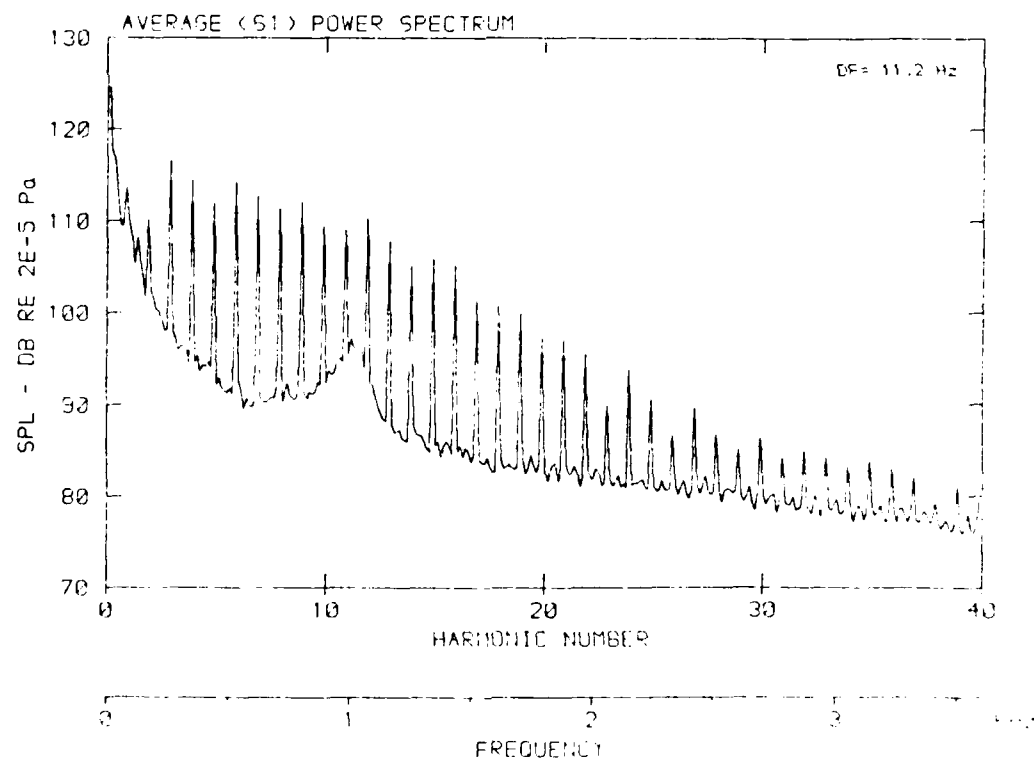
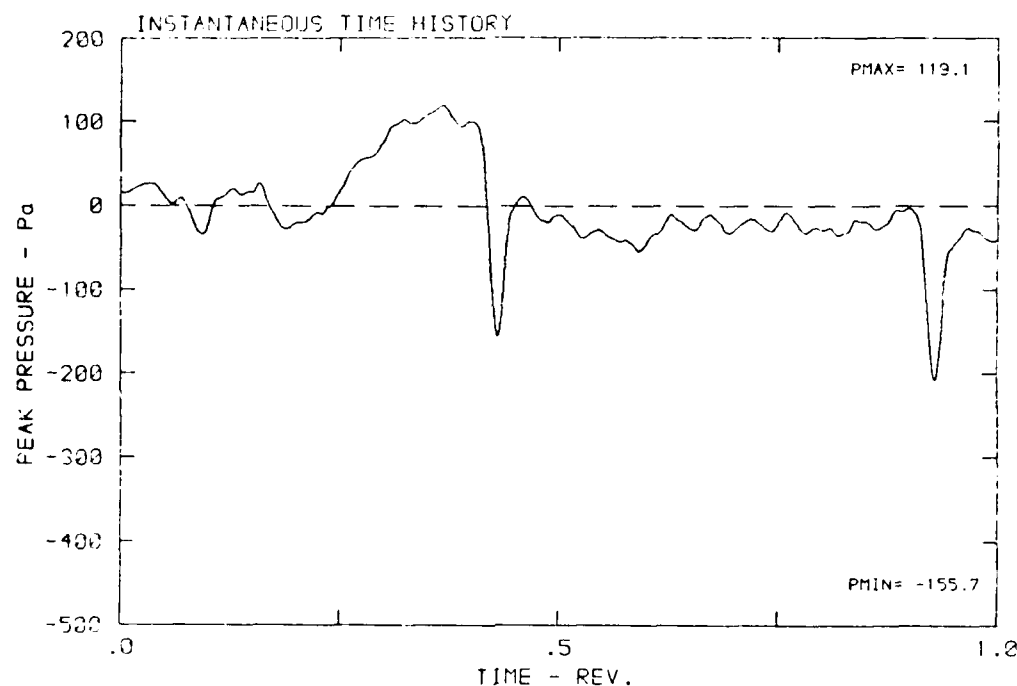
DATA POINT: KC-3 RUN: 190 MP: 7

β : 20.7° MH: .8595 n: 2700 rpm v/u: .270 ϕ : .0° T: 298.1 K



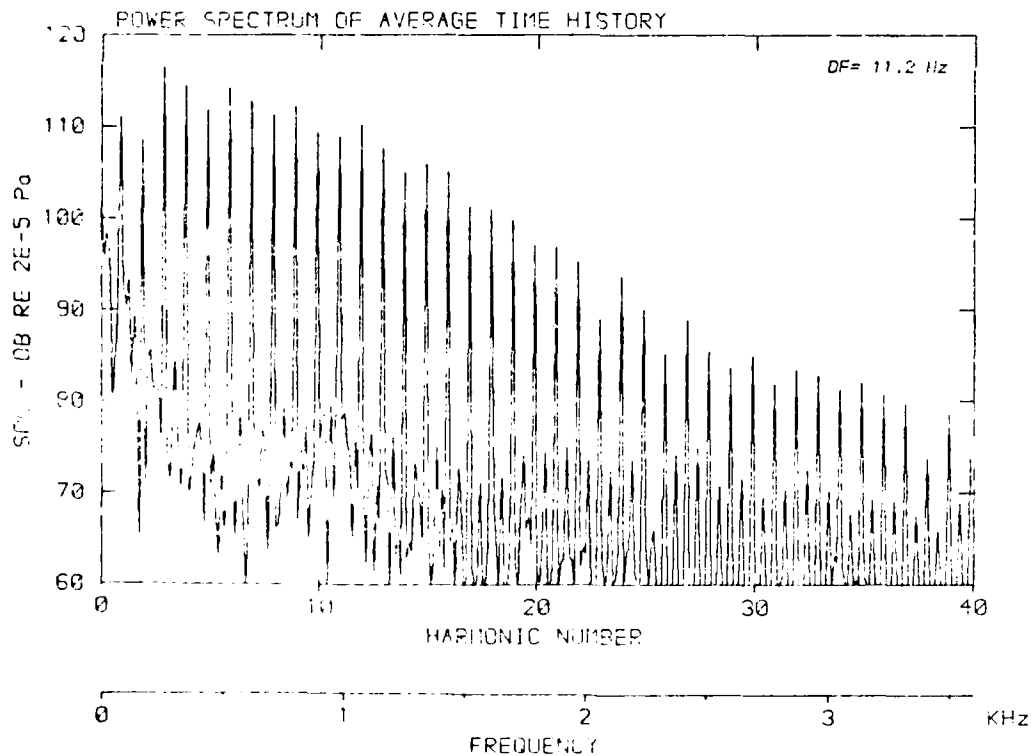
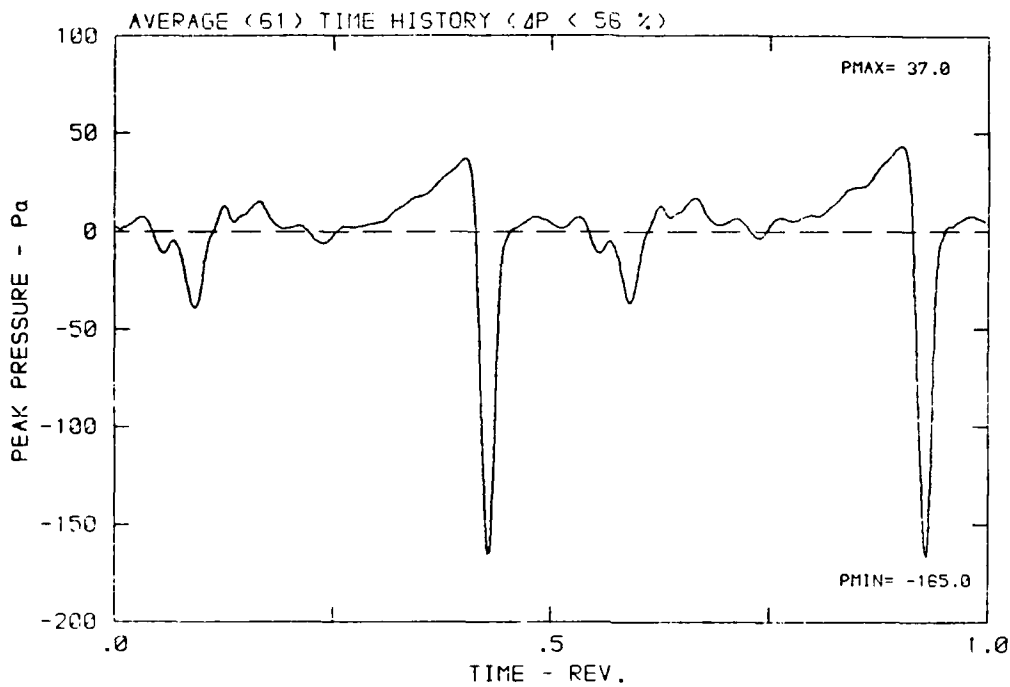
DATA POINT: KC-3 RUN: 190 MP: 9

β : 20.7° IH: .8595 n: 2700 rpm v/u : .270 ϕ : .6° T: 233.1 s



DATA POINT: KC-3 RUN: 190 MP: 9

β : 20.7° MH: .8595 n: 2700 rpm v/u : .270 ϕ : .0° T: 298.1 K



6. Propeller Rotational Harmonic Noise- and Overall Noise Levels

From all spectra of averaged time-histories the harmonic pressure levels are determined under the presupposition of a 10 dB signal-to-noise ratio, and are submitted to the A-weighting function. Both linear and A-weighted harmonic levels as well as the respective overall pressure levels (calculated from the energy sum of harmonic levels) are listed in the following tables.

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN											
HN-1 / 33				HN-2 / 34				HN-3 / 35			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	106.5	84.0	90.0	113.4	94.3	91.8	112.4	93.3		
2	160.0	100.8	87.4	180.0	111.7	100.8	183.6	114.2	103.3		
3	240.0	0.0	0.0	270.0	110.1	101.5	275.4	109.8	101.2		
4	320.0	0.0	0.0	360.0	108.7	103.9	367.2	111.3	106.5		
5	400.0	0.0	0.0	450.0	106.1	102.9	459.0	107.0	103.8		
6	480.0	0.0	0.0	540.0	103.0	99.8	550.8	104.1	100.9		
7	560.0	0.0	0.0	630.0	102.2	100.3	642.6	105.5	103.6		
8	640.0	0.0	0.0	720.0	101.5	100.7	734.4	105.2	104.4		
9	720.0	0.0	0.0	810.0	97.0	96.2	826.2	100.0	99.2		
10	800.0	0.0	0.0	900.0	95.5	95.5	918.0	102.1	102.1		
11	880.0	0.0	0.0	990.0	95.5	95.5	1009.8	99.5	99.5		
12	960.0	0.0	0.0	1080.0	91.1	91.1	1101.6	98.2	98.2		
13	1040.0	0.0	0.0	1170.0	86.9	87.5	1193.4	94.3	94.9		
14	1120.0	0.0	0.0	1260.0	88.9	89.5	1285.2	92.4	93.0		
15	1200.0	0.0	0.0	1350.0	83.0	83.6	1377.0	87.4	88.0		
16	1280.0	0.0	0.0	1440.0	76.6	77.6	1468.8	88.8	89.8		
17	1360.0	0.0	0.0	1530.0	0.0	0.0	1560.6	89.9	90.9		
18	1440.0	0.0	0.0	1620.0	0.0	0.0	1652.4	80.7	81.7		
19	1520.0	0.0	0.0	1710.0	0.0	0.0	1744.2	0.0	0.0		
20	1600.0	0.0	0.0	1800.0	0.0	0.0	1836.0	0.0	0.0		
21	1680.0	0.0	0.0	1890.0	0.0	0.0	1927.8	0.0	0.0		
22	1760.0	0.0	0.0	1980.0	0.0	0.0	2019.6	0.0	0.0		
23	1840.0	0.0	0.0	2070.0	0.0	0.0	2111.4	0.0	0.0		
24	1920.0	0.0	0.0	2160.0	0.0	0.0	2203.2	0.0	0.0		
25	2000.0	0.0	0.0	2250.0	0.0	0.0	2295.0	0.0	0.0		
26	2080.0	0.0	0.0	2340.0	0.0	0.0	2386.8	0.0	0.0		
27	2160.0	0.0	0.0	2430.0	0.0	0.0	2478.6	0.0	0.0		
28	2240.0	0.0	0.0	2520.0	0.0	0.0	2570.4	0.0	0.0		
29	2320.0	0.0	0.0	2610.0	0.0	0.0	2662.2	0.0	0.0		
30	2400.0	0.0	0.0	2700.0	0.0	0.0	2754.0	0.0	0.0		
31	2480.0	0.0	0.0	2790.0	0.0	0.0	2845.8	0.0	0.0		
32	2560.0	0.0	0.0	2880.0	0.0	0.0	2937.6	0.0	0.0		
33	2640.0	0.0	0.0	2970.0	0.0	0.0	3029.4	0.0	0.0		
34	2720.0	0.0	0.0	3060.0	0.0	0.0	3121.2	0.0	0.0		
35	2800.0	0.0	0.0	3150.0	0.0	0.0	3213.0	0.0	0.0		
36	2880.0	0.0	0.0	3240.0	0.0	0.0	3304.8	0.0	0.0		
37	2960.0	0.0	0.0	3330.0	0.0	0.0	3396.6	0.0	0.0		
38	3040.0	0.0	0.0	3420.0	0.0	0.0	3488.4	0.0	0.0		
39	3120.0	0.0	0.0	3510.0	0.0	0.0	3580.2	0.0	0.0		
40	3200.0	0.0	0.0	3600.0	0.0	0.0	3672.0	0.0	0.0		
OASPL		107.5	89.0		118.1	110.8		119.3	113.3		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN											
HN-1 / 33				HN-2 / 34				HN-3 / 35			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	105.5	83.0	90.0	113.7	94.6	91.8	112.8	93.7		
2	160.0	105.4	92.0	180.0	114.4	103.5	183.6	121.1	110.2		
3	240.0	106.0	97.4	270.0	115.4	106.8	275.4	114.2	105.6		
4	320.0	103.9	97.3	360.0	110.7	105.9	367.2	115.3	110.5		
5	400.0	101.9	97.1	450.0	114.3	111.1	459.0	116.8	113.6		
6	480.0	102.0	98.8	540.0	114.2	111.0	550.8	114.7	111.5		
7	560.0	98.7	95.5	630.0	111.7	109.8	642.6	114.3	112.4		
8	640.0	95.2	93.3	720.0	109.7	108.9	734.4	112.4	111.6		
9	720.0	91.8	91.0	810.0	110.2	109.4	826.2	114.2	113.4		
10	800.0	91.5	90.7	900.0	109.8	109.8	918.0	112.8	112.8		
11	880.0	90.0	89.2	990.0	106.6	106.6	1009.8	110.3	110.3		
12	960.0	85.1	85.1	1080.0	104.5	104.5	1101.6	109.6	109.6		
13	1040.0	84.0	84.0	1170.0	104.5	105.1	1193.4	108.6	109.2		
14	1120.0	78.0	78.0	1260.0	103.5	104.1	1285.2	109.1	109.7		
15	1200.0	78.2	78.8	1350.0	100.7	101.3	1377.0	105.3	105.9		
16	1280.0	75.1	75.7	1440.0	100.0	101.0	1468.8	105.5	106.5		
17	1360.0	0.0	0.0	1530.0	98.3	99.3	1560.6	105.3	106.3		
18	1440.0	0.0	0.0	1620.0	97.3	98.3	1652.4	102.6	103.6		
19	1520.0	0.0	0.0	1710.0	94.9	95.9	1744.2	101.1	102.1		
20	1600.0	0.0	0.0	1800.0	92.6	93.8	1836.0	98.8	100.0		
21	1680.0	0.0	0.0	1890.0	91.7	92.9	1927.8	100.6	101.8		
22	1760.0	0.0	0.0	1980.0	91.4	92.6	2019.6	98.3	99.5		
23	1840.0	0.0	0.0	2070.0	88.6	89.8	2111.4	96.2	97.4		
24	1920.0	0.0	0.0	2160.0	87.2	88.4	2203.2	95.2	96.4		
25	2000.0	0.0	0.0	2250.0	85.5	86.8	2295.0	95.4	96.7		
26	2080.0	0.0	0.0	2340.0	84.6	85.9	2386.8	95.3	96.6		
27	2160.0	0.0	0.0	2430.0	83.6	84.9	2478.6	92.3	93.6		
28	2240.0	0.0	0.0	2520.0	82.3	83.6	2570.4	94.4	95.7		
29	2320.0	0.0	0.0	2610.0	82.5	83.8	2662.2	93.3	94.6		
30	2400.0	0.0	0.0	2700.0	79.7	81.0	2754.0	90.6	91.9		
31	2480.0	0.0	0.0	2790.0	77.4	78.7	2845.8	88.9	90.1		
32	2560.0	0.0	0.0	2880.0	77.9	79.1	2937.6	90.7	91.9		
33	2640.0	0.0	0.0	2970.0	75.2	76.4	3029.4	91.1	92.3		
34	2720.0	0.0	0.0	3060.0	74.7	75.9	3121.2	86.2	87.4		
35	2800.0	0.0	0.0	3150.0	73.8	75.0	3213.0	85.7	86.9		
36	2880.0	0.0	0.0	3240.0	70.5	71.7	3304.8	87.9	89.1		
37	2960.0	0.0	0.0	3330.0	0.0	0.0	3396.6	85.8	87.0		
38	3040.0	0.0	0.0	3420.0	0.0	0.0	3488.4	82.9	84.1		
39	3120.0	0.0	0.0	3510.0	0.0	0.0	3580.2	83.5	84.5		
40	3200.0	0.0	0.0	3600.0	0.0	0.0	3672.0	85.1	86.1		
OASPL		112.6	105.4	123.3		119.6	126.3		122.9		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
HN-1 / 33				HN-2 / 34			HN-3 / 35			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	108.2	85.7	90.0	115.4	96.3	91.8	115.8	96.7	
2	160.0	106.5	93.1	180.0	115.3	104.4	183.6	116.9	106.0	
3	240.0	106.1	97.5	270.0	114.2	105.6	275.4	115.8	107.2	
4	320.0	104.8	98.2	360.0	115.7	110.9	367.2	118.1	113.3	
5	400.0	105.1	100.3	450.0	115.1	111.9	459.0	117.9	114.7	
6	480.0	102.4	99.2	540.0	113.2	110.0	550.8	115.5	112.3	
7	560.0	99.6	96.4	630.0	112.6	110.7	642.6	116.9	115.0	
8	640.0	98.5	96.6	720.0	113.9	113.1	734.4	117.1	116.3	
9	720.0	97.1	96.3	810.0	111.9	111.1	826.2	115.5	114.7	
10	800.0	93.4	92.6	900.0	111.1	111.1	918.0	115.1	115.1	
11	880.0	92.5	91.7	990.0	110.9	110.9	1009.8	114.4	114.4	
12	960.0	90.8	90.8	1080.0	108.7	108.7	1101.6	112.2	112.2	
13	1040.0	87.3	87.3	1170.0	107.2	107.8	1193.4	112.9	113.5	
14	1120.0	82.9	82.9	1260.0	108.7	109.3	1285.2	112.2	112.8	
15	1200.0	83.1	83.7	1350.0	105.2	105.8	1377.0	109.2	109.8	
16	1280.0	80.8	81.4	1440.0	103.6	104.6	1468.8	109.0	110.0	
17	1360.0	76.0	76.6	1530.0	104.0	105.0	1560.6	109.5	110.5	
18	1440.0	73.1	74.1	1620.0	103.5	104.5	1652.4	108.2	109.2	
19	1520.0	74.1	75.1	1710.0	99.7	100.7	1744.2	104.6	105.6	
20	1600.0	70.1	71.1	1800.0	98.1	99.3	1836.0	105.1	106.3	
21	1680.0	0.0	0.0	1890.0	98.4	99.6	1927.8	105.3	106.5	
22	1760.0	0.0	0.0	1980.0	97.0	98.2	2019.6	103.3	104.5	
23	1840.0	0.0	0.0	2070.0	94.5	95.7	2111.4	101.6	102.8	
24	1920.0	0.0	0.0	2160.0	94.7	95.9	2203.2	102.9	104.1	
25	2000.0	0.0	0.0	2250.0	93.7	95.0	2295.0	100.8	102.1	
26	2080.0	0.0	0.0	2340.0	89.6	90.9	2386.8	99.8	101.1	
27	2160.0	0.0	0.0	2430.0	90.5	91.8	2478.6	100.8	102.1	
28	2240.0	0.0	0.0	2520.0	90.3	91.6	2570.4	100.8	102.1	
29	2320.0	0.0	0.0	2610.0	88.2	89.5	2662.2	98.9	100.2	
30	2400.0	0.0	0.0	2700.0	86.5	87.8	2754.0	98.6	99.9	
31	2480.0	0.0	0.0	2790.0	86.8	88.1	2845.8	99.1	100.3	
32	2560.0	0.0	0.0	2880.0	86.4	87.6	2937.6	98.5	99.7	
33	2640.0	0.0	0.0	2970.0	85.5	86.7	3029.4	95.8	97.0	
34	2720.0	0.0	0.0	3060.0	82.9	84.1	3121.2	93.9	95.1	
35	2800.0	0.0	0.0	3150.0	80.7	81.9	3213.0	95.7	96.9	
36	2880.0	0.0	0.0	3240.0	82.9	84.1	3304.8	95.9	97.1	
37	2960.0	0.0	0.0	3330.0	81.8	83.0	3396.6	93.9	95.1	
38	3040.0	0.0	0.0	3420.0	78.6	79.8	3488.4	92.5	93.7	
39	3120.0	0.0	0.0	3510.0	76.0	77.2	3580.2	94.7	95.7	
40	3200.0	0.0	0.0	3600.0	78.4	79.4	3672.0	94.4	95.4	
OASPL		114.1	107.2	124.8		121.9	127.7		125.7	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN											
HN-1 / 33			HN-2 / 34			HN-3 / 35					
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	109.6	87.1	90.0	117.0	97.9	91.8	117.5	98.4		
2	160.0	106.5	93.1	180.0	113.6	102.7	183.6	115.9	105.0		
3	240.0	108.2	99.6	270.0	116.9	108.3	275.4	119.5	110.9		
4	320.0	107.0	100.4	360.0	115.4	110.6	367.2	117.7	112.9		
5	400.0	104.4	99.6	450.0	115.2	112.0	459.0	117.9	114.7		
6	480.0	101.7	98.5	540.0	114.7	111.5	550.8	117.1	113.9		
7	560.0	101.2	98.0	630.0	114.4	112.5	642.6	117.3	115.4		
8	640.0	99.3	97.4	720.0	113.0	112.2	734.4	115.9	115.1		
9	720.0	96.2	95.4	810.0	112.9	112.1	826.2	115.5	114.7		
10	800.0	94.8	94.0	900.0	112.4	112.4	918.0	115.6	115.6		
11	880.0	93.2	92.4	990.0	110.4	110.4	1009.8	114.1	114.1		
12	960.0	90.7	90.7	1080.0	111.1	111.1	1101.6	115.3	115.3		
13	1040.0	89.0	89.0	1170.0	109.2	109.8	1193.4	111.5	112.1		
14	1120.0	87.2	87.2	1260.0	107.3	107.9	1285.2	111.9	112.5		
15	1200.0	83.0	83.6	1350.0	106.8	107.4	1377.0	111.6	112.2		
16	1280.0	81.9	82.5	1440.0	105.9	106.9	1468.8	110.2	111.2		
17	1360.0	80.6	81.2	1530.0	103.7	104.7	1560.6	108.4	109.4		
18	1440.0	78.3	79.3	1620.0	101.8	102.8	1652.4	108.2	109.2		
19	1520.0	72.3	73.3	1710.0	102.3	103.3	1744.2	107.7	108.7		
20	1600.0	70.7	71.7	1800.0	100.1	101.3	1836.0	105.1	106.3		
21	1680.0	0.0	0.0	1890.0	97.1	98.3	1927.8	104.6	105.8		
22	1760.0	0.0	0.0	1980.0	97.9	99.1	2019.6	104.0	105.2		
23	1840.0	0.0	0.0	2070.0	95.9	97.1	2111.4	102.1	103.3		
24	1920.0	0.0	0.0	2160.0	93.0	94.2	2203.2	102.0	103.2		
25	2000.0	0.0	0.0	2250.0	93.9	95.2	2295.0	101.2	102.5		
26	2080.0	0.0	0.0	2340.0	91.9	93.2	2386.8	100.6	101.9		
27	2160.0	0.0	0.0	2430.0	91.1	92.4	2478.6	101.0	102.3		
28	2240.0	0.0	0.0	2520.0	91.4	92.7	2570.4	100.8	102.1		
29	2320.0	0.0	0.0	2610.0	89.5	90.8	2662.2	99.2	100.5		
30	2400.0	0.0	0.0	2700.0	87.5	88.8	2754.0	99.4	100.7		
31	2480.0	0.0	0.0	2790.0	88.4	89.7	2845.8	99.1	100.3		
32	2560.0	0.0	0.0	2880.0	86.6	87.8	2937.6	97.1	98.3		
33	2640.0	0.0	0.0	2970.0	84.4	85.6	3029.4	96.9	98.1		
34	2720.0	0.0	0.0	3060.0	83.7	84.9	3121.2	97.8	99.0		
35	2800.0	0.0	0.0	3150.0	84.0	85.2	3213.0	95.7	96.9		
36	2880.0	0.0	0.0	3240.0	81.7	82.9	3304.8	95.4	96.6		
37	2960.0	0.0	0.0	3330.0	81.3	82.5	3396.6	95.5	96.7		
38	3040.0	0.0	0.0	3420.0	80.2	81.4	3488.4	94.9	96.1		
39	3120.0	0.0	0.0	3510.0	79.1	80.3	3580.2	93.9	94.9		
40	3200.0	0.0	0.0	3600.0	78.7	79.7	3672.0	92.0	93.0		
OASPL		115.2	107.9			125.6	122.6			128.3	126.0

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
HN-1 / 33			HN-2 / 34			HN-3 / 35				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	110.5	88.0	90.0	118.4	99.3	91.8	119.0	99.9	
2	160.0	105.9	92.5	180.0	114.1	103.2	183.6	116.7	105.8	
3	240.0	104.4	95.8	270.0	117.1	108.5	275.4	118.5	109.9	
4	320.0	107.9	101.3	360.0	117.1	112.3	367.2	119.7	114.9	
5	400.0	102.1	97.3	450.0	110.4	107.2	459.0	112.2	109.0	
6	480.0	98.0	94.8	540.0	114.0	110.8	550.8	117.0	113.8	
7	560.0	99.9	96.7	630.0	113.8	111.9	642.6	116.7	114.8	
8	640.0	98.4	96.5	720.0	111.0	110.2	734.4	113.2	112.4	
9	720.0	92.7	91.9	810.0	109.7	108.9	826.2	113.6	112.8	
10	800.0	91.9	91.1	900.0	110.2	110.2	918.0	113.4	113.4	
11	880.0	88.8	88.0	990.0	109.3	109.3	1009.8	113.4	113.4	
12	960.0	88.7	88.7	1080.0	104.7	104.7	1101.6	108.3	108.3	
13	1040.0	85.2	85.2	1170.0	107.0	107.6	1193.4	111.9	112.5	
14	1120.0	80.9	80.9	1260.0	105.9	106.5	1285.2	110.0	110.6	
15	1200.0	81.9	82.5	1350.0	101.4	102.0	1377.0	105.4	106.0	
16	1280.0	78.8	79.4	1440.0	103.6	104.6	1468.8	108.3	109.3	
17	1360.0	75.8	76.4	1530.0	99.4	100.4	1560.6	105.9	106.9	
18	1440.0	0.0	0.0	1620.0	98.8	99.8	1652.4	102.6	103.6	
19	1520.0	0.0	0.0	1710.0	99.0	100.0	1744.2	104.2	105.2	
20	1600.0	0.0	0.0	1800.0	95.0	96.2	1836.0	101.9	103.1	
21	1680.0	0.0	0.0	1890.0	94.7	95.9	1927.8	101.1	102.3	
22	1760.0	0.0	0.0	1980.0	94.8	96.0	2019.6	101.0	102.2	
23	1840.0	0.0	0.0	2070.0	91.2	92.4	2111.4	99.3	100.5	
24	1920.0	0.0	0.0	2160.0	91.6	92.8	2203.2	97.4	98.6	
25	2000.0	0.0	0.0	2250.0	89.5	90.8	2295.0	97.4	98.7	
26	2080.0	0.0	0.0	2340.0	86.2	87.5	2386.8	96.2	97.5	
27	2160.0	0.0	0.0	2430.0	88.4	89.7	2478.6	95.2	96.5	
28	2240.0	0.0	0.0	2520.0	83.5	84.8	2570.4	91.8	93.1	
29	2320.0	0.0	0.0	2610.0	83.3	84.6	2662.2	95.5	96.8	
30	2400.0	0.0	0.0	2700.0	85.3	86.6	2754.0	92.4	93.7	
31	2480.0	0.0	0.0	2790.0	79.8	81.1	2845.8	90.5	91.7	
32	2560.0	0.0	0.0	2880.0	80.5	81.7	2937.6	94.3	95.5	
33	2640.0	0.0	0.0	2970.0	83.0	84.2	3029.4	89.7	90.9	
34	2720.0	0.0	0.0	3060.0	76.0	77.2	3121.2	90.7	91.9	
35	2800.0	0.0	0.0	3150.0	79.3	80.5	3213.0	91.1	92.3	
36	2880.0	0.0	0.0	3240.0	78.4	79.6	3304.8	86.8	88.0	
37	2960.0	0.0	0.0	3330.0	74.7	75.9	3396.6	89.3	90.5	
38	3040.0	0.0	0.0	3420.0	76.1	77.3	3488.4	86.8	88.0	
39	3120.0	0.0	0.0	3510.0	72.3	73.5	3580.2	84.7	85.7	
40	3200.0	0.0	0.0	3600.0	70.7	71.7	3672.0	87.2	88.2	
OASPL		114.6	106.3	125.0		120.8	127.4		124.1	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
HN-1 / 33			HN-2 / 34			HN-3 / 35				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	110.2	87.7	90.0	118.6	99.5	91.8	92.4	73.3	
2	160.0	103.7	90.3	180.0	117.6	106.7	183.6	92.0	81.1	
3	240.0	96.6	88.0	270.0	117.3	108.7	275.4	91.1	82.5	
4	320.0	103.2	96.6	360.0	113.2	108.4	367.2	88.9	84.1	
5	400.0	97.7	92.9	450.0	106.8	103.6	459.0	85.0	81.8	
6	480.0	94.1	90.9	540.0	111.1	107.9	550.8	88.4	85.2	
7	560.0	96.7	93.5	630.0	107.5	105.6	642.6	83.9	82.0	
8	640.0	90.0	88.1	720.0	100.4	99.6	734.4	80.3	79.5	
9	720.0	77.7	76.9	810.0	107.0	106.2	826.2	82.5	81.7	
10	800.0	0.0	0.0	900.0	102.3	102.3	918.0	77.8	77.8	
11	880.0	0.0	0.0	990.0	97.1	97.1	1009.8	71.4	71.4	
12	960.0	0.0	0.0	1080.0	100.5	100.5	1101.6	76.6	76.6	
13	1040.0	0.0	0.0	1170.0	95.8	96.4	1193.4	73.4	74.0	
14	1120.0	0.0	0.0	1260.0	93.0	93.6	1285.2	61.6	62.2	
15	1200.0	0.0	0.0	1350.0	92.6	93.2	1377.0	61.1	61.7	
16	1280.0	0.0	0.0	1440.0	90.9	91.9	1468.8	0.0	0.0	
17	1360.0	0.0	0.0	1530.0	88.1	89.1	1560.6	0.0	0.0	
18	1440.0	0.0	0.0	1620.0	75.3	76.3	1652.4	0.0	0.0	
19	1520.0	0.0	0.0	1710.0	89.1	90.1	1744.2	0.0	0.0	
20	1600.0	0.0	0.0	1800.0	78.0	79.2	1836.0	0.0	0.0	
21	1680.0	0.0	0.0	1890.0	77.9	79.1	1927.8	0.0	0.0	
22	1760.0	0.0	0.0	1980.0	79.7	80.9	2019.6	0.0	0.0	
23	1840.0	0.0	0.0	2070.0	75.3	76.5	2111.4	0.0	0.0	
24	1920.0	0.0	0.0	2160.0	71.5	72.7	2203.2	0.0	0.0	
25	2000.0	0.0	0.0	2250.0	0.0	0.0	2295.0	0.0	0.0	
26	2080.0	0.0	0.0	2340.0	0.0	0.0	2386.8	0.0	0.0	
27	2160.0	0.0	0.0	2430.0	0.0	0.0	2478.6	0.0	0.0	
28	2240.0	0.0	0.0	2520.0	0.0	0.0	2570.4	0.0	0.0	
29	2320.0	0.0	0.0	2610.0	0.0	0.0	2662.2	0.0	0.0	
30	2400.0	0.0	0.0	2700.0	0.0	0.0	2754.0	0.0	0.0	
31	2480.0	0.0	0.0	2790.0	0.0	0.0	2845.8	0.0	0.0	
32	2560.0	0.0	0.0	2880.0	0.0	0.0	2937.6	0.0	0.0	
33	2640.0	0.0	0.0	2970.0	0.0	0.0	3029.4	0.0	0.0	
34	2720.0	0.0	0.0	3060.0	0.0	0.0	3121.2	0.0	0.0	
35	2800.0	0.0	0.0	3150.0	0.0	0.0	3213.0	0.0	0.0	
36	2880.0	0.0	0.0	3240.0	0.0	0.0	3304.8	0.0	0.0	
37	2960.0	0.0	0.0	3330.0	0.0	0.0	3396.6	0.0	0.0	
38	3040.0	0.0	0.0	3420.0	0.0	0.0	3488.4	0.0	0.0	
39	3120.0	0.0	0.0	3510.0	0.0	0.0	3580.2	0.0	0.0	
40	3200.0	0.0	0.0	3600.0	0.0	0.0	3672.0	0.0	0.0	
OASPL		112.2	101.1	123.8		116.2	98.5		92.1	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
HN-1 / 33				HN-2 / 34			HN-3 / 35			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	101.3	78.8	90.0	114.7	95.6	91.8	117.0	97.9	
2	160.0	0.0	0.0	180.0	0.0	0.0	183.6	0.0	0.0	
3	240.0	0.0	0.0	270.0	0.0	0.0	275.4	0.0	0.0	
4	320.0	0.0	0.0	360.0	0.0	0.0	367.2	0.0	0.0	
5	400.0	0.0	0.0	450.0	0.0	0.0	459.0	0.0	0.0	
6	480.0	0.0	0.0	540.0	0.0	0.0	550.8	0.0	0.0	
7	560.0	0.0	0.0	630.0	0.0	0.0	642.6	0.0	0.0	
8	640.0	0.0	0.0	720.0	0.0	0.0	734.4	0.0	0.0	
9	720.0	0.0	0.0	810.0	0.0	0.0	826.2	0.0	0.0	
10	800.0	0.0	0.0	900.0	0.0	0.0	918.0	0.0	0.0	
11	880.0	0.0	0.0	990.0	0.0	0.0	1009.8	0.0	0.0	
12	960.0	0.0	0.0	1080.0	0.0	0.0	1101.6	0.0	0.0	
13	1040.0	0.0	0.0	1170.0	0.0	0.0	1193.4	0.0	0.0	
14	1120.0	0.0	0.0	1260.0	0.0	0.0	1285.2	0.0	0.0	
15	1200.0	0.0	0.0	1350.0	0.0	0.0	1377.0	0.0	0.0	
16	1280.0	0.0	0.0	1440.0	0.0	0.0	1468.8	0.0	0.0	
17	1360.0	0.0	0.0	1530.0	0.0	0.0	1560.6	0.0	0.0	
18	1440.0	0.0	0.0	1620.0	0.0	0.0	1652.4	0.0	0.0	
19	1520.0	0.0	0.0	1710.0	0.0	0.0	1744.2	0.0	0.0	
20	1600.0	0.0	0.0	1800.0	0.0	0.0	1836.0	0.0	0.0	
21	1680.0	0.0	0.0	1890.0	0.0	0.0	1927.8	0.0	0.0	
22	1760.0	0.0	0.0	1980.0	0.0	0.0	2019.6	0.0	0.0	
23	1840.0	0.0	0.0	2070.0	0.0	0.0	2111.4	0.0	0.0	
24	1920.0	0.0	0.0	2160.0	0.0	0.0	2203.2	0.0	0.0	
25	2000.0	0.0	0.0	2250.0	0.0	0.0	2295.0	0.0	0.0	
26	2080.0	0.0	0.0	2340.0	0.0	0.0	2386.8	0.0	0.0	
27	2160.0	0.0	0.0	2430.0	0.0	0.0	2478.6	0.0	0.0	
28	2240.0	0.0	0.0	2520.0	0.0	0.0	2570.4	0.0	0.0	
29	2320.0	0.0	0.0	2610.0	0.0	0.0	2662.2	0.0	0.0	
30	2400.0	0.0	0.0	2700.0	0.0	0.0	2754.0	0.0	0.0	
31	2480.0	0.0	0.0	2790.0	0.0	0.0	2845.8	0.0	0.0	
32	2560.0	0.0	0.0	2880.0	0.0	0.0	2937.6	0.0	0.0	
33	2640.0	0.0	0.0	2970.0	0.0	0.0	3029.4	0.0	0.0	
34	2720.0	0.0	0.0	3060.0	0.0	0.0	3121.2	0.0	0.0	
35	2800.0	0.0	0.0	3150.0	0.0	0.0	3213.0	0.0	0.0	
36	2880.0	0.0	0.0	3240.0	0.0	0.0	3304.8	0.0	0.0	
37	2960.0	0.0	0.0	3330.0	0.0	0.0	3396.6	0.0	0.0	
38	3040.0	0.0	0.0	3420.0	0.0	0.0	3488.4	0.0	0.0	
39	3120.0	0.0	0.0	3510.0	0.0	0.0	3580.2	0.0	0.0	
40	3200.0	0.0	0.0	3600.0	0.0	0.0	3672.0	0.0	0.0	
OASPL		101.3	78.8		114.7	95.6		117.0	97.9	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
HN-1 / 33			HN-2 / 34			HN-3 / 35				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	39.5	17.0	90.0	36.5	17.4	91.8	36.1	17.0	
2	160.0	0.0	0.0	180.0	0.0	0.0	183.6	0.0	0.0	
3	240.0	0.0	0.0	270.0	0.0	0.0	275.4	0.0	0.0	
4	320.0	0.0	0.0	360.0	0.0	0.0	367.2	0.0	0.0	
5	400.0	0.0	0.0	450.0	0.0	0.0	459.0	0.0	0.0	
6	480.0	0.0	0.0	540.0	0.0	0.0	550.8	0.0	0.0	
7	560.0	0.0	0.0	630.0	0.0	0.0	642.6	0.0	0.0	
8	640.0	0.0	0.0	720.0	0.0	0.0	734.4	0.0	0.0	
9	720.0	0.0	0.0	810.0	0.0	0.0	826.2	0.0	0.0	
10	800.0	0.0	0.0	900.0	0.0	0.0	918.0	0.0	0.0	
11	880.0	0.0	0.0	990.0	0.0	0.0	1009.8	0.0	0.0	
12	960.0	0.0	0.0	1080.0	0.0	0.0	1101.6	0.0	0.0	
13	1040.0	0.0	0.0	1170.0	0.0	0.0	1193.4	0.0	0.0	
14	1120.0	0.0	0.0	1260.0	0.0	0.0	1285.2	0.0	0.0	
15	1200.0	0.0	0.0	1350.0	0.0	0.0	1377.0	0.0	0.0	
16	1280.0	0.0	0.0	1440.0	0.0	0.0	1468.8	0.0	0.0	
17	1360.0	0.0	0.0	1530.0	0.0	0.0	1560.6	0.0	0.0	
18	1440.0	0.0	0.0	1620.0	0.0	0.0	1652.4	0.0	0.0	
19	1520.0	0.0	0.0	1710.0	0.0	0.0	1744.2	0.0	0.0	
20	1600.0	0.0	0.0	1800.0	0.0	0.0	1836.0	0.0	0.0	
21	1680.0	0.0	0.0	1890.0	0.0	0.0	1927.8	0.0	0.0	
22	1760.0	0.0	0.0	1980.0	0.0	0.0	2019.6	0.0	0.0	
23	1840.0	0.0	0.0	2070.0	0.0	0.0	2111.4	0.0	0.0	
24	1920.0	0.0	0.0	2160.0	0.0	0.0	2203.2	0.0	0.0	
25	2000.0	0.0	0.0	2250.0	0.0	0.0	2295.0	0.0	0.0	
26	2080.0	0.0	0.0	2340.0	0.0	0.0	2386.8	0.0	0.0	
27	2160.0	0.0	0.0	2430.0	0.0	0.0	2478.6	0.0	0.0	
28	2240.0	0.0	0.0	2520.0	0.0	0.0	2570.4	0.0	0.0	
29	2320.0	0.0	0.0	2610.0	0.0	0.0	2662.2	0.0	0.0	
30	2400.0	0.0	0.0	2700.0	0.0	0.0	2754.0	0.0	0.0	
31	2480.0	0.0	0.0	2790.0	0.0	0.0	2845.8	0.0	0.0	
32	2560.0	0.0	0.0	2880.0	0.0	0.0	2937.6	0.0	0.0	
33	2640.0	0.0	0.0	2970.0	0.0	0.0	3029.4	0.0	0.0	
34	2720.0	0.0	0.0	3060.0	0.0	0.0	3121.2	0.0	0.0	
35	2800.0	0.0	0.0	3150.0	0.0	0.0	3213.0	0.0	0.0	
36	2880.0	0.0	0.0	3240.0	0.0	0.0	3304.8	0.0	0.0	
37	2960.0	0.0	0.0	3330.0	0.0	0.0	3396.6	0.0	0.0	
38	3040.0	0.0	0.0	3420.0	0.0	0.0	3488.4	0.0	0.0	
39	3120.0	0.0	0.0	3510.0	0.0	0.0	3580.2	0.0	0.0	
40	3200.0	0.0	0.0	3600.0	0.0	0.0	3672.0	0.0	0.0	
OASPL		39.5	17.0		36.5	17.4		36.1	17.0	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
IN-1 / 36				IN-2 / 37			IN-3 / 38			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	101.8	75.6	80.0	102.6	80.1	90.0	110.7	91.6	
2	140.0	96.7	80.6	160.0	107.4	94.0	180.0	114.7	103.3	
3	210.0	93.9	83.0	240.0	102.6	94.0	270.0	108.1	99.5	
4	280.0	89.4	80.8	320.0	98.2	91.6	360.0	109.2	104.4	
5	350.0	85.8	79.2	400.0	96.7	91.9	450.0	105.2	102.0	
6	420.0	79.4	74.6	480.0	92.4	89.2	540.0	103.5	100.3	
7	490.0	72.6	69.4	560.0	86.7	83.5	630.0	102.2	100.3	
8	560.0	64.2	61.0	640.0	80.3	78.4	720.0	101.9	101.1	
9	630.0	0.0	0.0	720.0	82.1	81.3	810.0	98.4	97.6	
10	700.0	0.0	0.0	800.0	74.1	73.3	900.0	97.9	97.9	
11	770.0	0.0	0.0	880.0	65.1	64.3	990.0	94.9	94.9	
12	840.0	0.0	0.0	960.0	71.8	71.8	1080.0	90.9	90.9	
13	910.0	0.0	0.0	1040.0	65.5	65.5	1170.0	88.7	89.3	
14	980.0	0.0	0.0	1120.0	58.8	58.8	1260.0	88.5	89.1	
15	1050.0	0.0	0.0	1200.0	56.9	57.5	1350.0	85.5	86.1	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	82.1	83.1	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		103.8	87.7			110.2	99.7			118.0 111.1

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
IN-1 / 36				IN-2 / 37			IN-3 / 38				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	105.4	79.2	80.0	107.6	85.1	90.0	113.8	94.7		
2	140.0	103.2	87.1	160.0	108.9	95.5	180.0	113.0	102.1		
3	210.0	97.4	86.5	240.0	106.5	97.9	270.0	114.7	106.1		
4	280.0	94.4	85.8	320.0	104.6	98.0	360.0	111.2	106.4		
5	350.0	87.9	81.3	400.0	101.8	97.0	450.0	114.3	111.1		
6	420.0	84.8	80.0	480.0	101.4	98.2	540.0	114.2	111.0		
7	490.0	81.3	78.1	560.0	97.2	94.0	630.0	111.3	109.4		
8	560.0	74.8	71.6	640.0	93.8	91.9	720.0	109.8	109.0		
9	630.0	69.2	67.3	720.0	90.4	89.6	810.0	110.4	109.6		
10	700.0	66.1	64.2	800.0	91.8	91.0	900.0	109.6	109.6		
11	770.0	65.1	64.3	880.0	88.0	87.2	990.0	106.3	106.3		
12	840.0	54.1	53.3	960.0	84.4	84.4	1080.0	104.6	104.6		
13	910.0	0.0	0.0	1040.0	80.4	80.4	1170.0	104.2	104.8		
14	980.0	0.0	0.0	1120.0	78.5	78.5	1260.0	103.7	104.3		
15	1050.0	0.0	0.0	1200.0	76.1	76.7	1350.0	100.9	101.5		
16	1120.0	0.0	0.0	1280.0	72.2	72.8	1440.0	99.8	100.8		
17	1190.0	0.0	0.0	1360.0	68.6	69.2	1530.0	98.4	99.4		
18	1260.0	0.0	0.0	1440.0	63.4	64.4	1620.0	96.8	97.8		
19	1330.0	0.0	0.0	1520.0	63.4	64.4	1710.0	94.5	95.5		
20	1400.0	0.0	0.0	1600.0	59.9	60.9	1800.0	92.0	93.2		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	91.7	92.9		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	91.2	92.4		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	88.6	89.8		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	86.3	87.5		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	85.6	86.9		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	84.7	86.0		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	83.1	84.4		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	81.8	83.1		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	82.7	84.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	79.8	81.1		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	75.8	77.1		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	76.8	78.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	75.9	77.1		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	75.9	77.1		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	71.6	72.8		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	70.6	71.8		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	72.8	74.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	69.5	70.7		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		108.1	92.4			114.0	105.5			123.0	119.5

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
IN-1 / 36				IN-2 / 37				IN-3 / 38		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.0	80.8	80.0	111.9	89.4	90.0	114.7	95.6	
2	140.0	104.3	88.2	160.0	109.4	96.0	180.0	114.8	103.9	
3	210.0	99.1	88.2	240.0	108.5	99.9	270.0	114.1	105.5	
4	280.0	94.4	85.8	320.0	105.9	99.3	360.0	115.7	110.9	
5	350.0	91.4	84.8	400.0	106.6	101.8	450.0	115.0	111.8	
6	420.0	89.6	84.8	480.0	103.0	99.8	540.0	113.3	110.1	
7	490.0	85.0	81.8	560.0	99.3	96.1	630.0	113.0	111.1	
8	560.0	79.5	76.3	640.0	97.7	95.8	720.0	113.8	113.0	
9	630.0	77.3	75.4	720.0	96.2	95.4	810.0	111.6	110.8	
10	700.0	73.5	71.6	800.0	91.9	91.1	900.0	111.5	111.5	
11	770.0	67.3	66.5	880.0	91.5	90.7	990.0	110.7	110.7	
12	840.0	0.0	0.0	960.0	89.4	89.4	1080.0	108.5	108.5	
13	910.0	0.0	0.0	1040.0	86.9	86.9	1170.0	107.1	107.7	
14	980.0	0.0	0.0	1120.0	82.6	82.6	1260.0	108.5	109.1	
15	1050.0	0.0	0.0	1200.0	81.8	82.4	1350.0	105.0	105.6	
16	1120.0	0.0	0.0	1280.0	80.9	81.5	1440.0	103.5	104.5	
17	1190.0	0.0	0.0	1360.0	75.2	75.8	1530.0	103.7	104.7	
18	1260.0	0.0	0.0	1440.0	73.7	74.7	1620.0	103.4	104.4	
19	1330.0	0.0	0.0	1520.0	70.3	71.3	1710.0	99.3	100.3	
20	1400.0	0.0	0.0	1600.0	68.3	69.3	1800.0	97.5	98.7	
21	1470.0	0.0	0.0	1680.0	62.0	63.0	1890.0	98.1	99.3	
22	1540.0	0.0	0.0	1760.0	60.2	61.2	1980.0	96.6	97.8	
23	1610.0	0.0	0.0	1840.0	58.3	59.5	2070.0	93.8	95.0	
24	1680.0	0.0	0.0	1920.0	59.1	60.3	2160.0	94.4	95.6	
25	1750.0	0.0	0.0	2000.0	61.0	62.2	2250.0	93.1	94.4	
26	1820.0	0.0	0.0	2080.0	58.4	59.6	2340.0	89.3	90.6	
27	1890.0	0.0	0.0	2160.0	50.2	51.4	2430.0	89.7	91.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	89.7	91.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	87.9	89.2	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	85.9	87.2	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	86.1	87.4	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	86.0	87.2	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	84.9	86.1	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	82.6	83.8	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	81.0	82.2	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	82.3	83.5	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	81.4	82.6	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	77.9	79.1	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	76.7	77.9	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	78.1	79.1	
OASPL		109.6	94.2		116.5	108.0		124.7	121.8	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
IN-1 / 36			IN-2 / 37			IN-3 / 38				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	108.9	82.7	80.0	116.1	93.6	90.0	115.9	96.8	
2	140.0	105.3	89.2	160.0	110.4	97.0	180.0	113.1	102.2	
3	210.0	99.2	88.3	240.0	110.8	102.2	270.0	116.5	107.9	
4	280.0	98.1	89.5	320.0	108.2	101.6	360.0	114.9	110.1	
5	350.0	93.9	87.3	400.0	105.6	100.8	450.0	115.0	111.8	
6	420.0	89.3	84.5	480.0	103.1	99.9	540.0	114.6	111.4	
7	490.0	84.7	81.5	560.0	102.4	99.2	630.0	114.0	112.1	
8	560.0	80.7	77.5	640.0	100.4	98.5	720.0	112.9	112.1	
9	630.0	78.0	76.1	720.0	96.2	95.4	810.0	112.6	111.8	
10	700.0	73.8	71.9	800.0	95.4	94.6	900.0	112.3	112.3	
11	770.0	72.2	71.4	880.0	92.6	91.8	990.0	110.2	110.2	
12	840.0	67.4	66.6	960.0	90.0	90.0	1080.0	110.9	110.9	
13	910.0	58.0	58.0	1040.0	87.9	87.9	1170.0	109.3	109.9	
14	980.0	0.0	0.0	1120.0	86.6	86.6	1260.0	107.3	107.9	
15	1050.0	0.0	0.0	1200.0	82.3	82.9	1350.0	106.7	107.3	
16	1120.0	0.0	0.0	1280.0	78.8	79.4	1440.0	105.6	106.6	
17	1190.0	0.0	0.0	1360.0	79.0	79.6	1530.0	103.4	104.4	
18	1260.0	0.0	0.0	1440.0	75.3	76.3	1620.0	101.8	102.8	
19	1330.0	0.0	0.0	1520.0	71.2	72.2	1710.0	102.2	103.2	
20	1400.0	0.0	0.0	1600.0	69.7	70.7	1800.0	99.8	101.0	
21	1470.0	0.0	0.0	1680.0	67.9	68.9	1890.0	96.9	98.1	
22	1540.0	0.0	0.0	1760.0	64.8	65.8	1980.0	97.7	98.9	
23	1610.0	0.0	0.0	1840.0	61.5	62.7	2070.0	95.6	96.8	
24	1680.0	0.0	0.0	1920.0	62.5	63.7	2160.0	92.8	94.0	
25	1750.0	0.0	0.0	2000.0	62.6	63.8	2250.0	93.5	94.8	
26	1820.0	0.0	0.0	2080.0	56.1	57.3	2340.0	91.7	93.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	90.6	91.9	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	91.2	92.5	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	89.0	90.3	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	87.3	88.6	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	88.0	89.3	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	86.0	87.2	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	83.9	85.1	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	83.9	85.1	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	84.0	85.2	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	81.1	82.3	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	80.8	82.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	80.2	81.4	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	78.6	79.8	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	78.7	79.7	
OASPL		111.1	95.7		119.0	109.3		125.2	122.4	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
IN-1 / 36				IN-2 / 37			IN-3 / 38			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	109.7	83.5	80.0	117.4	94.9	90.0	116.9	97.8	
2	140.0	105.9	89.8	160.0	111.6	98.2	180.0	113.7	102.8	
3	210.0	97.2	86.3	240.0	108.6	100.0	270.0	116.0	107.4	
4	280.0	97.2	88.6	320.0	111.4	104.8	360.0	116.3	111.5	
5	350.0	92.9	86.3	400.0	106.2	101.4	450.0	110.0	106.8	
6	420.0	84.8	80.0	480.0	100.1	96.9	540.0	113.6	110.4	
7	490.0	81.3	78.1	560.0	101.8	98.6	630.0	113.2	111.3	
8	560.0	81.4	78.2	640.0	99.7	97.8	720.0	110.8	110.0	
9	630.0	76.7	74.8	720.0	94.1	93.3	810.0	109.2	108.4	
10	700.0	69.5	67.6	800.0	92.0	91.2	900.0	109.8	109.8	
11	770.0	66.6	65.8	880.0	90.3	89.5	990.0	109.2	109.2	
12	840.0	63.3	62.5	960.0	89.6	89.6	1080.0	104.1	104.1	
13	910.0	0.0	0.0	1040.0	85.6	85.6	1170.0	106.9	107.5	
14	980.0	0.0	0.0	1120.0	81.1	81.1	1260.0	105.5	106.1	
15	1050.0	0.0	0.0	1200.0	81.2	81.8	1350.0	101.1	101.7	
16	1120.0	0.0	0.0	1280.0	78.8	79.4	1440.0	103.1	104.1	
17	1190.0	0.0	0.0	1360.0	73.4	74.0	1530.0	99.0	100.0	
18	1260.0	0.0	0.0	1440.0	71.4	72.4	1620.0	98.3	99.3	
19	1330.0	0.0	0.0	1520.0	69.7	70.7	1710.0	99.0	100.0	
20	1400.0	0.0	0.0	1600.0	65.5	66.5	1800.0	94.7	95.9	
21	1470.0	0.0	0.0	1680.0	60.4	61.4	1890.0	94.4	95.6	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	94.7	95.9	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	90.5	91.7	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	91.5	92.7	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	89.6	90.9	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	85.4	86.7	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	88.5	89.8	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	83.5	84.8	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	82.4	83.7	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	85.7	87.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	80.2	81.5	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	80.1	81.3	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	83.1	84.3	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	75.7	76.9	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	78.6	79.8	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	78.0	79.2	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	74.4	75.6	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	75.0	76.2	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	71.8	73.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	71.5	72.5	
OASPL		111.7	94.8		120.0	109.4		124.2	120.3	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
IN-1 / 36				IN-2 / 37			IN-3 / 38				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	83.9	57.7	80.0	92.9	70.4	90.0	92.7	73.6		
2	140.0	78.2	62.1	160.0	87.1	73.7	180.0	93.1	82.2		
3	210.0	67.9	57.0	240.0	85.1	76.5	270.0	91.5	82.9		
4	280.0	0.0	0.0	320.0	83.9	77.3	360.0	89.5	84.7		
5	350.0	0.0	0.0	400.0	77.4	72.6	450.0	81.7	78.5		
6	420.0	0.0	0.0	480.0	68.4	65.2	540.0	86.6	83.4		
7	490.0	0.0	0.0	560.0	74.6	71.4	630.0	82.4	80.5		
8	560.0	0.0	0.0	640.0	68.3	66.4	720.0	76.6	75.8		
9	630.0	0.0	0.0	720.0	56.4	55.6	810.0	82.4	81.6		
10	700.0	0.0	0.0	800.0	62.9	62.1	900.0	78.1	78.1		
11	770.0	0.0	0.0	880.0	57.8	57.0	990.0	72.4	72.4		
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	76.4	76.4		
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	72.8	73.4		
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	68.4	69.0		
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	68.8	69.4		
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	67.2	68.2		
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	64.4	65.4		
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	52.5	53.5		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		85.0	64.4			95.0	82.4			98.7	91.6

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
IN-1 / 36				IN-2 / 37			IN-3 / 38			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	105.9	79.7	80.0	111.6	89.1	90.0	111.8	92.7	
2	140.0	0.0	0.0	160.0	0.0	0.0	180.0	0.0	0.0	
3	210.0	0.0	0.0	240.0	0.0	0.0	270.0	0.0	0.0	
4	280.0	0.0	0.0	320.0	0.0	0.0	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	0.0	0.0	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	0.0	0.0	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	0.0	0.0	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	0.0	0.0	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	0.0	0.0	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	0.0	0.0	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		105.9	79.7	111.6		89.1	111.8		92.7	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
IN-1 / 36				IN-2 / 37			IN-3 / 38			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	42.0	15.8	80.0	34.4	11.9	90.0	15.9	-3.2	
2	140.0	0.0	0.0	160.0	0.0	0.0	180.0	0.0	0.0	
3	210.0	0.0	0.0	240.0	0.0	0.0	270.0	0.0	0.0	
4	280.0	0.0	0.0	320.0	0.0	0.0	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	0.0	0.0	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	0.0	0.0	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	0.0	0.0	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	0.0	0.0	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	0.0	0.0	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	0.0	0.0	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		42.0	15.8		34.4	11.9		15.9	-3.2	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN											
JN-1 / 188				JN-2 / 189							
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	104.1	81.6	90.0	110.1	91.0					
2	160.0	101.2	87.8	180.0	106.8	95.9					
3	240.0	97.3	88.7	270.0	106.7	98.1					
4	320.0	93.5	86.9	360.0	103.7	98.9					
5	400.0	90.8	86.0	450.0	99.3	96.1					
6	480.0	86.9	83.7	540.0	100.4	97.2					
7	560.0	79.3	76.1	630.0	97.4	95.5					
8	640.0	77.2	75.3	720.0	92.1	91.3					
9	720.0	75.7	74.9	810.0	91.8	91.0					
10	800.0	71.4	70.6	900.0	91.8	91.8					
11	880.0	0.0	0.0	990.0	87.8	87.8					
12	960.0	0.0	0.0	1080.0	81.7	81.7					
13	1040.0	0.0	0.0	1170.0	77.9	78.5					
14	1120.0	0.0	0.0	1260.0	79.2	79.8					
15	1200.0	0.0	0.0	1350.0	70.9	71.5					
16	1280.0	0.0	0.0	1440.0	69.5	70.5					
17	1360.0	0.0	0.0	1530.0	0.0	0.0					
18	1440.0	0.0	0.0	1620.0	0.0	0.0					
19	1520.0	0.0	0.0	1710.0	0.0	0.0					
20	1600.0	0.0	0.0	1800.0	0.0	0.0					
21	1680.0	0.0	0.0	1890.0	0.0	0.0					
22	1760.0	0.0	0.0	1980.0	0.0	0.0					
23	1840.0	0.0	0.0	2070.0	0.0	0.0					
24	1920.0	0.0	0.0	2160.0	0.0	0.0					
25	2000.0	0.0	0.0	2250.0	0.0	0.0					
26	2080.0	0.0	0.0	2340.0	0.0	0.0					
27	2160.0	0.0	0.0	2430.0	0.0	0.0					
28	2240.0	0.0	0.0	2520.0	0.0	0.0					
29	2320.0	0.0	0.0	2610.0	0.0	0.0					
30	2400.0	0.0	0.0	2700.0	0.0	0.0					
31	2480.0	0.0	0.0	2790.0	0.0	0.0					
32	2560.0	0.0	0.0	2880.0	0.0	0.0					
33	2640.0	0.0	0.0	2970.0	0.0	0.0					
34	2720.0	0.0	0.0	3060.0	0.0	0.0					
35	2800.0	0.0	0.0	3150.0	0.0	0.0					
36	2880.0	0.0	0.0	3240.0	0.0	0.0					
37	2960.0	0.0	0.0	3330.0	0.0	0.0					
38	3040.0	0.0	0.0	3420.0	0.0	0.0					
39	3120.0	0.0	0.0	3510.0	0.0	0.0					
40	3200.0	0.0	0.0	3600.0	0.0	0.0					
OASPL		106.9	94.3		114.0	105.7					

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL, DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
JN-1 / 188				JN-2 / 189						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	105.8	83.3	90.0	110.9	91.8				
2	160.0	105.0	91.6	180.0	118.2	107.3				
3	240.0	101.8	93.2	270.0	108.0	99.4				
4	320.0	100.5	93.9	360.0	110.4	105.6				
5	400.0	98.9	94.1	450.0	109.6	106.4				
6	480.0	97.4	94.2	540.0	109.2	106.0				
7	560.0	94.9	91.7	630.0	107.6	105.7				
8	640.0	90.7	88.8	720.0	103.6	102.8				
9	720.0	86.3	85.5	810.0	104.5	103.7				
10	800.0	84.8	84.0	900.0	103.2	103.2				
11	880.0	82.9	82.1	990.0	99.1	99.1				
12	960.0	77.8	77.8	1080.0	99.0	99.0				
13	1040.0	76.5	76.5	1170.0	97.6	98.2				
14	1120.0	71.6	71.6	1260.0	94.9	95.5				
15	1200.0	0.0	0.0	1350.0	94.5	95.1				
16	1280.0	0.0	0.0	1440.0	90.4	91.4				
17	1360.0	0.0	0.0	1530.0	88.4	89.4				
18	1440.0	0.0	0.0	1620.0	88.1	89.1				
19	1520.0	0.0	0.0	1710.0	85.4	86.4				
20	1600.0	0.0	0.0	1800.0	83.9	85.1				
21	1680.0	0.0	0.0	1890.0	80.4	81.6				
22	1760.0	0.0	0.0	1980.0	80.3	81.5				
23	1840.0	0.0	0.0	2070.0	78.4	79.6				
24	1920.0	0.0	0.0	2160.0	72.8	74.0				
25	2000.0	0.0	0.0	2250.0	73.5	74.8				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		110.6	101.6		121.1	115.0				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
JN-1 / 188				JN-2 / 189						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	106.3	83.8	90.0	111.8	92.7				
2	160.0	105.2	91.8	180.0	112.0	101.1				
3	240.0	104.4	95.8	270.0	110.4	101.8				
4	320.0	101.1	94.5	360.0	111.0	106.2				
5	400.0	101.9	97.1	450.0	112.3	109.1				
6	480.0	98.2	95.0	540.0	108.1	104.9				
7	560.0	92.9	89.7	630.0	108.1	106.2				
8	640.0	93.2	91.3	720.0	108.8	108.0				
9	720.0	91.4	90.6	810.0	106.4	105.6				
10	800.0	88.9	88.1	900.0	105.7	105.7				
11	880.0	86.3	85.5	990.0	105.2	105.2				
12	960.0	83.1	83.1	1080.0	102.8	102.8				
13	1040.0	81.2	81.2	1170.0	99.1	99.7				
14	1120.0	77.2	77.2	1260.0	100.6	101.2				
15	1200.0	73.0	73.6	1350.0	98.0	98.6				
16	1280.0	73.4	74.0	1440.0	96.3	97.3				
17	1360.0	68.9	69.5	1530.0	94.2	95.2				
18	1440.0	64.9	65.9	1620.0	94.1	95.1				
19	1520.0	0.0	0.0	1710.0	92.5	93.5				
20	1600.0	0.0	0.0	1800.0	88.1	89.3				
21	1680.0	0.0	0.0	1890.0	87.1	88.3				
22	1760.0	0.0	0.0	1980.0	87.3	88.5				
23	1840.0	0.0	0.0	2070.0	85.0	86.2				
24	1920.0	0.0	0.0	2160.0	81.4	82.6				
25	2000.0	0.0	0.0	2250.0	81.4	82.7				
26	2080.0	0.0	0.0	2340.0	79.9	81.2				
27	2160.0	0.0	0.0	2430.0	76.6	77.9				
28	2240.0	0.0	0.0	2520.0	75.4	76.7				
29	2320.0	0.0	0.0	2610.0	75.1	76.4				
30	2400.0	0.0	0.0	2700.0	72.9	74.2				
31	2480.0	0.0	0.0	2790.0	69.4	70.7				
32	2560.0	0.0	0.0	2880.0	69.1	70.3				
33	2640.0	0.0	0.0	2970.0	67.7	68.9				
34	2720.0	0.0	0.0	3060.0	66.6	67.8				
35	2800.0	0.0	0.0	3150.0	65.1	66.3				
36	2880.0	0.0	0.0	3240.0	60.6	61.8				
37	2960.0	0.0	0.0	3330.0	62.3	63.5				
38	3040.0	0.0	0.0	3420.0	61.3	62.5				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		111.6	103.3			120.4	116.7			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
JN-1 / 188				JN-2 / 189						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	107.1	84.6	90.0	113.6	94.5				
2	160.0	104.7	91.3	180.0	112.3	101.4				
3	240.0	104.4	95.8	270.0	112.3	103.7				
4	320.0	106.4	99.8	360.0	114.1	109.3				
5	400.0	99.6	94.8	450.0	112.2	109.0				
6	480.0	97.6	94.4	540.0	108.9	105.7				
7	560.0	96.3	93.1	630.0	109.9	108.0				
8	640.0	94.0	92.1	720.0	108.3	107.5				
9	720.0	91.0	90.2	810.0	108.1	107.3				
10	800.0	89.4	88.6	900.0	106.6	106.6				
11	880.0	87.6	86.8	990.0	103.3	103.3				
12	960.0	83.7	83.7	1080.0	103.6	103.6				
13	1040.0	82.0	82.0	1170.0	103.2	103.8				
14	1120.0	80.9	80.9	1260.0	98.5	99.1				
15	1200.0	77.5	78.1	1350.0	99.6	100.2				
16	1280.0	70.8	71.4	1440.0	98.1	99.1				
17	1360.0	0.0	0.0	1530.0	95.5	96.5				
18	1440.0	0.0	0.0	1620.0	93.2	94.2				
19	1520.0	0.0	0.0	1710.0	92.4	93.4				
20	1600.0	0.0	0.0	1800.0	90.7	91.9				
21	1680.0	0.0	0.0	1890.0	89.0	90.2				
22	1760.0	0.0	0.0	1980.0	85.3	86.5				
23	1840.0	0.0	0.0	2070.0	86.1	87.3				
24	1920.0	0.0	0.0	2160.0	82.9	84.1				
25	2000.0	0.0	0.0	2250.0	81.2	82.5				
26	2080.0	0.0	0.0	2340.0	81.0	82.3				
27	2160.0	0.0	0.0	2430.0	78.5	79.8				
28	2240.0	0.0	0.0	2520.0	77.8	79.1				
29	2320.0	0.0	0.0	2610.0	76.6	77.9				
30	2400.0	0.0	0.0	2700.0	74.4	75.7				
31	2480.0	0.0	0.0	2790.0	71.6	72.9				
32	2560.0	0.0	0.0	2880.0	73.3	74.5				
33	2640.0	0.0	0.0	2970.0	69.1	70.3				
34	2720.0	0.0	0.0	3060.0	69.4	70.6				
35	2800.0	0.0	0.0	3150.0	63.6	64.8				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		112.5	104.4		121.6	117.6				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN											
JN-1 / 188				JN-2 / 189							
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	106.9	84.4	90.0	115.4	96.3					
2	160.0	104.3	90.9	180.0	108.0	97.1					
3	240.0	102.0	93.4	270.0	113.4	104.8					
4	320.0	103.8	97.2	360.0	115.8	111.0					
5	400.0	99.2	94.4	450.0	107.1	103.9					
6	480.0	94.1	90.9	540.0	108.8	105.6					
7	560.0	96.0	92.8	630.0	109.7	107.8					
8	640.0	92.5	90.6	720.0	106.7	105.9					
9	720.0	88.1	87.3	810.0	104.6	103.8					
10	800.0	86.0	85.2	900.0	103.7	103.7					
11	880.0	81.2	80.4	990.0	104.2	104.2					
12	960.0	0.0	0.0	1080.0	101.0	101.0					
13	1040.0	0.0	0.0	1170.0	98.0	98.6					
14	1120.0	0.0	0.0	1260.0	100.0	100.6					
15	1200.0	0.0	0.0	1350.0	96.6	97.2					
16	1280.0	0.0	0.0	1440.0	93.6	94.6					
17	1360.0	0.0	0.0	1530.0	94.4	95.4					
18	1440.0	0.0	0.0	1620.0	90.0	91.0					
19	1520.0	0.0	0.0	1710.0	88.4	89.4					
20	1600.0	0.0	0.0	1800.0	89.2	90.4					
21	1680.0	0.0	0.0	1890.0	83.9	85.1					
22	1760.0	0.0	0.0	1980.0	84.8	86.0					
23	1840.0	0.0	0.0	2070.0	82.8	84.0					
24	1920.0	0.0	0.0	2160.0	78.8	80.0					
25	2000.0	0.0	0.0	2250.0	81.0	82.3					
26	2080.0	0.0	0.0	2340.0	75.9	77.2					
27	2160.0	0.0	0.0	2430.0	74.5	75.8					
28	2240.0	0.0	0.0	2520.0	74.0	75.3					
29	2320.0	0.0	0.0	2610.0	70.3	71.6					
30	2400.0	0.0	0.0	2700.0	71.2	72.5					
31	2480.0	0.0	0.0	2790.0	63.6	69.9					
32	2560.0	0.0	0.0	2880.0	67.0	68.2					
33	2640.0	0.0	0.0	2970.0	62.7	63.9					
34	2720.0	0.0	0.0	3060.0	0.0	0.0					
35	2800.0	0.0	0.0	3150.0	0.0	0.0					
36	2880.0	0.0	0.0	3240.0	0.0	0.0					
37	2960.0	0.0	0.0	3330.0	0.0	0.0					
38	3040.0	0.0	0.0	3420.0	0.0	0.0					
39	3120.0	0.0	0.0	3510.0	0.0	0.0					
40	3200.0	0.0	0.0	3600.0	0.0	0.0					
OASPL		111.3	102.3		121.5	116.5					

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DP RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN											
JN-1 / 188				JN-2 / 189							
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	60.8	38.3	90.0	67.8	48.7					
2	160.0	0.0	0.0	180.0	62.4	51.5					
3	240.0	0.0	0.0	270.0	62.7	54.1					
4	320.0	0.0	0.0	360.0	0.0	0.0					
5	400.0	0.0	0.0	450.0	0.0	0.0					
6	480.0	0.0	0.0	540.0	0.0	0.0					
7	560.0	0.0	0.0	630.0	0.0	0.0					
8	640.0	0.0	0.0	720.0	0.0	0.0					
9	720.0	0.0	0.0	810.0	0.0	0.0					
10	800.0	0.0	0.0	900.0	0.0	0.0					
11	880.0	0.0	0.0	990.0	0.0	0.0					
12	960.0	0.0	0.0	1080.0	0.0	0.0					
13	1040.0	0.0	0.0	1170.0	0.0	0.0					
14	1120.0	0.0	0.0	1260.0	0.0	0.0					
15	1200.0	0.0	0.0	1350.0	0.0	0.0					
16	1280.0	0.0	0.0	1440.0	0.0	0.0					
17	1360.0	0.0	0.0	1530.0	0.0	0.0					
18	1440.0	0.0	0.0	1620.0	0.0	0.0					
19	1520.0	0.0	0.0	1710.0	0.0	0.0					
20	1600.0	0.0	0.0	1800.0	0.0	0.0					
21	1680.0	0.0	0.0	1890.0	0.0	0.0					
22	1760.0	0.0	0.0	1980.0	0.0	0.0					
23	1840.0	0.0	0.0	2070.0	0.0	0.0					
24	1920.0	0.0	0.0	2160.0	0.0	0.0					
25	2000.0	0.0	0.0	2250.0	0.0	0.0					
26	2080.0	0.0	0.0	2340.0	0.0	0.0					
27	2160.0	0.0	0.0	2430.0	0.0	0.0					
28	2240.0	0.0	0.0	2520.0	0.0	0.0					
29	2320.0	0.0	0.0	2610.0	0.0	0.0					
30	2400.0	0.0	0.0	2700.0	0.0	0.0					
31	2480.0	0.0	0.0	2790.0	0.0	0.0					
32	2560.0	0.0	0.0	2880.0	0.0	0.0					
33	2640.0	0.0	0.0	2970.0	0.0	0.0					
34	2720.0	0.0	0.0	3060.0	0.0	0.0					
35	2800.0	0.0	0.0	3150.0	0.0	0.0					
36	2880.0	0.0	0.0	3240.0	0.0	0.0					
37	2960.0	0.0	0.0	3330.0	0.0	0.0					
38	3040.0	0.0	0.0	3420.0	0.0	0.0					
39	3120.0	0.0	0.0	3510.0	0.0	0.0					
40	3200.0	0.0	0.0	3600.0	0.0	0.0					
OASPL		60.8	38.3		69.9	56.8					

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
JN-1 / 188				JN-2 / 189						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	109.8	87.3	90.0	115.0	95.9				
2	160.0	0.0	0.0	180.0	0.0	0.0				
3	240.0	0.0	0.0	270.0	0.0	0.0				
4	320.0	0.0	0.0	360.0	0.0	0.0				
5	400.0	0.0	0.0	450.0	0.0	0.0				
6	480.0	0.0	0.0	540.0	0.0	0.0				
7	560.0	0.0	0.0	630.0	0.0	0.0				
8	640.0	0.0	0.0	720.0	0.0	0.0				
9	720.0	0.0	0.0	810.0	0.0	0.0				
10	800.0	0.0	0.0	900.0	0.0	0.0				
11	880.0	0.0	0.0	990.0	0.0	0.0				
12	960.0	0.0	0.0	1080.0	0.0	0.0				
13	1040.0	0.0	0.0	1170.0	0.0	0.0				
14	1120.0	0.0	0.0	1260.0	0.0	0.0				
15	1200.0	0.0	0.0	1350.0	0.0	0.0				
16	1280.0	0.0	0.0	1440.0	0.0	0.0				
17	1360.0	0.0	0.0	1530.0	0.0	0.0				
18	1440.0	0.0	0.0	1620.0	0.0	0.0				
19	1520.0	0.0	0.0	1710.0	0.0	0.0				
20	1600.0	0.0	0.0	1800.0	0.0	0.0				
21	1680.0	0.0	0.0	1890.0	0.0	0.0				
22	1760.0	0.0	0.0	1980.0	0.0	0.0				
23	1840.0	0.0	0.0	2070.0	0.0	0.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		109.8	87.3			115.0	95.9			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.8 DEG)

DATA-POINT / RUN										
JN-1 / 188				JN-2 / 189						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	108.0	85.5	90.0	113.7	94.6				
2	160.0	103.9	90.5	180.0	108.7	97.8				
3	240.0	101.8	93.2	270.0	114.2	105.6				
4	320.0	103.5	96.9	360.0	112.2	107.4				
5	400.0	99.4	94.6	450.0	107.9	104.7				
6	480.0	97.0	93.8	540.0	110.5	107.3				
7	560.0	96.6	93.4	630.0	108.4	106.5				
8	640.0	93.4	91.5	720.0	106.5	105.7				
9	720.0	90.4	89.6	810.0	106.9	106.1				
10	800.0	86.1	85.3	900.0	103.6	103.6				
11	880.0	0.0	0.0	990.0	103.2	103.2				
12	960.0	0.0	0.0	1080.0	103.8	103.8				
13	1040.0	0.0	0.0	1170.0	101.2	101.8				
14	1120.0	0.0	0.0	1260.0	97.8	98.4				
15	1200.0	0.0	0.0	1350.0	98.3	98.9				
16	1280.0	0.0	0.0	1440.0	97.2	98.2				
17	1360.0	0.0	0.0	1530.0	93.2	94.2				
18	1440.0	0.0	0.0	1620.0	93.2	94.2				
19	1520.0	0.0	0.0	1710.0	92.0	93.0				
20	1600.0	0.0	0.0	1800.0	89.9	91.1				
21	1680.0	0.0	0.0	1890.0	88.9	90.1				
22	1760.0	0.0	0.0	1980.0	86.9	88.1				
23	1840.0	0.0	0.0	2070.0	80.4	81.6				
24	1920.0	0.0	0.0	2160.0	84.8	86.0				
25	2000.0	0.0	0.0	2250.0	81.5	82.8				
26	2080.0	0.0	0.0	2340.0	79.7	81.0				
27	2160.0	0.0	0.0	2430.0	81.9	83.2				
28	2240.0	0.0	0.0	2520.0	77.9	79.2				
29	2320.0	0.0	0.0	2610.0	73.9	75.2				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		111.7	102.7		120.7	116.2				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
KN-1 / 187				KN-2 / 186			KN-3 / 185			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	97.4	71.2	80.0	104.3	81.8	90.0	109.2	90.1	
2	140.0	91.6	75.5	160.0	101.7	88.3	180.0	106.8	95.9	
3	210.0	89.3	78.4	240.0	97.0	88.4	270.0	106.5	97.9	
4	280.0	84.0	75.4	320.0	93.1	86.5	360.0	103.7	98.9	
5	350.0	78.1	71.5	400.0	91.7	86.9	450.0	99.2	96.0	
6	420.0	75.2	70.4	480.0	82.9	79.7	540.0	100.4	97.2	
7	490.0	67.7	64.5	560.0	79.3	76.1	630.0	96.8	94.9	
8	560.0	64.1	60.9	640.0	74.2	72.3	720.0	92.3	91.5	
9	630.0	0.0	0.0	720.0	73.8	73.0	810.0	93.0	92.2	
10	700.0	0.0	0.0	800.0	67.4	66.6	900.0	91.0	91.0	
11	770.0	0.0	0.0	880.0	58.8	58.0	990.0	85.9	85.9	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	80.1	80.1	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	78.3	78.9	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	78.4	79.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	65.6	66.2	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	68.9	69.9	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	61.3	62.3	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		99.1	82.6	107.1		94.2	113.6		105.6	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
KN-1 / 187				KN-2 / 186				KN-3 / 185		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	101.7	75.5	80.0	107.6	85.1	90.0	111.3	92.2	
2	140.0	98.0	81.9	160.0	105.8	92.4	180.0	117.9	107.0	
3	210.0	94.6	83.7	240.0	102.2	93.6	270.0	108.0	99.4	
4	280.0	88.8	80.2	320.0	100.3	93.7	360.0	110.3	105.5	
5	350.0	79.9	73.3	400.0	98.6	93.8	450.0	109.3	106.1	
6	420.0	78.6	73.8	480.0	96.3	93.1	540.0	109.1	105.9	
7	490.0	0.0	0.0	560.0	93.3	90.1	630.0	107.3	105.4	
8	560.0	0.0	0.0	640.0	89.3	87.4	720.0	103.6	102.8	
9	630.0	0.0	0.0	720.0	85.1	84.3	810.0	104.5	103.7	
10	700.0	0.0	0.0	800.0	84.3	83.5	900.0	103.1	103.1	
11	770.0	0.0	0.0	880.0	81.2	80.4	990.0	99.0	99.0	
12	840.0	0.0	0.0	960.0	77.2	77.2	1080.0	98.7	98.7	
13	910.0	0.0	0.0	1040.0	72.6	72.6	1170.0	97.3	97.9	
14	980.0	0.0	0.0	1120.0	67.2	67.2	1260.0	94.5	95.1	
15	1050.0	0.0	0.0	1200.0	67.1	67.7	1350.0	94.2	94.8	
16	1120.0	0.0	0.0	1280.0	62.7	63.3	1440.0	89.6	90.6	
17	1190.0	0.0	0.0	1360.0	58.4	59.0	1530.0	88.4	89.4	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	87.7	88.7	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	84.5	85.5	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	83.3	84.5	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	79.6	80.8	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	79.9	81.1	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	76.4	77.6	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	73.4	74.6	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	73.2	74.5	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	70.1	71.4	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	69.4	70.7	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	68.9	70.2	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	64.8	66.1	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	60.8	62.1	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		104.0	87.6	111.4		101.3	120.9		114.8	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
KN-1 / 187				KN-2 / 186			KN-3 / 185			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	104.5	78.3	80.0	110.4	87.9	90.0	110.9	91.8	
2	140.0	99.7	83.6	160.0	107.3	93.9	180.0	111.3	100.4	
3	210.0	95.2	84.3	240.0	105.9	97.3	270.0	110.0	101.4	
4	280.0	89.7	81.1	320.0	100.7	94.1	360.0	110.8	106.0	
5	350.0	88.0	81.4	400.0	102.2	97.4	450.0	111.8	108.6	
6	420.0	85.9	81.1	480.0	98.4	95.2	540.0	108.2	105.0	
7	490.0	80.5	77.3	560.0	92.2	89.0	630.0	108.0	106.1	
8	560.0	73.5	70.3	640.0	92.2	90.3	720.0	108.3	107.5	
9	630.0	68.6	66.7	720.0	90.2	89.4	810.0	106.4	105.6	
10	700.0	63.9	62.0	800.0	87.4	86.6	900.0	105.4	105.4	
11	770.0	0.0	0.0	880.0	84.0	83.2	990.0	104.7	104.7	
12	840.0	0.0	0.0	960.0	81.6	81.6	1080.0	102.4	102.4	
13	910.0	0.0	0.0	1040.0	79.6	79.6	1170.0	99.1	99.7	
14	980.0	0.0	0.0	1120.0	75.0	75.0	1260.0	100.3	100.9	
15	1050.0	0.0	0.0	1200.0	70.6	71.2	1350.0	97.8	98.4	
16	1120.0	0.0	0.0	1280.0	70.4	71.0	1440.0	96.3	97.3	
17	1190.0	0.0	0.0	1360.0	66.1	66.7	1530.0	94.0	95.0	
18	1260.0	0.0	0.0	1440.0	61.4	62.4	1620.0	93.9	94.9	
19	1330.0	0.0	0.0	1520.0	58.6	59.6	1710.0	92.3	93.3	
20	1400.0	0.0	0.0	1600.0	57.6	58.6	1800.0	88.1	89.3	
21	1470.0	0.0	0.0	1680.0	55.9	56.9	1890.0	86.9	88.1	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	86.9	88.1	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	84.8	86.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	81.0	82.2	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	81.5	82.8	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	79.8	81.1	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	75.8	77.1	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	75.0	76.3	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	75.5	76.8	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	73.1	74.4	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	69.3	70.6	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	69.3	70.5	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	67.6	68.8	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	66.6	67.8	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	64.8	66.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	62.6	63.8	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	63.9	65.1	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	63.8	65.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	61.9	63.1	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	56.4	57.4	
OASPL		106.3	90.1	113.9		103.7	120.0		116.3	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
KN-1 / 187				KN-2 / 186				KN-3 / 185			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	107.0	80.8	80.0	113.0	90.5	90.0	112.6	93.5		
2	140.0	101.1	85.0	160.0	108.0	94.6	180.0	111.8	100.9		
3	210.0	95.7	84.8	240.0	107.4	98.8	270.0	111.5	102.9		
4	280.0	94.6	86.0	320.0	105.0	98.4	360.0	113.6	108.8		
5	350.0	89.3	82.7	400.0	101.1	96.3	450.0	111.4	108.2		
6	420.0	84.2	79.4	480.0	98.1	94.9	540.0	108.7	105.5		
7	490.0	78.3	75.1	560.0	95.5	92.3	630.0	109.2	107.3		
8	560.0	75.6	72.4	640.0	94.2	92.3	720.0	107.8	107.0		
9	630.0	74.4	72.5	720.0	90.6	89.8	810.0	107.4	106.6		
10	700.0	68.7	66.8	800.0	89.4	88.6	900.0	106.2	106.2		
11	770.0	63.2	62.4	880.0	86.0	85.2	990.0	102.9	102.9		
12	840.0	0.0	0.0	960.0	83.7	83.7	1080.0	103.2	103.2		
13	910.0	0.0	0.0	1040.0	80.2	80.2	1170.0	102.9	103.5		
14	980.0	0.0	0.0	1120.0	78.0	78.0	1260.0	98.2	98.8		
15	1050.0	0.0	0.0	1200.0	75.4	76.0	1350.0	99.4	100.0		
16	1120.0	0.0	0.0	1280.0	68.3	68.9	1440.0	97.8	98.8		
17	1190.0	0.0	0.0	1360.0	67.8	68.4	1530.0	94.9	95.9		
18	1260.0	0.0	0.0	1440.0	65.0	66.0	1620.0	93.0	94.0		
19	1330.0	0.0	0.0	1520.0	59.2	60.2	1710.0	91.8	92.8		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	90.9	92.1		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	88.3	89.5		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	85.7	86.9		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	85.4	86.6		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	83.4	84.6		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	80.2	81.5		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	80.8	82.1		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	79.3	80.6		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	77.6	78.9		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	76.4	77.7		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	74.3	75.6		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	72.8	74.1		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	72.3	73.5		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	69.7	70.9		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	66.1	67.3		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	67.8	69.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	66.0	67.2		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	65.2	66.4		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	60.2	61.4		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		108.5	91.7			115.8	105.0			120.9	117.0

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
KN-1 / 187				KN-2 / 186				KN-3 / 185		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	108.1	81.9	80.0	114.8	92.3	90.0	114.3	95.2	
2	140.0	101.9	85.8	160.0	109.3	95.9	180.0	107.3	96.4	
3	210.0	93.6	82.7	240.0	105.4	96.8	270.0	112.7	104.1	
4	280.0	93.2	84.6	320.0	107.1	100.5	360.0	114.8	110.0	
5	350.0	89.4	82.8	400.0	103.2	98.4	450.0	105.9	102.7	
6	420.0	83.6	78.8	480.0	95.5	92.3	540.0	107.8	104.6	
7	490.0	76.5	73.3	560.0	96.3	93.1	630.0	108.9	107.0	
8	560.0	76.7	73.5	640.0	93.9	92.0	720.0	106.0	105.2	
9	630.0	68.3	66.4	720.0	89.5	88.7	810.0	103.9	103.1	
10	700.0	65.8	63.9	800.0	86.1	85.3	900.0	103.0	103.0	
11	770.0	0.0	0.0	880.0	83.1	82.3	990.0	103.5	103.5	
12	840.0	0.0	0.0	960.0	81.1	81.1	1080.0	100.3	100.3	
13	910.0	0.0	0.0	1040.0	79.1	79.1	1170.0	97.6	98.2	
14	980.0	0.0	0.0	1120.0	74.9	74.9	1260.0	99.1	99.7	
15	1050.0	0.0	0.0	1200.0	69.2	69.8	1350.0	96.3	96.9	
16	1120.0	0.0	0.0	1280.0	69.8	70.4	1440.0	92.5	93.5	
17	1190.0	0.0	0.0	1360.0	65.4	66.0	1530.0	93.8	94.8	
18	1260.0	0.0	0.0	1440.0	60.8	61.8	1620.0	88.9	89.9	
19	1330.0	0.0	0.0	1520.0	59.2	60.2	1710.0	87.6	88.6	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	88.6	89.8	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	82.8	84.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	83.1	84.3	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	83.3	84.5	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	76.9	78.1	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	80.1	81.4	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	73.3	74.6	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	74.5	75.8	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	72.1	73.4	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	69.9	71.2	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	67.6	68.9	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		109.3	91.2	117.1		105.5	120.5		115.7	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
KN-1 / 187				KN-2 / 186				KN-3 / 185			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	95.6	69.4	80.0	108.9	86.4	90.0	114.2	95.1		
2	140.0	87.5	71.4	160.0	102.1	88.7	180.0	109.2	98.3		
3	210.0	77.8	66.9	240.0	98.5	89.9	270.0	110.2	101.6		
4	280.0	76.8	68.2	320.0	97.6	91.0	360.0	109.2	104.4		
5	350.0	74.4	67.8	400.0	90.9	86.1	450.0	99.3	96.1		
6	420.0	60.0	55.2	480.0	81.2	78.0	540.0	106.2	103.0		
7	490.0	0.0	0.0	560.0	86.5	83.3	630.0	103.5	101.6		
8	560.0	0.0	0.0	640.0	82.6	80.7	720.0	90.8	90.0		
9	630.0	0.0	0.0	720.0	71.3	70.5	810.0	100.2	99.4		
10	700.0	0.0	0.0	800.0	74.9	74.1	900.0	95.8	95.8		
11	770.0	0.0	0.0	880.0	70.0	69.2	990.0	84.5	84.5		
12	840.0	0.0	0.0	960.0	63.8	63.8	1080.0	93.2	93.2		
13	910.0	0.0	0.0	1040.0	55.5	55.5	1170.0	88.0	88.6		
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	80.0	80.6		
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	88.1	88.7		
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	78.9	79.9		
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	73.8	74.8		
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	74.7	75.7		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	68.5	69.5		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	72.2	73.4		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	71.9	73.1		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	63.2	64.4		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		96.4	76.1			110.4	96.3			118.0	110.3

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
KN-1 / 187				KN-2 / 186				KN-3 / 185		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	104.9	78.7	80.0	111.5	89.0	90.0	113.1	94.0	
2	140.0	94.9	78.8	160.0	102.9	89.5	180.0	0.0	0.0	
3	210.0	86.0	75.1	240.0	100.6	92.0	270.0	0.0	0.0	
4	280.0	0.0	0.0	320.0	90.0	83.4	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	86.2	81.4	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	68.0	64.8	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	0.0	0.0	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	0.0	0.0	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	0.0	0.0	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	0.0	0.0	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		105.3	82.6	112.4		95.6	113.1		94.0	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
KN-1 / 187				KN-2 / 186			KN-3 / 185				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	105.7	79.5	80.0	111.9	89.4	90.0	110.6	91.5		
2	140.0	101.7	85.6	160.0	107.5	94.1	180.0	107.3	96.4		
3	210.0	90.1	79.2	240.0	104.2	95.6	270.0	113.8	105.2		
4	280.0	94.5	85.9	320.0	105.7	99.1	360.0	111.2	106.4		
5	350.0	89.0	82.4	400.0	100.0	95.2	450.0	108.0	104.8		
6	420.0	81.1	76.3	480.0	97.4	94.2	540.0	110.1	106.9		
7	490.0	0.0	0.0	560.0	97.1	93.9	630.0	107.7	105.8		
8	560.0	0.0	0.0	640.0	93.3	91.4	720.0	106.1	105.3		
9	630.0	0.0	0.0	720.0	89.5	88.7	810.0	106.4	105.6		
10	700.0	0.0	0.0	800.0	86.6	85.8	900.0	103.4	103.4		
11	770.0	0.0	0.0	880.0	85.2	84.4	990.0	102.7	102.7		
12	840.0	0.0	0.0	960.0	78.8	78.8	1080.0	103.4	103.4		
13	910.0	0.0	0.0	1040.0	80.1	80.1	1170.0	100.7	101.3		
14	980.0	0.0	0.0	1120.0	77.4	77.4	1260.0	97.3	97.9		
15	1050.0	0.0	0.0	1200.0	71.2	71.8	1350.0	97.6	98.2		
16	1120.0	0.0	0.0	1280.0	69.3	69.9	1440.0	97.0	98.0		
17	1190.0	0.0	0.0	1360.0	66.2	66.8	1530.0	93.1	94.1		
18	1260.0	0.0	0.0	1440.0	62.6	63.6	1620.0	92.7	93.7		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	91.1	92.1		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	89.0	90.2		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	88.4	89.6		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	85.7	86.9		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	79.6	80.8		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	85.3	86.5		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	81.7	83.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	78.7	80.0		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	80.3	81.6		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	74.9	76.2		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	72.6	73.9		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	71.4	72.7		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		107.5	90.6			114.8	104.3			119.7	115.7

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	105.6	83.1	90.0	114.7	95.6				
2	160.0	97.6	84.2	180.0	115.8	104.9				
3	240.0	105.4	96.8	270.0	112.7	104.1				
4	320.0	104.9	98.3	360.0	111.9	107.1				
5	400.0	100.7	95.9	450.0	110.2	107.0				
6	480.0	94.5	91.3	540.0	108.0	104.8				
7	560.0	94.2	91.0	630.0	108.2	106.3				
8	640.0	88.2	86.3	720.0	108.2	107.4				
9	720.0	86.7	85.9	810.0	104.0	103.2				
10	800.0	84.8	84.0	900.0	104.5	104.5				
11	880.0	84.4	83.6	990.0	103.2	103.2				
12	960.0	78.2	78.2	1080.0	99.4	99.4				
13	1040.0	0.0	0.0	1170.0	95.5	96.1				
14	1120.0	0.0	0.0	1260.0	97.2	97.8				
15	1200.0	0.0	0.0	1350.0	93.8	94.4				
16	1280.0	0.0	0.0	1440.0	88.1	89.1				
17	1360.0	0.0	0.0	1530.0	93.7	94.7				
18	1440.0	0.0	0.0	1620.0	89.4	90.4				
19	1520.0	0.0	0.0	1710.0	82.5	83.5				
20	1600.0	0.0	0.0	1800.0	85.6	86.8				
21	1680.0	0.0	0.0	1890.0	83.3	84.5				
22	1760.0	0.0	0.0	1980.0	0.0	0.0				
23	1840.0	0.0	0.0	2070.0	0.0	0.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		111.0	103.0		121.5	115.9				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
JC-1 / 193				JC-2 / 194						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	107.3	84.8	90.0	113.1	94.0				
2	160.0	107.0	93.6	180.0	119.8	108.9				
3	240.0	105.0	96.4	270.0	111.5	102.9				
4	320.0	103.8	97.2	360.0	114.4	109.6				
5	400.0	102.7	97.9	450.0	113.3	110.1				
6	480.0	101.4	98.2	540.0	113.5	110.3				
7	560.0	99.3	96.1	630.0	112.7	110.8				
8	640.0	96.3	94.4	720.0	109.1	108.3				
9	720.0	91.8	91.0	810.0	110.0	109.2				
10	800.0	91.0	90.2	900.0	109.7	109.7				
11	880.0	89.5	88.7	990.0	106.6	106.6				
12	960.0	85.8	85.8	1080.0	105.9	105.9				
13	1040.0	83.8	83.8	1170.0	104.6	105.2				
14	1120.0	77.4	77.4	1260.0	102.9	103.5				
15	1200.0	78.1	78.7	1350.0	102.8	103.4				
16	1280.0	75.0	75.6	1440.0	99.0	100.0				
17	1360.0	72.4	73.0	1530.0	98.0	99.0				
18	1440.0	67.5	68.5	1620.0	96.9	97.9				
19	1520.0	0.0	0.0	1710.0	94.4	95.4				
20	1600.0	0.0	0.0	1800.0	93.7	94.9				
21	1680.0	0.0	0.0	1890.0	90.0	91.2				
22	1760.0	0.0	0.0	1980.0	89.5	90.7				
23	1840.0	0.0	0.0	2070.0	87.0	88.2				
24	1920.0	0.0	0.0	2160.0	84.3	85.5				
25	2000.0	0.0	0.0	2250.0	82.1	83.4				
26	2080.0	0.0	0.0	2340.0	81.7	83.0				
27	2160.0	0.0	0.0	2430.0	80.9	82.2				
28	2240.0	0.0	0.0	2520.0	78.2	79.5				
29	2320.0	0.0	0.0	2610.0	74.8	76.1				
30	2400.0	0.0	0.0	2700.0	76.8	78.1				
31	2480.0	0.0	0.0	2790.0	76.2	77.5				
32	2560.0	0.0	0.0	2880.0	71.5	72.7				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		113.2	105.5			124.2	119.8			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

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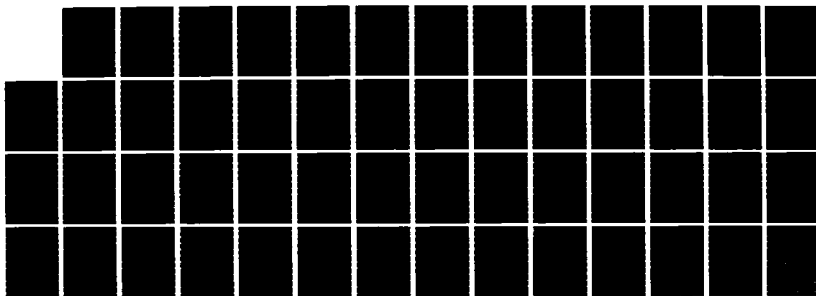
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DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN											
JC-1 / 193				JC-2 / 194							
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	107.3	84.8	90.0	113.1	94.0					
2	160.0	107.0	93.6	180.0	119.8	108.9					
3	240.0	105.0	96.4	270.0	111.5	102.9					
4	320.0	103.8	97.2	360.0	114.4	109.6					
5	400.0	102.7	97.9	450.0	113.3	110.1					
6	480.0	101.4	98.2	540.0	113.5	110.3					
7	560.0	99.3	96.1	630.0	112.7	110.8					
8	640.0	96.3	94.4	720.0	109.1	108.3					
9	720.0	91.8	91.0	810.0	110.0	109.2					
10	800.0	91.0	90.2	900.0	109.7	109.7					
11	880.0	89.5	88.7	990.0	106.6	106.6					
12	960.0	85.8	85.8	1080.0	105.9	105.9					
13	1040.0	83.8	83.8	1170.0	104.6	105.2					
14	1120.0	77.4	77.4	1260.0	102.9	103.5					
15	1200.0	78.1	78.7	1350.0	102.8	103.4					
16	1280.0	75.0	75.6	1440.0	99.0	100.0					
17	1360.0	72.4	73.0	1530.0	98.0	99.0					
18	1440.0	67.5	68.5	1620.0	96.9	97.9					
19	1520.0	0.0	0.0	1710.0	94.4	95.4					
20	1600.0	0.0	0.0	1800.0	93.7	94.9					
21	1680.0	0.0	0.0	1890.0	90.0	91.2					
22	1760.0	0.0	0.0	1980.0	89.5	90.7					
23	1840.0	0.0	0.0	2070.0	87.0	88.2					
24	1920.0	0.0	0.0	2160.0	84.3	85.5					
25	2000.0	0.0	0.0	2250.0	82.1	83.4					
26	2080.0	0.0	0.0	2340.0	81.7	83.0					
27	2160.0	0.0	0.0	2430.0	80.9	82.2					
28	2240.0	0.0	0.0	2520.0	78.2	79.5					
29	2320.0	0.0	0.0	2610.0	74.8	76.1					
30	2400.0	0.0	0.0	2700.0	76.8	78.1					
31	2480.0	0.0	0.0	2790.0	76.2	77.5					
32	2560.0	0.0	0.0	2880.0	71.5	72.7					
33	2640.0	0.0	0.0	2970.0	0.0	0.0					
34	2720.0	0.0	0.0	3060.0	0.0	0.0					
35	2800.0	0.0	0.0	3150.0	0.0	0.0					
36	2880.0	0.0	0.0	3240.0	0.0	0.0					
37	2960.0	0.0	0.0	3330.0	0.0	0.0					
38	3040.0	0.0	0.0	3420.0	0.0	0.0					
39	3120.0	0.0	0.0	3510.0	0.0	0.0					
40	3200.0	0.0	0.0	3600.0	0.0	0.0					
OASPL		113.2	105.5		124.2	119.8					

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN											
JC-1 / 193				JC-2 / 194							
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	107.2	84.7	90.0	112.9	93.8					
2	160.0	107.1	93.7	180.0	113.9	103.0					
3	240.0	106.9	98.3	270.0	113.3	104.7					
4	320.0	104.2	97.6	360.0	114.4	109.6					
5	400.0	105.6	100.8	450.0	115.9	112.7					
6	480.0	102.2	99.0	540.0	112.8	109.6					
7	560.0	98.2	95.0	630.0	113.0	111.1					
8	640.0	97.6	95.7	720.0	113.5	112.7					
9	720.0	96.9	96.1	810.0	112.3	111.5					
10	800.0	94.9	94.1	900.0	111.9	111.9					
11	880.0	93.0	92.2	990.0	111.3	111.3					
12	960.0	90.2	90.2	1080.0	109.2	109.2					
13	1040.0	88.2	88.2	1170.0	106.9	107.5					
14	1120.0	84.3	84.3	1260.0	108.1	108.7					
15	1200.0	81.5	82.1	1350.0	105.7	106.3					
16	1280.0	81.7	82.3	1440.0	104.3	105.3					
17	1360.0	77.4	78.0	1530.0	102.7	103.7					
18	1440.0	75.3	76.3	1620.0	102.5	103.5					
19	1520.0	73.3	74.3	1710.0	101.1	102.1					
20	1600.0	71.0	72.0	1800.0	97.3	98.5					
21	1680.0	0.0	0.0	1890.0	96.3	97.5					
22	1760.0	0.0	0.0	1980.0	96.3	97.5					
23	1840.0	0.0	0.0	2070.0	94.4	95.6					
24	1920.0	0.0	0.0	2160.0	91.1	92.3					
25	2000.0	0.0	0.0	2250.0	90.9	92.2					
26	2080.0	0.0	0.0	2340.0	89.0	90.3					
27	2160.0	0.0	0.0	2430.0	85.9	87.2					
28	2240.0	0.0	0.0	2520.0	85.4	86.7					
29	2320.0	0.0	0.0	2610.0	84.6	85.9					
30	2400.0	0.0	0.0	2700.0	83.4	84.7					
31	2480.0	0.0	0.0	2790.0	82.1	83.4					
32	2560.0	0.0	0.0	2880.0	82.1	83.3					
33	2640.0	0.0	0.0	2970.0	80.7	81.9					
34	2720.0	0.0	0.0	3060.0	80.7	81.9					
35	2800.0	0.0	0.0	3150.0	79.3	80.5					
36	2880.0	0.0	0.0	3240.0	76.7	77.9					
37	2960.0	0.0	0.0	3330.0	76.7	77.9					
38	3040.0	0.0	0.0	3420.0	77.0	78.2					
39	3120.0	0.0	0.0	3510.0	73.1	74.3					
40	3200.0	0.0	0.0	3600.0	69.9	70.9					
OASPL		114.1	107.2		124.4	121.9					

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	108.8	86.3	90.0	116.0	96.9				
2	160.0	109.7	96.3	180.0	118.5	107.6				
3	240.0	108.8	100.2	270.0	119.1	110.5				
4	320.0	106.8	100.2	360.0	114.6	109.8				
5	400.0	105.5	100.7	450.0	118.9	115.7				
6	480.0	106.1	102.9	540.0	119.2	116.0				
7	560.0	103.4	100.2	630.0	116.9	115.0				
8	640.0	100.4	98.5	720.0	115.6	114.8				
9	720.0	97.5	96.7	810.0	116.7	115.9				
10	800.0	97.9	97.1	900.0	116.6	116.6				
11	880.0	96.5	95.7	990.0	113.8	113.8				
12	960.0	92.6	92.6	1080.0	112.5	112.5				
13	1040.0	89.6	89.6	1170.0	112.3	112.9				
14	1120.0	87.8	87.8	1260.0	111.9	112.5				
15	1200.0	85.2	85.8	1350.0	109.4	110.0				
16	1280.0	83.4	84.0	1440.0	108.8	109.8				
17	1360.0	79.5	80.1	1530.0	107.6	108.6				
18	1440.0	76.1	77.1	1620.0	106.7	107.7				
19	1520.0	76.6	77.6	1710.0	104.8	105.8				
20	1600.0	72.8	73.8	1800.0	102.4	103.6				
21	1680.0	66.7	67.7	1890.0	102.5	103.7				
22	1760.0	0.0	0.0	1980.0	102.3	103.5				
23	1840.0	0.0	0.0	2070.0	99.9	101.1				
24	1920.0	0.0	0.0	2160.0	98.5	99.7				
25	2000.0	0.0	0.0	2250.0	98.6	99.9				
26	2080.0	0.0	0.0	2340.0	98.1	99.4				
27	2160.0	0.0	0.0	2430.0	97.1	98.4				
28	2240.0	0.0	0.0	2520.0	96.3	97.6				
29	2320.0	0.0	0.0	2610.0	98.0	99.3				
30	2400.0	0.0	0.0	2700.0	96.4	97.7				
31	2480.0	0.0	0.0	2790.0	93.2	94.5				
32	2560.0	0.0	0.0	2880.0	94.0	95.2				
33	2640.0	0.0	0.0	2970.0	94.5	95.7				
34	2720.0	0.0	0.0	3060.0	94.4	95.6				
35	2800.0	0.0	0.0	3150.0	89.6	90.8				
36	2880.0	0.0	0.0	3240.0	90.7	91.9				
37	2960.0	0.0	0.0	3330.0	92.2	93.4				
38	3040.0	0.0	0.0	3420.0	89.8	91.0				
39	3120.0	0.0	0.0	3510.0	86.9	88.1				
40	3200.0	0.0	0.0	3600.0	88.2	89.2				
OASPL		116.3	109.6		128.3	125.8				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	109.9	87.4	90.0	117.2	98.1				
2	160.0	108.9	95.5	180.0	118.1	107.2				
3	240.0	109.0	100.4	270.0	117.8	109.2				
4	320.0	108.2	101.6	360.0	119.7	114.9				
5	400.0	109.0	104.2	450.0	119.2	116.0				
6	480.0	106.4	103.2	540.0	117.9	114.7				
7	560.0	104.4	101.2	630.0	117.9	116.0				
8	640.0	103.6	101.7	720.0	119.3	118.5				
9	720.0	102.6	101.8	810.0	117.6	116.8				
10	800.0	100.0	99.2	900.0	117.6	117.6				
11	880.0	99.4	98.6	990.0	117.5	117.5				
12	960.0	97.7	97.7	1080.0	115.9	115.9				
13	1040.0	95.0	95.0	1170.0	114.6	115.2				
14	1120.0	91.4	91.4	1260.0	116.5	117.1				
15	1200.0	91.3	91.9	1350.0	113.6	114.2				
16	1280.0	89.9	90.5	1440.0	112.4	113.4				
17	1360.0	84.6	85.2	1530.0	112.8	113.8				
18	1440.0	83.9	84.9	1620.0	112.4	113.4				
19	1520.0	81.7	82.7	1710.0	108.5	109.5				
20	1600.0	81.3	82.3	1800.0	106.8	108.0				
21	1680.0	75.2	76.2	1890.0	107.0	108.2				
22	1760.0	74.0	75.0	1980.0	105.3	106.5				
23	1840.0	71.5	72.7	2070.0	102.6	103.8				
24	1920.0	68.7	69.9	2160.0	104.2	105.4				
25	2000.0	67.7	68.9	2250.0	104.4	105.7				
26	2080.0	59.5	60.7	2340.0	102.0	103.3				
27	2160.0	0.0	0.0	2430.0	103.8	105.1				
28	2240.0	0.0	0.0	2520.0	104.7	106.0				
29	2320.0	0.0	0.0	2610.0	103.8	105.1				
30	2400.0	0.0	0.0	2700.0	102.5	103.8				
31	2480.0	0.0	0.0	2790.0	102.8	104.1				
32	2560.0	0.0	0.0	2880.0	102.2	103.4				
33	2640.0	0.0	0.0	2970.0	101.2	102.4				
34	2720.0	0.0	0.0	3060.0	98.2	99.4				
35	2800.0	0.0	0.0	3150.0	97.0	98.2				
36	2880.0	0.0	0.0	3240.0	99.1	100.3				
37	2960.0	0.0	0.0	3330.0	99.3	100.5				
38	3040.0	0.0	0.0	3420.0	97.5	98.7				
39	3120.0	0.0	0.0	3510.0	96.7	97.9				
40	3200.0	0.0	0.0	3600.0	99.1	100.1				
OASPL		117.4	111.8		129.9	128.2				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	110.6	88.1	90.0	118.5	99.4				
2	160.0	108.6	95.2	180.0	116.7	105.8				
3	240.0	110.9	102.3	270.0	120.2	111.6				
4	320.0	110.0	103.4	360.0	119.2	114.4				
5	400.0	108.6	103.8	450.0	119.6	116.4				
6	480.0	105.9	102.7	540.0	119.6	116.4				
7	560.0	105.9	102.7	630.0	119.5	117.6				
8	640.0	104.5	102.6	720.0	118.7	117.9				
9	720.0	101.6	100.8	810.0	118.7	117.9				
10	800.0	101.1	100.3	900.0	118.7	118.7				
11	880.0	99.5	98.7	990.0	117.1	117.1				
12	960.0	97.0	97.0	1080.0	117.9	117.9				
13	1040.0	96.4	96.4	1170.0	116.4	117.0				
14	1120.0	95.2	95.2	1260.0	114.8	115.4				
15	1200.0	90.5	91.1	1350.0	114.4	115.0				
16	1280.0	89.1	89.7	1440.0	113.6	114.6				
17	1360.0	88.1	88.7	1530.0	111.4	112.4				
18	1440.0	85.2	86.2	1620.0	109.9	110.9				
19	1520.0	81.3	82.3	1710.0	110.3	111.3				
20	1600.0	80.7	81.7	1800.0	108.3	109.5				
21	1680.0	78.2	79.2	1890.0	105.5	106.7				
22	1760.0	72.4	73.4	1980.0	106.7	107.9				
23	1840.0	72.0	73.2	2070.0	105.1	106.3				
24	1920.0	70.2	71.4	2160.0	103.2	104.4				
25	2000.0	66.3	67.5	2250.0	104.8	106.1				
26	2080.0	0.0	0.0	2340.0	103.4	104.7				
27	2160.0	0.0	0.0	2430.0	103.6	104.9				
28	2240.0	0.0	0.0	2520.0	104.4	105.7				
29	2320.0	0.0	0.0	2610.0	103.2	104.5				
30	2400.0	0.0	0.0	2700.0	102.2	103.5				
31	2480.0	0.0	0.0	2790.0	103.3	104.6				
32	2560.0	0.0	0.0	2880.0	102.1	103.3				
33	2640.0	0.0	0.0	2970.0	100.3	101.5				
34	2720.0	0.0	0.0	3060.0	100.9	102.1				
35	2800.0	0.0	0.0	3150.0	100.9	102.1				
36	2880.0	0.0	0.0	3240.0	99.3	100.5				
37	2960.0	0.0	0.0	3330.0	99.1	100.3				
38	3040.0	0.0	0.0	3420.0	98.8	100.0				
39	3120.0	0.0	0.0	3510.0	98.2	99.4				
40	3200.0	0.0	0.0	3600.0	96.6	97.6				
OASPL		118.1	112.3		130.5	128.8				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	111.1	88.6	90.0	119.3	100.2				
2	160.0	108.0	94.6	180.0	116.9	106.0				
3	240.0	106.8	98.2	270.0	119.9	111.3				
4	320.0	111.4	104.8	360.0	120.7	115.9				
5	400.0	105.8	101.0	450.0	114.9	111.7				
6	480.0	102.3	99.1	540.0	118.6	115.4				
7	560.0	104.8	101.6	630.0	118.7	116.8				
8	640.0	103.3	101.4	720.0	116.4	115.6				
9	720.0	98.3	97.5	810.0	115.7	114.9				
10	800.0	98.6	97.8	900.0	116.2	116.2				
11	880.0	95.4	94.6	990.0	115.8	115.8				
12	960.0	95.8	95.8	1080.0	111.3	111.3				
13	1040.0	92.7	92.7	1170.0	114.0	114.6				
14	1120.0	88.9	88.9	1260.0	112.8	113.4				
15	1200.0	89.8	90.4	1350.0	108.7	109.3				
16	1280.0	87.0	87.6	1440.0	110.9	111.9				
17	1360.0	84.2	84.8	1530.0	106.9	107.9				
18	1440.0	80.5	81.5	1620.0	106.1	107.1				
19	1520.0	80.7	81.7	1710.0	106.8	107.8				
20	1600.0	76.6	77.6	1800.0	102.9	104.1				
21	1680.0	73.1	74.1	1890.0	102.4	103.6				
22	1760.0	0.0	0.0	1980.0	103.0	104.2				
23	1840.0	0.0	0.0	2070.0	99.7	100.9				
24	1920.0	0.0	0.0	2160.0	101.0	102.2				
25	2000.0	0.0	0.0	2250.0	99.6	100.9				
26	2080.0	0.0	0.0	2340.0	97.6	98.9				
27	2160.0	0.0	0.0	2430.0	100.2	101.5				
28	2240.0	0.0	0.0	2520.0	96.6	97.9				
29	2320.0	0.0	0.0	2610.0	95.9	97.2				
30	2400.0	0.0	0.0	2700.0	99.7	101.0				
31	2480.0	0.0	0.0	2790.0	94.5	95.8				
32	2560.0	0.0	0.0	2880.0	95.5	96.7				
33	2640.0	0.0	0.0	2970.0	98.8	100.0				
34	2720.0	0.0	0.0	3060.0	92.8	94.0				
35	2800.0	0.0	0.0	3150.0	95.0	96.2				
36	2880.0	0.0	0.0	3240.0	94.7	95.9				
37	2960.0	0.0	0.0	3330.0	90.6	91.8				
38	3040.0	0.0	0.0	3420.0	92.8	94.0				
39	3120.0	0.0	0.0	3510.0	90.1	91.3				
40	3200.0	0.0	0.0	3600.0	88.5	89.5				
OASPL		117.1	110.5			129.0	126.3			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN											
HC-1 / 39				HC-2 / 40							
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	85.9	63.4	90.0	97.1	78.0					
2	160.0	77.1	63.7	180.0	98.1	87.2					
3	240.0	0.0	0.0	270.0	96.8	88.2					
4	320.0	0.0	0.0	360.0	95.9	91.1					
5	400.0	0.0	0.0	450.0	87.8	84.6					
6	480.0	0.0	0.0	540.0	93.3	90.1					
7	560.0	0.0	0.0	630.0	90.2	88.3					
8	640.0	0.0	0.0	720.0	84.2	83.4					
9	720.0	0.0	0.0	810.0	89.9	89.1					
10	800.0	0.0	0.0	900.0	86.1	86.1					
11	880.0	0.0	0.0	990.0	80.6	80.6					
12	960.0	0.0	0.0	1080.0	85.0	85.0					
13	1040.0	0.0	0.0	1170.0	81.1	81.7					
14	1120.0	0.0	0.0	1260.0	76.5	77.1					
15	1200.0	0.0	0.0	1350.0	77.9	78.5					
16	1280.0	0.0	0.0	1440.0	75.8	76.8					
17	1360.0	0.0	0.0	1530.0	72.7	73.7					
18	1440.0	0.0	0.0	1620.0	63.9	64.9					
19	1520.0	0.0	0.0	1710.0	74.0	75.0					
20	1600.0	0.0	0.0	1800.0	63.1	64.3					
21	1680.0	0.0	0.0	1890.0	65.1	66.3					
22	1760.0	0.0	0.0	1980.0	67.4	68.6					
23	1840.0	0.0	0.0	2070.0	57.3	58.5					
24	1920.0	0.0	0.0	2160.0	0.0	0.0					
25	2000.0	0.0	0.0	2250.0	0.0	0.0					
26	2080.0	0.0	0.0	2340.0	0.0	0.0					
27	2160.0	0.0	0.0	2430.0	0.0	0.0					
28	2240.0	0.0	0.0	2520.0	0.0	0.0					
29	2320.0	0.0	0.0	2610.0	0.0	0.0					
30	2400.0	0.0	0.0	2700.0	0.0	0.0					
31	2480.0	0.0	0.0	2790.0	0.0	0.0					
32	2560.0	0.0	0.0	2880.0	0.0	0.0					
33	2640.0	0.0	0.0	2970.0	0.0	0.0					
34	2720.0	0.0	0.0	3060.0	0.0	0.0					
35	2800.0	0.0	0.0	3150.0	0.0	0.0					
36	2880.0	0.0	0.0	3240.0	0.0	0.0					
37	2960.0	0.0	0.0	3330.0	0.0	0.0					
38	3040.0	0.0	0.0	3420.0	0.0	0.0					
39	3120.0	0.0	0.0	3510.0	0.0	0.0					
40	3200.0	0.0	0.0	3600.0	0.0	0.0					
OASPL		86.5	66.6		104.2	98.3					

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	103.8	81.3	90.0	115.5	96.4				
2	160.0	0.0	0.0	180.0	0.0	0.0				
3	240.0	0.0	0.0	270.0	0.0	0.0				
4	320.0	0.0	0.0	360.0	0.0	0.0				
5	400.0	0.0	0.0	450.0	0.0	0.0				
6	480.0	0.0	0.0	540.0	0.0	0.0				
7	560.0	0.0	0.0	630.0	0.0	0.0				
8	640.0	0.0	0.0	720.0	0.0	0.0				
9	720.0	0.0	0.0	810.0	0.0	0.0				
10	800.0	0.0	0.0	900.0	0.0	0.0				
11	880.0	0.0	0.0	990.0	0.0	0.0				
12	960.0	0.0	0.0	1080.0	0.0	0.0				
13	1040.0	0.0	0.0	1170.0	0.0	0.0				
14	1120.0	0.0	0.0	1260.0	0.0	0.0				
15	1200.0	0.0	0.0	1350.0	0.0	0.0				
16	1280.0	0.0	0.0	1440.0	0.0	0.0				
17	1360.0	0.0	0.0	1530.0	0.0	0.0				
18	1440.0	0.0	0.0	1620.0	0.0	0.0				
19	1520.0	0.0	0.0	1710.0	0.0	0.0				
20	1600.0	0.0	0.0	1800.0	0.0	0.0				
21	1680.0	0.0	0.0	1890.0	0.0	0.0				
22	1760.0	0.0	0.0	1980.0	0.0	0.0				
23	1840.0	0.0	0.0	2070.0	0.0	0.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		103.8	81.3			115.5	96.4			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	37.2	14.7	90.0	34.0	14.9				
2	160.0	0.0	0.0	180.0	0.0	0.0				
3	240.0	0.0	0.0	270.0	0.0	0.0				
4	320.0	0.0	0.0	360.0	0.0	0.0				
5	400.0	0.0	0.0	450.0	0.0	0.0				
6	480.0	0.0	0.0	540.0	0.0	0.0				
7	560.0	0.0	0.0	630.0	0.0	0.0				
8	640.0	0.0	0.0	720.0	0.0	0.0				
9	720.0	0.0	0.0	810.0	0.0	0.0				
10	800.0	0.0	0.0	900.0	0.0	0.0				
11	880.0	0.0	0.0	990.0	0.0	0.0				
12	960.0	0.0	0.0	1080.0	0.0	0.0				
13	1040.0	0.0	0.0	1170.0	0.0	0.0				
14	1120.0	0.0	0.0	1260.0	0.0	0.0				
15	1200.0	0.0	0.0	1350.0	0.0	0.0				
16	1280.0	0.0	0.0	1440.0	0.0	0.0				
17	1360.0	0.0	0.0	1530.0	0.0	0.0				
18	1440.0	0.0	0.0	1620.0	0.0	0.0				
19	1520.0	0.0	0.0	1710.0	0.0	0.0				
20	1600.0	0.0	0.0	1800.0	0.0	0.0				
21	1680.0	0.0	0.0	1890.0	0.0	0.0				
22	1760.0	0.0	0.0	1980.0	0.0	0.0				
23	1840.0	0.0	0.0	2070.0	0.0	0.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		37.2	14.7			34.0	14.9			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	103.0	76.8	80.0	105.5	83.0	90.0	113.0	93.9	
2	140.0	97.7	81.6	160.0	109.6	96.2	180.0	116.9	106.0	
3	210.0	95.0	84.1	240.0	105.3	96.7	270.0	112.0	103.4	
4	280.0	90.3	81.7	320.0	101.9	95.3	360.0	112.5	107.7	
5	350.0	86.9	80.3	400.0	100.5	95.7	450.0	110.6	107.4	
6	420.0	79.6	74.8	480.0	96.2	93.0	540.0	108.3	105.1	
7	490.0	75.8	72.6	560.0	91.8	88.6	630.0	107.2	105.3	
8	560.0	61.2	58.0	640.0	86.1	84.2	720.0	107.8	107.0	
9	630.0	0.0	0.0	720.0	88.5	87.7	810.0	104.6	103.8	
10	700.0	0.0	0.0	800.0	82.7	81.9	900.0	104.0	104.0	
11	770.0	0.0	0.0	880.0	73.8	73.0	990.0	102.9	102.9	
12	840.0	0.0	0.0	960.0	79.7	79.7	1080.0	100.3	100.3	
13	910.0	0.0	0.0	1040.0	75.4	75.4	1170.0	95.7	96.3	
14	980.0	0.0	0.0	1120.0	71.9	71.9	1260.0	96.6	97.2	
15	1050.0	0.0	0.0	1200.0	63.3	63.9	1350.0	94.5	95.1	
16	1120.0	0.0	0.0	1280.0	63.1	63.7	1440.0	90.4	91.4	
17	1190.0	0.0	0.0	1360.0	66.2	66.8	1530.0	92.5	93.5	
18	1260.0	0.0	0.0	1440.0	49.1	50.1	1620.0	88.5	89.5	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	83.6	84.6	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	81.7	82.9	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		104.9	88.8	112.9		103.0	121.5		115.9	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	106.3	80.1	80.0	109.2	86.7	90.0	114.8	95.7	
2	140.0	104.3	88.2	160.0	110.8	97.4	180.0	115.2	104.3	
3	210.0	99.7	88.8	240.0	109.1	100.5	270.0	118.2	109.6	
4	280.0	97.4	88.8	320.0	107.5	100.9	360.0	115.4	110.6	
5	350.0	92.0	85.4	400.0	105.4	100.6	450.0	118.6	115.4	
6	420.0	89.1	84.3	480.0	105.5	102.3	540.0	119.2	116.0	
7	490.0	86.6	83.4	560.0	102.0	98.8	630.0	116.9	115.0	
8	560.0	82.4	79.2	640.0	98.6	96.7	720.0	115.6	114.8	
9	630.0	75.2	73.3	720.0	95.7	94.9	810.0	116.6	115.8	
10	700.0	70.5	68.6	800.0	97.0	96.2	900.0	116.6	116.6	
11	770.0	69.4	68.6	880.0	94.4	93.6	990.0	113.8	113.8	
12	840.0	66.5	65.7	960.0	91.2	91.2	1080.0	112.5	112.5	
13	910.0	62.7	62.7	1040.0	87.8	87.8	1170.0	112.2	112.8	
14	980.0	50.4	50.4	1120.0	86.0	86.0	1260.0	112.4	113.0	
15	1050.0	0.0	0.0	1200.0	84.2	84.8	1350.0	109.8	110.4	
16	1120.0	0.0	0.0	1280.0	81.0	81.6	1440.0	108.9	109.9	
17	1190.0	0.0	0.0	1360.0	77.8	78.4	1530.0	107.9	108.9	
18	1260.0	0.0	0.0	1440.0	74.3	75.3	1620.0	106.7	107.7	
19	1330.0	0.0	0.0	1520.0	73.1	74.1	1710.0	104.6	105.6	
20	1400.0	0.0	0.0	1600.0	70.1	71.1	1800.0	102.1	103.3	
21	1470.0	0.0	0.0	1680.0	64.3	65.3	1890.0	102.4	103.6	
22	1540.0	0.0	0.0	1760.0	61.9	62.9	1980.0	102.2	103.4	
23	1610.0	0.0	0.0	1840.0	57.4	58.6	2070.0	99.8	101.0	
24	1680.0	0.0	0.0	1920.0	57.5	58.7	2160.0	98.0	99.2	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	98.1	99.4	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	97.8	99.1	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	96.3	97.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	95.7	97.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	97.7	99.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	96.2	97.5	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	92.8	94.1	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	93.7	94.9	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	94.4	95.6	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	94.7	95.9	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	89.5	90.7	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	90.5	91.7	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	92.5	93.7	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	90.1	91.3	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	87.7	88.9	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	88.5	89.5	
OASPL		109.4	95.1	116.5			109.2	127.9		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42				IC-3 / 43		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.6	81.4	80.0	112.7	90.2	90.0	116.7	97.6	
2	140.0	105.1	89.0	160.0	111.1	97.7	180.0	117.6	106.7	
3	210.0	101.2	90.3	240.0	110.8	102.2	270.0	117.6	109.0	
4	280.0	97.5	88.9	320.0	108.6	102.0	360.0	119.7	114.9	
5	350.0	94.1	87.5	400.0	109.5	104.7	450.0	119.0	115.8	
6	420.0	92.3	87.5	480.0	106.6	103.4	540.0	117.5	114.3	
7	490.0	88.0	84.8	560.0	103.7	100.5	630.0	117.7	115.8	
8	560.0	83.2	80.0	640.0	102.7	100.8	720.0	119.0	118.2	
9	630.0	81.7	79.8	720.0	101.5	100.7	810.0	117.2	116.4	
10	700.0	78.5	76.6	800.0	98.4	97.6	900.0	117.4	117.4	
11	770.0	73.9	73.1	880.0	98.0	97.2	990.0	117.4	117.4	
12	840.0	71.3	70.5	960.0	95.9	95.9	1080.0	115.9	115.9	
13	910.0	65.8	65.8	1040.0	93.6	93.6	1170.0	114.9	115.5	
14	980.0	62.0	62.0	1120.0	89.6	89.6	1260.0	116.9	117.5	
15	1050.0	0.0	0.0	1200.0	89.0	89.6	1350.0	114.1	114.7	
16	1120.0	0.0	0.0	1280.0	88.0	88.6	1440.0	113.1	114.1	
17	1190.0	0.0	0.0	1360.0	82.2	82.8	1530.0	113.3	114.3	
18	1260.0	0.0	0.0	1440.0	80.6	81.6	1620.0	112.9	113.9	
19	1330.0	0.0	0.0	1520.0	77.9	78.9	1710.0	108.6	109.6	
20	1400.0	0.0	0.0	1600.0	76.9	77.9	1800.0	106.8	108.0	
21	1470.0	0.0	0.0	1680.0	72.3	73.3	1890.0	106.6	107.8	
22	1540.0	0.0	0.0	1760.0	68.9	69.9	1980.0	104.0	105.2	
23	1610.0	0.0	0.0	1840.0	67.3	68.5	2070.0	100.7	101.9	
24	1680.0	0.0	0.0	1920.0	66.5	67.7	2160.0	103.0	104.2	
25	1750.0	0.0	0.0	2000.0	66.1	67.3	2250.0	103.9	105.2	
26	1820.0	0.0	0.0	2080.0	61.2	62.4	2340.0	102.4	103.7	
27	1890.0	0.0	0.0	2160.0	58.9	60.1	2430.0	104.3	105.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	105.4	106.7	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	104.7	106.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	103.3	104.6	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	103.6	104.9	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	102.3	103.5	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	100.5	101.7	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	96.8	98.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	95.2	96.4	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	98.9	100.1	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	100.4	101.6	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	99.7	100.9	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	99.5	100.7	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	101.8	102.8	
OASPL		110.6	96.5	118.6		111.6	129.8		128.2	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	109.3	83.1	80.0	116.4	93.9	90.0	117.5	98.4	
2	140.0	106.1	90.0	160.0	111.9	98.5	180.0	115.9	105.0	
3	210.0	100.9	90.0	240.0	112.8	104.2	270.0	119.6	111.0	
4	280.0	99.9	91.3	320.0	111.0	104.4	360.0	118.7	113.9	
5	350.0	95.1	88.5	400.0	108.9	104.1	450.0	119.1	115.9	
6	420.0	91.7	86.9	480.0	106.8	103.6	540.0	119.4	116.2	
7	490.0	88.4	85.2	560.0	106.4	103.2	630.0	119.3	117.4	
8	560.0	86.1	82.9	640.0	105.1	103.2	720.0	118.4	117.6	
9	630.0	83.3	81.4	720.0	101.2	100.4	810.0	118.8	118.0	
10	700.0	78.6	76.7	800.0	100.6	99.8	900.0	118.5	118.5	
11	770.0	77.3	76.5	880.0	98.5	97.7	990.0	116.9	116.9	
12	840.0	72.1	71.3	960.0	96.3	96.3	1080.0	118.0	118.0	
13	910.0	66.4	66.4	1040.0	94.5	94.5	1170.0	116.5	117.1	
14	980.0	60.0	60.0	1120.0	93.8	93.8	1260.0	115.0	115.6	
15	1050.0	0.0	0.0	1200.0	89.8	90.4	1350.0	114.5	115.1	
16	1120.0	0.0	0.0	1280.0	86.0	86.6	1440.0	113.6	114.6	
17	1190.0	0.0	0.0	1360.0	86.6	87.2	1530.0	111.4	112.4	
18	1260.0	0.0	0.0	1440.0	82.7	83.7	1620.0	110.0	111.0	
19	1330.0	0.0	0.0	1520.0	78.8	79.8	1710.0	110.5	111.5	
20	1400.0	0.0	0.0	1600.0	76.7	77.7	1800.0	108.2	109.4	
21	1470.0	0.0	0.0	1680.0	75.2	76.2	1890.0	105.5	106.7	
22	1540.0	0.0	0.0	1760.0	72.9	73.9	1980.0	106.6	107.8	
23	1610.0	0.0	0.0	1840.0	68.5	69.7	2070.0	104.8	106.0	
24	1680.0	0.0	0.0	1920.0	65.7	66.9	2160.0	102.7	103.9	
25	1750.0	0.0	0.0	2000.0	64.4	65.6	2250.0	104.4	105.7	
26	1820.0	0.0	0.0	2080.0	57.5	58.7	2340.0	103.1	104.4	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	103.3	104.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	104.6	105.9	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	103.2	104.5	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	102.5	103.8	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	103.9	105.2	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	102.8	104.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	100.7	101.9	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	102.1	103.3	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	102.2	103.4	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	100.3	101.5	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	100.8	102.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	100.4	101.6	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	99.8	101.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	98.5	99.5	
OASPL		111.9	97.4		120.6	112.8		130.2	128.7	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
IC-1 / 41				IC-2 / 42			IC-3 / 43				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	110.1	83.9	80.0	118.1	95.6	90.0	118.0	98.9		
2	140.0	106.4	90.3	160.0	113.3	99.9	180.0	115.7	104.8		
3	210.0	98.7	87.8	240.0	110.7	102.1	270.0	119.0	110.4		
4	280.0	99.1	90.5	320.0	114.0	107.4	360.0	120.0	115.2		
5	350.0	97.1	90.5	400.0	109.1	104.3	450.0	114.6	111.4		
6	420.0	89.5	84.7	480.0	103.8	100.6	540.0	118.1	114.9		
7	490.0	86.5	83.3	560.0	105.9	102.7	630.0	113.3	116.4		
8	560.0	84.3	81.1	640.0	104.2	102.3	720.0	116.1	115.3		
9	630.0	81.5	79.6	720.0	99.3	98.5	810.0	115.3	114.5		
10	700.0	77.1	75.2	800.0	97.5	96.7	900.0	116.2	116.2		
11	770.0	72.0	71.2	880.0	95.5	94.7	990.0	115.7	115.7		
12	840.0	68.4	67.6	960.0	95.6	95.6	1080.0	111.1	111.1		
13	910.0	64.7	64.7	1040.0	92.3	92.3	1170.0	114.1	114.7		
14	980.0	61.6	61.6	1120.0	88.5	88.5	1260.0	112.9	113.5		
15	1050.0	53.6	53.6	1200.0	88.1	88.7	1350.0	108.8	109.4		
16	1120.0	0.0	0.0	1280.0	86.8	87.4	1440.0	111.0	112.0		
17	1190.0	0.0	0.0	1360.0	80.5	81.1	1530.0	106.9	107.9		
18	1260.0	0.0	0.0	1440.0	79.4	80.4	1620.0	106.1	107.1		
19	1330.0	0.0	0.0	1520.0	78.3	79.3	1710.0	106.9	107.9		
20	1400.0	0.0	0.0	1600.0	72.1	73.1	1800.0	102.9	104.1		
21	1470.0	0.0	0.0	1680.0	70.4	71.4	1890.0	102.4	103.6		
22	1540.0	0.0	0.0	1760.0	69.1	70.1	1980.0	103.0	104.2		
23	1610.0	0.0	0.0	1840.0	67.0	68.2	2070.0	99.3	100.5		
24	1680.0	0.0	0.0	1920.0	61.1	62.3	2160.0	100.8	102.0		
25	1750.0	0.0	0.0	2000.0	62.3	63.5	2250.0	99.7	101.0		
26	1820.0	0.0	0.0	2080.0	58.5	59.7	2340.0	97.0	98.3		
27	1890.0	0.0	0.0	2160.0	49.9	51.1	2430.0	100.3	101.6		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	96.7	98.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	96.2	97.5		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	100.4	101.7		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	95.5	96.8		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	96.5	97.7		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	100.1	101.3		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	93.8	95.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	96.5	97.7		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	96.7	97.9		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	92.3	93.5		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	94.7	95.9		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	92.4	93.6		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	91.1	92.1		
OASPL		112.3	97.0			121.5	112.6			118.4	126.1

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42				IC-3 / 43		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	84.5	58.3	80.0	92.5	70.0	90.0	92.7	73.6	
2	140.0	79.5	63.4	160.0	86.2	72.8	180.0	92.3	81.4	
3	210.0	73.1	62.2	240.0	82.1	73.5	270.0	92.7	84.1	
4	280.0	70.0	61.4	320.0	84.7	78.1	360.0	92.1	87.3	
5	350.0	67.6	61.0	400.0	80.2	75.4	450.0	82.4	79.2	
6	420.0	56.6	51.8	480.0	73.9	70.7	540.0	89.6	86.4	
7	490.0	50.9	47.7	560.0	77.5	74.3	630.0	86.7	84.8	
8	560.0	0.0	0.0	640.0	71.8	69.9	720.0	80.1	79.3	
9	630.0	0.0	0.0	720.0	62.9	62.1	810.0	86.8	86.0	
10	700.0	0.0	0.0	800.0	68.0	67.2	900.0	82.4	82.4	
11	770.0	0.0	0.0	880.0	61.3	60.5	990.0	77.9	77.9	
12	840.0	0.0	0.0	960.0	53.9	53.9	1080.0	81.4	81.4	
13	910.0	0.0	0.0	1040.0	53.7	53.7	1170.0	77.2	77.8	
14	980.0	0.0	0.0	1120.0	56.6	56.6	1260.0	74.7	75.3	
15	1050.0	0.0	0.0	1200.0	40.5	41.1	1350.0	74.7	75.3	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	72.8	73.8	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	70.0	71.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	61.0	62.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	71.8	72.8	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	62.4	63.6	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	62.3	63.5	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	64.3	65.5	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	56.8	58.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	57.3	58.5	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	61.9	63.2	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	58.9	60.2	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	51.5	52.8	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		86.1	68.7		94.5	83.2		99.9	94.5	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	106.1	79.9	80.0	114.6	92.1	90.0	110.6	91.5	
2	140.0	0.0	0.0	160.0	0.0	0.0	180.0	0.0	0.0	
3	210.0	0.0	0.0	240.0	0.0	0.0	270.0	0.0	0.0	
4	280.0	0.0	0.0	320.0	0.0	0.0	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	0.0	0.0	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	0.0	0.0	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	0.0	0.0	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	0.0	0.0	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	0.0	0.0	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	0.0	0.0	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
CASPL		106.1	79.9	114.6		92.1	110.6		91.5	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	19.5	-6.7	80.0	36.4	13.9	90.0	42.2	23.1	
2	140.0	0.0	0.0	160.0	0.0	0.0	180.0	0.0	0.0	
3	210.0	0.0	0.0	240.0	0.0	0.0	270.0	0.0	0.0	
4	280.0	0.0	0.0	320.0	0.0	0.0	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	0.0	0.0	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	0.0	0.0	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	0.0	0.0	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	0.0	0.0	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	0.0	0.0	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	0.0	0.0	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		19.5	-6.7	36.4		13.9	42.2		23.1	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
JC-1 / 193				JC-2 / 194						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	105.5	83.0	90.0	112.0	92.9				
2	160.0	103.1	89.7	180.0	109.6	98.7				
3	240.0	99.8	91.2	270.0	109.6	101.0				
4	320.0	96.7	90.1	360.0	107.1	102.3				
5	400.0	94.4	89.6	450.0	103.5	100.3				
6	480.0	91.3	88.1	540.0	105.1	101.9				
7	560.0	84.7	81.5	630.0	102.3	100.4				
8	640.0	83.3	81.4	720.0	97.3	96.5				
9	720.0	79.3	78.5	810.0	98.9	98.1				
10	800.0	80.2	79.4	900.0	97.7	97.7				
11	880.0	72.8	72.0	990.0	93.9	93.9				
12	960.0	66.9	66.9	1080.0	90.3	90.3				
13	1040.0	0.0	0.0	1170.0	88.6	89.2				
14	1120.0	0.0	0.0	1260.0	86.4	87.0				
15	1200.0	0.0	0.0	1350.0	76.9	77.5				
16	1280.0	0.0	0.0	1440.0	77.3	78.3				
17	1360.0	0.0	0.0	1530.0	69.9	70.9				
18	1440.0	0.0	0.0	1620.0	79.2	80.2				
19	1520.0	0.0	0.0	1710.0	72.8	73.8				
20	1600.0	0.0	0.0	1800.0	78.0	79.2				
21	1680.0	0.0	0.0	1890.0	66.5	67.7				
22	1760.0	0.0	0.0	1980.0	65.9	67.1				
23	1840.0	0.0	0.0	2070.0	46.8	48.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		108.7	97.4		116.9	109.9				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
KN-1 / 187				KN-2 / 186				KN-3 / 185			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	105.7	79.5	80.0	111.9	89.4	90.0	110.6	91.5		
2	140.0	101.7	85.6	160.0	107.5	94.1	180.0	107.3	96.4		
3	210.0	90.1	79.2	240.0	104.2	95.6	270.0	113.8	105.2		
4	280.0	94.5	85.9	320.0	105.7	99.1	360.0	111.2	106.4		
5	350.0	89.0	82.4	400.0	100.0	95.2	450.0	108.0	104.8		
6	420.0	81.1	76.3	480.0	97.4	94.2	540.0	110.1	106.9		
7	490.0	0.0	0.0	560.0	97.1	93.9	630.0	107.7	105.8		
8	560.0	0.0	0.0	640.0	93.3	91.4	720.0	106.1	105.3		
9	630.0	0.0	0.0	720.0	89.5	88.7	810.0	106.4	105.6		
10	700.0	0.0	0.0	800.0	86.6	85.8	900.0	103.4	103.4		
11	770.0	0.0	0.0	880.0	85.2	84.4	990.0	102.7	102.7		
12	840.0	0.0	0.0	960.0	78.8	78.8	1080.0	103.4	103.4		
13	910.0	0.0	0.0	1040.0	80.1	80.1	1170.0	100.7	101.3		
14	980.0	0.0	0.0	1120.0	77.4	77.4	1260.0	97.3	97.9		
15	1050.0	0.0	0.0	1200.0	71.2	71.8	1350.0	97.6	98.2		
16	1120.0	0.0	0.0	1280.0	69.3	69.9	1440.0	97.0	98.0		
17	1190.0	0.0	0.0	1360.0	66.2	66.8	1530.0	93.1	94.1		
18	1260.0	0.0	0.0	1440.0	62.6	63.6	1620.0	92.7	93.7		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	91.1	92.1		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	89.0	90.2		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	88.4	89.6		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	85.7	86.9		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	79.6	80.8		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	85.3	86.5		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	81.7	83.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	78.7	80.0		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	80.3	81.6		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	74.9	76.2		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	72.6	73.9		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	71.4	72.7		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		107.5	90.6		114.8	104.3		119.7	115.7		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	105.6	83.1	90.0	114.7	95.6				
2	160.0	97.6	84.2	180.0	115.8	104.9				
3	240.0	105.4	96.8	270.0	112.7	104.1				
4	320.0	104.9	98.3	360.0	111.9	107.1				
5	400.0	100.7	95.9	450.0	110.2	107.0				
6	480.0	94.5	91.3	540.0	108.0	104.8				
7	560.0	94.2	91.0	630.0	108.2	106.3				
8	640.0	88.2	86.3	720.0	108.2	107.4				
9	720.0	86.7	85.9	810.0	104.0	103.2				
10	800.0	84.8	84.0	900.0	104.5	104.5				
11	880.0	84.4	83.6	990.0	103.2	103.2				
12	960.0	78.2	78.2	1080.0	99.4	99.4				
13	1040.0	0.0	0.0	1170.0	95.5	96.1				
14	1120.0	0.0	0.0	1260.0	97.2	97.8				
15	1200.0	0.0	0.0	1350.0	93.8	94.4				
16	1280.0	0.0	0.0	1440.0	88.1	89.1				
17	1360.0	0.0	0.0	1530.0	93.7	94.7				
18	1440.0	0.0	0.0	1620.0	89.4	90.4				
19	1520.0	0.0	0.0	1710.0	82.5	83.5				
20	1600.0	0.0	0.0	1800.0	85.6	86.8				
21	1680.0	0.0	0.0	1890.0	83.3	84.5				
22	1760.0	0.0	0.0	1980.0	0.0	0.0				
23	1840.0	0.0	0.0	2070.0	0.0	0.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		111.0	103.0		121.5	115.9				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	108.8	86.3	90.0	116.0	96.9				
2	160.0	109.7	96.3	180.0	118.5	107.6				
3	240.0	108.8	100.2	270.0	119.1	110.5				
4	320.0	106.8	100.2	360.0	114.6	109.8				
5	400.0	105.5	100.7	450.0	118.9	115.7				
6	480.0	106.1	102.9	540.0	119.2	116.0				
7	560.0	103.4	100.2	630.0	116.9	115.0				
8	640.0	100.4	98.5	720.0	115.6	114.8				
9	720.0	97.5	96.7	810.0	116.7	115.9				
10	800.0	97.9	97.1	900.0	116.6	116.6				
11	880.0	96.5	95.7	990.0	113.8	113.8				
12	960.0	92.6	92.6	1080.0	112.5	112.5				
13	1040.0	89.6	89.6	1170.0	112.3	112.9				
14	1120.0	87.8	87.8	1260.0	111.9	112.5				
15	1200.0	85.2	85.8	1350.0	109.4	110.0				
16	1280.0	83.4	84.0	1440.0	108.8	109.8				
17	1360.0	79.5	80.1	1530.0	107.6	108.6				
18	1440.0	76.1	77.1	1620.0	106.7	107.7				
19	1520.0	76.6	77.6	1710.0	104.8	105.8				
20	1600.0	72.8	73.8	1800.0	102.4	103.6				
21	1680.0	66.7	67.7	1890.0	102.5	103.7				
22	1760.0	0.0	0.0	1980.0	102.3	103.5				
23	1840.0	0.0	0.0	2070.0	99.9	101.1				
24	1920.0	0.0	0.0	2160.0	98.5	99.7				
25	2000.0	0.0	0.0	2250.0	98.6	99.9				
26	2080.0	0.0	0.0	2340.0	98.1	99.4				
27	2160.0	0.0	0.0	2430.0	97.1	98.4				
28	2240.0	0.0	0.0	2520.0	96.3	97.6				
29	2320.0	0.0	0.0	2610.0	98.0	99.3				
30	2400.0	0.0	0.0	2700.0	96.4	97.7				
31	2480.0	0.0	0.0	2790.0	93.2	94.5				
32	2560.0	0.0	0.0	2880.0	94.0	95.2				
33	2640.0	0.0	0.0	2970.0	94.5	95.7				
34	2720.0	0.0	0.0	3060.0	94.4	95.6				
35	2800.0	0.0	0.0	3150.0	89.6	90.8				
36	2880.0	0.0	0.0	3240.0	90.7	91.9				
37	2960.0	0.0	0.0	3330.0	92.2	93.4				
38	3040.0	0.0	0.0	3420.0	89.8	91.0				
39	3120.0	0.0	0.0	3510.0	86.9	88.1				
40	3200.0	0.0	0.0	3600.0	88.2	89.2				
OASPL		116.3	109.6			128.3	125.8			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	110.6	88.1	90.0	118.5	99.4				
2	160.0	108.6	95.2	180.0	116.7	105.8				
3	240.0	110.9	102.3	270.0	120.2	111.6				
4	320.0	110.0	103.4	360.0	119.2	114.4				
5	400.0	108.6	103.8	450.0	119.6	116.4				
6	480.0	105.9	102.7	540.0	119.6	116.4				
7	560.0	105.9	102.7	630.0	119.5	117.6				
8	640.0	104.5	102.6	720.0	118.7	117.9				
9	720.0	101.6	100.8	810.0	118.7	117.9				
10	800.0	101.1	100.3	900.0	118.7	118.7				
11	880.0	99.5	98.7	990.0	117.1	117.1				
12	960.0	97.0	97.0	1080.0	117.9	117.9				
13	1040.0	96.4	96.4	1170.0	116.4	117.0				
14	1120.0	95.2	95.2	1260.0	114.8	115.4				
15	1200.0	90.5	91.1	1350.0	114.4	115.0				
16	1280.0	89.1	89.7	1440.0	113.6	114.6				
17	1360.0	88.1	88.7	1530.0	111.4	112.4				
18	1440.0	85.2	86.2	1620.0	109.9	110.9				
19	1520.0	81.3	82.3	1710.0	110.3	111.3				
20	1600.0	80.7	81.7	1800.0	108.3	109.5				
21	1680.0	78.2	79.2	1890.0	105.5	106.7				
22	1760.0	72.4	73.4	1980.0	106.7	107.9				
23	1840.0	72.0	73.2	2070.0	105.1	106.3				
24	1920.0	70.2	71.4	2160.0	103.2	104.4				
25	2000.0	66.3	67.5	2250.0	104.8	106.1				
26	2080.0	0.0	0.0	2340.0	103.4	104.7				
27	2160.0	0.0	0.0	2430.0	103.6	104.9				
28	2240.0	0.0	0.0	2520.0	104.4	105.7				
29	2320.0	0.0	0.0	2610.0	103.2	104.5				
30	2400.0	0.0	0.0	2700.0	102.2	103.5				
31	2480.0	0.0	0.0	2790.0	103.3	104.6				
32	2560.0	0.0	0.0	2880.0	102.1	103.3				
33	2640.0	0.0	0.0	2970.0	100.3	101.5				
34	2720.0	0.0	0.0	3060.0	100.9	102.1				
35	2800.0	0.0	0.0	3150.0	100.9	102.1				
36	2880.0	0.0	0.0	3240.0	99.3	100.5				
37	2960.0	0.0	0.0	3330.0	99.1	100.3				
38	3040.0	0.0	0.0	3420.0	98.8	100.0				
39	3120.0	0.0	0.0	3510.0	98.2	99.4				
40	3200.0	0.0	0.0	3600.0	96.6	97.6				
OASPL		118.1	112.3			130.5	128.8			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	110.6	88.1	90.0	118.5	99.4				
2	160.0	108.6	95.2	180.0	116.7	105.8				
3	240.0	110.9	102.3	270.0	120.2	111.6				
4	320.0	110.0	103.4	360.0	119.2	114.4				
5	400.0	108.6	103.8	450.0	119.6	116.4				
6	480.0	105.9	102.7	540.0	119.6	116.4				
7	560.0	105.9	102.7	630.0	119.5	117.6				
8	640.0	104.5	102.6	720.0	118.7	117.9				
9	720.0	101.6	100.8	810.0	118.7	117.9				
10	800.0	101.1	100.3	900.0	118.7	118.7				
11	880.0	99.5	98.7	990.0	117.1	117.1				
12	960.0	97.0	97.0	1080.0	117.9	117.9				
13	1040.0	96.4	96.4	1170.0	116.4	117.0				
14	1120.0	95.2	95.2	1260.0	114.8	115.4				
15	1200.0	90.5	91.1	1350.0	114.4	115.0				
16	1280.0	89.1	89.7	1440.0	113.6	114.6				
17	1360.0	88.1	88.7	1530.0	111.4	112.4				
18	1440.0	85.2	86.2	1620.0	109.9	110.9				
19	1520.0	81.3	82.3	1710.0	110.3	111.3				
20	1600.0	80.7	81.7	1800.0	108.3	109.5				
21	1680.0	78.2	79.2	1890.0	105.5	106.7				
22	1760.0	72.4	73.4	1980.0	106.7	107.9				
23	1840.0	72.0	73.2	2070.0	105.1	106.3				
24	1920.0	70.2	71.4	2160.0	103.2	104.4				
25	2000.0	66.3	67.5	2250.0	104.8	106.1				
26	2080.0	0.0	0.0	2340.0	103.4	104.7				
27	2160.0	0.0	0.0	2430.0	103.6	104.9				
28	2240.0	0.0	0.0	2520.0	104.4	105.7				
29	2320.0	0.0	0.0	2610.0	103.2	104.5				
30	2400.0	0.0	0.0	2700.0	102.2	103.5				
31	2480.0	0.0	0.0	2790.0	103.3	104.6				
32	2560.0	0.0	0.0	2880.0	102.1	103.3				
33	2640.0	0.0	0.0	2970.0	100.3	101.5				
34	2720.0	0.0	0.0	3060.0	100.9	102.1				
35	2800.0	0.0	0.0	3150.0	100.9	102.1				
36	2880.0	0.0	0.0	3240.0	99.3	100.5				
37	2960.0	0.0	0.0	3330.0	99.1	100.3				
38	3040.0	0.0	0.0	3420.0	98.8	100.0				
39	3120.0	0.0	0.0	3510.0	98.2	99.4				
40	3200.0	0.0	0.0	3600.0	96.6	97.6				
OASPL		118.1	112.3		130.5	128.8				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN											
HC-1 / 39				HC-2 / 40							
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	111.1	88.6	90.0	119.3	100.2					
2	160.0	108.0	94.6	180.0	116.9	106.0					
3	240.0	106.8	98.2	270.0	119.9	111.3					
4	320.0	111.4	104.8	360.0	120.7	115.9					
5	400.0	105.8	101.0	450.0	114.9	111.7					
6	480.0	102.3	99.1	540.0	118.6	115.4					
7	560.0	104.8	101.6	630.0	118.7	116.8					
8	640.0	103.3	101.4	720.0	116.4	115.6					
9	720.0	98.3	97.5	810.0	115.7	114.9					
10	800.0	98.6	97.8	900.0	116.2	116.2					
11	880.0	95.4	94.6	990.0	115.8	115.8					
12	960.0	95.8	95.8	1080.0	111.3	111.3					
13	1040.0	92.7	92.7	1170.0	114.0	114.6					
14	1120.0	88.9	88.9	1260.0	112.8	113.4					
15	1200.0	89.8	90.4	1350.0	108.7	109.3					
16	1280.0	87.0	87.6	1440.0	110.9	111.9					
17	1360.0	84.2	84.8	1530.0	106.9	107.9					
18	1440.0	80.5	81.5	1620.0	106.1	107.1					
19	1520.0	80.7	81.7	1710.0	106.8	107.8					
20	1600.0	76.6	77.6	1800.0	102.9	104.1					
21	1680.0	73.1	74.1	1890.0	102.4	103.6					
22	1760.0	0.0	0.0	1980.0	103.0	104.2					
23	1840.0	0.0	0.0	2070.0	99.7	100.9					
24	1920.0	0.0	0.0	2160.0	101.0	102.2					
25	2000.0	0.0	0.0	2250.0	99.6	100.9					
26	2080.0	0.0	0.0	2340.0	97.6	98.9					
27	2160.0	0.0	0.0	2430.0	100.2	101.5					
28	2240.0	0.0	0.0	2520.0	96.6	97.9					
29	2320.0	0.0	0.0	2610.0	95.9	97.2					
30	2400.0	0.0	0.0	2700.0	99.7	101.0					
31	2480.0	0.0	0.0	2790.0	94.5	95.8					
32	2560.0	0.0	0.0	2880.0	95.5	96.7					
33	2640.0	0.0	0.0	2970.0	98.8	100.0					
34	2720.0	0.0	0.0	3060.0	92.8	94.0					
35	2800.0	0.0	0.0	3150.0	95.0	96.2					
36	2880.0	0.0	0.0	3240.0	94.7	95.9					
37	2960.0	0.0	0.0	3330.0	90.6	91.8					
38	3040.0	0.0	0.0	3420.0	92.8	94.0					
39	3120.0	0.0	0.0	3510.0	90.1	91.3					
40	3200.0	0.0	0.0	3600.0	88.5	89.5					
OASPL		117.1	110.5		129.0	126.3					

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	85.9	63.4	90.0	97.1	78.0				
2	160.0	77.1	63.7	180.0	98.1	87.2				
3	240.0	0.0	0.0	270.0	96.8	88.2				
4	320.0	0.0	0.0	360.0	95.9	91.1				
5	400.0	0.0	0.0	450.0	87.8	84.6				
6	480.0	0.0	0.0	540.0	93.3	90.1				
7	560.0	0.0	0.0	630.0	90.2	88.3				
8	640.0	0.0	0.0	720.0	84.2	83.4				
9	720.0	0.0	0.0	810.0	89.9	89.1				
10	800.0	0.0	0.0	900.0	86.1	86.1				
11	880.0	0.0	0.0	990.0	80.6	80.6				
12	960.0	0.0	0.0	1080.0	85.0	85.0				
13	1040.0	0.0	0.0	1170.0	81.1	81.7				
14	1120.0	0.0	0.0	1260.0	76.5	77.1				
15	1200.0	0.0	0.0	1350.0	77.9	78.5				
16	1280.0	0.0	0.0	1440.0	75.8	76.8				
17	1360.0	0.0	0.0	1530.0	72.7	73.7				
18	1440.0	0.0	0.0	1620.0	63.9	64.9				
19	1520.0	0.0	0.0	1710.0	74.0	75.0				
20	1600.0	0.0	0.0	1800.0	63.1	64.3				
21	1680.0	0.0	0.0	1890.0	65.1	66.3				
22	1760.0	0.0	0.0	1980.0	67.4	68.6				
23	1840.0	0.0	0.0	2070.0	57.3	58.5				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		86.5	66.6			104.2	98.3			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	103.8	81.3	90.0	115.5	96.4				
2	160.0	0.0	0.0	180.0	0.0	0.0				
3	240.0	0.0	0.0	270.0	0.0	0.0				
4	320.0	0.0	0.0	360.0	0.0	0.0				
5	400.0	0.0	0.0	450.0	0.0	0.0				
6	480.0	0.0	0.0	540.0	0.0	0.0				
7	560.0	0.0	0.0	630.0	0.0	0.0				
8	640.0	0.0	0.0	720.0	0.0	0.0				
9	720.0	0.0	0.0	810.0	0.0	0.0				
10	800.0	0.0	0.0	900.0	0.0	0.0				
11	880.0	0.0	0.0	990.0	0.0	0.0				
12	960.0	0.0	0.0	1080.0	0.0	0.0				
13	1040.0	0.0	0.0	1170.0	0.0	0.0				
14	1120.0	0.0	0.0	1260.0	0.0	0.0				
15	1200.0	0.0	0.0	1350.0	0.0	0.0				
16	1280.0	0.0	0.0	1440.0	0.0	0.0				
17	1360.0	0.0	0.0	1530.0	0.0	0.0				
18	1440.0	0.0	0.0	1620.0	0.0	0.0				
19	1520.0	0.0	0.0	1710.0	0.0	0.0				
20	1600.0	0.0	0.0	1800.0	0.0	0.0				
21	1680.0	0.0	0.0	1890.0	0.0	0.0				
22	1760.0	0.0	0.0	1980.0	0.0	0.0				
23	1840.0	0.0	0.0	2070.0	0.0	0.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		103.8	81.3			115.5	96.4			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
HC-1 / 39				HC-2 / 40						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	37.2	14.7	90.0	34.0	14.9				
2	160.0	0.0	0.0	180.0	0.0	0.0				
3	240.0	0.0	0.0	270.0	0.0	0.0				
4	320.0	0.0	0.0	360.0	0.0	0.0				
5	400.0	0.0	0.0	450.0	0.0	0.0				
6	480.0	0.0	0.0	540.0	0.0	0.0				
7	560.0	0.0	0.0	630.0	0.0	0.0				
8	640.0	0.0	0.0	720.0	0.0	0.0				
9	720.0	0.0	0.0	810.0	0.0	0.0				
10	800.0	0.0	0.0	900.0	0.0	0.0				
11	880.0	0.0	0.0	990.0	0.0	0.0				
12	960.0	0.0	0.0	1080.0	0.0	0.0				
13	1040.0	0.0	0.0	1170.0	0.0	0.0				
14	1120.0	0.0	0.0	1260.0	0.0	0.0				
15	1200.0	0.0	0.0	1350.0	0.0	0.0				
16	1280.0	0.0	0.0	1440.0	0.0	0.0				
17	1360.0	0.0	0.0	1530.0	0.0	0.0				
18	1440.0	0.0	0.0	1620.0	0.0	0.0				
19	1520.0	0.0	0.0	1710.0	0.0	0.0				
20	1600.0	0.0	0.0	1800.0	0.0	0.0				
21	1680.0	0.0	0.0	1890.0	0.0	0.0				
22	1760.0	0.0	0.0	1980.0	0.0	0.0				
23	1840.0	0.0	0.0	2070.0	0.0	0.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		37.2	14.7		34.0	14.9				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
IC-1 / 41				IC-2 / 42				IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	103.0	76.8	80.0	105.5	83.0	90.0	113.0	93.9		
2	140.0	97.7	81.6	160.0	109.6	96.2	180.0	116.9	106.0		
3	210.0	95.0	84.1	240.0	105.3	96.7	270.0	112.0	103.4		
4	280.0	90.3	81.7	320.0	101.9	95.3	360.0	112.5	107.7		
5	350.0	86.9	80.3	400.0	100.5	95.7	450.0	110.6	107.4		
6	420.0	79.6	74.8	480.0	96.2	93.0	540.0	108.3	105.1		
7	490.0	75.8	72.6	560.0	91.8	88.6	630.0	107.2	105.3		
8	560.0	61.2	58.0	640.0	86.1	84.2	720.0	107.8	107.0		
9	630.0	0.0	0.0	720.0	88.5	87.7	810.0	104.6	103.8		
10	700.0	0.0	0.0	800.0	82.7	81.9	900.0	104.0	104.0		
11	770.0	0.0	0.0	880.0	73.8	73.0	990.0	102.9	102.9		
12	840.0	0.0	0.0	960.0	79.7	79.7	1080.0	100.3	100.3		
13	910.0	0.0	0.0	1040.0	75.4	75.4	1170.0	95.7	96.3		
14	980.0	0.0	0.0	1120.0	71.9	71.9	1260.0	96.6	97.2		
15	1050.0	0.0	0.0	1200.0	63.3	63.9	1350.0	94.5	95.1		
16	1120.0	0.0	0.0	1280.0	63.1	63.7	1440.0	90.4	91.4		
17	1190.0	0.0	0.0	1360.0	66.2	66.8	1530.0	92.5	93.5		
18	1260.0	0.0	0.0	1440.0	49.1	50.1	1620.0	88.5	89.5		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	83.6	84.6		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	81.7	82.9		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		104.9	88.8		112.9	103.0		121.5	115.9		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	106.3	80.1	80.0	109.2	86.7	90.0	114.8	95.7	
2	140.0	104.3	88.2	160.0	110.8	97.4	180.0	115.2	104.3	
3	210.0	99.7	88.8	240.0	109.1	100.5	270.0	118.2	109.6	
4	280.0	97.4	88.8	320.0	107.5	100.9	360.0	115.4	110.6	
5	350.0	92.0	85.4	400.0	105.4	100.6	450.0	118.6	115.4	
6	420.0	89.1	84.3	480.0	105.5	102.3	540.0	119.2	116.0	
7	490.0	86.6	83.4	560.0	102.0	98.8	630.0	116.9	115.0	
8	560.0	82.4	79.2	640.0	98.6	96.7	720.0	115.6	114.8	
9	630.0	75.2	73.3	720.0	95.7	94.9	810.0	116.6	115.8	
10	700.0	70.5	68.6	800.0	97.0	96.2	900.0	116.6	116.6	
11	770.0	69.4	68.6	880.0	94.4	93.6	990.0	113.8	113.8	
12	840.0	66.5	65.7	960.0	91.2	91.2	1080.0	112.5	112.5	
13	910.0	62.7	62.7	1040.0	87.8	87.8	1170.0	112.2	112.8	
14	980.0	50.4	50.4	1120.0	86.0	86.0	1260.0	112.4	113.0	
15	1050.0	0.0	0.0	1200.0	84.2	84.8	1350.0	109.8	110.4	
16	1120.0	0.0	0.0	1280.0	81.0	81.6	1440.0	108.9	109.9	
17	1190.0	0.0	0.0	1360.0	77.8	78.4	1530.0	107.9	108.9	
18	1260.0	0.0	0.0	1440.0	74.3	75.3	1620.0	106.7	107.7	
19	1330.0	0.0	0.0	1520.0	73.1	74.1	1710.0	104.6	105.6	
20	1400.0	0.0	0.0	1600.0	70.1	71.1	1800.0	102.1	103.3	
21	1470.0	0.0	0.0	1680.0	64.3	65.3	1890.0	102.4	103.6	
22	1540.0	0.0	0.0	1760.0	61.9	62.9	1980.0	102.2	103.4	
23	1610.0	0.0	0.0	1840.0	57.4	58.6	2070.0	99.8	101.0	
24	1680.0	0.0	0.0	1920.0	57.5	58.7	2160.0	98.0	99.2	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	98.1	99.4	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	97.8	99.1	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	96.3	97.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	95.7	97.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	97.7	99.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	96.2	97.5	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	92.8	94.1	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	93.7	94.9	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	94.4	95.6	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	94.7	95.9	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	89.5	90.7	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	90.5	91.7	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	92.5	93.7	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	90.1	91.3	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	87.7	88.9	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	88.5	89.5	
OASPL		109.4	95.1	116.5		109.2	127.9		125.8	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 3 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
IC-1 / 41				IC-2 / 42				IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	107.6	81.4	80.0	112.7	90.2	90.0	116.7	97.6		
2	140.0	105.1	89.0	160.0	111.1	97.7	180.0	117.6	106.7		
3	210.0	101.2	90.3	240.0	110.8	102.2	270.0	117.6	109.0		
4	280.0	97.5	88.9	320.0	108.6	102.0	360.0	119.7	114.9		
5	350.0	94.1	87.5	400.0	109.5	104.7	450.0	119.0	115.8		
6	420.0	92.3	87.5	480.0	106.6	103.4	540.0	117.5	114.3		
7	490.0	88.0	84.8	560.0	103.7	100.5	630.0	117.7	115.8		
8	560.0	83.2	80.0	640.0	102.7	100.8	720.0	119.0	118.2		
9	630.0	81.7	79.8	720.0	101.5	100.7	810.0	117.2	116.4		
10	700.0	78.5	76.6	800.0	98.4	97.6	900.0	117.4	117.4		
11	770.0	73.9	73.1	880.0	98.0	97.2	990.0	117.4	117.4		
12	840.0	71.3	70.5	960.0	95.9	95.9	1080.0	115.9	115.9		
13	910.0	65.8	65.8	1040.0	93.6	93.6	1170.0	114.9	115.5		
14	980.0	62.0	62.0	1120.0	89.6	89.6	1260.0	116.9	117.5		
15	1050.0	0.0	0.0	1200.0	89.0	89.6	1350.0	114.1	114.7		
16	1120.0	0.0	0.0	1280.0	88.0	88.6	1440.0	113.1	114.1		
17	1190.0	0.0	0.0	1360.0	82.2	82.8	1530.0	113.3	114.3		
18	1260.0	0.0	0.0	1440.0	80.6	81.6	1620.0	112.9	113.9		
19	1330.0	0.0	0.0	1520.0	77.9	78.9	1710.0	108.6	109.6		
20	1400.0	0.0	0.0	1600.0	76.9	77.9	1800.0	106.8	108.0		
21	1470.0	0.0	0.0	1680.0	72.3	73.3	1890.0	106.6	107.8		
22	1540.0	0.0	0.0	1760.0	68.9	69.9	1980.0	104.0	105.2		
23	1610.0	0.0	0.0	1840.0	67.3	68.5	2070.0	100.7	101.9		
24	1680.0	0.0	0.0	1920.0	66.5	67.7	2160.0	103.0	104.2		
25	1750.0	0.0	0.0	2000.0	66.1	67.3	2250.0	103.9	105.2		
26	1820.0	0.0	0.0	2080.0	61.2	62.4	2340.0	102.4	103.7		
27	1890.0	0.0	0.0	2160.0	58.9	60.1	2430.0	104.3	105.6		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	105.4	106.7		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	104.7	106.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	103.3	104.6		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	103.6	104.9		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	102.3	103.5		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	100.5	101.7		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	96.8	98.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	95.2	96.4		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	98.9	100.1		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	100.4	101.6		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	99.7	100.9		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	99.5	100.7		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	101.8	102.8		
OASPL											
		110.6	96.5			118.6	111.6			129.8	128.2

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
IC-1 / 41				IC-2 / 42				IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	109.3	83.1	80.0	116.4	93.9	90.0	117.5	98.4		
2	140.0	106.1	90.0	160.0	111.9	98.5	180.0	115.9	105.0		
3	210.0	100.9	90.0	240.0	112.8	104.2	270.0	119.6	111.0		
4	280.0	99.9	91.3	320.0	111.0	104.4	360.0	118.7	113.9		
5	350.0	95.1	88.5	400.0	108.9	104.1	450.0	119.1	115.9		
6	420.0	91.7	86.9	480.0	106.8	103.6	540.0	119.4	116.2		
7	490.0	88.4	85.2	560.0	106.4	103.2	630.0	119.3	117.4		
8	560.0	86.1	82.9	640.0	105.1	103.2	720.0	118.4	117.6		
9	630.0	83.3	81.4	720.0	101.2	100.4	810.0	118.8	118.0		
10	700.0	78.6	76.7	800.0	100.6	99.8	900.0	118.5	118.5		
11	770.0	77.3	76.5	880.0	98.5	97.7	990.0	116.9	116.9		
12	840.0	72.1	71.3	960.0	96.3	96.3	1080.0	118.0	118.0		
13	910.0	66.4	66.4	1040.0	94.5	94.5	1170.0	116.5	117.1		
14	980.0	60.0	60.0	1120.0	93.8	93.8	1260.0	115.0	115.6		
15	1050.0	0.0	0.0	1200.0	89.8	90.4	1350.0	114.5	115.1		
16	1120.0	0.0	0.0	1280.0	86.0	86.6	1440.0	113.6	114.6		
17	1190.0	0.0	0.0	1360.0	86.6	87.2	1530.0	111.4	112.4		
18	1260.0	0.0	0.0	1440.0	82.7	83.7	1620.0	110.0	111.0		
19	1330.0	0.0	0.0	1520.0	78.8	79.8	1710.0	110.5	111.5		
20	1400.0	0.0	0.0	1600.0	76.7	77.7	1800.0	108.2	109.4		
21	1470.0	0.0	0.0	1680.0	75.2	76.2	1890.0	105.5	106.7		
22	1540.0	0.0	0.0	1760.0	72.9	73.9	1980.0	106.6	107.8		
23	1610.0	0.0	0.0	1840.0	68.5	69.7	2070.0	104.8	106.0		
24	1680.0	0.0	0.0	1920.0	65.7	66.9	2160.0	102.7	103.9		
25	1750.0	0.0	0.0	2000.0	64.4	65.6	2250.0	104.4	105.7		
26	1820.0	0.0	0.0	2080.0	57.5	58.7	2340.0	103.1	104.4		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	103.3	104.6		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	104.6	105.9		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	103.2	104.5		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	102.5	103.8		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	103.9	105.2		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	102.8	104.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	100.7	101.9		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	102.1	103.3		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	102.2	103.4		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	100.3	101.5		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	100.8	102.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	100.4	101.6		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	99.8	101.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	98.5	99.5		
OASPL		111.9	97.4	120.6		112.8	130.2		128.7		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	110.1	83.9	80.0	118.1	95.6	90.0	118.0	98.9	
2	140.0	106.4	90.3	160.0	113.3	99.9	180.0	115.7	104.8	
3	210.0	98.7	87.8	240.0	110.7	102.1	270.0	119.0	110.4	
4	280.0	99.1	90.5	320.0	114.0	107.4	360.0	120.0	115.2	
5	350.0	97.1	90.5	400.0	109.1	104.3	450.0	114.6	111.4	
6	420.0	89.5	84.7	480.0	103.8	100.6	540.0	118.1	114.9	
7	490.0	86.5	83.3	560.0	105.9	102.7	630.0	118.3	116.4	
8	560.0	84.3	81.1	640.0	104.2	102.3	720.0	116.1	115.3	
9	630.0	81.5	79.6	720.0	99.3	98.5	810.0	115.3	114.5	
10	700.0	77.1	75.2	800.0	97.5	96.7	900.0	116.2	116.2	
11	770.0	72.0	71.2	880.0	95.5	94.7	990.0	115.7	115.7	
12	840.0	68.4	67.6	960.0	95.6	95.6	1080.0	111.1	111.1	
13	910.0	64.7	64.7	1040.0	92.3	92.3	1170.0	114.1	114.7	
14	980.0	61.6	61.6	1120.0	88.5	88.5	1260.0	112.9	113.5	
15	1050.0	53.6	53.6	1200.0	88.1	88.7	1350.0	108.8	109.4	
16	1120.0	0.0	0.0	1280.0	86.8	87.4	1440.0	111.0	112.0	
17	1190.0	0.0	0.0	1360.0	80.5	81.1	1530.0	106.9	107.9	
18	1260.0	0.0	0.0	1440.0	79.4	80.4	1620.0	106.1	107.1	
19	1330.0	0.0	0.0	1520.0	78.3	79.3	1710.0	106.9	107.9	
20	1400.0	0.0	0.0	1600.0	72.1	73.1	1800.0	102.9	104.1	
21	1470.0	0.0	0.0	1680.0	70.4	71.4	1890.0	102.4	103.6	
22	1540.0	0.0	0.0	1760.0	69.1	70.1	1980.0	103.0	104.2	
23	1610.0	0.0	0.0	1840.0	67.0	68.2	2070.0	99.3	100.5	
24	1680.0	0.0	0.0	1920.0	61.1	62.3	2160.0	100.8	102.0	
25	1750.0	0.0	0.0	2000.0	62.3	63.5	2250.0	99.7	101.0	
26	1820.0	0.0	0.0	2080.0	58.5	59.7	2340.0	97.0	98.3	
27	1890.0	0.0	0.0	2160.0	49.9	51.1	2430.0	100.3	101.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	96.7	98.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	96.2	97.5	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	100.4	101.7	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	95.5	96.8	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	96.5	97.7	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	100.1	101.3	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	93.8	95.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	96.5	97.7	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	96.7	97.9	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	92.3	93.5	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	94.7	95.9	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	92.4	93.6	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	91.1	92.1	
OASPL		112.3	97.0	121.5 112.6			128.4 126.1			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
IC-1 / 41				IC-2 / 42			IC-3 / 43				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	84.5	58.3	80.0	92.5	70.0	90.0	92.7	73.6		
2	140.0	79.5	63.4	160.0	86.2	72.8	180.0	92.3	81.4		
3	210.0	73.1	62.2	240.0	82.1	73.5	270.0	92.7	84.1		
4	280.0	70.0	61.4	320.0	84.7	78.1	360.0	92.1	87.3		
5	350.0	67.6	61.0	400.0	80.2	75.4	450.0	82.4	79.2		
6	420.0	56.6	51.8	480.0	73.9	70.7	540.0	89.6	86.4		
7	490.0	50.9	47.7	560.0	77.5	74.3	630.0	86.7	84.8		
8	560.0	0.0	0.0	640.0	71.8	69.9	720.0	80.1	79.3		
9	630.0	0.0	0.0	720.0	62.9	62.1	810.0	86.8	86.0		
10	700.0	0.0	0.0	800.0	68.0	67.2	900.0	82.4	82.4		
11	770.0	0.0	0.0	880.0	61.3	60.5	990.0	77.9	77.9		
12	840.0	0.0	0.0	960.0	53.9	53.9	1080.0	81.4	81.4		
13	910.0	0.0	0.0	1040.0	53.7	53.7	1170.0	77.2	77.8		
14	980.0	0.0	0.0	1120.0	56.6	56.6	1260.0	74.7	75.3		
15	1050.0	0.0	0.0	1200.0	40.5	41.1	1350.0	74.7	75.3		
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	72.8	73.8		
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	70.0	71.0		
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	61.0	62.0		
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	71.8	72.8		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	62.4	63.6		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	62.3	63.5		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	64.3	65.5		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	56.8	58.0		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	57.3	58.5		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	61.9	63.2		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	58.9	60.2		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	51.5	52.8		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0		
OASPL		86.1	68.7			94.5	83.2			99.9	94.5

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	106.1	79.9	80.0	114.6	92.1	90.0	110.6	91.5	
2	140.0	0.0	0.0	160.0	0.0	0.0	180.0	0.0	0.0	
3	210.0	0.0	0.0	240.0	0.0	0.0	270.0	0.0	0.0	
4	280.0	0.0	0.0	320.0	0.0	0.0	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	0.0	0.0	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	0.0	0.0	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	0.0	0.0	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	0.0	0.0	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	0.0	0.0	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	0.0	0.0	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		106.1	79.9	114.6		92.1	110.6		91.5	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
IC-1 / 41				IC-2 / 42			IC-3 / 43			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	19.5	-6.7	80.0	36.4	13.9	90.0	42.2	23.1	
2	140.0	0.0	0.0	160.0	0.0	0.0	180.0	0.0	0.0	
3	210.0	0.0	0.0	240.0	0.0	0.0	270.0	0.0	0.0	
4	280.0	0.0	0.0	320.0	0.0	0.0	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	0.0	0.0	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	0.0	0.0	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	0.0	0.0	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	0.0	0.0	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	0.0	0.0	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	0.0	0.0	900.0	0.0	0.0	
11	770.0	0.0	0.0	880.0	0.0	0.0	990.0	0.0	0.0	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		19.5	-6.7		36.4	13.9		42.2	23.1	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 1 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
JC-1 / 193				JC-2 / 194						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	105.5	83.0	90.0	112.0	92.9				
2	160.0	103.1	89.7	180.0	109.6	98.7				
3	240.0	99.8	91.2	270.0	109.6	101.0				
4	320.0	96.7	90.1	360.0	107.1	102.3				
5	400.0	94.4	89.6	450.0	103.5	100.3				
6	480.0	91.3	88.1	540.0	105.1	101.9				
7	560.0	84.7	81.5	630.0	102.3	100.4				
8	640.0	83.3	81.4	720.0	97.3	96.5				
9	720.0	79.3	78.5	810.0	98.9	98.1				
10	800.0	80.2	79.4	900.0	97.7	97.7				
11	880.0	72.8	72.0	990.0	93.9	93.9				
12	960.0	66.9	66.9	1080.0	90.3	90.3				
13	1040.0	0.0	0.0	1170.0	88.6	89.2				
14	1120.0	0.0	0.0	1260.0	86.4	87.0				
15	1200.0	0.0	0.0	1350.0	76.9	77.5				
16	1280.0	0.0	0.0	1440.0	77.3	78.3				
17	1360.0	0.0	0.0	1530.0	69.9	70.9				
18	1440.0	0.0	0.0	1620.0	79.2	80.2				
19	1520.0	0.0	0.0	1710.0	72.8	73.8				
20	1600.0	0.0	0.0	1800.0	78.0	79.2				
21	1680.0	0.0	0.0	1890.0	66.5	67.7				
22	1760.0	0.0	0.0	1980.0	65.9	67.1				
23	1840.0	0.0	0.0	2070.0	46.8	48.0				
24	1920.0	0.0	0.0	2160.0	0.0	0.0				
25	2000.0	0.0	0.0	2250.0	0.0	0.0				
26	2080.0	0.0	0.0	2340.0	0.0	0.0				
27	2160.0	0.0	0.0	2430.0	0.0	0.0				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		108.7	97.4			116.9	109.9			

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
JC-1 / 193				JC-2 / 194						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	107.3	84.8	90.0	113.1	94.0				
2	160.0	107.0	93.6	180.0	119.8	108.9				
3	240.0	105.0	96.4	270.0	111.5	102.9				
4	320.0	103.8	97.2	360.0	114.4	109.6				
5	400.0	102.7	97.9	450.0	113.3	110.1				
6	480.0	101.4	98.2	540.0	113.5	110.3				
7	560.0	99.3	96.1	630.0	112.7	110.8				
8	640.0	96.3	94.4	720.0	109.1	108.3				
9	720.0	91.8	91.0	810.0	110.0	109.2				
10	800.0	91.0	90.2	900.0	109.7	109.7				
11	880.0	89.5	88.7	990.0	106.6	106.6				
12	960.0	85.8	85.8	1080.0	105.9	105.9				
13	1040.0	83.8	83.8	1170.0	104.6	105.2				
14	1120.0	77.4	77.4	1260.0	102.9	103.5				
15	1200.0	78.1	78.7	1350.0	102.8	103.4				
16	1280.0	75.0	75.6	1440.0	99.0	100.0				
17	1360.0	72.4	73.0	1530.0	98.0	99.0				
18	1440.0	67.5	68.5	1620.0	96.9	97.9				
19	1520.0	0.0	0.0	1710.0	94.4	95.4				
20	1600.0	0.0	0.0	1800.0	93.7	94.9				
21	1680.0	0.0	0.0	1890.0	90.0	91.2				
22	1760.0	0.0	0.0	1980.0	89.5	90.7				
23	1840.0	0.0	0.0	2070.0	87.0	88.2				
24	1920.0	0.0	0.0	2160.0	84.3	85.5				
25	2000.0	0.0	0.0	2250.0	82.1	83.4				
26	2080.0	0.0	0.0	2340.0	81.7	83.0				
27	2160.0	0.0	0.0	2430.0	80.9	82.2				
28	2240.0	0.0	0.0	2520.0	78.2	79.5				
29	2320.0	0.0	0.0	2610.0	74.8	76.1				
30	2400.0	0.0	0.0	2700.0	76.8	78.1				
31	2480.0	0.0	0.0	2790.0	76.2	77.5				
32	2560.0	0.0	0.0	2880.0	71.5	72.7				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		113.2	105.5		124.2	119.8				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DAY 12 - FOLLER NOISE TEST

TEST NO. 3 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN									
JC-1 / 193			JC-2 / 194						
NO.	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	90.0	107.2	84.7	90.0	112.9	93.8			
2	180.0	107.1	93.7	180.0	113.9	103.0			
3	270.0	106.9	98.5	270.0	113.3	104.7			
4	360.0	104.2	97.6	360.0	114.4	109.6			
5	450.0	103.6	100.8	450.0	115.9	112.7			
6	540.0	102.2	99.0	540.0	112.8	103.6			
7	630.0	98.7	95.0	630.0	113.0	111.1			
8	720.0	97.2	95.7	720.0	113.5	112.7			
9	810.0	96.1	96.1	810.0	112.5	111.5			
10	900.0	94.1	94.1	900.0	111.9	111.9			
11	990.0	92.2	92.2	990.0	111.3	111.3			
12	1080.0	90.2	90.2	1080.0	109.2	109.2			
13	1170.0	88.2	88.2	1170.0	106.9	107.5			
14	1260.0	84.3	84.3	1260.0	108.1	106.7			
15	1350.0	82.1	82.1	1350.0	105.7	106.3			
16	1440.0	82.3	82.3	1440.0	104.3	105.7			
17	1530.0	78.0	78.0	1530.0	102.7	101.7			
18	1620.0	76.3	76.3	1620.0	102.5	103.5			
19	1710.0	74.5	74.5	1710.0	101.1	100.2			
20	1800.0	72.0	72.0	1800.0	97.3	98.3			
21	1890.0	0.0	0.0	1890.0	86.3	87.7			
22	1980.0	0.0	0.0	1980.0	86.3	97.7			
23	2070.0	0.0	0.0	2070.0	90.4	95.3			
24	2160.0	0.0	0.0	2160.0	91.1	92.3			
25	2250.0	0.0	0.0	2250.0	86.9	92.7			
26	2340.0	0.0	0.0	2340.0	89.0	90.3			
27	2430.0	0.0	0.0	2430.0	87.9	87.7			
28	2520.0	0.0	0.0	2520.0	85.4	86.7			
29	2610.0	0.0	0.0	2610.0	84.6	85.9			
30	2700.0	0.0	0.0	2700.0	83.4	84.7			
31	2790.0	0.0	0.0	2790.0	83.1	83.4			
32	2880.0	0.0	0.0	2880.0	83.1	83.7			
33	2970.0	0.0	0.0	2970.0	80.7	81.9			
34	3060.0	0.0	0.0	3060.0	80.7	81.9			
35	3150.0	0.0	0.0	3150.0	79.3	80.5			
36	3240.0	0.0	0.0	3240.0	78.7	78.9			
37	3330.0	0.0	0.0	3330.0	78.7	78.9			
38	3420.0	0.0	0.0	3420.0	75.0	78.7			
39	3510.0	0.0	0.0	3510.0	75.1	74.3			
40	3600.0	0.0	0.0	3600.0	69.9	70.9			
41	3690.0	0.0	0.0	3690.0	69.9	70.9			
42	3780.0	0.0	0.0	3780.0	69.9	70.9			
43	3870.0	0.0	0.0	3870.0	69.9	70.9			
44	3960.0	0.0	0.0	3960.0	69.9	70.9			
45	4050.0	0.0	0.0	4050.0	69.9	70.9			
46	4140.0	0.0	0.0	4140.0	69.9	70.9			
47	4230.0	0.0	0.0	4230.0	69.9	70.9			
48	4320.0	0.0	0.0	4320.0	69.9	70.9			
49	4410.0	0.0	0.0	4410.0	69.9	70.9			
50	4500.0	0.0	0.0	4500.0	69.9	70.9			
51	4590.0	0.0	0.0	4590.0	69.9	70.9			
52	4680.0	0.0	0.0	4680.0	69.9	70.9			
53	4770.0	0.0	0.0	4770.0	69.9	70.9			
54	4860.0	0.0	0.0	4860.0	69.9	70.9			
55	4950.0	0.0	0.0	4950.0	69.9	70.9			
56	5040.0	0.0	0.0	5040.0	69.9	70.9			
57	5130.0	0.0	0.0	5130.0	69.9	70.9			
58	5220.0	0.0	0.0	5220.0	69.9	70.9			
59	5310.0	0.0	0.0	5310.0	69.9	70.9			
60	5400.0	0.0	0.0	5400.0	69.9	70.9			
61	5490.0	0.0	0.0	5490.0	69.9	70.9			
62	5580.0	0.0	0.0	5580.0	69.9	70.9			
63	5670.0	0.0	0.0	5670.0	69.9	70.9			
64	5760.0	0.0	0.0	5760.0	69.9	70.9			
65	5850.0	0.0	0.0	5850.0	69.9	70.9			
66	5940.0	0.0	0.0	5940.0	69.9	70.9			
67	6030.0	0.0	0.0	6030.0	69.9	70.9			
68	6120.0	0.0	0.0	6120.0	69.9	70.9			
69	6210.0	0.0	0.0	6210.0	69.9	70.9			
70	6300.0	0.0	0.0	6300.0	69.9	70.9			
71	6390.0	0.0	0.0	6390.0	69.9	70.9			
72	6480.0	0.0	0.0	6480.0	69.9	70.9			
73	6570.0	0.0	0.0	6570.0	69.9	70.9			
74	6660.0	0.0	0.0	6660.0	69.9	70.9			
75	6750.0	0.0	0.0	6750.0	69.9	70.9			
76	6840.0	0.0	0.0	6840.0	69.9	70.9			
77	6930.0	0.0	0.0	6930.0	69.9	70.9			
78	7020.0	0.0	0.0	7020.0	69.9	70.9			
79	7110.0	0.0	0.0	7110.0	69.9	70.9			
80	7200.0	0.0	0.0	7200.0	69.9	70.9			
81	7290.0	0.0	0.0	7290.0	69.9	70.9			
82	7380.0	0.0	0.0	7380.0	69.9	70.9			
83	7470.0	0.0	0.0	7470.0	69.9	70.9			
84	7560.0	0.0	0.0	7560.0	69.9	70.9			
85	7650.0	0.0	0.0	7650.0	69.9	70.9			
86	7740.0	0.0	0.0	7740.0	69.9	70.9			
87	7830.0	0.0	0.0	7830.0	69.9	70.9			
88	7920.0	0.0	0.0	7920.0	69.9	70.9			
89	8010.0	0.0	0.0	8010.0	69.9	70.9			
90	8100.0	0.0	0.0	8100.0	69.9	70.9			
91	8190.0	0.0	0.0	8190.0	69.9	70.9			
92	8280.0	0.0	0.0	8280.0	69.9	70.9			
93	8370.0	0.0	0.0	8370.0	69.9	70.9			
94	8460.0	0.0	0.0	8460.0	69.9	70.9			
95	8550.0	0.0	0.0	8550.0	69.9	70.9			
96	8640.0	0.0	0.0	8640.0	69.9	70.9			
97	8730.0	0.0	0.0	8730.0	69.9	70.9			
98	8820.0	0.0	0.0	8820.0	69.9	70.9			
99	8910.0	0.0	0.0	8910.0	69.9	70.9			
100	9000.0	0.0	0.0	9000.0	69.9	70.9			
101	9090.0	0.0	0.0	9090.0	69.9	70.9			
102	9180.0	0.0	0.0	9180.0	69.9	70.9			
103	9270.0	0.0	0.0	9270.0	69.9	70.9			
104	9360.0	0.0	0.0	9360.0	69.9	70.9			
105	9450.0	0.0	0.0	9450.0	69.9	70.9			
106	9540.0	0.0	0.0	9540.0	69.9	70.9			
107	9630.0	0.0	0.0	9630.0	69.9	70.9			
108	9720.0	0.0	0.0	9720.0	69.9	70.9			
109	9810.0	0.0	0.0	9810.0	69.9	70.9			
110	9900.0	0.0	0.0	9900.0	69.9	70.9			
111	9990.0	0.0	0.0	9990.0	69.9	70.9			
112	10080.0	0.0	0.0	10080.0	69.9	70.9			
113	10170.0	0.0	0.0	10170.0	69.9	70.9			
114	10260.0	0.0	0.0	10260.0	69.9	70.9			
115	10350.0	0.0	0.0	10350.0	69.9	70.9			
116	10440.0	0.0	0.0	10440.0	69.9	70.9			
117	10530.0	0.0	0.0	10530.0	69.9	70.9			
118	10620.0	0.0	0.0	10620.0	69.9	70.9			
119	10710.0	0.0	0.0	10710.0	69.9	70.9			
120	10800.0	0.0	0.0	10800.0	69.9	70.9			
121	10890.0	0.0	0.0	10890.0	69.9	70.9			
122	10980.0	0.0	0.0	10980.0	69.9	70.9			
123	11070.0	0.0	0.0	11070.0	69.9	70.9			
124	11160.0	0.0	0.0	11160.0	69.9	70.9			
125	11250.0	0.0	0.0	11250.0	69.9	70.9			
126	11340.0	0.0	0.0	11340.0	69.9	70.9			
127	11430.0	0.0	0.0	11430.0	69.9	70.9			
128	11520.0	0.0	0.0	11520.0	69.9	70.9			
129	11610.0	0.0	0.0	11610.0	69.9	70.9			
130	11700.0	0.0	0.0	11700.0	69.9	70.9			
131	11790.0	0.0	0.0	11790.0	69.9	70.9			
132									

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN											
JC-1 / 193				JC-2 / 194							
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	80.0	107.7	85.2	90.0	114.0	94.9					
2	160.0	106.1	92.7	180.0	114.3	103.4					
3	240.0	106.8	98.2	270.0	115.2	106.6					
4	320.0	108.5	101.9	360.0	117.3	112.5					
5	400.0	103.6	98.8	450.0	115.9	112.7					
6	480.0	102.0	98.8	540.0	113.4	110.2					
7	560.0	100.4	97.2	630.0	114.4	112.5					
8	640.0	99.5	97.6	720.0	113.5	112.7					
9	720.0	96.8	96.0	810.0	113.4	112.6					
10	800.0	95.9	95.1	900.0	112.5	112.5					
11	880.0	93.1	92.3	990.0	109.8	109.8					
12	960.0	90.6	90.6	1080.0	110.3	110.3					
13	1040.0	88.5	88.5	1170.0	110.2	110.8					
14	1120.0	87.2	87.2	1260.0	106.0	106.6					
15	1200.0	84.5	85.1	1350.0	107.2	107.8					
16	1280.0	78.2	78.8	1440.0	105.8	106.8					
17	1360.0	78.4	79.0	1530.0	103.3	104.3					
18	1440.0	76.1	77.1	1620.0	101.5	102.5					
19	1520.0	71.2	72.2	1710.0	100.6	101.6					
20	1600.0	0.0	0.0	1800.0	99.7	100.9					
21	1680.0	0.0	0.0	1890.0	97.2	98.4					
22	1760.0	0.0	0.0	1980.0	94.6	95.8					
23	1840.0	0.0	0.0	2070.0	94.6	95.8					
24	1920.0	0.0	0.0	2160.0	92.2	93.4					
25	2000.0	0.0	0.0	2250.0	89.3	90.6					
26	2080.0	0.0	0.0	2340.0	89.8	91.1					
27	2160.0	0.0	0.0	2430.0	87.6	88.9					
28	2240.0	0.0	0.0	2520.0	87.0	88.3					
29	2320.0	0.0	0.0	2610.0	86.2	87.5					
30	2400.0	0.0	0.0	2700.0	84.5	85.8					
31	2480.0	0.0	0.0	2790.0	83.7	85.0					
32	2560.0	0.0	0.0	2880.0	84.0	85.2					
33	2640.0	0.0	0.0	2970.0	82.6	83.8					
34	2720.0	0.0	0.0	3060.0	80.8	82.0					
35	2800.0	0.0	0.0	3150.0	79.8	81.0					
36	2880.0	0.0	0.0	3240.0	80.7	81.9					
37	2960.0	0.0	0.0	3330.0	78.1	79.3					
38	3040.0	0.0	0.0	3420.0	76.5	77.7					
39	3120.0	0.0	0.0	3510.0	77.9	79.1					
40	3200.0	0.0	0.0	3600.0	74.8	75.8					
OASPL		114.6	107.9		125.3	122.6					

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 5 (PITCH ANGLE: 23.6 DEG)

DATA-POINT / RUN									
JC-1 / 193			JC-2 / 194						
RN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	30.0	107.8	85.3	90.0	115.6	96.5			
2	180.0	105.9	92.5	180.0	108.5	97.6			
3	250.0	104.0	95.4	270.0	116.2	107.6			
4	320.0	107.0	100.4	360.0	119.4	114.6			
5	400.0	103.2	98.4	450.0	110.2	107.0			
6	450.0	95.4	92.2	540.0	112.8	109.6			
7	500.0	100.2	97.0	630.0	114.0	112.1			
8	650.0	98.0	96.1	720.0	111.0	110.5			
9	720.0	94.2	93.4	810.0	109.6	108.8			
10	800.0	92.5	91.7	900.0	109.2	109.2			
11	850.0	89.5	88.7	990.0	109.9	109.9			
12	900.0	88.3	88.3	1080.0	107.0	107.0			
13	1050.0	86.7	86.7	1170.0	104.3	104.9			
14	1120.0	80.9	80.9	1260.0	106.5	107.1			
15	1150.0	80.4	81.0	1350.0	103.5	104.1			
16	1180.0	79.7	80.3	1440.0	100.0	101.0			
17	1300.0	76.2	76.8	1530.0	101.7	102.7			
18	1350.0	73.1	74.1	1620.0	97.2	98.2			
19	1420.0	65.5	66.5	1710.0	95.1	96.1			
20	1450.0	0.0	0.0	1800.0	96.8	98.0			
21	1600.0	0.0	0.0	1890.0	91.3	92.5			
22	1700.0	0.0	0.0	1980.0	91.5	92.7			
23	1800.0	0.0	0.0	2070.0	90.9	92.1			
24	1900.0	0.0	0.0	2160.0	87.1	88.3			
25	2000.0	0.0	0.0	2250.0	87.0	88.3			
26	2050.0	0.0	0.0	2340.0	84.0	85.3			
27	2100.0	0.0	0.0	2430.0	81.6	82.9			
28	2200.0	0.0	0.0	2520.0	82.6	83.9			
29	2250.0	0.0	0.0	2610.0	79.2	80.5			
30	2300.0	0.0	0.0	2700.0	78.8	80.1			
31	2350.0	0.0	0.0	2790.0	80.3	81.6			
32	2400.0	0.0	0.0	2880.0	78.0	79.2			
33	2450.0	0.0	0.0	2970.0	75.4	76.6			
34	2500.0	0.0	0.0	3060.0	78.2	79.4			
35	2550.0	0.0	0.0	3150.0	76.3	77.5			
36	2600.0	0.0	0.0	3240.0	71.9	73.1			
37	2650.0	0.0	0.0	3330.0	74.4	75.6			
38	2700.0	0.0	0.0	3420.0	73.9	75.1			
39	2750.0	0.0	0.0	3510.0	70.2	71.4			
40	2800.0	0.0	0.0	3600.0	69.8	70.8			
41	2850.0	115.5	106.1	3690.0	124.0	127.0			

REMARKS: 1. DATA END

2. MICROPHONE: 1/2" DIAMETER, 100 KHZ, 10-5 PA

3. MICROPHONE: 1/2" DIAMETER, 100 KHZ, 10-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
JC-1 / 193				JC-2 / 194						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	108.7	86.2	90.0	116.6	97.5				
2	160.0	103.3	89.9	180.0	112.4	101.5				
3	240.0	101.5	92.9	270.0	113.9	105.3				
4	320.0	103.0	96.4	360.0	113.2	108.4				
5	400.0	96.1	91.3	450.0	103.6	100.4				
6	480.0	92.6	89.4	540.0	111.4	108.2				
7	560.0	96.1	92.9	630.0	108.7	106.8				
8	640.0	89.9	88.0	720.0	97.3	96.5				
9	720.0	71.5	70.7	810.0	106.6	105.8				
10	800.0	0.0	0.0	900.0	102.7	102.7				
11	880.0	0.0	0.0	990.0	91.4	91.4				
12	960.0	0.0	0.0	1080.0	100.6	100.6				
13	1040.0	0.0	0.0	1170.0	94.5	95.1				
14	1120.0	0.0	0.0	1260.0	87.6	88.2				
15	1200.0	0.0	0.0	1350.0	95.2	95.8				
16	1280.0	0.0	0.0	1440.0	87.3	88.3				
17	1360.0	0.0	0.0	1530.0	82.0	83.0				
18	1440.0	0.0	0.0	1620.0	85.0	86.0				
19	1520.0	0.0	0.0	1710.0	80.2	81.2				
20	1600.0	0.0	0.0	1800.0	81.6	82.8				
21	1680.0	0.0	0.0	1890.0	79.9	81.1				
22	1760.0	0.0	0.0	1980.0	70.6	71.8				
23	1840.0	0.0	0.0	2070.0	77.2	78.4				
24	1920.0	0.0	0.0	2160.0	71.1	72.3				
25	2000.0	0.0	0.0	2250.0	68.7	70.0				
26	2080.0	0.0	0.0	2340.0	72.5	73.8				
27	2160.0	0.0	0.0	2430.0	54.5	55.8				
28	2240.0	0.0	0.0	2520.0	0.0	0.0				
29	2320.0	0.0	0.0	2610.0	0.0	0.0				
30	2400.0	0.0	0.0	2700.0	0.0	0.0				
31	2480.0	0.0	0.0	2790.0	0.0	0.0				
32	2560.0	0.0	0.0	2880.0	0.0	0.0				
33	2640.0	0.0	0.0	2970.0	0.0	0.0				
34	2720.0	0.0	0.0	3060.0	0.0	0.0				
35	2800.0	0.0	0.0	3150.0	0.0	0.0				
36	2880.0	0.0	0.0	3240.0	0.0	0.0				
37	2960.0	0.0	0.0	3330.0	0.0	0.0				
38	3040.0	0.0	0.0	3420.0	0.0	0.0				
39	3120.0	0.0	0.0	3510.0	0.0	0.0				
40	3200.0	0.0	0.0	3600.0	0.0	0.0				
OASPL		111.5	101.0		121.5	115.2				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

Age	Sex	Height (cm)	Weight (kg)	Body mass index (kg/m ²)	Waist circumference (cm)	Waist-hip ratio	Trunk circumference (cm)	Trunk-hip ratio	Neck circumference (cm)	Neck-hip ratio	Neck-thigh ratio	Neck-calf ratio	Neck-ankle ratio
1	M	170	70	24.2	90	0.90	100	1.11	35	0.39	0.44	0.49	0.54
2	F	160	55	21.5	80	0.88	90	1.13	30	0.38	0.43	0.48	0.53
3	M	175	75	24.5	95	0.92	105	1.15	38	0.40	0.45	0.50	0.55
4	F	165	60	22.0	85	0.90	95	1.11	32	0.39	0.44	0.49	0.54
5	M	180	80	25.0	100	0.94	110	1.18	40	0.42	0.47	0.52	0.57
6	F	170	65	22.5	90	0.92	100	1.13	35	0.40	0.45	0.50	0.55
7	M	185	85	25.5	105	0.96	115	1.20	42	0.44	0.49	0.54	0.59
8	F	175	70	23.0	95	0.94	105	1.15	38	0.42	0.47	0.52	0.57
9	M	190	90	26.0	110	0.98	120	1.22	45	0.46	0.51	0.56	0.61
10	F	180	75	23.5	100	0.96	110	1.18	40	0.44	0.49	0.54	0.59

[illegible]

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 21.6 DEG)

DATA-POINT / RUN										
JC-1 / 193				JC-2 / 194						
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	80.0	108.4	85.9	90.0	112.6	93.5				
2	160.0	103.9	90.5	180.0	109.6	98.7				
3	240.0	104.5	95.9	270.0	116.9	108.3				
4	320.0	106.8	100.2	360.0	115.2	110.4				
5	400.0	102.3	97.5	450.0	112.1	108.9				
6	480.0	101.0	97.8	540.0	114.5	111.3				
7	560.0	101.6	98.4	630.0	112.8	110.9				
8	640.0	98.2	96.3	720.0	111.7	110.9				
9	720.0	94.8	94.0	810.0	112.3	111.5				
10	800.0	94.3	93.5	900.0	109.6	109.6				
11	880.0	93.7	92.9	990.0	108.8	108.8				
12	960.0	89.0	89.0	1080.0	110.4	110.4				
13	1040.0	89.9	89.9	1170.0	108.0	108.6				
14	1120.0	88.2	88.2	1260.0	104.9	105.5				
15	1200.0	80.8	81.4	1350.0	105.9	106.5				
16	1280.0	78.5	79.1	1440.0	105.4	106.4				
17	1360.0	77.8	78.4	1530.0	101.4	102.4				
18	1440.0	0.0	0.0	1620.0	101.2	102.2				
19	1520.0	0.0	0.0	1710.0	100.0	101.0				
20	1600.0	0.0	0.0	1800.0	97.6	98.8				
21	1680.0	0.0	0.0	1890.0	97.1	98.3				
22	1760.0	0.0	0.0	1980.0	95.6	96.8				
23	1840.0	0.0	0.0	2070.0	90.0	91.2				
24	1920.0	0.0	0.0	2160.0	94.5	95.7				
25	2000.0	0.0	0.0	2250.0	91.2	92.5				
26	2080.0	0.0	0.0	2340.0	86.3	87.6				
27	2160.0	0.0	0.0	2430.0	90.0	91.3				
28	2240.0	0.0	0.0	2520.0	86.5	87.8				
29	2320.0	0.0	0.0	2610.0	84.7	86.0				
30	2400.0	0.0	0.0	2700.0	86.1	87.4				
31	2480.0	0.0	0.0	2790.0	83.9	85.2				
32	2560.0	0.0	0.0	2880.0	84.5	85.7				
33	2640.0	0.0	0.0	2970.0	83.9	85.1				
34	2720.0	0.0	0.0	3060.0	81.7	82.9				
35	2800.0	0.0	0.0	3150.0	82.1	83.3				
36	2880.0	0.0	0.0	3240.0	81.5	82.7				
37	2960.0	0.0	0.0	3330.0	80.3	81.5				
38	3040.0	0.0	0.0	3420.0	74.9	76.1				
39	3120.0	0.0	0.0	3510.0	79.2	80.4				
40	3200.0	0.0	0.0	3600.0	77.4	78.4				
OASPL		113.7	106.8		124.1	121.3				

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DATA POINT / RUN							
RC-2 / 191				RC-3 / 190			
TIME	F	SPL	SPLA	F	SPL	SPLA	
100.0	108.4	83.9	96.0	111.2	92.1		
110.0	104.7	90.9	180.0	109.3	98.4		
120.0	99.8	91.3	270.0	109.5	100.9		
130.0	97.4	90.7	360.0	106.9	102.1		
140.0	95.8	90.7	450.0	103.5	100.3		
150.0	88.0	87.8	540.0	104.9	101.7		
160.0	85.5	80.4	630.0	102.2	100.3		
170.0	81.7	78.8	720.0	97.1	96.3		
180.0	80.4	79.3	810.0	99.0	98.2		
190.0	71.5	70.5	900.0	98.1	98.1		
200.0	65.0	65.1	990.0	94.1	94.1		
210.0	68.2	66.2	1080.0	91.1	91.1		
220.0	68.0	65.6	1170.0	87.5	88.1		
230.0	60.8	60.8	1260.0	86.9	87.5		
240.0	54.3	54.3	1350.0	78.1	78.7		
250.0	0.0	0.0	1440.0	78.2	79.2		
260.0	0.0	0.0	1530.0	74.7	75.7		
270.0	0.0	0.0	1620.0	78.4	79.4		
280.0	0.0	0.0	1710.0	75.4	76.4		
290.0	0.0	0.0	1800.0	76.5	77.7		
300.0	0.0	0.0	1890.0	66.4	67.6		
310.0	0.0	0.0	1980.0	66.0	67.2		
320.0	0.0	0.0	2070.0	0.0	0.0		
330.0	0.0	0.0	2160.0	0.0	0.0		
340.0	0.0	0.0	2250.0	0.0	0.0		
350.0	0.0	0.0	2340.0	0.0	0.0		
360.0	0.0	0.0	2430.0	0.0	0.0		
370.0	0.0	0.0	2520.0	0.0	0.0		
380.0	0.0	0.0	2610.0	0.0	0.0		
390.0	0.0	0.0	2700.0	0.0	0.0		
400.0	0.0	0.0	2790.0	0.0	0.0		
410.0	0.0	0.0	2880.0	0.0	0.0		
420.0	0.0	0.0	2970.0	0.0	0.0		
430.0	0.0	0.0	3060.0	0.0	0.0		
440.0	0.0	0.0	3150.0	0.0	0.0		
450.0	0.0	0.0	3240.0	0.0	0.0		
460.0	0.0	0.0	3330.0	0.0	0.0		
470.0	0.0	0.0	3420.0	0.0	0.0		
480.0	0.0	0.0	3510.0	0.0	0.0		
490.0	0.0	0.0	3600.0	0.0	0.0		
500.0							
510.0							
520.0							
530.0							
540.0							
550.0							
560.0							
570.0							
580.0							
590.0							
600.0							
610.0							
620.0							
630.0							
640.0							
650.0							
660.0							
670.0							
680.0							
690.0							
700.0							
710.0							
720.0							
730.0							
740.0							
750.0							
760.0							
770.0							
780.0							
790.0							
800.0							
810.0							
820.0							
830.0							
840.0							
850.0							
860.0							
870.0							
880.0							
890.0							
900.0							
910.0							
920.0							
930.0							
940.0							
950.0							
960.0							
970.0							
980.0							
990.0							
1000.0							
1010.0							
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1070.0							
1080.0							
1090.0							
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1120.0							
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1160.0							
1170.0							
1180.0							
1190.0							
1200.0							
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1800.0							
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1870.0							
1880.0							
1890.0							
1900.0							
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1940.0							
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1970.0							
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2090.0							
2100.0							
2110.0							
2120.0							
2130.0							
2140.0							
2150.0							
2160.0							
2170.0							
2180.0							
2190.0							
2200.0							
2210.0							
2220.0							
2230.0							
2240.0							
2250.0							
2260.0							
2270.0							
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2490.0							
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2510.0							
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2540.0							
2550.0							
2560.0							
2570.0							
2580.0							
2590.0							
2600.0							
2610.0							
2620.0							

DNW PROPELLER NOISE TEST

MICROPHONE: MP 2 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
KC-1 / 192				KC-2 / 191				KC-3 / 190		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	102.3	76.1	80.0	109.0	86.5	90.0	112.8	93.7	
2	140.0	98.8	82.7	160.0	107.9	94.5	180.0	119.5	108.6	
3	210.0	97.3	86.4	240.0	105.2	96.6	270.0	110.7	102.1	
4	280.0	93.1	84.5	320.0	102.9	96.3	360.0	113.7	108.9	
5	350.0	86.1	79.5	400.0	102.5	97.7	450.0	113.4	110.2	
6	420.0	84.2	79.4	480.0	100.6	97.4	540.0	113.6	110.4	
7	490.0	81.9	78.7	560.0	98.4	95.2	630.0	112.3	110.4	
8	560.0	78.3	75.1	640.0	94.6	92.7	720.0	108.9	108.1	
9	630.0	71.4	69.5	720.0	90.3	89.5	810.0	110.2	109.4	
10	700.0	66.2	64.3	800.0	90.1	89.3	900.0	109.6	109.6	
11	770.0	62.6	61.8	880.0	87.4	86.6	990.0	106.4	106.4	
12	840.0	59.8	59.0	960.0	84.4	84.4	1080.0	106.0	106.0	
13	910.0	0.0	0.0	1040.0	80.4	80.4	1170.0	104.7	105.3	
14	980.0	0.0	0.0	1120.0	75.1	75.1	1260.0	103.0	103.6	
15	1050.0	0.0	0.0	1200.0	74.4	75.0	1350.0	102.8	103.4	
16	1120.0	0.0	0.0	1280.0	71.9	72.5	1440.0	99.0	100.0	
17	1190.0	0.0	0.0	1360.0	67.6	68.2	1530.0	97.6	98.6	
18	1260.0	0.0	0.0	1440.0	65.5	66.5	1620.0	96.9	97.9	
19	1330.0	0.0	0.0	1520.0	62.9	63.9	1710.0	94.5	95.5	
20	1400.0	0.0	0.0	1600.0	57.8	58.8	1800.0	93.2	94.4	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	89.6	90.8	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	89.5	90.7	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	86.5	87.7	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	83.6	84.8	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	82.8	84.1	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	80.6	81.9	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	78.7	80.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	76.7	78.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	75.8	77.1	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	75.8	77.1	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	73.4	74.7	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	70.9	72.1	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	70.4	71.6	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	69.2	70.4	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		105.2	90.9	113.7		105.0	124.0		119.7	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 4 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
KC-1 / 192			KC-2 / 191			KC-3 / 190				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.2	81.0	80.0	113.5	91.0	90.0	113.5	94.4	
2	140.0	101.5	85.4	160.0	109.7	96.3	180.0	113.8	102.9	
3	210.0	97.3	86.4	240.0	109.7	101.1	270.0	114.3	105.7	
4	280.0	96.7	88.1	320.0	107.5	100.9	360.0	117.2	112.4	
5	350.0	92.7	86.1	400.0	104.7	99.9	450.0	115.5	112.3	
6	420.0	88.2	83.4	480.0	102.3	99.1	540.0	113.1	109.9	
7	490.0	83.8	80.6	560.0	99.9	96.7	630.0	114.0	112.1	
8	560.0	81.6	78.4	640.0	99.0	97.1	720.0	113.3	112.5	
9	630.0	77.8	75.9	720.0	95.4	94.6	810.0	113.2	112.4	
10	700.0	72.1	70.2	800.0	94.9	94.1	900.0	112.2	112.2	
11	770.0	69.2	68.4	880.0	92.4	91.6	990.0	109.8	109.8	
12	840.0	67.0	66.2	960.0	90.4	90.4	1080.0	110.1	110.1	
13	910.0	59.8	59.8	1040.0	86.8	86.8	1170.0	110.1	110.7	
14	980.0	0.0	0.0	1120.0	85.8	85.8	1260.0	105.9	106.5	
15	1050.0	0.0	0.0	1200.0	82.9	83.5	1350.0	106.9	107.5	
16	1120.0	0.0	0.0	1280.0	78.1	78.7	1440.0	105.8	106.8	
17	1190.0	0.0	0.0	1360.0	76.9	77.5	1530.0	103.3	104.3	
18	1260.0	0.0	0.0	1440.0	75.2	76.2	1620.0	101.5	102.5	
19	1330.0	0.0	0.0	1520.0	71.7	72.7	1710.0	100.5	101.5	
20	1400.0	0.0	0.0	1600.0	67.8	68.8	1800.0	99.4	100.6	
21	1470.0	0.0	0.0	1680.0	66.6	67.6	1890.0	97.1	98.3	
22	1540.0	0.0	0.0	1760.0	64.6	65.6	1980.0	93.9	95.1	
23	1610.0	0.0	0.0	1840.0	62.7	63.9	2070.0	94.2	95.4	
24	1680.0	0.0	0.0	1920.0	58.0	59.2	2160.0	91.5	92.7	
25	1750.0	0.0	0.0	2000.0	55.8	57.0	2250.0	89.1	90.4	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	88.8	90.1	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	87.0	88.3	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	85.9	87.2	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	85.6	86.9	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	83.7	85.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	83.1	84.4	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	84.0	85.2	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	81.5	82.7	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	81.0	82.2	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	79.6	80.8	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	81.0	82.2	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	78.3	79.5	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	77.2	78.4	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	77.1	78.3	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	76.2	77.2	
OASPL		109.0	93.9		117.3	108.3		125.0	122.4	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

ENGINE HELLER NOISE TEST

DATE: 12/10/81 BY: J. J. J. J. J.

MEASUREMENT: MP 5 (PITCH ANGLE: 10.7 DEG)

DATA POINTS (Hz)

KC-1 / 192				KC-2 / 194				KC-3 / 192				
PN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	70.0	105.4	82.2	80.0	115.3	92.8	90.0	117.5	95.4	100.0	117.5	95.4
2	140.0	102.5	86.4	160.0	119.3	97.4	180.0	108.6	97.7	200.0	115.3	106.7
3	210.0	94.9	84.0	240.0	107.5	93.9	270.0	115.3	106.7	300.0	116.6	113.6
4	250.0	96.3	87.7	320.0	109.7	95.2	360.0	116.6	113.6	400.0	117.1	106.9
5	350.0	95.9	87.3	400.0	112.8	98.2	450.0	117.1	106.9	500.0	117.1	106.9
6	420.0	85.9	81.1	480.0	107.1	94.7	540.0	117.1	106.9	600.0	117.1	106.9
7	500.0	79.1	75.0	560.0	111.2	90.2	630.0	117.1	106.9	700.0	117.1	106.9
8	550.0	79.6	76.4	600.0	106.7	86.7	670.0	117.1	106.9	750.0	117.1	106.9
9	600.0	75.5	73.0	720.0	107.5	93.9	800.0	116.6	113.6	900.0	116.6	113.6
10	700.0	70.7	65.8	800.0	107.9	94.2	900.0	116.6	113.6	1000.0	116.6	113.6
11	770.0	65.1	64.3	850.0	89.7	88.7	950.0	109.6	109.6	109.6	109.6	109.6
12	850.0	65.0	62.2	960.0	87.9	87.9	1050.0	104.3	104.3	104.3	104.3	104.3
13	1100.0	56.2	56.2	1040.0	81.1	81.1	1150.0	104.3	104.3	104.3	104.3	104.3
14	1250.0	0.0	0.0	1120.0	81.1	81.1	1250.0	104.3	104.3	104.3	104.3	104.3
15	1350.0	0.0	0.0	1200.0	77.9	77.9	1350.0	104.3	104.3	104.3	104.3	104.3
16	1450.0	0.0	0.0	1300.0	74.0	74.0	1450.0	104.3	104.3	104.3	104.3	104.3
17	1550.0	0.0	0.0	1400.0	70.8	70.8	1550.0	93.0	93.0	93.0	93.0	93.0
18	1650.0	0.0	0.0	1500.0	66.2	66.2	1650.0	93.0	93.0	93.0	93.0	93.0
19	1750.0	0.0	0.0	1600.0	62.2	62.2	1750.0	93.0	93.0	93.0	93.0	93.0
20	1850.0	0.0	0.0	1700.0	59.2	59.2	1850.0	93.0	93.0	93.0	93.0	93.0
21	1950.0	0.0	0.0	1800.0	56.2	56.2	1950.0	93.0	93.0	93.0	93.0	93.0
22	2050.0	0.0	0.0	1900.0	53.1	53.1	2050.0	93.0	93.0	93.0	93.0	93.0
23	2150.0	0.0	0.0	2000.0	50.0	50.0	2150.0	93.0	93.0	93.0	93.0	93.0
24	2250.0	0.0	0.0	2100.0	46.9	46.9	2250.0	93.0	93.0	93.0	93.0	93.0
25	2350.0	0.0	0.0	2200.0	43.8	43.8	2350.0	93.0	93.0	93.0	93.0	93.0
26	2450.0	0.0	0.0	2300.0	40.7	40.7	2450.0	93.0	93.0	93.0	93.0	93.0
27	2550.0	0.0	0.0	2400.0	37.6	37.6	2550.0	93.0	93.0	93.0	93.0	93.0
28	2650.0	0.0	0.0	2500.0	34.6	34.6	2650.0	93.0	93.0	93.0	93.0	93.0
29	2750.0	0.0	0.0	2600.0	31.5	31.5	2750.0	93.0	93.0	93.0	93.0	93.0
30	2850.0	0.0	0.0	2700.0	28.4	28.4	2850.0	93.0	93.0	93.0	93.0	93.0
31	2950.0	0.0	0.0	2800.0	25.4	25.4	2950.0	93.0	93.0	93.0	93.0	93.0
32	3050.0	0.0	0.0	2900.0	22.3	22.3	3050.0	93.0	93.0	93.0	93.0	93.0
33	3150.0	0.0	0.0	3000.0	19.3	19.3	3150.0	93.0	93.0	93.0	93.0	93.0
34	3250.0	0.0	0.0	3100.0	16.2	16.2	3250.0	93.0	93.0	93.0	93.0	93.0
35	3350.0	0.0	0.0	3200.0	13.2	13.2	3350.0	93.0	93.0	93.0	93.0	93.0
36	3450.0	0.0	0.0	3300.0	10.2	10.2	3450.0	93.0	93.0	93.0	93.0	93.0
37	3550.0	0.0	0.0	3400.0	7.1	7.1	3550.0	93.0	93.0	93.0	93.0	93.0
38	3650.0	0.0	0.0	3500.0	4.1	4.1	3650.0	93.0	93.0	93.0	93.0	93.0
39	3750.0	0.0	0.0	3600.0	1.1	1.1	3750.0	93.0	93.0	93.0	93.0	93.0
40	3850.0	0.0	0.0	3700.0	0.0	0.0	3850.0	93.0	93.0	93.0	93.0	93.0
41	3950.0	0.0	0.0	3800.0	0.0	0.0	3950.0	93.0	93.0	93.0	93.0	93.0
42	4050.0	0.0	0.0	3900.0	0.0	0.0	4050.0	93.0	93.0	93.0	93.0	93.0
43	4150.0	0.0	0.0	4000.0	0.0	0.0	4150.0	93.0	93.0	93.0	93.0	93.0
44	4250.0	0.0	0.0	4100.0	0.0	0.0	4250.0	93.0	93.0	93.0	93.0	93.0
45	4350.0	0.0	0.0	4200.0	0.0	0.0	4350.0	93.0	93.0	93.0	93.0	93.0
46	4450.0	0.0	0.0	4300.0	0.0	0.0	4450.0	93.0	93.0	93.0	93.0	93.0
47	4550.0	0.0	0.0	4400.0	0.0	0.0	4550.0	93.0	93.0	93.0	93.0	93.0
48	4650.0	0.0	0.0	4500.0	0.0	0.0	4650.0	93.0	93.0	93.0	93.0	93.0
49	4750.0	0.0	0.0	4600.0	0.0	0.0	4750.0	93.0	93.0	93.0	93.0	93.0
50	4850.0	0.0	0.0	4700.0	0.0	0.0	4850.0	93.0	93.0	93.0	93.0	93.0
51	4950.0	0.0	0.0	4800.0	0.0	0.0	4950.0	93.0	93.0	93.0	93.0	93.0
52	5050.0	0.0	0.0	4900.0	0.0	0.0	5050.0	93.0	93.0	93.0	93.0	93.0
53	5150.0	0.0	0.0	5000.0	0.0	0.0	5150.0	93.0	93.0	93.0	93.0	93.0
54	5250.0	0.0	0.0	5100.0	0.0	0.0	5250.0	93.0	93.0	93.0	93.0	93.0
55	5350.0	0.0	0.0	5200.0	0.0	0.0	5350.0	93.0	93.0	93.0	93.0	93.0
56	5450.0	0.0	0.0	5300.0	0.0	0.0	5450.0	93.0	93.0	93.0	93.0	93.0
57	5550.0	0.0	0.0	5400.0	0.0	0.0	5550.0	93.0	93.0	93.0	93.0	93.0
58	5650.0	0.0	0.0	5500.0	0.0	0.0	5650.0	93.0	93.0	93.0	93.0	93.0
59	5750.0	0.0	0.0	5600.0	0.0	0.0	5750.0	93.0	93.0	93.0	93.0	93.0
60	5850.0	0.0	0.0	5700.0	0.0	0.0	5850.0	93.0	93.0	93.0	93.0	93.0
61	5950.0	0.0	0.0	5800.0	0.0	0.0	5950.0	93.0	93.0	93.0	93.0	93.0
62	6050.0	0.0	0.0	5900.0	0.0	0.0	6050.0	93.0	93.0	93.0	93.0	93.0
63	6150.0	0.0	0.0	6000.0	0.0	0.0	6150.0	93.0	93.0	93.0	93.0	93.0
64	6250.0	0.0	0.0	6100.0	0.0	0.0	6250.0	93.0	93.0	93.0	93.0	93.0
65	6350.0	0.0	0.0	6200.0	0.0	0.0	6350.0	93.0	93.0	93.0	93.0	93.0
66	6450.0	0.0	0.0	6300.0	0.0	0.0	6450.0	93.0	93.0	93.0	93.0	93.0
67	6550.0	0.0	0.0	6400.0	0.0	0.0	6550.0	93.0	93.0	93.0	93.0	93.0
68	6650.0	0.0	0.0	6500.0	0.0	0.0	6650.0	93.0	93.0	93.0	93.0	93.0
69	6750.0	0.0	0.0	6600.0	0.0	0.0	6750.0	93.0	93.0	93.0	93.0	93.0
70	6850.0	0.0	0.0	6700.0	0.0	0.0	6850.0	93.0	93.0	93.0	93.0	93.0
71	6950.0	0.0	0.0	6800.0	0.0	0.0	6950.0	93.0	93.0	93.0	93.0	93.0
72	7050.0	0.0	0.0	6900.0	0.0	0.0	7050.0	93.0	93.0	93.0	93.0	93.0
73	7150.0	0.0	0.0	7000.0	0.0	0.0	7150.0	93.0	93.0	93.0	93.0	93.0
74	7250.0	0.0	0.0	7100.0	0.0	0.0	7250.0	93.0	93.0	93.0	93.0	93.0
75	7350.0	0.0	0.0	7200.0	0.0	0.0	7350.0	93.0	93.0	93.0	93.0	93.0
76	7450.0	0.0	0.0	7300.0	0.0	0.0	7450.0	93.0	93.0	93.0	93.0	93.0
77	7550.0	0.0	0.0	7400.0	0.0	0.0	7550.0	93.0	93.0	93.0	93.0	93.0
78	7650.0	0.0	0.0	7500.0	0.0	0.0	7650.0	93.0	93.0	93.0	93.0	93.0
79	7750.0	0.0	0.0	7600.0	0.0	0.0	7750.0	93.0	93.0	93.0	93.0	93.0
80	7850.0	0.0	0.0	7700.0	0.0	0.0	7850.0	93.0	93.0	93.0	93.0	93.0
81	7950.0	0.0	0.0	7800.0	0.0	0.0	7950.0	93.0	93.0	93.0	93.0	93.0
82	8050.0	0.0	0.0	7900.0	0.0	0.0	8050.0	93.0	93.0	93.0	93.0	93.0
83	8150.0	0.0	0.0	8000.0	0.0	0.0	8150.0	93.0	93.0	93.0	93.0	93.0
84	8250.0	0.0	0.0	8100.0	0.0	0.0	8250.0	93.0	93.0	93.0	93.0	93.0
85	8350.0	0.0	0.0	8200.0	0.0	0.0	8350.0	93.0	93.0	93.0	93.0	93.0
86	8450.0	0.0	0.0	8300.0	0.0	0.0	8450.0	93.0	93.0	93.0	93.0	93.0
87	8550.0	0.0	0.0	8400.0	0.0	0.0	8550.0	93.0				

DNW PROPELLER NOISE TEST

MICROPHONE: MP 6 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN										
KC-1 / 192				KC-2 / 191				KC-3 / 190		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	108.6	82.4	80.0	116.2	93.7	90.0	115.0	95.9	
2	140.0	101.5	85.4	160.0	110.2	96.8	180.0	110.9	100.0	
3	210.0	93.9	83.0	240.0	107.0	98.4	270.0	112.8	104.2	
4	280.0	93.5	84.9	320.0	106.7	100.1	360.0	112.1	107.3	
5	350.0	88.3	81.7	400.0	101.2	96.4	450.0	103.1	99.9	
6	420.0	81.1	76.3	480.0	93.2	90.0	540.0	110.5	107.3	
7	490.0	75.2	72.0	560.0	97.2	94.0	630.0	107.9	106.0	
8	560.0	75.7	72.5	640.0	93.3	91.4	720.0	95.6	94.8	
9	630.0	71.1	69.2	720.0	83.5	82.7	810.0	105.9	105.1	
10	700.0	60.6	58.7	800.0	87.3	86.5	900.0	102.3	102.3	
11	770.0	0.0	0.0	880.0	81.8	81.0	990.0	90.8	90.8	
12	840.0	0.0	0.0	960.0	74.8	74.8	1080.0	100.4	100.4	
13	910.0	0.0	0.0	1040.0	67.5	67.5	1170.0	94.0	94.6	
14	980.0	0.0	0.0	1120.0	73.2	73.2	1260.0	86.4	87.0	
15	1050.0	0.0	0.0	1200.0	53.2	53.8	1350.0	94.9	95.5	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	85.8	86.8	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	82.9	83.9	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	84.4	85.4	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	80.7	81.7	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	81.0	82.2	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	78.8	80.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	70.8	72.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	76.1	77.3	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	68.6	69.8	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	67.9	69.2	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	71.5	72.8	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	61.6	62.9	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0	
OASPL		109.6	91.0	118.1		105.4	120.3		114.3	

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RPM									
KC-1 / 192				KC-2 / 191			KC-3 / 190		
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	70.0	105.0	78.8	80.0	112.7	90.2	90.0	112.2	93.1
2	140.0	94.2	78.1	160.0	105.0	91.6	180.0	0.0	0.0
3	210.0	86.8	75.9	240.0	103.3	94.7	270.0	0.0	0.0
4	280.0	76.8	68.2	320.0	90.8	84.2	360.0	0.0	0.0
5	350.0	67.3	60.7	400.0	90.1	85.3	470.0	0.0	0.0
6	420.0	0.0	0.0	480.0	78.4	73.2	540.0	0.0	0.0
7	490.0	0.0	0.0	560.0	75.0	71.1	630.0	0.0	0.0
8	560.0	0.0	0.0	640.0	70.0	68.1	720.0	0.0	0.0
9	630.0	0.0	0.0	720.0	71.8	71.3	810.0	0.0	0.0
10	700.0	0.0	0.0	800.0	69.9	68.1	900.0	0.0	0.0
11	770.0	0.0	0.0	880.0	68.9	63.7	990.0	0.0	0.0
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	0.0	0.0
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	0.0	0.0
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	0.0	0.0
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	0.0	0.0
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	0.0	0.0
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	0.0	0.0
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	0.0	0.0
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	0.0	0.0
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	0.0	0.0
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	0.0	0.0
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	0.0	0.0
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	0.0	0.0
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	0.0	0.0
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	0.0	0.0
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	0.0	0.0
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	0.0	0.0
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	0.0	0.0
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	0.0	0.0
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	0.0	0.0
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	0.0	0.0
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	0.0	0.0
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	0.0	0.0
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	0.0	0.0
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	0.0	0.0
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	0.0	0.0
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	0.0	0.0
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	0.0	0.0
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	0.0	0.0
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	0.0	0.0
OASPL		105.4	82.7	113.81		97.0	111.21		93.1

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 20.7 DEG)

DATA-POINT / RUN											
KC-1 / 192				KC-2 / 191				KC-3 / 190			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	105.2	79.0	80.0	112.5	90.0	90.0	111.1	92.0		
2	140.0	102.1	86.0	160.0	108.9	95.5	180.0	108.8	97.9		
3	210.0	93.2	82.3	240.0	106.1	97.5	270.0	116.4	107.8		
4	280.0	97.3	88.7	320.0	108.3	101.7	360.0	114.4	109.6		
5	350.0	92.8	86.2	400.0	103.5	98.7	450.0	111.8	108.6		
6	420.0	85.9	81.1	480.0	101.3	98.1	540.0	114.2	111.0		
7	490.0	81.3	78.1	560.0	101.0	97.8	630.0	112.7	110.8		
8	560.0	80.9	77.7	640.0	97.9	96.0	720.0	111.2	110.4		
9	630.0	75.2	73.3	720.0	94.8	94.0	810.0	112.1	111.3		
10	700.0	73.2	71.3	800.0	92.3	91.5	900.0	109.3	109.3		
11	770.0	65.3	64.5	880.0	91.5	90.7	990.0	108.8	108.8		
12	840.0	0.0	0.0	960.0	86.8	86.8	1080.0	110.2	110.2		
13	910.0	0.0	0.0	1040.0	85.8	85.8	1170.0	107.7	108.3		
14	980.0	0.0	0.0	1120.0	84.5	84.5	1260.0	104.9	105.5		
15	1050.0	0.0	0.0	1200.0	80.7	81.3	1350.0	105.8	106.4		
16	1120.0	0.0	0.0	1280.0	77.0	77.6	1440.0	105.1	106.1		
17	1190.0	0.0	0.0	1360.0	74.7	75.3	1530.0	101.2	102.2		
18	1260.0	0.0	0.0	1440.0	73.1	74.1	1620.0	101.0	102.0		
19	1330.0	0.0	0.0	1520.0	71.1	72.1	1710.0	99.8	100.8		
20	1400.0	0.0	0.0	1600.0	66.1	67.1	1800.0	97.1	98.3		
21	1470.0	0.0	0.0	1680.0	63.6	64.6	1890.0	96.8	98.0		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	95.3	96.5		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	89.1	90.3		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	93.6	94.8		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	90.1	91.4		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	85.2	86.5		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	88.9	90.2		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	85.5	86.8		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	83.6	84.9		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	85.0	86.3		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	81.8	83.1		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	83.4	84.6		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	82.8	84.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	81.3	82.5		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	82.0	83.2		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	80.6	81.8		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	79.7	80.9		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	73.8	75.0		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	78.6	79.8		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	76.4	77.4		
OASPL		107.8	93.2		116.3	107.4		123.6	121.0		

F - FREQUENCY HZ

SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA

SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

7. Comments on Data Interpretation

In the preceeding chapters acoustic as-measured data are presented in terms of pressure-time histories and narrow-band spectra for all microphone positions MP 1 to MP 9*.

As stated in the "Executive Report" to this Appendix all data have been analysed regardless of occasional microphone drop-outs or the occurrence of external pressure disturbances which may distort the propeller noise-signature completely.

To avoid erroneous data interpretation, the following list summarizes all those data-points (within the total test-program) which should be deleted with respect to the microphone position indicated:

Microphone Position MP 3:

Delete analyses of Data Points BC-4
 BC-5.

Microphone Position MP 6:

Subprogram	Delete analyses of Data Points
Basic Program	AN-1,2,3,4,5,7; BN-1,2,3,4,5,6,61,7 BC-1,2,3,4,5,6,61,7
Temperature Effect	HN-3; IN-1,2,3; JN-1,2,3; KN-1,2 HC-1,2; IC-1,2,3;
Attitude Effect	-
Installation Effect	FNC-7,8,9,10,11,12

* MP 8 has only been analysed for data points within the "Attitude-effect" test-program.

In addition, noise data acquired at microphone position MP 7 should be interpreted with care for such data-points which combine low propeller rotational speeds with high tunnel flow-velocities. Respective data are often disturbed due to the effects of microphone vibration. In each of these cases the respective averaged pressure-time history and the corresponding level-spectrum should be inspected carefully. If both data representations do not exhibit any periodic behaviour the respective analysis should not be interpreted.

On top of the averaged pressure-time history plot the number of averages as well as the magnitude of "disturbance-pressure-amplitudes" (which have been detected and deleted within the analysed time-interval) are indicated, the latter by ΔP . In case of completely distorted propeller noise signatures, ΔP generally assumes values of 496% (referenced to the minimum peak-to-peak pressure amplitude within the total number of propeller revolutions analysed). If even higher disturbance amplitudes occur, respective data analyses are marked by $\Delta P > ***$ and should be deleted. Lists of harmonic levels in this case often contain just one level-value for the fundamental frequency ($HN=1$) which then however has no physical meaning.

Therefore, data interpretation should not be solely based on the listing of harmonic levels. In particular, if only one harmonic level at $HN=1$ is listed, a careful inspection of the respective level-spectrum (as calculated from the averaged time-history) is necessary to ensure the physical relevance of this harmonic level.

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