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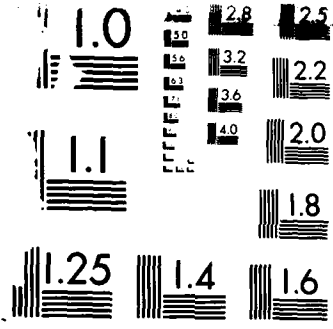
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METRIC LINE RESOLUTION TEST CHART
ANSI #2 - 1983

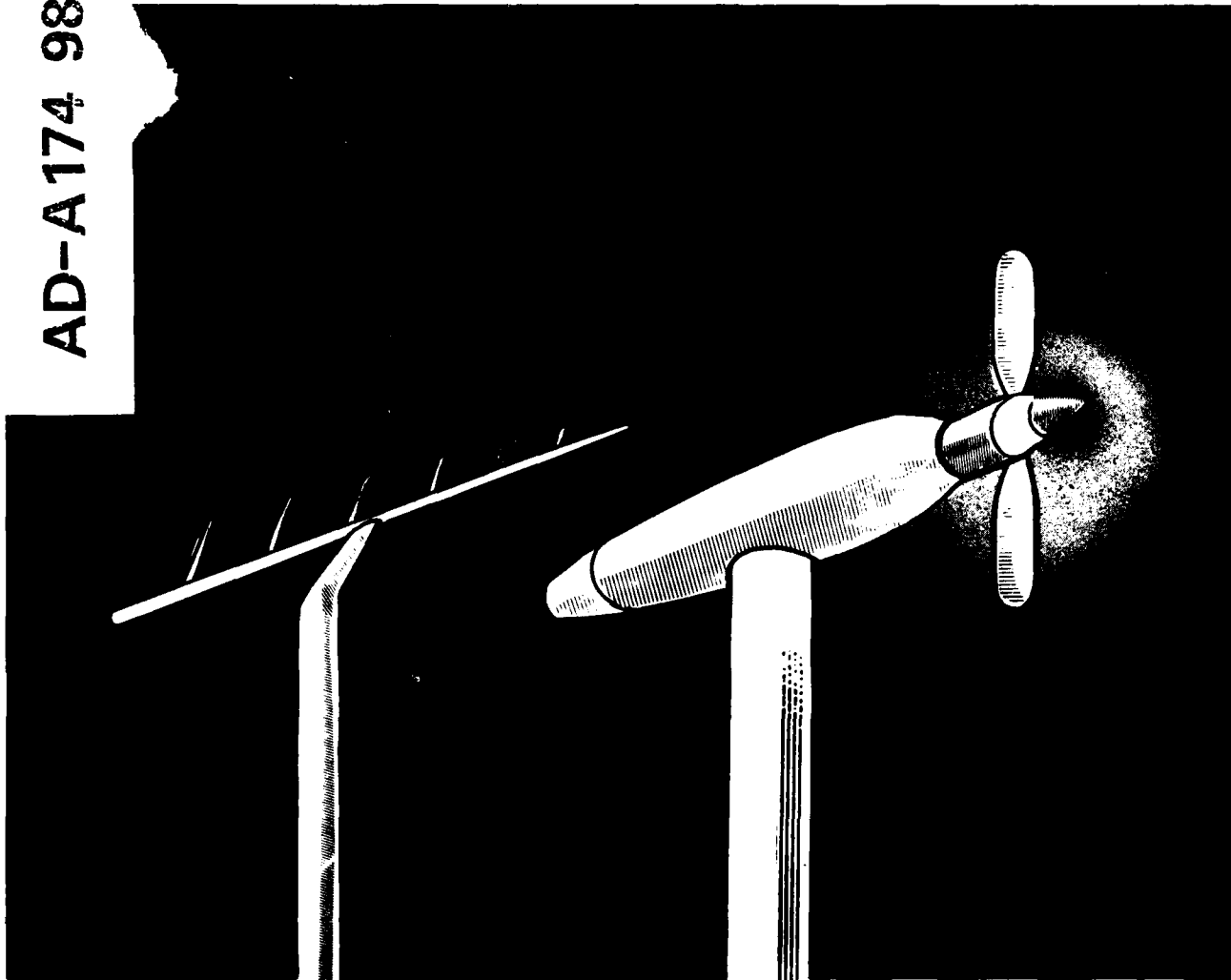
DFVLR/FAA Propeller Noise Tests in the German-Dutch Wind Tunnel DNW

(1)

Appendix IV: The Effect of Propeller Disc-plane Attitude
(Propeller : Thickness 6.4%, Round Tip-shape)

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DEC 10 1986

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DATA REPORT ON PROPELLER NOISE TESTS
IN THE GERMAN-DUTCH WIND TUNNEL

APPENDIX IV

TEST RESULTS ON THE EFFECT
OF PROPELLER DISC-PLANE ATTITUDE
(PROPELLER 1: THICKNESS 6.4%, ROUND TIP-SHAPE)

by

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1. Introduction

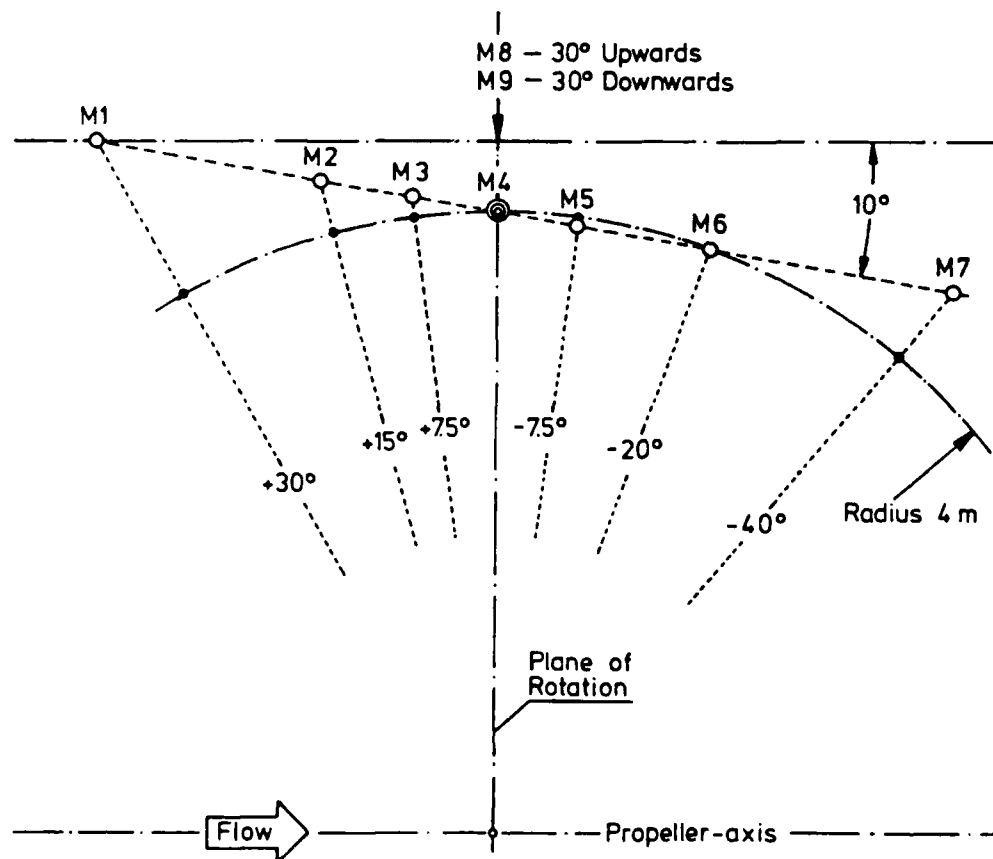
Within a joint effort (and supported by the German Ministry of Research and Technology/BMFT) between the Deutsche Forschungs- und Versuchsanstalt für Luft- und Raumfahrt (DFVLR), the US Federal Aviation Administration (FAA), and the German Ministry of Transportation (BMV), propeller noise tests were 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.

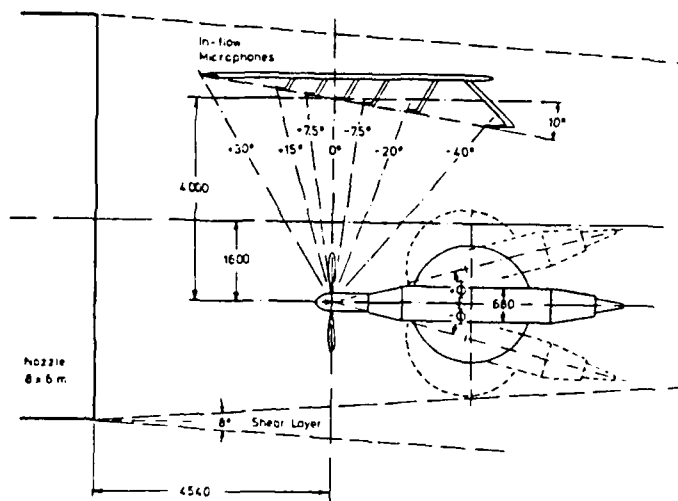
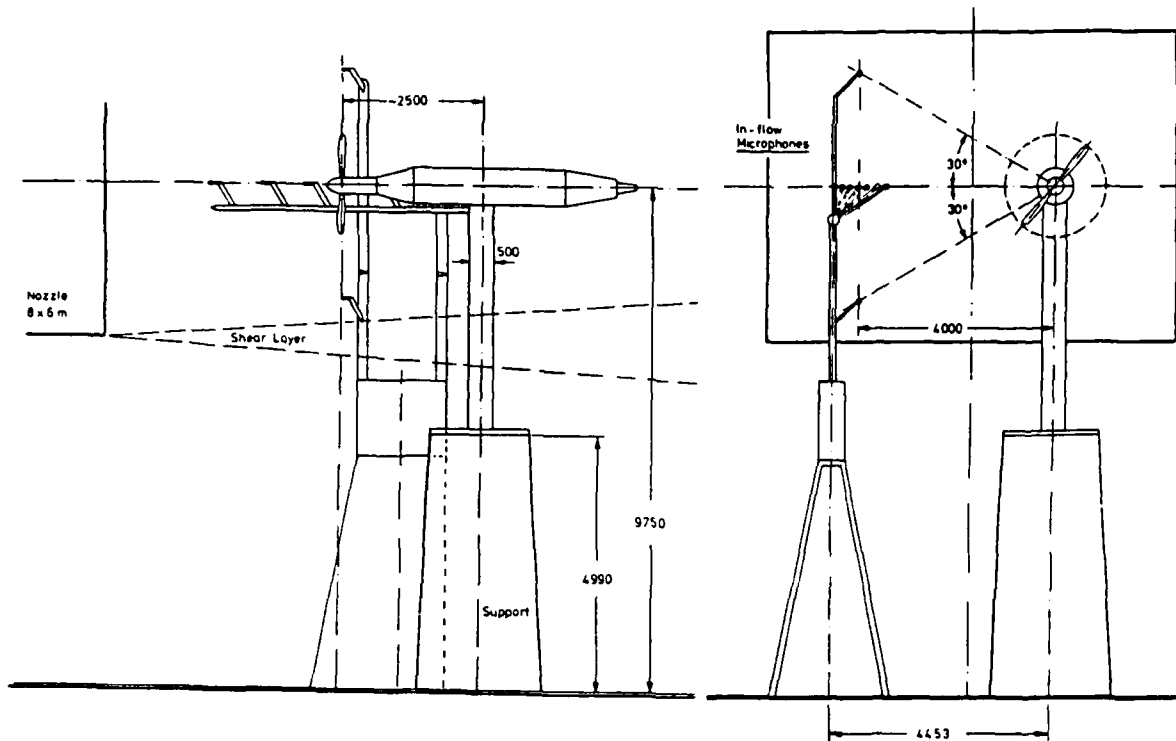
In this Appendix the test results on the effect of propeller disc/plane attitude (Propeller 1: Thickness 6.4%, round tip-shape) are documented in terms of pressure-time histories, narrow-band spectra and unweighted as well as A-weighted overall sound pressure levels, together with supplementary information 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		THRUST		ATTITUDE ANGLE		FLOW TEMP.		FLOW PRES.		FLOW DENS.		ADV. RATIO	ATTACK ANGLE	POWER COEF.	THRUST COEF.	HEL. MACHN.
		DEG	DEG		RPM	M/S	KW	NEWTON	DEG	DEG	KELVIN	PASCAL	KG/CM	DEG	DEG								
151	GN-1	19.9	2100.	51.4	97.0	1515.	-7.4	286.9	100171.	1.214	0.2300	2.847	0.0538	0.0598	0.6751								
152	GN-2	19.9	2400.	51.7	174.7	2623.	-7.4	287.5	100172.	1.211	0.2025	4.793	0.0651	0.0794	0.7664								
153	GN-3	19.9	2700.	77.0	149.9	1476.	-7.4	288.4	100171.	1.207	0.2680	0.234	0.0393	0.0354	0.8735								
148	GN-4	23.7	1800.	51.2	81.4	1270.	-7.4	287.7	100150.	1.210	0.2673	4.081	0.0719	0.0684	0.5830								
149	GN-5	23.7	2100.	51.2	157.7	2363.	-7.4	288.2	100150.	1.208	0.2292	6.710	0.0879	0.0937	0.6735								
150	GN-6	23.7	2400.	66.8	212.4	2525.	-7.4	288.2	100160.	1.208	0.2616	4.471	0.0793	0.0766	0.7755								
154	LN-1	19.9	2100.	51.6	94.8	1461.	-3.8	288.5	100160.	1.207	0.2309	2.785	0.0529	0.0580	0.6734								
155	LN-2	19.9	2400.	51.7	170.4	2569.	-3.8	288.9	100161.	1.205	0.2025	4.793	0.0638	0.0782	0.7645								
156	LN-3	19.9	2700.	76.9	145.9	1422.	-3.8	288.9	100201.	1.205	0.2677	0.257	0.0383	0.0342	0.8727								
157	LN-4	23.7	1800.	51.4	82.2	1285.	-3.8	286.3	100131.	1.216	0.2684	4.010	0.0723	0.0689	0.5845								
158	LN-5	23.7	2100.	51.4	159.0	2368.	-3.8	286.9	100090.	1.213	0.2300	6.647	0.0883	0.0935	0.6751								
159	LN-6	23.7	2400.	67.2	211.9	2486.	-3.8	287.2	100155.	1.212	0.2632	4.364	0.0788	0.0752	0.7771								
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								
101	CN-3	23.7	1800.	51.5	80.1	1255.	0.0	287.1	100082.	1.212	0.2689	3.975	0.0707	0.0675	0.5838								
100	CN-4	23.7	2100.	51.2	157.0	2359.	0.0	286.6	100069.	1.214	0.2292	6.710	0.0871	0.0930	0.6754								
98	CN-5	23.7	2400.	67.3	208.9	2525.	0.0	287.0	100125.	1.213	0.2636	4.338	0.0777	0.0763	0.7775								
166	FN-1	19.9	2100.	51.6	97.9	1481.	3.6	287.5	100133.	1.211	0.2309	2.785	0.0544	0.0586	0.6746								
167	FN-2	19.9	2400.	51.7	174.9	2584.	3.6	288.2	100101.	1.207	0.2025	4.793	0.0653	0.0785	0.7655								
168	FN-3	19.9	2700.	77.2	151.6	1432.	3.6	288.2	100152.	1.208	0.2687	0.186	0.0398	0.0343	0.8740								
169	FN-4	23.7	1800.	51.0	80.3	1260.	3.6	287.3	100058.	1.211	0.2663	4.152	0.0709	0.0678	0.5832								
170	FN-5	23.7	2100.	51.5	155.9	2339.	3.6	288.0	100060.	1.207	0.2305	6.616	0.0869	0.0927	0.6739								
171	FN-6	23.7	2400.	67.3	208.6	2481.	3.6	288.4	100063.	1.206	0.2636	4.338	0.0780	0.0754	0.7756								
163	EN-1	19.9	2100.	51.4	97.9	1540.	7.3	285.8	100132.	1.218	0.2300	2.847	0.0541	0.0605	0.6764								
164	EN-2	19.9	2400.	51.9	176.2	2638.	7.3	286.6	100132.	1.215	0.2033	4.737	0.0654	0.0796	0.7677								
165	EN-3	19.9	2700.	77.3	154.9	1530.	7.3	287.9	100162.	1.209	0.2691	0.163	0.0406	0.0366	0.8745								
160	EN-4	23.7	1800.	51.4	81.6	1299.	7.3	286.1	100102.	1.217	0.2684	4.010	0.0717	0.0696	0.5847								
161	EN-5	23.7	2100.	51.6	158.1	2398.	7.3	286.7	100101.	1.214	0.2309	6.585	0.0877	0.0946	0.6755								
162	EN-6	23.7	2400.	67.2	212.4	2569.	7.3	287.1	100146.	1.213	0.2632	4.364	0.0790	0.0777	0.7773								

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.

ATTITUDE EFFECT, ROUND-TIP PROP. (1)

DNW PROPELLER NOISE TEST

Run No.	Data Point	In-Flow Noise Level									
		M1	M2	M3	M4	M5	M6	M7	M8	M9	
151	GN-1	L -dB(A)	88.4	91.6	94.0	94.5	96.0	94.7	95.4*	99.2	96.7
		ΔASPL-dB	100.6	106.3*	106.9	108.1	110.2	108.9	104.7	113.2*	109.4
152	GN-2	L -dB(A)	93.6	99.3	102.5	104.3	106.0	104.7	98.2*	104.8	103.5
		ΔASPL-dB	106.5	110.6*	111.8	113.9	116.2	116.8	114.3*	116.3	113.6
153	GN-3	L -dB(A)	102.7	114.3*	114.3	116.1	119.0	112.8	119.1*	115.5	115.8
		ΔASPL-dB	114.1*	124.5*	120.5	121.8*	126.9*	120.0	133.6*	126.4	126.0
148	GN-4	L -dB(A)	87.8	88.4	89.0	90.7	94.0	93.0*	93.6*	98.5*	94.5
		ΔASPL-dB	99.1	104.9*	102.3	104.3	107.5	106.2	102.4	112.9*	109.8
149	GN-5	L -dB(A)	89.5	93.8	95.7	96.8	97.9	97.5	94.2	100.4*	97.5
		ΔASPL-dB	102.1	110.3*	109.7	110.8	112.4	112.1	110.2	114.2*	111.2
150	GN-6	L -dB(A)	96.4	101.6	103.5	105.1	107.5	105.6	105.9*	107.7*	105.2
		ΔASPL-dB	109.5	114.7*	113.1	114.8	117.9*	118.1	121.1	119.7*	118.9
154	LN-1	L -dB(A)	88.9	93.4	94.0	95.3	97.1	94.7	91.6*	99.8*	96.7
		ΔASPL-dB	101.9	107.3*	107.9	108.9	110.7	109.6	106.7	113.4*	110.3
155	LN-2	L -dB(A)	95.6	101.5	104.4	105.6	106.8	105.0	98.5*	105.6	104.4
		ΔASPL-dB	107.6	112.0	113.7	115.4	117.5	117.7	113.7	116.3*	114.9
156	LN-3	L -dB(A)	105.2	116.2*	116.8	117.9	119.8	112.8	120.3*	116.9	116.9
		ΔASPL-dB	115.2	125.9*	121.8	123.2*	127.5	120.9	134.0*	126.8*	126.3*
157	LN-4	L -dB(A)	87.8	88.8	89.7	90.9	93.4	92.2*	92.9*	99.8*	95.2
		ΔASPL-dB	100.8*	104.6*	104.3	105.9	108.5	107.5	107.6*	113.5*	109.7
158	LN-5	L -dB(A)	90.4	94.7	97.2	98.0	99.1	98.1	95.4*	101.6*	98.7
		ΔASPL-dB	104.5	110.2*	110.9	112.1	113.7	113.8	112.0*	115.3	112.2
159	LN-6	L -dB(A)	98.0	103.5*	105.8	107.2	109.1	107.5	107.0*	108.4	106.8
		ΔASPL-dB	110.8	116.2*	114.8	116.4	119.4	119.5	120.2*	120.3	120.0
54	BN-4	L -dB(A)	90.2	93.5	94.8	96.0	96.5	--	97.9*	101.0*	97.2
		ΔASPL-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
		ΔASPL-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	118.9
		ΔASPL-dB	120.1*	127.6*	123.3	123.9	123.5	--	138.0*	125.2*	126.6
101	CN-3	L -dB(A)	88.9	91.1*	91.6	91.2	92.6	91.5	92.2*	100.0*	94.7
		ΔASPL-dB	102.1	110.3*	105.7	107.4	109.0	107.5	105.5*	114.5*	110.6
100	CN-4	L -dB(A)	91.7	96.3	97.8	99.1	99.5	98.1	95.1	101.3*	98.9
		ΔASPL-dB	106.4	111.6*	112.0	113.6	114.9	114.6	113.0	115.9*	113.2
98	CN-5	L -dB(A)	102.1*	105.6	107.9	109.1	109.8	106.7	98.3*	109.4	108.0
		ΔASPL-dB	112.4	117.1*	116.7	119.0*	120.5	119.8	111.1*	120.9	120.3

*Higher "R" values

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

ATTITUDE EFFECT, ROUND-TIP PROP. (2)

DNW PROPELLER NOISE TEST

Run No.	Data Point	In-Flow Noise Level									
		M1	M2	M3	M4	M5	M6	M7	M8	M9	
166	FN-1	L _A -dB(A)	90.8	95.0	96.5	96.8	97.9	96.1	93.5	101.2*	97.9
		OASPL-dB	104.8	110.7*	110.5	111.8	113.2	112.8	110.2*	114.8*	111.7
167	FN-2	L _A -dB(A)	100.4	105.8	108.0	108.5	109.0	105.6	99.0*	108.2	107.5
		OASPL-dB	110.8	115.4	116.9	118.6	120.2	119.6	114.9	118.5	117.5
168	FN-3	L _A -dB(A)	112.9	122.0	122.1	121.3	121.0	113.9	120.6*	120.0	119.5
		OASPL-dB	119.1	129.2*	125.2	125.3	128.7*	122.9	133.0*	127.5	127.4
169	FN-4	L _A -dB(A)	88.3	90.4*	90.5	92.3	94.1	93.4	93.2*	99.3*	95.4
		OASPL-dB	103.5	107.0*	107.3	108.7	110.7	109.7	106.8	114.9*	110.7
170	FN-5	L _A -dB(A)	92.9	97.0	99.2*	100.5	101.0	99.3	96.5*	102.1*	100.2
		OASPL-dB	107.5	112.5	113.5	114.9	116.6	116.5	114.1	116.7*	114.3
171	FN-6	L _A -dB(A)	102.0	108.1	110.1	110.5	111.4	108.0	105.4*	110.2	109.3
		OASPL-dB	113.0	118.1	118.8	120.3	122.4	121.7	119.8*	121.2	121.2
163	EN-1	L _A -dB(A)	92.0	97.0	97.8	98.6	99.0	96.8	95.5*	101.2*	99.3
		OASPL-dB	106.5	111.6*	112.1	113.4	114.7	114.1	111.0*	115.1*	113.0
164	EN-2	L _A -dB(A)	103.1	108.2	110.0	109.9	110.0	106.1	98.7	108.9	108.4
		OASPL-dB	112.5	116.8	118.9	120.2	121.5	120.6	115.3	119.5	118.7
165	EN-3	L _A -dB(A)	117.3	125.2	124.4	122.8	122.2	114.6	119.0	121.2	121.3
		OASPL-dB	121.7	130.7*	127.2	126.6	129.5	123.9	133.5*	127.8	127.8
160	EN-4	L _A -dB(A)	88.9	91.2	91.8	93.4	94.1	93.7	92.7*	100.1*	96.0
		OASPL-dB	105.0	108.4*	109.3	110.6	112.2	111.5	108.5	115.1	111.8
161	EN-5	L _A -dB(A)	93.9	99.0	100.9	101.7	102.2	99.8	96.1*	102.6	101.2
		OASPL-dB	108.9	113.9	115.3	116.7	118.0	117.7	115.1	117.1	115.4
162	EN-6	L _A -dB(A)	105.2	110.7	112.4	112.1	112.8	109.1	104.1*	111.8	111.0
		OASPL-dB	114.9	120.0	121.0	122.1	123.9	123.1	120.9*	122.3	122.4

*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:

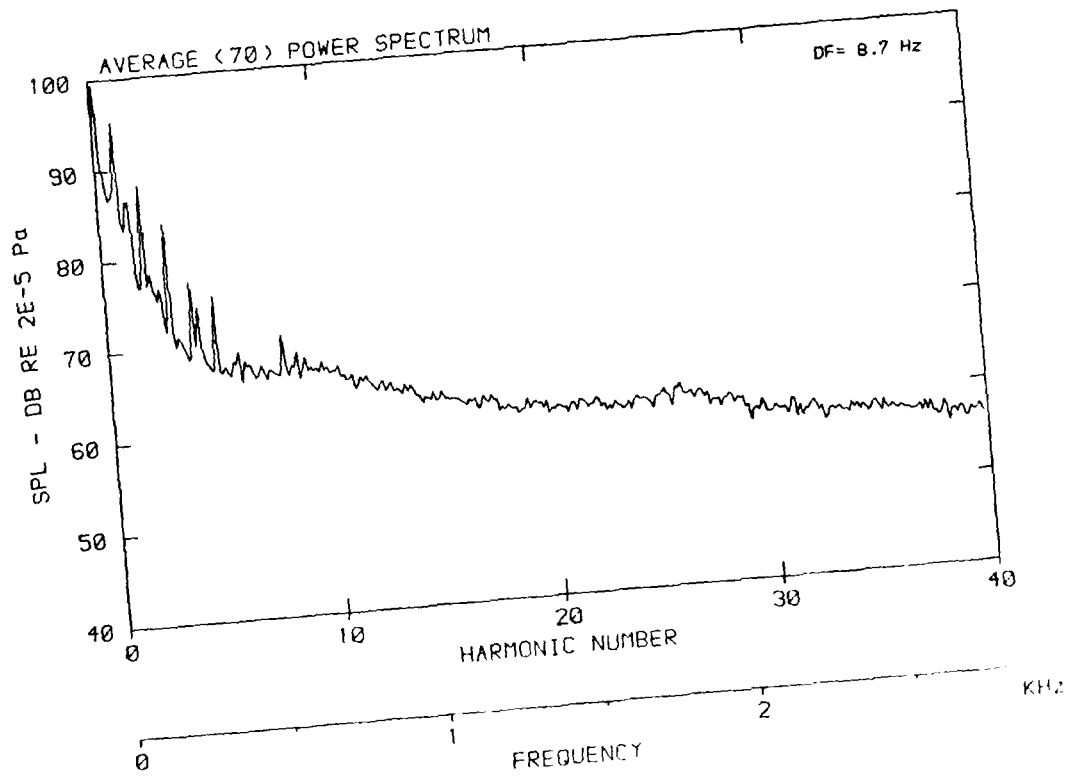
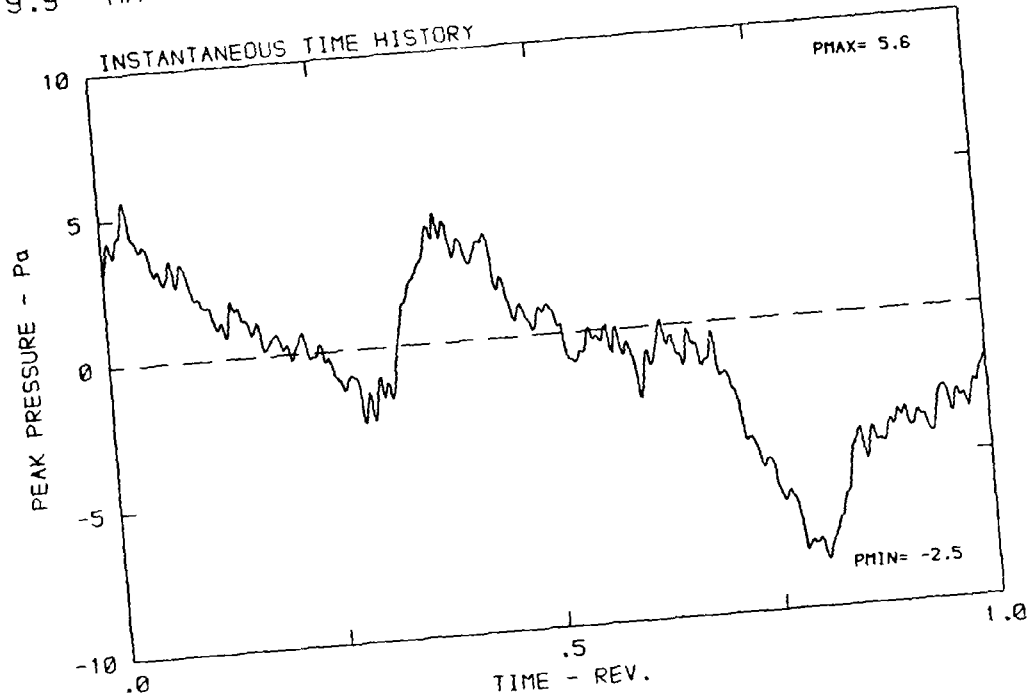
- a) A single instantaneous pressure-time history is presented and labeled "Instantaneous Time History" together with a power spectrum which had been calculated as an energy average of individual power spectra corresponding to a certain number of instantaneous pressure-time histories. This spectrum is 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".

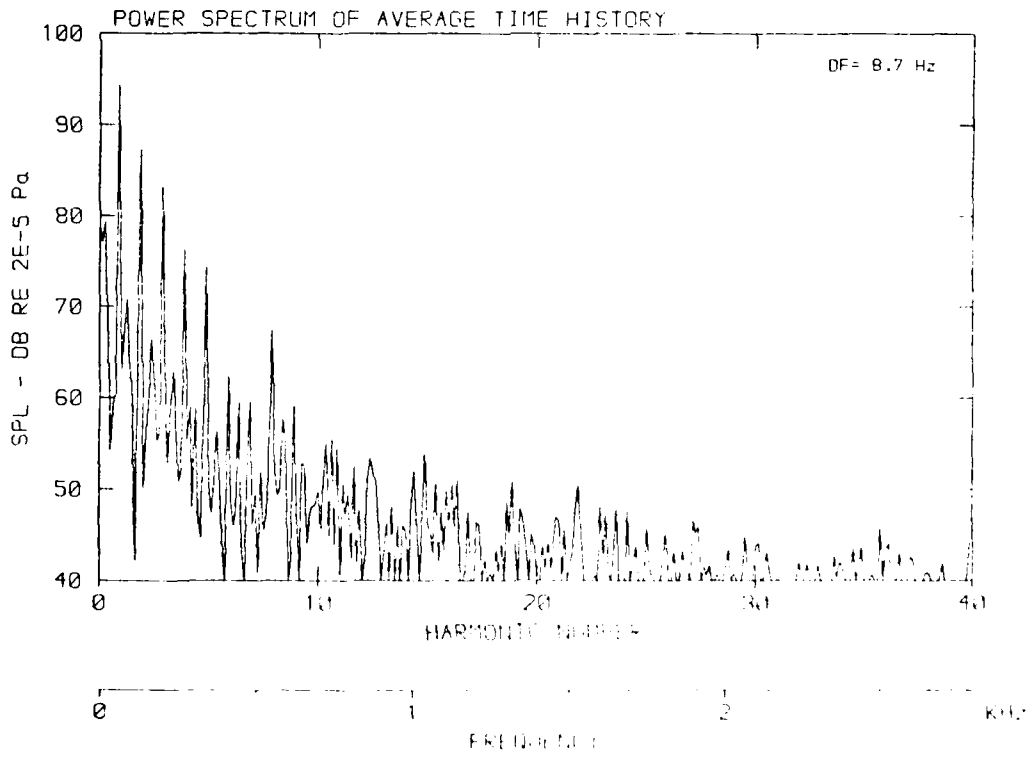
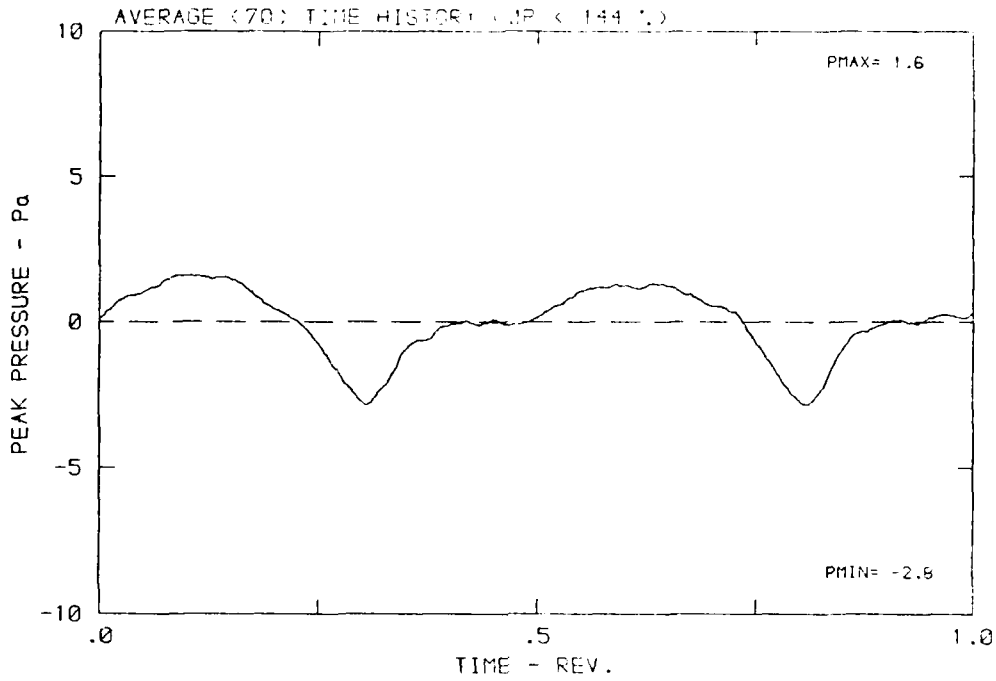
DATA POINT: GN-1 RUN: 151 MP: 1

β : 19.9° MH: .6751 n: 2100 rpm v/u : .230 ϕ : -7.4° T: 265.9 K



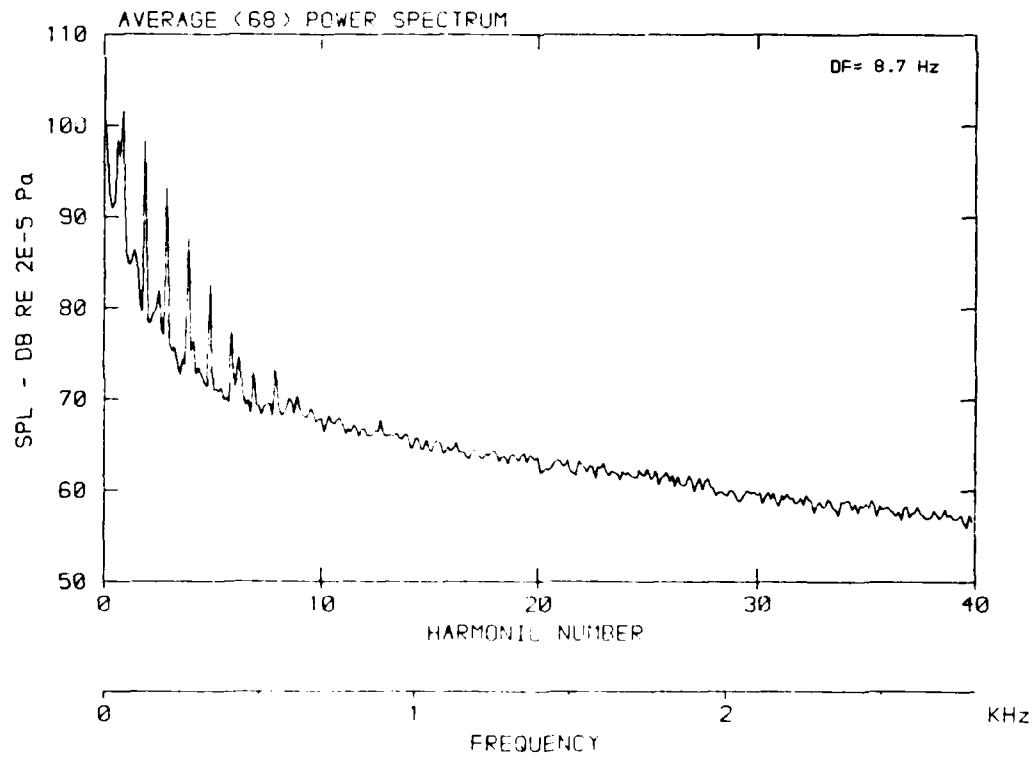
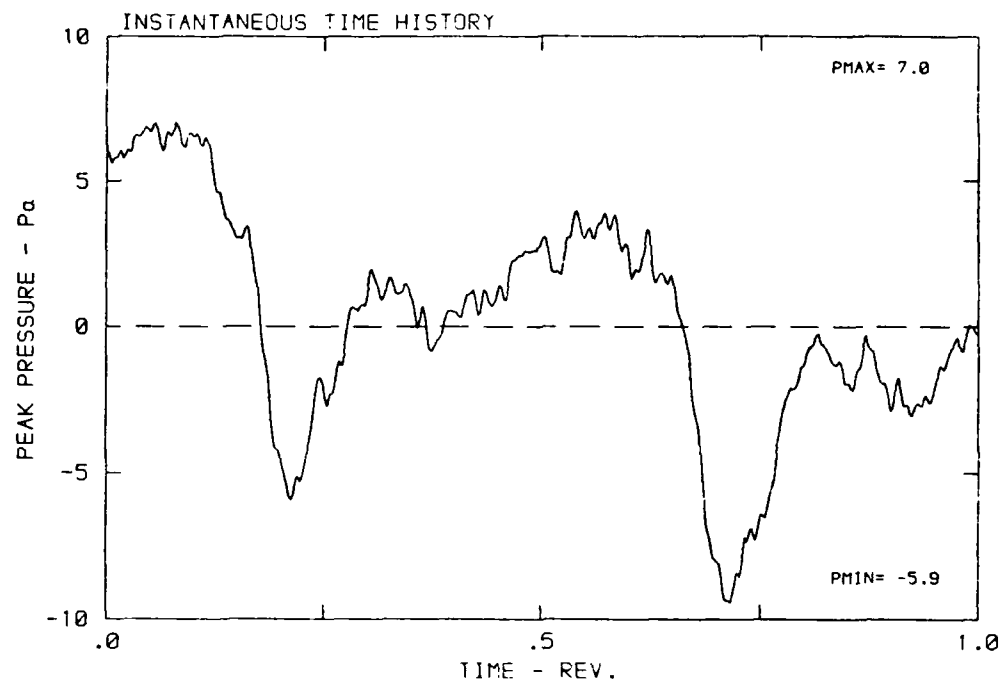
DATA POINT: ON-1 RUN: 150 TIME: 1

β : 19.9° MH: .6751 n: 2100 rpm ρ : 1.200 μ : 17.4° T: 298.9 K



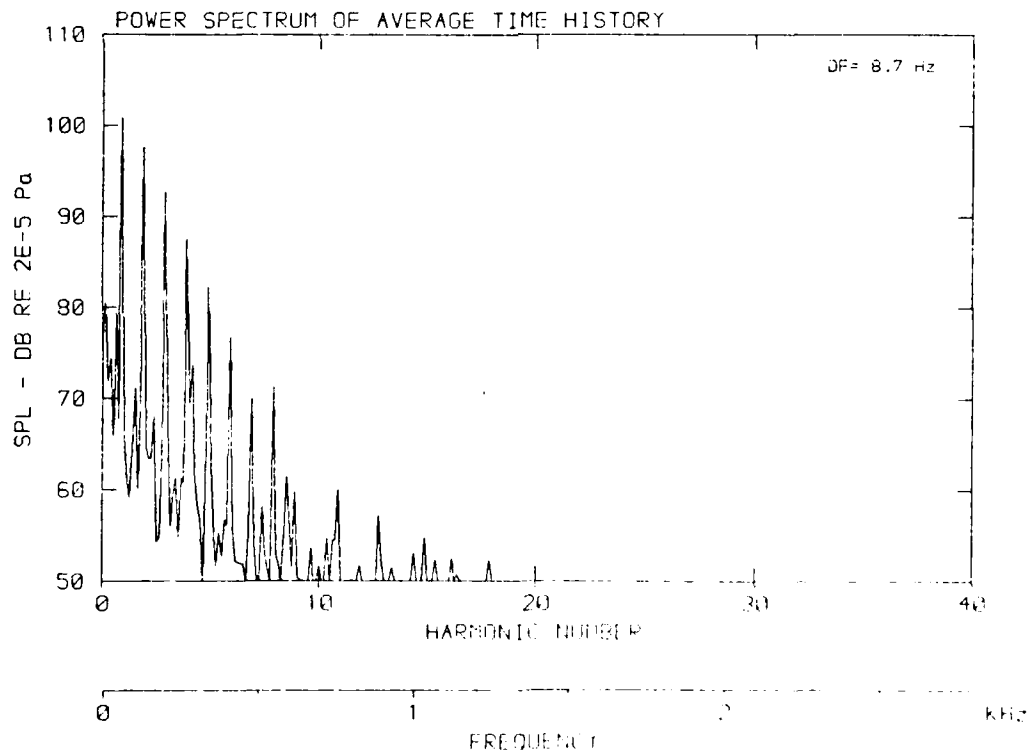
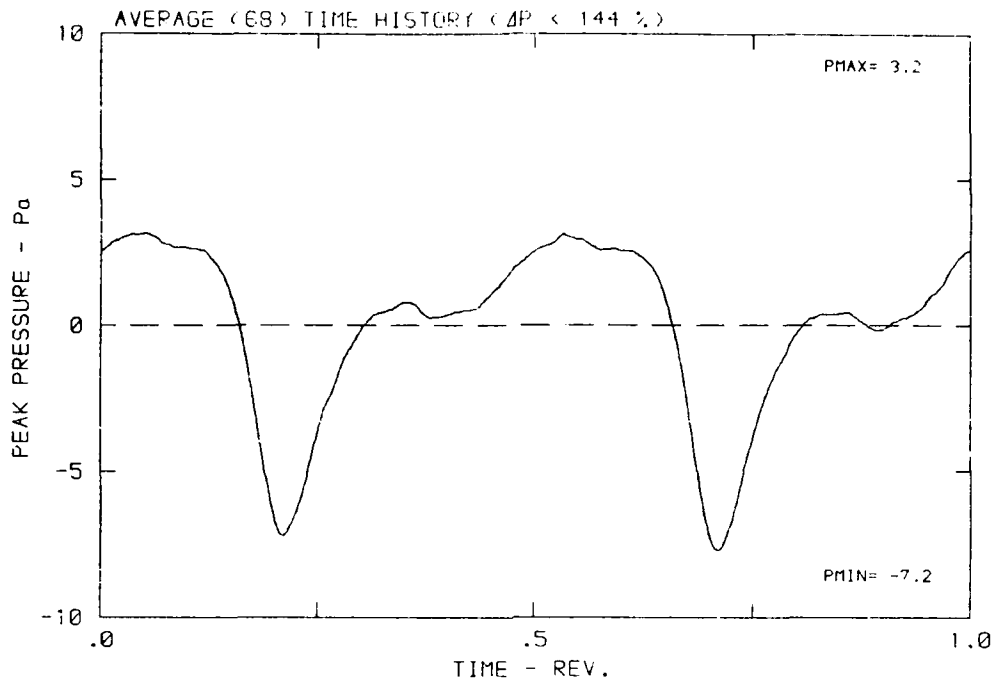
DATA POINT: GN-1 RUN: 151 MP: 2

β : 19.9° MH: .6751 n: 2100 rpm v/u: .230 ϕ : -7.4° T: 286.9 K



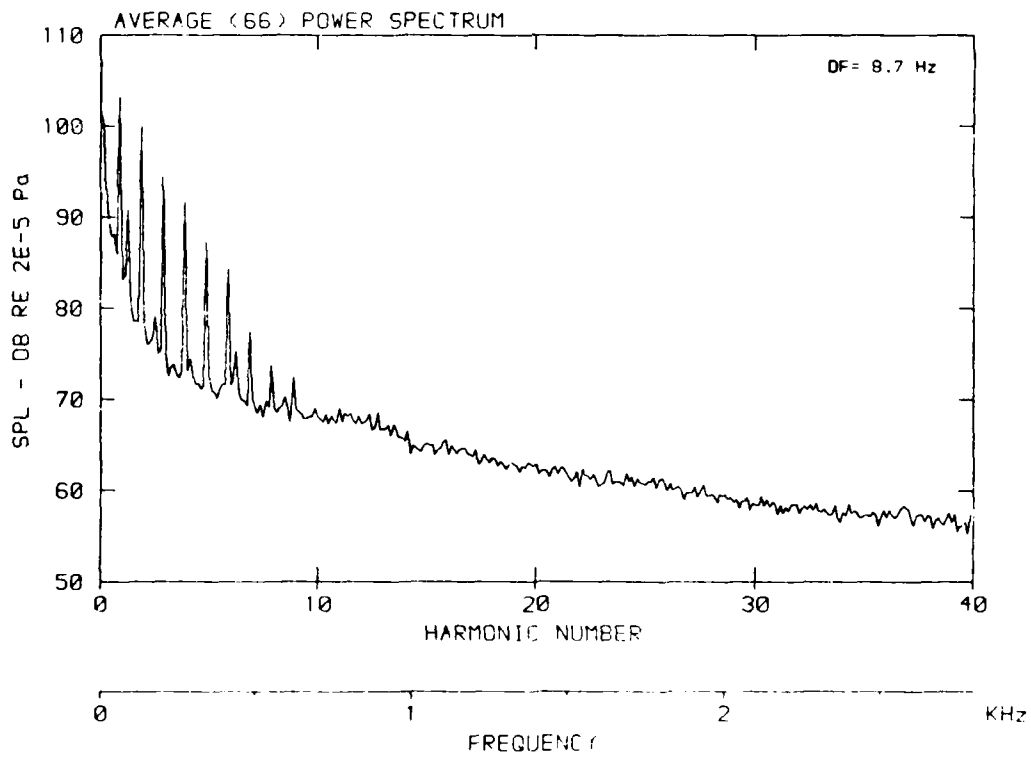
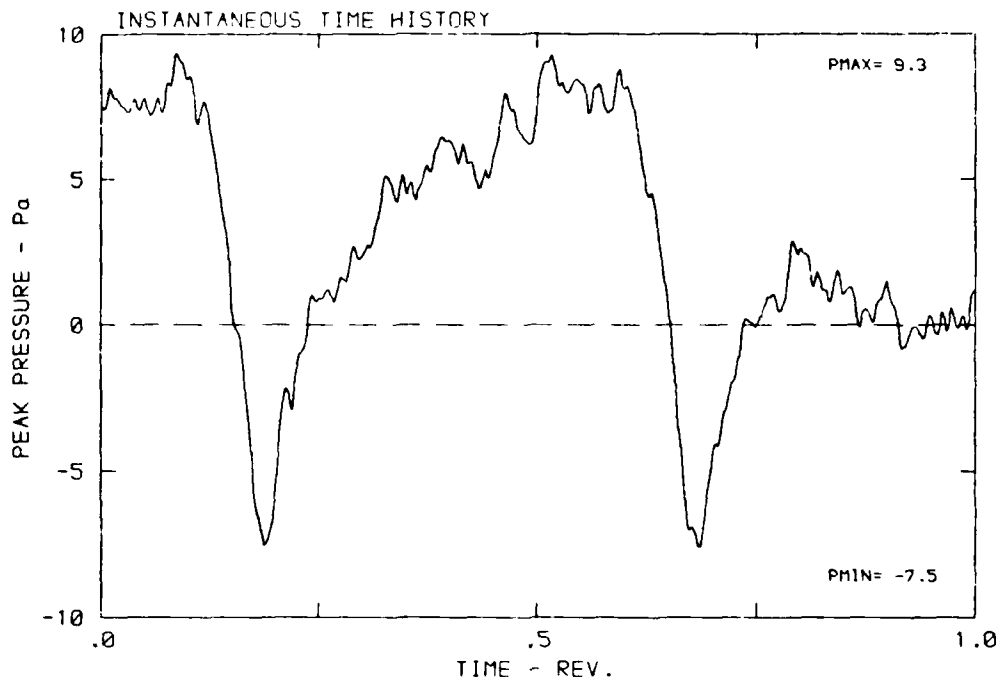
DATA POINT: GN-1 RUN: 151 MF: 2

β : 19.9° MH: .6751 n: 2100 rpm v_{cu} : .230 ϕ : -7.4° T: 288.9 K



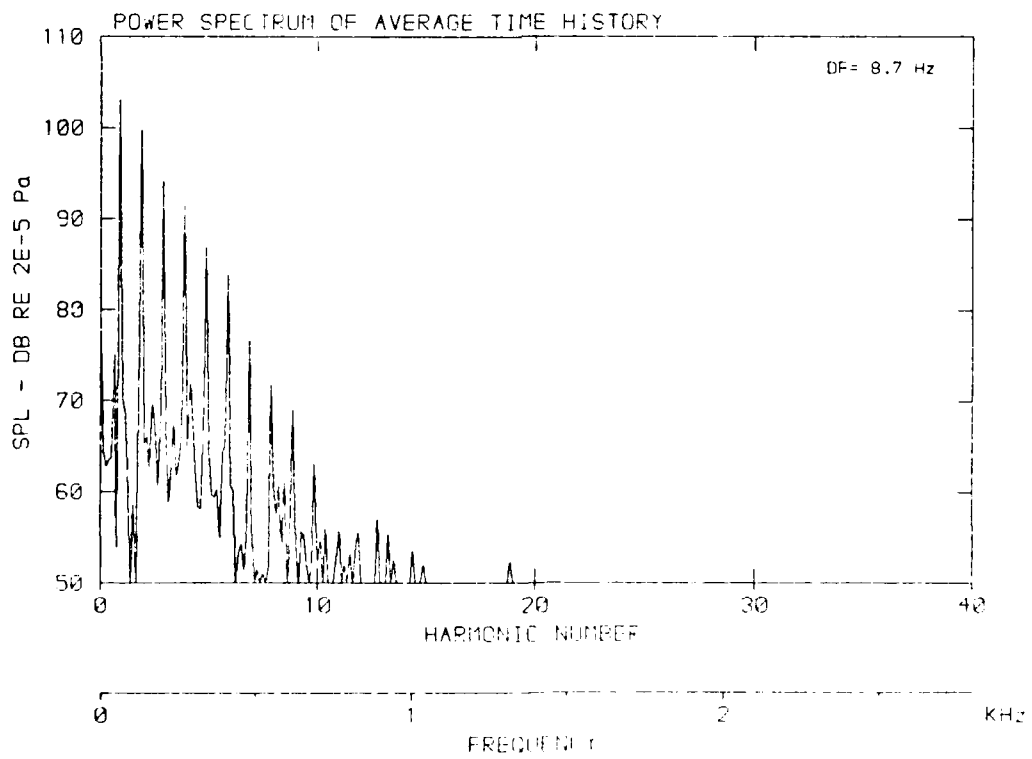
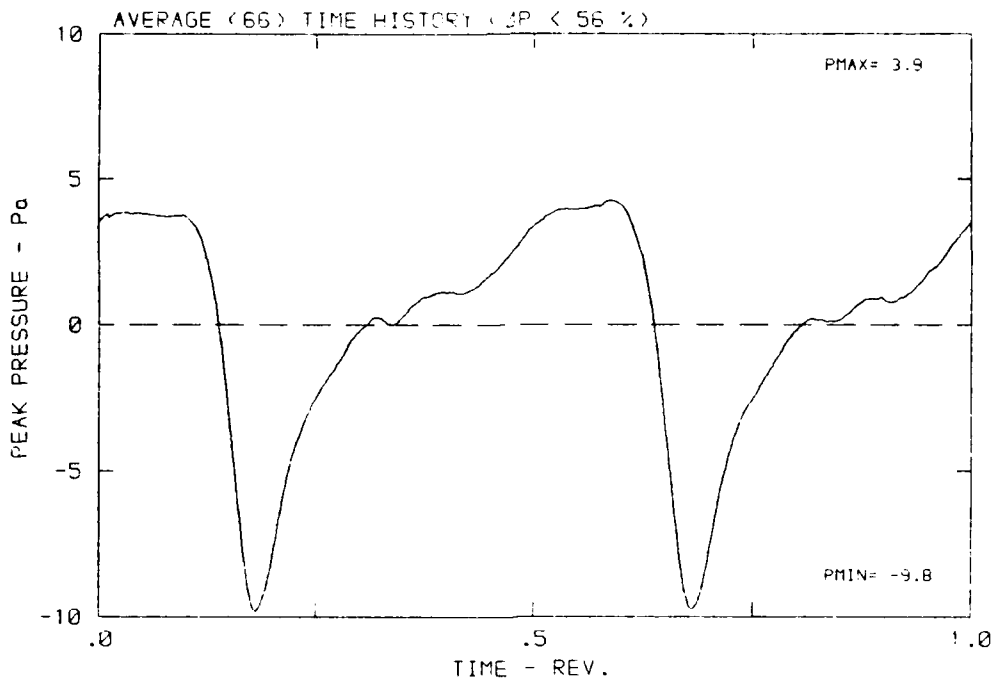
DATA POINT: 6N-1 RUN: 15: MP: 3

β : 19.9° MH: .6751 n: 2100 rpm v/u : .230 ϕ : -7.4° T: 286.9 K



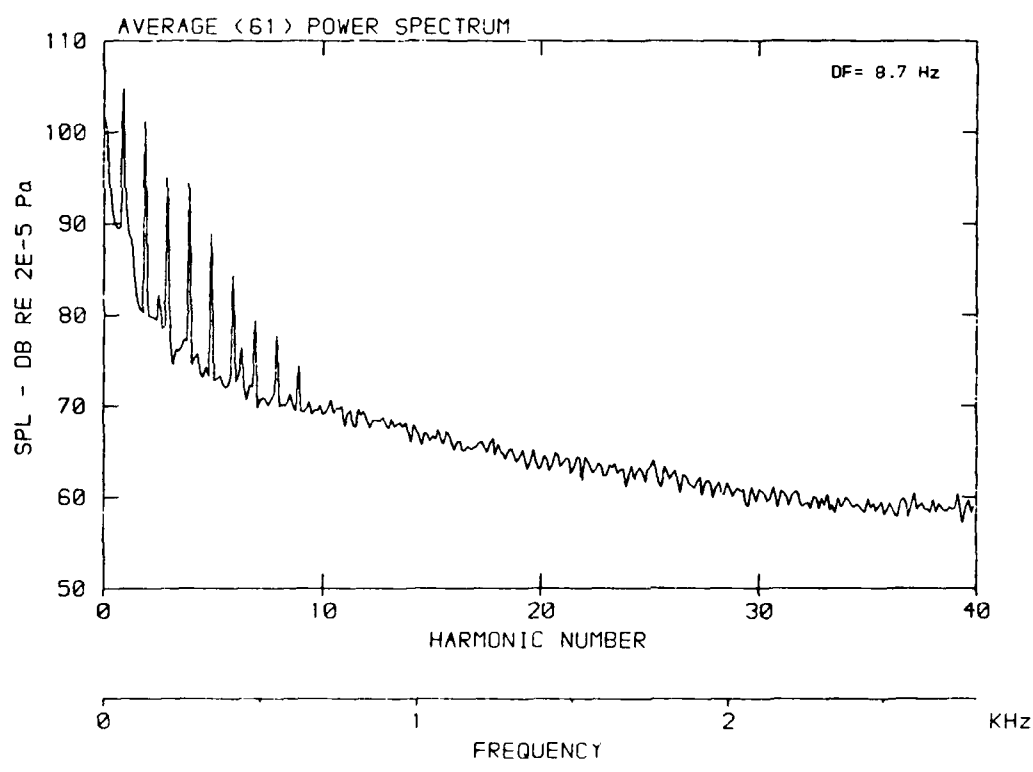
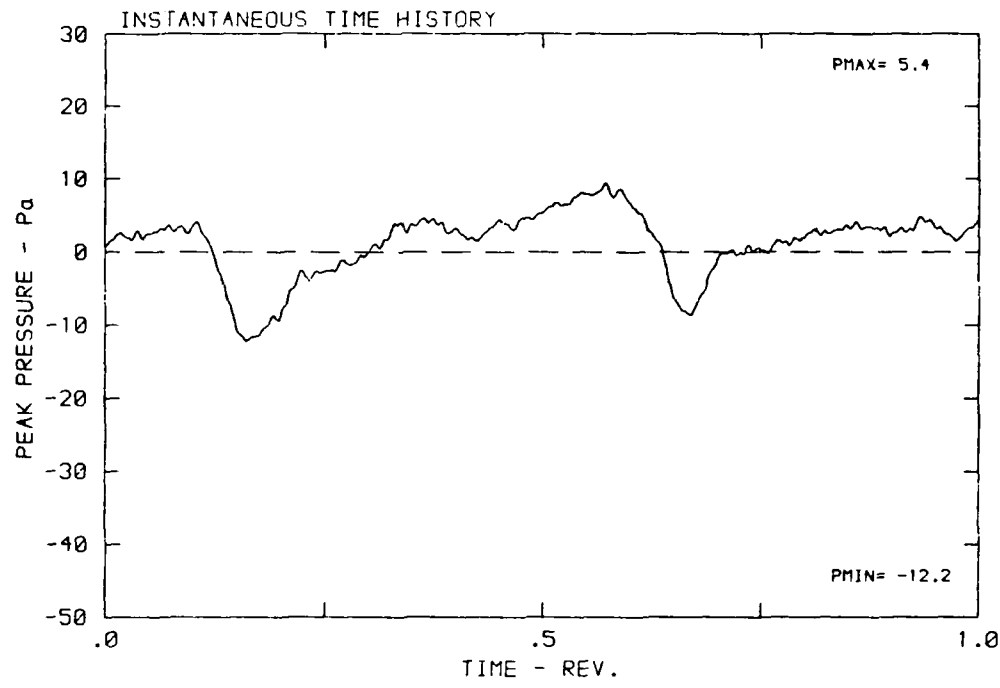
DATA POINT: GN-1 RUN: 151 MP: 3

β : 19.9° MH: .6751 n: 2100 rpm ν : .230 ϕ : -7.4° T: 286.9 K



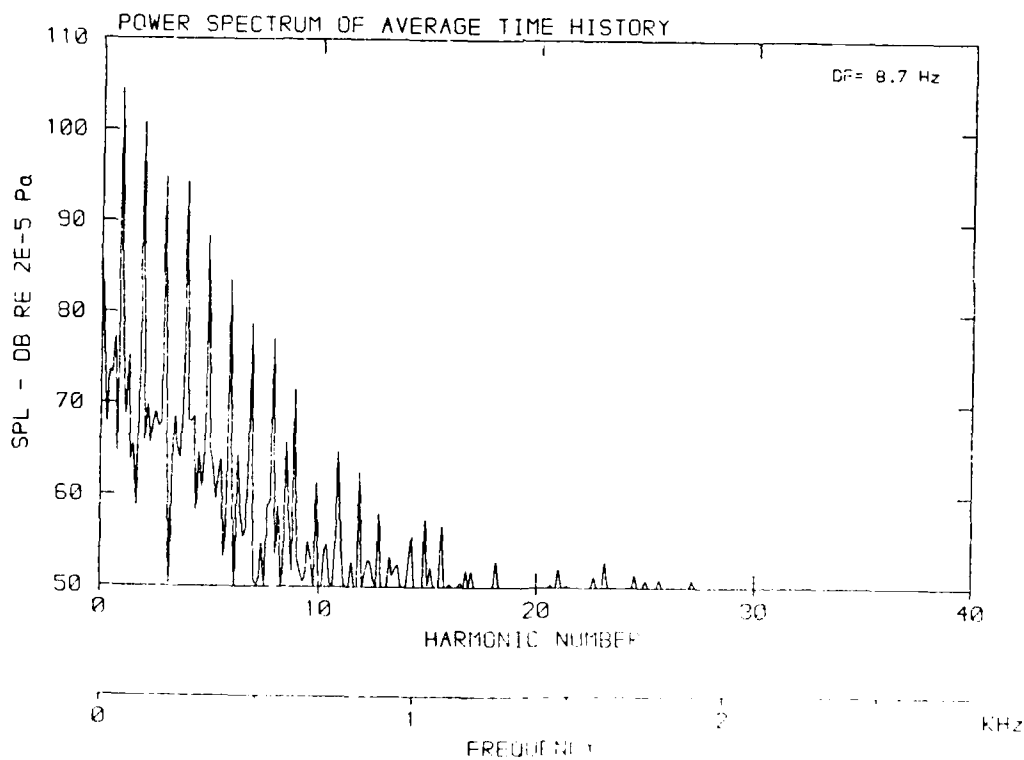
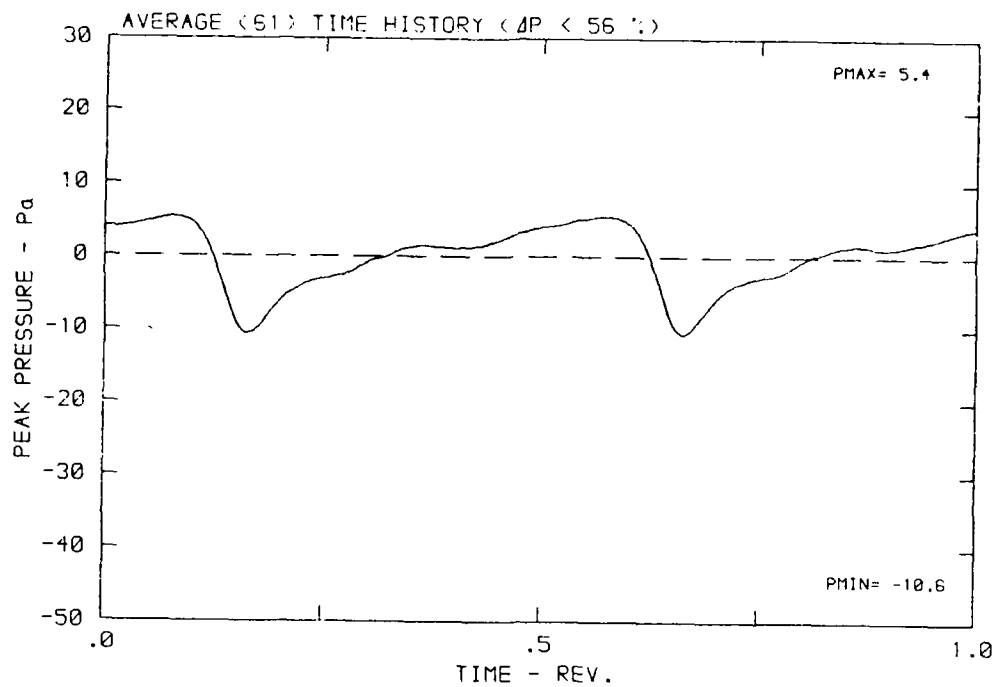
DATA POINT : GN-1 RUN : 151 MF : 4

β : 19.9° MH : .6751 n : 2100 rpm v/u : .230 ϕ : -7.4° T : 286.9 K



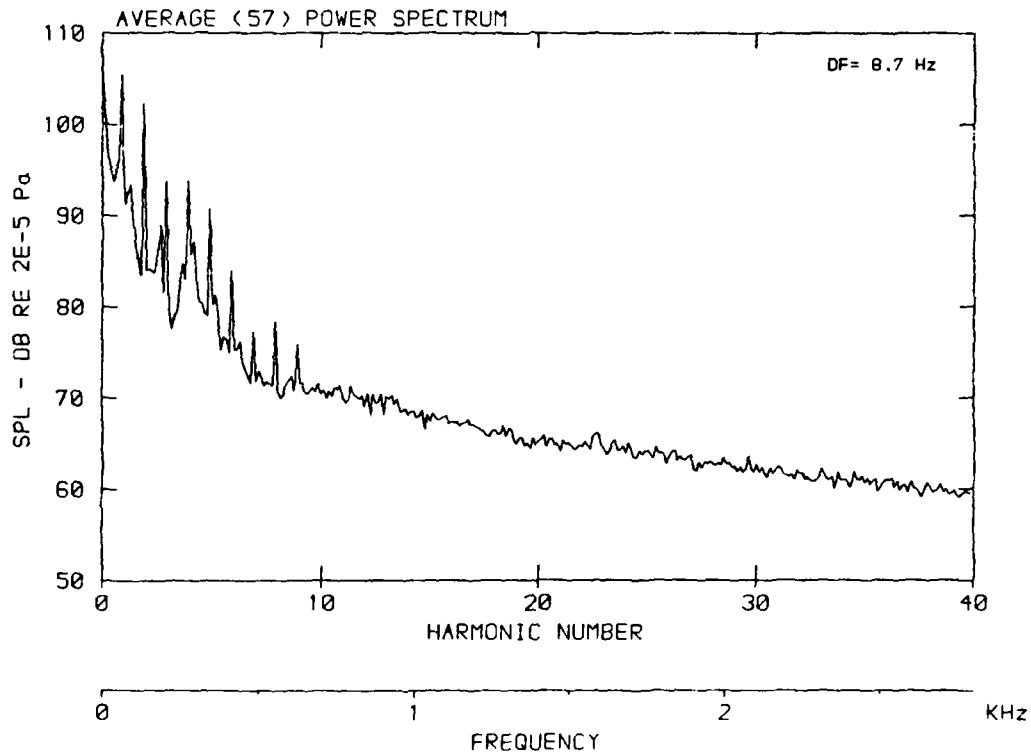
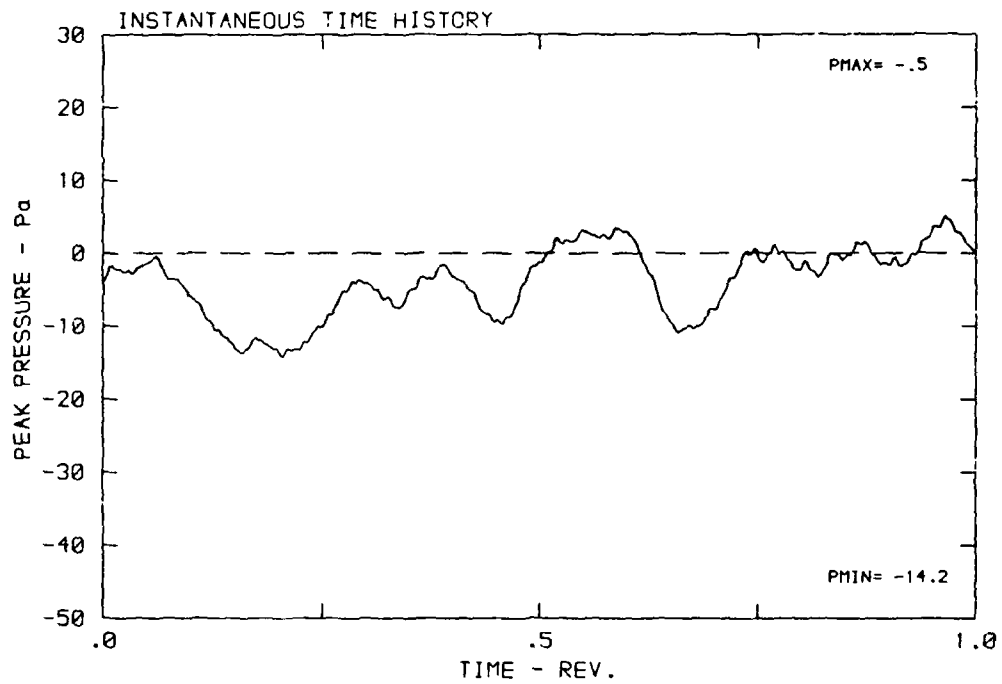
DATA POINT: GN-1 RUN: 151 MP: 4

β : 19.9° MH: .6751 n: 2100 rpm v/u: .230 ϕ : -7.4° T: 286.9 K



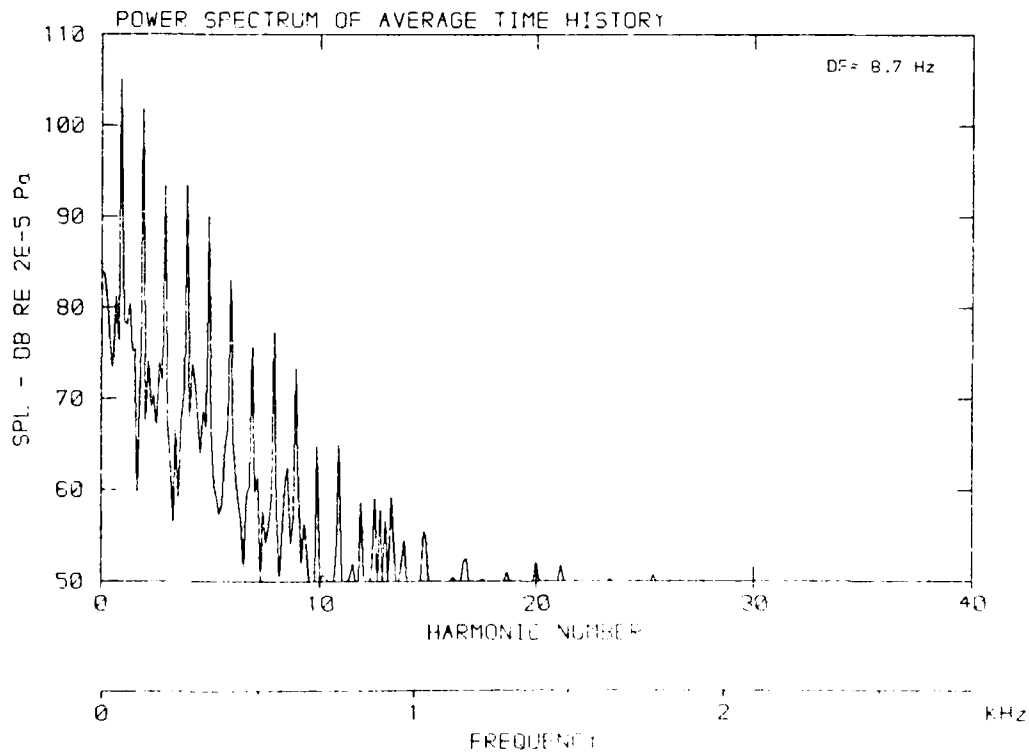
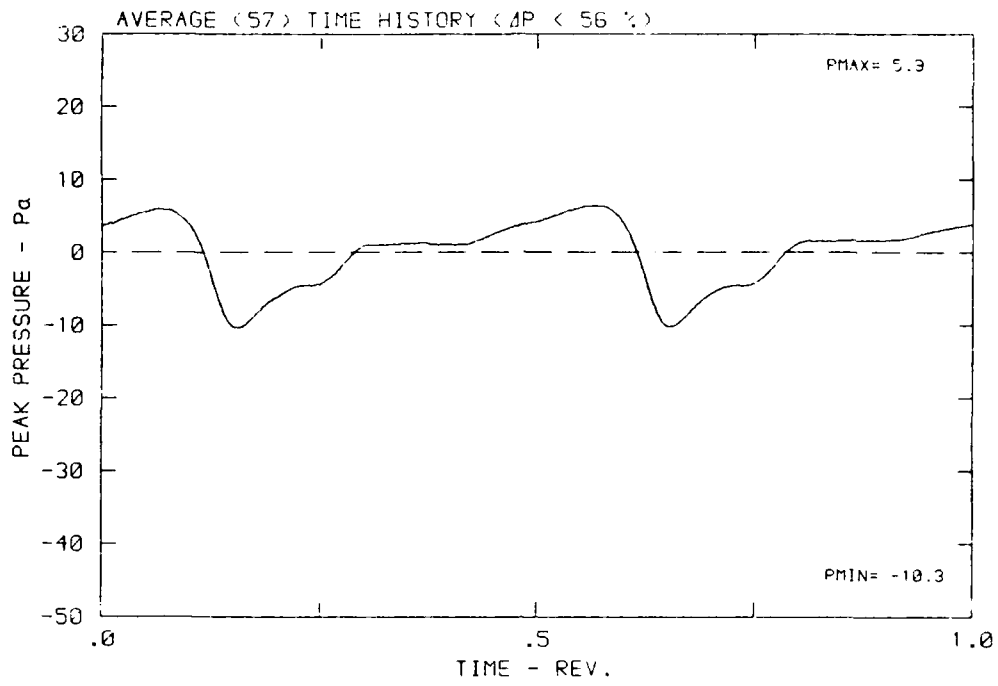
DATA POINT: GN-1 RUN: 151 MP: 5

β : 19.9° MH: .6751 n: 2100 rpm v/u: .230 ψ : -7.4° T: 286.9 K



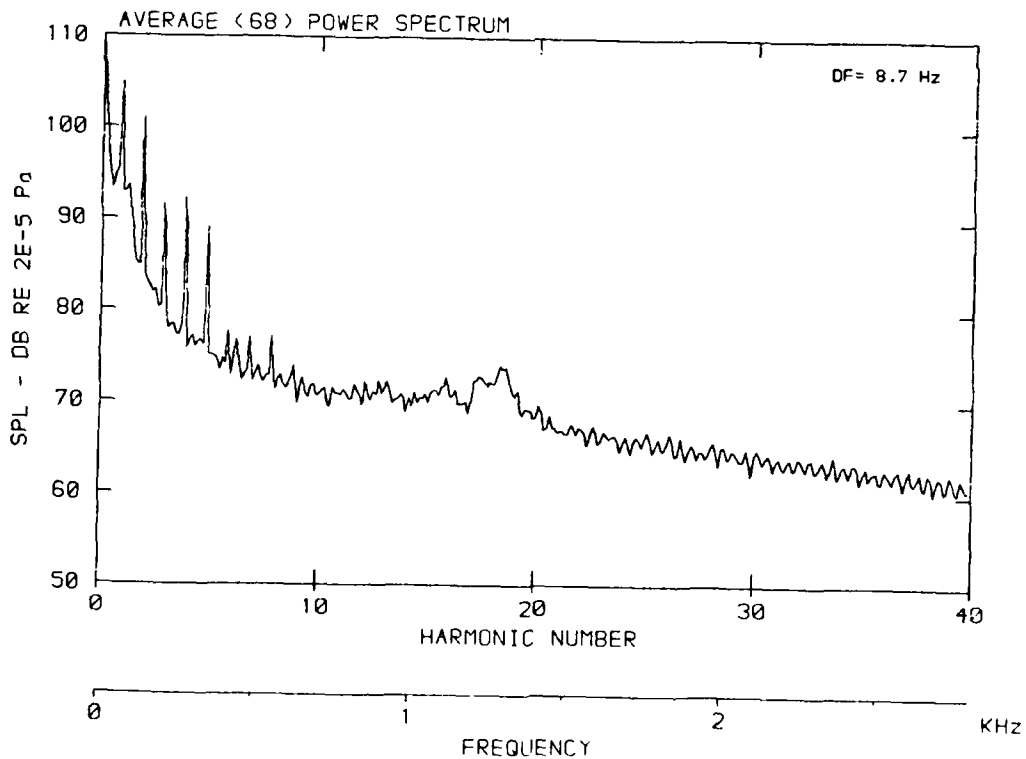
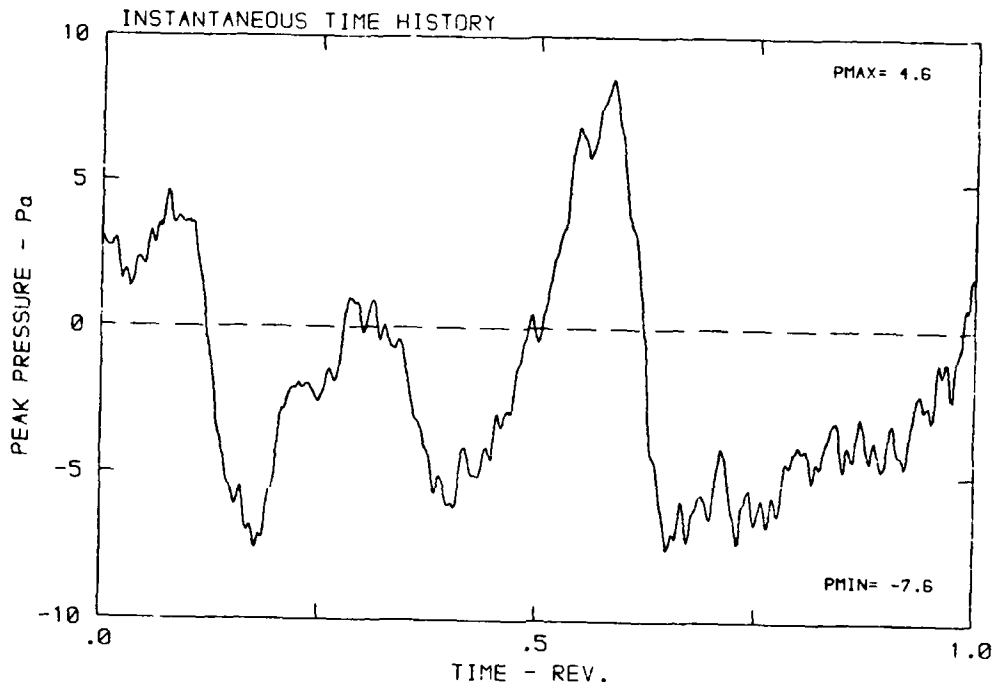
DATA POINT: GN-1 RUN: 151 MP: 5

β : 19.9° MH: .6751 n: 2100 rpm v_{tu} : .230 ϕ : -7.4° T: 286.9 K



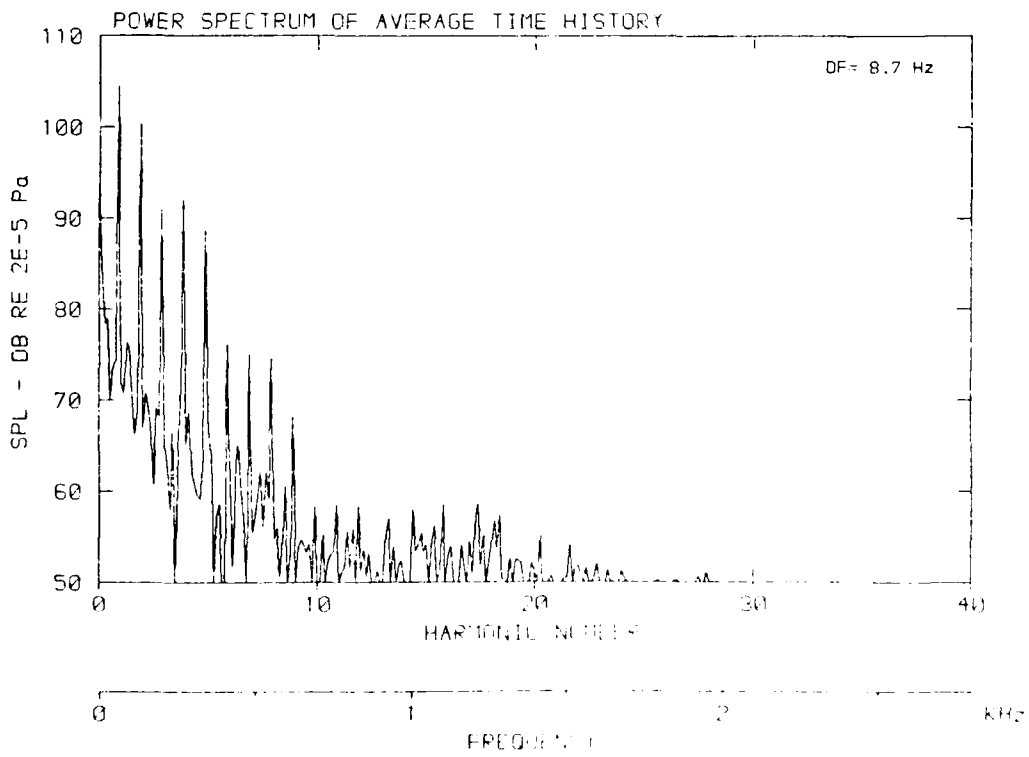
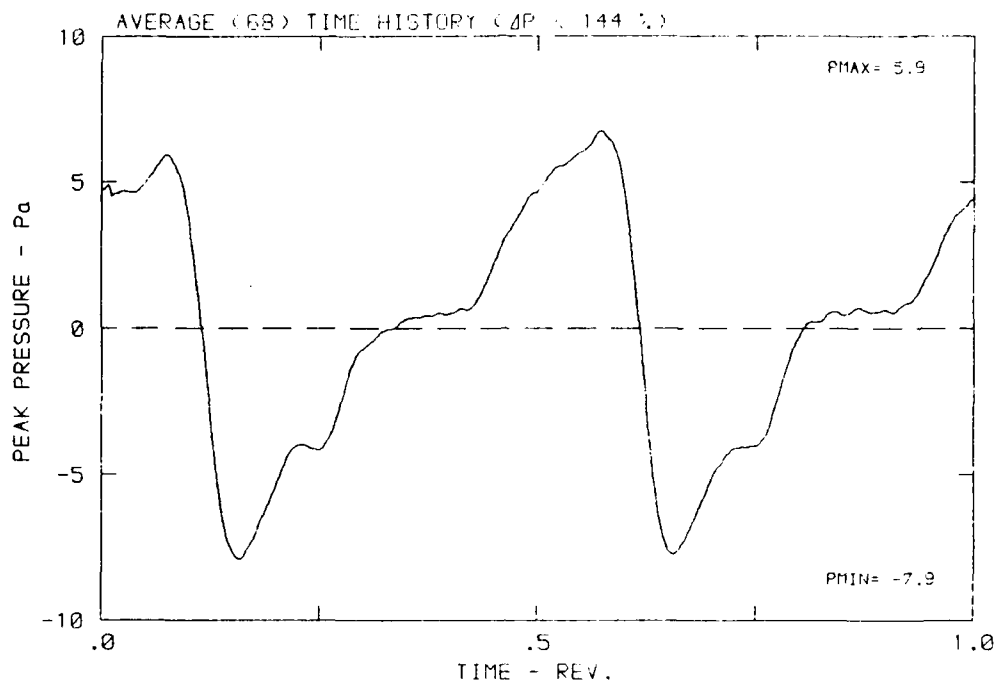
DATA POINT: GN-1 RUN: 151 MP: 6

β : 19.9° MH: .6751 n: 2100 rpm v/u: .230 ϕ : -7.4° T: 286.9 K



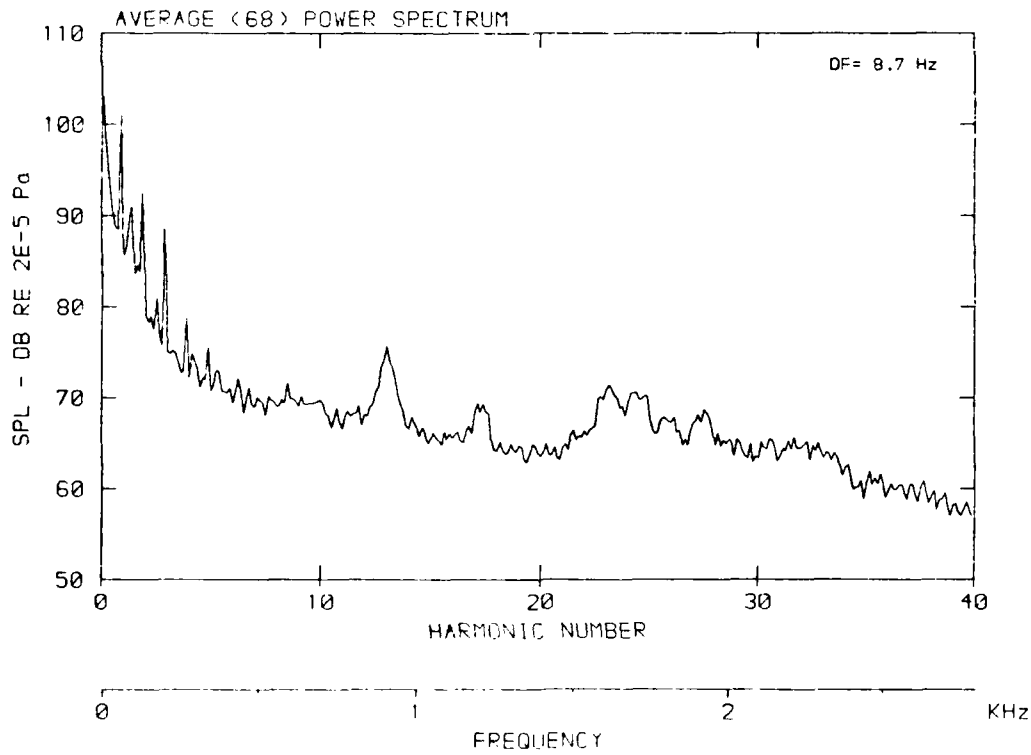
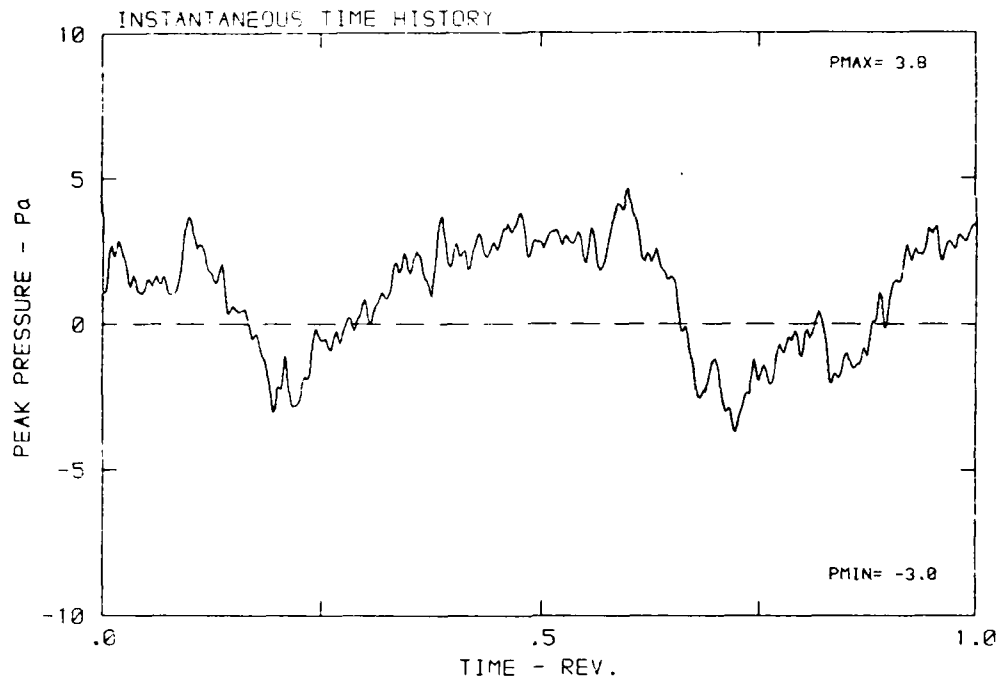
DATA POINT: GN-1 RUN: 151 MP: 6

β : 19.9° MH: .6751 n: 2100 rpm v_{z0} : .230 ϕ : -7.4° T: 286.9 K



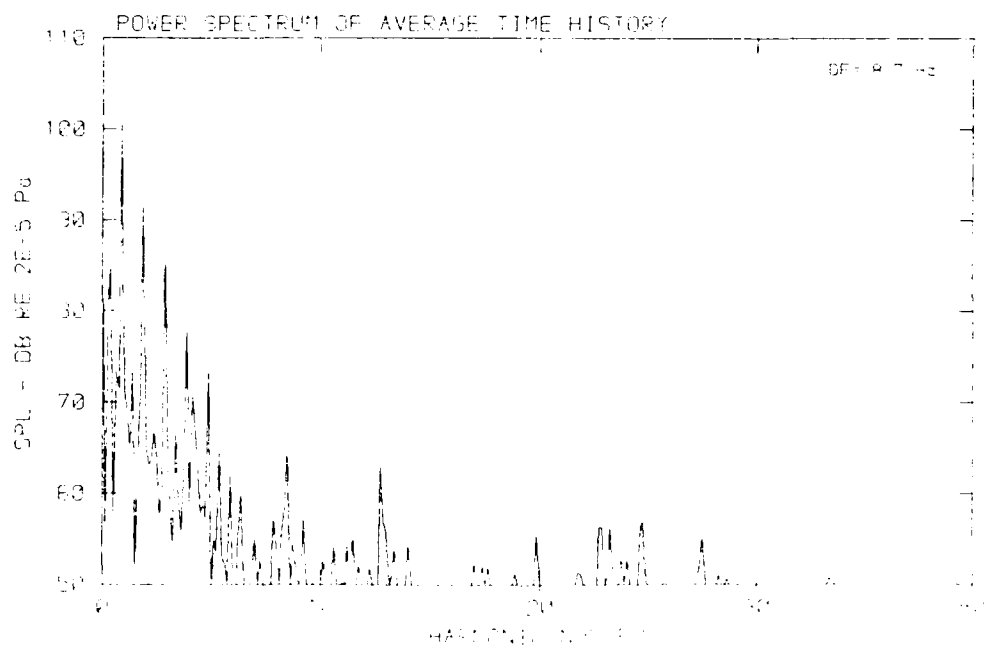
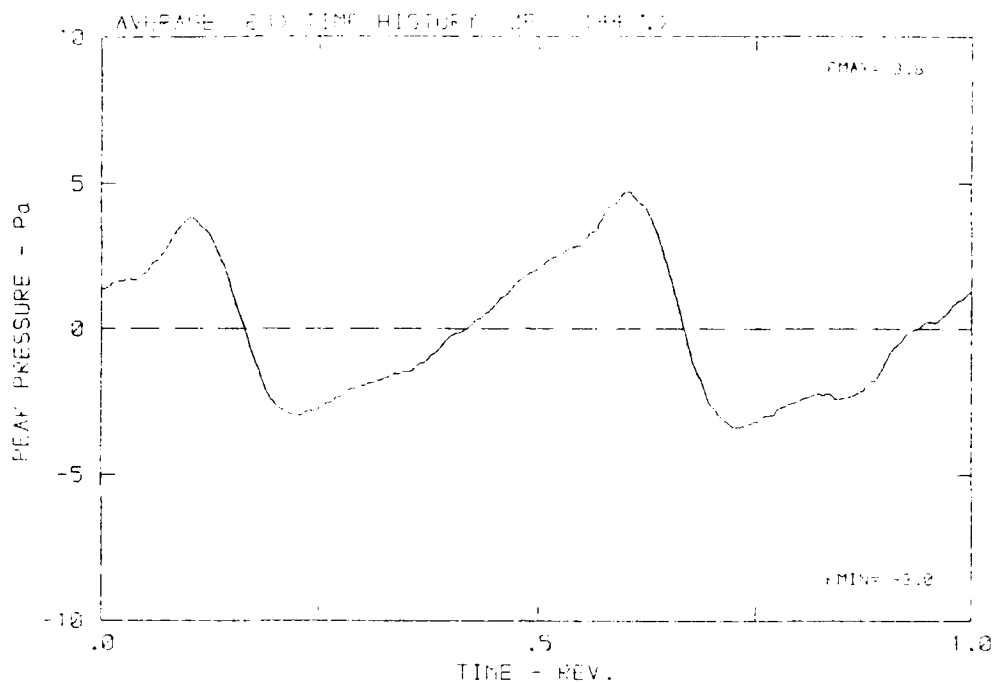
DATA POINT: GN-1 RUN: 151 MP: 7

β : 19.9° MH: .6731 n: 2100 rpm ν : .230 ϕ : -7.4° T: 286.9 K



DATA POINTS (REV) TIME (SEC) (REV) (SEC)

B: 19.9° MH: .6751 n: .2100 rpm: 1000 r: .230 φ: 7.48 T: 286.6

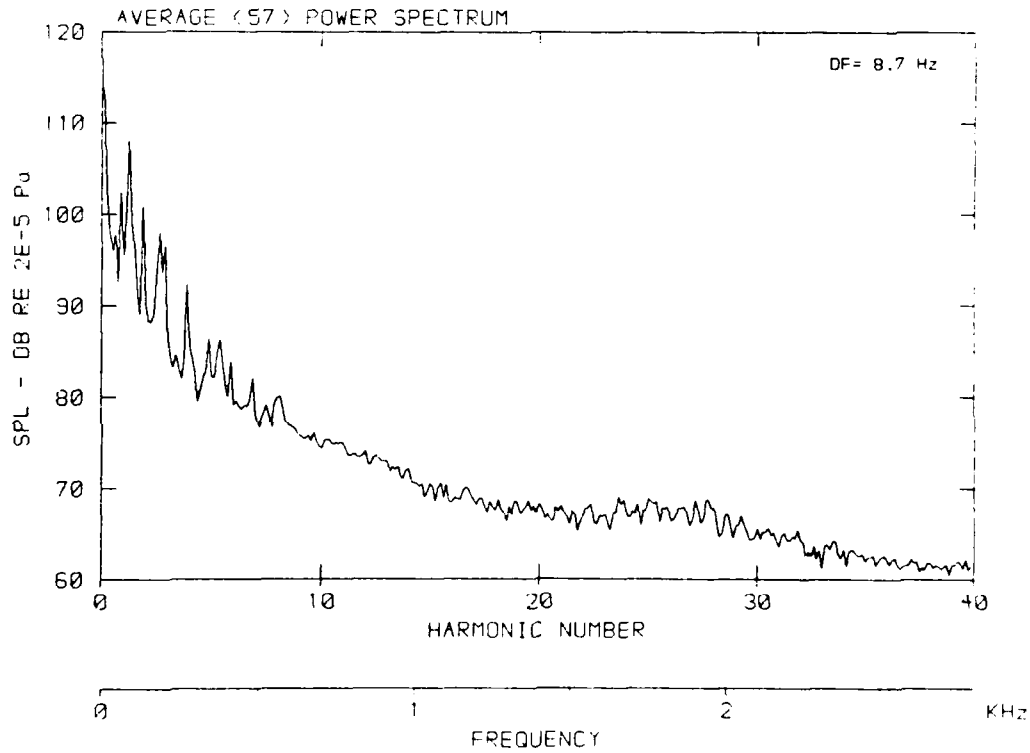
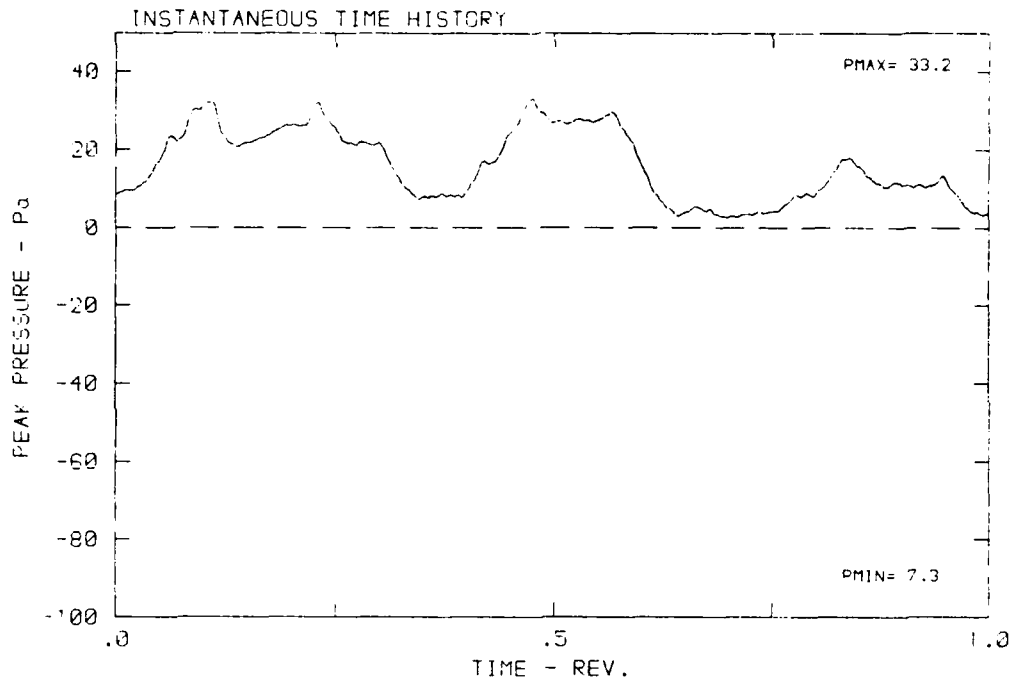


0 10 20 30 40 50 60 70 80 90 100 110

0 10 20 30 40 50 60 70 80 90 100 110

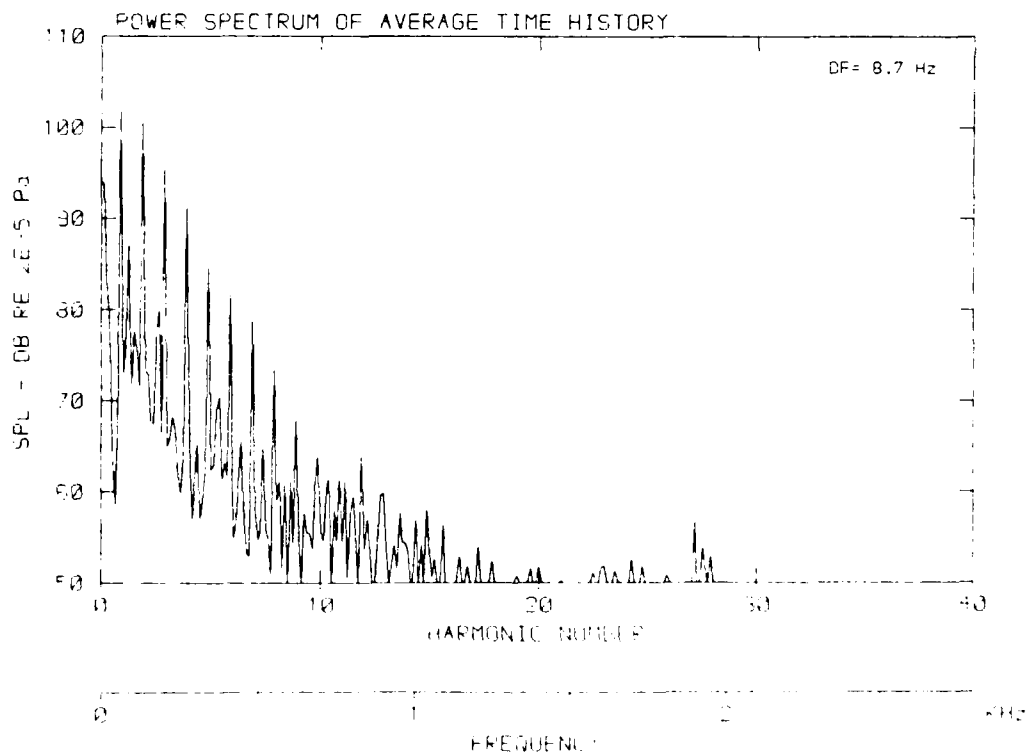
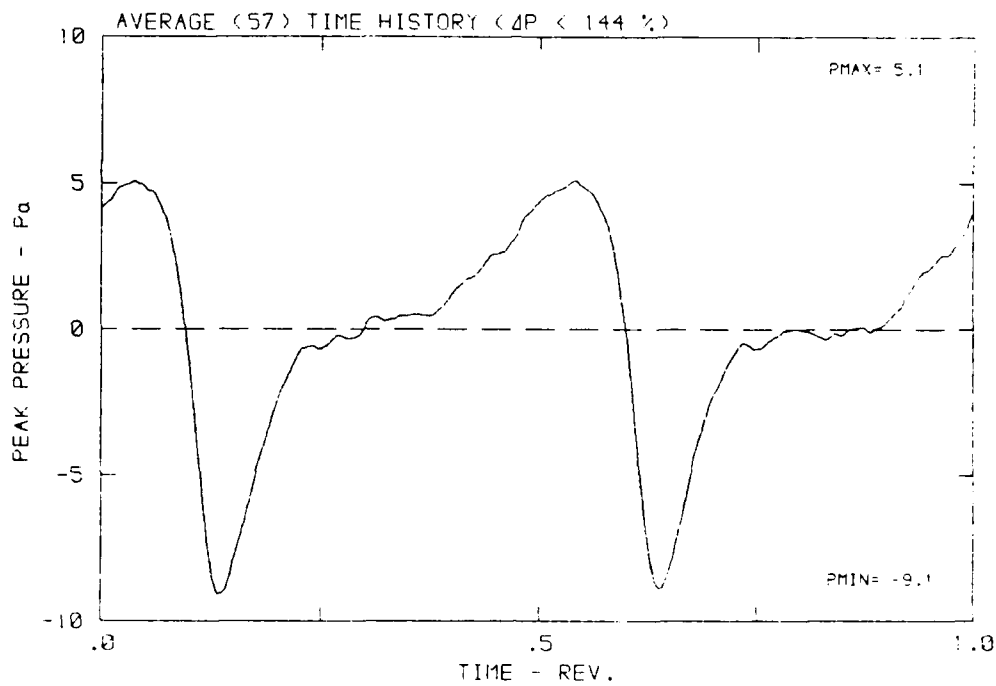
DATA POINT: GN-1 RUN: 151 MP: 8

β : 19.9° MH: .6751 n: 2100 rpm ν/ω : .230 ϕ : -7.4° T: 286.9 K



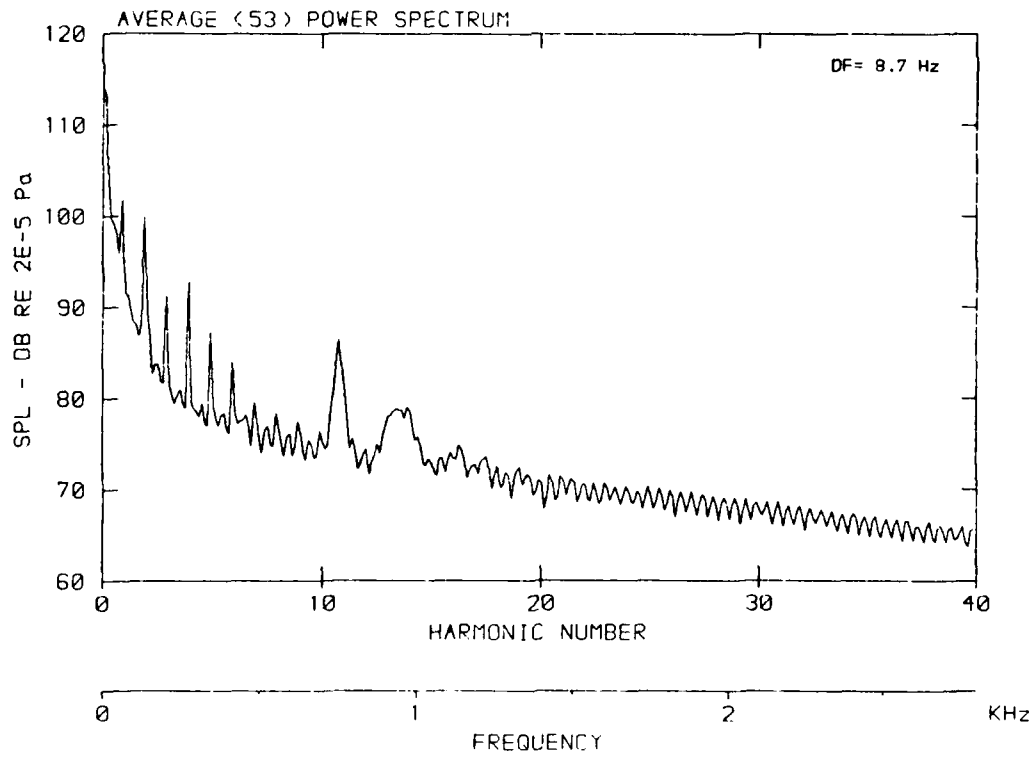
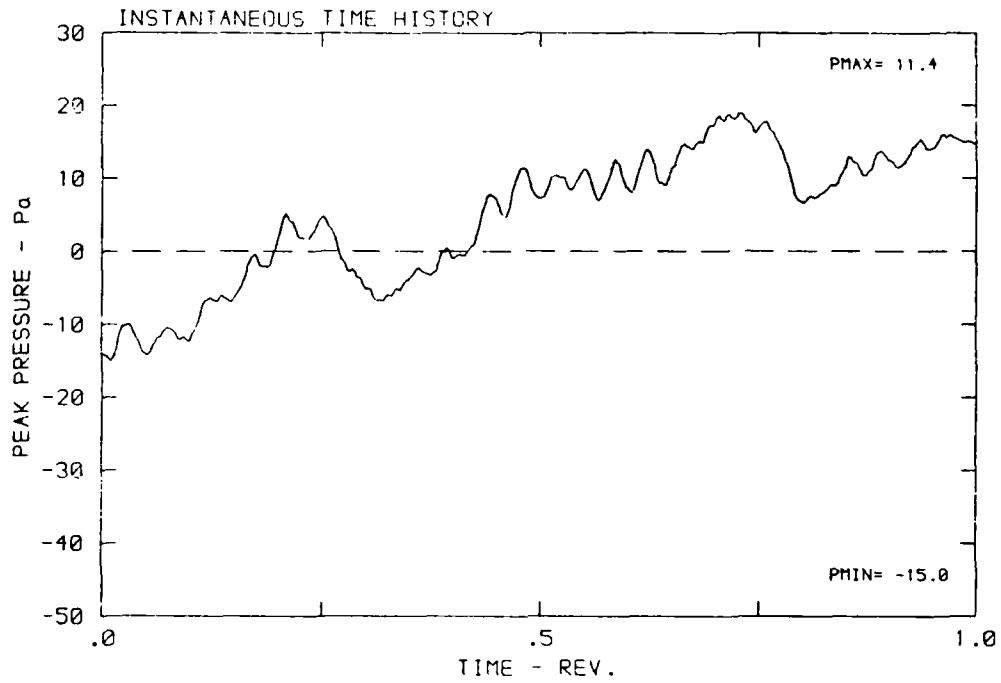
DATA POINT: GN-1 RUN: 151 MP: 8

β : 19.9° MH: .6751 n: 2100 rpm vzu: .230 ϕ : -7.4° T: 286.3 K



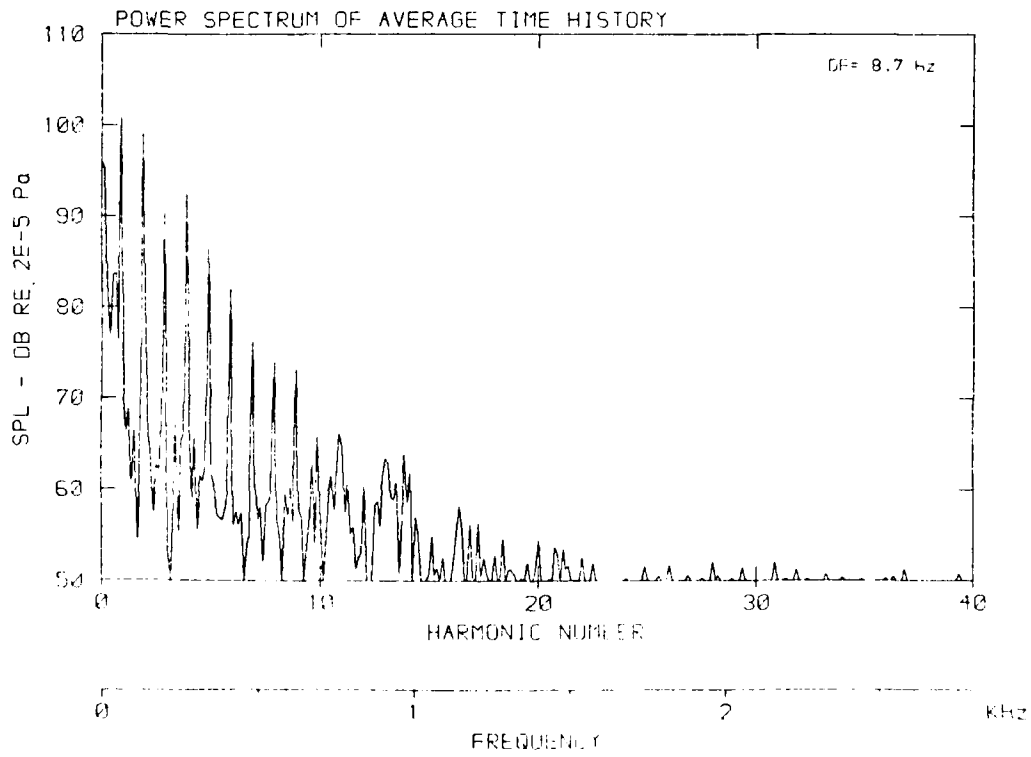
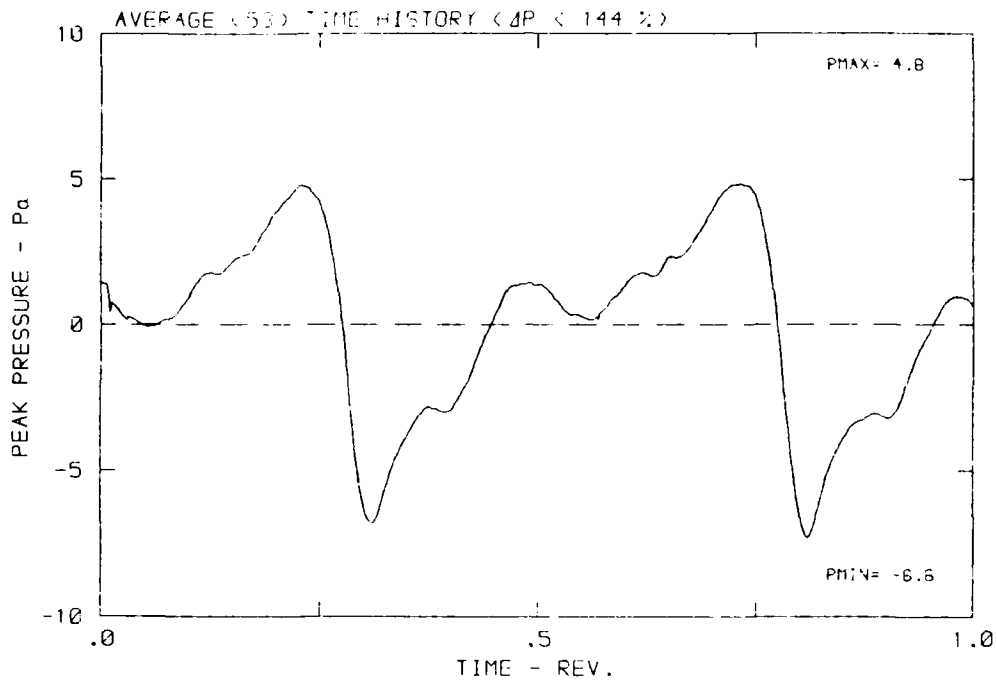
DATA POINT: GN-1 RUN: 151 MP: 9

β : 19.9° MH: .6751 n: 2100 rpm v/u : .230 ϕ : -7.4° T: 286.3 K



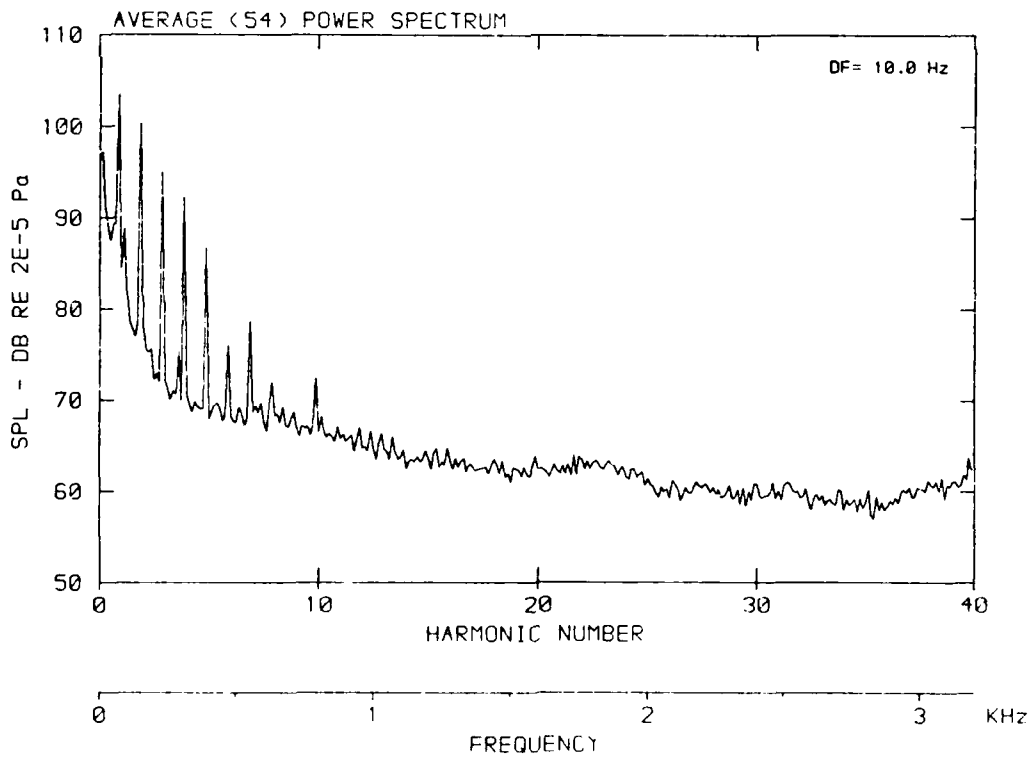
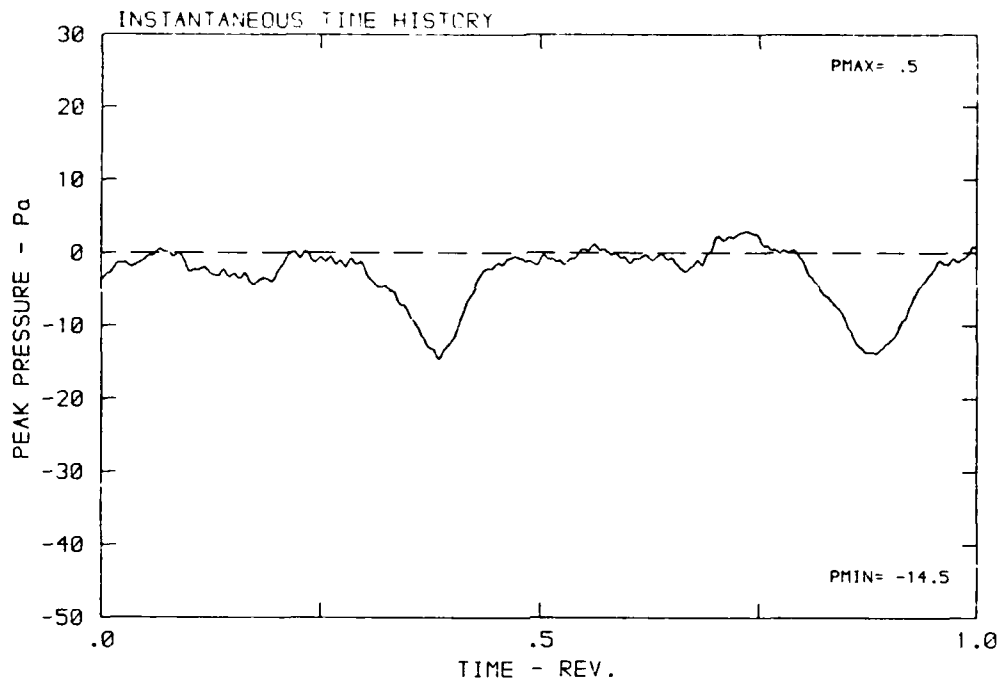
DATA POINT: GN-1 RUN: 151 MP: 9

β : 19.9° MH: .6751 n: 2100 rpm vru: .230 ϕ : -7.4° T: 286.0 K



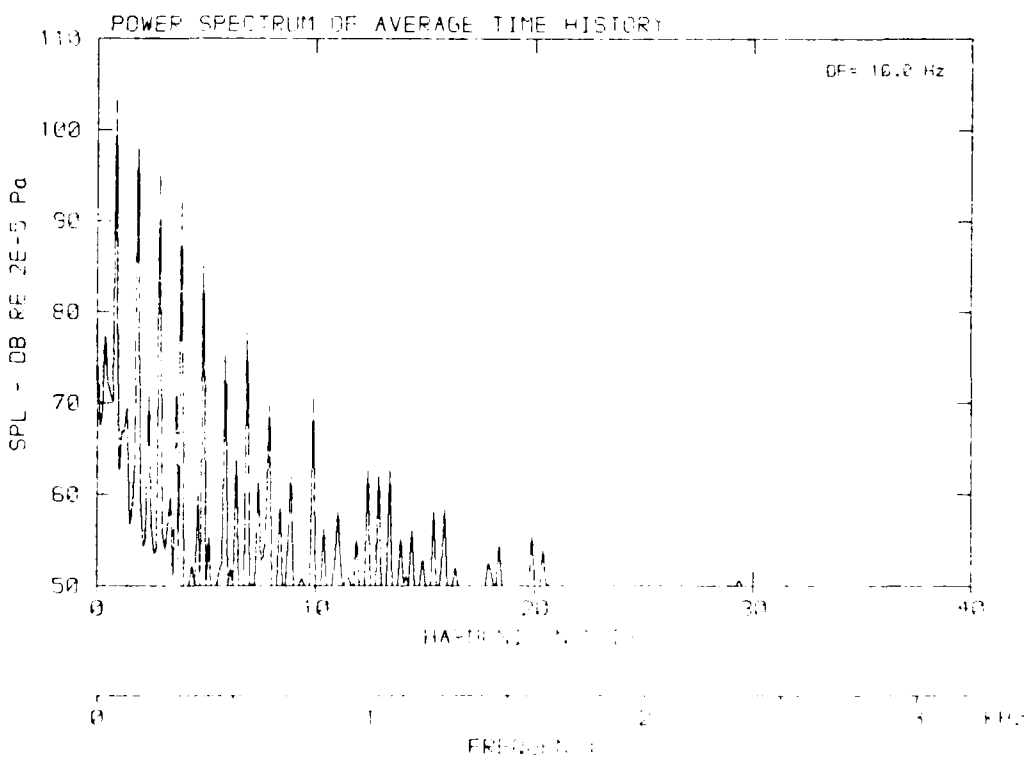
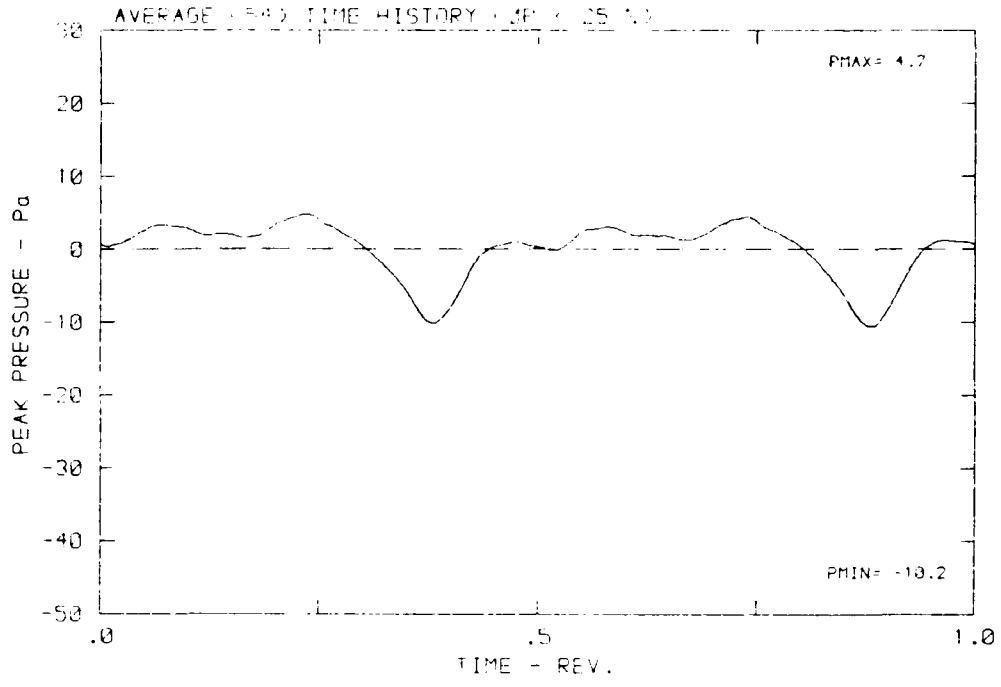
DATA POINT: GN-? RUN: 152 MP: 1

β : 19.9° MH: .7664 n: 2400 rpm ν : .200 ϕ : -7.4° T: 157.5



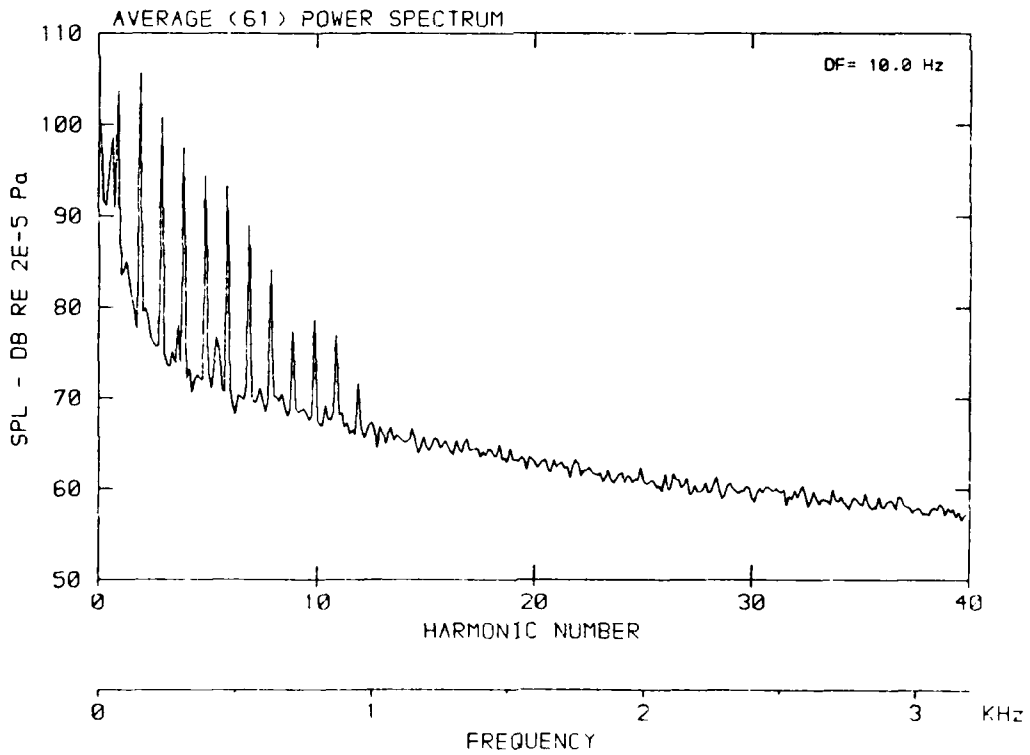
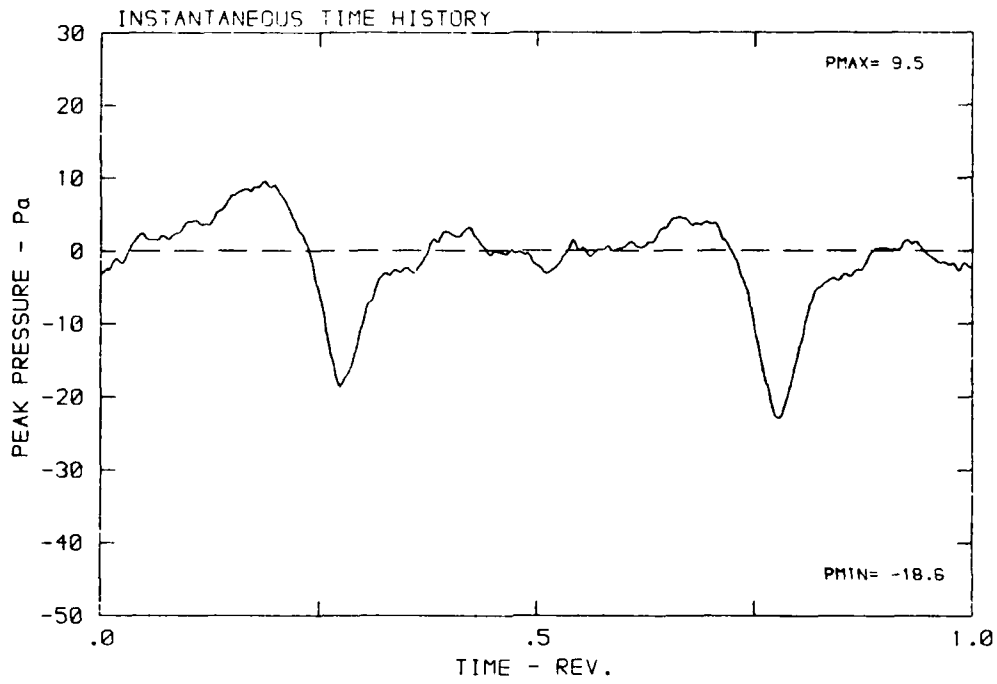
DATA POINT: 6N-2 RUN: 15 ME: 1

β : 19.9° MH: .1804 n: 2400 rpm V: .202 ϕ : -7.4° T: 287.5 K



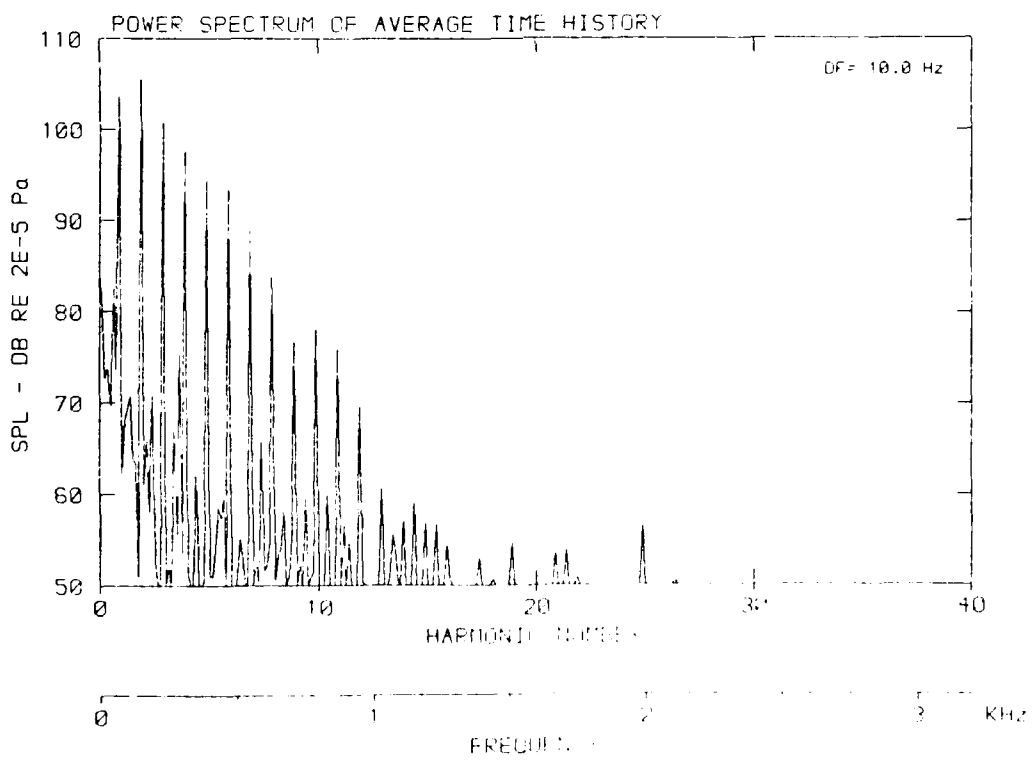
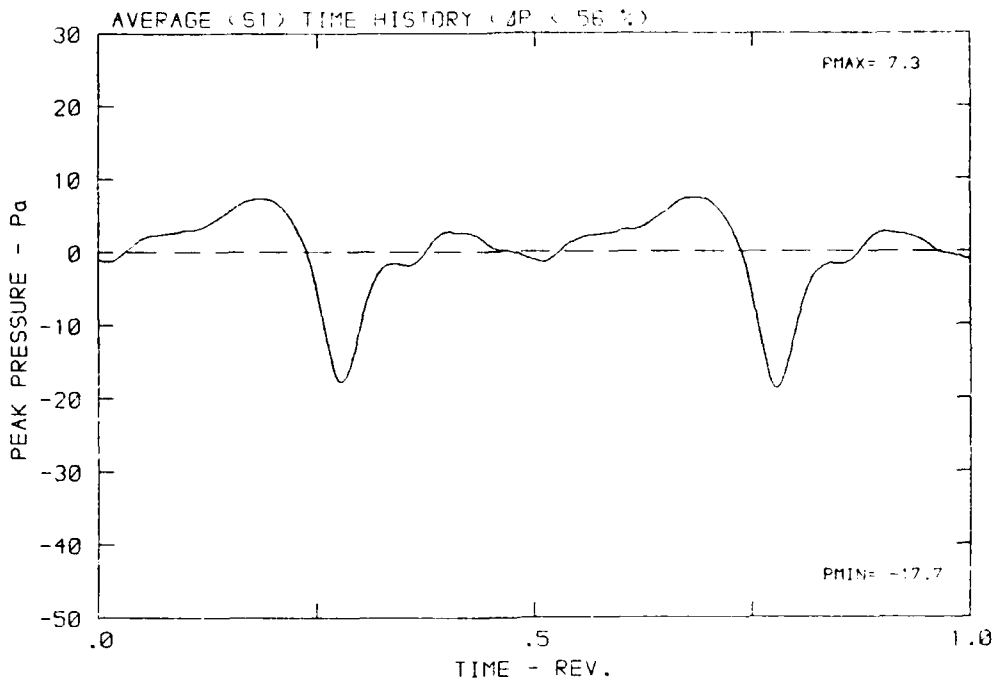
DATA POINT: GN-2 RUN: 152 MP: 2

β : 19.9° MH: .7664 n: 2400 rpm vru: .202 ϕ : -7.4° T: 287.5 K



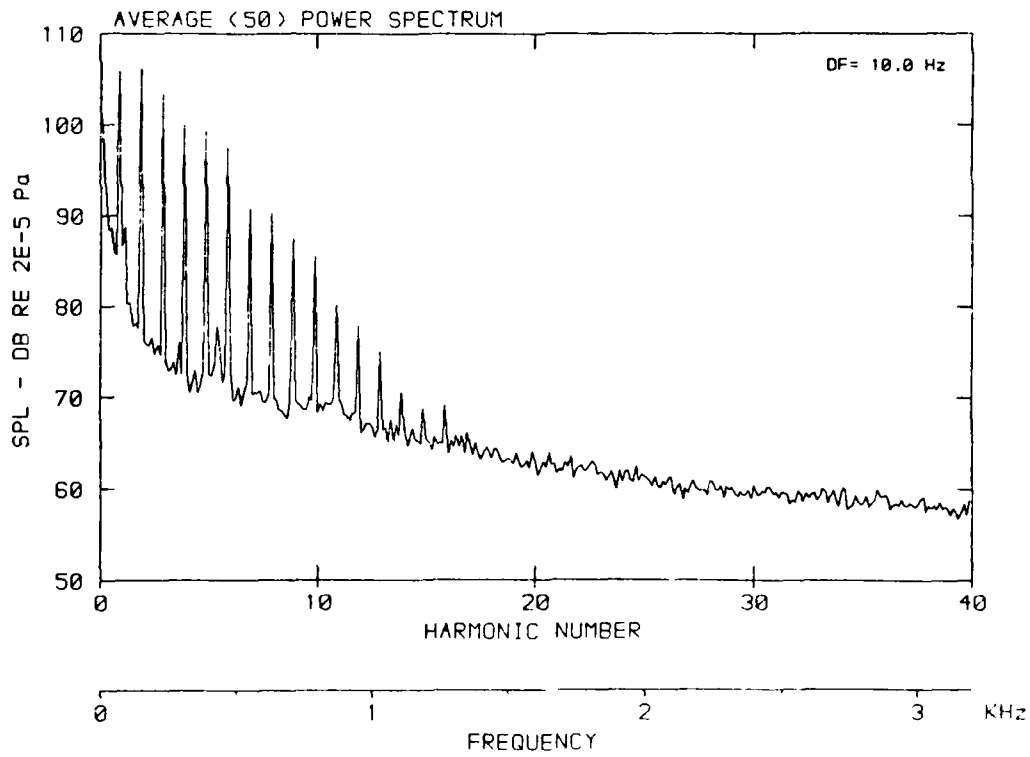
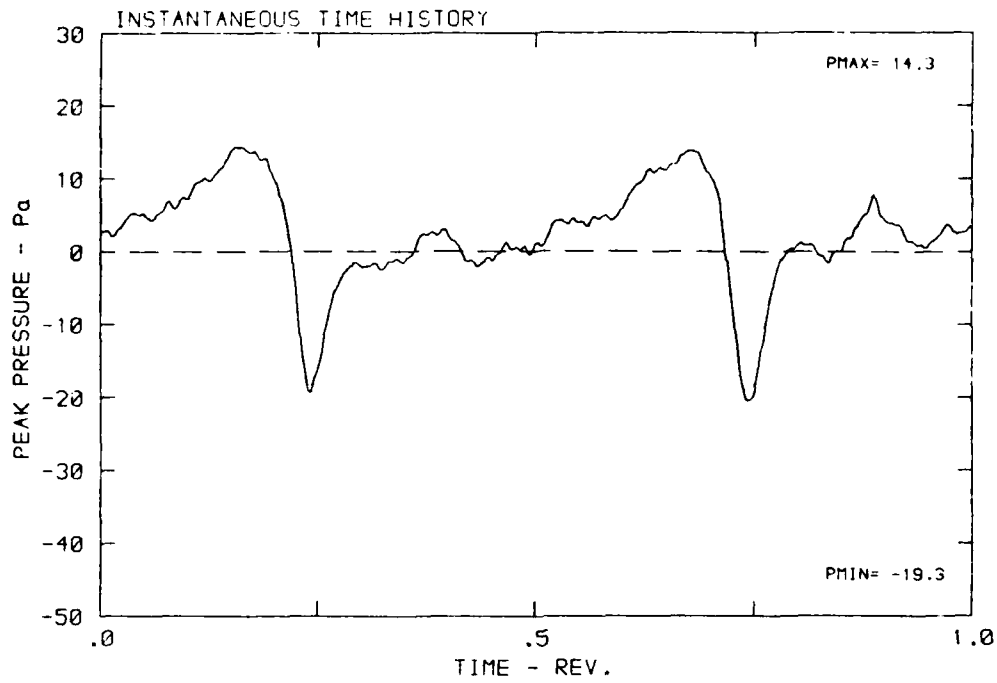
DATA POINT: GN-2 PIN: 152 MP: 2

β : 19.9° MH: .7664 n: 2400 rpm v/u: .200 p: -7.4° T: 287.5 K



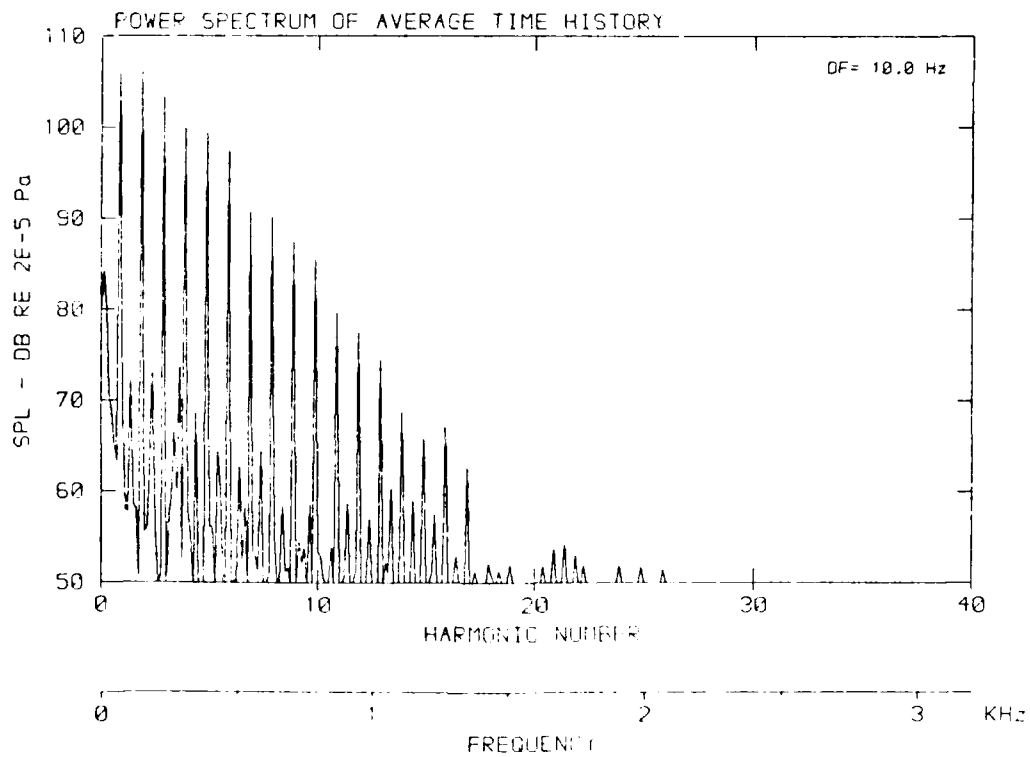
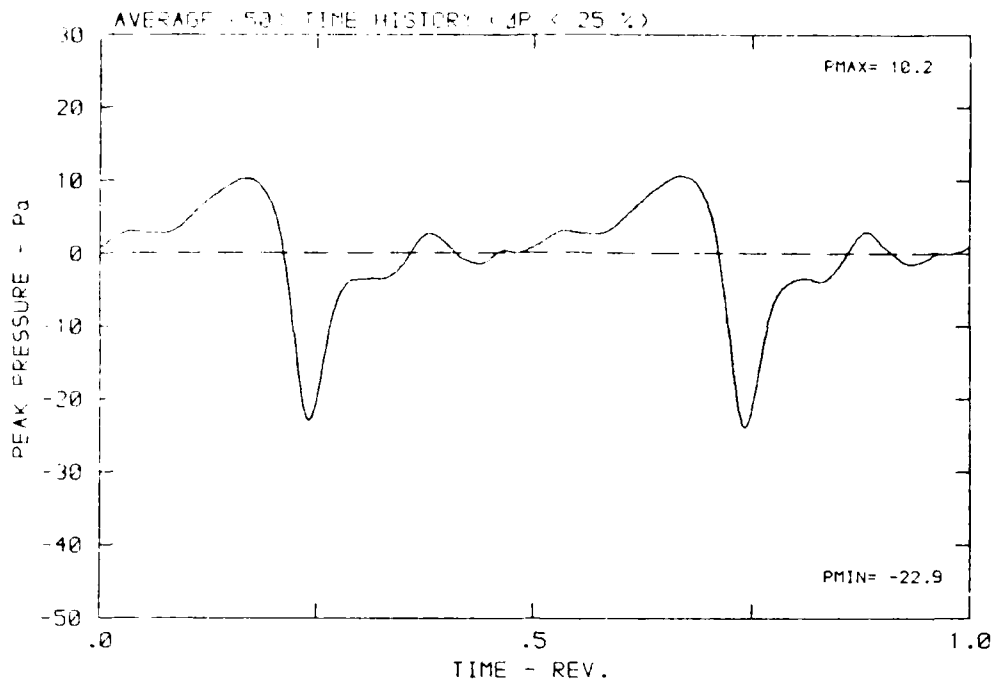
DATA POINT: GN-2 RUN: 152 MP: 3

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 297.5 K



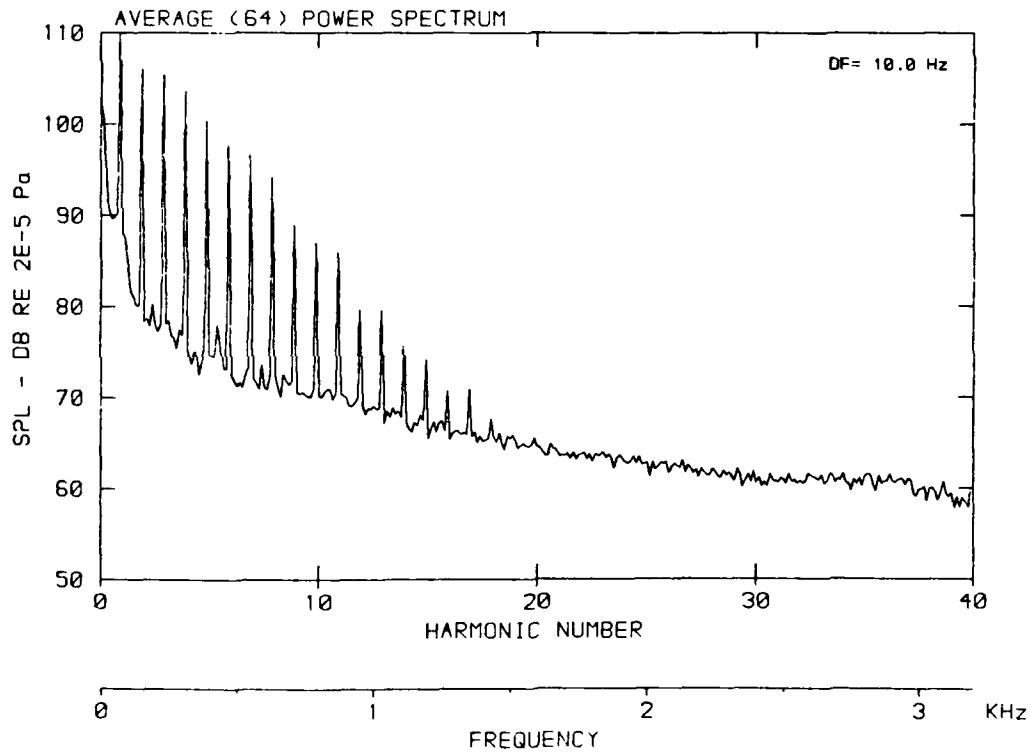
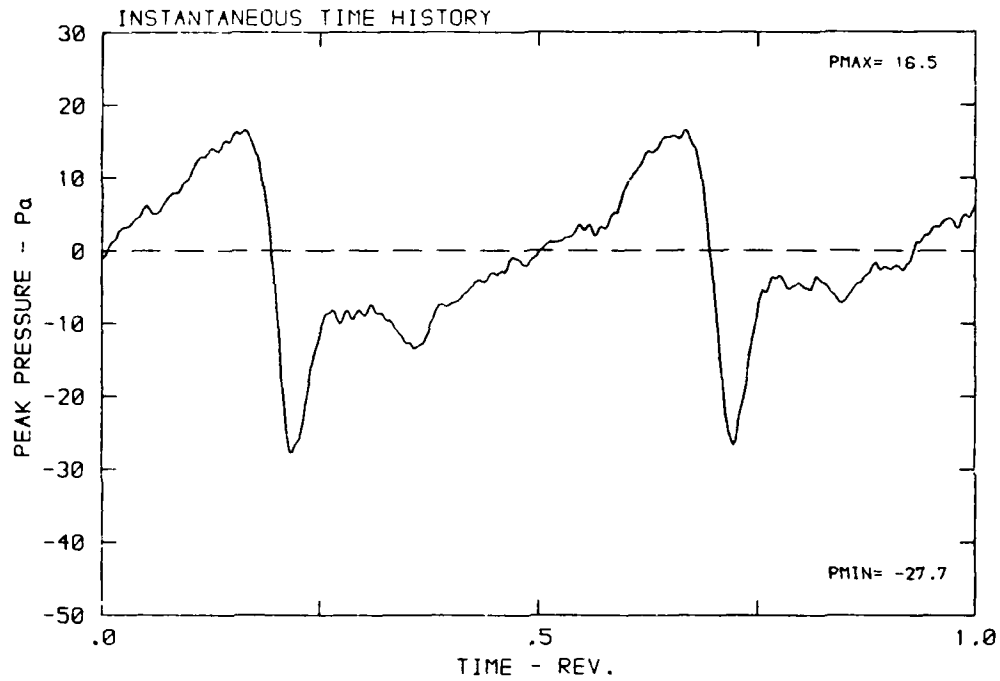
DATA POINT: GN-2 RUN: 152 MP: 3

β : 19.9° MH: .7664 n: 2400 rpm ν : .202 ϕ : -7.4° T: 287.5 K



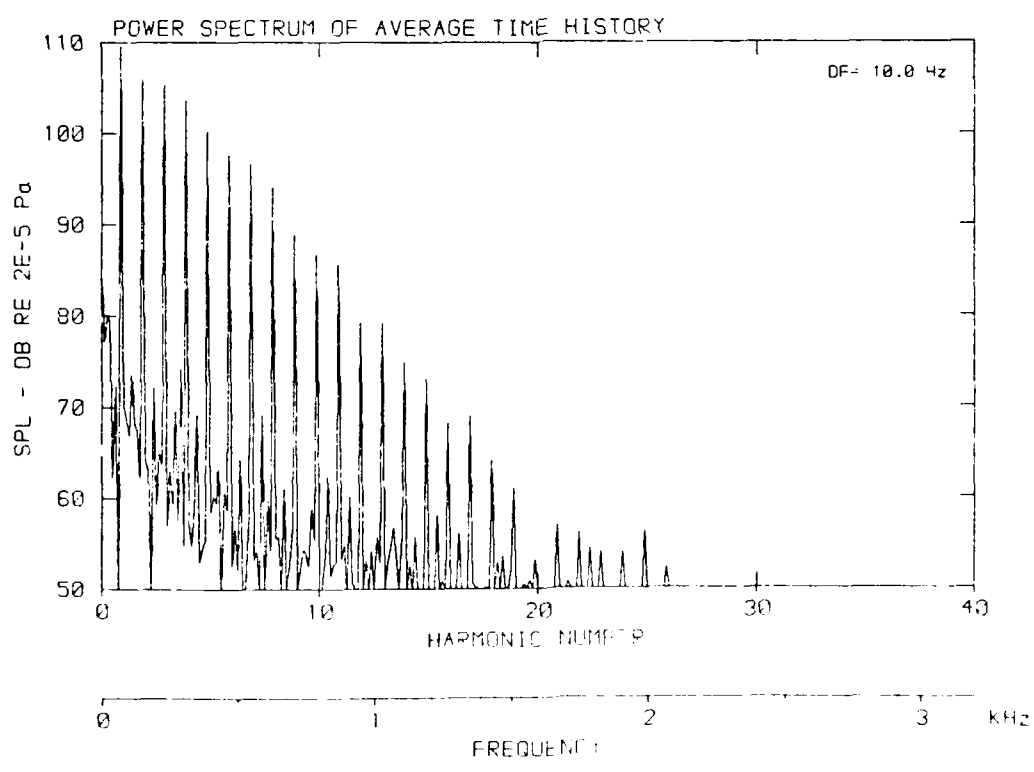
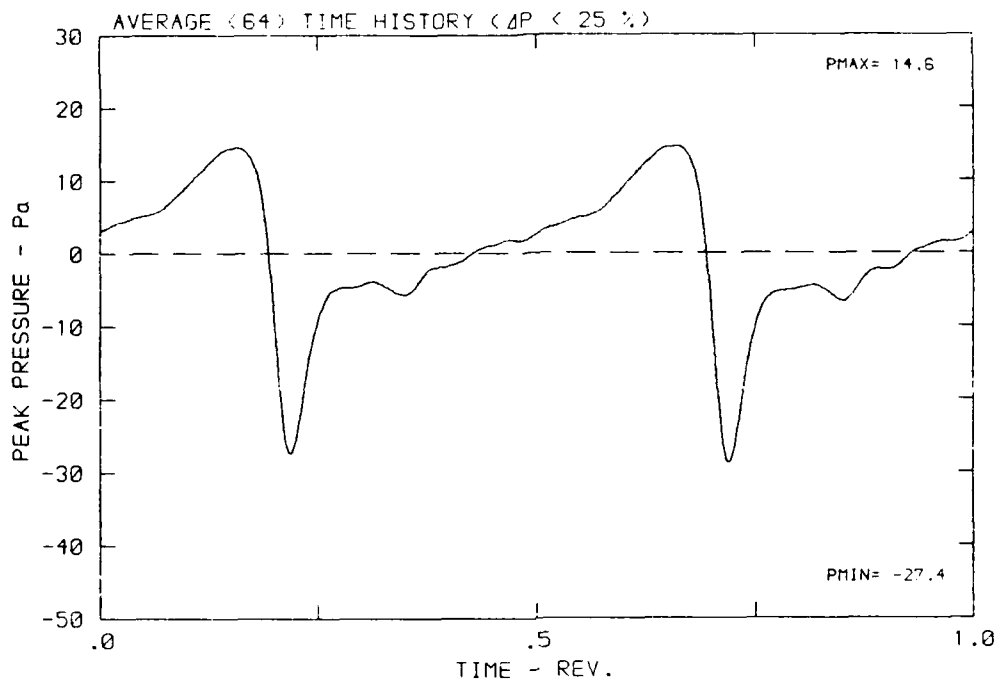
DATA POINT: GN-2 RUN: 152 MP: 4

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



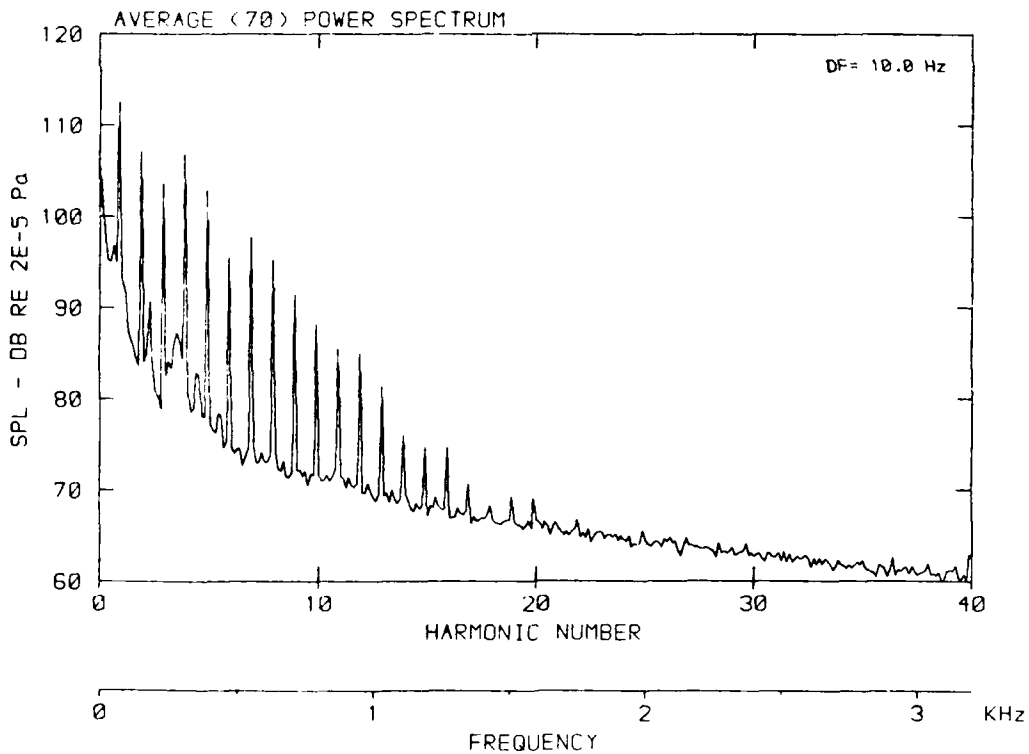
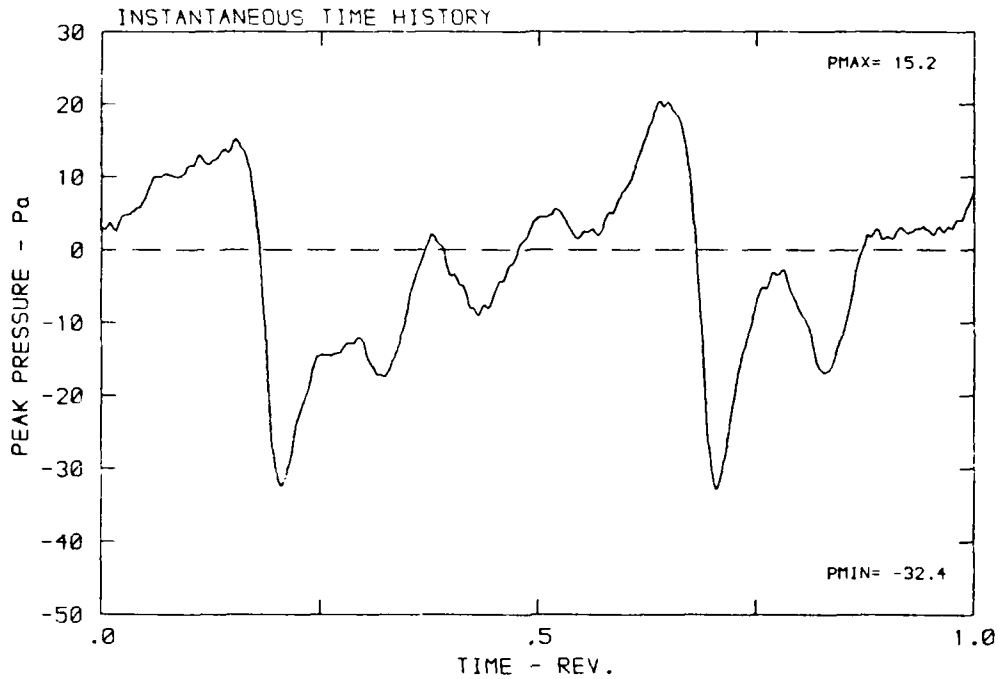
DATA POINT: GN-2 RUN: 152 MP: 4

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



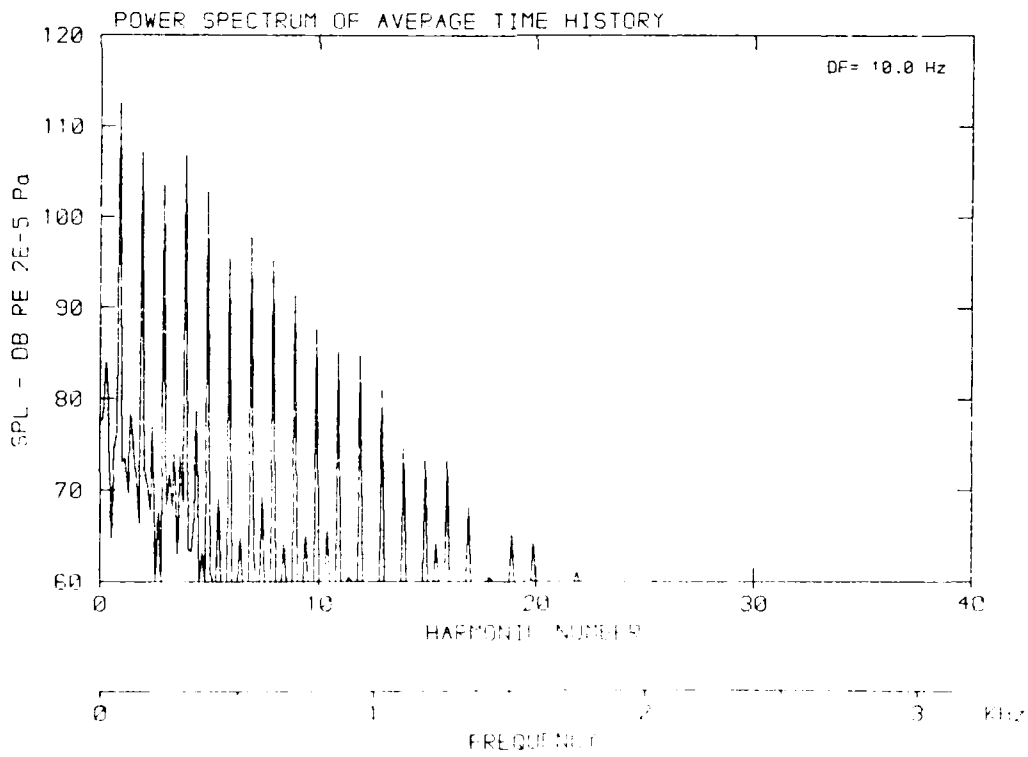
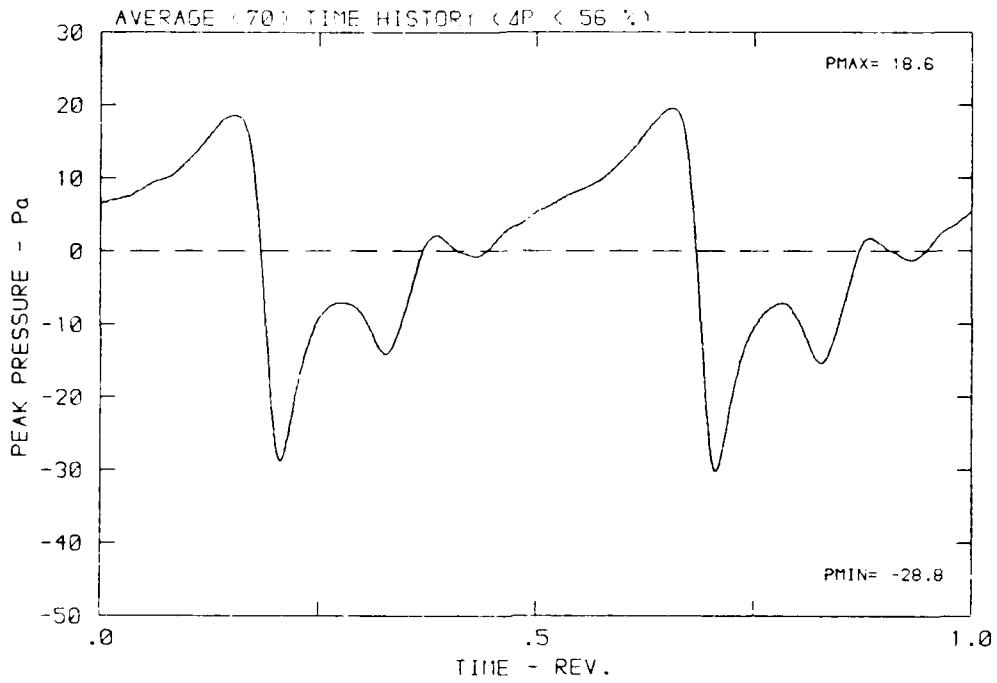
DATA POINT: GN-2 RUN: 152 MP: 5

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



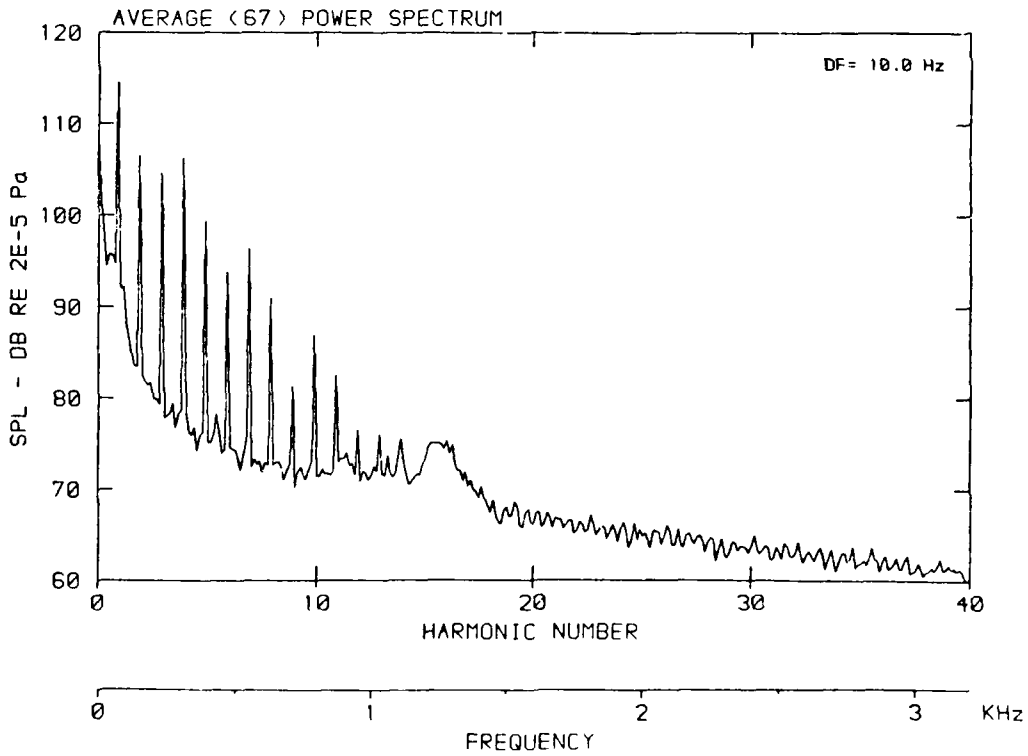
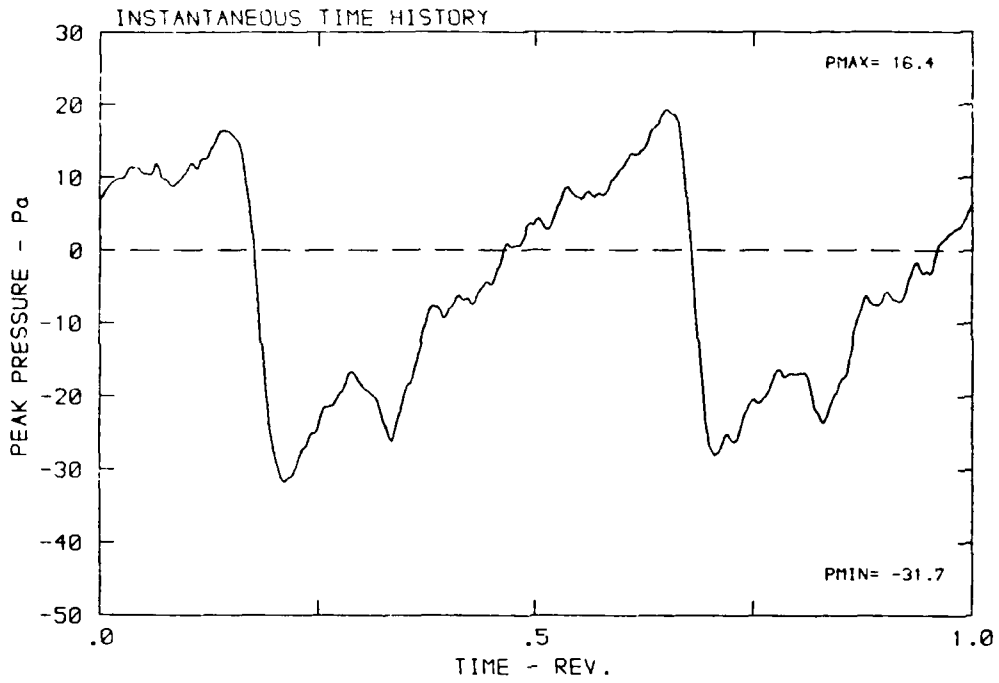
DATA POINT: GN-2 RUN: 152 MP: 5

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



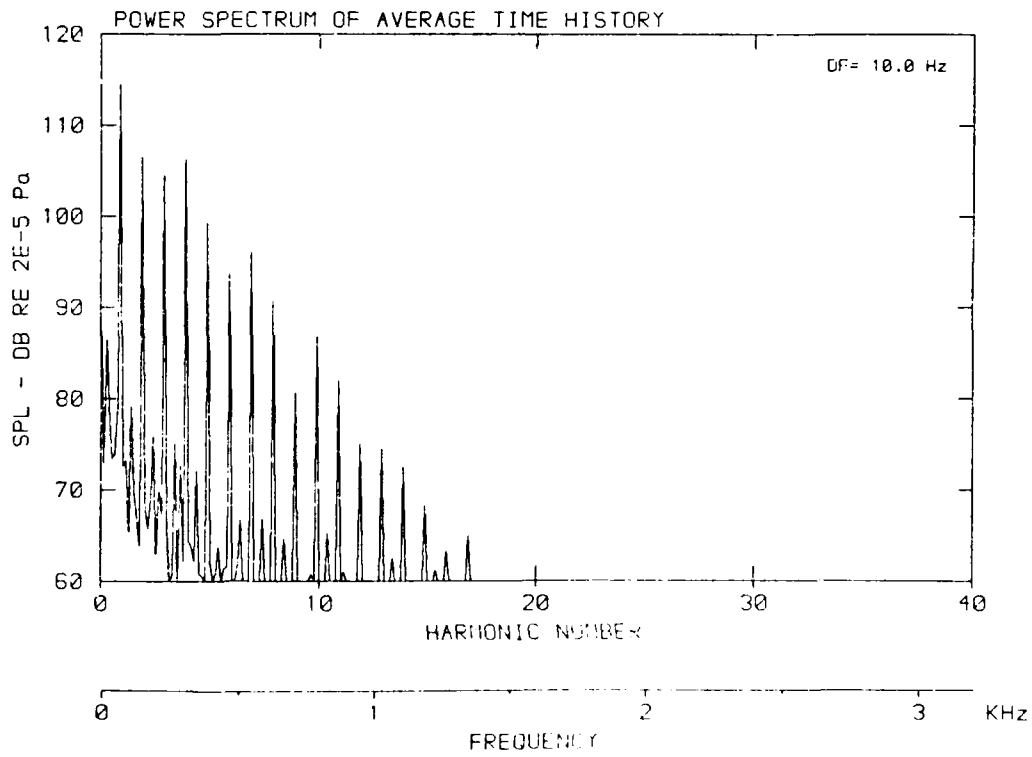
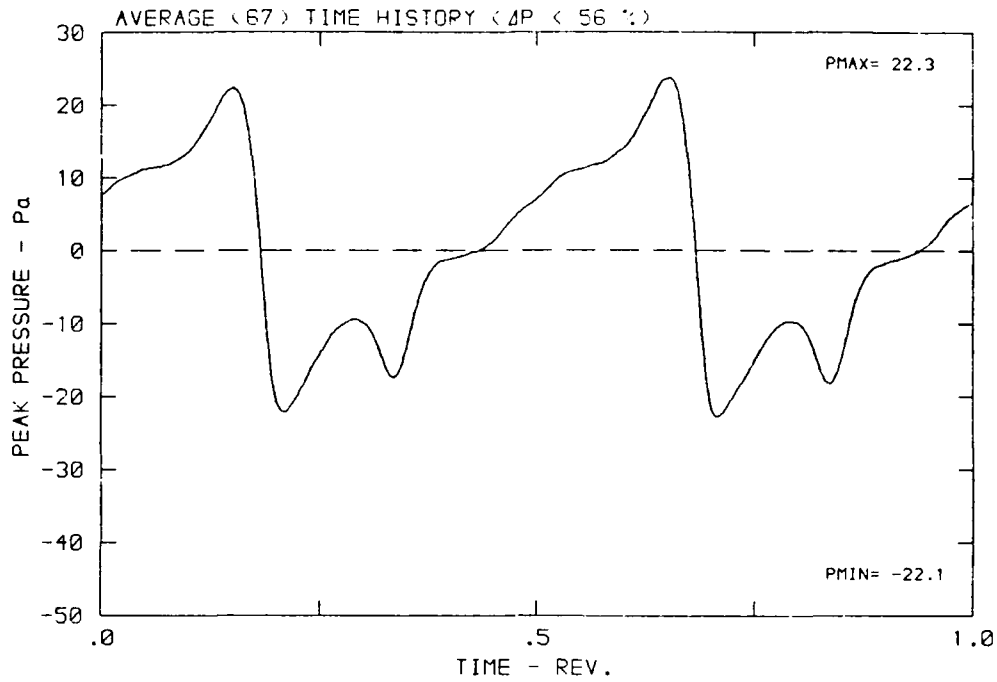
DATA POINT: GN-2 RUN: 152 MP: 6

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



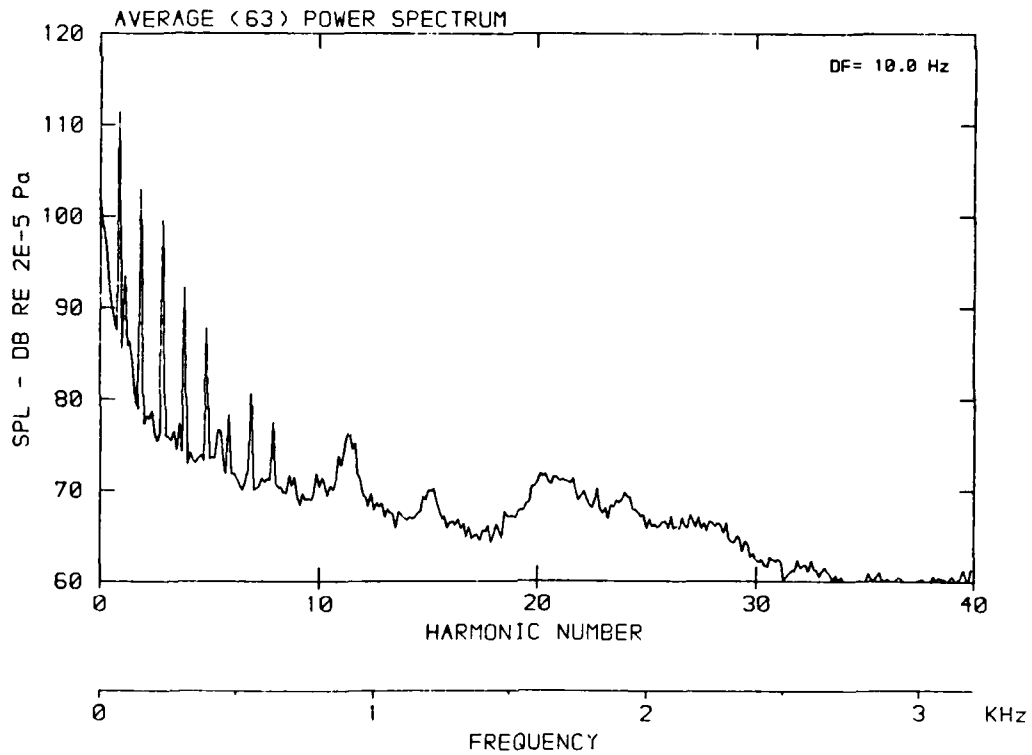
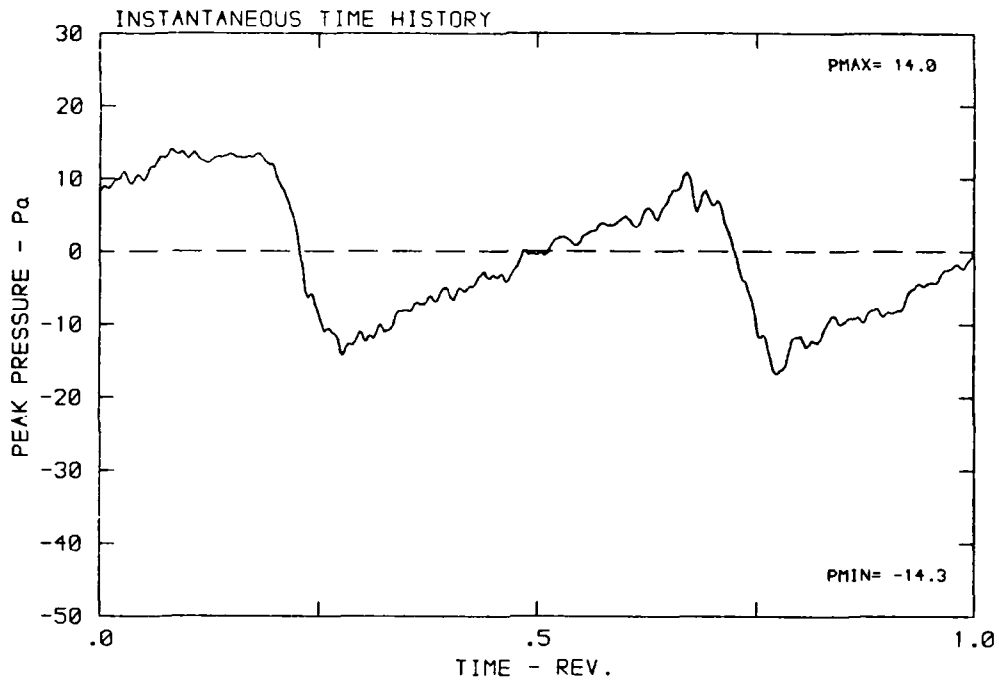
DATA POINT: GN-2 RUN: 152 MP: 6

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



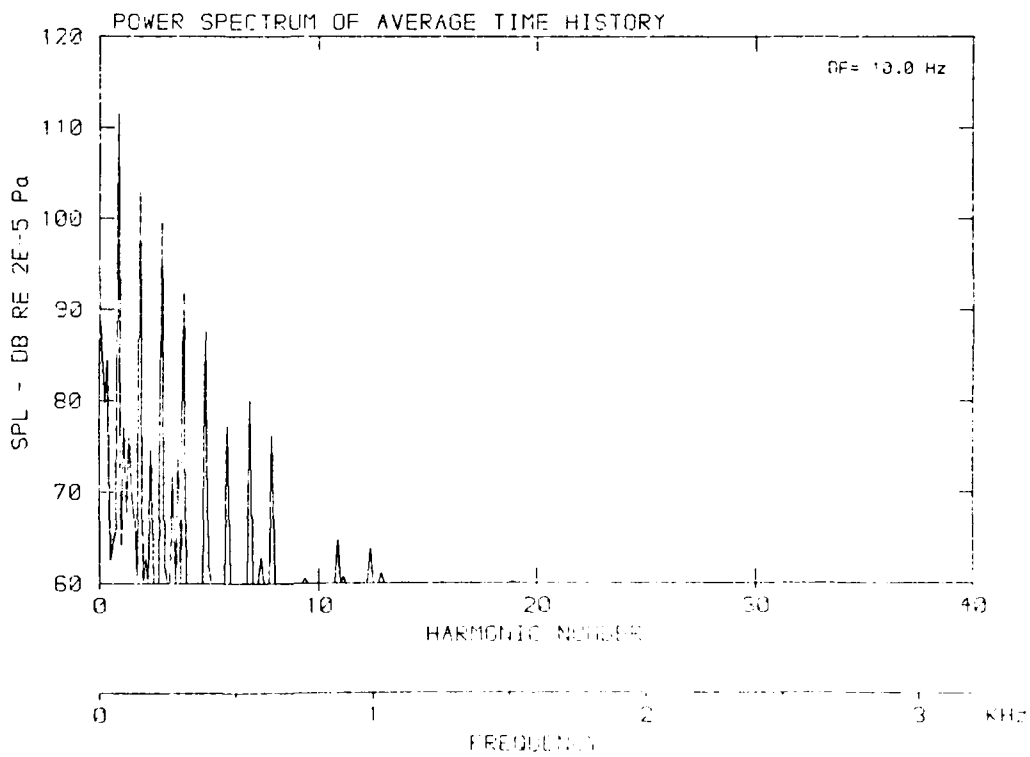
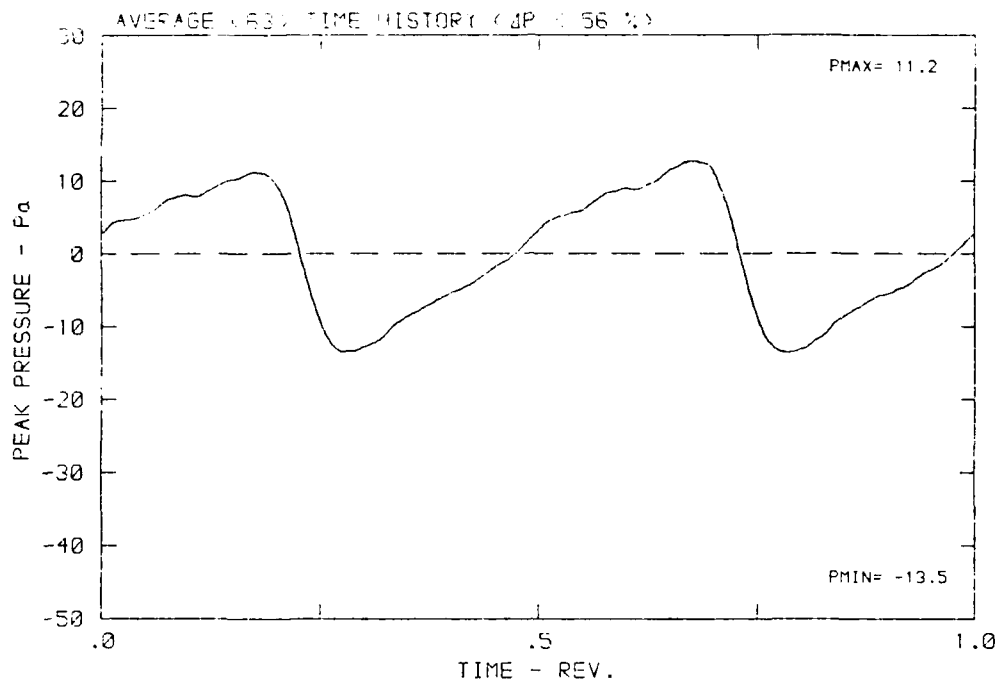
DATA POINT: GN-2 RUN: 152 MP: 7

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



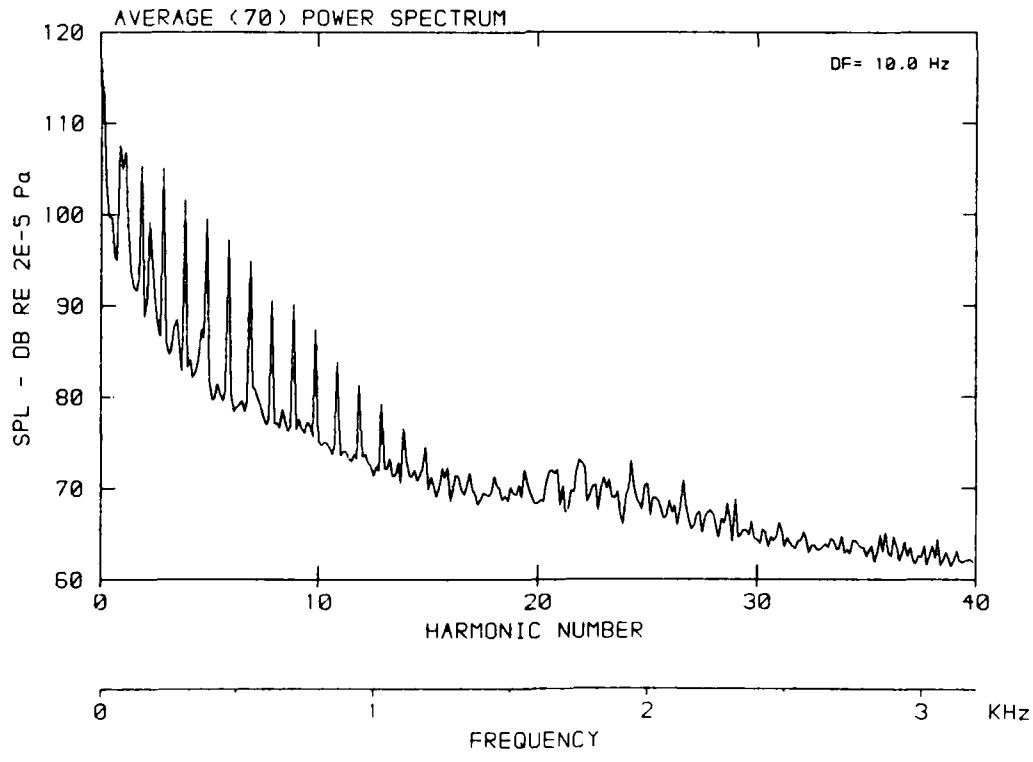
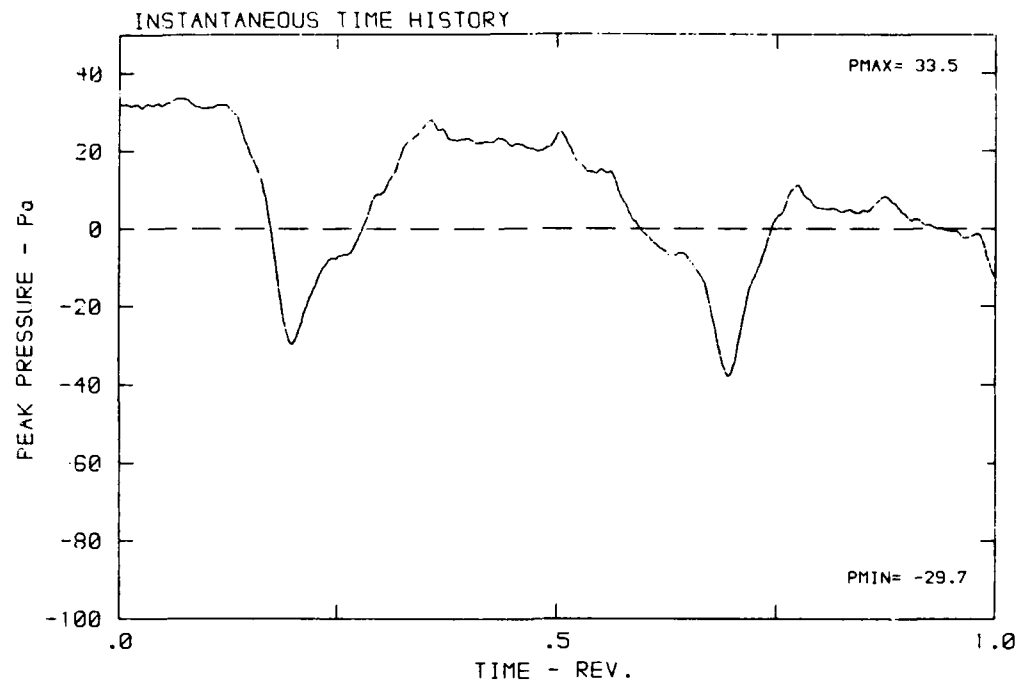
DATA POINT: 6H-2 RUN: 152 NP: 7

β : 19.9° RH: .7664 n: 2400 rpm ν_{cu} : .202 ϕ : -7.4° T: 287.5 K



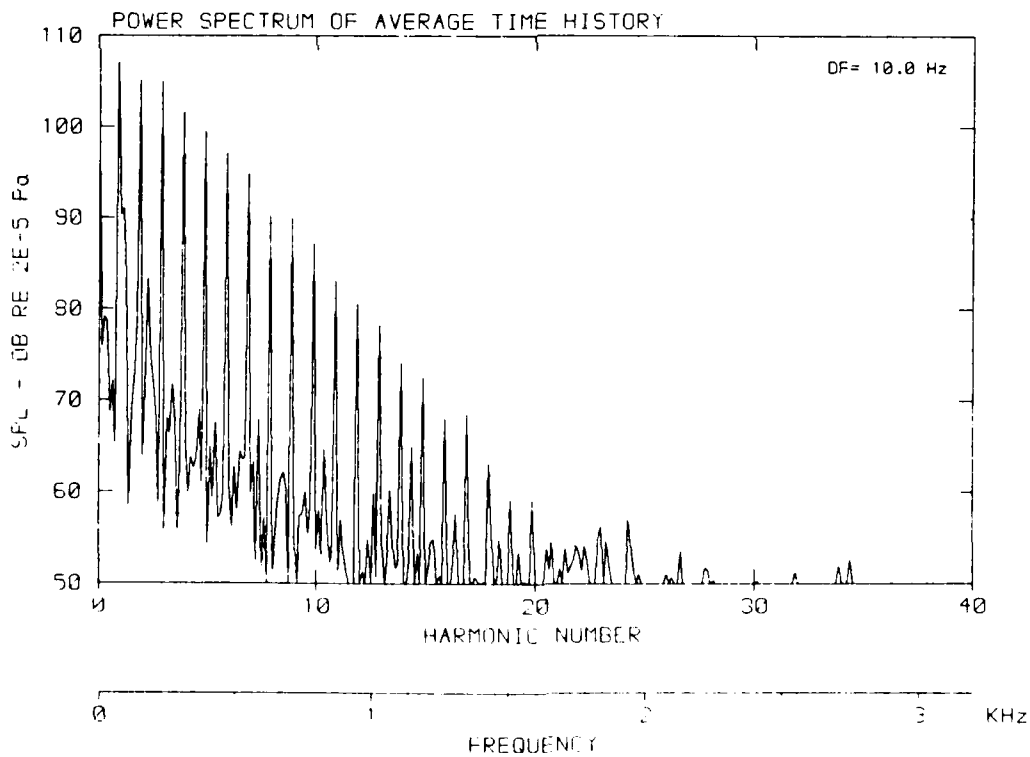
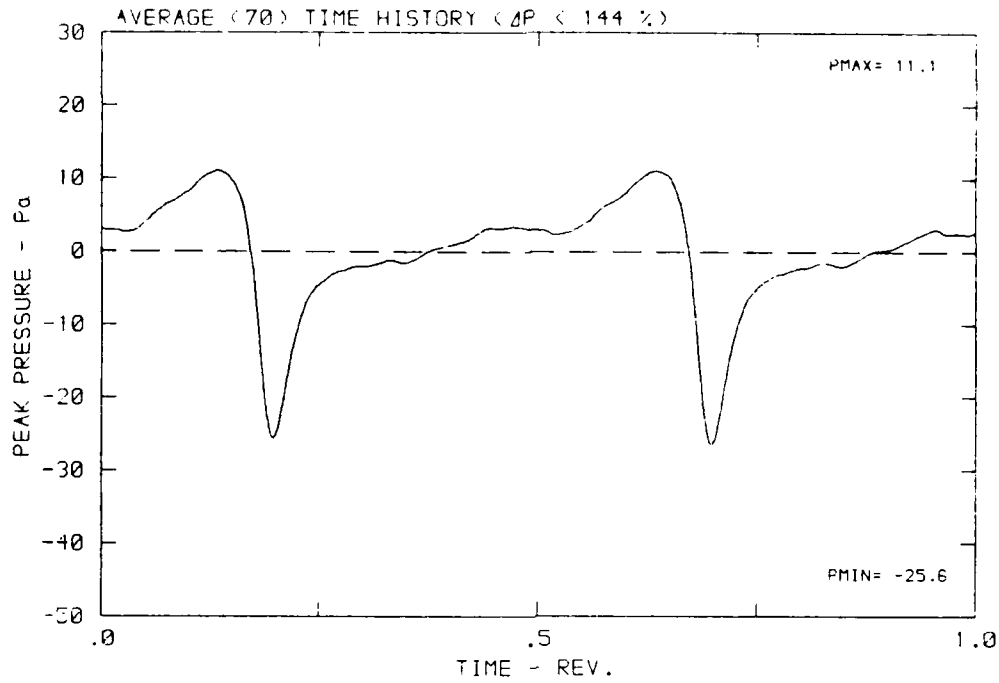
DATA POINT: GN-2 RUN: 152 MP: 8

β : 19.9° MH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



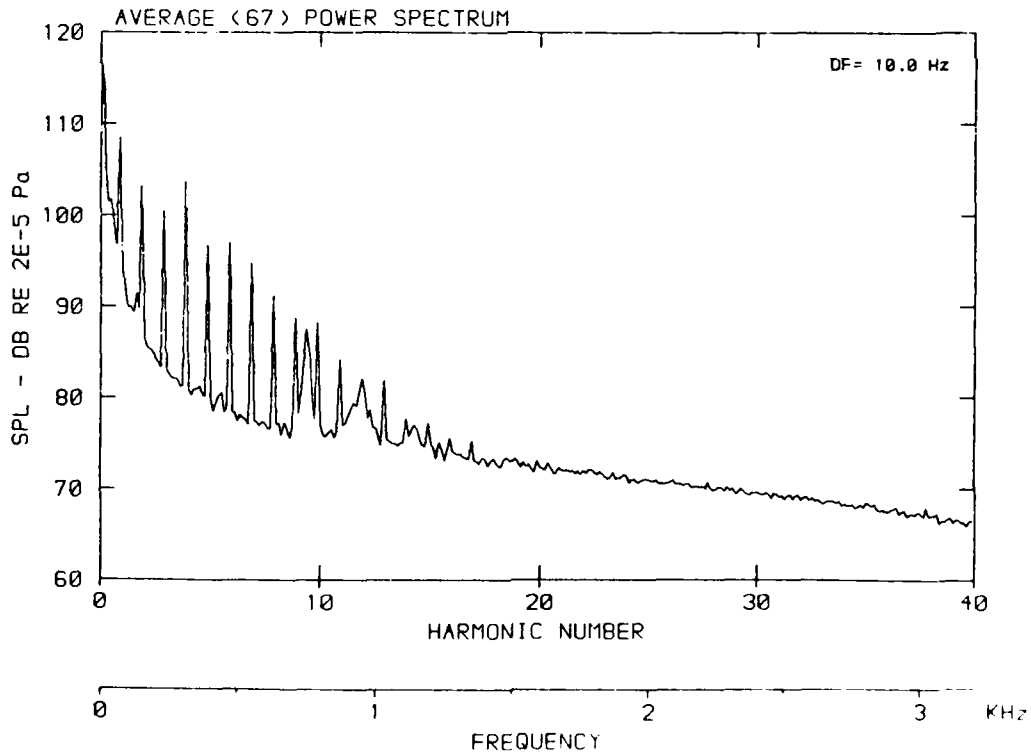
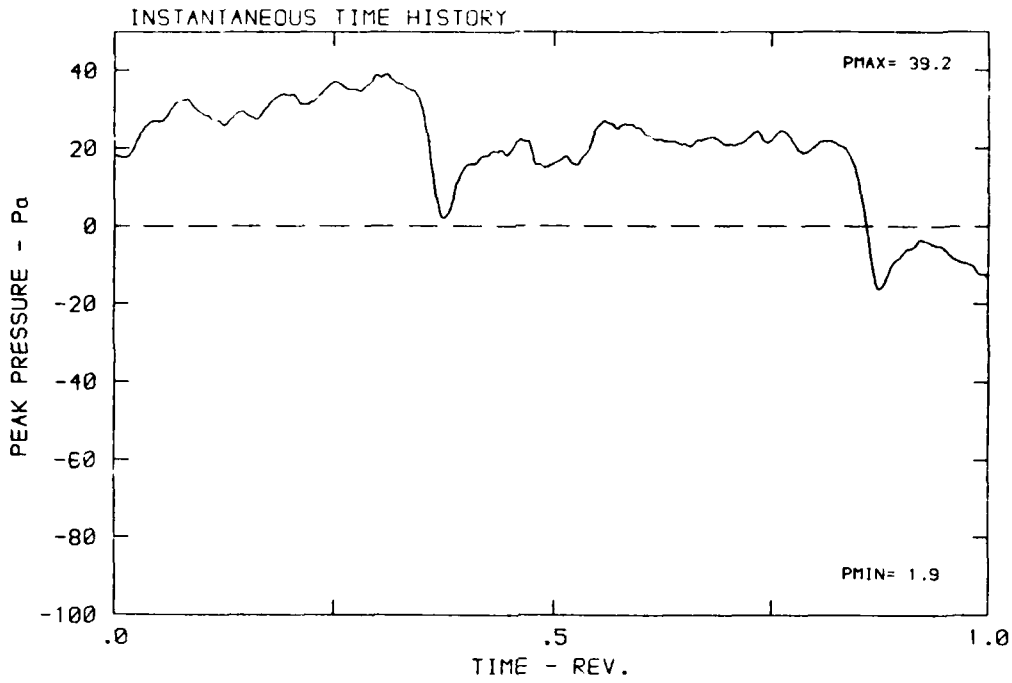
DATA POINT : GN-2 RUN : 152 MP : 8

β : 19.9° MH : .7664 n : 2400 rpm v/u : .202 ϕ : -7.4° T : 287.5 K



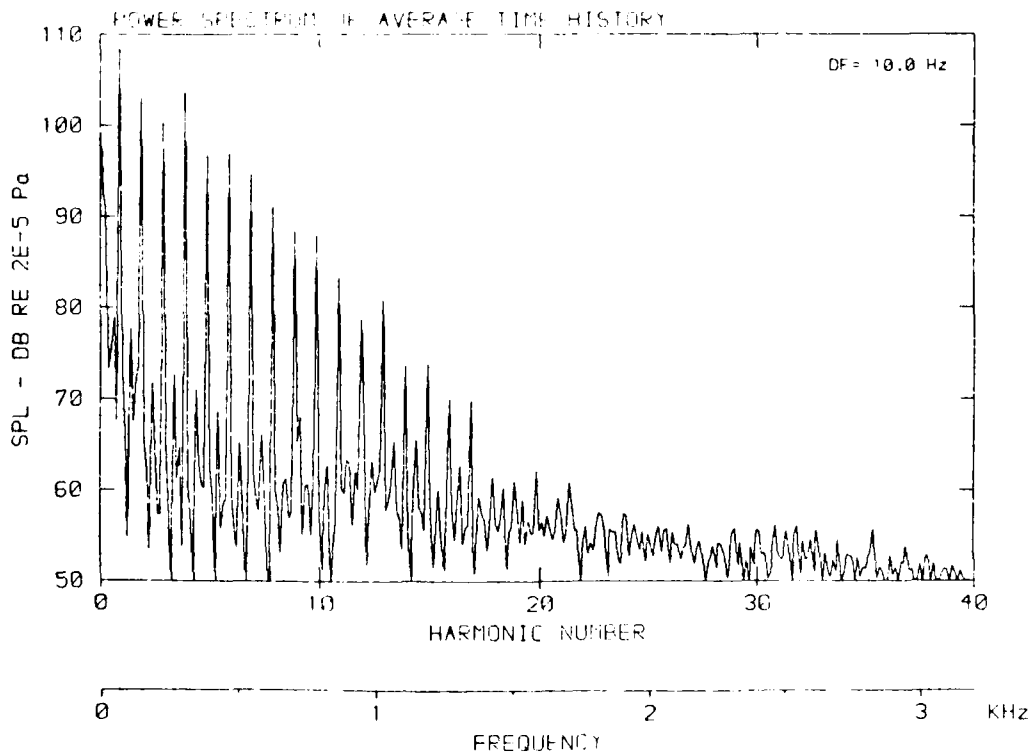
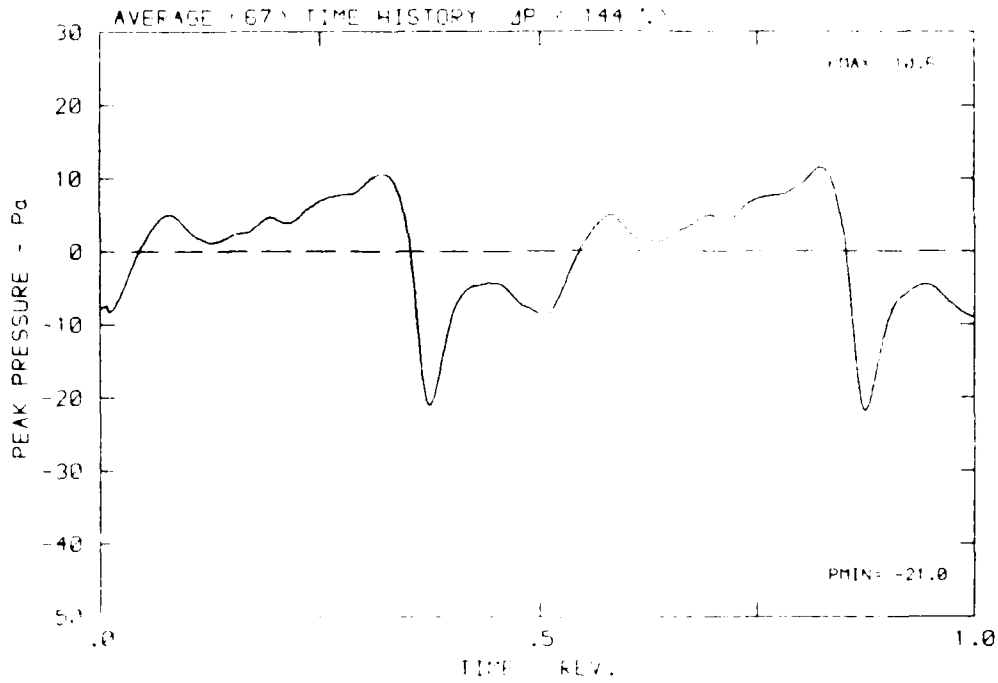
DATA POINT: GN-2 RUN: 152 MP: 9

β : 19.9° NH: .7664 n: 2400 rpm v/u: .202 ϕ : -7.4° T: 287.5 K



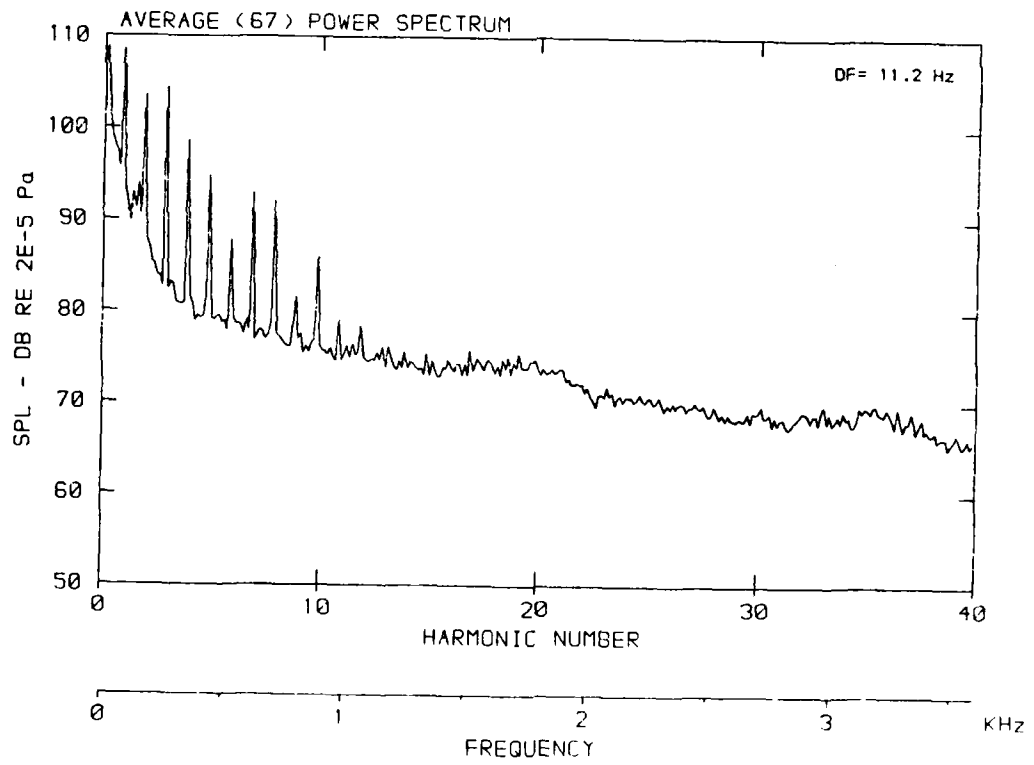
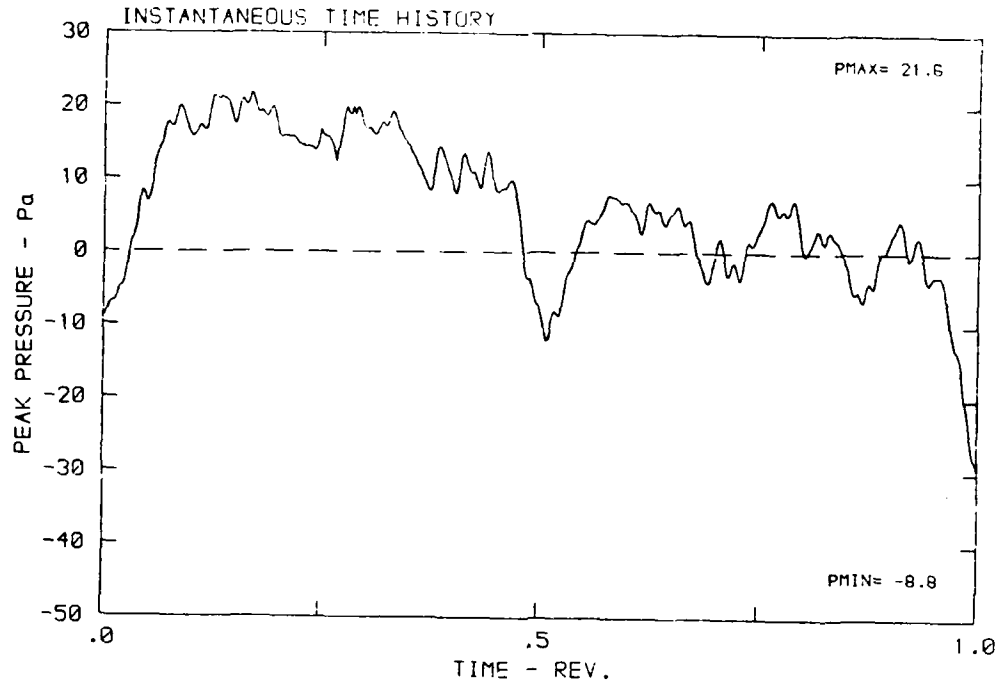
DATA POINT: GN-2 RUN: 152 MP: 9

β : 19.9° MH: .7664 n: 2400 rpm v : .203 ϕ : -7.4° T: 287.5 K



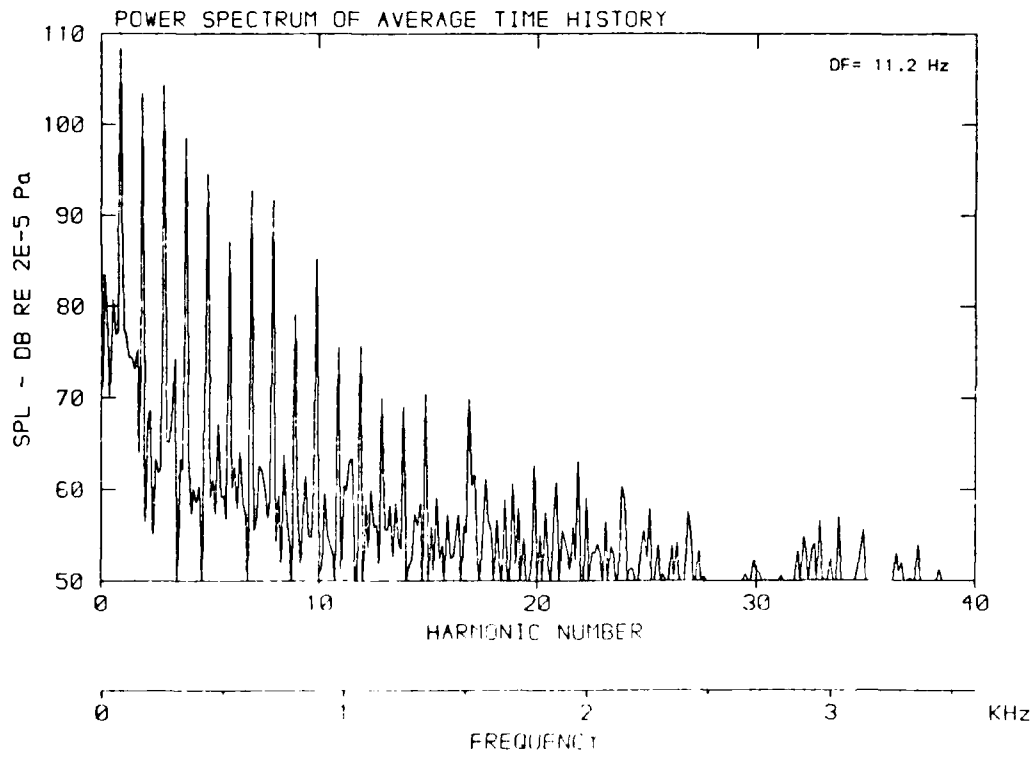
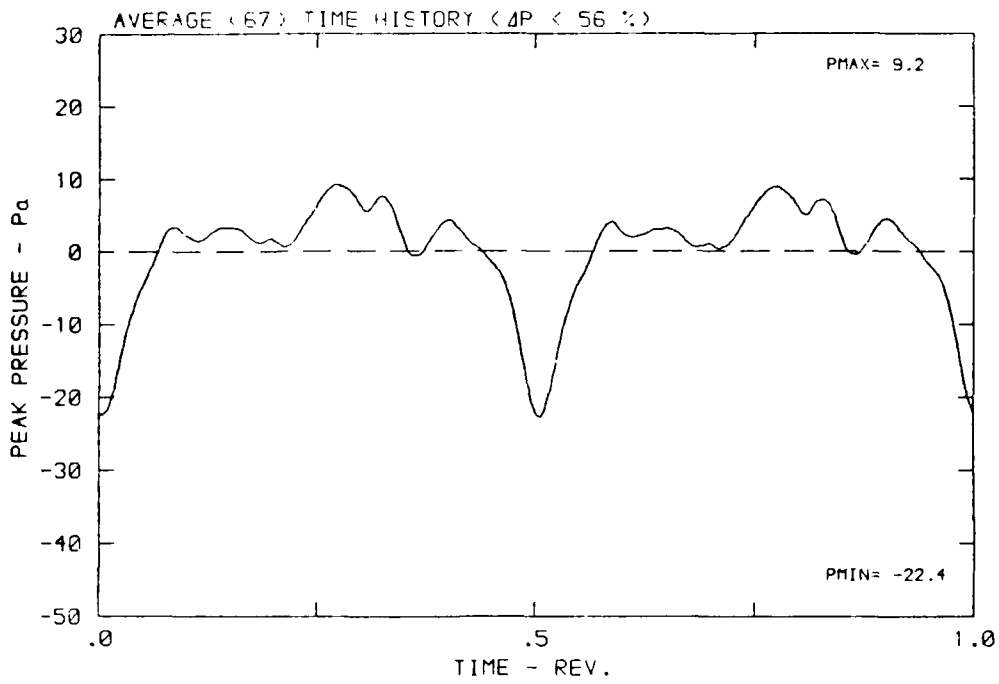
DATA POINT: GN-3 RUN: 153 MP: 1

β : 19.9° MH: .8735 n: 2700 rpm γ : .268 ϕ : -7.4° T: 234.4



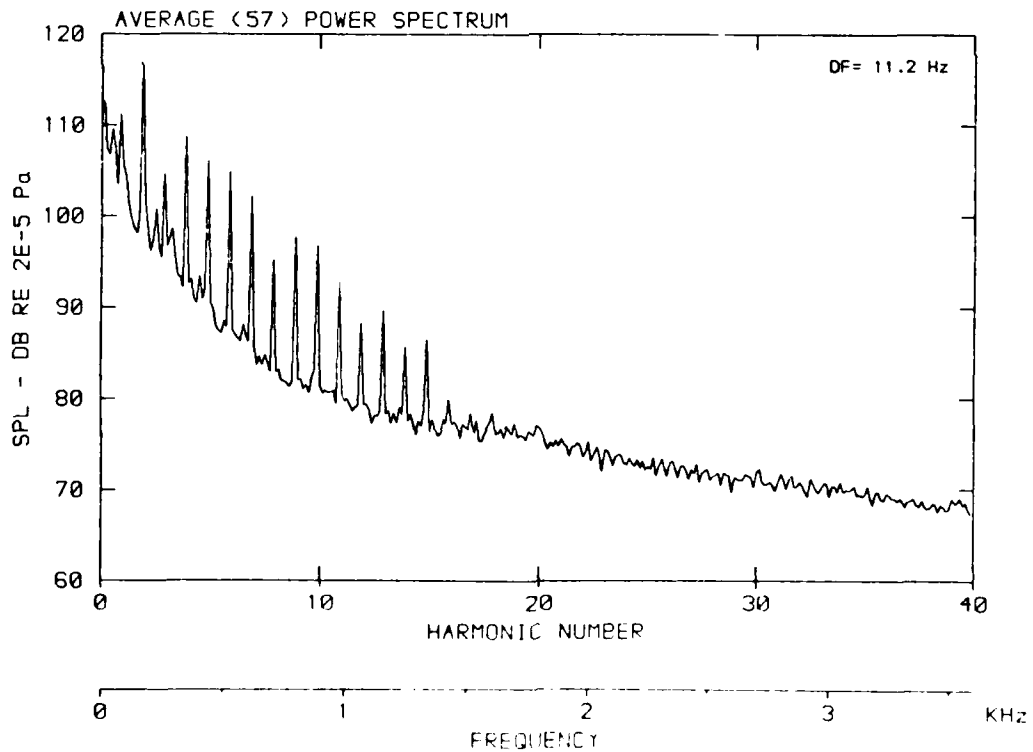
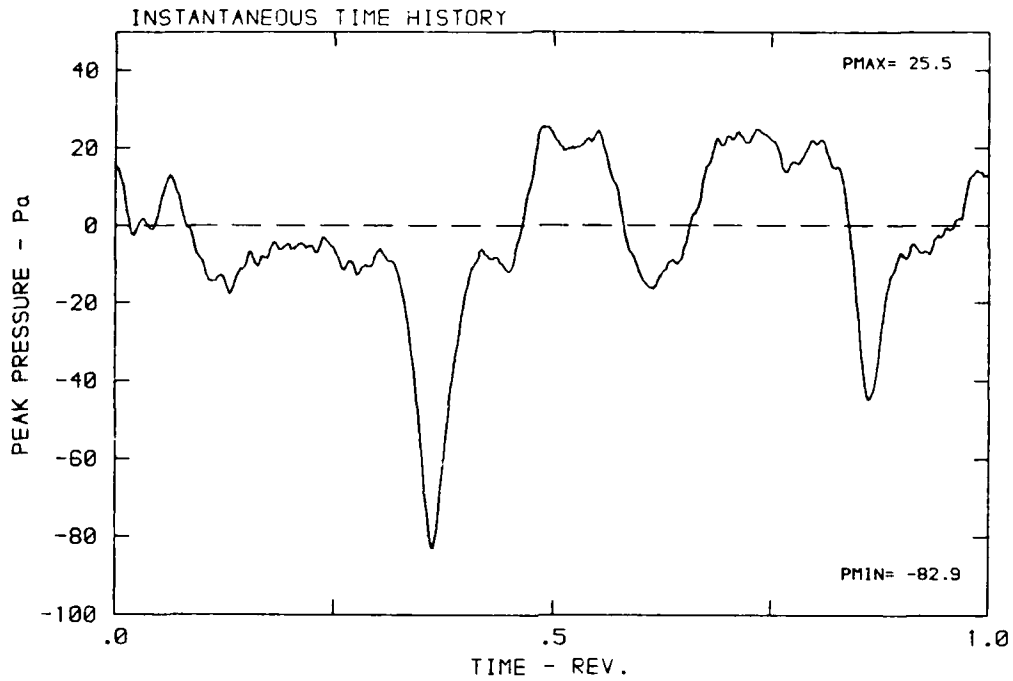
DATA POINT: GN-3 RUN: 153 MP: 1

β : 19.9° MH: .8735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



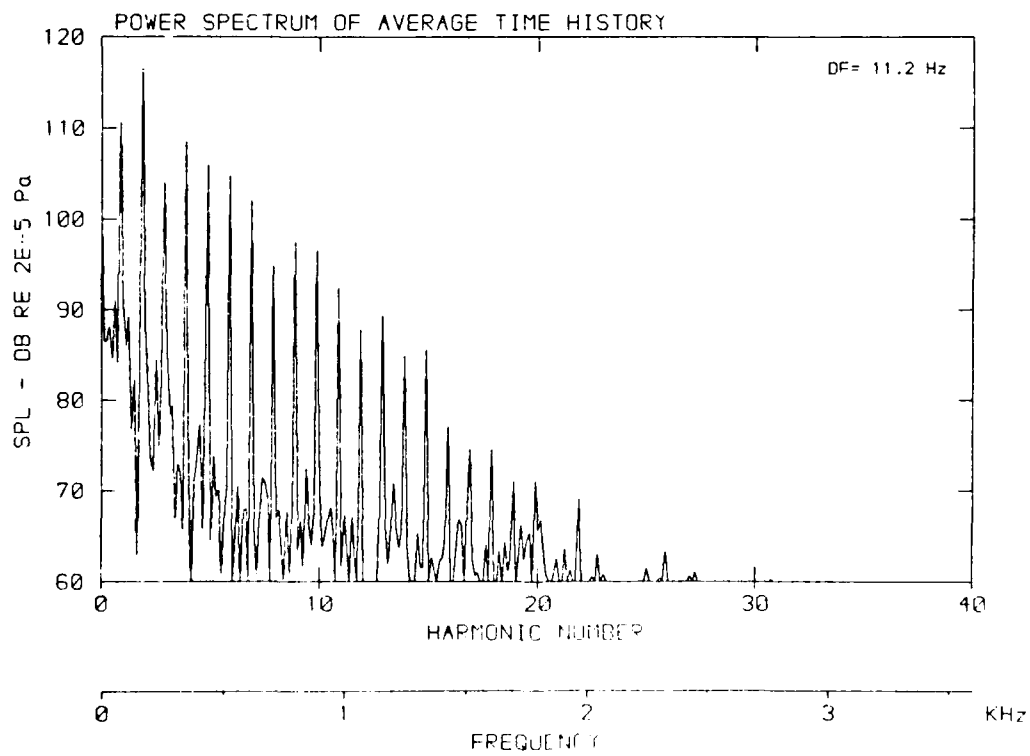
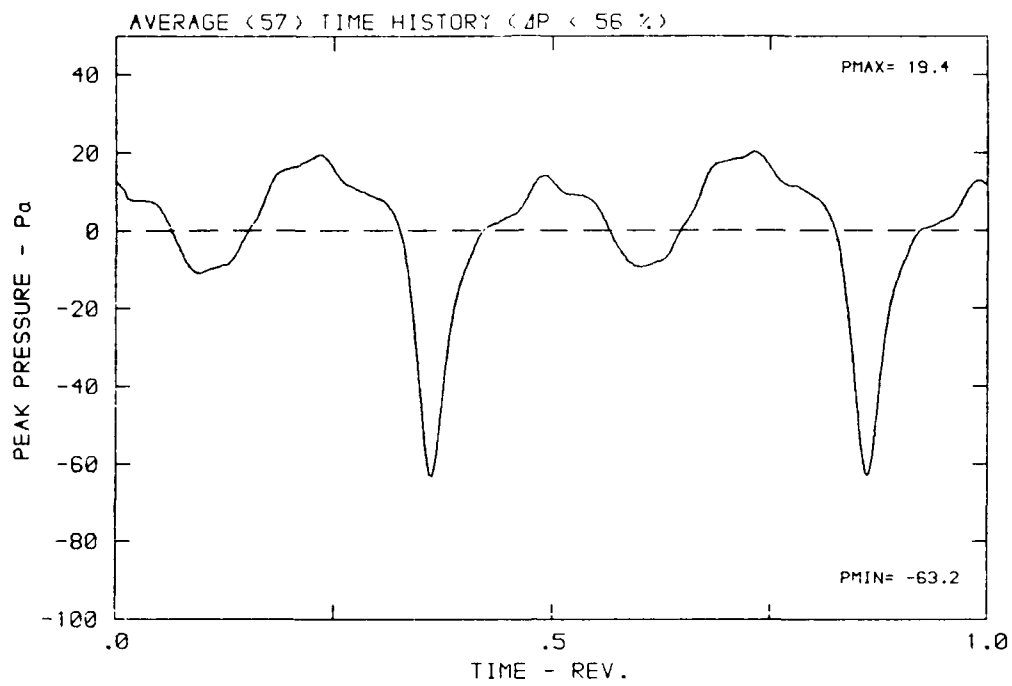
DATA POINT: GN-3 RUN: 153 MP: 2

β : 19.9° MH: .8735 n: 2700 rpm v/u: .268 ϕ : -7.4° T: 288.4 K



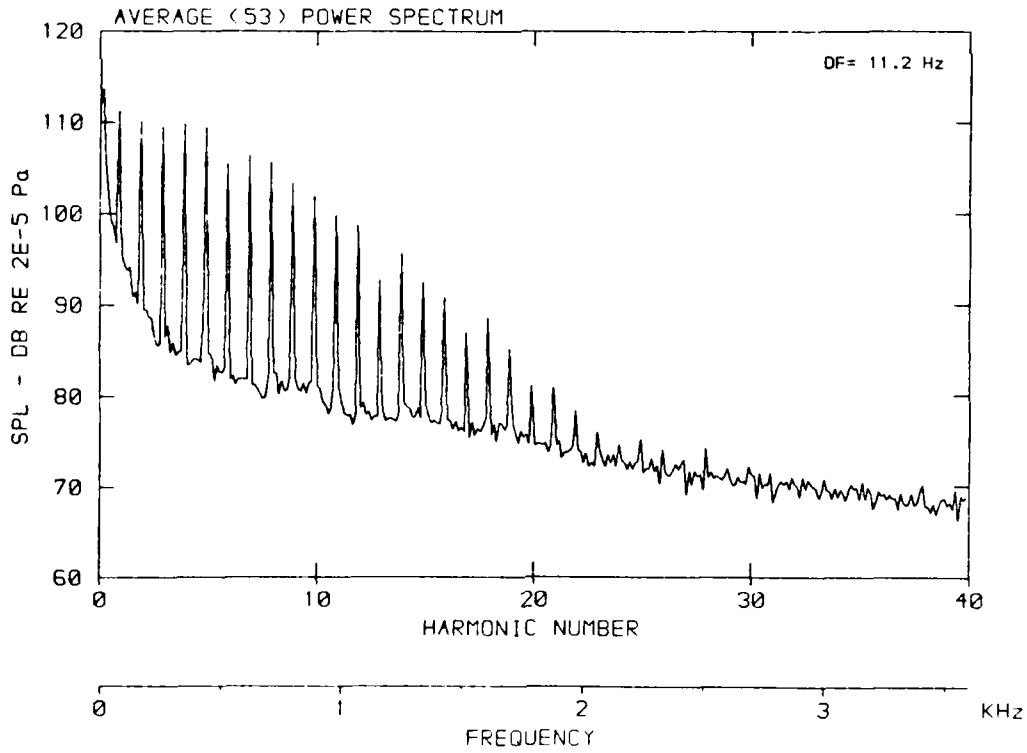
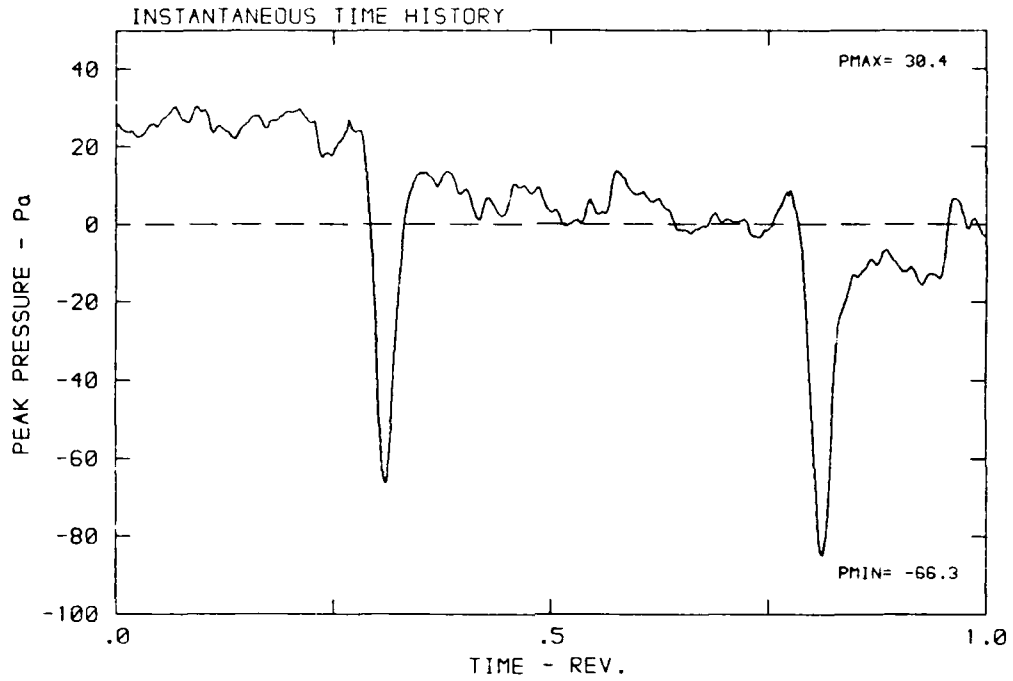
DATA POINT: GN-3 RUN: 153 MP: 2

β : 19.9° MH: .8735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



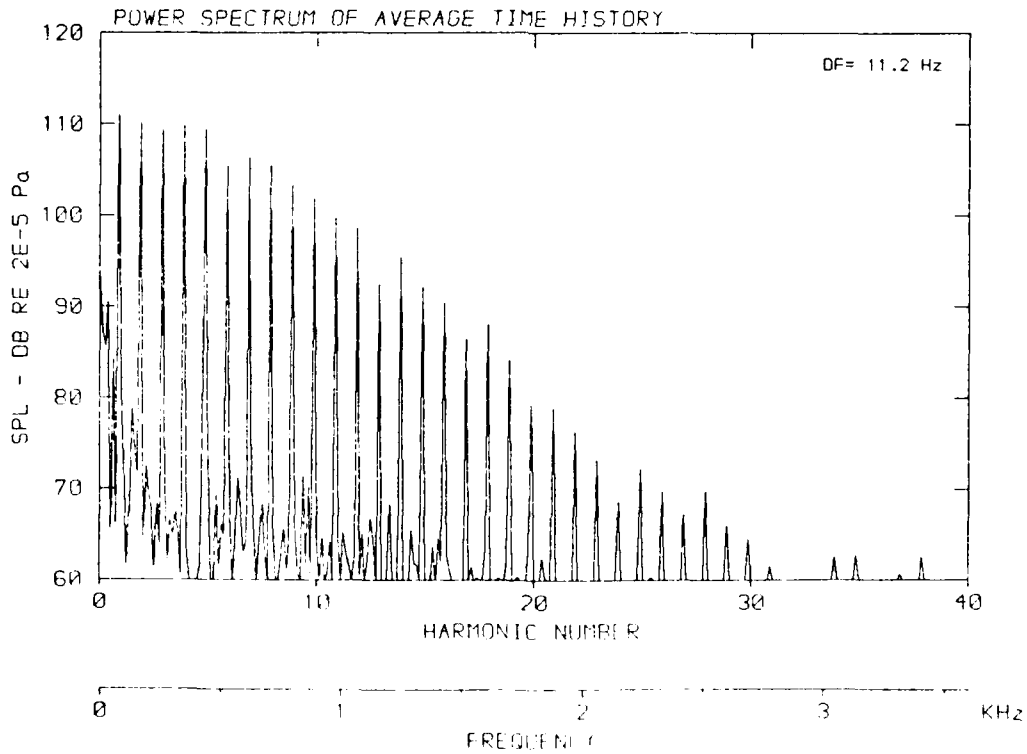
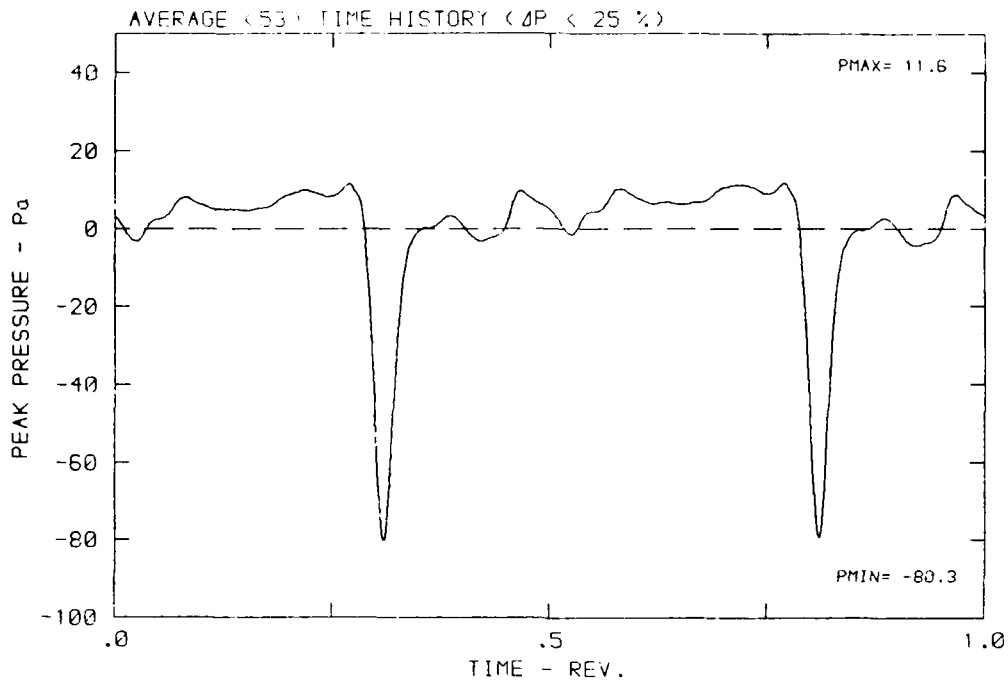
DATA POINT: GN-3 RUN: 153 MP: 3

β : 19.9° MH: .8735 n: 2700 rpm v/u: .268 ϕ : -7.4° T: 288.4 K



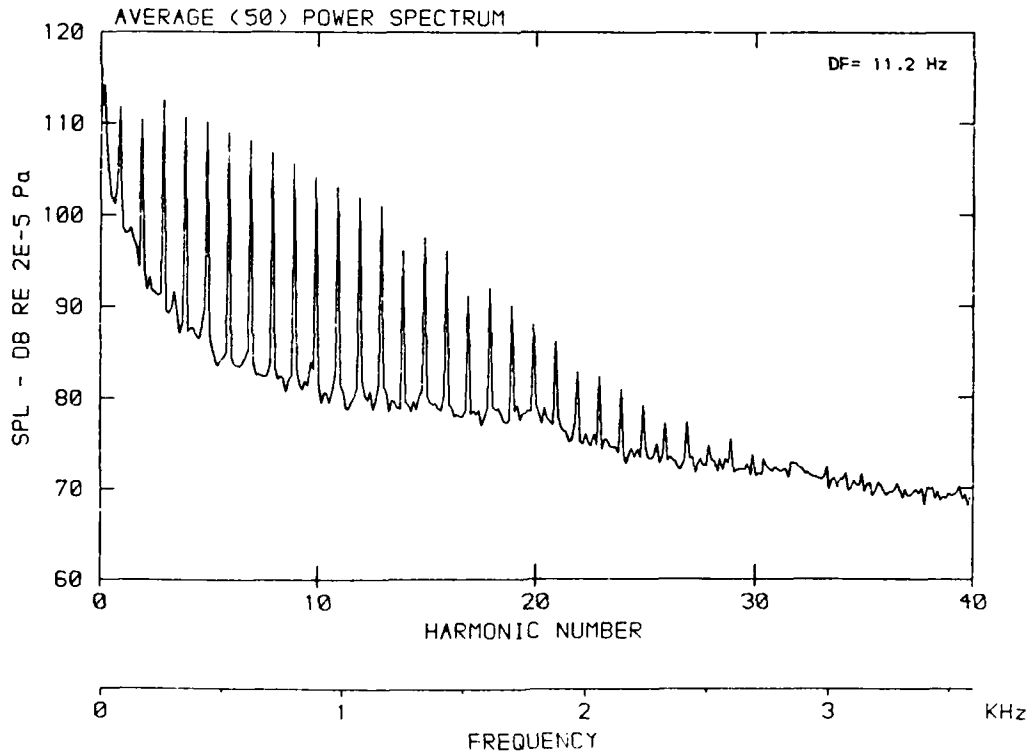
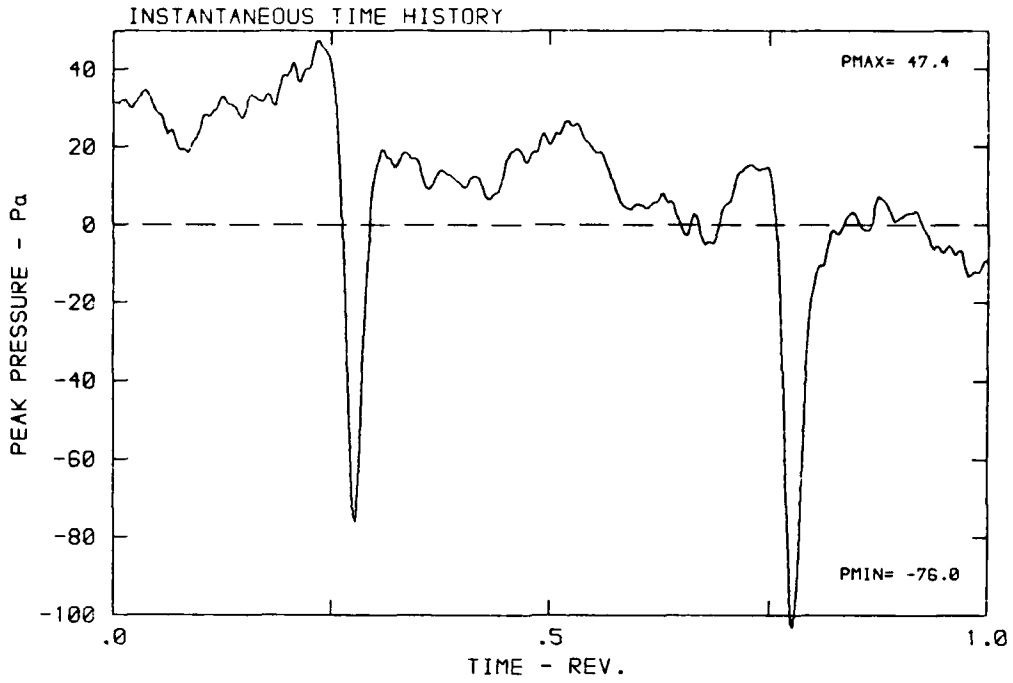
DATA POINT: GN-3 RUN: 153 MP: 3

β : 19.9° MH: .8735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



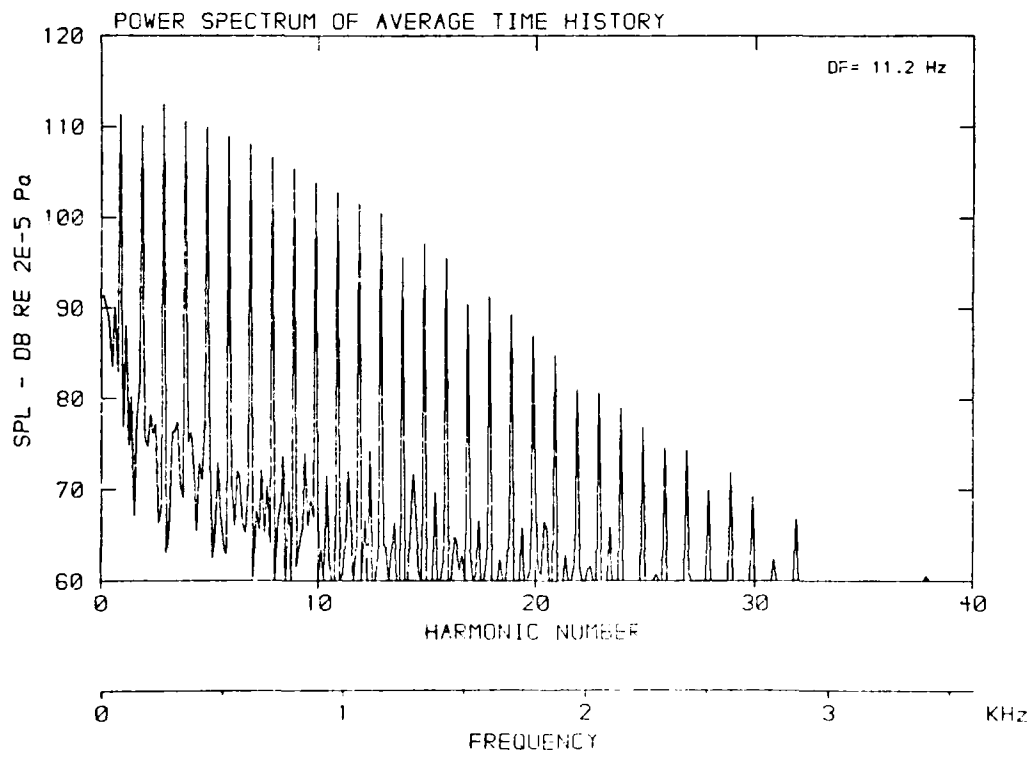
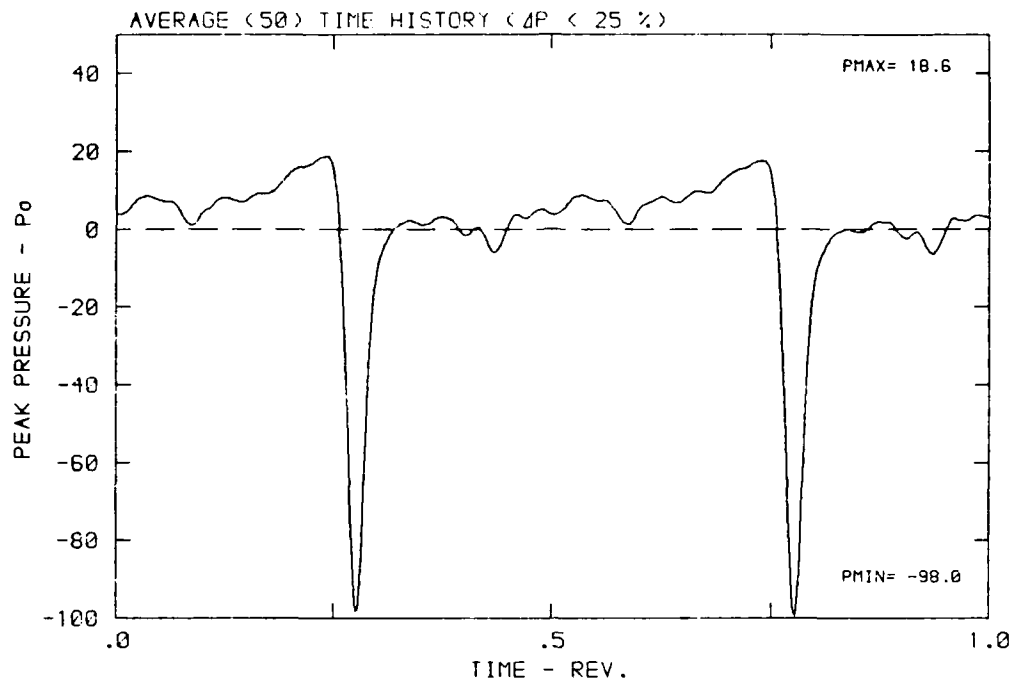
DATA POINT: GN-3 RUN: 153 MP: 4

β : 19.9° MH: .8735 n: 2700 rpm v/u: .268 ϕ : -7.4° T: 288.4 K



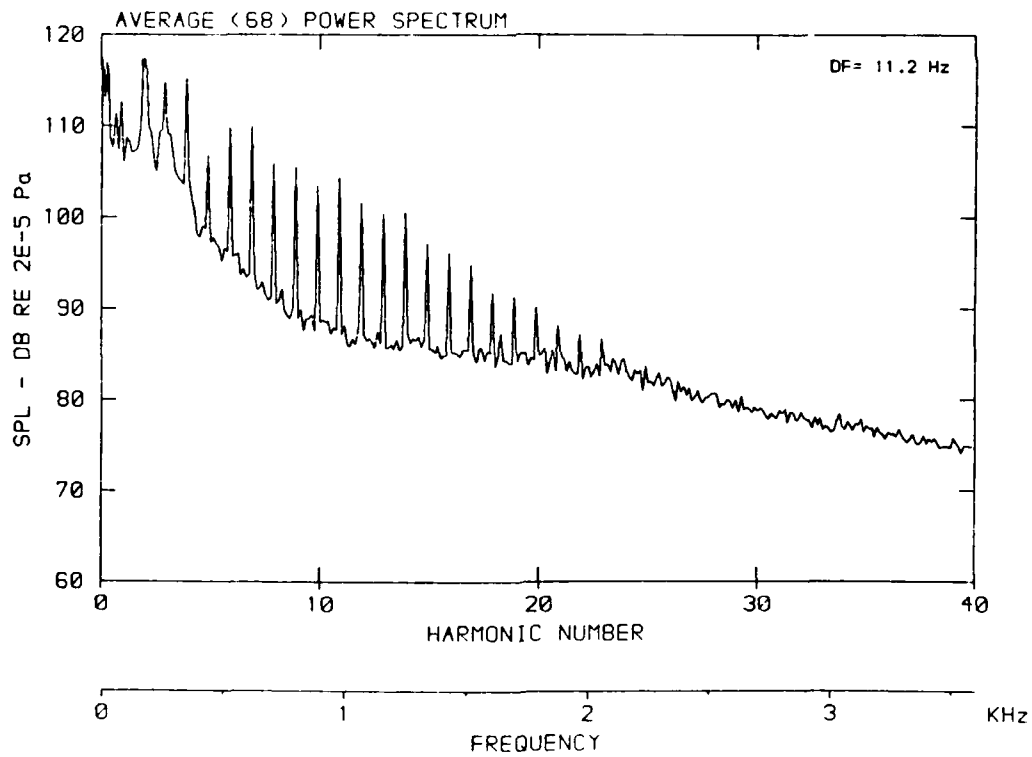
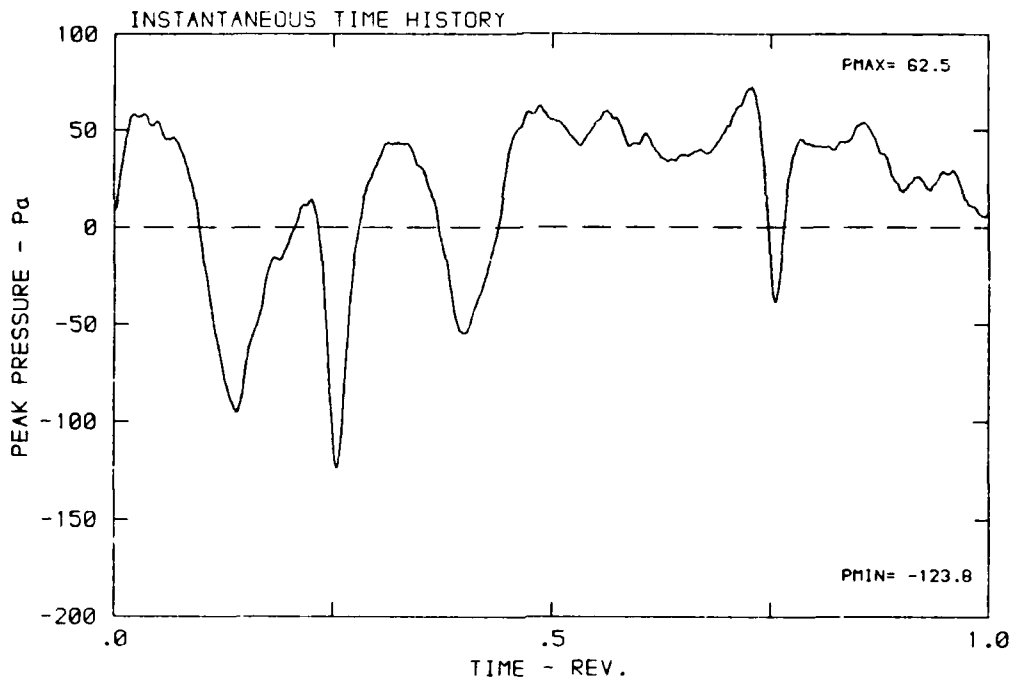
DATA POINT: GN-3 RUN: 153 MP: 4

β : 19.9° MH: .8735 n: 2700 rpm v/u: .268 ϕ : -7.4° T: 288.4 K



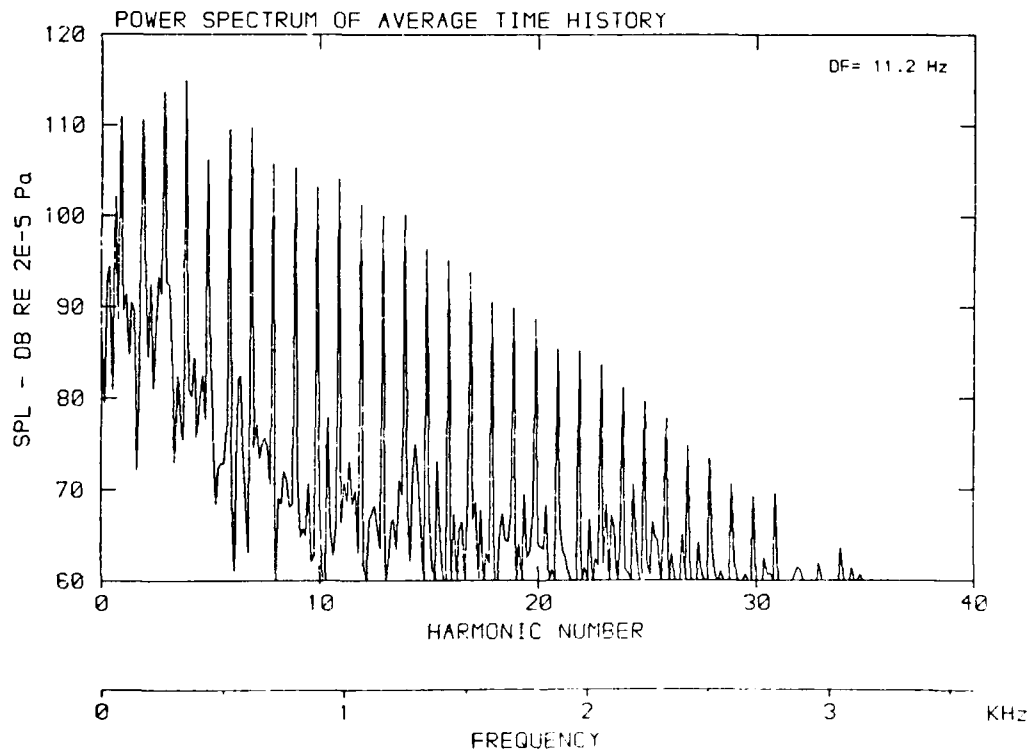
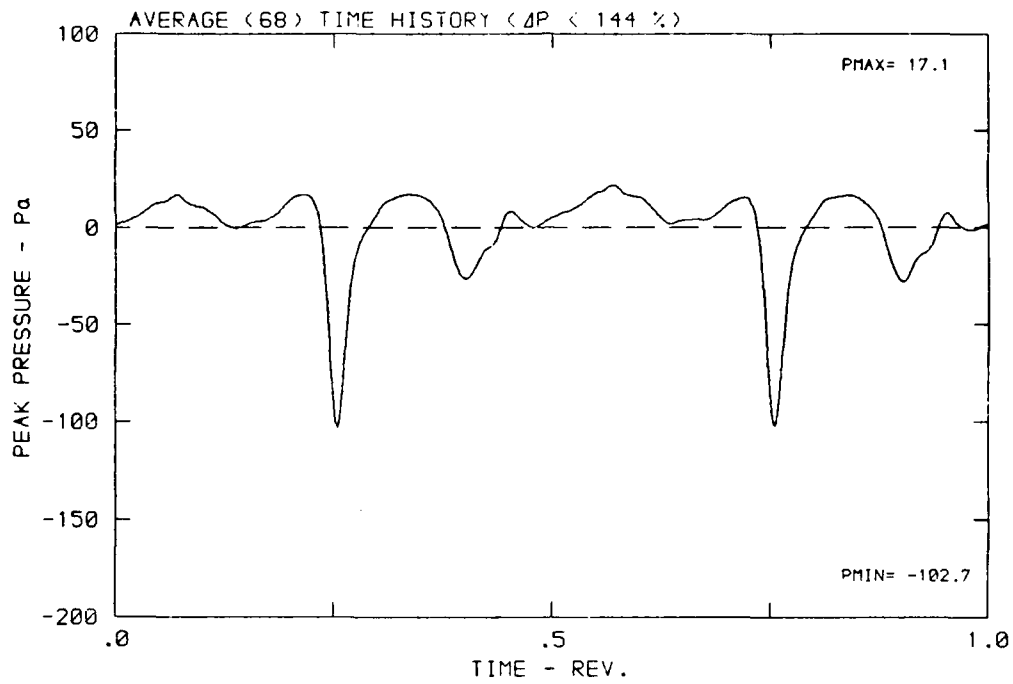
DATA POINT: GN-3 RUN: 153 MP: 5

β : 19.9° MH: .8735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



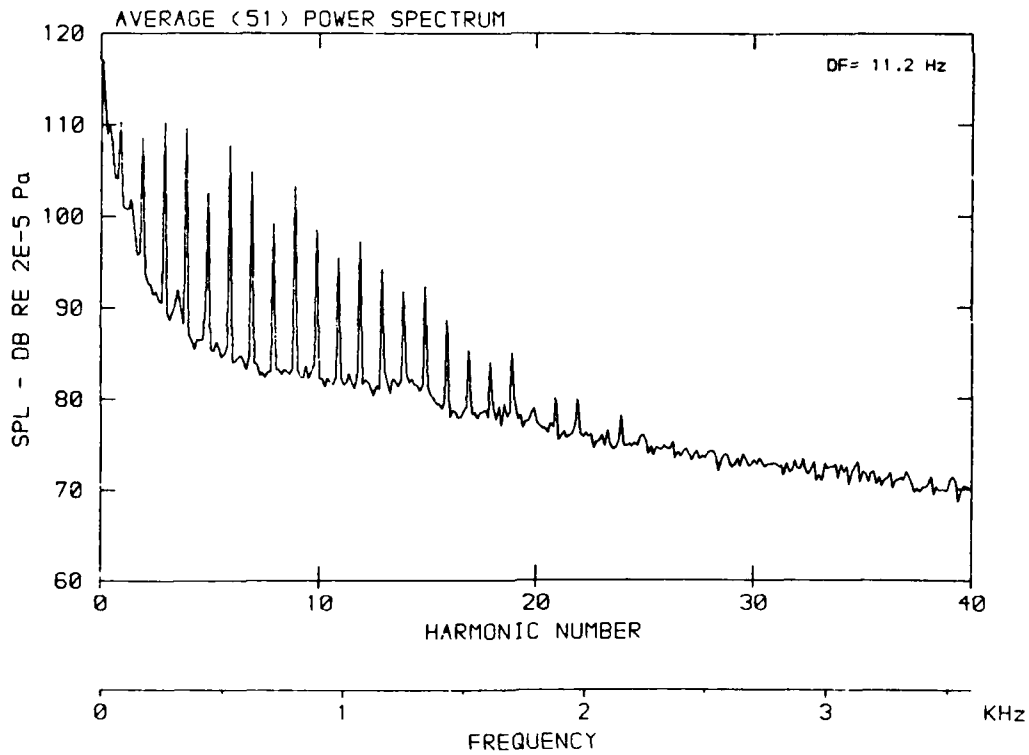
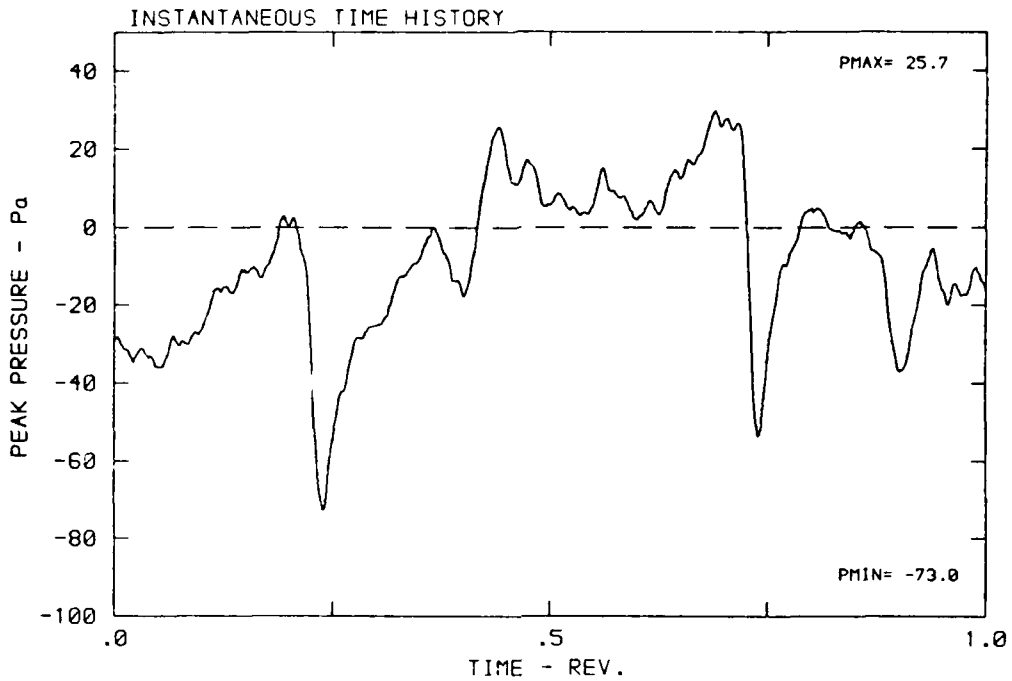
DATA POINT: GN-3 RUN: 153 MP: 5

β : 19.9° MH: .8735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



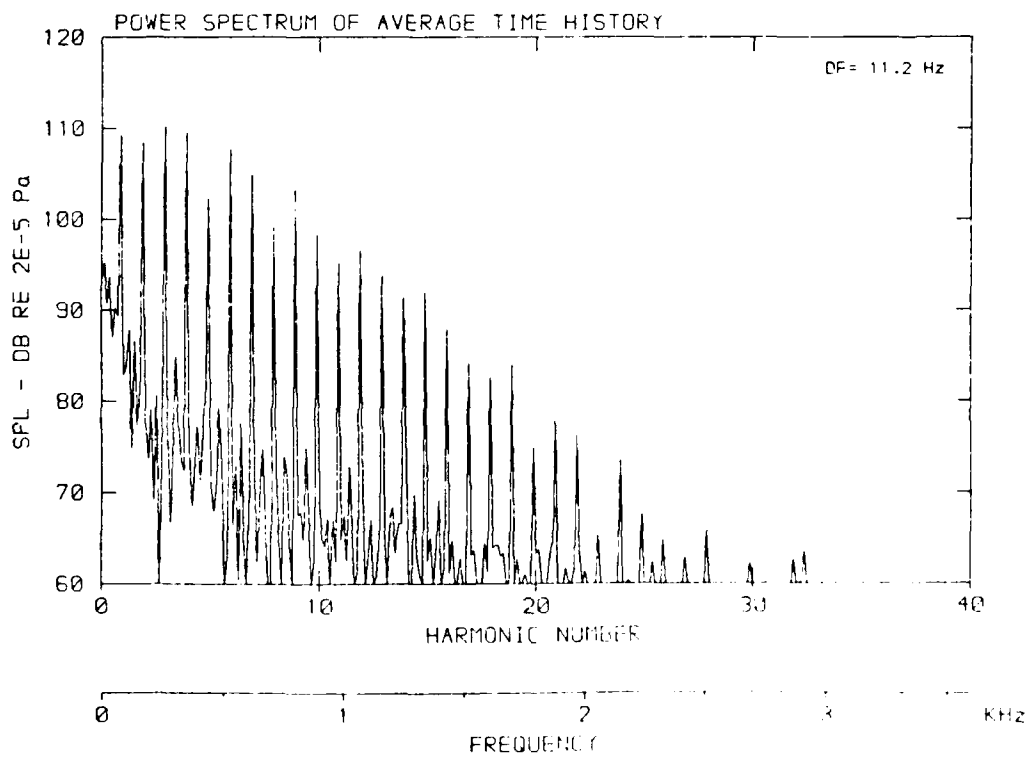
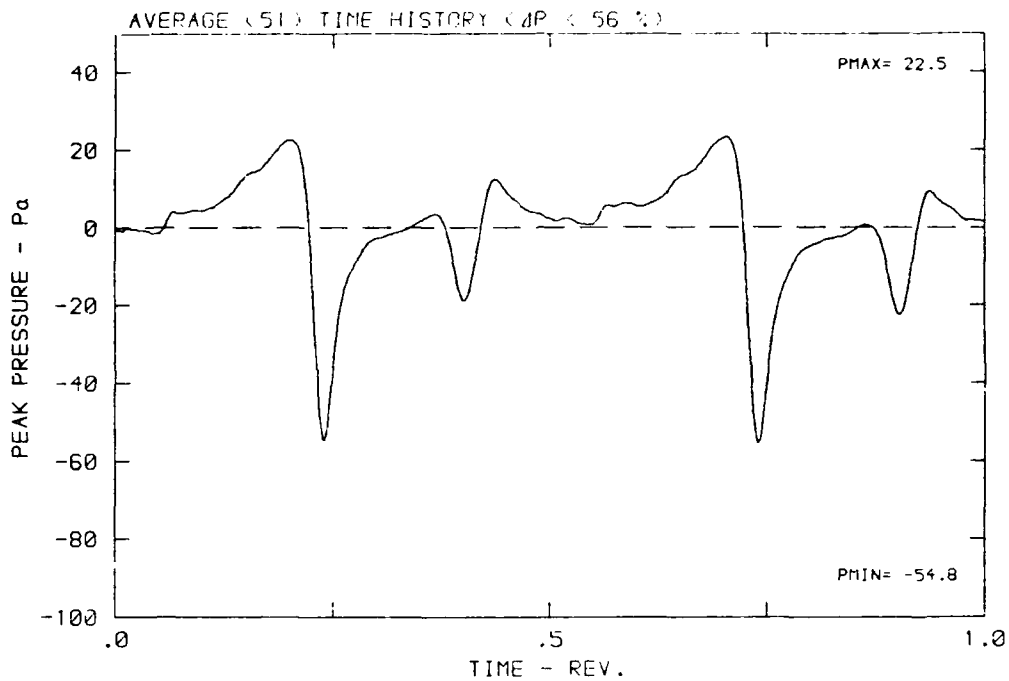
DATA POINT: GN-3 RUN: 153 MP: 6

β : 19.9° MH: .8735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



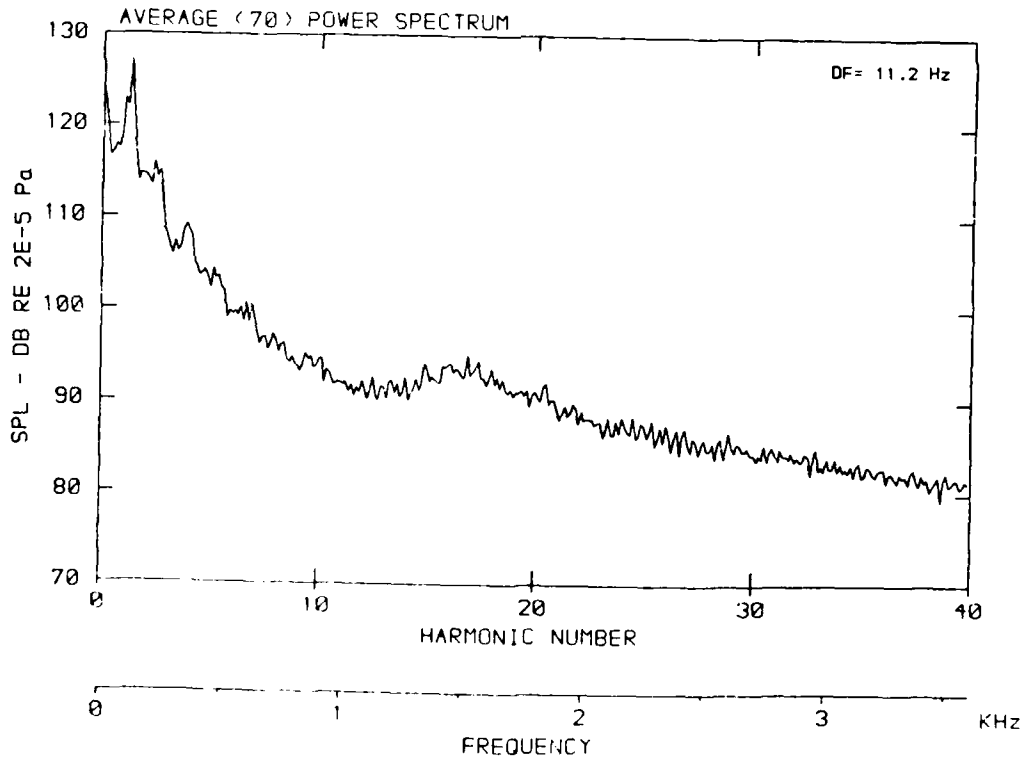
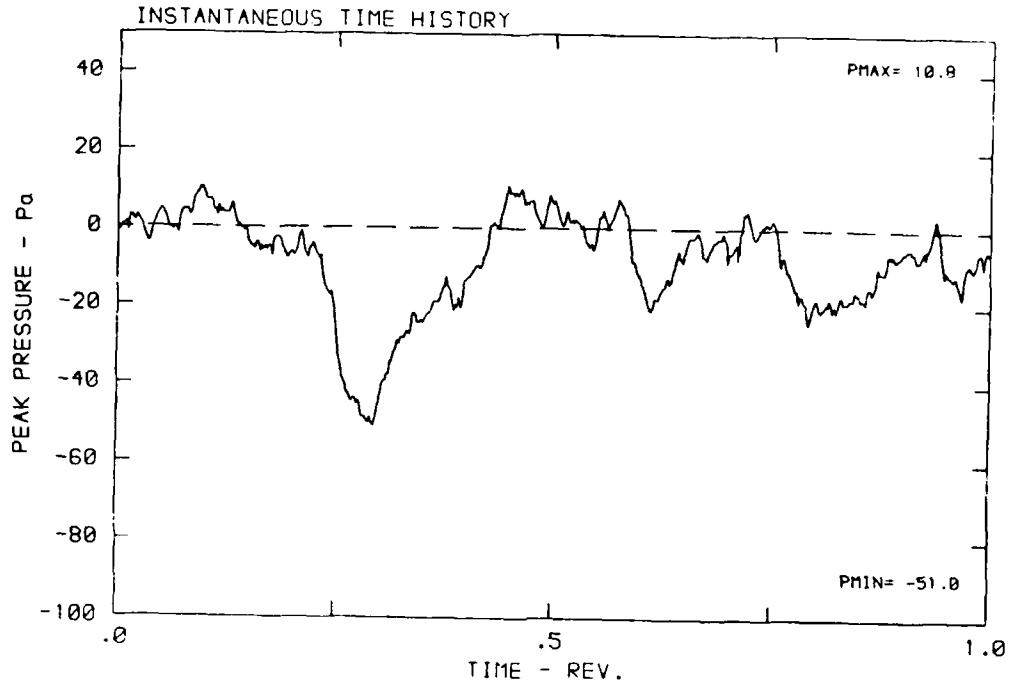
DATA POINT: GN-3 RUN: 153 MP: 6

β : 19.9° MH: .8735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



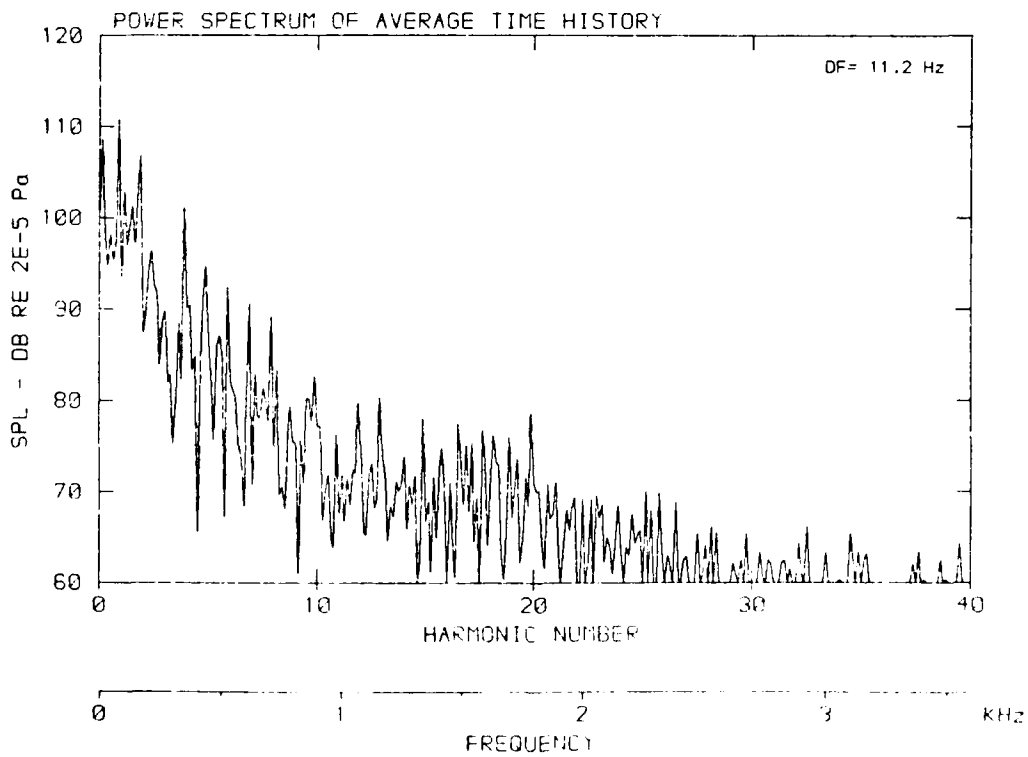
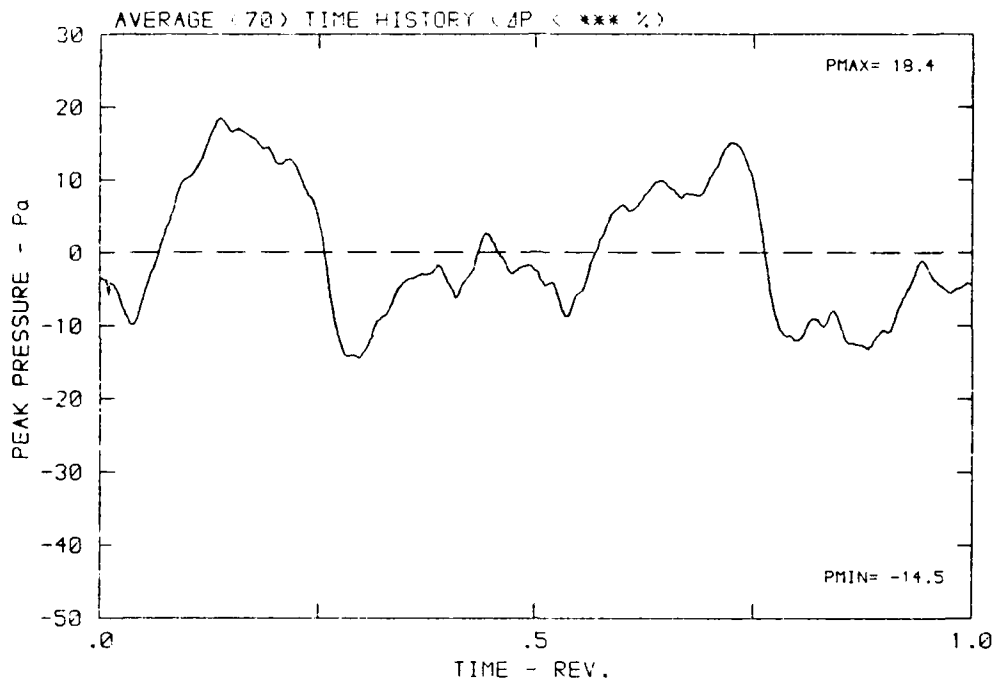
DATA POINT: GN-3 RUN: 153 MP: 7

β : 19.9° MH: .8735 n: 2700 rpm v/u: .268 ϕ : -7.4° T: 299.4 K



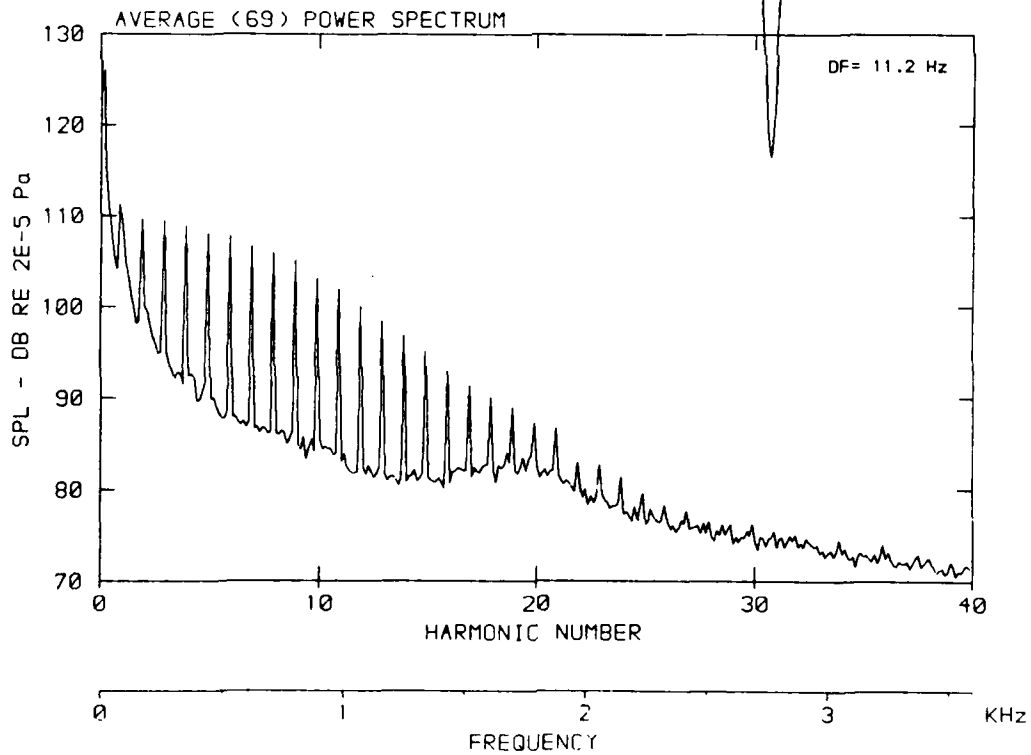
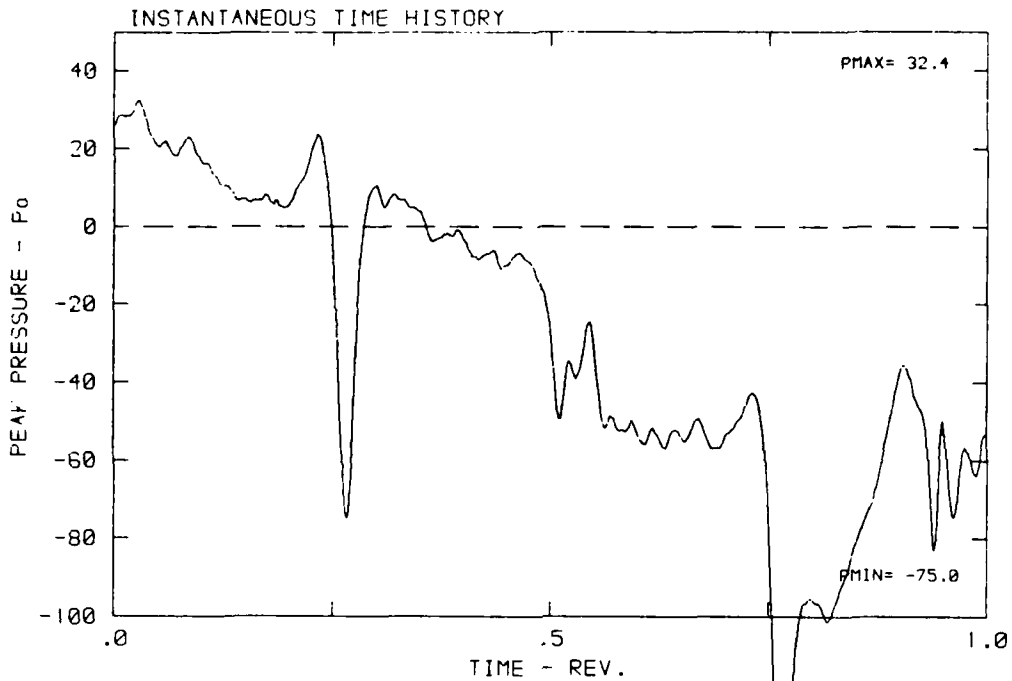
DATA POINT: GN-3 RUN: 153 MP: 7

β : 19.9° MH: .8735 n: 2700 rpm ν : .268 ϕ : -7.4° T: 288.4 K



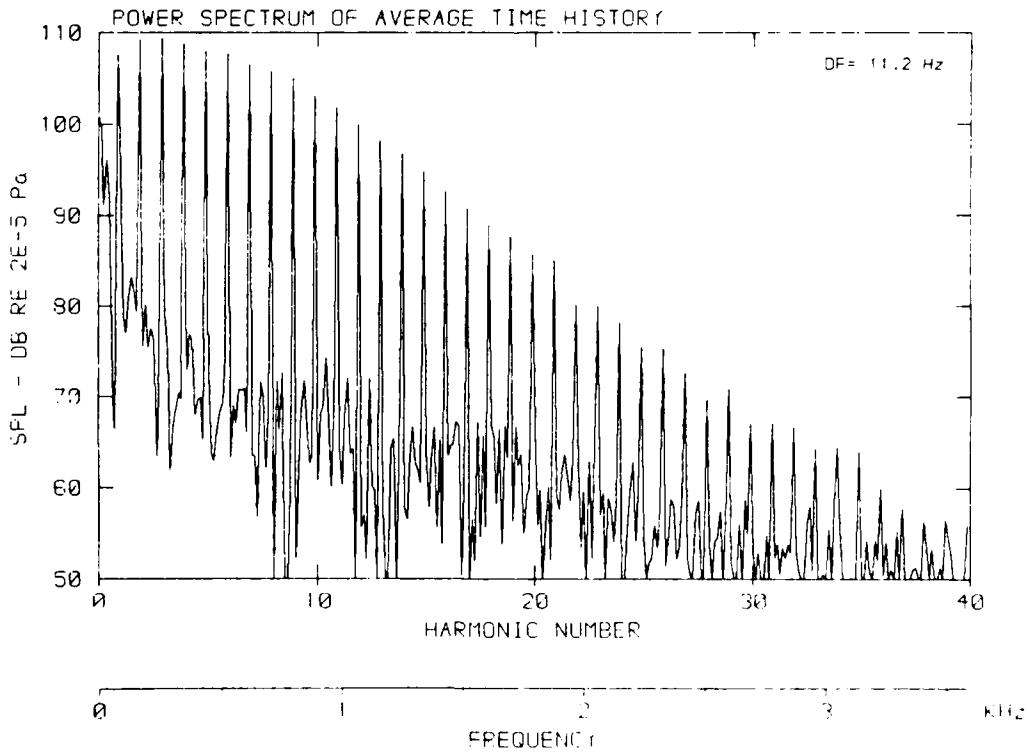
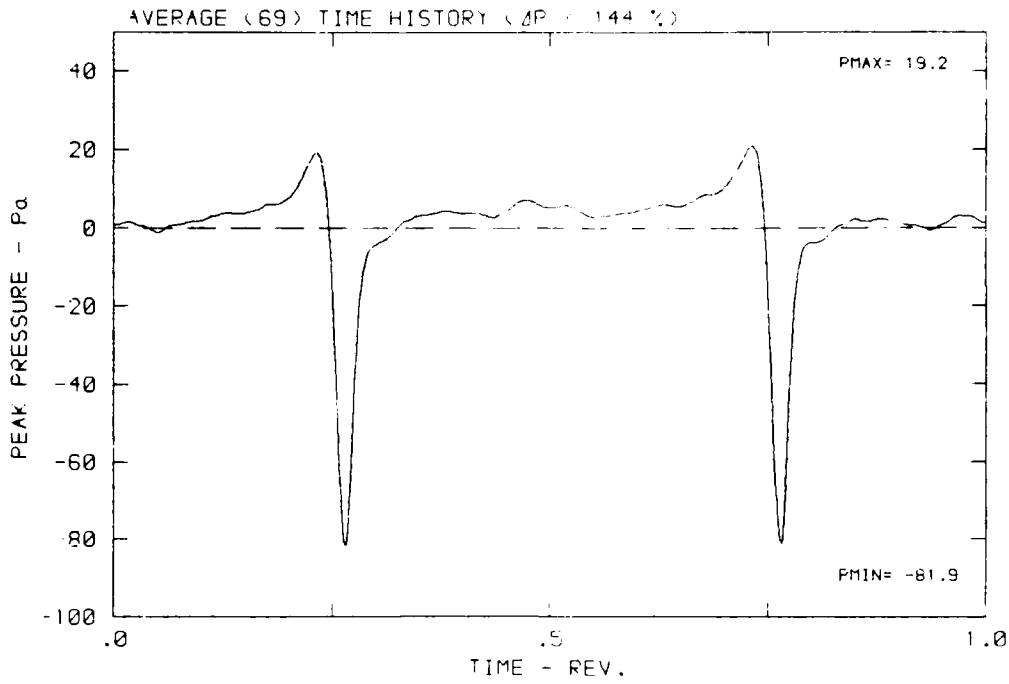
DATA POINT: GN-3 RUN: 153 MP: 8

β : 19.9° MH: .8735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



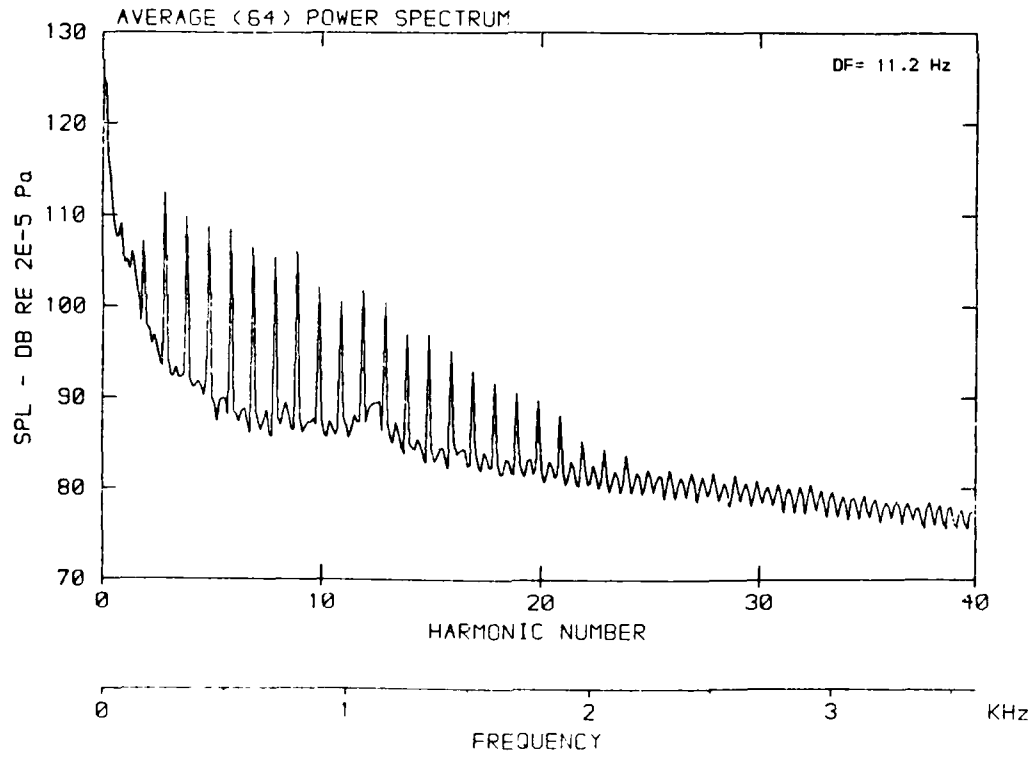
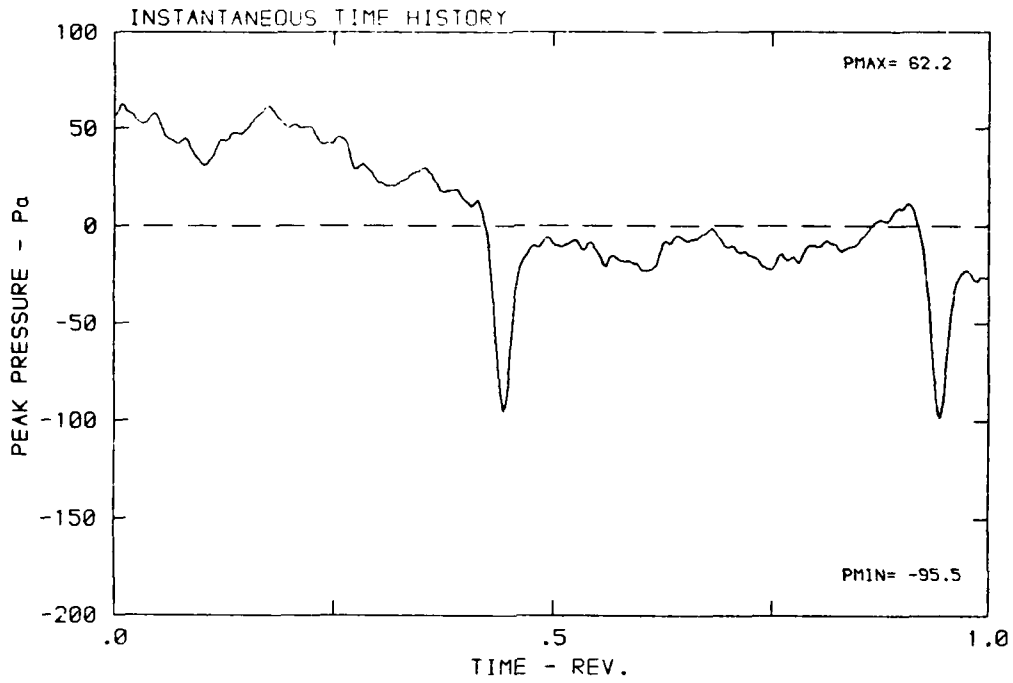
DATA POINT: GN-3 RUN: 153 MP: 8

β : 19.9° MH: .8735 n: 2700 rpm ν : .268 ϕ : -7.4° T: 288.4 K



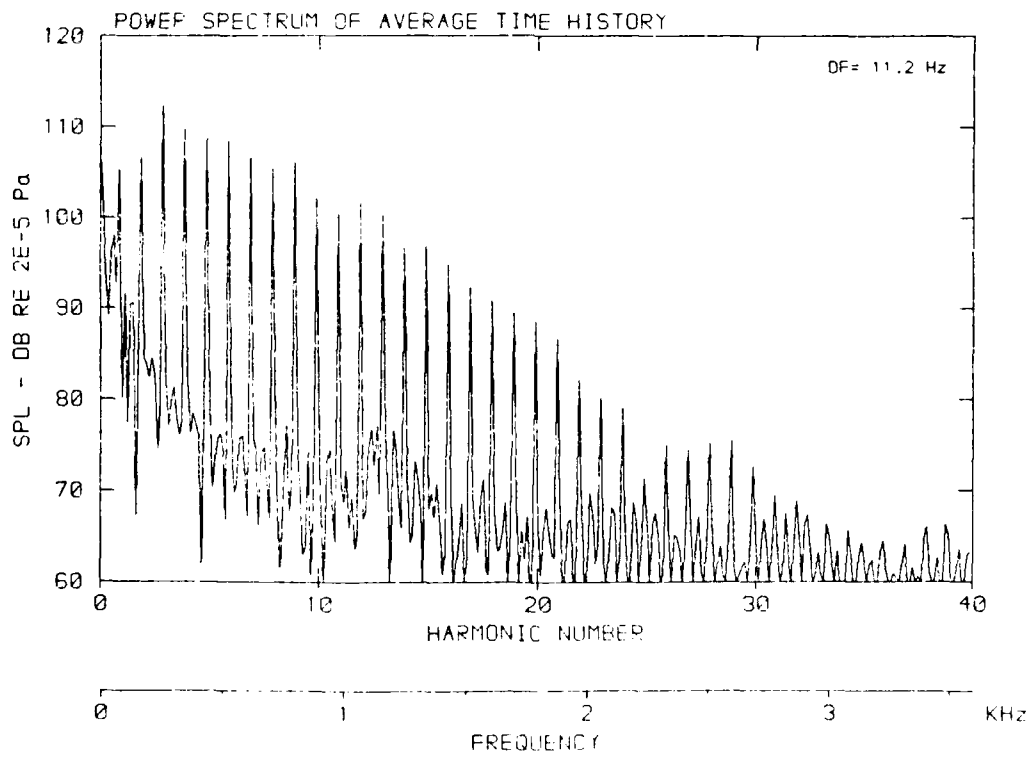
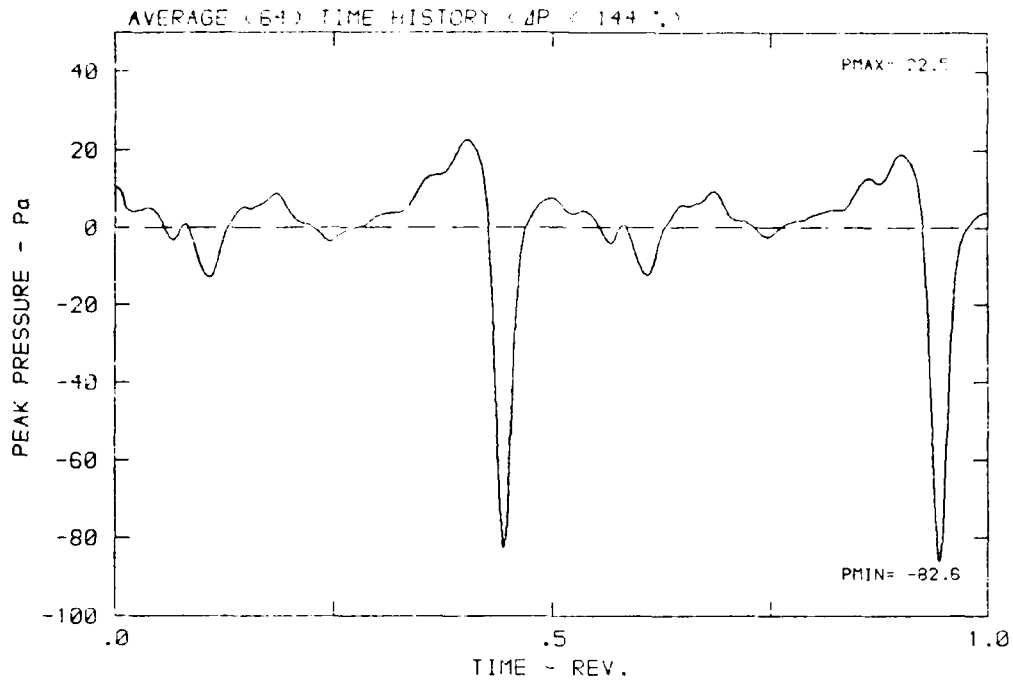
DATA POINT: GN-3 RUN: 153 MP: 9

β : 19.9° MH: .9735 n: 2700 rpm v/u : .268 ϕ : -7.4° T: 288.4 K



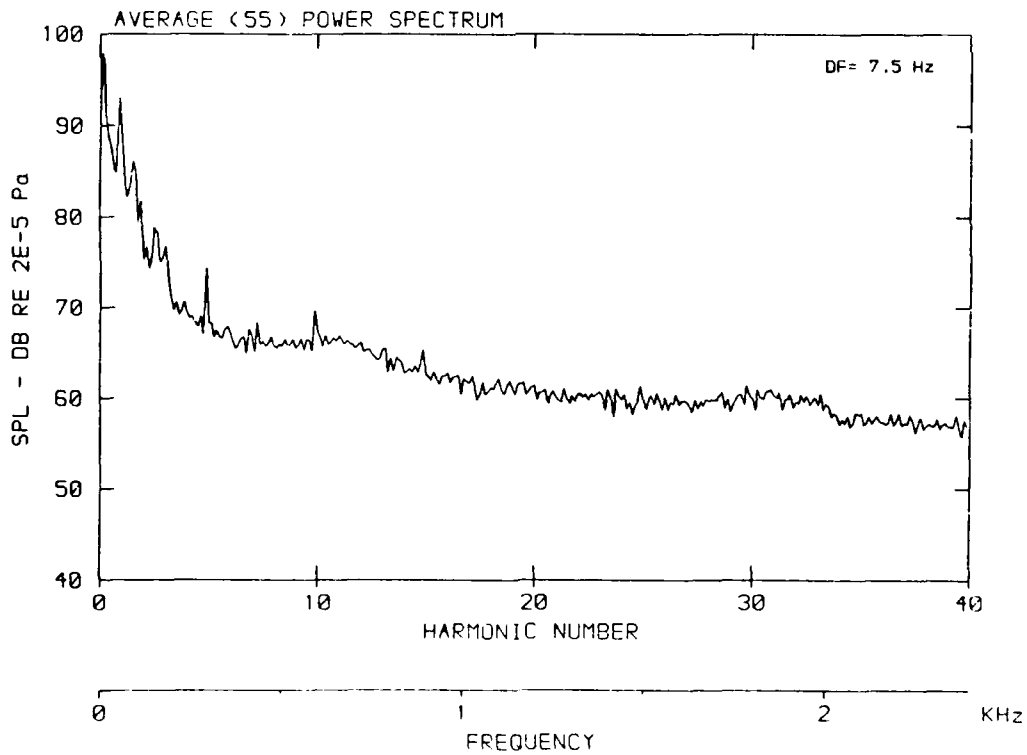
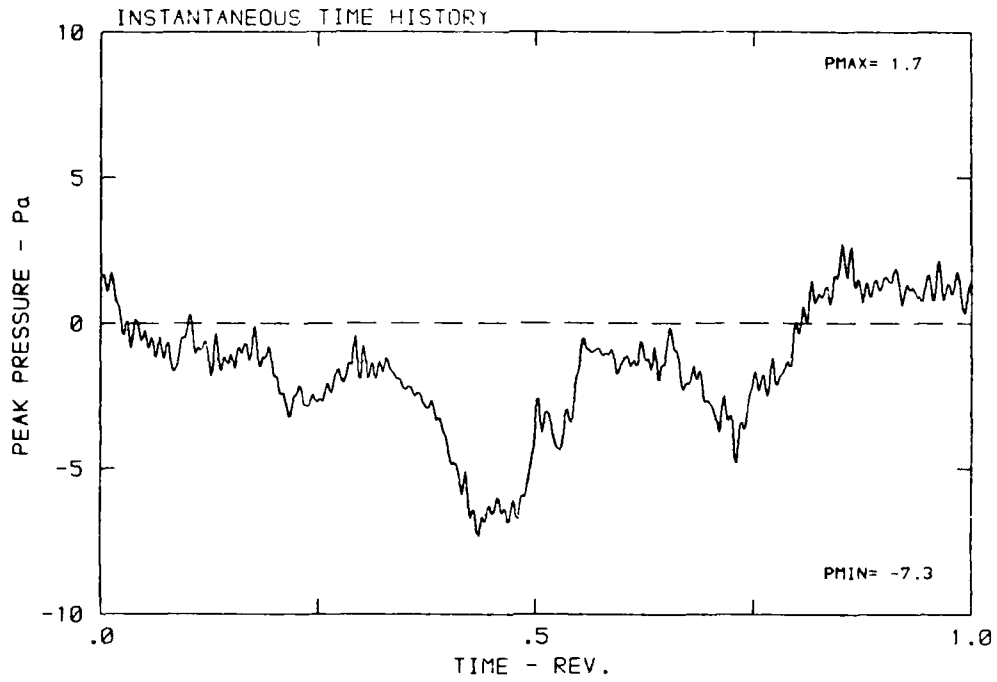
DATA POINT: GN-3 RUN: 153 MP: 9

β : 19.9° MH: .8735 n: 2700 rpm ν : .268 ϕ : -7.4° T: 298.4 K



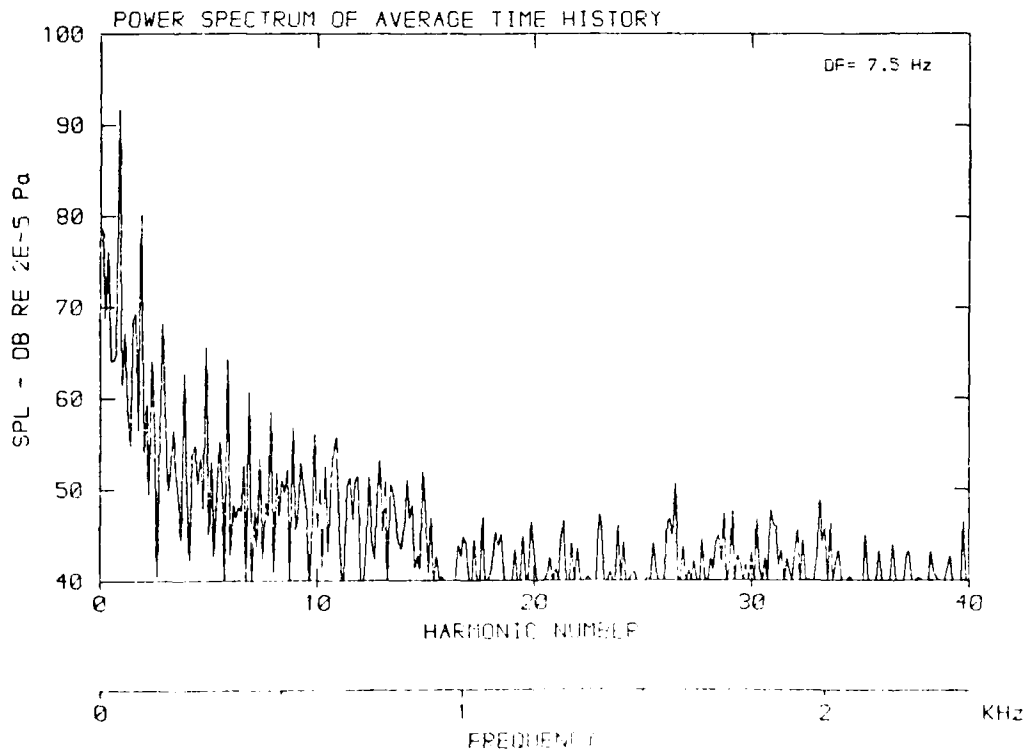
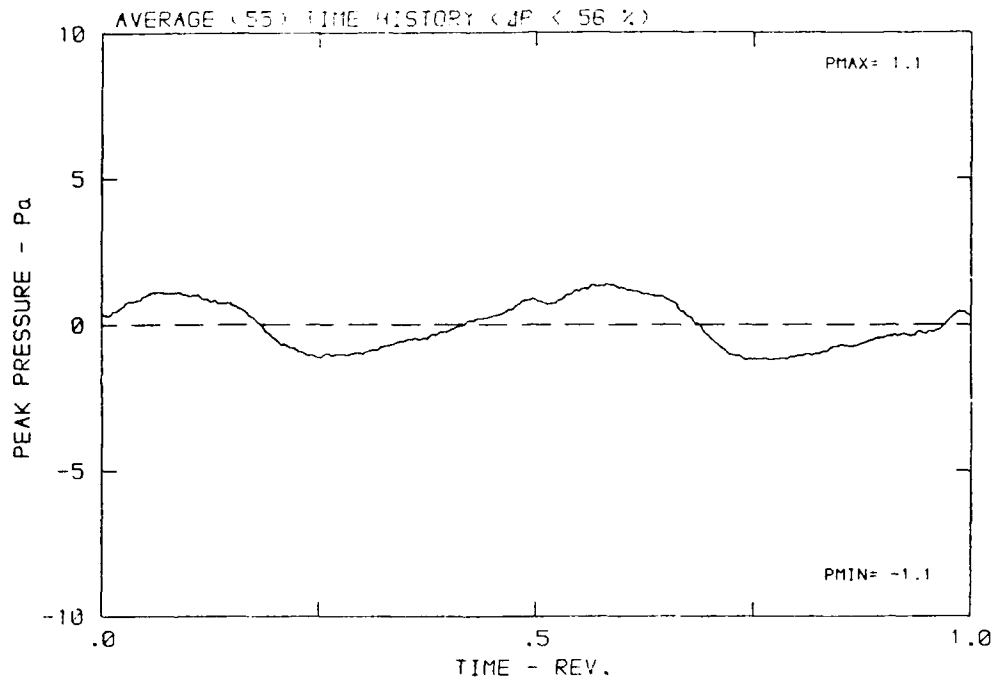
DATA POINT: GN-4 RUN: 148 MP: 1

β : 23.7° MH: .5829 n: 1800 rpm v/u: .257 ϕ : -7.4° T: 287.7 K



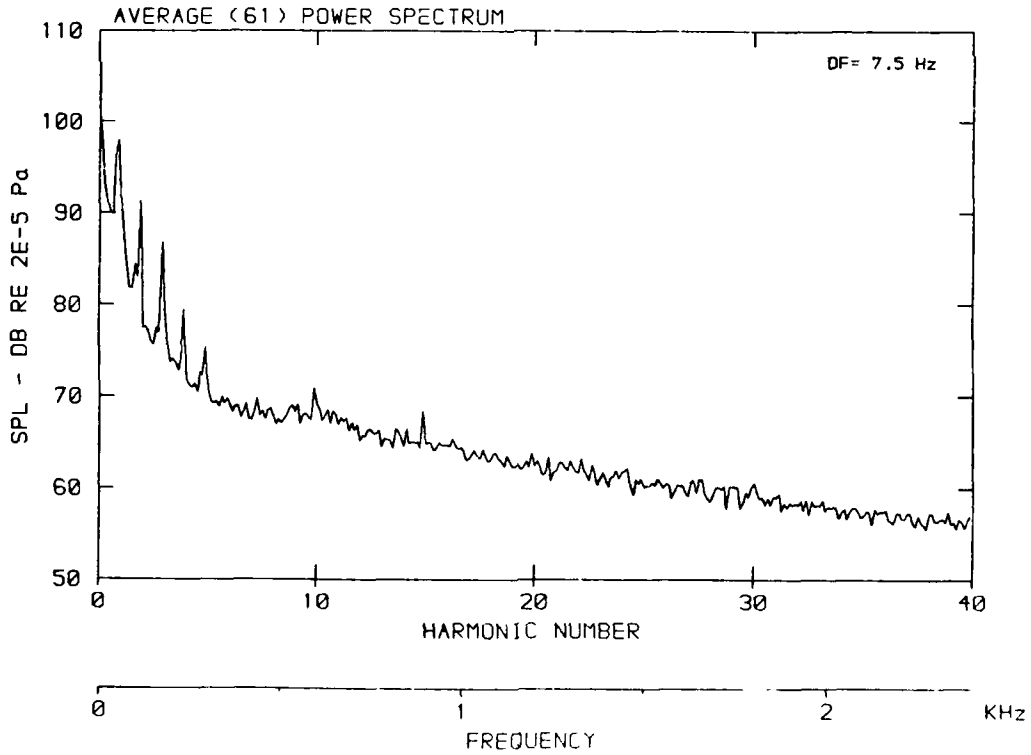
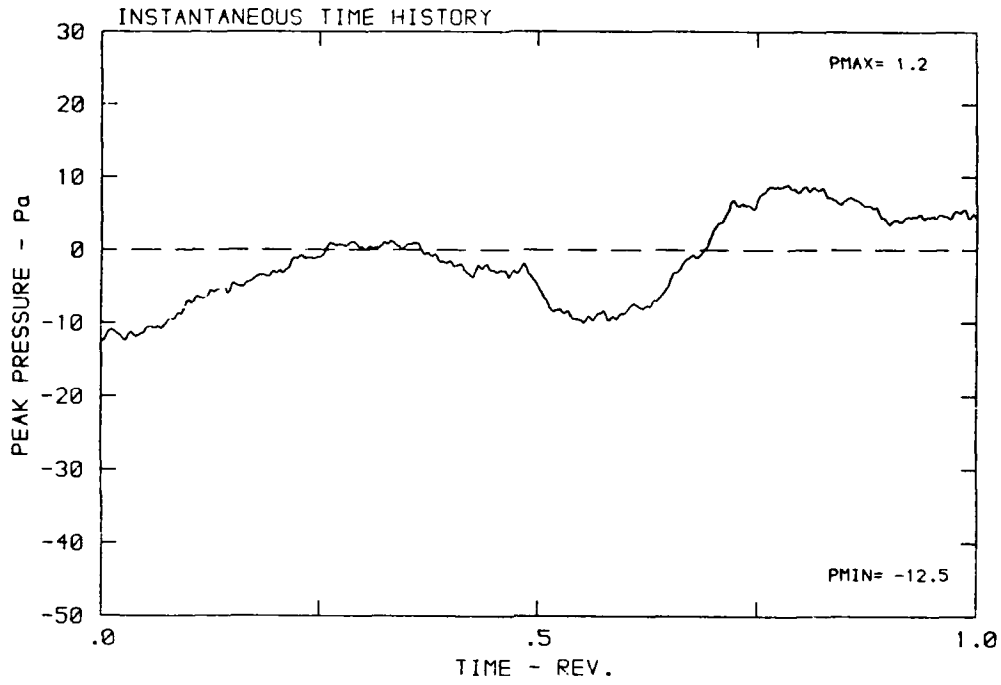
DATA POINT: 6N-4 RUN: 148 MP: 1

β : 23.7° MH: .5829 n: 1800 rpm ν/ω : .267 ϕ : -7.4° T: 287.7 K



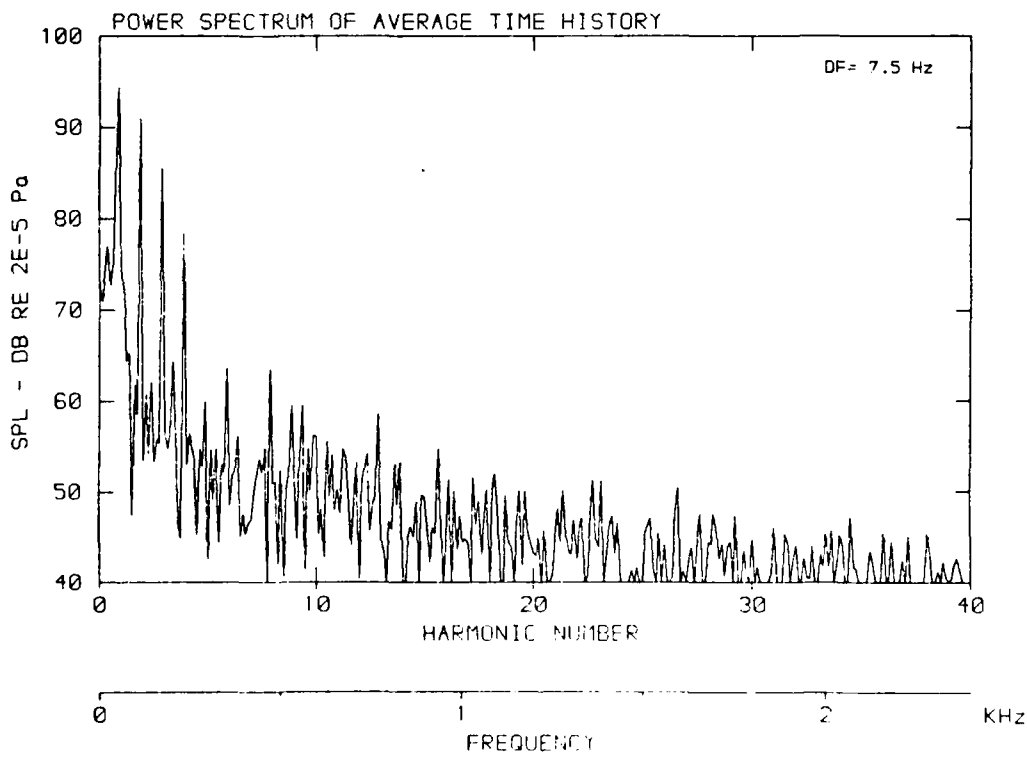
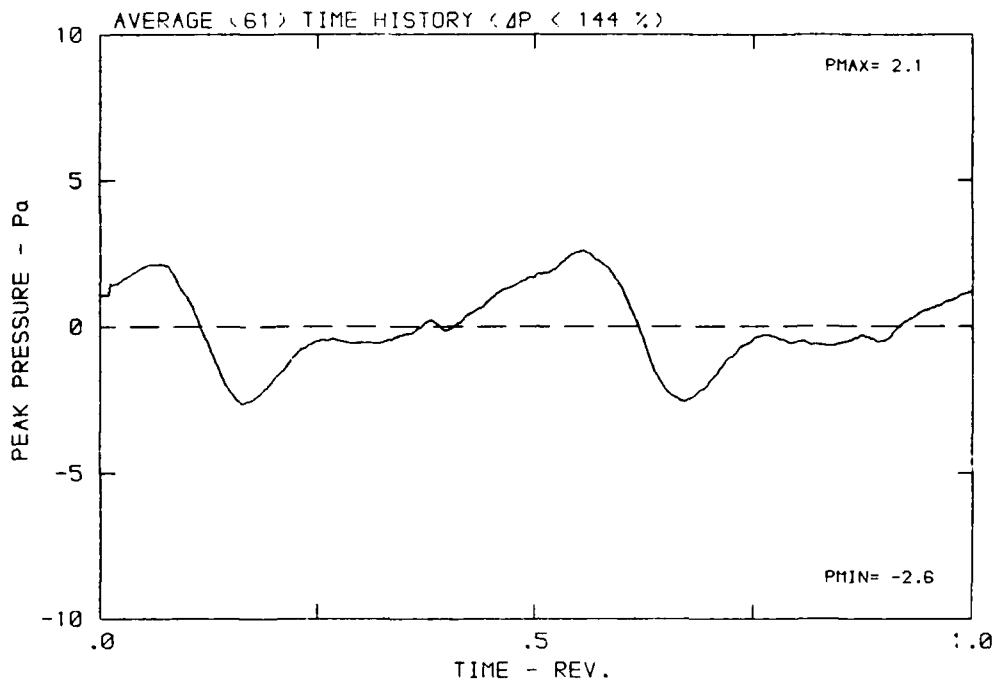
DATA POINT: GN-4 RUN: 148 MP: 2

β : 23.7° MH: .5829 n: 1800 rpm v/u : .267 ϕ : -7.4° T: 287.7 K



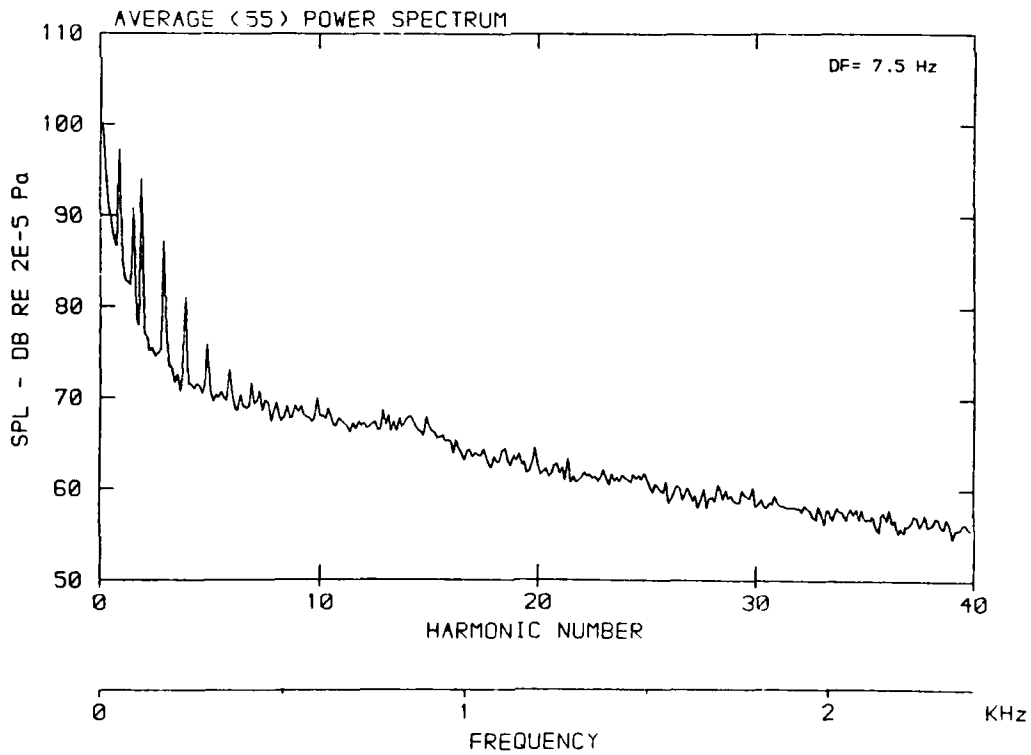
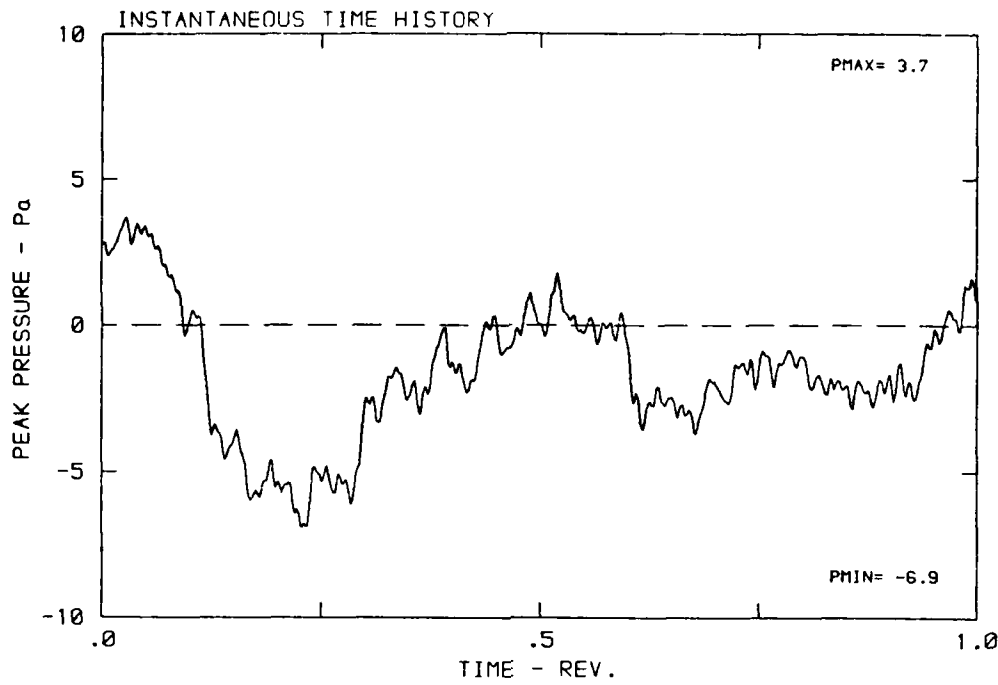
DATA POINT: GN-4 RUN: 148 MP: 2

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



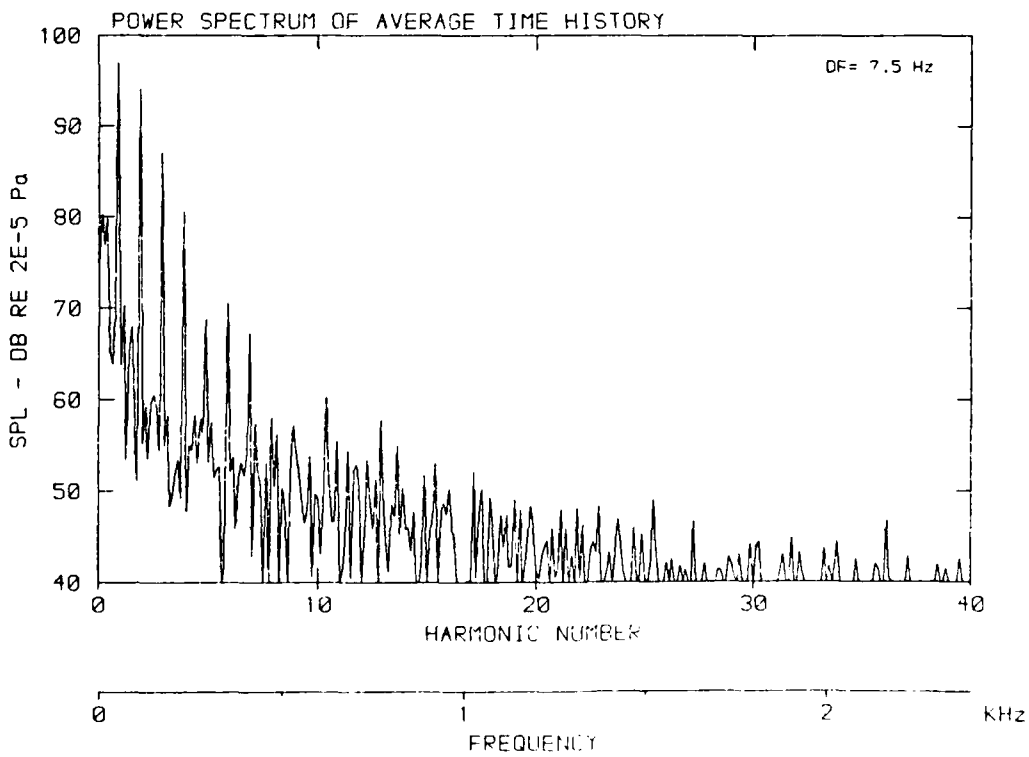
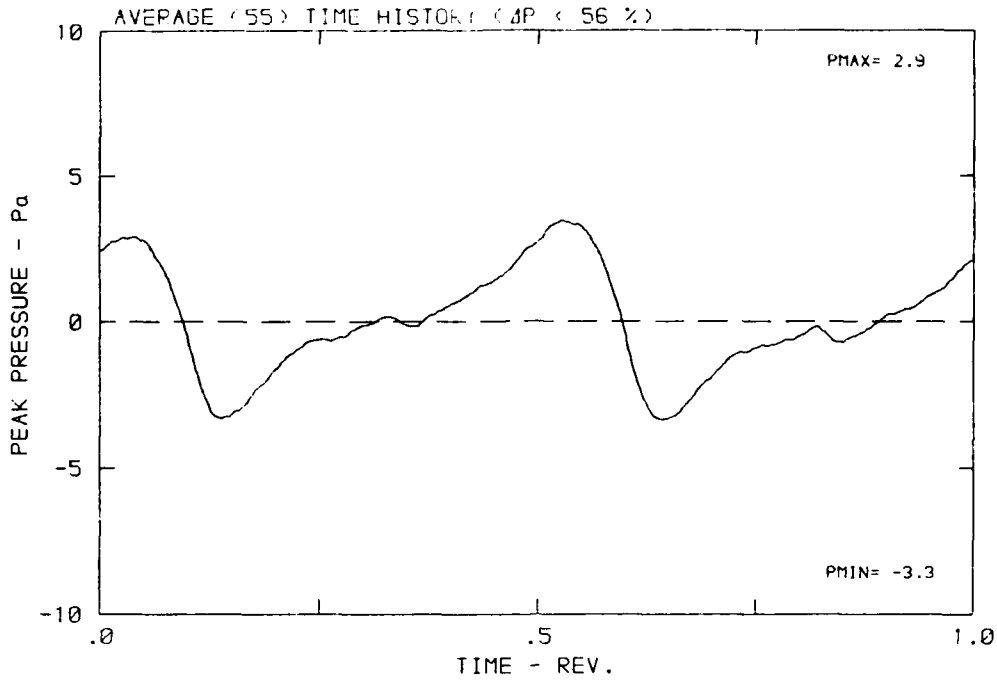
DATA POINT: GN-4 RUN: 148 MP: 3

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



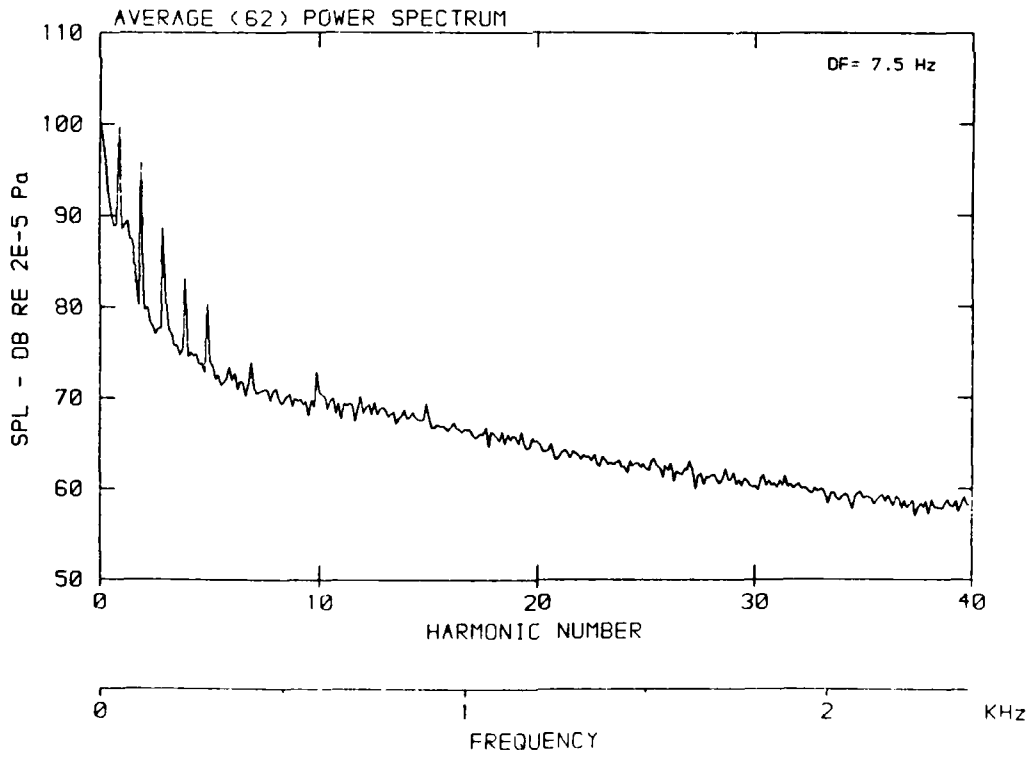
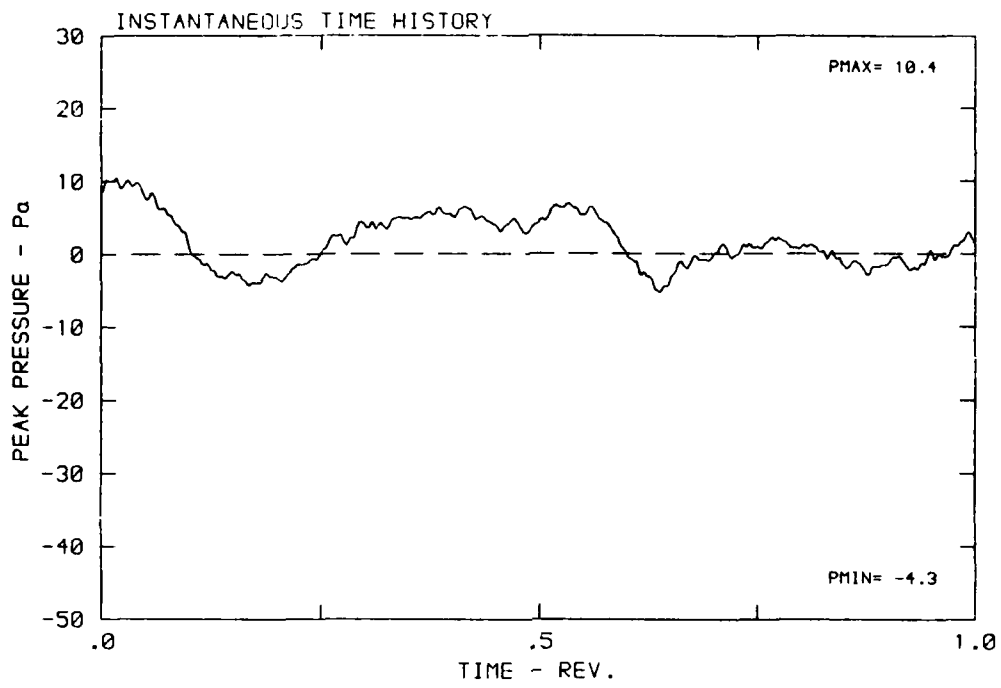
DATA POINT: GN-4 RUN: 148 MP: 3

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



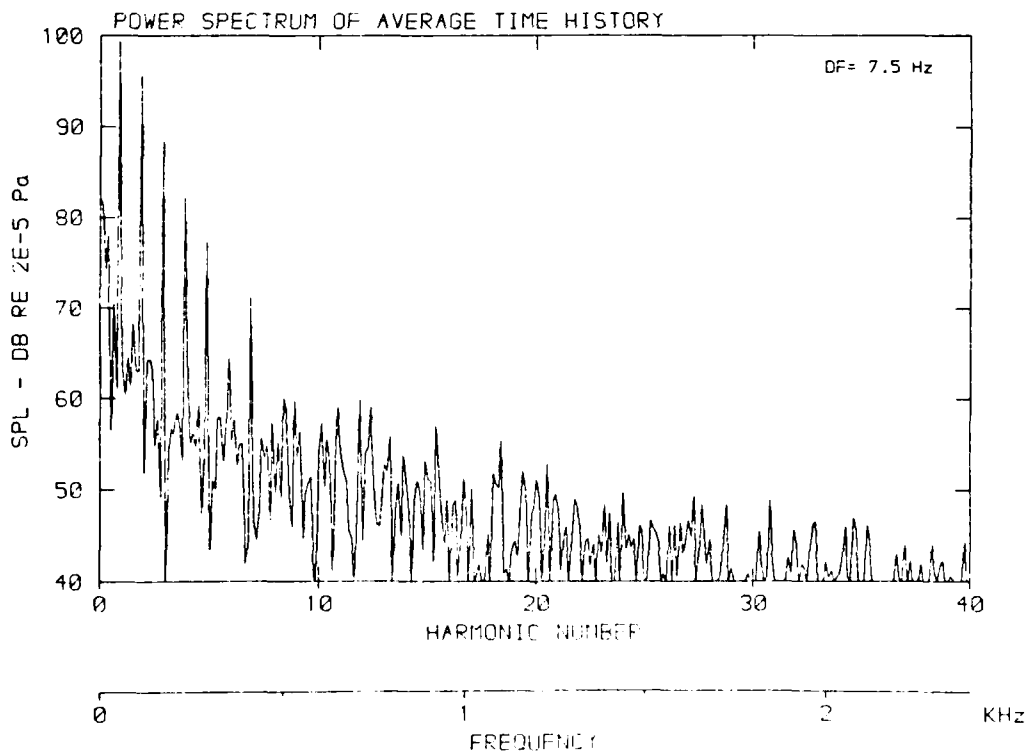
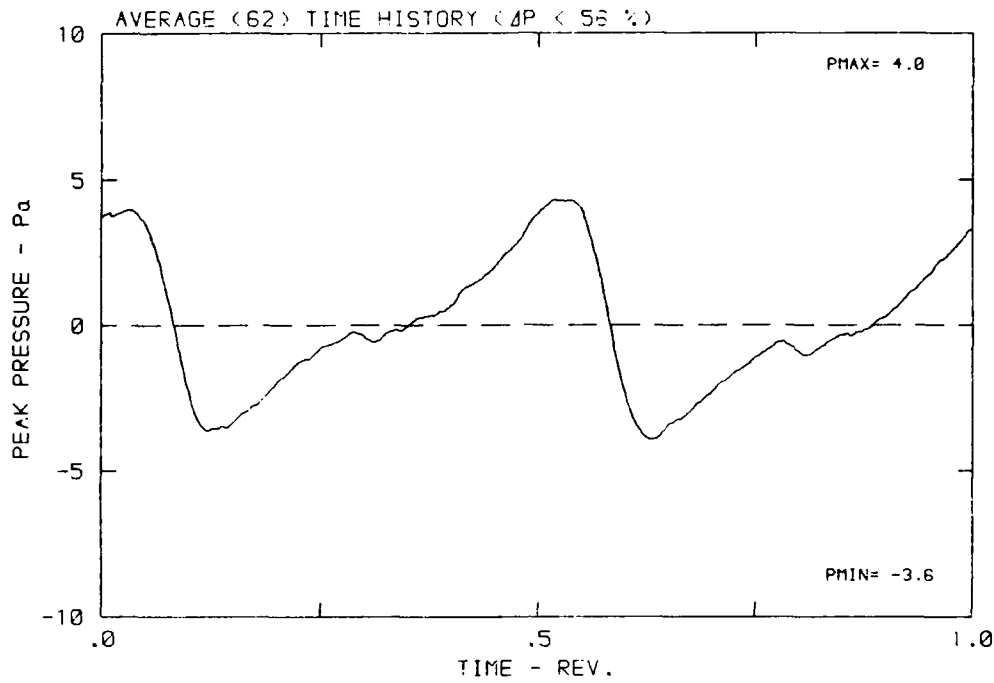
DATA POINT: GN-4 RUN: 148 MP: 4

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



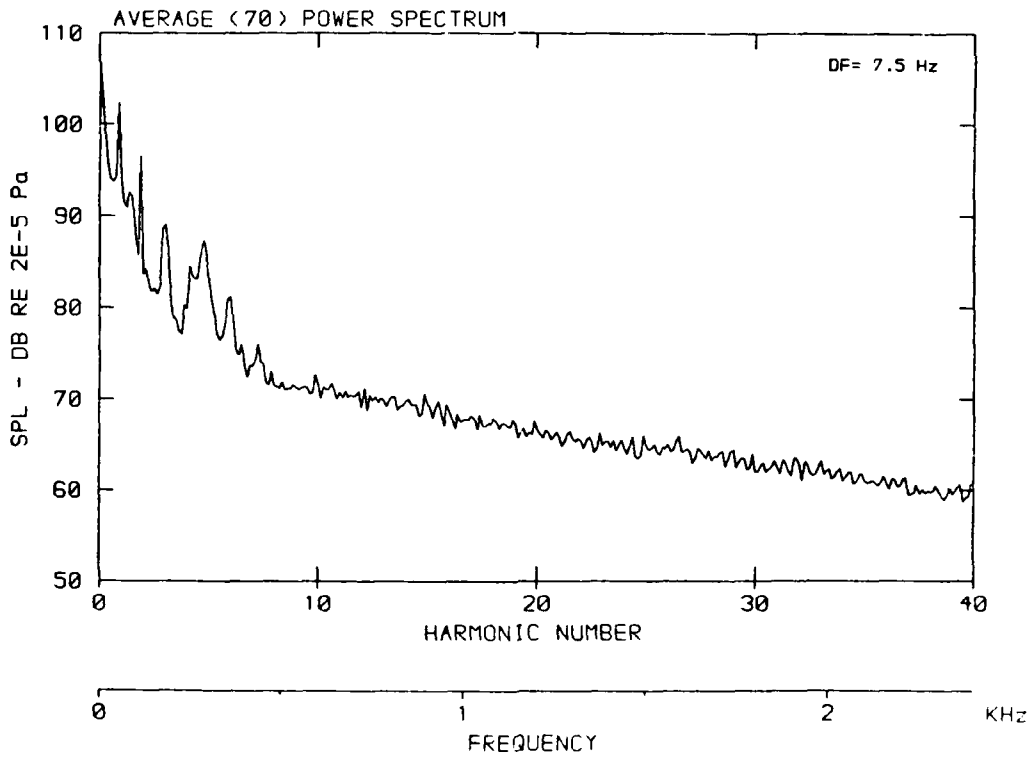
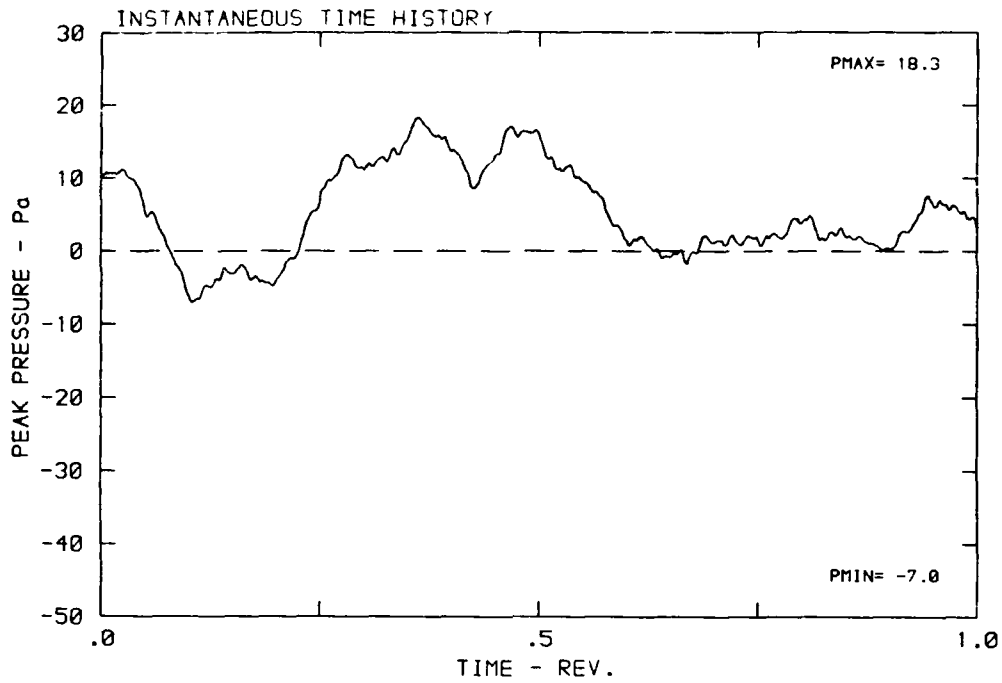
DATA POINT: GN-4 RUN: 148 MP: 4

β : 23.7° MH: .5829 n: 1800 rpm v/u : .267 ψ : -7.4° T: 287.7 K



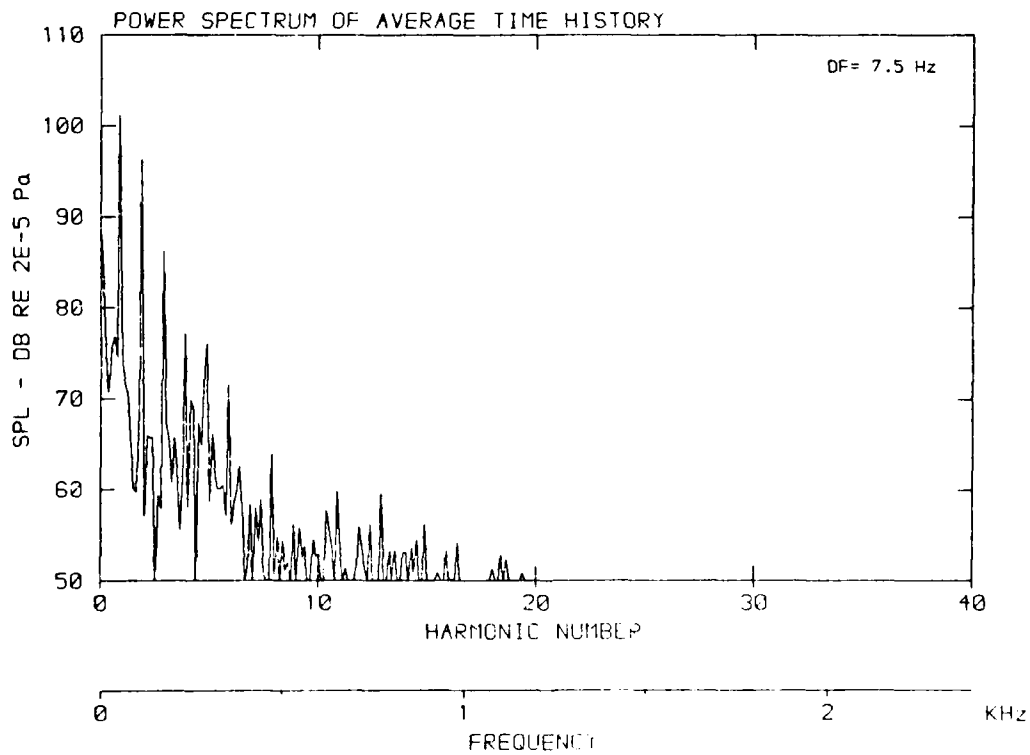
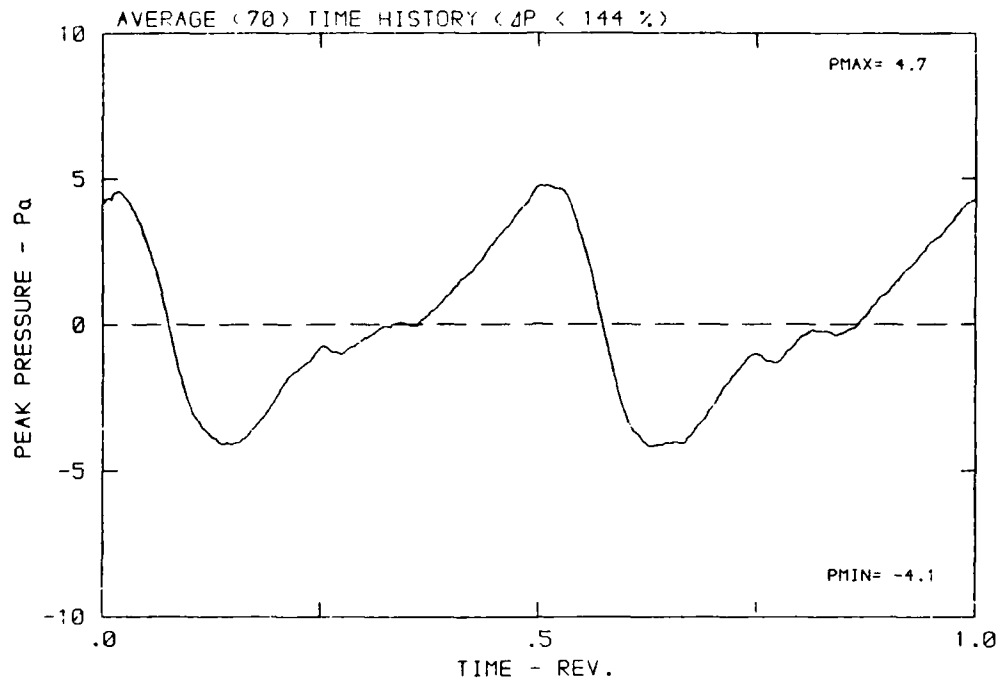
DATA POINT: GN-4 RUN: 148 MP: 5

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



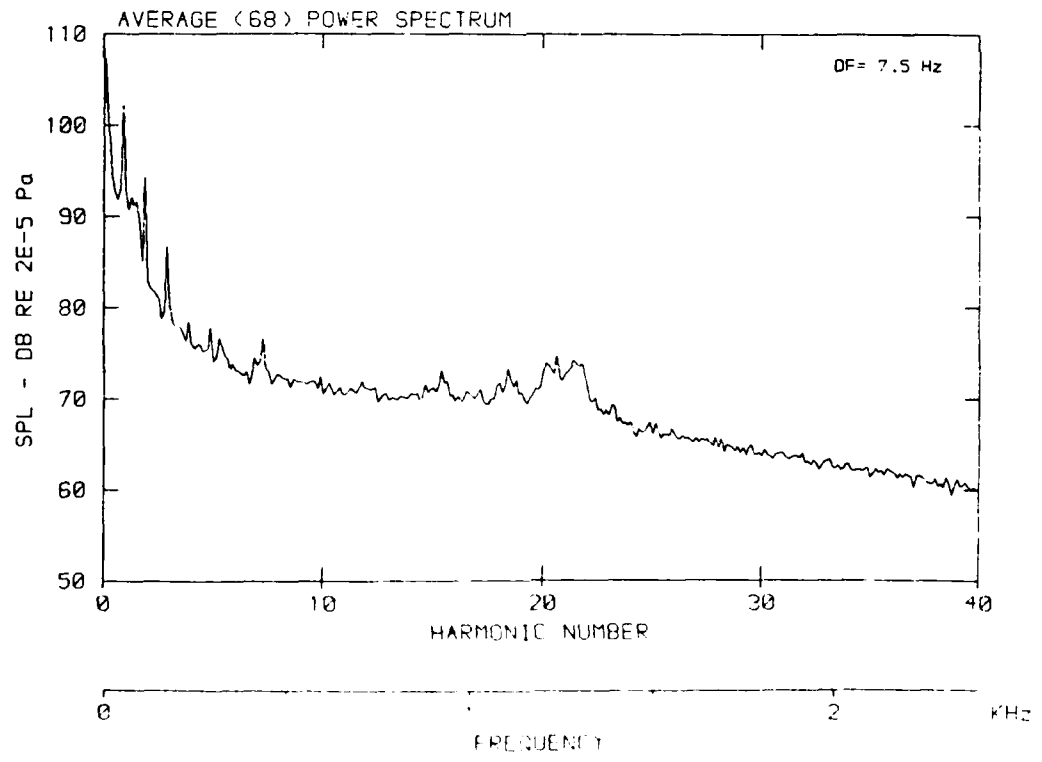
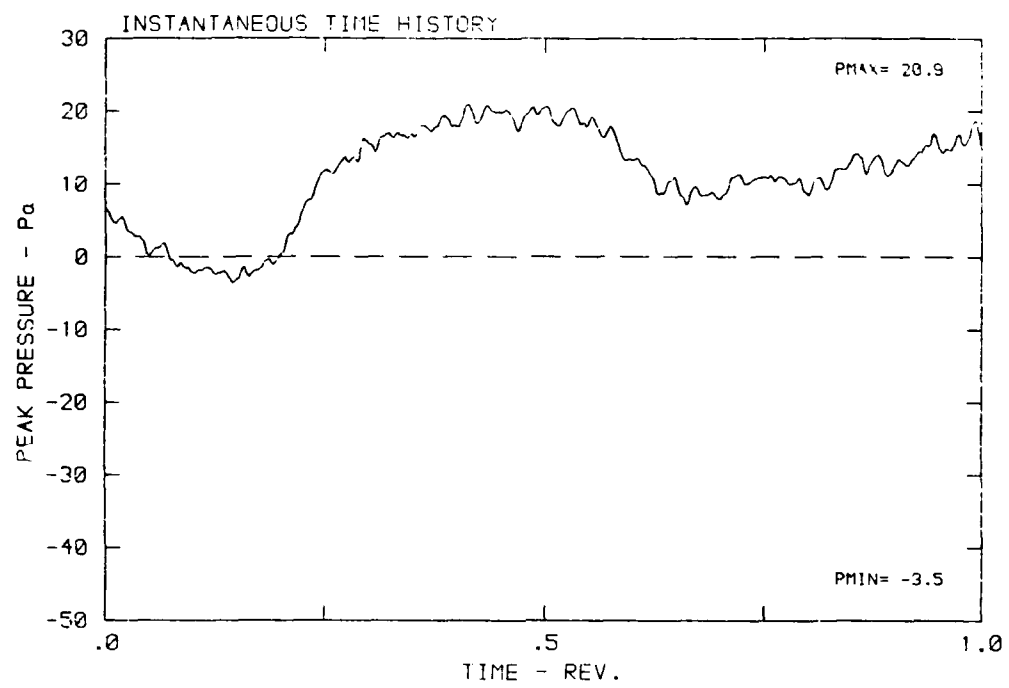
DATA POINT: GN-4 RUN: 148 MP: 5

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



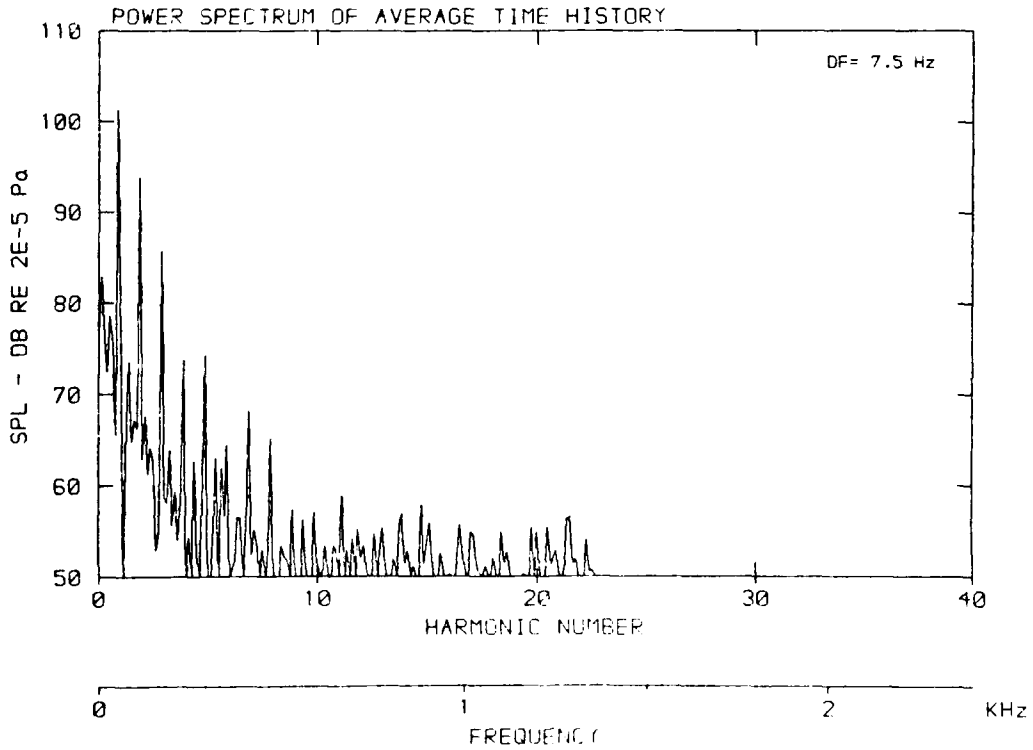
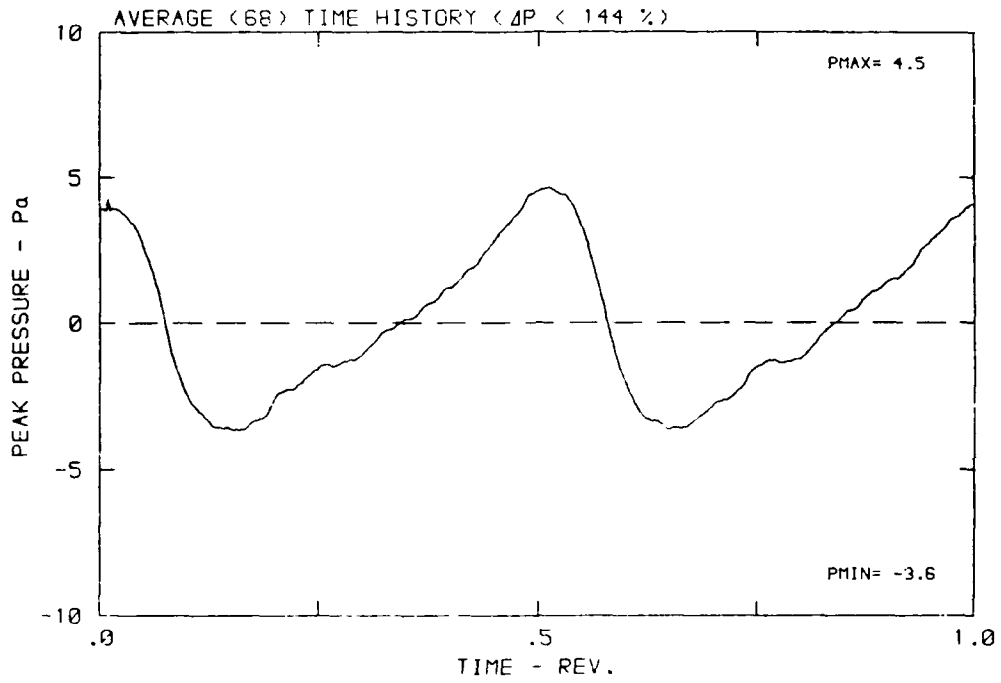
DATA POINT: GN-4 RUN: 148 MP: E

β : 23.7° MH: .5829 n: 1800 rpm vru: .207 p: -7.4° T: 237.7



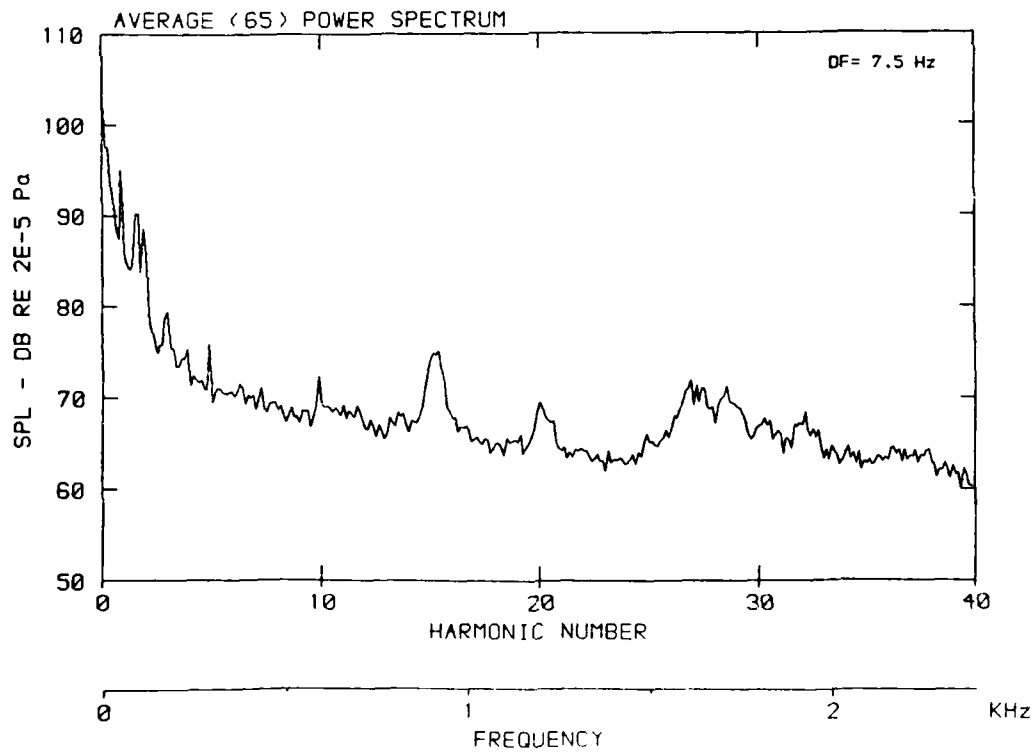
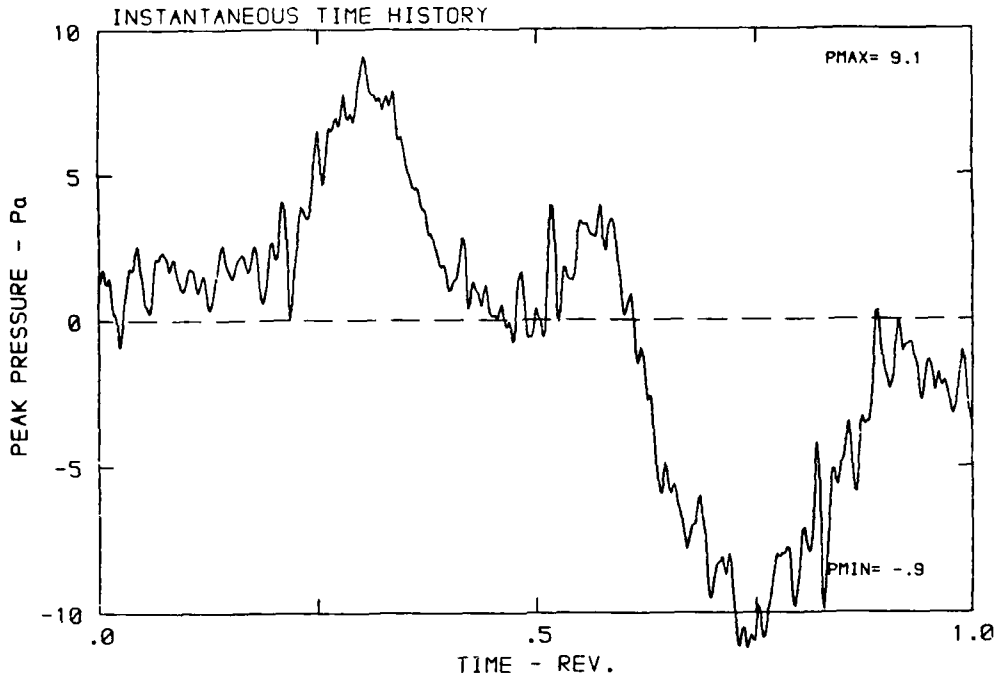
DATA POINT: GN-4 RUN: 148 MP: 6

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



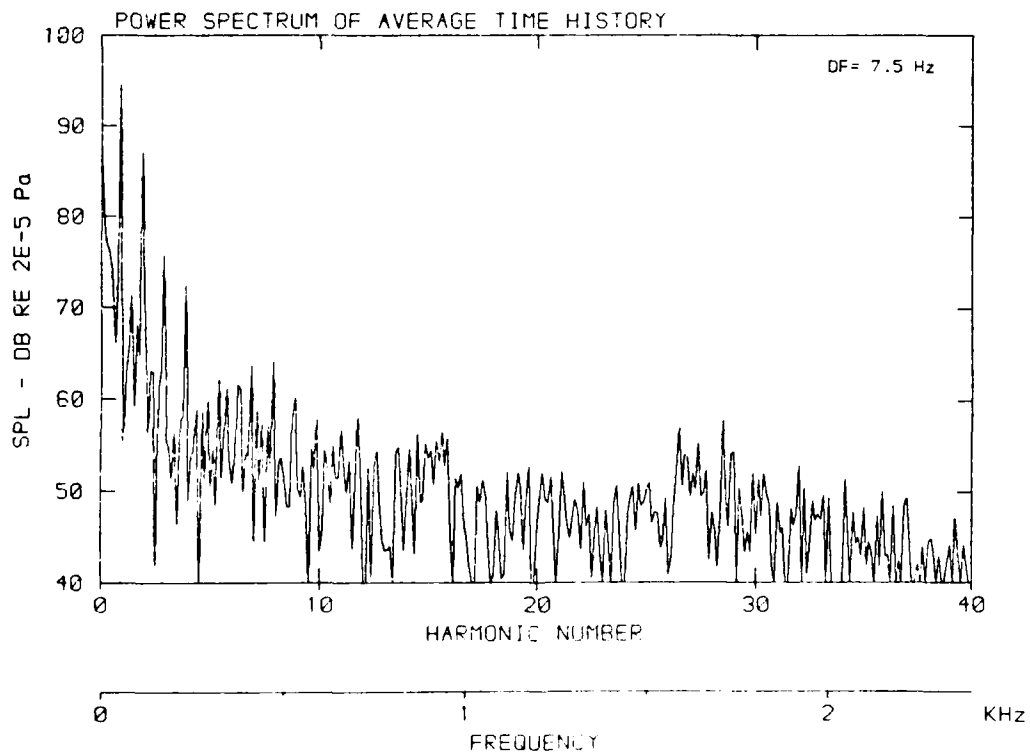
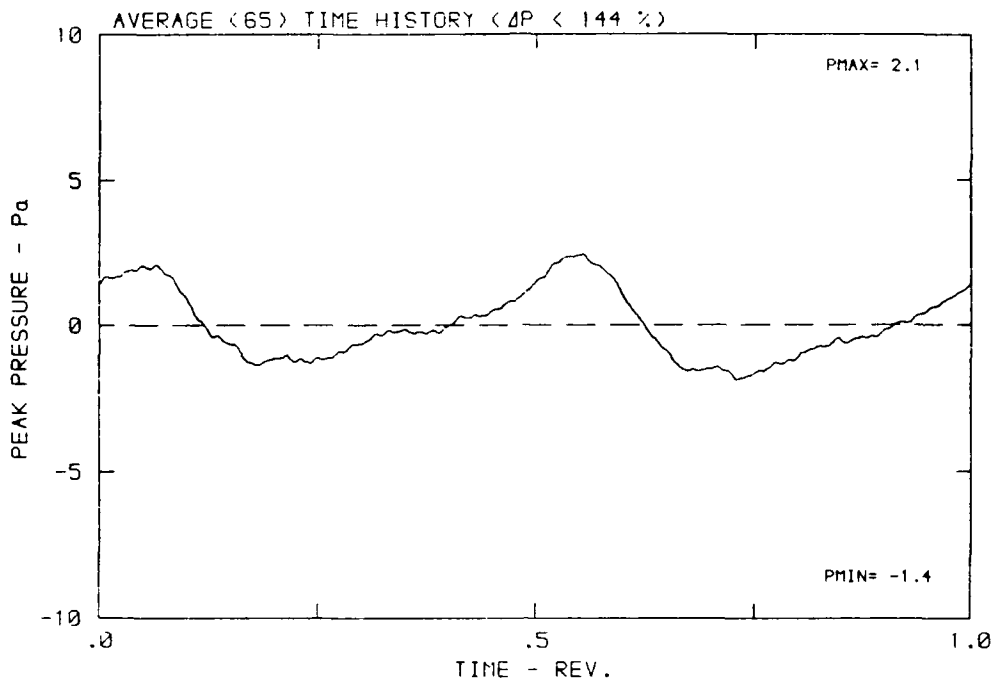
DATA POINT: GN-4 RUN: 148 MP: 7

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



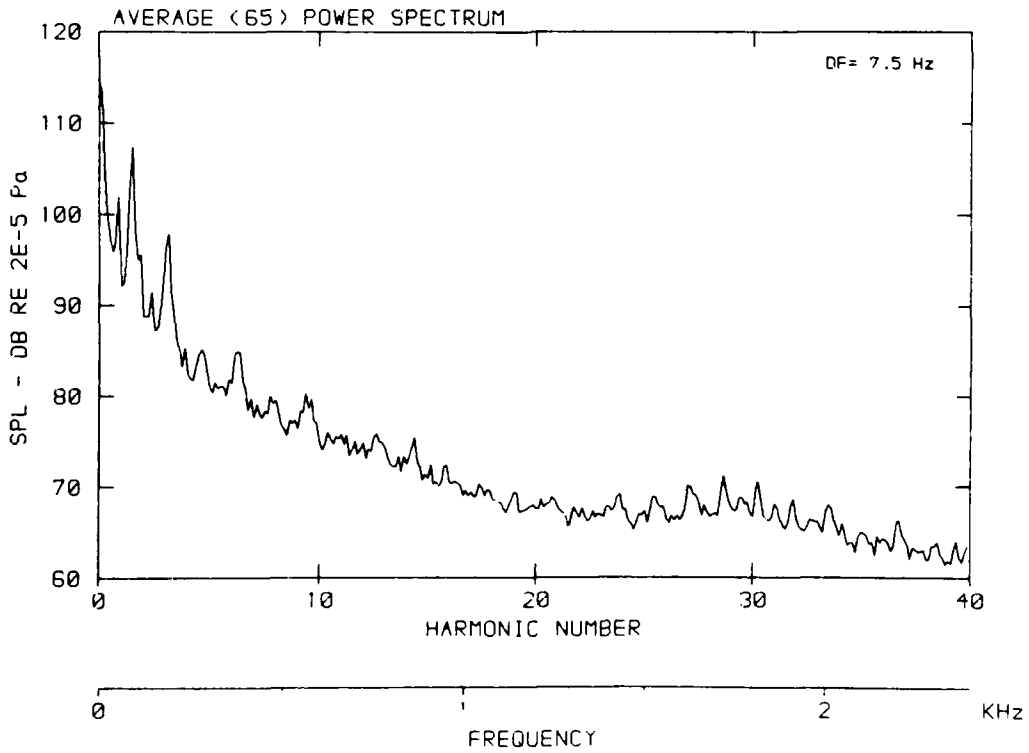
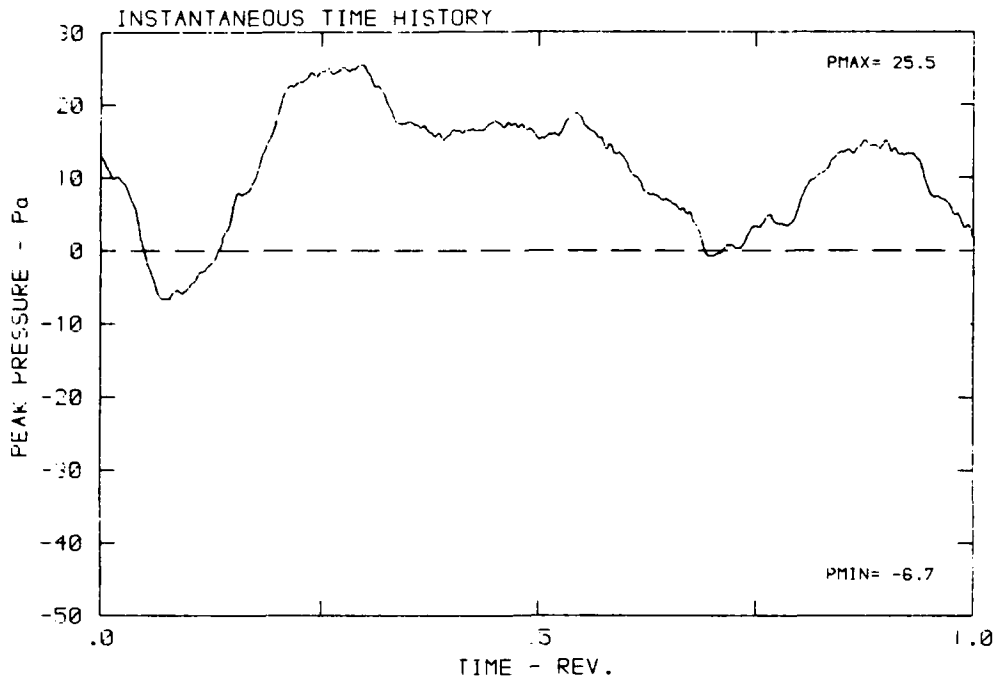
DATA PCINT: GN-4 RUN: 148 MP: 7

β : 23.7° MH: .5829 n: 1800 rpm v/u : .267 ϕ : -7.4° T: 287.7 K



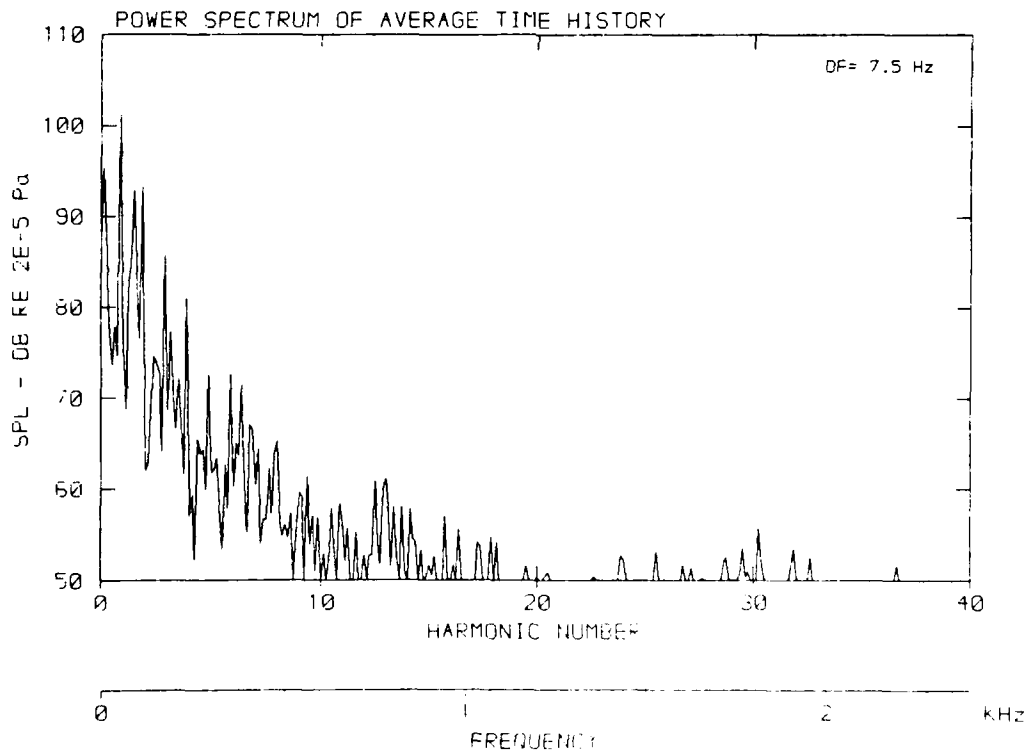
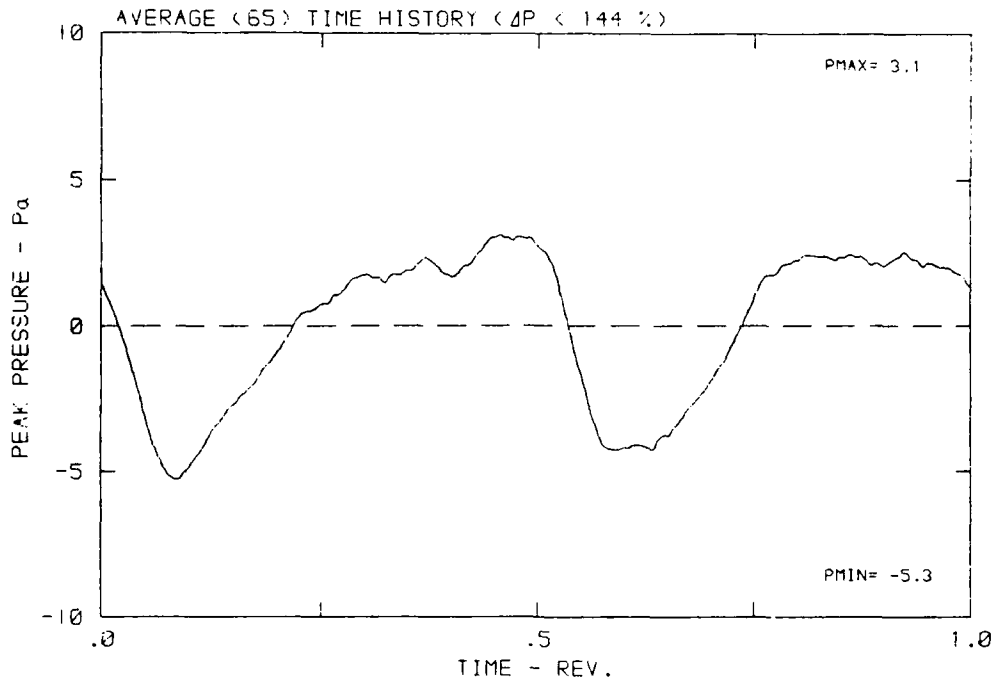
DATA POINT: GN-4 RUN: 148 MP: 8

β : 23.7° MH: .5829 n: 1800 rpm v/u : .267 ϕ : -7.4° T: 287.7 K



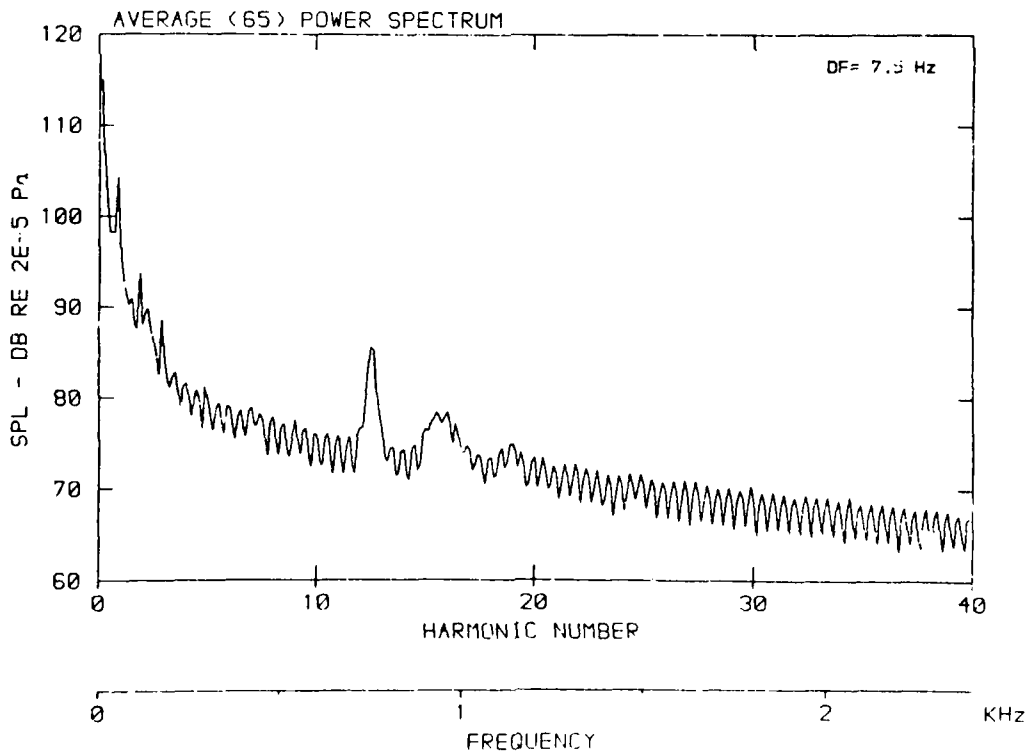
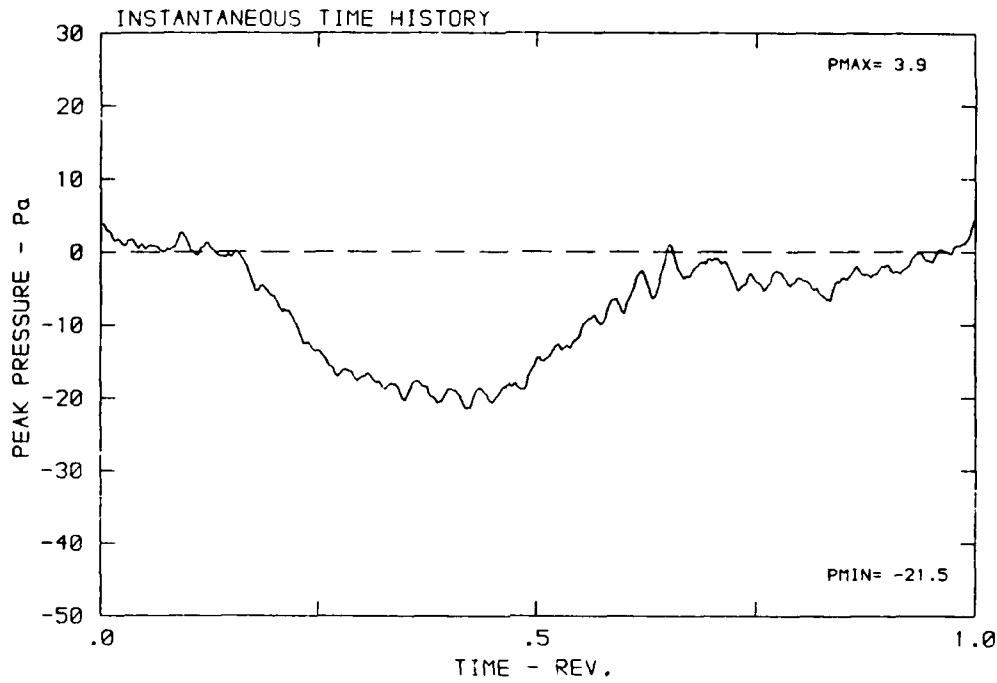
DATA POINT : GN-4 RUN : 148 MP : 8

β : 23.7° MH : .5829 n : 1800 rpm v/u : .267 ϕ : -7.4° T : 287.7 K



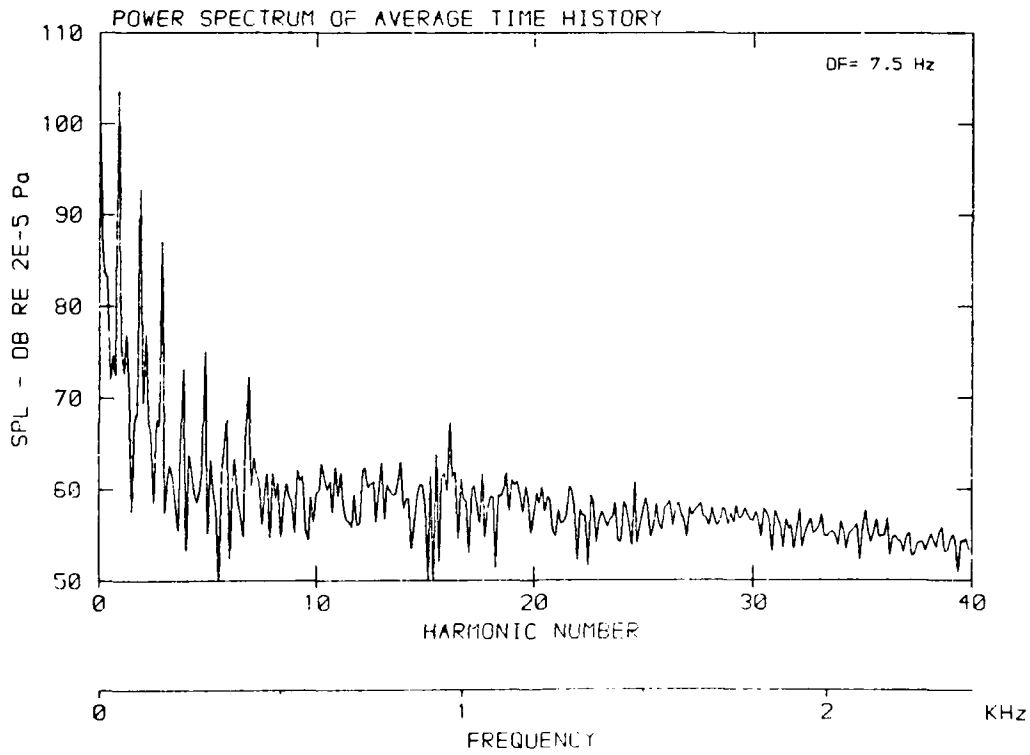
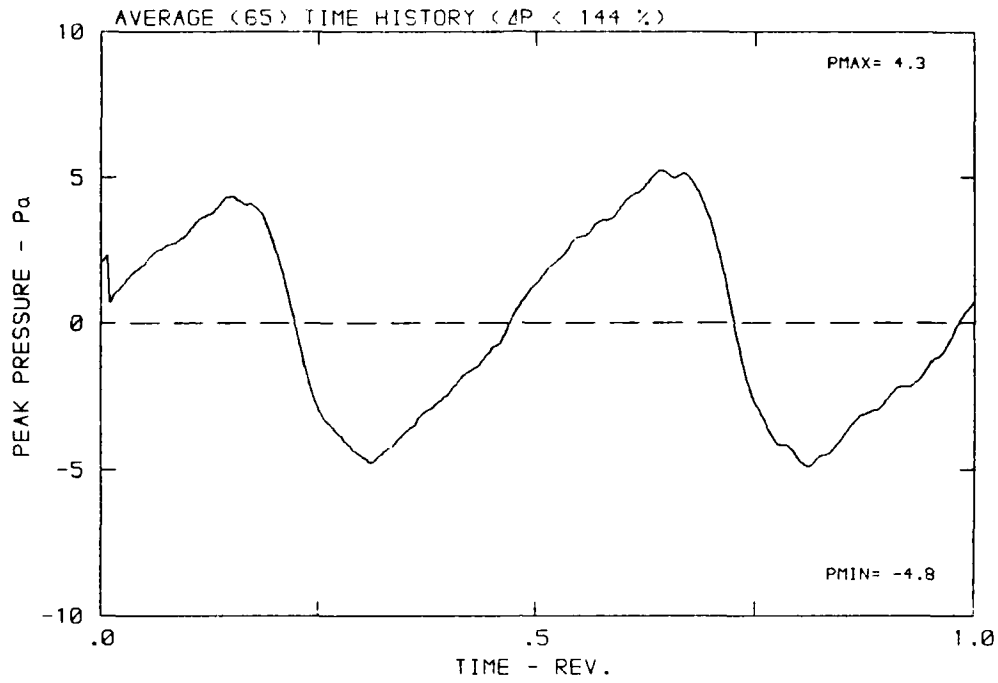
DATA POINT: GN-4 RUN: 148 MF: 9

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



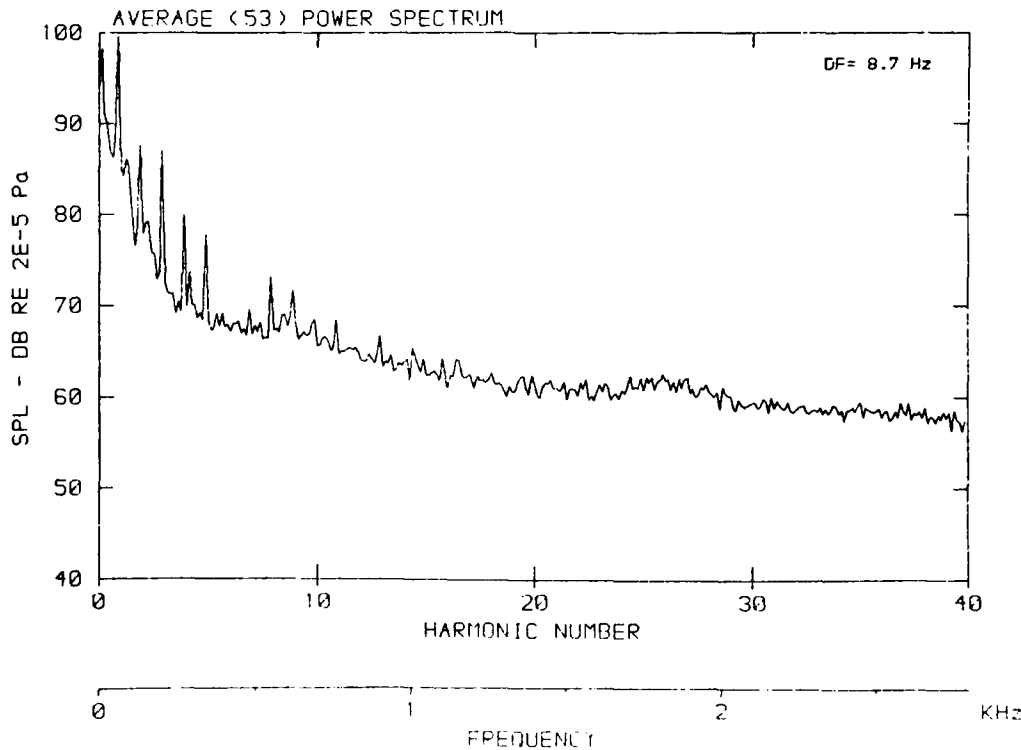
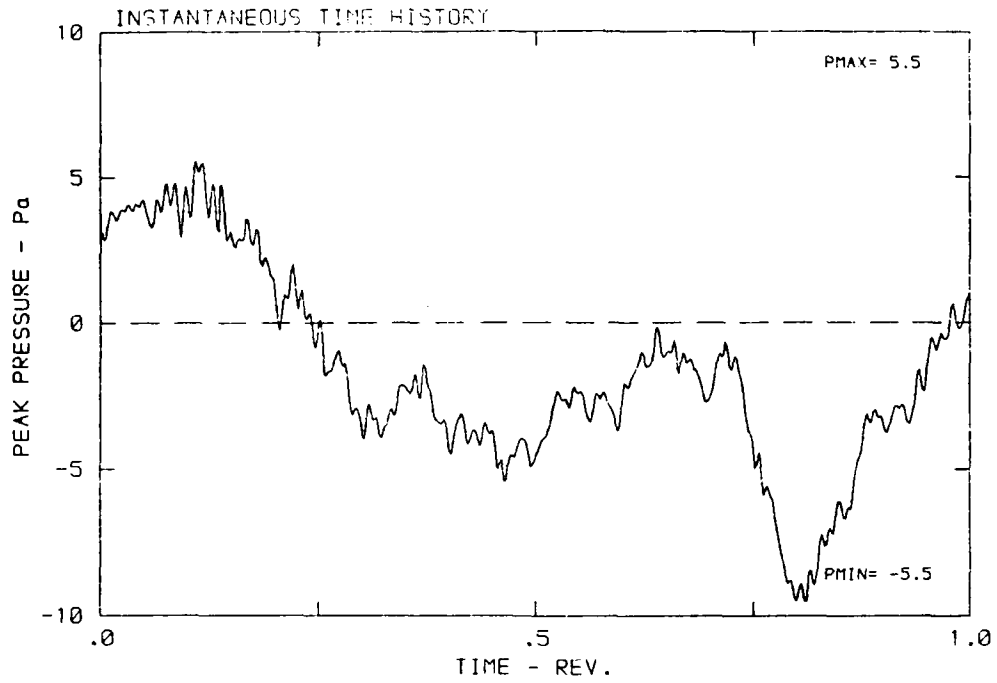
DATA POINT: GN-4 RUN: 148 MP: 9

β : 23.7° MH: .5829 n: 1800 rpm v/u: .267 ϕ : -7.4° T: 287.7 K



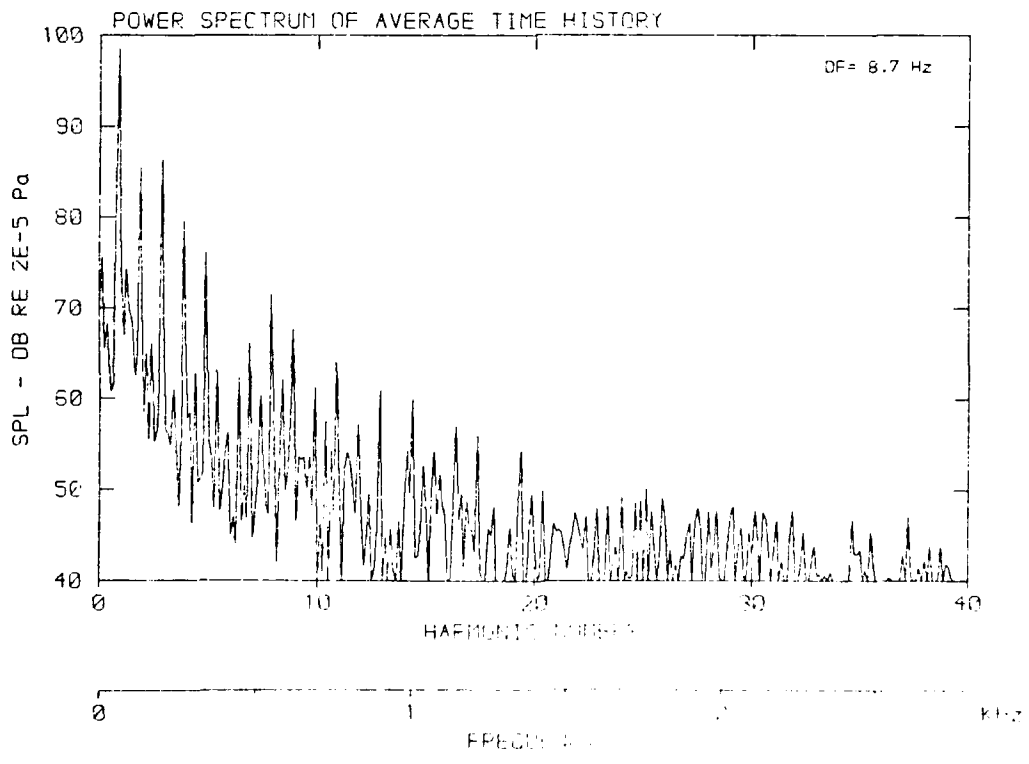
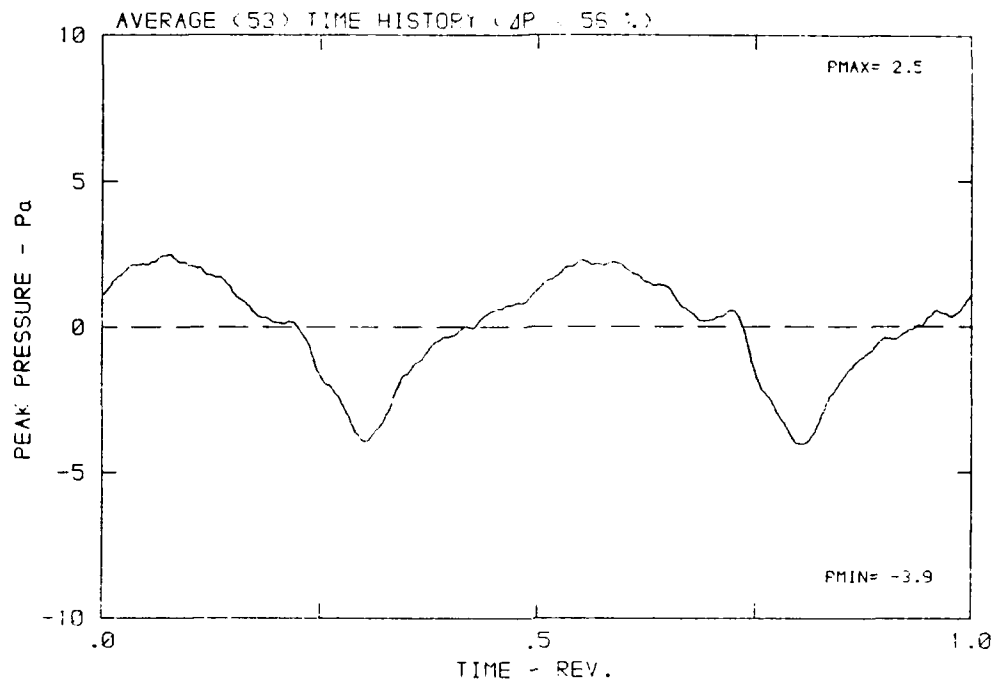
DATA POINT: GN-5 RUN: 149 MP: 1

β : 23.7° MH: .6735 n: 2100 rpm v_{z0} : .229 ϕ : -7.4° T: 298.2 K



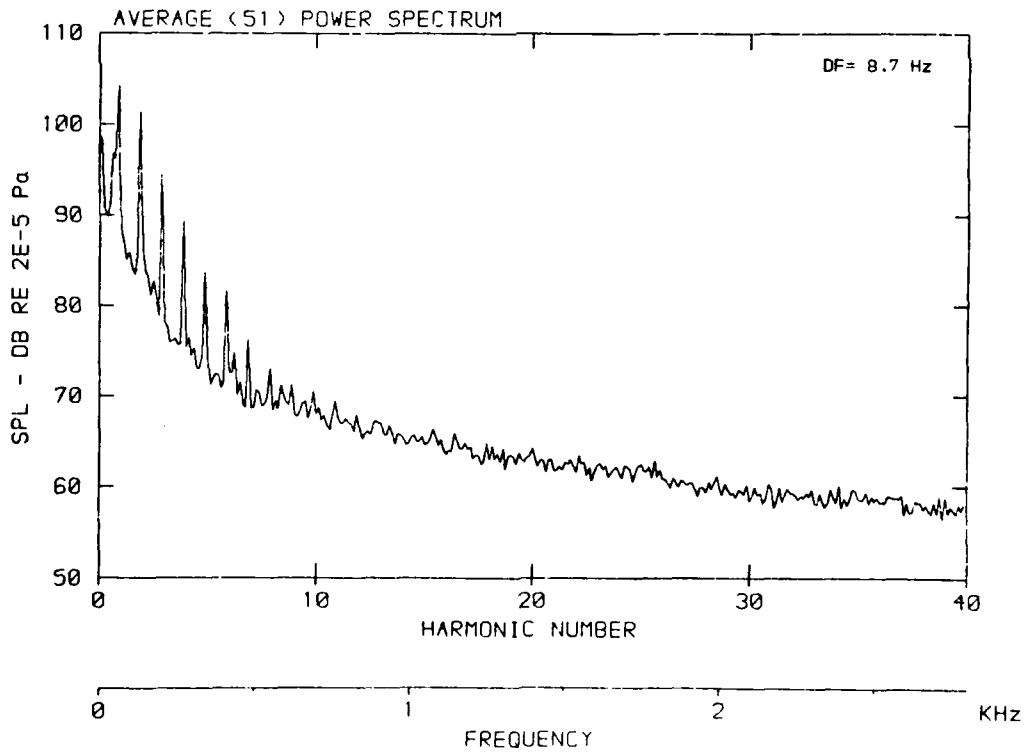
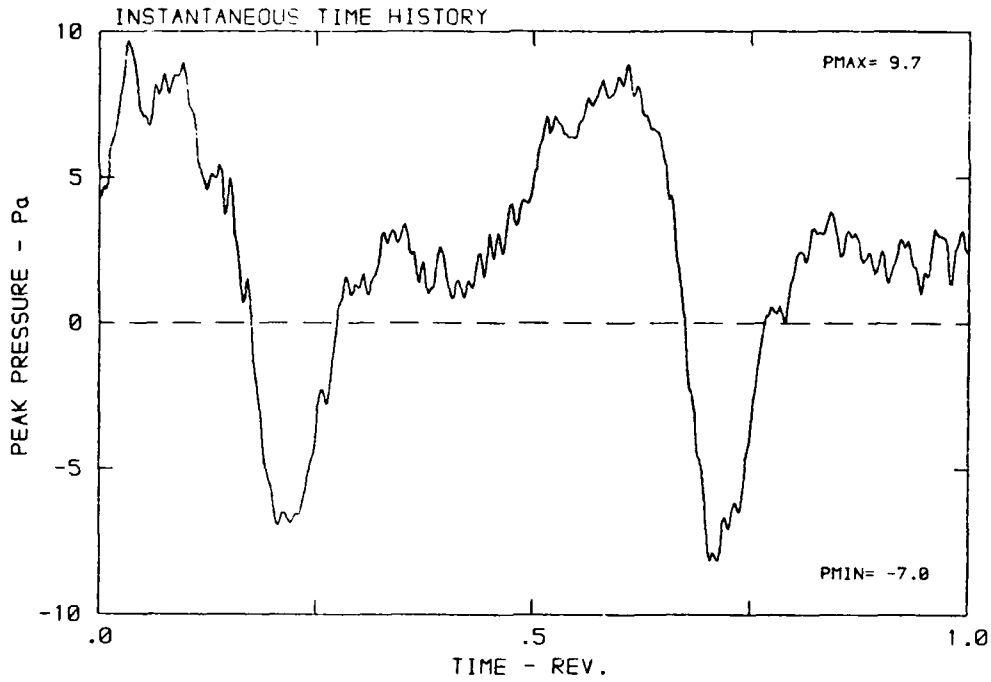
DATA POINT: GN-5 RUN: 149 NP: 1

β : 23.7° MH: .6735 n: 2100 rpm ν : .229 ϕ : -7.4° T: 239.2



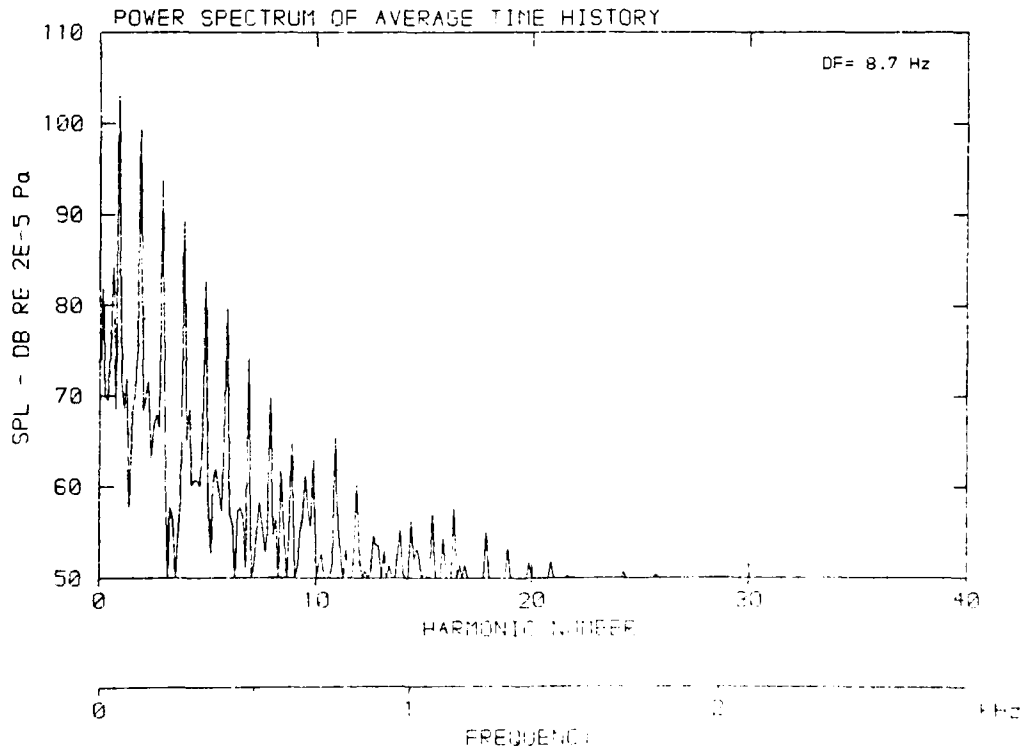
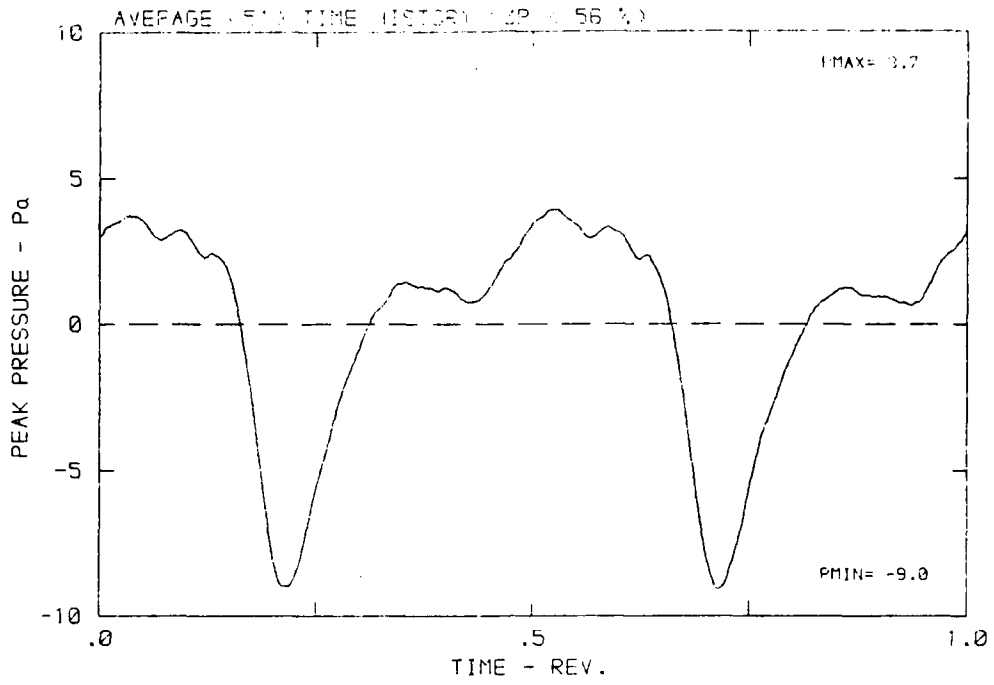
DATA POINT: GN-5 RUN: 149 MP: 2

β : 23.7° MH: .6735 n: 2100 rpm v/u: .229 ϕ : -7.4° T: 288.2 K



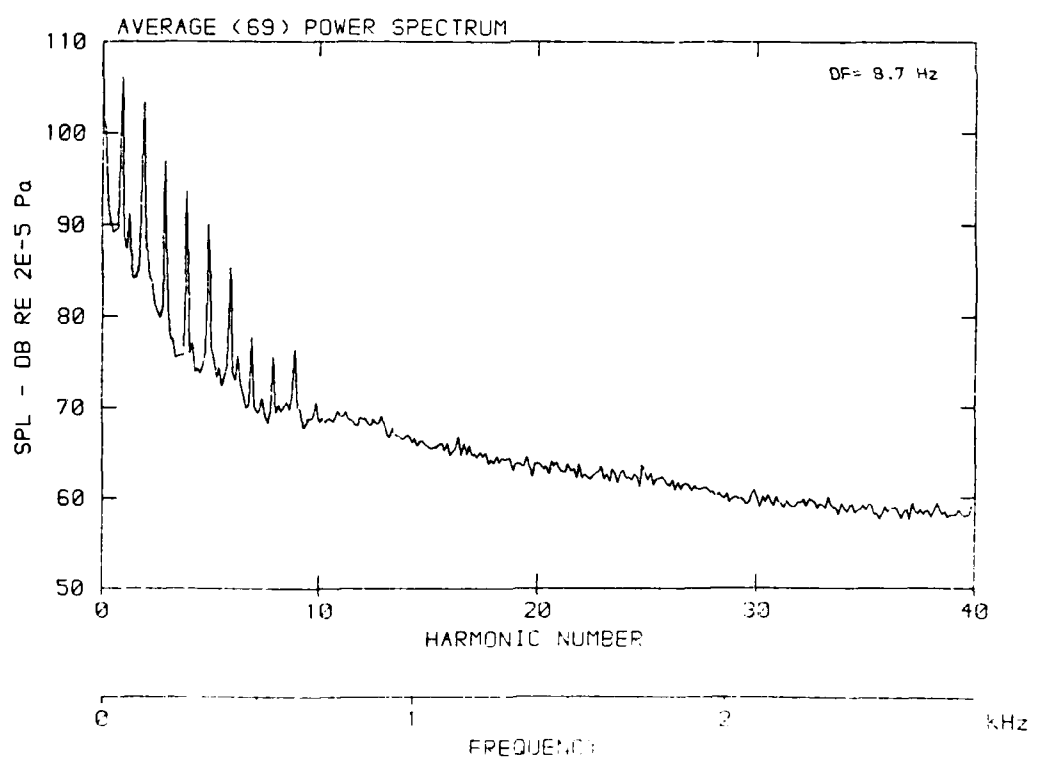
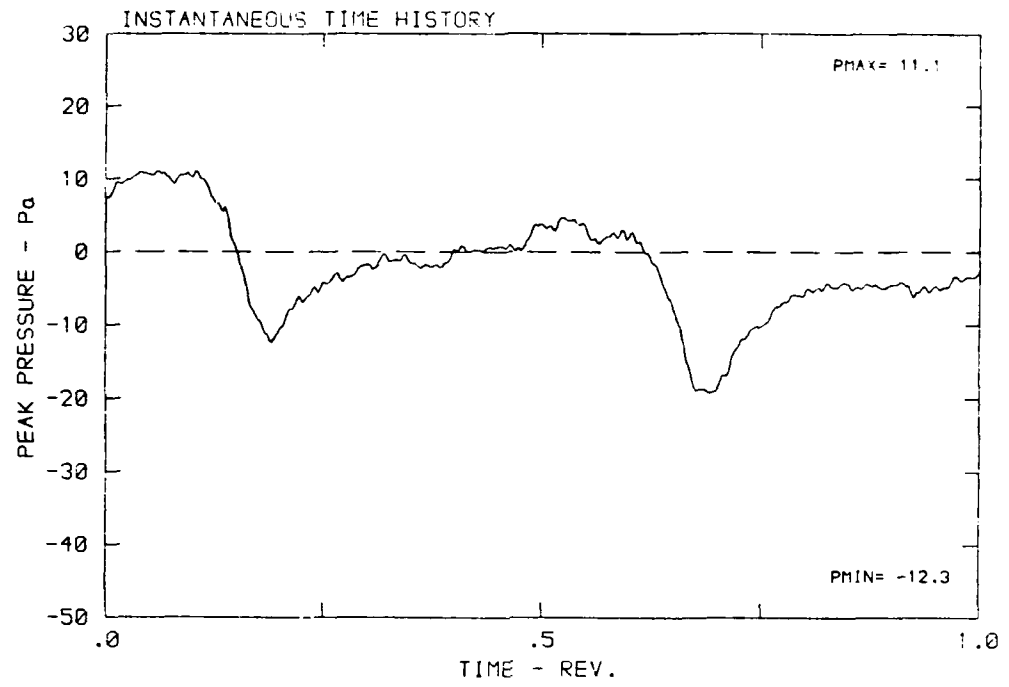
DATA POINTS: 10000 MIN: 1000 MAX: 10000

β : 23.7° MH: 16705 H: 2100 rpm γ : .229 ϕ : -7.4° T: 288.2 K



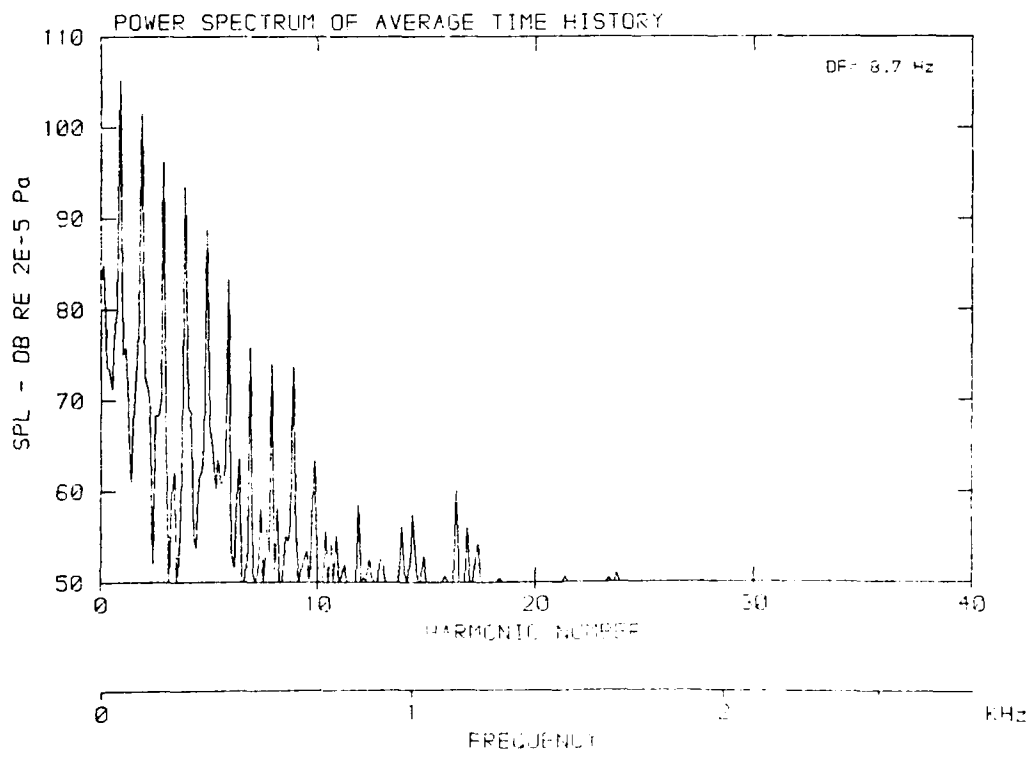
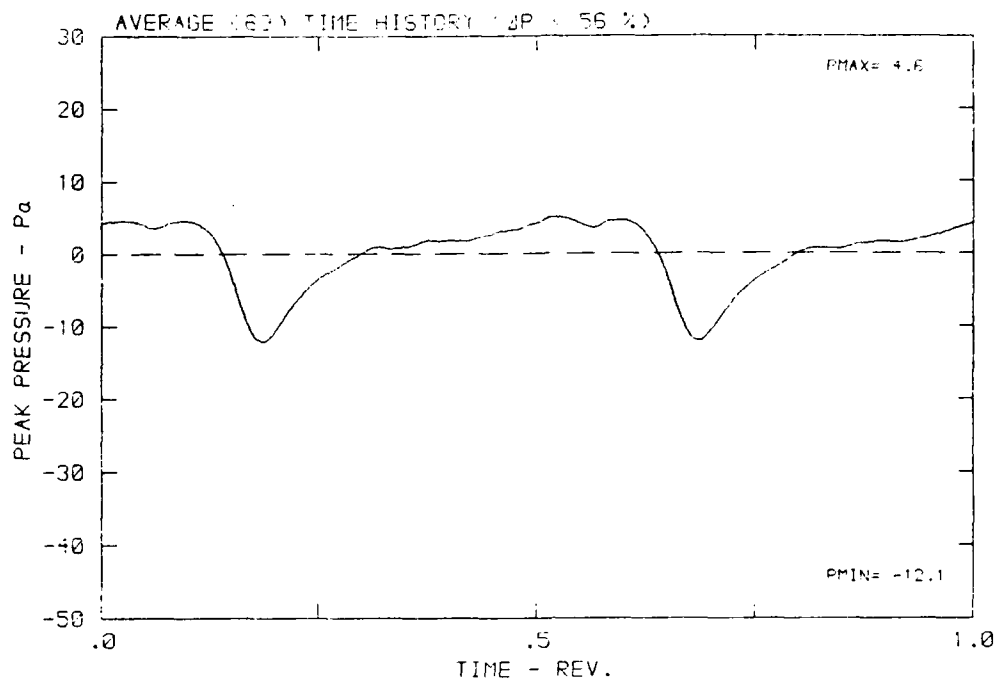
DATA POINT: GN-5 RUN: 147 RE: 3

β : 23.7° MH: .6735 n: 2120 rpm vzu: .228 ϕ : -7.4° T: 29.13



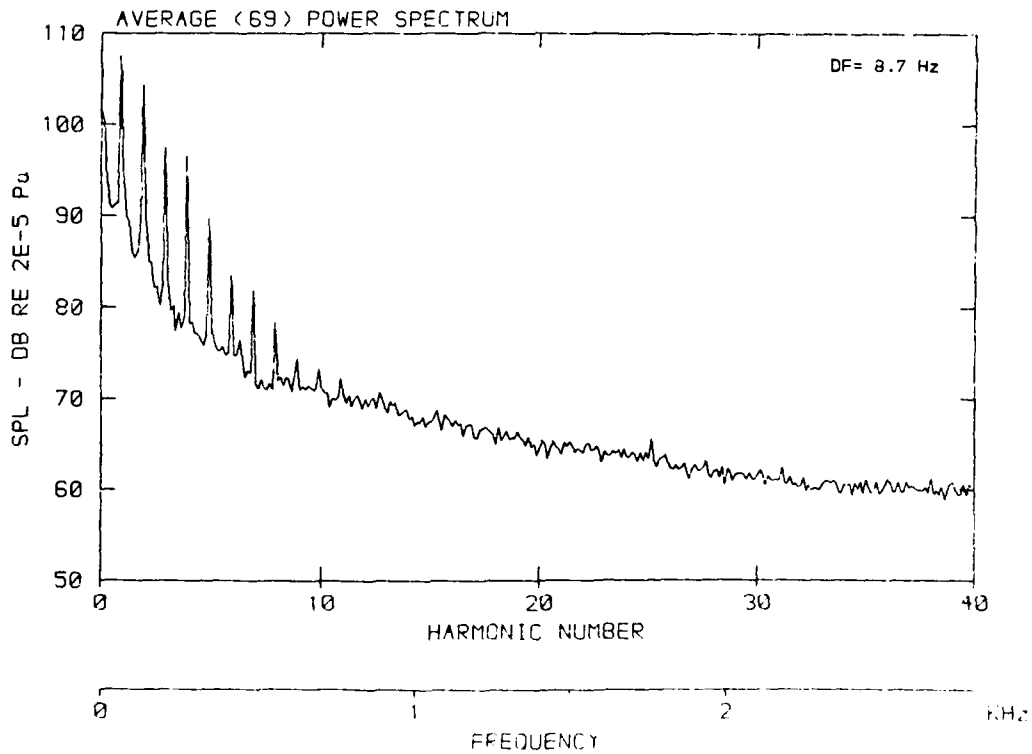
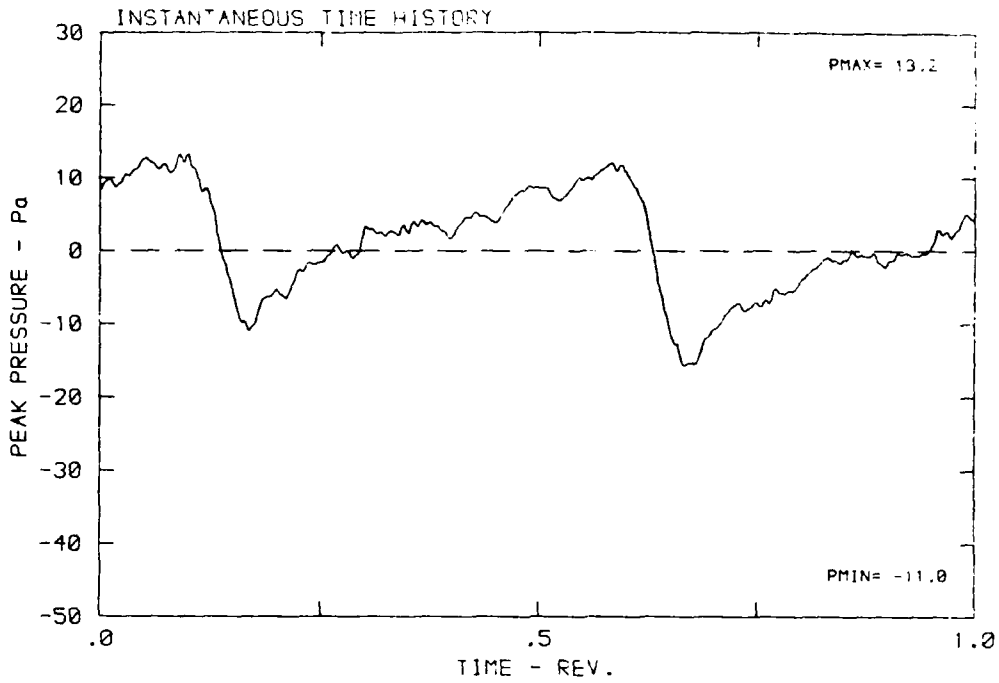
DATA POINT: GN-5 RUN: 149 MF: 3

β : 23.7° MH: .6735 n: 2100 rpm ν : .229 ϕ : -7.4° T: 299.2 K



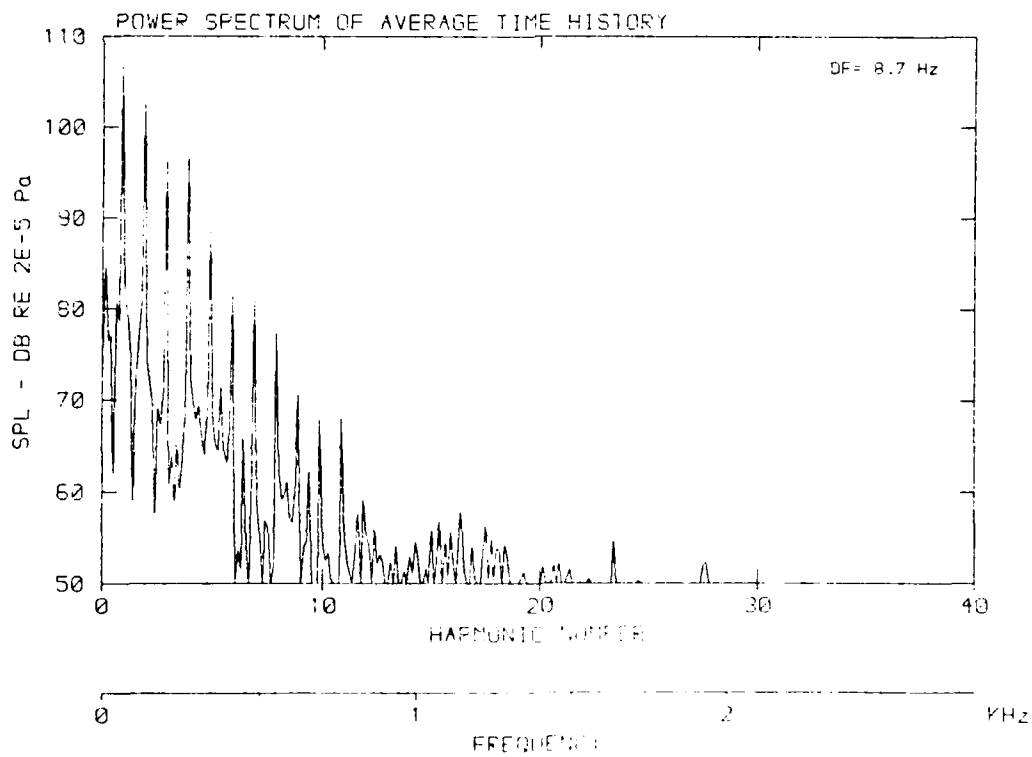
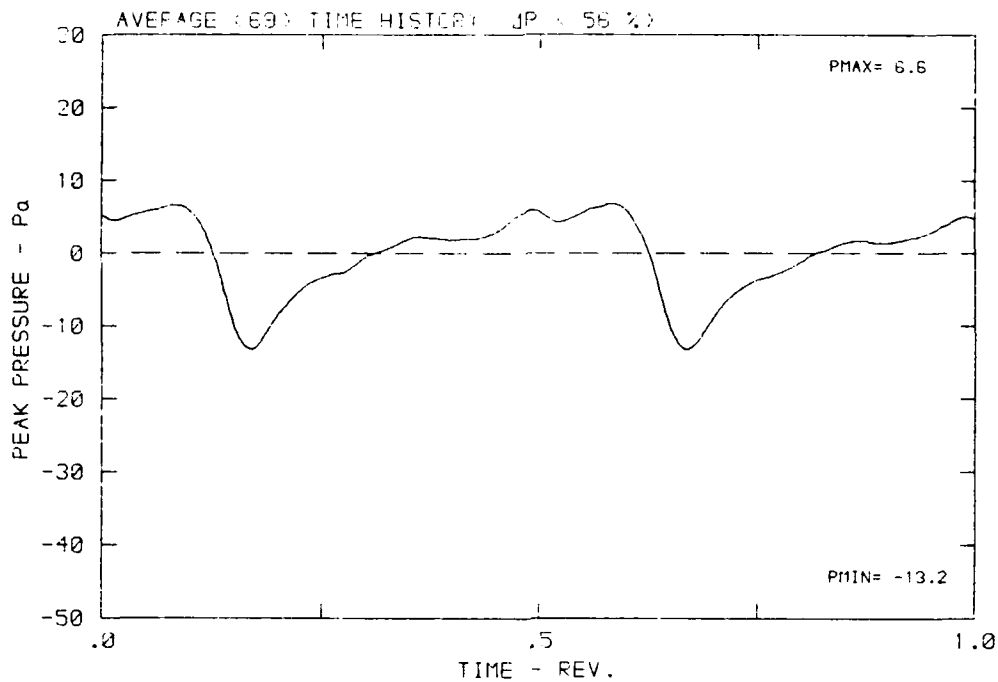
DATA POINT: GN-5 RUN: 149 NP: 4

β : 23.7° IH: .6735 n: 2100 rpm v/u : .229 ϕ : -7.4° T: 29.12 k



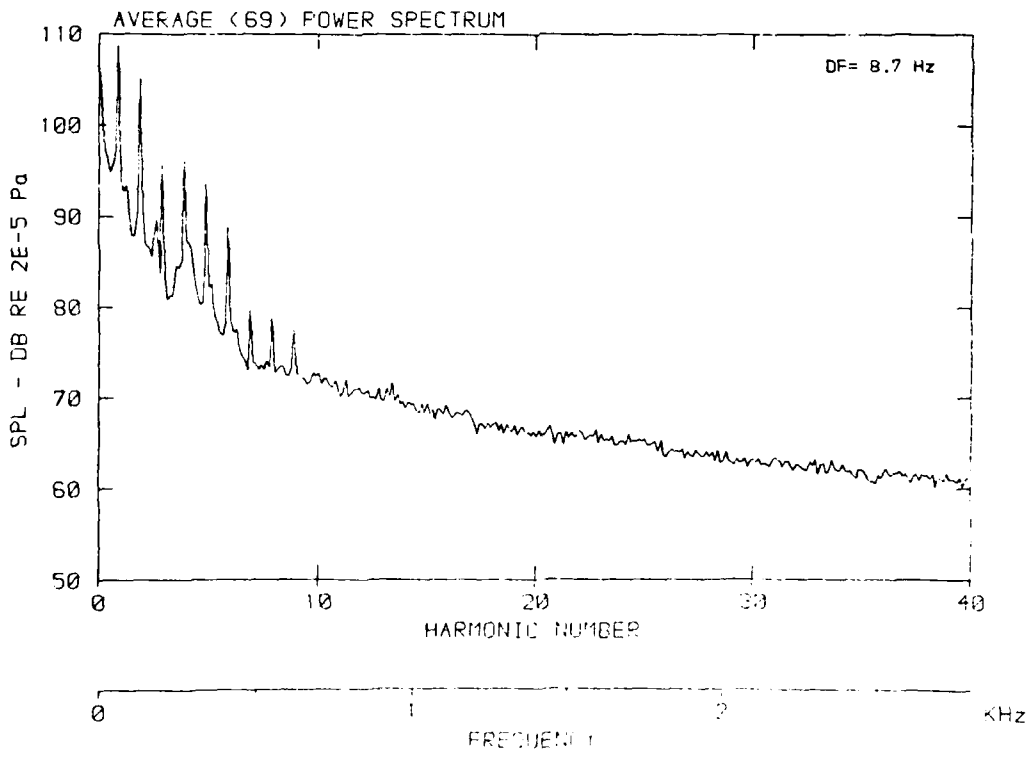
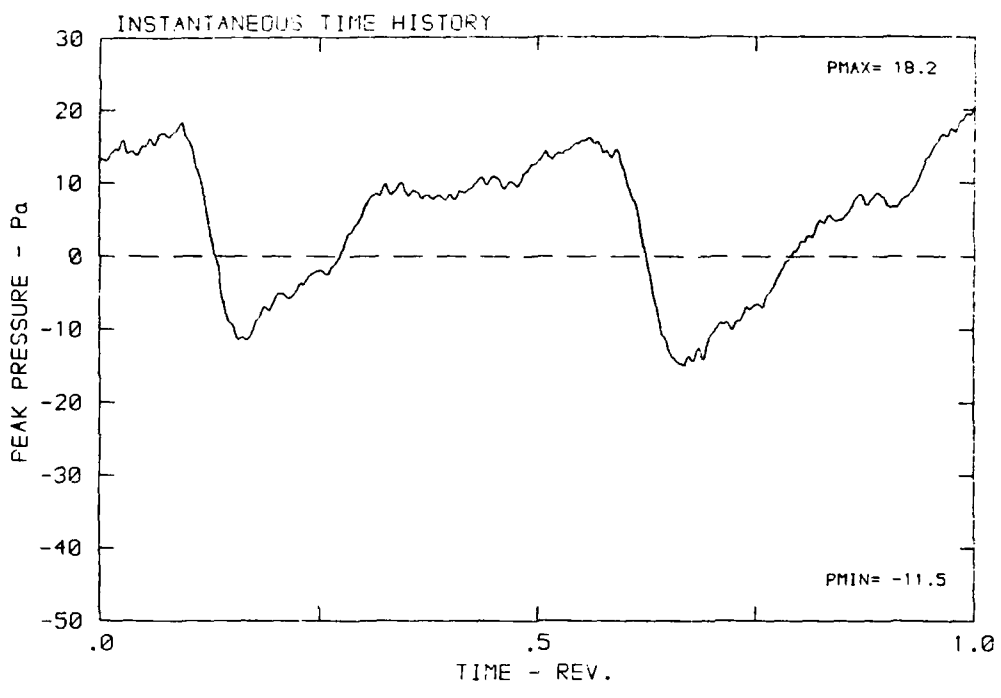
DATA POINT: GN-5 RUN: 148 MP: 4

β : 23.7° MH: .6735 n: 2100 rpm ν : .229 ϕ : -7.4° T: 288.2 K



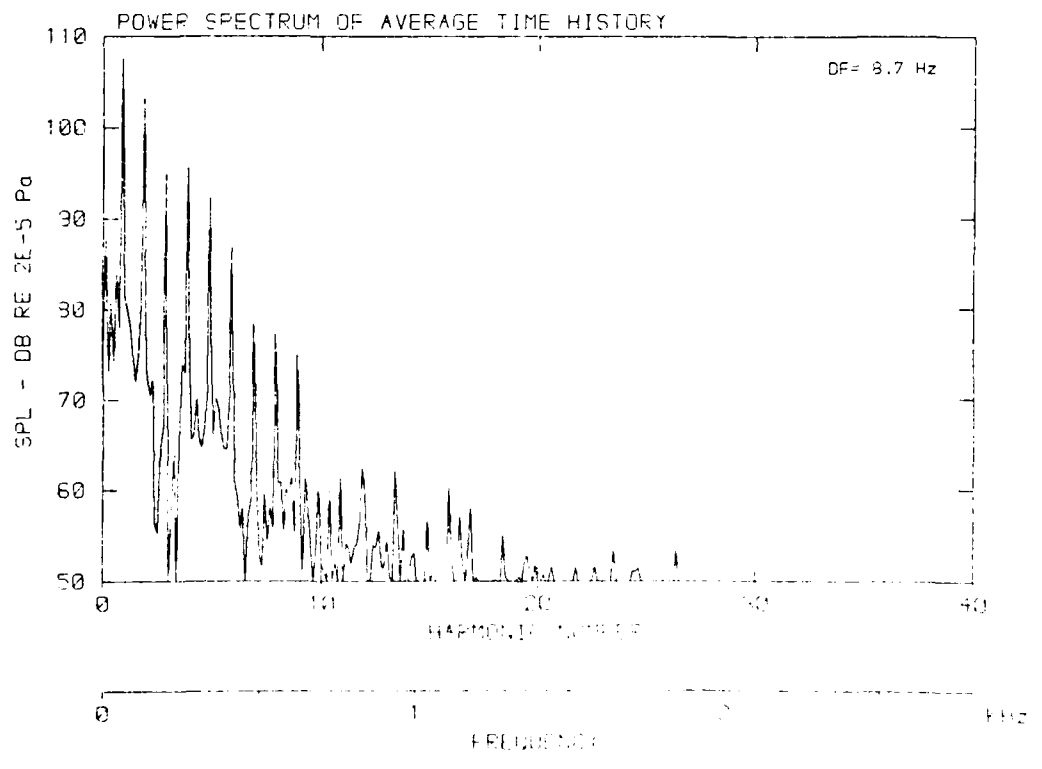
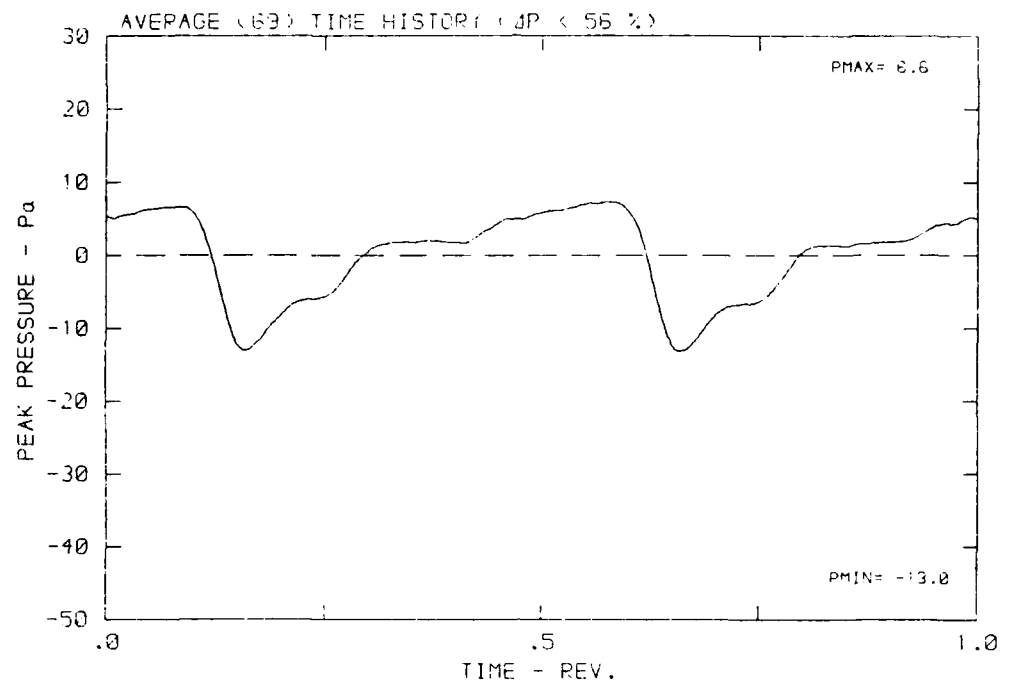
DATA POINT: GN-5 RUN: 149 MP: 5

β : 23.7° MH: .6735 n: 2100 rpm vzu: .229 ϕ : -7.4° T: 298.2 K



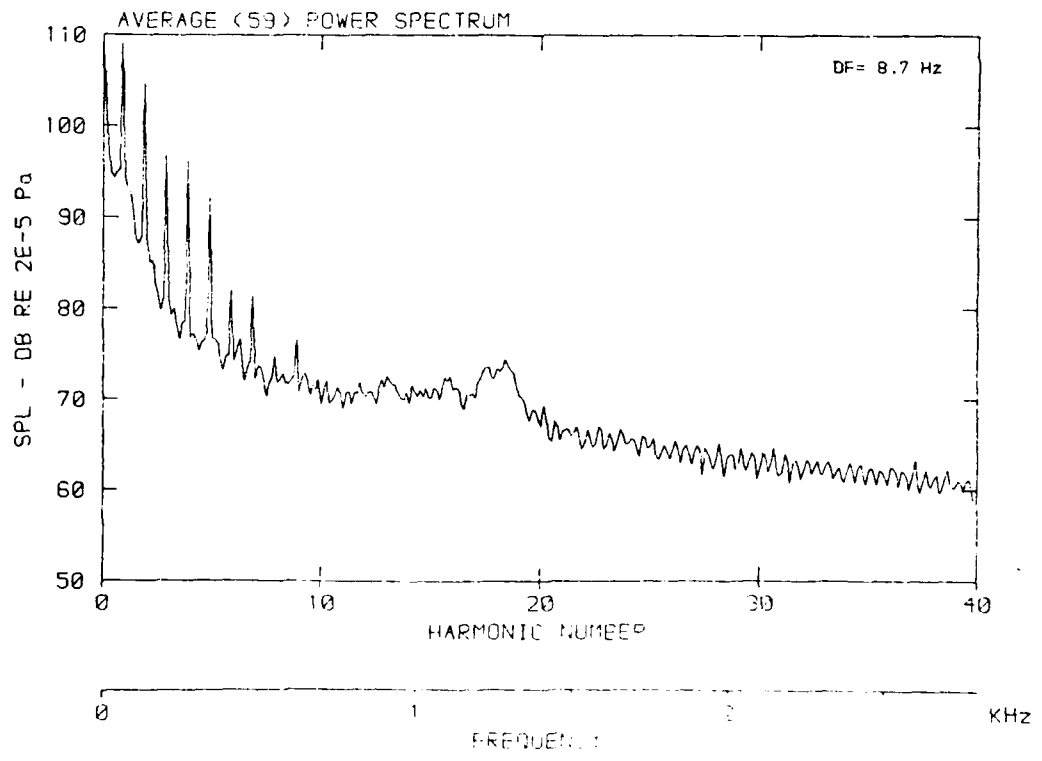
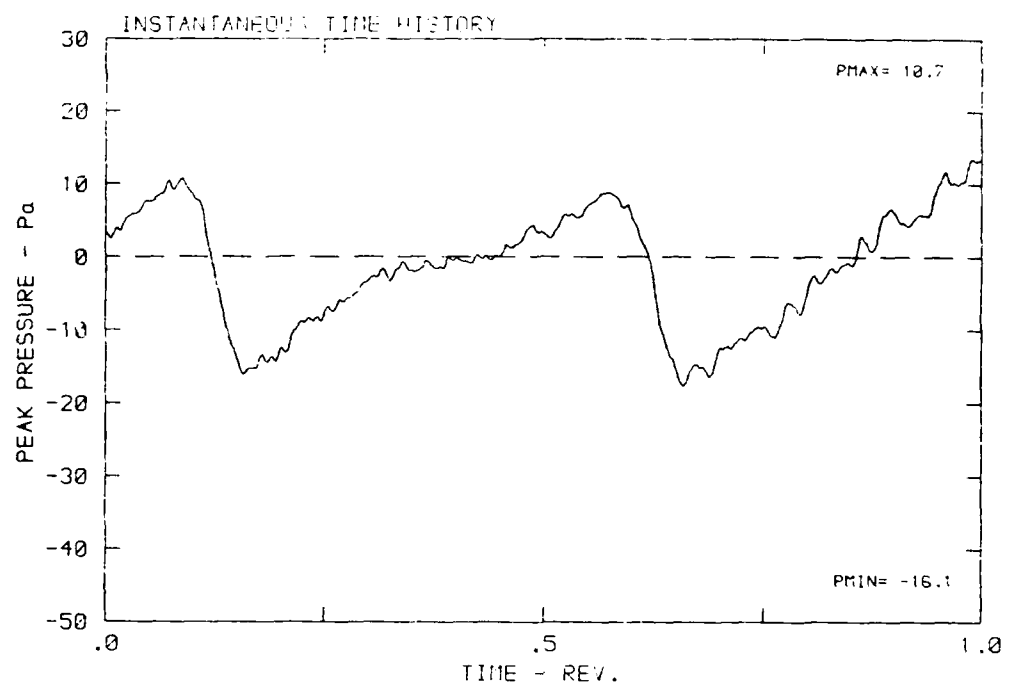
DATA POINT: GN-5 RUN: 143 ME: E

β : 23.7° MH: .6735 n: 2100 rpm vru: .229 ϕ : -7.4° T: 138.2



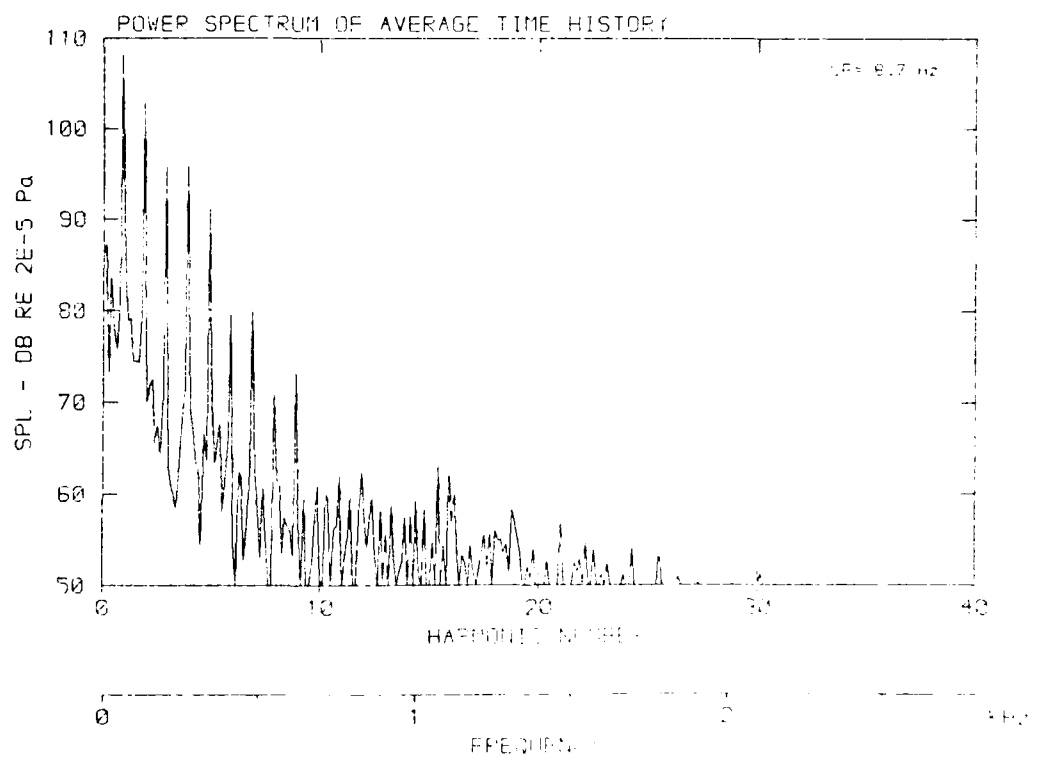
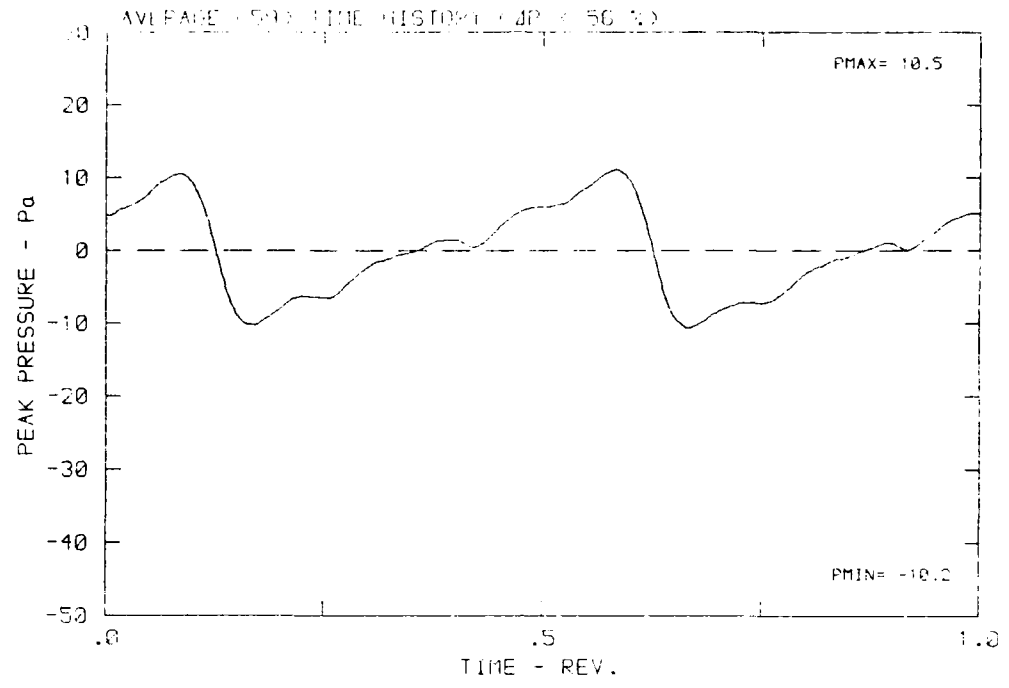
DATA POINT: BN-5 FINE: 48 ME: 1

β : 23.7° MH: .0737 n: 1100 rpm γ : .220 ρ : -7.49 τ : 295.2



DATA POINT: GN-5 F IN: 145 MP: 5

β : 23.7° NH: .6735 n: 2100 rpm ν : .229 ϕ : -7.4° T: 288.2 K



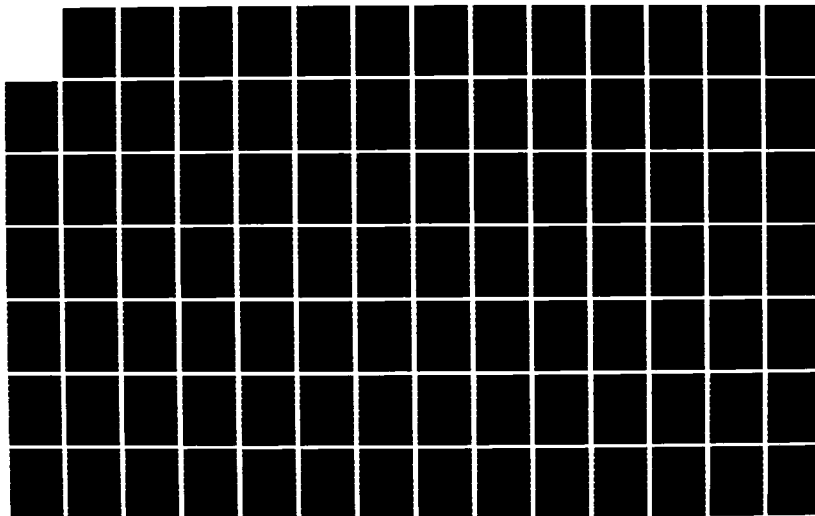
AD-A174 988

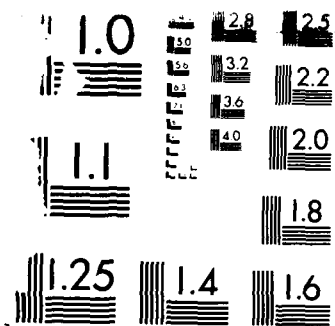
DFVLR/FAA (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER
LUFT UND RAUMFAHR.. (U) DEUTSCHE FORSCHUNGS- UND
VERSUCHSANSTALT FUER LUFT- UND RAUMF.. 2/6
M M DOBRZYNSKI ET AL. 1986

UNCLASSIFIED

F/G 20/1

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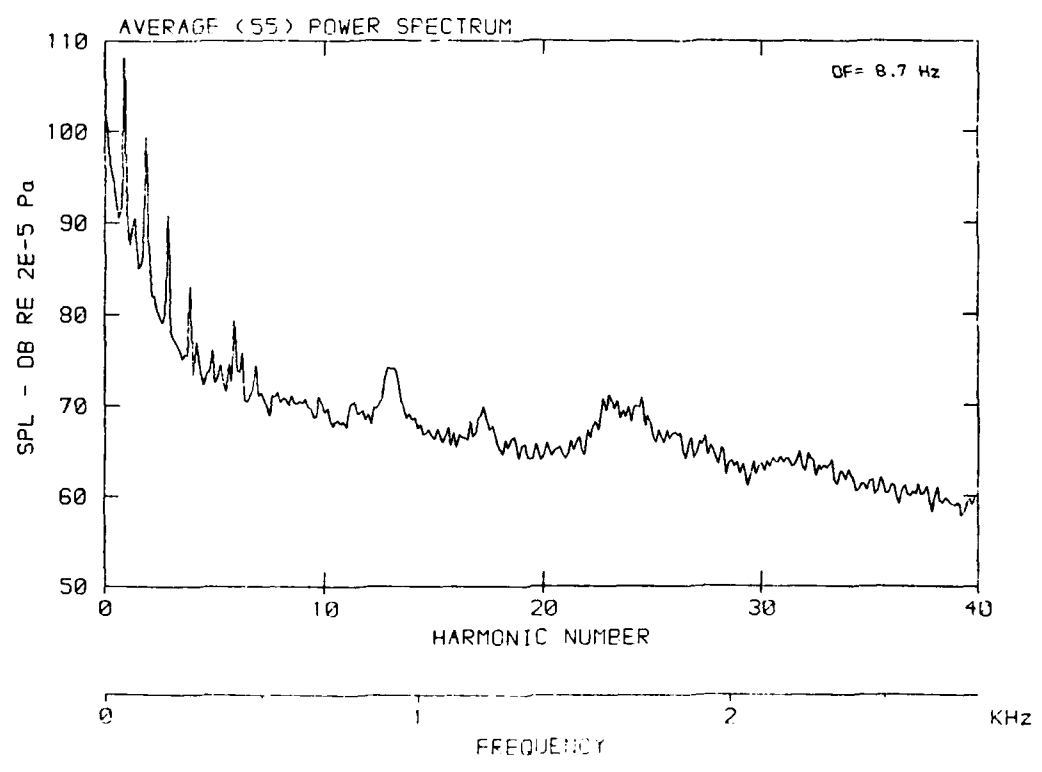
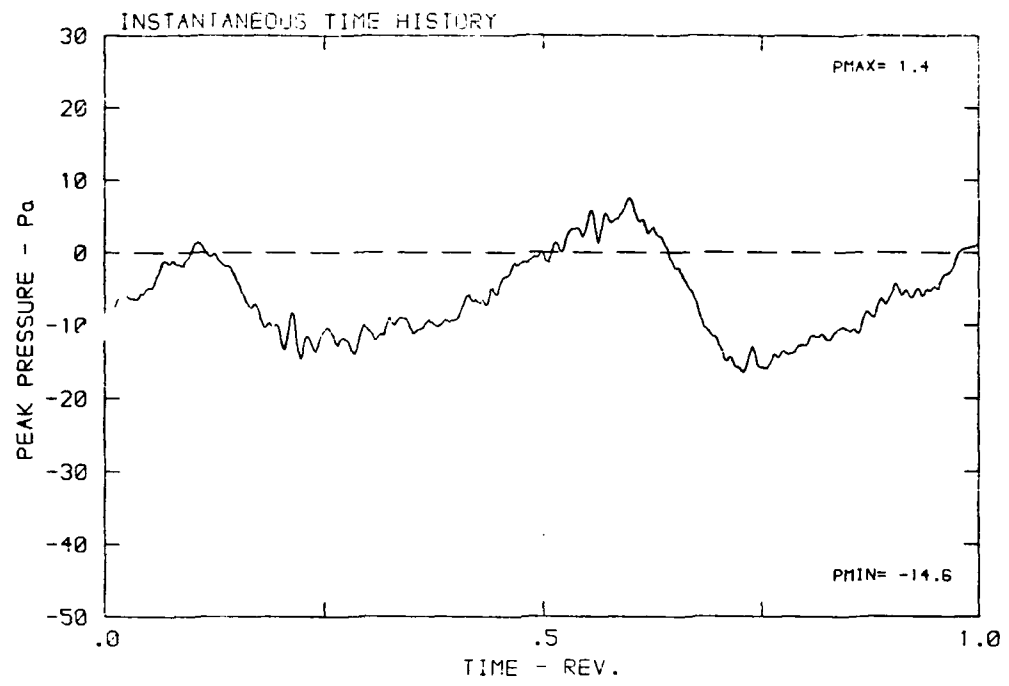




RESOLUTION TEST CHART
MILITARY STANDARD 1950A

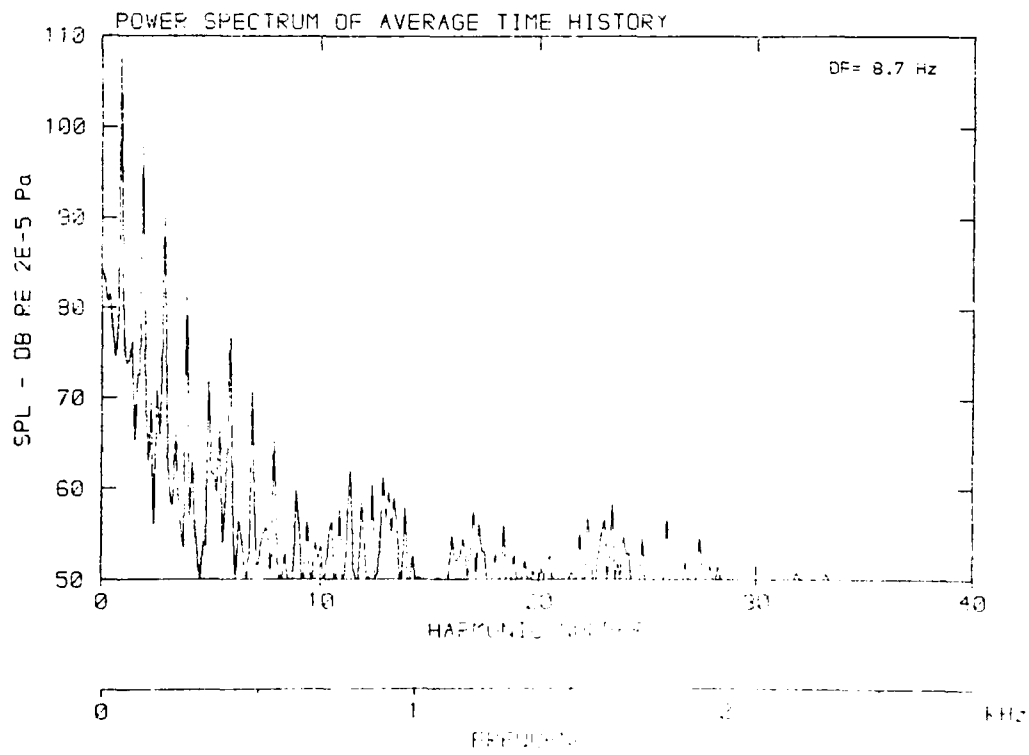
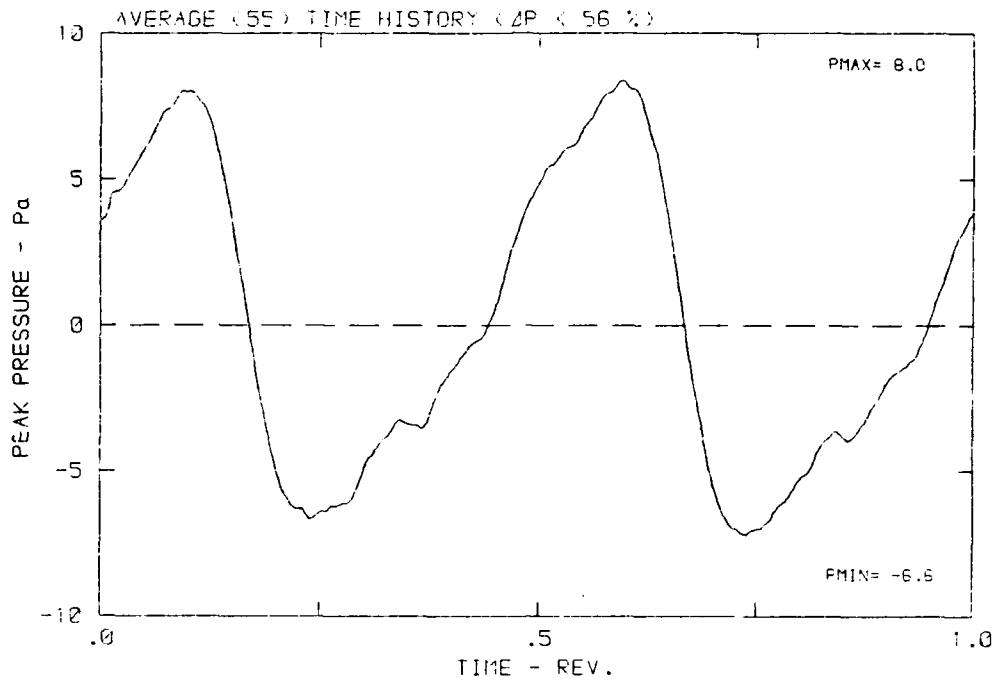
DATA POINT: GN-5 RUN: 149 MP: 7

β : 23.7° MH: .6735 n: 2100 rpm μ : .025 ϕ : -7.4° θ : 289.2°



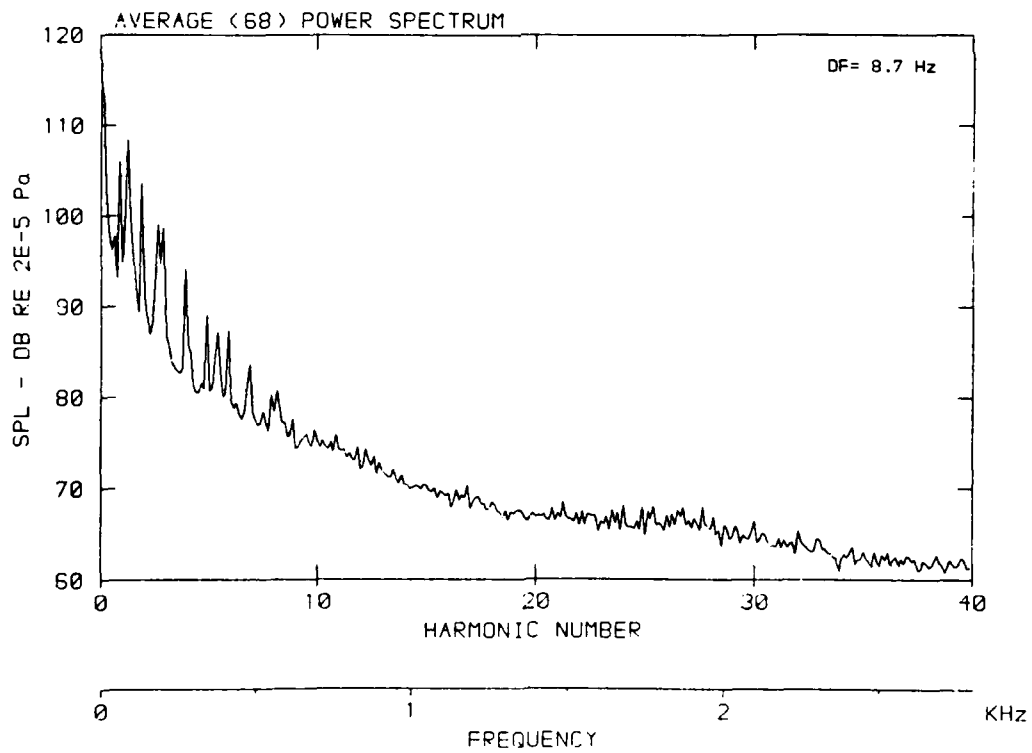
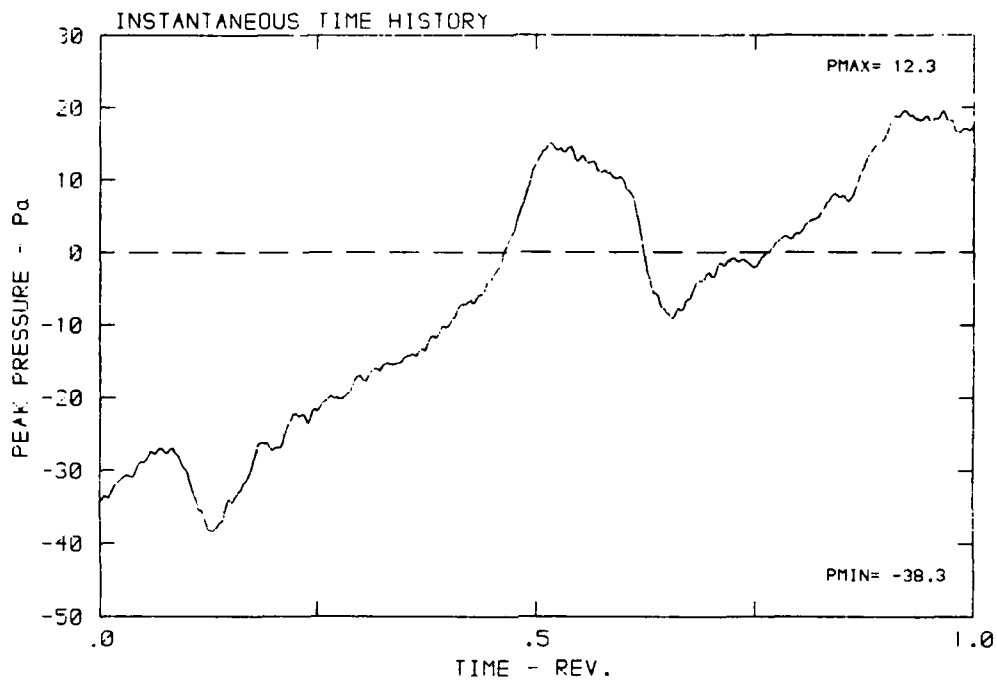
DATA POINTS: GN-5 RUN: 149 MP: 7

β : 23.7° MH: .6735 n: 2100 rpm v/u : .229 ϕ : -7.4° T: 285.2 K



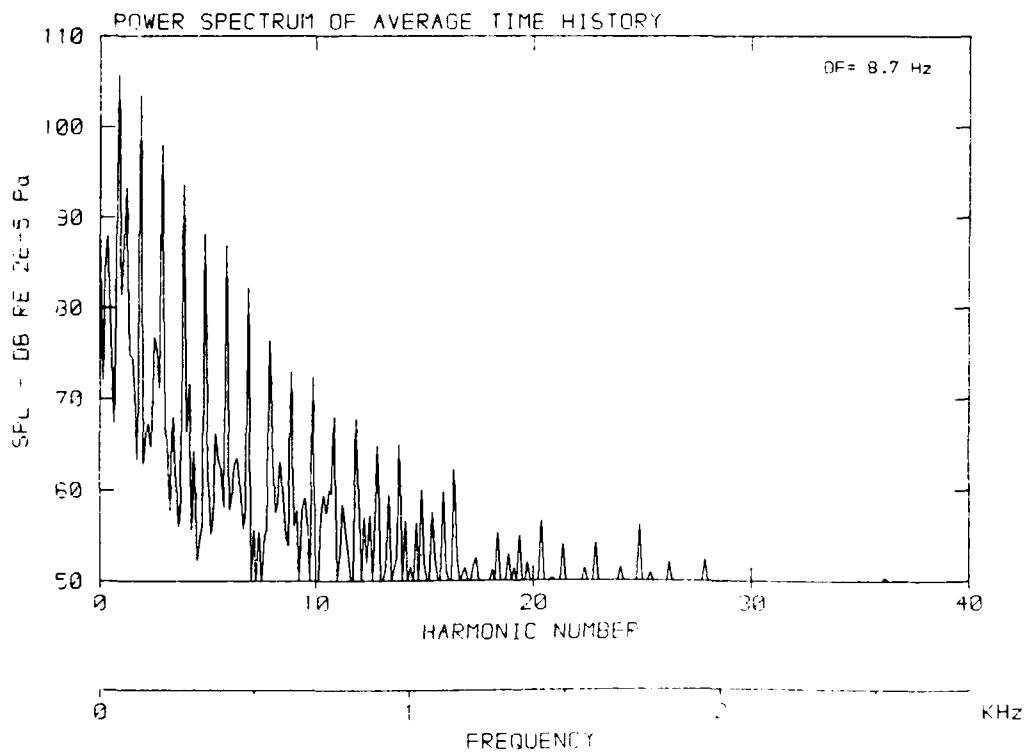
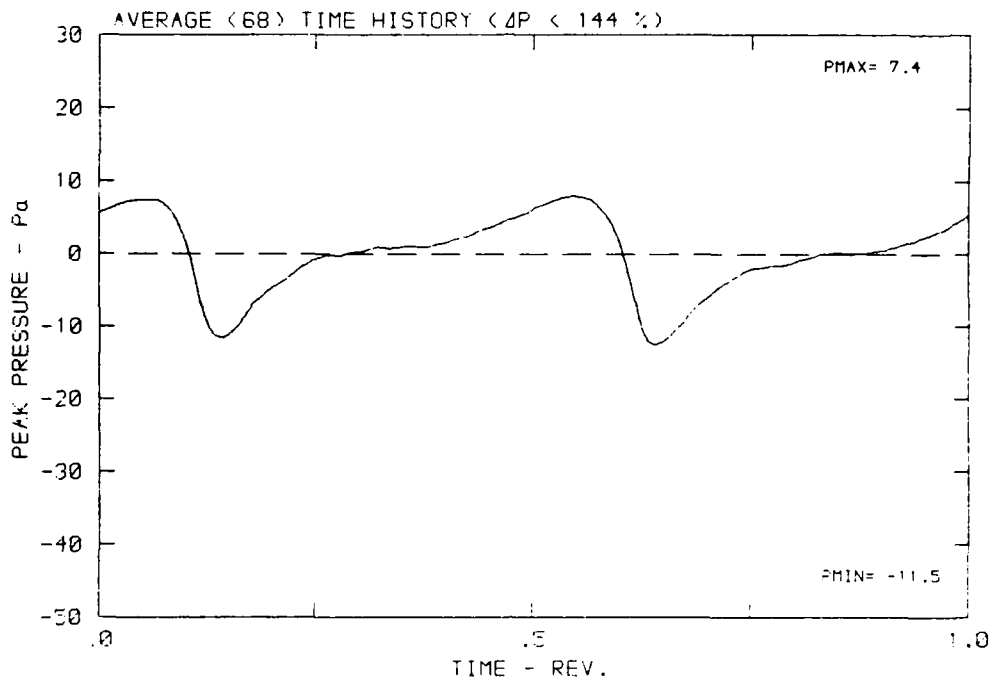
DATA POINT: GN-5 RUN: 149 MP: 8

β : 23.7° MH: .6735 n: 2100 rpm v/u: .229 ϕ : -7.4° T: 288.2 K



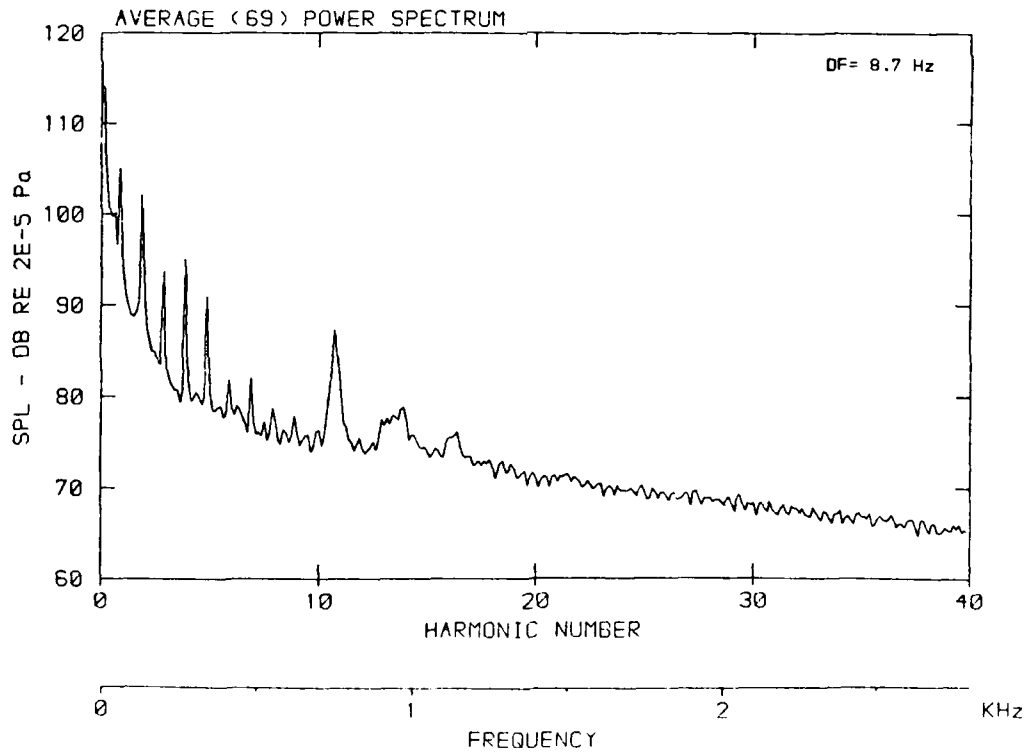
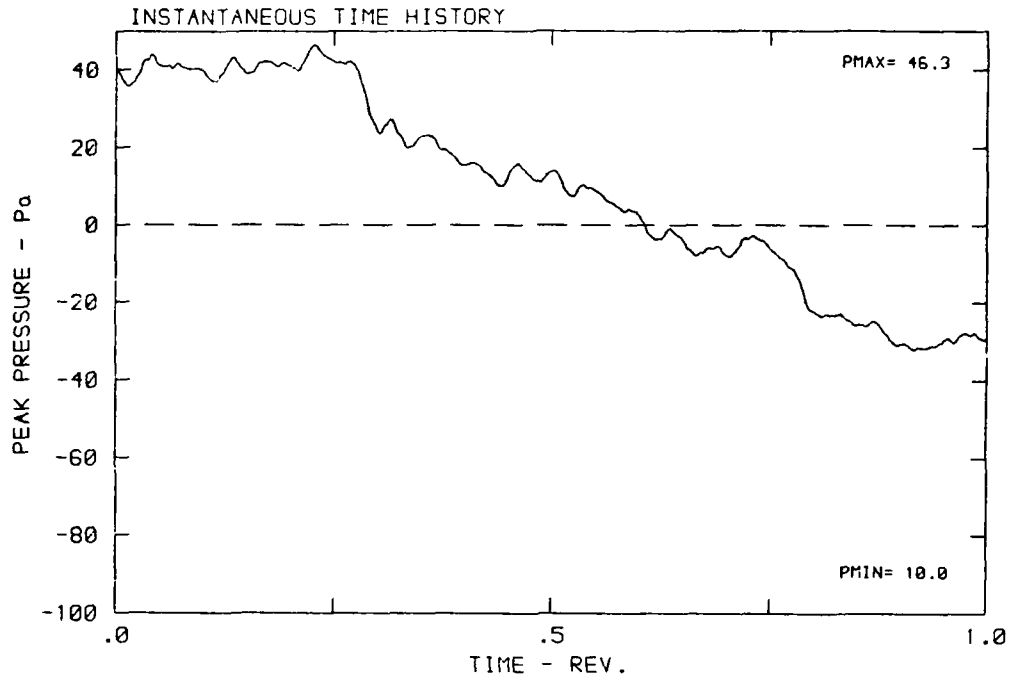
DATA POINT: GN-5 RUN: 149 MP: 8

β : 23.7° MH: .6735 n: 2100 rpm v/u: .229 ϕ : -7.4° T: 288.2 K



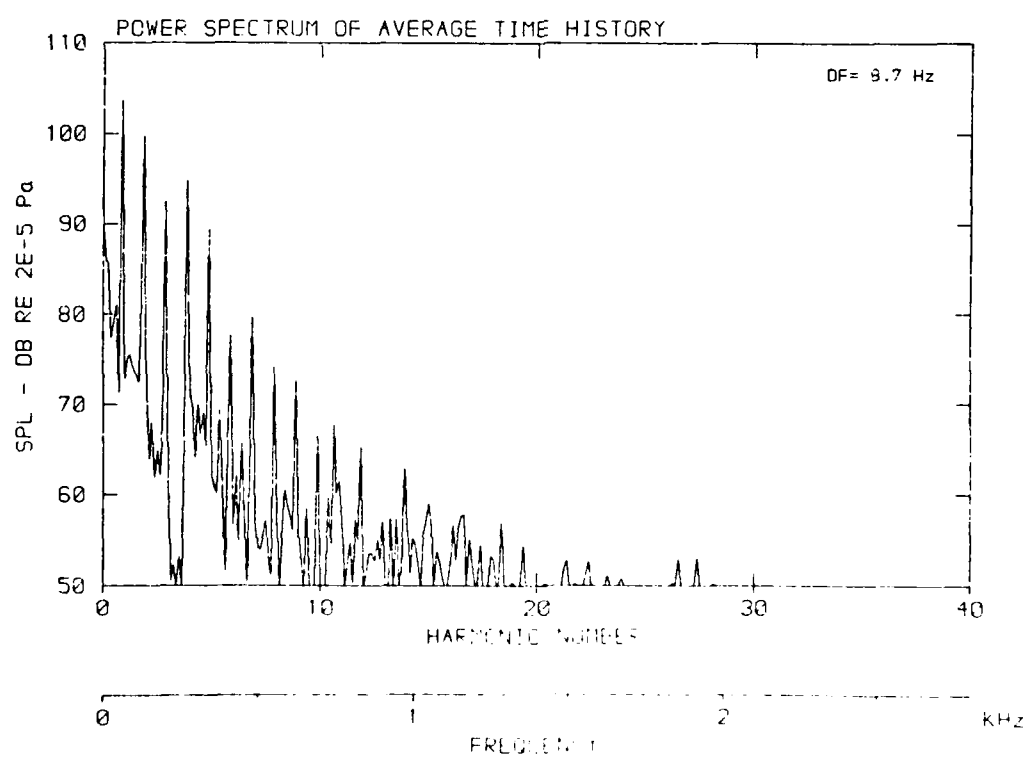
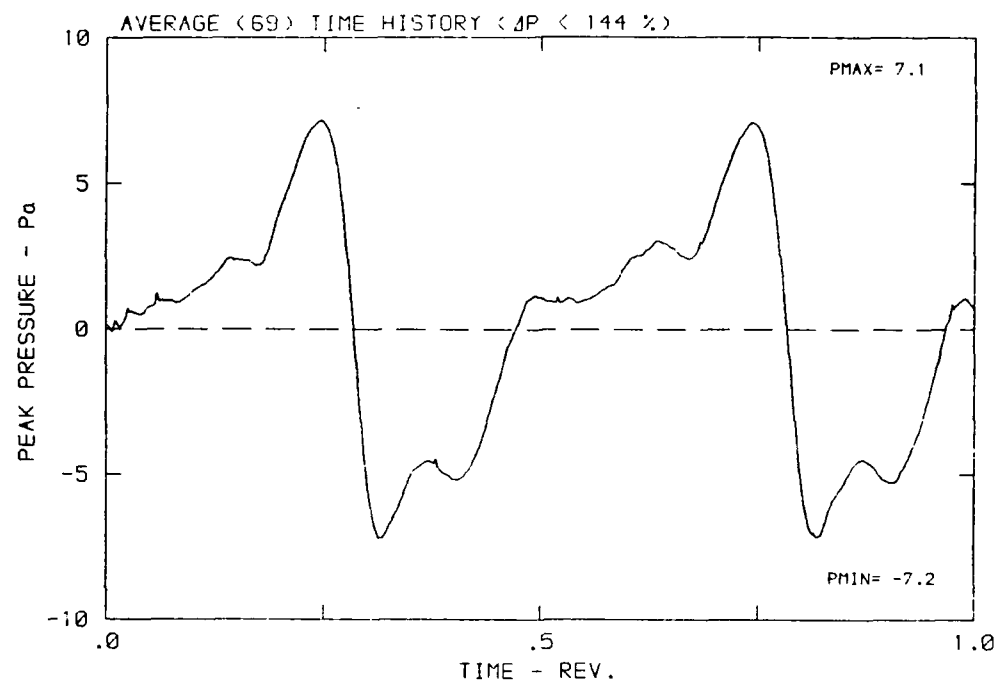
DATA POINT: GN-5 RUN: 149 MP: 9

β : 23.7° MH: .6735 n: 2100 rpm v/u : .229 ϕ : -7.4° T: 288.2 K



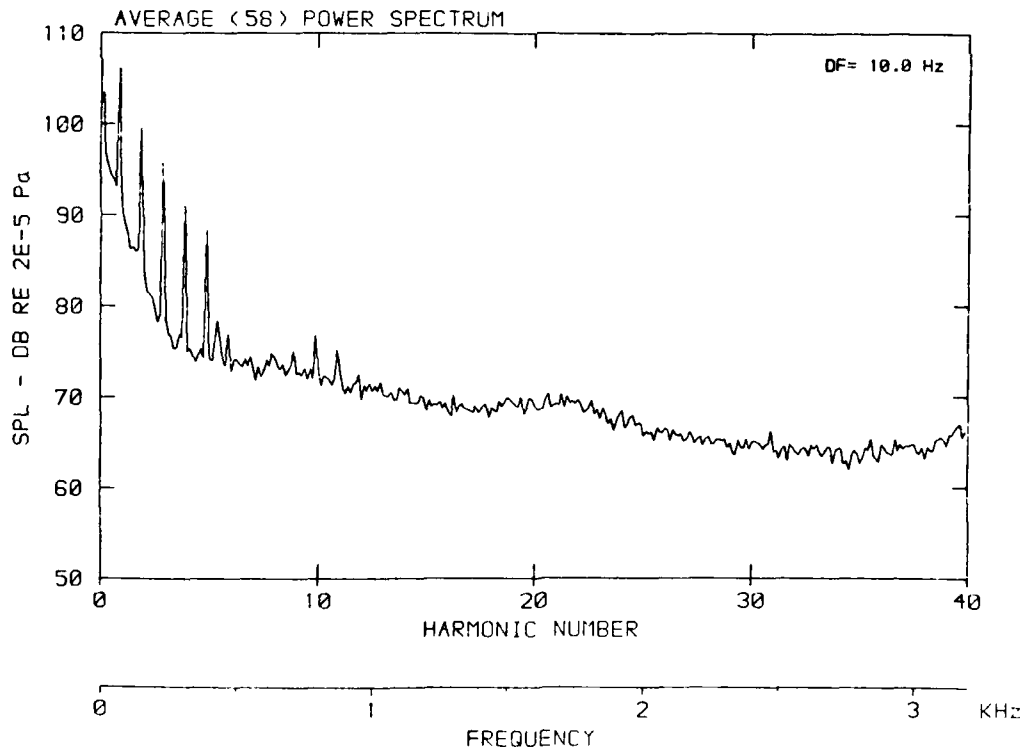
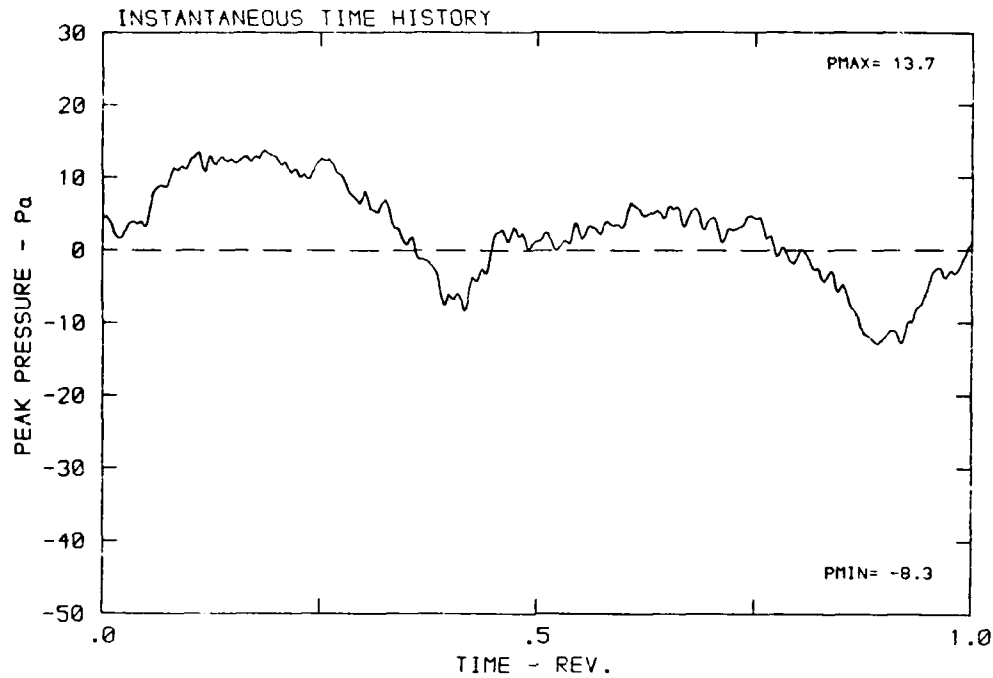
DATA POINT: GN-5 RUN: 149 MP: 9

β : 23.7° MH: .6735 n: 2100 rpm v/u : .229 ϕ : -7.4° T: 288.2 K



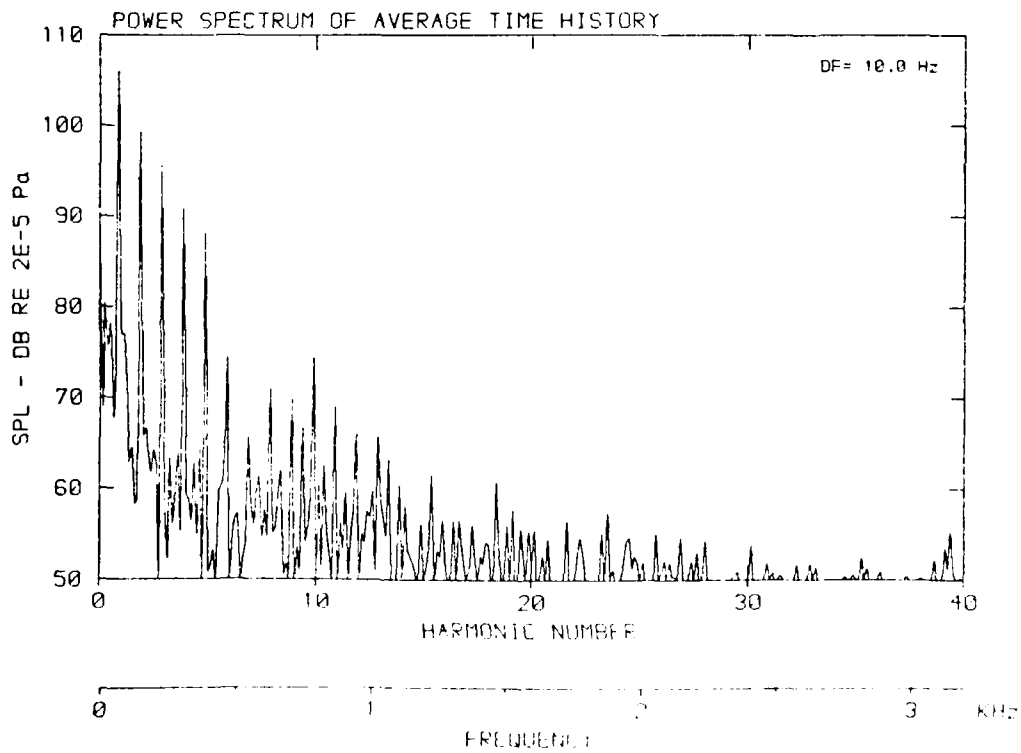
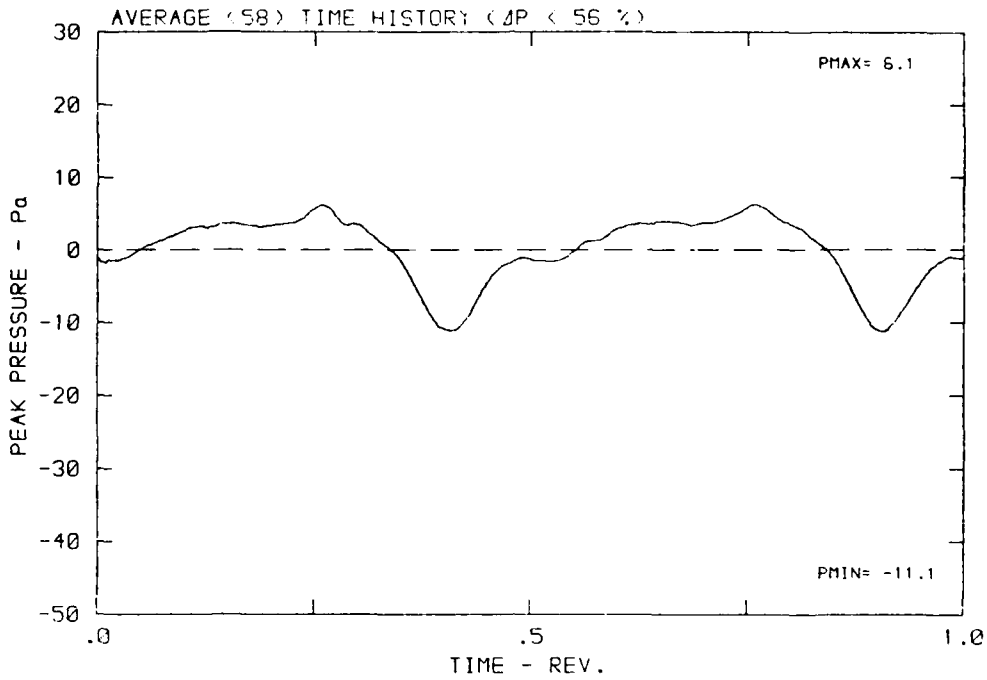
DATA POINT: GN-6 RUN: 150 MP: 1

β : 23.7° MH: .7755 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 288.2 K



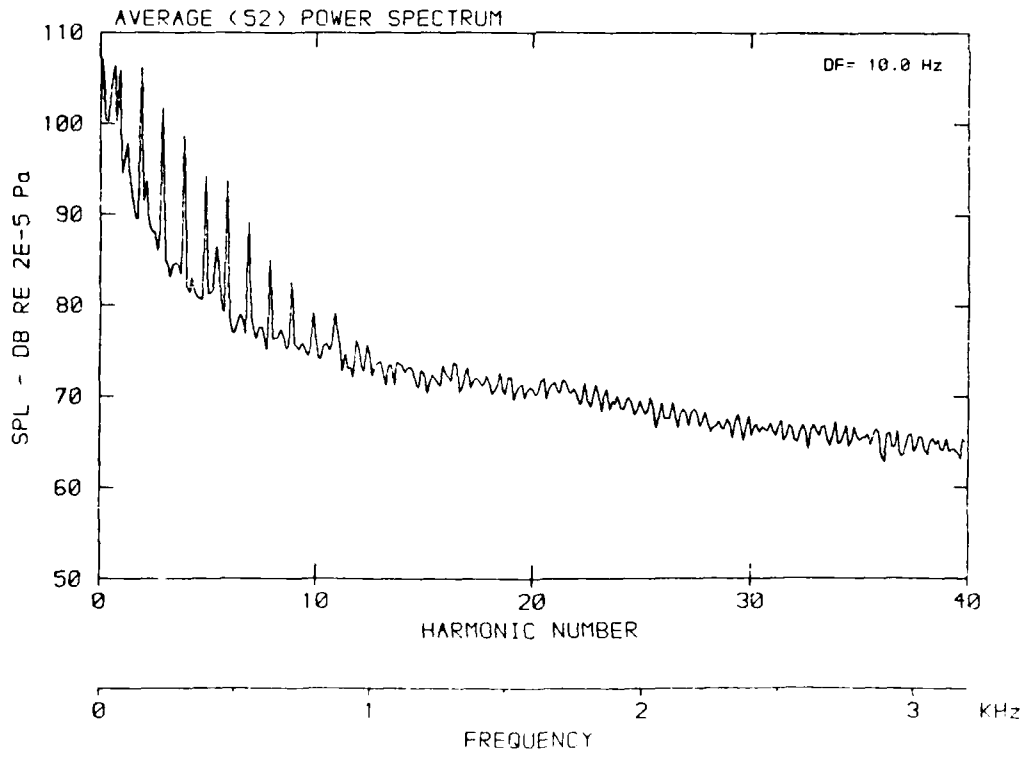
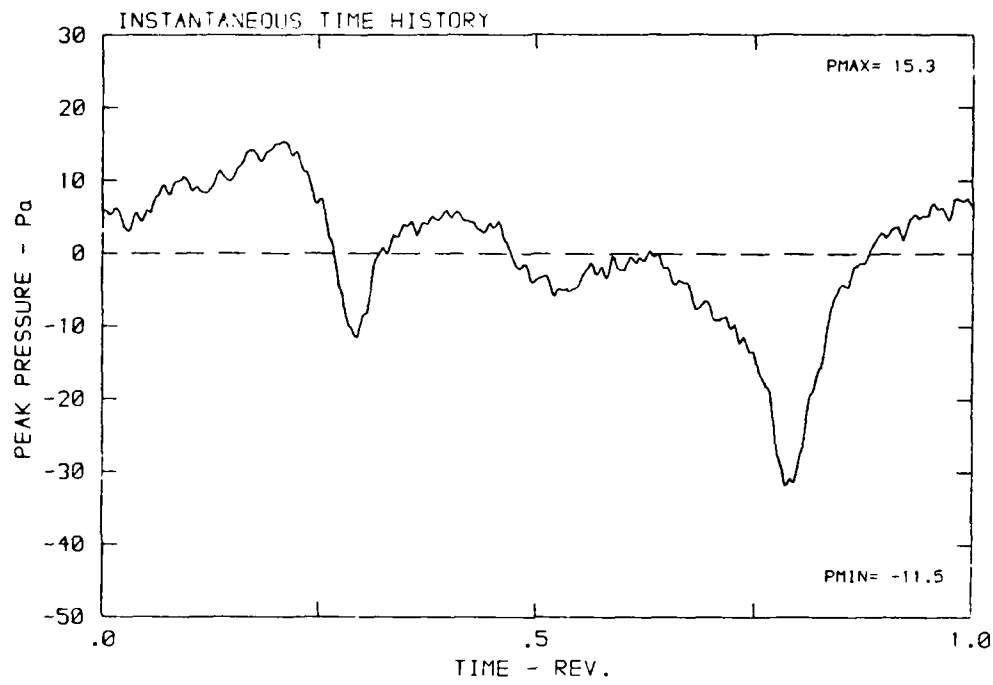
DATA POINT: GN-6 RUN: 150 MP: 1

β : 23.7° MH: .7755 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.2 K



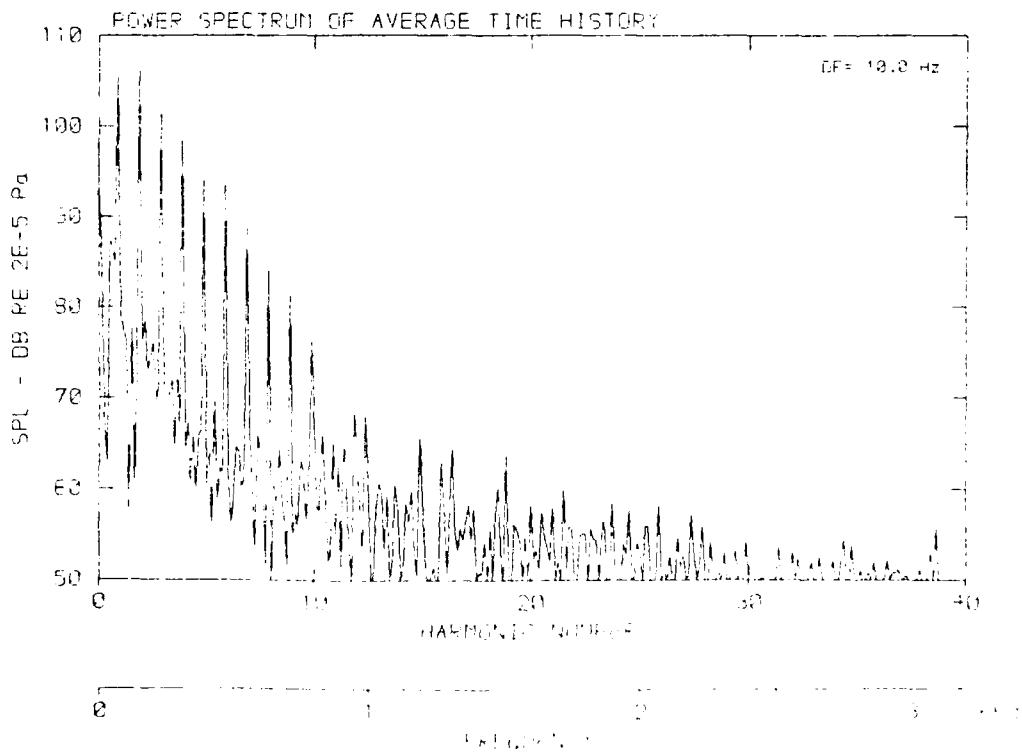
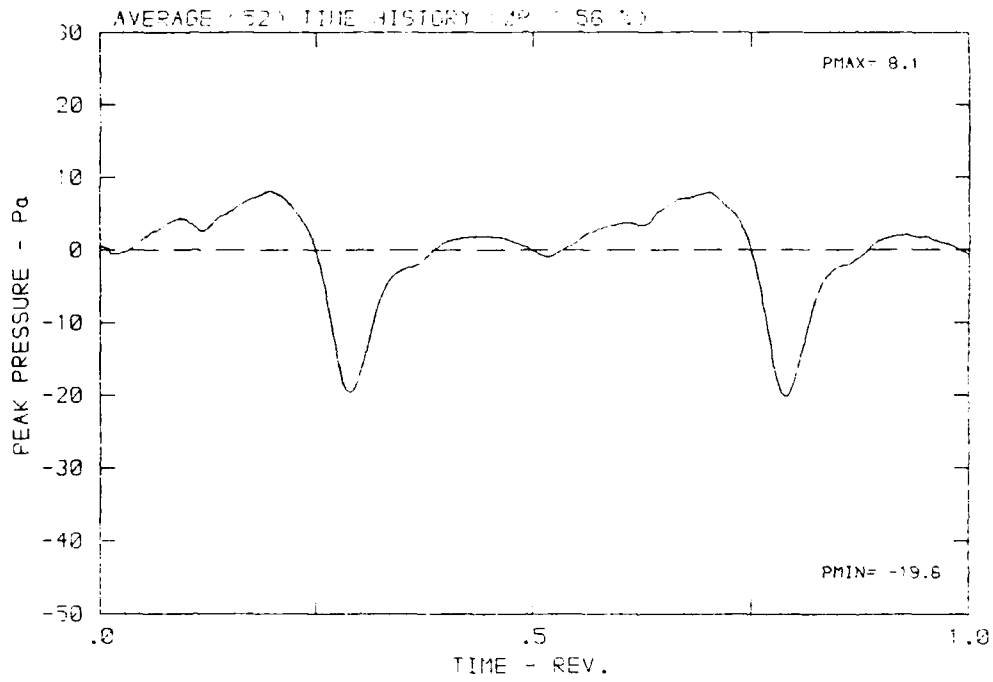
DATA POINT: GN-6 RUN: 150 MP: 2

β : 23.7° MH: .7755 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 288.2 K



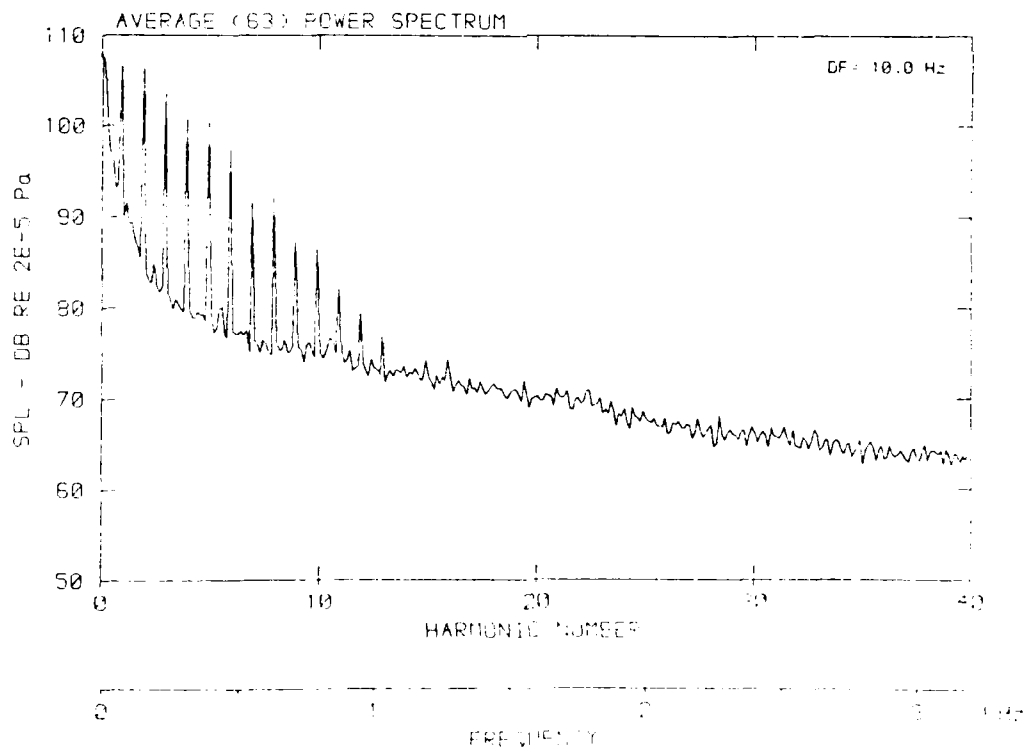
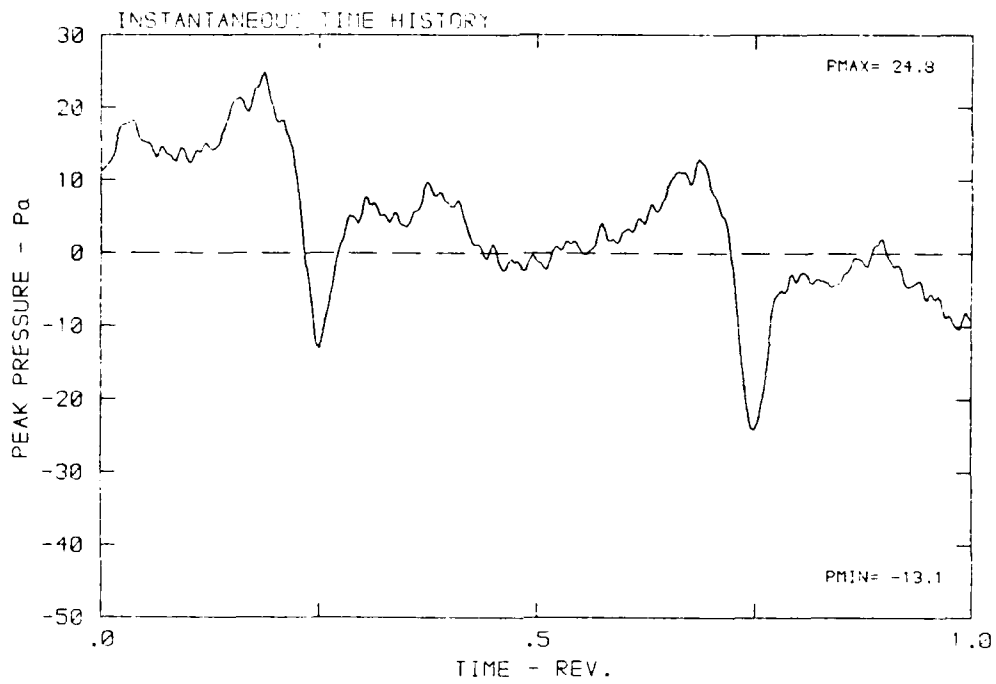
DATA POINT: GN-5 RUN: 1E3 ME: 2

β : 23.7° MH: .7755 n: 2400 rpm r_{ho} : .261 ω : 47.8° τ : 209.0



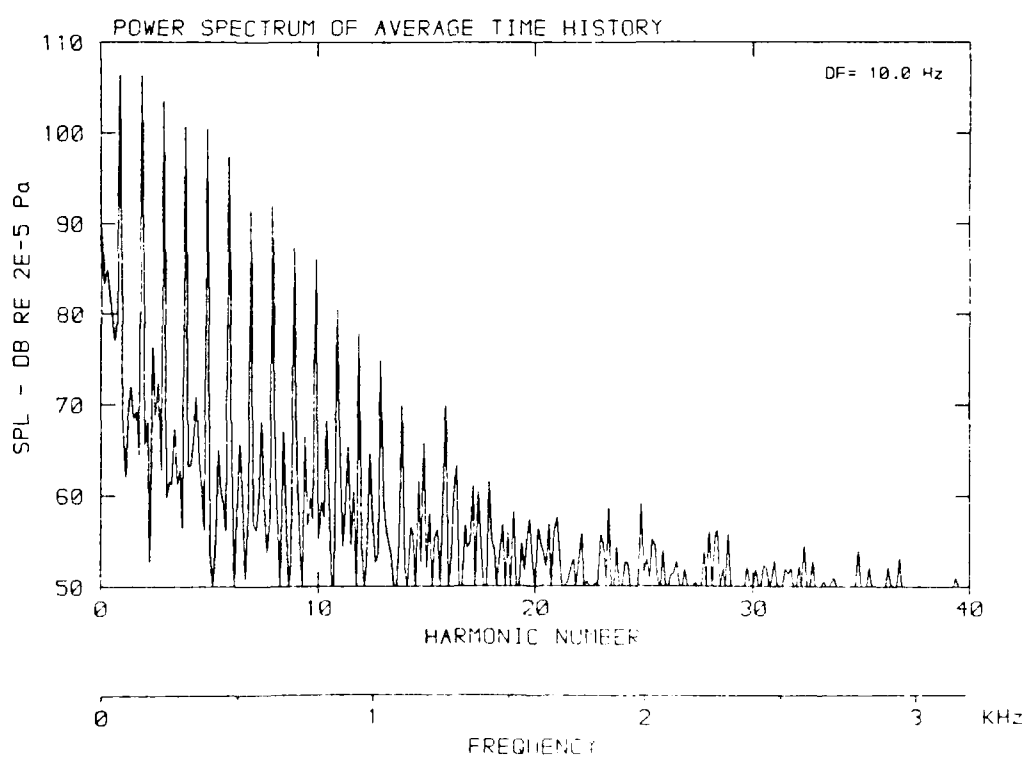
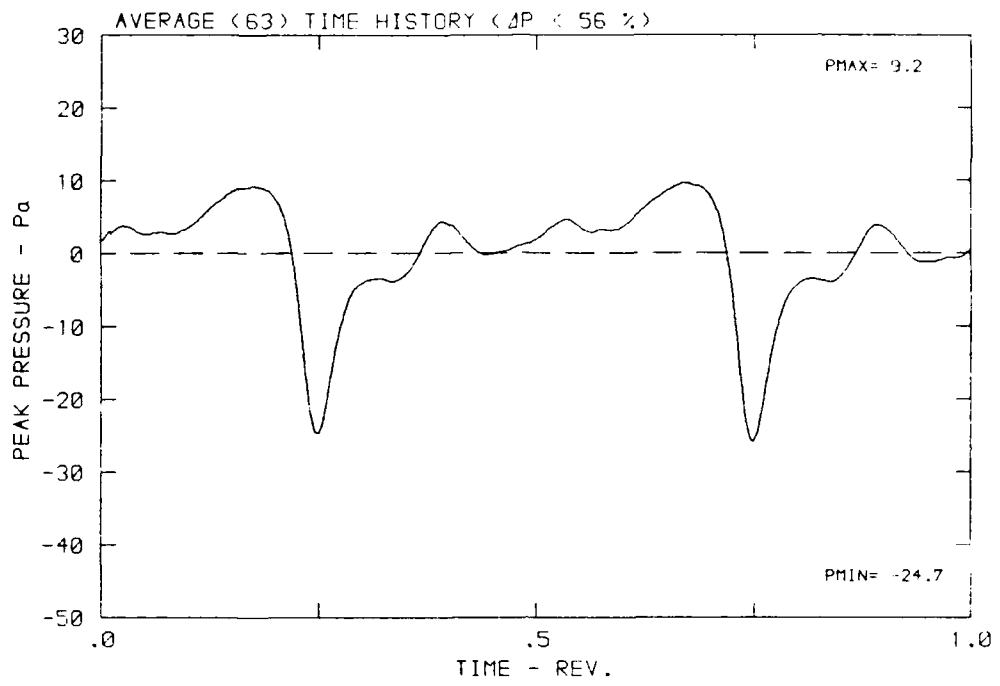
DATA POINT: GN-6 RUN: 150 MF: 5

β : 23.7° MH: .7755 n: 2400 rpm ν_{zu} : .262 ϕ : -7.4° T: 289.2



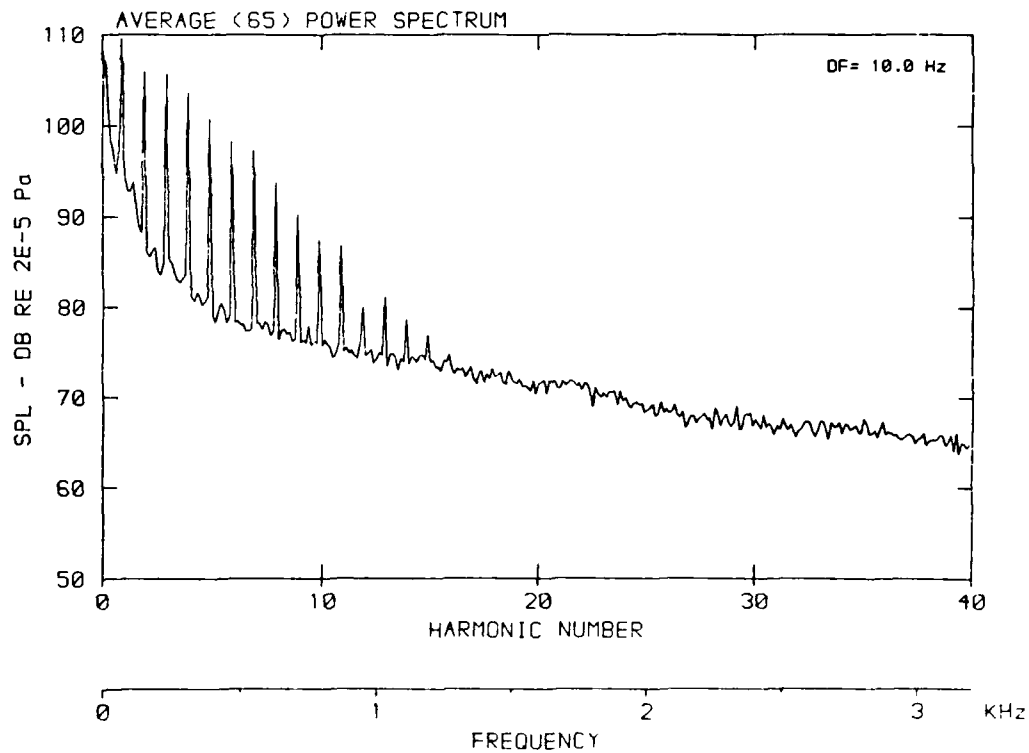
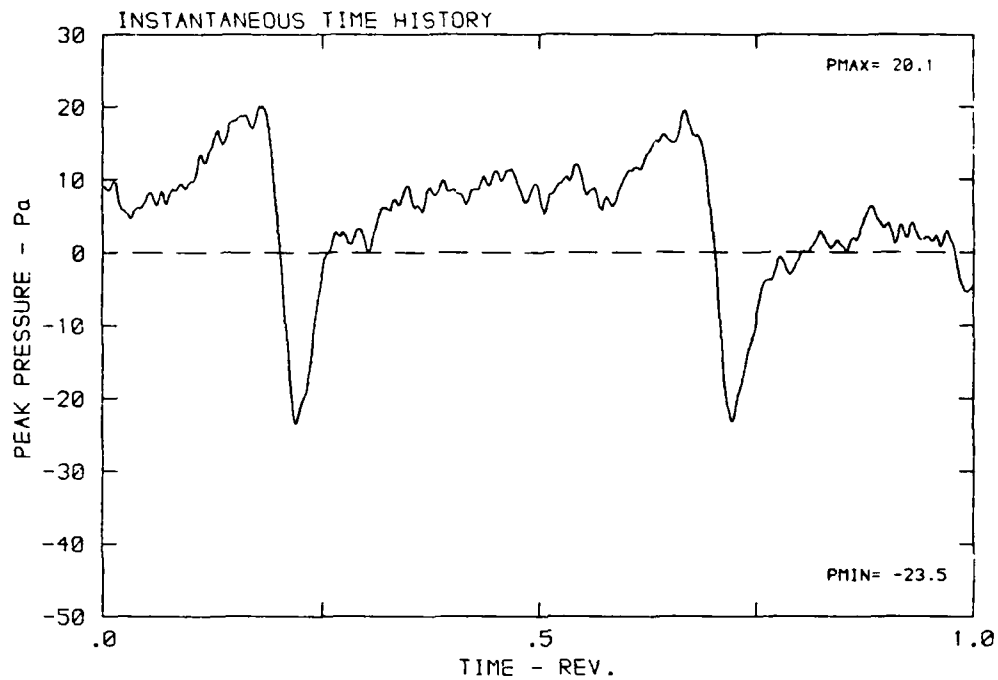
DATA POINT: GN-6 RUN: 150 MP: 3

β : 23.7° MH: .7755 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.2 K



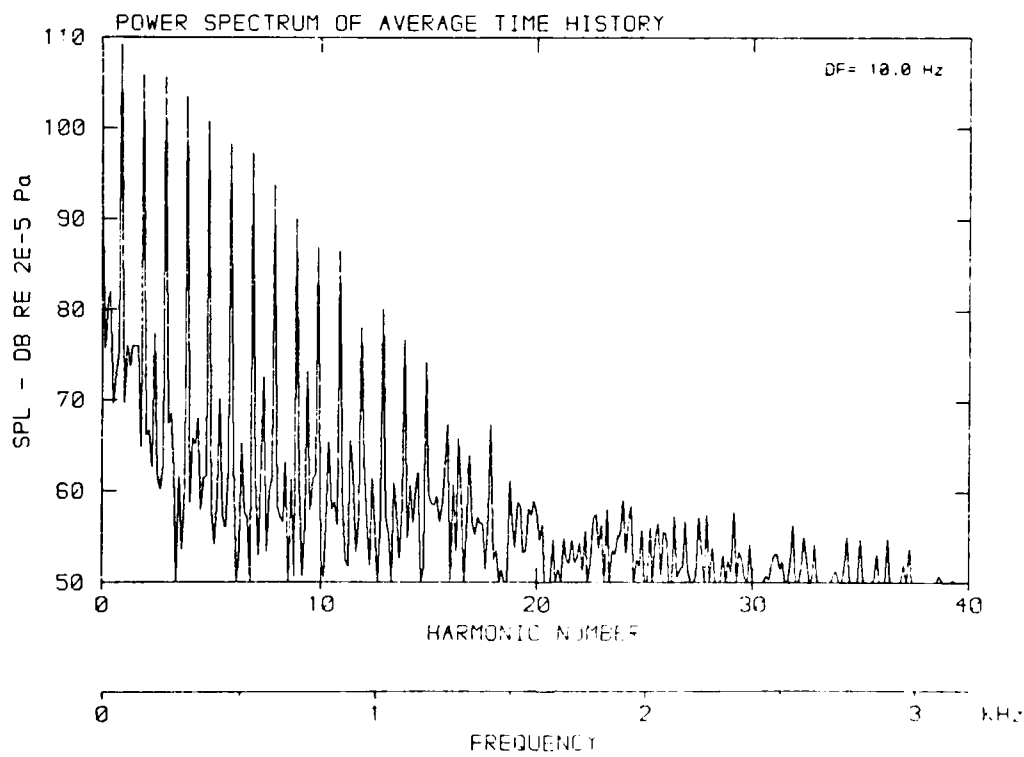
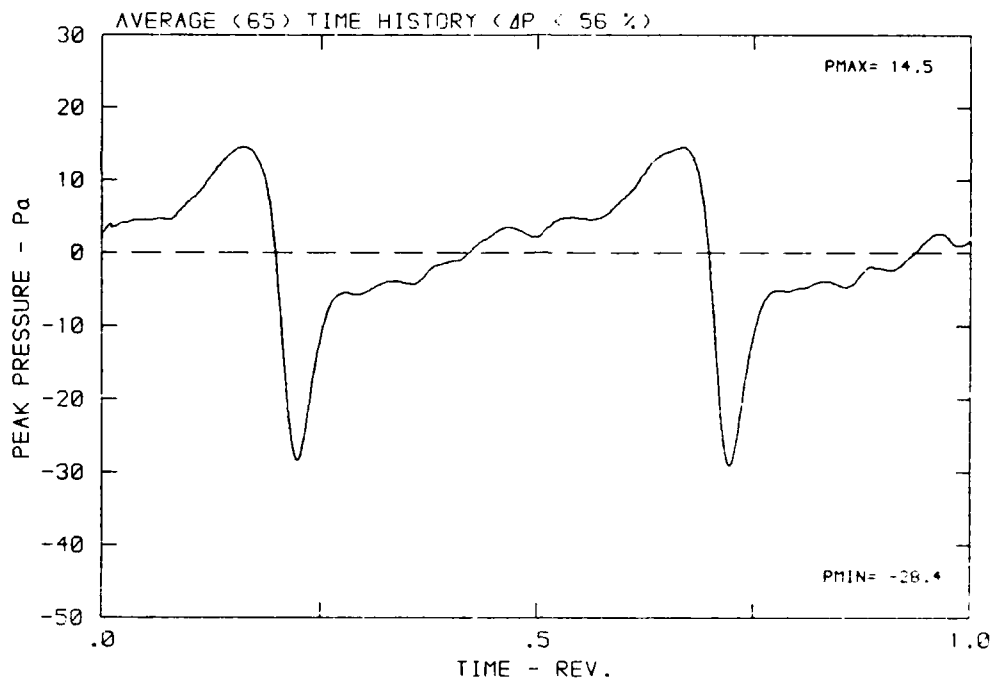
DATA POINT: GN-6 RUN: 150 MP: 4

β : 23.7° MH: .7755 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.2 K



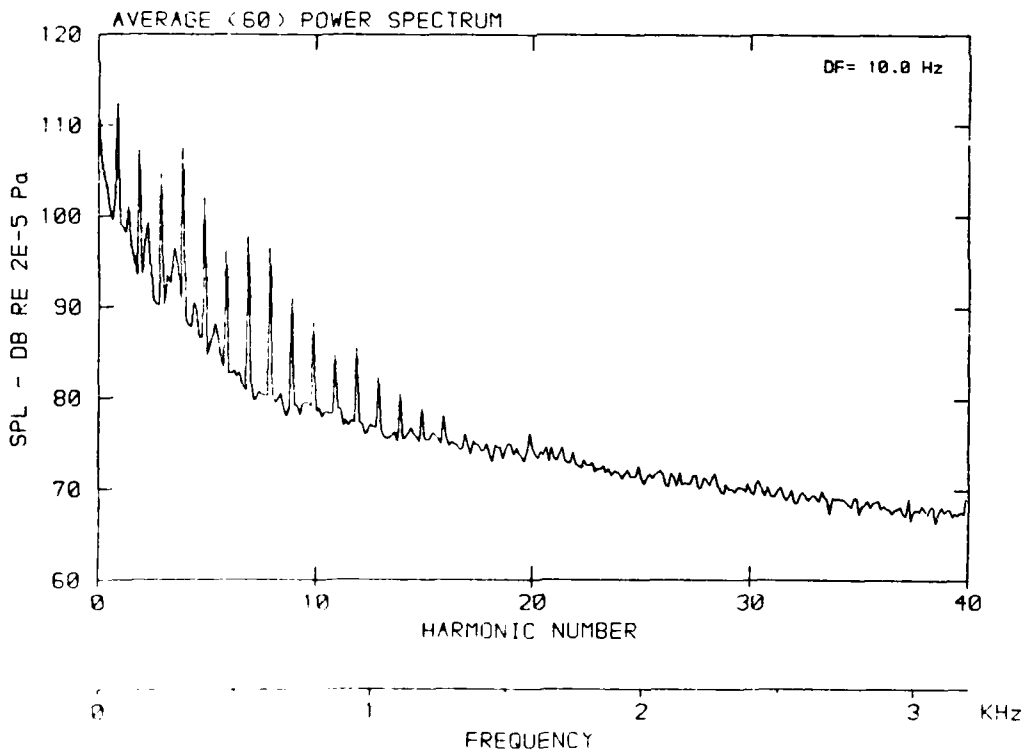
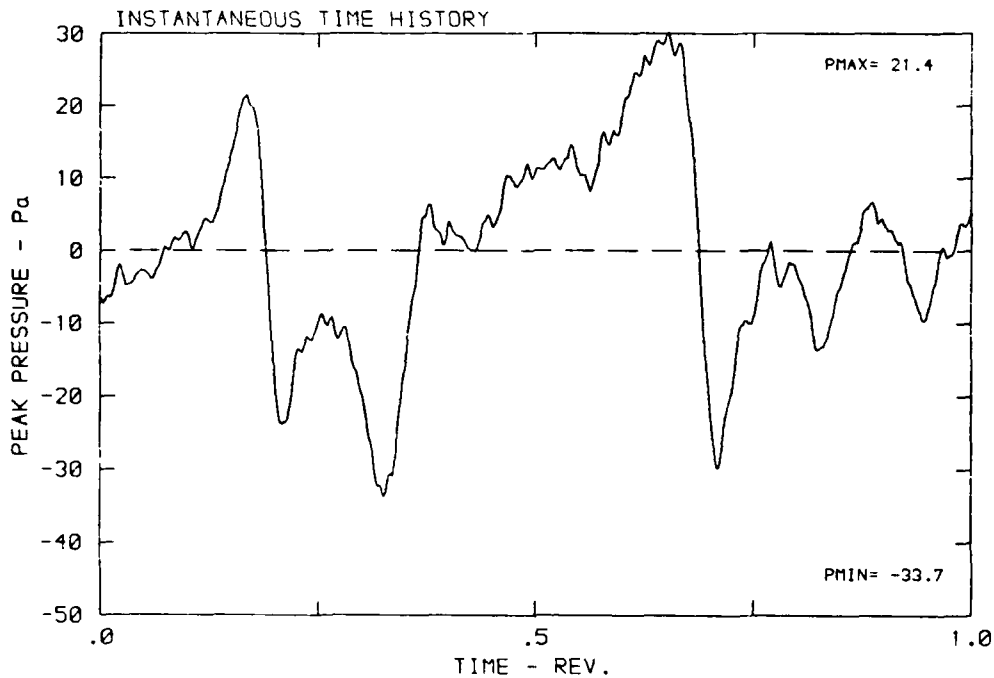
DATA POINT: GN-6 RUN: 150 MP: 4

β : 23.7° MH: .7755 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 288.2 K



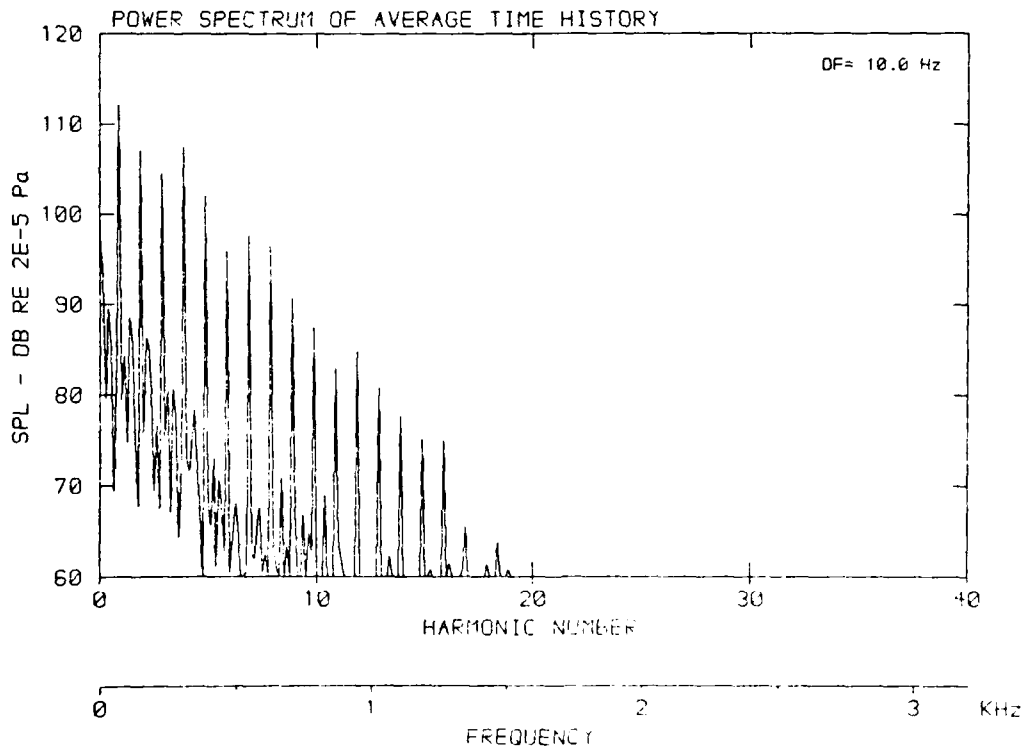
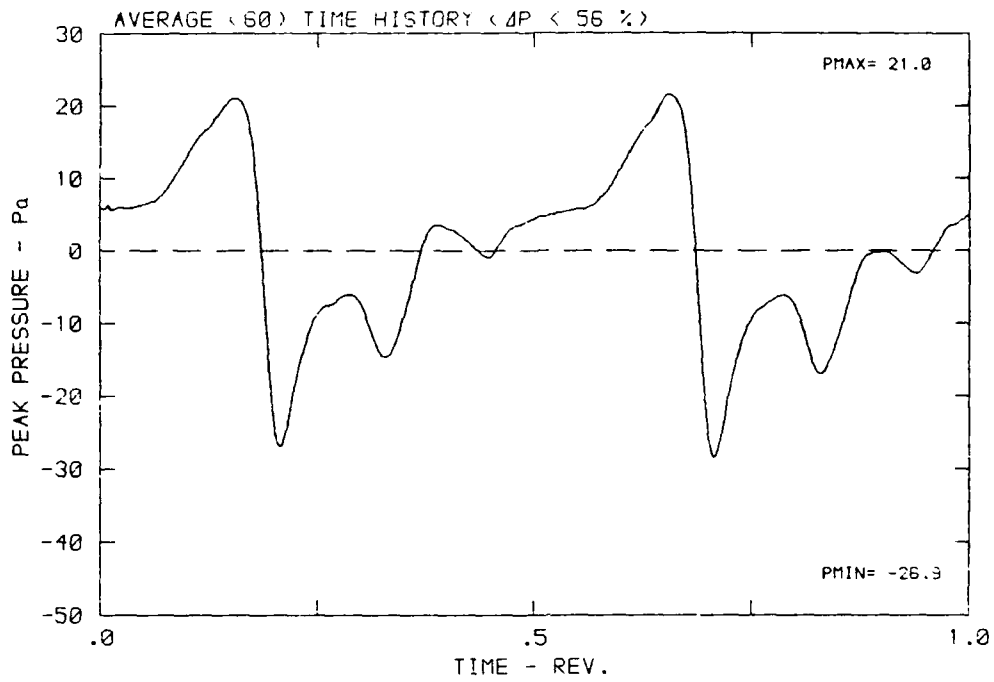
DATA POINT: GN-6 RUN: 150 MP: 5

β : 23.7° MH: .7755 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.2 K



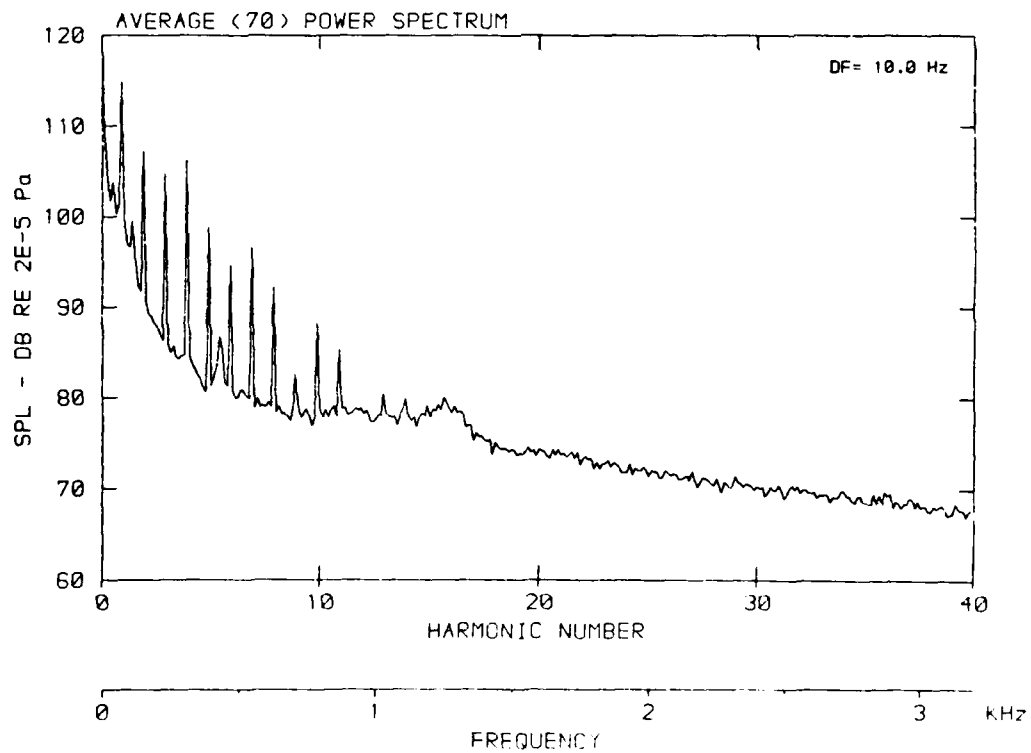
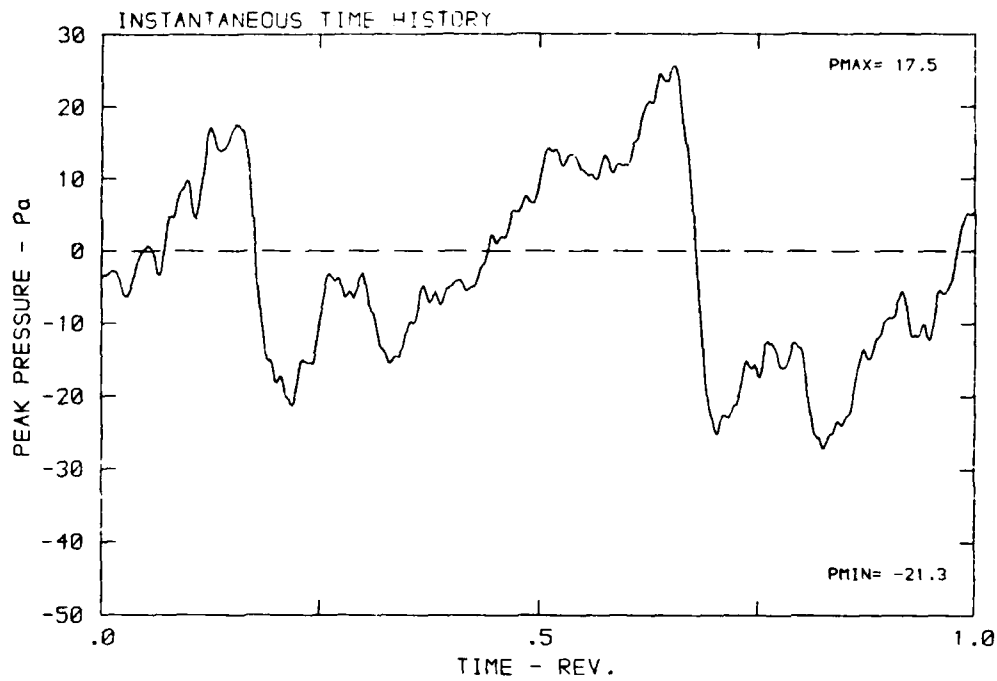
DATA POINT: GN-6 RUN: 150 MP: 5

β : 23.7° MH: .7755 n: 2400 rpm v/u: .262 ϕ : -7.4° T: 288.2 K



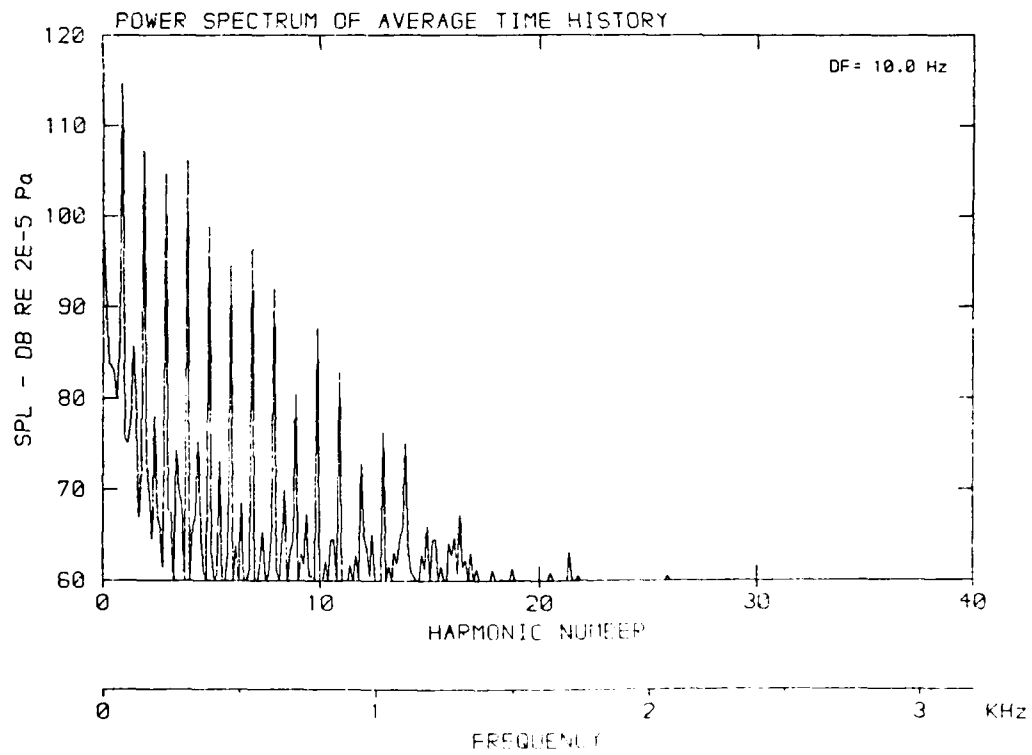
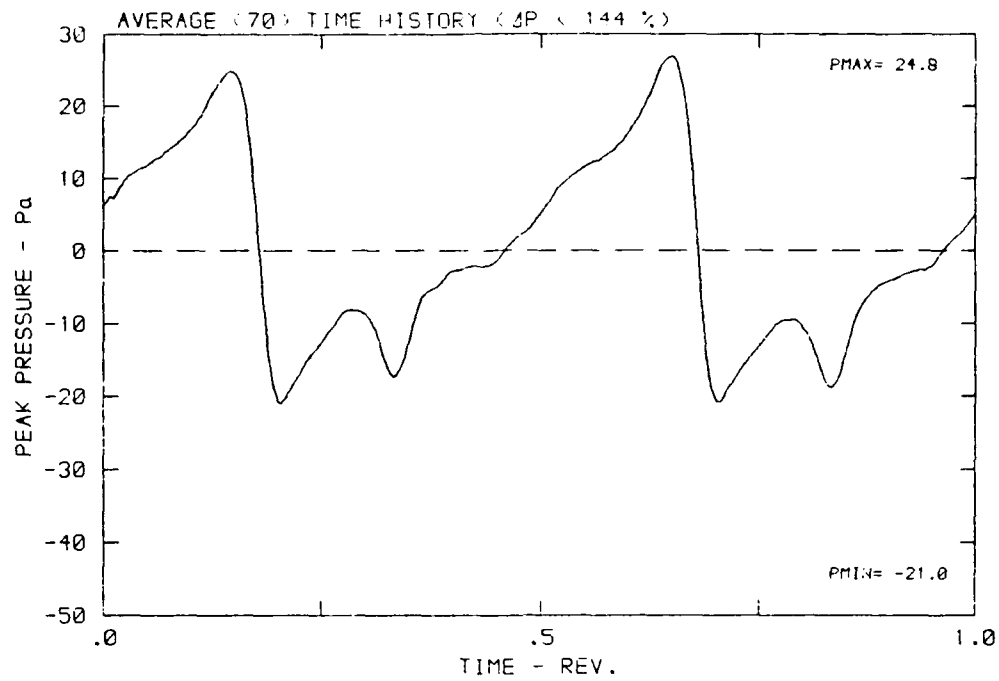
DATA POINT: GN-5 RUN: 150 MP: 6

β : 23.7° MH: .7755 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 288.2 K



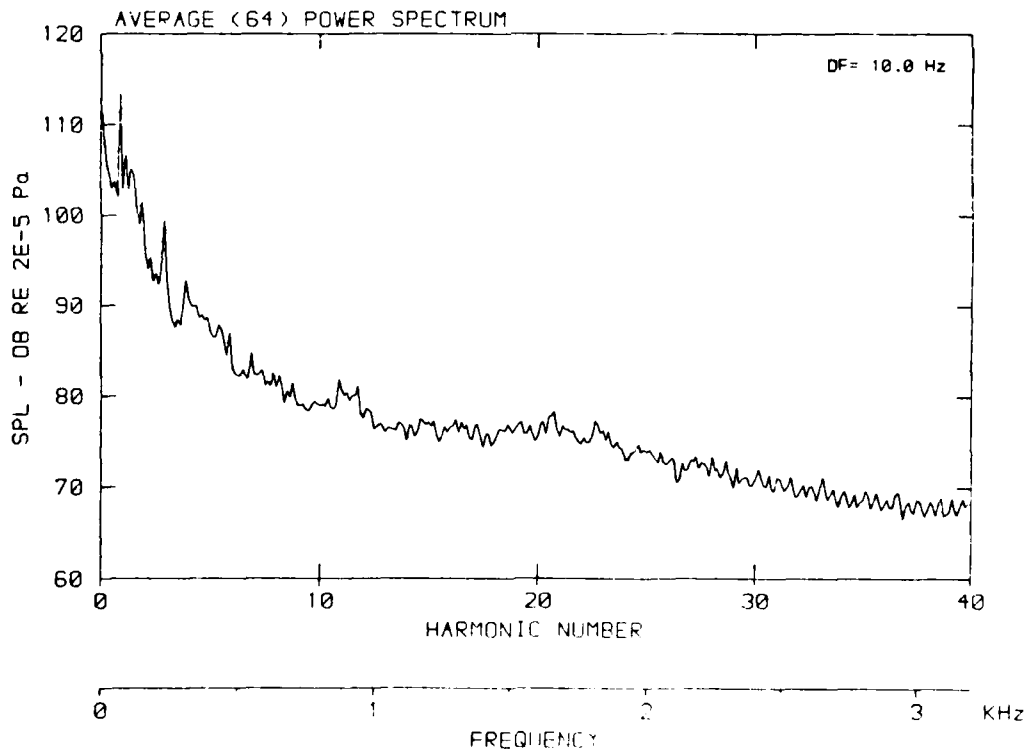
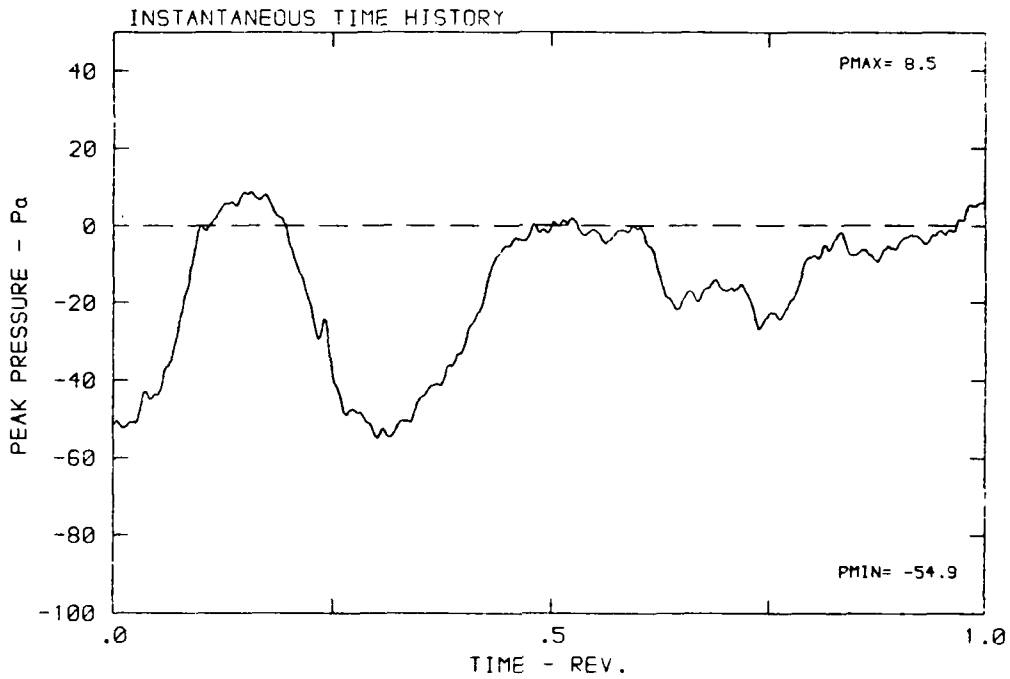
DATA POINT: GN-6 RUN: 150 MP: 6

β : 23.7° MH: .7755 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 289.2 K



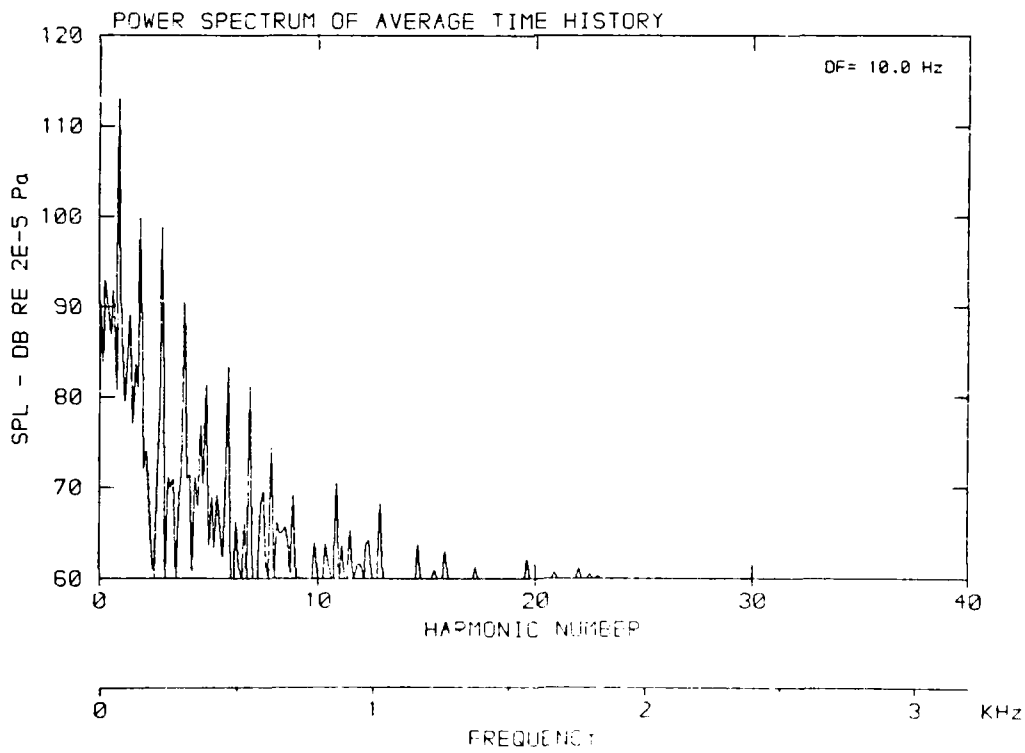
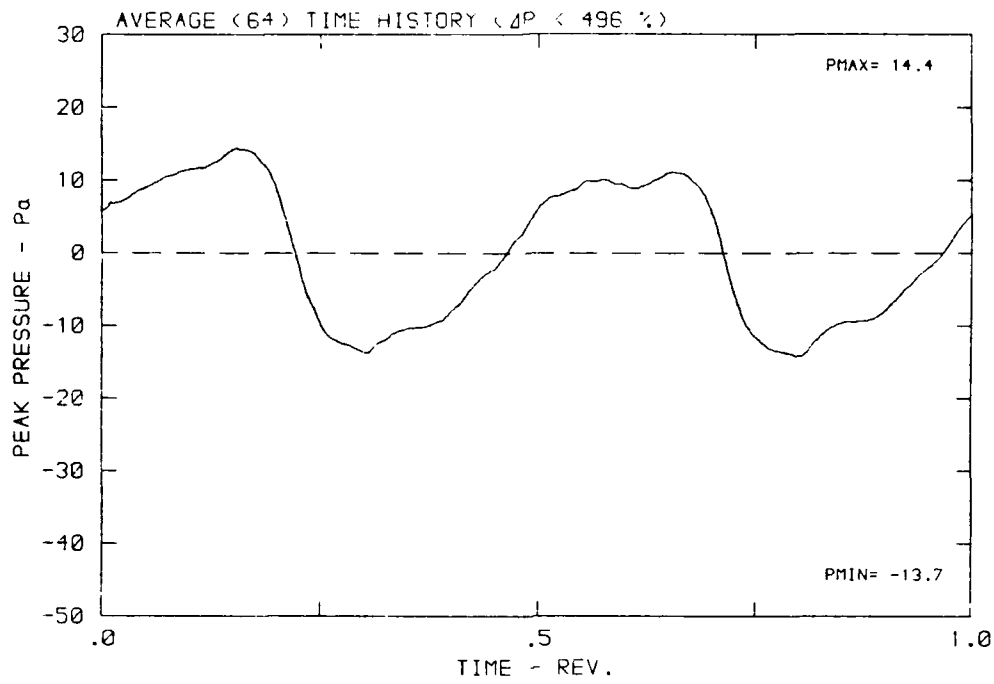
DATA POINT: GN-6 RUN: 150 MP: 7

β : 23.7° MH: .7755 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 288.2 K



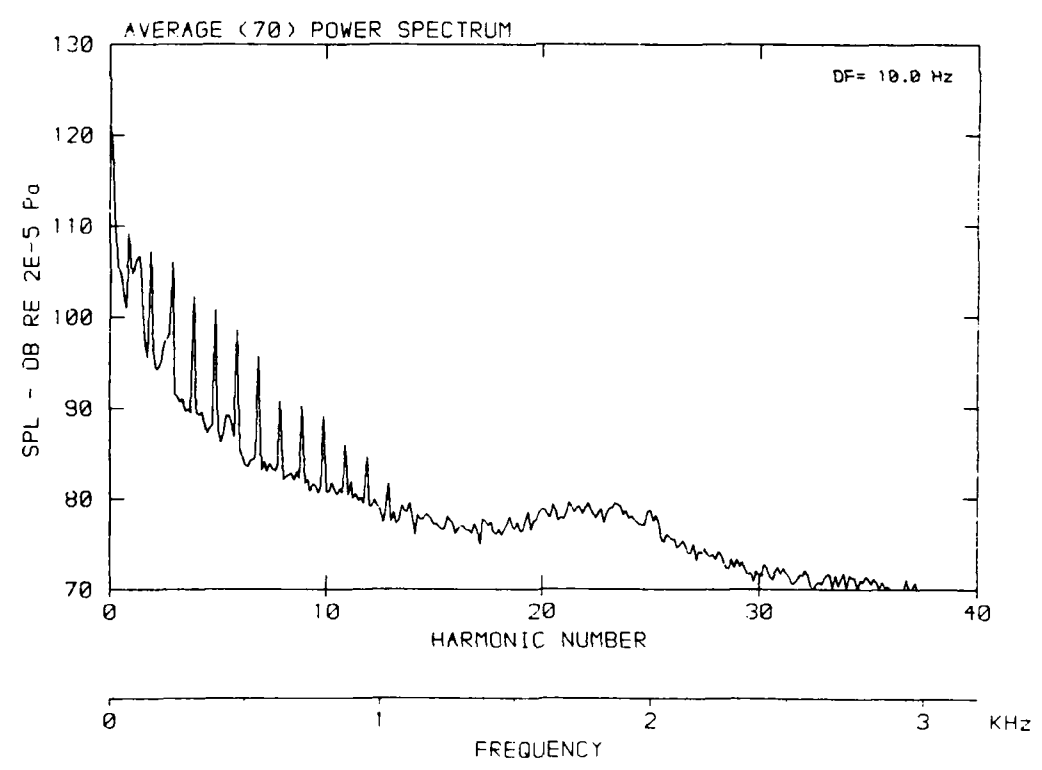
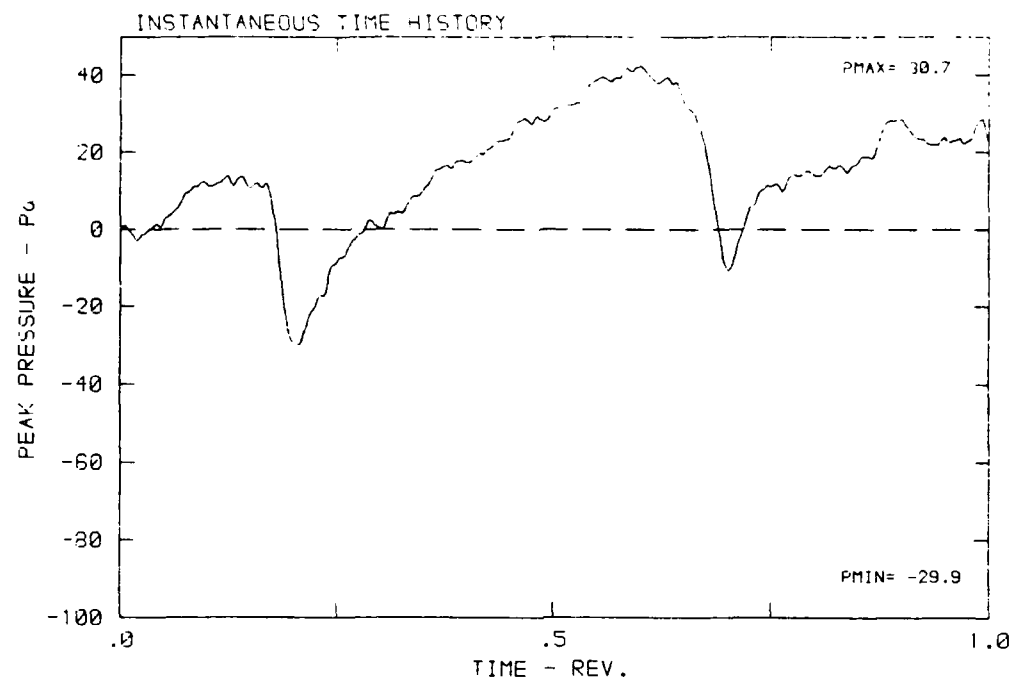
DATA POINT: GN-6 RUN: 150 MP: 7

β : 23.7° MH: .7755 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 288.2 K



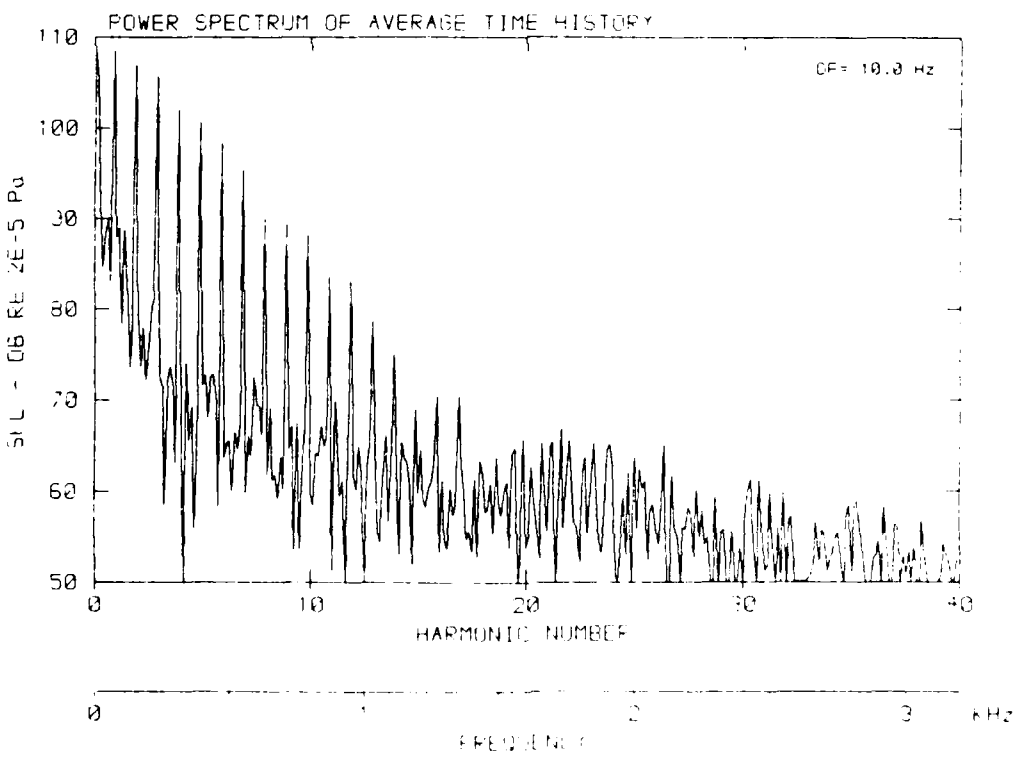
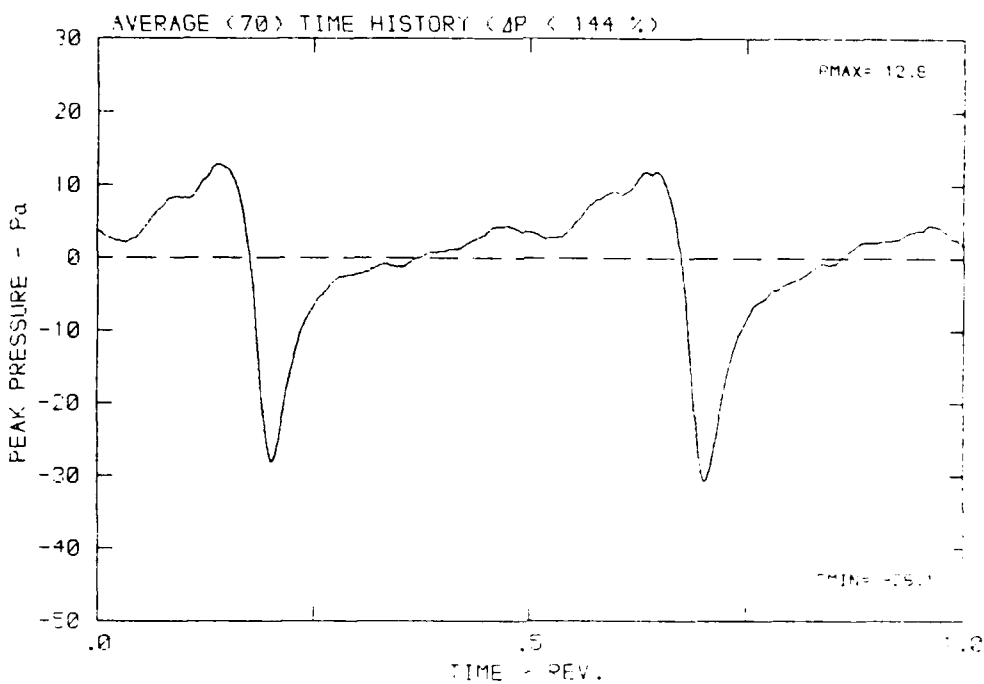
DATA POINT: GN-5 RUN: 150 MP: 3

β : 23.7° MH: .7755 n: 2400 rpm ν : .262 ϕ : -7.4° T: 298.2 K



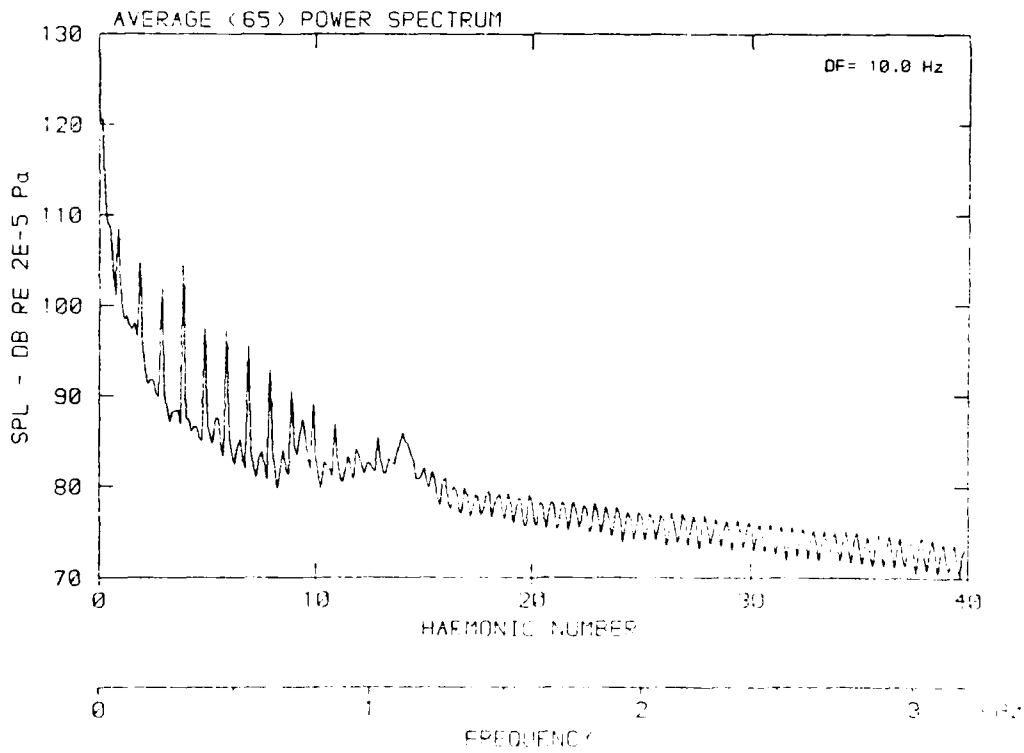
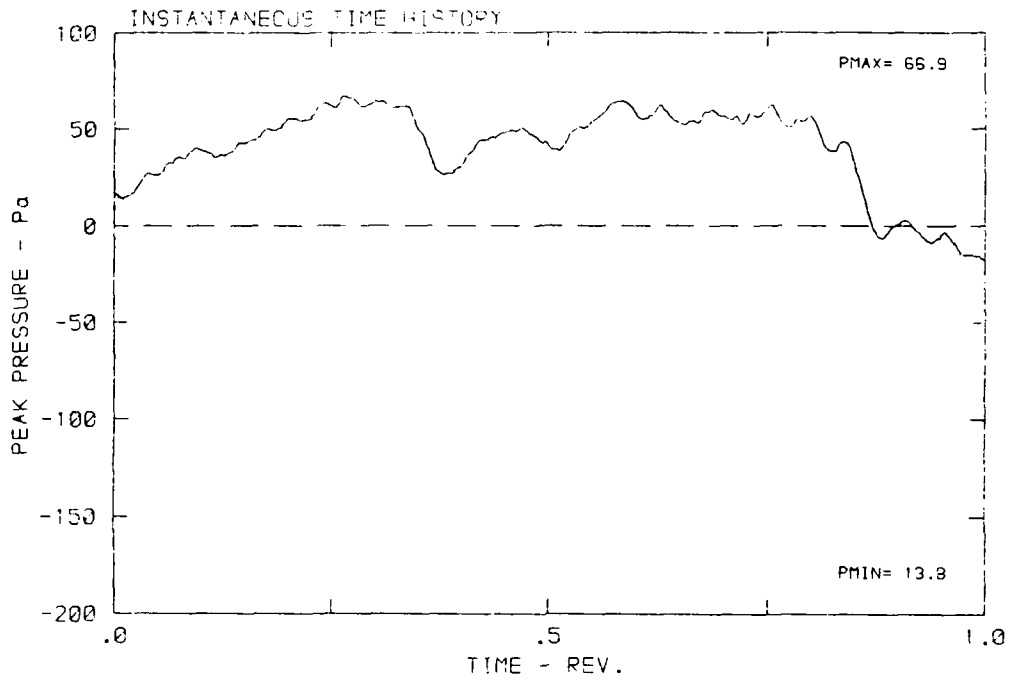
DATA POINT: GN-6 RUN: 150 MP: 8

β : 23.7° MH: .7755 n: 2400 rpm v/u : .262 ϕ : -7.4° T: 288.2 K



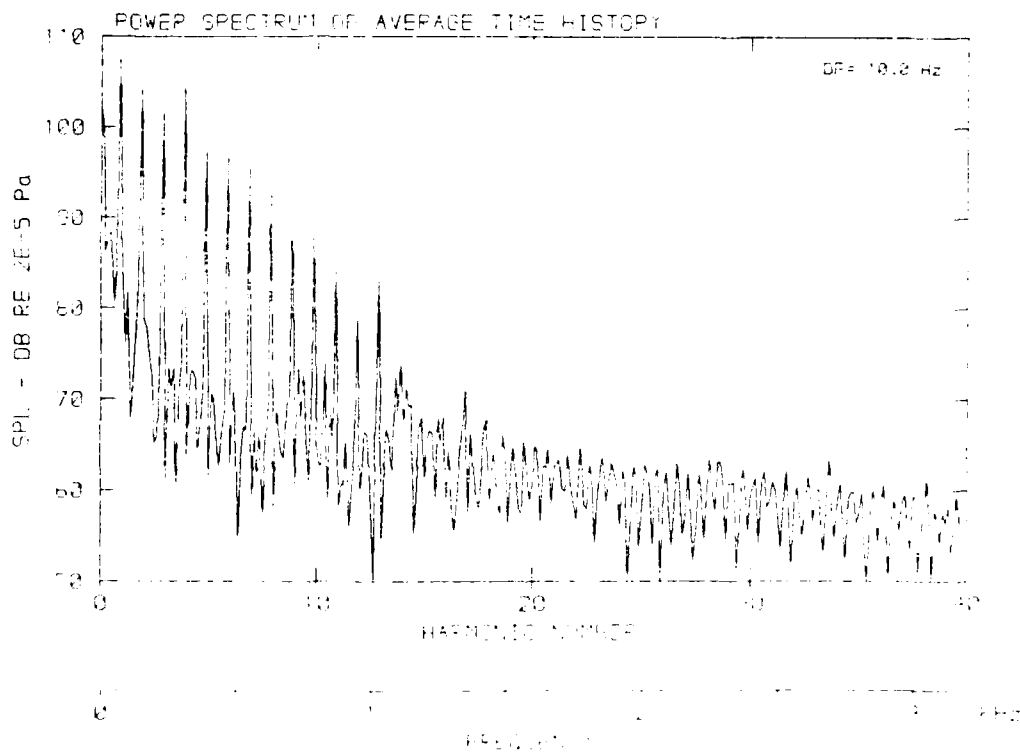
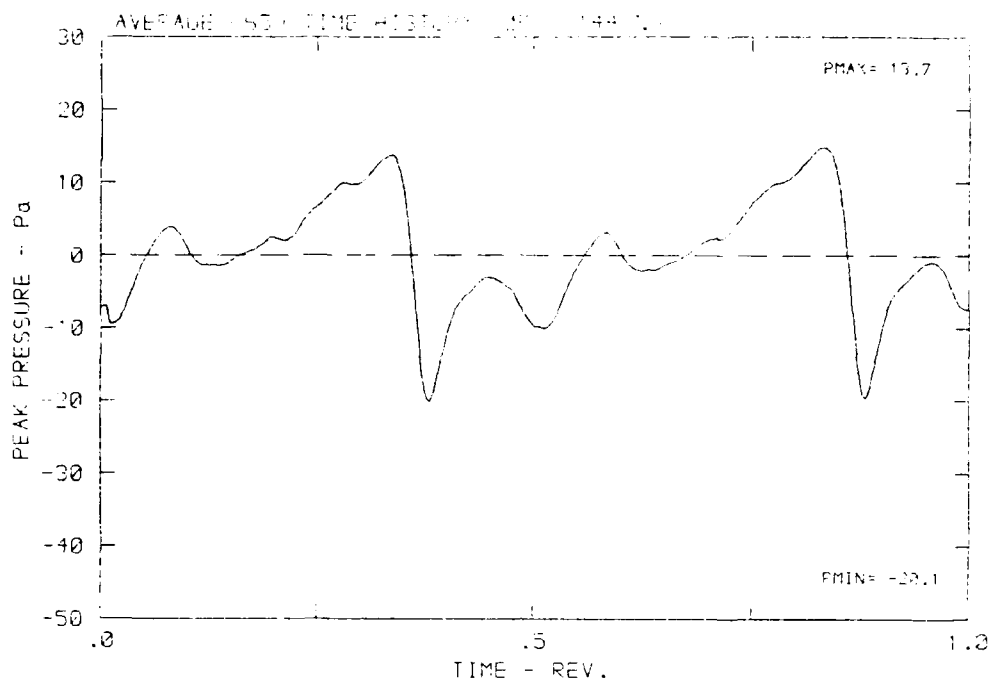
DATA POINT: GN-5 REV: 150 ME: E

8: 23.7° RH: .7755 n: 2400 rpm z: .062 φ: -7.4° T: 230.0



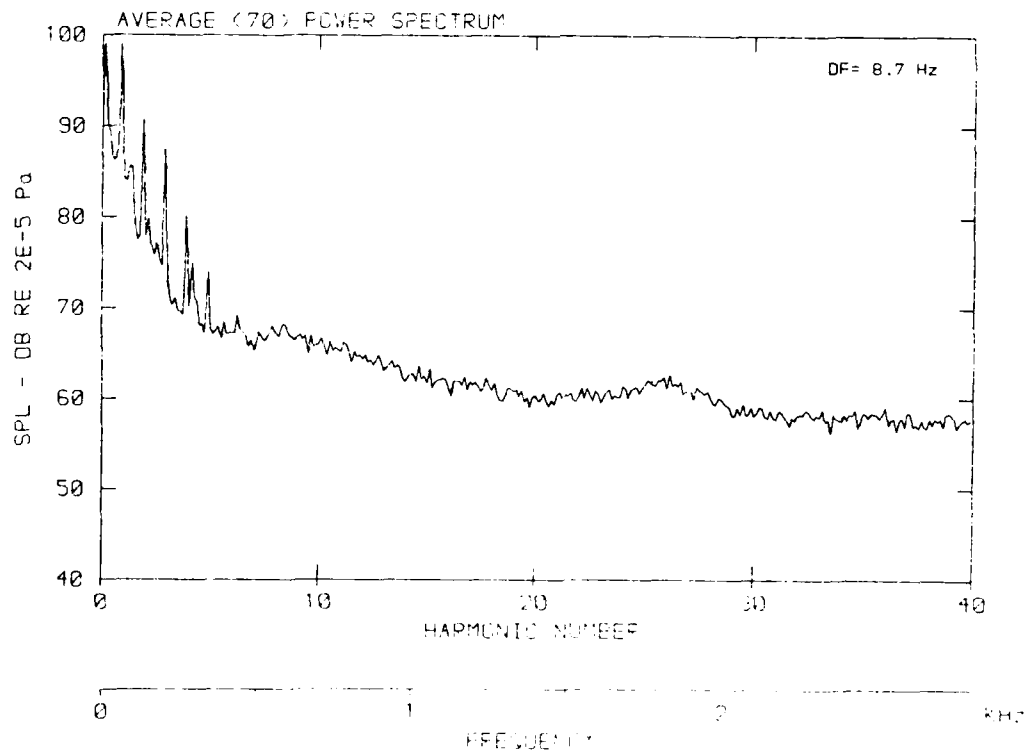
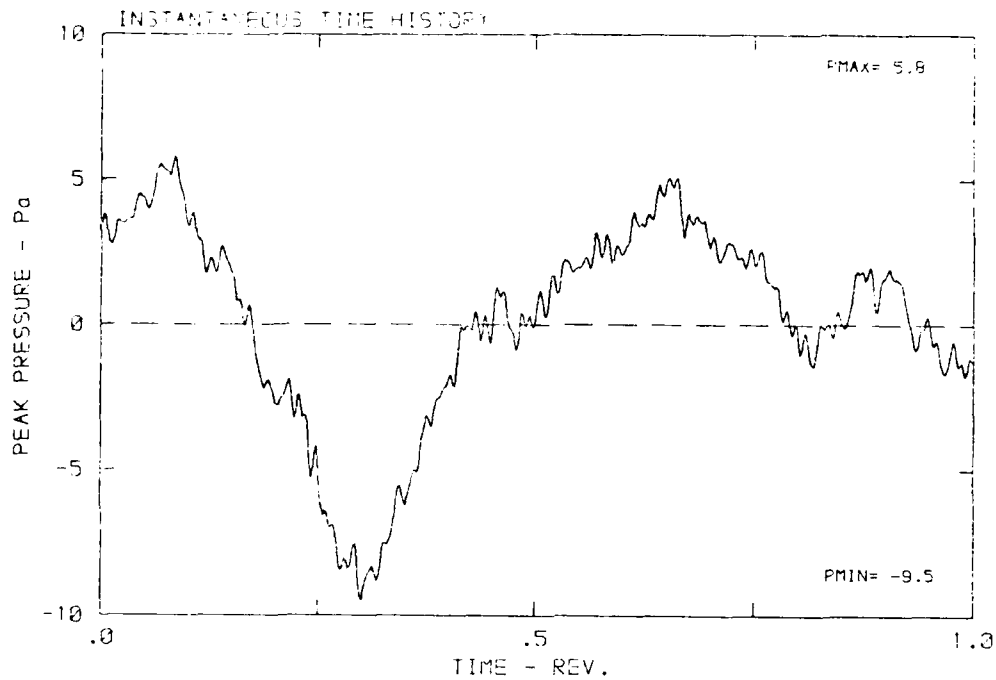
DATA POINT: 5116 P: 1.00 R: 1.00

β : 23.7° NH: .7755 n: 24.00 ρ : .0002 ϕ : -0.4° τ : 0.8110



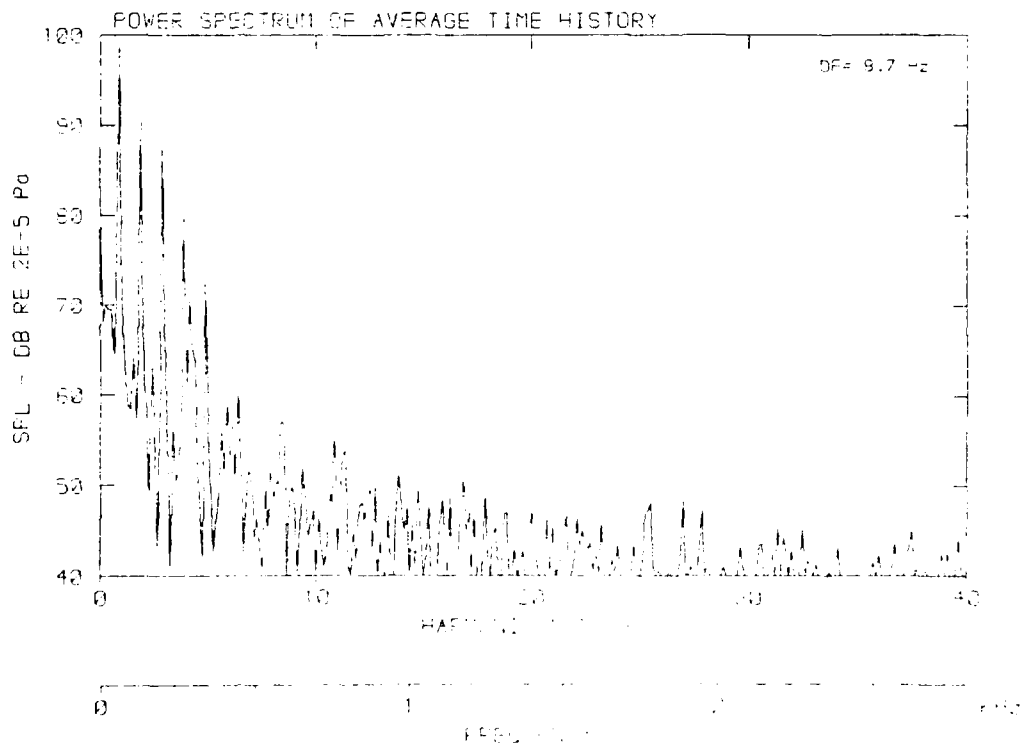
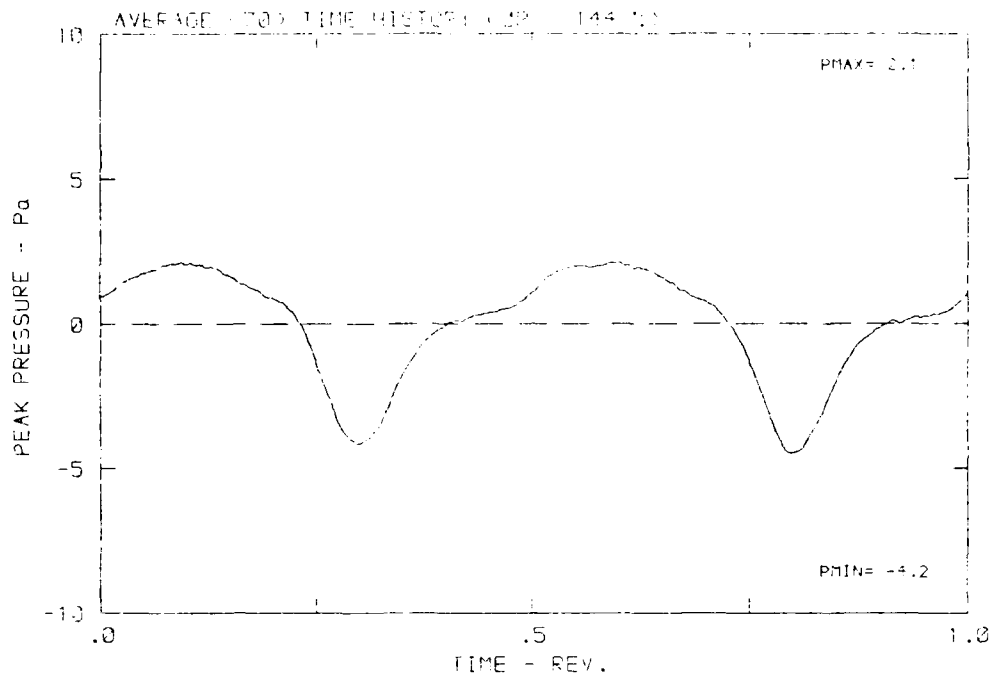
DATA POINTS: 1000 RUN: 154 154

β : 19.9° μ H: 18704 ω : 0100 ρ : 1.031 ϕ : -31.0° τ : 208.8



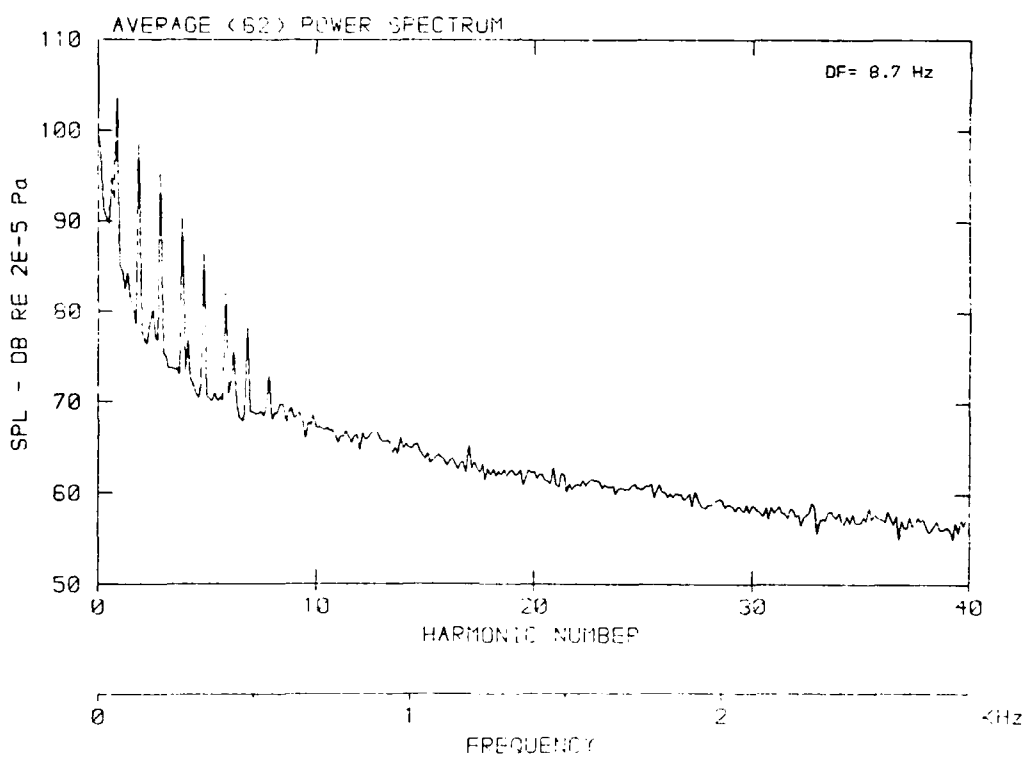
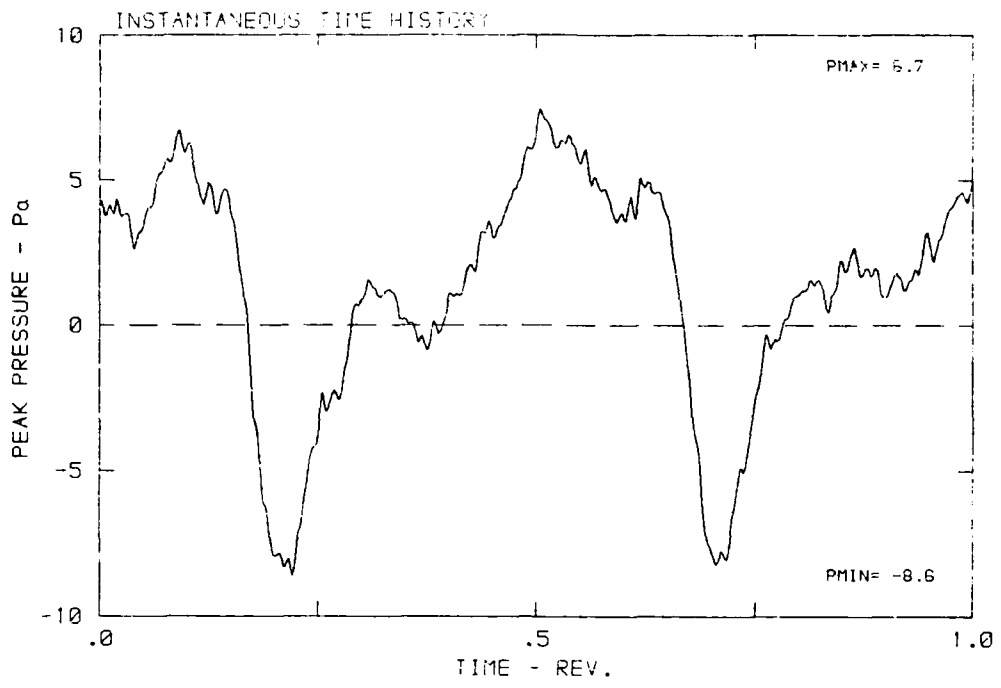
DATA POINT: 11-1 07 N: 154 ME

β : 19.9° MH: .6734 n: 2100 rpm r: .01 .231 p: 43.3° T: 268.5



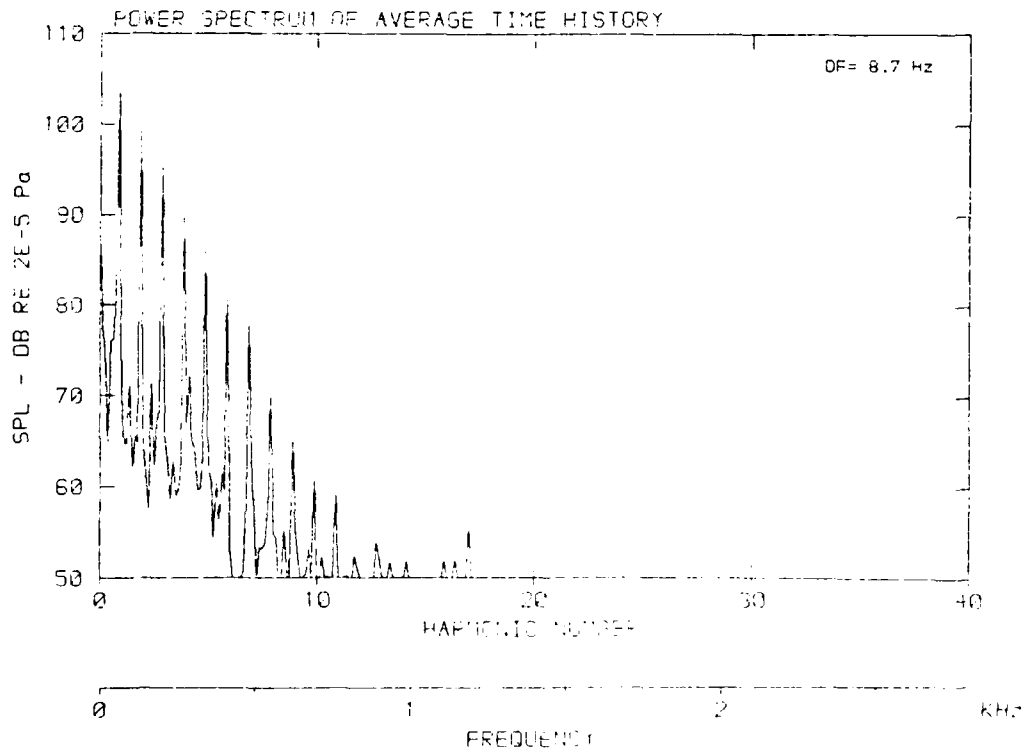
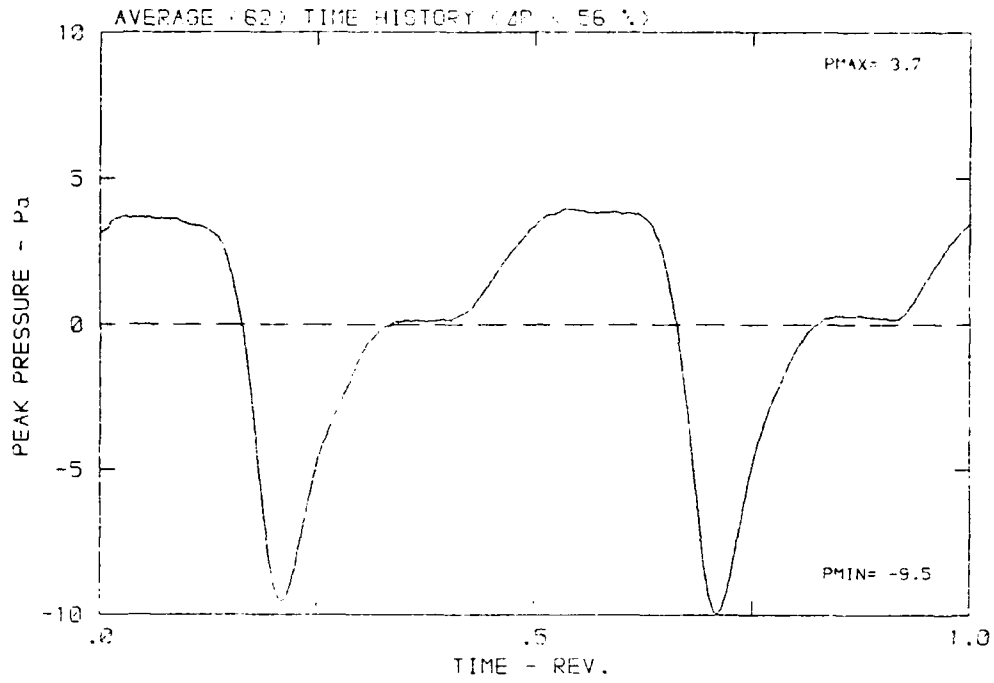
DATA POINT: LN-100001 TEST: 1000

β : 19.3° μ : .6734 ρ : 211.0 ρ μ : .231 μ : -3.1° τ : 253.5 μ



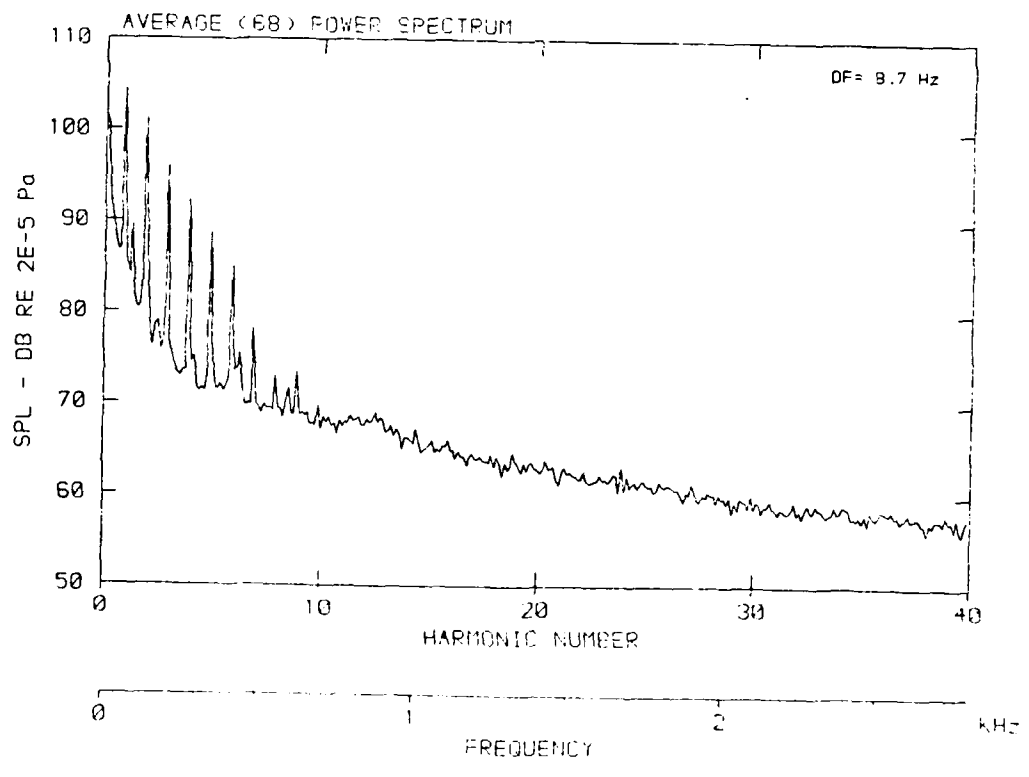
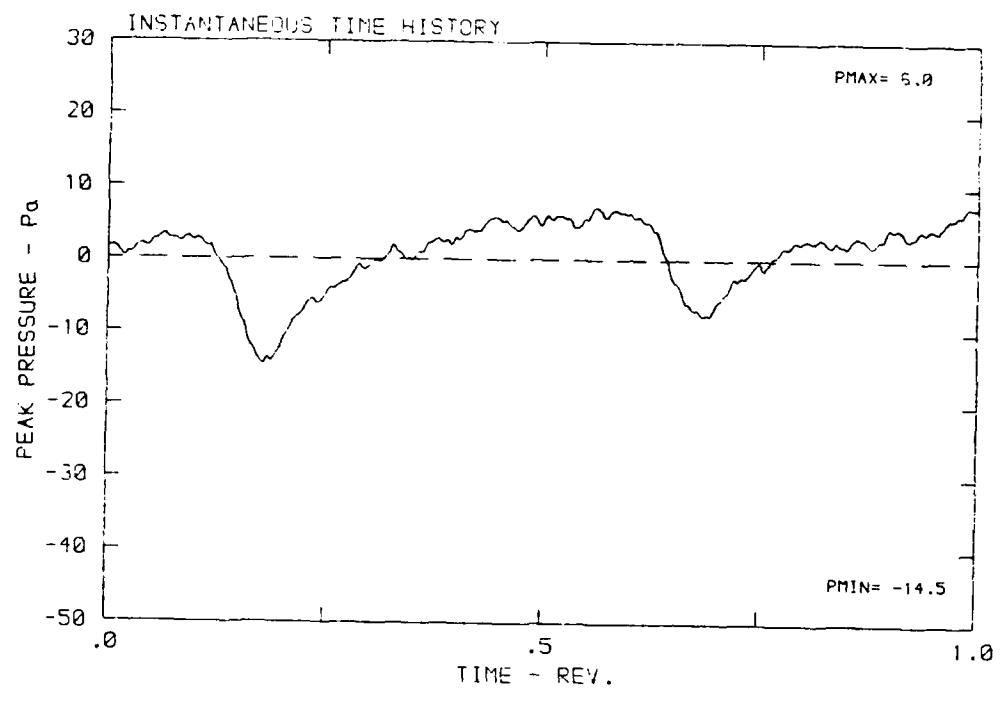
DATA POINTS LN=1 RUN=154 MF=1

β : 19.9° MH: .6734 n: 2100 rpm γ : .231 ϕ : -3.8° T: 258.5 s



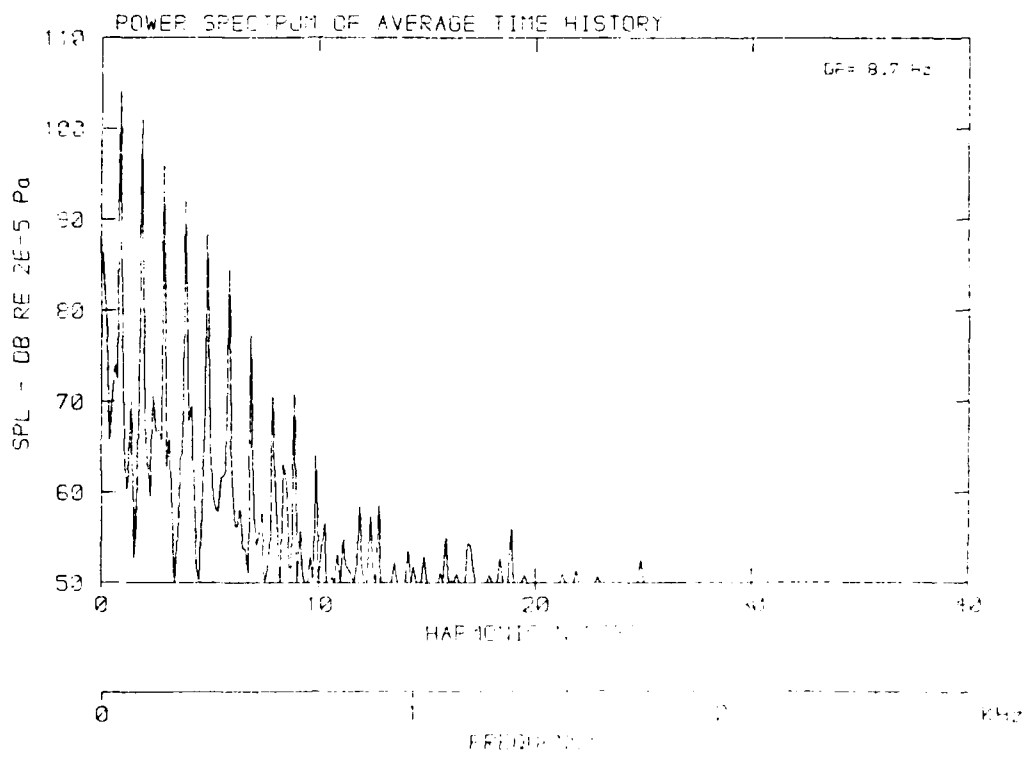
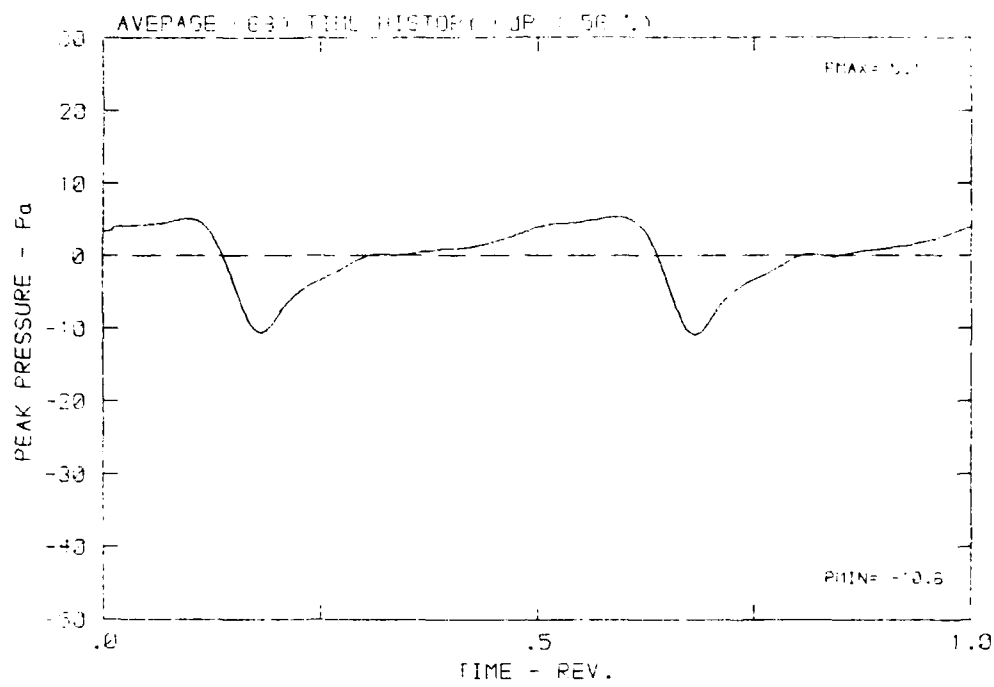
DATA POINT: LN-1 RUN: 154 MP: 3

β : 19.9° MH: .6734 n: 2100 rpm μ : 1.231 ϕ : -3.9° T: 298.5 K

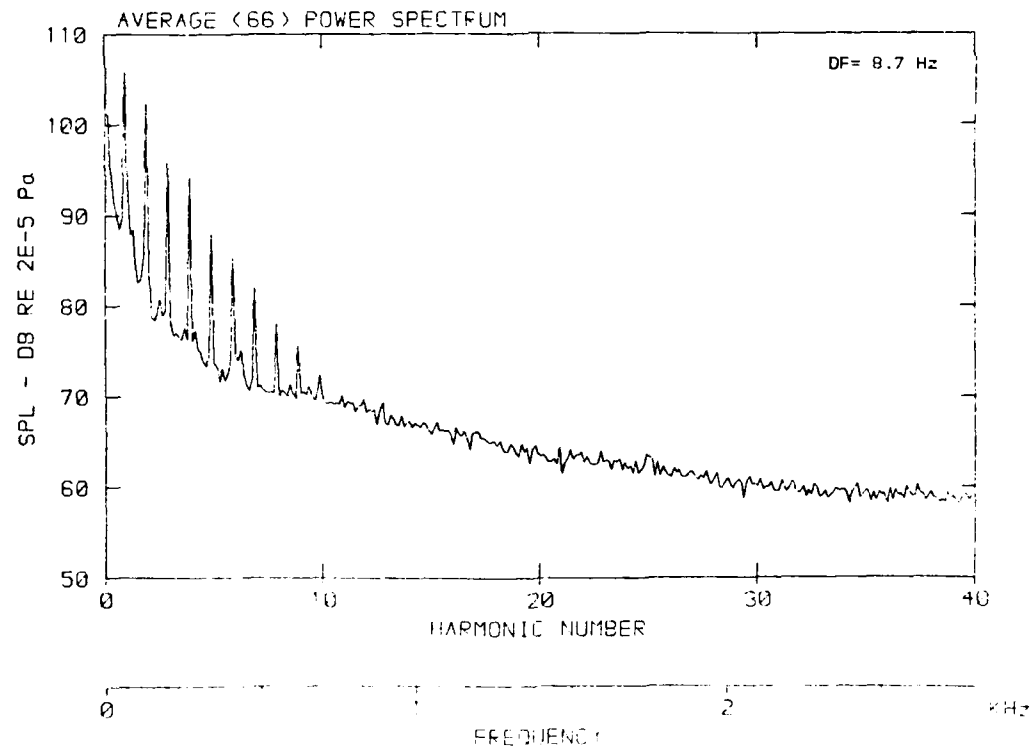
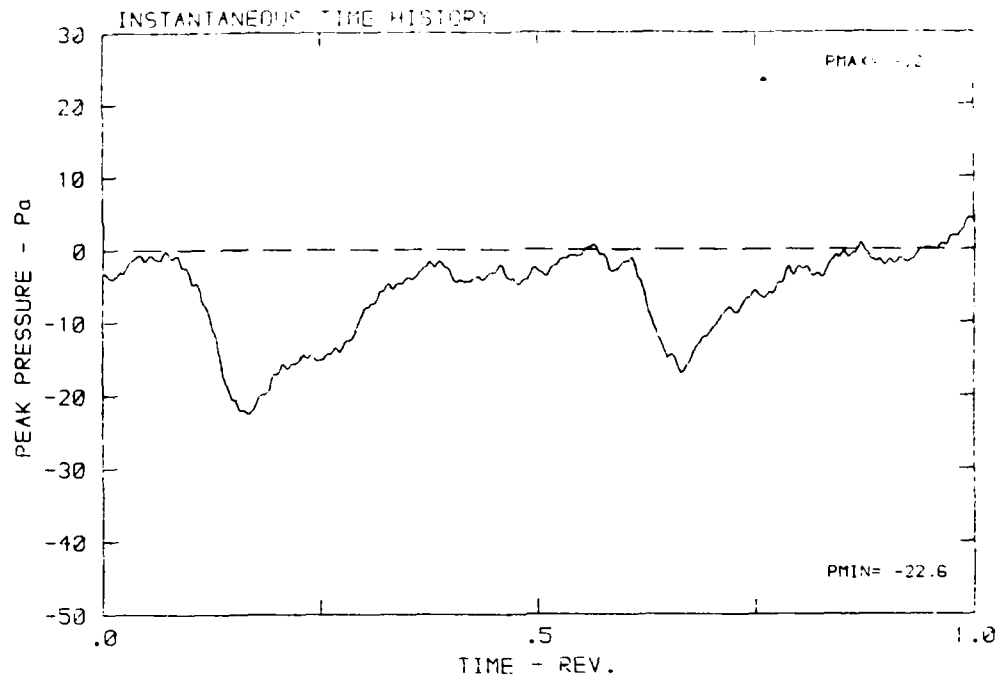


DATA POINTS: LN=1 RUNS: 154 REP: 1

θ : 19.3° MR: .0724 n: 2100 rpm VCU: .231 ϕ : -3.3° T: 231.0

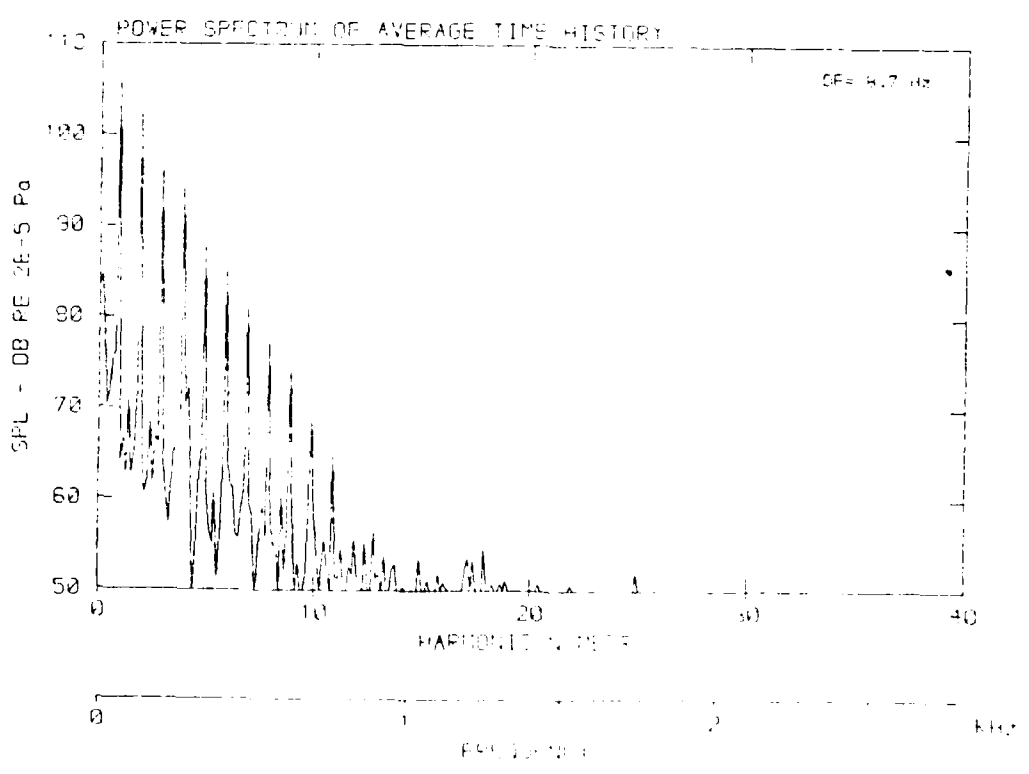
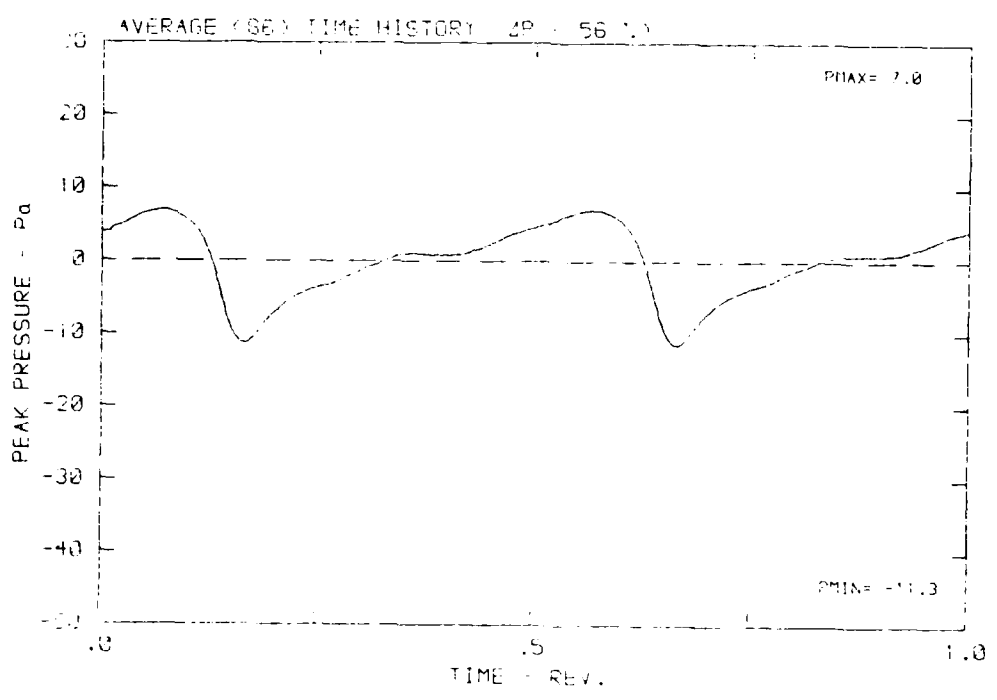


DATA POINT: 19.90 PH: .6734 W: 2100 Hz V: 1.01 P: 1.01 T: 2.97



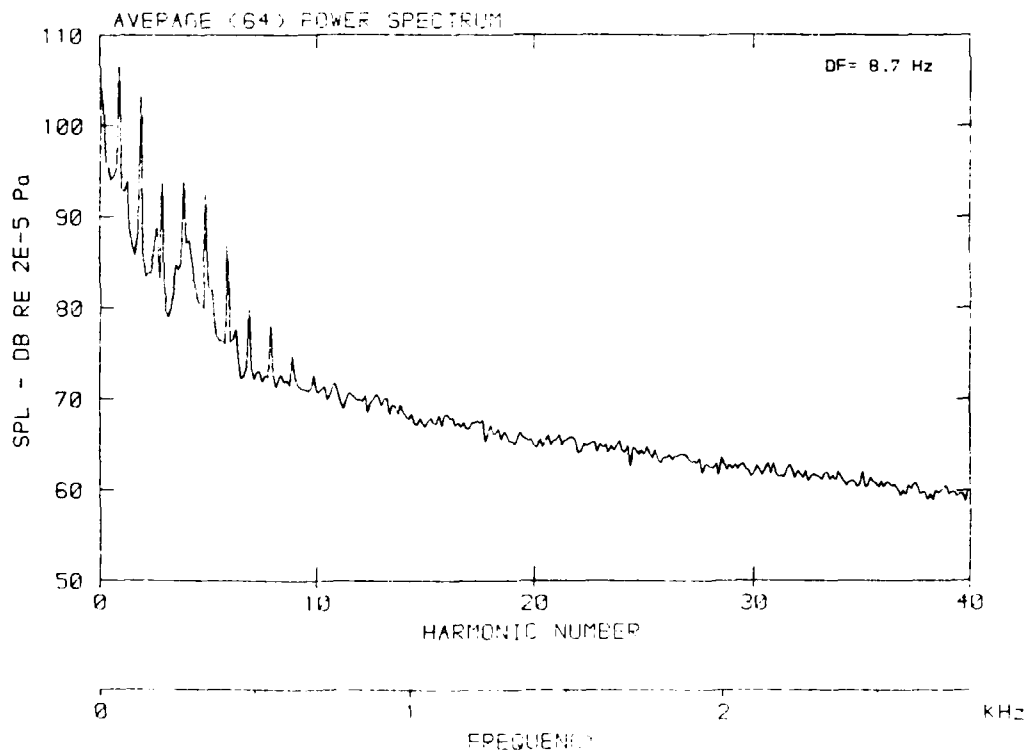
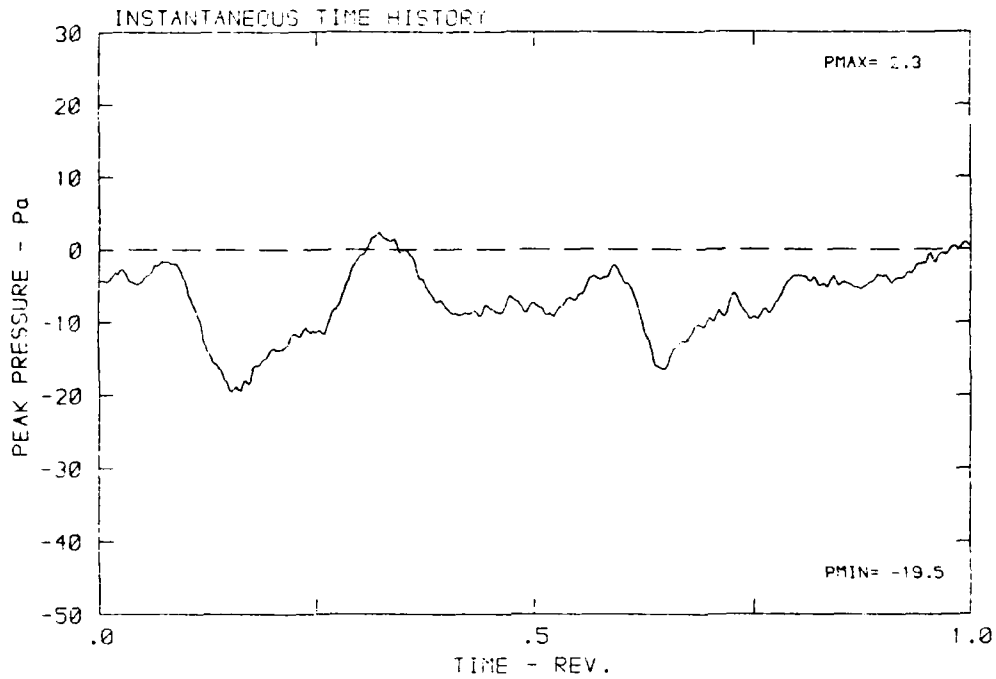
DATA POINTS : 1000 (REV) 1000 (REV) 1000 (REV)

$r = 10.3''$ $MR = .9734$ $R = 2100$ rpm $W = .031$ $\phi = -3.2''$ $FR = 103.3$



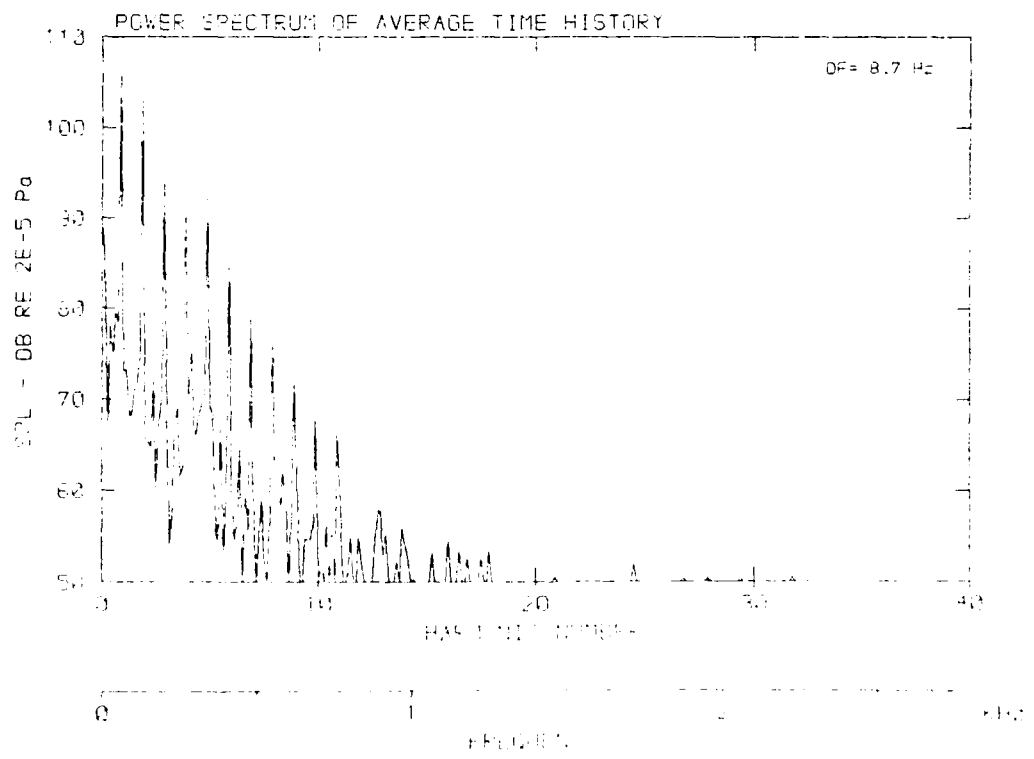
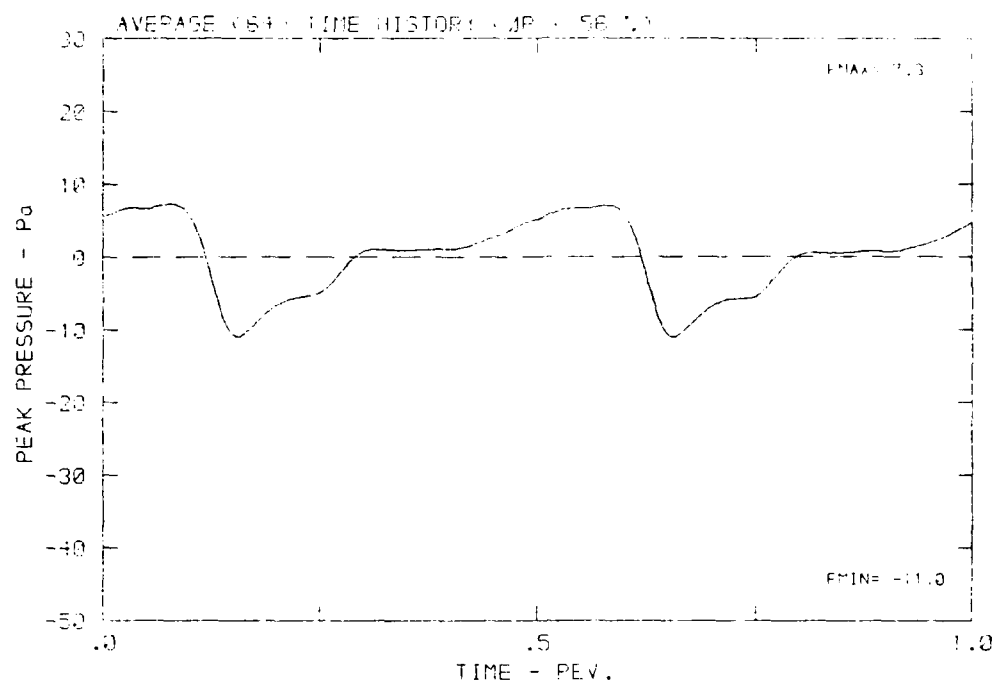
DATA POINT: LN-1 RUN: 154 NP: 3

β : 19.9° MH: .6734 n: 2100 rpm v: .231 s: -3.6° T: 285.5



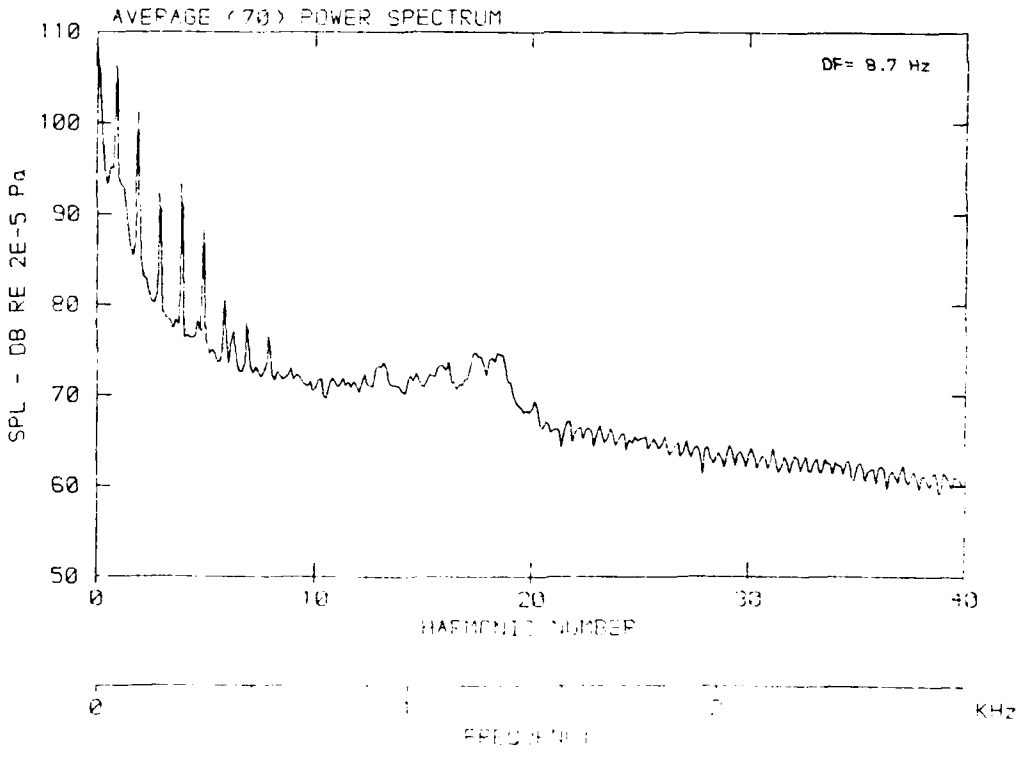
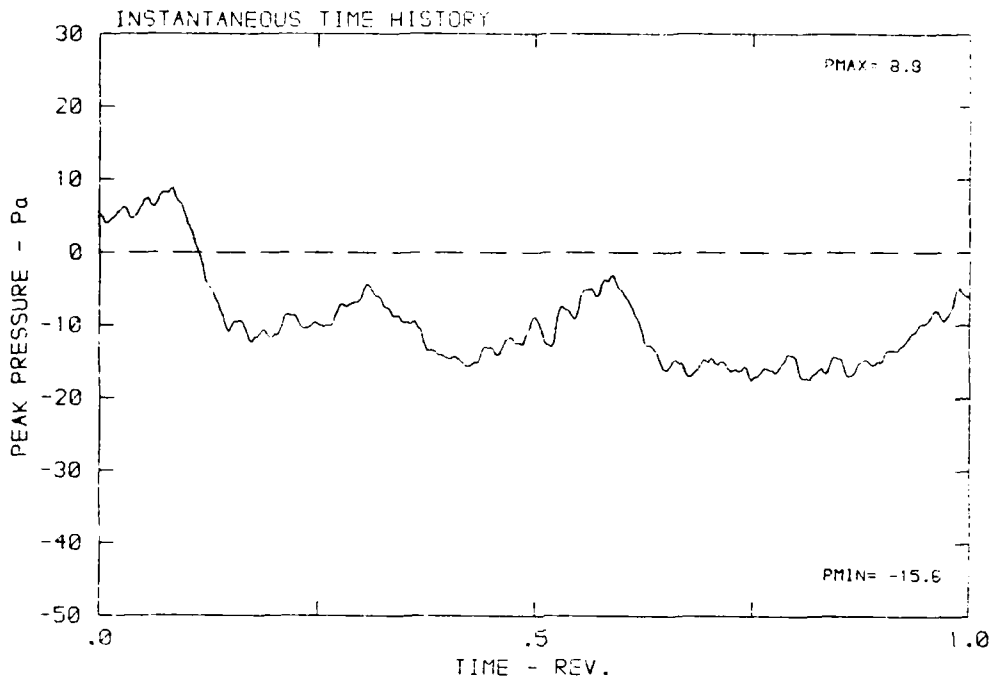
DATA POINT: LN-1 RUN: 154

β : 19.9° RH: .6734 n: 2100 rpm VIB: 1.231 U: 1.98 T: 1.14



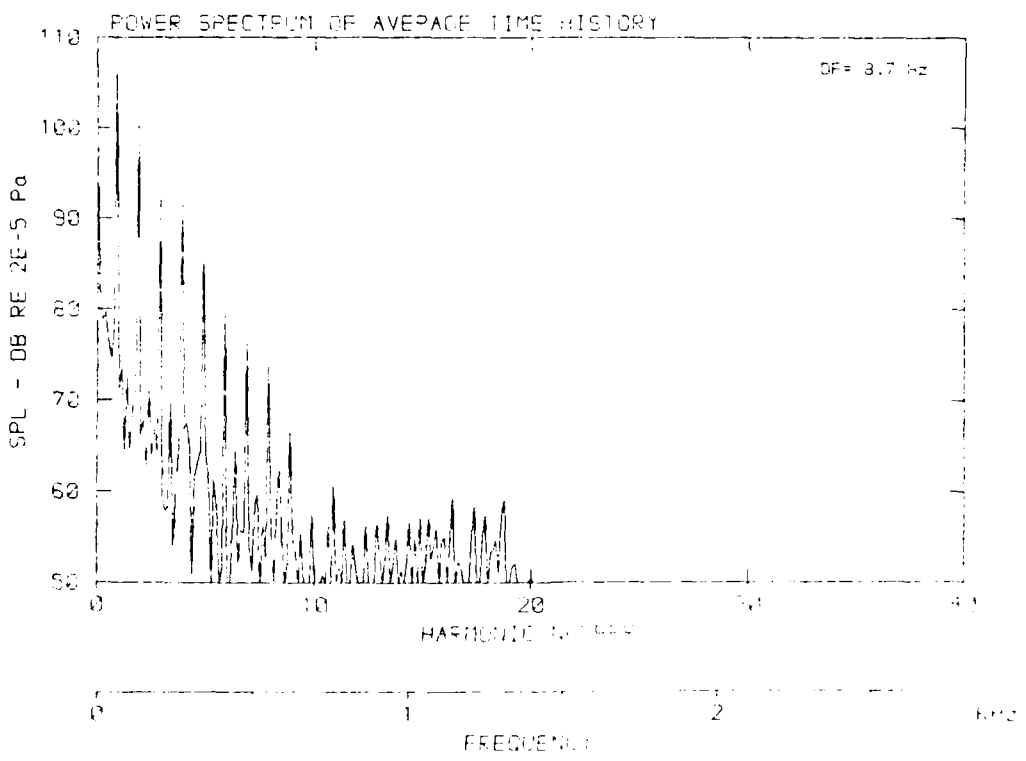
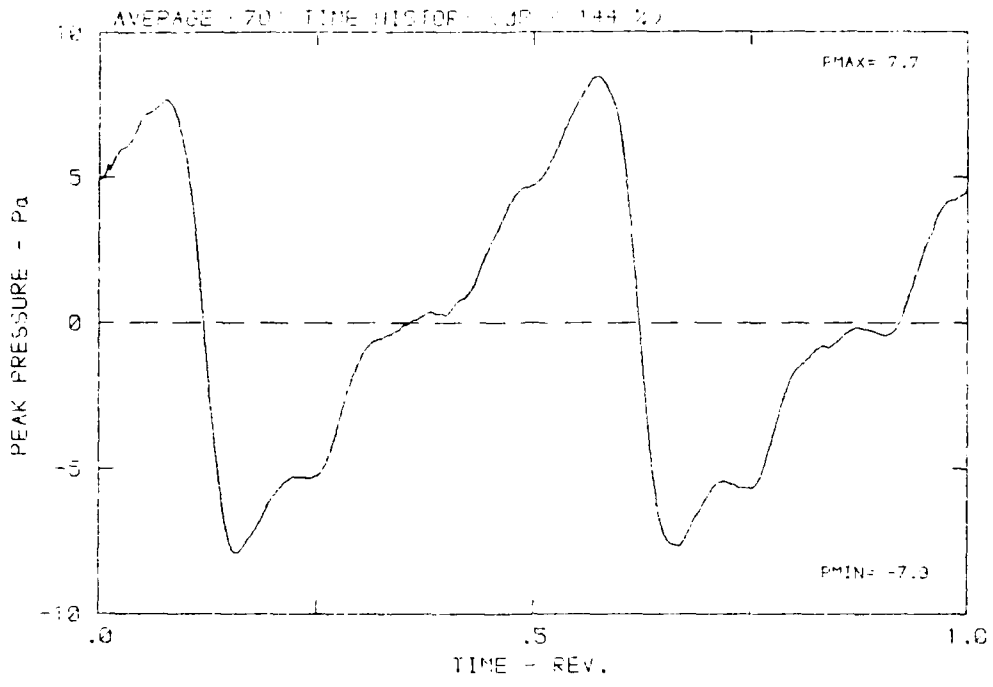
DATA POINT: LN-1 RUN: 104 MP: 5

β : 19.9° IH: .6734 n: 2100 rpm u: .031 ϕ : -3.6° T: 298.6 K



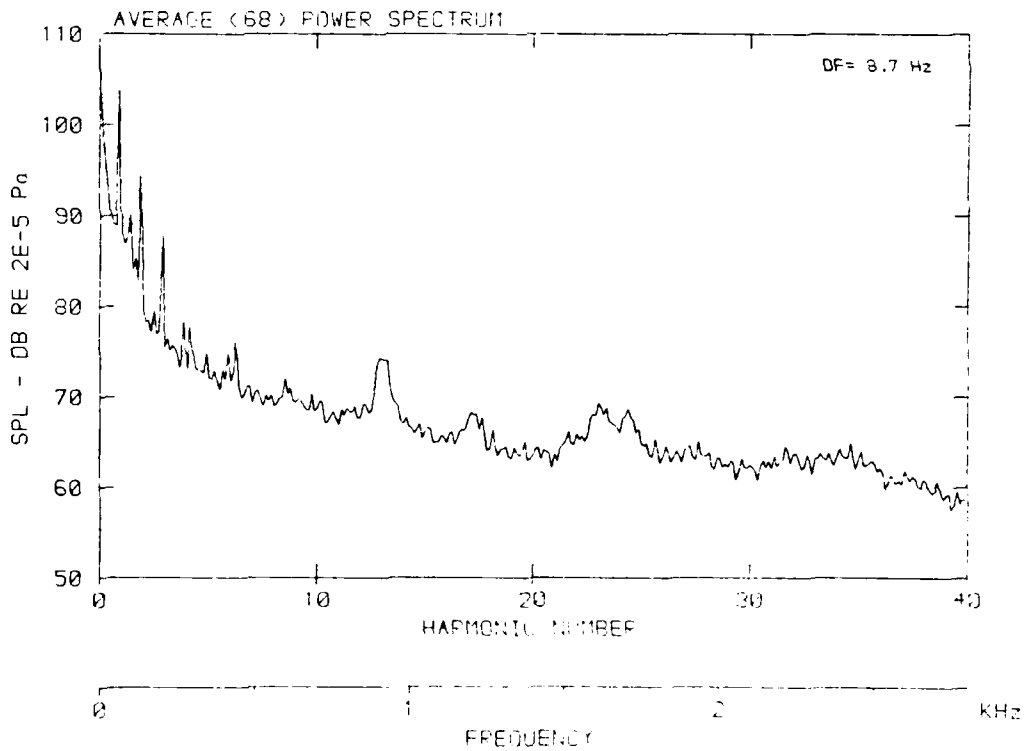
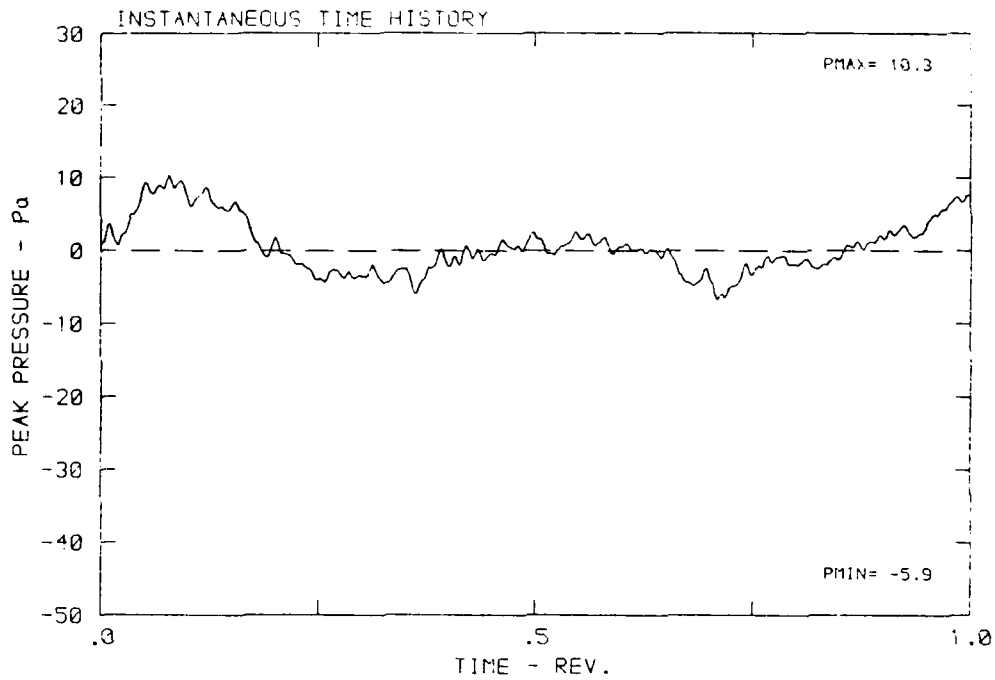
DATA POINTS: 1000

B: 19.5° MH: 16734 R: 2100 rpm U: 1.231 φ: -3.8° T: 289.3



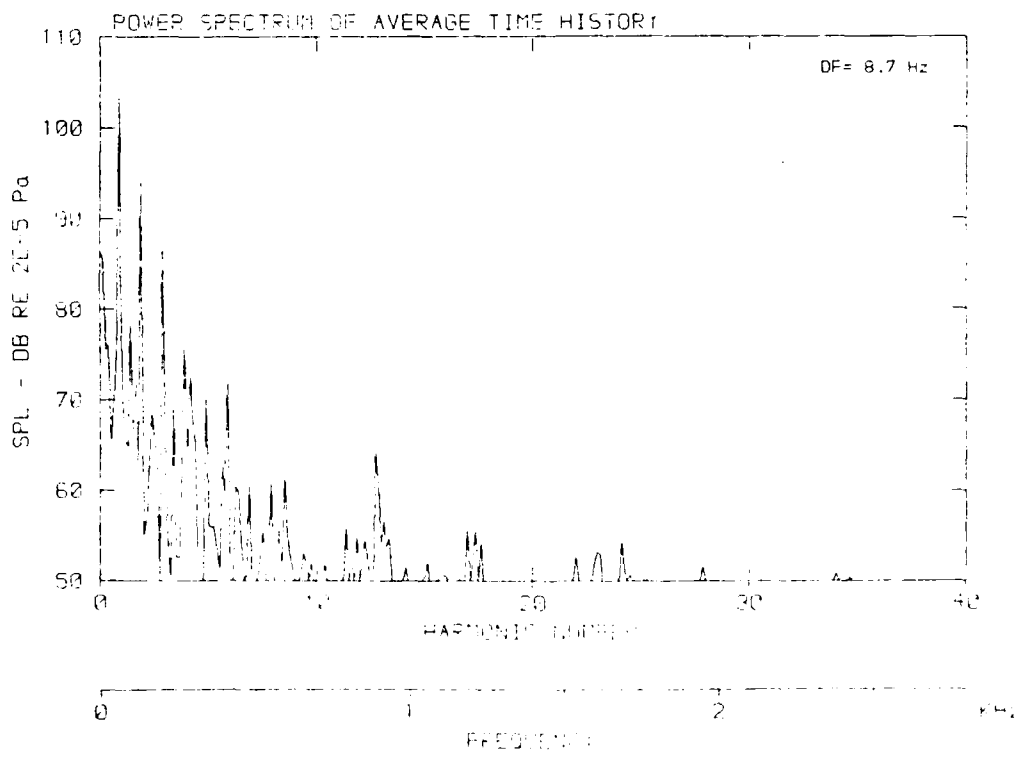
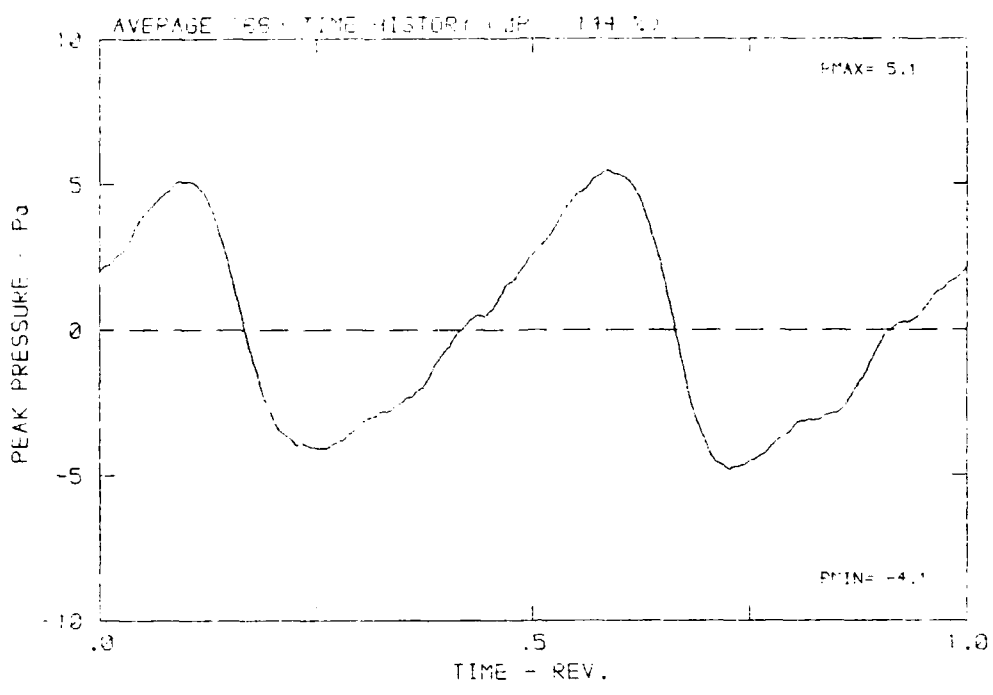
DATA POINT: LN-1 RUN: 154 MP: 7

β : 19.9° MH: .8734 n: 3180 rpm μ : .001 ω : -3.8° T: 288.5 s



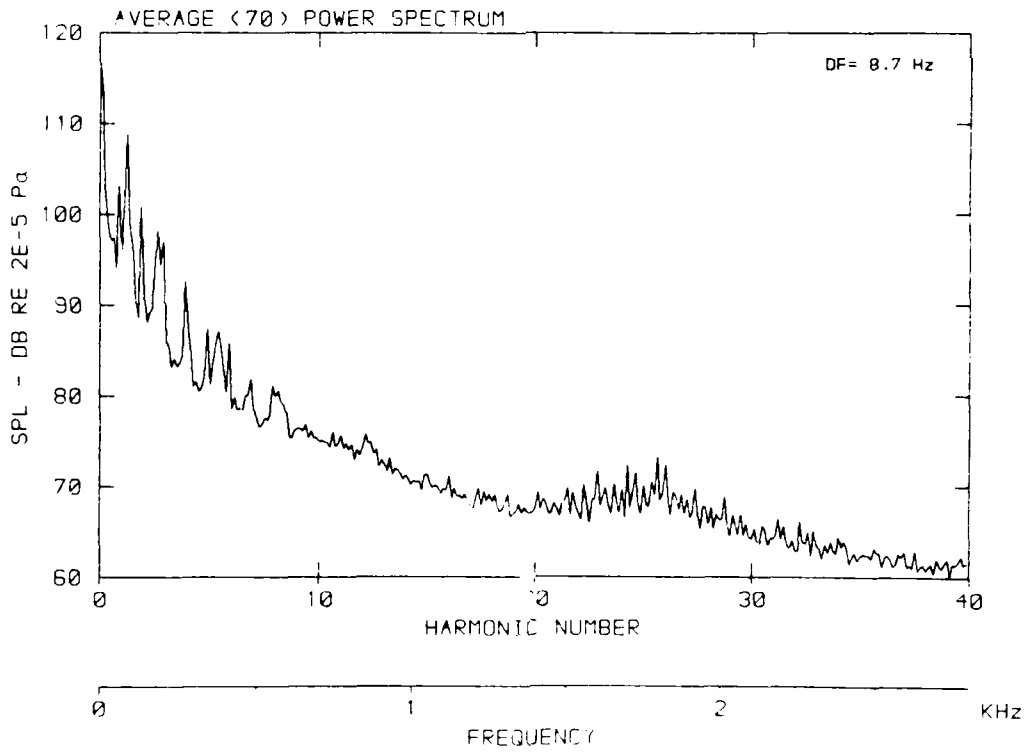
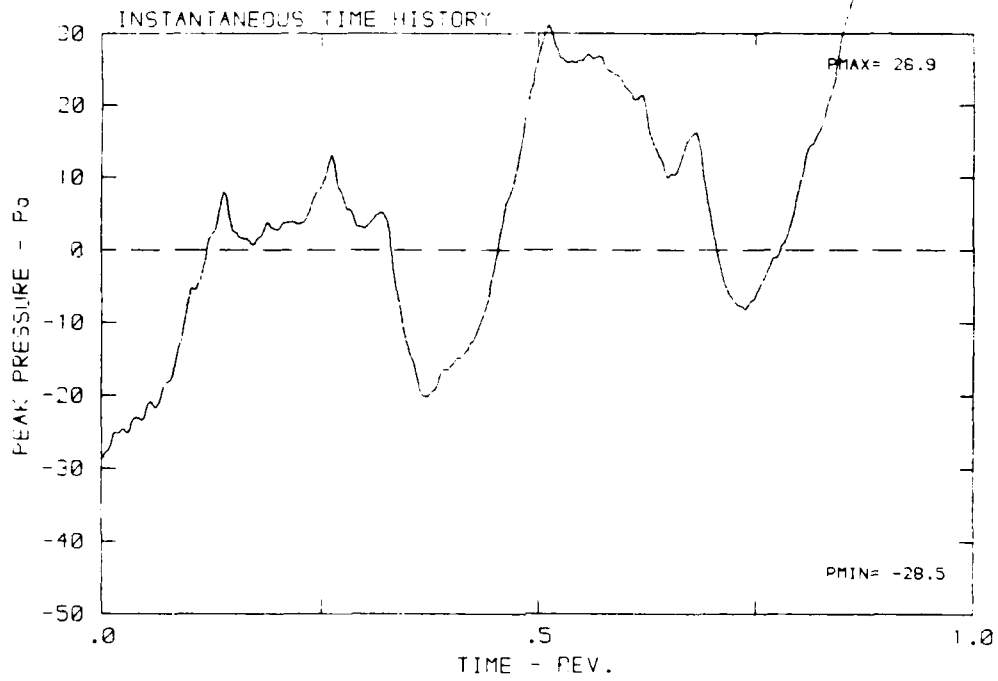
DATA POINT: LN=1 P=101.111

β : 19.9° MH: .673+ n: 2180 rpm v: u: .23: ϕ : -2.8° T: 299.7



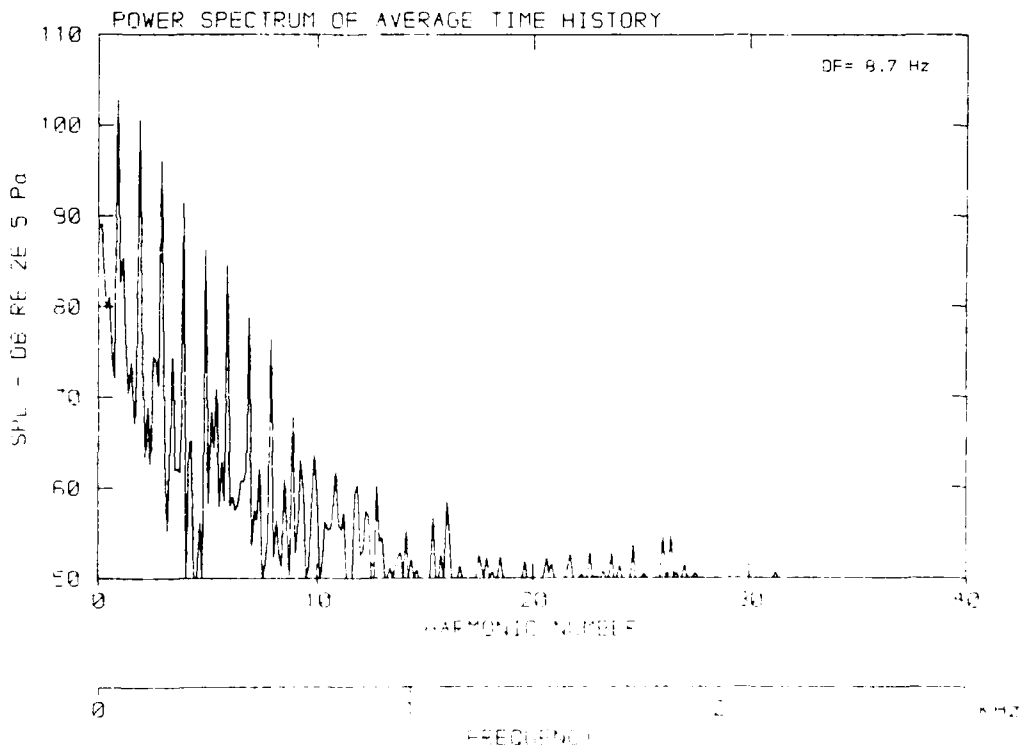
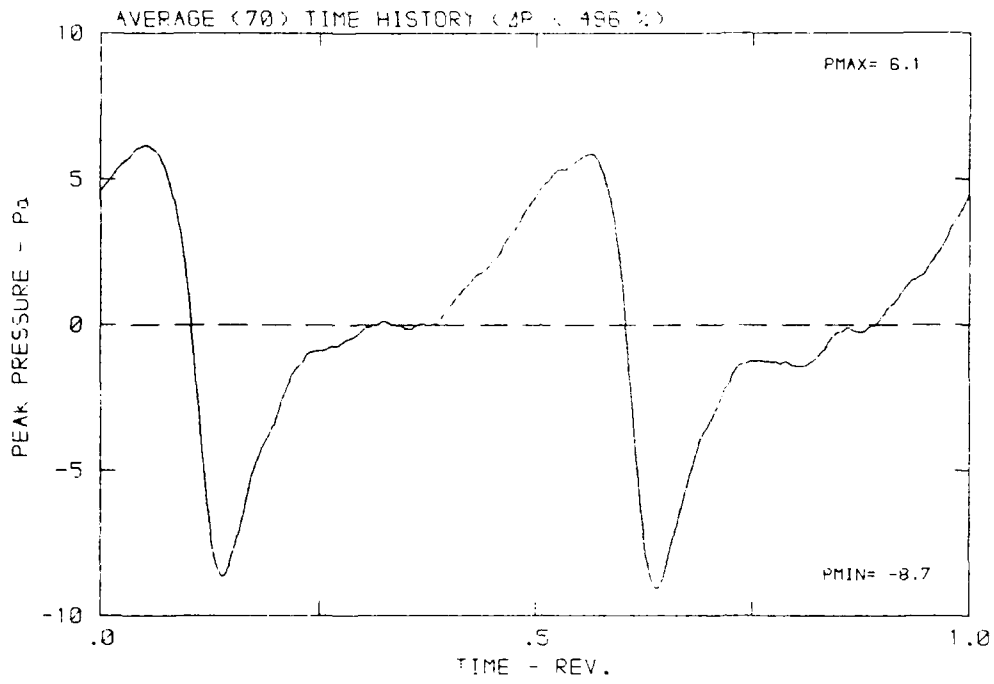
DATA POINT: LN-1 RUN: 154 MP: 9

B: 19.3° MH: .6734 n: 2100 rpm V/U: .231 W: -3.94 T: 298.5 K



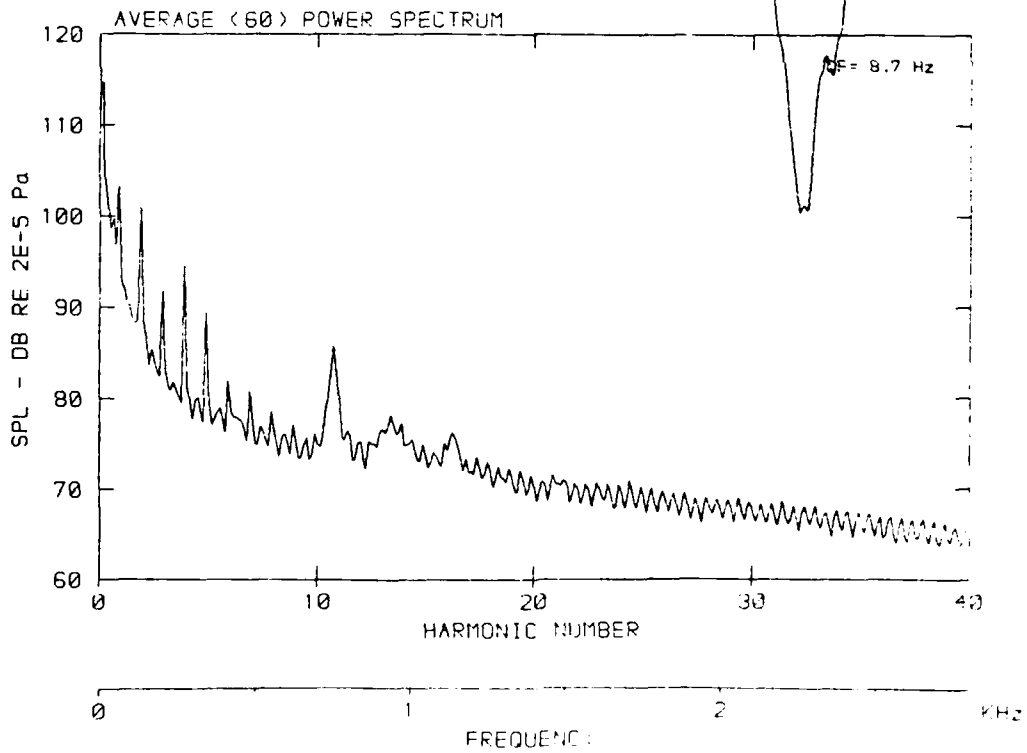
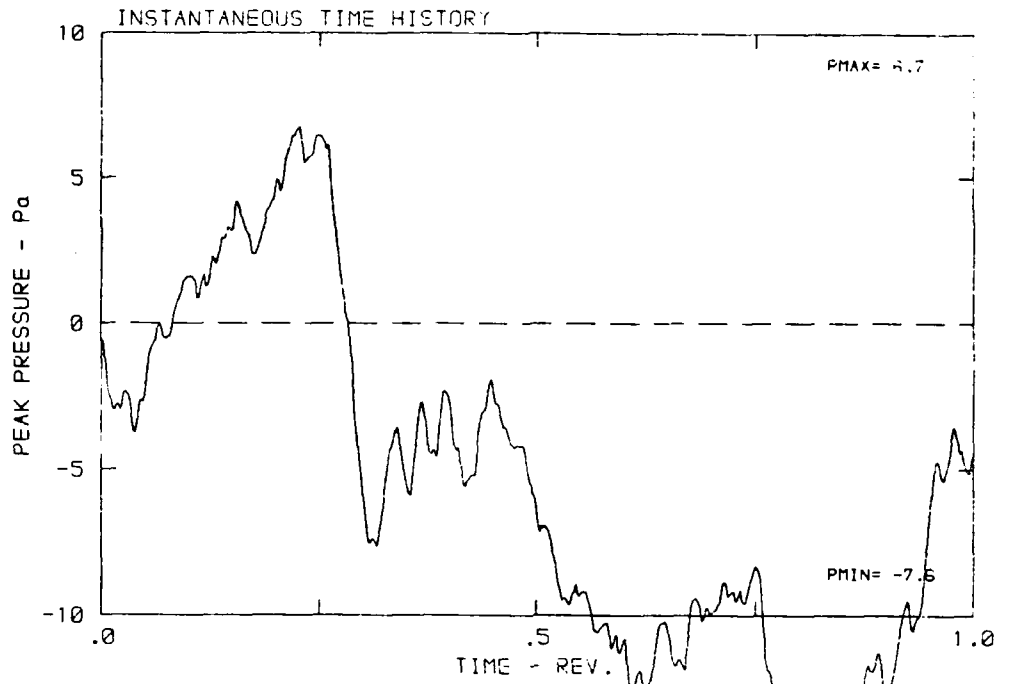
DATA POINT: LN-1 RUN: 154 MP: 8

β : 19.9° MH: .6734 n: 2100 rpm v_{z0} : .231 ϕ : -3.8° T: 288.5 K



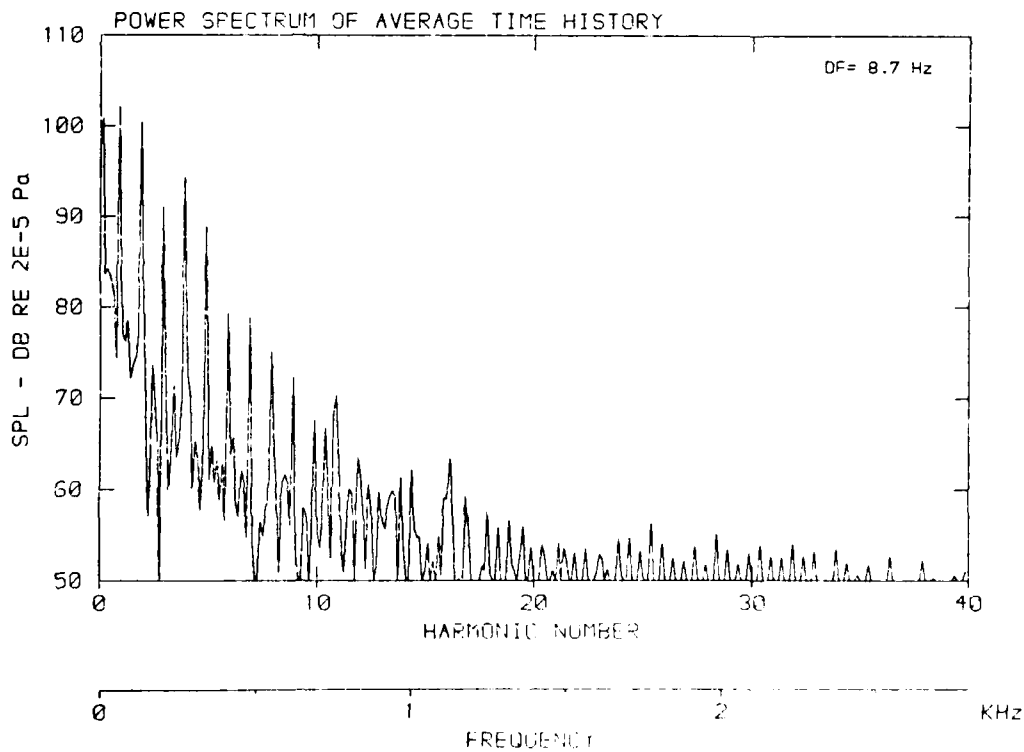
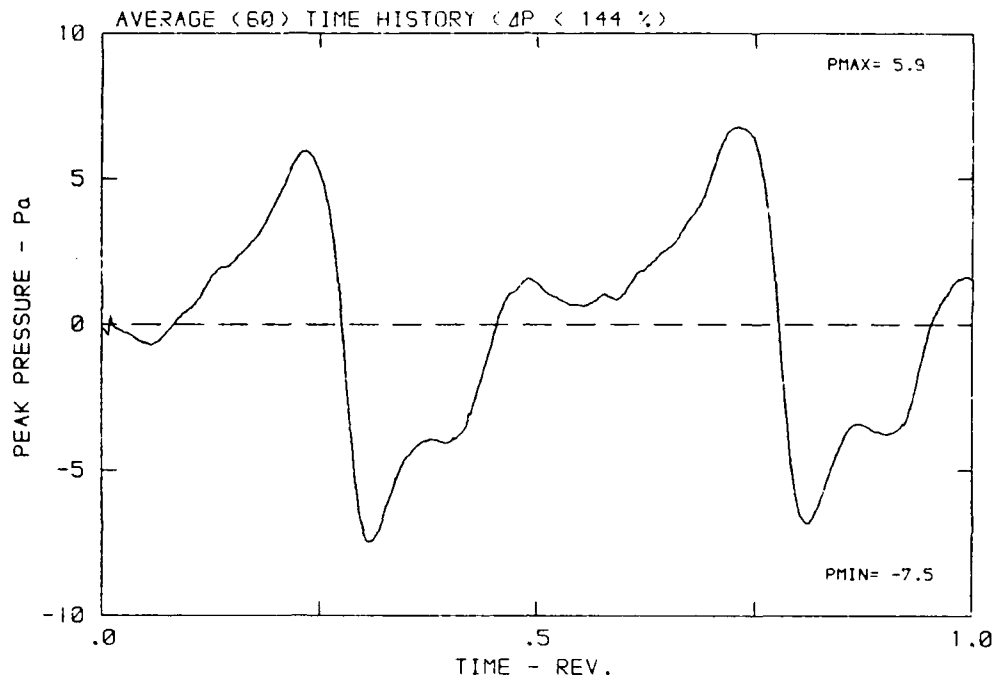
DATA POINT: LN-1 RUN: 154 MF: 3

β : 19.9° MH: .6734 n: 2100 rpm vkt: .231 ϕ : -3.9° τ : 236.5



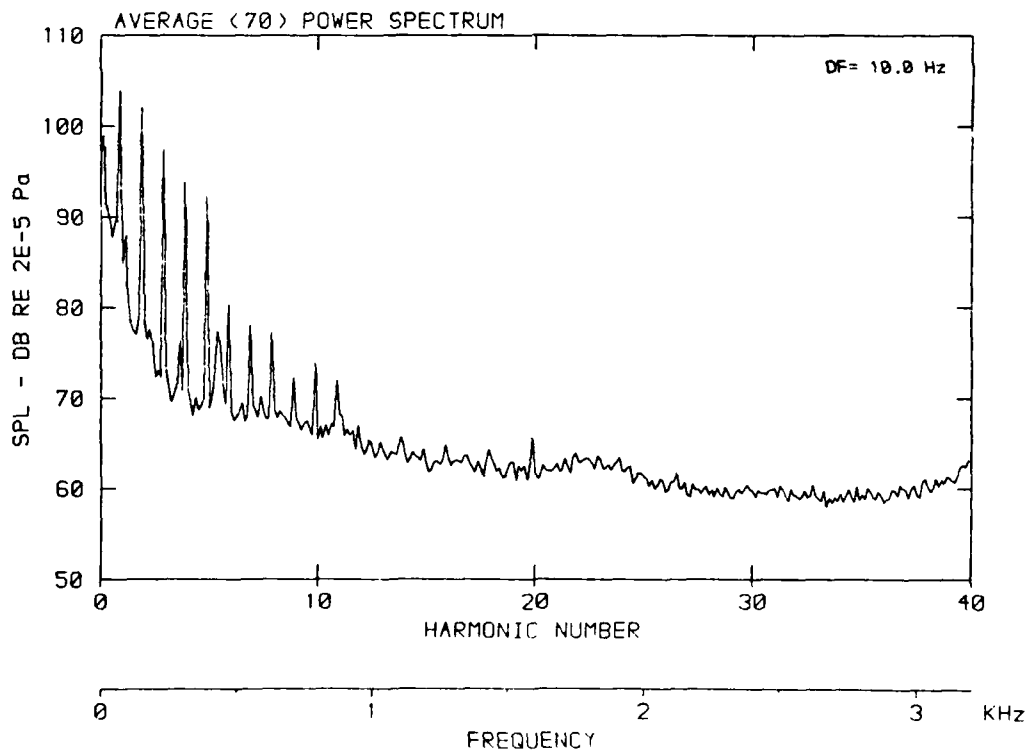
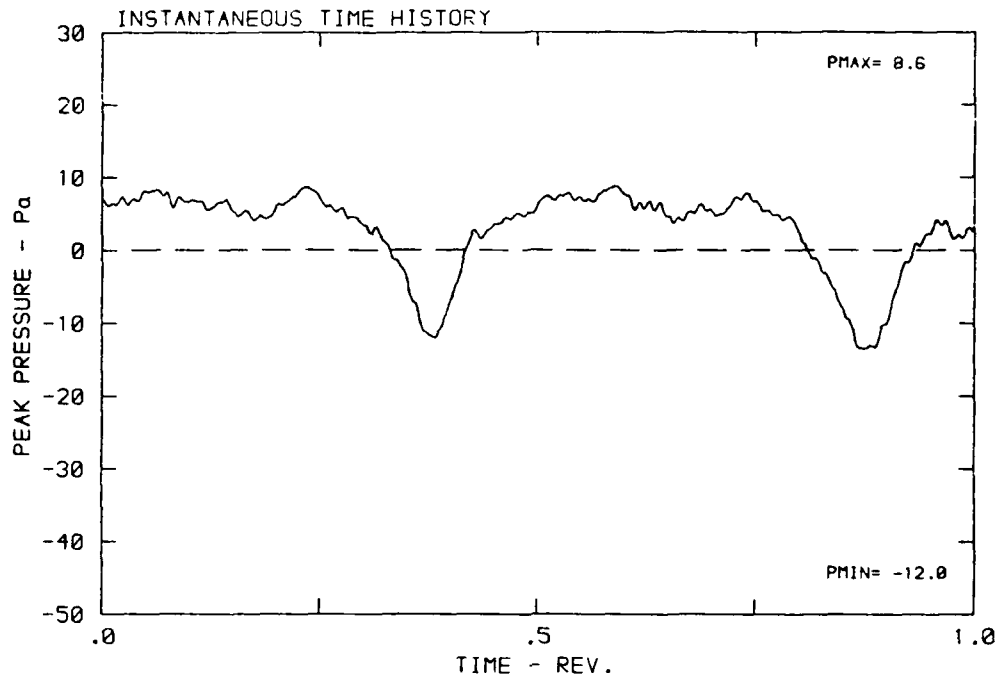
DATA POINT: LN-1 RUN: 154 MP: 9

β : 19.9° MH: .6734 n: 2100 rpm v/u: .231 ϕ : -3.8° T: 288.5 K



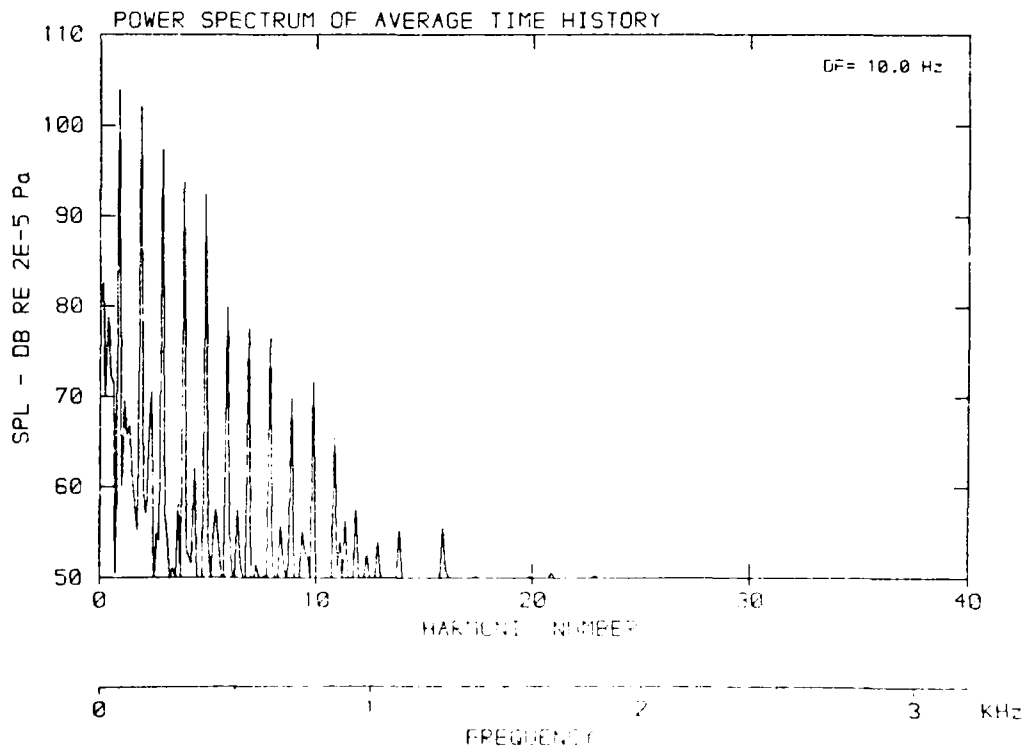
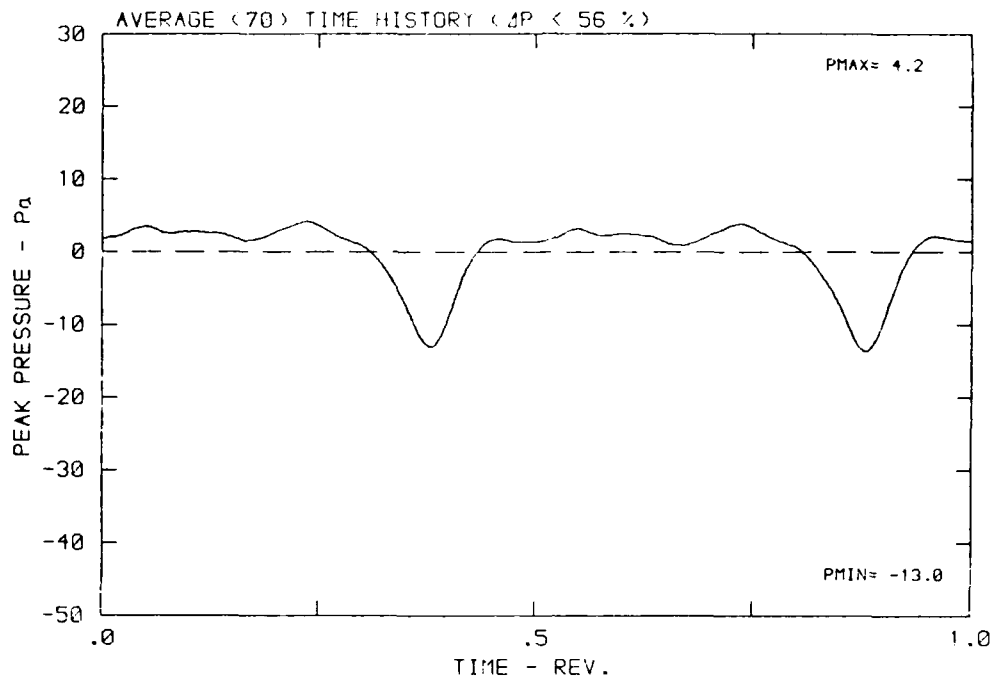
DATA POINT: LN-2 RUN: 155 MP: 1

β : 19.9° MH: .7645 n: 2400 rpm v/u: .202 ϕ : -3.9° T: 288.9 K



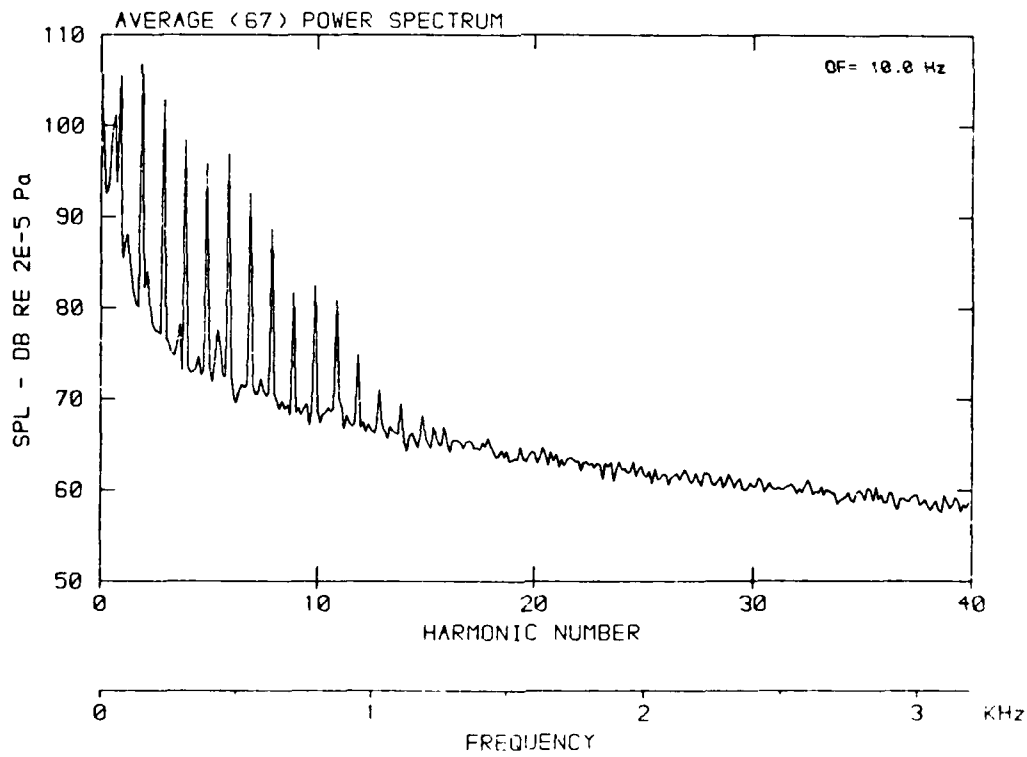
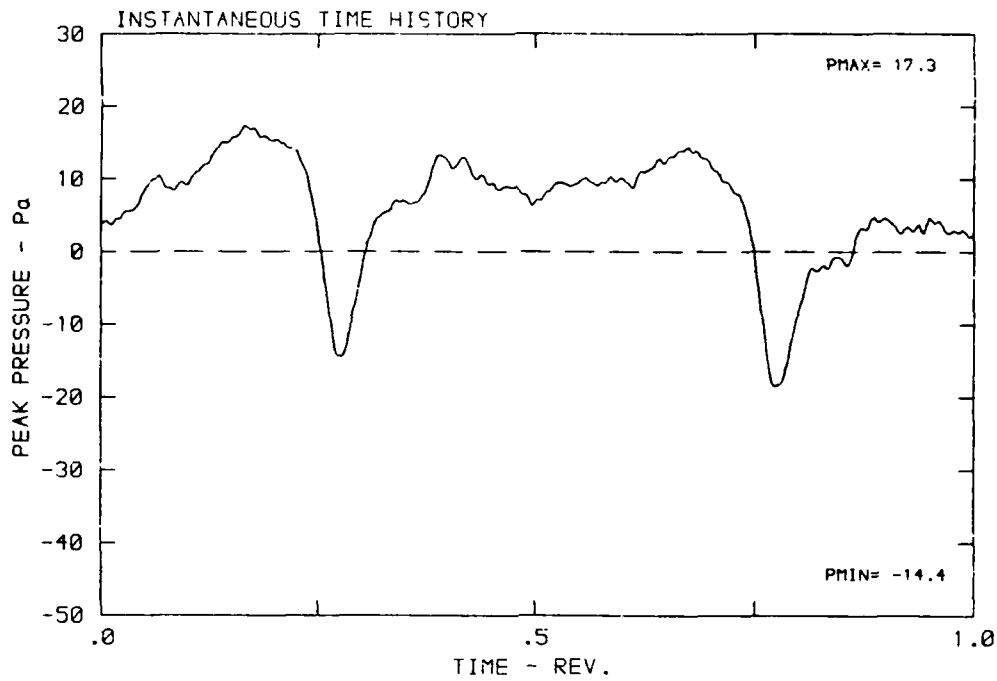
DATA POINT: LN-2 RUN: 155 MP: 1

β : 19.9° MH: .7645 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 288.9 K



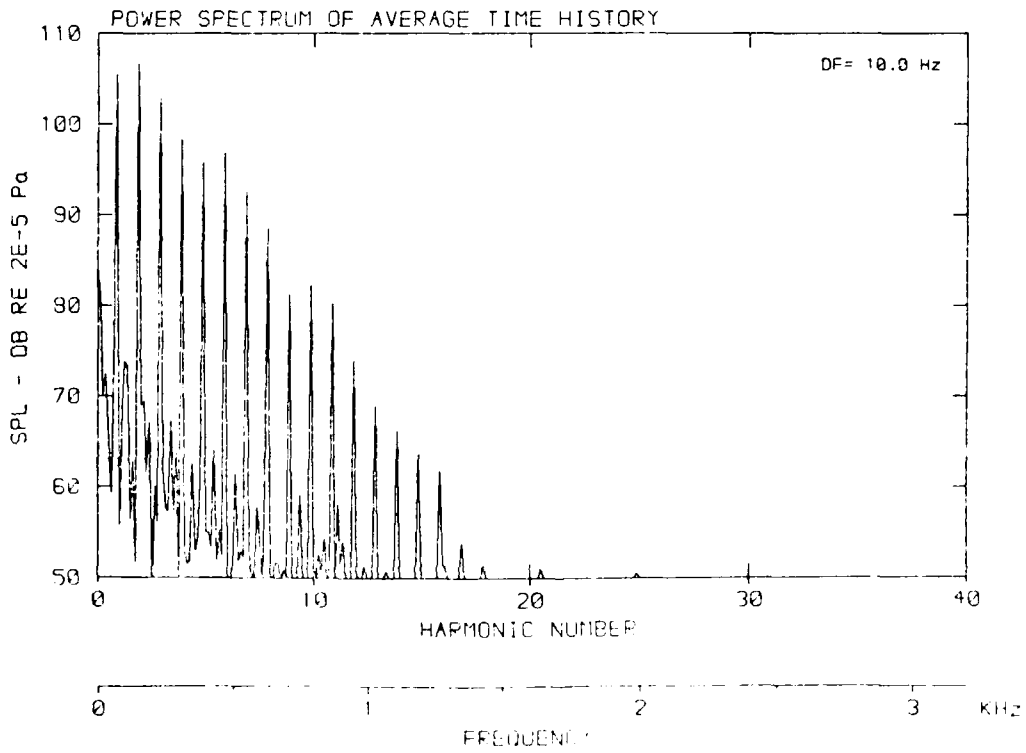
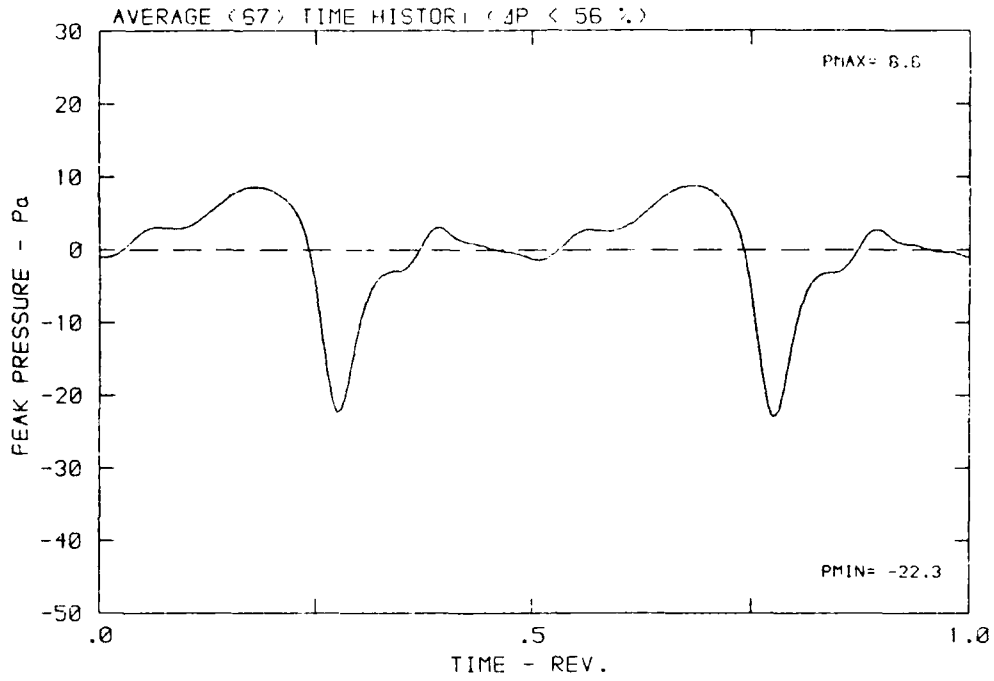
DATA POINT: LN-2 RUN: 155 MP: 2

β : 19.9° MH: .7645 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 288.9 K



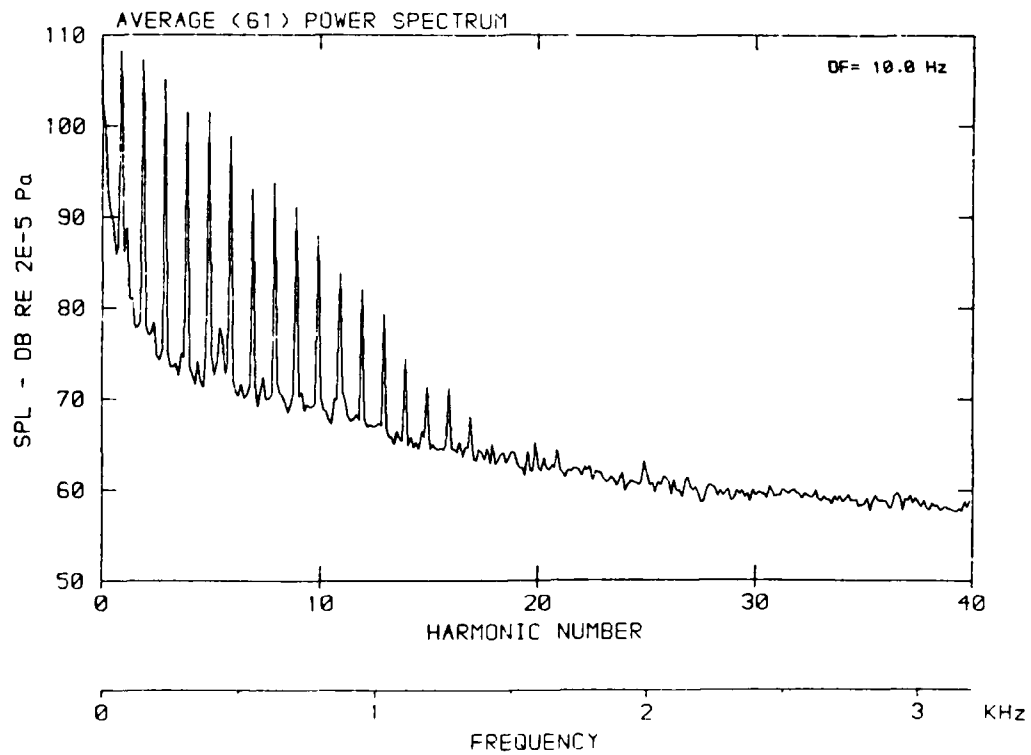
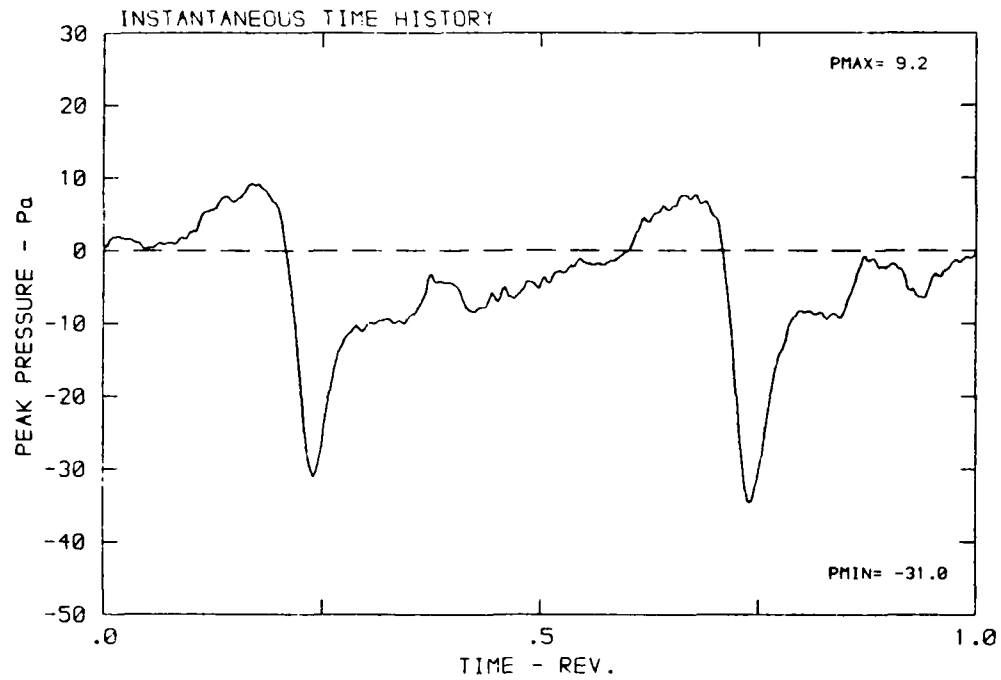
DATA POINT: LN-2 RUN: 155 MP: 2

β : 19.9° MH: .7645 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 288.9 K



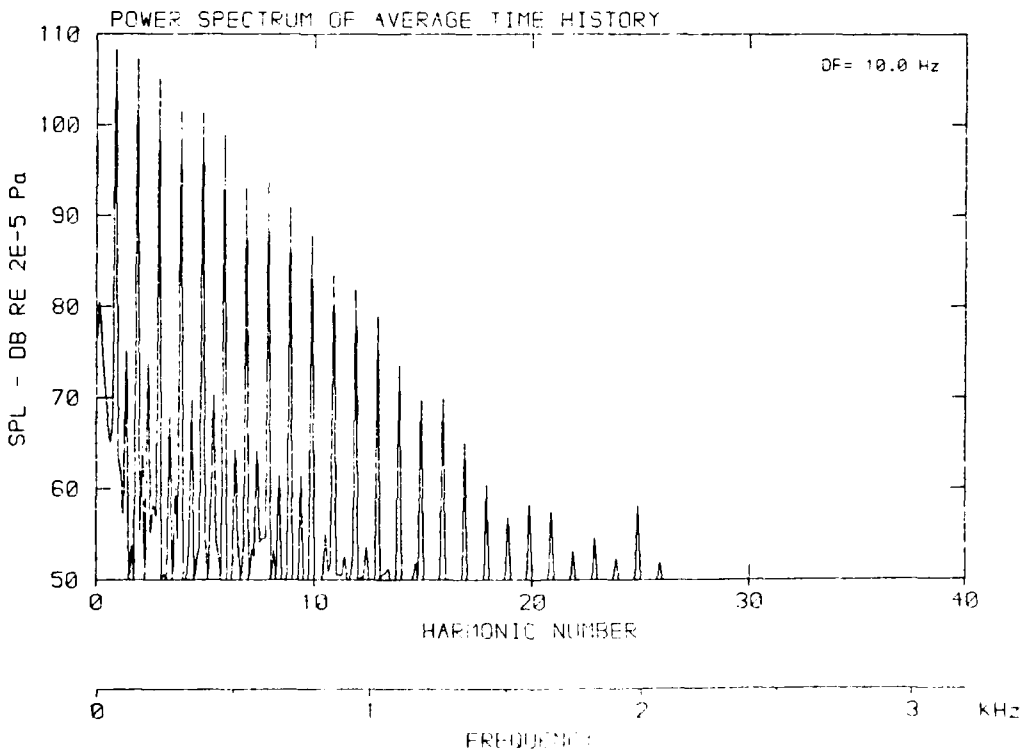
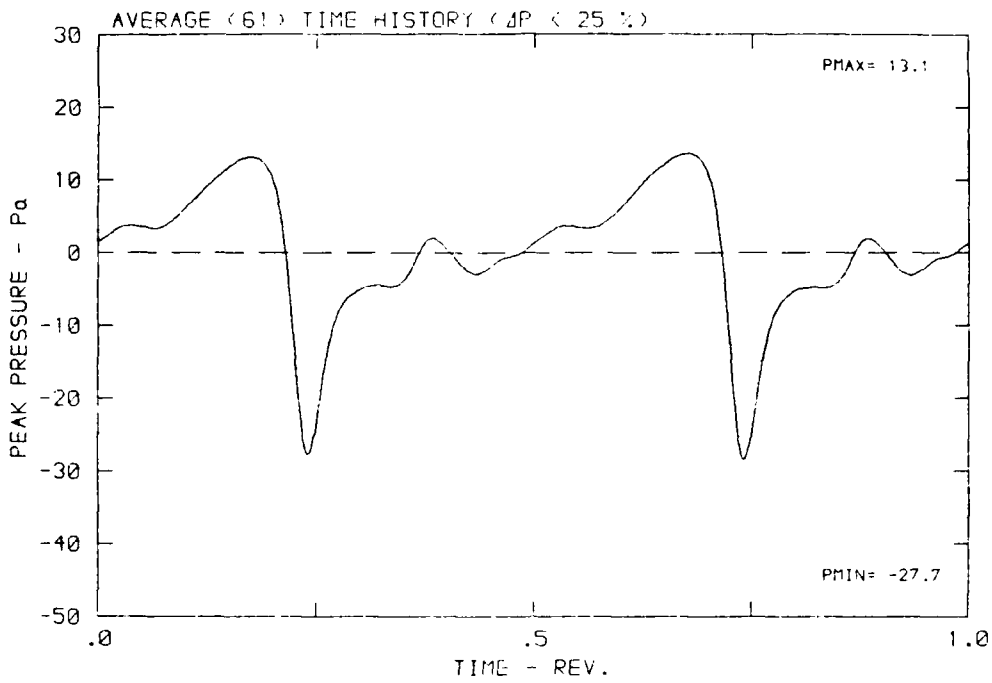
DATA POINT: LN-2 RUN: 155 MP: 3

β : 19.9° MH: .7645 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 288.9 K



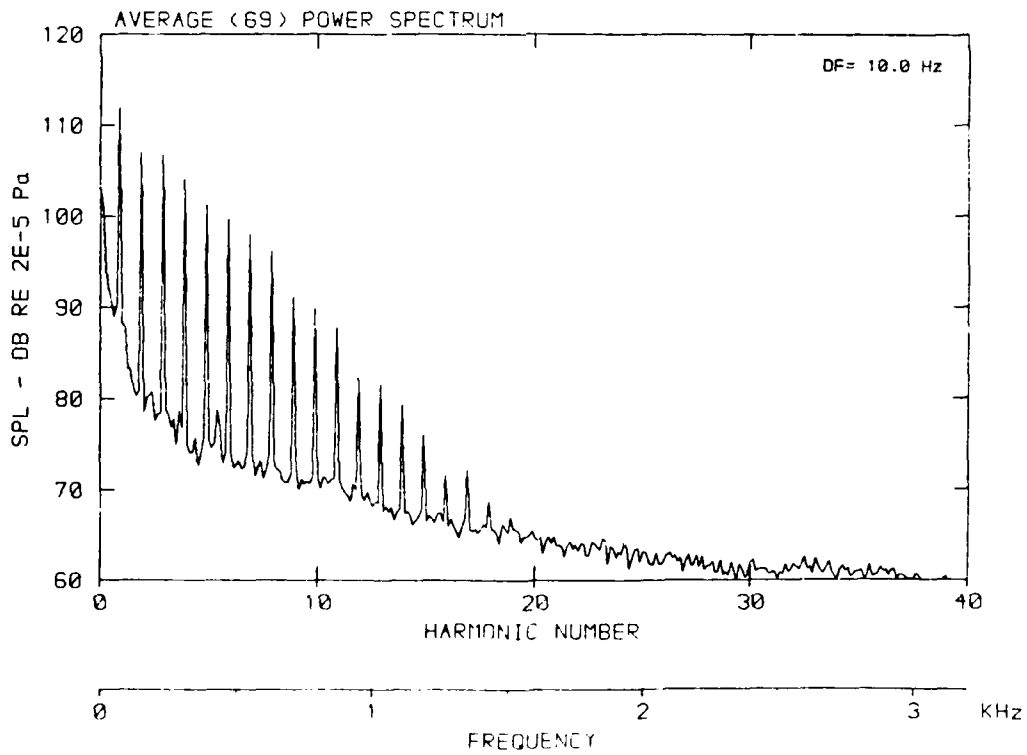
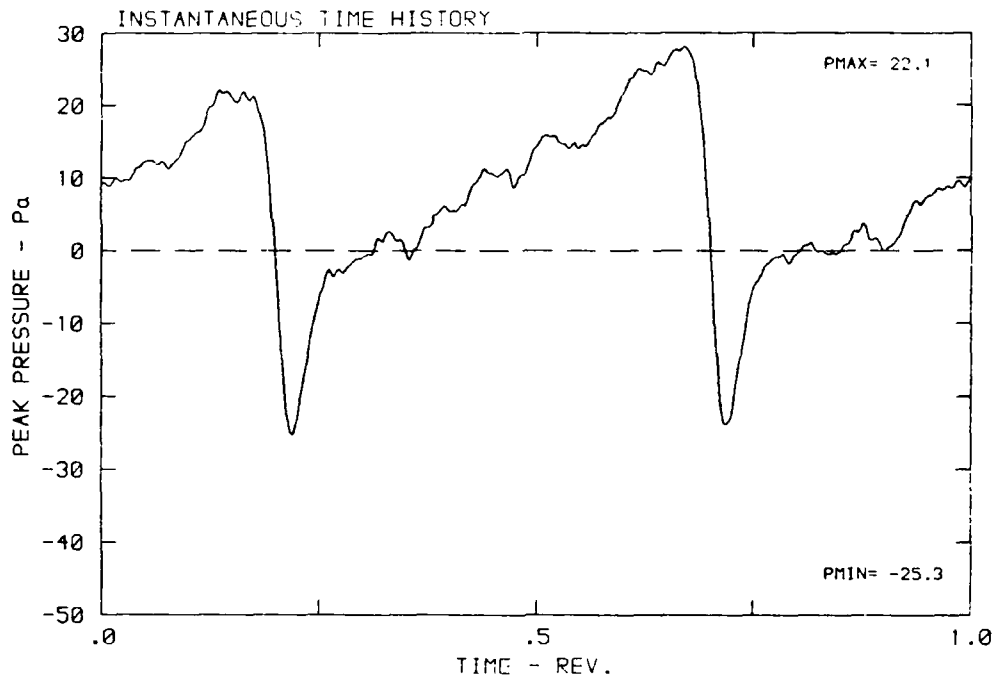
DATA POINT: LN-2 RUN: 155 MP: 3

β : 19.9° MH: .7645 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 266.9 K



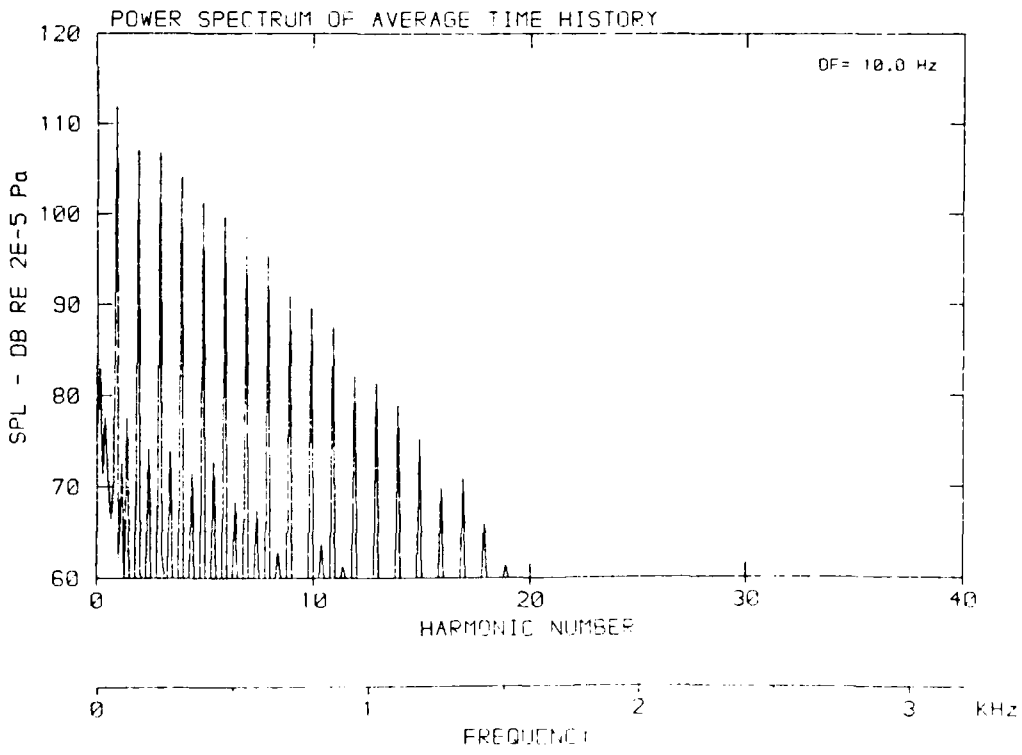
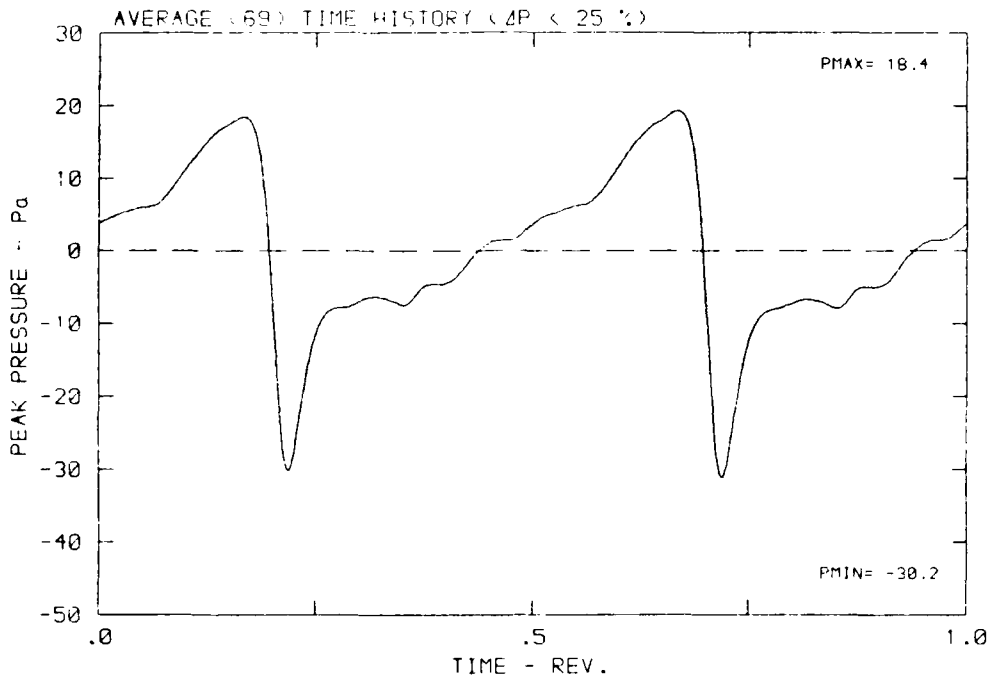
DATA POINT: LN-2 RUN: 155 MP: 4

β : 19.9° MH: .7645 n: 2400 rpm ν : .202 ϕ : -3.8° T: 288.9 K



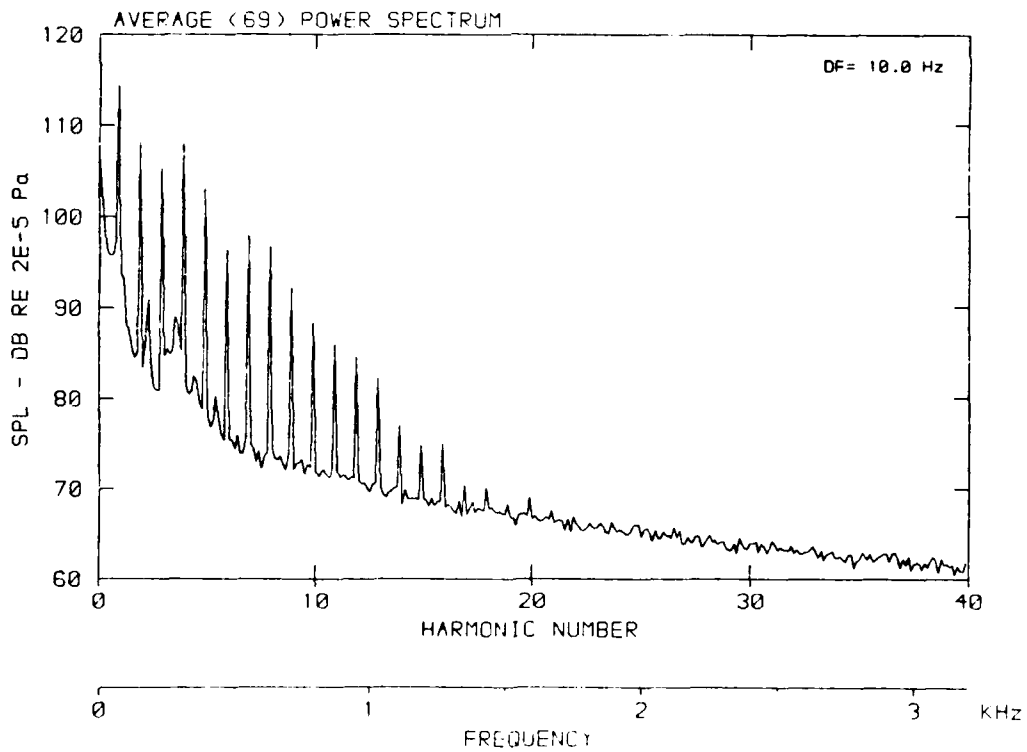
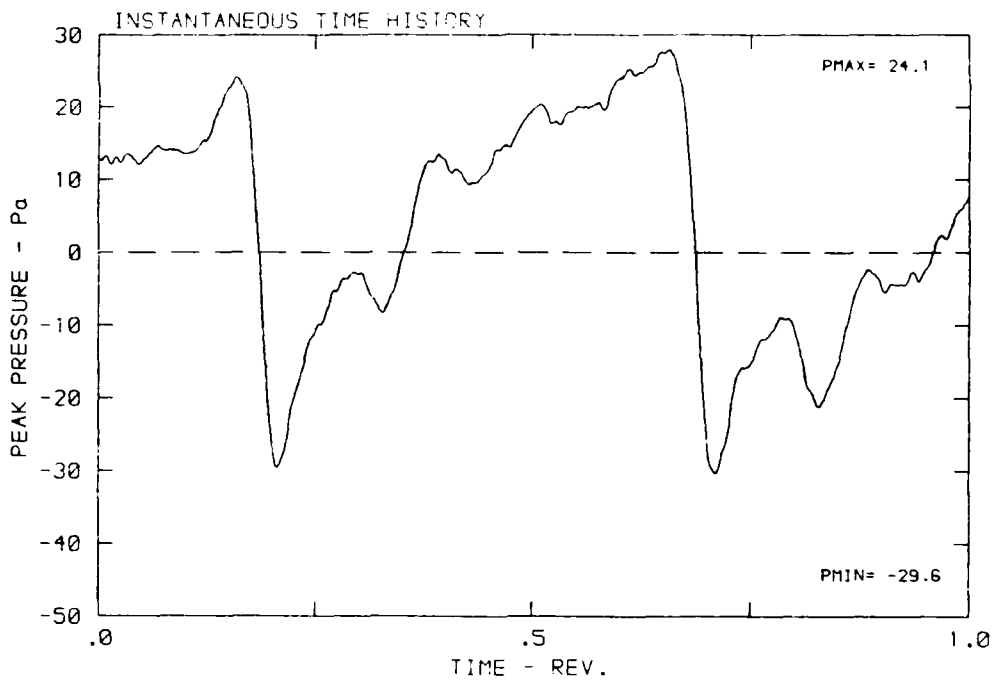
DATA POINT: LN-2 RUN: 155 MP: 4

β : 19.9° MH: .7645 n: 2400 rpm v/u : .202 ϕ : -3.8° T: 289.9 K



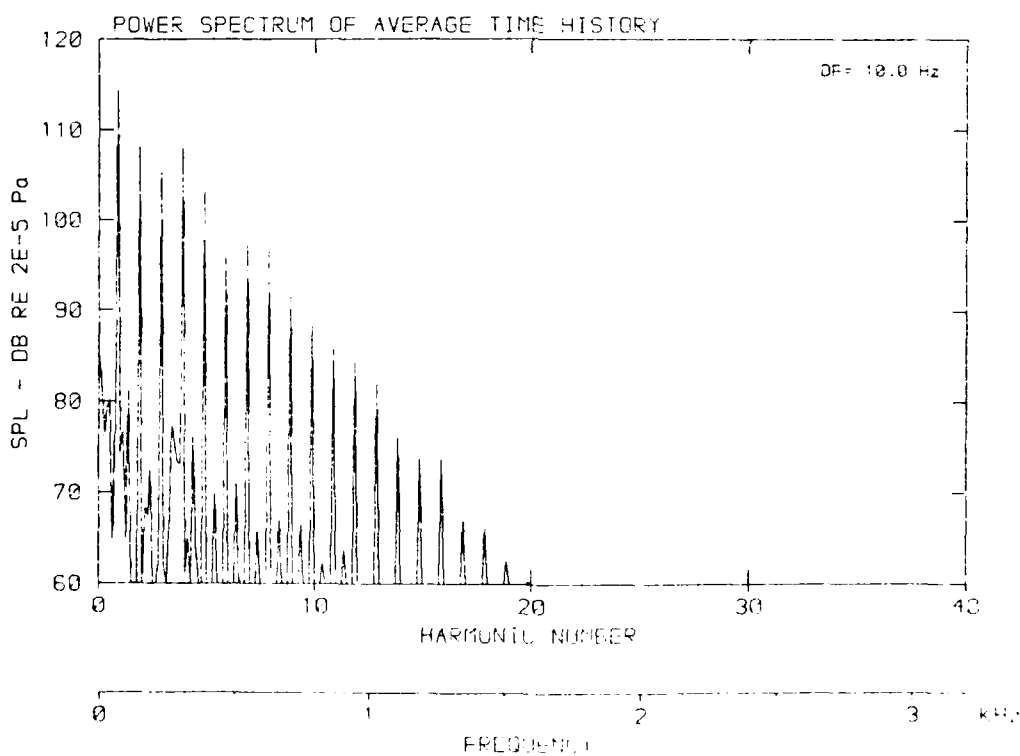
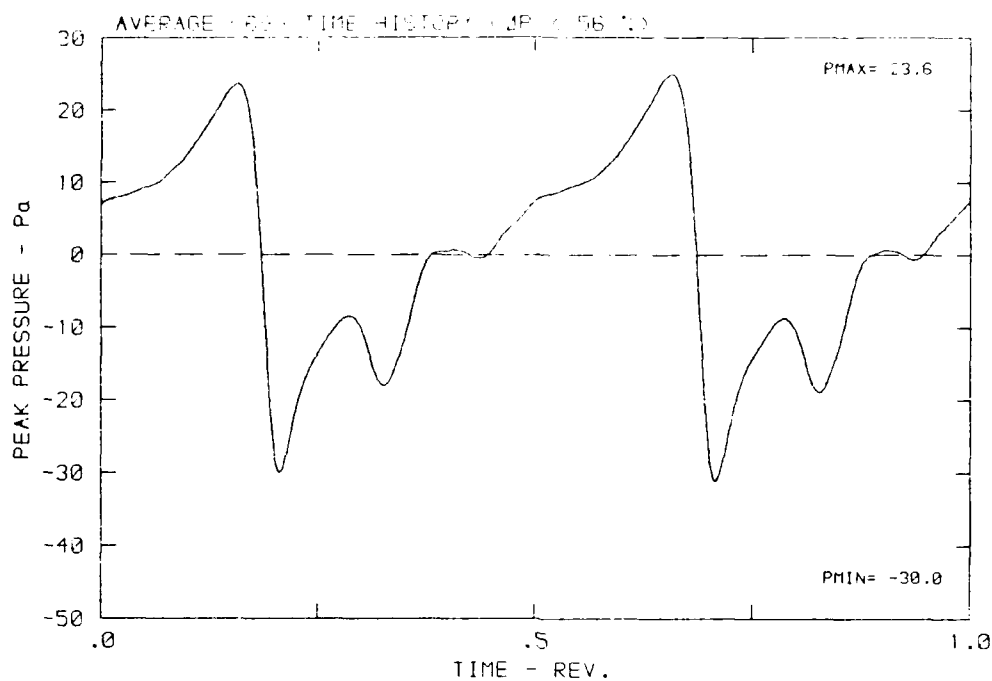
DATA POINT: LN-2 RUN: 155 MP: 5

β : 19.9° MH: .7645 n: 2400 rpm ν : .202 ϕ : -3.8° T: 268.9 K



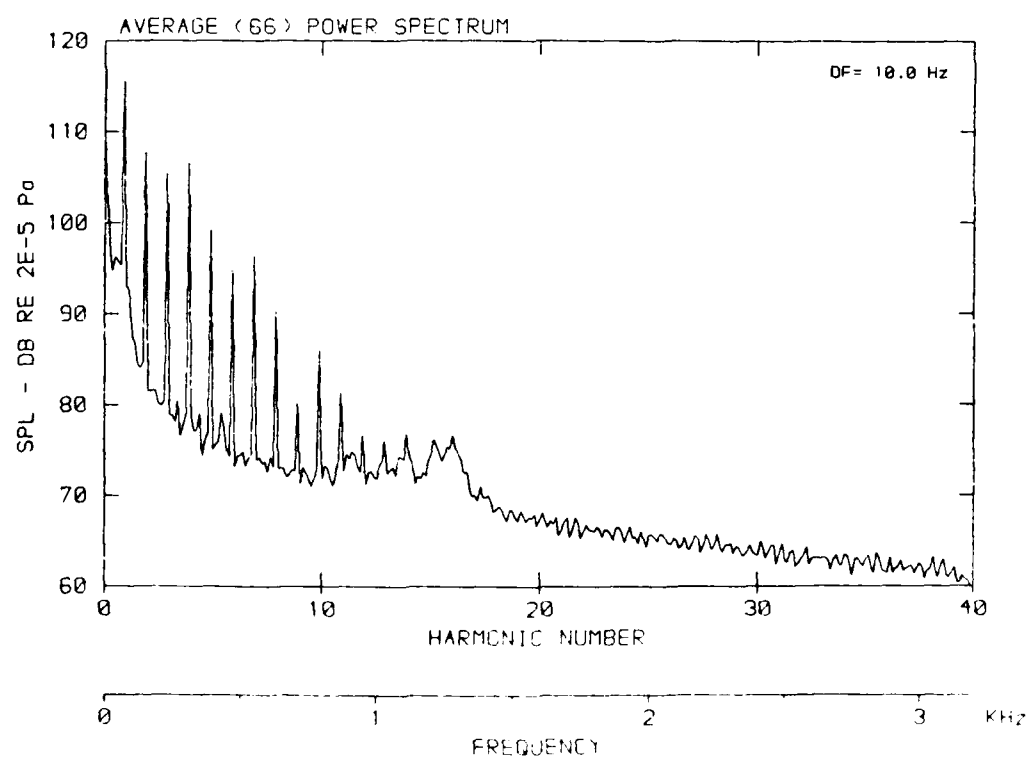
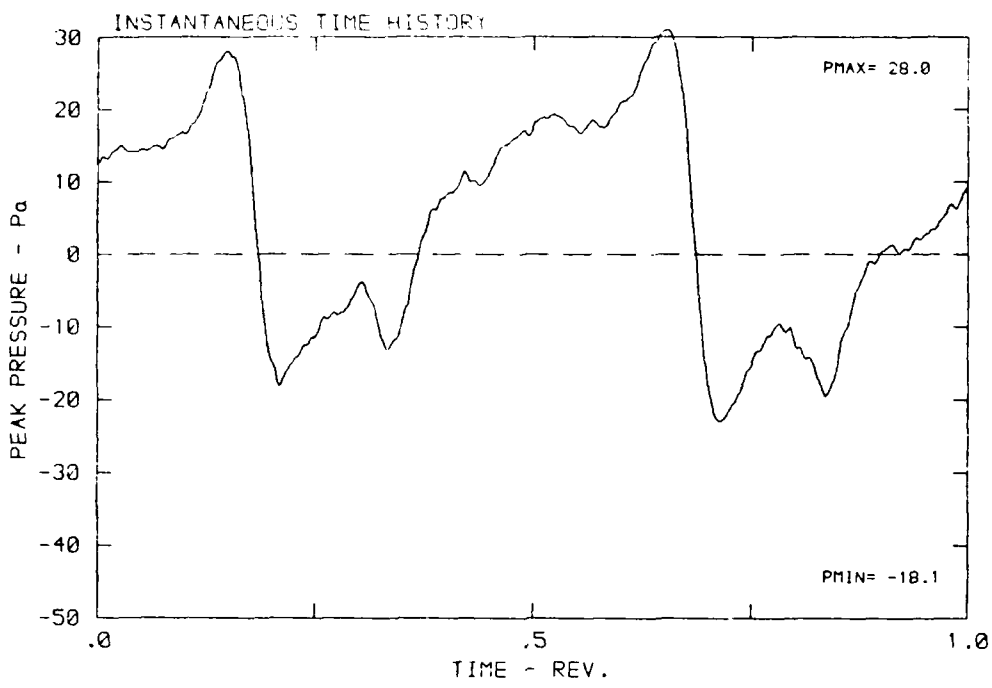
DATA POINT: UN-C-10-15-15-15-15-15

β : 19.9° NH: .7645 n: 2400 rpm μ : 1.202 ϕ : -3.5° T: 209.9 K



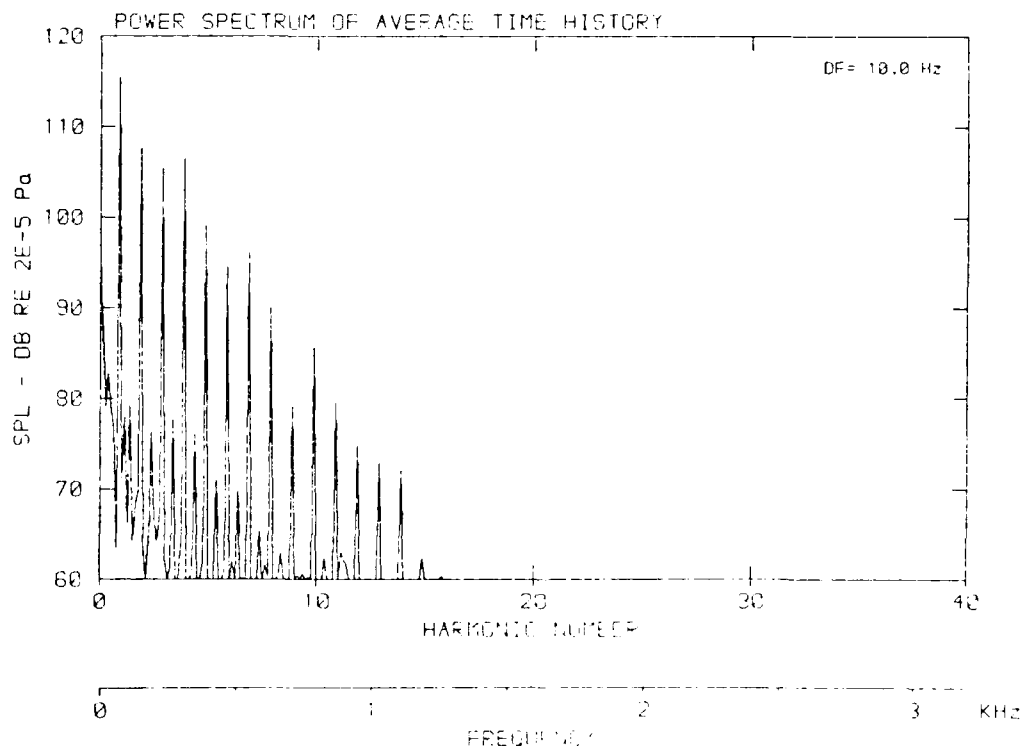
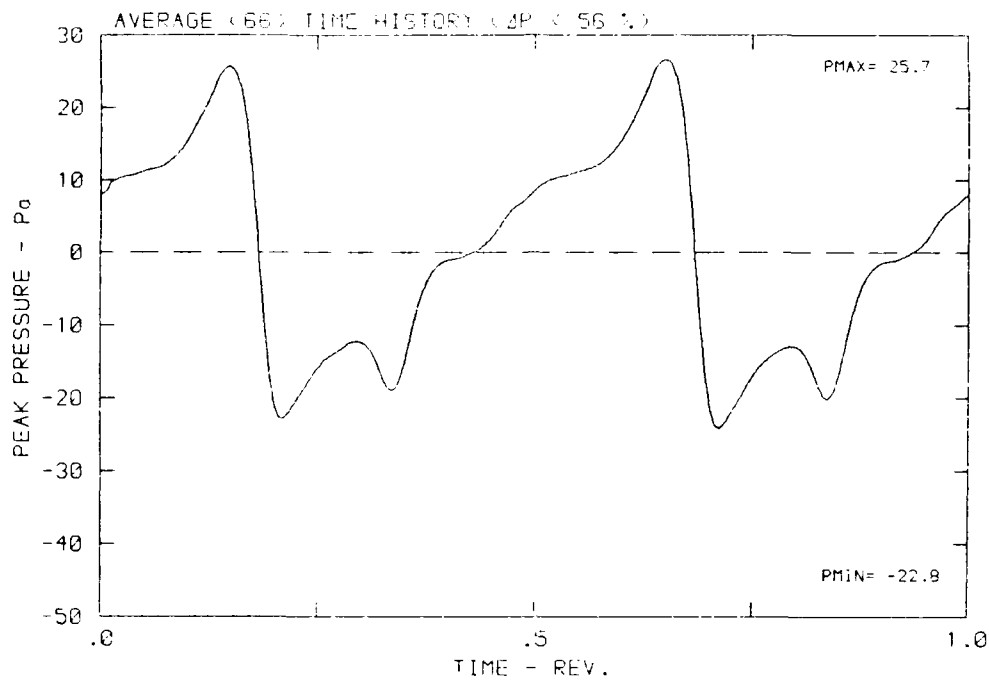
DATA POINT: LN-2 RUN: 155 MP: E

β : 19.9° MH: .7645 n: 2400 rpm ν : .202 ϕ : -3.6° T: 288.9 K



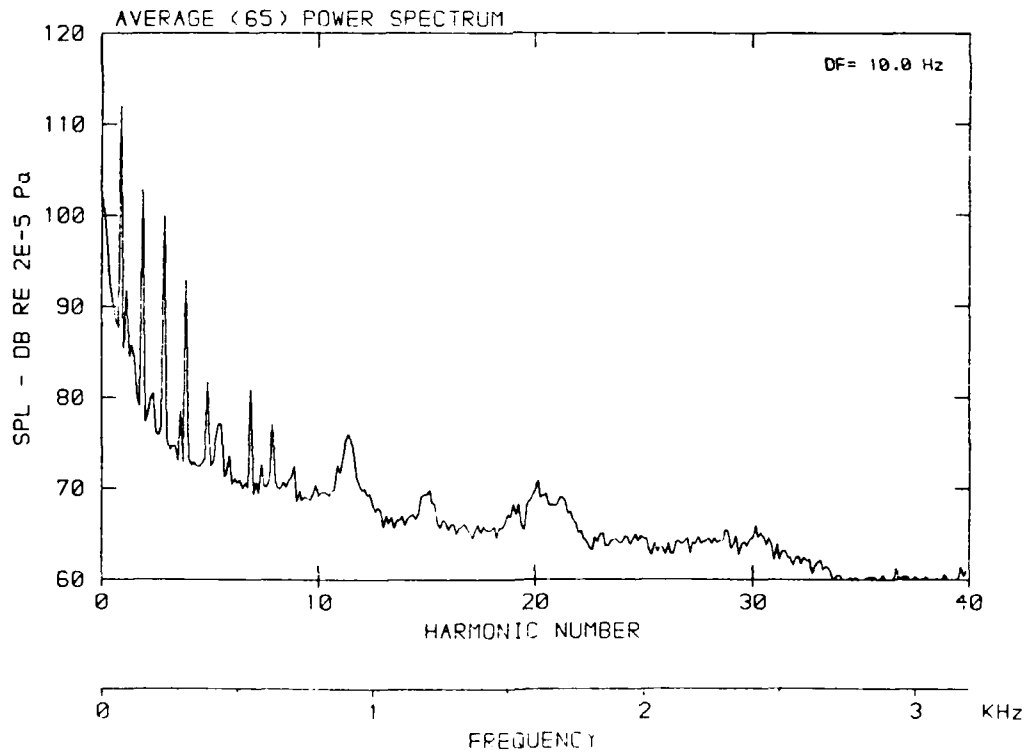
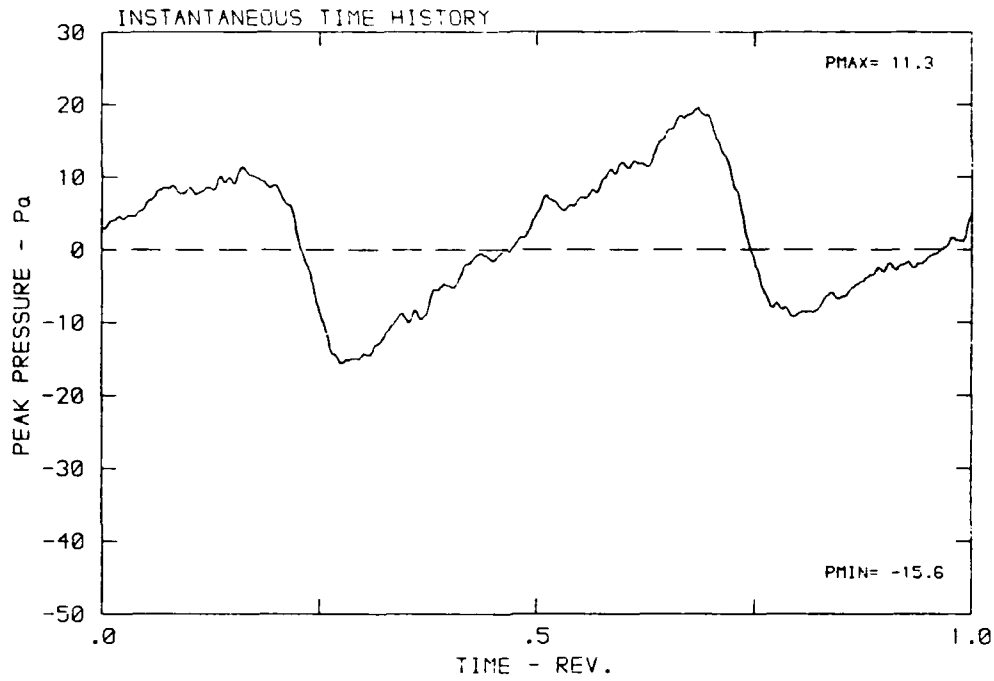
DATA POINT: LN-2 RUN: 155 MP: E

β : 19.9° MH: .7645 n: 2400 rpm vru: .202 ϕ : -3.8° T: 285.9 k



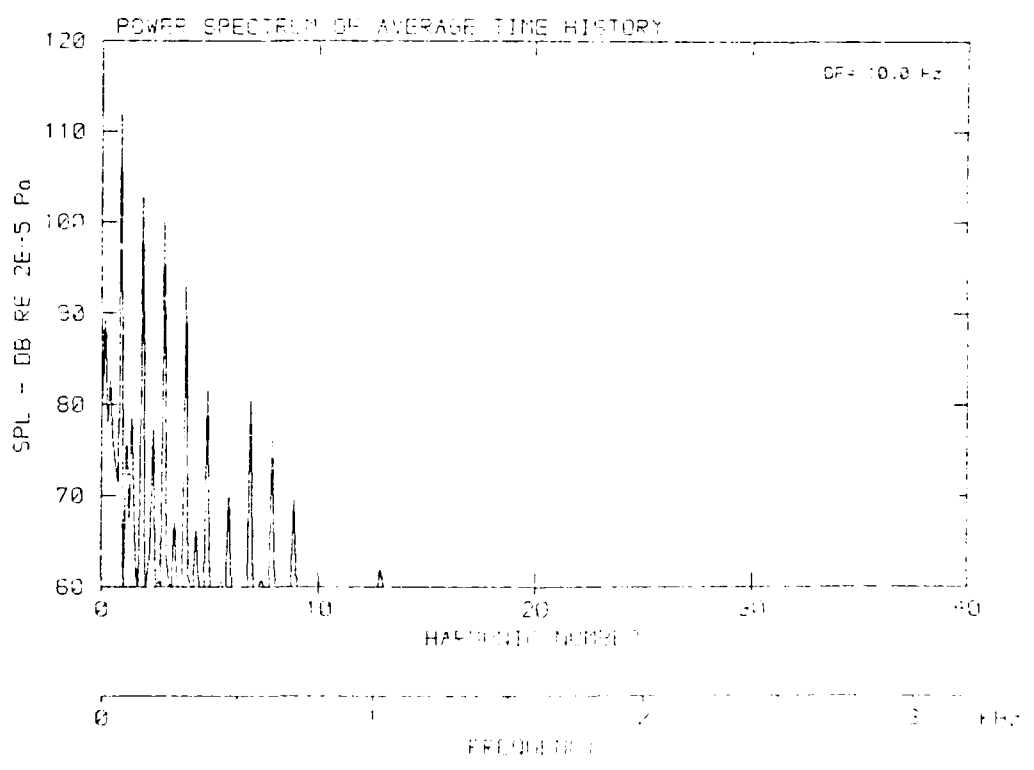
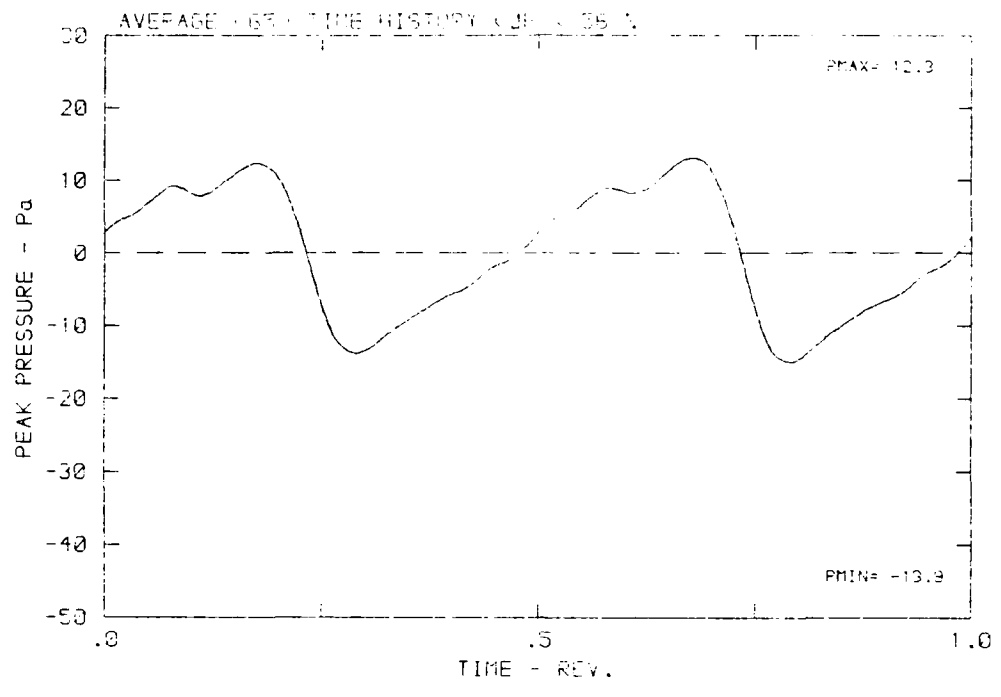
DATA POINT: LN-2 RUN: 155 MP: 7

β : 19.9° MH: .7645 n: 2400 rpm v/u : .202 ψ : -3.8° T: 285.9 K



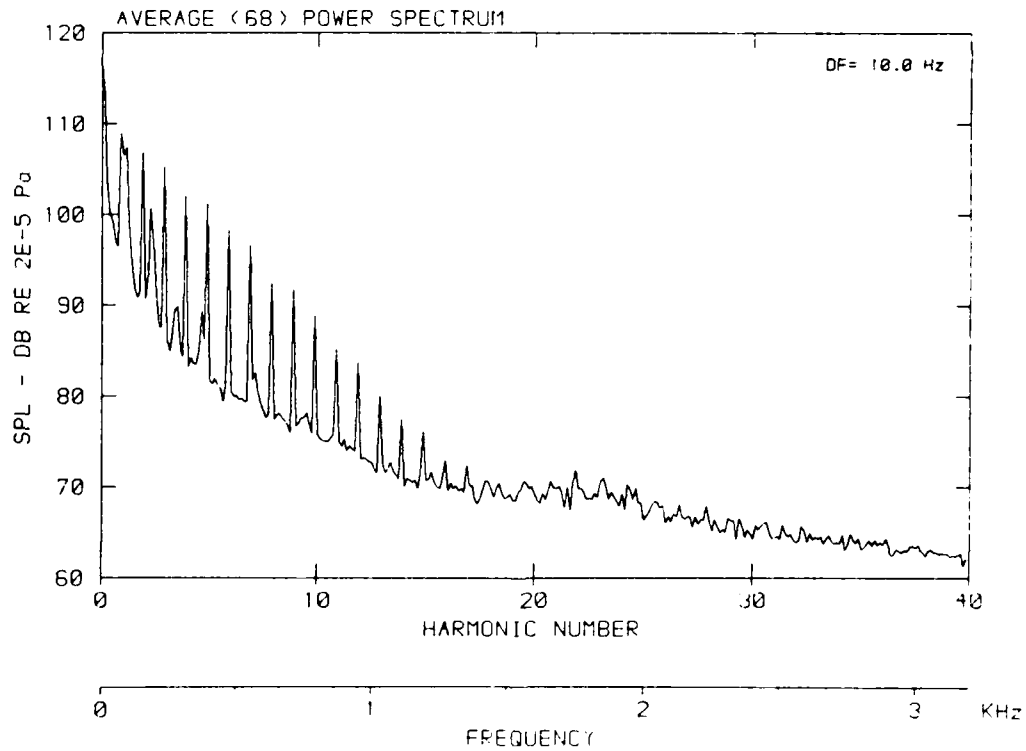
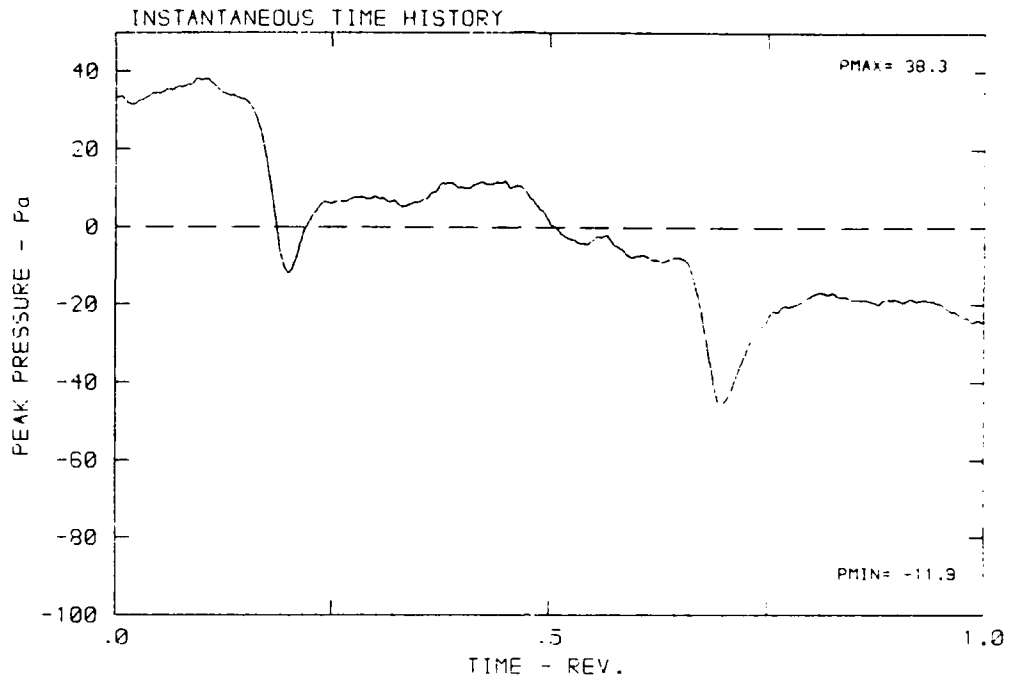
DATA PRINTED FROM [unclear] [unclear] [unclear]

β : 19.9° MH: .7645 n: 2400 rpm r: 0: .200 d: 3.87 t: 26.12



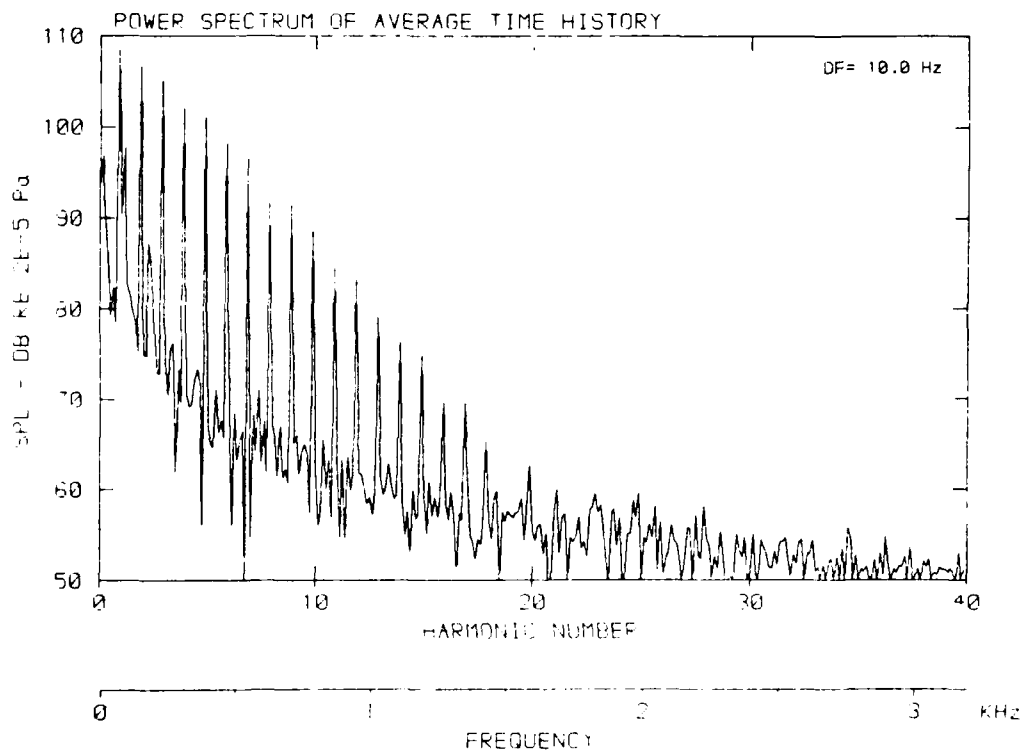
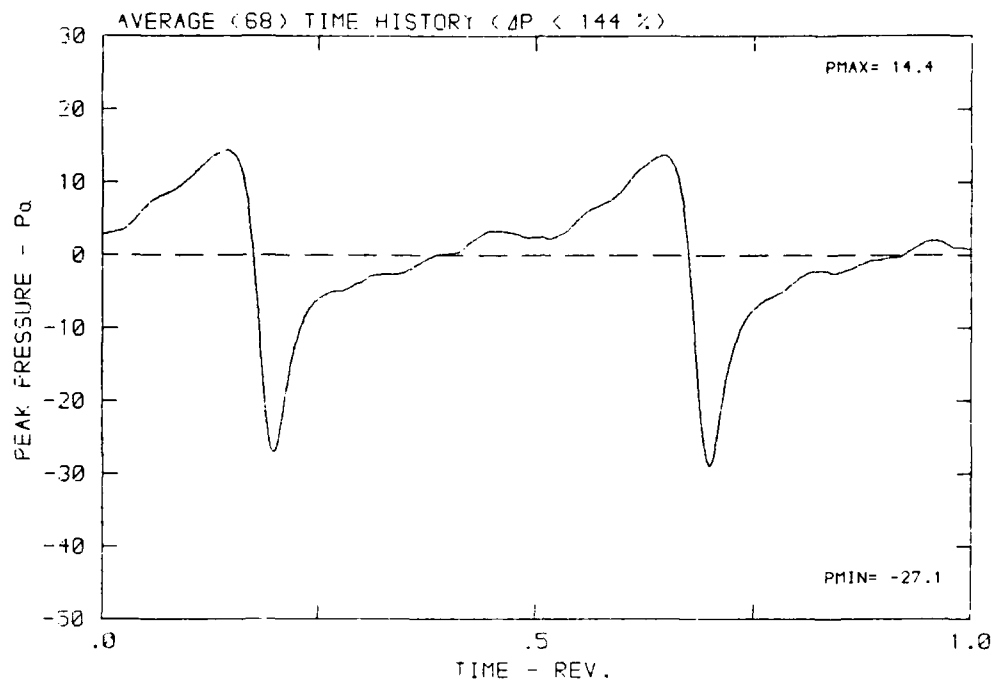
DATA POINT: LN-2 RUN: 155 MP: 3

β : 19.9° MH: .7645 n: 2400 rpm v/u : .202 ϕ : -3.3° T: 288.3 K



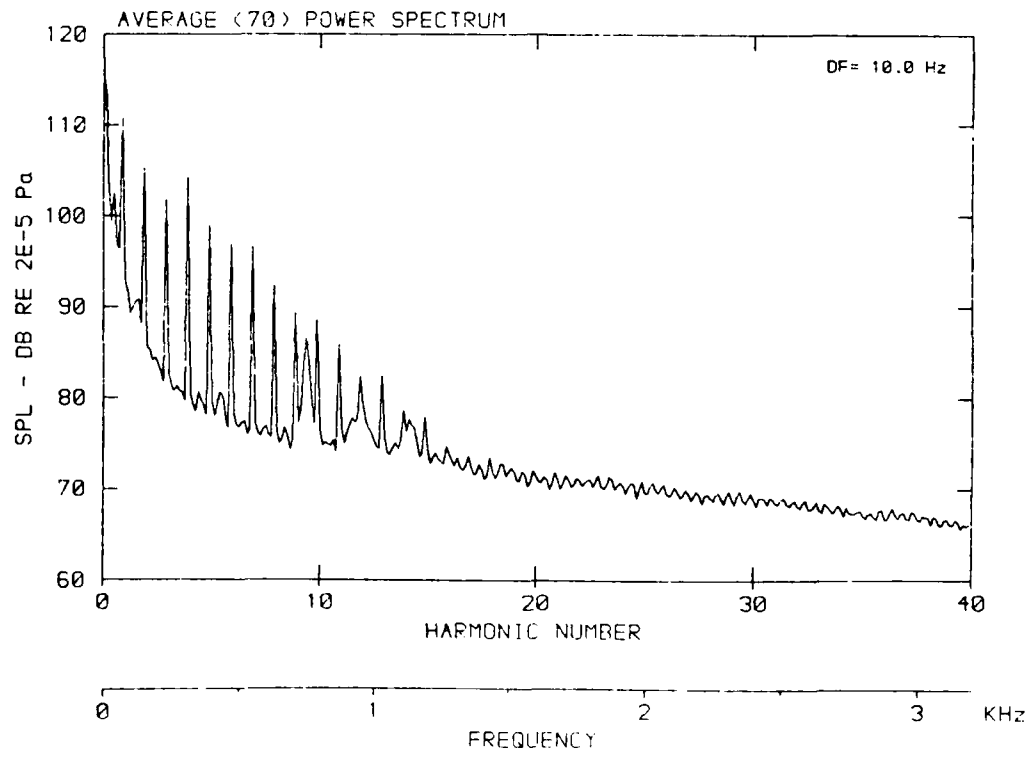
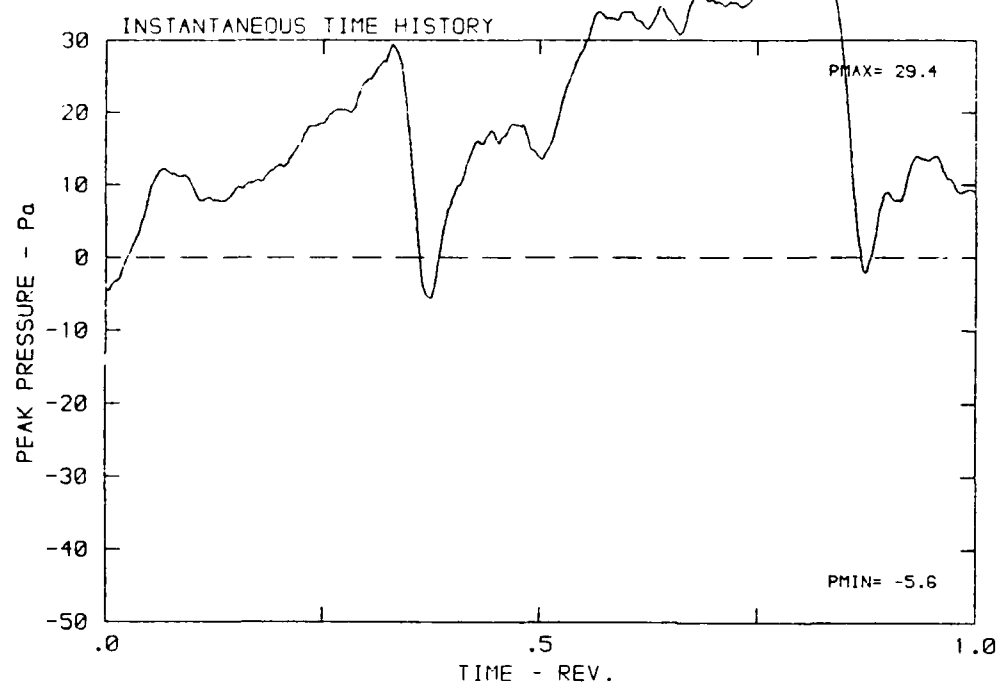
DATA POINT: LN-2 RUN: 155 MP: 8

β : 19.9° MH: .7645 n: 2400 rpm v/u: .202 ϕ : -3.8° Γ : 288.9 K



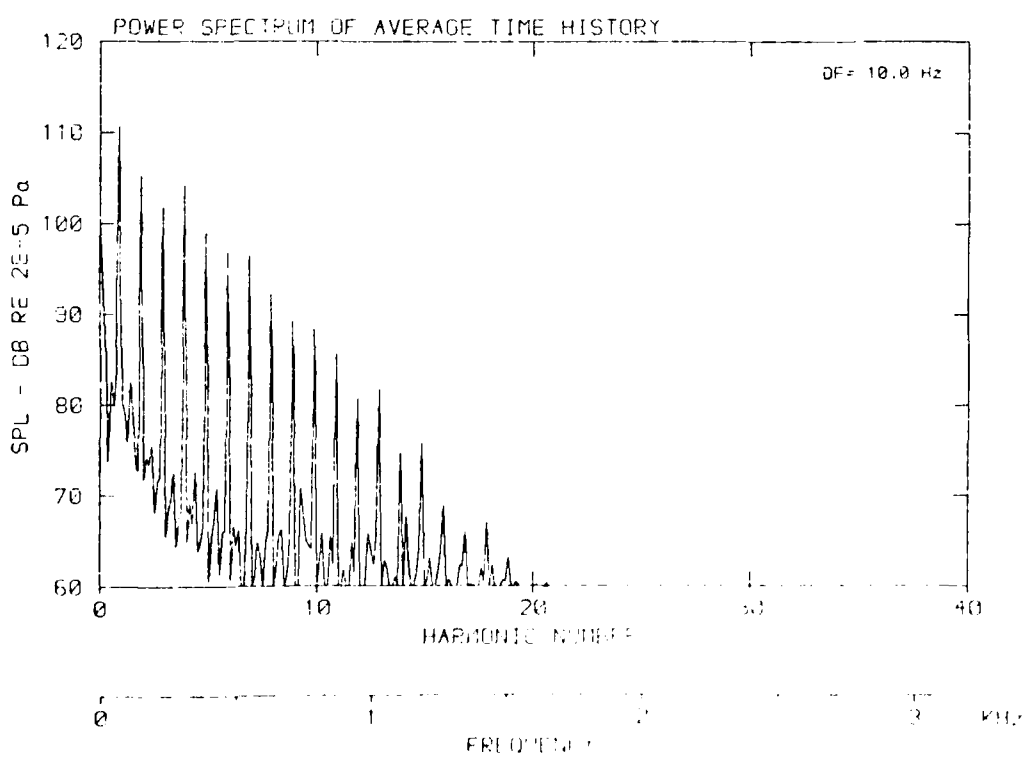
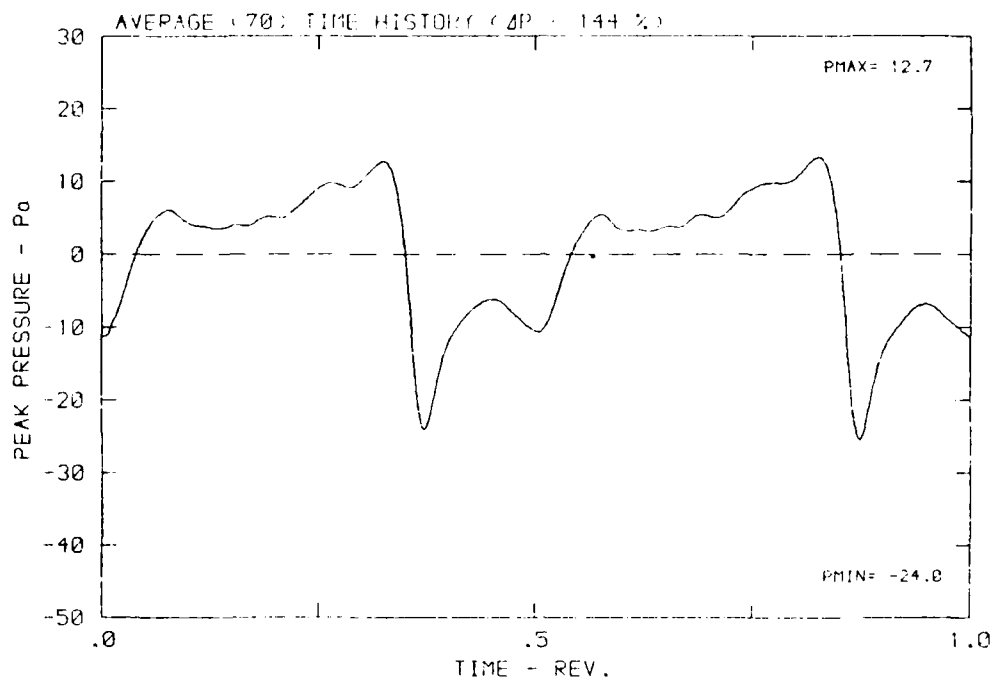
DATA POINT: LN-2 RUN: 155 MP: 2

β : 19.9° MH: .7645 n: 2400 rpm v/u: .202 ϕ : -3.8° T: 288.9 K



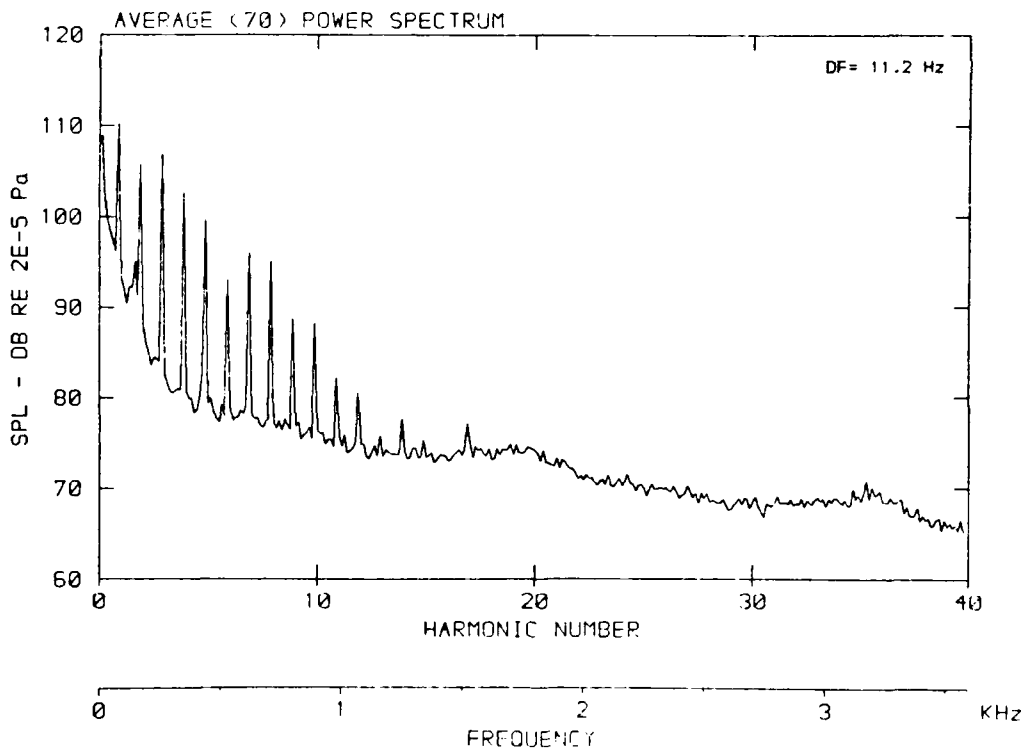
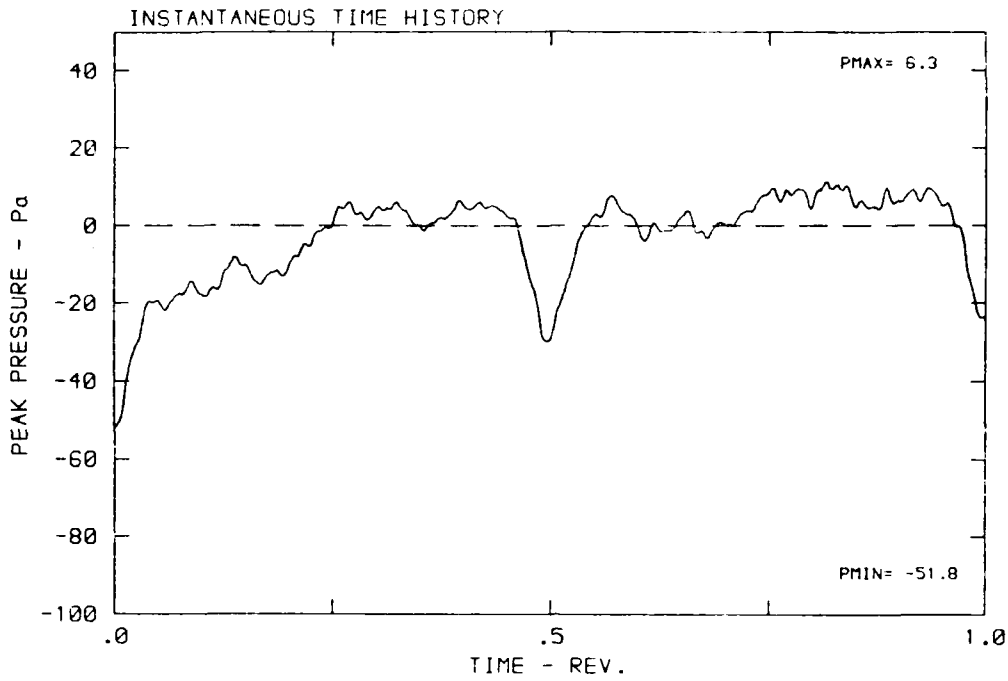
DATA POINT: LN-2 RUN: 155 MP: 3

β : 19.9° MH: .7645 n: 2400 rpm vru: .202 ϕ : -3.8° T: 288.9 K



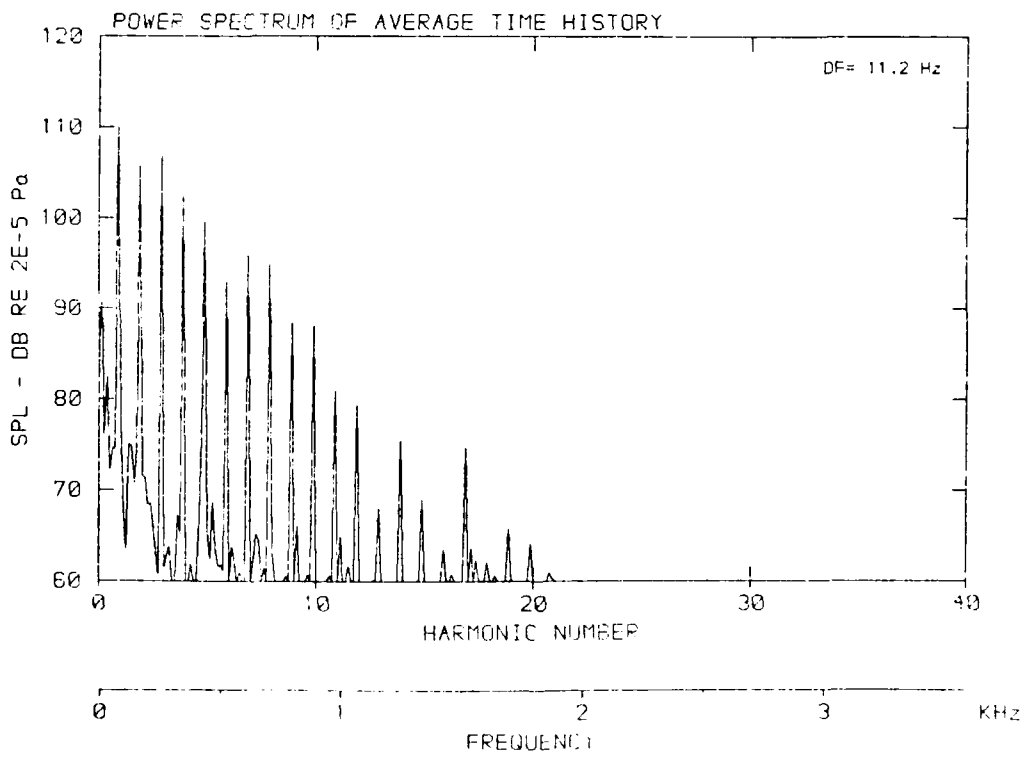
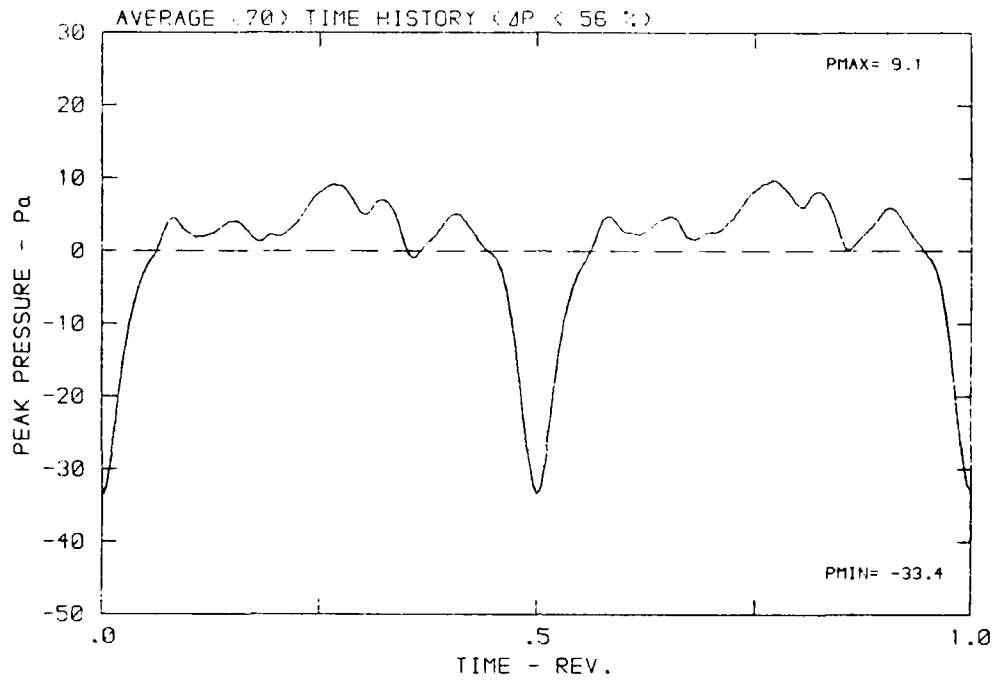
DATA POINT: LN-3 RUN: 156 MP: 1

β : 19.9° MH: .8727 n: 2700 rpm v/u : .263 ϕ : -3.3° T: 288.3 K



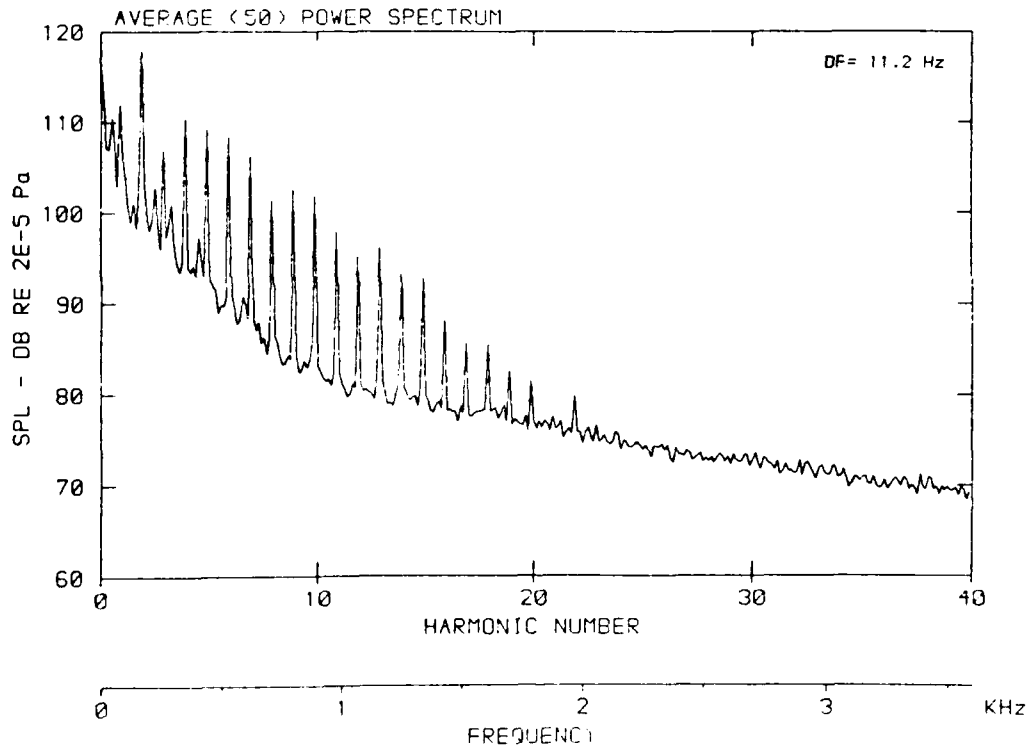
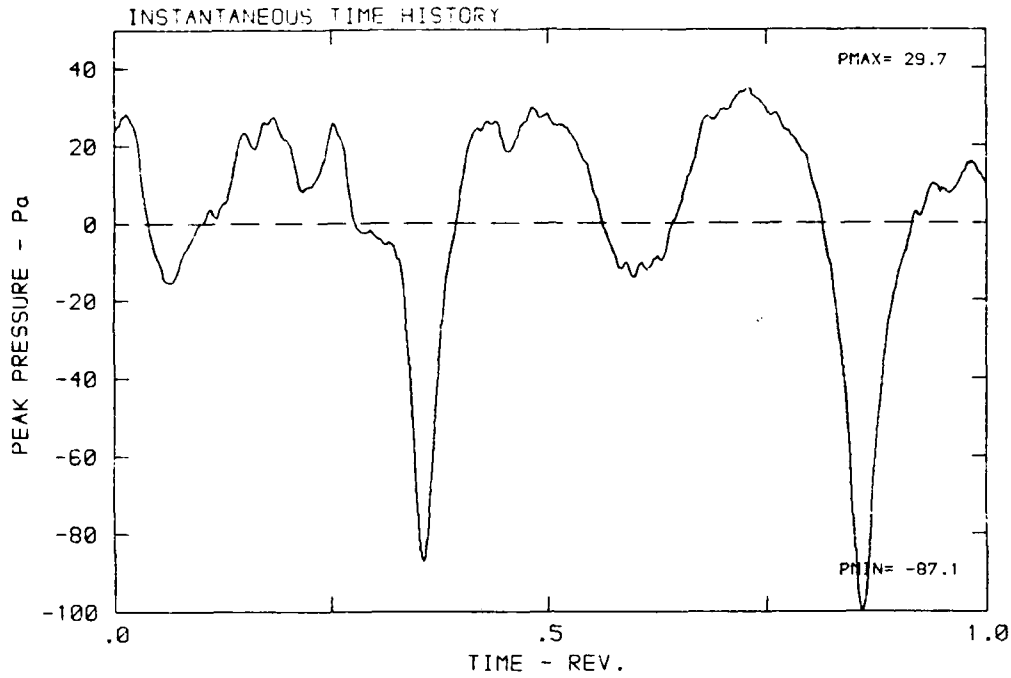
DATA POINT: LN-3 RUN: 156 MP: 1

β : 19.9° MH: .8727 n: 2700 rpm v/u : .268 ϕ : -3.8° T: 288.9 K



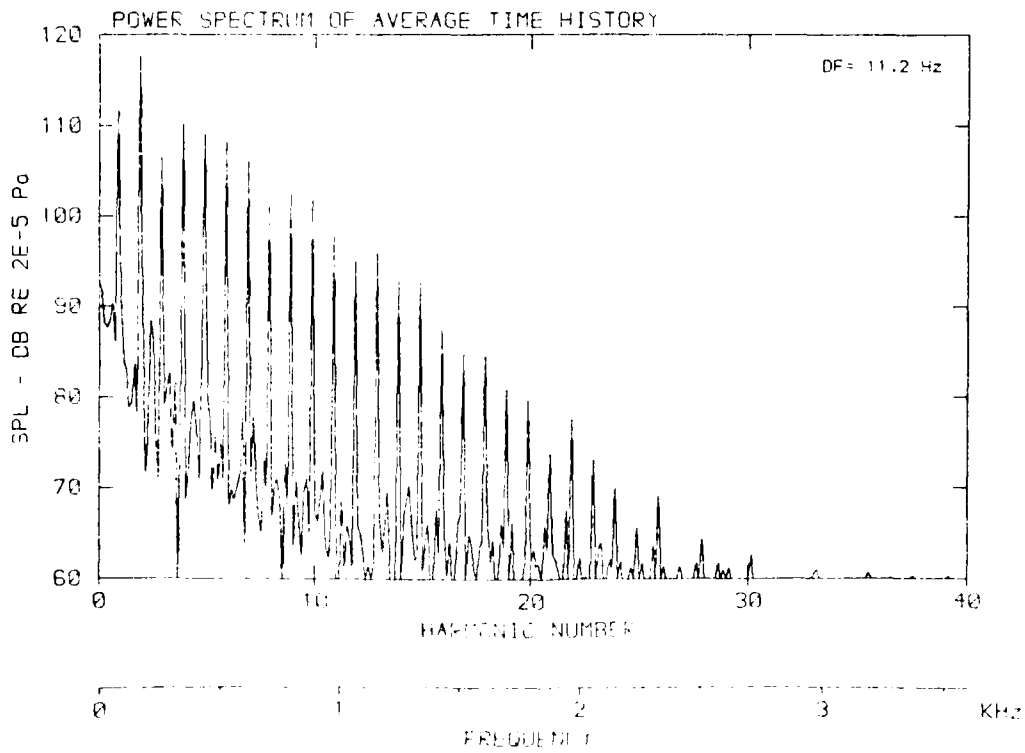
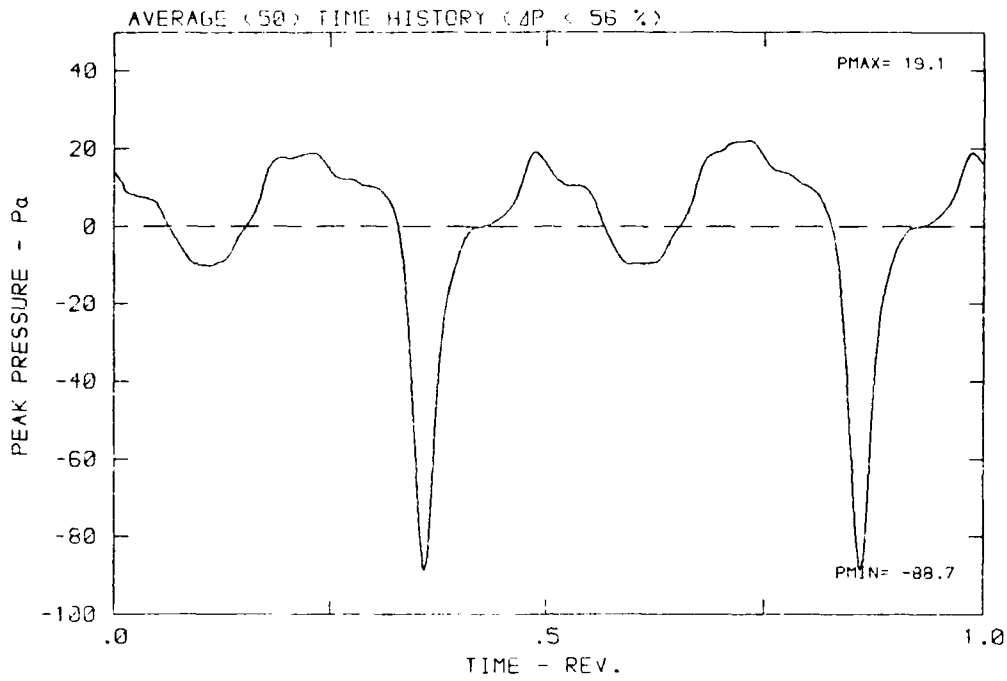
DATA POINT: LN-3 RUN: 156 MF: 2

β : 19.9° MH: .8727 n: 2700 rpm v_{zu} : .268 ϕ : -3.8° T: 288.9 K



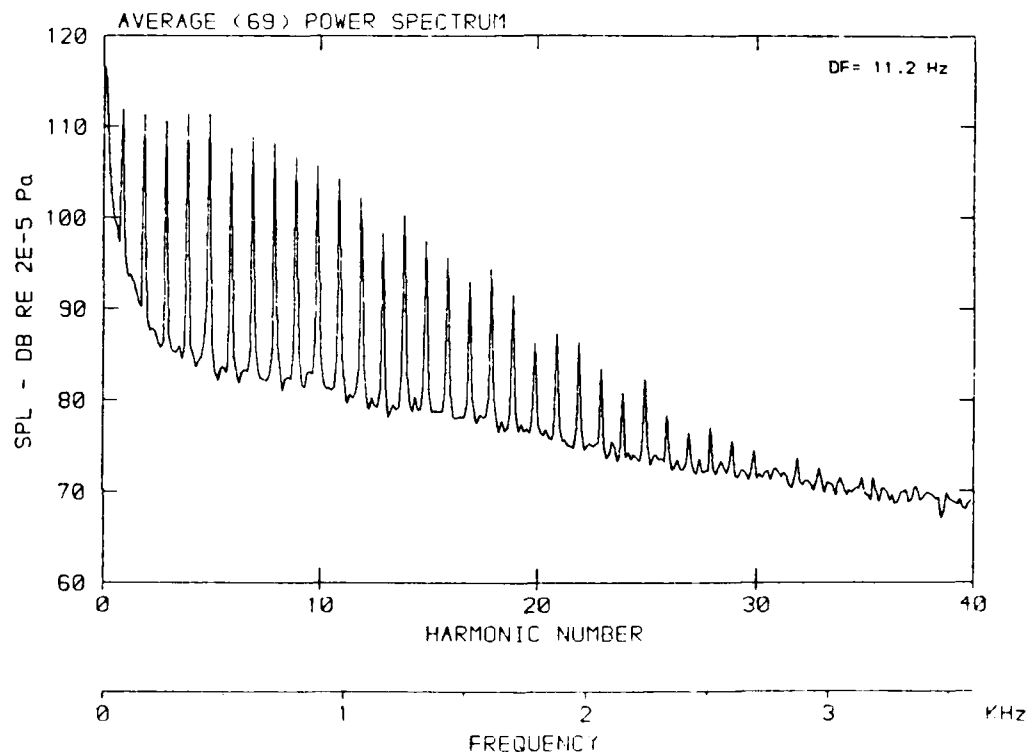
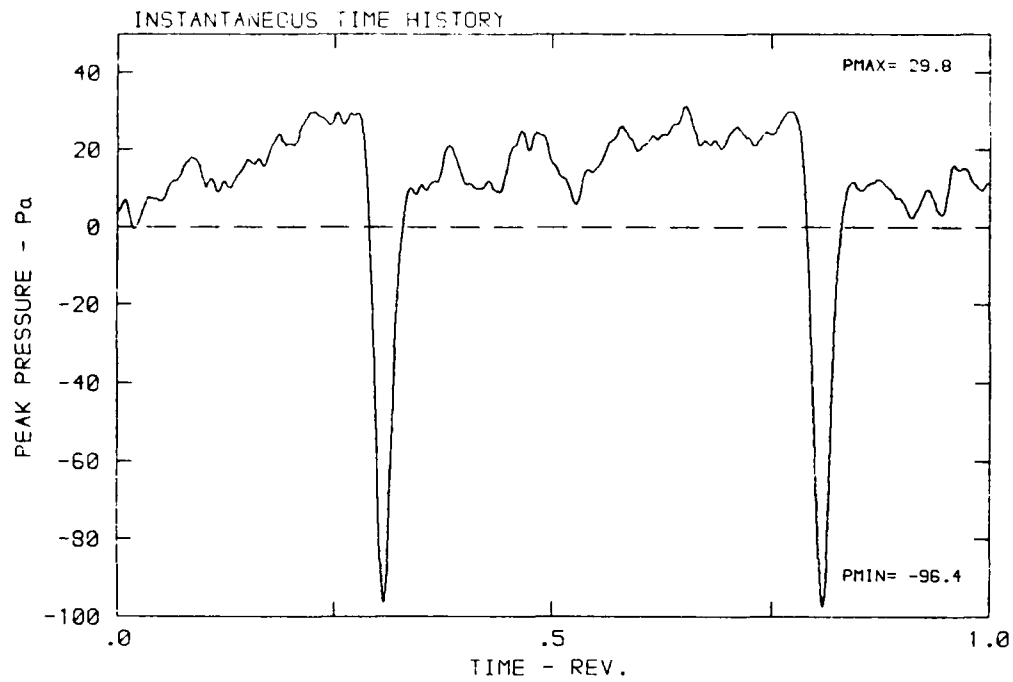
DATA POINT: LN-3 RUN: 156 MP: 2

β : 19.9° MH: .8727 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 288.9 K



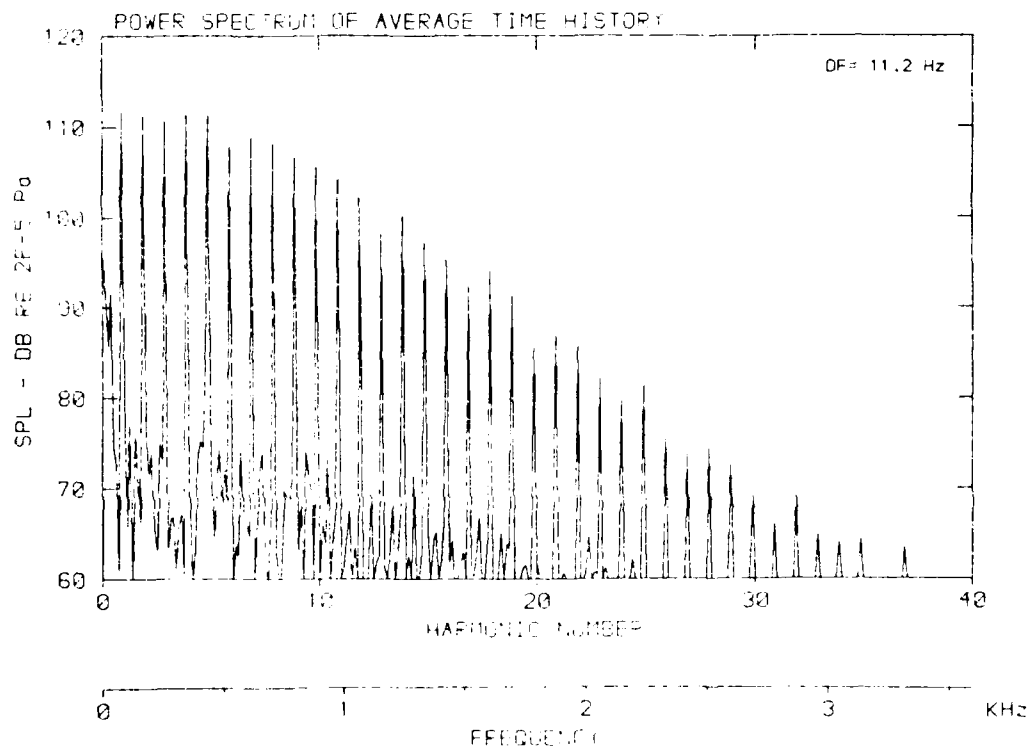
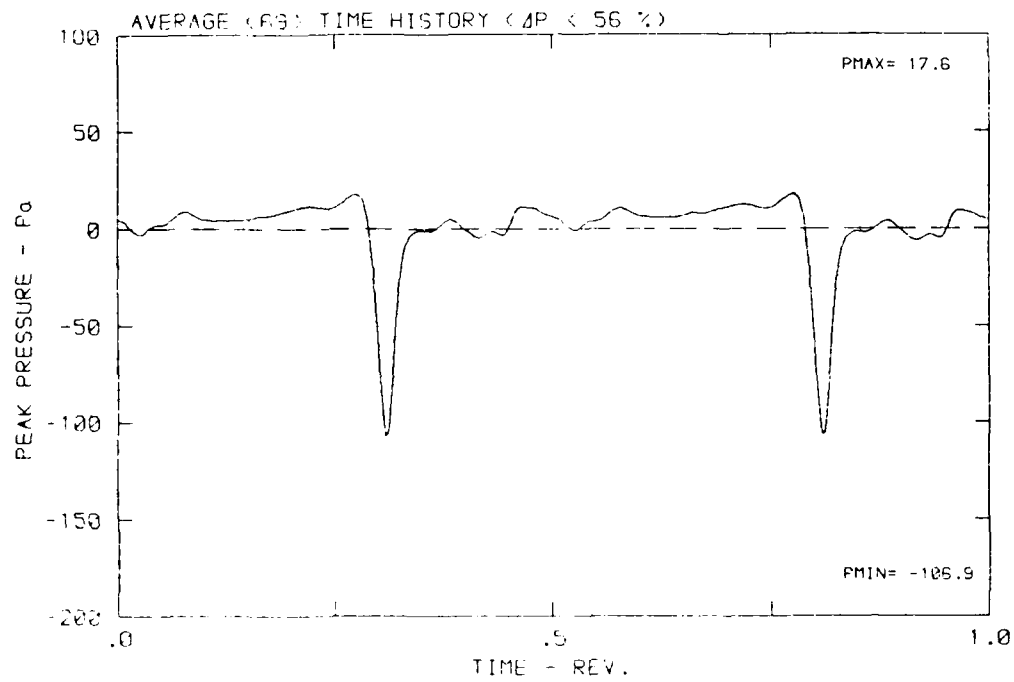
DATA POINT: LN-3 RUN: 156 MF: 3

β : 19.9° MH: .8727 n: 2700 rpm vzu: .268 ϕ : -3.9° T: 286.9 K



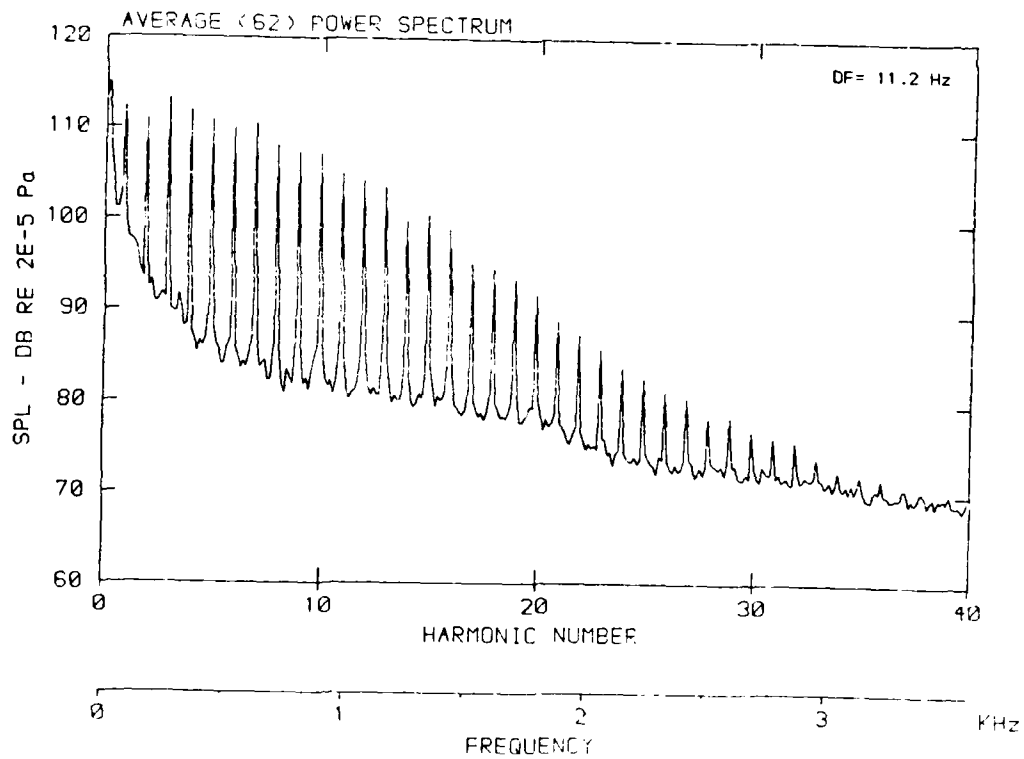
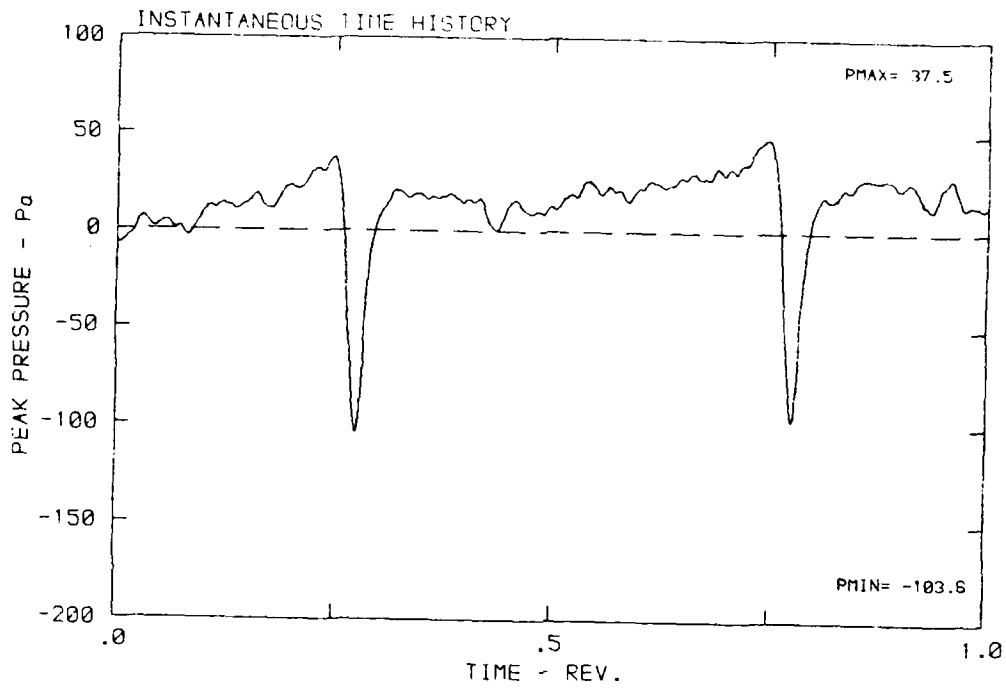
DATA POINT: LN-3 RUN: 158 MP: 3

β : 19.9° MH: .8727 n: 2700 rpm ν : .268 ϕ : -3.8° T: 288.9 K



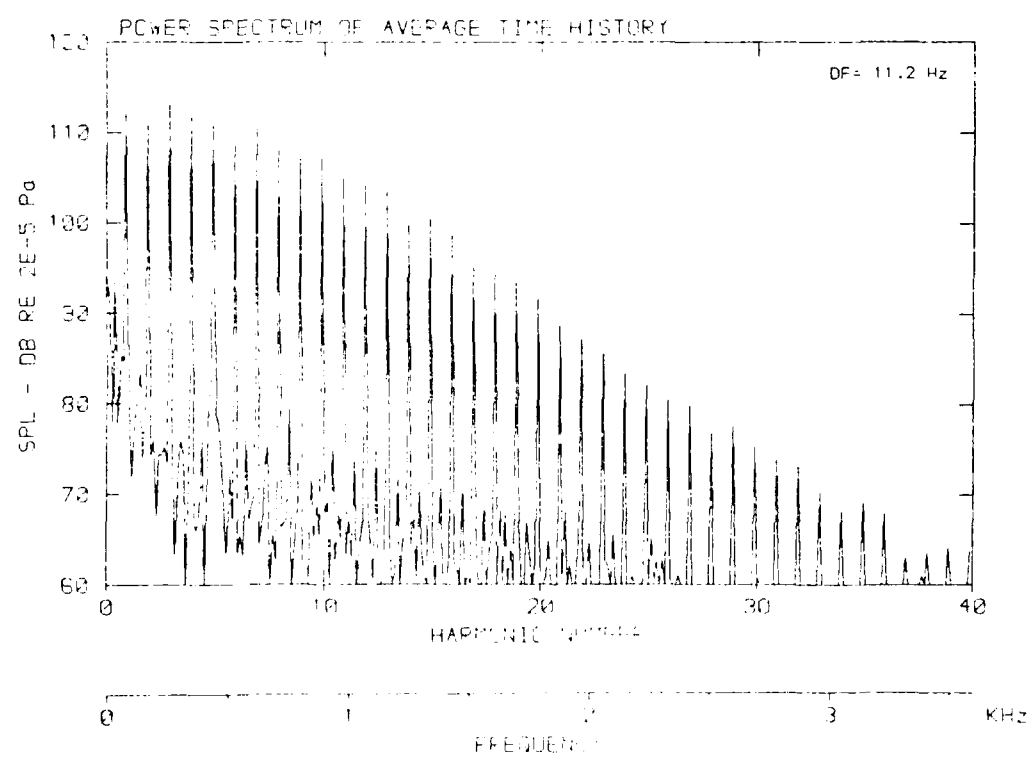
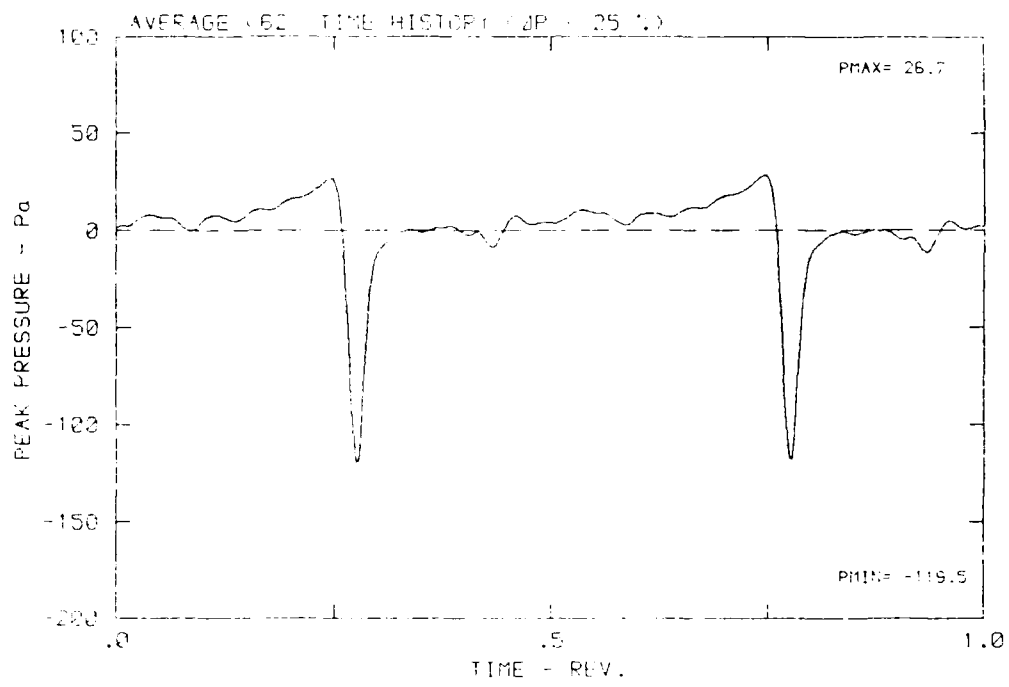
DATA POINT: LN-3 RUN: 155 MP: 1

β : 19.9° MH: .8727 n: 2700 rpm v/u : .265 ϕ : -3.2° T: 288.3 K



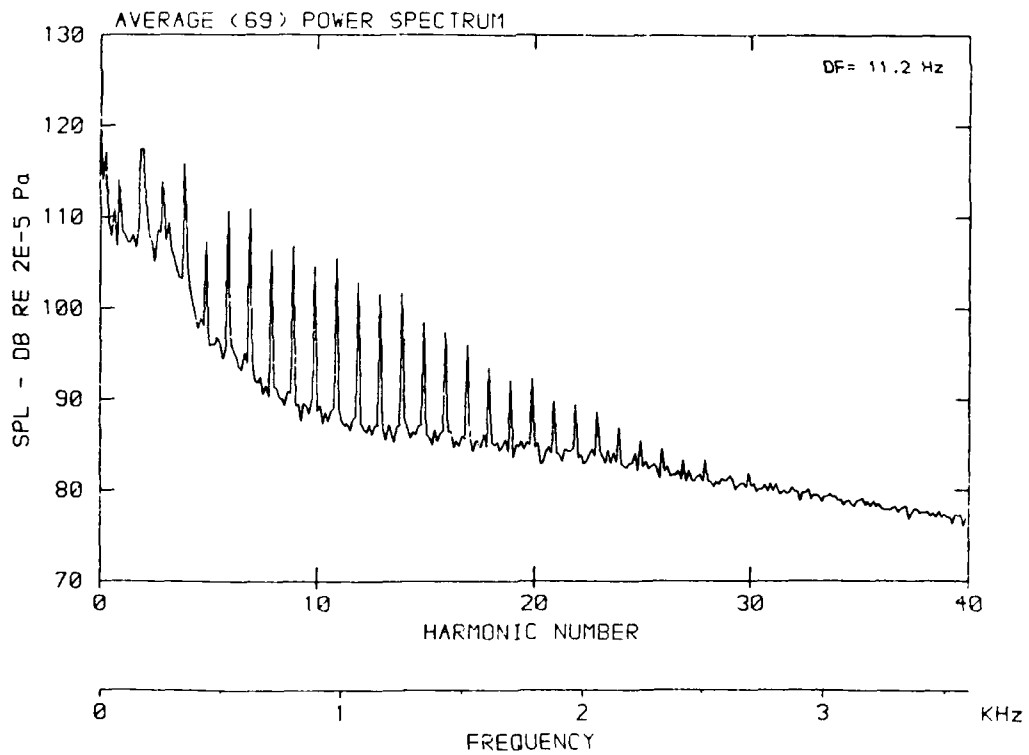
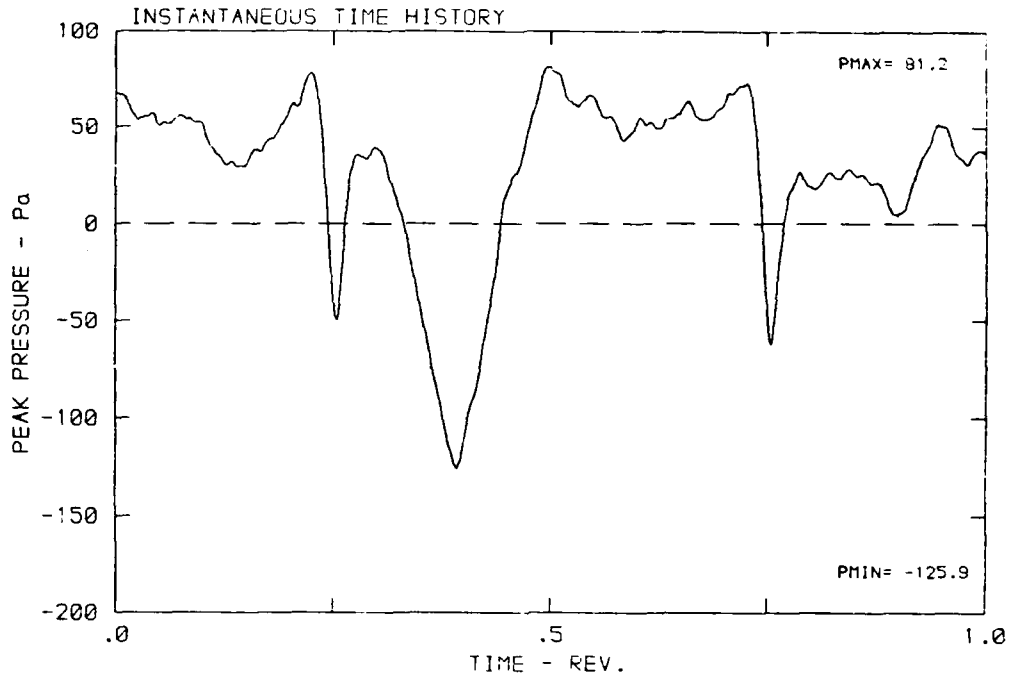
DATA POINT: LN-3 RUN: 15E NF: 4

β : 19.9° MH: .8707 n: 2700 rpm vru: .268 ϕ : -3.6° T: 258.9 s



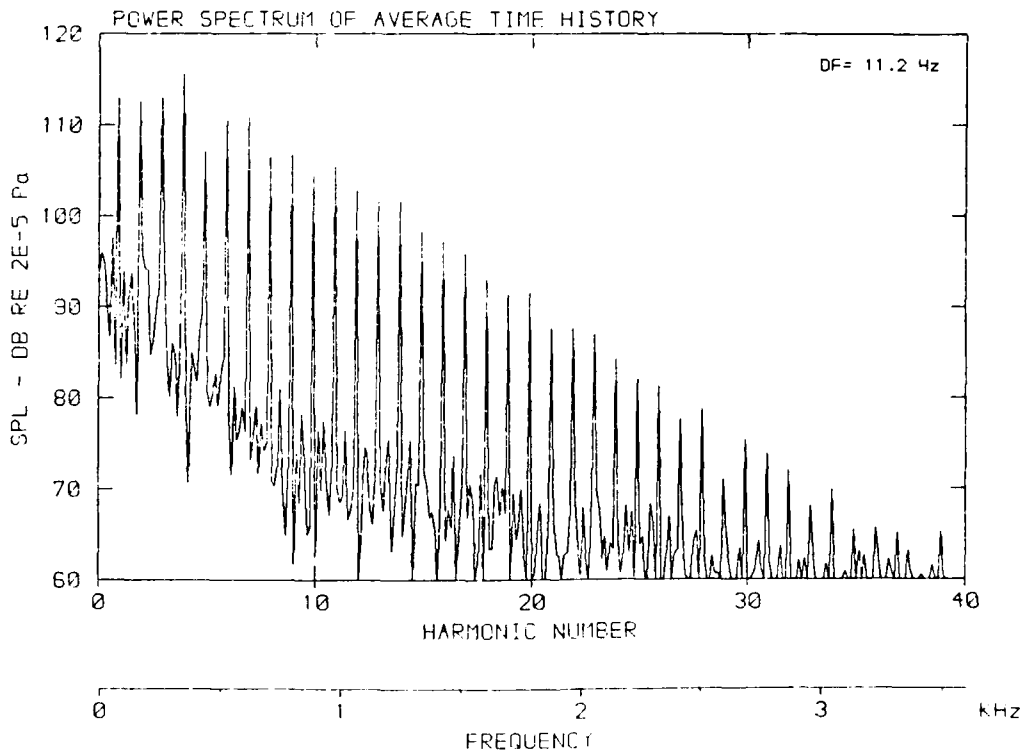
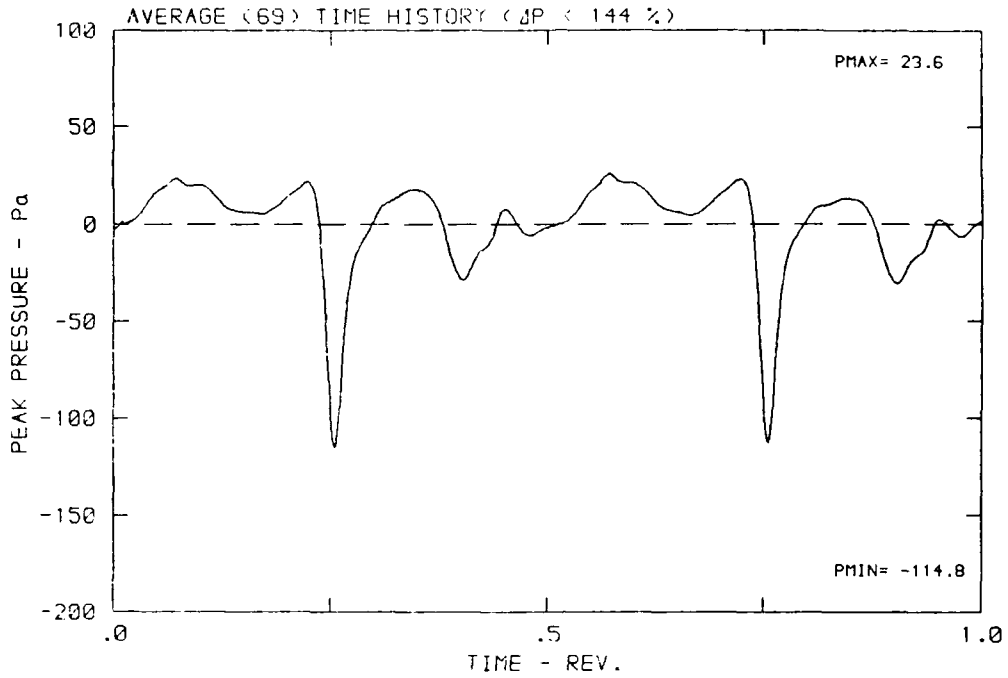
DATA POINT: LN-3 RUN: 156 MP: E

β : 19.9° MH: .8727 n: 2700 rpm v/u: .268 ψ : -3.8° T: 288.9 K



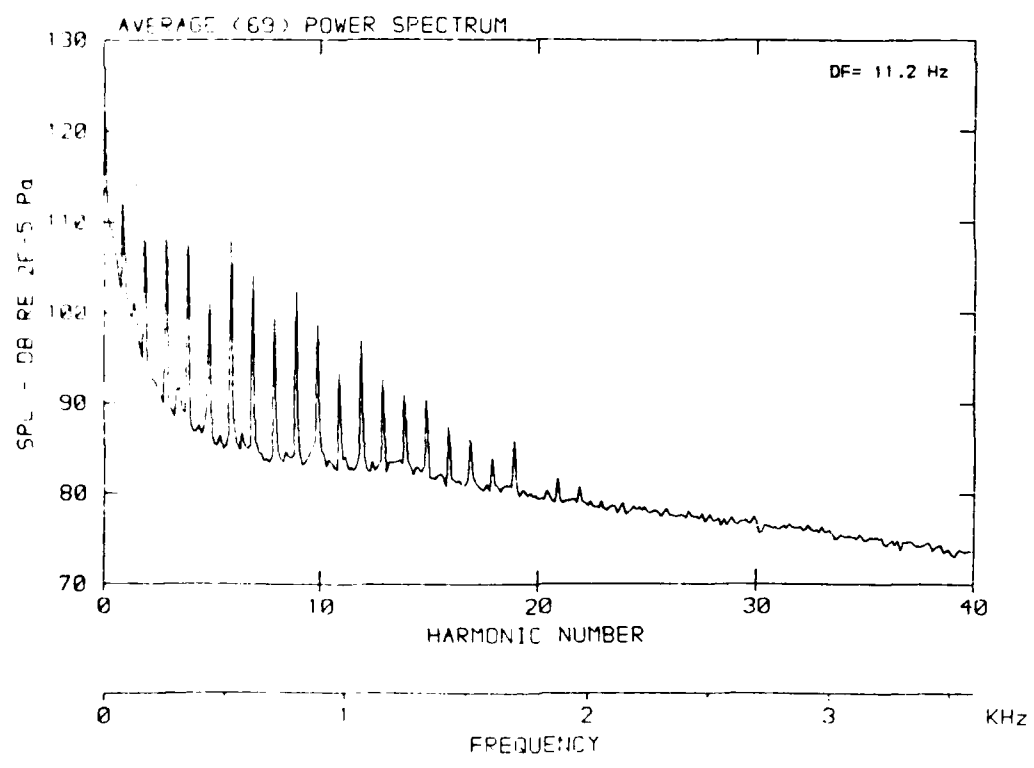
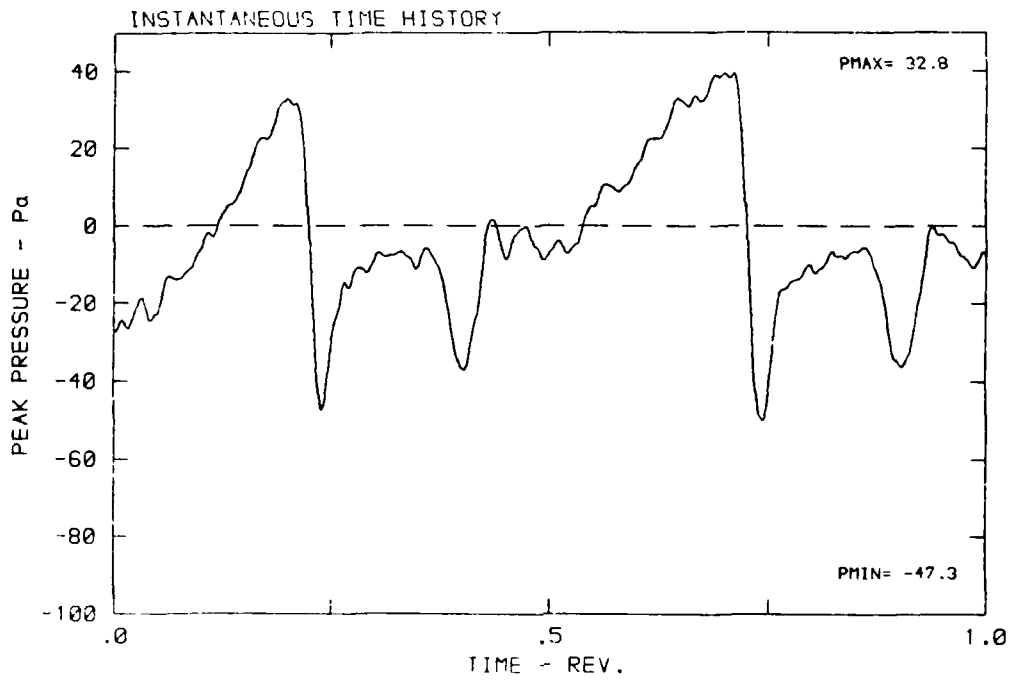
DATA POINT: LN-3 RUN: 156 MP: 5

β : 19.9° MH: .8727 n: 2700 rpm v_{cu} : .268 ϕ : -3.8° T: 288.9 K



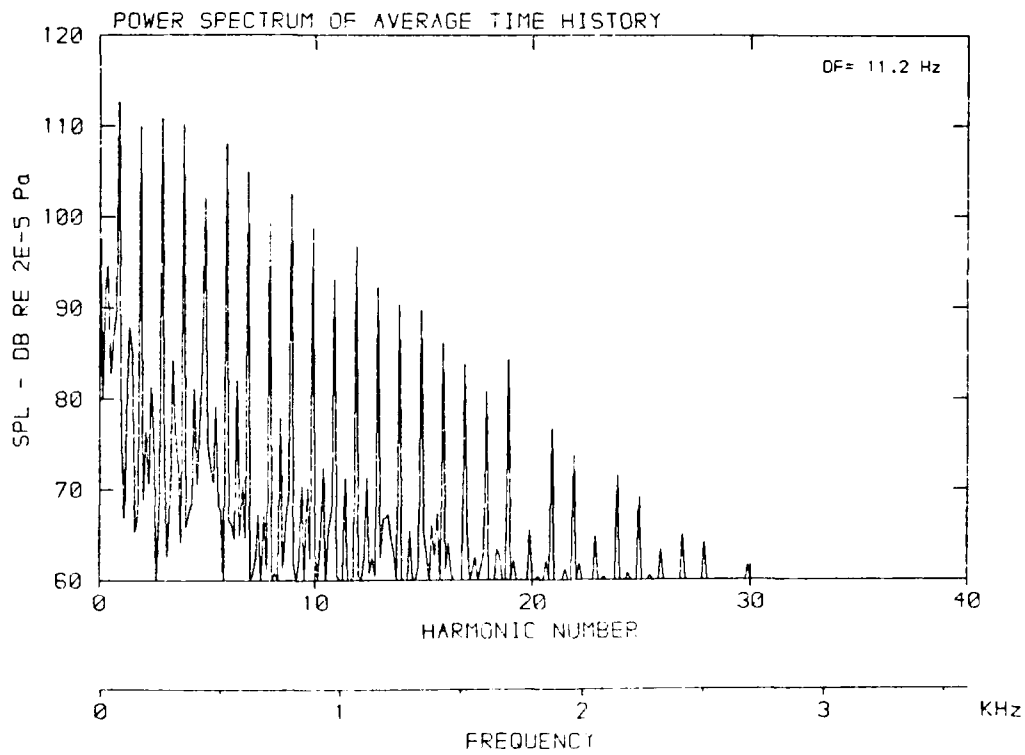
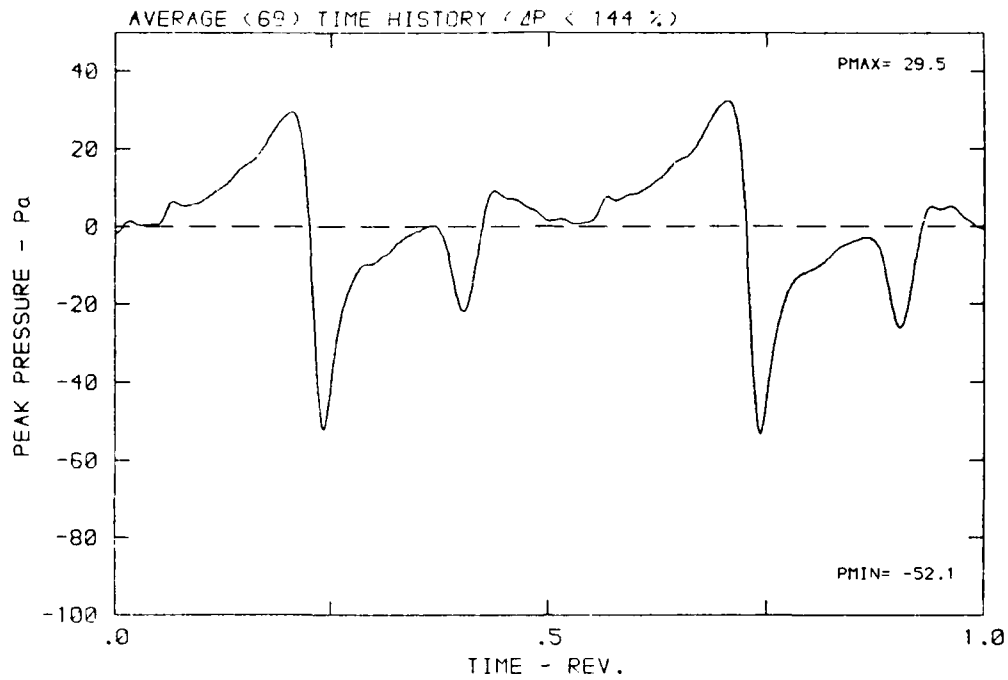
DATA POINT: LN-3 RUN: 156 MF: 6

β : 19.9° MH: .8727 n: 2700 rpm v/u : .268 ϕ : -3.8° T: 283.9 K



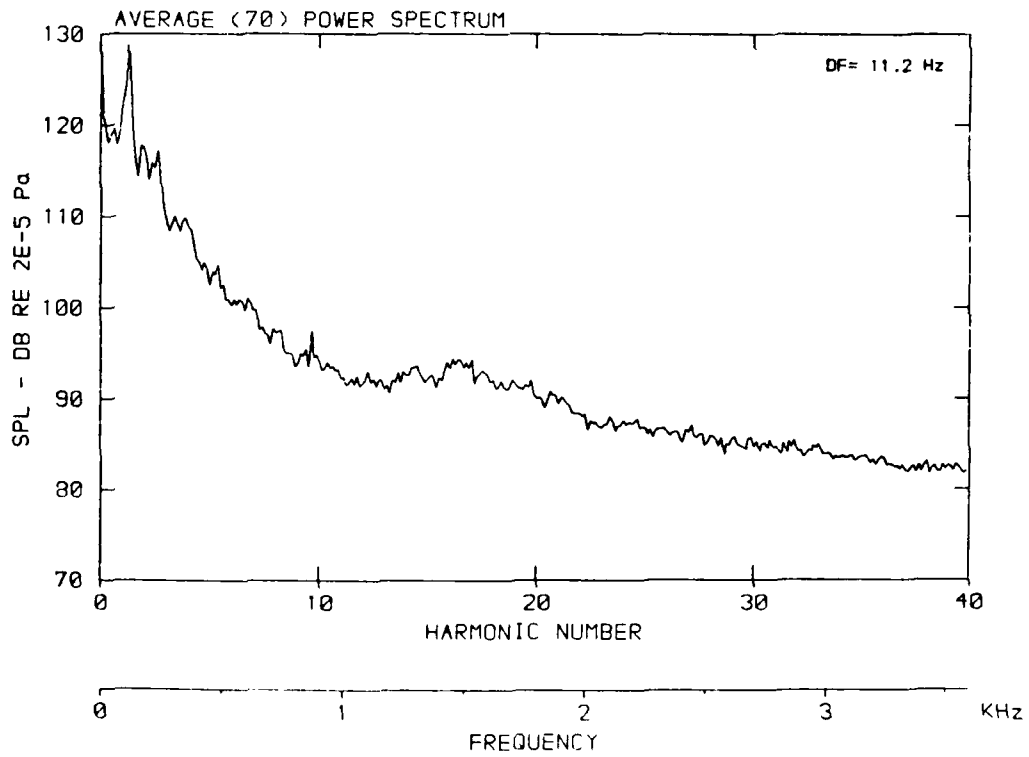
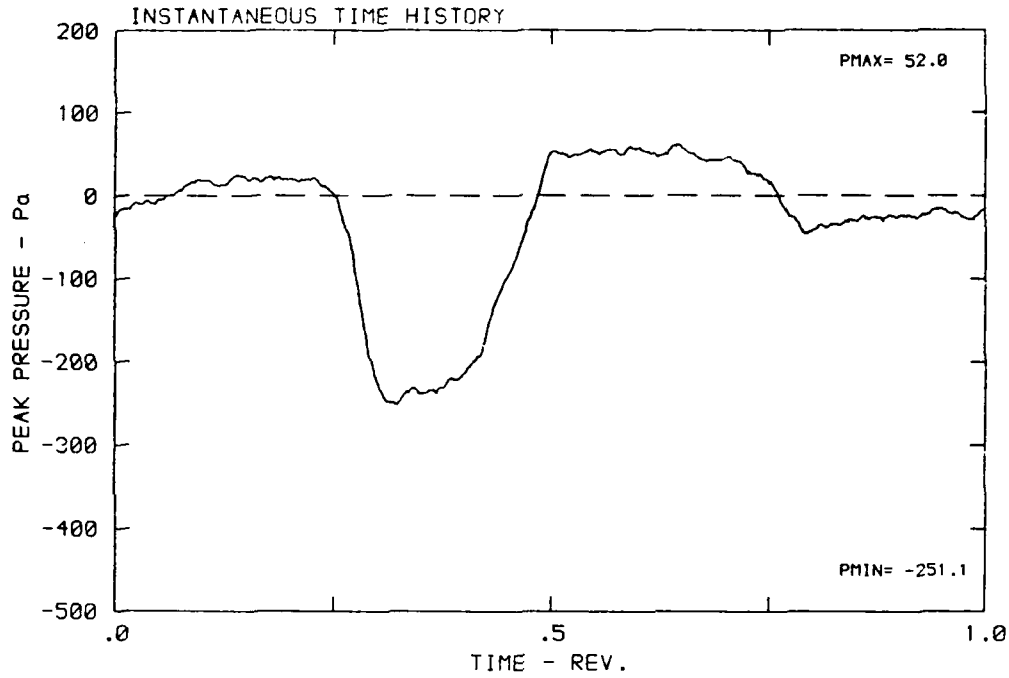
DATA POINT: LN-3 RUN: 156 MP: 6

β : 19.9° MH: .8727 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 288.9 K



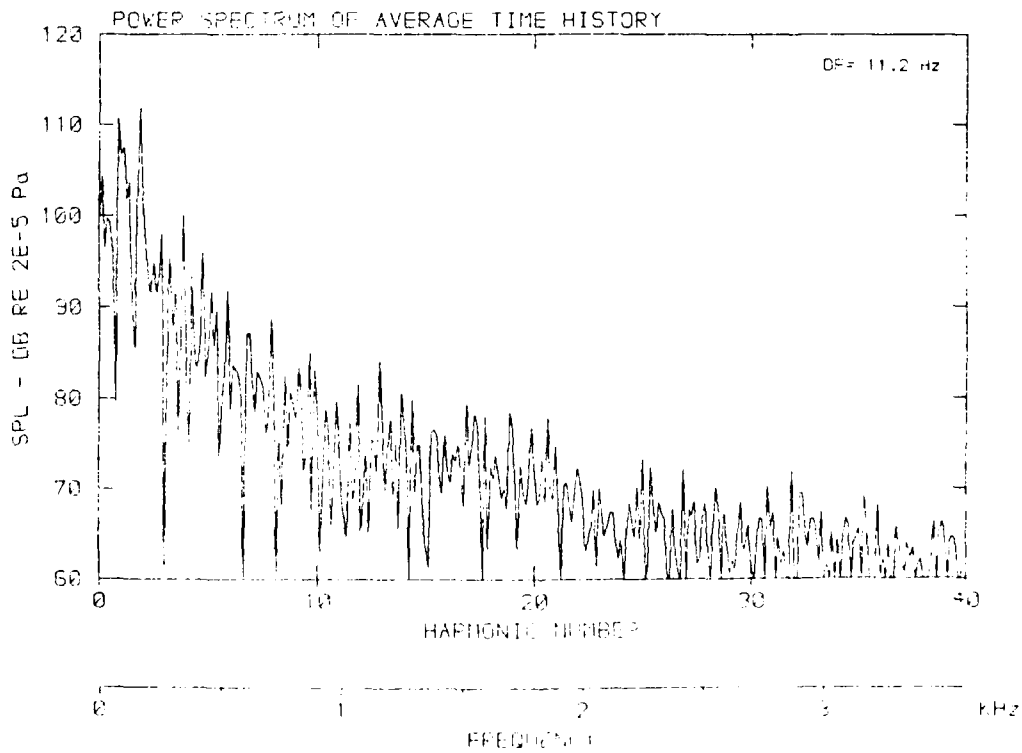
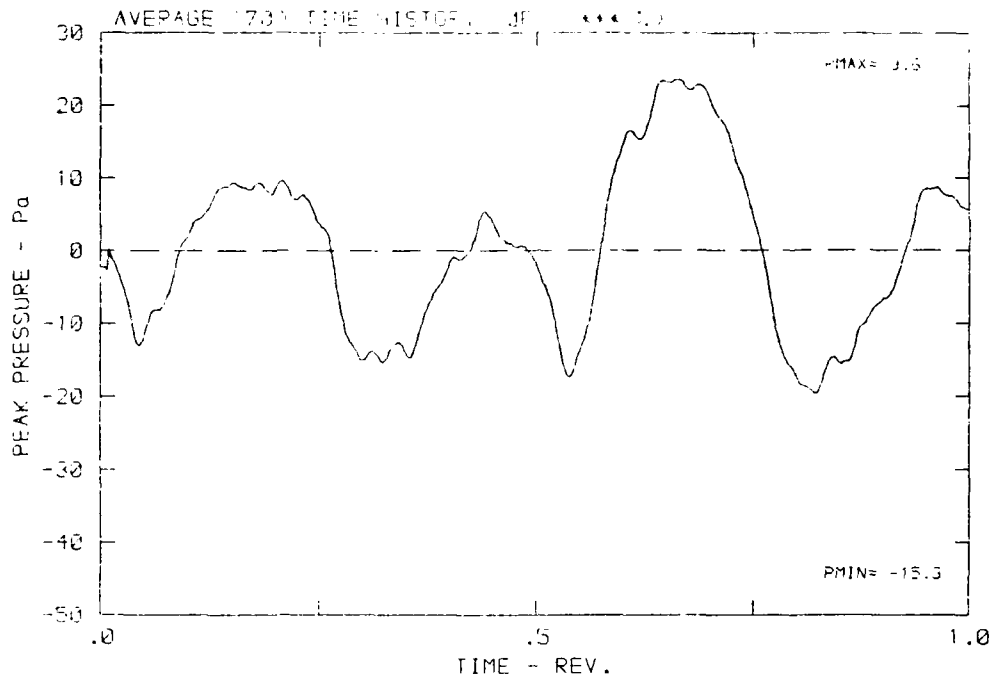
DATA POINT: LN-3 RUN: 156 MP: 7

β : 19.9° MH: .9727 n: 2700 rpm v/u : .268 ϕ : -3.8° T: 288.9 K



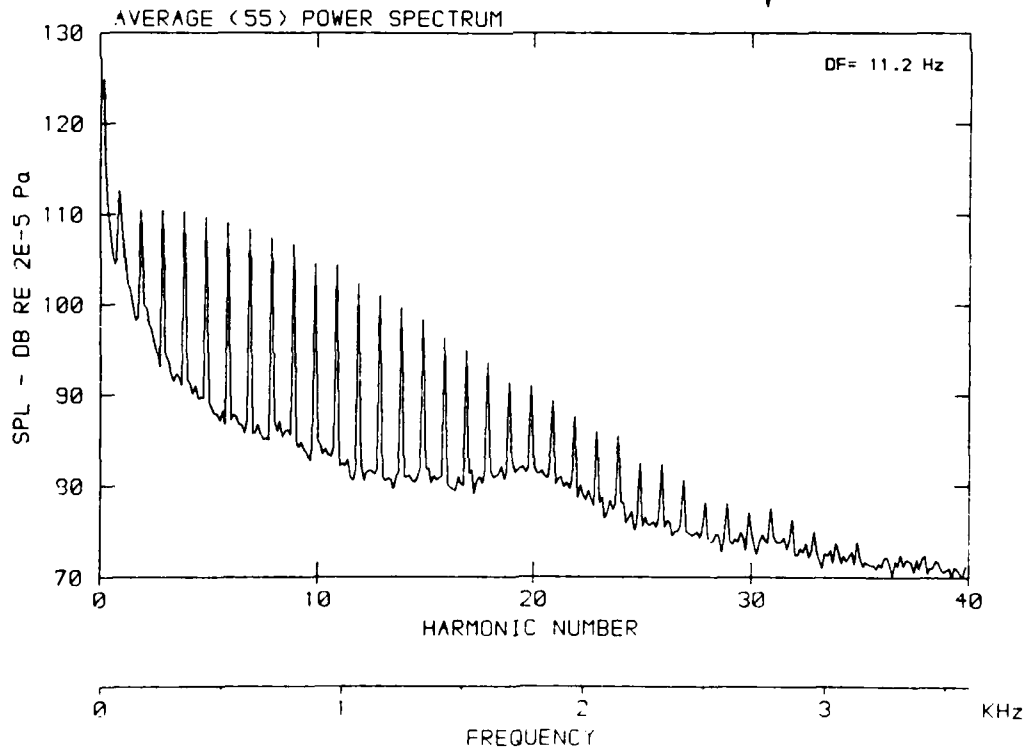
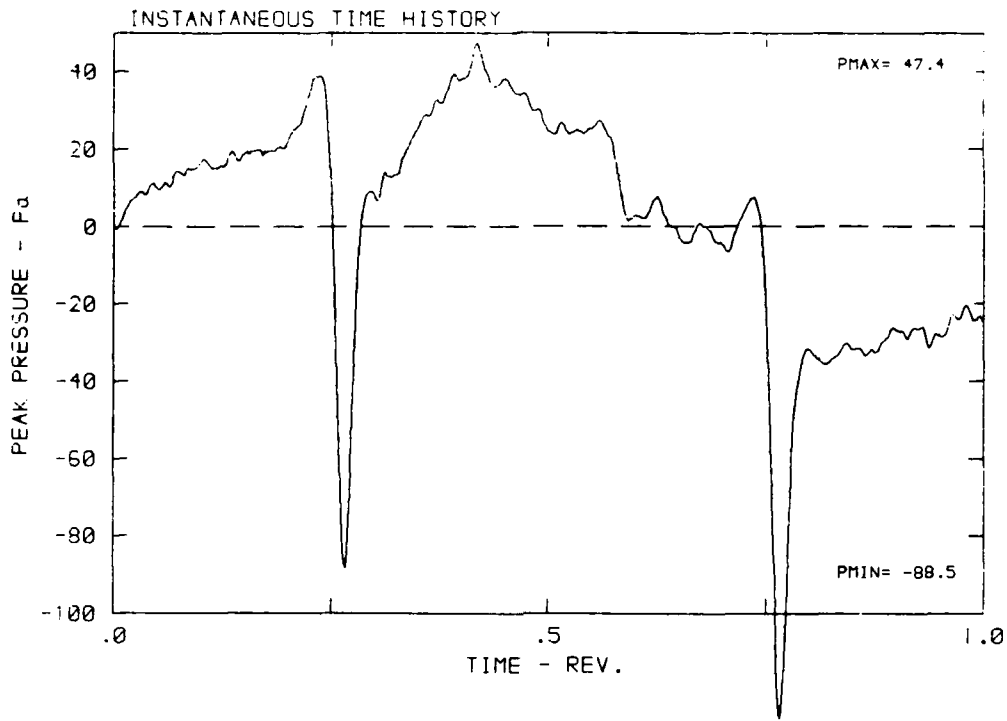
DATA POINTS: 1000

β : 19.9° MH: 1.9717 R: 2700 RPM S: 1.296 J: -3.6° T: 283.3



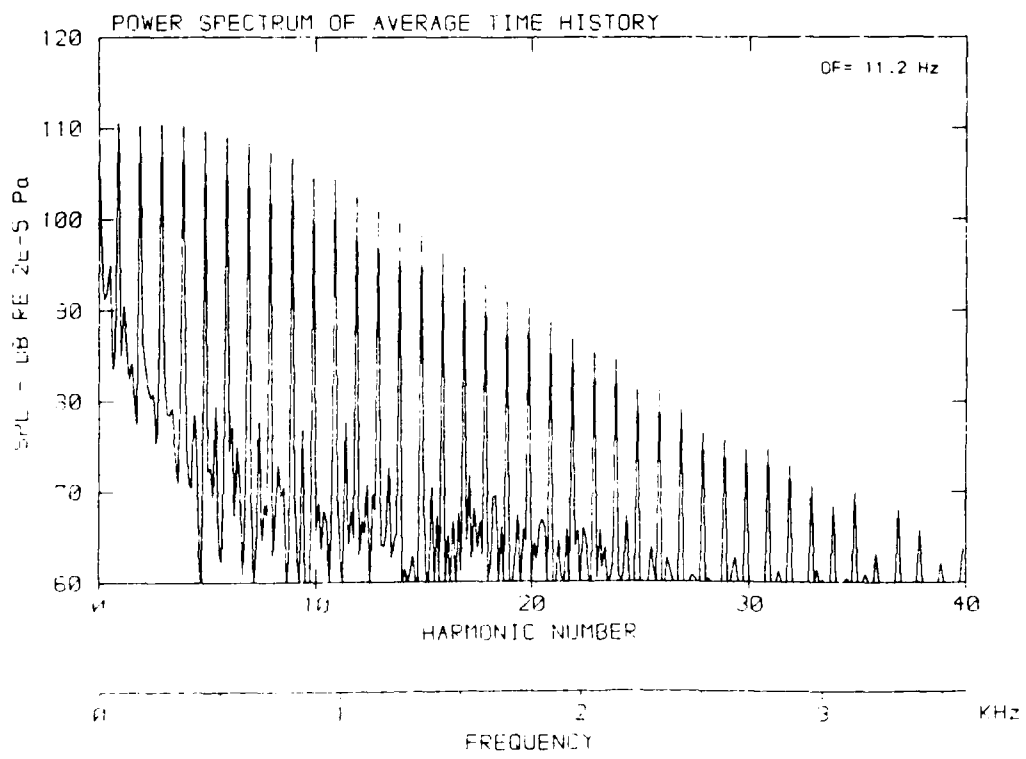
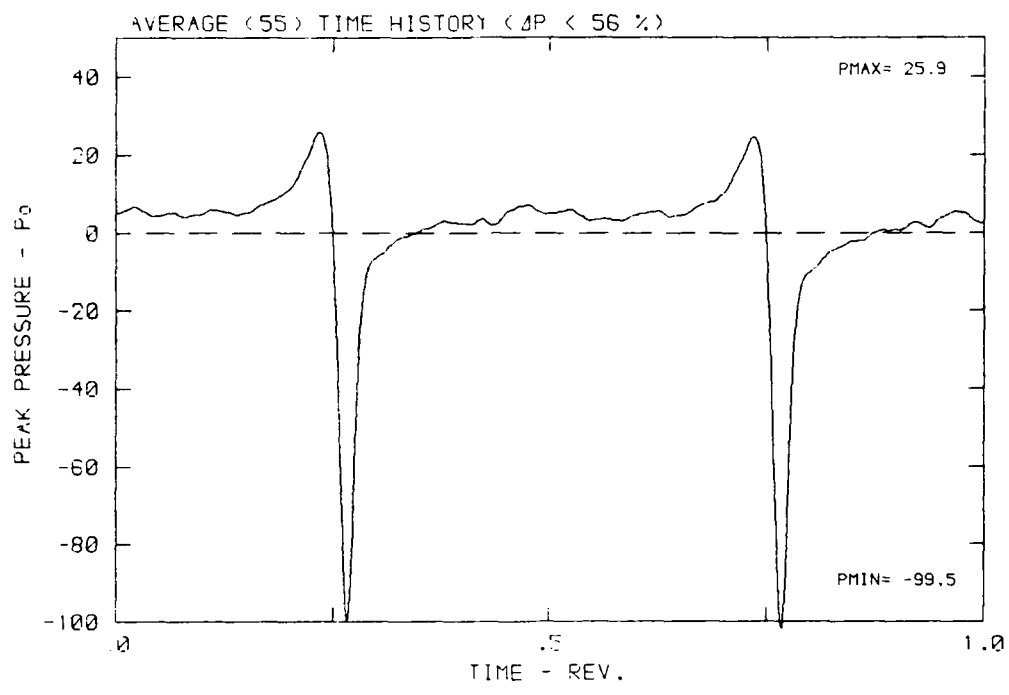
DATA POINT: LN-3 PUN: 156 MP: 3

β : 19.9° MH: .8727 n: 2700 rpm ν : .266 α : -3.3° τ : 288.3 s



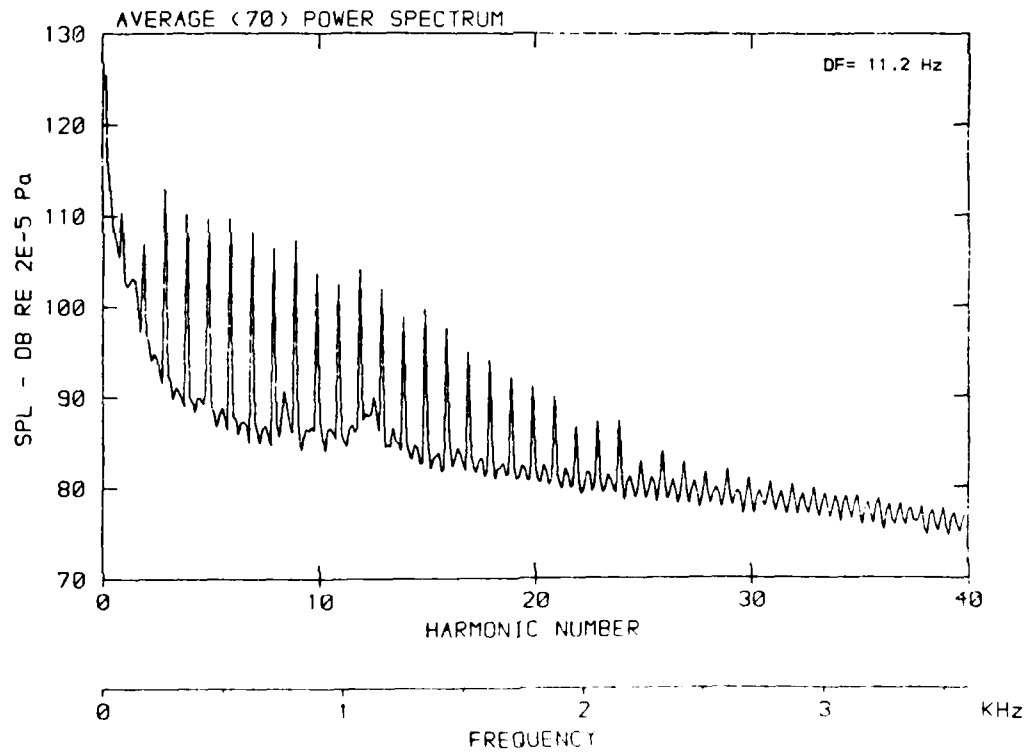
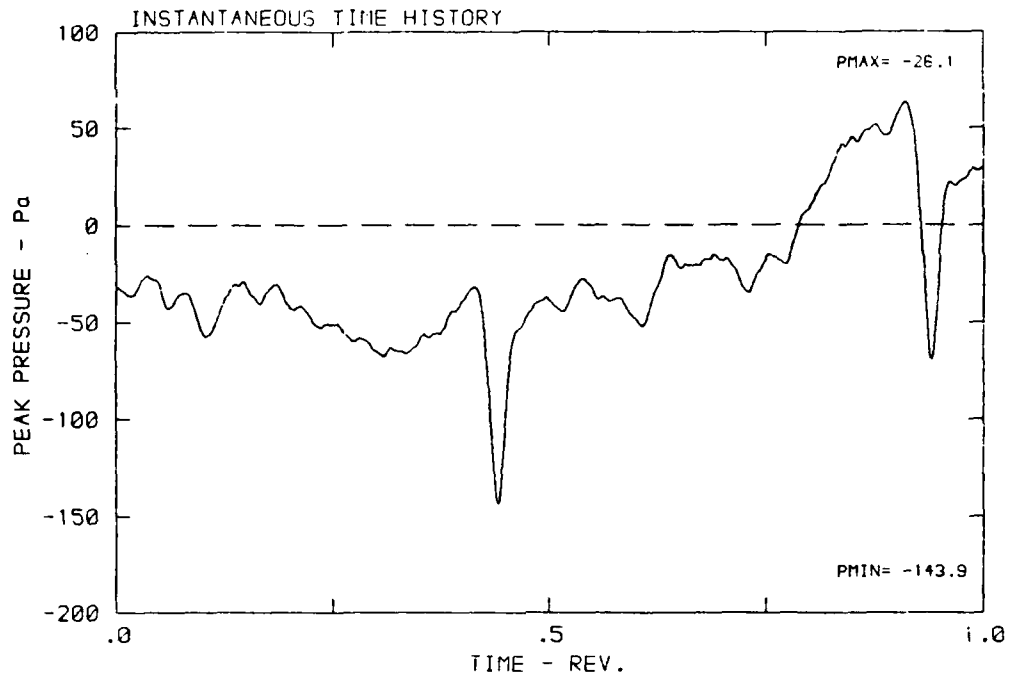
DATA POINT: LN-3 RUN: 156 MP: 8

β : 19.9° MH: .8727 n: 2700 rpm v/u: .268 ϕ : -3.8° T: 288.9 K



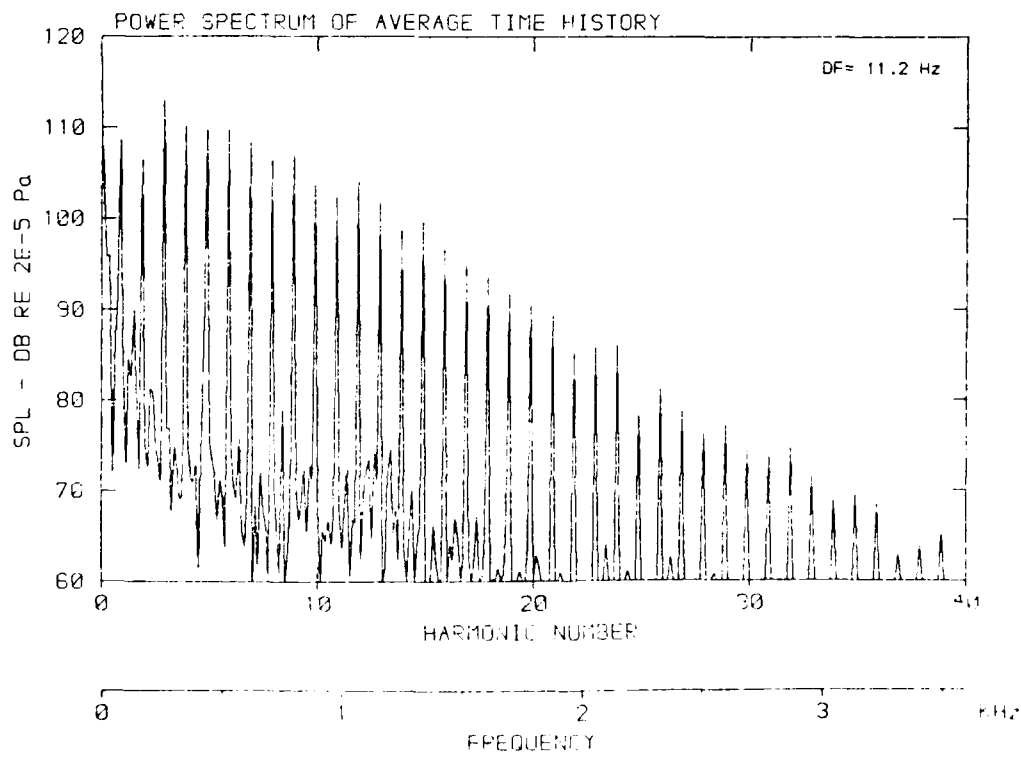
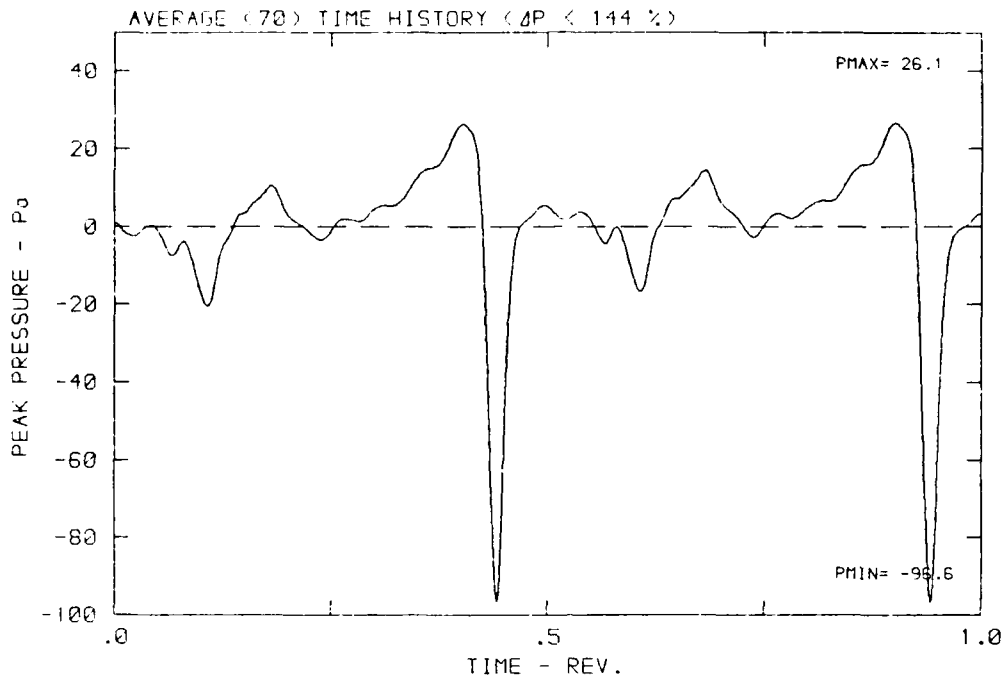
DATA POINT: LN-3 RUN: 156 MP: 9

β : 19.9° MH: .8727 n: 2700 rpm v/u : .268 ϕ : -3.3° T: 289.9 K



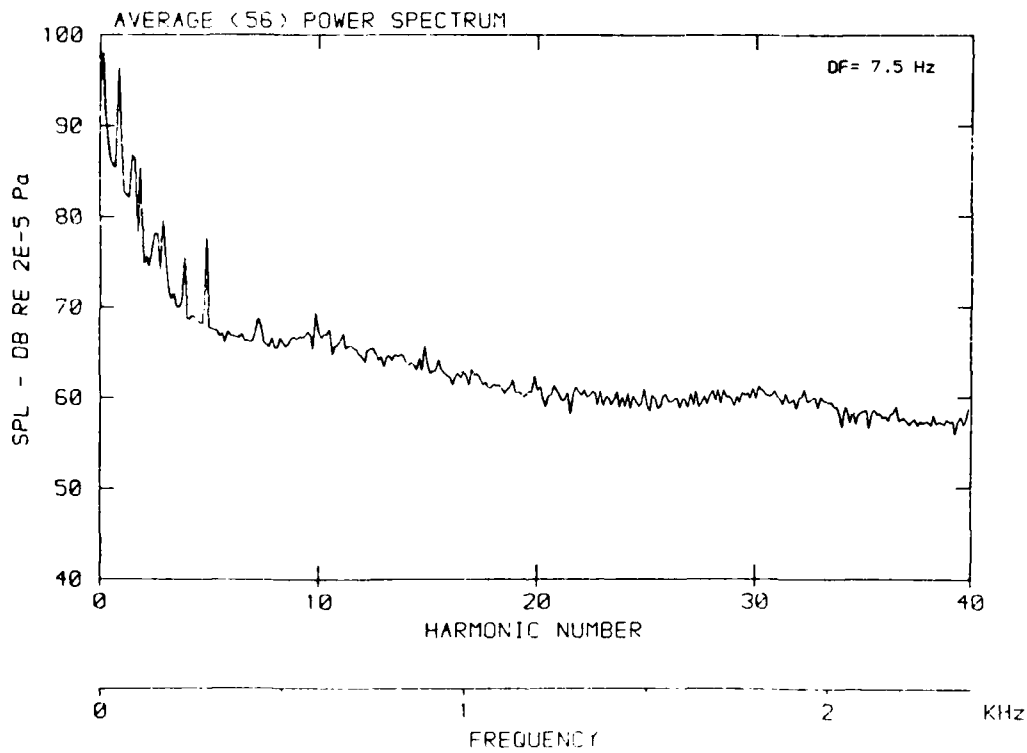
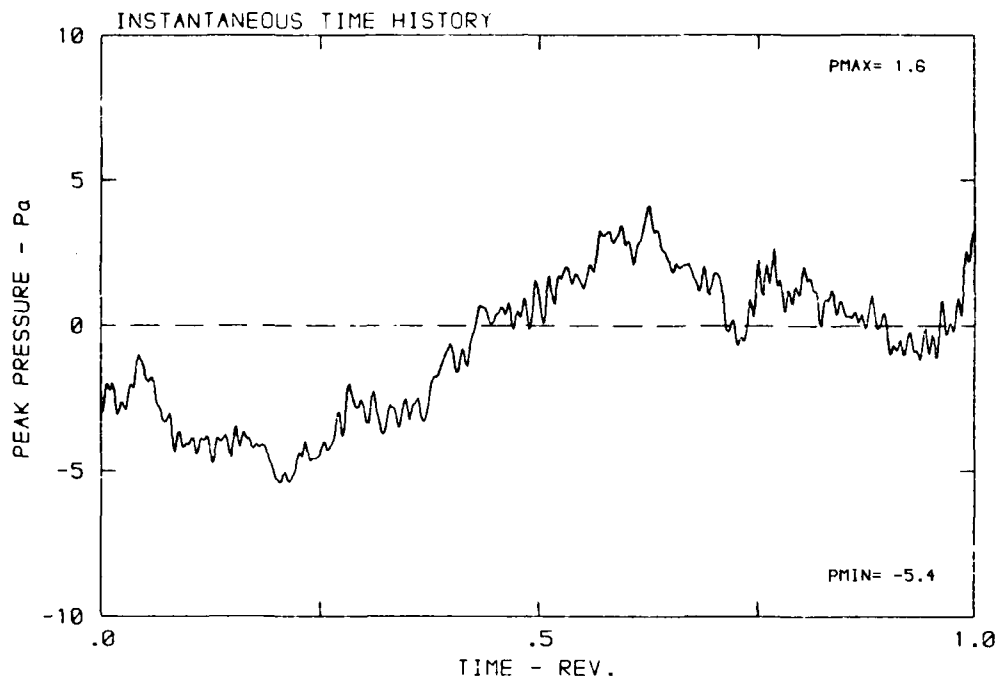
DATA POINT: LN-3 RUN: 156 MP: 9

β : 19.3° MH: .8727 n: 2700 rpm v/u : .268 ϕ : -3.8° T: 288.9 K



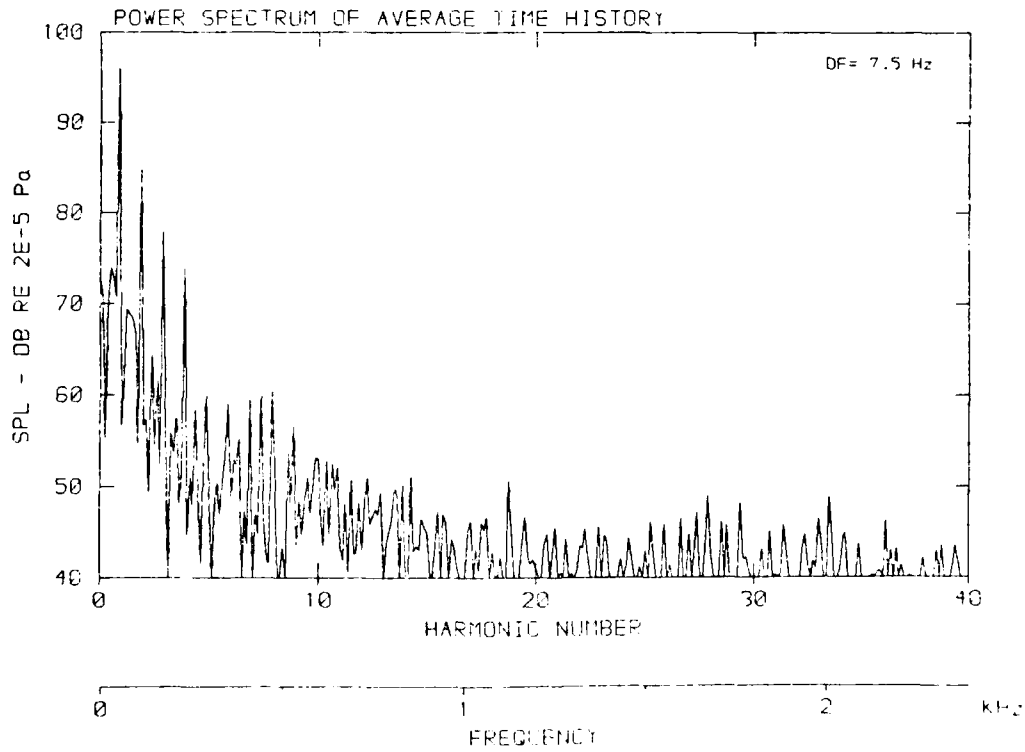
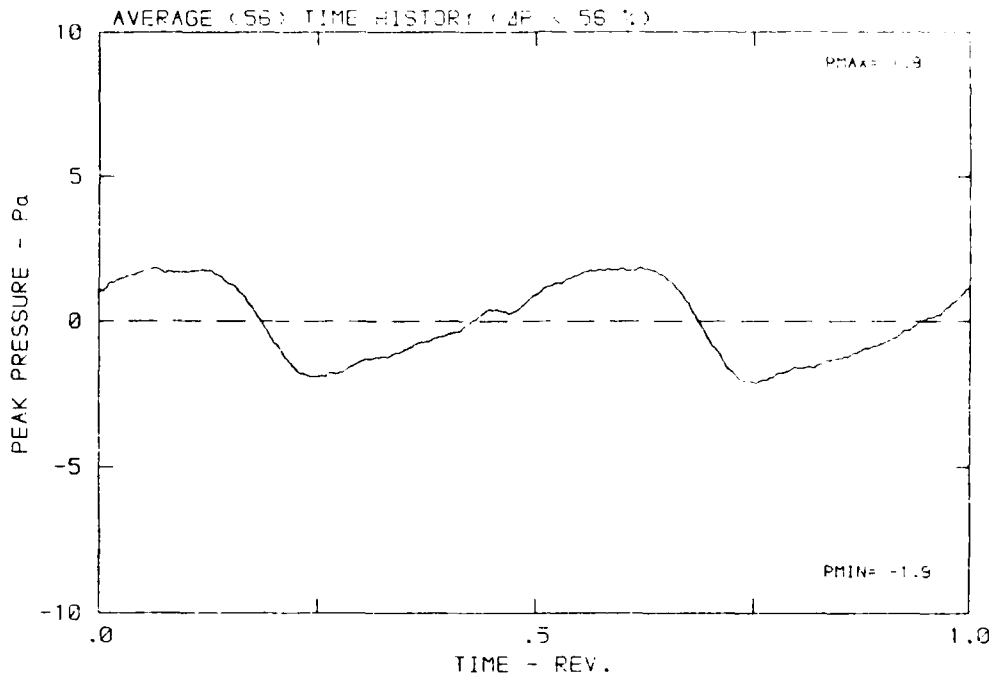
DATA POINT: LN-4 RUN: 157 MP: 1

β : 23.7° MH: .5345 n: 1800 rpm v/u: .268 ϕ : -3.8° T: 285.3 K



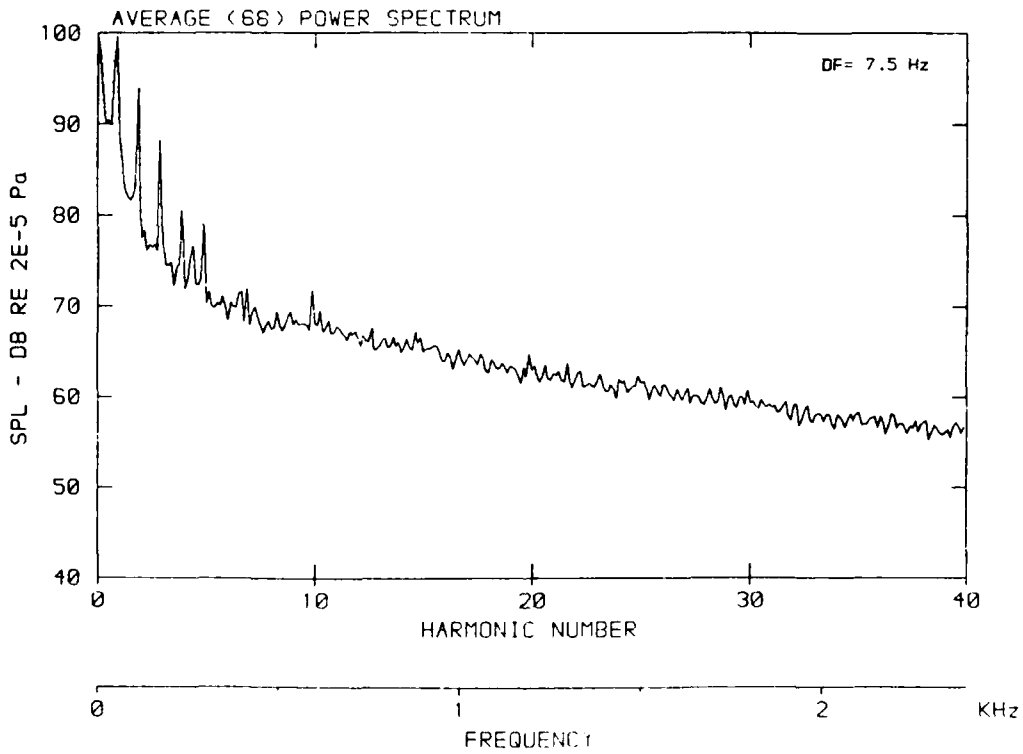
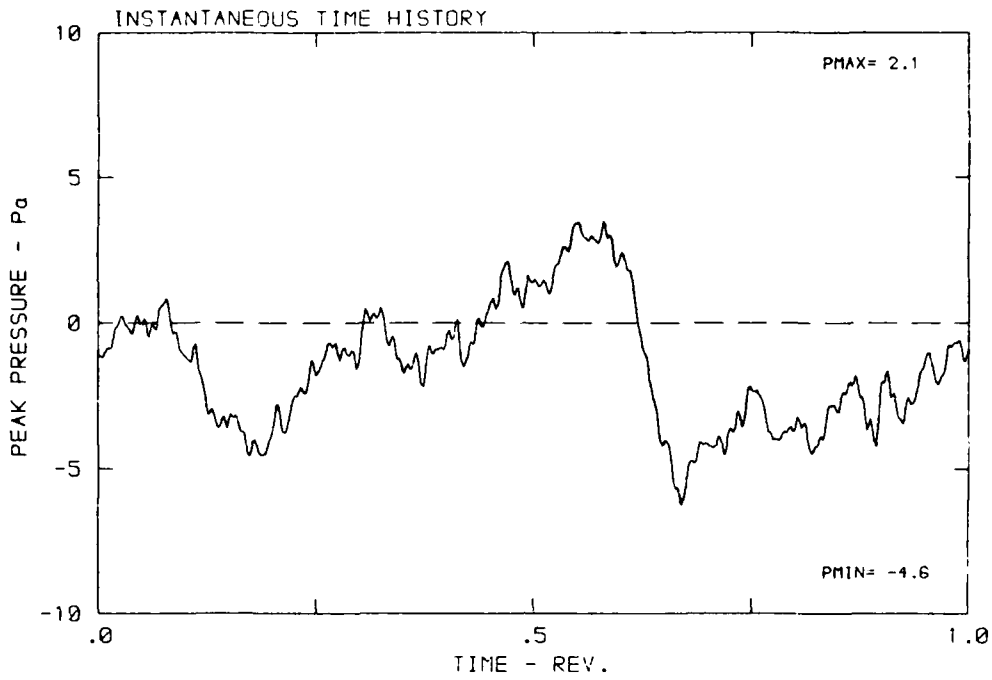
DATA POINT: LN-4 RUN: 157 MP: 1

β : 23.7° MH: .5845 n: 1800 rpm v/u: .268 ϕ : -3.8° I: 286.3 K



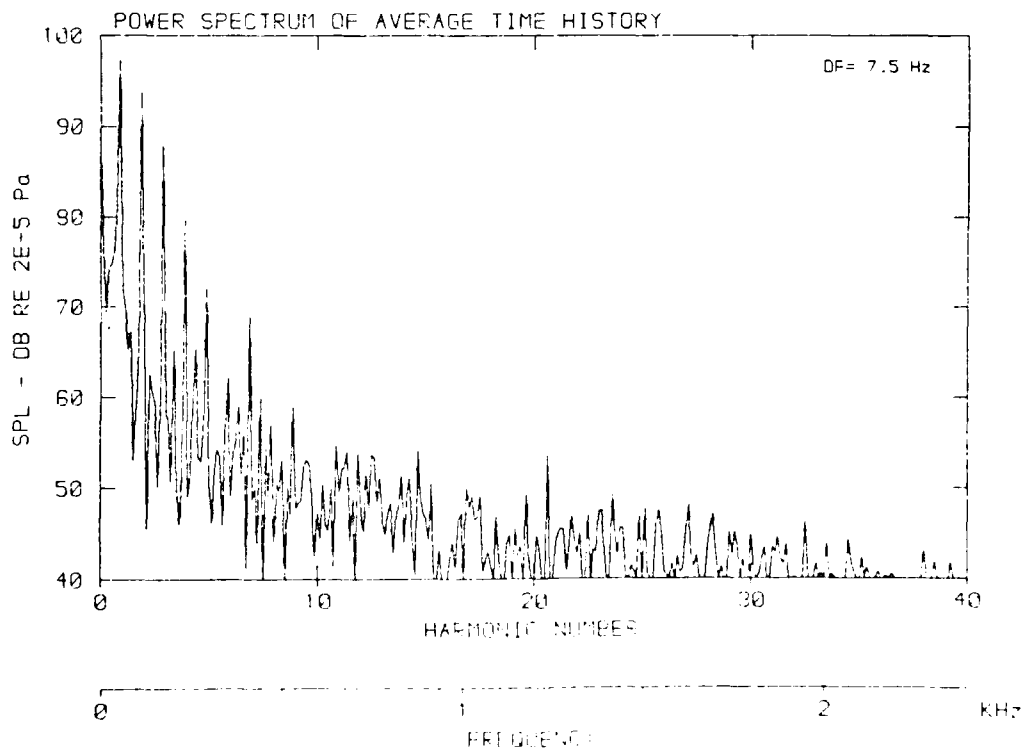
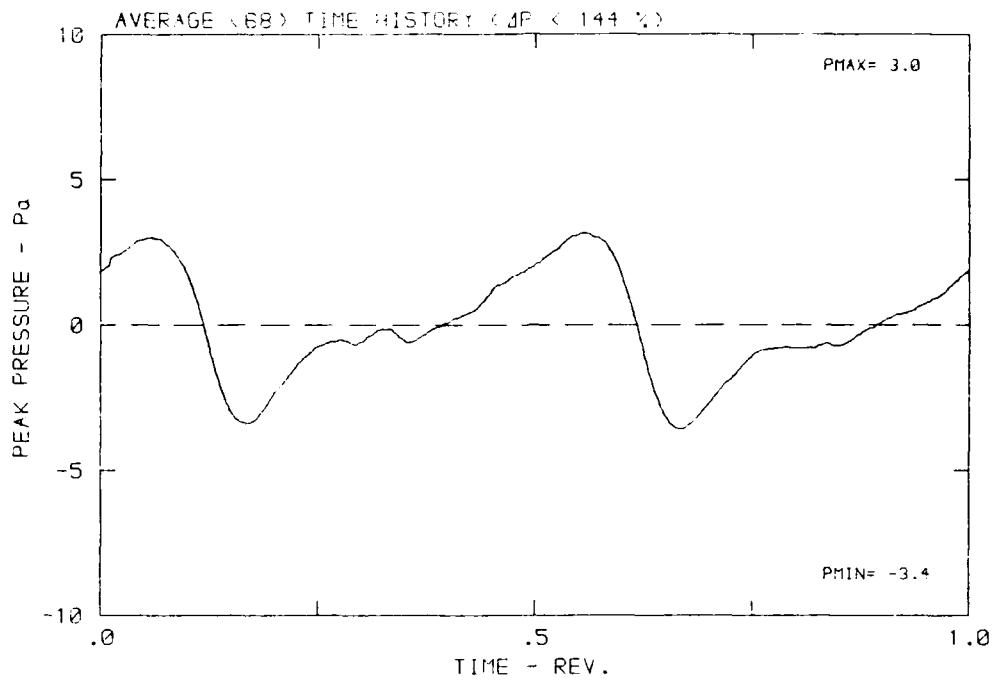
DATA POINT: LN-4 RUN: 157 MP: 2

β : 23.7° MH: .5945 n: 1800 rpm v/u: .268 ϕ : -3.9° T: 286.3 K



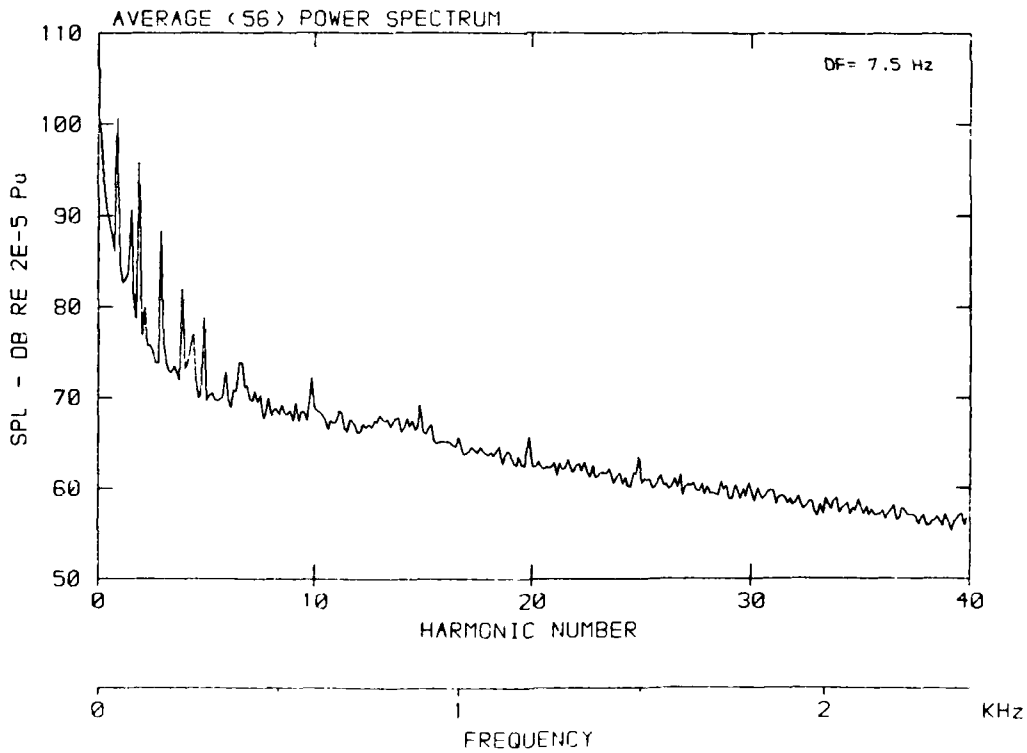
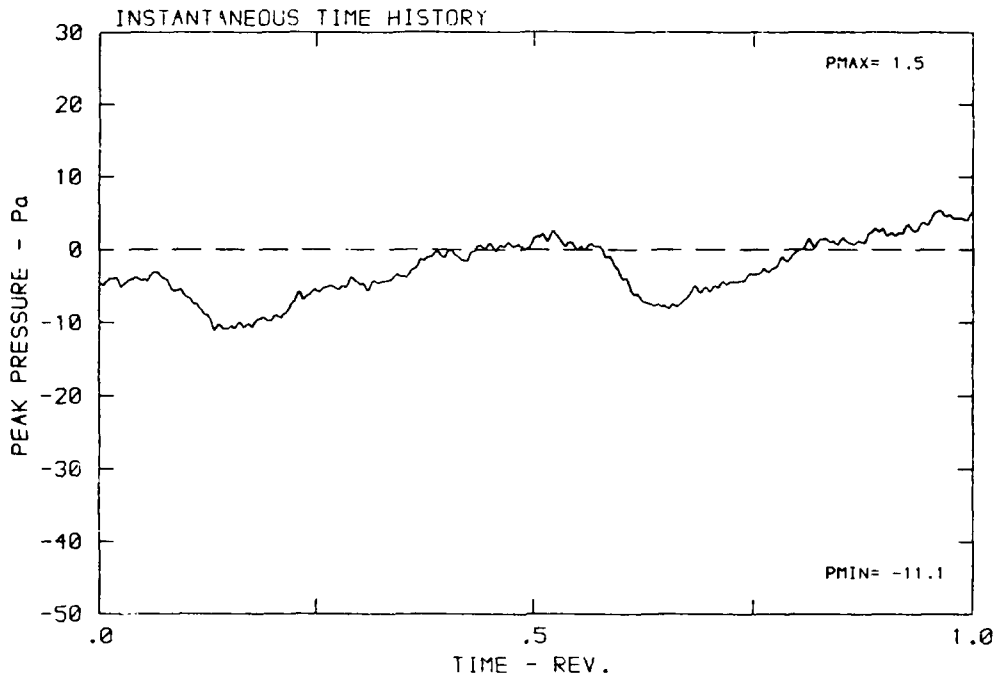
DATA POINT: LN-4 RUN: 157 MP: 2

β : 23.7° MH: .5845 n: 1800 rpm ν : .268 ψ : -3.6° T: 286.3 K



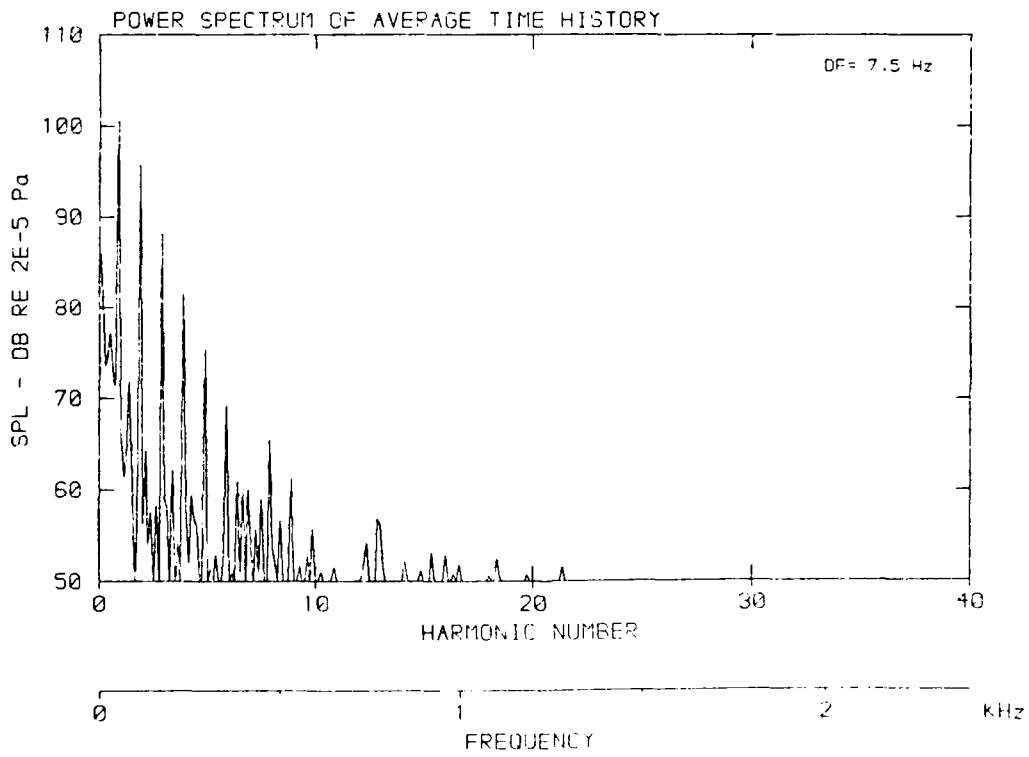
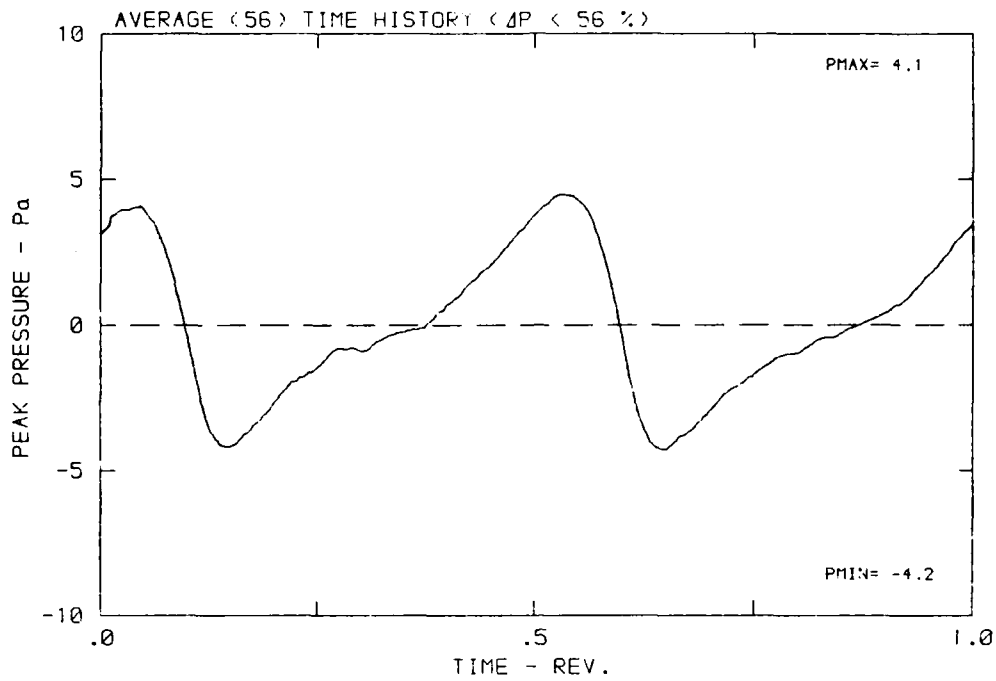
DATA POINT: LN-4 RUN: 157 MP: 3

β : 23.7° MH: .5845 n: 1800 rpm v/u : .266 ϕ : -3.8° T: 296.3 K



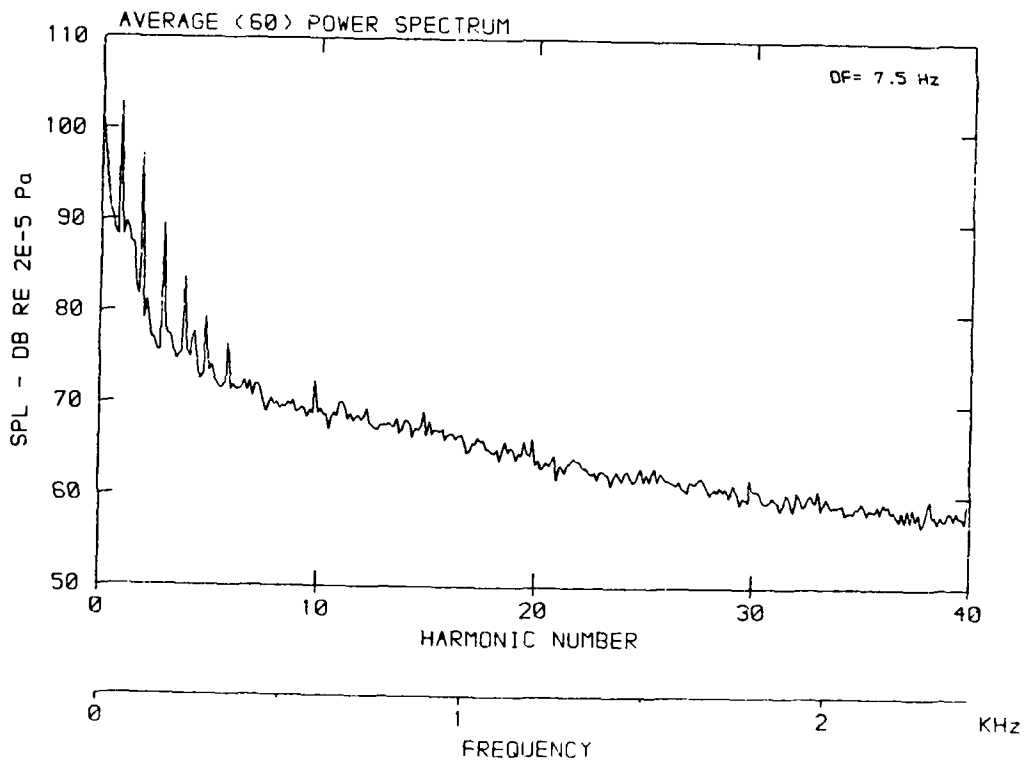
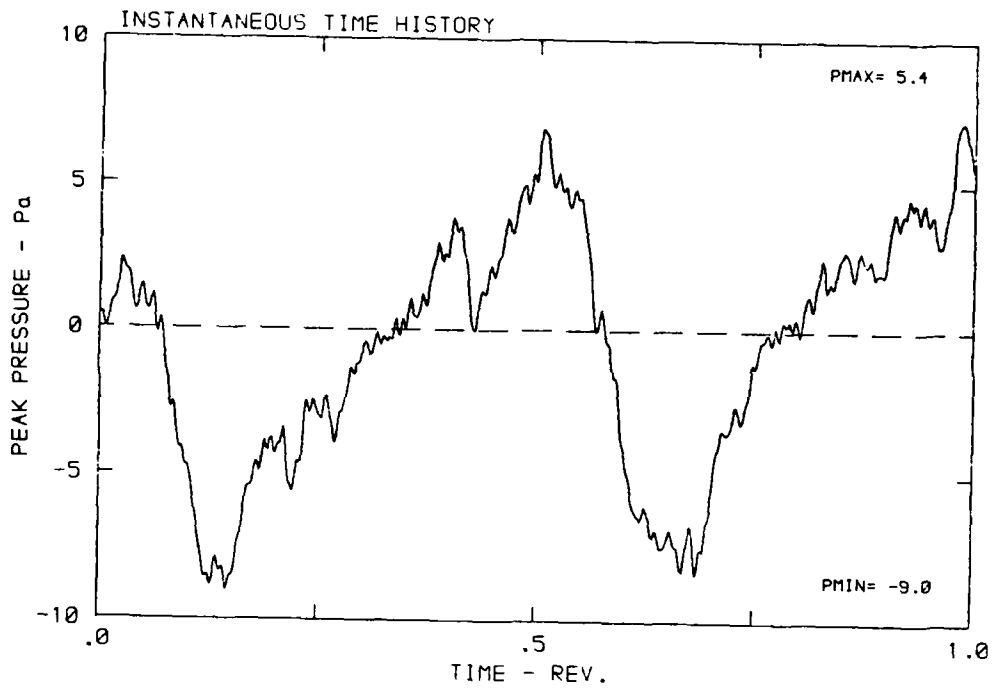
DATA POINT: LN-4 RUN: 157 MP: 3

β : 23.7° MH: .5845 n: 1800 rpm v/u : .268 ϕ : -3.8° T: 286.3 K



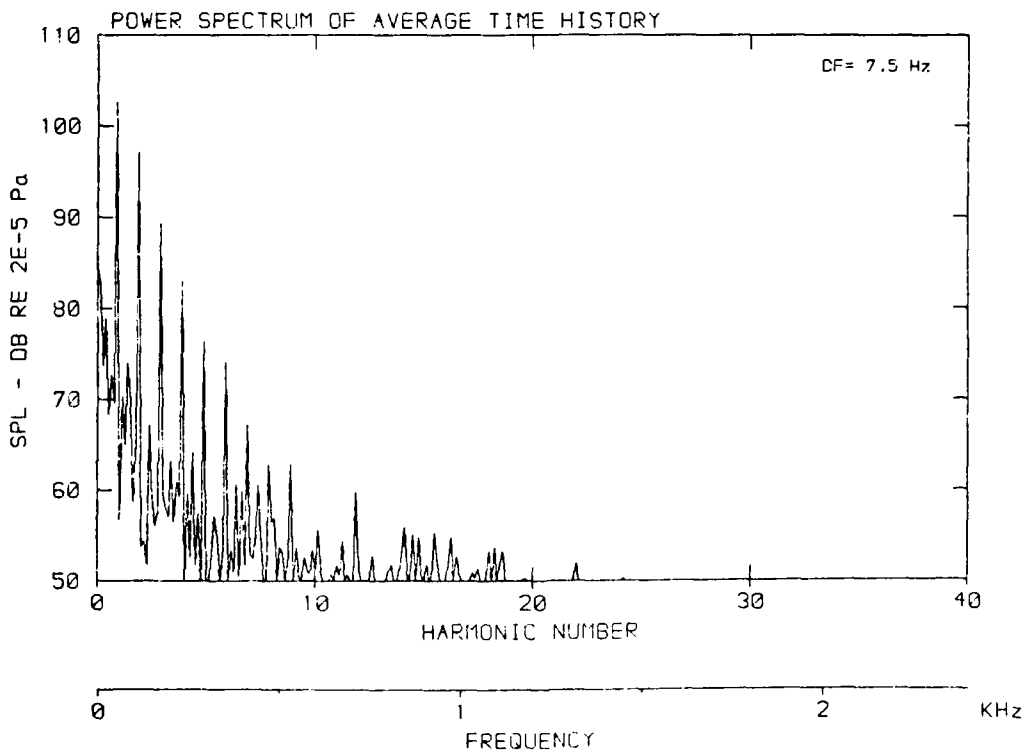
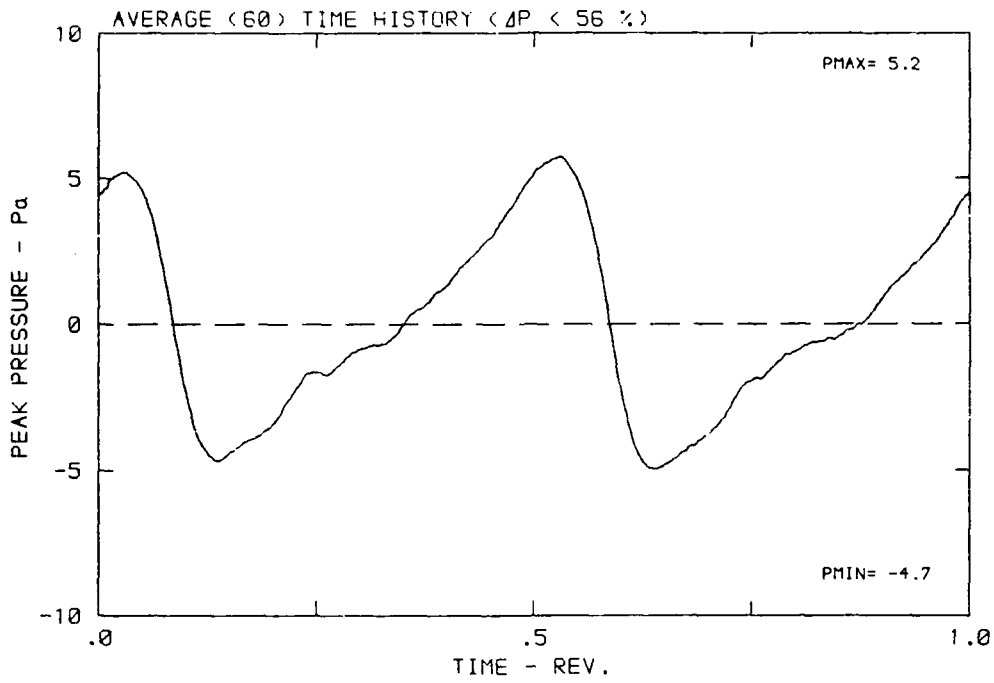
DATA POINT: LN-4 RUN: 157 MP: 4

β : 23.7° MH: .5845 n: 1800 rpm v/u: .268 ψ : -3.8° T: 296.3 K



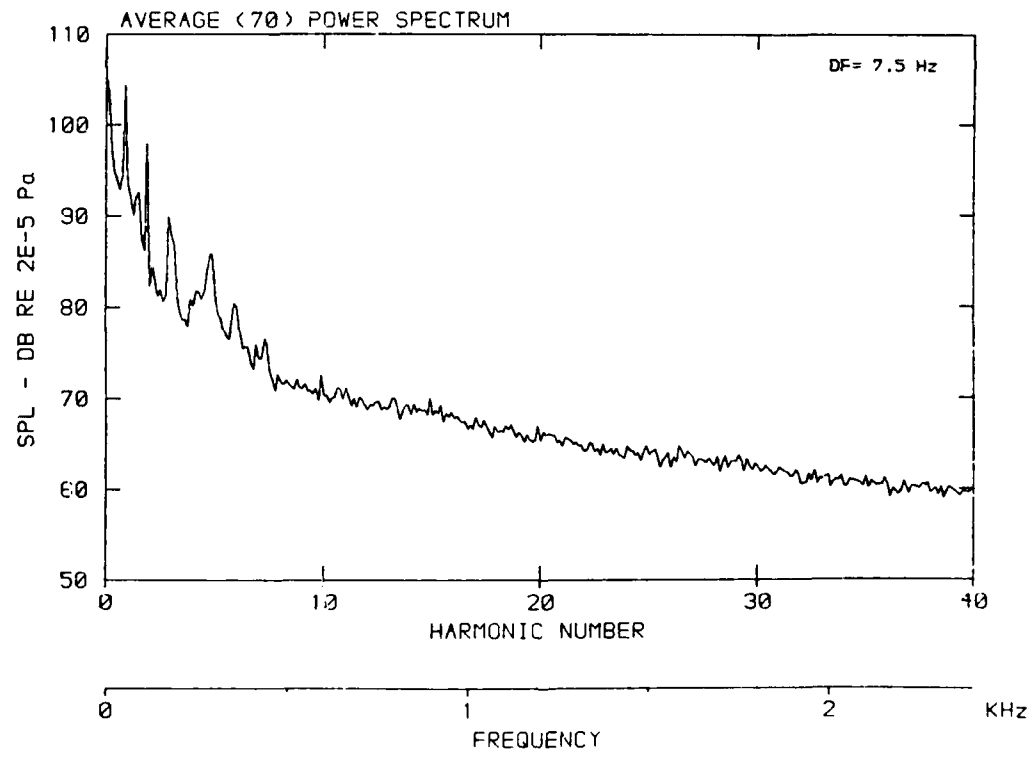
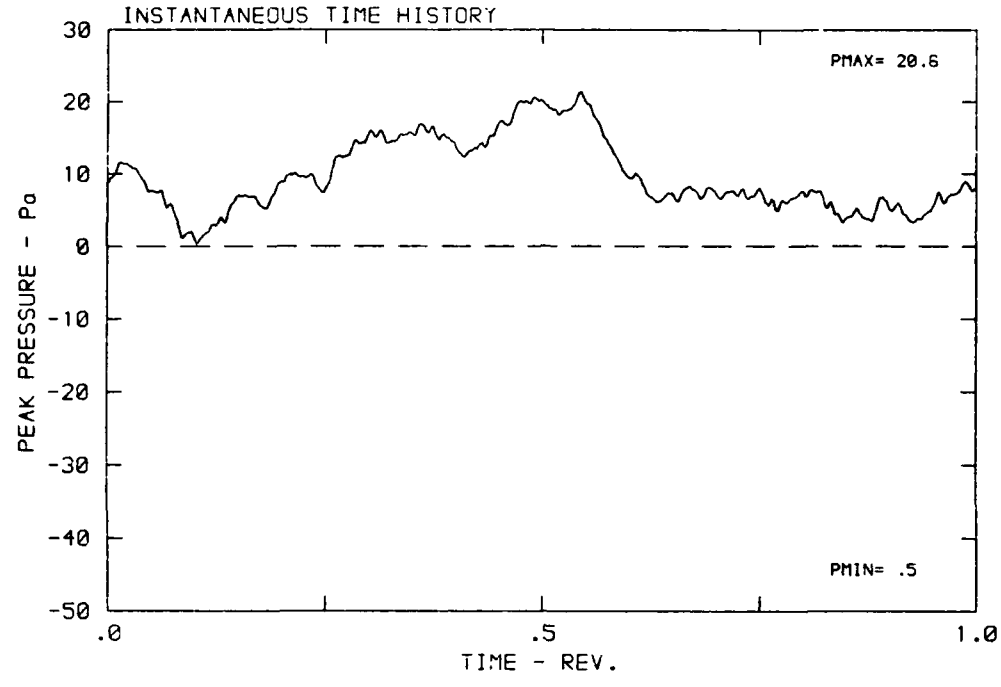
DATA POINT: LN-4 RUN: 157 MP: 4

β : 23.7° MH: .5845 n: 1800 rpm v/u : .268 ϕ : -3.8° T: 286.3 K



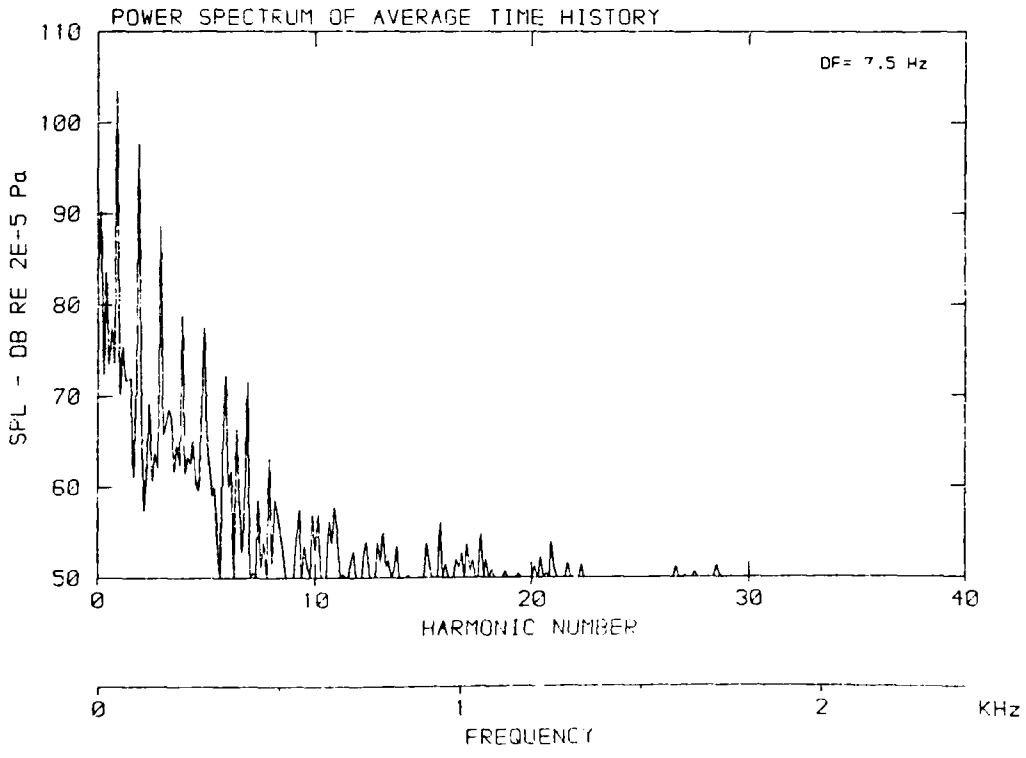
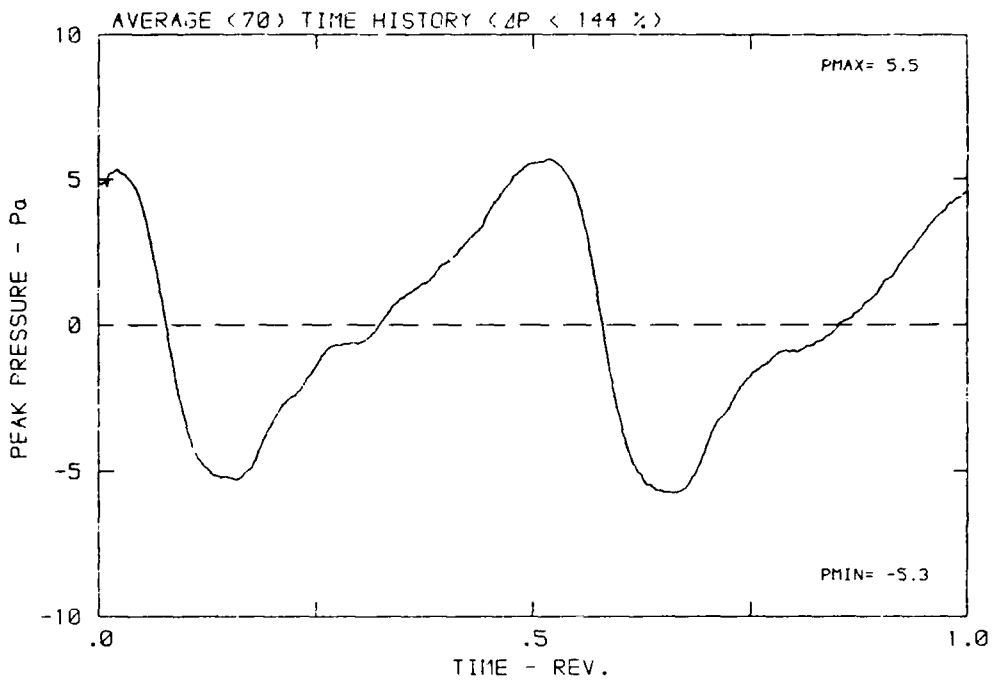
DATA POINT: LN-4 RUN: 157 MP: 5

β : 23.7° MH: .5845 n: 1800 rpm v/u : .268 ϕ : -3.8° T: 286.3 K



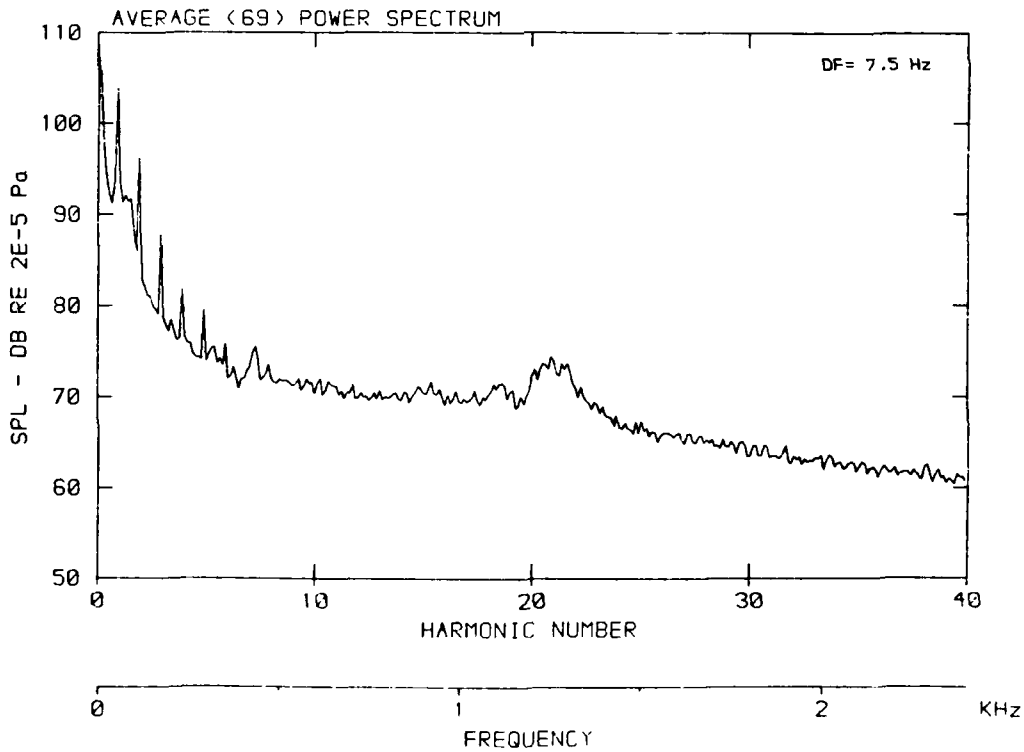
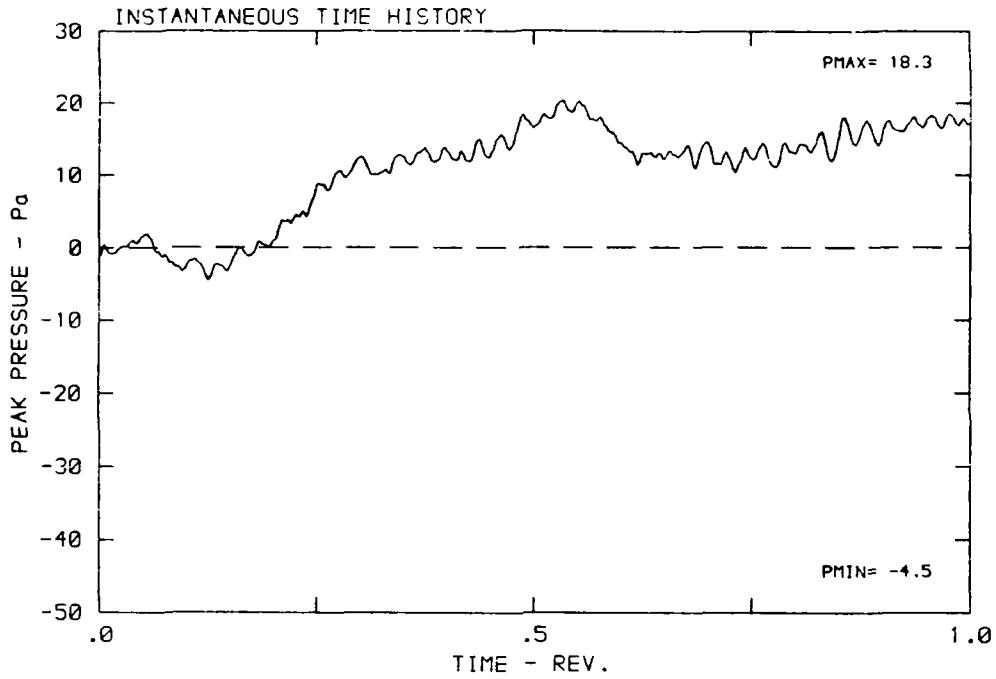
DATA POINT: LN-4 RUN: 157 MF: 5

β : 23.7° MH: .5845 n: 1800 rpm v/u : .268 ϕ : -3.8° T: 286.3 K



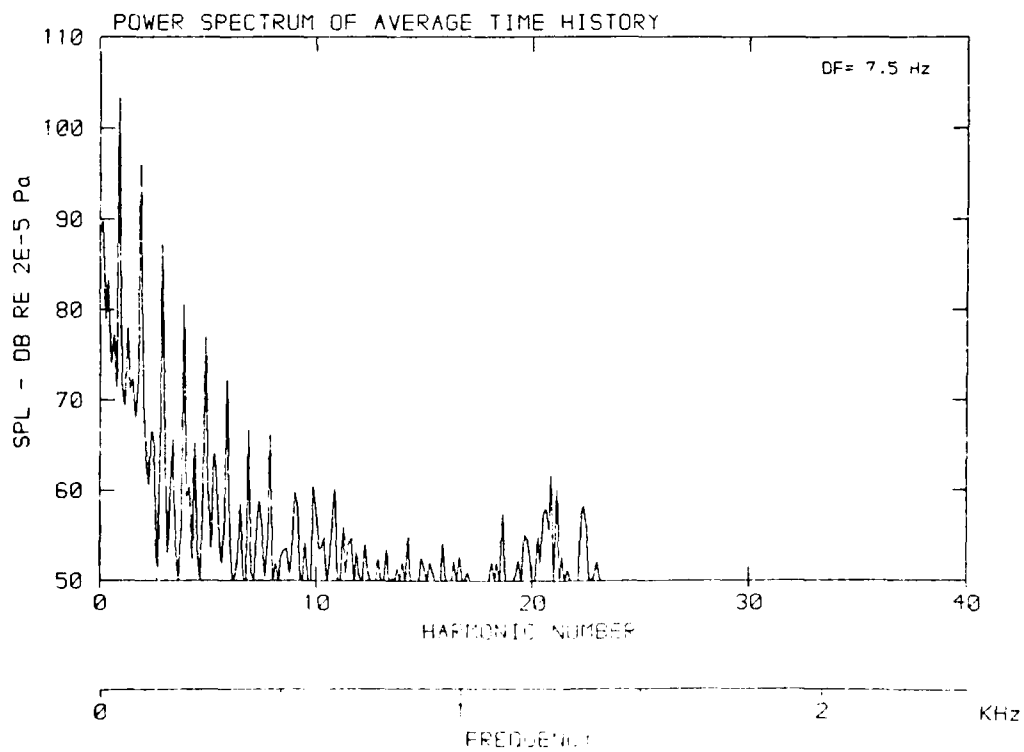
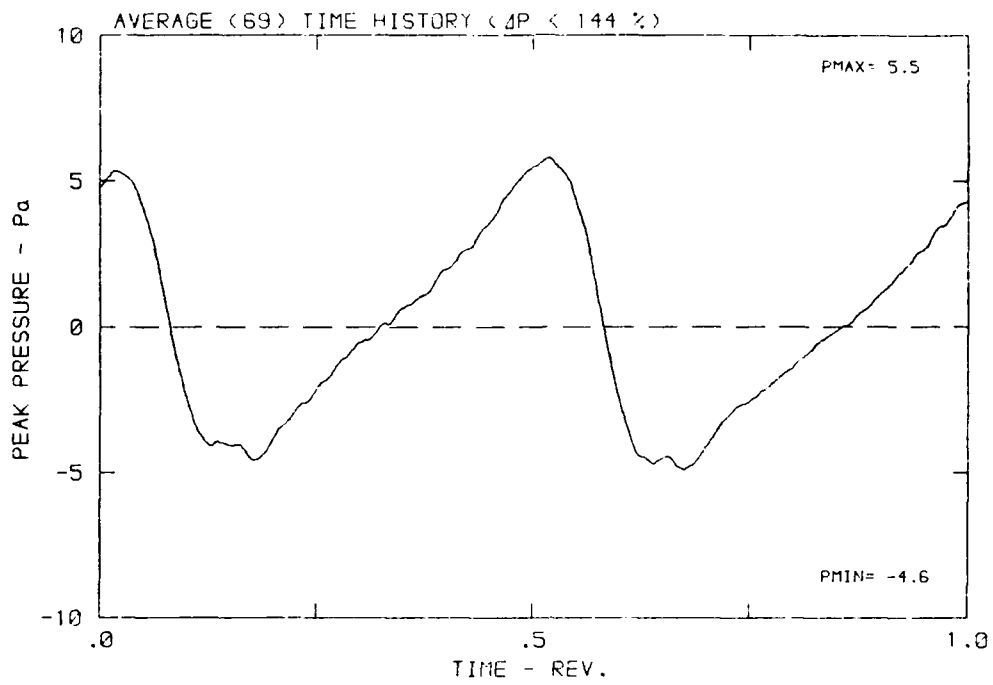
DATA POINT: LN-4 RUN: 157 MP: 6

β : 23.7° MH: .5845 n: 1800 rpm v/u : .268 ϕ : -3.8° T: 286.3 K



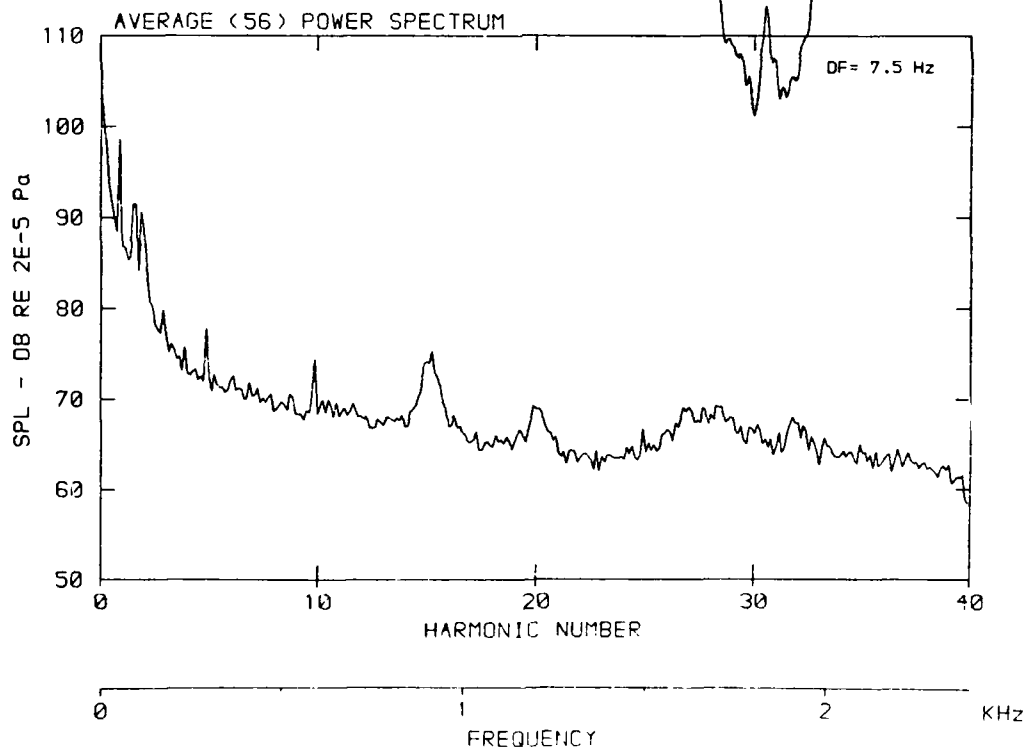
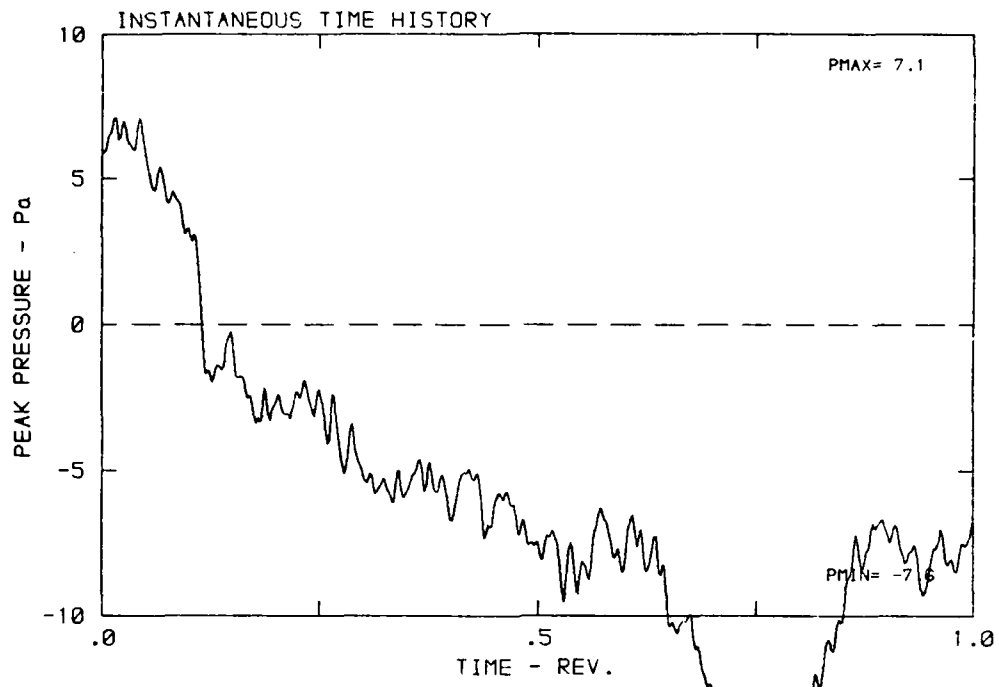
DATA POINT: LN-4 RUN: 157 MF: E

β : 23.7° MH: .5845 n: 1800 rpm v_{tu} : .269 ϕ : -3.8° T: 286.3 K



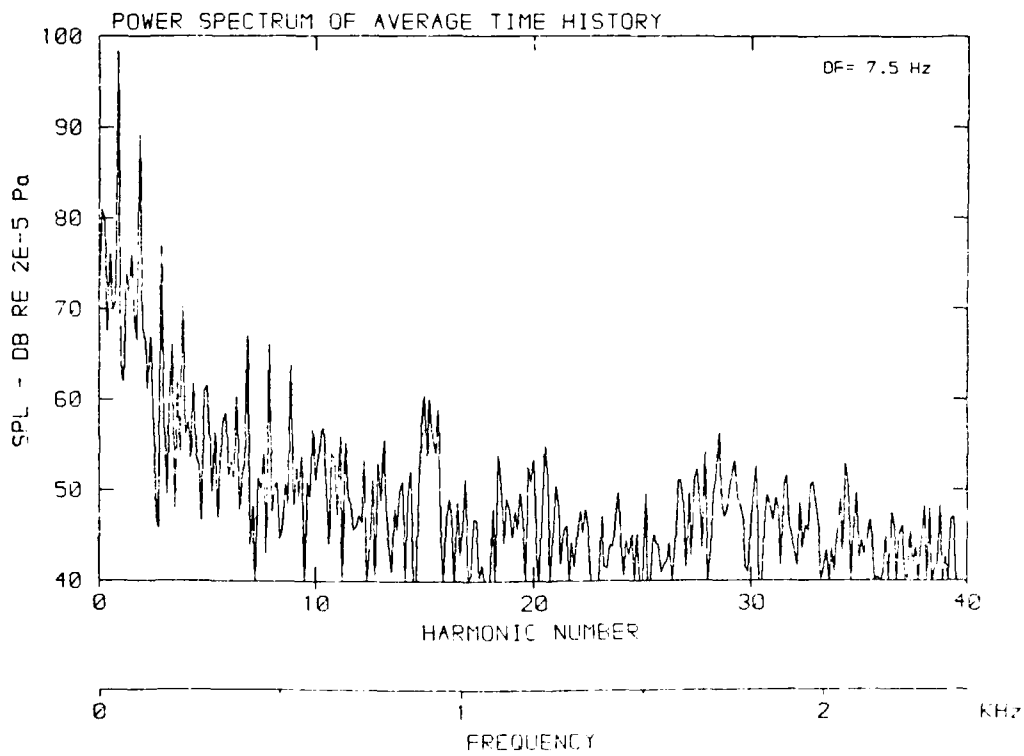
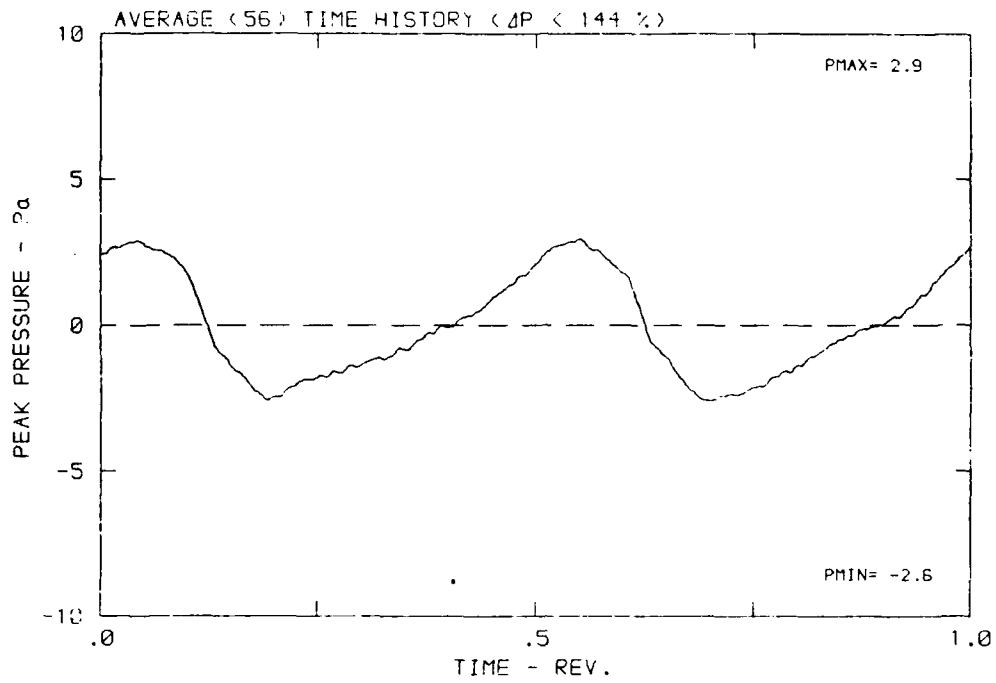
DATA POINT: LN-4 RUN: 157 MF: 7

β : 23.7° MH: .5845 n: 1800 rpm v/u : .268 ϕ : -3.8° T: 286.3 K



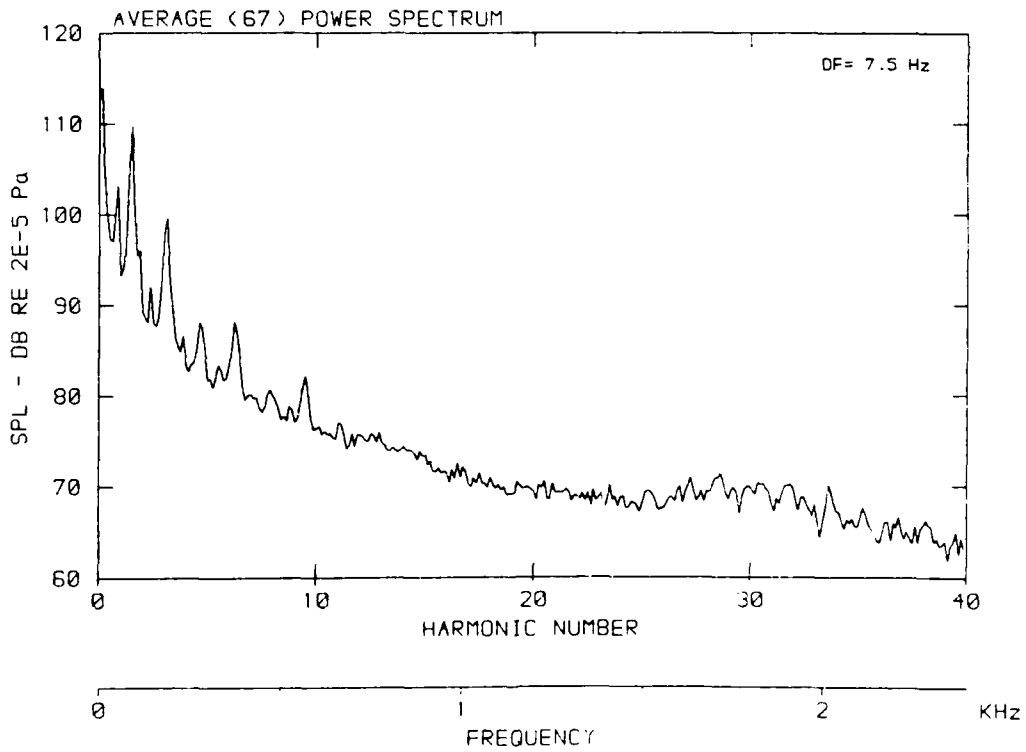
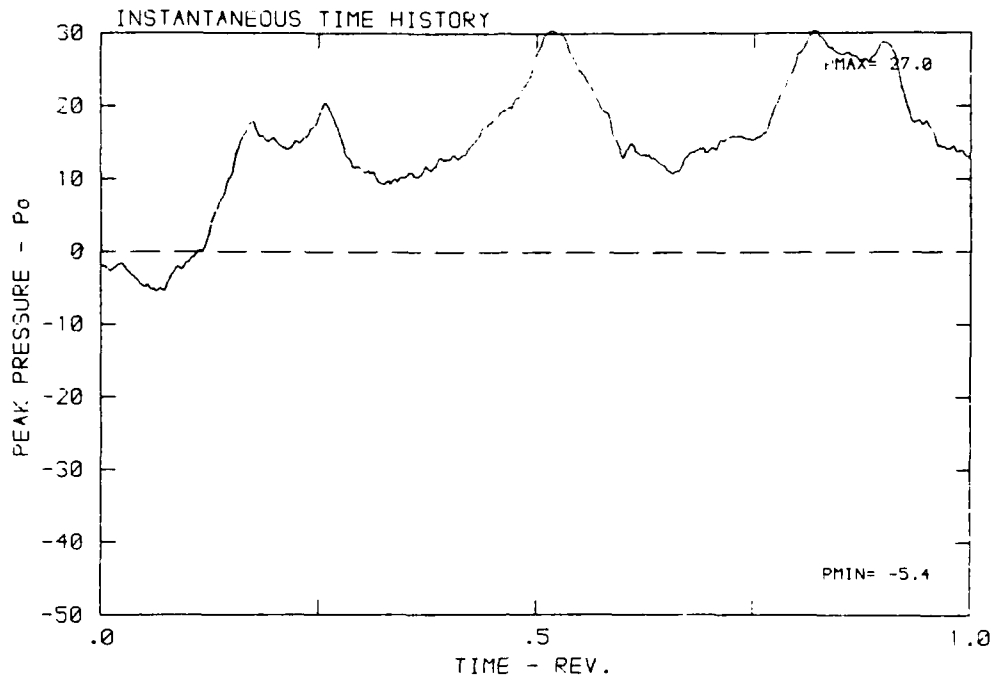
DATA POINT: LN-4 RUN: 157 MP: 7

β : 23.7° MH: .5845 n: 1800 rpm v/u : .268 ϕ : -3.8° T: 286.3 K



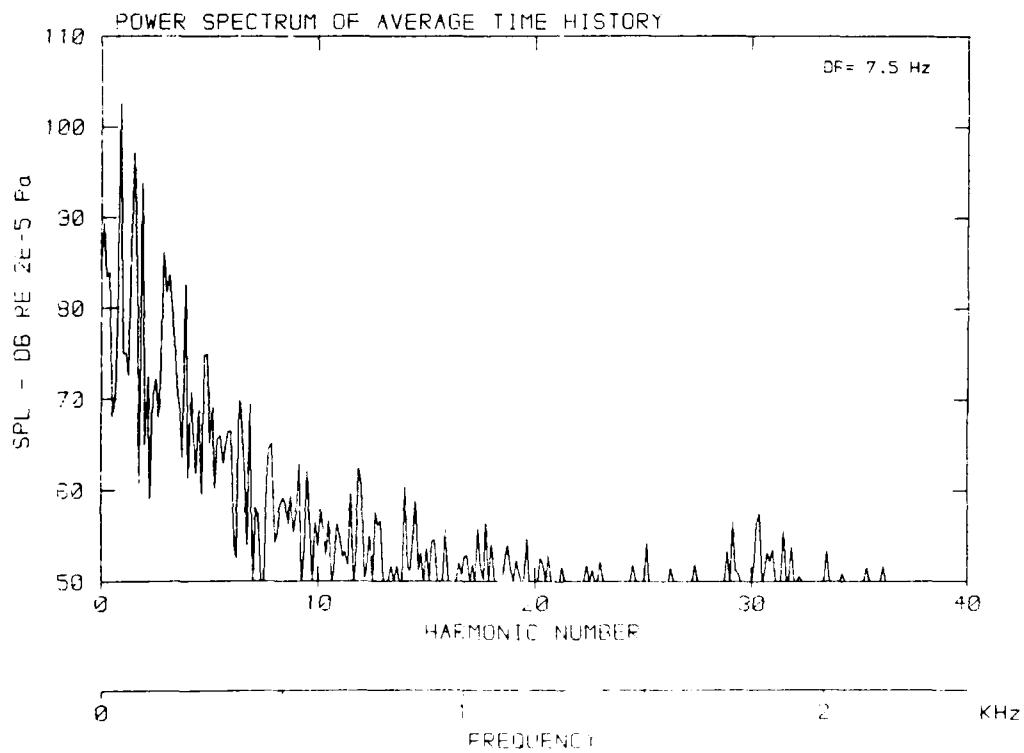
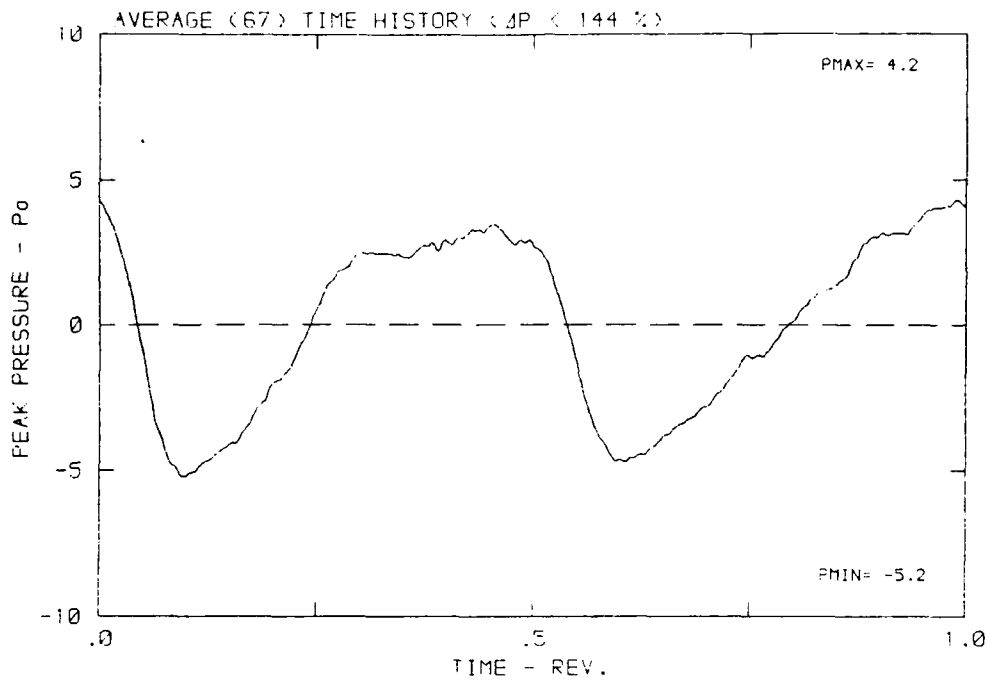
DATA POINT: LN-4 RUN: 157 MP: 8

β : 23.7° MH: .5845 n: 1800 rpm v/u: .268 ϕ : -3.8° T: 286.3 K



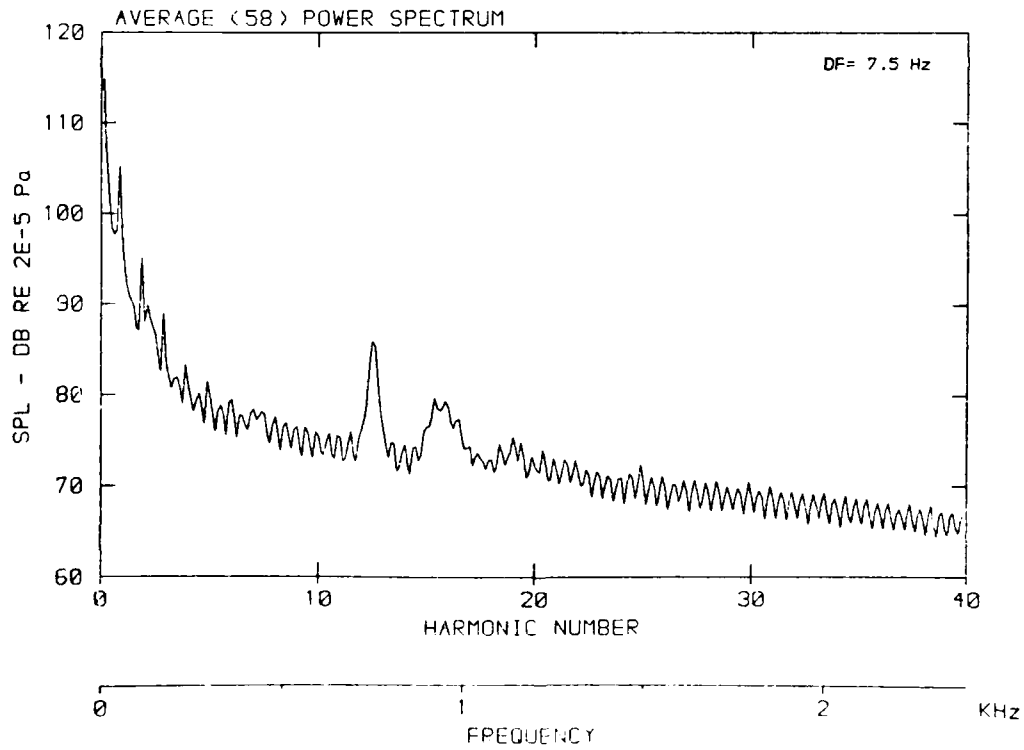
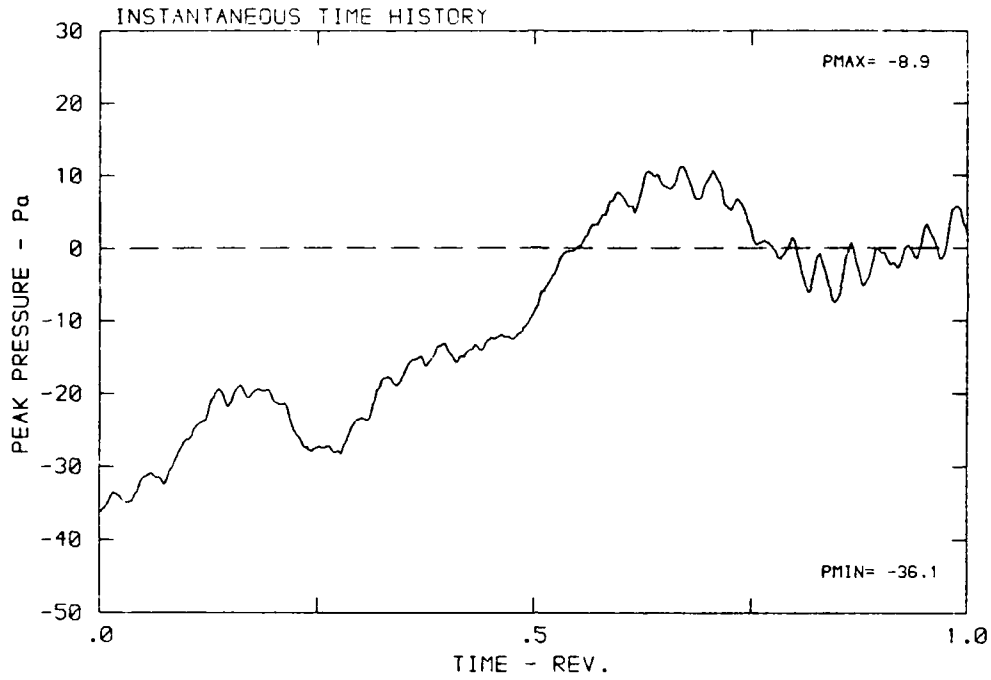
DATA POINT: LN-4 RUN: 157 MP: 8

β : 23.7° MH: .5845 n: 1800 rpm v/u : .268 ϕ : -3.8° T: 286.3 K



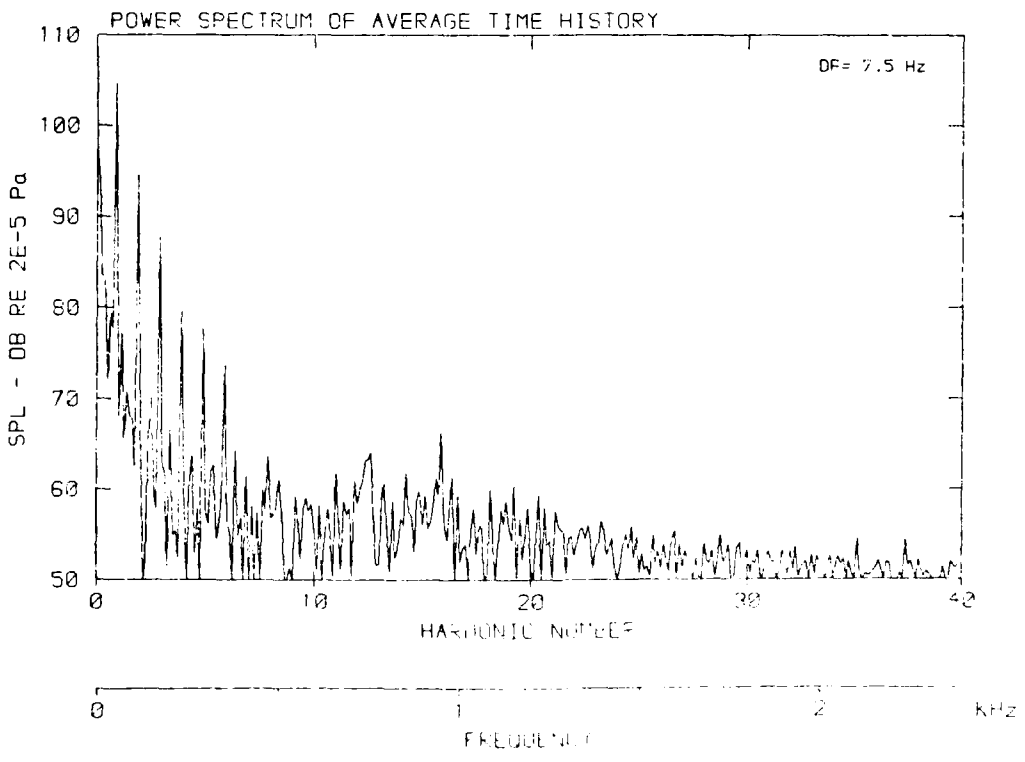
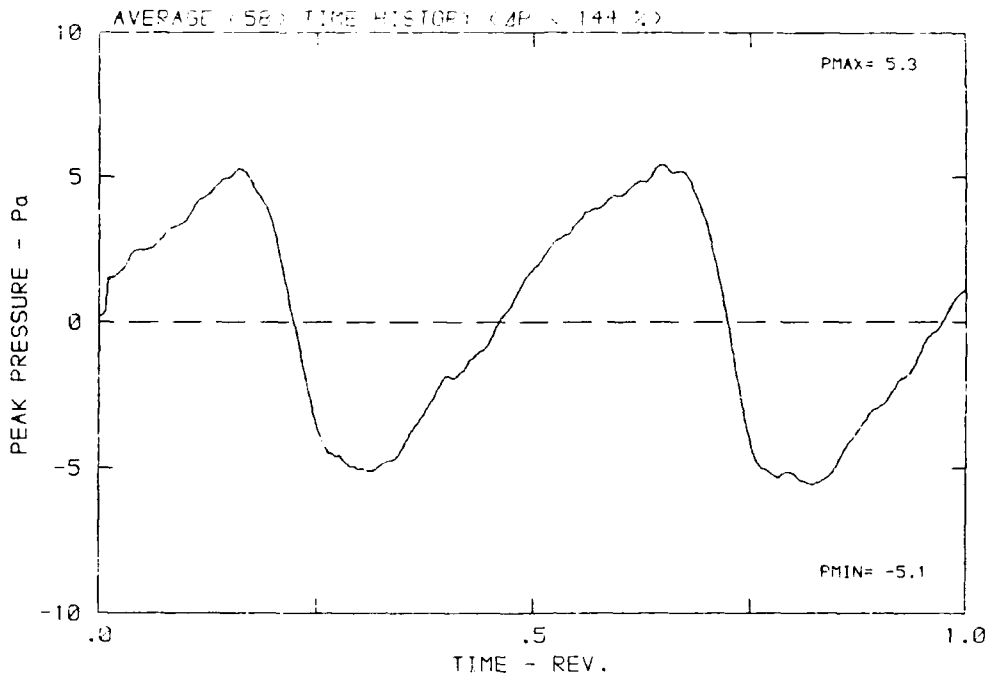
DATA POINT: LN-4 RUN: 157 MP: 9

β : 23.7° MH: .5845 n: 1800 rpm v_{ru} : .268 ϕ : -3.8° T: 286.3 K

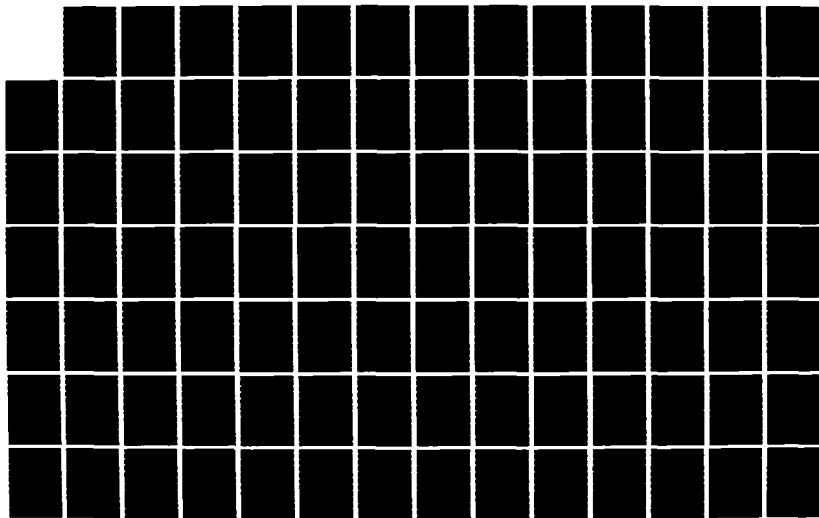


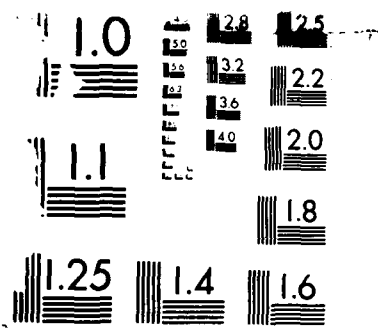
DATA POINTS: UN-4 RUN: 157 MP: 9

β : 23.7° MH: .5843 n: 1900 rpm v_{20} : .268 p : -3.8° T: 286.3 K



AD-A174 980 DFVLR/FAR (DEUTSCHE FORSCHUNGS-UND VERSUCHSANSTALT FUER LUFT UND RAUMFAHR. (U) DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMF.. 3/6
UNCLASSIFIED M M DOBRZYNSKI ET AL. 1986 F/G 28/1 NL

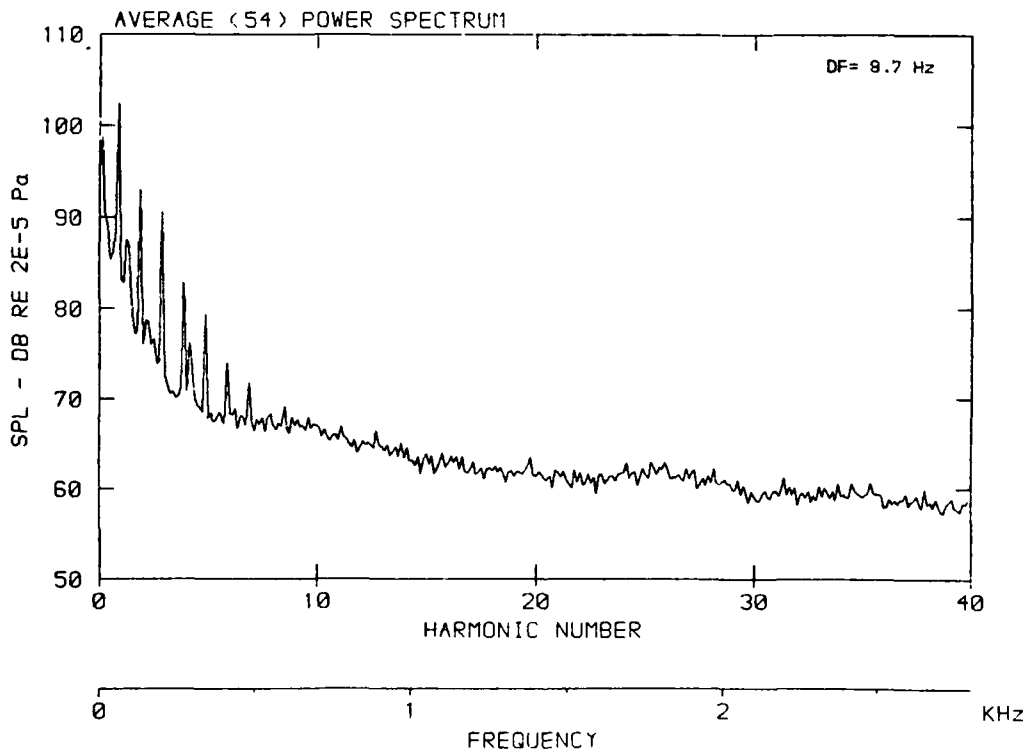
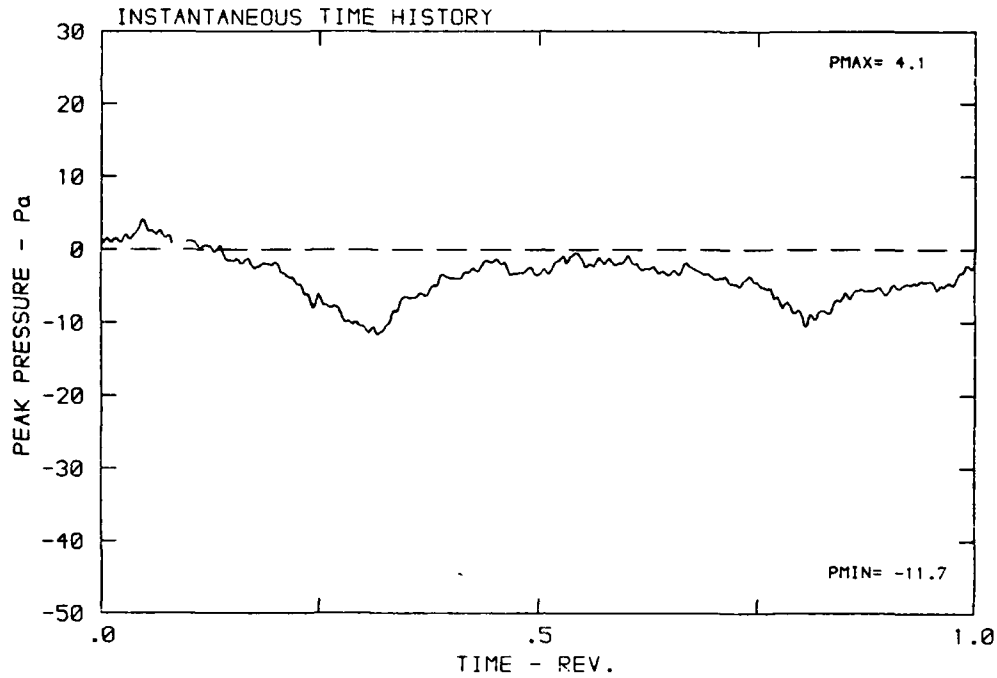




RESOLUTION TEST CHART
1963-A

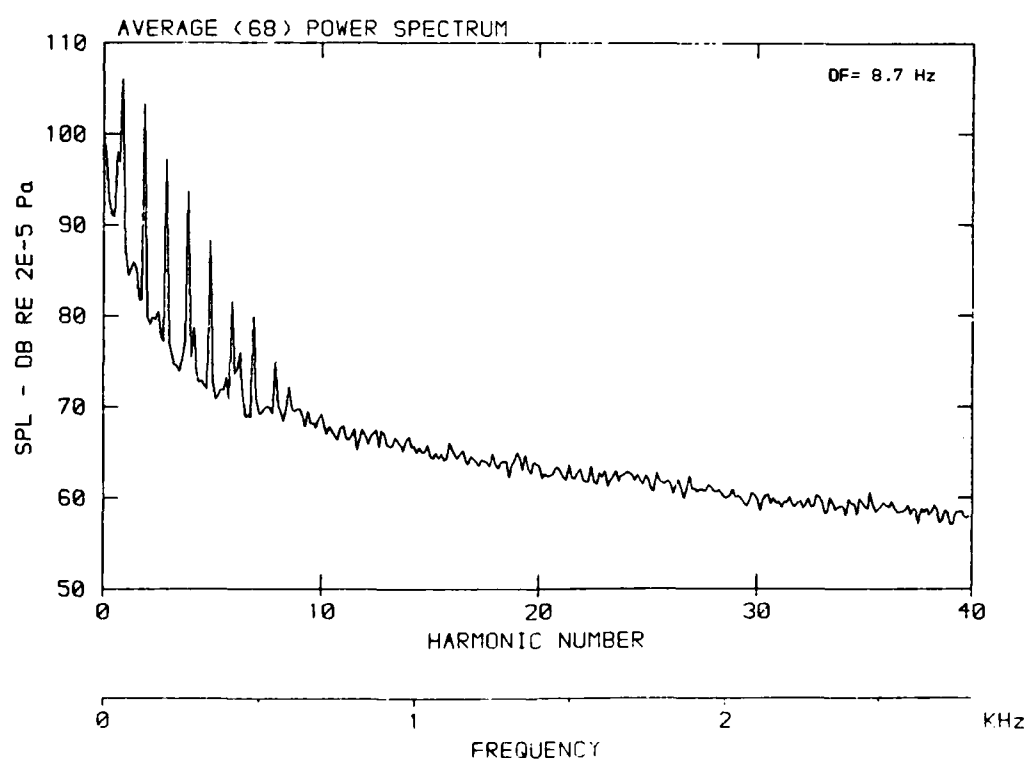
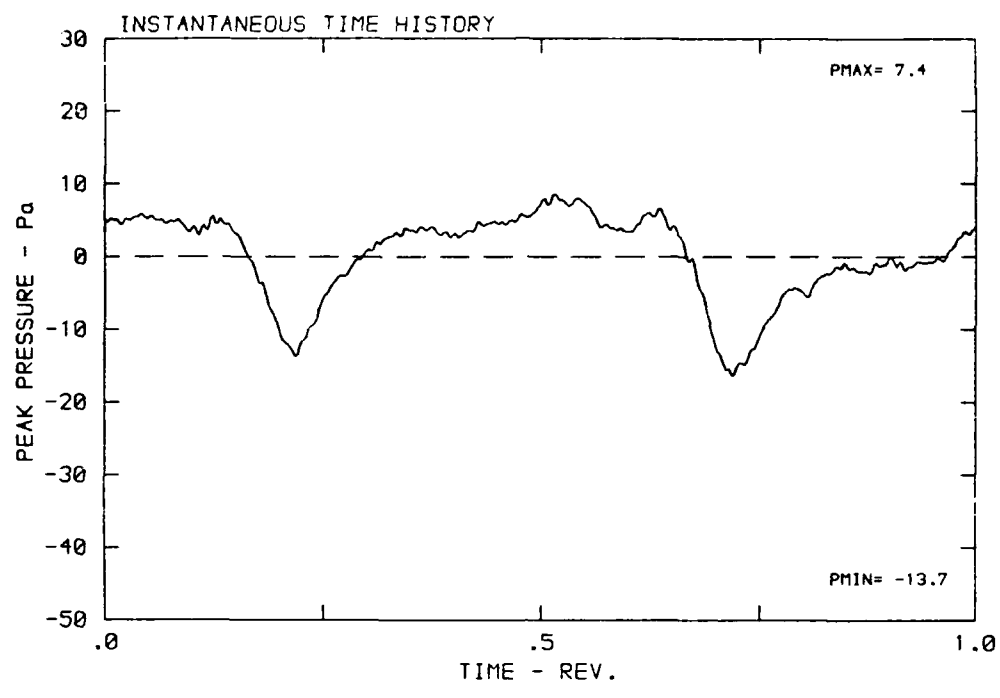
DATA POINT: LN-5 RUN: 158 MP: 1

β : 23.7° MH: .6751 n: 2100 rpm v/u : .230 ϕ : -3.8° T: 286.9 K



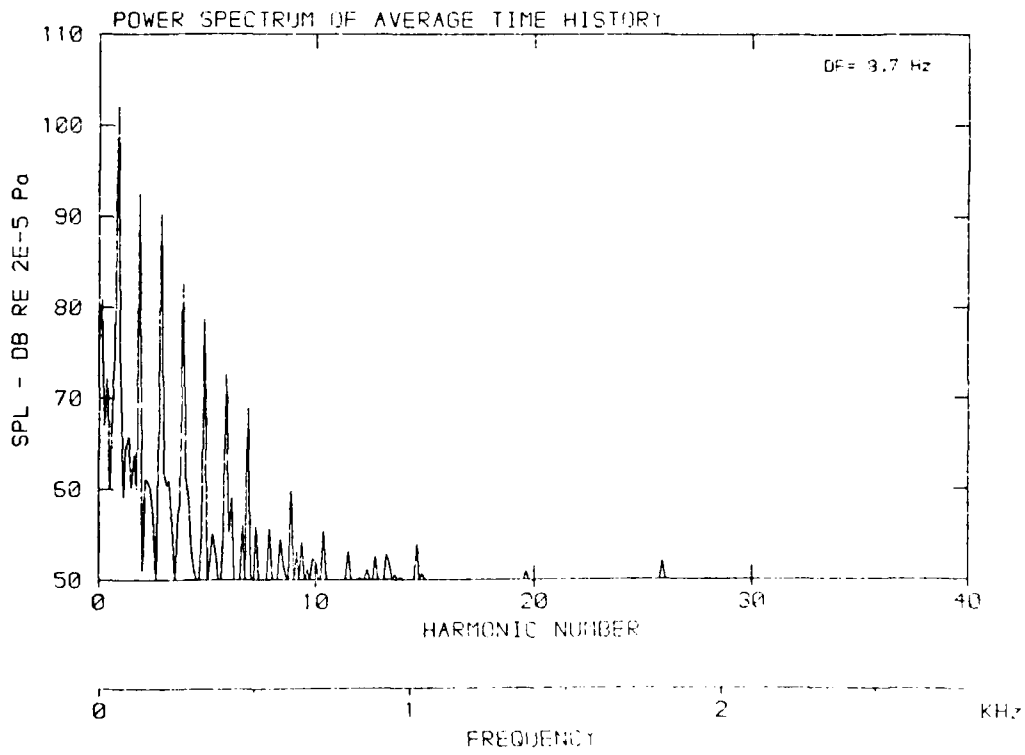
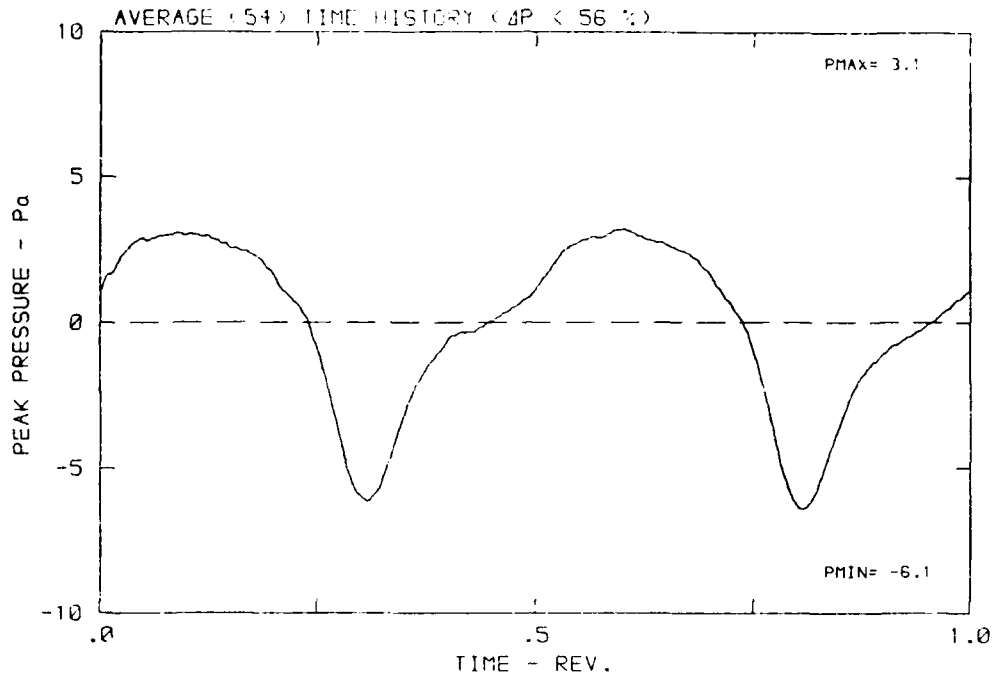
DATA POINT: LN-5 RUN: 158 MP: 2

β : 23.7° MH: .6751 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 286.9 K



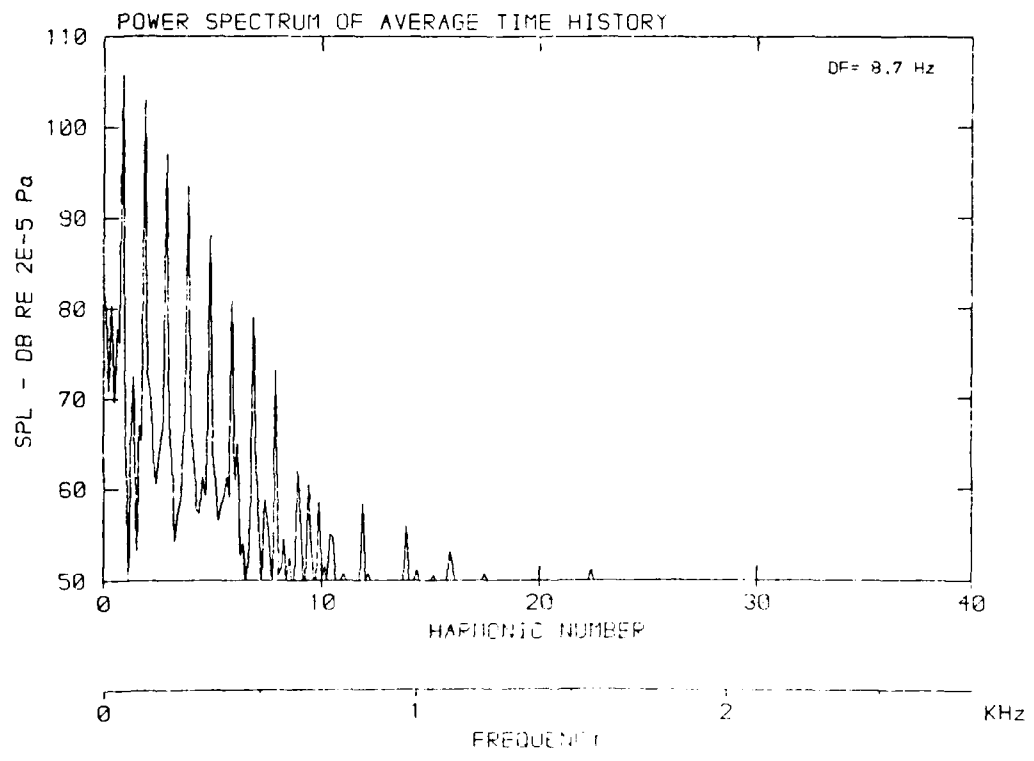
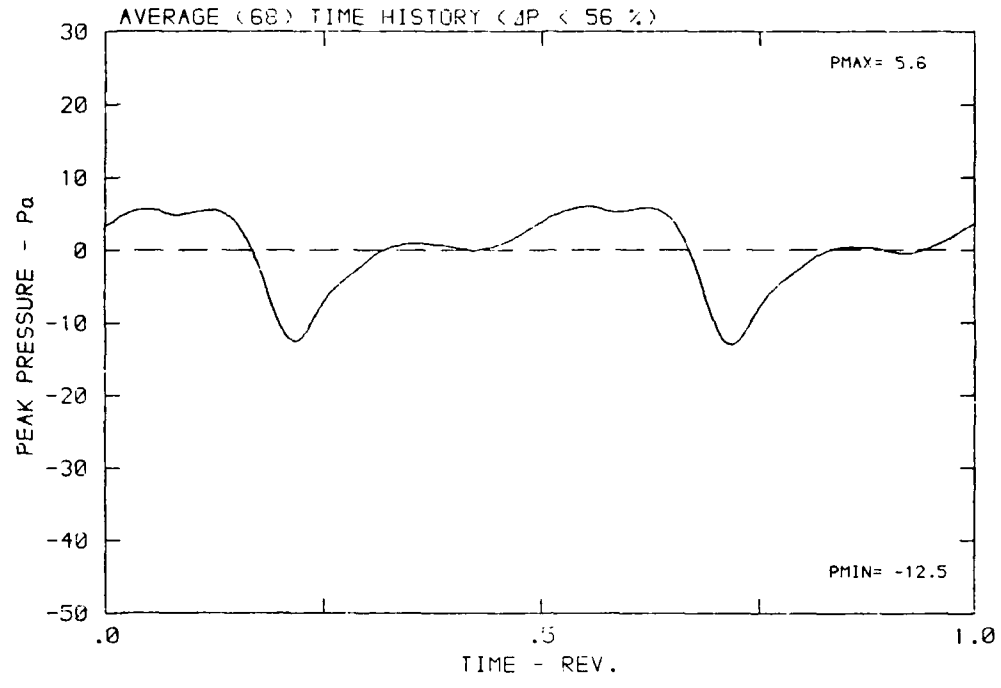
DATA POINT: LN-5 RUN: 158 MP: 1

β : 23.7° MH: .6751 n: 2100 rpm ν : .230 ϕ : -3.2° T: 286.9 K



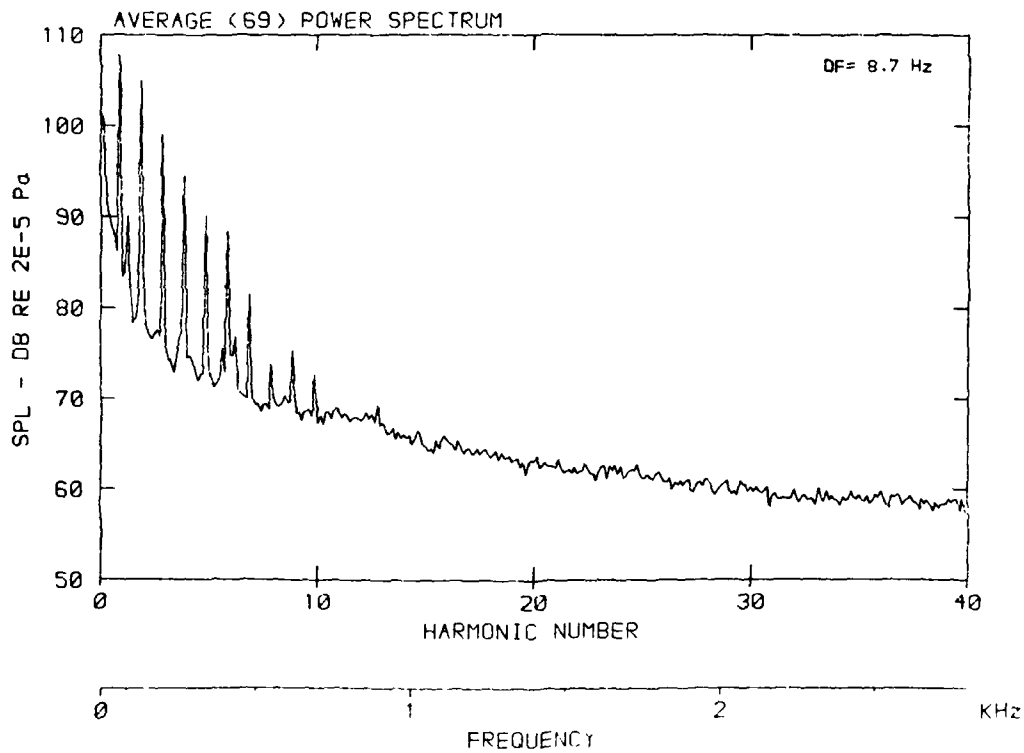
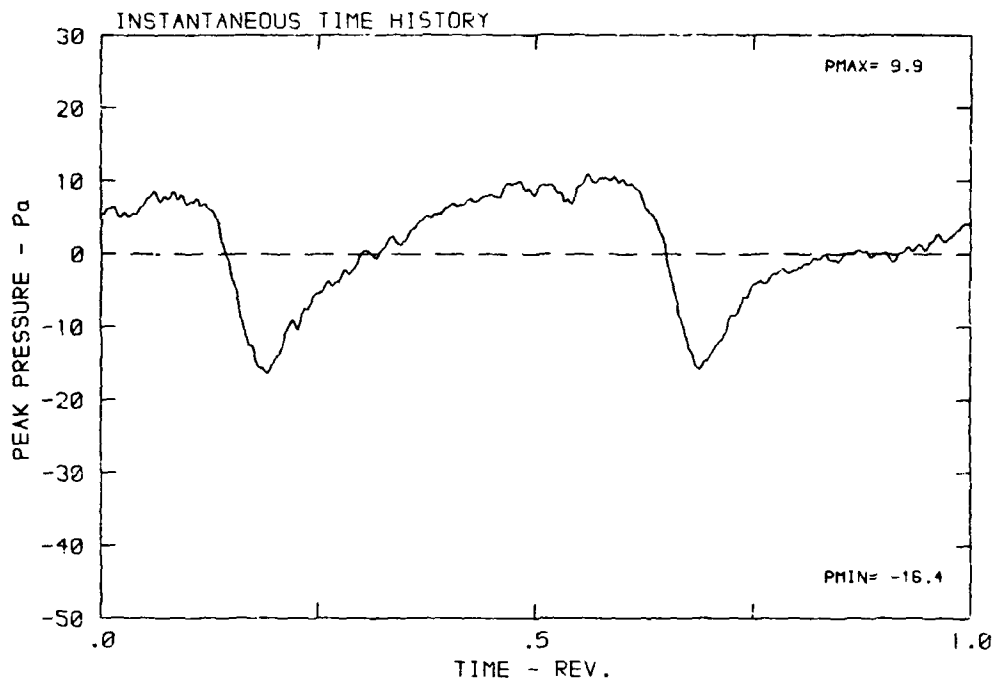
DATA POINT: LN-5 RUN: 158 MP: 2

β : 23.7° MH: .6751 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 286.9 K



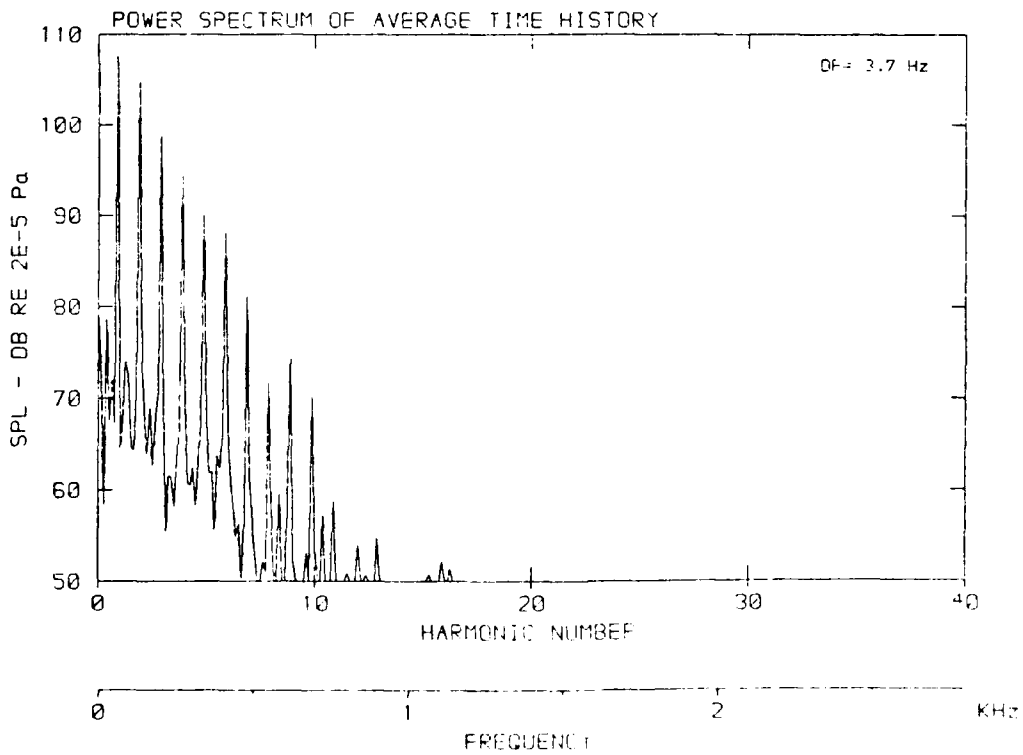
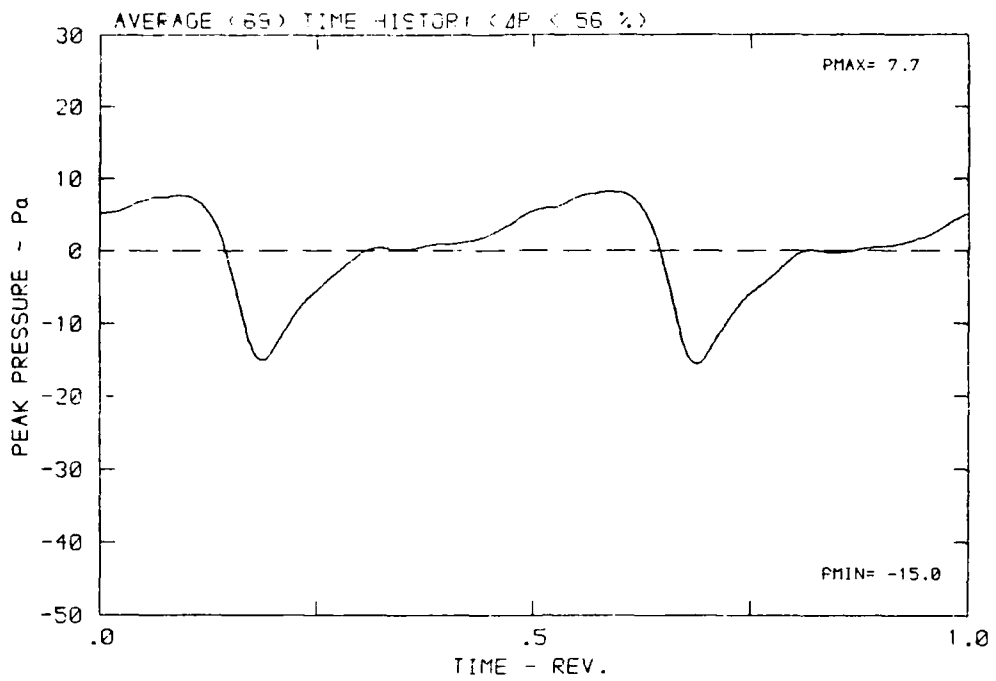
DATA POINT: LN-5 RUN: 158 MP: 3

β : 23.7° MH: .6751 n: 2100 rpm v/u: .230 ψ : -3.8° T: 286.9 K



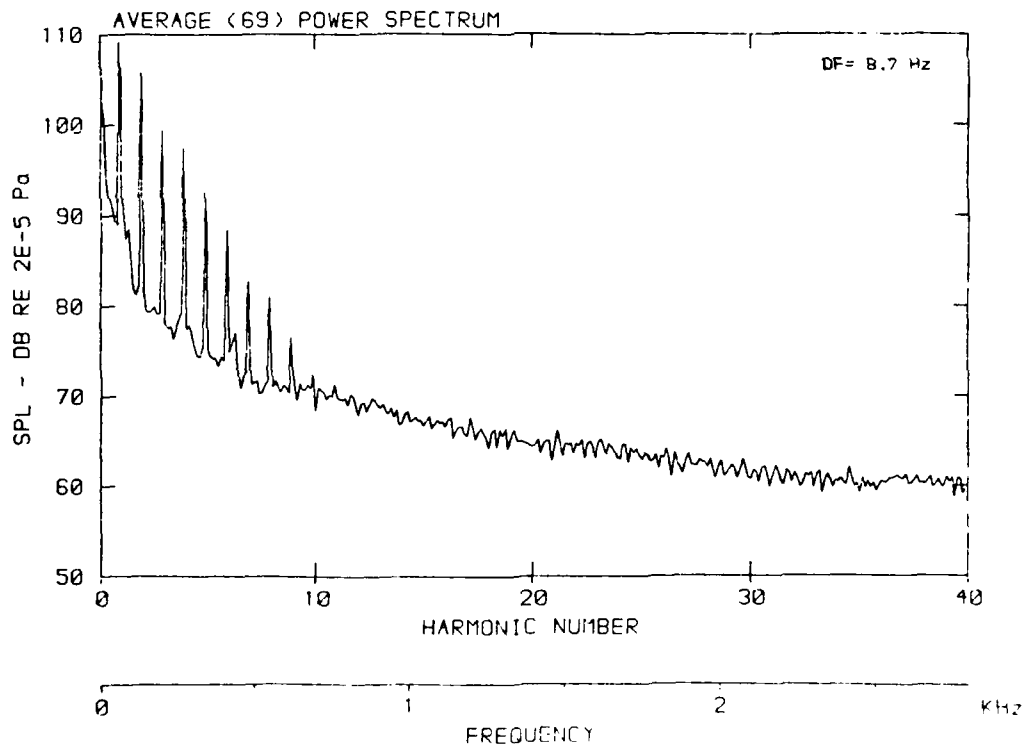
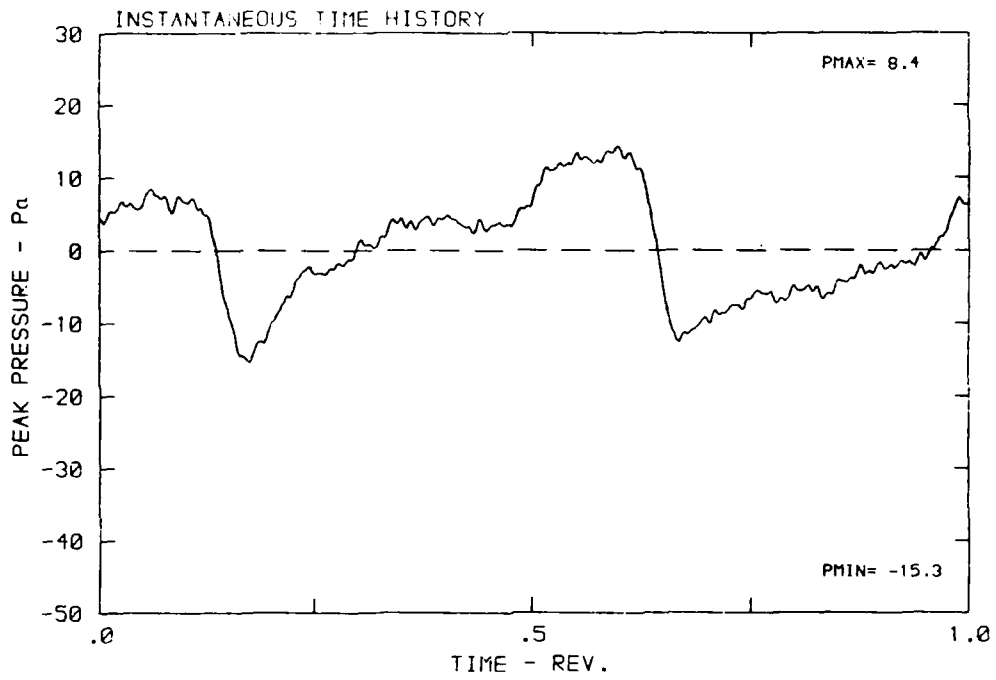
DATA POINT: LN-5 RUN: 158 MP: 3

β : 23.7° MH: .6751 n: 2100 rpm vru: .230 ϕ : -3.8° T: 266.9



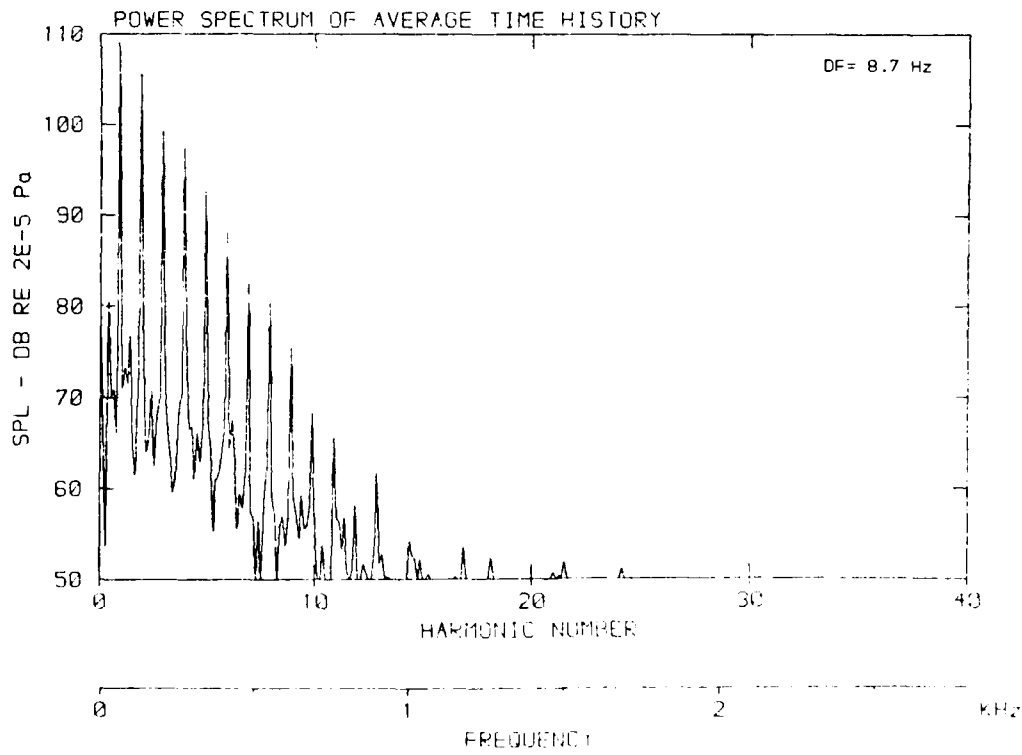
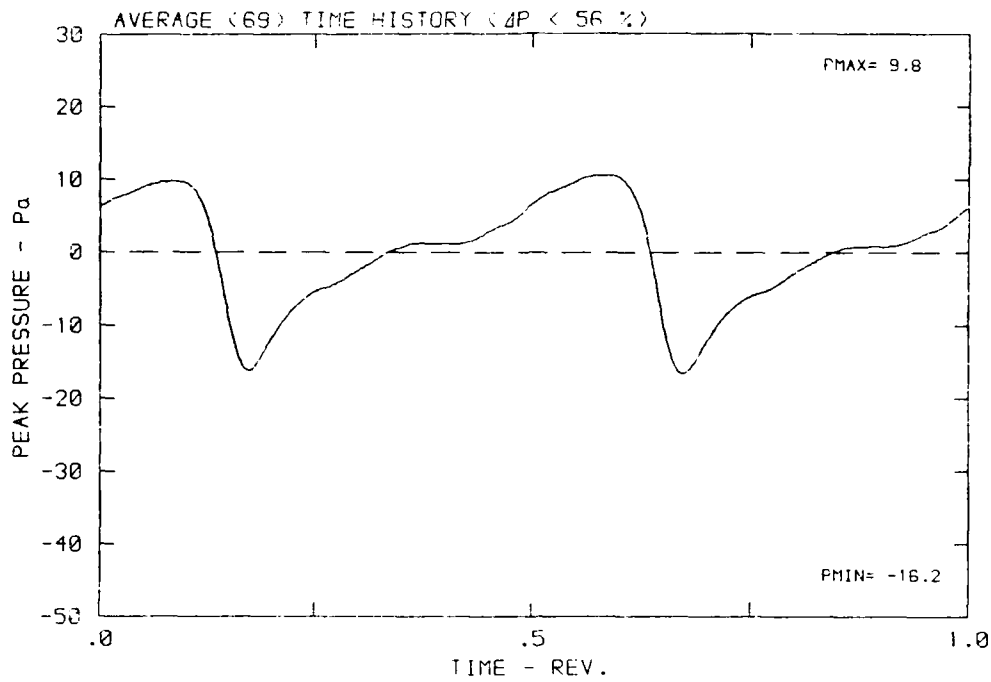
DATA POINT: LN-5 RUN: 158 MP: 4

β : 23.7° MH: .6751 n: 2100 rpm v/u : .230 ϕ : -3.8° T: 286.9 K



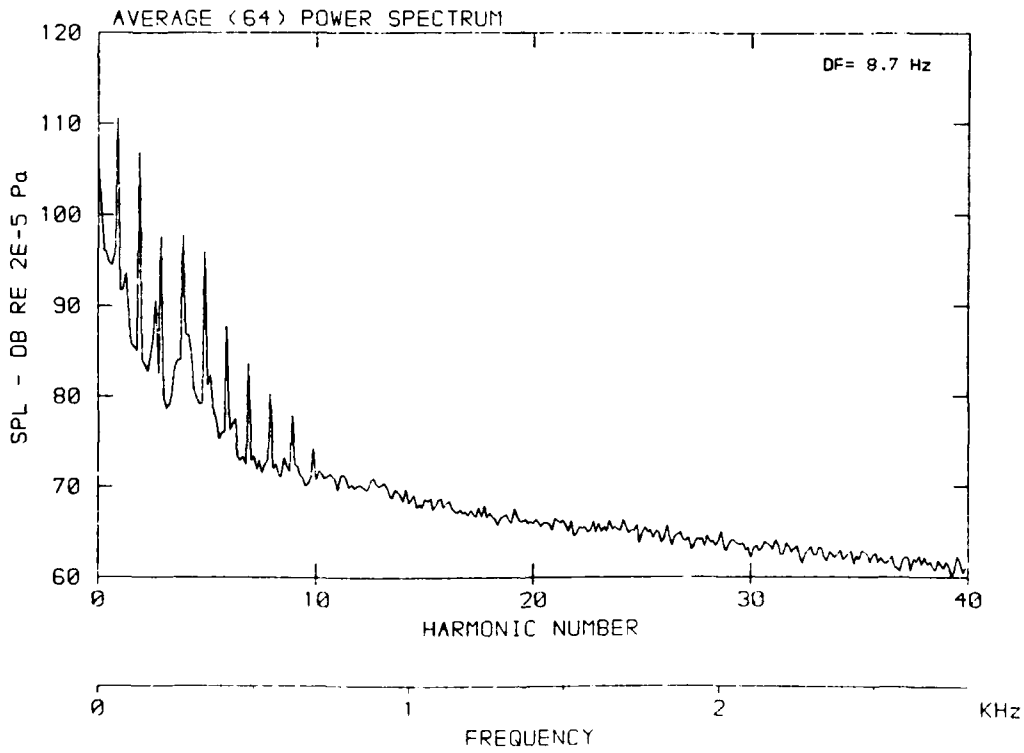
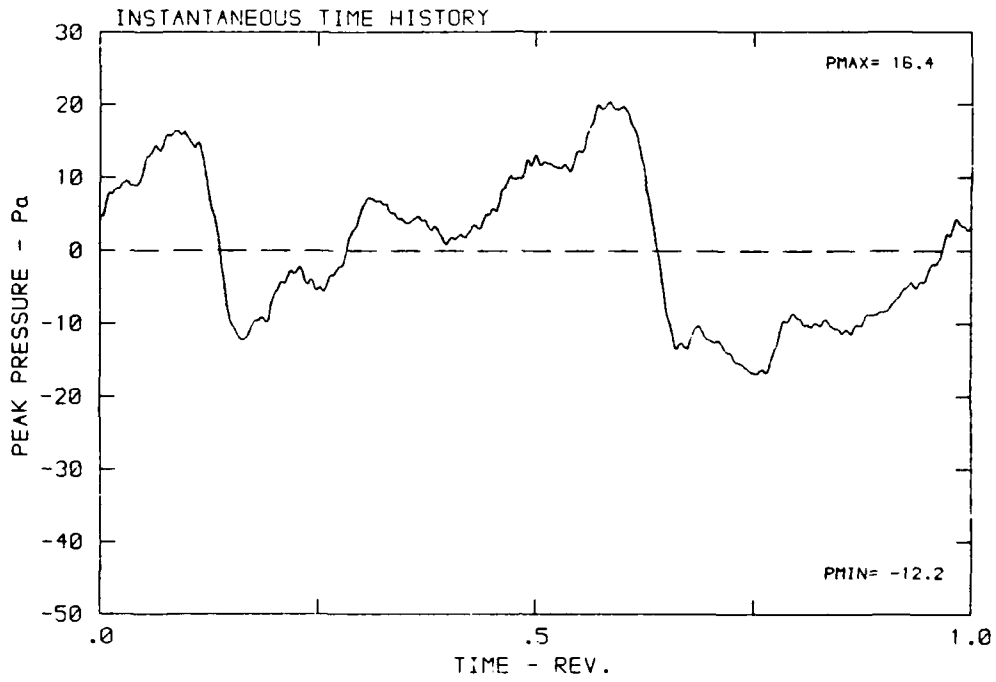
DATA POINT: LN-5 RUN: 158 MF: 4

β : 23.7° MH: .6751 n: 2100 rpm v/u : .230 ϕ : -3.8° T: 286.9 K



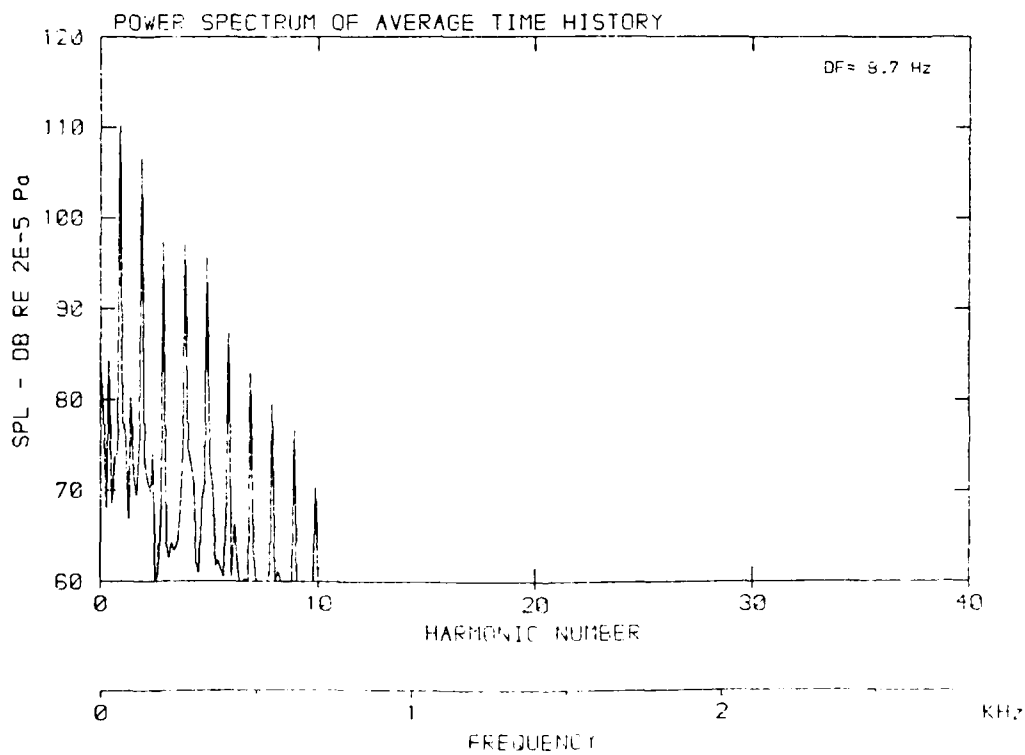
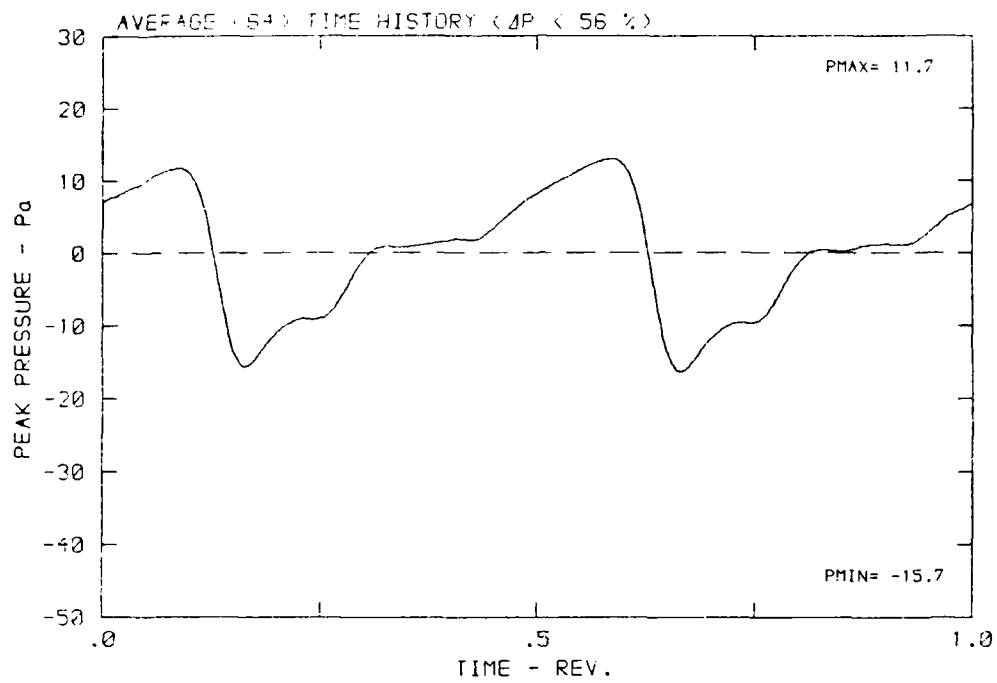
DATA POINT: LN-5 RUN: 158 MP: 5

β : 23.7° MH: .6751 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 286.9 K



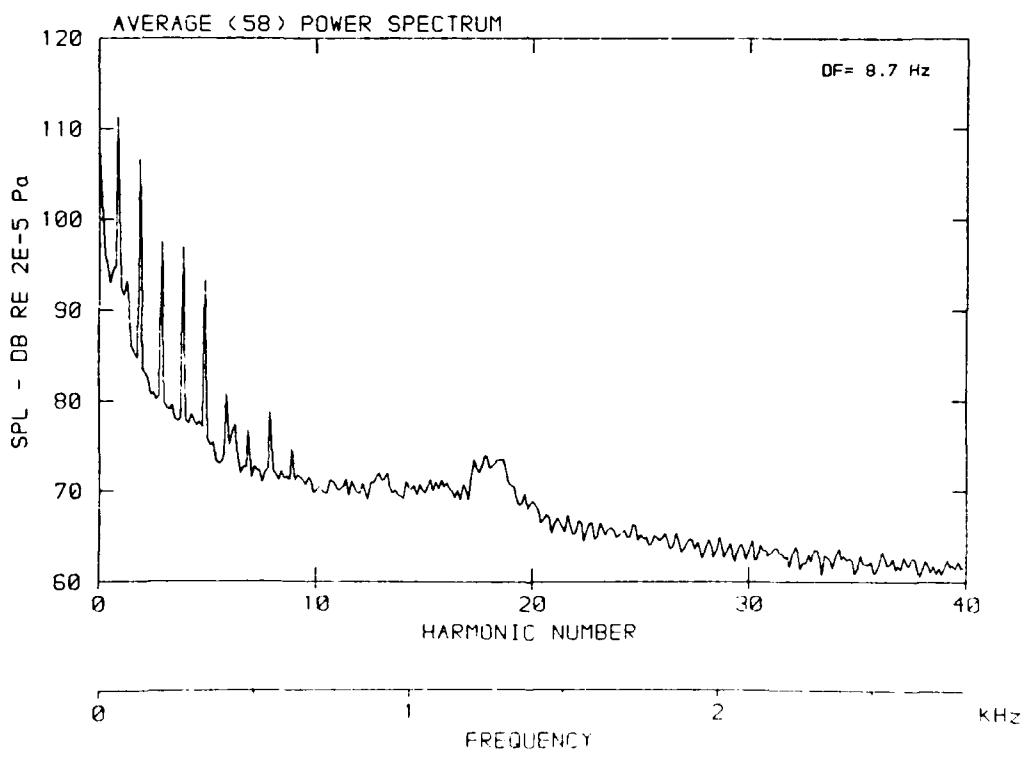
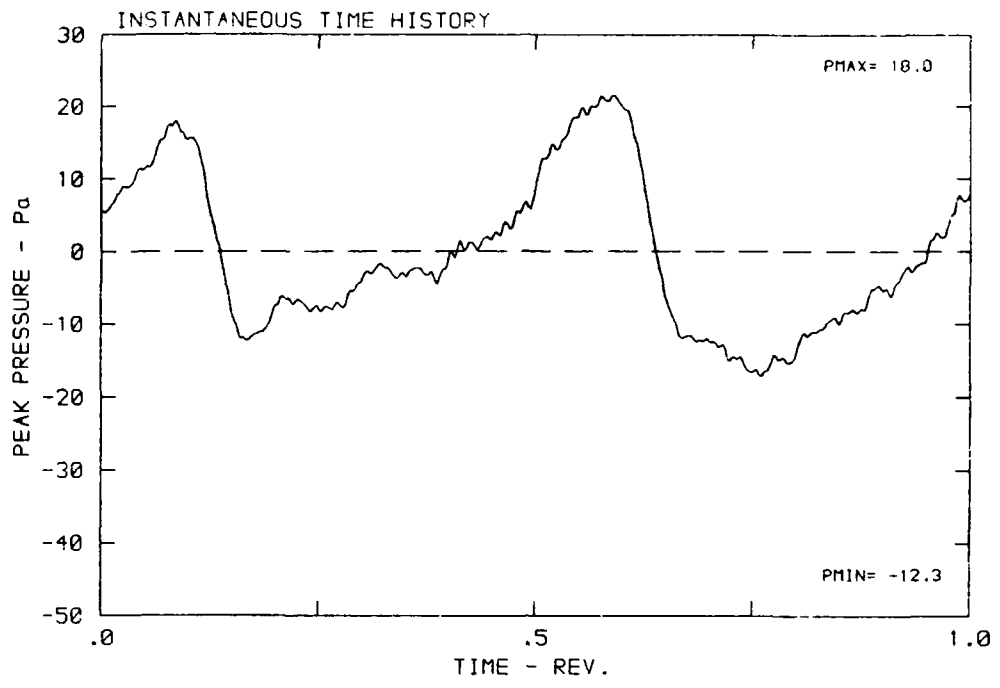
DATA POINT: LN-5 RUN: 158 MP: 5

β : 23.7° MH: .875i n: 2100 rpm v/u: .230 ϕ : -3.8° T: 285.9 K



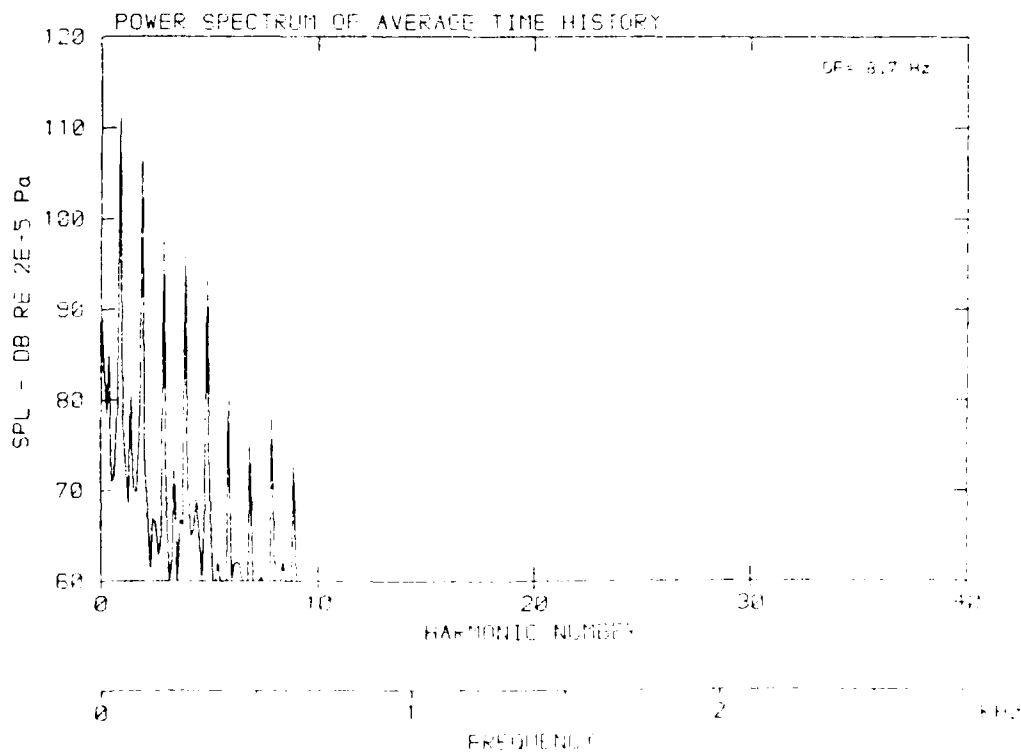
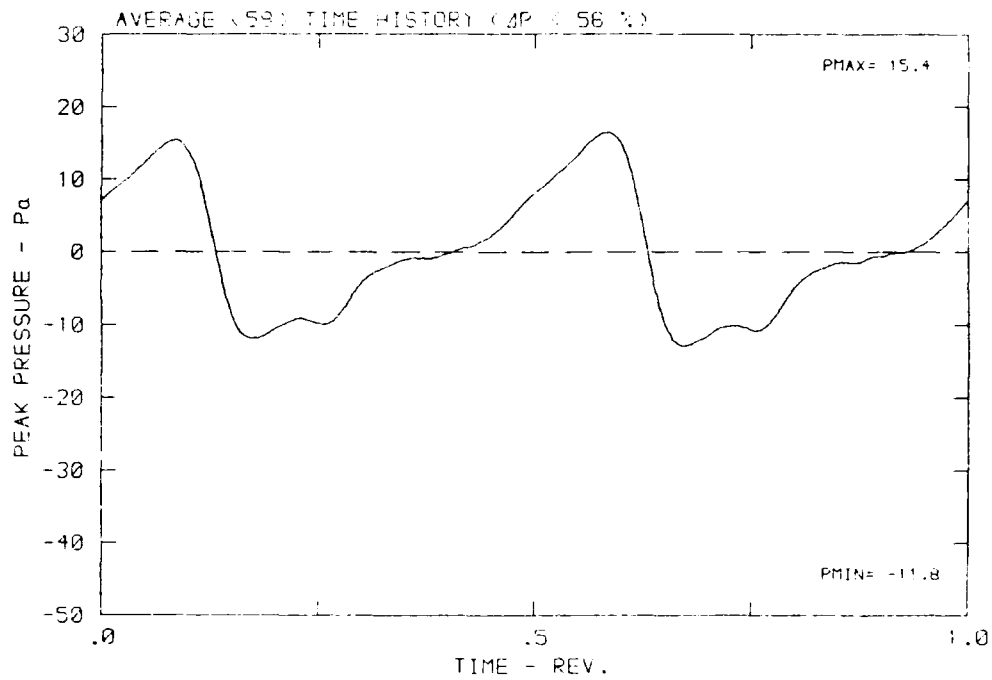
DATA POINT: LN-5 RUN: 156 MF: 6

β : 23.7° MH: .6751 n: 2100 rpm ν : .230 ϕ : -3.9° T: 286.9 K



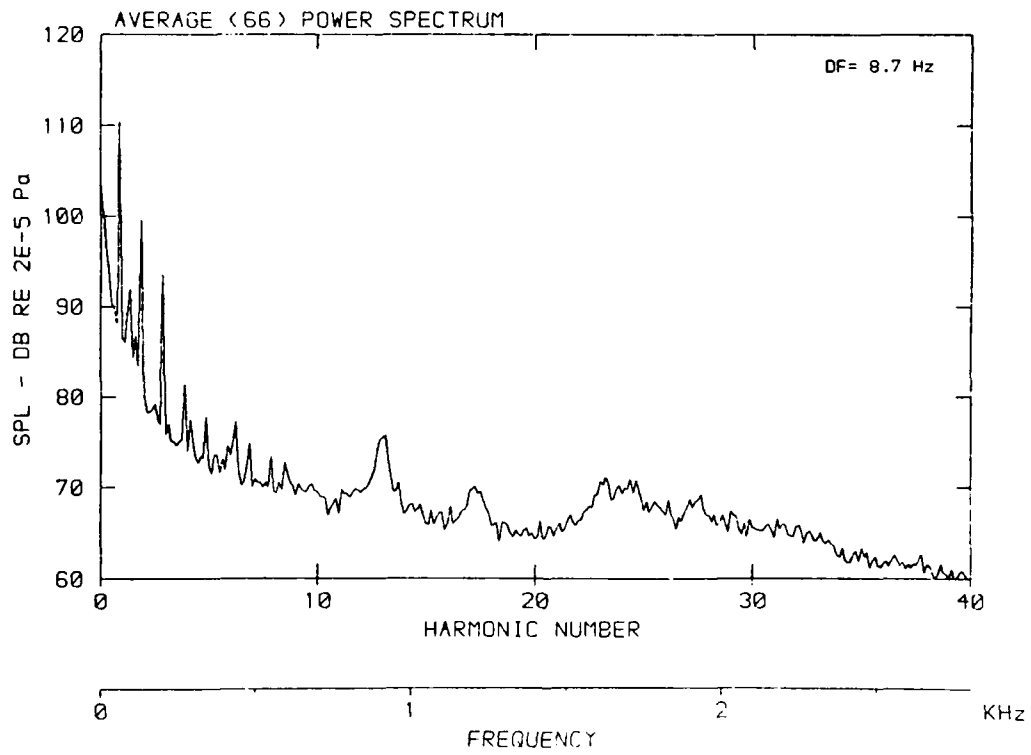
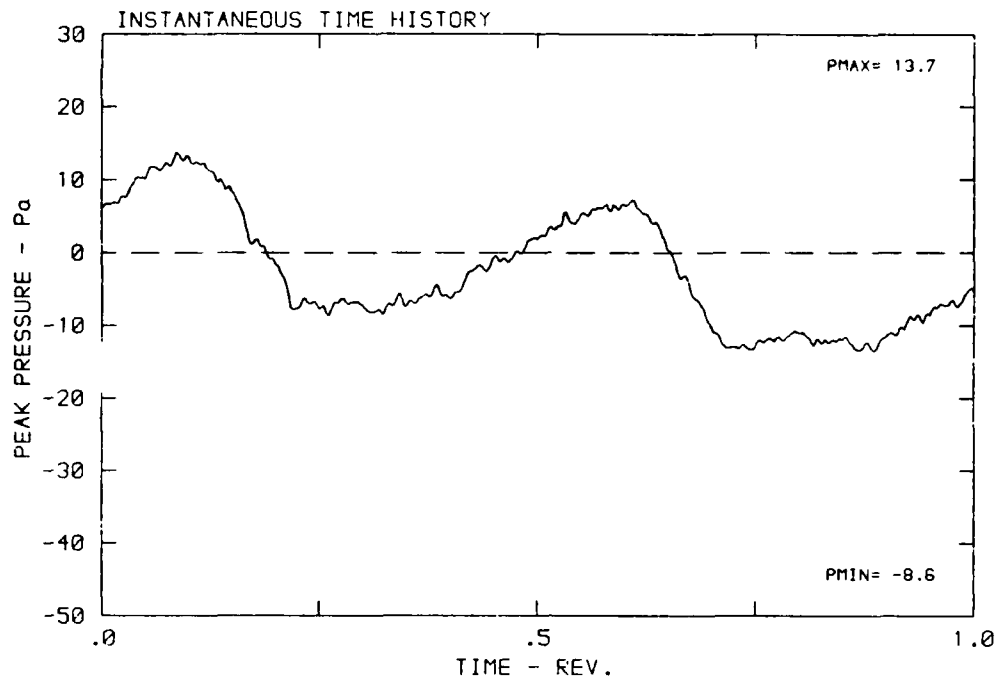
DATA POINT: LN-5 PUN: 156 MP: 6

β : 23.7° MH: .6751 n: 2100 rpm vru: .230 ϕ : -3.3° T: 186.9 K



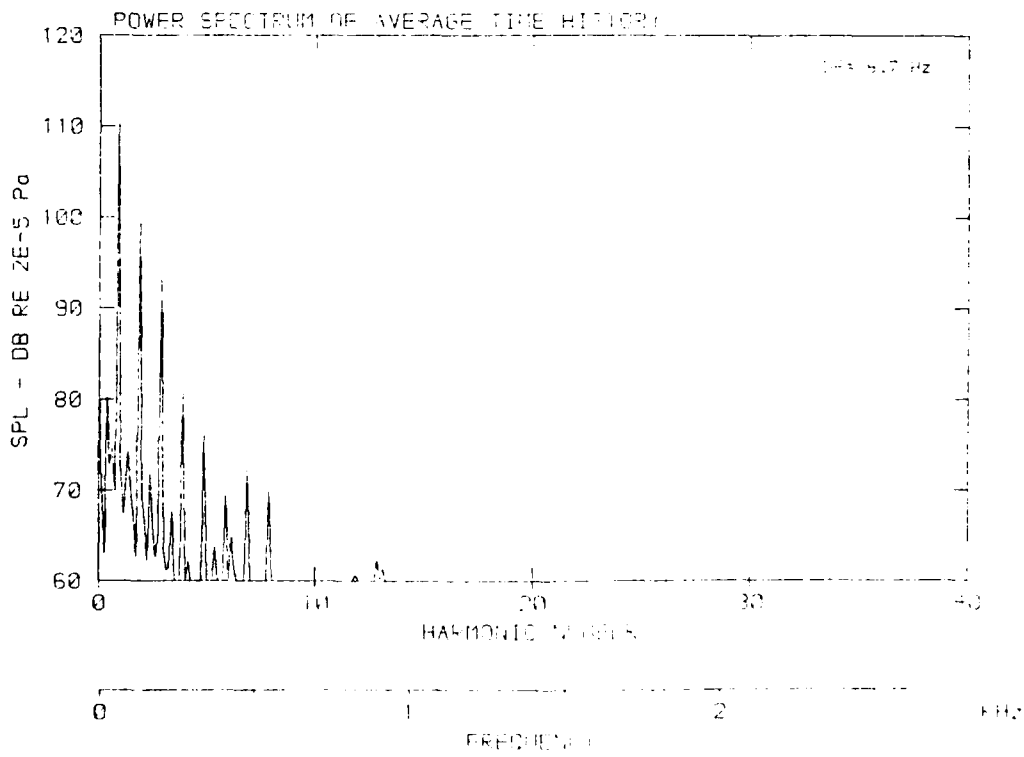
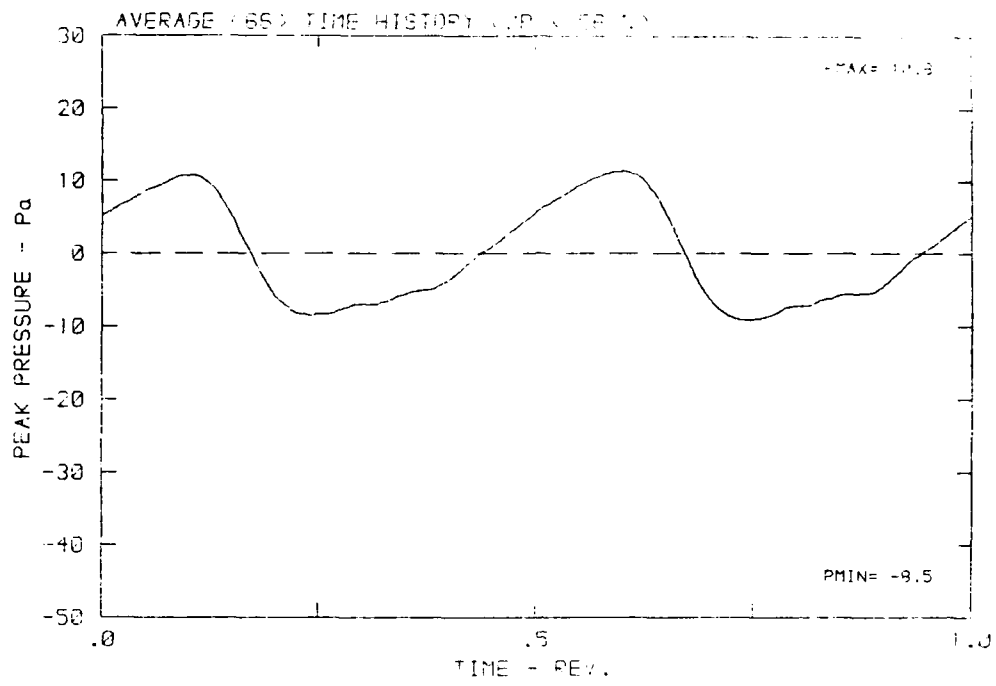
DATA POINT: LN-5 RUN: 158 MP: 7

β : 23.7° MH: .675! n: 2100 rpm v/u: .230 ϕ : -3.9° T: 286.9 K



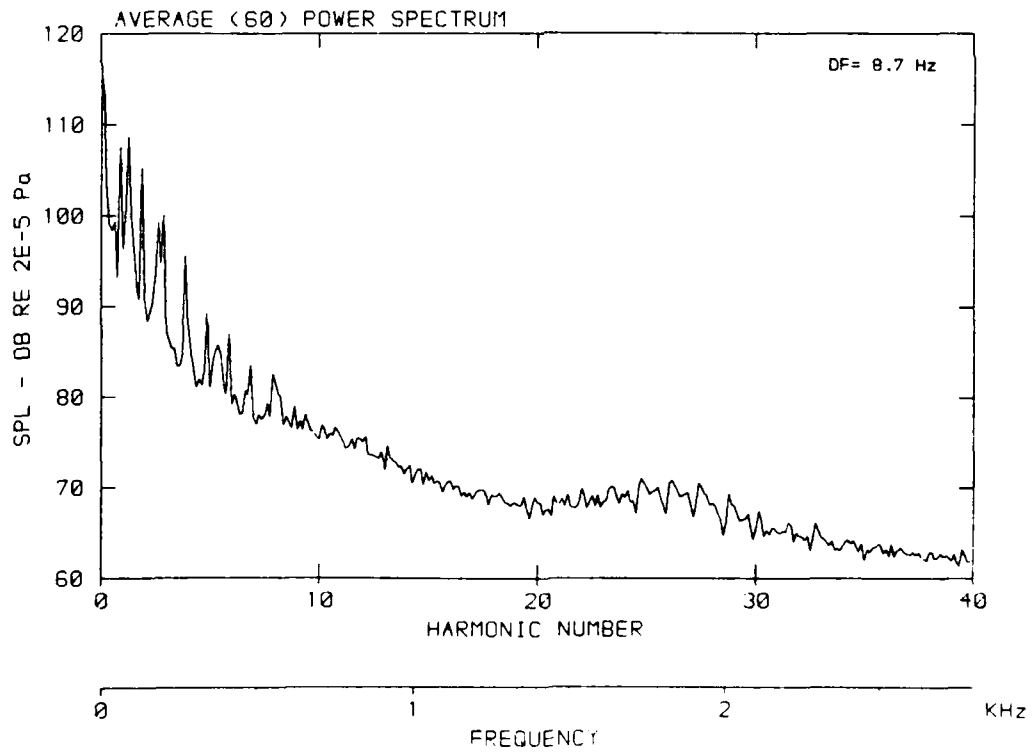
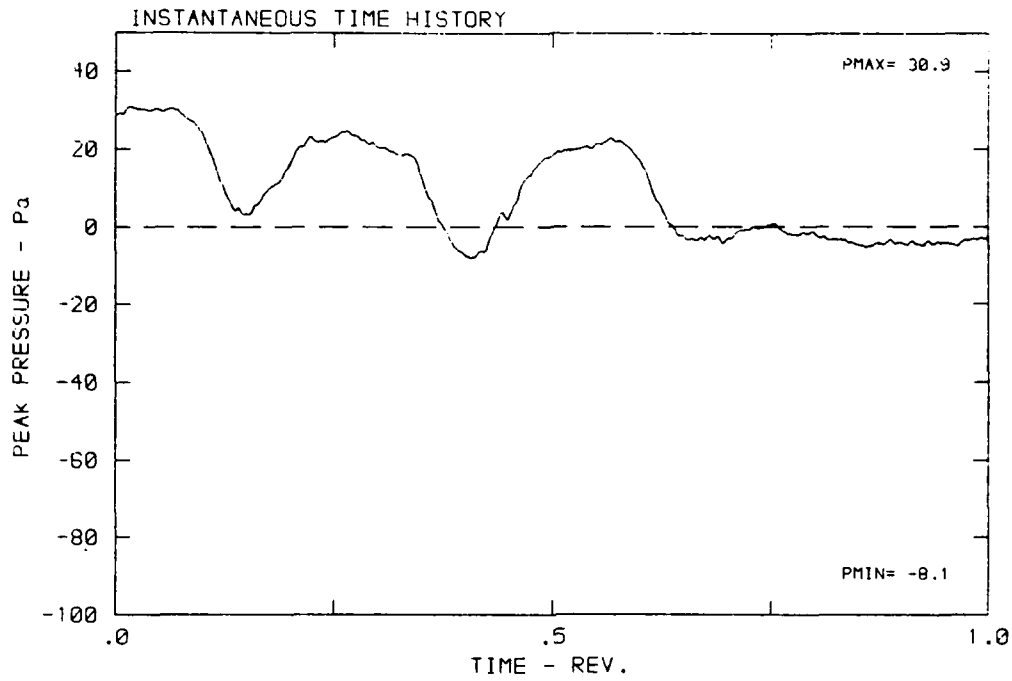
DATA POINTS

β : 23.7° ω H: .6751 ω : 2100 ω W: 1.233 ω U: 43.35 ω T: 116.0



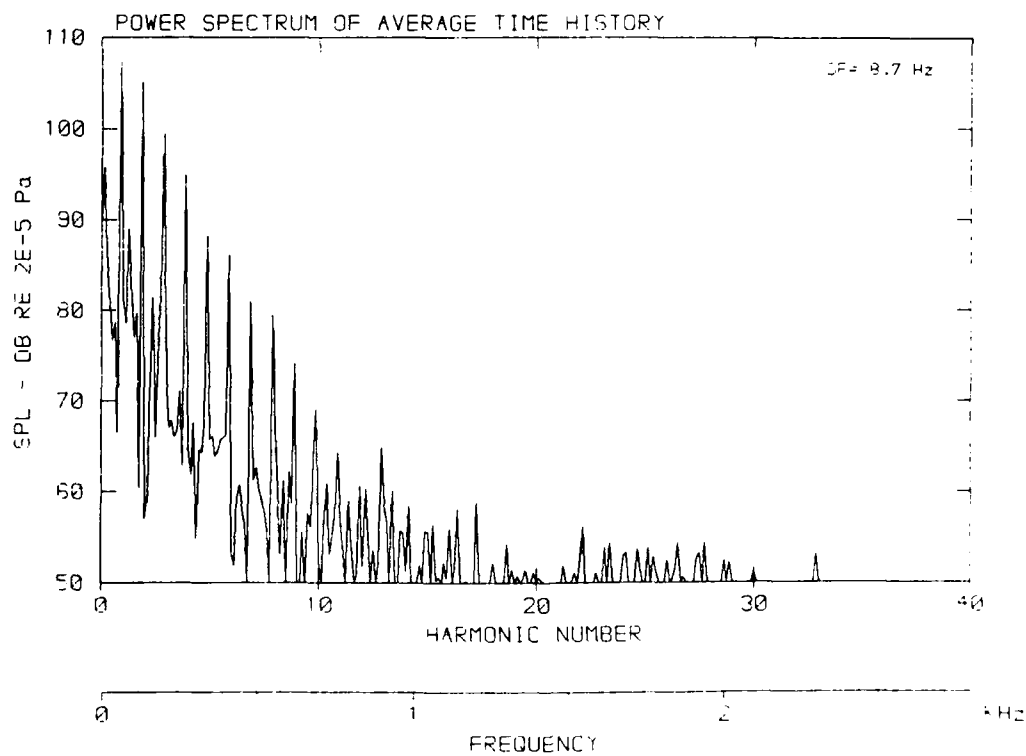
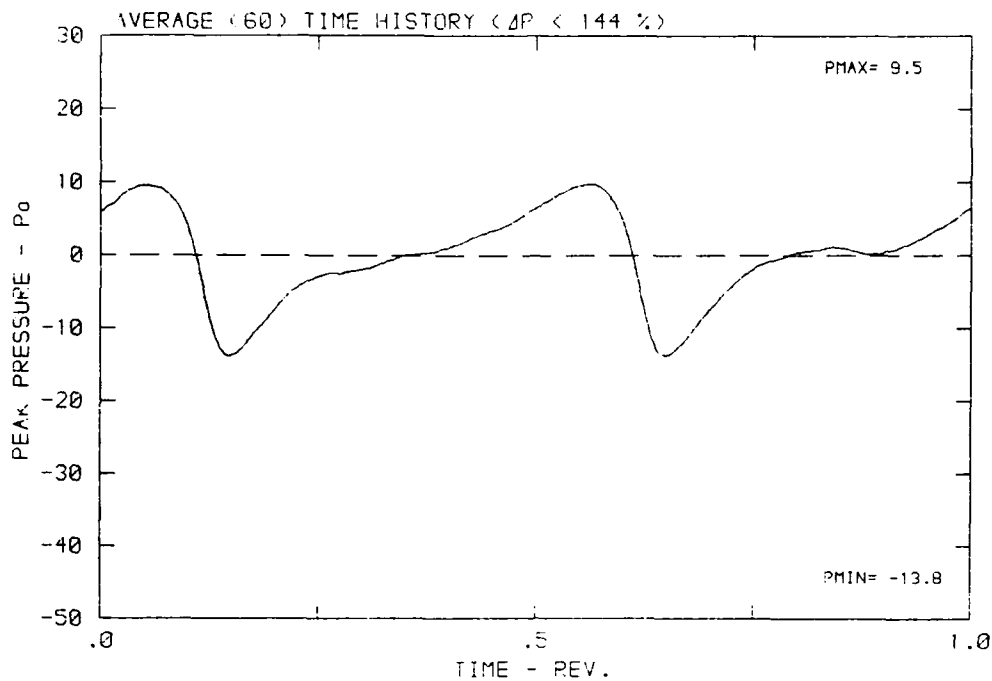
DATA POINT: LN-5 RUN: 158 MP: 9

β : 23.7° MH: .6751 n: 2100 rpm v/u : .230 ϕ : -3.3° T: 296.8 K



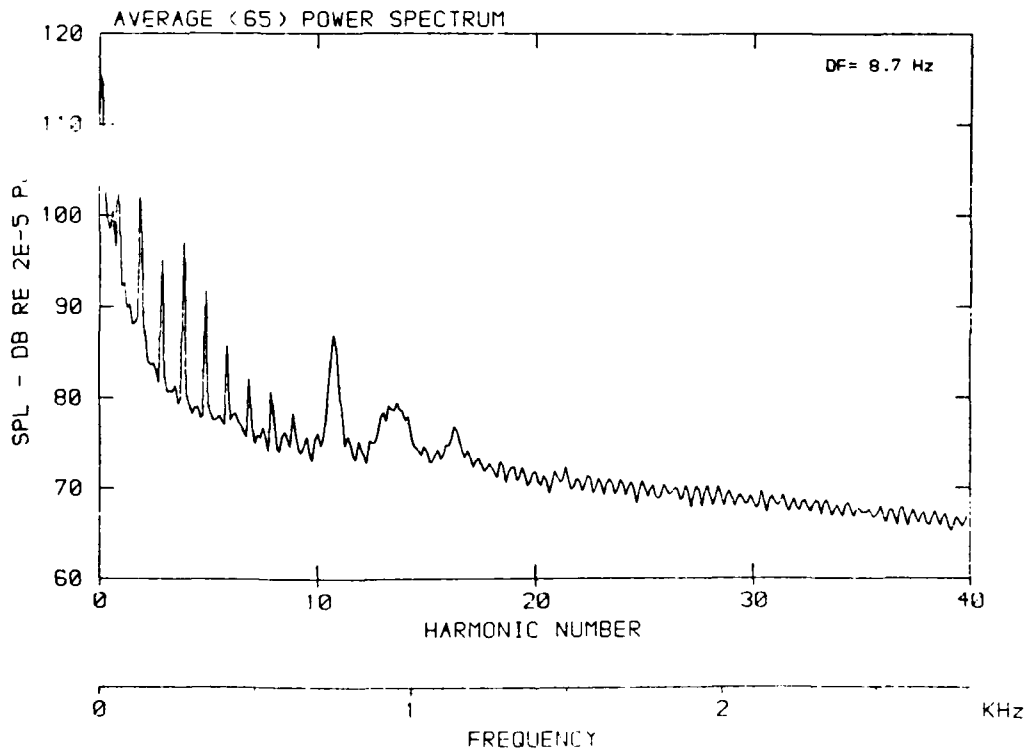
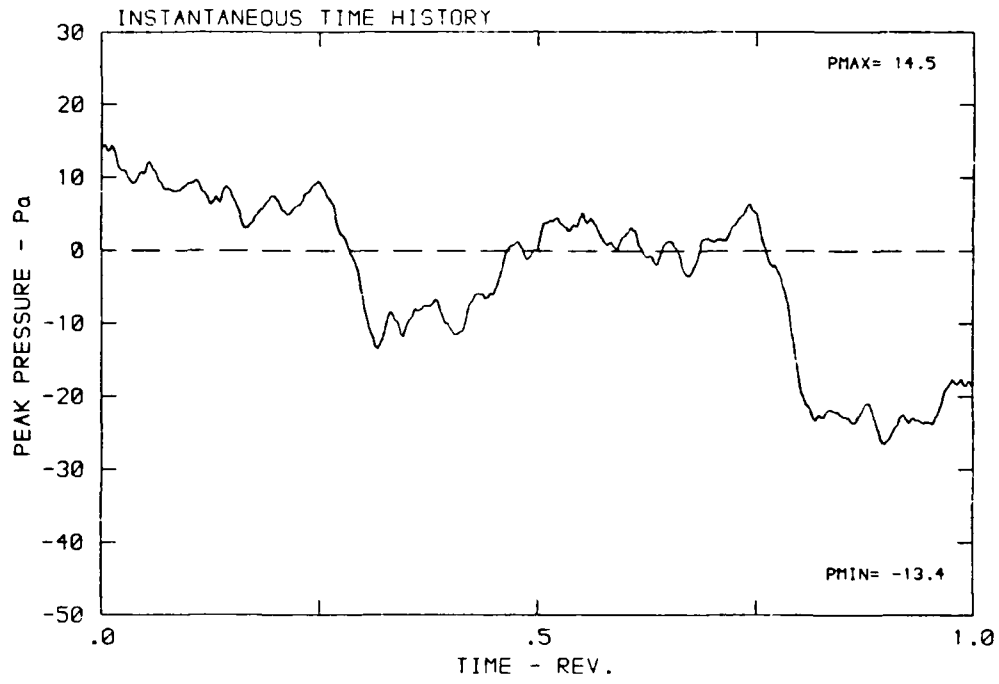
DATA POINT : LN-5 RUN : 158 MP : 8

β : 23.7° MH : .6751 n : 2100 rpm v/u : .230 ϕ : -3.8° T : 286.9 K



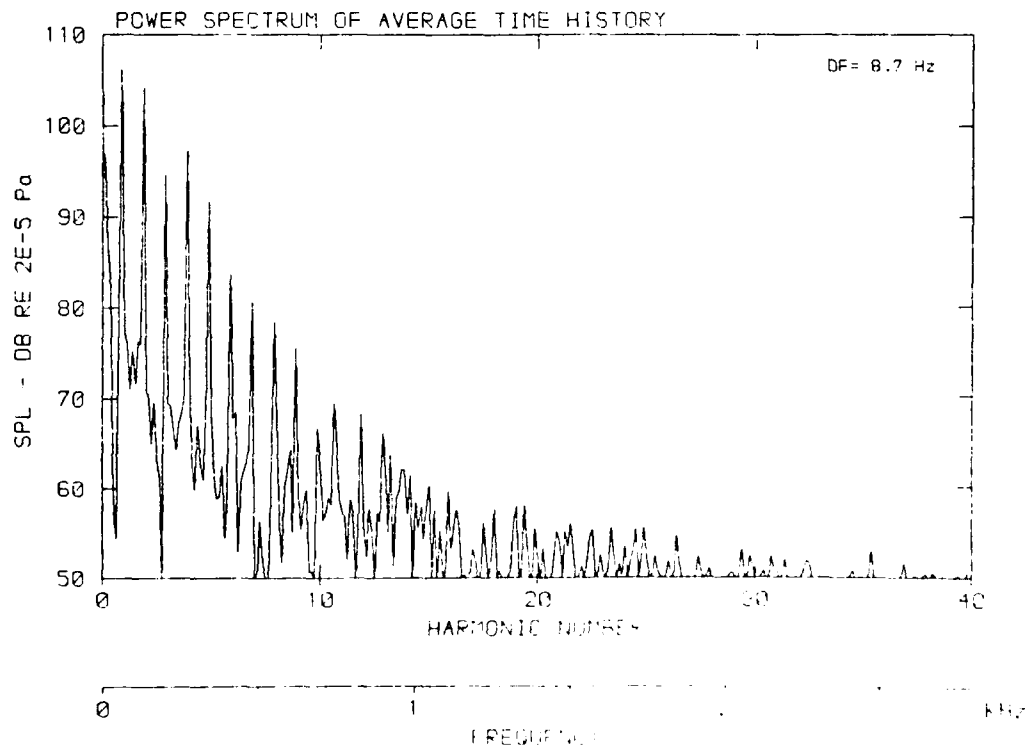
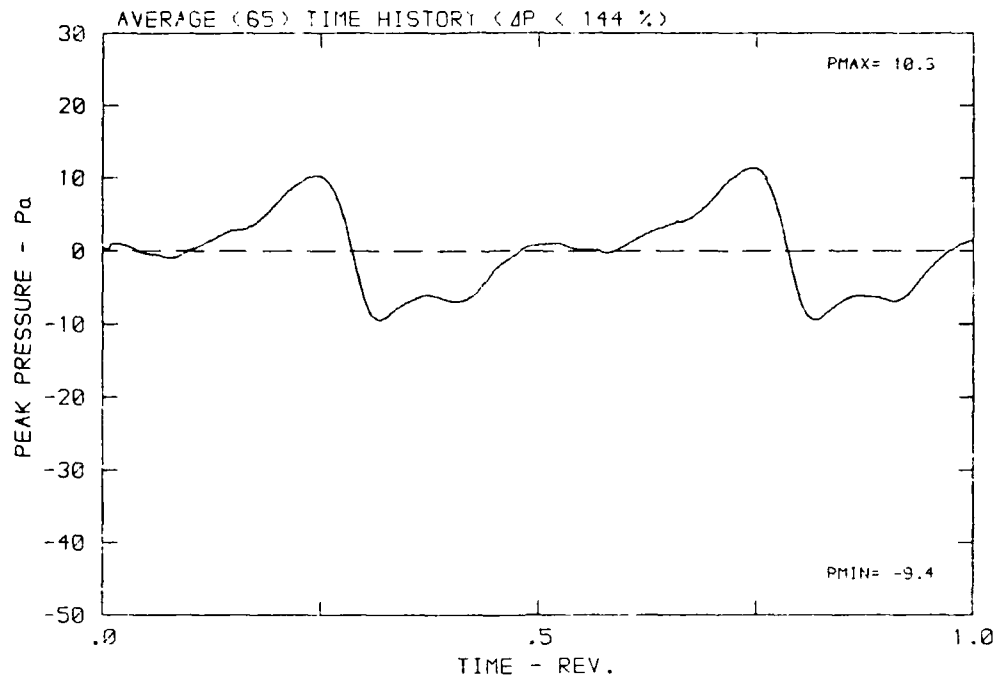
DATA POINT: LN-5 RUN: 158 MP: 9

β : 23.7° MH: .6751 n: 2100 rpm v/u: .230 ϕ : -3.8° T: 286.9 K



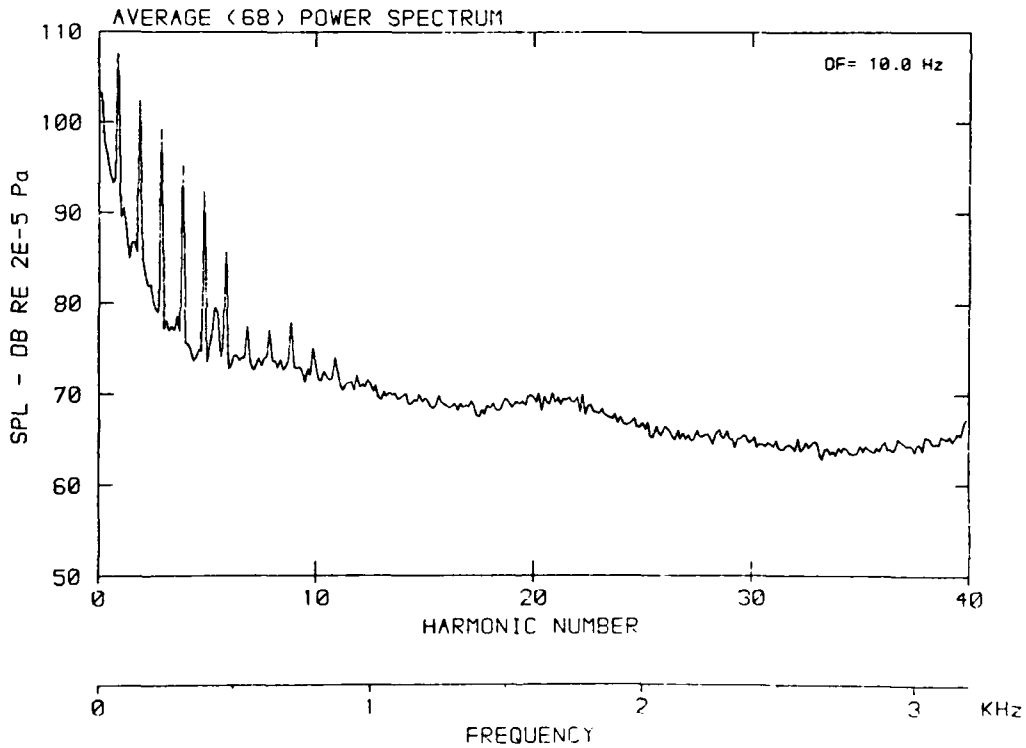
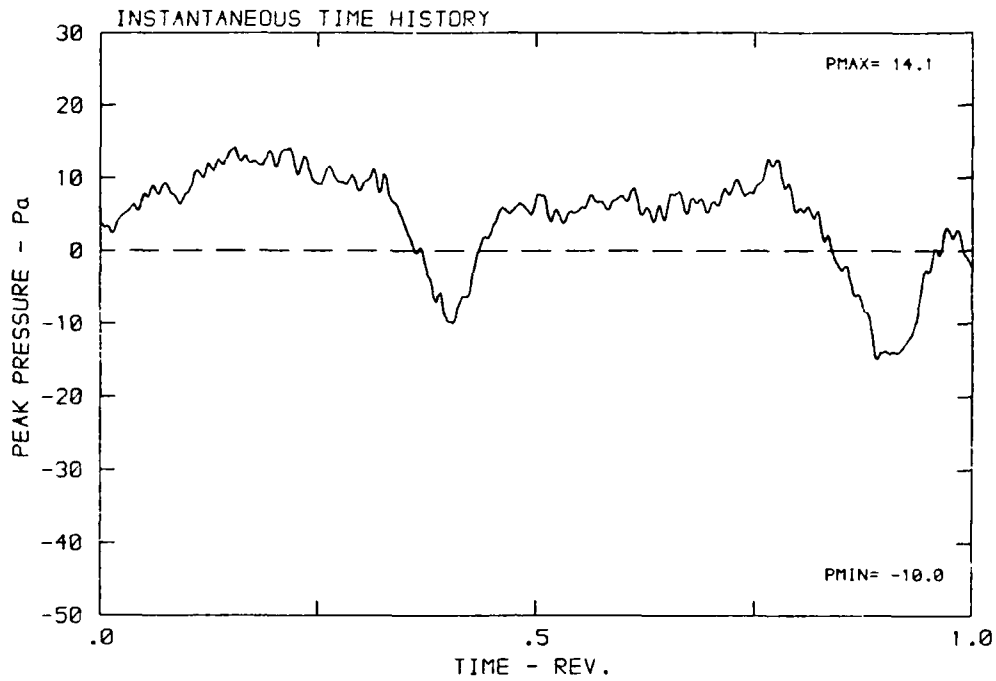
DATA POINT: LN-5 RUN: 158 MF: 9

β : 23.7° MH: .6751 n: 2100 rpm v/u : .230 ϕ : -3.8° T: 285.9 K



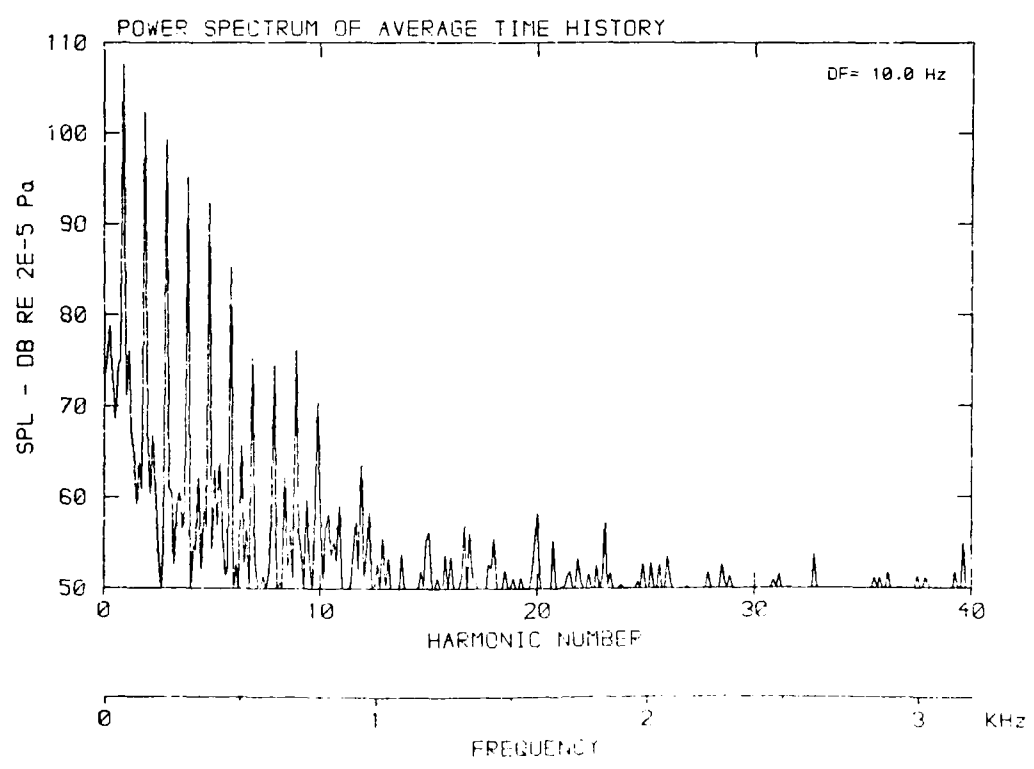
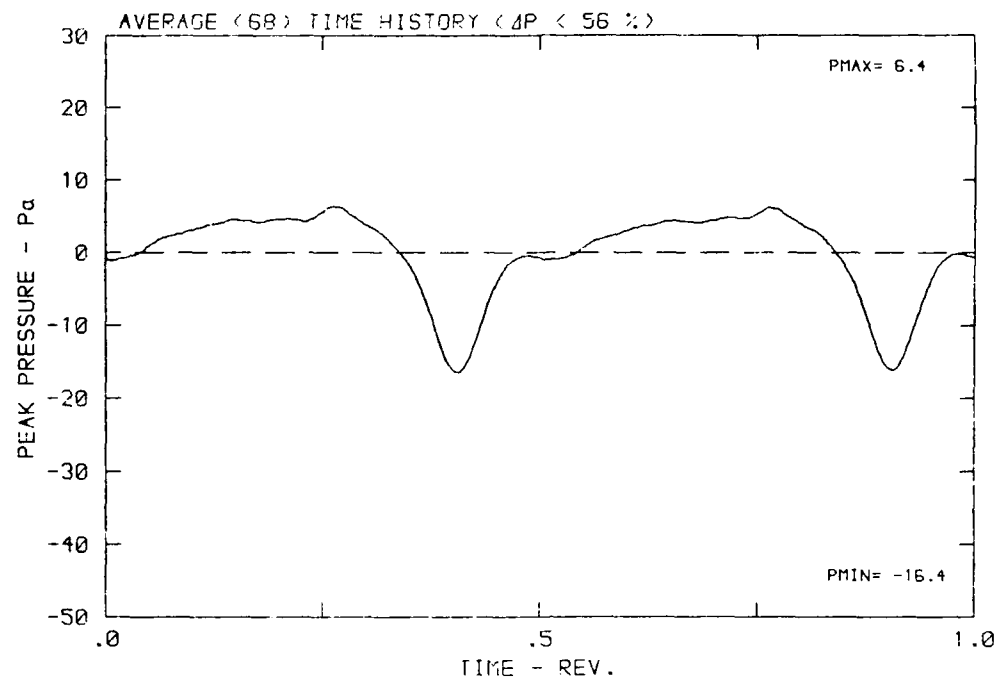
DATA POINT: LN-6 RUN: 159 MP: 1

β : 23.7° MH: .7771 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.2 K



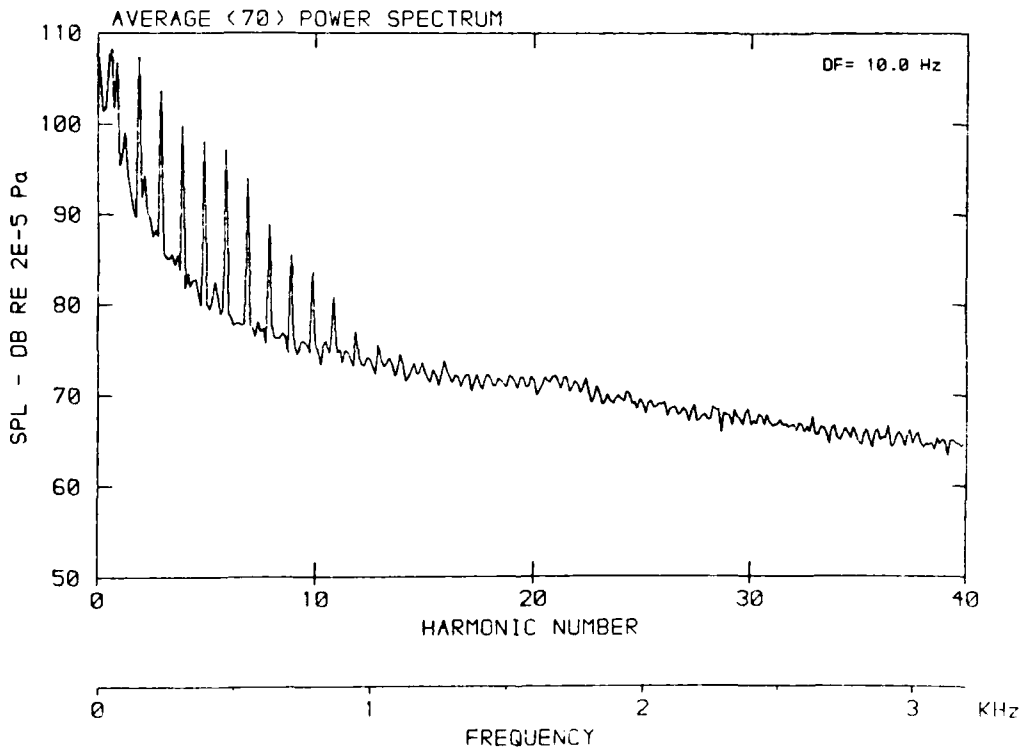
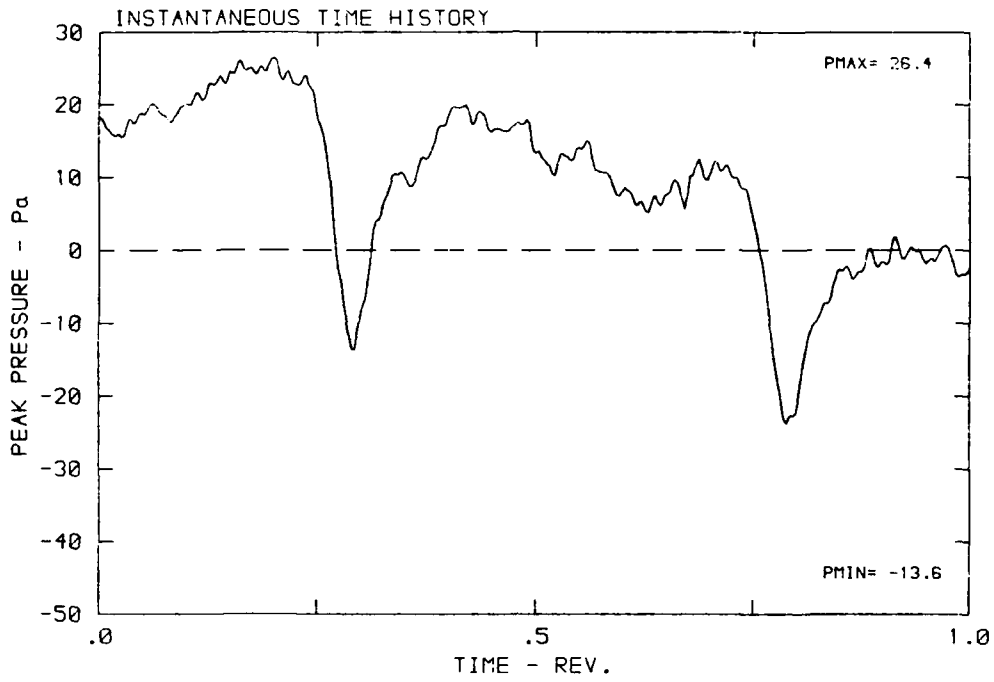
DATA POINT: LN-6 RUN: 159 MP: 1

β : 23.7° MH: .7771 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.2 k



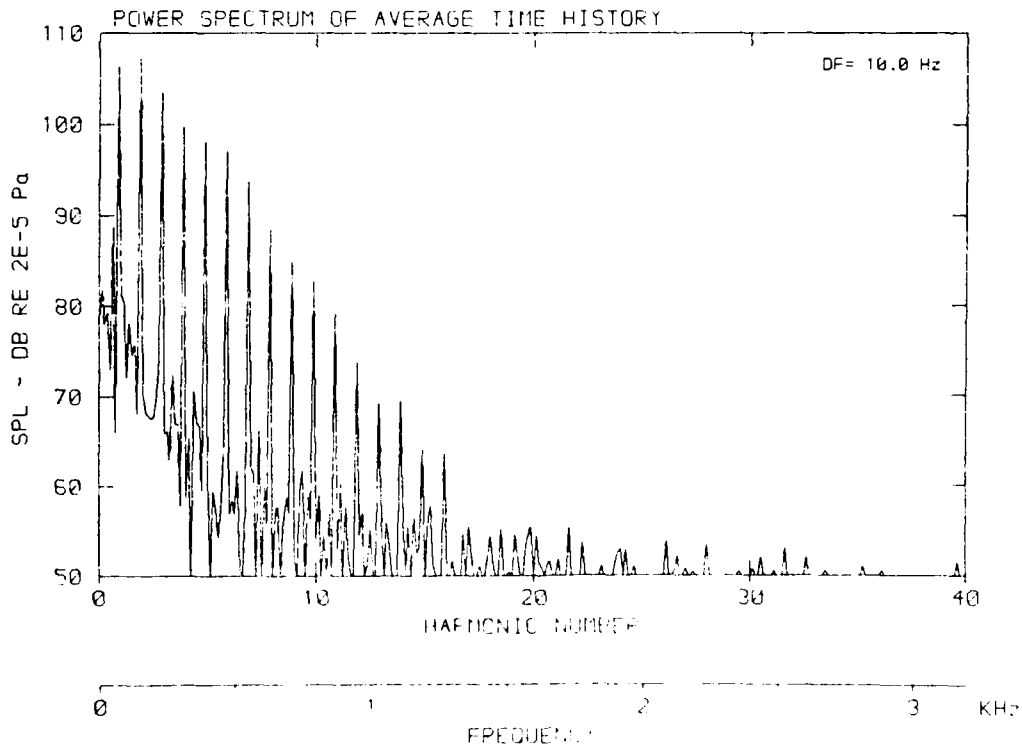
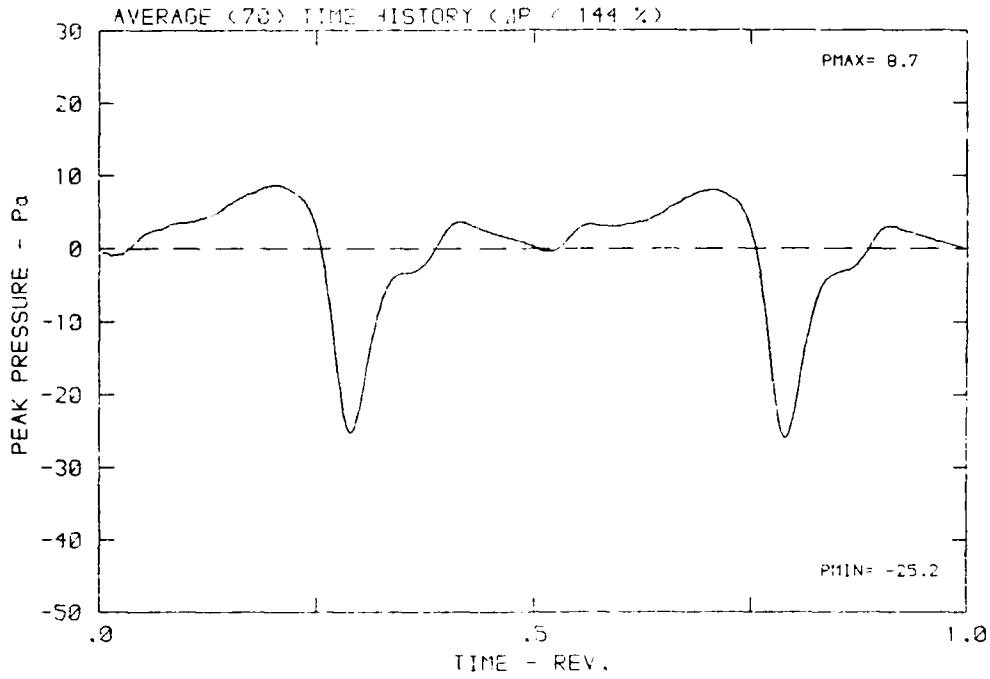
DATA POINT: LN-6 RUN: 159 MF: 2

β : 23.7° MH: .7771 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 297.0 K



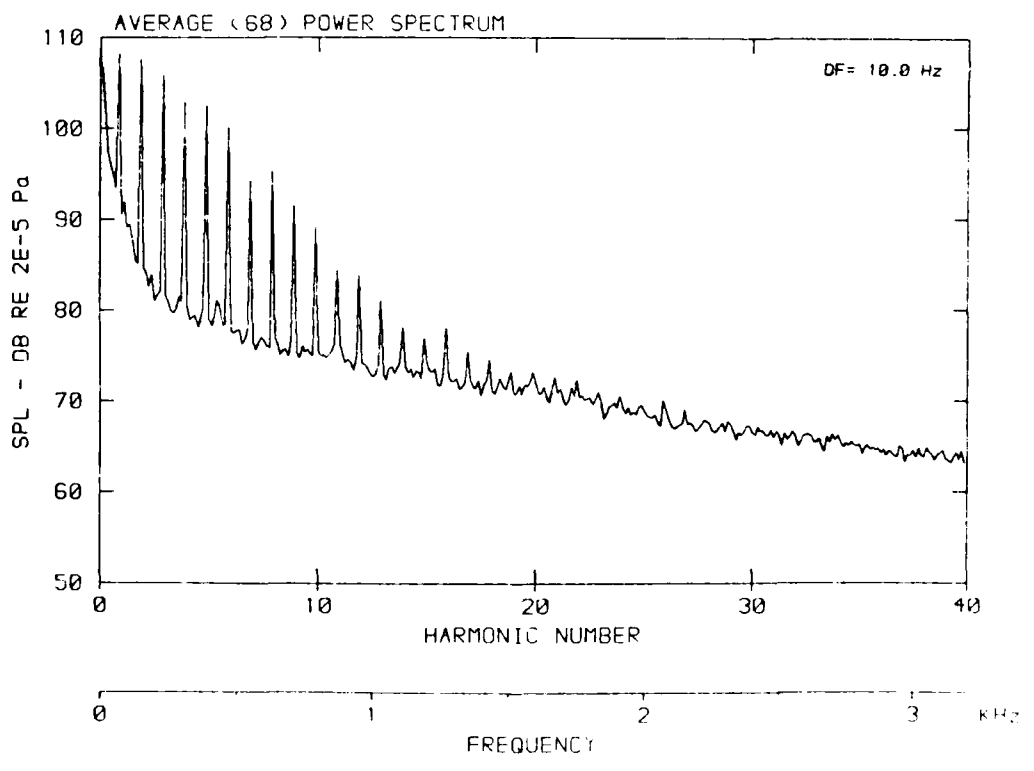
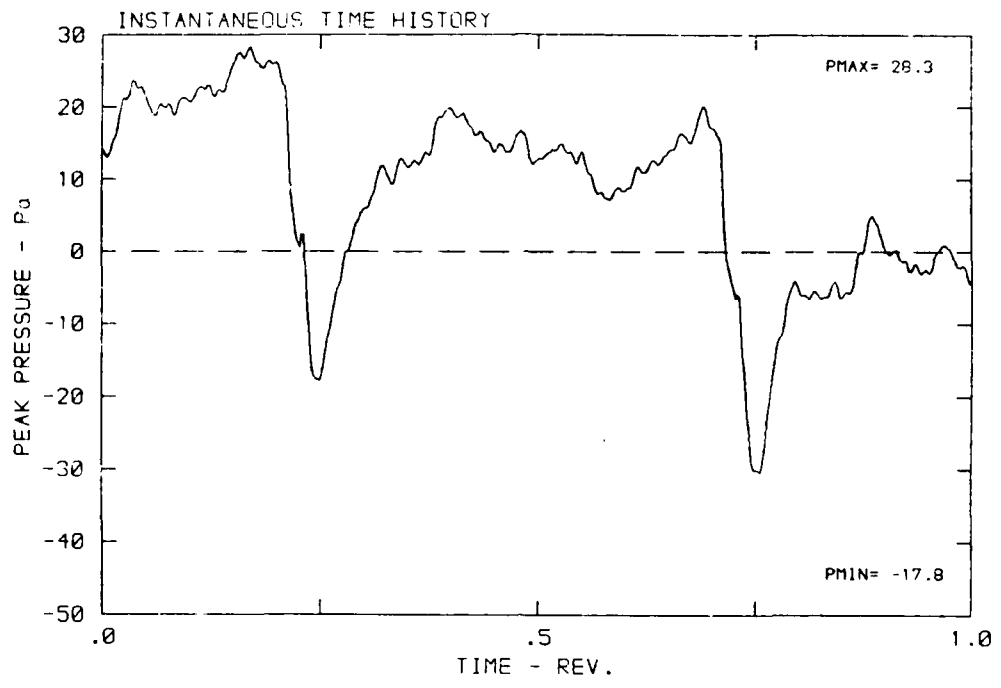
DATA POINT: LN-6 RUN: 159 MP: 2

β : 23.7° MH: .7771 n: 2400 rpm ν : .263 ϕ : -3.8° T: 267.2 K



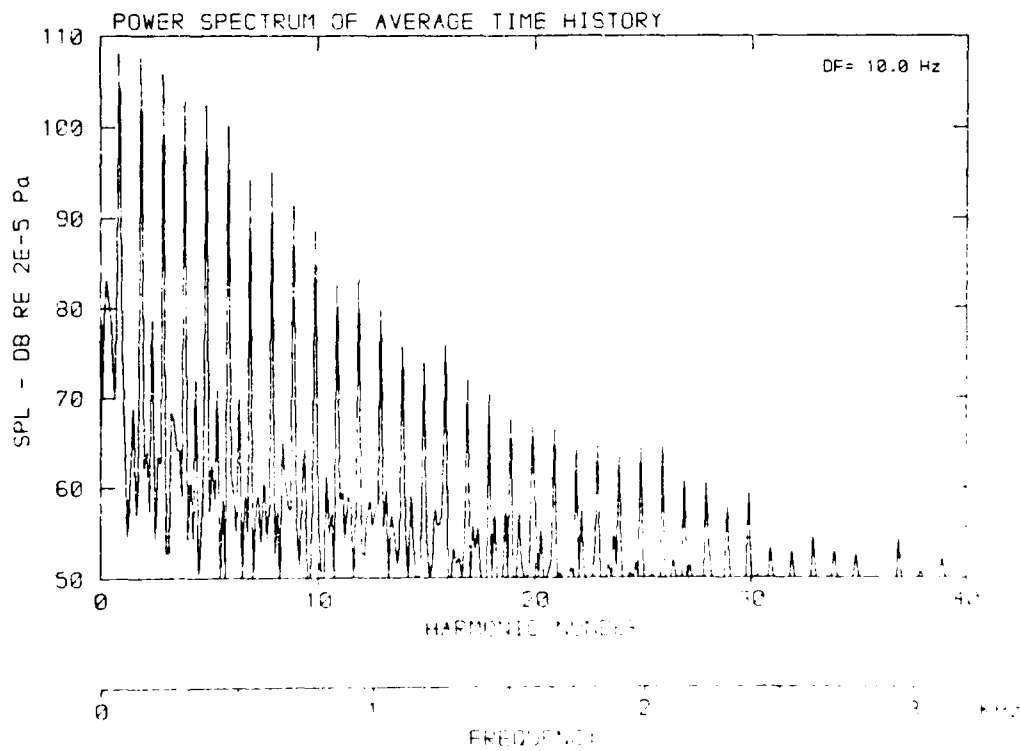
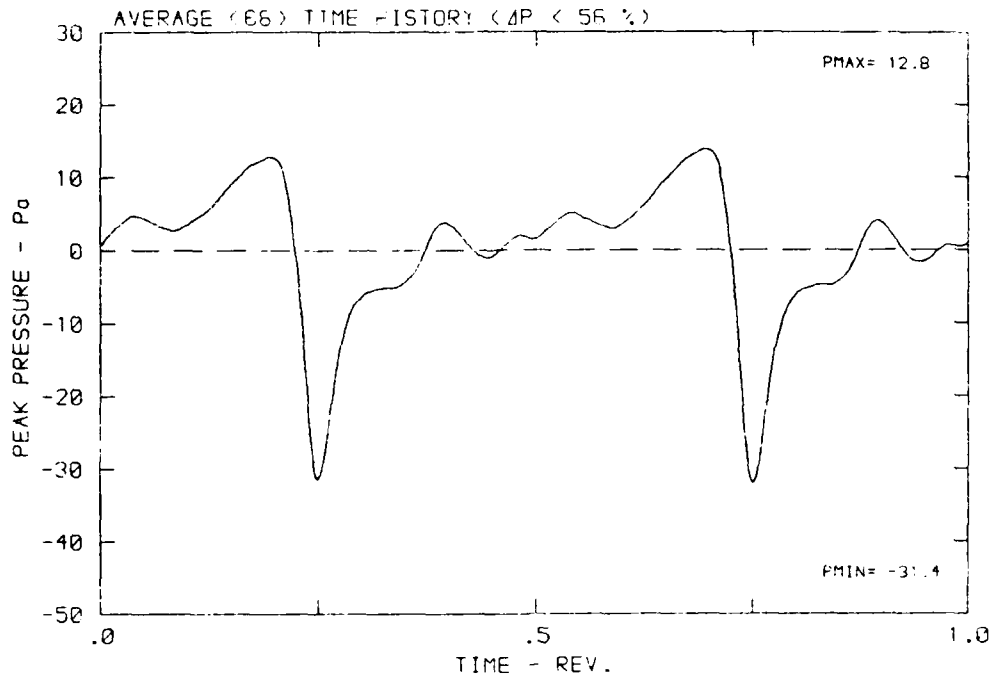
DATA POINT: LN-6 RUN: 159 MP: 3

β : 23.7° MH: .7771 n: 2400 rpm v/u : .263 ϕ : -3.6° τ : 287.2



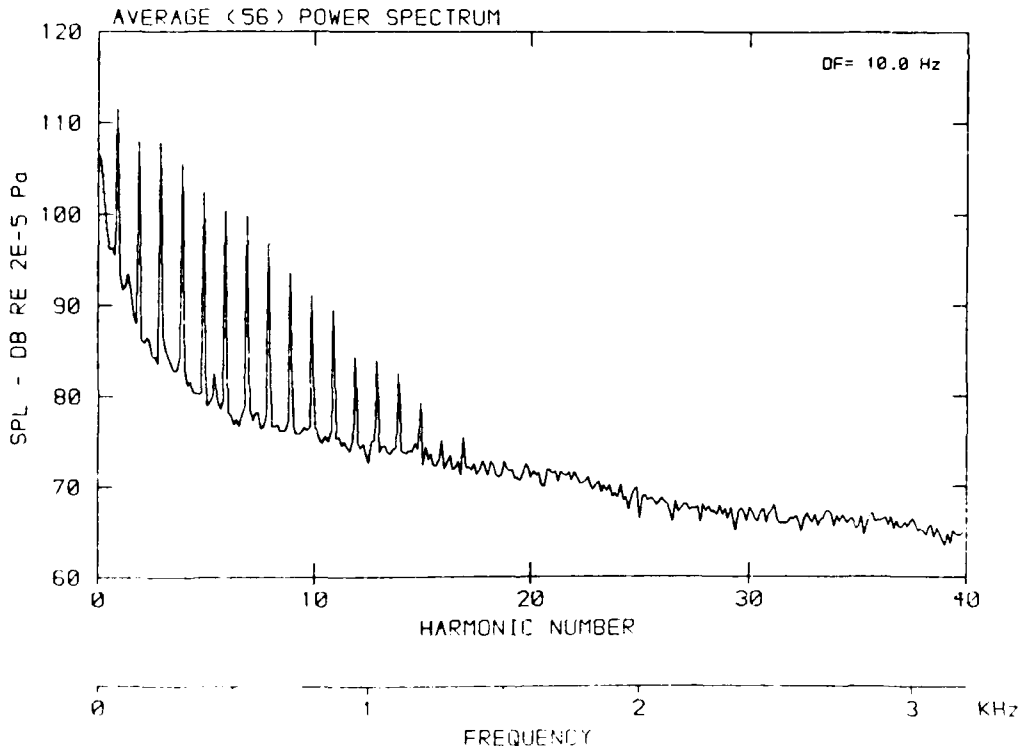
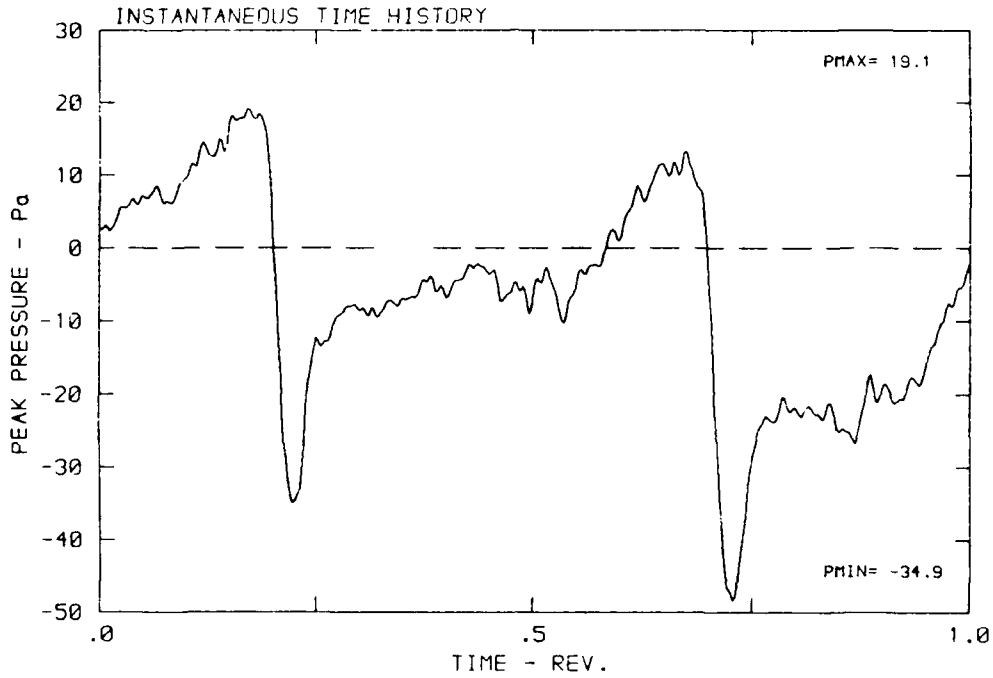
DATA POINT: LN-6 RUN: 159 MP: 3

β : 23.7° NH: .7771 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 297.2 K



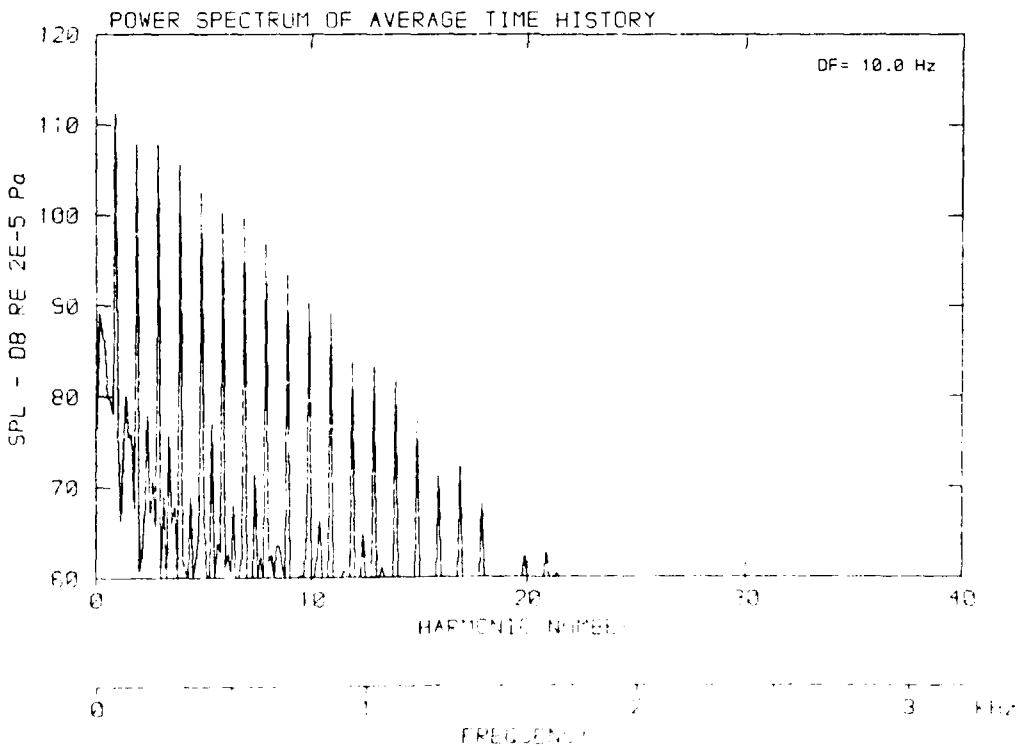
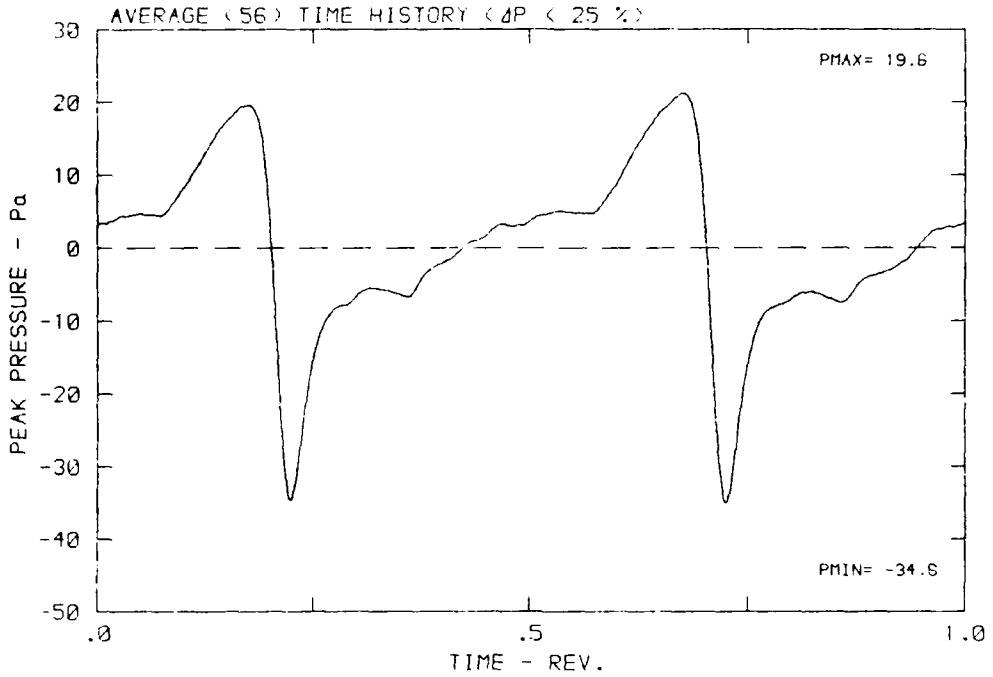
DATA POINT: LN-6 RUN: 153 MP: 4

β : 23.7° MH: .7771 n: 2400 rpm vzu: .263 ϕ : -3.8° T: 287.2 K



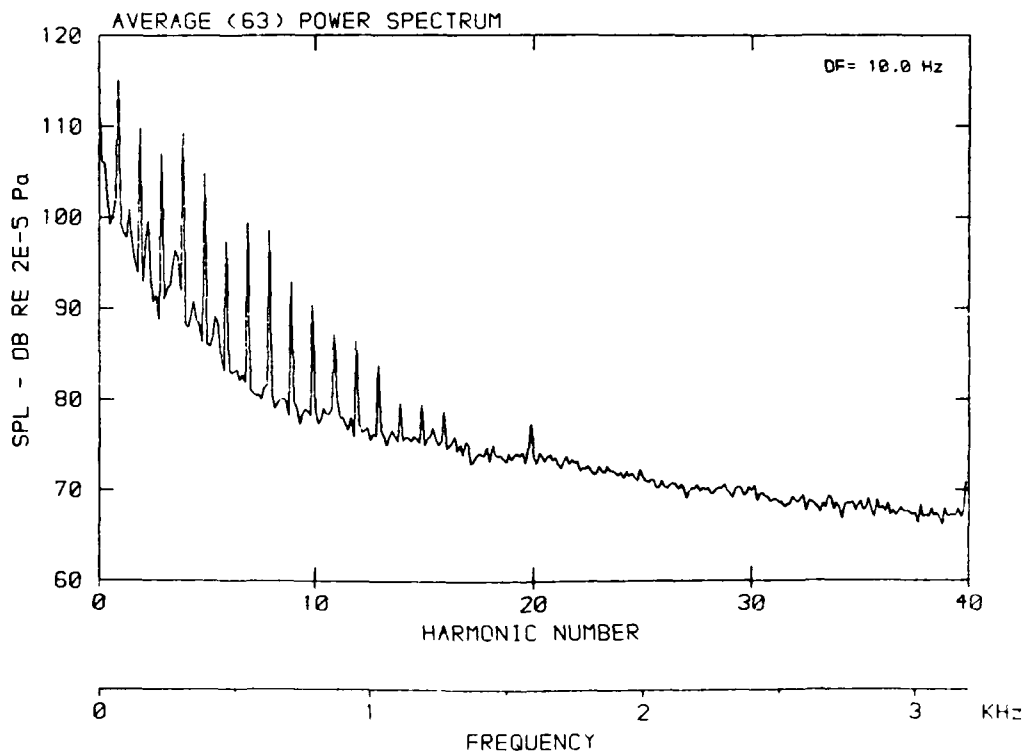
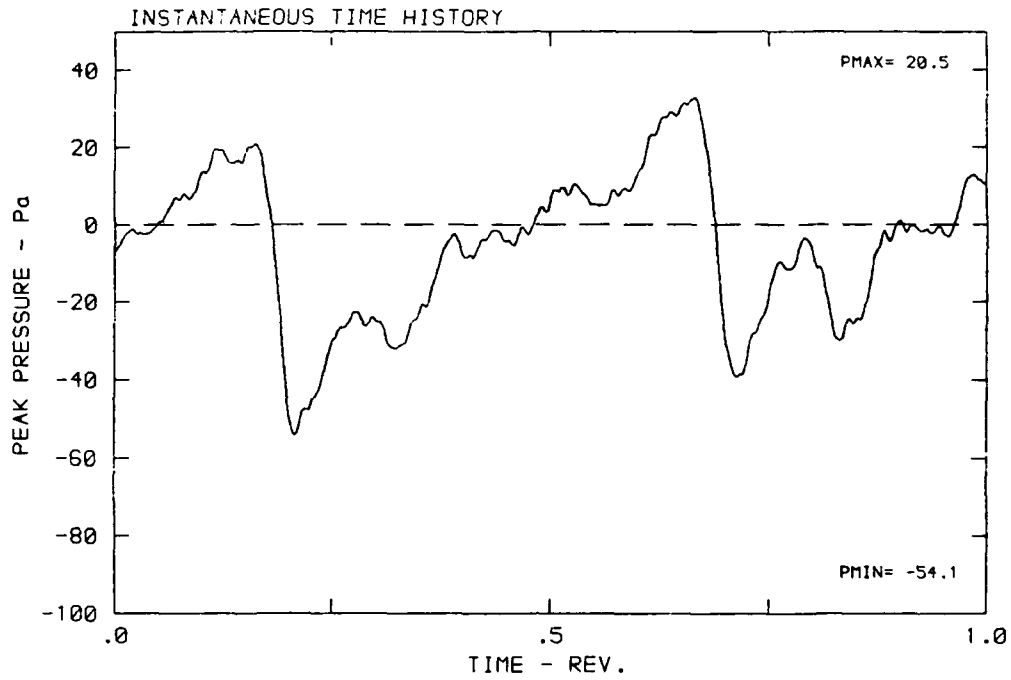
DATA POINT: LN-6 RUN: 159 MP: 4

β : 23.7° MH: .7771 n: 2400 rpm v/u : .268 ϕ : -3.8° T: 287.2 K



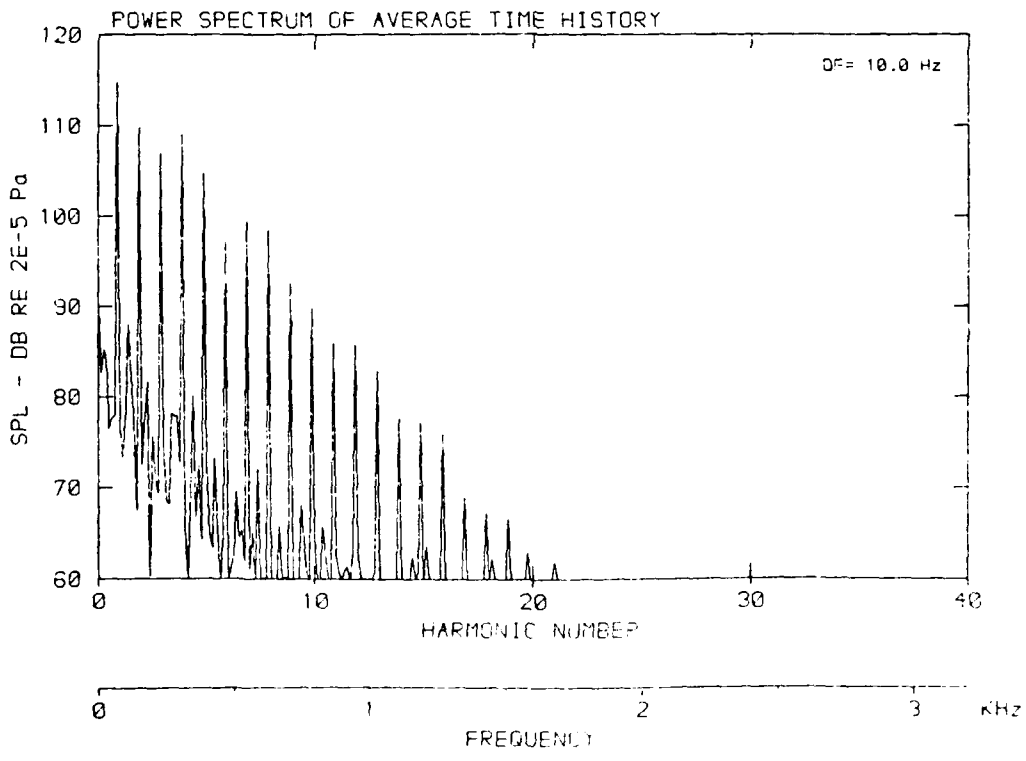
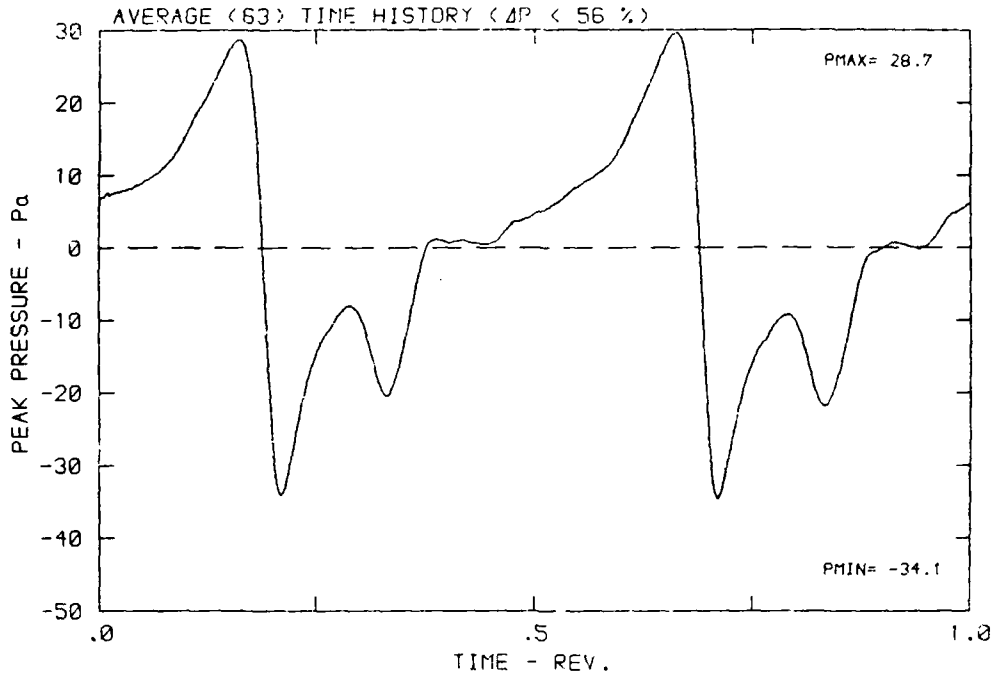
DATA POINT: LN-6 RUN: 159 MP: 5

β : 23.7° MH: .7771 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 287.2 K



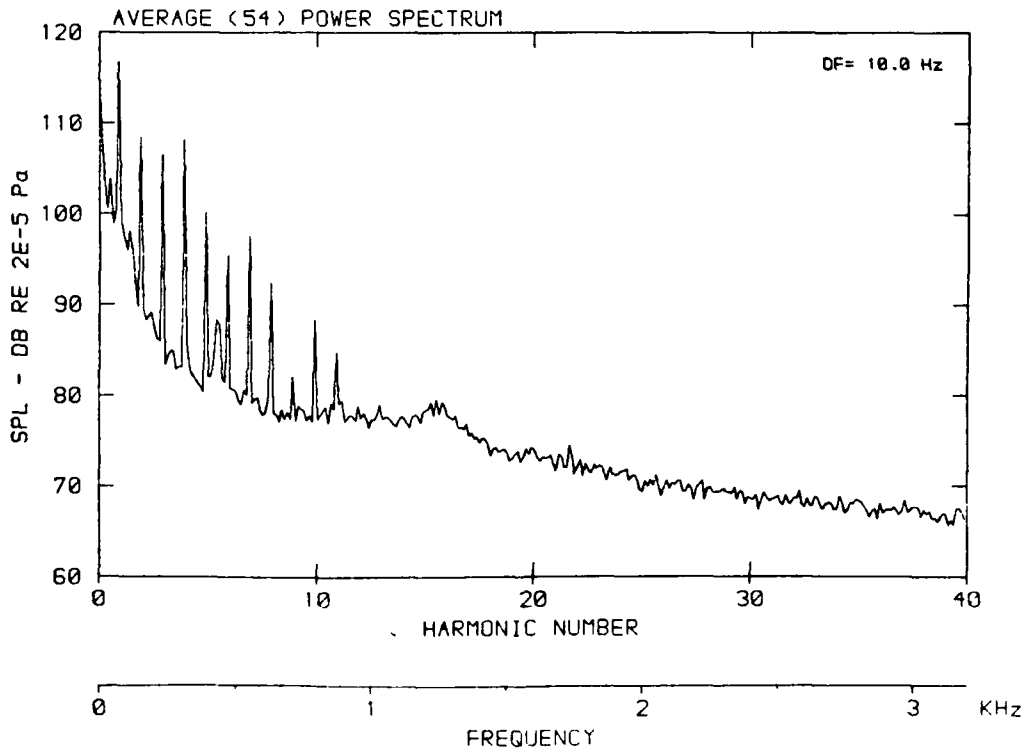
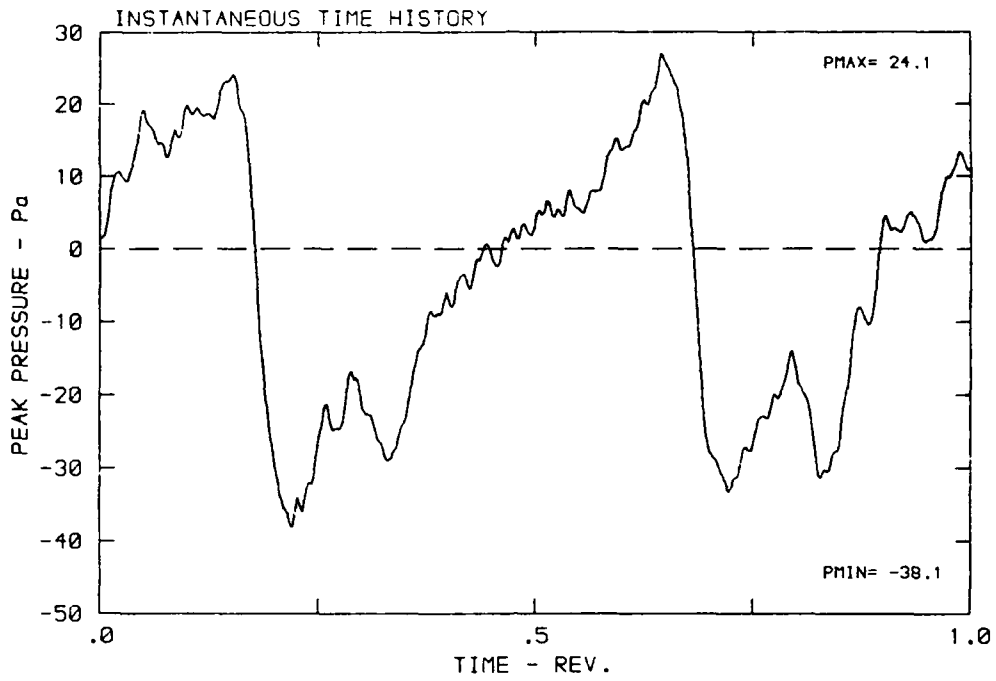
DATA POINT: LN-6 RUN: 159 MP: 5

β : 23.7° MH: .7771 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.2 K



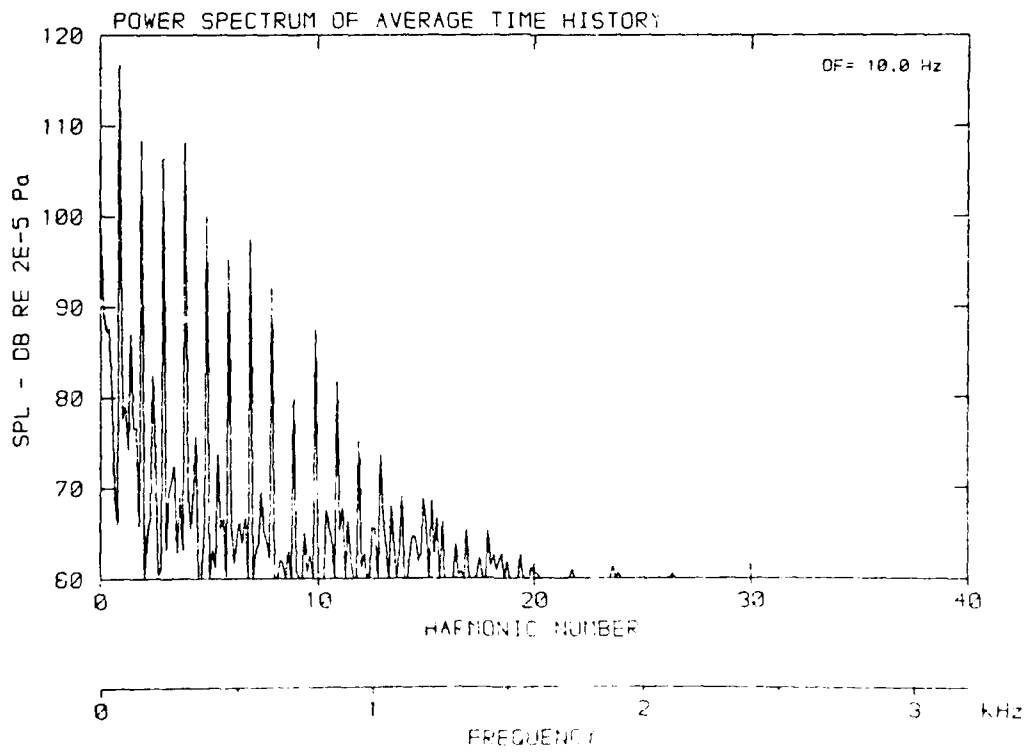
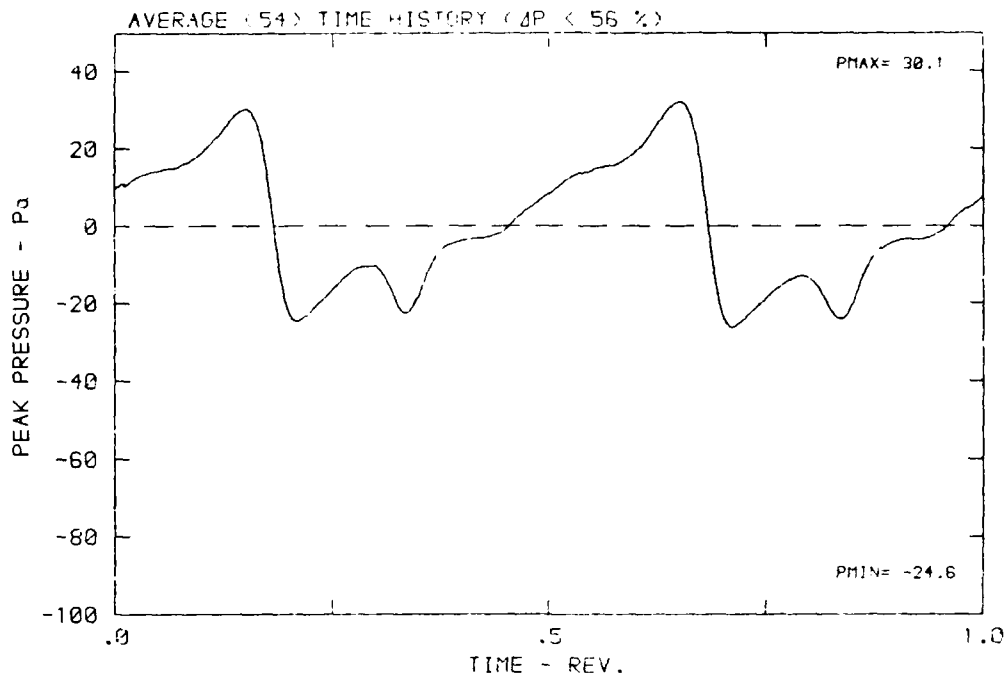
DATA POINT: LN-6 RUN: 159 MP: 6

β : 23.7° MH: .7771 n: 2400 rpm v/u : .263 ψ : -3.8° T: 287.2 K



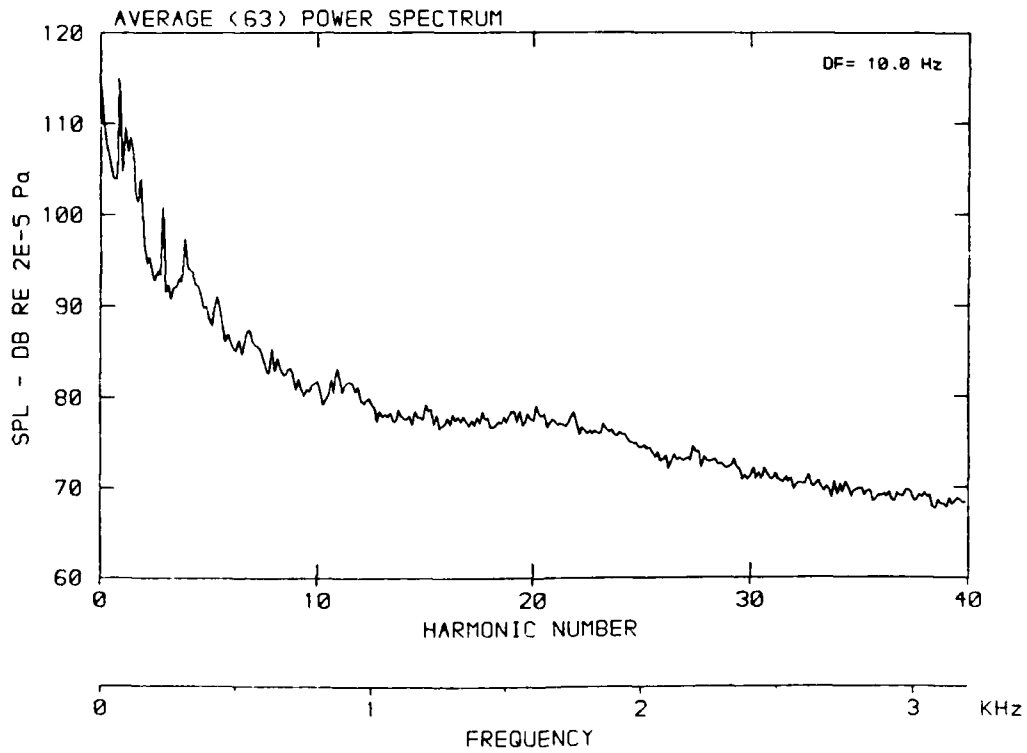
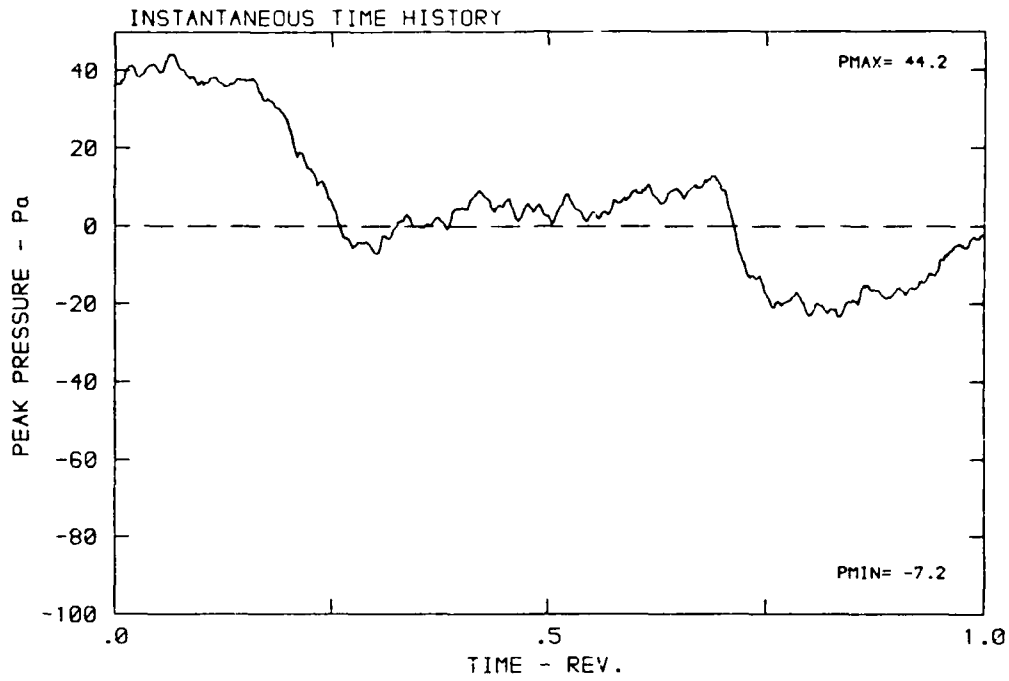
DATA POINT: LN-6 RUN: 159 MP: 6

β : 23.7° MH: .7771 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 267.2 K



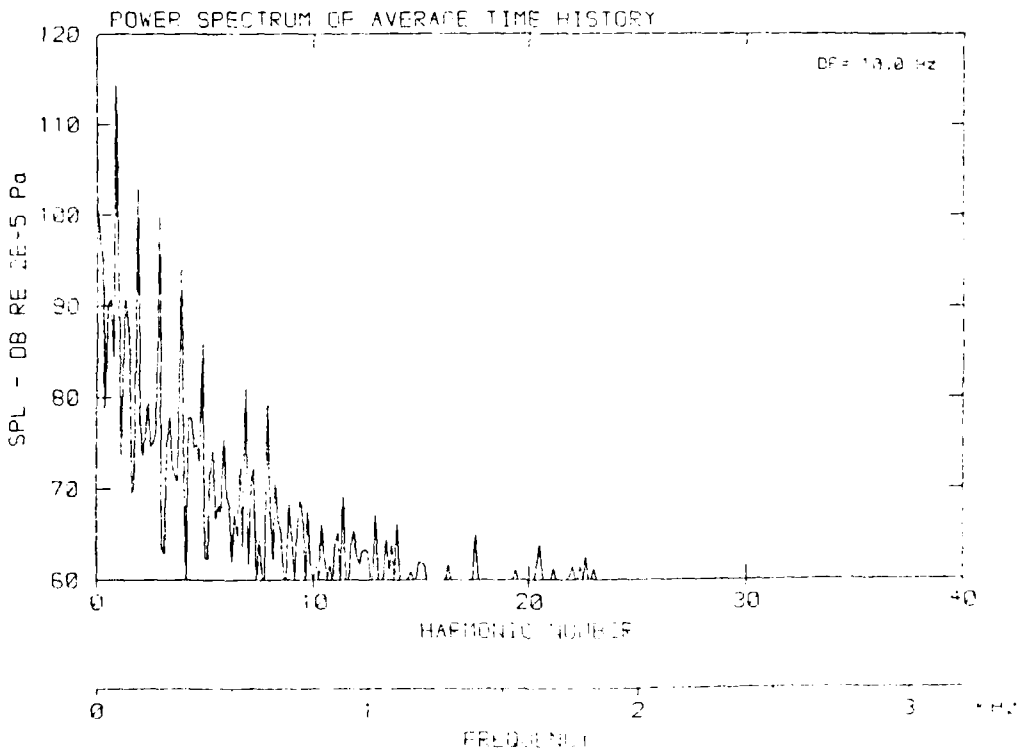
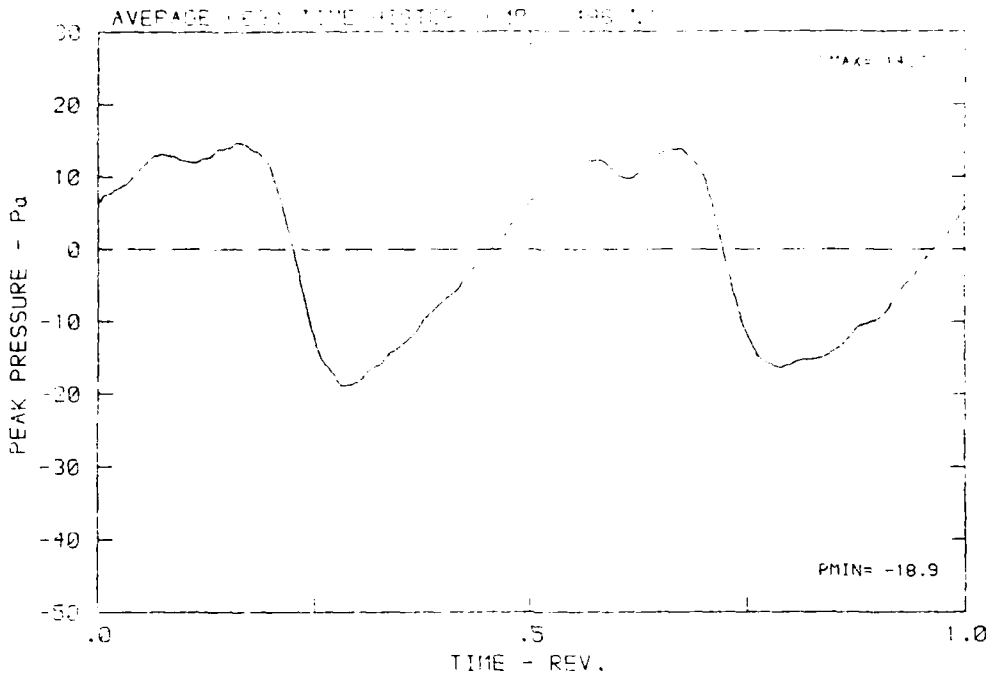
DATA POINT: LN-6 RUN: 159 MP: 7

β : 23.7° MH: .7771 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 287.2 K



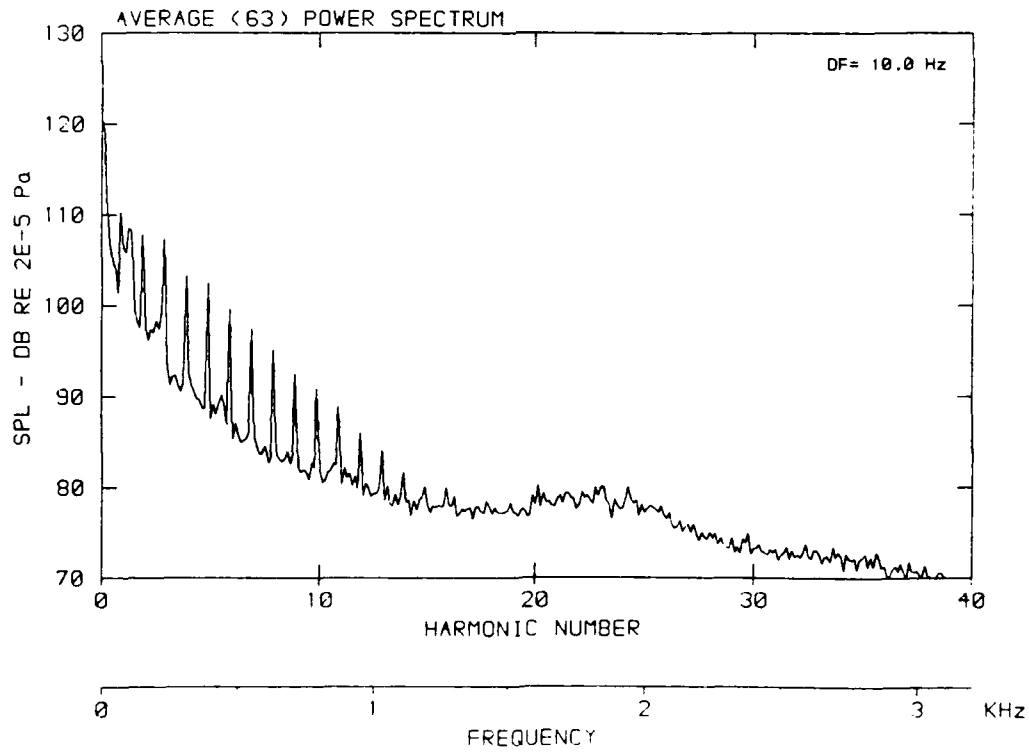
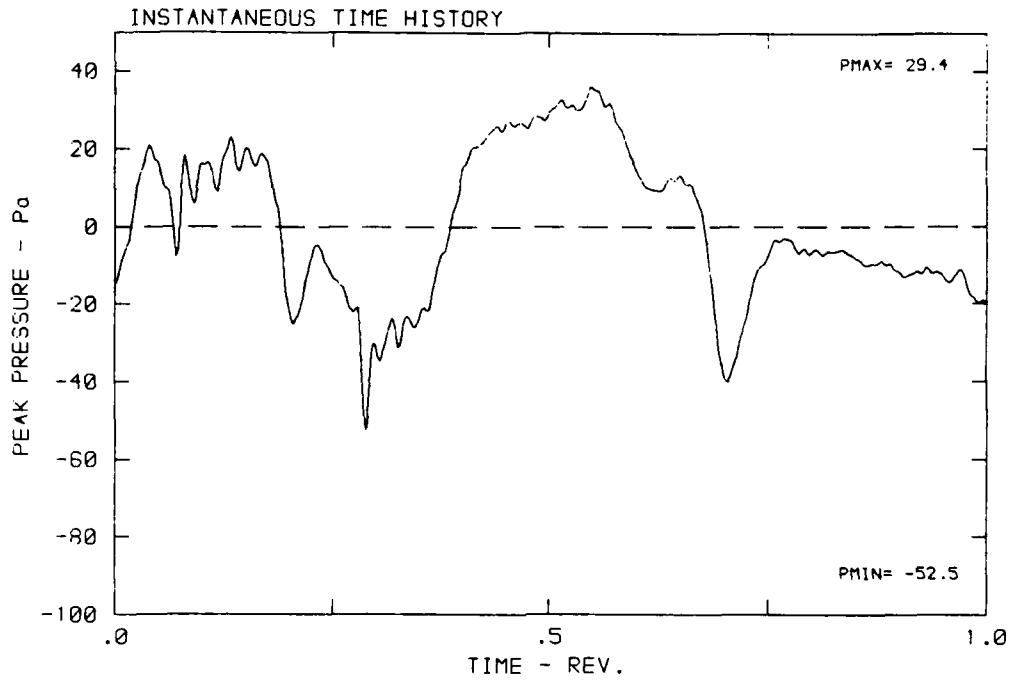
DATA POINT: LN-5

β: 23.7° MH: .0771 N: 19.0 PM: 1.04 .000 01 00.00



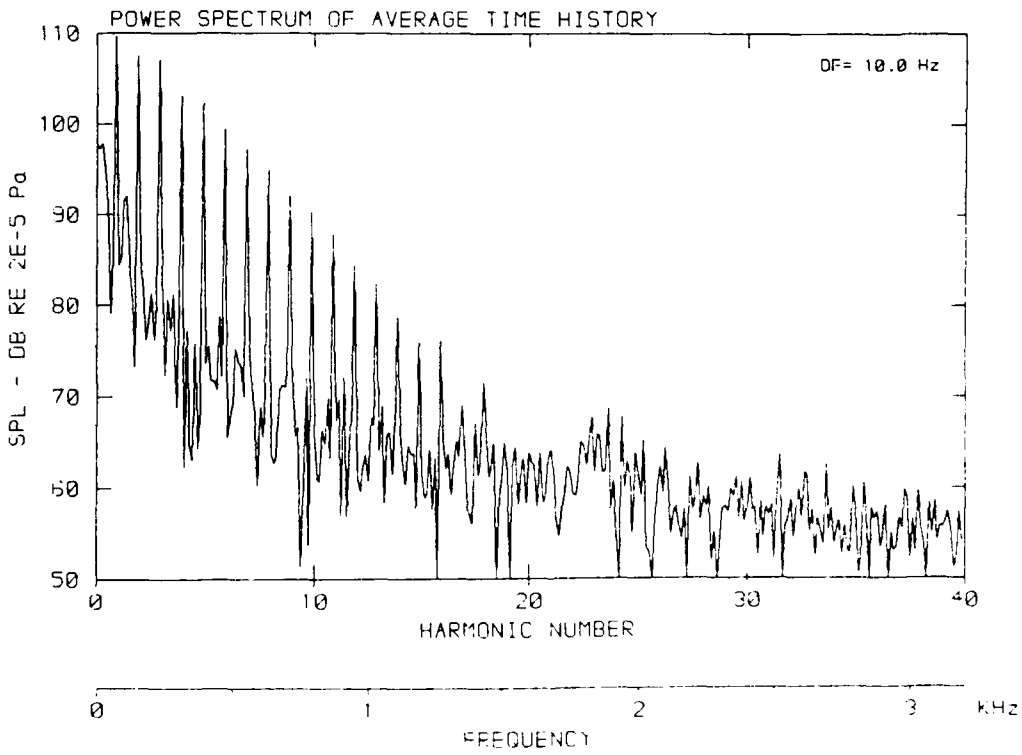
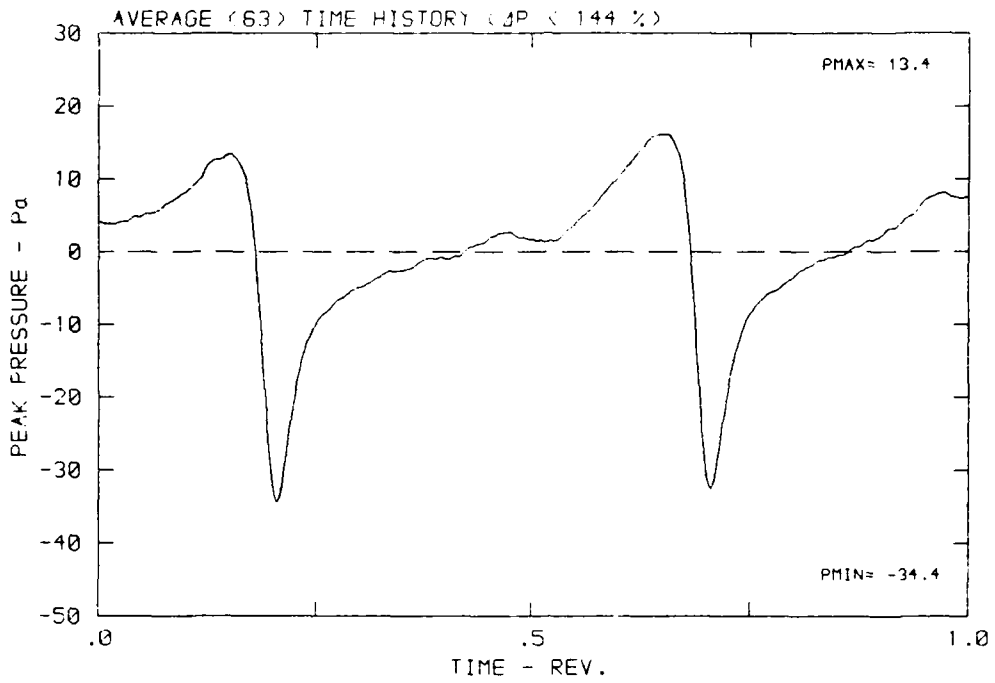
DATA POINT: LN-6 RUN: 159 MP: 8

β : 23.7° MH: .7771 n: 2400 rpm v/u: .263 ϕ : -3.8° T: 287.2 K



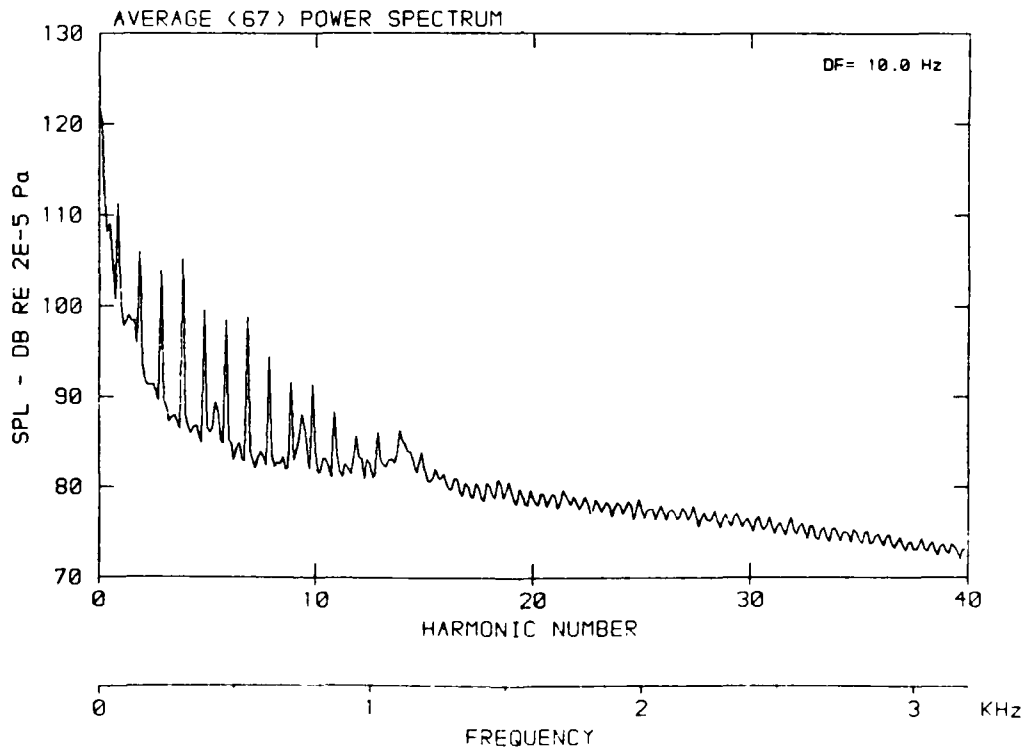
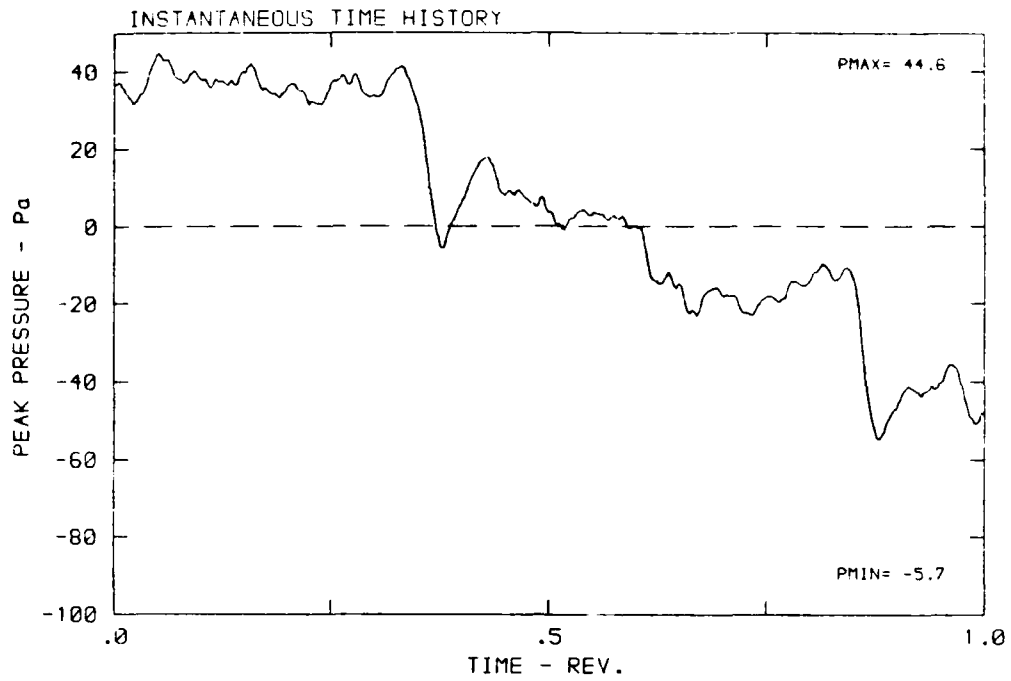
DATA POINT: LN-6 RUN: 159 MP: 8

β : 23.7° MH: .7771 n: 2400 rpm v/u : .263 ϕ : -3.8° T: 287.2 K



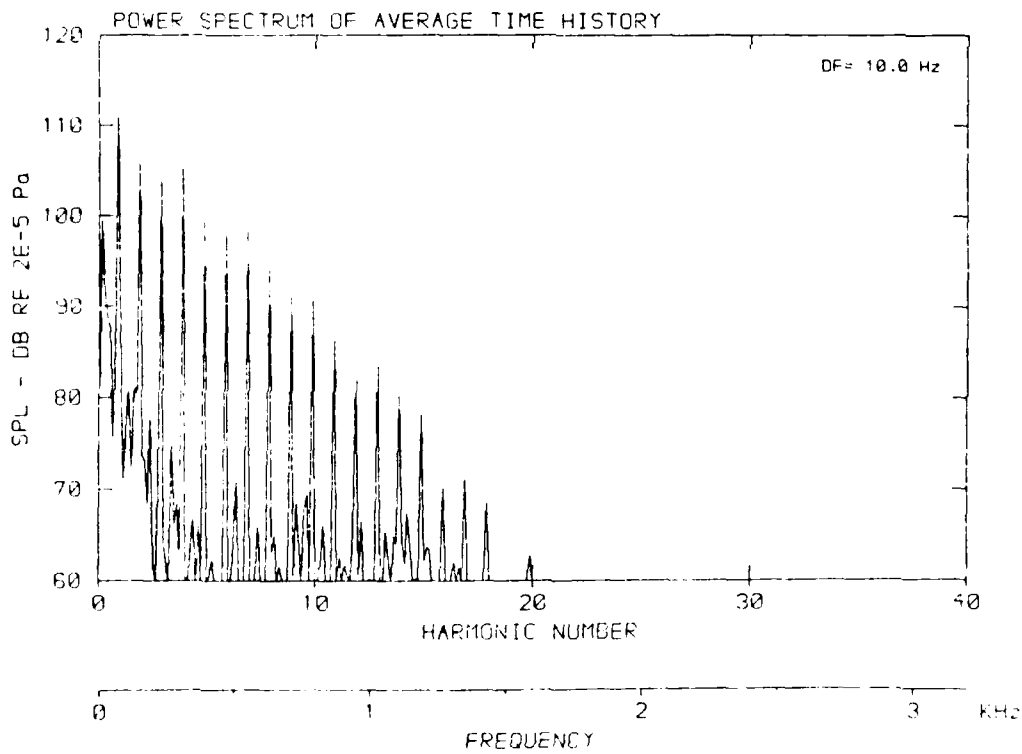
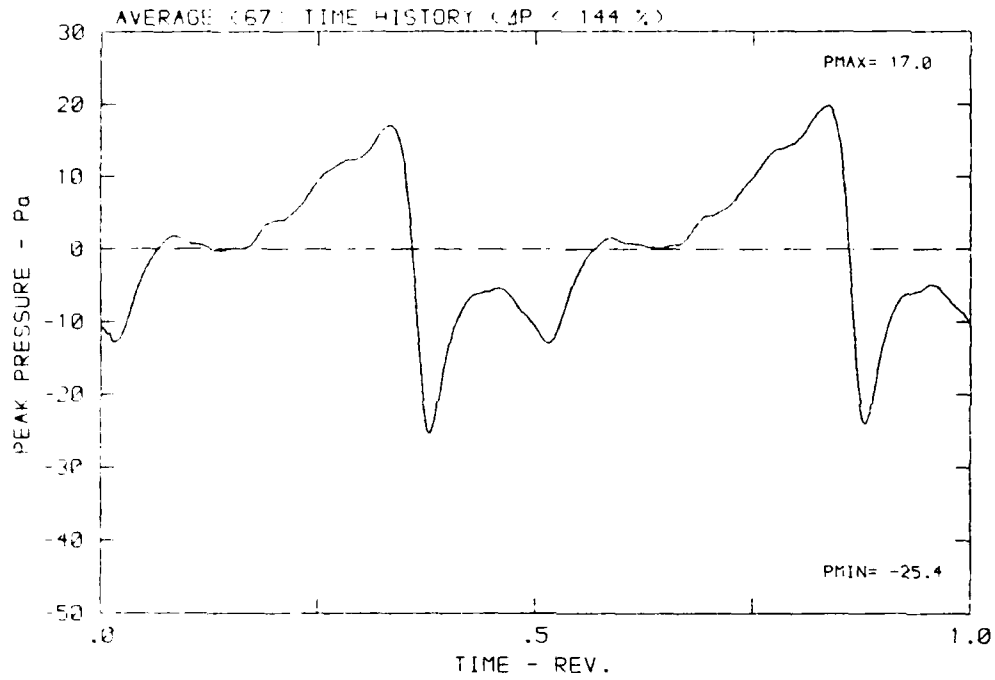
DATA POINT: LN-6 RUN: 159 MP: 6

β : 23.7° MH: .7771 n: 2400 rpm v_{tu} : .253 ϕ : -3.5° r : 257.1



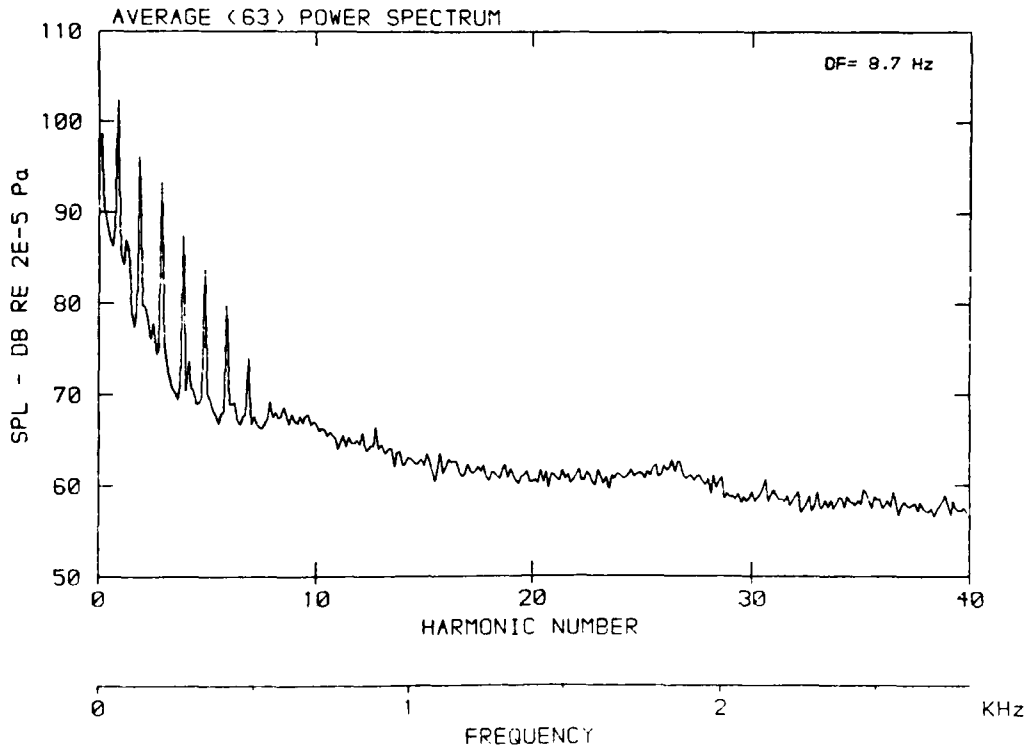
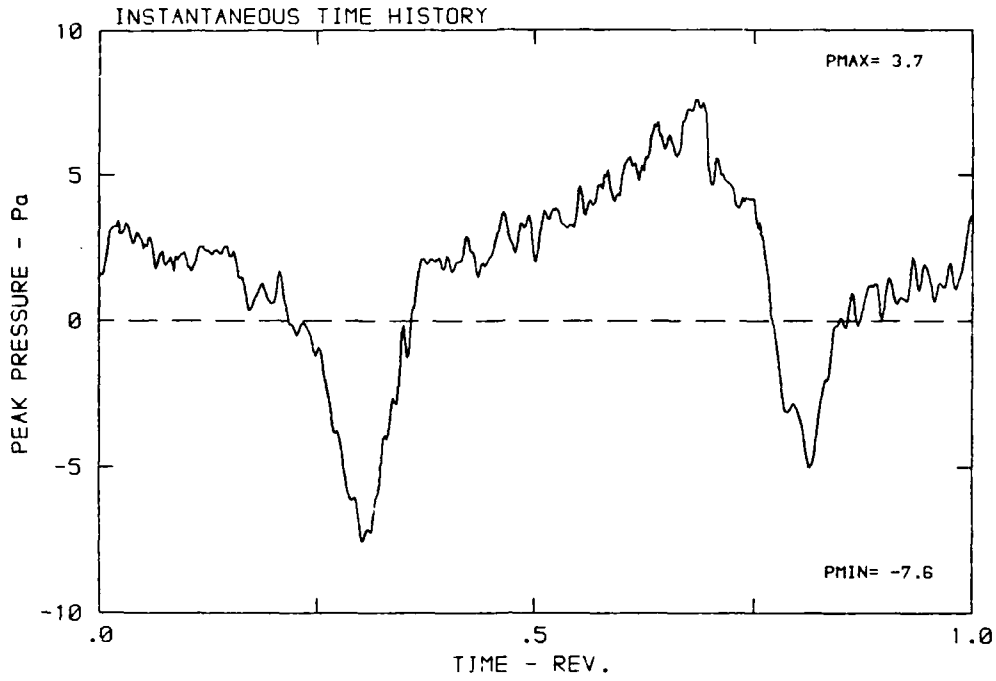
DATA POINT: LN-6 RUN: 159 MP: 9

β : 23.7° MH: .7771 n: 2400 rpm ν : .263 ϕ : -3.8° T: 287.2 K



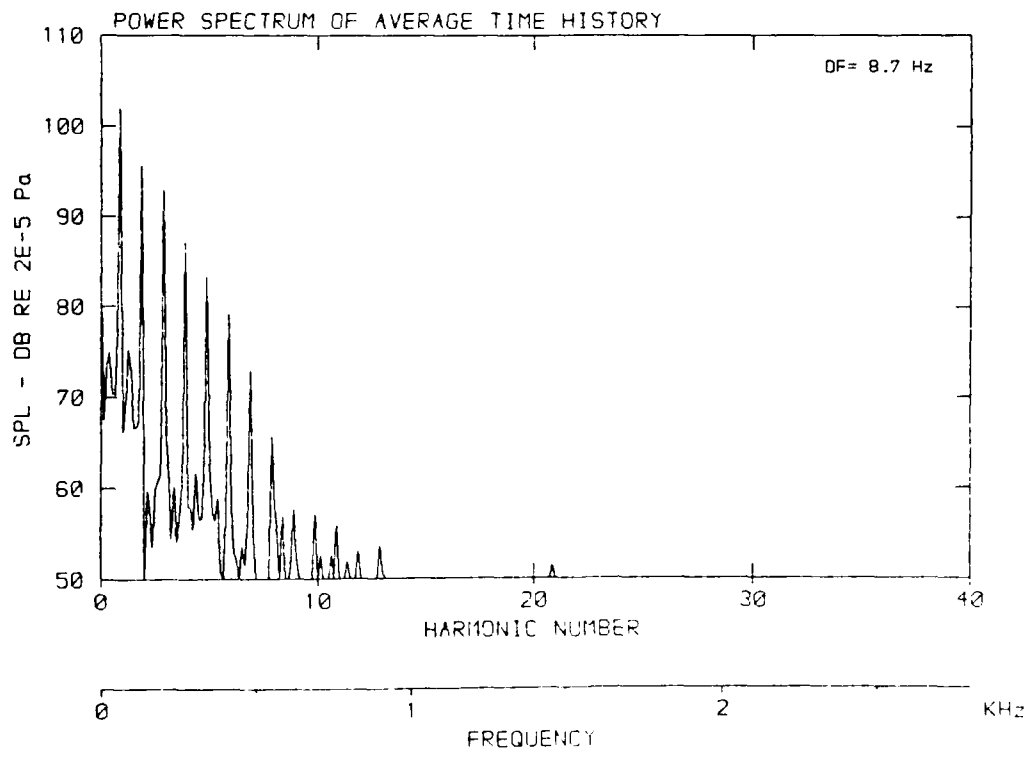
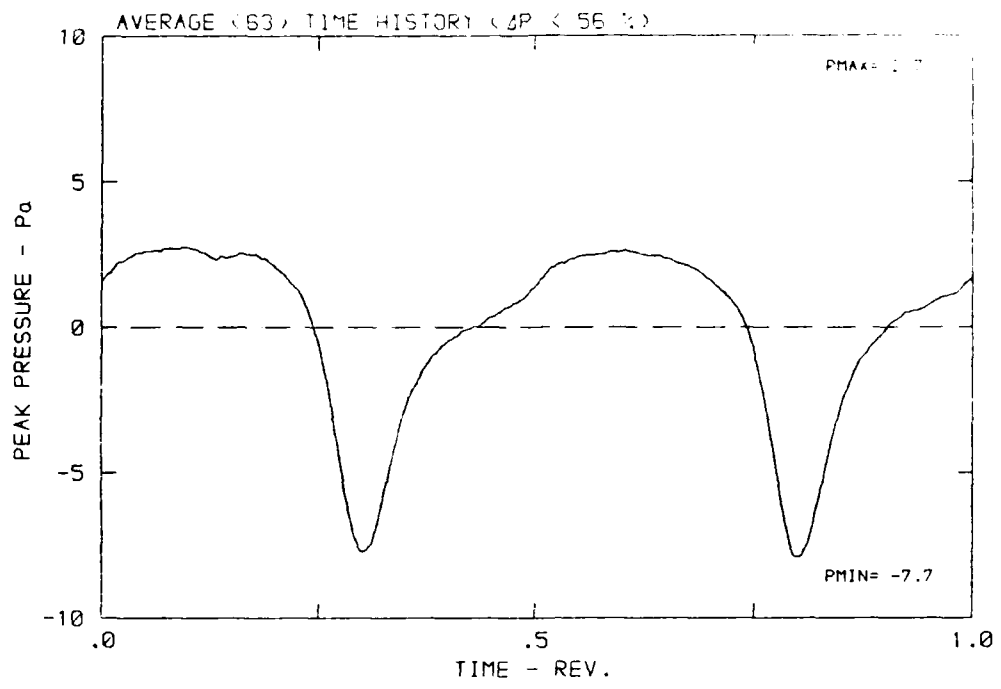
DATA POINT: FN-1 RUN: 166 MP: 1

β : 19.9° MH: .6745 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 287.5 K



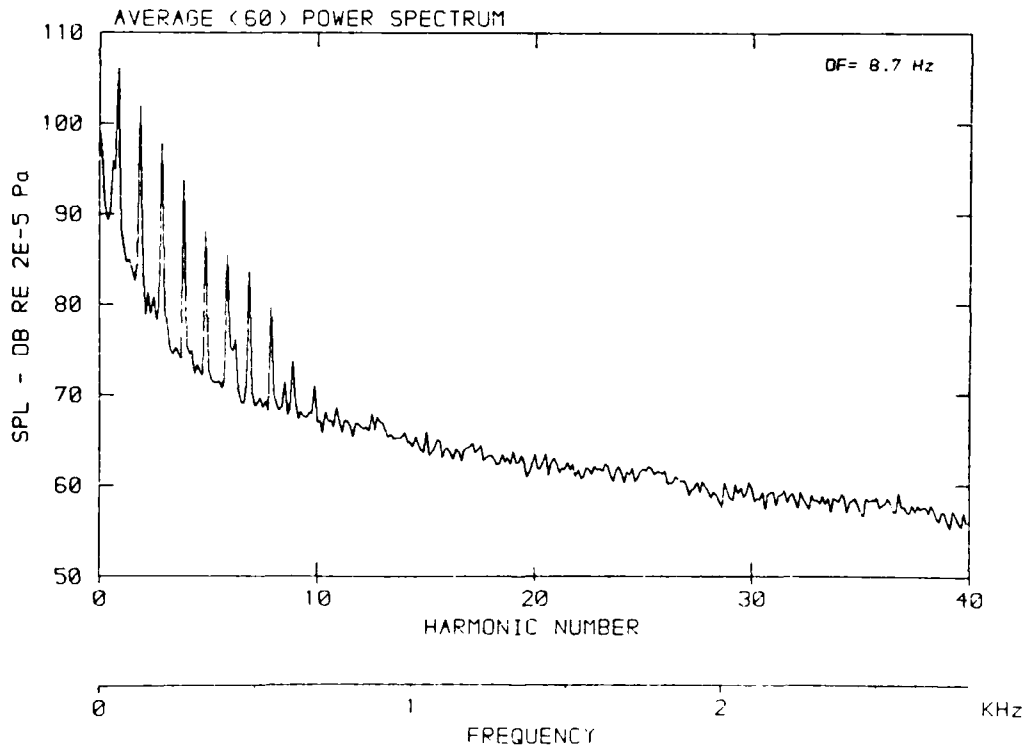
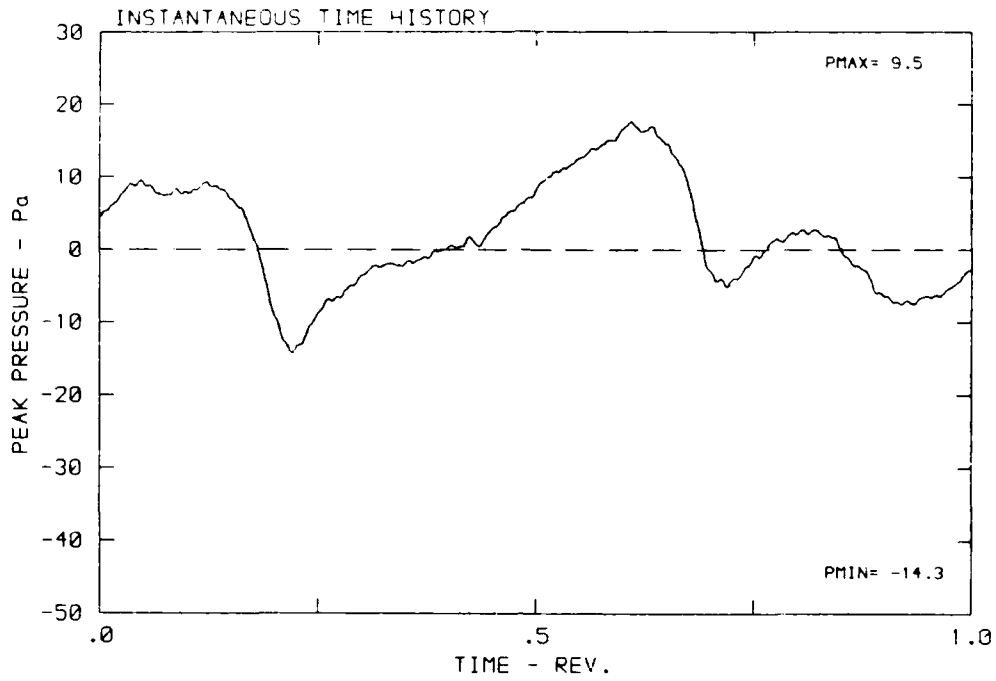
DATA POINT: FN-1 RUN: 166 MF: 1

β : 19.9° MH: .6745 n: 2100 rpm v_{tu} : .231 ϕ : 3.6° T : 28.15



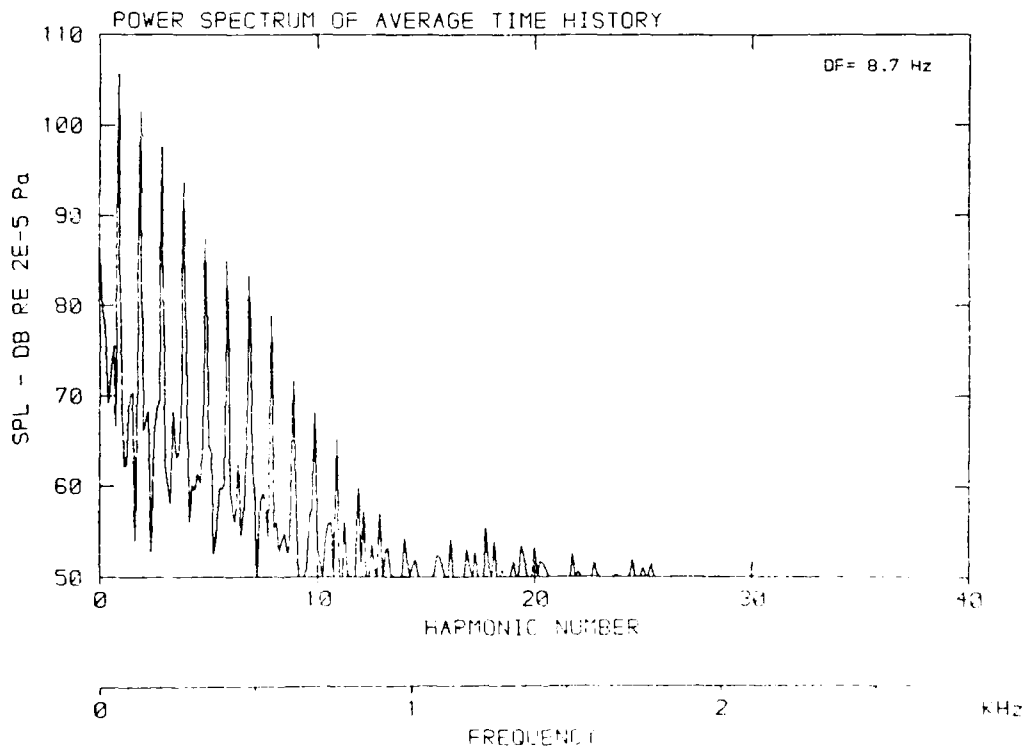
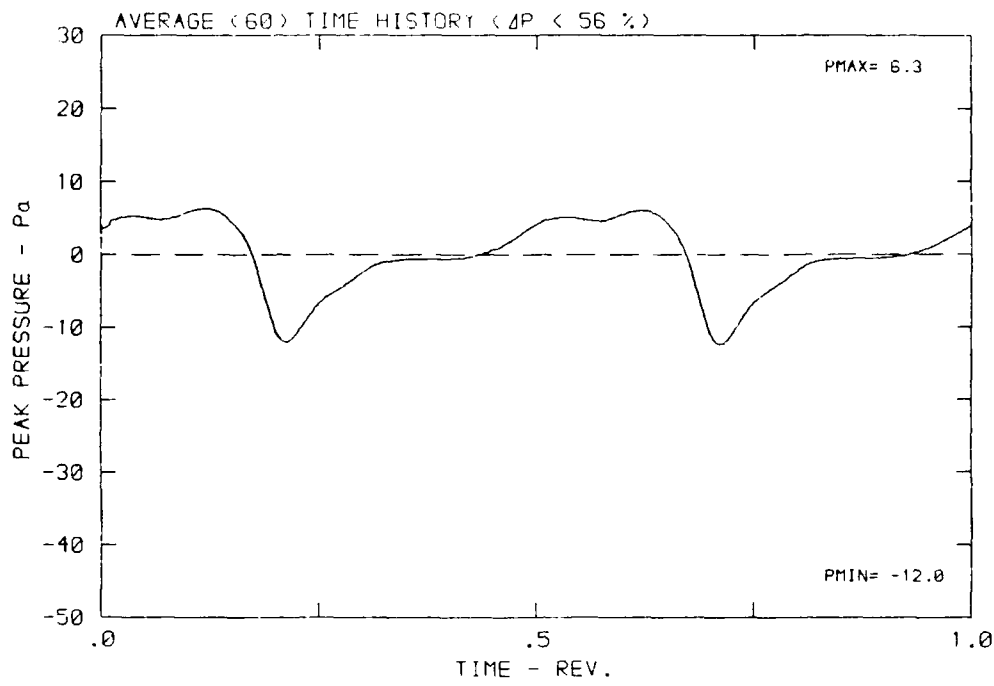
DATA POINT: FN-1 RUN: 166 MF: 2

β : 19.9° MH: .6745 n: 2100 rpm ν : .231 ϕ : 3.6° T: 287.5 K



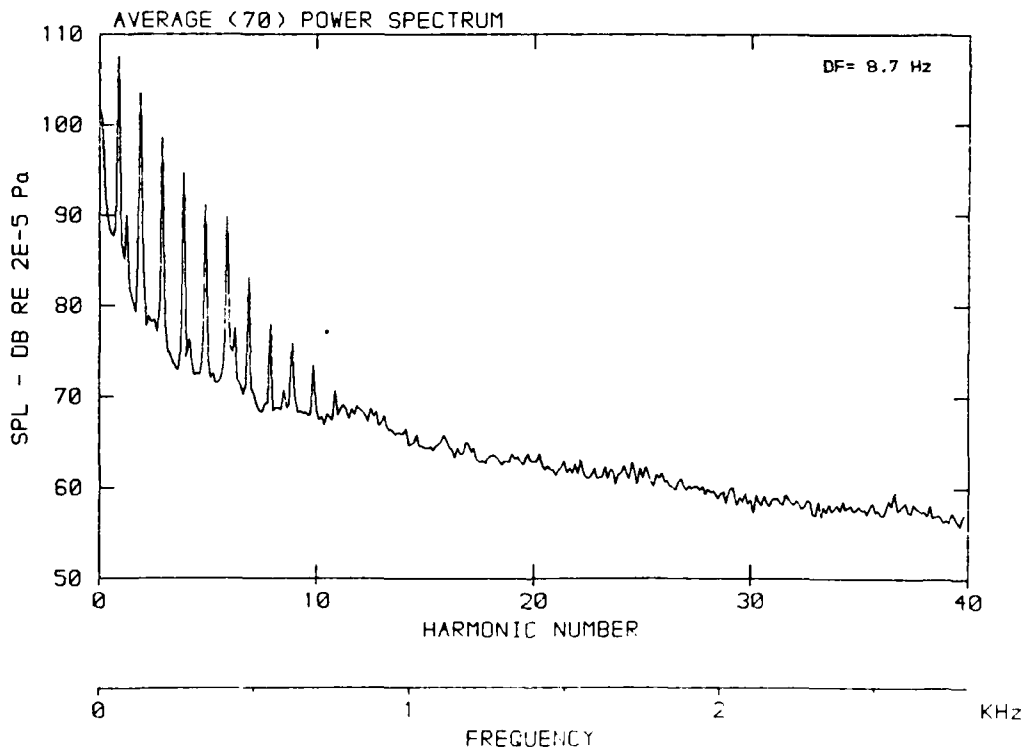
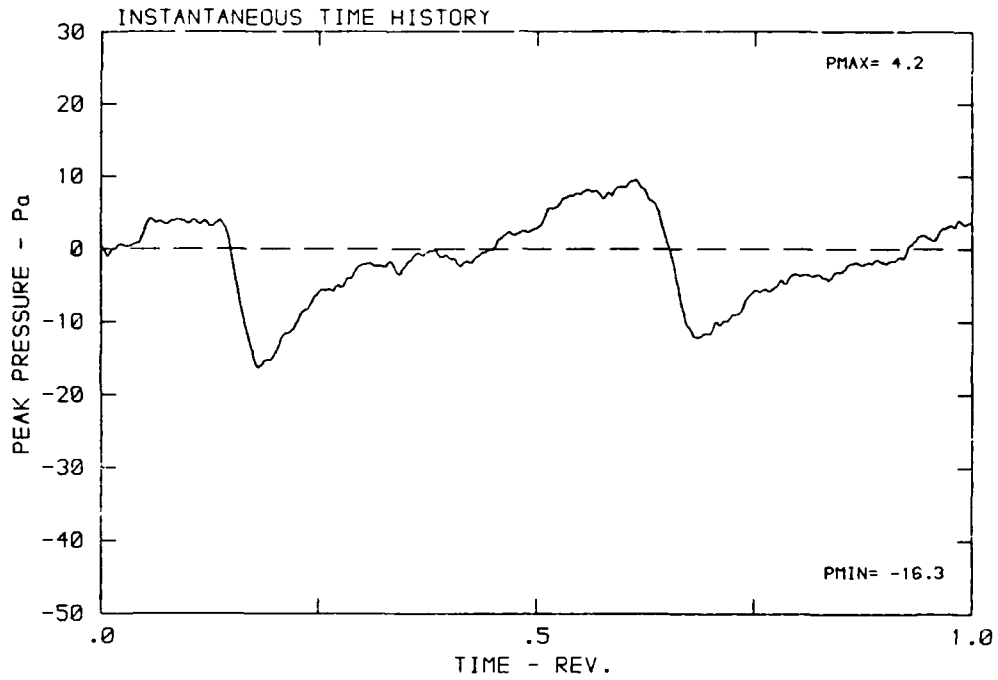
DATA POINT: FN-1 RUN: 166 MP: 2

β : 19.9° MH: .6745 n: 2100 rpm v_{ru} : .231 ϕ : 3.6° T: 287.5 K



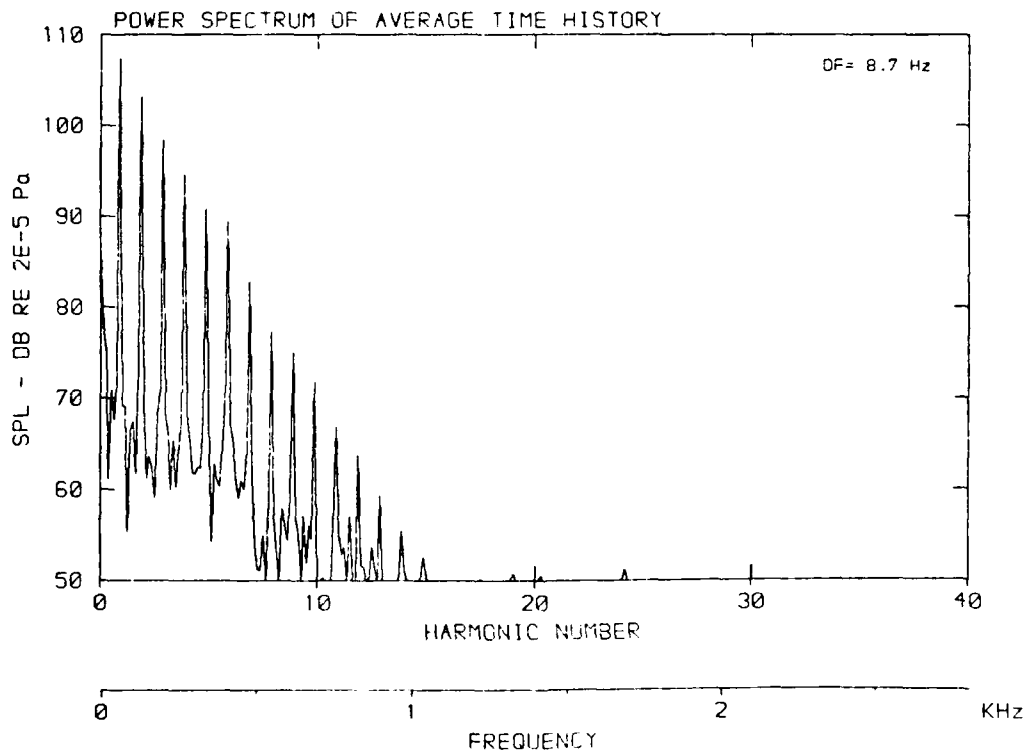
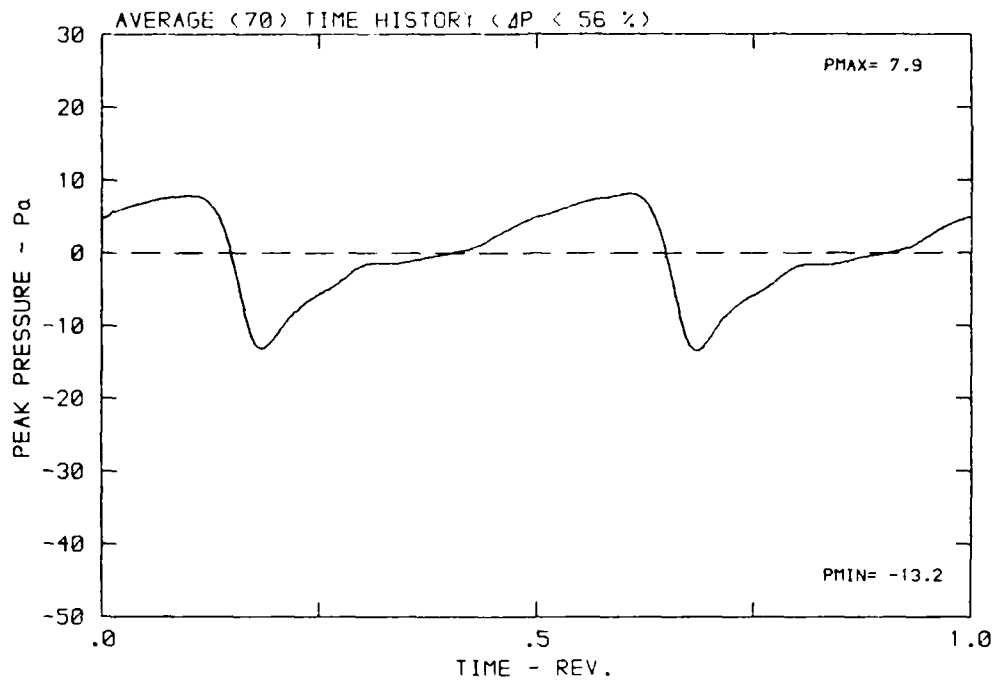
DATA POINT: FN-1 RUN: 166 MP: 3

β : 19.9° MH: .6745 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 287.5 K



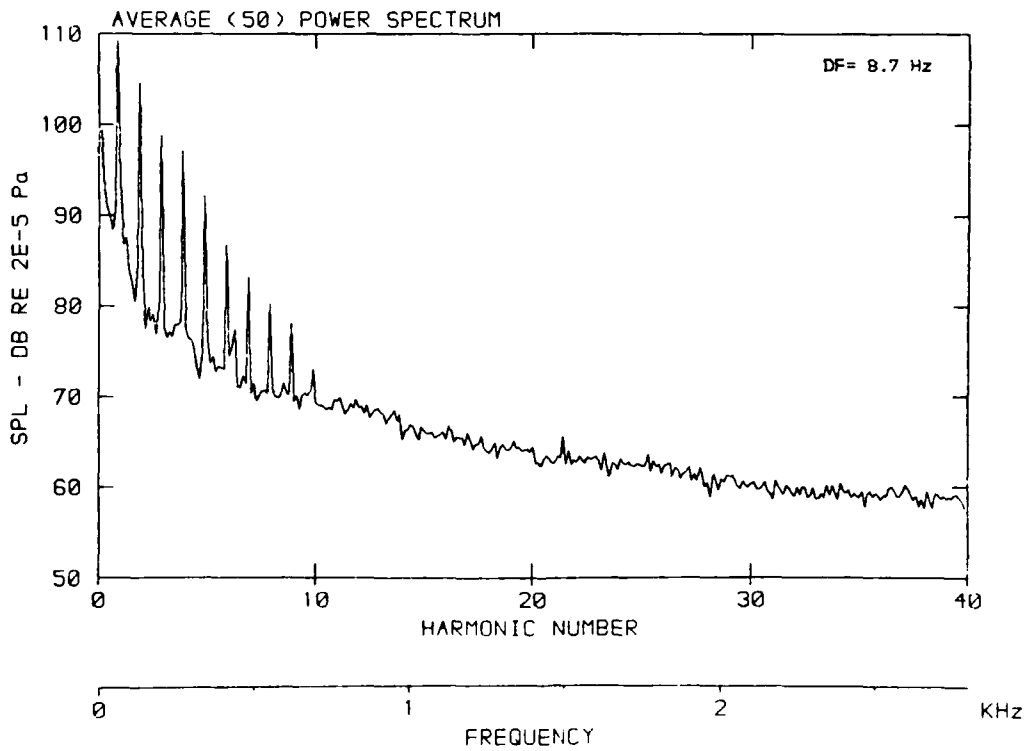
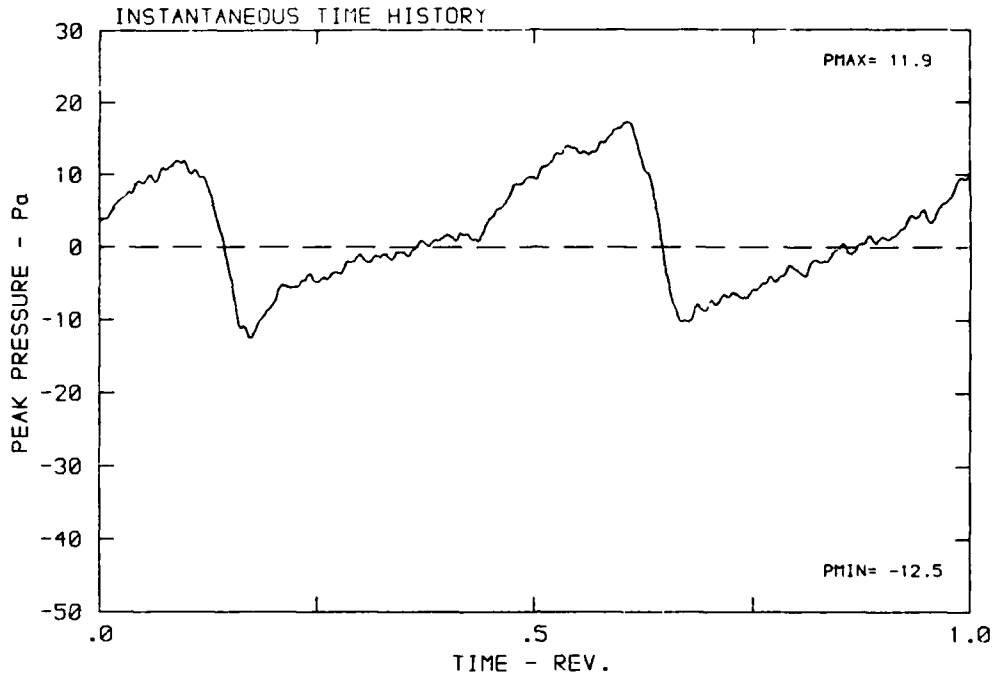
DATA POINT: FN-1 RUN: 166 MP: 3

β : 19.9° MH: .6745 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 287.5 K



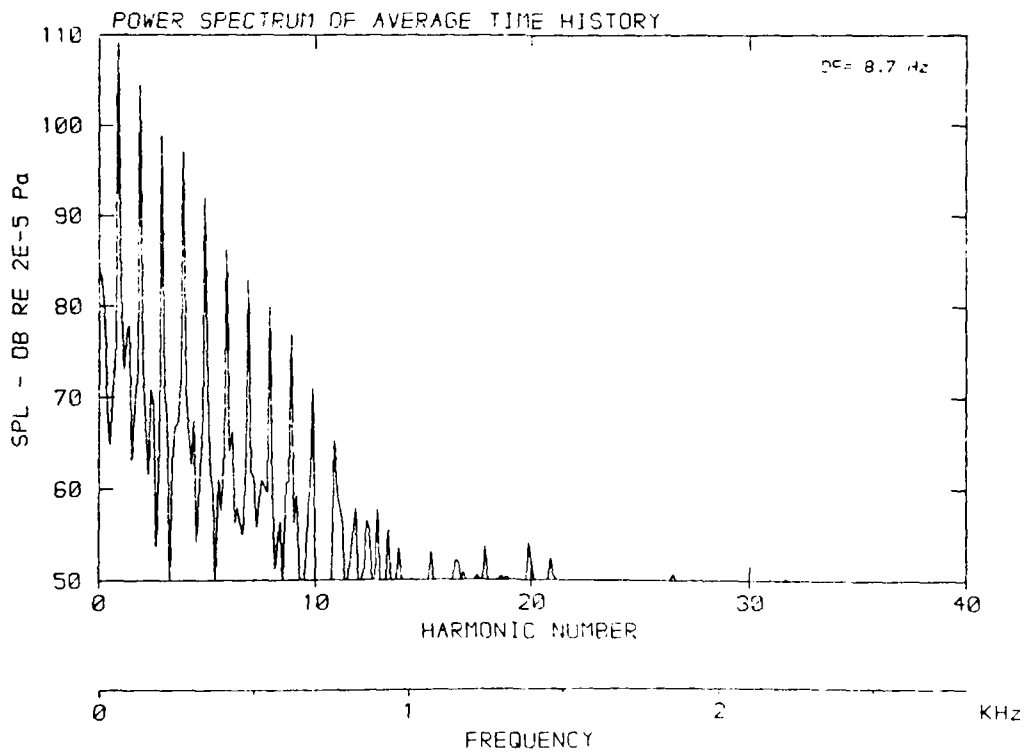
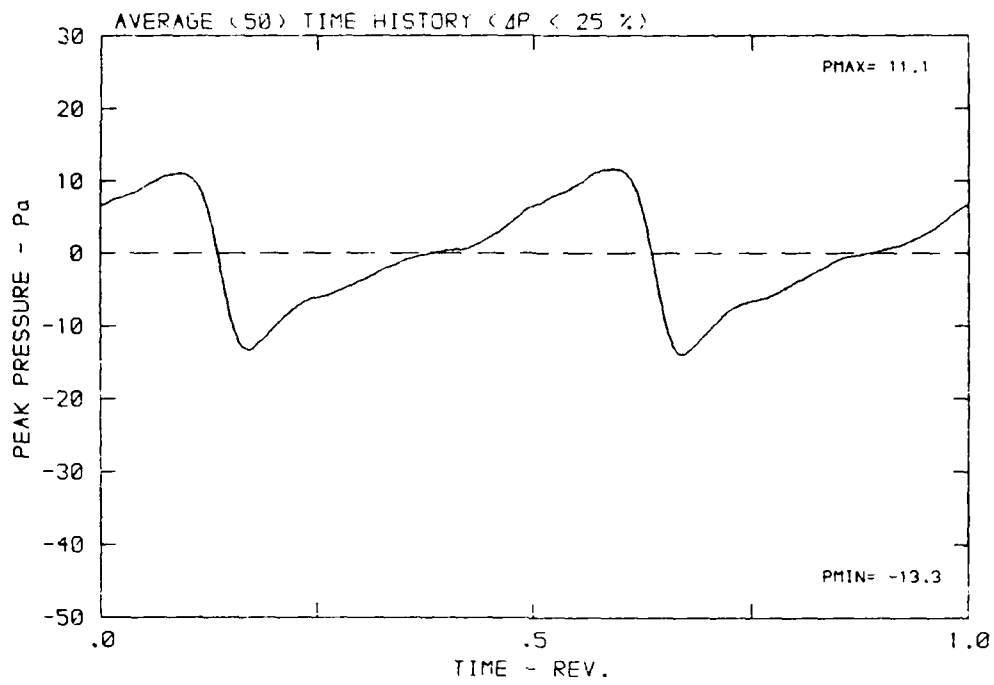
DATA POINT: FN-1 RUN: 166 MP: 4

β : 19.9° MH: .6745 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 287.5 K



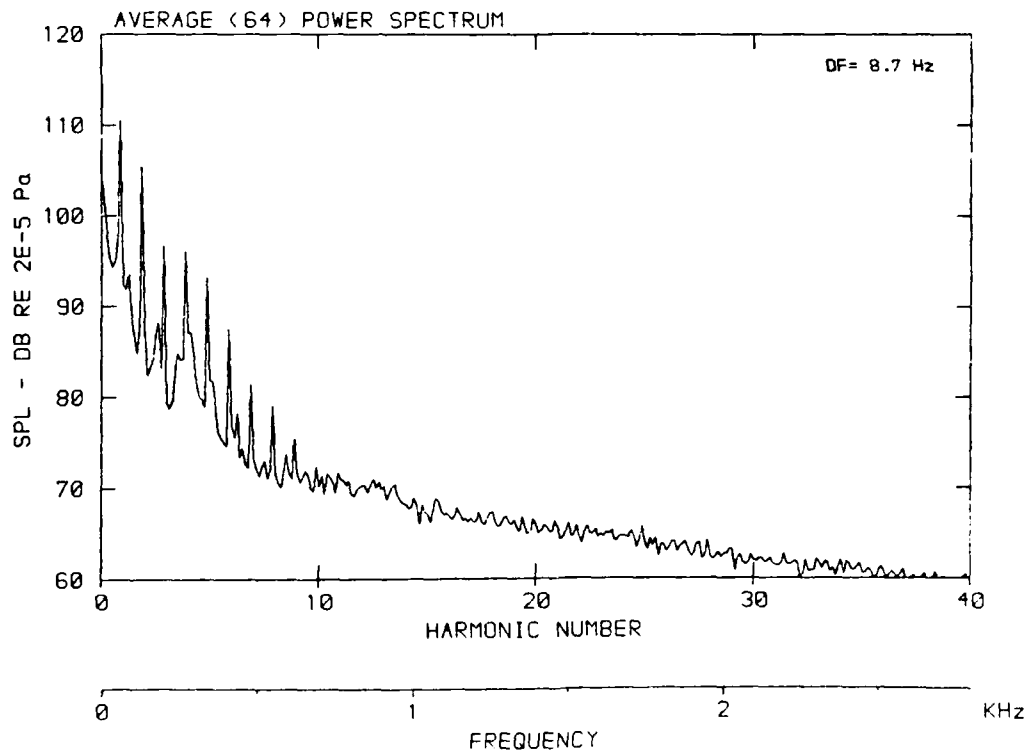
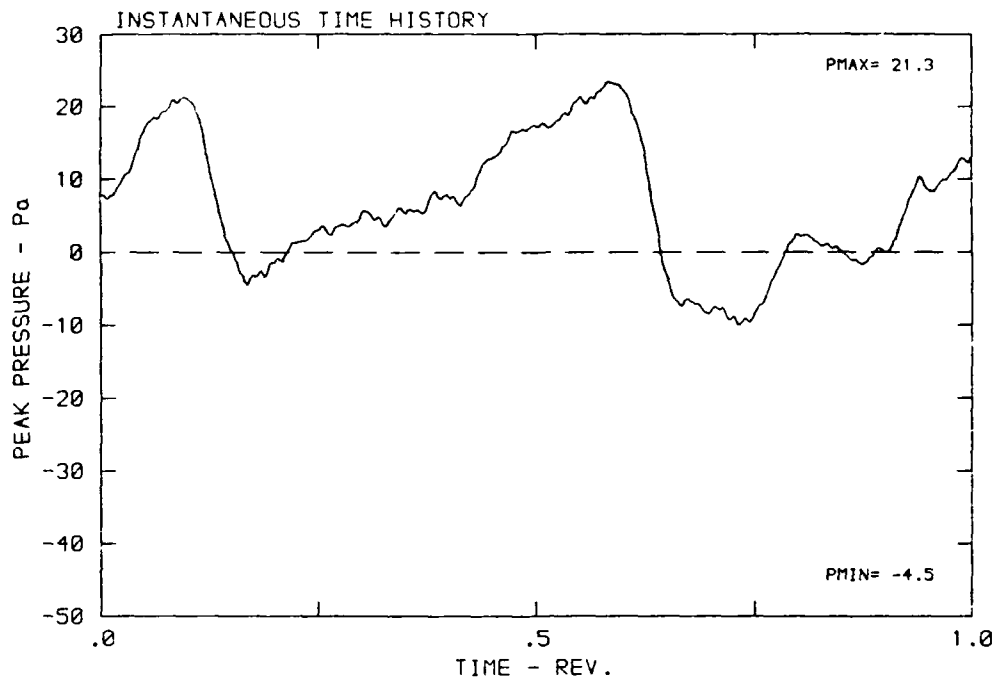
DATA POINT: FN-1 RUN: 166 MP: 4

β : 19.9° MH: .6745 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 287.5 K



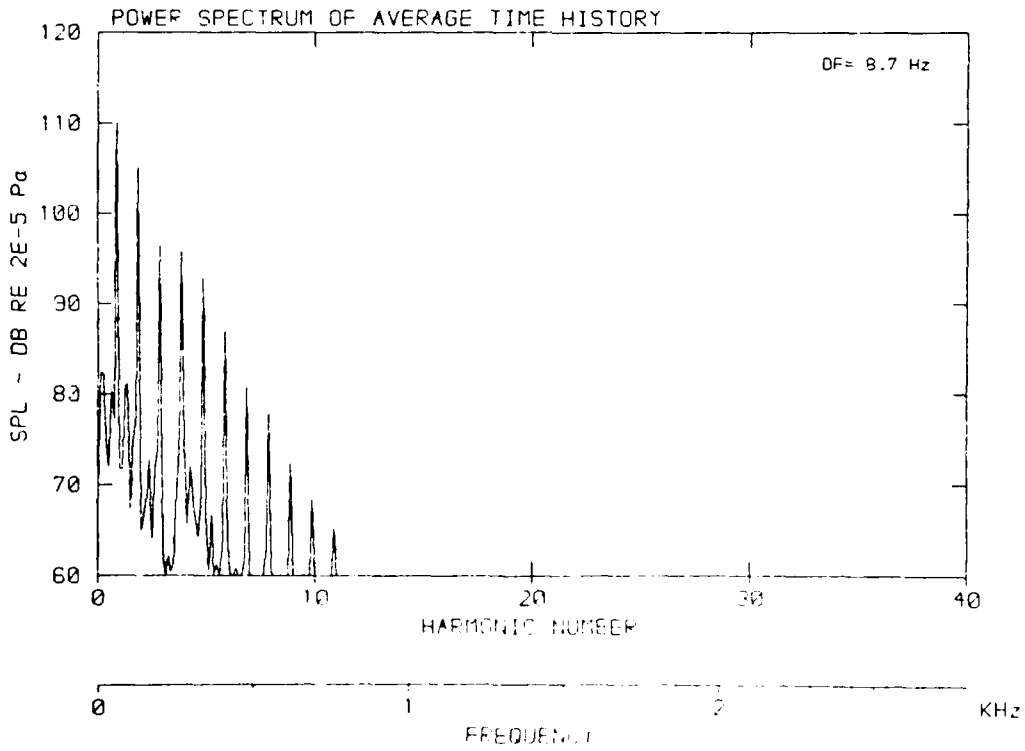
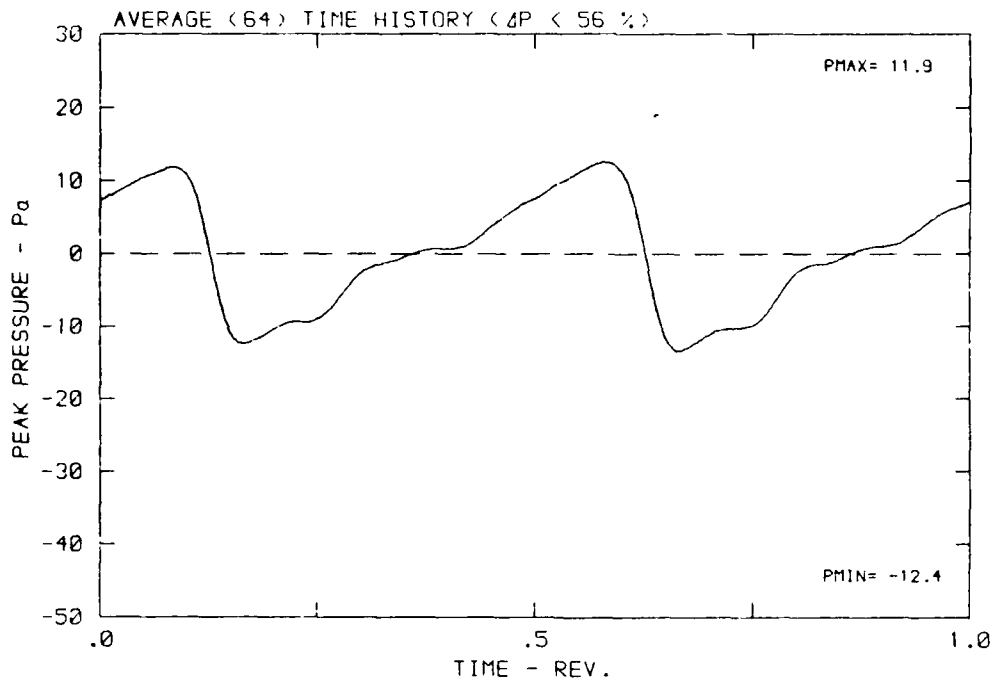
DATA POINT: FN-1 RUN: 166 MP: 5

β : 19.9° MH: .6745 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 287.5 K



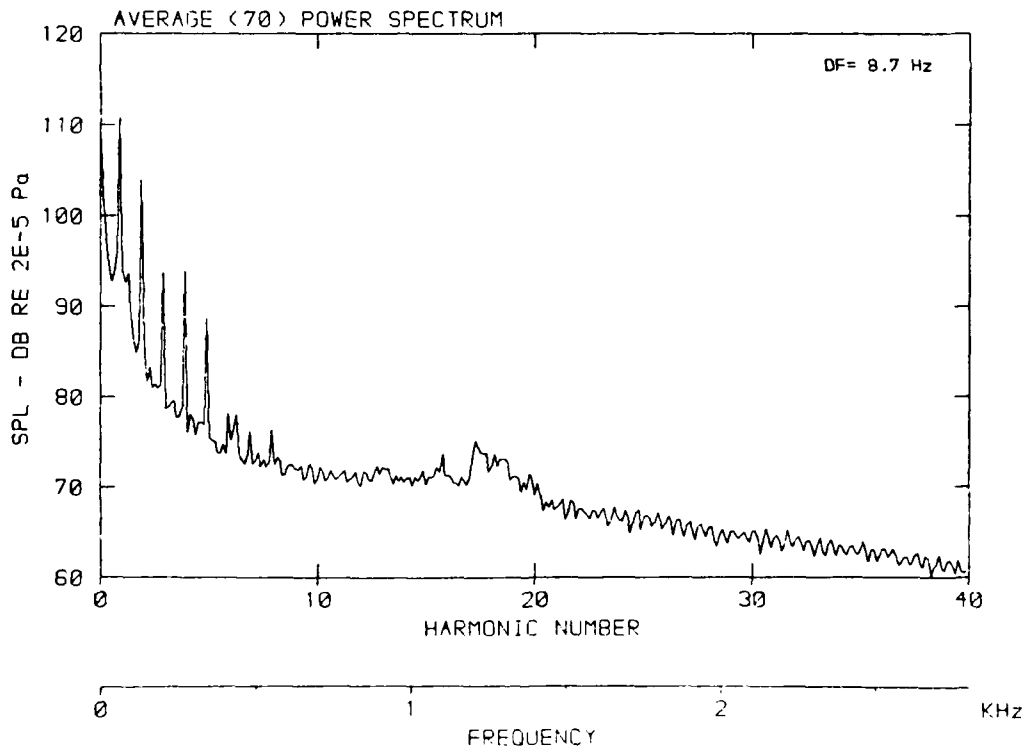
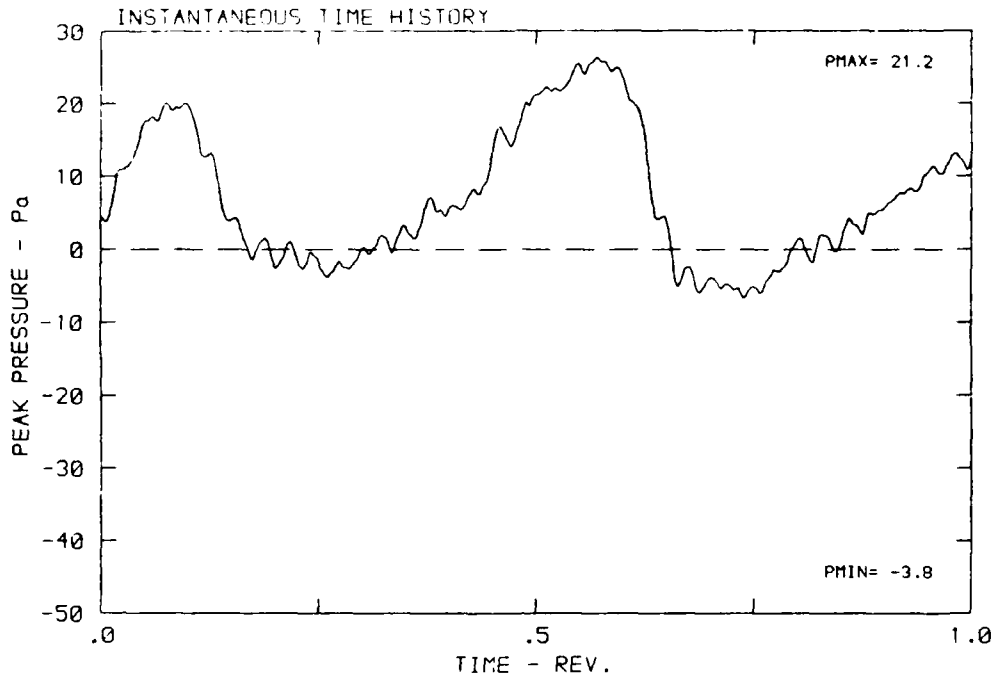
DATA POINT: FN-1 RUN: 166 MP: 5

β : 19.9° MH: .6745 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 287.5 K



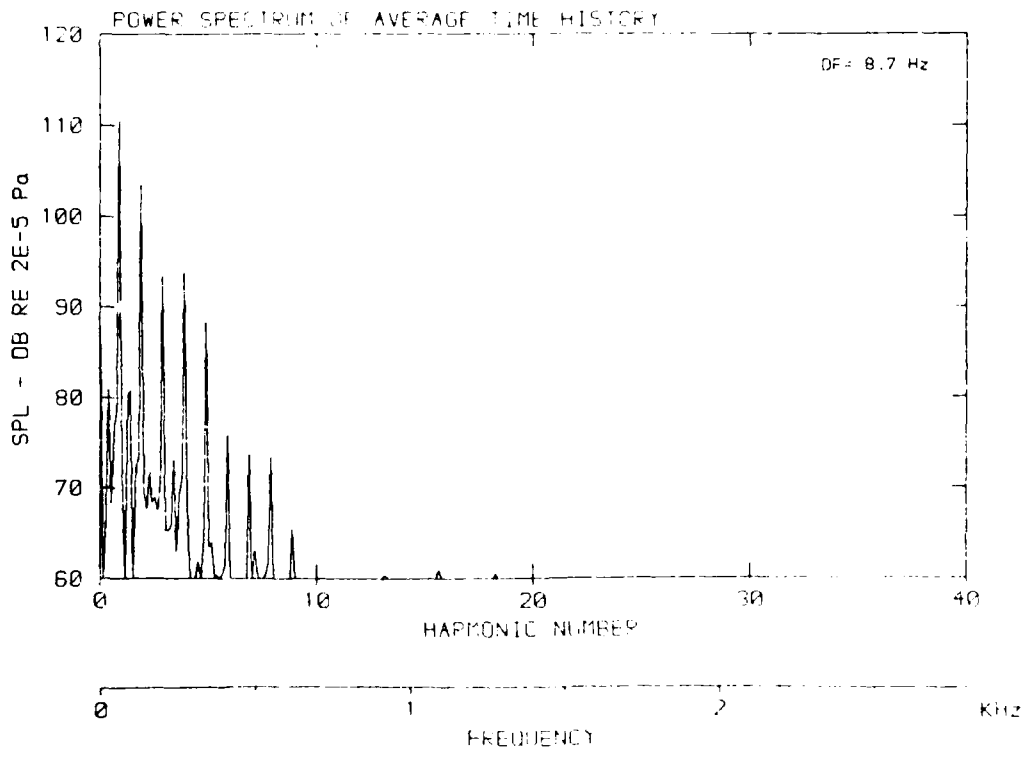
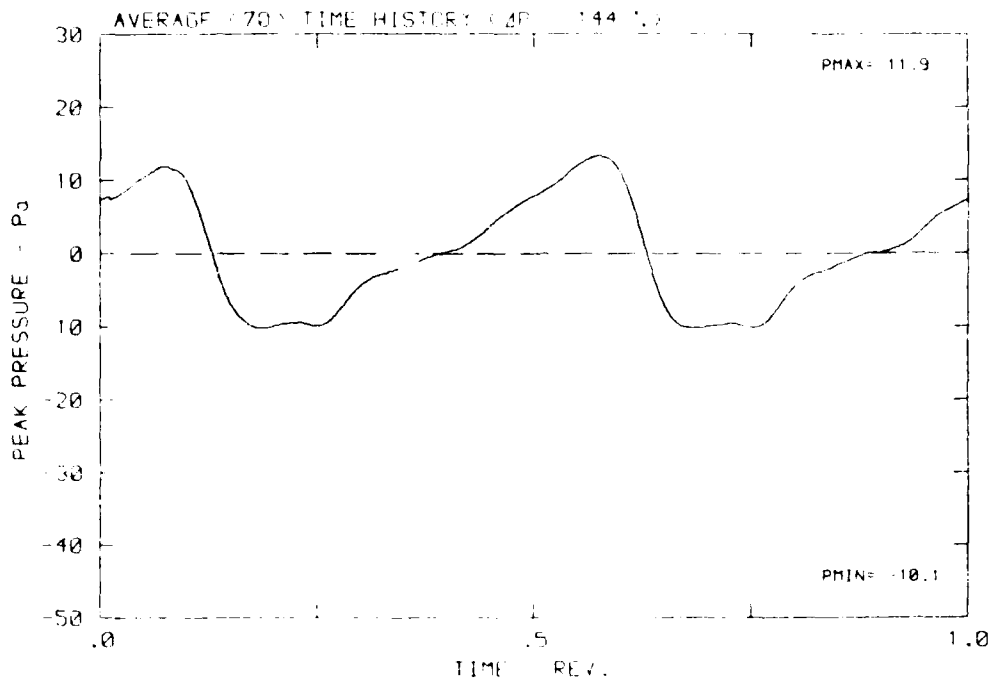
DATA POINT: FN-1 RUN: 166 MP: 6

β : 19.9° MH: .6745 n: 2100 rpm v/u : .231 ψ : 3.6° T: 287.5 K



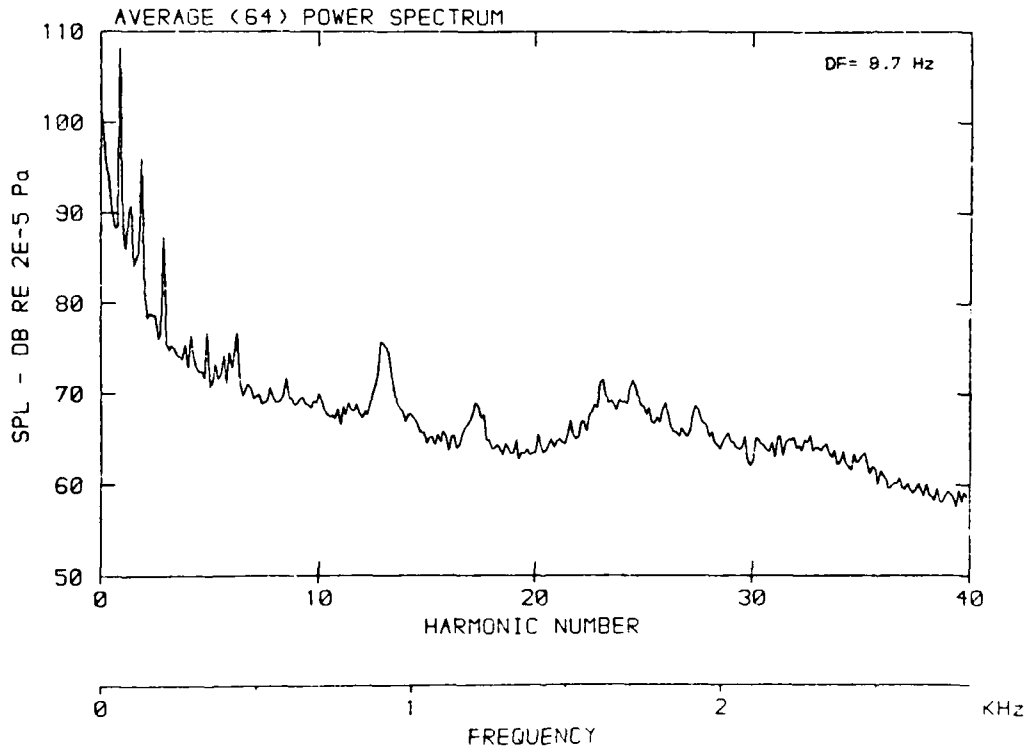
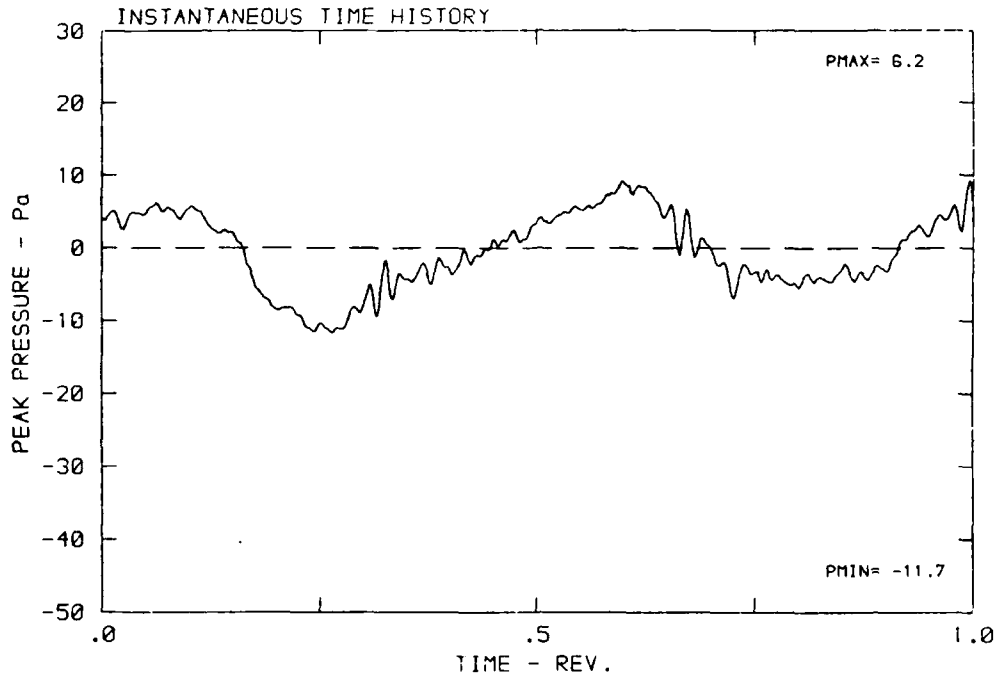
DATA POINT: FN-1 PIN: 1E+ MF: 5

β : 19.9° MH: .6745 n: 2100 rpm v_a : .231 p : 3.6° T: 287.5 K



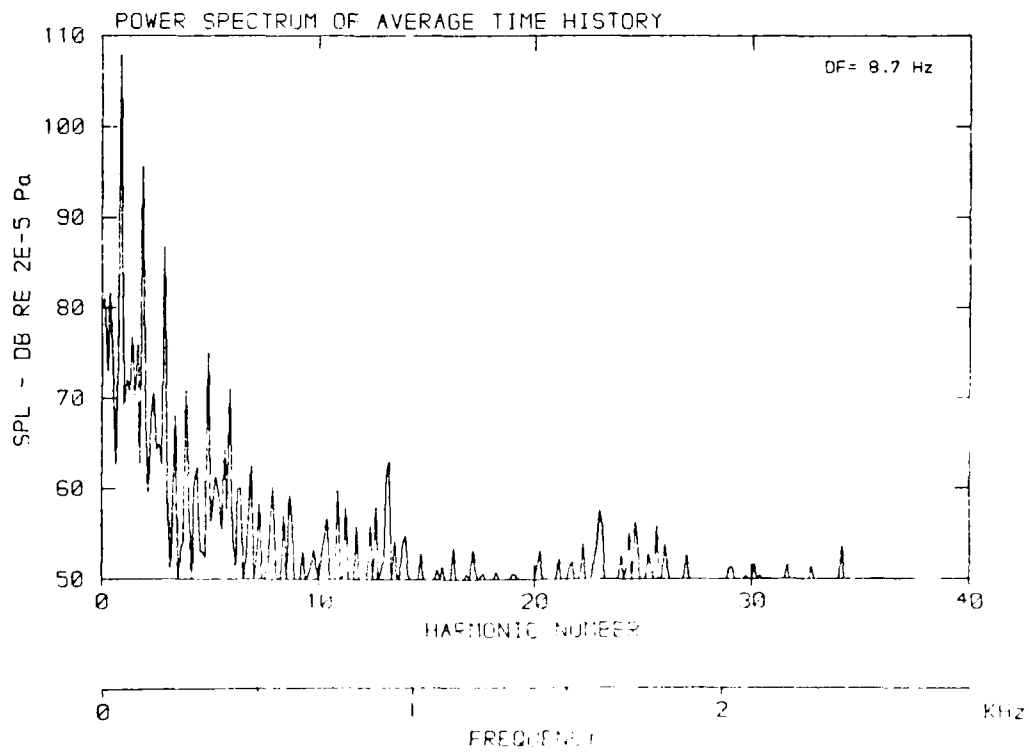
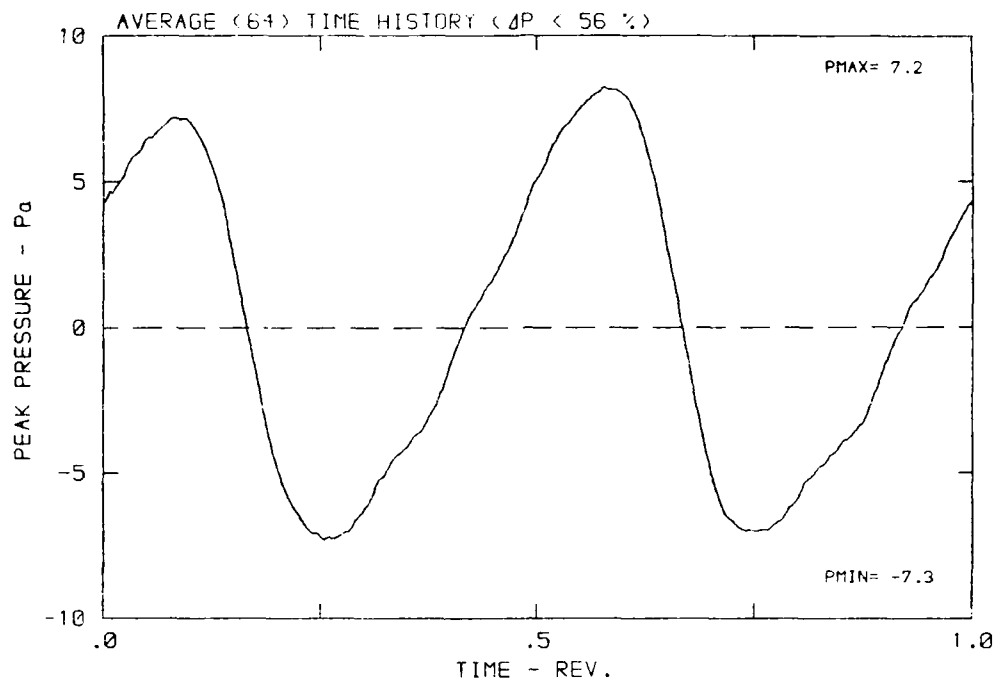
DATA POINT: FN-1 RUN: 166 MP: 7

β : 19.9° MH: .6745 n: 2100 rpm v_{z0} : .231 ϕ : 3.6° T: 287.5 K



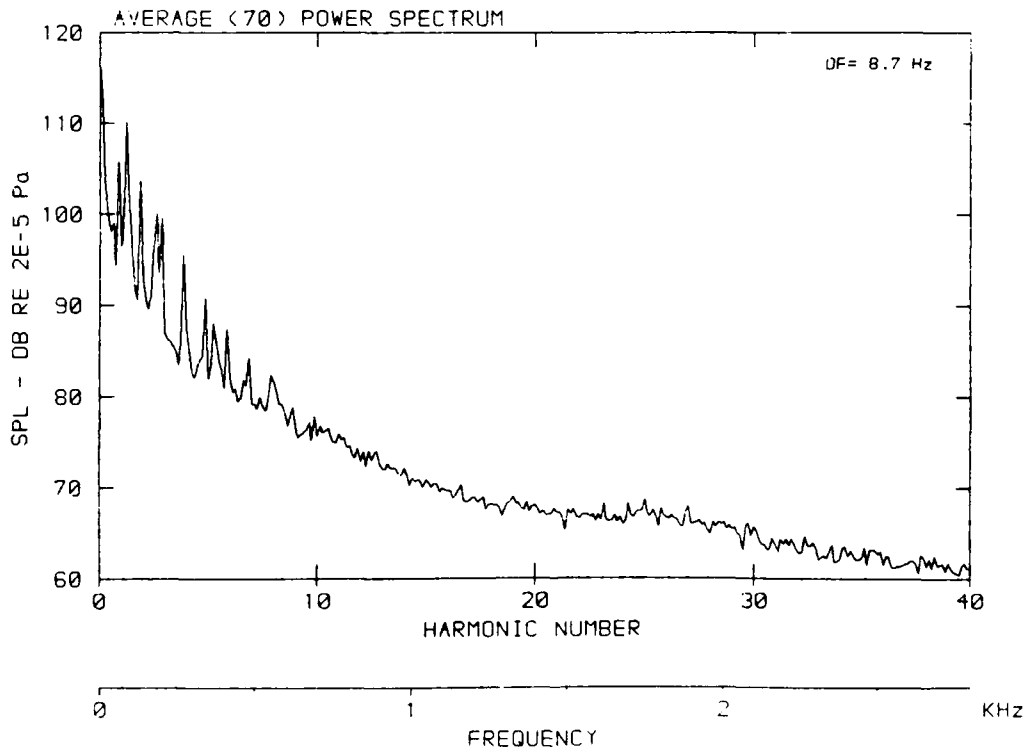
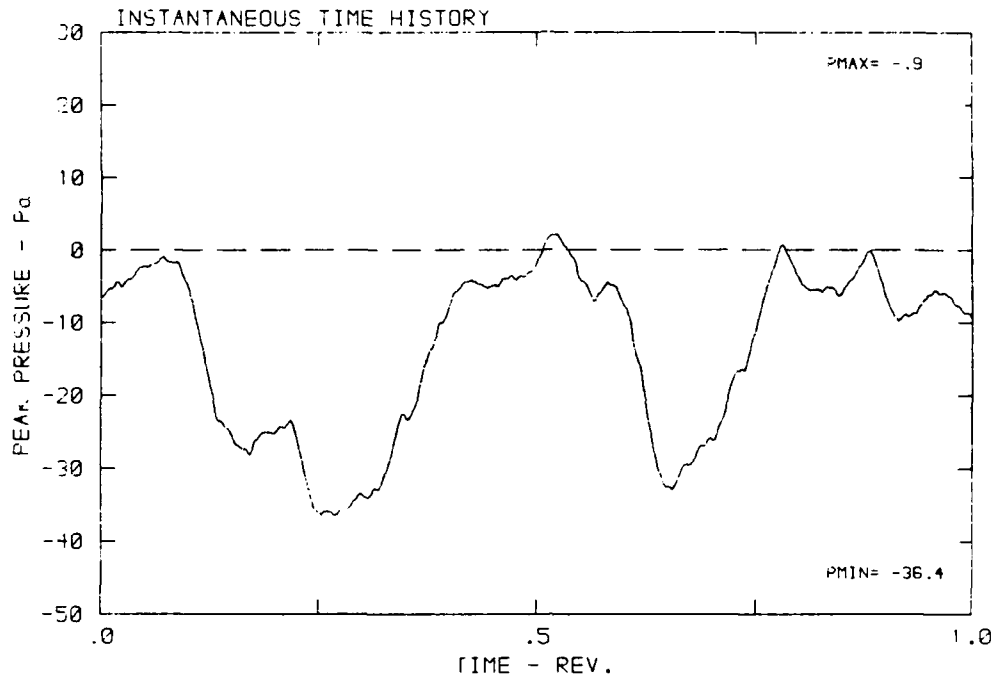
DATA POINT : FN-1 RUN : 166 MP : 7

β : 19.9° MH : .6745 n : 2100 rpm v/u : .231 ϕ : 3.6° T : 287.5 K



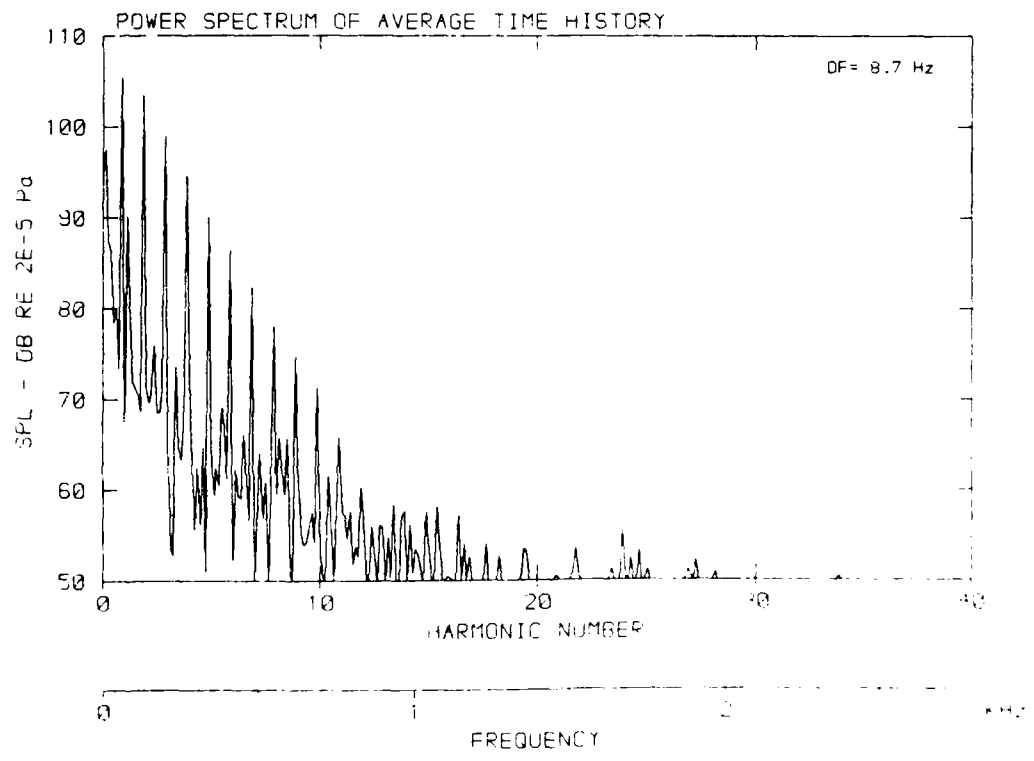
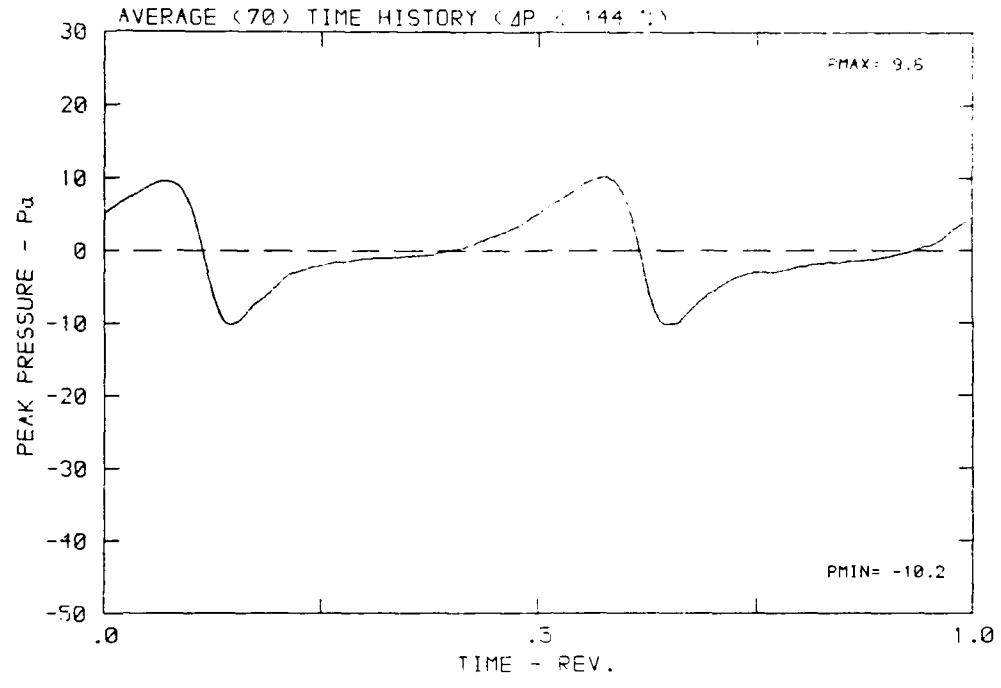
DATA POINT: FN-1 RUN: 166 MP: 8

p : 19.9° MH: .6745 n: 2100 rpm v_{zu} : .231 ϕ : 3.6° T: 287.5 K



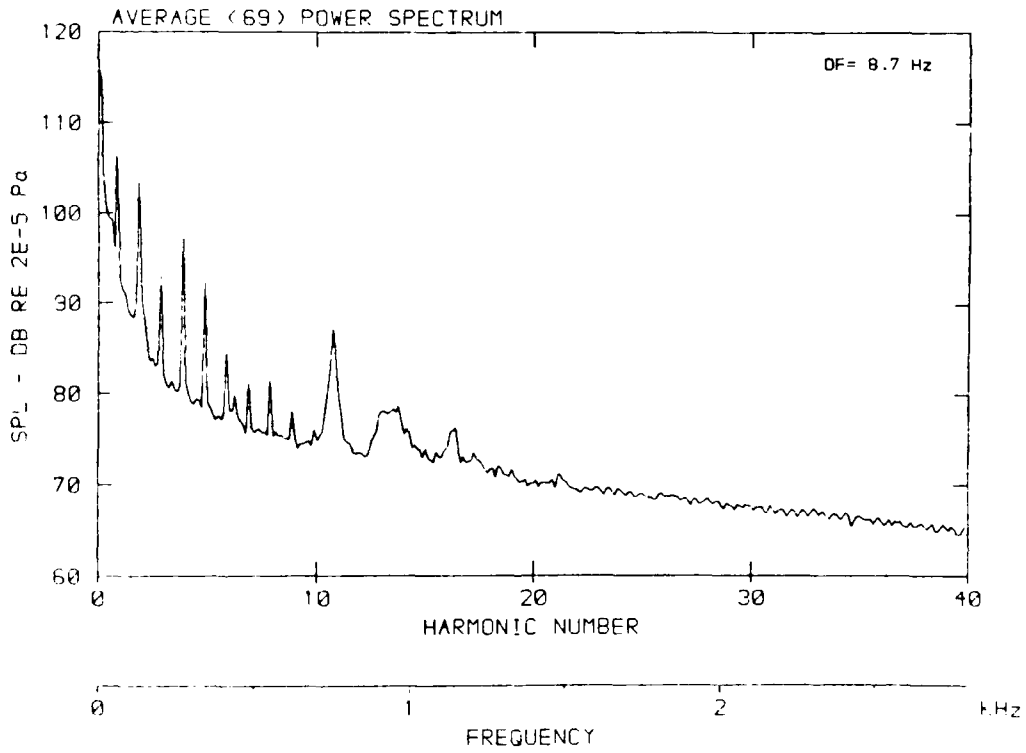
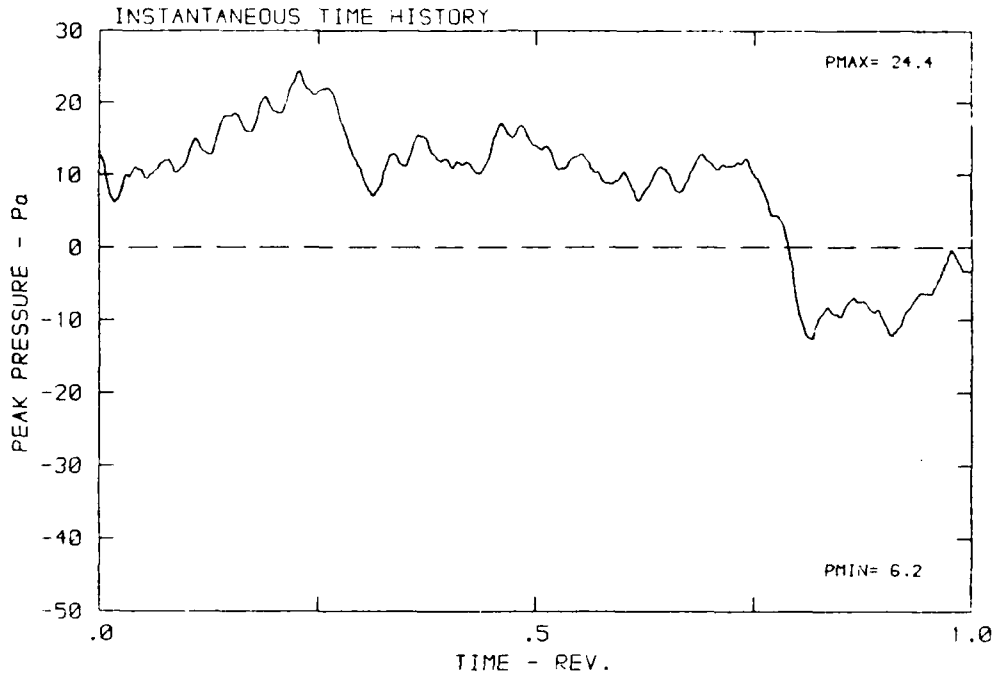
DATA POINT: FN-1 RUN: 166 MP: 8

β : 19.9° MH: .6745 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 287.5 K



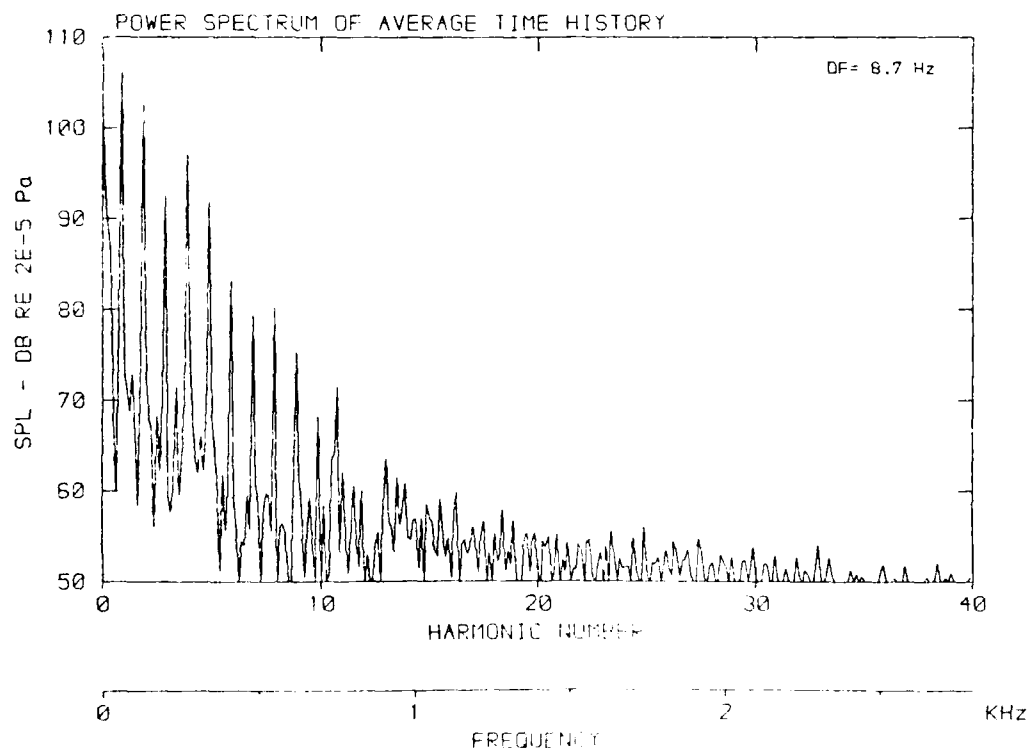
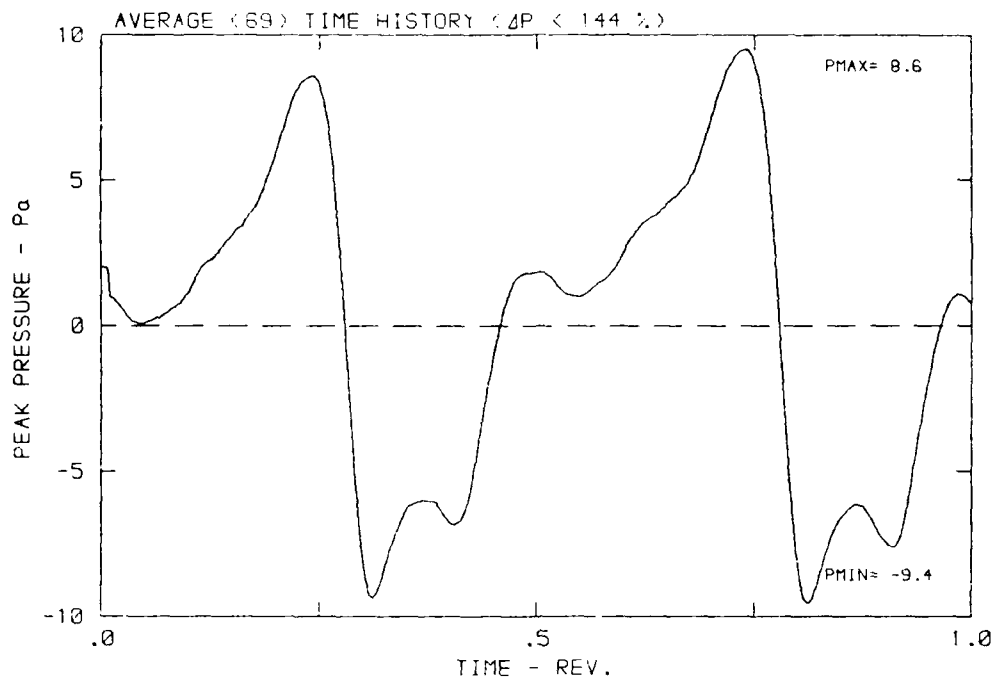
DATA POINT: FN-1 RUN: 166 MP: 9

β : 19.9° MH: .6745 n: 2100 rpm vru: .031 ϕ : 3.6° T: 267.5 K



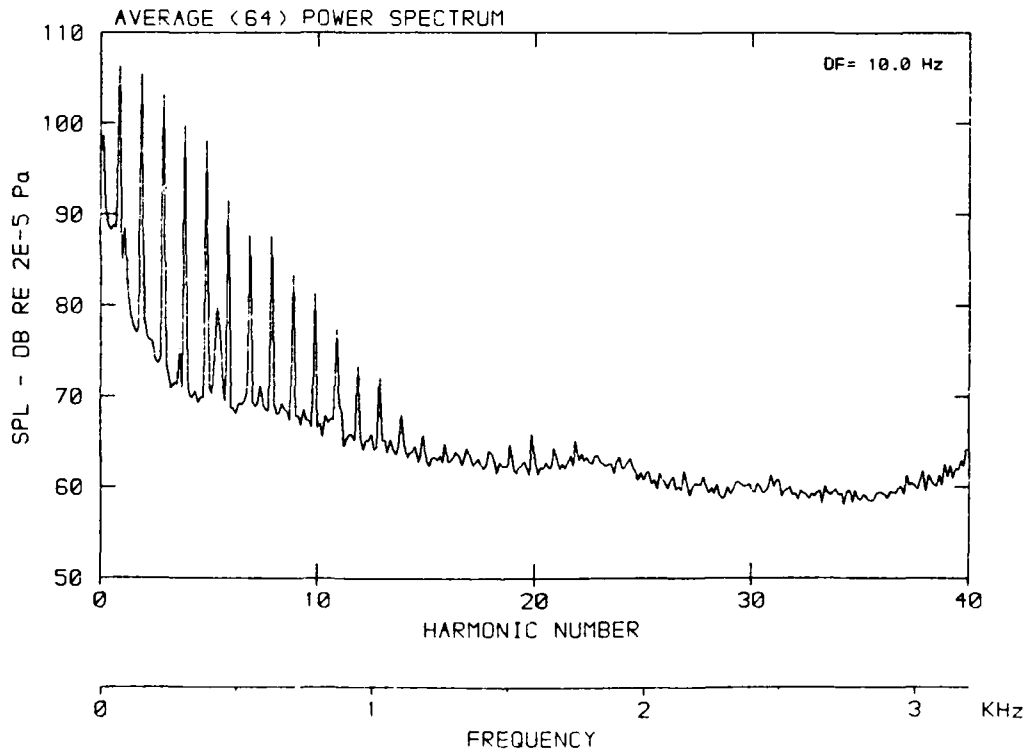
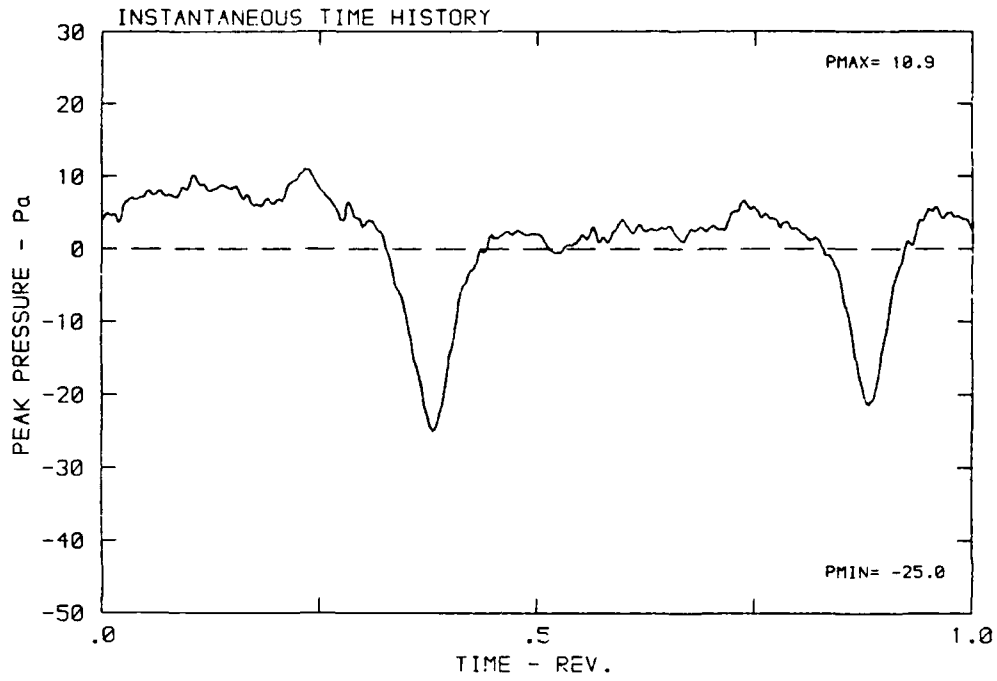
DATA POINT: FN-1 RUN: 166 MP: 9

β : 19.9° MH: .6745 n: 2100 rpm ν/α : .231 ϕ : 3.6° T: 287.5 K



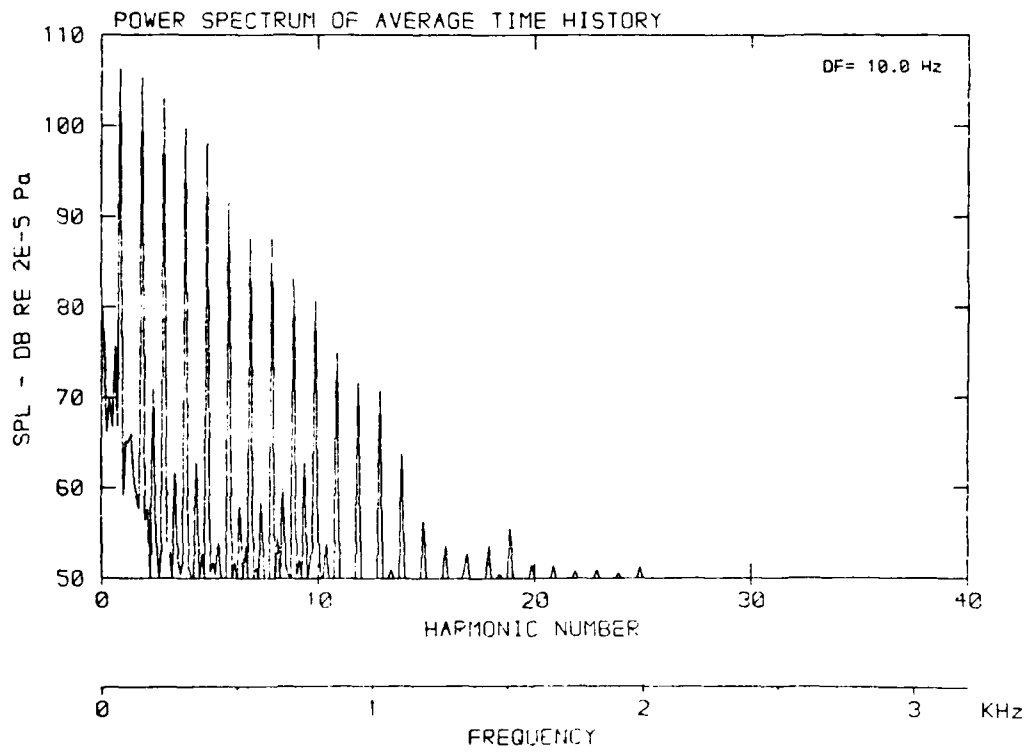
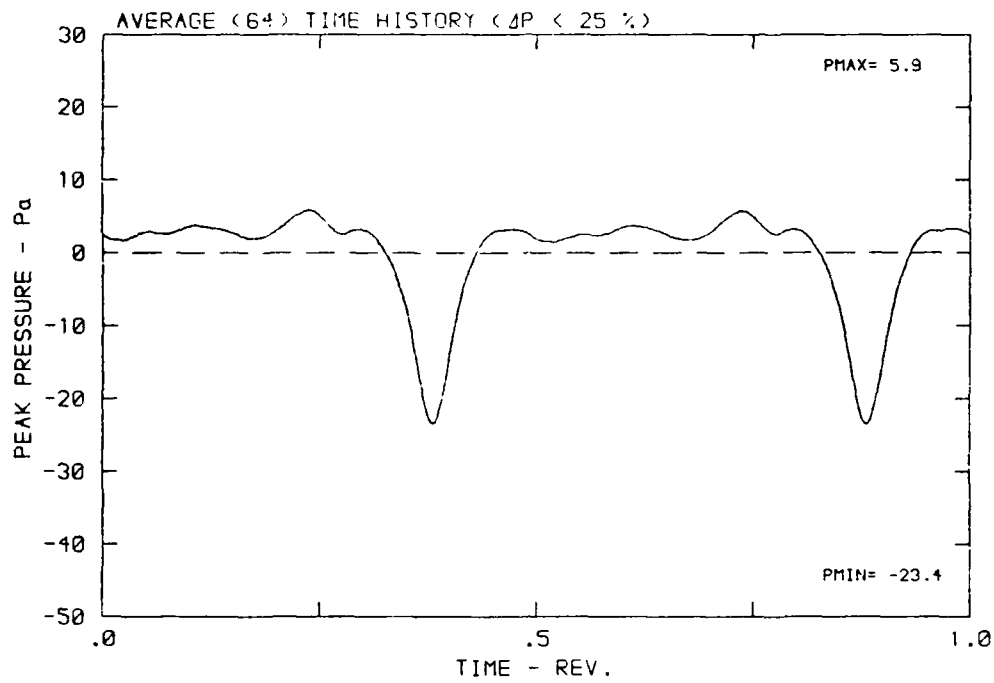
DATA POINT: FN-2 RUN: 167 MP: |

β : 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



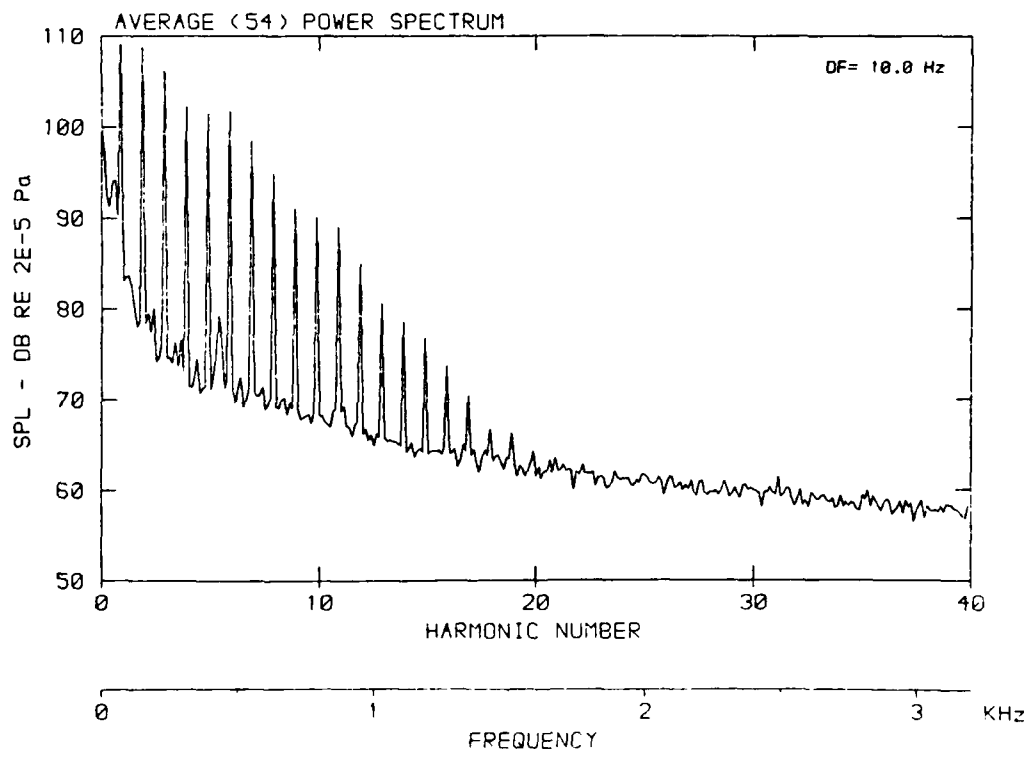
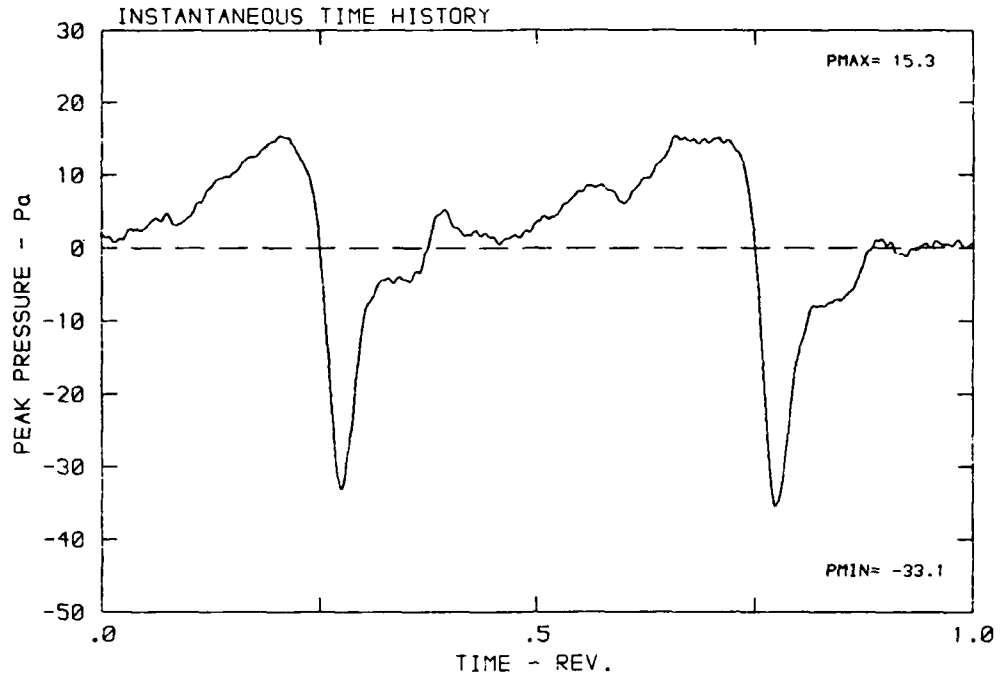
DATA POINT: FN-2 RUN: 167 MP: 1

β : 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



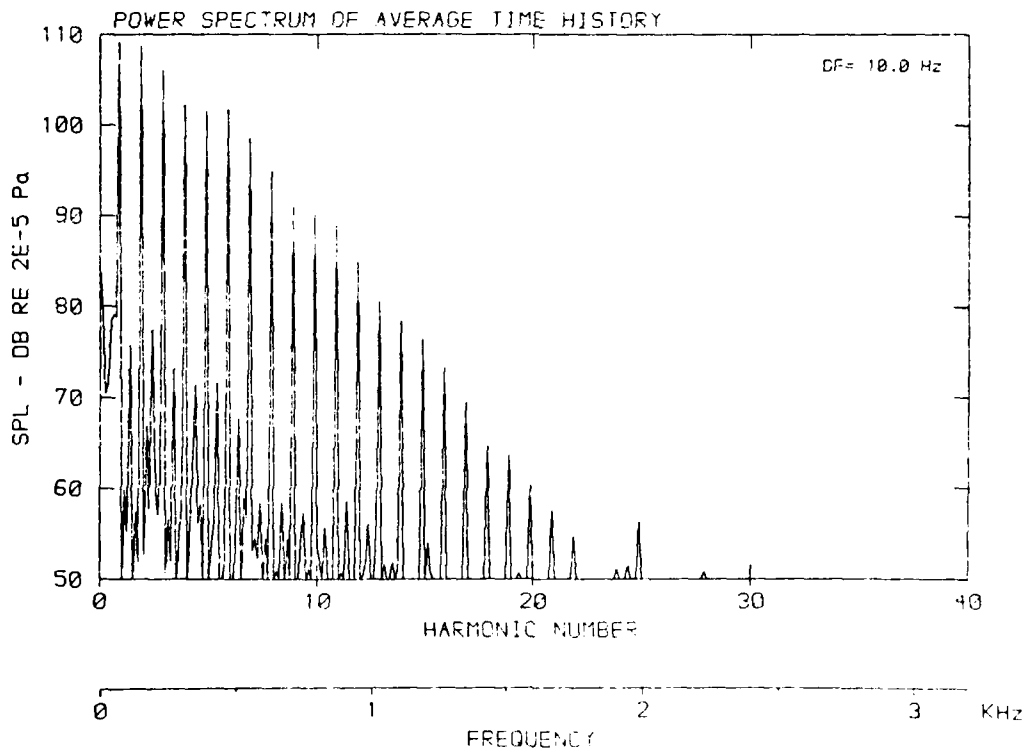
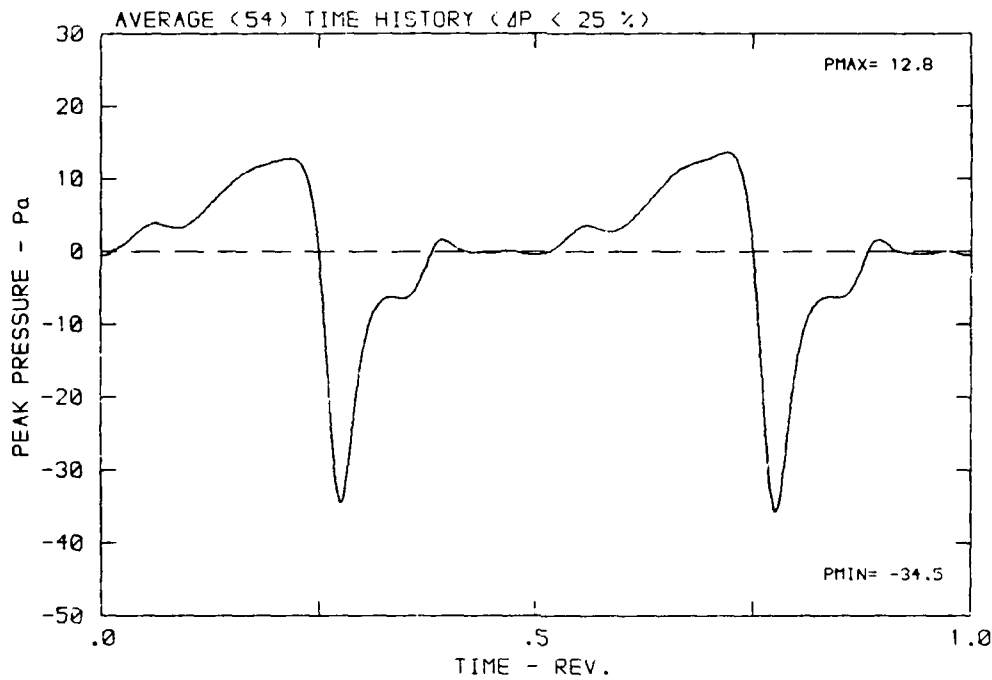
DATA POINT: FN-2 RUN: 167 MF: 2

β : 19.9° MH: .7655 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 288.2 K



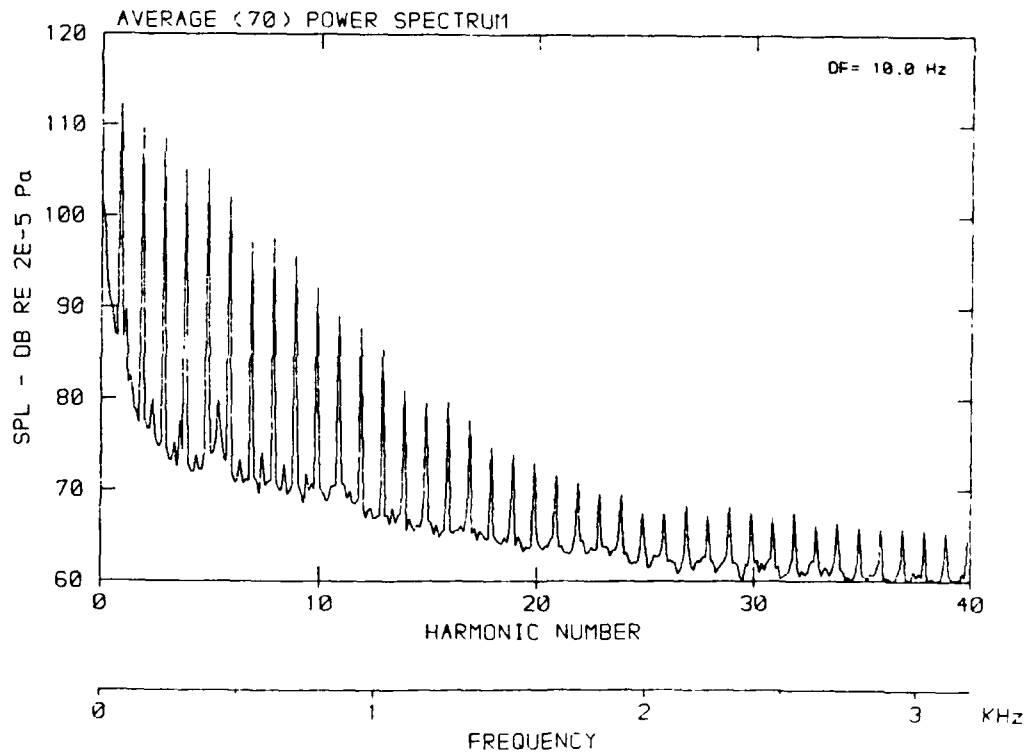
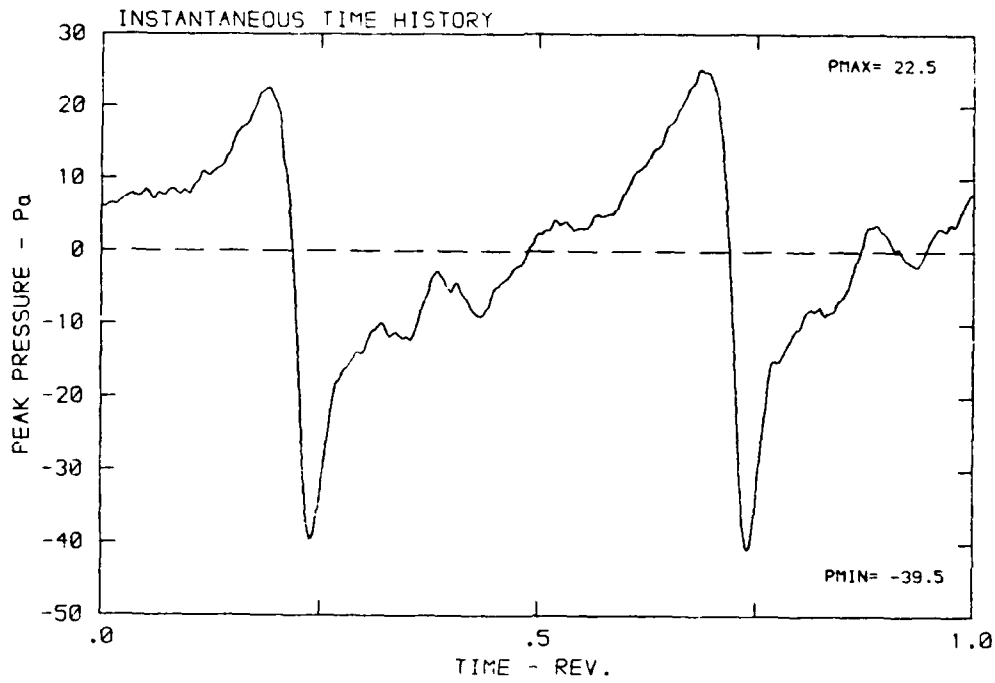
DATA POINT: FN-2 RUN: 167 MP: 2

β : 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



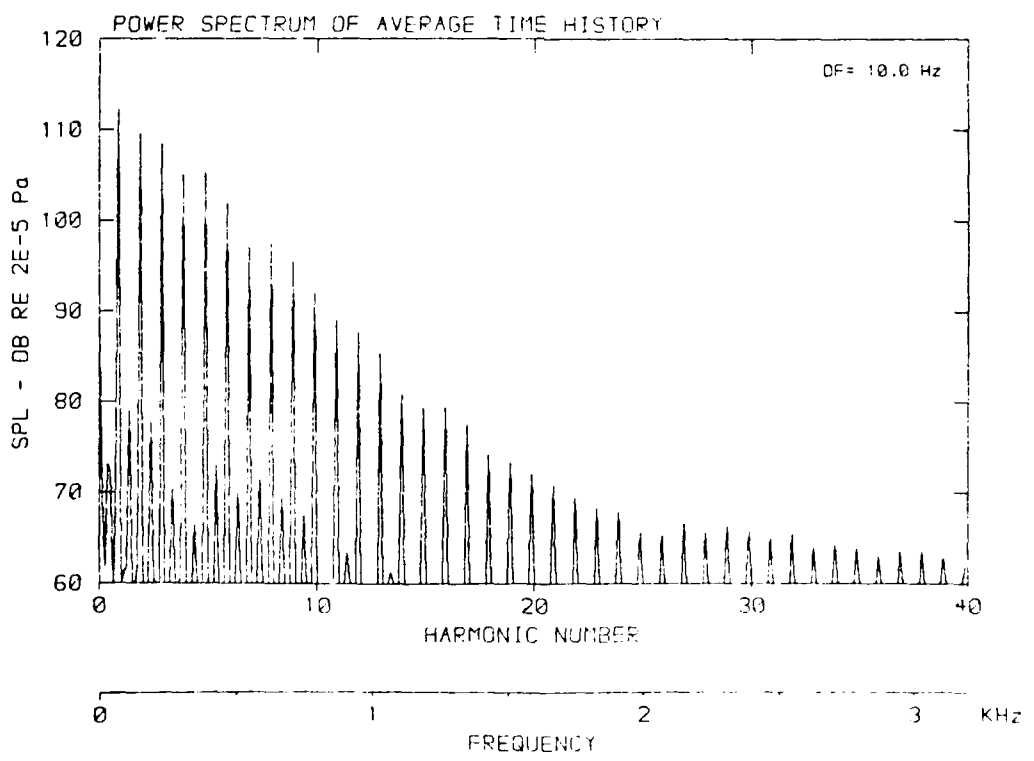
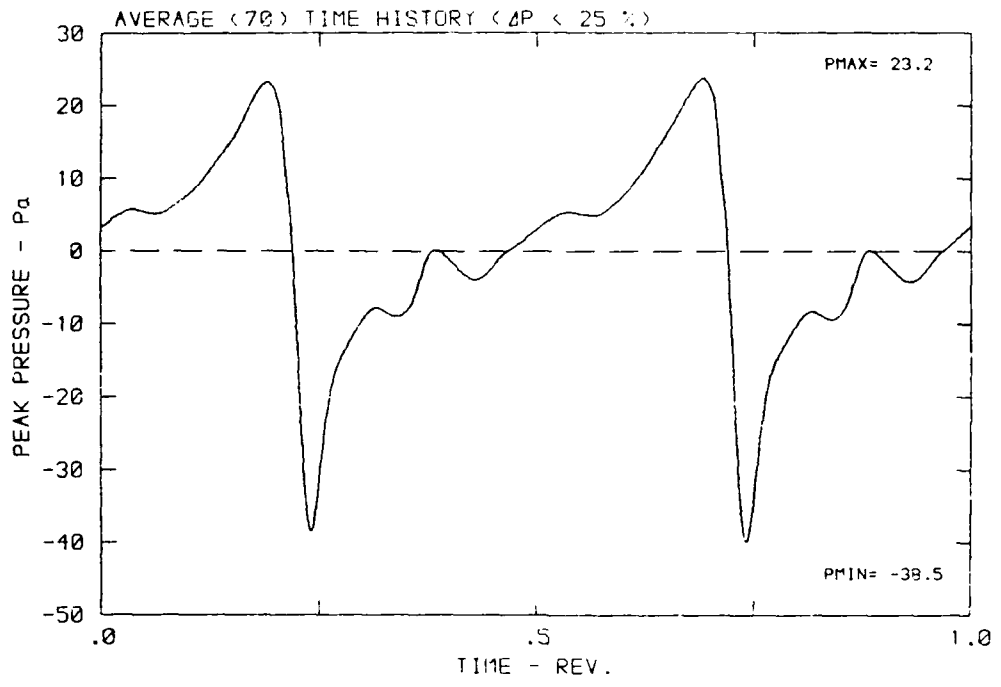
DATA POINT: FN-2 RUN: 167 MP: 3

β : 19.9° MH: .7655 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 298.2 K



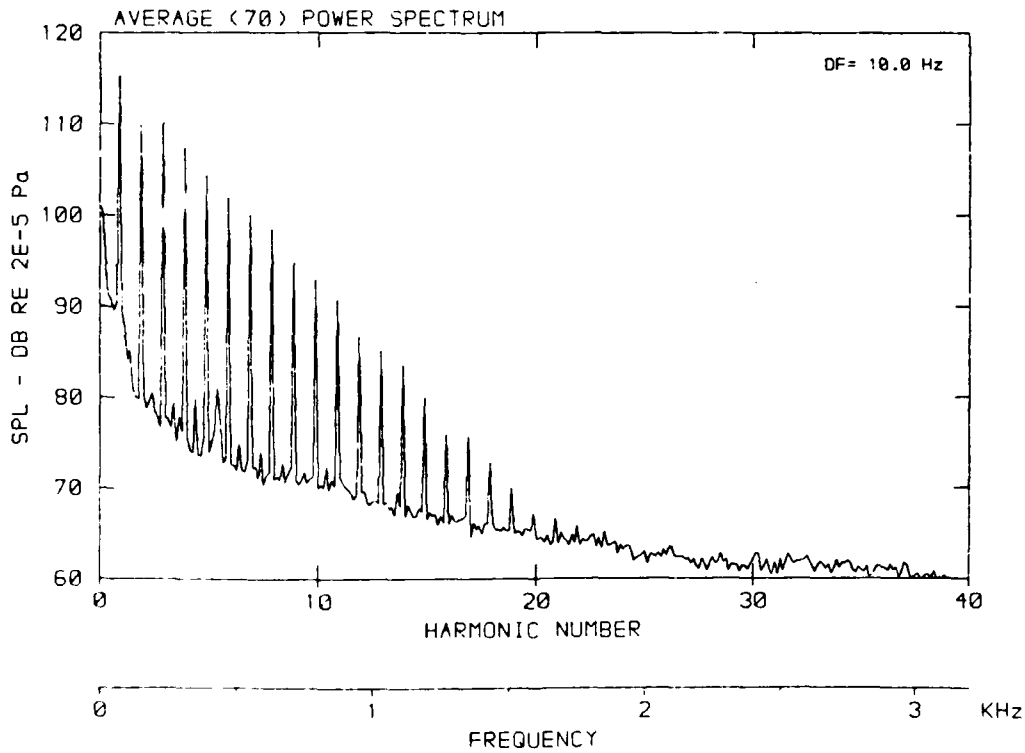
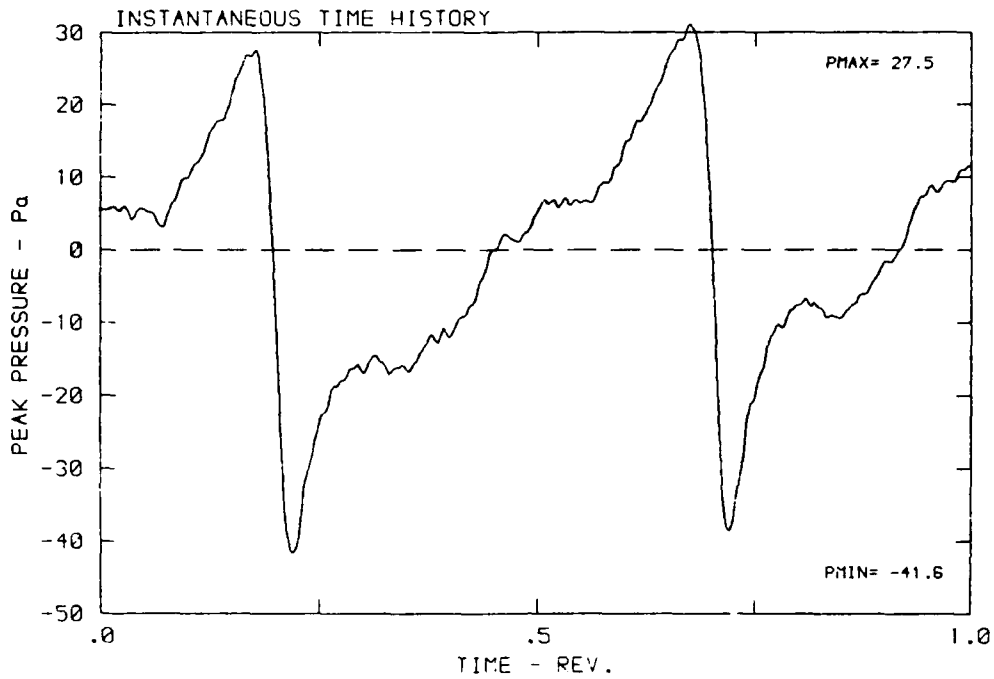
DATA POINT: FN-2 RUN: 167 MP: 3

β : 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



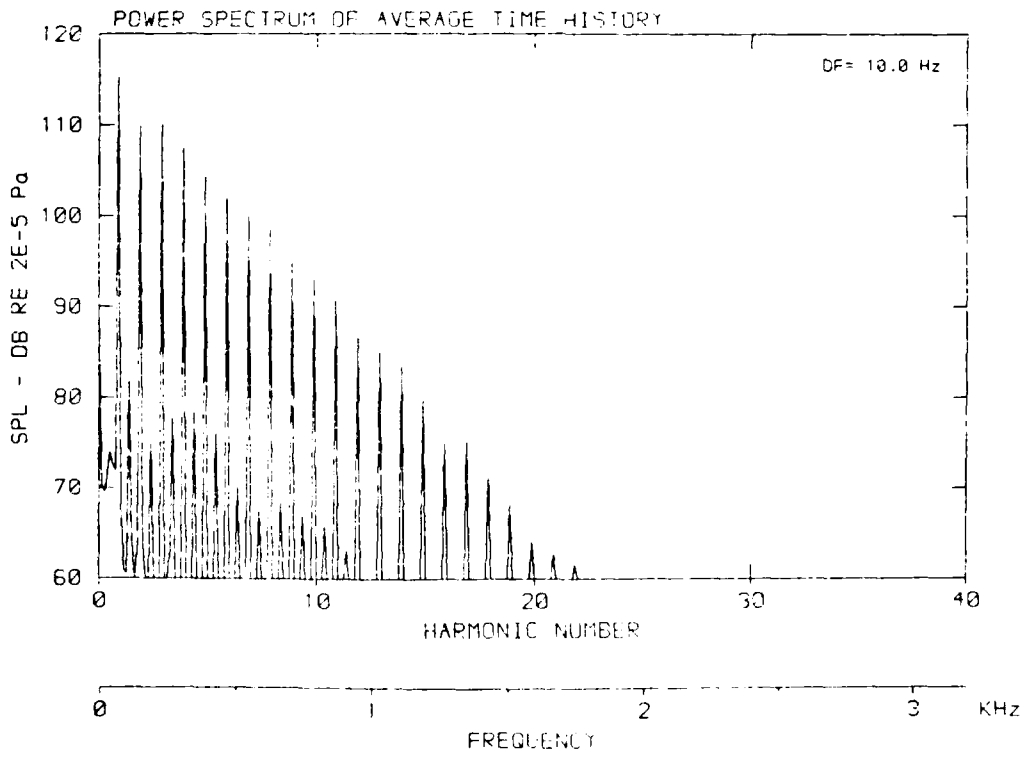
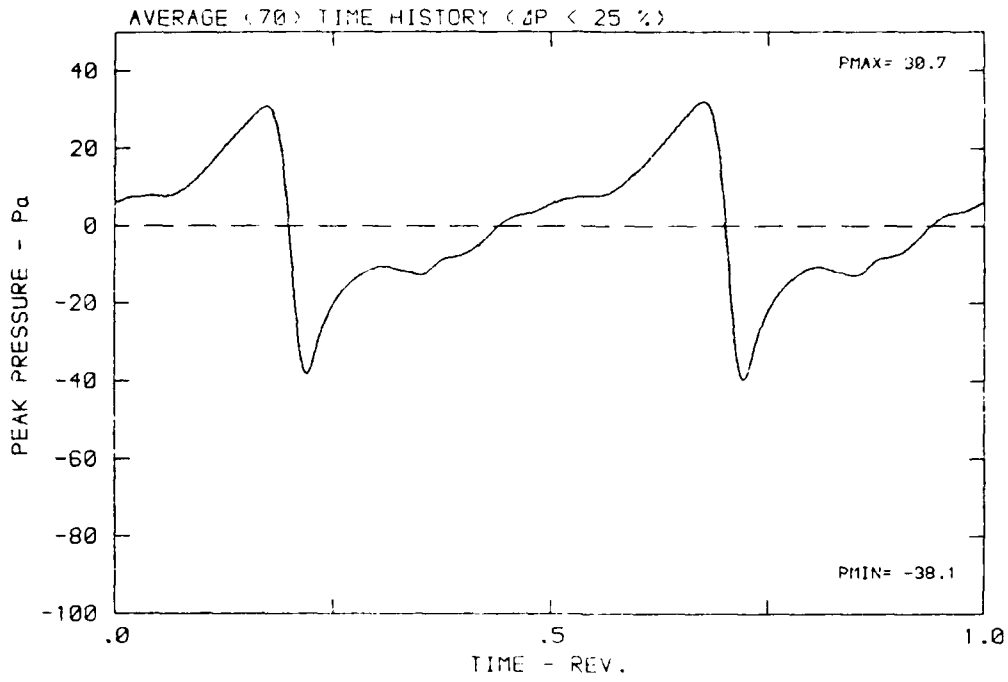
DATA POINT: FN-2 RUN: 167 MP: 4

β : 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



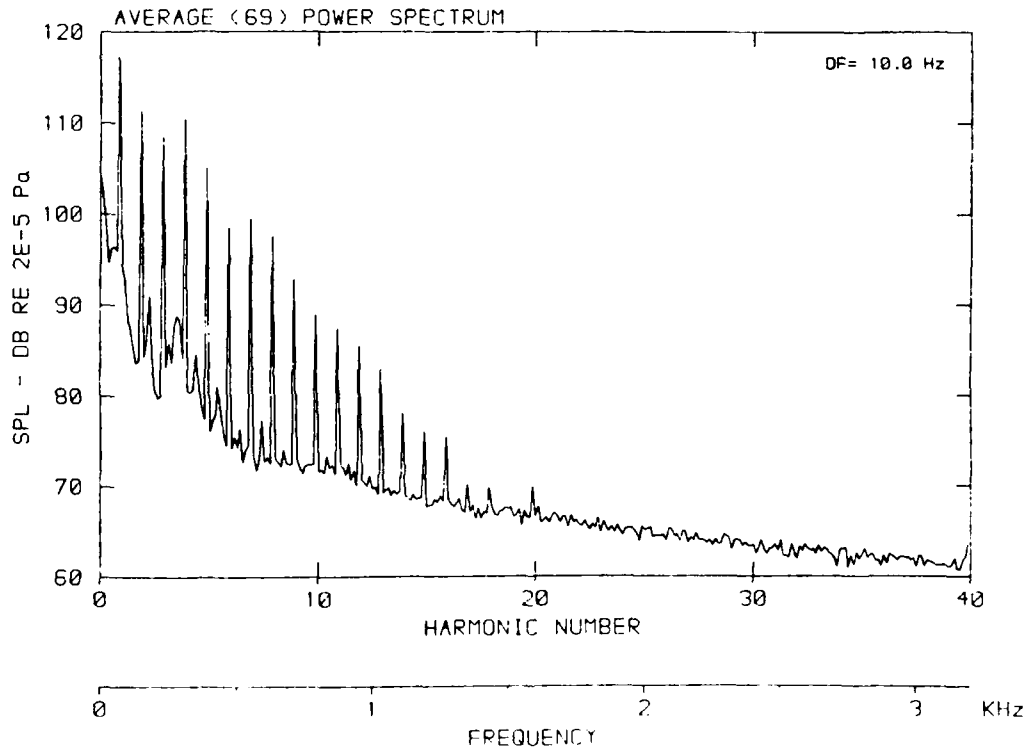
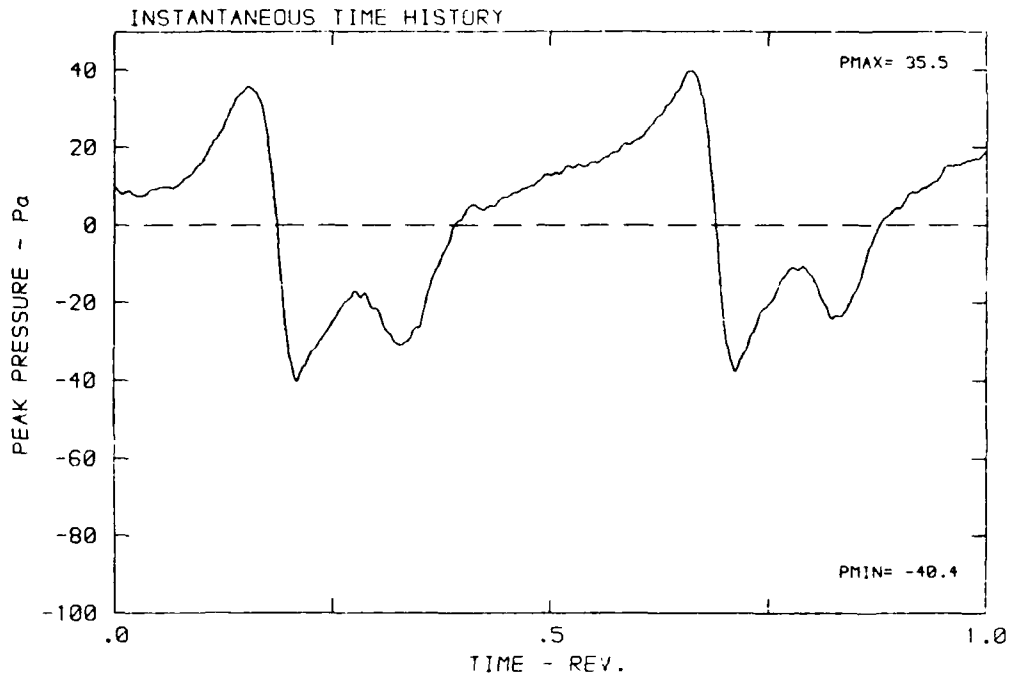
DATA POINT: FN-2 RUN: 167 MF: 4

β : 19.9° MH: .7655 n: 2400 rpm ν/u : .202 ϕ : 3.6° T: 288.2 K



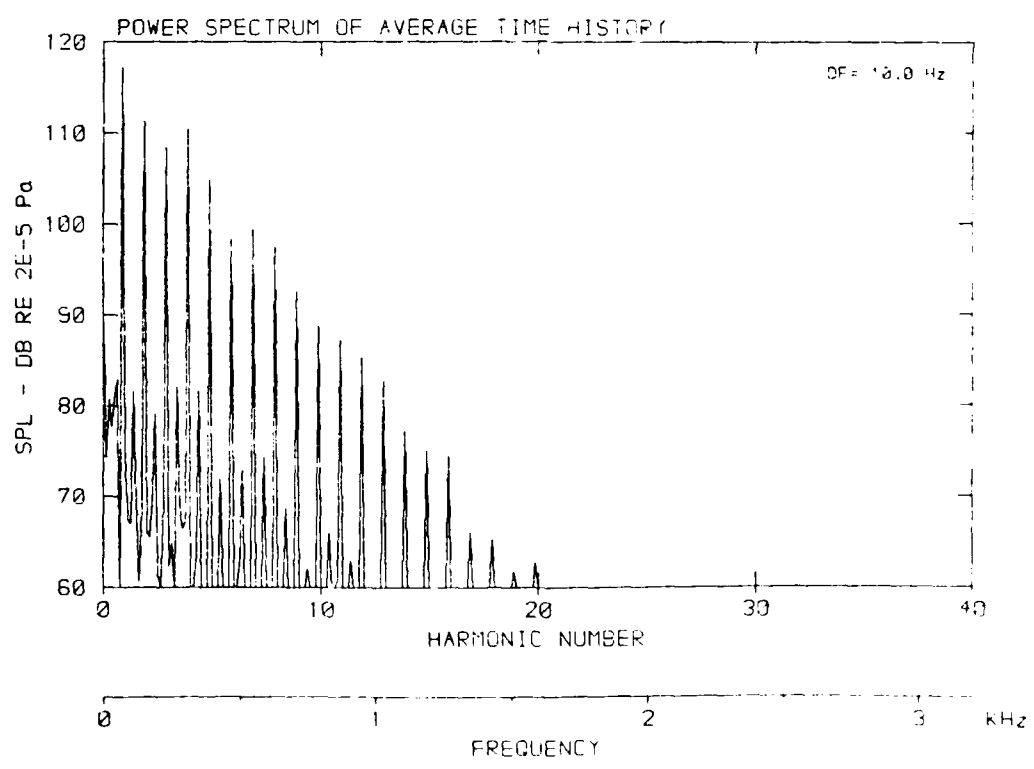
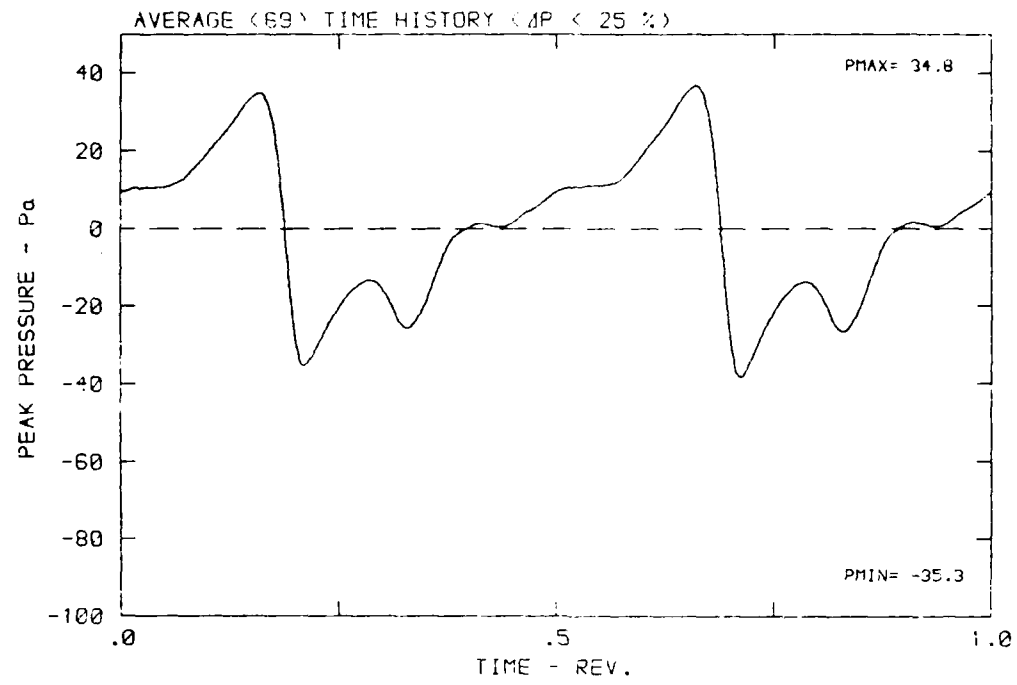
DATA POINT: FN-2 RUN: 167 MP: E

B: 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



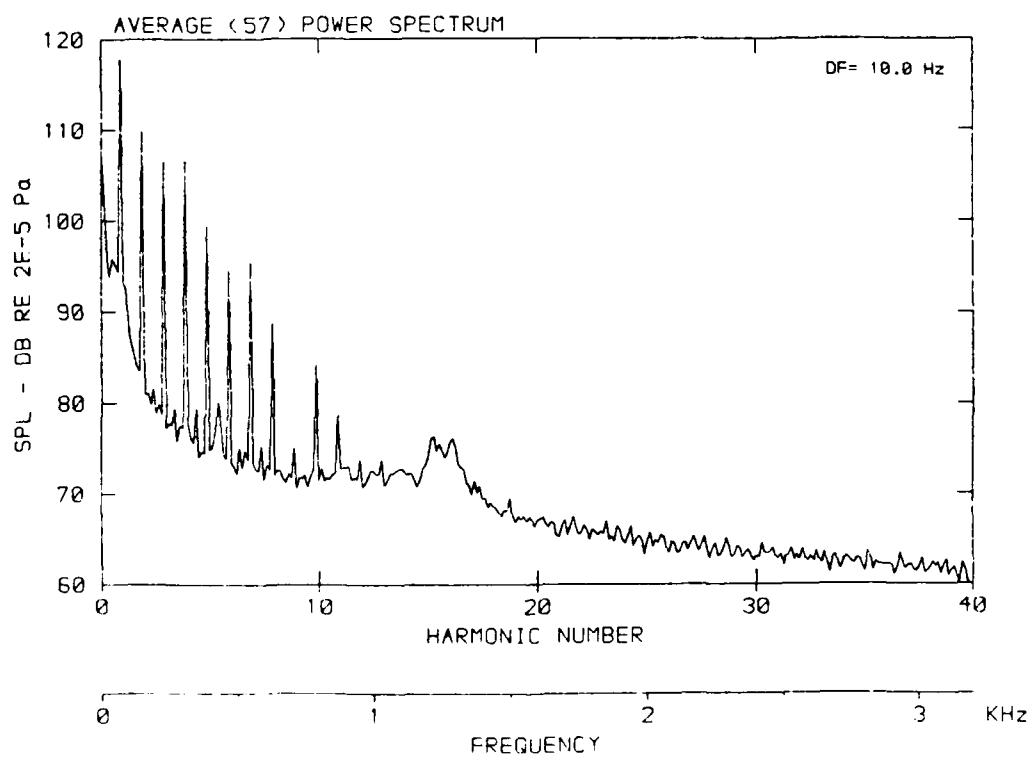
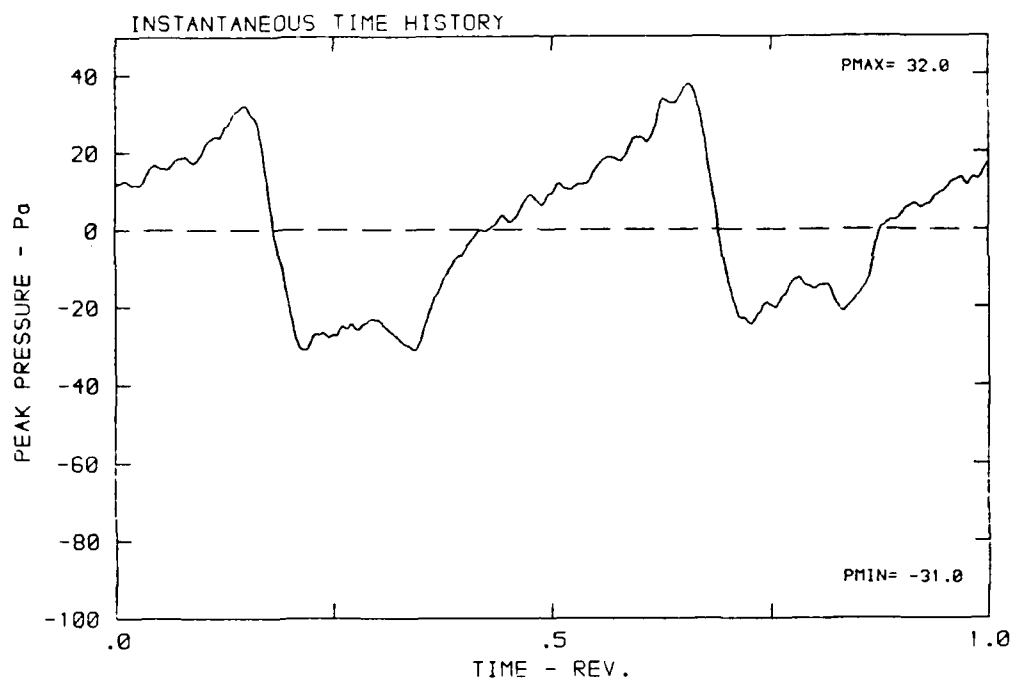
DATA POINT: FN-2 RUN: 167 MP: 5

β : 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



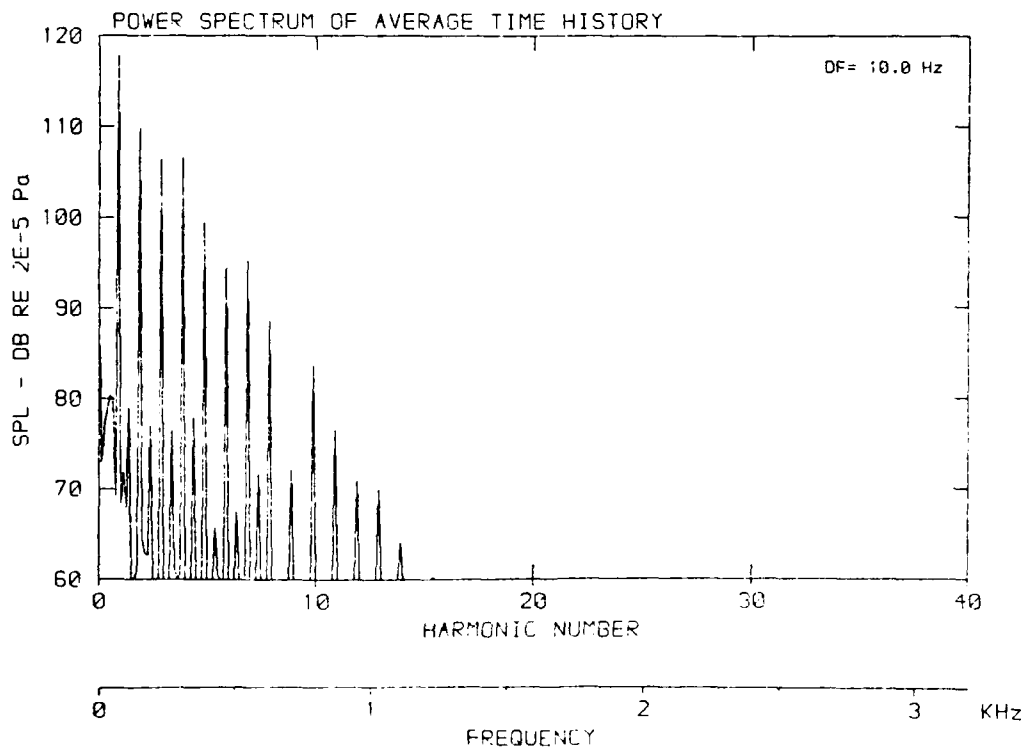
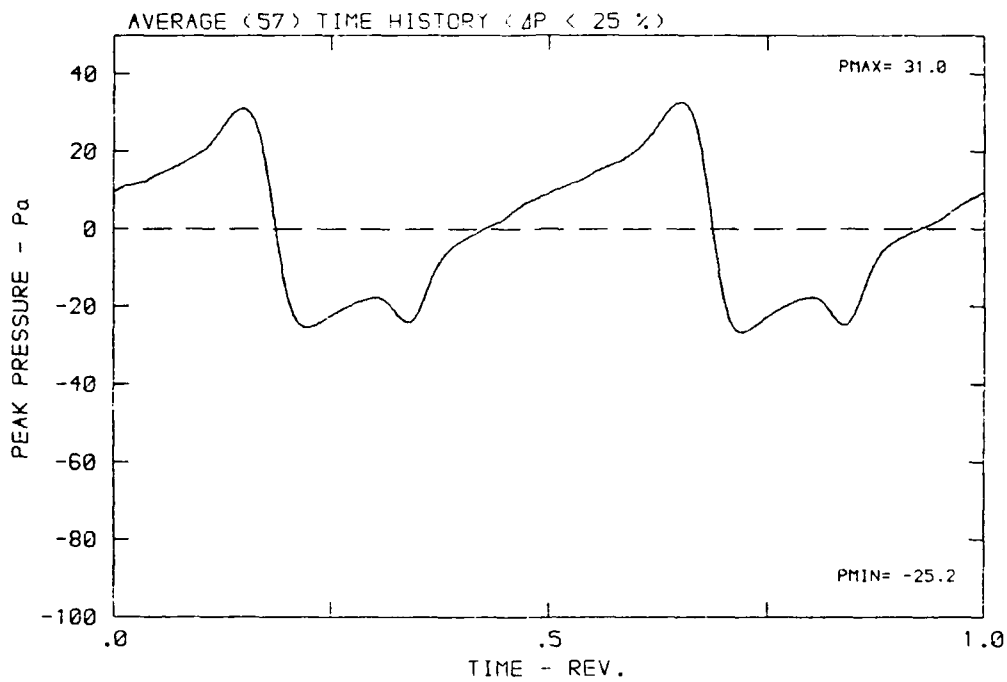
DATA POINT: FN-2 RUN: 157 MP: 6

β : 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



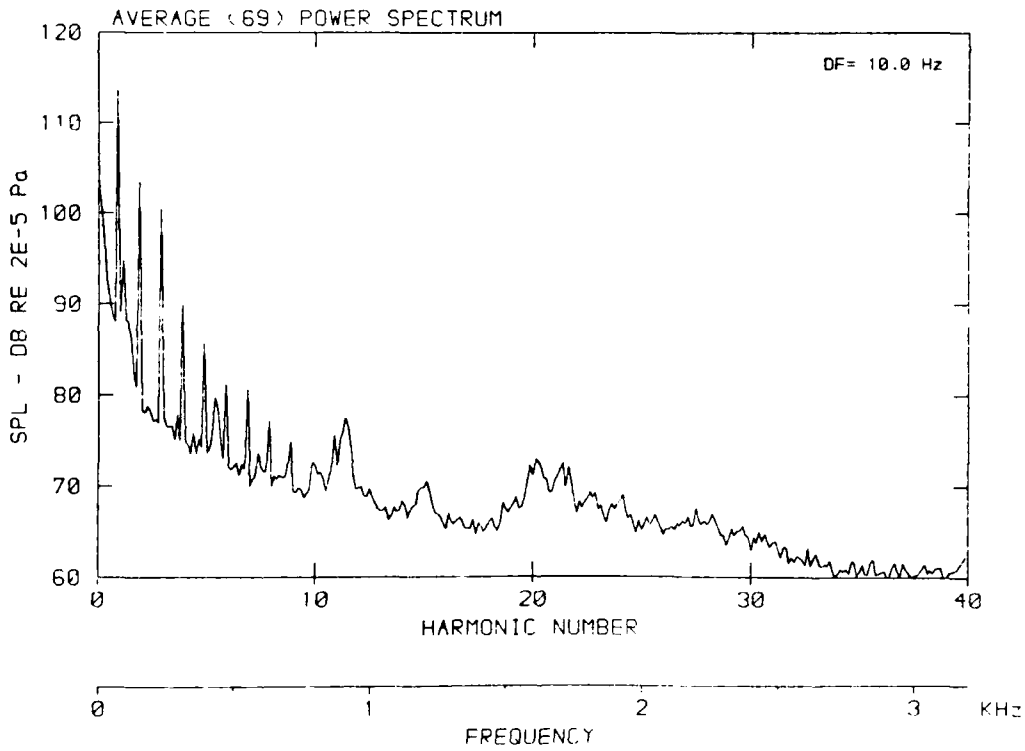
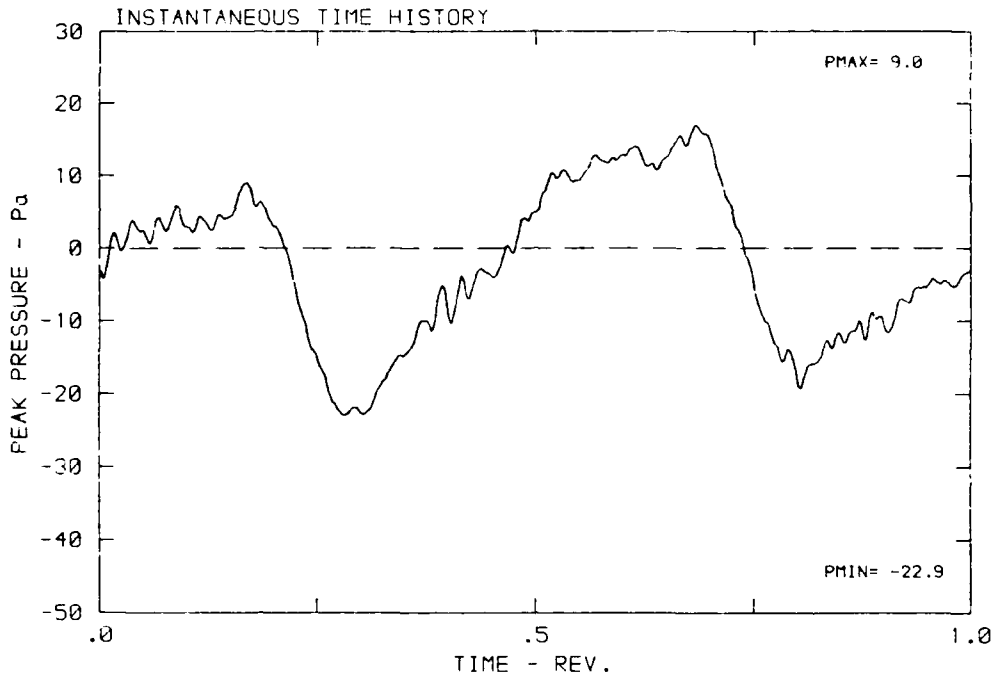
DATA POINT: FN-2 RUN: 167 MP: 6

β : 19.9° MH: .7655 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 288.2 K



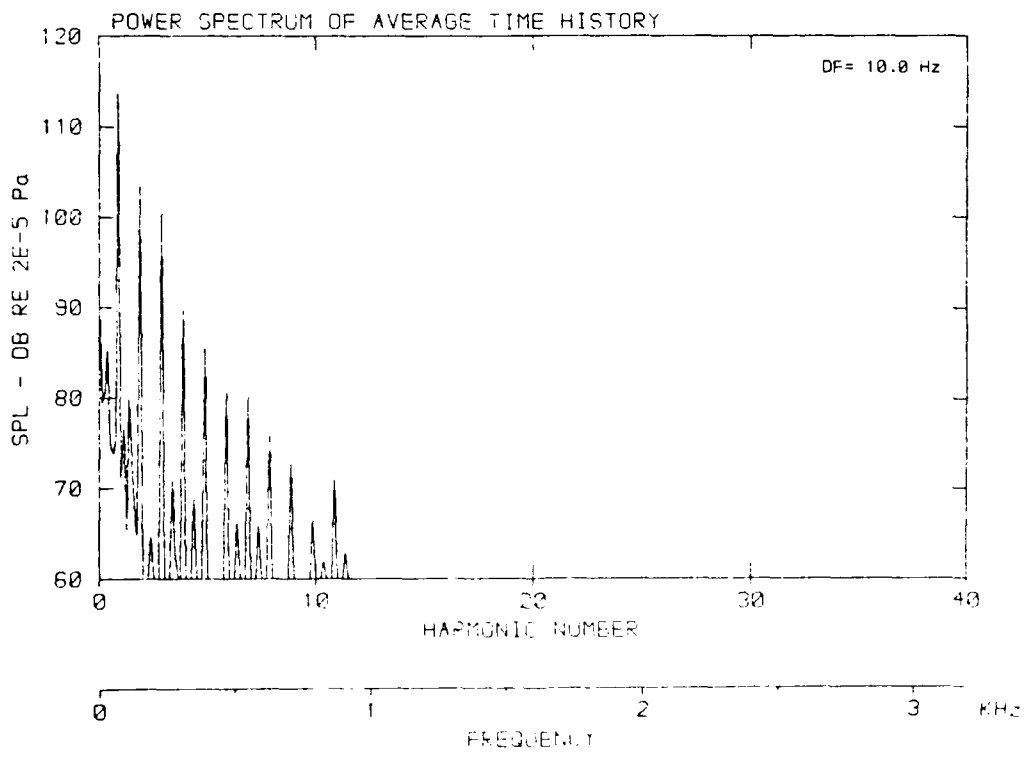
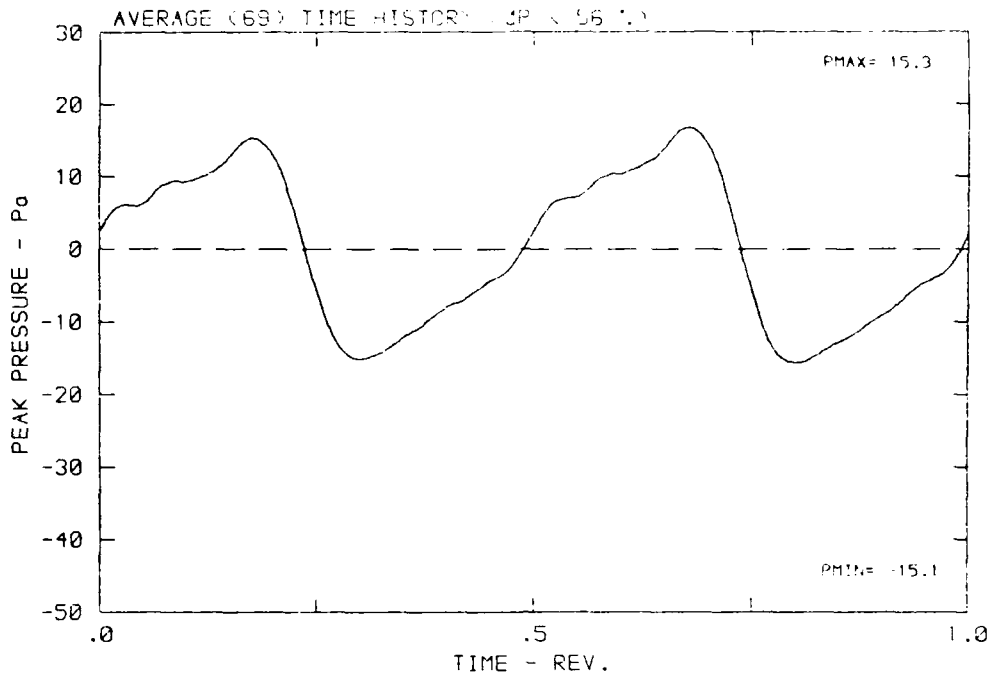
DATA POINT: FN-2 RUN: 167 MP: 7

β : 19.9° MH: .7655 n: 2400 rpm v-u: .202 ϕ : 3.6° T: 268.2 K



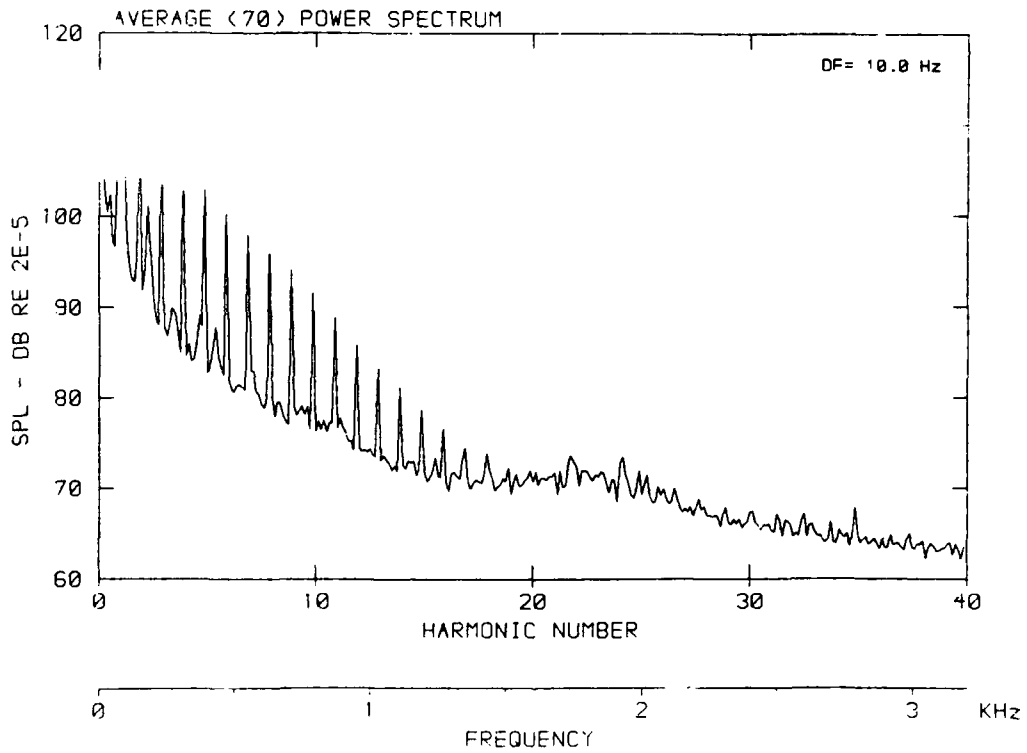
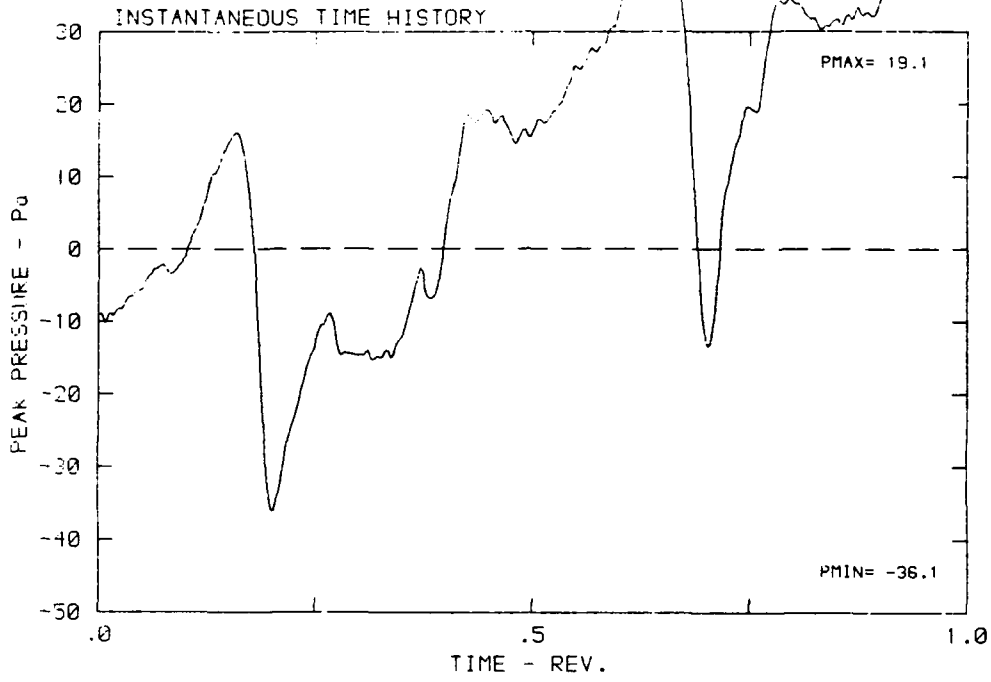
DATA POINT: FN-2 RUN: 157 MP: 7

β : 19.9° MH: .7655 n: 2400 rpm v : .202 ϕ : 3.5° r : 268.2 k



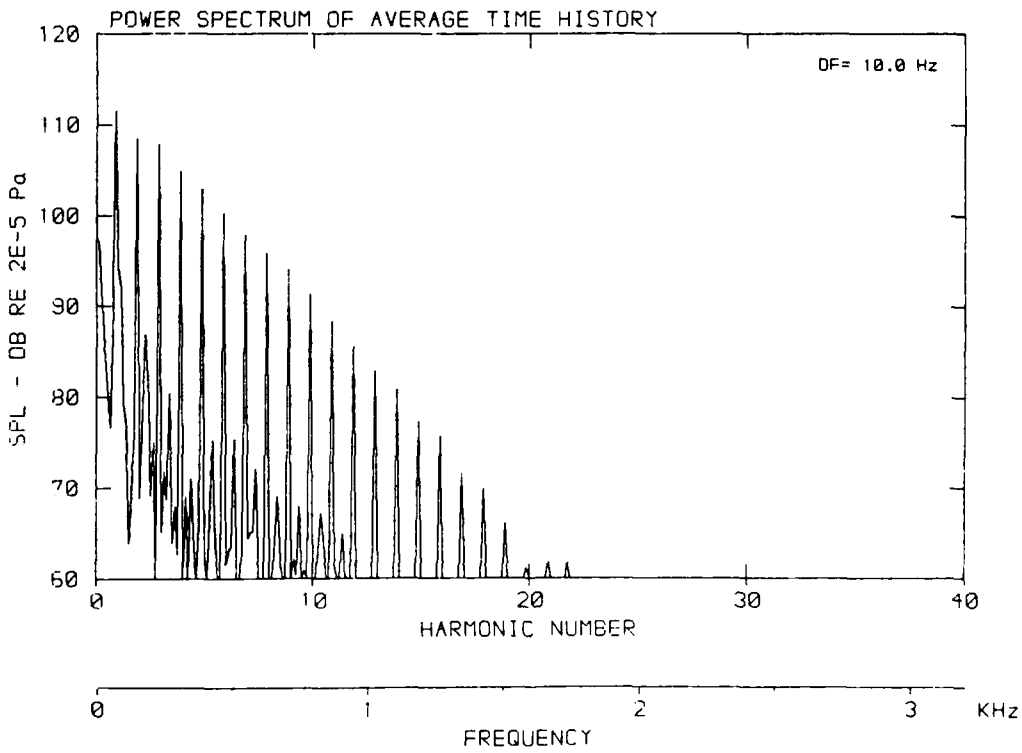
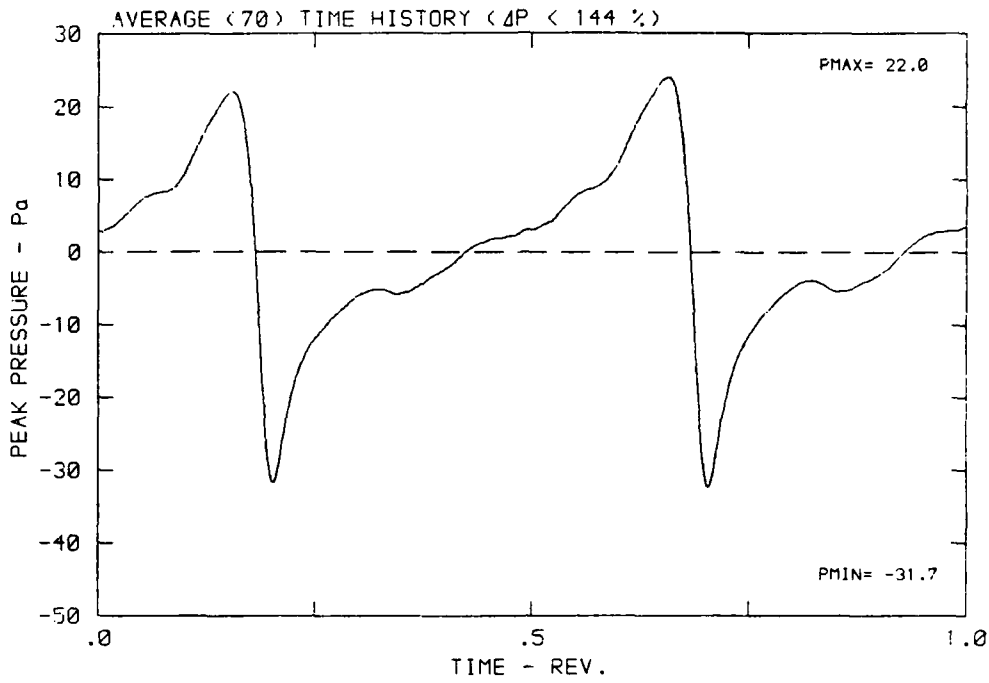
DATA POINT: FN-2 RUN: 167 MP: 8

β : 19.9° MH: .7655 n: 2400 rpm v/u : .202 ϕ : 3.6° Δ : 288.2 K



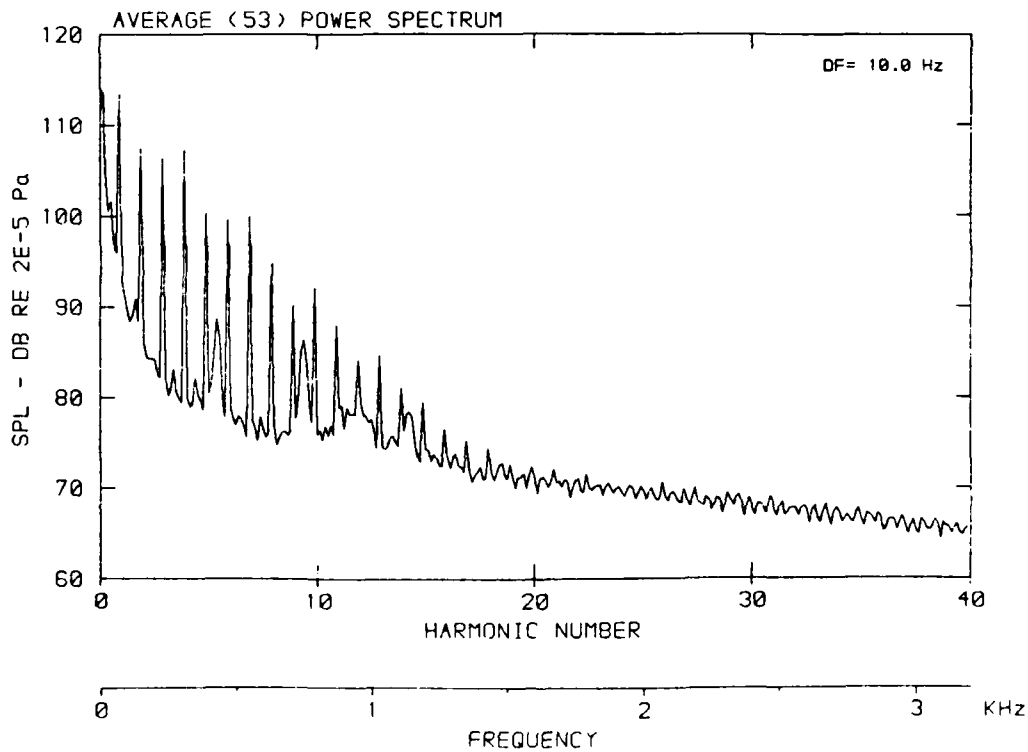
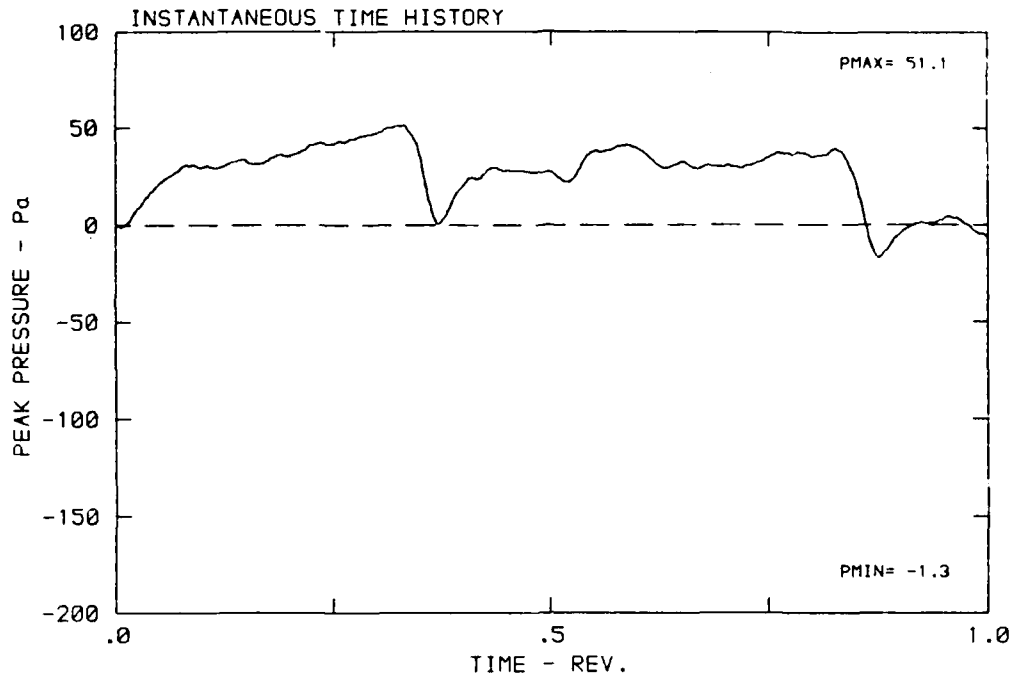
DATA POINT: FN-2 RUN: 167 MP: 8

β : 19.9° MH: .7655 n: 2400 rpm v/u: .202 ϕ : 3.6° T: 288.2 K



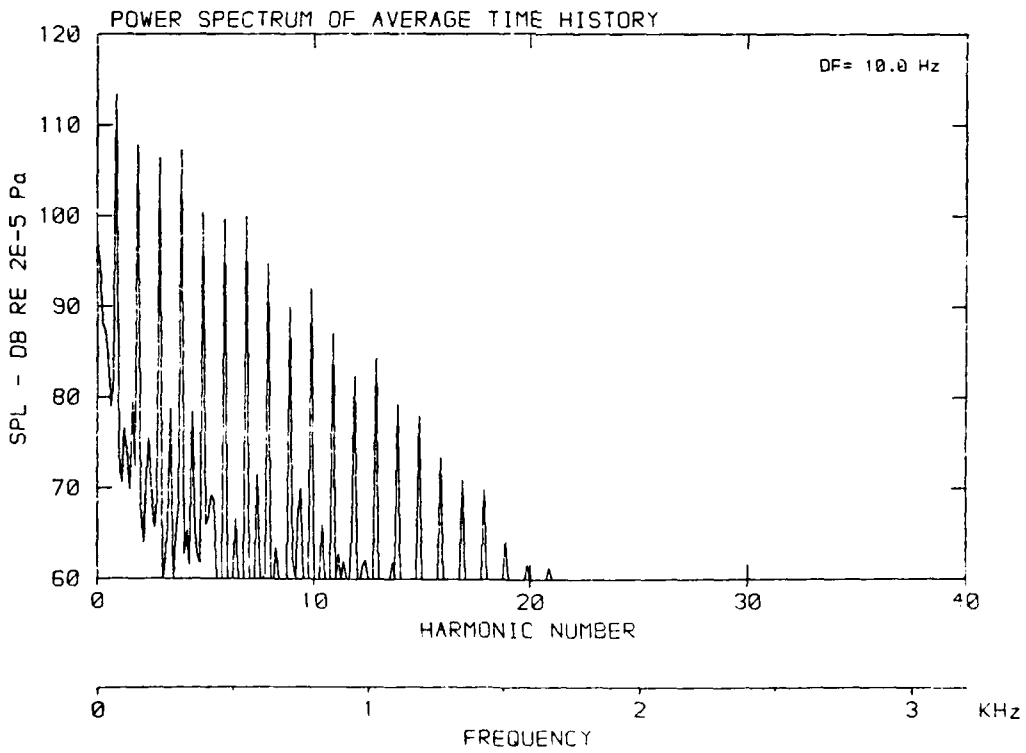
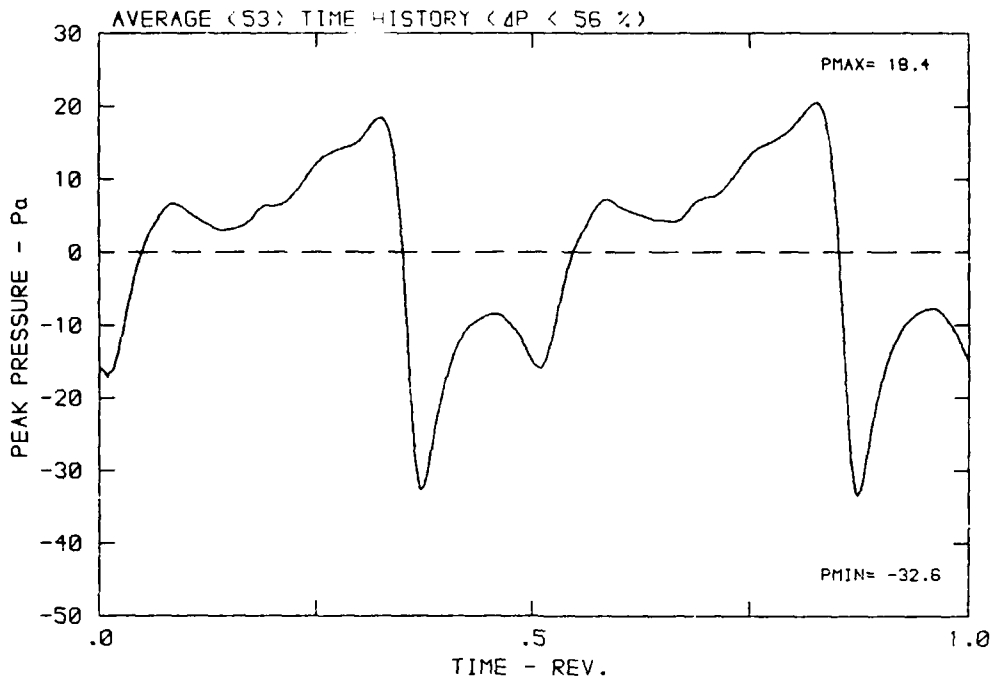
DATA POINT: FN-2 RUN: 167 MP: 9

β : 19.9° MH: .7655 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 288.2 K



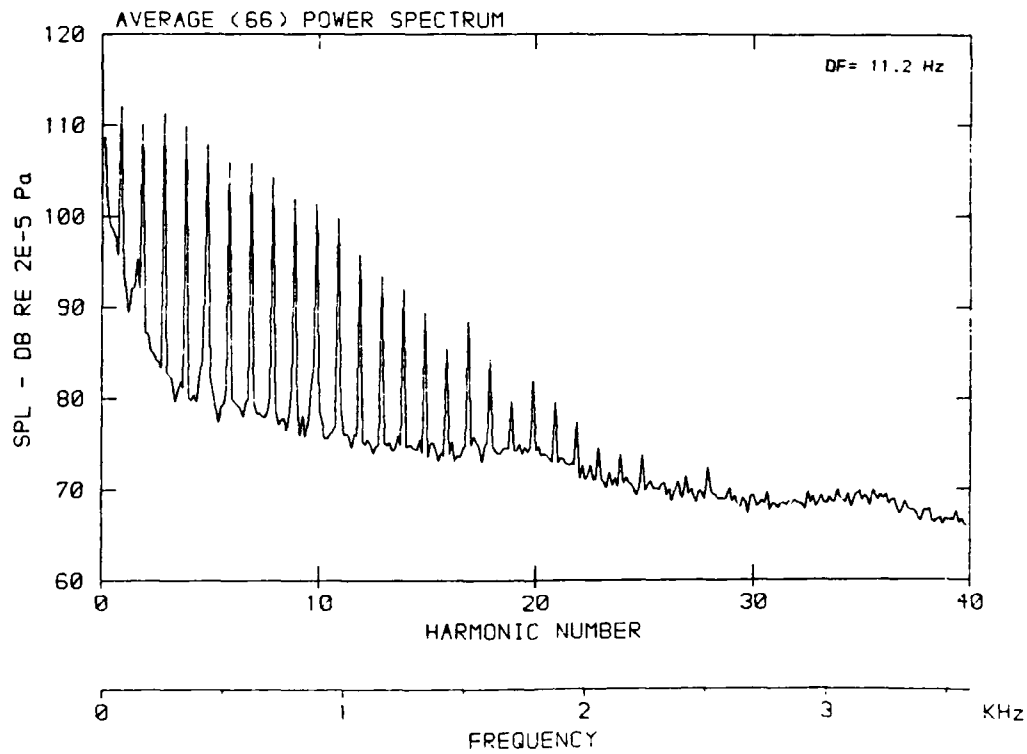
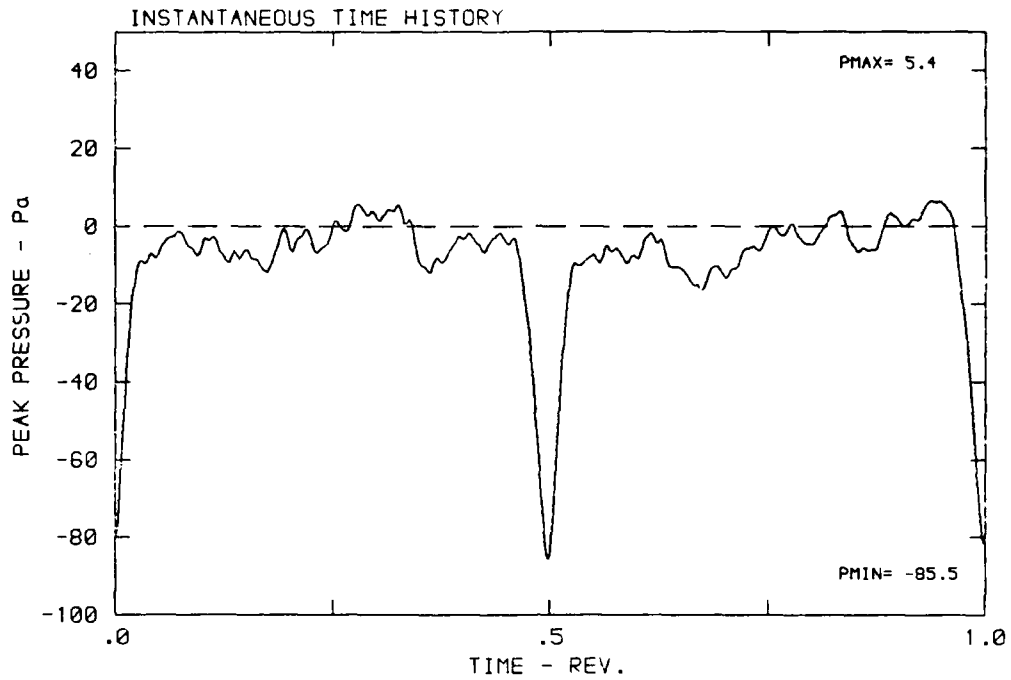
DATA POINT: FN-2 RUN: 167 MP: 9

β : 19.9° MH: .7655 n: 2400 rpm v/u : .202 ϕ : 3.6° T: 288.2 K



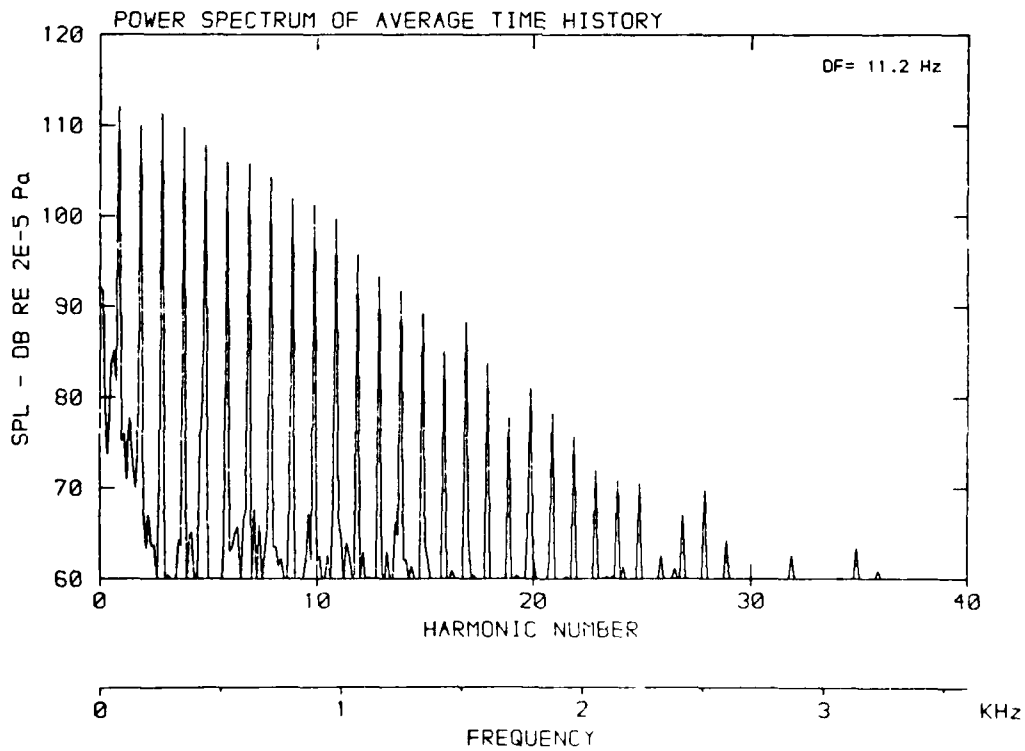
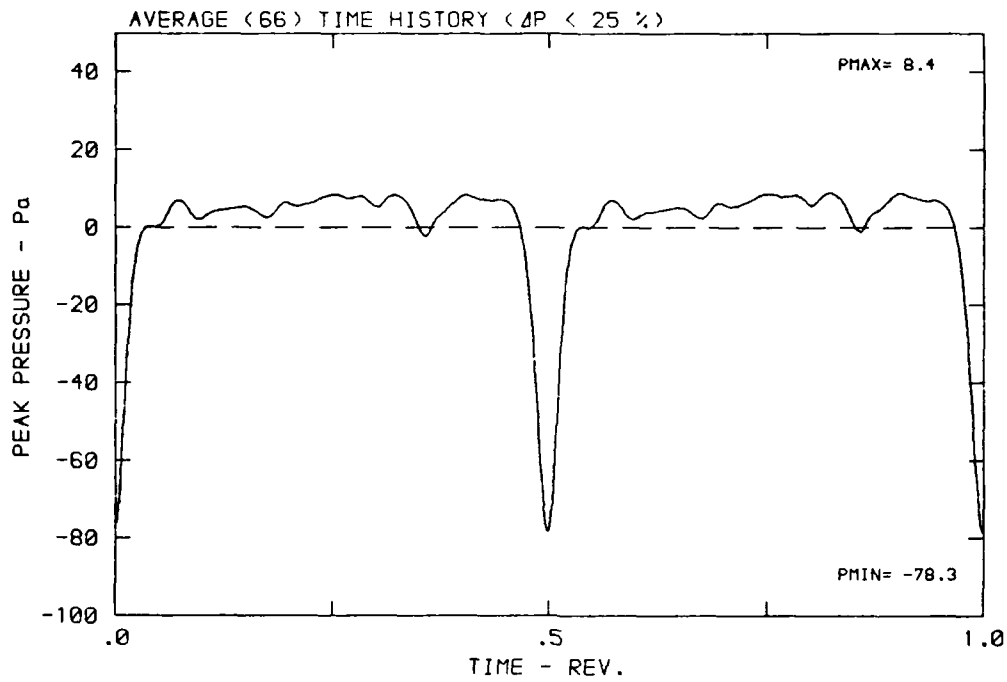
DATA POINT: FN-3 RUN: 168 MP: 1

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



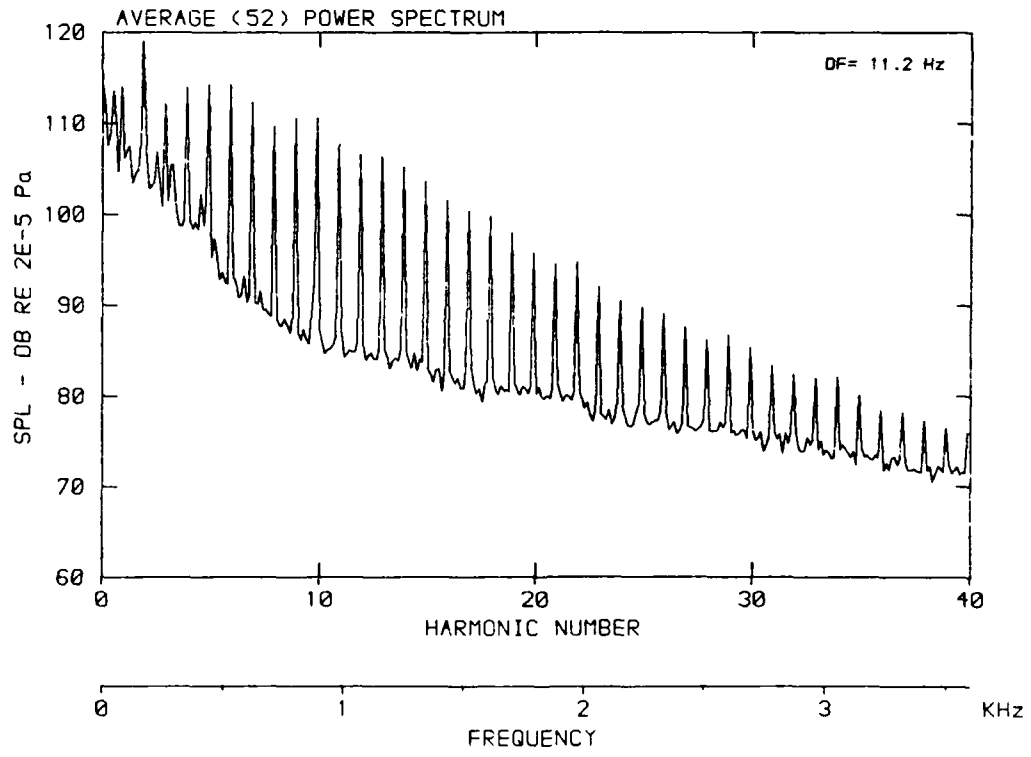
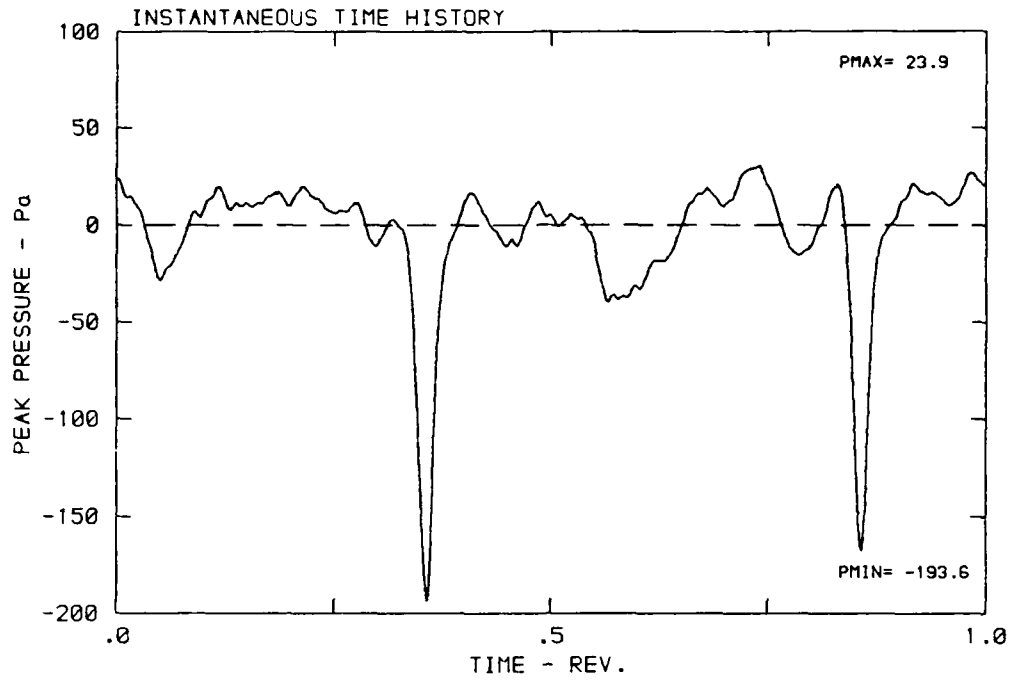
DATA POINT: FN-3 RUN: 168 MP: 1

β : 19.9° MH: .8740 n: 2700 rpm v/u : .269 ϕ : 3.6° T: 288.2 K



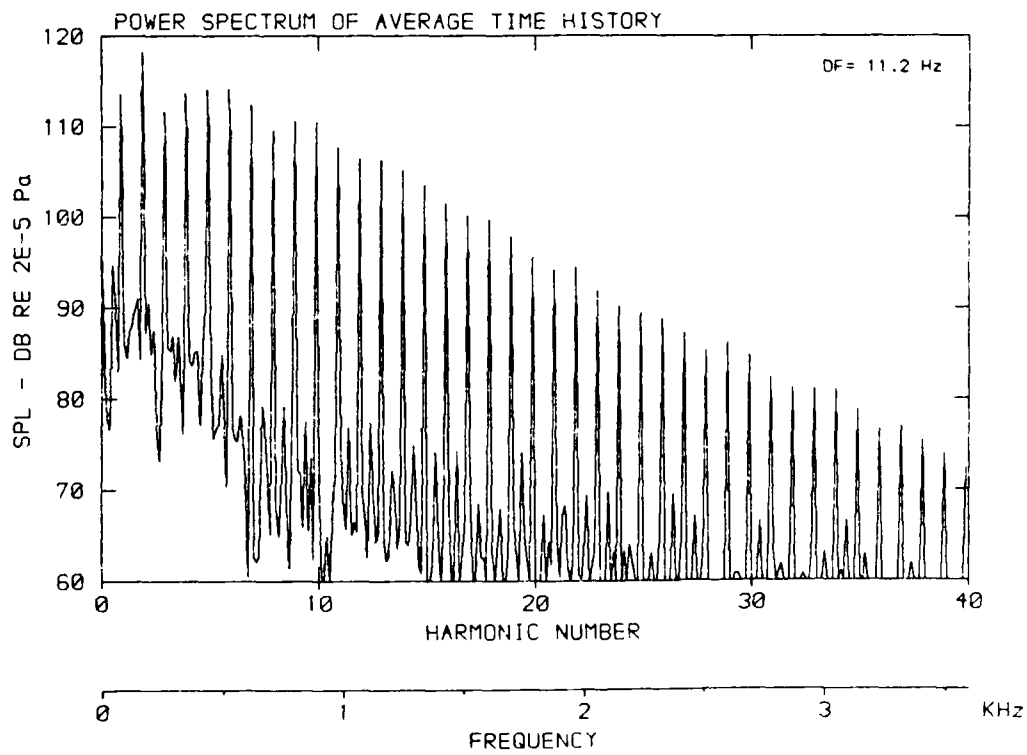
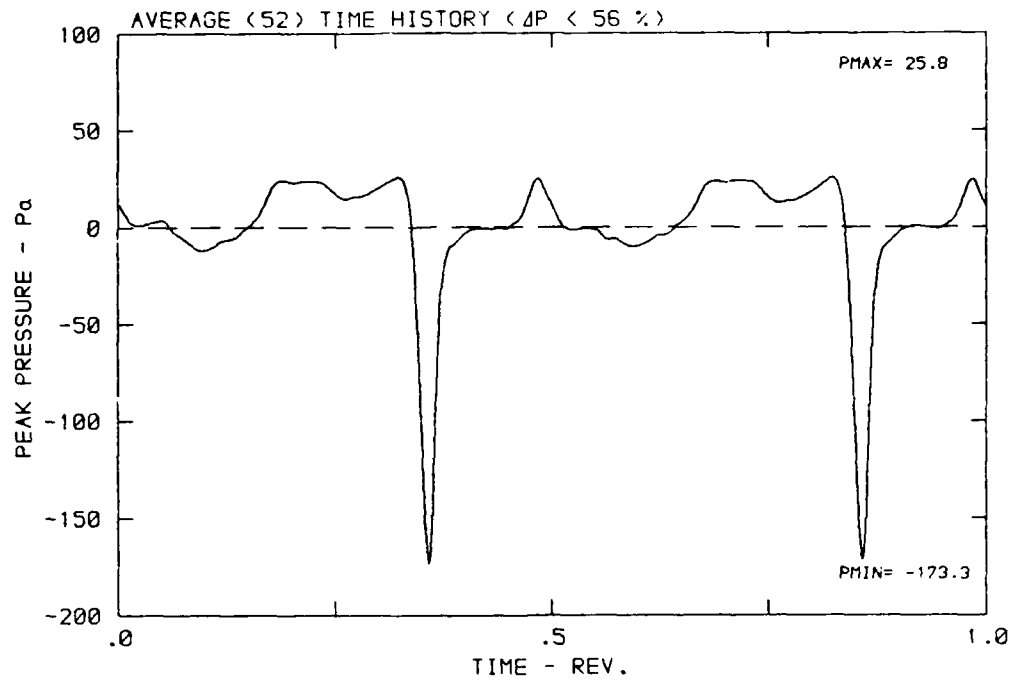
DATA POINT: FN-3 RUN: 168 MP: 2

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



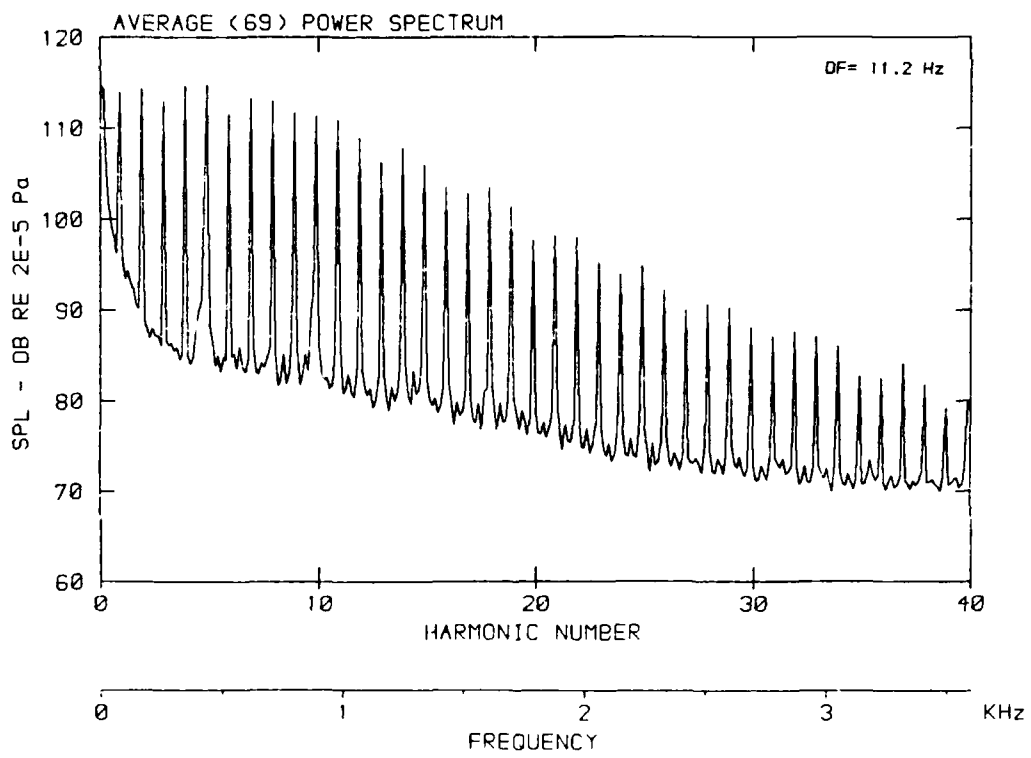
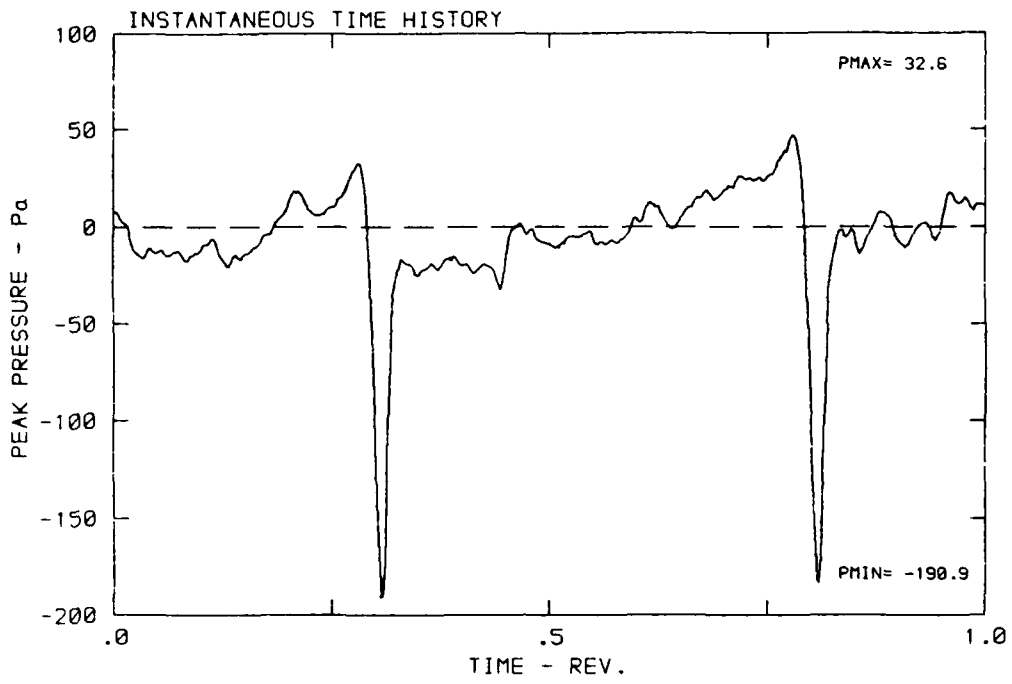
DATA POINT: FN-3 RUN: 168 MP: 2

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



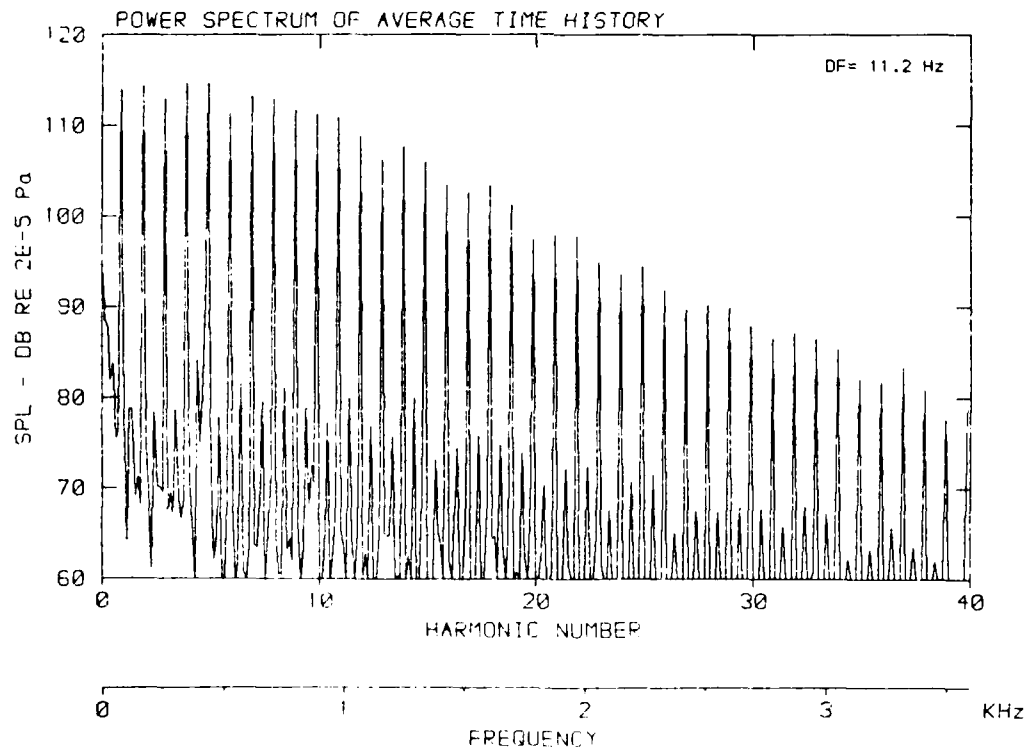
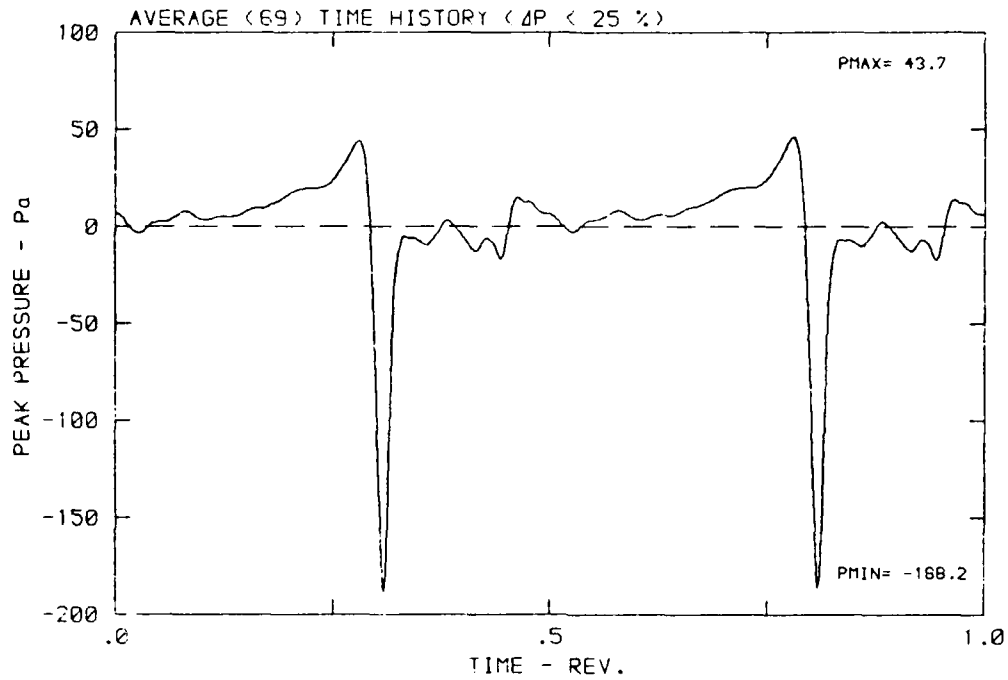
DATA POINT: FN-3 RUN: 168 MP: 3

β : 19.9° MH: .8740 n: 2700 rpm v/u : .269 ϕ : 3.6° T: 288.2 K



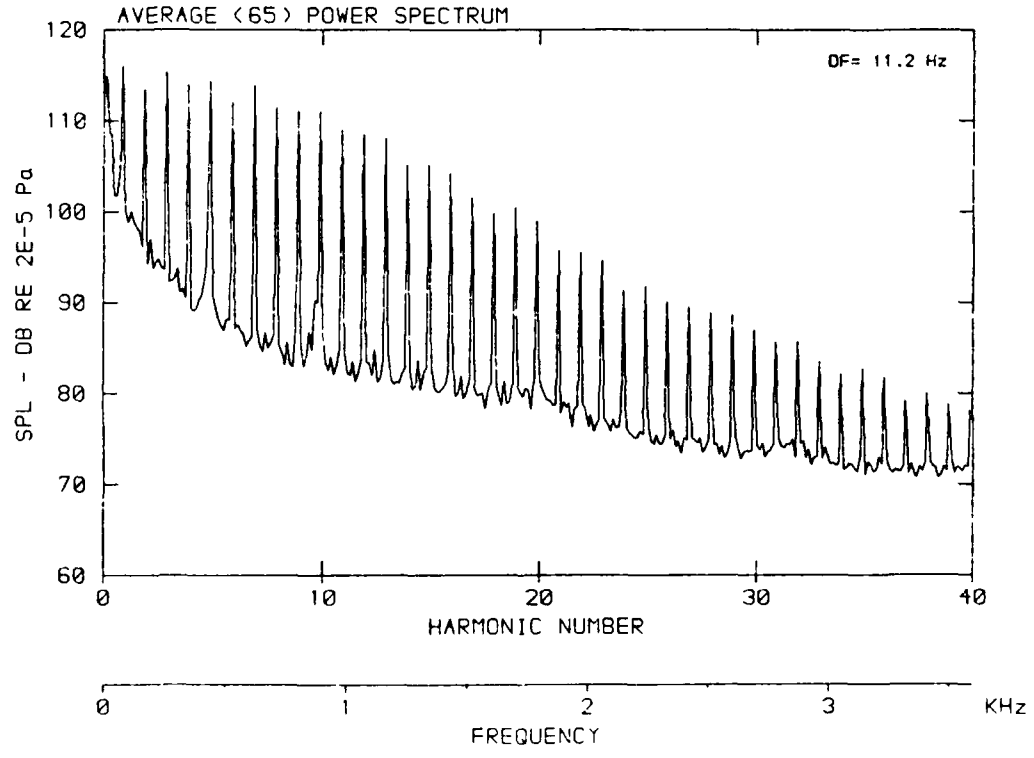
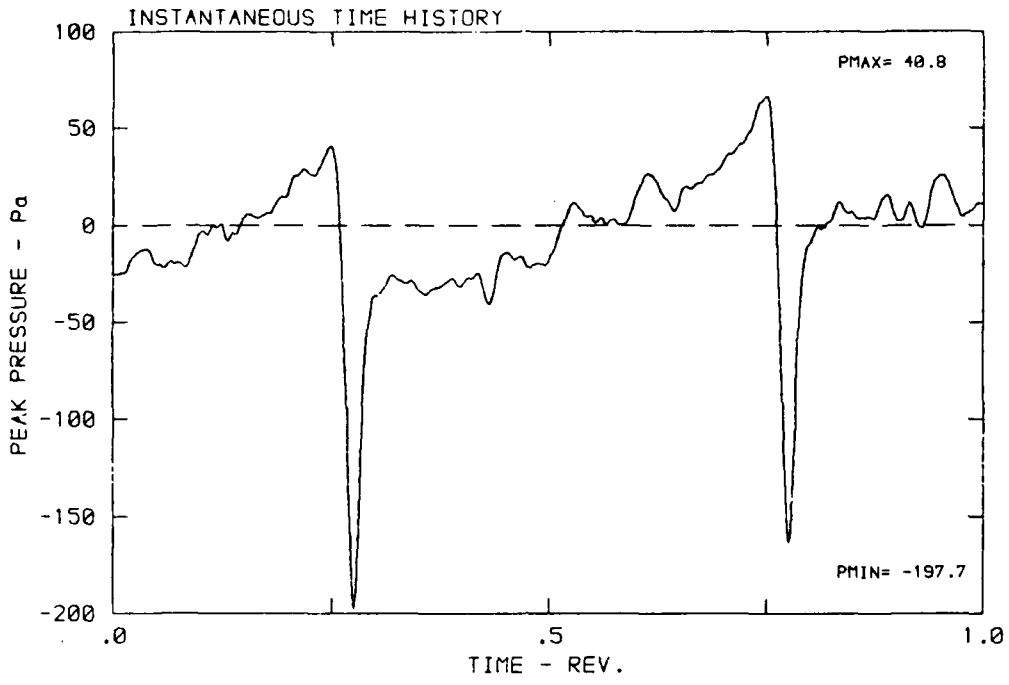
DATA POINT: FN-3 RUN: 168 MP: 3

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



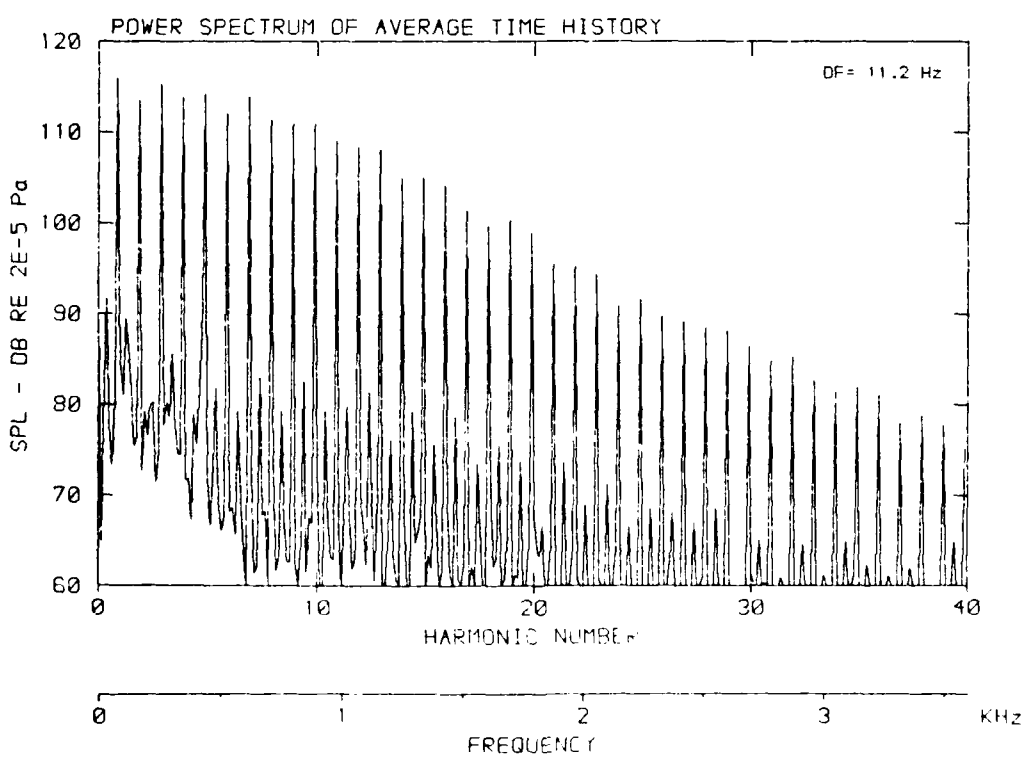
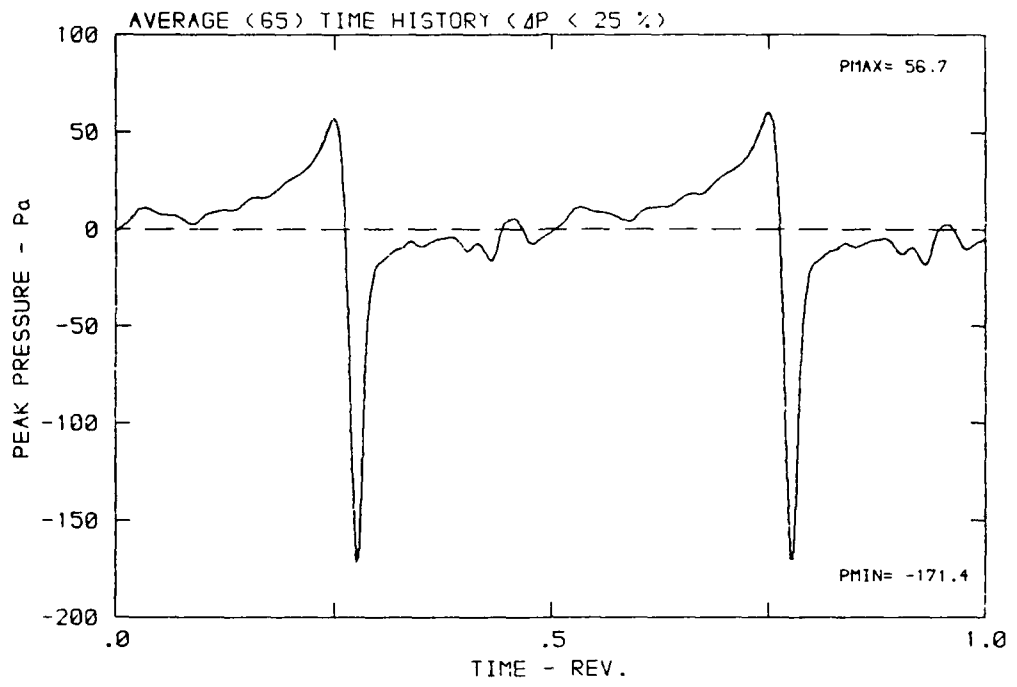
DATA POINT: FN-3 RUN: 168 MP: 4

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



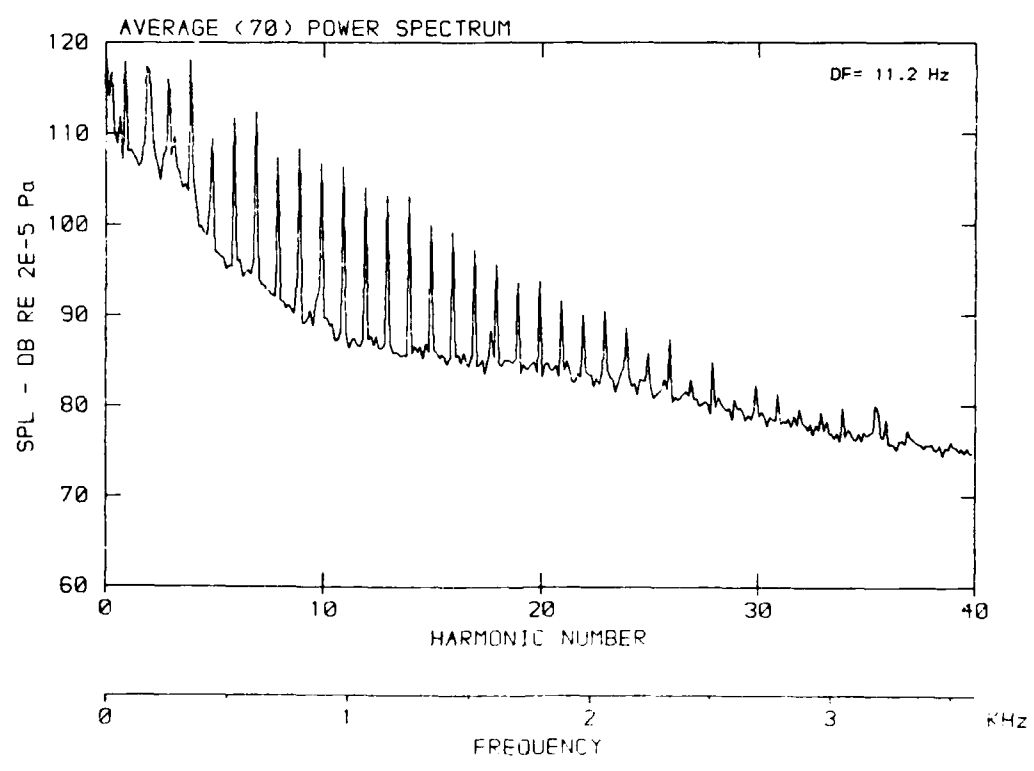
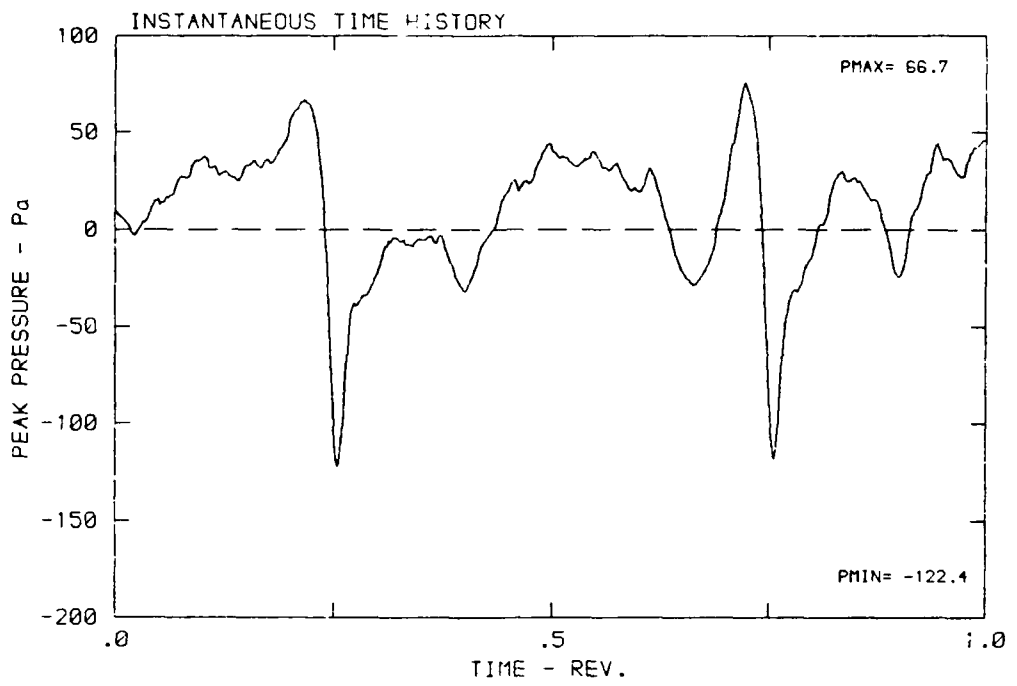
DATA POINT: FN-3 RUN: 168 MP: 4

β : 19.9° MH: .8740 n: 2700 rpm v/u : .269 ϕ : 3.6° T: 288.2 K



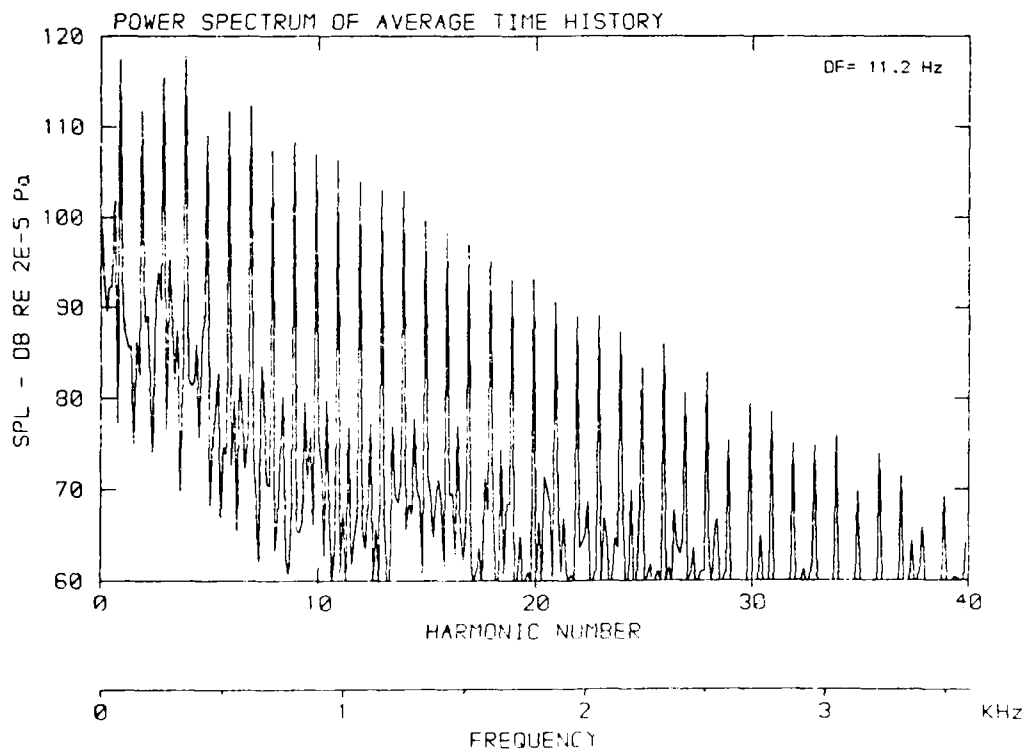
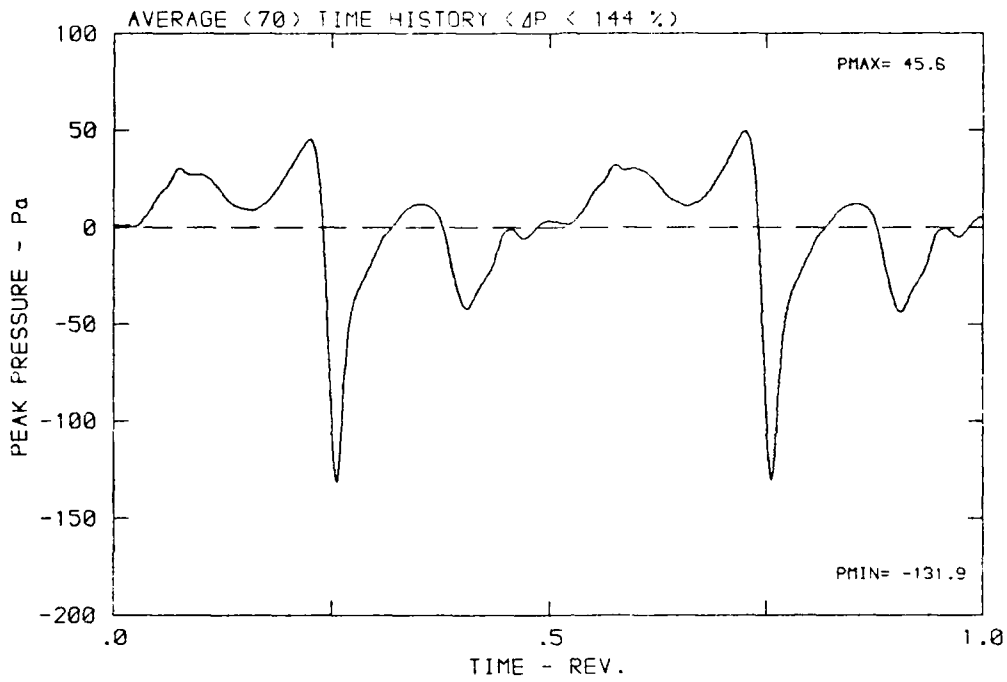
DATA POINT: FN-3 RUN: 168 MP: 5

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ψ : 3.6° T: 288.2 K



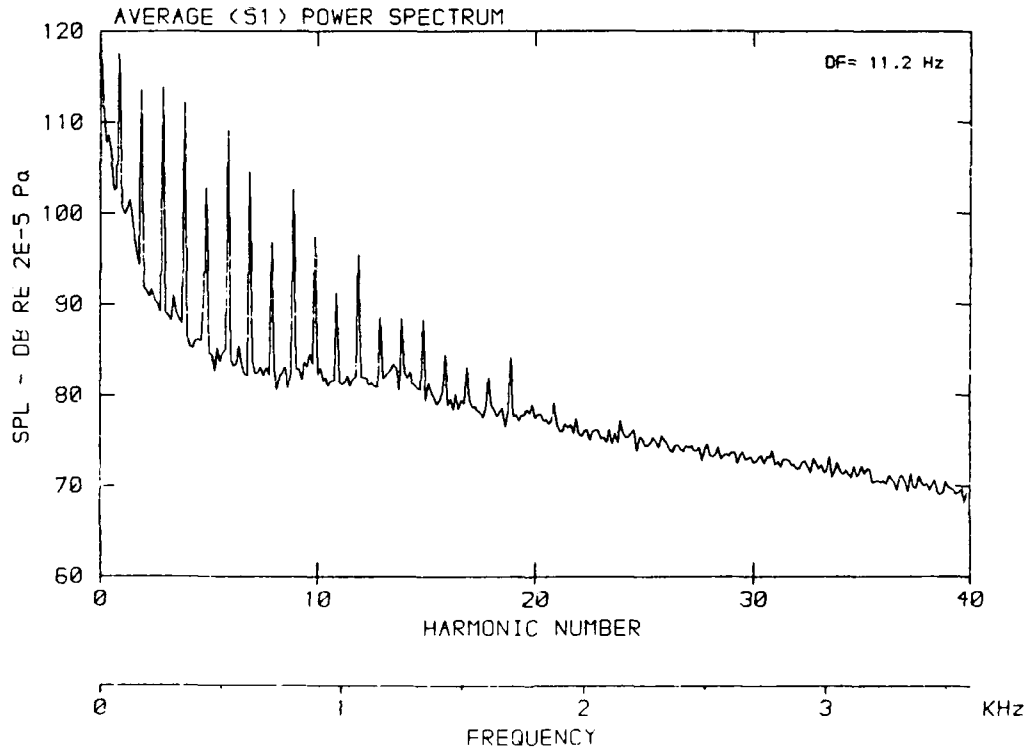
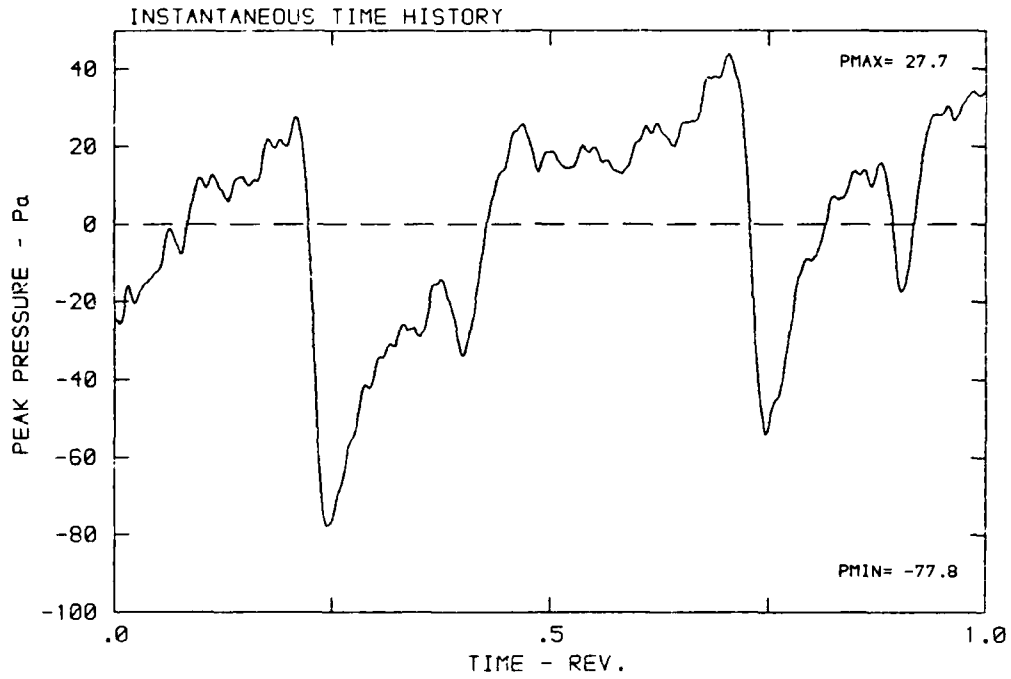
DATA POINT: FN-3 RUN: 168 MP: 5

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



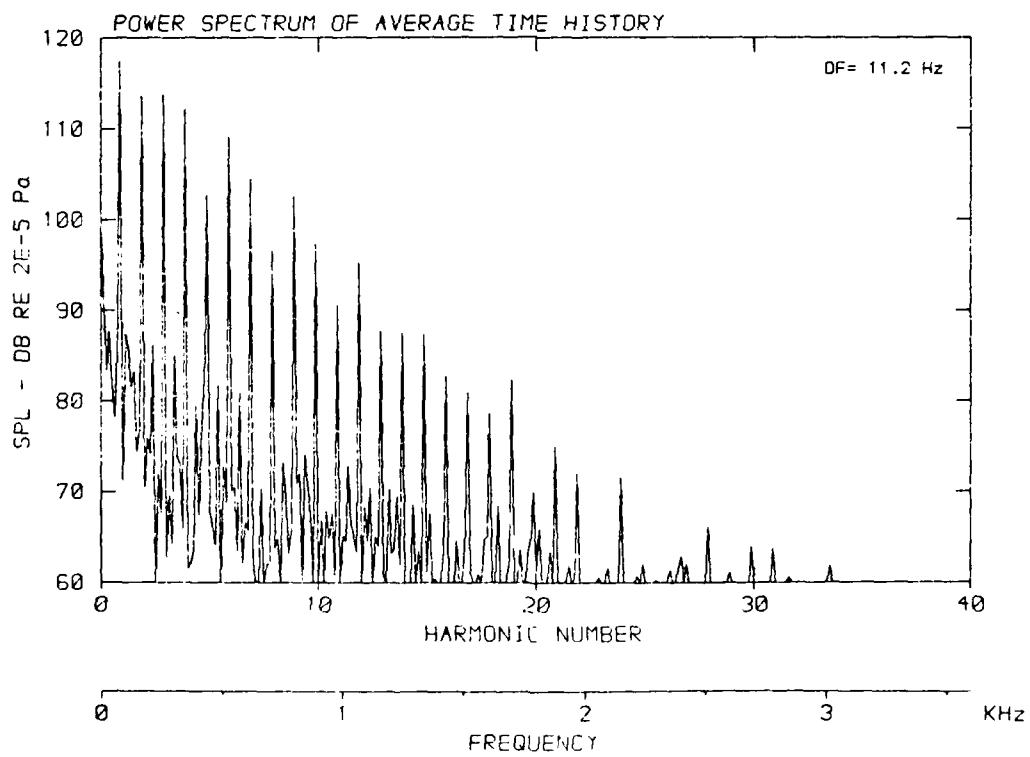
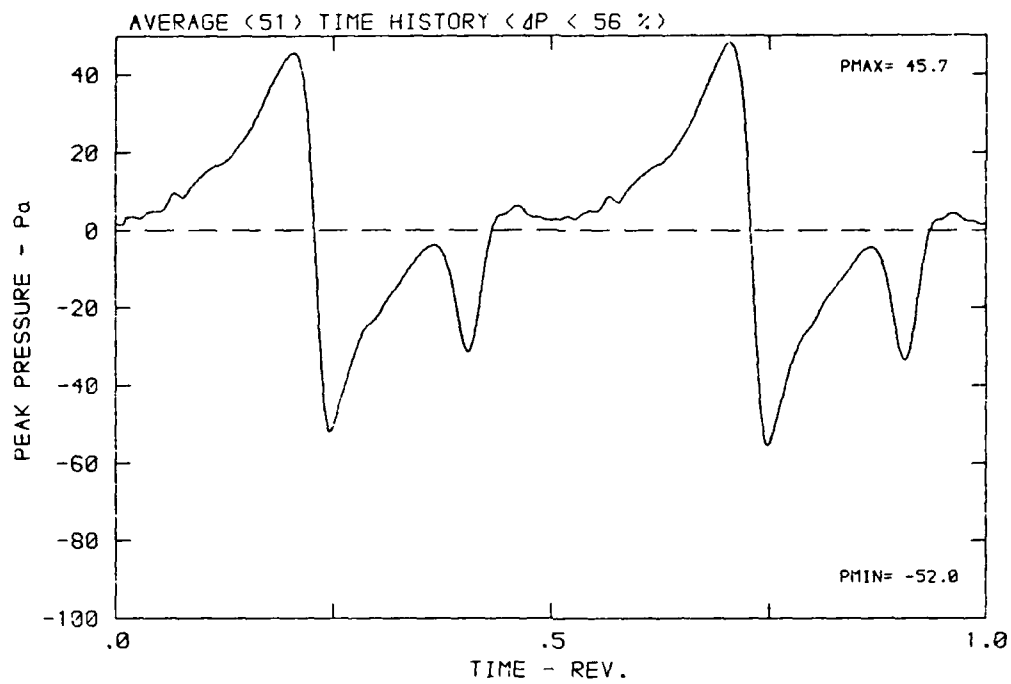
DATA POINT: FN-3 RUN: 168 MP: 6

β : 19.9° MH: .9740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



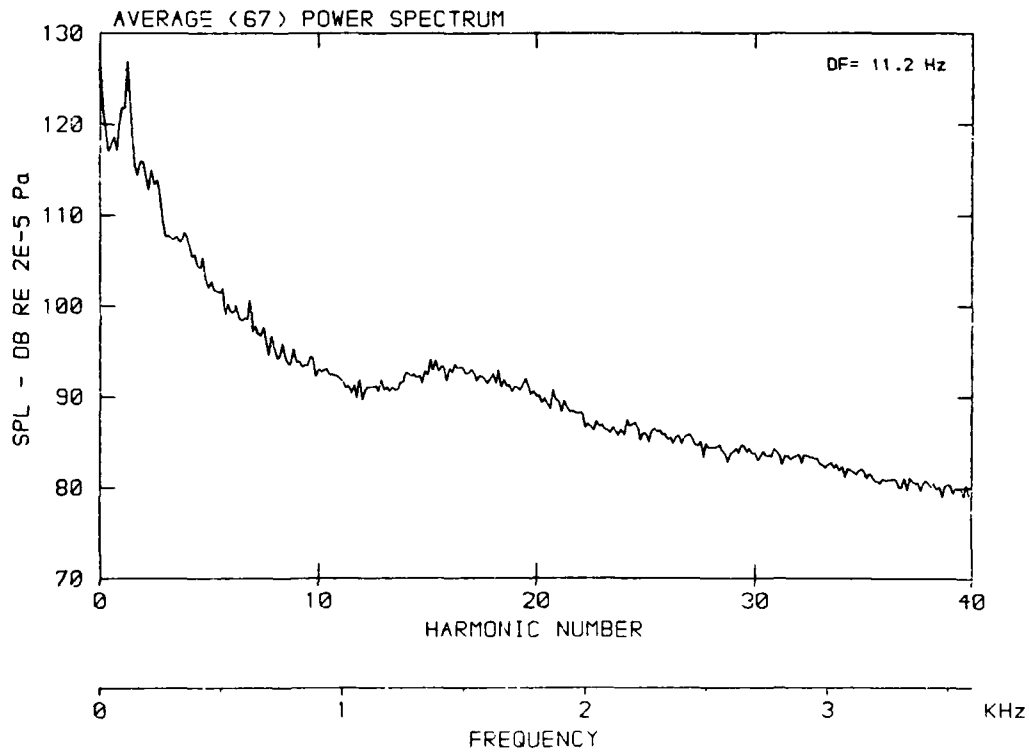
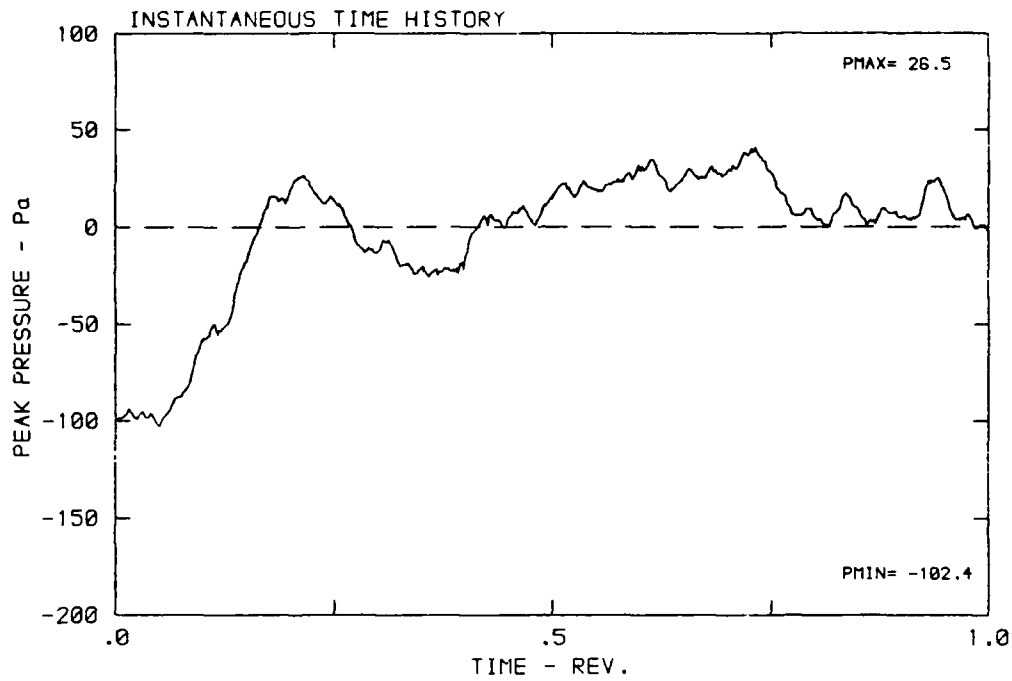
DATA POINT: FN-3 RUN: 168 MP: 6

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



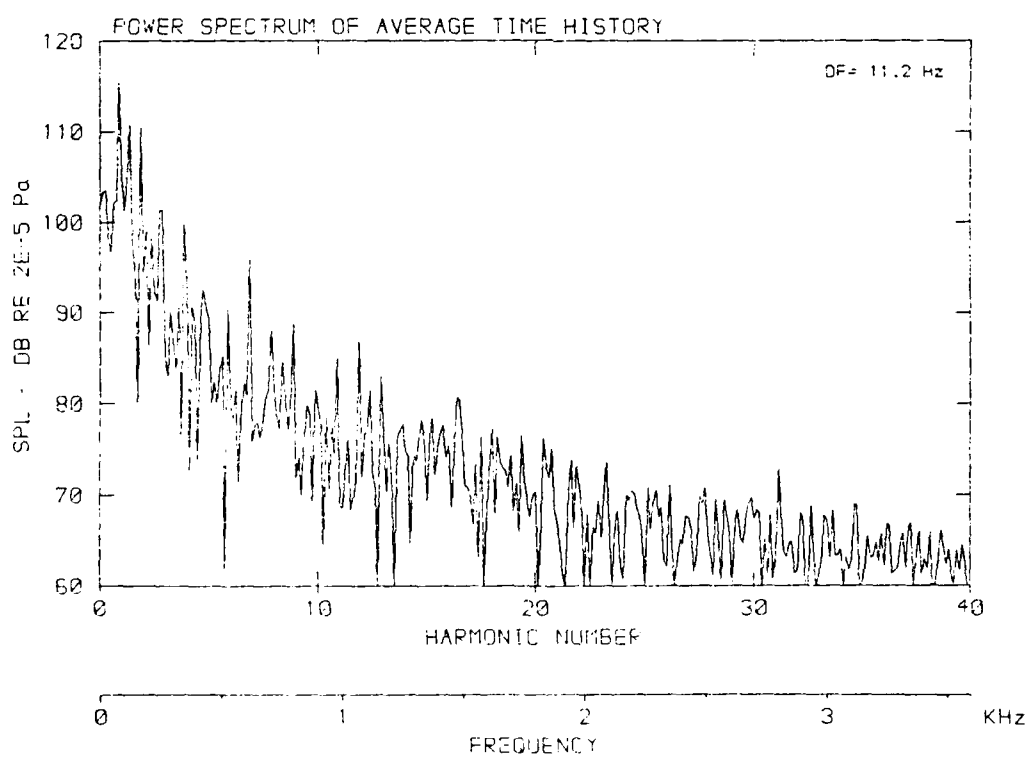
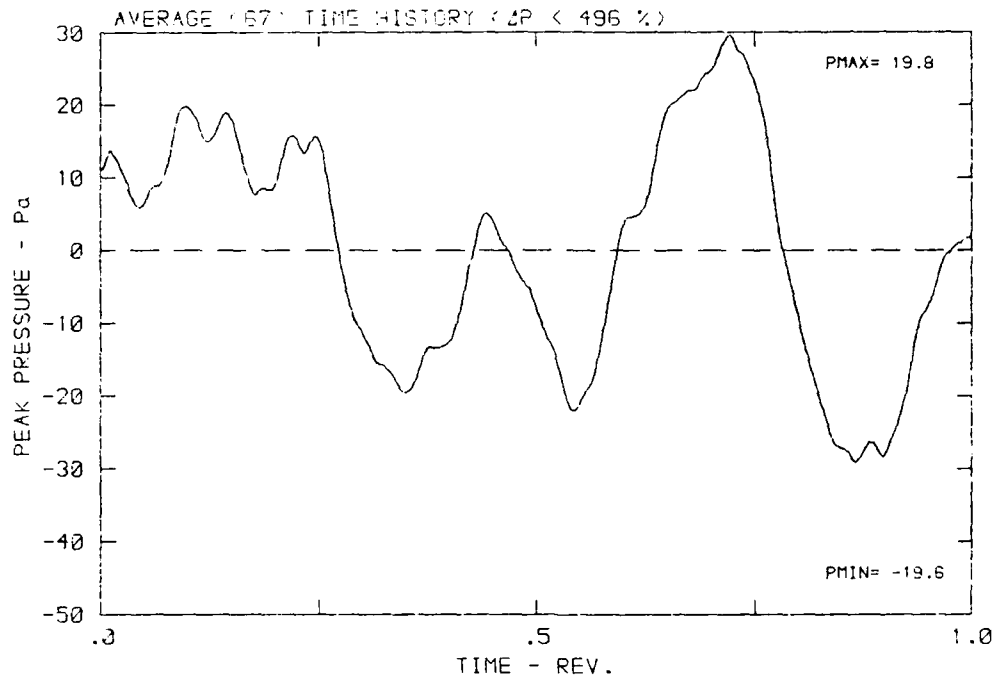
DATA POINT: FN-3 RUN: 168 MP: 7

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



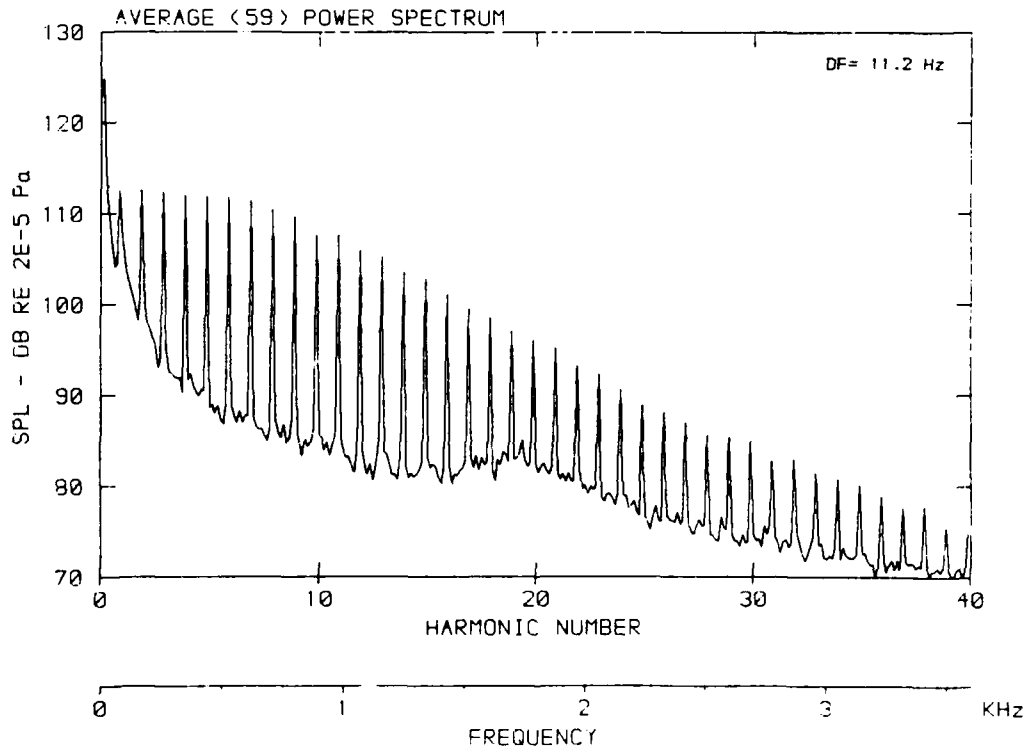
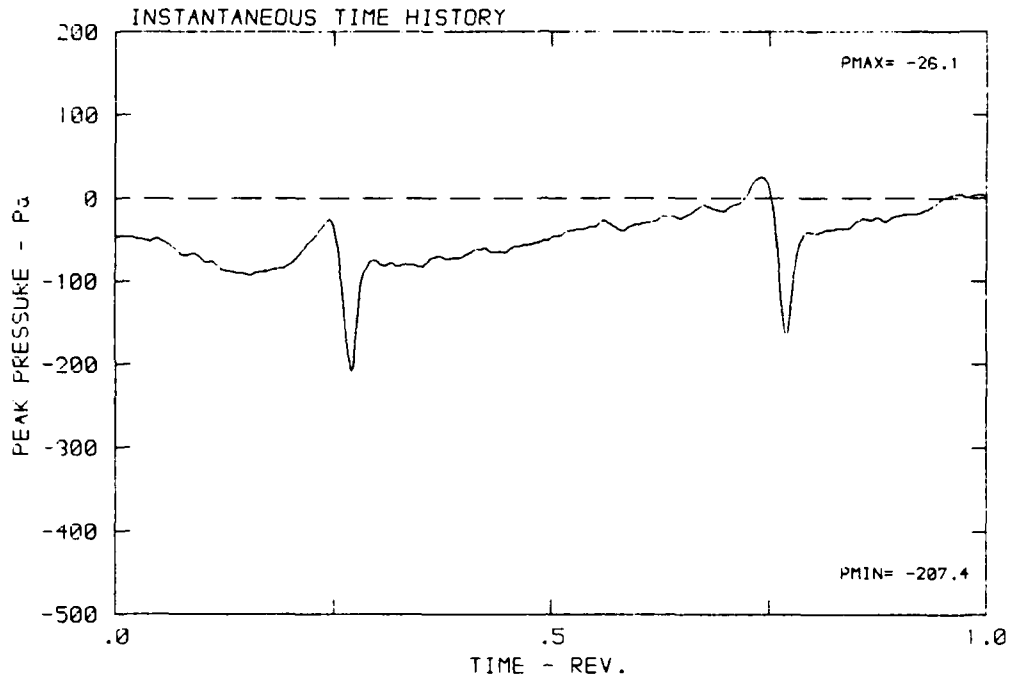
DATA POINT: FN-3 RUN: 169 MP: 7

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



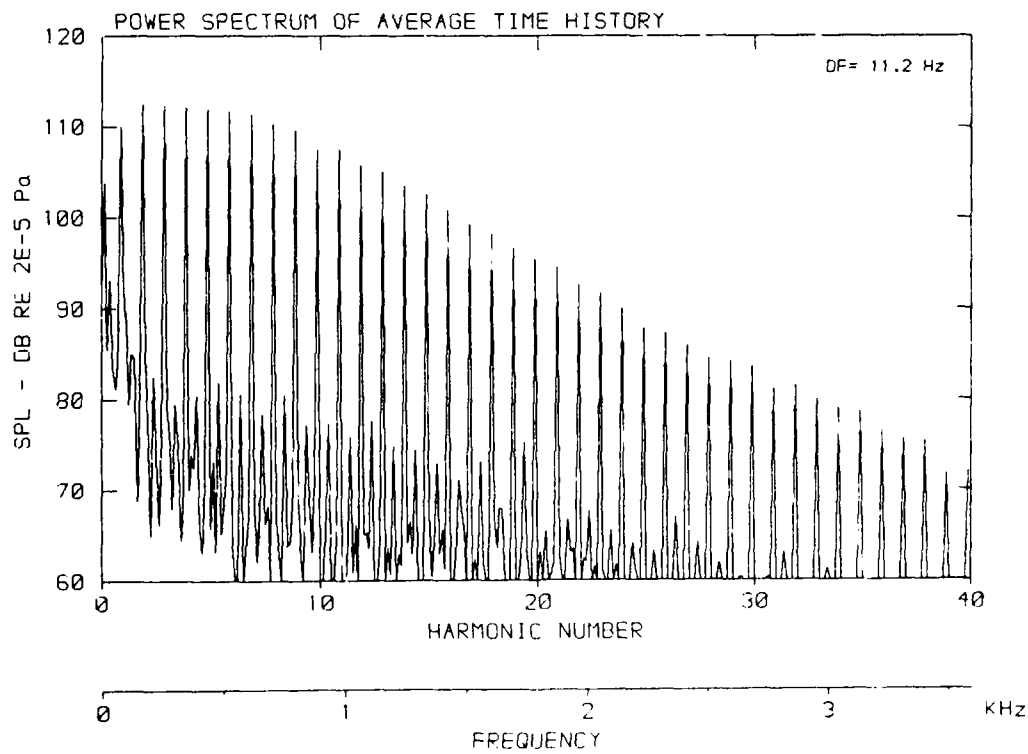
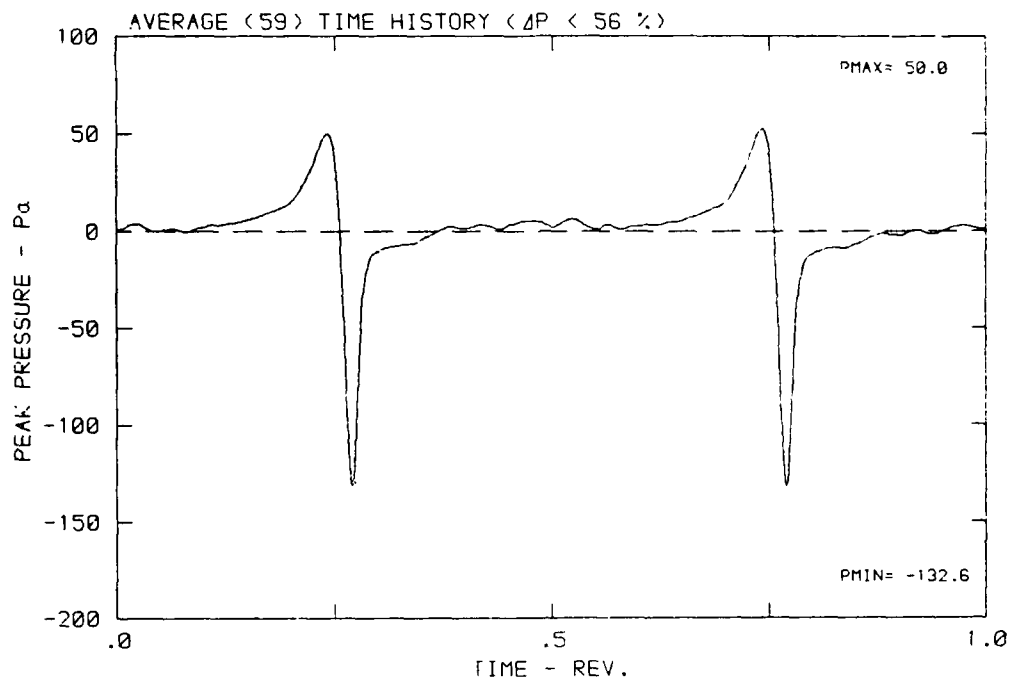
DATA POINT: FN-3 RUN: 168 MP: 8

p: 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



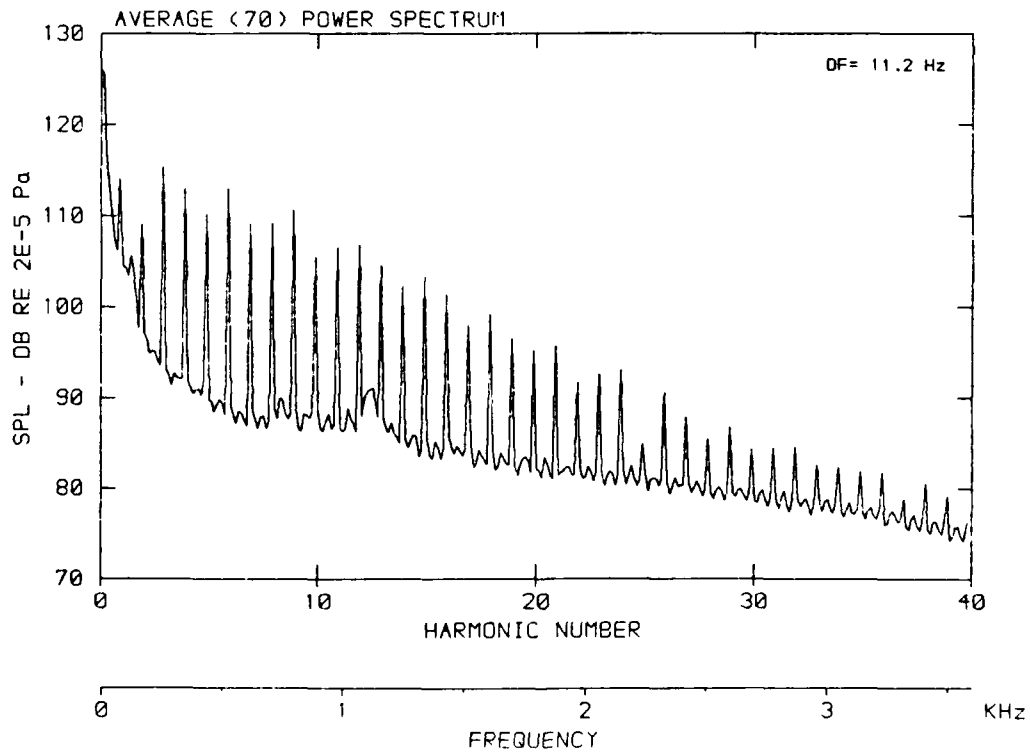
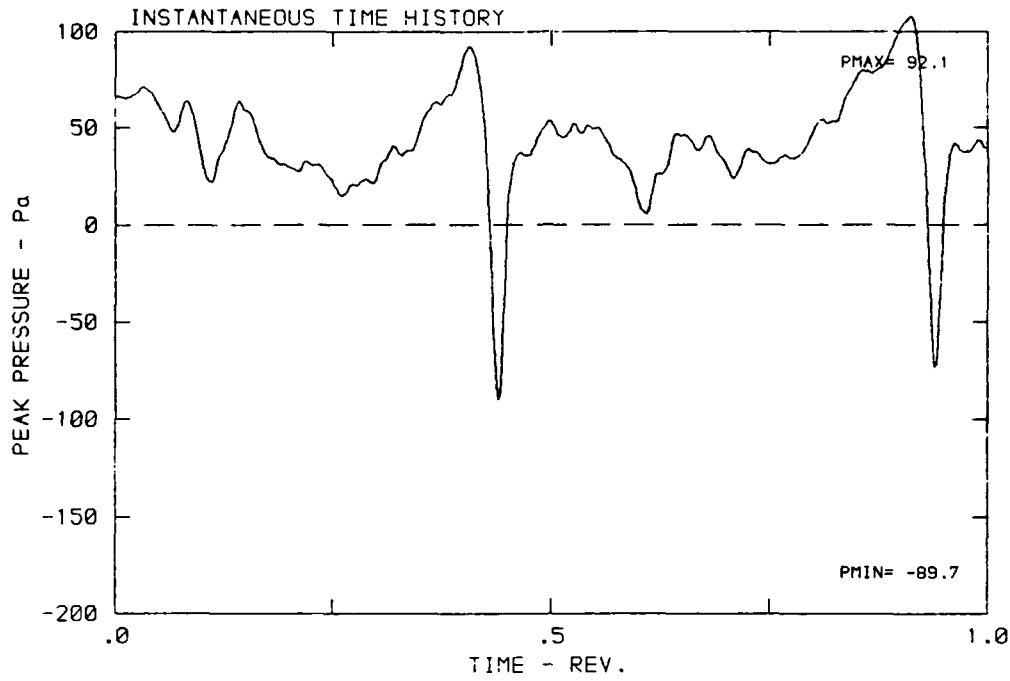
DATA POINT: FN-3 RUN: 168 MP: 8

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



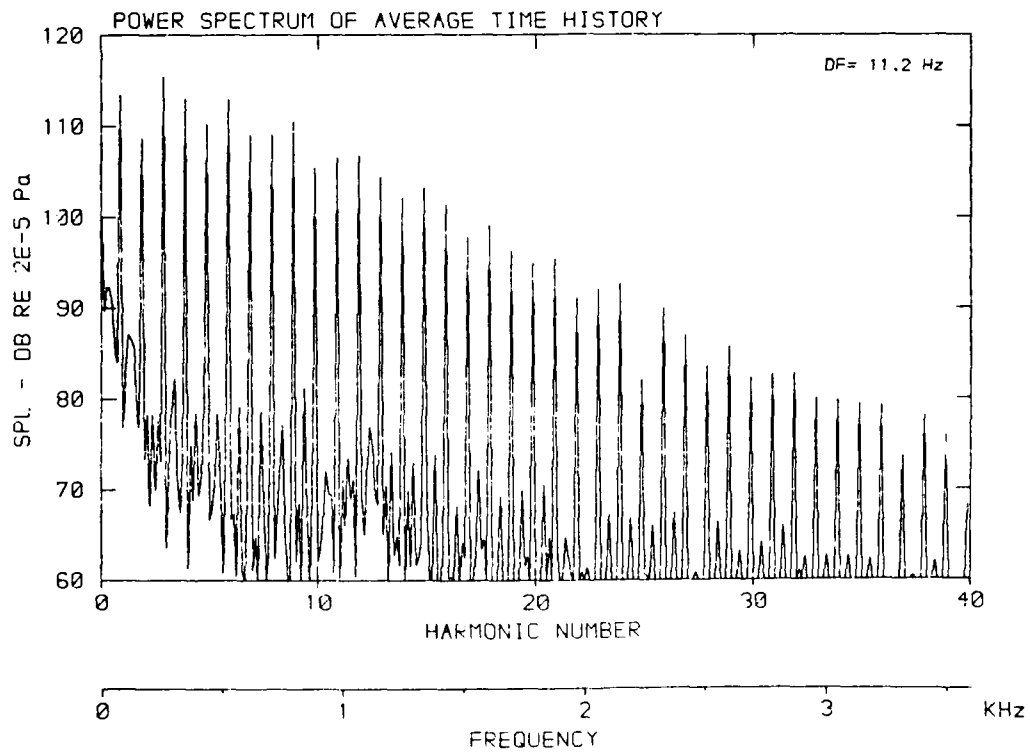
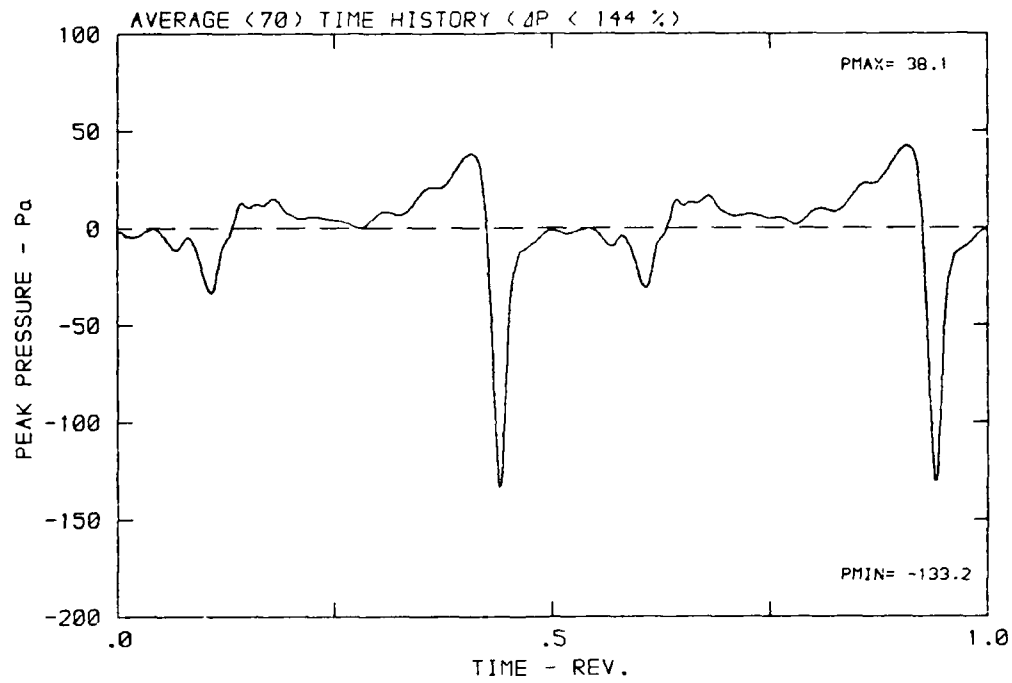
DATA POINT: FN-3 RUN: 168 MP: 3

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



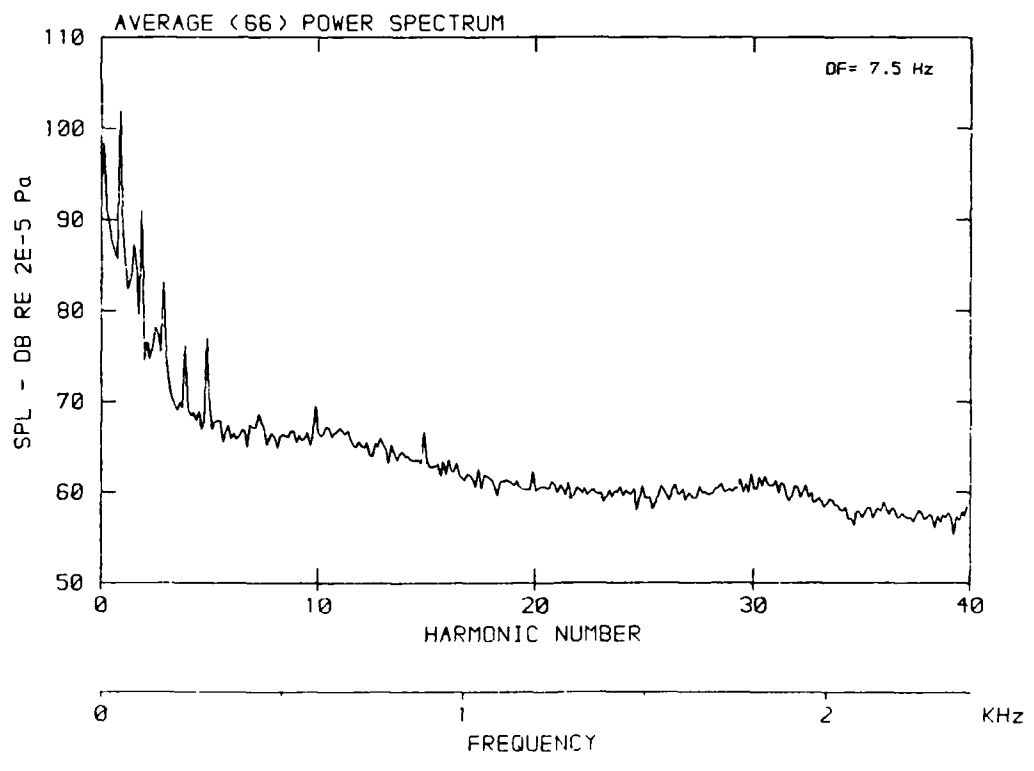
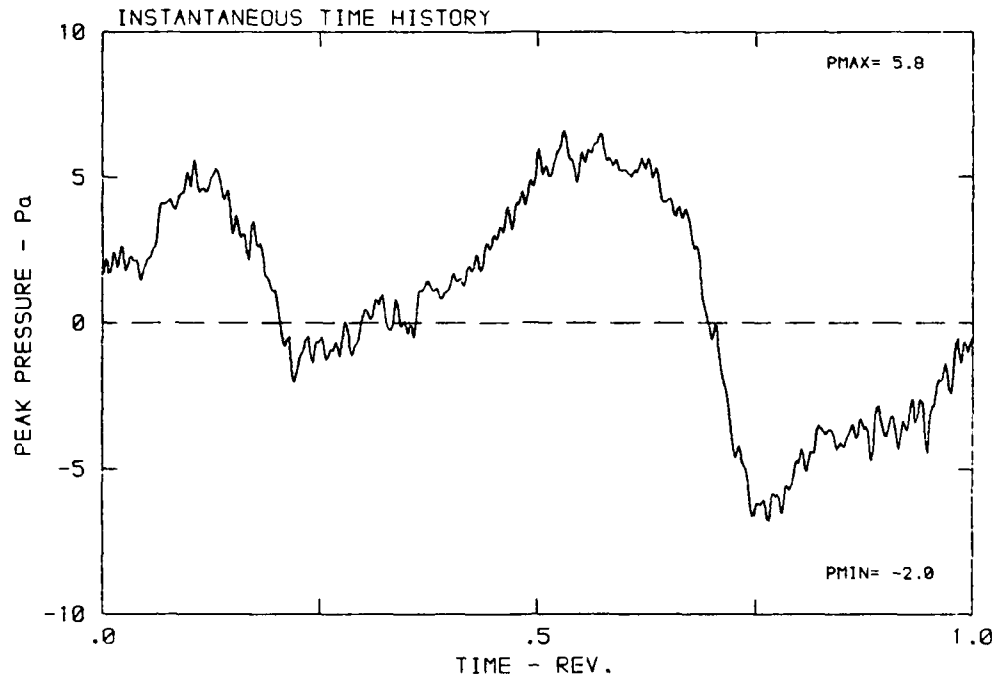
DATA POINT: FN-3 RUN: 168 MP: 9

β : 19.9° MH: .8740 n: 2700 rpm v/u: .269 ϕ : 3.6° T: 288.2 K



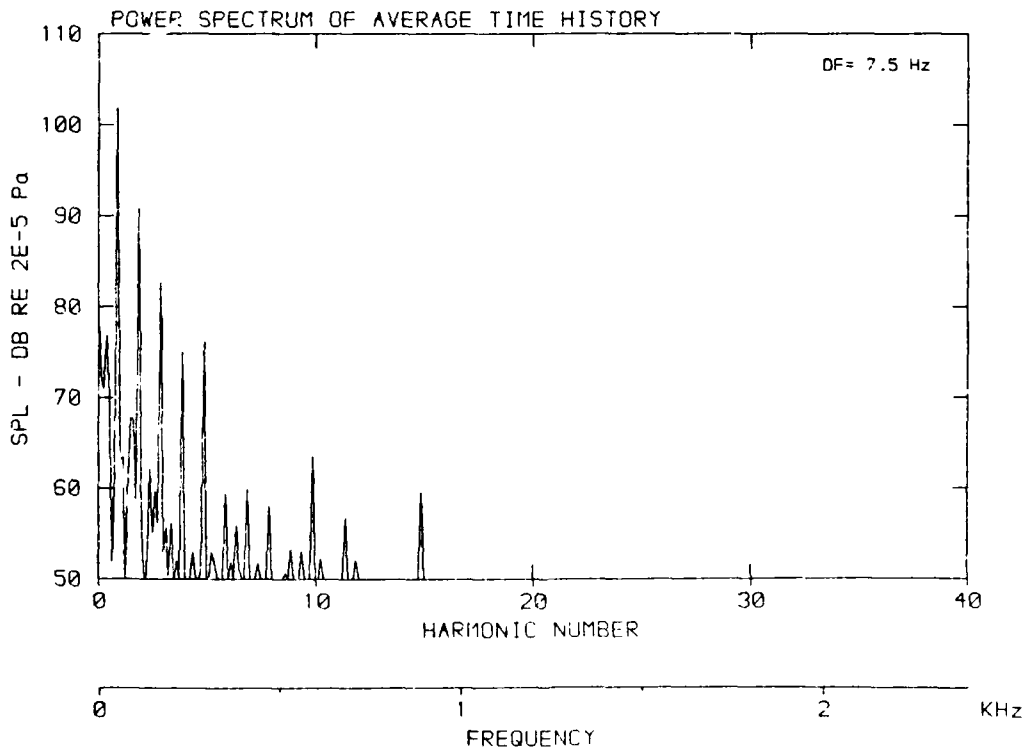
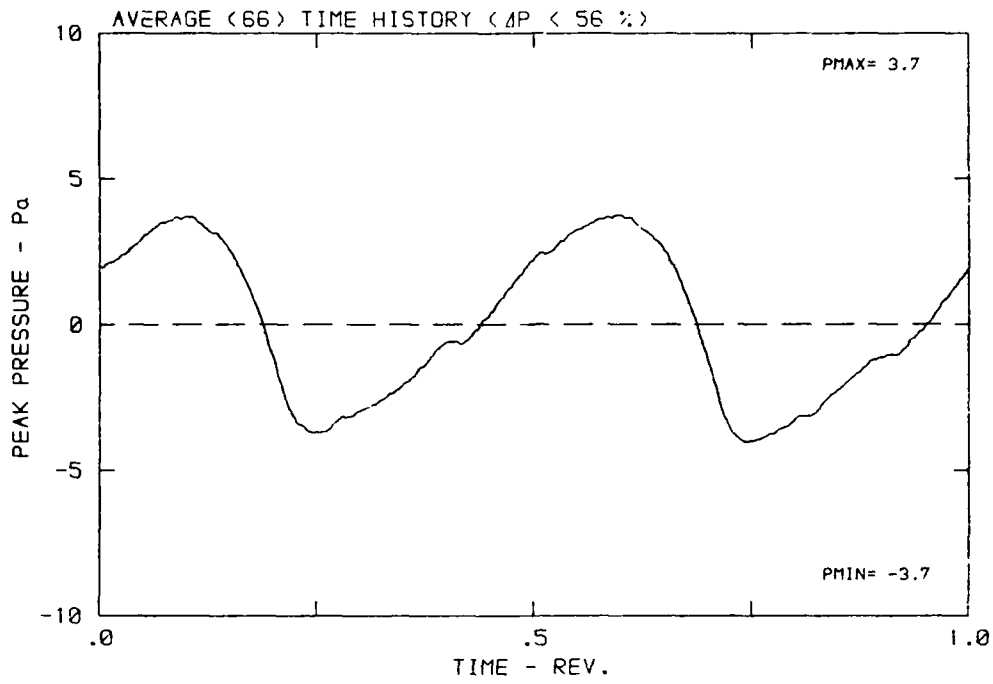
DATA POINT: FN-4 RUN: 169 MP: 1

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



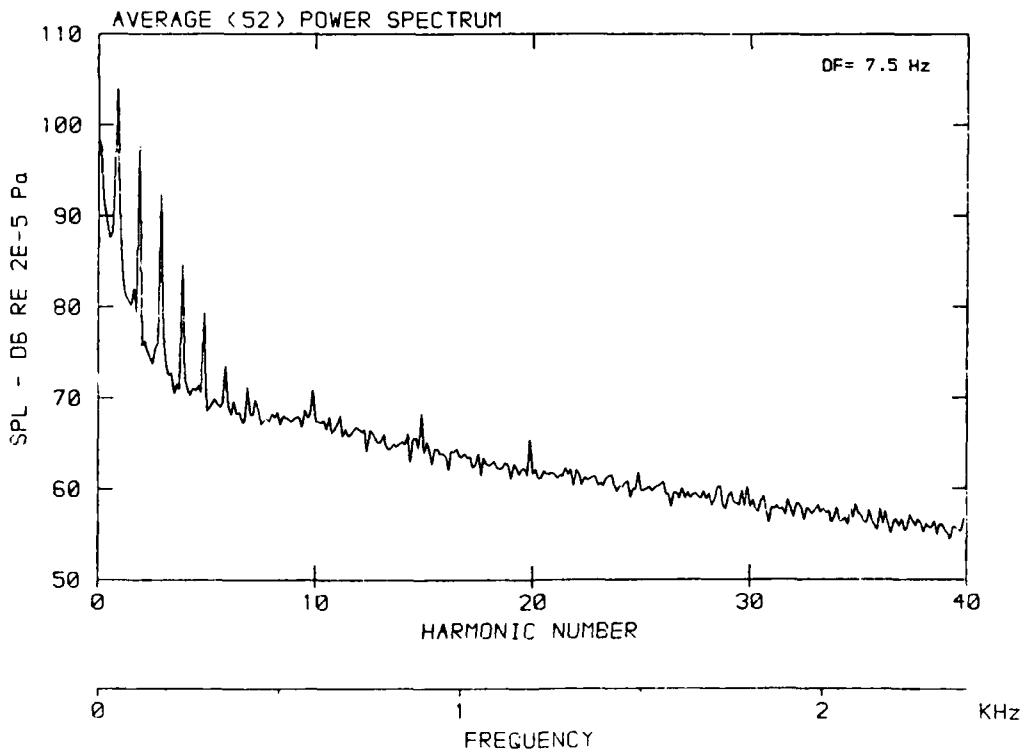
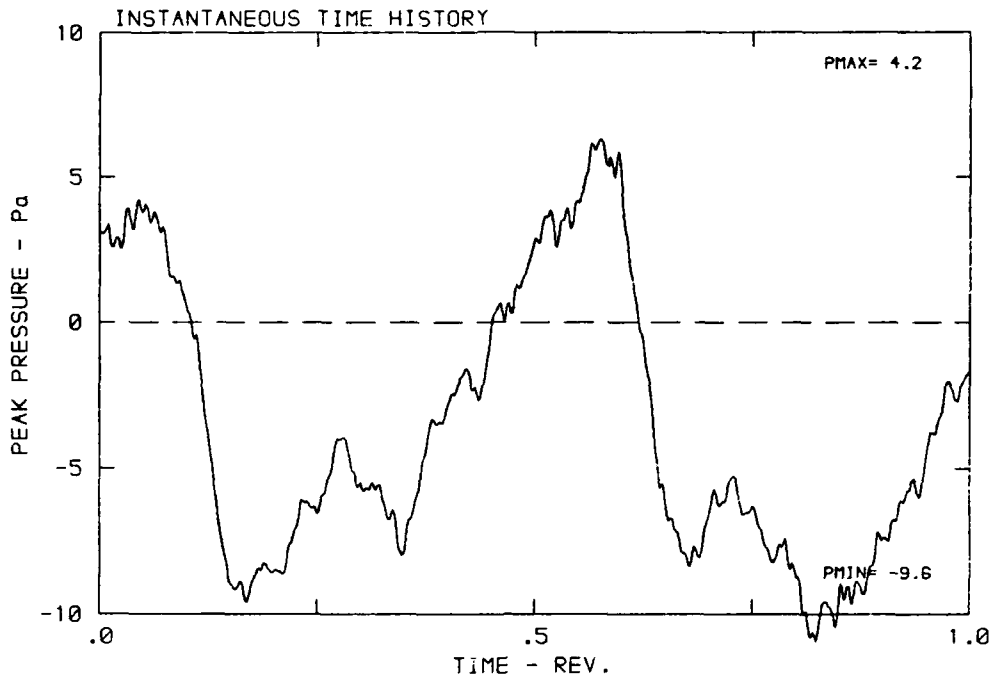
DATA POINT: FN-4 RUN: 169 MP: 1

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



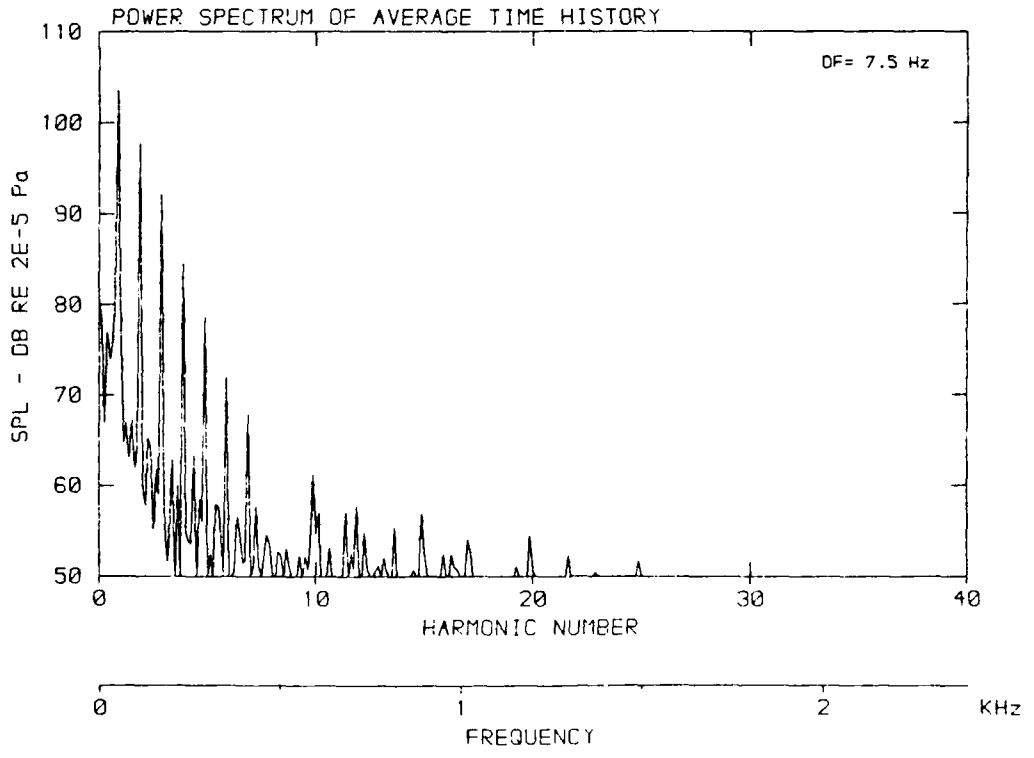
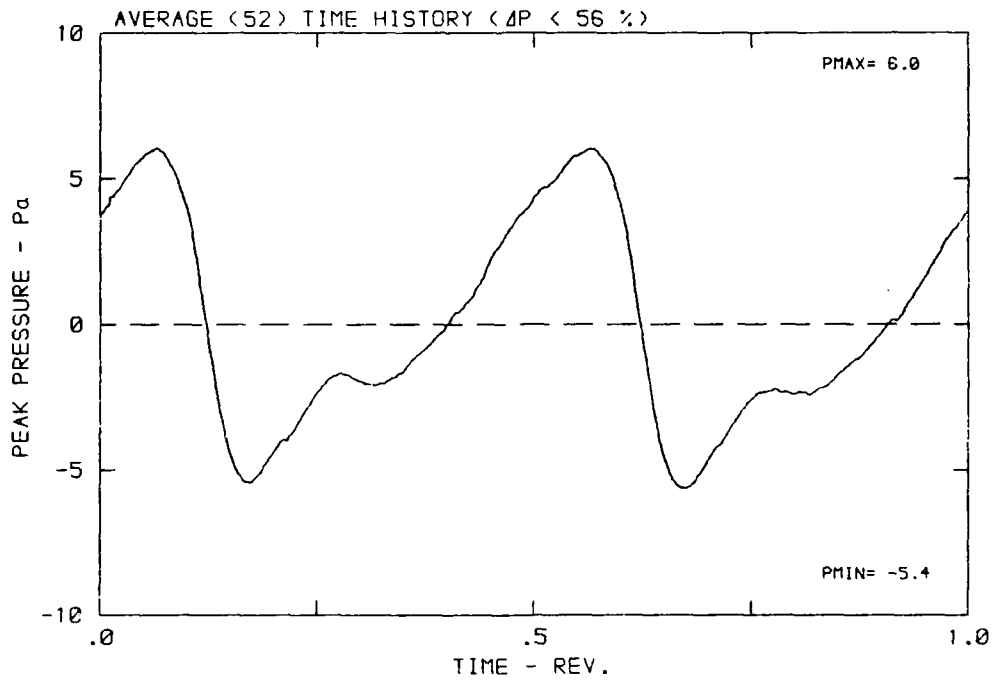
DATA POINT: FN-4 RUN: 169 MP: 2

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



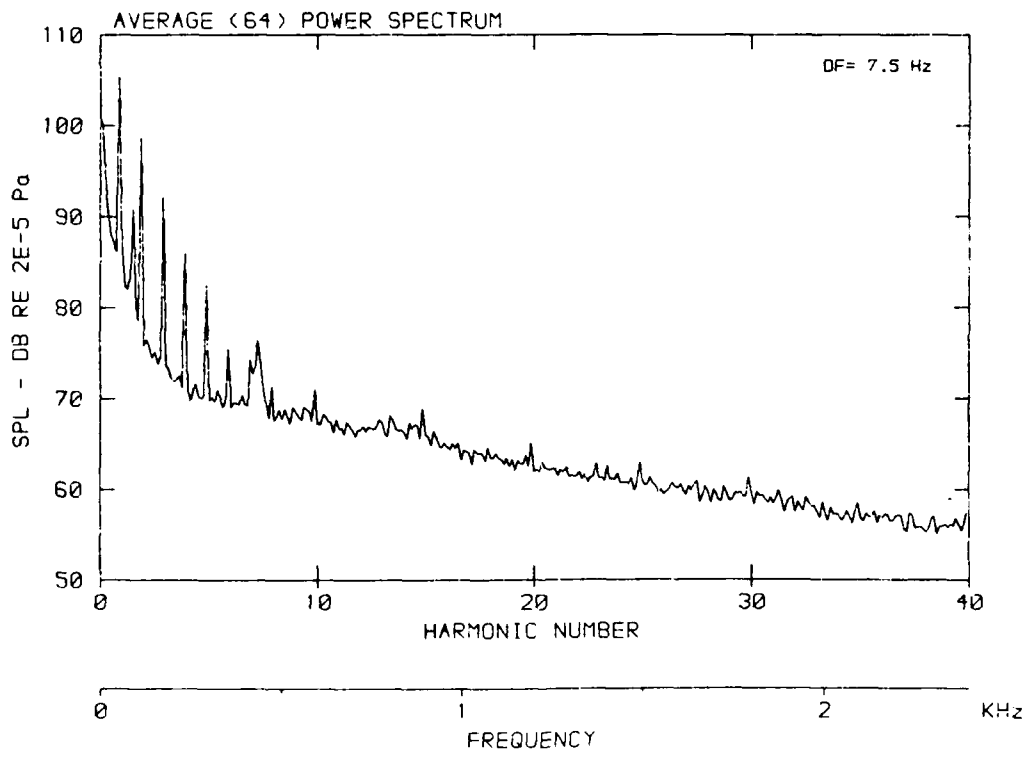
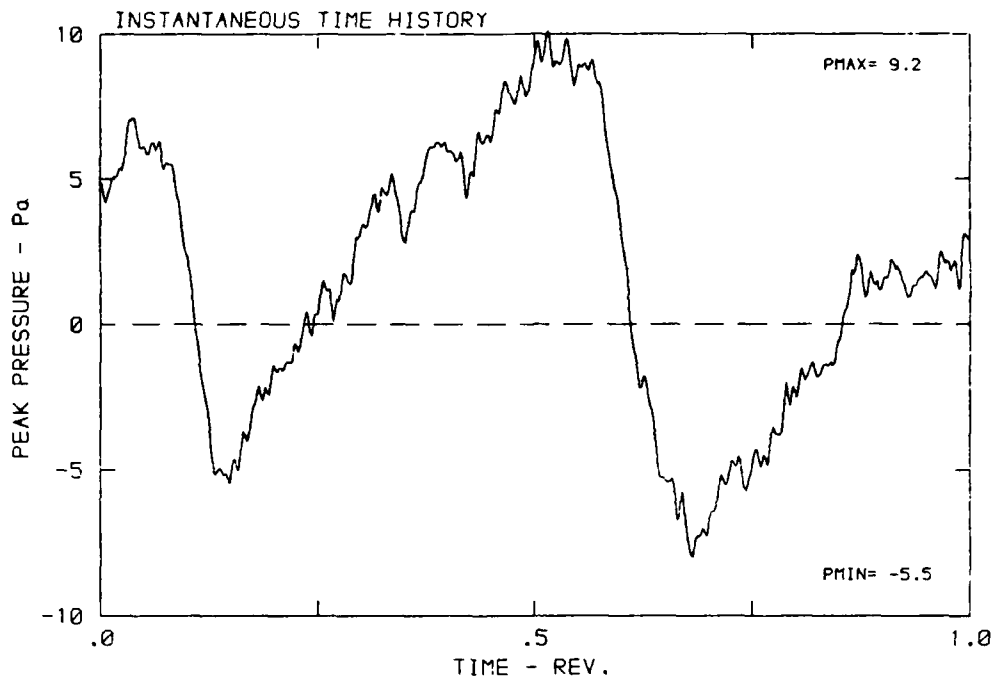
DATA POINT: FN-4 RUN: 169 MP: 2

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



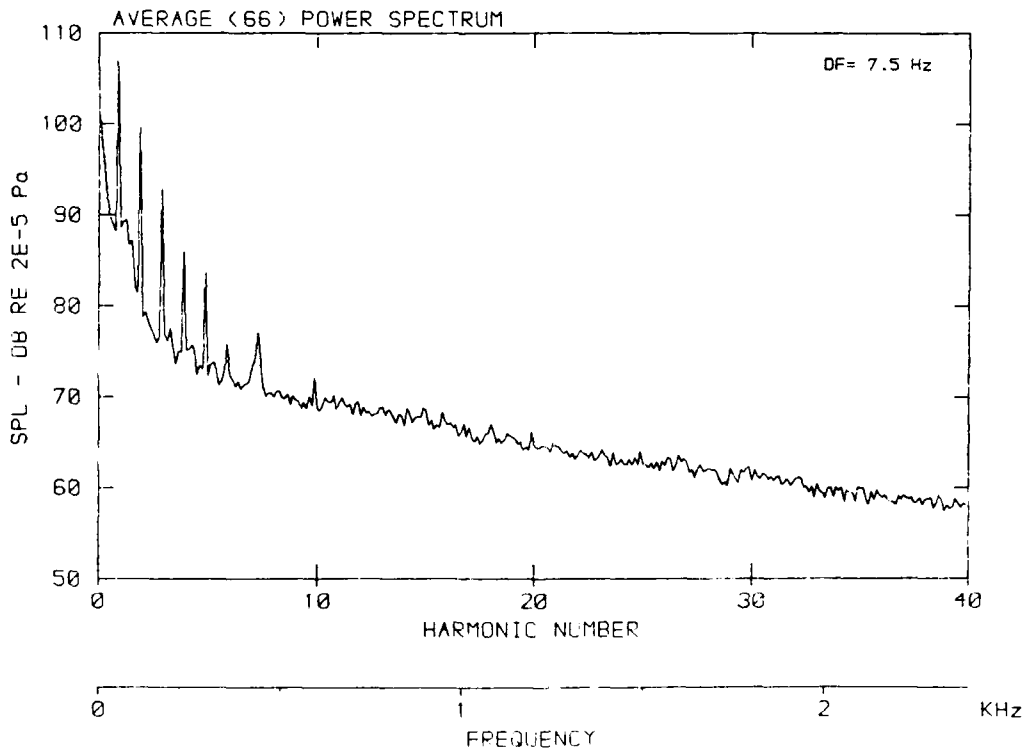
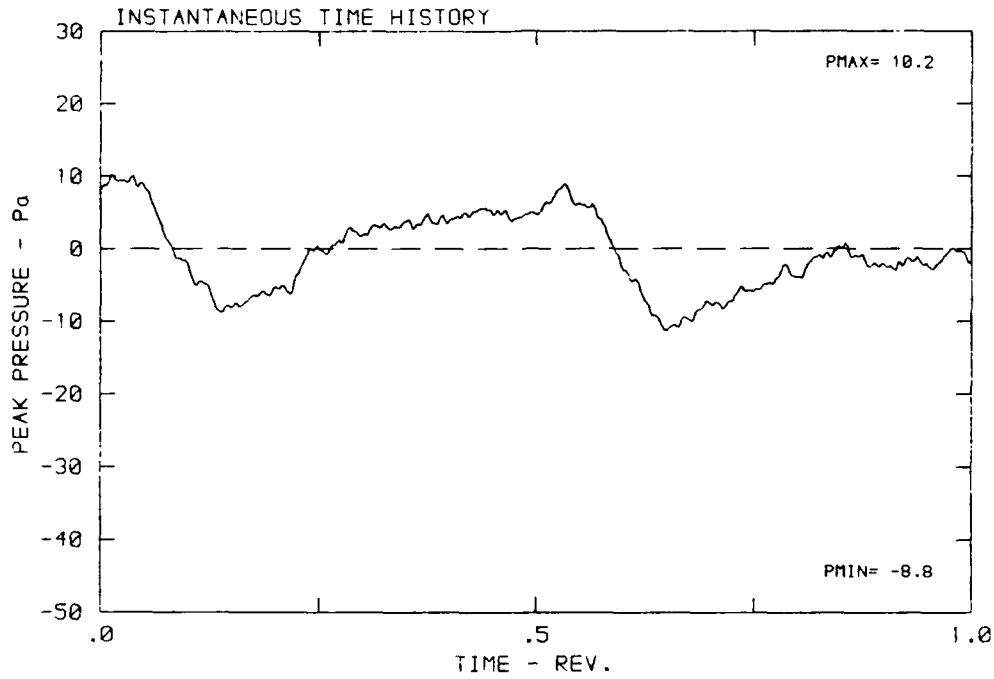
DATA POINT: FN-4 RUN: 169 MP: 3

β : 23.7° MH: .5832 n: 1800 rpm v/u : .266 ϕ : 3.6° T: 287.3 K



DATA POINT: FN-4 RUN: 169 MP: 4

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



AD-A174 988

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

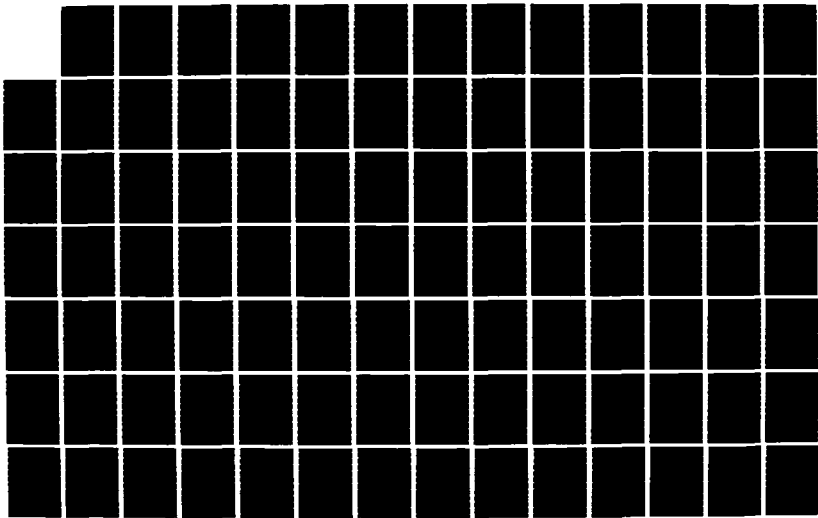
4/6

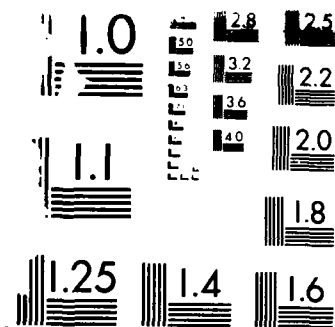
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ML

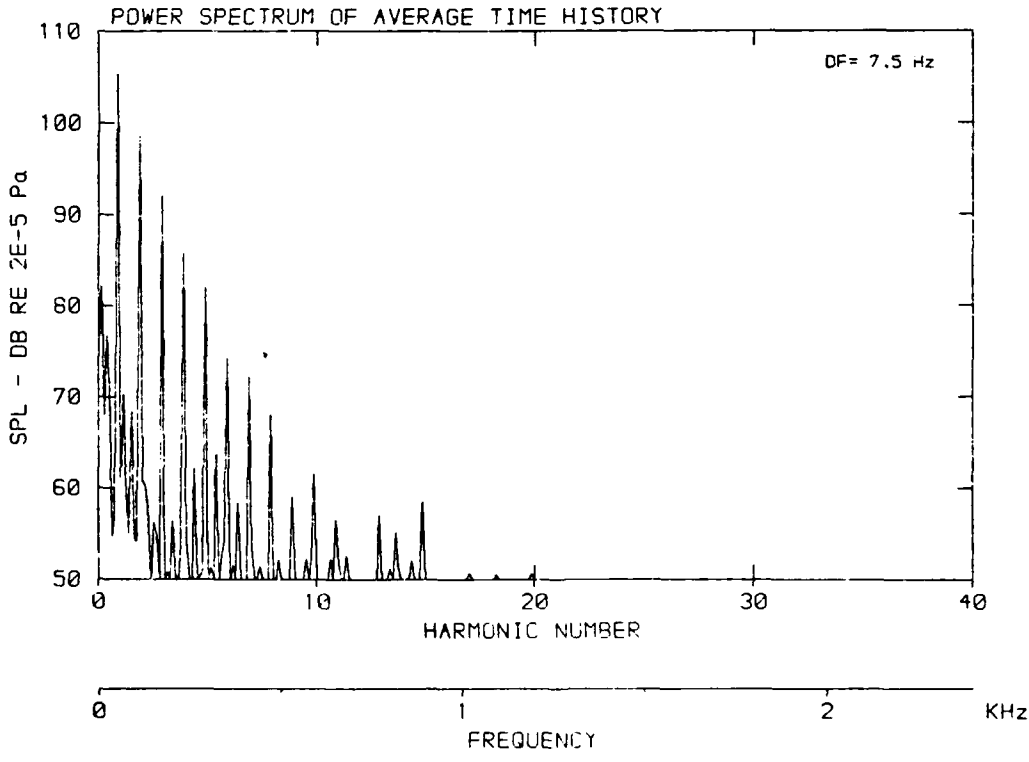
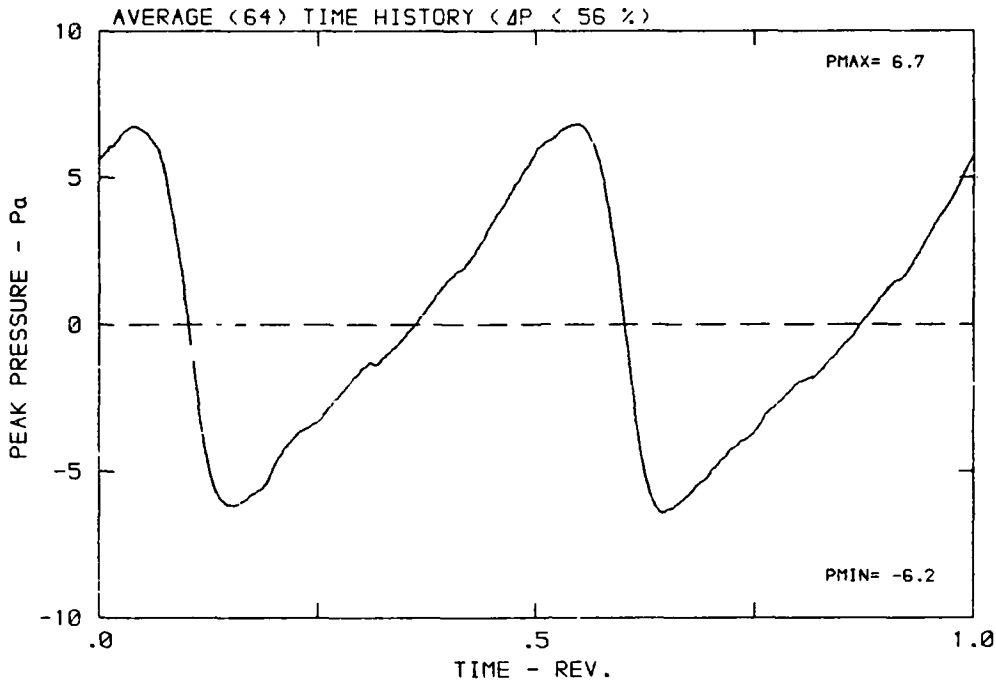




RESOLUTION TEST CHART
1963-A

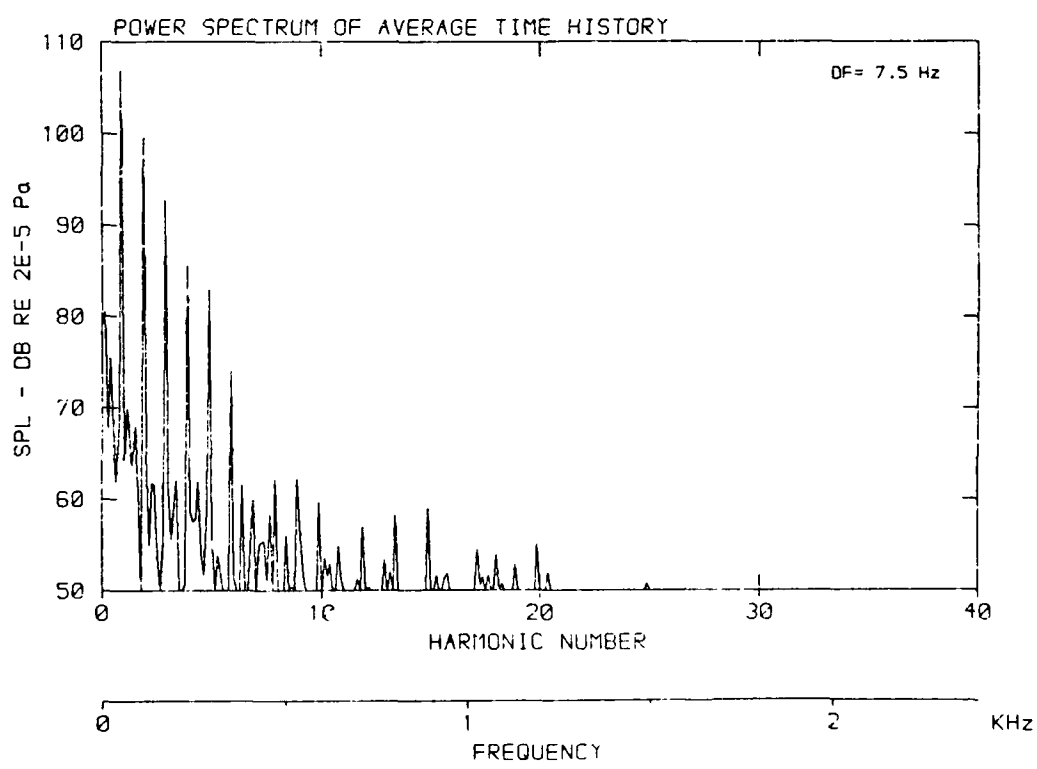
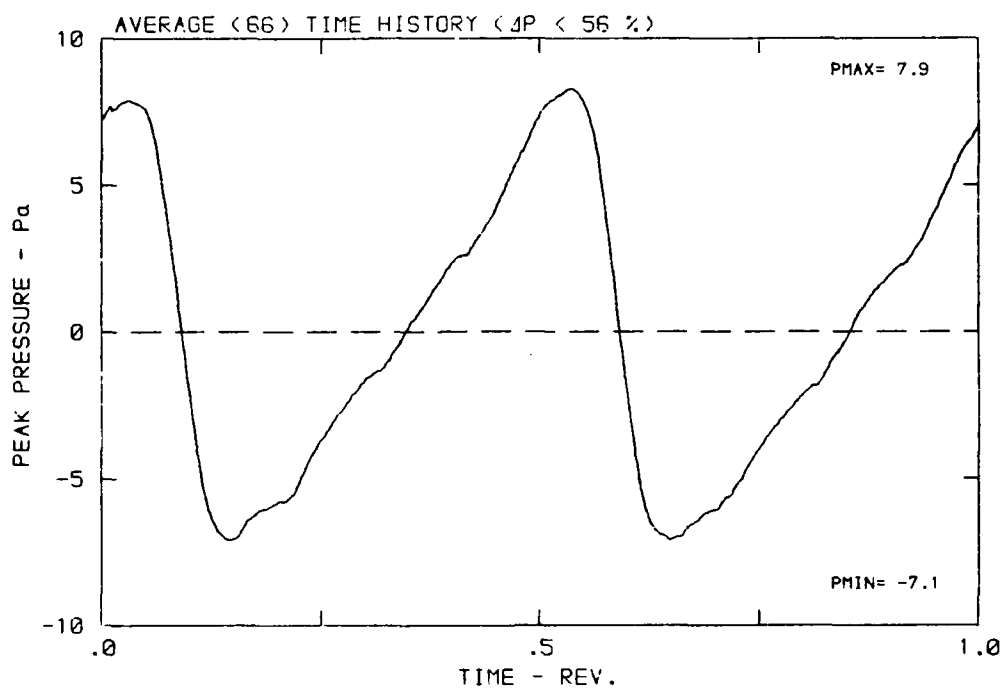
DATA POINT: FN-4 RUN: 169 MP: 3

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



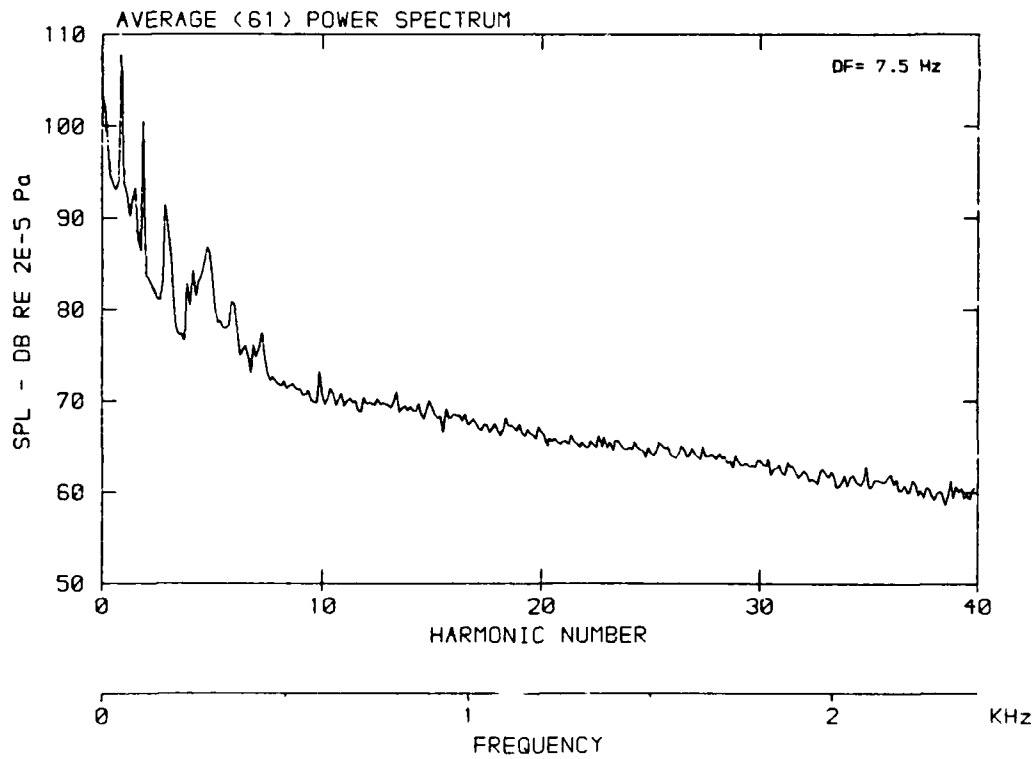
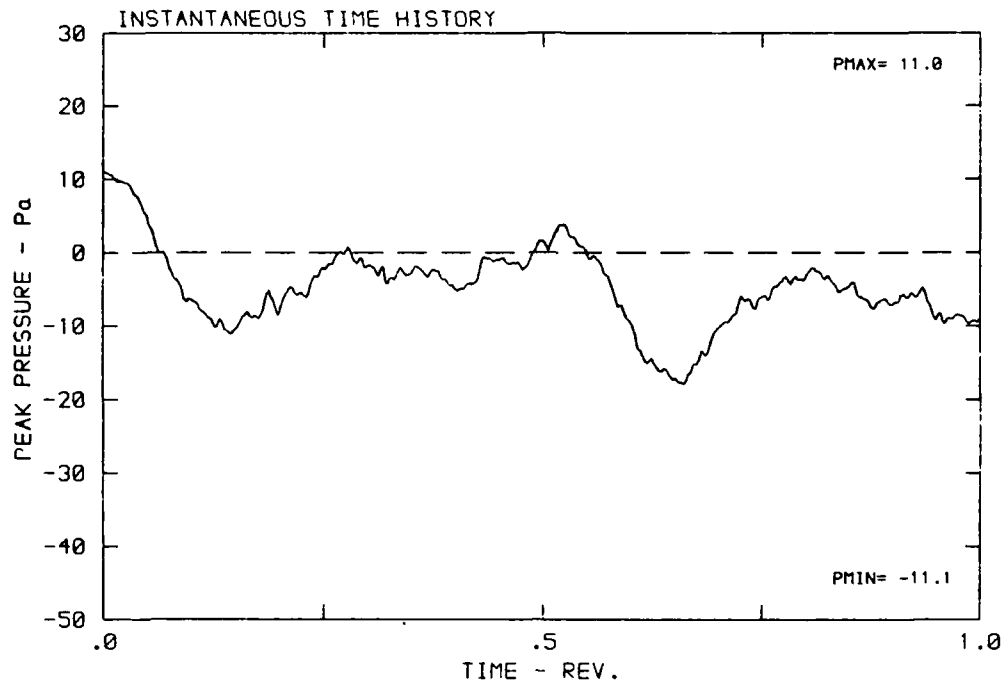
DATA POINT: FN-4 RUN: 169 MP: 4

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



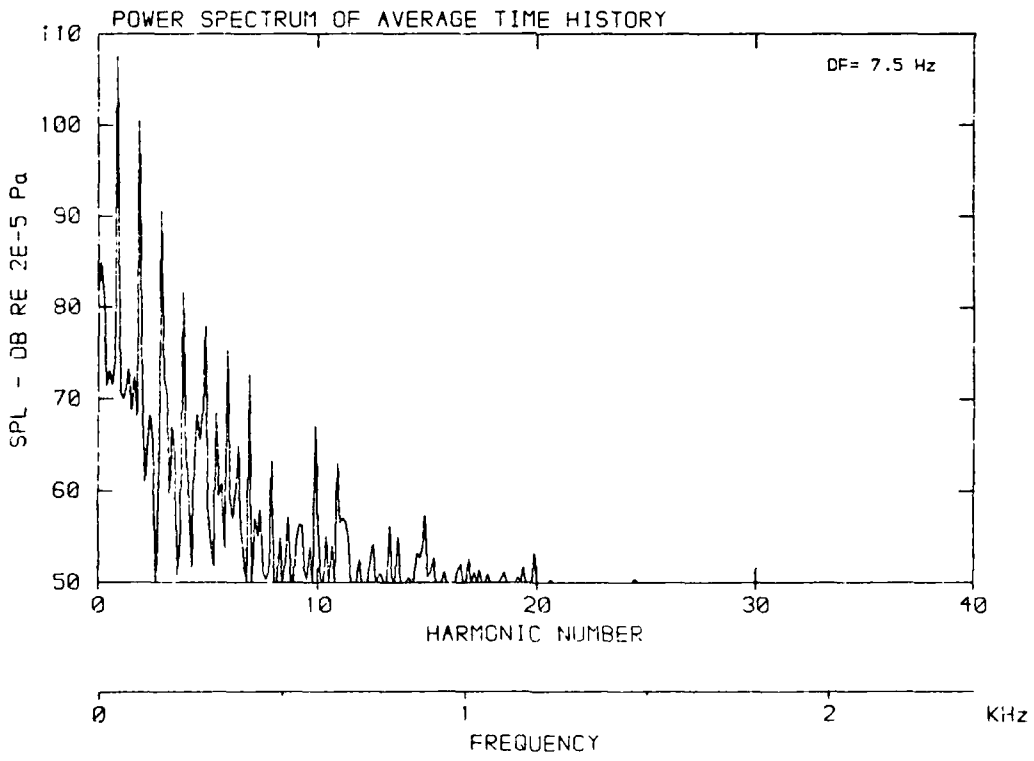
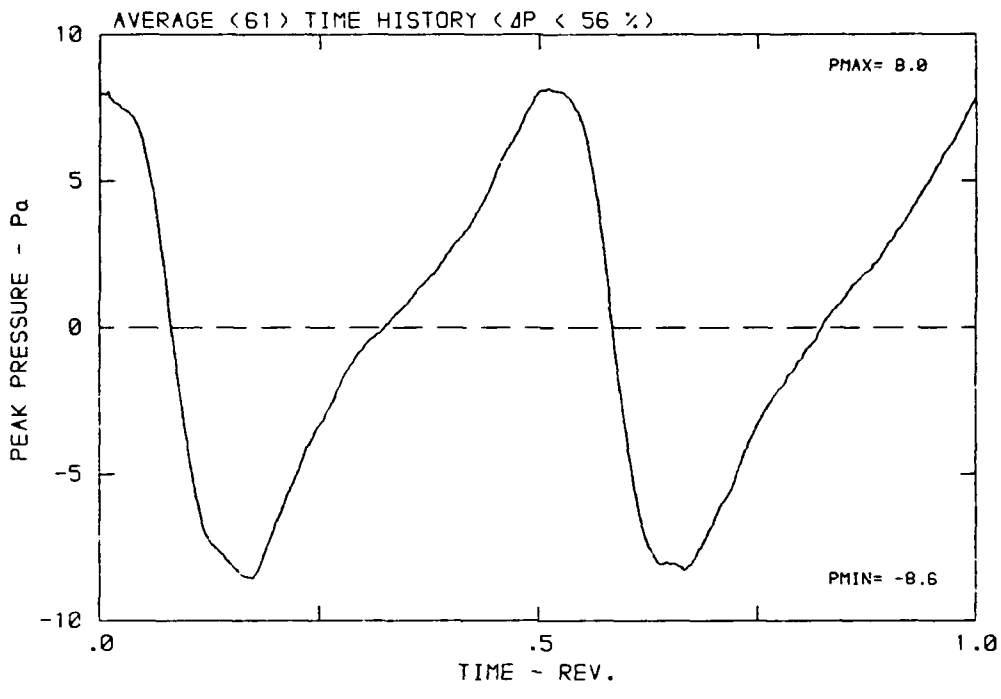
DATA POINT: FN-4 RUN: 169 MP: 5

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



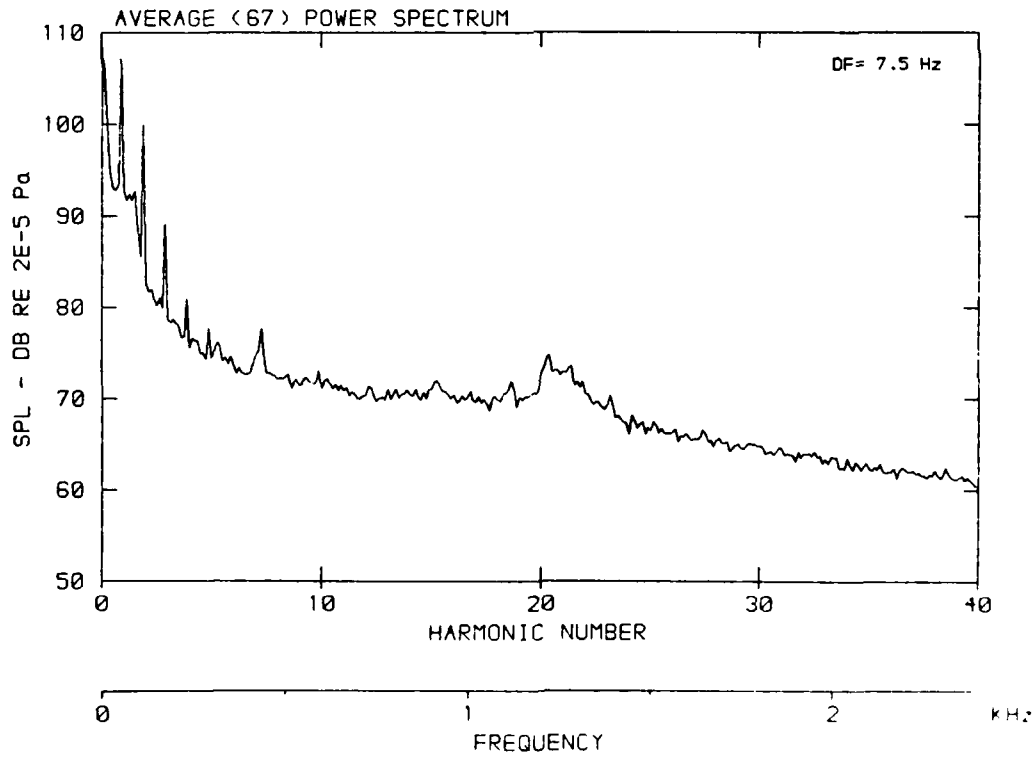
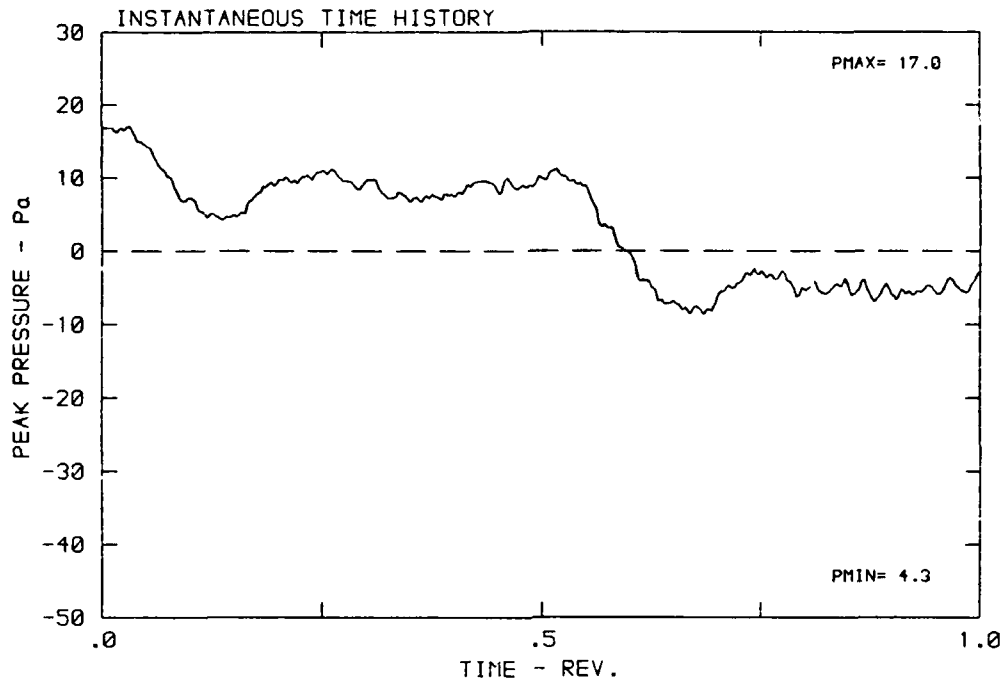
DATA POINT: FN-4 RUN: 169 MP: 5

β : 23.7° MH: .5832 n: 1800 rpm v/u : .266 ϕ : 3.6° T: 287.3 K



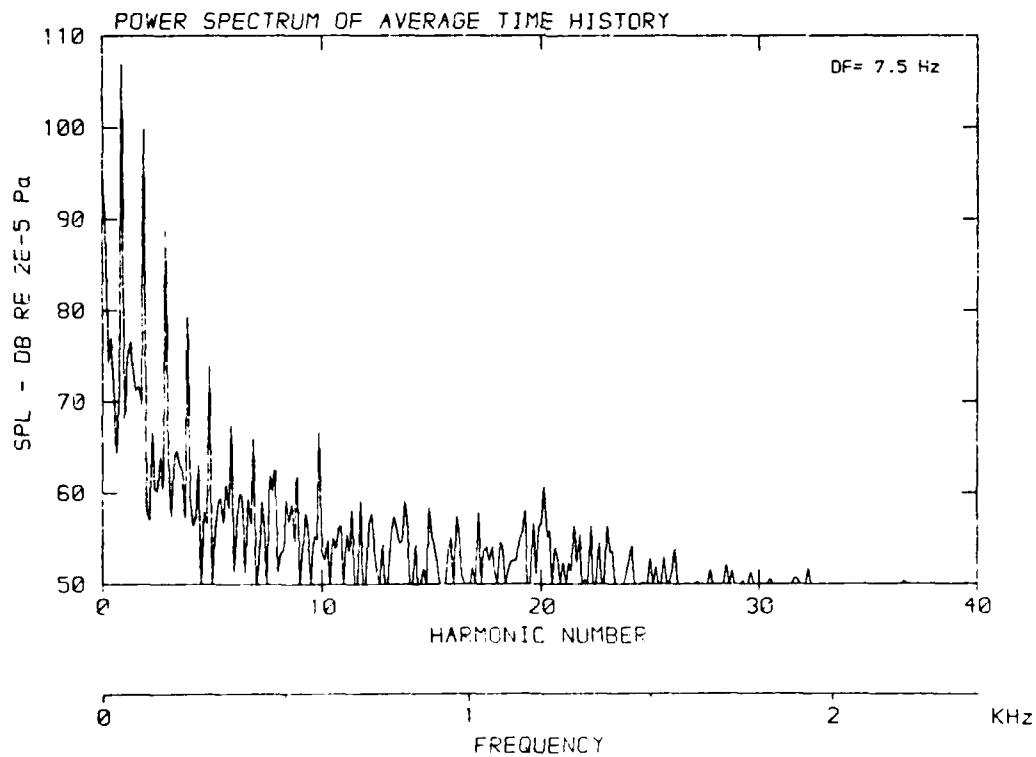
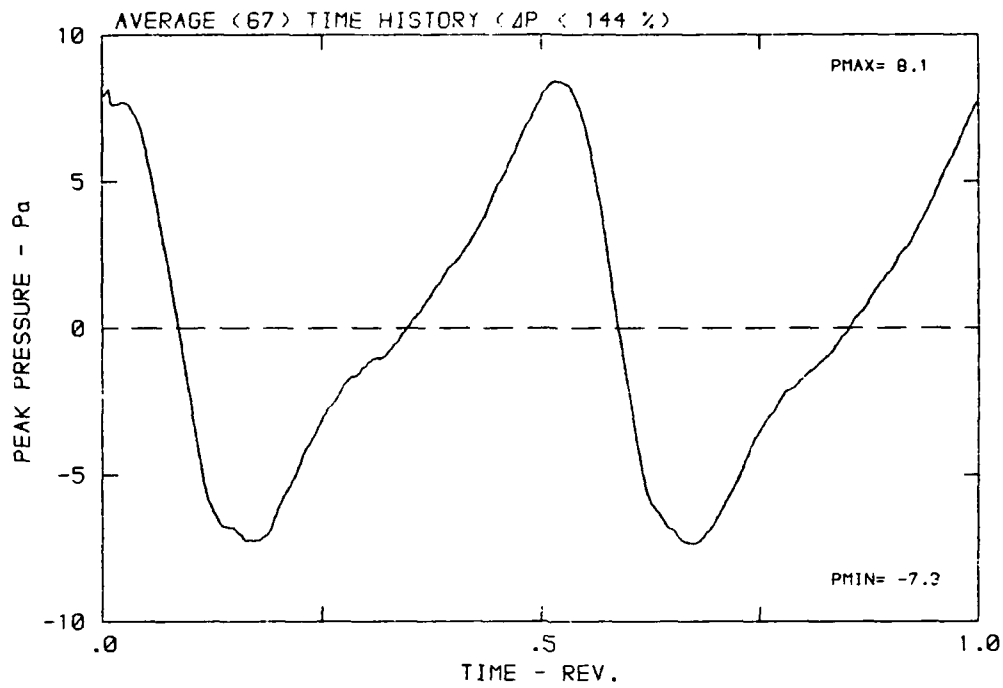
DATA POINT: FN-4 RUN: 169 MP: 6

β : 23.7° MH: .5832 n: 1800 rpm v/u : .266 ϕ : 3.6° T: 297.3 K



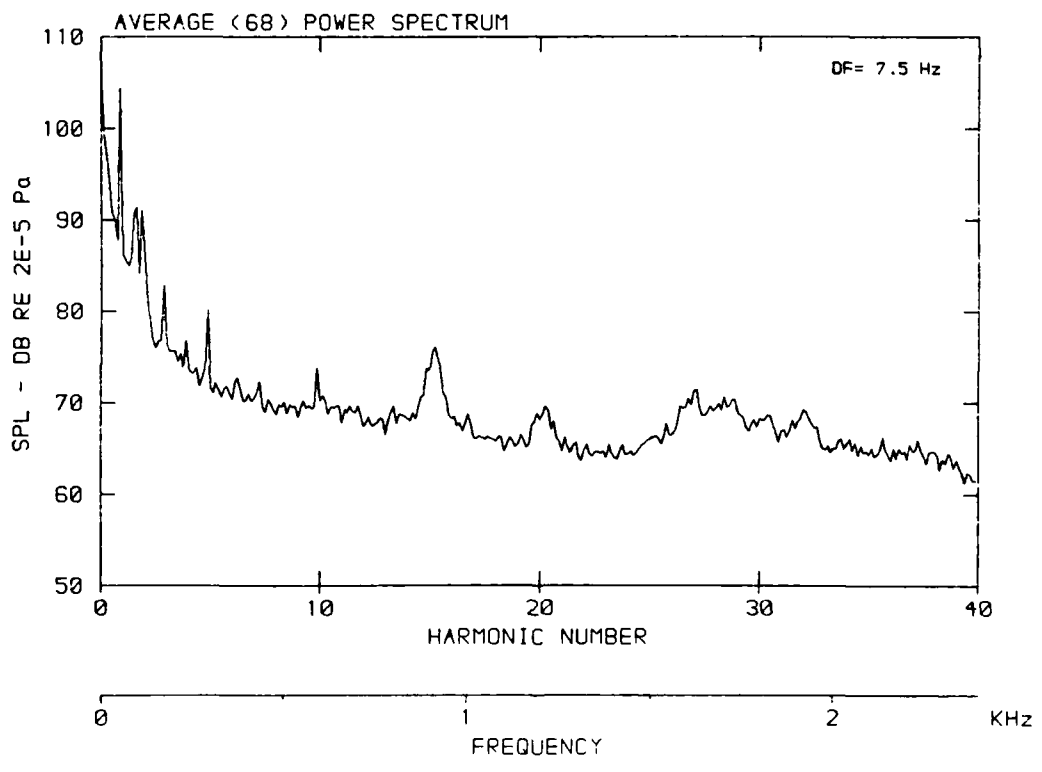
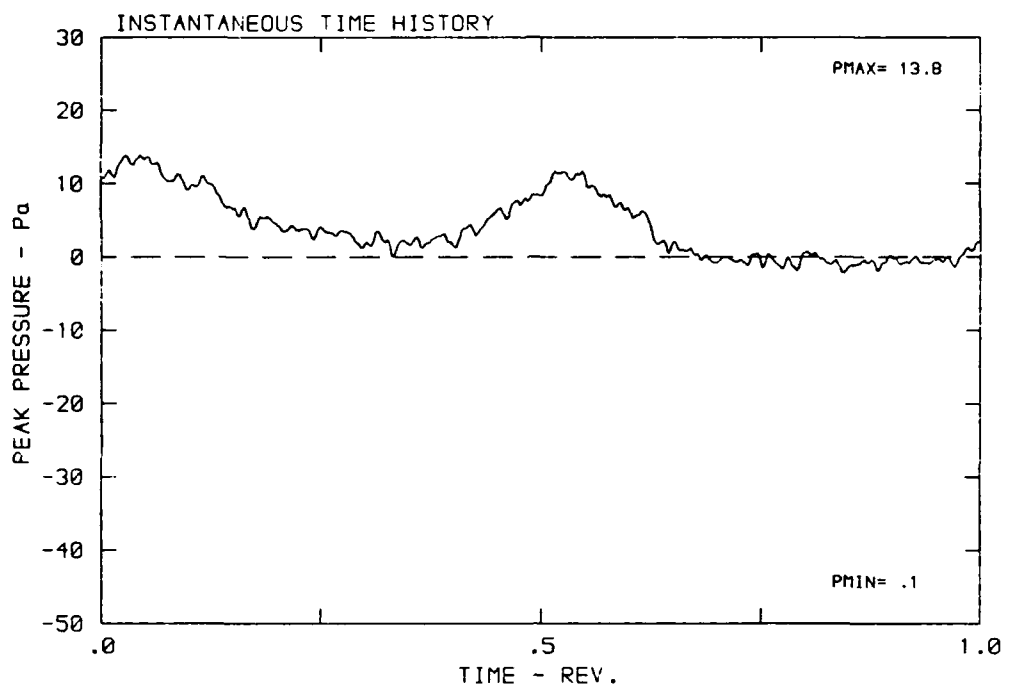
DATA POINT: FN-4 RUN: 169 MP: 6

β : 23.7° MH: .5832 n: 1800 rpm v/u : .266 ϕ : 3.6° T: 287.3 K



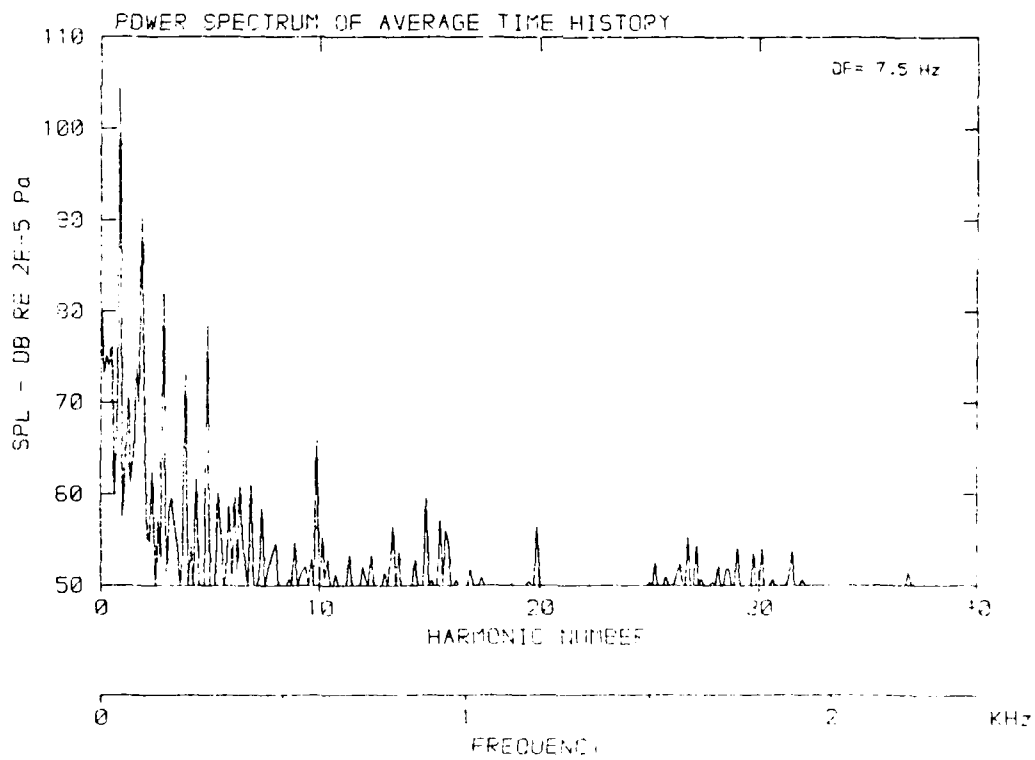
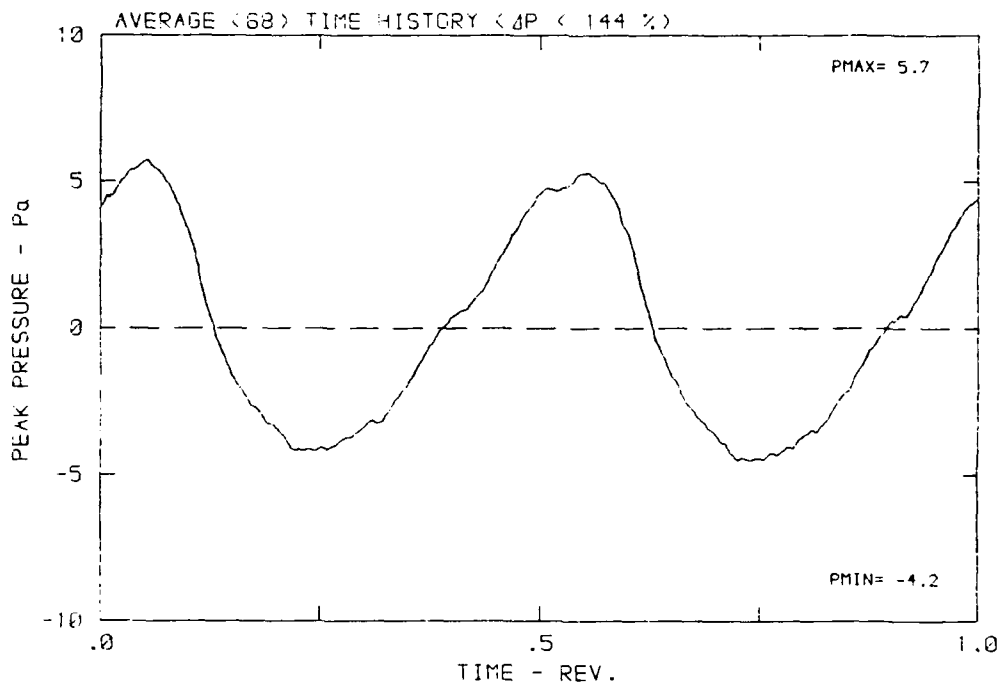
DATA POINT: FN-4 RUN: 169 MP: 7

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° τ : 287.3 K



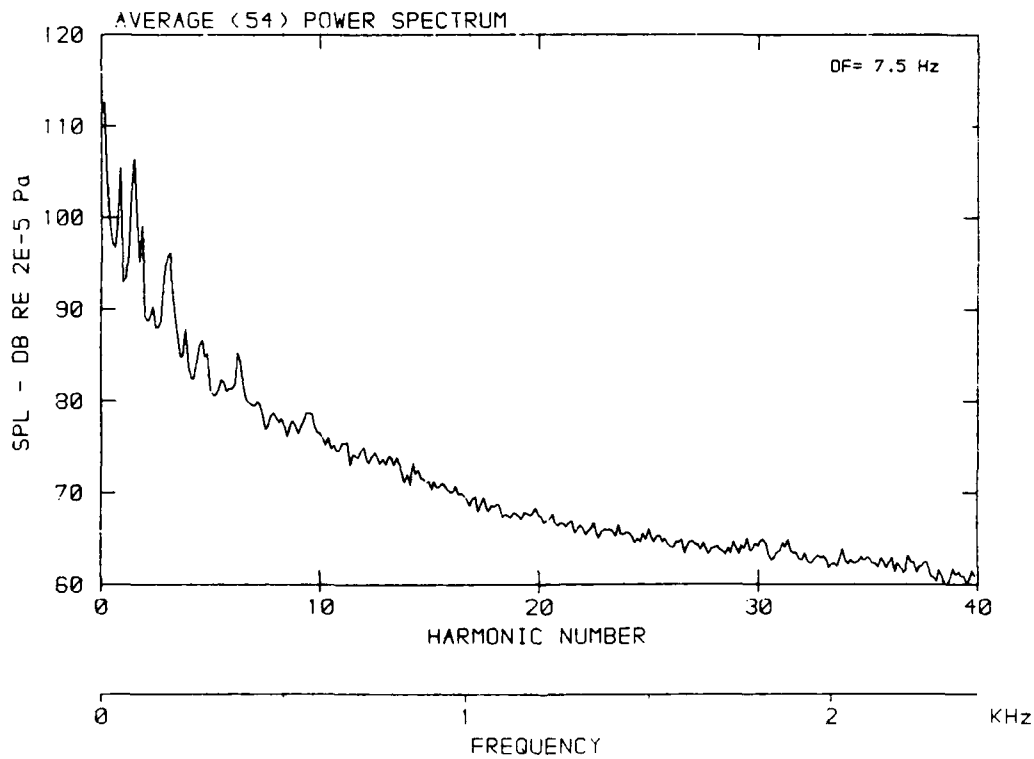
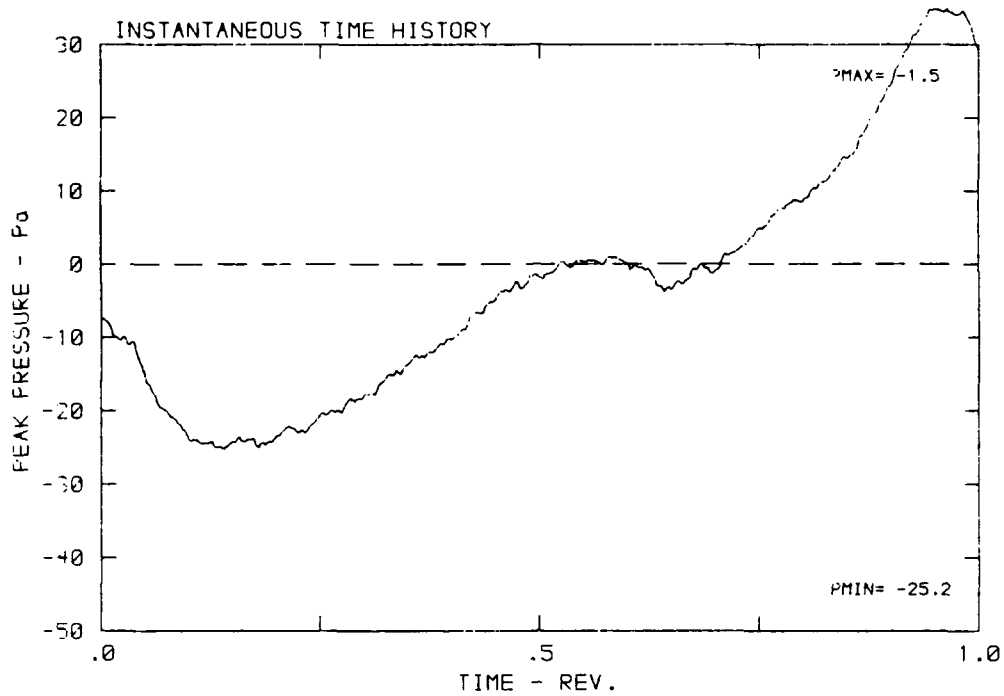
DATA POINT: FN-4 RUN: 169 MP: 7

β : 23.7° MH: .5832 n: 1800 rpm v/u : .266 ϕ : 3.6° T: 287.3 K



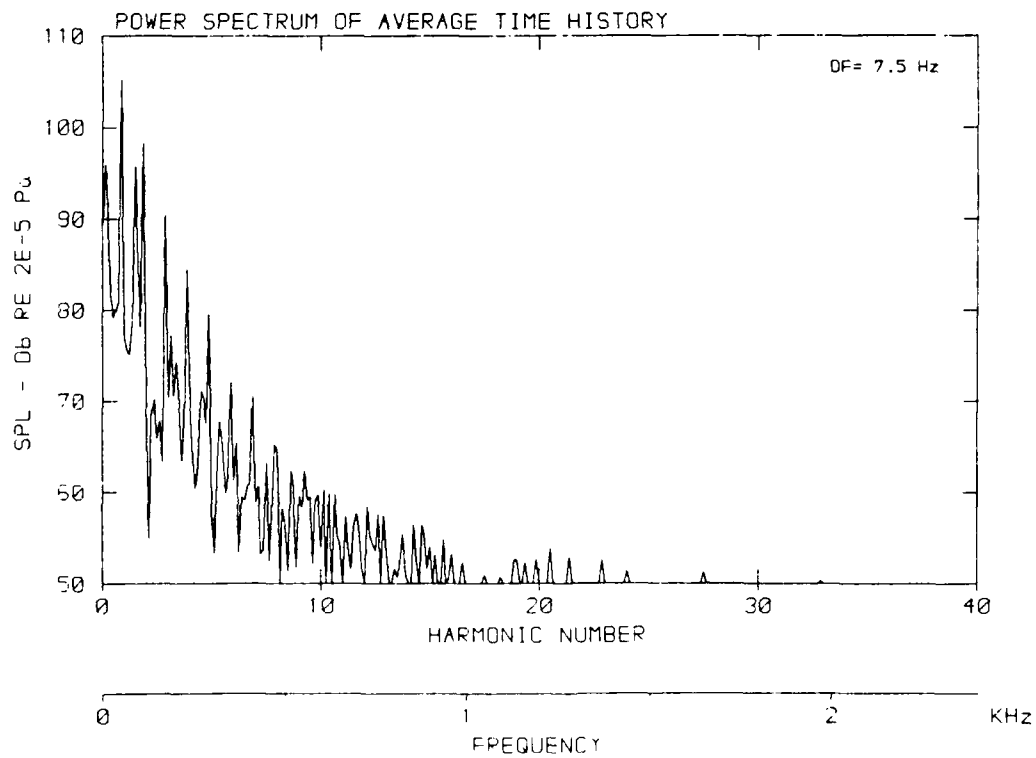
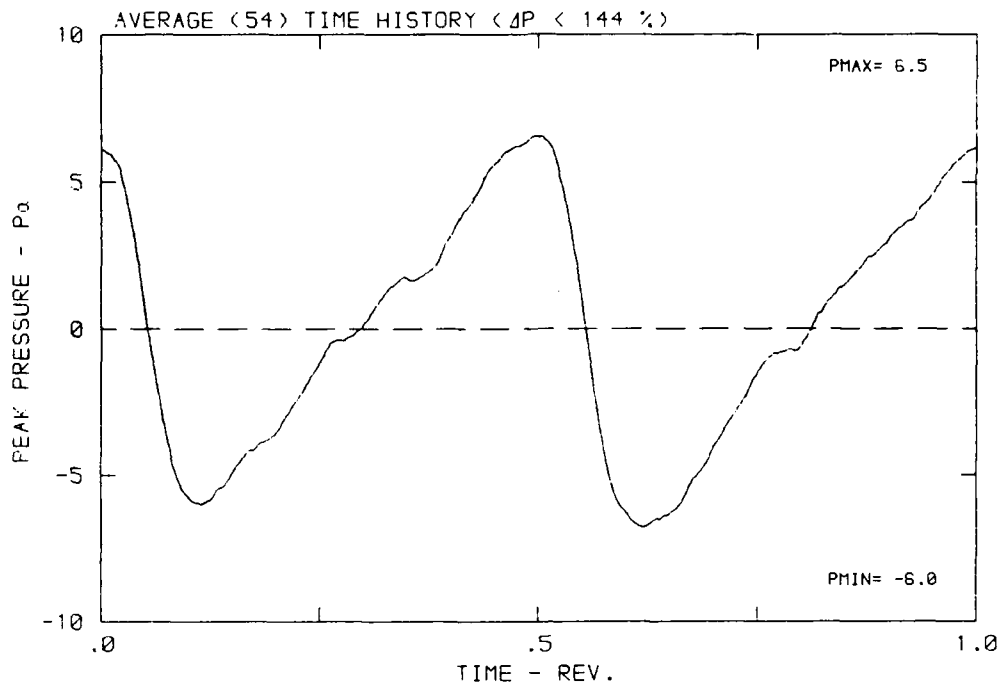
DATA POINT: FN-4 RUN: 169 MP: 8

β : 23.7° MH: .5832 n: 1800 rpm v/u : .266 ϕ : 3.6° T: 287.3 K



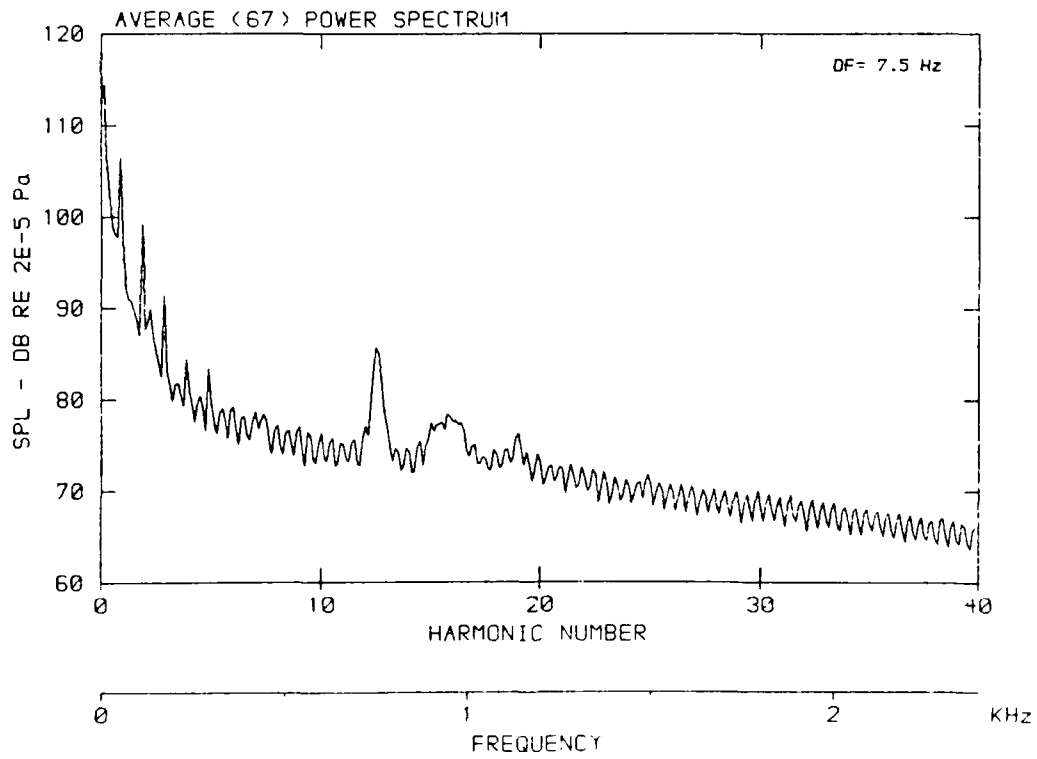
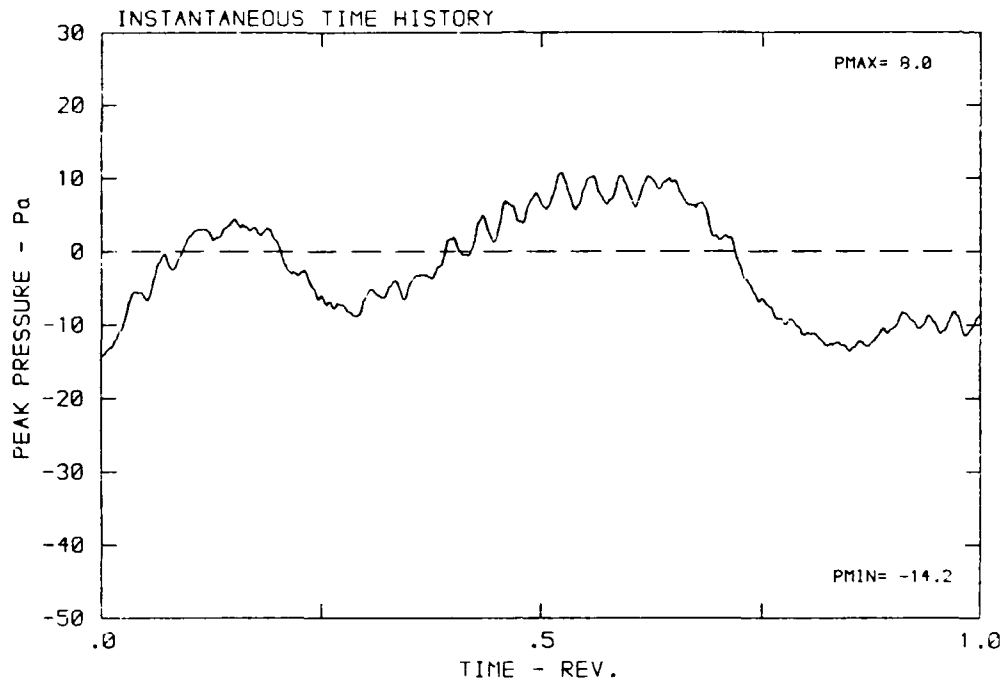
DATA POINT: FN-4 RUN: 169 MP: 8

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



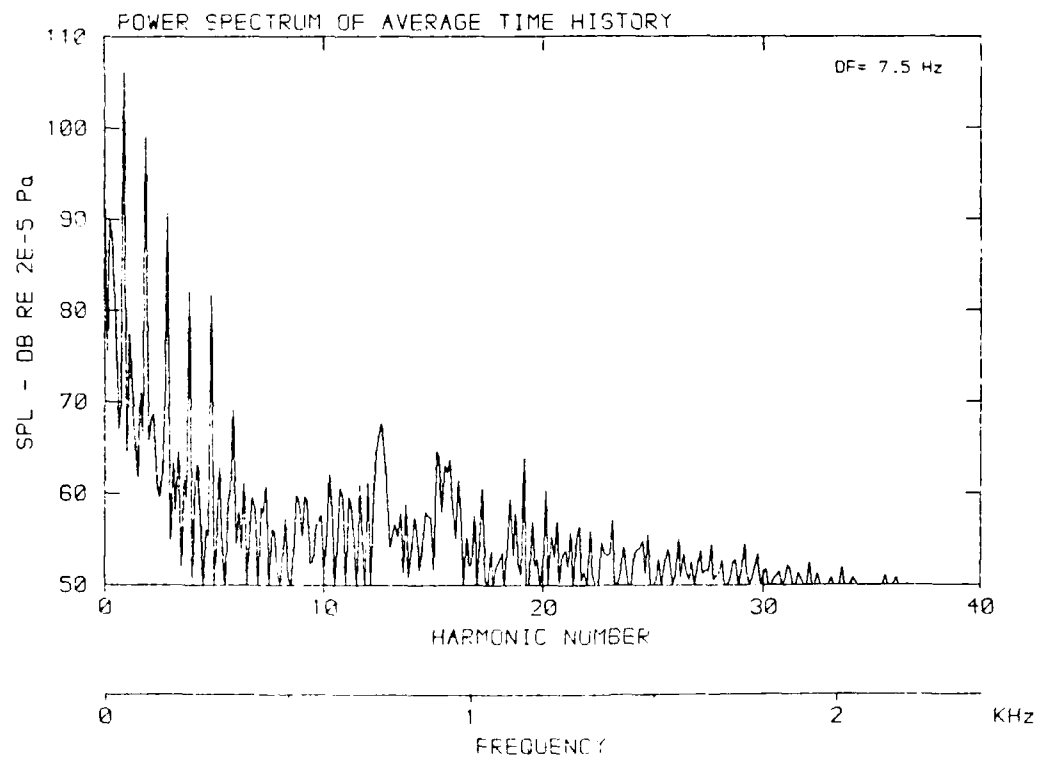
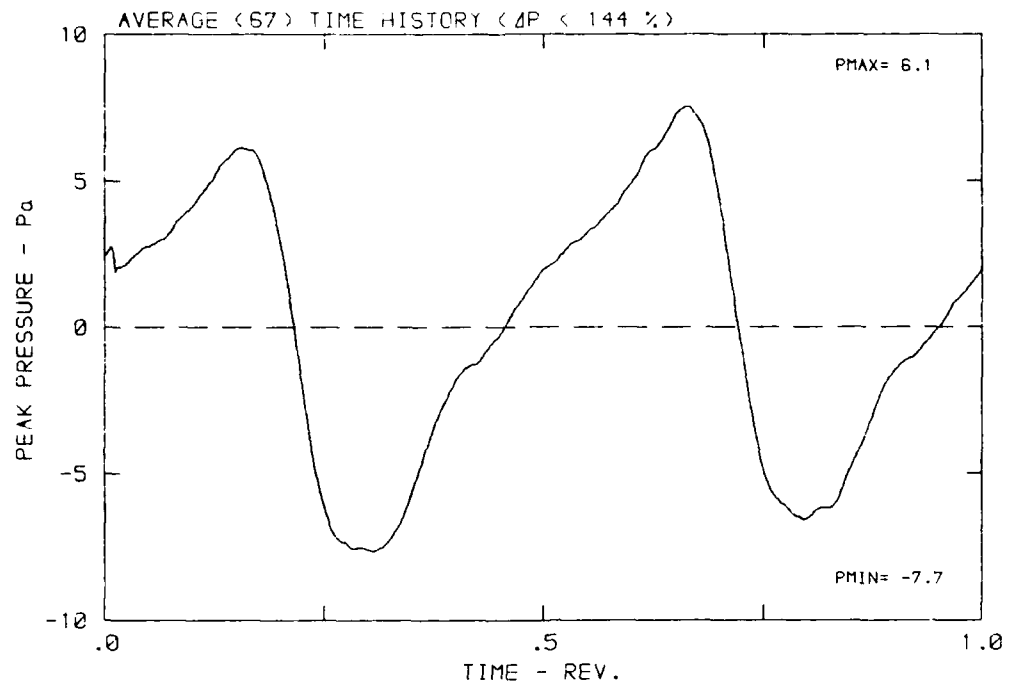
DATA POINT: FN-4 RUN: 169 MP: 9

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



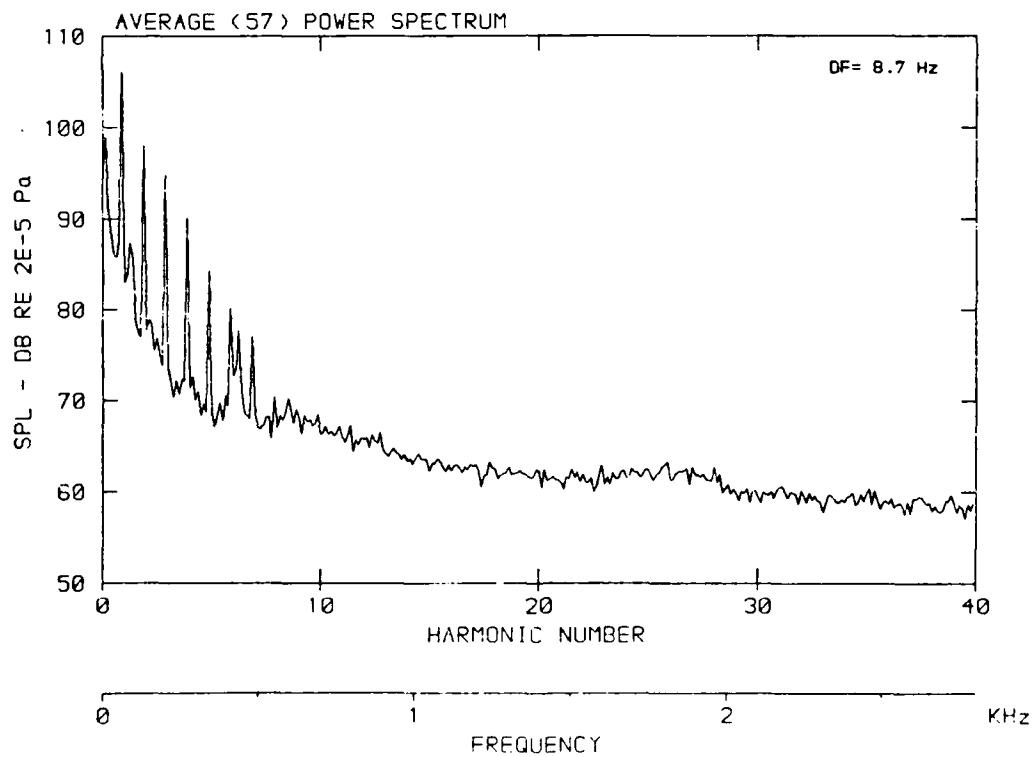
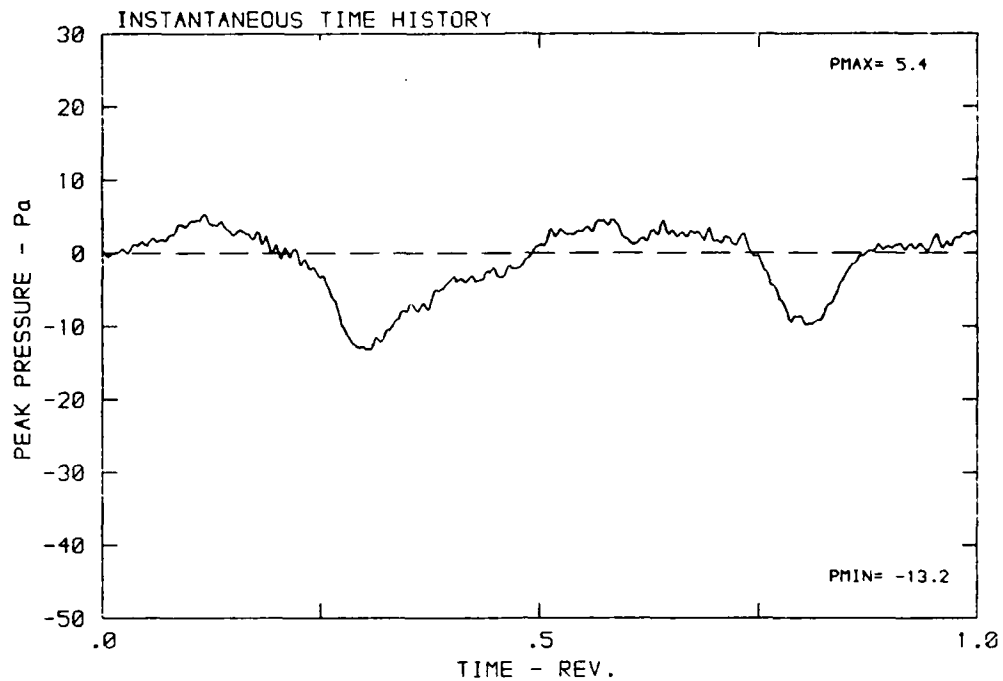
DATA POINT: FN-4 RUN: 169 MP: 9

β : 23.7° MH: .5832 n: 1800 rpm v/u: .266 ϕ : 3.6° T: 287.3 K



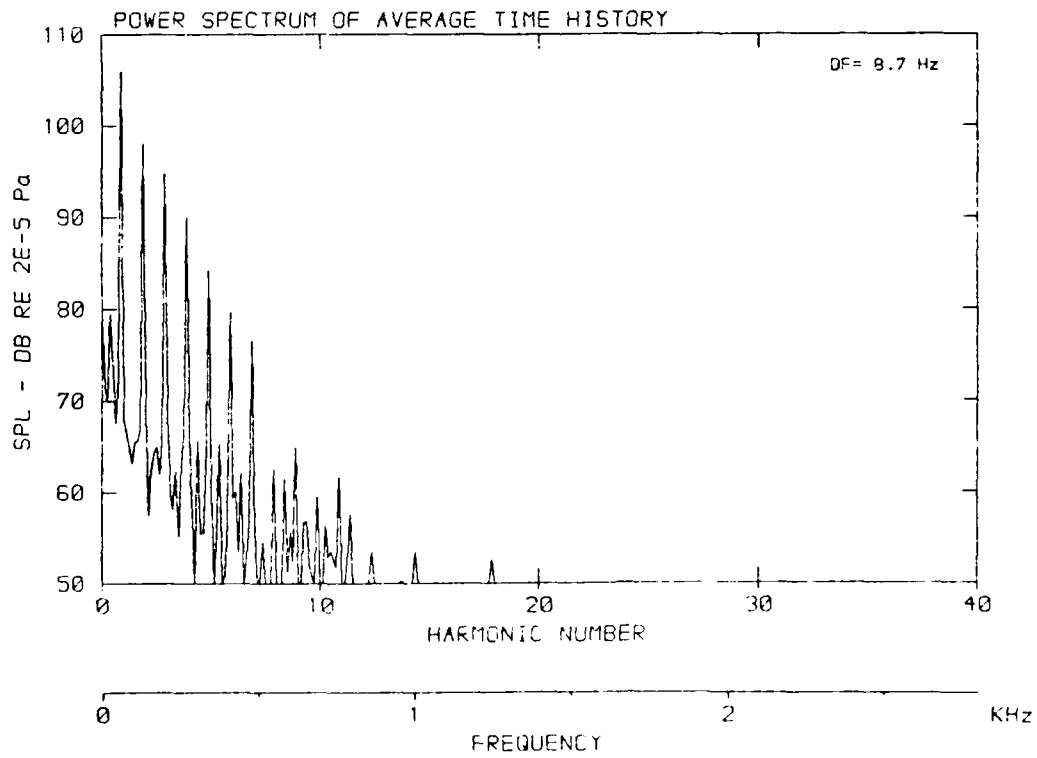
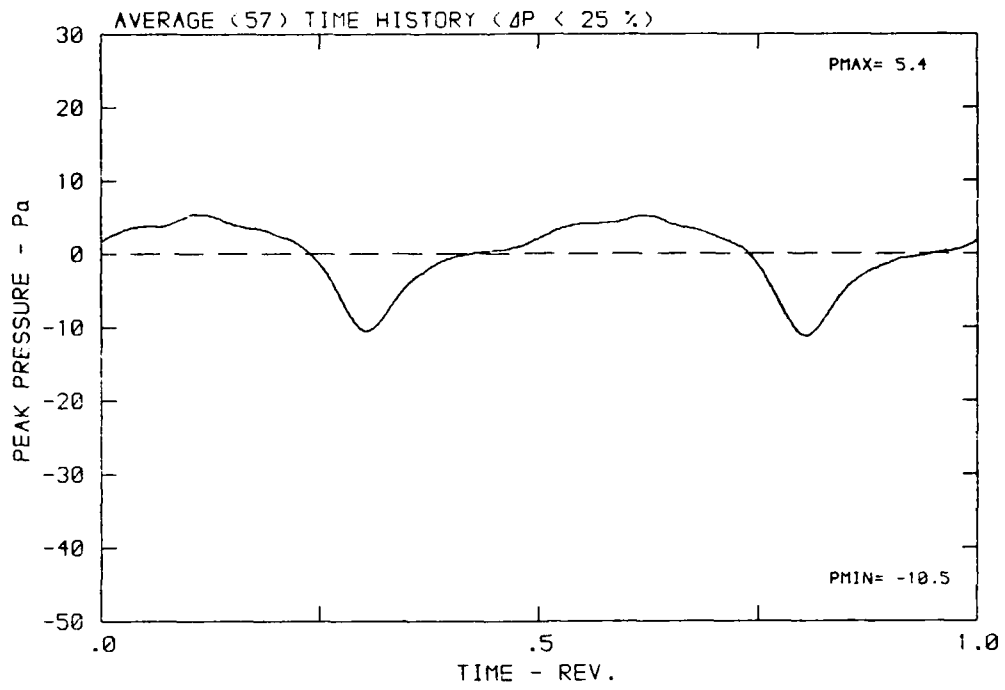
DATA POINT: FN-5 RUN: 170 MP: 1

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



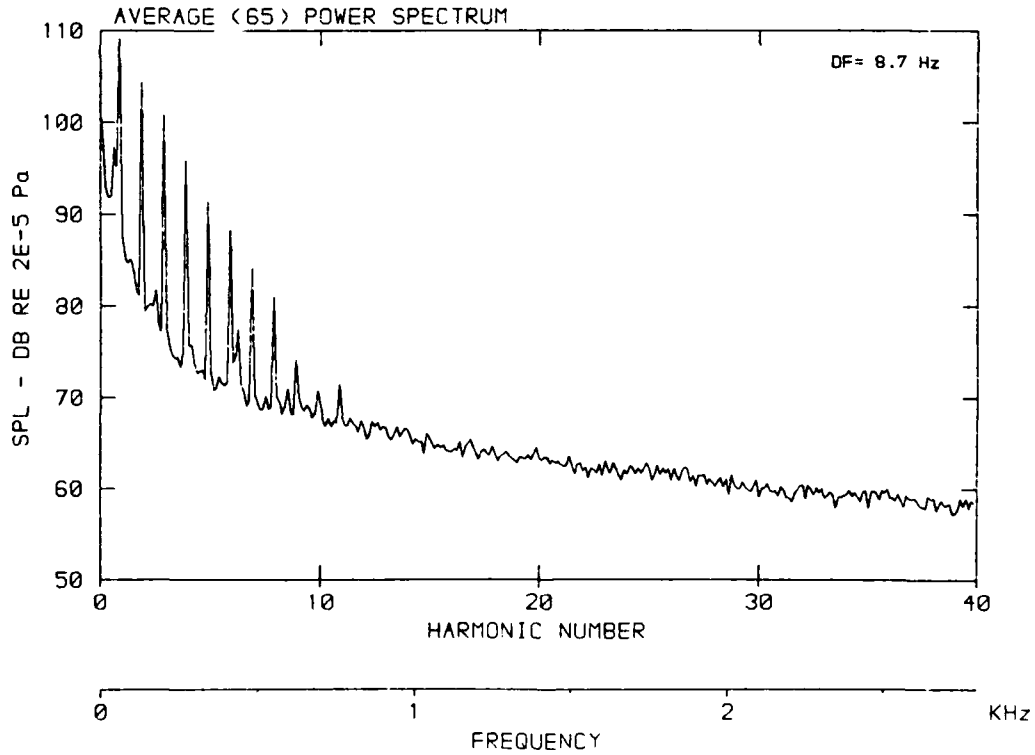
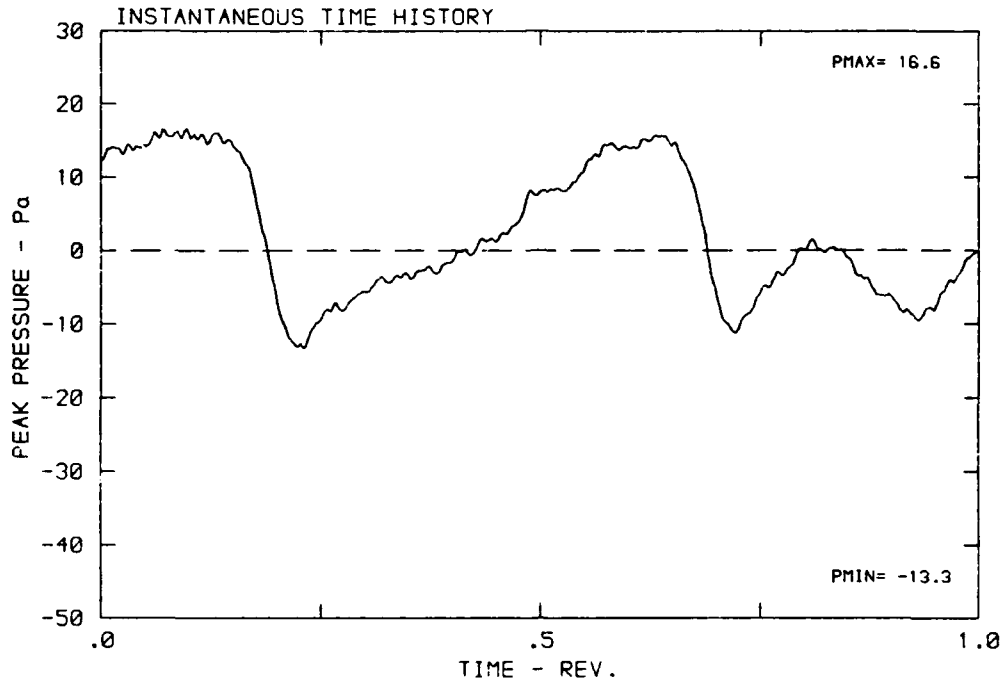
DATA POINT: FN-5 RUN: 170 MP: 1

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



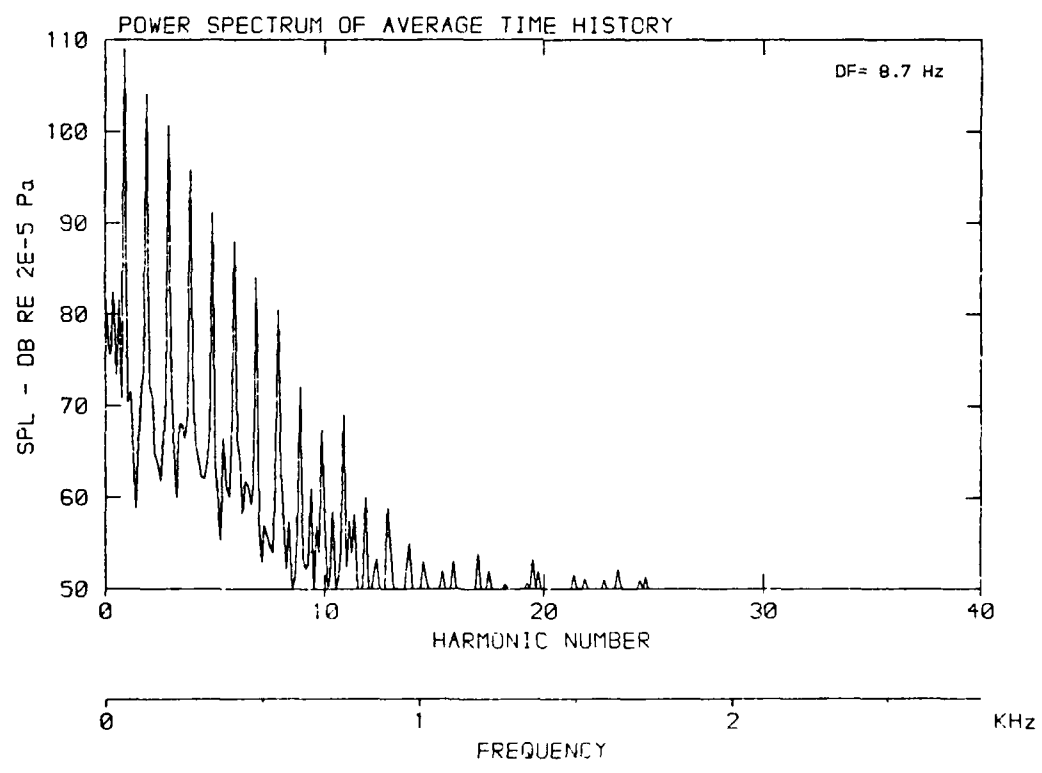
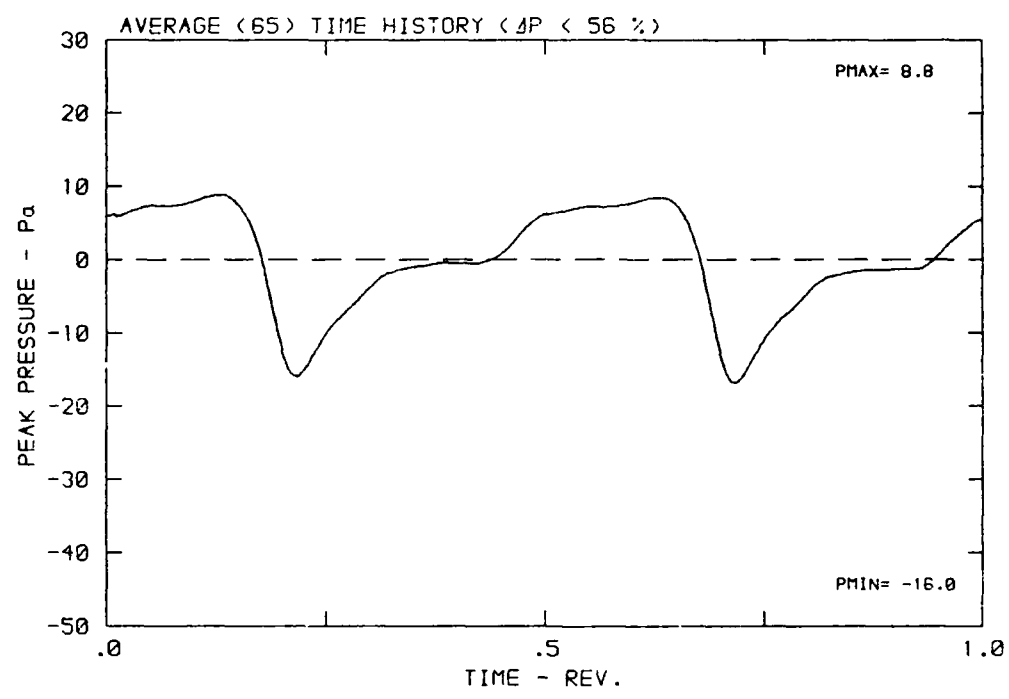
DATA POINT: FN-5 RUN: 170 MP: 2

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



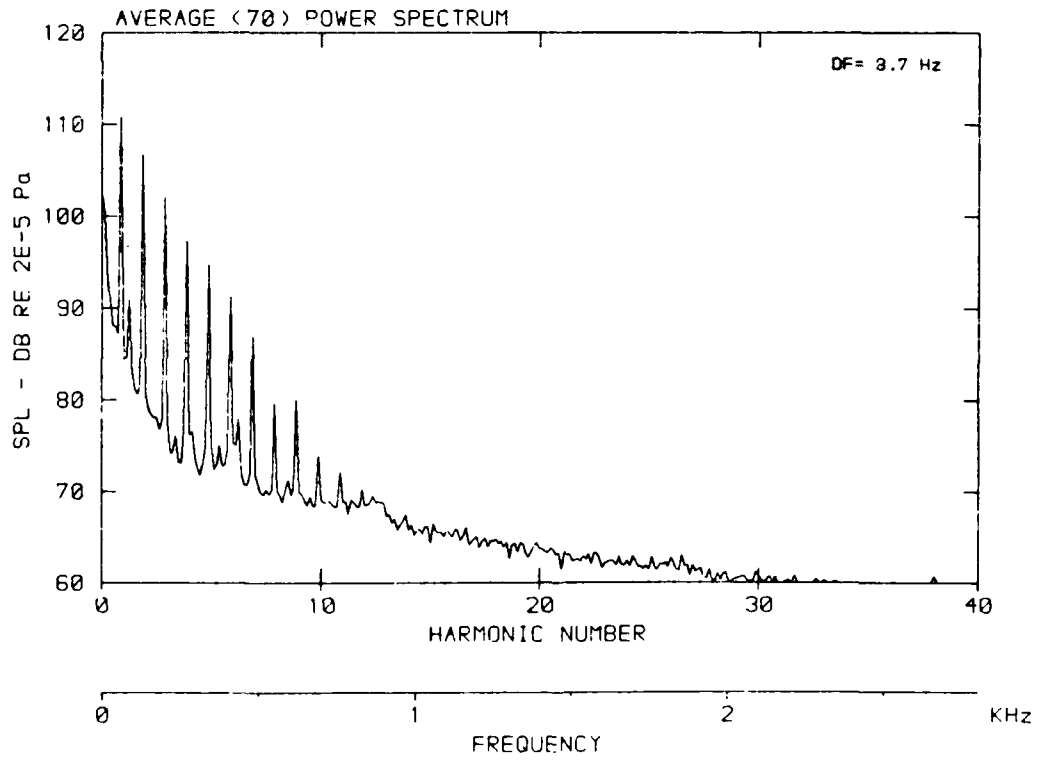
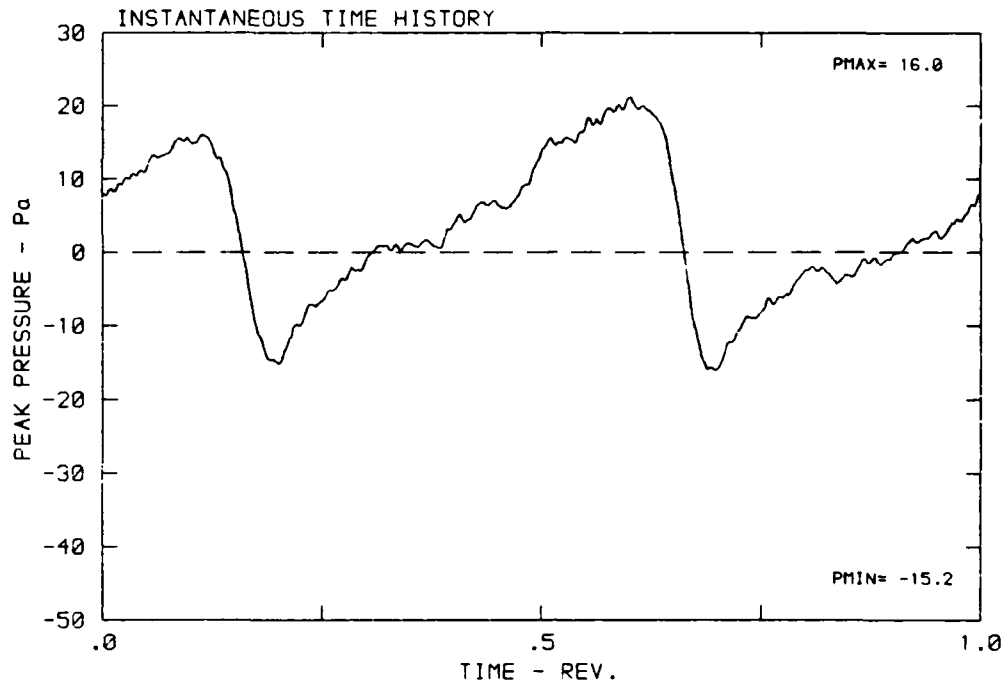
DATA POINT: FN-5 RUN: 170 MP: 2

β : 23.7° MH: .6739 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 288.0 K



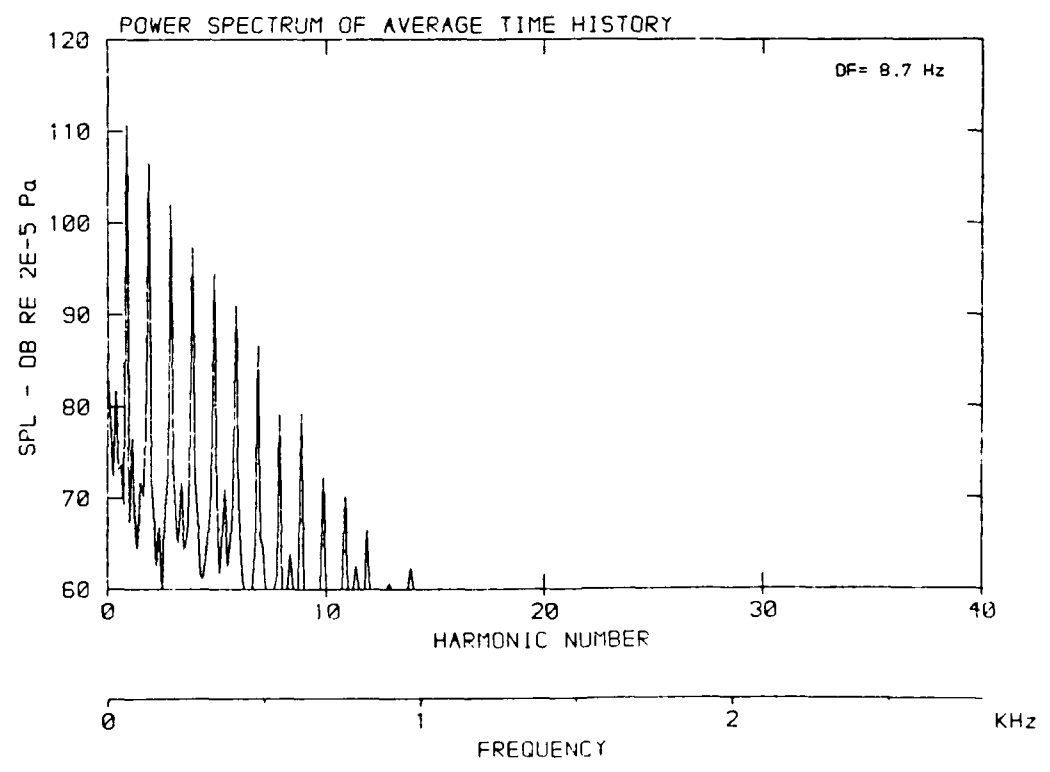
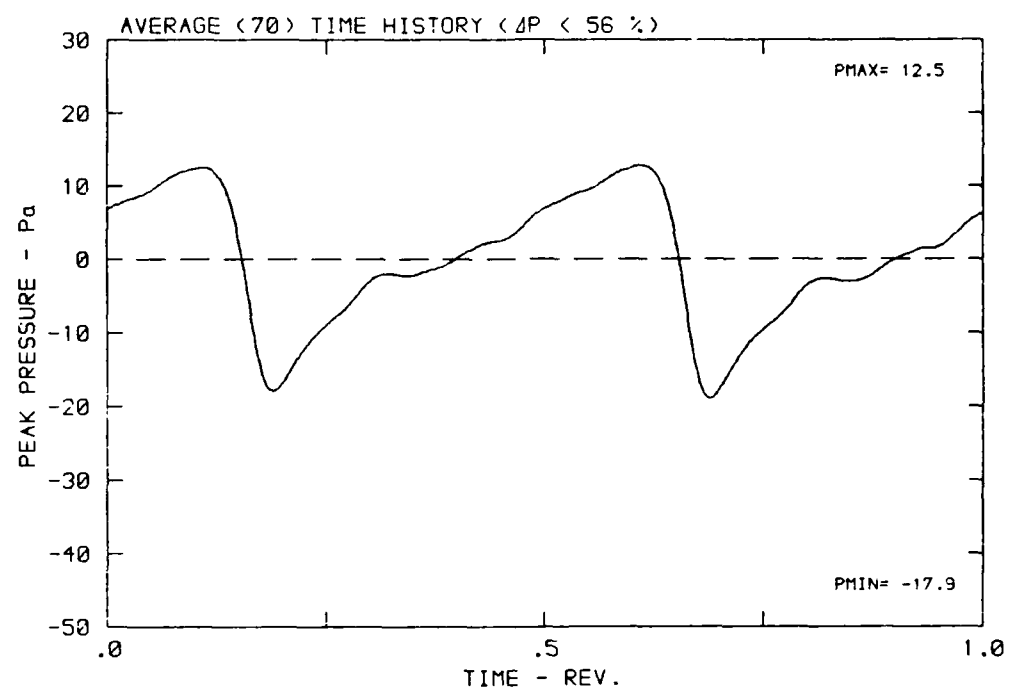
DATA POINT: FN-5 RUN: 170 MP: 3

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



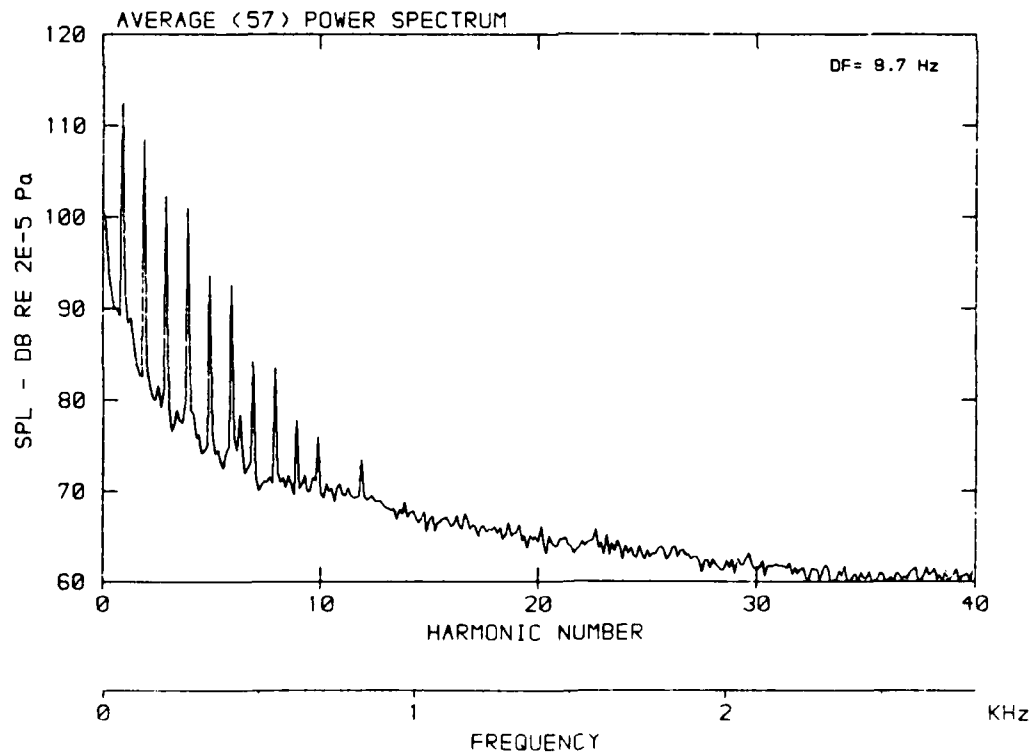
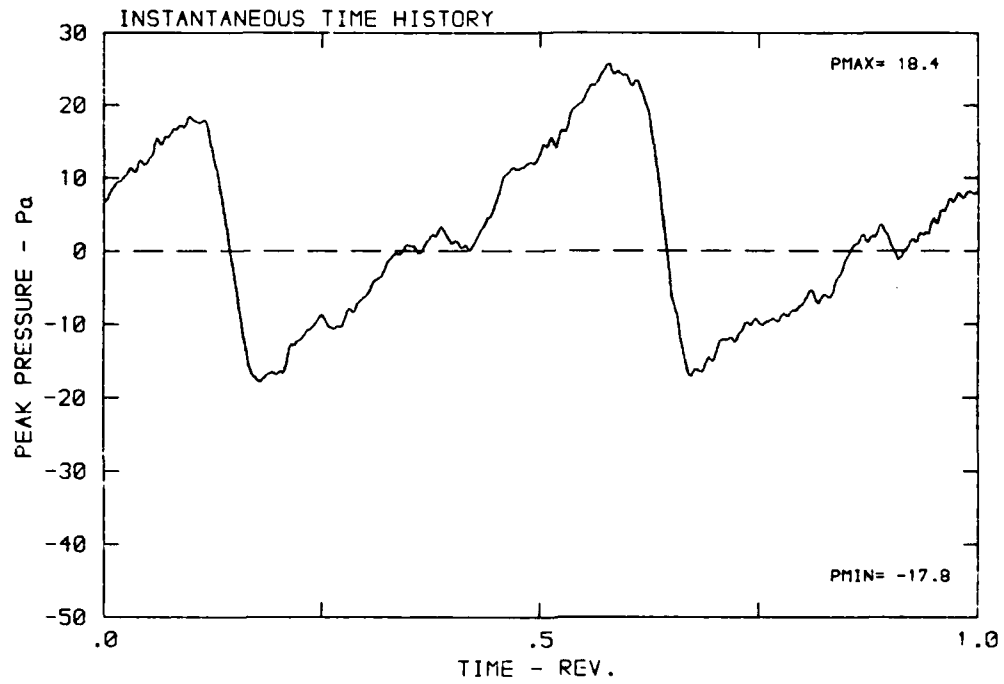
DATA POINT: FN-5 RUN: 170 MP: 3

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



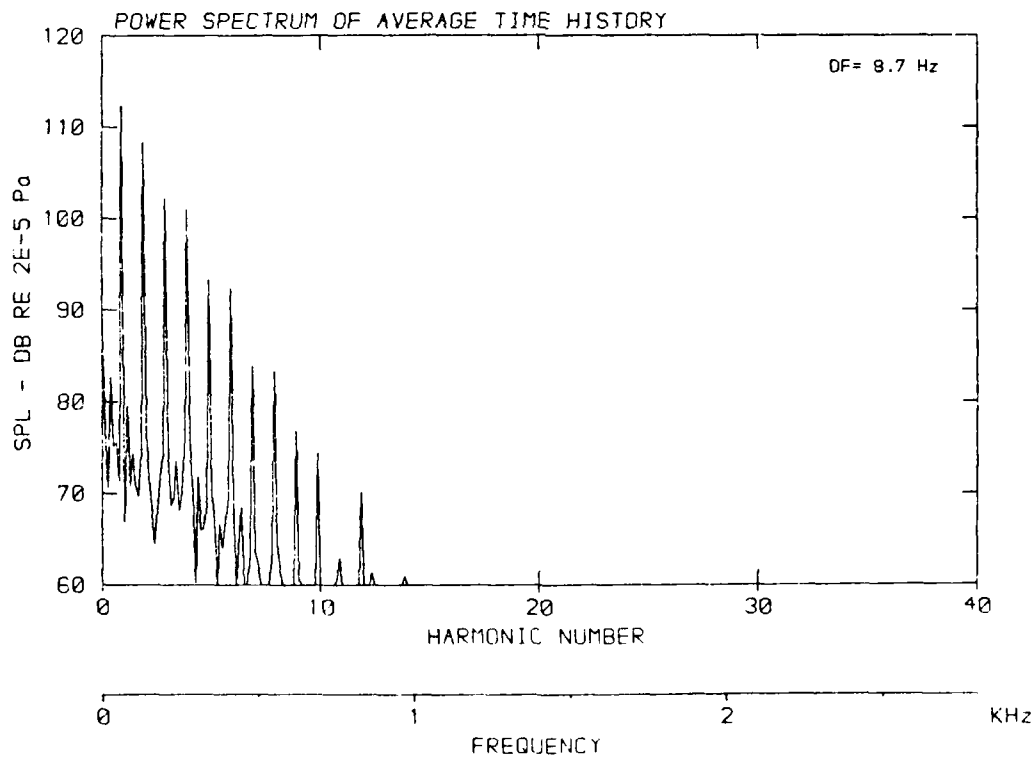
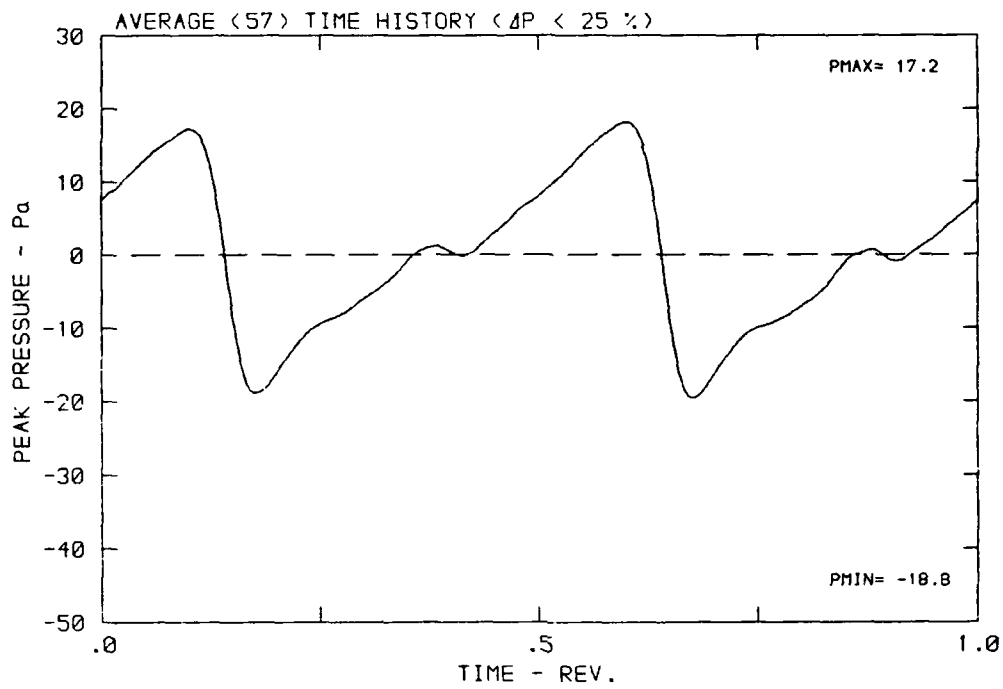
DATA POINT: FN-5 RUN: 170 MP: 4

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



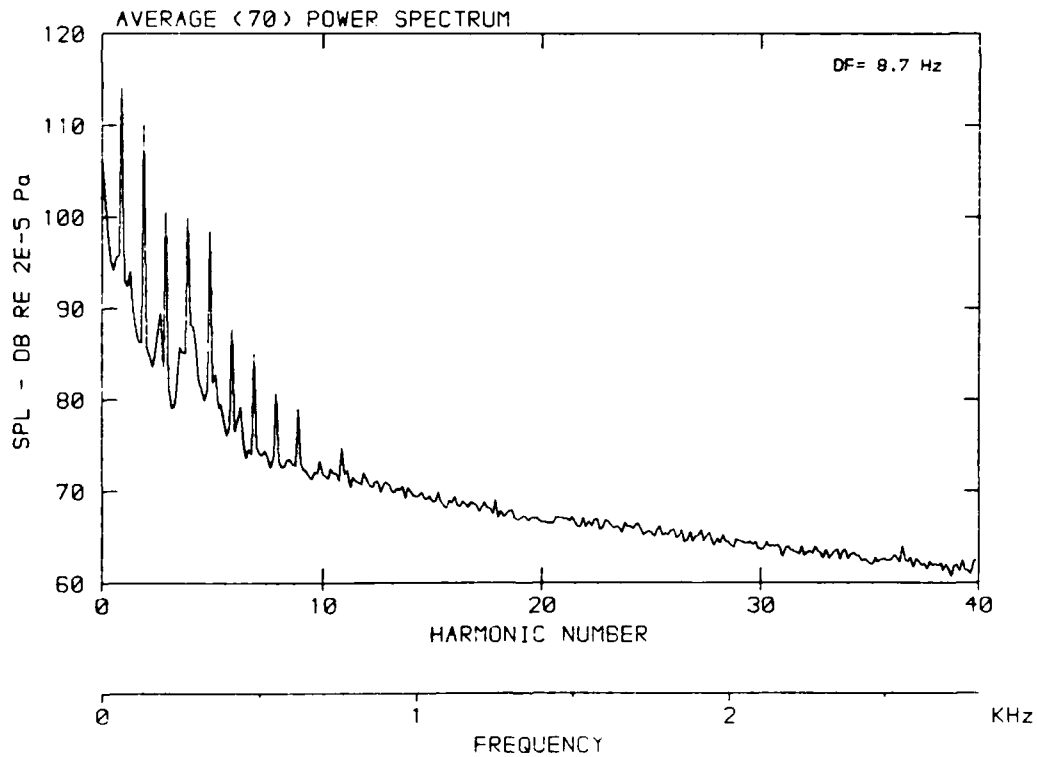
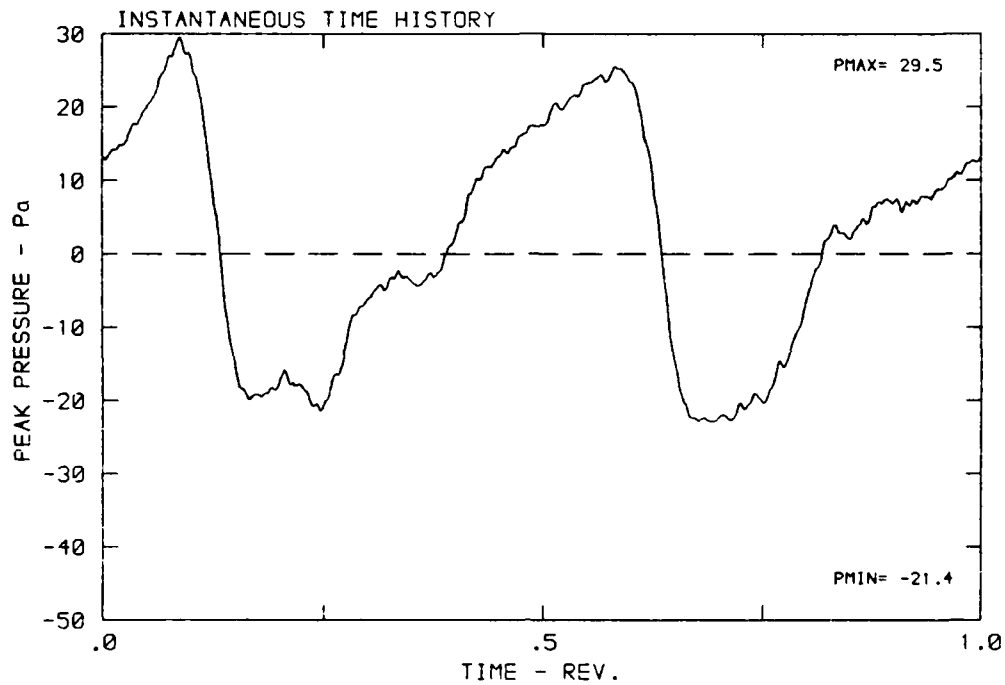
DATA POINT: FN-5 RUN: 170 MP: 4

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



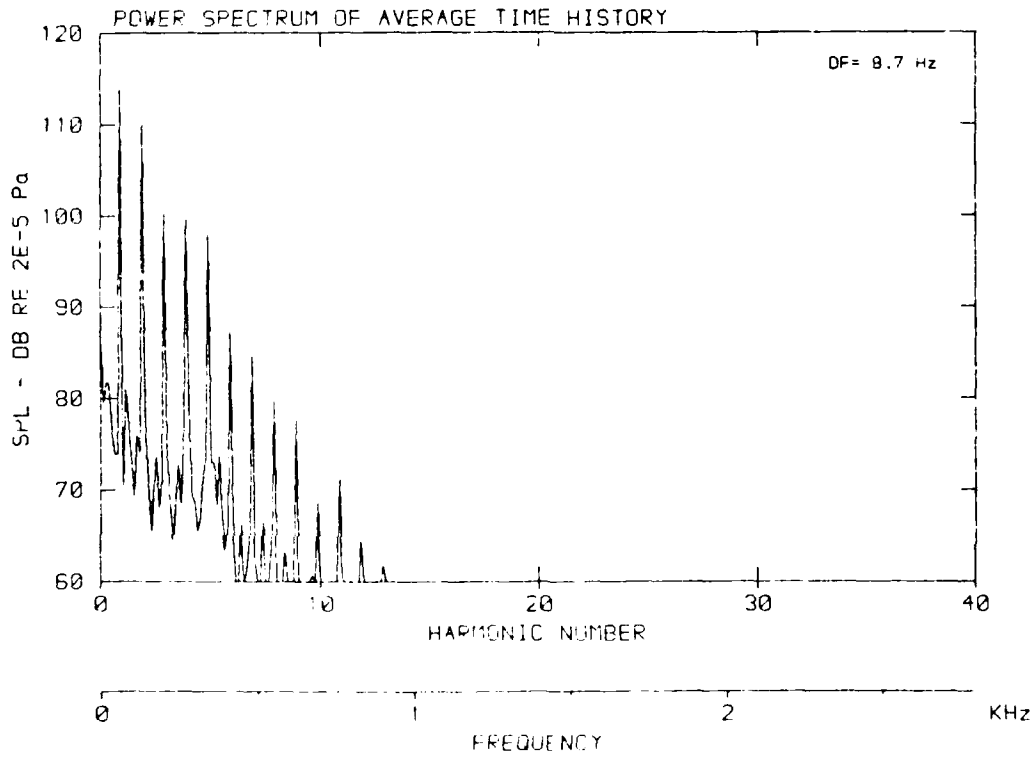
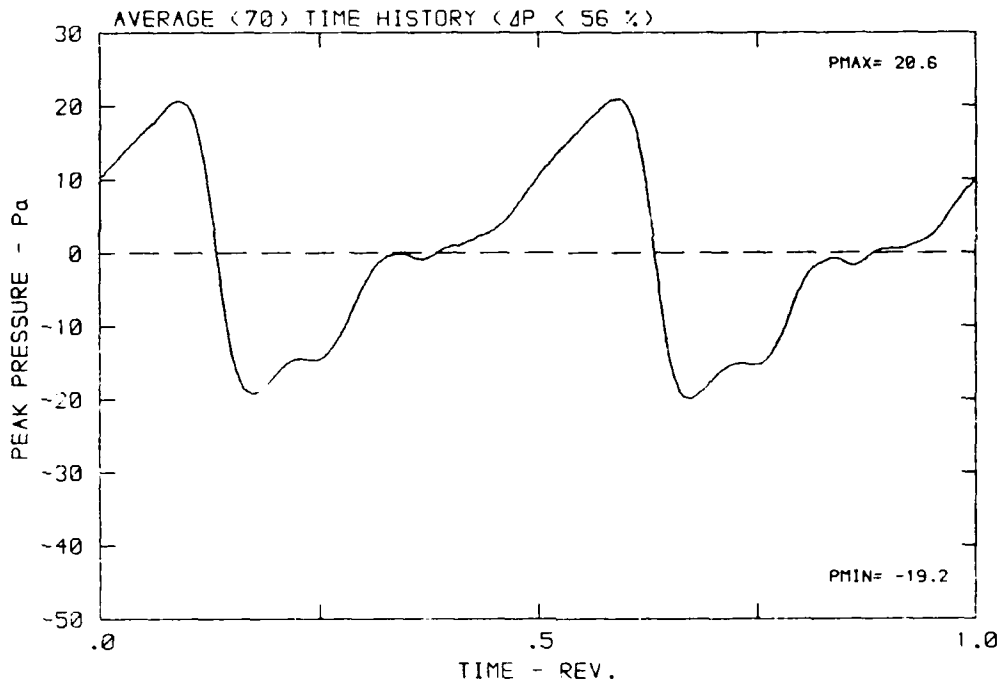
DATA POINT: FN-5 RUN: 170 MP: 5

β : 23.7° MH: .6739 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 288.0 K



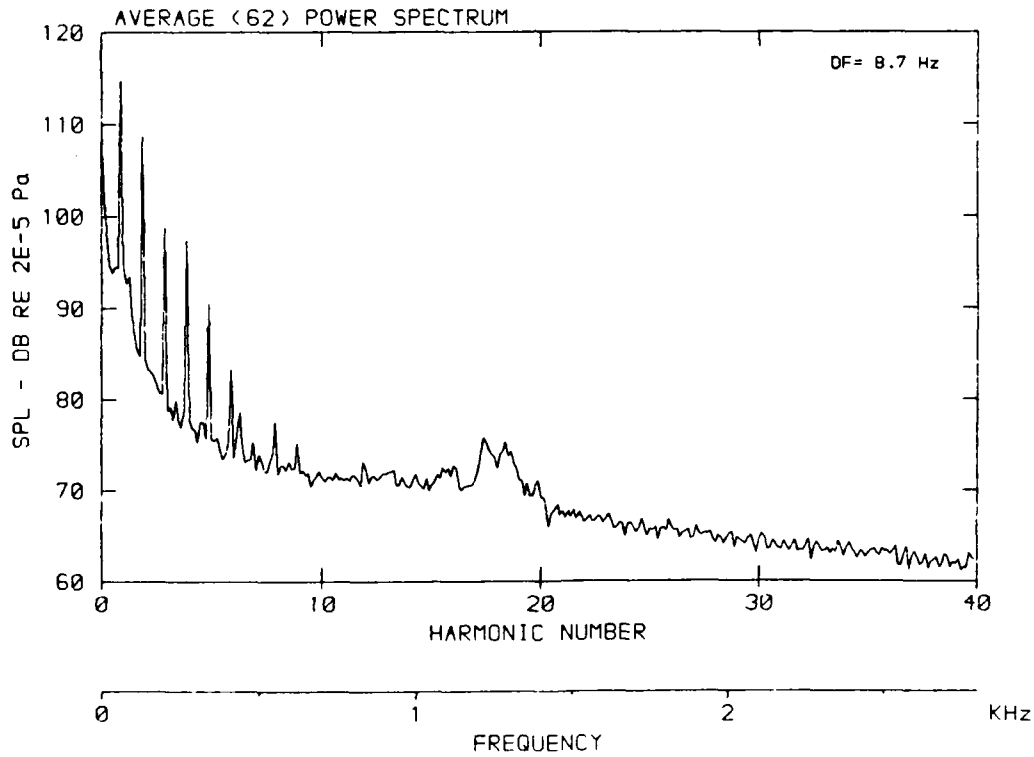
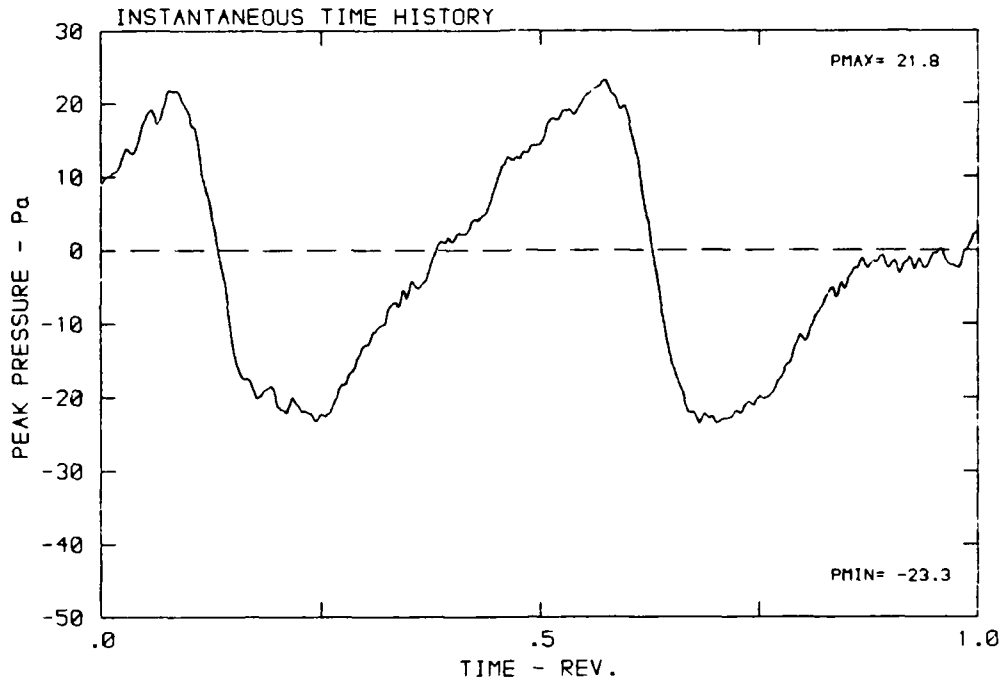
DATA POINT: FN-5 RUN: 170 MP: 5

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



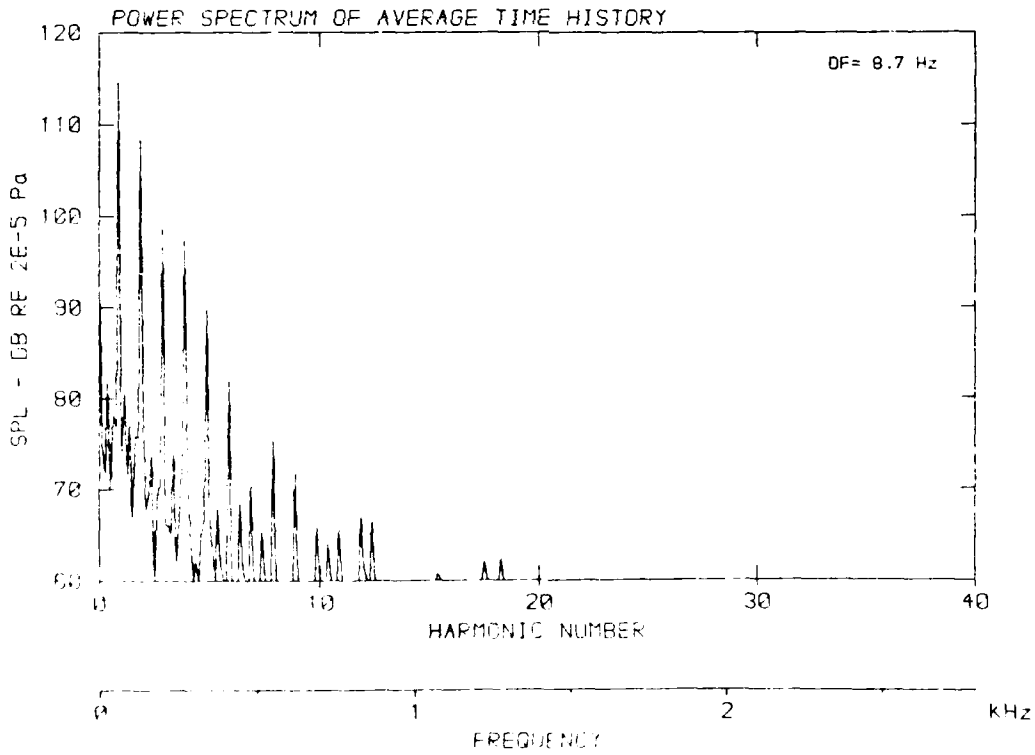
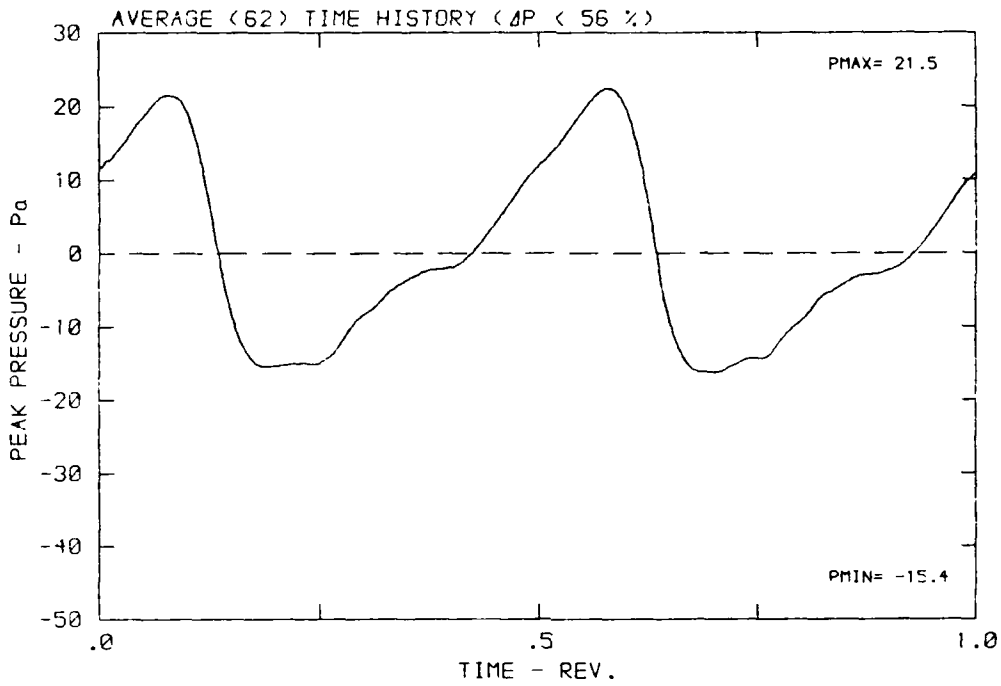
DATA POINT: FN-5 RUN: 170 MP: 6

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



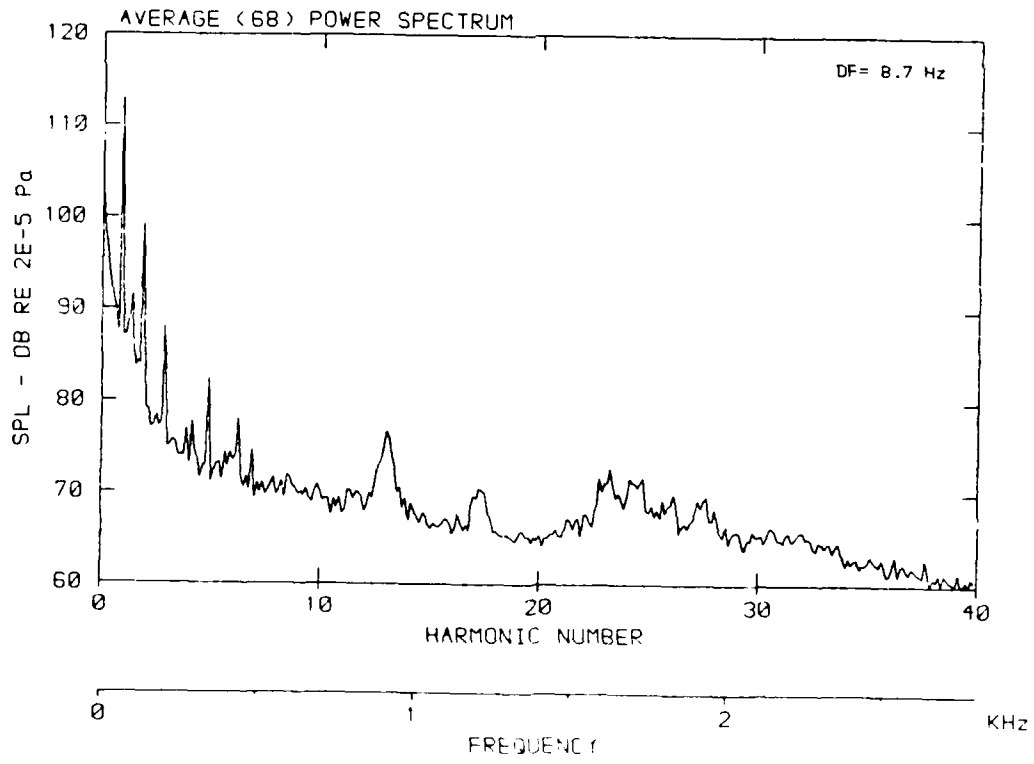
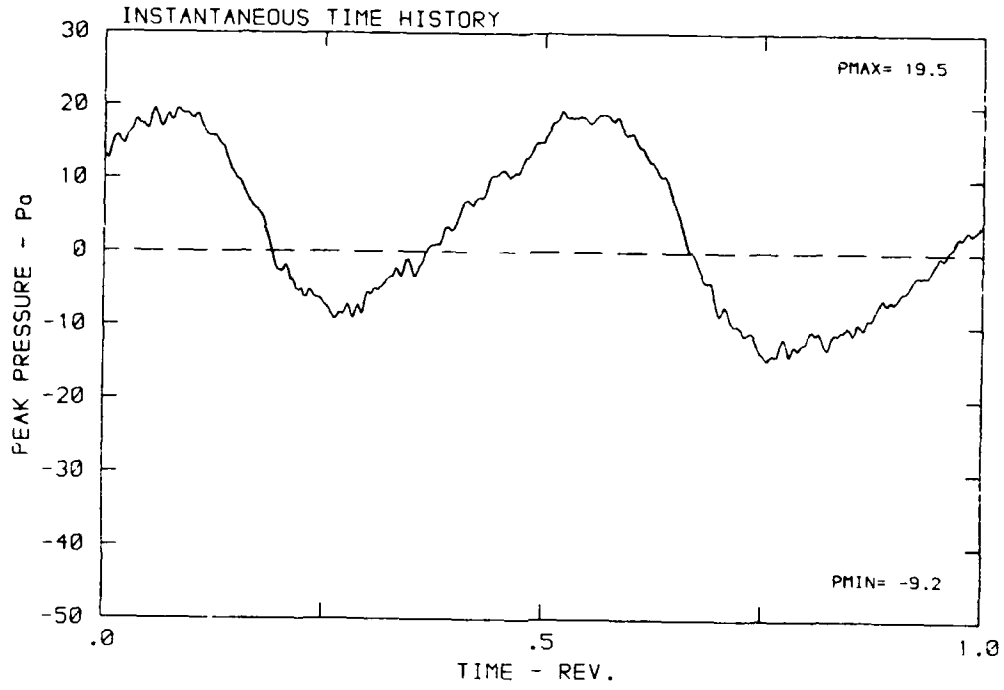
DATA POINT: FN-5 RUN: 170 MP: 6

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



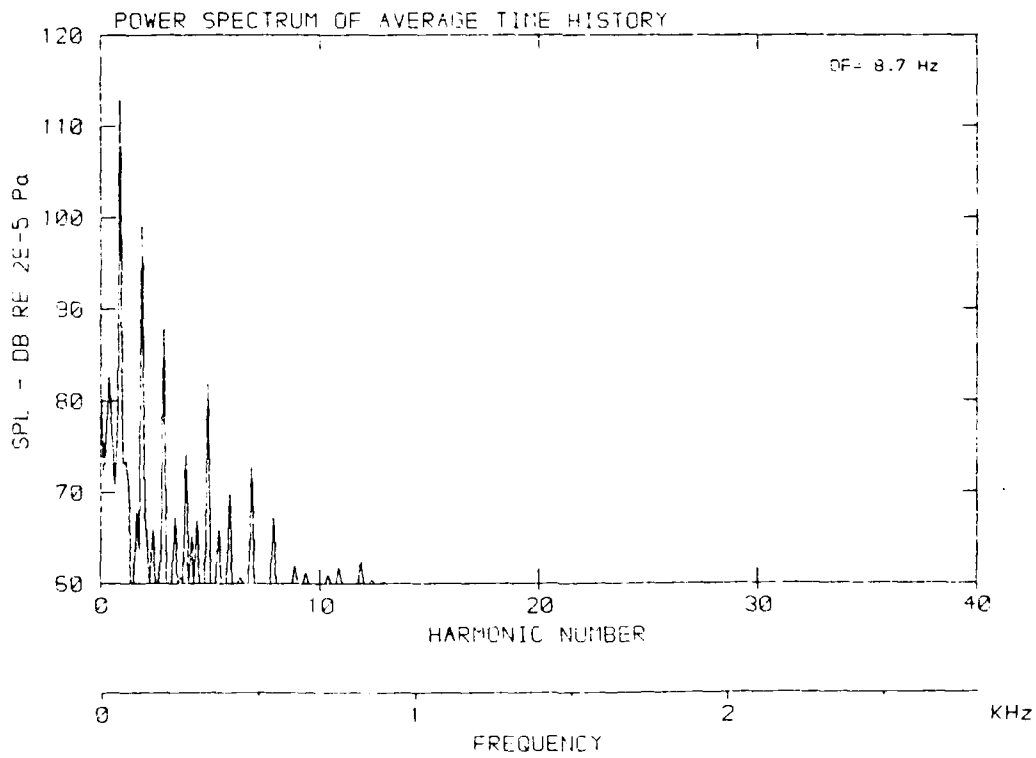
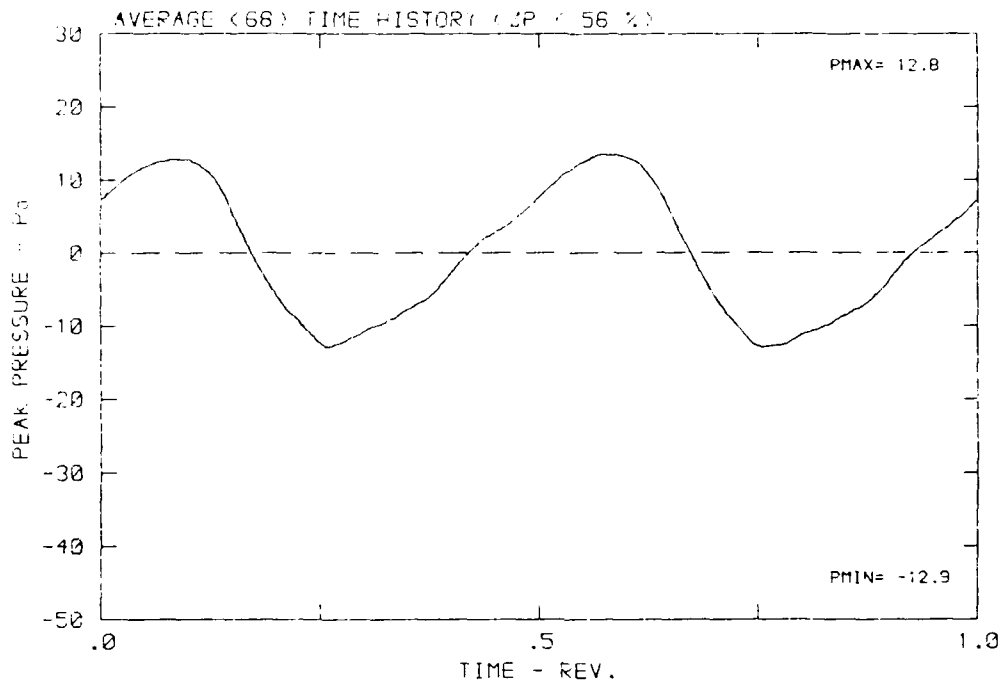
DATA POINT: FN-5 RUN: 170 MP: 7

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



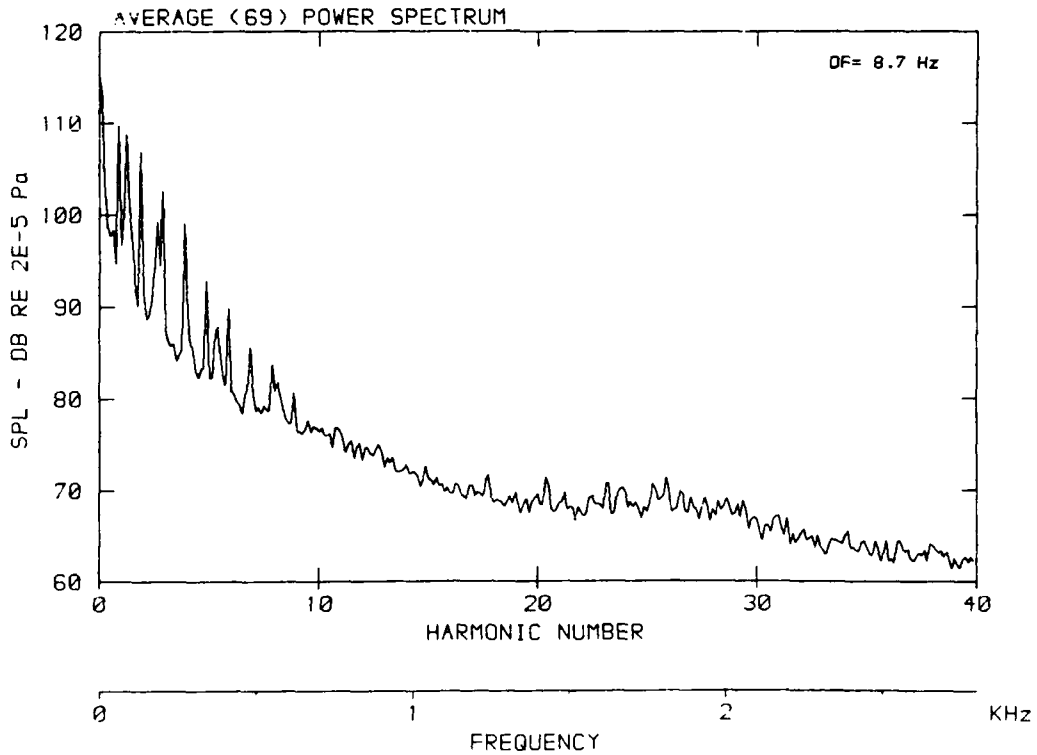
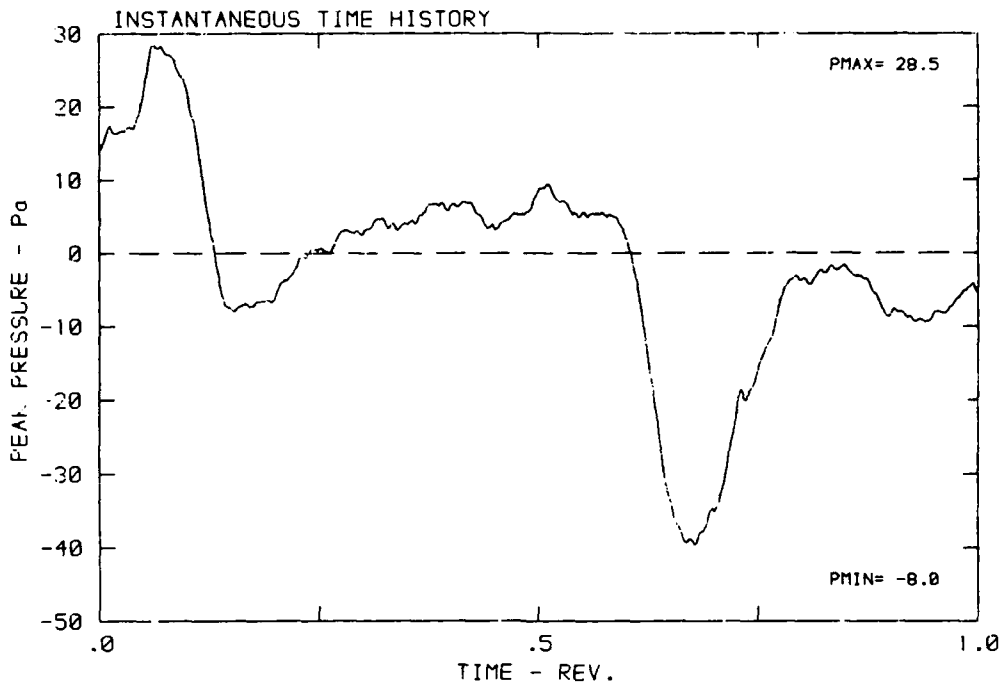
DATA POINT: FN-5 RUN: 170 MP: 7

β : 23.7° MH: .6739 n: 2100 rpm v_{ru} : .231 ϕ : 3.6° T: 288.0 K



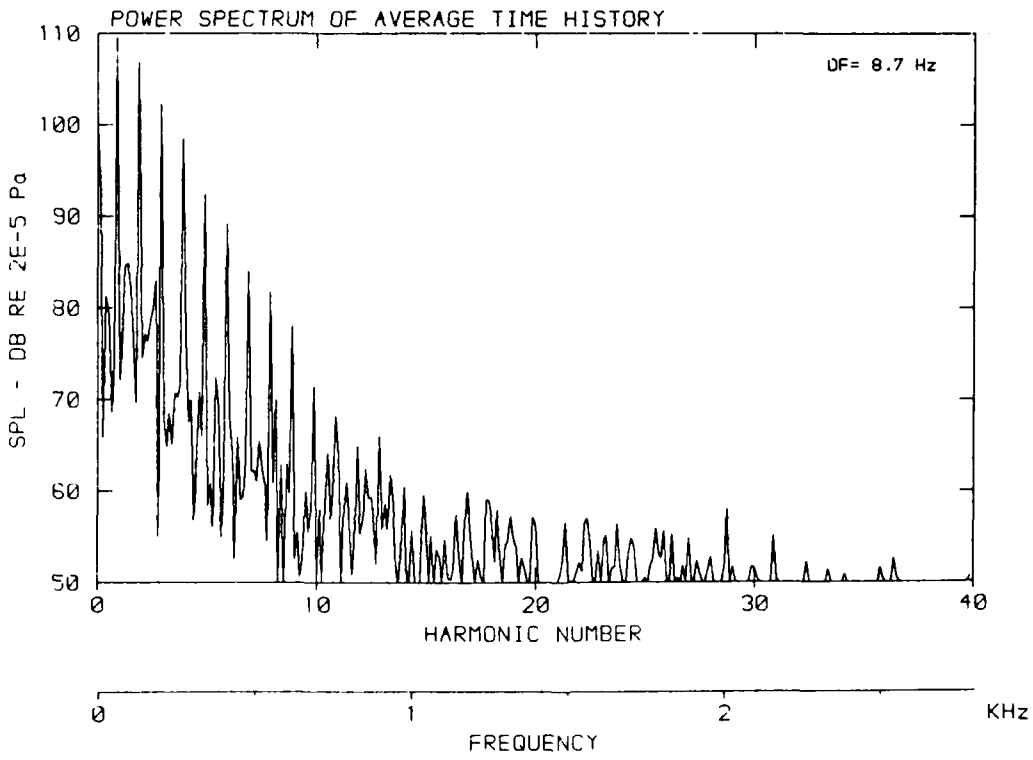
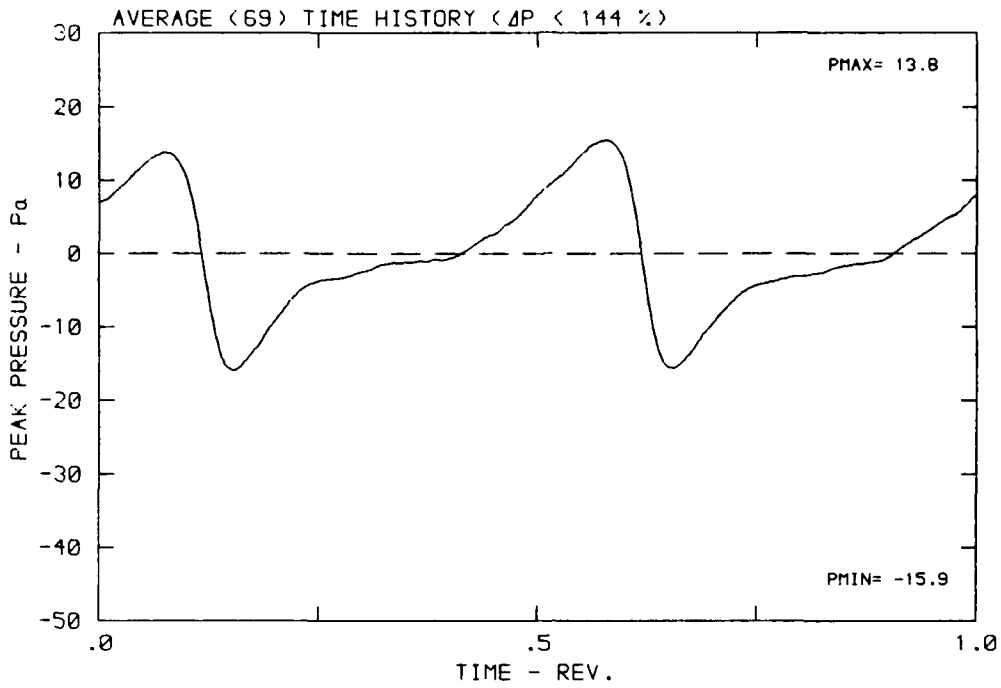
DATA POINT: FN-5 RUN: 170 MP: 8

β : 23.7° MH: .6739 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 288.0 K



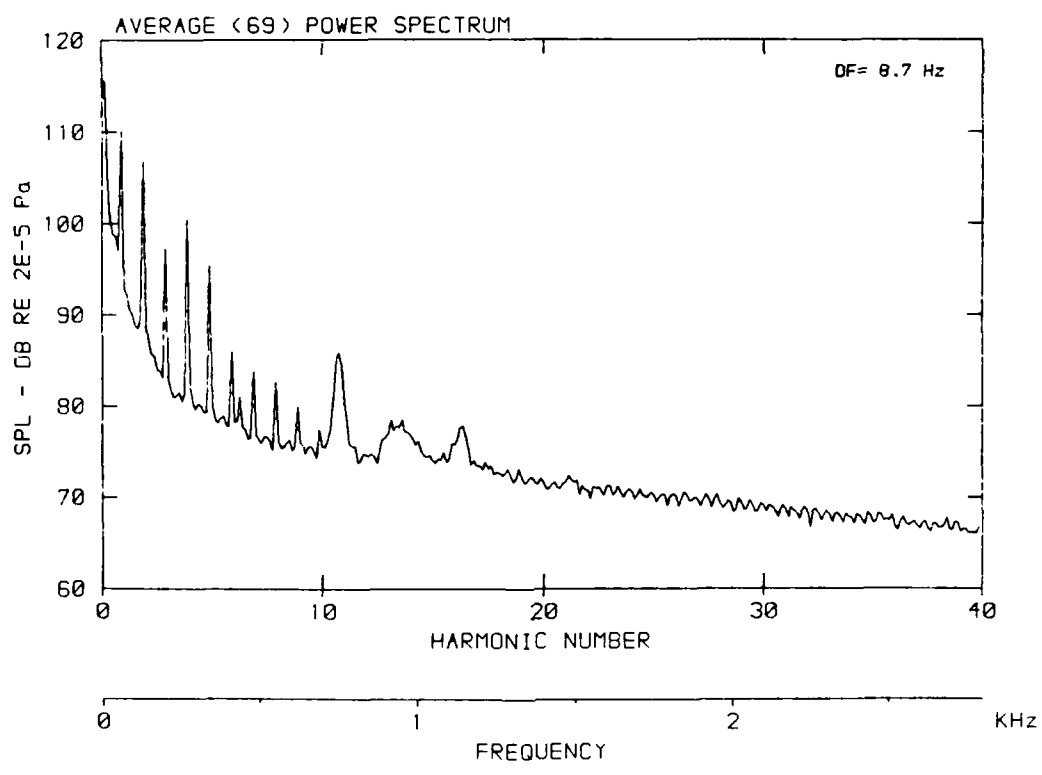
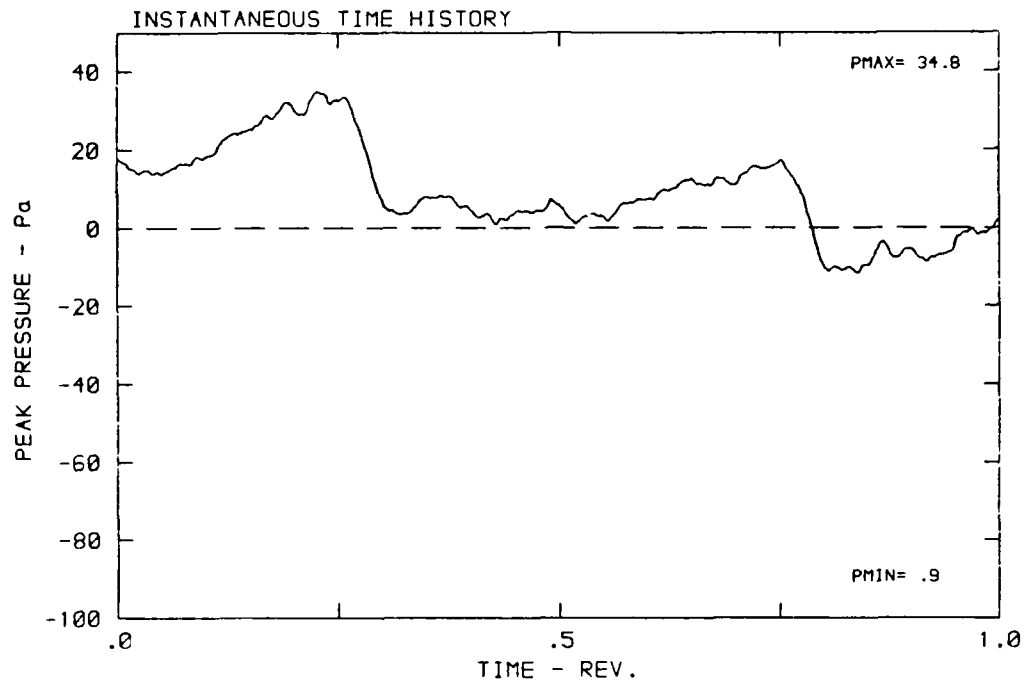
DATA POINT: FN-5 RUN: 170 MP: 8

β : 23.7° MH: .6739 n: 2100 rpm v/u: .231 ϕ : 3.6° T: 288.0 K



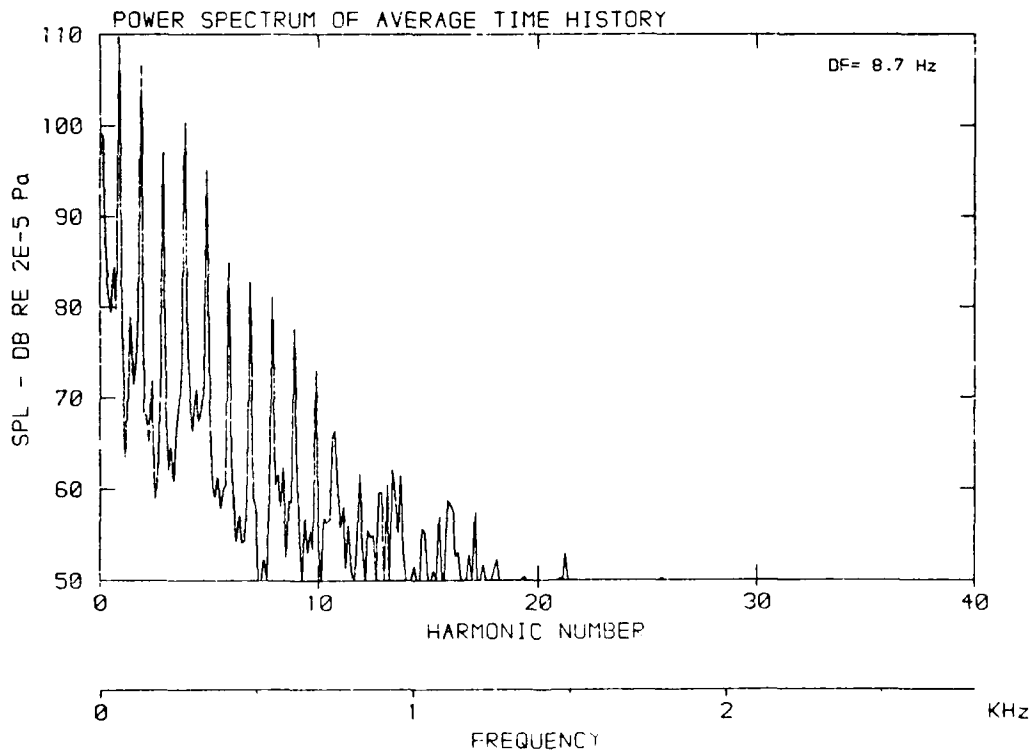
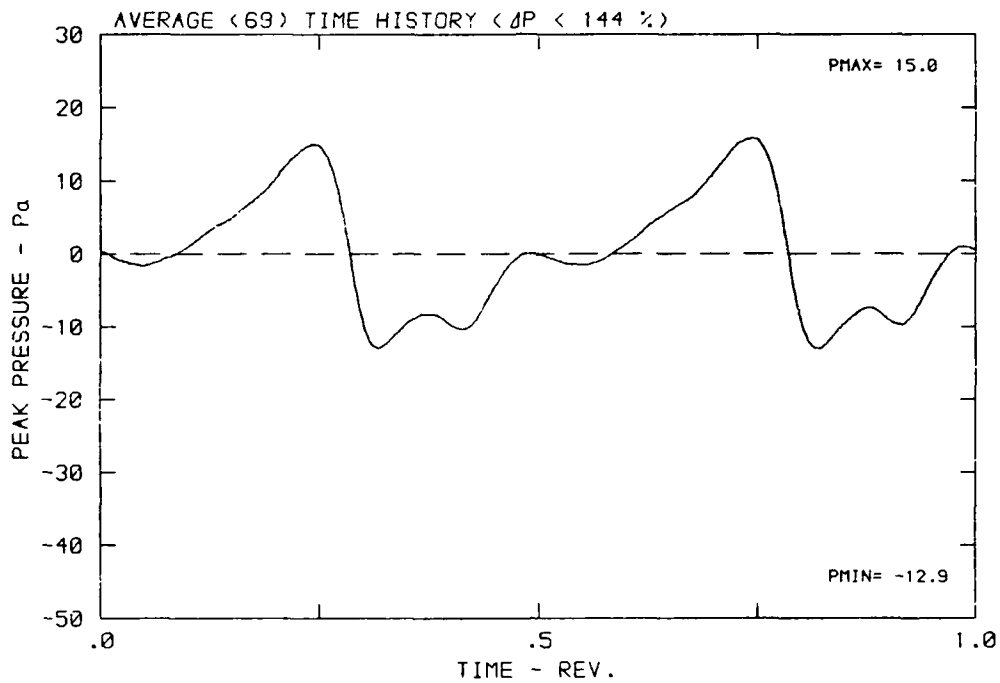
DATA POINT: FN-5 RUN: 170 MP: 9

β : 23.7° MH: .6739 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 288.0 K



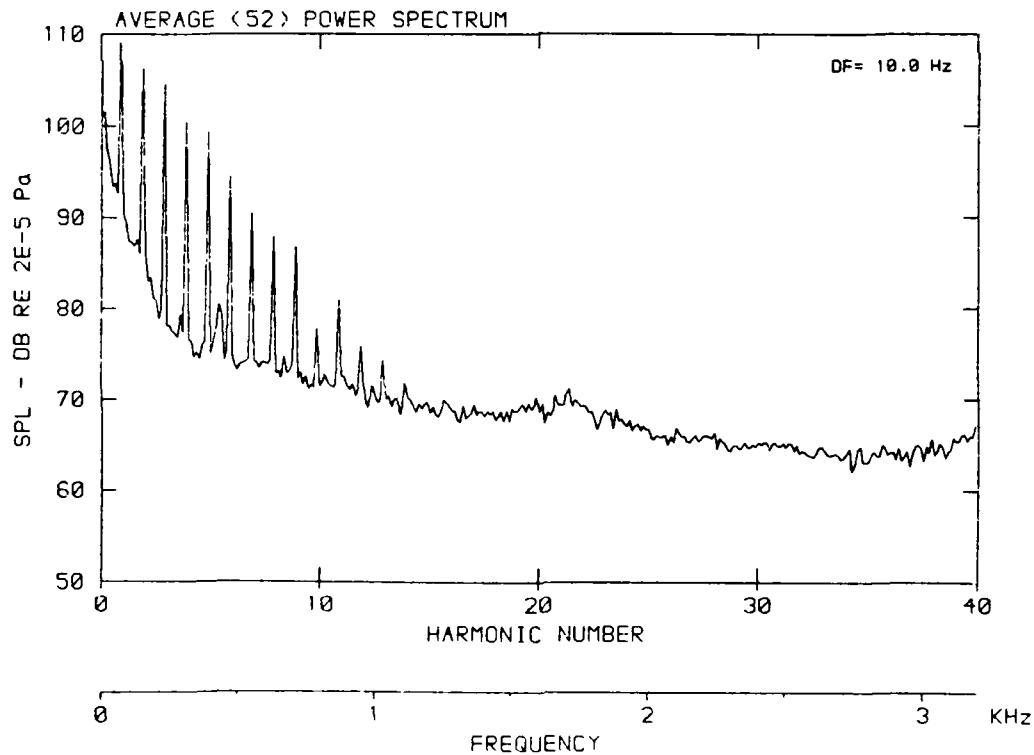
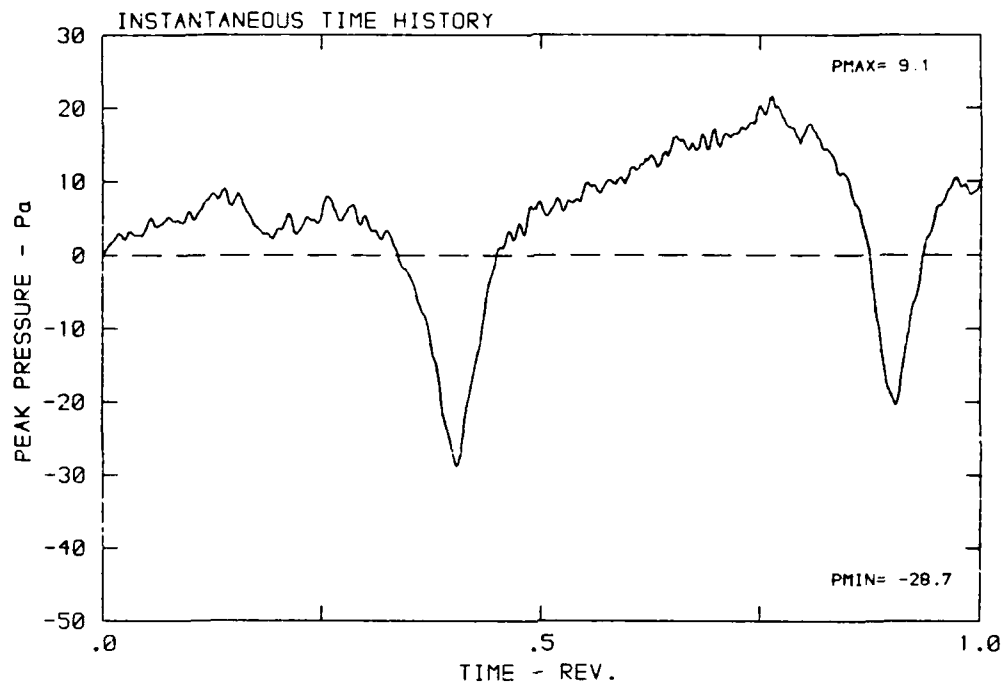
DATA POINT: FN-5 RUN: 170 MP: 9

β : 23.7° MH: .6739 n: 2100 rpm v/u : .231 ϕ : 3.6° T: 288.0 K



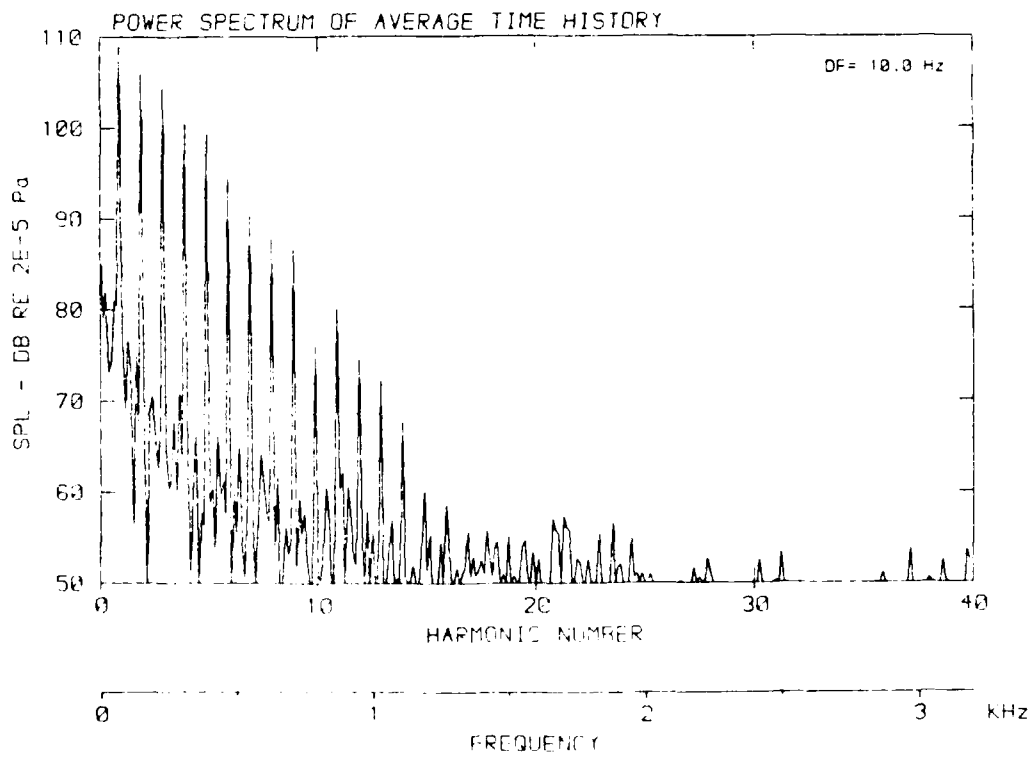
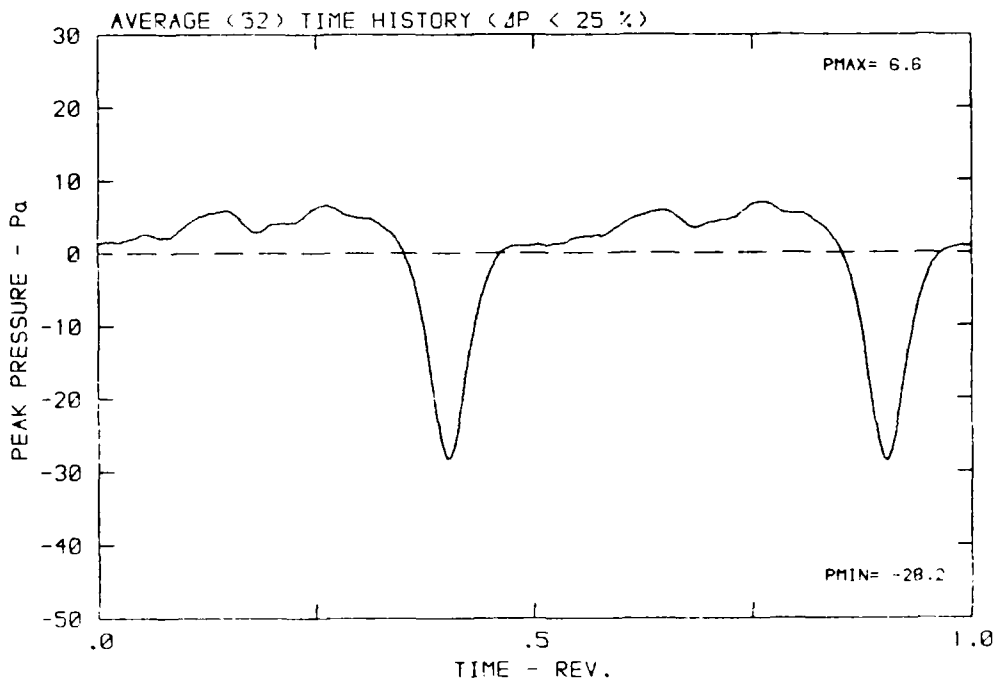
DATA POINT: FN-6 RUN: 171 MP: 1

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



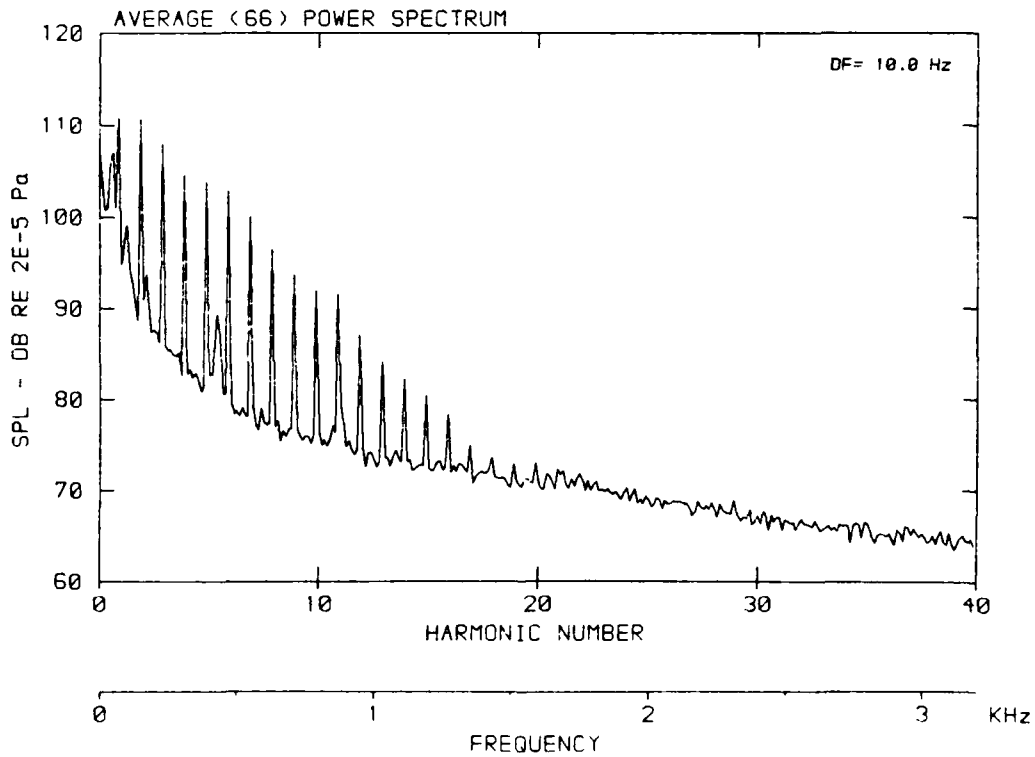
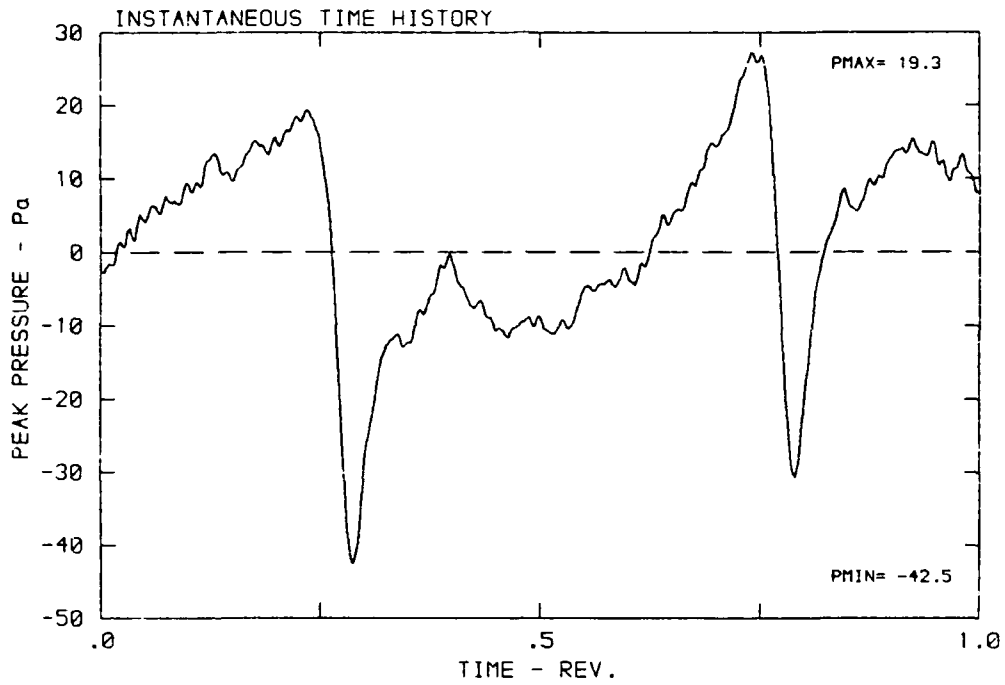
DATA POINT: FN-6 RUN: 171 MP: 1

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



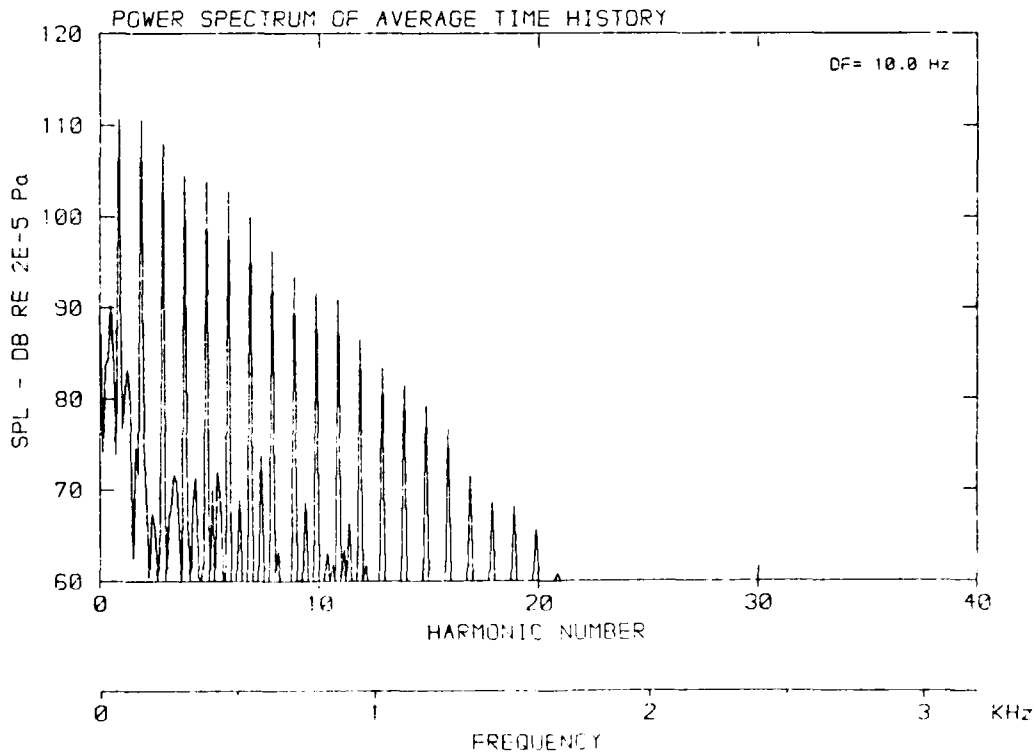
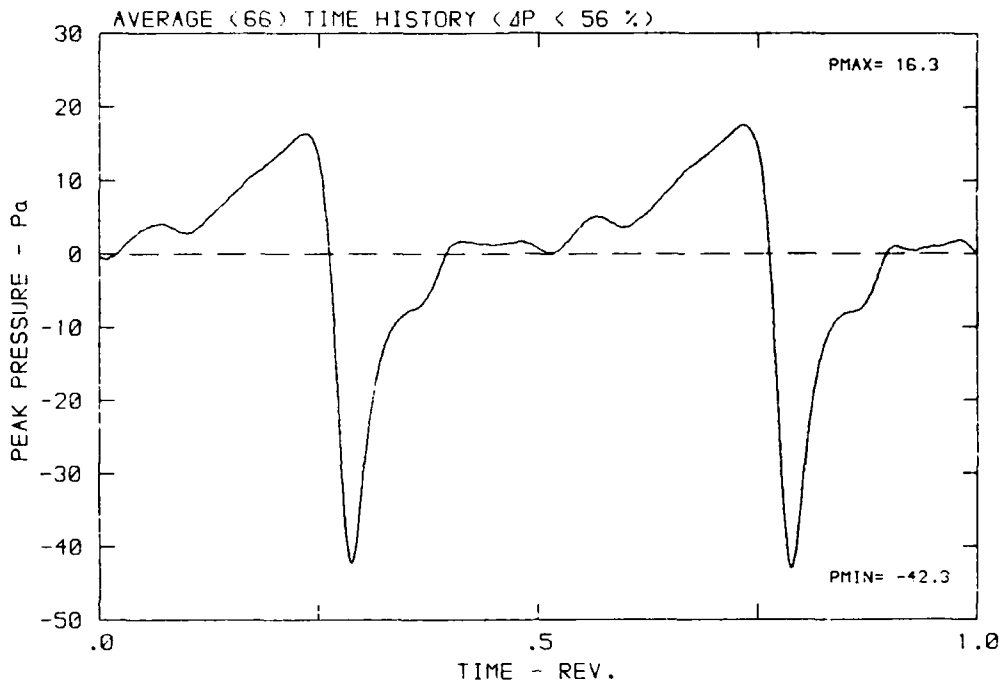
DATA POINT: FN-6 RUN: 171 MP: 2

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



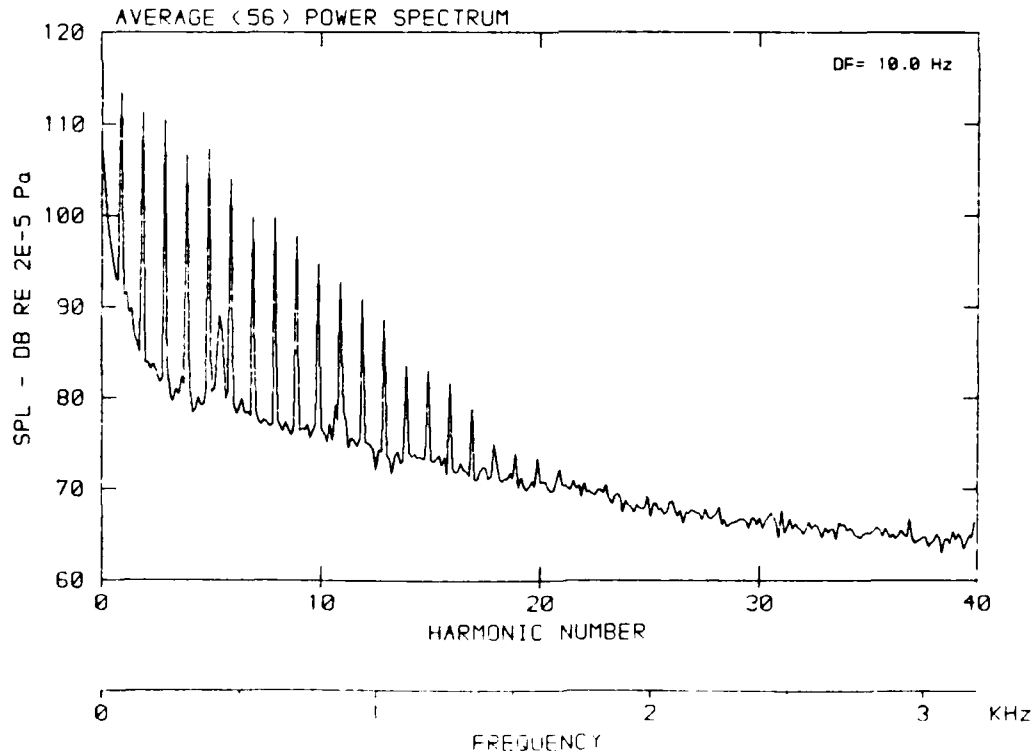
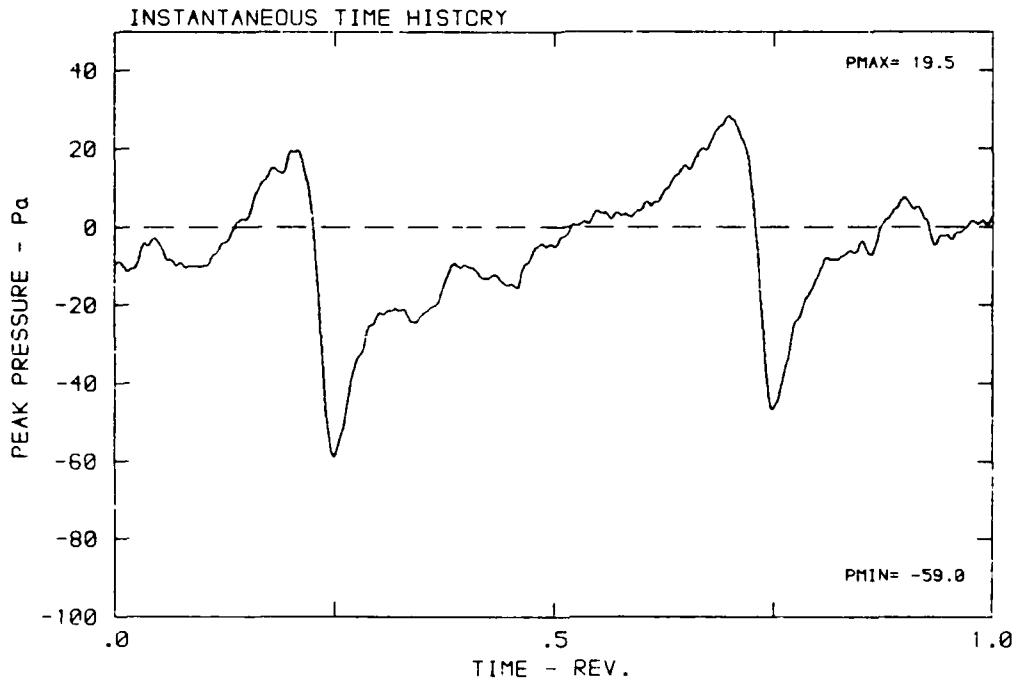
DATA POINT: FN-6 RUN: 171 MP: 2

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



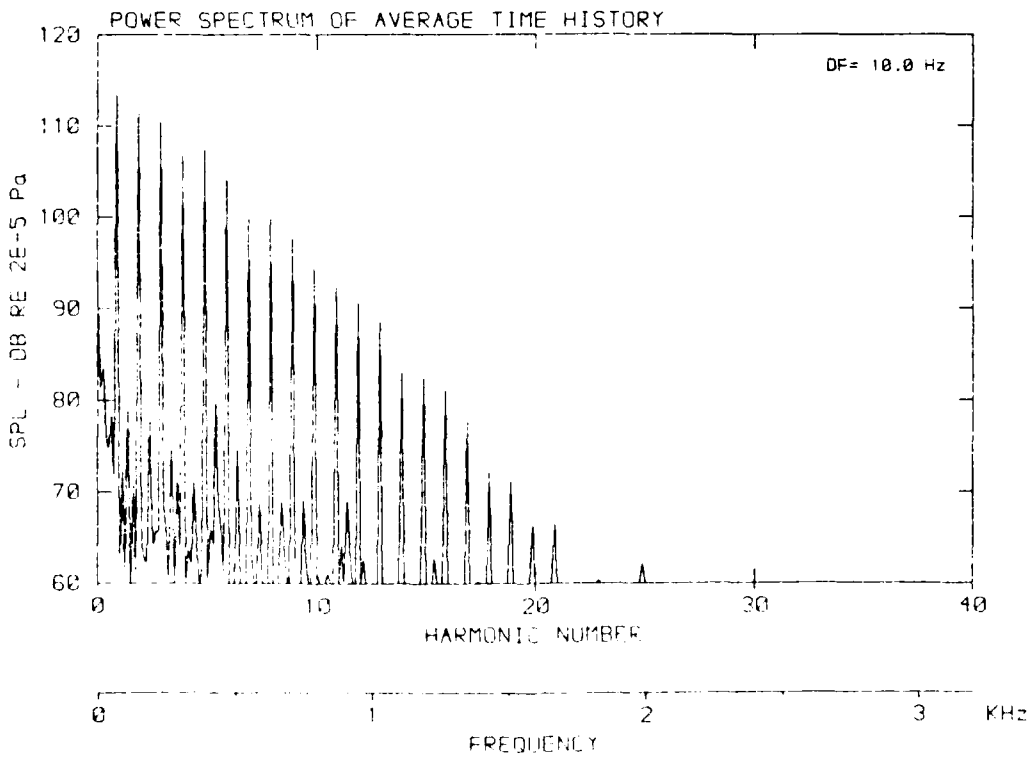
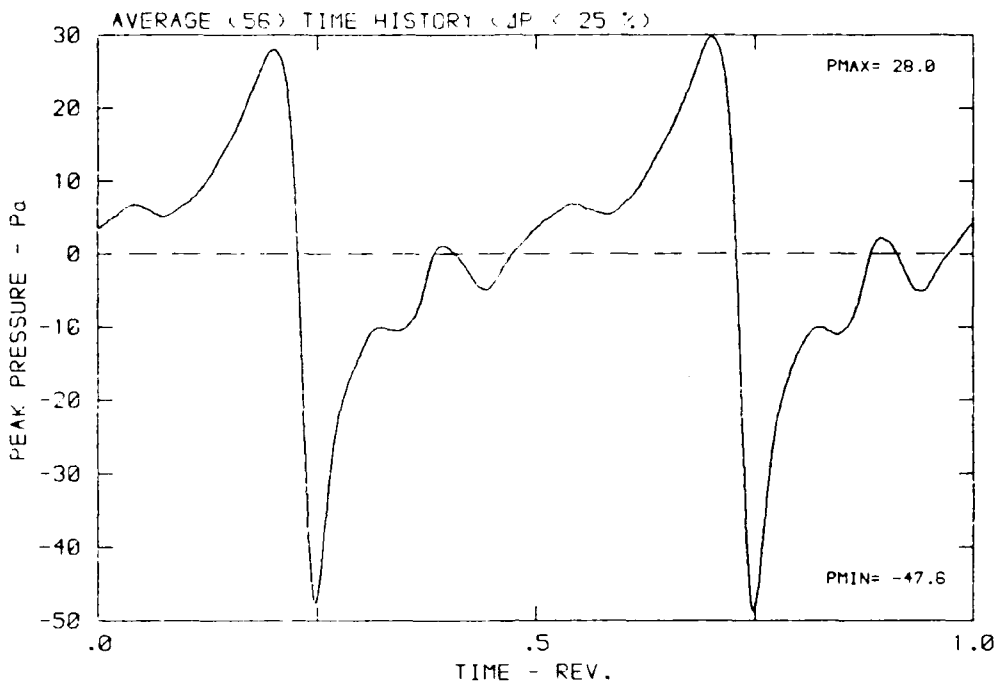
DATA POINT: FN-6 RUN: 171 MP: 3

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



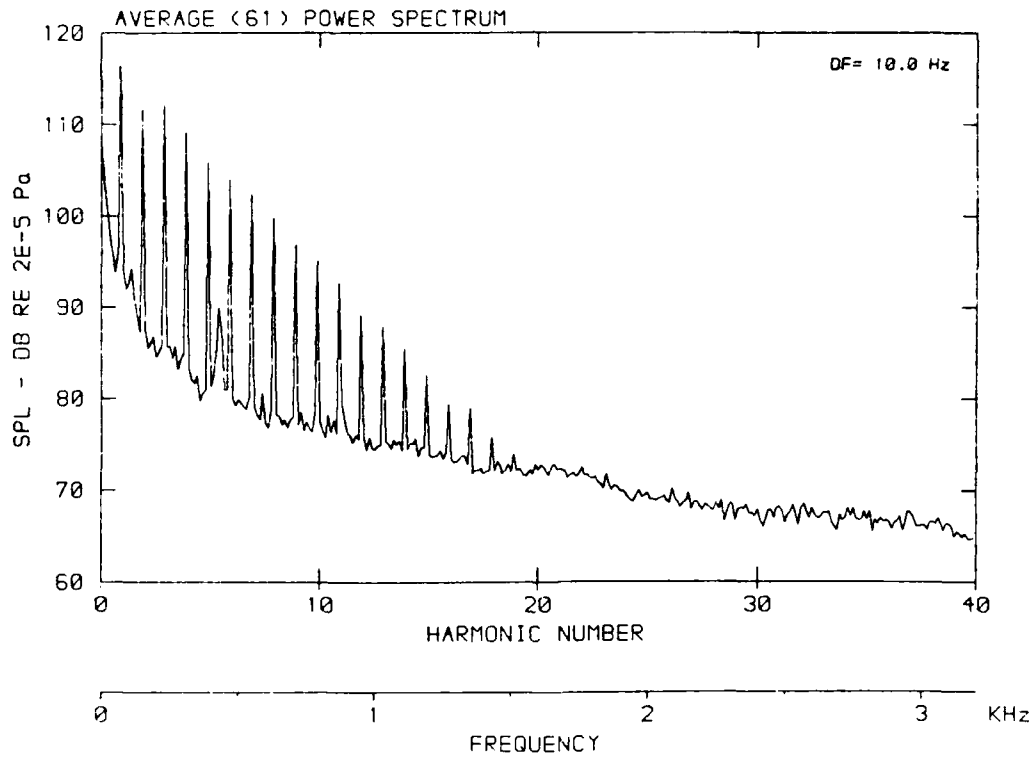
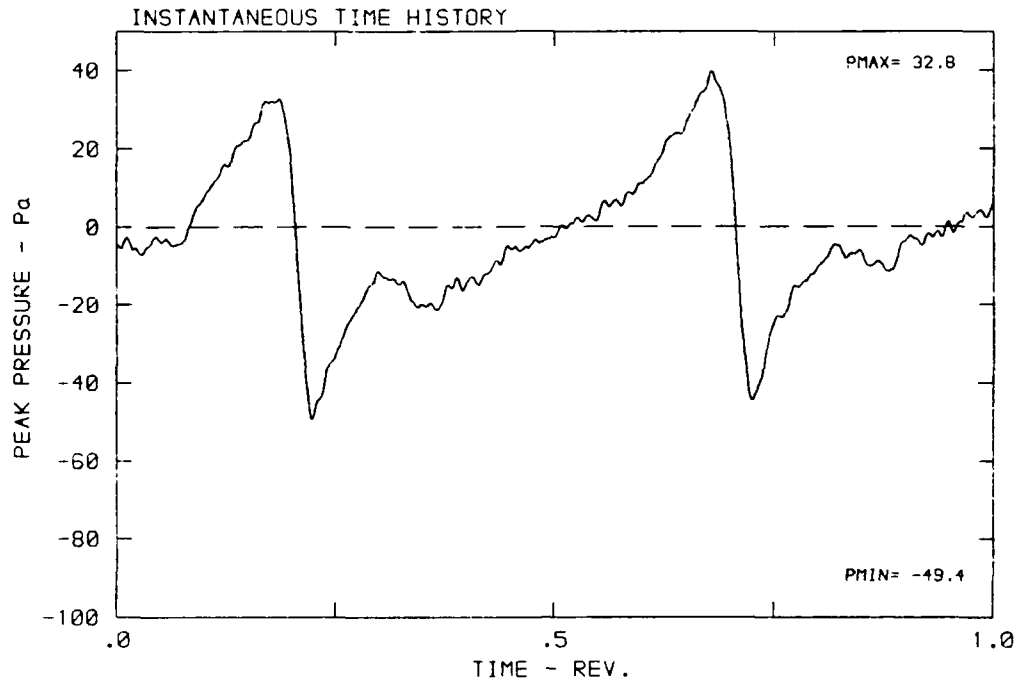
DATA POINT: FN-6 RUN: 171 MP: 3

β : 23.7° MH: .7756 n: 2400 rpm v/u : .264 ϕ : 3.6° T: 288.4 K



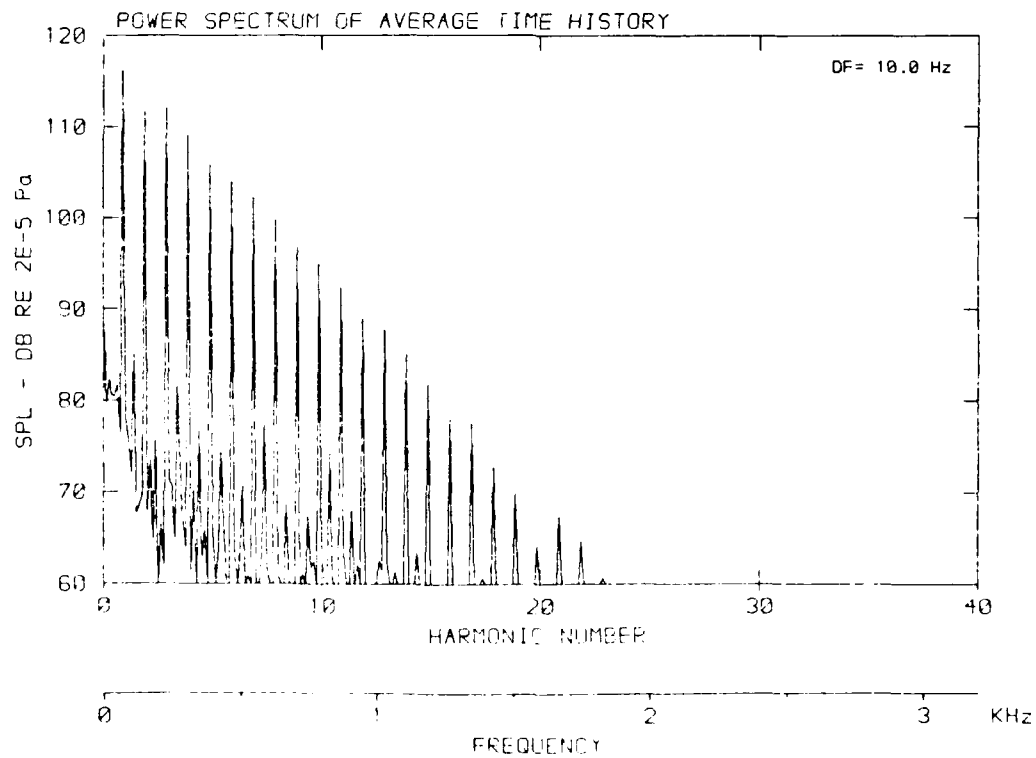
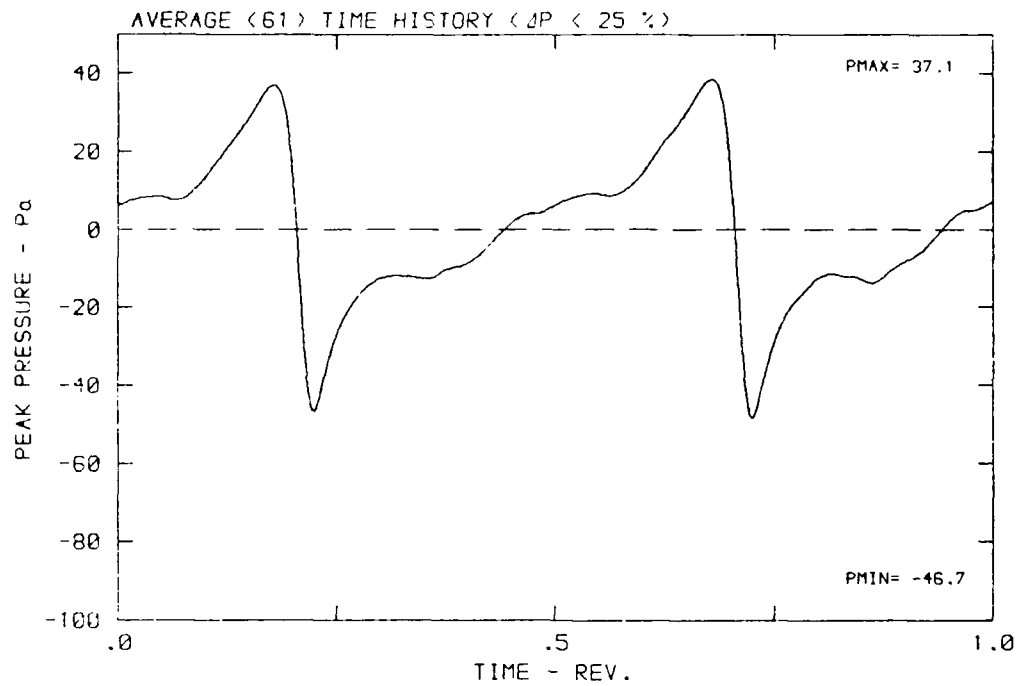
DATA POINT: FN-6 RUN: 171 MP: 4

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



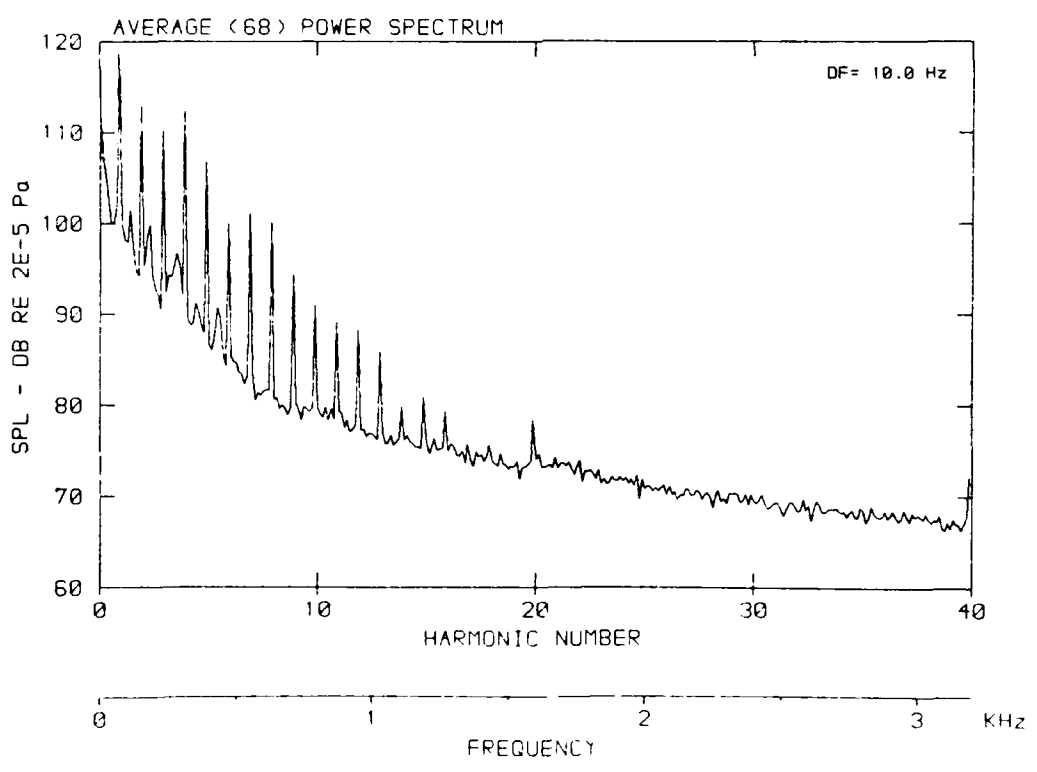
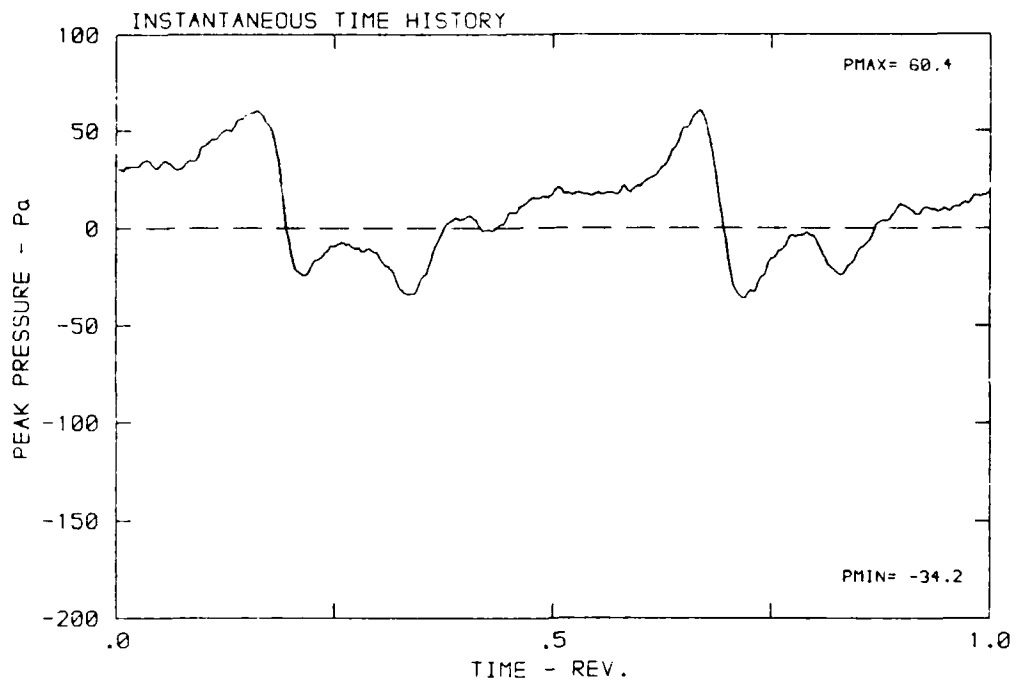
DATA POINT: FN-6 RUN: 171 MP: 4

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



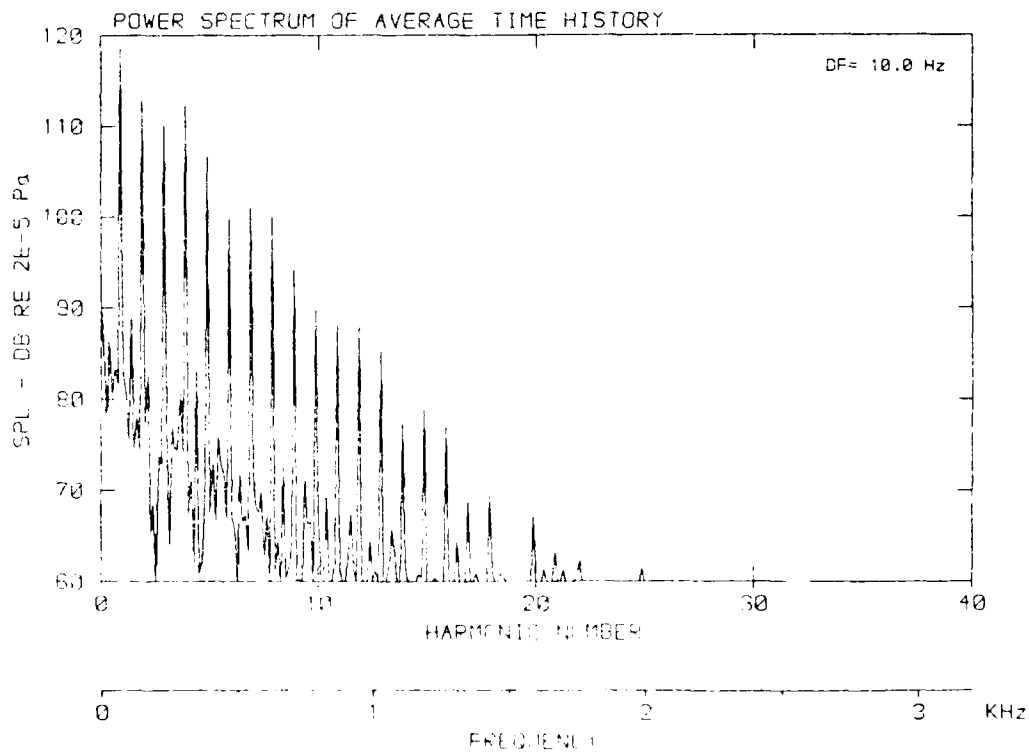
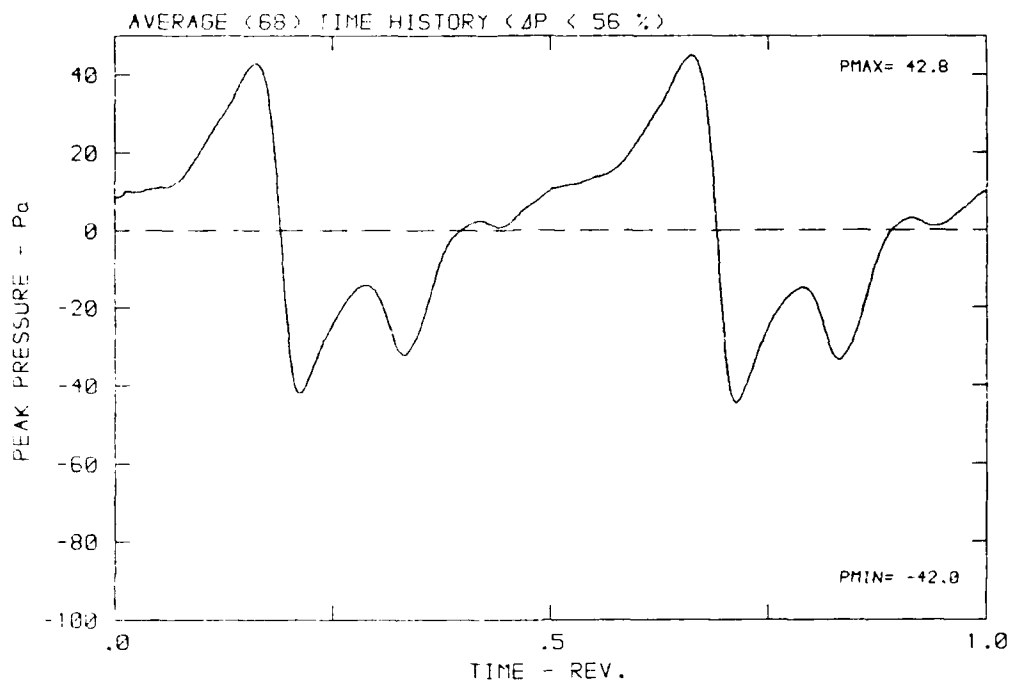
DATA POINT: FN-6 RUN: 171 MP: 5

β : 23.7° MH: .7756 n: 2400 rpm v/u : .264 ϕ : 3.6° T: 288.4 K



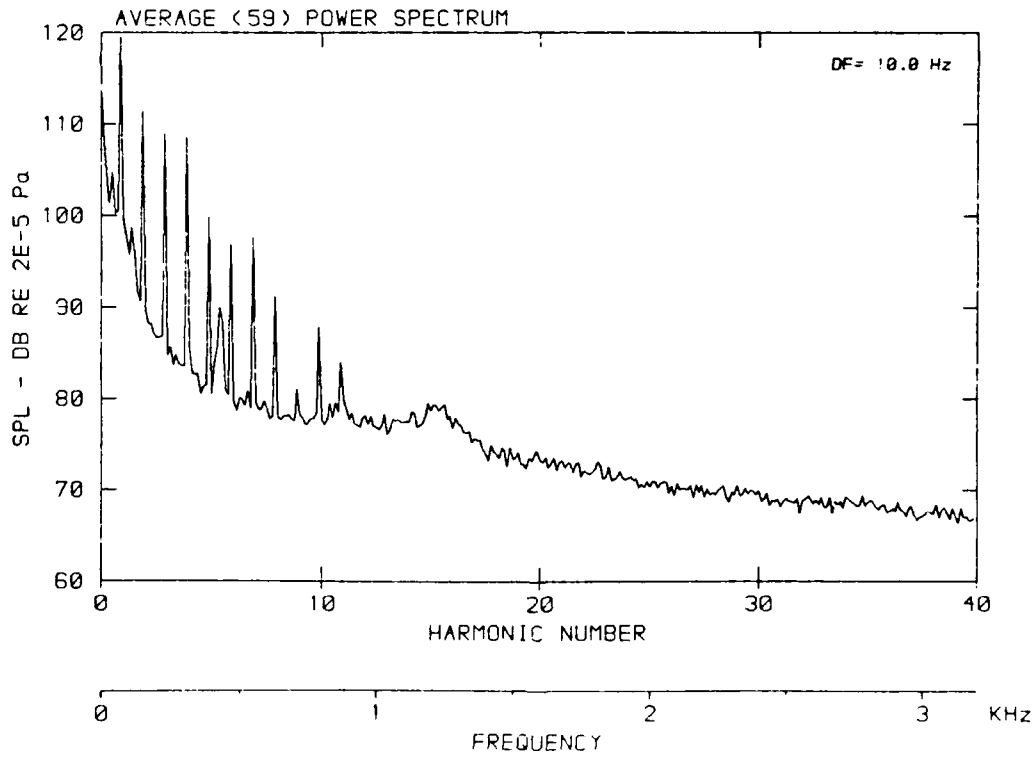
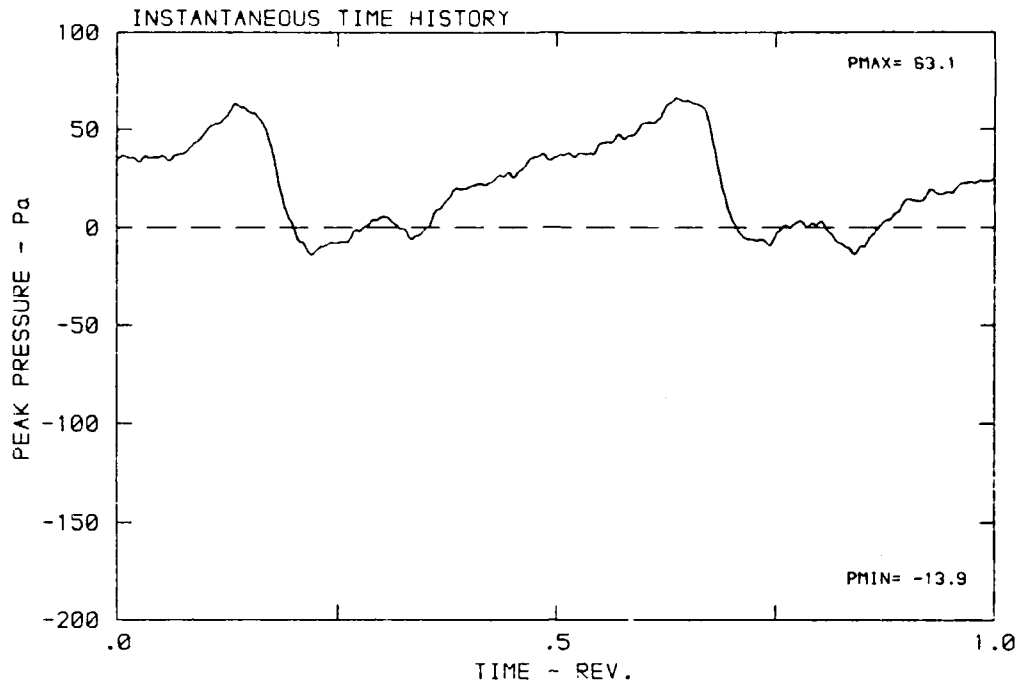
DATA POINT: FN-6 RUN: 171 MP: 5

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



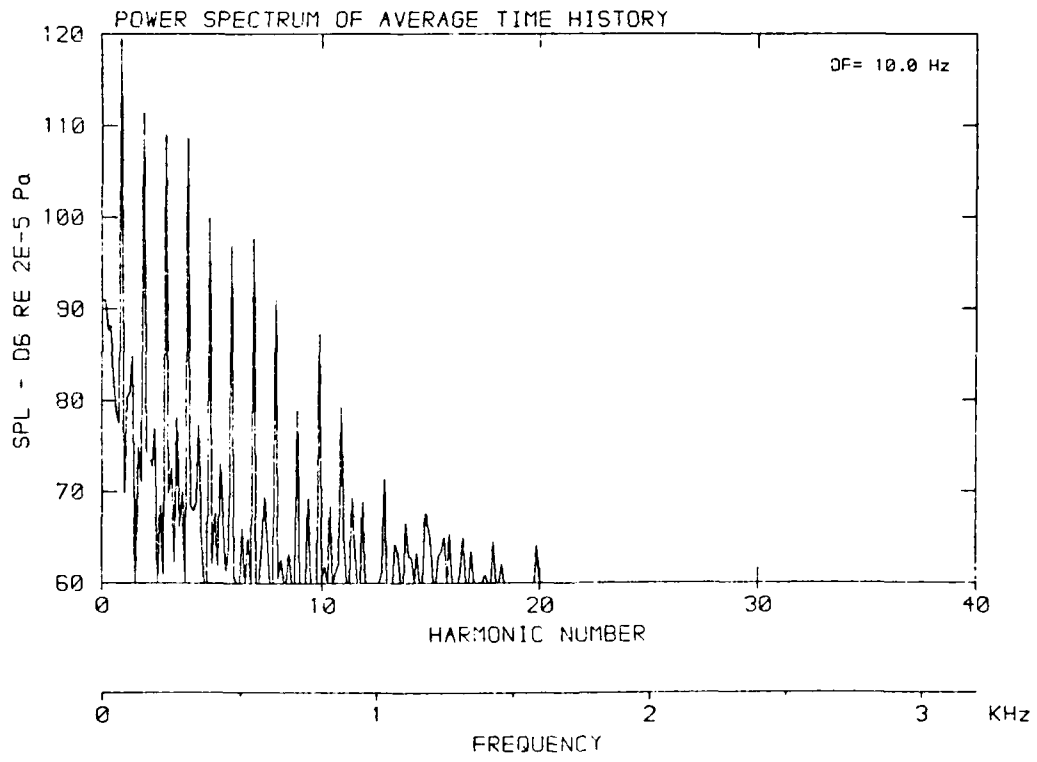
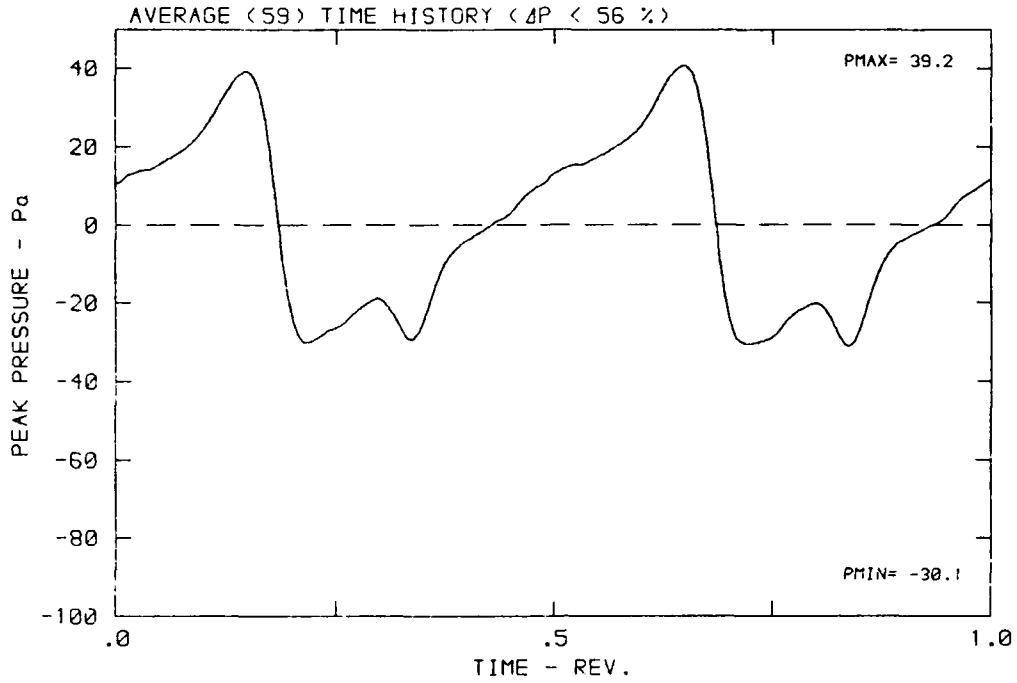
DATA POINT: FN-6 RUN: 171 MP: 6

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



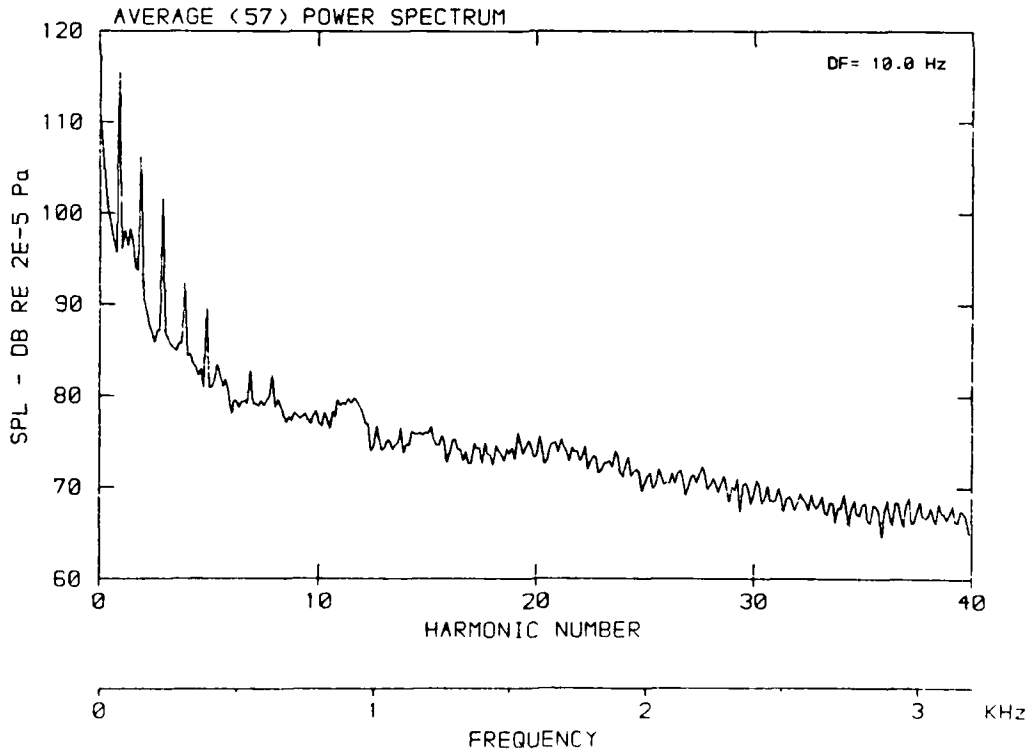
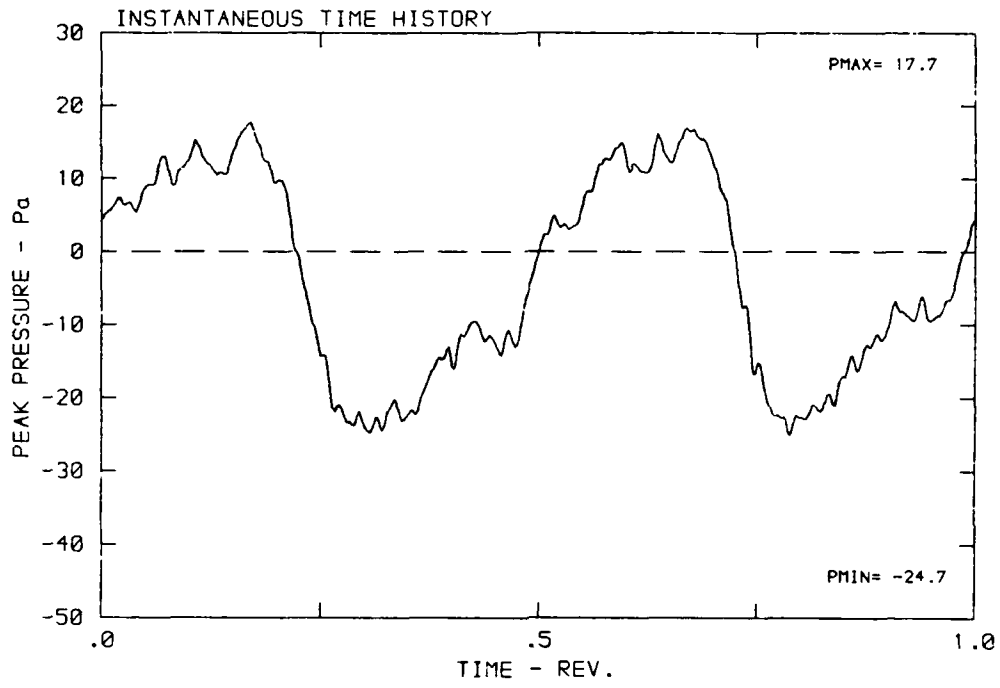
DATA POINT: FN-6 RUN: 171 MP: 6

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



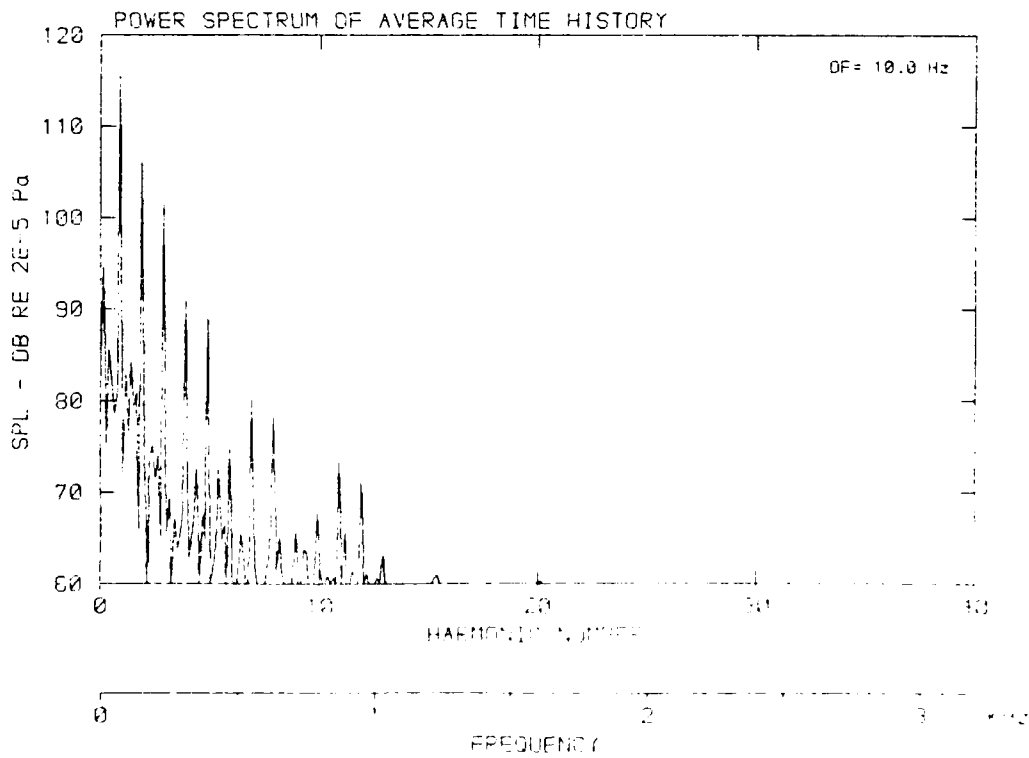
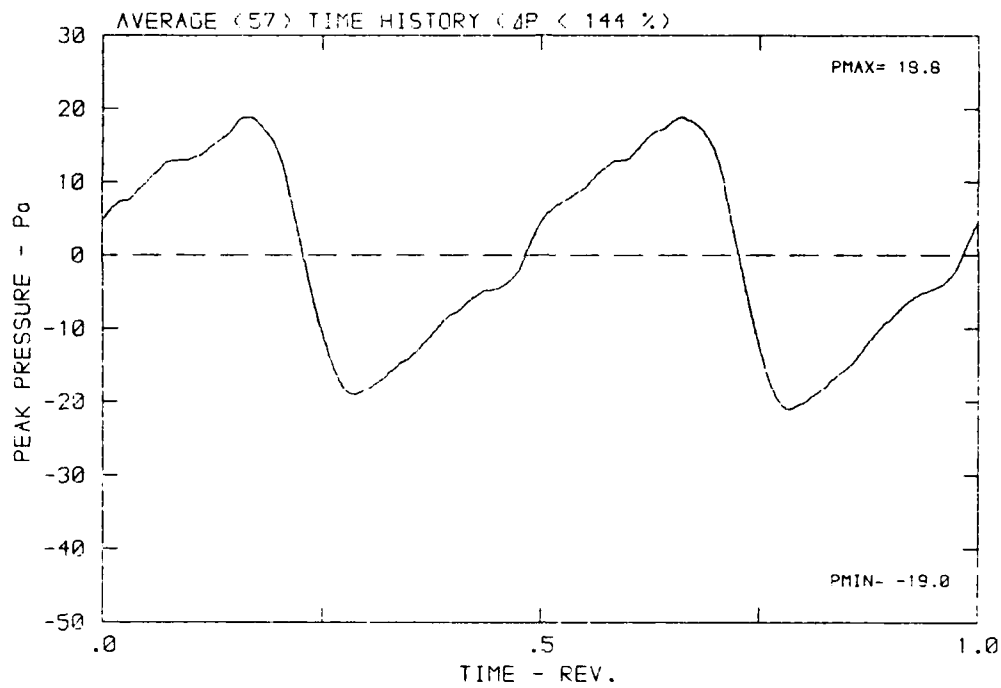
DATA POINT: FN-6 RUN: 171 MP: 7

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



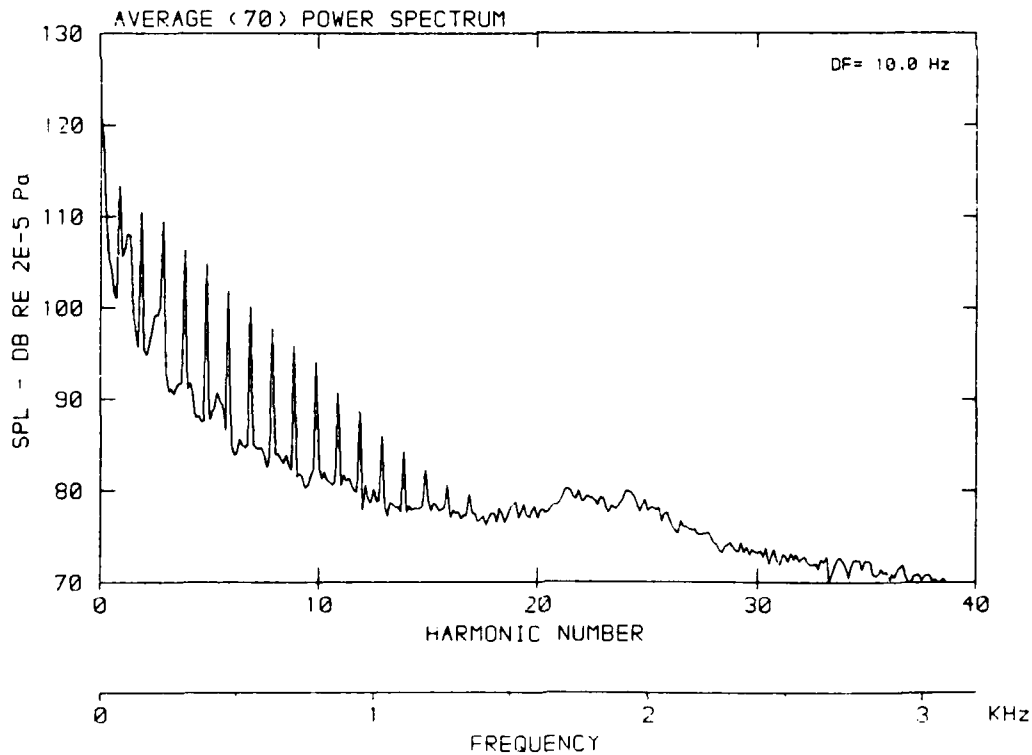
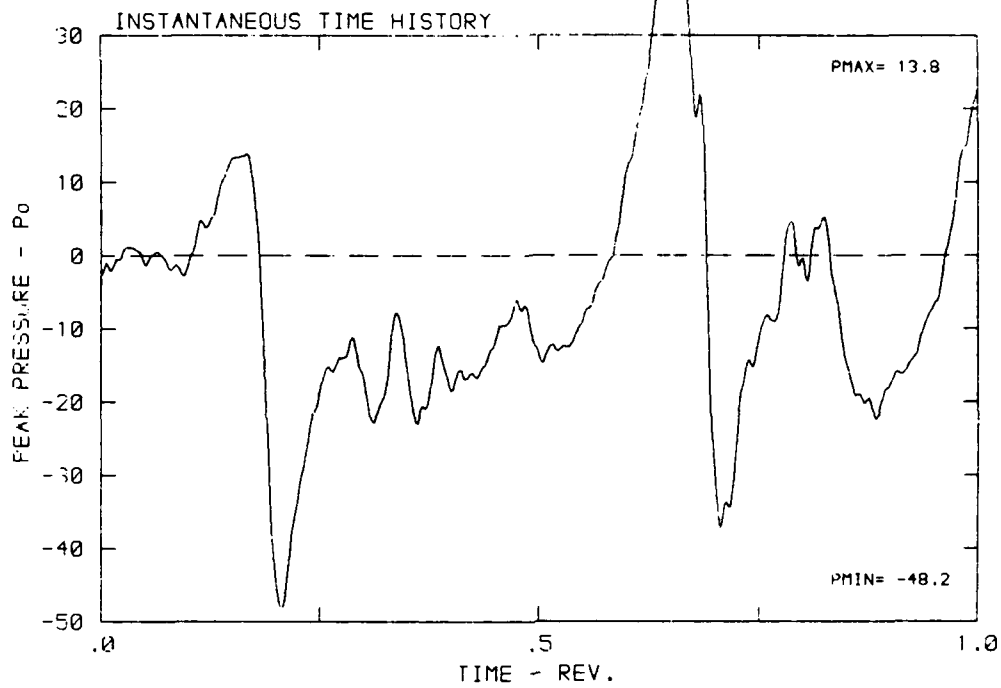
DATA POINT: FN-6 RUN: 171 MP: 7

β : 23.7° MH: .7755 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



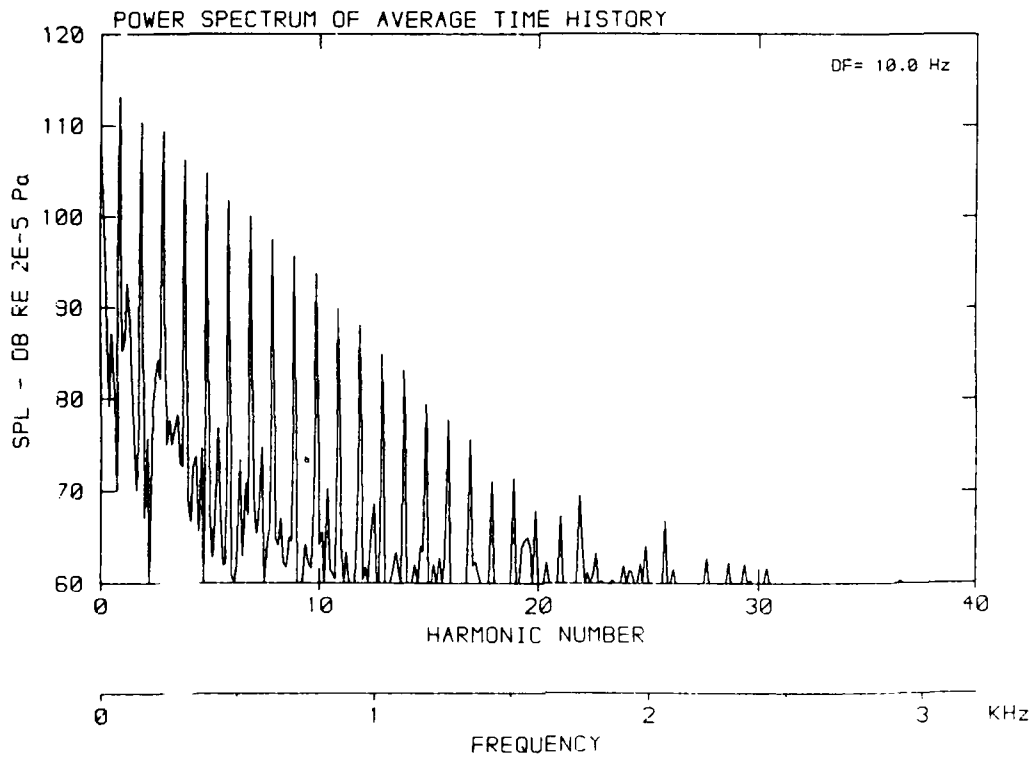
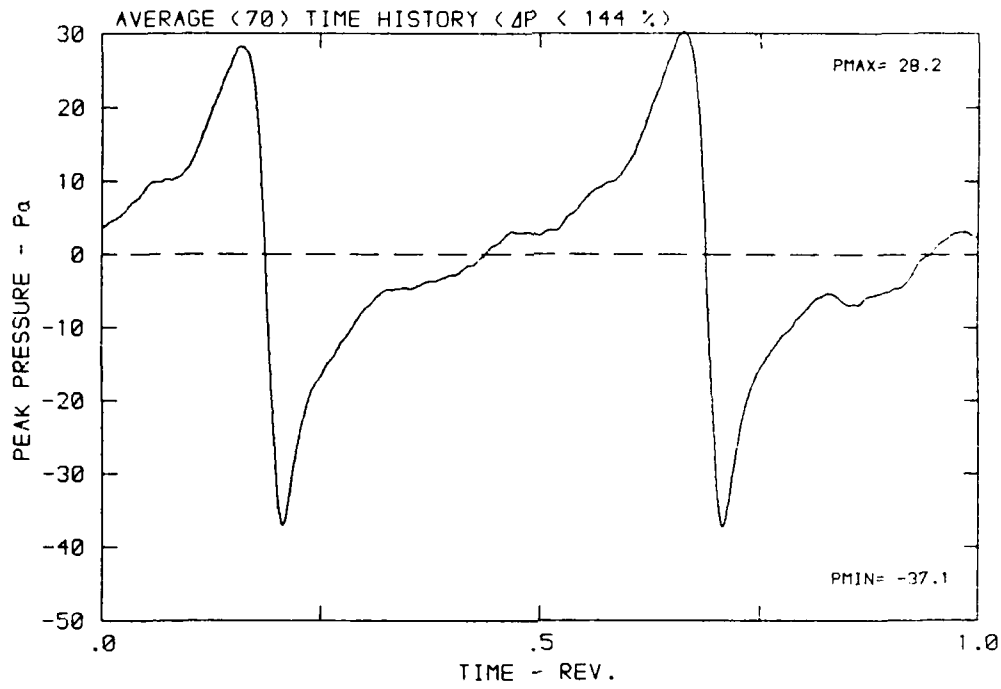
DATA POINT: FN-6 RUN: 171 MP: 8

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



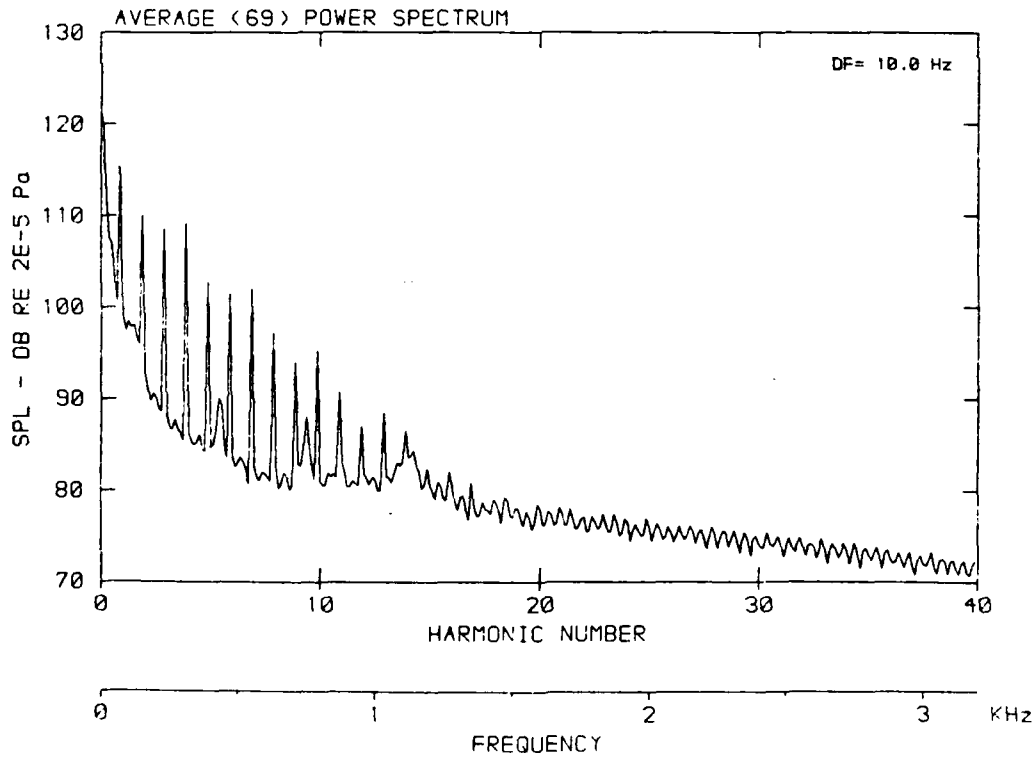
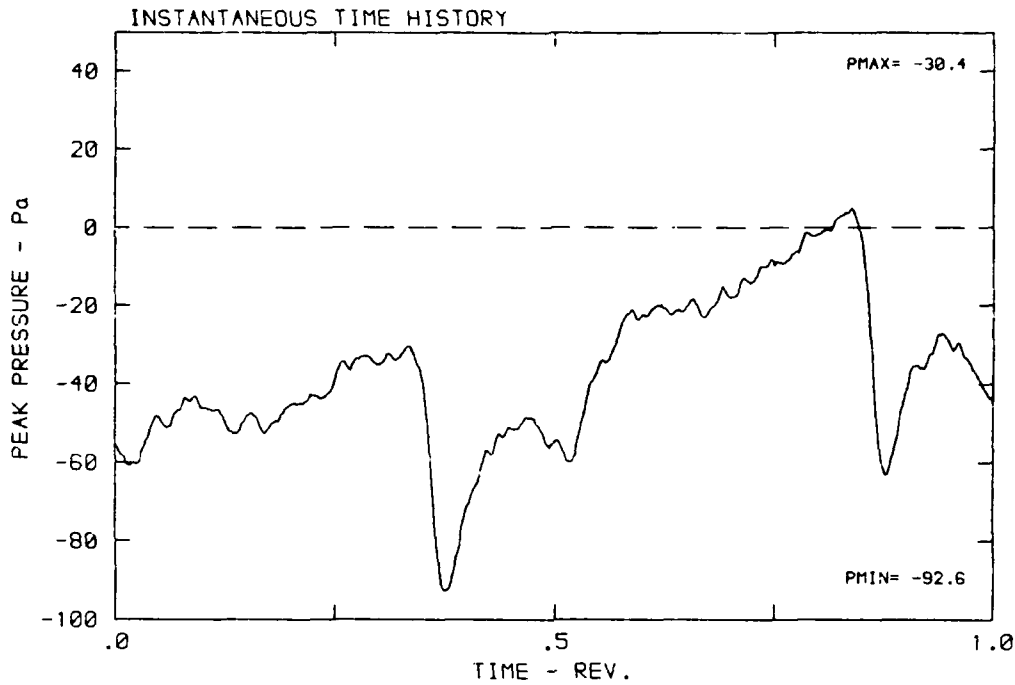
DATA POINT: FN-6 RUN: 171 MP: 8

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



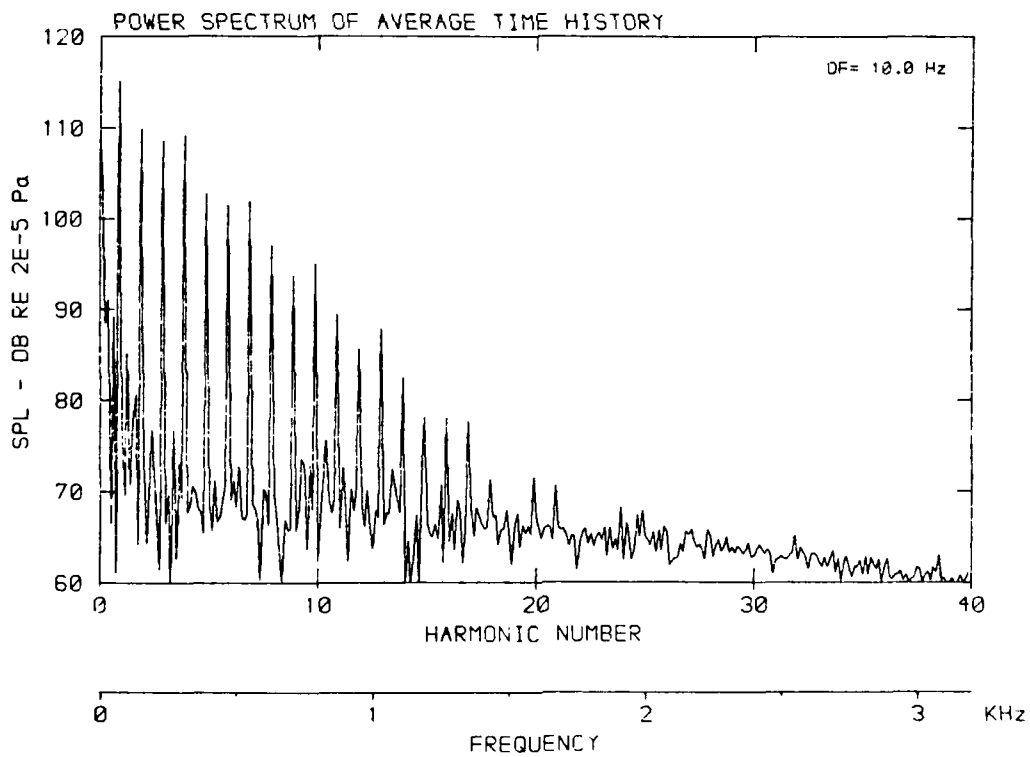
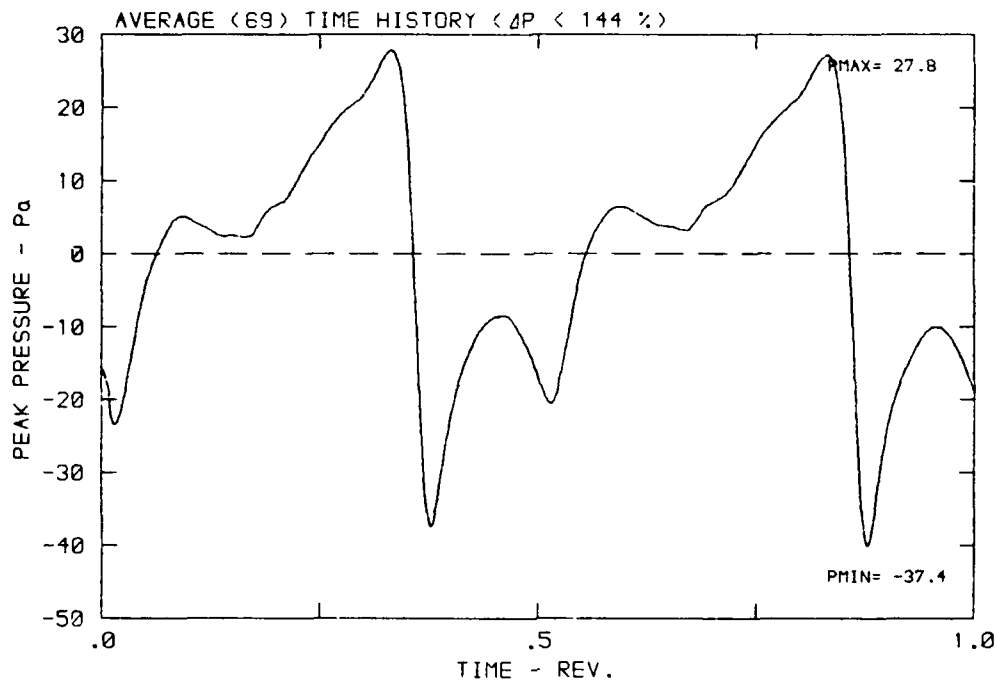
DATA POINT: FN-6 RUN: 171 MP: 9

β : 23.7° MH: .7756 n: 2400 rpm v/u : .264 ϕ : 3.6° T: 288.4 K



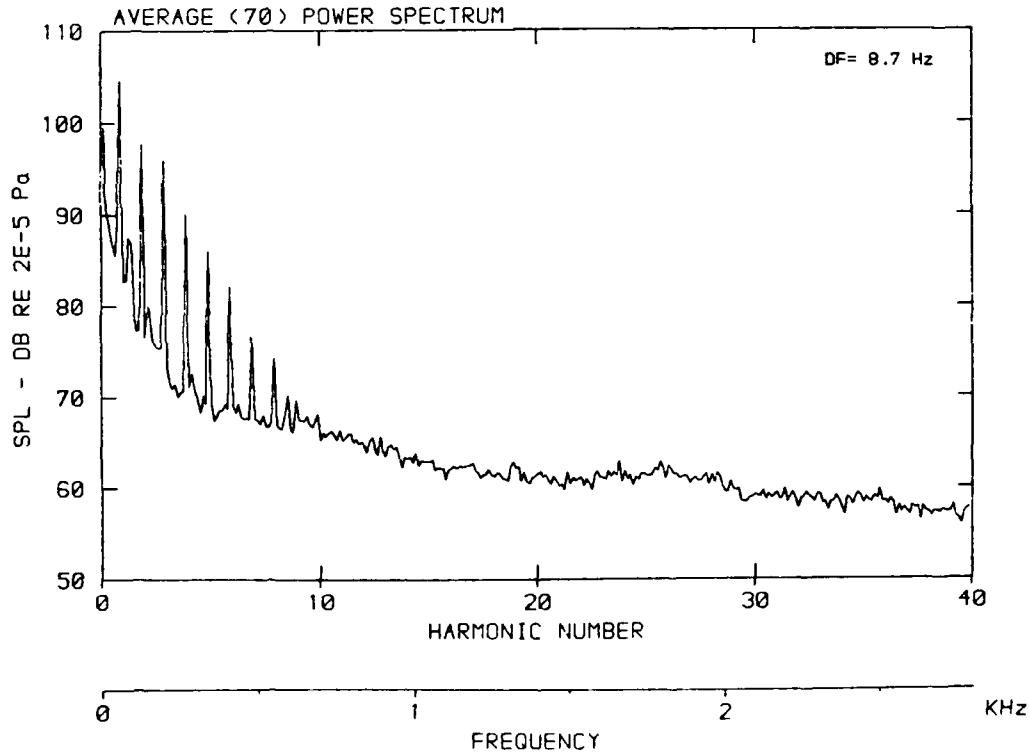
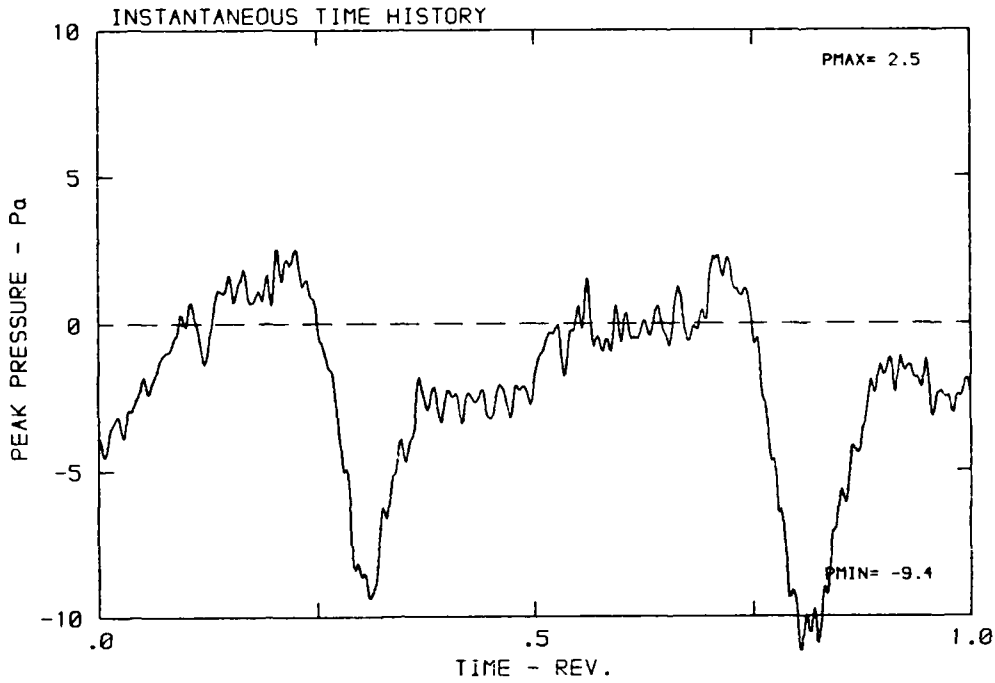
DATA POINT: FN-6 RUN: 171 MP: 9

β : 23.7° MH: .7756 n: 2400 rpm v/u: .264 ϕ : 3.6° T: 288.4 K



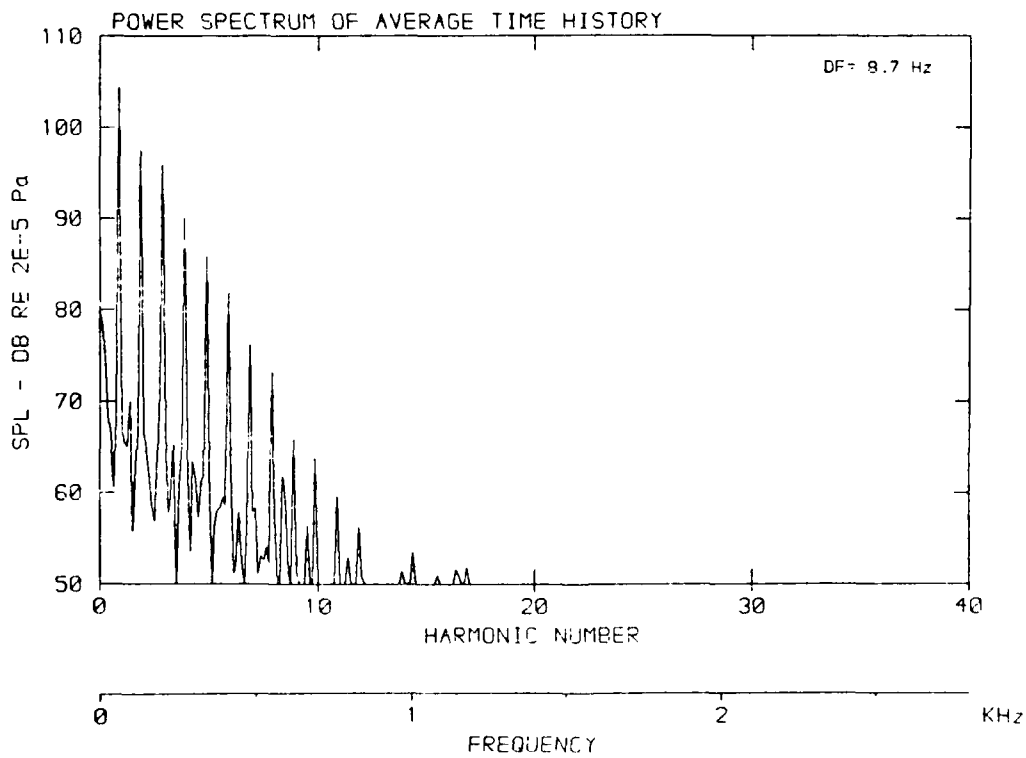
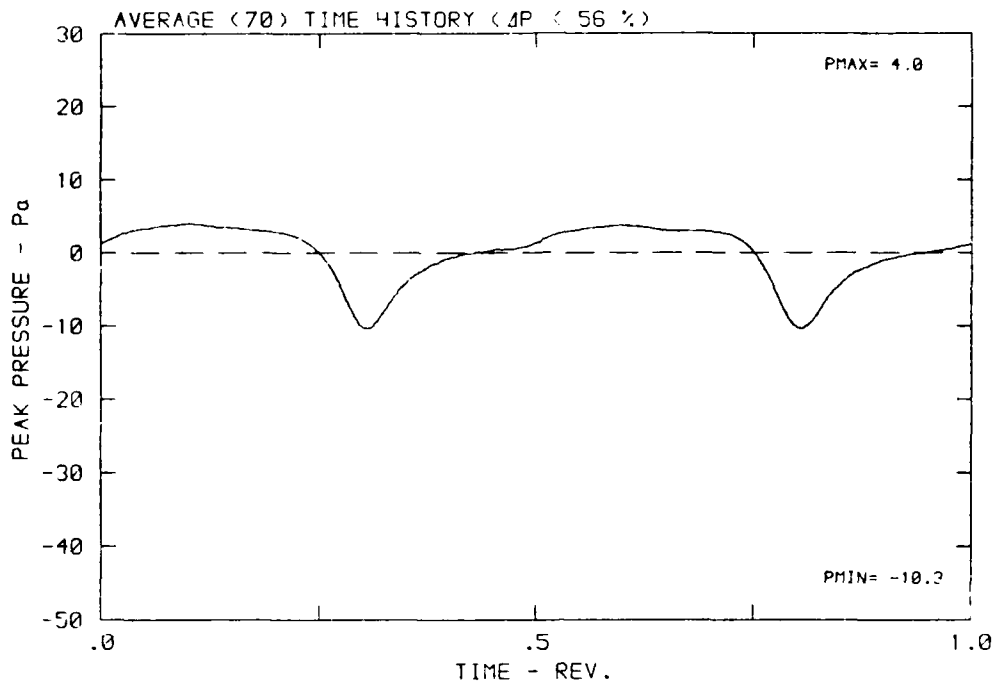
DATA POINT: EN-1 RUN: 163 MP: 1

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.8 K



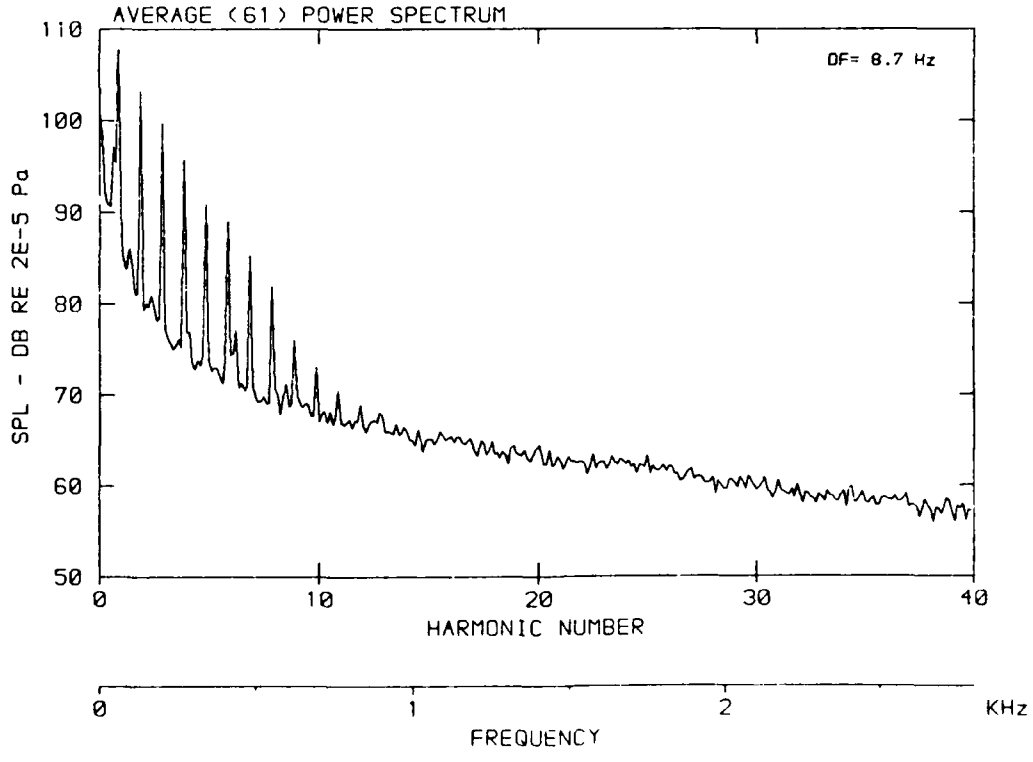
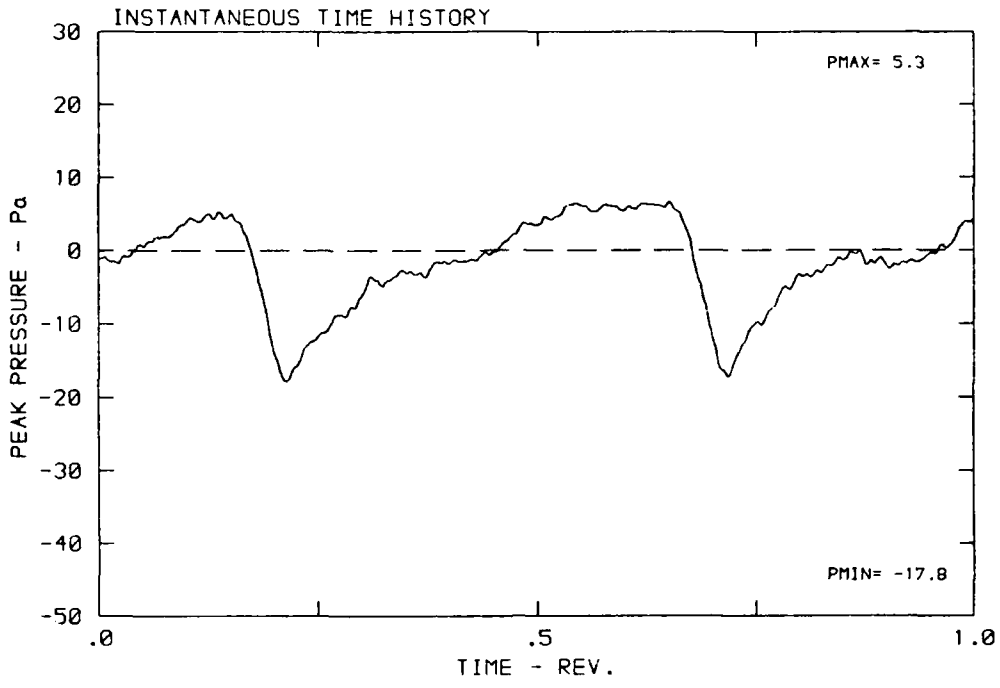
DATA POINT: EN-1 RUN: 163 MP: 1

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.8 K



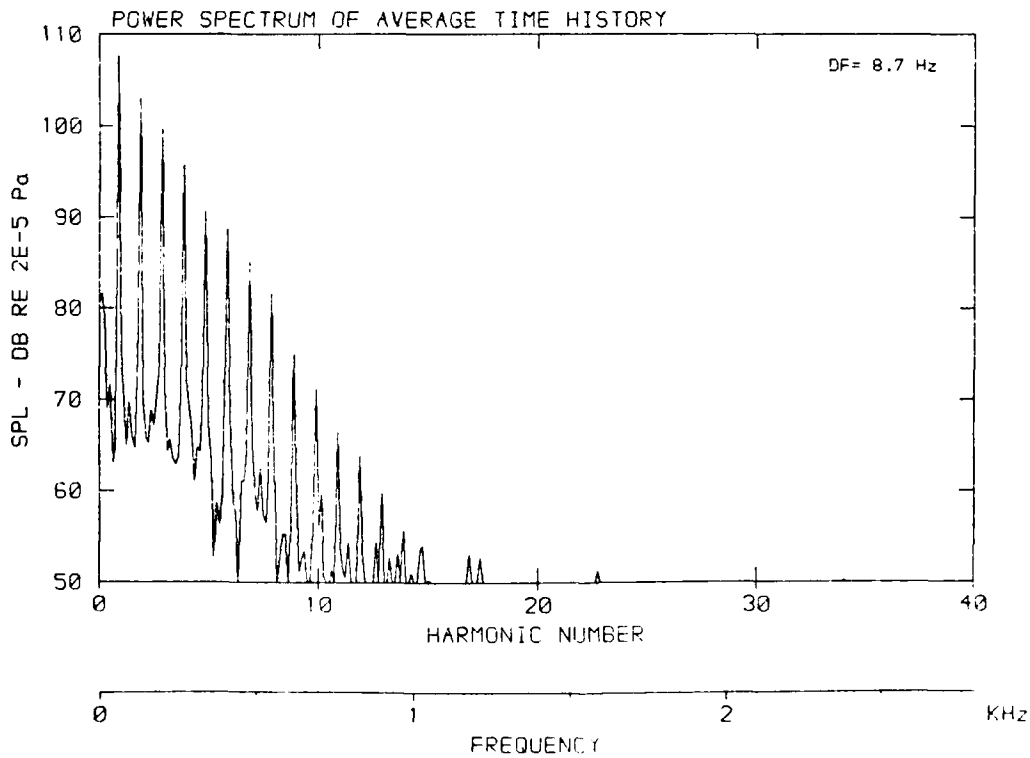
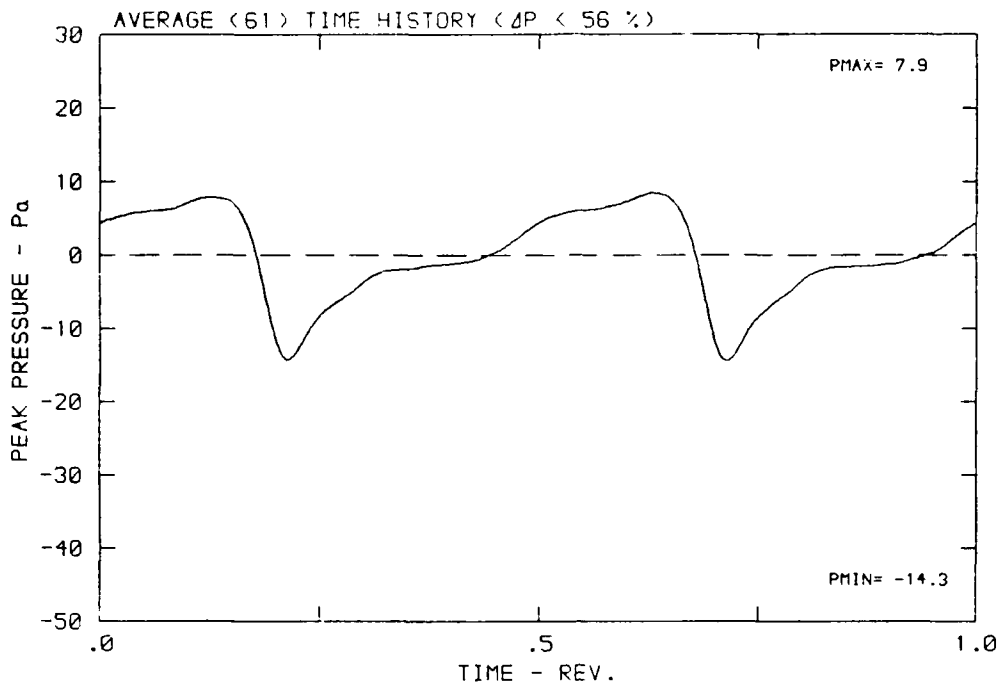
DATA POINT: EN-1 RUN: 163 MP: 2

β : 19.9° MH: .6764 n: 2100 rpm v/u : .230 ϕ : 7.3° T: 285.8 K



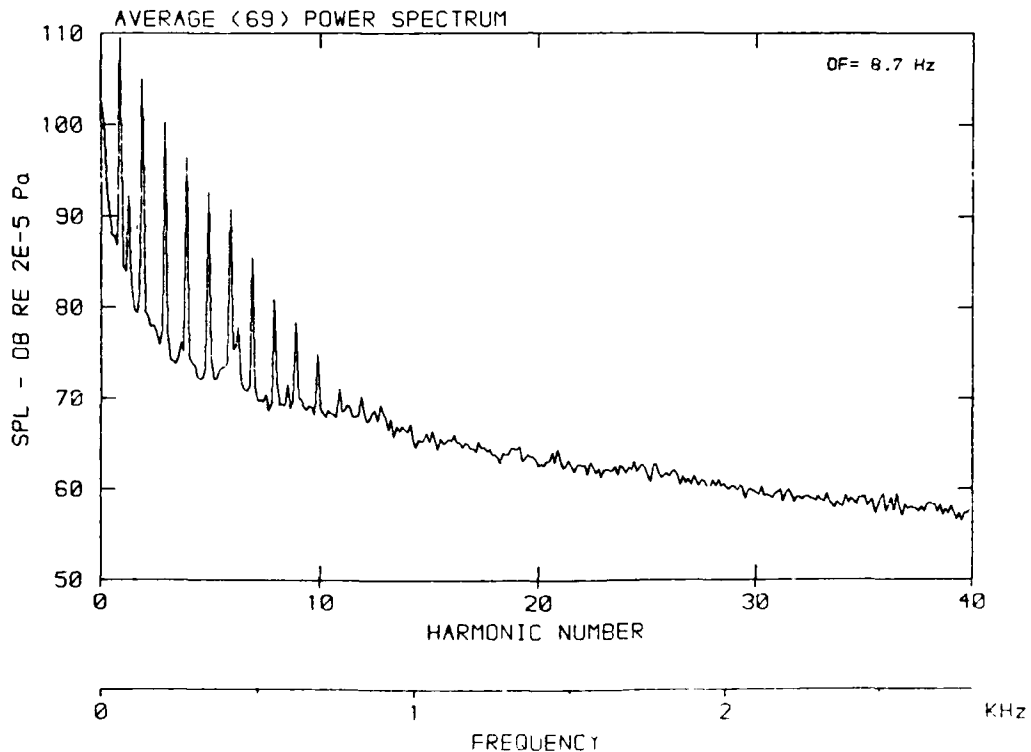
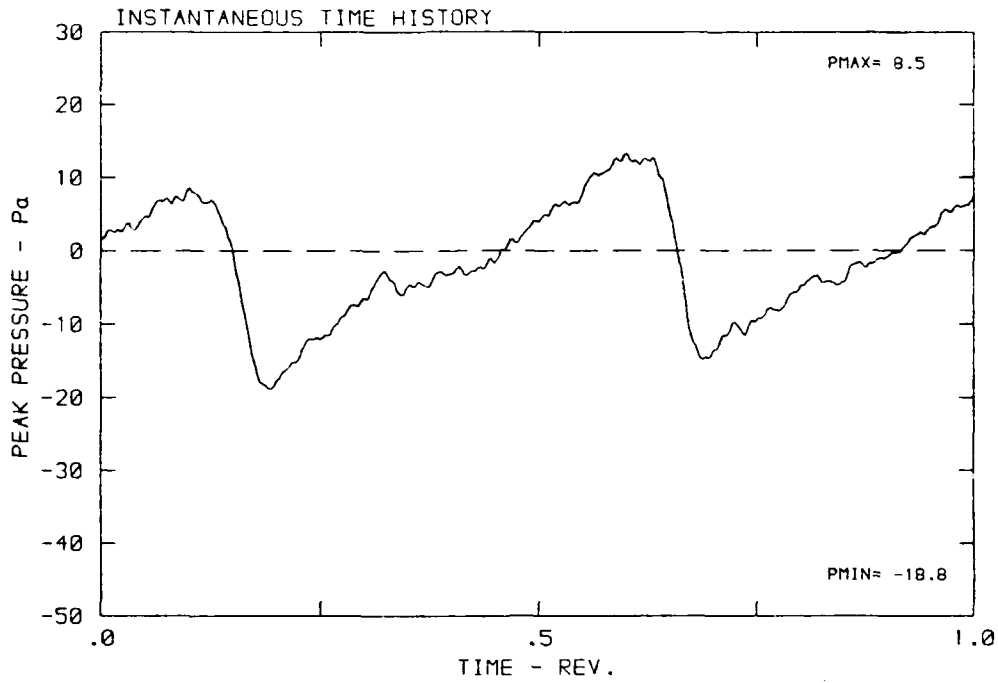
DATA POINT: EN-1 RUN: 163 MP: 2

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.8 K



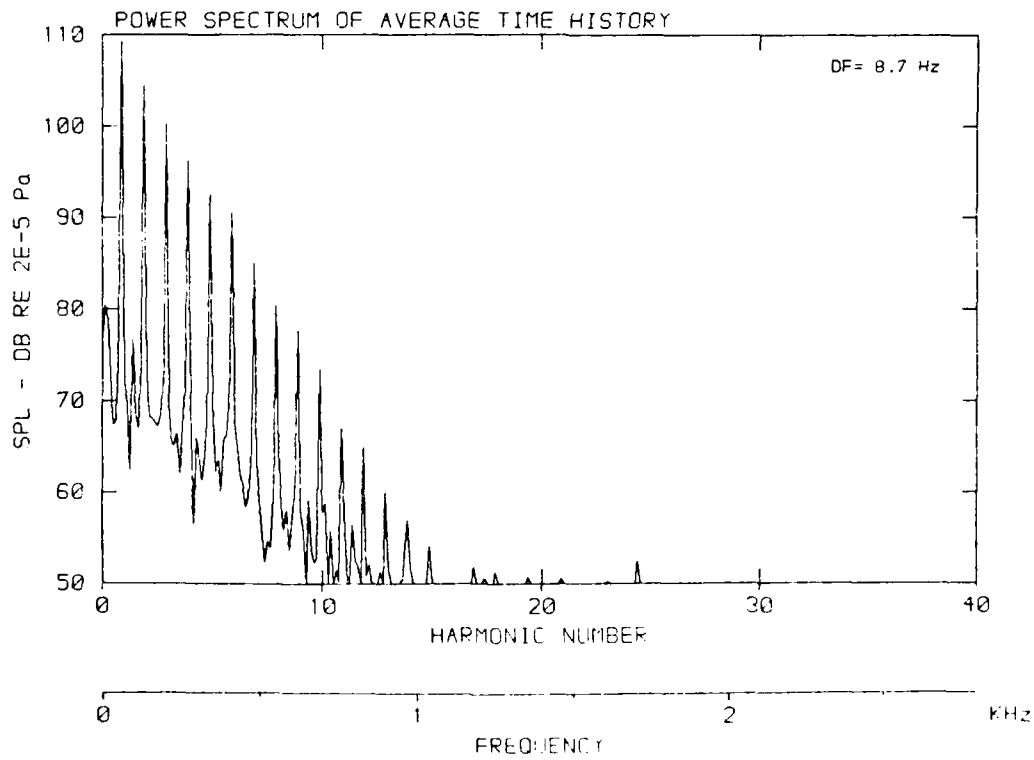
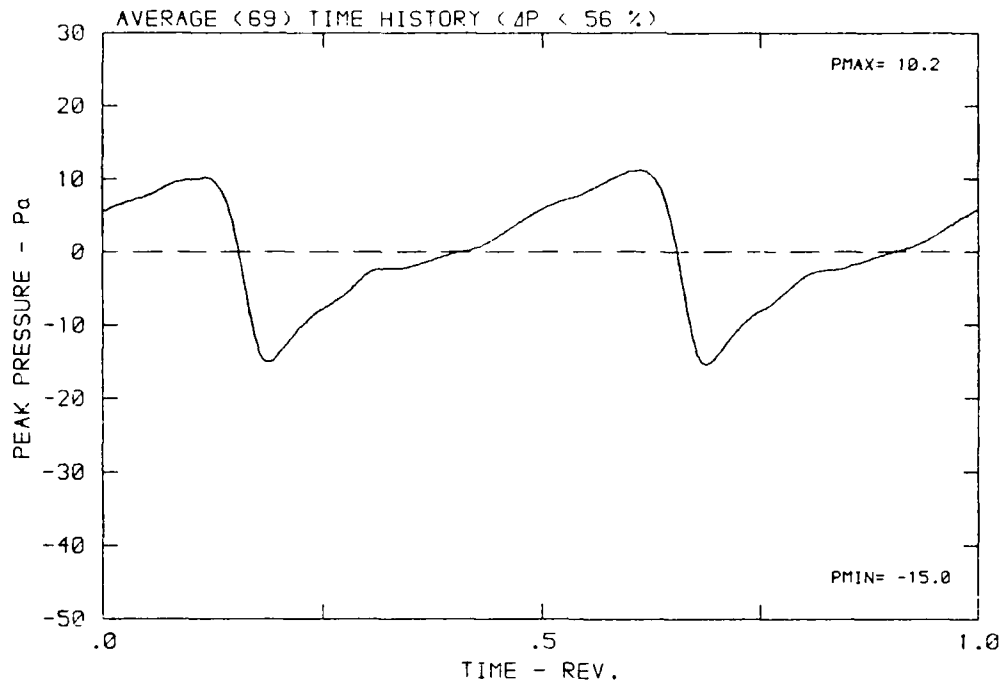
DATA POINT: EN-1 RUN: 153 MP: 3

β : 19.9° MH: .6764 n: 2100 rpm v/u : .230 d : 7.3° T: 285.8 K



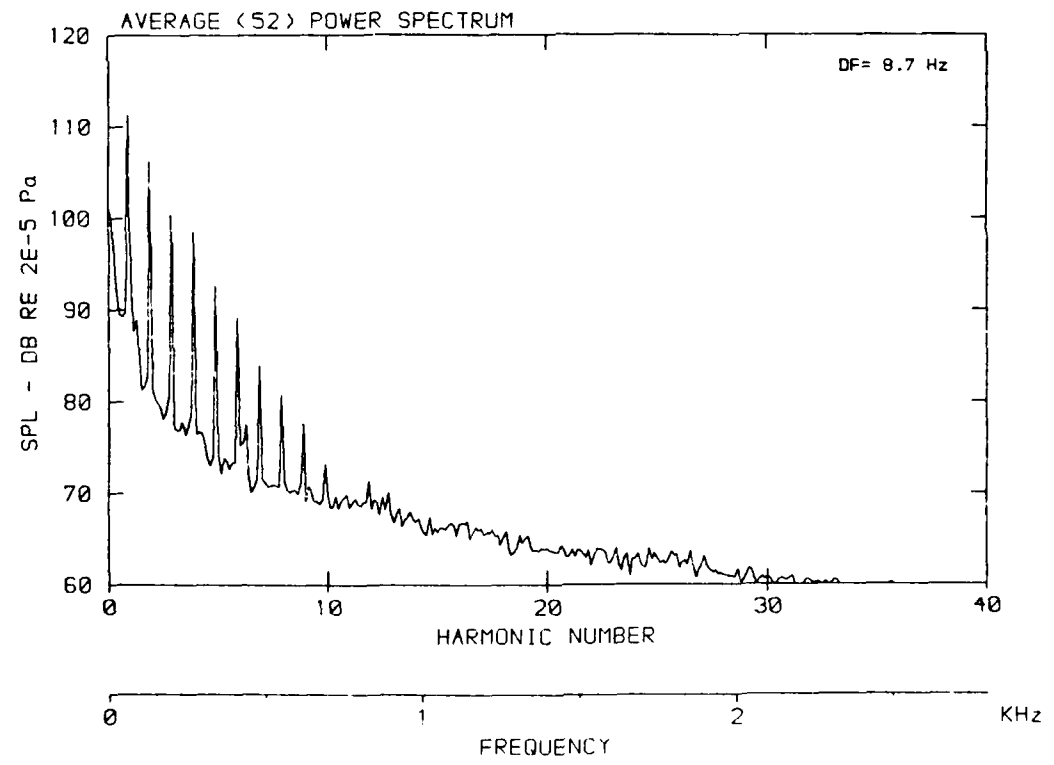
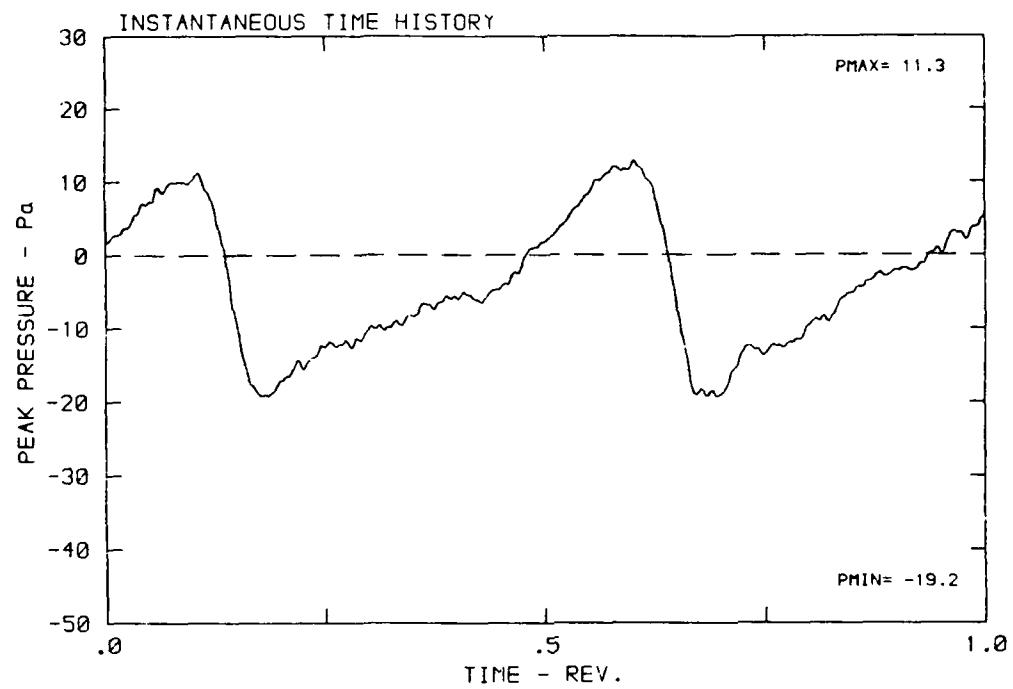
DATA POINT: EN-1 RUN: 163 MP: 3

β : 19.9° MH: .6764 n: 2100 rpm v/u : .230 ϕ : 7.3° T: 285.8 K



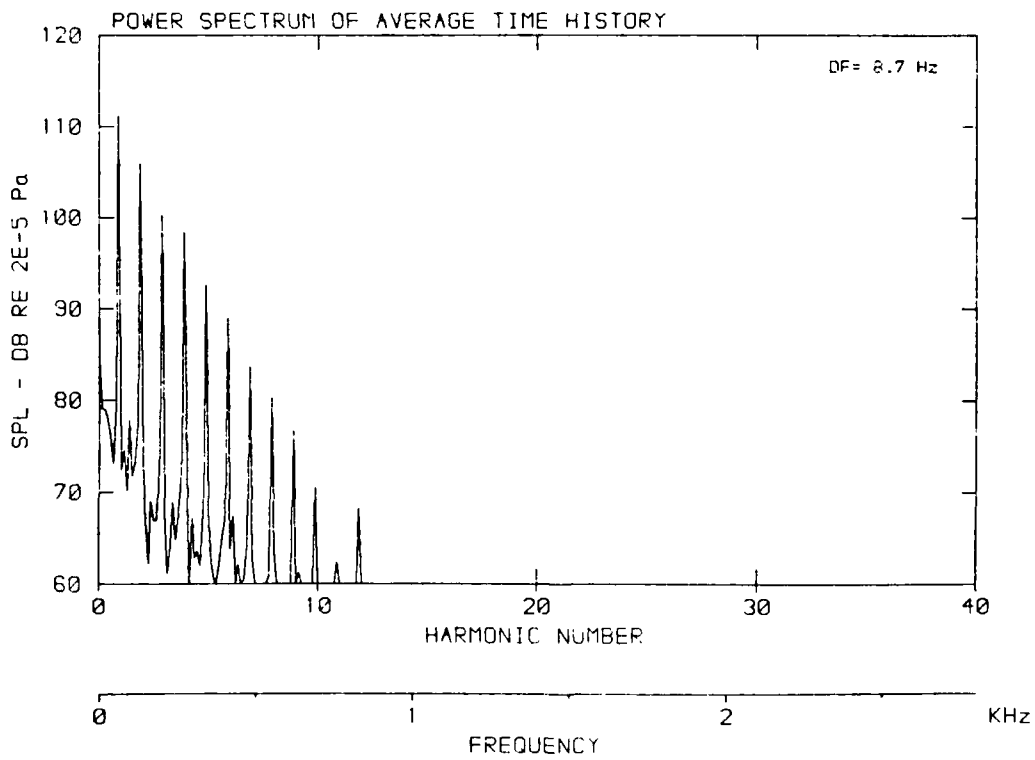
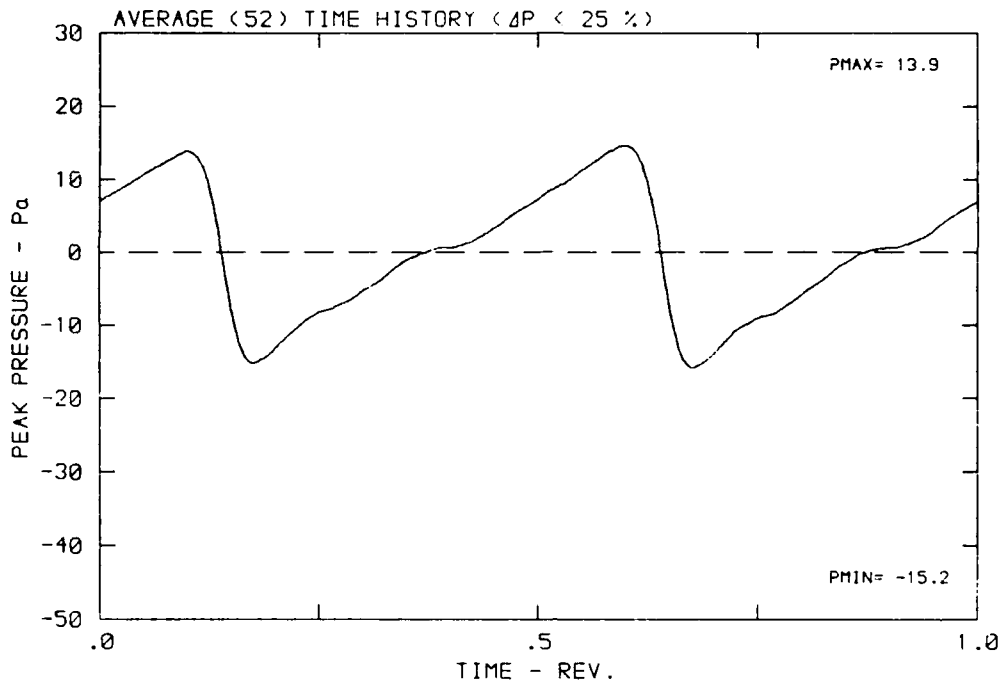
DATA POINT: EN-1 RUN: 163 MP: 4

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.8 K



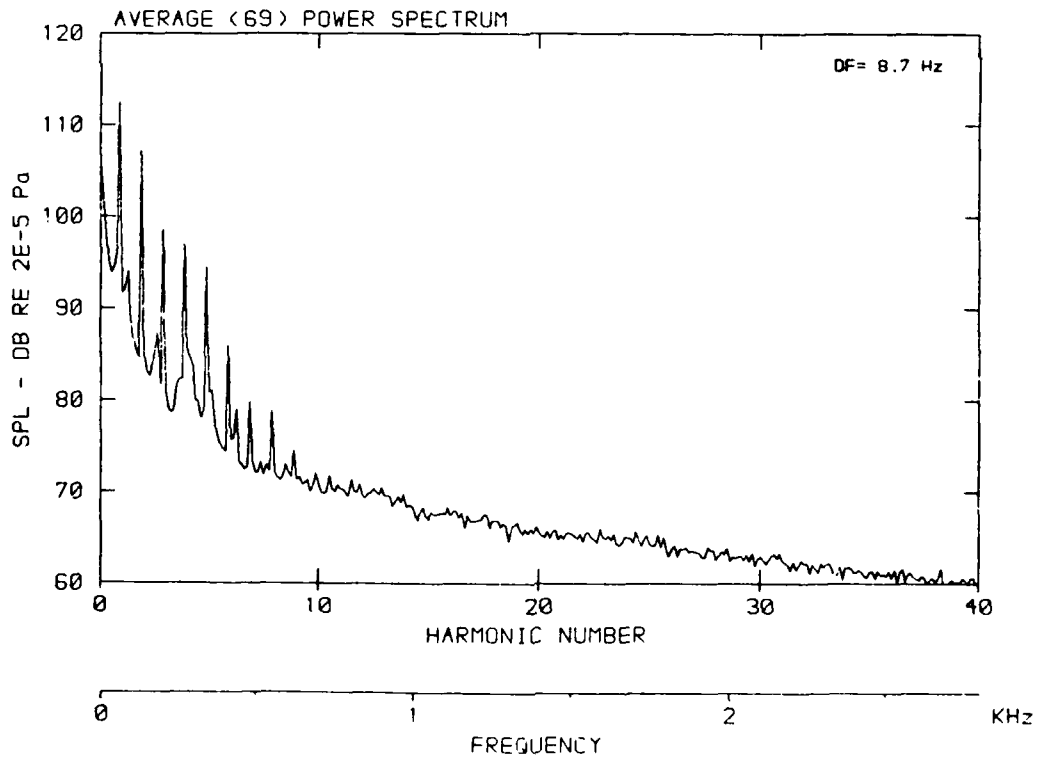
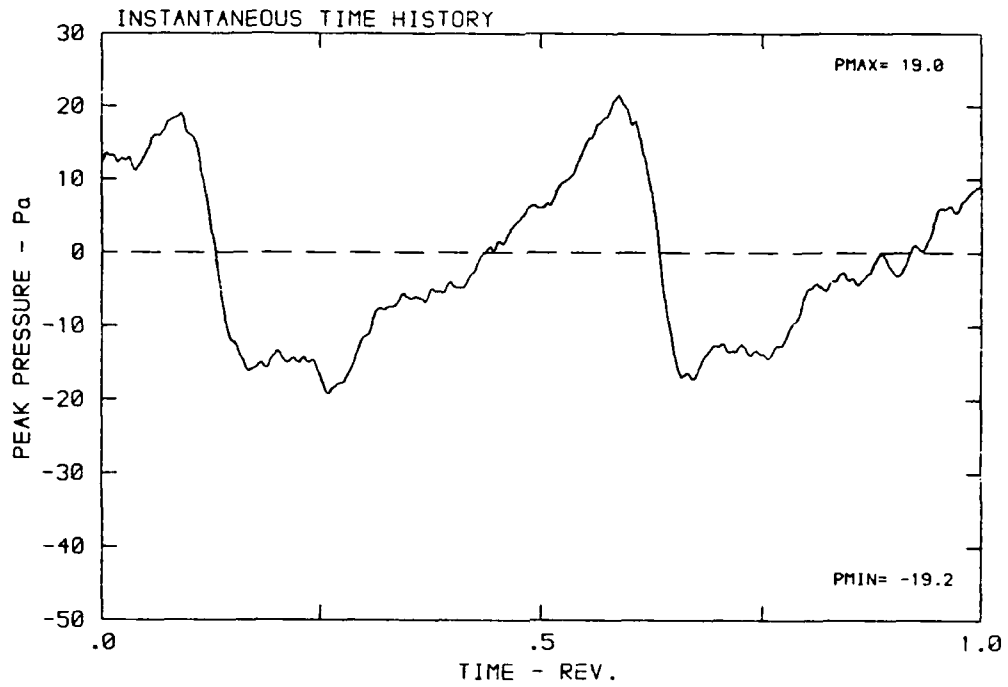
DATA POINT: EN-1 RUN: 163 MP: 4

β : 19.9° MH: .6764 n: 2100 rpm v/u : .230 ϕ : 7.3° T: 285.8 K



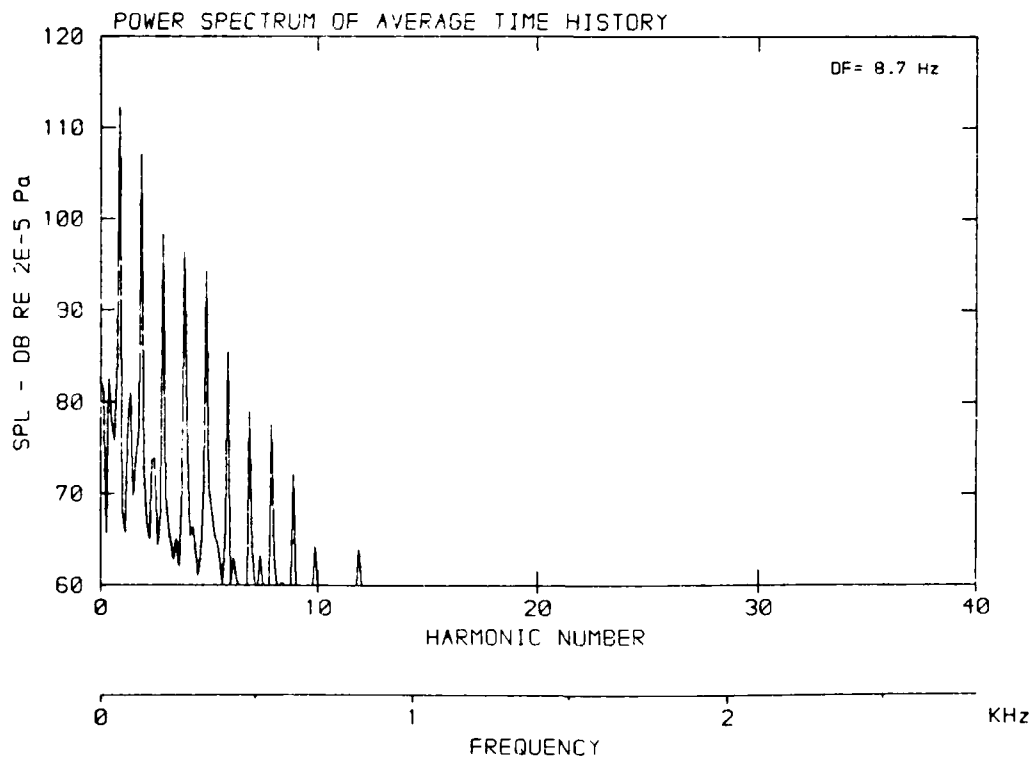
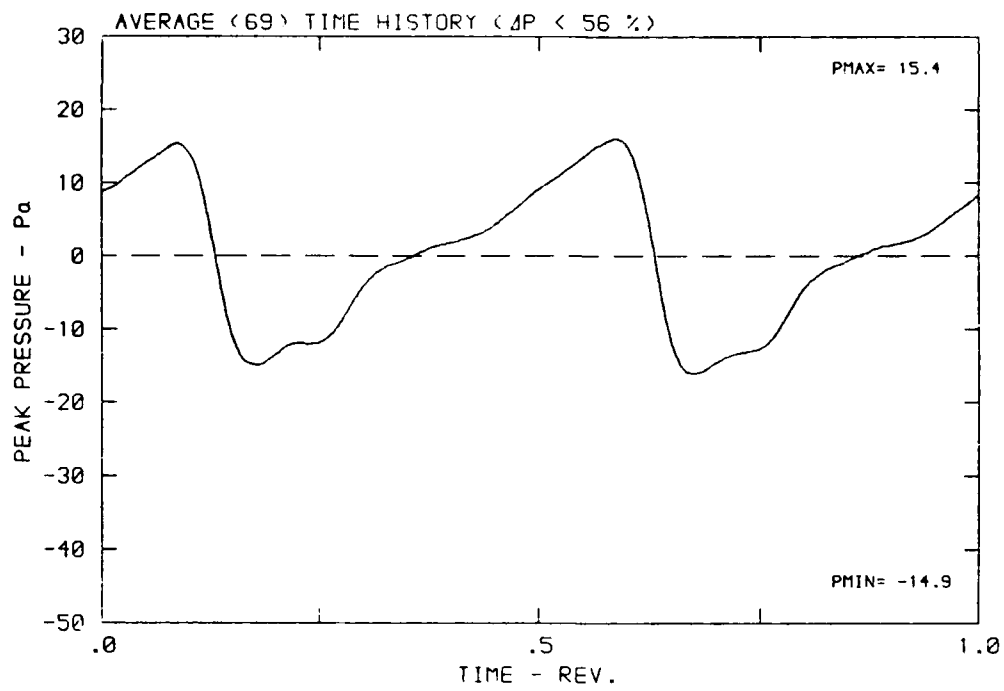
DATA POINT: EN-1 RUN: 163 MP: 5

β : 19.9° MH: .6764 n: 2100 rpm v/u : .230 ϕ : 7.3° T: 285.8 K



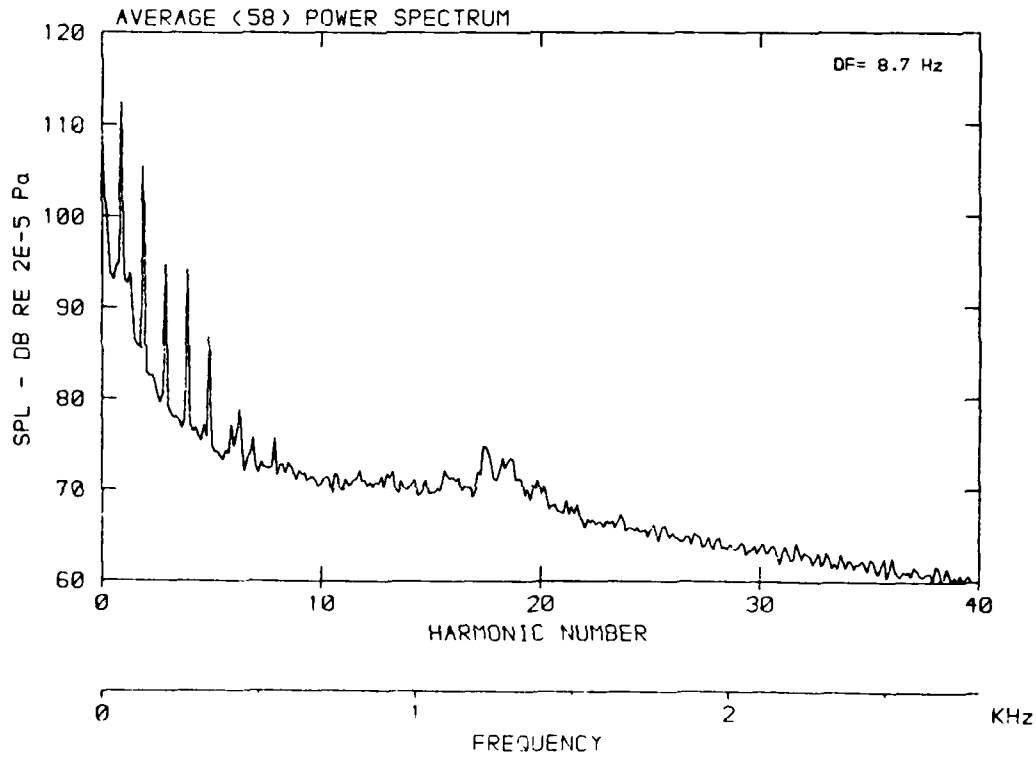
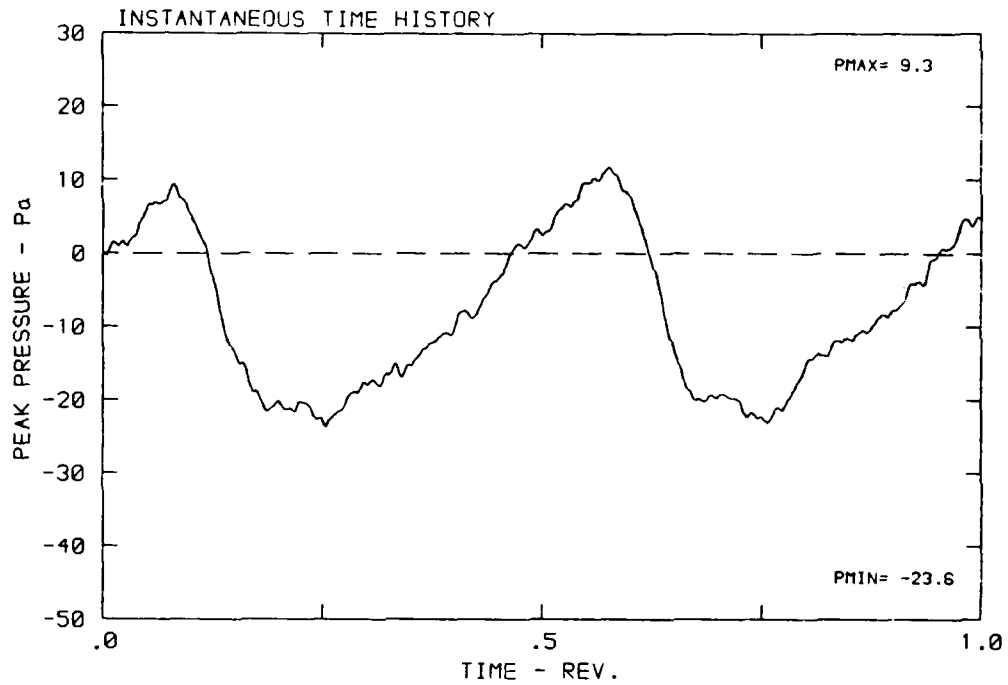
DATA POINT: EN-1 RUN: 163 MP: 5

β : 19.9° MH: .6764 n: 2100 rpm v/u : .230 ϕ : 7.3° T: 285.8 K



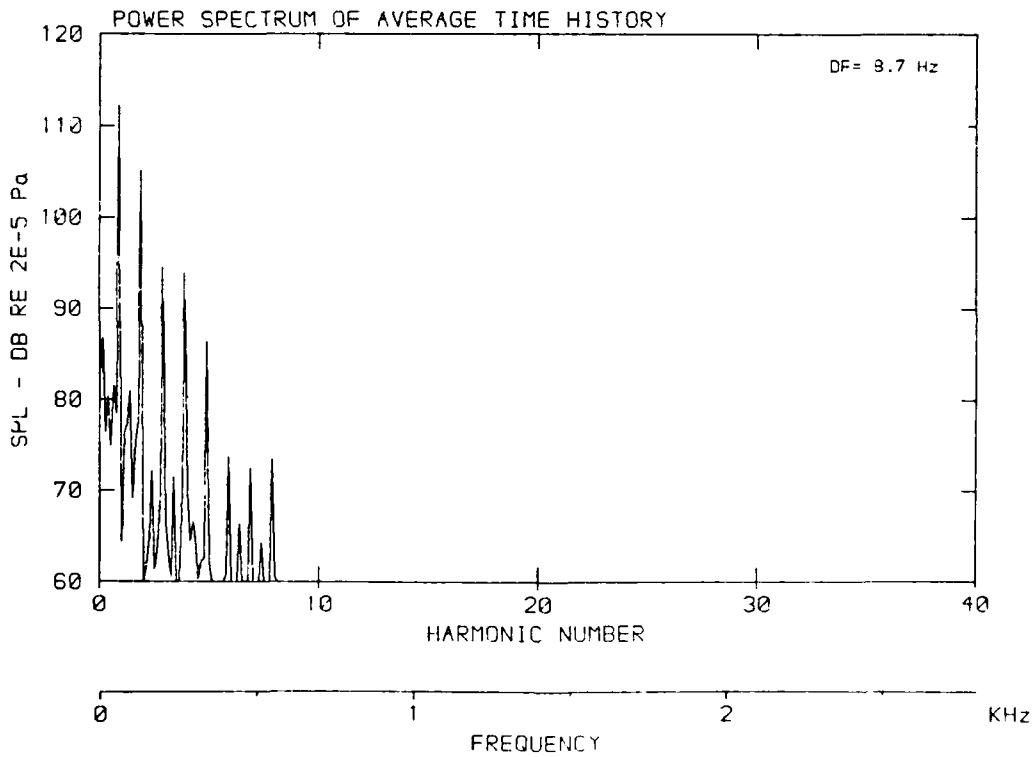
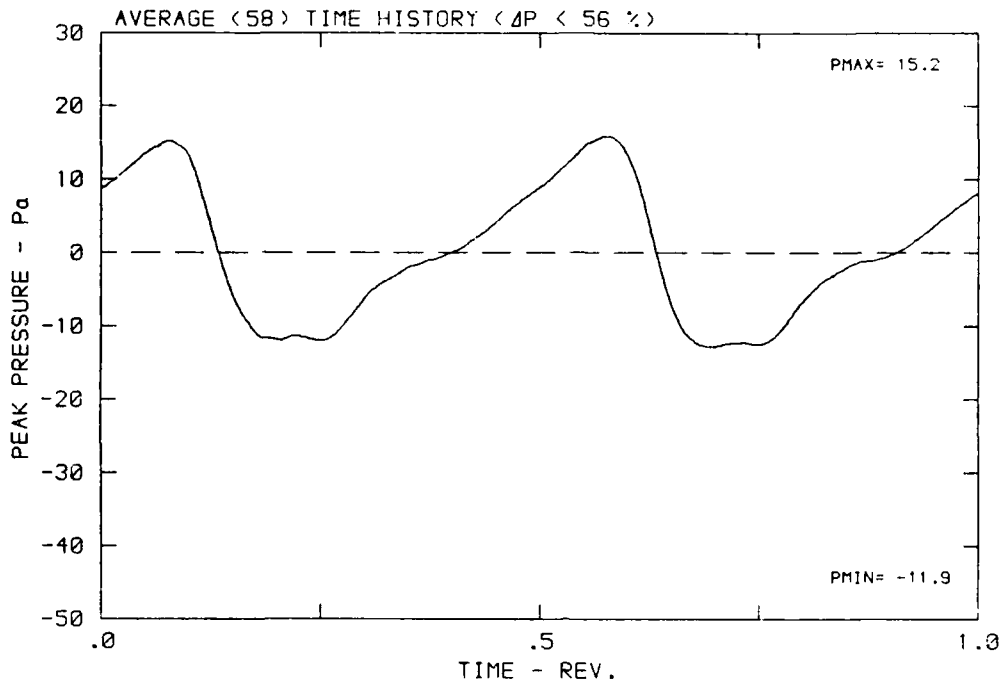
DATA POINT: EN-1 RUN: 163 MP: 6

β : 19.9° MH: .6764 n: 2100 rpm v/u : .230 ϕ : 7.3° T: 285.8 K



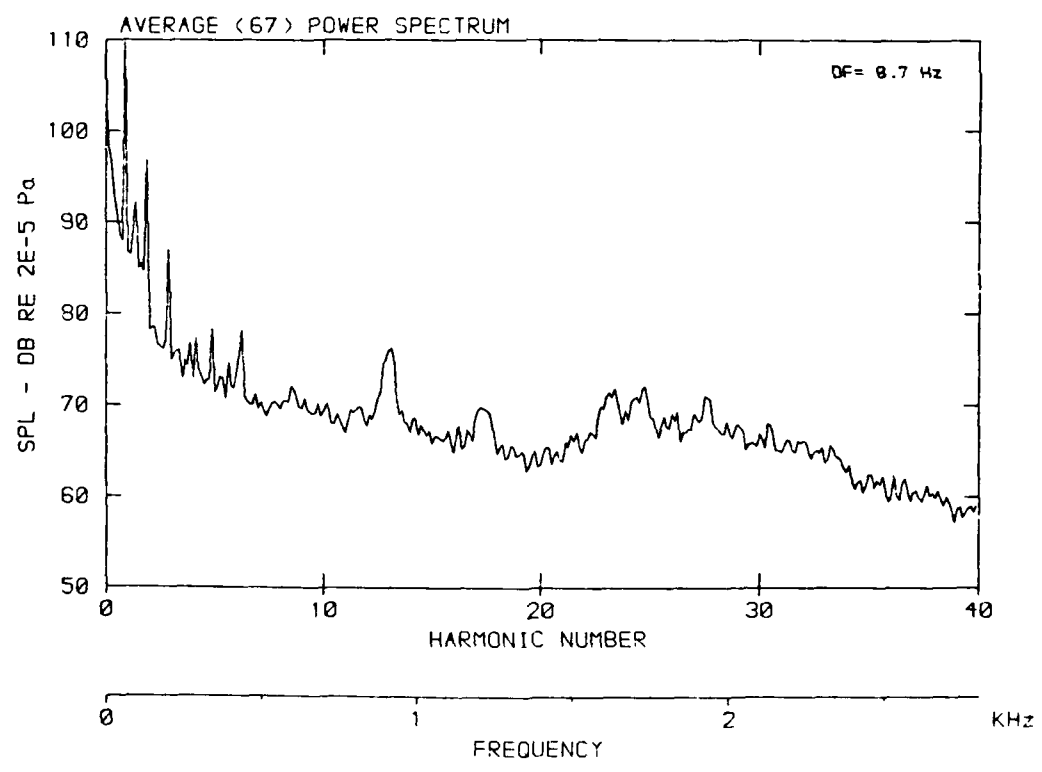
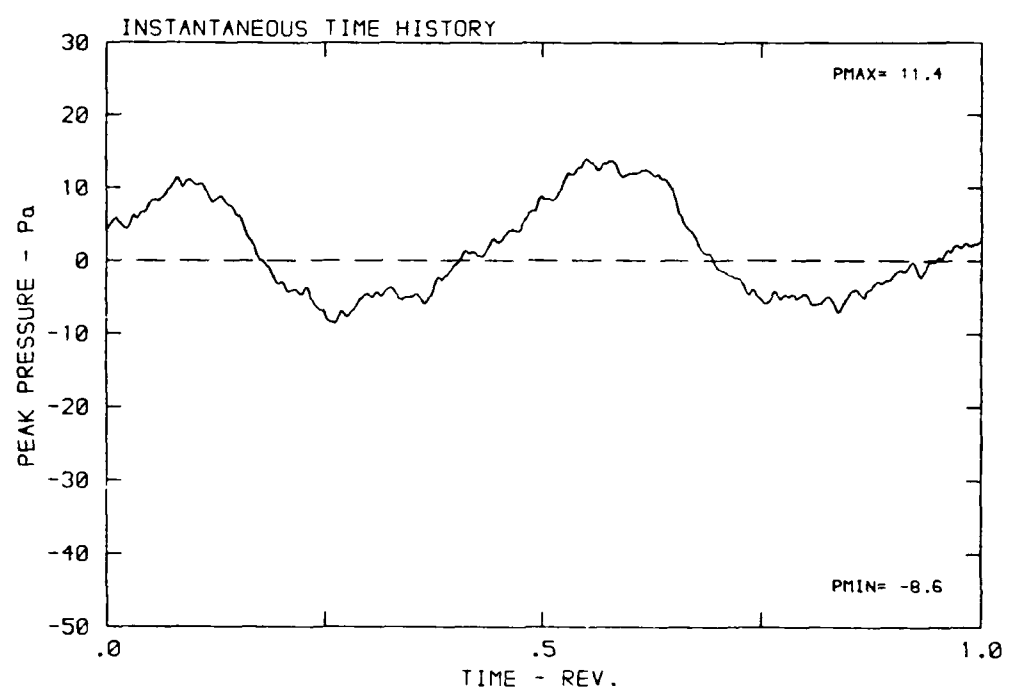
DATA POINT: EN-1 RUN: 163 MP: 6

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.8 K



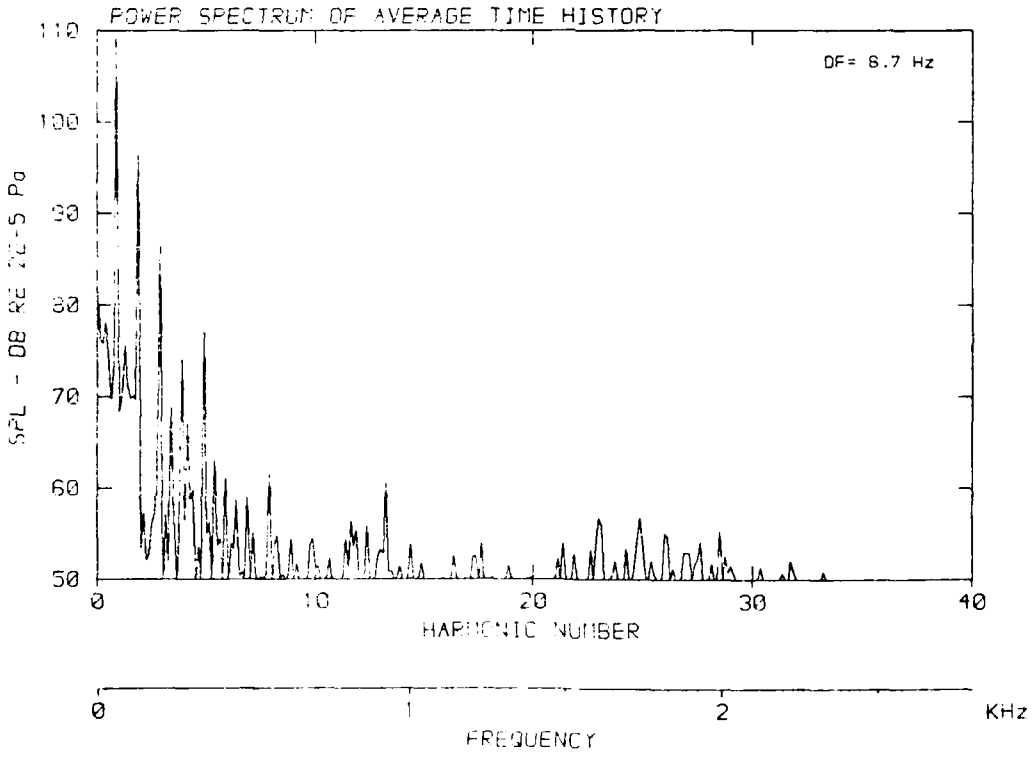
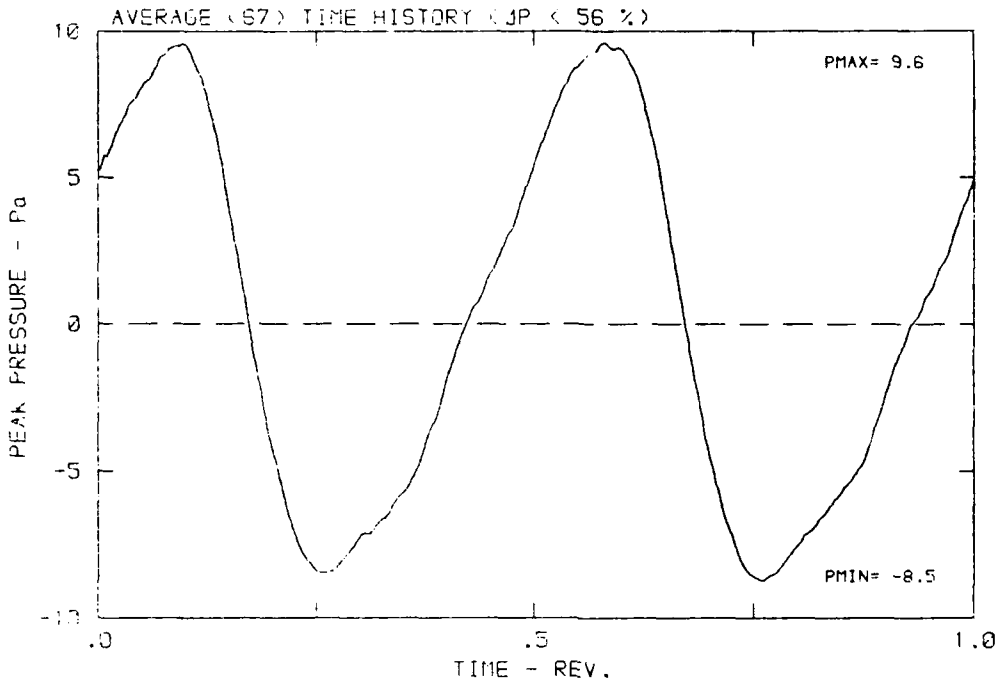
DATA POINT: EN-1 RUN: 163 MP: 7

β : 19.9° MH: .6764 n: 2100 rpm v/u : .230 ϕ : 7.3° T: 285.8 K



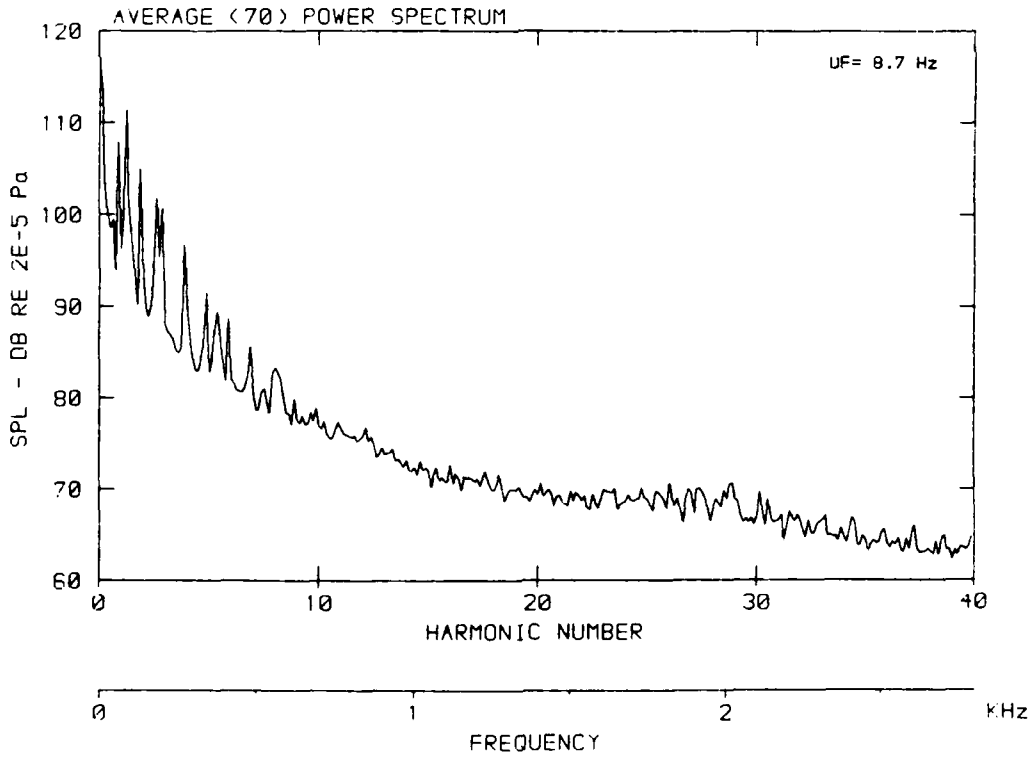
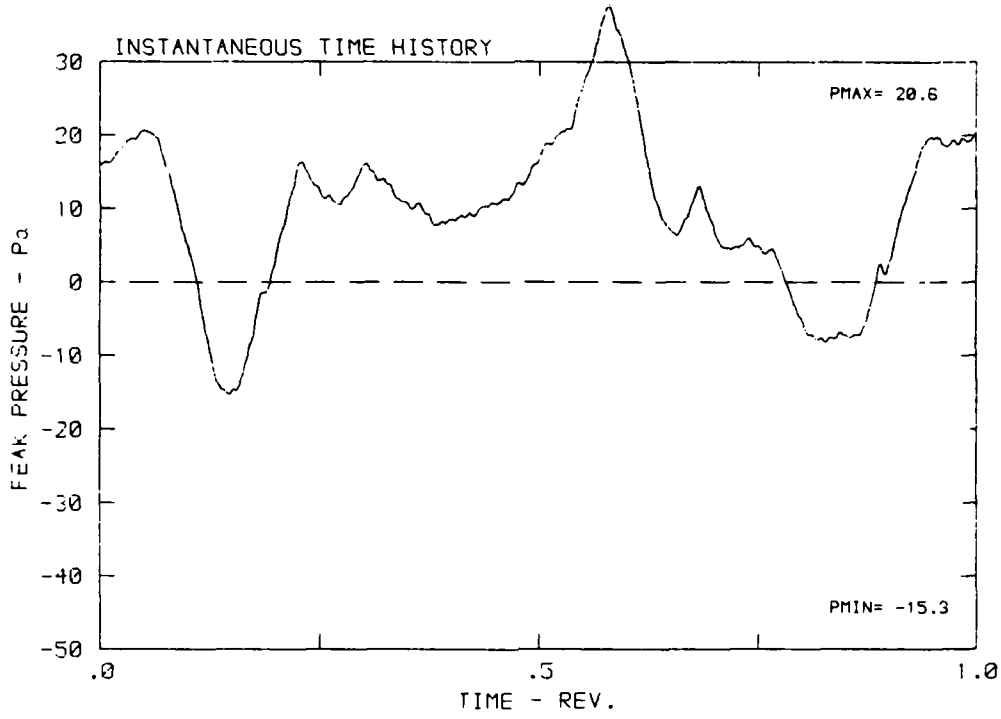
DATA POINT: EN-1 RUN: 163 MP: 7

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.8 K



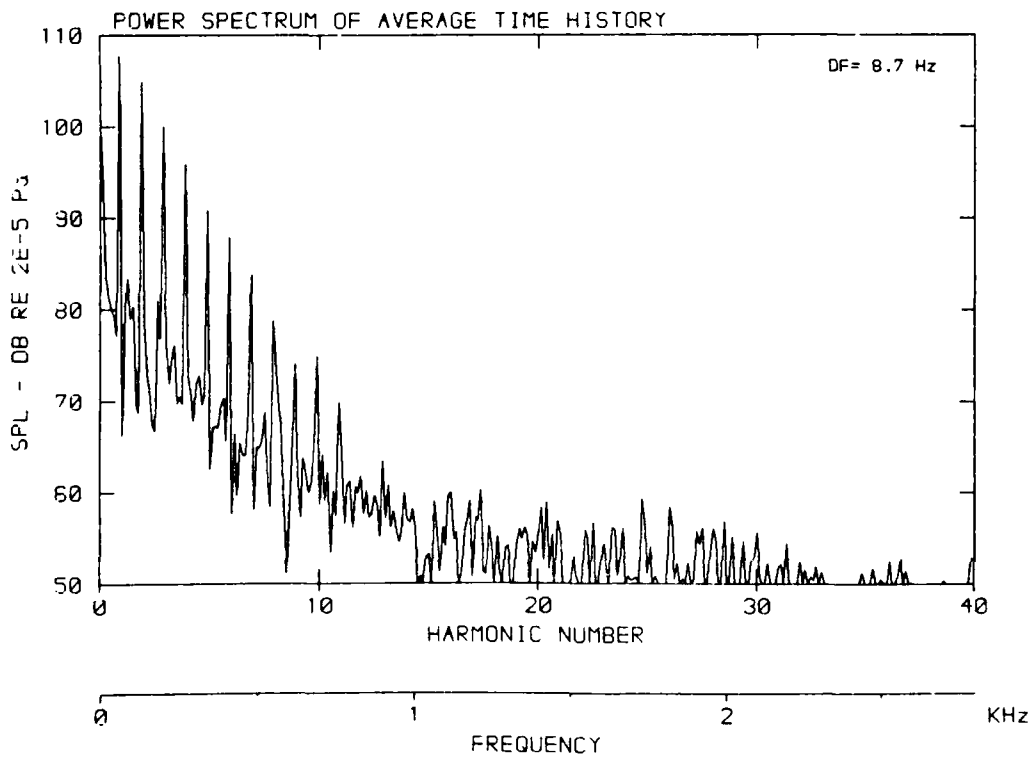
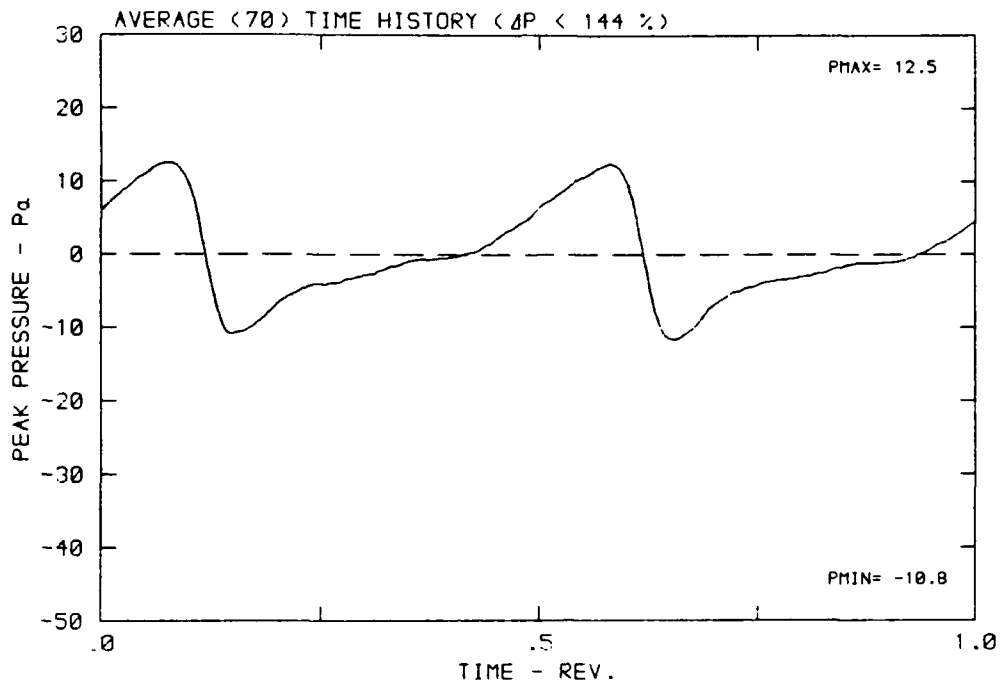
DATA POINT: EN-1 RUN: 163 MP: 8

ρ : 19.9⁰ MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3⁰ T: 285.8 K



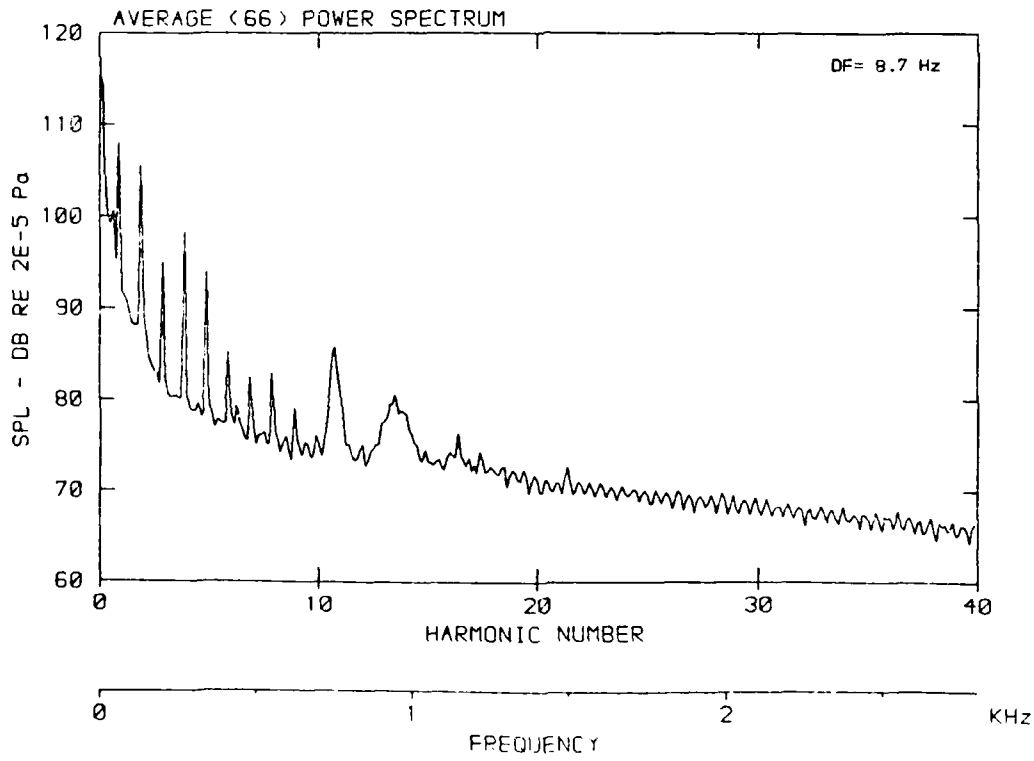
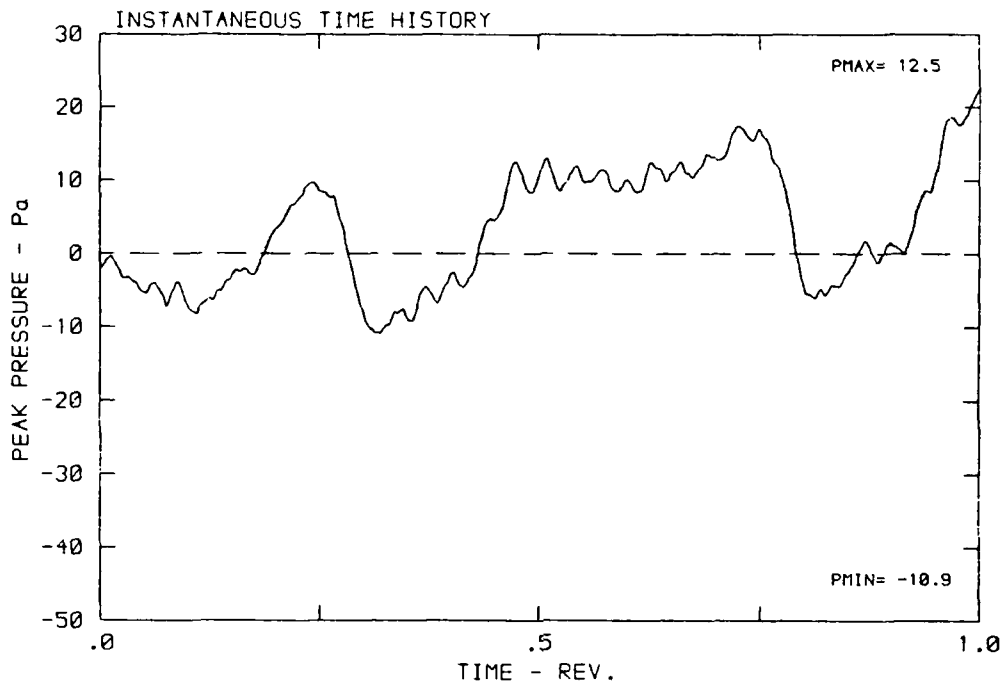
DATA POINT: EN-1 RUN: 163 MP: 8

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.8 K



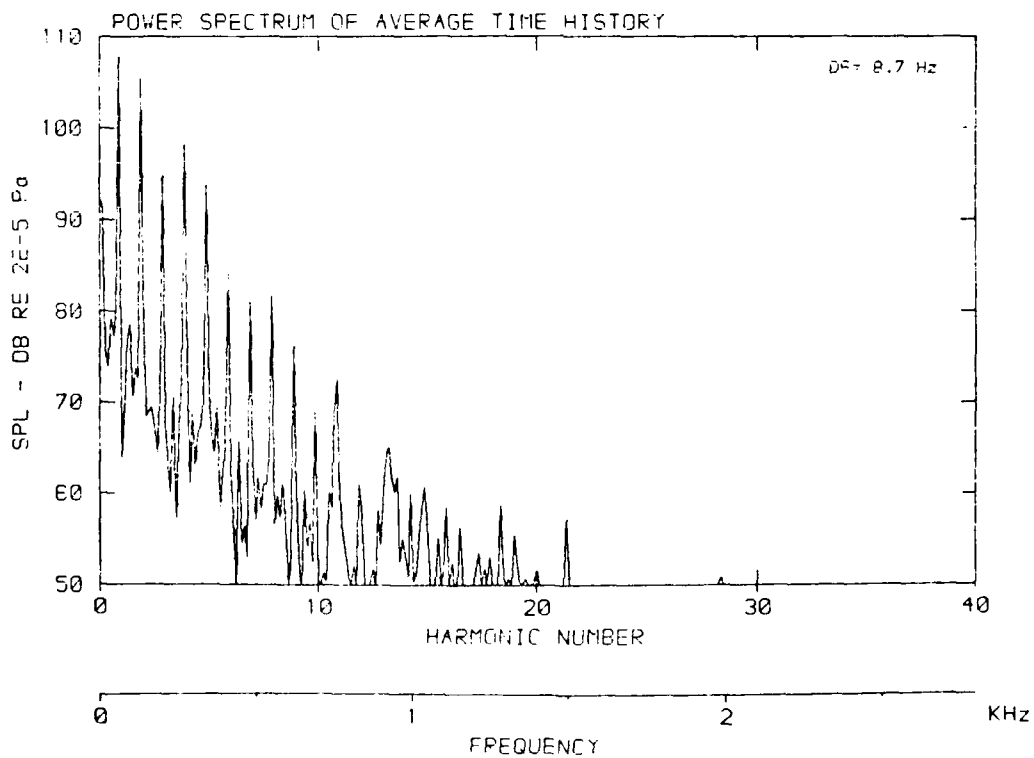
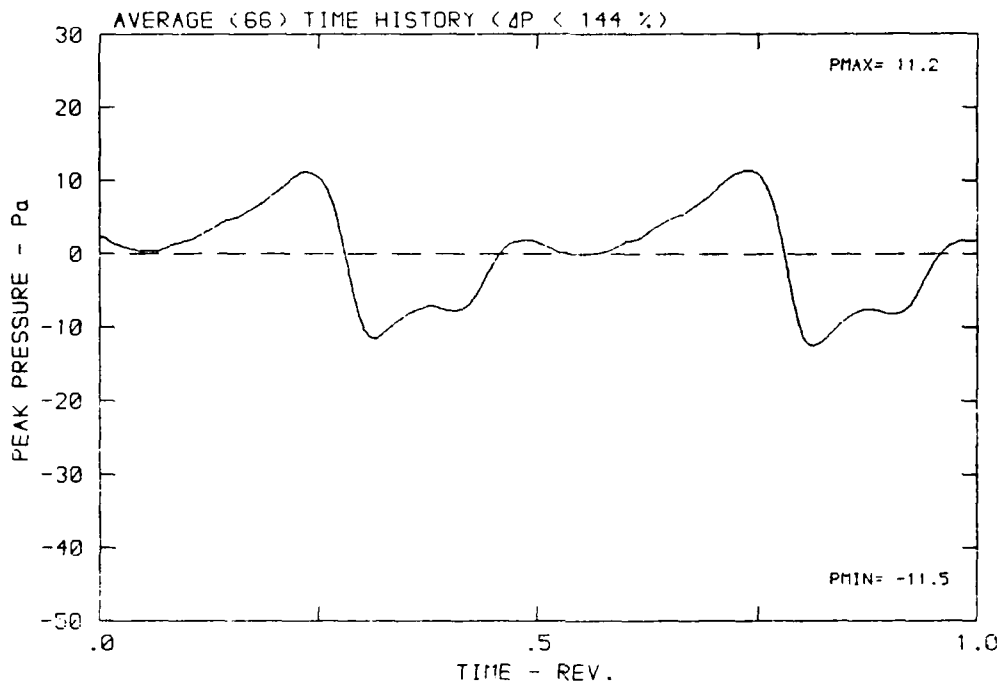
DATA POINT: EN-1 RUN: 163 MP: 9

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.3 K



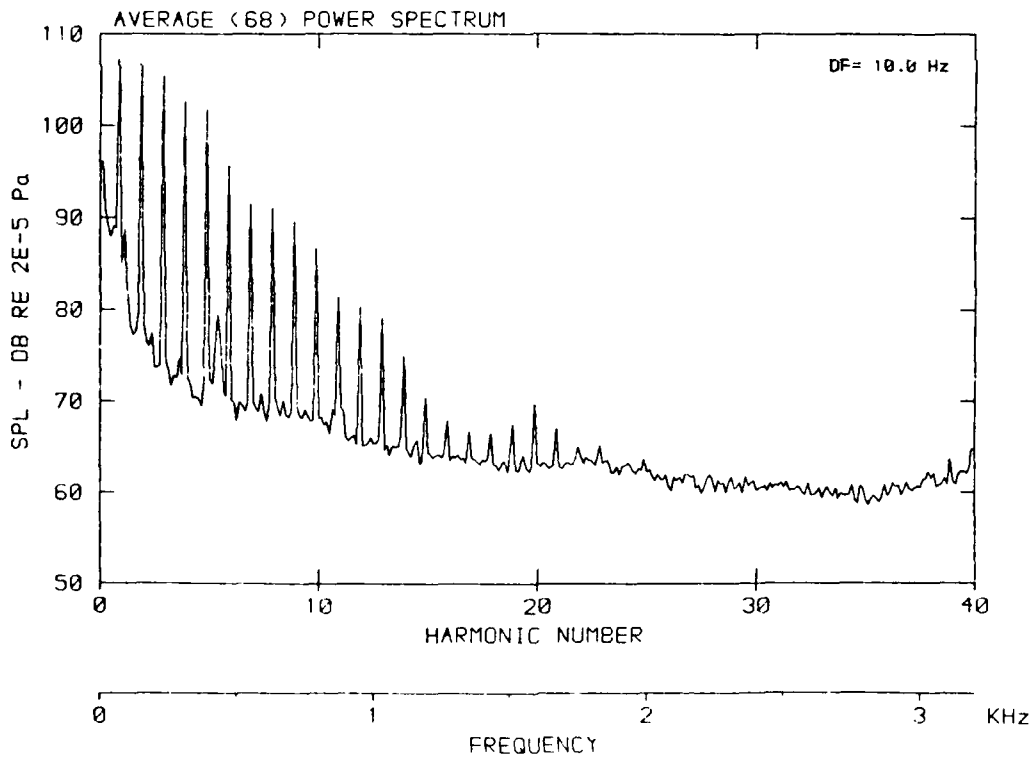
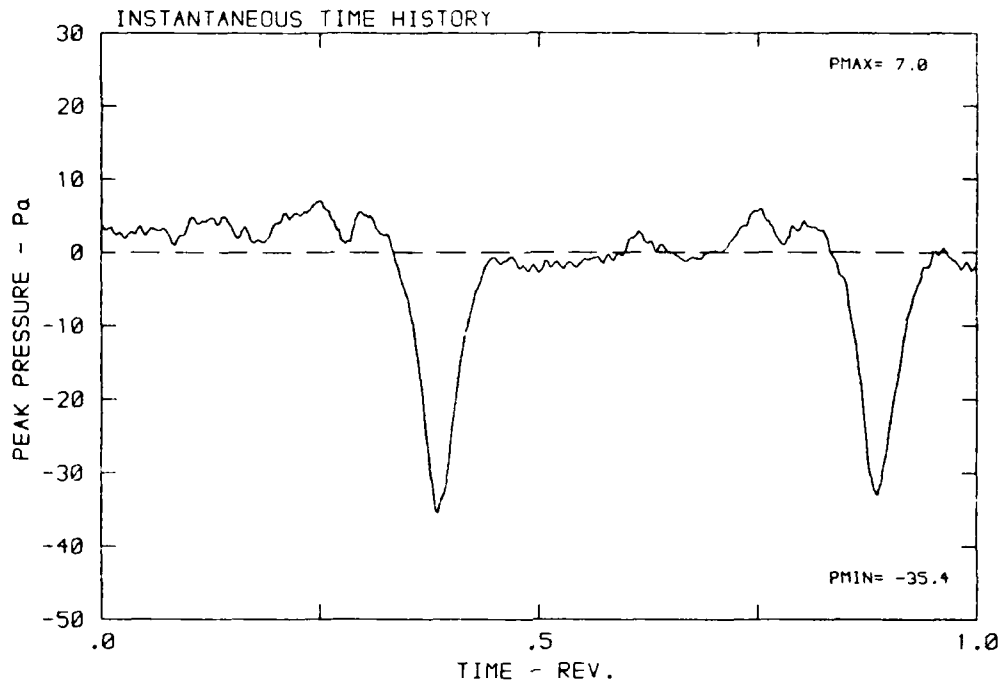
DATA POINT: EN-1 RUN: 163 MP: 9

β : 19.9° MH: .6764 n: 2100 rpm v/u: .230 ϕ : 7.3° T: 285.8 K



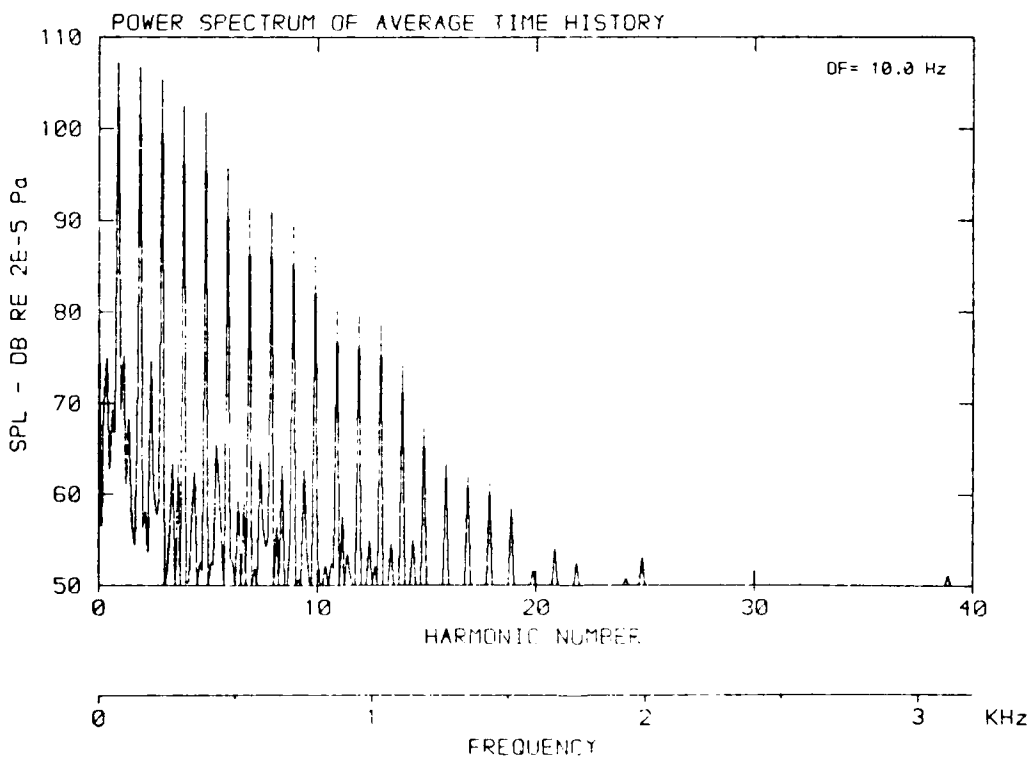
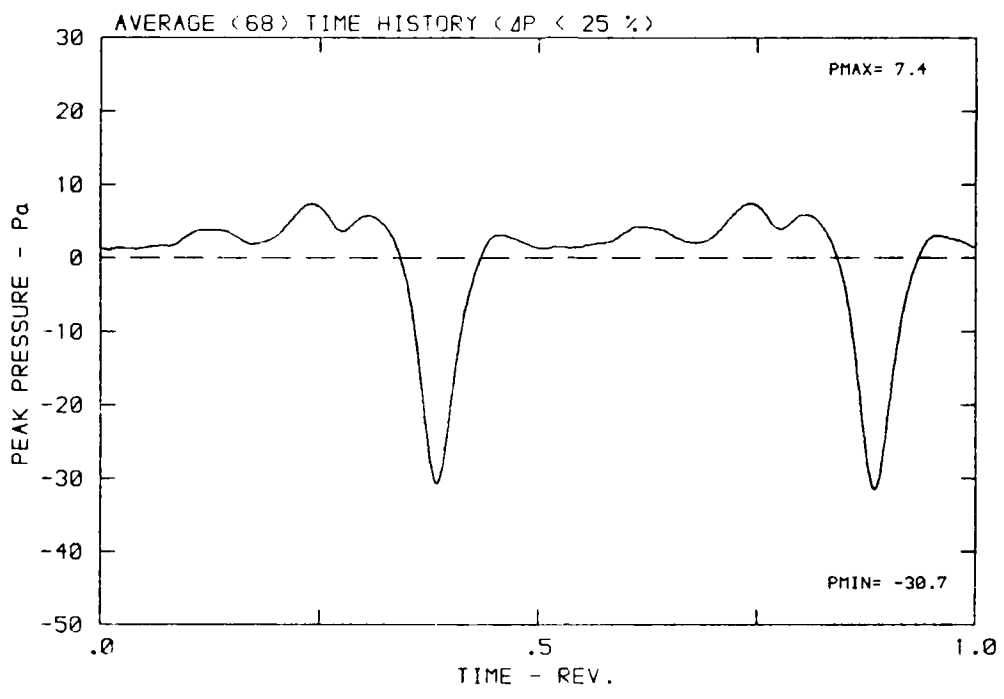
DATA POINT: EN-2 RUN: 164 MP: 1

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



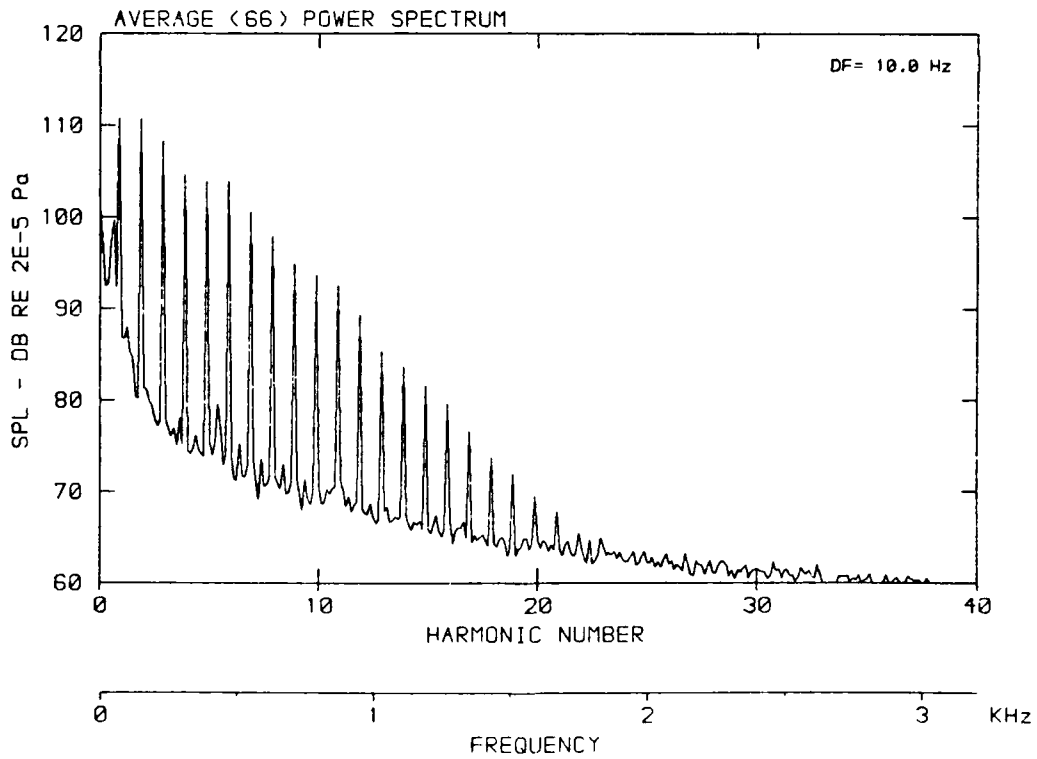
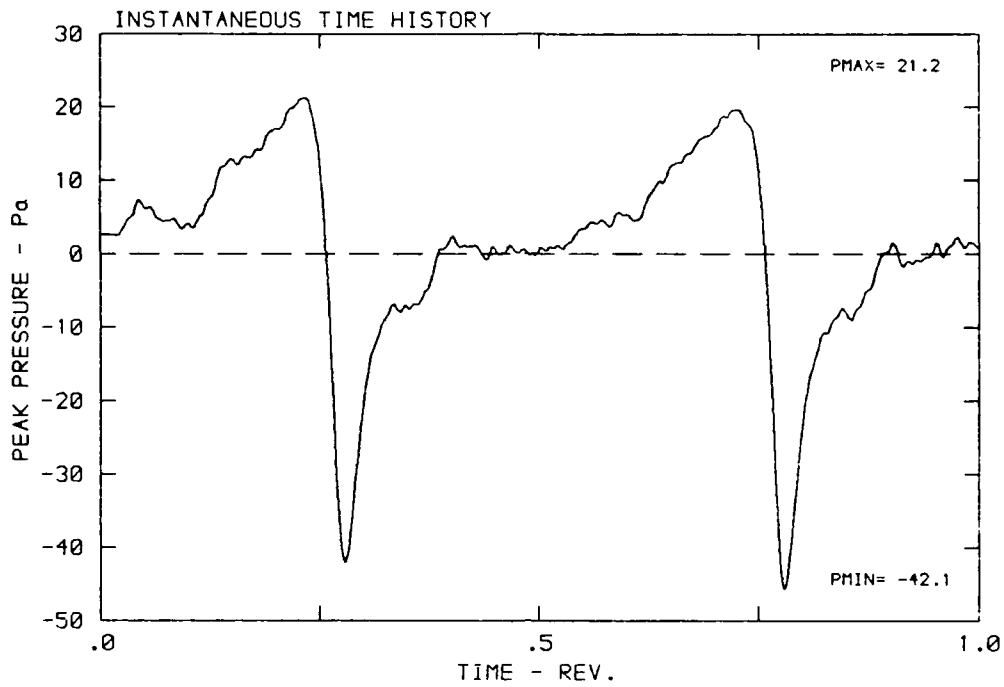
DATA POINT: EN-2 RUN: 164 MP: 1

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



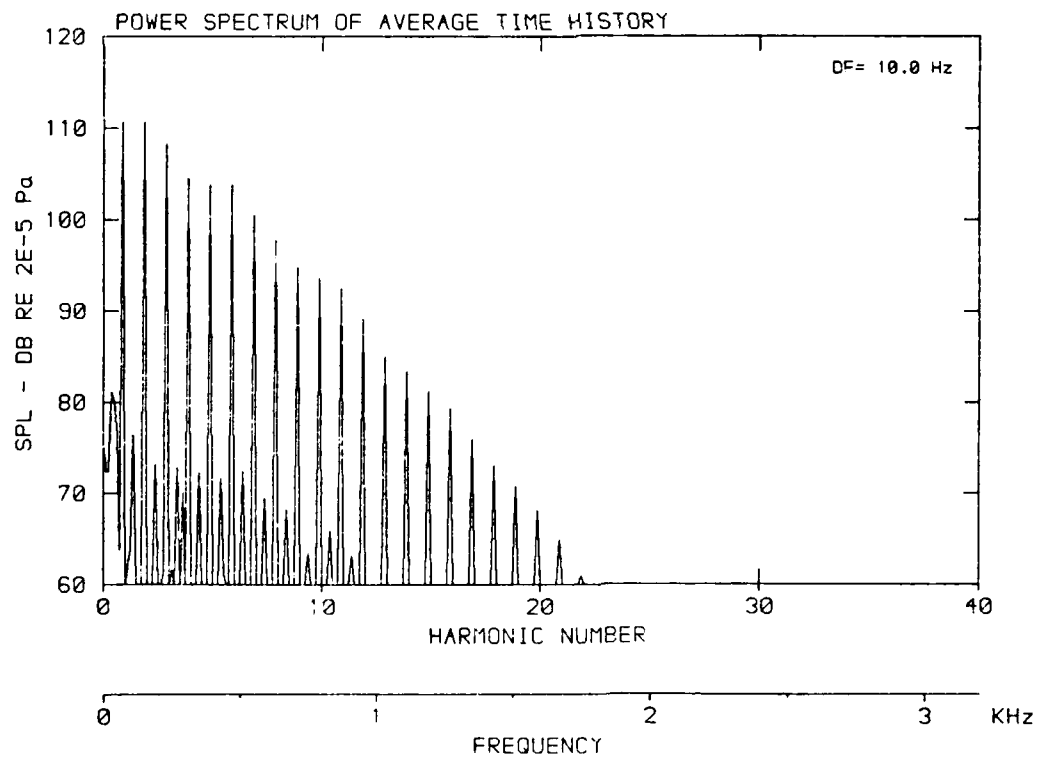
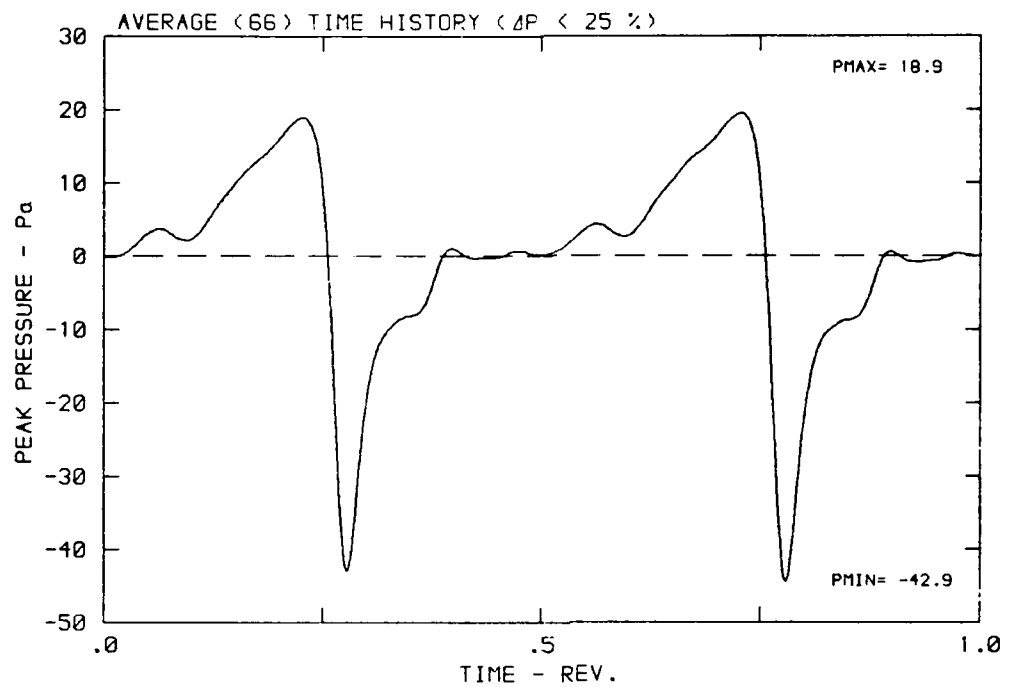
DATA POINT: EN-2 RUN: 164 MP: 2

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



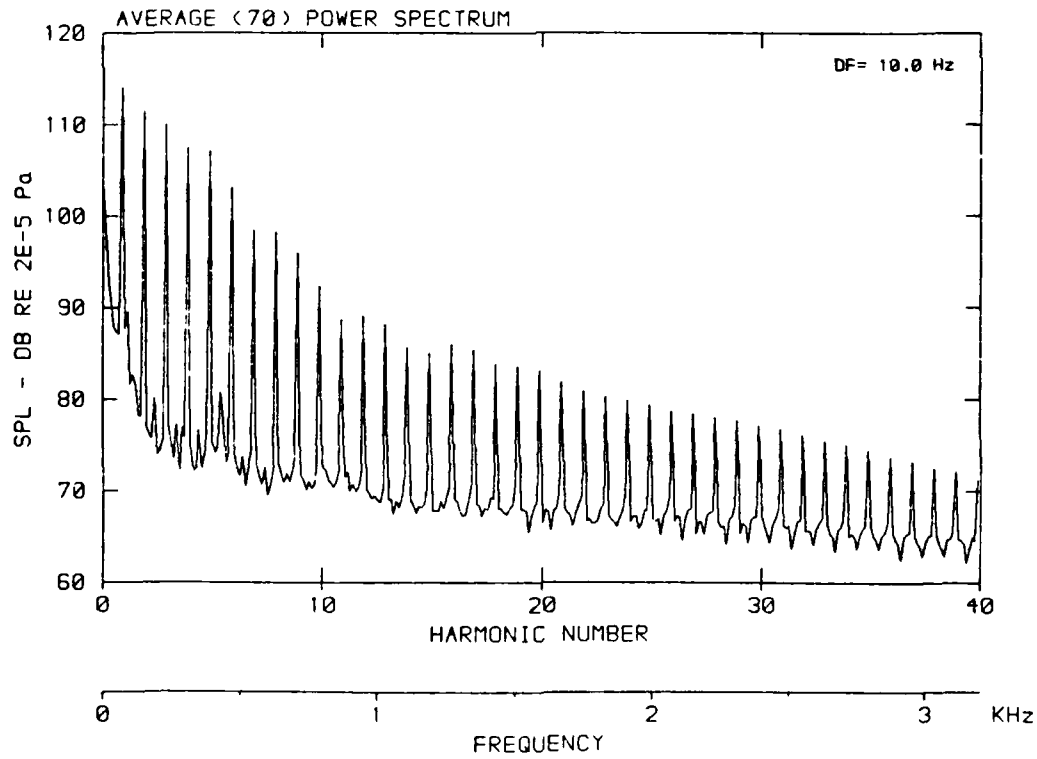
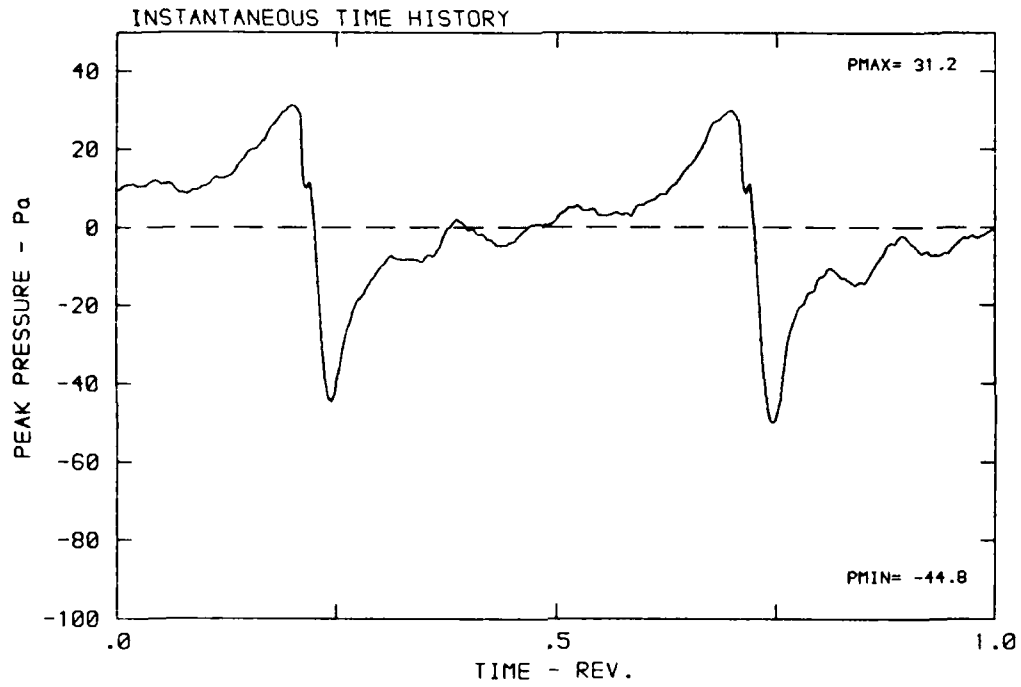
DATA POINT: EN-2 RUN: 164 MP: 2

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



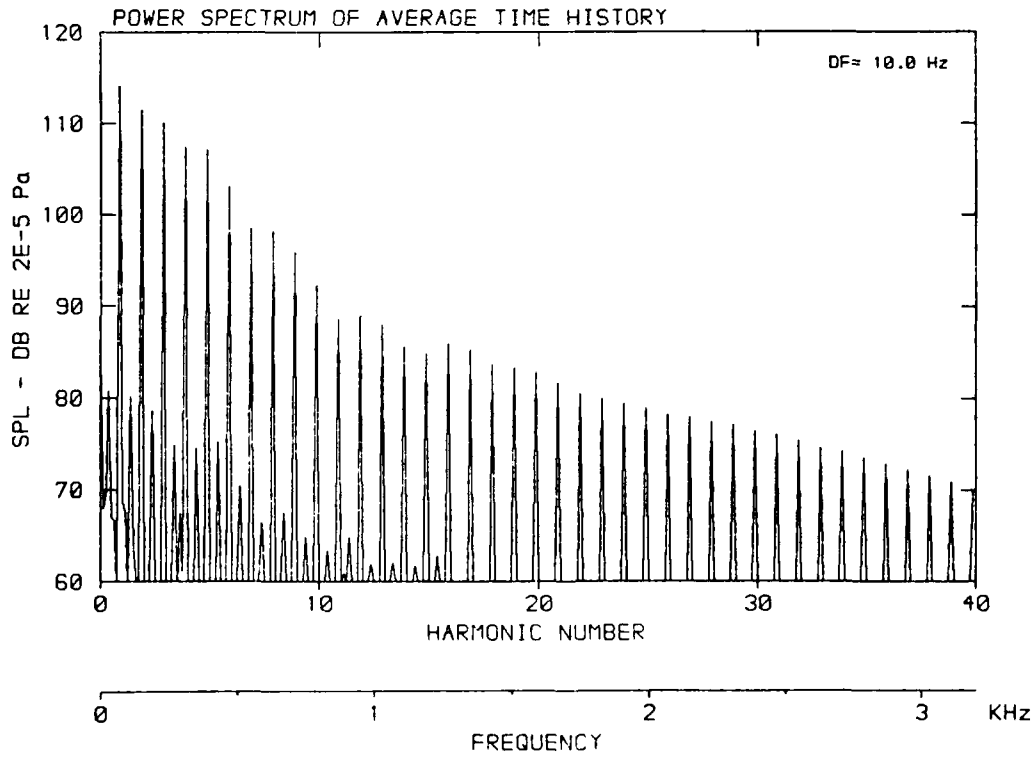
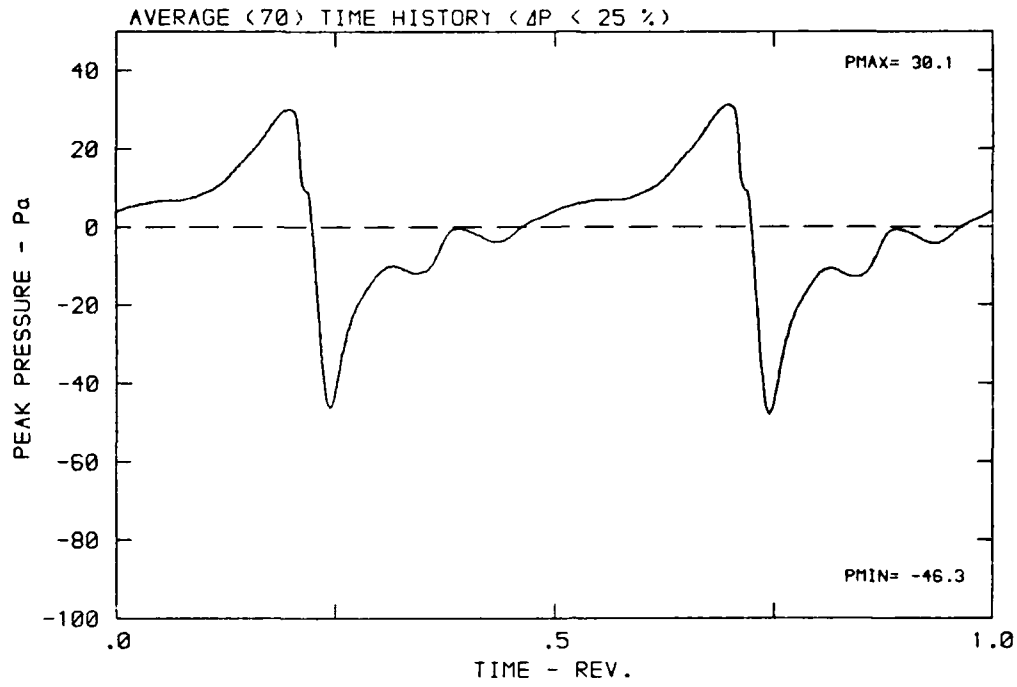
DATA POINT: EN-2 RUN: 164 MP: 3

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



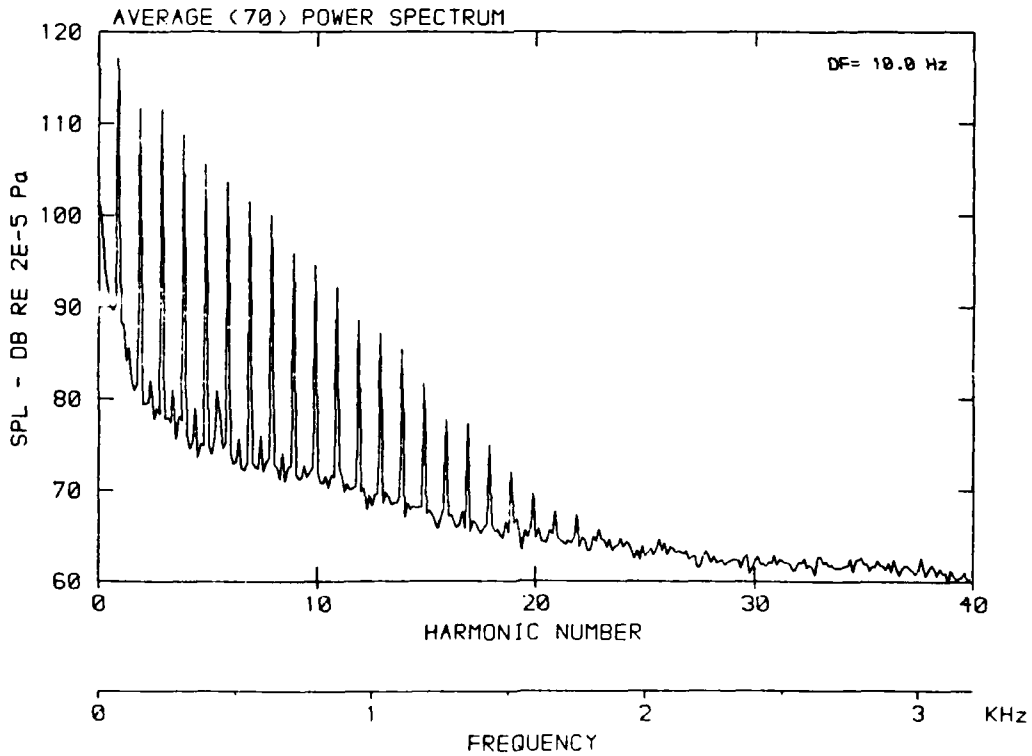
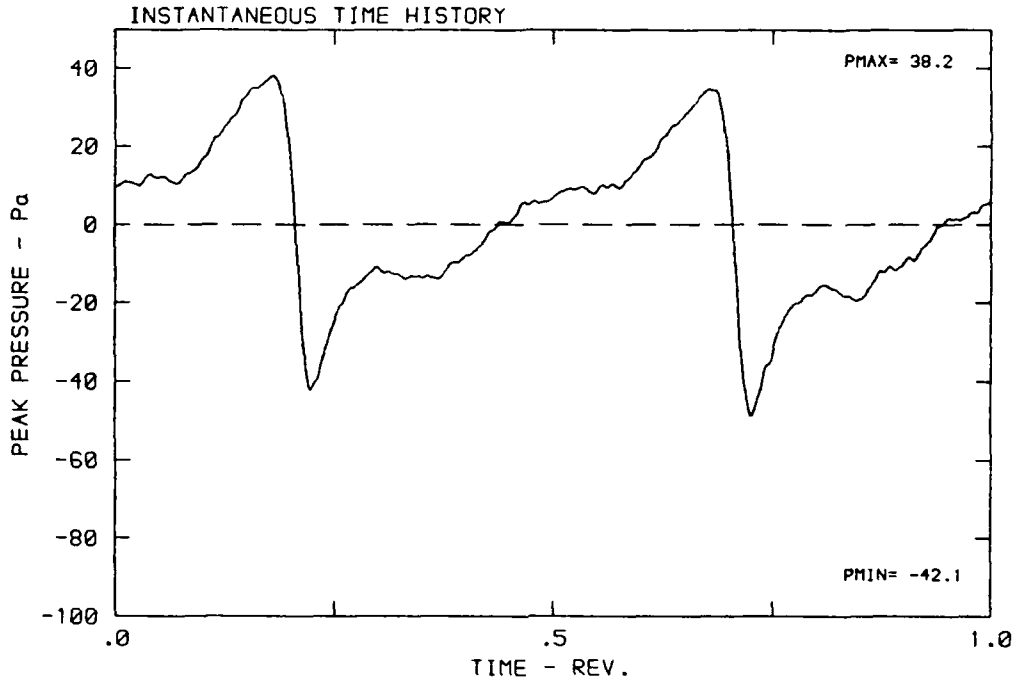
DATA POINT: EN-2 RUN: 164 MP: 3

β : 19.9° MH: .7677 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 286.6 K



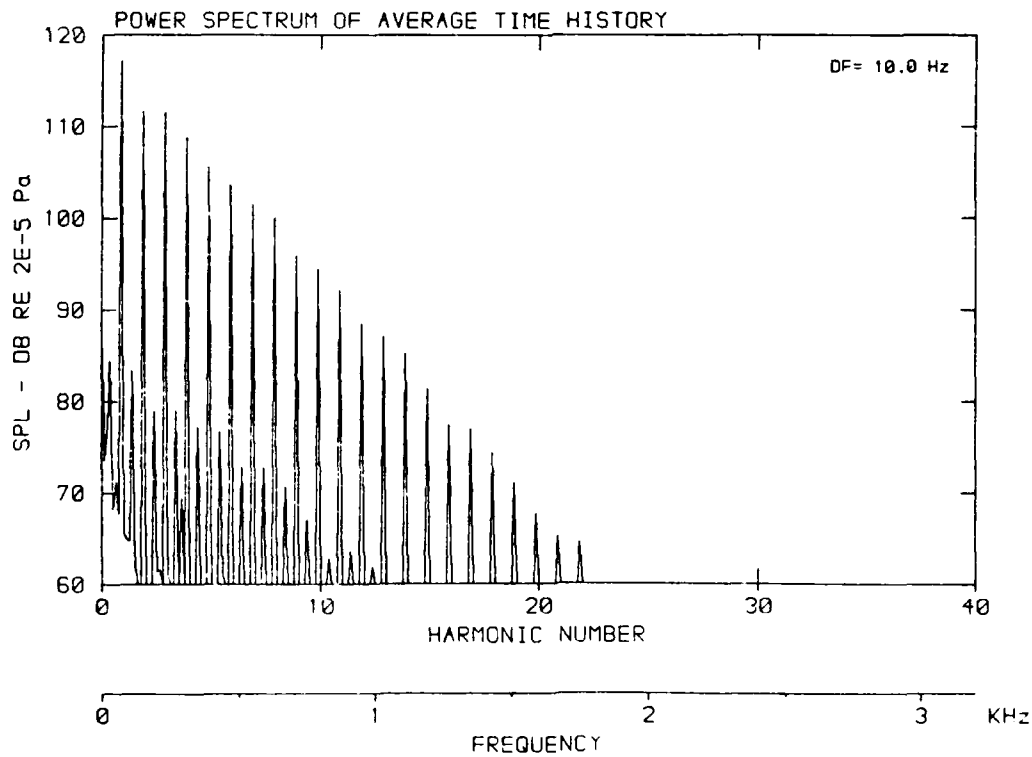
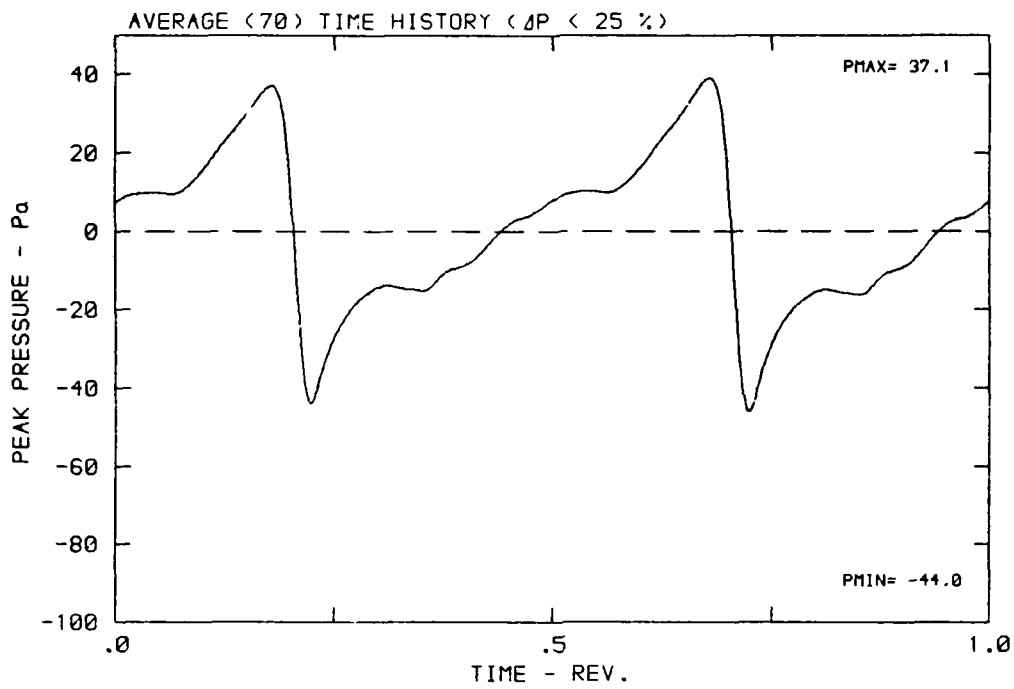
DATA POINT: EN-2 RUN: 164 MP: 4

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



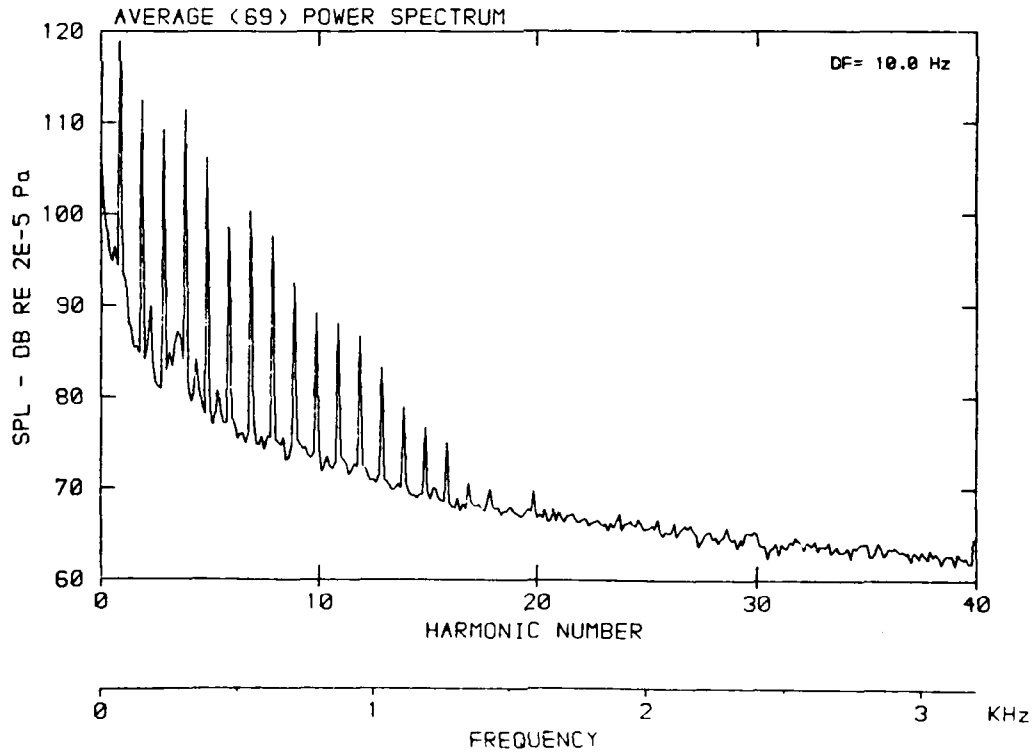
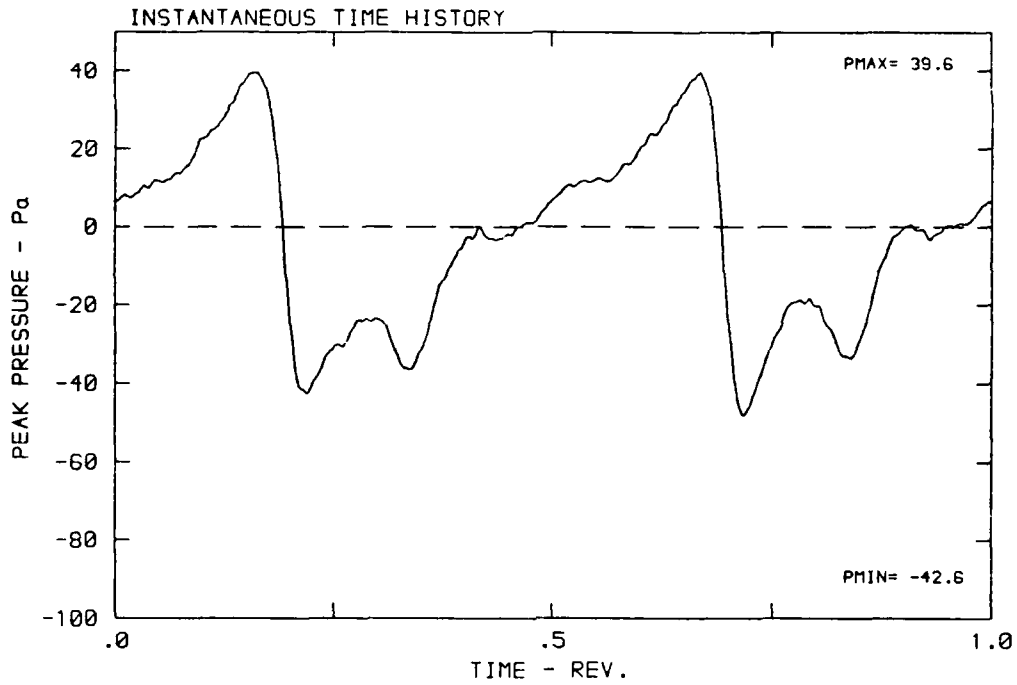
DATA POINT: EN-2 RUN: 164 MP: 4

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



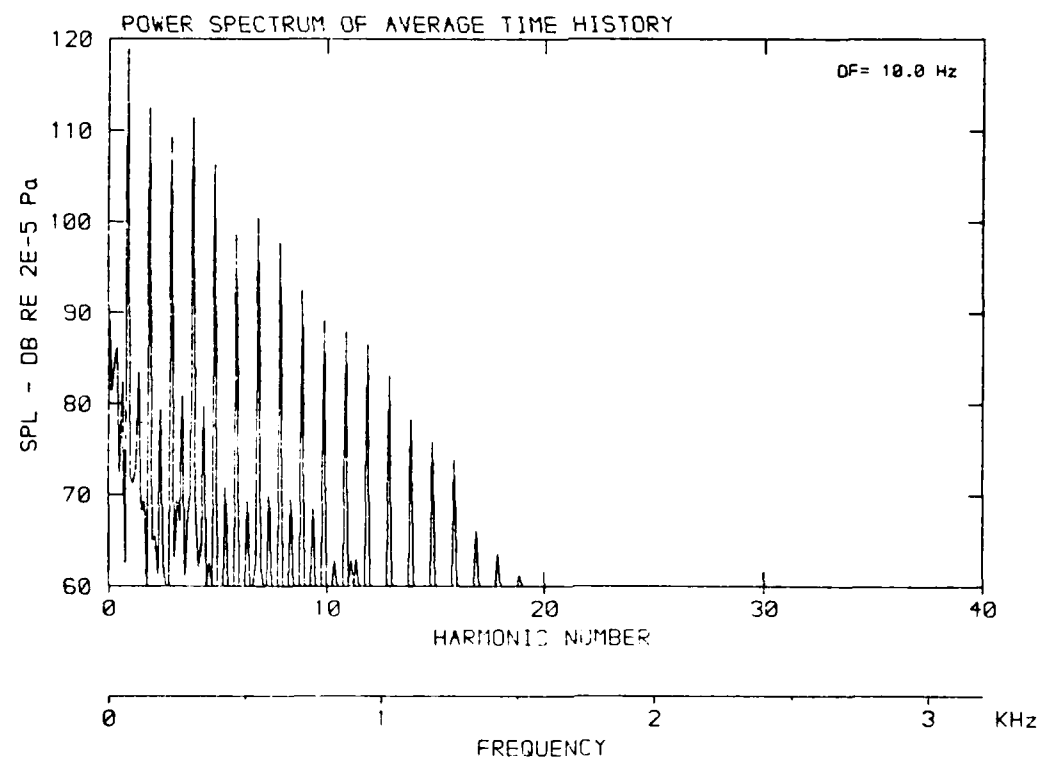
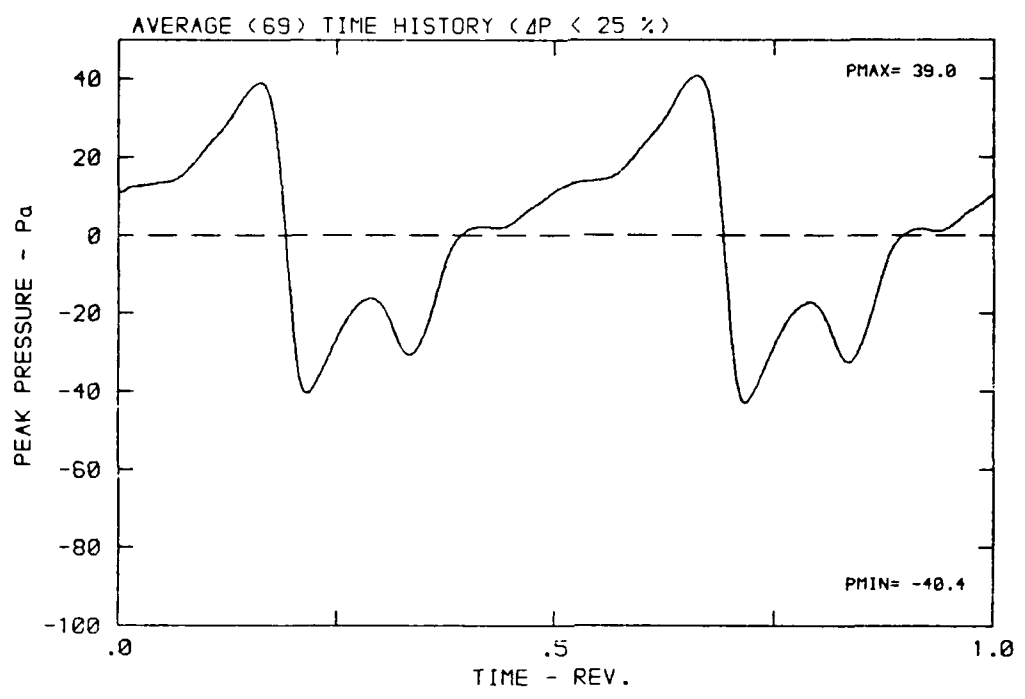
DATA POINT: EN-2 RUN: 164 MP: 5

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



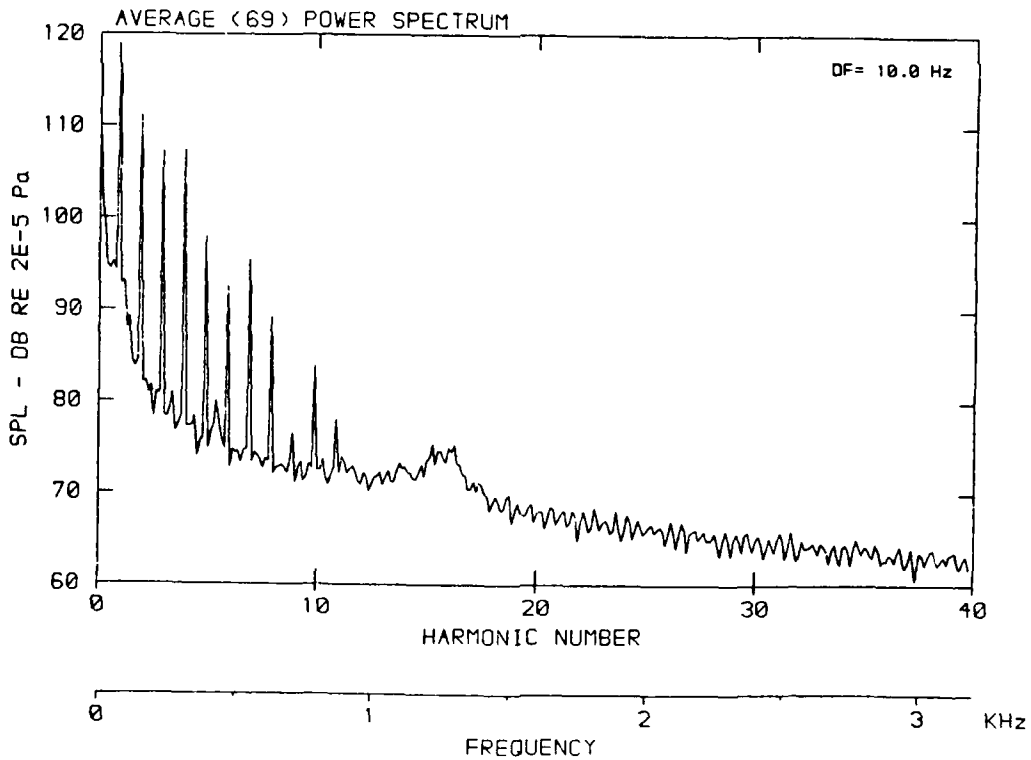
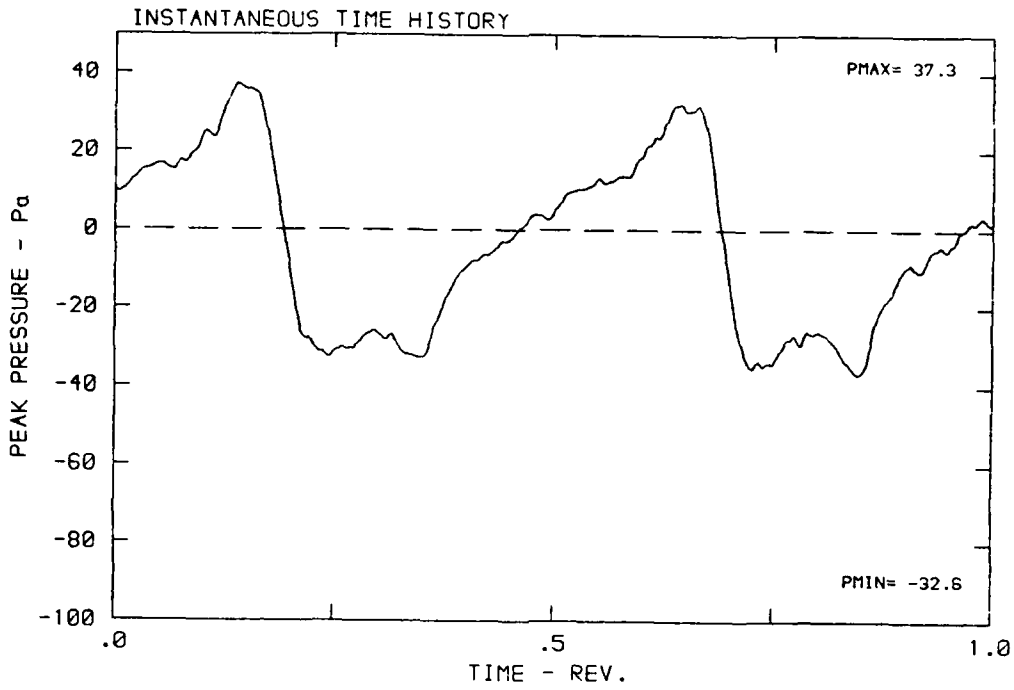
DATA POINT: EN-2 RUN: 164 MP: 5

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



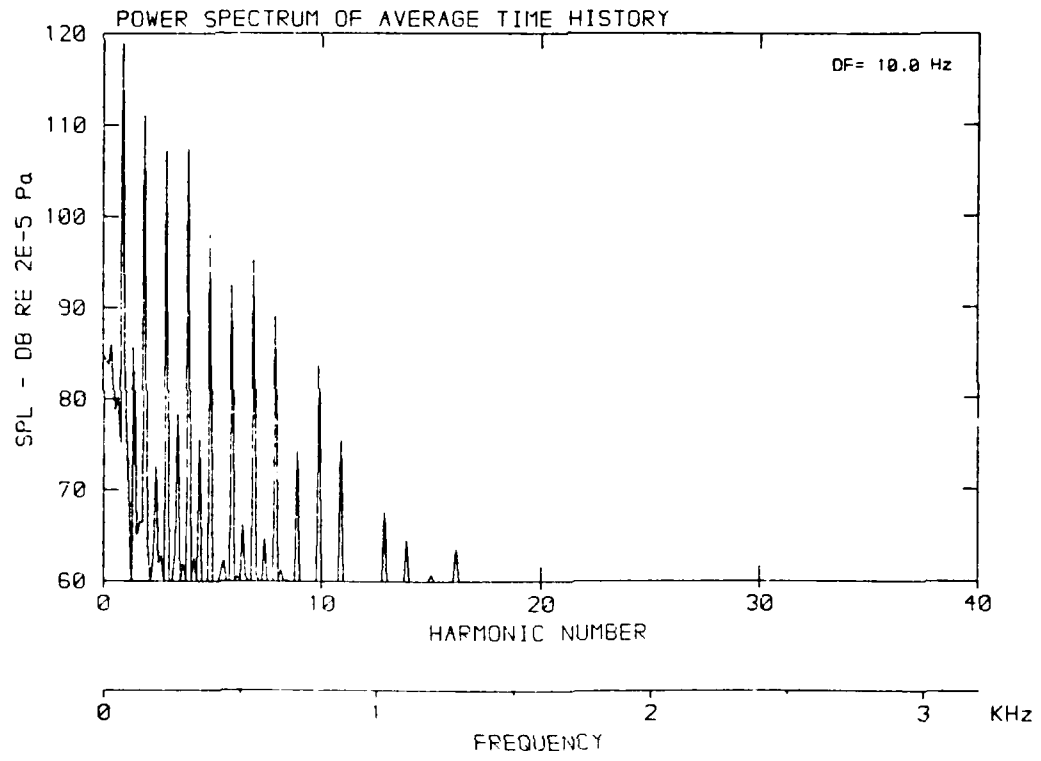
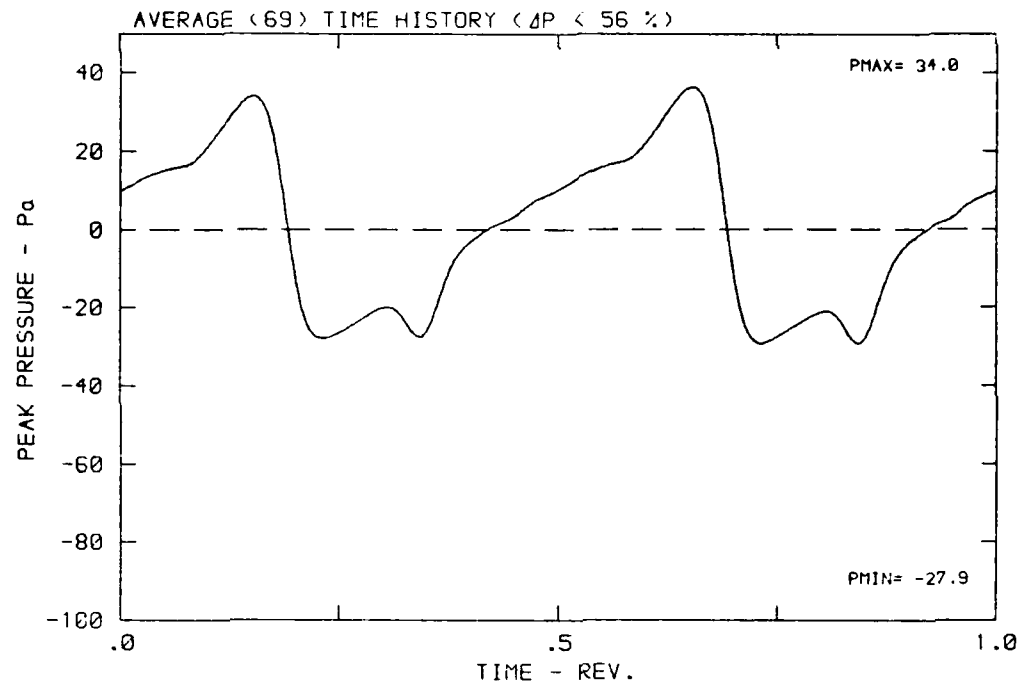
DATA POINT: EN-2 RUN: 164 MP: 6

β : 19.9° MH: .7677 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 286.6 K



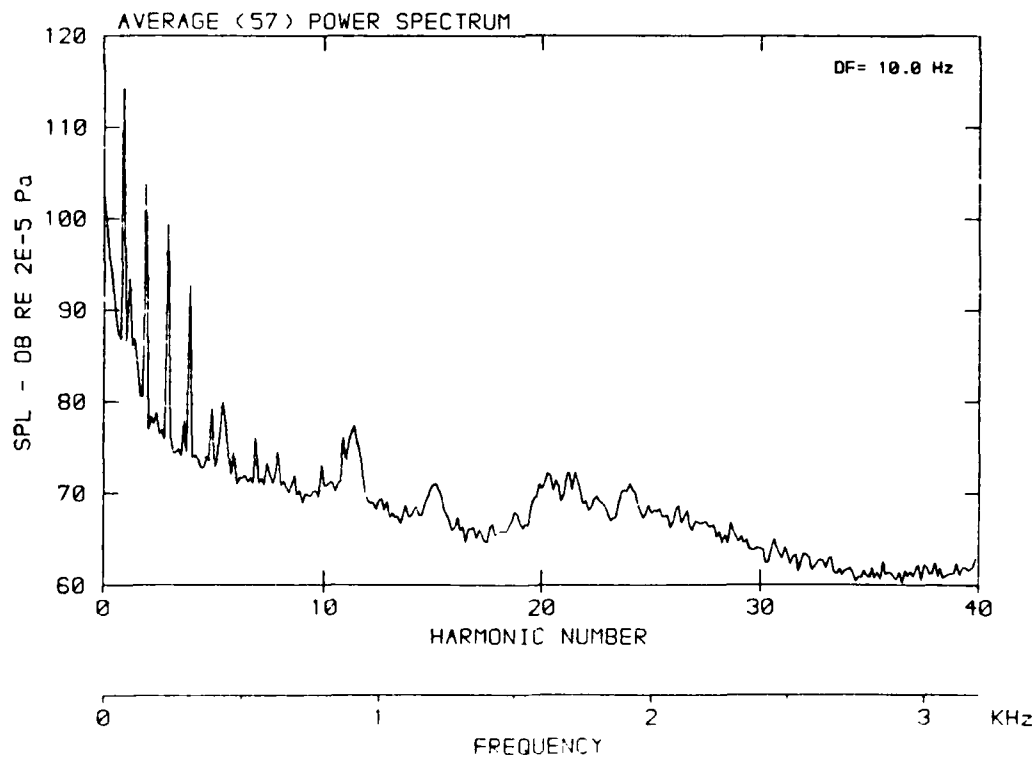
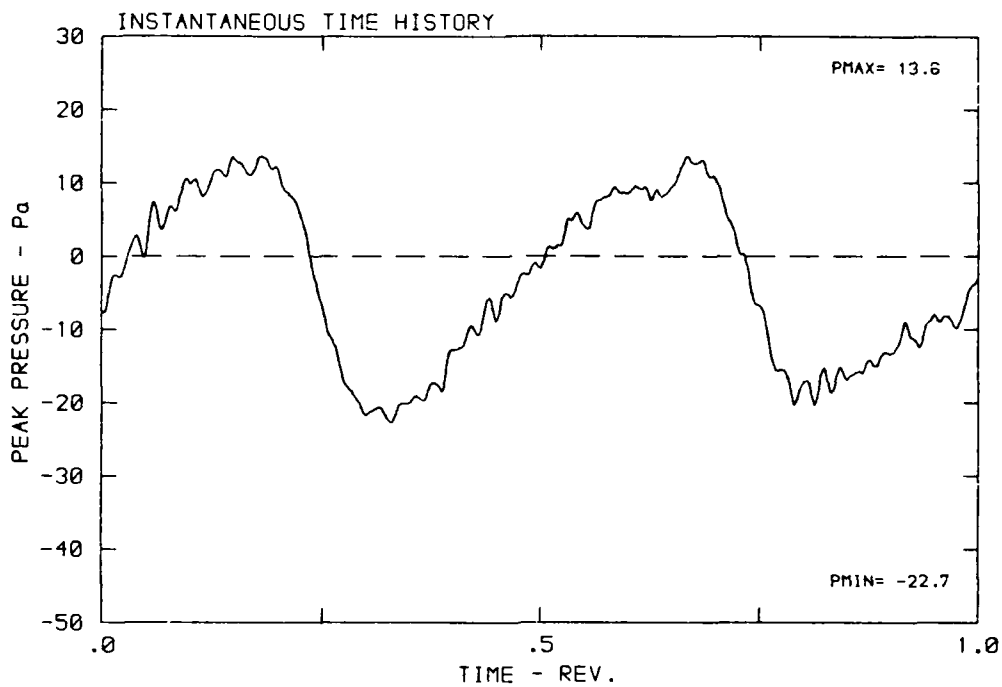
DATA POINT: EN-2 RUN: 164 MP: 6

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



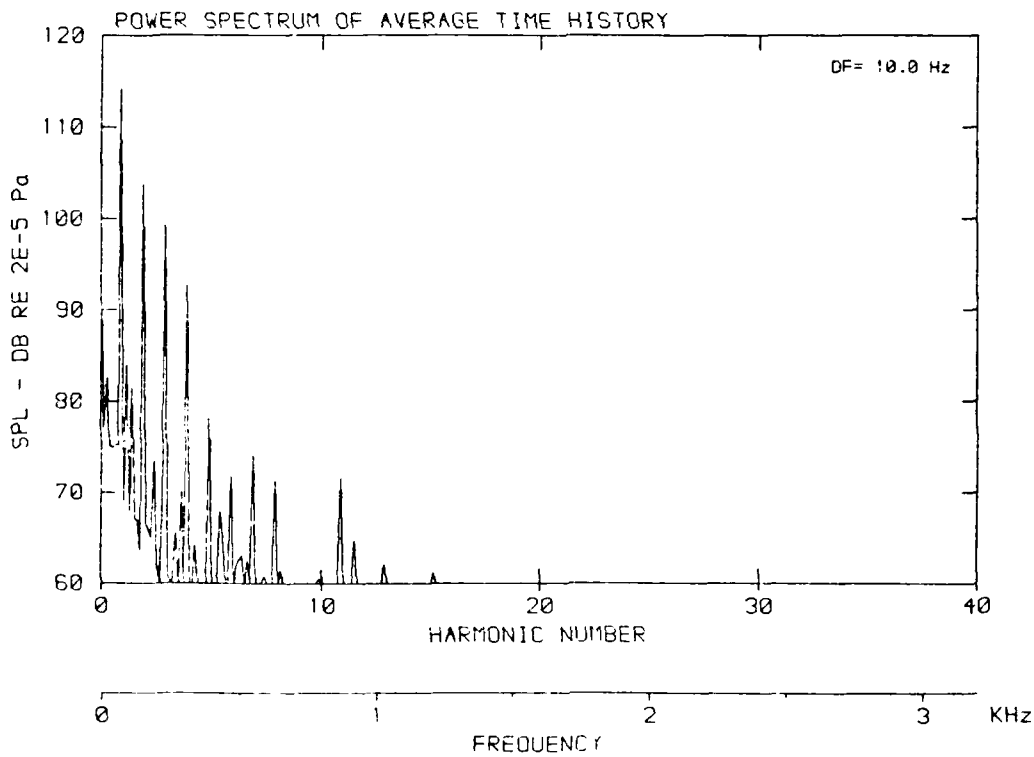
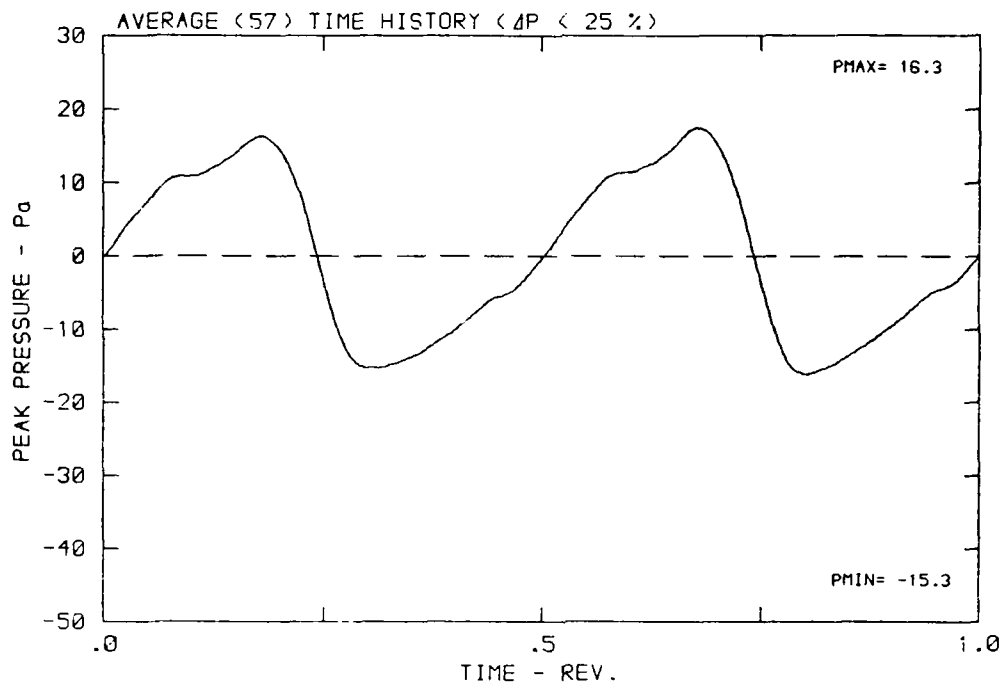
DATA POINT: EN-2 RUN: 164 MP: 7

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



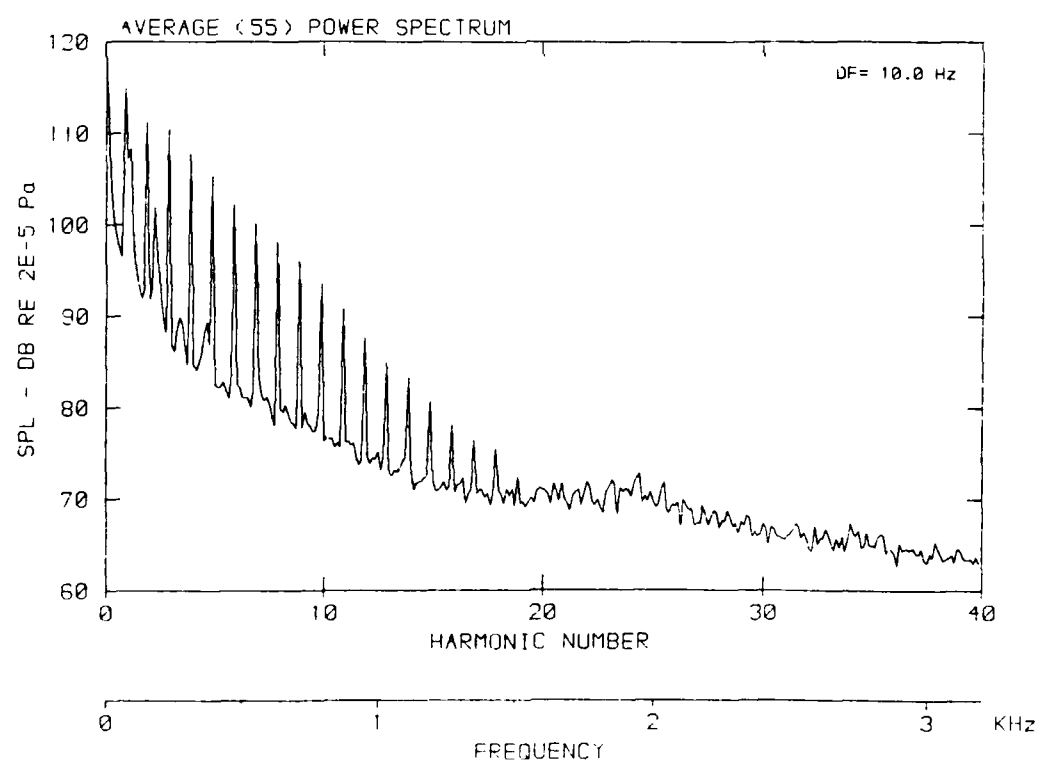
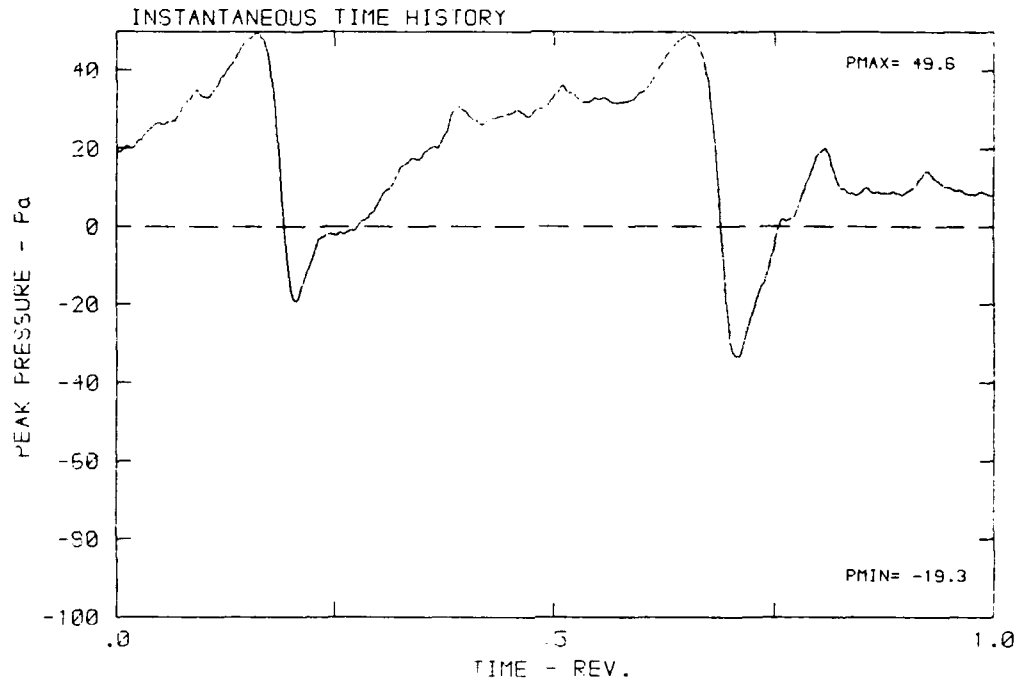
DATA POINT: EN-2 RUN: 164 MP: 7

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



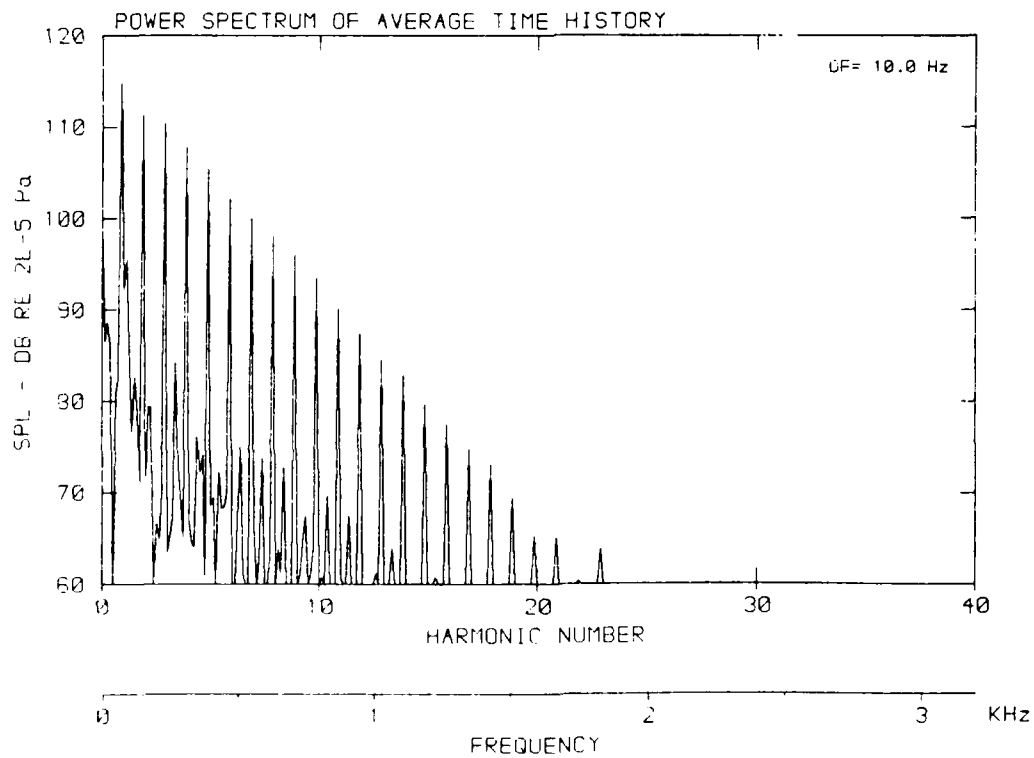
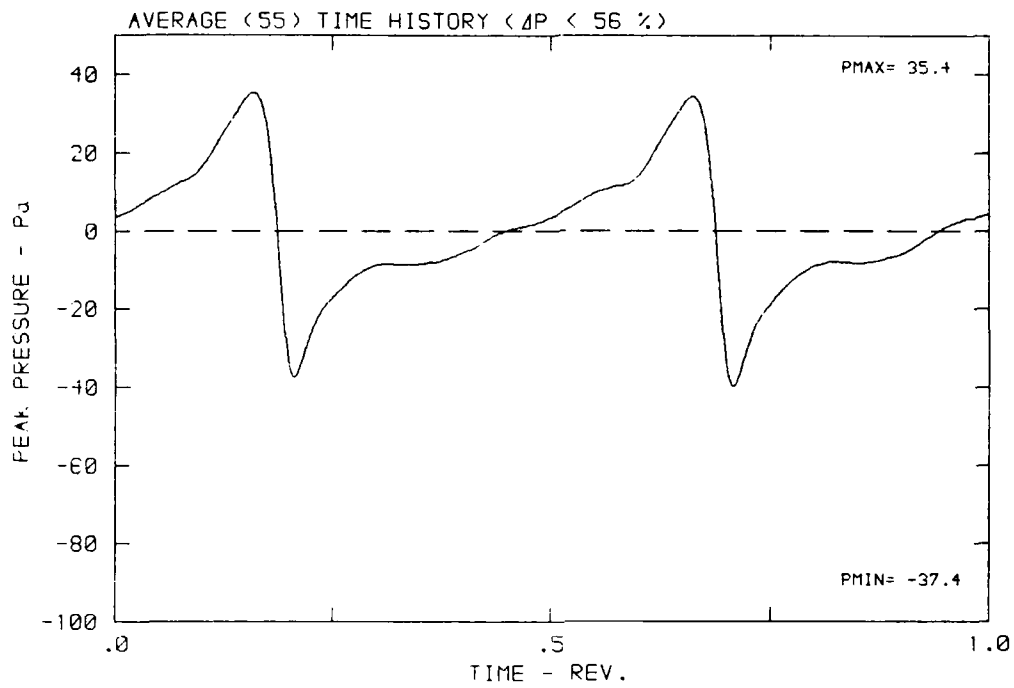
DATA POINT: EN-2 RUN: 164 MP: 8

\bar{p} : 19.9⁰ MH: .7677 n: 2400 rpm v/u : .203 ϕ : 7.3⁰ T: 285.5 K



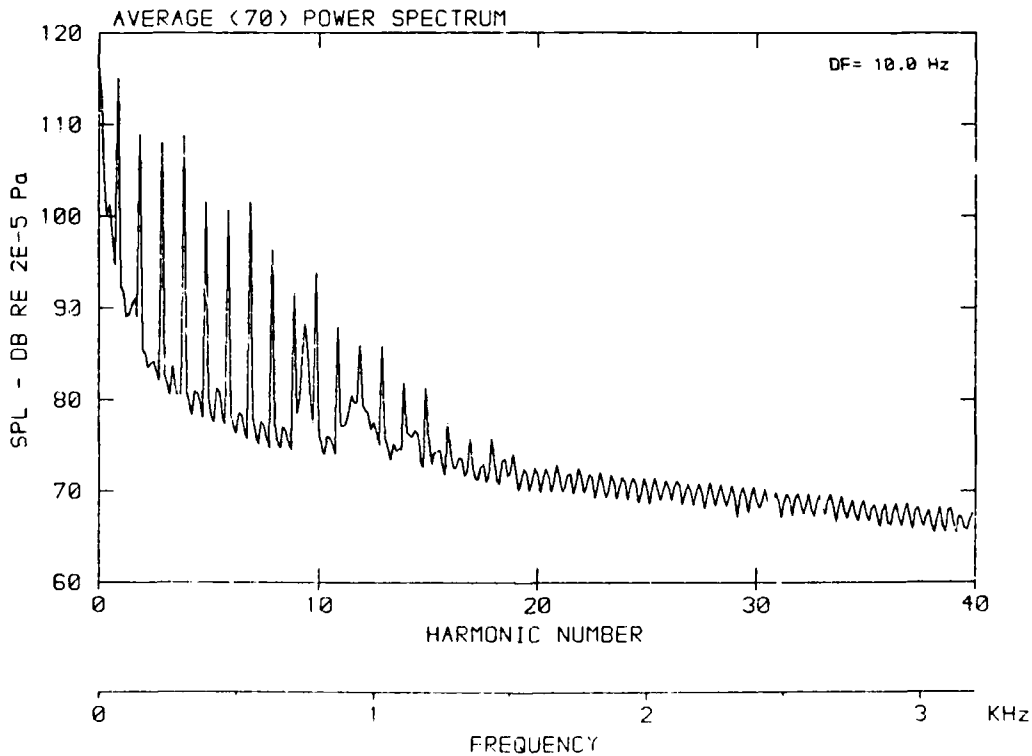
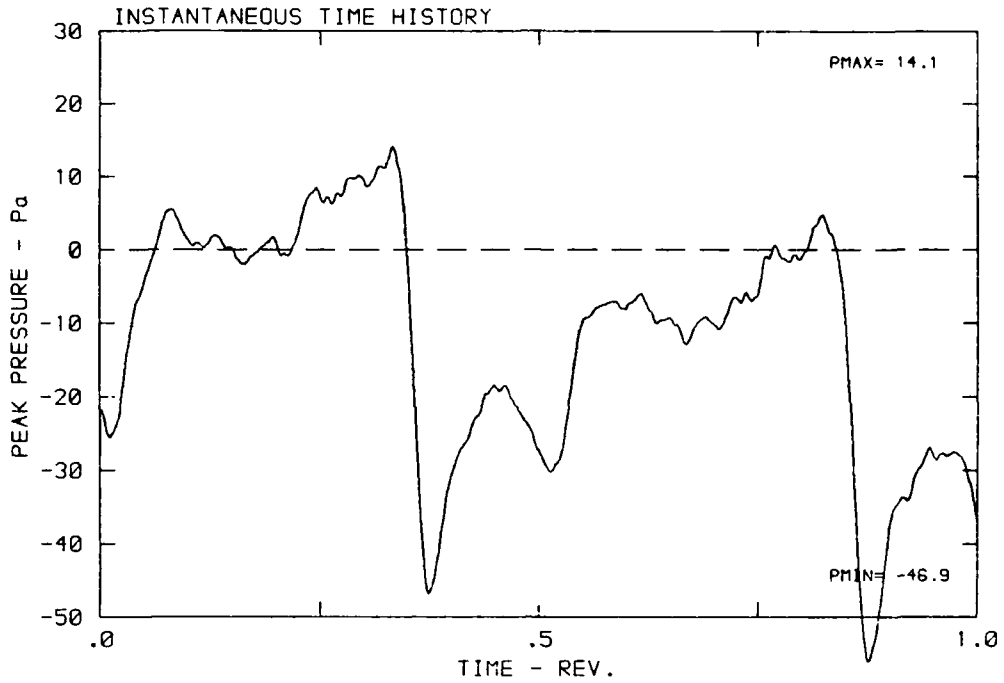
DATA POINT: EN-2 RUN: 164 MP: 8

β : 19.9° MH: .7677 n: 2400 rpm v/u : .203 ϕ : 7.3° T: 286.6 K



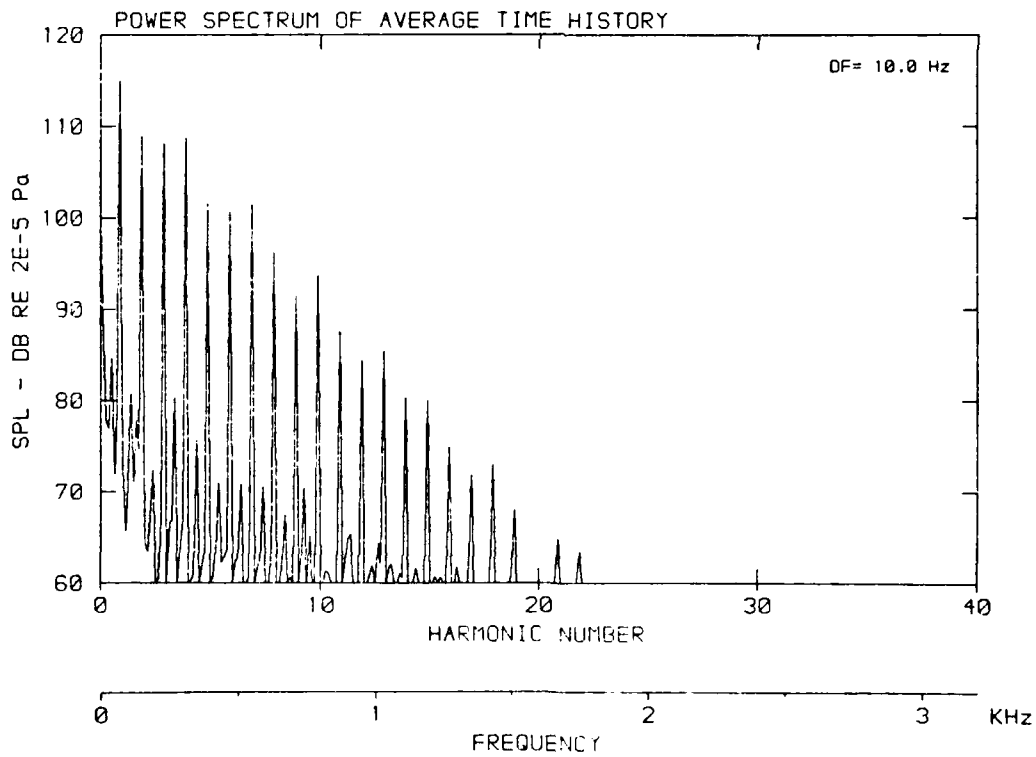
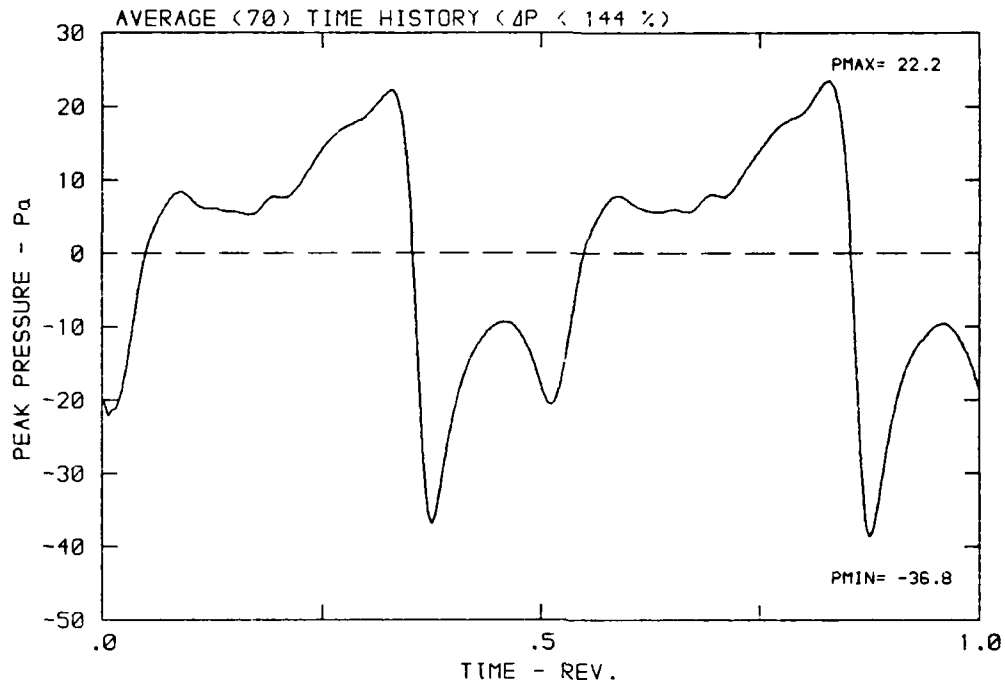
DATA POINT: EN-2 RUN: 164 MP: 9

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



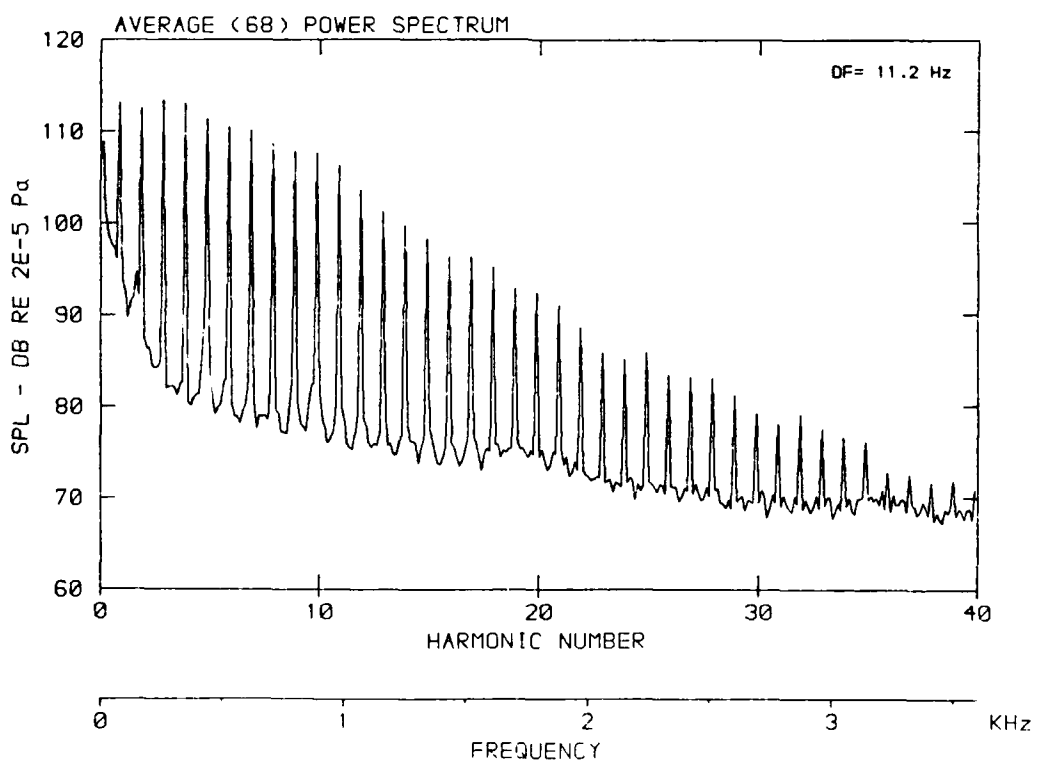
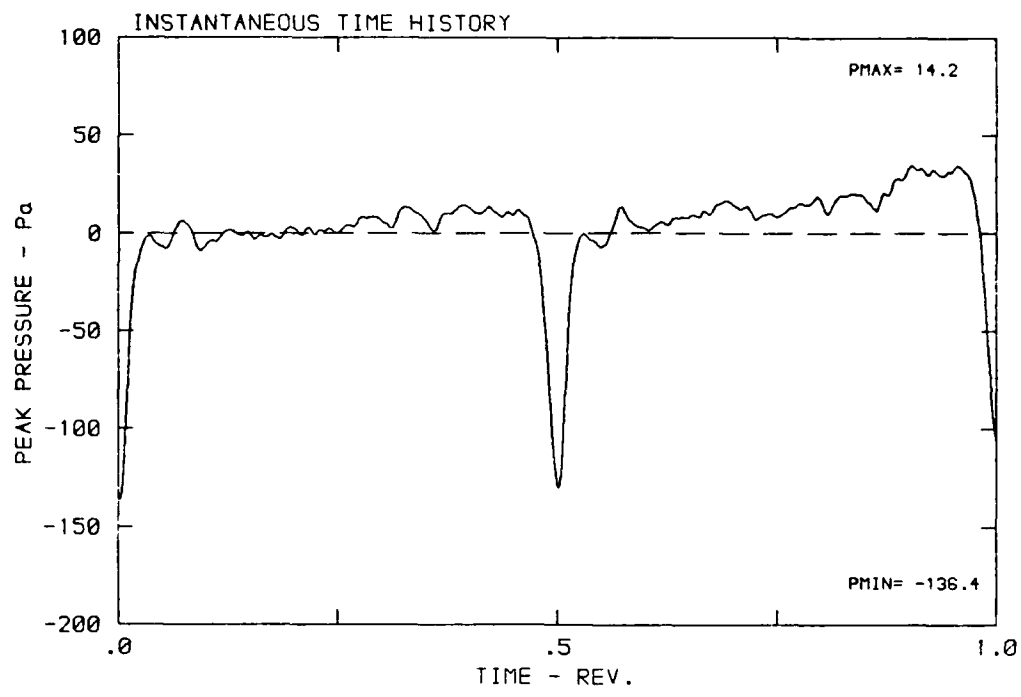
DATA POINT: EN-2 RUN: 164 MP: 9

β : 19.9° MH: .7677 n: 2400 rpm v/u: .203 ϕ : 7.3° T: 286.6 K



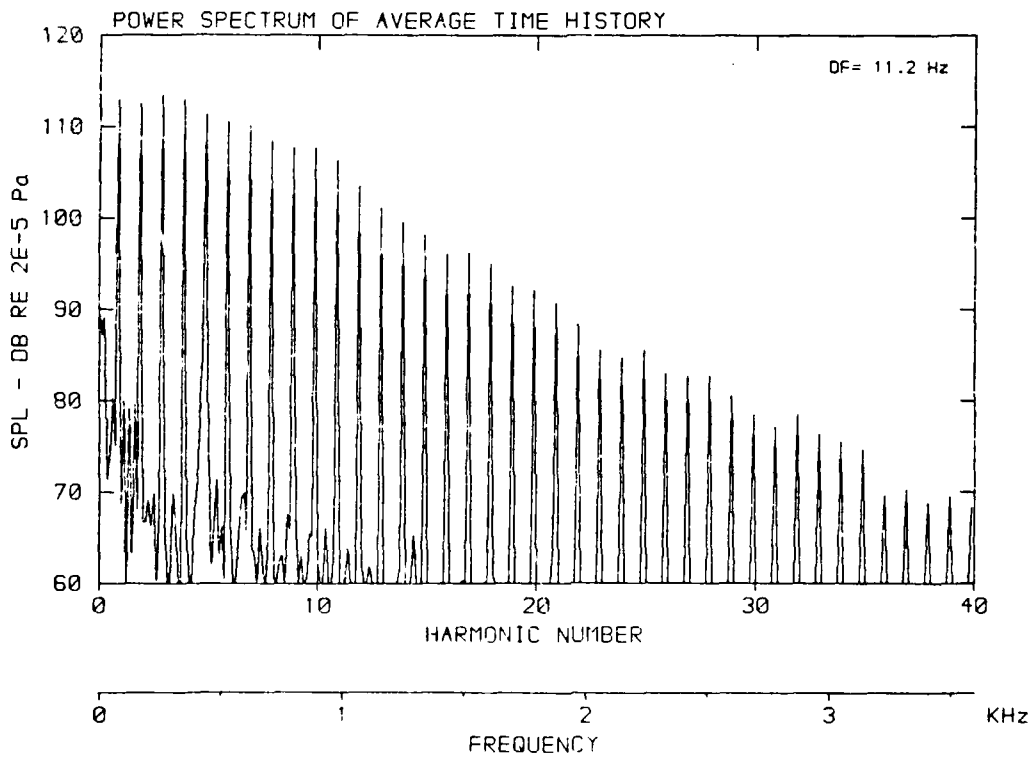
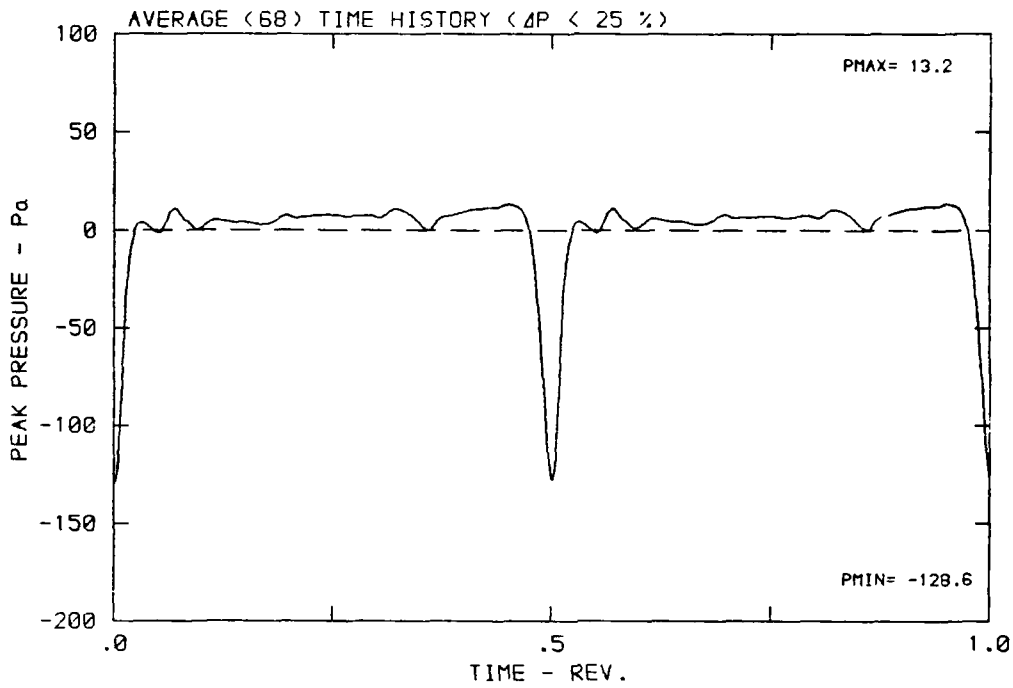
DATA POINT: EN-3 RUN: 165 MP: 1

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



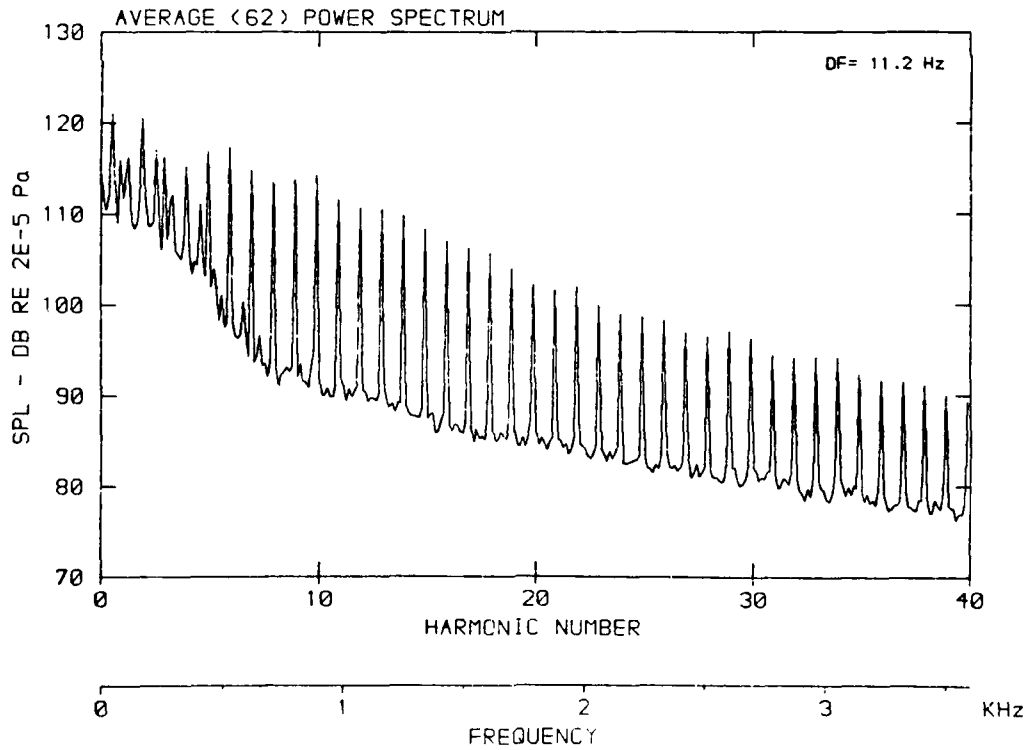
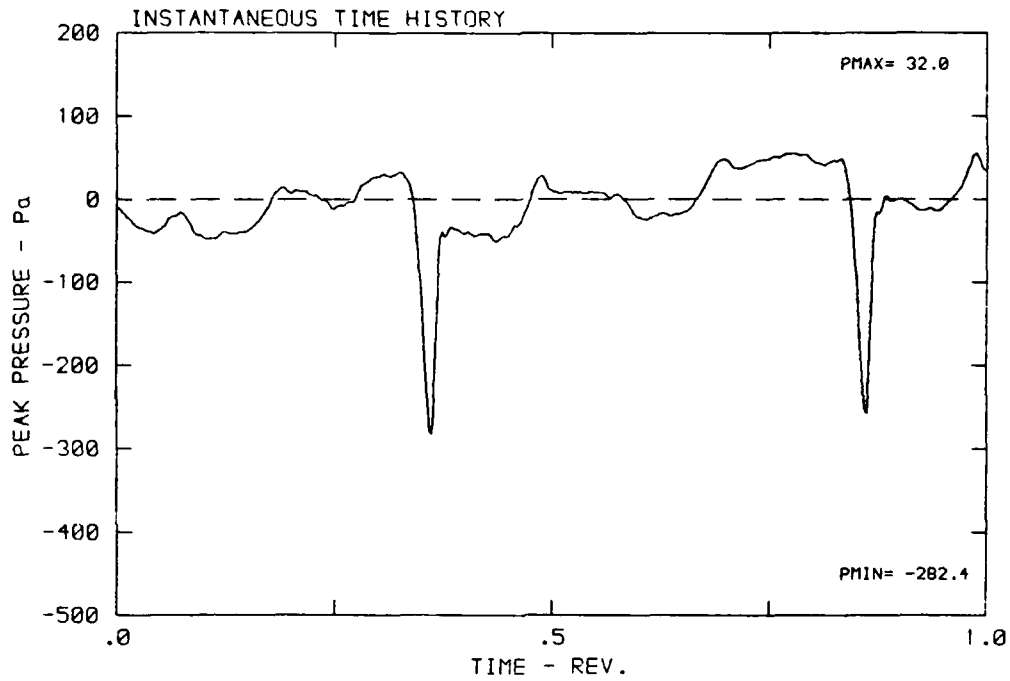
DATA POINT: EN-3 RUN: 165 MP: 1

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



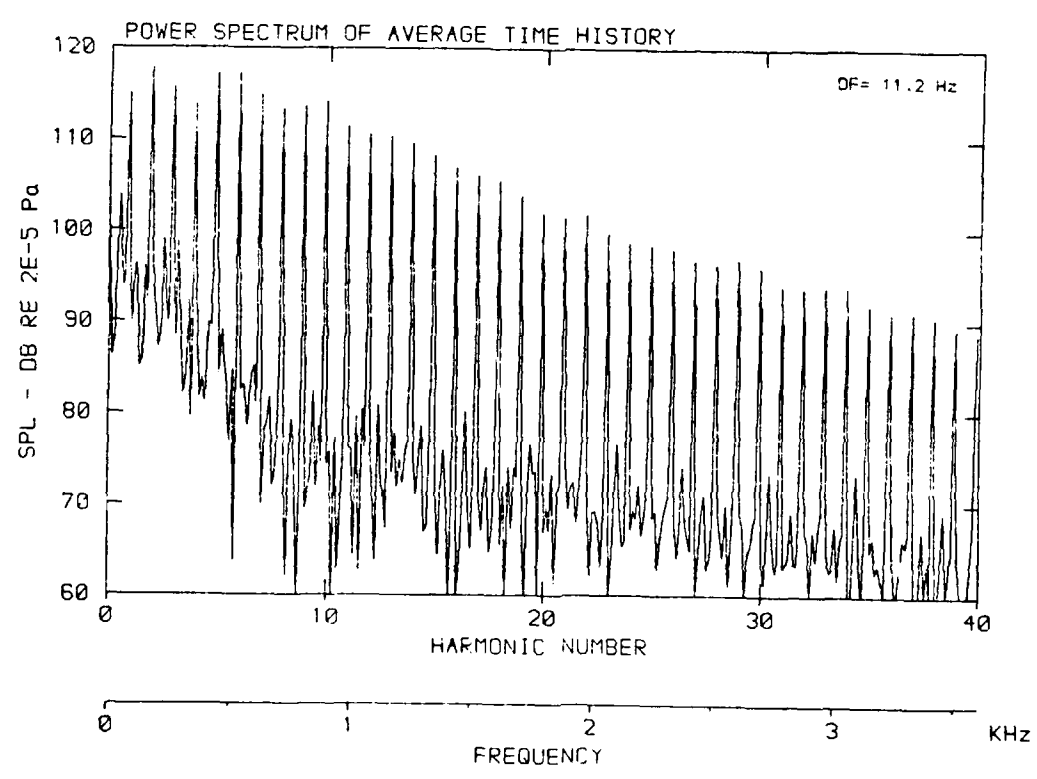
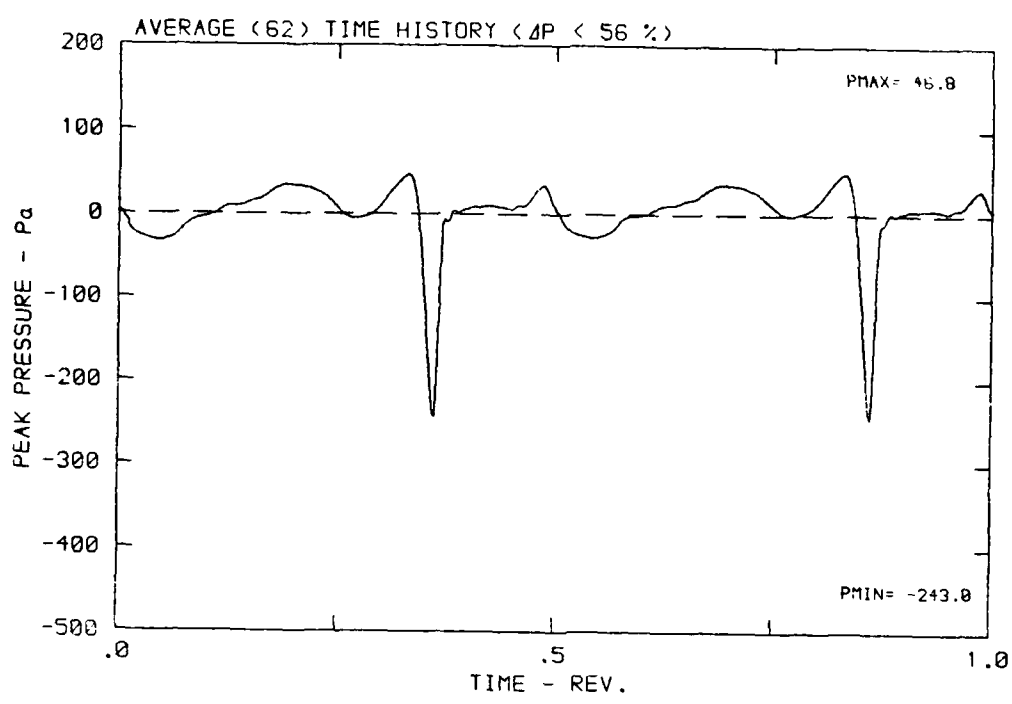
DATA POINT: EN-3 RUN: 165 MP: 2

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



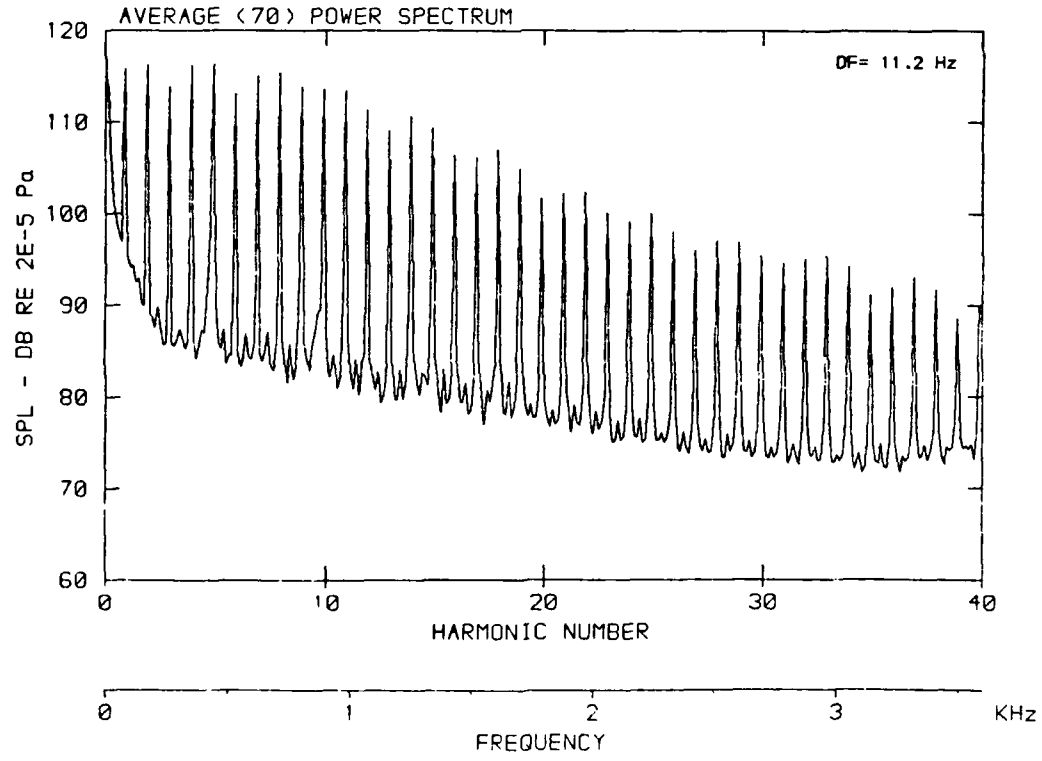
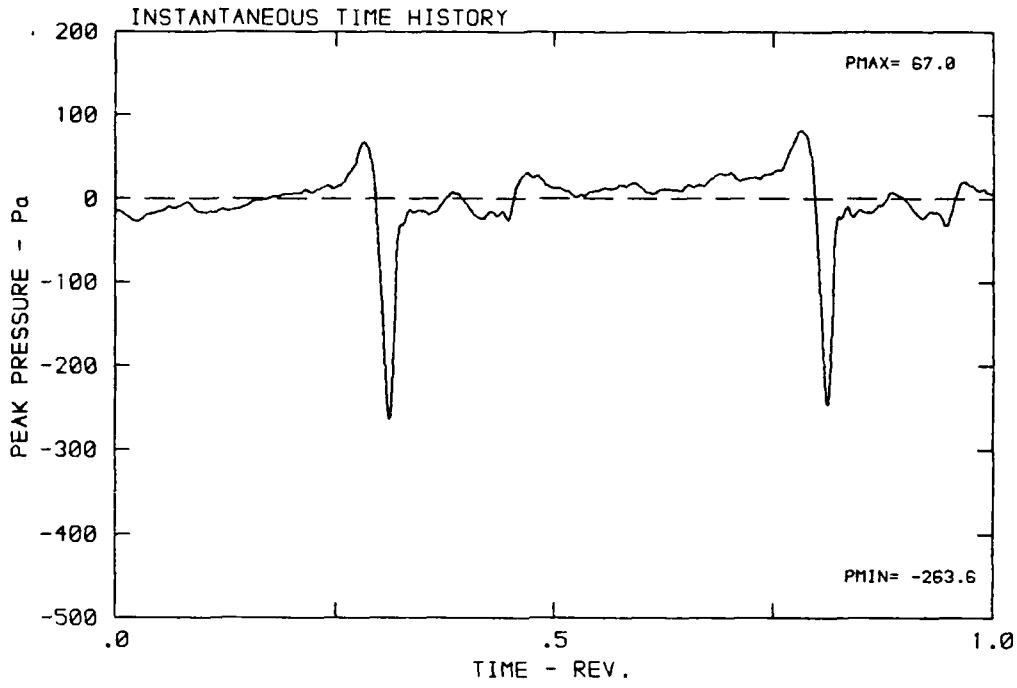
DATA POINT: EN-3 RUN: 165 MP: 2

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



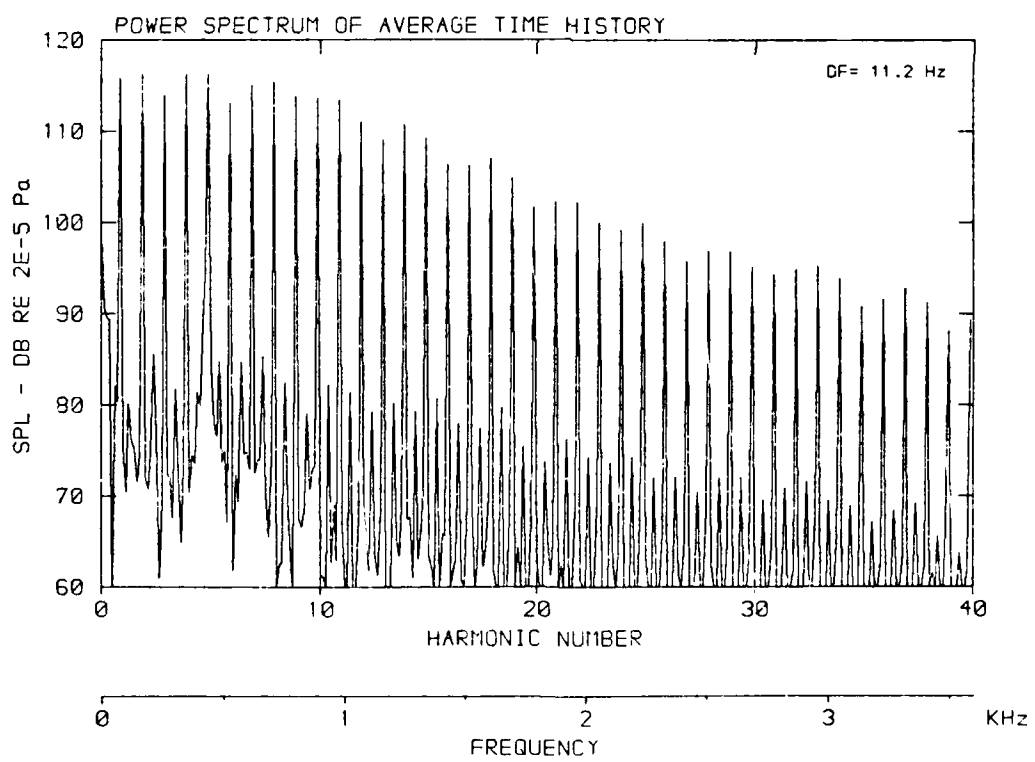
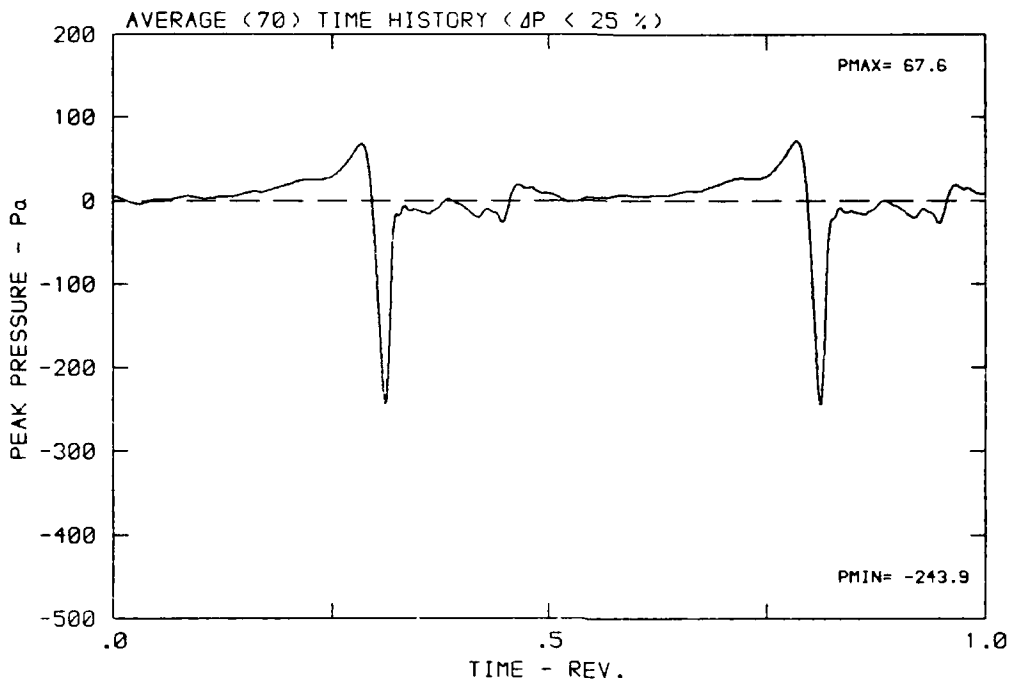
DATA POINT: EN-3 RUN: 165 MP: 3

β : 19.9° MH: .8745 n: 2700 rpm v/u : .269 ϕ : 7.3° T: 287.9 K



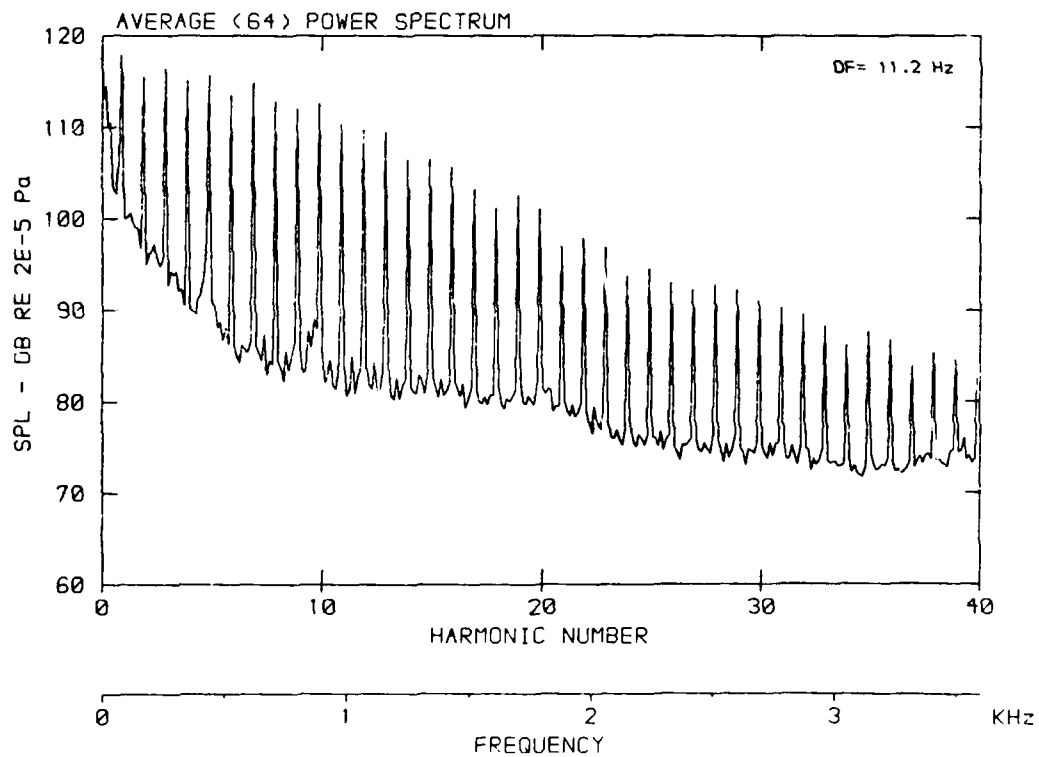
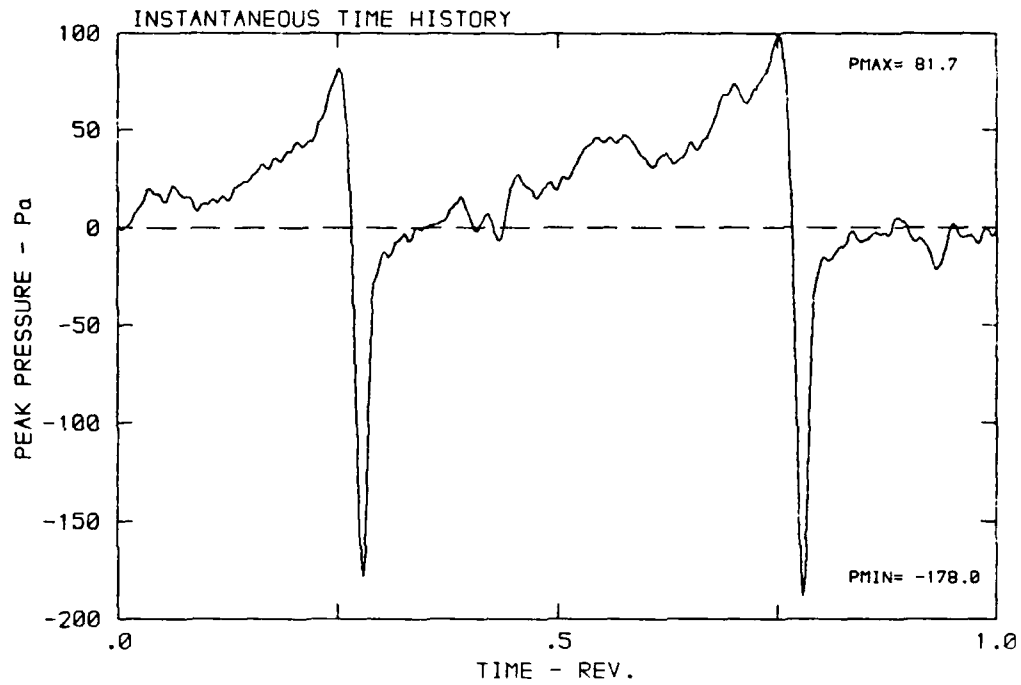
DATA POINT: EN-3 RUN: 165 MP: 3

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



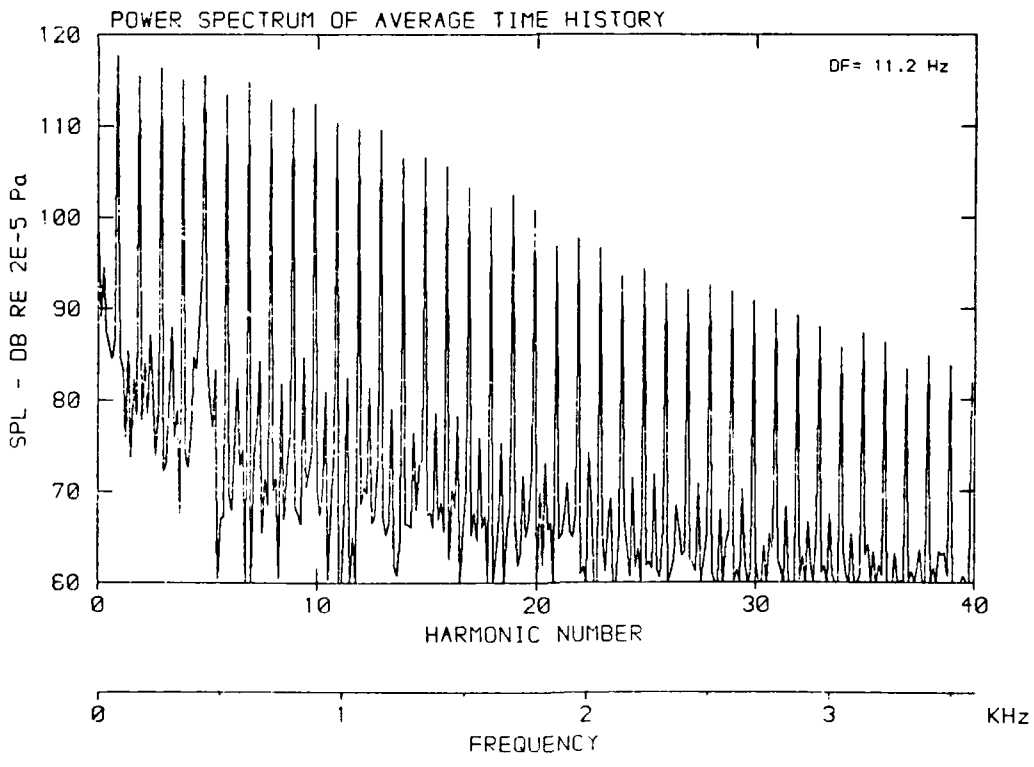
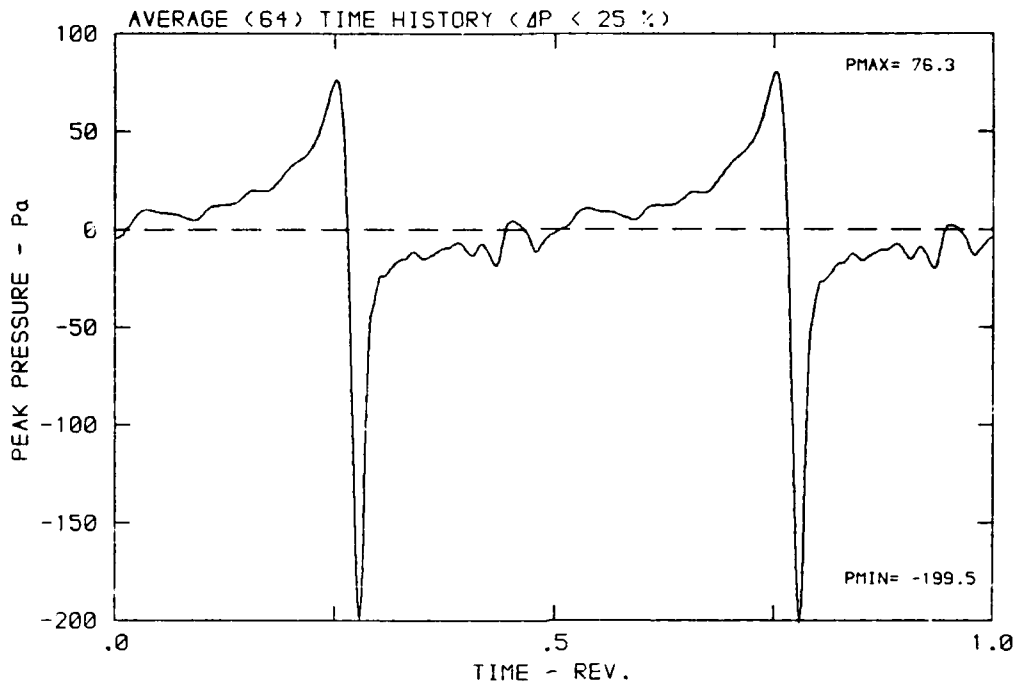
DATA POINT: EN-3 RUN: 165 MP: 4

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



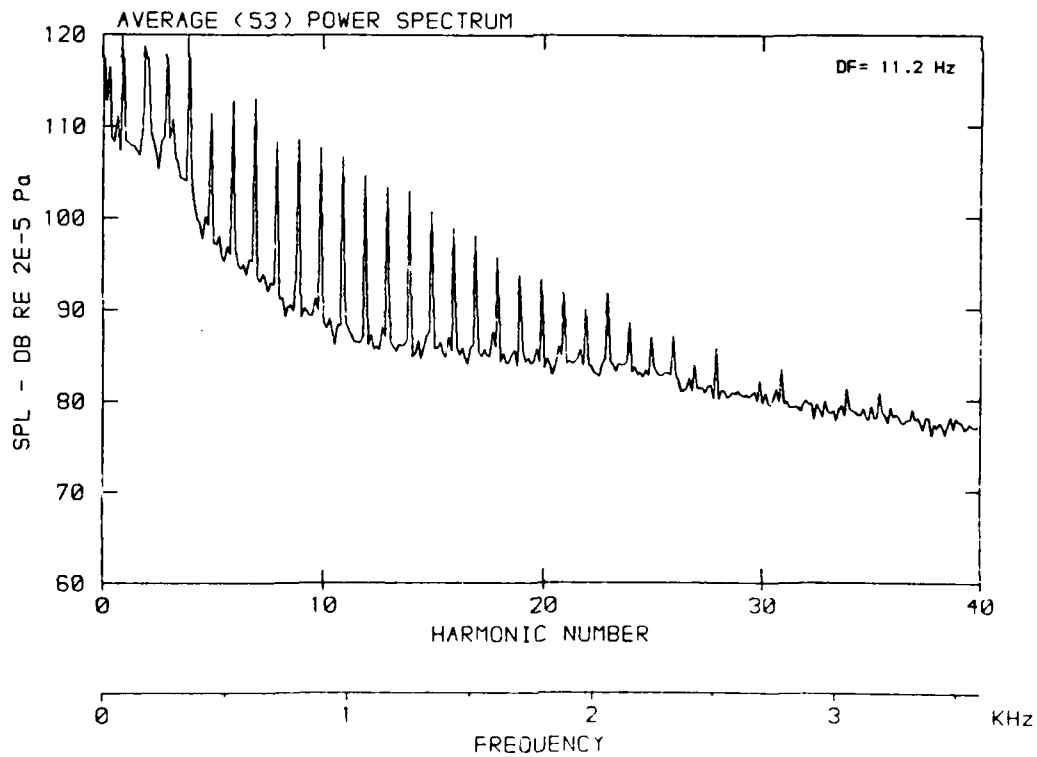
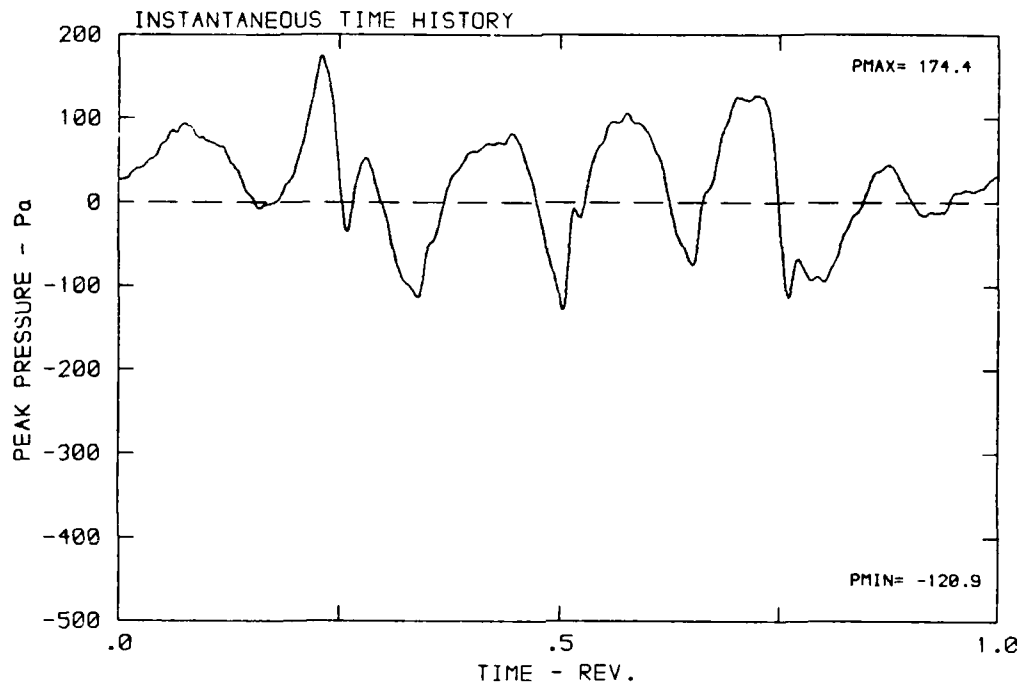
DATA POINT: EN-3 RUN: 165 MP: 4

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



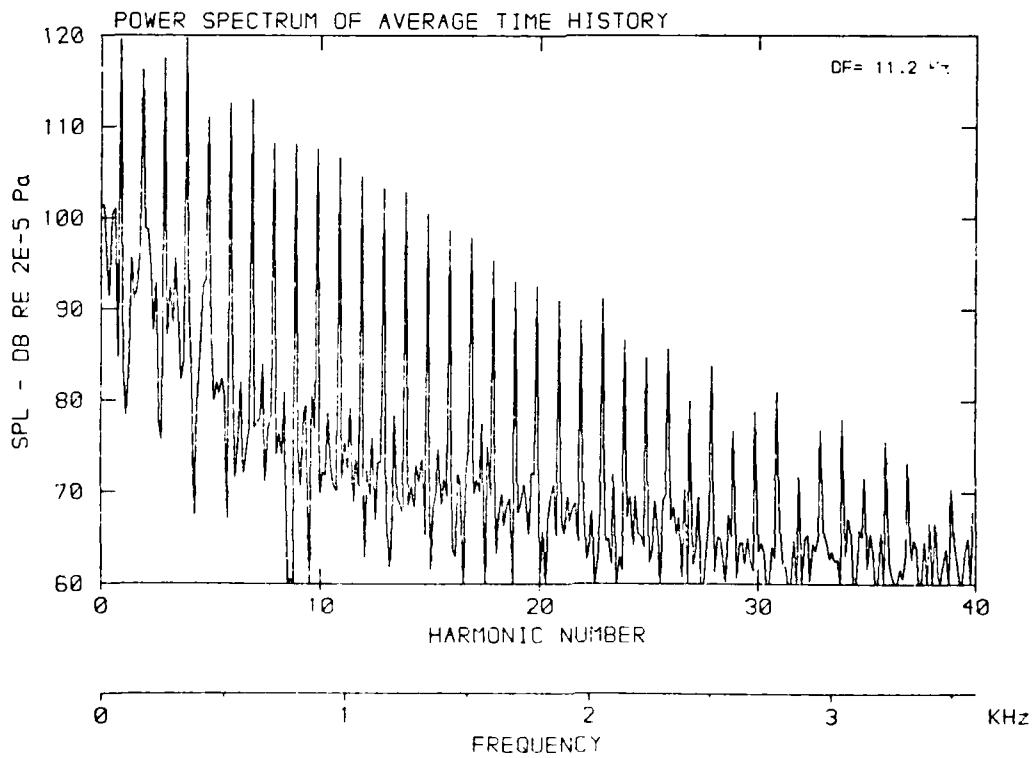
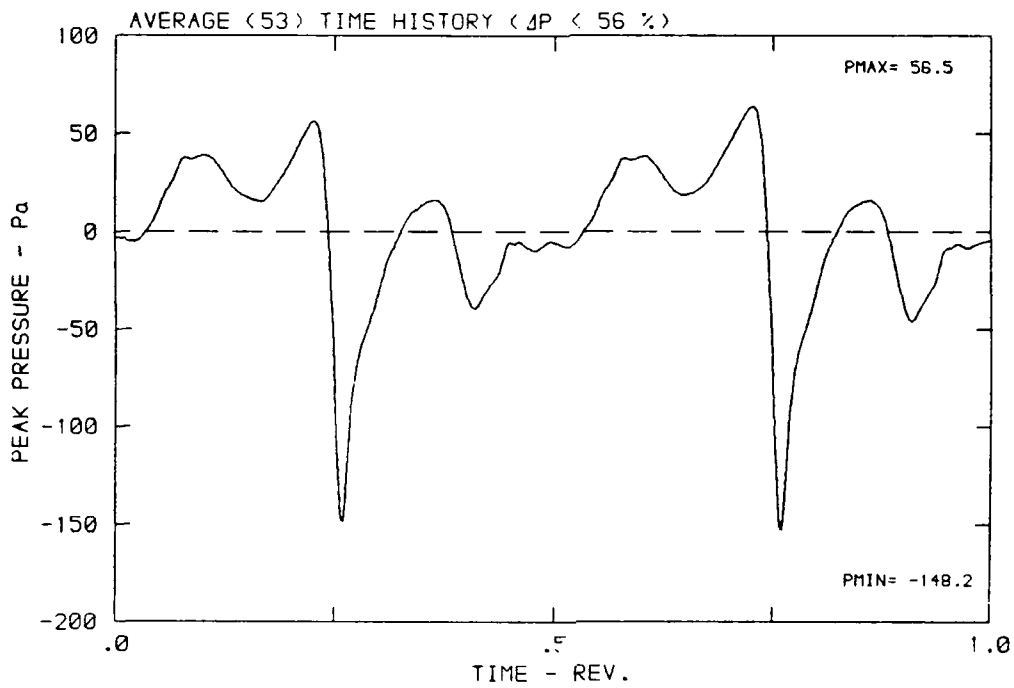
DATA POINT: EN-3 RUN: 165 MP: 5

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



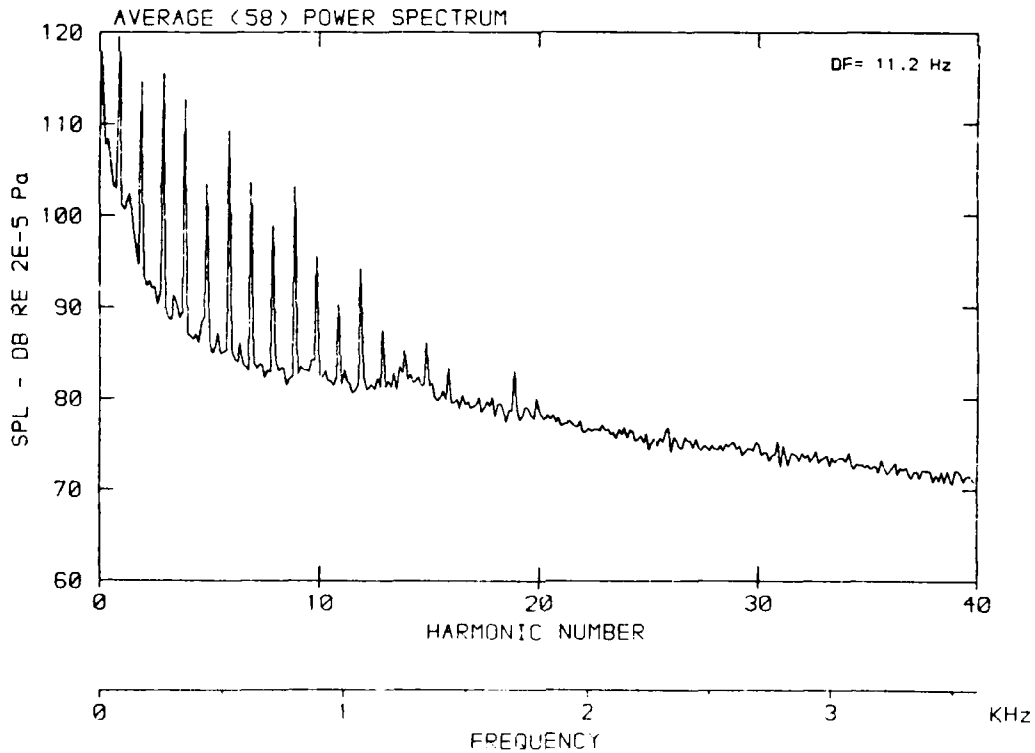
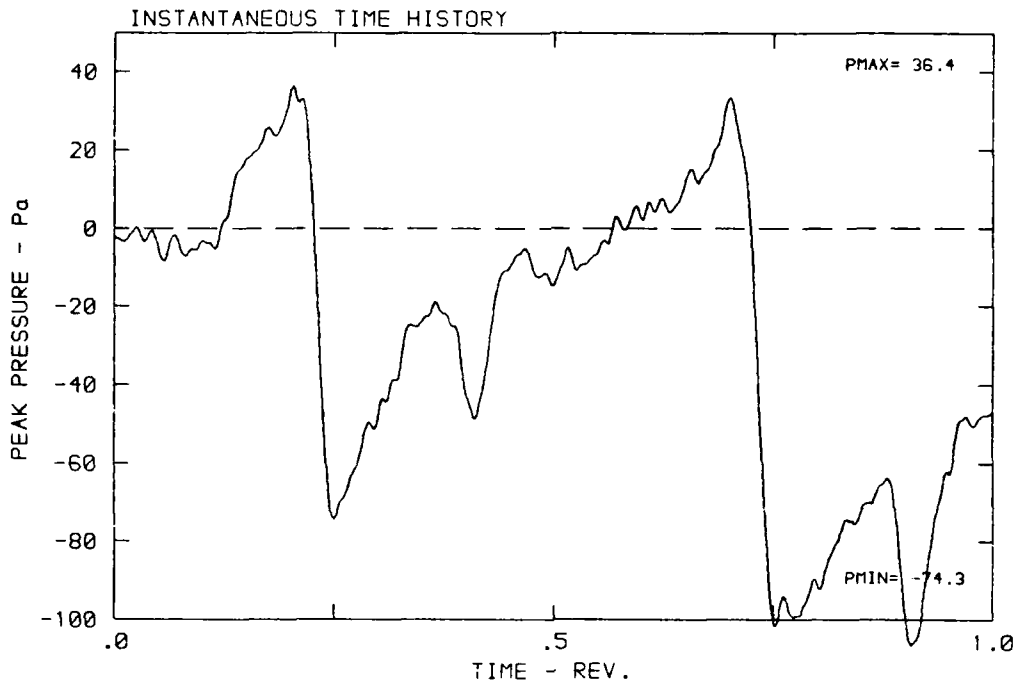
DATA POINT: EN-3 RUN: 165 MP: 5

β : 19.9° MH: .8745 n: 2700 rpm v/u : .269 ϕ : 7.3° T: 287.9 K



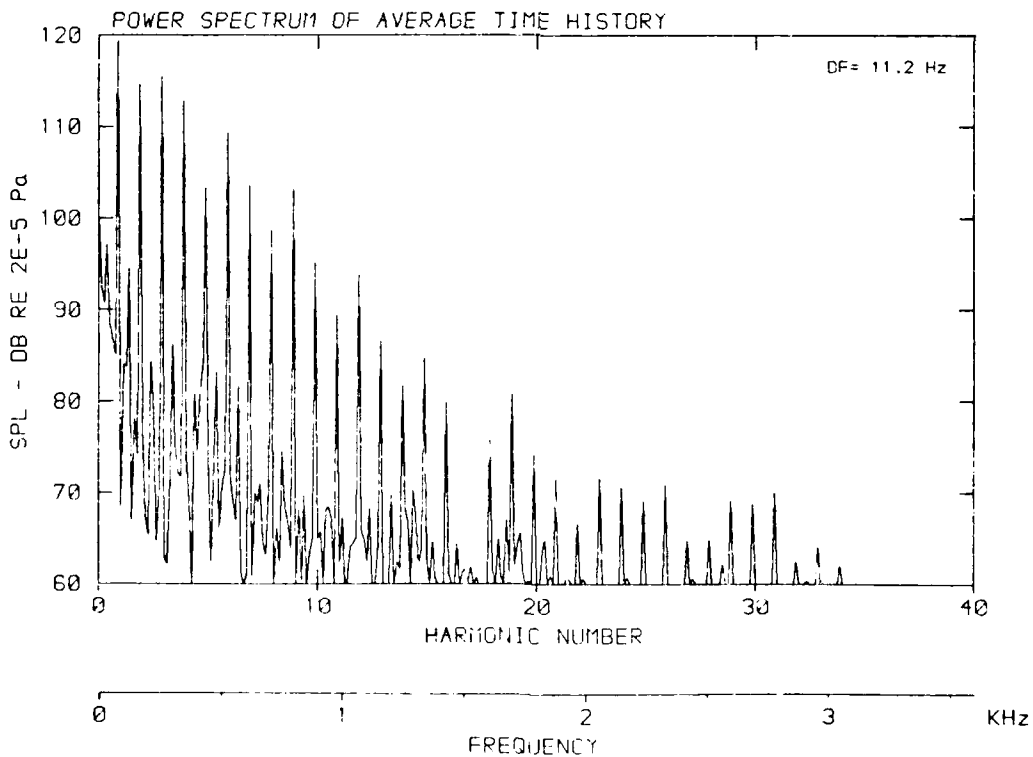
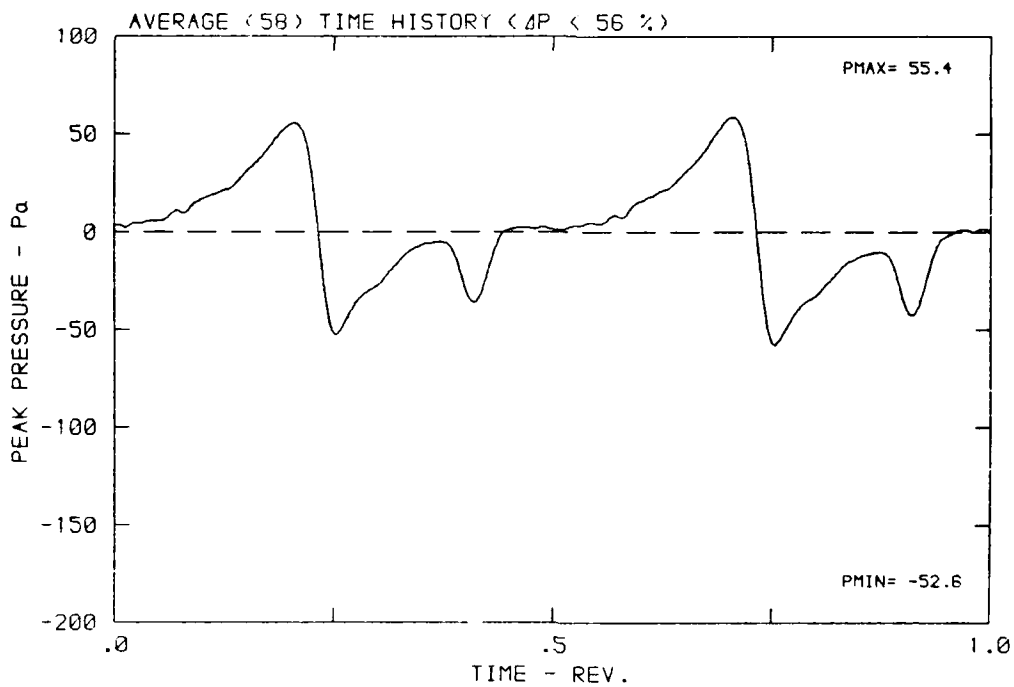
DATA POINT: EN-3 RUN: 165 MP: 6

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



DATA POINT: EN-3 RUN: 165 MP: 6

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



AD-A174 980

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

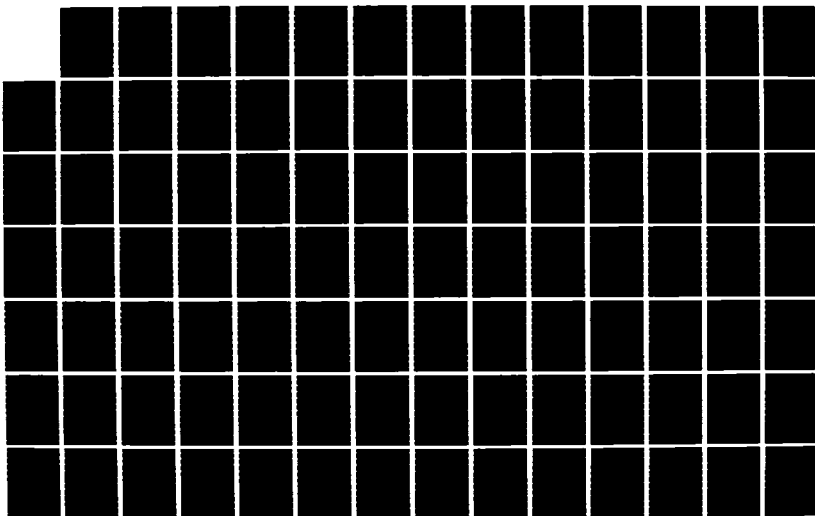
5/6

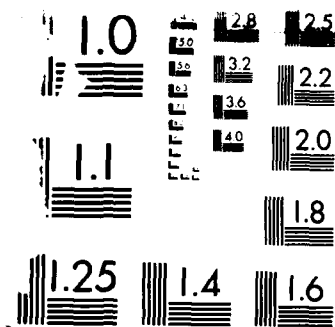
UNCLASSIFIED

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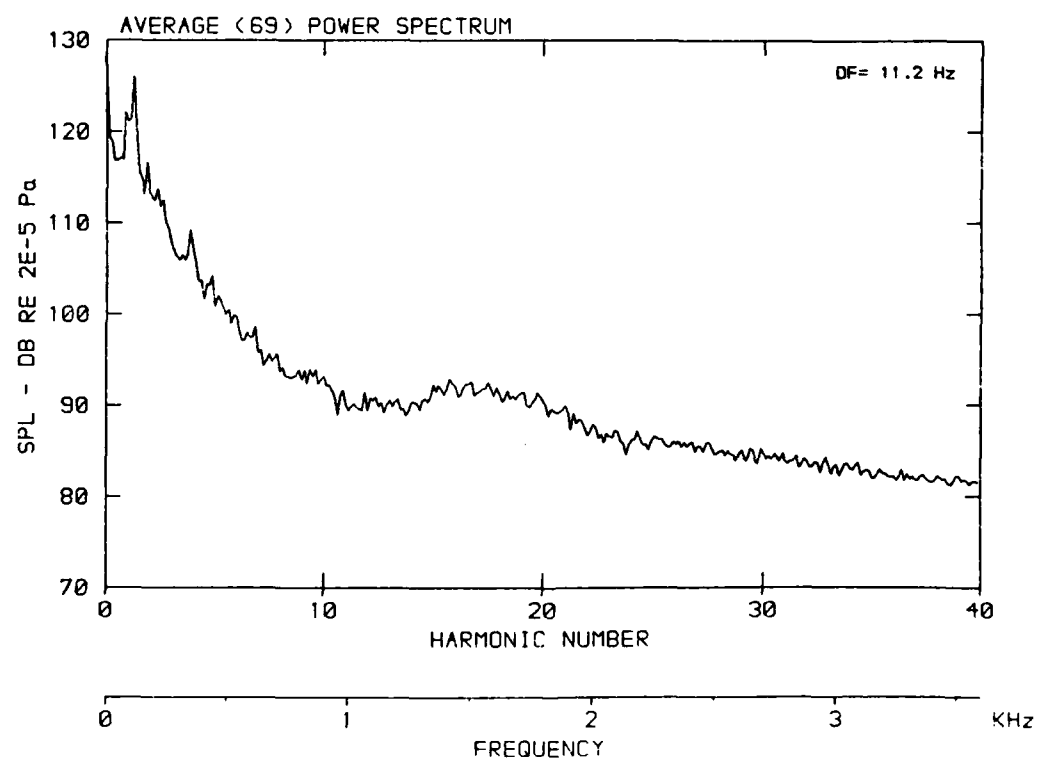
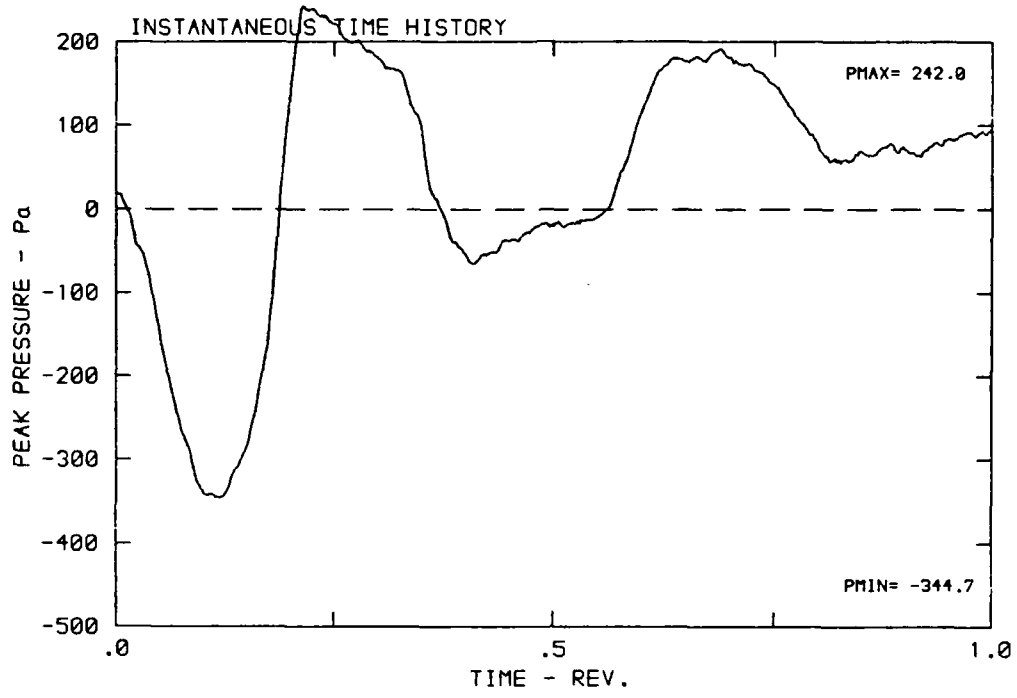




METRIC RESOLUTION TEST CHART
1963-A

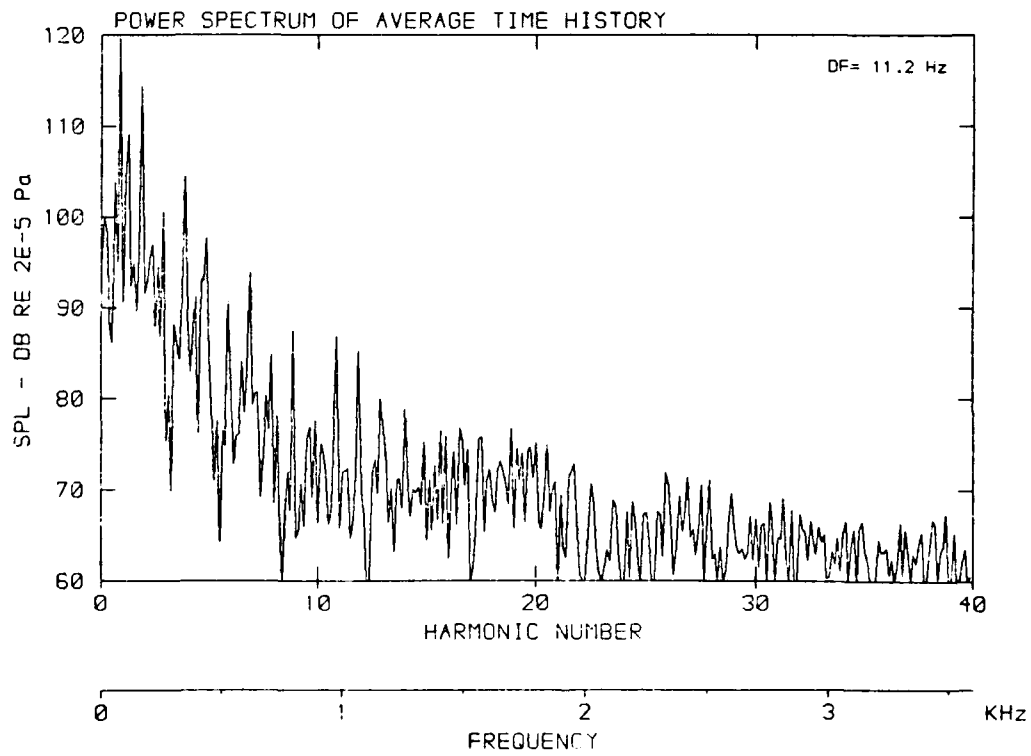
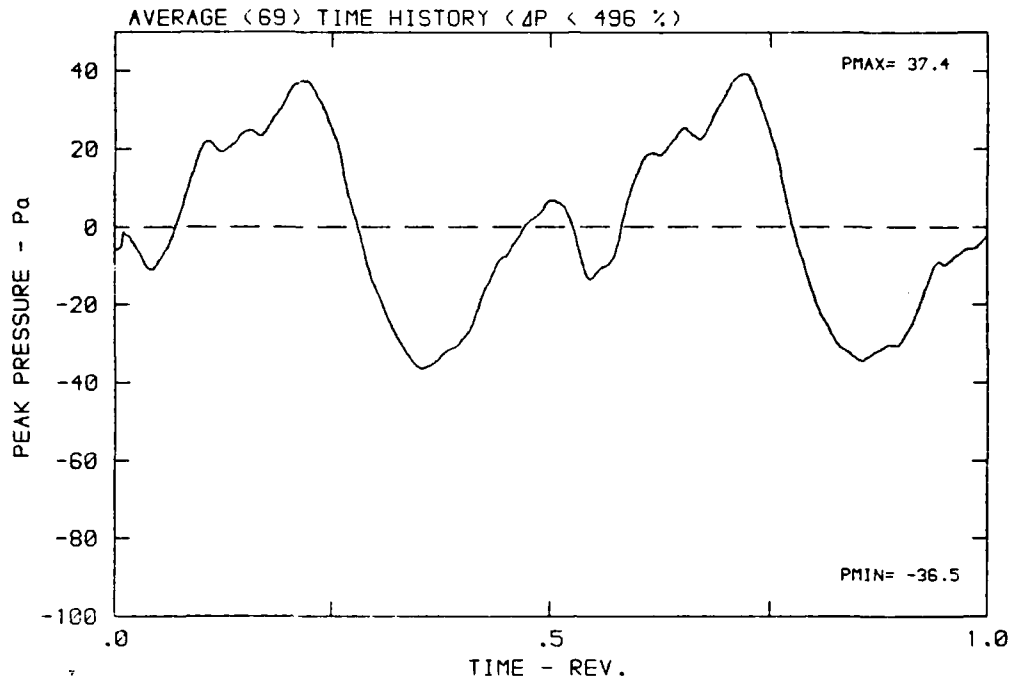
DATA POINT: EN-3 RUN: 165 MP: 7

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



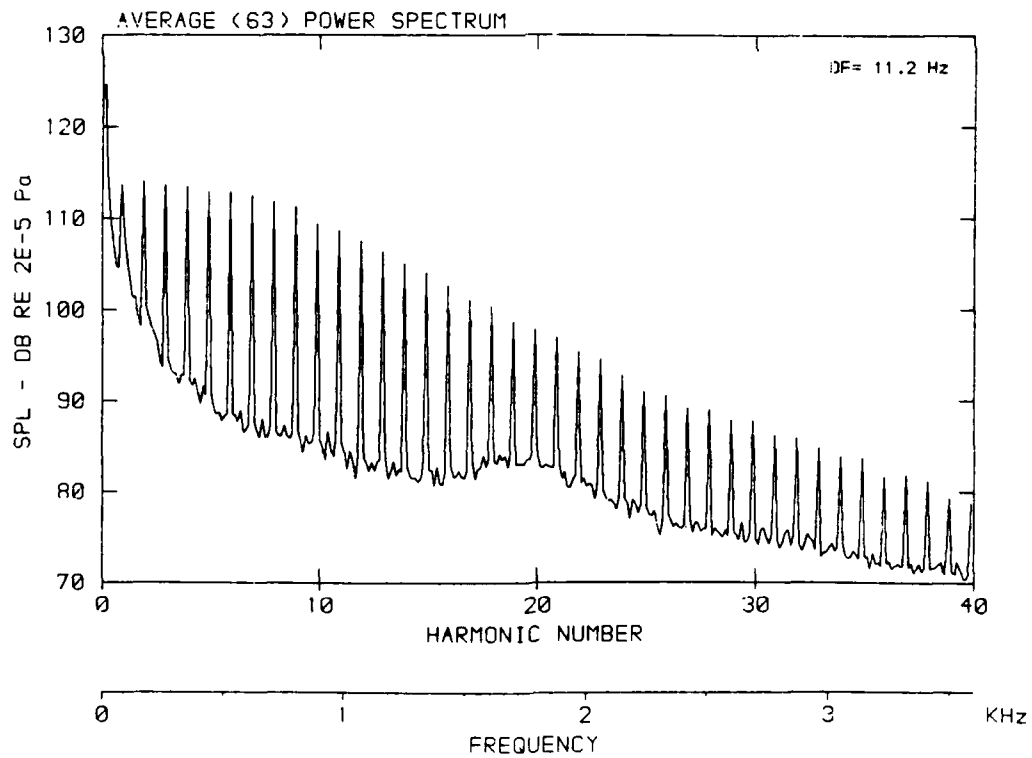
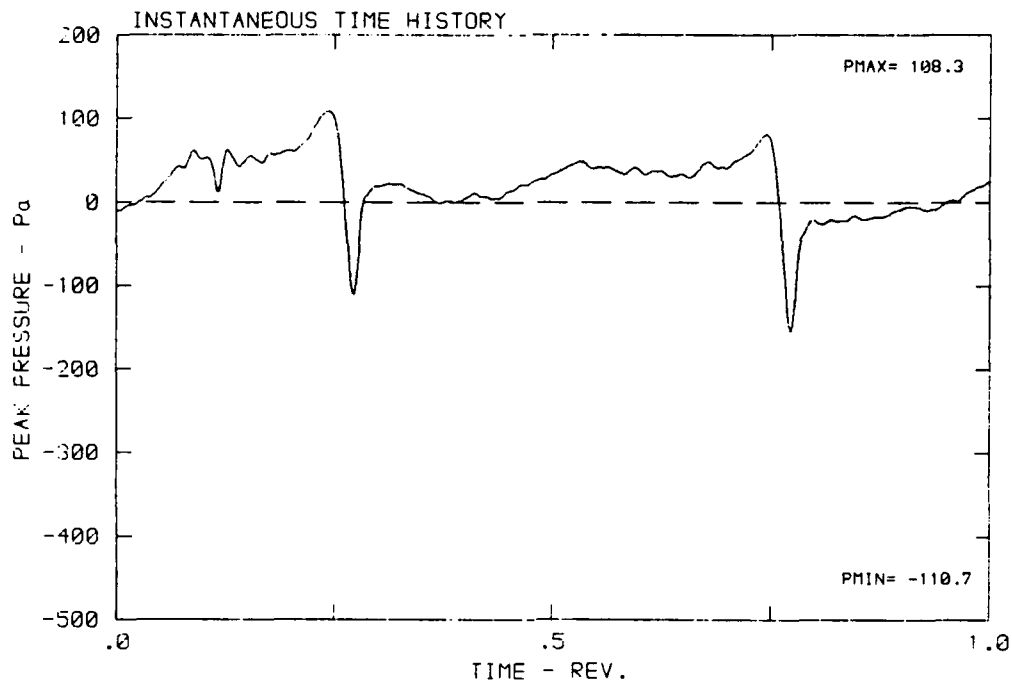
DATA POINT: EN-3 RUN: 165 MP: 7

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



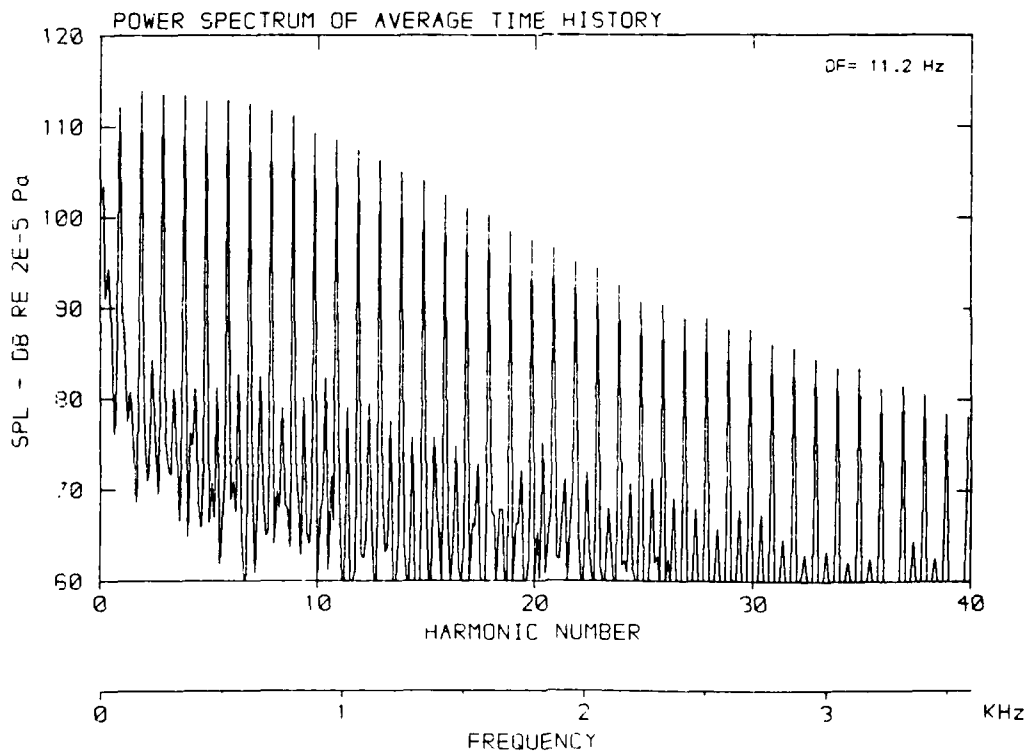
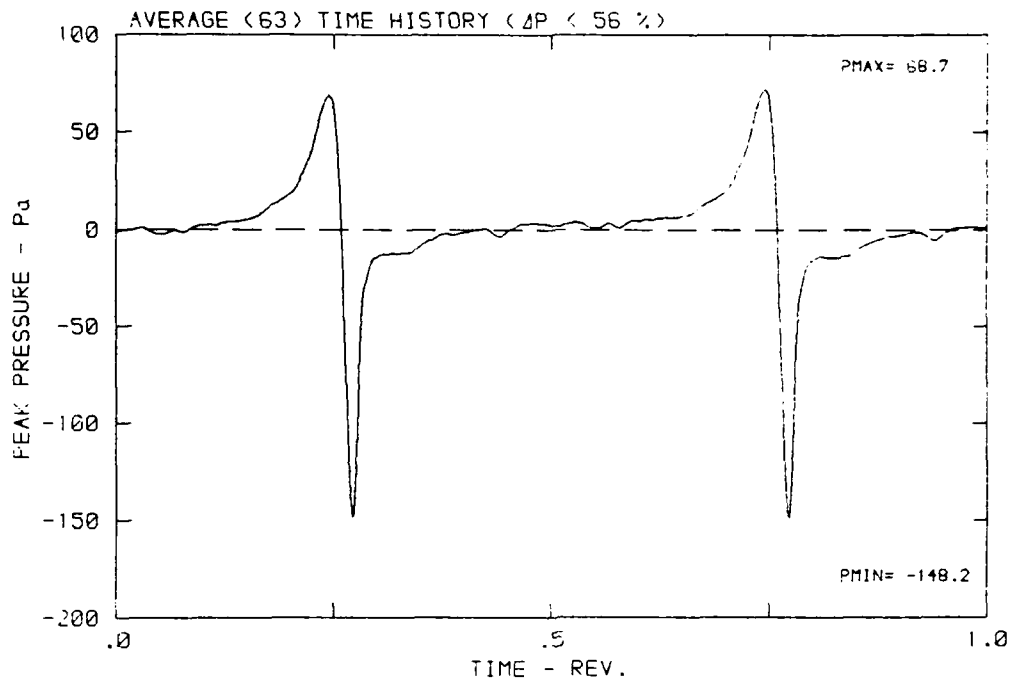
DATA POINT: EN-3 RUN: 165 MP: 8

β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



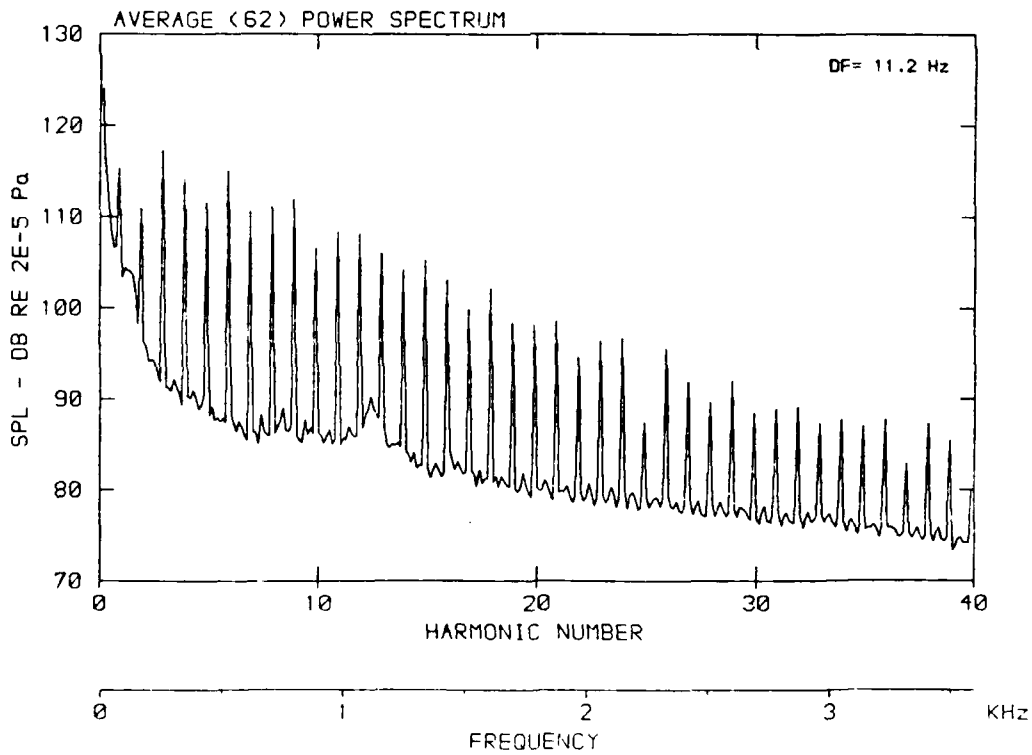
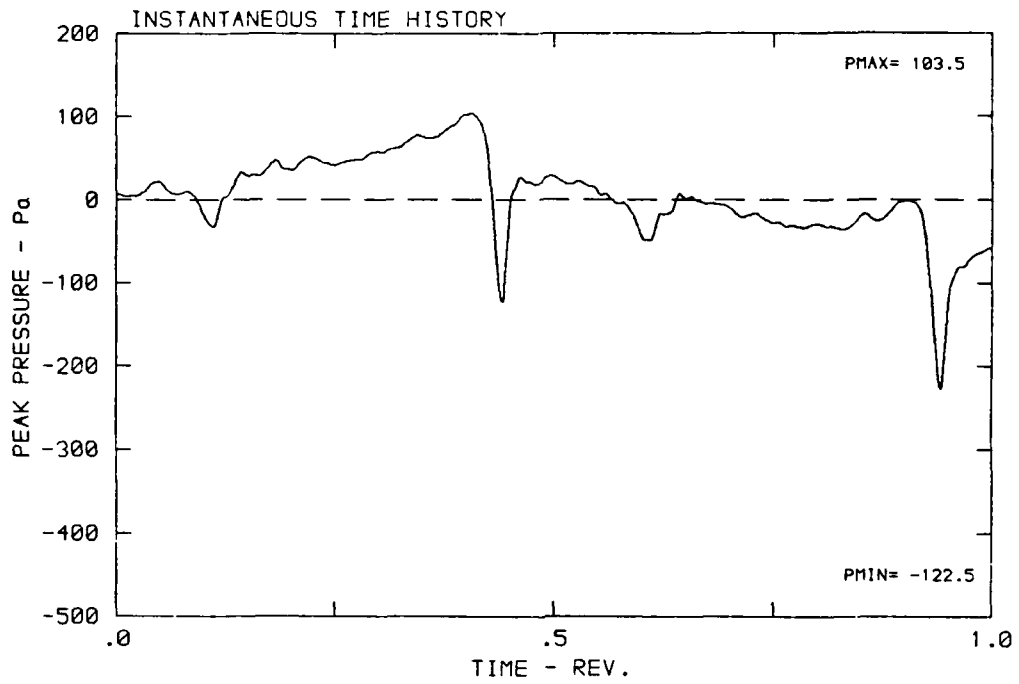
DATA POINT: EN-3 RUN: 165 MP: 8

β : 19.9° MH: .8745 n: 2700 rpm v/u : .269 ϕ : 7.3° T: 287.9 K



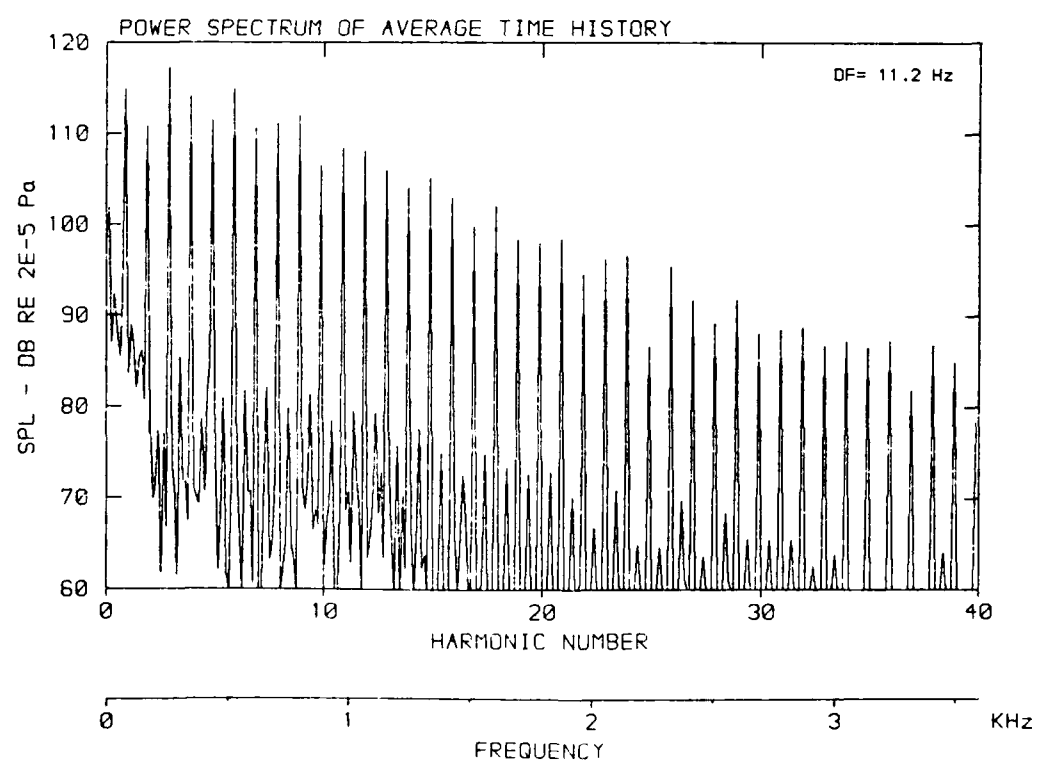
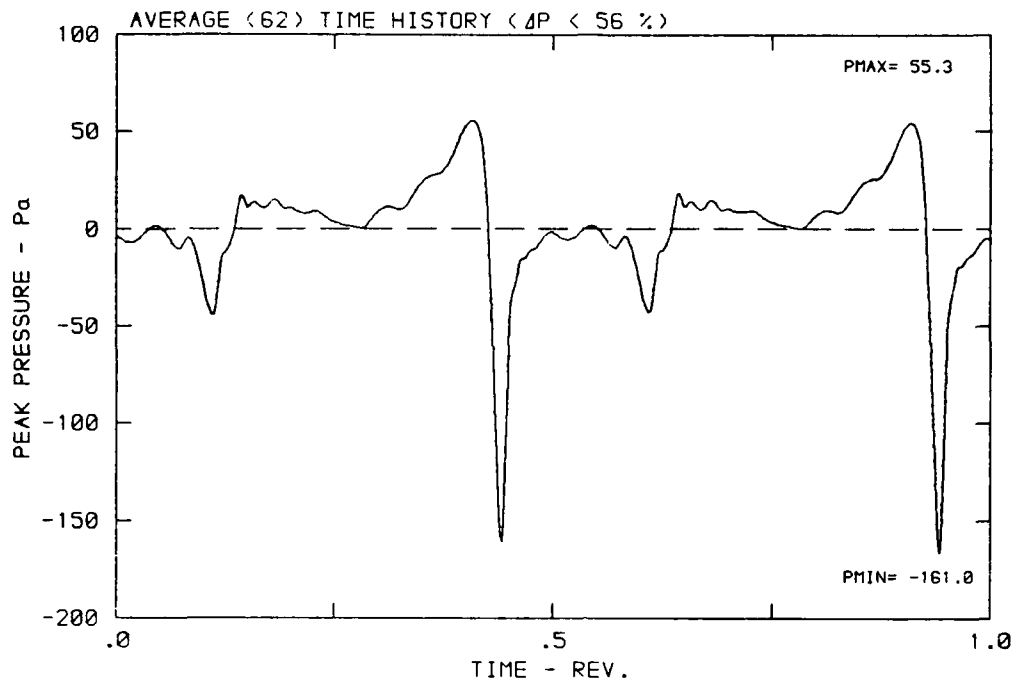
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β : 19.9° MH: .8745 n: 2700 rpm v/u: .269 ϕ : 7.3° T: 287.9 K



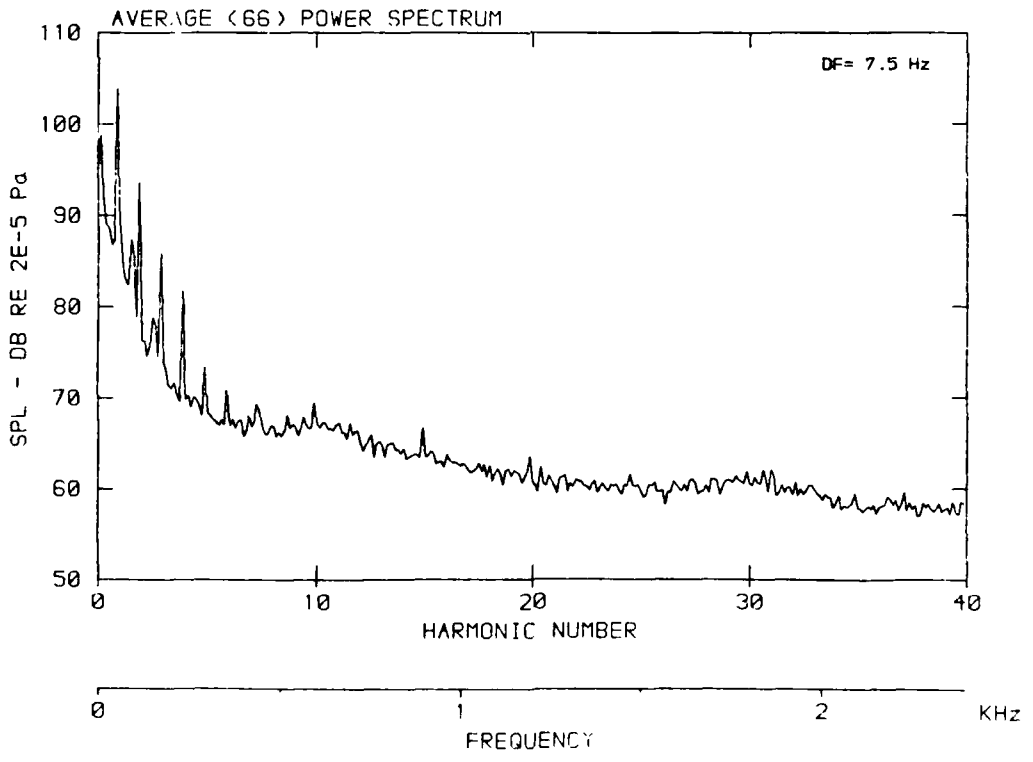
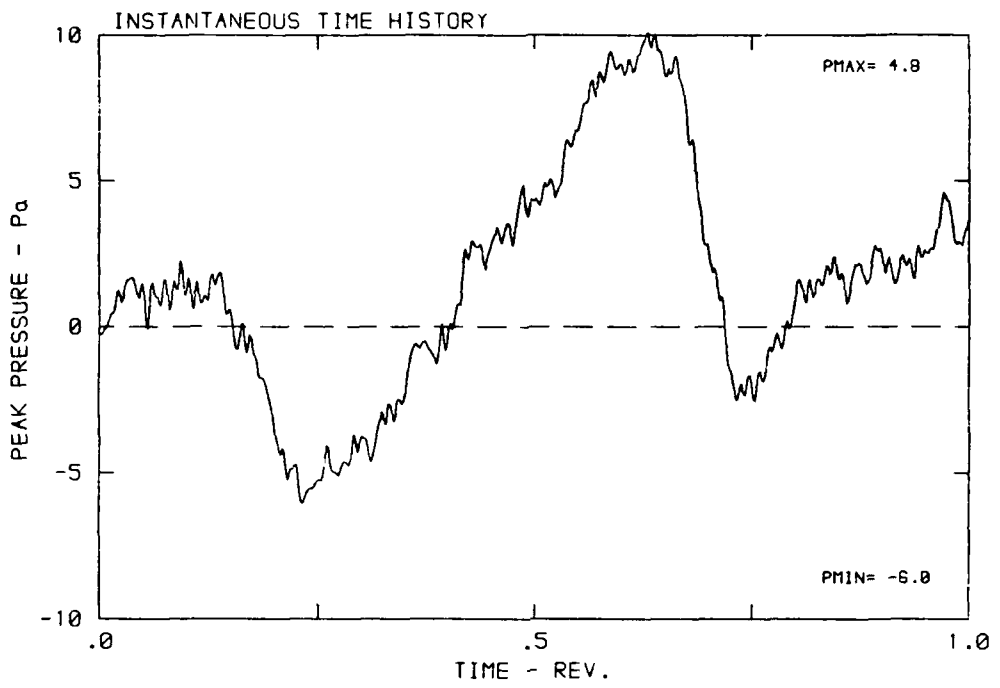
DATA POINT: EN-3 RUN: 165 MP: 9

β : 19.9° MH: .8745 n: 2700 rpm v/u : .269 ϕ : 7.3° T: 287.9 K



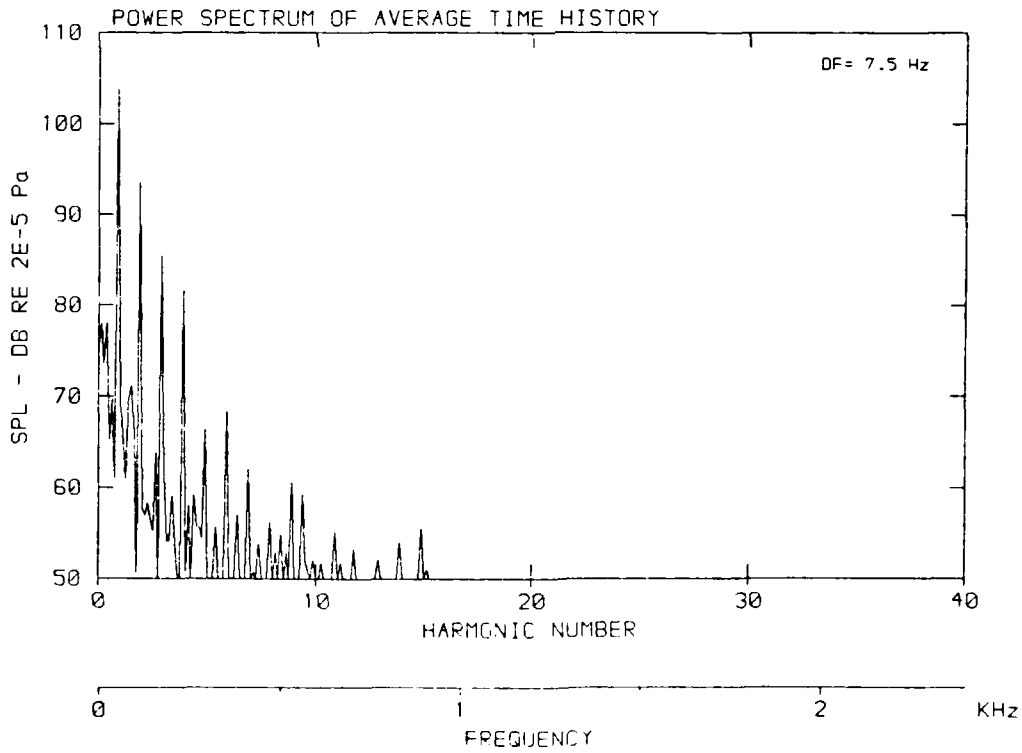
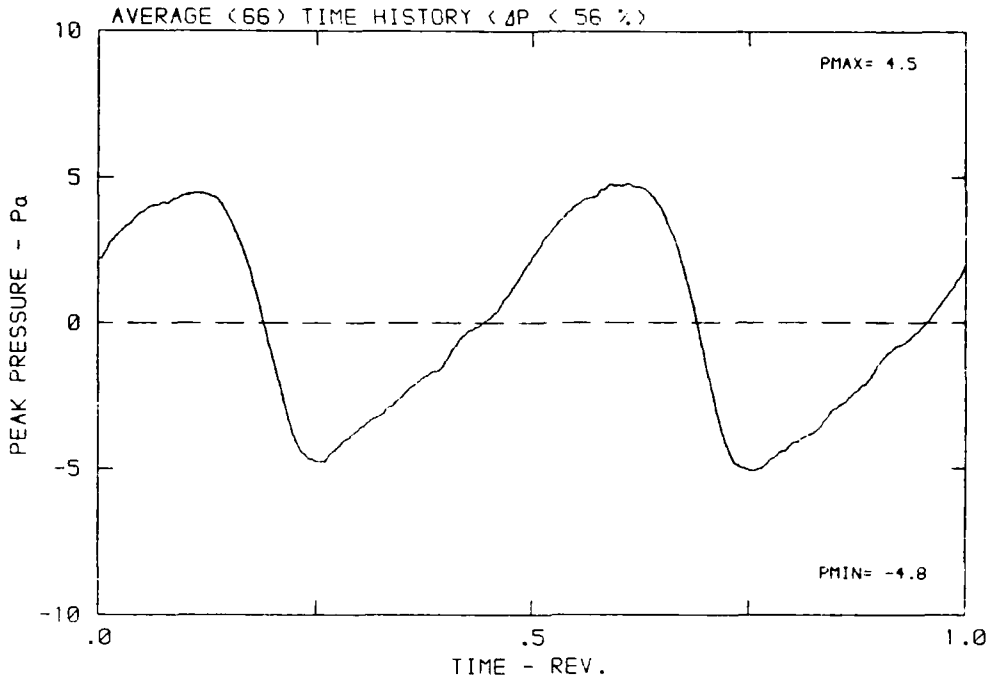
DATA POINT: EN-4 RUN: 160 MP: 1

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



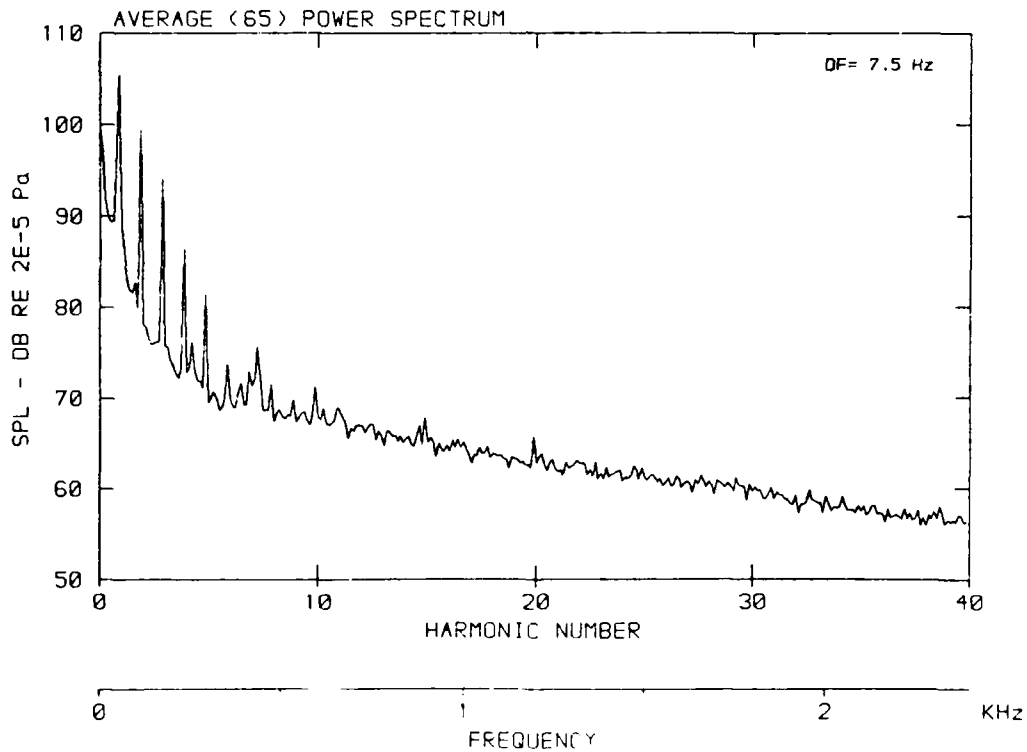
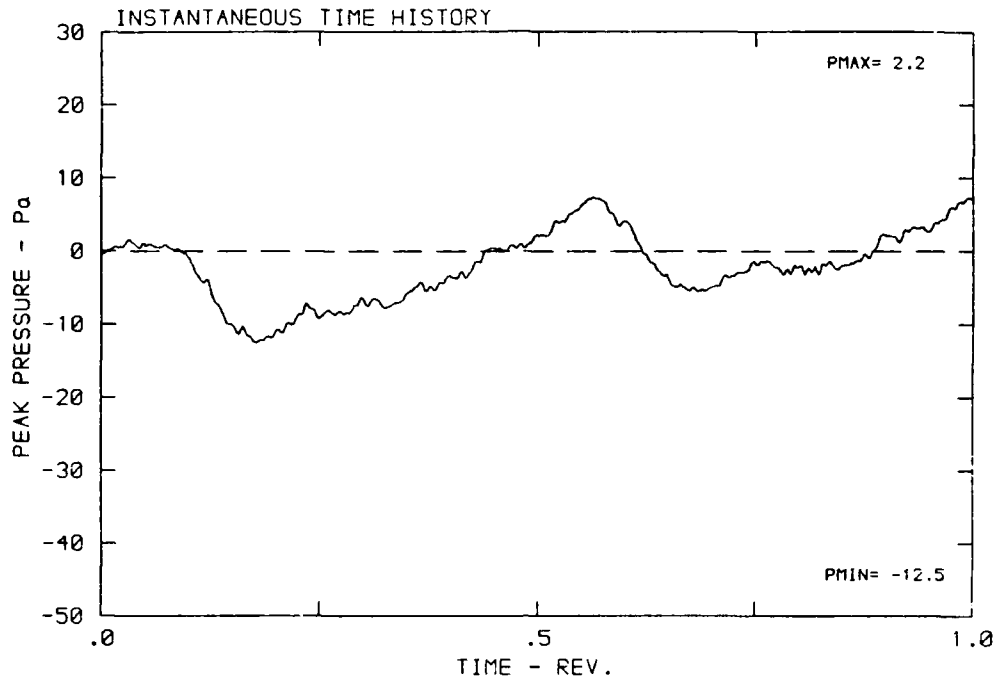
DATA POINT: EN-4 RUN: 160 MP: 1

β : 23.7° MH: .5847 n: 1800 rpm v/u : .268 ϕ : 7.3° T: 286.1 K



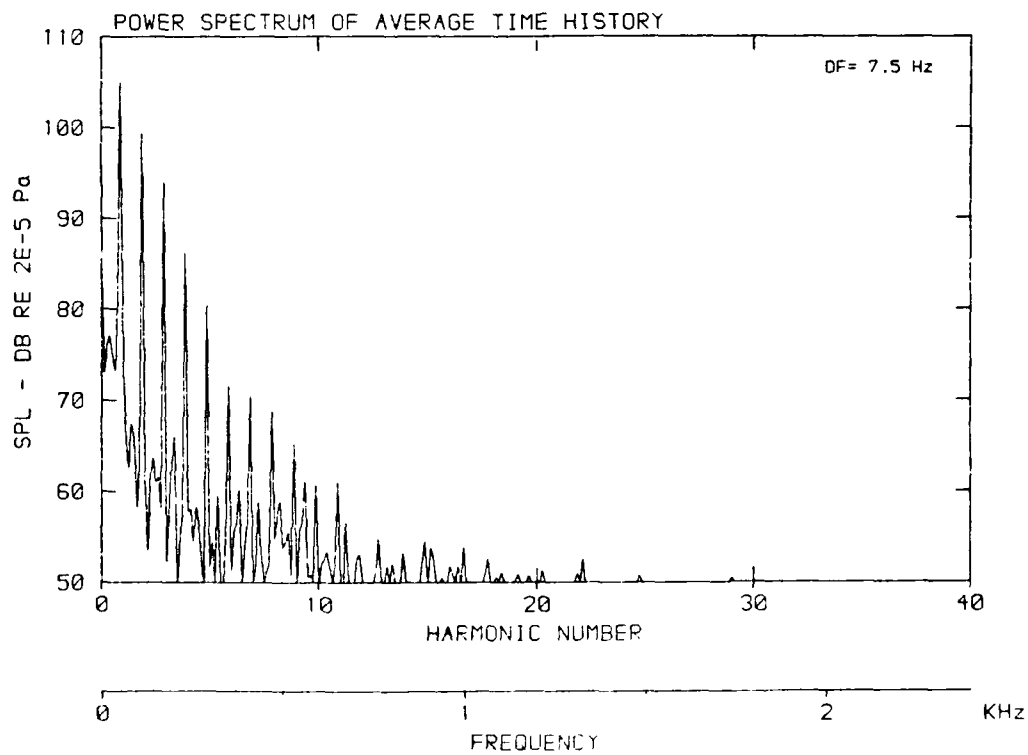
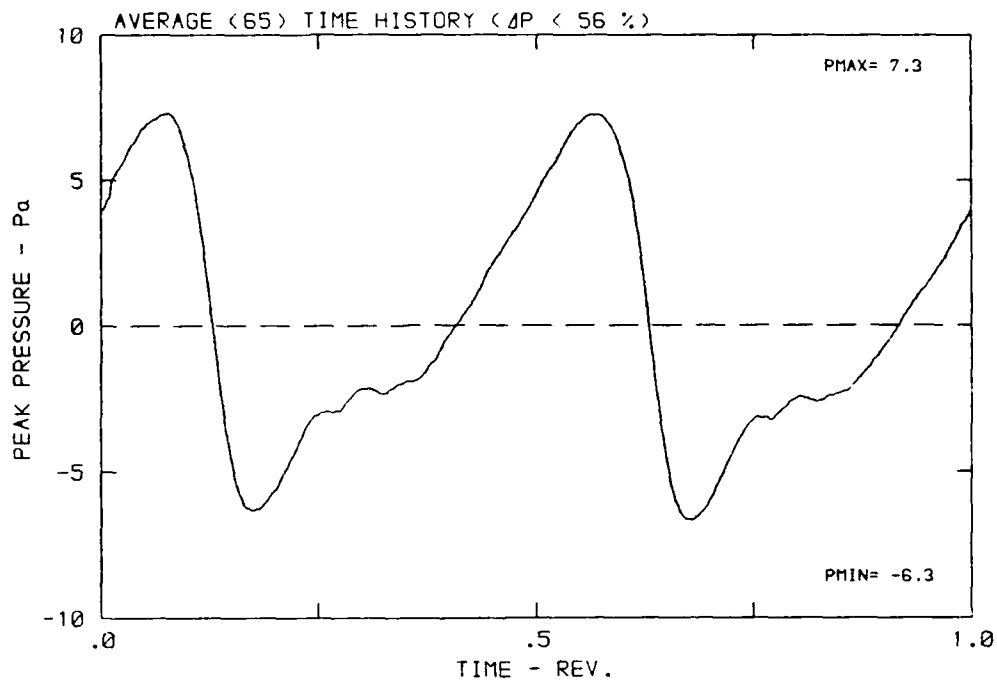
DATA POINT: EN-4 RUN: 160 MP: 2

β : 23.7° MH: .5847 n: 1800 rpm v/u : .268 ϕ : 7.3° T: 286.1 K



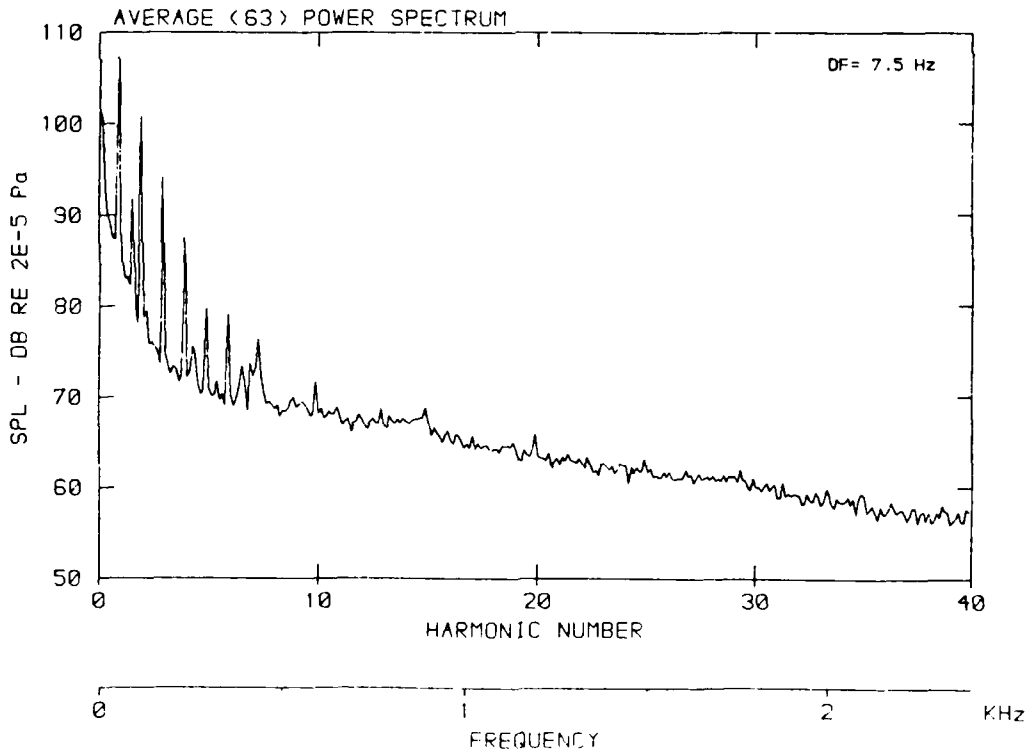
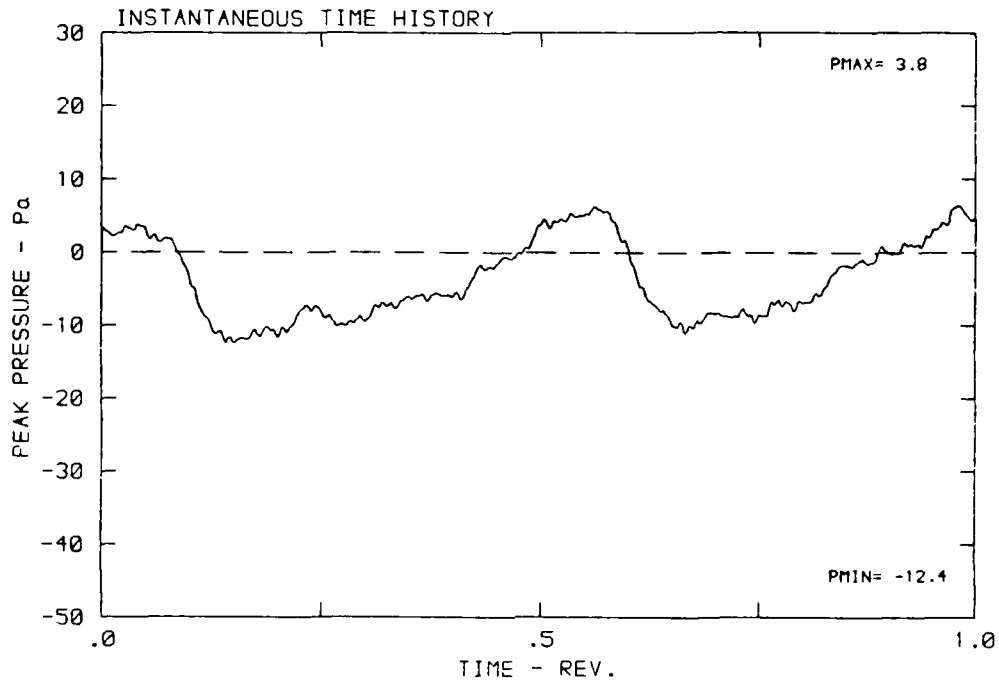
DATA POINT: EN-4 RUN: 160 MP: 2

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



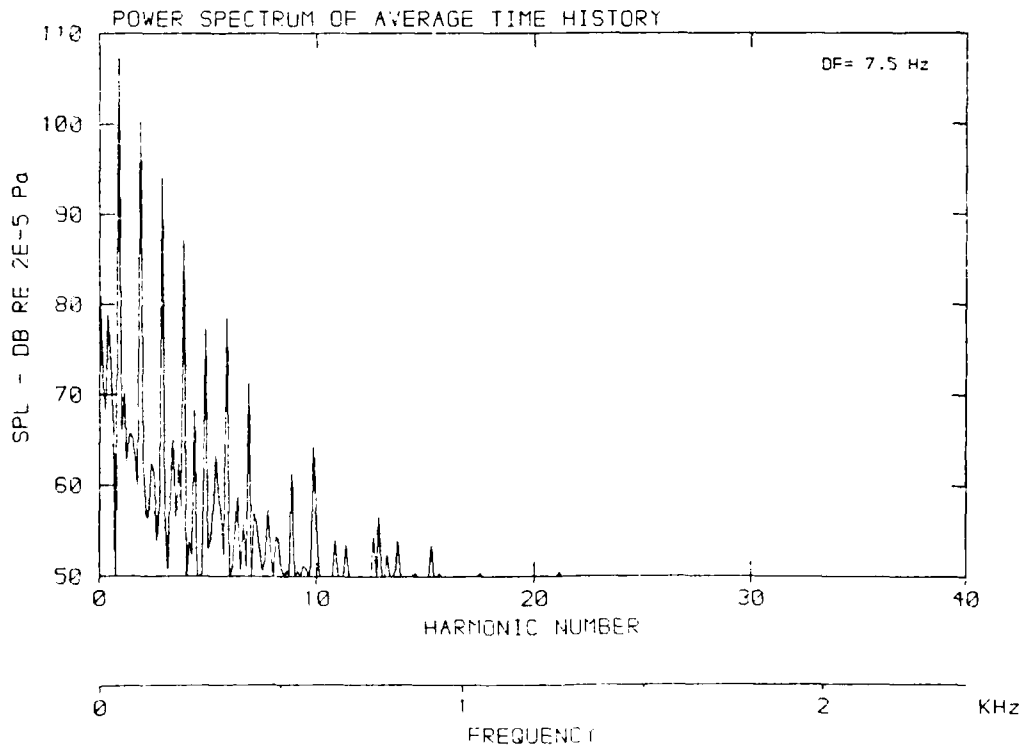
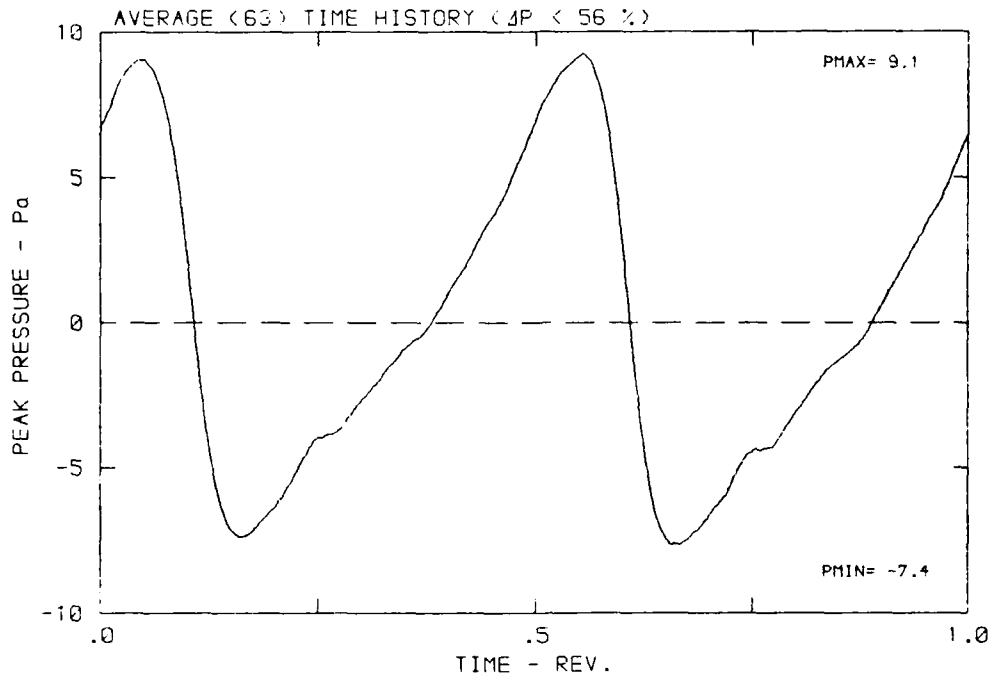
DATA POINT: EN-4 RUN: 160 MP: 3

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



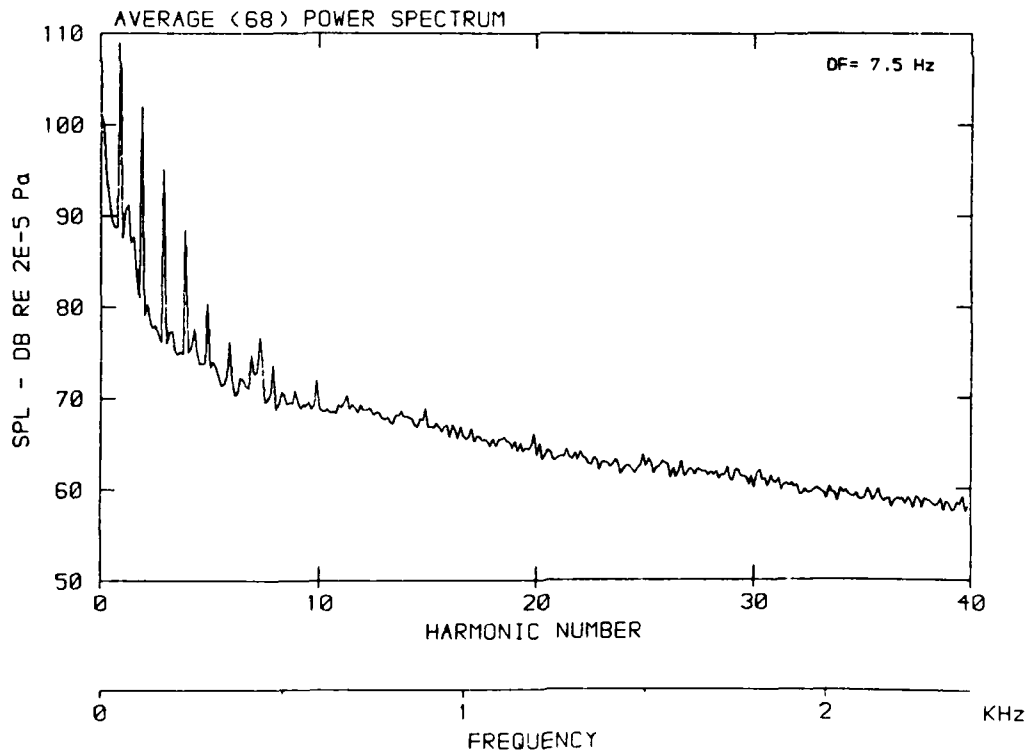
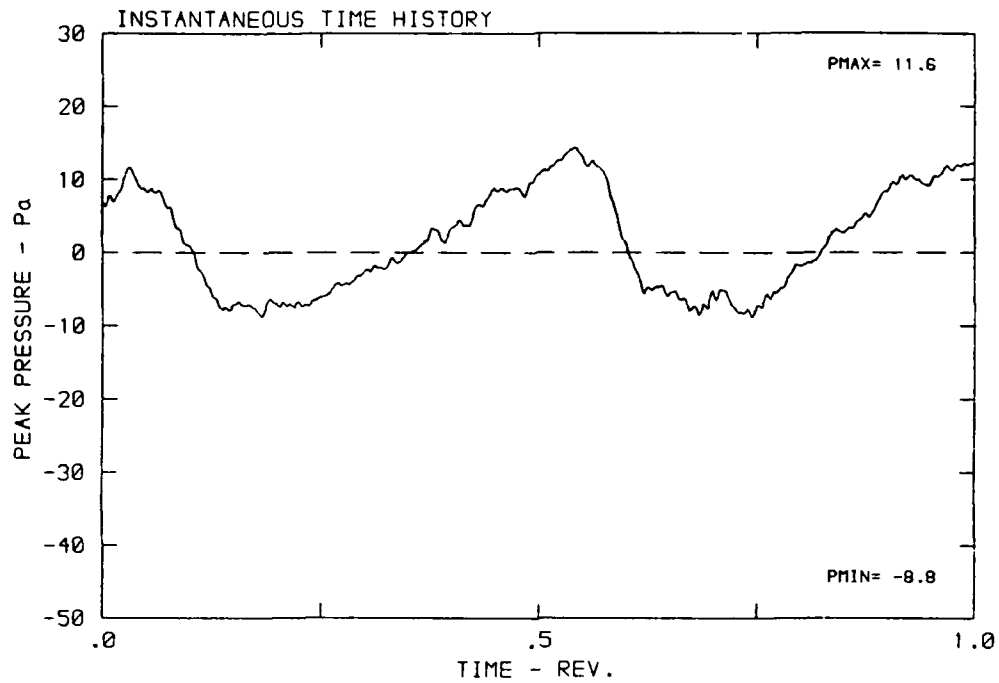
DATA POINT: EN-4 RUN: 160 MP: 3

β : 23.7° MH: .5847 n: 1800 rpm v/u : .268 ϕ : 7.3° T: 286.1 K



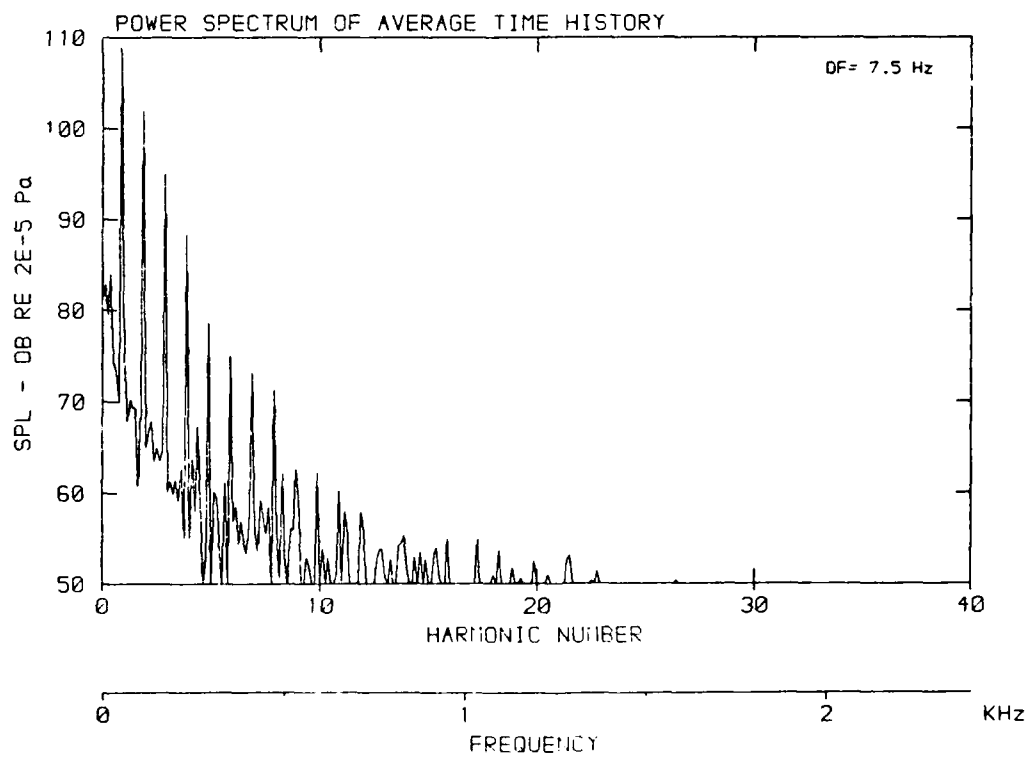
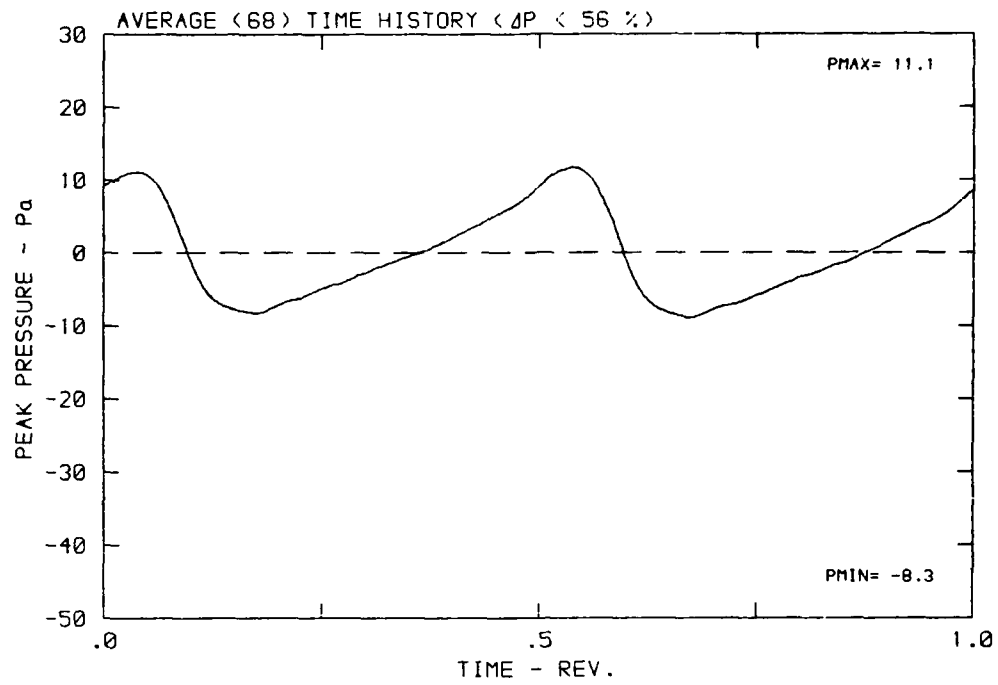
DATA POINT: EN-4 RUN: 160 MP: 4

β : 23.7° MH: .5847 n: 1800 rpm v/u : .268 ϕ : 7.3° T: 286.1 K



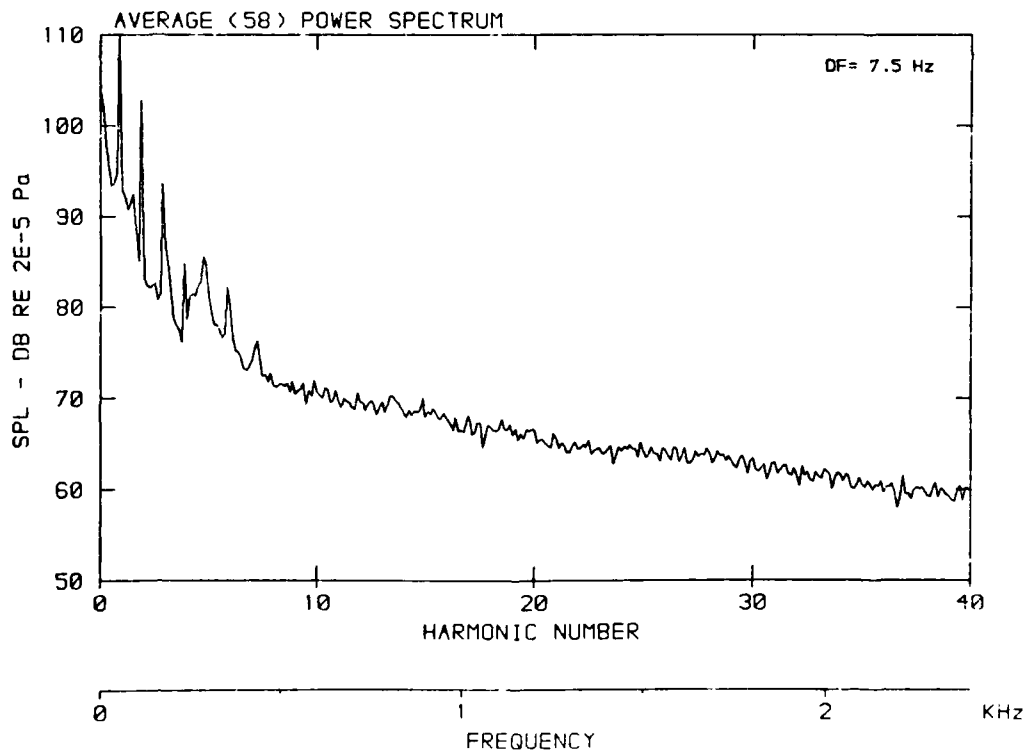
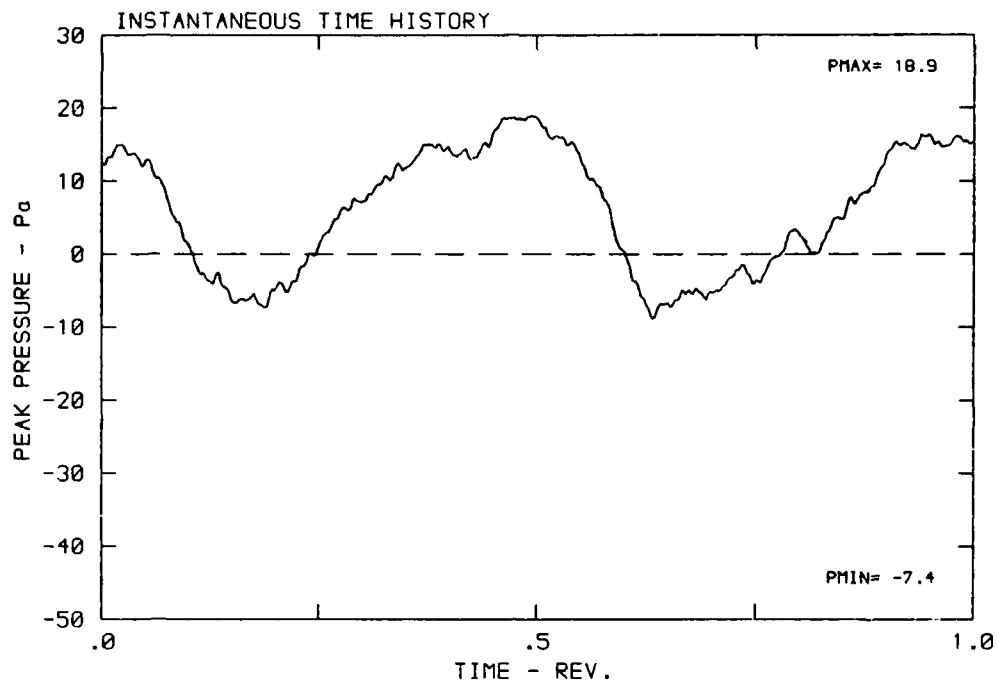
DATA POINT: EN-4 RUN: 160 MP: 4

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



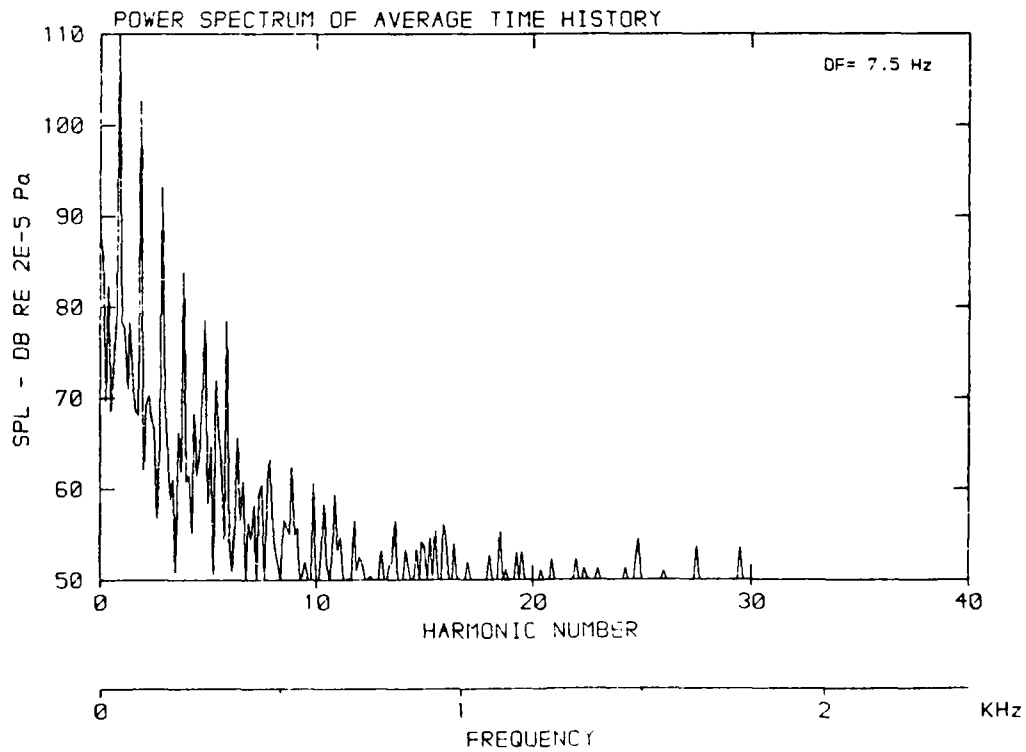
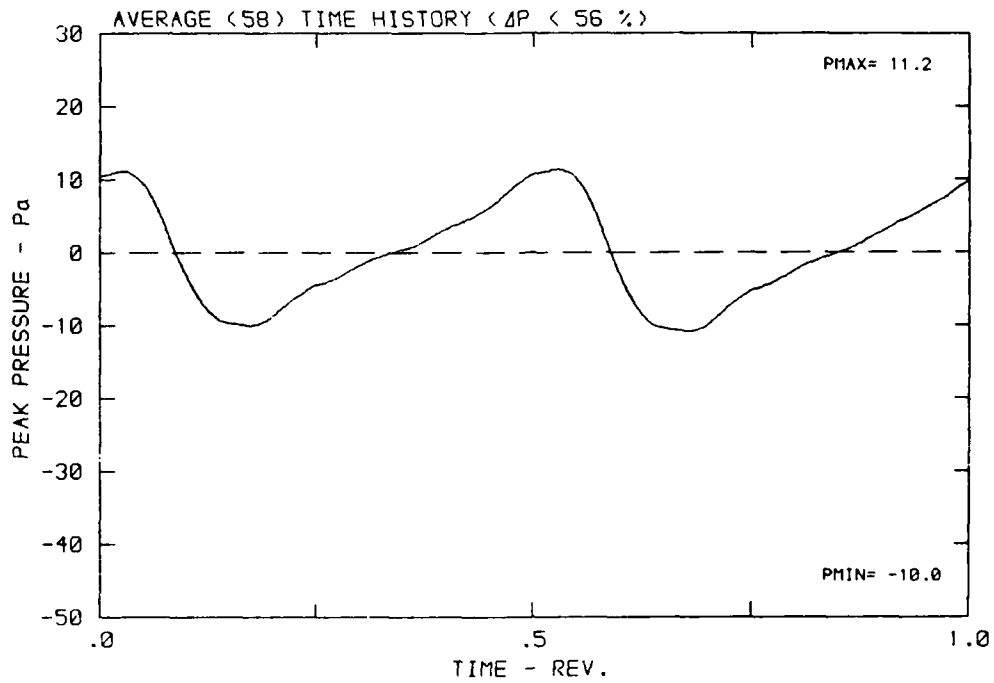
DATA POINT: EN-4 RUN: 160 MP: 5

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



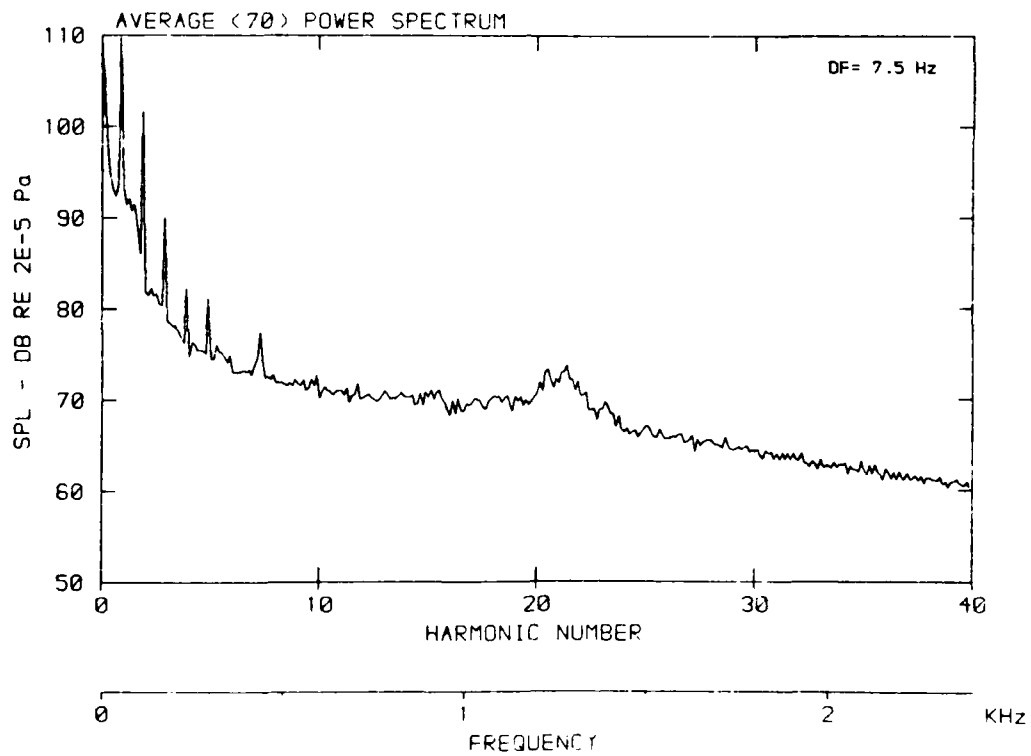
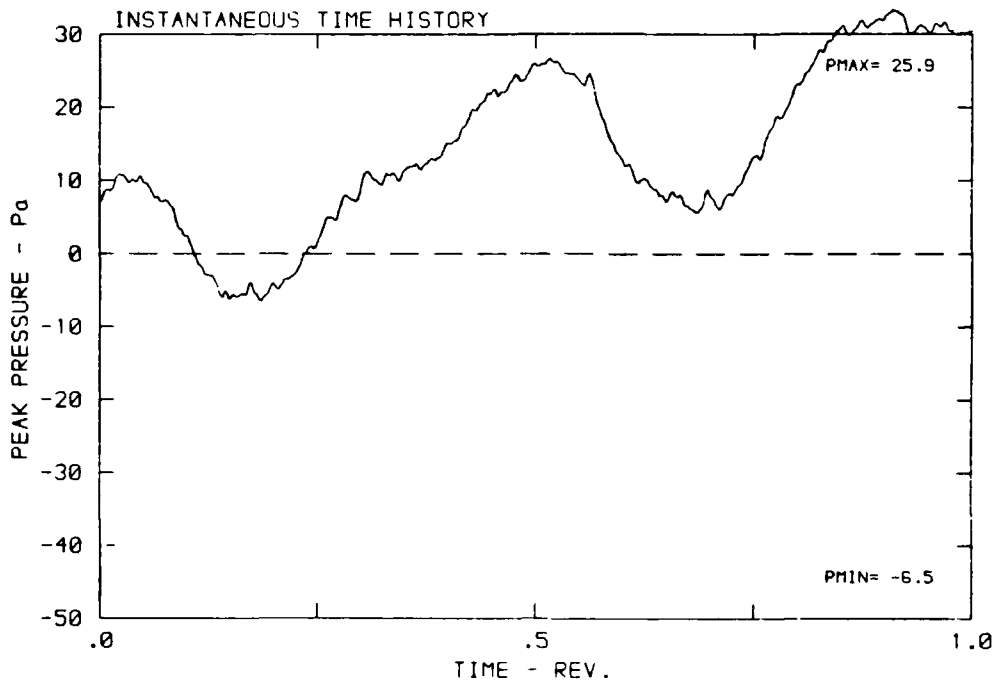
DATA POINT: EN-4 RUN: 160 MP: 5

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



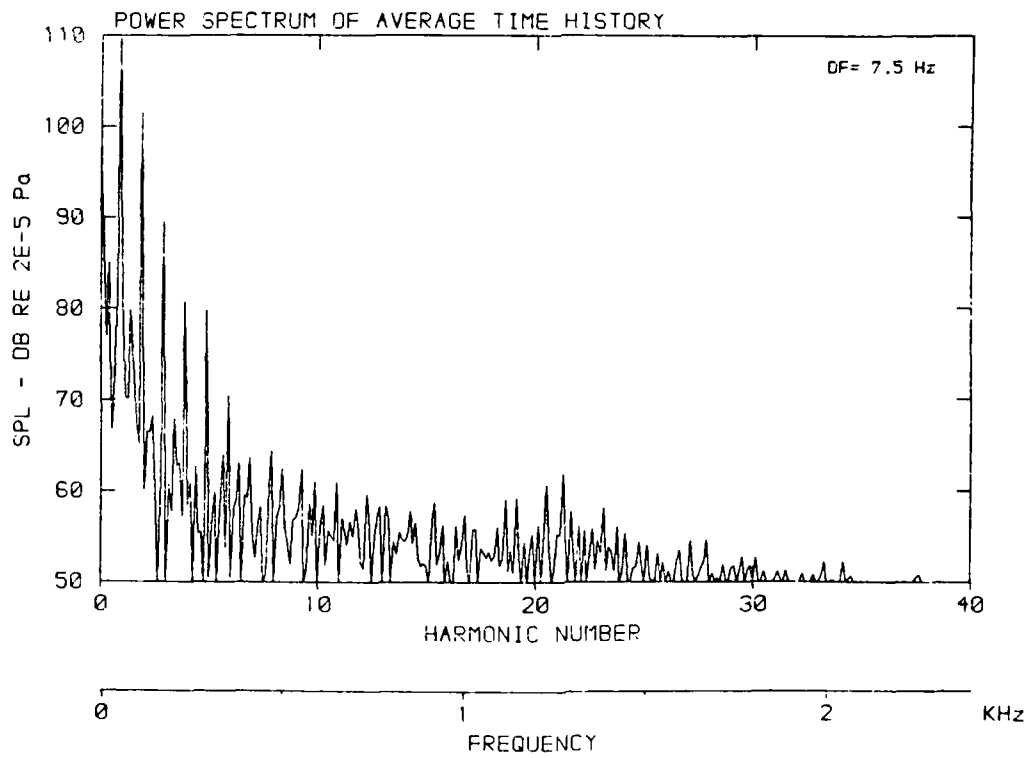
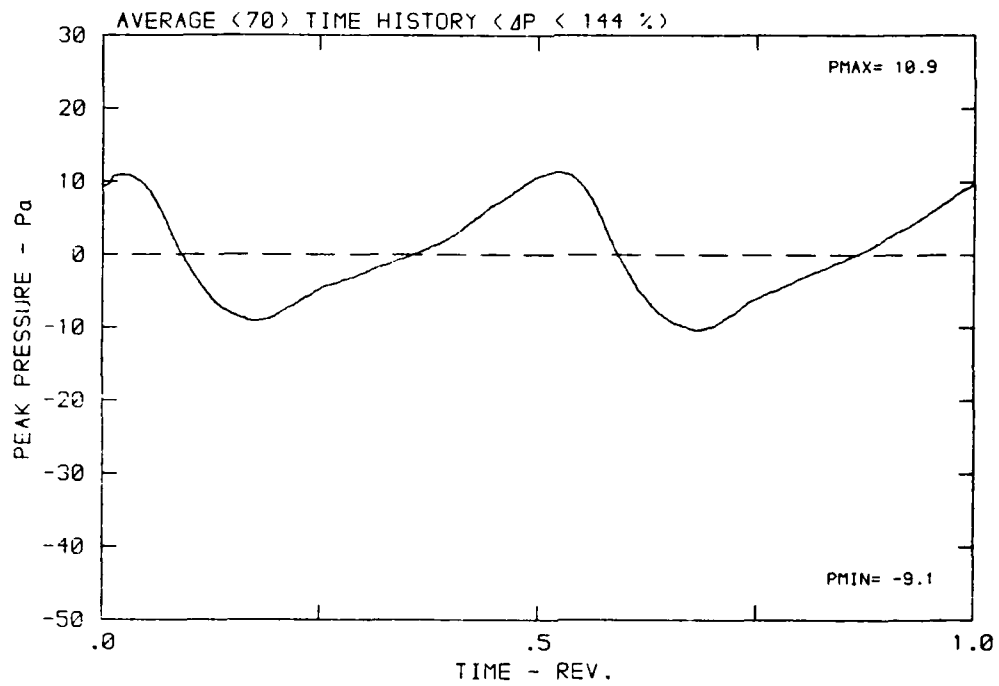
DATA POINT: EN-4 RUN: 160 MP: 6

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



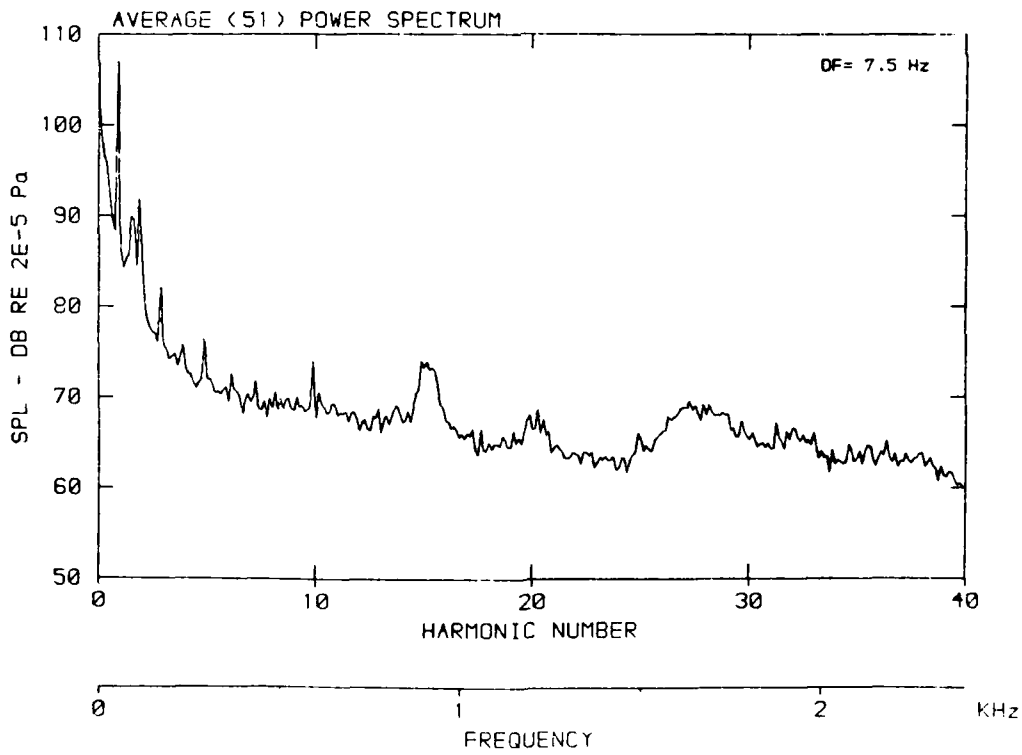
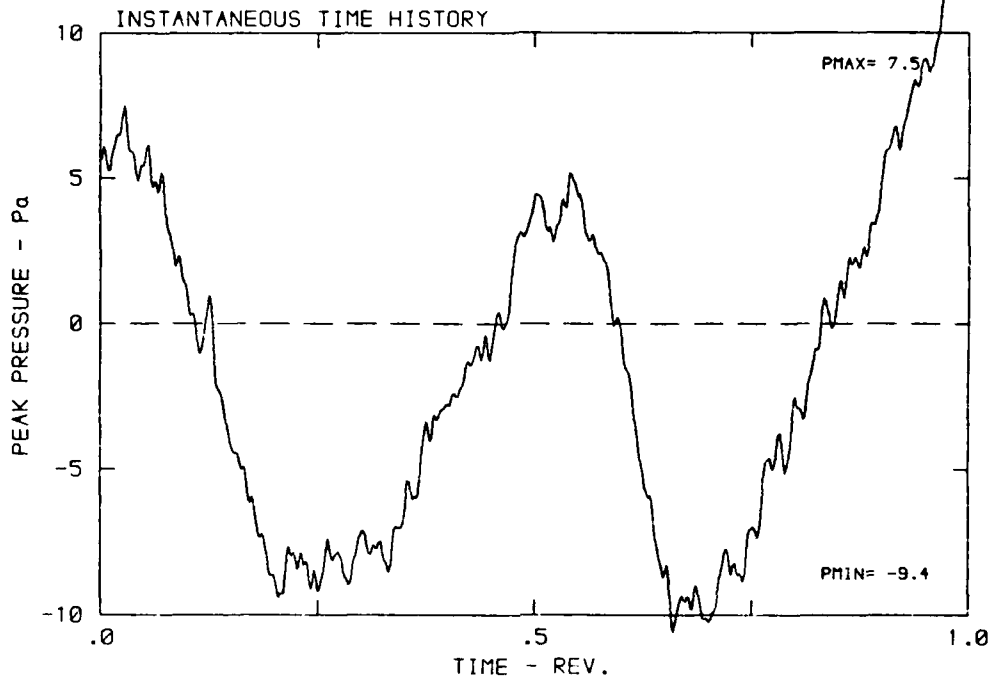
DATA POINT: EN-4 RUN: 160 MP: 6

β : 23.7° MH: .5847 n: 1800 rpm v/u : .268 ϕ : 7.3° T: 286.1 K



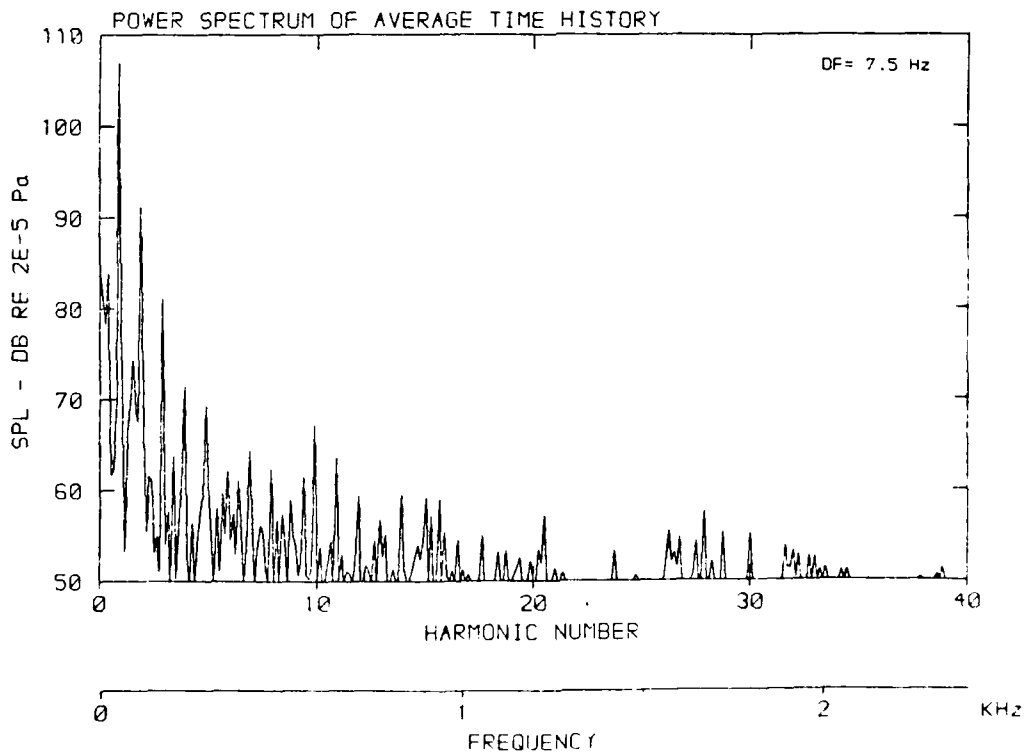
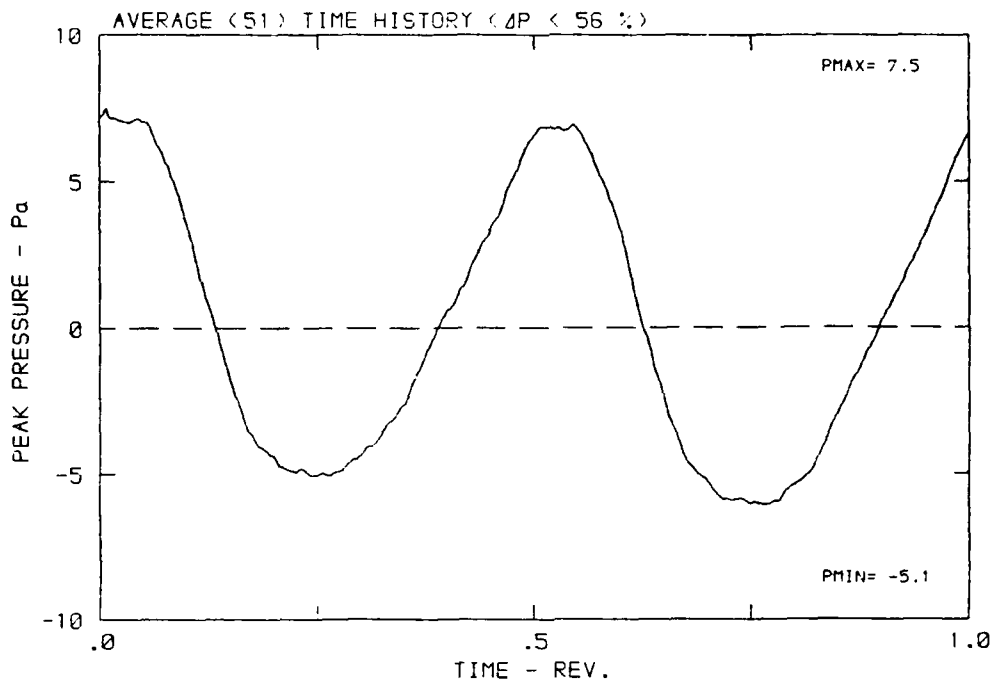
DATA POINT: EN-4 RUN: 160 MP: 7

β : 23.7° MH: .5847 n: 1800 rpm v/u : .268 ϕ : 7.3° T: 286.1 K



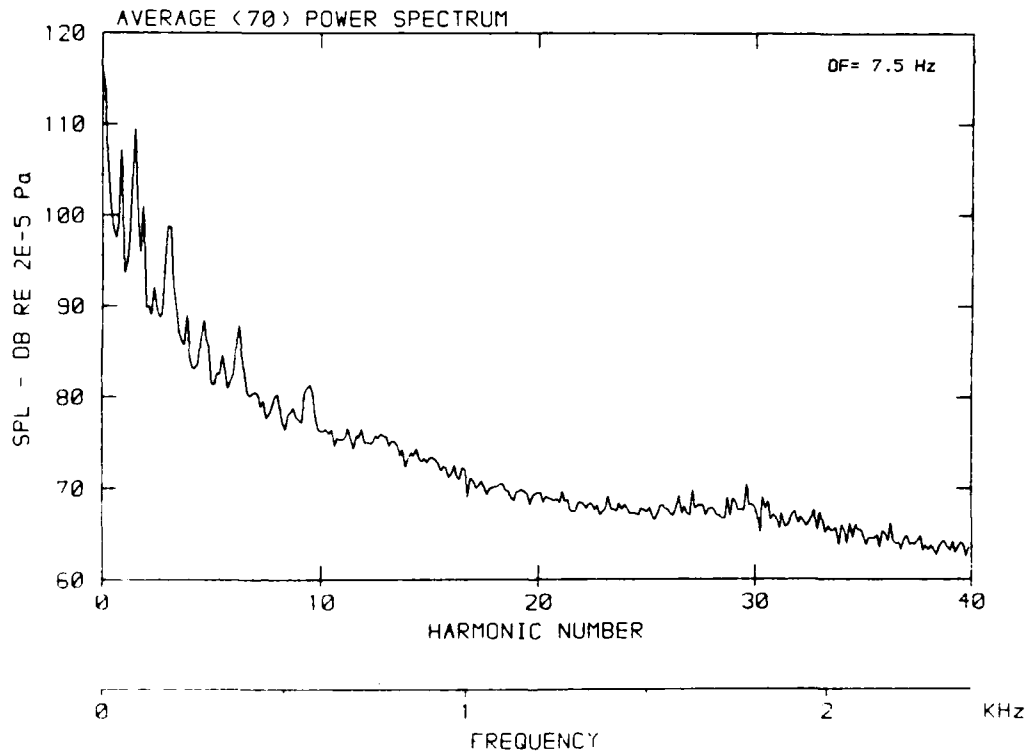
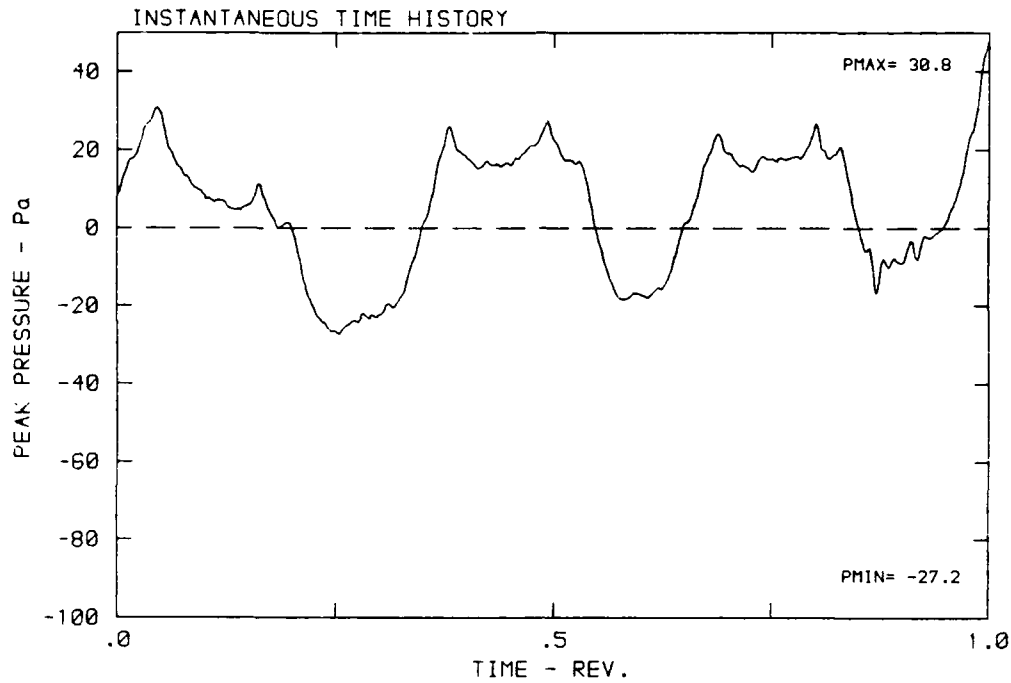
DATA POINT: EN-4 RUN: 160 MP: 7

β : 23.7° MH: .5847 n: 1800 rpm v/u : .268 ϕ : 7.3° T: 286.1 K



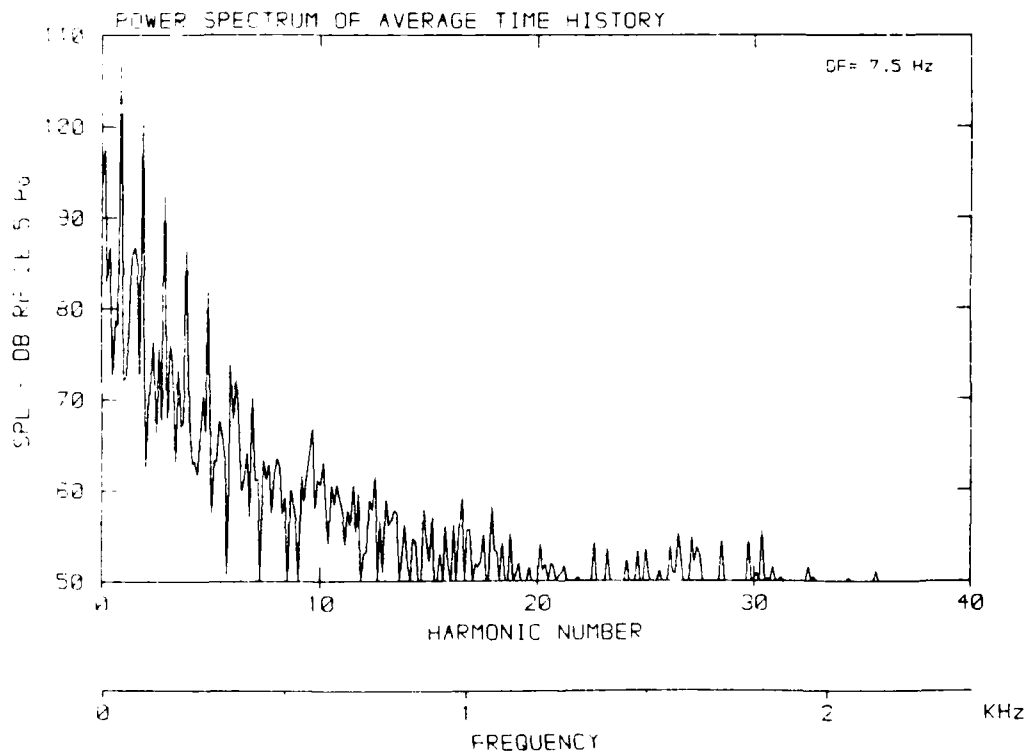
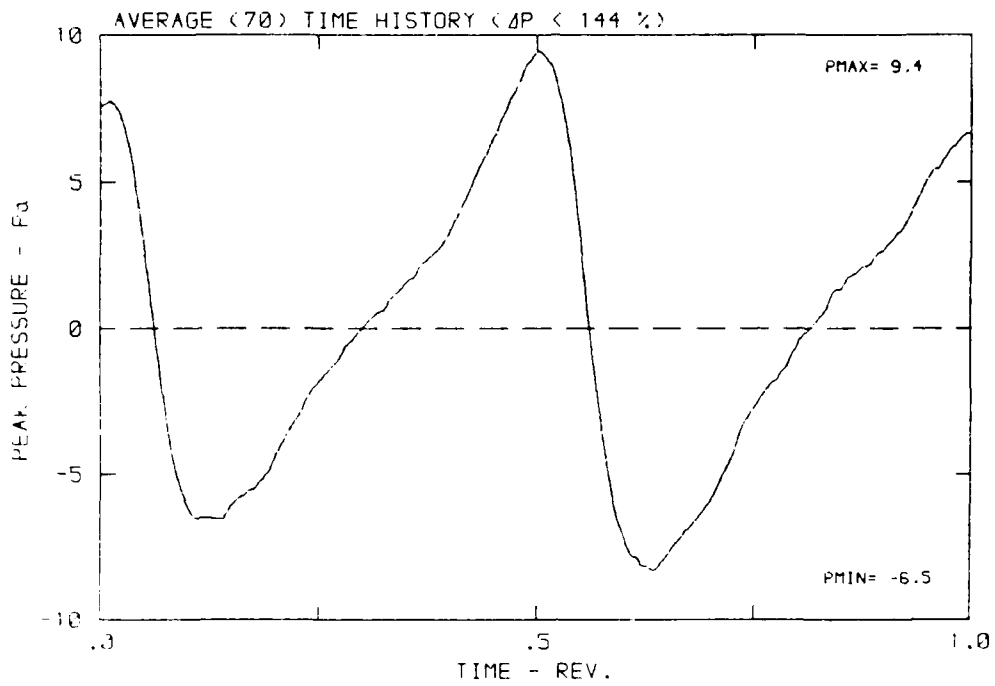
DATA POINT: EN-4 RUN: 160 MP: 8

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



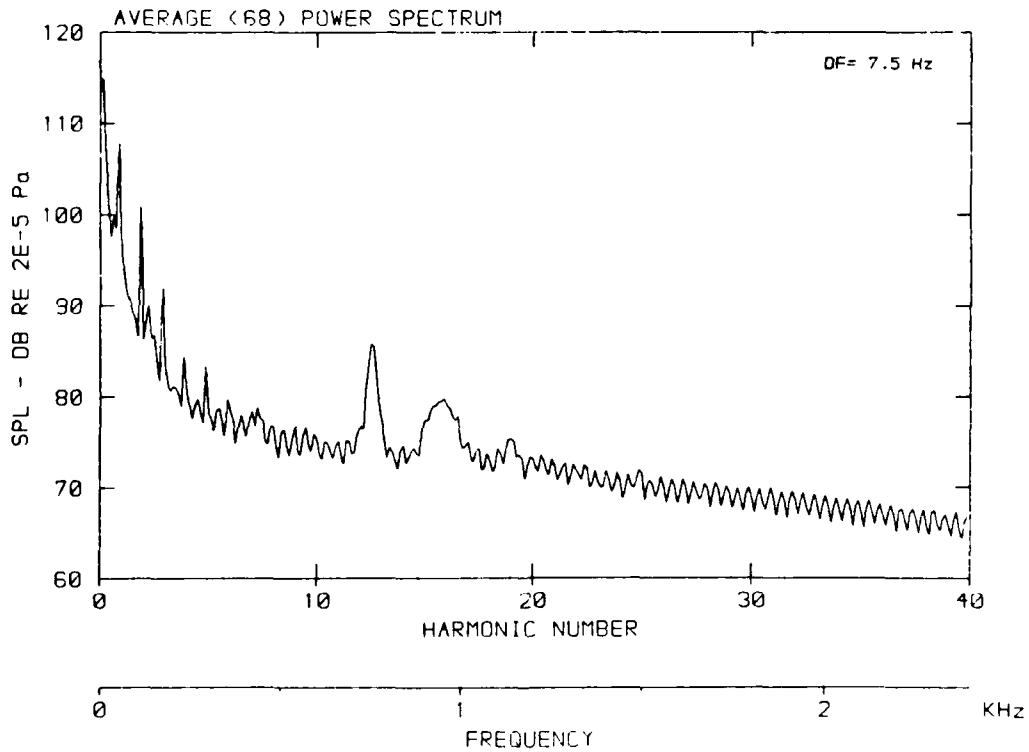
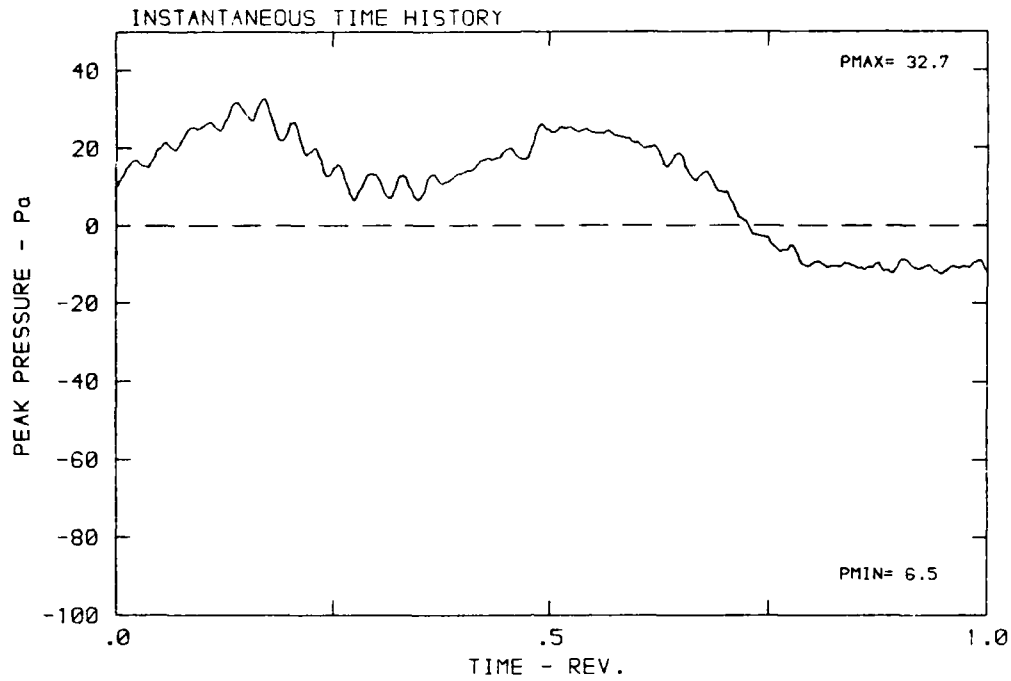
DATA POINT: EN-4 RUN: 160 MP: 8

β : 23.7° MH: .5847 n: 1800 rpm v/u : .268 ϕ : 7.3° T: 286.1 K



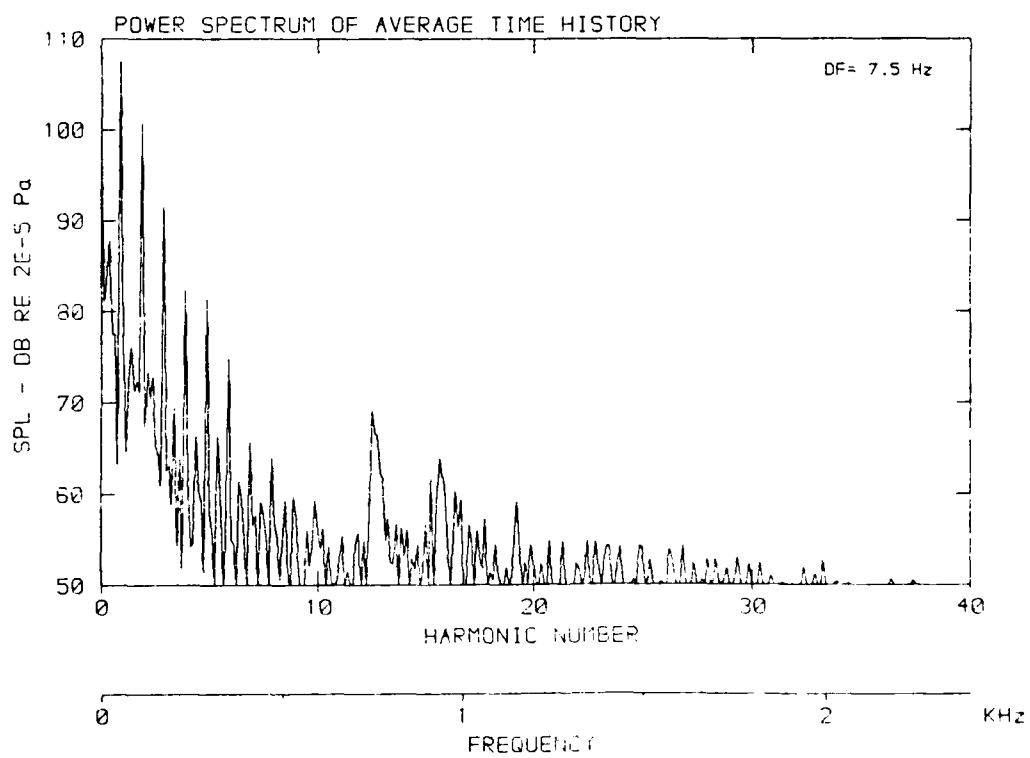
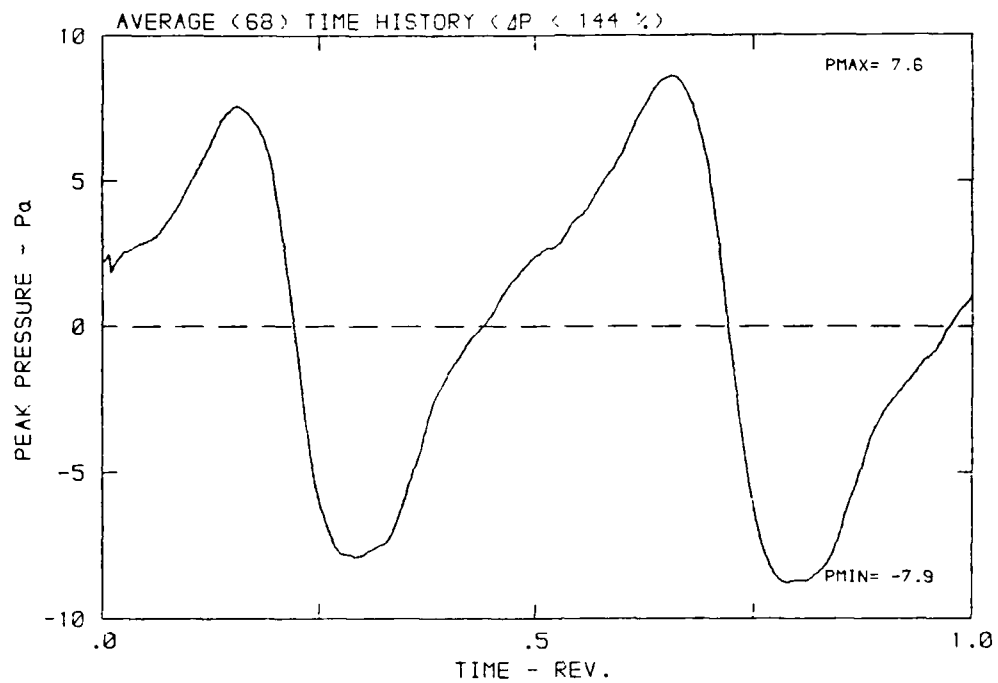
DATA POINT: EN-4 RUN: 160 MP: 9

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



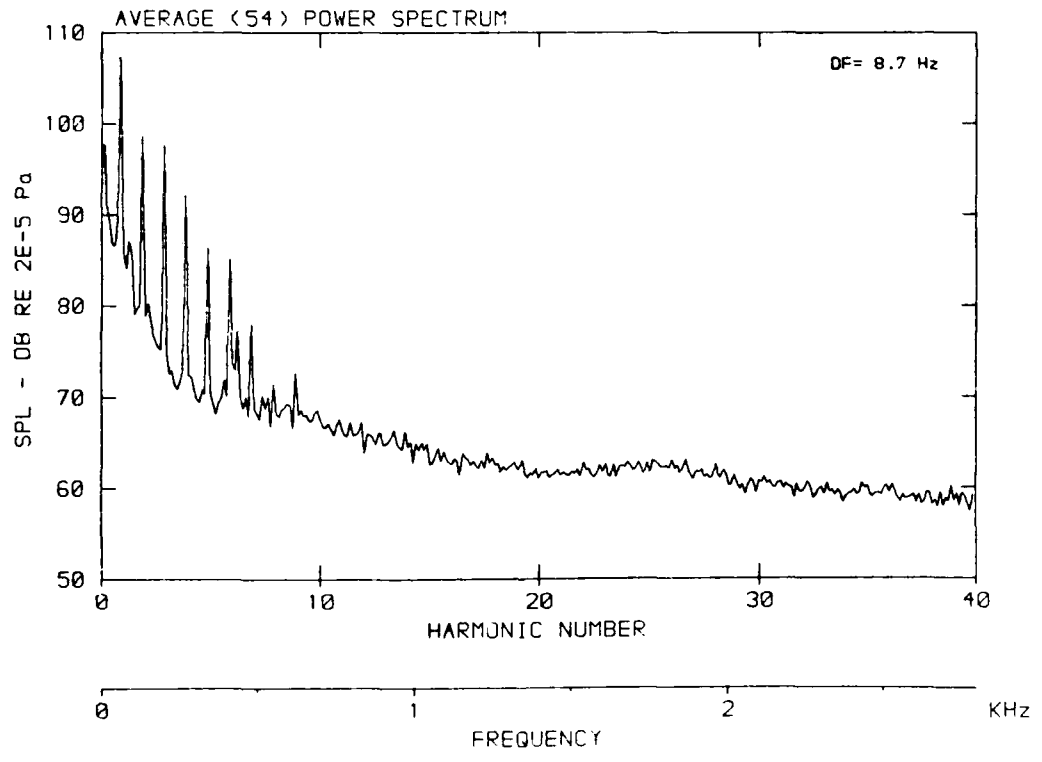
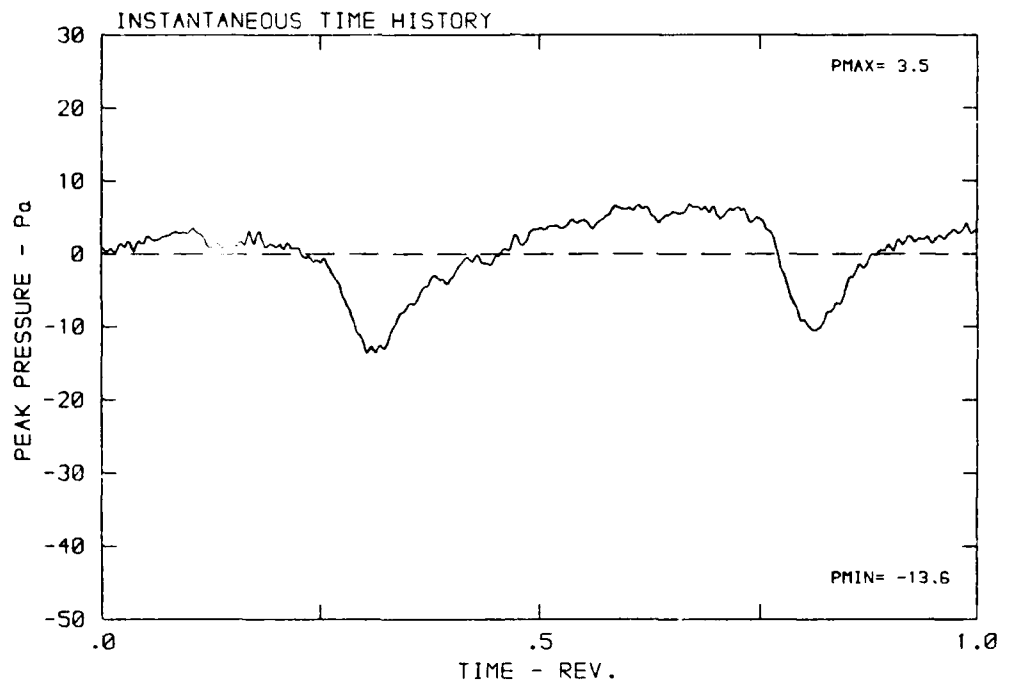
DATA POINT: EN-4 RUN: 160 MP: 9

β : 23.7° MH: .5847 n: 1800 rpm v/u: .268 ϕ : 7.3° T: 286.1 K



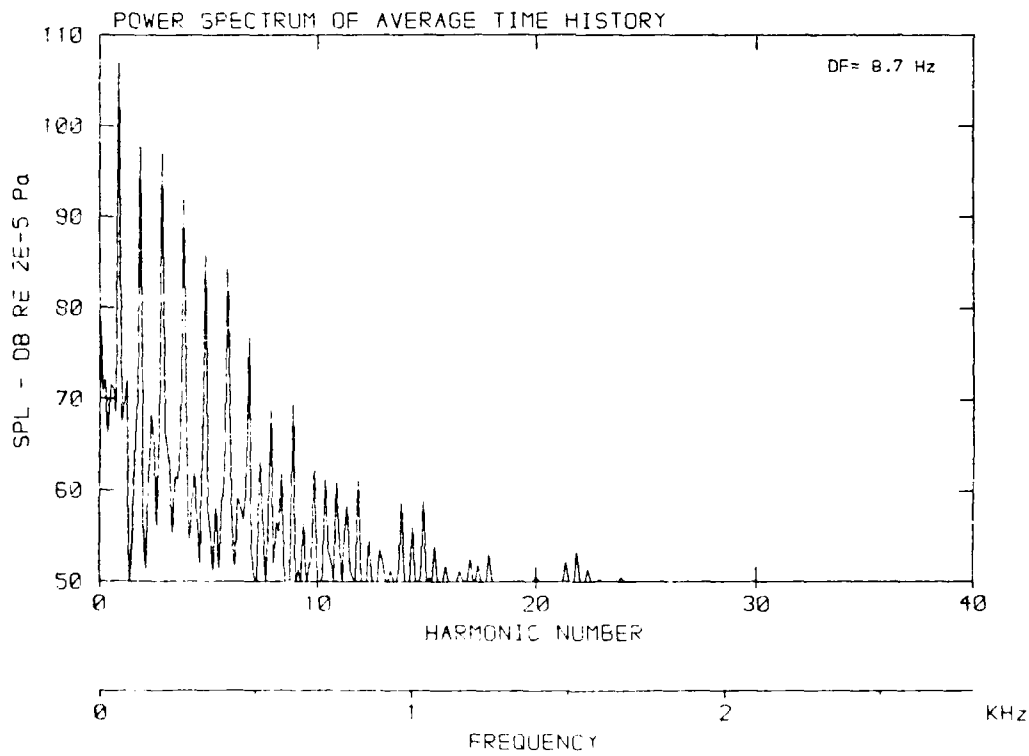
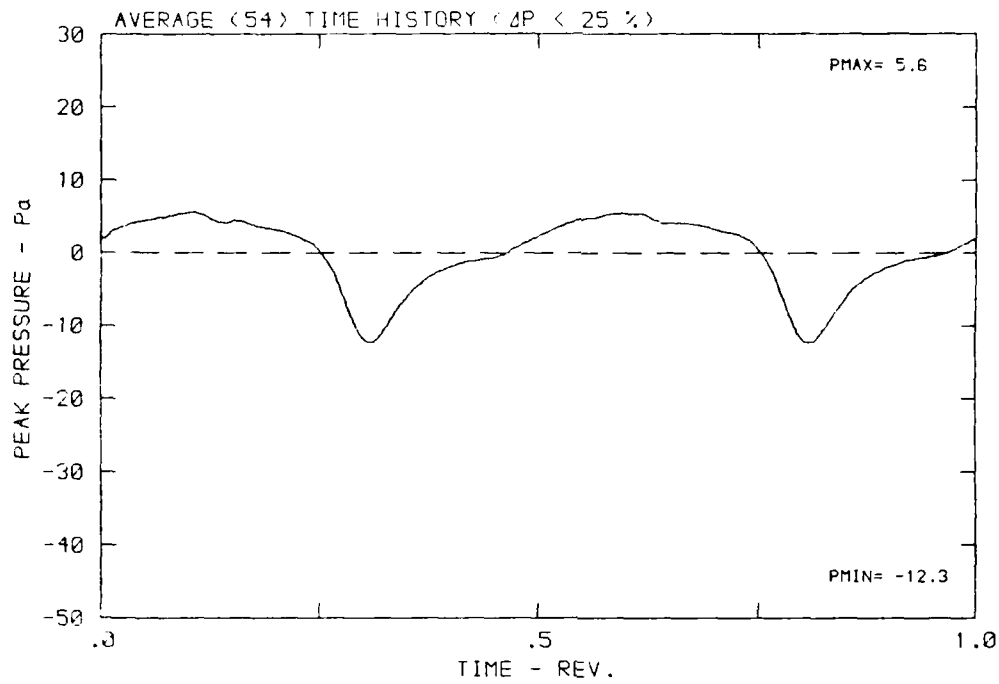
DATA POINT: EN-5 RUN: 161 MP: 1

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



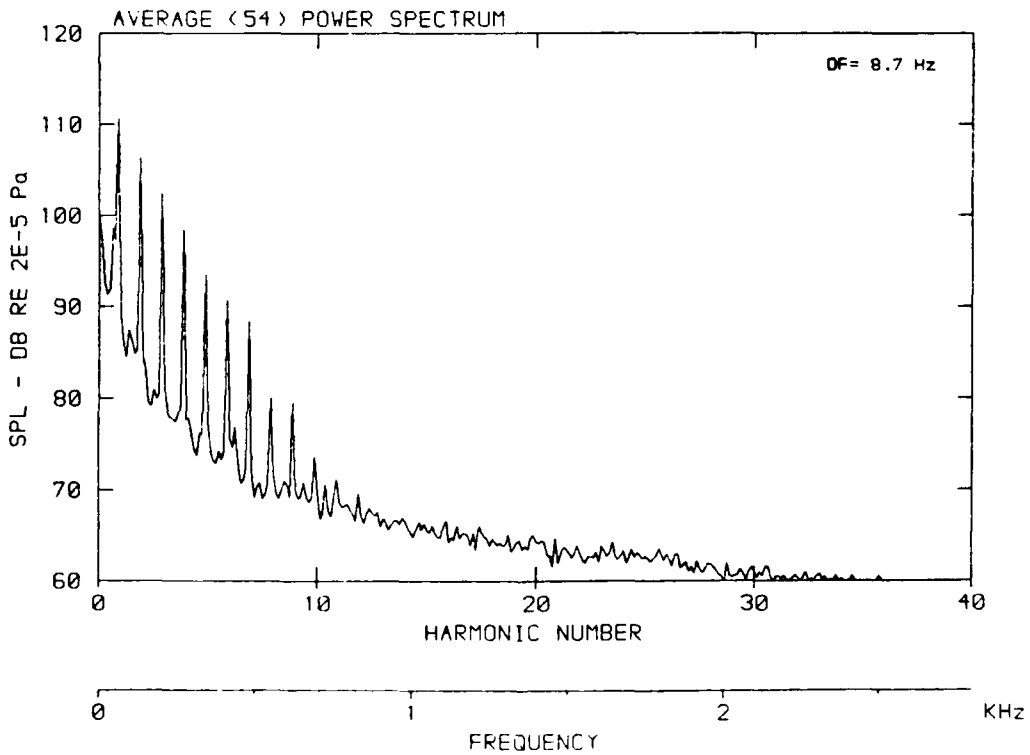
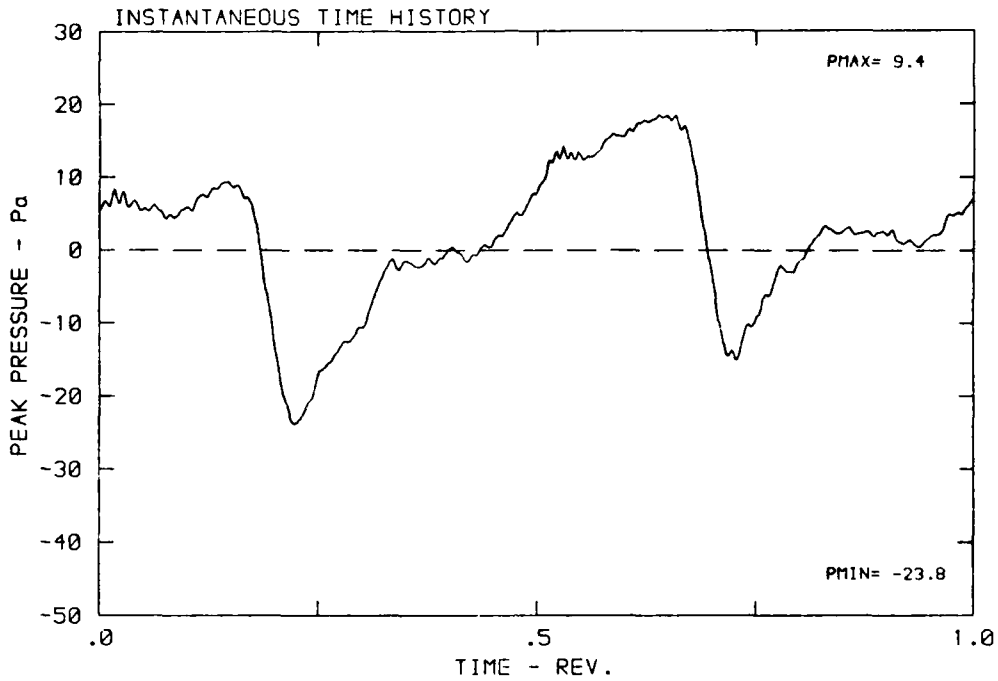
DATA POINT: EN-5 RUN: 161 MP: 1

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



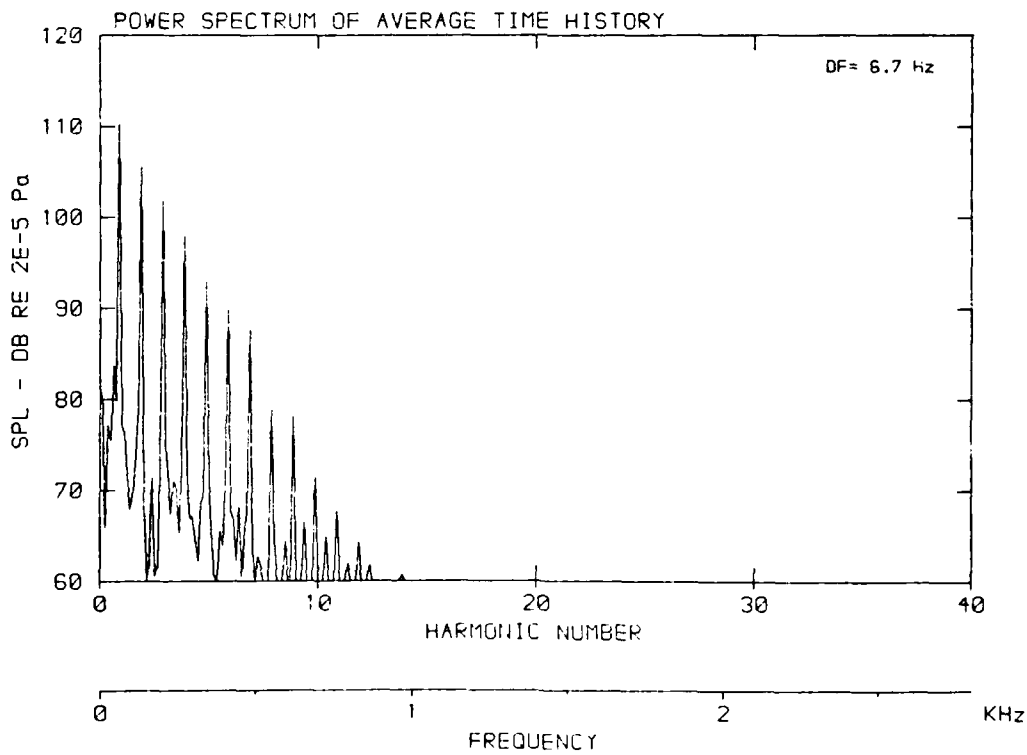
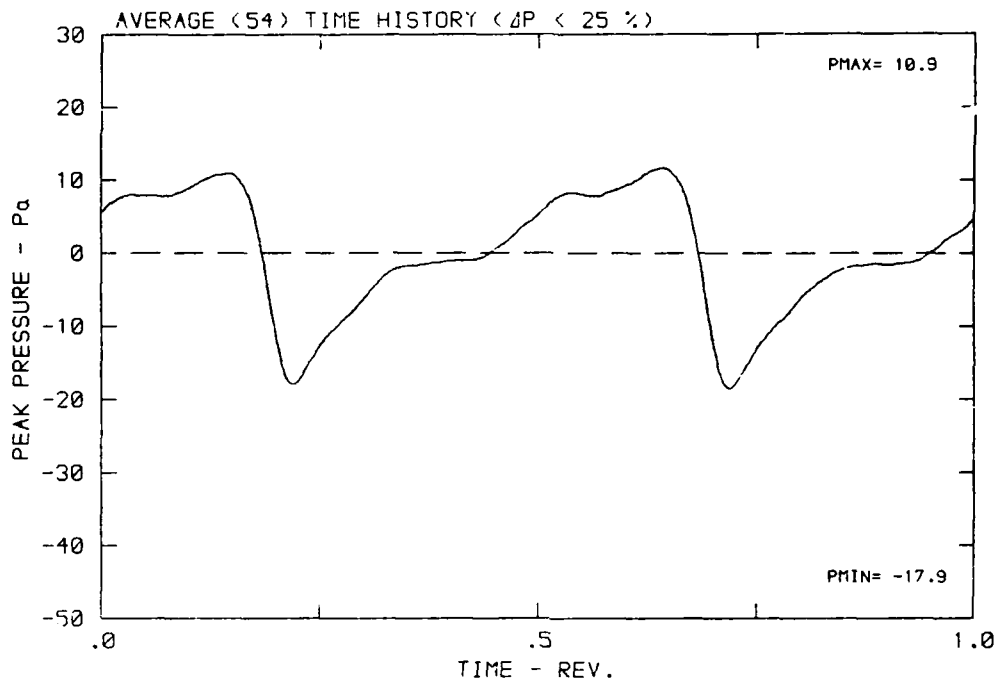
DATA POINT: EN-5 RUN: 161 MP: 2

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



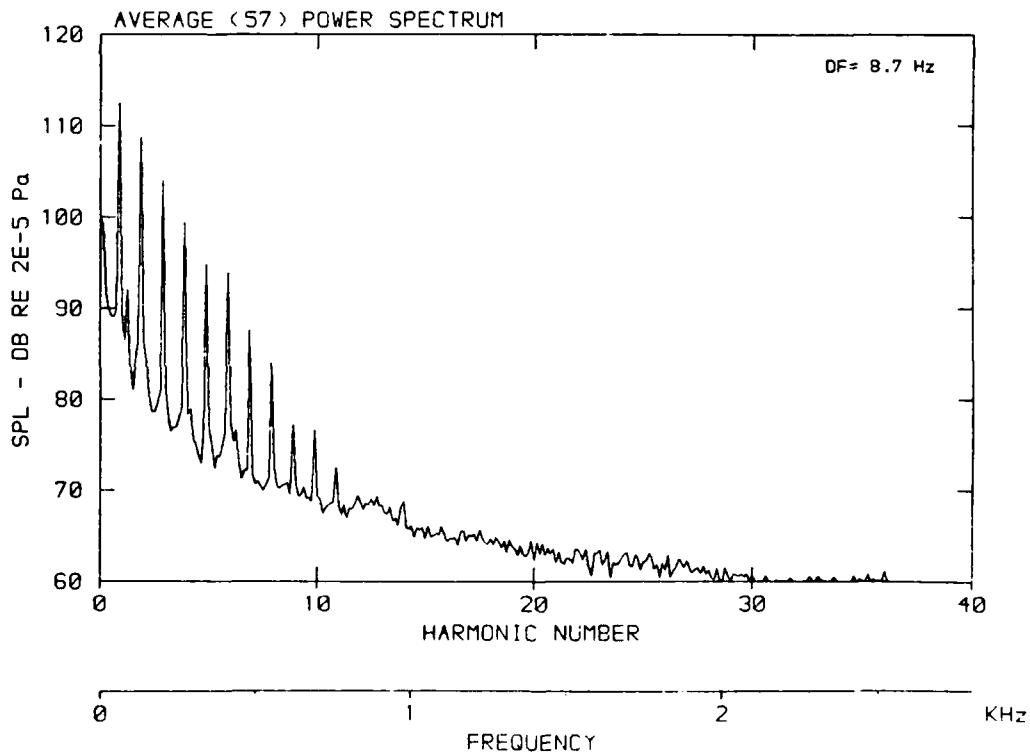
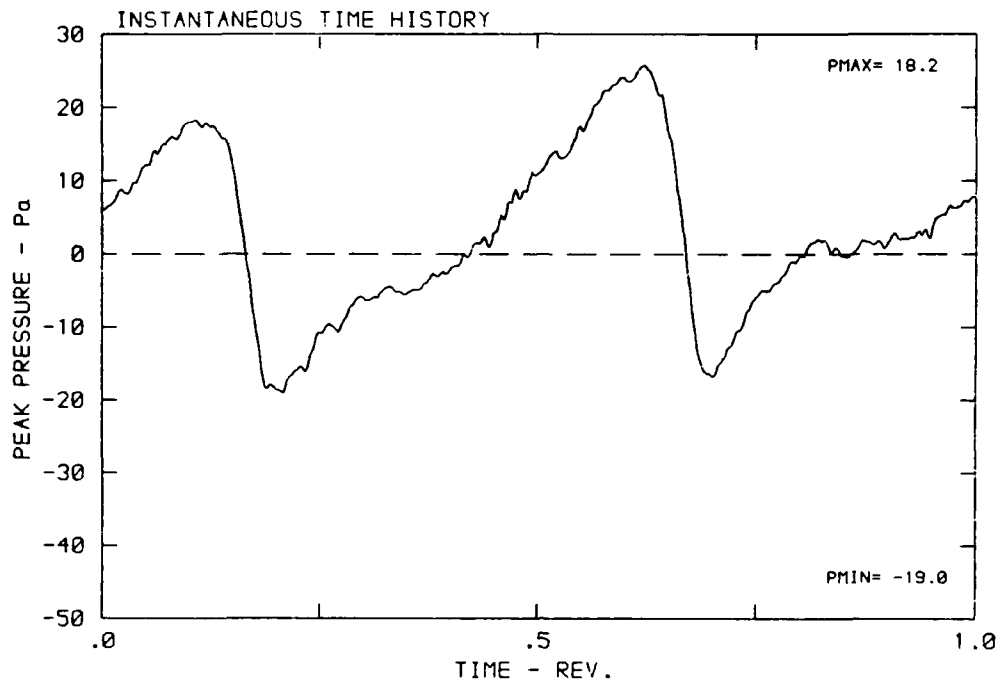
DATA POINT: EN-5 RUN: 161 MP: 2

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



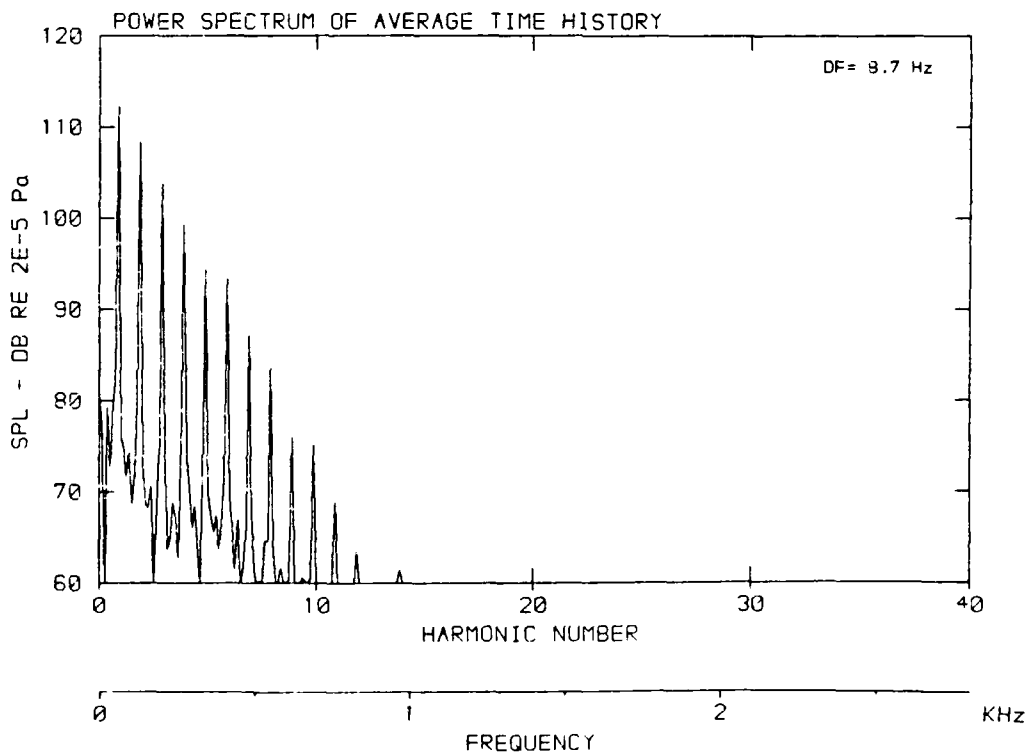
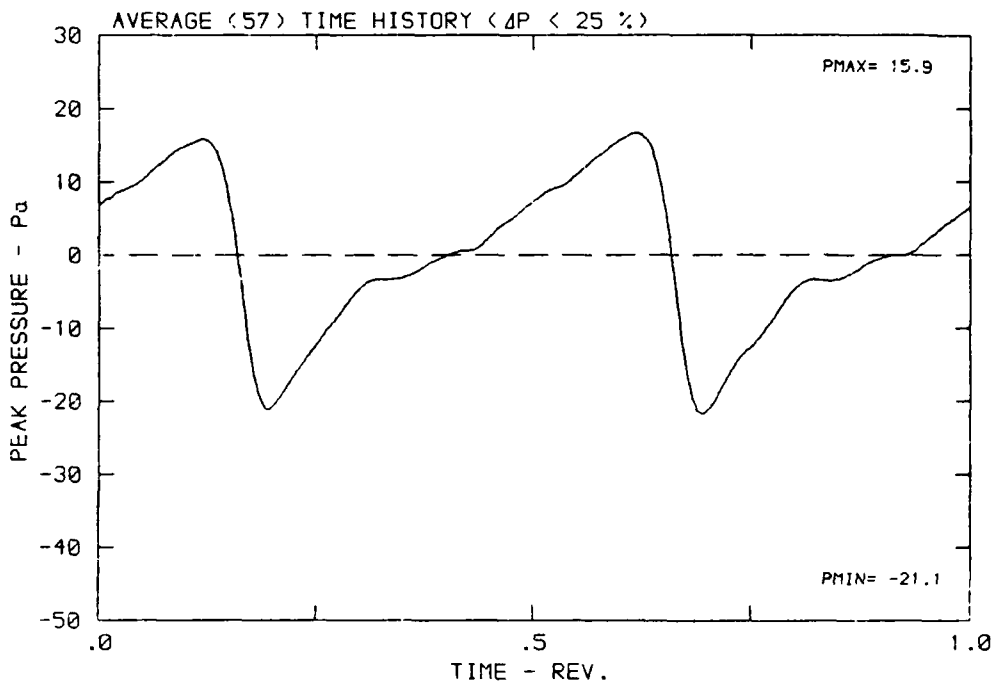
DATA POINT: EN-5 RUN: 161 MP: 3

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



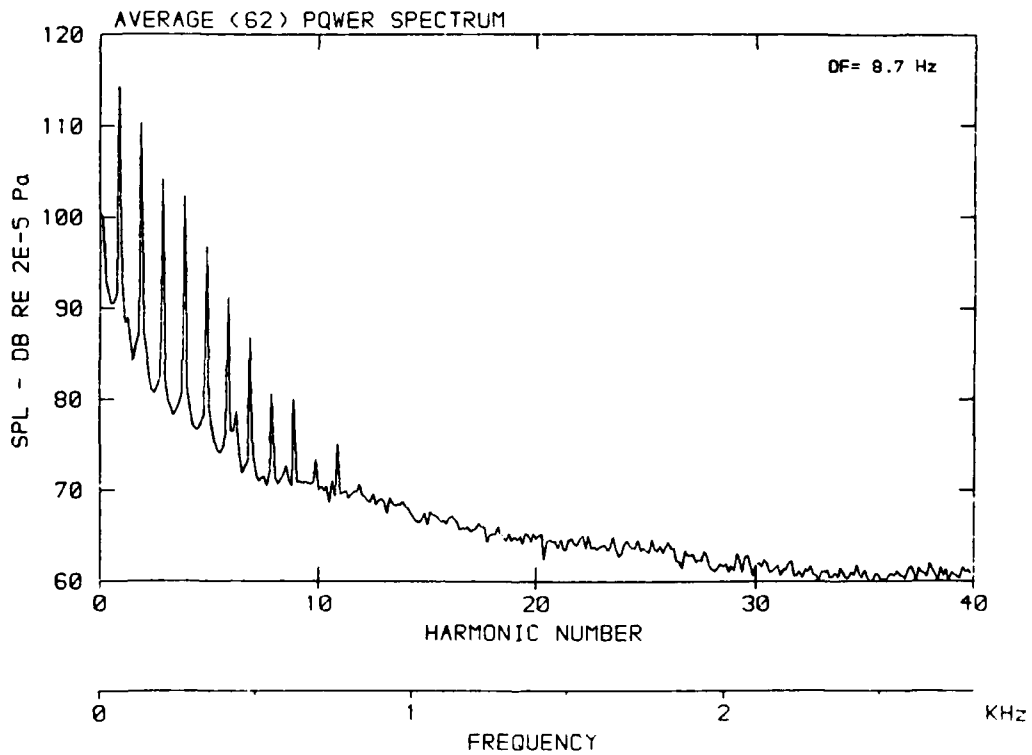
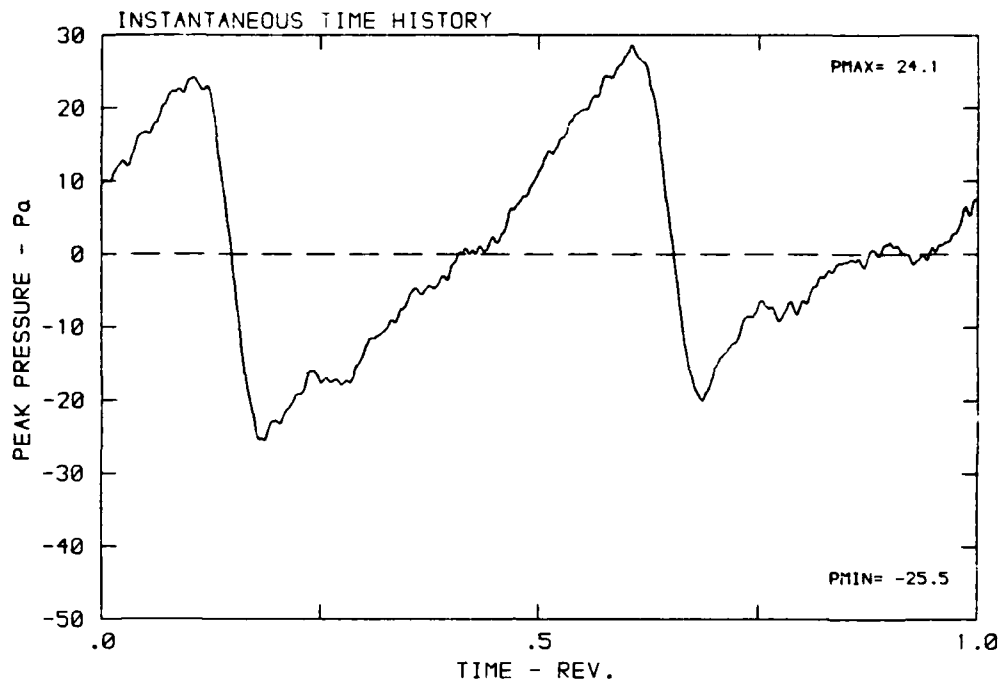
DATA POINT: EN-5 RUN: 161 MP: 3

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



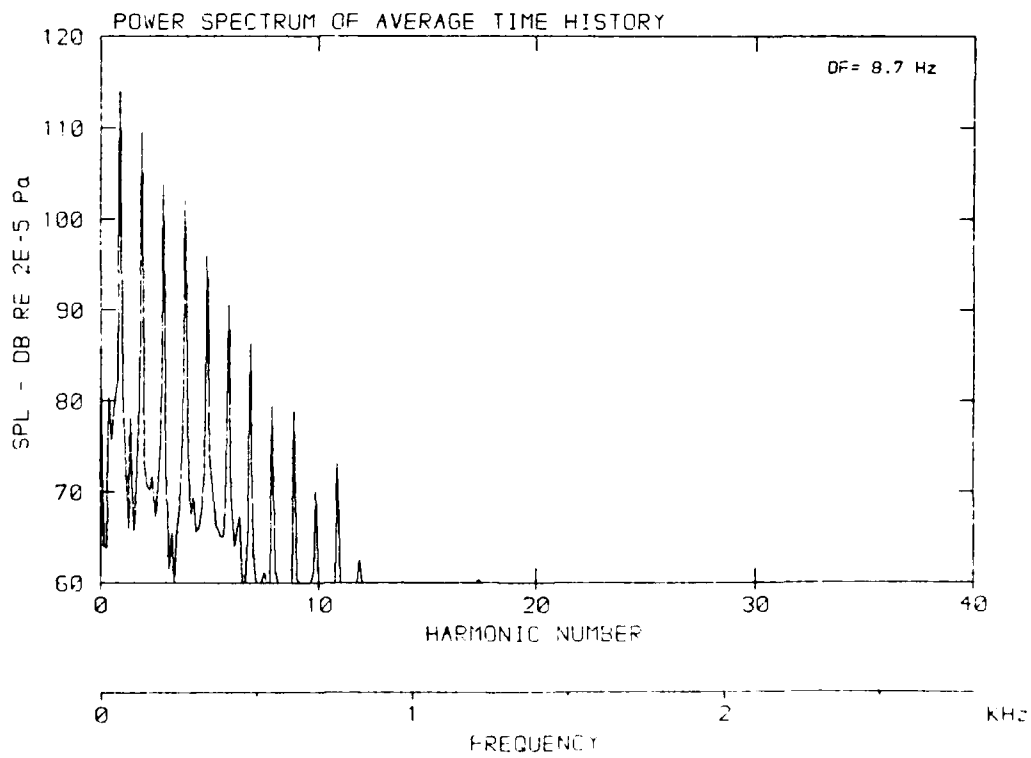
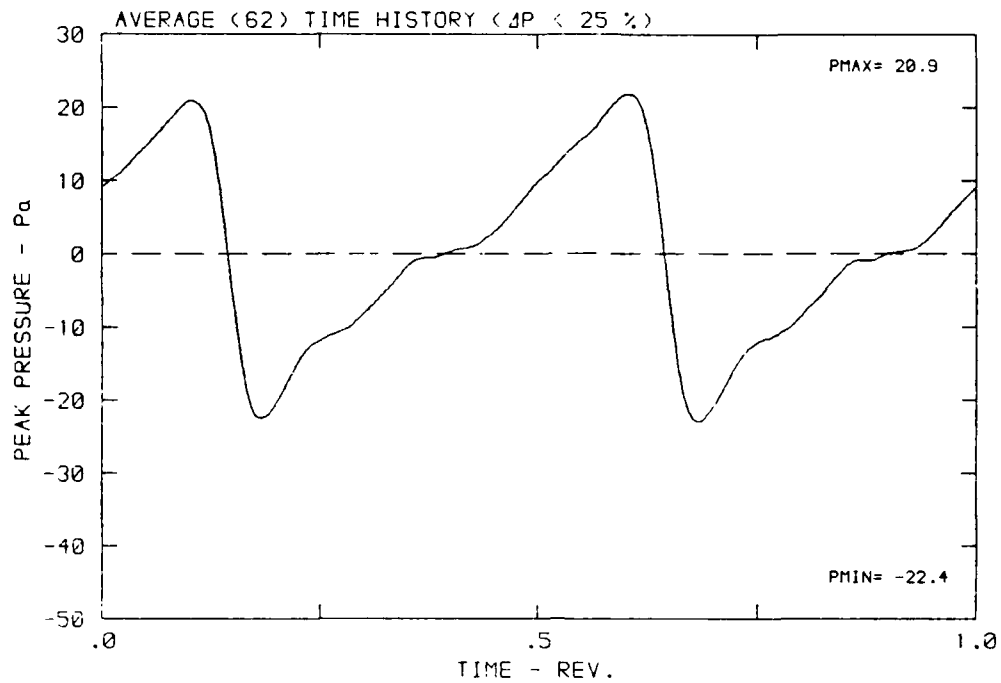
DATA POINT: EN-5 RUN: 161 MP: 4

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



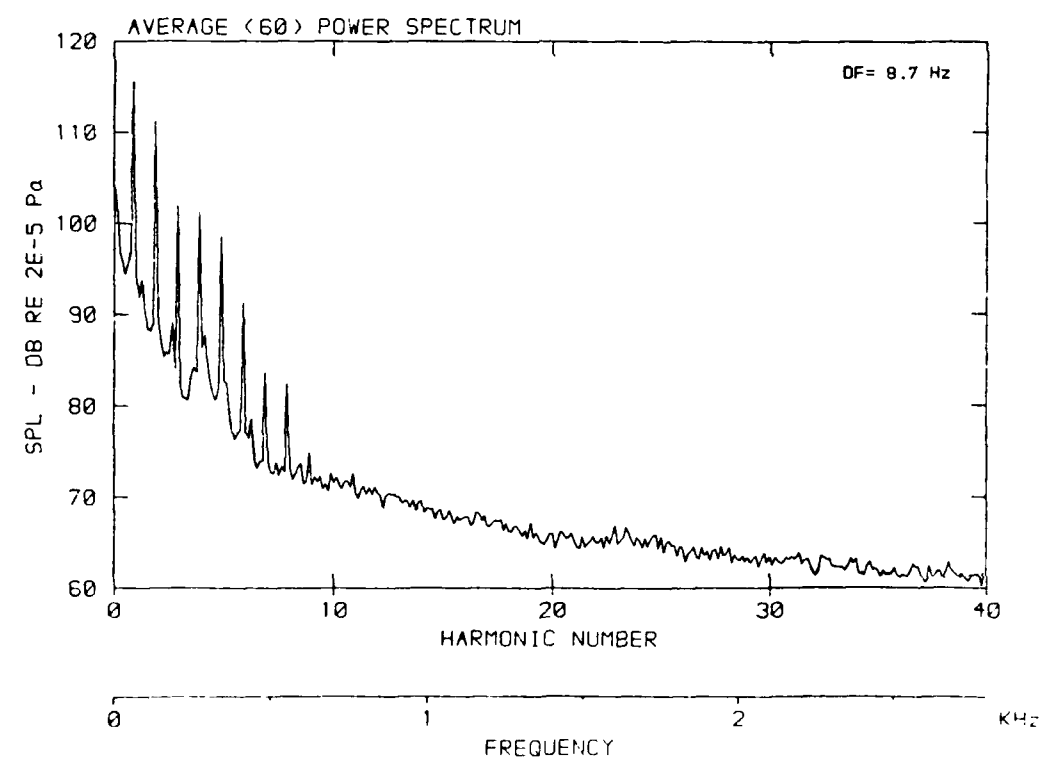
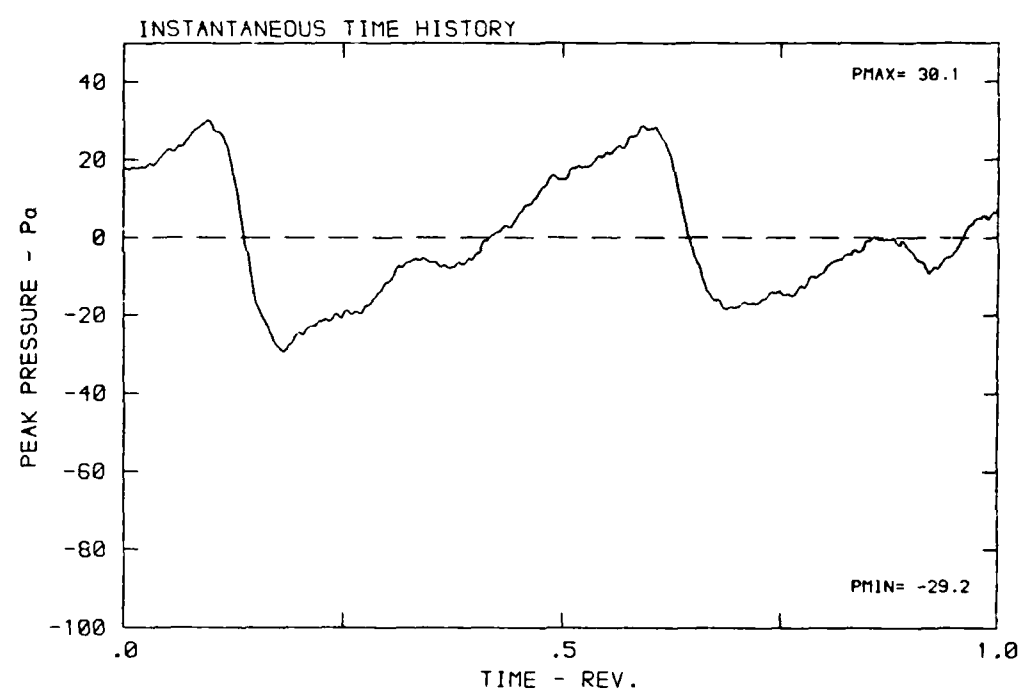
DATA POINT: EN-5 RUN: 161 MP: 4

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



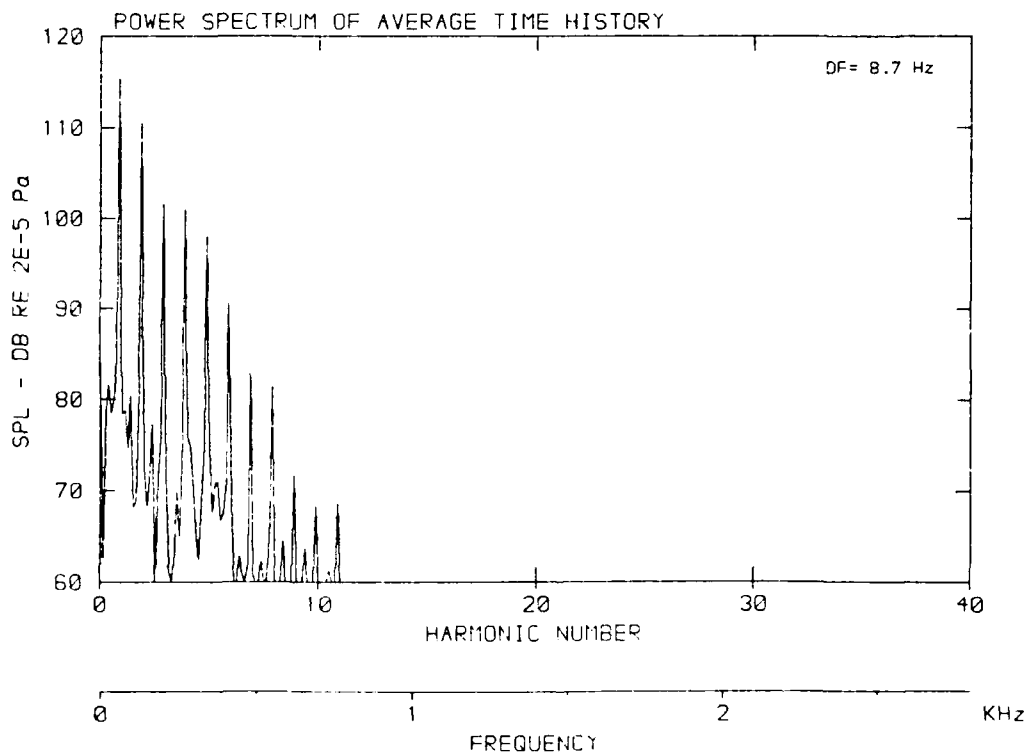
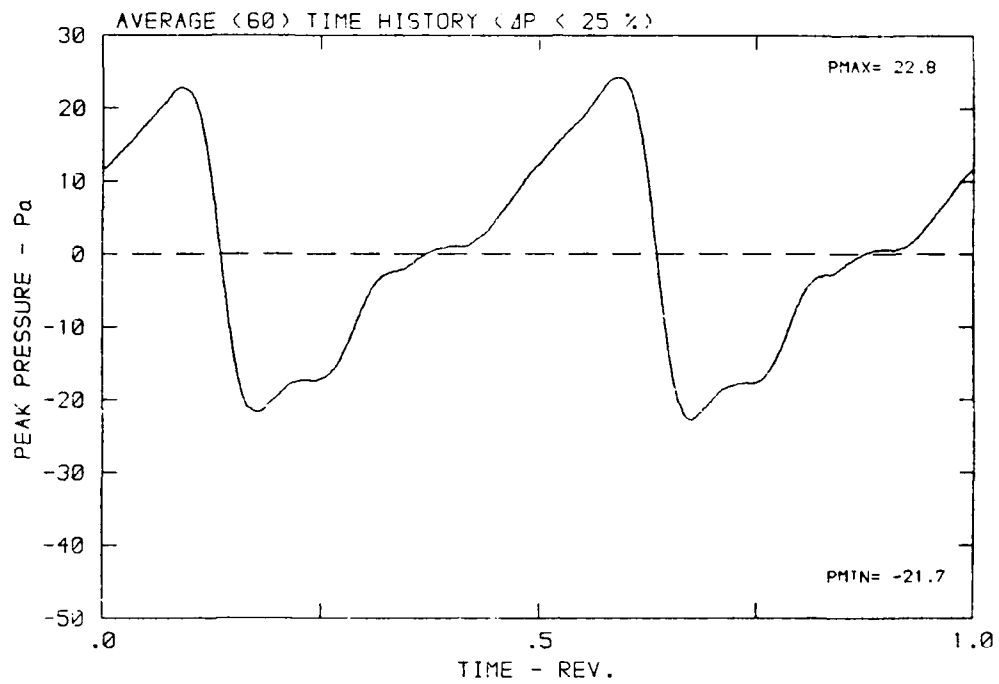
DATA POINT: EN-5 RUN: 161 MP: 5

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



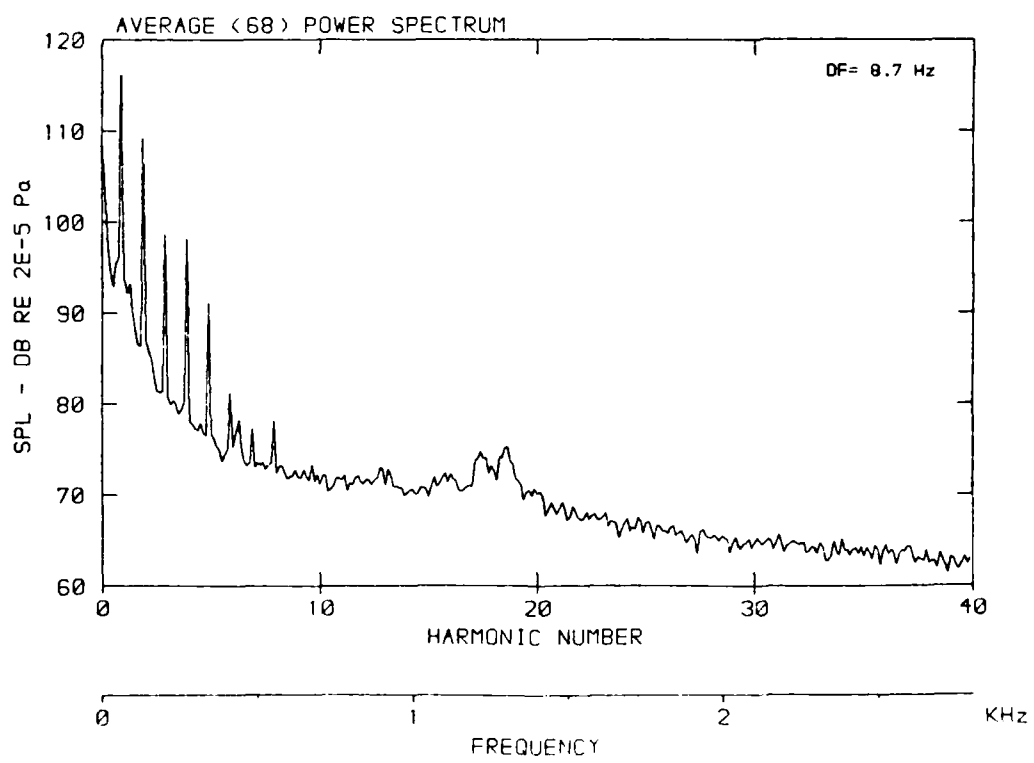
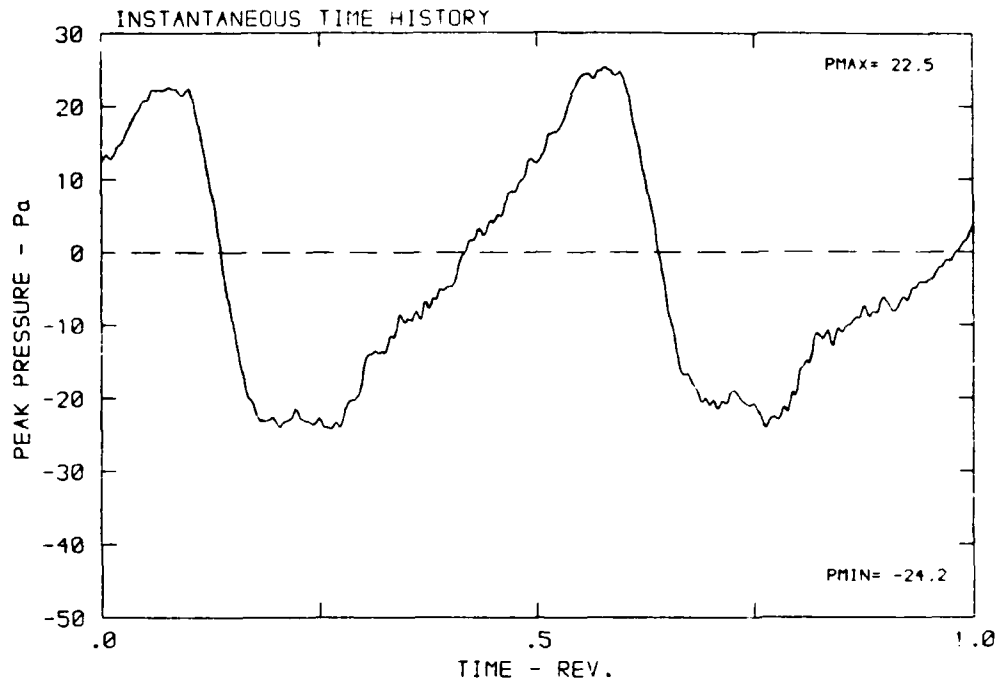
DATA POINT: EN-5 RUN: 161 MP: 5

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



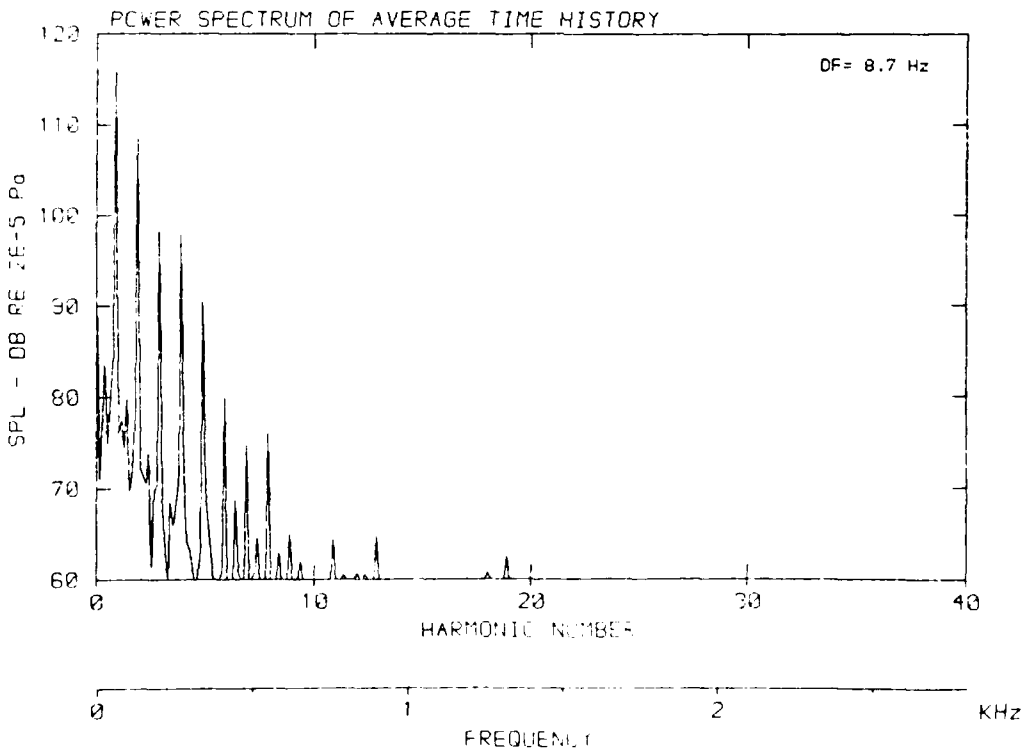
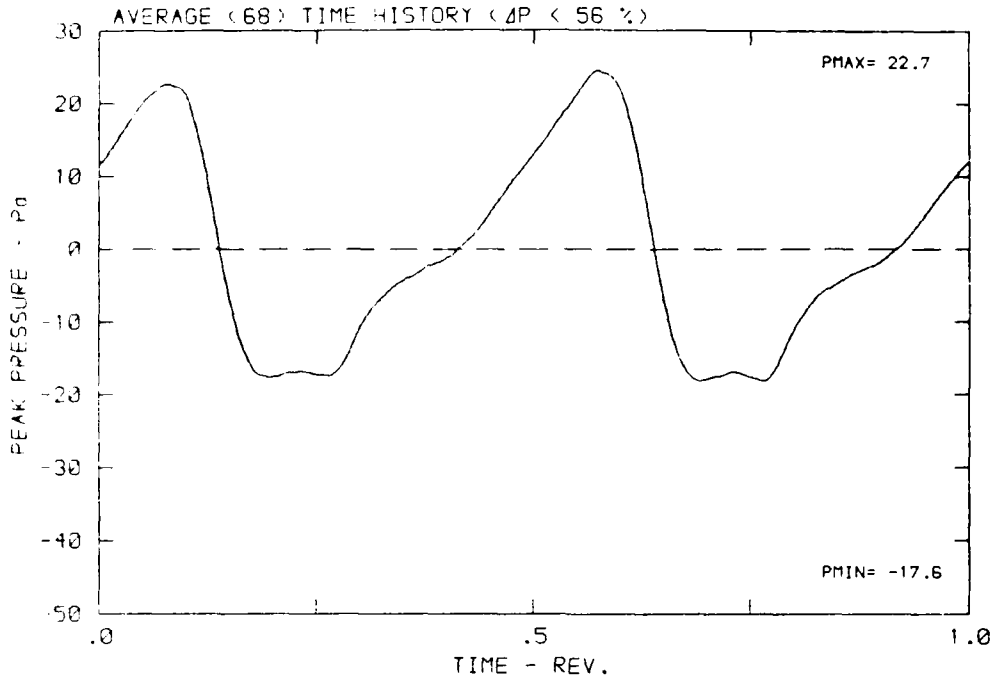
DATA POINT: EN-5 RUN: 161 MF: 6

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



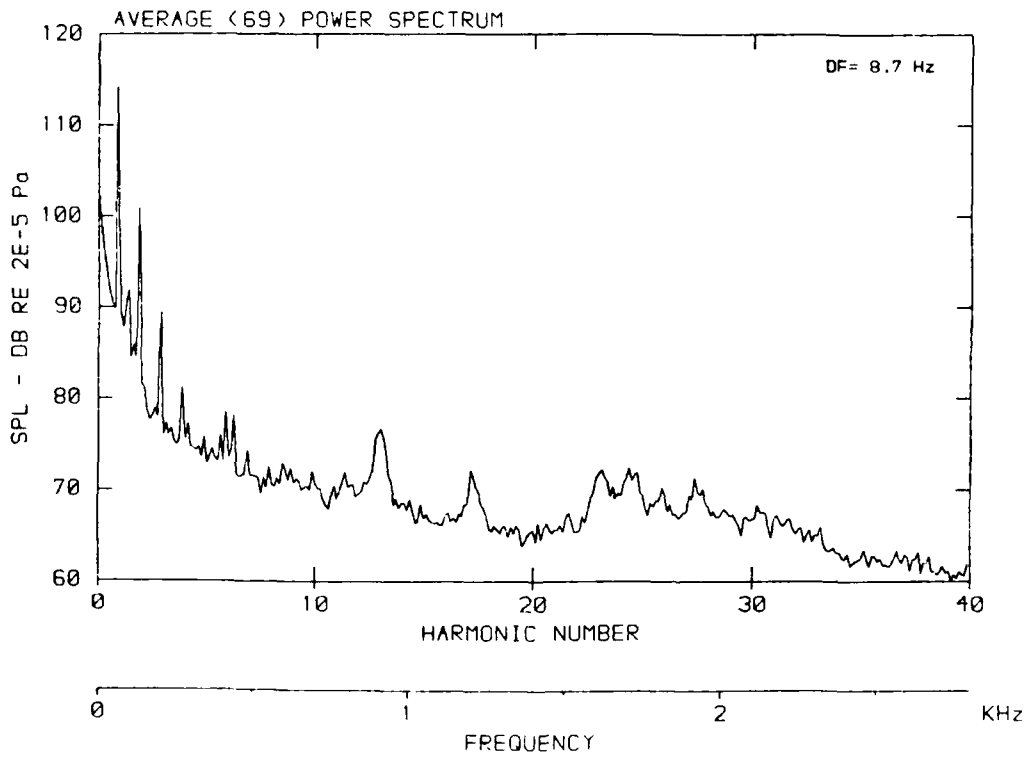
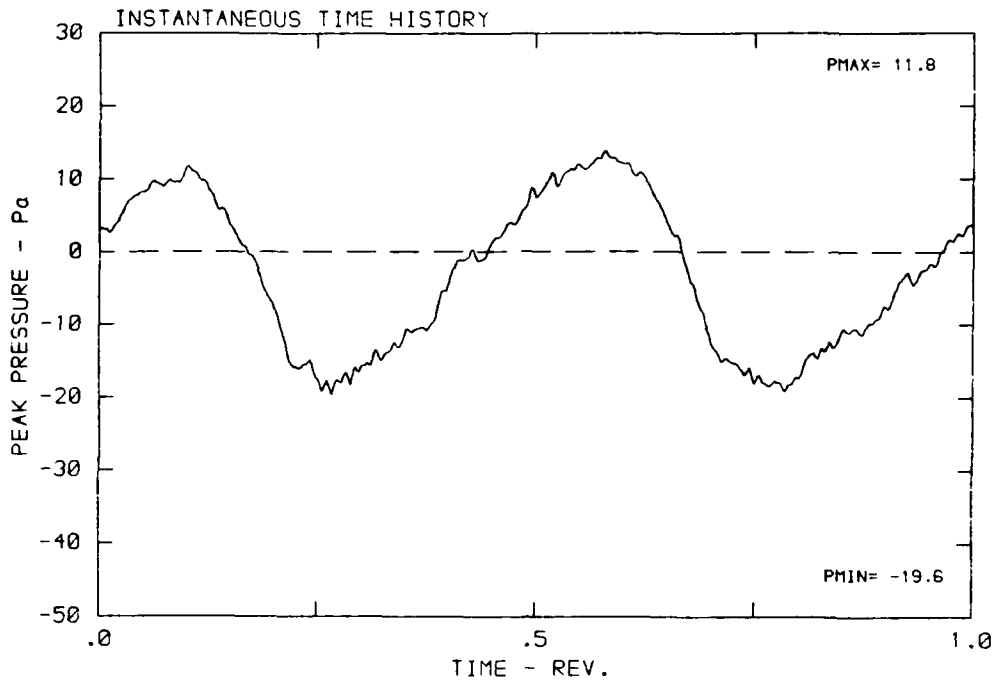
DATA POINT: EN-5 RUN: 161 MP: 6

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



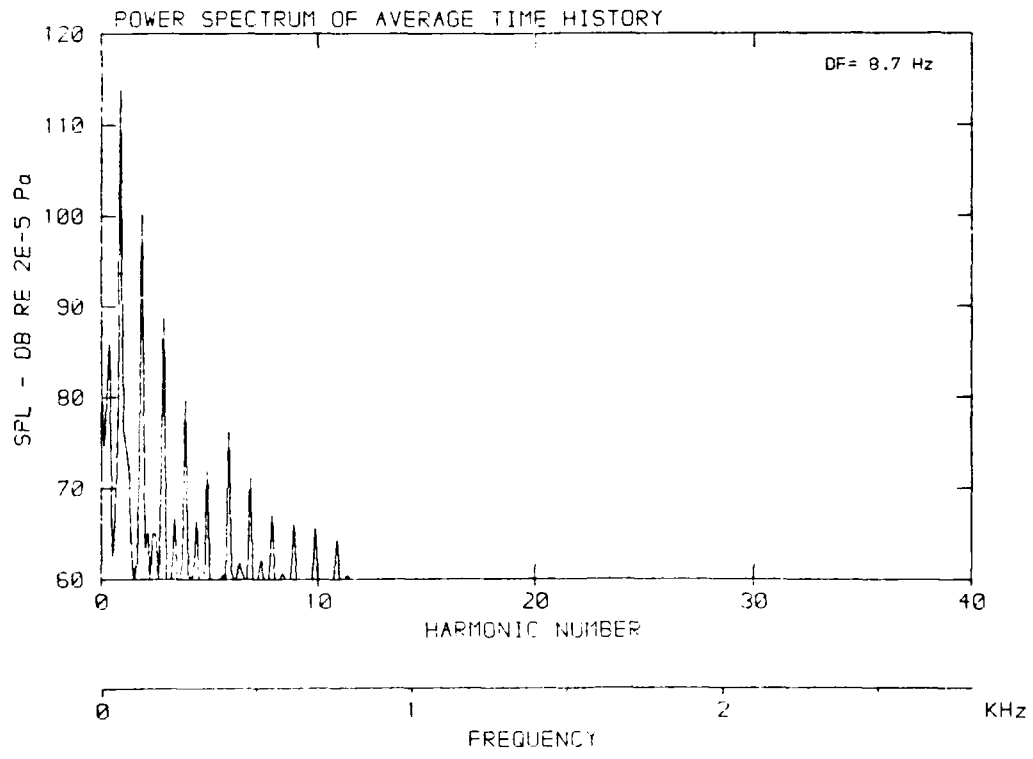
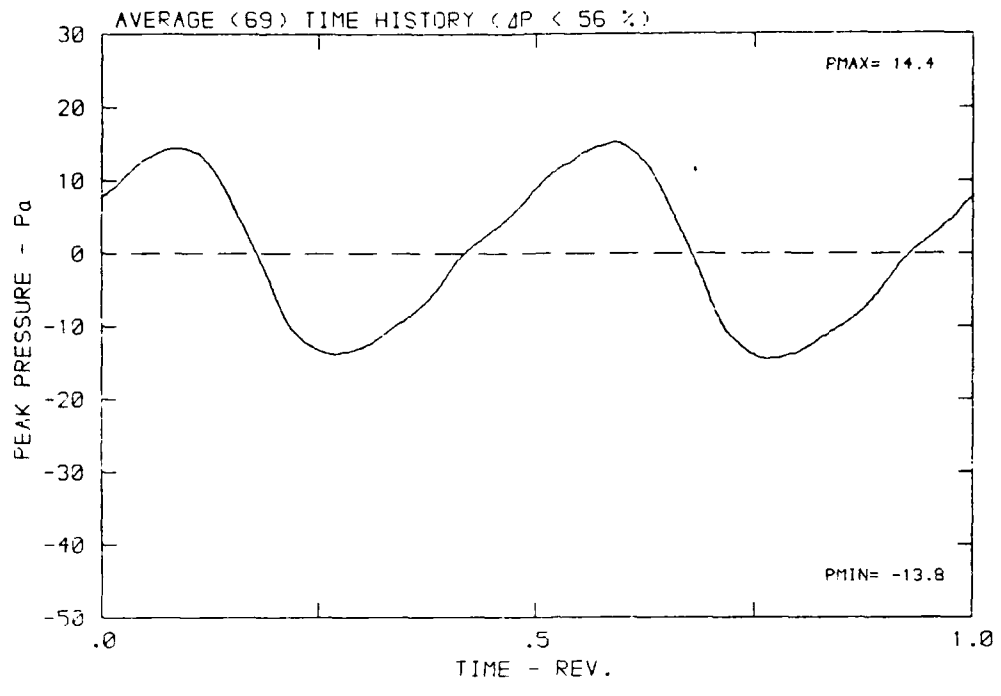
DATA POINT: EN-5 RUN: 161 MP: 7

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



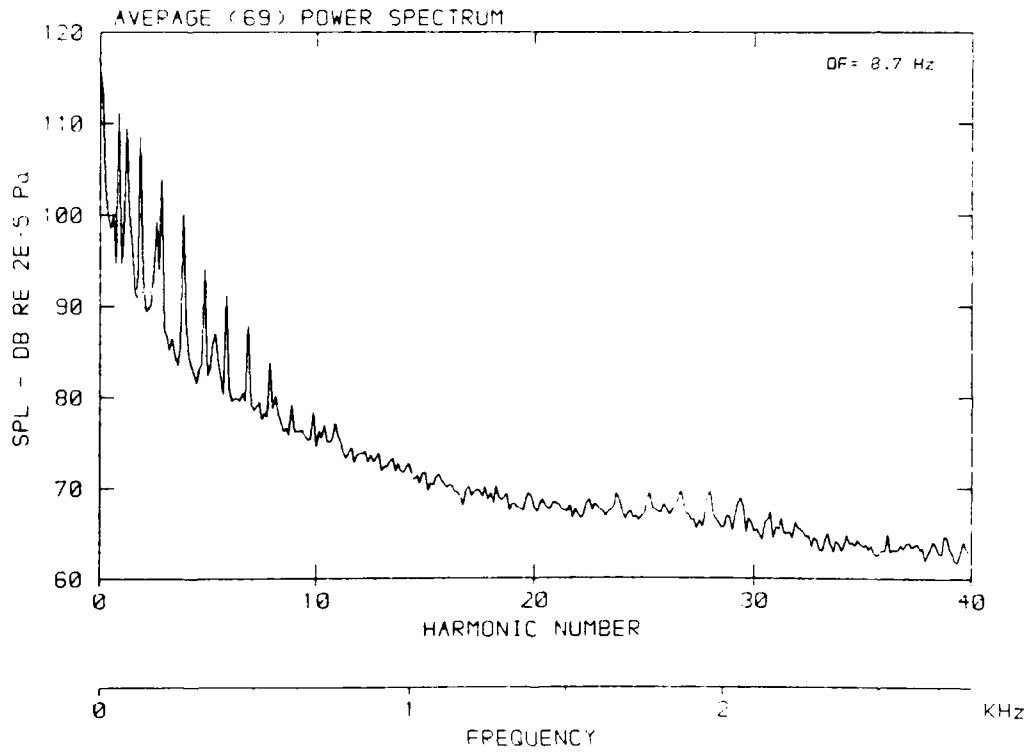
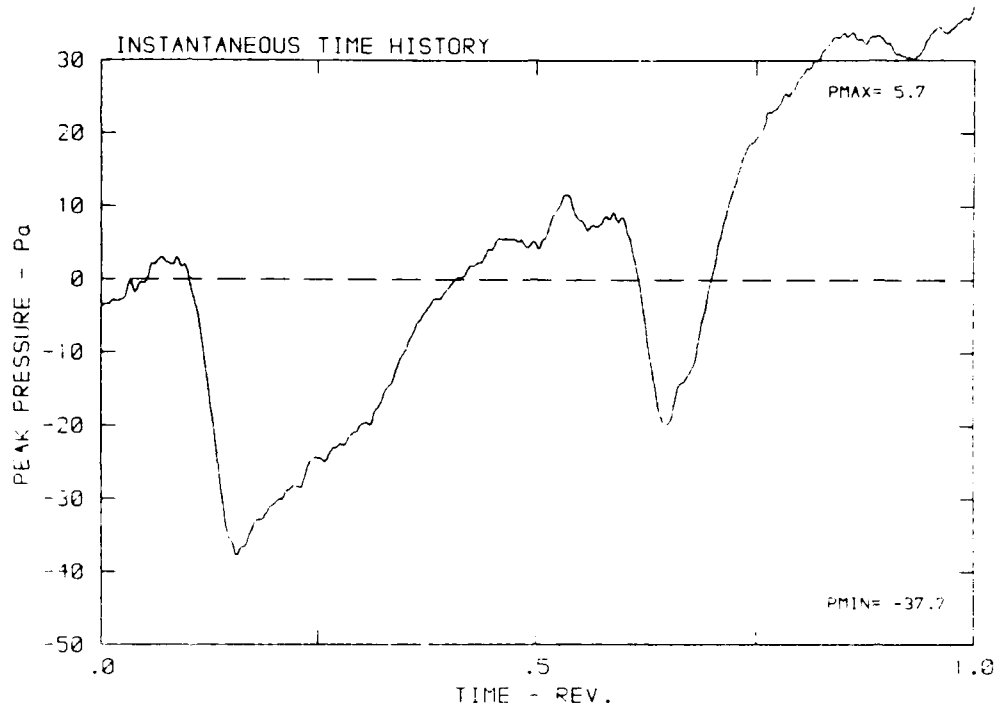
DATA POINT: EN-5 RUN: 161 MP: 7

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



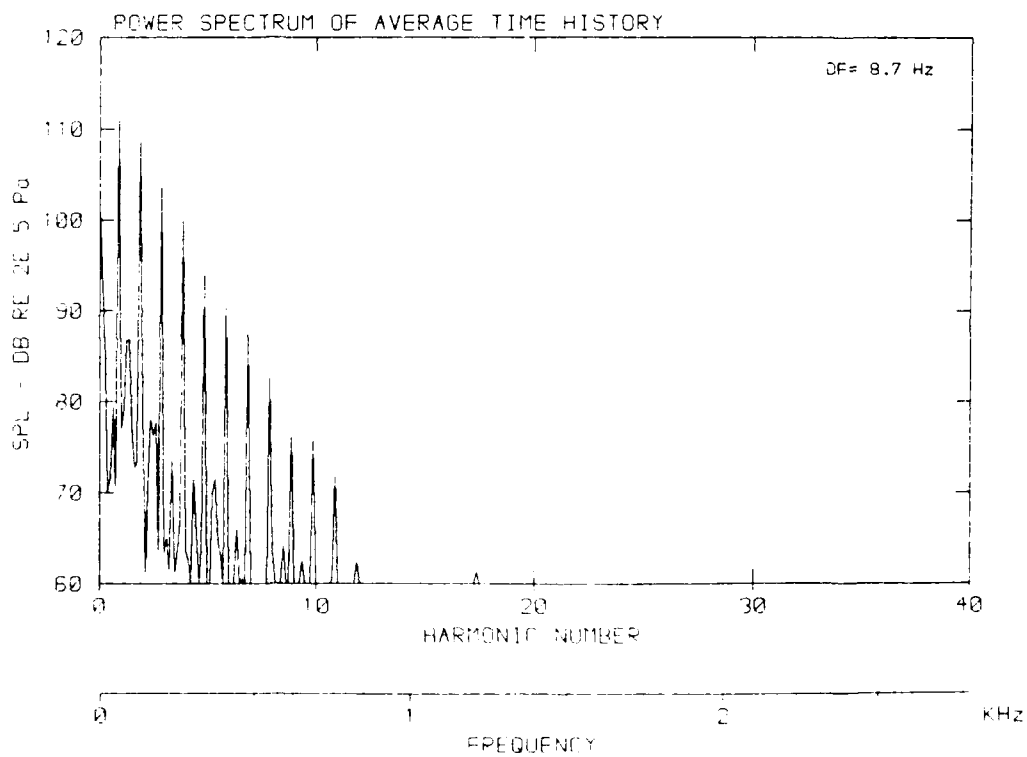
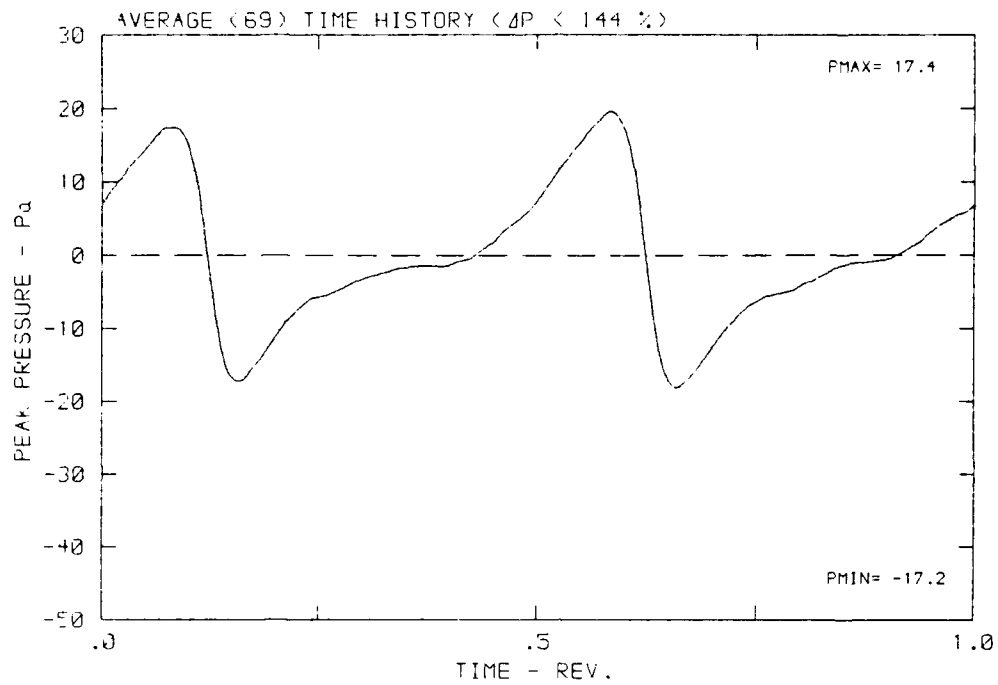
DATA POINT: EN-5 RUN: 161 MP: 8

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



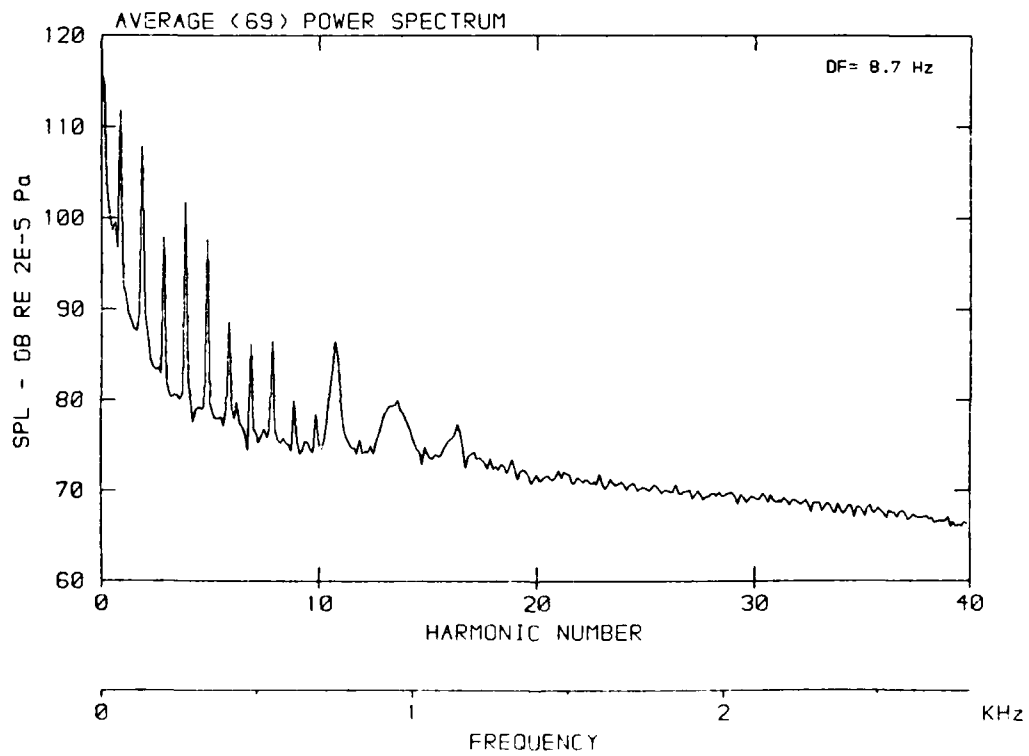
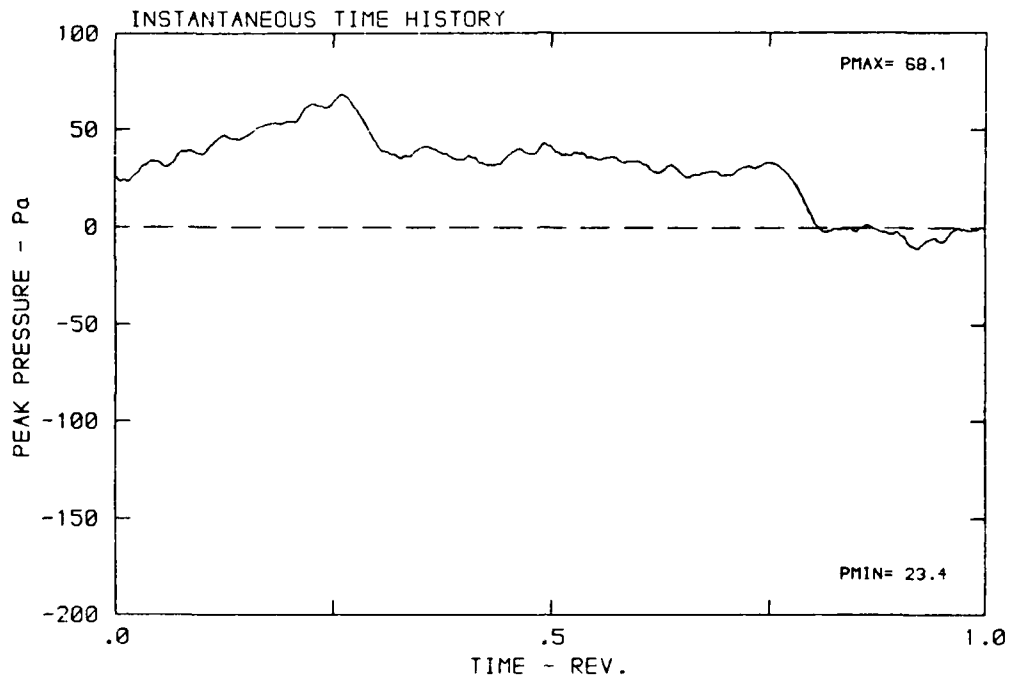
DATA POINT: EN-5 RUN: 161 MP: 8

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



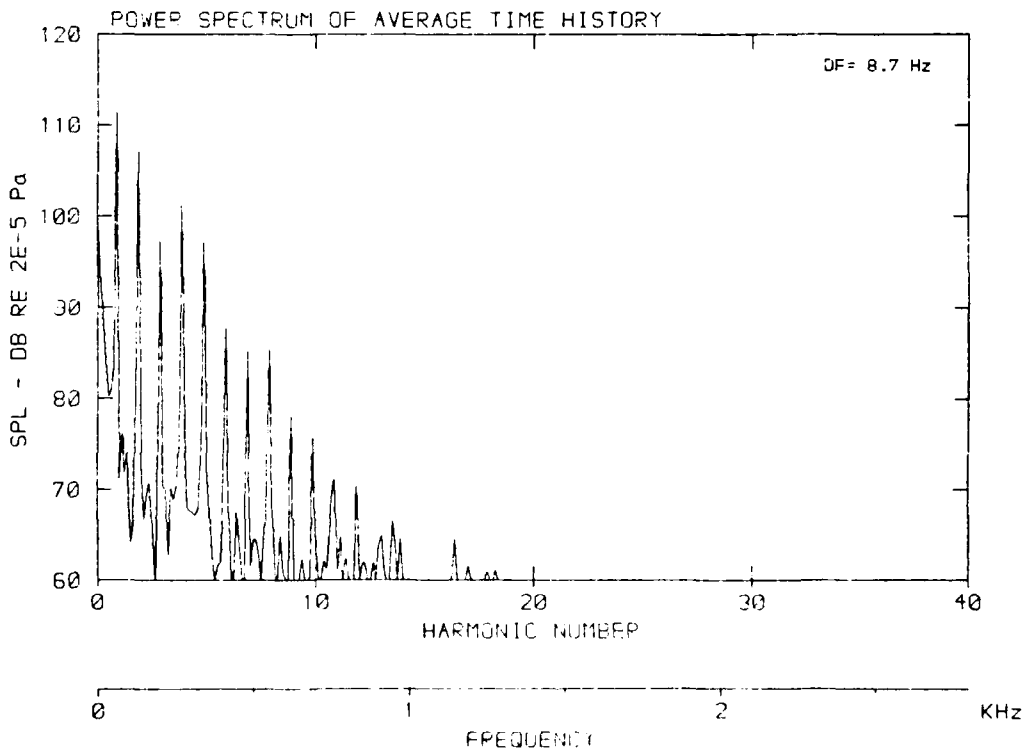
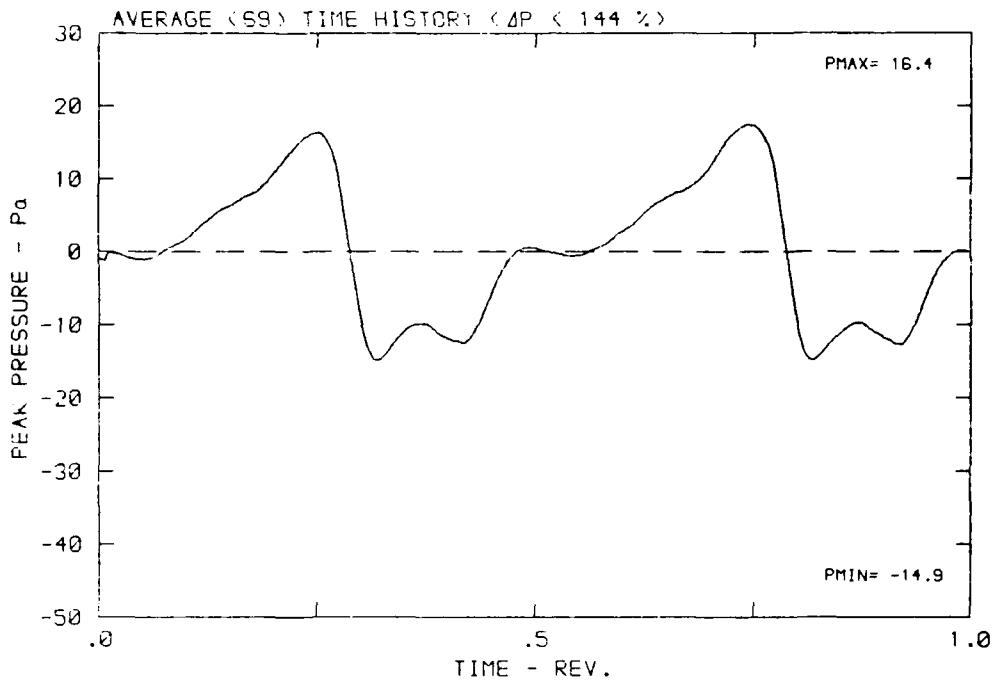
DATA POINT: EN-5 RUN: 161 MP: 9

β : 23.7° MH: .6755 n: 2100 rpm v/u: .231 ϕ : 7.3° T: 286.7 K



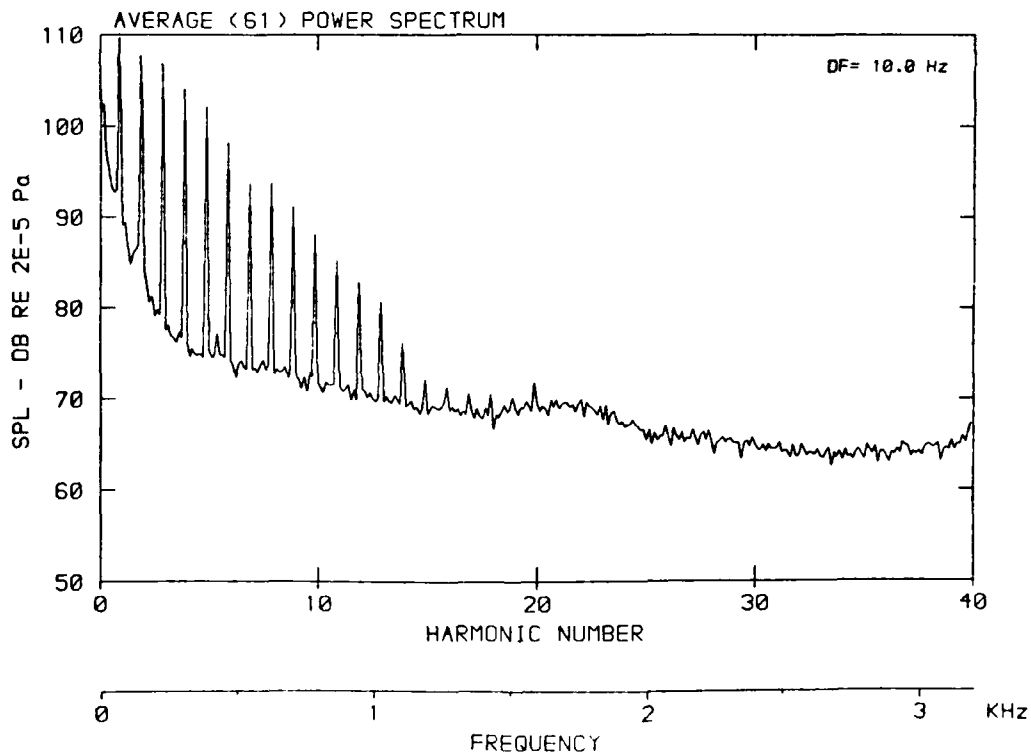
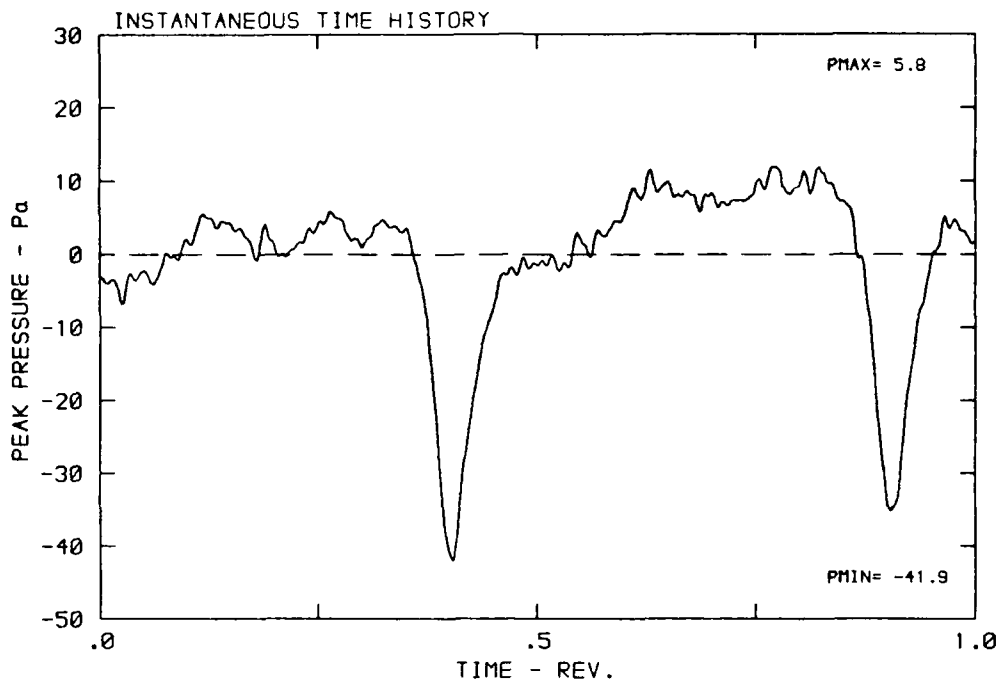
DATA POINT: EN-5 RUN: 161 MP: 9

β : 23.7° MH: .6755 n: 2100 rpm v/u : .231 ϕ : 7.3° T: 286.7 K



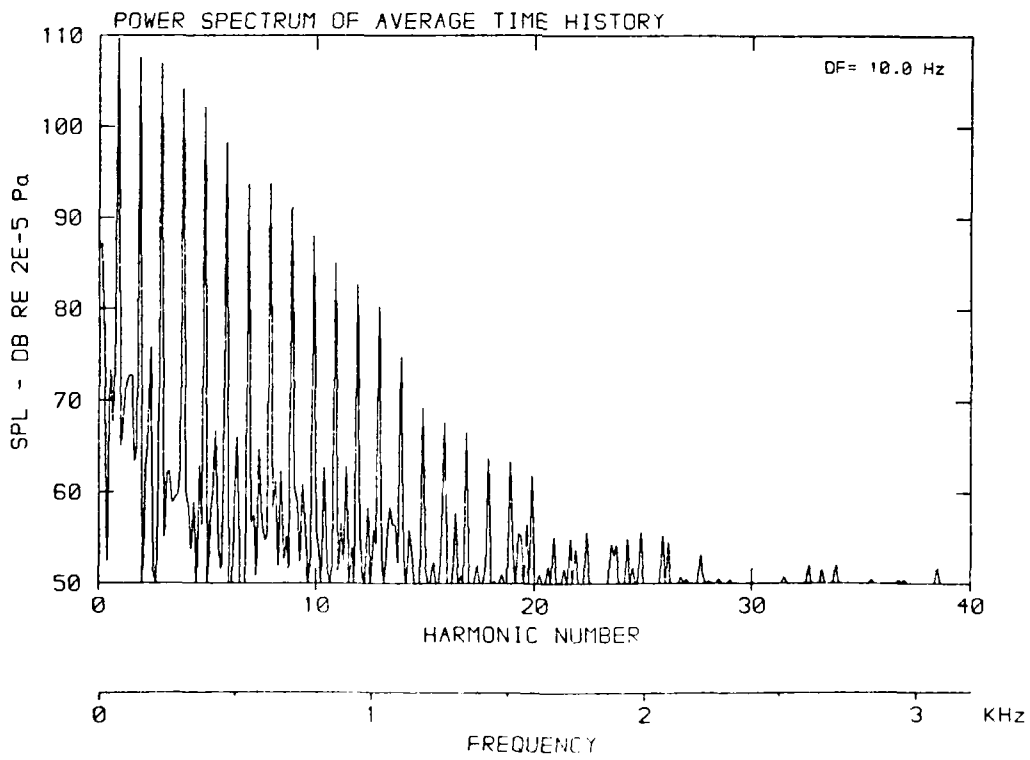
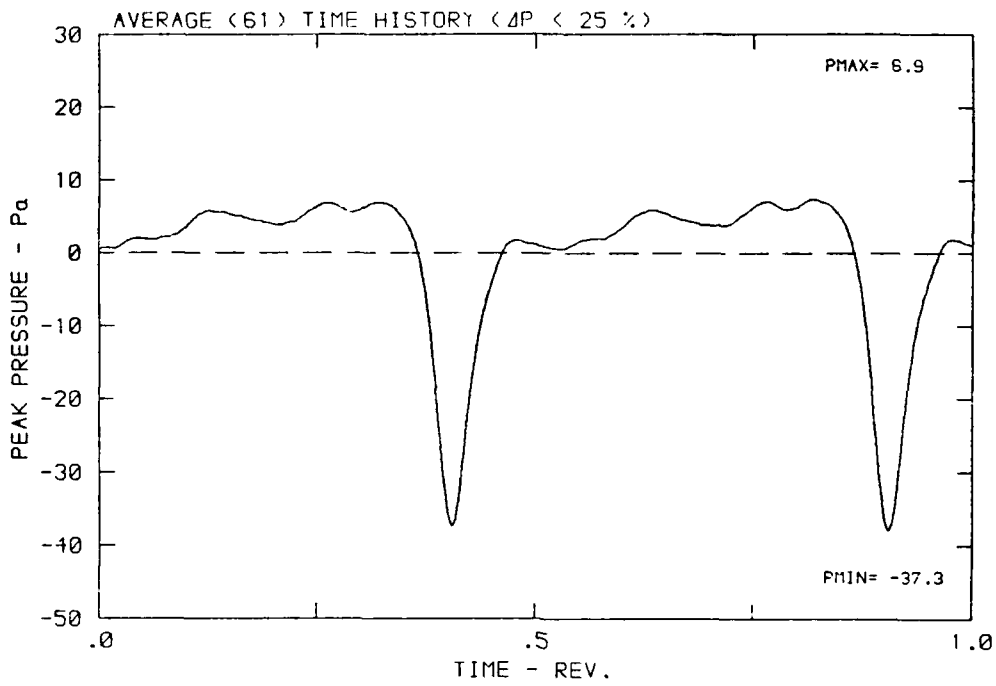
DATA POINT: EN-6 RUN: 162 MP: 1

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



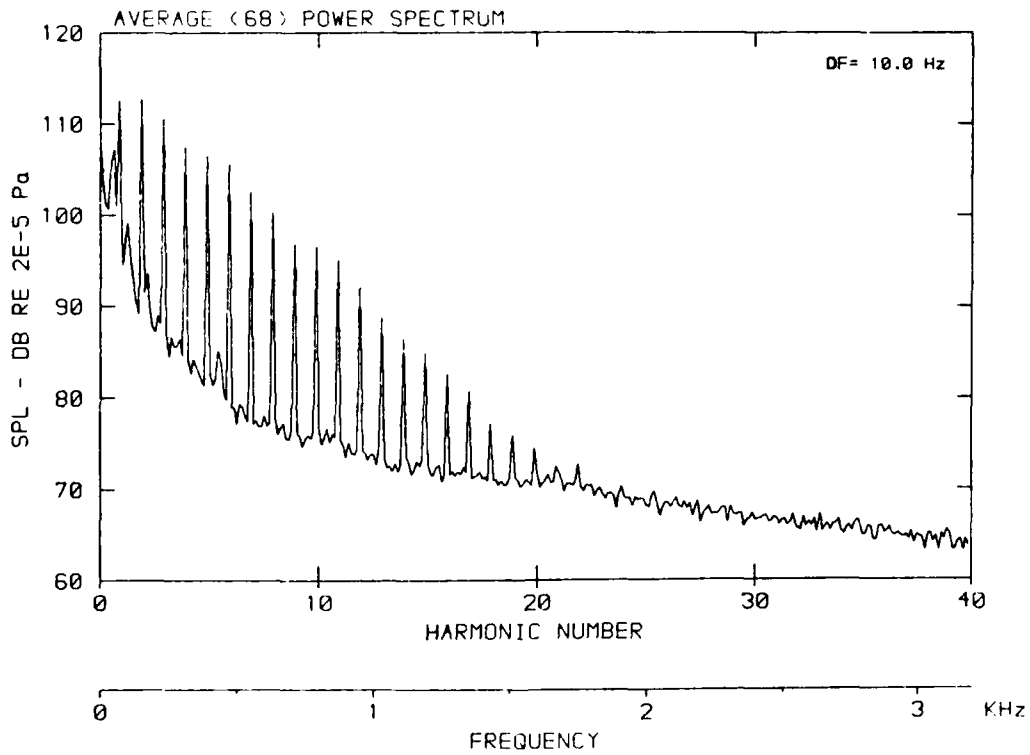
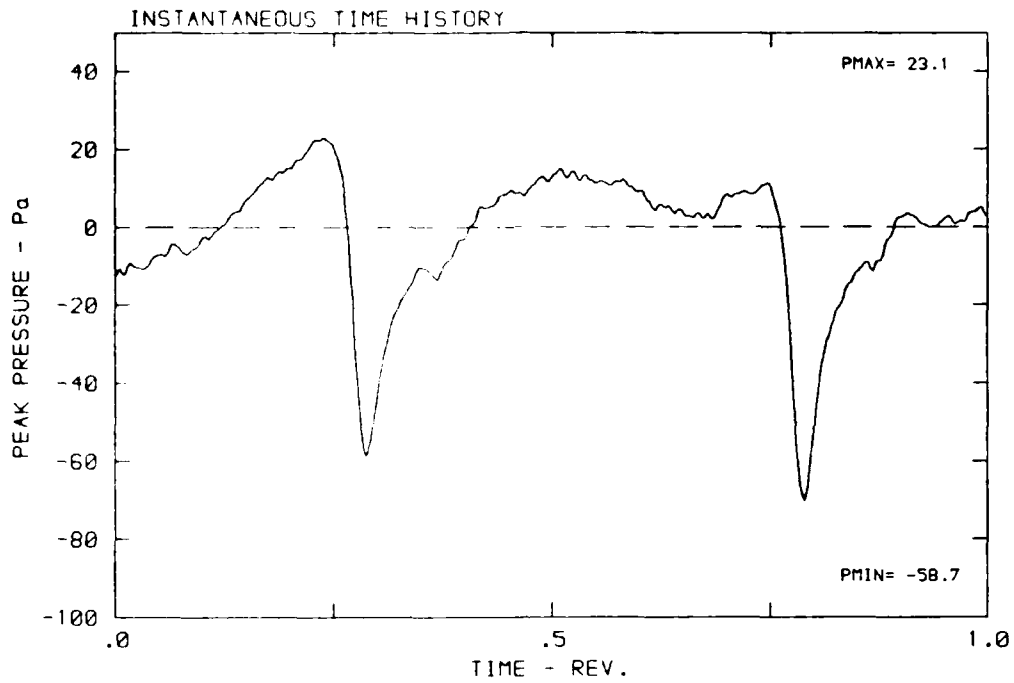
DATA POINT: EN-6 RUN: 162 MP: 1

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



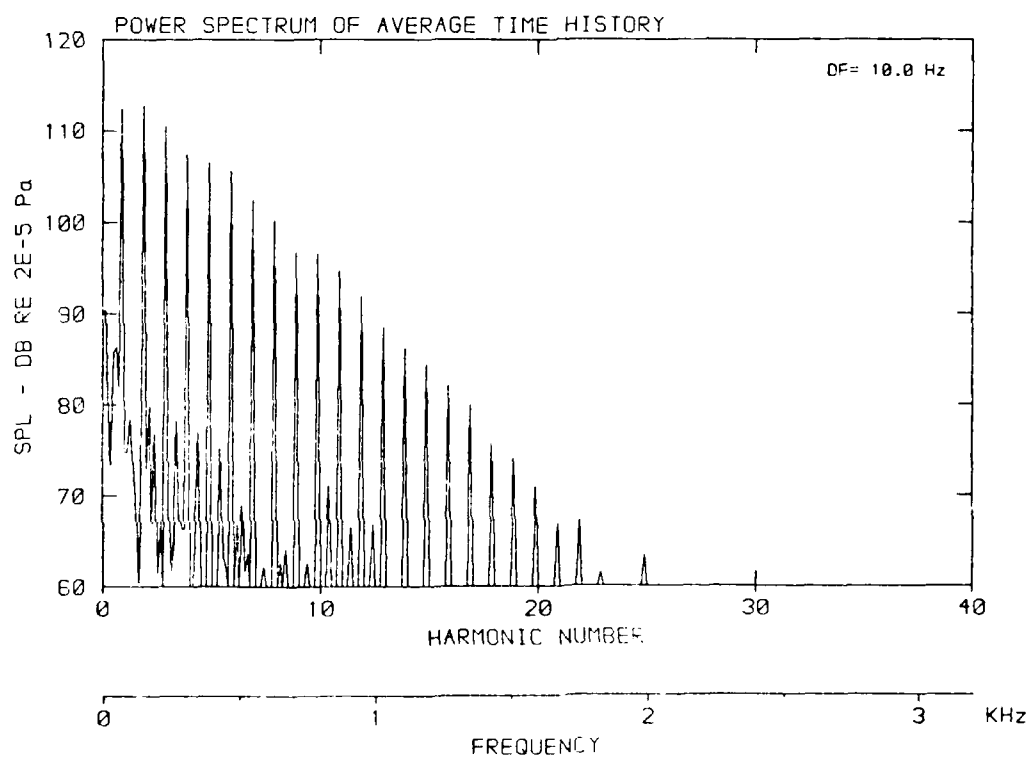
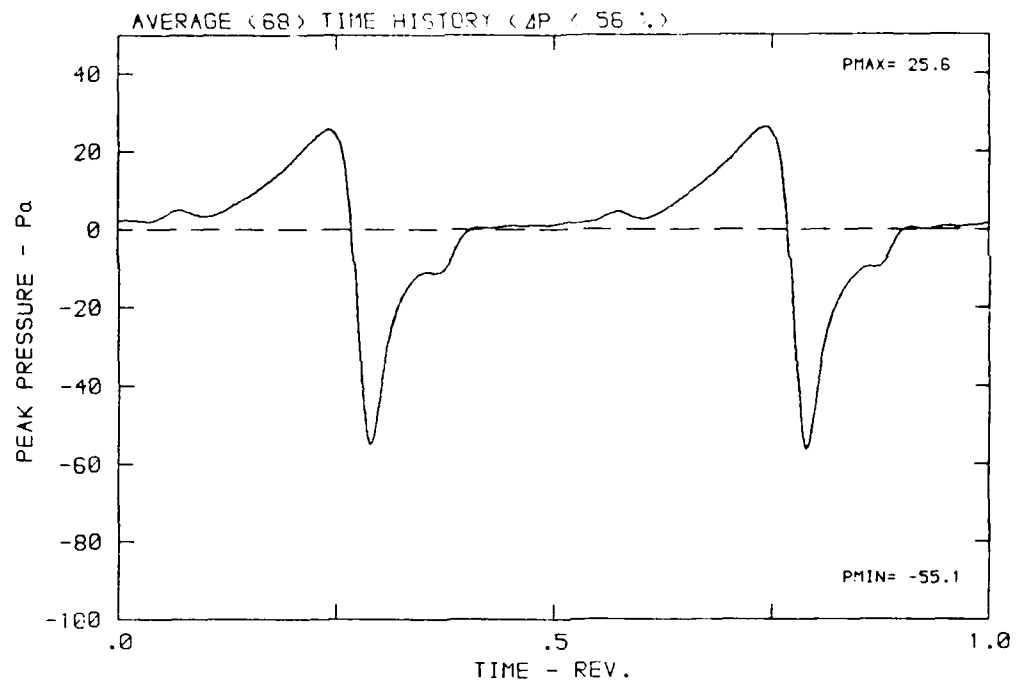
DATA POINT: EN-6 RUN: 162 MP: 2

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



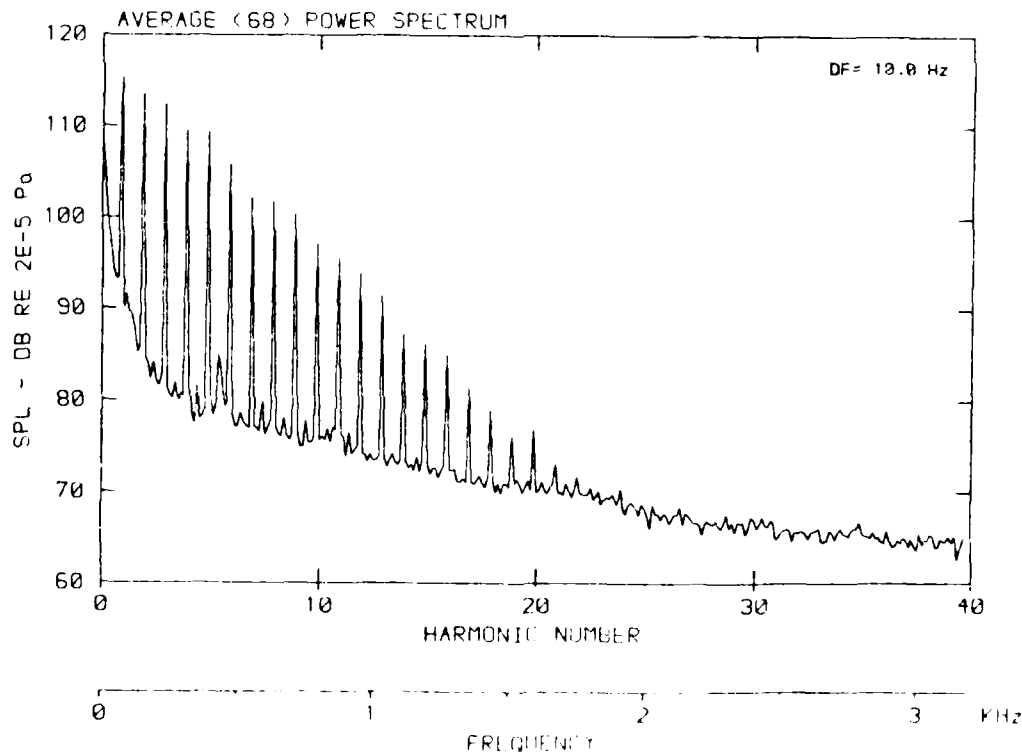
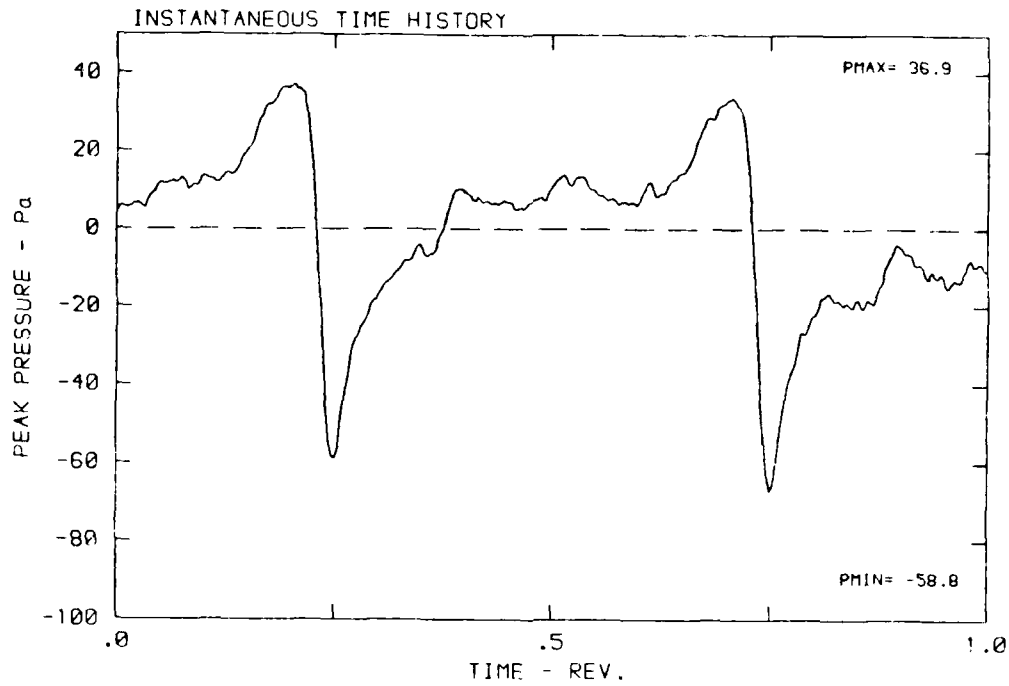
DATA POINT: EN-6 PUN: 162 MP: 2

β : 23.7° MH: .7773 n: 2400 rpm v_z : .263 ϕ : 7.3° T: 287.1 K



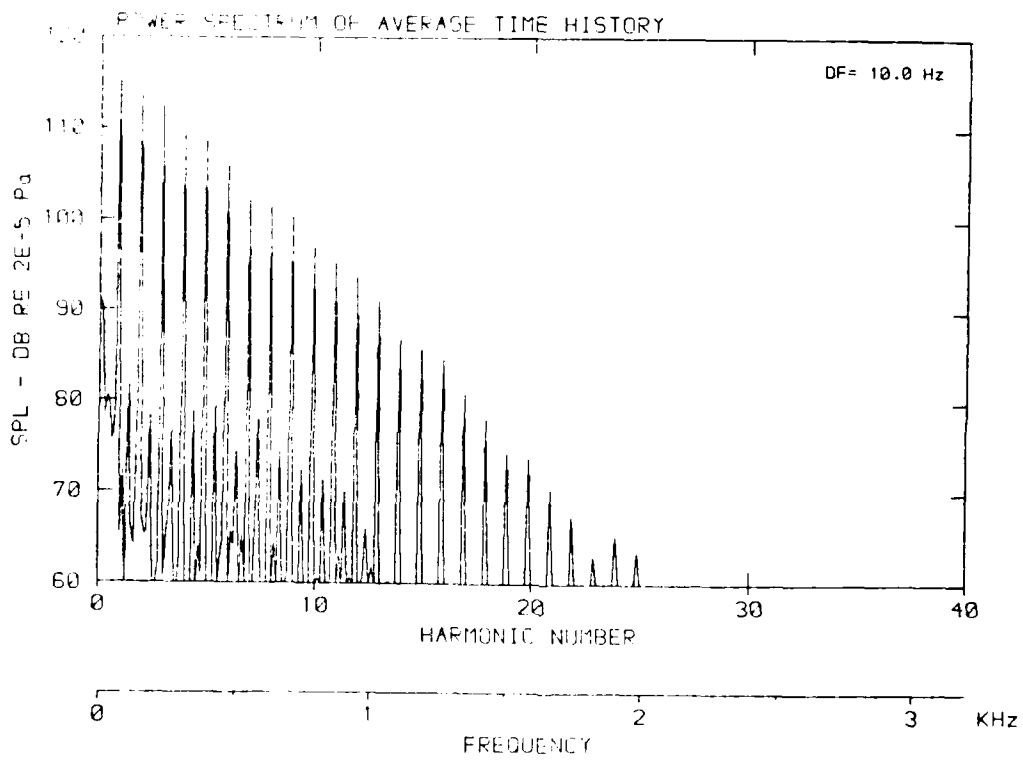
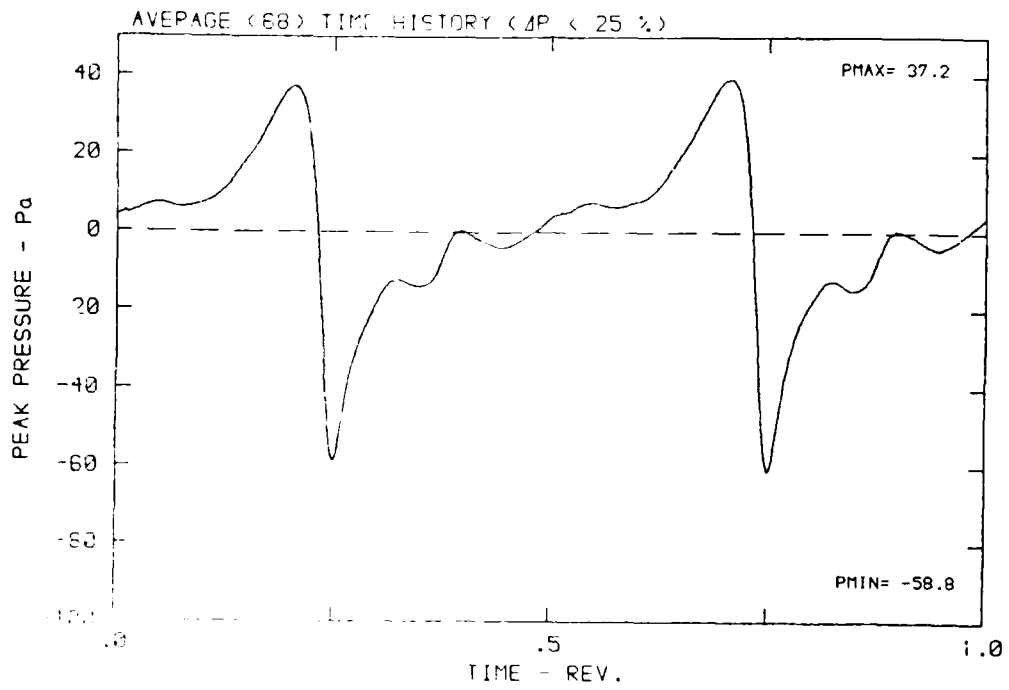
DATA POINT: EN-6 RUN: 162 MP: 3

β : 23.7° MH: .7773 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 287.1 K



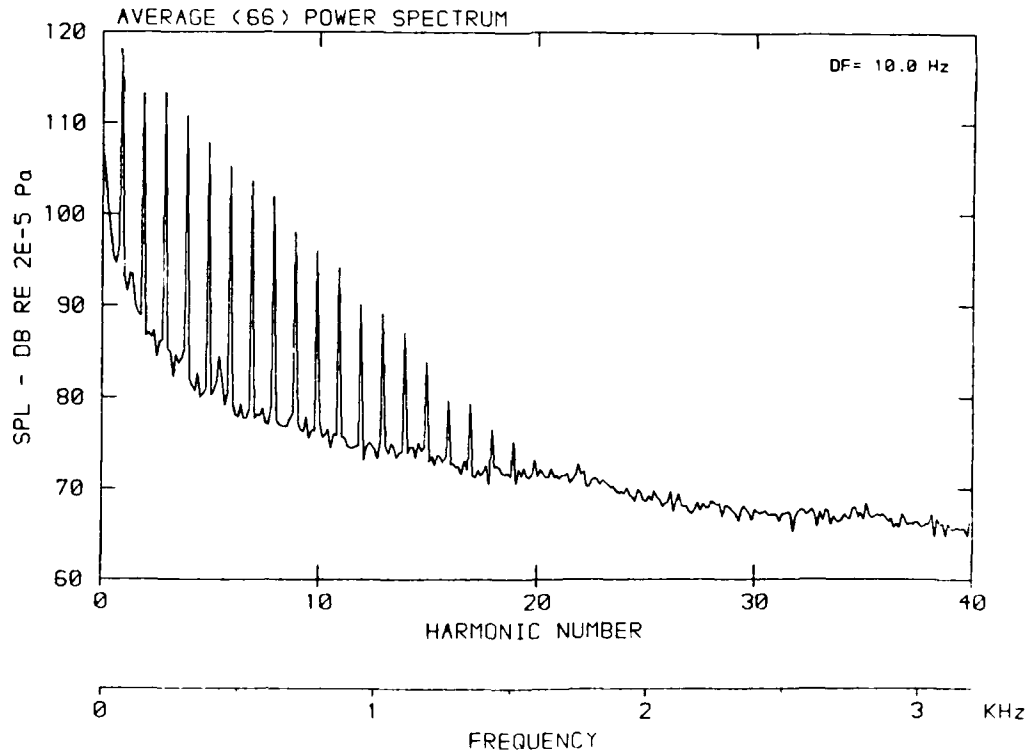
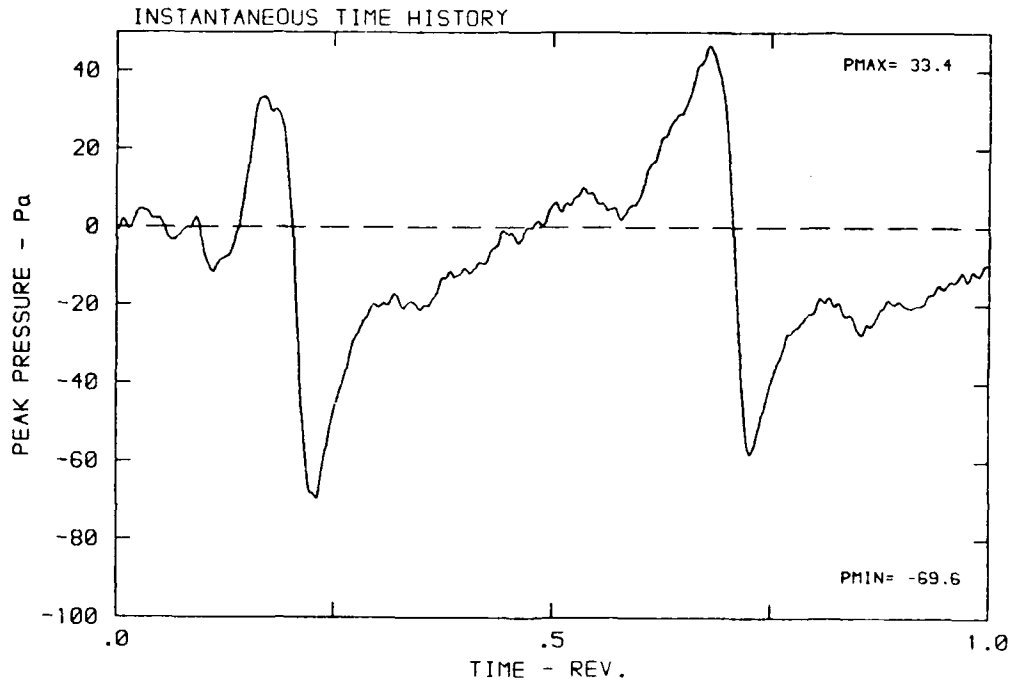
DATA POINT: EN-6 RUN: 162 MP: 3

β : 23.7° MH: .7773 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 287.1 K



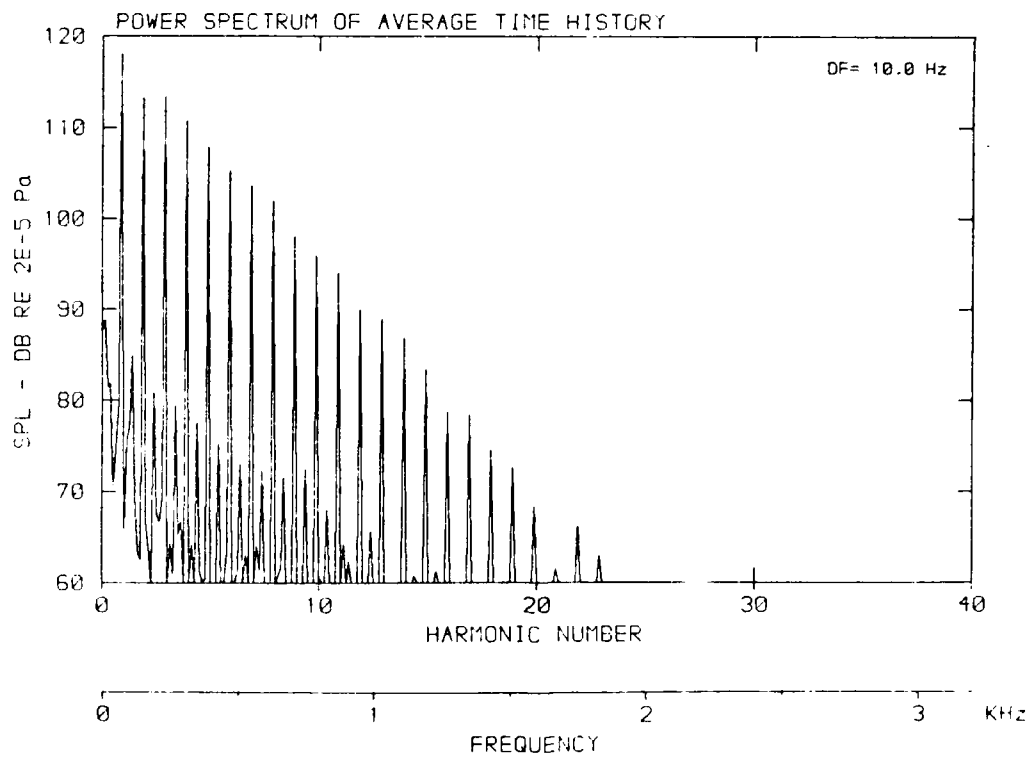
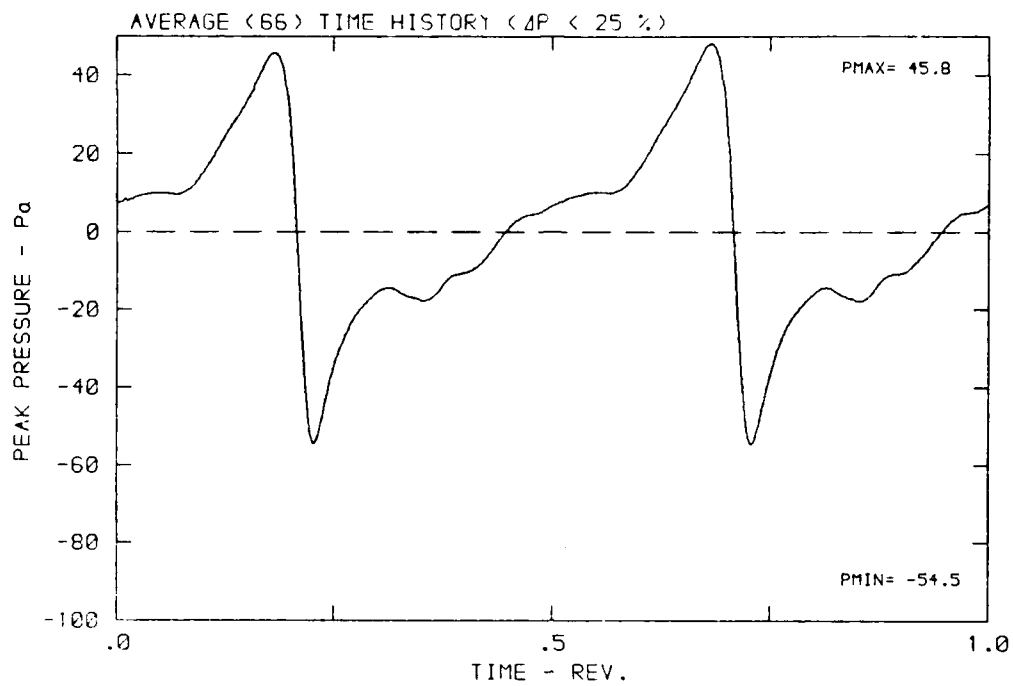
DATA POINT: EN-6 RUN: 162 MP: 4

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



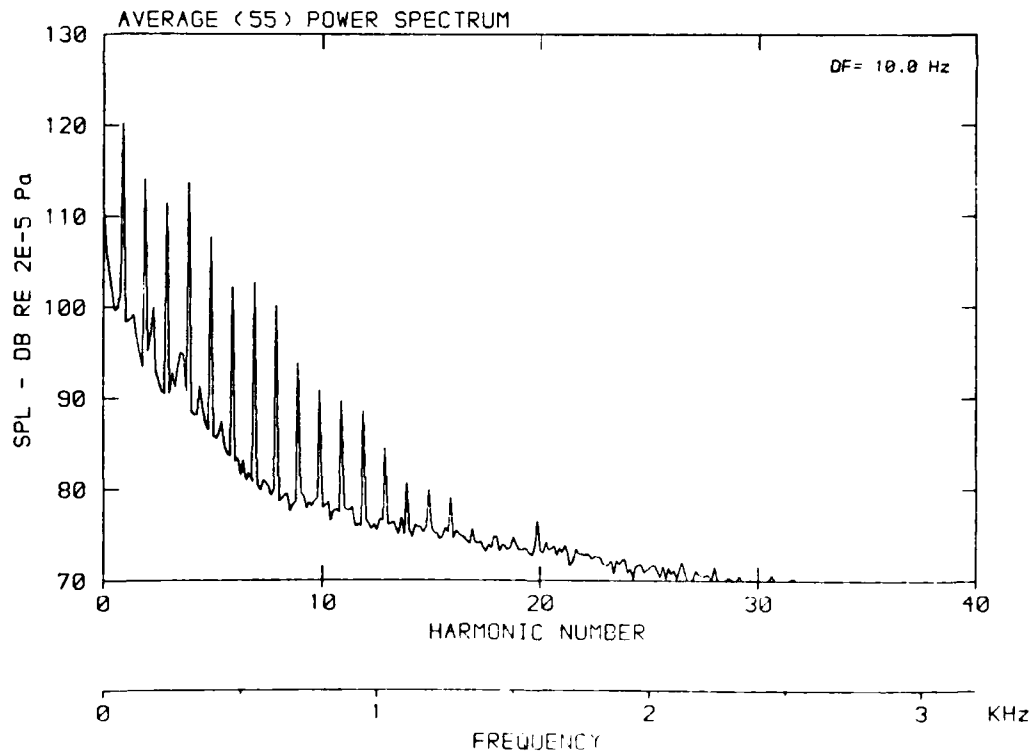
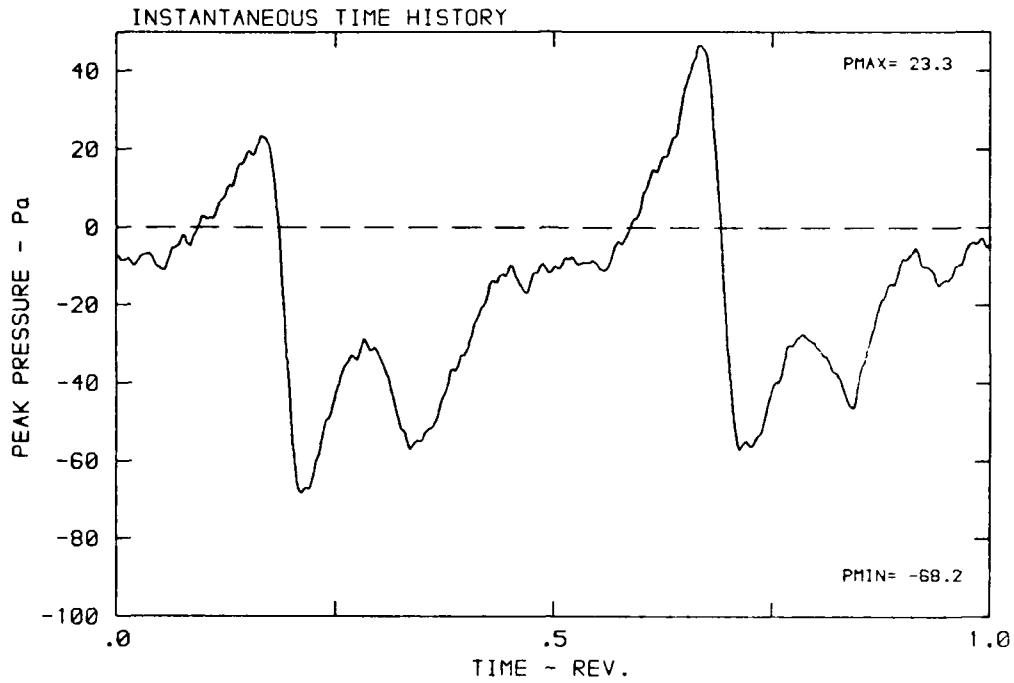
DATA POINT: EN-6 RUN: 162 MP: 4

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



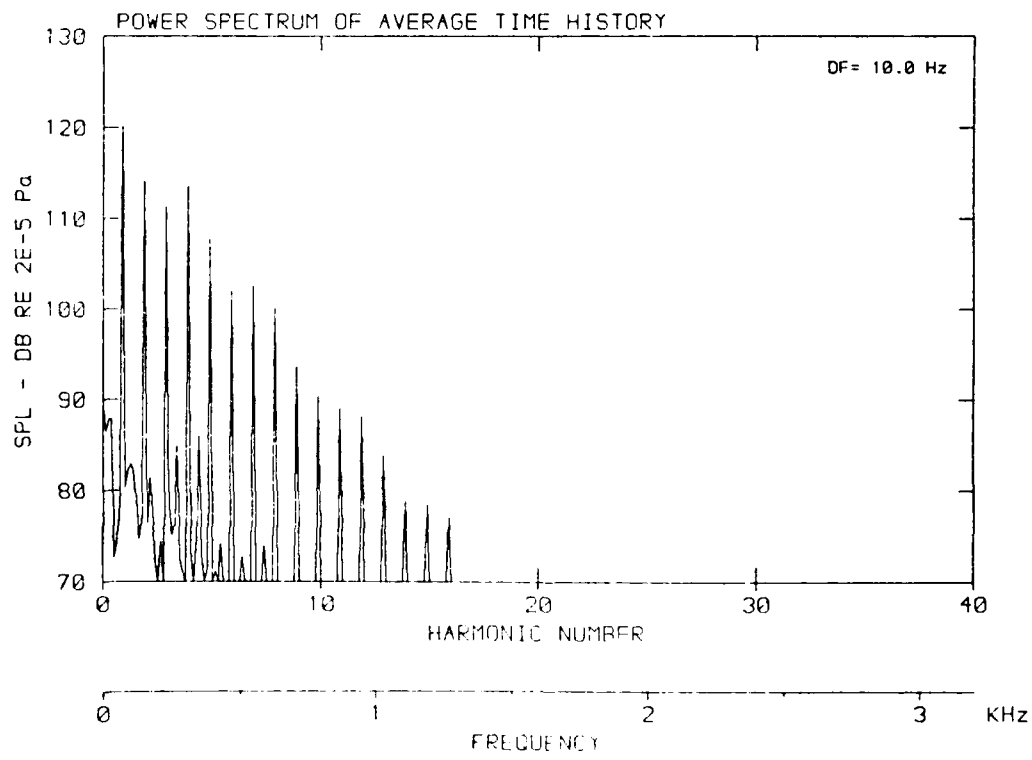
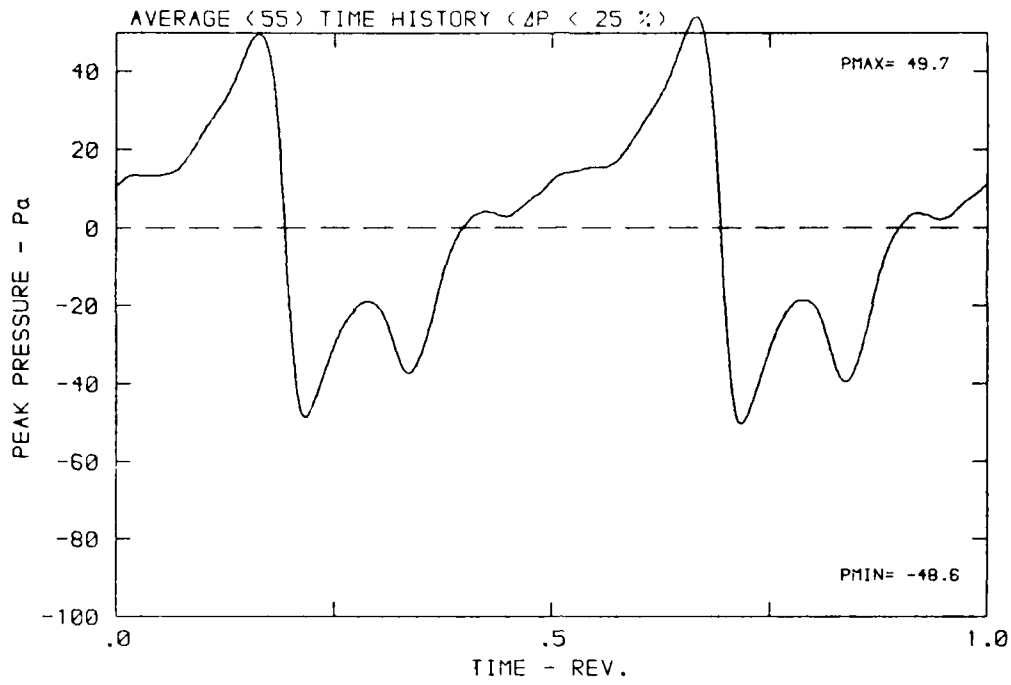
DATA POINT: EN-6 RUN: 162 MP: 5

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



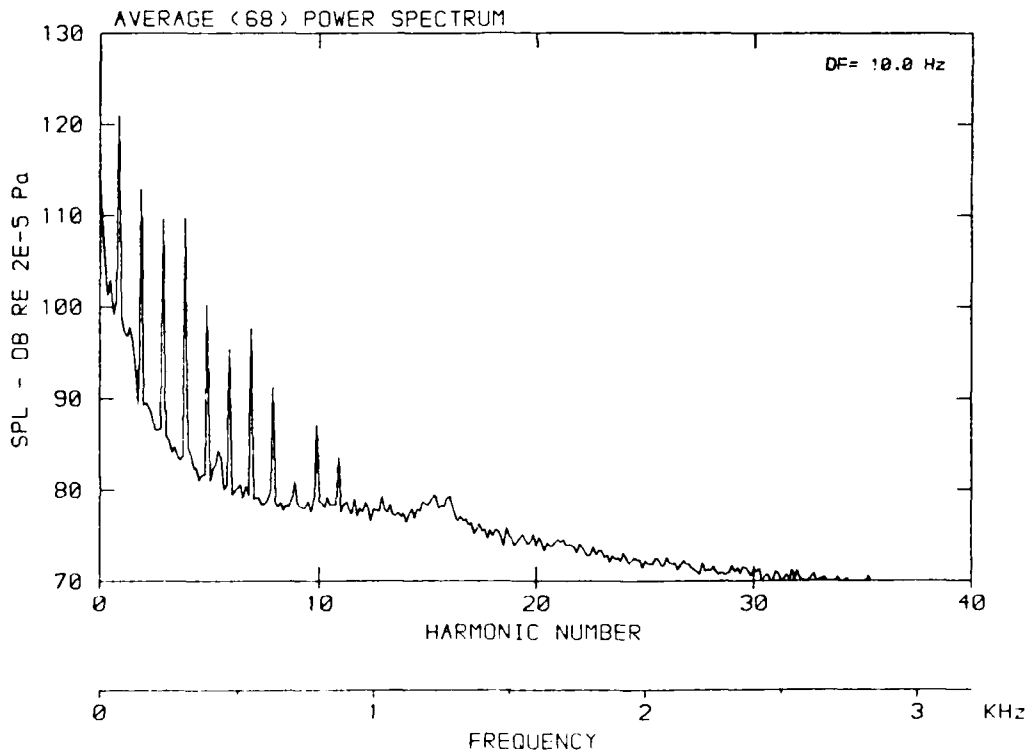
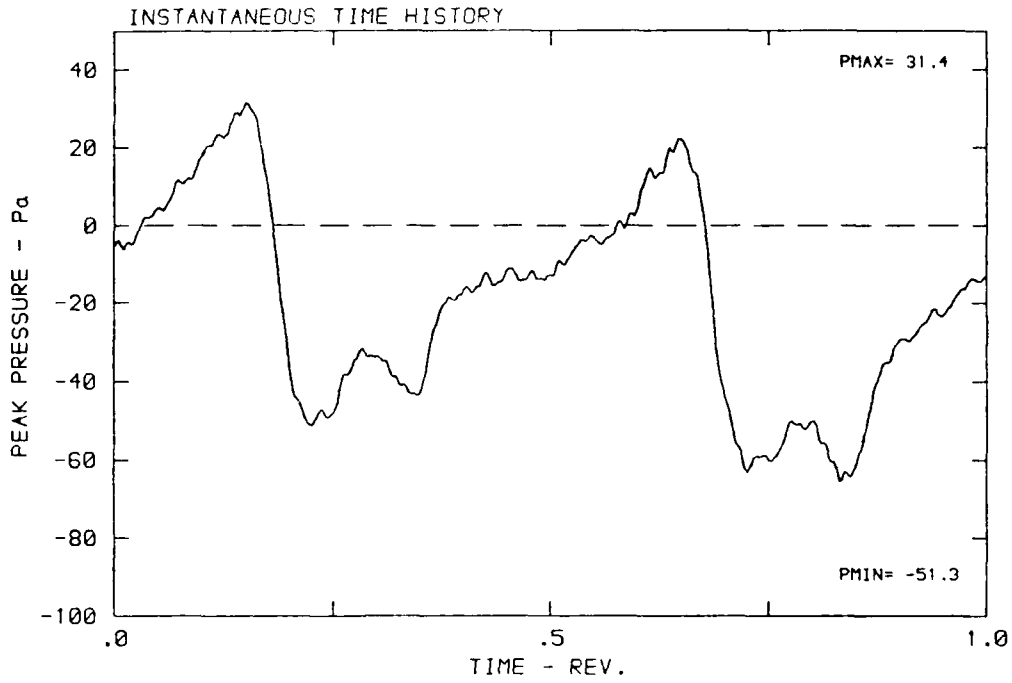
DATA POINT: EN-6 RUN: 162 MP: 5

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



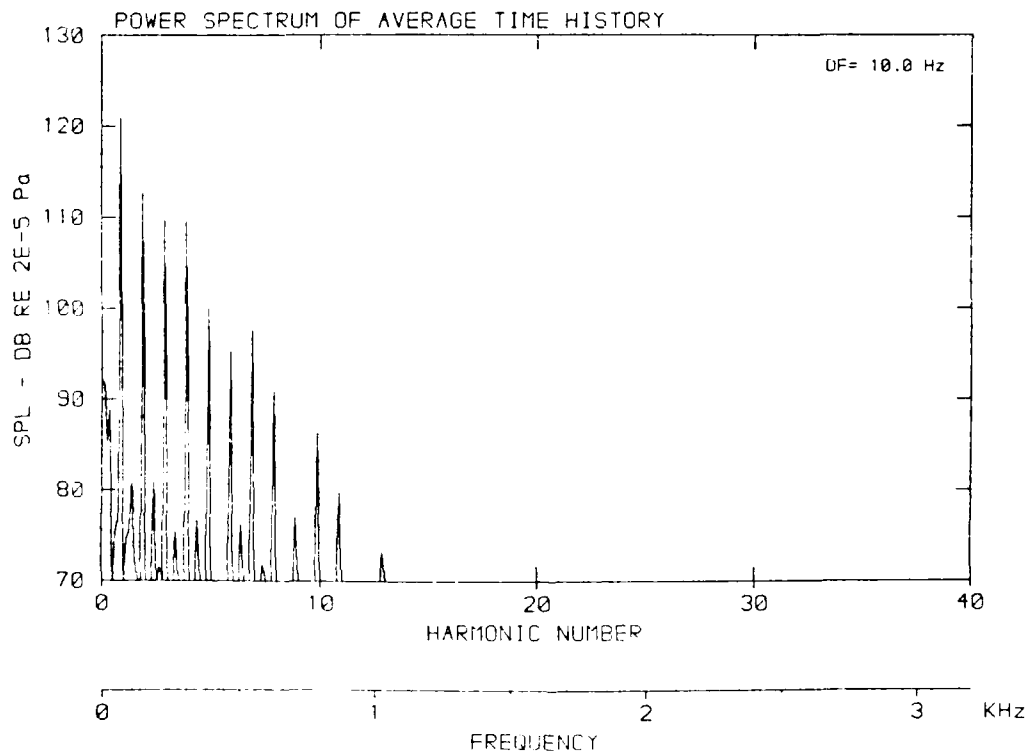
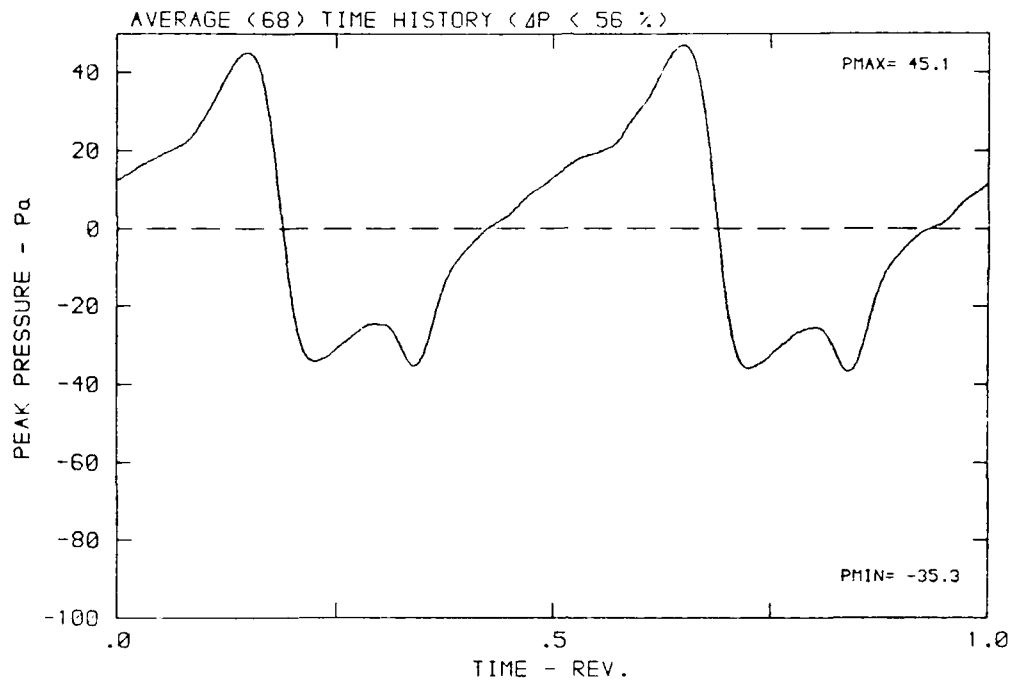
DATA POINT: EN-6 RUN: 162 MP: 6

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



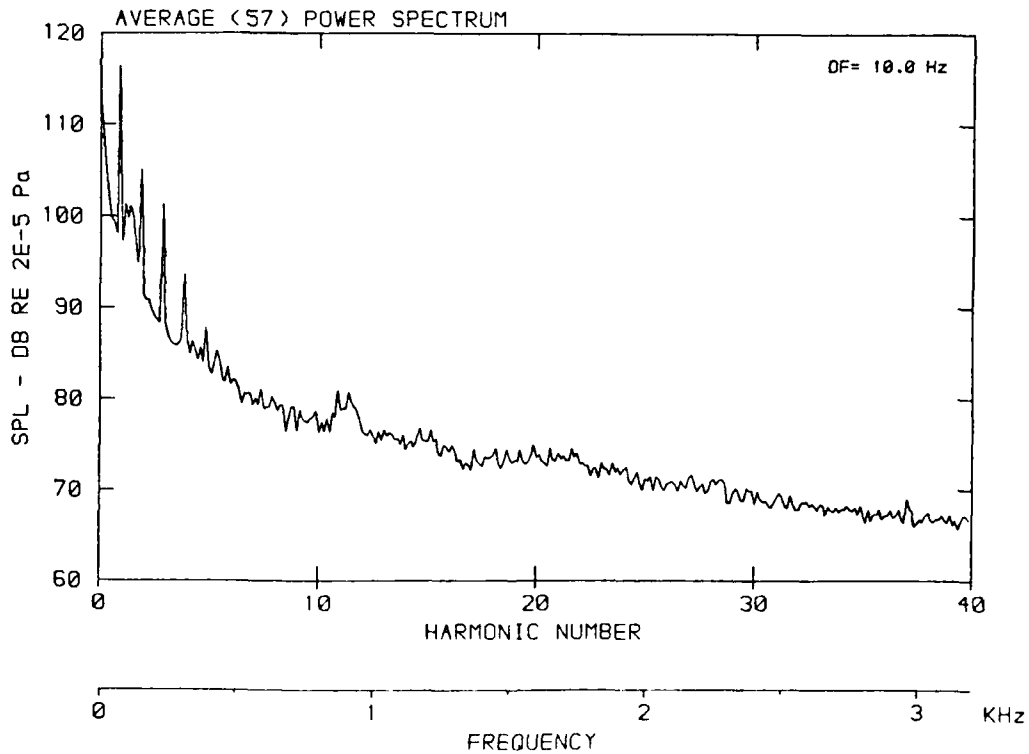
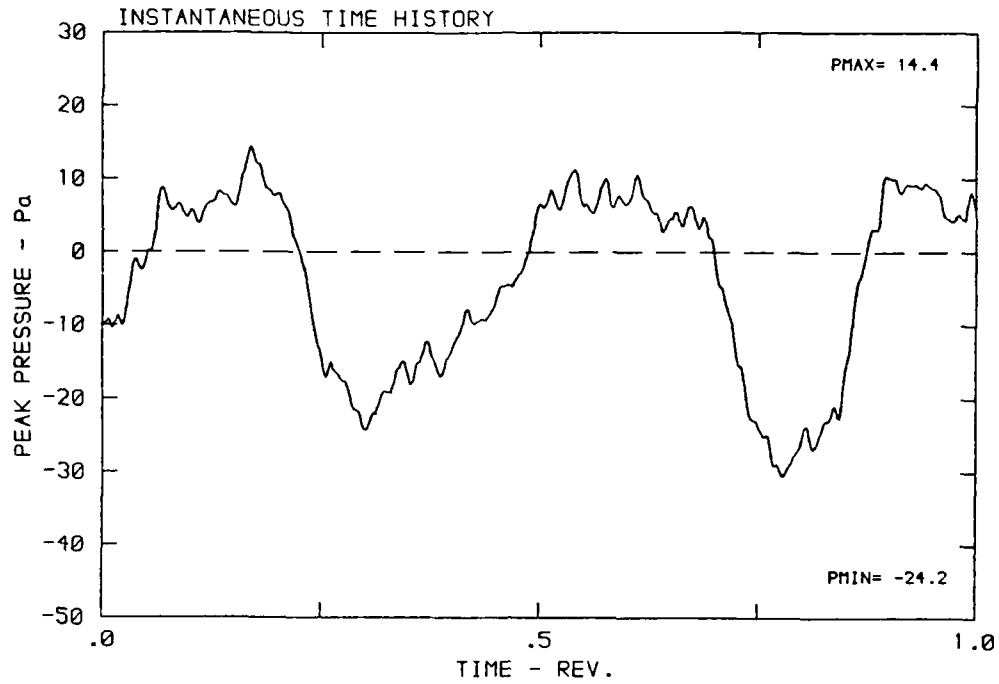
DATA POINT: EN-6 RUN: 162 MP: 6

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



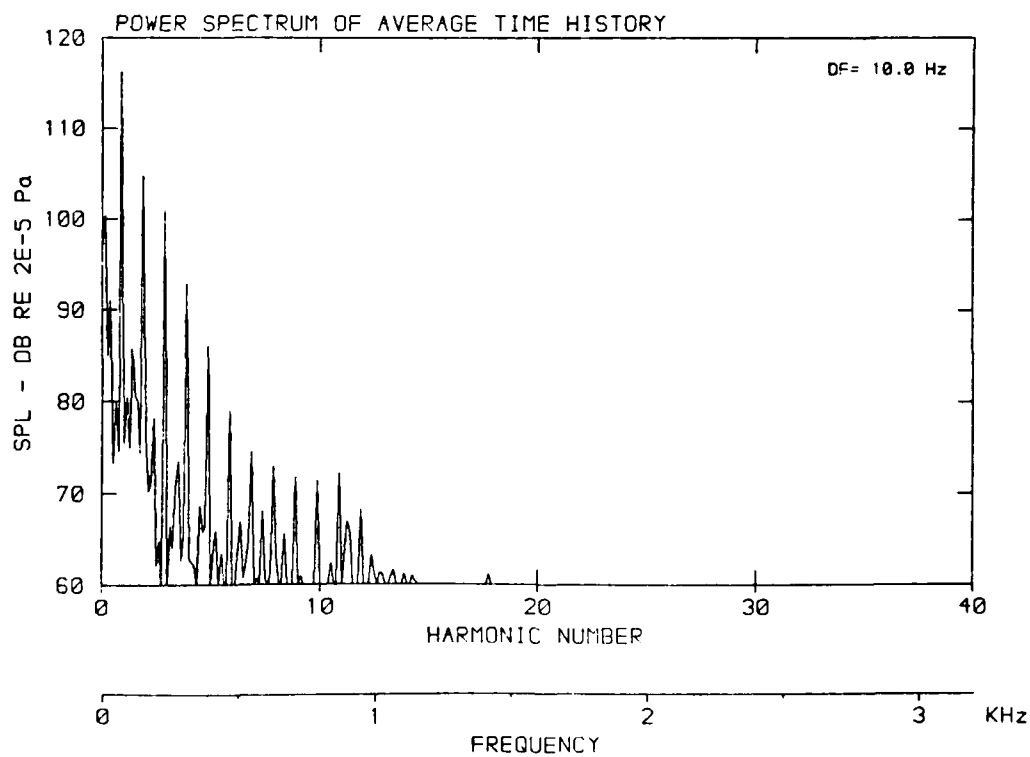
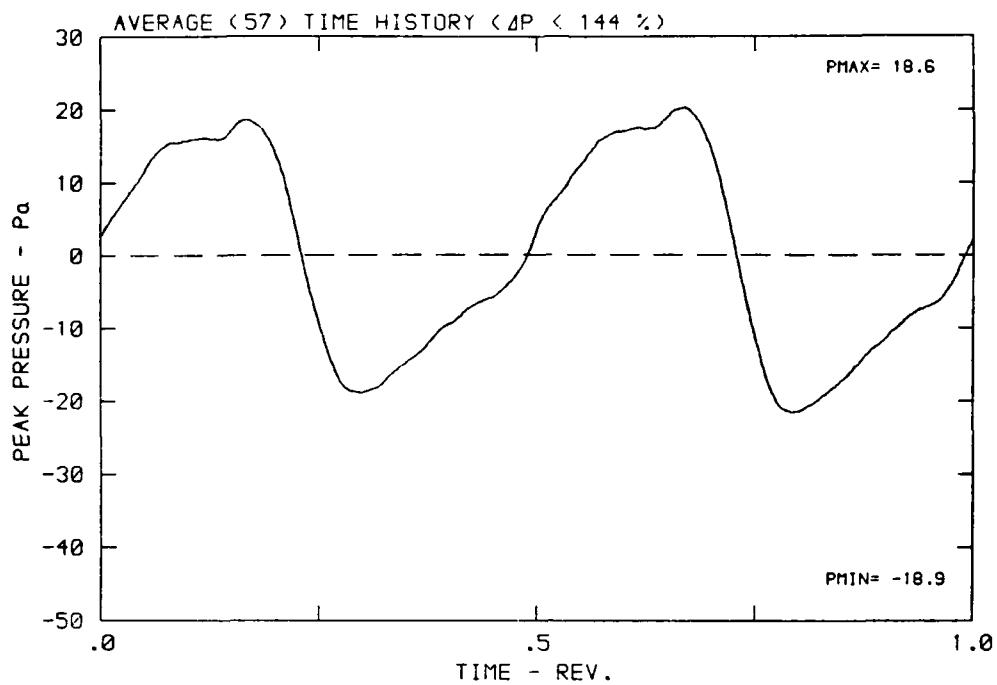
DATA POINT: EN-6 RUN: 162 MP: 7

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



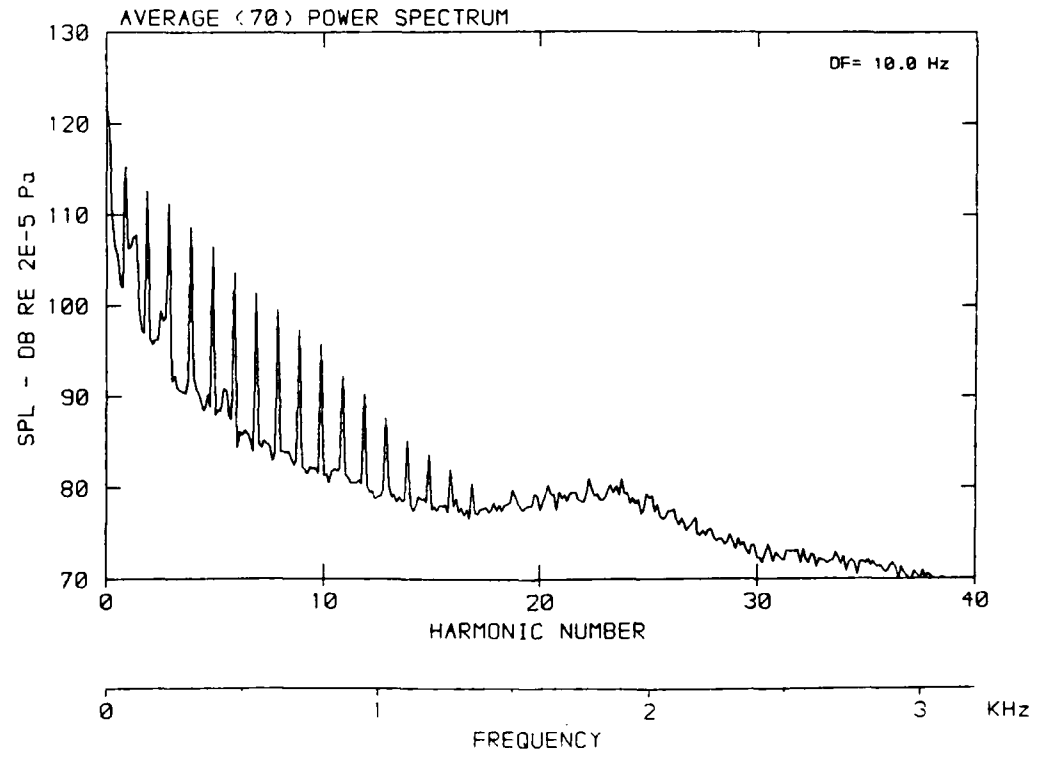
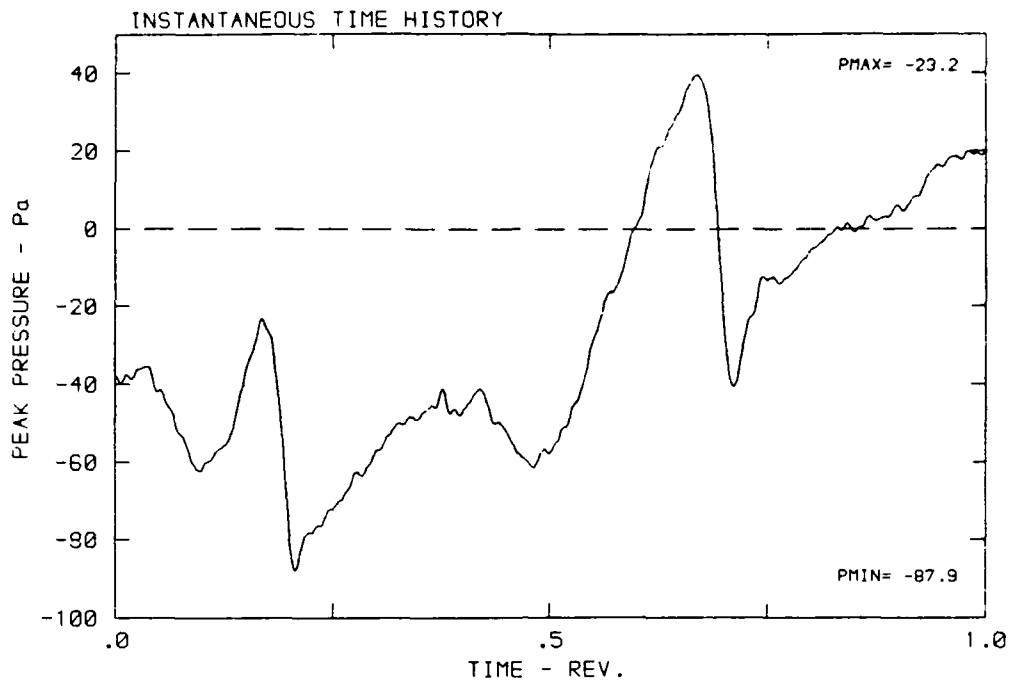
DATA POINT: EN-6 RUN: 162 MP: 7

β : 23.7° MH: .7773 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 287.1 K



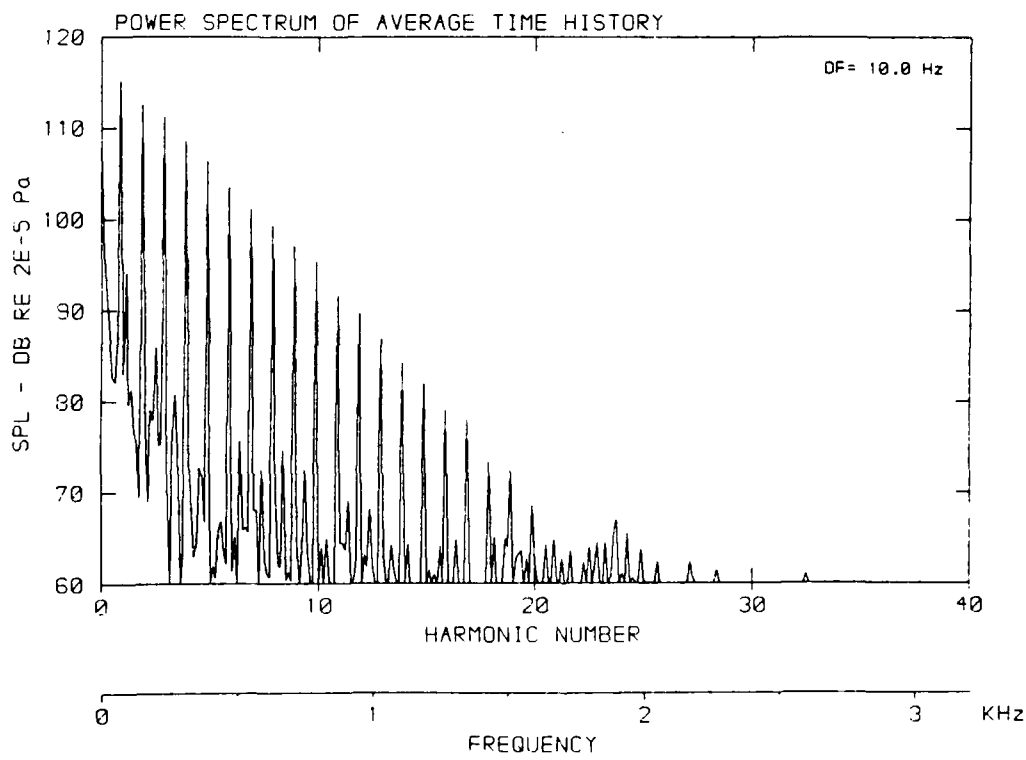
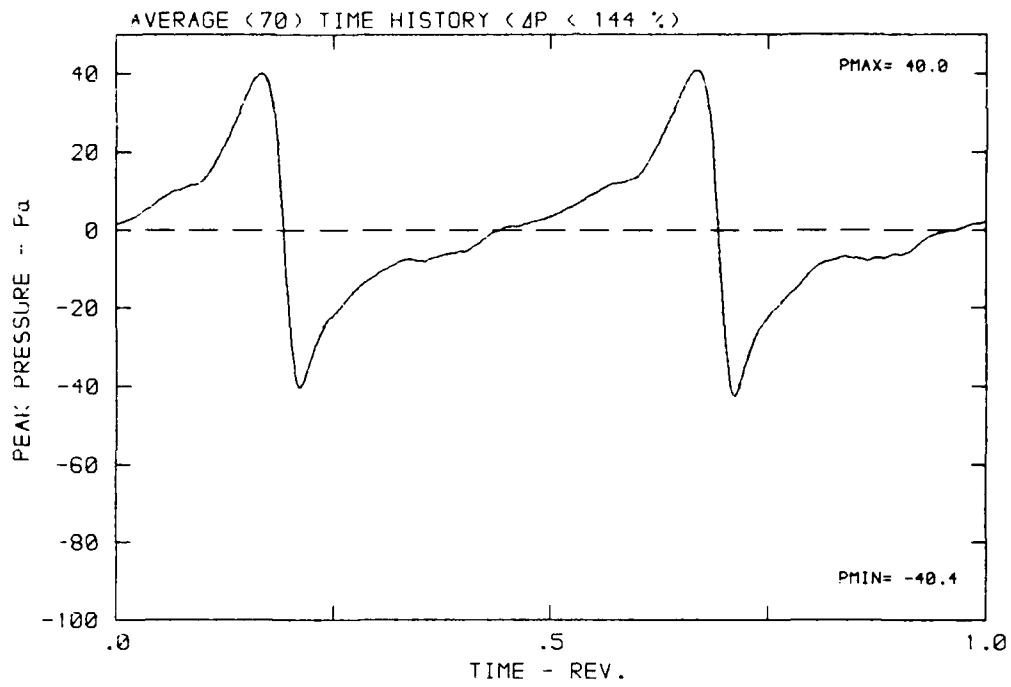
DATA POINT: EN-6 RUN: 162 MP: 3

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



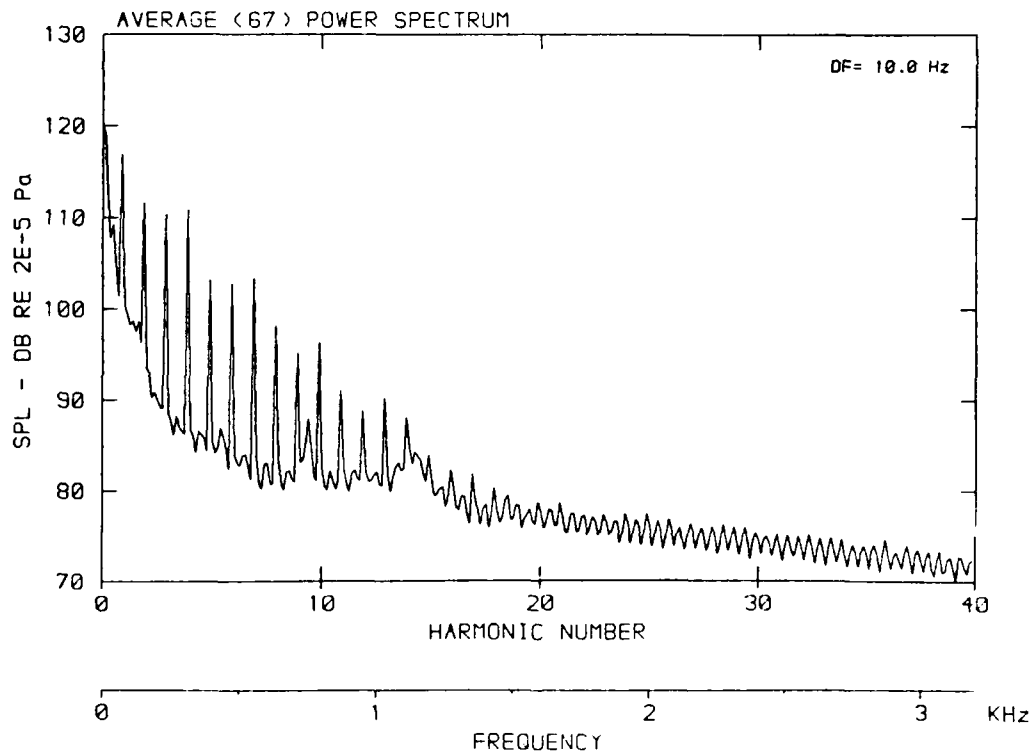
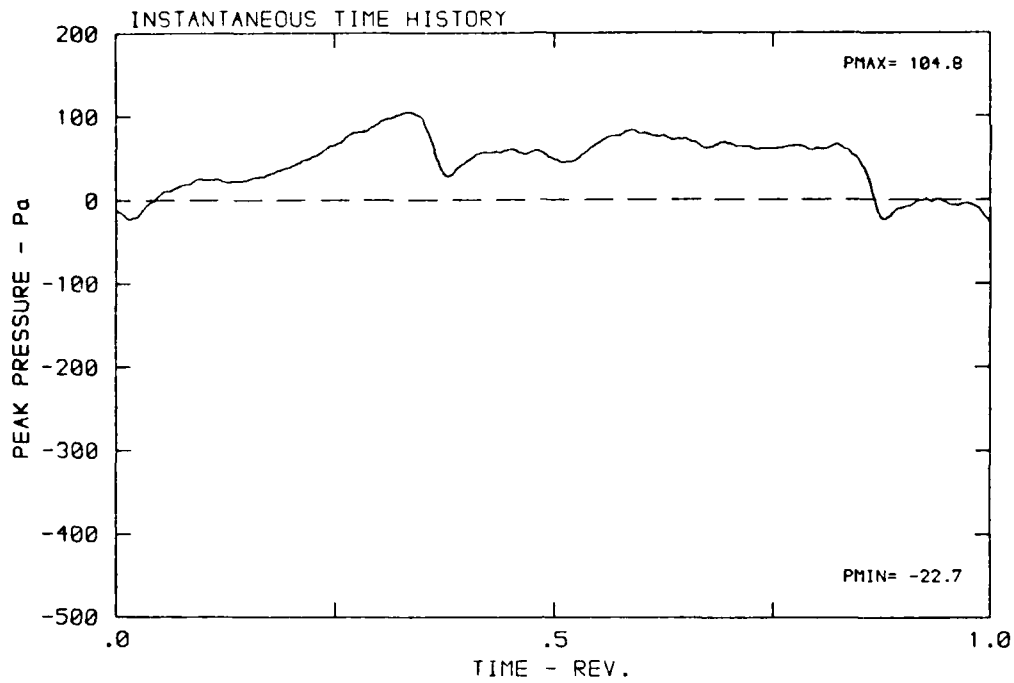
DATA POINT: EN-6 RUN: 162 MP: 8

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 K



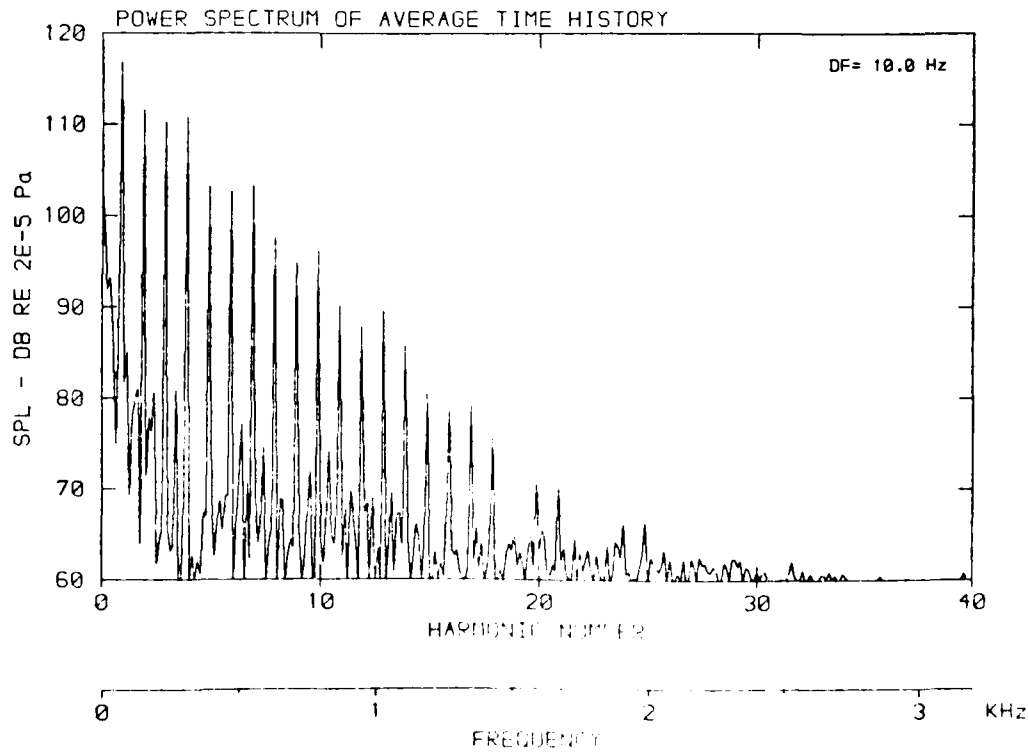
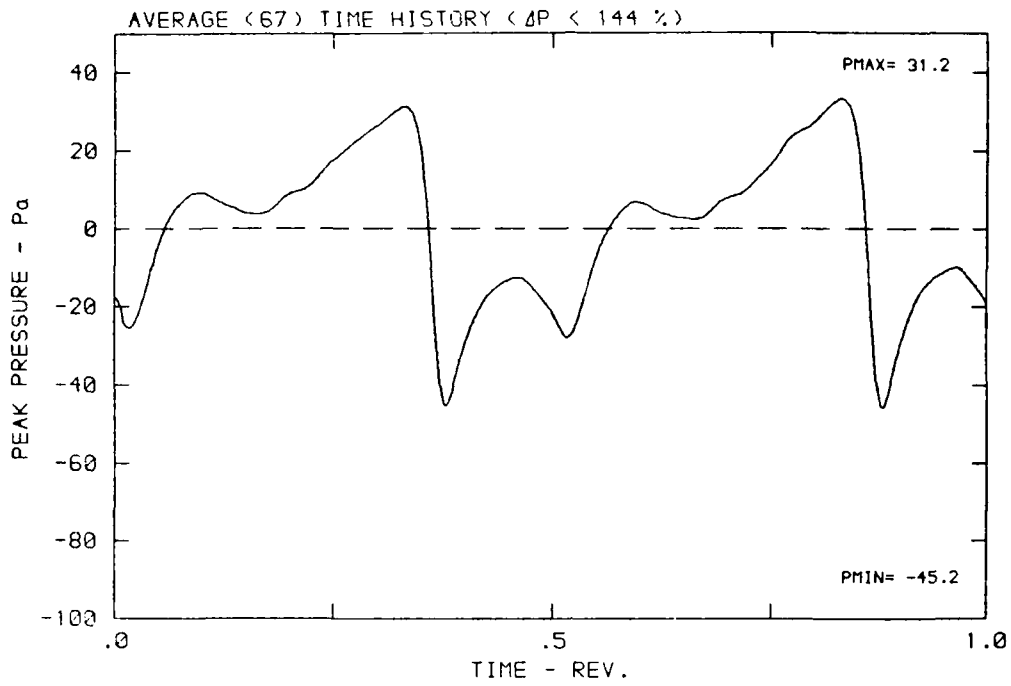
DATA POINT: EN-6 RUN: 162 MP: 9

β : 23.7° MH: .7773 n: 2400 rpm v/u : .263 ϕ : 7.3° T: 287.1 K



DATA POINT: EN-6 RUN: 162 MP: 9

β : 23.7° MH: .7773 n: 2400 rpm v/u: .263 ϕ : 7.3° T: 287.1 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: 19.9 DEG)

DATA-POINT / RUN										
GN-1 / 151			GN-2 / 152			GN-3 / 153				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	94.2	68.0	80.0	103.4	80.9	90.0	108.4	89.3	
2	140.0	87.3	71.2	160.0	100.3	86.9	180.0	103.4	92.5	
3	210.0	83.1	72.2	240.0	94.9	86.3	270.0	104.3	95.7	
4	280.0	76.2	67.6	320.0	92.2	85.6	360.0	98.6	93.8	
5	350.0	74.3	67.7	400.0	86.7	81.9	450.0	94.6	91.4	
6	420.0	62.3	57.5	480.0	75.2	72.0	540.0	87.1	83.9	
7	490.0	59.7	56.5	560.0	78.1	74.9	630.0	92.7	90.8	
8	560.0	67.3	64.1	640.0	69.8	67.9	720.0	91.6	90.8	
9	630.0	59.1	57.2	720.0	62.3	61.5	810.0	79.2	78.4	
10	700.0	0.0	0.0	800.0	70.6	69.8	900.0	85.2	85.2	
11	770.0	0.0	0.0	880.0	52.3	51.5	990.0	75.5	75.5	
12	840.0	0.0	0.0	960.0	0.0	0.0	1080.0	75.7	75.7	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	70.0	70.6	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	69.1	69.7	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	70.4	71.0	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	57.3	58.3	
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		95.4	77.2	105.8		92.1	111.2		101.2	

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 2 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
GN-1 / 151			GN-2 / 152			GN-3 / 153				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	100.8	74.6	80.0	103.6	81.1	90.0	110.7	91.6	
2	140.0	97.6	81.5	160.0	105.6	92.2	180.0	116.5	105.6	
3	210.0	92.7	81.8	240.0	100.7	92.1	270.0	104.0	95.4	
4	280.0	87.6	79.0	320.0	97.5	90.9	360.0	108.5	103.7	
5	350.0	82.2	75.6	400.0	94.4	89.6	450.0	105.9	102.7	
6	420.0	76.7	71.9	480.0	93.3	90.1	540.0	104.7	101.5	
7	490.0	70.0	66.8	560.0	88.9	85.7	630.0	102.0	100.1	
8	560.0	71.3	68.1	640.0	84.0	82.1	720.0	94.8	94.0	
9	630.0	0.0	0.0	720.0	76.6	75.8	810.0	97.5	96.7	
10	700.0	0.0	0.0	800.0	78.1	77.3	900.0	96.6	96.6	
11	770.0	0.0	0.0	880.0	75.8	75.0	990.0	92.5	92.5	
12	840.0	0.0	0.0	960.0	69.6	69.6	1080.0	87.8	87.8	
13	910.0	0.0	0.0	1040.0	60.6	60.6	1170.0	89.4	90.0	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	85.0	85.6	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	85.6	86.2	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	77.1	78.1	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	74.6	75.6	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	74.6	75.6	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	71.1	72.1	
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		103.1	86.7	109.2		98.6	118.8		110.9	

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: 19.9 DEG)

DATA-POINT / RUN										
GN-1 / 151			GN-2 / 152			GN-3 / 153				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	103.0	76.8	80.0	105.8	83.3	90.0	111.0	91.9	
2	140.0	99.8	83.7	160.0	106.1	92.7	180.0	110.1	99.2	
3	210.0	94.3	83.4	240.0	103.3	94.7	270.0	109.5	100.9	
4	280.0	91.6	83.0	320.0	100.0	93.4	360.0	109.8	105.0	
5	350.0	87.1	80.5	400.0	99.3	94.5	450.0	109.4	106.2	
6	420.0	83.8	79.0	480.0	97.4	94.2	540.0	105.4	102.2	
7	490.0	76.6	73.4	560.0	90.7	87.5	630.0	106.3	104.4	
8	560.0	71.7	68.5	640.0	90.2	88.3	720.0	105.6	104.8	
9	630.0	69.1	67.2	720.0	87.3	86.5	810.0	103.3	102.5	
10	700.0	63.0	61.1	800.0	85.3	84.5	900.0	101.8	101.8	
11	770.0	0.0	0.0	880.0	79.6	78.8	990.0	99.8	99.8	
12	840.0	0.0	0.0	960.0	77.5	75.5	1080.0	98.6	98.6	
13	910.0	0.0	0.0	1040.0	74.4	74.4	1170.0	92.5	93.1	
14	980.0	0.0	0.0	1120.0	68.7	68.7	1260.0	95.4	96.0	
15	1050.0	0.0	0.0	1200.0	65.7	66.3	1350.0	92.2	92.8	
16	1120.0	0.0	0.0	1280.0	67.0	67.6	1440.0	90.4	91.4	
17	1190.0	0.0	0.0	1360.0	62.6	63.2	1530.0	86.5	87.5	
18	1260.0	0.0	0.0	1440.0	52.1	53.1	1620.0	88.1	89.1	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	84.2	85.2	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	79.2	80.4	
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	76.4	77.6	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	73.2	74.4	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	68.7	69.9	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	72.3	73.6	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	69.7	71.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	67.3	68.6	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	69.7	71.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	66.0	67.3	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	64.5	65.8	
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	89.7	111.1		101.7	118.3		113.6	

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 4 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
GN-1 / 151			GN-2 / 152			GN-3 / 153				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	104.5	78.3	80.0	109.6	87.1	90.0	111.4	92.3	
2	140.0	100.7	84.6	160.0	106.0	92.6	180.0	110.2	99.3	
3	210.0	94.8	83.9	240.0	105.4	96.8	270.0	112.4	103.8	
4	280.0	94.3	85.7	320.0	103.7	97.1	360.0	110.5	105.7	
5	350.0	88.5	81.9	400.0	100.3	95.5	450.0	110.0	106.8	
6	420.0	83.6	78.8	480.0	97.7	94.5	540.0	108.9	105.7	
7	490.0	78.7	75.5	560.0	96.6	93.4	630.0	108.1	106.2	
8	560.0	77.1	73.9	640.0	94.1	92.2	720.0	106.6	105.8	
9	630.0	71.6	69.7	720.0	88.8	88.0	810.0	105.4	104.6	
10	700.0	61.5	59.6	800.0	86.9	86.1	900.0	103.9	103.9	
11	770.0	0.0	0.0	880.0	85.7	84.9	990.0	102.9	102.9	
12	840.0	0.0	0.0	960.0	79.3	79.3	1080.0	101.7	101.7	
13	910.0	0.0	0.0	1040.0	79.2	79.2	1170.0	100.7	101.3	
14	980.0	0.0	0.0	1120.0	74.9	74.9	1260.0	95.8	96.4	
15	1050.0	0.0	0.0	1200.0	73.1	73.7	1350.0	97.3	97.9	
16	1120.0	0.0	0.0	1280.0	68.3	68.9	1440.0	95.6	96.6	
17	1190.0	0.0	0.0	1360.0	69.1	69.7	1530.0	90.7	91.7	
18	1260.0	0.0	0.0	1440.0	64.7	65.7	1620.0	91.4	92.4	
19	1330.0	0.0	0.0	1520.0	61.1	62.1	1710.0	89.4	90.4	
20	1400.0	0.0	0.0	1600.0	53.2	54.2	1800.0	87.1	88.3	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	85.0	86.2	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	81.2	82.4	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	80.8	82.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	79.1	80.3	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	77.0	78.3	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	74.8	76.1	
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	70.0	71.3	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	71.9	73.2	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	69.4	70.7	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	62.4	63.7	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	66.8	68.0	
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		106.7	91.1	113.3		103.8	119.7		115.6	

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: 19.9 DEG)

DATA-POINT / RUN										
GN-1 / 151			GN-2 / 152			GN-3 / 153				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	105.0	78.8	80.0	112.6	90.1	90.0	110.9	91.8	
2	140.0	101.8	85.7	160.0	107.1	93.7	180.0	110.6	99.7	
3	210.0	93.4	82.5	240.0	103.6	95.0	270.0	113.6	105.0	
4	280.0	93.3	84.7	320.0	106.8	100.2	360.0	114.8	110.0	
5	350.0	90.0	83.4	400.0	102.9	98.1	450.0	106.2	103.0	
6	420.0	83.1	78.3	480.0	95.4	92.2	540.0	109.5	106.3	
7	490.0	75.8	72.6	560.0	97.7	94.5	630.0	109.8	107.9	
8	560.0	77.2	74.0	640.0	95.2	93.3	720.0	105.7	104.9	
9	630.0	73.3	71.4	720.0	91.4	90.6	810.0	105.3	104.5	
10	700.0	64.8	62.9	800.0	88.0	87.2	900.0	103.2	103.2	
11	770.0	64.9	64.1	880.0	85.2	84.4	990.0	104.1	104.1	
12	840.0	58.7	57.9	960.0	84.8	84.8	1080.0	101.2	101.2	
13	910.0	0.0	0.0	1040.0	81.0	81.0	1170.0	100.1	100.7	
14	980.0	0.0	0.0	1120.0	74.8	74.8	1260.0	100.1	100.7	
15	1050.0	0.0	0.0	1200.0	73.3	73.9	1350.0	96.5	97.1	
16	1120.0	0.0	0.0	1280.0	73.4	74.0	1440.0	95.4	96.4	
17	1190.0	0.0	0.0	1360.0	68.2	68.8	1530.0	94.0	95.0	
18	1260.0	0.0	0.0	1440.0	60.5	61.5	1620.0	90.7	91.7	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	90.1	91.1	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	88.8	90.0	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	85.5	86.7	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	85.4	86.6	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	83.8	85.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	81.3	82.5	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	79.8	81.1	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	77.9	79.2	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	75.0	76.3	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	73.5	74.8	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	70.7	72.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	69.2	70.5	
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		107.2	91.0	115.3		105.1	120.7		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 6 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
GN-1 / 151			GN-2 / 152			GN-3 / 153				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	104.4	78.2	80.0	114.5	92.0	90.0	109.3	90.2	
2	140.0	100.3	84.2	160.0	106.5	93.1	180.0	108.4	97.5	
3	210.0	91.1	80.2	240.0	104.5	95.9	270.0	110.2	101.6	
4	280.0	92.0	83.4	320.0	106.2	99.6	360.0	109.5	104.7	
5	350.0	88.8	82.2	400.0	99.4	94.6	450.0	102.4	99.2	
6	420.0	76.1	71.3	480.0	93.7	90.5	540.0	107.7	104.5	
7	490.0	75.0	71.8	560.0	96.2	93.0	630.0	104.8	102.9	
8	560.0	74.5	71.3	640.0	90.8	88.9	720.0	99.1	98.3	
9	630.0	68.2	66.3	720.0	80.5	79.7	810.0	103.1	102.3	
10	700.0	58.3	56.4	800.0	86.7	85.9	900.0	98.2	98.2	
11	770.0	0.0	0.0	880.0	81.9	81.1	990.0	95.2	95.2	
12	840.0	0.0	0.0	960.0	75.0	75.0	1080.0	96.9	96.9	
13	910.0	0.0	0.0	1040.0	74.4	74.4	1170.0	93.8	94.4	
14	980.0	0.0	0.0	1120.0	72.4	72.4	1260.0	91.3	91.9	
15	1050.0	0.0	0.0	1200.0	68.3	68.9	1350.0	91.9	92.5	
16	1120.0	0.0	0.0	1280.0	63.3	63.9	1440.0	88.0	89.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	84.2	85.2	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	82.7	83.7	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	84.0	85.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	75.1	76.3	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	77.9	79.1	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	76.4	77.6	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	65.4	66.6	
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		106.2	89.4		116.1	103.8		117.0	111.8	

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: 19.9 DEG)

DATA-POINT / RUN										
	GN-1 / 151			GN-2 / 152			GN-3 / 153			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	100.5	74.3	80.0	111.5	89.0	90.0	110.8	91.7	
2	140.0	91.5	75.4	160.0	103.0	89.6	180.0	0.0	0.0	
3	210.0	88.0	77.1	240.0	99.6	91.0	270.0	0.0	0.0	
4	280.0	77.8	69.2	320.0	92.1	85.5	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	87.6	82.8	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	77.3	74.1	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	80.0	76.8	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	76.3	74.4	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	58.9	58.1	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		101.2	80.8	112.3		95.5	110.8		91.7	

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 7 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
CN-3 / 101			CN-4 / 100			CN-7 / 99				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	101.7	75.5	70.0	112.0	85.8	75.0	113.9	91.4	
2	120.0	90.7	74.6	140.0	98.4	82.3	150.0	107.3	93.9	
3	180.0	83.1	72.2	210.0	93.2	82.3	225.0	100.1	91.5	
4	240.0	76.5	67.9	280.0	77.8	69.2	300.0	85.7	79.1	
5	300.0	74.2	67.6	350.0	78.2	71.6	375.0	77.6	72.8	
6	360.0	72.1	67.3	420.0	73.6	68.8	450.0	69.6	66.4	
7	420.0	70.7	65.9	490.0	68.5	65.3	525.0	78.7	75.5	
8	480.0	68.2	65.0	560.0	61.3	58.1	600.0	67.7	65.8	
9	540.0	61.1	57.9	630.0	0.0	0.0	675.0	70.5	68.6	
10	600.0	0.0	0.0	700.0	0.0	0.0	750.0	69.5	68.7	
11	660.0	0.0	0.0	770.0	0.0	0.0	825.0	68.4	67.6	
12	720.0	0.0	0.0	840.0	0.0	0.0	900.0	56.0	56.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	975.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1050.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1125.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1200.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1275.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1350.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1425.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1500.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1575.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1650.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1725.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1800.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	1875.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	1950.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2025.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2100.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2175.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2250.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2325.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2400.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2475.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2550.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2625.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2700.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2775.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	2850.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	2925.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3000.0	0.0	0.0	
OASPL		102.1	80.2	112.2		88.8	114.9		97.3	

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: 23.7 DEG)

DATA-POINT / RUN										
CN-3 / 101			CN-4 / 100			CN-7 / 99				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	104.5	78.3	70.0	112.7	86.5	75.0	114.7	92.2	
2	120.0	97.8	81.7	140.0	107.4	91.3	150.0	111.2	97.8	
3	180.0	87.1	76.2	210.0	97.4	86.5	225.0	105.0	96.4	
4	240.0	72.8	64.2	280.0	97.1	88.5	300.0	104.0	97.4	
5	300.0	0.0	0.0	350.0	92.7	86.1	375.0	98.5	93.7	
6	360.0	0.0	0.0	420.0	81.3	76.5	450.0	87.2	84.0	
7	420.0	0.0	0.0	490.0	80.6	77.4	525.0	91.4	88.2	
8	480.0	0.0	0.0	560.0	77.4	74.2	600.0	88.0	86.1	
9	540.0	0.0	0.0	630.0	66.2	64.3	675.0	74.1	72.2	
10	600.0	0.0	0.0	700.0	0.0	0.0	750.0	76.1	75.3	
11	660.0	0.0	0.0	770.0	0.0	0.0	825.0	75.2	74.4	
12	720.0	0.0	0.0	840.0	0.0	0.0	900.0	68.4	68.4	
13	780.0	0.0	0.0	910.0	0.0	0.0	975.0	62.3	62.3	
14	840.0	0.0	0.0	980.0	0.0	0.0	1050.0	59.5	59.5	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1125.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1200.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1275.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1350.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1425.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1500.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1575.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1650.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1725.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1800.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	1875.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	1950.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2025.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2100.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2175.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2250.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2325.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2400.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2475.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2550.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2625.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2700.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2775.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	2850.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	2925.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3000.0	0.0	0.0	
OASPL		105.4	84.2	114.0		95.4	116.9		103.3	

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 8 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
GN-1 / 151			GN-2 / 152			GN-3 / 153				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	101.9	75.7	80.0	107.0	84.5	90.0	107.7	88.6	
2	140.0	100.5	84.4	160.0	105.1	91.7	180.0	109.3	98.4	
3	210.0	95.4	84.5	240.0	105.0	96.4	270.0	109.3	100.7	
4	280.0	91.1	82.5	320.0	101.5	94.9	360.0	108.8	104.0	
5	350.0	84.8	78.2	400.0	99.4	94.6	450.0	108.0	104.8	
6	420.0	81.8	77.0	480.0	97.1	93.9	540.0	107.7	104.5	
7	490.0	78.7	75.5	560.0	94.8	91.6	630.0	106.6	104.7	
8	560.0	73.5	70.3	640.0	90.3	88.4	720.0	105.8	105.0	
9	630.0	67.9	66.0	720.0	90.0	89.2	810.0	105.0	104.2	
10	700.0	64.1	62.2	800.0	87.2	86.4	900.0	103.1	103.1	
11	770.0	0.0	0.0	880.0	83.1	82.3	990.0	101.9	101.9	
12	840.0	0.0	0.0	960.0	80.6	80.6	1080.0	100.0	100.0	
13	910.0	0.0	0.0	1040.0	78.3	78.3	1170.0	98.3	98.9	
14	980.0	0.0	0.0	1120.0	74.0	74.0	1260.0	96.7	97.3	
15	1050.0	0.0	0.0	1200.0	72.5	73.1	1350.0	94.8	95.4	
16	1120.0	0.0	0.0	1280.0	68.0	68.6	1440.0	92.7	93.7	
17	1190.0	0.0	0.0	1360.0	68.6	69.2	1530.0	90.8	91.8	
18	1260.0	0.0	0.0	1440.0	63.2	64.2	1620.0	89.1	90.1	
19	1330.0	0.0	0.0	1520.0	59.2	60.2	1710.0	87.8	88.8	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	85.9	87.1	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	85.1	86.3	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	80.4	81.6	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	80.2	81.4	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	78.3	79.5	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	75.6	76.9	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	75.4	76.7	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	72.8	74.1	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	69.7	71.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	70.9	72.2	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	67.1	68.4	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	67.3	68.6	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	66.8	68.0	
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		105.0	89.7		111.7	102.6		117.8	114.1	

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: 19.9 DEG)

DATA-POINT / RUN										
GN-1 / 151			GN-2 / 152			GN-3 / 153				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	100.7	74.5	80.0	108.4	85.9	90.0	105.3	86.2	
2	140.0	99.1	83.0	160.0	103.0	89.6	180.0	106.5	95.6	
3	210.0	90.2	79.3	240.0	100.4	91.8	270.0	112.3	103.7	
4	280.0	92.5	83.9	320.0	103.6	97.0	360.0	109.8	105.0	
5	350.0	86.5	79.9	400.0	96.8	92.0	450.0	108.7	105.5	
6	420.0	82.1	77.3	480.0	96.9	93.7	540.0	108.5	105.3	
7	490.0	76.3	73.1	560.0	94.6	91.4	630.0	106.6	104.7	
8	560.0	74.0	70.8	640.0	91.1	89.2	720.0	105.4	104.6	
9	630.0	73.2	71.3	720.0	88.4	87.6	810.0	106.0	105.2	
10	700.0	65.8	63.9	800.0	87.9	87.1	900.0	102.0	102.0	
11	770.0	0.0	0.0	880.0	83.3	82.5	990.0	100.4	100.4	
12	840.0	0.0	0.0	960.0	78.7	78.7	1080.0	101.5	101.5	
13	910.0	0.0	0.0	1040.0	80.8	80.8	1170.0	100.3	100.9	
14	980.0	0.0	0.0	1120.0	73.7	73.7	1260.0	96.7	97.3	
15	1050.0	0.0	0.0	1200.0	73.8	74.4	1350.0	96.7	97.3	
16	1120.0	0.0	0.0	1280.0	69.9	70.5	1440.0	94.8	95.8	
17	1190.0	0.0	0.0	1360.0	69.8	70.4	1530.0	92.3	93.3	
18	1260.0	0.0	0.0	1440.0	61.4	62.4	1620.0	90.9	91.9	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	89.6	90.6	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	88.7	89.9	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	86.7	87.9	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	82.2	83.4	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	80.3	81.5	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	79.1	80.3	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	71.5	72.8	
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		103.7	88.8	111.4		101.9	118.3		114.7	

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: 23.7 DEG)

DATA-POINT / RUN										
	GN-4 / 148			GN-5 / 149			GN-6 / 150			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	91.7	65.5	70.0	98.5	72.3	80.0	106.0	83.5	
2	120.0	80.2	64.1	140.0	85.5	69.4	160.0	99.3	85.9	
3	180.0	68.3	57.4	210.0	86.3	75.4	240.0	95.6	87.0	
4	240.0	62.7	54.1	280.0	79.6	71.0	320.0	90.8	84.2	
5	300.0	0.0	0.0	350.0	76.2	69.6	400.0	88.1	83.3	
6	360.0	0.0	0.0	420.0	56.3	51.5	480.0	74.4	71.2	
7	420.0	0.0	0.0	490.0	66.2	63.0	560.0	65.7	62.5	
8	480.0	0.0	0.0	560.0	71.5	68.3	640.0	0.0	0.0	
9	540.0	0.0	0.0	630.0	67.7	65.8	720.0	0.0	0.0	
10	600.0	0.0	0.0	700.0	61.4	59.5	800.0	0.0	0.0	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	

	OASPL	92.0	68.4		99.0	79.8		107.3	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 2 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
GN-4 / 148			GN-5 / 149			GN-6 / 150				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	94.4	68.2	70.0	103.0	76.8	80.0	105.4	82.9	
2	120.0	91.0	74.9	140.0	99.3	83.2	160.0	106.0	92.6	
3	180.0	85.5	74.6	210.0	93.7	82.8	240.0	101.6	93.0	
4	240.0	78.4	69.8	280.0	89.2	80.6	320.0	98.5	91.9	
5	300.0	60.0	53.4	350.0	82.6	76.0	400.0	94.0	89.2	
6	360.0	0.0	0.0	420.0	79.6	74.8	480.0	93.5	90.3	
7	420.0	0.0	0.0	490.0	74.3	71.1	560.0	88.7	85.5	
8	480.0	0.0	0.0	560.0	69.9	66.7	640.0	84.2	82.3	
9	540.0	0.0	0.0	630.0	64.8	62.9	720.0	81.3	80.5	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	76.3	75.5	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	65.0	64.2	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		96.5	78.8	105.1		88.2	110.1		99.1	

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 3 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
GN-4 / 148			GN-5 / 149			GN-6 / 150				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	97.0	70.8	70.0	105.2	79.0	80.0	106.4	83.9	
2	120.0	94.0	77.9	140.0	101.5	85.4	160.0	106.3	92.9	
3	180.0	87.0	76.1	210.0	96.2	85.3	240.0	103.5	94.9	
4	240.0	80.6	72.0	280.0	93.4	84.8	320.0	100.6	94.0	
5	300.0	68.7	62.1	350.0	88.9	82.3	400.0	100.4	95.6	
6	360.0	70.5	65.7	420.0	83.3	78.5	480.0	97.4	94.2	
7	420.0	67.2	62.4	490.0	75.9	72.7	560.0	91.5	88.3	
8	480.0	0.0	0.0	560.0	74.1	70.9	640.0	92.0	90.1	
9	540.0	0.0	0.0	630.0	73.7	71.8	720.0	87.2	86.5	
10	600.0	0.0	0.0	700.0	63.5	61.6	800.0	86.1	85.3	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	80.5	79.7	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	77.9	77.9	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	74.9	74.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	69.9	69.9	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		99.1	81.3	107.4		91.3	111.5		102.2	

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: 23.7 DEG)

DATA-POINT / RUN									
GN-4 / 148			GN-5 / 149			GN-6 / 150			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	60.0	99.3	73.1	70.0	106.6	80.4	80.0	109.1	86.6
2	120.0	95.7	79.6	140.0	102.5	86.4	160.0	105.9	92.5
3	180.0	88.3	77.4	210.0	96.9	86.0	240.0	105.6	97.0
4	240.0	82.2	73.6	280.0	96.4	87.8	320.0	103.5	96.9
5	300.0	77.6	71.0	350.0	88.6	82.0	400.0	100.8	96.0
6	360.0	64.5	59.7	420.0	81.7	76.9	480.0	98.2	95.0
7	420.0	0.0	0.0	490.0	80.9	77.7	560.0	97.3	94.1
8	480.0	0.0	0.0	560.0	77.3	74.1	640.0	93.7	91.8
9	540.0	0.0	0.0	630.0	70.6	68.7	720.0	90.1	89.3
10	600.0	0.0	0.0	700.0	67.9	66.0	800.0	87.1	86.3
11	660.0	0.0	0.0	770.0	68.1	67.3	880.0	86.6	85.8
12	720.0	0.0	0.0	840.0	59.2	58.4	960.0	78.2	78.2
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	80.2	80.2
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	76.8	76.8
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	74.4	75.0
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	67.4	68.0
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0
OASPL		101.2	83.1	108.7		92.7	113.2		104.0

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: 23.7 DEG)

DATA-POINT / RUN										
GN-4 / 148			GN-5 / 149			GN-6 / 150				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	101.1	74.9	70.0	107.5	81.3	80.0	112.1	89.6	
2	120.0	96.2	80.1	140.0	103.2	87.1	160.0	107.1	93.7	
3	180.0	86.3	75.4	210.0	94.9	84.0	240.0	104.4	95.8	
4	240.0	77.1	68.5	280.0	95.6	87.0	320.0	107.4	100.8	
5	300.0	0.0	0.0	350.0	92.3	85.7	400.0	102.0	97.2	
6	360.0	0.0	0.0	420.0	87.1	82.3	480.0	96.0	92.8	
7	420.0	0.0	0.0	490.0	78.4	75.2	560.0	97.7	94.5	
8	480.0	0.0	0.0	560.0	77.4	74.2	640.0	96.5	94.6	
9	540.0	0.0	0.0	630.0	75.1	73.2	720.0	90.8	90.0	
10	600.0	0.0	0.0	700.0	61.0	59.1	800.0	87.5	86.7	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	83.1	82.3	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	84.8	84.8	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	81.0	81.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	77.9	77.9	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	75.2	75.8	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	75.1	75.7	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	65.5	66.1	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	61.3	62.3	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		102.5	82.4	109.4		93.1	115.2		105.4	

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 6 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
	GN-4 / 148			GN-5 / 149			GN-6 / 150			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	101.3	75.1	70.0	108.1	81.9	80.0	114.7	92.2	
2	120.0	93.9	77.8	140.0	102.9	86.8	160.0	107.2	93.8	
3	180.0	85.7	74.8	210.0	96.1	85.2	240.0	104.6	96.0	
4	240.0	73.8	65.2	280.0	96.0	87.4	320.0	106.2	99.6	
5	300.0	74.2	67.6	350.0	91.1	84.5	400.0	98.8	94.0	
6	360.0	64.4	59.6	420.0	79.6	74.8	480.0	94.5	91.3	
7	420.0	0.0	0.0	490.0	80.0	76.8	560.0	96.4	93.2	
8	480.0	0.0	0.0	560.0	70.8	67.6	640.0	92.1	90.2	
9	540.0	0.0	0.0	630.0	0.0	0.0	720.0	80.5	79.7	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	87.7	86.9	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	82.9	82.1	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	72.8	72.8	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		102.1	81.2	109.7		92.8	116.4		104.0	

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 7 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
	GN-4 / 148			GN-5 / 149			GN-6 / 150			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	94.6	68.4	70.0	107.5	81.3	80.0	113.0	90.5	
2	120.0	87.0	70.9	140.0	97.9	81.8	160.0	99.8	86.4	
3	180.0	75.7	64.8	210.0	90.3	79.4	240.0	98.9	90.3	
4	240.0	72.4	63.8	280.0	82.4	73.8	320.0	90.5	83.9	
5	300.0	59.9	53.3	350.0	71.9	65.3	400.0	81.3	76.5	
6	360.0	0.0	0.0	420.0	76.7	71.9	480.0	83.3	80.1	
7	420.0	0.0	0.0	490.0	70.8	67.6	560.0	81.2	78.0	
8	480.0	0.0	0.0	560.0	65.7	62.5	640.0	74.5	72.6	
9	540.0	0.0	0.0	630.0	59.8	57.9	720.0	0.0	0.0	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	0.0	0.0	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL	95.3	73.9		108.0	86.3		113.4	94.9		

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 8 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN									
GN-4 / 148			GN-5 / 149			GN-6 / 150			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	60.0	101.3	75.1	70.0	105.7	79.5	80.0	108.5	86.0
2	120.0	93.3	77.2	140.0	103.5	87.4	160.0	106.8	93.4
3	180.0	85.7	74.8	210.0	98.0	87.1	240.0	105.7	97.1
4	240.0	81.0	72.4	280.0	93.5	84.9	320.0	102.0	95.4
5	300.0	72.5	65.9	350.0	88.1	81.5	400.0	100.7	95.9
6	360.0	0.0	0.0	420.0	86.8	82.0	480.0	98.3	95.1
7	420.0	0.0	0.0	490.0	82.1	78.9	560.0	95.4	92.2
8	480.0	0.0	0.0	560.0	76.3	73.1	640.0	90.1	88.2
9	540.0	0.0	0.0	630.0	72.9	71.0	720.0	89.5	88.7
10	600.0	0.0	0.0	700.0	72.2	70.3	800.0	88.2	87.4
11	660.0	0.0	0.0	770.0	67.9	67.1	880.0	83.6	82.8
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	83.1	83.1
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	78.7	78.7
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	75.1	75.1
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0
OASPL		102.1	81.3	108.4		92.8	112.9		103.5

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: 23.7 DEG)

DATA-POINT / RUN										
GN-4 / 148			GN-5 / 149			GN-6 / 150				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	103.6	77.4	70.0	103.7	77.5	80.0	107.5	85.0	
2	120.0	92.7	76.6	140.0	99.8	83.7	160.0	104.3	90.9	
3	180.0	87.1	76.2	210.0	92.5	81.6	240.0	101.6	93.0	
4	240.0	73.2	64.6	280.0	94.8	86.2	320.0	104.4	97.8	
5	300.0	0.0	0.0	350.0	89.5	82.9	400.0	97.2	92.4	
6	360.0	0.0	0.0	420.0	77.7	72.9	480.0	97.0	93.8	
7	420.0	0.0	0.0	490.0	79.7	76.5	560.0	95.3	92.1	
8	480.0	0.0	0.0	560.0	74.2	71.0	640.0	92.6	90.7	
9	540.0	0.0	0.0	630.0	72.8	70.9	720.0	89.8	89.0	
10	600.0	0.0	0.0	700.0	66.6	64.7	800.0	87.8	87.0	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	84.3	83.5	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	78.8	78.8	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	83.1	83.1	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	73.8	73.8	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		104.0	81.6	105.9		90.6	111.6		102.6	

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 1 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
LN-1 / 154			LN-2 / 155			LN-3 / 156					
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	98.6	72.4	80.0	103.9	81.4	90.0	110.1	91.0		
2	140.0	90.4	74.3	160.0	102.1	88.7	180.0	105.7	94.8		
3	210.0	87.3	76.4	240.0	97.4	88.8	270.0	106.8	98.2		
4	280.0	79.7	71.1	320.0	93.8	87.2	360.0	102.6	97.8		
5	350.0	72.7	66.1	400.0	92.4	87.6	450.0	99.6	96.4		
6	420.0	59.1	54.3	480.0	80.0	76.8	540.0	93.0	89.8		
7	490.0	0.0	0.0	560.0	77.6	74.4	630.0	96.0	94.1		
8	560.0	0.0	0.0	640.0	76.6	74.7	720.0	94.9	94.1		
9	630.0	0.0	0.0	720.0	70.0	69.2	810.0	88.4	87.6		
10	700.0	0.0	0.0	800.0	71.7	70.9	900.0	88.1	88.1		
11	770.0	0.0	0.0	880.0	65.9	65.1	990.0	81.0	81.0		
12	840.0	0.0	0.0	960.0	57.7	57.7	1080.0	79.4	79.4		
13	910.0	0.0	0.0	1040.0	54.0	54.0	1170.0	68.0	68.6		
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		99.6	80.2			107.0	94.5			113.5	104.6

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										
LN-1 / 154			LN-2 / 155			LN-3 / 156				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	103.4	77.2	80.0	105.4	82.9	90.0	111.6	92.5	
2	140.0	99.3	83.2	160.0	106.7	93.3	180.0	117.7	106.8	
3	210.0	95.3	84.4	240.0	102.8	94.2	270.0	106.5	97.9	
4	280.0	90.3	81.7	320.0	98.3	91.7	360.0	110.2	105.4	
5	350.0	86.3	79.7	400.0	95.8	91.0	450.0	109.1	105.9	
6	420.0	81.8	77.0	480.0	96.8	93.6	540.0	108.3	105.1	
7	490.0	77.7	74.5	560.0	92.5	89.3	630.0	106.1	104.2	
8	560.0	69.9	66.7	640.0	88.5	86.6	720.0	101.2	100.4	
9	630.0	64.9	63.0	720.0	81.3	80.5	810.0	102.5	101.7	
10	700.0	60.7	58.8	800.0	82.2	81.4	900.0	101.8	101.8	
11	770.0	0.0	0.0	880.0	80.2	79.4	990.0	97.7	97.7	
12	840.0	0.0	0.0	960.0	74.0	74.0	1080.0	95.1	95.1	
13	910.0	0.0	0.0	1040.0	69.1	69.1	1170.0	96.0	96.6	
14	980.0	0.0	0.0	1120.0	66.3	66.3	1260.0	93.0	93.6	
15	1050.0	0.0	0.0	1200.0	63.7	64.3	1350.0	92.6	93.2	
16	1120.0	0.0	0.0	1280.0	61.8	62.4	1440.0	87.6	88.6	
17	1190.0	0.0	0.0	1360.0	53.8	54.4	1530.0	84.9	85.9	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	84.6	85.6	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	81.0	82.0	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	79.7	80.9	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	73.8	75.0	
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		105.5	89.3	110.8		100.7	120.5		114.0	

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: 19.9 DEG)

DATA-POINT / RUN										
LN-1 / 154			LN-2 / 155			LN-3 / 156				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	104.3	78.1	80.0	108.2	85.7	90.0	111.7	92.6	
2	140.0	100.9	84.8	160.0	107.3	93.9	180.0	111.3	100.4	
3	210.0	95.9	85.0	240.0	105.1	96.5	270.0	110.6	102.0	
4	280.0	92.2	83.6	320.0	101.5	94.9	360.0	111.4	106.6	
5	350.0	88.4	81.8	400.0	101.5	96.7	450.0	111.3	108.1	
6	420.0	84.6	79.8	480.0	98.9	95.7	540.0	107.7	104.5	
7	490.0	77.3	74.1	560.0	93.0	89.8	630.0	108.9	107.0	
8	560.0	70.6	67.4	640.0	93.7	91.8	720.0	108.2	107.4	
9	630.0	0.0	0.0	720.0	91.0	90.2	810.0	106.7	105.9	
10	700.0	0.0	0.0	800.0	87.7	86.9	900.0	105.6	105.6	
11	770.0	0.0	0.0	880.0	83.4	82.6	990.0	104.3	104.3	
12	840.0	0.0	0.0	960.0	81.7	81.7	1080.0	102.2	102.2	
13	910.0	0.0	0.0	1040.0	78.9	78.9	1170.0	98.3	98.9	
14	980.0	0.0	0.0	1120.0	73.5	73.5	1260.0	100.2	100.8	
15	1050.0	0.0	0.0	1200.0	69.7	70.3	1350.0	97.4	98.0	
16	1120.0	0.0	0.0	1280.0	69.9	70.5	1440.0	95.5	96.5	
17	1190.0	0.0	0.0	1360.0	65.1	65.7	1530.0	92.8	93.8	
18	1260.0	0.0	0.0	1440.0	60.4	61.4	1620.0	94.2	95.2	
19	1330.0	0.0	0.0	1520.0	56.9	57.9	1710.0	91.3	92.3	
20	1400.0	0.0	0.0	1600.0	58.2	59.2	1800.0	85.7	86.9	
21	1470.0	0.0	0.0	1680.0	57.4	58.4	1890.0	86.9	88.1	
22	1540.0	0.0	0.0	1760.0	53.2	54.2	1980.0	85.8	87.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	82.8	84.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	79.8	81.0	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	81.4	82.7	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	76.5	77.8	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	73.8	75.1	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	74.5	75.8	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	73.1	74.4	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	69.3	70.6	
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		106.6	90.8	112.9		103.6	120.1		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										
LN-1 / 154				LN-2 / 155			LN-3 / 156			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	105.6	79.4	80.0	111.8	89.3	90.0	112.1	93.0	
2	140.0	102.1	86.0	160.0	107.0	93.6	180.0	110.8	99.9	
3	210.0	95.9	85.0	240.0	106.7	98.1	270.0	113.1	104.5	
4	280.0	94.1	85.5	320.0	104.0	97.4	360.0	111.9	107.1	
5	350.0	87.8	81.2	400.0	101.2	96.4	450.0	110.8	107.6	
6	420.0	85.0	80.2	480.0	99.6	96.4	540.0	110.1	106.9	
7	490.0	81.6	78.4	560.0	98.0	94.8	630.0	110.5	108.6	
8	560.0	77.2	74.0	640.0	96.1	94.2	720.0	108.1	107.3	
9	630.0	74.1	72.2	720.0	91.0	90.2	810.0	107.2	106.4	
10	700.0	68.9	67.0	800.0	89.7	88.9	900.0	107.2	107.2	
11	770.0	64.8	64.0	880.0	87.5	86.7	990.0	105.0	105.0	
12	840.0	55.5	54.7	960.0	82.1	82.1	1080.0	104.2	104.2	
13	910.0	0.0	0.0	1040.0	81.4	81.4	1170.0	103.6	104.2	
14	980.0	0.0	0.0	1120.0	79.0	79.0	1260.0	99.8	100.4	
15	1050.0	0.0	0.0	1200.0	75.3	75.9	1350.0	100.6	101.2	
16	1120.0	0.0	0.0	1280.0	70.0	70.6	1440.0	99.0	100.0	
17	1190.0	0.0	0.0	1360.0	71.0	71.6	1530.0	95.2	96.2	
18	1260.0	0.0	0.0	1440.0	66.0	67.0	1620.0	94.6	95.6	
19	1330.0	0.0	0.0	1520.0	61.4	62.4	1710.0	93.5	94.5	
20	1400.0	0.0	0.0	1600.0	59.8	60.8	1800.0	91.8	93.0	
21	1470.0	0.0	0.0	1680.0	58.1	59.1	1890.0	88.8	90.0	
22	1540.0	0.0	0.0	1760.0	56.5	57.5	1980.0	87.3	88.5	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	85.7	86.9	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	83.5	84.7	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	82.3	83.6	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	80.7	82.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	80.0	81.3	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	77.1	78.4	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	77.7	79.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	75.3	76.6	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	74.0	75.3	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	73.3	74.5	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	70.3	71.5	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	68.3	69.5	
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		107.8	91.8	114.9 105.1			121.0 117.4			

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									
LN-1 / 154			LN-2 / 155			LN-3 / 156			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	70.0	106.1	79.9	80.0	114.3	91.8	90.0	113.0	93.9
2	140.0	103.0	86.9	160.0	108.1	94.7	180.0	112.6	101.7
3	210.0	93.8	82.9	240.0	105.3	96.7	270.0	113.0	104.4
4	280.0	93.0	84.4	320.0	107.9	101.3	360.0	115.5	110.7
5	350.0	92.2	85.6	400.0	103.0	98.2	450.0	107.0	103.8
6	420.0	86.3	81.5	480.0	96.3	93.1	540.0	110.4	107.2
7	490.0	78.8	75.6	560.0	97.8	94.6	630.0	110.8	108.9
8	560.0	76.4	73.2	640.0	96.6	94.7	720.0	106.4	105.6
9	630.0	71.8	69.9	720.0	92.1	91.3	810.0	106.7	105.9
10	700.0	67.9	66.0	800.0	88.2	87.4	900.0	104.4	104.4
11	770.0	66.1	65.3	880.0	85.7	84.9	990.0	105.3	105.3
12	840.0	54.8	54.0	960.0	84.3	84.3	1080.0	102.8	102.8
13	910.0	0.0	0.0	1040.0	81.9	81.9	1170.0	101.6	102.2
14	980.0	0.0	0.0	1120.0	76.1	76.1	1260.0	101.5	102.1
15	1050.0	0.0	0.0	1200.0	73.8	74.4	1350.0	98.2	98.8
16	1120.0	0.0	0.0	1280.0	73.7	74.3	1440.0	97.1	98.1
17	1190.0	0.0	0.0	1360.0	67.0	67.6	1530.0	95.7	96.7
18	1260.0	0.0	0.0	1440.0	66.2	67.2	1620.0	93.0	94.0
19	1330.0	0.0	0.0	1520.0	62.6	63.6	1710.0	91.3	92.3
20	1400.0	0.0	0.0	1600.0	60.4	61.4	1800.0	91.6	92.8
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	87.6	88.8
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	87.6	88.8
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	87.0	88.2
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	84.2	85.4
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	82.0	83.3
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	81.3	82.6
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	77.6	78.9
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	78.8	80.1
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	71.1	72.4
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		108.3	92.1	116.7		106.0	121.6		117.3

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										
LN-1 / 154			LN-2 / 155			LN-3 / 156				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	106.0	79.8	80.0	115.5	93.0	90.0	112.6	93.5	
2	140.0	101.0	84.9	160.0	107.7	94.3	180.0	109.9	99.0	
3	210.0	92.0	81.1	240.0	105.4	96.8	270.0	110.8	102.2	
4	280.0	93.1	84.5	320.0	106.4	99.8	360.0	110.1	105.3	
5	350.0	87.9	81.3	400.0	99.1	94.3	450.0	102.0	98.8	
6	420.0	79.3	74.5	480.0	94.7	91.5	540.0	108.0	104.8	
7	490.0	76.3	73.1	560.0	96.2	93.0	630.0	104.9	103.0	
8	560.0	73.8	70.6	640.0	90.2	88.3	720.0	99.4	98.6	
9	630.0	66.5	64.6	720.0	79.3	78.5	810.0	102.4	101.6	
10	700.0	57.5	55.6	800.0	85.7	84.9	900.0	98.7	98.7	
11	770.0	0.0	0.0	880.0	80.0	79.2	990.0	93.1	93.1	
12	840.0	0.0	0.0	960.0	74.9	74.9	1080.0	96.8	96.8	
13	910.0	0.0	0.0	1040.0	73.0	73.0	1170.0	92.2	92.8	
14	980.0	0.0	0.0	1120.0	72.1	72.1	1260.0	90.3	90.9	
15	1050.0	0.0	0.0	1200.0	62.3	62.9	1350.0	89.8	90.4	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	86.1	87.1	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	83.8	84.8	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	80.8	81.8	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	84.4	85.4	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	65.5	66.7	
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		107.5	90.1	117.1		104.2	118.2		112.0	

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 7 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
LN-1 / 154			LN-2 / 155			LN-3 / 156				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	103.6	77.4	80.0	112.0	89.5	90.0	110.7	91.6	
2	140.0	94.0	77.9	160.0	102.8	89.4	180.0	0.0	0.0	
3	210.0	87.5	76.6	240.0	99.9	91.3	270.0	0.0	0.0	
4	280.0	75.9	67.3	320.0	92.9	86.3	360.0	0.0	0.0	
5	350.0	0.0	0.0	400.0	81.4	76.6	450.0	0.0	0.0	
6	420.0	0.0	0.0	480.0	69.8	66.6	540.0	0.0	0.0	
7	490.0	0.0	0.0	560.0	80.4	77.2	630.0	0.0	0.0	
8	560.0	0.0	0.0	640.0	76.2	74.3	720.0	0.0	0.0	
9	630.0	0.0	0.0	720.0	69.6	68.8	810.0	0.0	0.0	
10	700.0	0.0	0.0	800.0	39.2	38.4	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		104.1	82.3	112.7		95.6	110.7		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 8 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
LN-1 / 154			LN-2 / 155			LN-3 / 156				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	102.7	76.5	80.0	108.5	86.0	90.0	110.5	91.4	
2	140.0	100.6	84.5	160.0	106.7	93.3	180.0	110.2	99.3	
3	210.0	96.0	85.1	240.0	105.1	96.5	270.0	110.4	101.8	
4	280.0	91.5	82.9	320.0	102.0	95.4	360.0	110.2	105.4	
5	350.0	86.3	79.7	400.0	101.1	96.3	450.0	109.7	106.5	
6	420.0	84.7	79.9	480.0	98.2	95.0	540.0	109.0	105.8	
7	490.0	78.9	75.7	560.0	96.4	93.2	630.0	108.3	106.4	
8	560.0	76.4	73.2	640.0	92.2	90.3	720.0	107.3	106.5	
9	630.0	68.0	66.1	720.0	91.5	90.7	810.0	106.6	105.8	
10	700.0	0.0	0.0	800.0	88.6	87.8	900.0	104.4	104.4	
11	770.0	0.0	0.0	880.0	84.7	83.9	990.0	104.3	104.3	
12	840.0	0.0	0.0	960.0	83.3	83.3	1080.0	102.3	102.3	
13	910.0	0.0	0.0	1040.0	79.3	79.3	1170.0	100.9	101.5	
14	980.0	0.0	0.0	1120.0	76.4	76.4	1260.0	99.6	100.2	
15	1050.0	0.0	0.0	1200.0	75.0	75.6	1350.0	98.3	98.9	
16	1120.0	0.0	0.0	1280.0	69.9	70.5	1440.0	96.2	97.2	
17	1190.0	0.0	0.0	1360.0	69.6	70.2	1530.0	94.7	95.7	
18	1260.0	0.0	0.0	1440.0	65.4	66.4	1620.0	93.4	94.4	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	90.9	91.9	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	90.5	91.7	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	88.6	89.8	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	86.8	88.0	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	85.2	86.4	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	84.5	85.7	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	81.1	82.4	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	81.1	82.4	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	79.1	80.4	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	76.5	77.8	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	75.7	77.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	74.7	76.0	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	74.7	76.0	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	72.9	74.1	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	70.6	71.8	
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		105.6	90.4	112.9		103.8	119.5		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 9 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
LN-1 / 154			LN-2 / 155			LN-3 / 156				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	102.1	75.9	80.0	110.6	88.1	90.0	108.6	89.5	
2	140.0	100.4	84.3	160.0	105.3	91.9	180.0	106.5	95.6	
3	210.0	91.1	80.2	240.0	101.8	93.2	270.0	113.0	104.4	
4	280.0	94.2	85.6	320.0	104.3	97.7	360.0	110.2	105.4	
5	350.0	88.8	82.2	400.0	99.0	94.2	450.0	109.6	106.4	
6	420.0	79.3	74.5	480.0	96.9	93.7	540.0	109.7	106.5	
7	490.0	78.8	75.6	560.0	96.6	93.4	630.0	108.2	106.3	
8	560.0	75.1	71.9	640.0	92.3	90.4	720.0	106.4	105.6	
9	630.0	72.3	70.4	720.0	89.2	88.4	810.0	107.3	106.5	
10	700.0	67.7	65.8	800.0	88.3	87.5	900.0	103.6	103.6	
11	770.0	0.0	0.0	880.0	85.5	84.7	990.0	102.3	102.3	
12	840.0	0.0	0.0	960.0	80.7	80.7	1080.0	103.9	103.9	
13	910.0	0.0	0.0	1040.0	81.6	81.6	1170.0	101.7	102.3	
14	980.0	0.0	0.0	1120.0	74.6	74.6	1260.0	98.6	99.2	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	99.6	100.2	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	97.4	98.4	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	94.7	95.7	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	93.7	94.7	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	91.5	92.5	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	90.3	91.5	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	89.3	90.5	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	85.1	86.3	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	85.7	86.9	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	86.0	87.2	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	78.1	79.4	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	81.0	82.3	
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	76.3	77.6	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	77.1	78.4	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	74.4	75.7	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	73.8	75.1	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	74.6	75.8	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	71.7	72.9	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	68.8	70.0	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	69.5	70.7	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	68.5	69.7	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	62.9	64.1	
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		105.1	90.2		113.3	103.0		119.4	116.0	

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: 23.7 DEG)

DATA-POINT / RUN										
LN-4 / 157			LN-5 / 158			LN-6 / 159				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	95.9	69.7	70.0	102.1	75.9	80.0	107.5	85.0	
2	120.0	84.7	68.6	140.0	92.5	76.4	160.0	102.3	88.9	
3	180.0	77.9	67.0	210.0	90.3	79.4	240.0	99.2	90.6	
4	240.0	74.0	65.4	280.0	82.6	74.0	320.0	95.1	88.5	
5	300.0	60.0	53.4	350.0	78.7	72.1	400.0	92.3	87.5	
6	360.0	0.0	0.0	420.0	72.6	67.8	480.0	85.3	82.1	
7	420.0	0.0	0.0	490.0	68.9	65.7	560.0	75.3	72.1	
8	480.0	0.0	0.0	560.0	55.6	52.4	640.0	74.5	72.6	
9	540.0	0.0	0.0	630.0	0.0	0.0	720.0	76.1	75.3	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	70.5	69.7	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	59.2	58.4	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		96.3	74.0	102.9		83.5	109.4		95.8	

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 2 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
LN-4 / 157			LN-5 / 158			LN-6 / 159				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	97.3	71.1	70.0	105.7	79.5	80.0	106.3	83.8	
2	120.0	93.7	77.6	140.0	102.9	86.8	160.0	107.2	93.8	
3	180.0	87.8	76.9	210.0	97.0	86.1	240.0	103.5	94.9	
4	240.0	79.7	71.1	280.0	93.6	85.0	320.0	99.8	93.2	
5	300.0	72.5	65.9	350.0	88.1	81.5	400.0	98.1	93.3	
6	360.0	62.1	57.3	420.0	81.0	76.2	480.0	97.0	93.8	
7	420.0	0.0	0.0	490.0	79.2	76.0	560.0	93.8	90.6	
8	480.0	0.0	0.0	560.0	73.2	70.0	640.0	88.5	86.6	
9	540.0	0.0	0.0	630.0	62.2	60.3	720.0	84.9	84.1	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	82.8	82.0	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	79.2	78.4	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	73.9	73.9	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	69.2	69.2	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	69.6	69.6	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	64.2	64.8	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1330.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		99.2	81.3	108.1		91.8	111.5		101.6	

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 3 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
LN-4 / 157			LN-5 / 158			LN-6 / 159				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	100.5	74.3	70.0	107.5	81.3	80.0	108.1	85.6	
2	120.0	95.7	79.6	140.0	104.7	88.6	160.0	107.6	94.2	
3	180.0	88.1	77.2	210.0	99.0	88.1	240.0	105.8	97.2	
4	240.0	81.5	72.9	280.0	94.4	85.8	320.0	102.8	96.2	
5	300.0	75.3	68.7	350.0	90.1	83.5	400.0	102.5	97.7	
6	360.0	69.2	64.4	420.0	88.1	83.3	480.0	100.1	96.9	
7	420.0	0.0	0.0	490.0	81.1	77.9	560.0	94.2	91.0	
8	480.0	0.0	0.0	560.0	71.8	68.6	640.0	95.1	93.2	
9	540.0	0.0	0.0	630.0	74.3	72.4	720.0	91.3	90.5	
10	600.0	0.0	0.0	700.0	70.2	68.3	800.0	88.7	87.9	
11	660.0	0.0	0.0	770.0	58.8	58.0	880.0	83.4	82.6	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	83.3	83.3	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	80.0	80.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	75.8	75.8	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	74.0	74.6	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	76.2	76.8	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	72.1	72.7	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	70.5	71.5	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	67.7	68.7	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	66.8	67.8	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	66.6	67.6	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	64.2	65.2	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		102.0	83.0	110.0		93.8	113.3		104.6	

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 4 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
LN-4 / 157			LN-5 / 158			LN-6 / 159				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	102.6	76.4	70.0	109.0	82.8	80.0	111.3	88.8	
2	120.0	97.1	81.0	140.0	105.6	89.5	160.0	107.9	94.5	
3	180.0	89.3	78.4	210.0	99.2	88.3	240.0	107.9	99.3	
4	240.0	83.0	74.4	280.0	97.4	88.8	320.0	105.5	98.9	
5	300.0	76.4	69.8	350.0	92.6	86.0	400.0	102.5	97.7	
6	360.0	74.1	69.3	420.0	88.1	83.3	480.0	100.3	97.1	
7	420.0	67.2	62.4	490.0	82.3	79.1	560.0	99.7	96.5	
8	480.0	63.0	59.8	560.0	80.6	77.4	640.0	96.8	94.9	
9	540.0	0.0	0.0	630.0	75.4	73.5	720.0	93.4	92.6	
10	600.0	0.0	0.0	700.0	68.2	66.3	800.0	90.9	90.1	
11	660.0	0.0	0.0	770.0	65.5	64.7	880.0	89.2	88.4	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	83.7	83.7	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	83.2	83.2	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	81.5	81.5	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	77.3	77.9	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	71.2	71.8	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	72.3	72.9	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	68.2	69.2	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	59.2	60.2	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		103.9	84.6	111.2		95.2	115.3		106.3	

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 5 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
LN-4 / 157				LN-5 / 158			LN-6 / 159			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	103.5	77.3	70.0	110.3	84.1	80.0	114.8	92.3	
2	120.0	97.7	81.6	140.0	106.6	90.5	160.0	109.7	96.3	
3	180.0	88.6	77.7	210.0	97.5	86.6	240.0	106.9	98.3	
4	240.0	78.8	70.2	280.0	97.6	89.0	320.0	109.2	102.6	
5	300.0	77.5	70.9	350.0	95.8	89.2	400.0	104.7	99.9	
6	360.0	72.3	67.5	420.0	87.5	82.7	480.0	97.2	94.0	
7	420.0	71.5	66.7	490.0	83.1	79.9	560.0	99.4	96.2	
8	480.0	63.2	60.0	560.0	79.6	76.4	640.0	98.5	96.6	
9	540.0	0.0	0.0	630.0	76.7	74.8	720.0	92.7	91.9	
10	600.0	0.0	0.0	700.0	70.4	68.5	800.0	89.8	89.0	
11	660.0	0.0	0.0	770.0	53.9	53.1	880.0	85.9	85.1	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	85.8	85.8	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	82.9	82.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	77.6	77.6	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	77.2	77.8	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	76.0	76.6	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	69.0	69.6	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	67.3	68.3	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		104.7	84.7	112.3		95.8	117.7		107.4	

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

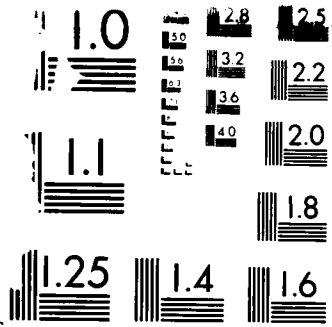
MICROPHONE: MP 6 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
LN-4 / 157				LN-5 / 158			LN-6 / 159			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	103.3	77.1	70.0	111.1	84.9	80.0	116.7	94.2	
2	120.0	95.9	79.8	140.0	106.4	90.3	160.0	108.4	95.0	
3	180.0	87.2	76.3	210.0	97.5	86.6	240.0	106.4	97.8	
4	240.0	80.6	72.0	280.0	96.9	88.3	320.0	108.1	101.5	
5	300.0	77.0	70.4	350.0	93.2	86.6	400.0	100.0	95.2	
6	360.0	72.2	67.4	420.0	79.9	75.1	480.0	95.3	92.1	
7	420.0	66.8	62.0	490.0	74.9	71.7	560.0	97.4	94.2	
8	480.0	66.3	63.1	560.0	78.0	74.8	640.0	92.1	90.2	
9	540.0	53.1	49.9	630.0	72.6	70.7	720.0	79.9	79.1	
10	600.0	0.0	0.0	700.0	51.0	49.1	800.0	87.6	86.8	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	81.8	81.0	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	75.2	75.2	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		104.1	83.5	112.6		94.8	118.3		105.5	

F - FREQUENCY HZ

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

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



RESOLUTION TEST CHART
1963-A

DNW PROPELLER NOISE TEST

MICROPHONE: MP 7 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
	LN-4 / 157			LN-5 / 158			LN-6 / 159			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	98.3	72.1	70.0	110.3	84.1	80.0	114.5	92.0	
2	120.0	89.2	73.1	140.0	99.3	83.2	160.0	102.8	89.4	
3	180.0	77.0	66.1	210.0	93.3	82.4	240.0	100.0	91.4	
4	240.0	70.5	61.9	280.0	80.6	72.0	320.0	94.0	87.4	
5	300.0	60.9	54.3	350.0	76.1	69.5	400.0	85.7	80.9	
6	420.0	0.0	0.0	420.0	69.4	64.6	480.0	75.4	72.2	
7	420.0	0.0	0.0	490.0	0.0	0.0	560.0	0.0	0.0	
8	480.0	0.0	0.0	560.0	0.0	0.0	640.0	0.0	0.0	
9	540.0	0.0	0.0	630.0	0.0	0.0	720.0	0.0	0.0	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	0.0	0.0	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL	98.8	76.3		110.7	88.2		115.0	96.5		

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 8 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
LN-4 / 157			LN-5 / 158			LN-6 / 159				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	102.7	76.5	70.0	107.3	81.1	80.0	109.7	87.2	
2	120.0	0.0	0.0	140.0	105.1	89.0	160.0	107.5	94.1	
3	180.0	0.0	0.0	210.0	99.5	88.6	240.0	107.0	98.4	
4	240.0	0.0	0.0	280.0	94.9	86.3	320.0	103.1	96.5	
5	300.0	0.0	0.0	350.0	88.2	81.6	400.0	102.3	97.5	
6	360.0	0.0	0.0	420.0	86.1	81.3	480.0	99.4	96.2	
7	420.0	0.0	0.0	490.0	81.1	77.9	560.0	97.1	93.9	
8	480.0	0.0	0.0	560.0	79.5	76.3	640.0	94.8	92.9	
9	540.0	0.0	0.0	630.0	74.2	72.3	720.0	92.0	91.2	
10	600.0	0.0	0.0	700.0	69.1	67.2	800.0	90.3	89.5	
11	660.0	0.0	0.0	770.0	64.3	63.5	880.0	87.7	86.9	
12	720.0	0.0	0.0	840.0	60.6	59.8	960.0	84.4	84.4	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	82.3	82.3	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	78.7	78.7	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	75.9	76.5	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	76.1	76.7	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	68.9	69.5	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		102.7	76.5	110.0		93.9	114.1		105.0	

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: 23.7 DEG)

DATA-POINT / RUN										
LN-4 / 157				LN-5 / 158			LN-6 / 159			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	104.6	78.4	70.0	106.2	80.0	80.0	110.9	88.4	
2	120.0	94.5	78.4	140.0	104.1	88.0	160.0	105.7	92.3	
3	180.0	87.9	77.0	210.0	94.6	83.7	240.0	103.7	95.1	
4	240.0	79.6	71.0	280.0	97.2	88.6	320.0	105.1	98.5	
5	300.0	77.6	71.0	350.0	91.6	85.0	400.0	99.5	94.7	
6	360.0	73.7	68.9	420.0	84.6	79.8	480.0	98.4	95.2	
7	420.0	61.8	57.0	490.0	80.7	77.5	560.0	98.8	95.6	
8	480.0	0.0	0.0	560.0	78.5	75.3	640.0	94.1	92.2	
9	540.0	0.0	0.0	630.0	75.6	73.7	720.0	91.1	90.3	
10	600.0	0.0	0.0	700.0	66.7	64.8	800.0	90.6	89.8	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	86.2	85.4	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	82.0	82.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	83.6	83.6	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	80.3	80.3	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	78.2	78.8	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	70.2	70.8	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		105.1	83.5	108.9		93.4	113.9		104.4	

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 1 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
FN-1 / 166			FN-2 / 167			FN-3 / 168				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	101.9	75.7	80.0	106.2	83.7	90.0	112.0	92.9	
2	140.0	95.6	79.5	160.0	105.3	91.9	180.0	110.0	99.1	
3	210.0	93.0	82.1	240.0	103.1	94.5	270.0	111.3	102.7	
4	280.0	87.3	78.7	320.0	99.7	93.1	360.0	109.8	105.0	
5	350.0	83.2	76.6	400.0	98.1	93.3	450.0	107.8	104.6	
6	420.0	79.0	74.2	480.0	91.5	88.3	540.0	105.9	102.7	
7	490.0	72.9	69.7	560.0	87.6	84.4	630.0	105.8	103.9	
8	560.0	65.6	62.4	640.0	87.5	85.6	720.0	104.2	103.4	
9	630.0	57.7	55.8	720.0	83.1	82.3	810.0	101.9	101.1	
10	700.0	57.1	55.2	800.0	80.8	80.0	900.0	101.2	101.2	
11	770.0	0.0	0.0	880.0	75.0	74.2	990.0	99.7	99.7	
12	840.0	0.0	0.0	960.0	72.0	72.0	1080.0	95.7	95.7	
13	910.0	0.0	0.0	1040.0	70.8	70.8	1170.0	93.3	93.9	
14	980.0	0.0	0.0	1120.0	63.8	63.8	1260.0	91.7	92.3	
15	1050.0	0.0	0.0	1200.0	56.3	56.9	1350.0	89.2	89.8	
16	1120.0	0.0	0.0	1280.0	53.7	54.3	1440.0	85.0	86.0	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	88.3	89.3	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	83.7	84.7	
19	1330.0	0.0	0.0	1520.0	0.0	0.0	1710.0	77.8	78.8	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	80.9	82.1	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	78.2	79.4	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	75.6	76.8	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	71.9	73.1	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	70.8	72.0	
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		103.4	86.5	110.6		100.2	118.5		113.0	

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 4 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
FN-1 / 166				FN-2 / 167			FN-3 / 168			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	109.2	83.0	80.0	115.2	92.7	90.0	115.9	96.8	
2	140.0	104.5	88.4	160.0	110.0	96.6	180.0	113.5	102.6	
3	210.0	98.8	87.9	240.0	110.1	101.5	270.0	115.3	106.7	
4	280.0	97.1	88.5	320.0	107.4	100.8	360.0	113.9	109.1	
5	350.0	92.0	85.4	400.0	104.3	99.5	450.0	114.3	111.1	
6	420.0	86.5	81.7	480.0	101.9	98.7	540.0	112.0	108.8	
7	490.0	83.0	79.8	560.0	100.1	96.9	630.0	113.8	111.9	
8	560.0	79.9	76.7	640.0	98.5	96.6	720.0	111.4	110.6	
9	630.0	76.9	75.0	720.0	94.8	94.0	810.0	110.9	110.1	
10	700.0	70.9	69.0	800.0	92.9	92.1	900.0	111.0	111.0	
11	770.0	65.5	64.7	880.0	90.7	89.9	990.0	108.9	108.9	
12	840.0	0.0	0.0	960.0	86.7	86.7	1080.0	108.3	108.3	
13	910.0	0.0	0.0	1040.0	85.0	85.0	1170.0	108.0	108.6	
14	980.0	0.0	0.0	1120.0	83.4	83.4	1260.0	105.0	105.6	
15	1050.0	0.0	0.0	1200.0	79.7	80.3	1350.0	104.9	105.5	
16	1120.0	0.0	0.0	1280.0	75.2	75.8	1440.0	104.1	105.1	
17	1190.0	0.0	0.0	1360.0	75.2	75.8	1530.0	101.4	102.4	
18	1260.0	0.0	0.0	1440.0	71.9	72.9	1620.0	99.7	100.7	
19	1330.0	0.0	0.0	1520.0	68.2	69.2	1710.0	100.3	101.3	
20	1400.0	0.0	0.0	1600.0	64.0	65.0	1800.0	98.8	100.0	
21	1470.0	0.0	0.0	1680.0	62.8	63.8	1890.0	95.5	96.7	
22	1540.0	0.0	0.0	1760.0	61.5	62.5	1980.0	95.2	96.4	
23	1610.0	0.0	0.0	1840.0	60.0	61.2	2070.0	94.3	95.5	
24	1680.0	0.0	0.0	1920.0	57.3	58.5	2160.0	90.9	92.1	
25	1750.0	0.0	0.0	2000.0	53.6	54.8	2250.0	91.6	92.9	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	89.8	91.1	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	89.2	90.5	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	88.5	89.8	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	88.3	89.6	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	86.6	87.9	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	85.0	86.3	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	85.3	86.5	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	82.7	83.9	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	81.4	82.6	
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	81.1	82.3	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	78.0	79.2	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	78.8	80.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	77.8	79.0	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	75.9	76.9	
OASPL		111.0	94.6	118.2 108.1			124.1 121.0			

F - FREQUENCY HZ
 SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA
 SPLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 8 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
FN-1 / 166				FN-2 / 167			FN-3 / 168			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	105.4	79.2	80.0	111.6	89.1	90.0	110.0	90.9	
2	140.0	103.4	87.3	160.0	108.5	95.1	180.0	112.4	101.5	
3	210.0	98.9	88.0	240.0	107.9	99.3	270.0	112.3	103.7	
4	280.0	94.6	86.0	320.0	104.9	98.3	360.0	112.0	107.2	
5	350.0	90.0	83.4	400.0	102.9	98.1	450.0	111.9	108.7	
6	420.0	86.2	81.4	480.0	100.1	96.9	540.0	111.7	108.5	
7	490.0	82.2	79.0	560.0	97.9	94.7	630.0	111.4	109.5	
8	560.0	77.9	74.7	640.0	95.8	93.9	720.0	110.3	109.5	
9	630.0	74.6	72.7	720.0	94.0	93.2	810.0	109.6	108.8	
10	700.0	71.2	69.3	800.0	91.2	90.4	900.0	107.5	107.5	
11	770.0	65.9	65.1	880.0	88.3	87.5	990.0	107.5	107.5	
12	840.0	0.0	0.0	960.0	85.6	85.6	1080.0	105.8	105.8	
13	910.0	0.0	0.0	1040.0	82.9	82.9	1170.0	105.0	105.6	
14	980.0	0.0	0.0	1120.0	80.8	80.8	1260.0	103.4	104.0	
15	1050.0	0.0	0.0	1200.0	77.3	77.9	1350.0	102.6	103.2	
16	1120.0	0.0	0.0	1280.0	75.7	76.3	1440.0	100.9	101.9	
17	1190.0	0.0	0.0	1360.0	71.6	72.2	1530.0	99.2	100.2	
18	1260.0	0.0	0.0	1440.0	70.0	71.0	1620.0	98.2	99.2	
19	1330.0	0.0	0.0	1520.0	66.1	67.1	1710.0	96.7	97.7	
20	1400.0	0.0	0.0	1600.0	61.2	62.2	1800.0	95.6	96.8	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	94.7	95.9	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	92.7	93.9	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	91.8	93.0	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	90.0	91.2	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	87.9	89.2	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	87.3	88.6	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	86.0	87.3	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	84.6	85.9	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	84.2	85.5	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	83.6	84.9	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	81.2	82.5	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	81.5	82.7	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	80.0	81.2	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	79.1	80.3	
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	76.6	77.8	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	75.6	76.8	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	75.4	76.6	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	71.7	72.9	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	72.0	73.0	
OASPL		108.4	93.3	115.5		106.1	121.8		118.9	

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: 23.7 DEG)

DATA-POINT / RUN										
FN-4 / 169			FN-5 / 170			FN-6 / 171				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	101.7	75.5	70.0	105.9	79.7	80.0	109.0	86.5	
2	120.0	90.7	74.6	140.0	98.0	81.9	160.0	106.2	92.8	
3	180.0	82.7	71.8	210.0	94.7	83.8	240.0	104.5	95.9	
4	240.0	75.1	66.5	280.0	90.0	81.4	320.0	100.5	93.9	
5	300.0	76.1	69.5	350.0	84.1	77.5	400.0	99.3	94.5	
6	360.0	59.4	54.6	420.0	79.7	74.9	480.0	94.4	91.2	
7	420.0	0.0	0.0	490.0	76.5	73.3	560.0	90.3	87.1	
8	480.0	0.0	0.0	560.0	62.6	59.4	640.0	87.7	85.8	
9	540.0	0.0	0.0	630.0	0.0	0.0	720.0	86.6	85.8	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	76.0	75.2	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	80.0	79.2	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	74.5	74.5	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	72.1	72.1	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	67.7	67.7	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	60.1	60.7	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		102.1	79.7	107.0		88.7	112.4		101.6	

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: 23.7 DEG)

DATA-POINT / RUN										
FN-4 / 169				FN-5 / 170			FN-6 / 171			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	103.6	77.4	70.0	109.0	82.8	80.0	110.6	88.1	
2	120.0	97.6	81.5	140.0	104.1	88.0	160.0	110.6	97.2	
3	180.0	92.1	81.2	210.0	100.7	89.8	240.0	107.9	99.3	
4	240.0	84.4	75.8	280.0	95.8	87.2	320.0	104.5	97.9	
5	300.0	78.4	71.8	350.0	91.1	84.5	400.0	103.7	98.9	
6	360.0	71.9	67.1	420.0	87.9	83.1	480.0	102.7	99.5	
7	420.0	67.8	63.0	490.0	83.9	80.7	560.0	99.9	96.7	
8	480.0	53.6	50.4	560.0	80.4	77.2	640.0	96.3	94.4	
9	540.0	0.0	0.0	630.0	72.0	70.1	720.0	93.5	92.7	
10	600.0	0.0	0.0	700.0	67.4	65.5	800.0	91.6	90.8	
11	660.0	0.0	0.0	770.0	69.0	68.2	880.0	90.9	90.1	
12	720.0	0.0	0.0	840.0	60.0	59.2	960.0	86.5	86.5	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	83.5	83.5	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	81.5	81.5	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	79.2	79.8	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	76.8	77.4	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	71.6	72.2	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	68.8	69.8	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	68.2	69.2	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	65.6	66.6	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	60.8	61.8	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		104.9	85.9	110.9		94.7	115.8		107.0	

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: 23.7 DEG)

DATA-POINT / RUN										
	FN-4 / 169			FN-5 / 170			FN-6 / 171			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	105.3	79.1	70.0	110.7	84.5	80.0	113.3	90.8	
2	120.0	98.6	82.5	140.0	106.5	90.4	160.0	111.3	97.9	
3	180.0	92.0	81.1	210.0	102.0	91.1	240.0	110.5	101.9	
4	240.0	85.8	77.2	280.0	97.2	88.6	320.0	106.7	100.1	
5	300.0	81.9	75.3	350.0	94.4	87.8	400.0	107.4	102.6	
6	360.0	74.3	69.5	420.0	91.0	86.2	480.0	104.0	100.8	
7	420.0	72.3	67.5	490.0	86.6	83.4	560.0	99.8	96.6	
8	480.0	68.1	64.9	560.0	79.2	76.0	640.0	99.8	97.9	
9	540.0	59.0	55.8	630.0	79.3	77.4	720.0	97.6	96.8	
10	600.0	0.0	0.0	700.0	72.3	70.4	800.0	94.6	93.8	
11	660.0	0.0	0.0	770.0	70.3	69.5	880.0	92.3	91.5	
12	720.0	0.0	0.0	840.0	66.5	65.7	960.0	90.6	90.6	
13	780.0	0.0	0.0	910.0	60.7	60.7	1040.0	88.4	88.4	
14	840.0	0.0	0.0	980.0	62.4	62.4	1120.0	83.1	83.1	
15	900.0	0.0	0.0	1050.0	51.4	51.4	1200.0	82.4	83.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	81.0	81.6	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	77.7	78.3	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	72.2	73.2	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	71.1	72.1	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	66.3	67.3	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	66.5	67.5	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	59.1	60.1	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		106.3	86.9	112.7		96.8	117.9		109.3	

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: 23.7 DEG)

DATA-POINT / RUN										
FN-4 / 169				FN-5 / 170			FN-6 / 171			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	106.8	80.6	70.0	112.4	86.2	80.0	116.3	93.8	
2	120.0	99.6	83.5	140.0	108.2	92.1	160.0	111.6	98.2	
3	180.0	92.8	81.9	210.0	102.1	91.2	240.0	112.1	103.5	
4	240.0	85.5	76.9	280.0	101.0	92.4	320.0	109.1	102.5	
5	300.0	82.9	76.3	350.0	93.3	86.7	400.0	105.8	101.0	
6	360.0	74.0	69.2	420.0	92.2	87.4	480.0	103.9	100.7	
7	420.0	59.9	55.1	490.0	83.8	80.6	560.0	102.3	99.1	
8	480.0	0.0	0.0	560.0	83.3	80.1	640.0	99.7	97.8	
9	540.0	0.0	0.0	630.0	76.7	74.8	720.0	96.7	95.9	
10	600.0	0.0	0.0	700.0	74.4	72.5	800.0	94.9	94.1	
11	660.0	0.0	0.0	770.0	62.9	62.1	880.0	92.2	91.4	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	88.9	88.9	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	87.6	87.6	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	85.0	85.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	81.7	82.3	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	77.9	78.5	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	77.5	78.1	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	72.7	73.7	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	70.0	71.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	64.0	65.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		107.8	87.7	114.3		98.1	119.6		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 5 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
	FN-4 / 169			FN-5 / 170			FN-6 / 171			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	107.5	81.3	70.0	113.8	87.6	80.0	118.6	96.1	
2	120.0	100.5	84.4	140.0	109.9	93.8	160.0	112.8	99.4	
3	180.0	90.5	79.6	210.0	100.3	89.4	240.0	110.1	101.5	
4	240.0	81.6	73.0	280.0	99.6	91.0	320.0	112.3	105.7	
5	300.0	77.9	71.3	350.0	98.1	91.5	400.0	106.7	101.9	
6	360.0	75.3	70.5	420.0	87.1	82.3	480.0	99.9	96.7	
7	420.0	72.6	67.8	490.0	84.5	81.3	560.0	101.0	97.8	
8	480.0	63.4	60.2	560.0	79.7	76.5	640.0	100.0	98.1	
9	540.0	0.0	0.0	630.0	77.6	75.7	720.0	94.2	93.4	
10	600.0	0.0	0.0	700.0	68.6	66.7	800.0	89.8	89.0	
11	660.0	0.0	0.0	770.0	71.2	70.4	880.0	88.1	87.3	
12	720.0	0.0	0.0	840.0	64.4	63.6	960.0	87.8	87.8	
13	780.0	0.0	0.0	910.0	61.8	61.8	1040.0	85.2	85.2	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	77.5	77.5	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	79.1	79.7	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	77.0	77.6	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	68.8	69.4	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		108.4	87.4	115.6		98.4	121.1		110.1	

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: 23.7 DEG)

DATA-POINT / RUN										
FN-4 / 169			FN-5 / 170			FN-6 / 171				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	106.9	80.7	70.0	114.6	88.4	80.0	119.4	96.9	
2	120.0	99.8	83.7	140.0	108.4	92.3	160.0	111.3	97.9	
3	180.0	88.7	77.8	210.0	98.6	87.7	240.0	108.9	100.3	
4	240.0	79.3	70.7	280.0	97.3	88.7	320.0	108.5	101.9	
5	300.0	73.9	67.3	350.0	90.0	83.4	400.0	99.9	95.1	
6	360.0	67.5	62.7	420.0	82.3	77.5	480.0	96.8	93.6	
7	420.0	0.0	0.0	490.0	70.5	67.3	560.0	97.6	94.4	
8	480.0	0.0	0.0	560.0	75.5	72.3	640.0	91.0	89.1	
9	540.0	0.0	0.0	630.0	71.8	69.9	720.0	78.9	78.1	
10	600.0	0.0	0.0	700.0	65.9	64.0	800.0	87.2	86.4	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	79.3	78.5	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	68.9	68.9	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	71.4	71.4	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		107.7	86.3	115.7		96.0	120.7		106.7	

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 7 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
FN-4 / 169			FN-5 / 170			FN-6 / 171				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	104.3	78.1	70.0	112.8	86.6	80.0	115.4	92.9	
2	120.0	90.3	74.2	140.0	98.9	82.8	160.0	106.0	92.6	
3	180.0	81.9	71.0	210.0	87.7	76.8	240.0	101.4	92.8	
4	240.0	73.5	64.9	280.0	74.2	65.6	320.0	91.2	84.6	
5	300.0	78.4	71.8	350.0	0.0	0.0	400.0	88.9	84.1	
6	360.0	58.7	53.9	420.0	0.0	0.0	480.0	74.8	71.6	
7	420.0	0.0	0.0	490.0	0.0	0.0	560.0	80.4	77.2	
8	480.0	0.0	0.0	560.0	0.0	0.0	640.0	78.9	77.0	
9	540.0	0.0	0.0	630.0	0.0	0.0	720.0	65.7	64.9	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	0.0	0.0	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		104.5	80.9		113.0	88.4		116.1	98.0	

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 8 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
FN-4 / 169			FN-5 / 170			FN-6 / 171				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	105.2	79.0	70.0	109.5	83.3	80.0	113.1	90.6	
2	120.0	98.2	82.1	140.0	106.8	90.7	160.0	110.3	96.9	
3	180.0	90.4	79.5	210.0	102.2	91.3	240.0	109.3	100.7	
4	240.0	84.5	75.9	280.0	98.5	89.9	320.0	106.2	99.6	
5	300.0	79.6	73.0	350.0	92.4	85.8	400.0	104.7	99.9	
6	360.0	72.1	67.3	420.0	89.1	84.3	480.0	101.7	98.5	
7	420.0	0.0	0.0	490.0	84.0	80.8	560.0	100.0	96.8	
8	480.0	0.0	0.0	560.0	81.8	78.6	640.0	97.5	95.6	
9	540.0	0.0	0.0	630.0	78.0	76.1	720.0	95.6	94.8	
10	600.0	0.0	0.0	700.0	71.4	69.5	800.0	93.6	92.8	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	89.9	89.1	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	88.1	88.1	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	85.0	85.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	83.2	83.2	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	79.5	80.1	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	77.7	78.3	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	75.7	76.3	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	71.1	72.1	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	71.3	72.3	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		106.2	86.0	112.2		96.7	117.0		107.7	

F - FREQUENCY HZ
 SPL - SOUND PRESSURE LEVEL DB RE 2E-5 PA
 SFLA - A-WEIGHTED SOUND PRESSURE LEVEL DBA RE 2E-5 PA

DNW PROPELLER NOISE TEST

MICROPHONE: MP 9 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
	FN-4 / 169			FN-5 / 170			FN-6 / 171			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	106.1	79.9	70.0	109.8	83.6	80.0	115.1	92.6	
2	120.0	99.0	82.9	140.0	106.6	90.5	160.0	109.9	96.5	
3	180.0	90.7	79.8	210.0	97.1	86.2	240.0	108.5	99.9	
4	240.0	82.1	73.5	280.0	100.4	91.8	320.0	109.1	102.5	
5	300.0	81.7	75.1	350.0	95.2	88.6	400.0	102.7	97.9	
6	360.0	69.1	64.3	420.0	84.9	80.1	480.0	101.3	98.1	
7	420.0	58.3	53.5	490.0	82.7	79.5	560.0	101.8	98.6	
8	480.0	0.0	0.0	560.0	81.1	77.9	640.0	97.1	95.2	
9	540.0	0.0	0.0	630.0	77.5	75.6	720.0	93.7	92.9	
10	600.0	0.0	0.0	700.0	72.9	71.0	800.0	95.0	94.2	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	89.4	88.6	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	85.6	85.6	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	87.8	87.8	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	82.4	82.4	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	78.0	78.6	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL	107.0	86.5		112.1	96.3		118.0	108.1		

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: 19.9 DEG)

DATA-POINT / RUN										
EN-1 / 163			EN-2 / 164			EN-3 / 165				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	104.4	78.2	80.0	107.2	84.7	90.0	113.1	94.0	
2	140.0	97.4	81.3	160.0	106.7	93.3	180.0	112.4	101.5	
3	210.0	95.9	85.0	240.0	105.4	96.8	270.0	113.4	104.8	
4	280.0	90.0	81.4	320.0	102.5	95.9	360.0	113.0	108.2	
5	350.0	85.9	79.3	400.0	101.8	97.0	450.0	111.3	108.1	
6	420.0	81.8	77.0	480.0	95.7	92.5	540.0	110.5	107.3	
7	490.0	76.2	73.0	560.0	91.4	88.2	630.0	110.1	108.2	
8	560.0	73.2	70.0	640.0	91.0	89.1	720.0	108.6	107.8	
9	630.0	66.0	64.1	720.0	89.4	88.6	810.0	107.7	106.9	
10	700.0	0.0	0.0	800.0	86.3	85.5	900.0	107.6	107.6	
11	770.0	0.0	0.0	880.0	80.2	79.4	990.0	106.3	106.3	
12	840.0	0.0	0.0	960.0	79.6	79.6	1080.0	103.5	103.5	
13	910.0	0.0	0.0	1040.0	78.6	78.6	1170.0	101.2	101.8	
14	980.0	0.0	0.0	1120.0	74.1	74.1	1260.0	99.6	100.2	
15	1050.0	0.0	0.0	1200.0	67.2	67.8	1350.0	98.2	98.8	
16	1120.0	0.0	0.0	1280.0	63.5	64.1	1440.0	96.1	97.1	
17	1190.0	0.0	0.0	1360.0	62.1	62.7	1530.0	96.2	97.2	
18	1260.0	0.0	0.0	1440.0	61.2	62.2	1620.0	95.1	96.1	
19	1330.0	0.0	0.0	1520.0	58.4	59.4	1710.0	92.7	93.7	
20	1400.0	0.0	0.0	1600.0	51.6	52.6	1800.0	92.2	93.4	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	90.8	92.0	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	88.4	89.6	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	85.6	86.8	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	84.8	86.0	
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	83.0	84.3	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	82.8	84.1	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	82.8	84.1	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	80.7	82.0	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	78.6	79.9	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	77.2	78.5	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	78.5	79.7	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	76.4	77.6	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	75.5	76.7	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	74.7	75.9	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	69.6	70.8	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	70.2	71.4	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	68.8	70.0	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	69.5	70.7	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	68.4	69.4	
OASPL		105.8	89.1	112.4		103.2	121.6		117.7	

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: 19.9 DEG)

DATA-POINT / RUN										
EN-1 / 163			EN-2 / 164			EN-3 / 165				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.6	81.4	80.0	110.7	88.2	90.0	115.0	95.9	
2	140.0	103.0	86.9	160.0	110.6	97.2	180.0	117.7	106.8	
3	210.0	99.6	88.7	240.0	108.2	99.6	270.0	115.7	107.1	
4	280.0	95.7	87.1	320.0	104.5	97.9	360.0	113.7	108.9	
5	350.0	90.6	84.0	400.0	103.8	99.0	450.0	117.1	113.9	
6	420.0	88.7	83.9	480.0	103.9	100.7	540.0	117.2	114.0	
7	490.0	85.0	81.8	560.0	100.5	97.3	630.0	114.8	112.9	
8	560.0	81.6	78.4	640.0	97.8	95.9	720.0	113.3	112.5	
9	630.0	74.8	72.9	720.0	94.8	94.0	810.0	113.6	112.8	
10	700.0	71.1	69.2	800.0	93.6	92.8	900.0	114.1	114.1	
11	770.0	66.4	65.6	880.0	92.4	91.6	990.0	111.4	111.4	
12	840.0	63.9	63.1	960.0	89.2	89.2	1080.0	110.6	110.6	
13	910.0	0.0	0.0	1040.0	85.1	85.1	1170.0	110.3	110.9	
14	980.0	0.0	0.0	1120.0	83.5	83.5	1260.0	109.6	110.2	
15	1050.0	0.0	0.0	1200.0	81.3	81.9	1350.0	108.1	108.7	
16	1120.0	0.0	0.0	1280.0	79.3	79.9	1440.0	106.8	107.8	
17	1190.0	0.0	0.0	1360.0	76.0	76.6	1530.0	106.1	107.1	
18	1260.0	0.0	0.0	1440.0	73.1	74.1	1620.0	105.5	106.5	
19	1330.0	0.0	0.0	1520.0	70.9	71.9	1710.0	103.9	104.9	
20	1400.0	0.0	0.0	1600.0	68.2	69.2	1800.0	102.0	103.2	
21	1470.0	0.0	0.0	1680.0	64.9	65.9	1890.0	101.4	102.6	
22	1540.0	0.0	0.0	1760.0	61.0	62.0	1980.0	101.8	103.0	
23	1610.0	0.0	0.0	1840.0	57.7	58.9	2070.0	99.7	100.9	
24	1680.0	0.0	0.0	1920.0	52.7	53.9	2160.0	98.7	99.9	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	98.4	99.7	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	98.0	99.3	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	96.7	98.0	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	96.3	97.6	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	96.9	98.2	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	96.0	97.3	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	94.0	95.3	
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	93.8	95.0	
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	91.9	93.1	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	91.1	92.3	
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	91.1	92.3	
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	90.6	91.8	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	89.3	90.5	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	88.8	89.8	
OASPL		109.6	94.2	116.0		107.6	126.4		123.8	

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										
EN-1 / 163			EN-2 / 164			EN-3 / 165				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	109.3	83.1	80.0	114.1	91.6	90.0	115.8	96.7	
2	140.0	104.7	88.6	160.0	111.4	98.0	180.0	116.3	105.4	
3	210.0	100.2	89.3	240.0	110.1	101.5	270.0	113.9	105.3	
4	280.0	96.4	87.8	320.0	107.4	100.8	360.0	116.2	111.4	
5	350.0	92.5	85.9	400.0	107.1	102.3	450.0	116.3	113.1	
6	420.0	90.5	85.7	480.0	103.1	99.9	540.0	113.1	109.9	
7	490.0	85.1	81.9	560.0	98.4	95.2	630.0	115.0	113.1	
8	560.0	80.4	77.2	640.0	98.2	96.3	720.0	115.3	114.5	
9	630.0	77.6	75.7	720.0	95.9	95.1	810.0	113.8	113.0	
10	700.0	73.4	71.5	800.0	92.2	91.4	900.0	113.6	113.6	
11	770.0	66.9	66.1	880.0	88.6	87.8	990.0	113.4	113.4	
12	840.0	65.0	64.2	960.0	89.0	89.0	1080.0	111.2	111.2	
13	910.0	60.0	60.0	1040.0	88.0	88.0	1170.0	109.0	109.6	
14	980.0	0.0	0.0	1120.0	85.6	85.6	1260.0	110.6	111.2	
15	1050.0	0.0	0.0	1200.0	84.9	85.5	1350.0	109.3	109.9	
16	1120.0	0.0	0.0	1280.0	85.9	86.5	1440.0	106.3	107.3	
17	1190.0	0.0	0.0	1360.0	85.3	85.9	1530.0	106.1	107.1	
18	1260.0	0.0	0.0	1440.0	83.7	84.7	1620.0	107.0	108.0	
19	1330.0	0.0	0.0	1520.0	83.4	84.4	1710.0	104.9	105.9	
20	1400.0	0.0	0.0	1600.0	82.9	83.9	1800.0	101.6	102.8	
21	1470.0	0.0	0.0	1680.0	81.7	82.7	1890.0	102.1	103.3	
22	1540.0	0.0	0.0	1760.0	80.6	81.6	1980.0	102.2	103.4	
23	1610.0	0.0	0.0	1840.0	80.0	81.2	2070.0	100.0	101.2	
24	1680.0	0.0	0.0	1920.0	79.5	80.7	2160.0	99.1	100.3	
25	1750.0	0.0	0.0	2000.0	78.9	80.1	2250.0	99.9	101.2	
26	1820.0	0.0	0.0	2080.0	78.3	79.5	2340.0	97.9	99.2	
27	1890.0	0.0	0.0	2160.0	78.0	79.2	2430.0	95.8	97.1	
28	1960.0	0.0	0.0	2240.0	77.5	78.8	2520.0	96.9	98.2	
29	2030.0	0.0	0.0	2320.0	77.1	78.4	2610.0	96.8	98.1	
30	2100.0	0.0	0.0	2400.0	76.5	77.8	2700.0	95.2	96.5	
31	2170.0	0.0	0.0	2480.0	76.1	77.4	2790.0	94.4	95.7	
32	2240.0	0.0	0.0	2560.0	75.5	76.8	2880.0	94.9	96.1	
33	2310.0	0.0	0.0	2640.0	74.6	75.9	2970.0	95.2	96.4	
34	2380.0	0.0	0.0	2720.0	74.2	75.5	3060.0	94.0	95.2	
35	2450.0	0.0	0.0	2800.0	73.5	74.8	3150.0	90.8	92.0	
36	2520.0	0.0	0.0	2880.0	72.8	74.0	3240.0	91.6	92.8	
37	2590.0	0.0	0.0	2960.0	72.2	73.4	3330.0	92.8	94.0	
38	2660.0	0.0	0.0	3040.0	71.6	72.8	3420.0	91.3	92.5	
39	2730.0	0.0	0.0	3120.0	70.9	72.1	3510.0	88.1	89.3	
40	2800.0	0.0	0.0	3200.0	69.8	71.0	3600.0	89.4	90.4	
OASPL		111.2	95.3	118.1		109.0	126.2		123.9	

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 4 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN									
EN-1 / 163			EN-2 / 164			EN-3 / 165			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA
1	70.0	111.1	84.9	80.0	117.1	94.6	90.0	117.7	98.6
2	140.0	105.9	89.8	160.0	111.6	98.2	180.0	115.5	104.6
3	210.0	100.3	89.4	240.0	111.5	102.9	270.0	116.4	107.8
4	280.0	98.4	89.8	320.0	108.8	102.2	360.0	115.1	110.3
5	350.0	92.5	85.9	400.0	105.5	100.7	450.0	115.6	112.4
6	420.0	88.9	84.1	480.0	103.6	100.4	540.0	113.5	110.3
7	490.0	83.6	80.4	560.0	101.4	98.2	630.0	114.8	112.9
8	560.0	80.3	77.1	640.0	100.0	98.1	720.0	112.9	112.1
9	630.0	76.6	74.7	720.0	95.8	95.0	810.0	112.0	111.2
10	700.0	70.5	68.6	800.0	94.4	93.6	900.0	112.5	112.5
11	770.0	62.4	61.6	880.0	92.1	91.3	990.0	110.4	110.4
12	840.0	0.0	0.0	960.0	88.5	88.5	1080.0	109.7	109.7
13	910.0	0.0	0.0	1040.0	87.0	87.0	1170.0	109.5	110.1
14	980.0	0.0	0.0	1120.0	85.2	85.2	1260.0	106.5	107.1
15	1050.0	0.0	0.0	1200.0	81.3	81.9	1350.0	106.5	107.1
16	1120.0	0.0	0.0	1280.0	77.4	78.0	1440.0	105.6	106.6
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	74.3	75.3	1620.0	101.1	102.1
19	1330.0	0.0	0.0	1520.0	71.1	72.1	1710.0	102.5	103.5
20	1400.0	0.0	0.0	1600.0	67.7	68.7	1800.0	100.9	102.1
21	1470.0	0.0	0.0	1680.0	65.2	66.2	1890.0	96.9	98.1
22	1540.0	0.0	0.0	1760.0	64.5	65.5	1980.0	97.7	98.9
23	1610.0	0.0	0.0	1840.0	59.6	60.8	2070.0	96.7	97.9
24	1680.0	0.0	0.0	1920.0	59.1	60.3	2160.0	93.6	94.8
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	94.4	95.7
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	92.8	94.1
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	92.2	93.5
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	92.7	94.0
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	92.0	93.3
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	90.9	92.2
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	90.0	91.3
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	89.3	90.5
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	88.1	89.3
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	85.8	87.0
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	87.4	88.6
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	86.4	87.6
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	83.4	84.6
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	84.9	86.1
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	83.7	84.9
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	81.8	82.8
OASPL		112.8	95.9		119.9	109.5		125.6	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										
EN-1 / 163				EN-2 / 164			EN-3 / 165			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	112.3	86.1	80.0	118.9	96.4	90.0	119.5	100.4	
2	140.0	107.0	90.9	160.0	112.5	99.1	180.0	116.3	105.4	
3	210.0	98.4	87.5	240.0	109.3	100.7	270.0	117.5	108.9	
4	280.0	96.8	88.2	320.0	111.5	104.9	360.0	119.6	114.8	
5	350.0	94.2	87.6	400.0	106.2	101.4	450.0	111.0	107.8	
6	420.0	85.4	80.6	480.0	98.6	95.4	540.0	112.7	109.5	
7	490.0	79.0	75.8	560.0	100.4	97.2	630.0	113.0	111.1	
8	560.0	77.5	74.3	640.0	97.7	95.8	720.0	108.2	107.4	
9	630.0	72.1	70.2	720.0	92.6	91.8	810.0	108.5	107.7	
10	700.0	64.2	62.3	800.0	89.2	88.4	900.0	107.6	107.6	
11	770.0	52.5	51.7	880.0	88.0	87.2	990.0	106.6	106.6	
12	840.0	0.0	0.0	960.0	86.6	86.6	1080.0	104.6	104.6	
13	910.0	0.0	0.0	1040.0	83.1	83.1	1170.0	103.3	103.9	
14	980.0	0.0	0.0	1120.0	78.3	78.3	1260.0	102.9	103.5	
15	1050.0	0.0	0.0	1200.0	75.9	76.5	1350.0	100.5	101.1	
16	1120.0	0.0	0.0	1280.0	73.9	74.5	1440.0	98.7	99.7	
17	1190.0	0.0	0.0	1360.0	66.1	66.7	1530.0	97.9	98.9	
18	1260.0	0.0	0.0	1440.0	63.5	64.5	1620.0	95.5	96.5	
19	1330.0	0.0	0.0	1520.0	61.2	62.2	1710.0	93.2	94.2	
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	92.7	93.9	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	91.1	92.3	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	88.9	90.1	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	91.2	92.4	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	86.7	87.9	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	84.8	86.1	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	85.7	87.0	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	80.0	81.3	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	83.8	85.1	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	76.8	78.1	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	78.9	80.2	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	81.1	82.4	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	71.7	72.9	
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	
CASEL	113.7	95.6		121.0	109.3		125.6	120.2		

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 6 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
EN-1 / 163			EN-2 / 164			EN-3 / 165				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	112.2	86.0	80.0	118.9	96.4	90.0	119.4	100.3	
2	140.0	105.2	89.1	160.0	111.0	97.6	180.0	114.6	103.7	
3	210.0	94.5	83.6	240.0	107.2	98.6	270.0	115.4	106.8	
4	280.0	94.0	85.4	320.0	107.3	100.7	360.0	112.8	108.0	
5	350.0	86.4	79.8	400.0	98.0	93.2	450.0	103.3	100.1	
6	420.0	73.7	68.9	480.0	92.5	89.3	540.0	109.2	106.0	
7	490.0	72.6	69.4	560.0	95.4	92.2	630.0	103.5	101.6	
8	560.0	73.5	70.3	640.0	89.1	87.2	720.0	98.6	97.8	
9	630.0	57.1	55.2	720.0	74.3	73.5	810.0	103.0	102.2	
10	700.0	0.0	0.0	800.0	83.7	82.9	900.0	95.1	95.1	
11	770.0	0.0	0.0	880.0	75.5	74.7	990.0	89.4	89.4	
12	840.0	0.0	0.0	960.0	59.3	59.3	1080.0	93.8	93.8	
13	910.0	0.0	0.0	1040.0	0.0	0.0	1170.0	86.6	87.2	
14	980.0	0.0	0.0	1120.0	0.0	0.0	1260.0	81.8	82.4	
15	1050.0	0.0	0.0	1200.0	0.0	0.0	1350.0	84.6	85.2	
16	1120.0	0.0	0.0	1280.0	0.0	0.0	1440.0	79.9	80.9	
17	1190.0	0.0	0.0	1360.0	0.0	0.0	1530.0	58.3	59.3	
18	1260.0	0.0	0.0	1440.0	0.0	0.0	1620.0	75.8	76.8	
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	74.3	75.5	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	71.6	72.8	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	66.6	67.8	
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		113.1	97.8	120.1		105.4	122.7		113.8	

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: 19.9 DEG)

DATA-POINT / RUN										
EN-1 / 163			EN-2 / 164			EN-3 / 165				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	109.6	83.4	80.0	114.2	91.7	90.0	119.6	100.5	
2	140.0	96.5	80.4	160.0	103.8	90.4	180.0	114.3	103.4	
3	210.0	86.4	75.5	240.0	99.3	90.7	270.0	100.6	92.0	
4	280.0	74.0	65.4	320.0	92.6	86.0	360.0	104.5	99.7	
5	350.0	0.0	0.0	400.0	78.0	73.2	450.0	97.7	94.5	
6	420.0	0.0	0.0	480.0	71.7	68.5	540.0	90.8	87.6	
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		109.9	85.7		114.8	96.2		120.9	106.7	

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 8 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
EN-1 / 163			EN-2 / 164			EN-3 / 165				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	107.7	81.5	80.0	114.8	92.3	90.0	112.1	93.0	
2	140.0	104.9	88.8	160.0	111.2	97.8	180.0	113.9	103.0	
3	210.0	100.0	89.1	240.0	110.4	101.8	270.0	113.5	104.9	
4	280.0	95.8	87.2	320.0	107.7	101.1	360.0	113.4	108.6	
5	350.0	90.8	84.2	400.0	105.3	100.5	450.0	112.8	109.6	
6	420.0	87.8	83.0	480.0	102.1	98.9	540.0	112.9	109.7	
7	490.0	83.8	80.6	560.0	100.0	96.8	630.0	112.5	110.6	
8	560.0	78.7	75.5	640.0	98.0	96.1	720.0	111.8	111.0	
9	630.0	0.0	0.0	720.0	95.9	95.1	810.0	111.1	110.3	
10	700.0	0.0	0.0	800.0	93.4	92.6	900.0	109.3	109.3	
11	770.0	0.0	0.0	880.0	90.6	89.8	990.0	108.5	108.5	
12	840.0	0.0	0.0	960.0	87.4	87.4	1080.0	107.4	107.4	
13	910.0	0.0	0.0	1040.0	84.5	84.5	1170.0	106.2	106.8	
14	980.0	0.0	0.0	1120.0	82.8	82.8	1260.0	104.9	105.5	
15	1050.0	0.0	0.0	1200.0	79.6	80.2	1350.0	104.0	104.6	
16	1120.0	0.0	0.0	1280.0	77.4	78.0	1440.0	102.5	103.5	
17	1190.0	0.0	0.0	1360.0	74.7	75.3	1530.0	100.9	101.9	
18	1260.0	0.0	0.0	1440.0	73.0	74.0	1620.0	100.2	101.2	
19	1330.0	0.0	0.0	1520.0	69.5	70.5	1710.0	98.5	99.5	
20	1400.0	0.0	0.0	1600.0	65.2	66.2	1800.0	97.6	98.8	
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	96.7	97.9	
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	95.0	96.2	
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	94.3	95.5	
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	92.4	93.6	
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	90.6	91.9	
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	90.2	91.5	
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	88.8	90.1	
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	88.7	90.0	
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	87.5	88.8	
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	87.6	88.9	
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	85.9	87.2	
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	85.6	86.8	
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	84.3	85.5	
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	83.4	84.6	
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	83.3	84.5	
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	81.2	82.4	
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	80.5	81.7	
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	78.4	79.6	
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	78.0	79.0	
OASPL		110.2	94.5	118.3		108.5	123.2		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 7 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN										
EN-1 / 163			EN-2 / 164			EN-3 / 165				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	70.0	109.6	83.4	80.0	114.2	91.7	90.0	119.6	100.5	
2	140.0	96.5	80.4	160.0	103.8	90.4	180.0	114.3	103.4	
3	210.0	86.4	75.5	240.0	99.3	90.7	270.0	100.6	92.0	
4	280.0	74.0	65.4	320.0	92.6	86.0	360.0	104.5	99.7	
5	350.0	0.0	0.0	400.0	78.0	73.2	450.0	97.7	94.5	
6	420.0	0.0	0.0	480.0	71.7	68.5	540.0	90.8	87.6	
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		109.9	85.7	114.8		96.2	120.9		106.7	

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 8 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
EN-1 / 163			EN-2 / 164			EN-3 / 165					
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	107.7	81.5	80.0	114.8	92.3	90.0	112.1	93.0		
2	140.0	104.9	88.8	160.0	111.2	97.8	180.0	113.9	103.0		
3	210.0	100.0	89.1	240.0	110.4	101.8	270.0	113.5	104.9		
4	280.0	95.8	87.2	320.0	107.7	101.1	360.0	113.4	108.6		
5	350.0	90.8	84.2	400.0	105.3	100.5	450.0	112.8	109.6		
6	420.0	87.8	83.0	480.0	102.1	98.9	540.0	112.9	109.7		
7	490.0	83.8	80.6	560.0	100.0	96.8	630.0	112.5	110.6		
8	560.0	78.7	75.5	640.0	98.0	96.1	720.0	111.8	111.0		
9	630.0	0.0	0.0	720.0	95.9	95.1	810.0	111.1	110.3		
10	700.0	0.0	0.0	800.0	93.4	92.6	900.0	109.3	109.3		
11	770.0	0.0	0.0	880.0	90.6	89.8	990.0	108.5	108.5		
12	840.0	0.0	0.0	960.0	87.4	87.4	1080.0	107.4	107.4		
13	910.0	0.0	0.0	1040.0	84.5	84.5	1170.0	106.2	106.8		
14	980.0	0.0	0.0	1120.0	82.8	82.8	1260.0	104.9	105.5		
15	1050.0	0.0	0.0	1200.0	79.6	80.2	1350.0	104.0	104.6		
16	1120.0	0.0	0.0	1280.0	77.4	78.0	1440.0	102.5	103.5		
17	1190.0	0.0	0.0	1360.0	74.7	75.3	1530.0	100.9	101.9		
18	1260.0	0.0	0.0	1440.0	73.0	74.0	1620.0	100.2	101.2		
19	1330.0	0.0	0.0	1520.0	69.5	70.5	1710.0	98.5	99.5		
20	1400.0	0.0	0.0	1600.0	65.2	66.2	1800.0	97.6	98.8		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	96.7	97.9		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	95.0	96.2		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	94.3	95.5		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	92.4	93.6		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	90.6	91.9		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	90.2	91.5		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	88.8	90.1		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	88.7	90.0		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	87.5	88.8		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	87.6	88.9		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	85.9	87.2		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	85.6	86.8		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	84.3	85.5		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	83.4	84.6		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	83.3	84.5		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	81.2	82.4		
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	80.5	81.7		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	78.4	79.6		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	78.0	79.0		
OASPL		110.2	94.5	118.3		108.5	123.2		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 9 (PITCH ANGLE: 19.9 DEG)

DATA-POINT / RUN											
EN-1 / 163			EN-2 / 164			EN-3 / 165					
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA		
1	70.0	107.8	81.6	80.0	115.0	92.5	90.0	114.8	95.7		
2	140.0	105.4	89.3	160.0	108.9	95.5	180.0	110.8	99.9		
3	210.0	94.7	83.8	240.0	108.0	99.4	270.0	117.3	108.7		
4	280.0	98.2	89.6	320.0	108.7	102.1	360.0	114.2	109.4		
5	350.0	93.8	87.2	400.0	101.5	96.7	450.0	111.5	108.3		
6	420.0	84.4	79.6	480.0	100.6	97.4	540.0	115.0	111.8		
7	490.0	81.1	77.9	560.0	101.4	98.2	630.0	110.6	108.7		
8	560.0	81.8	78.6	640.0	96.2	94.3	720.0	111.1	110.3		
9	630.0	76.2	74.3	720.0	91.5	90.7	810.0	111.9	111.1		
10	700.0	69.0	67.1	800.0	93.7	92.9	900.0	106.5	106.5		
11	770.0	0.0	0.0	880.0	87.6	86.8	990.0	108.4	108.4		
12	840.0	0.0	0.0	960.0	84.4	84.4	1080.0	108.1	108.1		
13	910.0	0.0	0.0	1040.0	85.4	85.4	1170.0	105.9	106.5		
14	980.0	0.0	0.0	1120.0	80.3	80.3	1260.0	104.1	104.7		
15	1050.0	0.0	0.0	1200.0	80.1	80.7	1350.0	105.2	105.8		
16	1120.0	0.0	0.0	1280.0	74.9	75.5	1440.0	103.0	104.0		
17	1190.0	0.0	0.0	1360.0	71.9	72.5	1530.0	99.8	100.8		
18	1260.0	0.0	0.0	1440.0	73.0	74.0	1620.0	102.1	103.1		
19	1330.0	0.0	0.0	1520.0	68.1	69.1	1710.0	98.3	99.3		
20	1400.0	0.0	0.0	1600.0	0.0	0.0	1800.0	98.0	99.2		
21	1470.0	0.0	0.0	1680.0	0.0	0.0	1890.0	98.4	99.6		
22	1540.0	0.0	0.0	1760.0	0.0	0.0	1980.0	94.4	95.6		
23	1610.0	0.0	0.0	1840.0	0.0	0.0	2070.0	96.2	97.4		
24	1680.0	0.0	0.0	1920.0	0.0	0.0	2160.0	96.6	97.8		
25	1750.0	0.0	0.0	2000.0	0.0	0.0	2250.0	86.7	88.0		
26	1820.0	0.0	0.0	2080.0	0.0	0.0	2340.0	95.4	96.7		
27	1890.0	0.0	0.0	2160.0	0.0	0.0	2430.0	91.7	93.0		
28	1960.0	0.0	0.0	2240.0	0.0	0.0	2520.0	89.2	90.5		
29	2030.0	0.0	0.0	2320.0	0.0	0.0	2610.0	91.8	93.1		
30	2100.0	0.0	0.0	2400.0	0.0	0.0	2700.0	88.1	89.4		
31	2170.0	0.0	0.0	2480.0	0.0	0.0	2790.0	88.5	89.8		
32	2240.0	0.0	0.0	2560.0	0.0	0.0	2880.0	88.8	90.0		
33	2310.0	0.0	0.0	2640.0	0.0	0.0	2970.0	86.8	88.0		
34	2380.0	0.0	0.0	2720.0	0.0	0.0	3060.0	87.3	88.5		
35	2450.0	0.0	0.0	2800.0	0.0	0.0	3150.0	86.6	87.8		
36	2520.0	0.0	0.0	2880.0	0.0	0.0	3240.0	87.4	88.6		
37	2590.0	0.0	0.0	2960.0	0.0	0.0	3330.0	82.0	83.2		
38	2660.0	0.0	0.0	3040.0	0.0	0.0	3420.0	86.9	88.1		
39	2730.0	0.0	0.0	3120.0	0.0	0.0	3510.0	85.0	86.2		
40	2800.0	0.0	0.0	3200.0	0.0	0.0	3600.0	78.4	79.4		
OASPL		110.3	94.7			117.6	107.4			123.7	120.4

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 1 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
	EN-4 / 160			EN-5 / 161			EN-6 / 162			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	103.8	77.6	70.0	106.9	80.7	80.0	109.6	87.1	
2	120.0	93.5	77.4	140.0	97.7	81.6	160.0	107.6	94.2	
3	180.0	85.4	74.5	210.0	97.0	86.1	240.0	106.9	98.3	
4	240.0	81.5	72.9	280.0	91.9	83.3	320.0	104.1	97.5	
5	300.0	66.4	59.8	350.0	85.8	79.2	400.0	102.2	97.4	
6	360.0	68.3	63.5	420.0	84.2	79.4	480.0	98.2	95.0	
7	420.0	62.1	57.3	490.0	76.7	73.5	560.0	93.7	90.5	
8	480.0	56.2	53.0	560.0	68.9	65.7	640.0	93.7	91.8	
9	540.0	0.0	0.0	630.0	69.4	67.5	720.0	91.1	90.3	
10	600.0	0.0	0.0	700.0	63.0	61.1	800.0	87.9	87.1	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	85.0	84.2	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	82.6	82.6	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	80.2	80.2	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	74.8	74.8	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	69.2	69.8	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	67.6	68.2	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	66.4	67.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	63.8	64.8	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	63.3	64.3	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	

OASPL	104.2	82.1		107.9	90.4		114.0	104.6		

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: 23.7 DEG)

DATA-POINT / RUN										
EN-4 / 160			EN-5 / 161			EN-6 / 162				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	105.1	78.9	70.0	110.2	84.0	80.0	112.4	89.9	
2	120.0	99.4	83.3	140.0	105.5	89.4	160.0	112.7	99.3	
3	180.0	93.9	83.0	210.0	101.9	91.0	240.0	110.5	101.9	
4	240.0	86.1	77.5	280.0	98.1	89.5	320.0	107.4	100.8	
5	300.0	80.4	73.8	350.0	93.0	86.4	400.0	106.5	101.7	
6	360.0	71.5	66.7	420.0	89.9	85.1	480.0	105.5	102.3	
7	420.0	70.4	65.6	490.0	87.6	84.4	560.0	102.4	99.2	
8	480.0	68.8	65.6	560.0	78.8	75.6	640.0	100.2	98.3	
9	540.0	0.0	0.0	630.0	78.1	76.2	720.0	96.7	95.9	
10	600.0	0.0	0.0	700.0	71.4	69.5	800.0	96.4	95.6	
11	660.0	0.0	0.0	770.0	67.7	66.9	880.0	94.8	94.0	
12	720.0	0.0	0.0	840.0	64.3	63.5	960.0	91.9	91.9	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	88.5	88.5	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	86.1	86.1	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	84.5	85.1	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	82.1	82.7	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	80.0	80.6	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	75.7	76.7	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	74.0	75.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	71.0	72.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	67.0	68.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	67.1	68.1	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	61.5	62.7	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		106.4	87.7	112.2		96.4	118.1		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 3 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
EN-4 / 160			EN-5 / 161			EN-6 / 162				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	107.3	81.1	70.0	112.2	86.0	80.0	115.3	92.8	
2	120.0	100.8	84.7	140.0	108.3	92.2	160.0	113.5	100.1	
3	180.0	94.1	83.2	210.0	103.8	92.9	240.0	112.4	103.8	
4	240.0	87.4	78.8	280.0	99.3	90.7	320.0	109.5	102.9	
5	300.0	77.4	70.8	350.0	94.3	87.7	400.0	109.3	104.5	
6	360.0	78.5	73.7	420.0	93.3	88.5	480.0	106.0	102.8	
7	420.0	71.4	66.6	490.0	87.1	83.9	560.0	102.1	98.9	
8	480.0	53.8	50.6	560.0	83.6	80.4	640.0	101.6	99.7	
9	540.0	0.0	0.0	630.0	75.9	74.0	720.0	100.4	99.6	
10	600.0	0.0	0.0	700.0	75.1	73.2	800.0	97.0	96.2	
11	660.0	0.0	0.0	770.0	68.8	68.0	880.0	95.4	94.6	
12	720.0	0.0	0.0	840.0	63.5	62.7	960.0	93.8	93.8	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	91.2	91.2	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	87.0	87.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	85.8	86.4	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	84.8	85.4	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	81.0	81.6	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	78.2	79.2	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	74.5	75.5	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	73.8	74.8	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	70.4	71.4	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	67.4	68.4	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	62.9	64.1	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		108.4	88.7	114.4		98.4	120.0		111.5	

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 4 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
EN-4 / 160			EN-5 / 161			EN-6 / 162				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	108.9	82.7	70.0	114.0	87.8	80.0	118.0	95.5	
2	120.0	101.9	85.8	140.0	109.6	93.5	160.0	113.3	99.9	
3	180.0	95.0	84.1	210.0	103.7	92.8	240.0	113.4	104.8	
4	240.0	88.3	79.7	280.0	102.2	93.6	320.0	110.8	104.2	
5	300.0	78.5	71.9	350.0	96.3	89.7	400.0	107.8	103.0	
6	360.0	74.9	70.1	420.0	90.5	85.7	480.0	105.2	102.0	
7	420.0	73.2	68.4	490.0	86.2	83.0	560.0	103.6	100.4	
8	480.0	71.3	68.1	560.0	79.4	76.2	640.0	101.9	100.0	
9	540.0	0.0	0.0	630.0	78.8	76.9	720.0	98.0	97.2	
10	600.0	0.0	0.0	700.0	70.0	68.1	800.0	95.8	95.0	
11	660.0	0.0	0.0	770.0	73.1	72.3	880.0	93.9	93.1	
12	720.0	0.0	0.0	840.0	62.4	61.6	960.0	89.9	89.9	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	88.9	88.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	86.8	86.8	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	83.4	84.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	78.7	79.3	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	78.3	78.9	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	74.5	75.5	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	72.6	73.6	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	68.4	69.4	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	61.6	62.6	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		109.9	89.8	115.9		99.4	121.2		111.4	

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: 23.7 DEG)

DATA-POINT / RUN										
	EN-4 / 160			EN-5 / 161			EN-6 / 162			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	109.9	83.7	70.0	115.2	89.0	80.0	120.1	97.6	
2	120.0	102.7	86.6	140.0	110.5	94.4	160.0	114.1	100.7	
3	180.0	93.2	82.3	210.0	101.5	90.6	240.0	111.4	102.8	
4	240.0	83.8	75.2	280.0	100.9	92.3	320.0	113.6	107.0	
5	300.0	78.6	72.0	350.0	98.0	91.4	400.0	107.7	102.9	
6	360.0	78.4	73.6	420.0	90.6	85.8	480.0	102.1	98.9	
7	420.0	56.2	51.4	490.0	82.8	79.6	560.0	102.6	99.4	
8	480.0	0.0	0.0	560.0	81.4	78.2	640.0	100.1	98.2	
9	540.0	0.0	0.0	630.0	71.7	69.8	720.0	93.6	92.8	
10	600.0	0.0	0.0	700.0	68.4	66.5	800.0	90.4	89.6	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	89.1	88.3	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	88.1	88.1	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	83.9	83.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	78.9	78.9	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	78.4	79.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	77.1	77.7	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	70.0	70.6	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	67.9	68.9	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		110.7	89.7	116.8		99.2	122.5		111.3	

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

M. CROPHONE: MP 6 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
EN-4 / 160			EN-5 / 161			EN-6 / 162				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	109.7	83.5	70.0	115.8	89.6	80.0	120.9	98.4	
2	120.0	101.5	85.4	140.0	108.6	92.5	160.0	112.8	99.4	
3	180.0	89.5	78.6	210.0	98.3	87.4	240.0	109.7	101.1	
4	240.0	80.7	72.1	280.0	97.9	89.3	320.0	109.6	103.0	
5	300.0	79.6	73.0	350.0	90.6	84.0	400.0	100.2	95.4	
6	360.0	70.4	65.6	420.0	79.9	75.1	480.0	95.3	92.1	
7	420.0	63.6	58.8	490.0	74.8	71.6	560.0	97.6	94.4	
8	480.0	0.0	0.0	560.0	76.0	72.8	640.0	91.0	89.1	
9	540.0	0.0	0.0	630.0	65.0	63.1	720.0	77.0	76.2	
10	600.0	0.0	0.0	700.0	59.7	57.8	800.0	86.4	85.6	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	79.8	79.0	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	68.4	68.4	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		110.3	88.3	116.7		96.4	122.1		107.6	

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: 23.7 DEG)

DATA-POINT / RUN										
EN-4 / 160				EN-5 / 161			EN-6 / 162			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	106.9	80.7	70.0	113.8	87.6	80.0	116.3	93.8	
2	120.0	91.3	75.2	140.0	100.1	84.0	160.0	104.8	91.4	
3	180.0	81.0	70.1	210.0	88.8	77.9	240.0	101.0	92.4	
4	240.0	71.4	62.8	280.0	79.6	71.0	320.0	92.8	86.2	
5	300.0	69.3	62.7	350.0	72.0	65.4	400.0	86.0	81.2	
6	360.0	0.0	0.0	420.0	76.2	71.4	480.0	78.9	75.7	
7	420.0	0.0	0.0	490.0	71.2	68.0	560.0	74.4	71.2	
8	480.0	0.0	0.0	560.0	67.1	63.9	640.0	72.9	71.0	
9	540.0	0.0	0.0	630.0	66.1	64.2	720.0	71.7	70.9	
10	600.0	0.0	0.0	700.0	0.0	0.0	800.0	71.4	70.6	
11	660.0	0.0	0.0	770.0	0.0	0.0	880.0	0.0	0.0	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	0.0	0.0	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	0.0	0.0	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	0.0	0.0	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	0.0	0.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	0.0	0.0	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	0.0	0.0	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	0.0	0.0	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		107.0	82.2	114.0		89.7	116.7		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 8 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
EN-4 / 160			EN-5 / 161			EN-6 / 162				
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	106.9	80.7	70.0	111.0	84.8	80.0	115.1	92.6	
2	120.0	100.2	84.1	140.0	108.5	92.4	160.0	112.5	99.1	
3	180.0	92.7	81.8	210.0	103.7	92.8	240.0	111.2	102.6	
4	240.0	86.5	77.9	280.0	99.9	91.3	320.0	108.6	102.0	
5	300.0	81.9	75.3	350.0	93.9	87.3	400.0	106.4	101.6	
6	360.0	73.7	68.9	420.0	90.9	86.1	480.0	103.6	100.4	
7	420.0	0.0	0.0	490.0	87.4	84.2	560.0	101.2	98.0	
8	480.0	0.0	0.0	560.0	82.6	79.4	640.0	99.3	97.4	
9	540.0	0.0	0.0	630.0	76.3	74.4	720.0	97.2	96.4	
10	600.0	0.0	0.0	700.0	75.6	73.7	800.0	95.4	94.6	
11	660.0	0.0	0.0	770.0	71.9	71.1	880.0	91.7	90.9	
12	720.0	0.0	0.0	840.0	62.3	61.5	960.0	89.7	89.7	
13	780.0	0.0	0.0	910.0	60.1	60.1	1040.0	86.9	86.9	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	84.3	84.3	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	81.9	82.5	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	79.0	79.6	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	78.0	78.6	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	73.3	74.3	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	0.0	0.0	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		107.9	88.0		113.7	98.2		119.1	109.6	

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 9 (PITCH ANGLE: 23.7 DEG)

DATA-POINT / RUN										
	EN-4 / 160			EN-5 / 161			EN-6 / 162			
HN	F	SPL	SPLA	F	SPL	SPLA	F	SPL	SPLA	
1	60.0	107.5	81.3	70.0	111.4	85.2	80.0	116.8	94.3	
2	120.0	100.7	84.6	140.0	107.1	91.0	160.0	111.5	98.1	
3	180.0	91.6	80.7	210.0	97.3	86.4	240.0	110.3	101.7	
4	240.0	82.3	73.7	280.0	101.5	92.9	320.0	110.8	104.2	
5	300.0	81.3	74.7	350.0	97.2	90.6	400.0	103.2	98.4	
6	360.0	74.8	70.0	420.0	87.7	82.9	480.0	102.6	99.4	
7	420.0	65.7	60.9	490.0	85.2	82.0	560.0	103.2	100.0	
8	480.0	0.0	0.0	560.0	85.6	82.4	640.0	98.0	96.1	
9	540.0	0.0	0.0	630.0	78.1	76.2	720.0	94.8	94.0	
10	600.0	0.0	0.0	700.0	75.6	73.7	800.0	96.1	95.3	
11	660.0	0.0	0.0	770.0	71.1	70.3	880.0	90.2	89.4	
12	720.0	0.0	0.0	840.0	0.0	0.0	960.0	87.8	87.8	
13	780.0	0.0	0.0	910.0	0.0	0.0	1040.0	89.5	89.5	
14	840.0	0.0	0.0	980.0	0.0	0.0	1120.0	85.7	85.7	
15	900.0	0.0	0.0	1050.0	0.0	0.0	1200.0	80.4	81.0	
16	960.0	0.0	0.0	1120.0	0.0	0.0	1280.0	78.7	79.3	
17	1020.0	0.0	0.0	1190.0	0.0	0.0	1360.0	79.1	79.7	
18	1080.0	0.0	0.0	1260.0	0.0	0.0	1440.0	75.8	76.8	
19	1140.0	0.0	0.0	1330.0	0.0	0.0	1520.0	65.2	66.2	
20	1200.0	0.0	0.0	1400.0	0.0	0.0	1600.0	0.0	0.0	
21	1260.0	0.0	0.0	1470.0	0.0	0.0	1680.0	0.0	0.0	
22	1320.0	0.0	0.0	1540.0	0.0	0.0	1760.0	0.0	0.0	
23	1380.0	0.0	0.0	1610.0	0.0	0.0	1840.0	0.0	0.0	
24	1440.0	0.0	0.0	1680.0	0.0	0.0	1920.0	0.0	0.0	
25	1500.0	0.0	0.0	1750.0	0.0	0.0	2000.0	0.0	0.0	
26	1560.0	0.0	0.0	1820.0	0.0	0.0	2080.0	0.0	0.0	
27	1620.0	0.0	0.0	1890.0	0.0	0.0	2160.0	0.0	0.0	
28	1680.0	0.0	0.0	1960.0	0.0	0.0	2240.0	0.0	0.0	
29	1740.0	0.0	0.0	2030.0	0.0	0.0	2320.0	0.0	0.0	
30	1800.0	0.0	0.0	2100.0	0.0	0.0	2400.0	0.0	0.0	
31	1860.0	0.0	0.0	2170.0	0.0	0.0	2480.0	0.0	0.0	
32	1920.0	0.0	0.0	2240.0	0.0	0.0	2560.0	0.0	0.0	
33	1980.0	0.0	0.0	2310.0	0.0	0.0	2640.0	0.0	0.0	
34	2040.0	0.0	0.0	2380.0	0.0	0.0	2720.0	0.0	0.0	
35	2100.0	0.0	0.0	2450.0	0.0	0.0	2800.0	0.0	0.0	
36	2160.0	0.0	0.0	2520.0	0.0	0.0	2880.0	0.0	0.0	
37	2220.0	0.0	0.0	2590.0	0.0	0.0	2960.0	0.0	0.0	
38	2280.0	0.0	0.0	2660.0	0.0	0.0	3040.0	0.0	0.0	
39	2340.0	0.0	0.0	2730.0	0.0	0.0	3120.0	0.0	0.0	
40	2400.0	0.0	0.0	2800.0	0.0	0.0	3200.0	0.0	0.0	
OASPL		108.4	87.8	113.3		97.6	119.7		109.5	

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 preceding 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.

END

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