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AN EXPERIMENTAL INVESTIGATION OF TANGENTIAL BLOWING TO REDUCE BUFFET RESPONSE OF THE VERTICAL TAILS OF AN F-15 WIND TUNNEL MODEL

VOLUME 2 -- RESPONSE DATA

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JANUARY 1999

FINAL REPORT FOR 06/01/1996 – 12/31/1998

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This technical report has been reviewed and is approved for publication.

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This is Volume 2 of AN EXPERIMENTAL INVESTIGATION OF TANGENTIAL BLOWING TO REDUCE BUFFET RESPONSE OF THE VERTICAL TAILS OF AN F-15 WIND TUNNEL MODEL. This volume presents the detailed PSD graphs and summary tables of rms response data from those graphs. To aid with the comprehension of this data, figures from Volume 1 showing the model, setup, and model instrumentation are repeated here. The reader will most likely have to refer to Volume 1 of added tie-in.

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FOREWORD

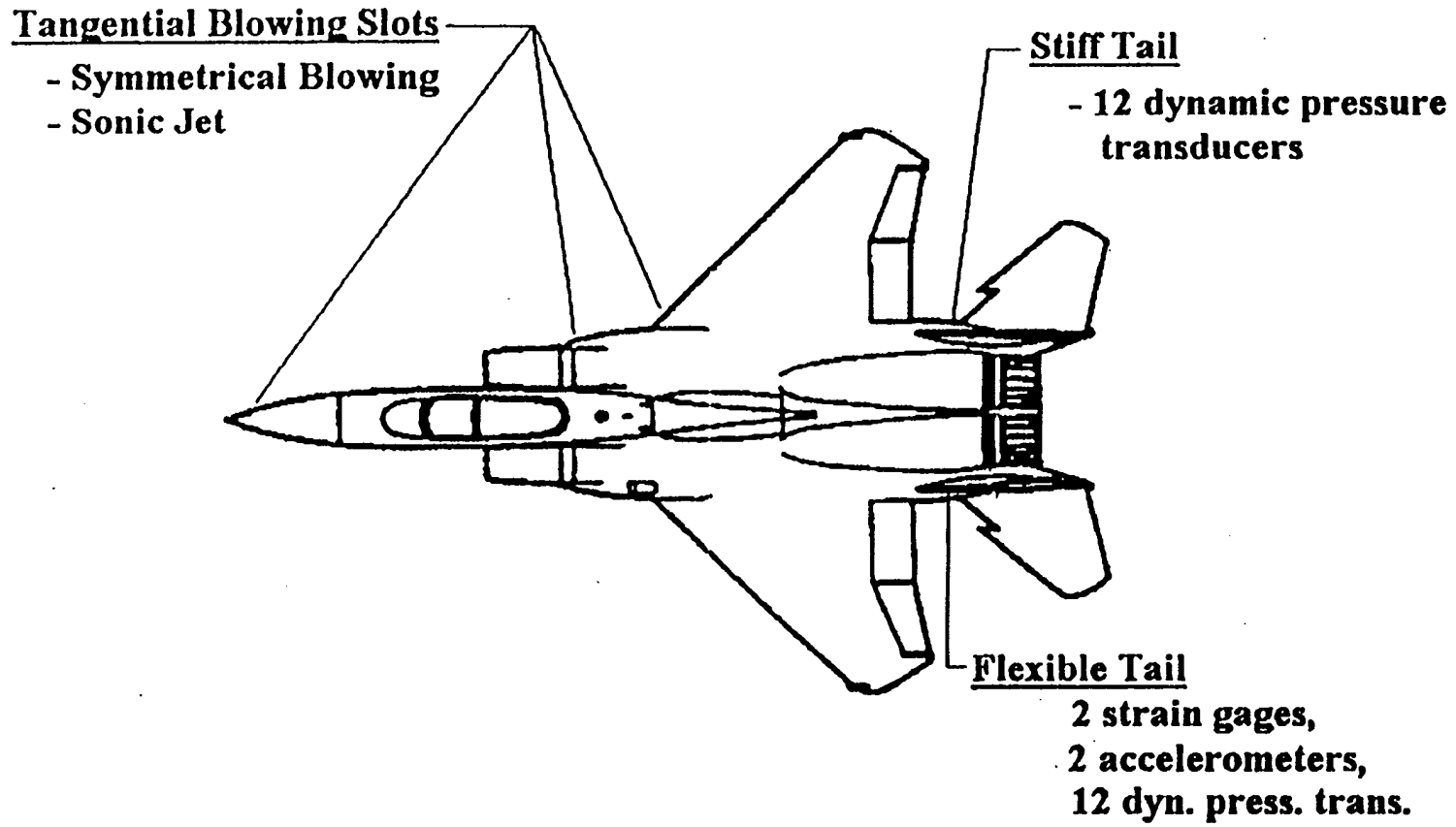
This report was prepared by Dr. Marty Allen Ferman, Consultant for CSA Engineering of Palo Alto, California. The work was performed under Contract F33615-94-3200, Task 3413-31 for the Air Vehicles Directorate of the Air Force Research Laboratory, Wright-Patterson Air Force Base, Ohio. Mr. Elijah W. Turner was the Air Force Project Engineer. This effort was sponsored by the Unsteady Aerodynamics Integrated Product Team (IPT) of the Air Vehicles Directorate, Air Force Research Laboratory. Mr. Lawrence J. Huttsell was Chairman of the IPT.

The work by Dr. Ferman was conducted between 15 June 1996 and 15 October 1998 under job order number 24044951. The data presented in this report were reduced by Mr. Dansen Brown of the Acoustics and Sonic Fatigue Branch, Structures Division, Air Vehicles Directorate, Air Force Research Laboratory from the 4.7% F-15 Vertical Tail Buffet Test.

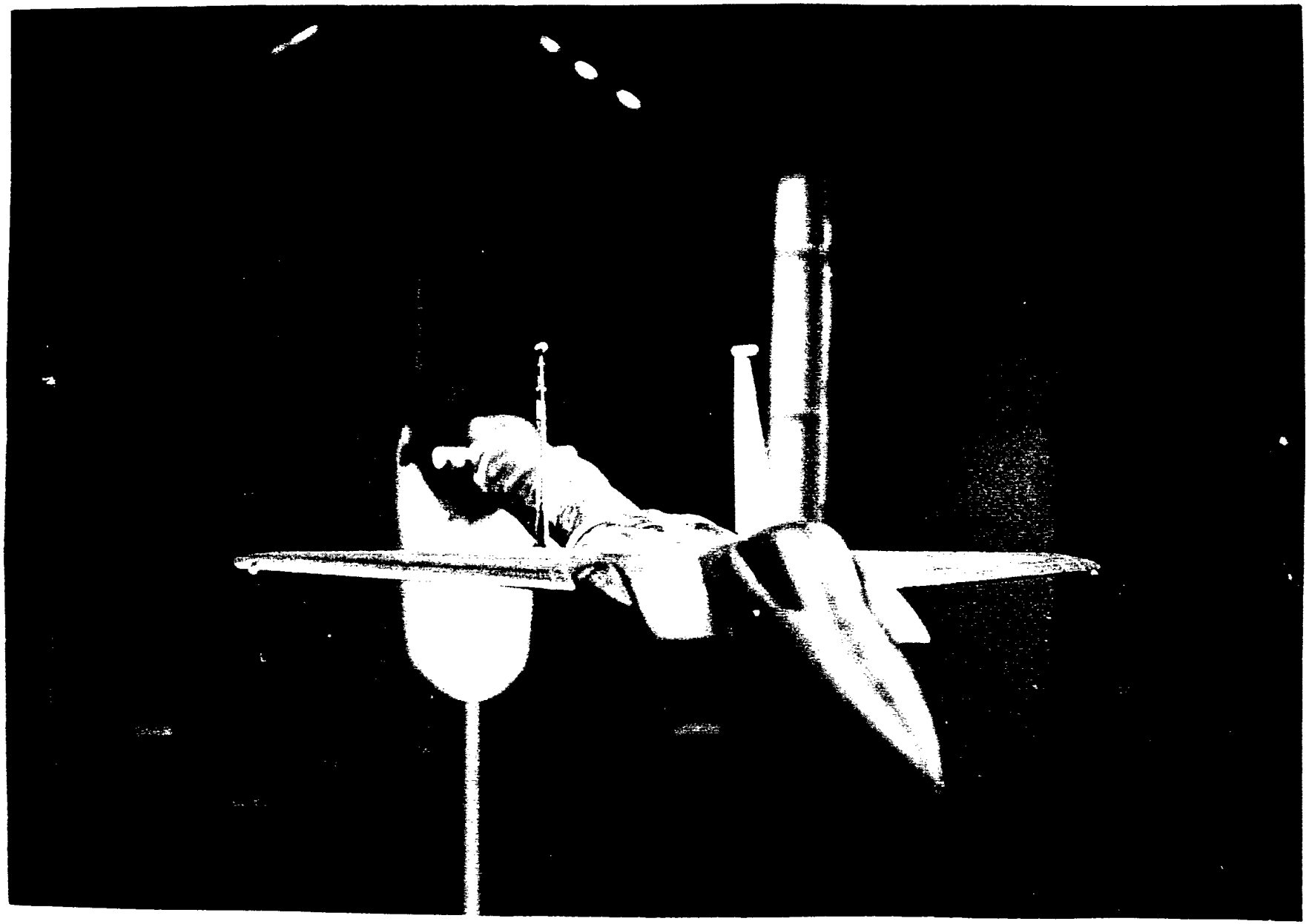
The Buffet Tests were conducted in the Subsonic Aerodynamics Research Laboratory (SARL) wind tunnel at Wright-Patterson Air Force Base in October and November of 1995. The Test Engineer was Mr. Jon Tinapple of the Aerodynamic Configuration Branch, Aeronautical Sciences Division, Air Vehicles Directorate, Air Force Research Laboratory.

This report is Volume 2 of "AN EXPERIMENTAL INVESTIGATION OF TANGENTIAL BLOWING TO REDUCE BUFFET RESPONSE OF THE VERTICAL TAILS OF AN F-15 WIND TUNNEL MODEL. This volume presents the detailed PSD graphs and summary tables of rms response data from those graphs. To aid with the comprehension of this data, figures from Volume 1 (AFRL-VA-WP-TR-3018), showing the model, setup, and model instrumentation are repeated at the beginning of this report. The reader will most likely have to refer to Volume 1 for added tie-in.

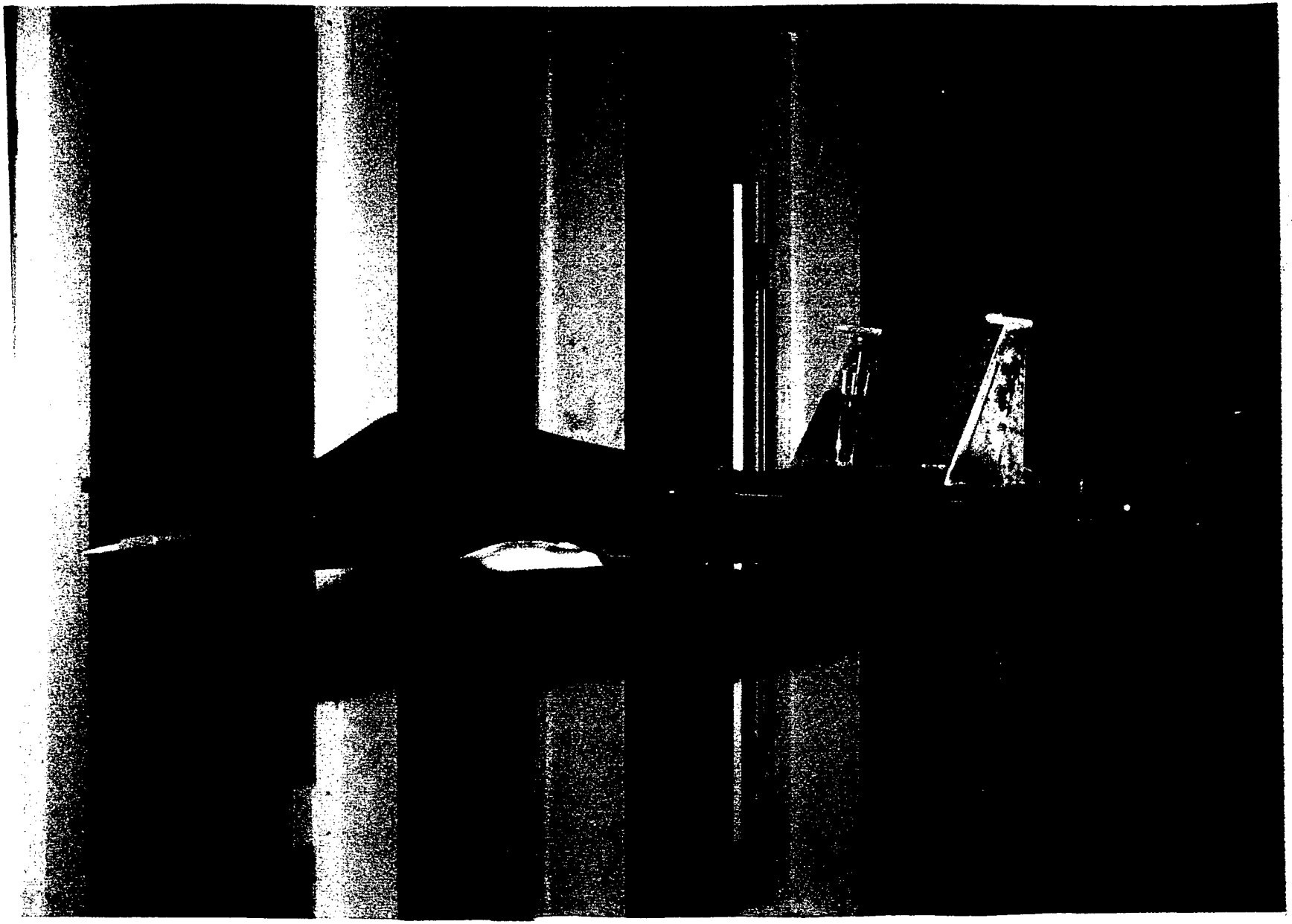
This report was submitted in January 1999 for publication as an Air Force Research Laboratory Technical Report.



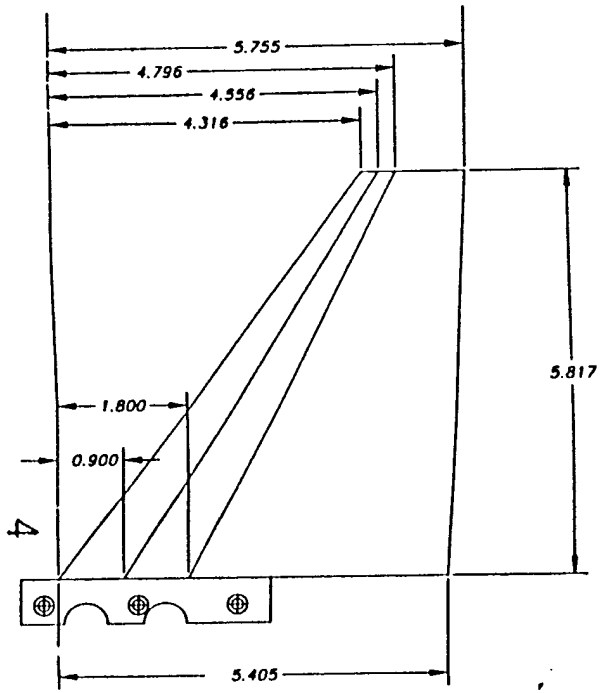
PLANVIEW OF 4.7 % F-15 WIND TUNNEL MODEL



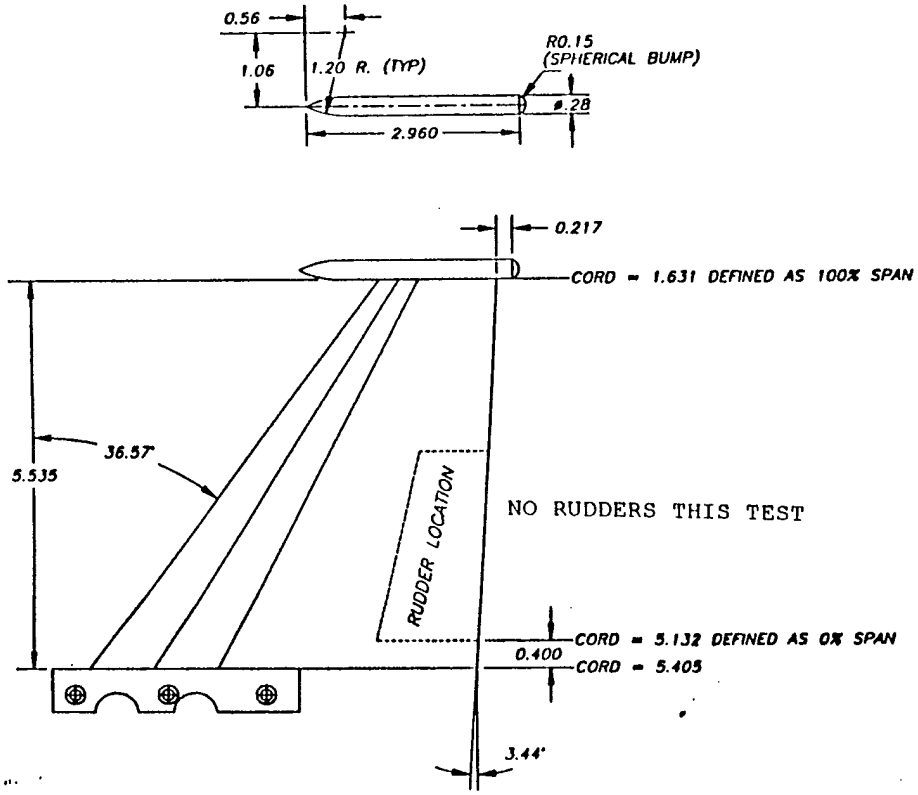
4.7 % BUFFET MODEL IN WIND TUNNEL



4.7 % MODEL - VIEW FROM FLEX TAIL SIDE

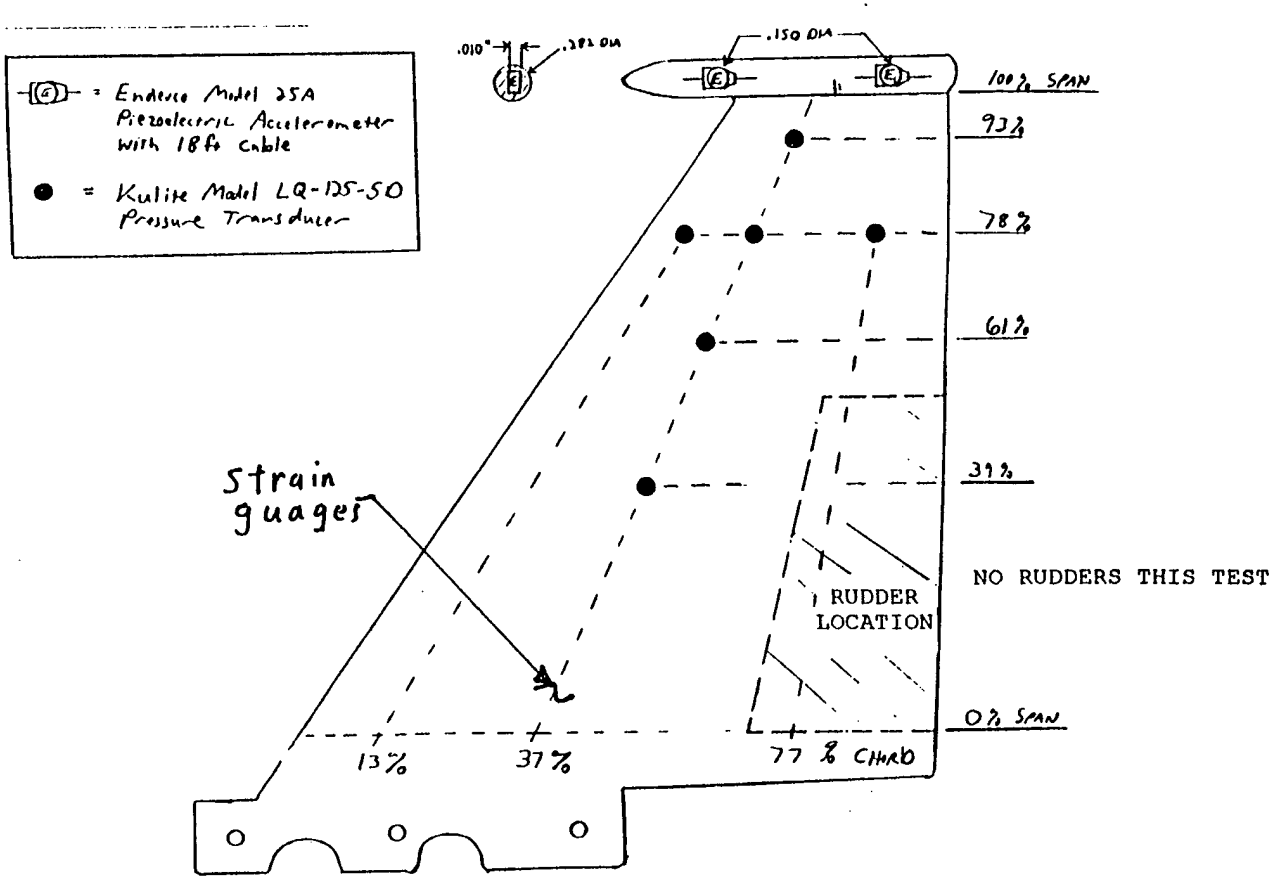


VERT. TAIL GEOMETRY WITHOUT TIP PODS

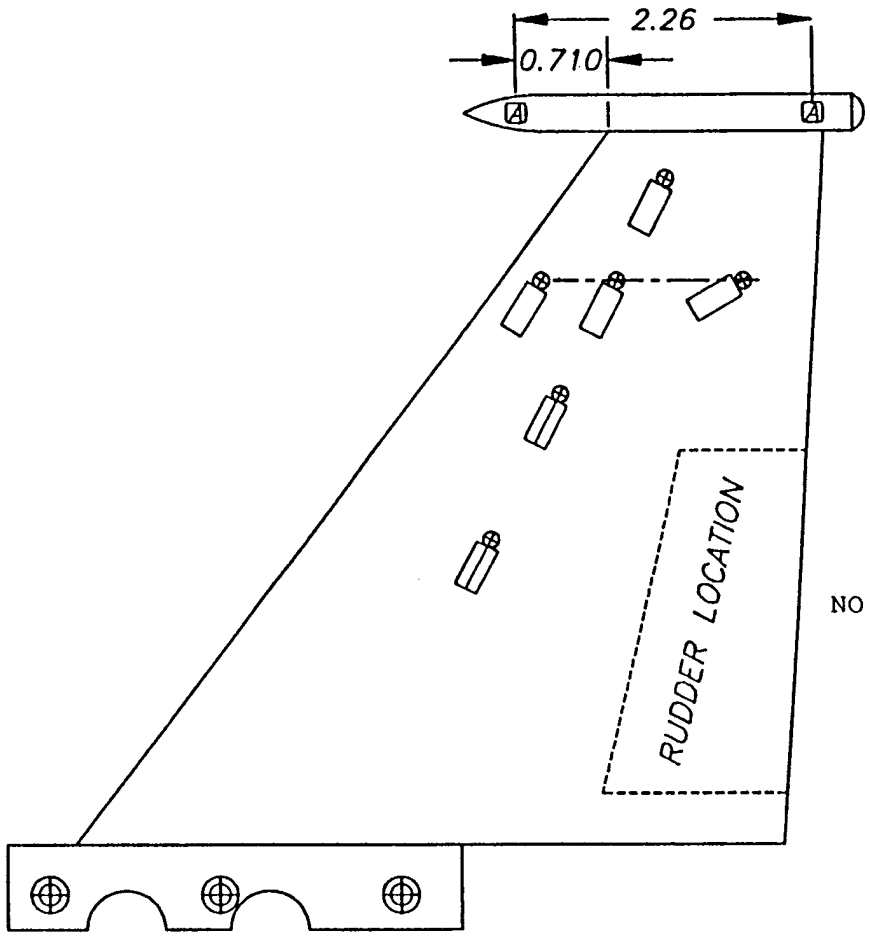


DETAILS OF VERT. TAIL WITH TIP POD

GEOMETRY OF 4.7% SCALE VERTICAL TAIL



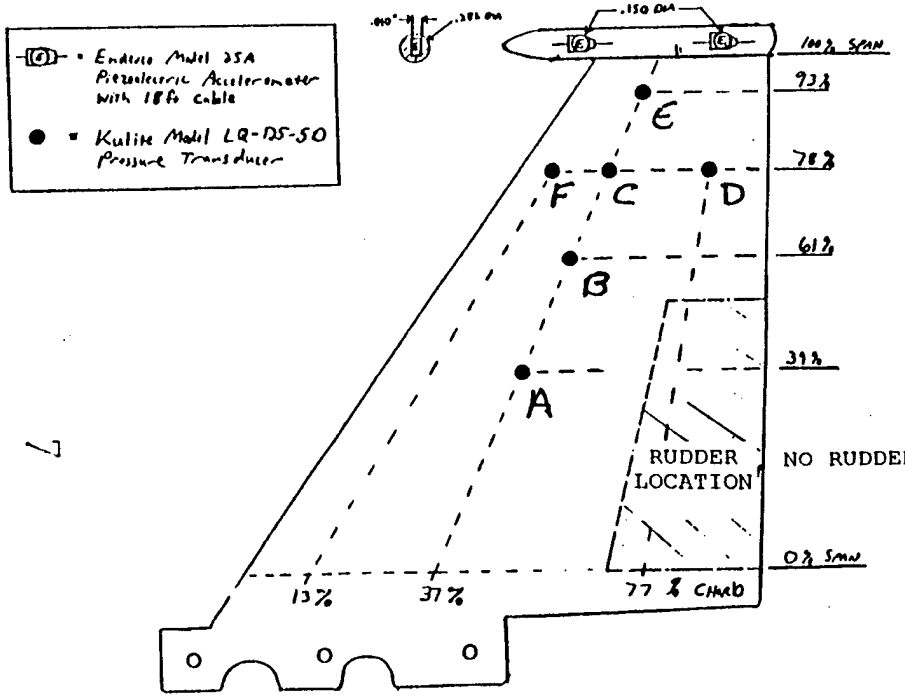
INSTRUMENTATION LAYOUT ON FLEXIBLE VERTICAL TAIL



NO RUDDERS IN THIS TEST

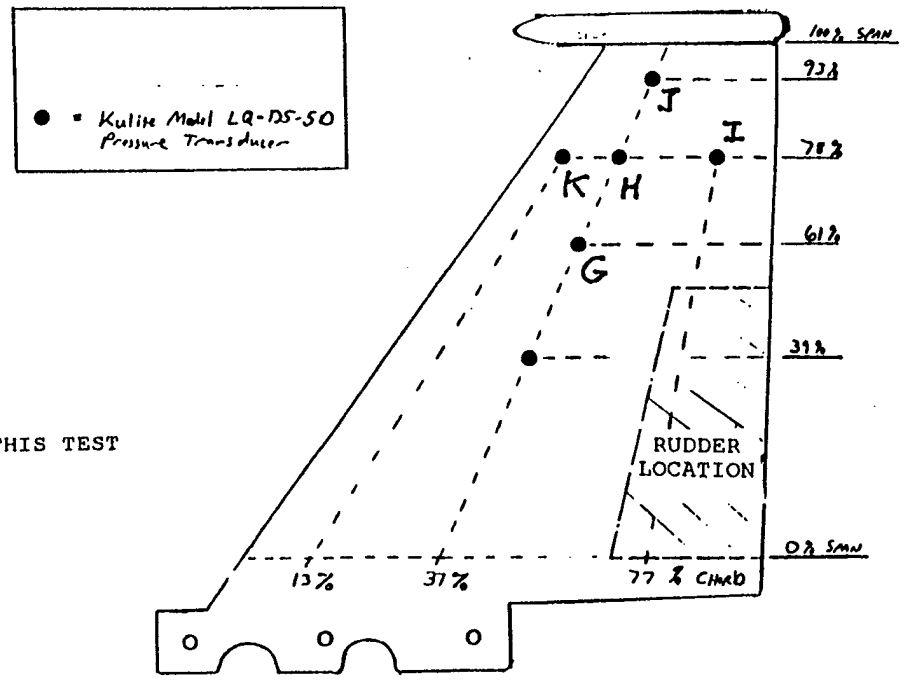
PRESSURE TRANSDUCER LAYOUT - BOTH TAILS

FLEXIBLE TAIL



NO RUDDERS THIS TEST

RIGID TAIL



PRESSURE TRANSDUCERS- LETTER INDENTIFICATION

FLEXIBLE TAIL RESPONSE
BENDING AND TORSION

2.1 Q=56 PSF

2.1.1 PSD GRAPHS

2.1.1.1 WBP = 0, 45, 65 psi,

2.1.1.2 GBP = 65 psi

2.1.1.3 GBP = 65 psi, WBP = 65 psi

2.1.1.4 NBP = 87 psi

2.1.1.5 NBP = 87 psi, GBP = 65 psi

2.1.1.6 NBP = 87 psi, GBP = 65 psi

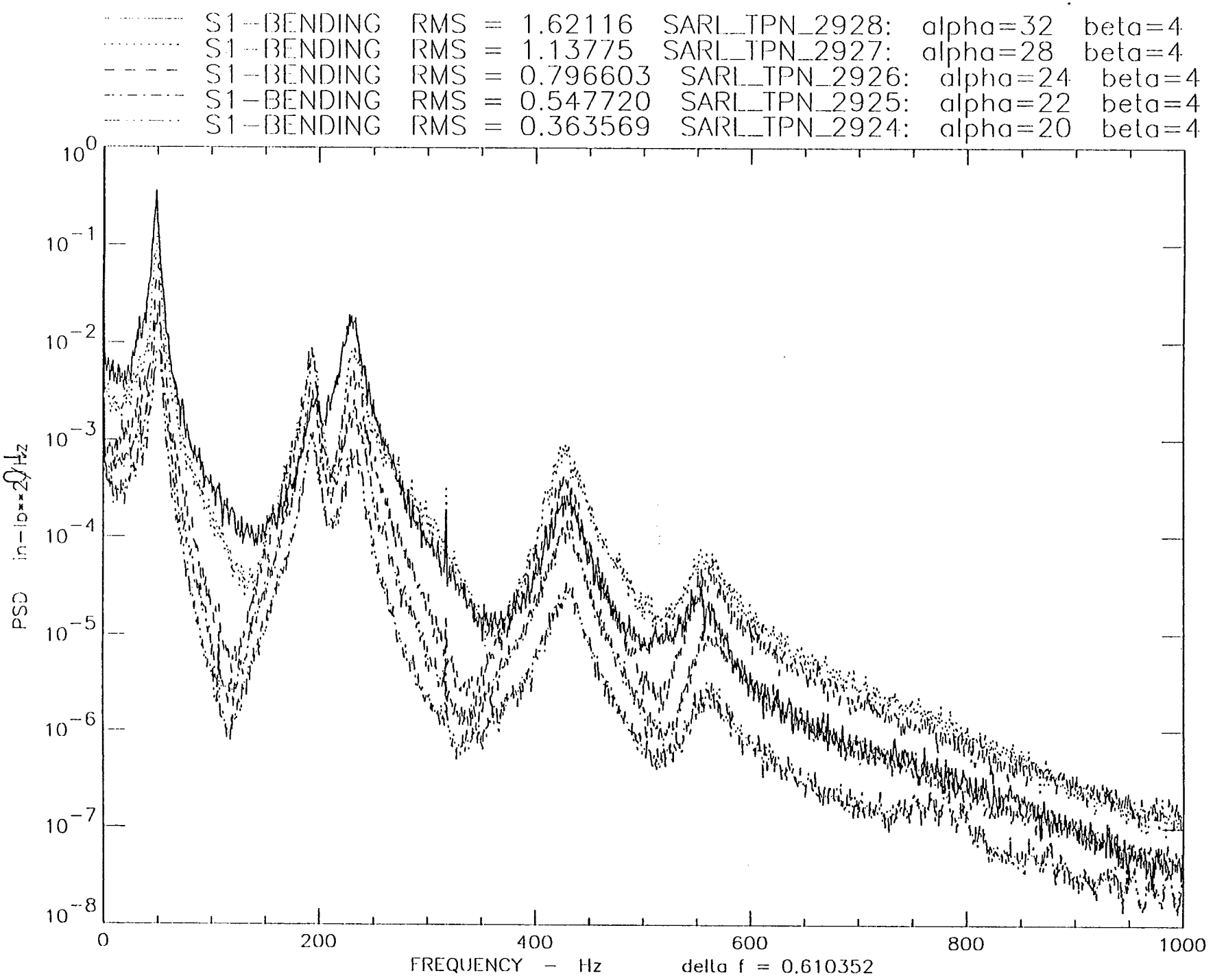
2.1.2 RMS SUMMARY TABS

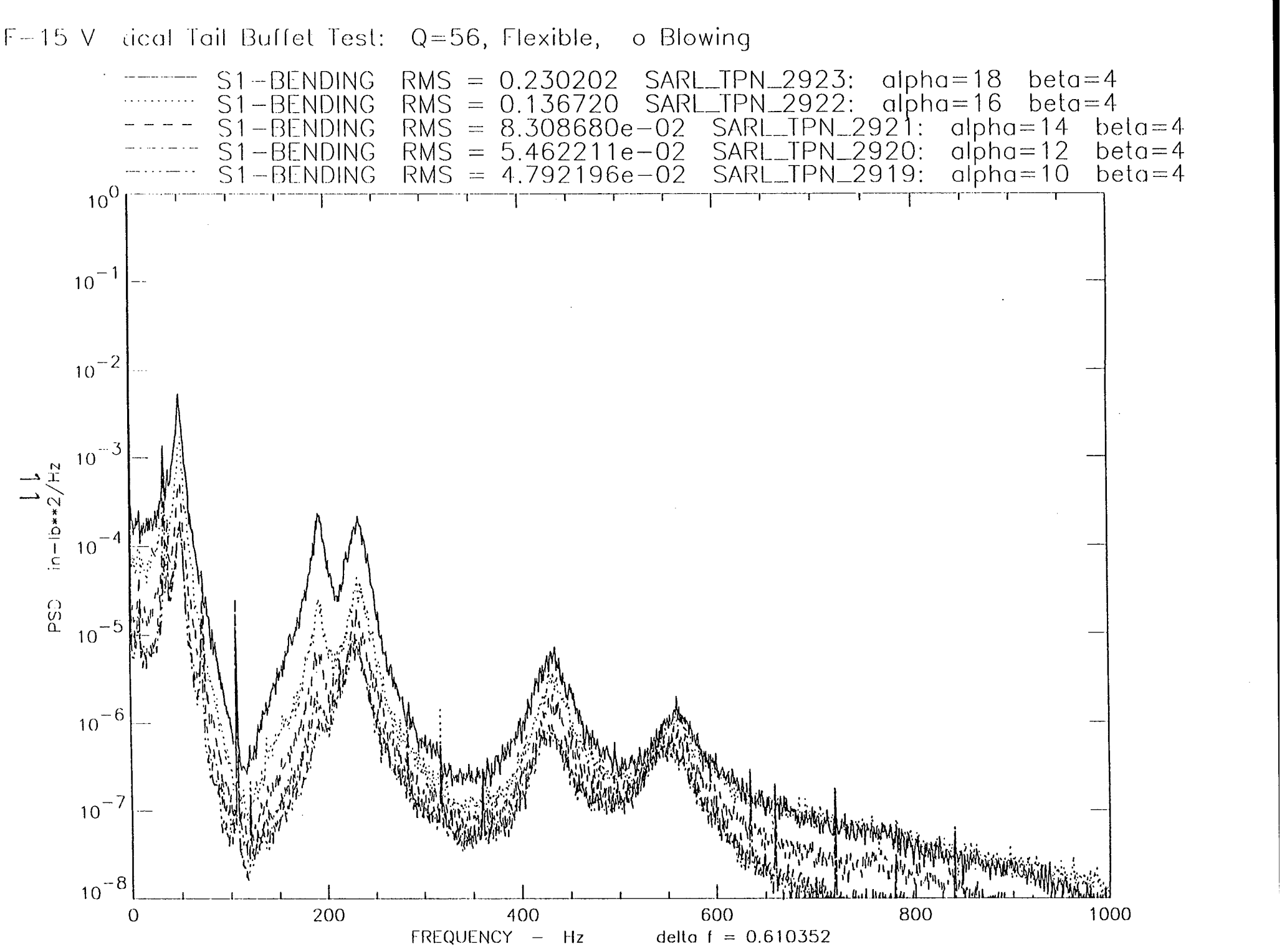
FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION

PSD GRAPHS
Q= 56 PSF

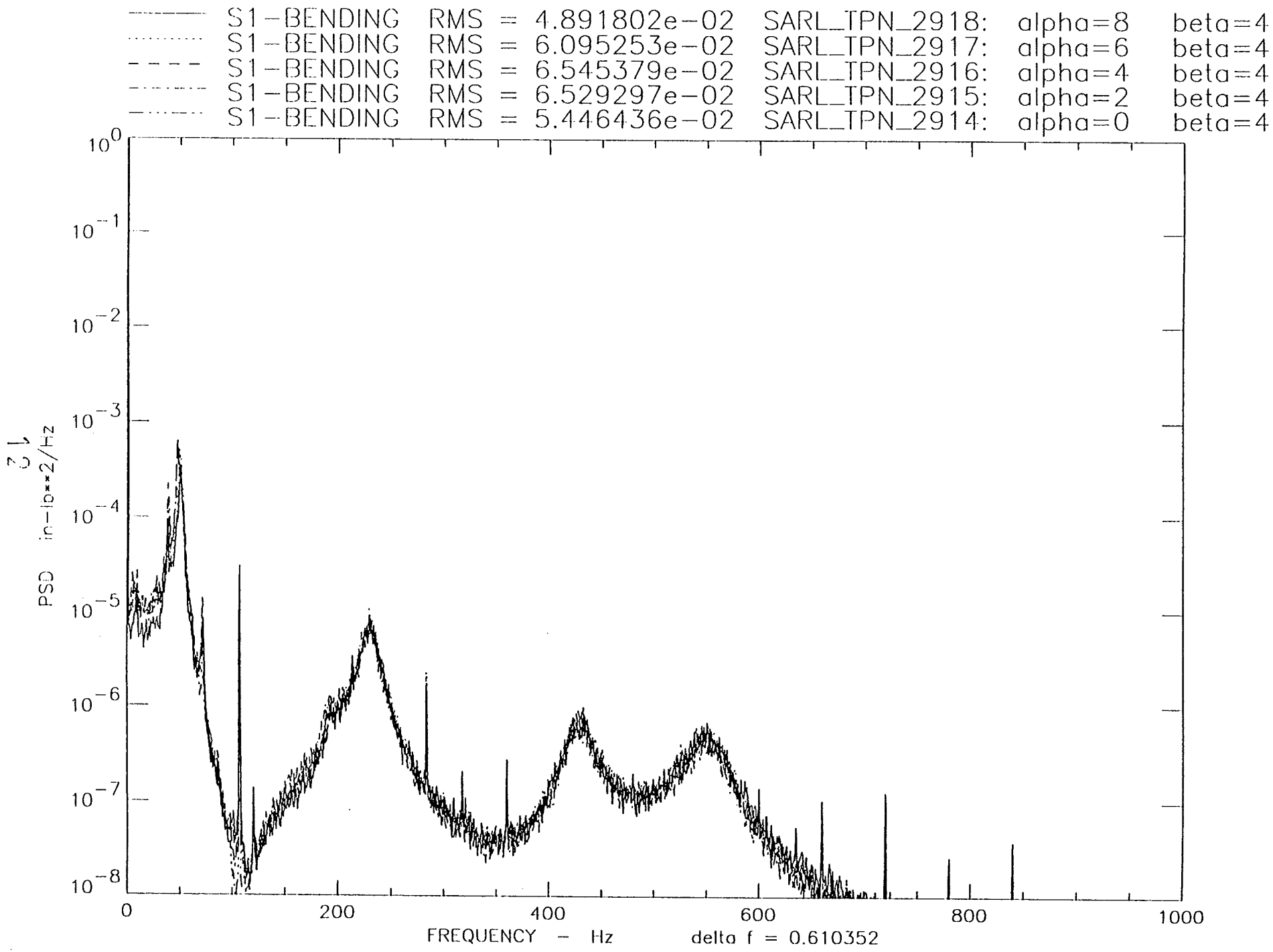
2.1.1.1 WBP = 0, BETA= 0, + 4, - 4, ALPHA= 0.....32 Deg

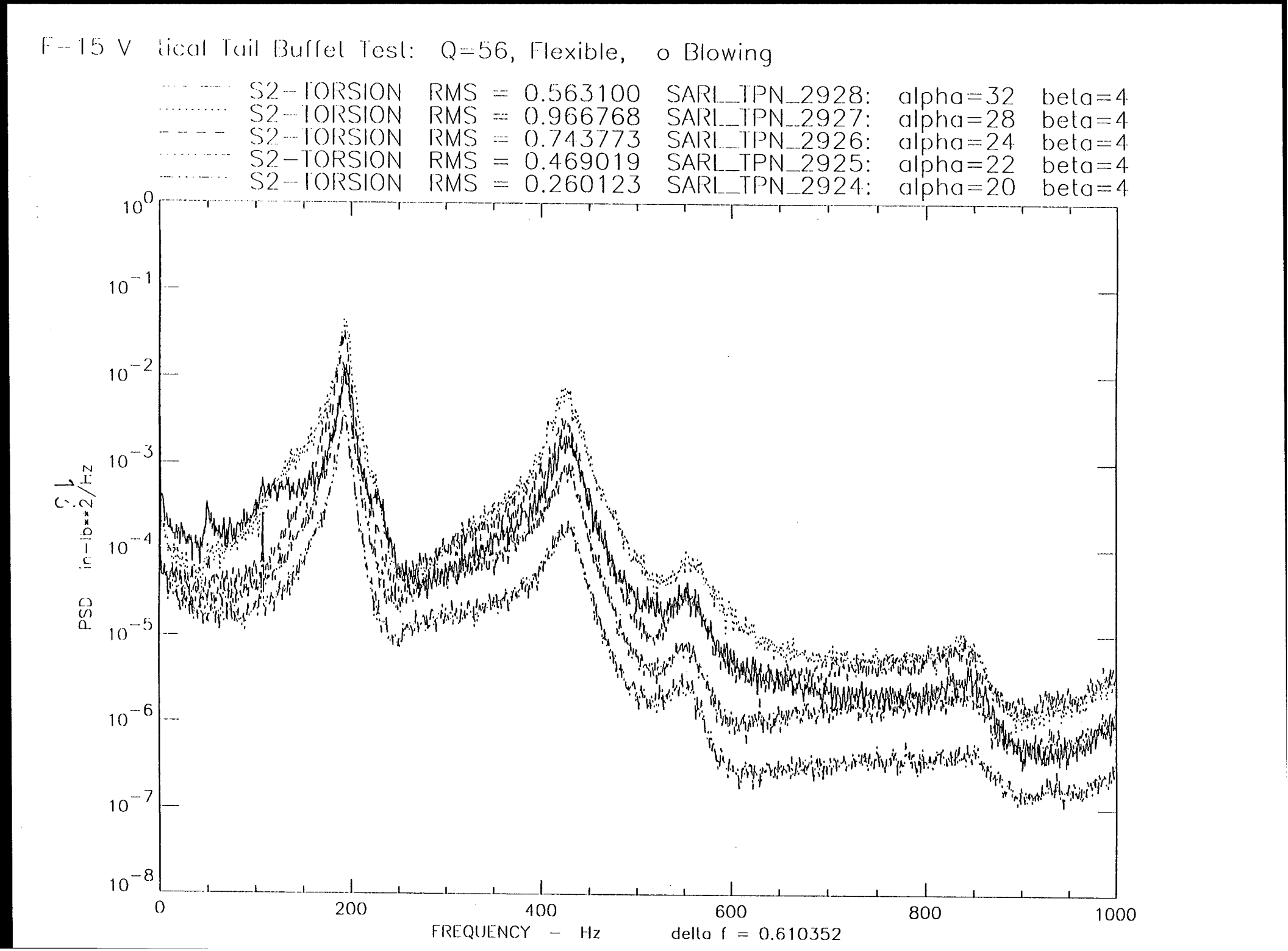
F-15 Vertical Tail Buffet Test: Q=56, Flexible, o Blowing

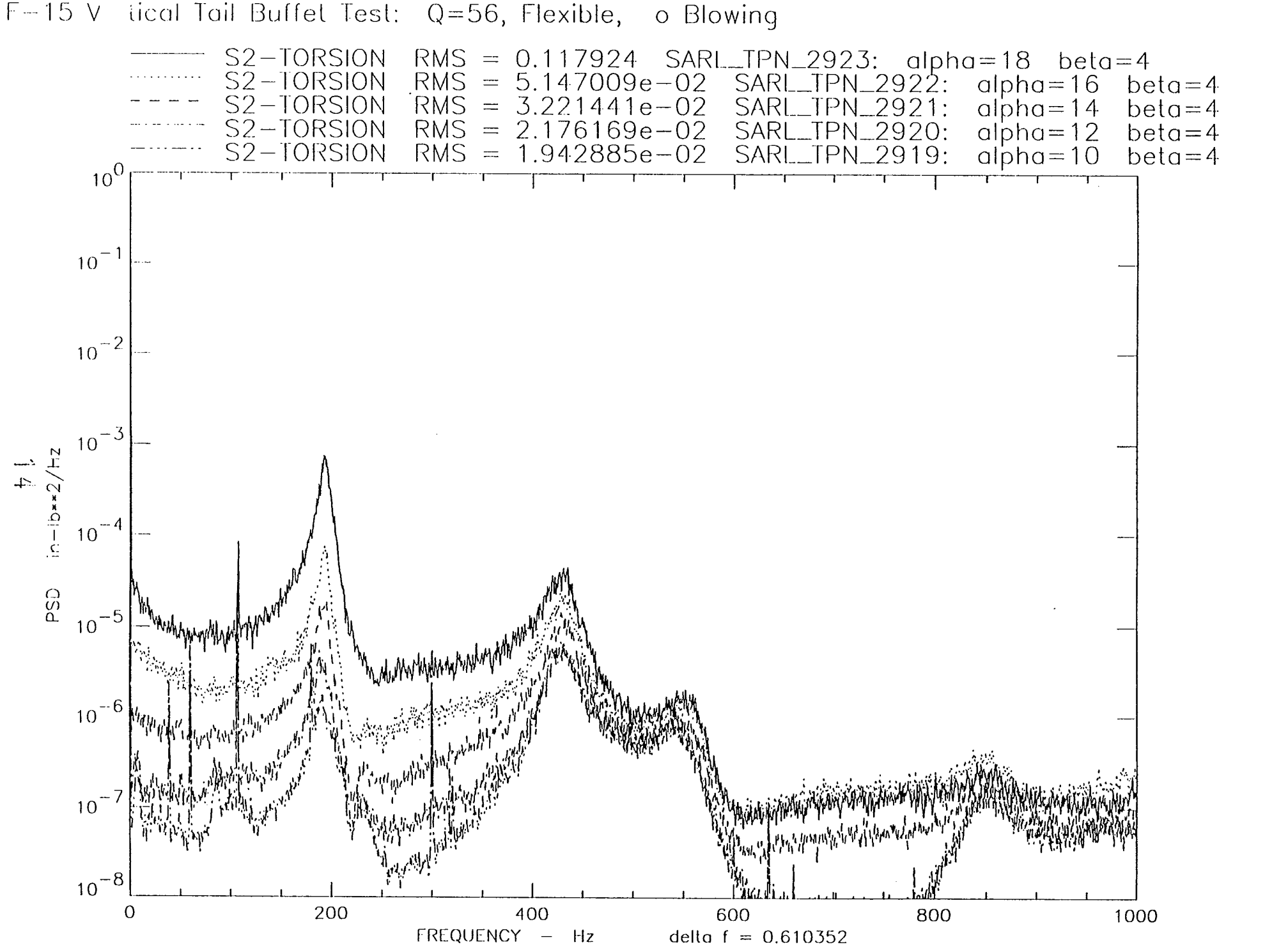



F-15 V dical Tail Buffet Test: Q=56, Flexible, o Blowing
S1-BENDING RMS = 0.230202 SARL_TPN_2923: alpha=18 beta=4
S1-BENDING RMS = 0.136720 SARL_TPN_2922: alpha=16 beta=4
S1-BENDING RMS = 8.308680e-02 SARL_TPN_2921: alpha=14 beta=4
S1-BENDING RMS = 5.462211e-02 SARL_TPN_2920: alpha=12 beta=4
S1-BENDING RMS = 4.792196e-02 SARL_TPN_2919: alpha=10 beta=4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
0
200
400
600
800
1000

F-15 V tical Tail Buffet Test: Q=56, Flexible, .o Blowing

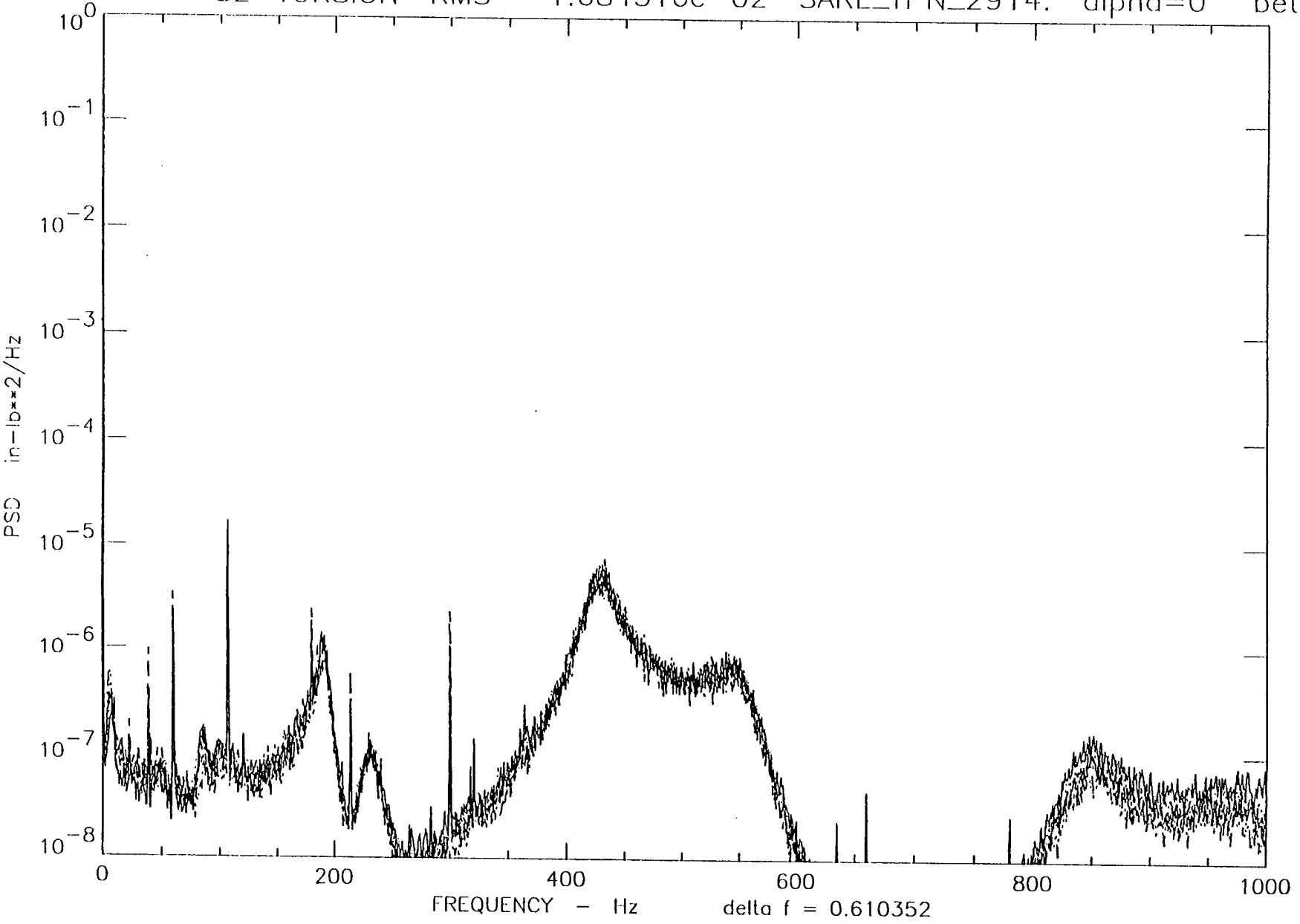



F-15 V tical Tail Buffet Test: Q=56, Flexible, o Blowing
S2-TORSION RMS = 0.563100 SARL_TPN_2928: alpha=32 beta=4
S2-TORSION RMS = 0.966768 SARL_TPN_2927: alpha=28 beta=4
S2-TORSION RMS = 0.743773 SARL_TPN_2926: alpha=24 beta=4
S2-TORSION RMS = 0.469019 SARL_TPN_2925: alpha=22 beta=4
S2-TORSION RMS = 0.260123 SARL_TPN_2924: alpha=20 beta=4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 V tical Tail Buffet Test: Q=56, Flexible, o Blowing
S2-TORSION RMS = 0.117924 SARL_TPN_2923: alpha=18 beta=4
S2-TORSION RMS = 5.147009e-02 SARL_TPN_2922: alpha=16 beta=4
S2-TORSION RMS = 3.221441e-02 SARL_TPN_2921: alpha=14 beta=4
S2-TORSION RMS = 2.176169e-02 SARL_TPN_2920: alpha=12 beta=4
S2-TORSION RMS = 1.942885e-02 SARL_TPN_2919: alpha=10 beta=4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

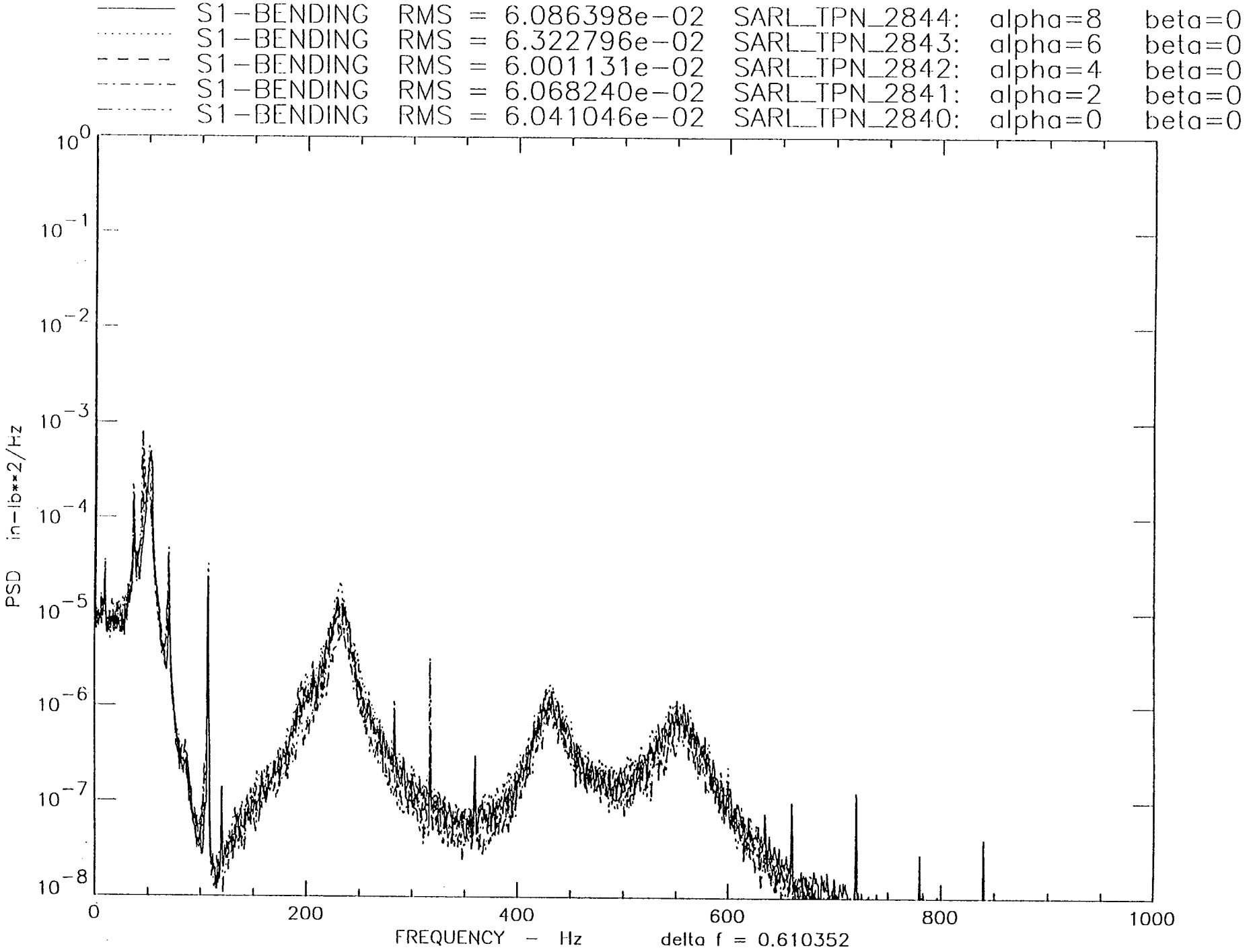
F-15 V tical Tail Buffet Test: Q=56, Flexible, o Blowing

S2-TORSION RMS = 1.746896e-02 SARL_TPN_2918: alpha=8 beta=4
S2-TORSION RMS = 1.743821e-02 SARL_TPN_2917: alpha=6 beta=4
S2-TORSION RMS = 1.732974e-02 SARL_TPN_2916: alpha=4 beta=4
S2-TORSION RMS = 1.646047e-02 SARL_TPN_2915: alpha=2 beta=4
S2-TORSION RMS = 1.684516e-02 SARL_TPN_2914: alpha=0 beta=4

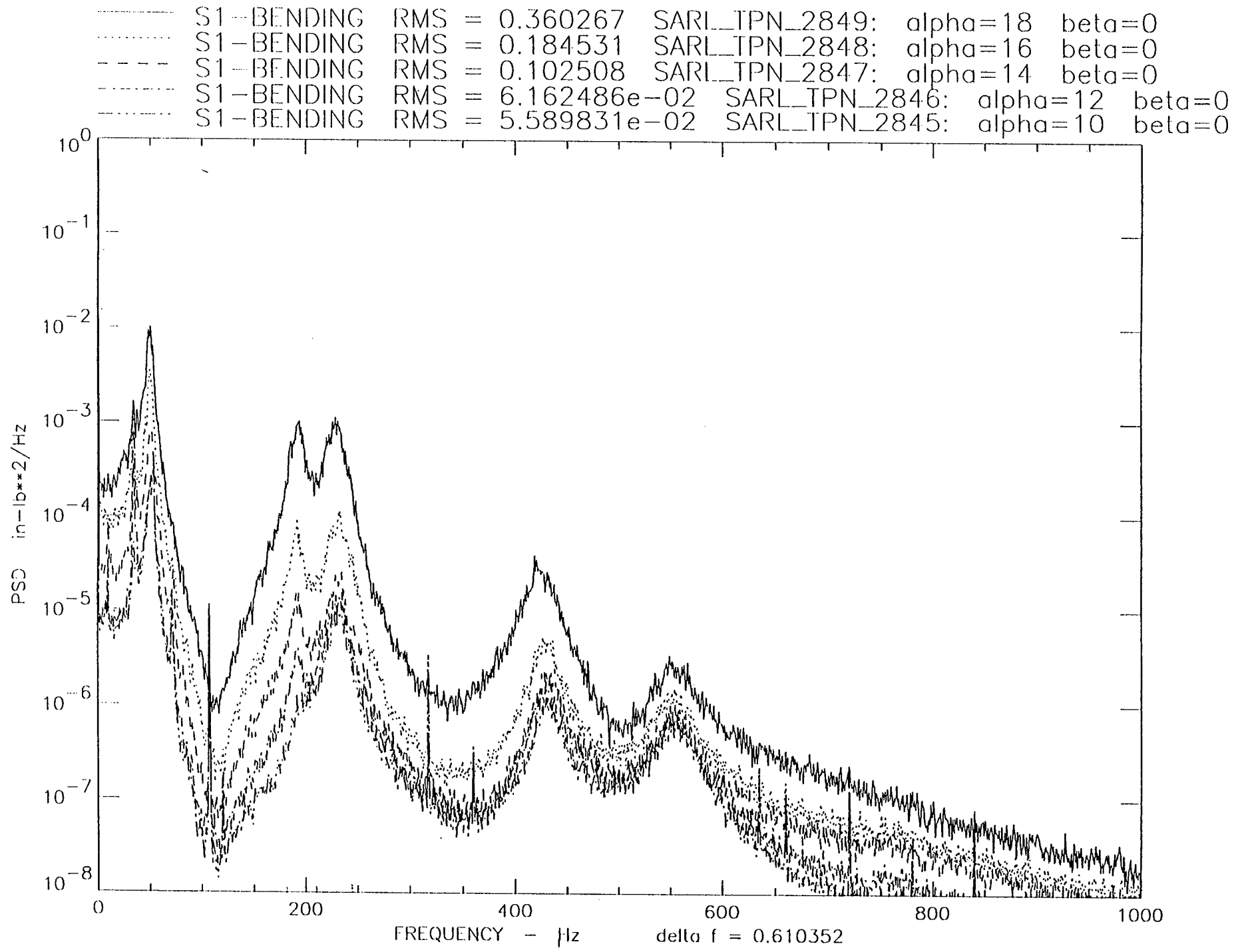


15

F-15 ;tical Tail Buffet Test: Q=56, Flexible, No Blowing

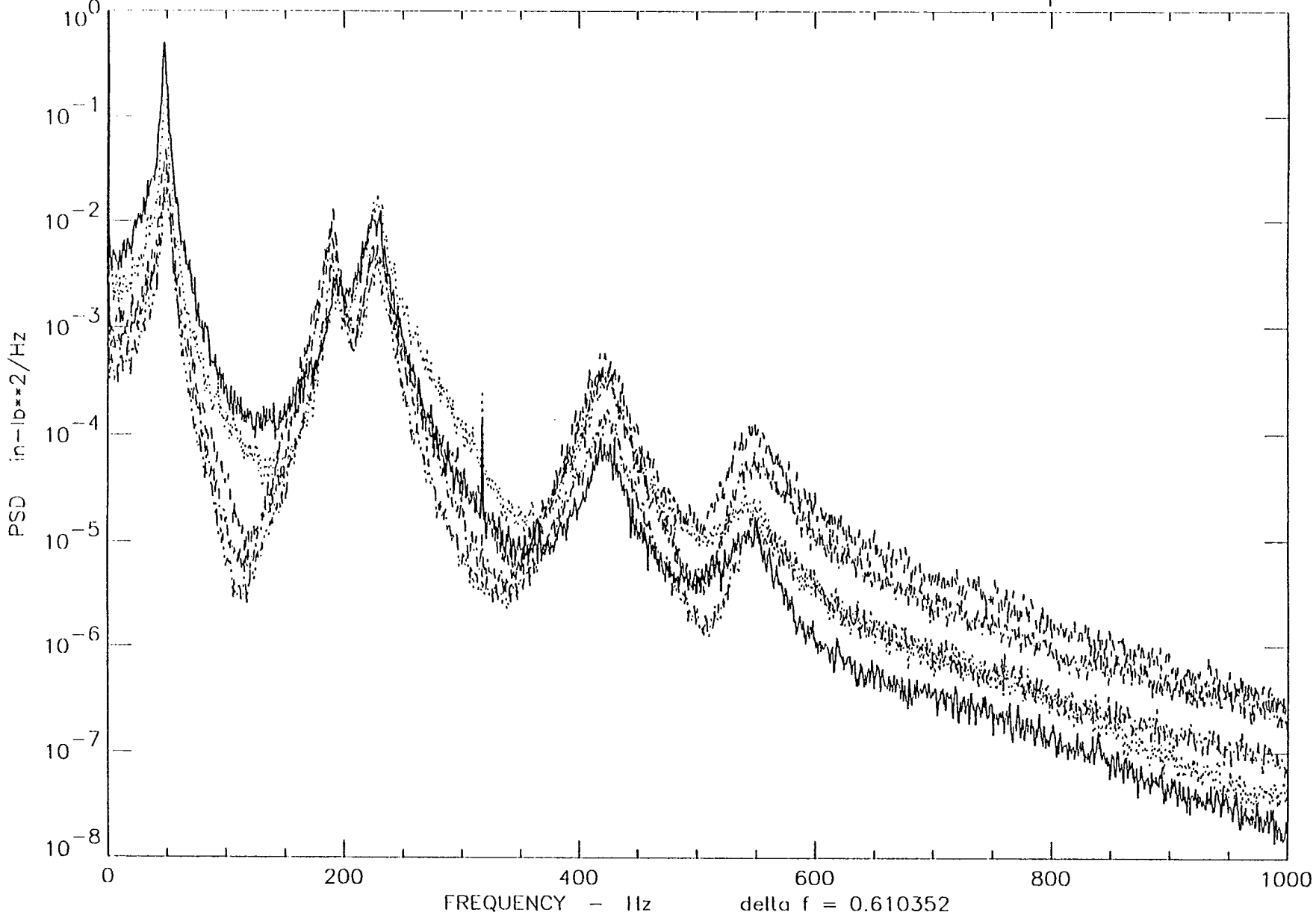


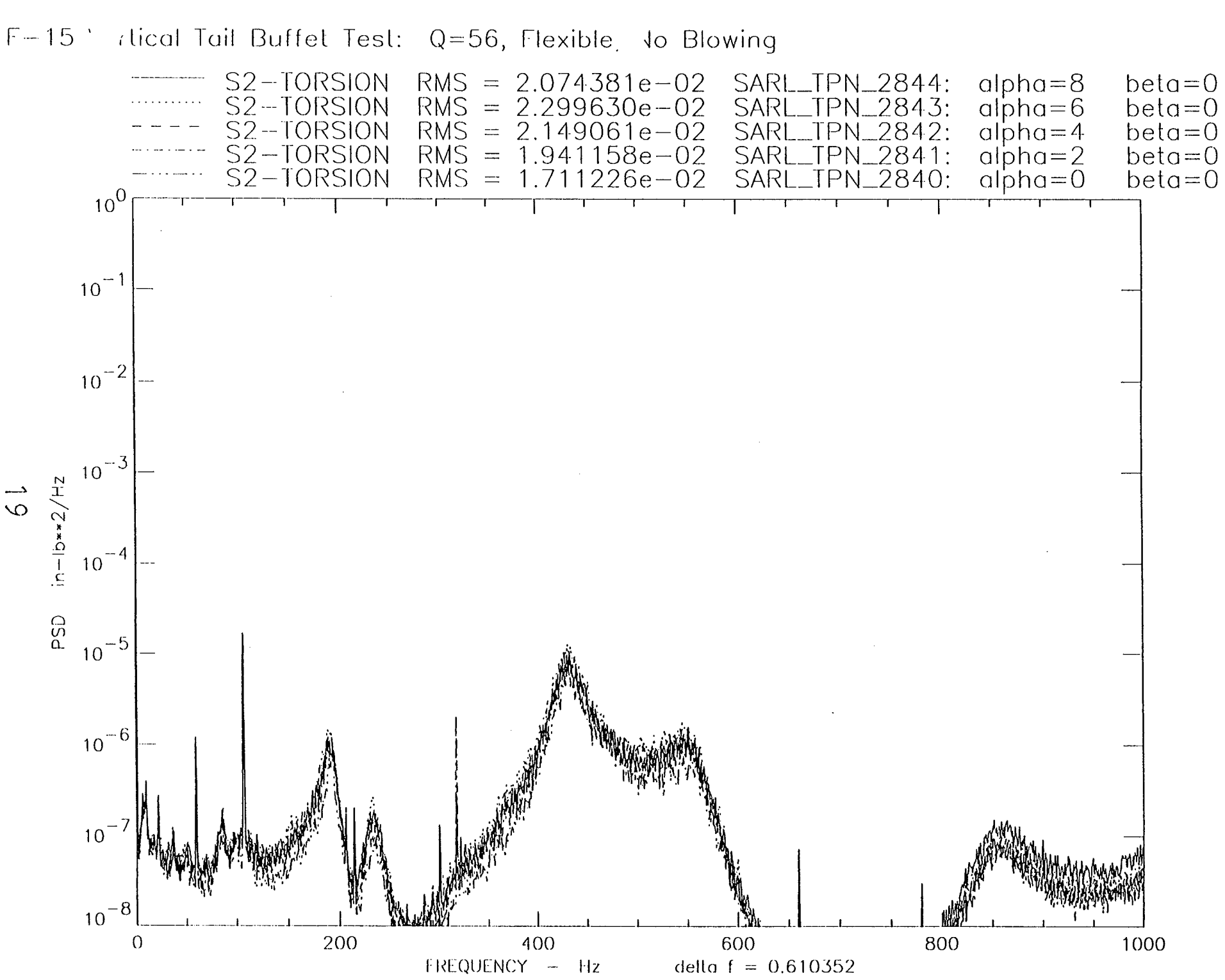
F- 15 rtical Tail Buffet Test: Q=56, Flexible No Blowing



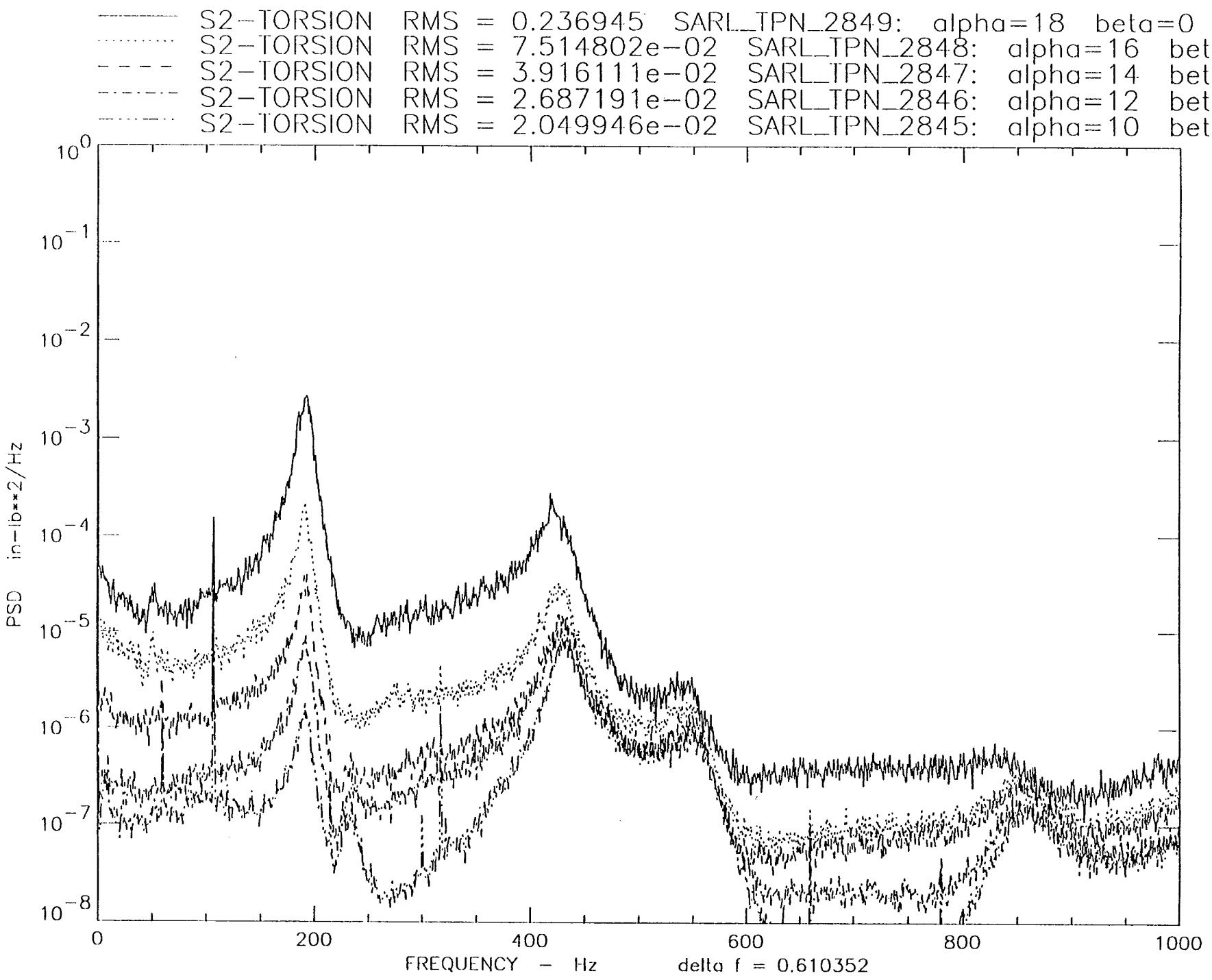
F-15 ' .tical Tail Buffet Test: Q=56, Flexible No Blowing

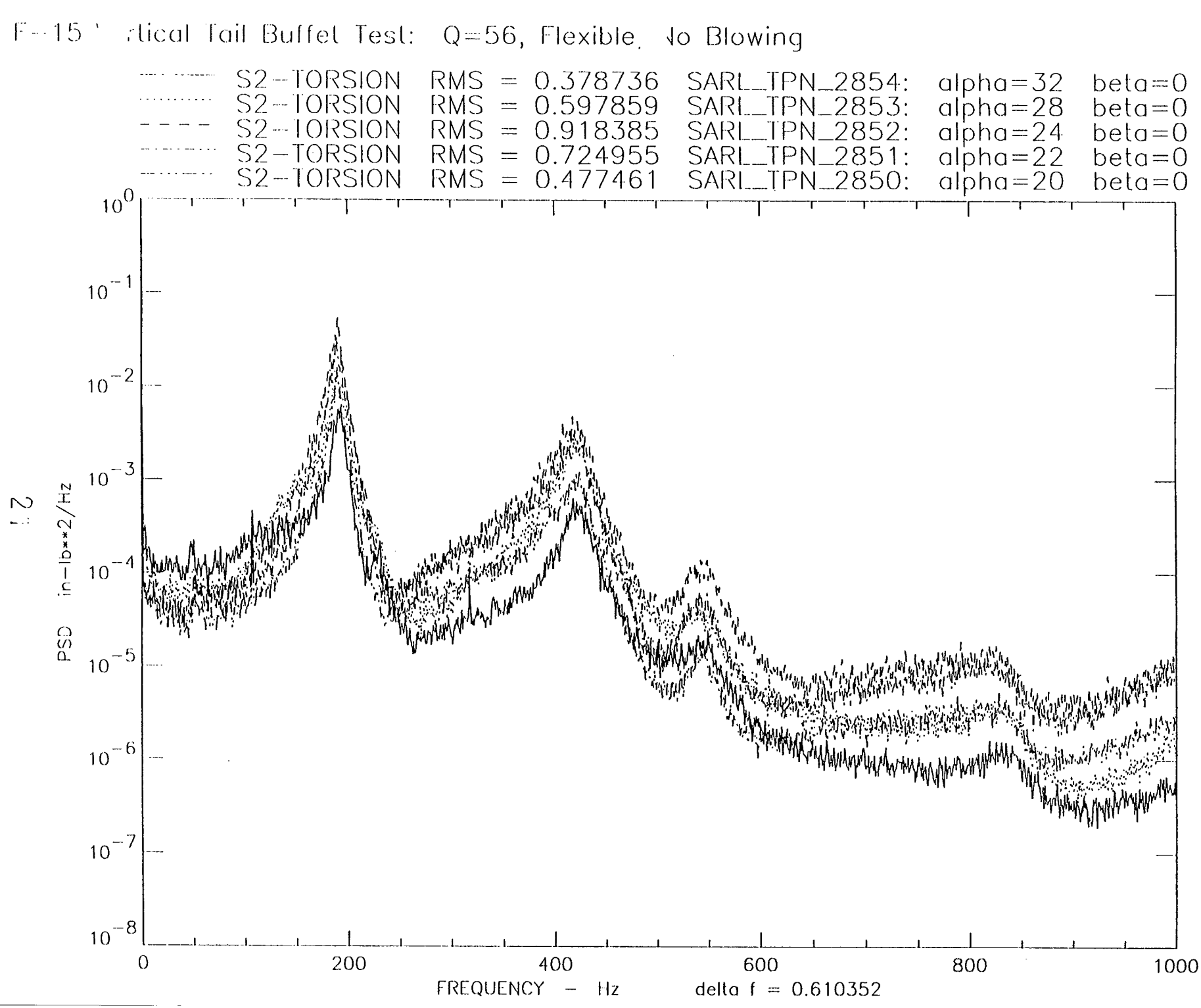
S1-BENDING RMS = 1.79350 SARL_TPN_2854: alpha=32 beta=0
S1-BENDING RMS = 1.24011 SARL_TPN_2853: alpha=28 beta=0
S1-BENDING RMS = 0.863039 SARL_TPN_2852: alpha=24 beta=0
S1-BENDING RMS = 0.737765 SARL_TPN_2851: alpha=22 beta=0
S1-BENDING RMS = 0.575412 SARL_TPN_2850: alpha=20 beta=0

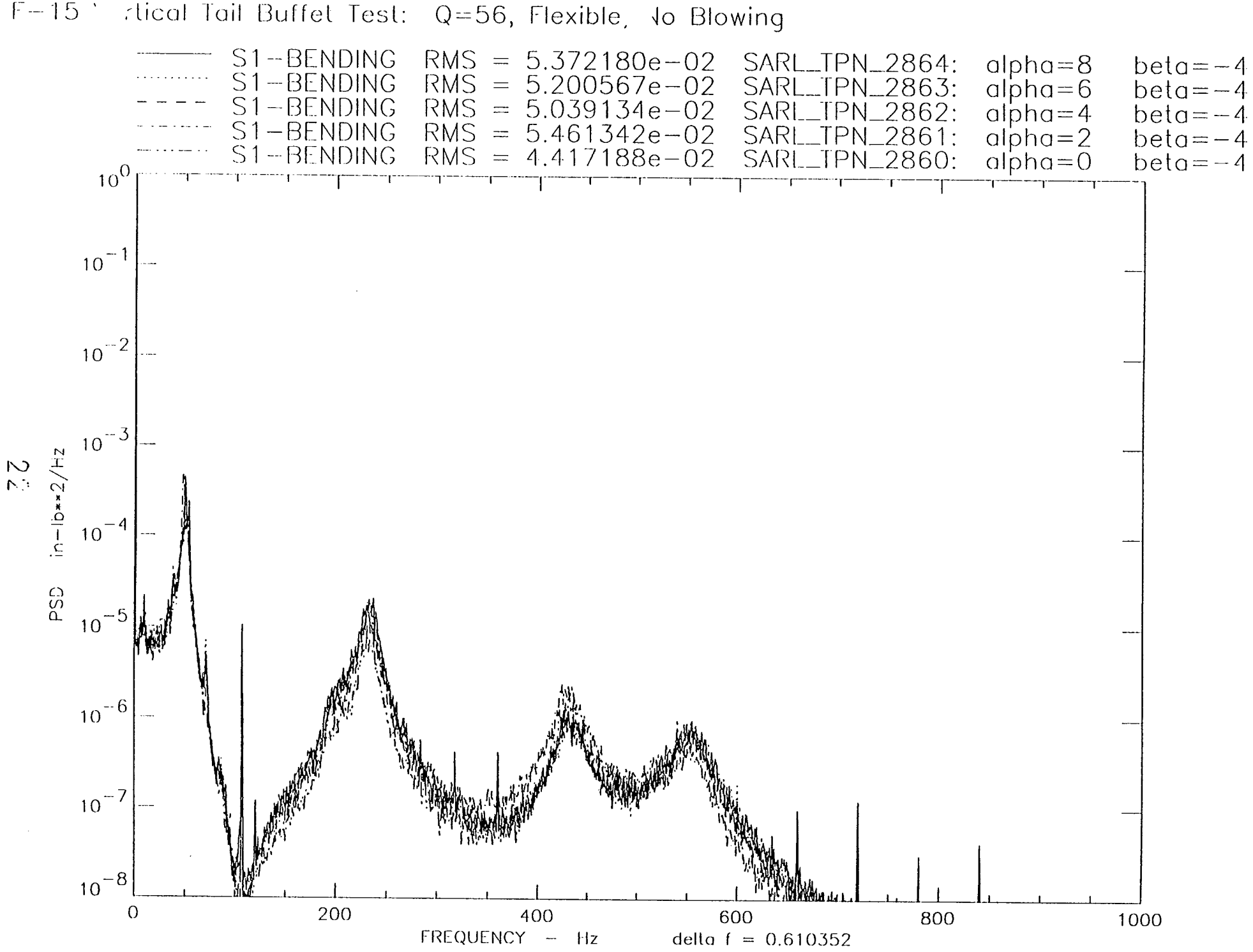



F-15 ' rtical Tail Buffet Test: Q=56, Flexible, No Blowing
S2-TORSION RMS = 2.074381e-02 SARL_TPN_2844: alpha=8 beta=0
S2-TORSION RMS = 2.299630e-02 SARL_TPN_2843: alpha=6 beta=0
S2-TORSION RMS = 2.149061e-02 SARL_TPN_2842: alpha=4 beta=0
S2-TORSION RMS = 1.941158e-02 SARL_TPN_2841: alpha=2 beta=0
S2-TORSION RMS = 1.711226e-02 SARL_TPN_2840: alpha=0 beta=0
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

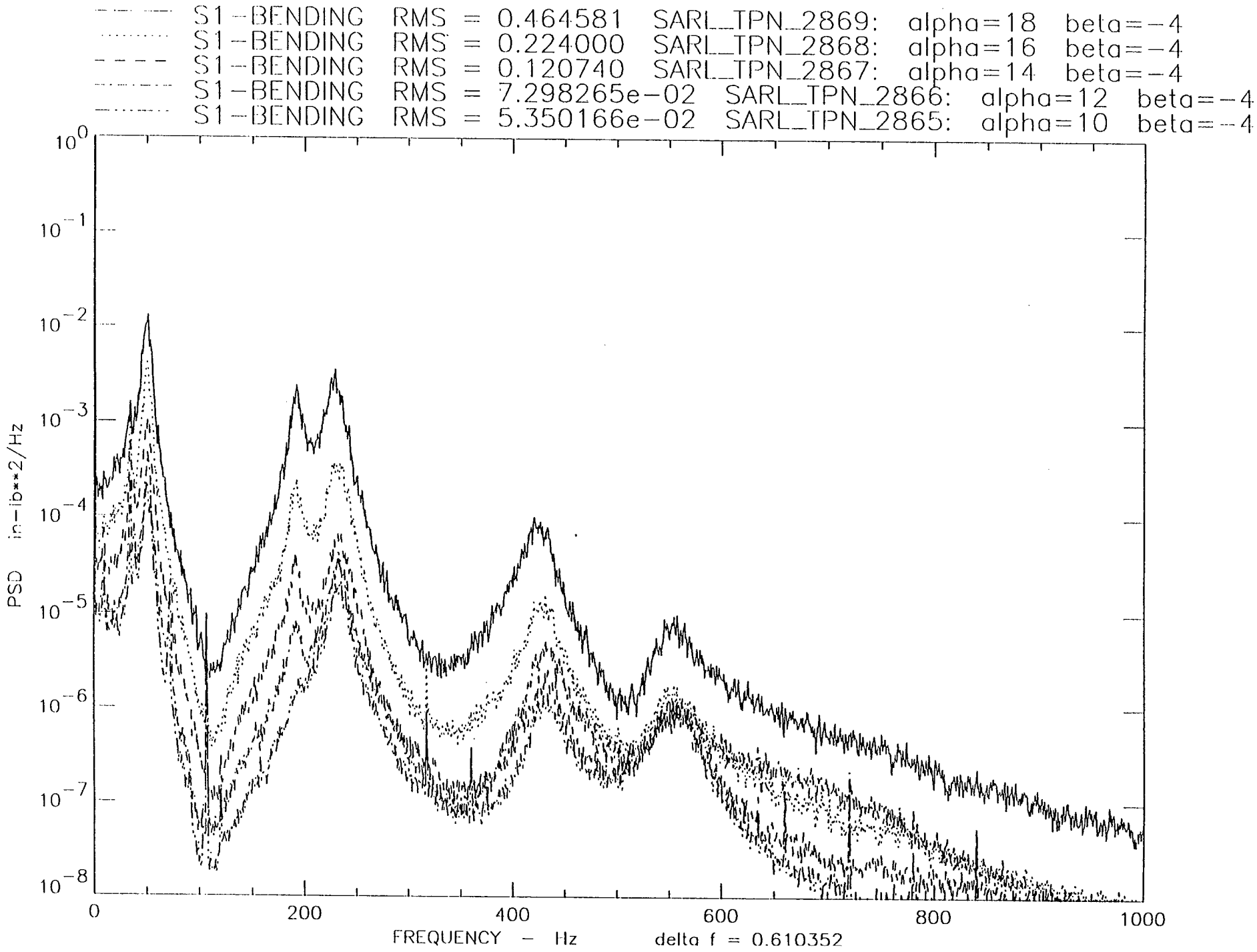
F-15 rtical Tail Buffet Test: Q=56, Flexible, No Blowing



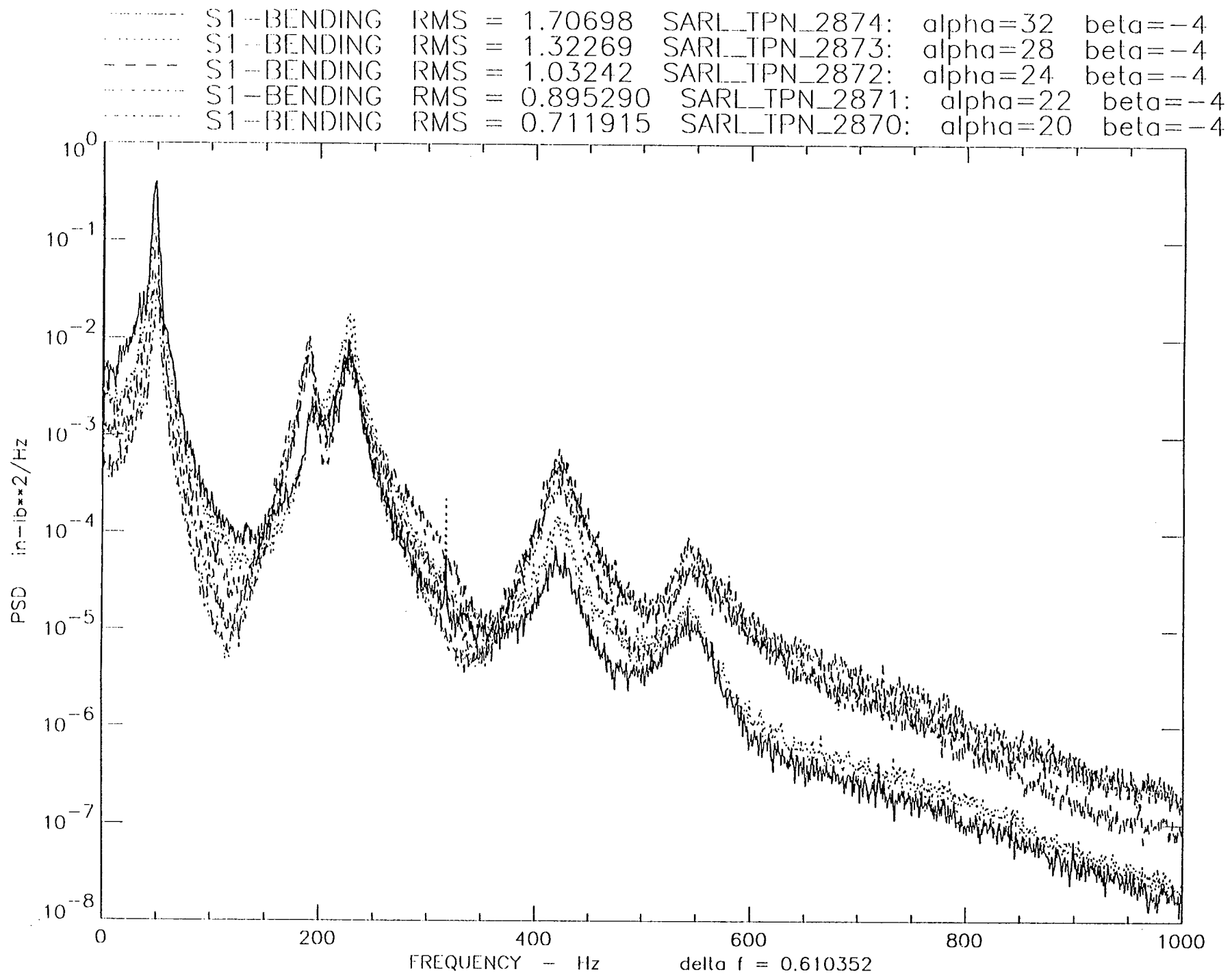

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
S2-TORSION RMS = 0.378736 SARL_TPN_2854: alpha=32 beta=0
S2-TORSION RMS = 0.597859 SARL_TPN_2853: alpha=28 beta=0
S2-TORSION RMS = 0.918385 SARL_TPN_2852: alpha=24 beta=0
S2-TORSION RMS = 0.724955 SARL_TPN_2851: alpha=22 beta=0
S2-TORSION RMS = 0.477461 SARL_TPN_2850: alpha=20 beta=0
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 ' :tical Tail Buffet Test: Q=56, Flexible, Jo Blowing
S1-BENDING RMS = 5.372180e-02 SARL_TPN_2864: alpha=8 beta=-4
S1-BENDING RMS = 5.200567e-02 SARL_TPN_2863: alpha=6 beta=-4
S1-BENDING RMS = 5.039134e-02 SARL_TPN_2862: alpha=4 beta=-4
S1-BENDING RMS = 5.461342e-02 SARL_TPN_2861: alpha=2 beta=-4
S1-BENDING RMS = 4.417188e-02 SARL_TPN_2860: alpha=0 beta=-4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

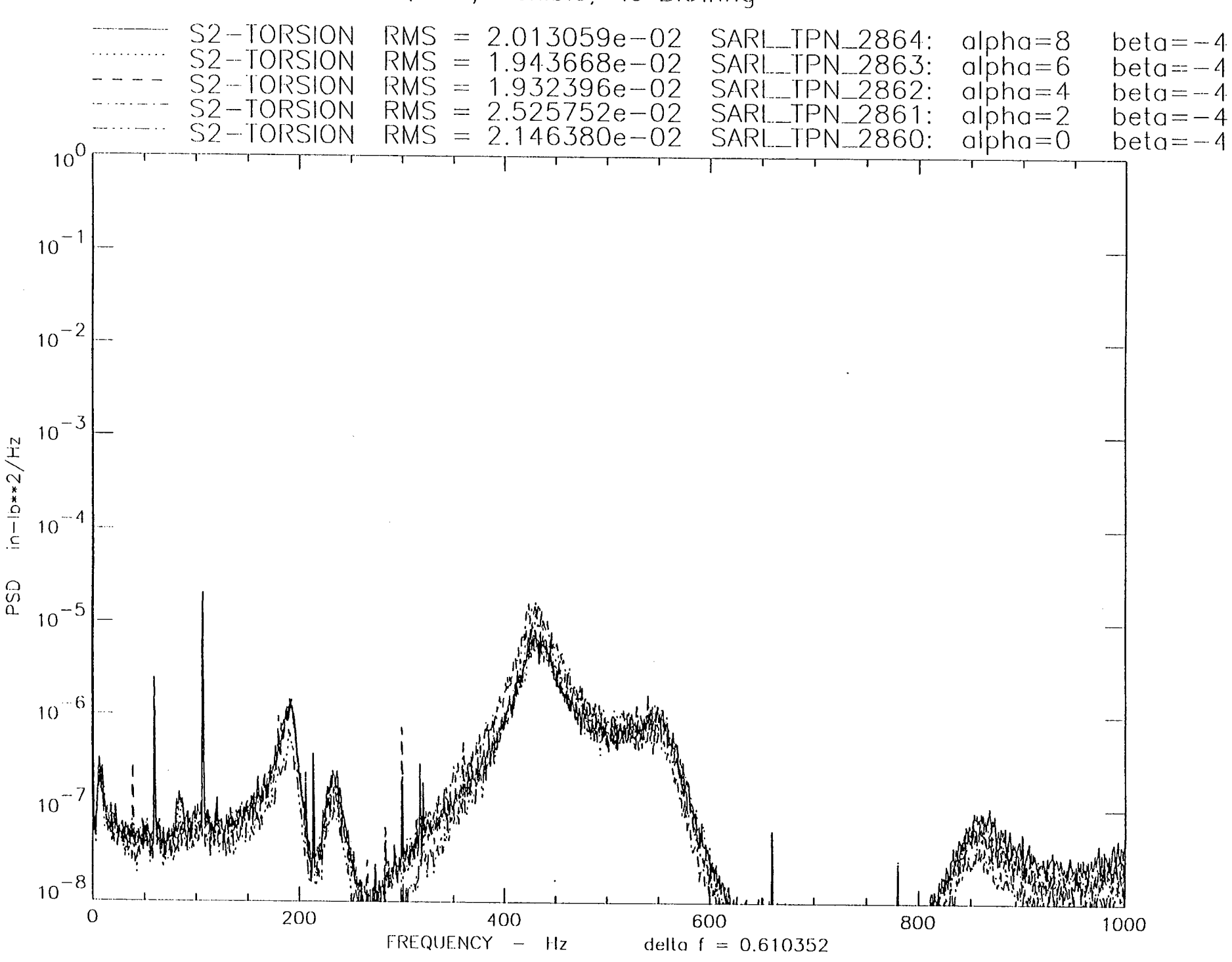
F-15 rtical Tail Buffet Test: Q=56, Flexible, No Blowing

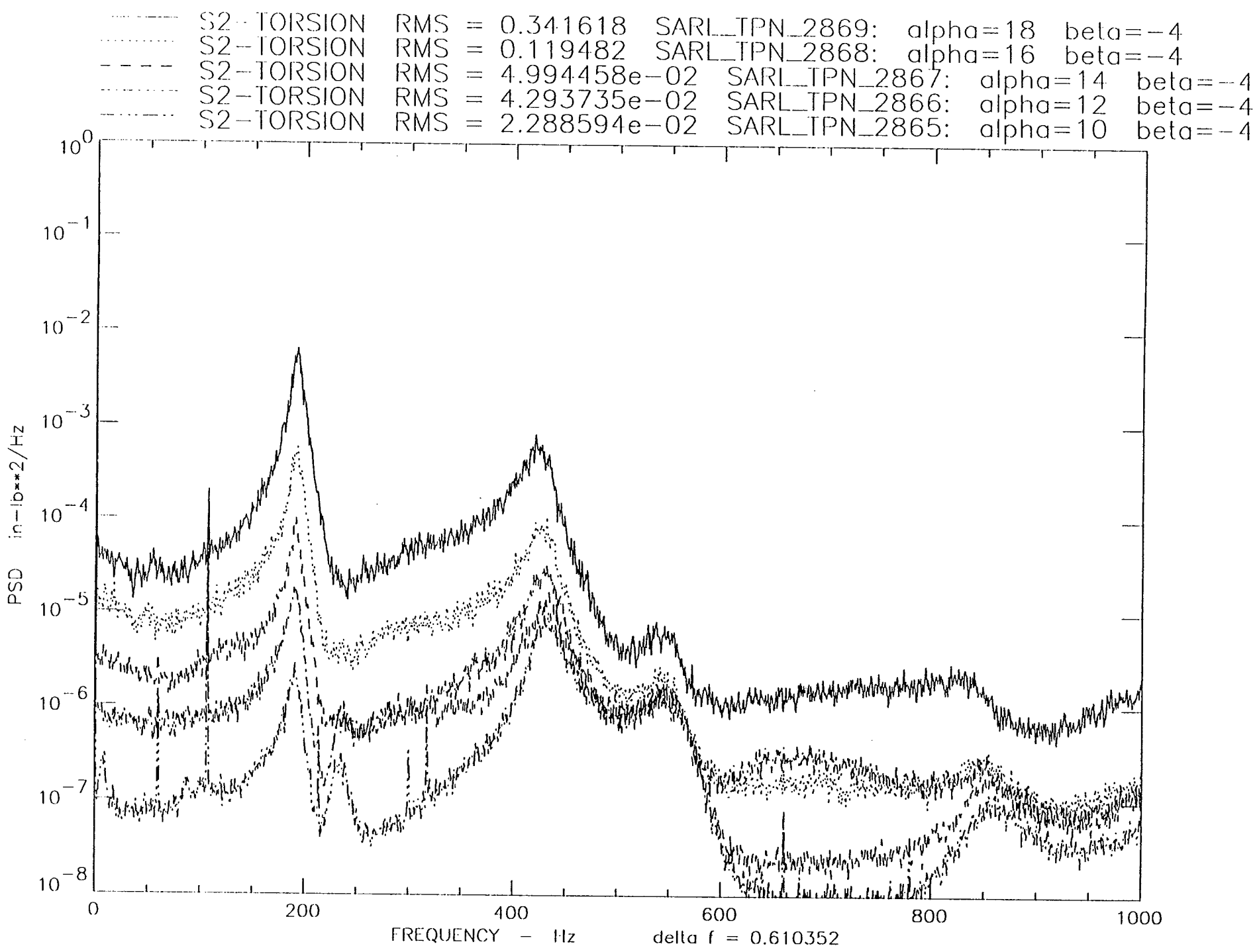


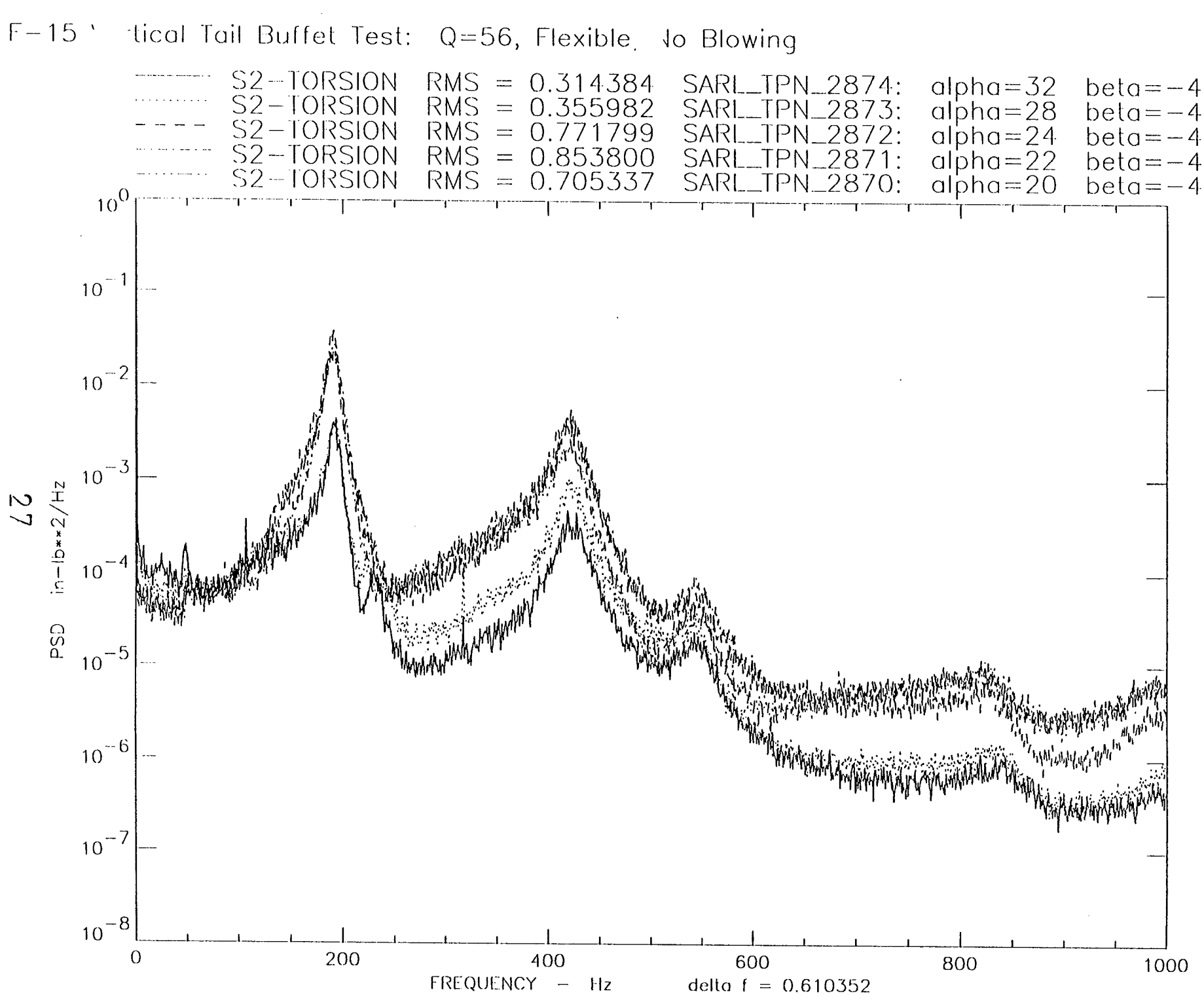
F-15 ' rtical Tail Buffet Test: Q=56, Flexible, No Blowing

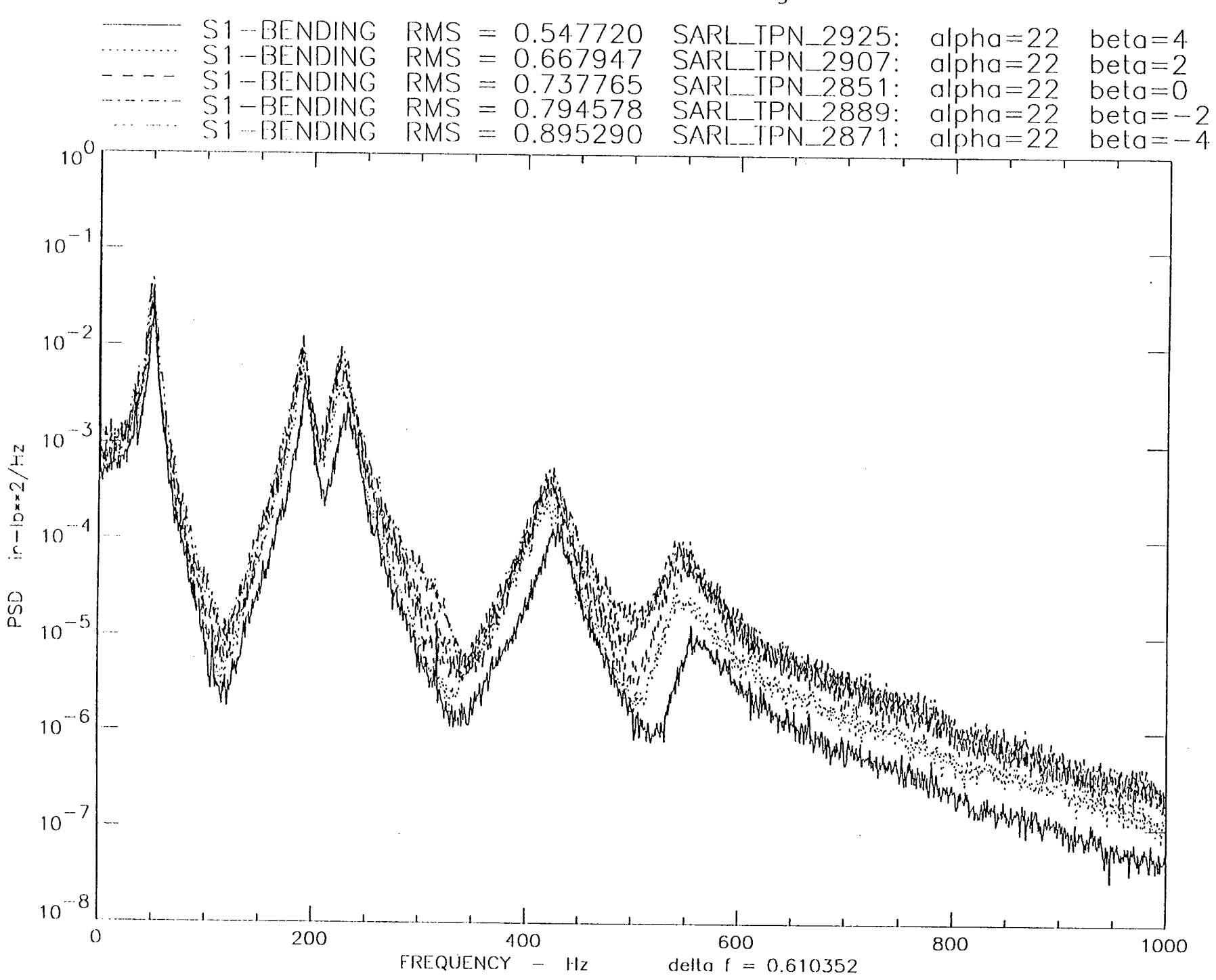


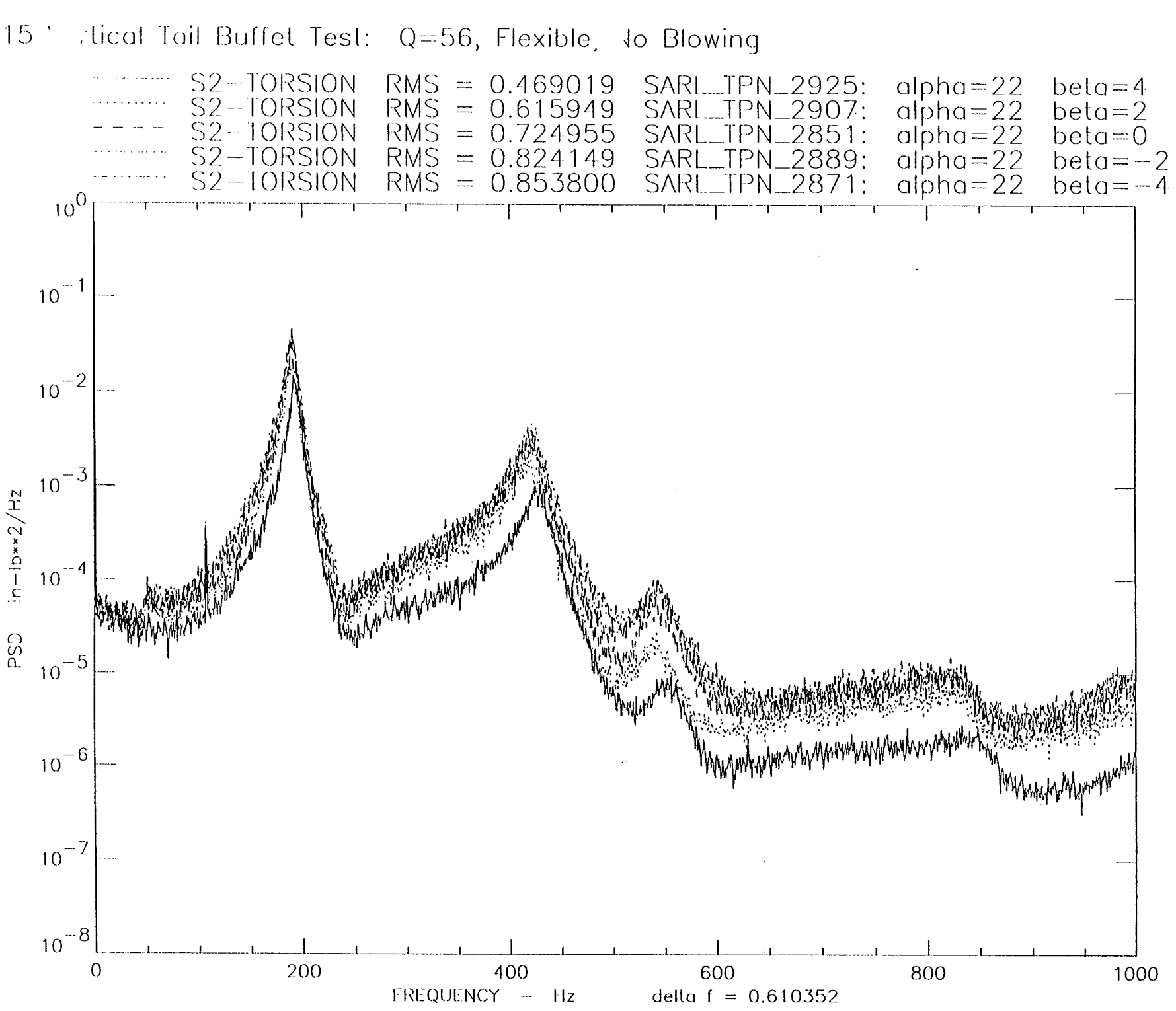
F-15 \ tical Tail Buffet Test: Q=56, Flexible, No Blowing

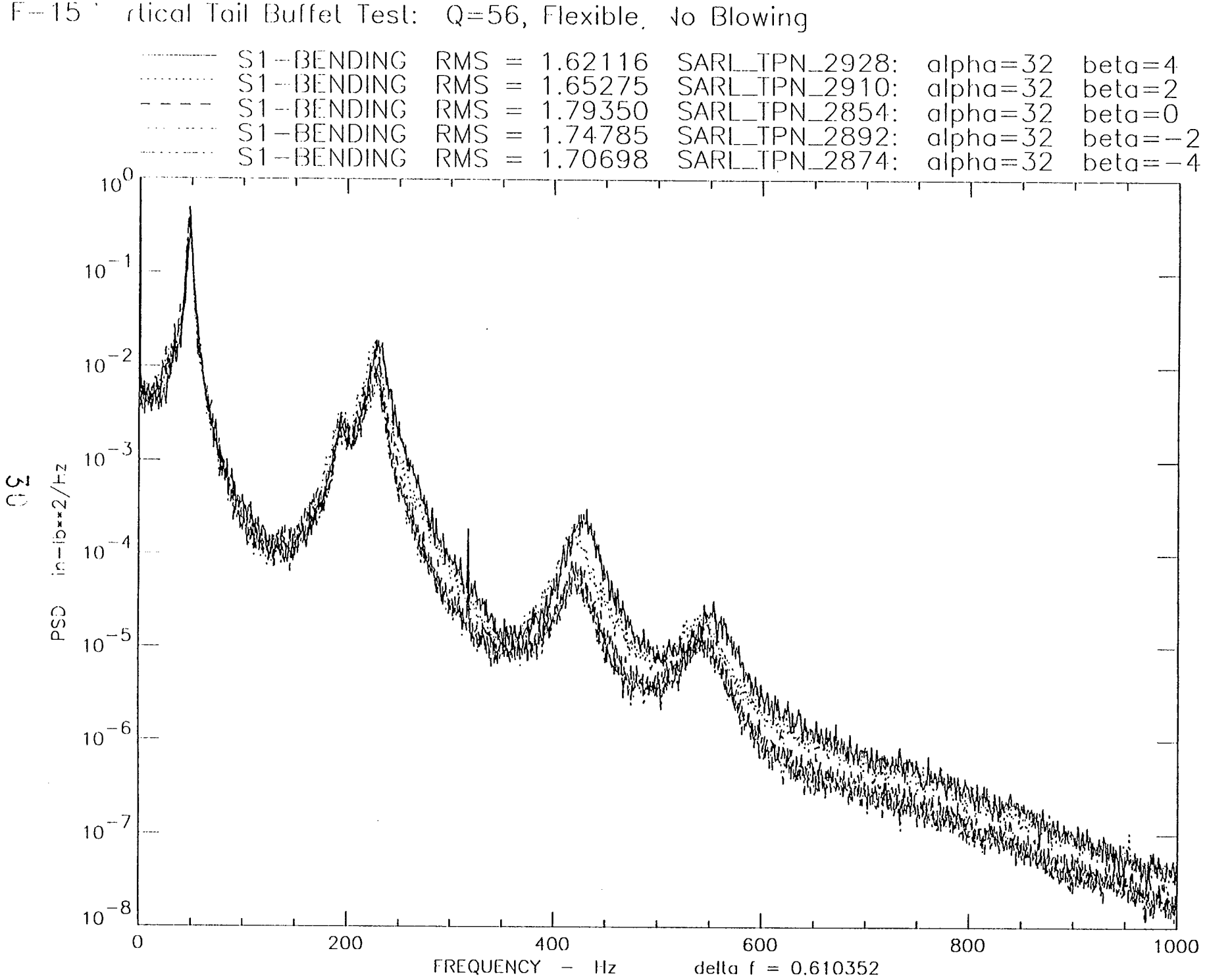



S2-TORSION RMS = 0.341618 SARL_TPN_2869: alpha=18 beta=-4
S2-TORSION RMS = 0.119482 SARL_TPN_2868: alpha=16 beta=-4
S2-TORSION RMS = 4.994458e-02 SARL_TPN_2867: alpha=14 beta=-4
S2-TORSION RMS = 4.293735e-02 SARL_TPN_2866: alpha=12 beta=-4
S2-TORSION RMS = 2.288594e-02 SARL_TPN_2865: alpha=10 beta=-4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

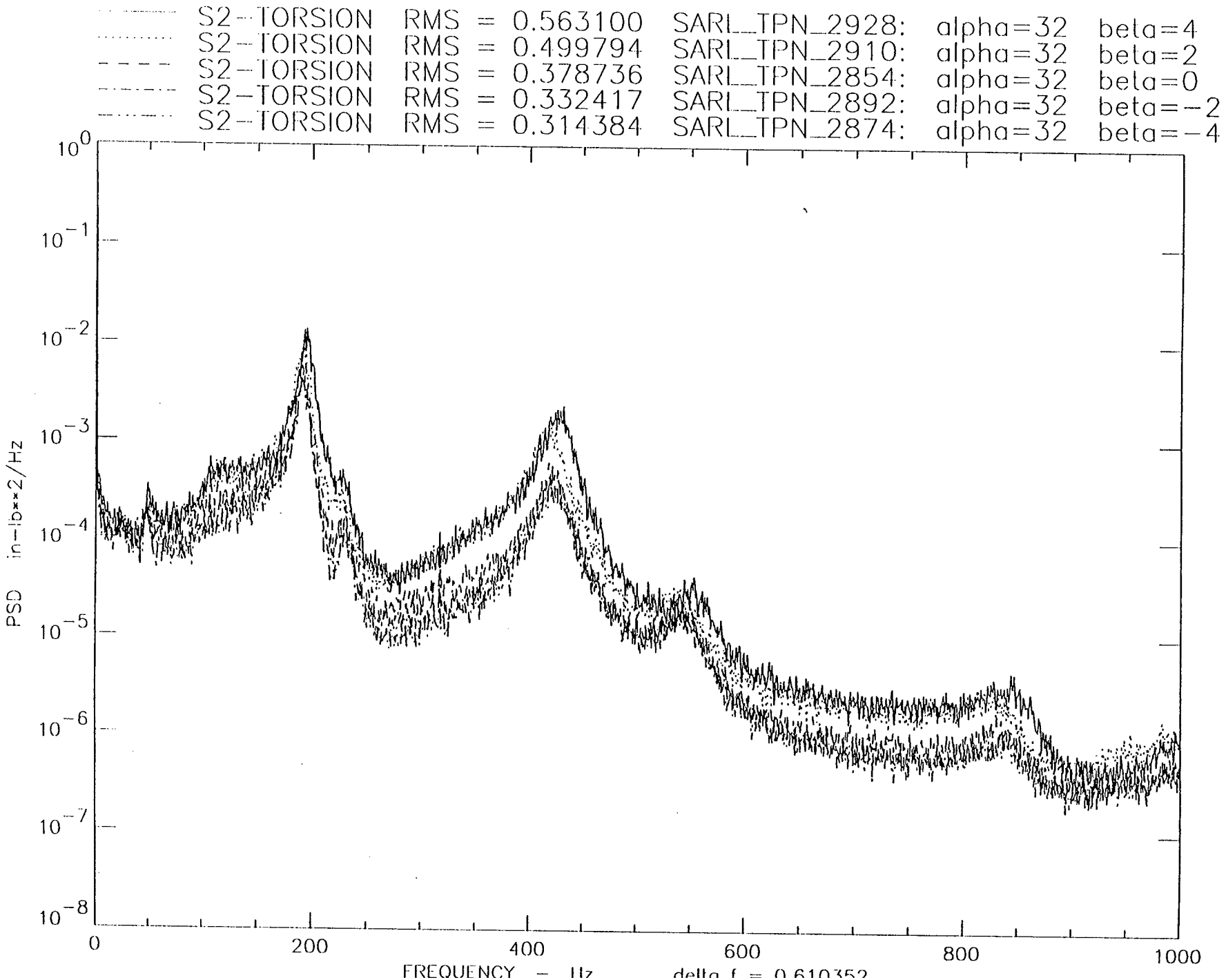

F-15 ' tical Tail Buffet Test: Q=56, Flexible, No Blowing
S2-TORSION RMS = 0.314384 SARL_TPN_2874: alpha=32 beta=-4
S2-TORSION RMS = 0.355982 SARL_TPN_2873: alpha=28 beta=-4
S2-TORSION RMS = 0.771799 SARL_TPN_2872: alpha=24 beta=-4
S2-TORSION RMS = 0.853800 SARL_TPN_2871: alpha=22 beta=-4
S2-TORSION RMS = 0.705337 SARL_TPN_2870: alpha=20 beta=-4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 rtical Tail Buffet Test: Q=56, Flexible, No Blowing
S1--BENDING RMS = 0.547720 SARL_TPN_2925: alpha=22 beta=4
S1--BENDING RMS = 0.667947 SARL_TPN_2907: alpha=22 beta=2
S1--BENDING RMS = 0.737765 SARL_TPN_2851: alpha=22 beta=0
S1--BENDING RMS = 0.794578 SARL_TPN_2889: alpha=22 beta=-2
S1--BENDING RMS = 0.895290 SARL_TPN_2871: alpha=22 beta=-4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 ' .tical Tail Buffet Test: Q=56, Flexible, No Blowing
S2--TORSION RMS = 0.469019 SARL_TPN_2925: alpha=22 beta=4
S2--TORSION RMS = 0.615949 SARL_TPN_2907: alpha=22 beta=2
S2--TORSION RMS = 0.724955 SARL_TPN_2851: alpha=22 beta=0
S2-TORSION RMS = 0.824149 SARL_TPN_2889: alpha=22 beta=-2
S2-TORSION RMS = 0.853800 SARL_TPN_2871: alpha=22 beta=-4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 rtical Tail Buffet Test: Q=56, Flexible, No Blowing
S1-BENDING RMS = 1.62116 SARL_TPN_2928: alpha=32 beta=4
S1-BENDING RMS = 1.65275 SARL_TPN_2910: alpha=32 beta=2
S1-BENDING RMS = 1.79350 SARL_TPN_2854: alpha=32 beta=0
S1-BENDING RMS = 1.74785 SARL_TPN_2892: alpha=32 beta=-2
S1-BENDING RMS = 1.70698 SARL_TPN_2874: alpha=32 beta=-4
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

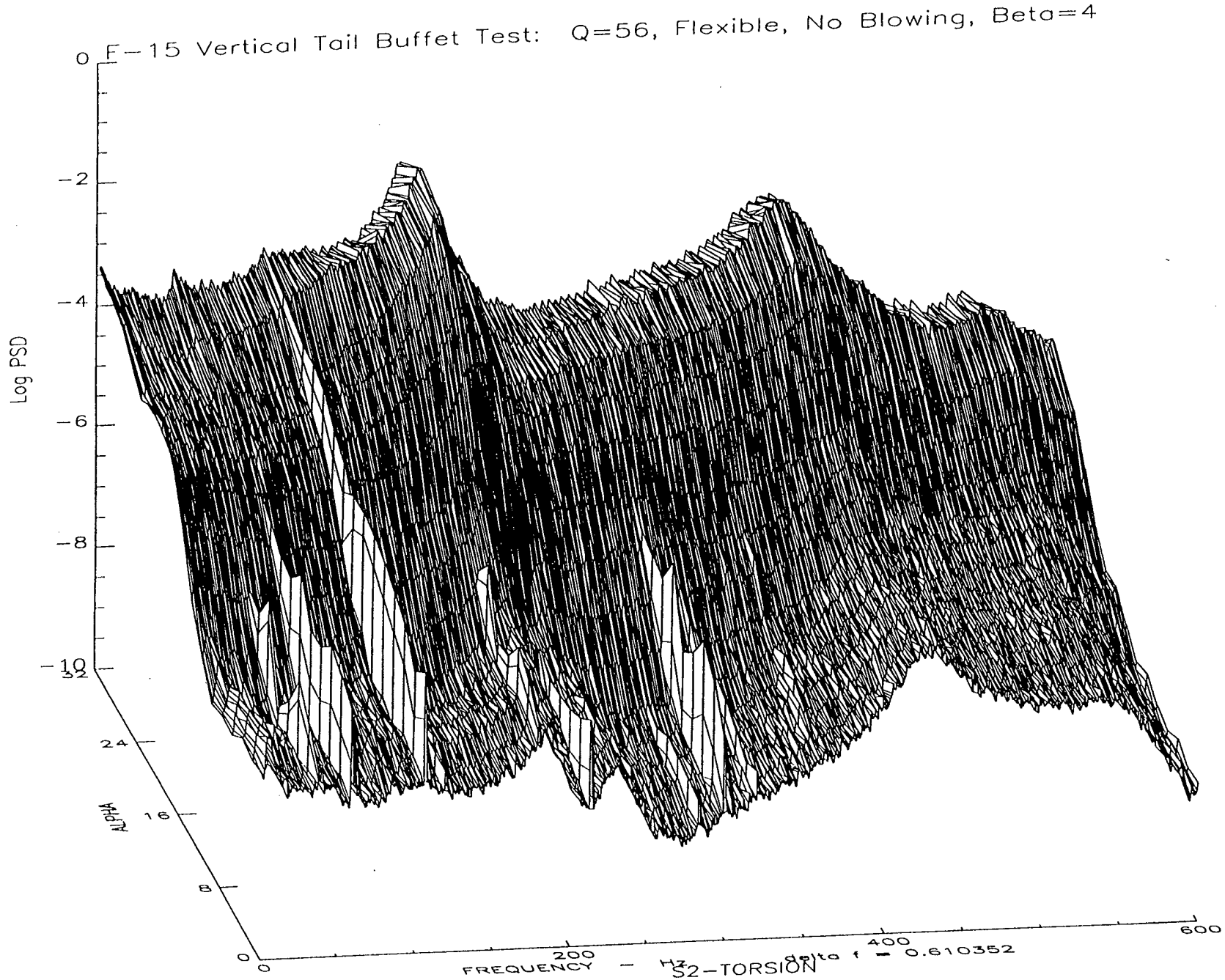
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing

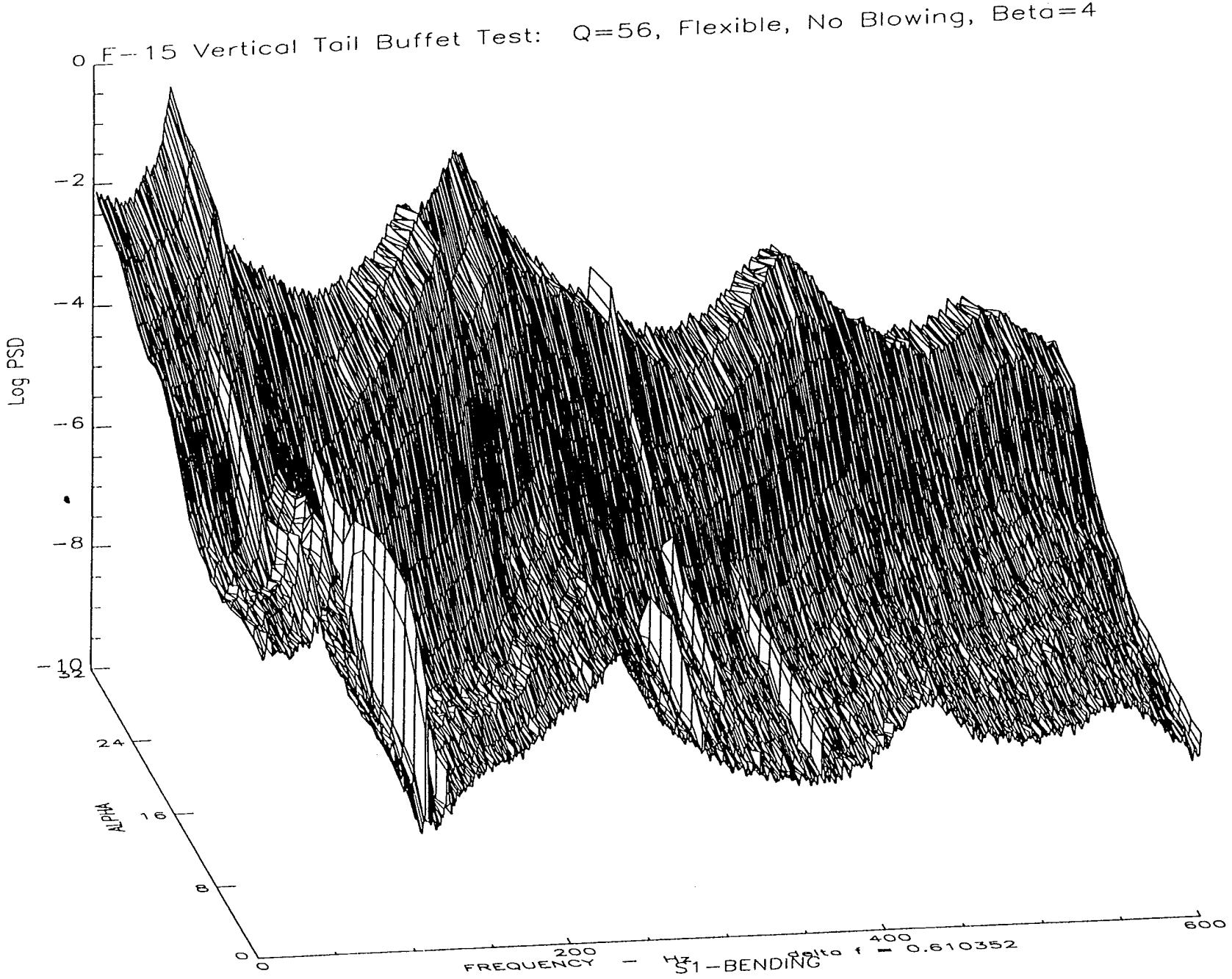


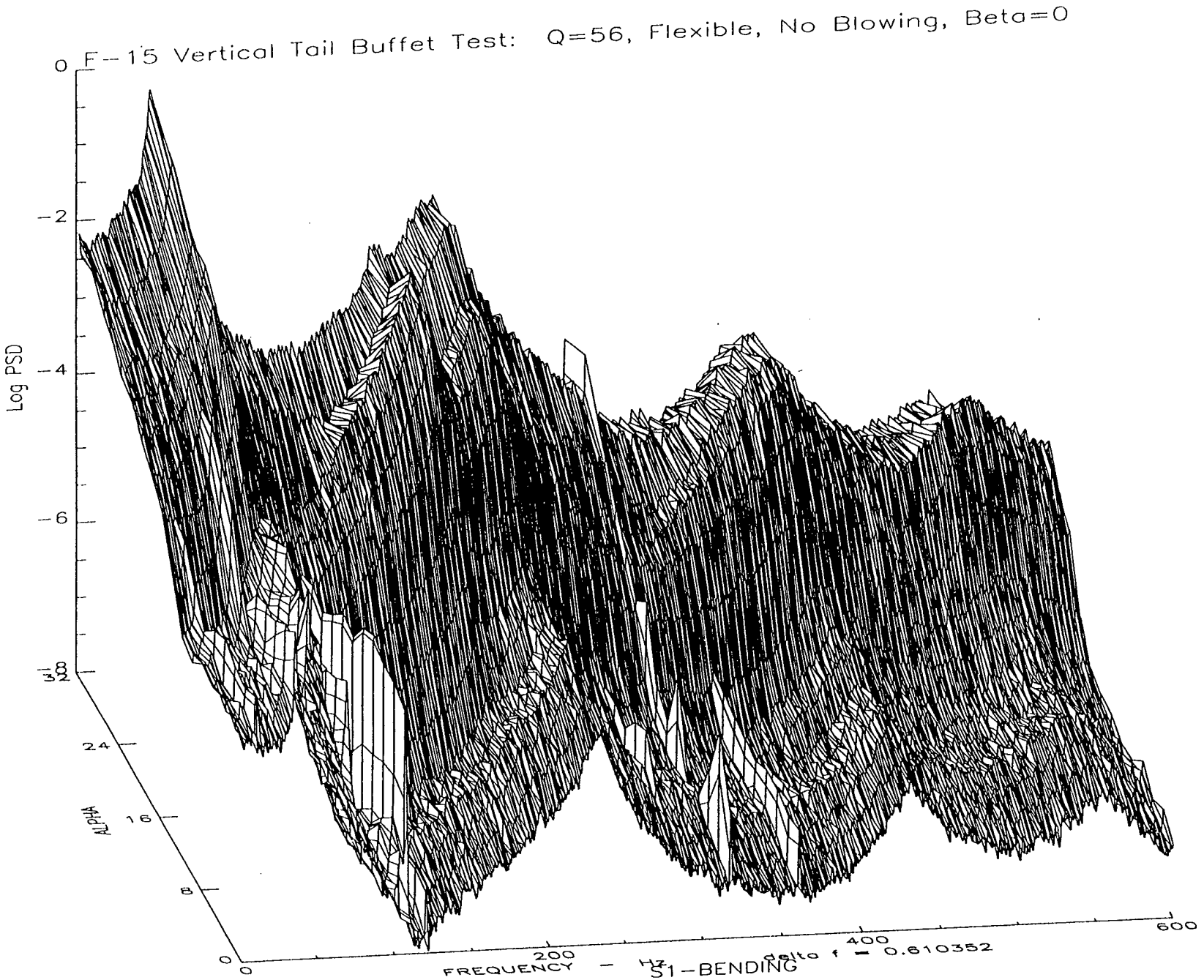
FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION
PSD's in 3D*

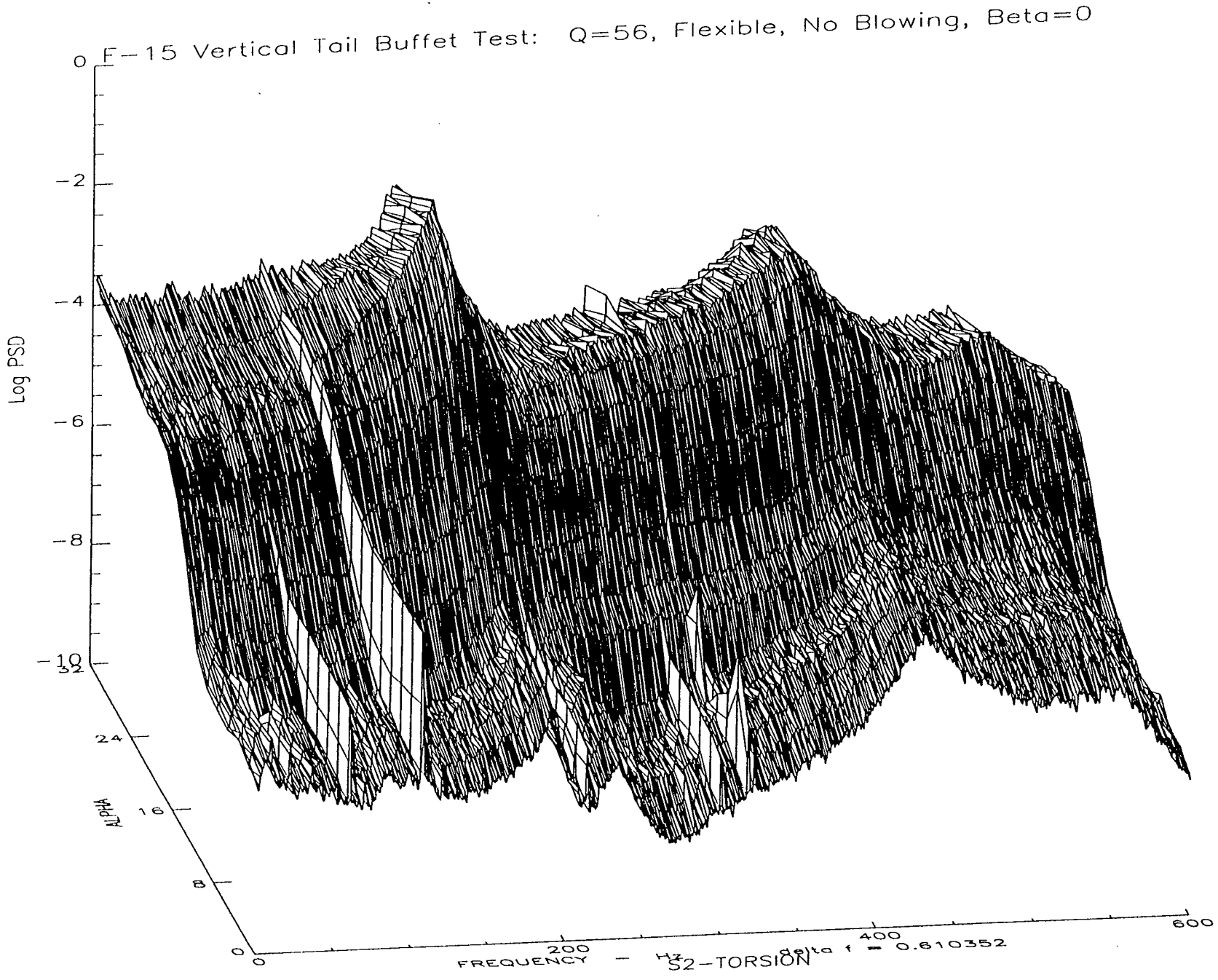
Q = 56 PSF
WBP = 0, 45, 65 PSI
BETA = 0, +4, -4 Deg
ALPHA = 0.....32 Deg

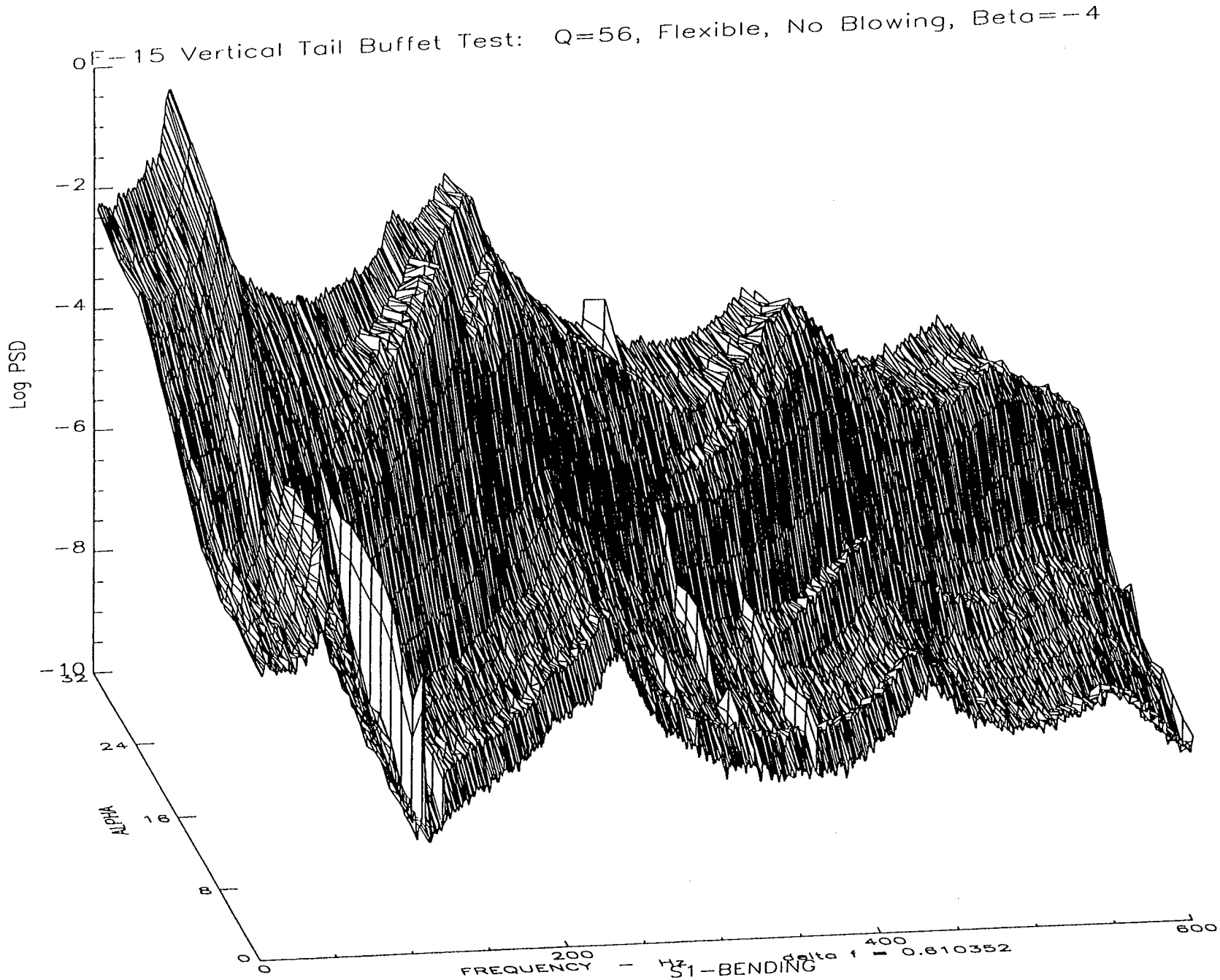
* PSD vs. freq vs ALPHA

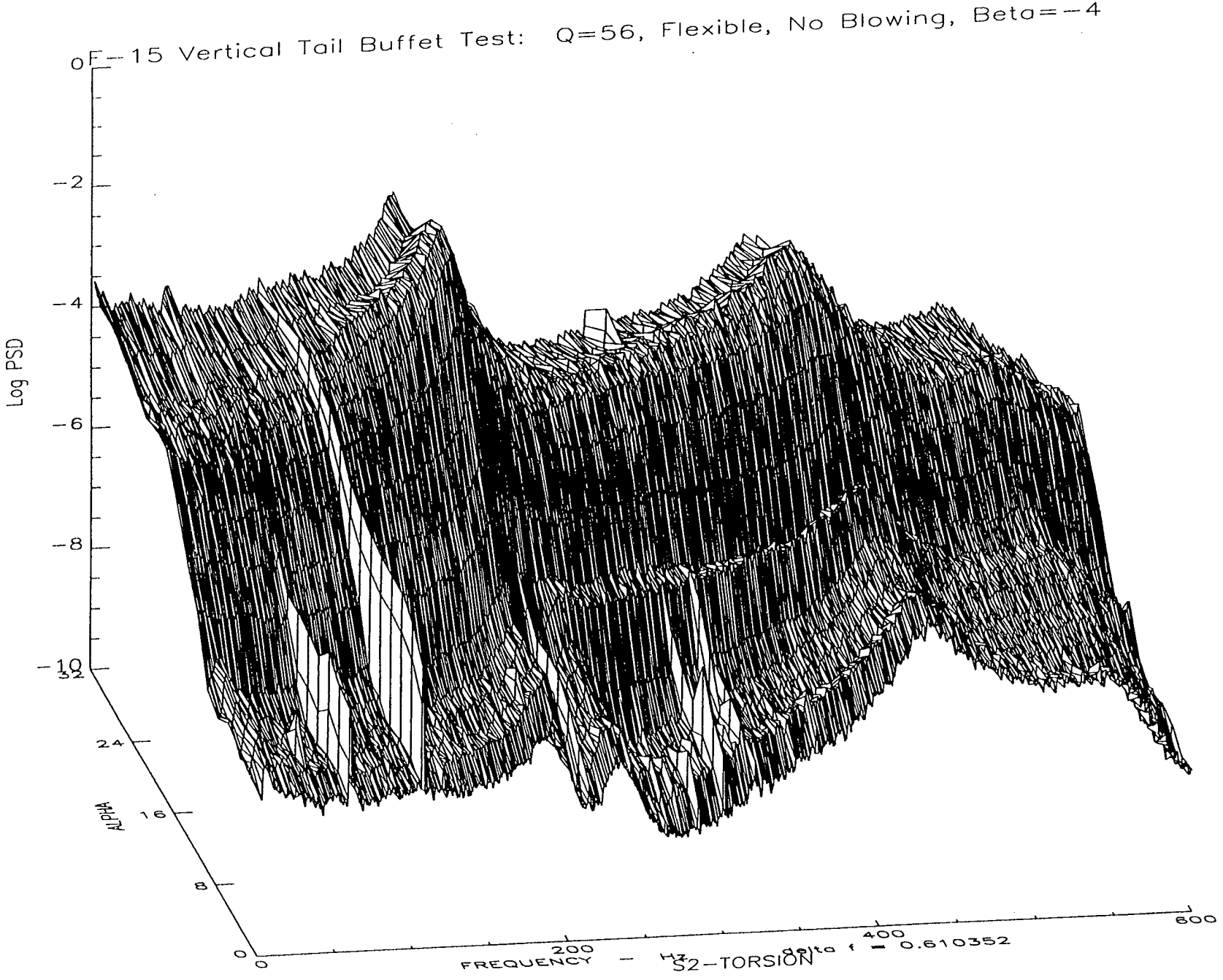

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=4
Log PSD
0
-2
-4
-6
-8
-10
ALPHA
24
16
8
0
0
200
400
600
FREQUENCY - Hz
Delta f = 0.610352
S2-TORSION

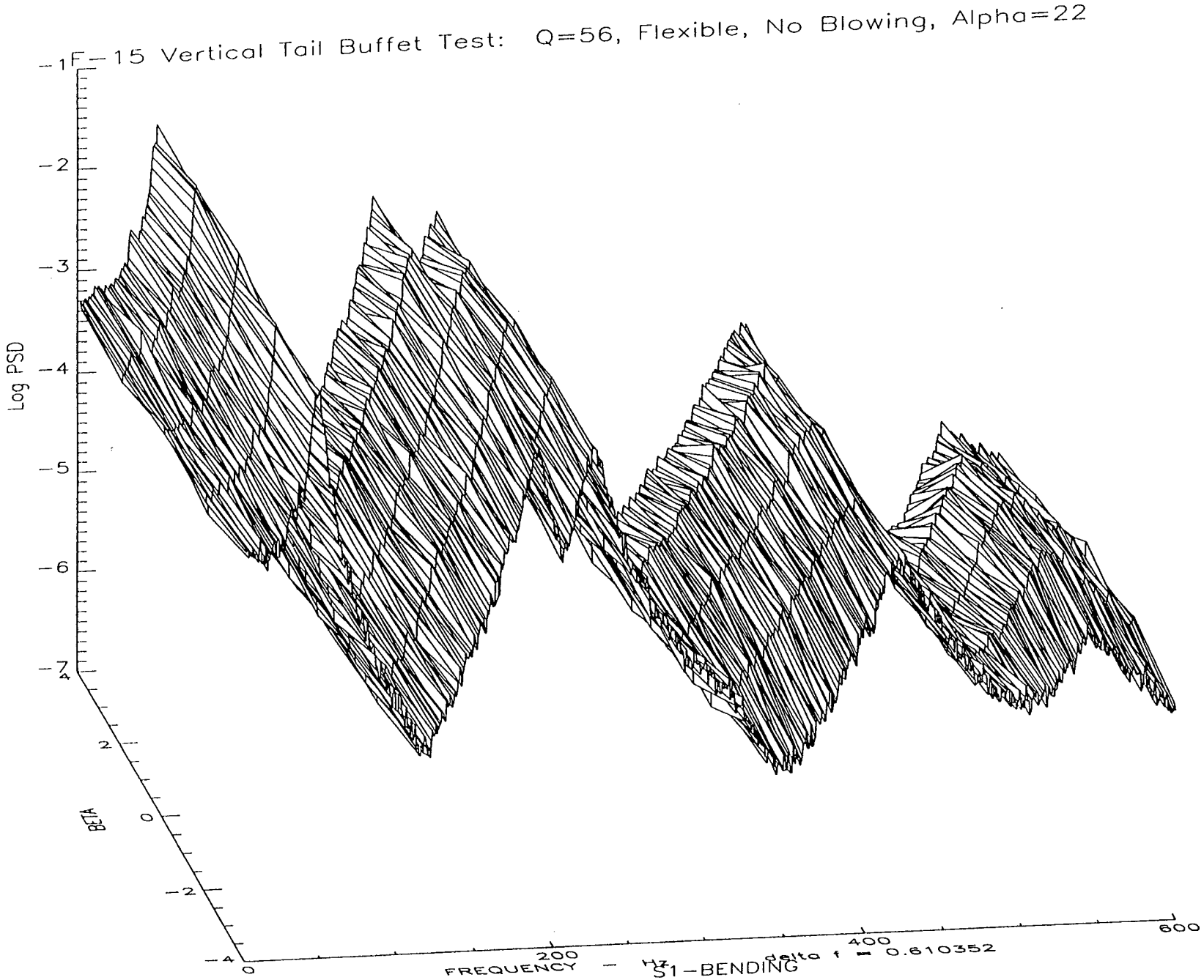

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=4
Log PSD
0
-2
-4
-6
-8
-10
ALPHA
32
24
16
8
0
0
200
400
600
FREQUENCY - Hz
delta f = 0.610352
1-BENDING

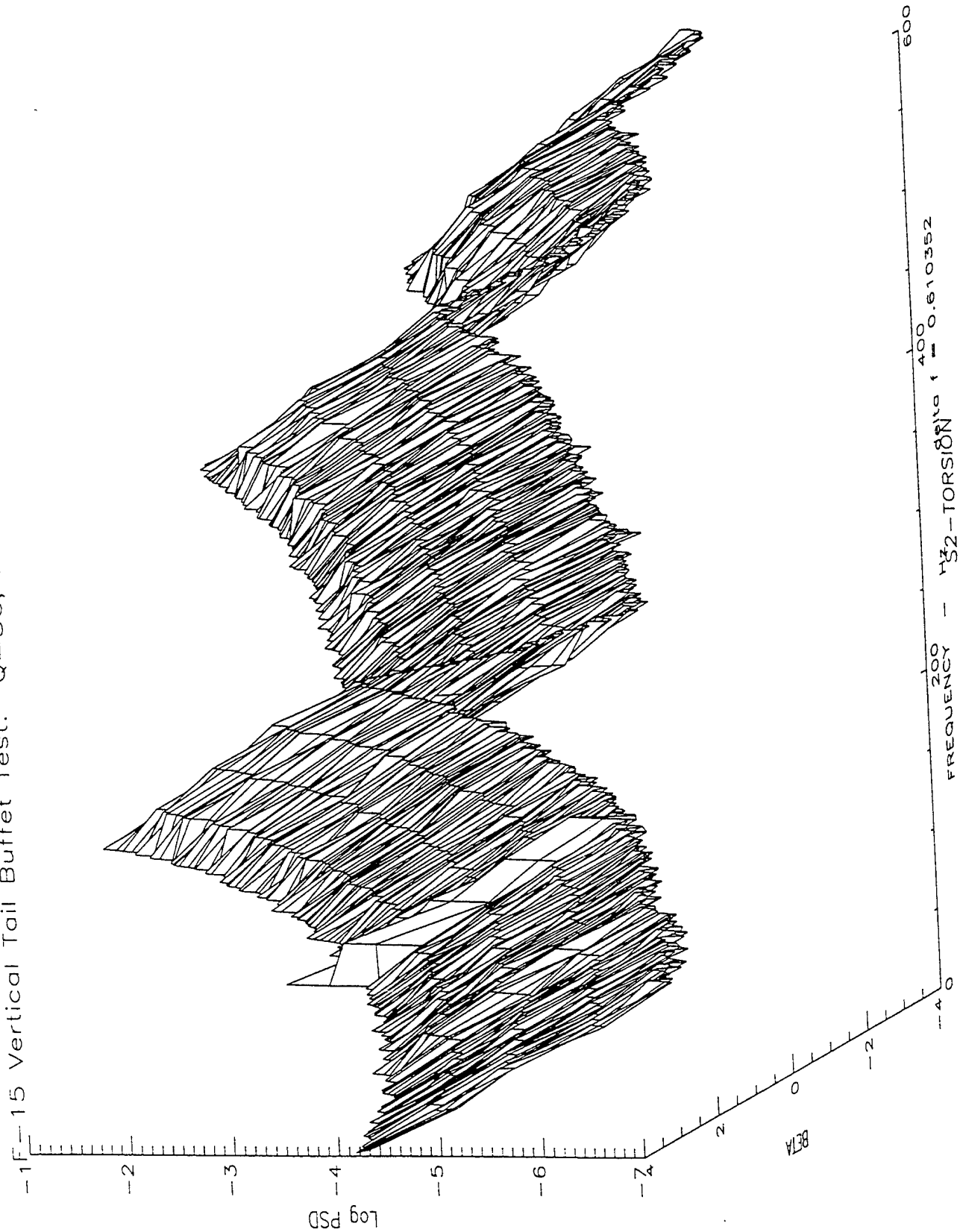

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=0
Log PSD
0
-2
-4
-6
-8
ALPHA
24
16
8
0
FREQUENCY - Hz
200
400
600
delta f = 0.610352
1-BENDING

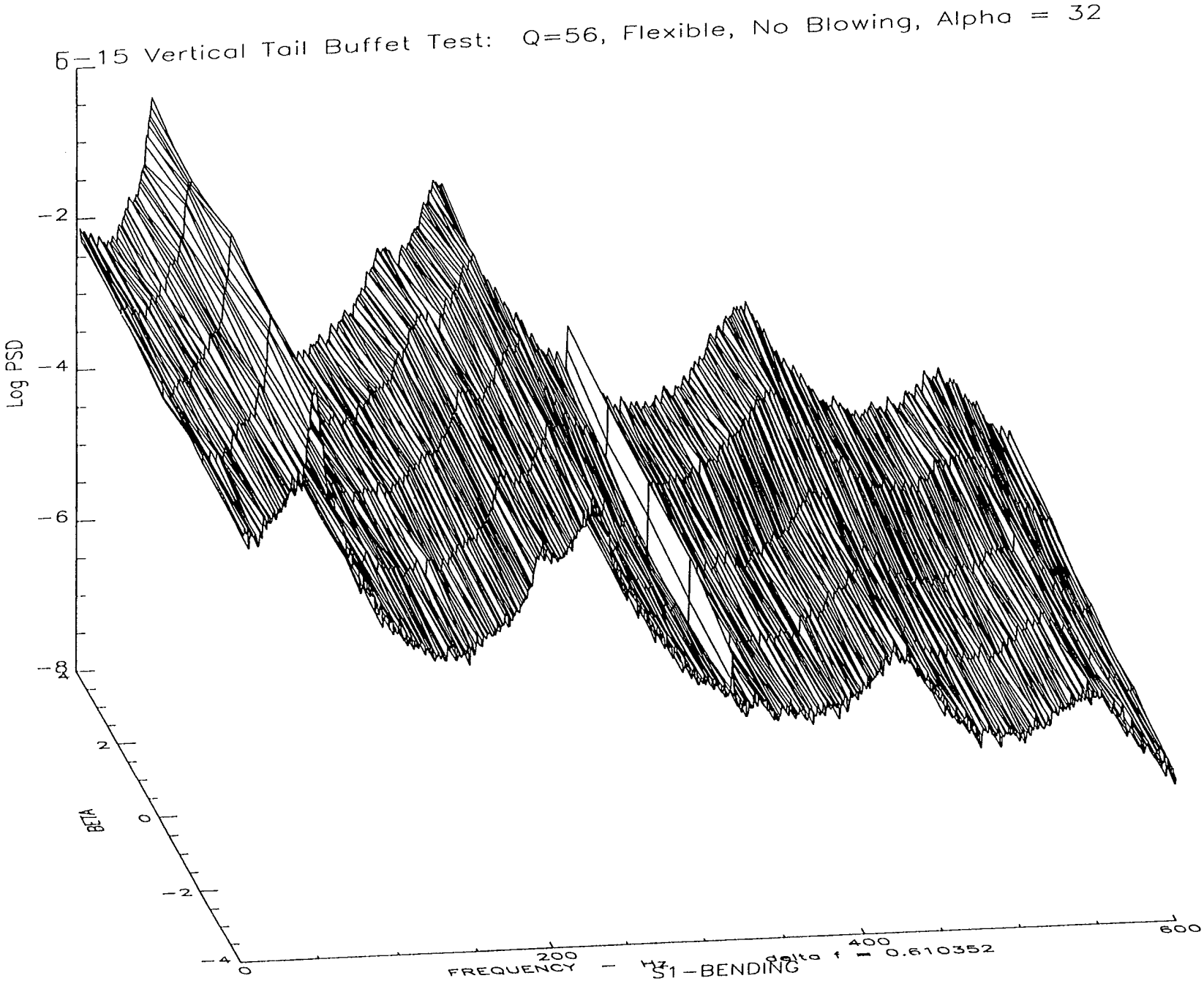

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=0
Log PSD
0
-2
-4
-6
-8
-10
ALPHA
32
24
16
8
0
0
200
400
600
FREQUENCY - Hz
S2-TORSION
delta f = 0.610352

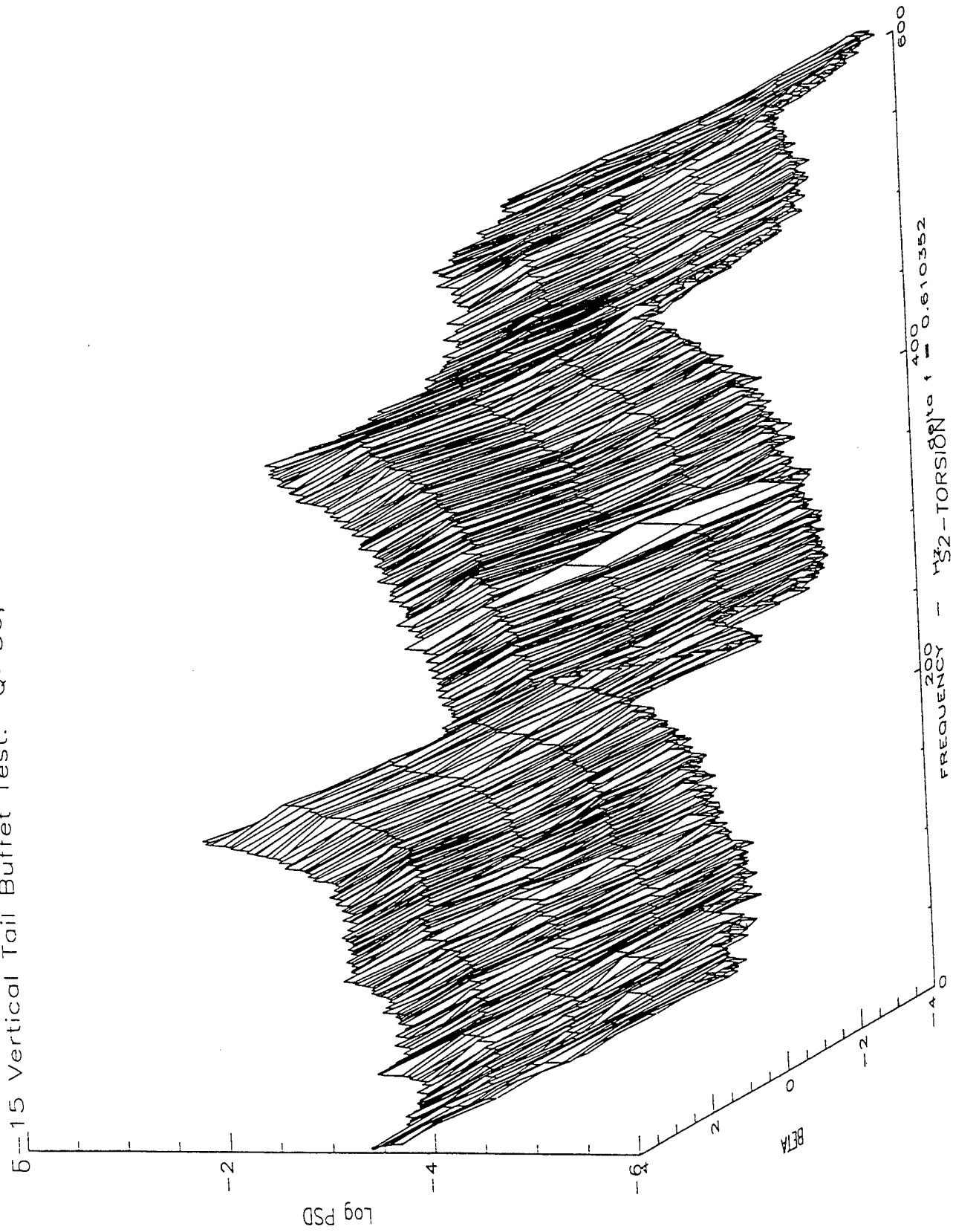

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=-4
Log PSD
0
-2
-4
-6
-8
-10
ALPHA
32
24
16
8
0
0
200
400
600
FREQUENCY - Hz
1-BENDING
Delta f = 0.610352

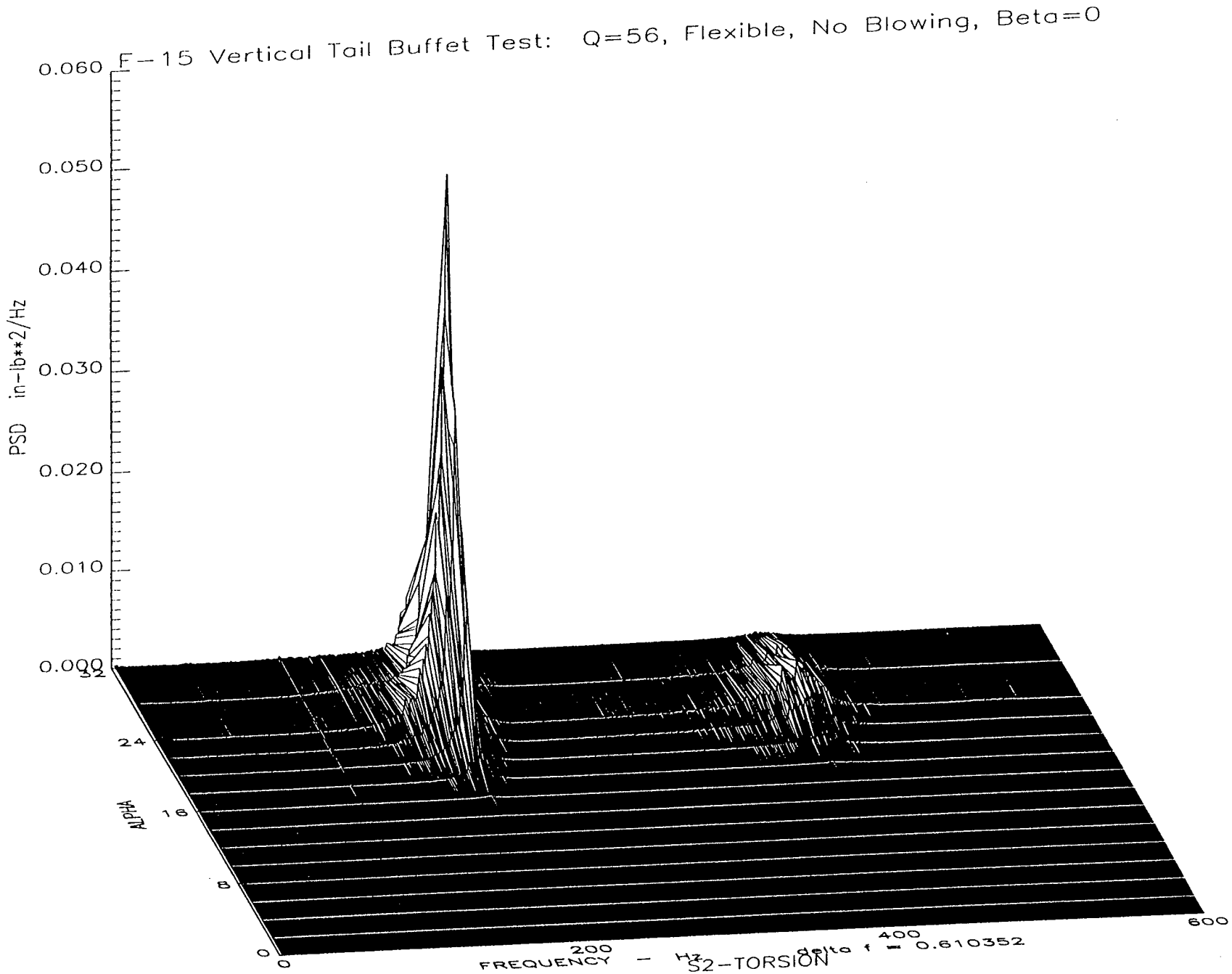

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=-4
Log PSD
0
-2
-4
-6
-8
-10
ALPHA
24
16
8
0
0
200
400
600
FREQUENCY - Hz
delta f = 0.610352
S2-TORSION

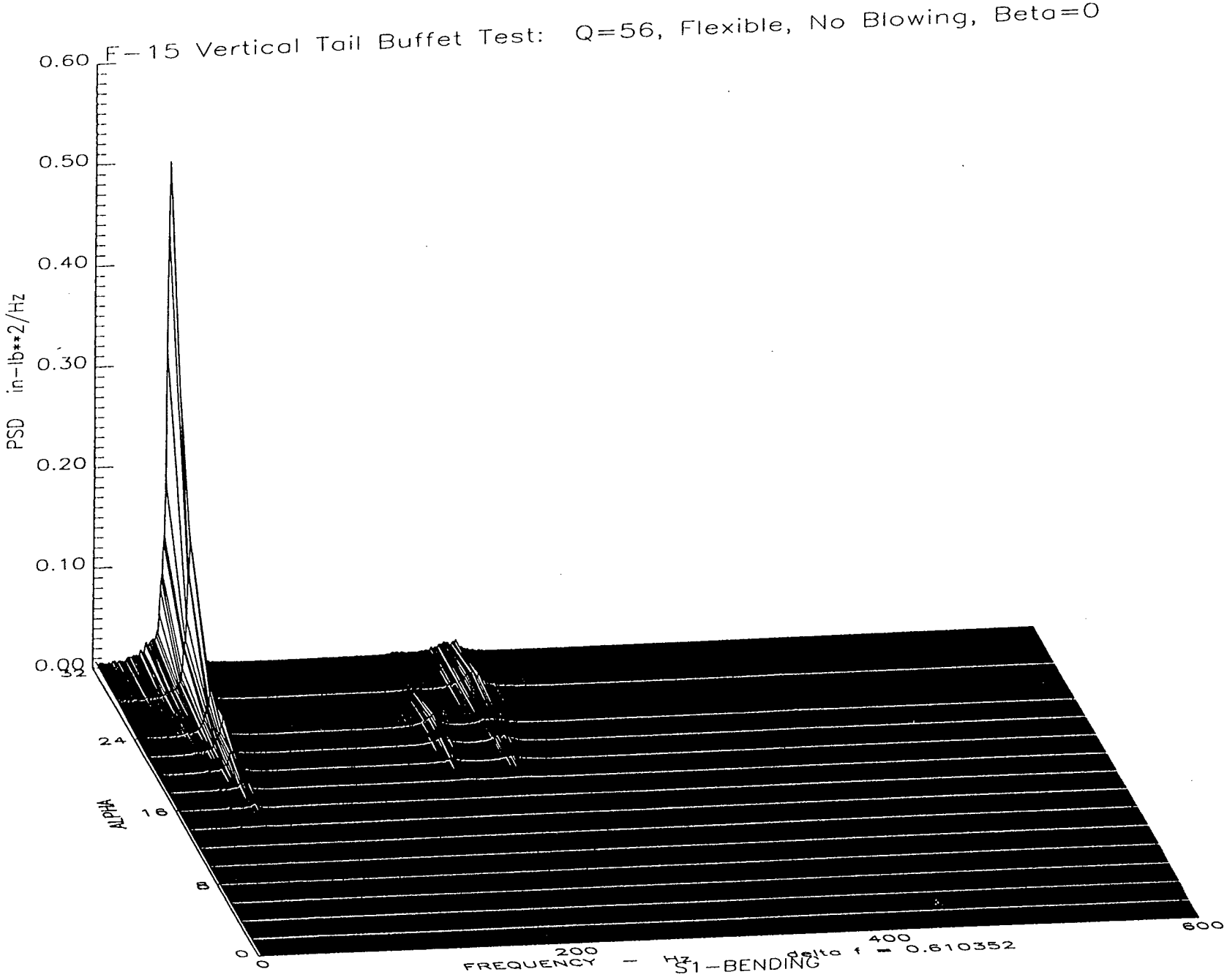

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Alpha=22
Log PSD
-1
-2
-3
-4
-5
-6
-7
BETA
4
2
0
-2
-4
0
200
400
600
FREQUENCY - Hz
delta f = 0.610352
S1-BENDING

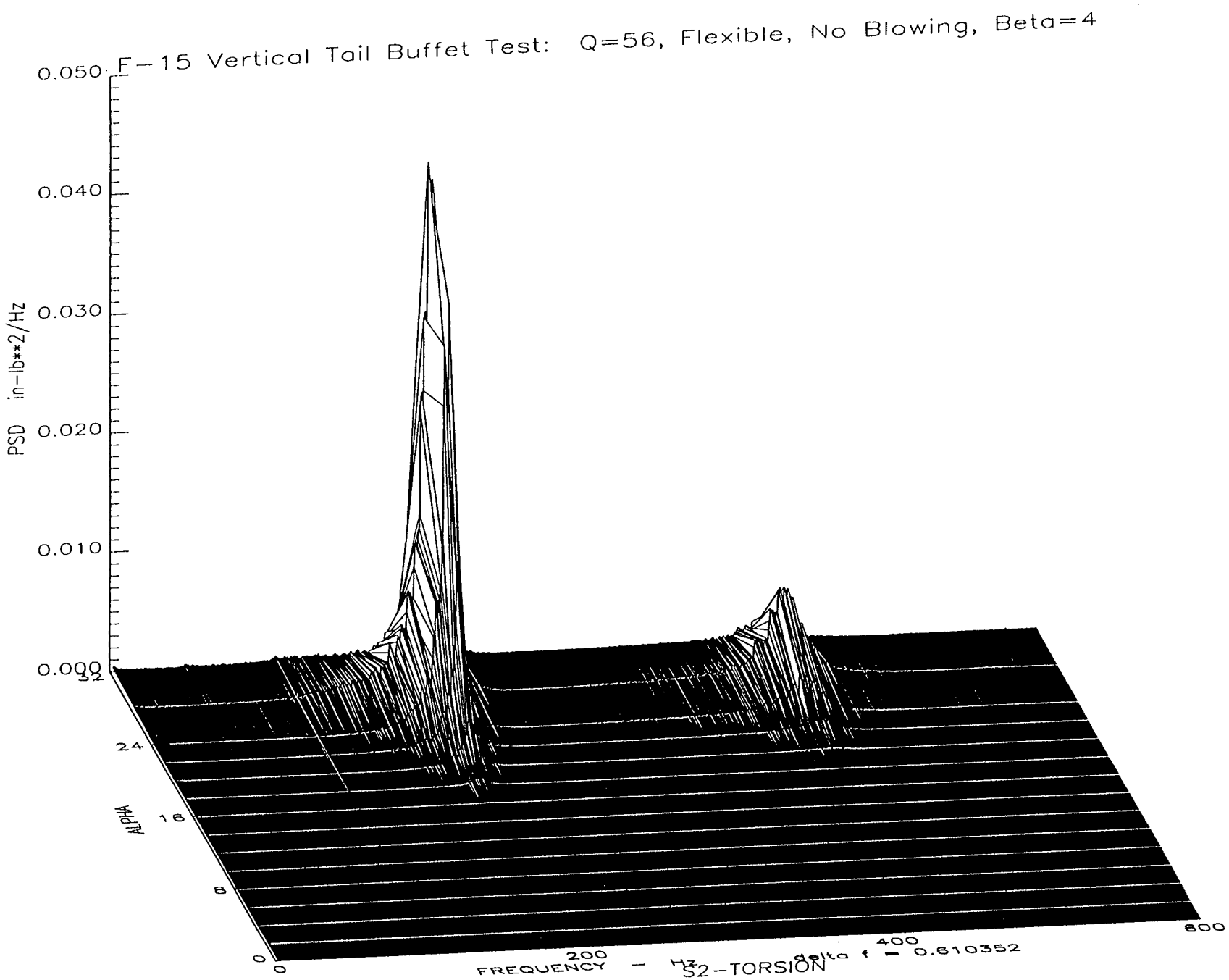

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Alpha=22
Log PSD
-1
-2
-3
-4
-5
-6
-7
BETA
2
0
-2
-4
FREQUENCY - Hz
200
400
600
S2-TORSION

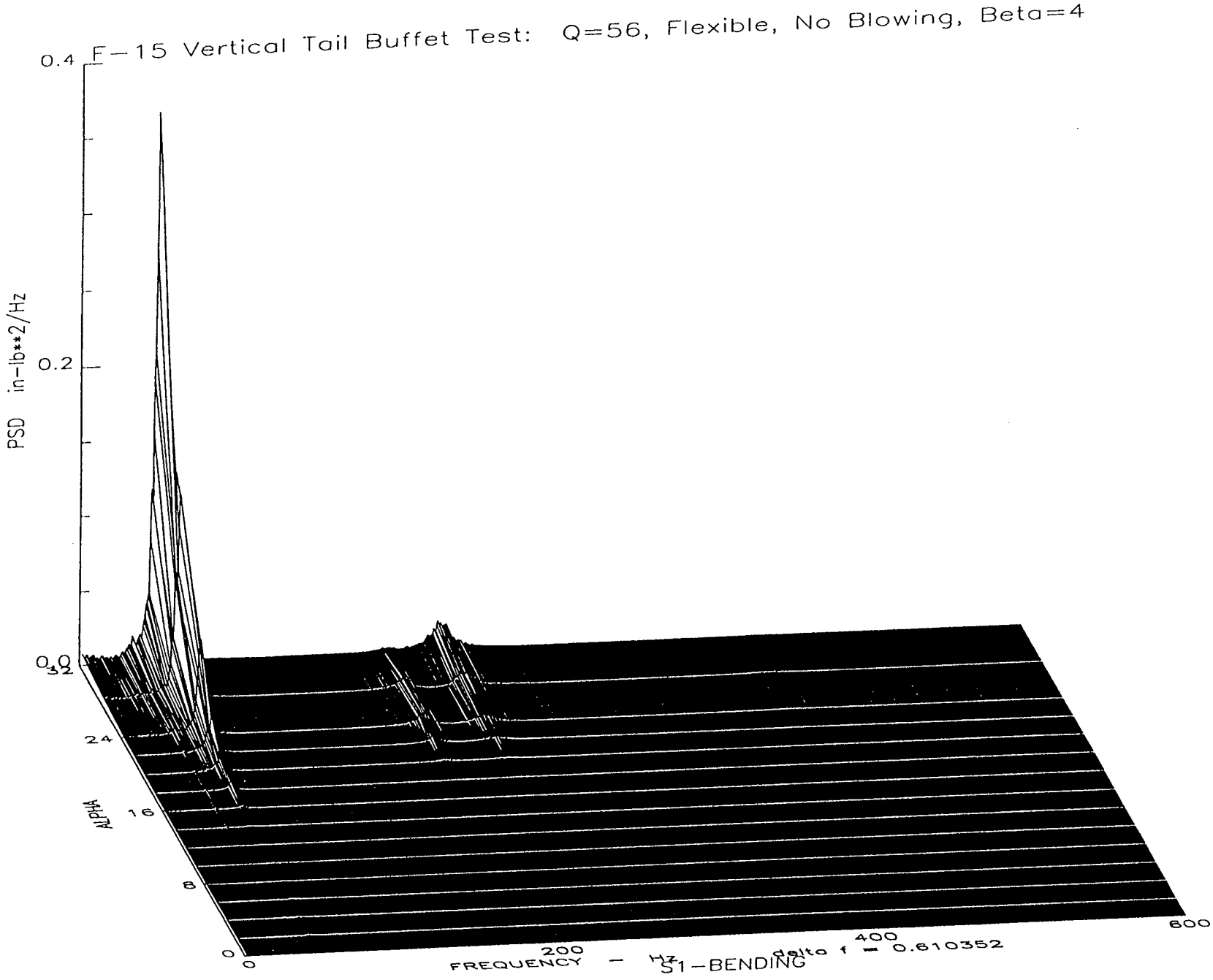

B-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Alpha = 32
Log PSD
-2
-4
-6
-8
BETA
2
0
-2
-4
0
200
400
600
FREQUENCY - HZ
Delta f = 0.610352
S1-BENDING


5-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Alpha = 32
Log PSD
-2
-4
-6
BETA
2
0
-2
-4
200
400
600
FREQUENCY - HZ
S2-TORSION 1 = 0.610352

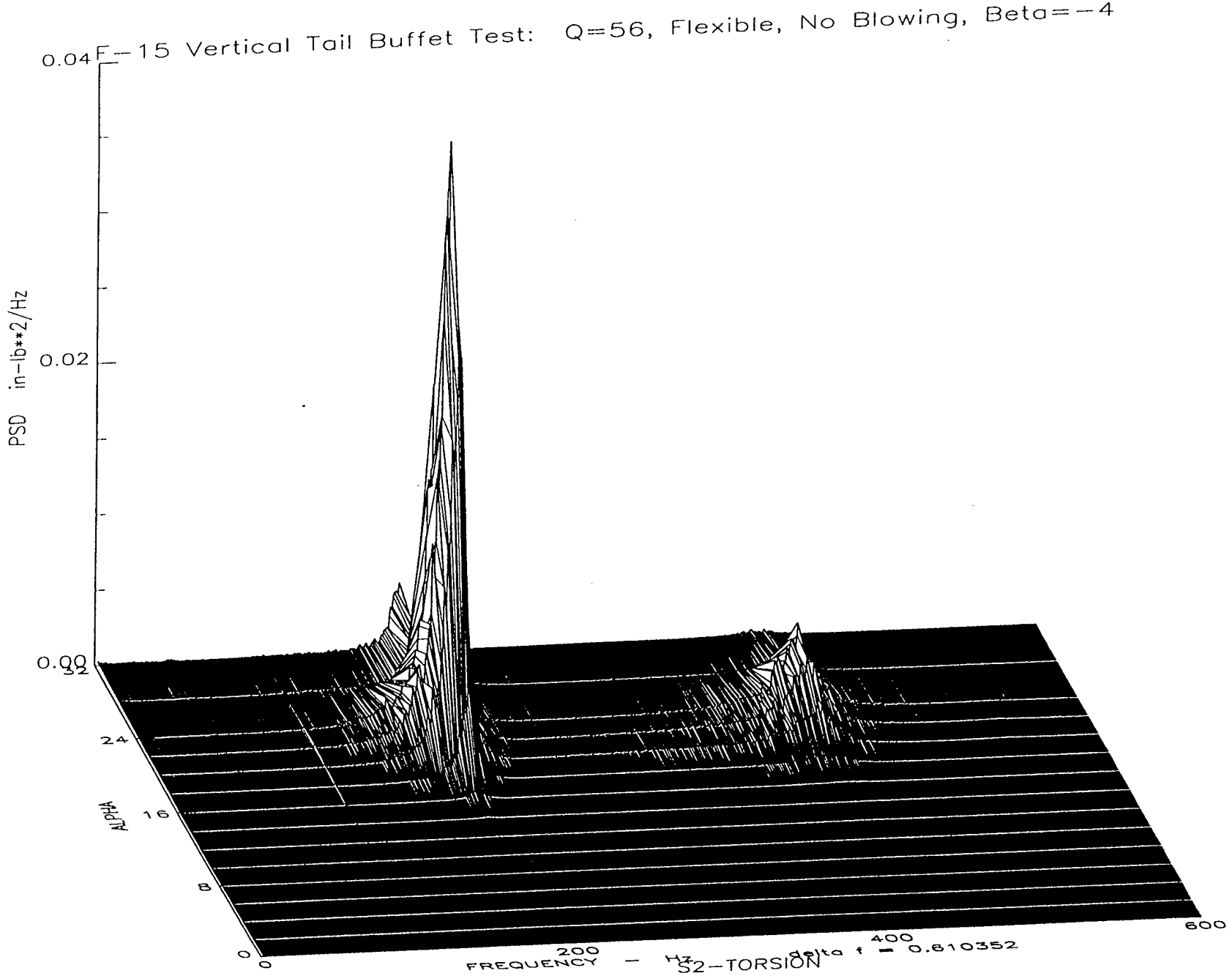

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=0
PSD in-lb**2/Hz
0.060
0.050
0.040
0.030
0.020
0.010
0.000
S2
24
ALPHA
16
8
0
0
200
400
600
FREQUENCY - Hz
S2-TORSION
delta f = 0.610352

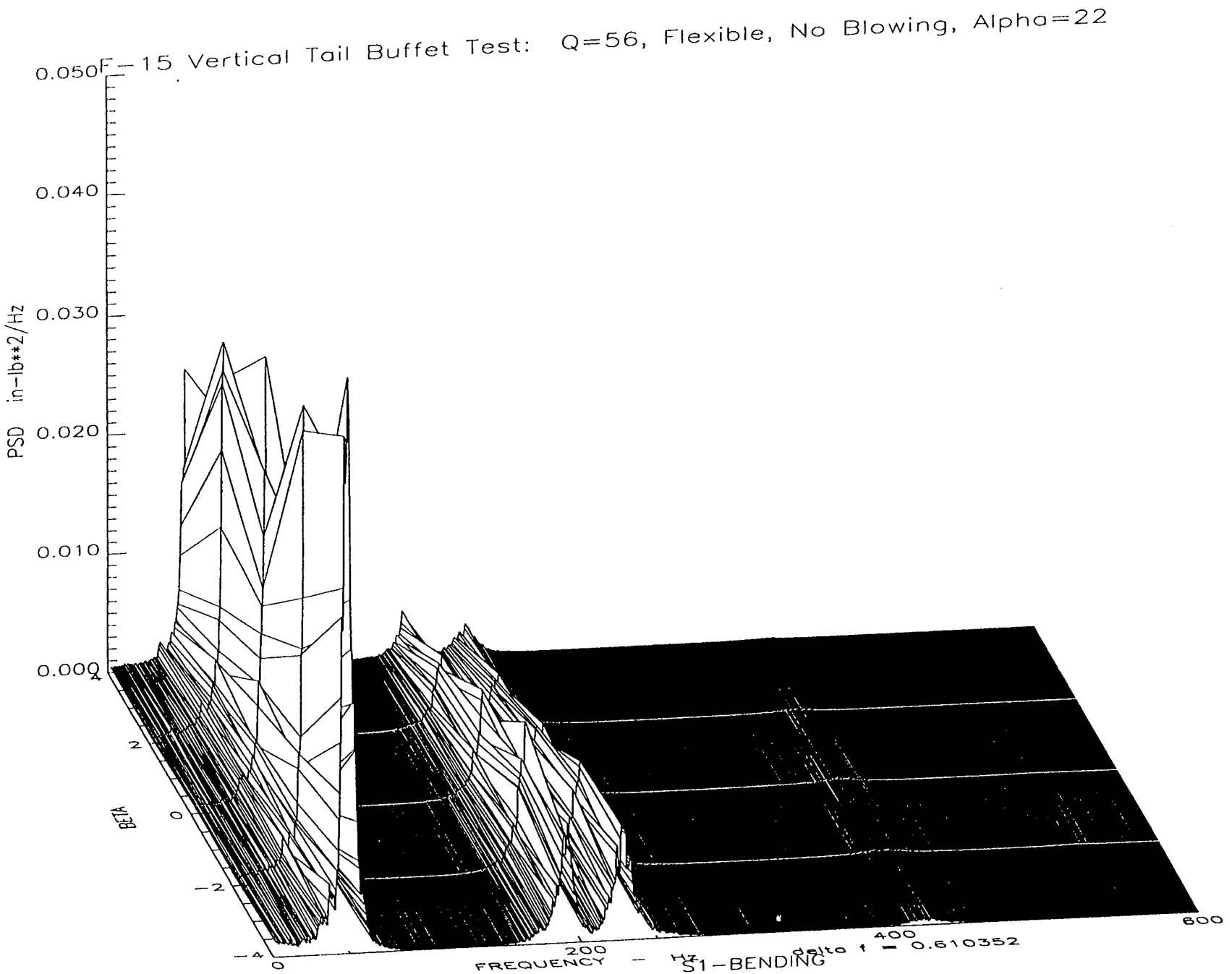

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=0
PSD in-lb**2/Hz
0.60
0.50
0.40
0.30
0.20
0.10
0.00
ALPHA
32
24
16
8
0
0
200
400
600
FREQUENCY - Hz
Delta f = 0.610352
1-BENDING

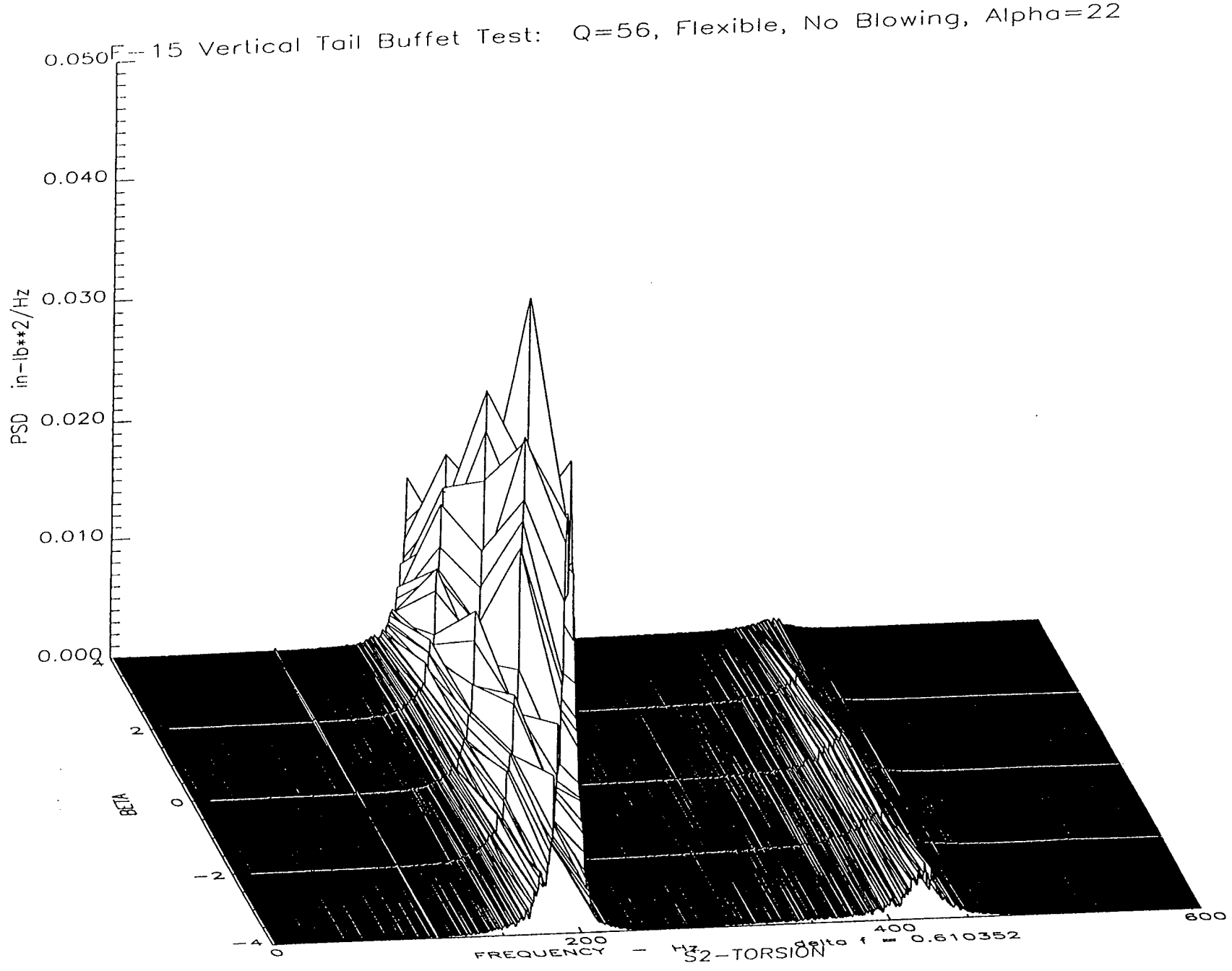

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=4
PSD in-lb**2/Hz
0.050
0.040
0.030
0.020
0.010
0.000
ALPHA
32
24
16
8
0
0
200
400
600
FREQUENCY - Hz
delta f = 0.610352
S2-TORSION

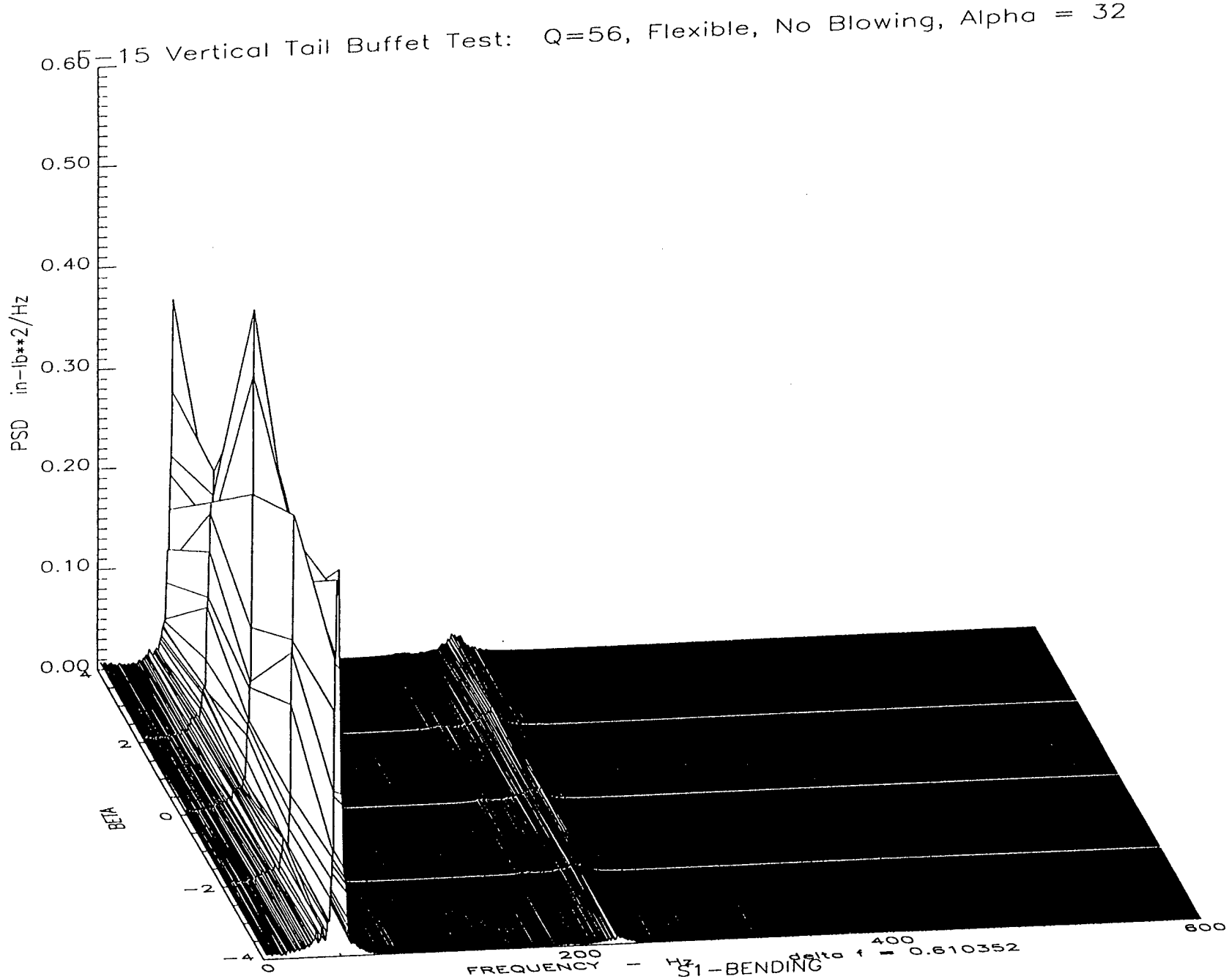

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=4
PSD in-lb**2/Hz
0.4
0.2
0.0
ALPHA
32
24
16
8
0
0
200
400
600
FREQUENCY - Hz
Delta f = 0.610352
1-BENDING

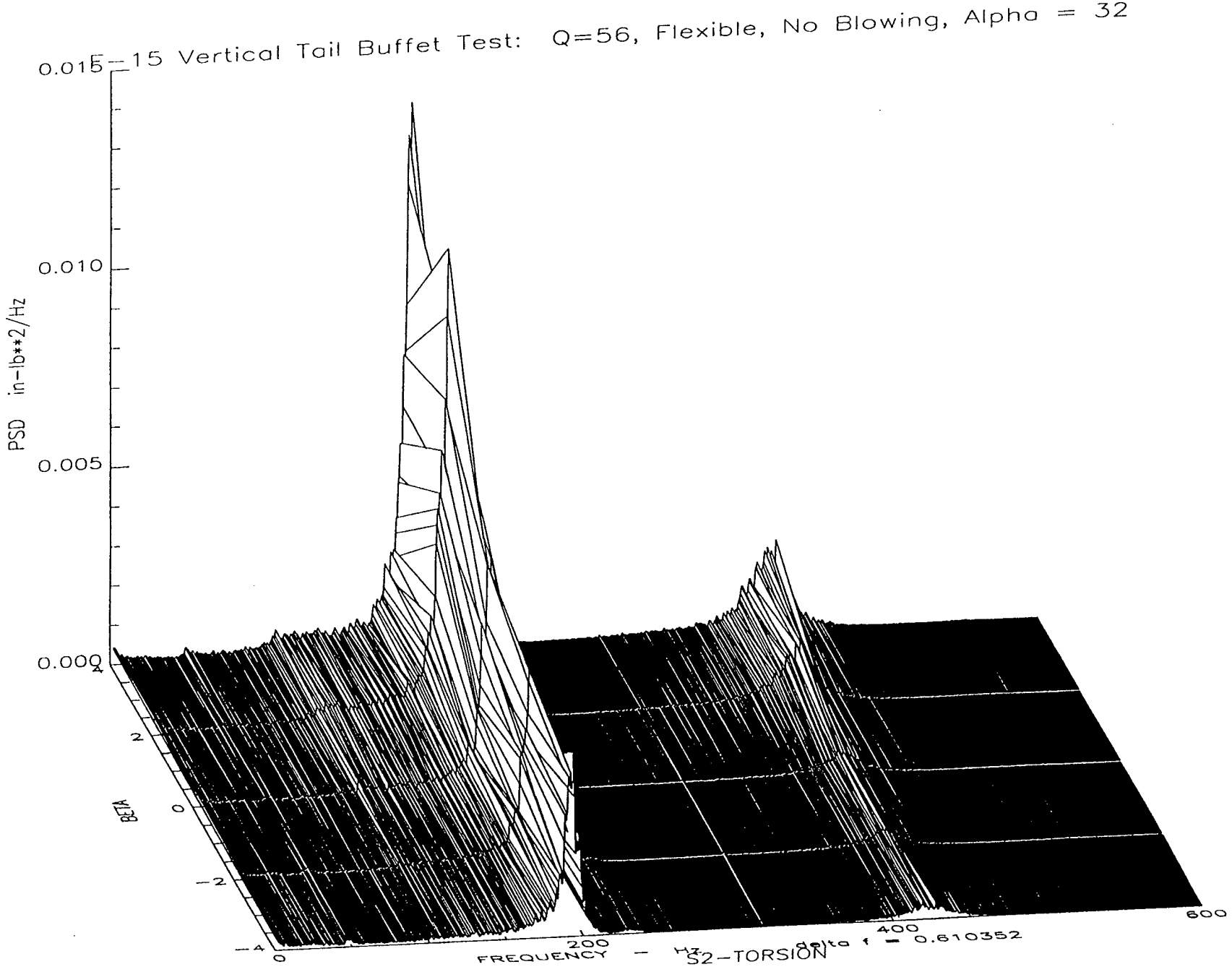
Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=-4
PSD in-lb**2/Hz
0.4
0.2
0.0
ALPHA
24
16
8
0
FREQUENCY - Hz
0
200
400
600
S1 - BENDING delta = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=-4
PSD in-lb**2/Hz
0.04
0.02
0.00
ALPHA
24
16
8
0
0
200
400
600
FREQUENCY - Hz
delta f = 0.610352
S2-TORSION

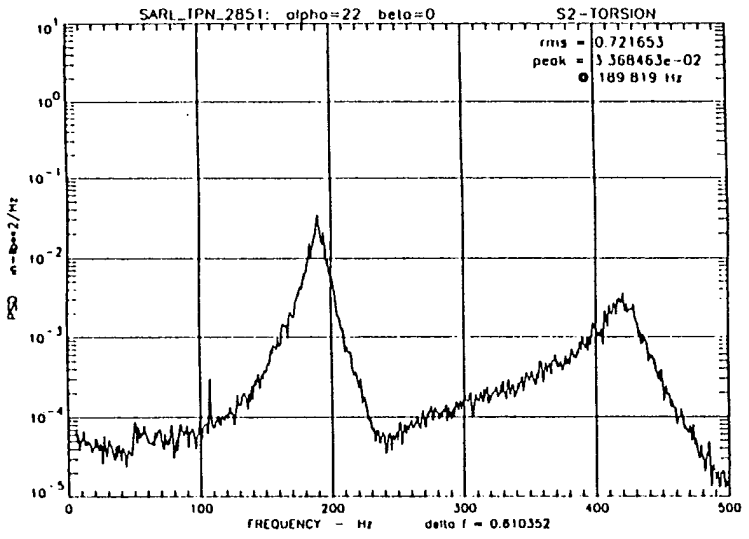

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Alpha=22
PSD in-lb**2/Hz
0.050
0.040
0.030
0.020
0.010
0.000
BETA
2
0
-2
-4
0
200
400
600
FREQUENCY - Hz
S1-BENDING
delta f = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Alpha=22
PSD in-lb**2/Hz
0.050
0.040
0.030
0.020
0.010
0.000
BETA
2
0
-2
-4
0
200
400
600
FREQUENCY - Hz
delta f = 0.610352
S2-TORSION

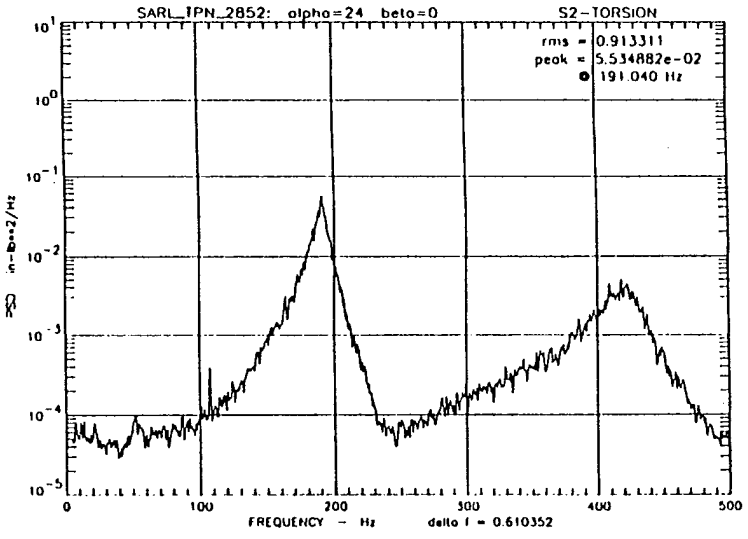

15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Alpha = 32
PSD in-lb**2/Hz
0.60
0.50
0.40
0.30
0.20
0.10
0.00
BETA
4
2
0
-2
-4
0
200
400
600
FREQUENCY - Hz
Delta f = 0.610352
S1-BENDING


15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Alpha = 32
0.015
0.010
0.005
0.000
PSD in-lb**2/Hz
BETA
2
0
-2
-4
0
200
400
600
FREQUENCY - Hz
S2-TORSION
Delta f = 0.610352

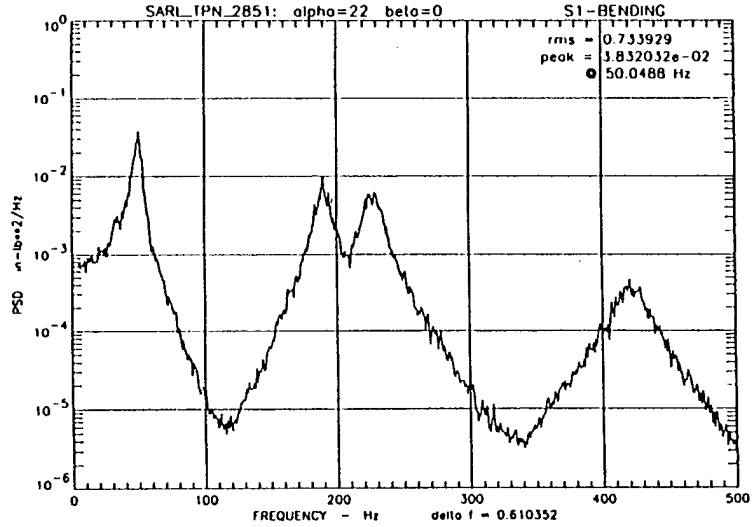
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



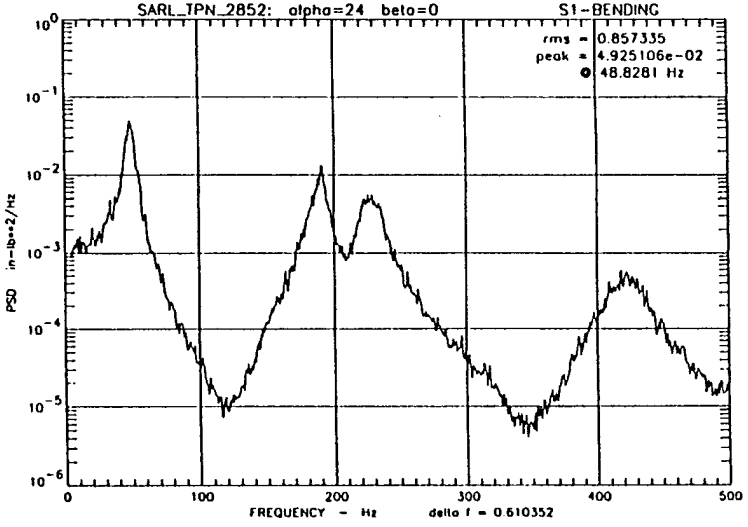
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



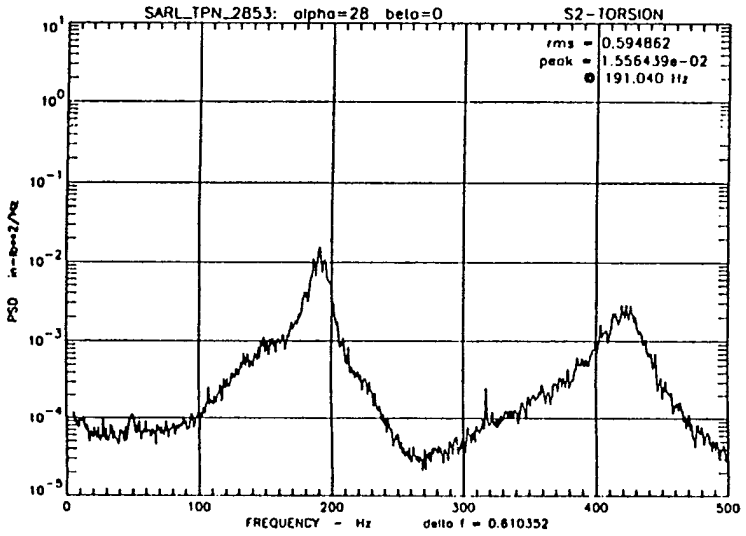
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



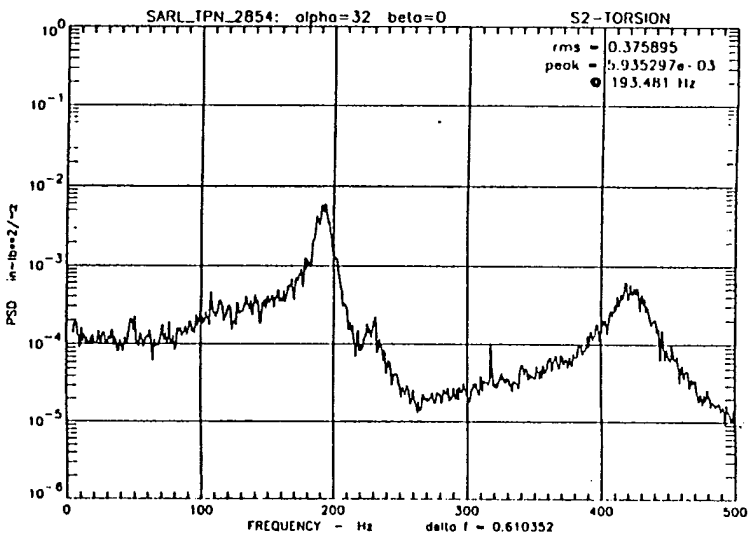
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



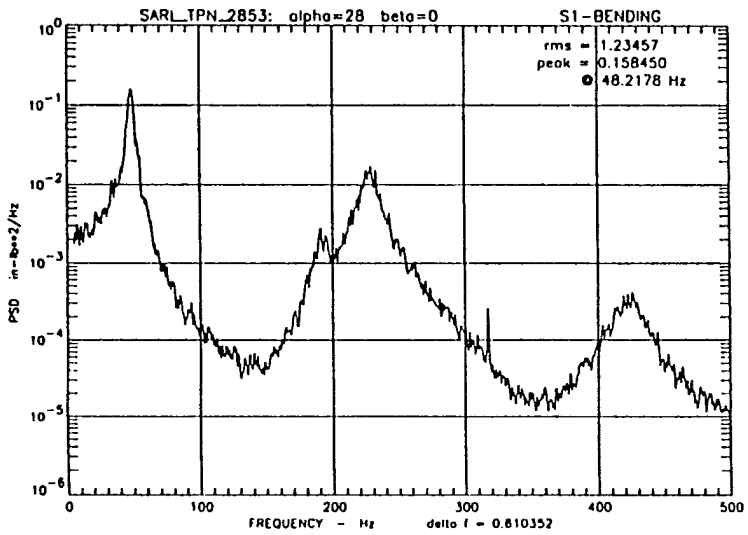
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



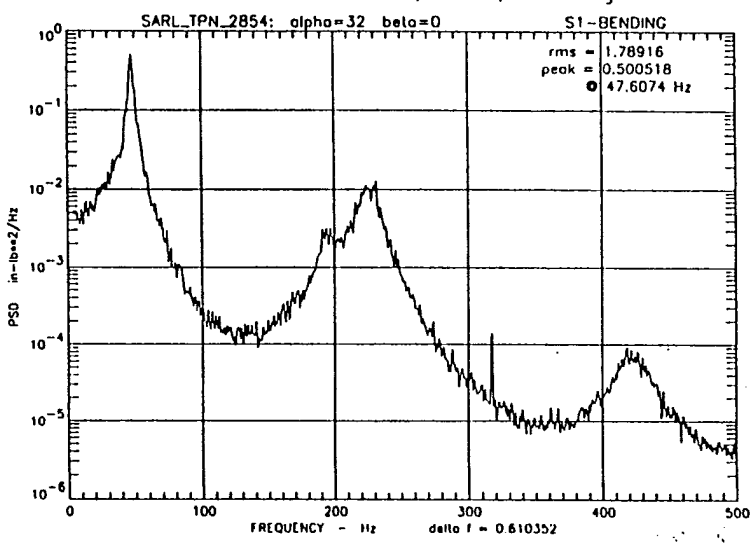
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing

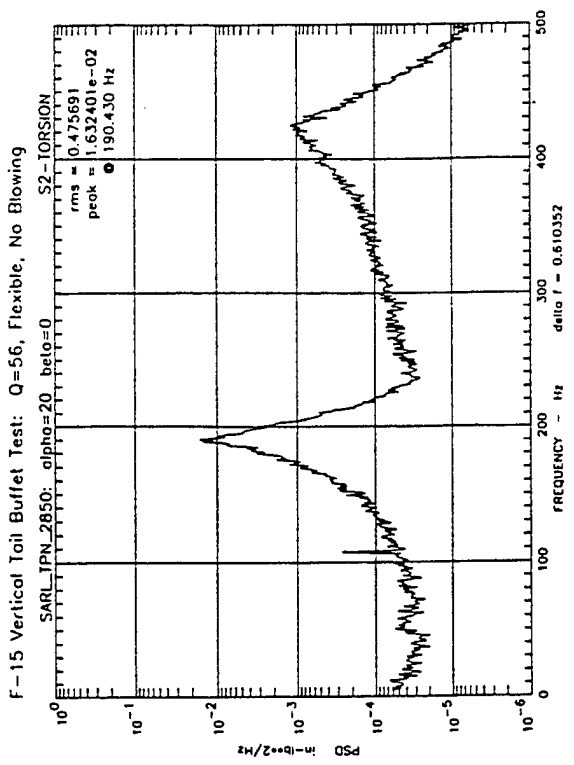


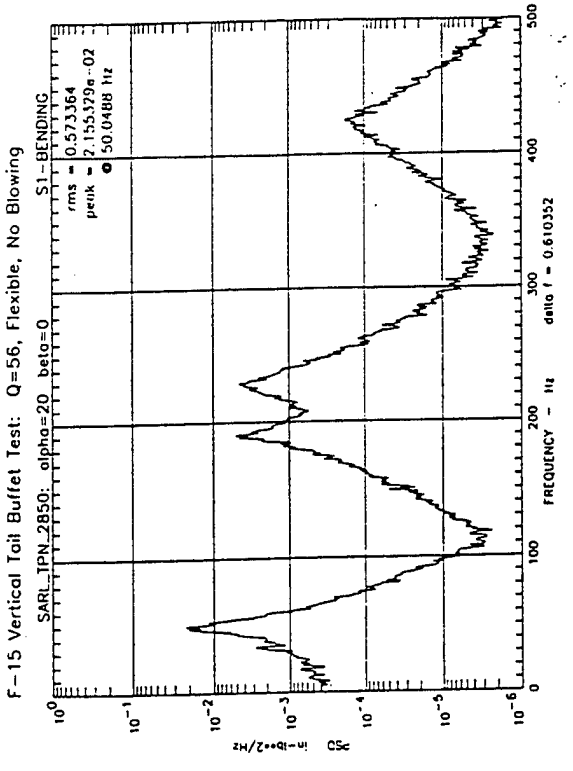
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing

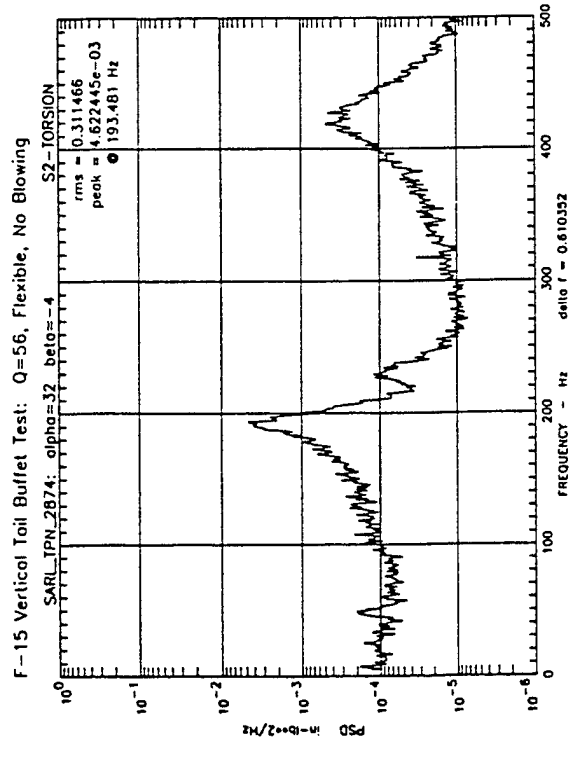


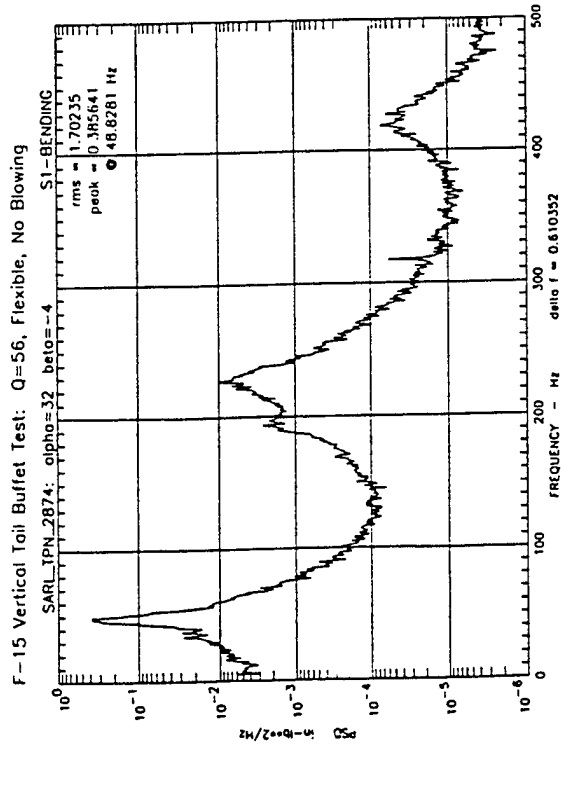
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



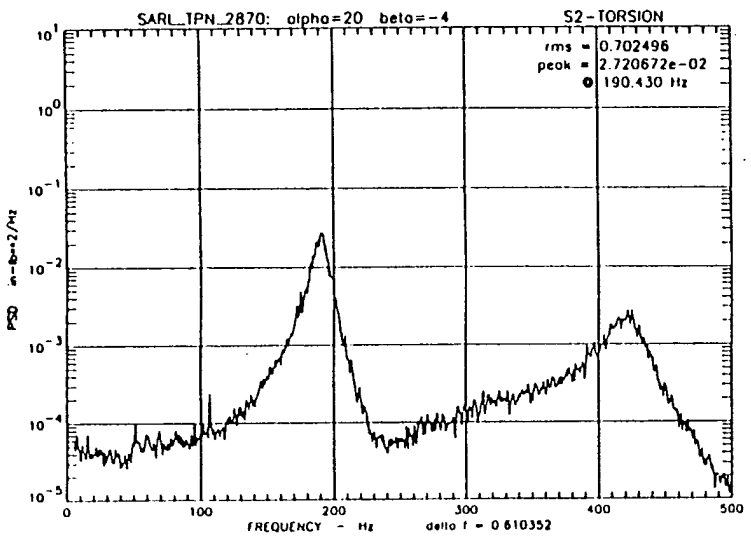

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
SARL_TPN_2850: alpha=20 beta=0
S2-TORSION
rms = 0.475691
peak = 1.632401e-02
@ 190.430 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
SARL_TPN_2850: alpha=20 beta=0
S1-BENDING
rms = 0.573364
peak = 2.155379e-02
@ 50.0488 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

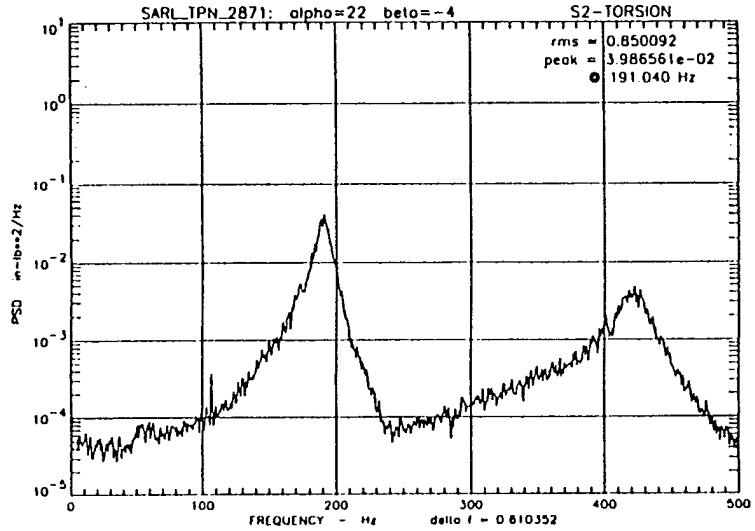

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
SARL_TPN_2874: alpha=32 beta=-4
S2-TORSION
rms = 0.311466
peak = 4.622445e-03
@ 193.481 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
SARL_TPN_2874: alpha=32 beta=-4
S1-BENDING
rms = 1.70235
peak = 0.385641
@ 48.8281 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

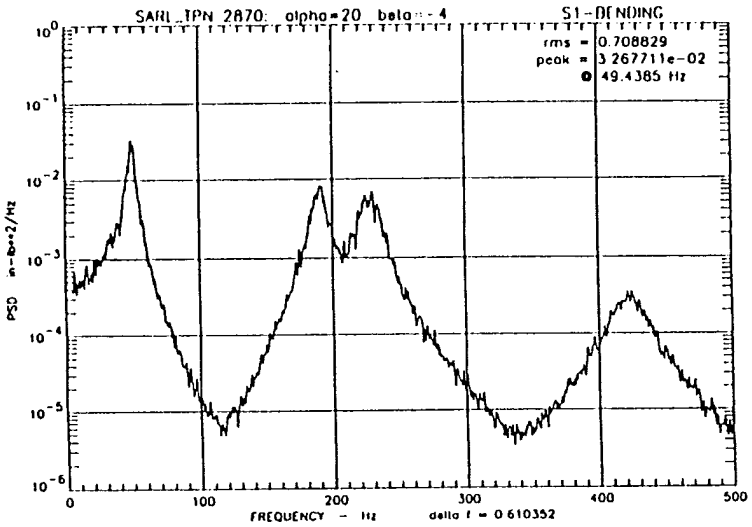
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



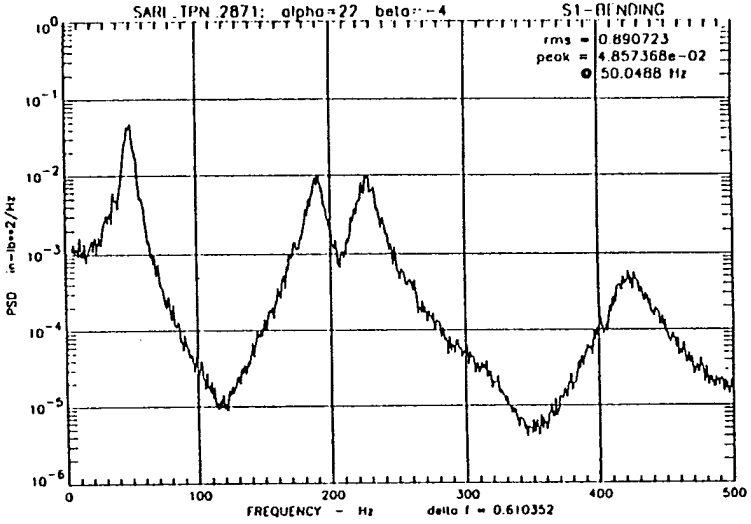
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



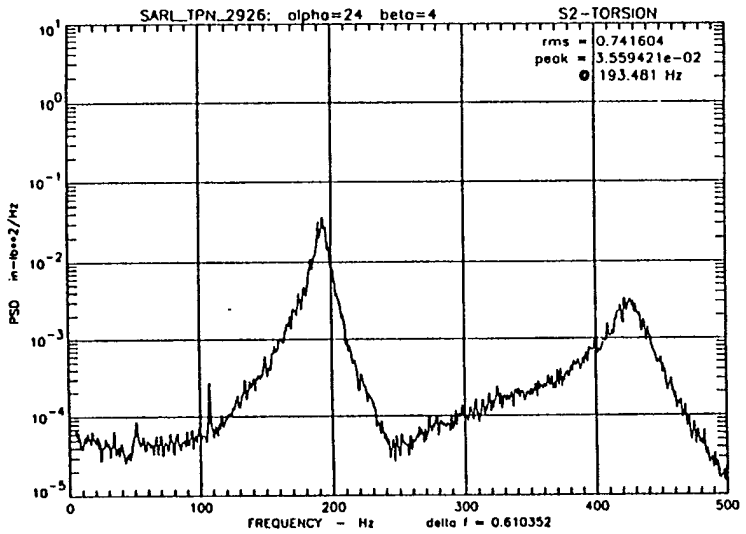
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



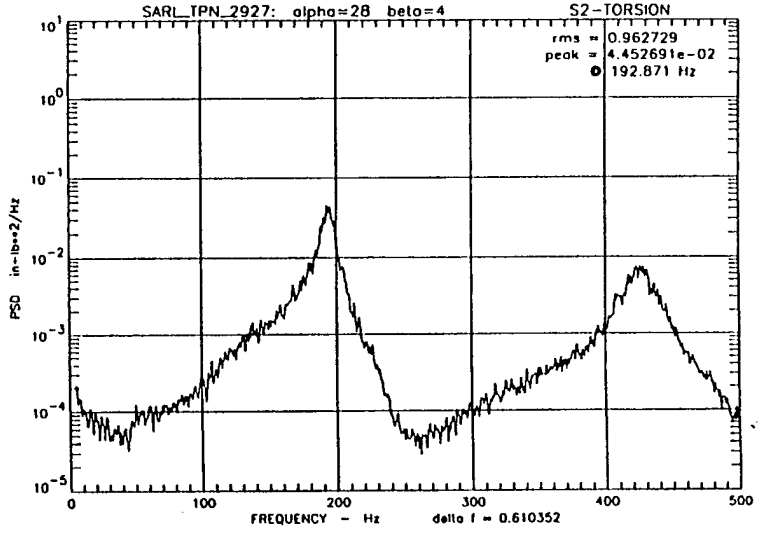
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



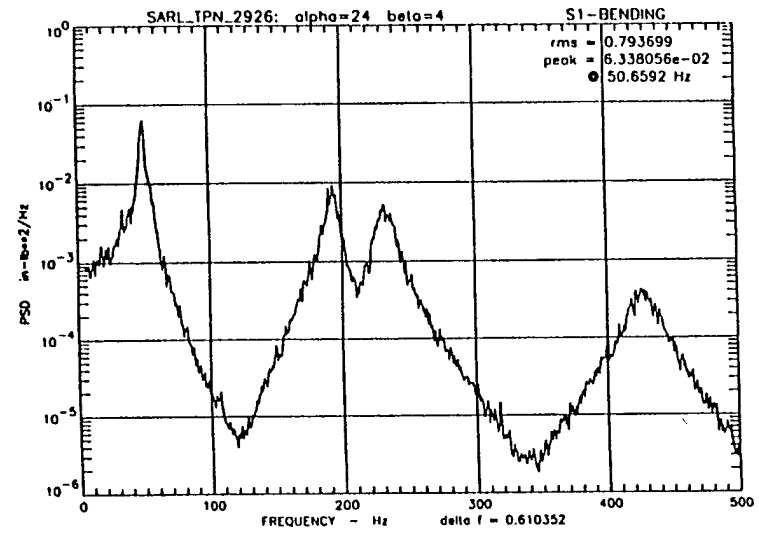
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



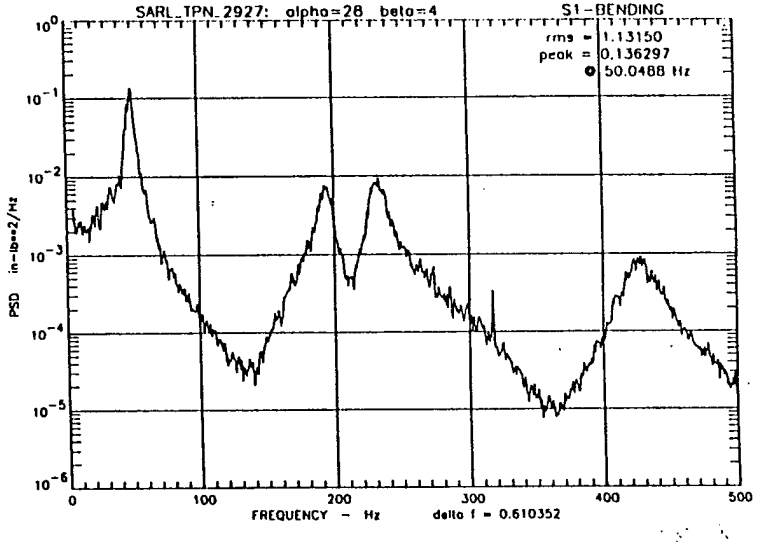
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



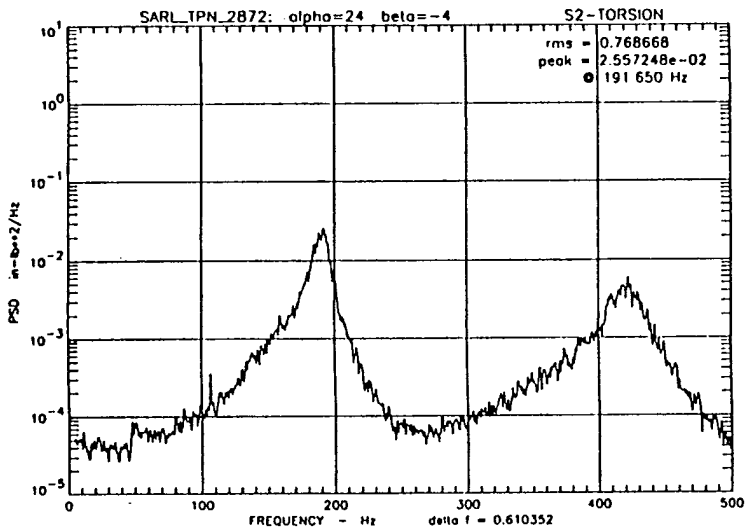
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



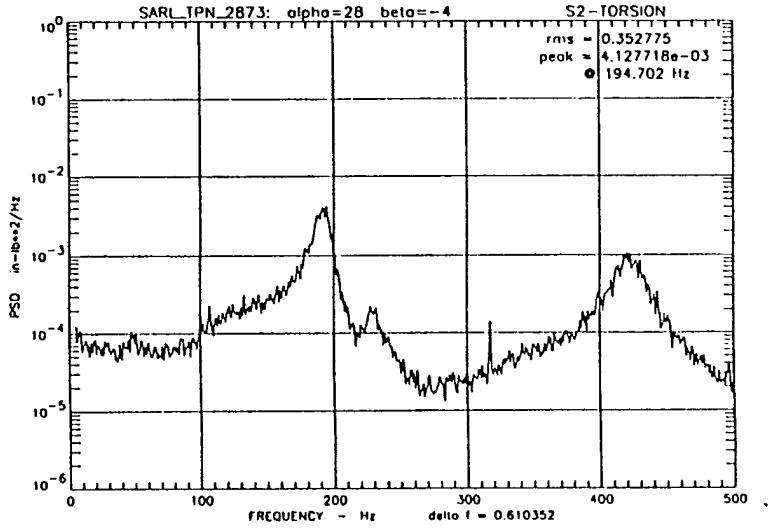
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



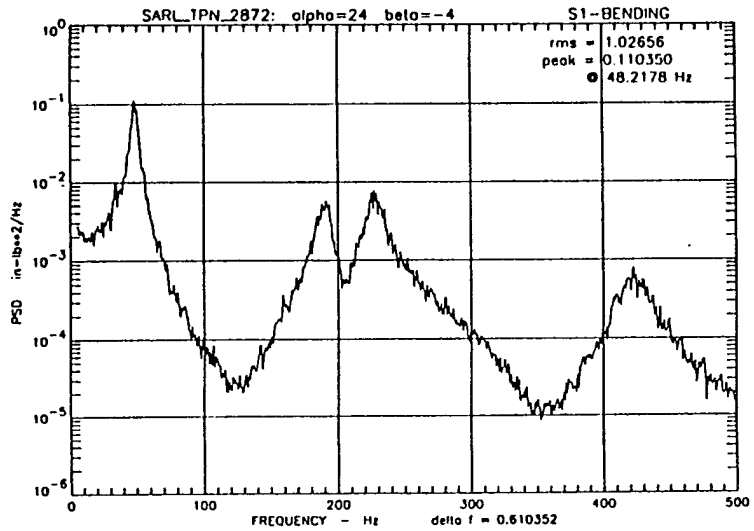
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



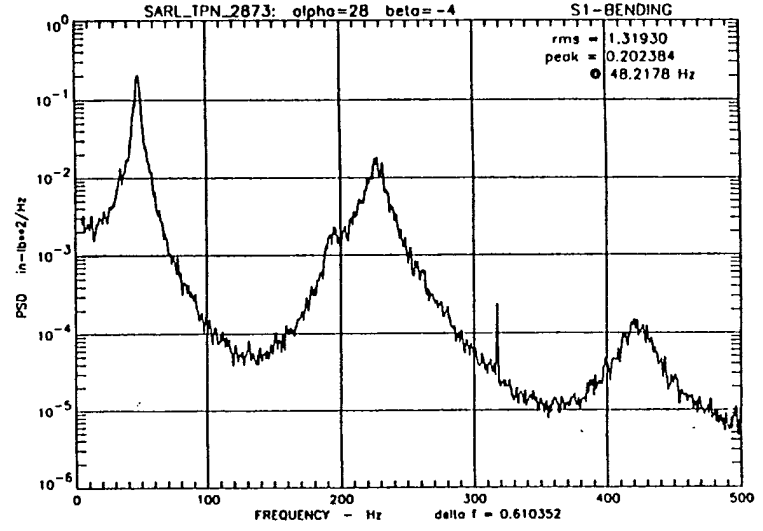
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing

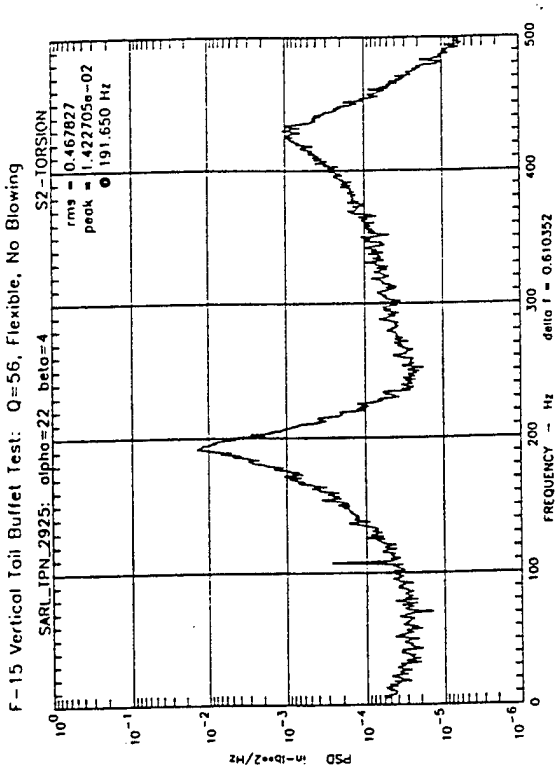


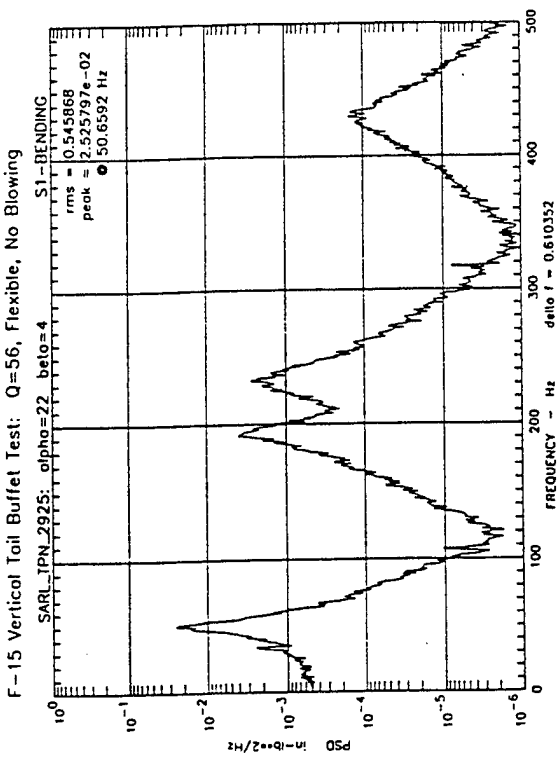
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing

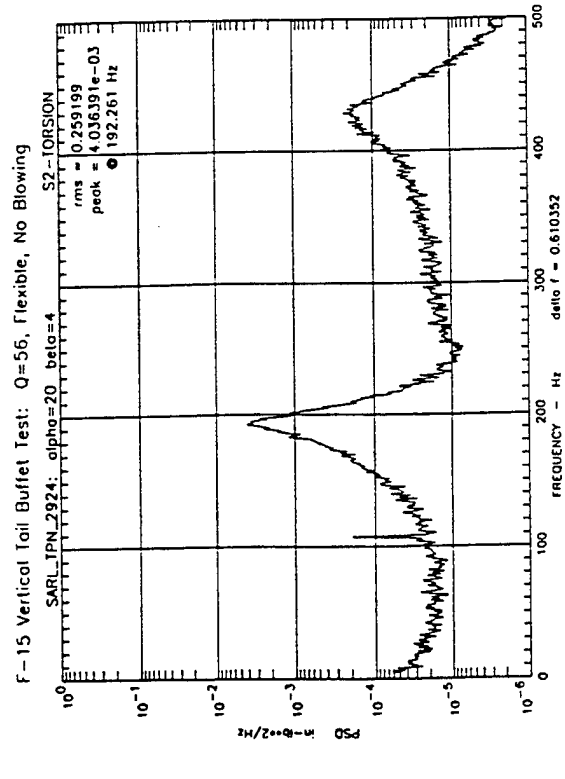


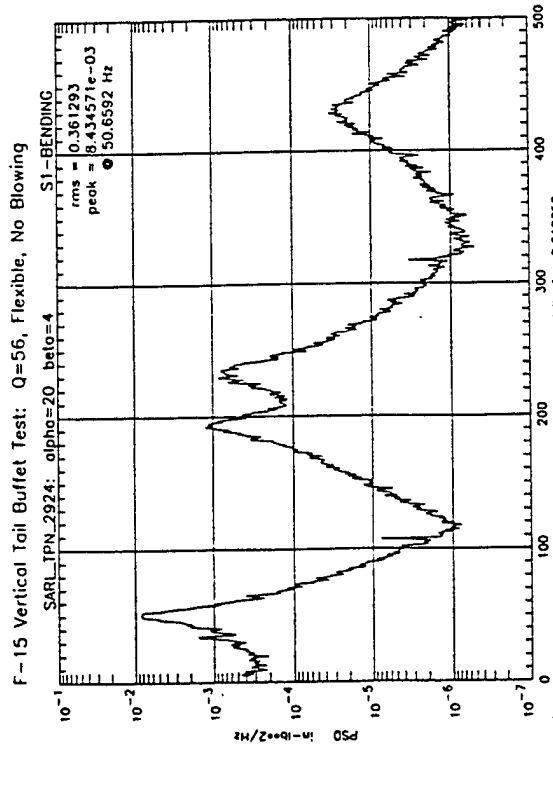
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing



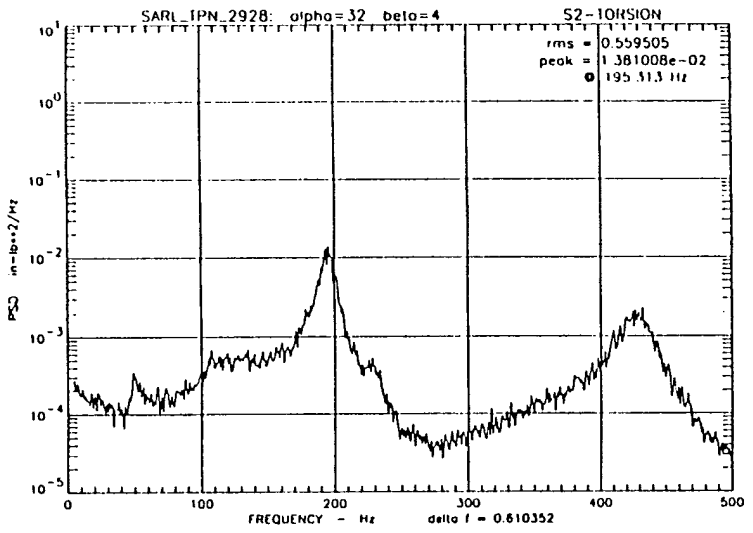

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
SARL_TPN_2925: alpha=22 beta=4
S2-TORSION
rms = 0.467827
peak = 1.422705e-02
@ 191.650 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
SARL_TPN_2925: alpha=22 beta=4
S1-BENDING
rms = 0.545868
peak = 2.525797e-02
@ 50.6592 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

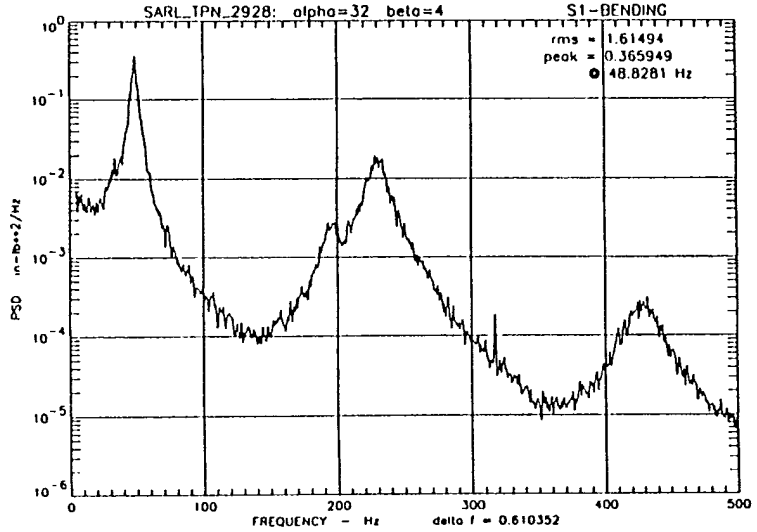

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
SARL_TPN_2924: alpha=20 beta=4
S2-TORSION
rms = 0.259199
peak = 4.036391e-03
@ 192.261 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

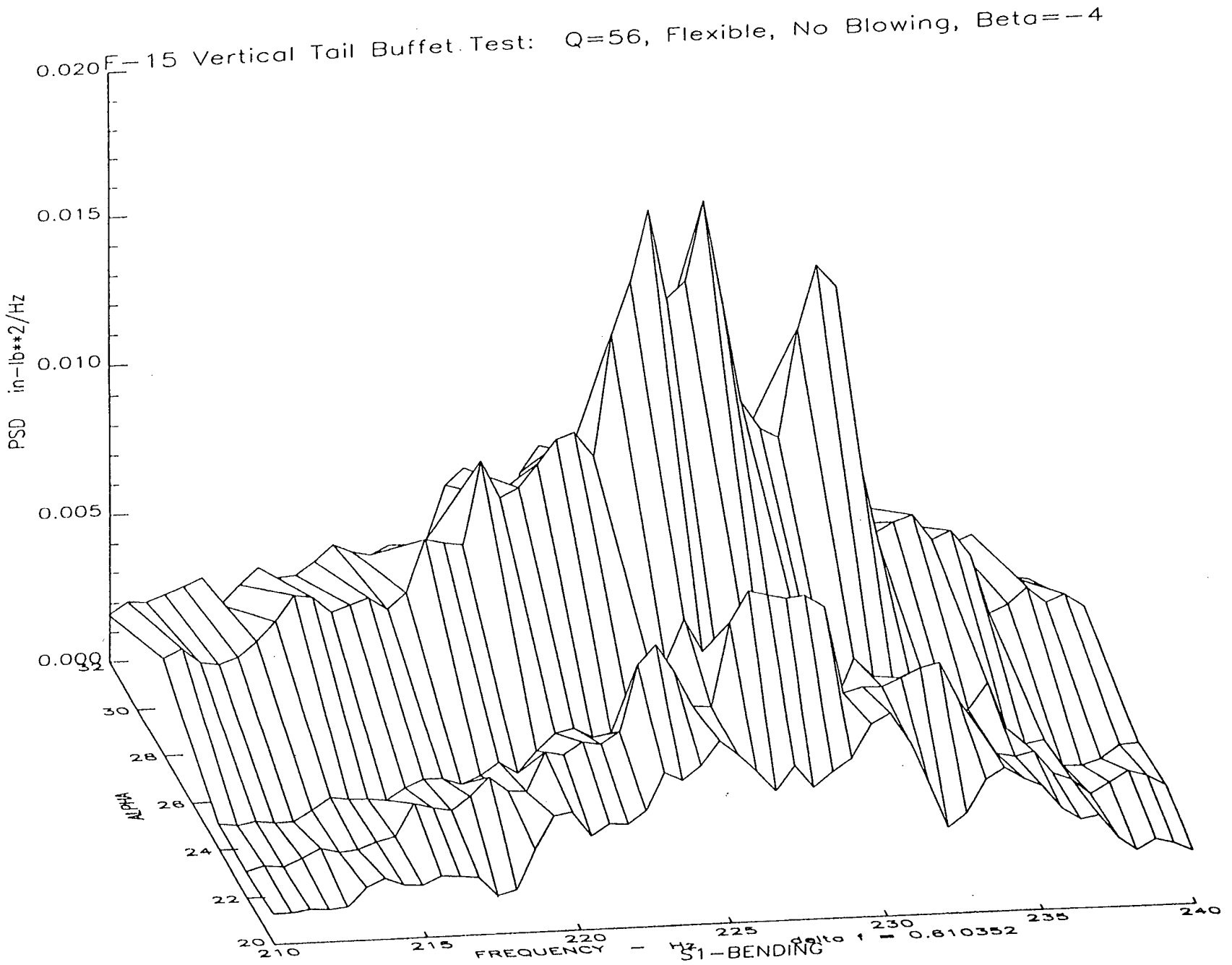

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing
SARL_TPN_2924: alpha=20 beta=4
S1-BENDING
rms = 0.361293
peak = 8.434571e-03
@ 50.6592 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

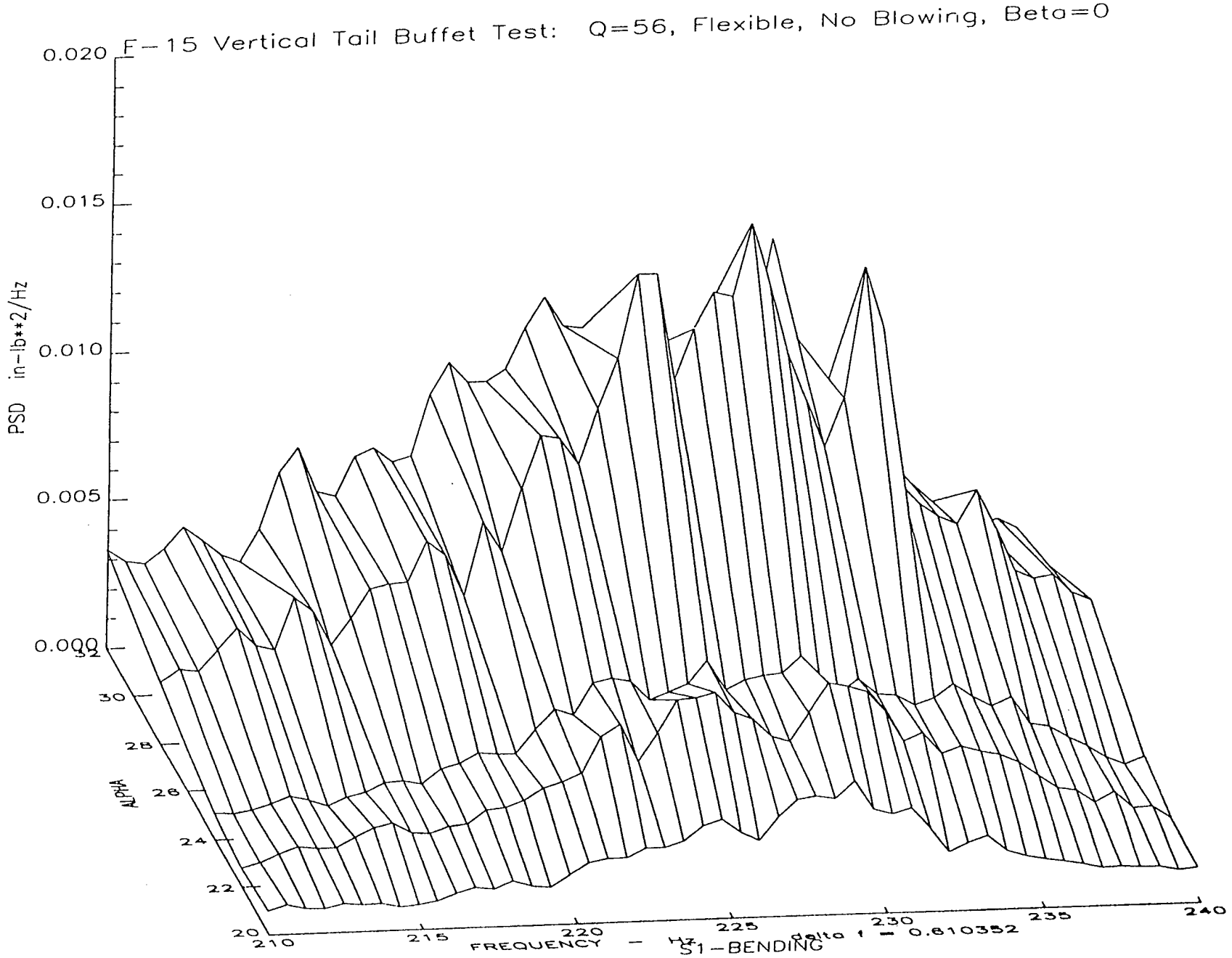
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing

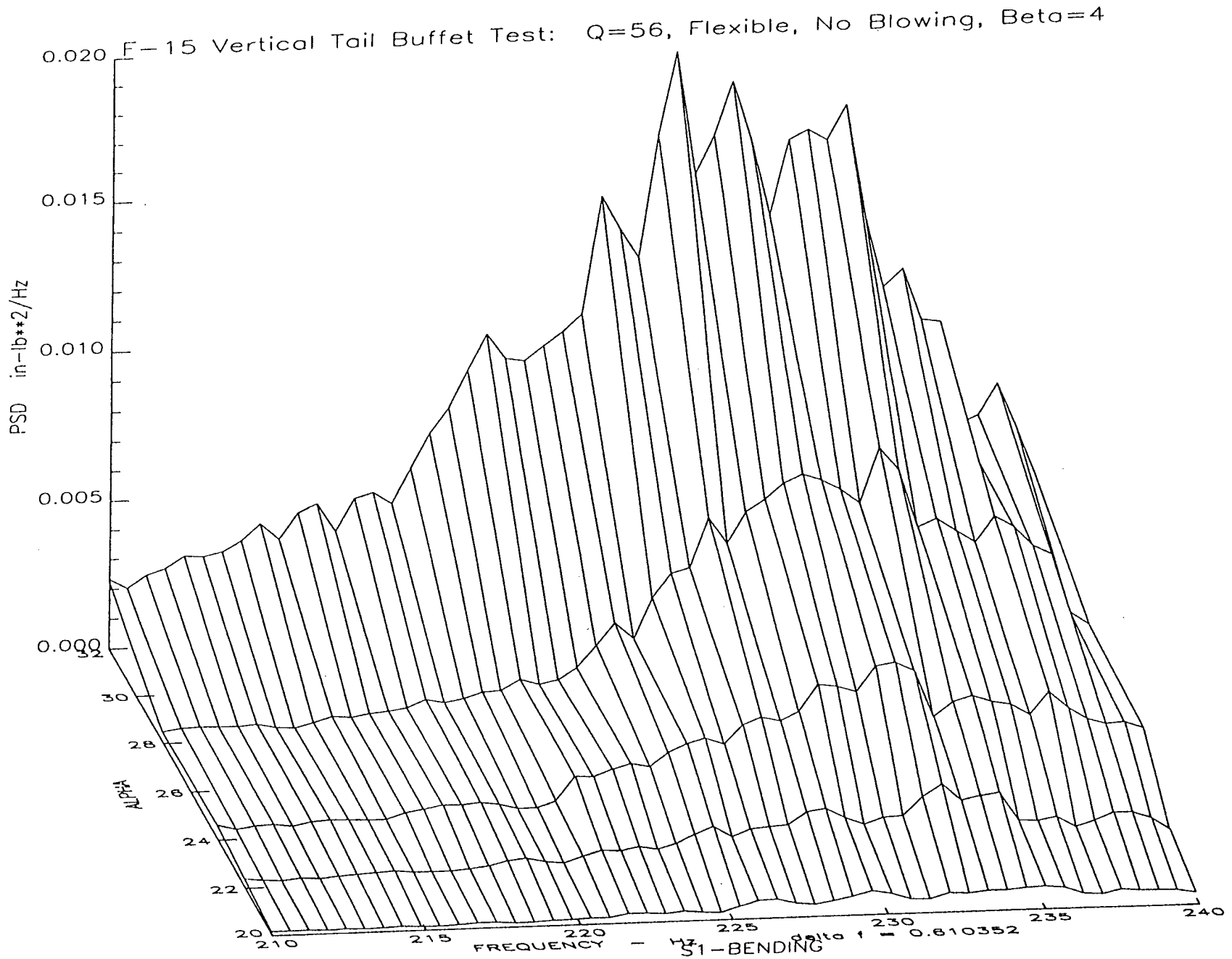


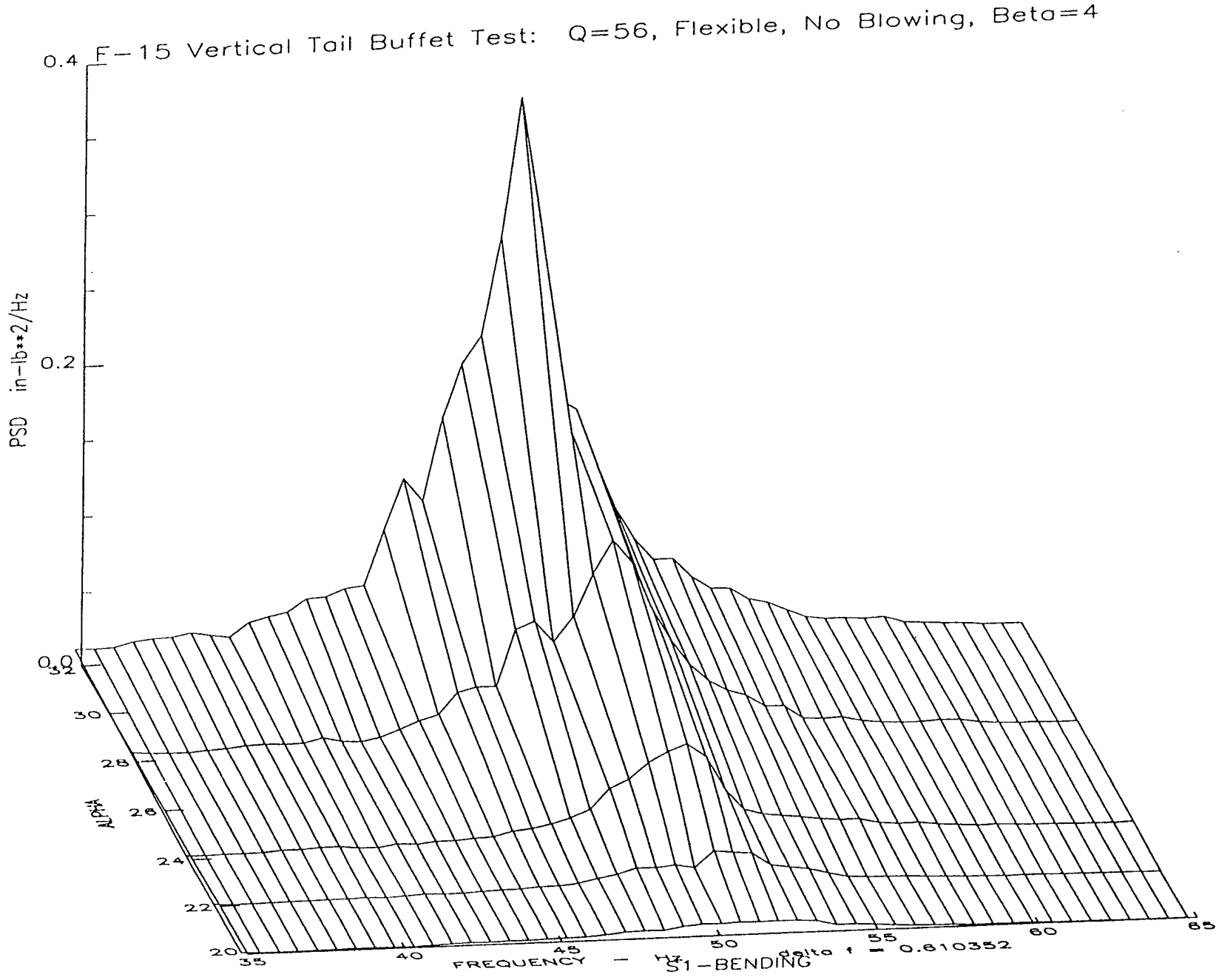
F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing

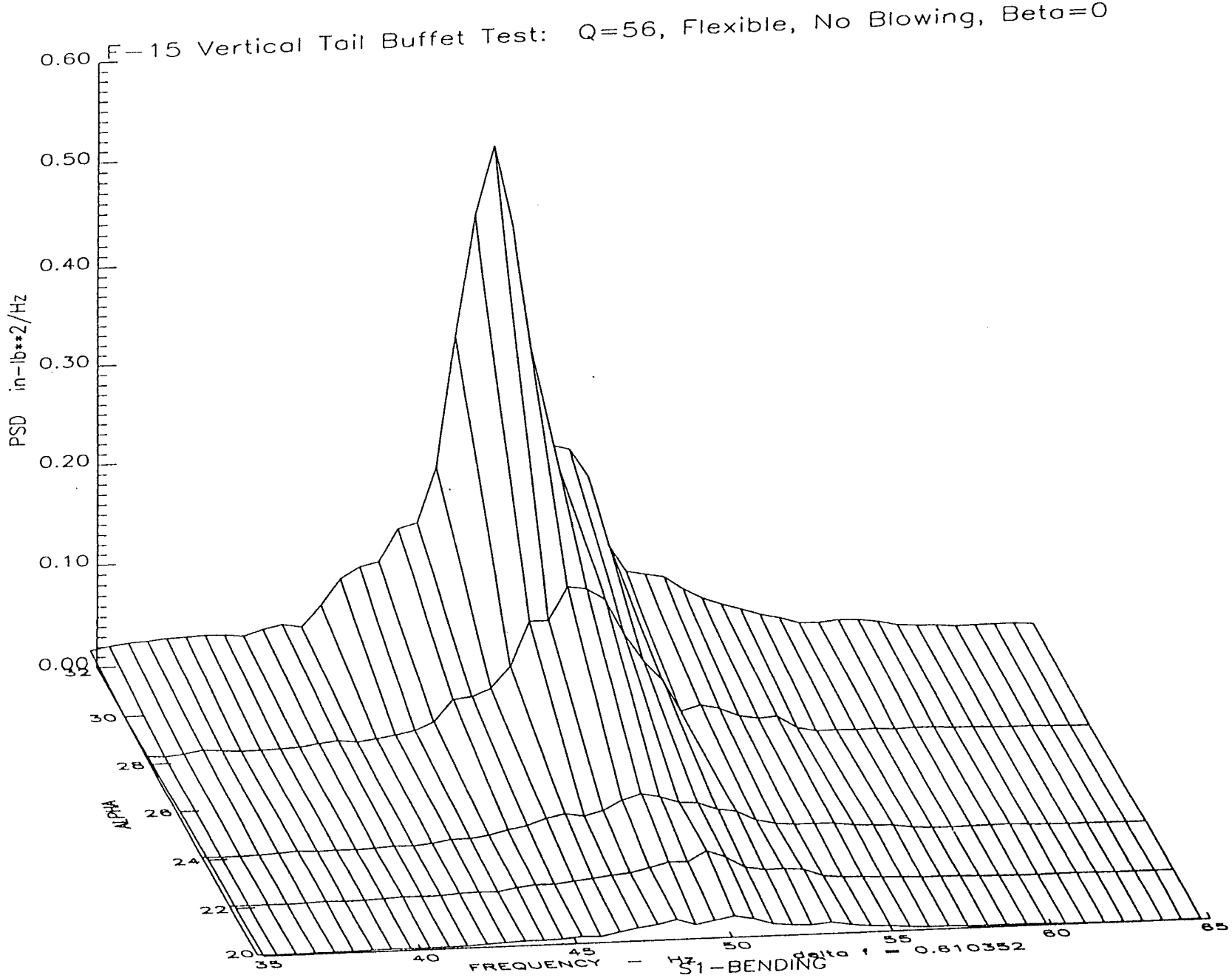


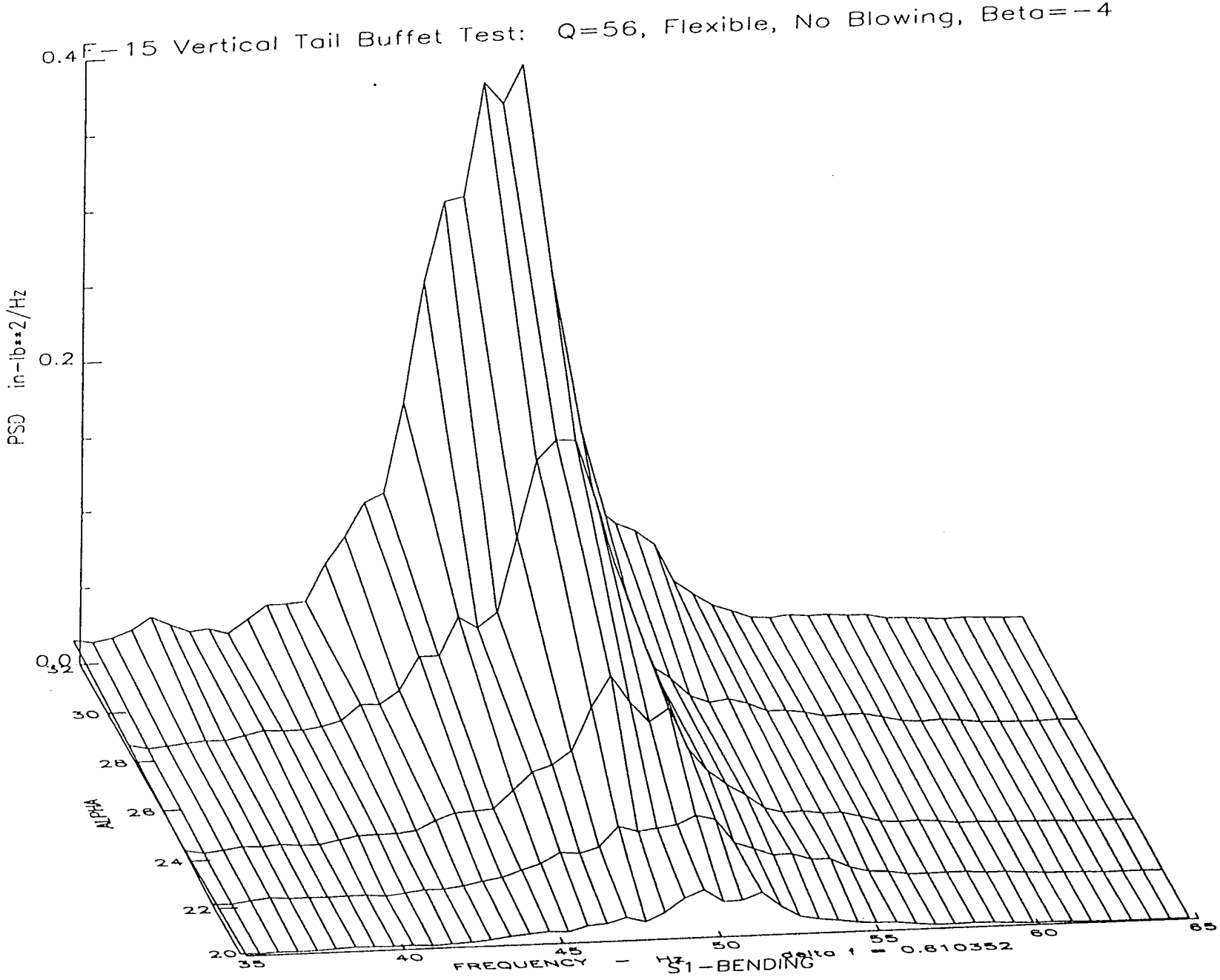

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=-4
PSD in-lb**2/Hz
0.020
0.015
0.010
0.005
0.000
ALPHA
32
30
28
26
24
22
20
210
215
220
225
230
235
240
FREQUENCY - Hz
delta = 0.810352
S1-BENDING

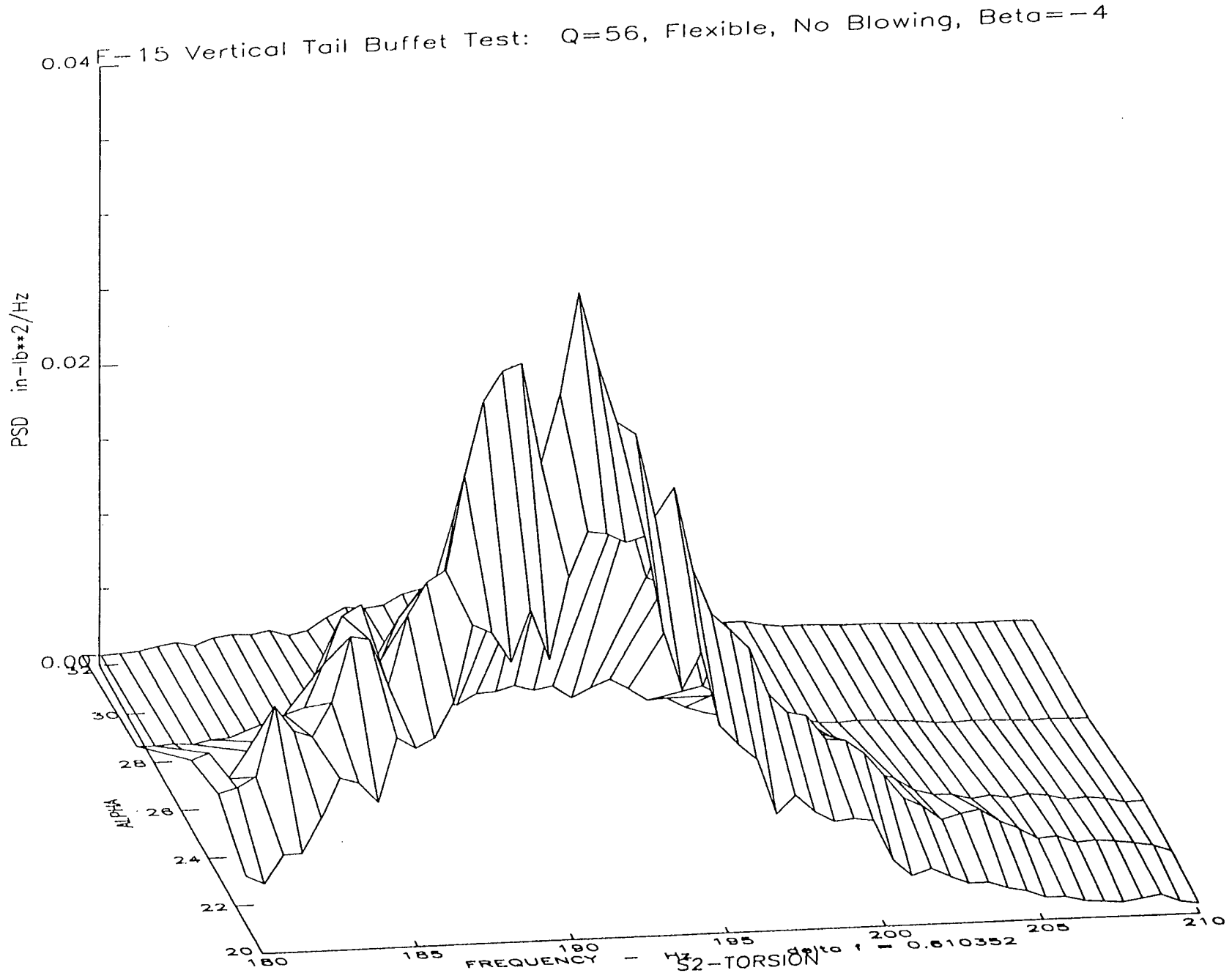

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=0
PSD in-lb**2/Hz
0.020
0.015
0.010
0.005
0.000
ALPHA
32
30
28
26
24
22
20
210
215
220
225
230
235
240
FREQUENCY - Hz
Delta f = 0.610352
1-BENDING

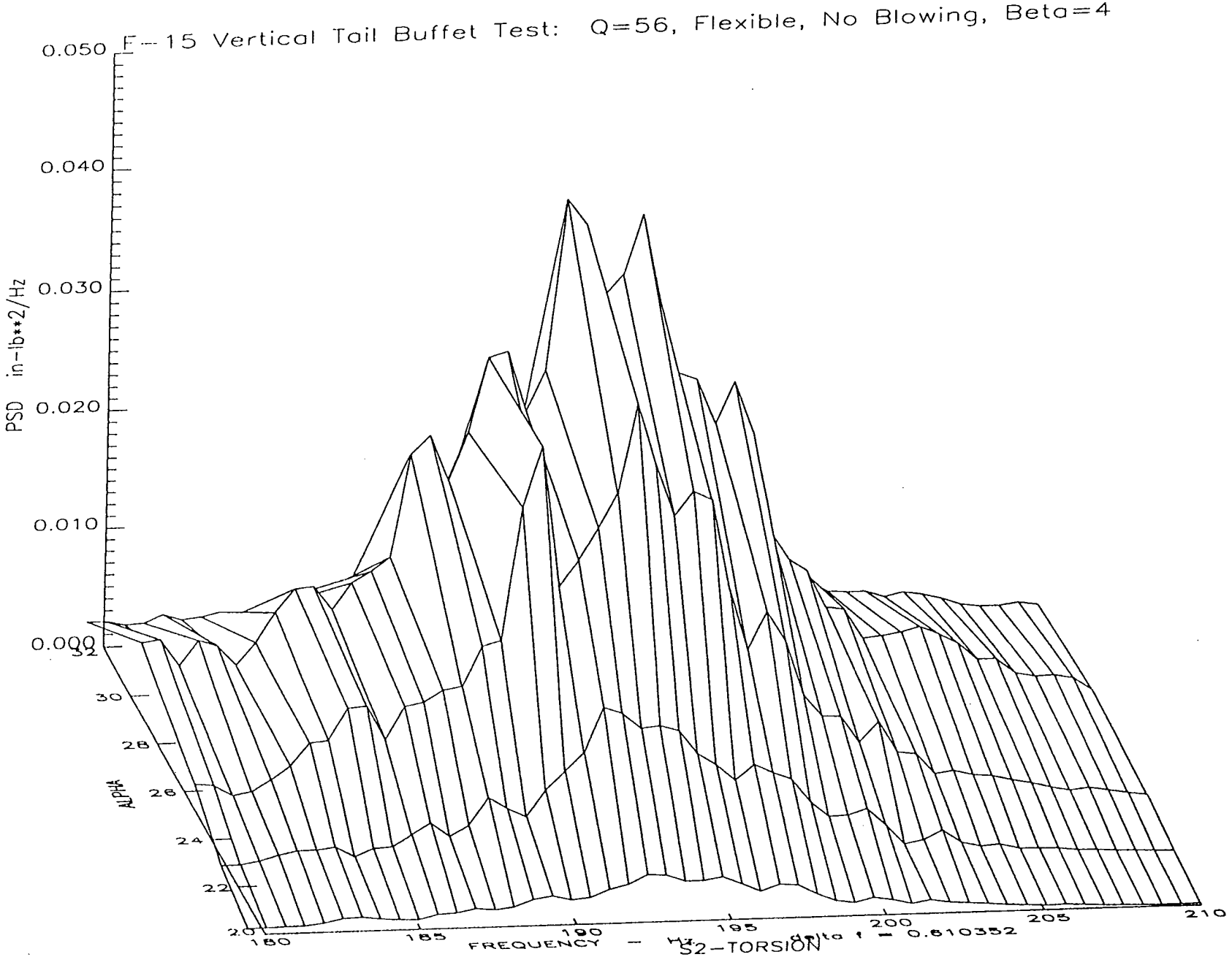

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=4
PSD in-lb**2/Hz
0.020
0.015
0.010
0.005
0.000
ALPHA
32
30
28
26
24
22
20
210
215
220
225
230
235
240
FREQUENCY - Hz
S1-BENDING
delta = 0.810352

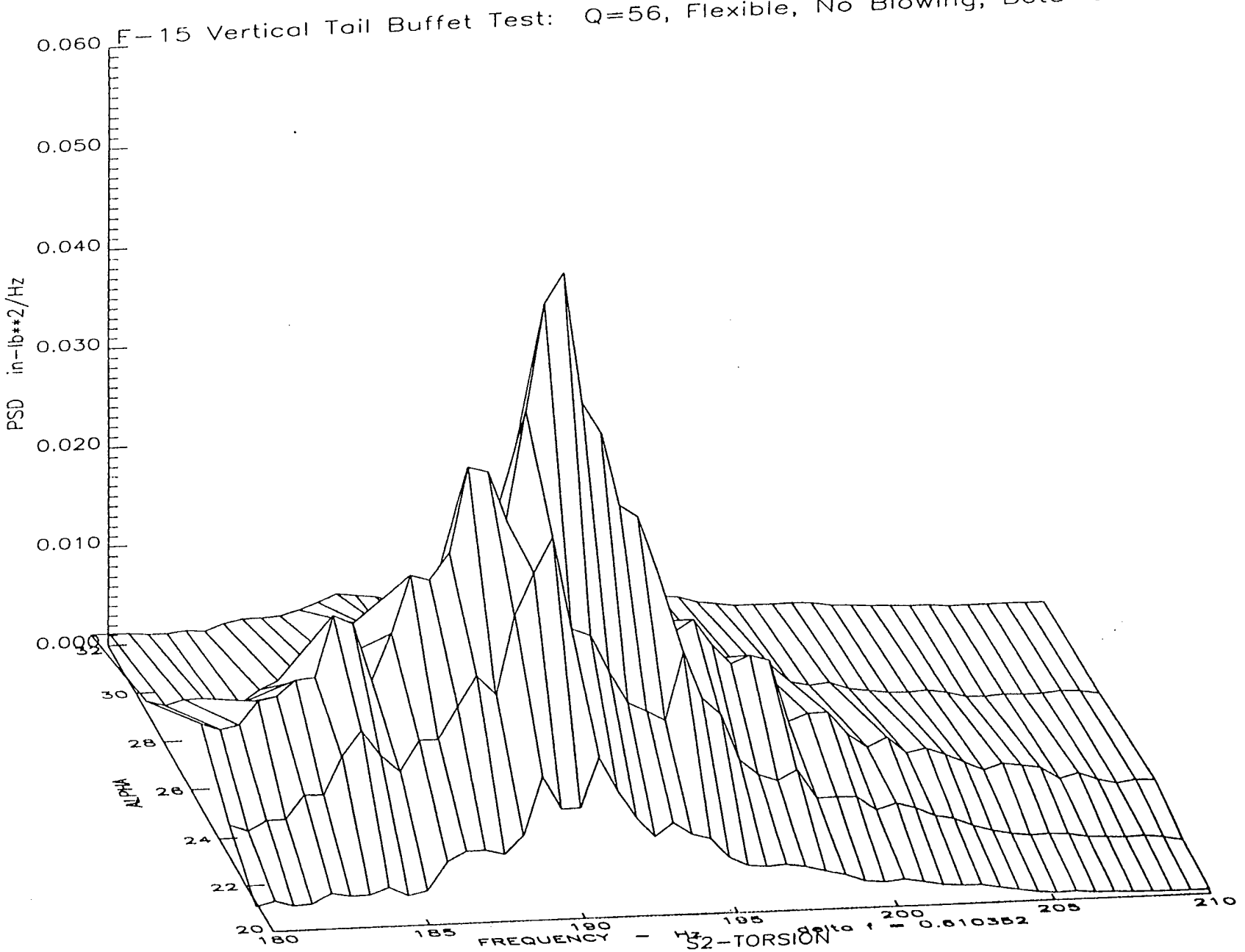

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=4
PSD in-lb**2/Hz
0.4
0.2
0.0
ALPHA
30
28
26
24
22
20
35
40
45
50
55
60
65
FREQUENCY - HZ
1-BENDING
Delta f = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=0
PSD in-lb**2/Hz
0.60
0.50
0.40
0.30
0.20
0.10
0.00
ALPHA
32
30
28
26
24
22
20
35
40
45
50
55
60
65
FREQUENCY - Hz
S1-BENDING
delta f = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=-4
PSD in-lb**2/Hz
0.4
0.2
0.0
ALPHA
32
30
28
26
24
22
20
35
40
45
50
55
60
65
FREQUENCY - Hz
Ratio 1 = 0.810352
S1-BENDING


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=-4
PSD in-lb**2/Hz
0.04
0.02
0.00
ALPHA
32
30
28
26
24
22
20
180
185
190
195
200
205
210
FREQUENCY - Hz
S2-TORSION
delta f = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=4
PSD in-lb**2/Hz
0.050
0.040
0.030
0.020
0.010
0.000
ALPHA
32
30
28
26
24
22
20
180
185
190
195
200
205
210
FREQUENCY - Hz
S2-TORSION
Delta t = 0.610352

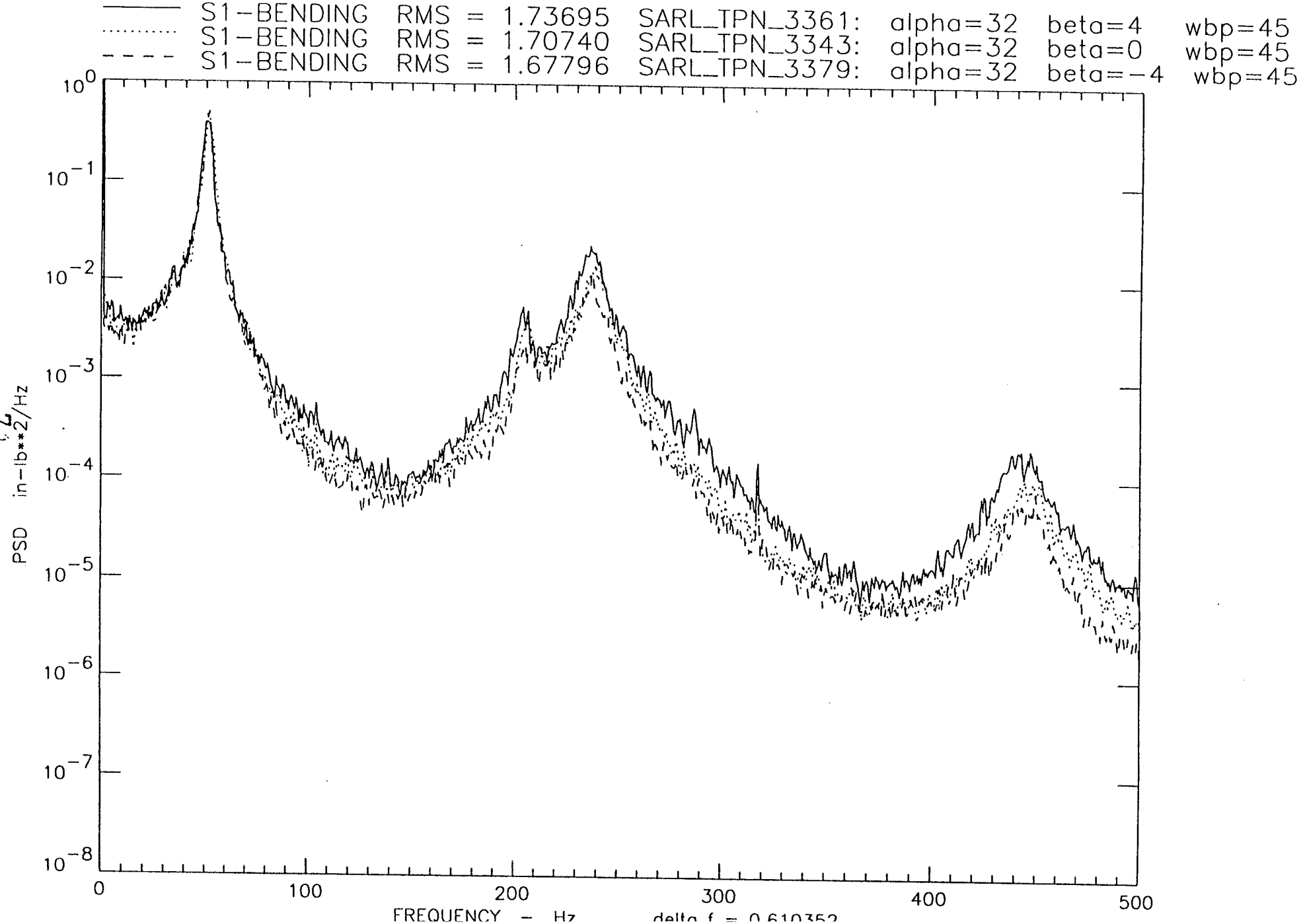

F-15 Vertical Tail Buffet Test: Q=56, Flexible, No Blowing, Beta=0
PSD in-lb**2/Hz
0.060
0.050
0.040
0.030
0.020
0.010
0.000
ALPHA
32
30
28
26
24
22
20
180
185
190
195
200
205
210
FREQUENCY - Hz
S2-TORSION
Delta f = 0.610352

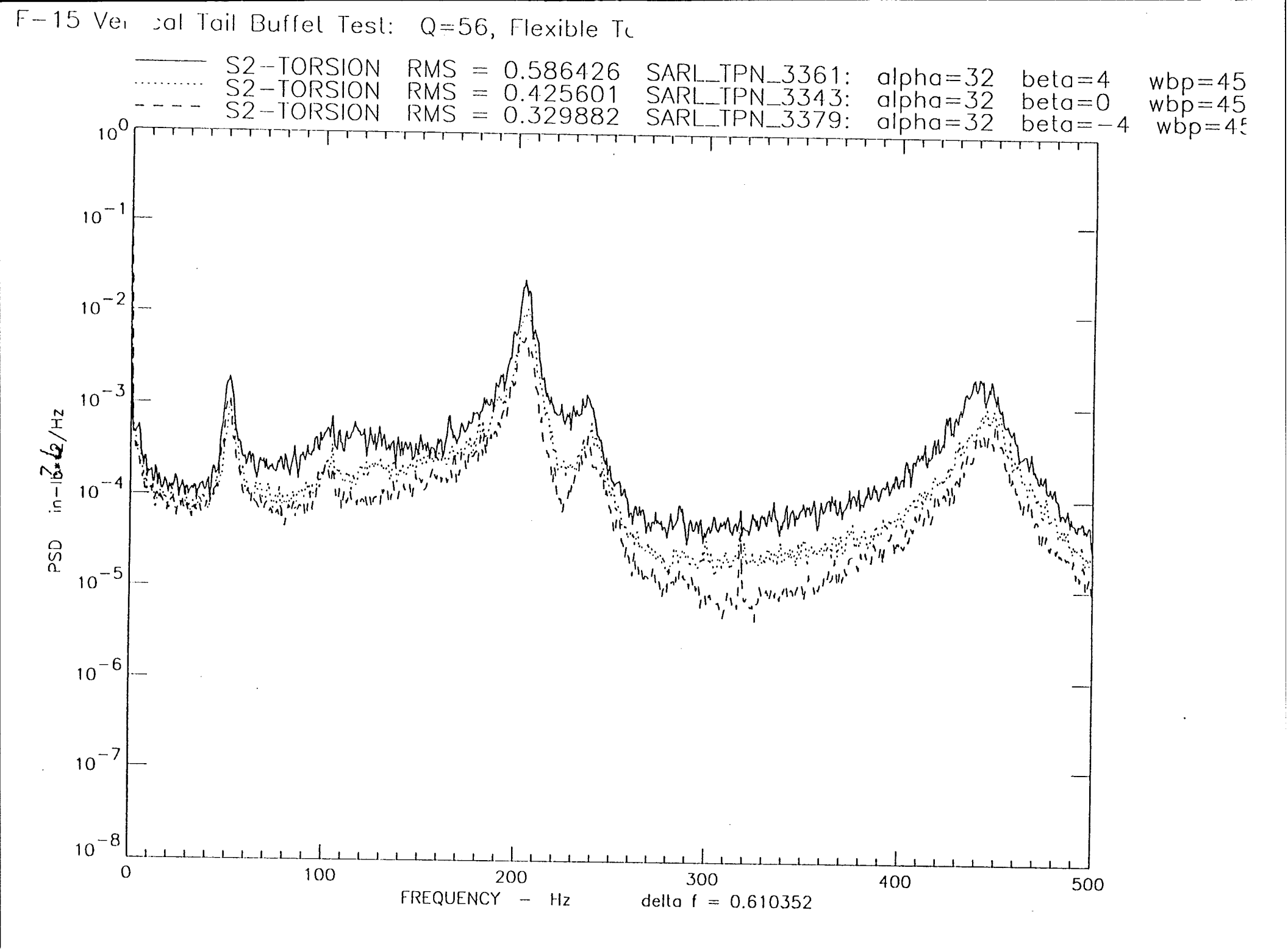
FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION

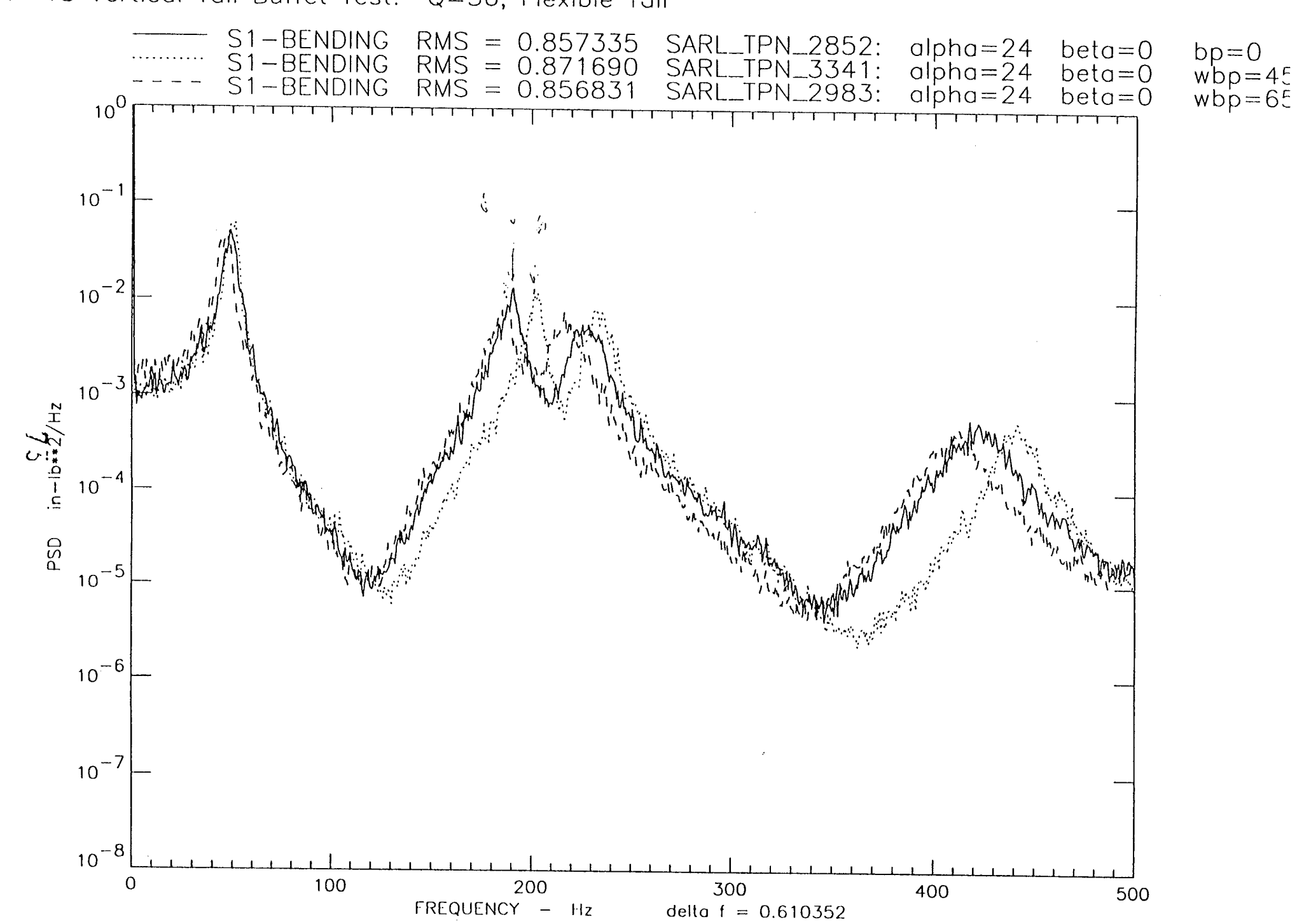
PSD GRAPHS
Q= 56 PSF

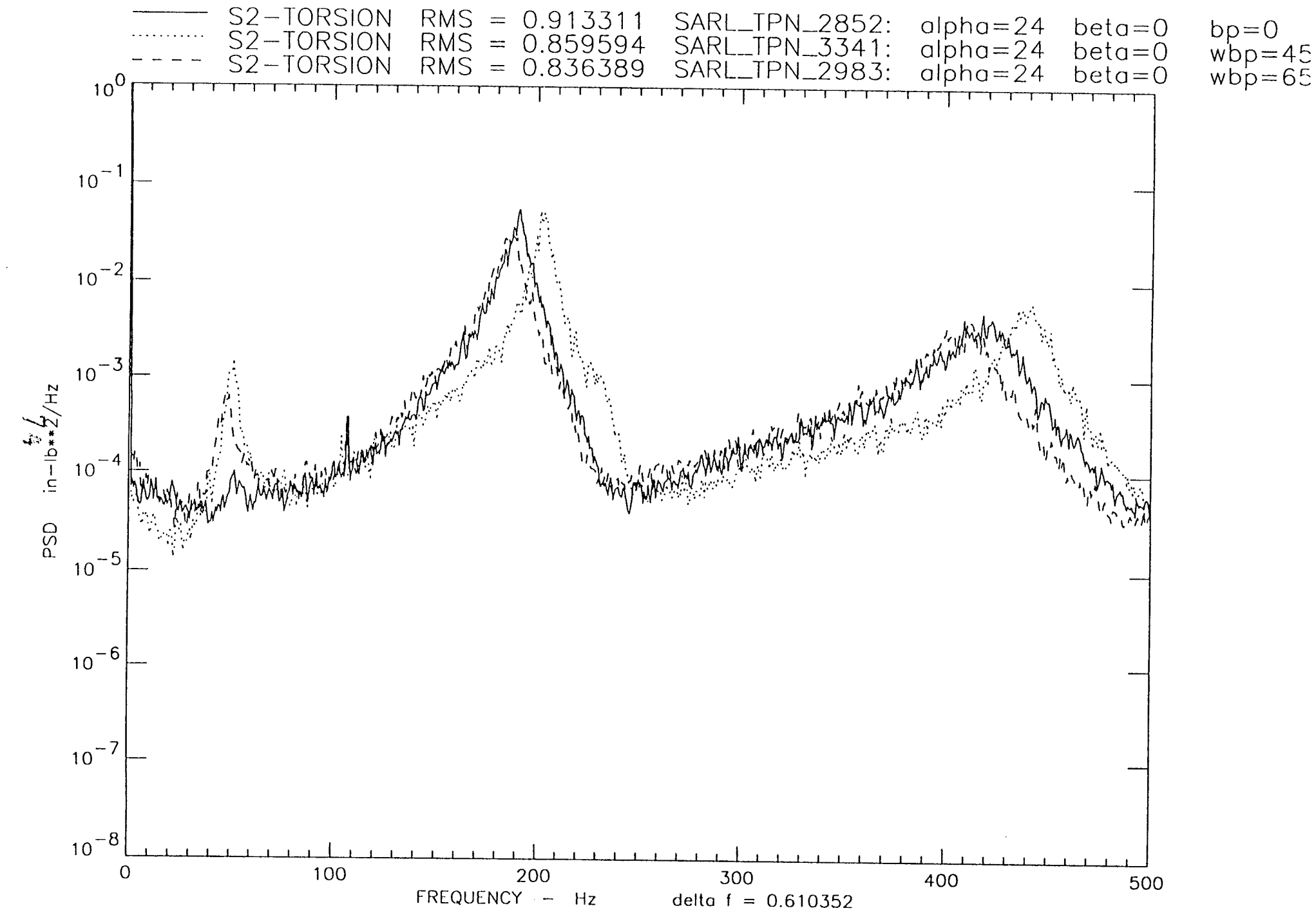
2.1.1.1 WBP = 45,65 psi, BETA= 0, + 4, - 4, ALPHA= 0.....32 Deg

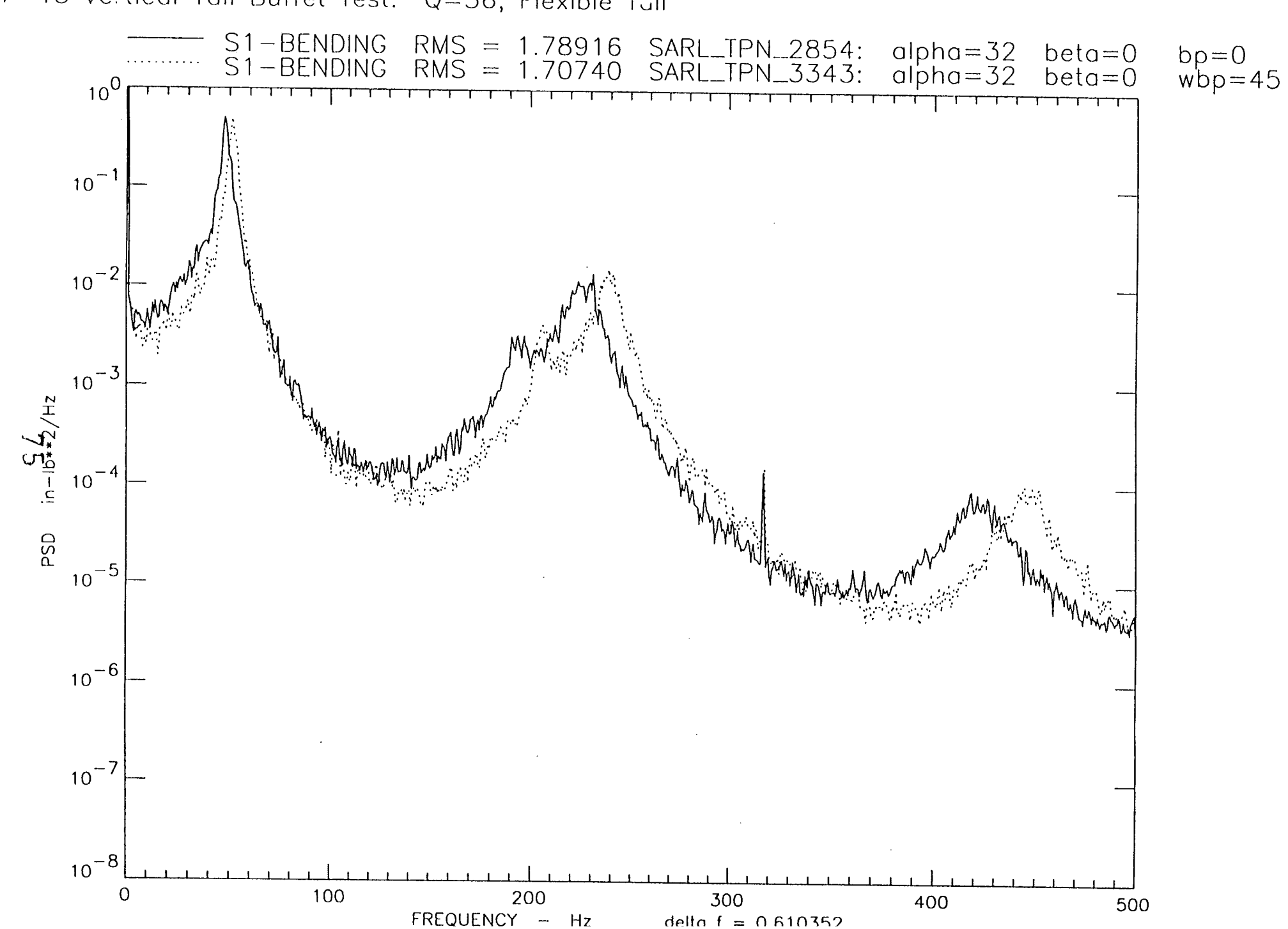
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



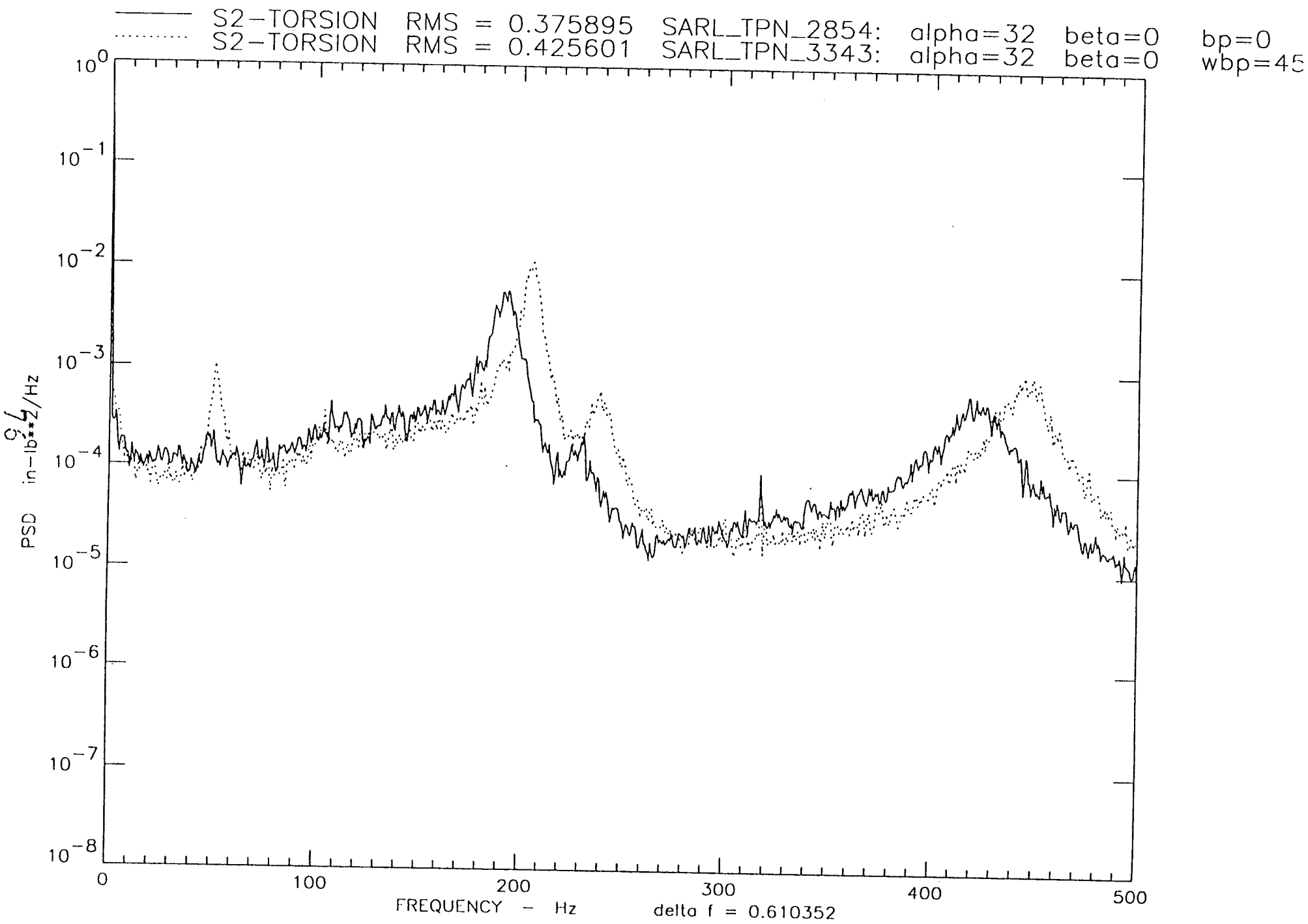

F-15 Ver cal Tail Buffet Test: Q=56, Flexible Tc
S2--TORSION RMS = 0.586426 SARL_TPN_3361: alpha=32 beta=4 wbp=45
S2--TORSION RMS = 0.425601 SARL_TPN_3343: alpha=32 beta=0 wbp=45
S2--TORSION RMS = 0.329882 SARL_TPN_3379: alpha=32 beta=-4 wbp=45
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

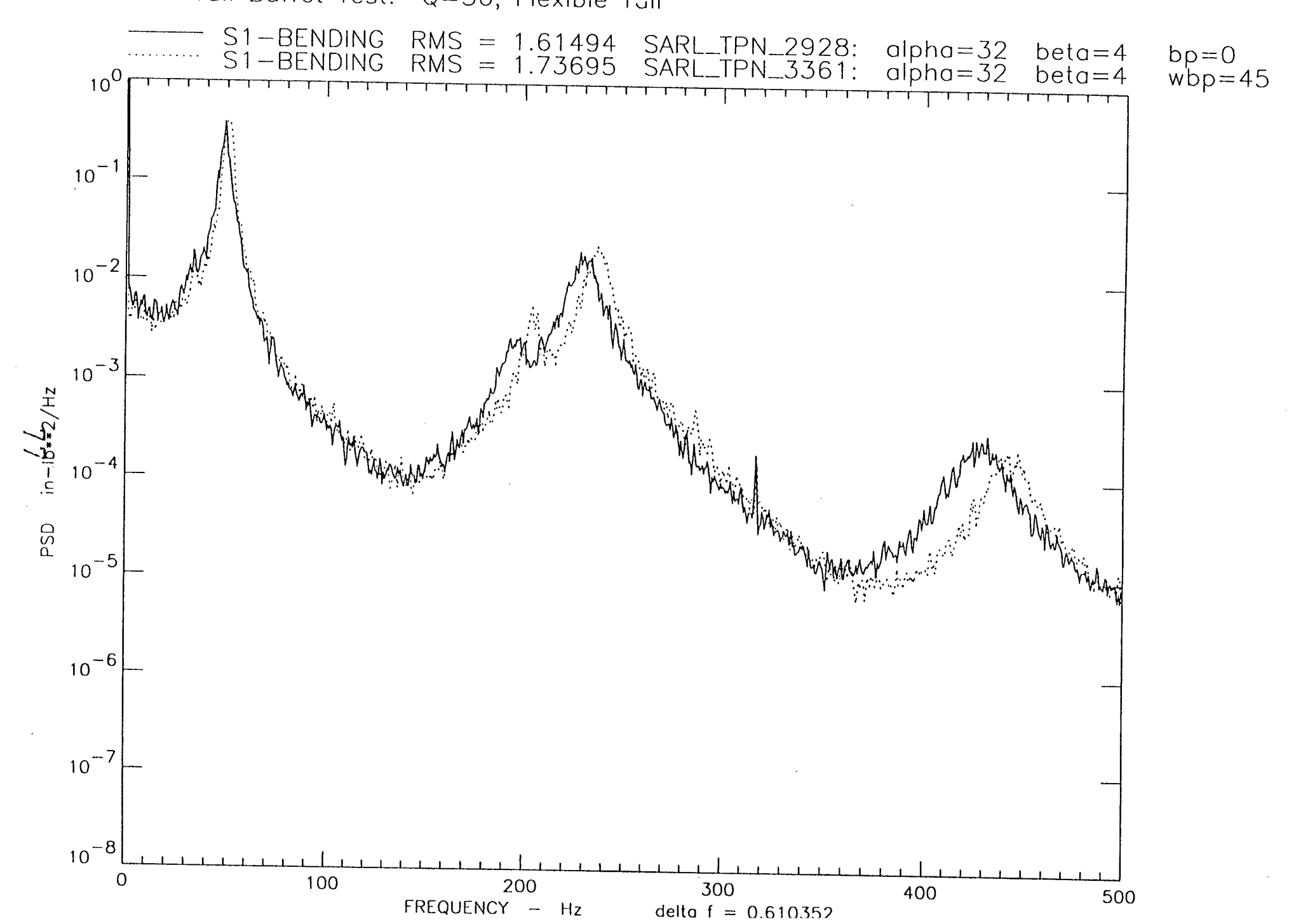

F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail
S1-BENDING RMS = 0.857335 SARL_TPN_2852: alpha=24 beta=0 bp=0
S1-BENDING RMS = 0.871690 SARL_TPN_3341: alpha=24 beta=0 wbp=45
S1-BENDING RMS = 0.856831 SARL_TPN_2983: alpha=24 beta=0 wbp=65
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail
S2-TORSION RMS = 0.913311 SARL_TPN_2852: alpha=24 beta=0 bp=0
S2-TORSION RMS = 0.859594 SARL_TPN_3341: alpha=24 beta=0 wbp=45
S2-TORSION RMS = 0.836389 SARL_TPN_2983: alpha=24 beta=0 wbp=65
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

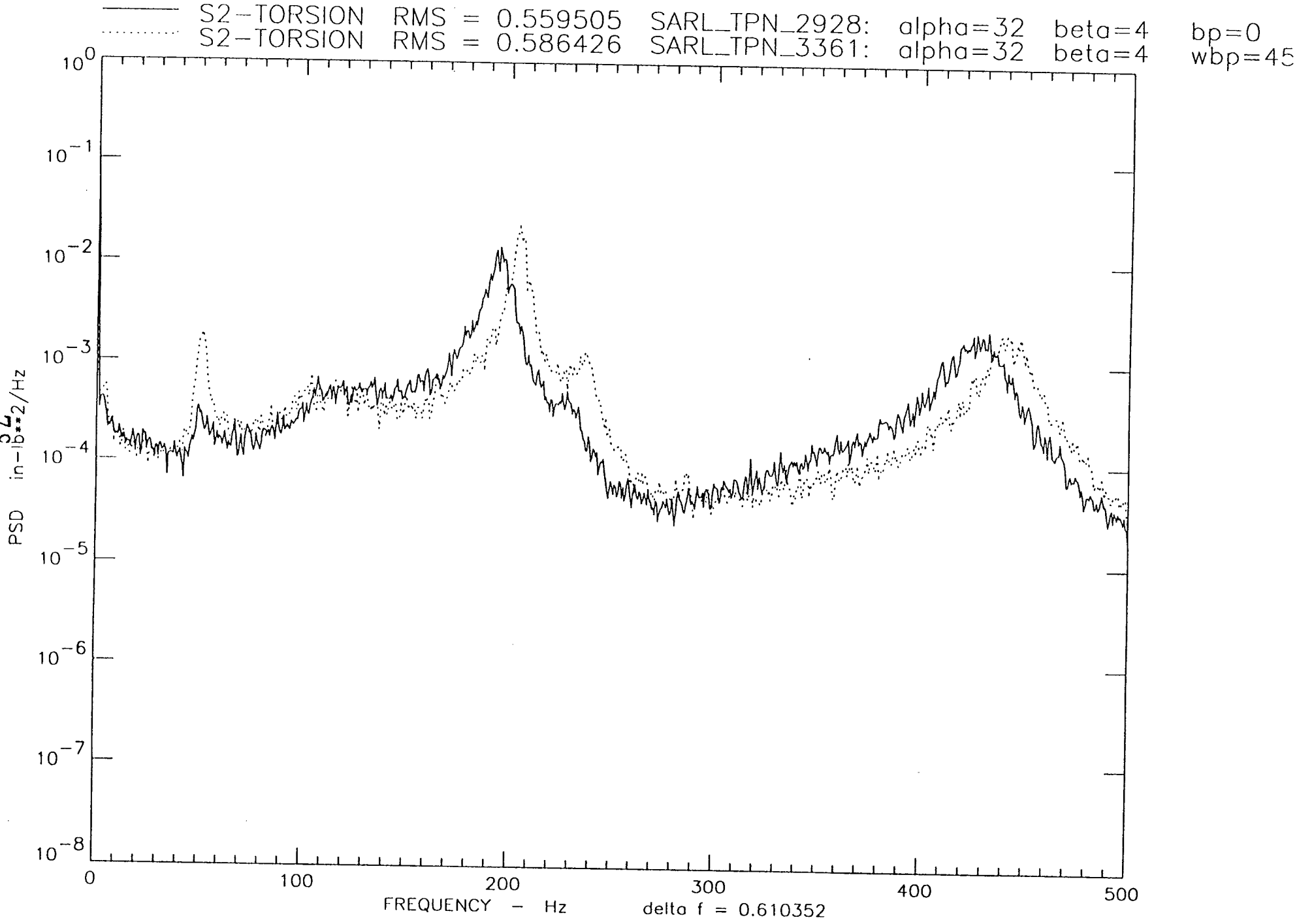

F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail
S1-BENDING RMS = 1.78916 SARL_TPN_2854: alpha=32 beta=0 bp=0
S1-BENDING RMS = 1.70740 SARL_TPN_3343: alpha=32 beta=0 wbp=45
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^-8
0
100
200
300
400
500

F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail

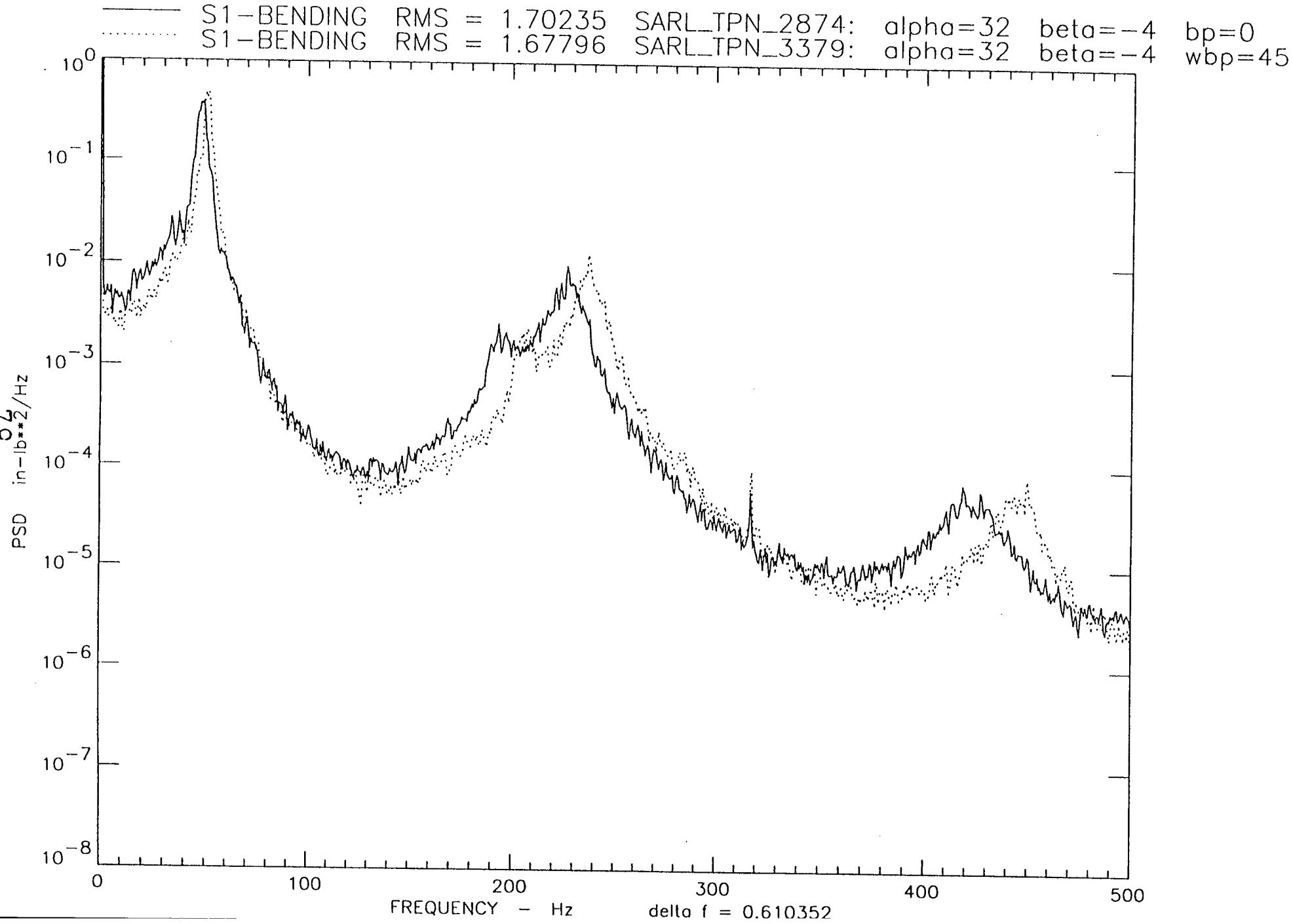



F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail
S1-BENDING RMS = 1.61494 SARL_TPN_2928: alpha=32 beta=4 bp=0
S1-BENDING RMS = 1.73695 SARL_TPN_3361: alpha=32 beta=4 wbp=45
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^-8
0
100
200
300
400
500

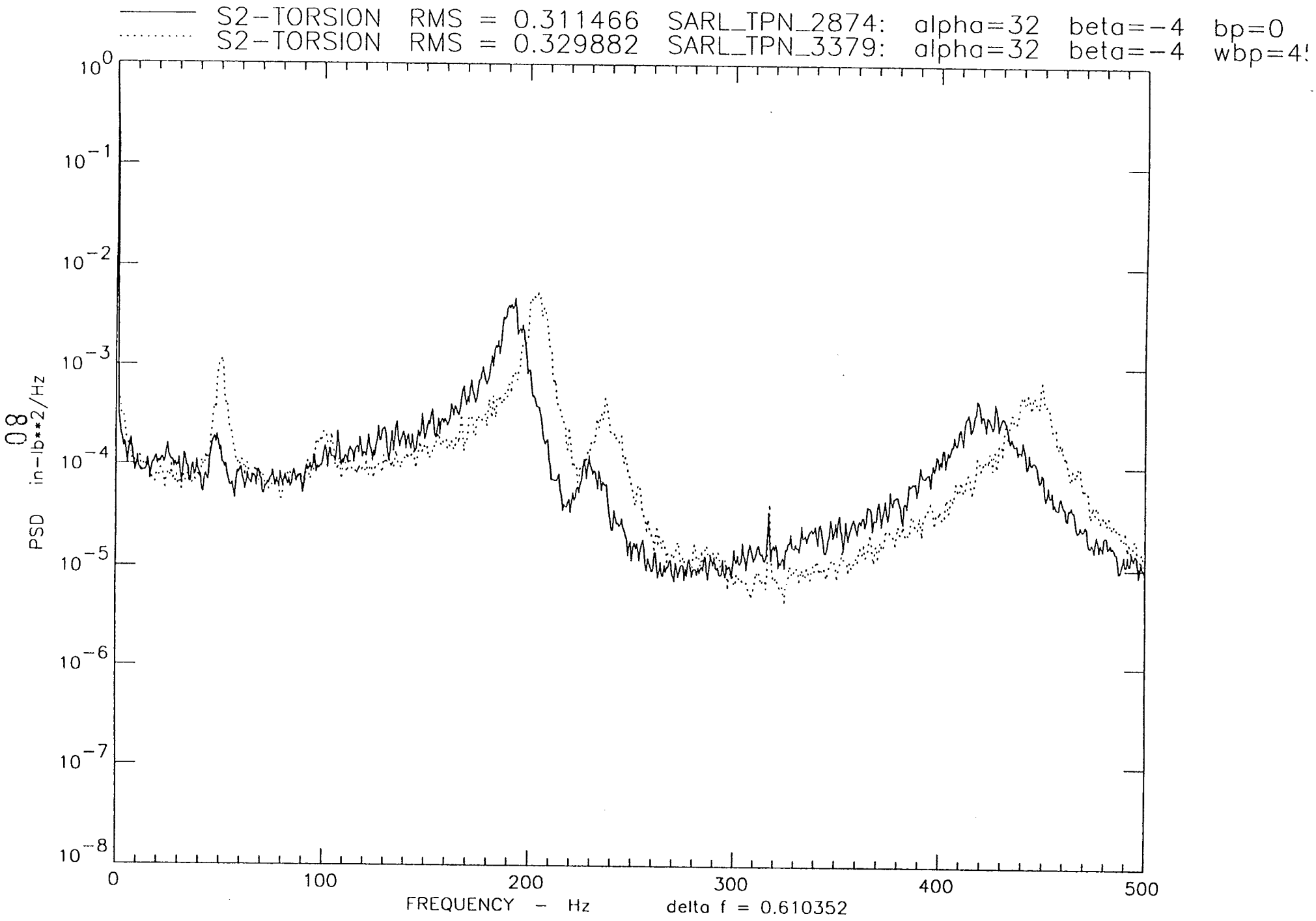
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



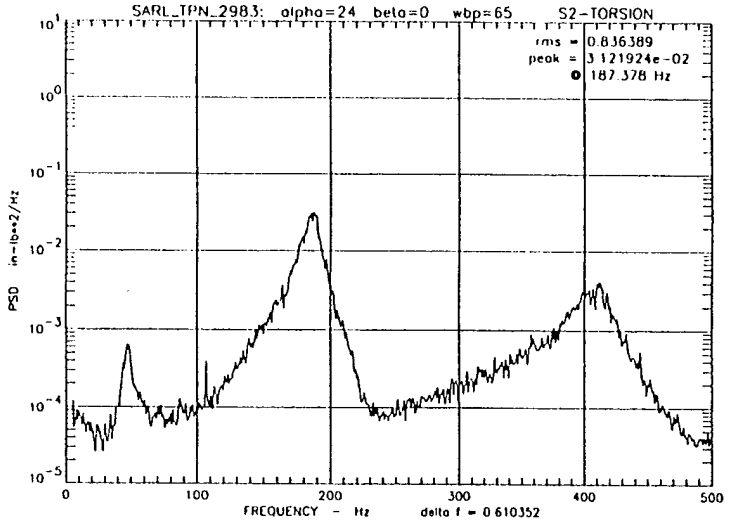
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



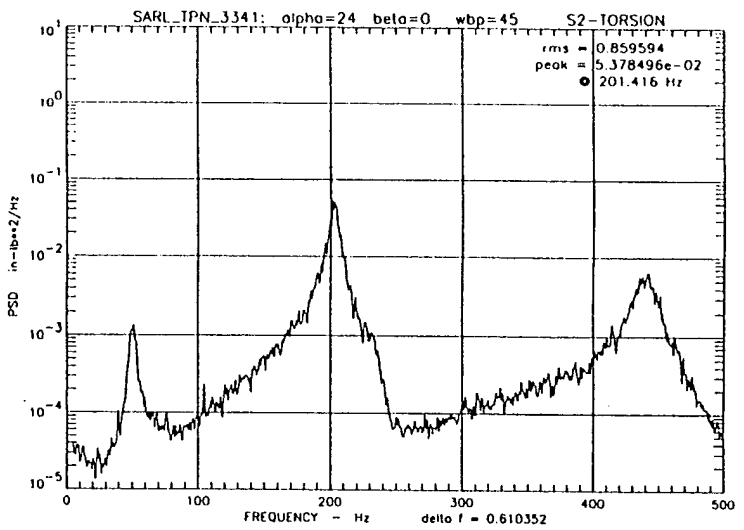
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



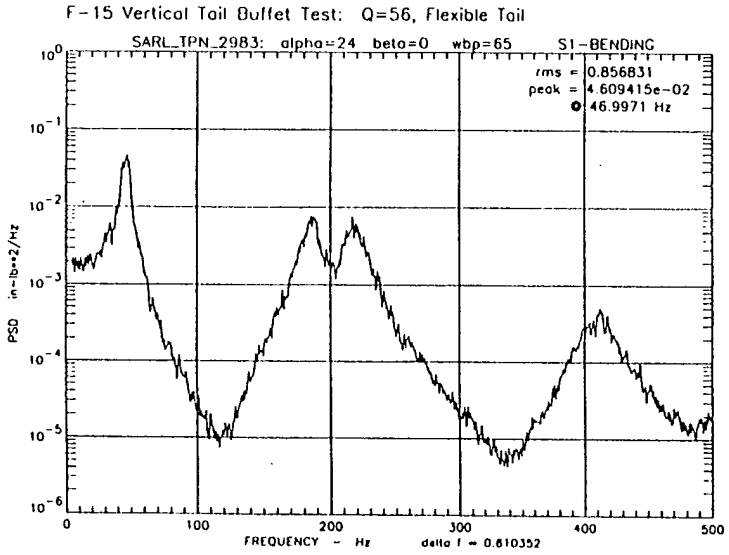
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



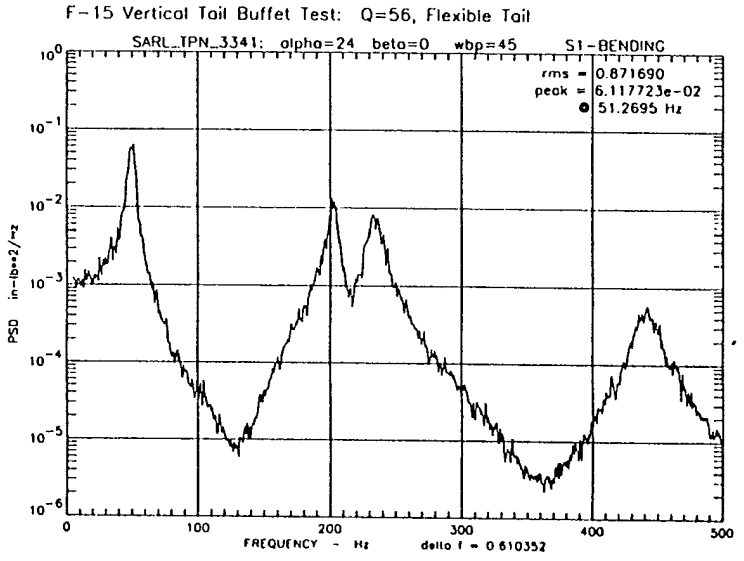
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



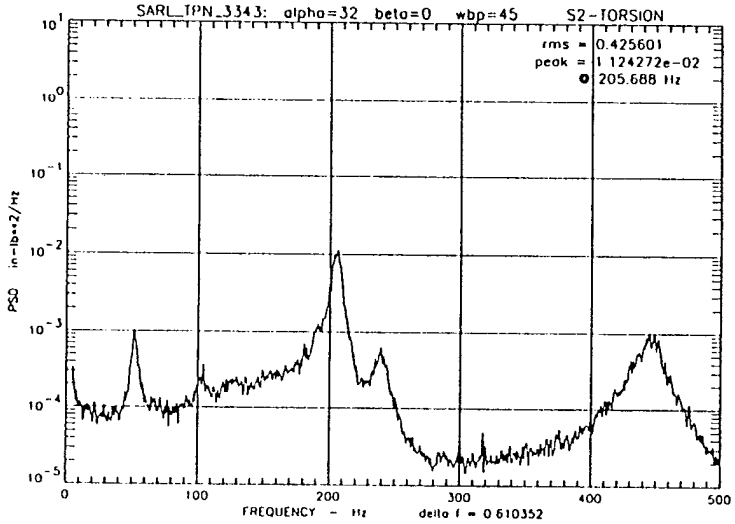
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



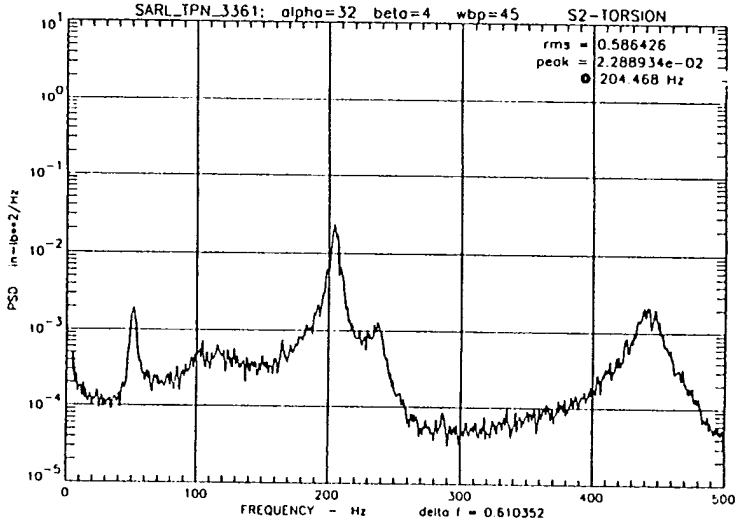
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



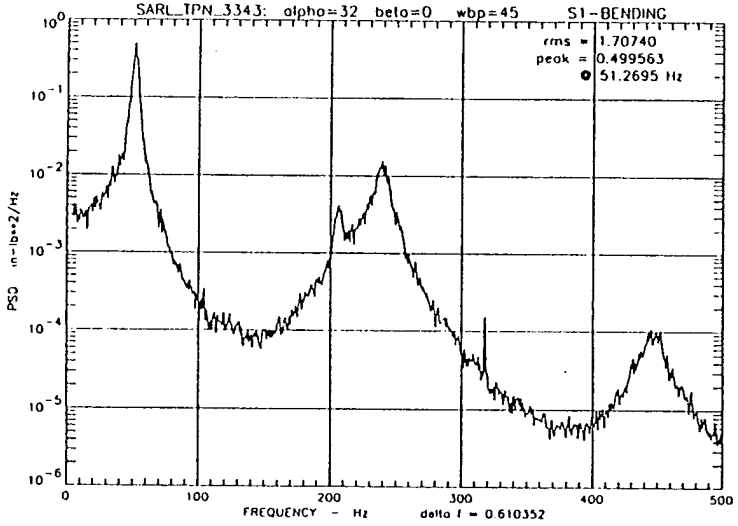
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



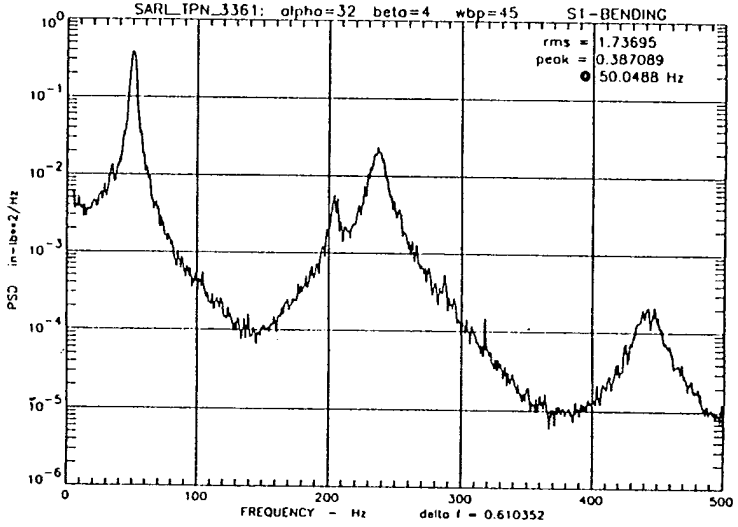
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



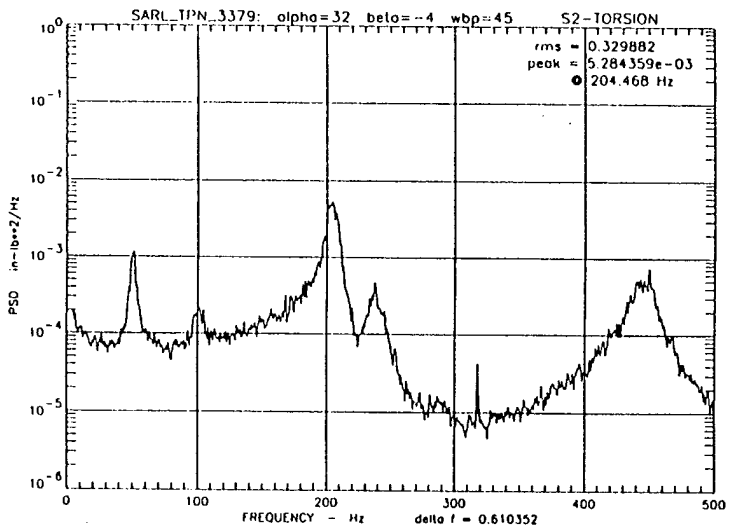
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



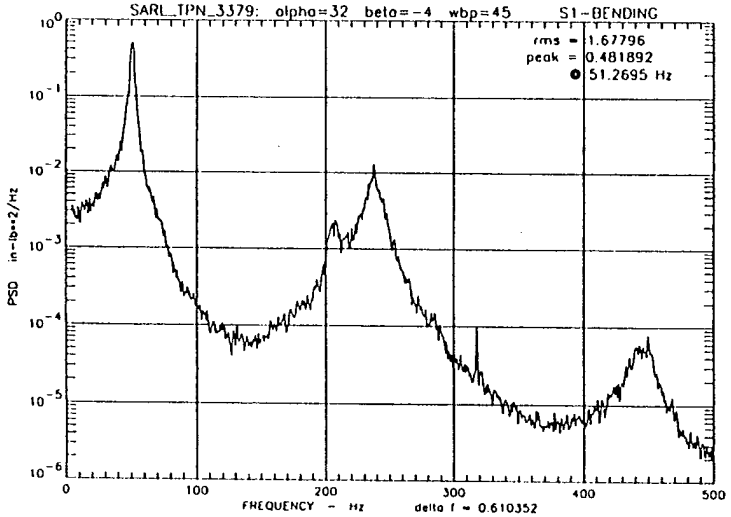
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail

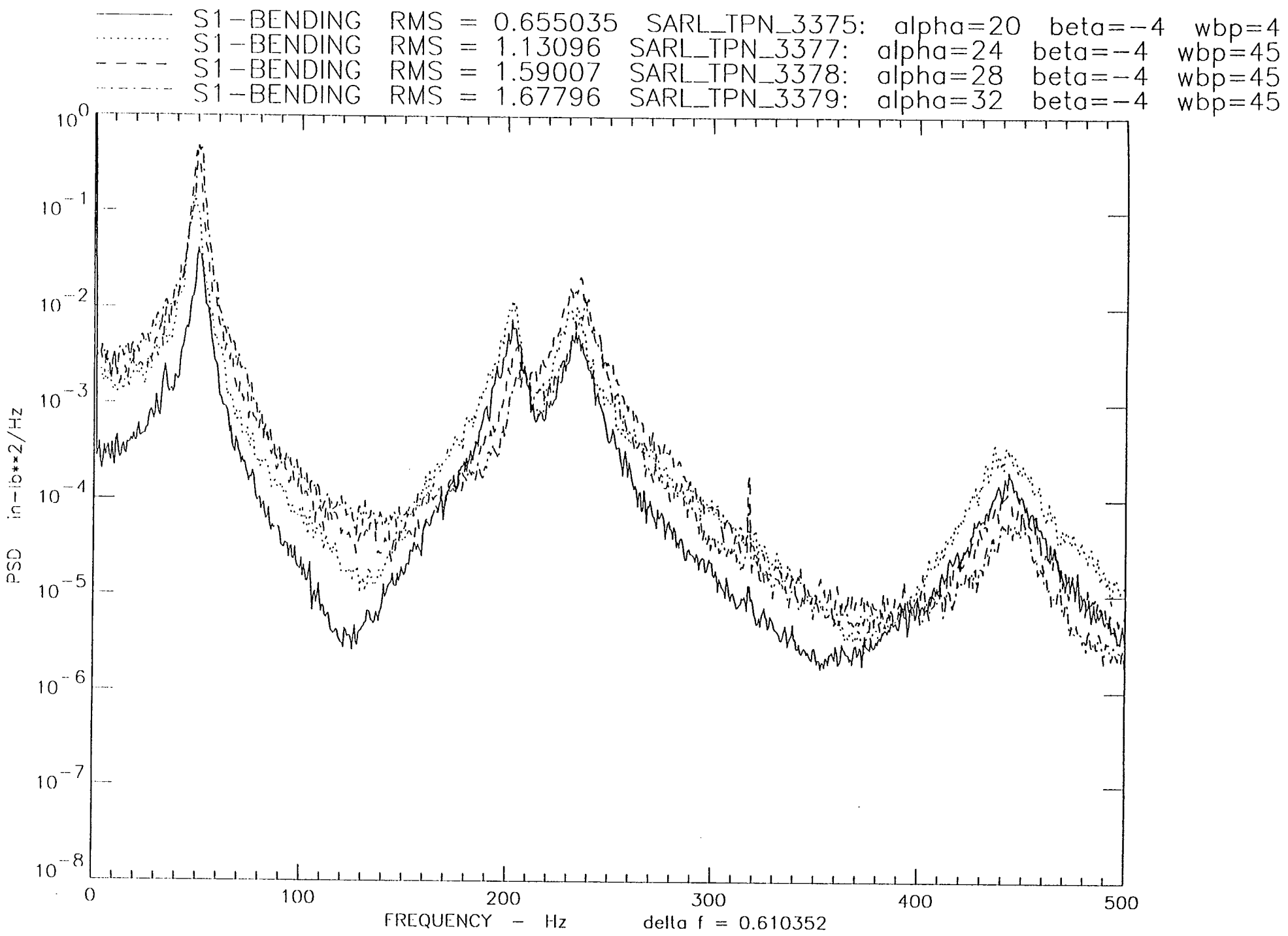


F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



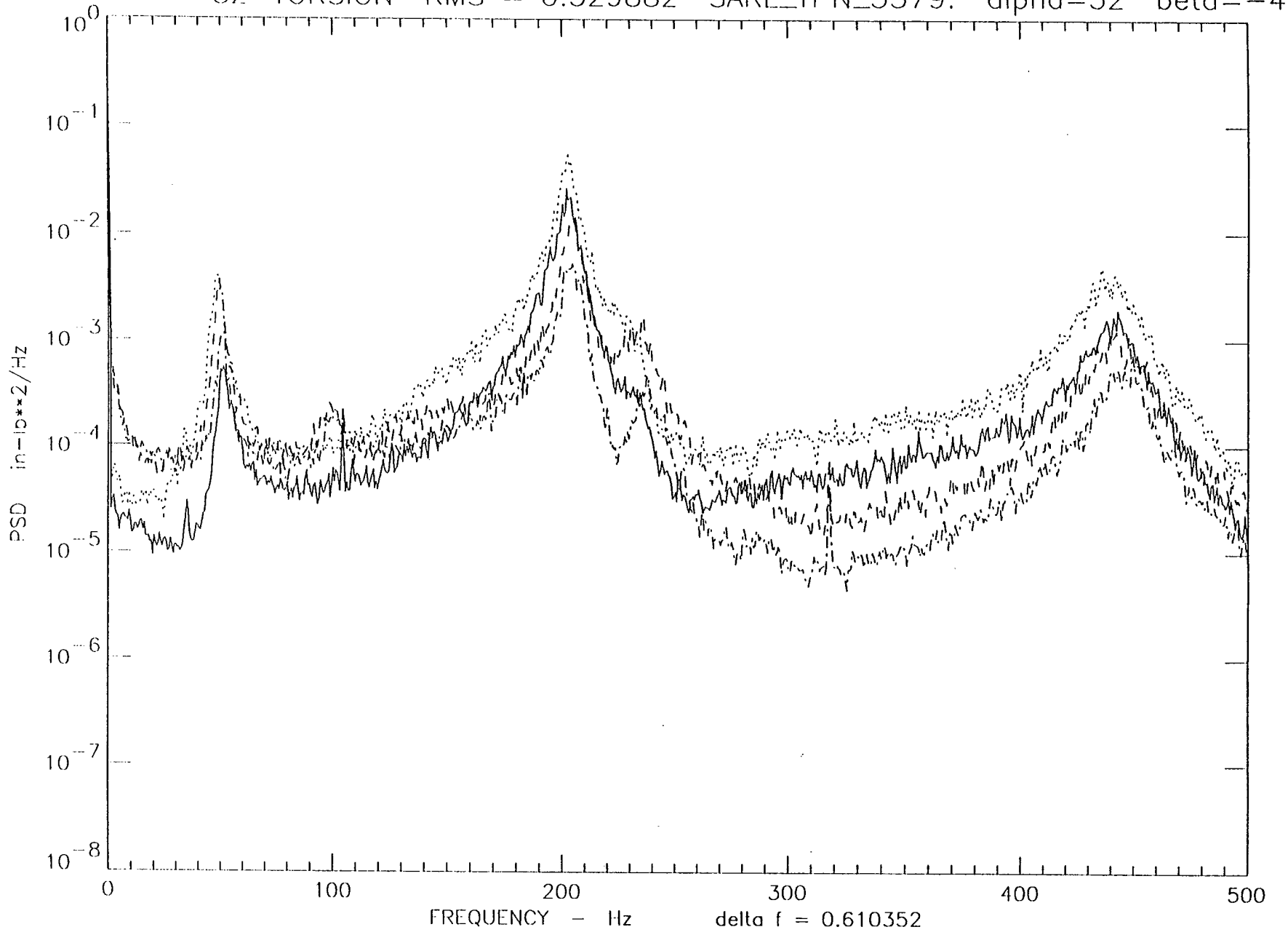
F-15 Vertical Tail Buffet Test: Q=56, Flexible Tail



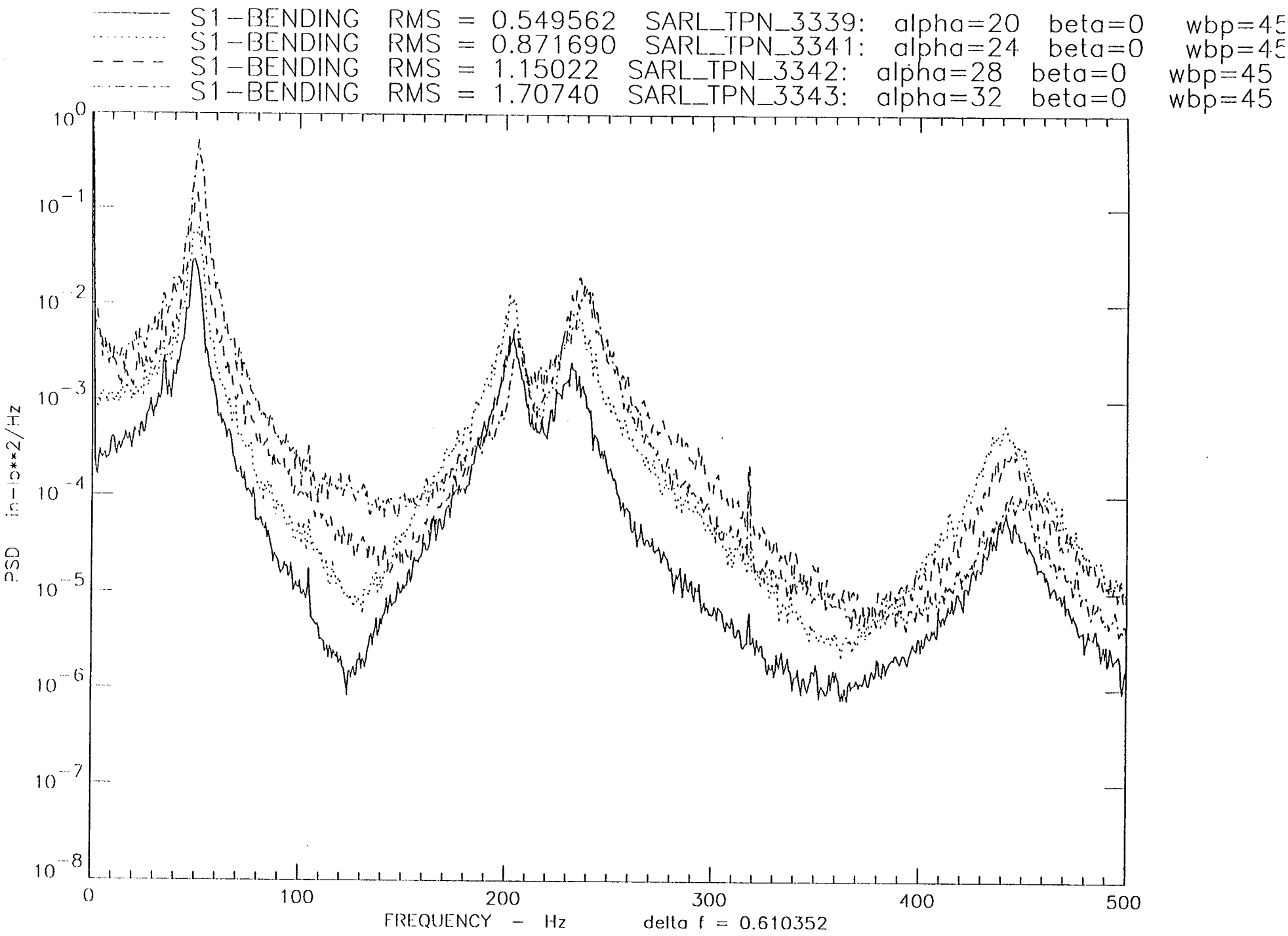

S1-BENDING RMS = 0.655035 SARL_TPN_3375: alpha=20 beta=-4 wbp=4
S1-BENDING RMS = 1.13096 SARL_TPN_3377: alpha=24 beta=-4 wbp=45
S1-BENDING RMS = 1.59007 SARL_TPN_3378: alpha=28 beta=-4 wbp=45
S1-BENDING RMS = 1.67796 SARL_TPN_3379: alpha=32 beta=-4 wbp=45
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

F-15 Vertical Tail Buffet Test: Q=56

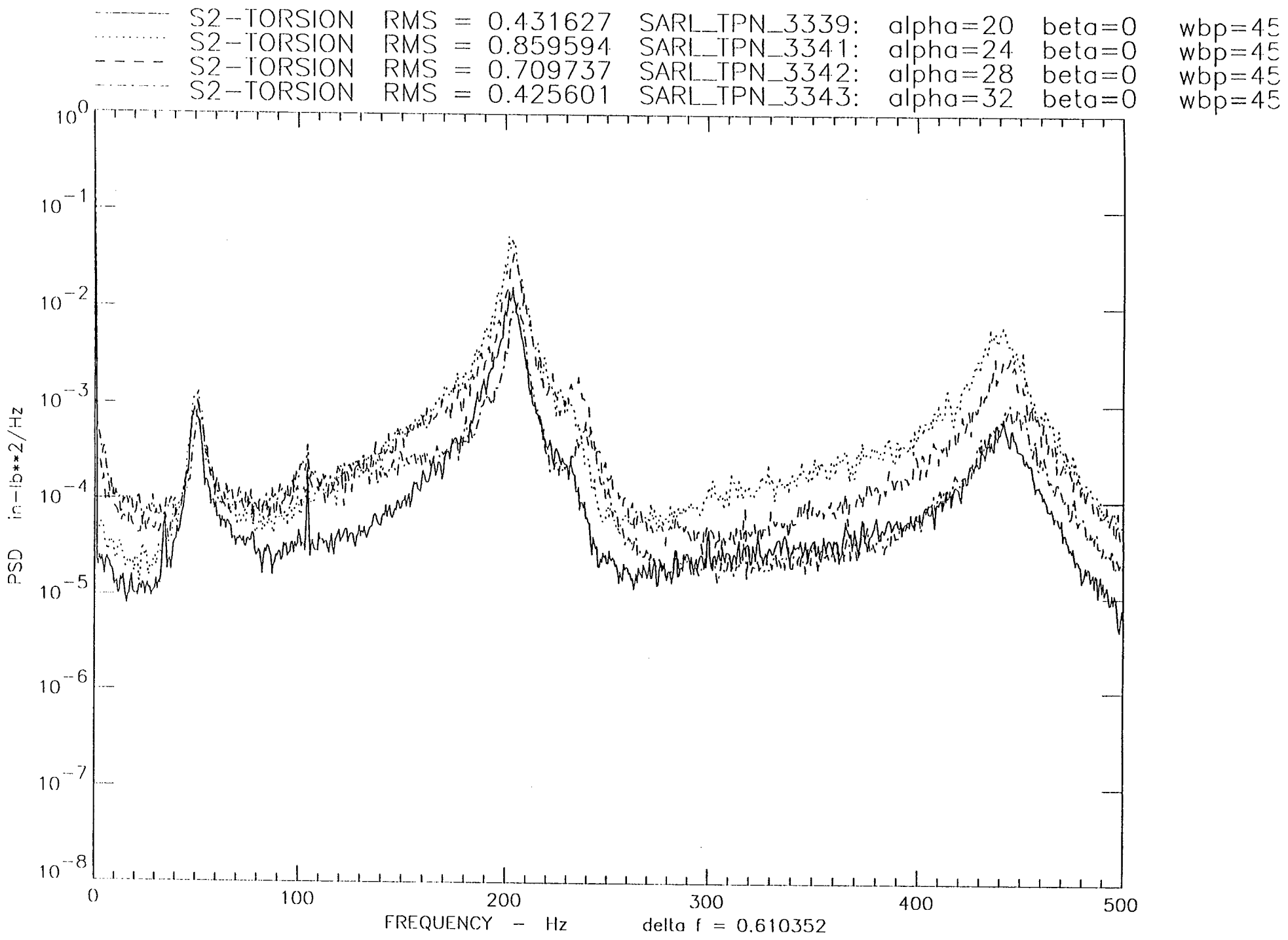
S2-TORSION RMS = 0.566799 SARL_TPN_3375: alpha=20 beta=-4 wbp=45
S2-TORSION RMS = 0.858179 SARL_TPN_3377: alpha=24 beta=-4 wbp=45
S2-TORSION RMS = 0.493807 SARL_TPN_3378: alpha=28 beta=-4 wbp=45
S2-TORSION RMS = 0.329882 SARL_TPN_3379: alpha=32 beta=-4 wbp=45



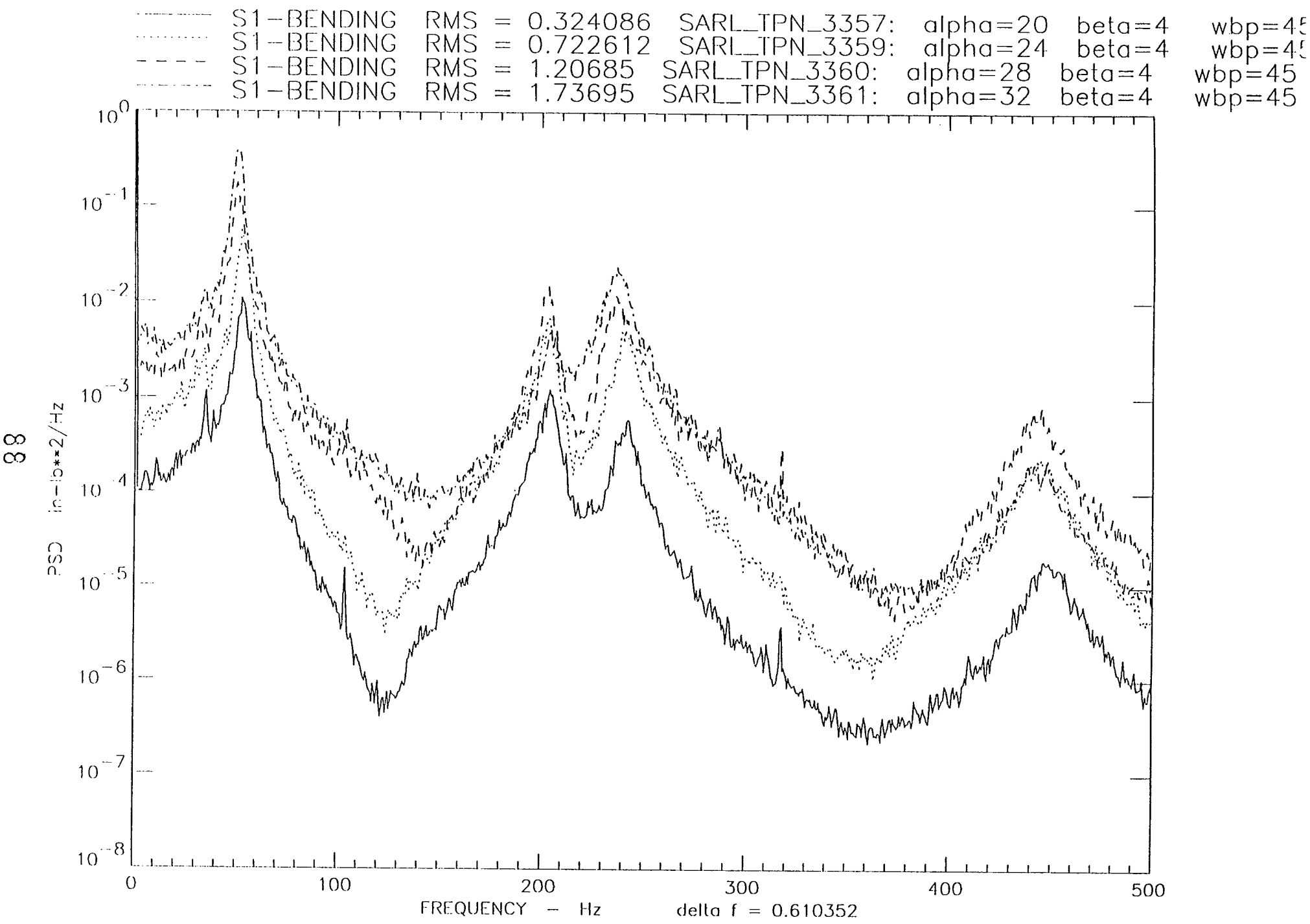
Vertical Tail Buffet Test: Q=56



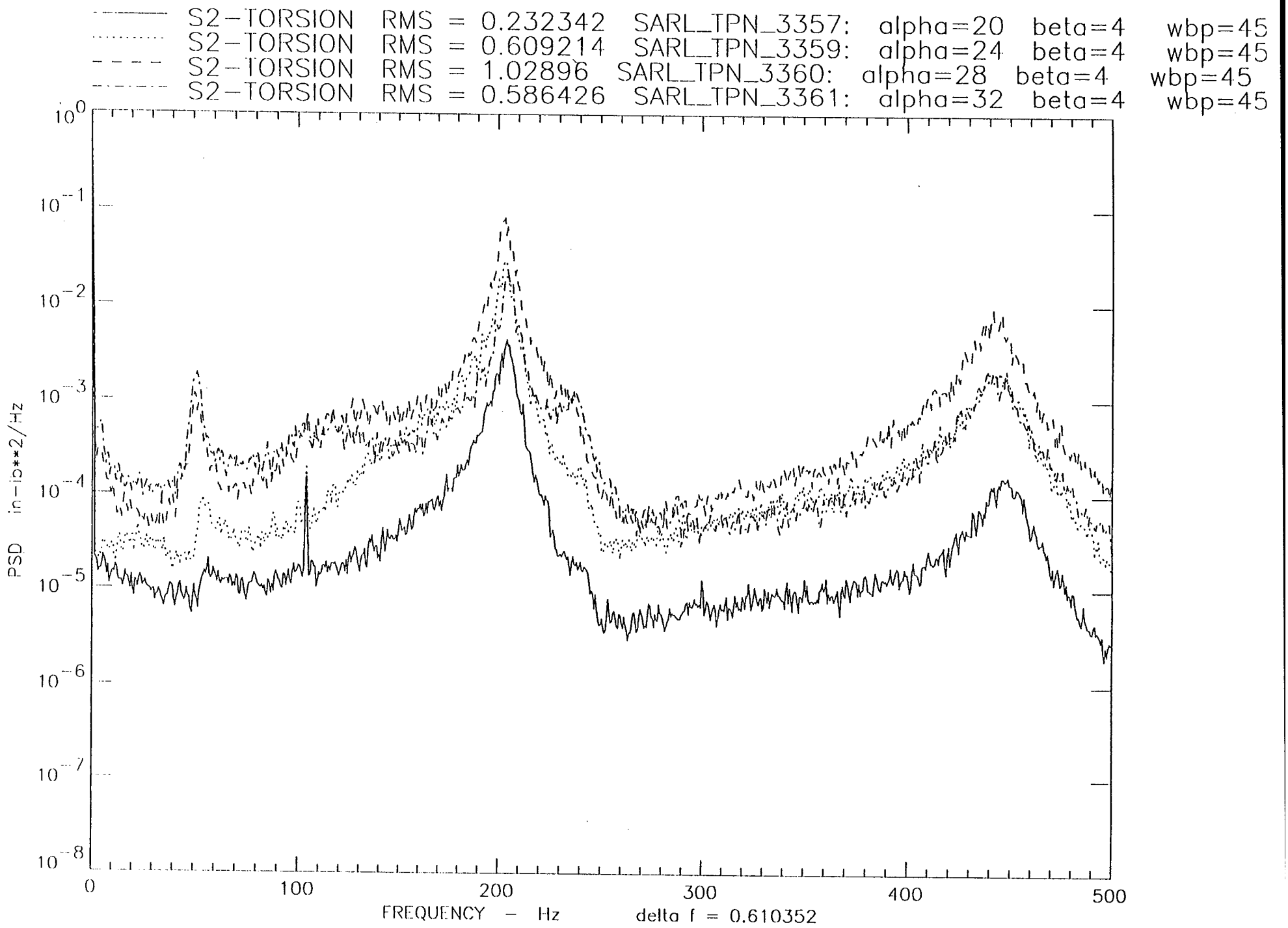
F-15 rtical Tail Buffet Test: Q=56



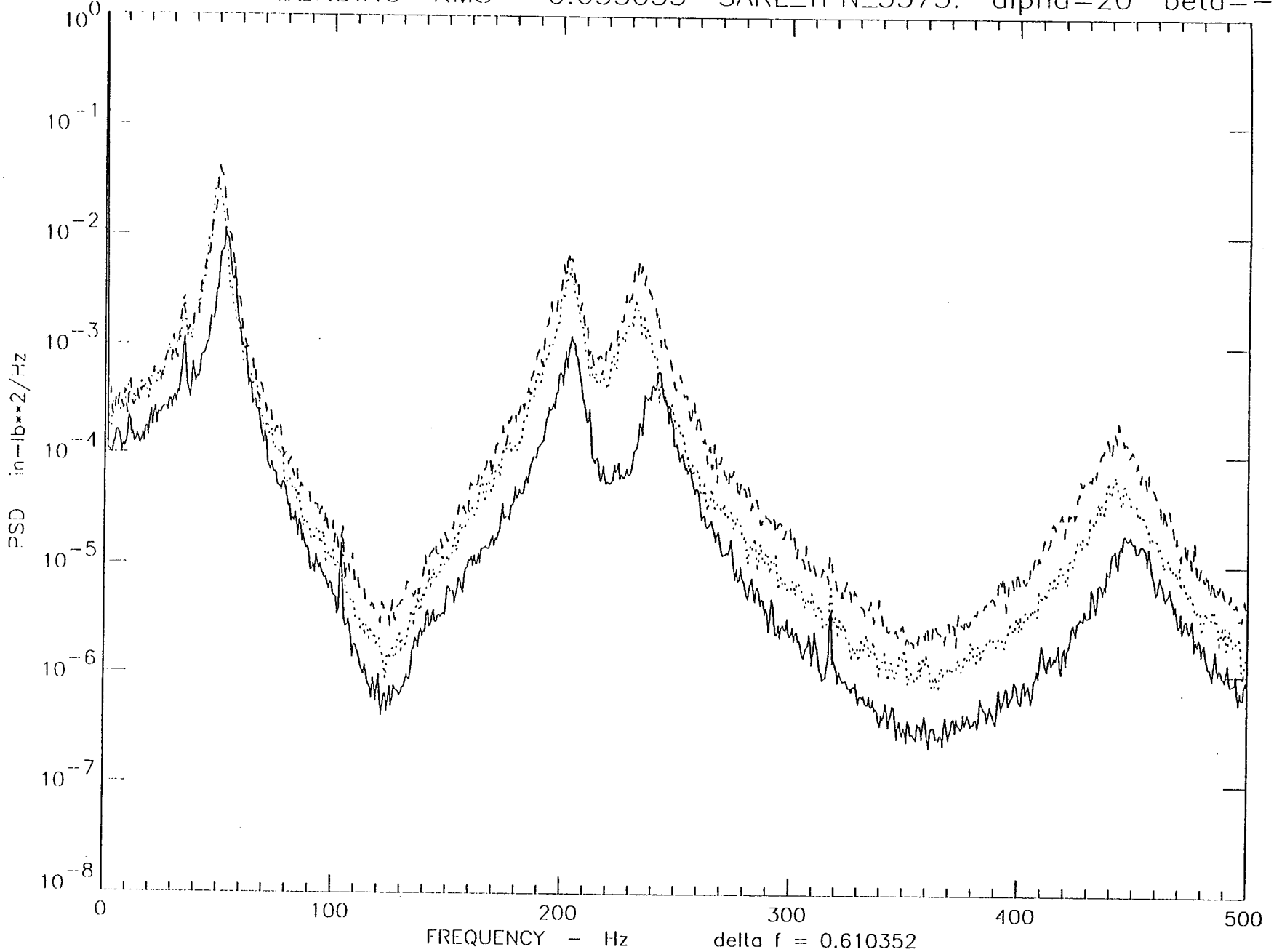
F-15 rtical Tail Buffet Test: Q=56



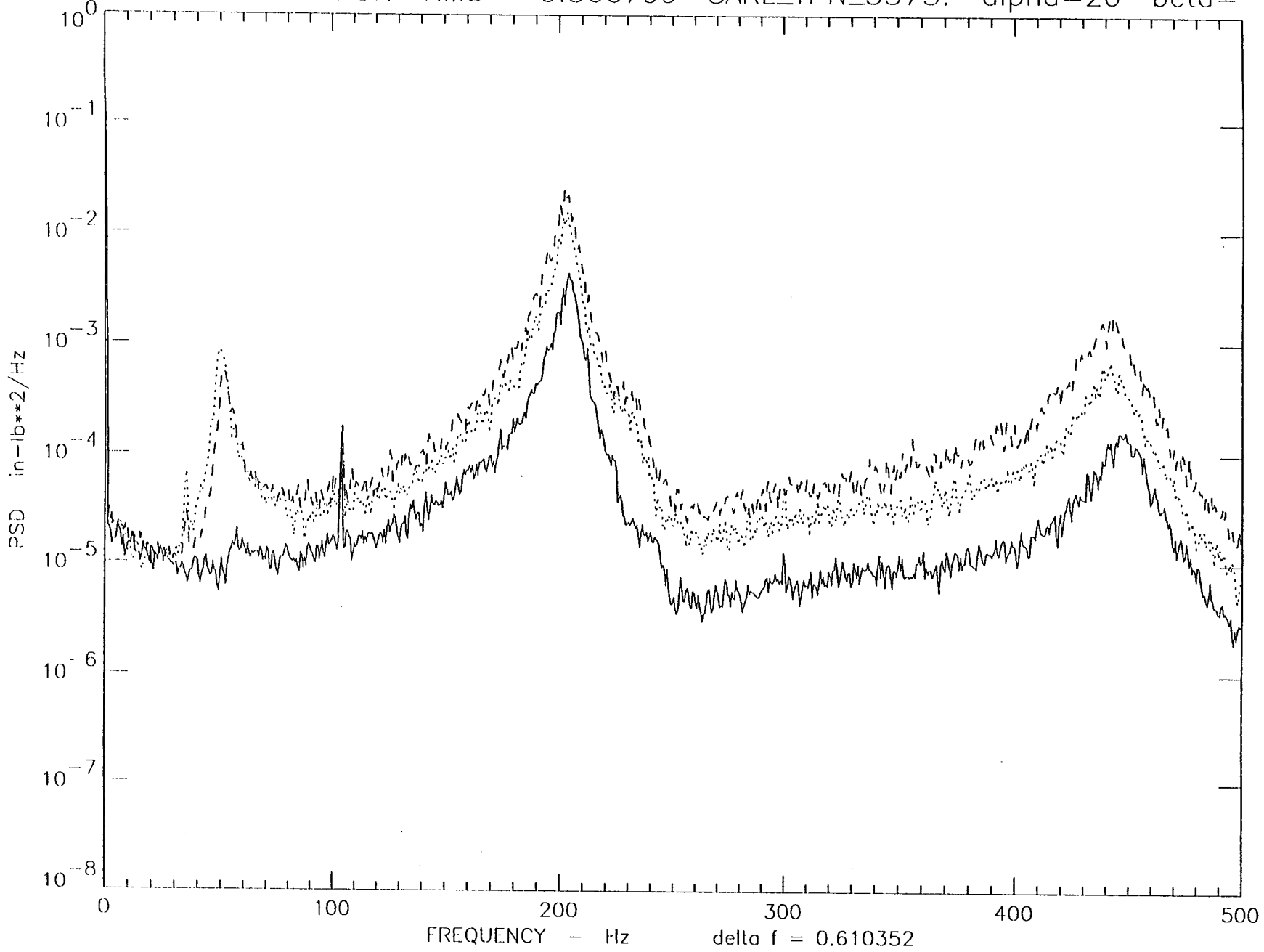
F-15 Vertical Tail Buffet Test: Q=56



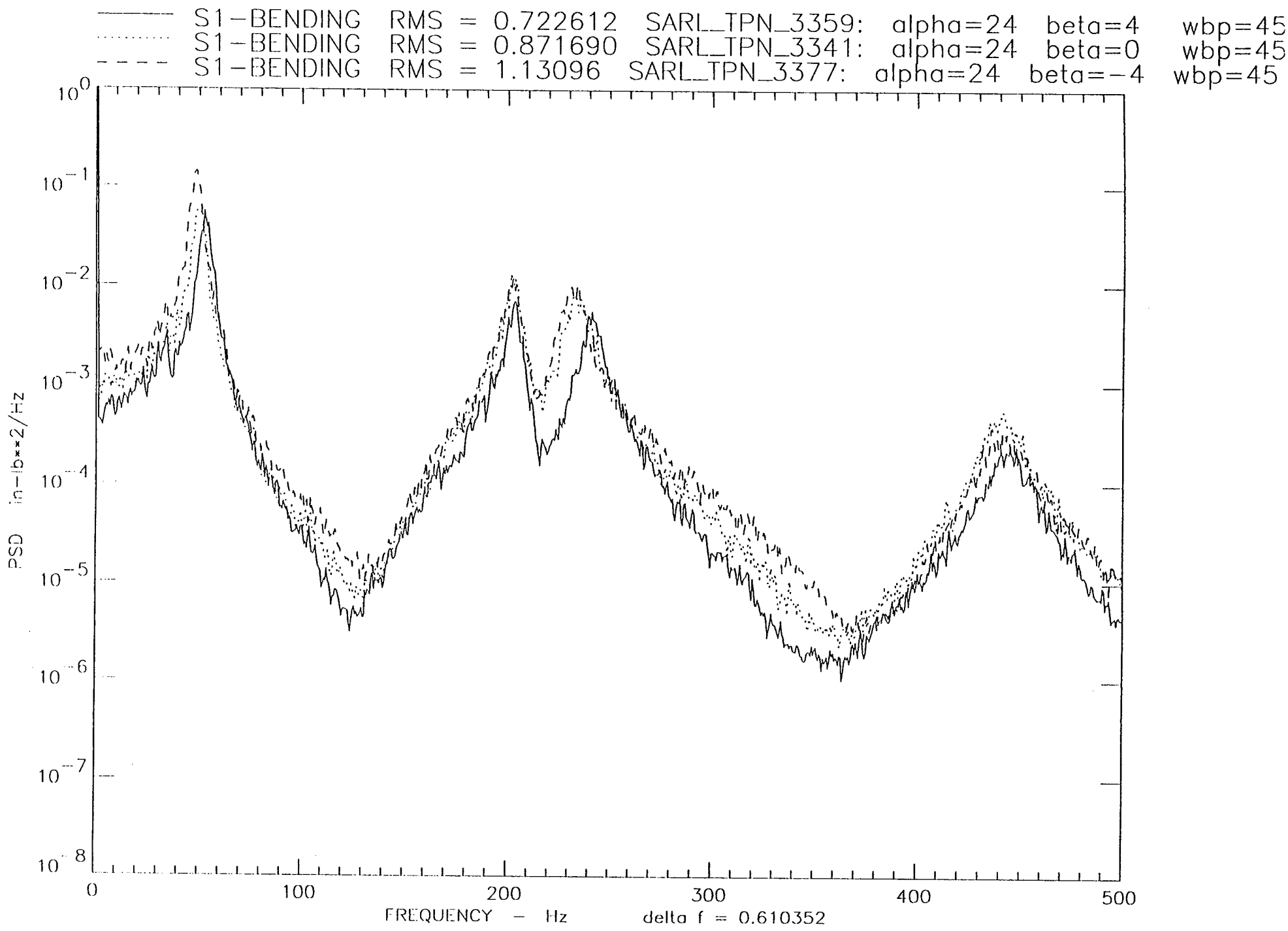
S1-BENDING RMS = 0.324086 SARL_TPN_3357: alpha=20 beta=4 wbp=45
S1-BENDING RMS = 0.549562 SARL_TPN_3339: alpha=20 beta=0 wbp=45
S1-BENDING RMS = 0.655035 SARL_TPN_3375: alpha=20 beta=-4 wbp=4!



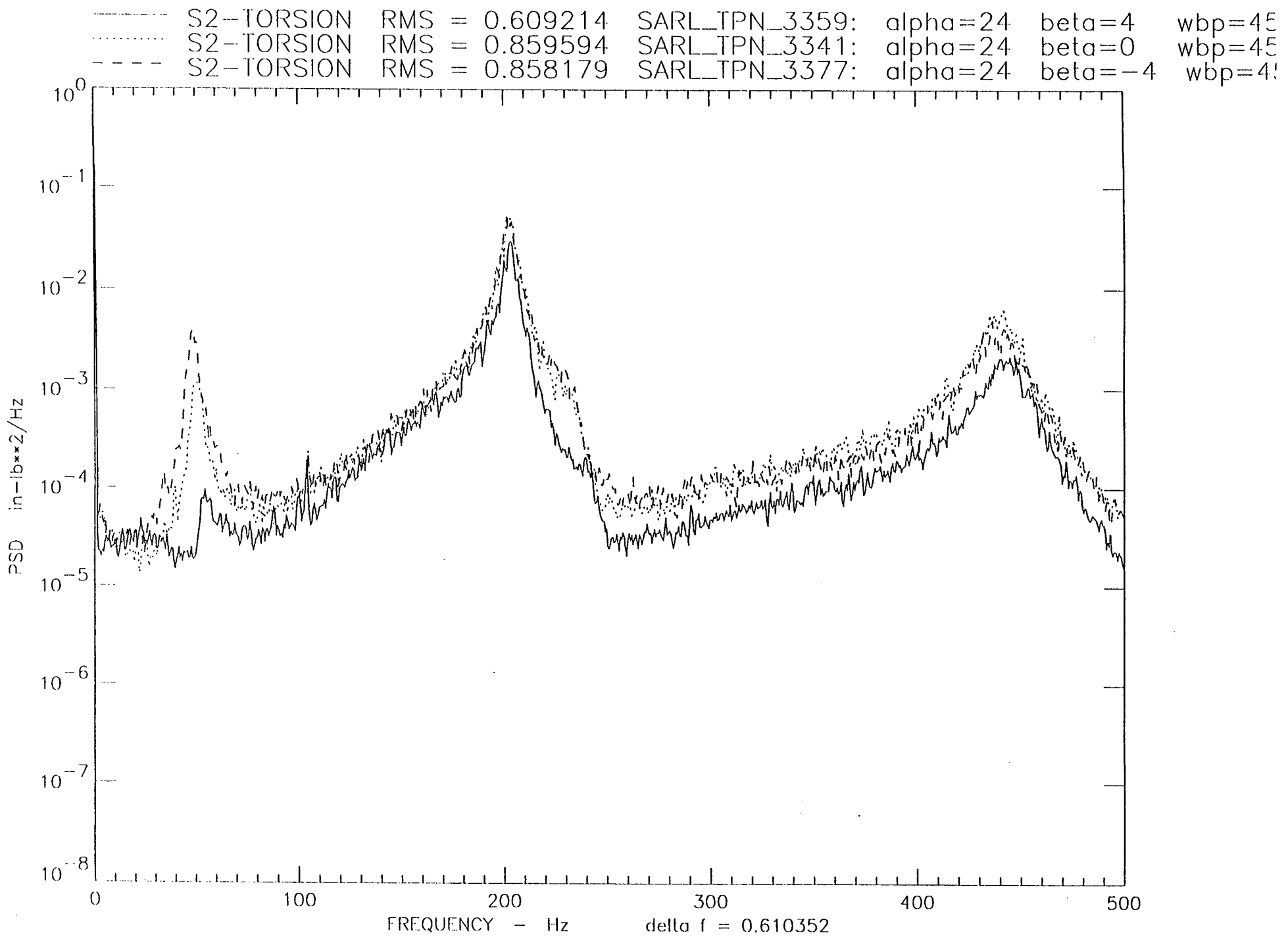
S2-TORSION RMS = 0.232342 SARL_TPN_3357: alpha=20 beta=4 wbp=45
S2-TORSION RMS = 0.431627 SARL_TPN_3339: alpha=20 beta=0 wbp=45
S2-TORSION RMS = 0.566799 SARL_TPN_3375: alpha=20 beta=-4 wbp=45

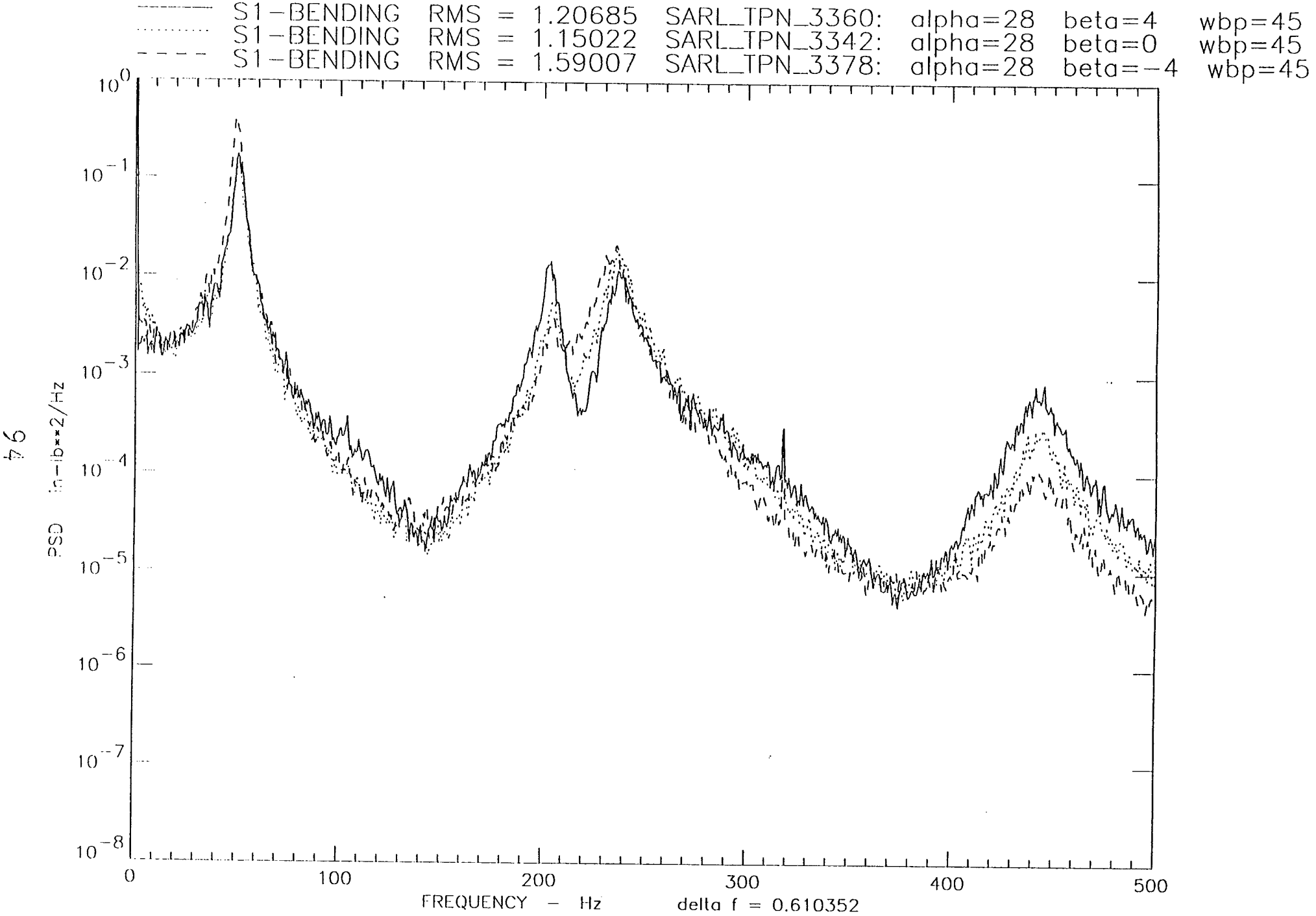


F-15 Vertical Tail Buffet Test: Q=56

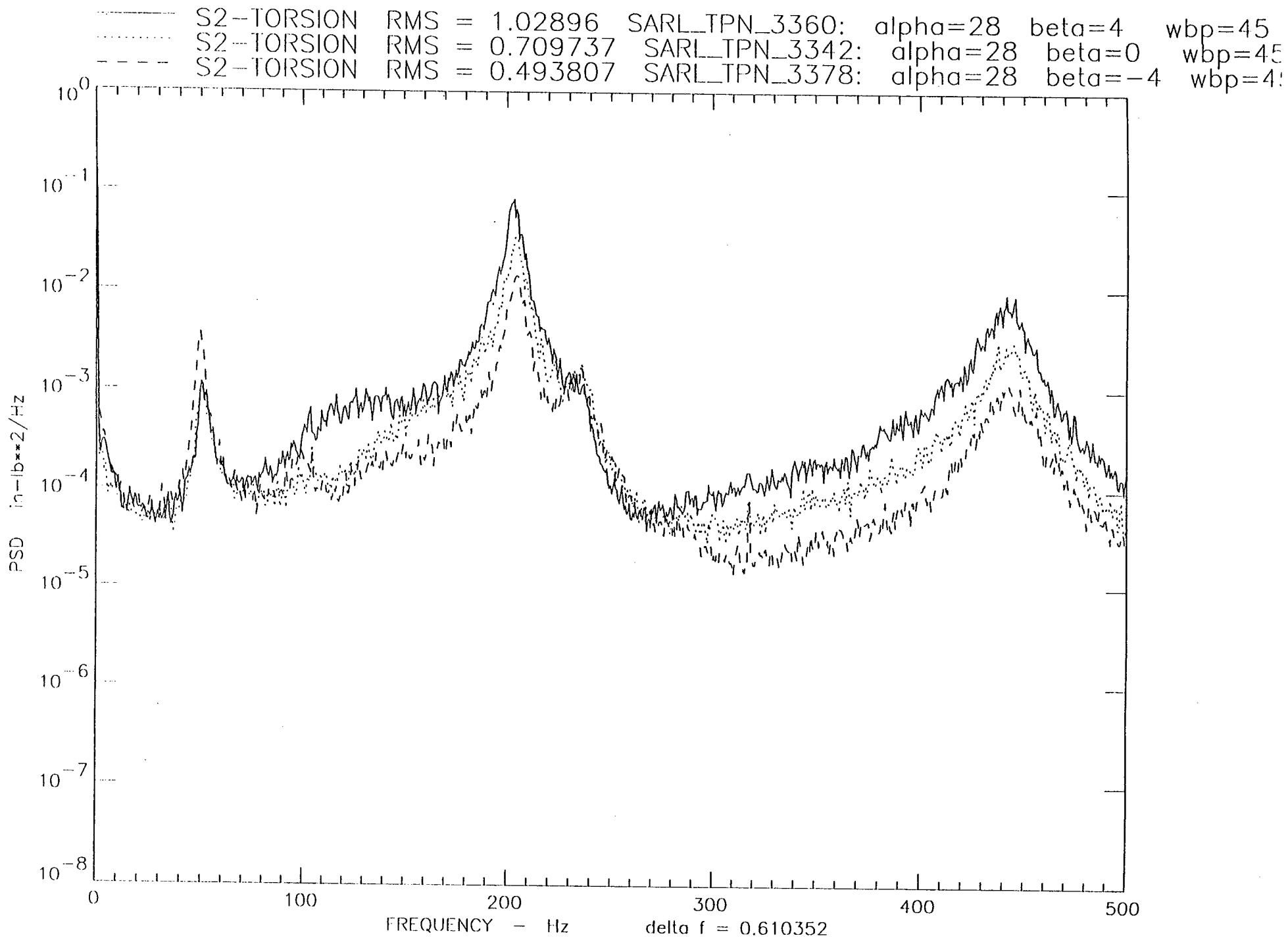


F-15 Vertical Tail Buffet Test: Q=56

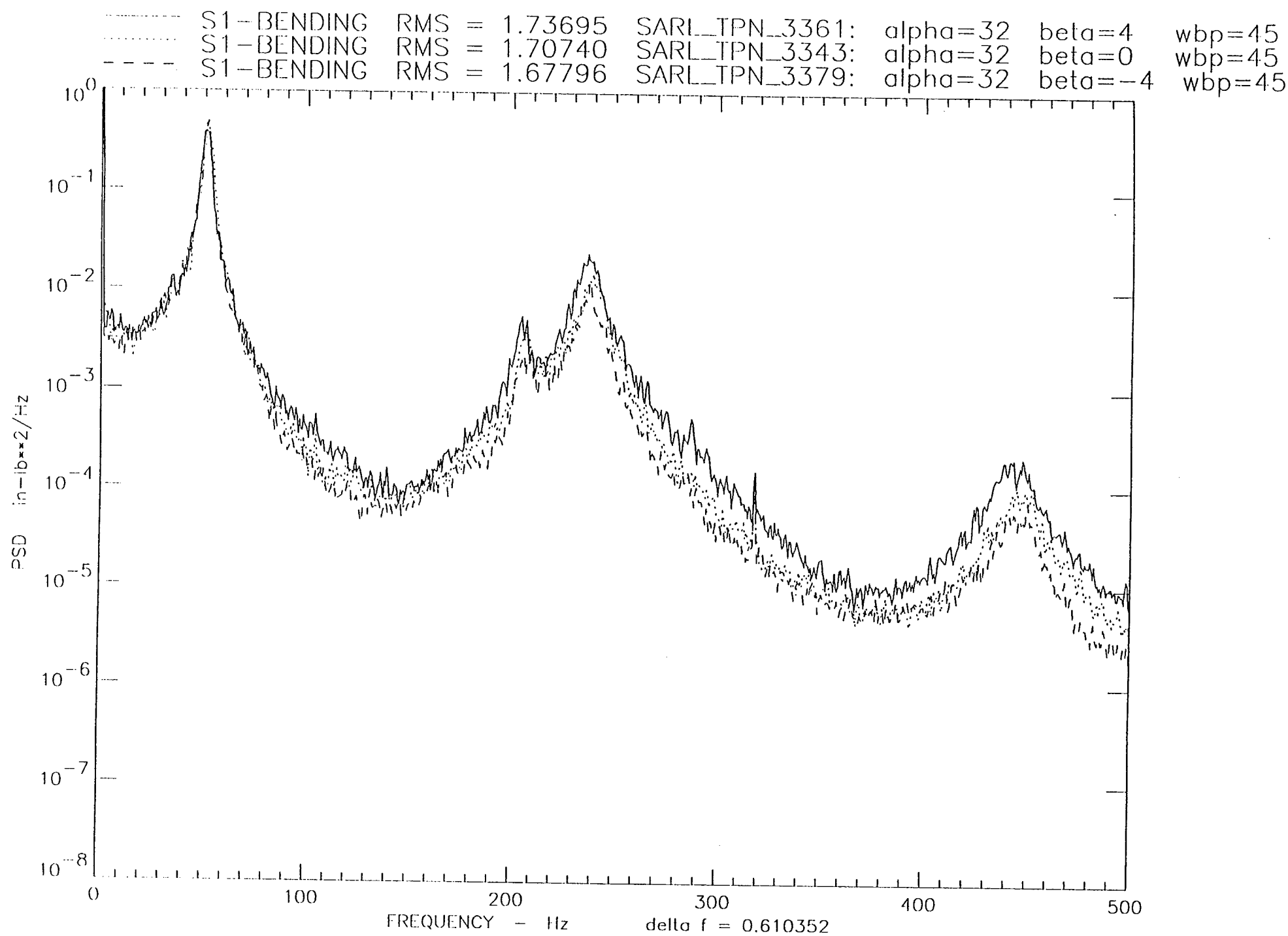



S1-BENDING RMS = 1.20685 SARL_TPN_3360: alpha=28 beta=4 wbp=45
S1-BENDING RMS = 1.15022 SARL_TPN_3342: alpha=28 beta=0 wbp=45
S1-BENDING RMS = 1.59007 SARL_TPN_3378: alpha=28 beta=-4 wbp=45
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

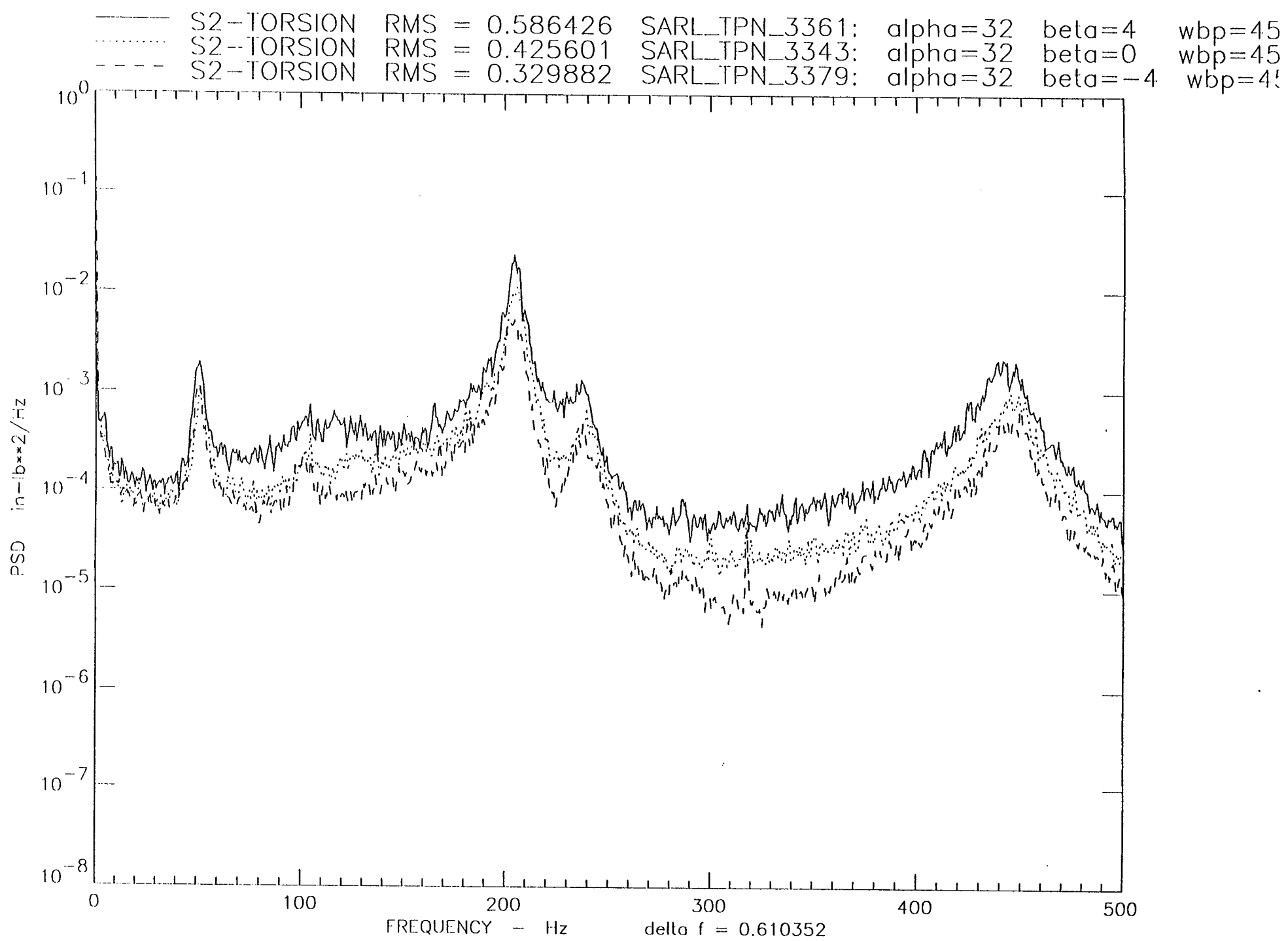
F-15 rtical Tail Buffet Test: Q=56



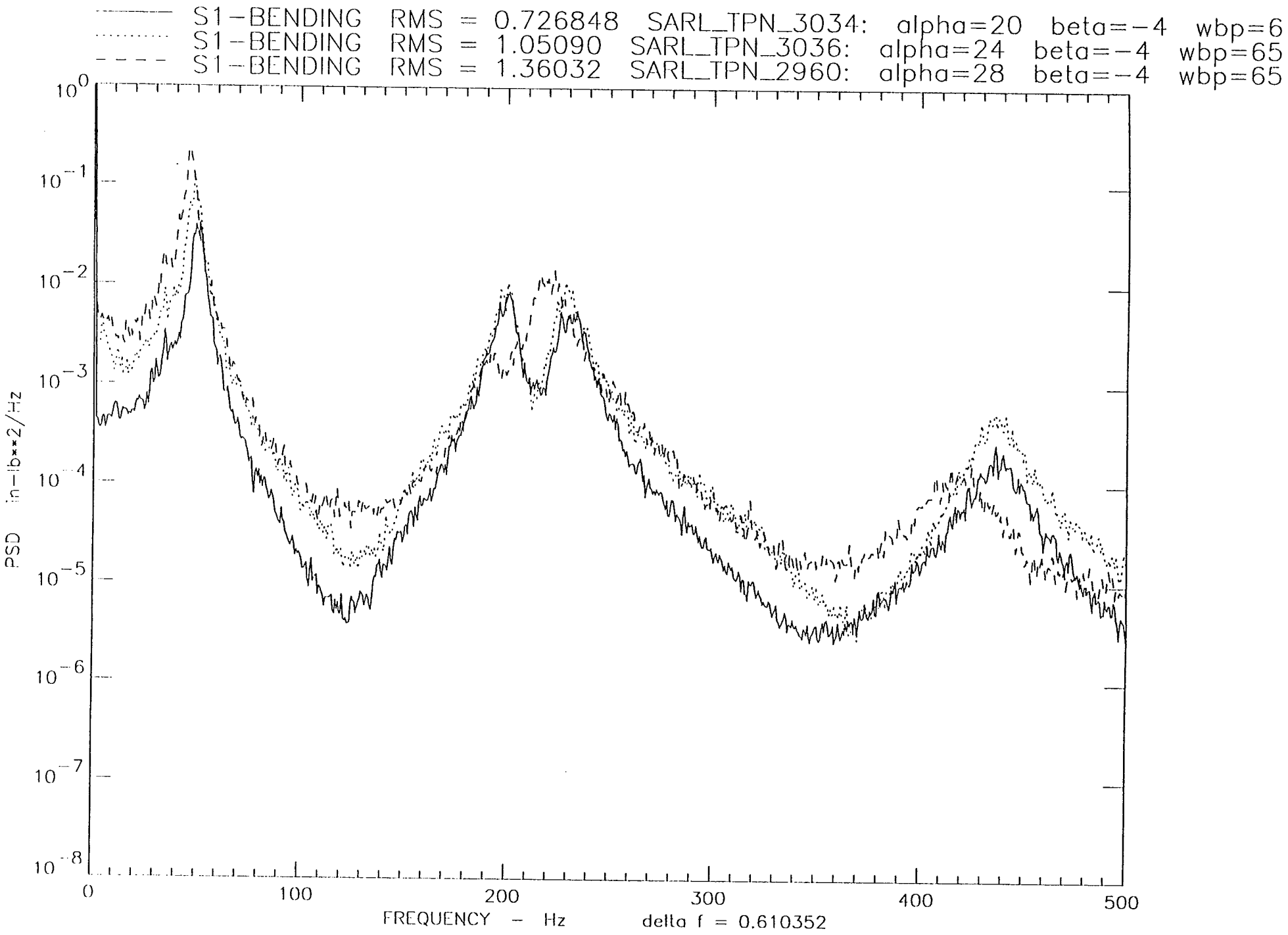
Vertical Tail Buffet Test: Q=56



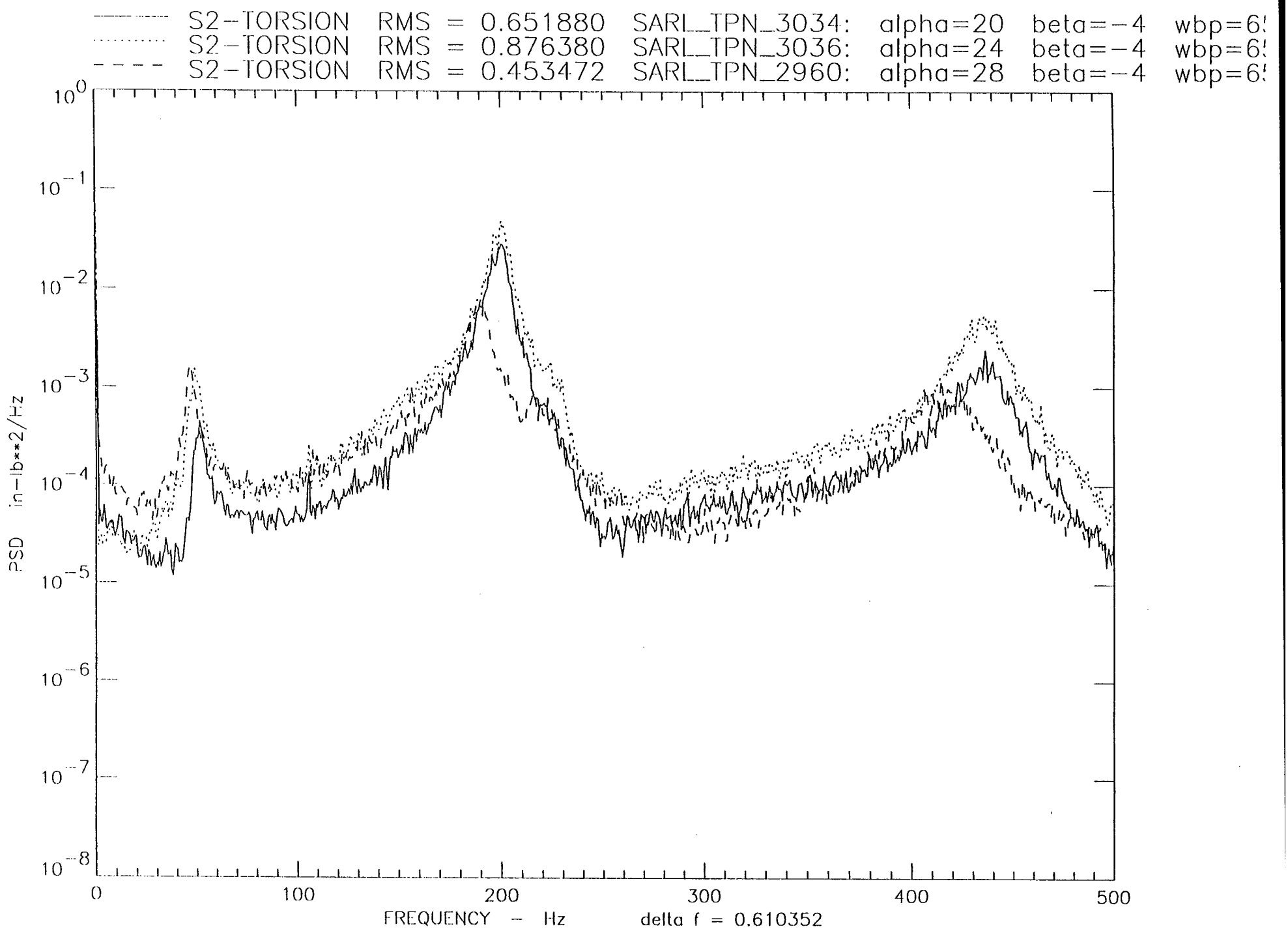
F-15 rtical Tail Buffet Test: Q=56

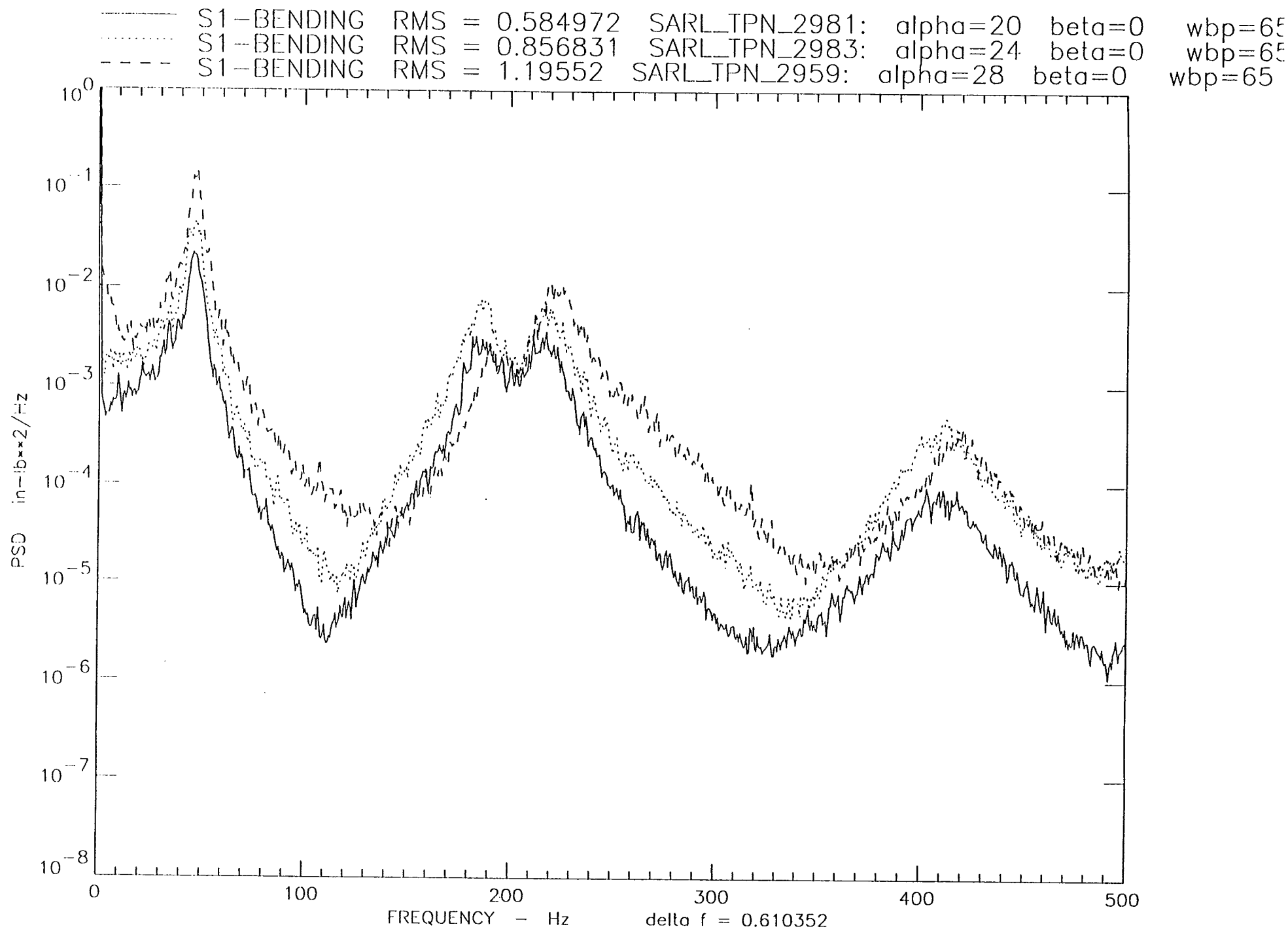


Typical Tail Buffet Test: Q=56



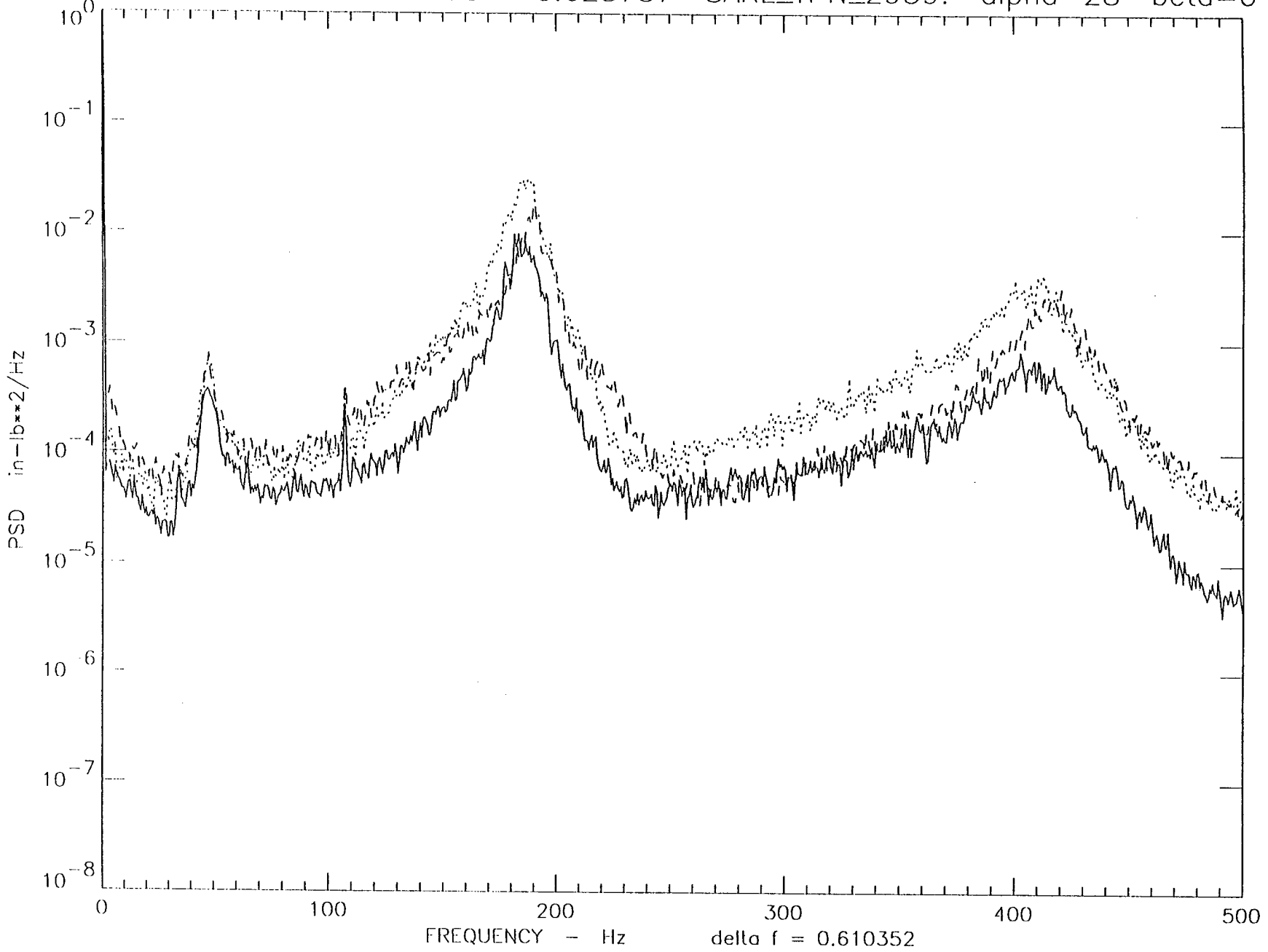
F-15 Vertical Tail Buffet Test: Q=56



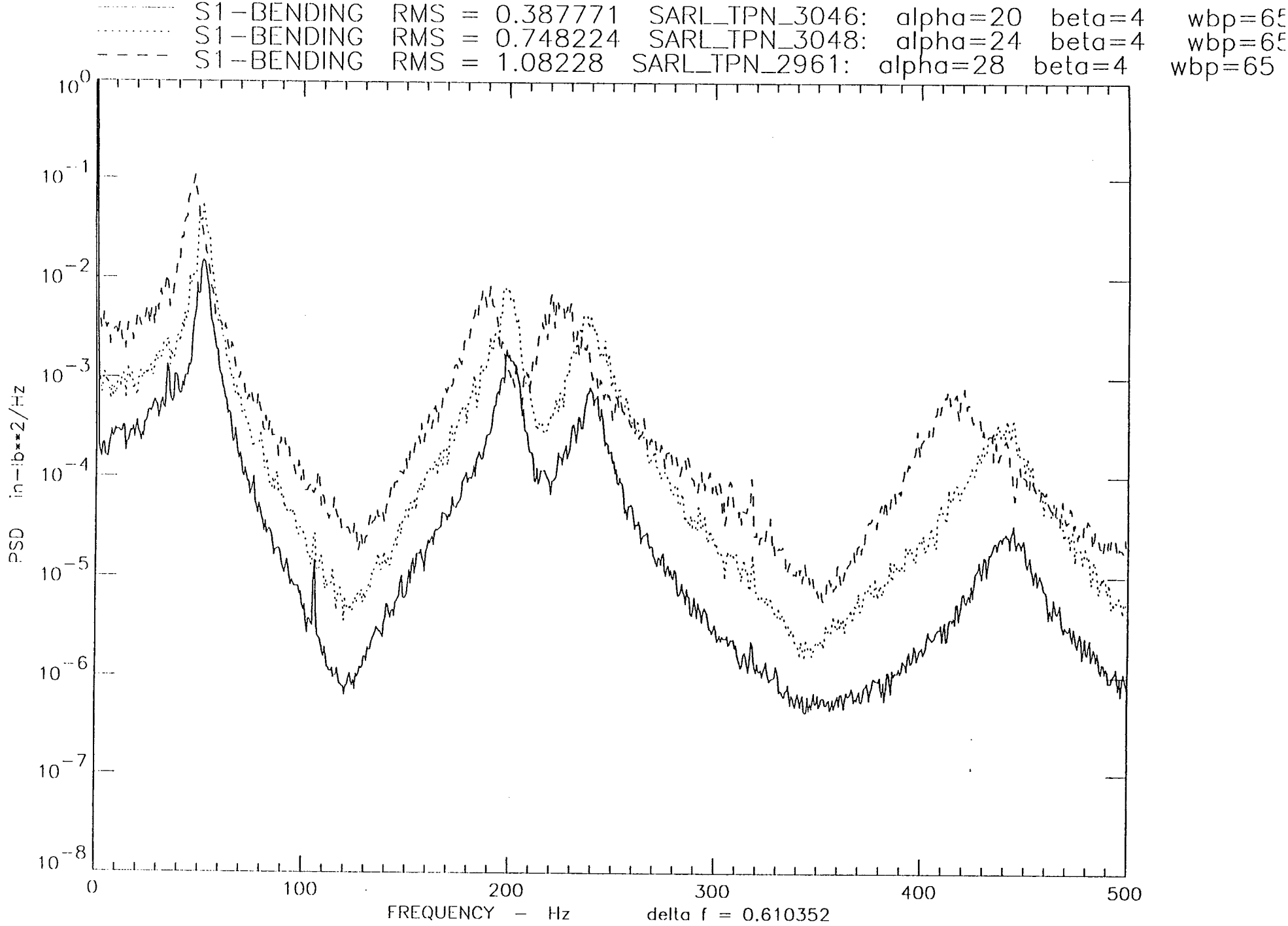

S1-BENDING RMS = 0.584972 SARL_TPN_2981: alpha=20 beta=0 wbp=65
S1-BENDING RMS = 0.856831 SARL_TPN_2983: alpha=24 beta=0 wbp=65
S1-BENDING RMS = 1.19552 SARL_TPN_2959: alpha=28 beta=0 wbp=65
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
0
100
200
300
400
500

Vertical Tail Buffet Test: Q=56

S2-TORSION RMS = 0.436062 SARL_TPN_2981: alpha=20 beta=0 wbp=65
S2-TORSION RMS = 0.836389 SARL_TPN_2983: alpha=24 beta=0 wbp=65
S2-TORSION RMS = 0.625737 SARL_TPN_2959: alpha=28 beta=0 wbp=65

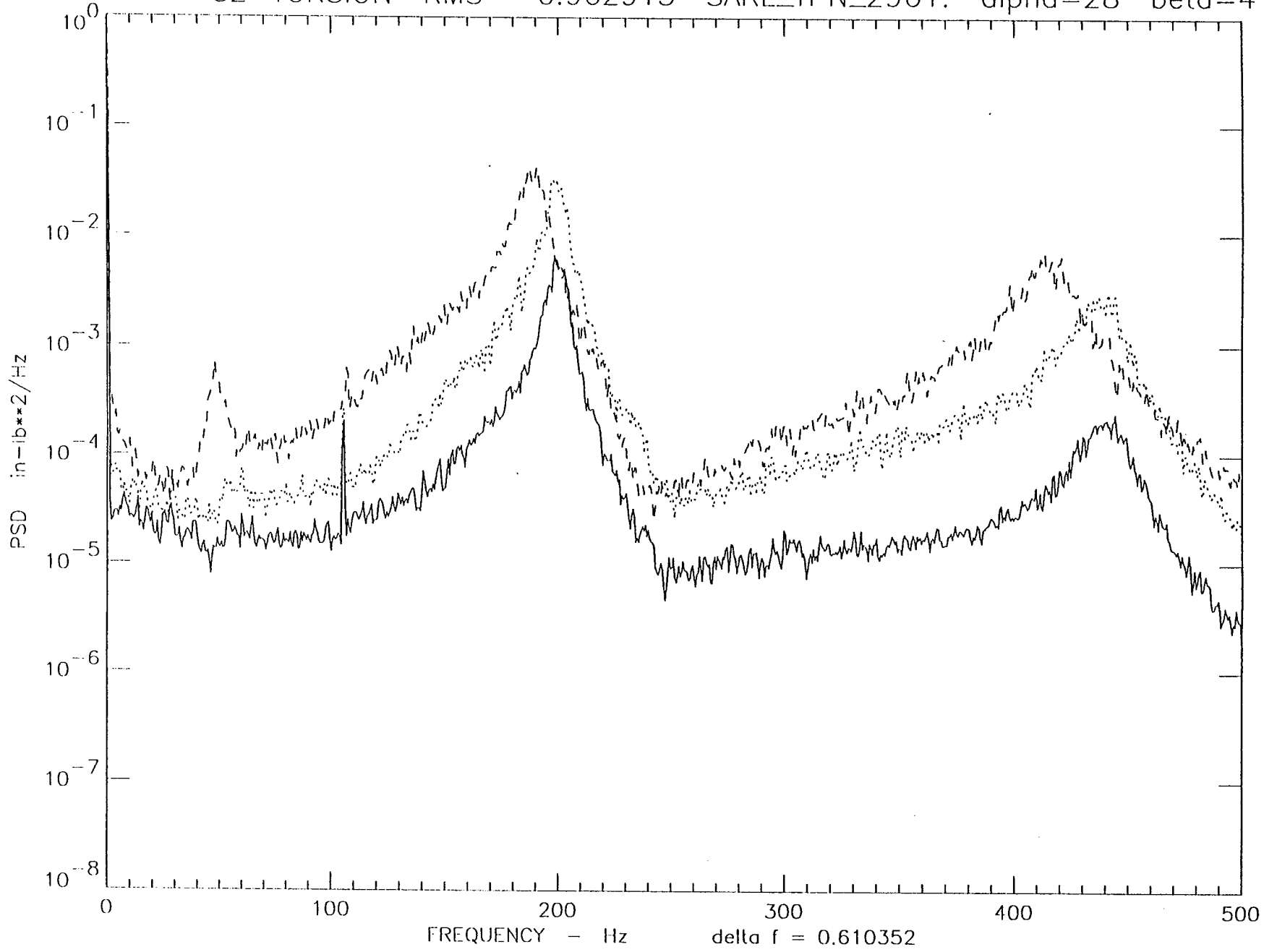


Vertical Tail Buffet Test: Q=56

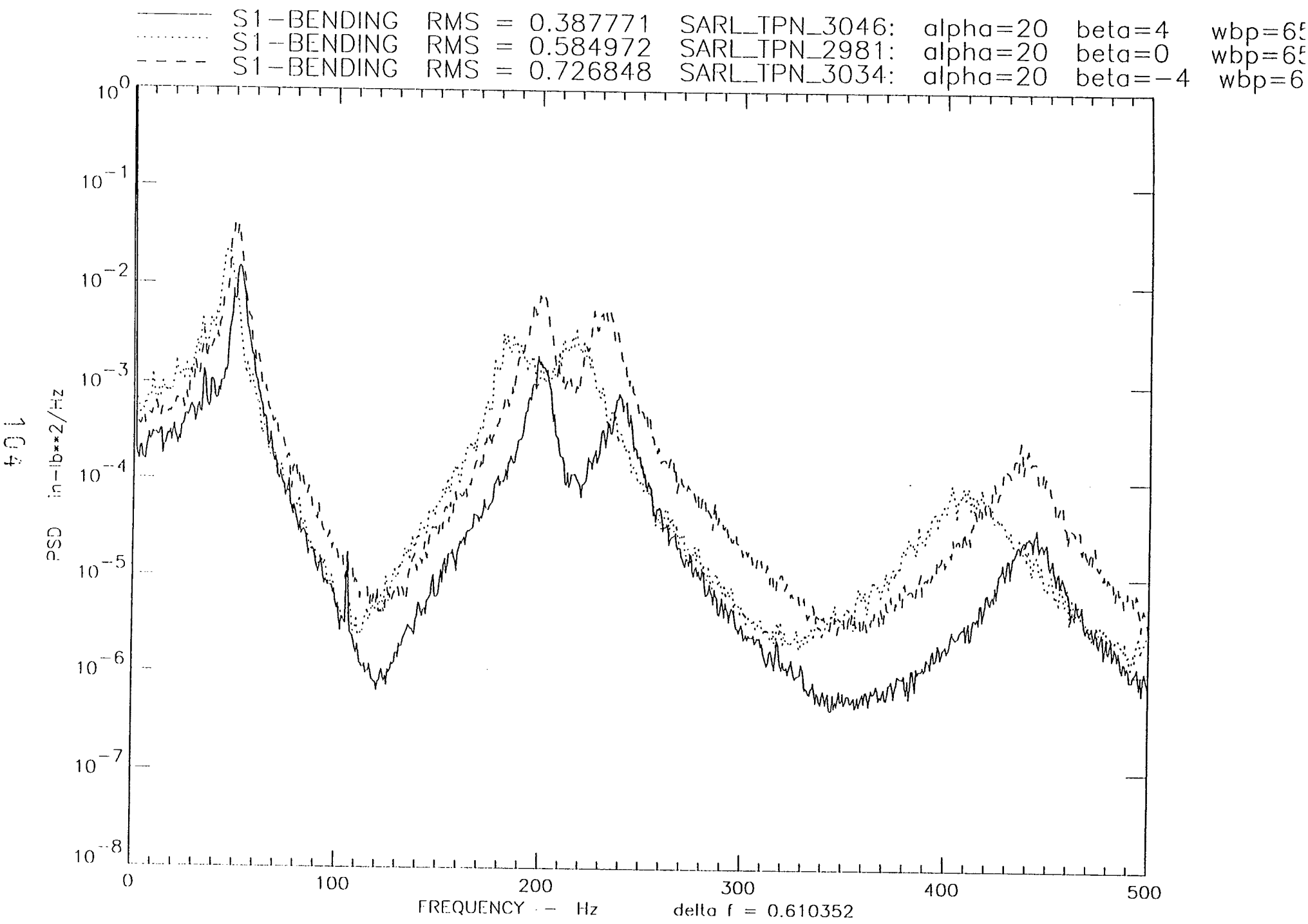


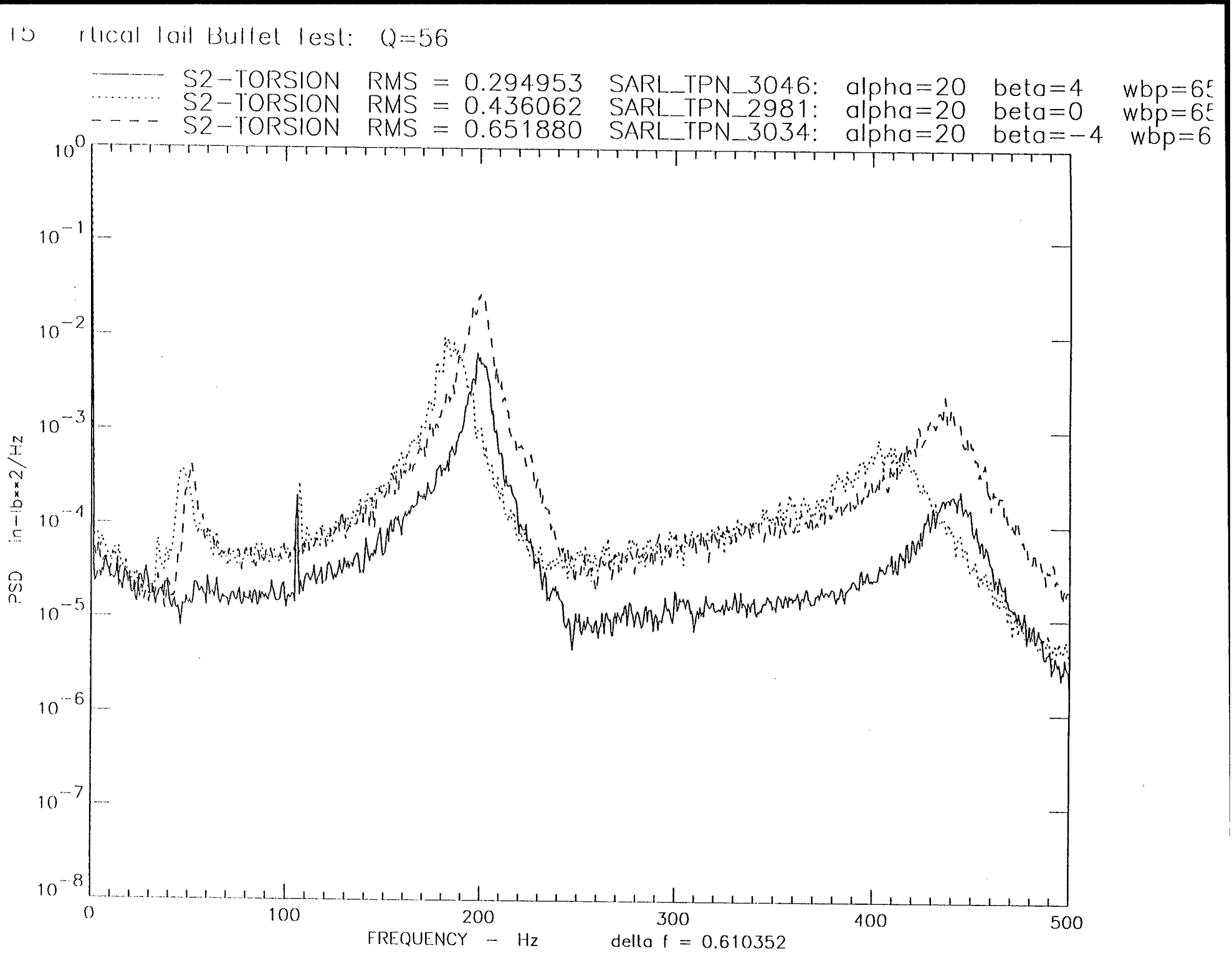
Vertical Tail Buffet Test: Q=56

S2-TORSION RMS = 0.294953 SARL_TPN_3046: alpha=20 beta=4 wbp=65
S2-TORSION RMS = 0.714004 SARL_TPN_3048: alpha=24 beta=4 wbp=65
S2-TORSION RMS = 0.962913 SARL_TPN_2961: alpha=28 beta=4 wbp=65

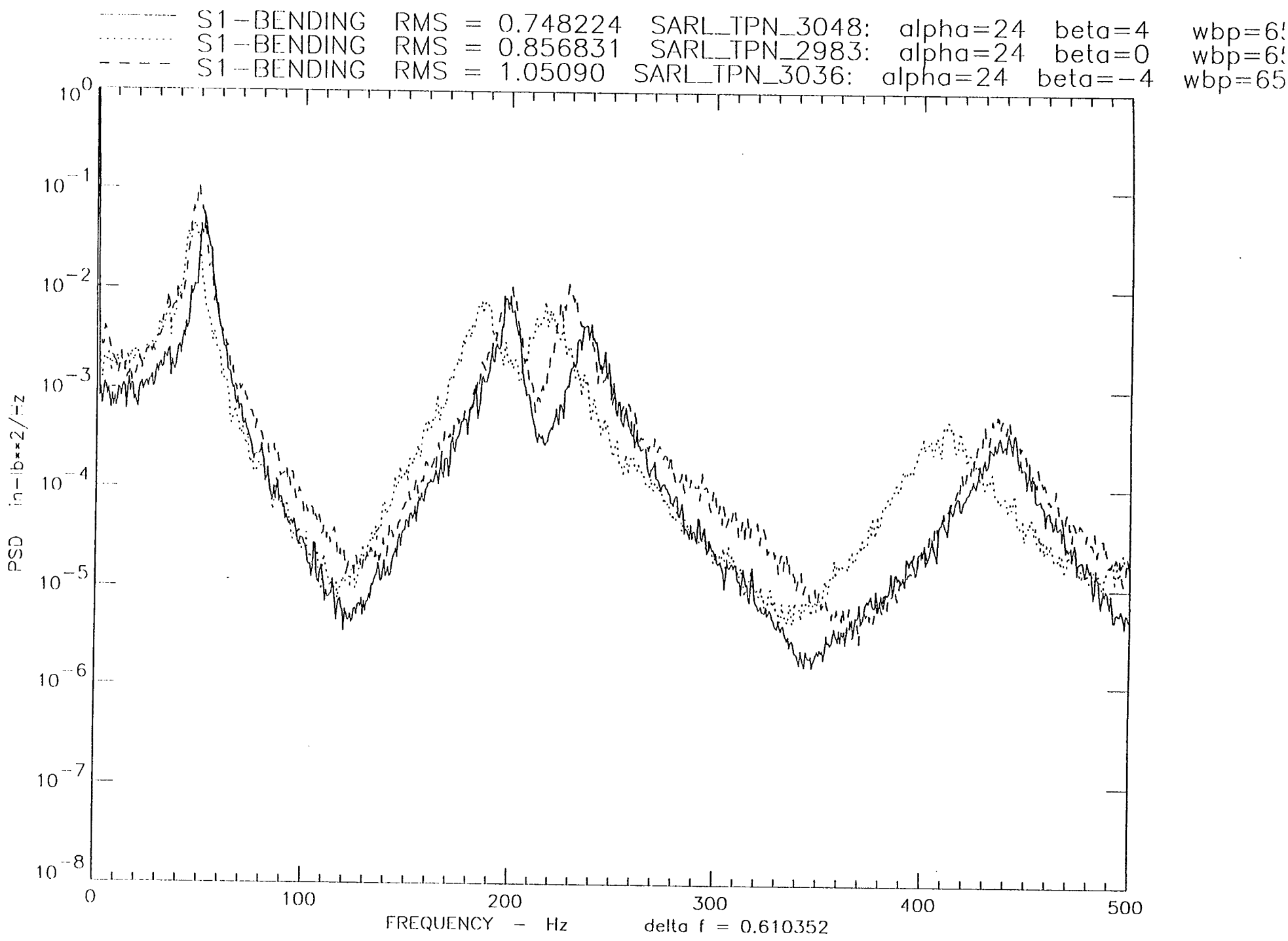


F-15 Vertical Tail Buffet Test: Q=56

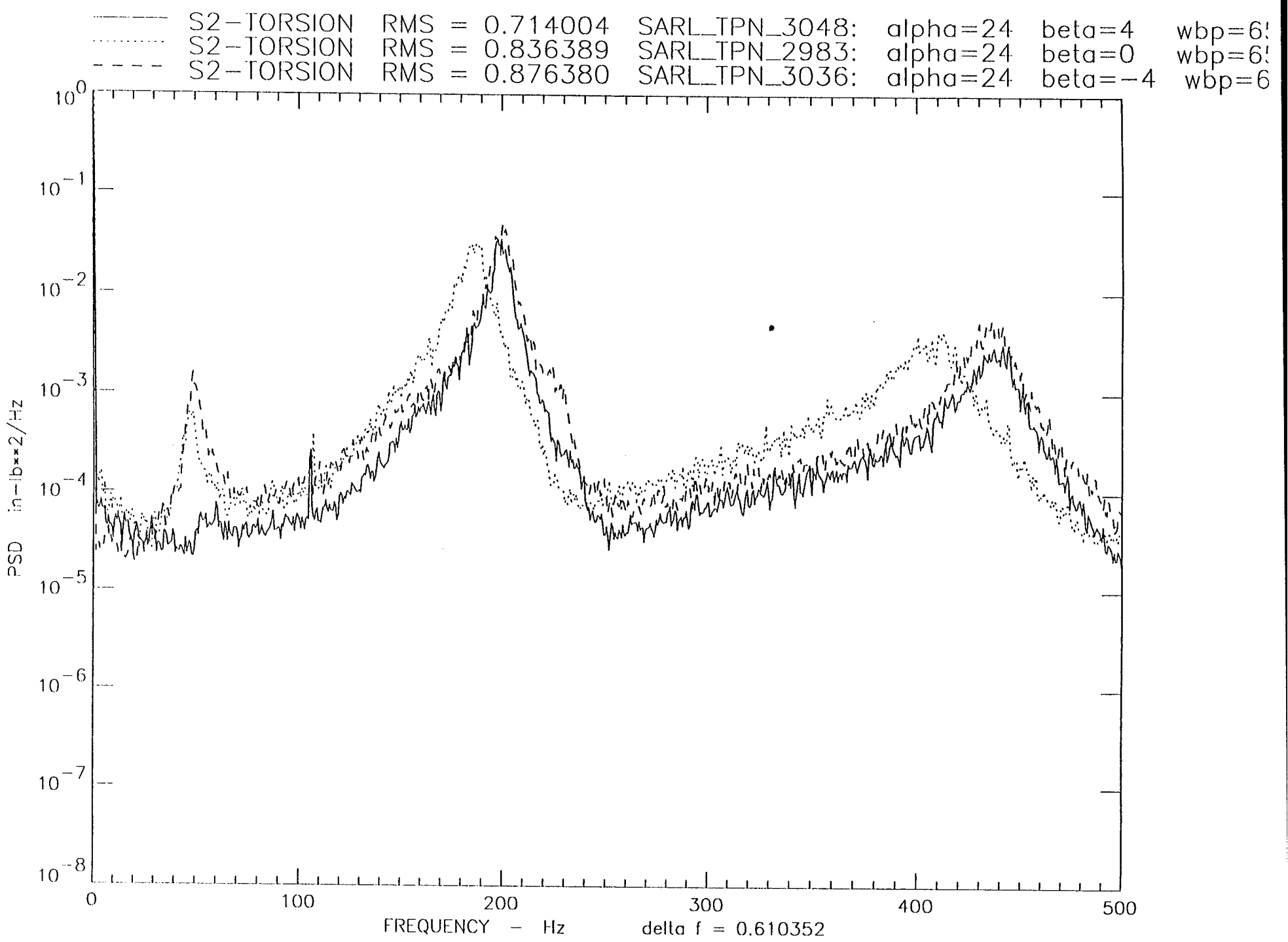



rtical Tail Buffet Test: Q=56
S2-TORSION RMS = 0.294953 SARL_TPN_3046: alpha=20 beta=4 wbp=65
S2-TORSION RMS = 0.436062 SARL_TPN_2981: alpha=20 beta=0 wbp=65
S2-TORSION RMS = 0.651880 SARL_TPN_3034: alpha=20 beta=-4 wbp=6
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

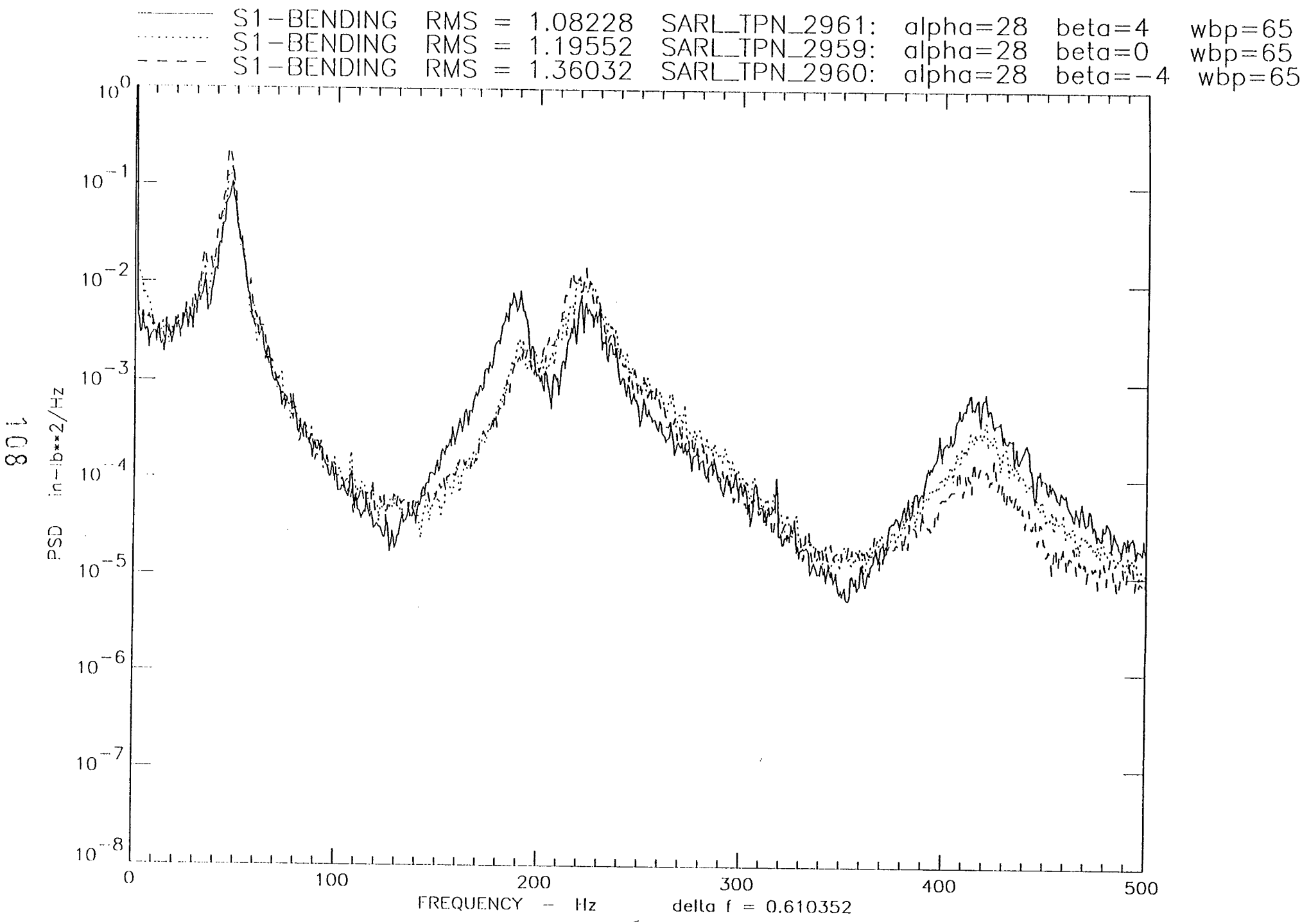
Aileron Buffet Test: Q=56



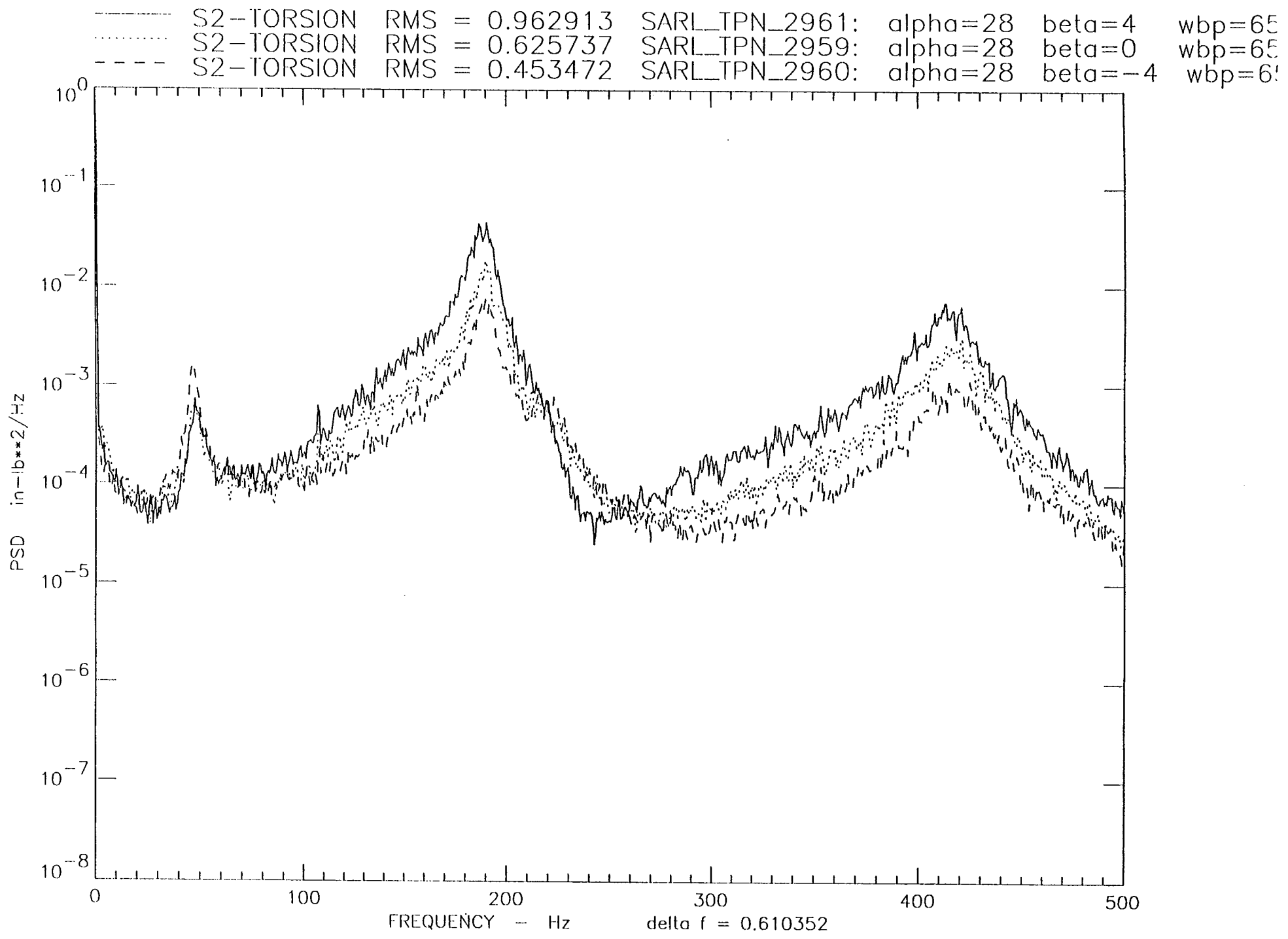
Vertical Tail Buffet Test: Q=56

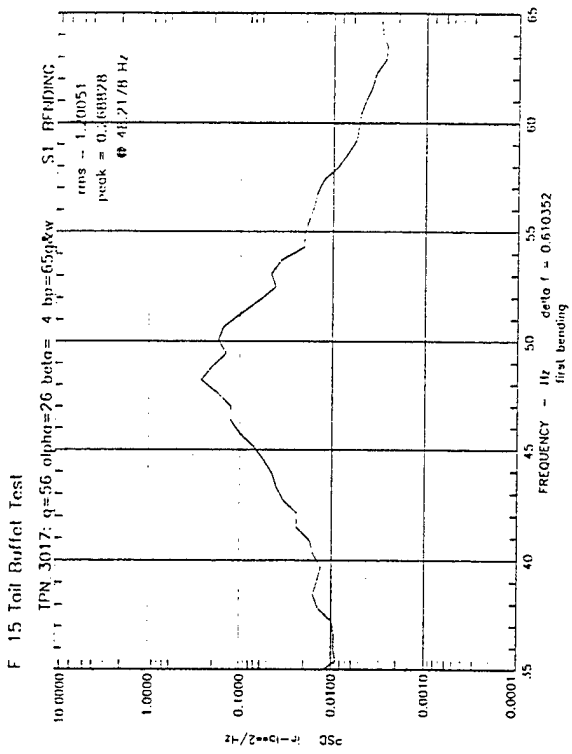


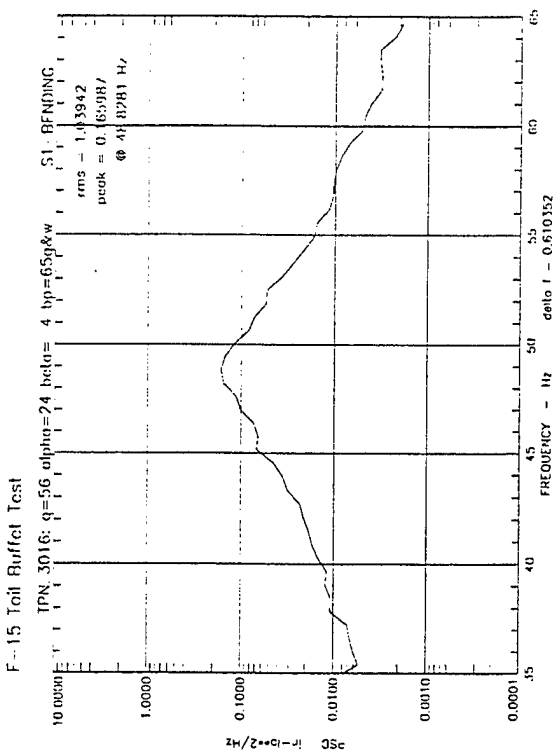
F-15 rtical Tail Buffet Test: Q=56

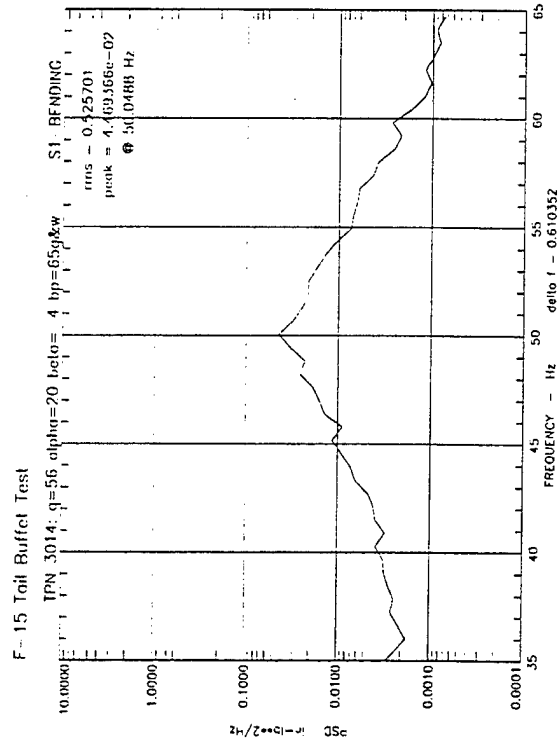


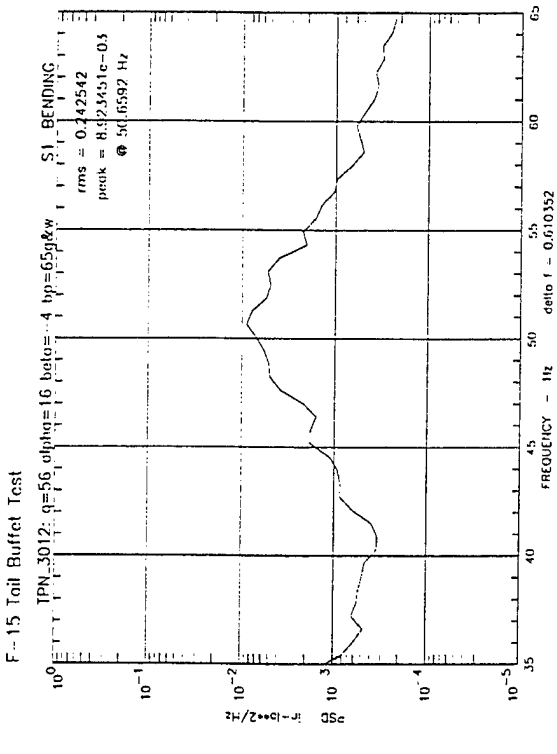
F-15 rtical Tail Buffet Test: Q=56




F-15 Tail Buffet Test
TPN 3017: q=56 alpha=26 beta= 4 bp=65g&w
S1 BENDING
rms = 1.10051
peak = 0.668928
@ 48.2178 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

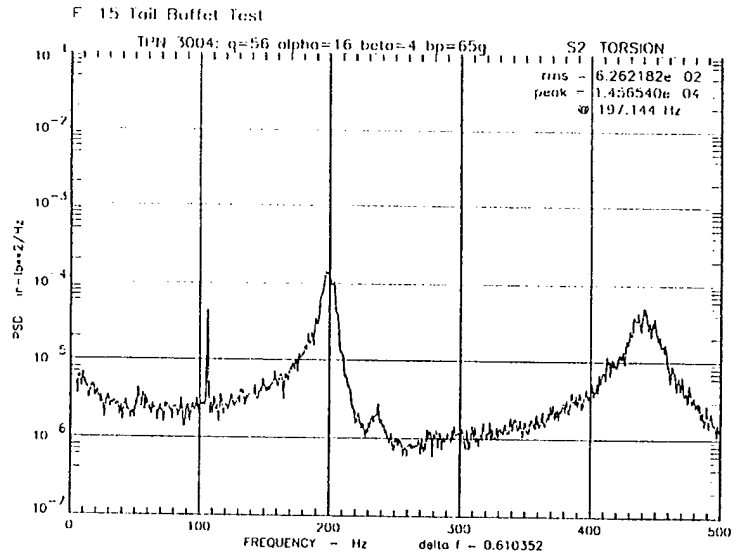

F-15 Tail Buffet Test
TPN 3016: q=56 alpha=24 beta= 4 bp=65g&w
S1 BENDING
rms = 1.03942
peak = 0.659887
@ 48.8281 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

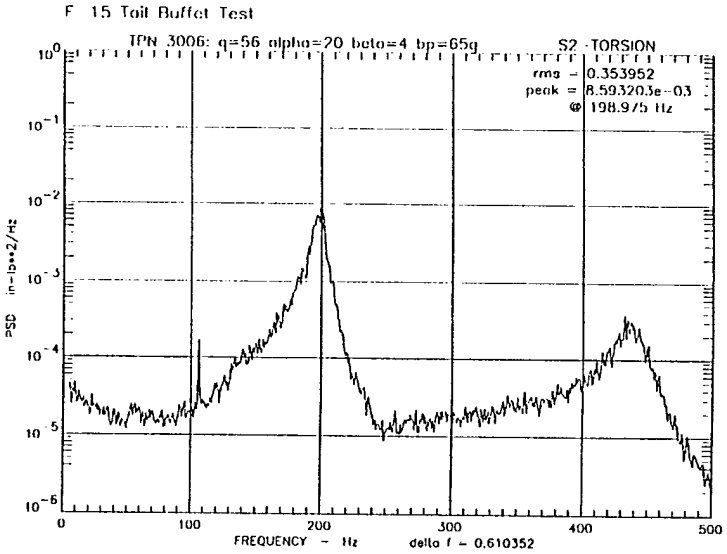

F-15 Tail Buffet Test
TPN 3014: q=56 alpha=20 beta= 4 bp=65g&w
S1 BENDING
rms = 0.425701
peak = 4.69366e-02
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

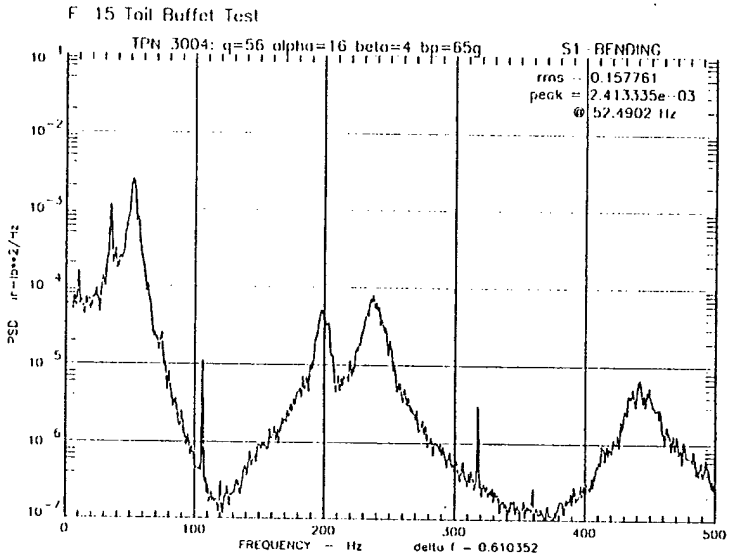

F-15 Tail Buffet Test
TPN 3012: q=56 alpha=16 beta= 4 bp=65g&w
S1 BENDING
rms = 0.242542
peak = 8.92345e-03
@ 50.6592 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

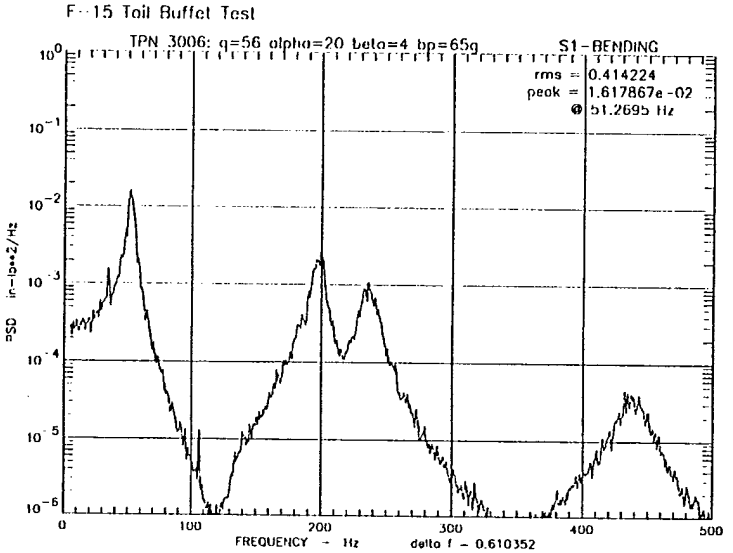
FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

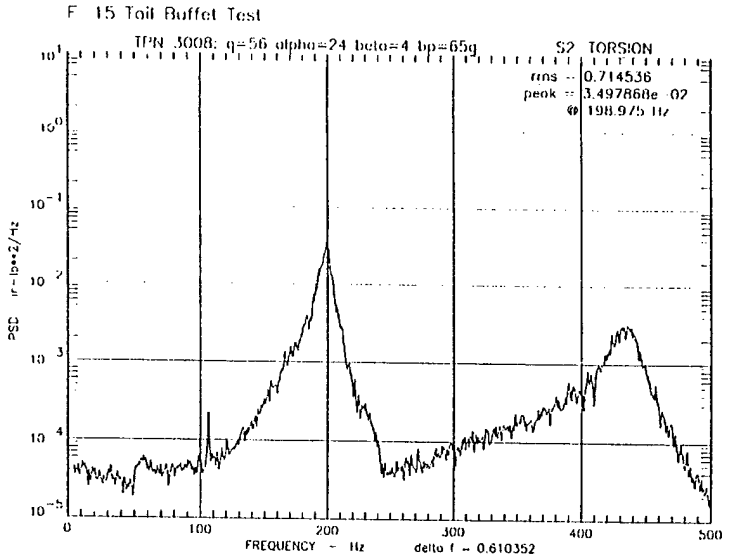
2.1.1.2 GBP = 65 psi, BETA= 0, +4, -4, ALPHA = 0....32 Deg

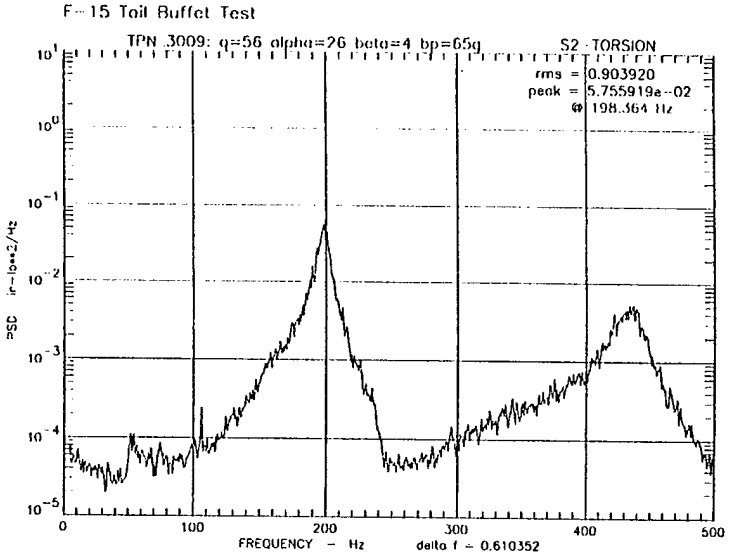

F 15 Tail Buffet Test
TPN 3004: q=56 alpha=16 beta=4 bp=65g
S2 TORSION
rms = 6.262182e 02
peak = 1.456540e 04
@ 197.144 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

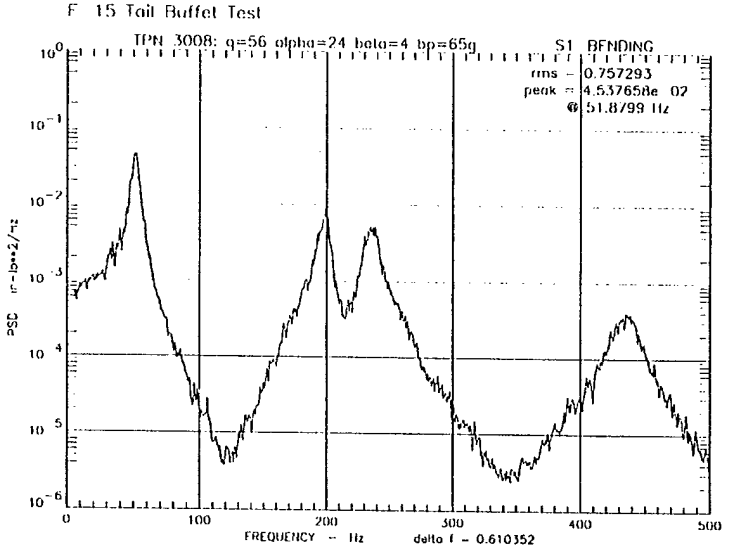

F 15 Tail Buffet Test
TPN 3006: q=56 alpha=20 beta=4 bp=65g
S2 -TORSION
rms = 0.353952
peak = 8.593203e-03
@ 198.975 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

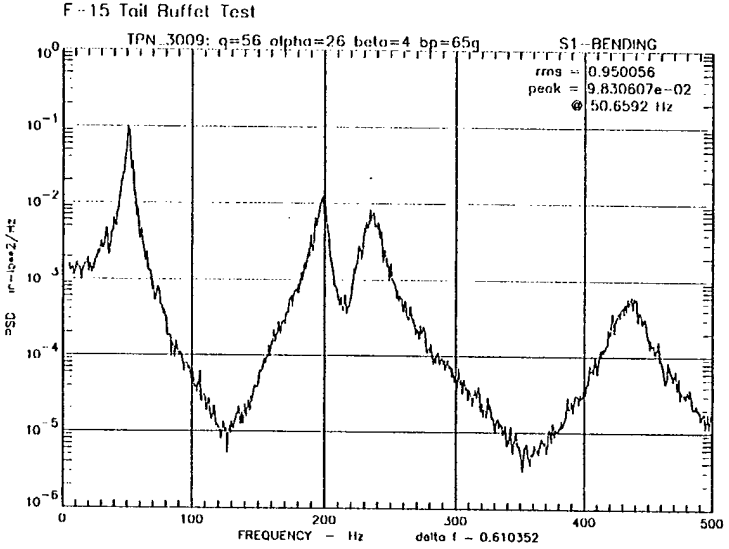

F 15 Tail Buffet Test
TPN 3004: q=56 alpha=16 beta=4 bp=65g
S1 -BENDING
rms = 0.157761
peak = 2.413335e-03
@ 52.4902 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

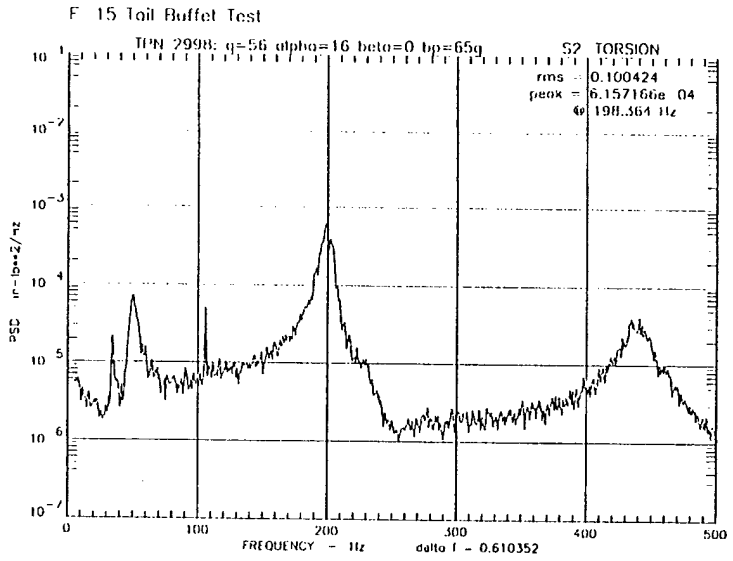

F-15 Tail Buffet Test
TPN 3006: q=56 alpha=20 beta=4 bp=65g
S1 -BENDING
rms = 0.414224
peak = 1.617867e-02
@ 51.2695 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

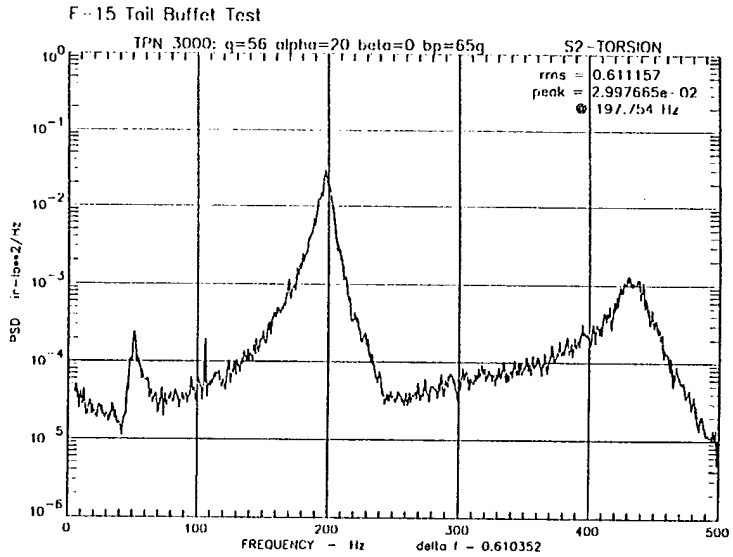

F 15 Tail Buffet Test
TPN 3008: q=56 alpha=24 beta=4 bp=65g
S2 TORSION
rms = 0.714536
peak = 3.497868e-02
@ 198.975 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

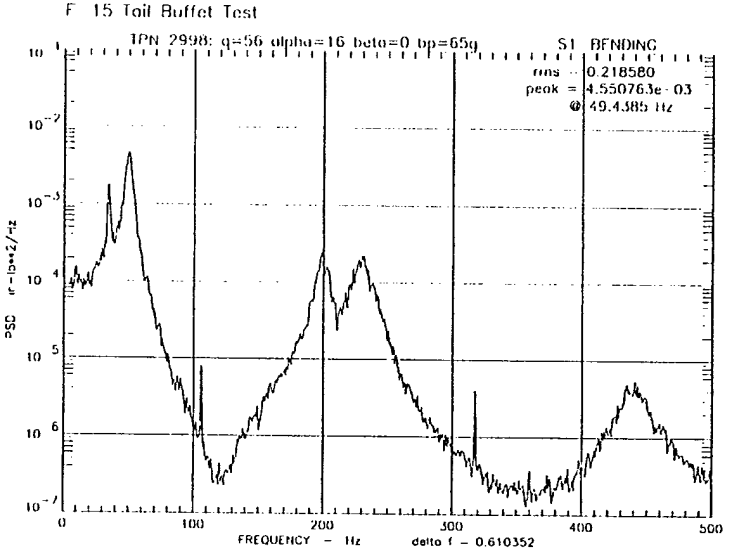

F-15 Tail Buffet Test
TPN 3009: q=56 alpha=26 beta=4 bp=65g
S2 TORSION
rms = 0.903920
peak = 5.755919e-02
@ 198.364 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

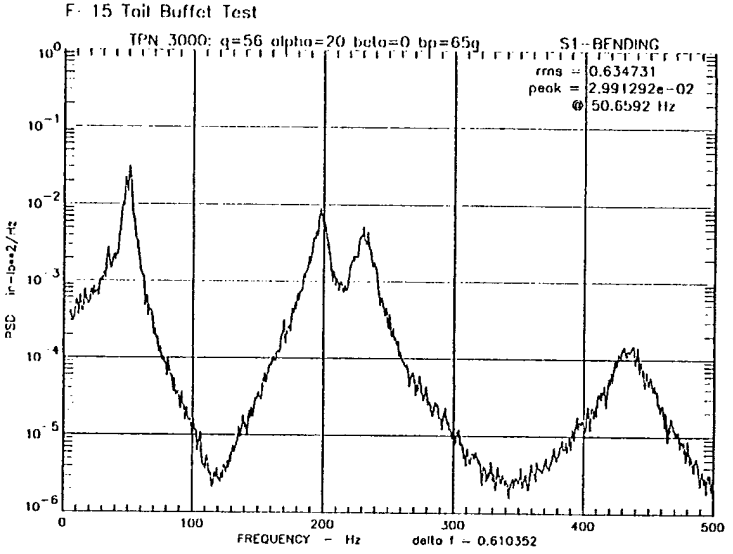

F 15 Tail Buffet Test
TPN 3008: q=56 alpha=24 beta=4 bp=65g
S1 BENDING
rms = 0.757293
peak = 4.537658e-02
@ 51.8799 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

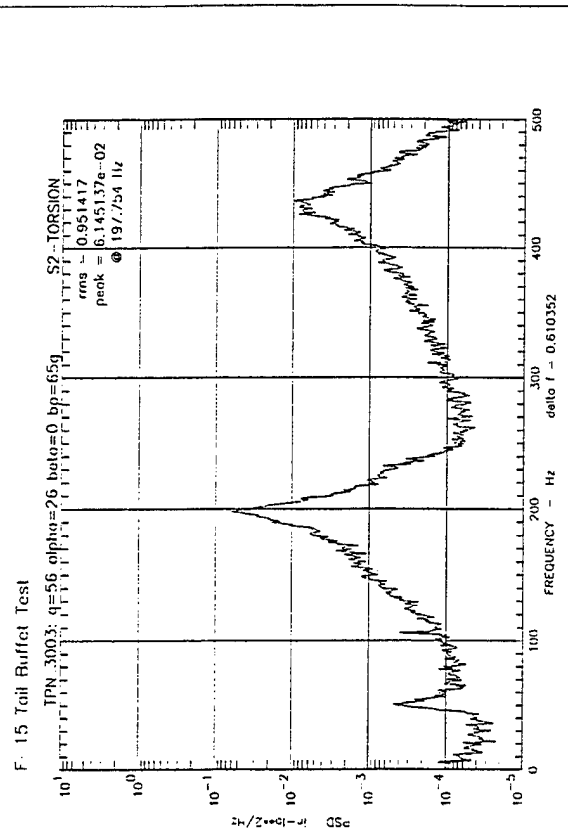

F-15 Tail Buffet Test
TPN 3009: q=56 alpha=26 beta=4 bp=65g
S1 BENDING
rms = 0.950056
peak = 9.830607e-02
@ 50.6592 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

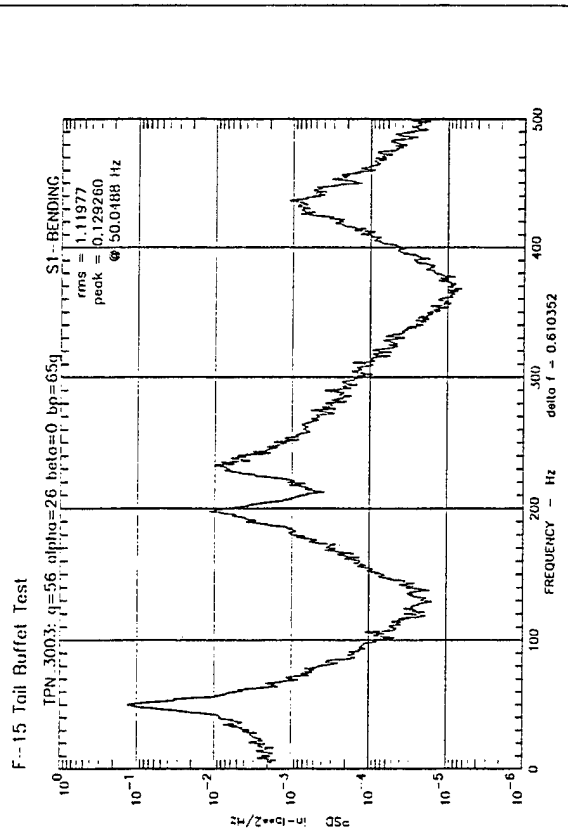

F 15 Tail Buffet Test
TPN 2998: q=56 alpha=16 beta=0 bp=65g
S2 TORSION
rms = 0.100424
peak = 6.157166e 04
@ 198.364 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

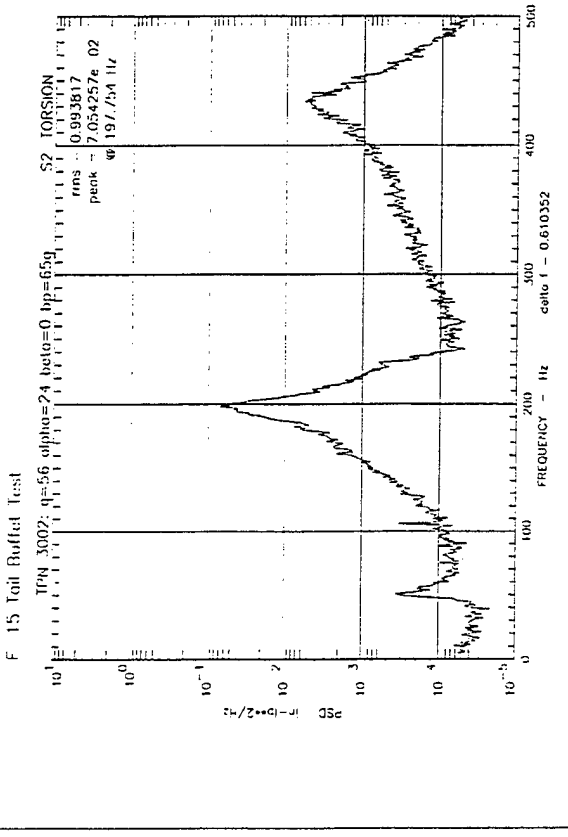

F-15 Tail Buffet Test
TPN 3000: q=56 alpha=20 beta=0 bp=65g
S2-TORSION
rms = 0.611157
peak = 2.997665e-02
@ 197.754 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

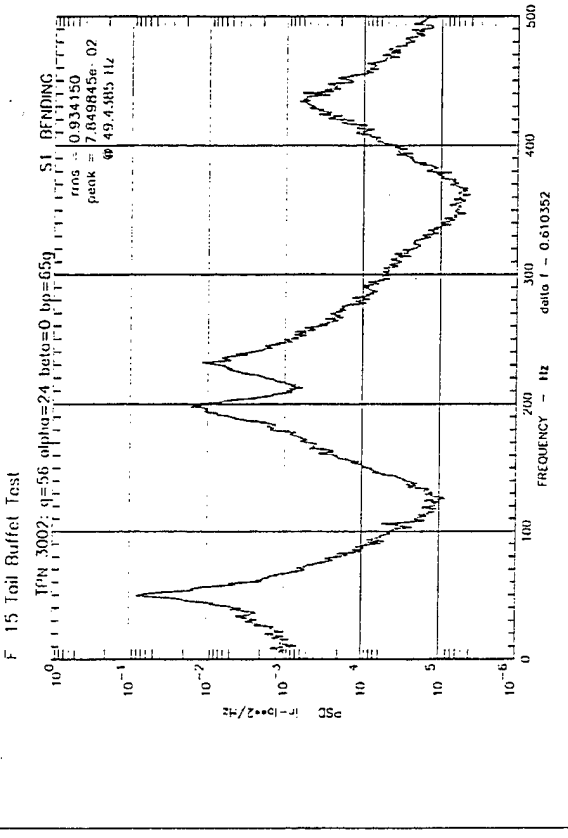

F 15 Tail Buffet Test
TPN 2998: q=56 alpha=16 beta=0 bp=65g
S1 BENDING
rms = 0.218580
peak = 4.550763e-03
@ 49.4385 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN 3000: q=56 alpha=20 beta=0 bp=65g
S1-BENDING
rms = 0.634731
peak = 2.991292e-02
@ 50.6592 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

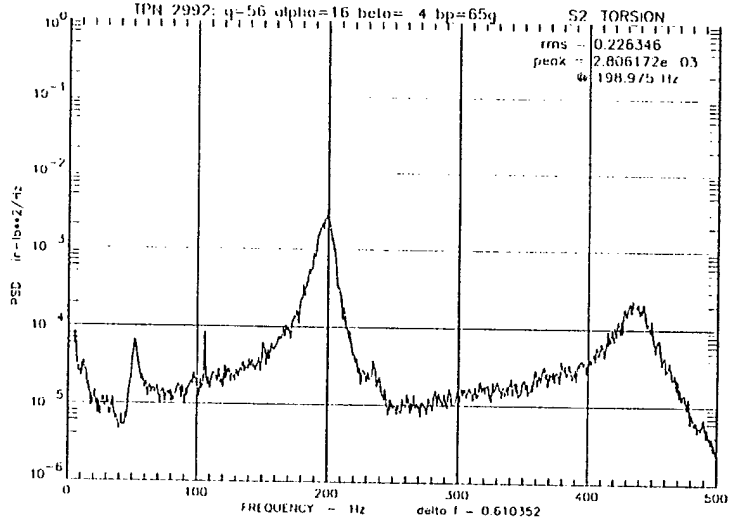

F-15 Tail Buffet Test
TPN 3003: q=56 alpha=26 beta=0 bp=65g
S2--TORSION
rms = 0.951417
peak = 6.145137e-02
@ 197.754 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN 3003: q=56 alpha=26 beta=0 bp=65g
S1--BENDING
rms = 1.11977
peak = 0.129260
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

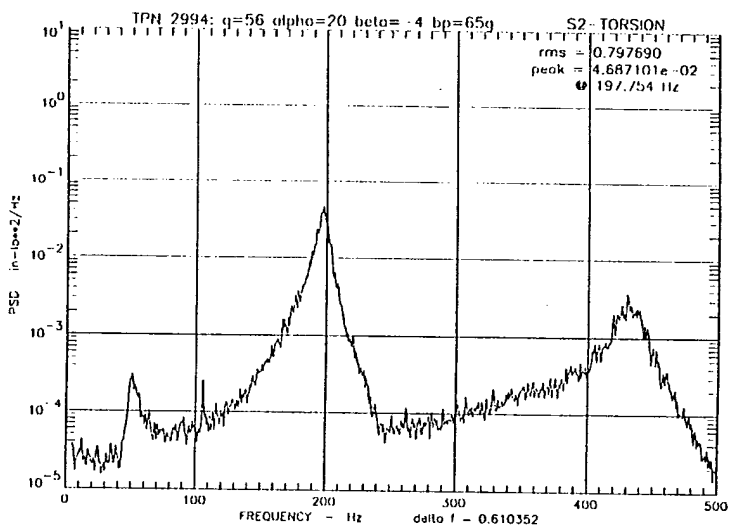

F-15 Tail Buffet Test
TPN 3002: q=56 alpha=24 beta=0 bp=65g
S2 TORSION
rms = 0.993617
peak = 7.054257e-02
@ 197.754 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN 3002: q=56 alpha=24 beta=0 bp=65g
S1 BENDING
rms = 0.934150
peak = 7.849845e-02
@ 49.4385 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

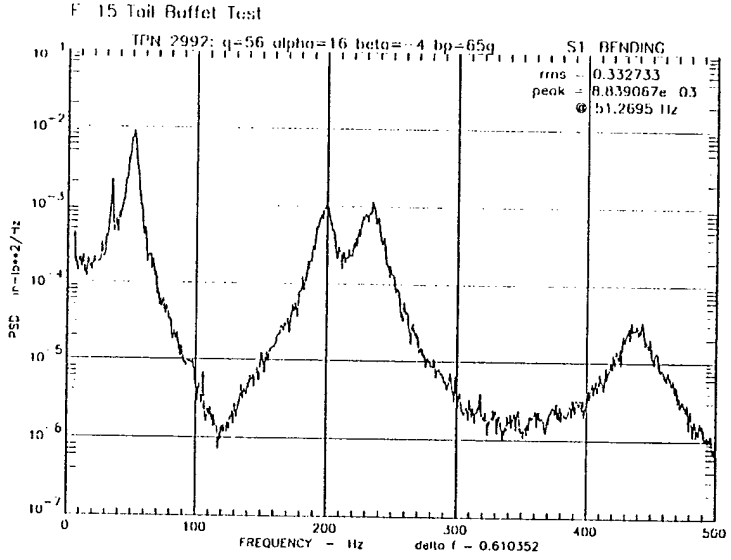
F-15 Tail Buffet Test



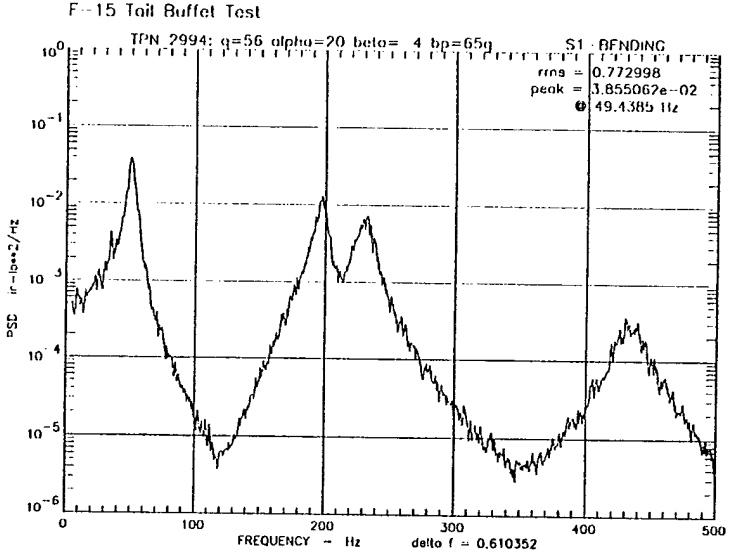
F-15 Tail Buffet Test

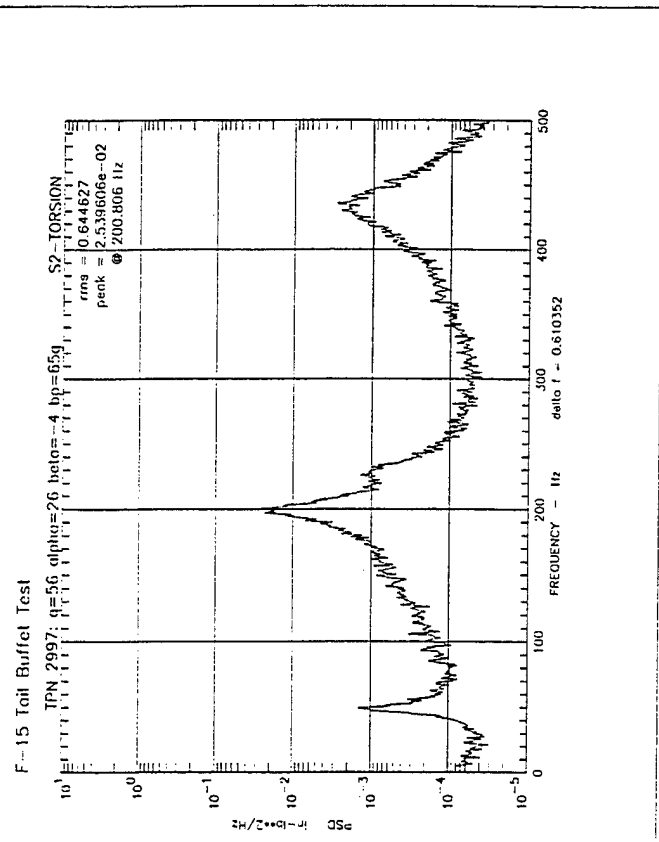


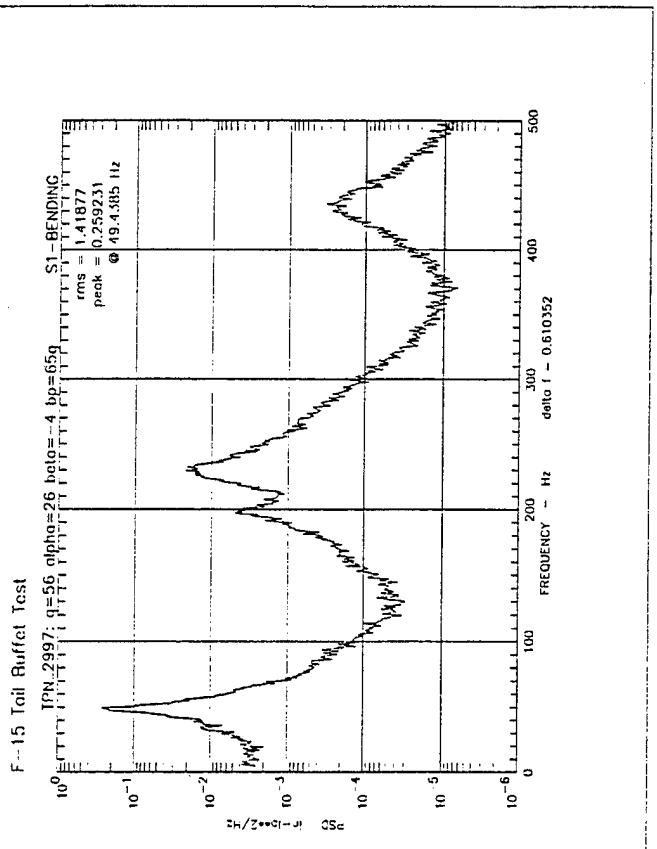
F-15 Tail Buffet Test

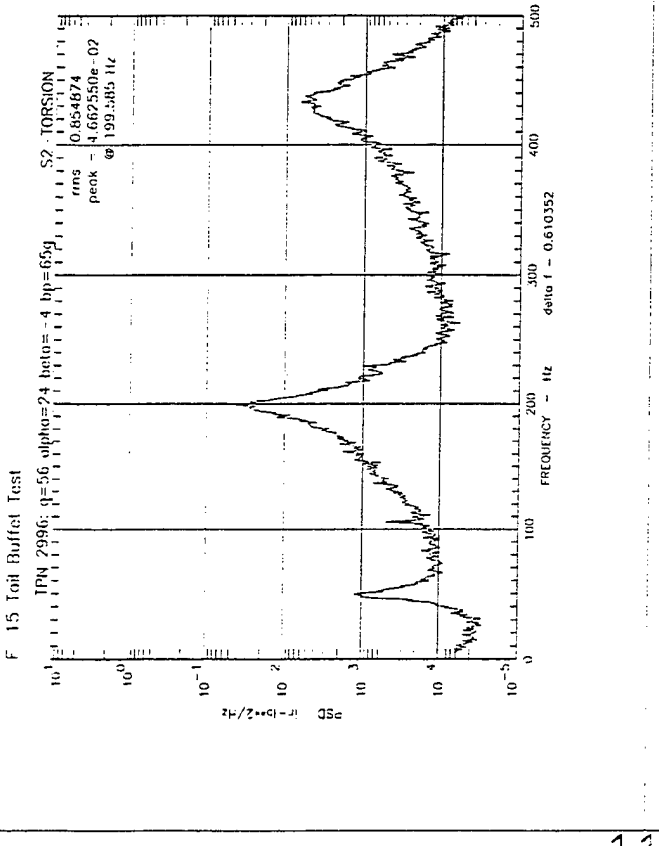


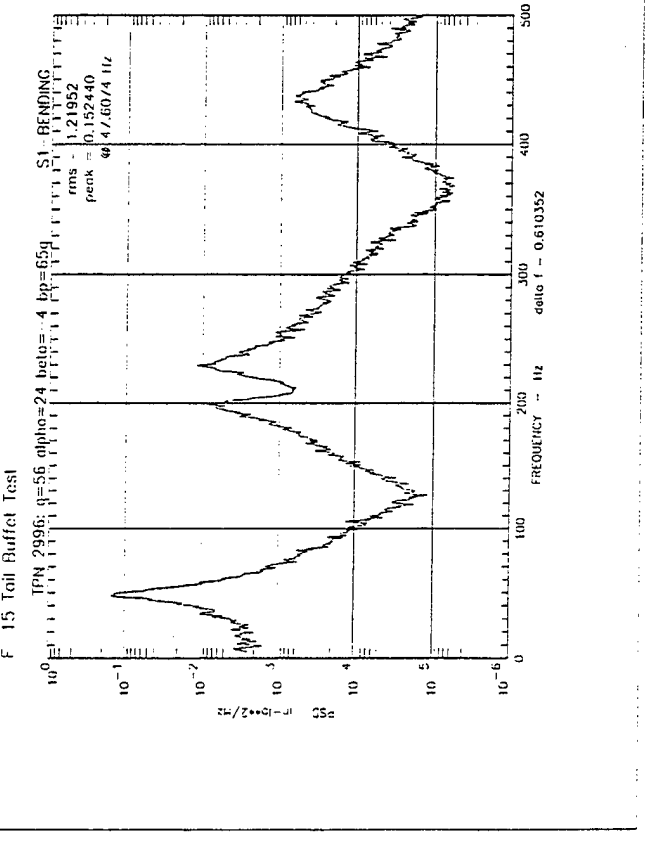
F-15 Tail Buffet Test

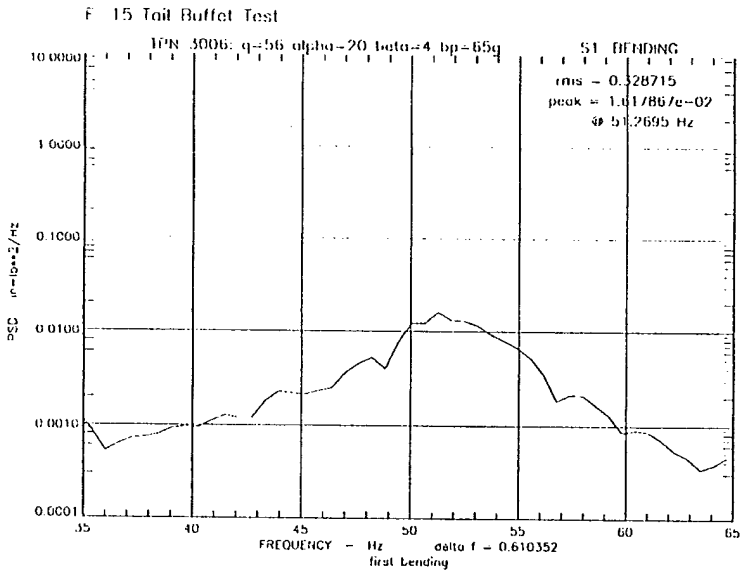


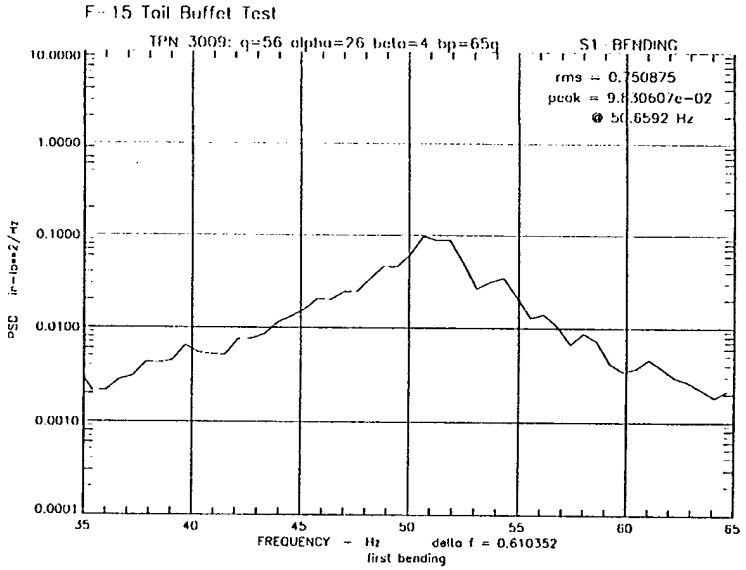

F-15 Tail Buffet Test
TPN 2997; q=56 alpha=26 beta=-4 bp=65g
S2-TORSION
rms = 0.644627
peak = 2.539606e-02
@ 200.806 Hz
PSD (ft-lbs**2/Hz)
FREQUENCY - Hz
delta f - 0.610352

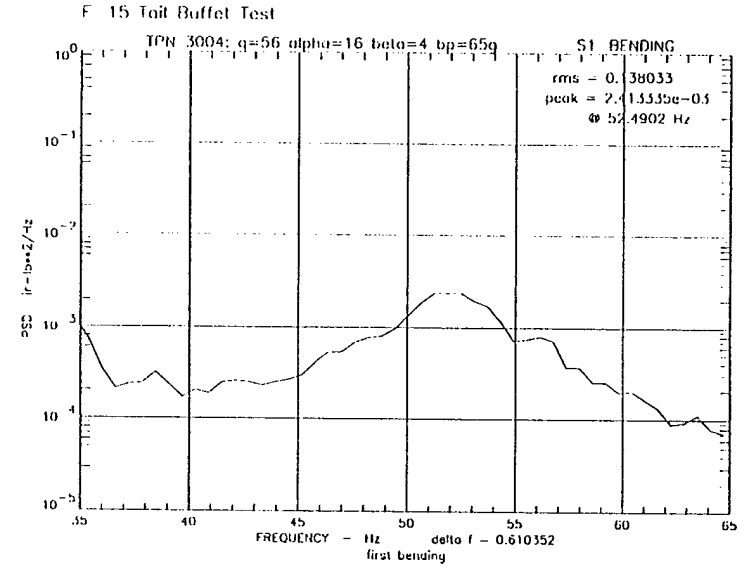

F-15 Tail Buffet Test
TPN 2997; q=56 alpha=26 beta=-4 bp=65g
S1-BENDING
rms = 1.41877
peak = 0.259231
@ 49.4585 Hz
PSD (ft-lbs**2/Hz)
FREQUENCY - Hz
delta f - 0.610352

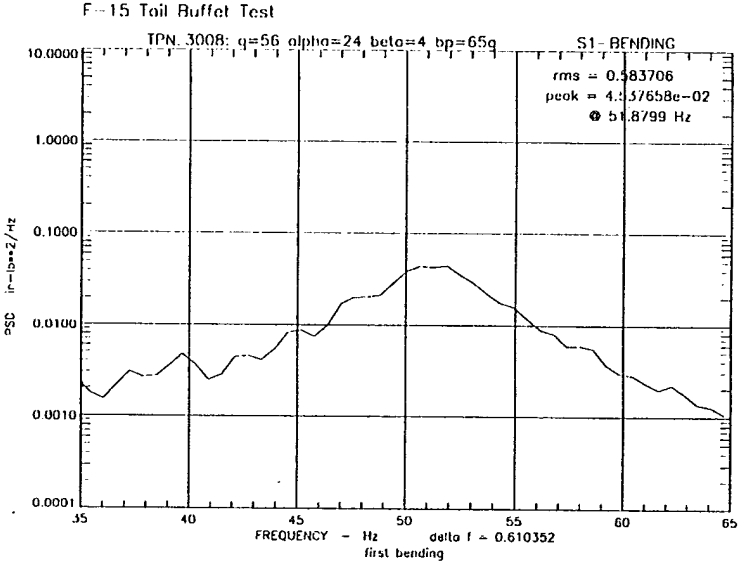

F 15 Tail Buffet Test
TPN 2996; q=56 alpha=24 beta=-4 bp=65g
S2-TORSION
rms = 0.854874
peak = 4.662550e-02
@ 199.585 Hz
PSD (ft-lbs**2/Hz)
FREQUENCY - Hz
delta f - 0.610352


F 15 Tail Buffet Test
TPN 2996; q=56 alpha=24 beta=-4 bp=65g
S1-BENDING
rms = 1.21952
peak = 0.152440
@ 47.6074 Hz
PSD (ft-lbs**2/Hz)
FREQUENCY - Hz
delta f - 0.610352


F 15 Tail Buffet Test
TPN 3006: q=56 alpha=20 beta=4 bp=65g
S1 BENDING
rms = 0.328715
peak = 1.617867e-02
@ 51.2695 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
TPN 3009: q=56 alpha=26 beta=4 bp=65g
S1 BENDING
rms = 0.750875
peak = 9.830607e-02
@ 50.6592 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F 15 Tail Buffet Test
TPN 3004: q=56 alpha=16 beta=4 bp=65g
S1 BENDING
rms = 0.138033
peak = 2.413335e-03
@ 52.4902 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
TPN 3008: q=56 alpha=24 beta=4 bp=65g
S1 BENDING
rms = 0.583706
peak = 4.537658e-02
@ 51.8799 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

F-15 Tail Buffet Test

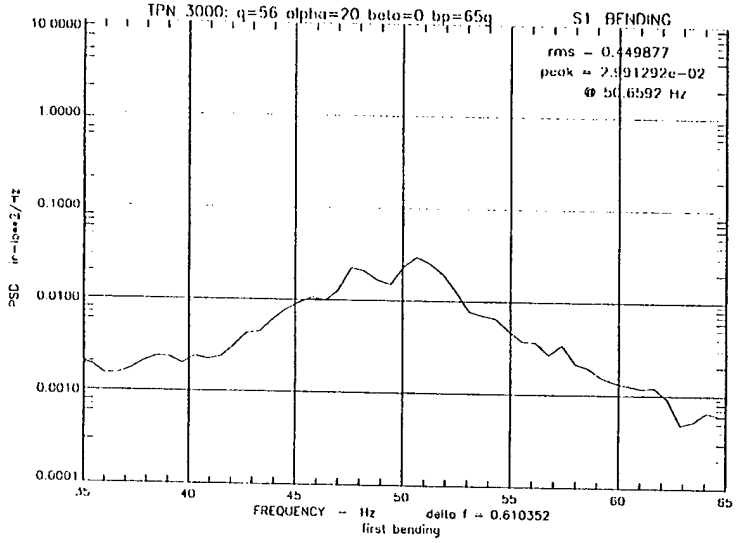
TPN 3000: q=56 alpha=20 beta=0 bp=65g

S1 BENDING

rms = 0.449877

peak = 2.991292e-02

@ 50.6592 Hz



F-15 Tail Buffet Test

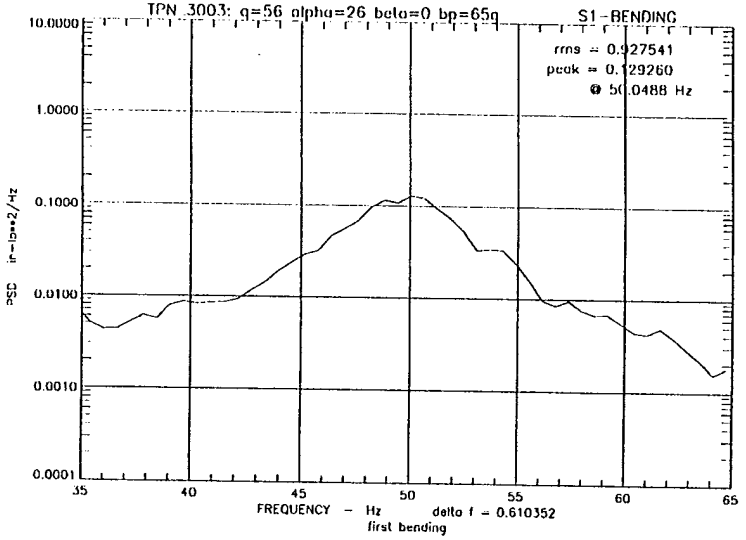
TPN 3003: q=56 alpha=26 beta=0 bp=65g

S1-BENDING

rms = 0.927541

peak = 0.129260

@ 50.0488 Hz



F-15 Tail Buffet Test

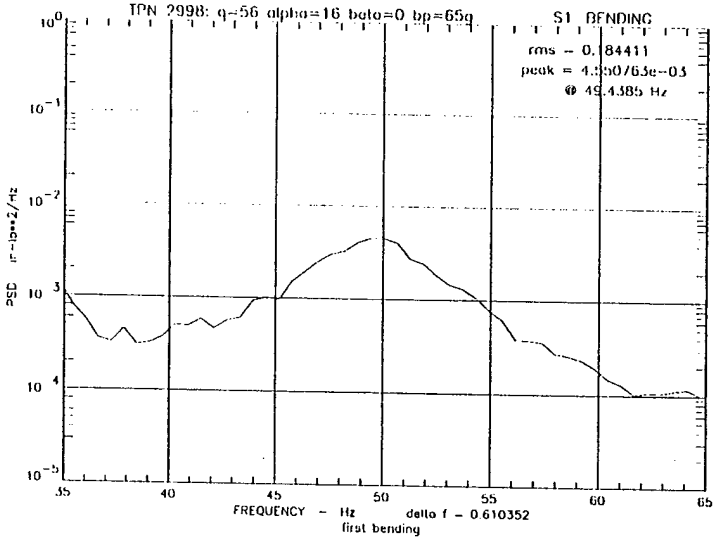
TPN 2998: q=56 alpha=16 beta=0 bp=65g

S1 BENDING

rms = 0.184411

peak = 4.350763e-03

@ 49.4385 Hz



F-15 Tail Buffet Test

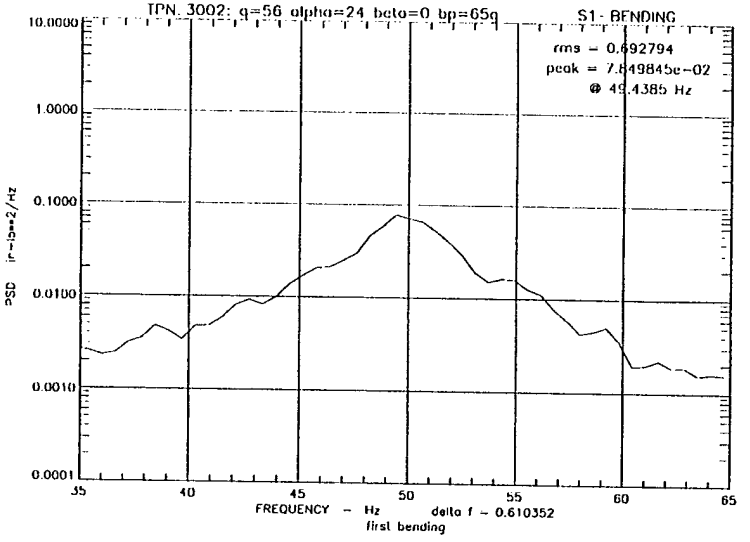
TPN 3002: q=56 alpha=24 beta=0 bp=65g

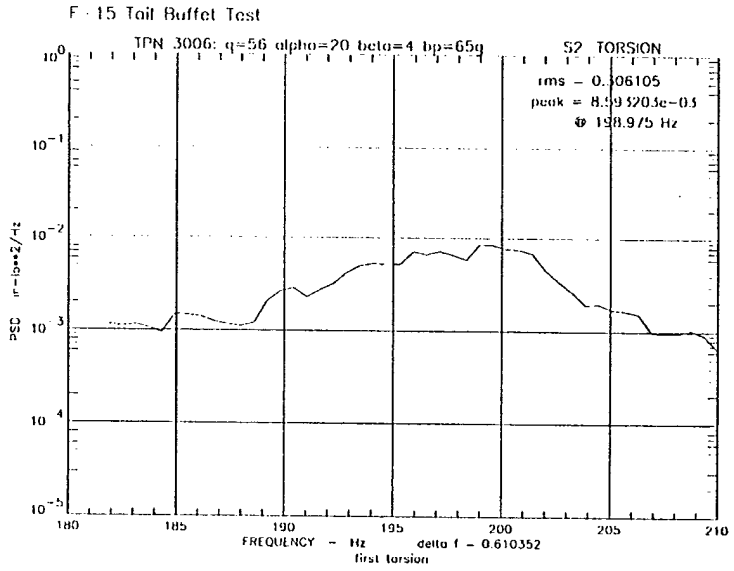
S1-BENDING

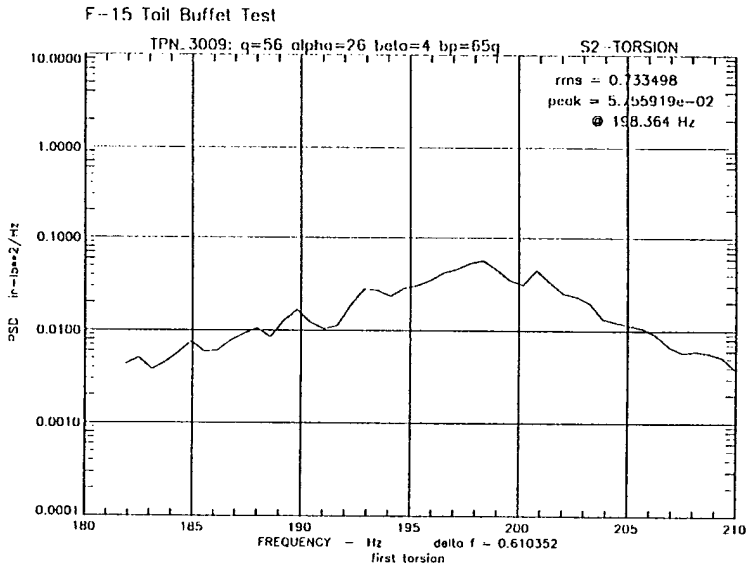
rms = 0.692794

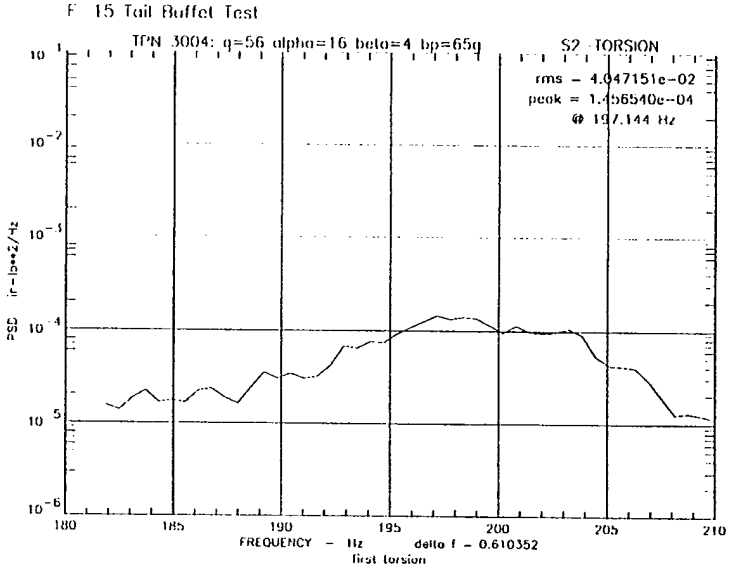
peak = 7.849845e-02

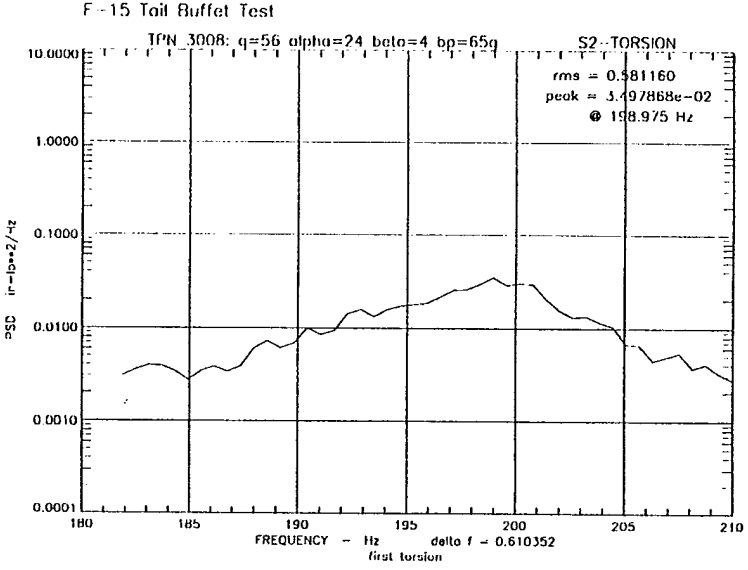
@ 49.4385 Hz




F-15 Tail Buffet Test
TPN 3006: q=56 alpha=20 beta=4 bp=65g
S2 TORSION
rms = 0.306105
peak = 8.593203e-03
@ 198.975 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion


F-15 Tail Buffet Test
TPN 3009: q=56 alpha=26 beta=4 bp=65g
S2 TORSION
rms = 0.733498
peak = 5.255919e-02
@ 198.364 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion


F-15 Tail Buffet Test
TPN 3004: q=56 alpha=16 beta=4 bp=65g
S2 TORSION
rms = 4.047151e-02
peak = 1.456540e-04
@ 197.144 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion


F-15 Tail Buffet Test
TPN 3008: q=56 alpha=24 beta=4 bp=65g
S2 TORSION
rms = 0.581160
peak = 3.497868e-02
@ 198.975 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

F-15 Tail Buffet Test

TPN 3000: q=56 alpha=20 beta=0 bp=65q S2 TORSION

rms = 0.528901

peak = 2.997665e-02

@ 197.754 Hz

PSD in-lb**2/Hz

FREQUENCY - Hz delta f = 0.610352

first torsion

F-15 Tail Buffet Test

TPN 3003: q=56 alpha=26 beta=0 bp=65q S2-TORSION

rms = 0.730990

peak = 6.145137e-02

@ 197.754 Hz

PSD in-lb**2/Hz

FREQUENCY - Hz delta f = 0.610352

first torsion

F-15 Tail Buffet Test

TPN 2998: q=56 alpha=16 beta=0 bp=65q S2 TORSION

rms = 7.820289e-02

peak = 6.157166e-04

@ 198.364 Hz

PSD in-lb**2/Hz

FREQUENCY - Hz delta f = 0.610352

first torsion

F-15 Tail Buffet Test

TPN 3002: q=56 alpha=24 beta=0 bp=65q S2-TORSION

rms = 0.822415

peak = 7.054257e-02

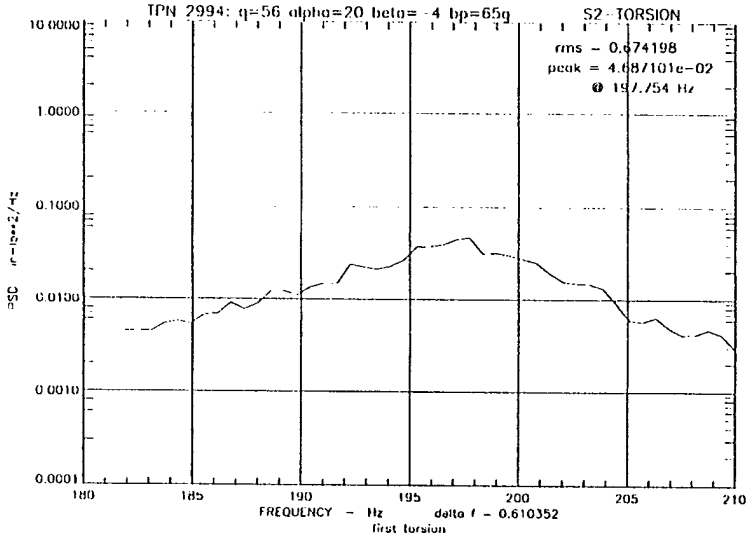
@ 197.754 Hz

PSD in-lb**2/Hz

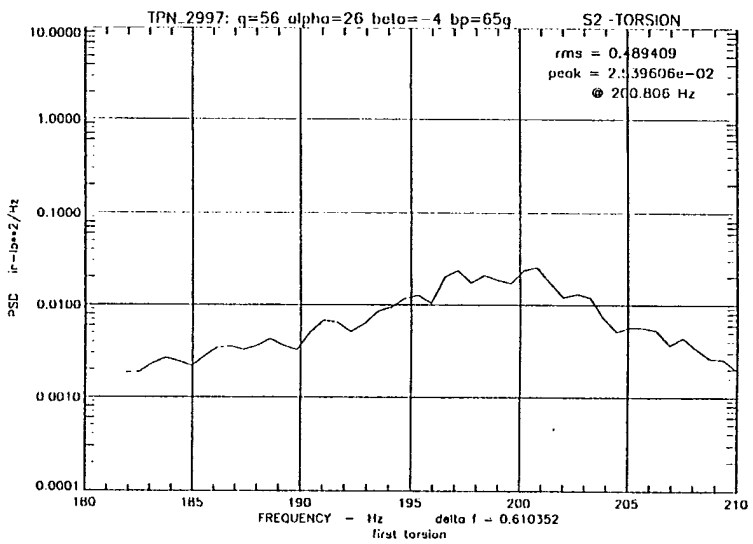
FREQUENCY - Hz delta f = 0.610352

first torsion

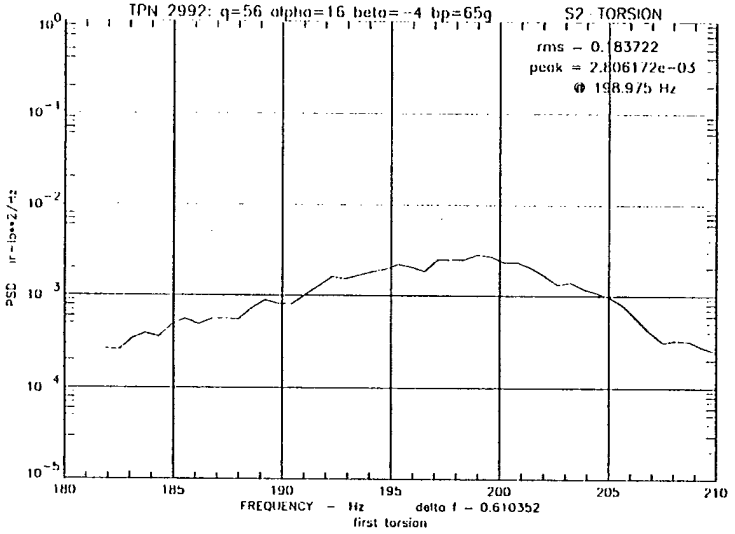
F 15 Tail Buffet Test



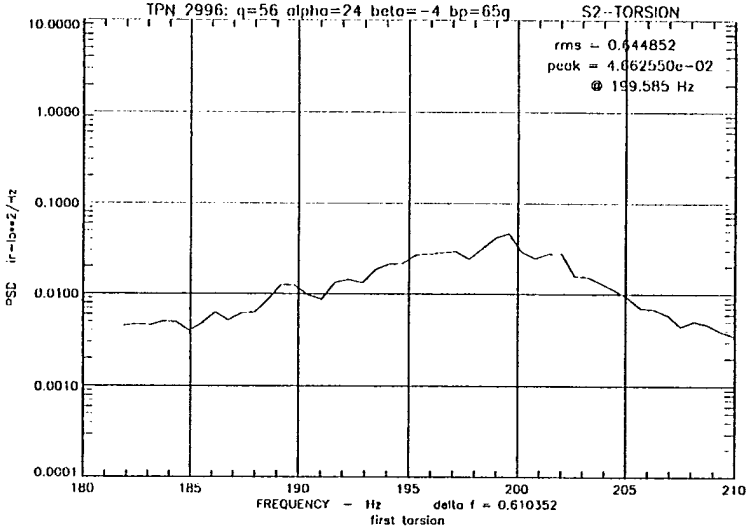
F-15 Tail Buffet Test

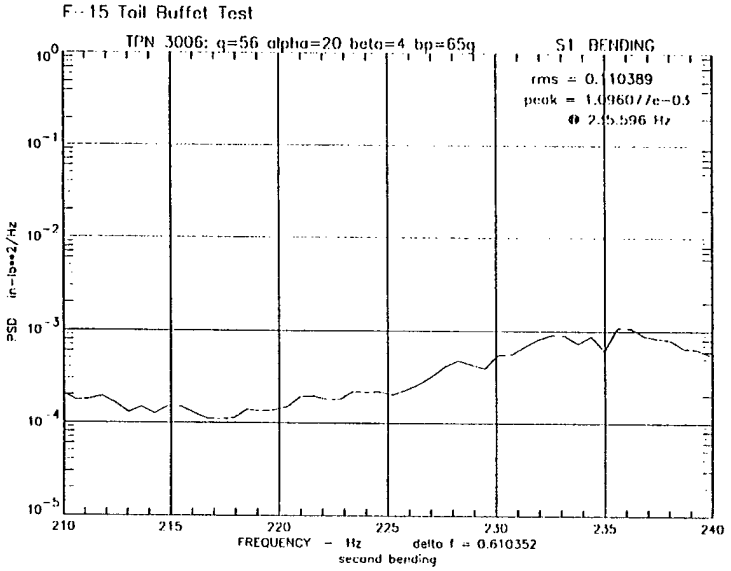


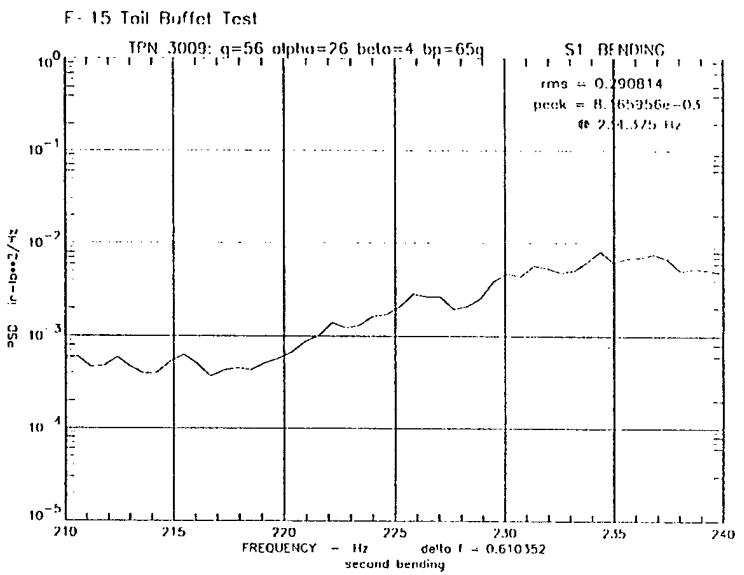
F 15 Tail Buffet Test

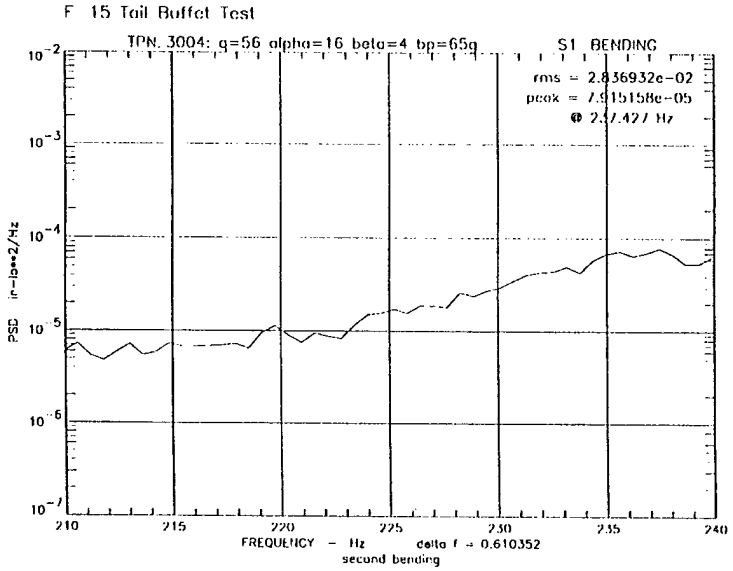


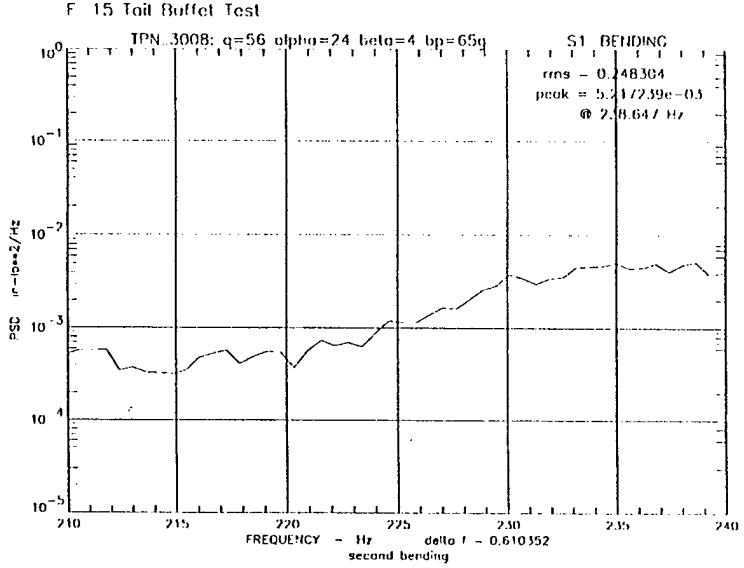
F-15 Tail Buffet Test

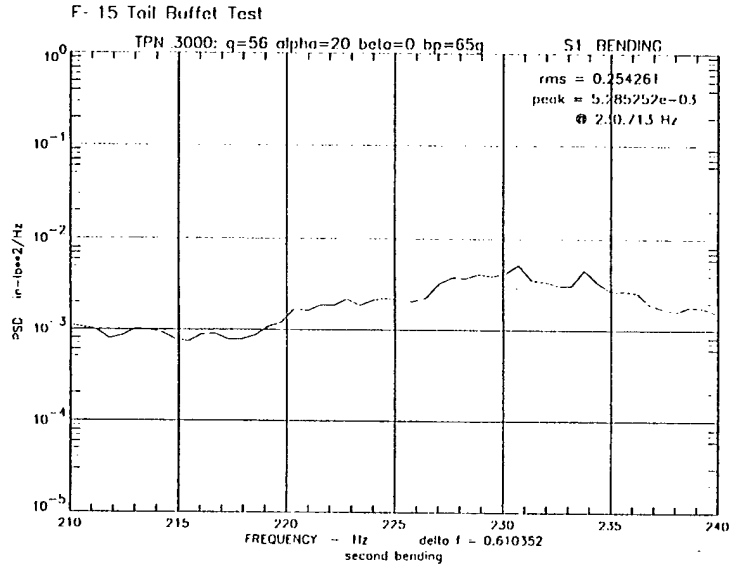


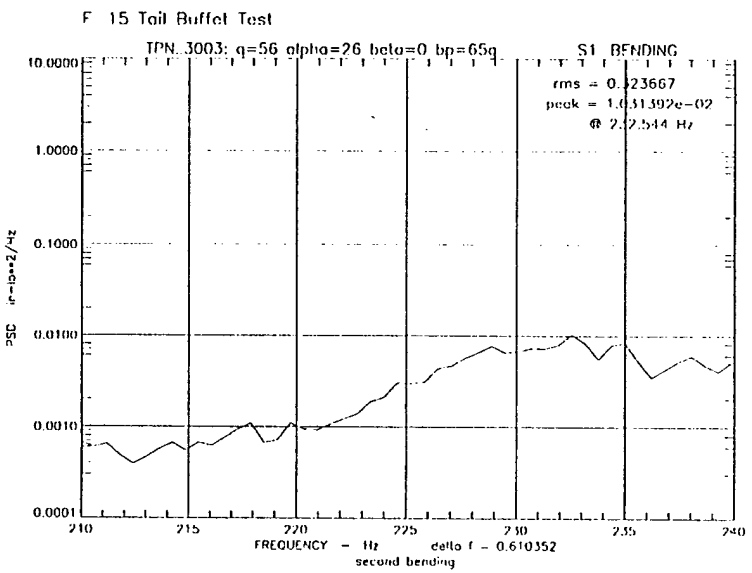

F-15 Tail Buffet Test
TPN 3006: q=56 alpha=20 beta=4 bp=65q
S1 BENDING
rms = 0.110389
peak = 1.09607e-03
@ 225.596 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

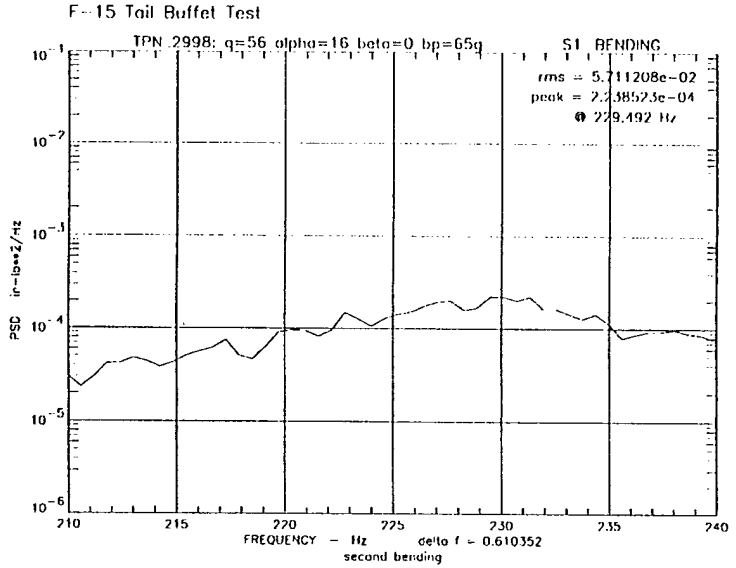

F-15 Tail Buffet Test
TPN 3009: q=56 alpha=26 beta=4 bp=65q
S1 BENDING
rms = 0.290814
peak = 8.165956e-03
@ 234.375 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

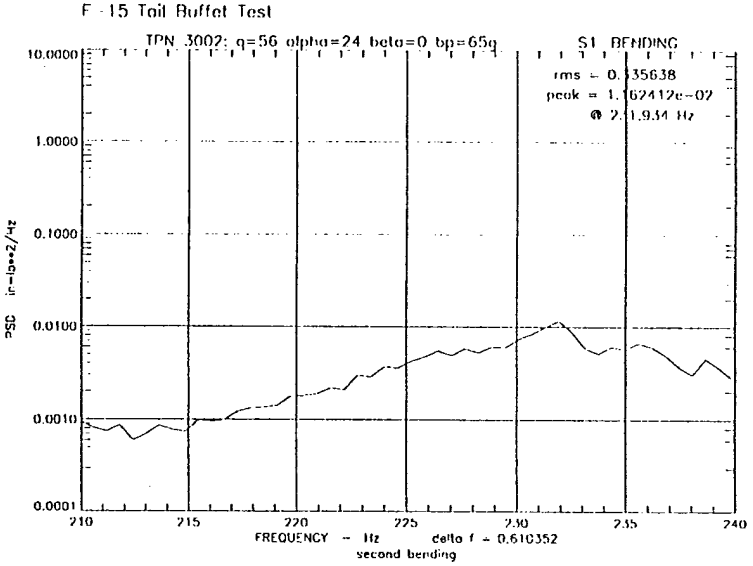

F-15 Tail Buffet Test
TPN 3004: q=56 alpha=16 beta=4 bp=65q
S1 BENDING
rms = 2.836932e-02
peak = 7.915158e-05
@ 237.427 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

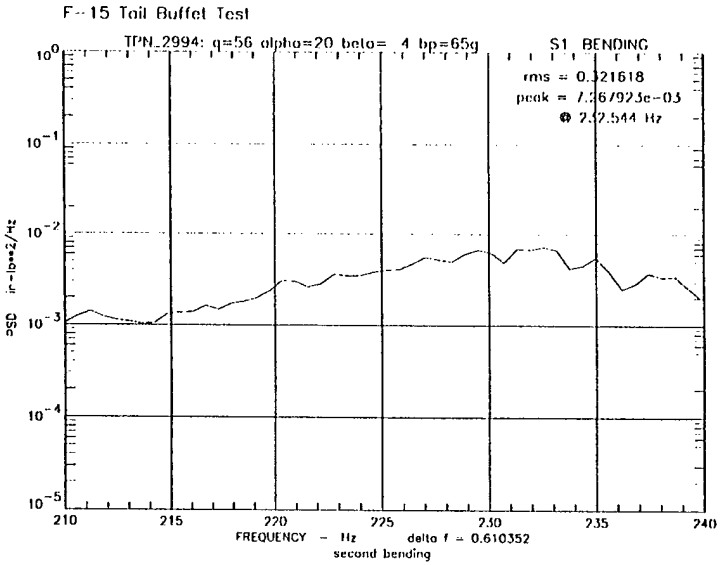

F-15 Tail Buffet Test
TPN 3008: q=56 alpha=24 beta=4 bp=65q
S1 BENDING
rms = 0.248304
peak = 5.217239e-03
@ 238.647 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

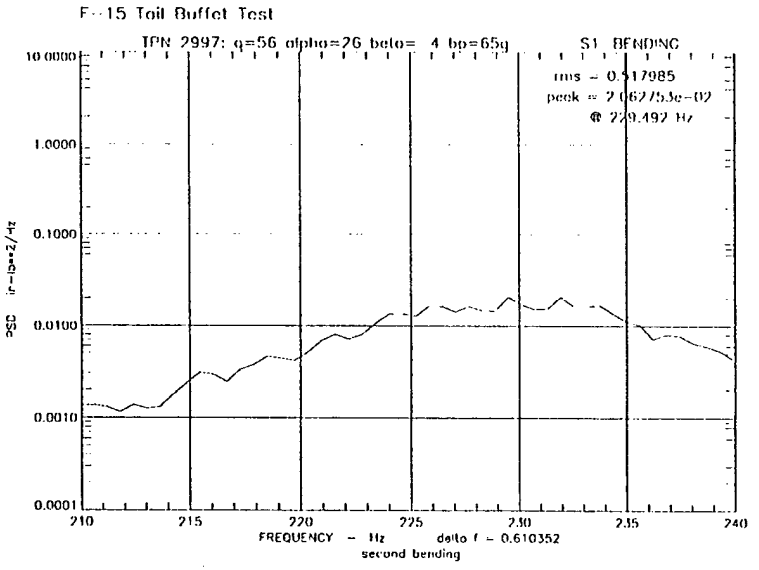

F- 15 Tail Buffet Test
TPN 3000: q=56 alpha=20 beta=0 bp=65q
S1 BENDING
rms = 0.254261
peak = 5.385252e-03
@ 230.713 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

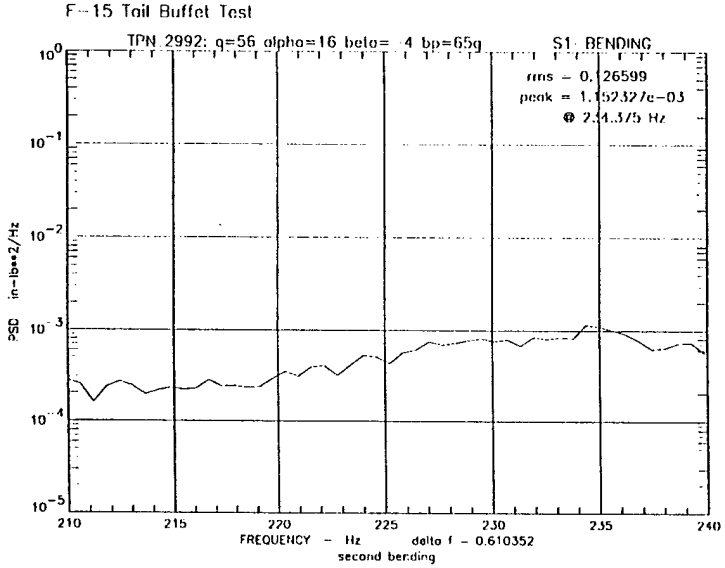

F 15 Tail Buffet Test
TPN 3003: q=56 alpha=26 beta=0 bp=65q
S1 BENDING
rms = 0.323667
peak = 1.031392e-02
@ 232.544 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

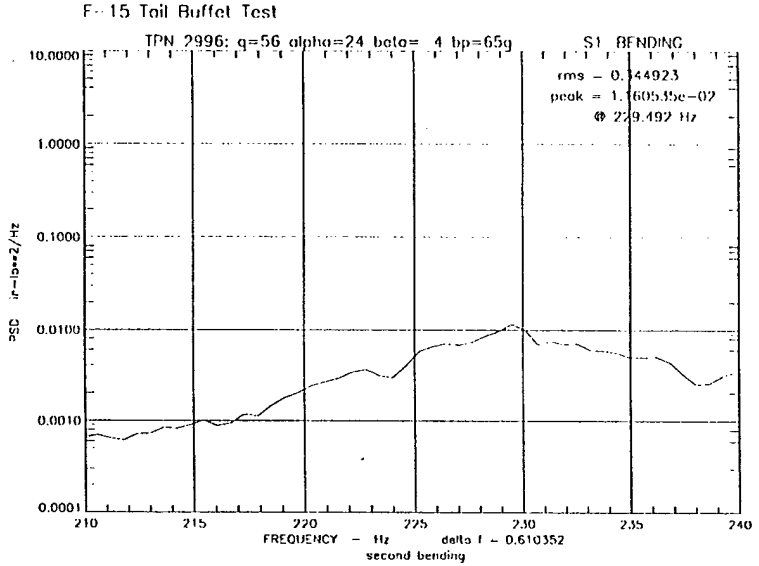

F-15 Tail Buffet Test
TPN 2998: q=56 alpha=16 beta=0 bp=65q
S1 BENDING
rms = 5.711208e-02
peak = 2.238523e-04
@ 229.492 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F -15 Tail Buffet Test
TPN 3002: q=56 alpha=24 beta=0 bp=65q
S1 BENDING
rms = 0.335638
peak = 1.162412e-02
@ 231.934 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 Tail Buffet Test
TPN 2994: q=56 alpha=20 beta= 4 bp=65g
S1 BENDING
rms = 0.321618
peak = 7.267925e-03
@ 232.544 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending


F-15 Tail Buffet Test
TPN 2997: q=56 alpha=26 beta= 4 bp=65g
S1 BENDING
rms = 0.517985
peak = 2.062753e-02
@ 229.492 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending


F-15 Tail Buffet Test
TPN 2992: q=56 alpha=16 beta= 4 bp=65g
S1 BENDING
rms = 0.126599
peak = 1.152327e-03
@ 234.375 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

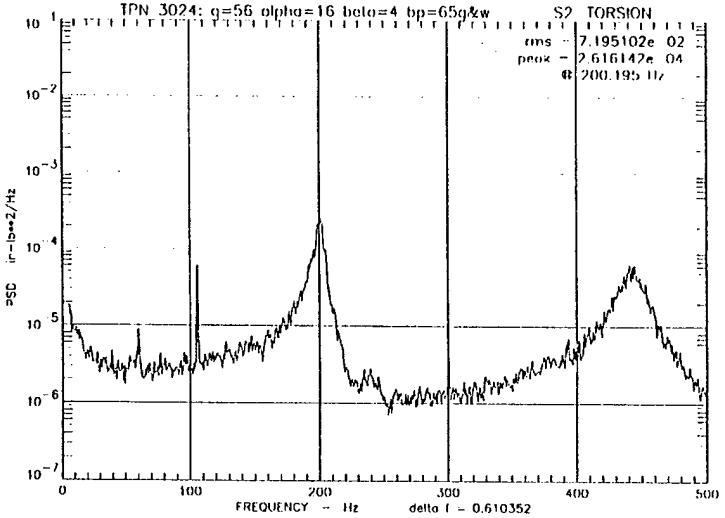

F-15 Tail Buffet Test
TPN 2996: q=56 alpha=24 beta= 4 bp=65g
S1 BENDING
rms = 0.344923
peak = 1.760535e-02
@ 229.492 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION

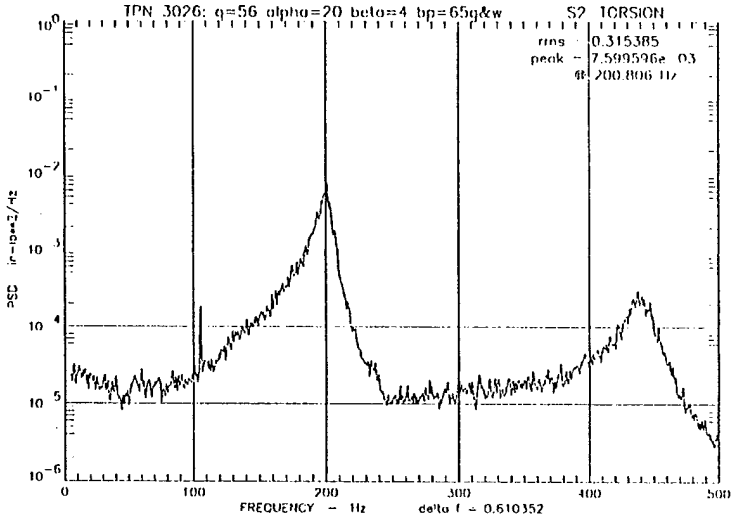
PSD GRAPHS
Q= 56 PSF

2.1.1.3 GBP = 65 psi,WBP = 65 psi BETA= 0, + 4, - 4, ALPHA= 0.....32 Deg

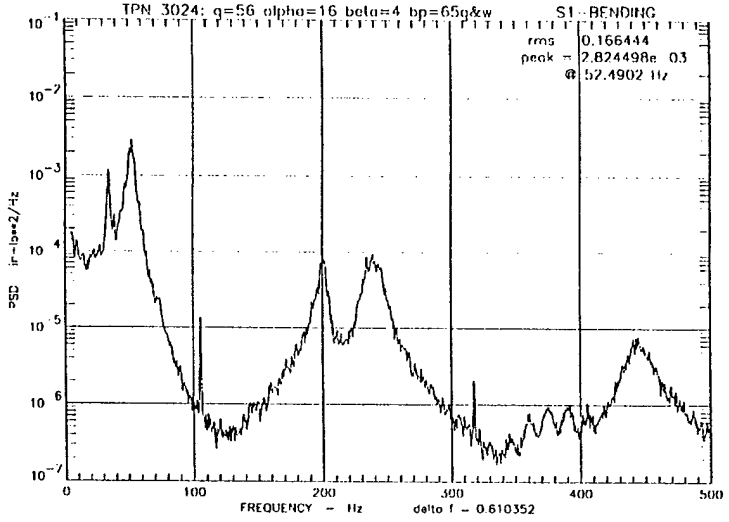
F-15 Tail Buffet Test



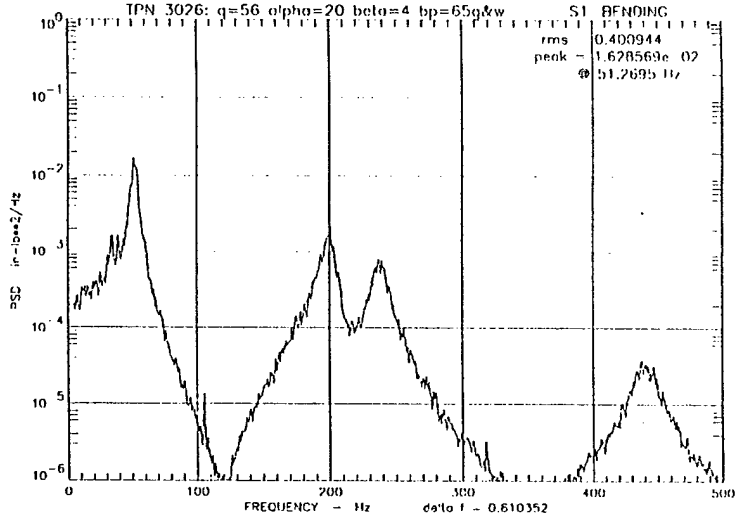
F-15 Tail Buffet Test



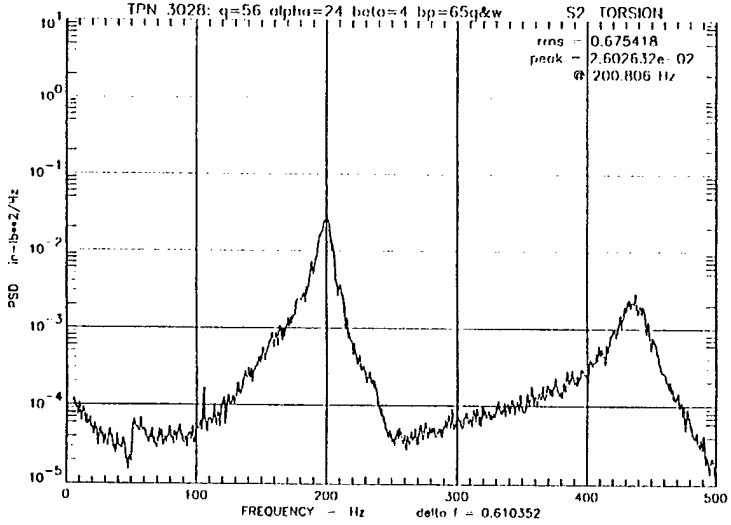
F-15 Tail Buffet Test



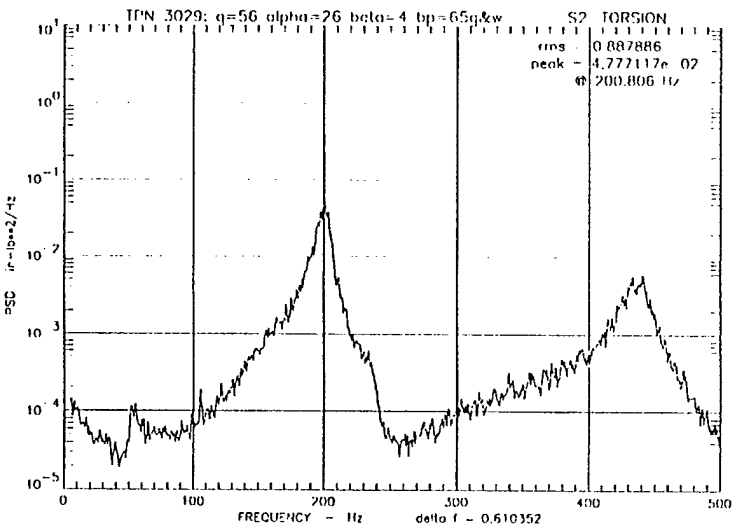
F-15 Tail Buffet Test



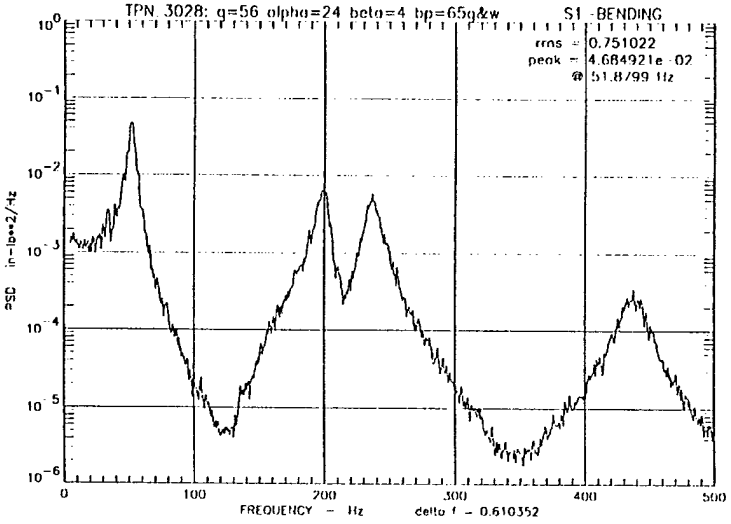
F-15 Tail Buffet Test



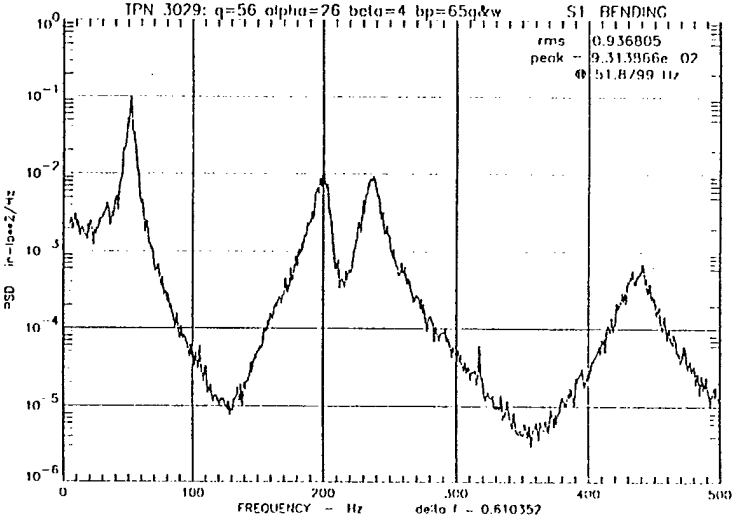
F-15 Tail Buffet Test



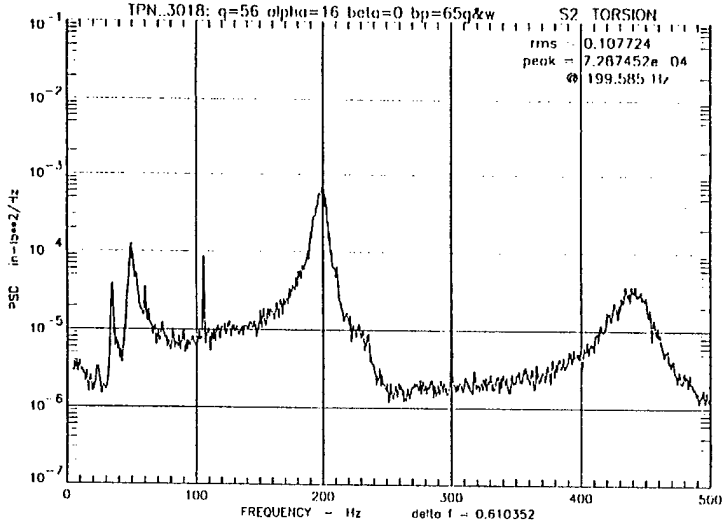
F-15 Tail Buffet Test



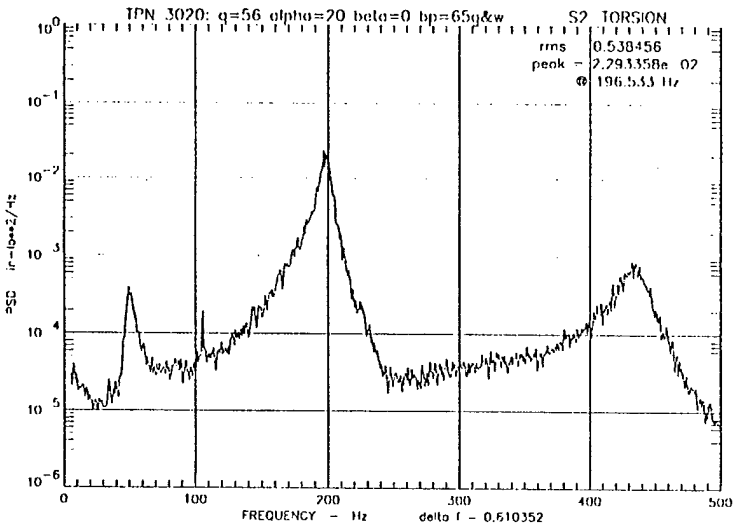
F-15 Tail Buffet Test



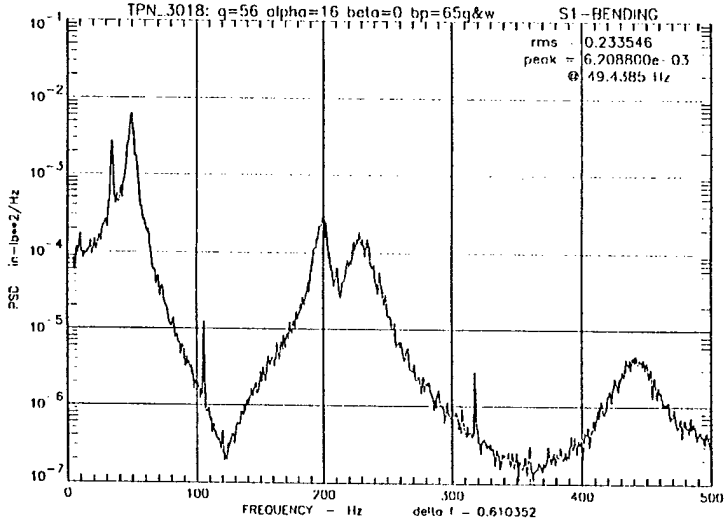
F-15 Tail Buffet Test



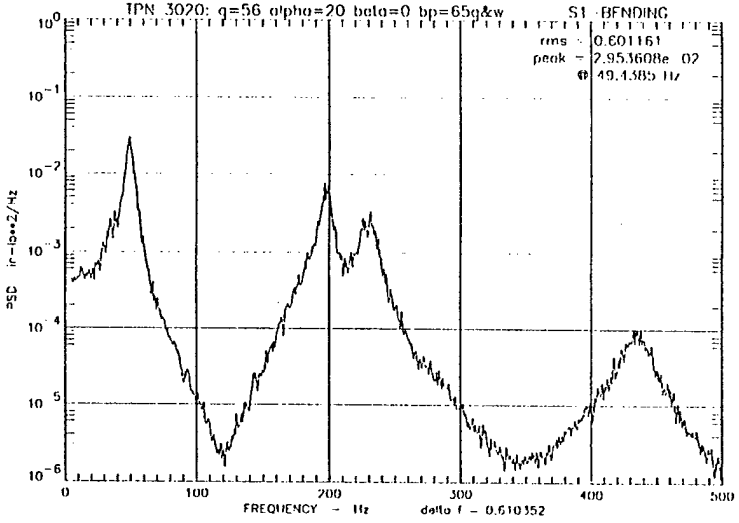
F-15 Tail Buffet Test

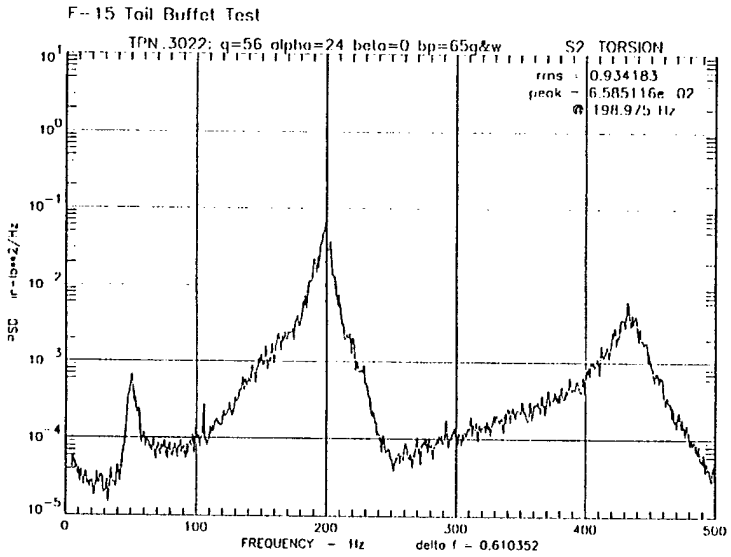


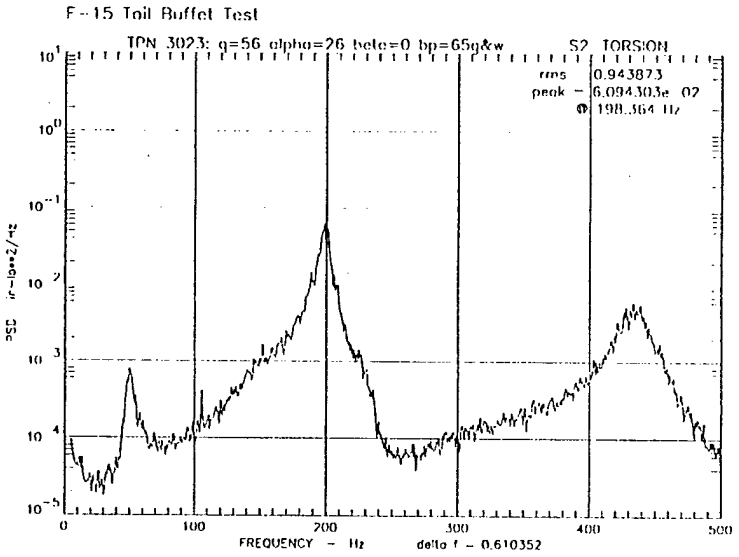
F-15 Tail Buffet Test

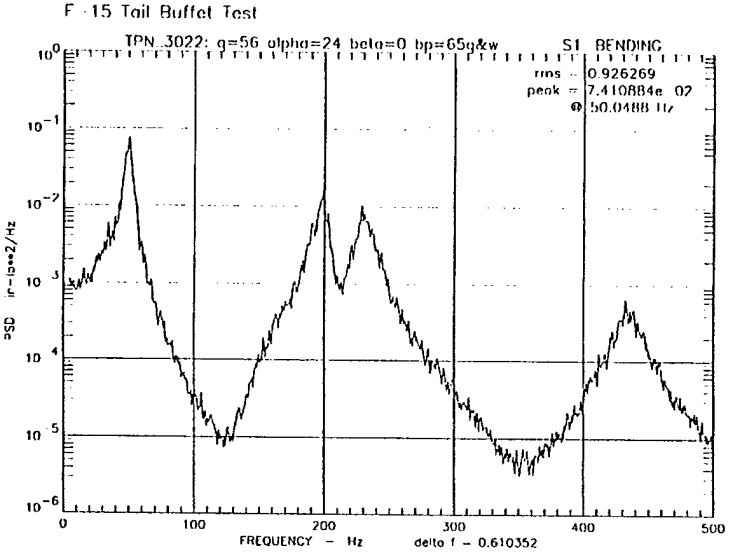


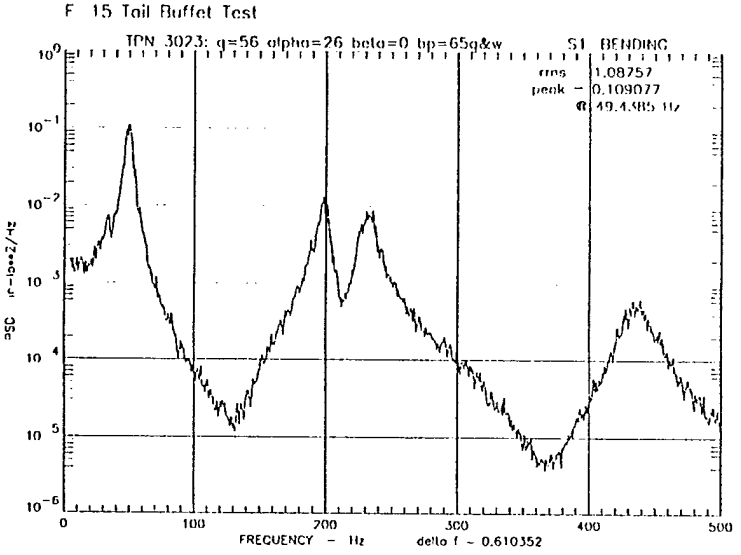
F-15 Tail Buffet Test



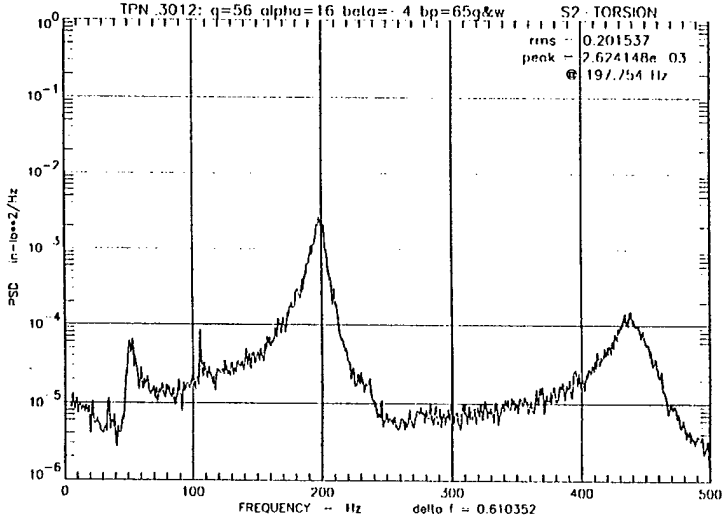

F-15 Tail Buffet Test
TPN 3022: q=56 alpha=24 beta=0 bp=65g&w
S2 TORSION
rms = 0.934183
peak = 6.585116e 02
@ 198.975 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN 3023: q=56 alpha=26 beta=0 bp=65g&w
S2 TORSION
rms = 0.943873
peak = 6.094303e 02
@ 198.364 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

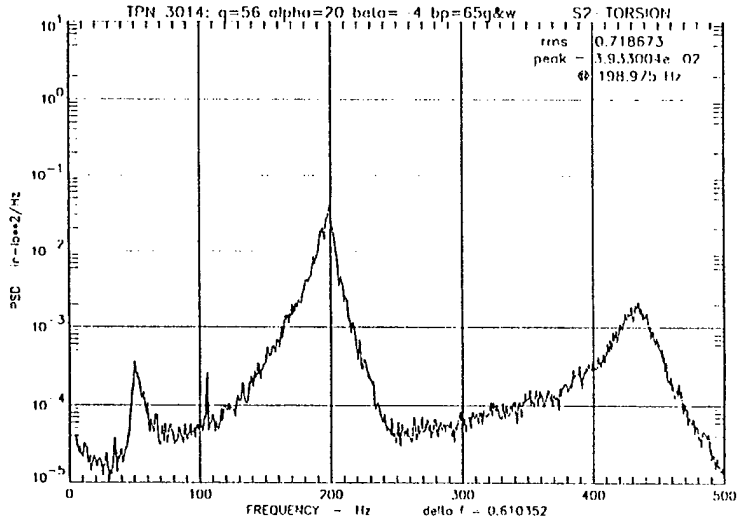

F-15 Tail Buffet Test
TPN 3022: q=56 alpha=24 beta=0 bp=65g&w
S1 BENDING
rms = 0.926269
peak = 7.410884e 02
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN 3023: q=56 alpha=26 beta=0 bp=65g&w
S1 BENDING
rms = 1.08757
peak = 0.109077
@ 49.4385 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

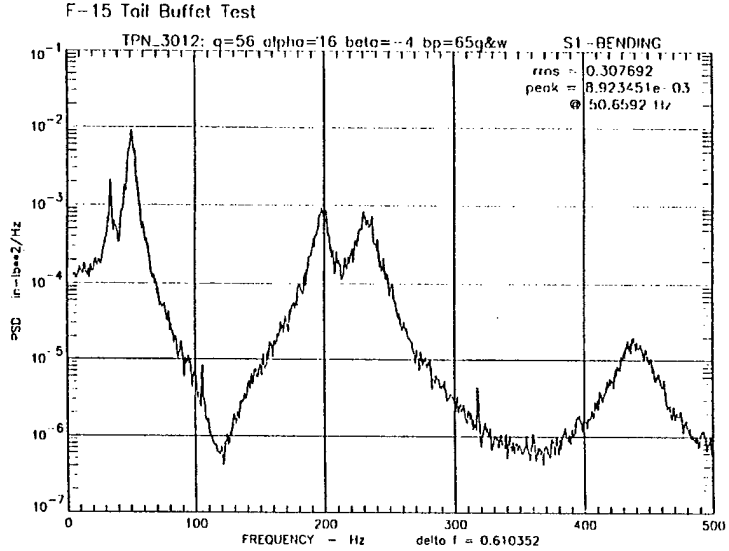
F-15 Tail Buffet Test



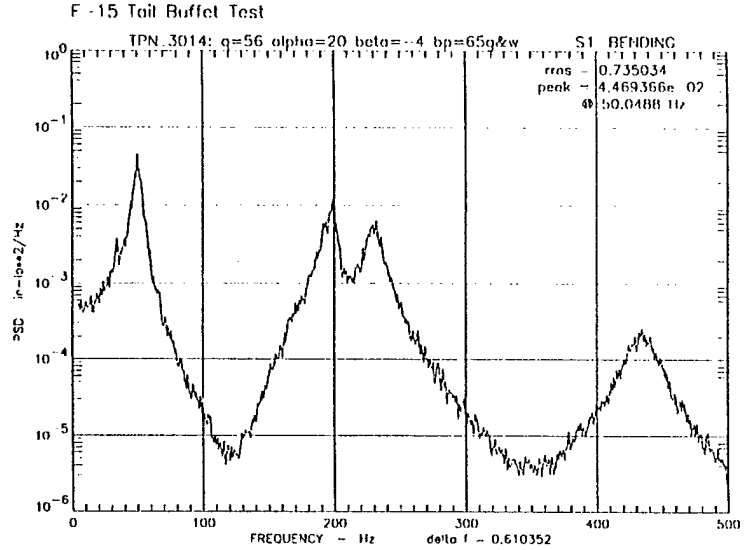
F-15 Tail Buffet Test

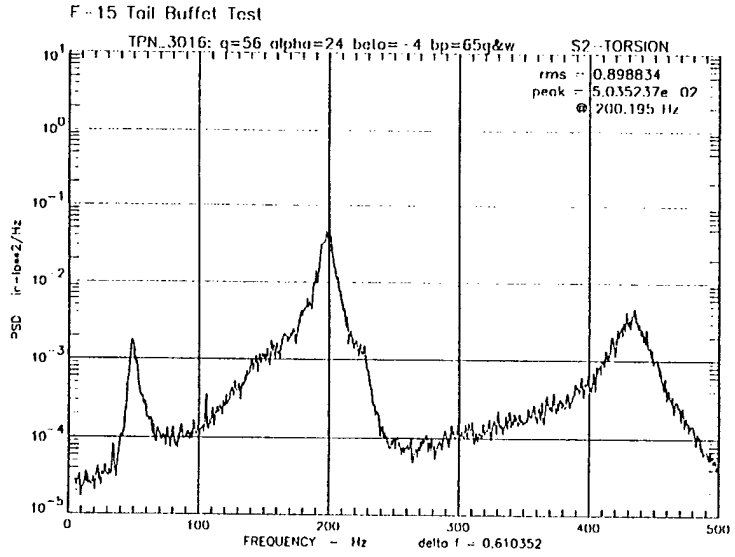


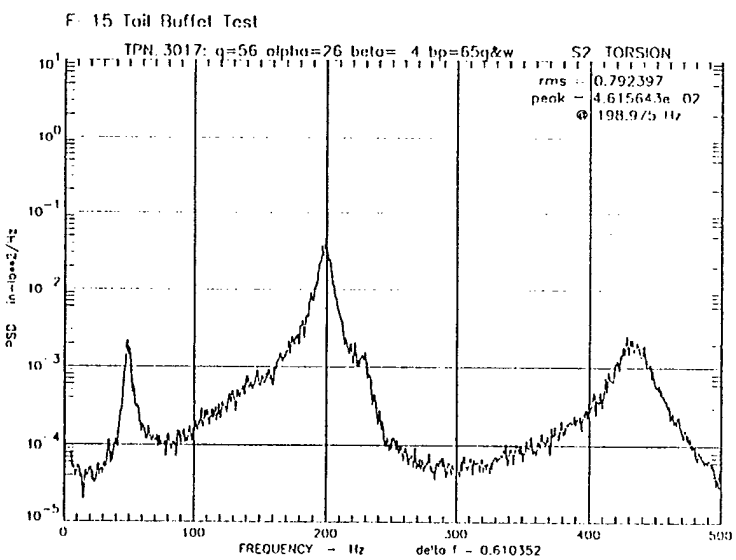
F-15 Tail Buffet Test

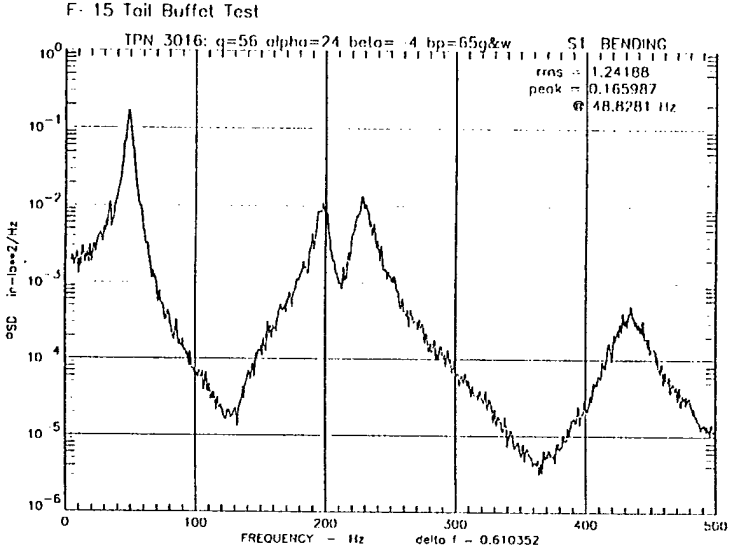


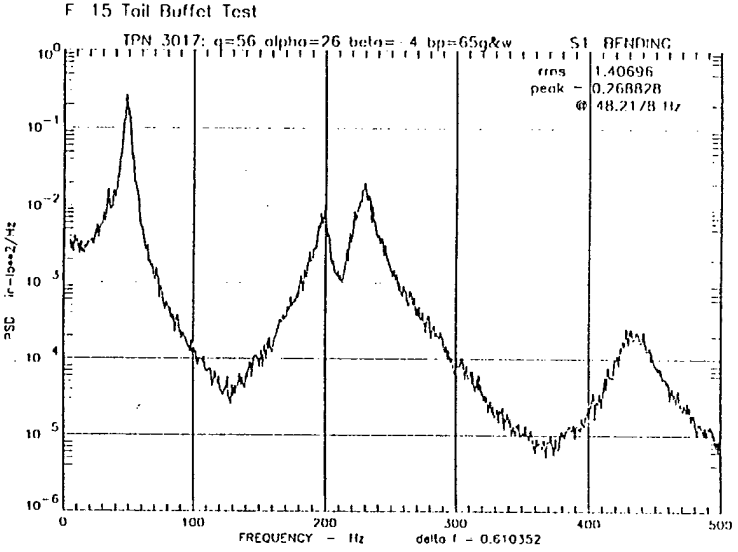
F-15 Tail Buffet Test

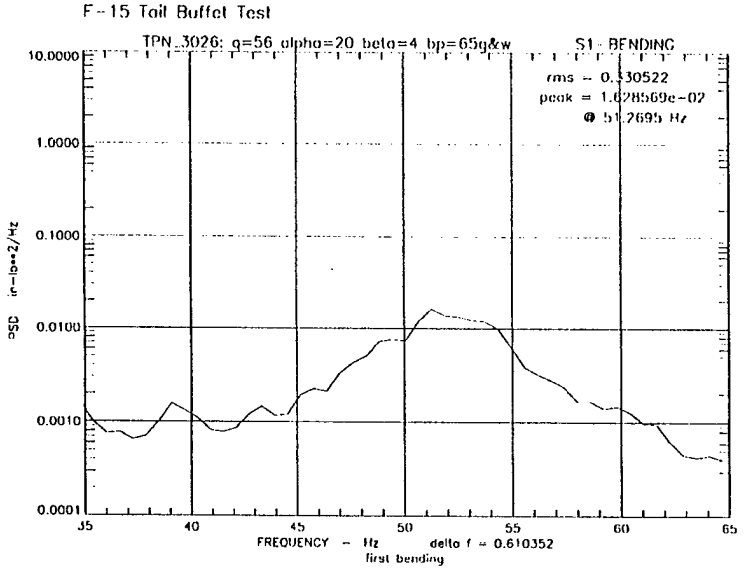


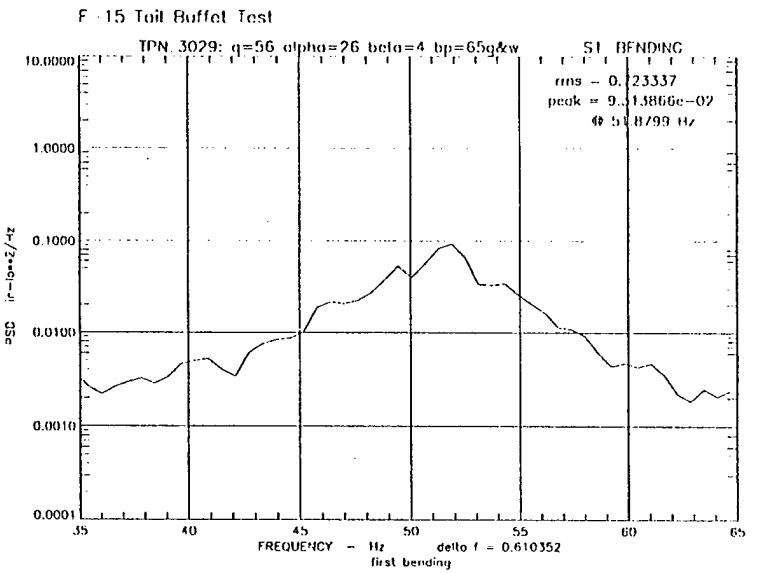

F-15 Tail Buffet Test
TPN_3016: q=56 alpha=24 beta=-4 bp=65g&w
S2 TORSION
rms = 0.898834
peak = 5.035237e 02
@ 200.195 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

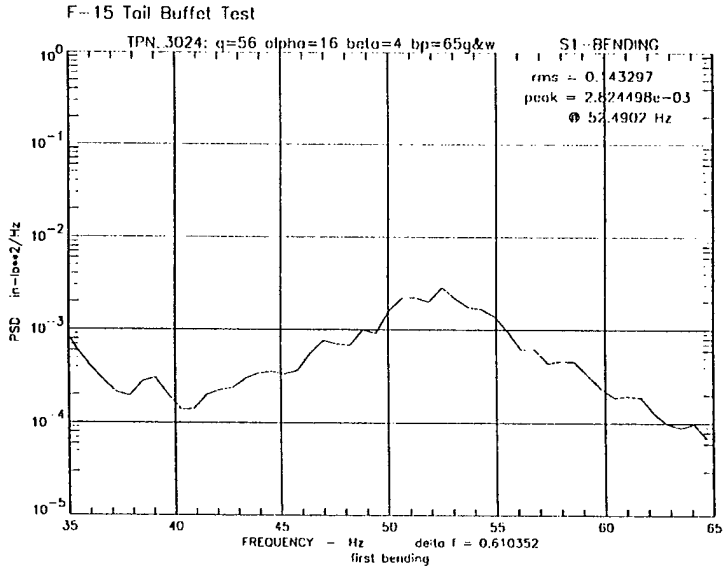

F-15 Tail Buffet Test
TPN_3017: q=56 alpha=26 beta=-4 bp=65g&w
S2 TORSION
rms = 0.792397
peak = 4.615643e 02
@ 198.975 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

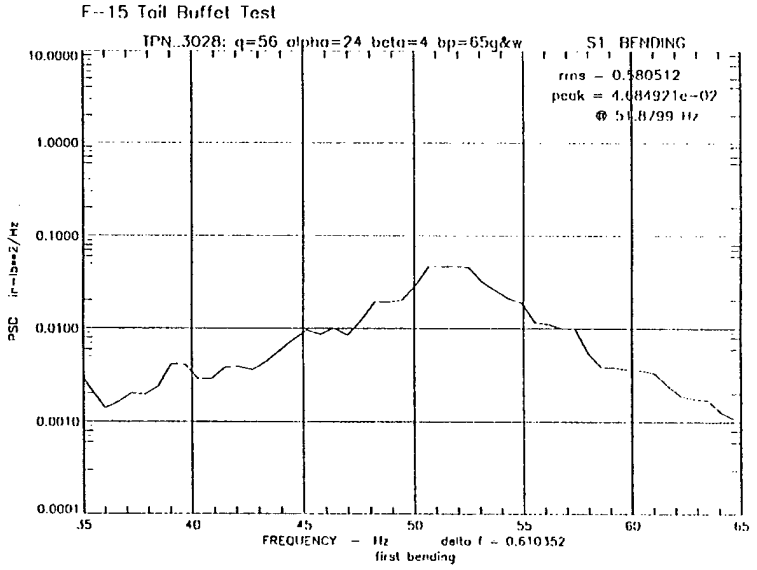

F-15 Tail Buffet Test
TPN_3016: q=56 alpha=24 beta=-4 bp=65g&w
S1 BENDING
rms = 1.24188
peak = 0.165987
@ 48.8281 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

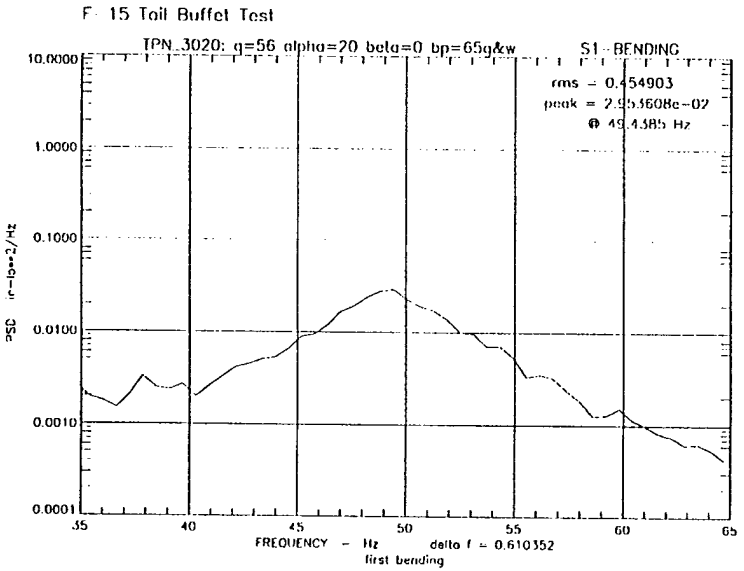

F-15 Tail Buffet Test
TPN_3017: q=56 alpha=26 beta=-4 bp=65g&w
S1 BENDING
rms = 1.40696
peak = 0.268828
@ 48.2178 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

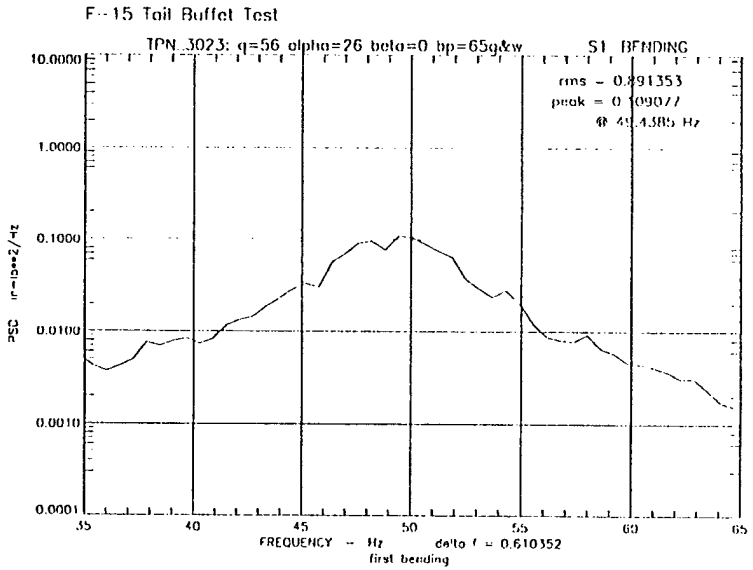

F-15 Tail Buffet Test
TPN 3026: q=56 alpha=20 beta=4 bp=65g&w
S1 BENDING
rms = 0.330522
peak = 1.628569e-02
@ 51.2695 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

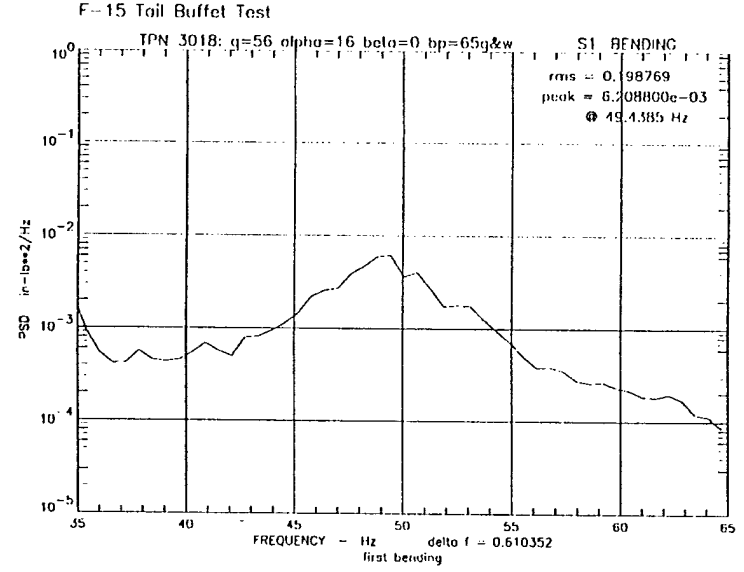

F-15 Tail Buffet Test
TPN 3029: q=56 alpha=26 beta=4 bp=65g&w
S1 BENDING
rms = 0.723337
peak = 9.138866e-02
@ 51.8799 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

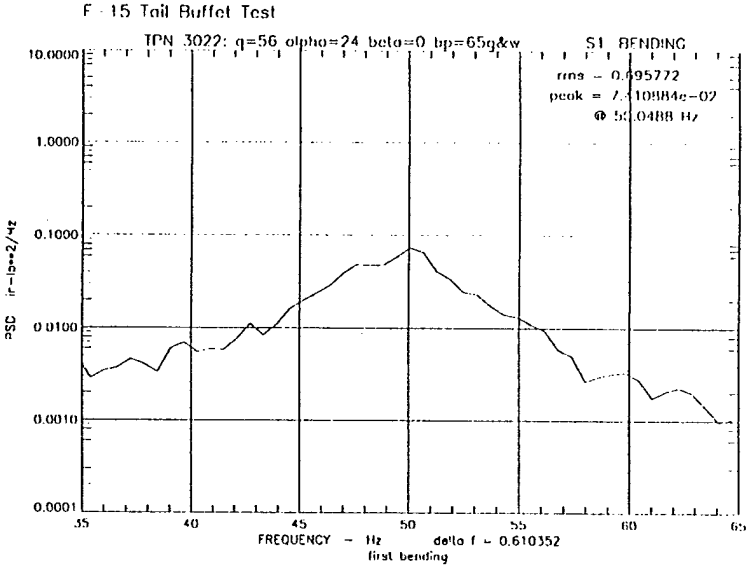

F-15 Tail Buffet Test
TPN 3024: q=56 alpha=16 beta=4 bp=65g&w
S1 BENDING
rms = 0.143297
peak = 2.824498e-03
@ 52.4902 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

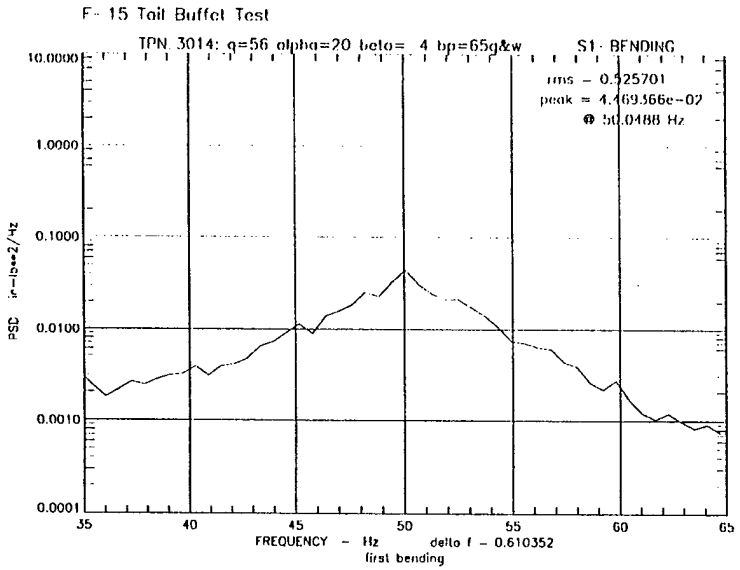

F-15 Tail Buffet Test
TPN 3028: q=56 alpha=24 beta=4 bp=65g&w
S1 BENDING
rms = 0.580512
peak = 4.084921e-02
@ 51.8799 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

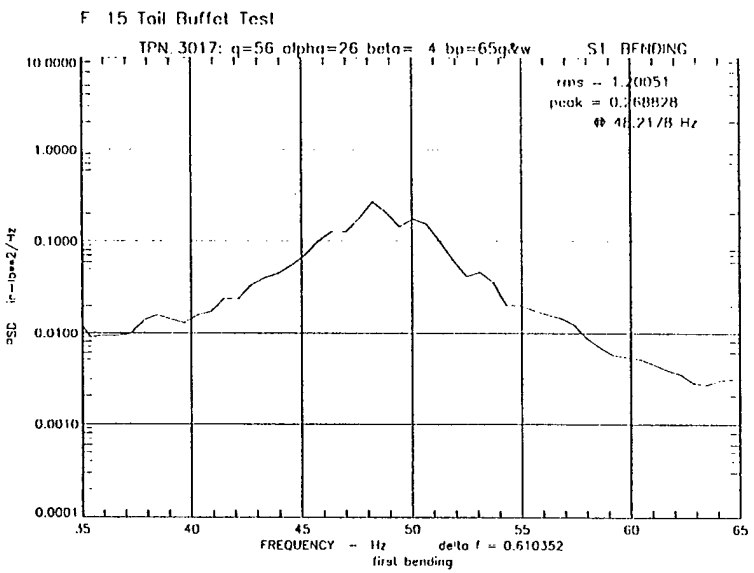

F-15 Tail Buffet Test
TPN 3020: q=56 alpha=20 beta=0 bp=65g&w
S1 BENDING
rms = 0.454903
peak = 2.955608e-02
@ 49.4385 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

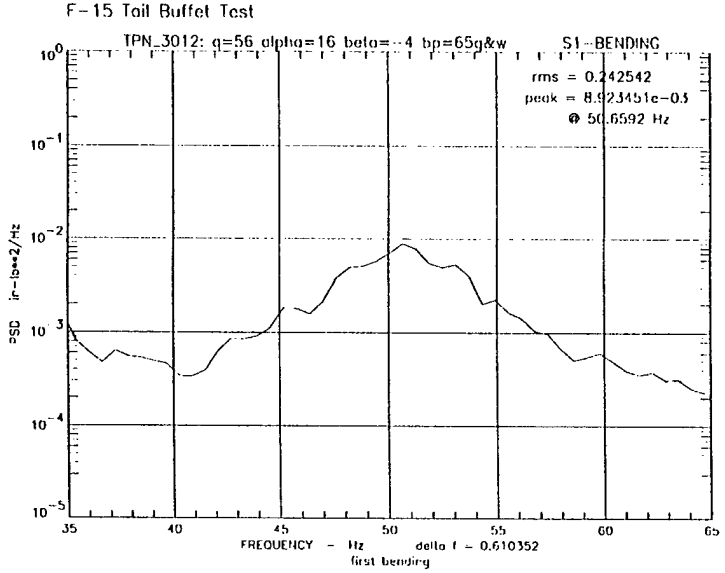

F-15 Tail Buffet Test
TPN 3023: q=56 alpha=26 beta=0 bp=65g&w
S1 BENDING
rms = 0.891353
peak = 0.109077
@ 49.4385 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

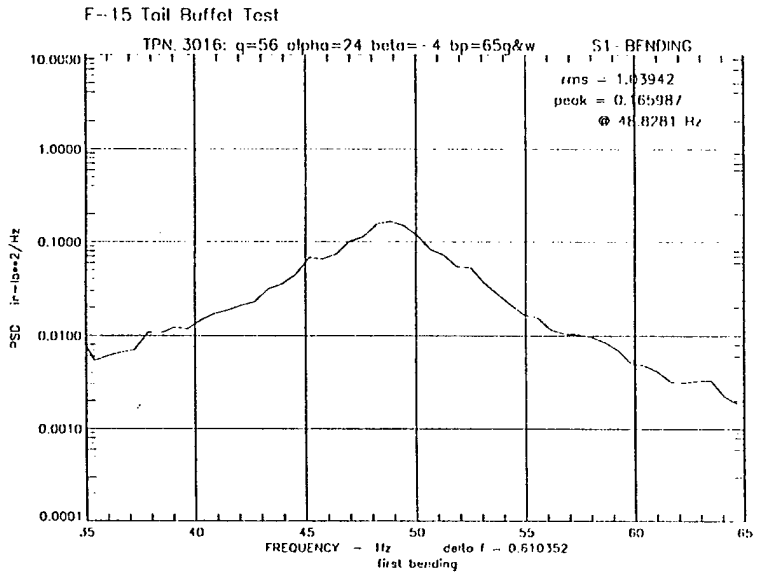

F-15 Tail Buffet Test
TPN 3018: q=56 alpha=16 beta=0 bp=65g&w
S1 BENDING
rms = 0.198769
peak = 6.208800e-03
@ 49.4385 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
TPN 3022: q=56 alpha=24 beta=0 bp=65g&w
S1 BENDING
rms = 0.695772
peak = 7.410984e-02
@ 50.0488 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

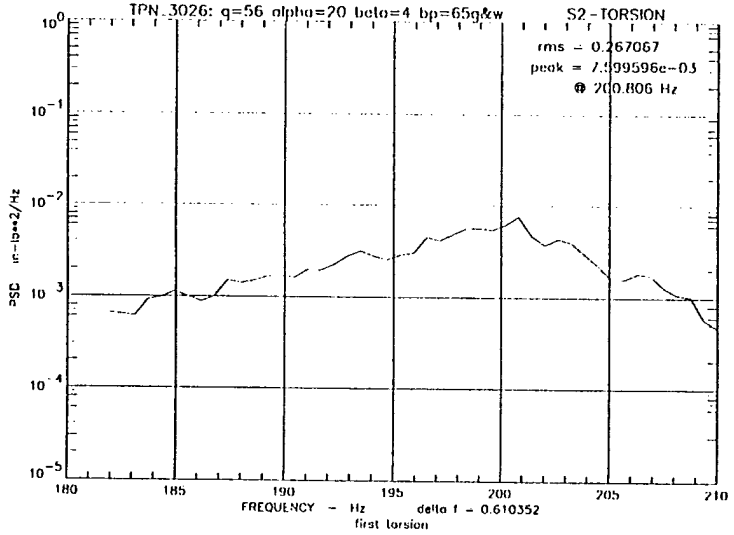

F-15 Tail Buffet Test
TPN_3014: q=56 alpha=20 beta= 4 bp=65g&w
S1-BENDING
rms = 0.525701
peak = 4.469366e-02
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
TPN_3017: q=56 alpha=26 beta= 4 bp=65g&w
S1-BENDING
rms = 1.20051
peak = 0.268828
@ 48.2178 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

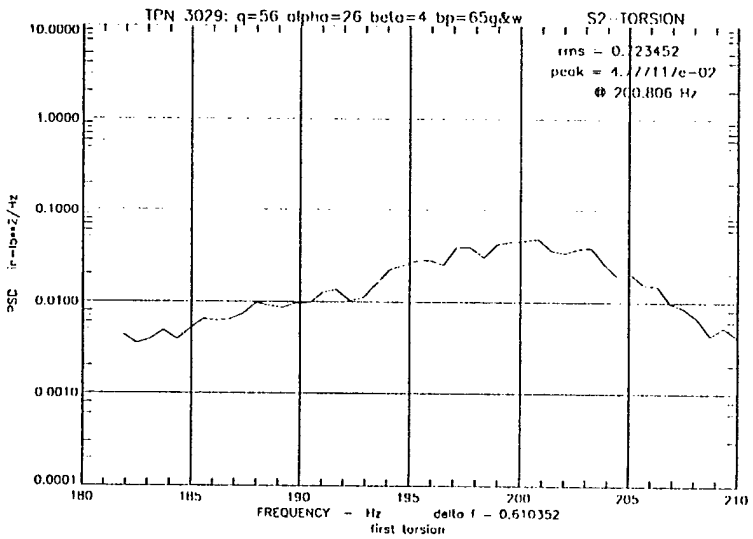

F-15 Tail Buffet Test
TPN_3012: q=56 alpha=16 beta=-4 bp=65g&w
S1-BENDING
rms = 0.242542
peak = 8.923451e-03
@ 50.6592 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
TPN_3016: q=56 alpha=24 beta= 4 bp=65g&w
S1-BENDING
rms = 1.03942
peak = 0.165987
@ 48.8281 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

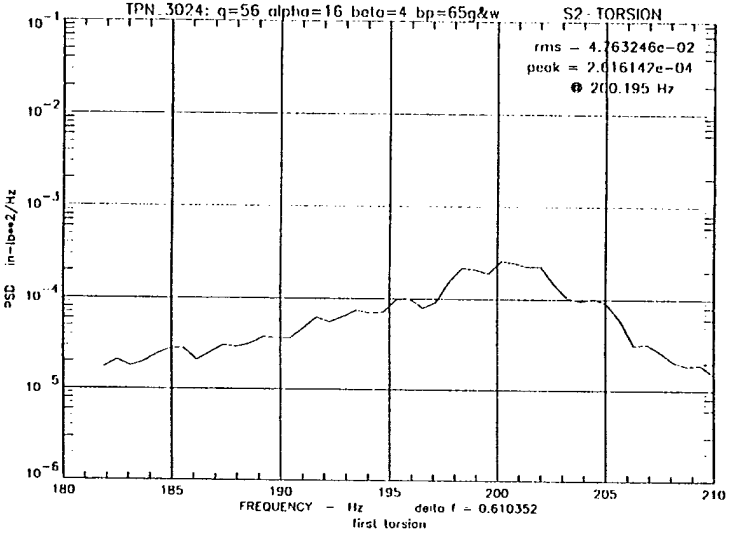
F-15 Tail Buffet Test



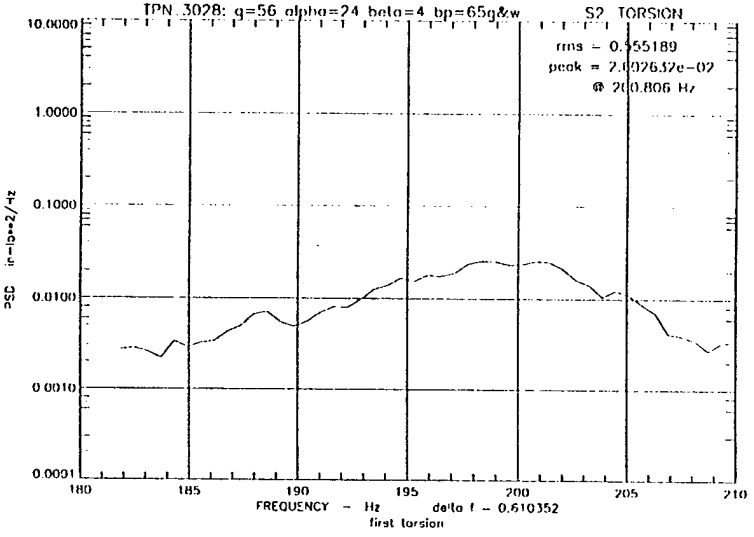
F-15 Tail Buffet Test



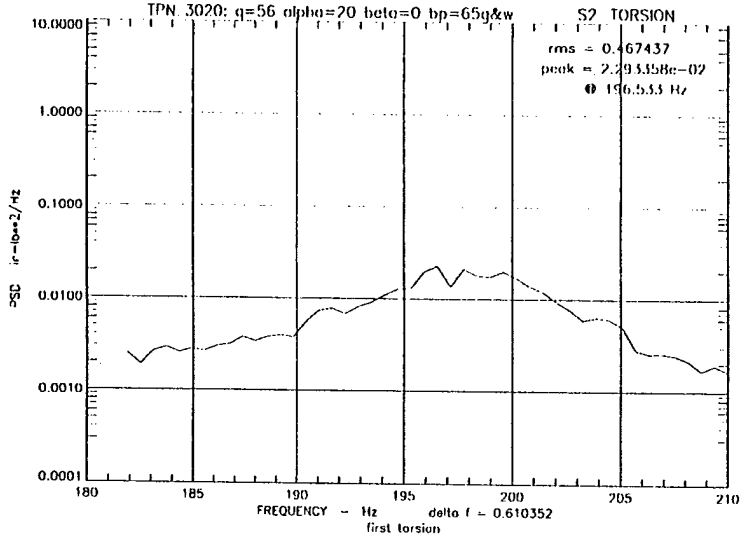
F-15 Tail Buffet Test



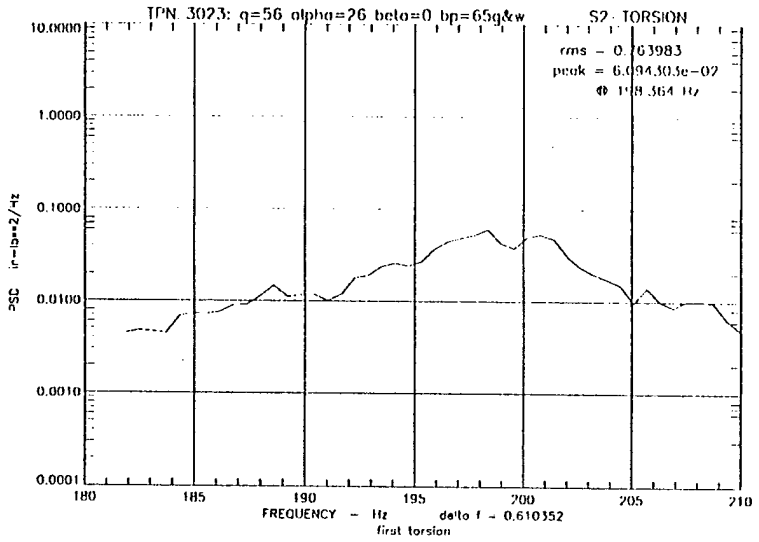
F-15 Tail Buffet Test



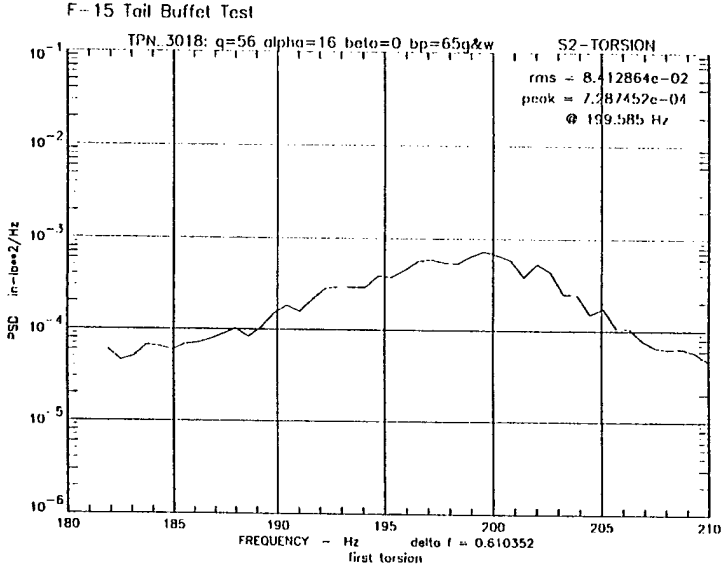
F-15 Tail Buffet Test



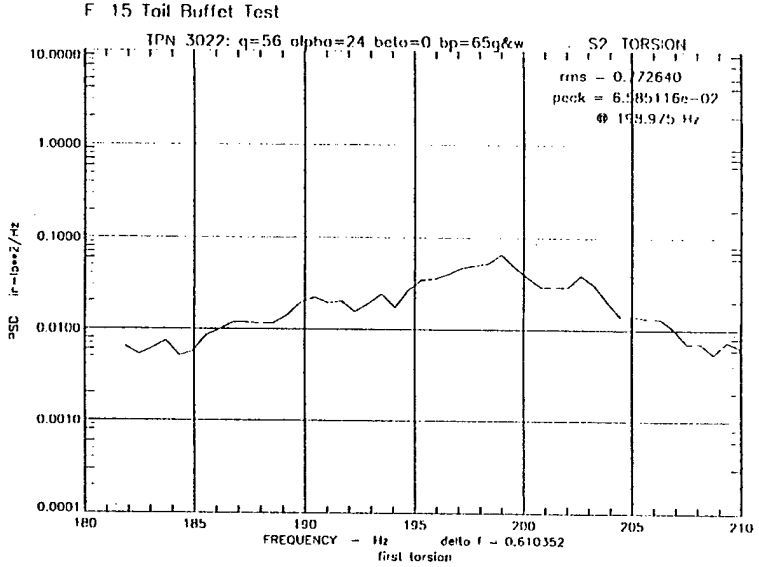
F-15 Tail Buffet Test

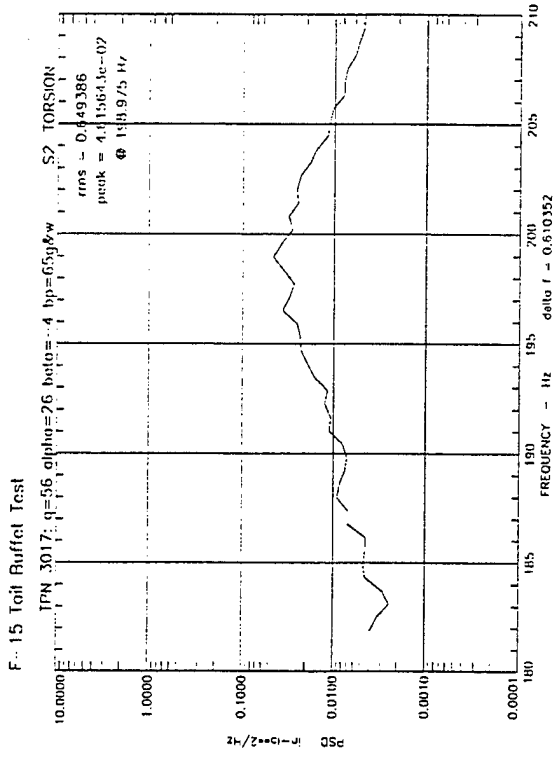


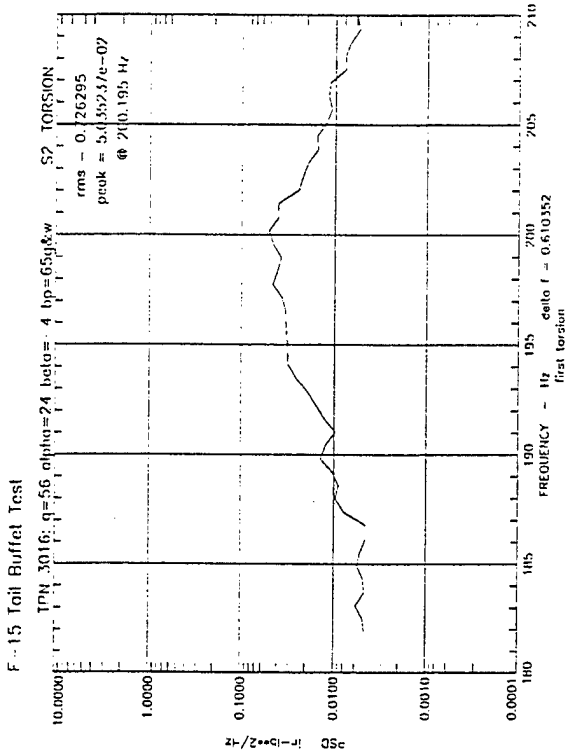
F-15 Tail Buffet Test

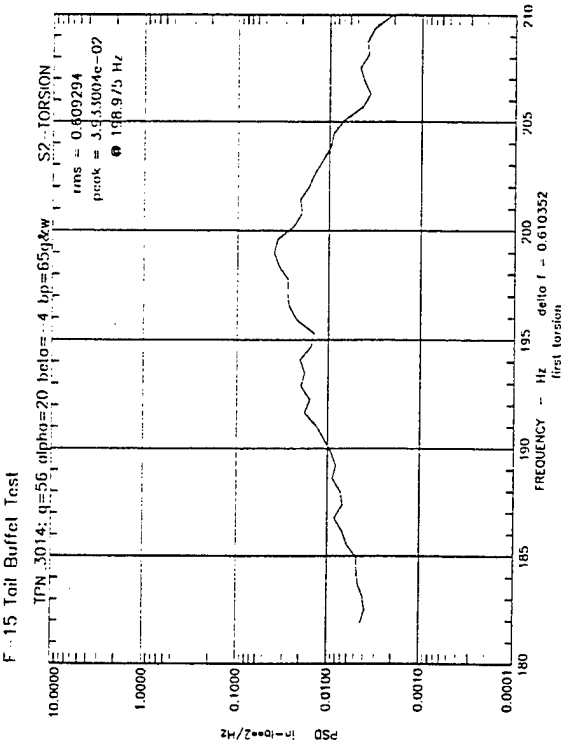


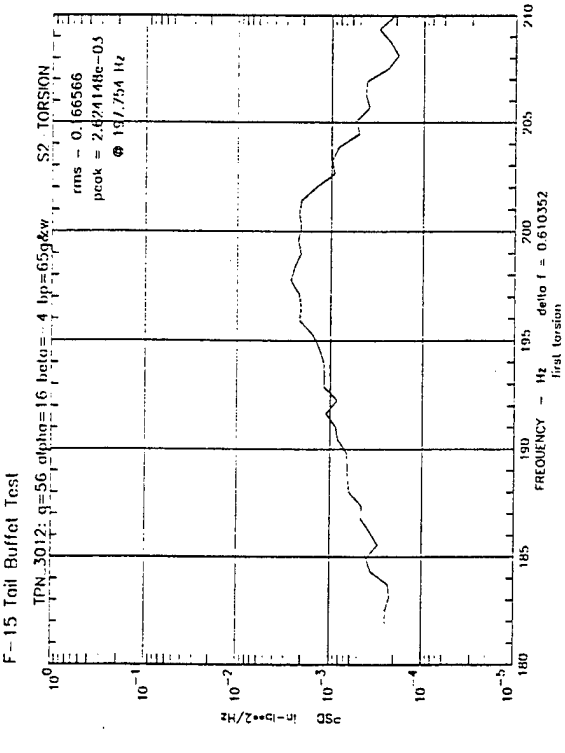
F-15 Tail Buffet Test



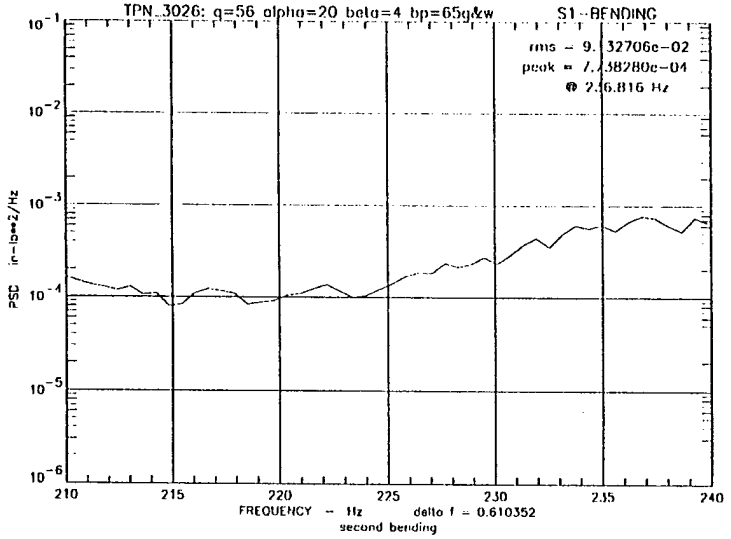

F-15 Tail Buffet Test
TPN 3017: q=56 alpha=26 beta= 4 bp=65g&w S2 TORSION
rms = 0.649386
peak = 4.115964e-07
@ 198.975 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
first torsion
delta f = 0.610352


F-15 Tail Buffet Test
TPN 3016: q=56 alpha=24 beta= 4 bp=65g&w S2 TORSION
rms = 0.726295
peak = 5.053237e-07
@ 200.195 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
first torsion
delta f = 0.610352

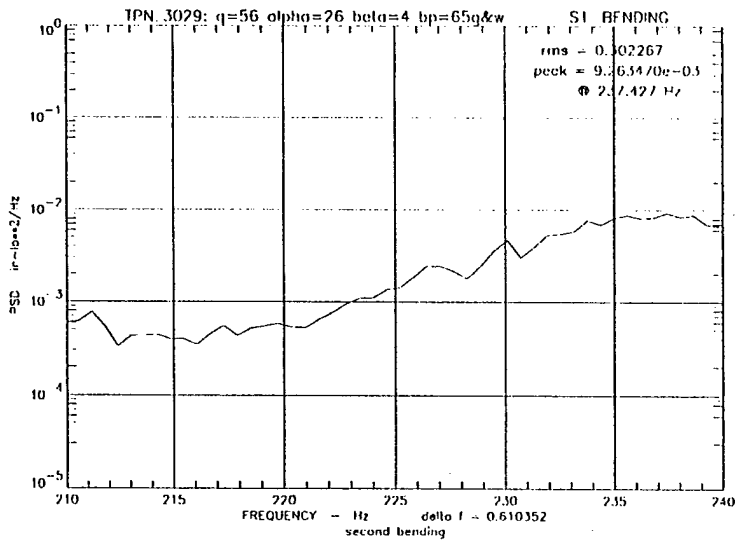

F-15 Tail Buffet Test
TPN 3014: q=56 alpha=20 beta= 4 bp=65g&w S2 TORSION
rms = 0.609294
peak = 3.513004e-07
@ 198.975 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
first torsion
delta f = 0.610352


F-15 Tail Buffet Test
TPN 3012: q=56 alpha=16 beta= 4 bp=65g&w S2 TORSION
rms = 0.66566
peak = 2.824148e-03
@ 197.754 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
first torsion
delta f = 0.610352

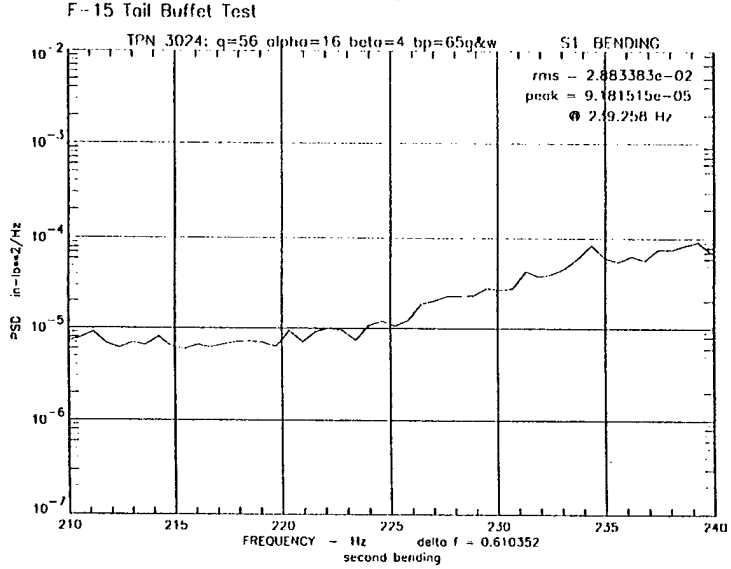
F-15 Tail Buffet Test



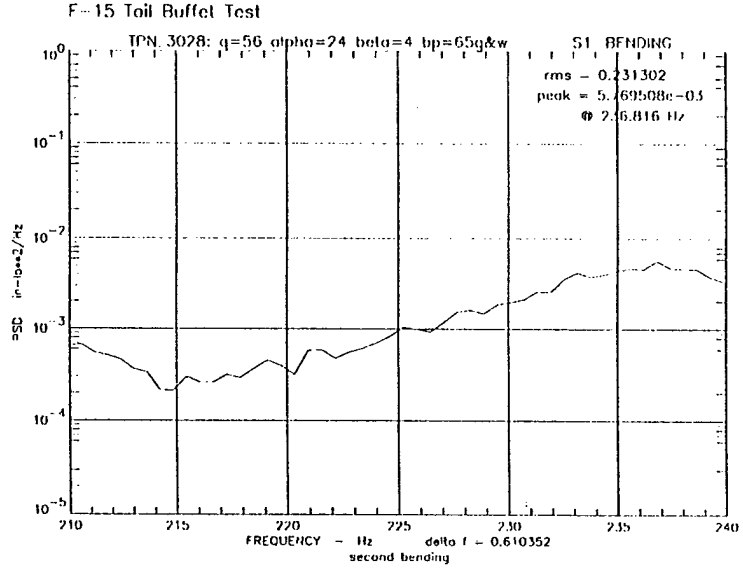
F-15 Tail Buffet Test

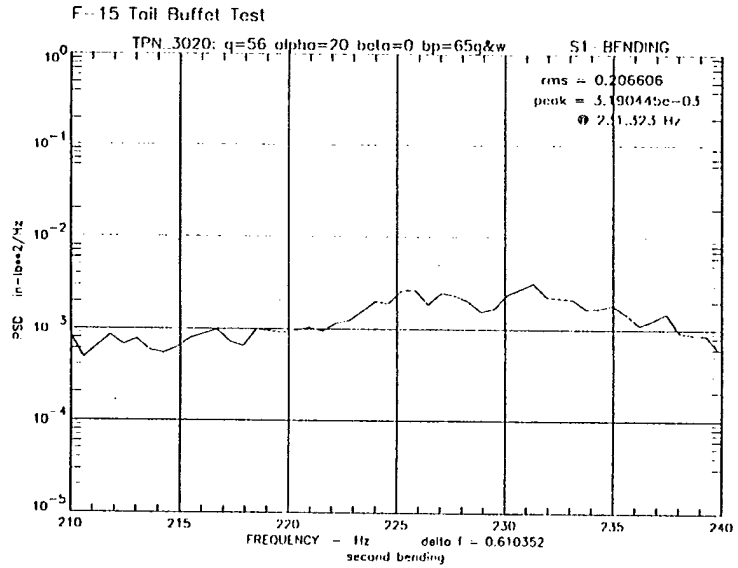


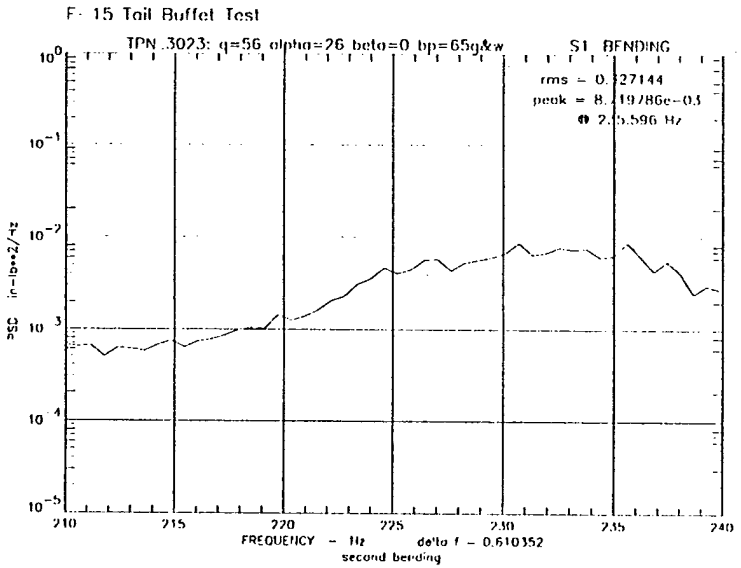
F-15 Tail Buffet Test

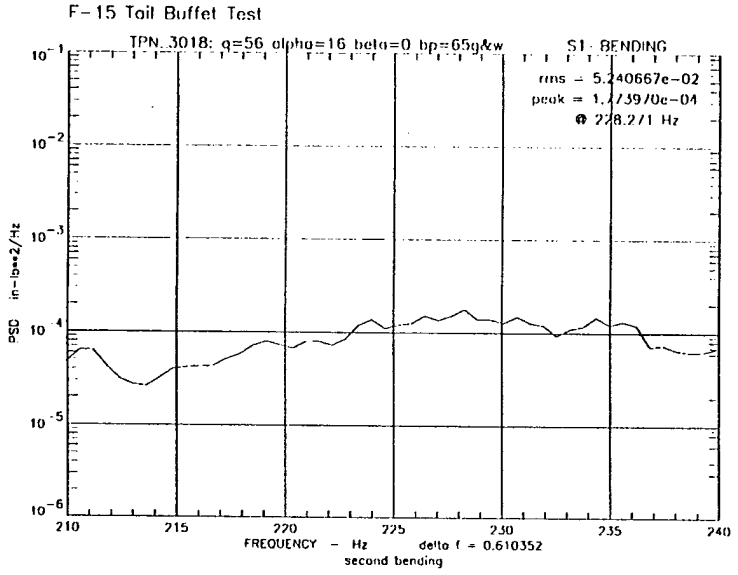


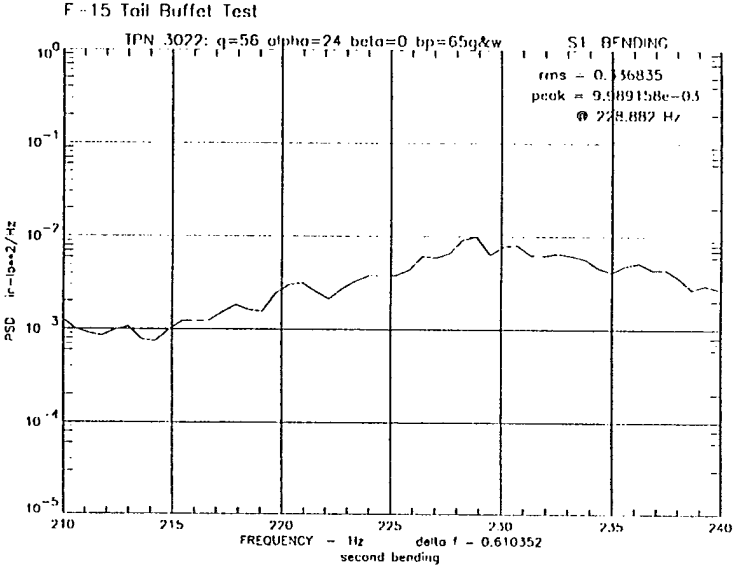
F-15 Tail Buffet Test

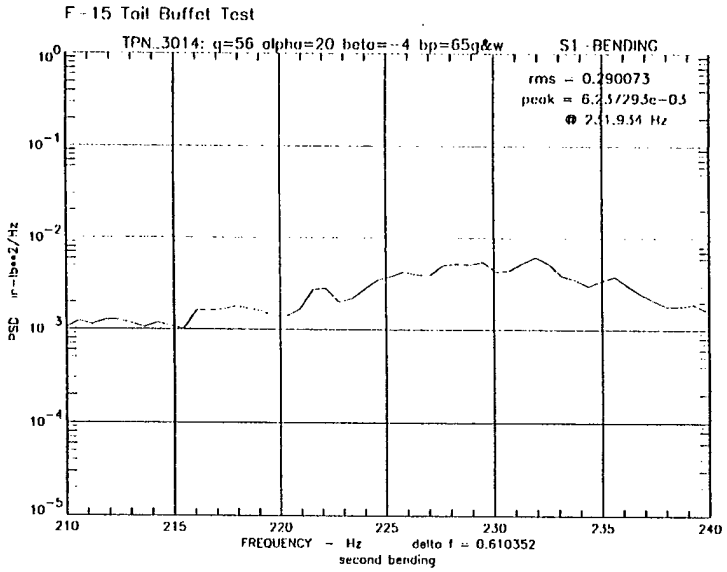


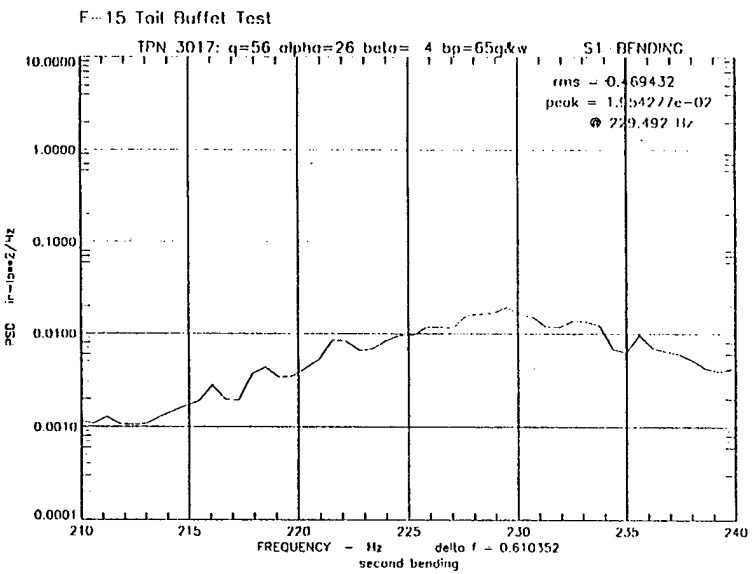

F-15 Tail Buffet Test
TPN 3020: q=56 alpha=20 beta=0 bp=65g&w
S1 BENDING
rms = 0.206606
peak = 3.190445e-03
@ 231.323 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

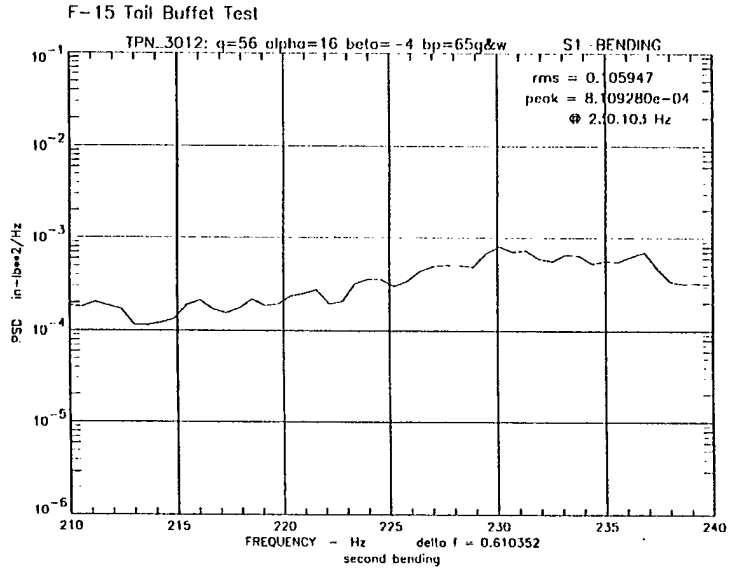

F-15 Tail Buffet Test
TPN 3023: q=56 alpha=26 beta=0 bp=65g&w
S1 BENDING
rms = 0.327144
peak = 8.219786e-03
@ 235.596 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

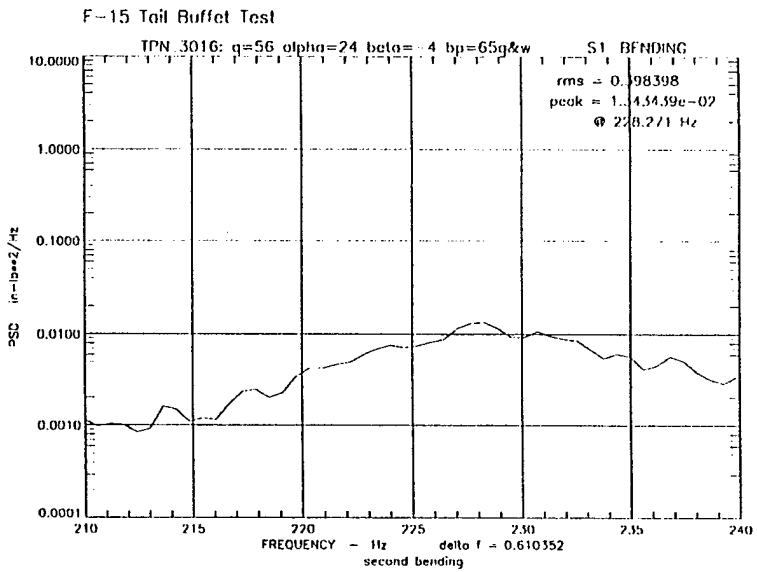

F-15 Tail Buffet Test
TPN 3018: q=56 alpha=16 beta=0 bp=65g&w
S1 BENDING
rms = 5.240667e-02
peak = 1.773970e-04
@ 228.271 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending


F-15 Tail Buffet Test
TPN 3022: q=56 alpha=24 beta=0 bp=65g&w
S1 BENDING
rms = 0.336835
peak = 9.989158e-03
@ 228.882 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending


F-15 Tail Buffet Test
TPN_3014: q=56 alpha=20 beta=-4 bp=65g&w
S1 BENDING
rms = 0.290073
peak = 6.257293e-03
@ 2.51.934 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending


F-15 Tail Buffet Test
TPN_3017: q=56 alpha=26 beta= 4 bp=65g&w
S1 BENDING
rms = 0.469432
peak = 1.554277e-02
@ 229.492 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending


F-15 Tail Buffet Test
TPN_3012: q=56 alpha=16 beta=-4 bp=65g&w
S1 BENDING
rms = 0.105947
peak = 8.109280e-04
@ 2.30.103 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

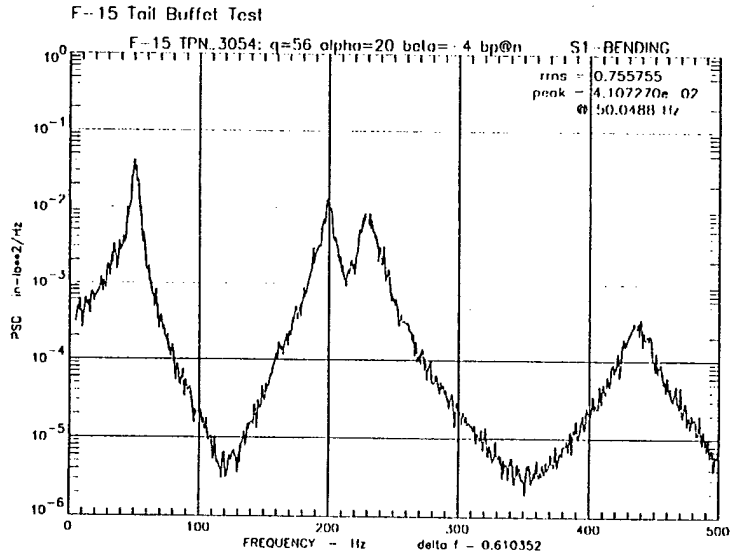

F-15 Tail Buffet Test
TPN_3016: q=56 alpha=24 beta= 4 bp=65g&w
S1 BENDING
rms = 0.398398
peak = 1.434.59e-02
@ 228.271 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

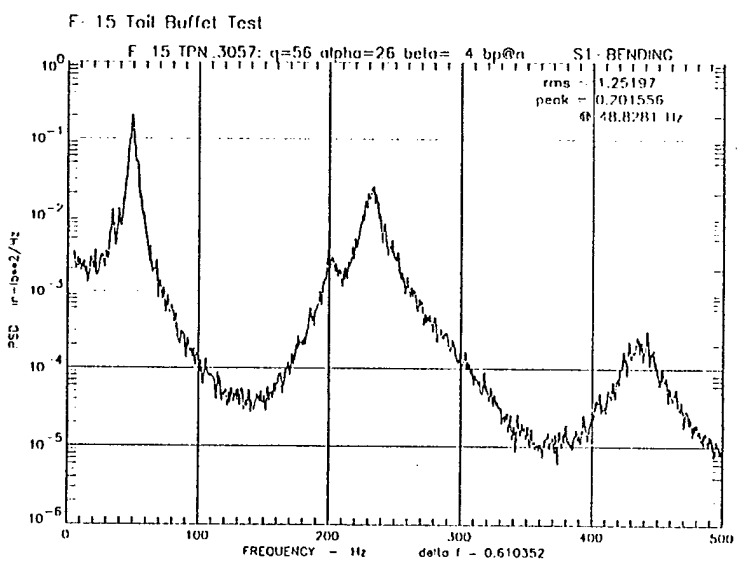
FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION
PSD GRAPHS
Q= 56 PSF

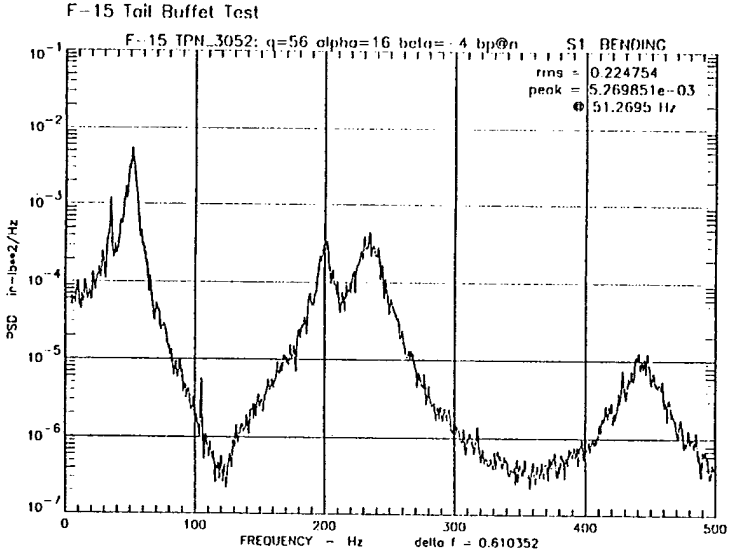
2.1.1.4 NBP = 87 psi, BETA= 0, +4, -4, ALPHA = 0....32 Deg

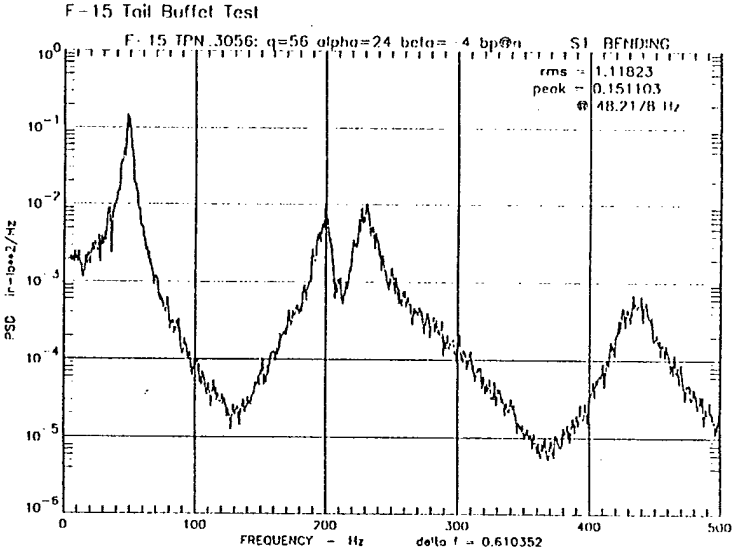
FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

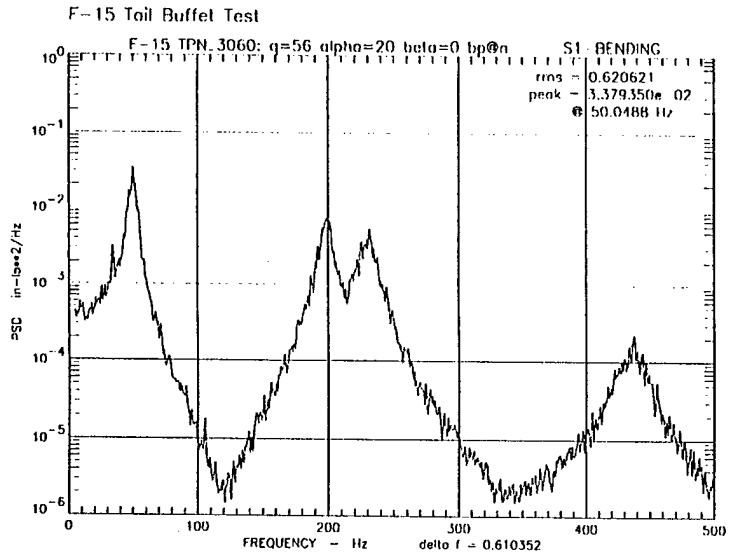
2.1.1.4 NBP = 87 psi, BETA= 0, +4, -4, ALPHA = 0....32 Deg

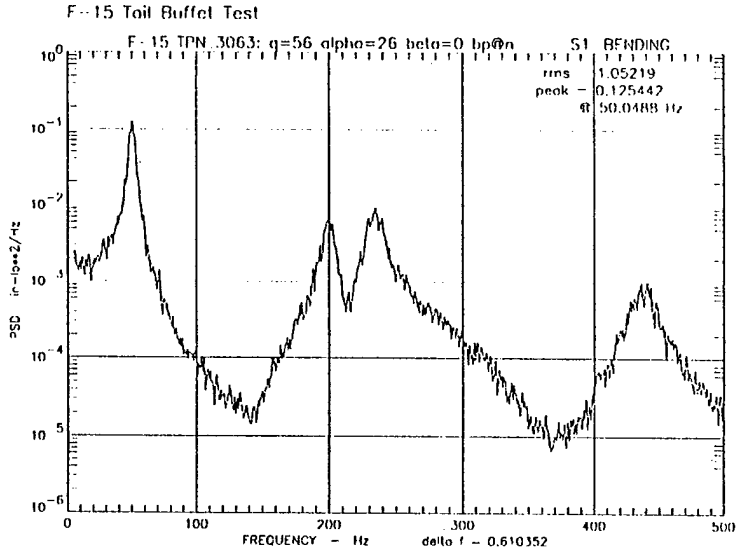

F-15 Tail Buffet Test
F-15 TPN_3054: q=56 alpha=20 beta= 4 bp@n S1 BENDING
rms = 0.755755
peak = 4.107270e-02
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

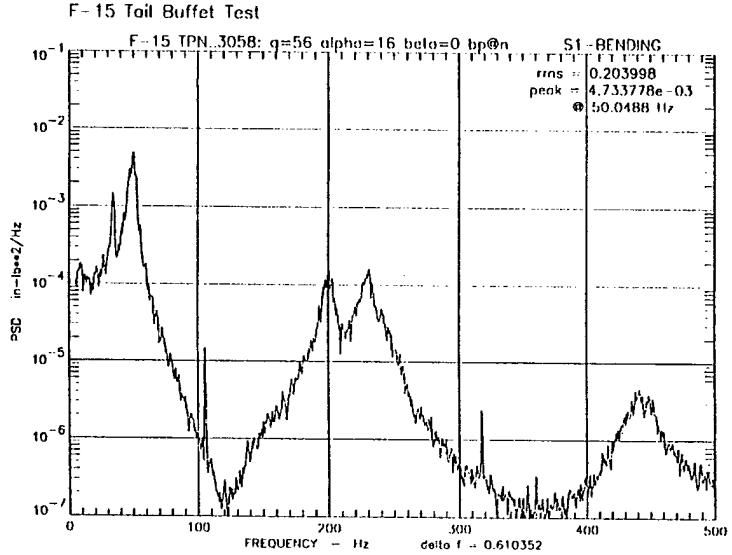

F-15 Tail Buffet Test
F-15 TPN_3057: q=56 alpha=26 beta= 4 bp@n S1 BENDING
rms = 1.25197
peak = 0.201556
@ 48.8281 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

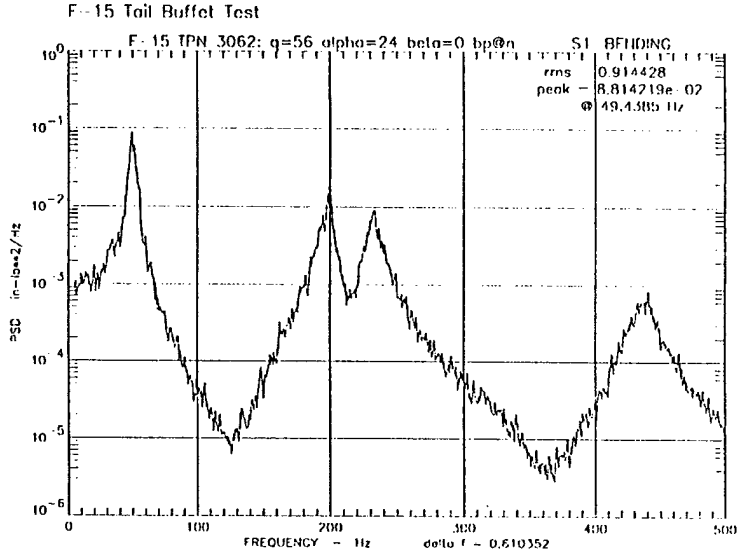

F-15 Tail Buffet Test
F-15 TPN_3052: q=56 alpha=16 beta= 4 bp@n S1 BENDING
rms = 0.224754
peak = 5.269851e-03
@ 51.2695 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3056: q=56 alpha=24 beta= 4 bp@n S1 BENDING
rms = 1.11823
peak = 0.151103
@ 48.2178 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

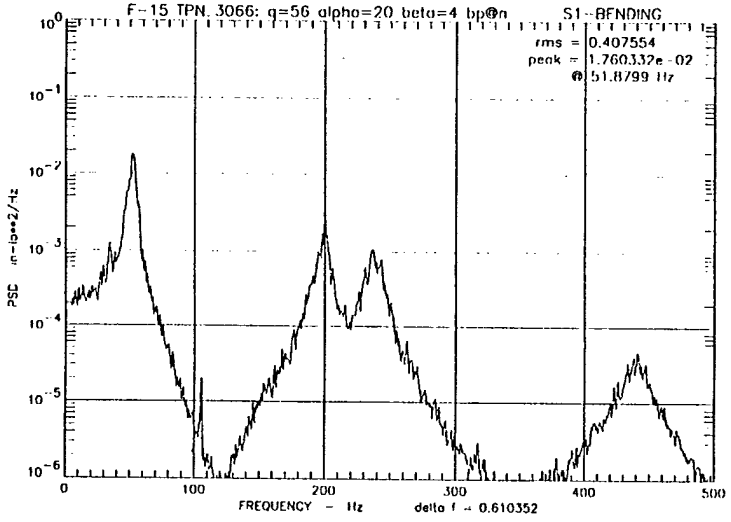

F-15 Tail Buffet Test
F-15 TPN_3060: q=56 alpha=20 beta=0 bp@n
S1 - BENDING
rms = 0.620621
peak = 3.379350e 02
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3063: q=56 alpha=26 beta=0 bp@n
S1 BENDING
rms 1.05219
peak - 0.125442
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

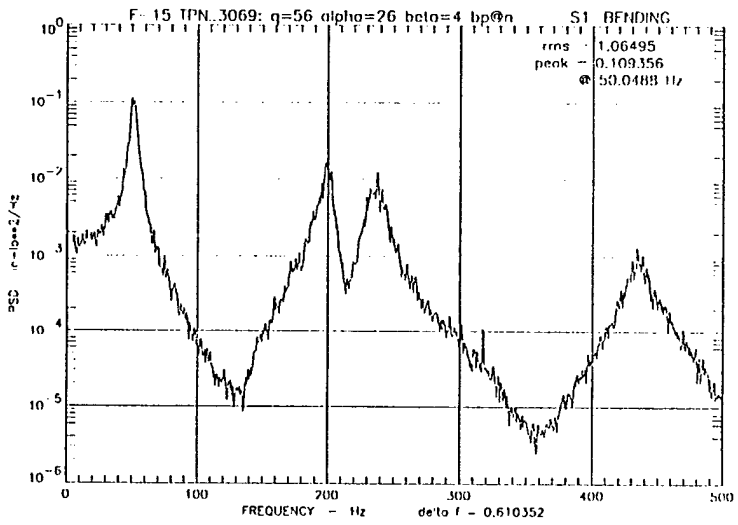

F-15 Tail Buffet Test
F-15 TPN_3058: q=56 alpha=16 beta=0 bp@n
S1 - BENDING
rms = 0.203998
peak = 4.733778e-03
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3062: q=56 alpha=24 beta=0 bp@n
S1 BENDING
rms 0.914428
peak - 8.814219e-02
@ 49.4385 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

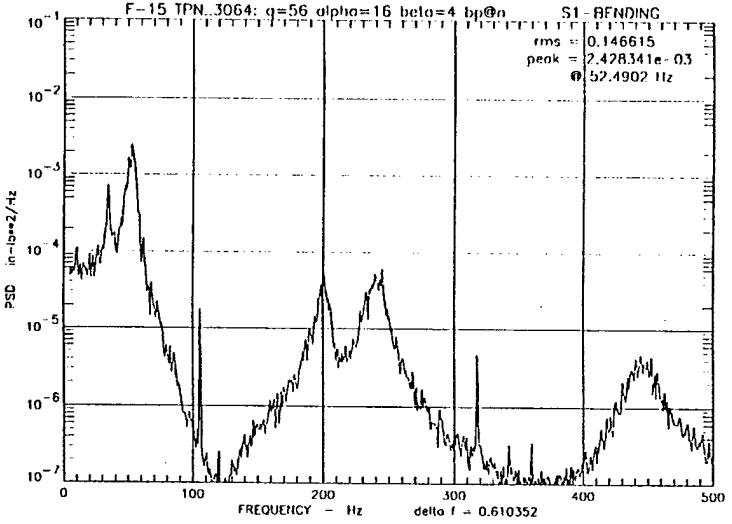
F-15 Tail Buffet Test



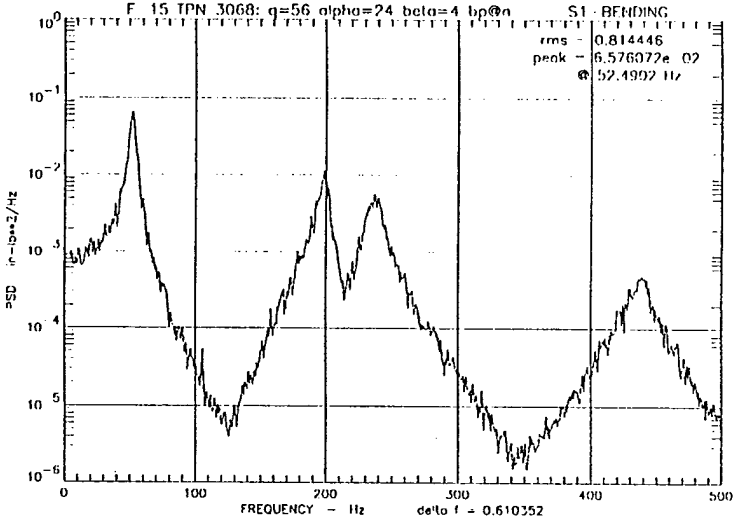
F-15 Tail Buffet Test



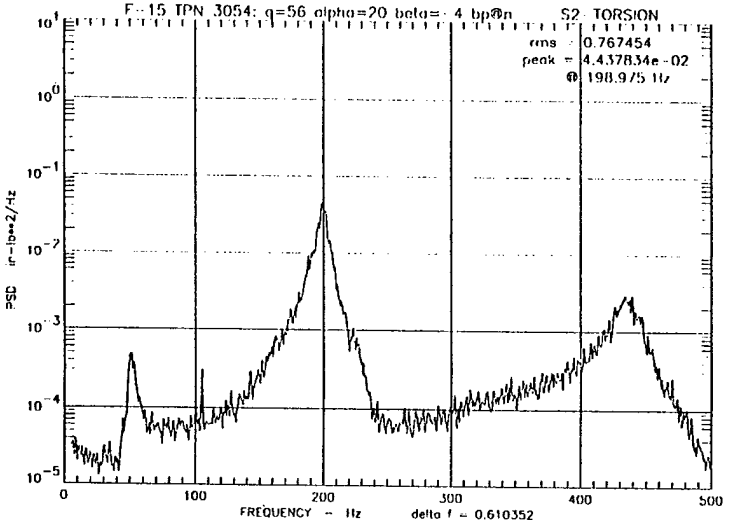
F-15 Tail Buffet Test



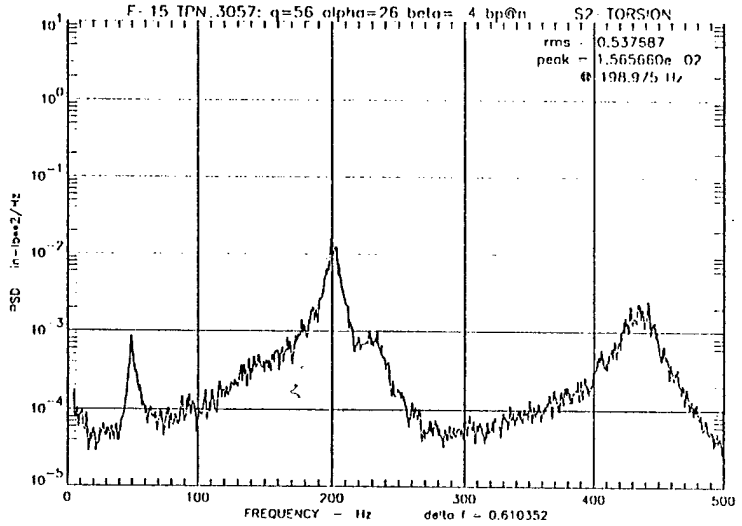
F-15 Tail Buffet Test



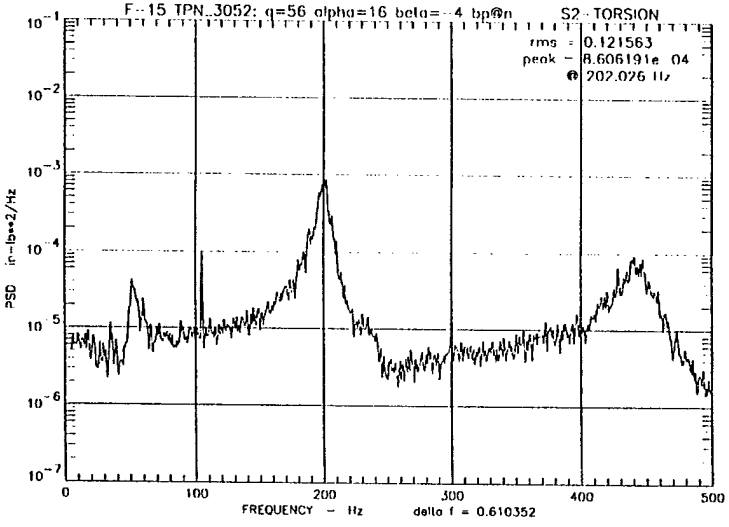
F-15 Tail Buffet Test



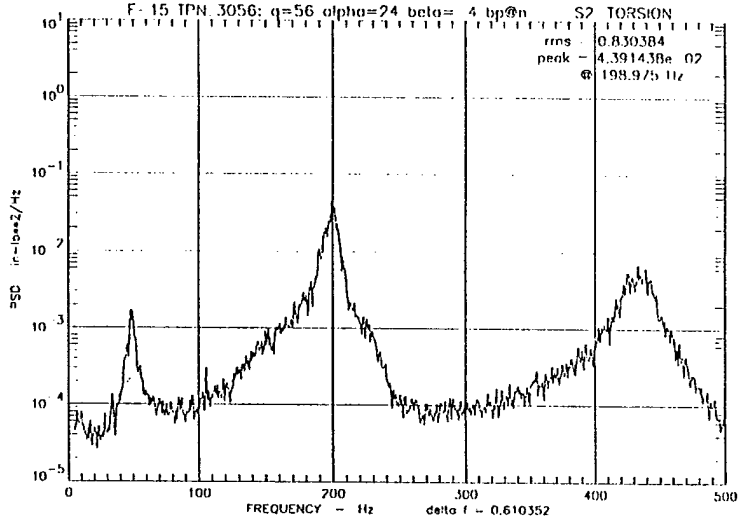
F-15 Tail Buffet Test

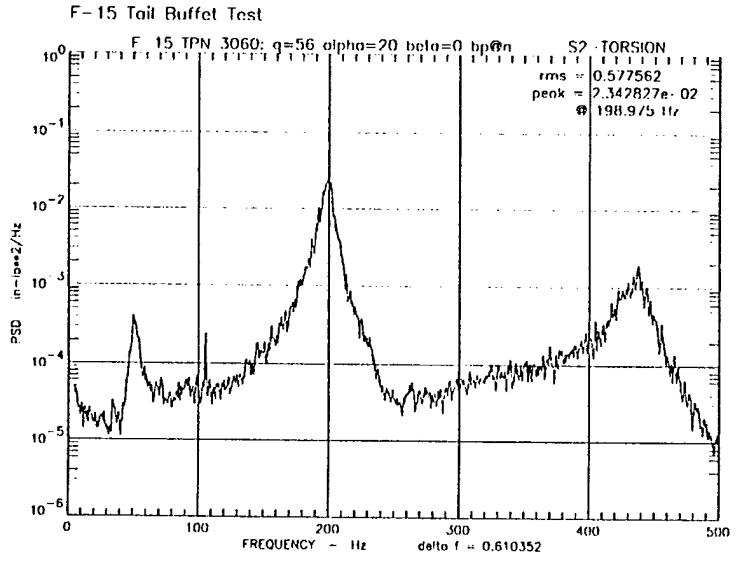


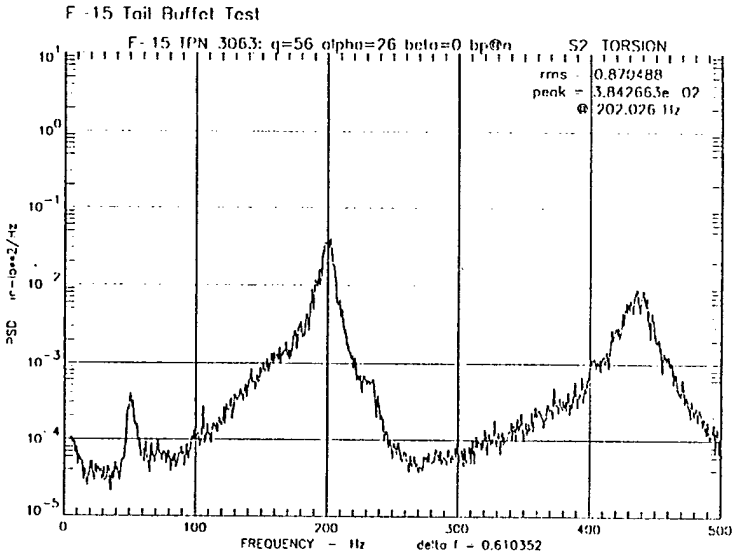
F-15 Tail Buffet Test

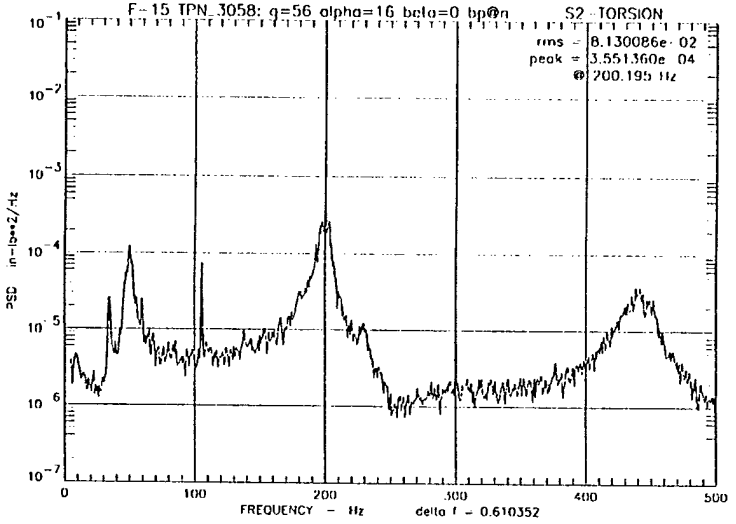


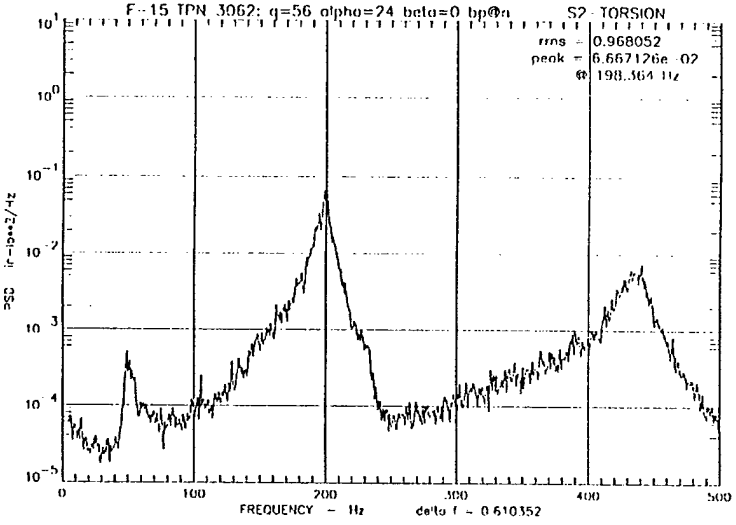
F-15 Tail Buffet Test



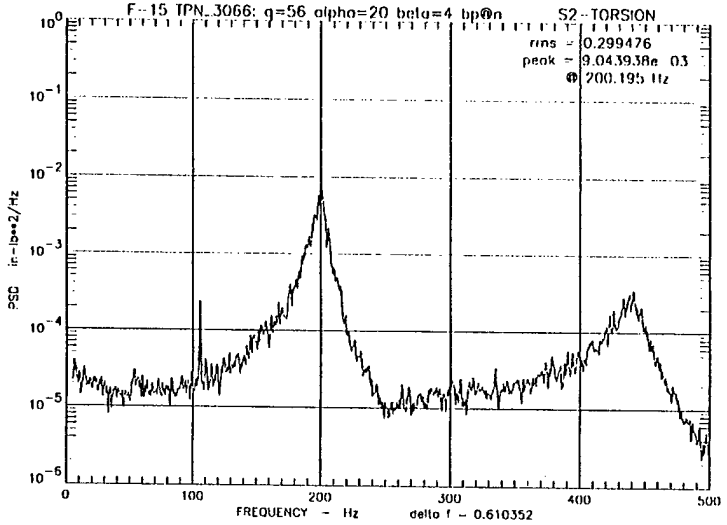

F-15 Tail Buffet Test
F_15 TPN_3060: q=56 alpha=20 beta=0 bp@n
S2 TORSION
rms = 0.577562
peak = 2.342827e-02
@ 198.975 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3063: q=56 alpha=26 beta=0 bp@n
S2 TORSION
rms = 0.870488
peak = 3.842663e-02
@ 202.026 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352

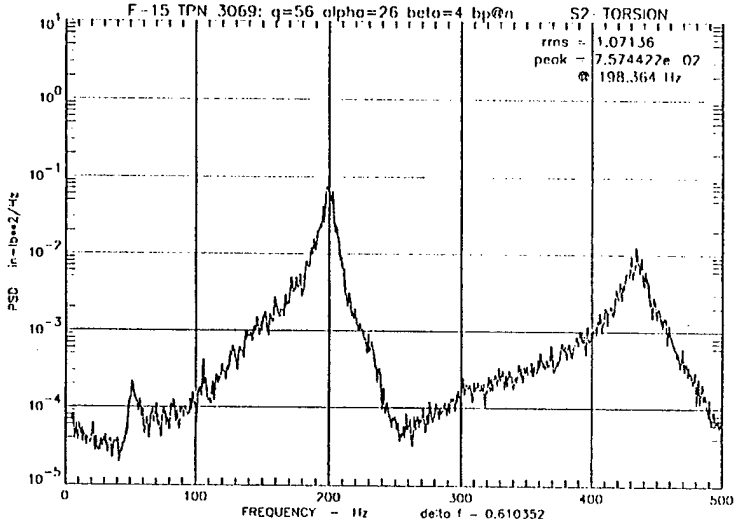

F-15 Tail Buffet Test
F-15 TPN_3058: q=56 alpha=16 beta=0 bp@n
S2 TORSION
rms = 8.130086e-02
peak = 3.551360e-04
@ 200.195 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3062: q=56 alpha=24 beta=0 bp@n
S2 TORSION
rms = 0.968052
peak = 6.667126e-02
@ 198.364 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352

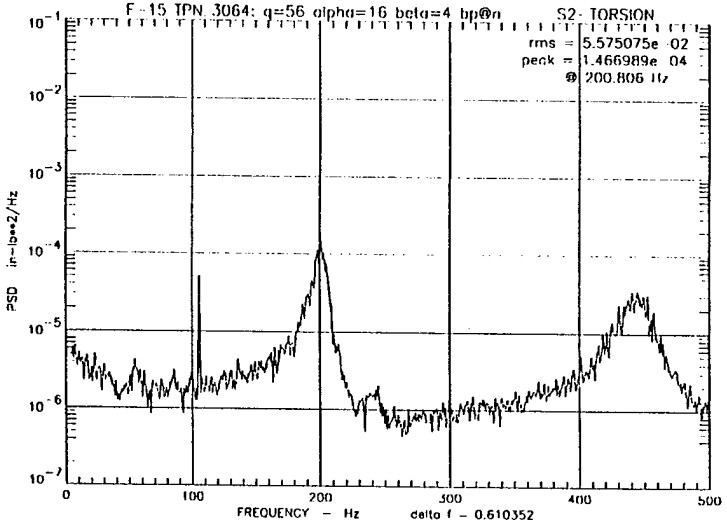
F-15 Tail Buffet Test



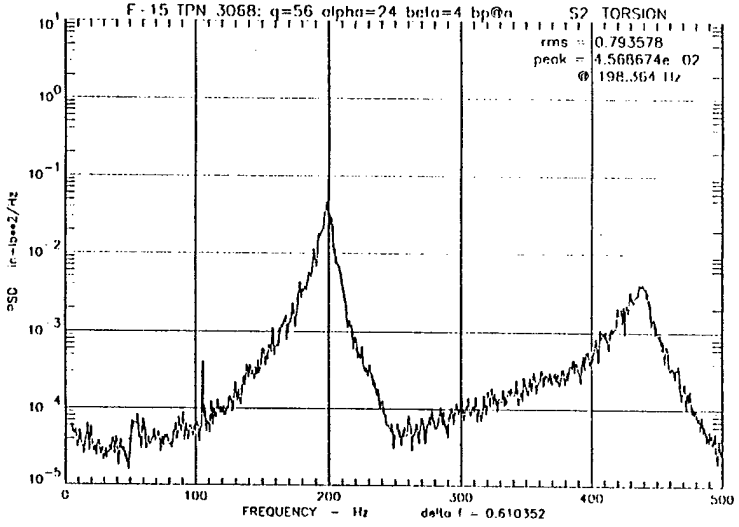
F-15 Tail Buffet Test

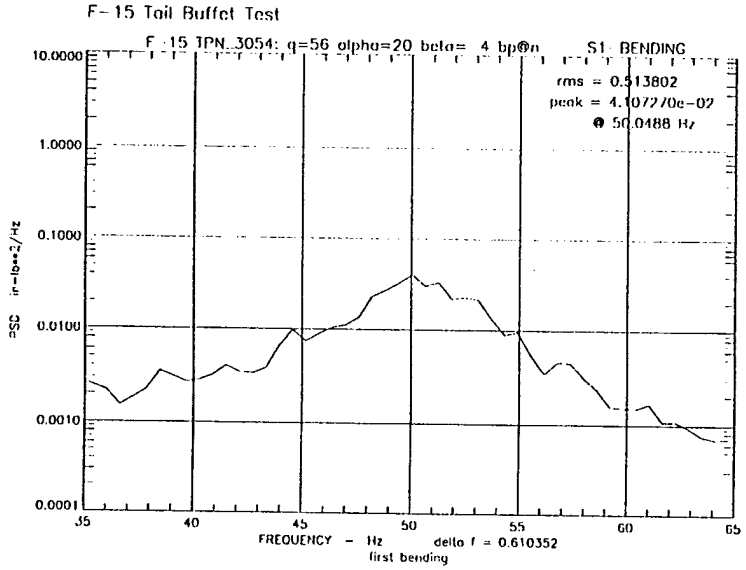


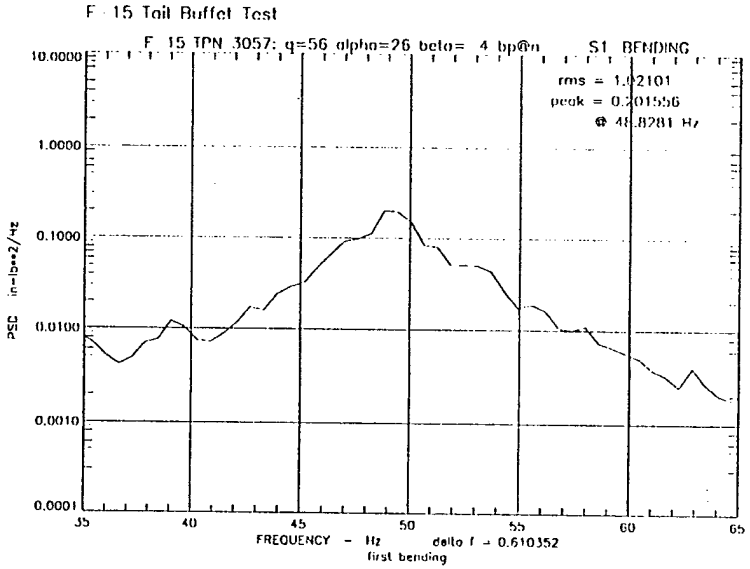
F-15 Tail Buffet Test

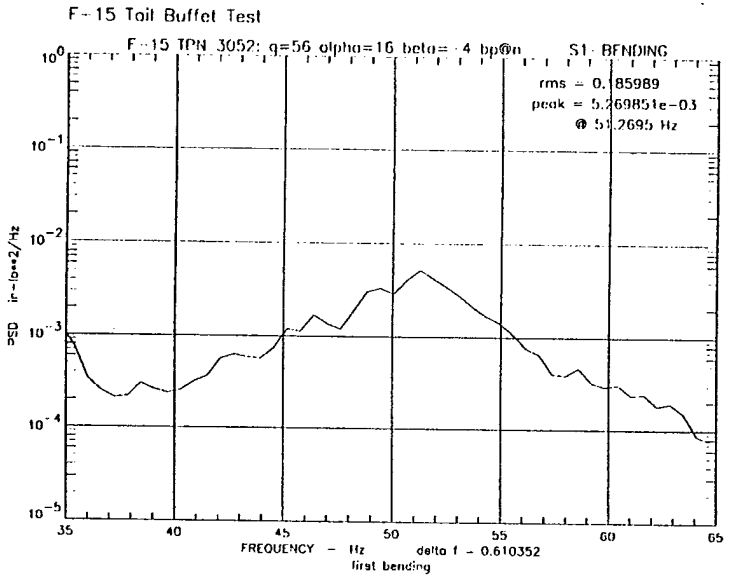


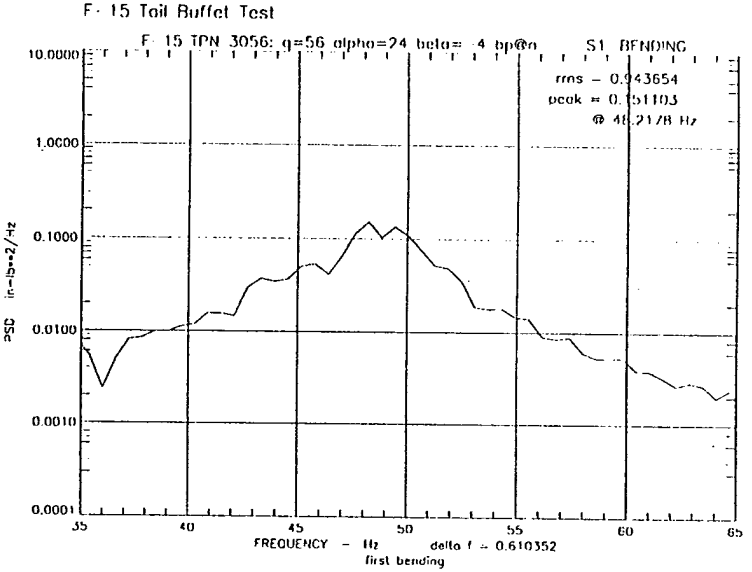
F-15 Tail Buffet Test



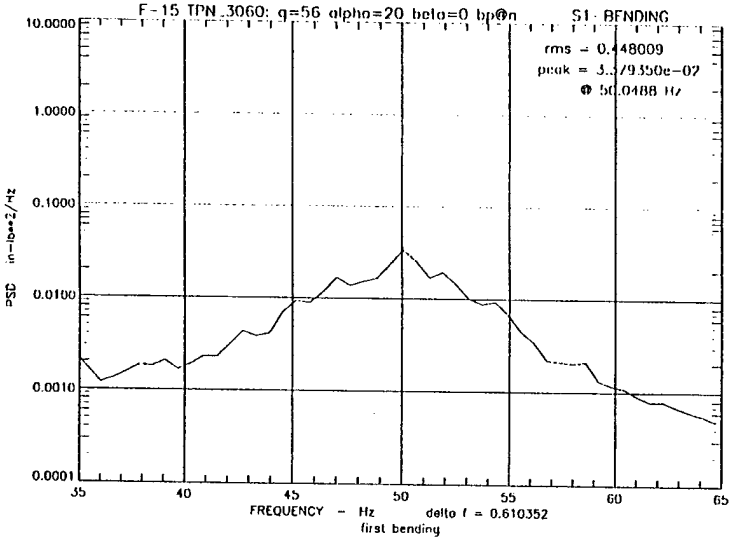

F-15 Tail Buffet Test
F-15 TPN 3054: q=56 alpha=20 beta= 4 bp@n
S1 BENDING
rms = 0.513802
peak = 4.107270e-02
@ 50.0488 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
F-15 TPN 3057: q=56 alpha=26 beta= 4 bp@n
S1 BENDING
rms = 1.02101
peak = 0.201556
@ 48.8281 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

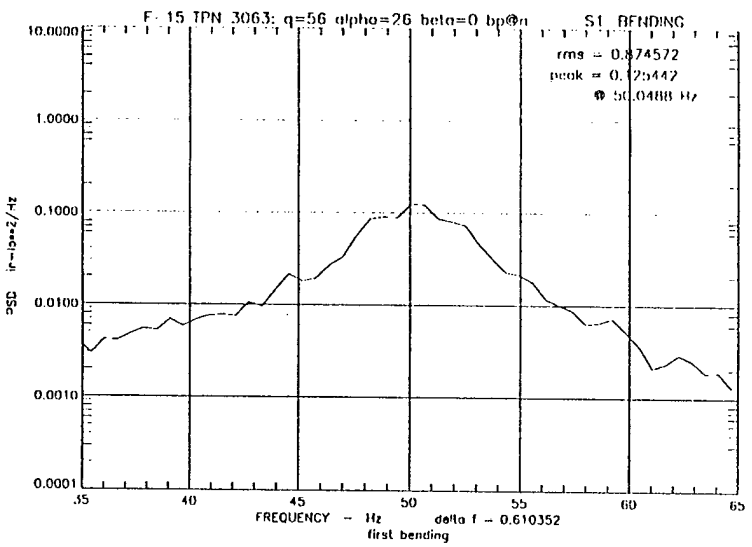

F-15 Tail Buffet Test
F-15 TPN 3052: q=56 alpha=16 beta= 4 bp@n
S1 BENDING
rms = 0.185989
peak = 5.269851e-03
@ 51.2695 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
F-15 TPN 3056: q=56 alpha=24 beta= 4 bp@n
S1 BENDING
rms = 0.943654
peak = 0.151103
@ 48.2178 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

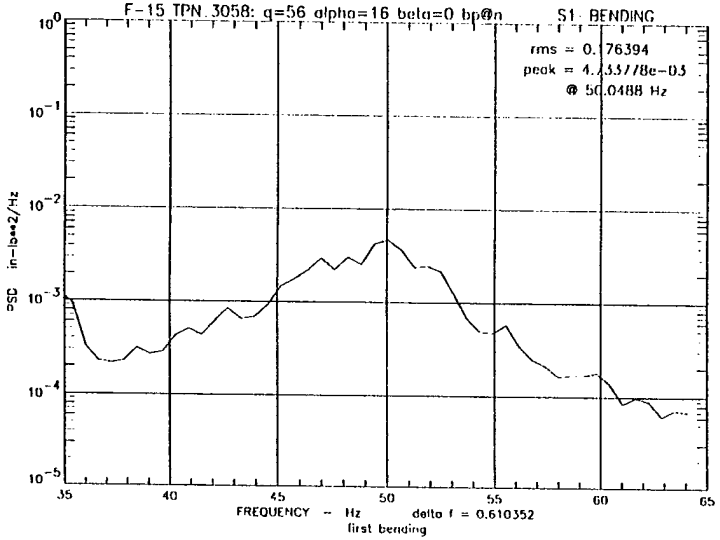
F-15 Tail Buffet Test



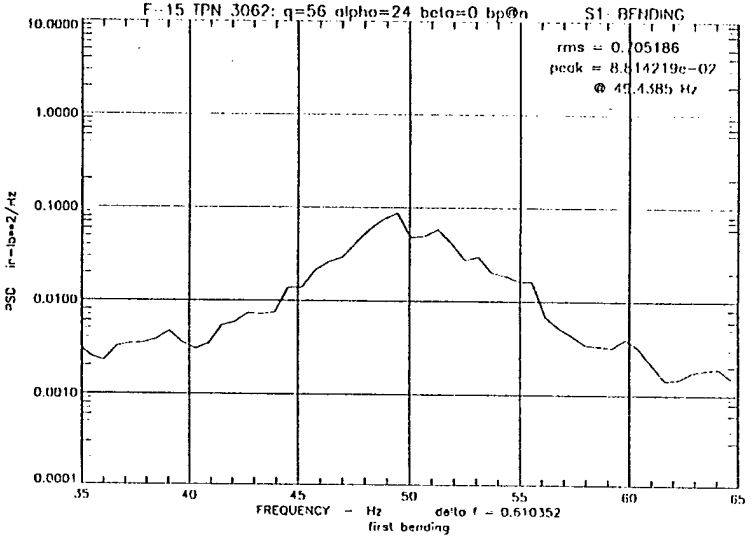
F-15 Tail Buffet Test



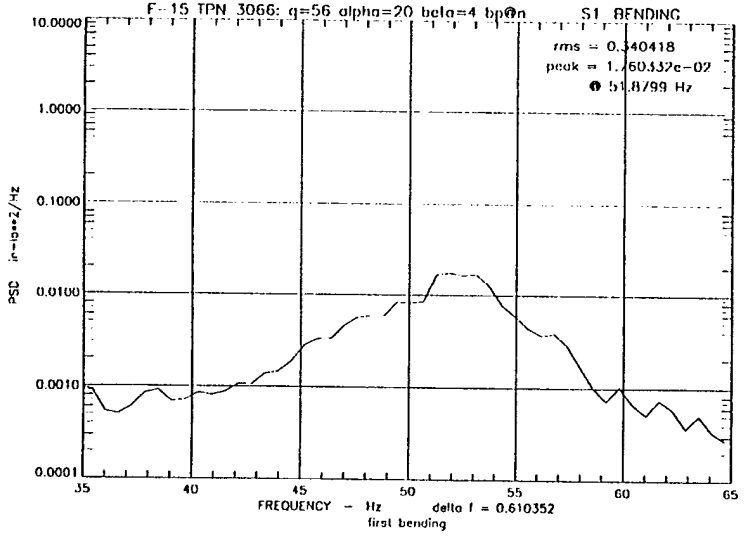
F-15 Tail Buffet Test



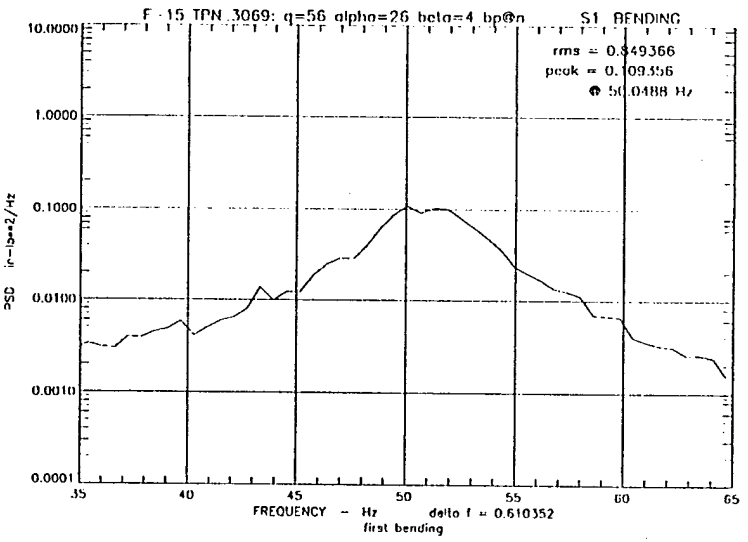
F-15 Tail Buffet Test



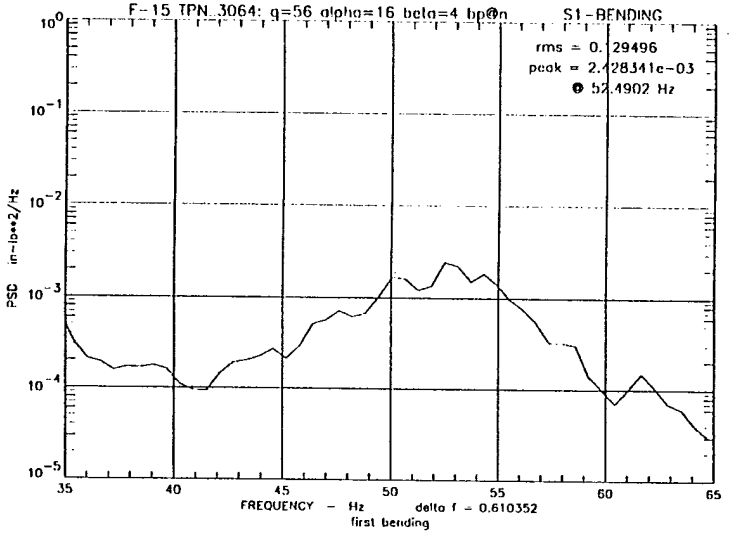
F-15 Tail Buffet Test



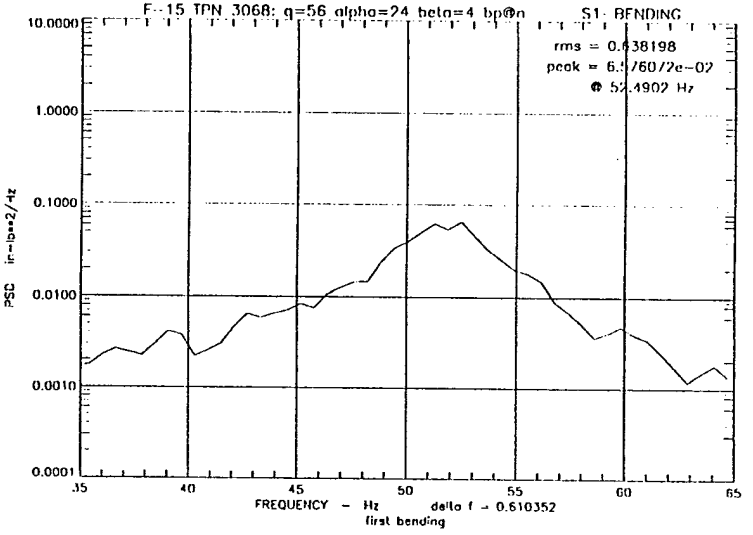
F-15 Tail Buffet Test



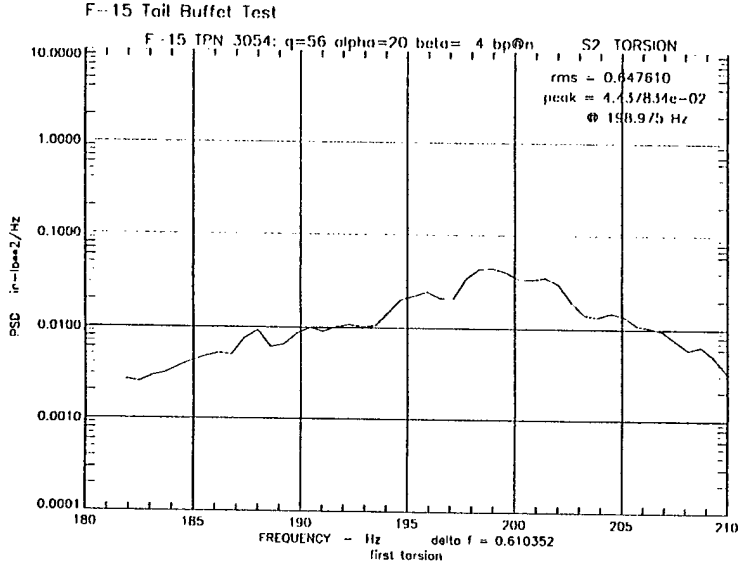
F-15 Tail Buffet Test

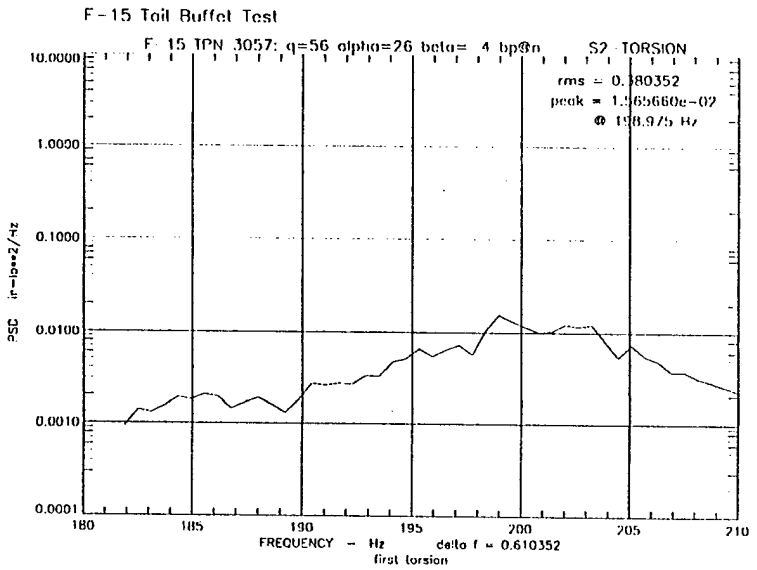


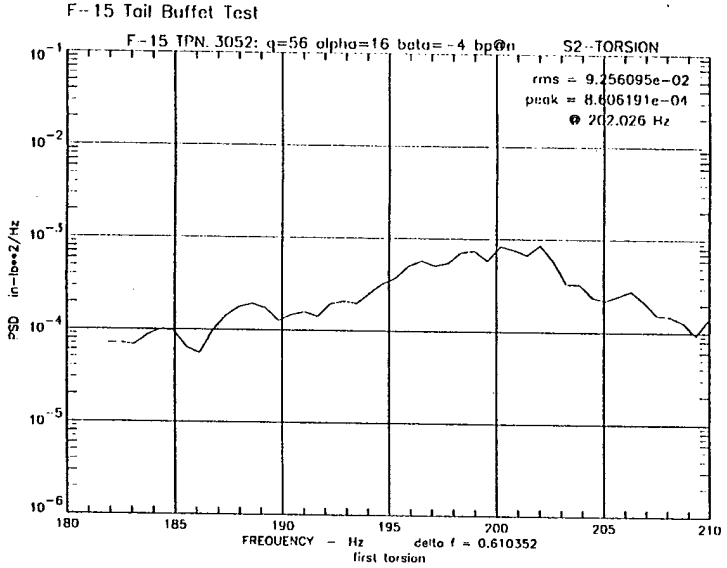
F-15 Tail Buffet Test

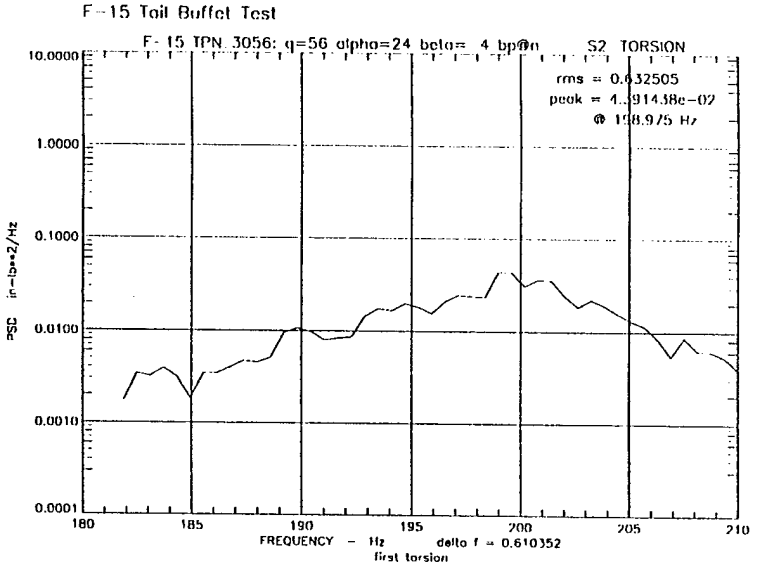


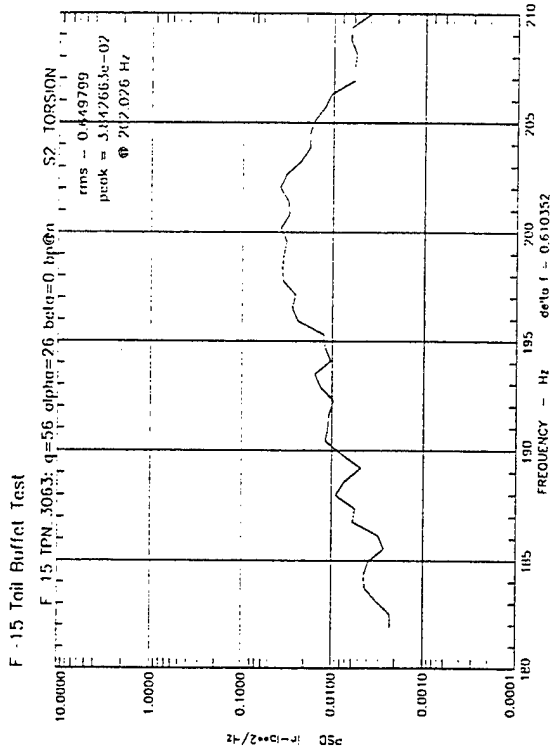
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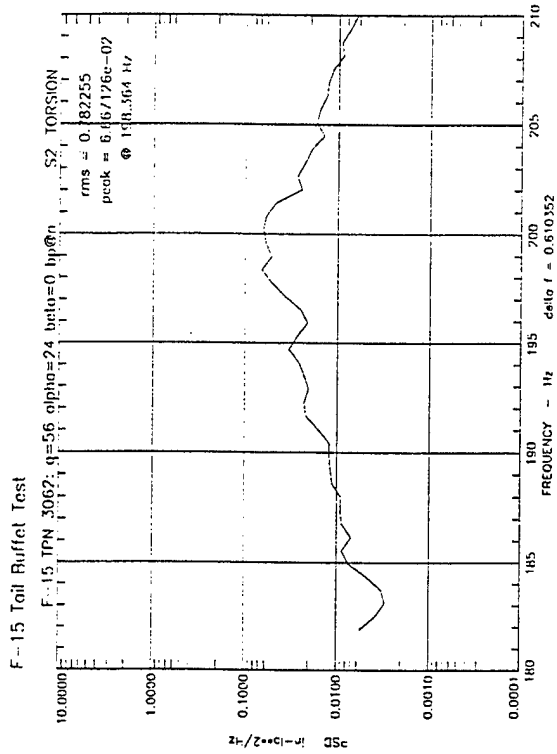

F-15 Tail Buffet Test
F-15 TPN 3054: q=56 alpha=20 beta= 4 bp@n S2 TORSION
rms = 0.647610
peak = 4.437854e-02
@ 198.975 Hz
PSD in-lbs**2/Hz
10.0000
1.0000
0.1000
0.0100
0.0010
0.0001
180
185
190
195
200
205
210
FREQUENCY - Hz delta f = 0.610352
first torsion

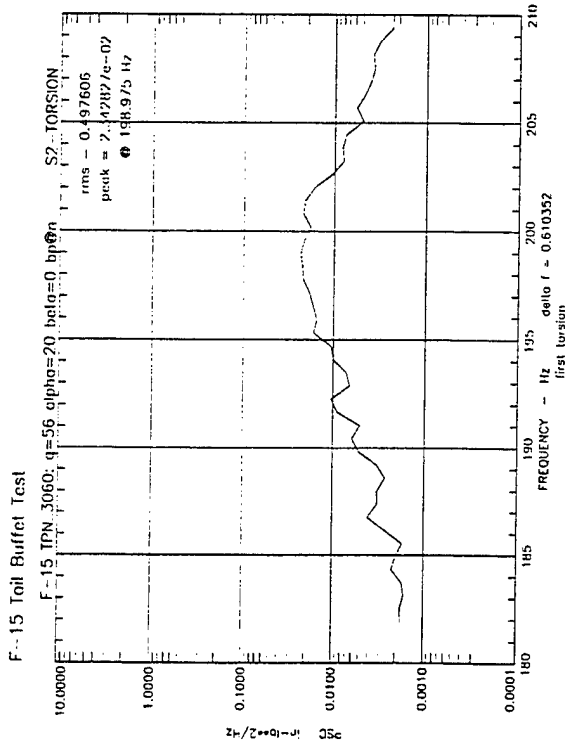

F-15 Tail Buffet Test
F-15 TPN 3057: q=56 alpha=26 beta= 4 bp@n S2 TORSION
rms = 0.380352
peak = 1.565660e-02
@ 198.975 Hz
PSD in-lbs**2/Hz
10.0000
1.0000
0.1000
0.0100
0.0010
0.0001
180
185
190
195
200
205
210
FREQUENCY - Hz delta f = 0.610352
first torsion

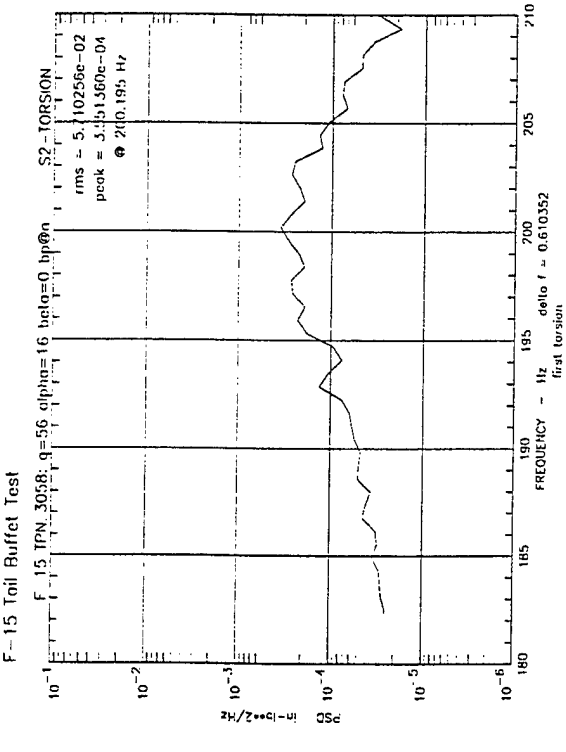

F-15 Tail Buffet Test
F-15 TPN 3052: q=56 alpha=16 beta= -4 bp@n S2 TORSION
rms = 9.256095e-02
peak = 8.606191e-04
@ 202.026 Hz
PSD in-lbs**2/Hz
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
180
185
190
195
200
205
210
FREQUENCY - Hz delta f = 0.610352
first torsion

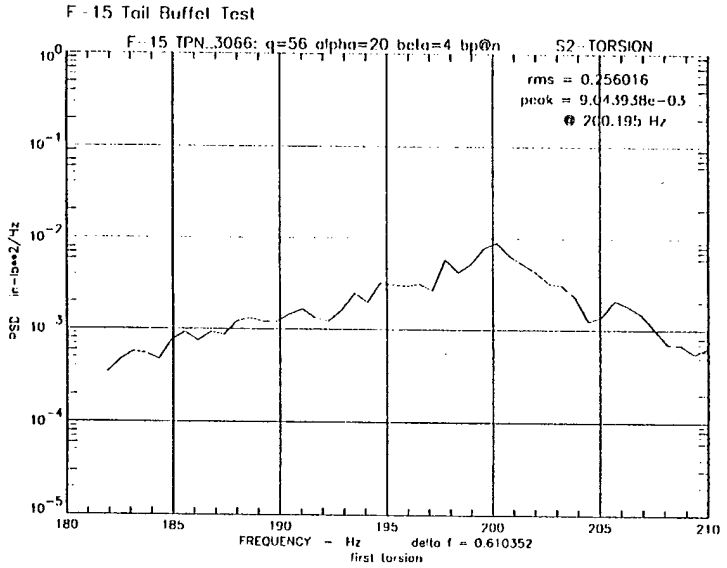

F-15 Tail Buffet Test
F-15 TPN 3056: q=56 alpha=24 beta= 4 bp@n S2 TORSION
rms = 0.632505
peak = 4.914386e-02
@ 198.975 Hz
PSD in-lbs**2/Hz
10.0000
1.0000
0.1000
0.0100
0.0010
0.0001
180
185
190
195
200
205
210
FREQUENCY - Hz delta f = 0.610352
first torsion

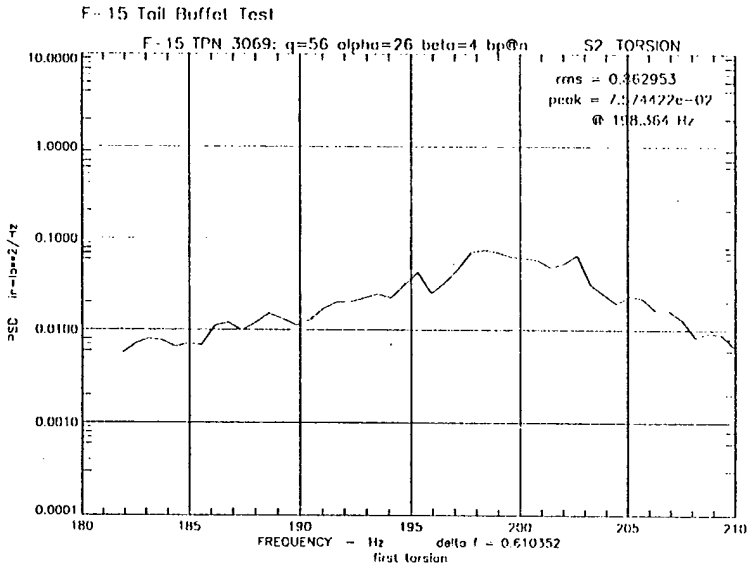

F-15 Tail Buffet Test
F-15 TPN 3063: q=56 alpha=26 beta=0 bp@n S2 TORSION
rms = 0.449799
peak = 3.184766.3e-07
@ 202.026 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

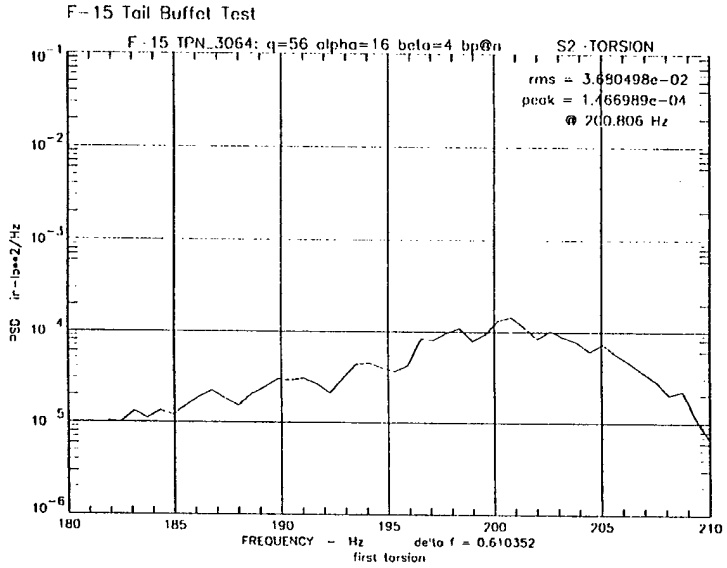

F-15 Tail Buffet Test
F-15 TPN 3062: q=56 alpha=24 beta=0 bp@n S2 TORSION
rms = 0.182255
peak = 6.66176e-02
@ 198.364 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

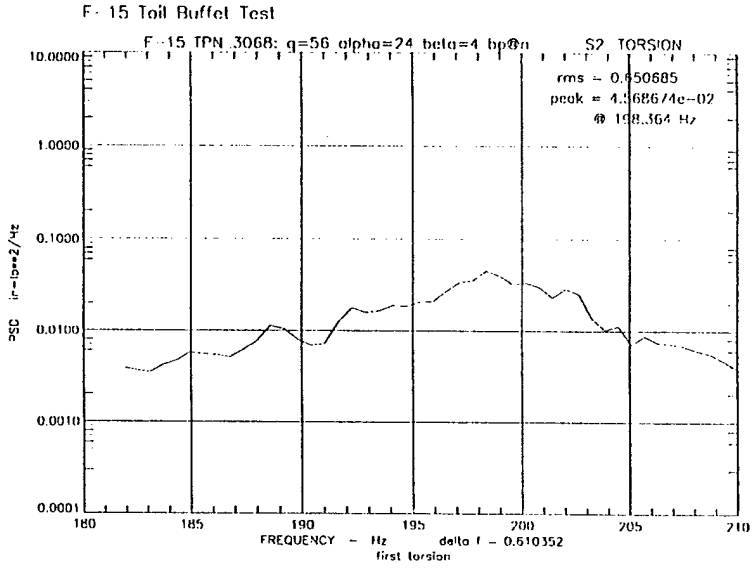

F-15 Tail Buffet Test
F-15 TPN 3060: q=56 alpha=20 beta=0 bp@n S2 TORSION
rms = 0.497606
peak = 2.142872e-07
@ 198.975 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion


F-15 Tail Buffet Test
F-15 TPN 3058: q=56 alpha=16 beta=0 bp@n S2 TORSION
rms = 5.710256e-02
peak = 3.513360e-04
@ 200.195 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

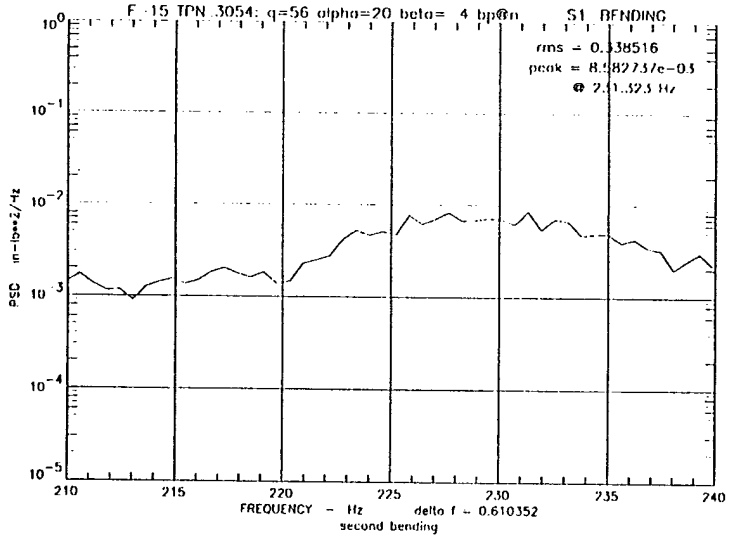

F-15 Tail Buffet Test
F-15 TPN_3066: q=56 alpha=20 beta=4 bp@n
S2 TORSION
rms = 0.256016
peak = 9.043938e-03
@ 200.195 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion


F-15 Tail Buffet Test
F-15 TPN_3069: q=56 alpha=26 beta=4 bp@n
S2 TORSION
rms = 0.362953
peak = 7.574422e-02
@ 198.364 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

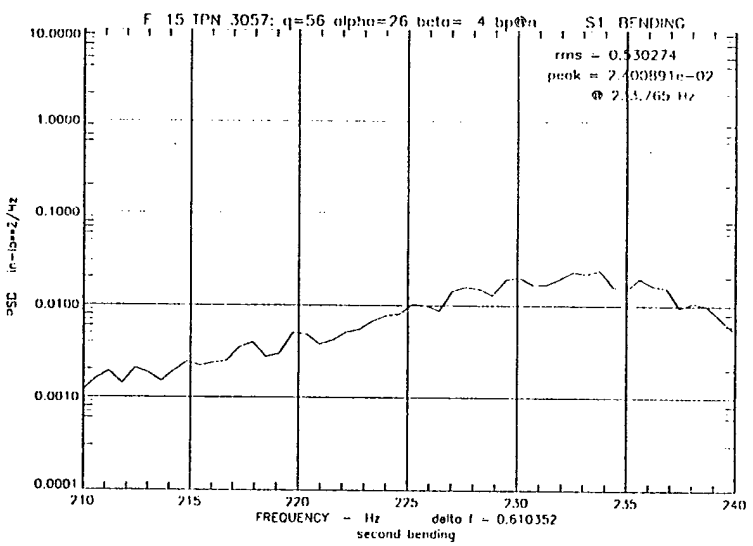

F-15 Tail Buffet Test
F-15 TPN_3064: q=56 alpha=16 beta=4 bp@n
S2 TORSION
rms = 3.680498e-02
peak = 1.466989e-04
@ 200.806 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion


F-15 Tail Buffet Test
F-15 TPN_3068: q=56 alpha=24 beta=4 bp@n
S2 TORSION
rms = 0.650685
peak = 4.568674e-02
@ 198.364 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

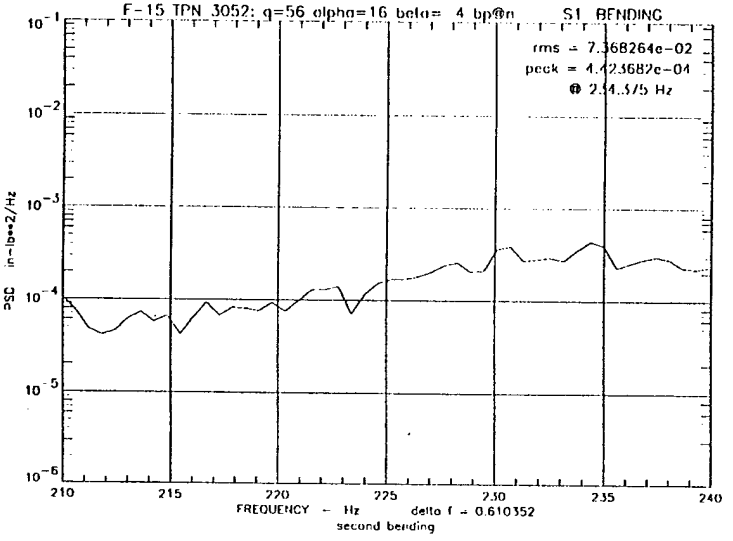
F-15 Tail Buffet Test



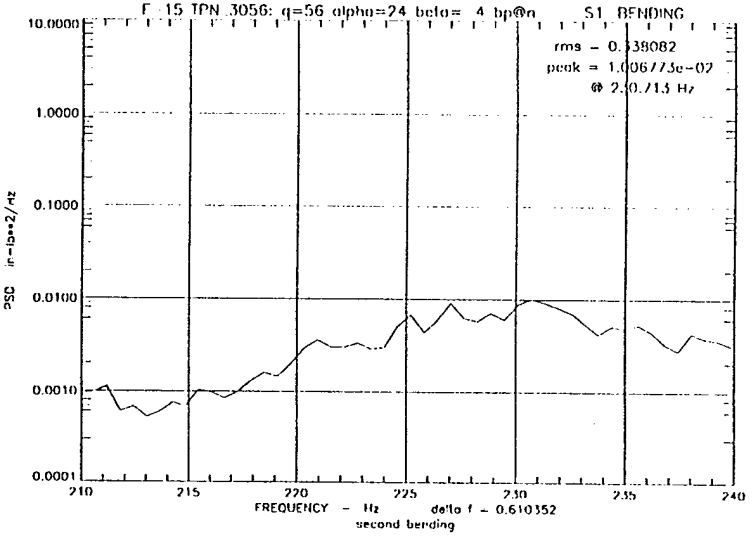
F-15 Tail Buffet Test



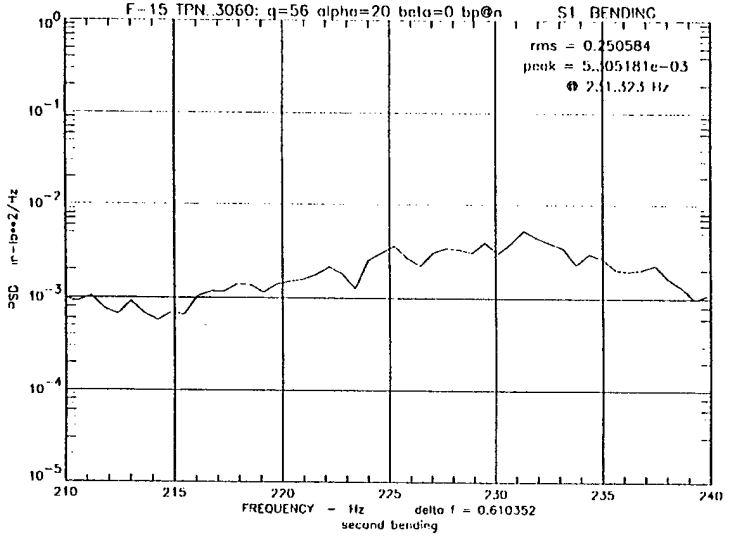
F-15 Tail Buffet Test



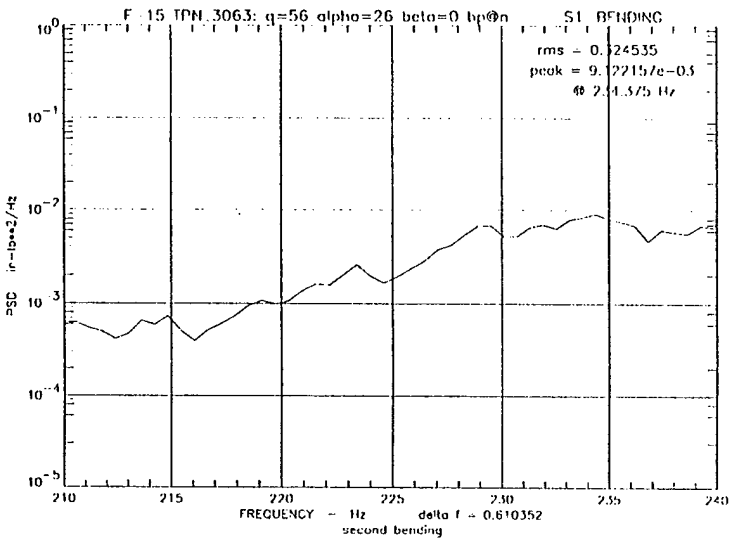
F-15 Tail Buffet Test



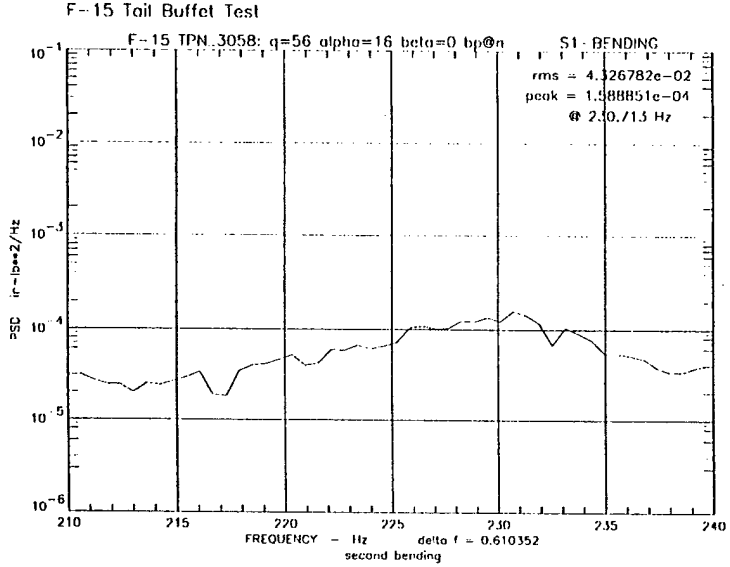
F-15 Tail Buffet Test



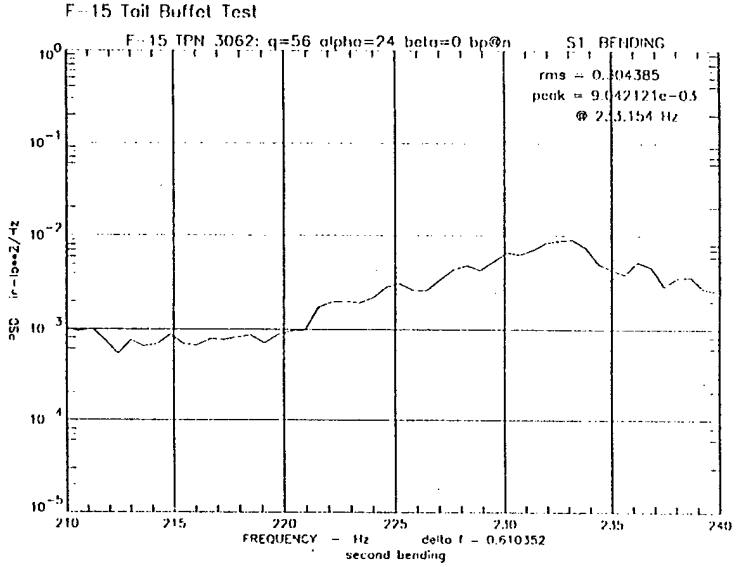
F-15 Tail Buffet Test



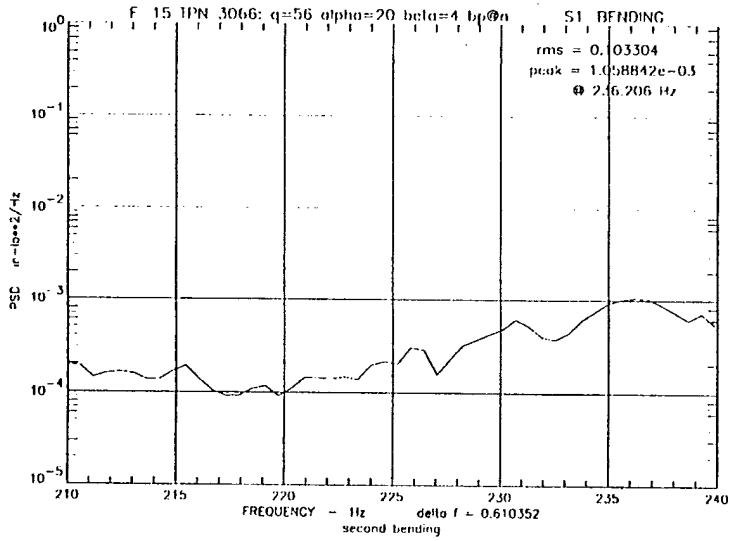
F-15 Tail Buffet Test



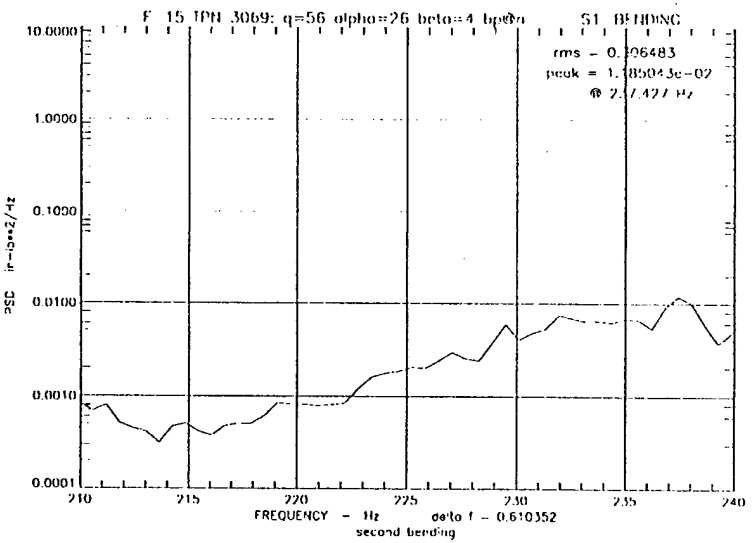
F-15 Tail Buffet Test



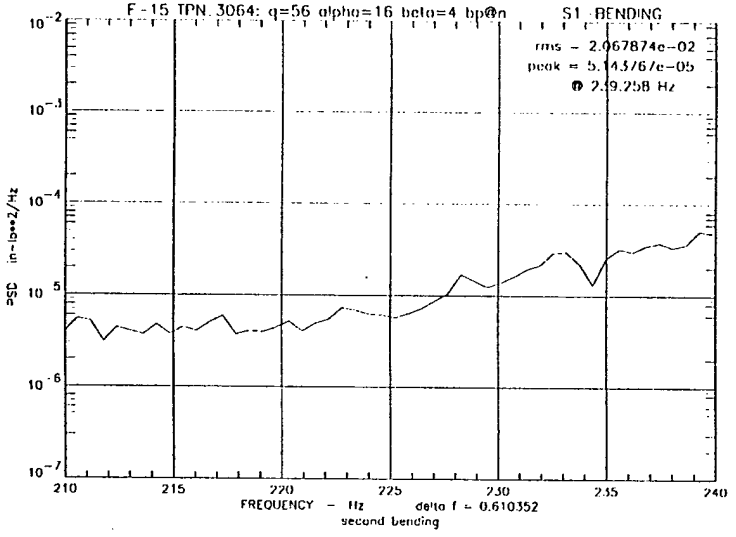
F-15 Tail Buffet Test



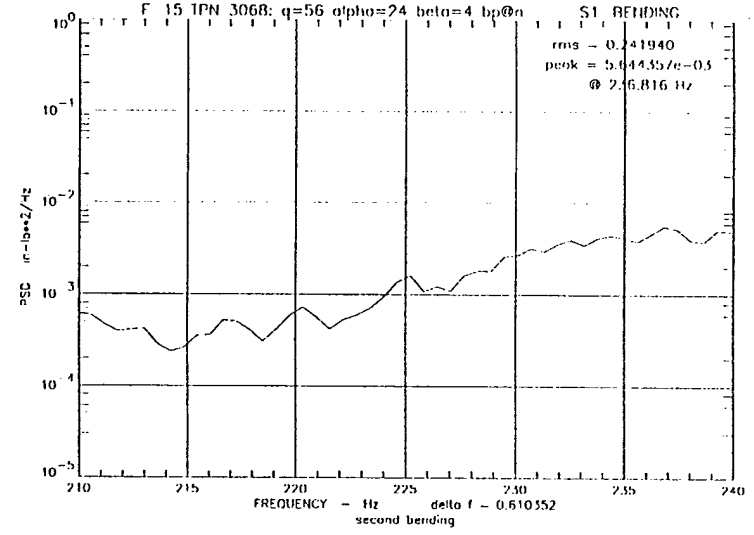
F-15 Tail Buffet Test



F-15 Tail Buffet Test



F-15 Tail Buffet Test

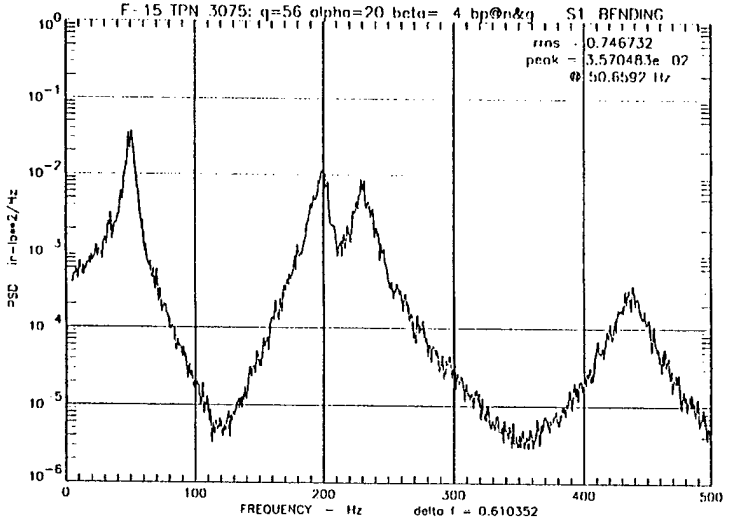


FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION
PSD GRAPHS
Q= 56 PSF
2.1.1.5 NBP = 87 psi, GBP = 65 psi, BETA= 0, +4, -4, ALPHA = 0....32 Deg

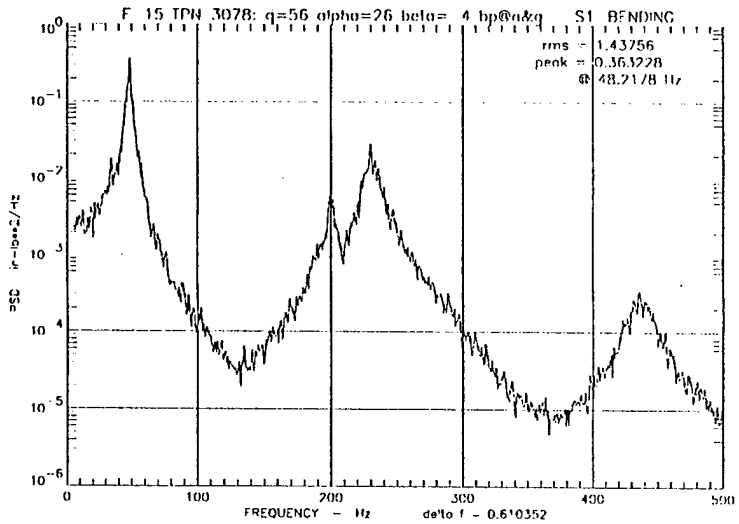
FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

2.1.1.5 NBP = 87 psi, GBP = 65 psi, BETA= 0, +4, -4, ALPHA = 0....32 Deg

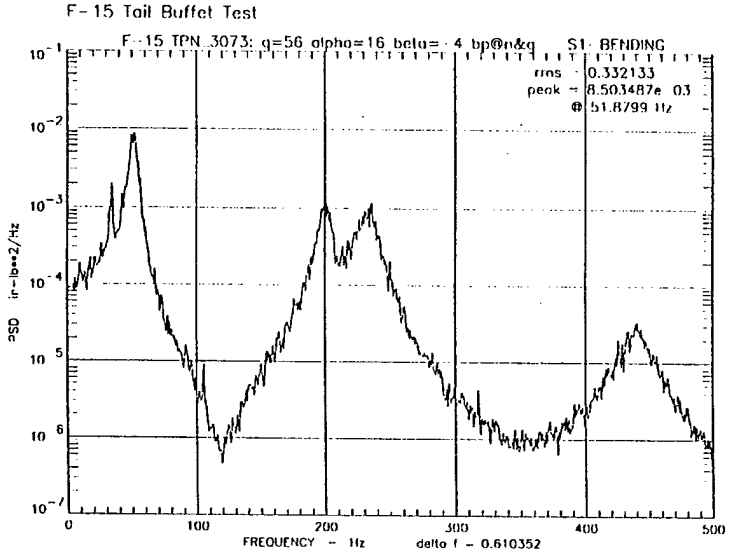
F-15 Tail Buffet Test



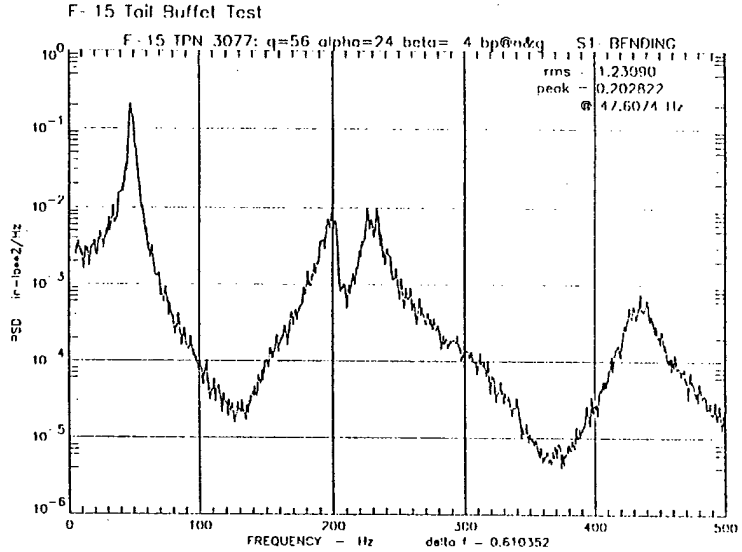
F-15 Tail Buffet Test



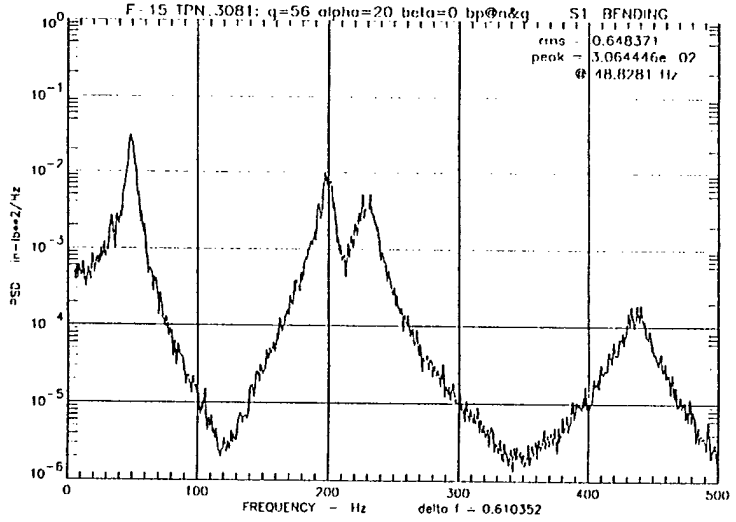
F-15 Tail Buffet Test



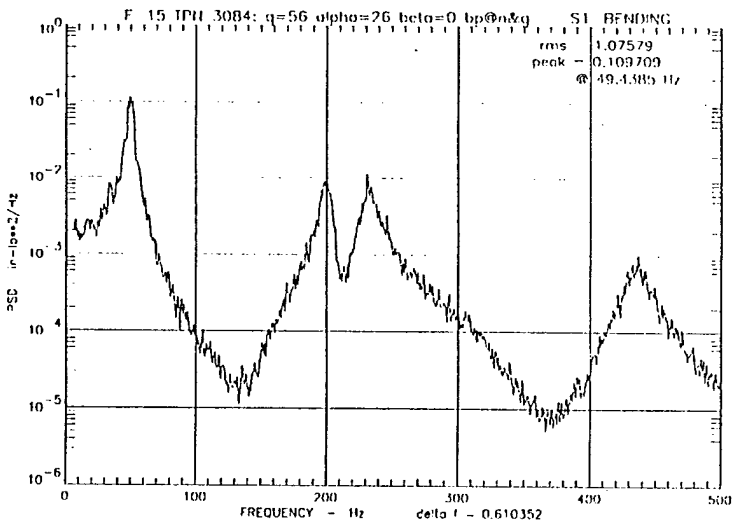
F-15 Tail Buffet Test



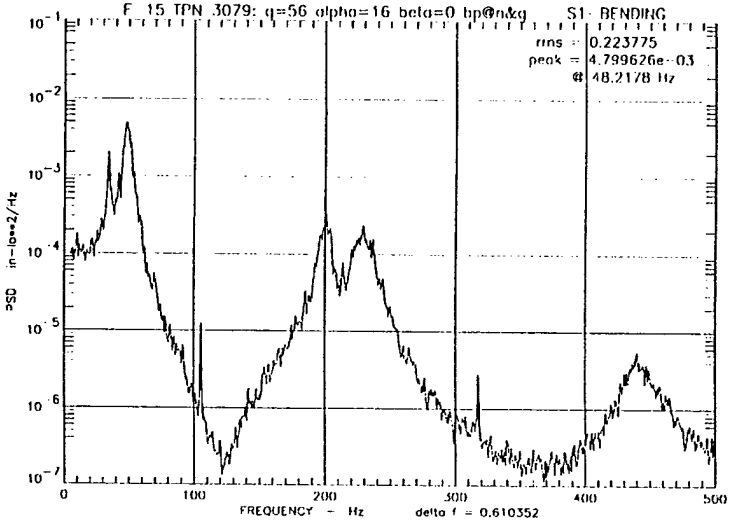
F-15 Tail Buffet Test



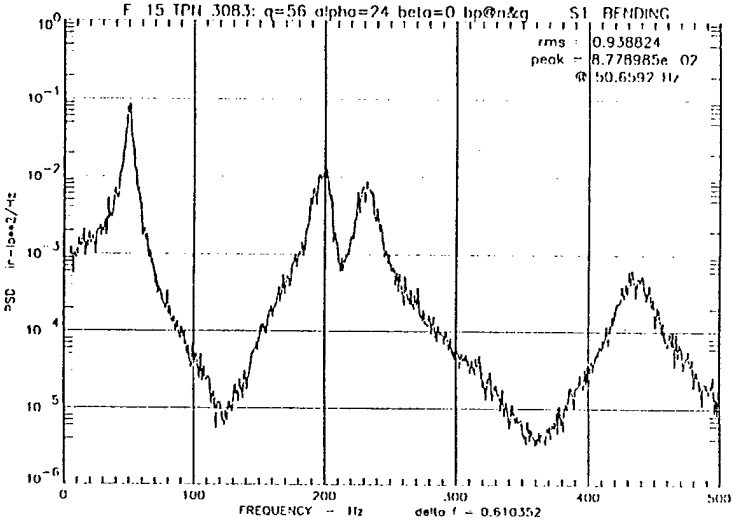
F 15 Tail Buffet Test



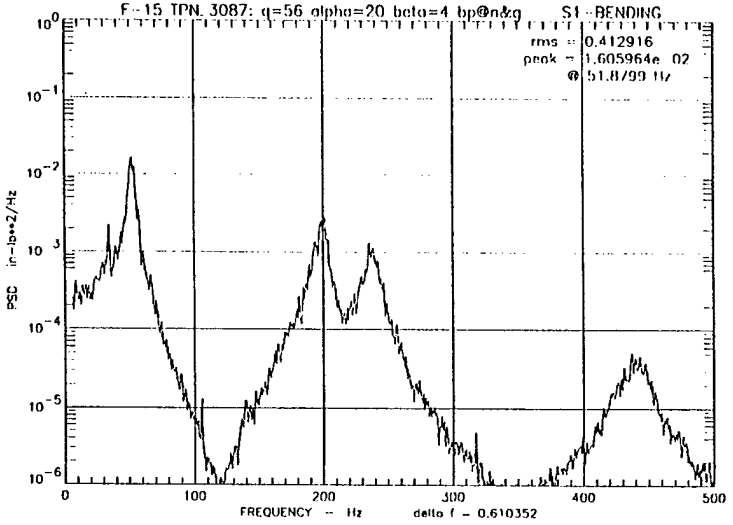
F-15 Tail Buffet Test



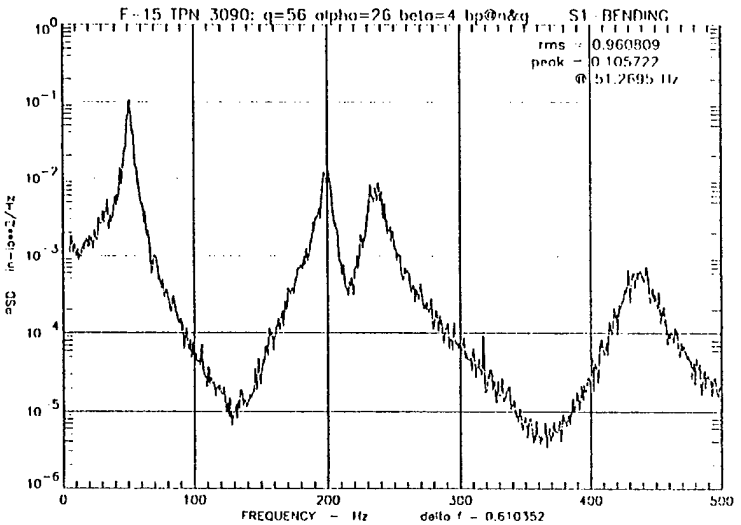
F-15 Tail Buffet Test



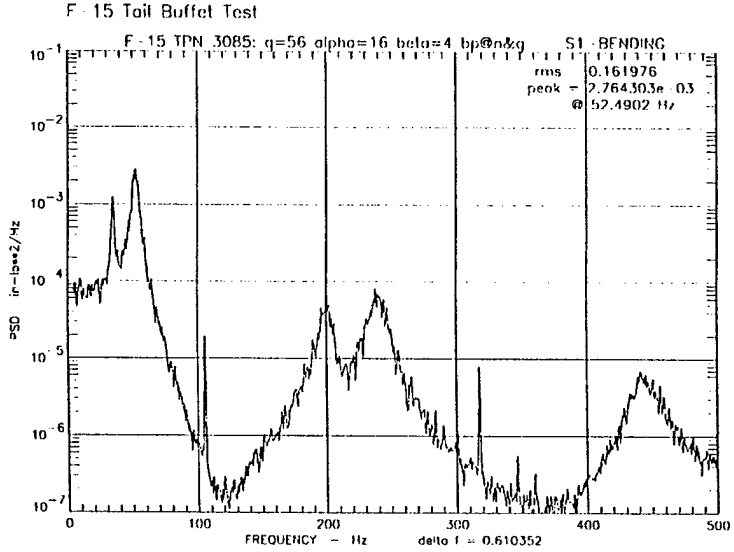
F-15 Tail Buffet Test



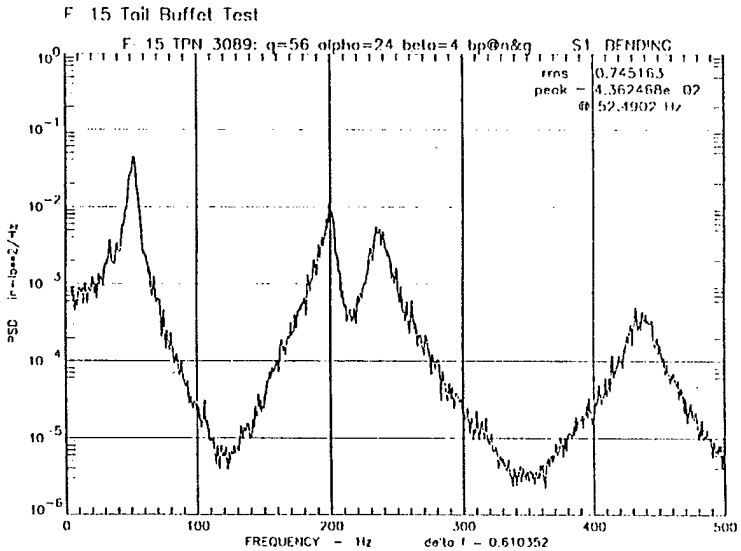
F-15 Tail Buffet Test

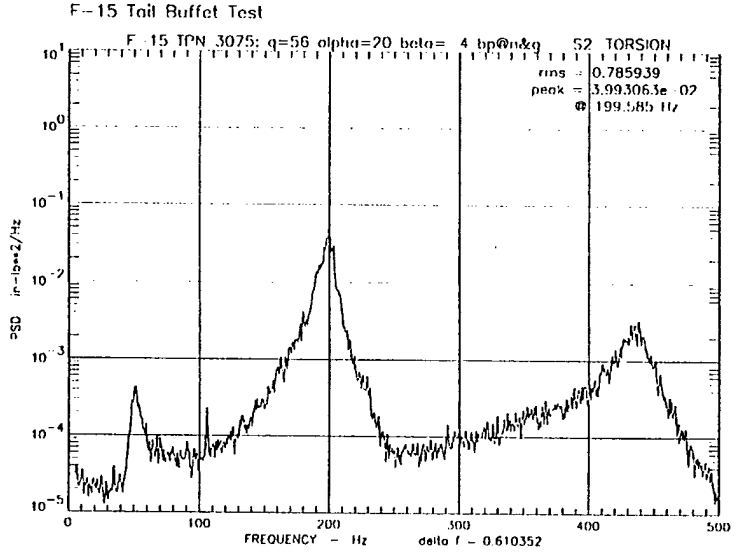


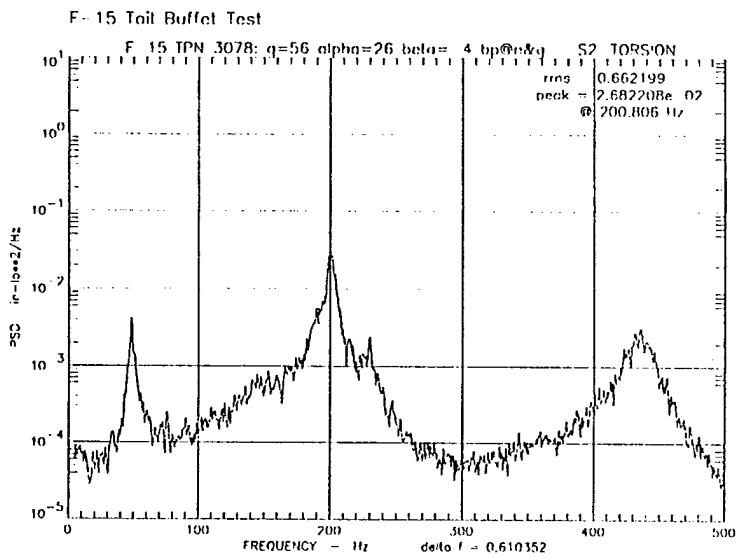
F-15 Tail Buffet Test

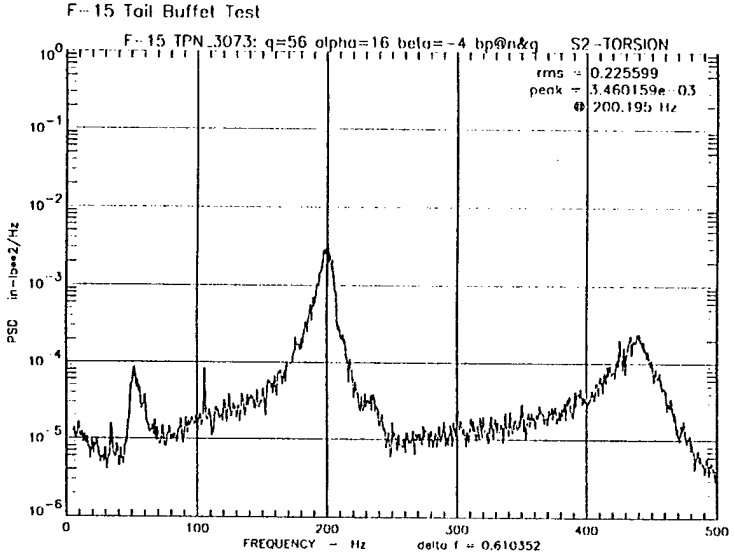


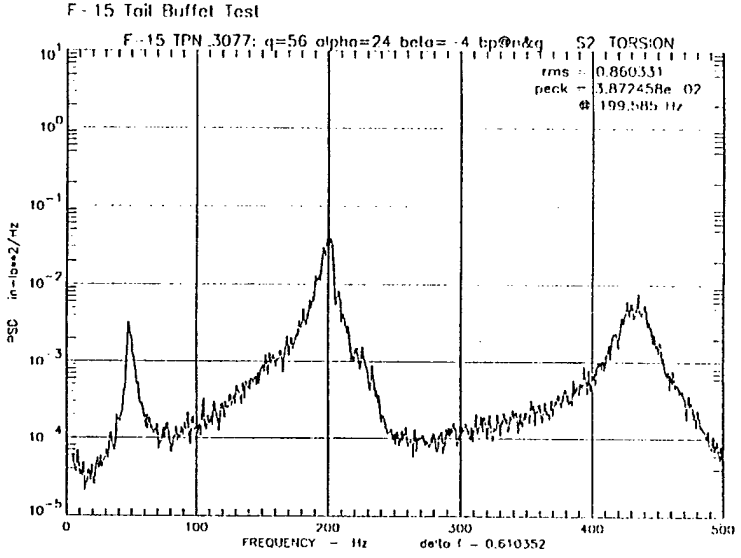
F-15 Tail Buffet Test

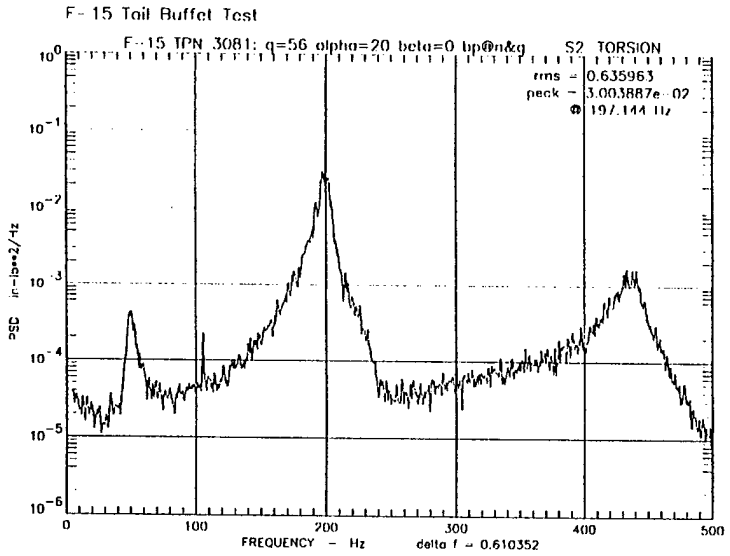


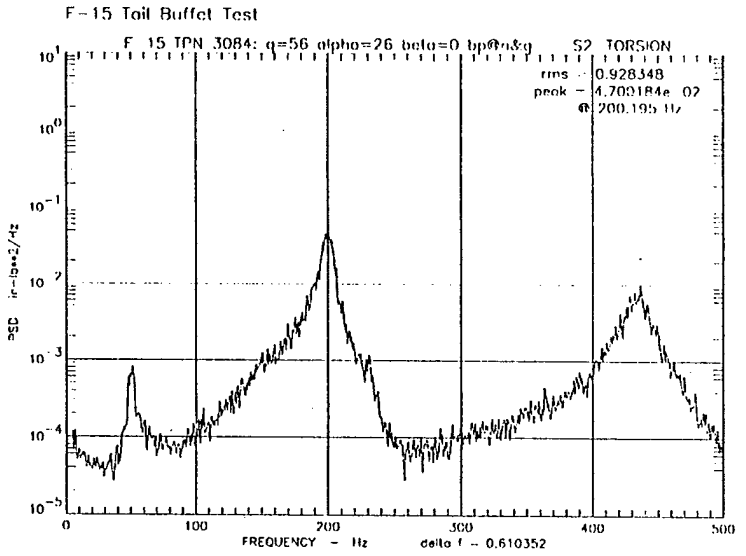

F-15 Tail Buffet Test
F_15 TPN_3075: q=56 alpha=20 beta= 4 bp@n&q S2 TORSION
rms = 0.785939
peak = 3.99306.3e-02
@ 199.585 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

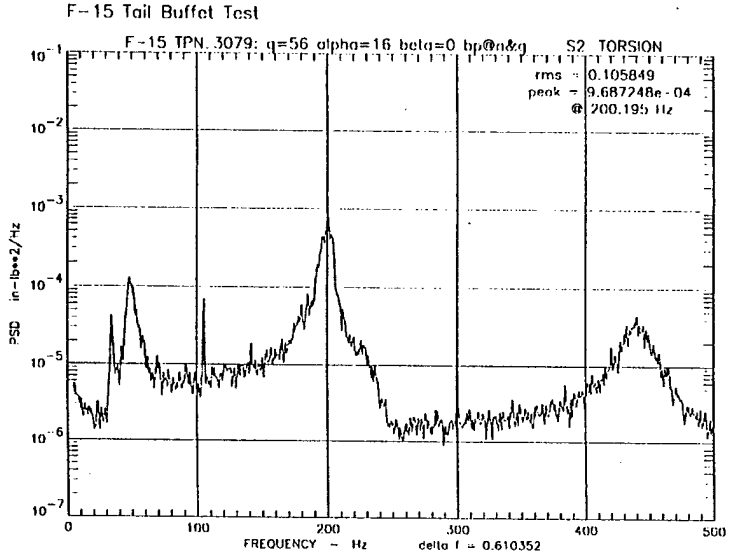

F-15 Tail Buffet Test
F_15 TPN_3078: q=56 alpha=26 beta= 4 bp@n&q S2 TORSION
rms 0.662199
peak = 2.68220Be-02
@ 200.806 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

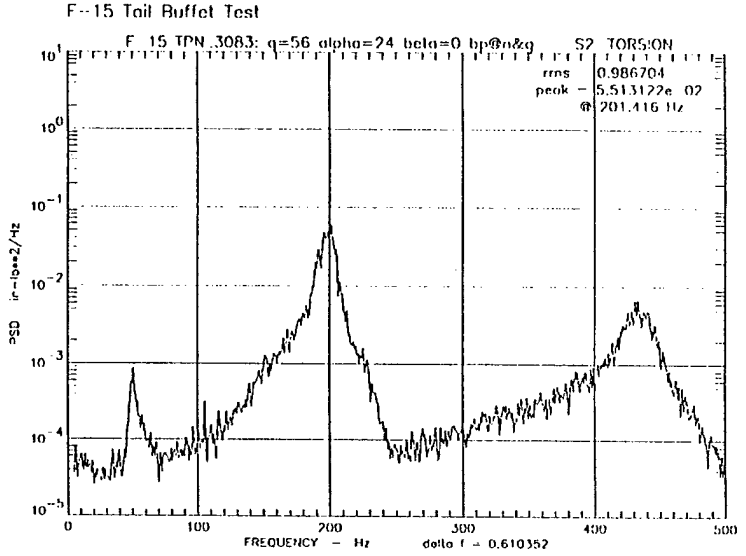

F-15 Tail Buffet Test
F_15 TPN_3073: q=56 alpha=16 beta=-4 bp@n&q S2 -TORSION
rms = 0.225599
peak = 3.460159e-03
@ 200.195 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F_15 TPN_3077: q=56 alpha=24 beta=-4 bp@n&q S2 TORSION
rms = 0.860331
peak = 3.87245Be-02
@ 199.585 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

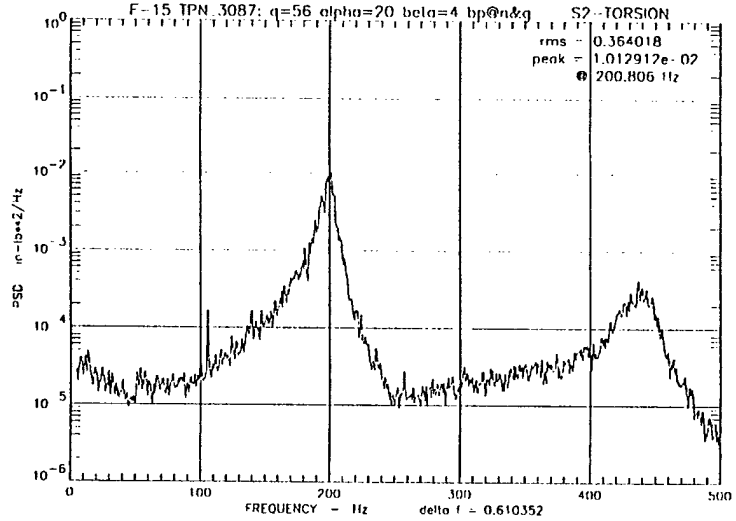

F-15 Tail Buffet Test
F-15 TPN 3081: q=56 alpha=20 beta=0 bp@n&g S2 TORSION
rms = 0.635963
peak = 3.003887e-02
@ 197.144 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN 3084: q=56 alpha=26 beta=0 bp@n&g S2 TORSION
rms = 0.928348
peak = 4.709184e-02
@ 200.195 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

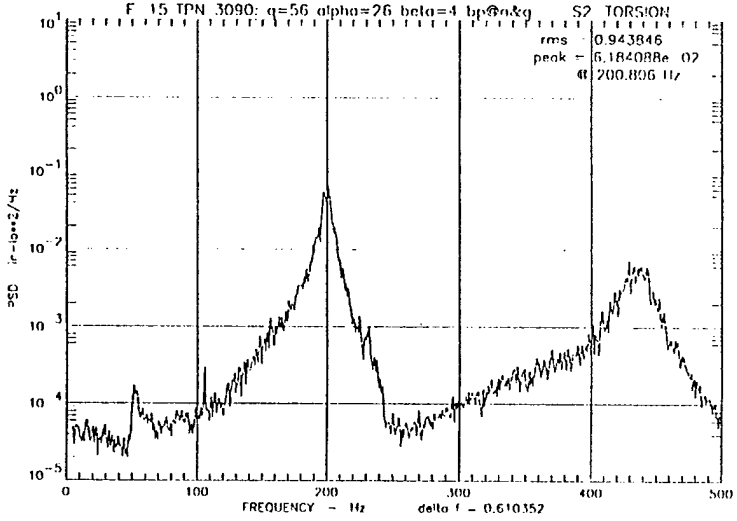

F-15 Tail Buffet Test
F-15 TPN 3079: q=56 alpha=16 beta=0 bp@n&g S2 TORSION
rms = 0.105849
peak = 9.687248e-04
@ 200.195 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN 3083: q=56 alpha=24 beta=0 bp@n&g S2 TORSION
rms = 0.986704
peak = 5.513122e-02
@ 201.416 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

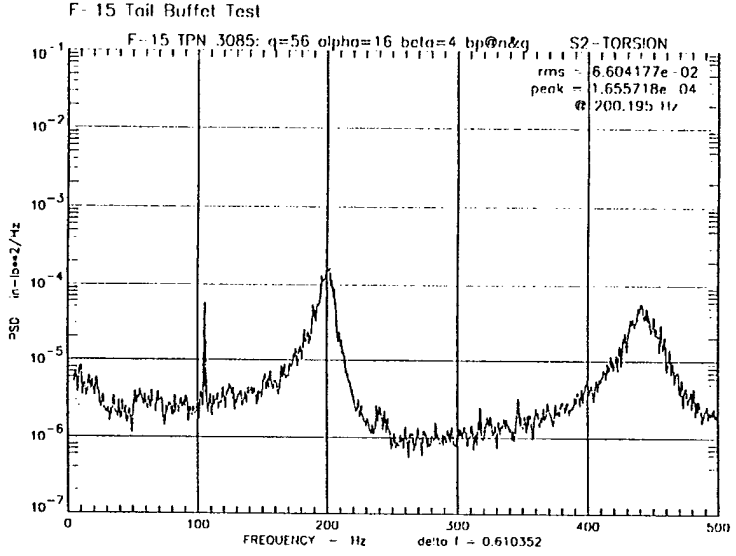
F-15 Tail Buffet Test



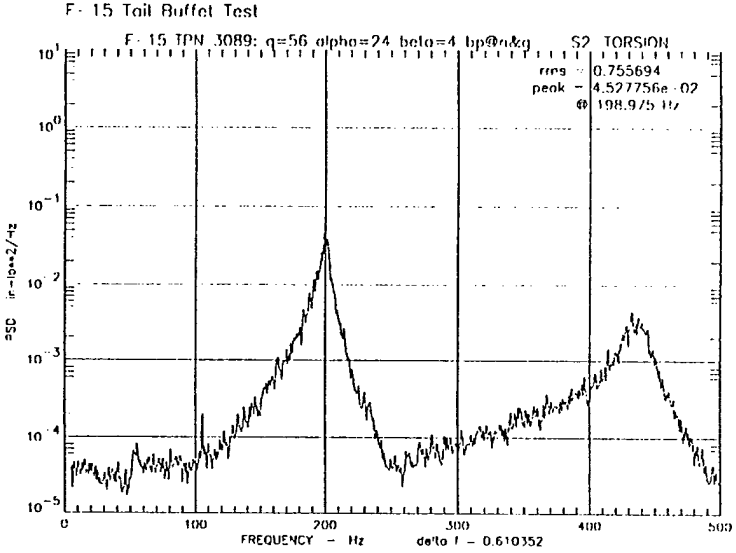
F 15 Tail Buffet Test



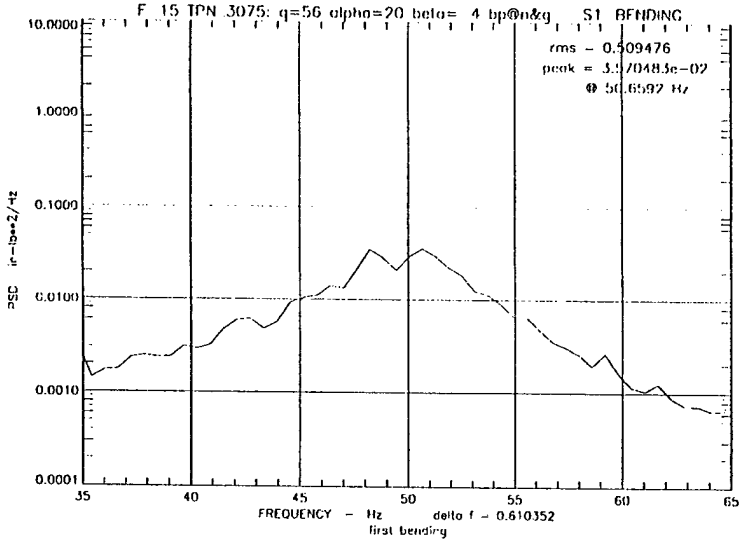
F-15 Tail Buffet Test



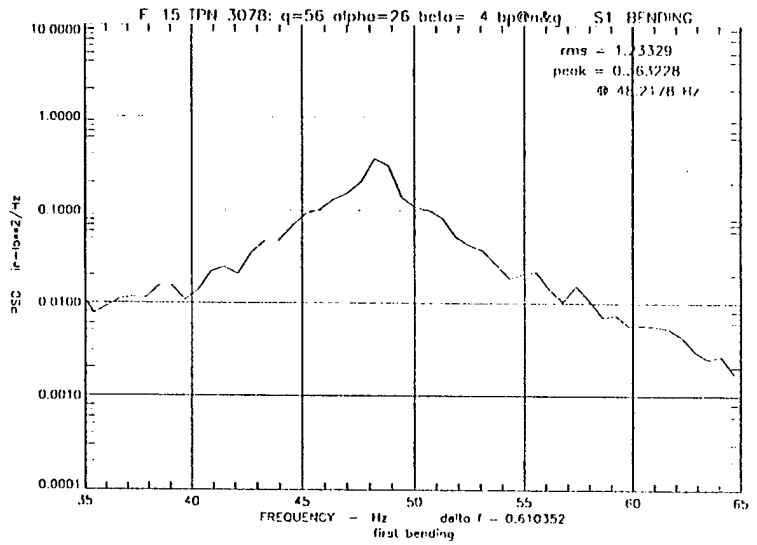
F- 15 Tail Buffet Test



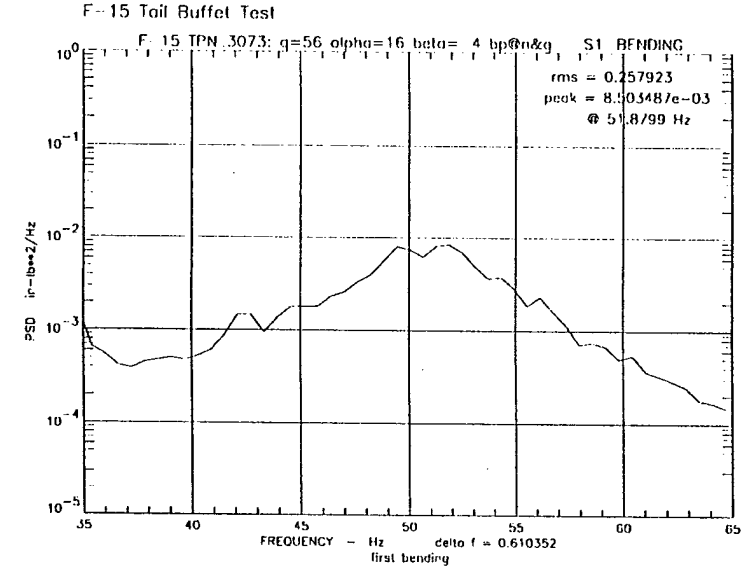
F-15 Tail Buffet Test



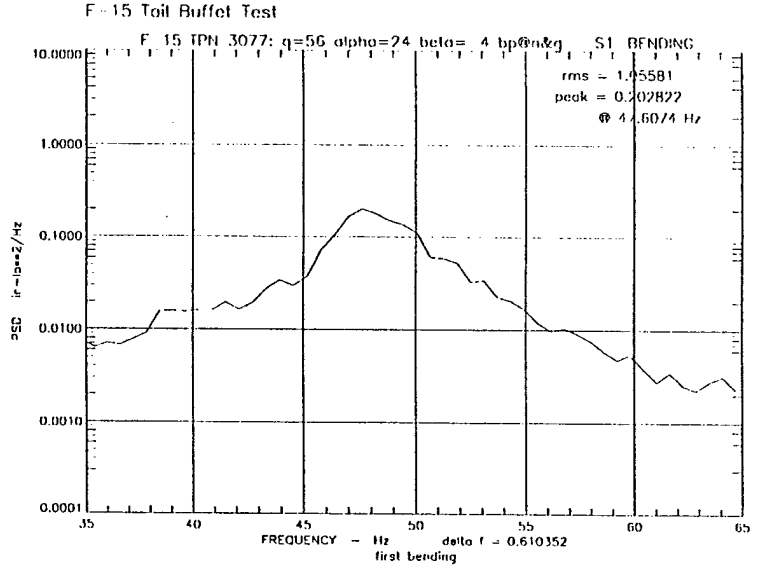
F-15 Tail Buffet Test

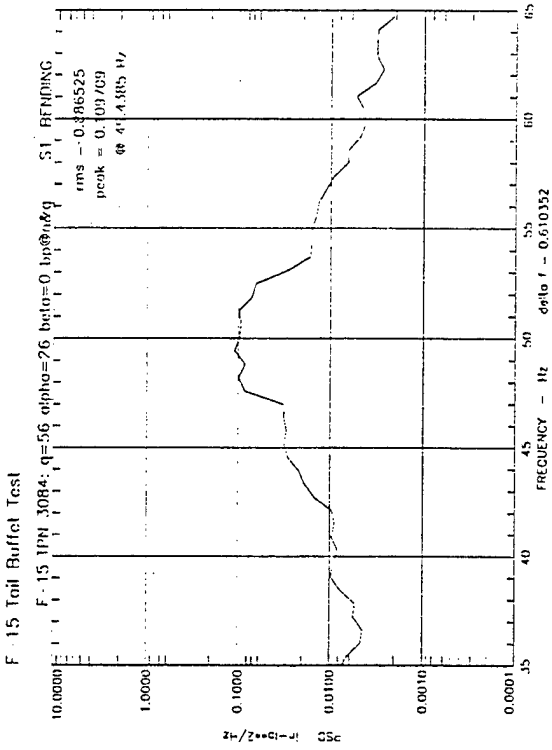


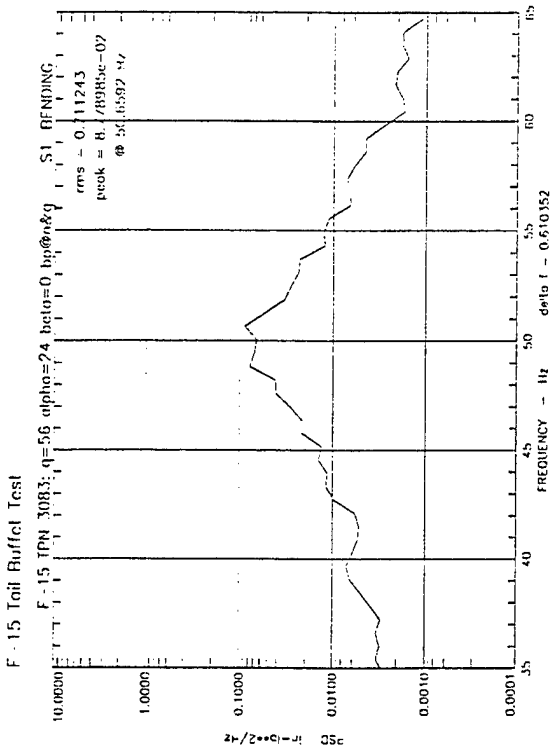
F-15 Tail Buffet Test

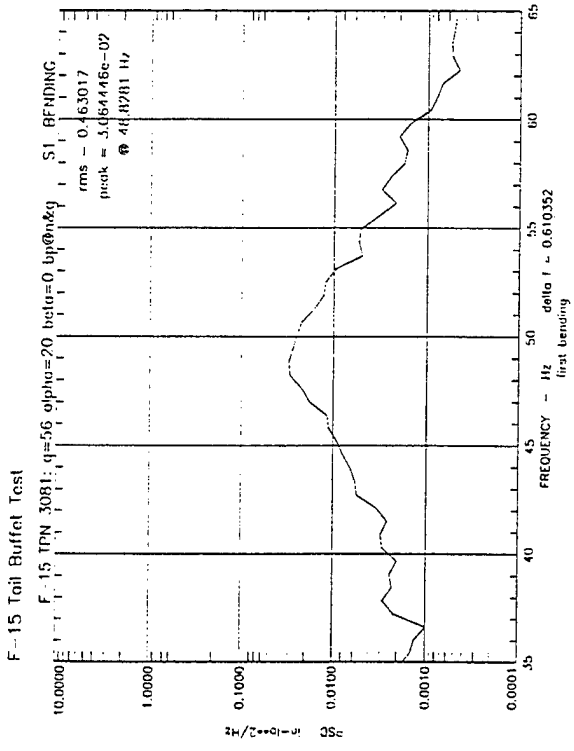


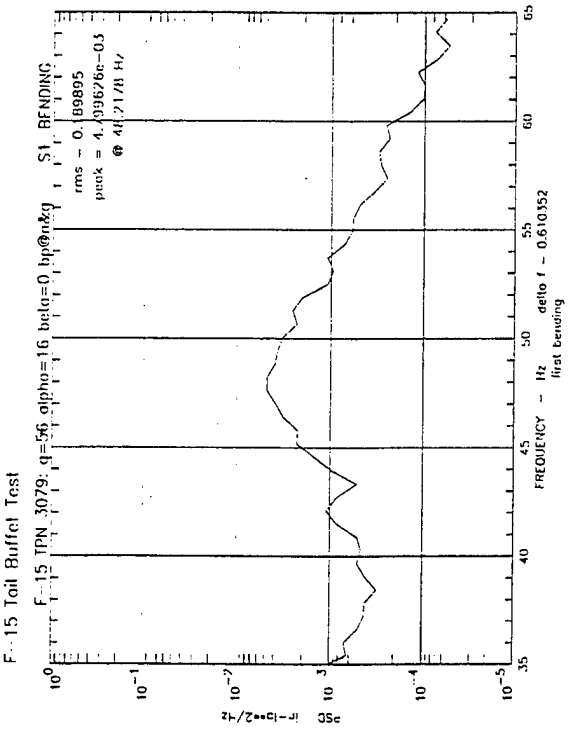
F-15 Tail Buffet Test



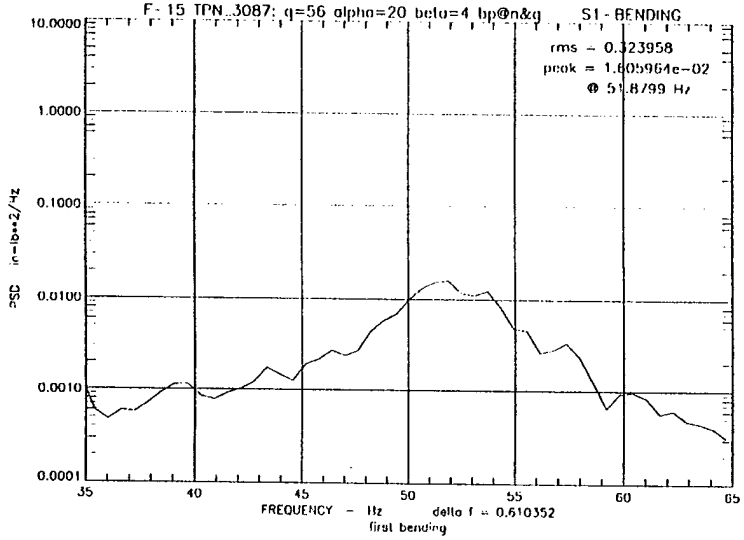

F-15 Tail Buffet Test
F-15 TPN 3084: q=56 alpha=26 beta=0 bp@n&g S1 BENDING
rms = 0.086525
peak = 0.109709
@ 41.4385 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
F-15 TPN 3083: q=56 alpha=24 beta=0 bp@n&g S1 BENDING
rms = 0.111243
peak = 8.789836e-02
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

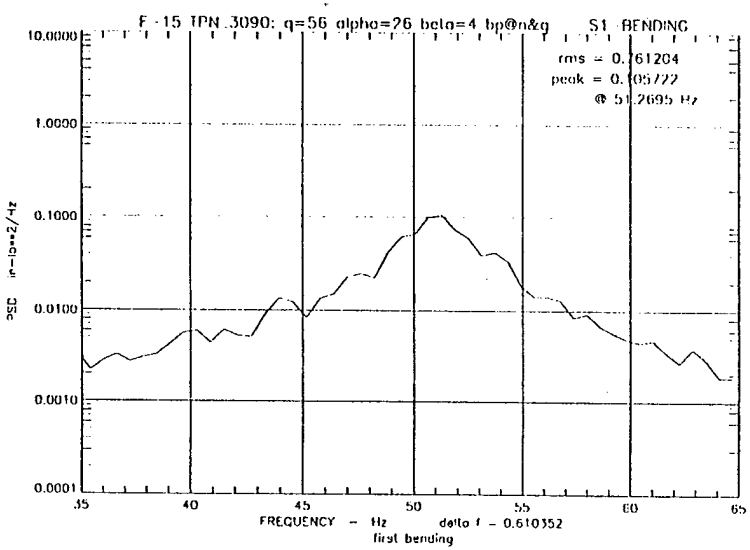

F-15 Tail Buffet Test
F-15 TPN 3081: q=56 alpha=20 beta=0 bp@n&g S1 BENDING
rms = 0.463017
peak = 3.064446e-02
@ 46.4981 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
F-15 TPN 3079: q=56 alpha=16 beta=0 bp@n&g S1 BENDING
rms = 0.189895
peak = 4.996768e-03
@ 46.9178 Hz
PSD in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

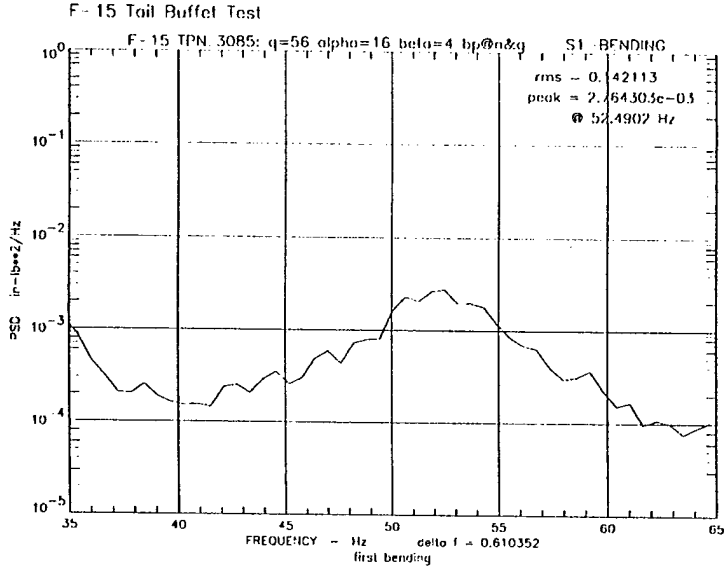
F-15 Tail Buffet Test



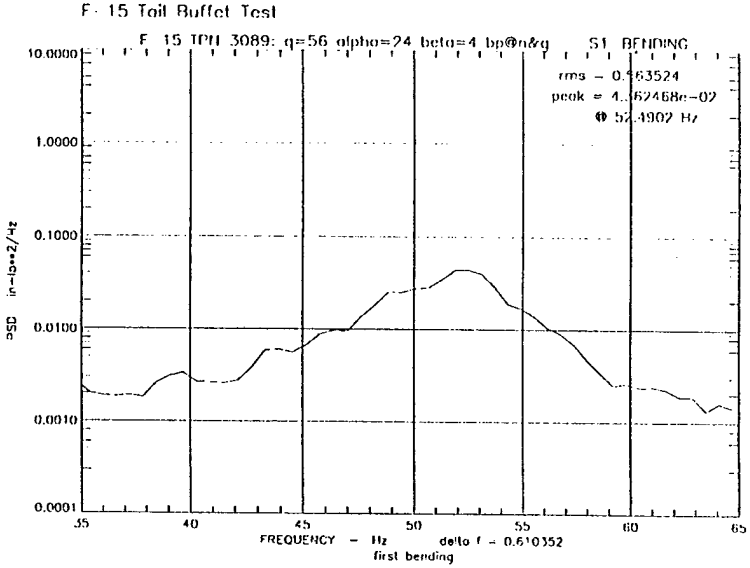
F-15 Tail Buffet Test



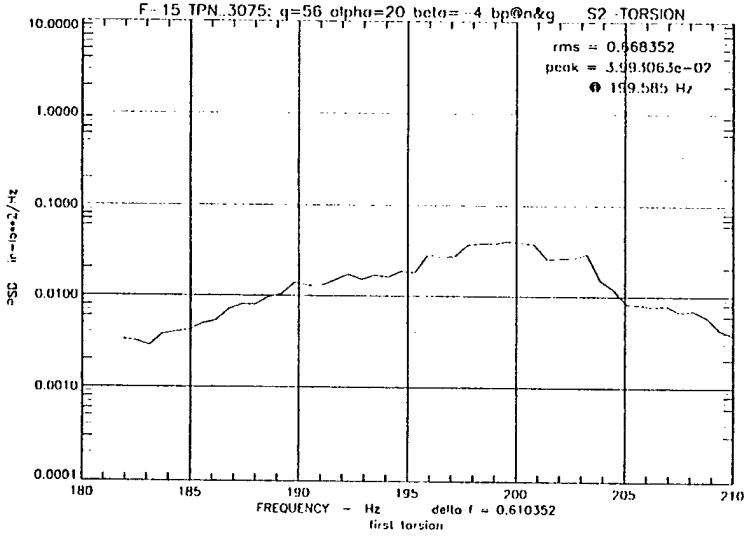
F-15 Tail Buffet Test



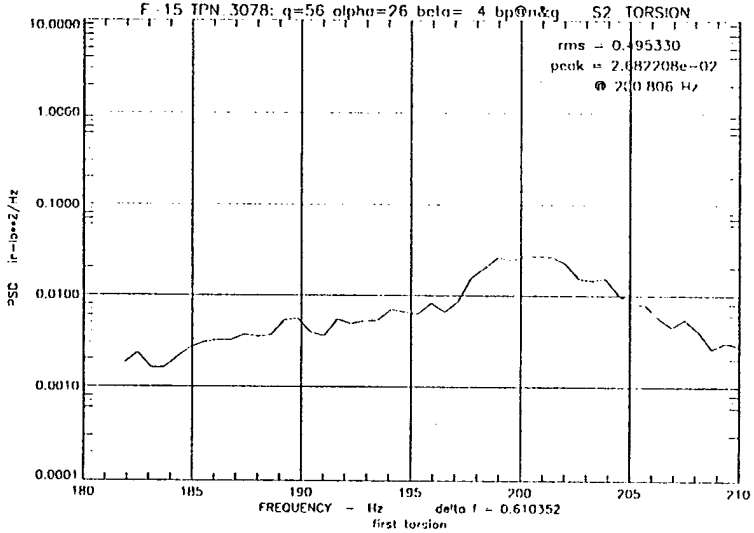
F-15 Tail Buffet Test



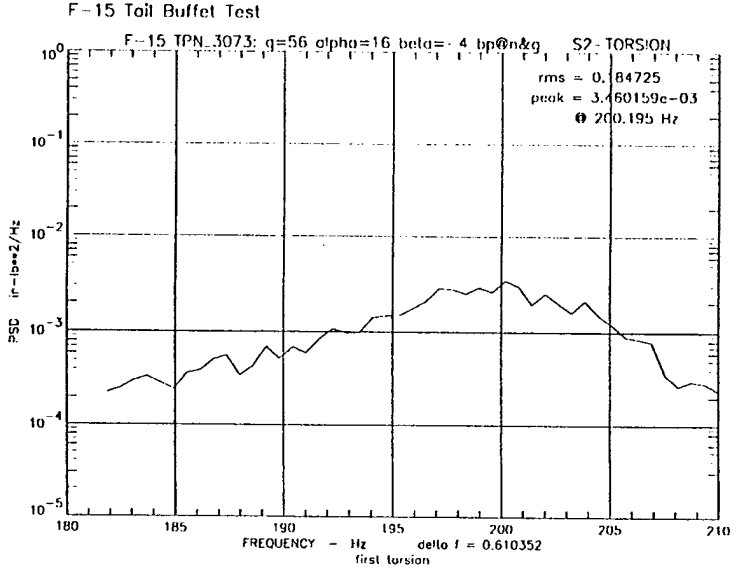
F-15 Tail Buffet Test



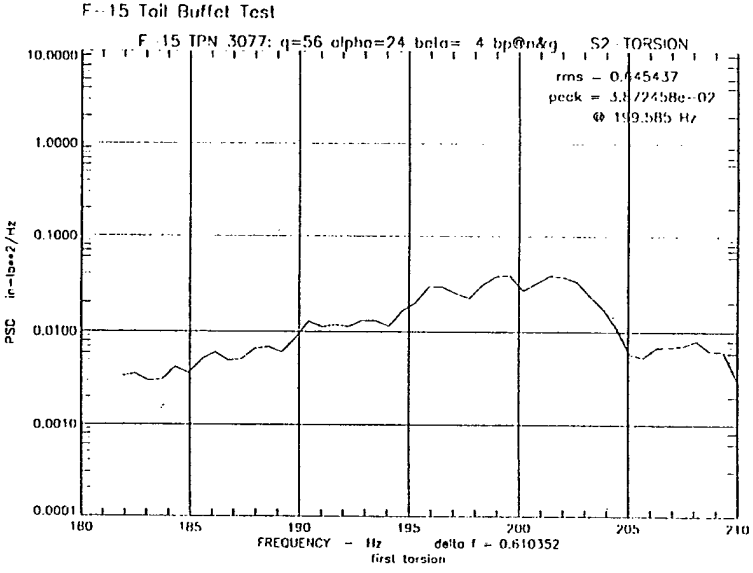
F-15 Tail Buffet Test

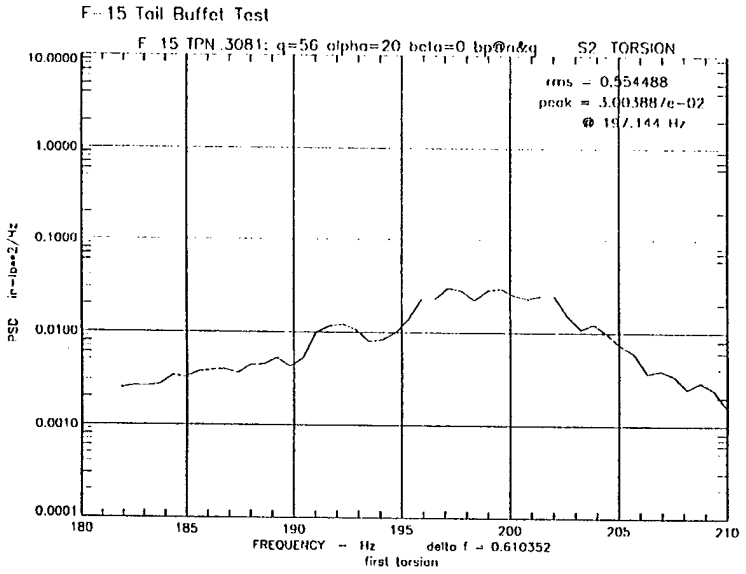


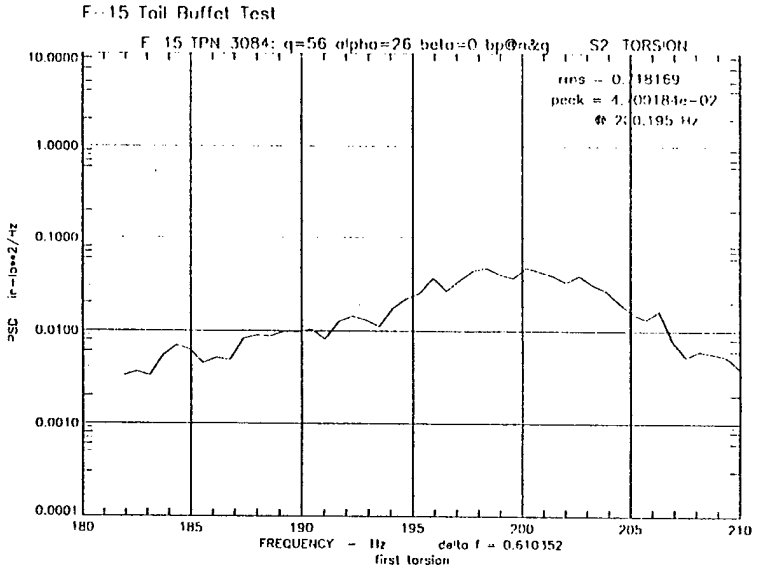
F-15 Tail Buffet Test

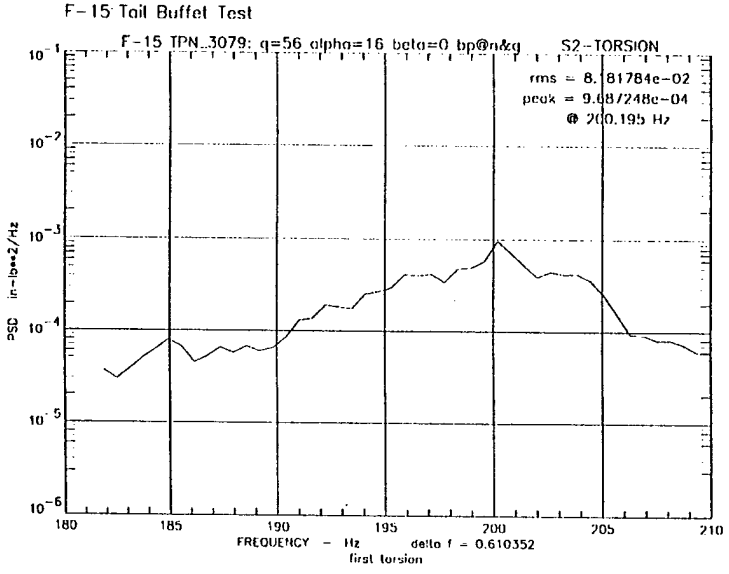


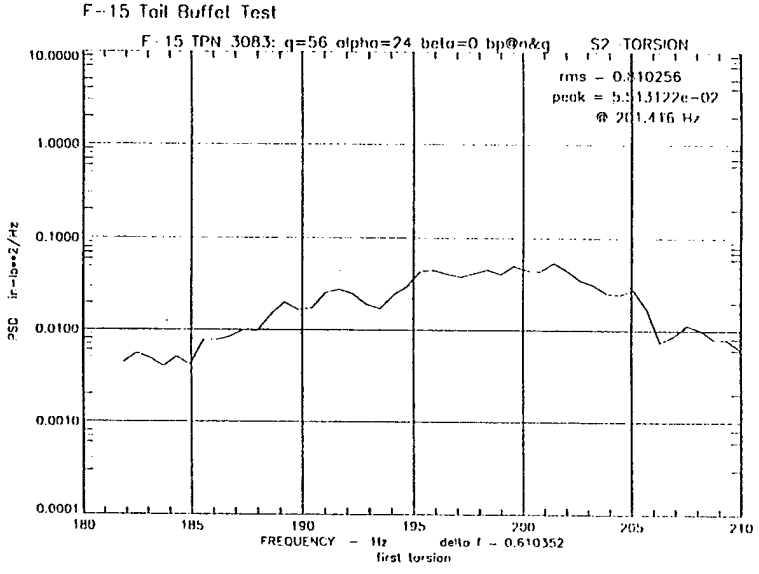
F-15 Tail Buffet Test



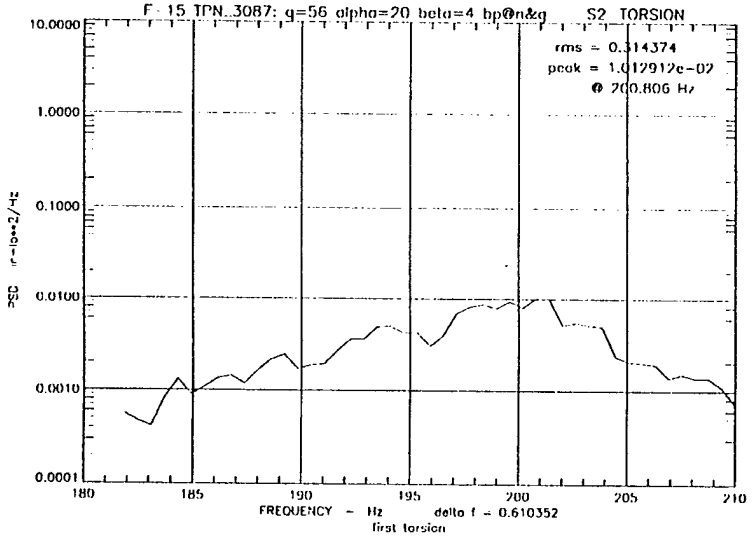

F-15 Tail Buffet Test
F_15 TPN_3081: q=56 alpha=20 beta=0 bp@n&g S2 TORSION
rms = 0.554488
peak = 3.00388/e-02
@ 197.144 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion


F-15 Tail Buffet Test
F_15 TPN_3084: q=56 alpha=26 beta=0 bp@n&g S2 TORSION
rms = 0.718169
peak = 4.700184e-02
@ 200.195 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

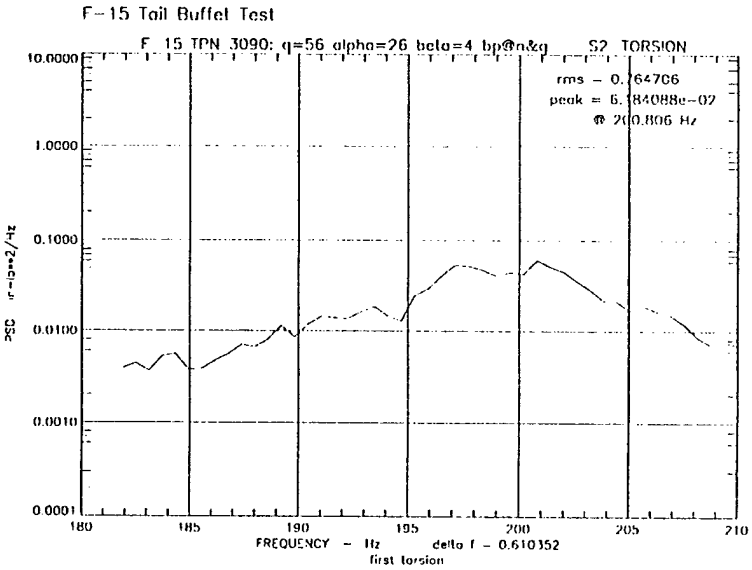

F-15 Tail Buffet Test
F-15 TPN_3079: q=56 alpha=16 beta=0 bp@n&g S2-TORSION
rms = 8.181784e-02
peak = 9.687248e-04
@ 200.195 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion


F-15 Tail Buffet Test
F_15 TPN_3083: q=56 alpha=24 beta=0 bp@n&g S2 TORSION
rms = 0.5310256
peak = 5.513122e-02
@ 201.416 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

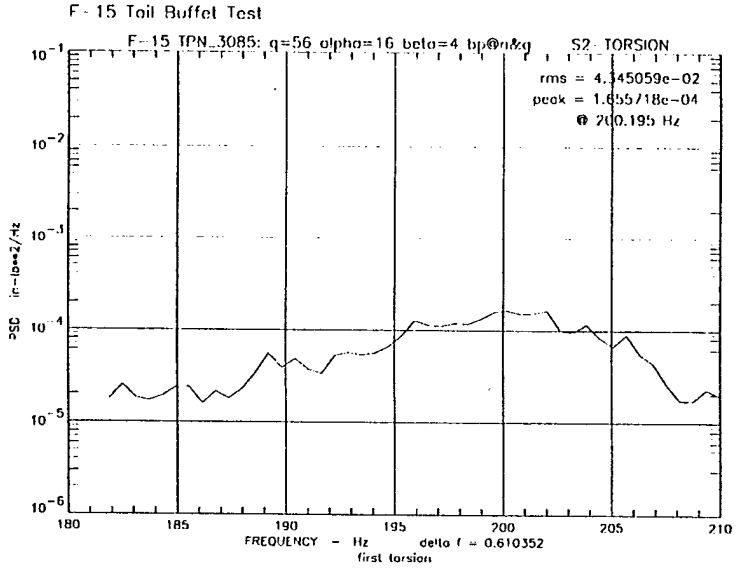
F-15 Tail Buffet Test



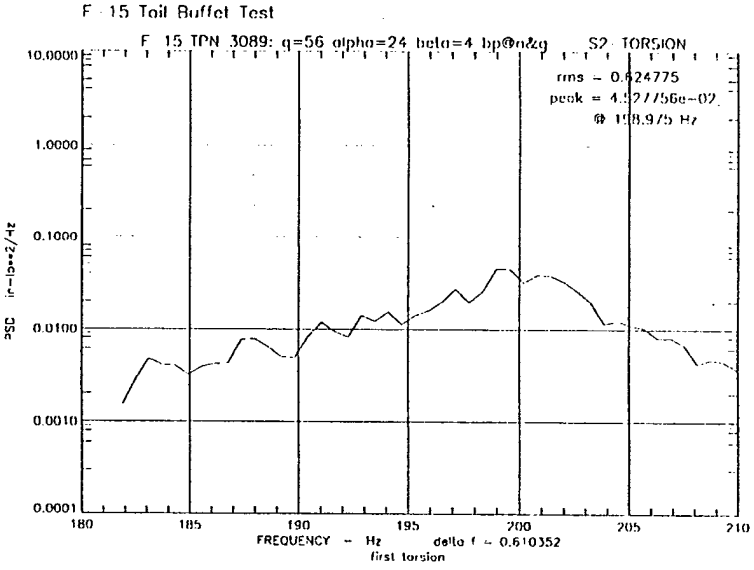
F-15 Tail Buffet Test



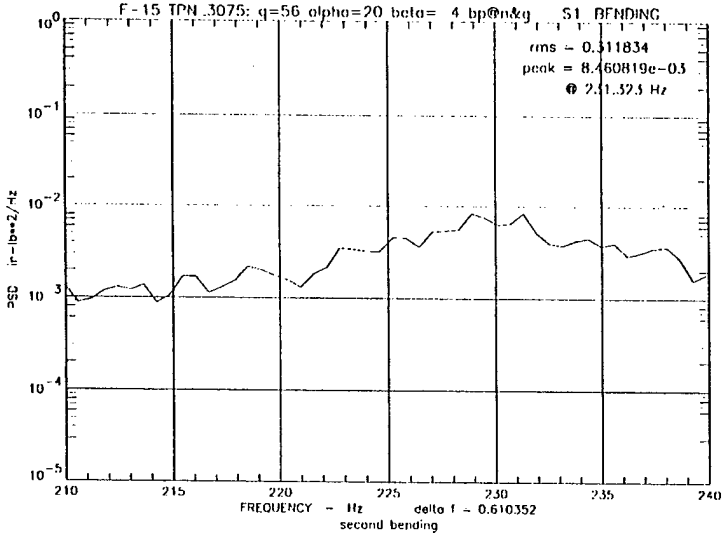
F-15 Tail Buffet Test



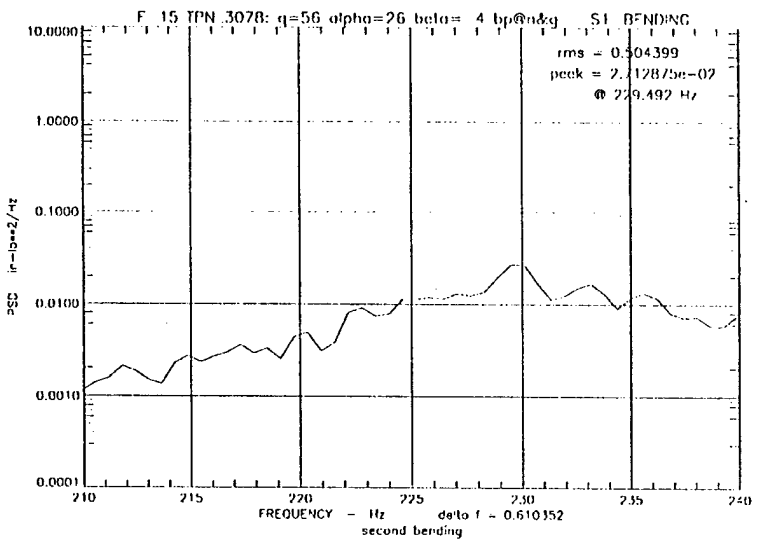
F-15 Tail Buffet Test



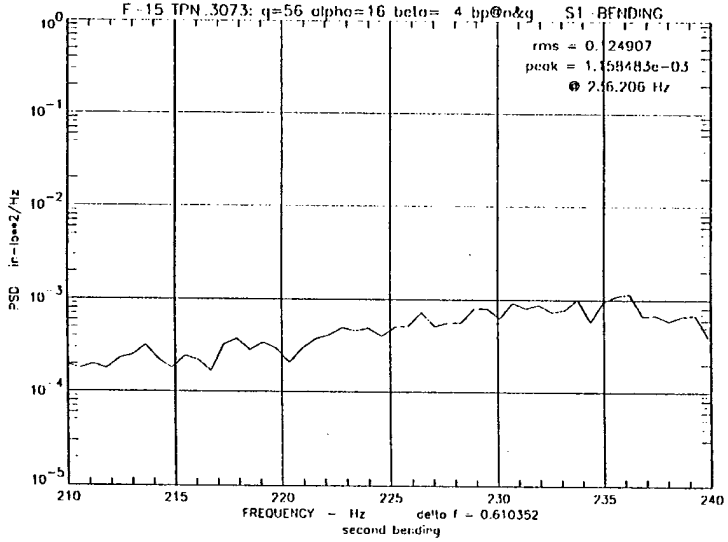
F-15 Tail Buffet Test



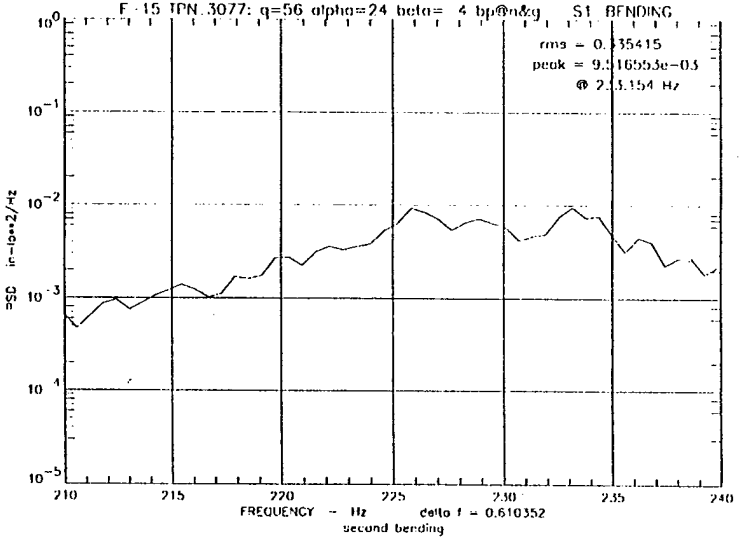
F-15 Tail Buffet Test



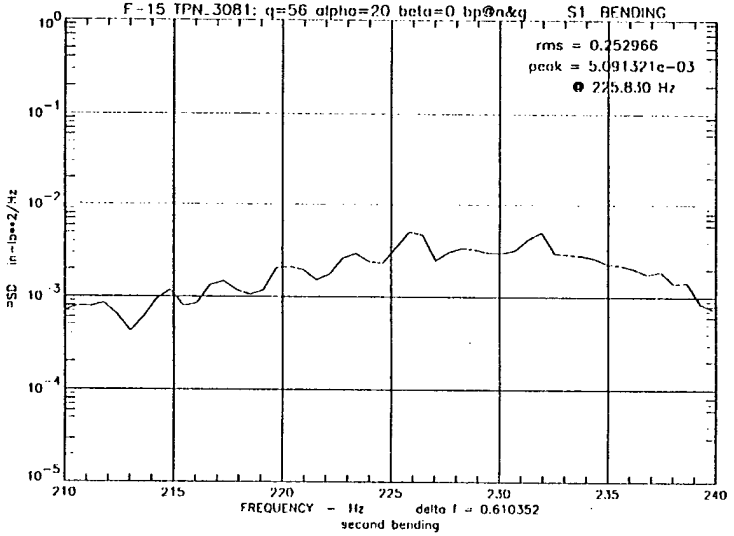
F-15 Tail Buffet Test



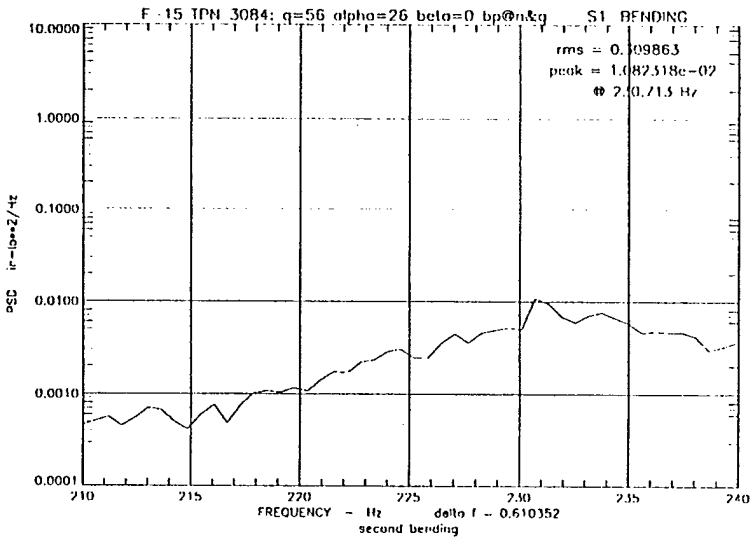
F-15 Tail Buffet Test



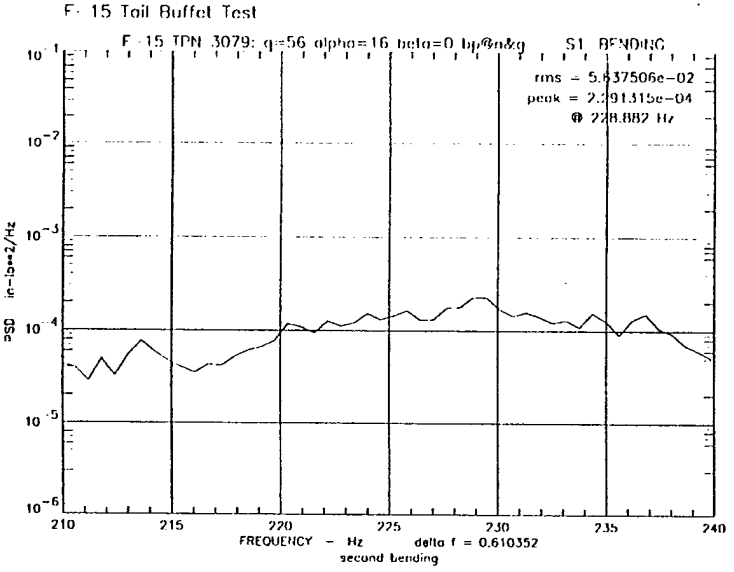
F-15 Tail Buffet Test



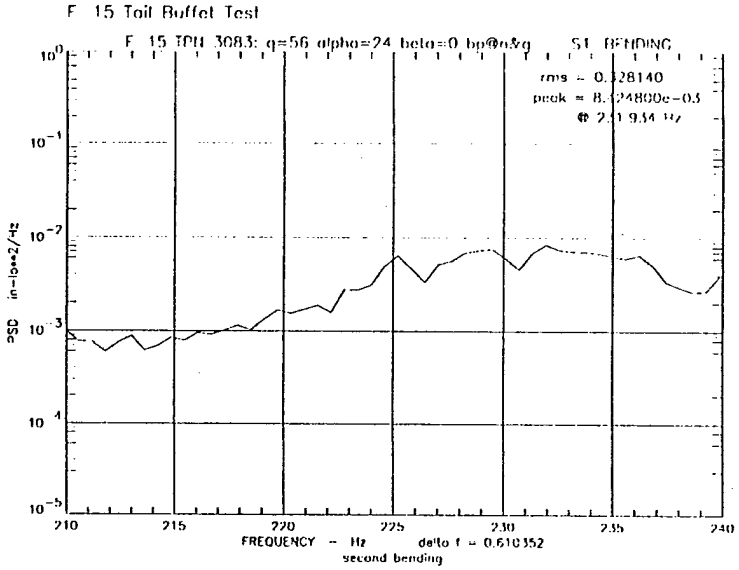
F-15 Tail Buffet Test



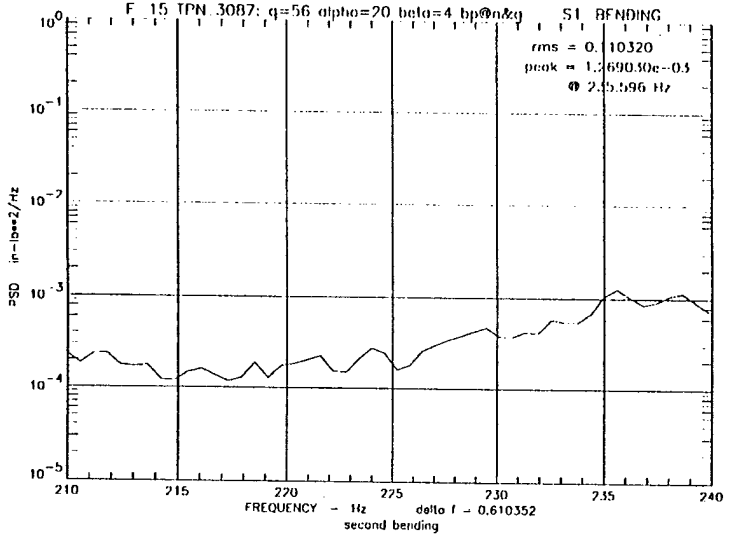
F-15 Tail Buffet Test



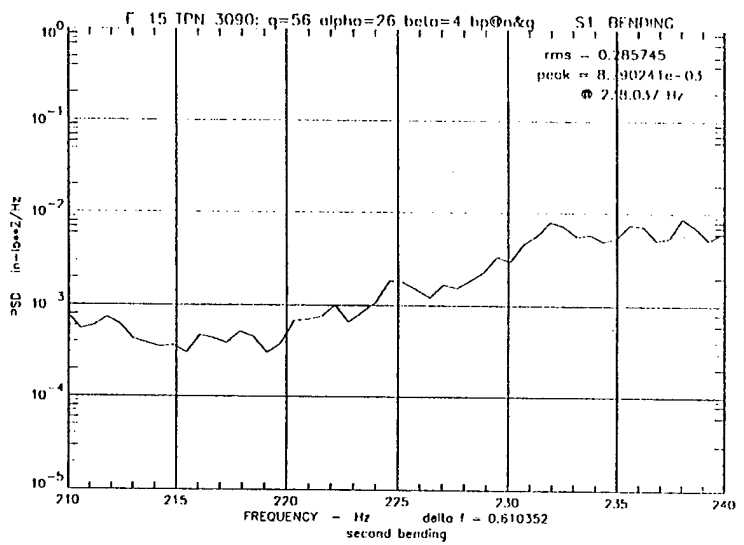
F-15 Tail Buffet Test



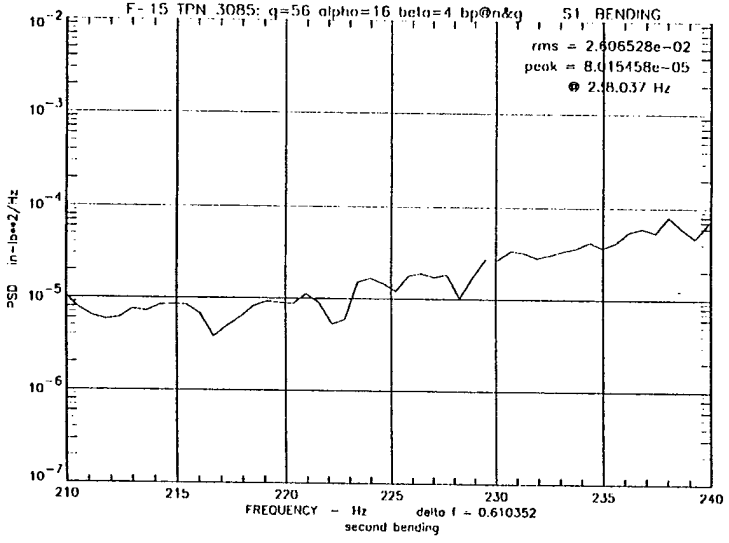
F-15 Tail Buffet Test



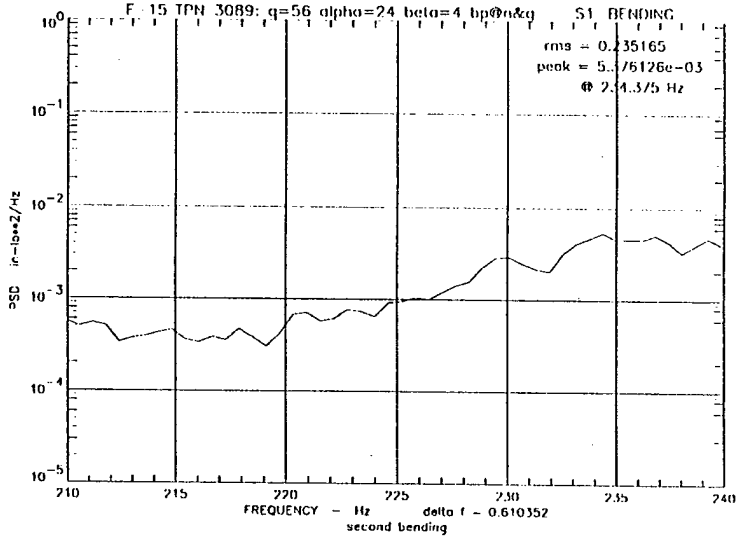
F-15 Tail Buffet Test



F-15 Tail Buffet Test

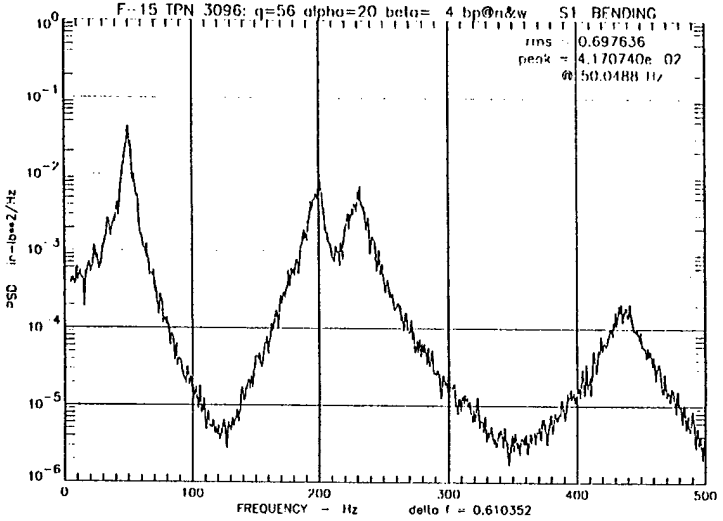


F-15 Tail Buffet Test

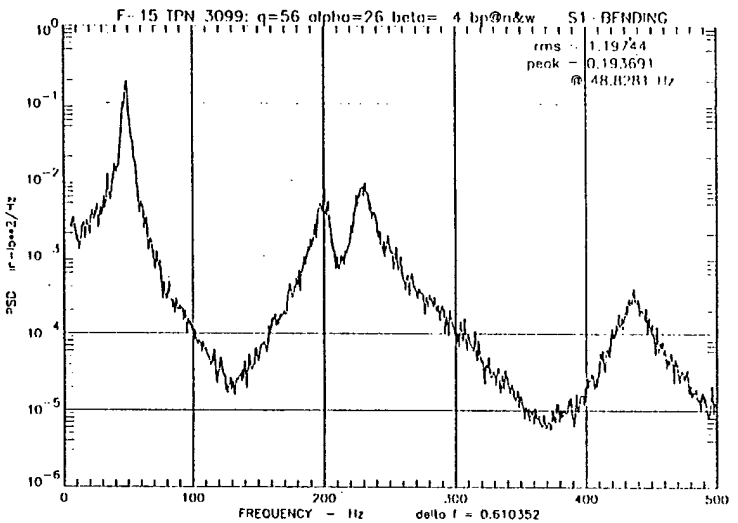


FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION
PSD GRAPHS
Q= 56 PSF
2.1.1.6 NBP = 87 psi, WBP = 65 psi, BETA= 0, +4, -4, ALPHA = 0....32 Deg

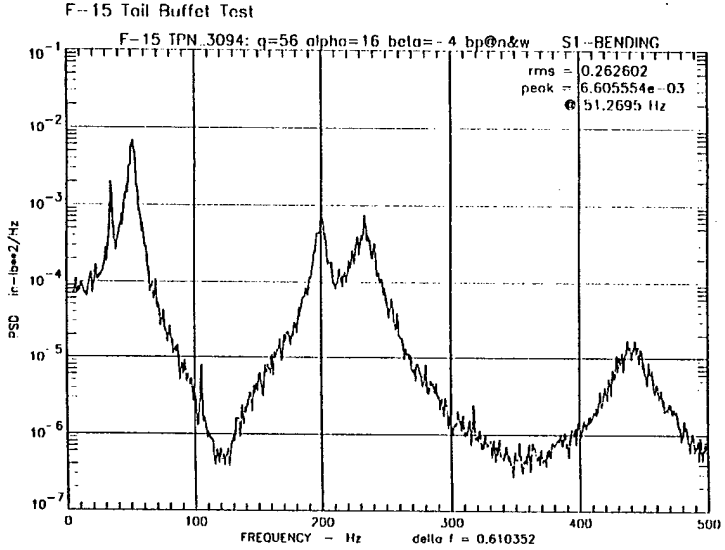
F-15 Tail Buffet Test



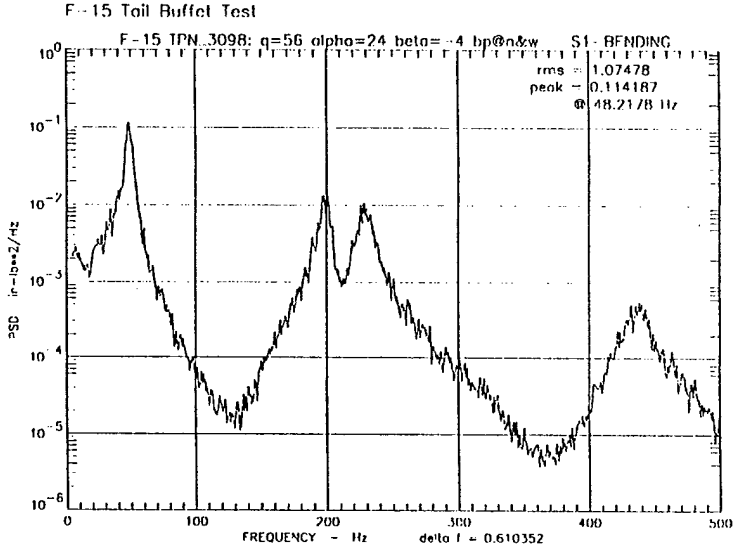
F-15 Tail Buffet Test

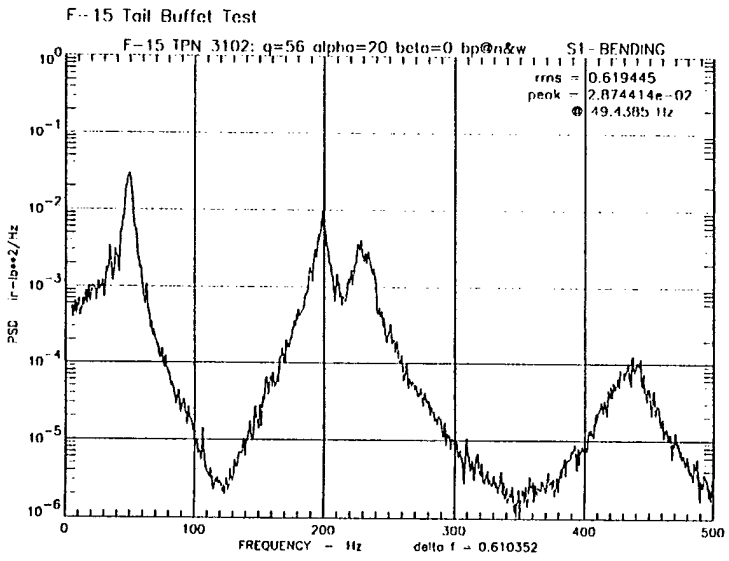


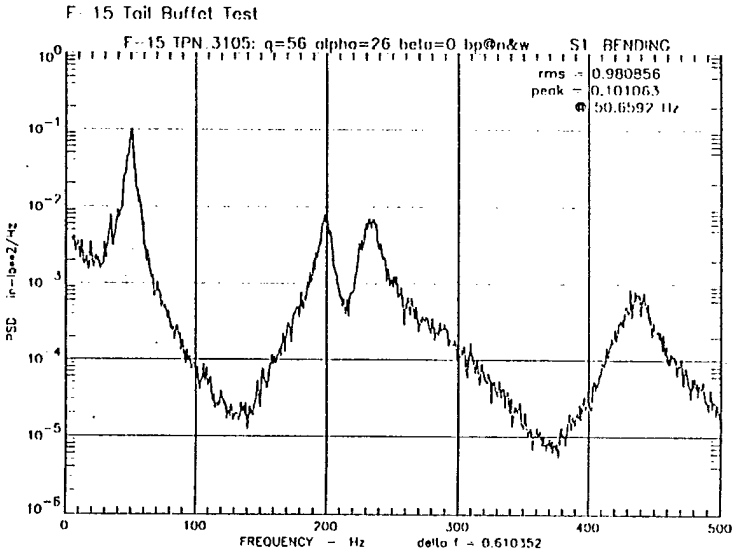
F-15 Tail Buffet Test

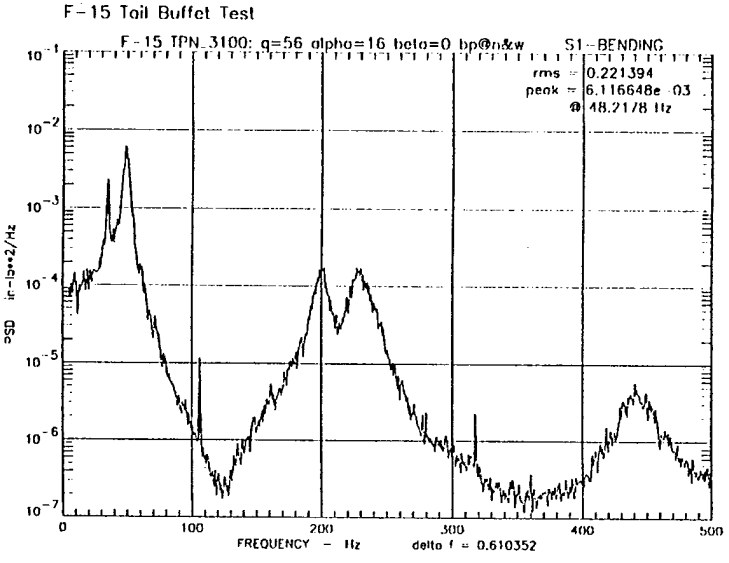


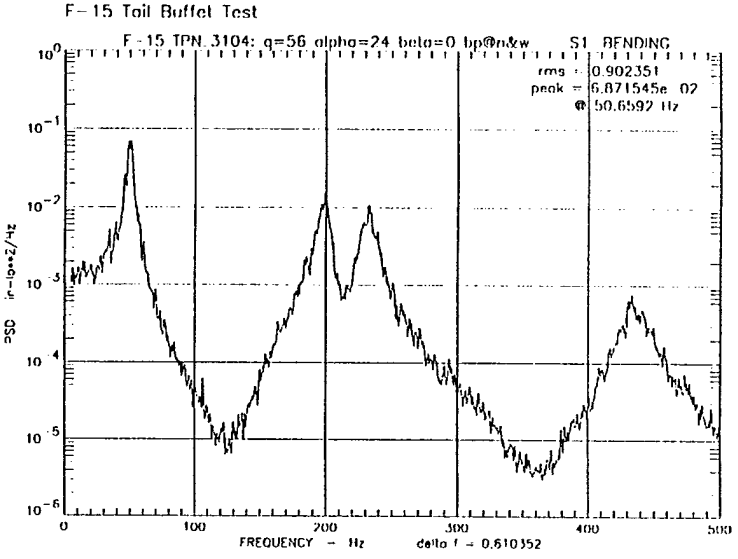
F-15 Tail Buffet Test



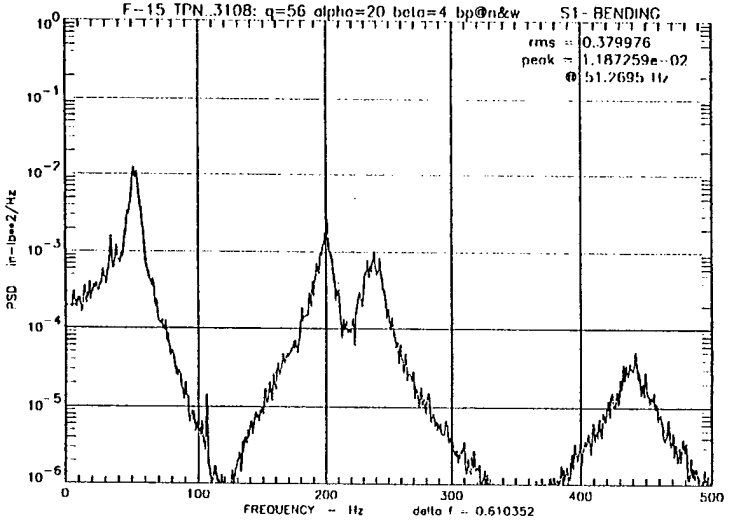

F-15 Tail Buffet Test
F-15 TPN_3102: q=56 alpha=20 beta=0 bp@n&w S1-BENDING
rms = 0.619445
peak = 2.874414e-02
@ 49.4385 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3105: q=56 alpha=26 beta=0 bp@n&w S1 BENDING
rms = 0.980856
peak = 0.101063
@ 50.6592 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

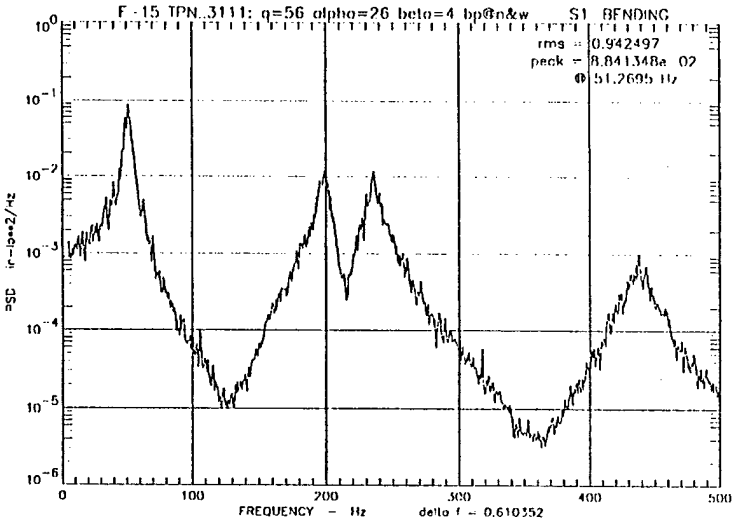

F-15 Tail Buffet Test
F-15 TPN_3100: q=56 alpha=16 beta=0 bp@n&w S1-BENDING
rms = 0.221394
peak = 6.116648e-03
@ 48.2178 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3104: q=56 alpha=24 beta=0 bp@n&w S1 BENDING
rms = 0.902351
peak = 6.871545e-02
@ 50.6592 Hz
PSD in-lb**2/Hz
FREQUENCY - Hz
delta f = 0.610352

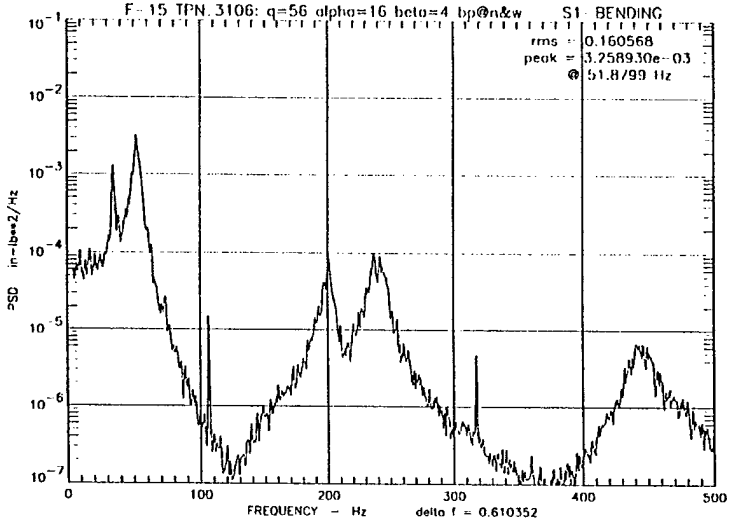
F-15 Tail Buffet Test



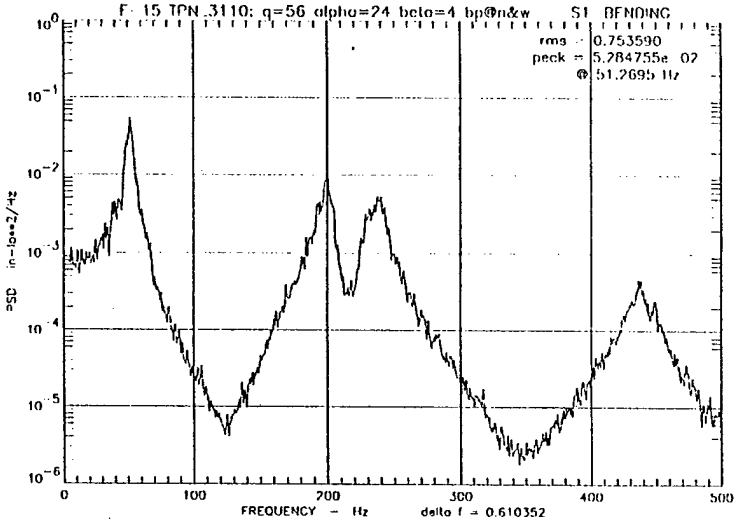
F-15 Tail Buffet Test



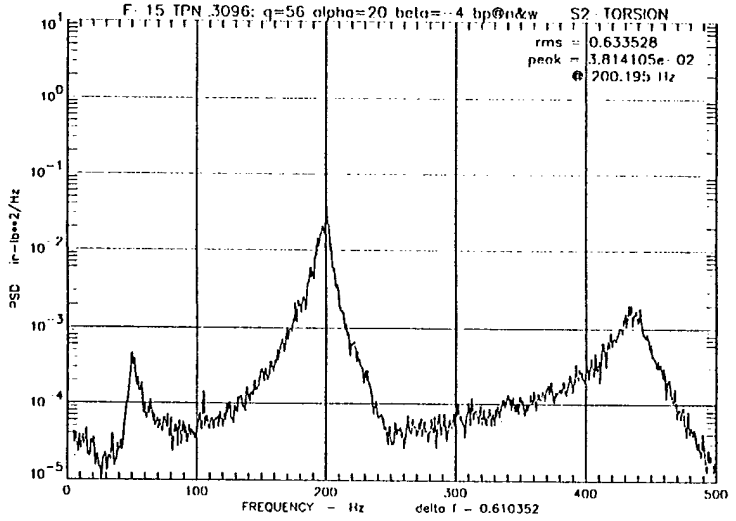
F-15 Tail Buffet Test



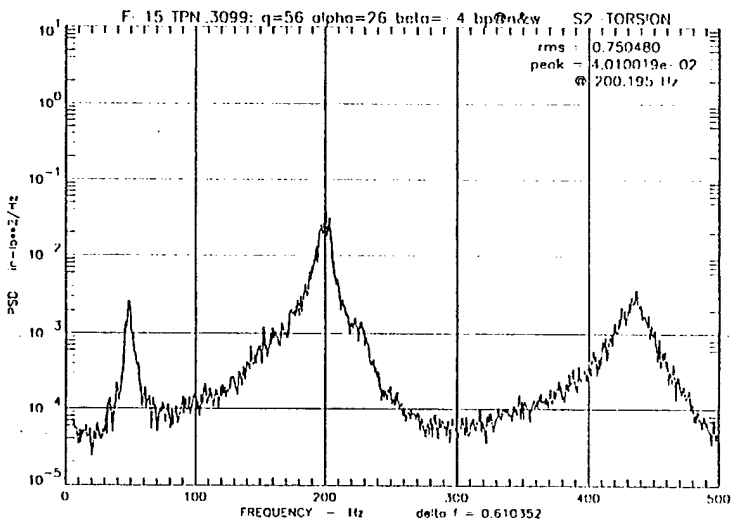
F-15 Tail Buffet Test



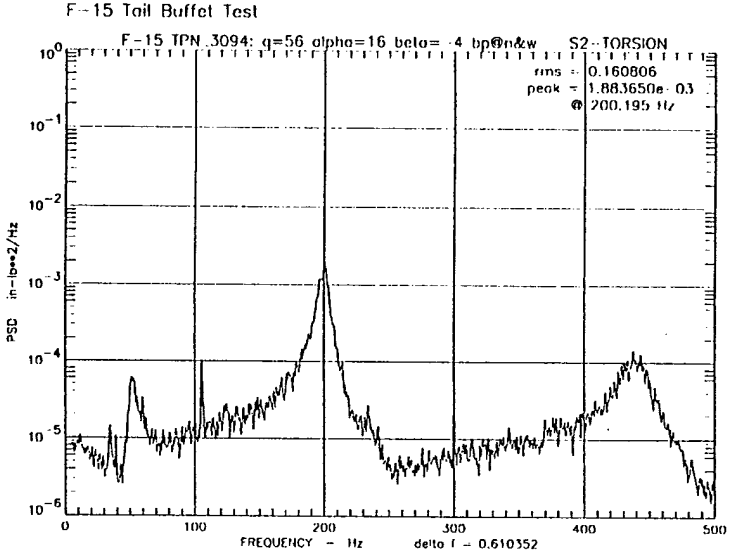
F-15 Tail Buffet Test



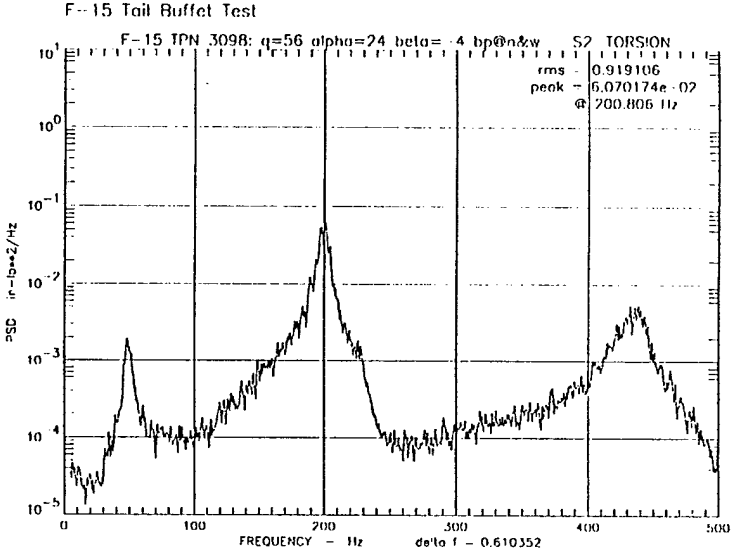
F-15 Tail Buffet Test



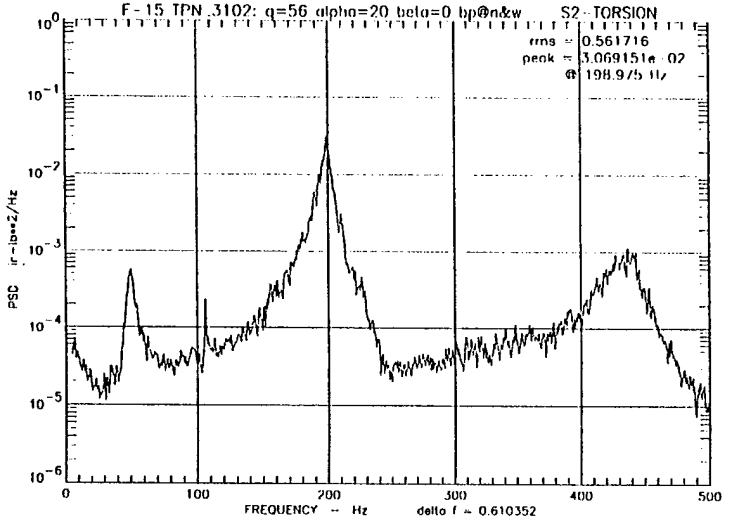
F-15 Tail Buffet Test



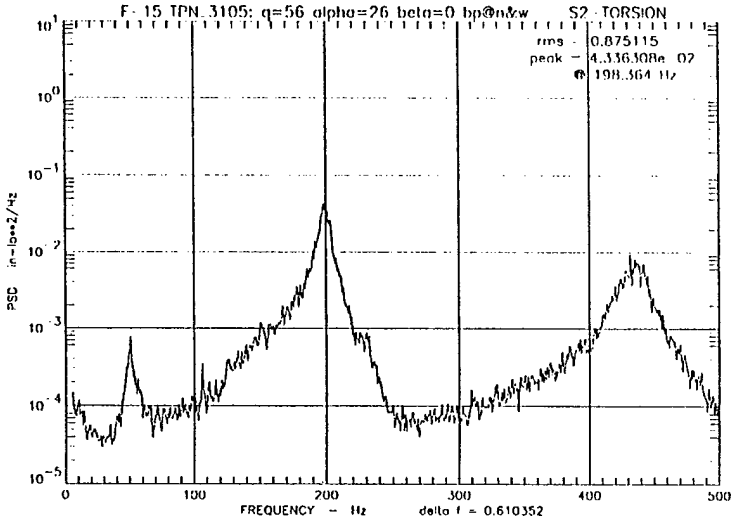
F-15 Tail Buffet Test



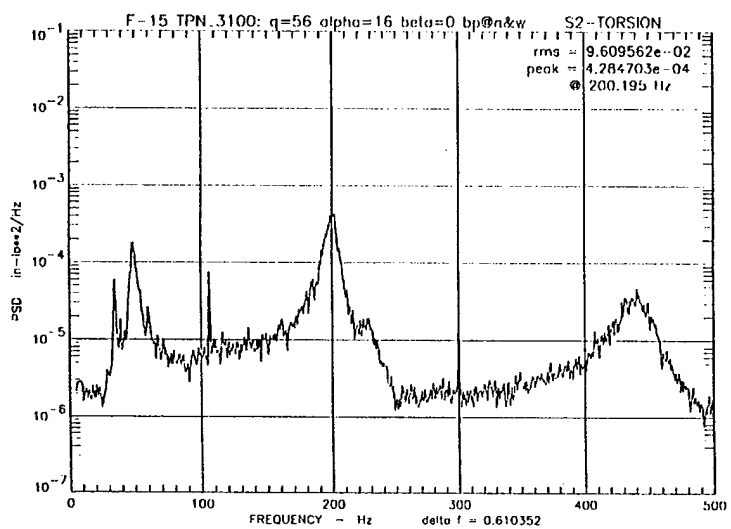
F-15 Tail Buffet Test



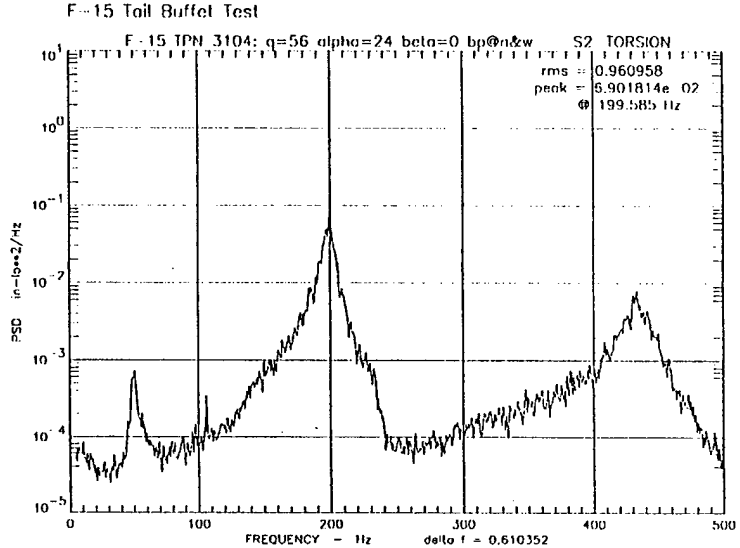
F-15 Tail Buffet Test



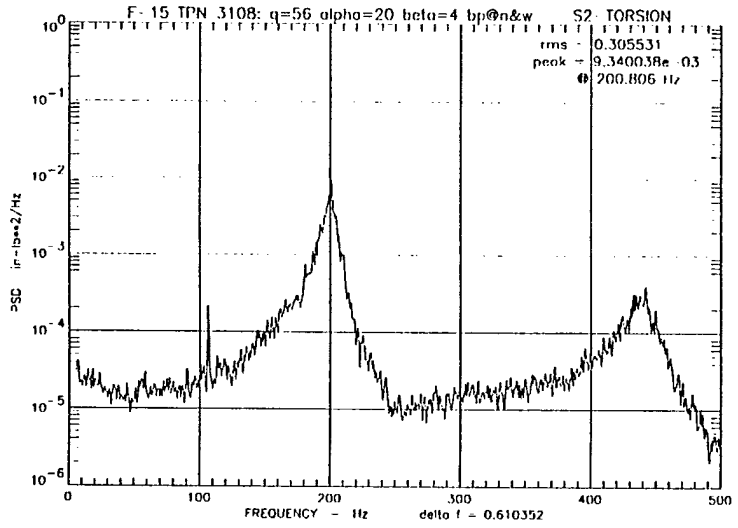
F-15 Tail Buffet Test



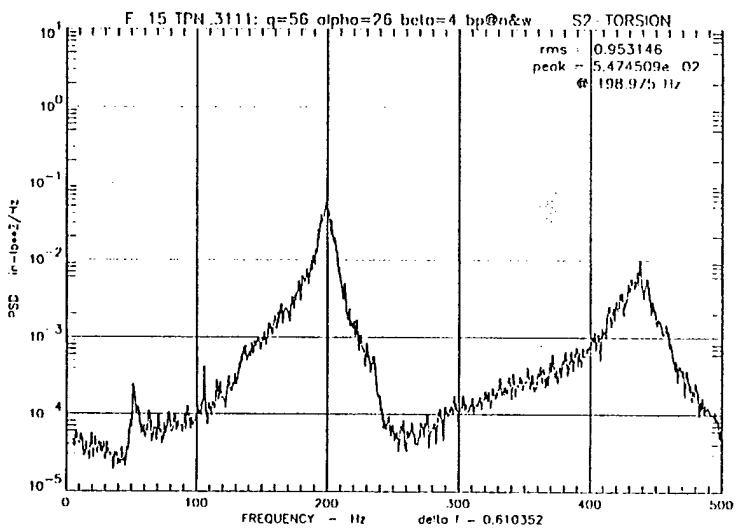
F-15 Tail Buffet Test



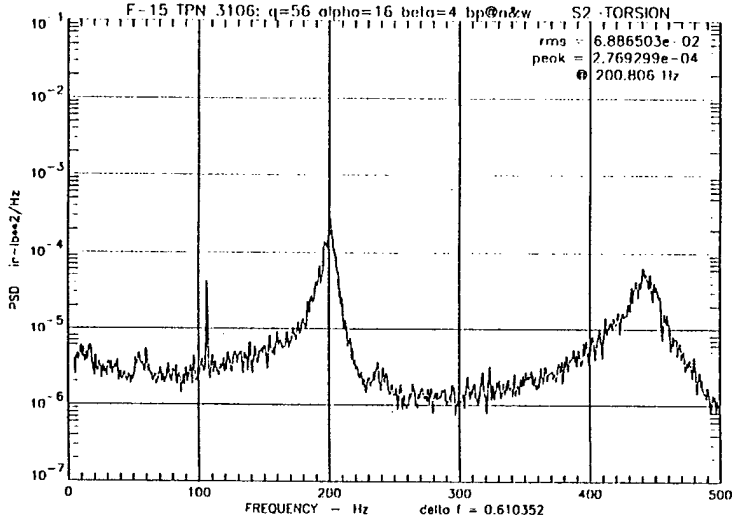
F-15 Tail Buffet Test



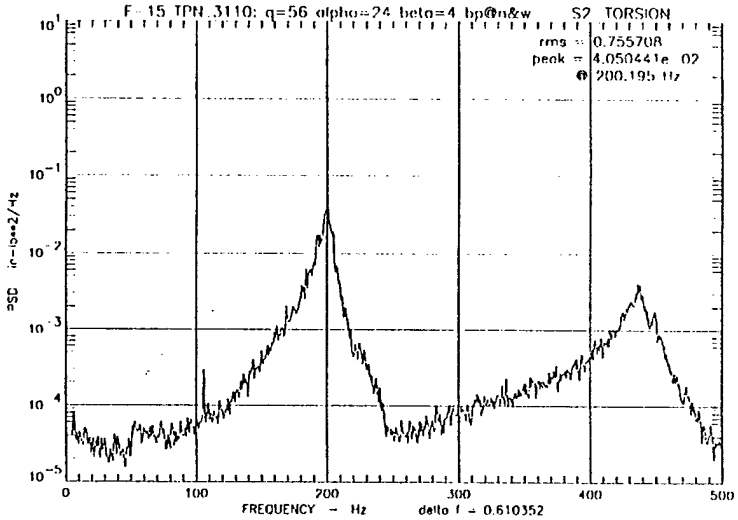
F-15 Tail Buffet Test



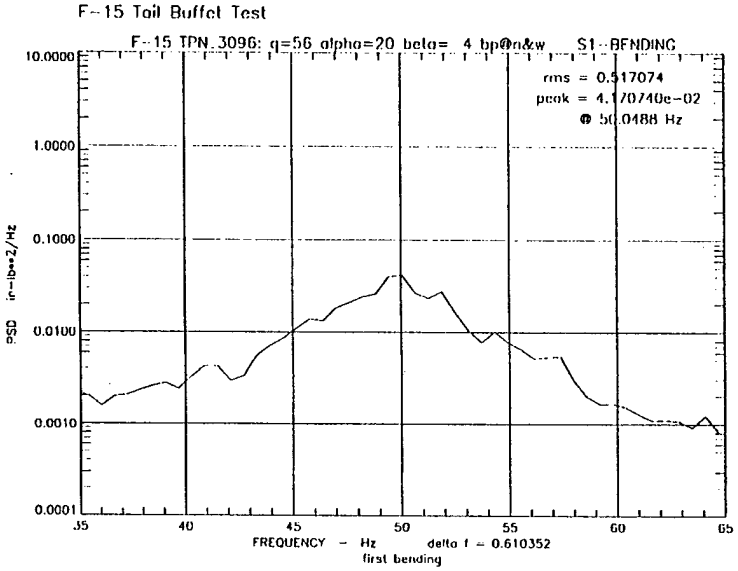
F-15 Tail Buffet Test

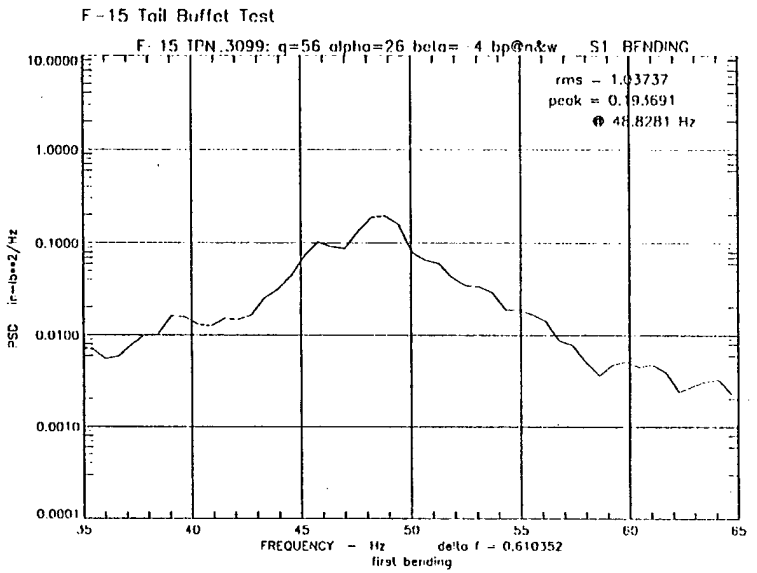


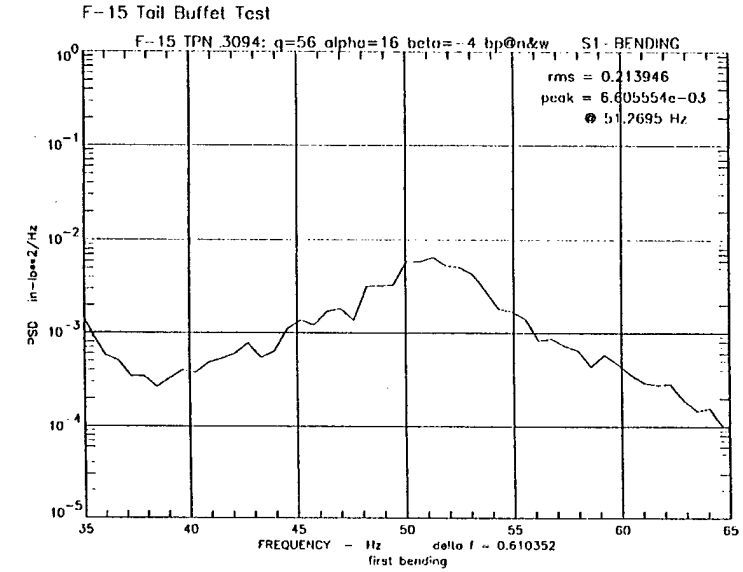
F-15 Tail Buffet Test

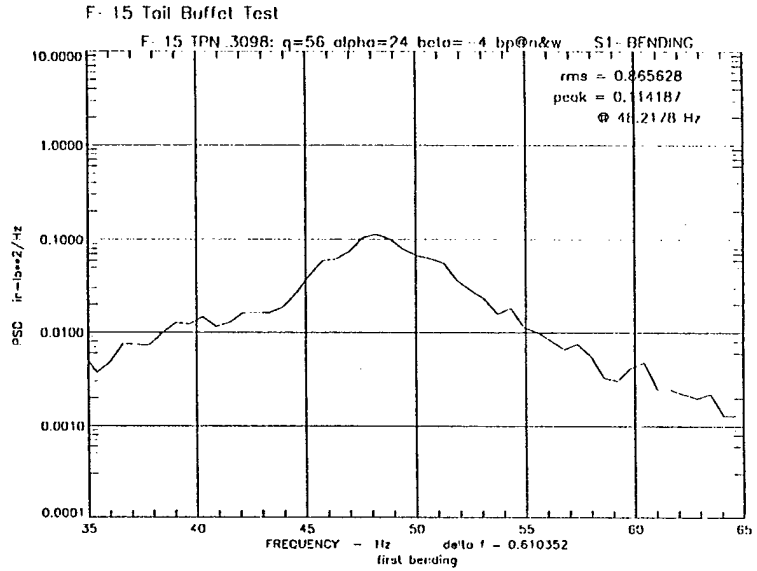


781

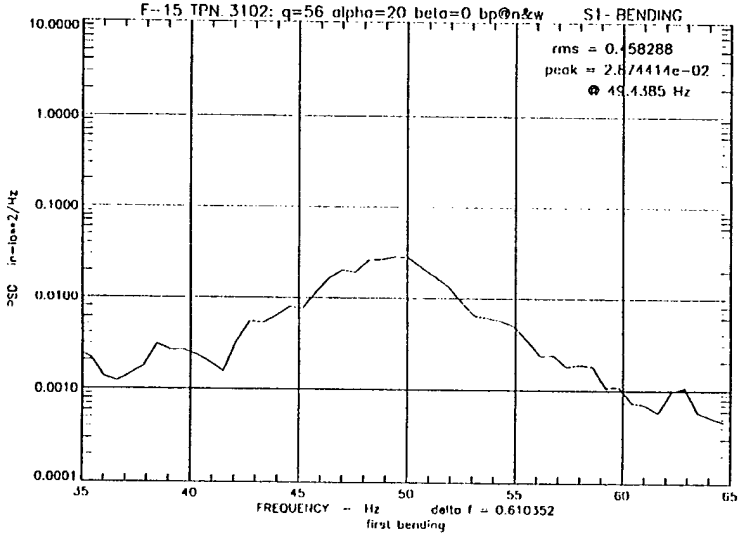

F-15 Tail Buffet Test
F-15 TPN 3096: q=56 alpha=20 beta= 4 bp@n&w S1-BENDING
rms = 0.517074
peak = 4.170740e-02
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending


F-15 Tail Buffet Test
F-15 TPN 3099: q=56 alpha=26 beta= 4 bp@n&w S1 BENDING
rms = 1.03737
peak = 0.193691
@ 48.8281 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

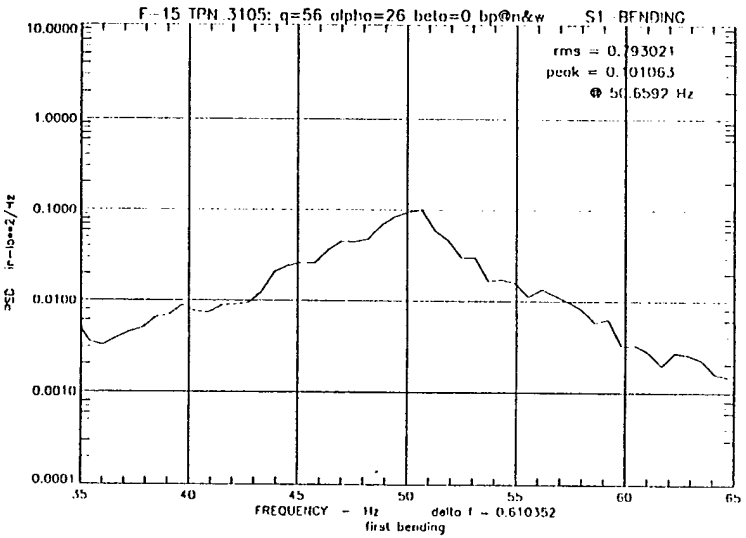

F-15 Tail Buffet Test
F-15 TPN 3094: q=56 alpha=16 beta= 4 bp@n&w S1-BENDING
rms = 0.213946
peak = 6.605554e-03
@ 51.2695 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending


F-15 Tail Buffet Test
F-15 TPN 3098: q=56 alpha=24 beta= 4 bp@n&w S1-BENDING
rms = 0.865628
peak = 0.114187
@ 48.2178 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

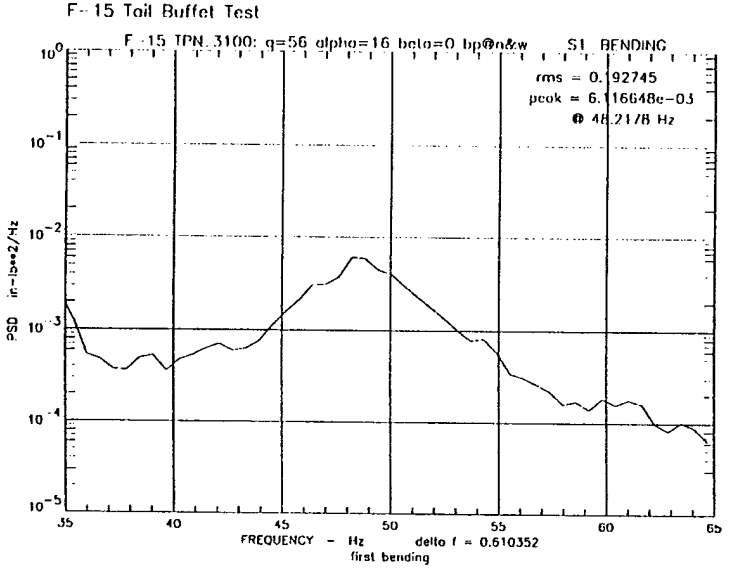
F-15 Tail Buffet Test



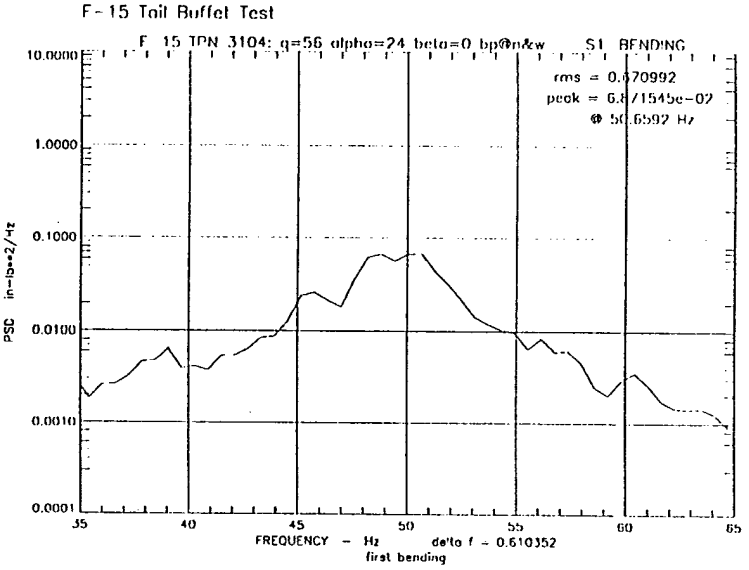
F-15 Tail Buffet Test

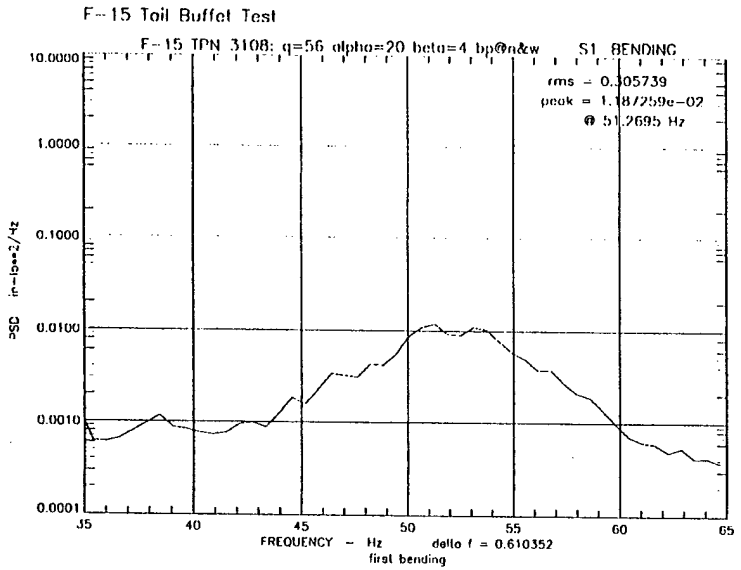


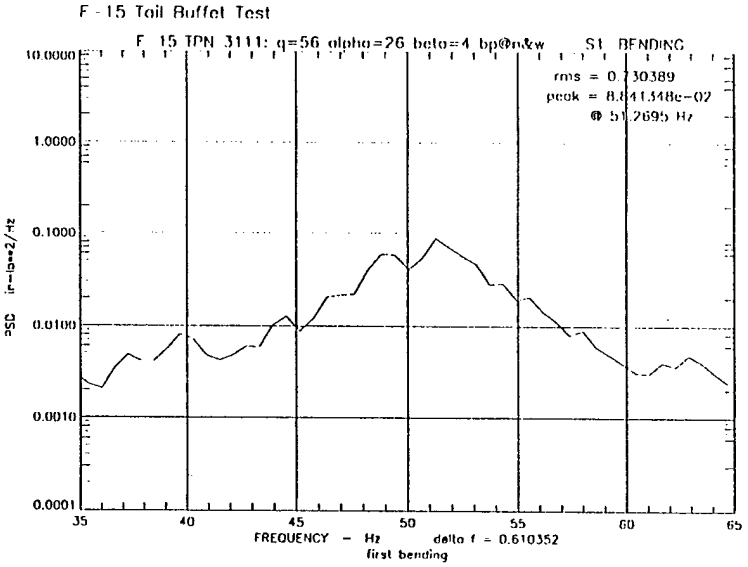
F-15 Tail Buffet Test

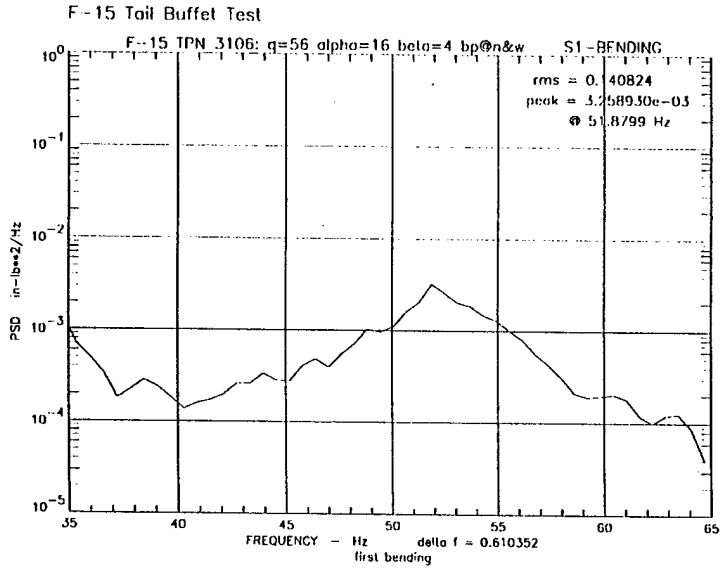


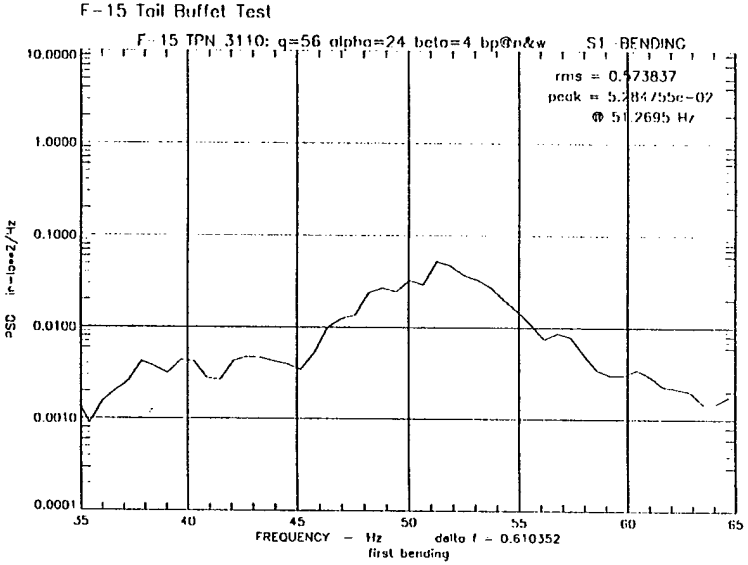
F-15 Tail Buffet Test



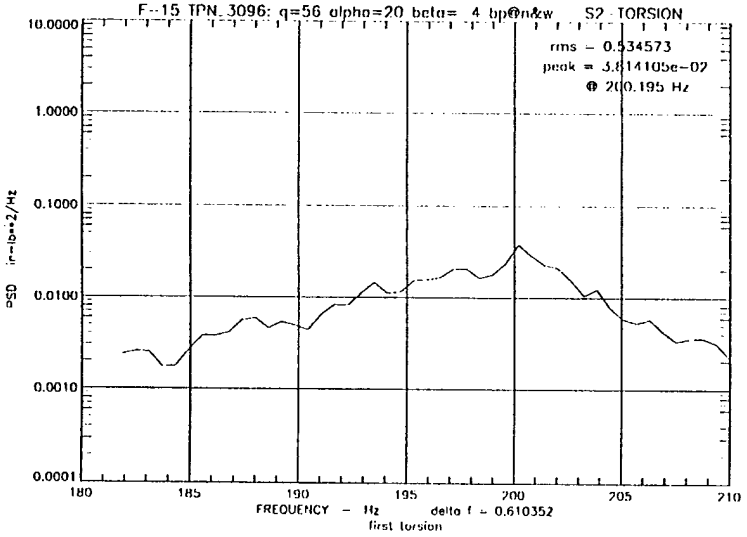

F-15 Tail Buffet Test
F-15 TPN 3108: q=56 alpha=20 beta=4 bp@n&w S1 BENDING
rms = 0.305739
peak = 1.187259e-02
@ 51.2695 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending


F-15 Tail Buffet Test
F-15 TPN 3111: q=56 alpha=26 beta=4 bp@n&w S1 BENDING
rms = 0.230389
peak = 8.841548e-02
@ 51.2695 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

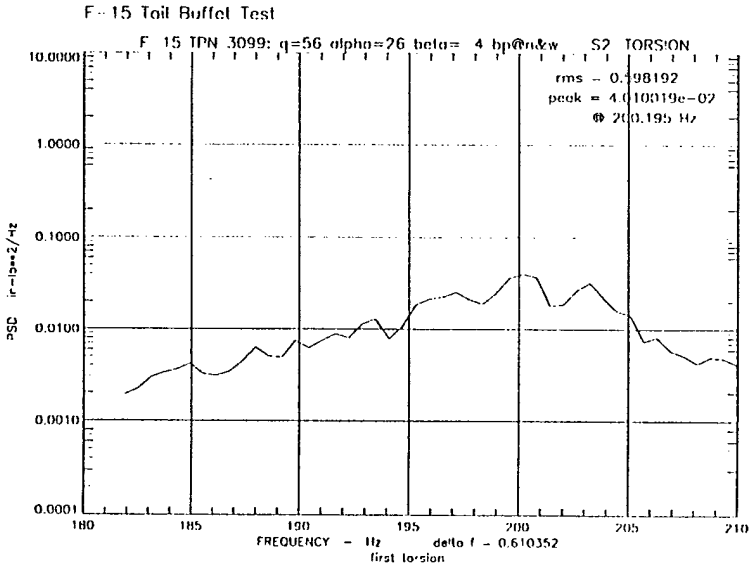

F-15 Tail Buffet Test
F-15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w S1 BENDING
rms = 0.140824
peak = 3.258930e-03
@ 51.8799 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending


F-15 Tail Buffet Test
F-15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w S1 BENDING
rms = 0.173837
peak = 5.284755e-02
@ 51.2695 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

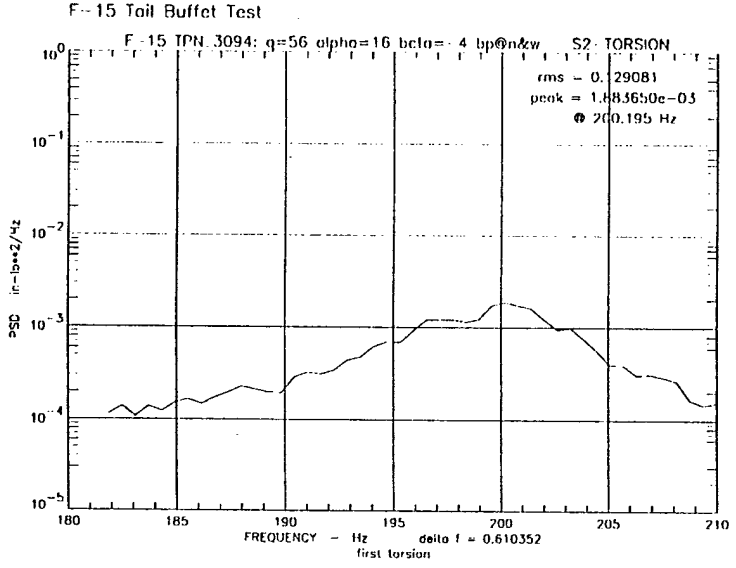
F-15 Tail Buffet Test



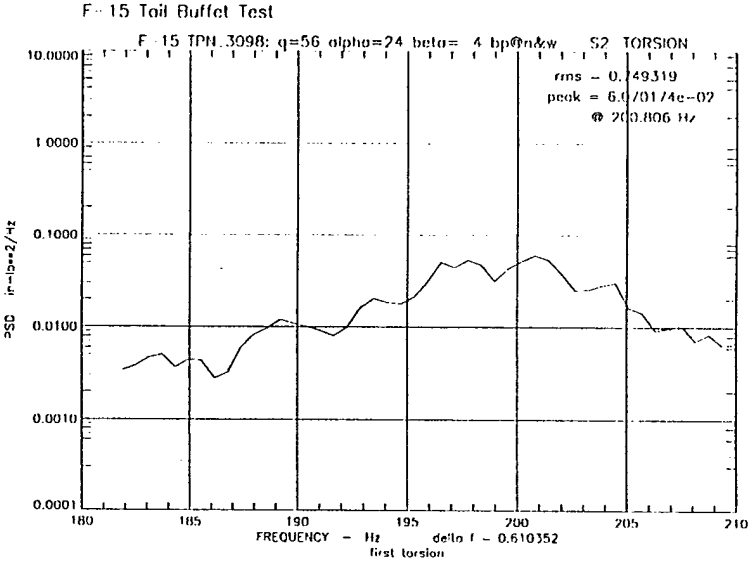
F-15 Tail Buffet Test



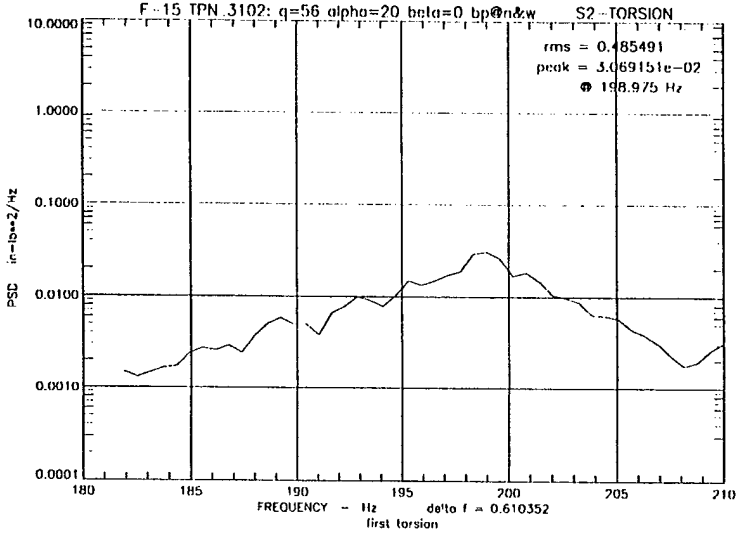
F-15 Tail Buffet Test



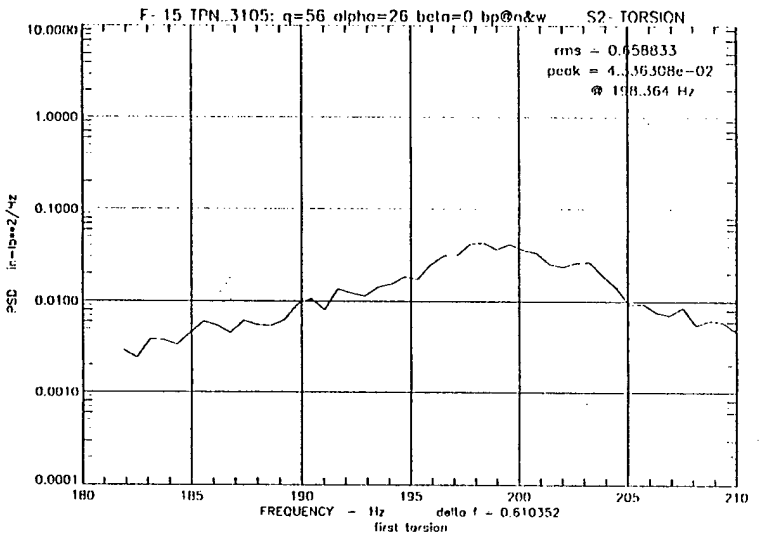
F-15 Tail Buffet Test



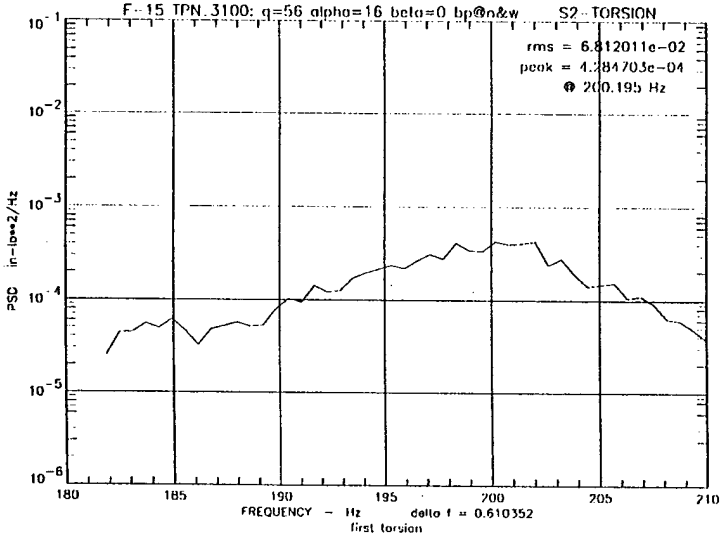
F-15 Tail Buffet Test



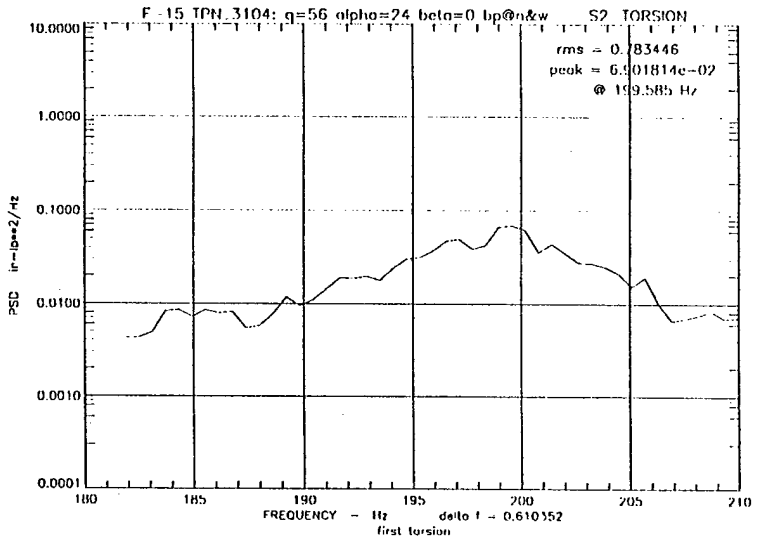
F-15 Tail Buffet Test



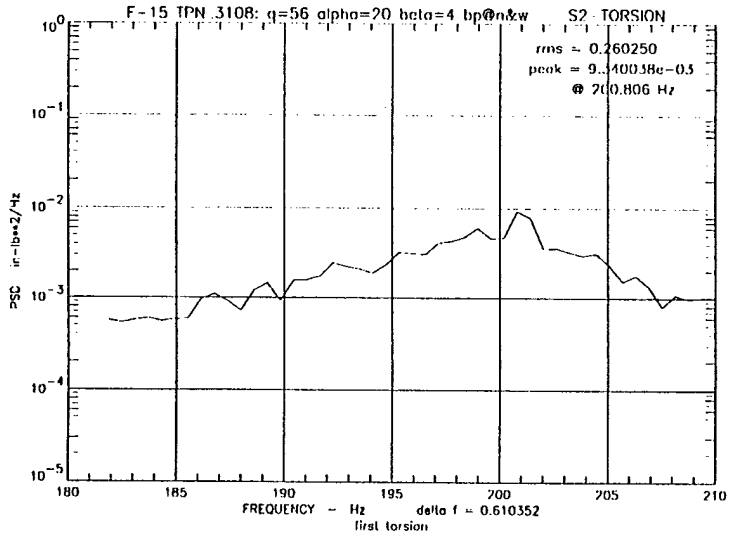
F-15 Tail Buffet Test



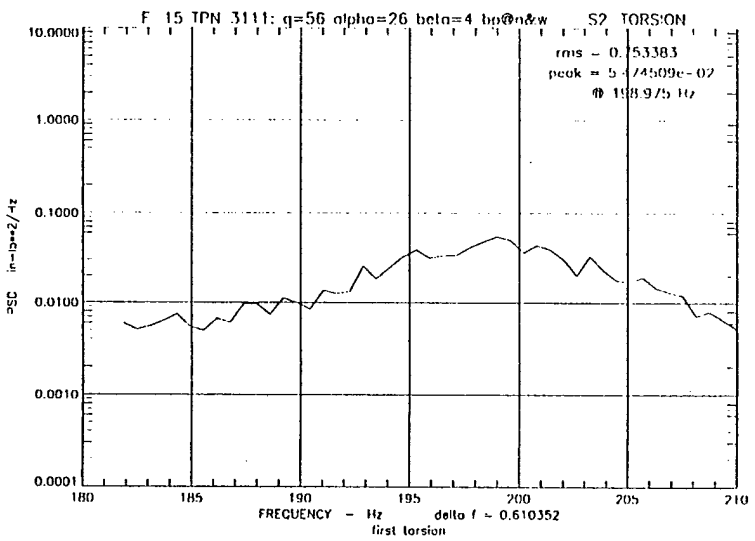
F-15 Tail Buffet Test



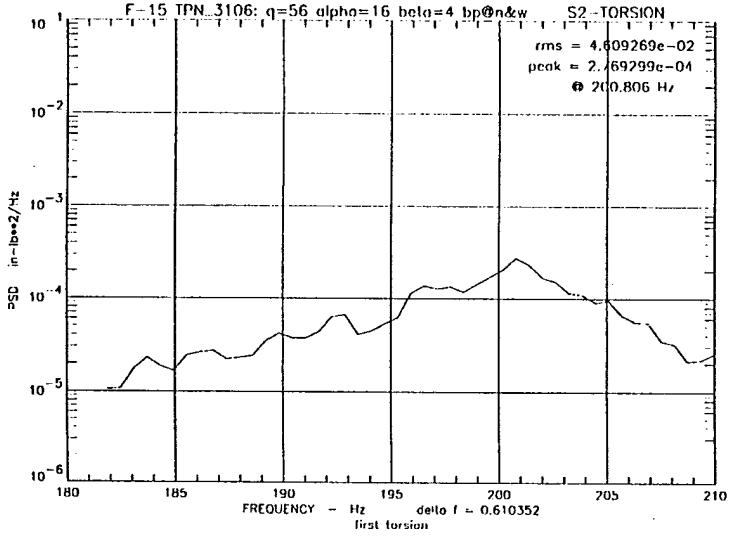
F-15 Tail Buffet Test



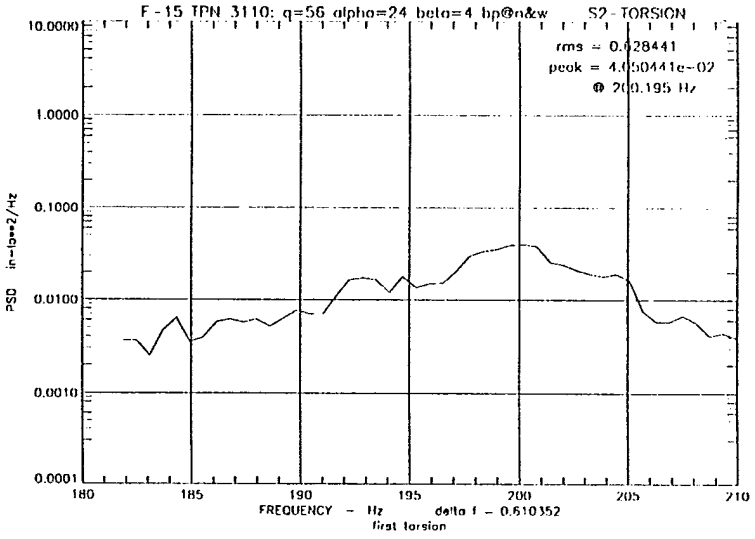
F-15 Tail Buffet Test

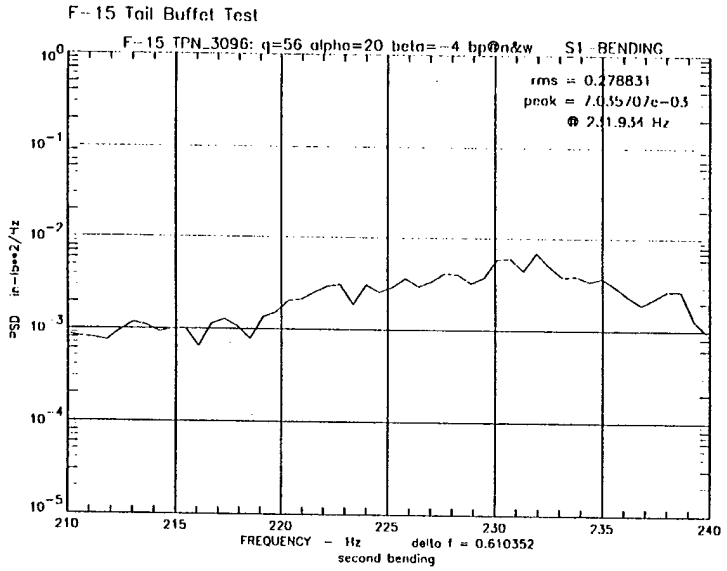


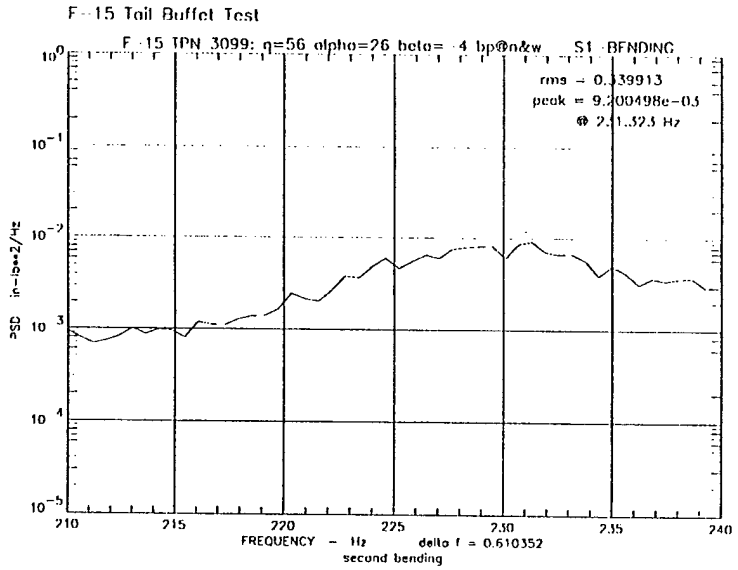
F-15 Tail Buffet Test

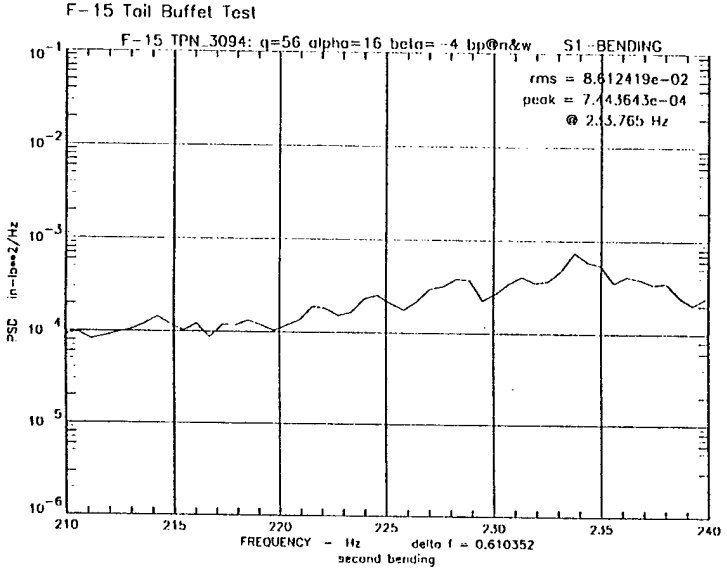


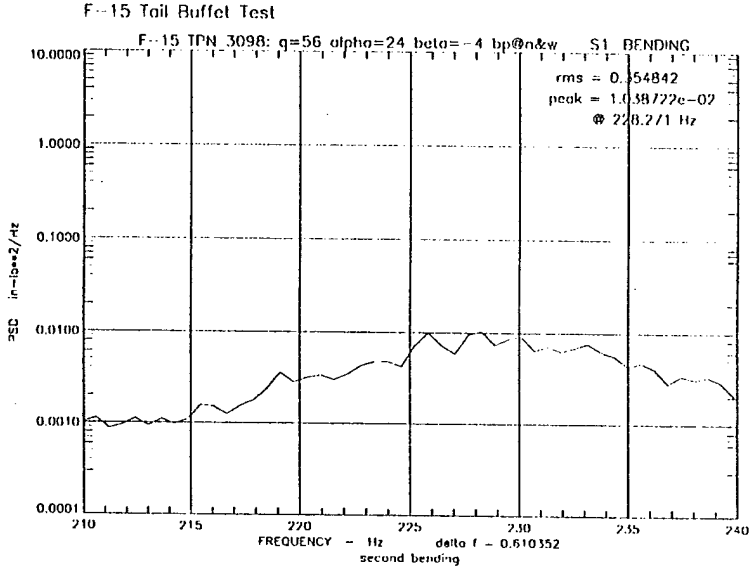
F-15 Tail Buffet Test



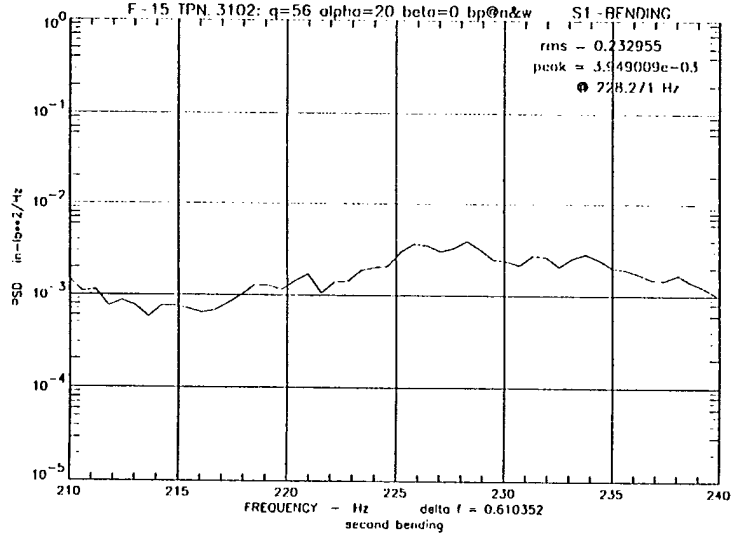

F-15 Tail Buffet Test
F-15 TPN_3096: q=56 alpha=20 beta=-4 bp@n&w S1 BENDING
rms = 0.278831
peak = 7.03570?e-03
@ 231.934 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 Tail Buffet Test
F-15 TPN_3099: q=56 alpha=26 beta=-4 bp@n&w S1 BENDING
rms = 0.339913
peak = 9.200498e-03
@ 231.525 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

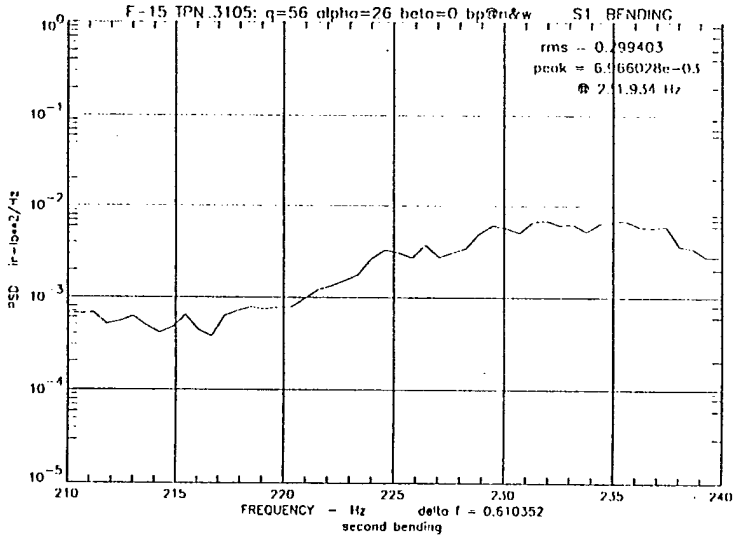

F-15 Tail Buffet Test
F-15 TPN_3094: q=56 alpha=16 beta=-4 bp@n&w S1 BENDING
rms = 8.612419e-02
peak = 7.443643e-04
@ 233.765 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 Tail Buffet Test
F-15 TPN_3098: q=56 alpha=24 beta=-4 bp@n&w S1 BENDING
rms = 0.354842
peak = 1.038722e-02
@ 228.271 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

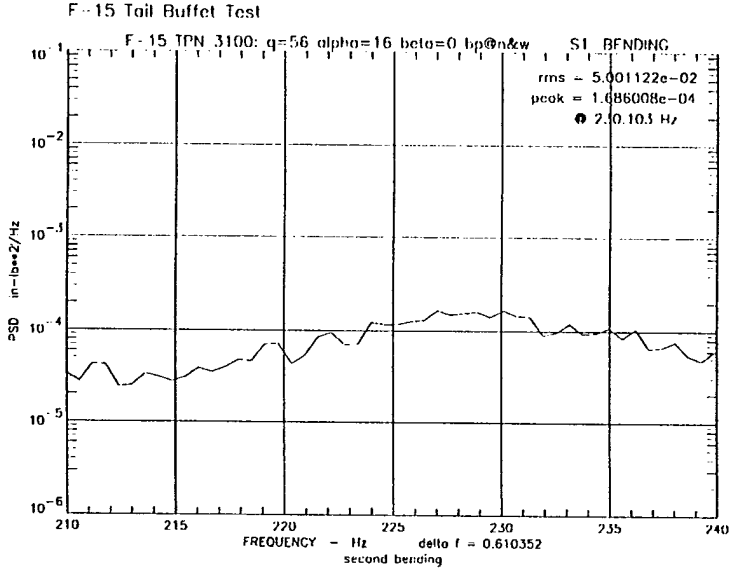
F-15 Tail Buffet Test



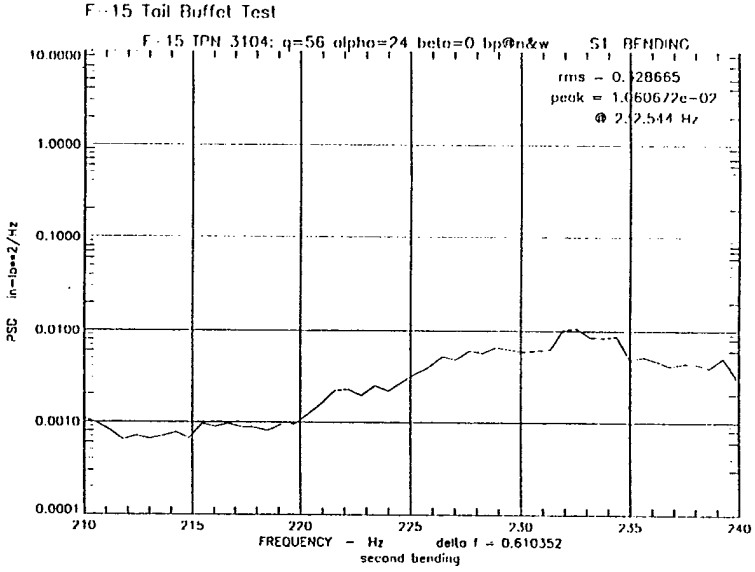
F-15 Tail Buffet Test

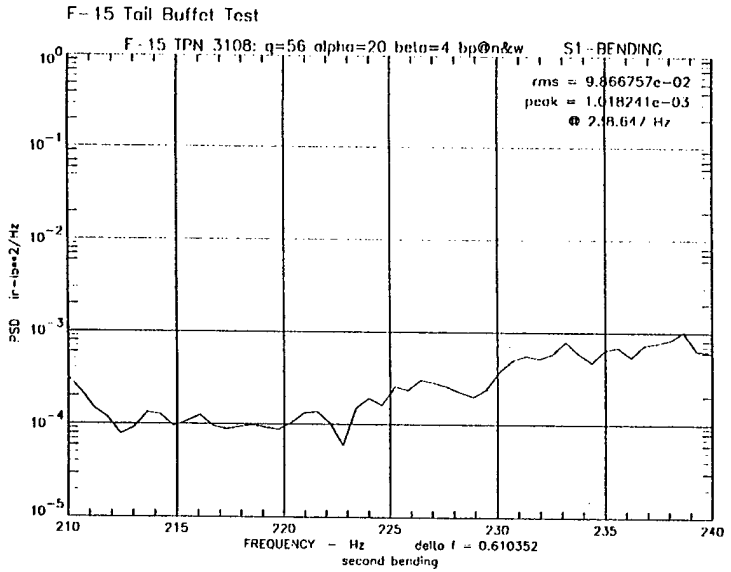


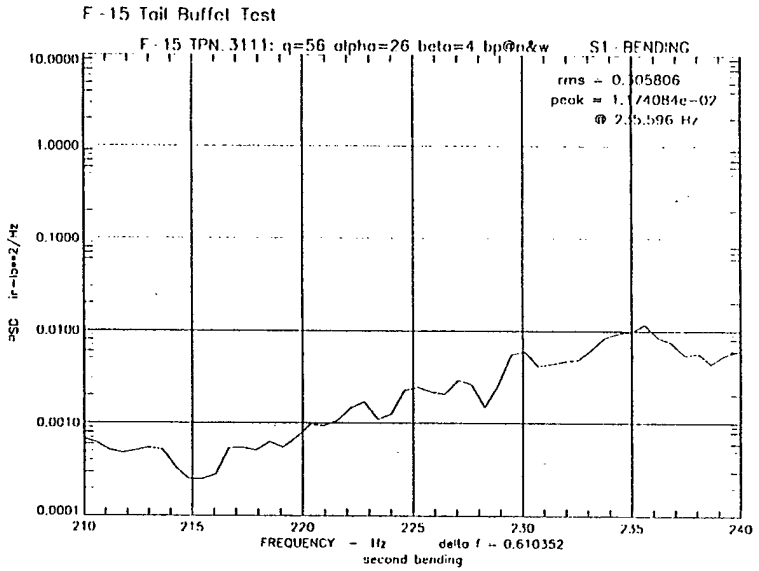
F-15 Tail Buffet Test

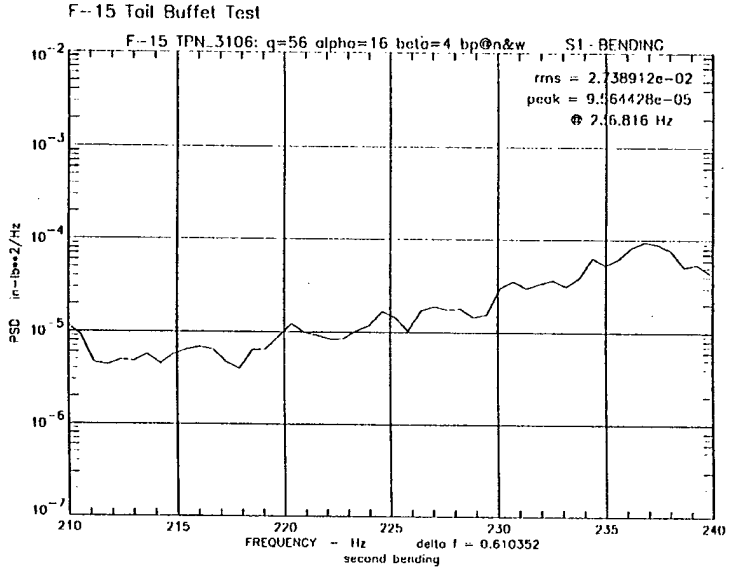


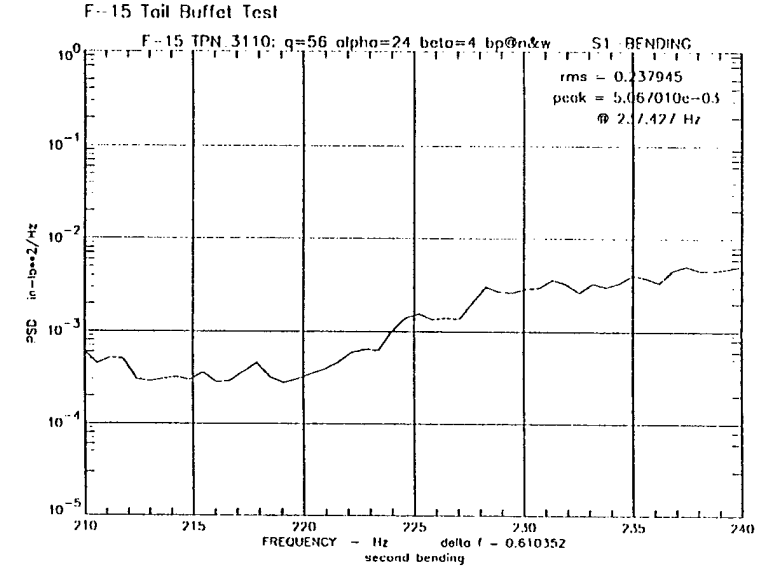
F-15 Tail Buffet Test




F-15 Tail Buffet Test
F-15 TPN_3108: q=56 alpha=20 beta=4 bp@n&w S1-BENDING
rms = 9.866757e-02
peak = 1.018241e-03
@ 2.16.647 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 Tail Buffet Test
F-15 TPN_3111: q=56 alpha=26 beta=4 bp@n&w S1-BENDING
rms = 0.305806
peak = 1.174084e-02
@ 2.15.596 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 Tail Buffet Test
F-15 TPN_3106: q=56 alpha=16 beta=4 bp@n&w S1-BENDING
rms = 2.738912e-02
peak = 9.564428e-05
@ 2.16.816 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 Tail Buffet Test
F-15 TPN_3110: q=56 alpha=24 beta=4 bp@n&w S1-BENDING
rms = 0.237945
peak = 5.067010e-03
@ 2.17.427 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION

Q= 56 PSF

2.1.2 RMS SUMMARY TABS

Q = 56 PSF
NO BLOWING

F-15 Vertical Tail Buffet Test: Overall RMS Strain values

Bending: beta=0

alpha	rms
0	0.0604
2	0.0607
4	0.0600
6	0.0632
8	0.0609
10	0.0559
12	0.0616
14	0.1025
16	0.1845
18	0.3603
20	0.5754
22	0.7378
24	0.8630
28	1.2401
32	1.7935

beta=-4

alpha	rms
0	0.0442
2	0.0546
4	0.0504
6	0.0520
8	0.0537
10	0.0535
12	0.0730
14	0.1207
16	0.2240
18	0.4646
20	0.7119
22	0.8953
24	1.0324
28	1.3223
32	1.7070

alpha=22

beta	rms
-4	0.8953
-2	0.7946
0	0.7378
2	0.6679
4	0.5477

alpha=32

beta	rms
-4	1.7070
-2	1.7478
0	1.7935
2	1.6527
4	1.6212

Torsion: beta=0

alpha	rms
0	0.0171
2	0.0194
4	0.0215
6	0.0230
8	0.0207
10	0.0205
12	0.0269
14	0.0392
16	0.0751
18	0.2369
20	0.4775
22	0.7250
24	0.9184
28	0.5979
32	0.3787

beta=-4

alpha	rms
0	0.0215
2	0.0253
4	0.0193
6	0.0194
8	0.0201
10	0.0229
12	0.0429
14	0.0499
16	0.1195
18	0.3416
20	0.7053
22	0.8538
24	0.7718
28	0.3560
32	0.3144

alpha=22

beta	rms
-4	0.8538
-2	0.8241
0	0.7250
2	0.6159
4	0.4690

alpha=32

beta	rms
-4	0.3143
-2	0.3324
0	0.3787
2	0.4998
4	0.5631

0-1000 1-17 Lvl

1ST Data PKG

F-15 Vertical Tail Buffet Test: Overall RMS & Peak Strain values (in-lbs)

1st Bending: 35-65 Hz

S1-BENDING:

Beta	Alpha	rms	peak	freq
-4	20	.4719	3.268E-02	49.4
-4	22	.6473	4.857E-02	50.0
-4	24	.8462	1.104E-01	48.2
-4	28	1.1270	2.024E-01	48.2
-4	32	1.5490	3.856E-01	48.8
0	20	.4131	2.155E-02	50.0
0	22	.5085	3.832E-02	50.0
0	24	.6262	4.925E-02	48.8
0	28	1.0190	1.584E-01	48.2
0	32	1.6110	5.005E-01	47.6
4	20	.2885	8.435E-03	50.7
4	22	.4207	2.526E-02	50.7
4	24	.6123	6.338E-02	50.7
4	28	.9290	1.363E-01	50.0
4	32	1.3960	3.659E-01	48.8

S2-TORSION:

Beta	Alpha	rms	peak	freq
-4	20	.0380	9.866E-05	51.3
-4	22	.0420	8.967E-05	50.0
-4	24	.0404	8.481E-05	50.7
-4	28	.0449	1.069E-04	47.6
-4	32	.0535	1.980E-04	48.8
0	20	.0327	5.622E-05	50.7
0	22	.0386	8.764E-05	50.7
0	24	.0404	9.997E-05	51.9
0	28	.0462	1.130E-04	49.4
0	32	.0608	2.242E-04	50.7
4	20	.0233	2.000E-05	50.7
4	22	.0295	4.364E-05	51.9
4	24	.0361	8.377E-05	51.3
4	28	.0477	1.203E-04	50.0
4	32	.0715	3.489E-04	49.4

1st Torsion: 180-210 Hz

S1-BENDING:

Beta	Alpha	rms	peak	freq
-4	20	.3252	8.078E-03	192.3
-4	22	.3477	1.006E-02	191.0
-4	24	.2642	5.653E-03	191.0
-4	28	.2000	2.500E-03	195.3
-4	32	.2036	2.551E-03	193.5
0	20	.2273	5.093E-03	190.4
0	22	.3139	9.370E-03	189.8
0	24	.3607	1.314E-02	191.0
0	28	.2121	2.764E-03	191.0
0	32	.2400	3.000E-03	193.5
4	20	.1215	1.235E-03	192.3
4	22	.2093	3.989E-03	191.6
4	24	.3067	8.946E-03	193.5
4	28	.3060	7.667E-03	193.5
4	32	.2200	2.000E-03	195.3

S2-TORSION:

Beta	Alpha	rms	peak	freq
-4	20	.5690	2.721E-02	190.4
-4	22	.6756	3.987E-02	191.0
-4	24	.5643	2.557E-02	191.6
-4	28	.2354	4.128E-03	194.7
-4	32	.2240	4.622E-03	193.5
0	20	.3817	1.632E-02	190.4
0	22	.5708	3.368E-02	189.8
0	24	.7279	5.535E-02	191.0
0	28	.4221	1.556E-02	191.0
0	32	.2695	5.935E-03	193.5
4	20	.2140	4.036E-03	192.3
4	22	.3882	1.423E-02	191.6
4	24	.6070	3.559E-02	193.5
4	28	.7277	4.453E-02	192.9
4	32	.3947	1.381E-02	195.3

2nd Bending: 210-240 Hz

S1-BENDING:

Beta	Alpha	rms	peak	freq
-4	20	.3241	6.926E-03	230.1
-4	22	.3698	9.630E-03	226.4
-4	24	.3158	7.514E-03	227.1
-4	28	.4941	1.790E-03	227.7
-4	32	.3532	9.624E-03	227.1
0	20	.2478	4.503E-03	228.9
0	22	.3145	6.206E-03	228.9
0	24	.3090	5.511E-03	228.9
0	28	.4908	1.687E-02	228.9
0	32	.4465	1.303E-02	231.3
4	20	.1100	8.259E-04	229.5
4	22	.1812	2.647E-03	232.5
4	24	.2640	5.177E-03	231.9
4	28	.3367	9.148E-03	233.2
4	32	.5290	1.955E-02	228.3

S2-TORSION:

Beta	Alpha	rms	peak	freq
-4	20			
-4	22			
-4	24			
-4	28	.0636	2.218E-04	227.7
-4	32	.0455	1.199E-04	229.5
0	20			
0	22			
0	24			
0	28			
0	32			
4	20			
4	22			
4	24			
4	28			
4	32			

F-15 Vertical Tail Buffet Test: RMS (in-lbs) & Peak PSD (in-lbs2/Hz)**

1st Bending: 35-65 Hz

S1-BENDING: No Blowing Pressure					Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	20	.4719	3.268E-02	49.4	.4986	4.054E-02	50.0	.5398	3.973E-02	51.3
-4	24	.8462	1.104E-01	48.2	.9510	1.452E-01	48.2	.8456	1.098E-01	48.8
-4	28	1.1270	2.024E-01	48.2	1.4290	4.141E-01	48.8	1.1660	2.355E-01	46.4
-4	32	1.5490	3.856E-01	48.8	1.5620	4.819E-01	51.3			
0	20	.4131	2.155E-02	50.0	.4412	2.900E-02	49.4	.4624	2.974E-02	50.7
0	24	.6262	4.925E-02	48.8	.6672	6.118E-02	51.3	.6778	5.635E-02	50.0
0	28	1.0190	1.584E-01	48.2	.9331	1.411E-01	50.7	.9817	1.540E-01	47.6
0	32	1.6110	5.005E-01	47.6	1.5640	4.996E-01	51.3			
4	20	.2885	8.435E-03	50.7	.2737	1.073E-02	52.5	.3216	1.506E-02	51.9
4	24	.6123	6.338E-02	50.7	.5828	5.478E-02	52.5	.5852	5.325E-02	51.9
4	28	.9290	1.363E-01	50.0	1.0090	1.738E-01	50.0	.8727	1.061E-01	47.6
4	32	1.3960	3.659E-01	48.8	1.5400	3.871E-01	50.0			

1st Torsion: 180-210 Hz

S2-TORSION: No Blowing Pressure					Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	20	.5690	2.721E-02	190.4	.4731	2.536E-02	202.0	.5591	2.847E-02	200.2
-4	24	.5643	2.557E-02	191.6	.6783	5.404E-02	202.6	.6991	4.891E-02	200.2
-4	28	.2354	4.128E-03	194.7	.3523	1.416E-02	204.5	.3057	7.418E-03	189.8
-4	32	.2240	4.622E-03	193.5	.2372	5.284E-03	204.5			
0	20	.3817	1.632E-02	190.4	.3662	1.566E-02	203.2	.4658	2.160E-02	200.2
0	24	.7279	5.535E-02	191.0	.6712	5.378E-02	201.4	.8163	7.479E-02	199.0
0	28	.4221	1.556E-02	191.0	.5519	3.562E-02	203.9	.4414	1.860E-02	189.8
0	32	.2695	5.935E-03	193.5	.3151	1.124E-02	205.7			
4	20	.2140	4.036E-03	192.3	.1989	4.321E-03	203.9	.2567	6.459E-03	198.4
4	24	.6070	3.559E-02	193.5	.4963	2.989E-02	203.2	.5939	3.316E-02	199.6
4	28	.7277	4.453E-02	192.9	.8196	8.183E-02	203.2	.7103	4.342E-02	190.4
4	32	.3947	1.381E-02	195.3	.4154	2.289E-02	204.5			

2nd Bending: 210-240 Hz

S1-BENDING: No Blowing Pressure					Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	20	.3241	6.926E-03	230.1	.2588	5.591E-03	233.2	.2924	5.703E-03	233.8
-4	24	.3158	7.514E-03	227.1	.3568	1.062E-02	233.8	.3576	1.117E-02	228.3
-4	28	.4941	1.790E-03	227.7	.4970	2.152E-02	235.6	.4578	1.407E-02	222.8
-4	32	.3532	9.624E-03	227.1	.3313	1.299E-02	237.4			
0	20	.2478	4.503E-03	228.9	.1813	2.526E-03	231.9	.2218	3.397E-03	230.7
0	24	.3090	5.511E-03	228.9	.3143	8.208E-03	232.5	.3331	9.752E-03	232.5
0	28	.4908	1.687E-02	228.9	.4239	1.939E-02	235.6	.4347	1.179E-02	219.7
0	32	.4465	1.303E-02	231.3	.3797	1.529E-02	239.3			
4	20	.1100	8.259E-04	229.5	no peak in range			.0875	8.117E-04	238.6
4	24	.2640	5.177E-03	231.9	no peak in range			.2121	4.425E-03	236.8
4	28	.3367	9.148E-03	233.2	.3236	1.183E-02	236.2	.3222	7.300E-03	220.3
4	32	.5290	1.955E-02	228.3	.4909	2.343E-02	236.8			

F-15 Vertical Tail Buffet Test: RMS (in-lbs) & Peak PSD (in-lbs**2/Hz)

1st Bending: 35-65 Hz

S1-BENDING: No Blowing Pressure

Beta	Alpha	rms	peak	freq
-4	20	.4719	3.268E-02	49.4
-4	22	.6473	4.857E-02	50.0
-4	24	.8462	1.104E-01	48.2
-4	28	1.1270	2.024E-01	48.2
-4	32	1.5490	3.856E-01	48.8
0	20	.4131	2.155E-02	50.0
0	22	.5085	3.832E-02	50.0
0	24	.6262	4.925E-02	48.8
0	28	1.0190	1.584E-01	48.2
0	32	1.6110	5.005E-01	47.6
4	20	.2885	8.435E-03	50.7
4	22	.4207	2.526E-02	50.7
4	24	.6123	6.338E-02	50.7
4	28	.9290	1.363E-01	50.0
4	32	1.3960	3.659E-01	48.8

Wing Blowing Pressure

B.P.	Beta	Alpha	rms	peak	freq
45	-4	32	1.5620	4.819E-01	51.3
45	0	24	.6672	6.118E-02	51.3
65	0	24	.6224	4.609E-02	47.0
45	0	32	1.5644	4.996E-01	51.3
45	4	32	1.5402	3.871E-01	50.0

1st Torsion: 180-210 Hz

S2-TORSION: No Blowing Pressure

Beta	Alpha	rms	peak	freq
-4	20	.5690	2.721E-02	190.4
-4	22	.6756	3.987E-02	191.0
-4	24	.5643	2.557E-02	191.6
-4	28	.2354	4.128E-03	194.7
-4	32	.2240	4.622E-03	193.5
0	20	.3817	1.632E-02	190.4
0	22	.5708	3.368E-02	189.8
0	24	.7279	5.535E-02	191.0
0	28	.4221	1.556E-02	191.0
0	32	.2695	5.935E-03	193.5
4	20	.2140	4.036E-03	192.3
4	22	.3882	1.423E-02	191.6
4	24	.6070	3.559E-02	193.5
4	28	.7277	4.453E-02	192.9
4	32	.3947	1.381E-02	195.3

Wing Blowing Pressure

B.P.	Beta	Alpha	rms	peak	freq
45	-4	32	.2372	5.284E-03	204.5
45	0	24	.6712	5.378E-02	201.4
65	0	24	.6099	3.122E-02	187.4
45	0	32	.3151	1.124E-02	205.7
45	4	32	.4154	2.289E-02	204.5

this changes to .8163 in next set of dat

2nd Bending: 210-240 Hz

S1-BENDING: No Blowing Pressure

Beta	Alpha	rms	peak	freq
-4	20	.3241	6.926E-03	230.1
-4	22	.3698	9.630E-03	226.4
-4	24	.3158	7.514E-03	227.1
-4	28	.4941	1.790E-03	227.7
-4	32	.3532	9.624E-03	227.1
0	20	.2478	4.503E-03	228.9
0	22	.3145	6.206E-03	228.9
0	24	.3090	5.511E-03	228.9
0	28	.4908	1.687E-02	228.9
0	32	.4465	1.303E-02	231.3
4	20	.1100	8.259E-04	229.5
4	22	.1812	2.647E-03	232.5
4	24	.2640	5.177E-03	231.9
4	28	.3367	9.148E-03	233.2
4	32	.5290	1.955E-02	228.3

Wing Blowing Pressure

B.P.	Beta	Alpha	rms	peak	freq
45	-4	32	.3313	1.299E-02	237.4
45	0	24	.3143	8.208E-03	232.5
65	0	24	.3136	7.744E-03	216.7
45	0	32	.3797	1.529E-02	239.3
45	4	32	.4909	2.343E-02	236.8

this changed to .3331 in next set of data

F-15 Vertical Tail Buffet Test: RMS (in-lbs) & Peak PSD (in-lbs2/Hz)**

1st Bending: 35-65 Hz

	S1-BENDING: No Blowing Pressure				Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	20	.4719	3.268E-02	49.4	.4986	4.054E-02	50.0	.5398	3.973E-02	51.3
-4	24	.8462	1.104E-01	48.2	.9510	1.452E-01	48.2	.8456	1.098E-01	48.8
-4	28	1.1270	2.024E-01	48.2	1.4290	4.141E-01	48.8	1.1660	2.355E-01	46.4
-4	32	1.5490	3.856E-01	48.8	1.5620	4.819E-01	51.3			
0	20	.4131	2.155E-02	50.0	.4412	2.900E-02	49.4	.4624	2.974E-02	50.7
0	24	.6262	4.925E-02	48.8	.6672	6.118E-02	51.3	.6778	5.635E-02	50.0
0	28	1.0180	1.584E-01	48.2	.9331	1.411E-01	50.7	.9817	1.540E-01	47.6
0	32	.6110	5.005E-01	47.6	1.5640	4.996E-01	51.3			
4	20	.2885	8.435E-03	50.7	.2737	1.073E-02	52.5	.3216	1.506E-02	51.9
4	24	.6123	6.338E-02	50.7	.5828	5.478E-02	52.5	.5852	5.325E-02	51.9
4	28	.9290	1.363E-01	50.0	1.0090	1.738E-01	50.0	.8727	1.061E-01	47.6
4	32	1.3960	3.659E-01	48.8	1.5400	3.871E-01	50.0			

1st Torsion: 180-210 Hz

	S2-TORSION: No Blowing Pressure				Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	20	.5690	2.721E-02	190.4	.4731	2.536E-02	202.0	.5591	2.847E-02	200.2
-4	24	.5643	2.557E-02	191.6	.6783	5.404E-02	202.6	.6991	4.891E-02	200.2
-4	28	.2354	4.128E-03	194.7	.3523	1.416E-02	204.5	.3057	7.418E-03	189.8
-4	32	.2240	4.622E-03	193.5	.2372	5.284E-03	204.5			
0	20	.3817	1.632E-02	190.4	.3662	1.566E-02	203.2	.4658	2.160E-02	200.2
0	24	.7279	5.535E-02	191.0	.6712	5.378E-02	201.4	.8163	7.479E-02	199.0
0	28	.4221	1.556E-02	191.0	.5519	3.562E-02	203.9	.4414	1.860E-02	189.8
0	32	.2695	5.935E-03	193.5	.3151	1.124E-02	205.7			
4	20	.2140	4.036E-03	192.3	.1989	4.321E-03	203.9	.2567	6.459E-03	198.4
4	24	.6070	3.559E-02	193.5	.4906	2.989E-02	203.2	.5939	3.316E-02	199.6
4	28	.7277	4.453E-02	192.9	.8196	8.183E-02	203.2	.7103	4.342E-02	190.4
4	32	.3947	1.381E-02	195.3	.4154	2.289E-02	204.5			

2nd Bending: 210-240 Hz

	S1-BENDING: No Blowing Pressure				Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	20	.3241	6.926E-03	230.1	.2588	5.591E-03	233.2	.2924	5.703E-03	233.8
-4	24	.3158	7.514E-03	227.1	.3568	1.062E-02	233.8	.3576	1.117E-02	228.3
-4	28	.4941	1.790E-03	227.7	.4970	2.152E-02	235.6	.4578	1.407E-02	222.8
-4	32	.3532	9.624E-03	227.1	.3313	1.299E-02	237.4			
0	20	.2478	4.503E-03	228.9	.1813	2.526E-03	231.9	.2218	3.397E-03	230.7
0	24	.3090	5.511E-03	228.9	.3143	8.208E-03	232.5	.3331	9.752E-03	232.5
0	28	.4908	1.687E-02	228.9	.4239	1.939E-02	235.6	.4347	1.179E-02	219.7
0	32	.4465	1.303E-02	231.3	.3797	1.529E-02	239.3			
4	20	.1100	8.259E-04	229.5	no peak in range			.0875	8.117E-04	238.6
4	24	.2640	5.177E-03	231.9	no peak in range			.2121	4.425E-03	236.8
4	28	.3367	9.148E-03	233.2	.3236	1.183E-02	236.2	.3222	7.300E-03	220.3
4	32	.5290	1.955E-02	228.3	.4909	2.343E-02	236.8			

F-15 Vertical Tail Buffet Test: Overall RMS (in-lbs) & Peak of PSD (in-lbs**2/Hz), Q=56 psi

2nd Bending: 210-240 Hz

S1-BENDING: No Blowing Pressure					Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	8	.0175	2.024E-05	232.5	no peak in range			no data		
-4	12	.0236	4.368E-05	231.9	no peak in range			no data		
-4	16	.0800	3.758E-04	228.3	no peak in range			.0894	6.685E-04	234.4
-4	20	.3241	6.926E-03	230.1	.2588	5.591E-03	233.2	.2924	5.703E-03	233.8
-4	24	.3158	7.514E-03	227.1	.3568	1.062E-02	233.8	.3576	1.117E-02	228.3
-4	28	.4941	1.790E-03	227.7	.4970	2.152E-02	235.6	.4578	1.407E-02	222.8
-4	32	.3532	9.624E-03	227.1	.3313	1.299E-02	237.4	no data		
0	8	.0145	1.373E-05	230.1	.0128	1.635E-05	235.0	no data		
0	12	.0155	1.542E-05	235.6	.0165	2.454E-05	233.8	no data		
0	16	.0407	1.148E-04	233.2	.0366	1.040E-04	233.2	.0504	1.850E-04	230.7
0	20	.2478	4.503E-03	228.9	.1813	2.526E-03	231.9	.2218	3.397E-03	230.7
0	24	.3090	5.511E-03	228.9	.3143	8.208E-03	232.5	.3331	9.752E-03	232.5
0	28	.4908	1.687E-02	228.9	.4239	1.939E-02	235.6	.4347	1.179E-02	219.7
0	32	.4465	1.303E-02	231.3	.3797	1.529E-02	239.3	no data		
4	8	.0111	8.438E-06	230.7	no peak in range			no data		
4	12	.0125	9.895E-06	230.1	no peak in range			no data		
4	16	.0237	4.391E-05	232.5	no peak in range			.0244	7.850E-05	238.0
4	20	.1100	8.259E-04	229.5	no peak in range			.0875	8.117E-04	238.6
4	24	.2640	5.177E-03	231.9	no peak in range			.2121	4.425E-03	236.8
4	28	.3367	9.148E-03	233.2	.3236	1.183E-02	236.2	.3222	7.300E-03	220.3
4	32	.5290	1.955E-02	228.3	.4909	2.343E-02	236.8	no data		

F-15 Vertical Tail Buffet Test: Overall RMS (in-lbs) & Peak of PSD (in-lbs**2/Hz), Q=56 psi

1st Bending: 35-65 Hz

S1-BENDING: No Blowing Pressure					Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	8	.0449	3.842E-04	50.1	.0469	3.488E-04	50.7	no data		
-4	12	.0573	4.540E-04	50.7	.0750	9.914E-04	52.5	no data		
-4	16	.1788	4.186E-03	50.7	.1973	7.406E-03	51.9	.2212	7.472E-03	51.3
-4	20	.4719	3.268E-02	49.4	.4986	4.054E-02	50.0	.5398	3.973E-02	51.3
-4	24	.8462	1.104E-01	48.2	.9510	1.452E-01	48.2	.8456	1.098E-01	48.8
-4	28	1.1270	2.024E-01	48.2	1.4290	4.141E-01	48.8	1.1660	2.355E-01	46.4
-4	32	1.5490	3.856E-01	48.8	1.5620	4.819E-01	51.3	no data		
0	8	.0539	4.883E-04	52.5	.0562	5.658E-04	50.7	no data		
0	12	.0500	2.673E-04	53.1	.0689	6.579E-04	49.4	no data		
0	16	.1552	3.504E-03	50.7	.1583	2.909E-03	48.8	.1818	4.153E-03	48.2
0	20	.4131	2.155E-02	50.0	.4412	2.900E-02	49.4	.4624	2.974E-02	50.7
0	24	.6262	4.925E-02	48.8	.6672	6.118E-02	51.3	.6778	5.635E-02	50.0
0	28	1.0190	1.584E-01	48.2	.9331	1.411E-01	50.7	.9817	1.540E-01	47.6
0	32	1.6110	5.005E-01	47.6	1.5640	4.996E-01	51.3	no data		
4	8	.0427	2.680E-04	50.7	.0451	3.113E-04	53.7	no data		
4	12	.0447	2.546E-04	50.7	.0497	2.661E-04	53.7	no data		
4	16	.1152	1.762E-03	51.9	.1083	1.594E-03	52.5	.1292	2.420E-03	53.1
4	20	.2885	8.435E-03	50.7	.2737	1.073E-02	52.5	.3216	1.506E-02	51.9
4	24	.6123	6.338E-02	50.7	.5828	5.478E-02	52.5	.5852	5.325E-02	51.9
4	28	.9290	1.363E-01	50.0	1.0090	1.738E-01	50.0	.8727	1.061E-01	47.6
4	32	1.3960	3.659E-01	48.8	1.5400	3.871E-01	50.0	no data		

F-15 Vertical Tail Buffet Test: Overall RMS (in-lbs) & Peak of PSD (in-lbs**2/Hz), Q=56 psi

1st Torsion: 180-210 Hz

S2-TORSION: No Blowing Pressure					Blowing pressure: 45			Blowing pressure: 65		
Beta	Alpha	rms	peak	freq	rms	peak	freq	rms	peak	freq
-4	8	.0041	1.421E-06	191.7	no peak in range			no data		
-4	12	.0150	1.804E-05	191.7	.0133	1.892E-05	204.5	no data		
-4	16	.0809	5.727E-04	192.3	.1086	1.217E-03	201.4	.1296	1.438E-03	200.8
-4	20	.5690	2.721E-02	190.4	.4731	2.536E-02	202.0	.5591	2.847E-02	200.2
-4	24	.5643	2.557E-02	191.6	.6783	5.404E-02	202.6	.6991	4.891E-02	200.2
-4	28	.2354	4.128E-03	194.7	.3523	1.416E-02	204.5	.3057	7.418E-03	189.8
-4	32	.2240	4.622E-03	193.5	.2372	5.284E-03	204.5	no data		
0	8	.0038	1.177E-06	189.2	no peak in range			no data		
0	12	.0102	9.125E-06	192.9	no peak in range			no data		
0	16	.0495	2.266E-04	191.7	.0520	2.861E-04	203.9	.0688	4.102E-04	198.4
0	20	.3817	1.632E-02	190.4	.3662	1.566E-02	203.2	.4658	2.160E-02	200.2
0	24	.7279	5.535E-02	191.0	.6712	5.378E-02	201.4	.8163	7.479E-02	199.0
0	28	.4221	1.556E-02	191.0	.5519	3.562E-02	203.9	.4414	1.860E-02	189.8
0	32	.2695	5.935E-03	193.5	.3151	1.124E-02	205.7	no data		
4	8	.0038	1.422E-06	188.6	no peak in range			no data		
4	12	.0082	5.333E-06	188.0	no peak in range			no data		
4	16	.0295	7.666E-05	192.9	.0360	1.457E-04	202.0	.0418	1.915E-04	201.4
4	20	.2140	4.036E-03	192.3	.1989	4.321E-03	203.9	.2567	6.459E-03	198.4
4	24	.6070	3.559E-02	193.5	.4963	2.989E-02	203.2	.5939	3.316E-02	199.6
4	28	.7277	4.453E-02	192.9	.8196	8.183E-02	203.2	.7103	4.342E-02	190.4
4	32	.3947	1.381E-02	195.3	.4154	2.289E-02	204.5	no data		

F-15 Vertical Tail Buffet Test: Overall RMS (in-lb), Q=56 psf

87 psi blowing pressure at nose only:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.1466	.0558	.1295	.0368	.0207
4	20	.4076	.2995	.3404	.2560	.1033
4	24	.8144	.7936	.6382	.6507	.2419
4	26	1.0650	1.0710	.8494	.8630	.3065
0	16	.2040	.0813	.1764	.0571	.0433
0	20	.6206	.5776	.4480	.4976	.2506
0	24	.9144	.9681	.7052	.7823	.3044
0	26	1.0520	.8705	.8746	.6498	.3245
-4	16	.2248	.1216	.1860	.0926	.0737
-4	20	.7558	.7675	.5138	.6476	.3385
-4	24	1.1180	.8304	.9437	.6325	.3381
-4	26	1.2520	.5377	1.0210	.3804	.5303

87 psi blowing pressure at nose & 65 psi at gun:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.1620	.0660	.1421	.0435	.0261
4	20	.4129	.3640	.3240	.3144	.1103
4	24	.7452	.7557	.5635	.6248	.2352
4	26	.9608	.9438	.7612	.7647	.2857
0	16	.2238	.1058	.1899	.0818	.0564
0	20	.6484	.6360	.4630	.5545	.2530
0	24	.9388	.9867	.7112	.8103	.3281
0	26	1.0760	.9283	.8865	.7182	.3099
-4	16	.3321	.2256	.2579	.1847	.1249
-4	20	.7467	.7859	.5095	.6684	.3118
-4	24	1.2310	.8603	1.0560	.6454	.3354
-4	26	1.4380	.6622	1.2330	.4953	.5044

87 psi blowing pressure at nose & 65 psi at wing L.E.:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.1606	.0689	.1408	.0461	.0274
4	20	.3800	.3055	.3057	.2603	.0987
4	24	.7536	.7557	.5738	.6284	.2379
4	26	.9425	.9531	.7304	.7534	.3058
0	16	.2214	.0961	.1927	.0681	.0500
0	20	.6194	.5617	.4583	.4855	.2330
0	24	.9024	.9610	.6710	.7834	.3287
0	26	.9809	.8751	.7930	.6588	.2994
-4	16	.2626	.1608	.2139	.1291	.0861
-4	20	.6976	.6335	.5171	.5346	.2788
-4	24	1.0750	.9191	.8656	.7493	.3548
-4	26	1.1970	.7505	1.0370	.5982	.3399

F-15 Vertical Tail Buffet Test: Overall RMS (in-lb), Q=56 psi

65 psi blowing pressure at gun only:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.1578	.0626	.1380	.0405	.0284
4	20	.4142	.3540	.3287	.3061	.1104
4	24	.7573	.7145	.5837	.5812	.2483
4	26	.9501	.9039	.7509	.7335	.2908
0	16	.2186	.1004	.1844	.0782	.0571
0	20	.6347	.6112	.4499	.5289	.2543
0	24	.9342	.9938	.6928	.8224	.3356
0	26	1.1200	.9514	.9275	.7310	.3237
-4	16	.3327	.2263	.2545	.1837	.1266
-4	20	.7730	.7977	.5344	.6742	.3216
-4	24	1.2190	.8549	1.0390	.6449	.3449
-4	26	1.4190	.6446	1.2040	.4894	.5180

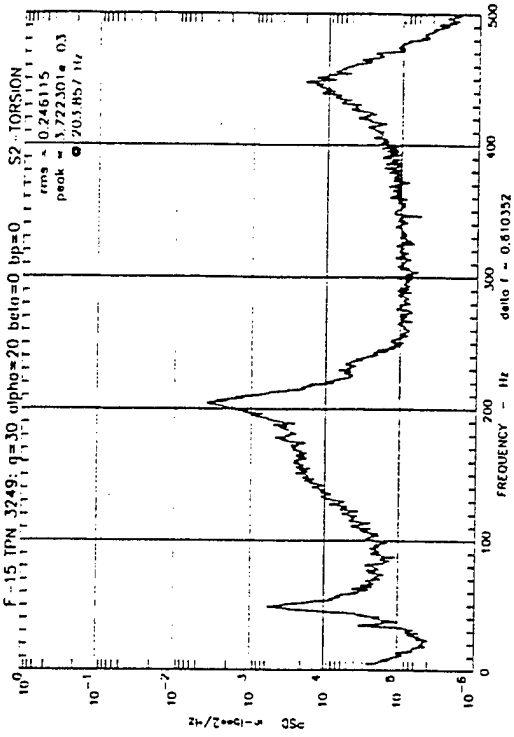
65 psi blowing pressure at gun & wing L.E.:

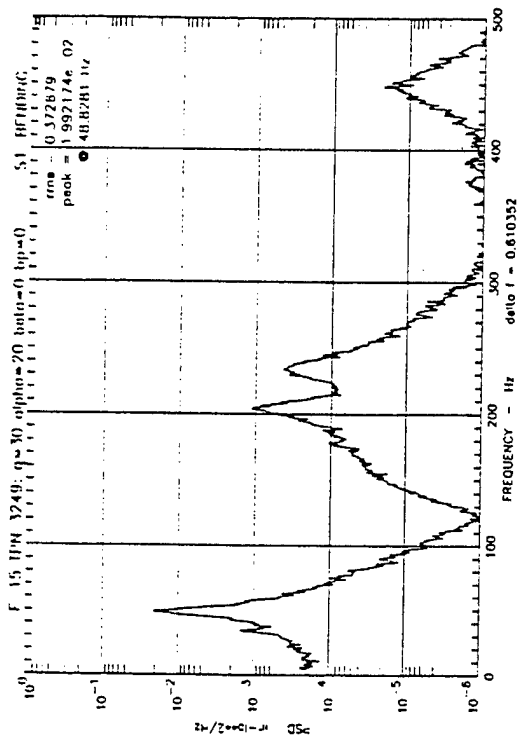
Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.1664	.0720	.1433	.0476	.0288
4	20	.4009	.3154	.3305	.2671	.0913
4	24	.7510	.6754	.5805	.5552	.2313
4	26	.9368	.8879	.7233	.7235	.3023
0	16	.2335	.1077	.1988	.0841	.0524
0	20	.6012	.5385	.4549	.4674	.2066
0	24	.9263	.9342	.6958	.7726	.3368
0	26	1.0880	.9439	.8914	.7640	.3271
-4	16	.3077	.2015	.2425	.1666	.1059
-4	20	.7350	.7187	.5257	.6093	.2901
-4	24	1.2420	.8988	1.0390	.7263	.3984
-4	26	1.4070	.7924	1.2010	.6494	.4694

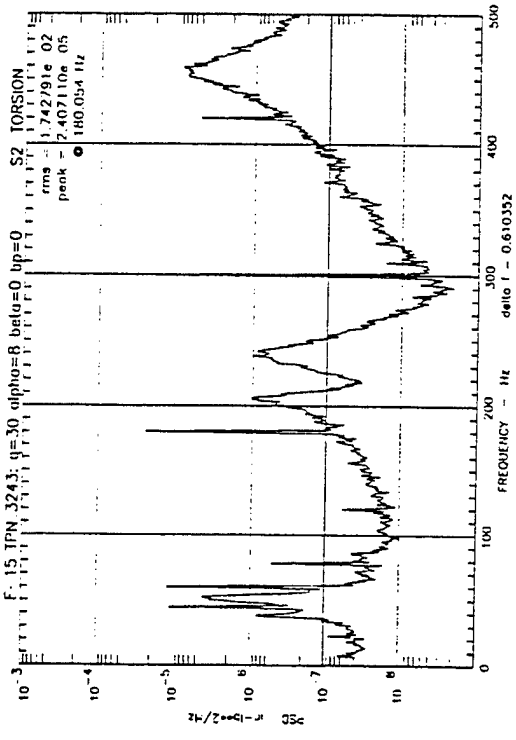
FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION

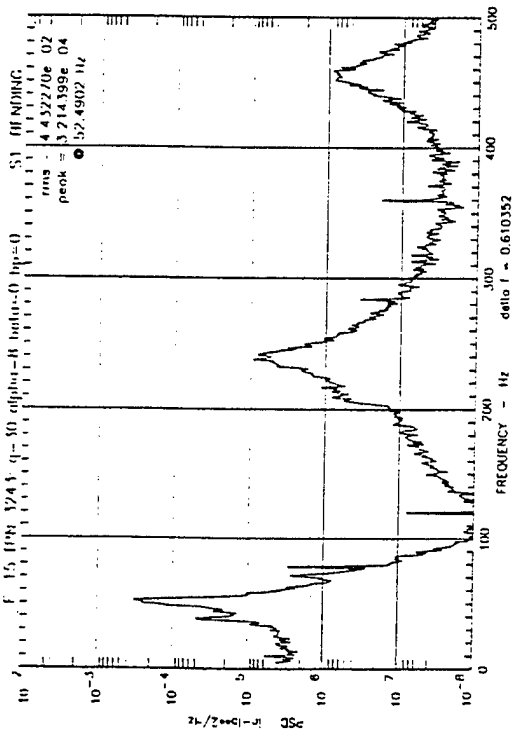
PSD GRAPHS
Q= 30 PSF

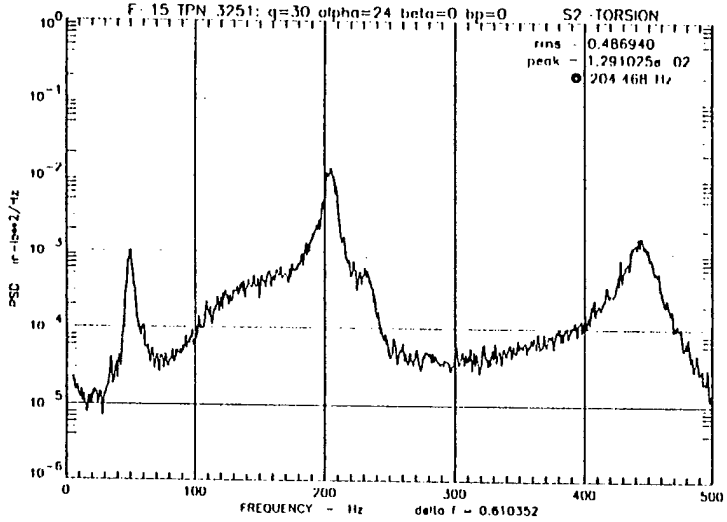
2.2.1 WBP =0, 45 psi, BETA = 0, +4, -4, ALPHA= 8....32 DEG

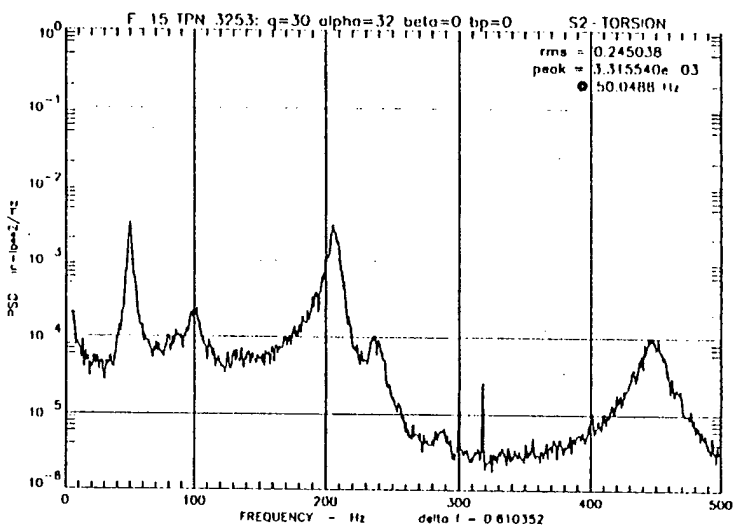

F-15 TPN 3249: q=30 alpha=20 beta=0 bp=0
S2 TORSION
rms = 0.246115
peak = 3.722301e 03
@ 203.857 Hz
FREQUENCY - Hz
delta f = 0.610352

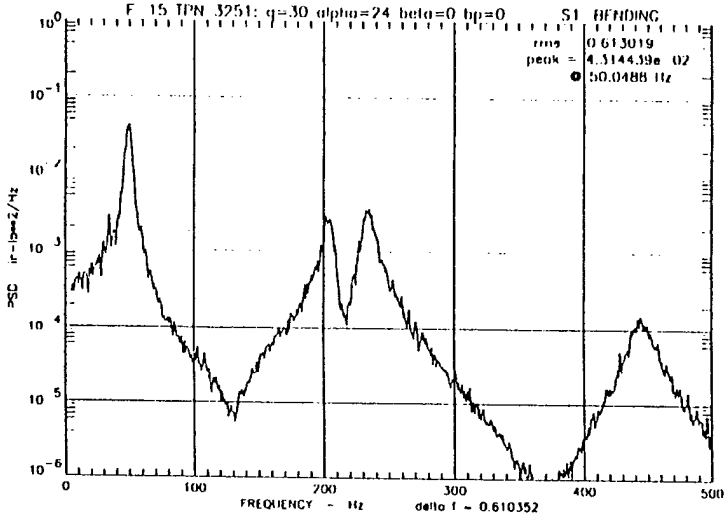

F-15 TPN 3249: q=30 alpha=20 beta=0 bp=0
S1 AFTBODY
rms = 0.372679
peak = 1.992174e 02
@ 48.8281 Hz
FREQUENCY - Hz
delta f = 0.610352

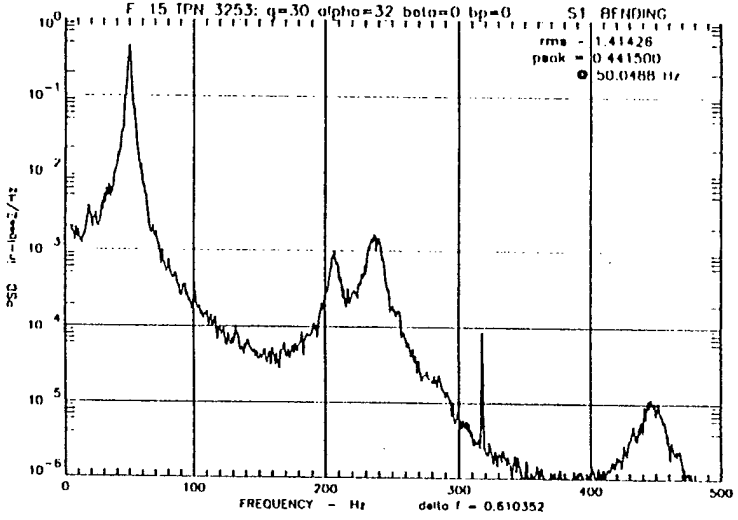

F-15 TPN 3243: q=30 alpha=8 beta=0 bp=0
S2 TORSION
rms = 1.742791e 02
peak = 2.407110e 05
@ 180.054 Hz
FREQUENCY - Hz
delta f = 0.610352

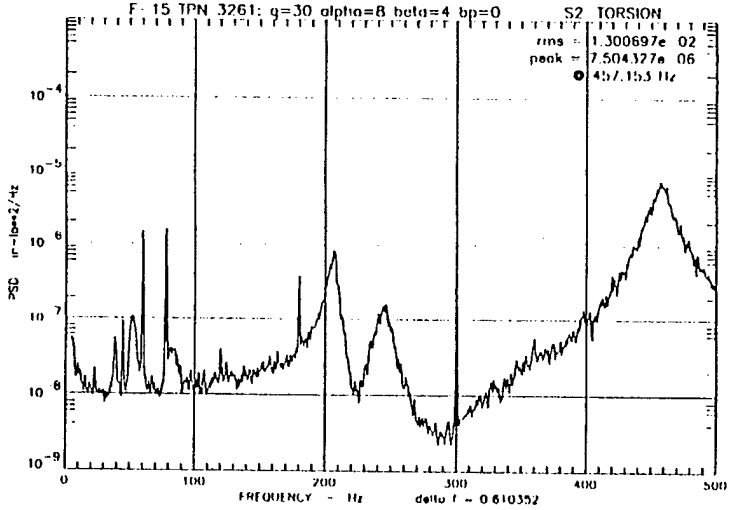

F-15 TPN 3243: q=30 alpha=8 beta=0 bp=0
S1 AFTBODY
rms = 4.432270e 02
peak = 3.214399e 04
@ 52.4902 Hz
FREQUENCY - Hz
delta f = 0.610352

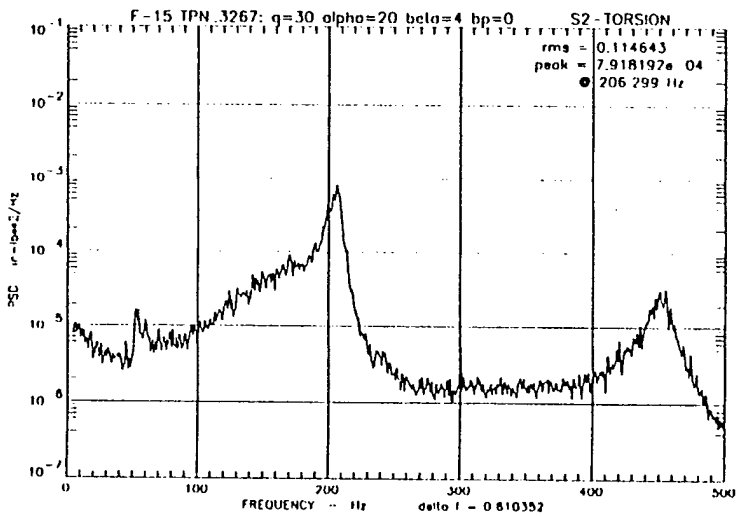

F 15 TPN 3251: q=30 alpha=24 beta=0 bp=0 S2 -TORSION
rms = 0.486940
peak = 1.291025e 02
@ 204.468 Hz
PSD in-lbm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

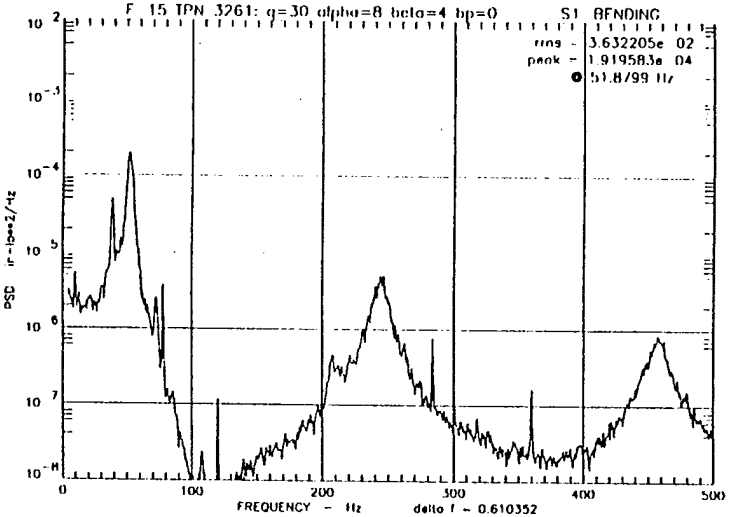

F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0 S2 - TORSION
rms = 0.245038
peak = 3.315540e 03
@ 50.0488 Hz
PSD in-lbm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

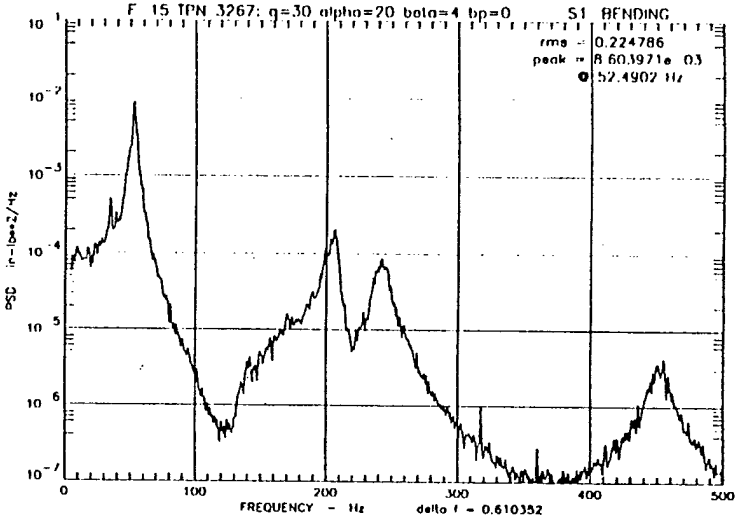

F 15 TPN 3251: q=30 alpha=24 beta=0 bp=0 S1 BENDING
rms = 0.613019
peak = 4.314439e 02
@ 50.0488 Hz
PSD in-lbm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

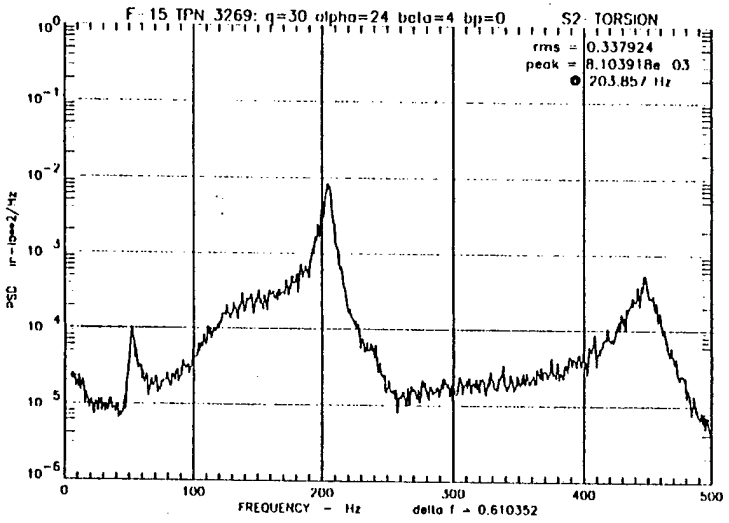

F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0 S1 BENDING
rms = 1.41426
peak = 0.441500
@ 50.0488 Hz
PSD in-lbm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

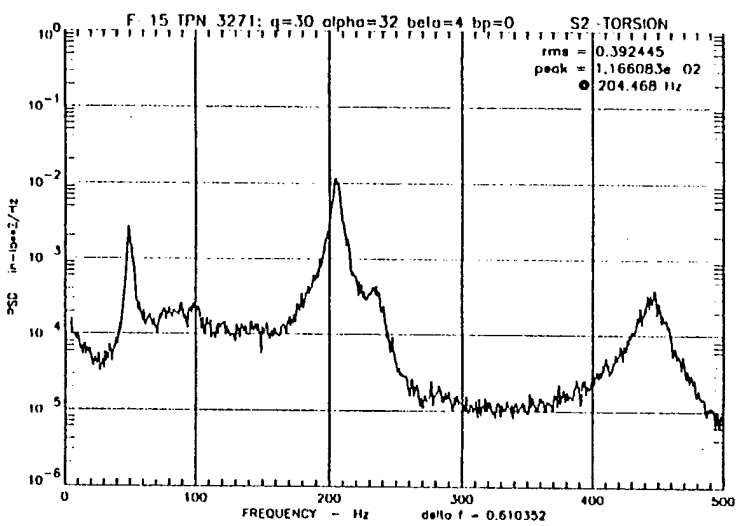

F-15 TPN 3261: q=30 alpha=8 beta=4 bp=0
S2 TORSION
rms = 1.300697e 02
peak = 7.504327e 06
@ 457.153 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

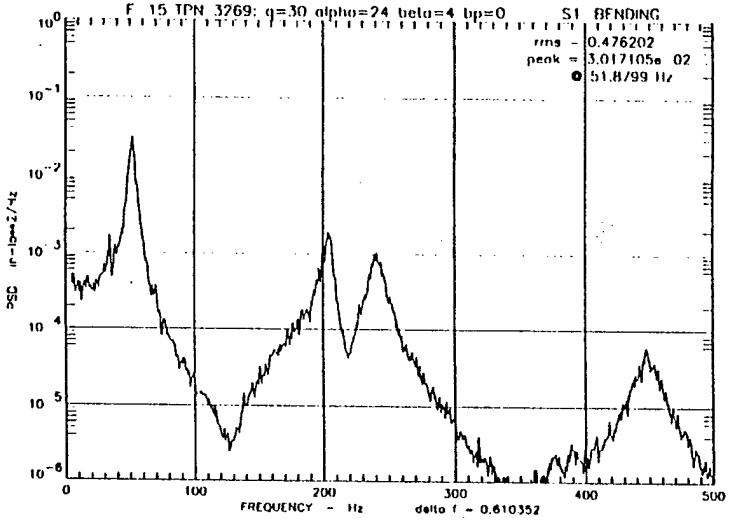

F-15 TPN 3267: q=30 alpha=20 beta=4 bp=0
S2 - TORSION
rms = 0.114643
peak = 7.918197e 04
@ 206.299 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

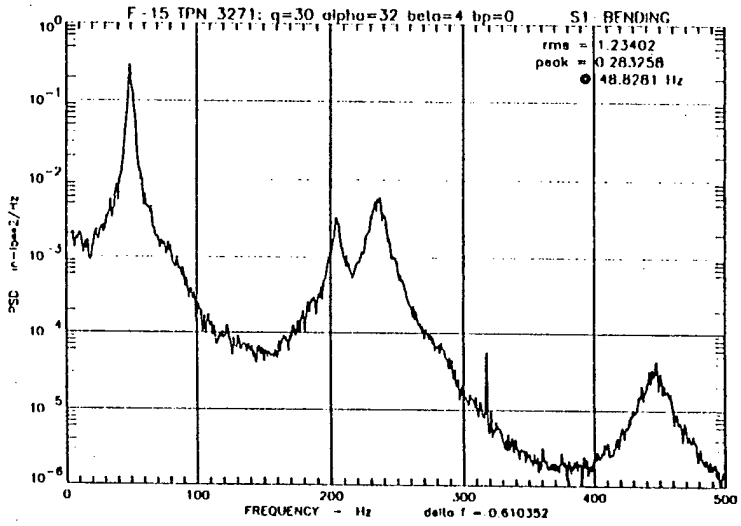

F-15 TPN 3261: q=30 alpha=8 beta=4 bp=0
S1 BENDING
rms = 3.632205e 02
peak = 1.919583e 04
@ 51.8799 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

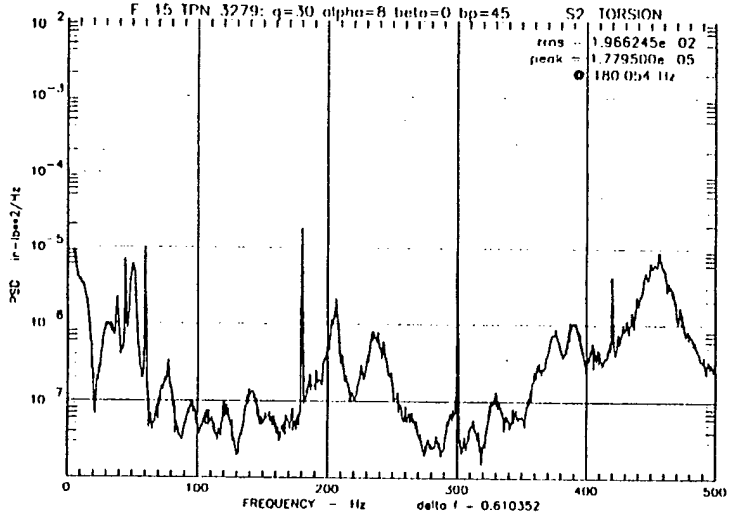

F-15 TPN 3267: q=30 alpha=20 beta=4 bp=0
S1 BENDING
rms = 0.224786
peak = 8.603971e 03
@ 52.4902 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

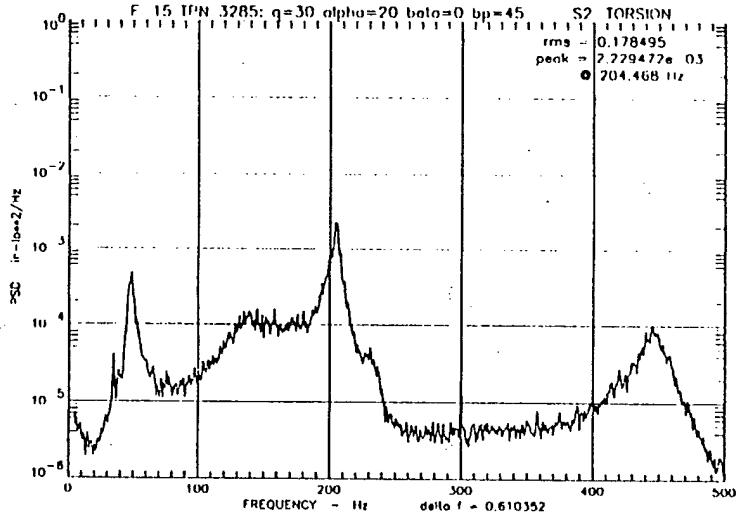

F-15 TPN 3269: q=30 alpha=24 beta=4 bp=0
S2 TORSION
rms = 0.337924
peak = 8.103918e 03
@ 203.857 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

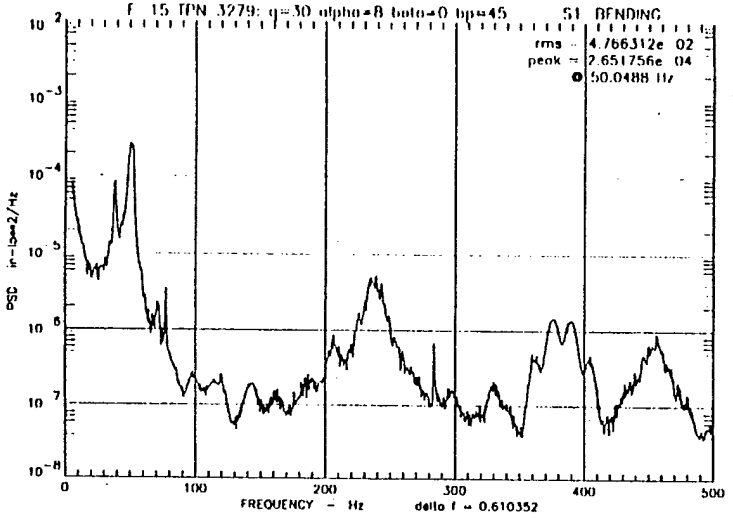

F-15 TPN 3271: q=30 alpha=32 beta=4 bp=0
S2 TORSION
rms = 0.392445
peak = 1.166083e 02
@ 204.468 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

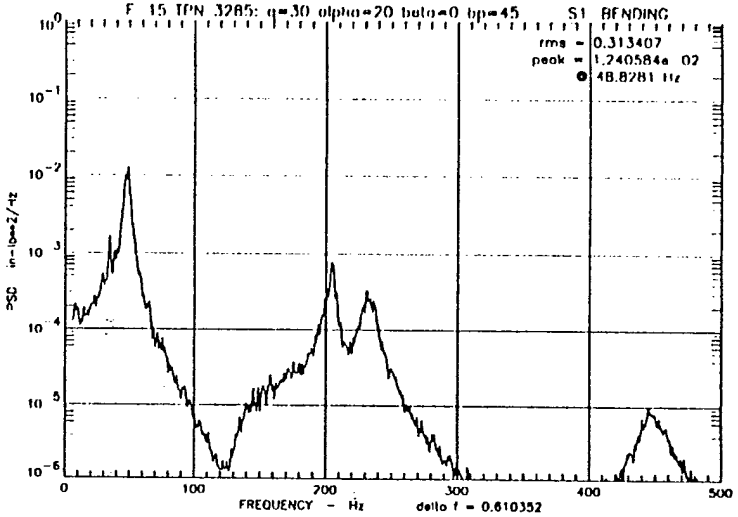

F-15 TPN 3269: q=30 alpha=24 beta=4 bp=0
S1 BENDING
rms = 0.476202
peak = 3.017105e 02
@ 51.8799 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

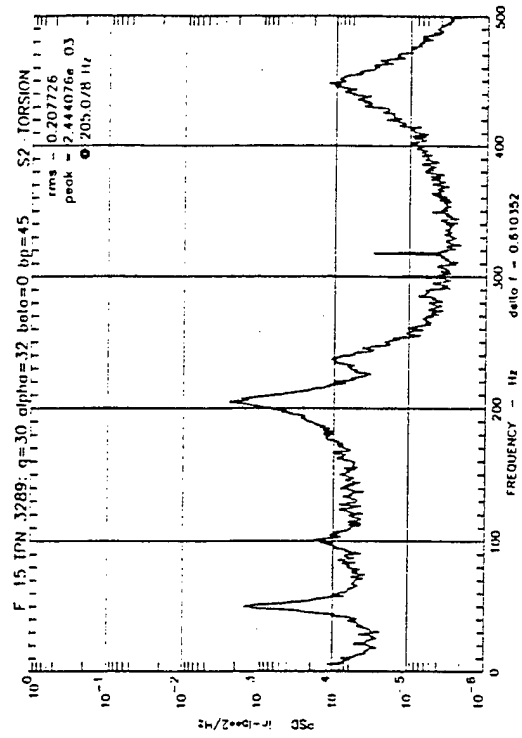

F-15 TPN 3271: q=30 alpha=32 beta=4 bp=0
S1 BENDING
rms = 1.23402
peak = 8.283758
@ 48.8281 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

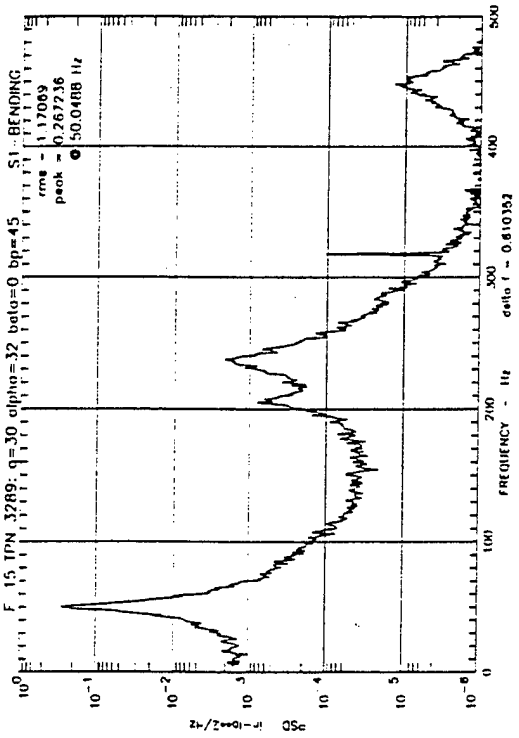

F 15 TPN 3279: q=30 alpha=8 beta=0 bp=45 S2 TORSION
rms = 1.966245e 02
peak = 1.779500e 05
@ 180.054 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

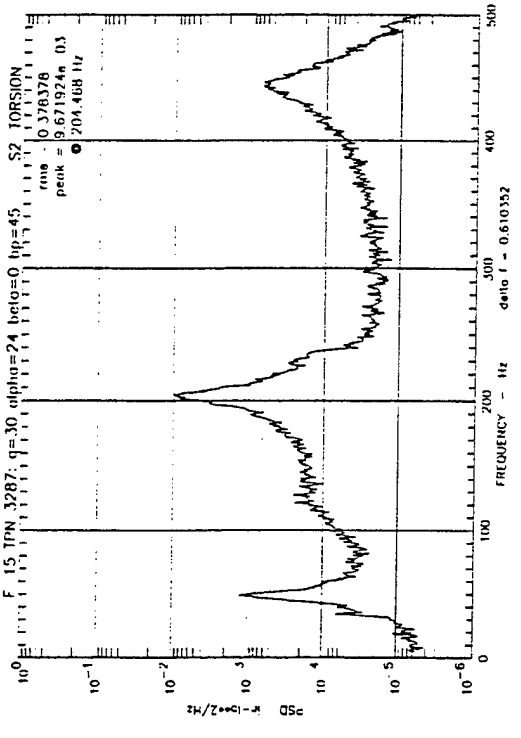

F 15 TPN 3285: q=30 alpha=20 beta=0 bp=45 S2 TORSION
rms = 0.178495
peak = 2.229472e 03
@ 204.468 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

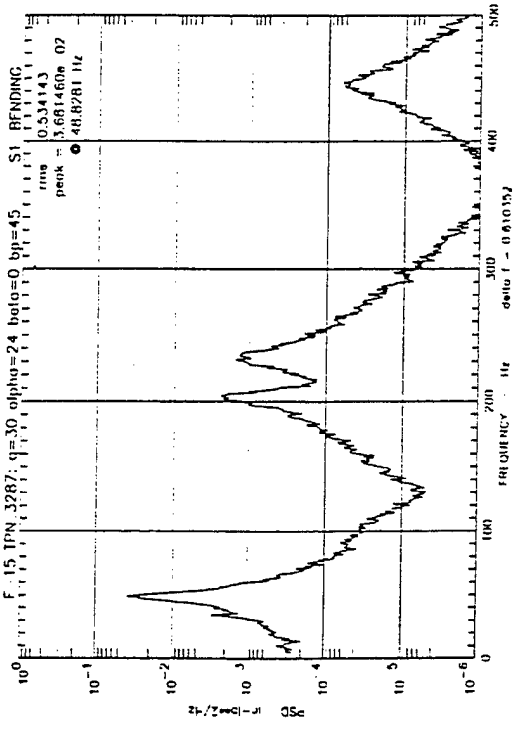

F 15 TPN 3279: q=30 alpha=8 beta=0 bp=45 S1 BENDING
rms = 4.766312e 02
peak = 2.651756e 04
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

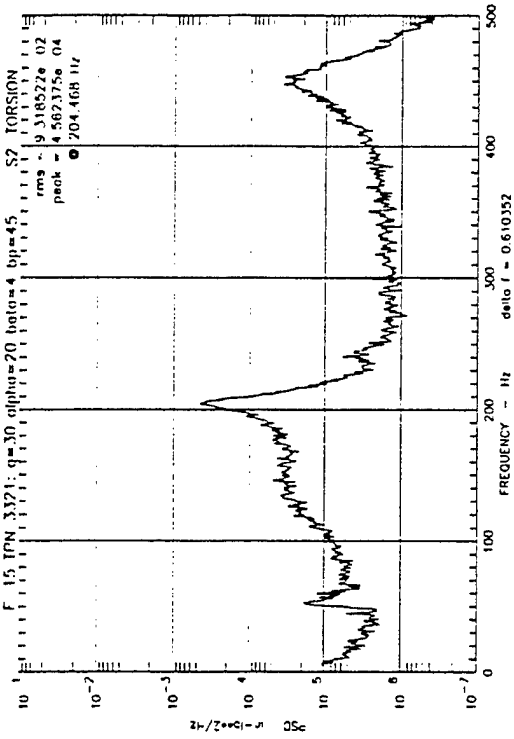

F 15 TPN 3285: q=30 alpha=20 beta=0 bp=45 S1 BENDING
rms = 0.313407
peak = 1.240584e 02
@ 48.8281 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352

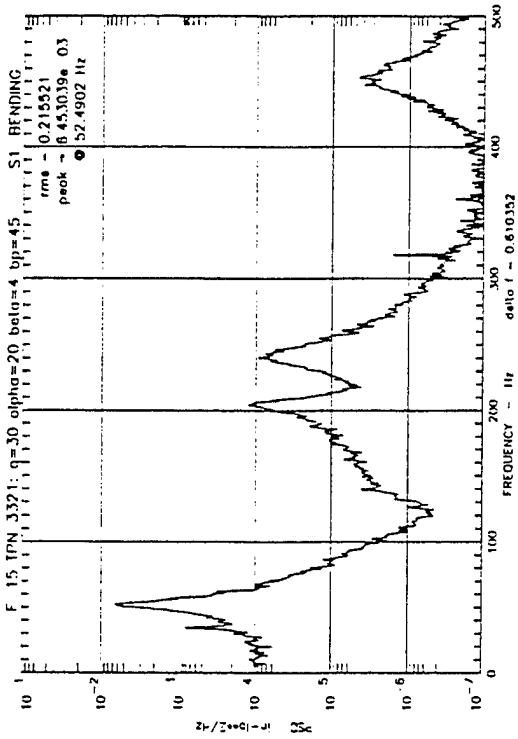

F 15 TPN 3289: q=30 alpha=32 beta=0 bp=45 S2 TORSION
rms = 0.207726
peak = 2.444076e 03
@ 205.078 Hz
delta f = 0.610352
FREQUENCY - Hz
PSD f**-1 e**2/Hz

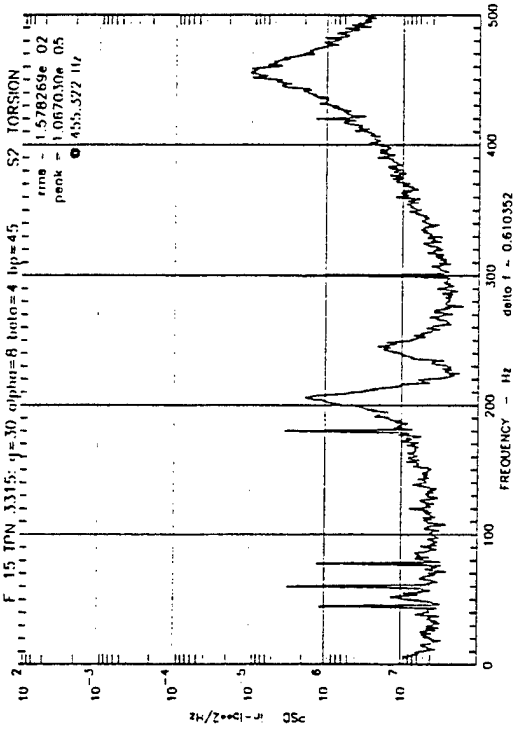

F 15 TPN 3289: q=30 alpha=32 beta=0 bp=45 S1 BENDING
rms = 1.17069
peak = 0.267236
@ 50.0488 Hz
delta f = 0.610352
FREQUENCY - Hz
PSD f**-1 e**2/Hz

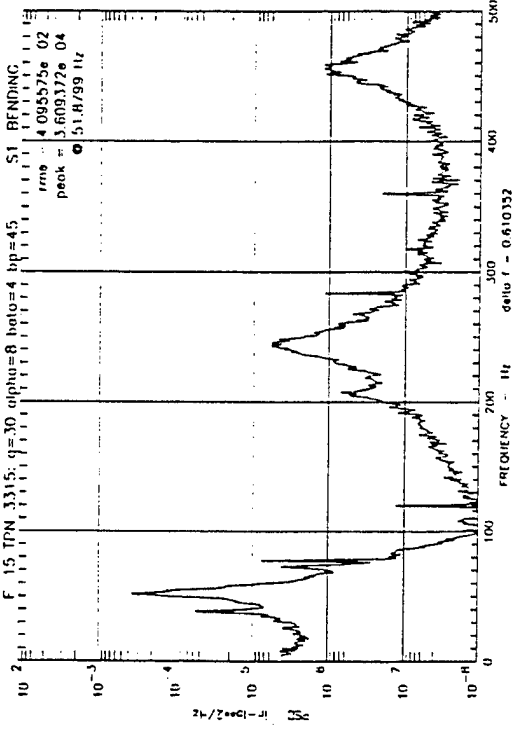

F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45 S2 TORSION
rms = 0.378378
peak = 9.671924e 03
@ 204.468 Hz
delta f = 0.610352
FREQUENCY - Hz
PSD f**-1 e**2/Hz

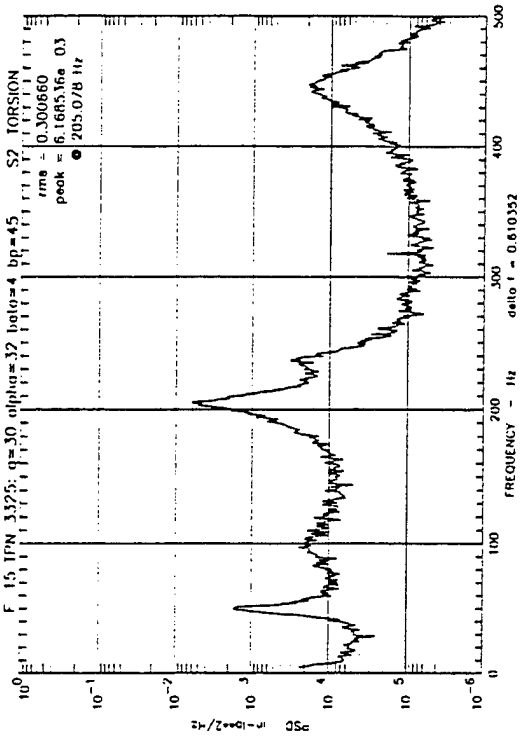

F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45 S1 BENDING
rms = 0.534143
peak = 3.681460e 02
@ 48.8281 Hz
delta f = 0.610352
FREQUENCY - Hz
PSD f**-1 e**2/Hz

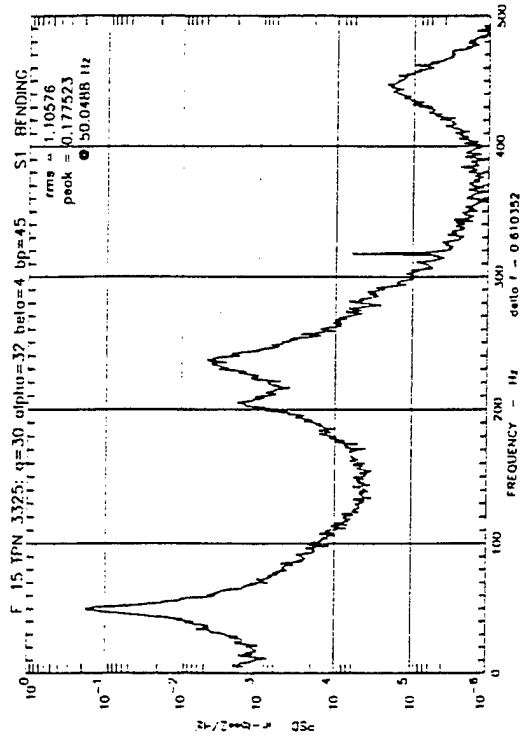

F 15 TPN 3321: q=30 alpha=20 beta=4 bp=45 S2 TORSION
rms = 9.318572e 02
peak = 4.582375e 04
@ 204.468 Hz
FREQUENCY - Hz
delta f = 0.610352

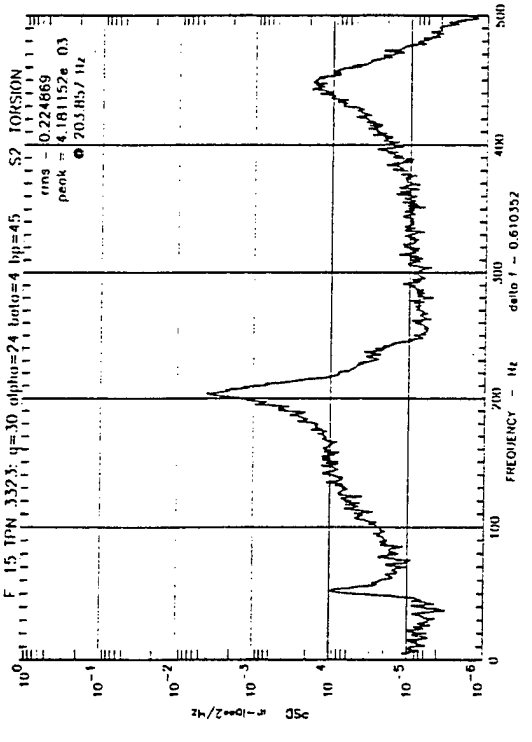

F 15 TPN 3321: q=30 alpha=20 beta=4 bp=45 S1 BENDING
rms = 0.215521
peak = 8.453039e 03
@ 52.4902 Hz
FREQUENCY - Hz
delta f = 0.610352

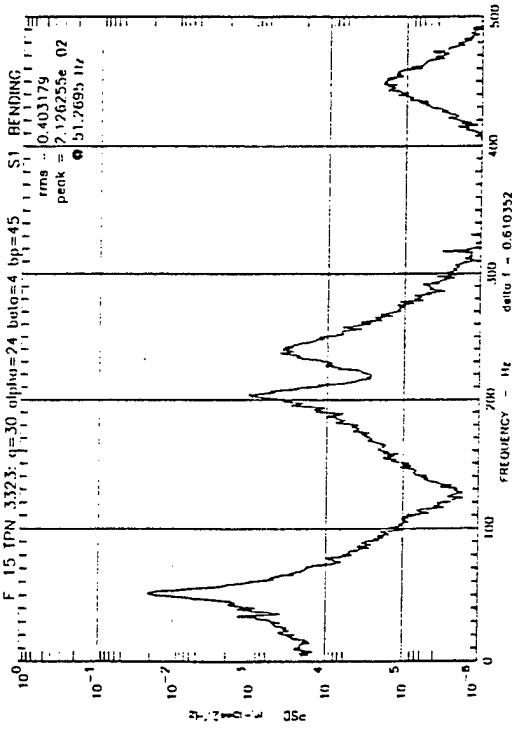

F 15 TPN 3315: q=30 alpha=8 beta=4 bp=45 S2 TORSION
rms = 1.578269e 02
peak = 1.067030e 05
@ 455.322 Hz
FREQUENCY - Hz
delta f = 0.610352

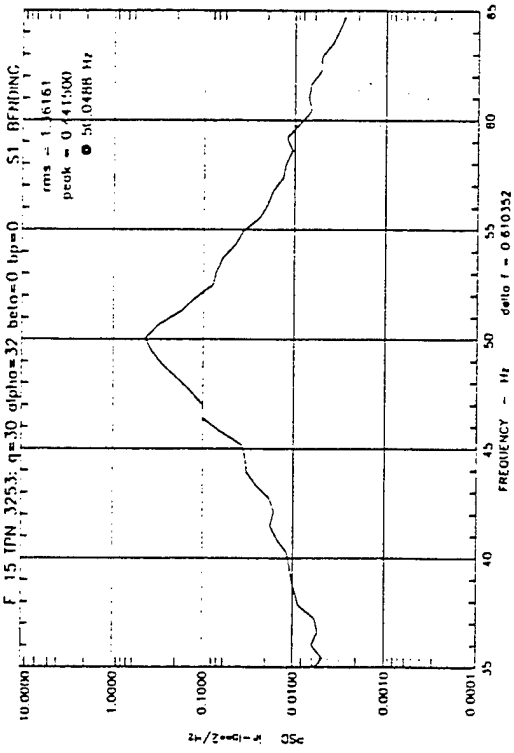

F 15 TPN 3315: q=30 alpha=8 beta=4 bp=45 S1 BENDING
rms = 4.095575e 02
peak = 3.609372e 04
@ 511.719 Hz
FREQUENCY - Hz
delta f = 0.610352

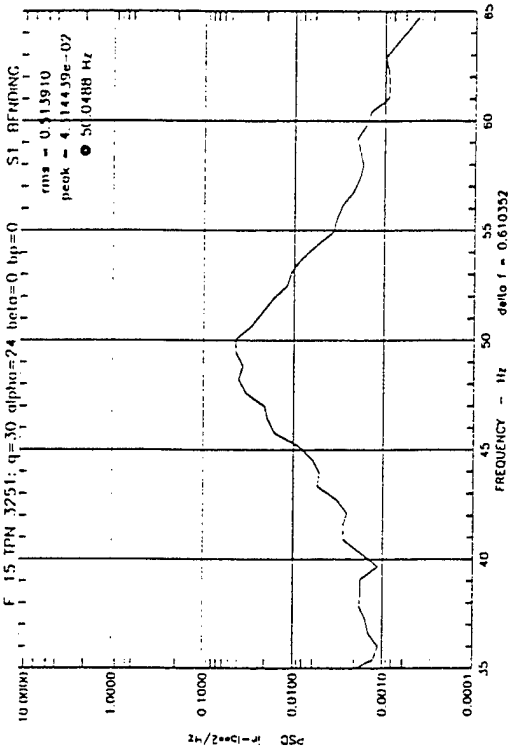

F 15 TPN 3325: q=30 alpha=32 beta=4 bp=45
S2 TORSION
rms = 0.300660
peak = 6.1685.36e 03
@ 205.078 Hz
delta f = 0.610352
FREQUENCY - Hz
PSD

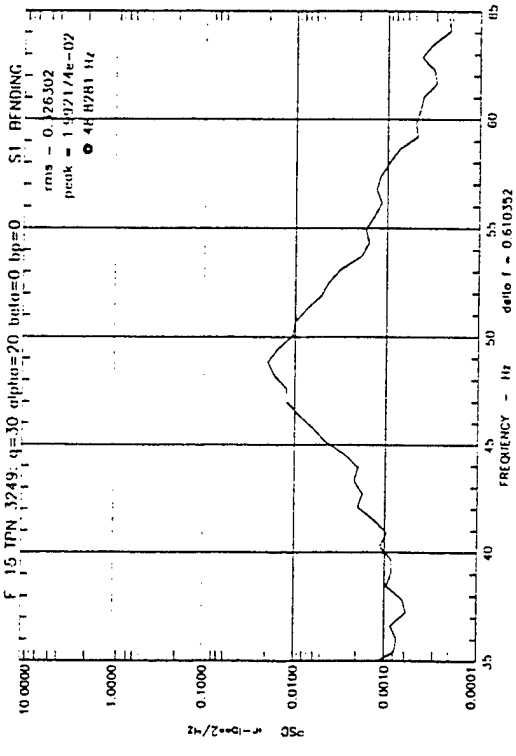

F 15 TPN 3325: q=30 alpha=32 beta=4 bp=45
S1 BENDING
rms = 1.10576
peak = 0.177523
@ 50.0488 Hz
delta f = 0.610352
FREQUENCY - Hz
PSD

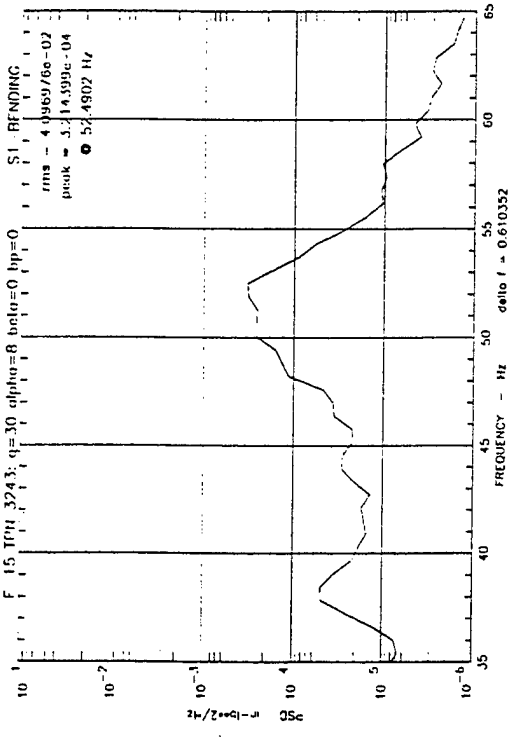

F 15 TPN 3323: q=30 alpha=24 beta=4 bp=45
S2 TORSION
rms = 0.224869
peak = 4.181152e 03
@ 203.857 Hz
delta f = 0.610352
FREQUENCY - Hz
PSD

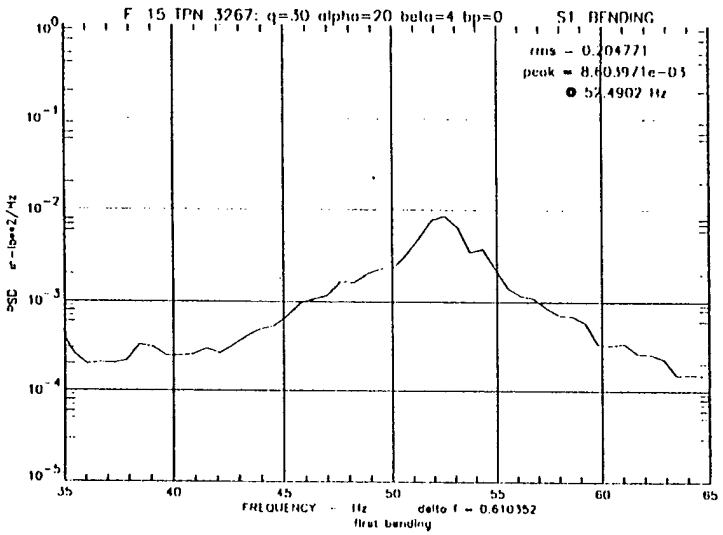

F 15 TPN 3323: q=30 alpha=24 beta=4 bp=45
S1 BENDING
rms = 0.403179
peak = 2.176255e 02
@ 51.7695 Hz
delta f = 0.610352
FREQUENCY - Hz
PSD

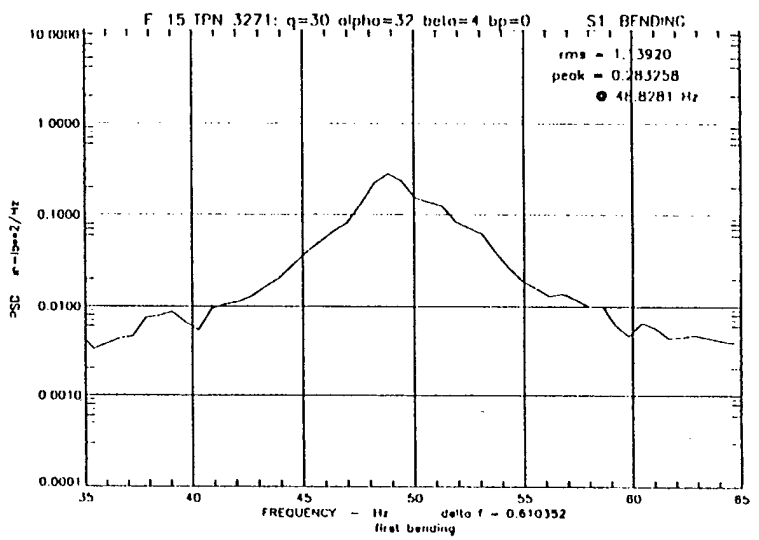

F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0 S1 BENDING
rms = 1.16161
peak = 0.441500
@ 50.0488 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first bending

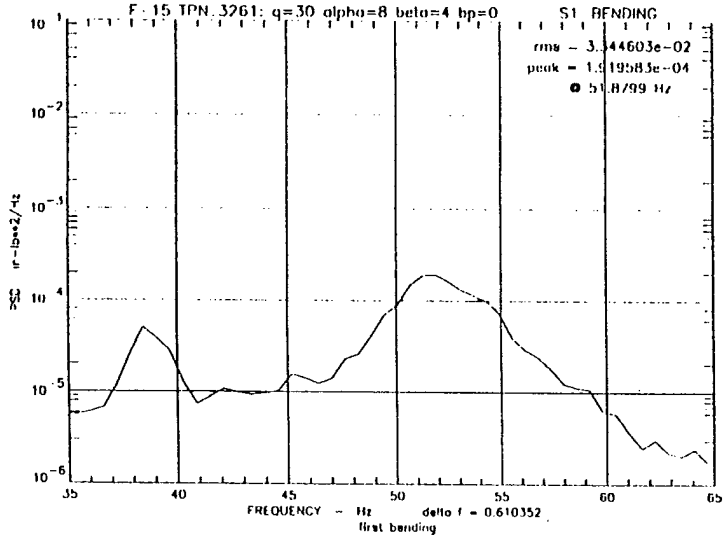

F 15 TPN 3251: q=30 alpha=24 beta=0 bp=0 S1 BENDING
rms = 0.913910
peak = 4.144439e-07
@ 50.0488 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first bending

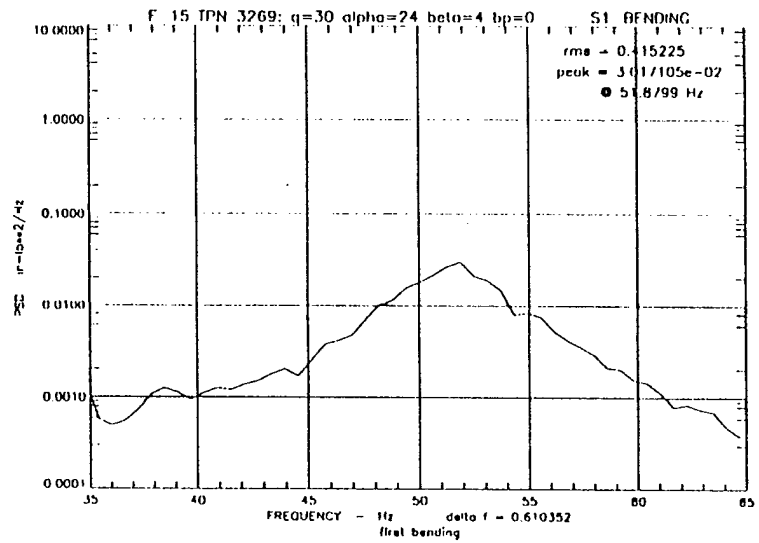

F 15 TPN 3249: q=30 alpha=20 beta=0 bp=0 S1 BENDING
rms = 0.726302
peak = 1.9371/4e-02
@ 48.8281 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first bending

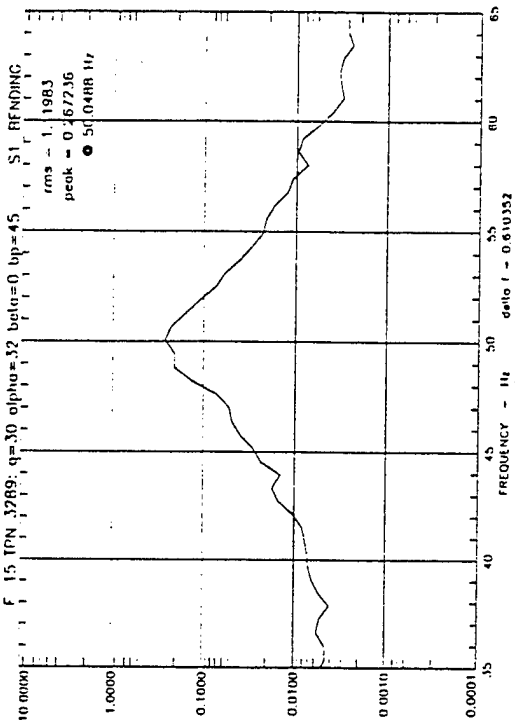

F 15 TPN 3243: q=30 alpha=8 beta=0 bp=0 S1 BENDING
rms = 4.0969/6e-02
peak = 3.2/4.599e-04
@ 52.4902 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first bending

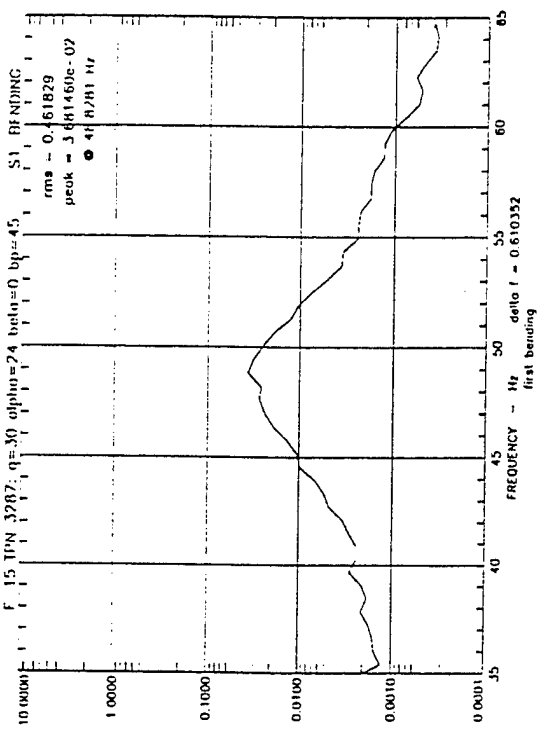

F 15 TPN 3267: q=30 alpha=20 beta=4 bp=0
S1 BENDING
rms = 0.204771
peak = 8.603971e-03
@ 52.4902 Hz
PSD g**2-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

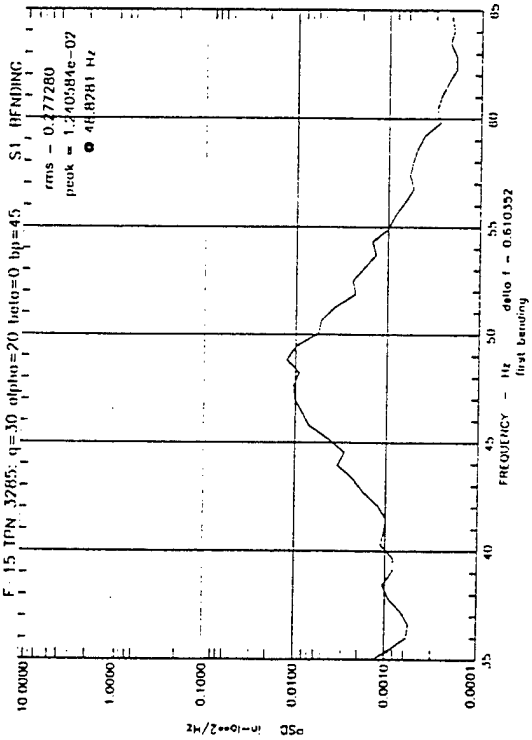

F 15 TPN 3271: q=30 alpha=32 beta=4 bp=0
S1 BENDING
rms = 1.13920
peak = 0.283758
@ 48.8281 Hz
PSD g**2-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

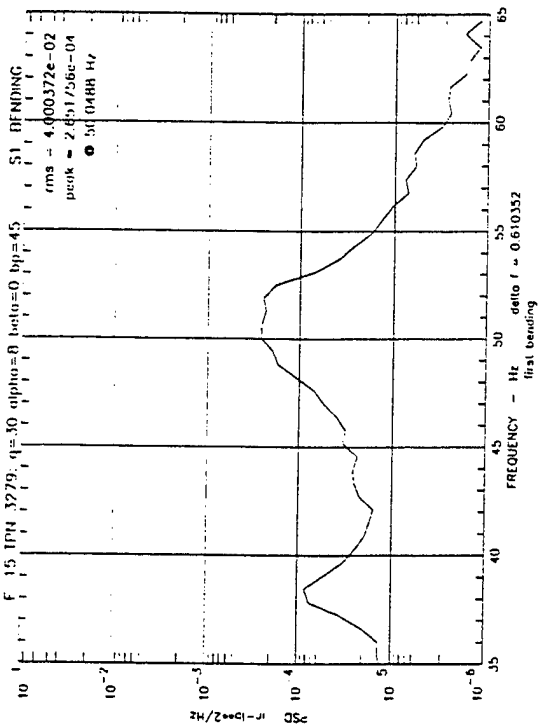

F 15 TPN 3261: q=30 alpha=8 beta=4 bp=0
S1 BENDING
rms = 3.344603e-02
peak = 1.919583e-04
@ 51.8799 Hz
PSD g**2-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

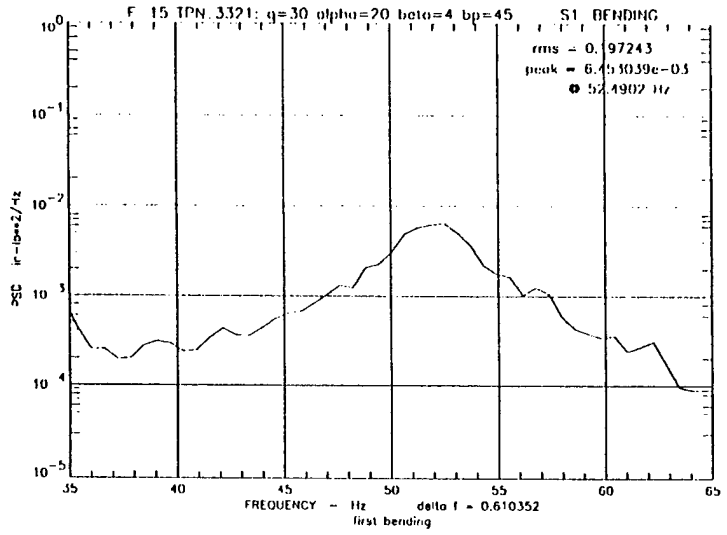

F 15 TPN 3269: q=30 alpha=24 beta=4 bp=0
S1 BENDING
rms = 0.415225
peak = 3.017105e-02
@ 51.8799 Hz
PSD g**2-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

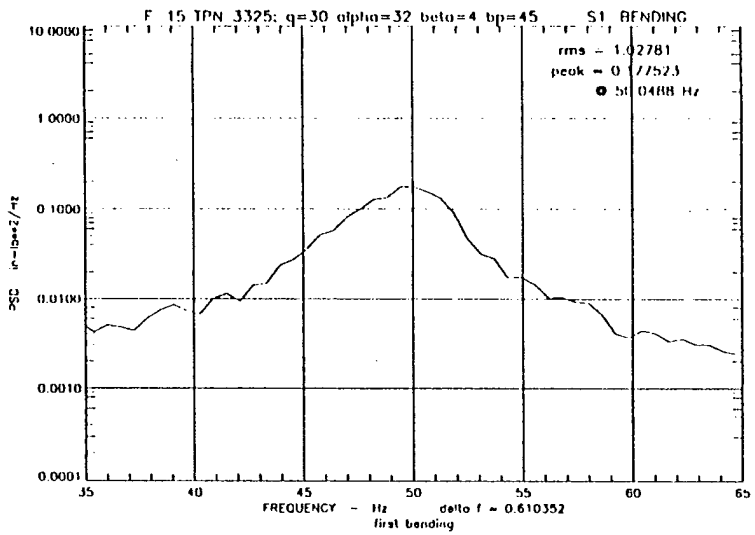

F 15 TPN 3289: q=30 alpha=32 beta=0 bp=45 S1 BENDING
rms = 1.1983
peak = 0.467236
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

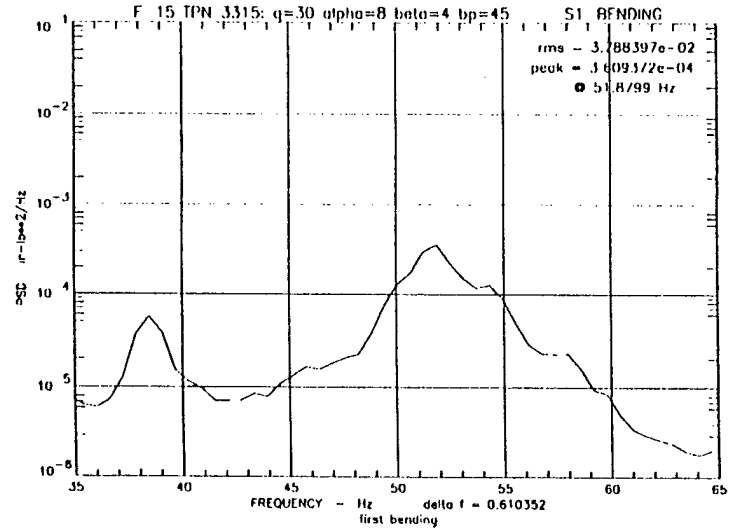

F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45 S1 BENDING
rms = 0.461829
peak = 3.6H1460e-07
@ 4[illegible] Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

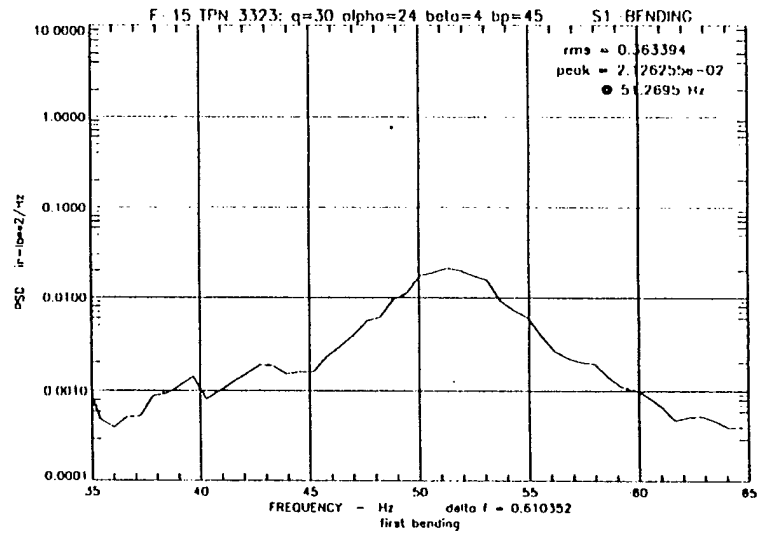

F 15 TPN 3285: q=30 alpha=20 beta=0 bp=45 S1 BENDING
rms = 0.277280
peak = 1.2405[illegible]e-07
@ 4[illegible] Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

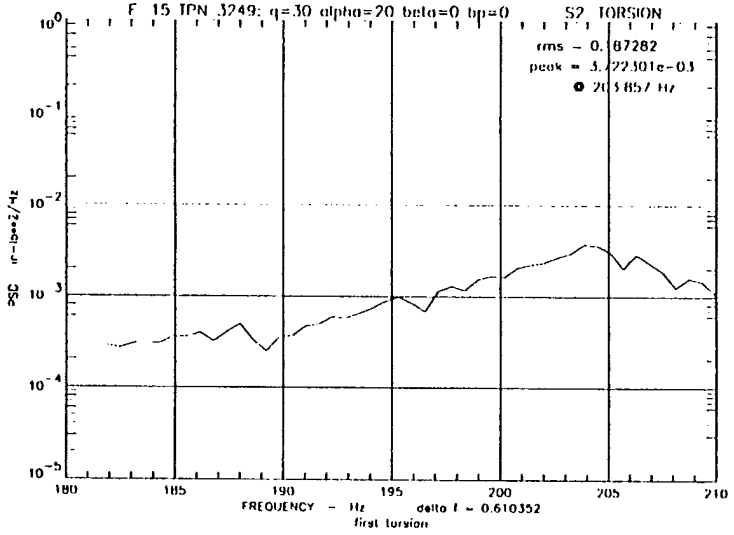

F 15 TPN 3279: q=30 alpha=8 beta=0 bp=45 S1 BENDING
rms = 4.000372e-02
peak = 2.[illegible]e-04
@ 50.0488 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

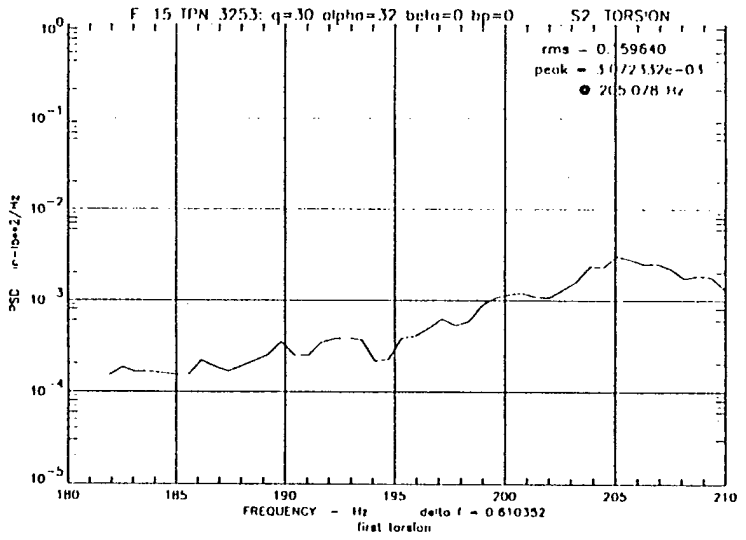

F 15 TPN 3321: q=30 alpha=20 beta=4 bp=45 S1 BENDING
rms = 0.197243
peak = 6.453039e-03
@ 52.4902 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

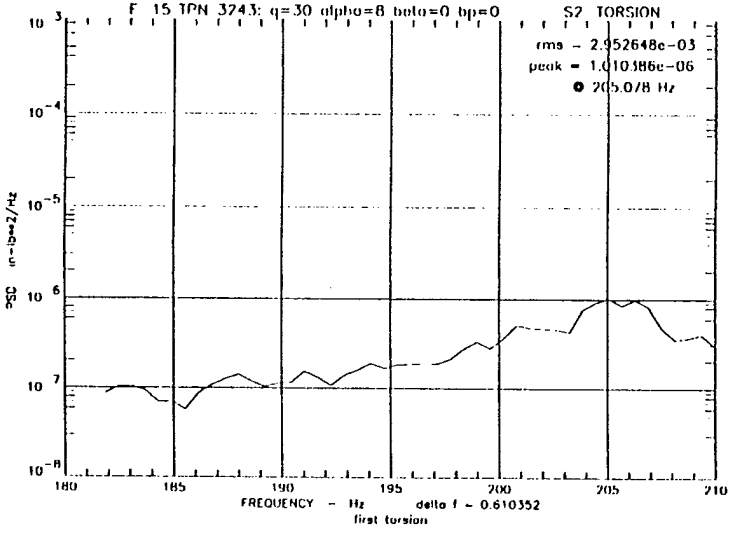

F 15 TPN 3325: q=30 alpha=32 beta=4 bp=45 S1 BENDING
rms = 1.02781
peak = 0.177523
@ 51.0488 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

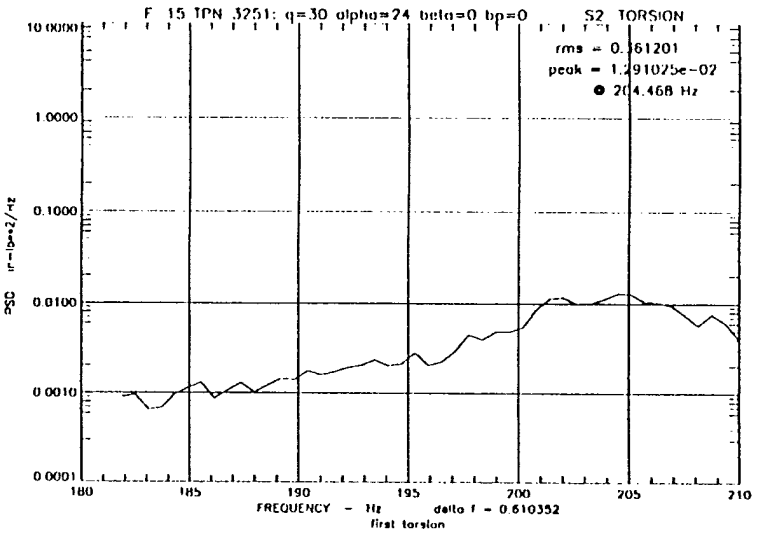

F 15 TPN 3315: q=30 alpha=8 beta=4 bp=45 S1 BENDING
rms = 3.788397e-02
peak = 3.609372e-04
@ 51.8799 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

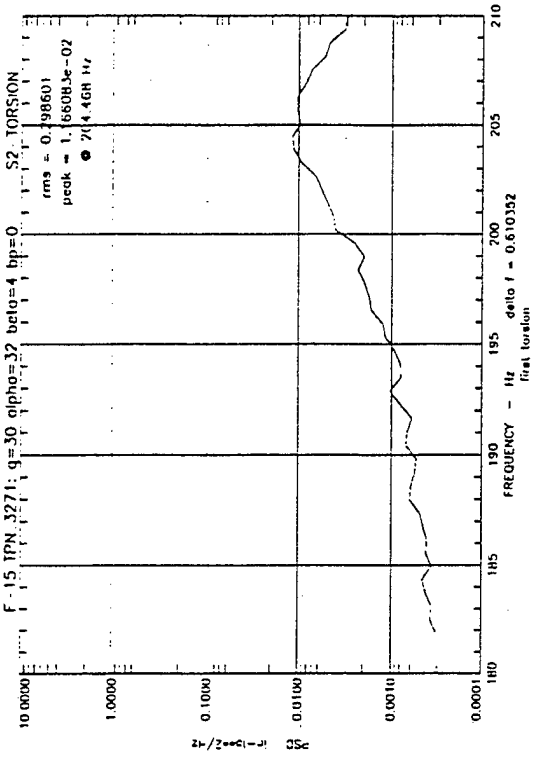

F 15 TPN 3323: q=30 alpha=24 beta=4 bp=45 S1 BENDING
rms = 0.363394
peak = 2.126255e-02
@ 51.2695 Hz
PSD in**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

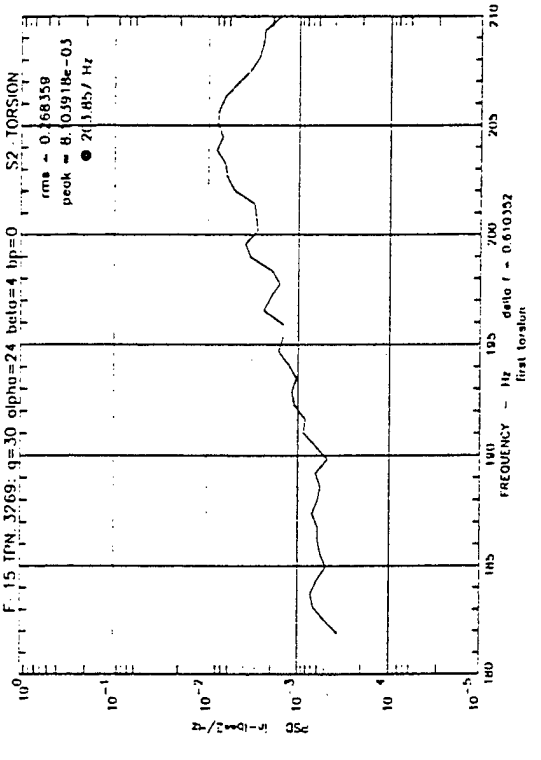

F 15 TPN 3249: q=30 alpha=20 beta=0 bp=0
S2 TORSION
rms = 0.187282
peak = 3.722301e-03
@ 205.857 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

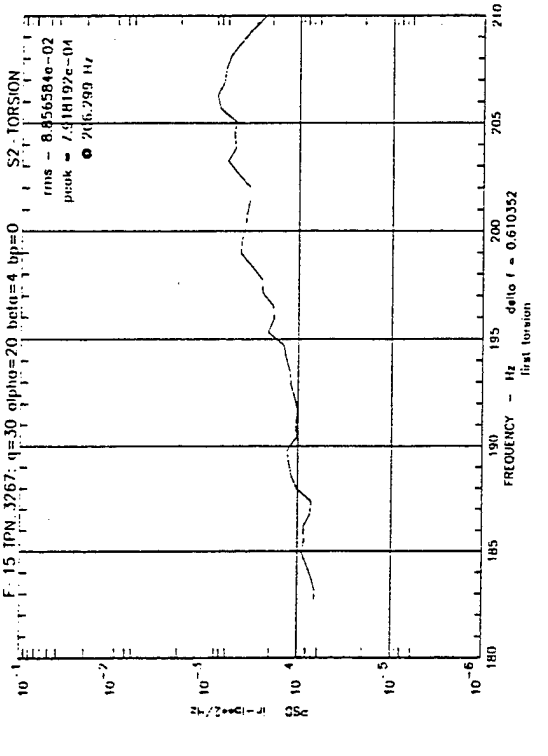

F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0
S2 TORSION
rms = 0.159640
peak = 3.072332e-03
@ 205.078 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

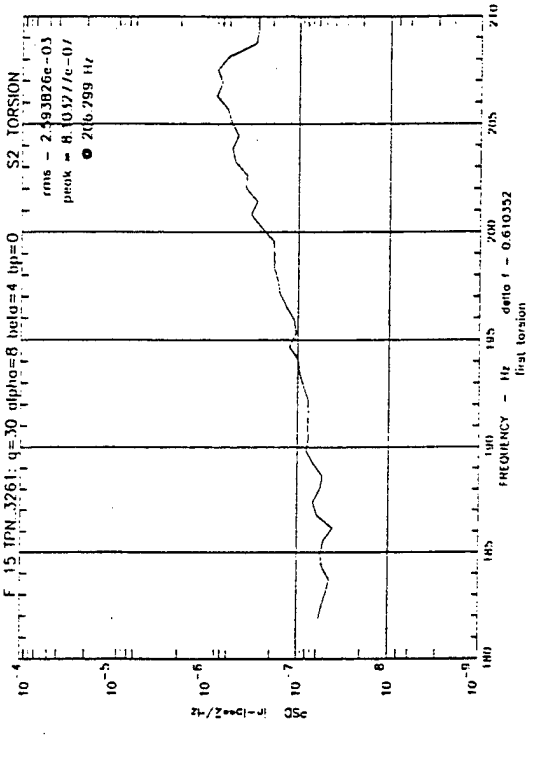

F 15 TPN 3243: q=30 alpha=8 beta=0 bp=0
S2 TORSION
rms = 2.952648e-03
peak = 1.010386e-06
@ 205.078 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

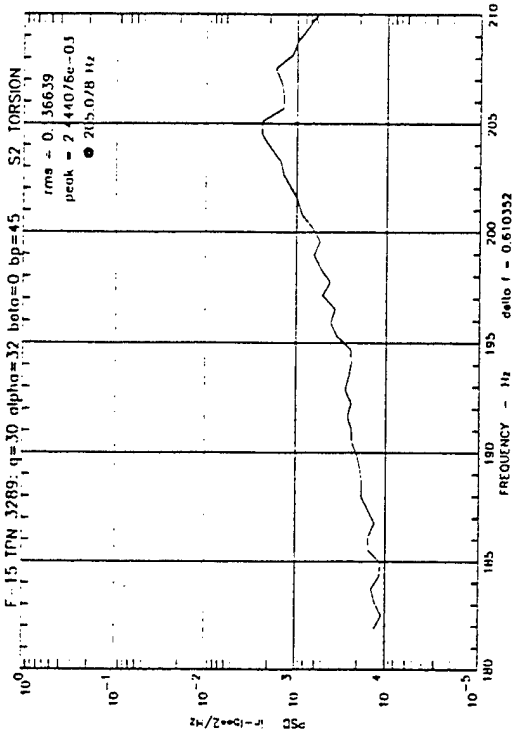

F 15 TPN 3251: q=30 alpha=24 beta=0 bp=0
S2 TORSION
rms = 0.361201
peak = 1.291075e-02
@ 204.468 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

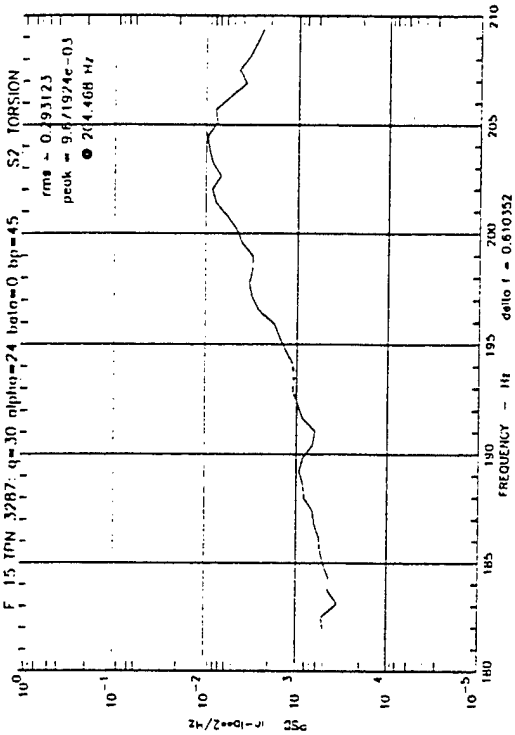

F-15 TPN 3271: q=30 alpha=32 beta=4 bp=0
S2 TORSION
rms = 0.298601
peak = 1.660836-02
@ 2(4.468 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first torsion

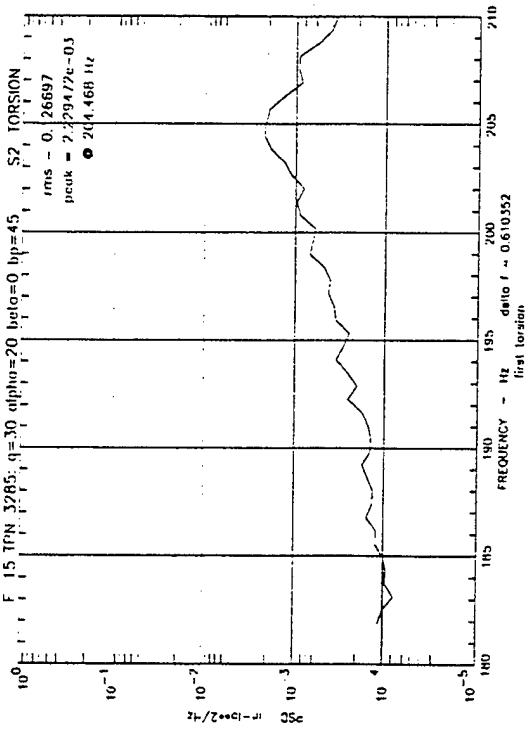

F-15 TPN 3269: q=30 alpha=24 beta=4 bp=0
S2 TORSION
rms = 0.268358
peak = 8.03918e-03
@ 2(3.85) Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first torsion

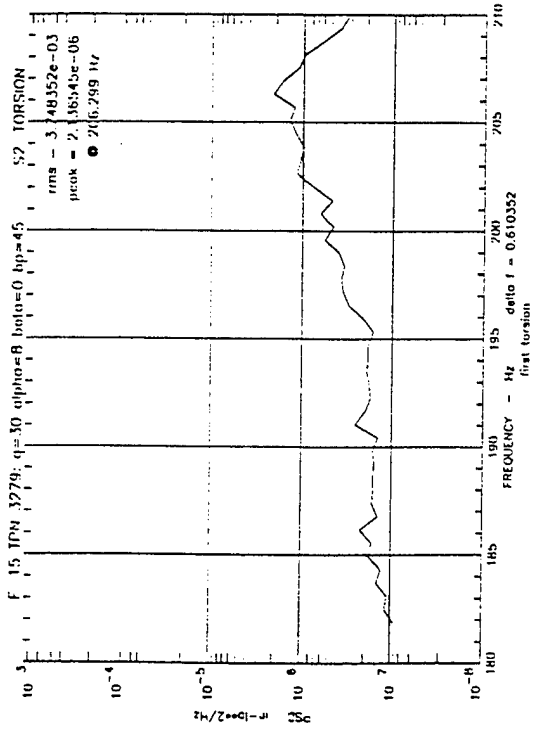

F-15 TPN 3267: q=30 alpha=20 beta=4 bp=0
S2 TORSION
rms = 8.856584e-02
peak = 7.411892e-04
@ 2(6.299 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first torsion

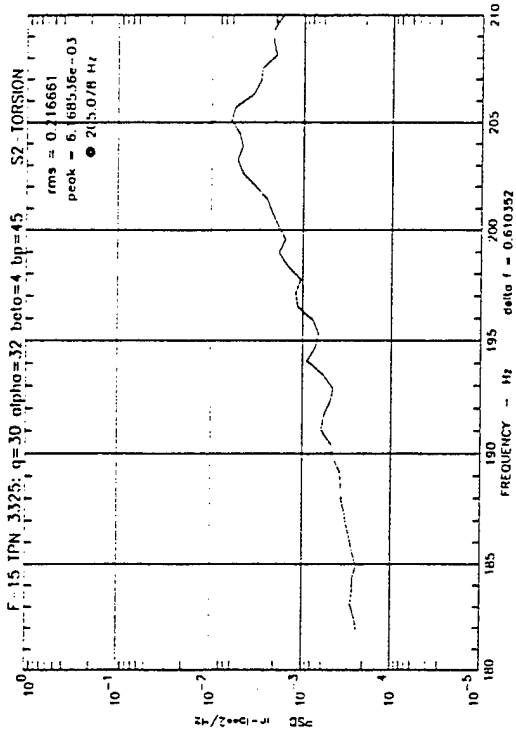

F-15 TPN 3261: q=30 alpha=8 beta=4 bp=0
S2 TORSION
rms = 2.593826e-03
peak = 8.03777e-07
@ 2(6.799 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first torsion

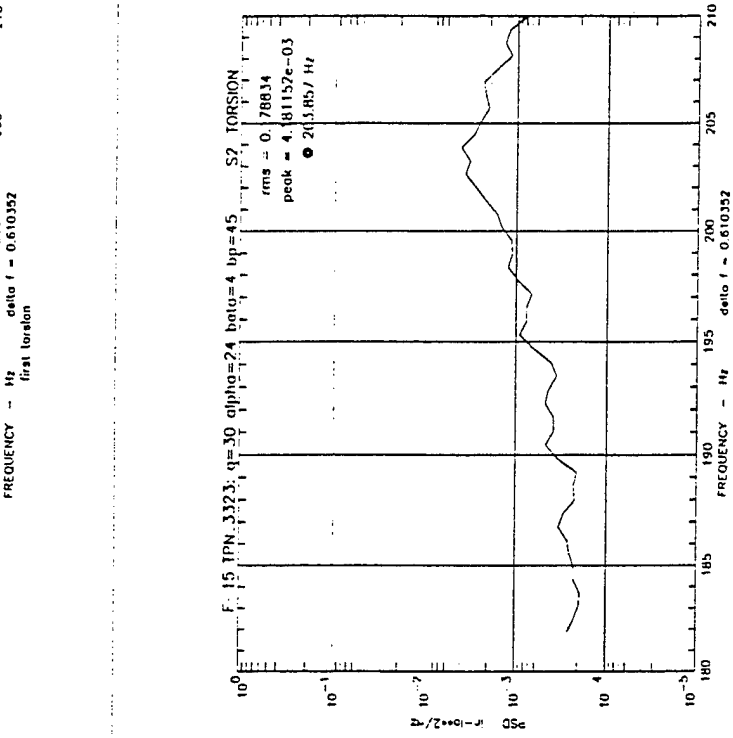

F 15 TPN 3289: q=30 alpha=32 beta=0 bp=45 S2 TORSION
rms = 0.136639
peak = 2.440765e-03
@ 205.078 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first torsion

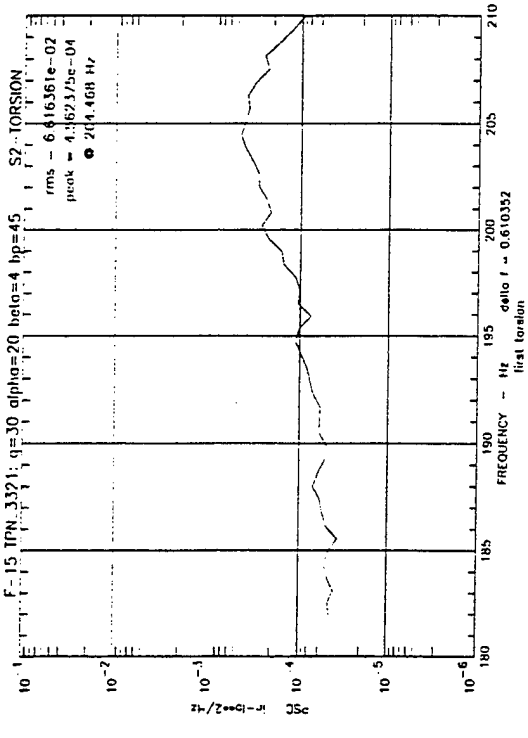

F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45 S2 TORSION
rms = 0.193123
peak = 9.871924e-03
@ 204.468 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first torsion

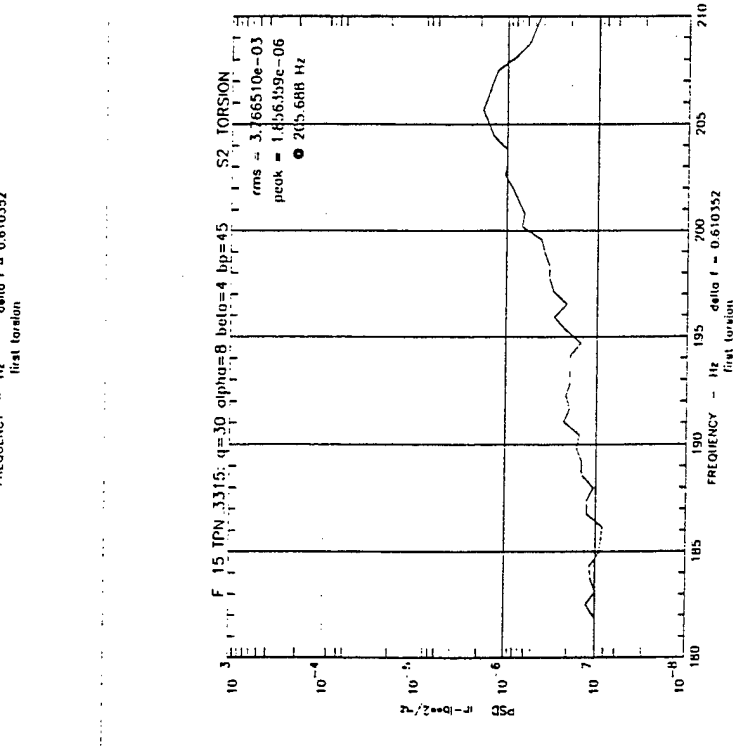

F 15 TPN 3285: q=30 alpha=20 beta=0 bp=45 S2 TORSION
rms = 0.126697
peak = 2.299472e-03
@ 204.468 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first torsion

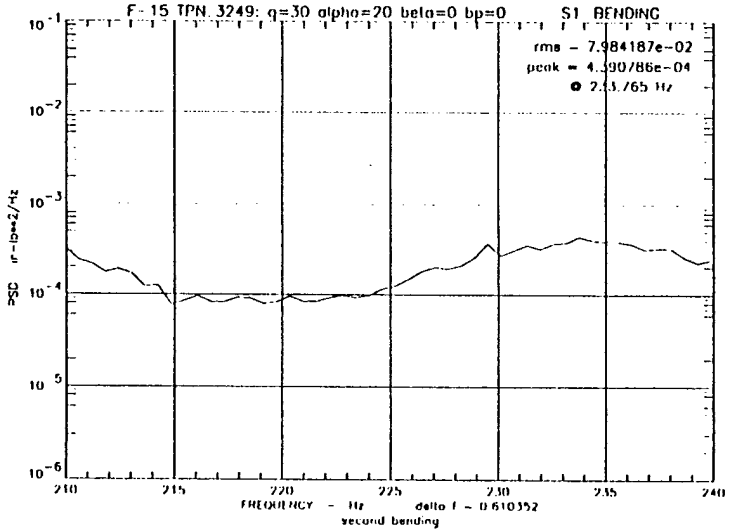

F 15 TPN 3279: q=30 alpha=8 beta=0 bp=45 S2 TORSION
rms = 3.148352e-03
peak = 2.136145e-06
@ 206.299 Hz
PSD
FREQUENCY - Hz
delta f = 0.610352
first torsion

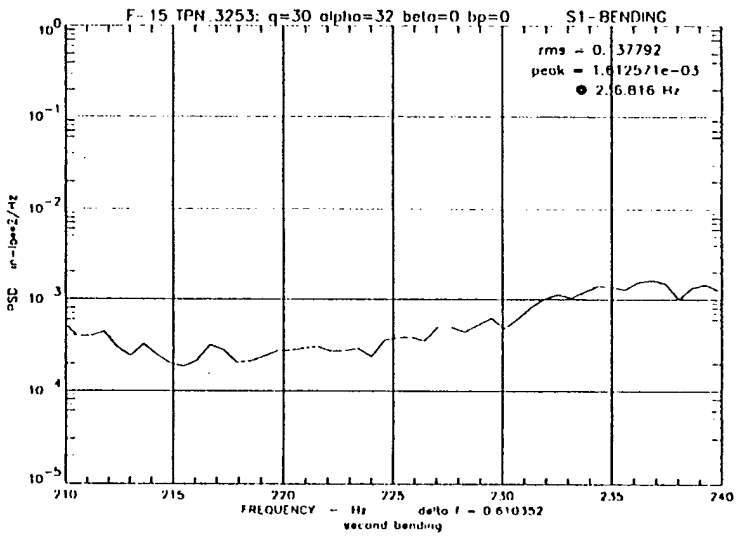

F-15 TPN 3325: q=30 alpha=32 beta=4 bp=45 S2 TORSION
rms = 0.216661
peak = 6.168536e-03
@ 205.078 Hz
PSD ir-loss2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

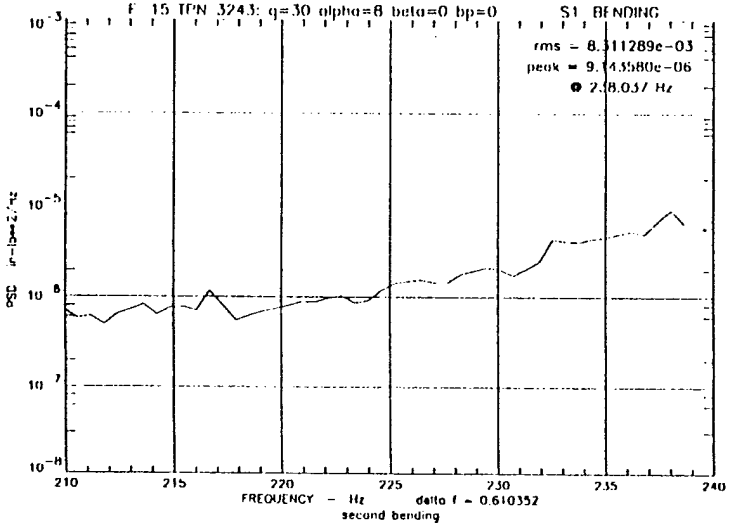

F-15 TPN 3323: q=30 alpha=24 beta=4 bp=45 S2 TORSION
rms = 0.788134
peak = 4.181152e-03
@ 203.857 Hz
PSD ir-loss2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

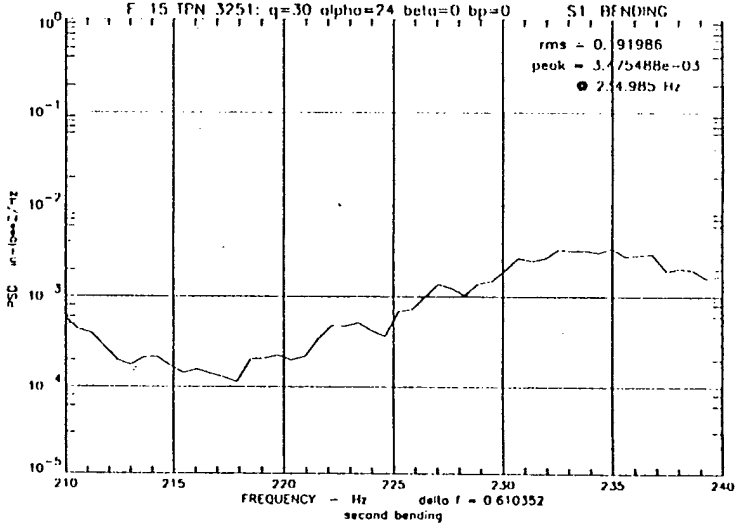

F-15 TPN 3321: q=30 alpha=20 beta=4 bp=45 S2 TORSION
rms = 6.616361e-02
peak = 4.162231e-04
@ 204.468 Hz
PSD ir-loss2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

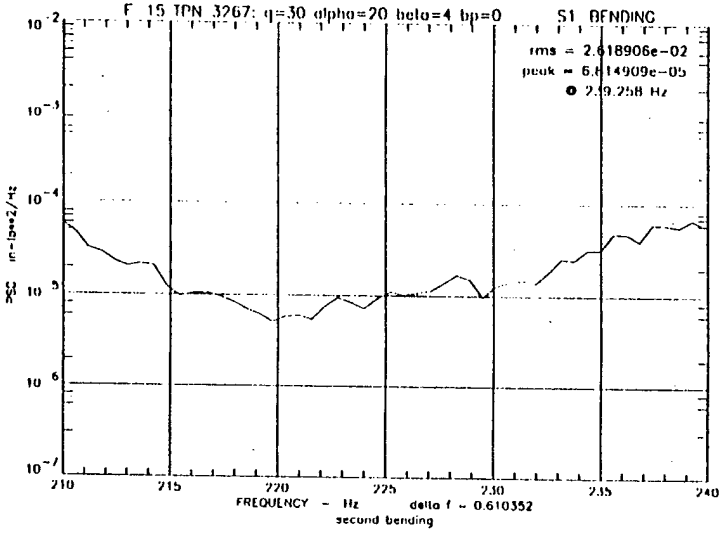

F-15 TPN 3315: q=30 alpha=8 beta=4 bp=45 S2 TORSION
rms = 3.766510e-03
peak = 1.856399e-06
@ 205.688 Hz
PSD ir-loss2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

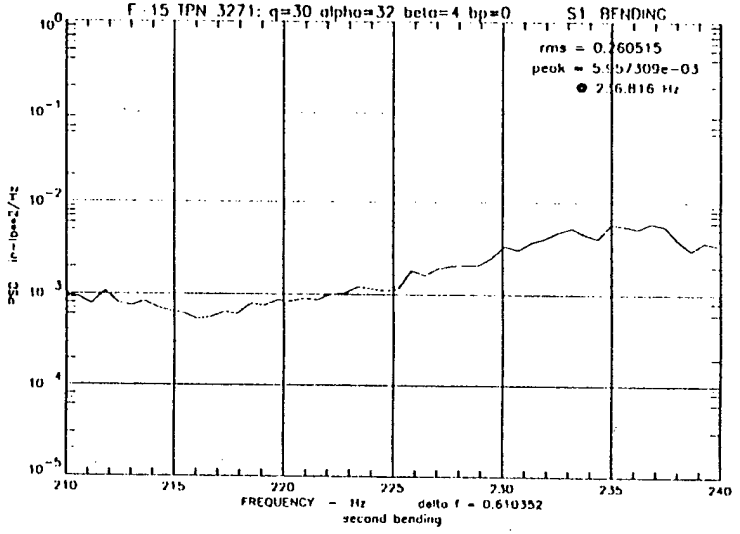

F-15 TPN 3249: q=30 alpha=20 beta=0 bp=0 S1 BENDING
rms = 7.984187e-02
peak = 4.390786e-04
@ 233.765 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

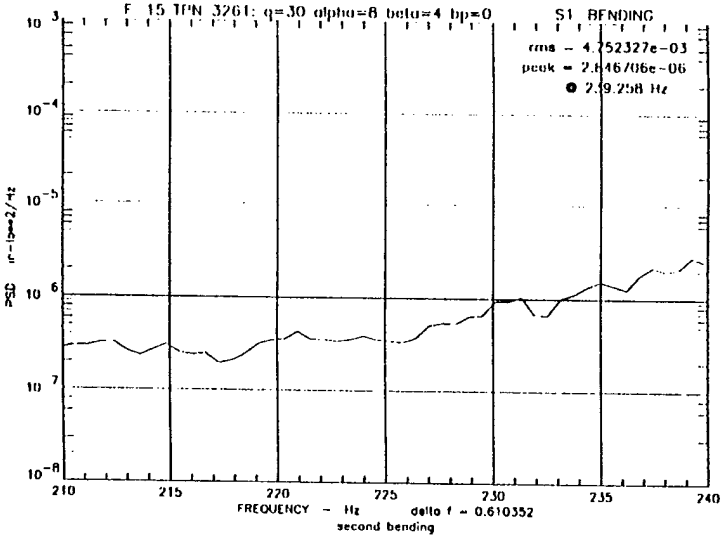

F-15 TPN 3253: q=30 alpha=32 beta=0 bp=0 S1 BENDING
rms = 0.137792
peak = 1.612571e-03
@ 236.816 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

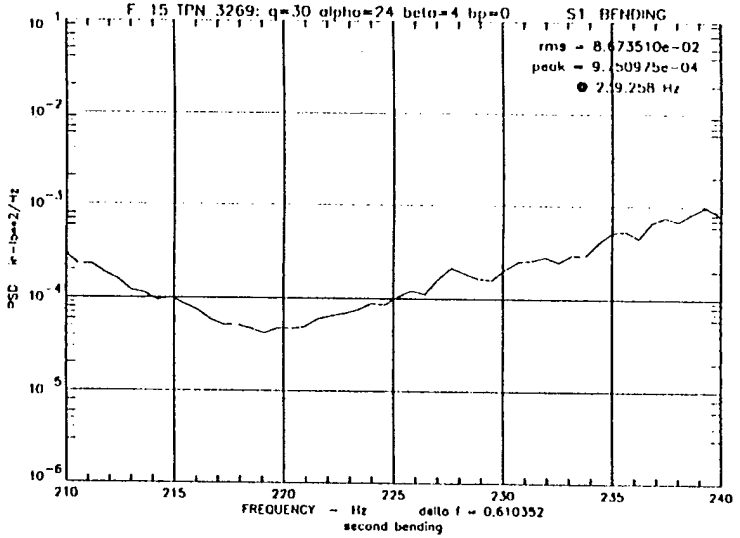

F-15 TPN 3243: q=30 alpha=8 beta=0 bp=0 S1 BENDING
rms = 8.311289e-03
peak = 9.145580e-06
@ 238.037 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

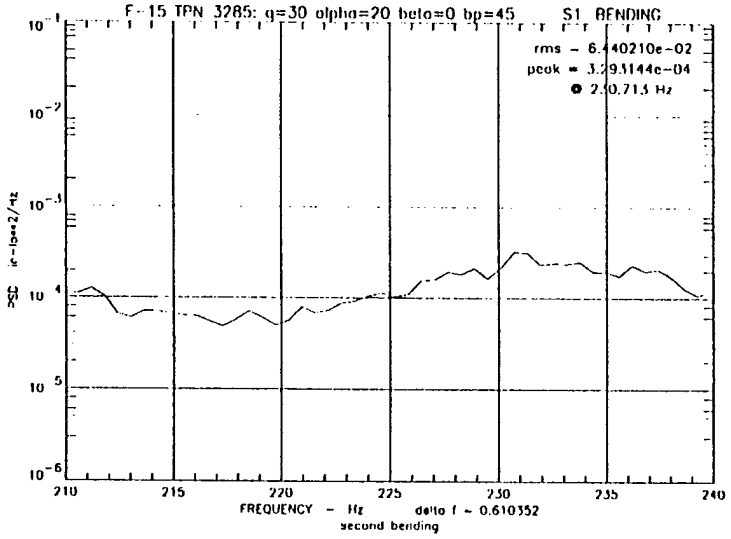

F-15 TPN 3251: q=30 alpha=24 beta=0 bp=0 S1 BENDING
rms = 0.191986
peak = 3.475488e-03
@ 234.985 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

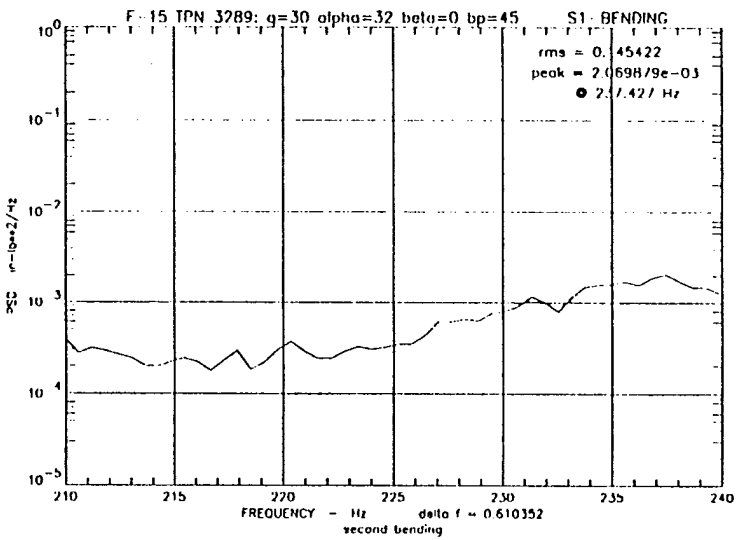

F 15 TPN 3267: q=30 alpha=20 beta=4 bp=0
S1 BENDING
rms = 2.618906e-02
peak = 6.814909e-05
@ 229.258 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

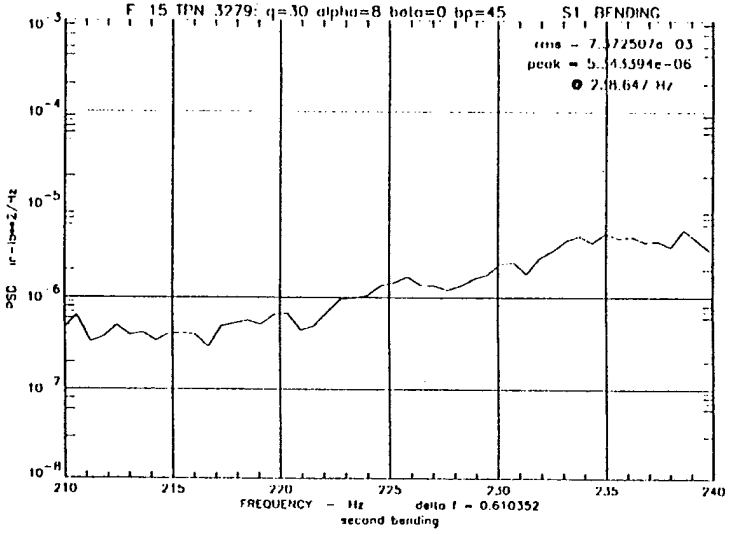

F 15 TPN 3271: q=30 alpha=32 beta=4 bp=0
S1 BENDING
rms = 0.260515
peak = 5.957309e-03
@ 236.816 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

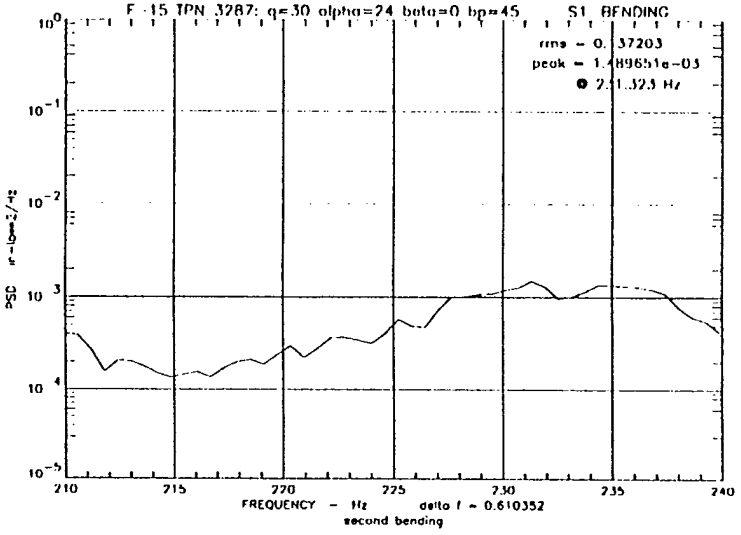

F 15 TPN 3261: q=30 alpha=8 beta=4 bp=0
S1 BENDING
rms = 4.752327e-03
peak = 2.846706e-06
@ 229.258 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

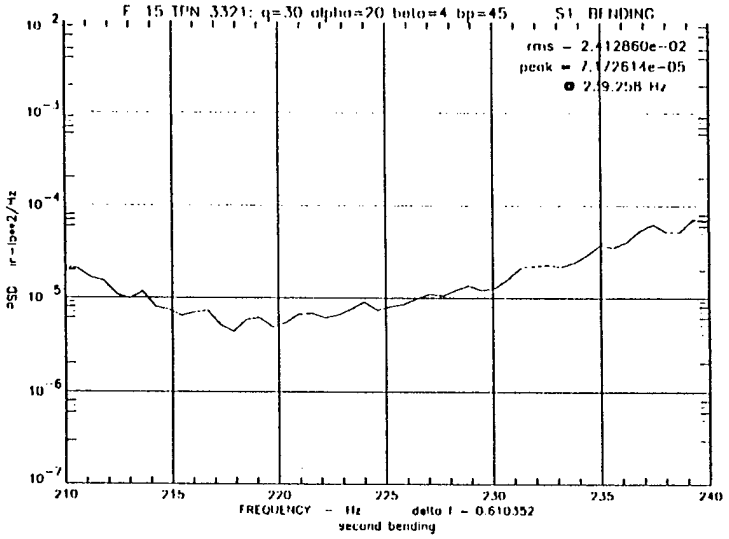

F 15 TPN 3269: q=30 alpha=24 beta=4 bp=0
S1 BENDING
rms = 8.673510e-02
peak = 9.250975e-04
@ 229.258 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

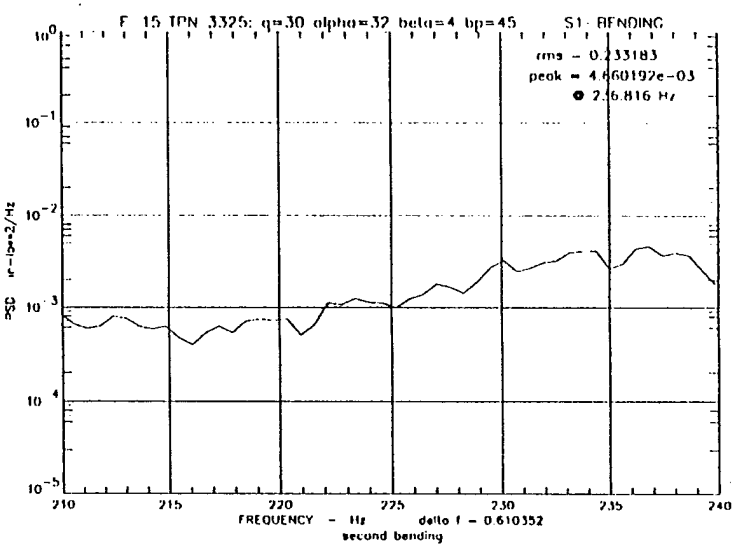

F-15 TPN 3285: q=30 alpha=20 beta=0 bp=45 S1 BENDING
rms = 6.440210e-02
peak = 3.293144e-04
@ 230.713 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

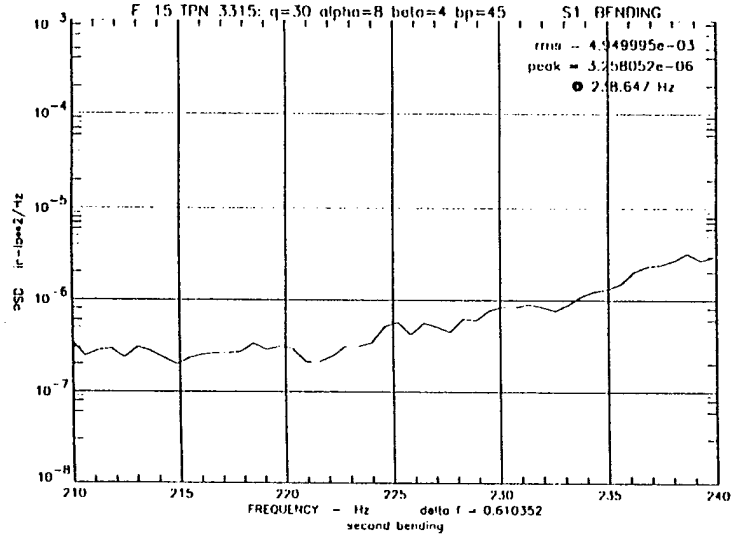

F-15 TPN 3289: q=30 alpha=32 beta=0 bp=45 S1 BENDING
rms = 0.145422
peak = 2.069879e-03
@ 237.427 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

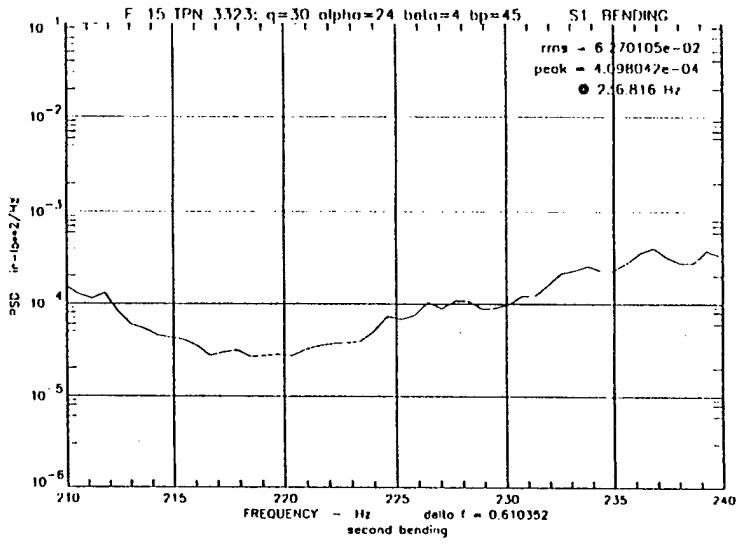

F-15 TPN 3279: q=30 alpha=8 beta=0 bp=45 S1 BENDING
rms = 7.372507e-03
peak = 5.143594e-06
@ 238.647 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 TPN 3287: q=30 alpha=24 beta=0 bp=45 S1 BENDING
rms = 0.137203
peak = 1.489651e-03
@ 231.323 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F 15 TPN 3321: q=30 alpha=20 beta=4 bp=45 S1 BENDING
rms = 2.412860e-02
peak = 7.172614e-05
@ 229.258 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F 15 TPN 3325: q=30 alpha=32 beta=4 bp=45 S1 BENDING
rms = 0.233183
peak = 4.660192e-03
@ 236.816 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F 15 TPN 3315: q=30 alpha=8 beta=4 bp=45 S1 BENDING
rms = 4.949995e-03
peak = 3.258052e-06
@ 238.647 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F 15 TPN 3323: q=30 alpha=24 beta=4 bp=45 S1 BENDING
rms = 6.270105e-02
peak = 4.098042e-04
@ 236.816 Hz
PSD in-lbs**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

FLEXIBLE TAIL RESPONSE
DIMENSIONAL BENDING AND TORSION

Q= 30 PSF

2.2.2 RMS SUMMARY TABS- WBP =0, 45 psi, BETA = 0, +4, -4,
ALPHA= 8....32 DEG

F-15 Vertical Tail Buffet Test: Overall RMS (in-lb), Q=30 psi

0 psi blowing pressure:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	8	.03632	.01300	.03345	.00259	.00475
4	20	.22480	.11460	.20480	.08857	.02619
4	24	.47620	.33790	.41520	.26840	.08674
4	32	1.23400	.39240	1.13900	.29860	.26050
0	8	.04432	.01743	.04100	.00295	.00831
0	20	.37270	.24610	.32630	.18730	.07984
0	24	.61300	.48690	.51390	.36120	.19200
0	32	1.41400	.24500	1.36200	.15960	.13780

45 psi blowing pressure:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	8	.04100	.01578	.03788	.00377	.00495
4	20	.21550	.09318	.19720	.06616	.02413
4	24	.40320	.22490	.36340	.17880	.06270
4	32	1.10600	.30070	1.02800	.21670	.23320
0	8	.04766	.01966	.04000	.00375	.00737
0	20	.31340	.17850	.27730	.12670	.06440
0	24	.53410	.37840	.46180	.29310	.13720
0	32	1.17100	.20770	1.12000	.13660	.14540

Pages 226 through 248 have been omitted because they were a duplication of previous data.

3. NONDIMENSIONAL BENDING AND TORSION DATA

3.1 Q = 56 PSF

3.1.1 PSD GRAPHS

3.1.1.1WBP = 0, 45, 65 psi

3.1.1.2 GBP = 65 psi

3.1.1.3 GBP = 65 psi, WBP = 65 psi

3.1.1.4 NBP = 87 psi

3.1.1.5 NBP = 87 psi, GBP = 65 psi

3.1.1.6 NBP = 87 psi, WBP= 65 psi

3.1. 2 RMS SUMMARY TABLES

3.2 Q = 30 PSF

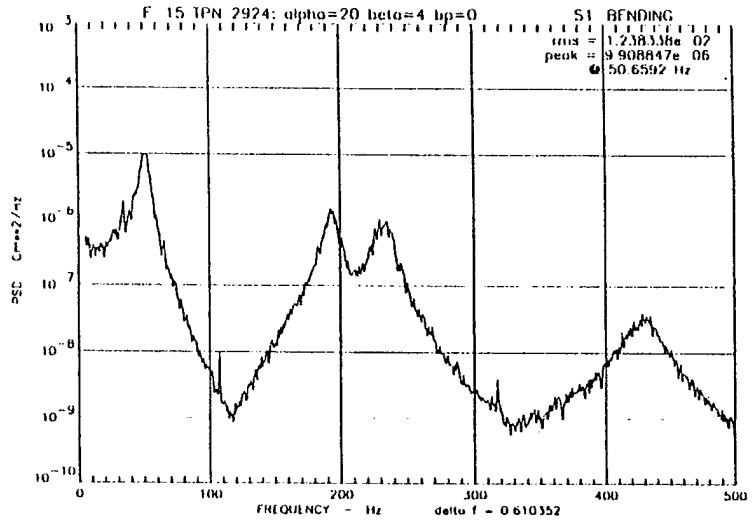
3.2.1 PSD GRAPHS - WBP = 0, 45 psi

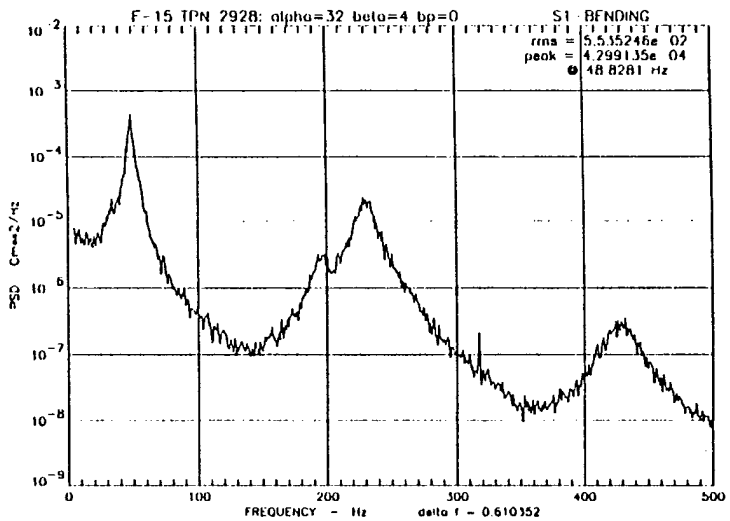
3.2.2 RMS SUMMARY TABLES

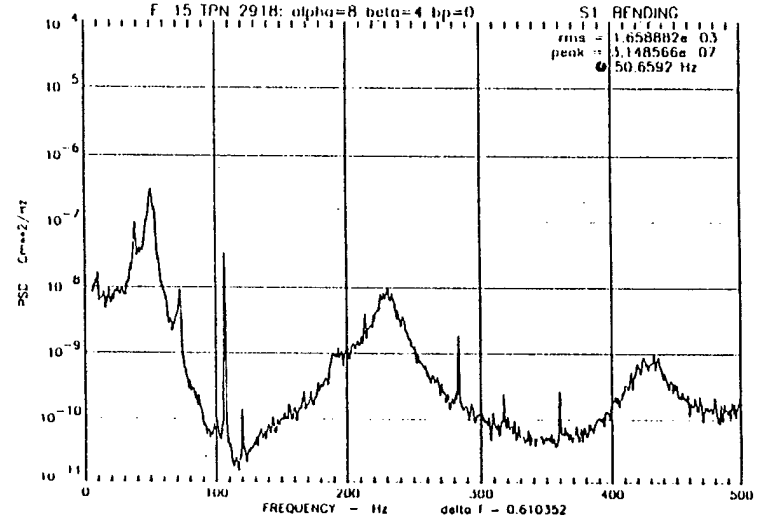
FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

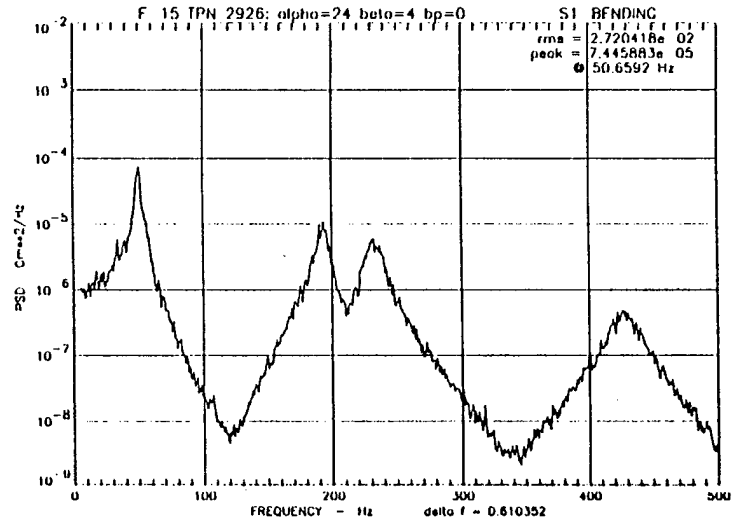
Q= 56PSF

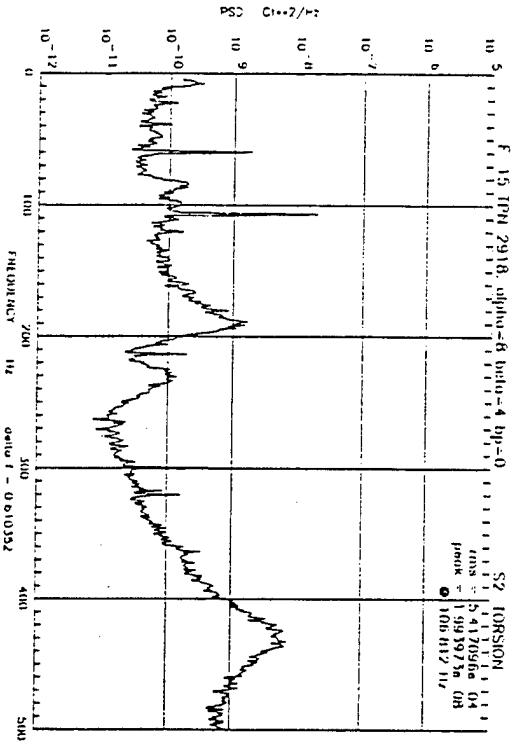
3.1.1.1 WBP =0, 45, 65 PSI, BETA = 0, +4, -4 DEG, ALPHA= 8....32 DEG

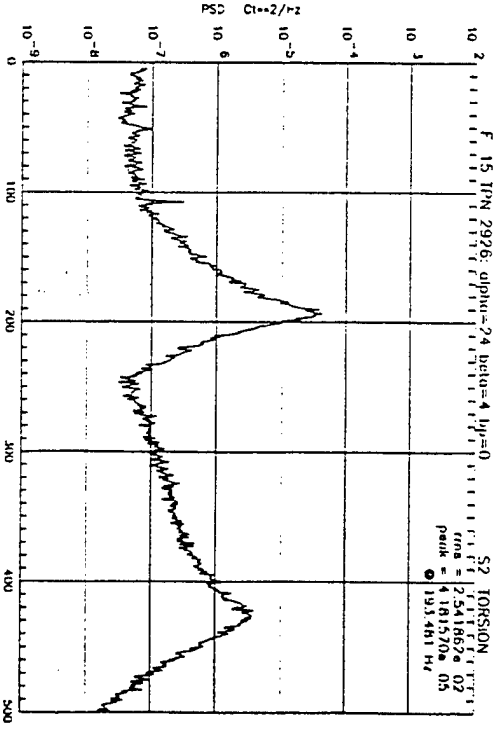

F 15 TPN 2924: alpha=20 beta=4 bp=0
S1 BENDING
rms = 1.238338e 02
peak = 9.908847e 06
@ 50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

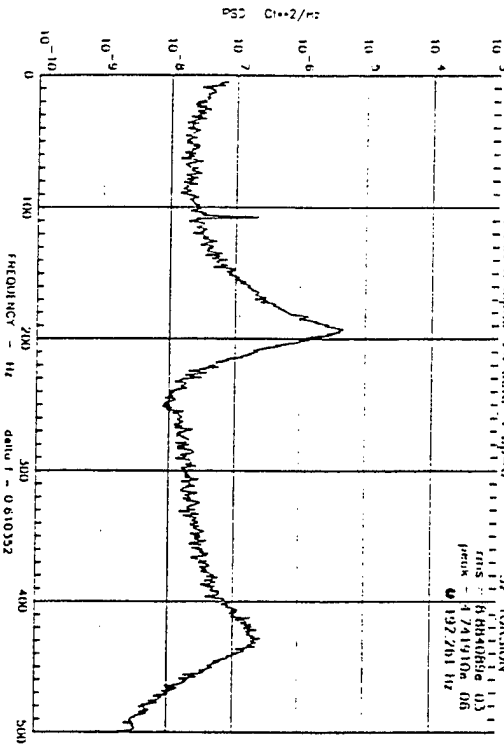

F-15 TPN 2928: alpha=32 beta=4 bp=0
S1 BENDING
rms = 5.535246e 02
peak = 4.299135e 04
@ 48.8281 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

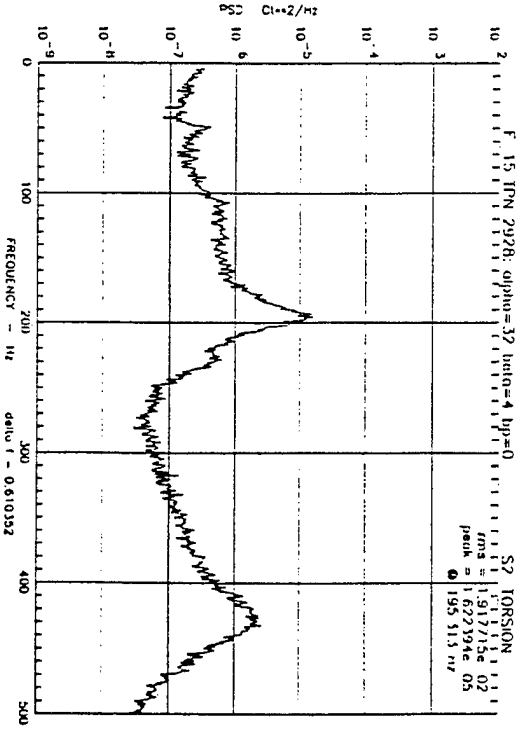

F 15 TPN 2918: alpha=8 beta=4 bp=0
S1 BENDING
rms = 1.658882e 03
peak = 3.148566e 07
@ 50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

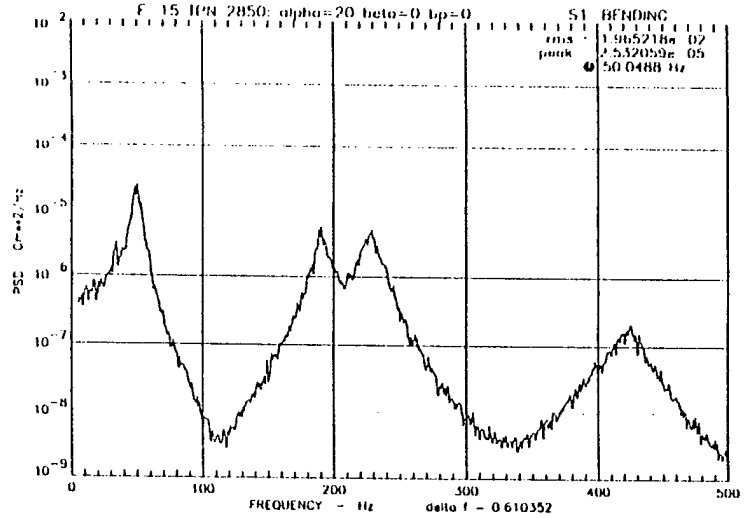

F 15 TPN 2926: alpha=24 beta=4 bp=0
S1 BENDING
rms = 2.720418e 02
peak = 7.445883e 05
@ 50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

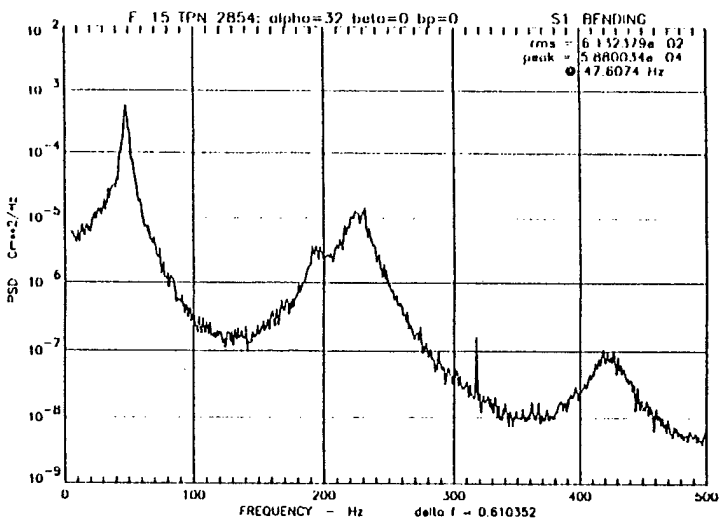

F 15 TPN 2924: alpha=20 beta=4 bp=0
S2 TORSION
rms = 6.884086e 03
peak = 4.741910e 06
192.201 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

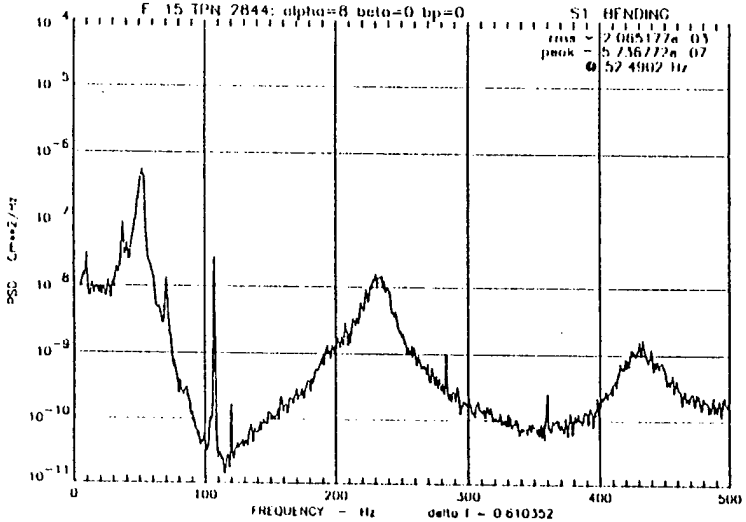

F 15 TPN 2926: alpha=24 beta=4 bp=0
S2 TORSION
rms = 2.541866e 02
peak = 4.181570e 05
193.481 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

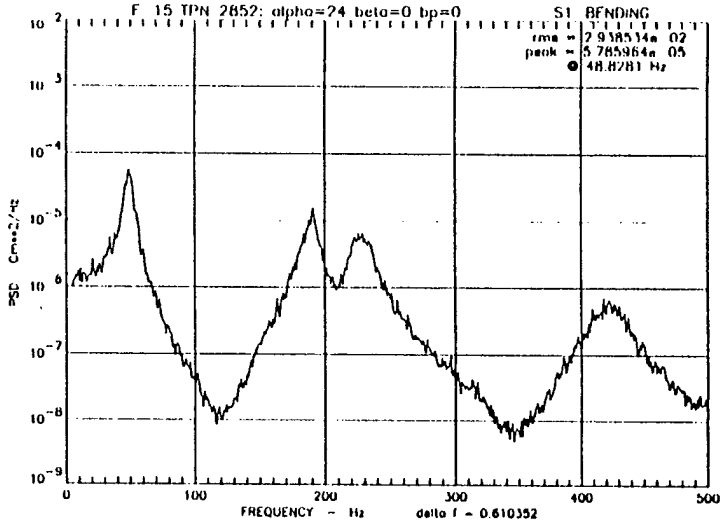

F 15 TPN 2924: alpha=20 beta=4 bp=0
S2 TORSION
rms = 6.884086e 03
peak = 4.741910e 06
192.201 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

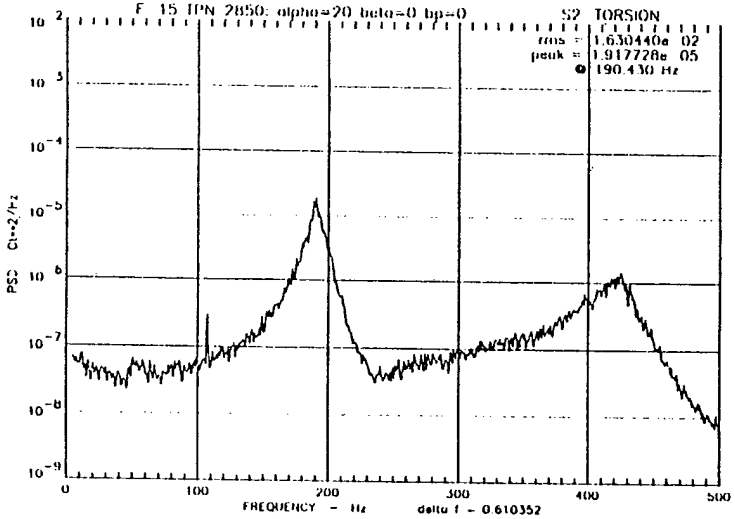

F 15 TPN 2928: alpha=32 beta=4 bp=0
S2 TORSION
rms = 1.917715e 02
peak = 1.622594e 05
195.313 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

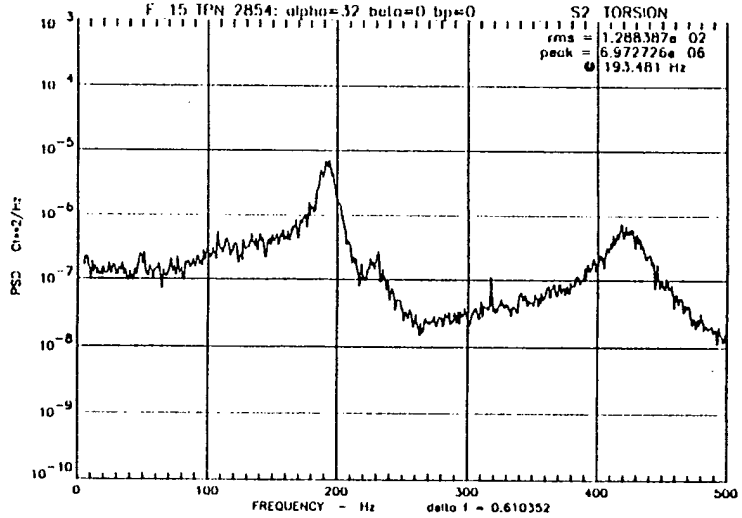

F 15 TPN 2850: alpha=20 beta=0 bp=0
S1 BENDING
rms = 1.965218e 02
peak = 2.532059e 05
@ 50.0488 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

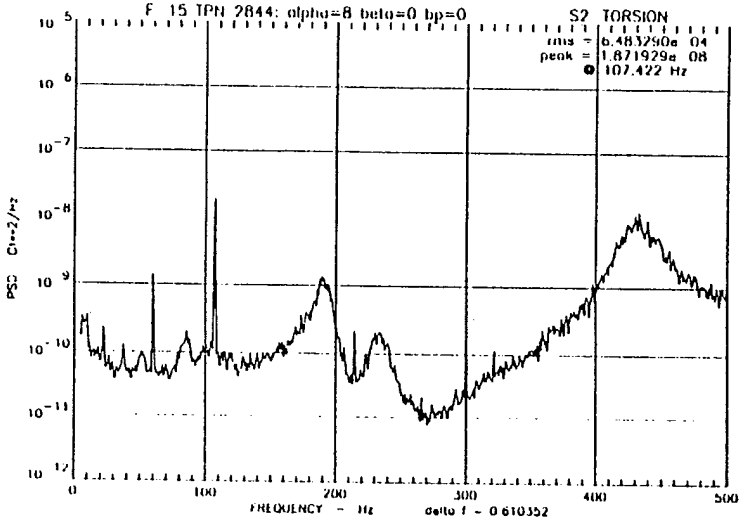

F 15 TPN 2854: alpha=32 beta=0 bp=0
S1 BENDING
rms = 6.112179e 02
peak = 5.880034e 04
@ 47.6074 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

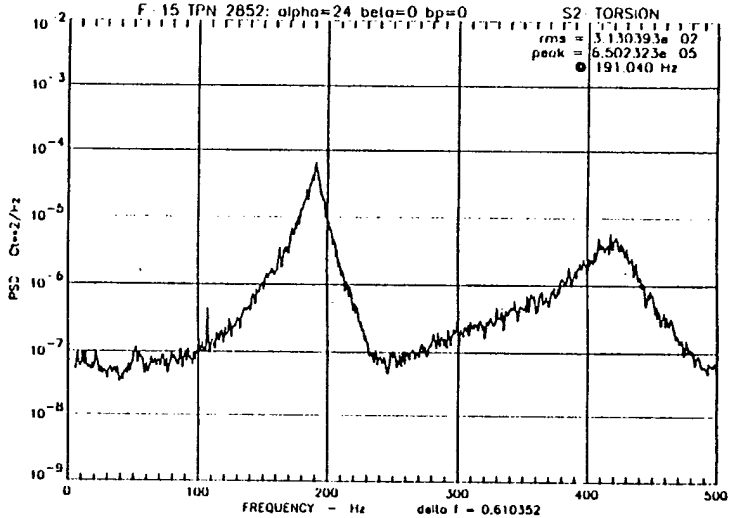

F 15 TPN 2844: alpha=8 beta=0 bp=0
S1 BENDING
rms = 2.065177e 03
peak = 5.736772e 07
@ 52.4902 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

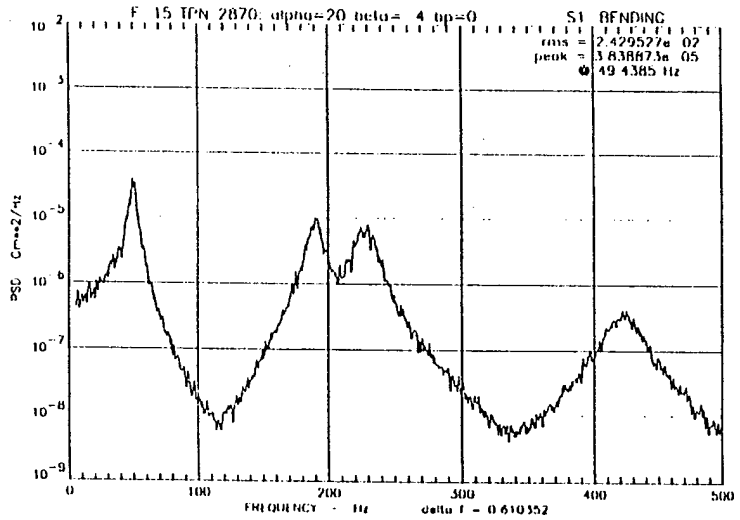

F 15 TPN 2852: alpha=24 beta=0 bp=0
S1 BENDING
rms = 2.938514e 02
peak = 5.785964e 05
@ 48.8281 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

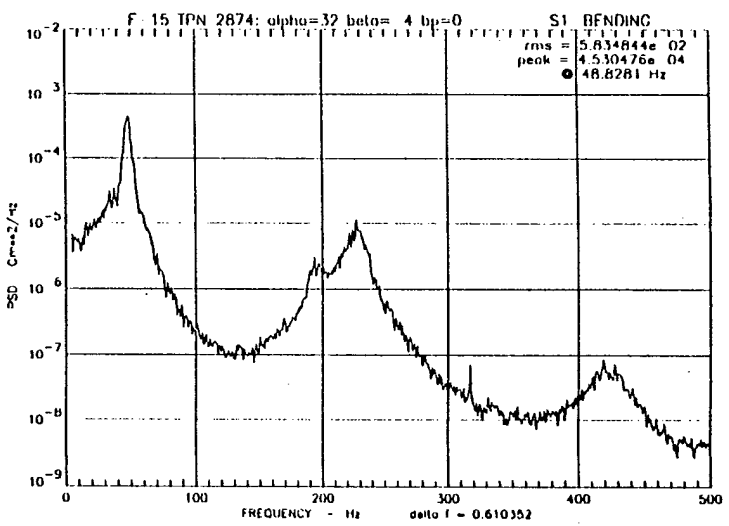

F 15 TPN 2850: alpha=20 beta=0 bp=0
S2 TORSION
rms = 1.630440e 02
peak = 1.917728e 05
@ 190.430 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

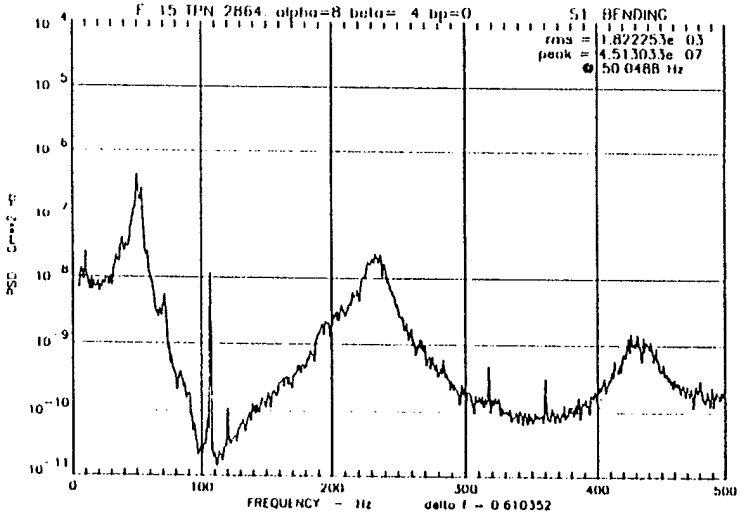

F 15 TPN 2854: alpha=32 beta=0 bp=0
S2 TORSION
rms = 1.288387e 02
peak = 6.972726e 06
@ 193.481 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

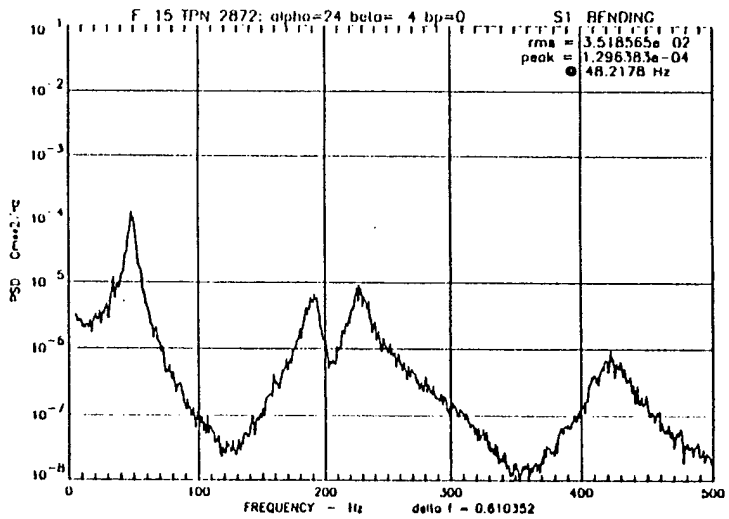

F 15 TPN 2844: alpha=8 beta=0 bp=0
S2 TORSION
rms = 6.483290e 04
peak = 1.871929e 08
@ 107.422 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

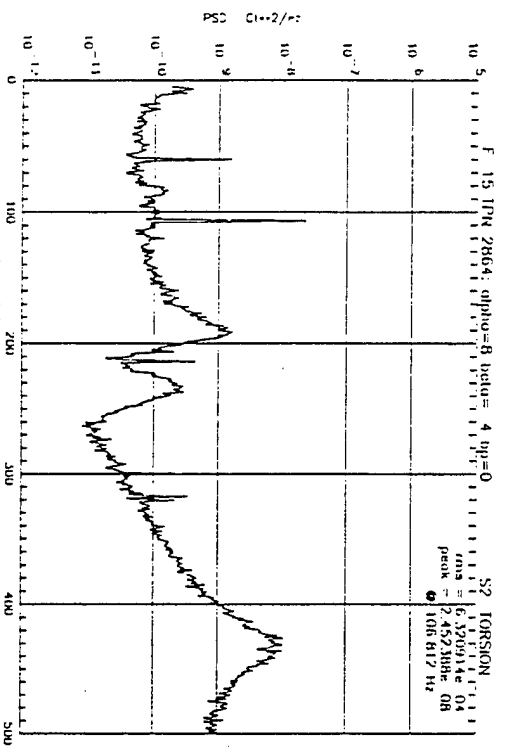

F 15 TPN 2852: alpha=24 beta=0 bp=0
S2 TORSION
rms = 3.130393e 02
peak = 6.502323e 05
@ 191.040 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

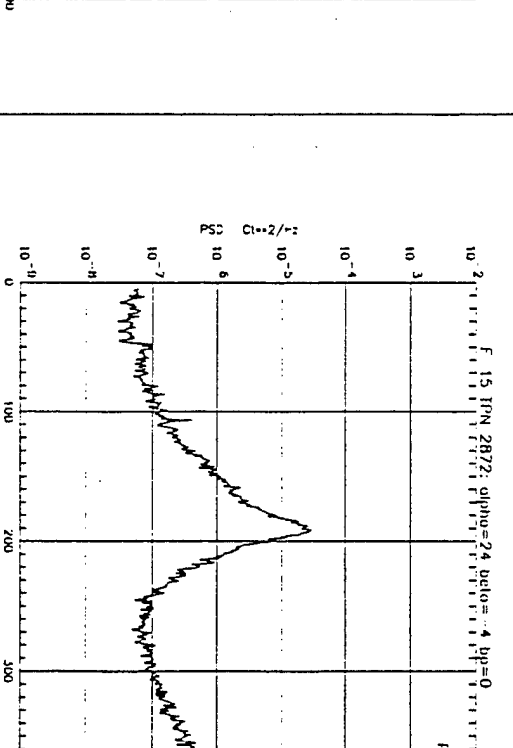

F 15 TPN 2870: alpha=20 beta= 4 bp=0
S1 BENDING
rms = 2.429527e 02
peak = 3.838873e 05
@ 49.4385 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

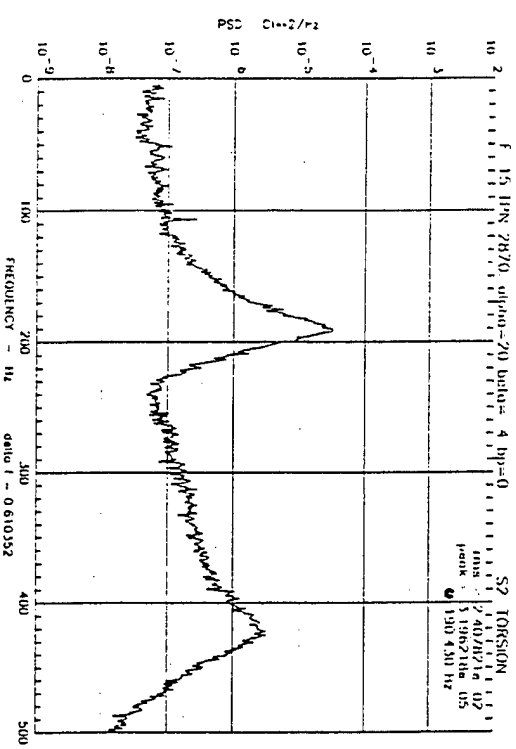

F 15 TPN 2874: alpha=32 beta= 4 bp=0
S1 BENDING
rms = 5.834844e 02
peak = 4.530476e 04
@ 48.8281 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

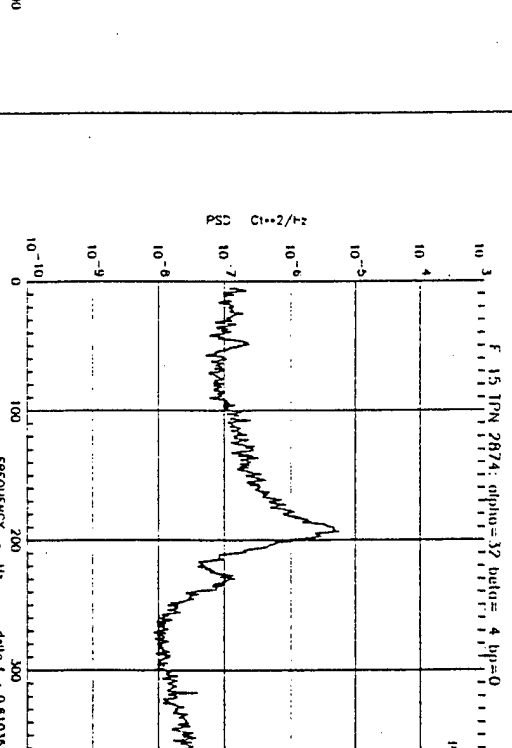

F 15 TPN 2864: alpha=8 beta= 4 bp=0
S1 BENDING
rms = 1.822253e 03
peak = 4.513033e 07
@ 50.0488 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

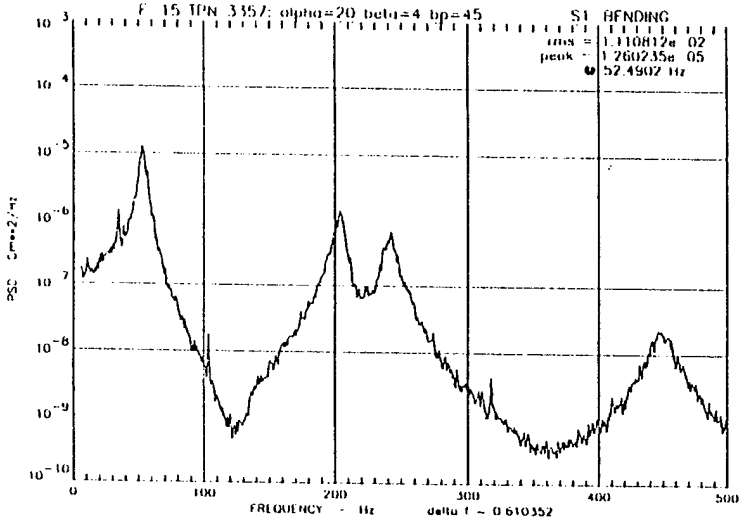

F 15 TPN 2872: alpha=24 beta= 4 bp=0
S1 BENDING
rms = 3.518565e 02
peak = 1.296383e-04
@ 48.2178 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

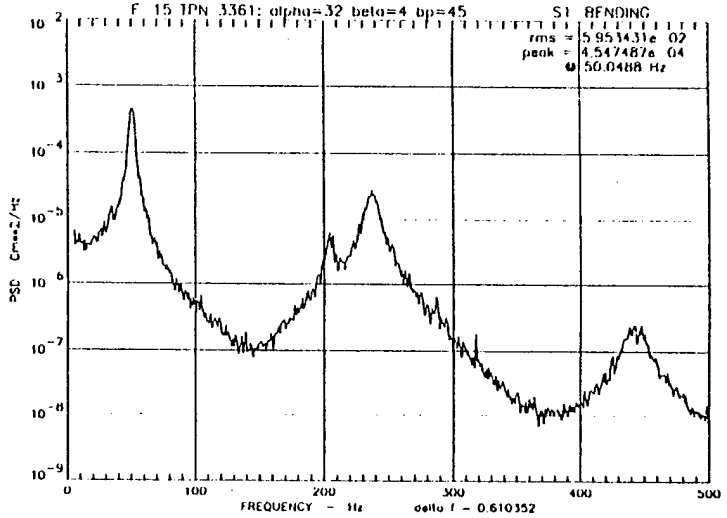

F 15 IPN 2870: alpha=20 beta= 4 bp=0
S2 TORSION
rms = 5.193921e 02
peak = 5.193921e 02
190.430 Hz
PSD (t**2/Hz
FREQUENCY - Hz
delta f = 0.610352

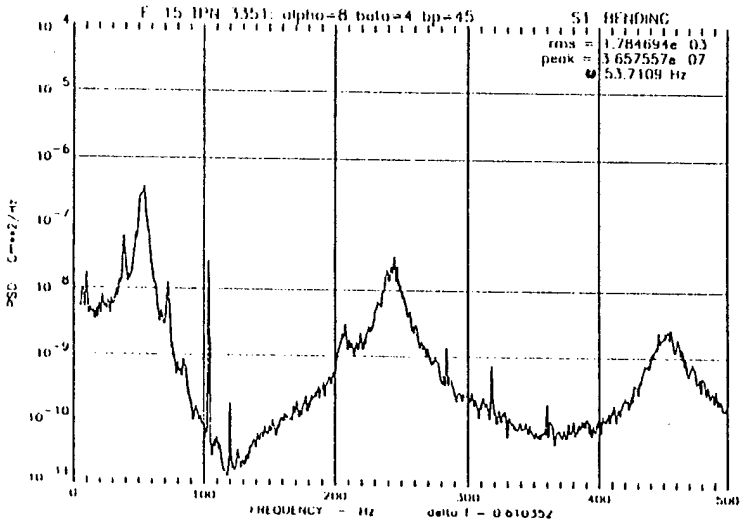

F 15 IPN 2864: alpha=8 beta= 4 bp=0
S2 TORSION
rms = 6.320914e 04
peak = 2.452318e 05
106.812 Hz
PSD (t**2/Hz
FREQUENCY - Hz
delta f = 0.610352

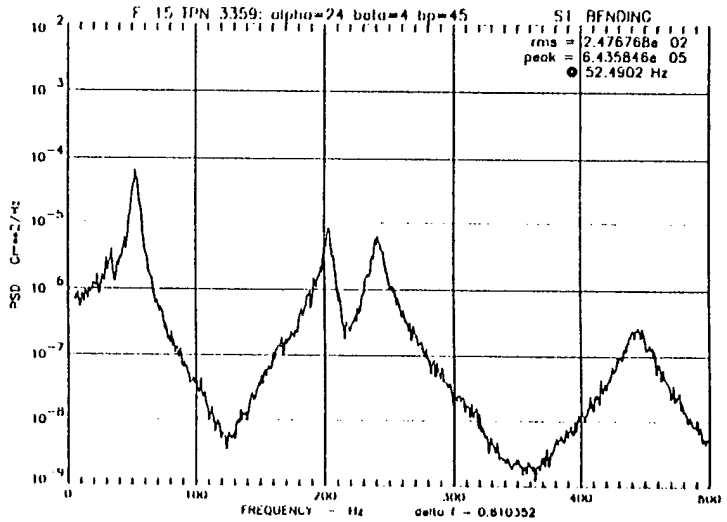

F 15 IPN 2874: alpha=32 beta= 4 bp=0
S2 TORSION
rms = 1.067558e 02
peak = 5.430469e 06
193.481 Hz
PSD (t**2/Hz
FREQUENCY - Hz
delta f = 0.610352

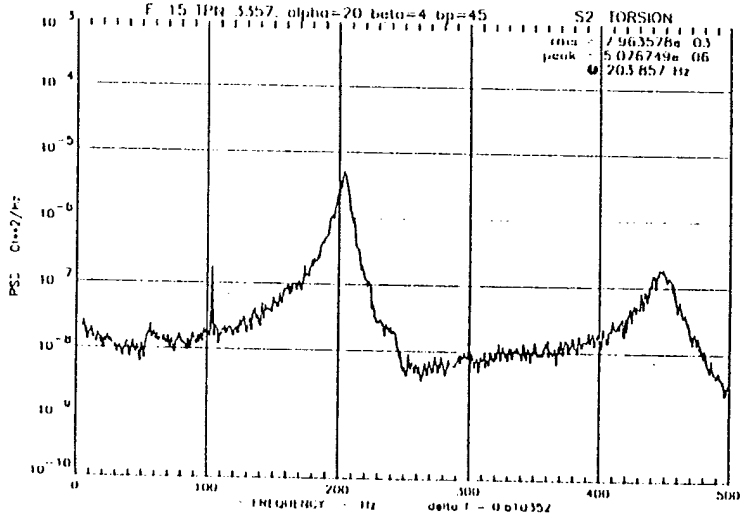

F 15 IPN 2872: alpha=24 beta= 4 bp=0
S2 TORSION
rms = 2.634626e 02
peak = 1.004229e 05
191.650 Hz
PSD (t**2/Hz
FREQUENCY - Hz
delta f = 0.610352

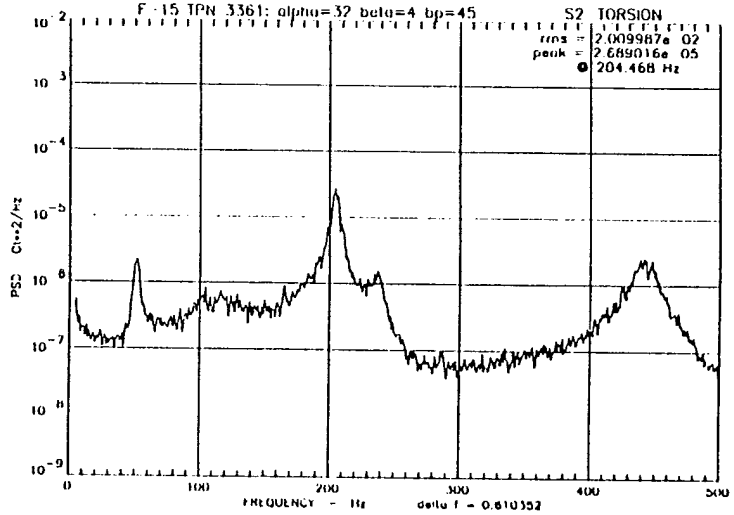

F 15 TPN 3357: alpha=20 beta=4 bp=45
S1 BENDING
rms = 1.110812e 02
peak = 1.260235e 05
@ 52.4902 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

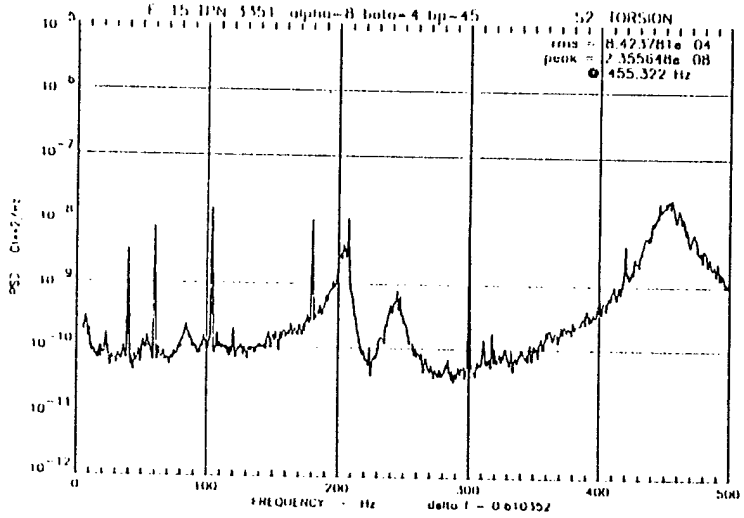

F 15 TPN 3361: alpha=32 beta=4 bp=45
S1 BENDING
rms = 5.953431e 02
peak = 4.547487e 04
@ 50.0488 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

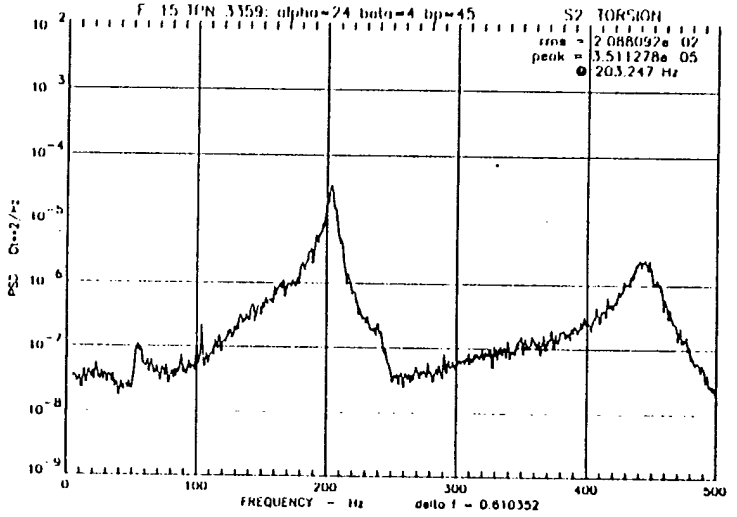

F 15 TPN 3351: alpha=8 beta=4 bp=45
S1 BENDING
rms = 1.784694e 03
peak = 3.657557e 07
@ 53.7109 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

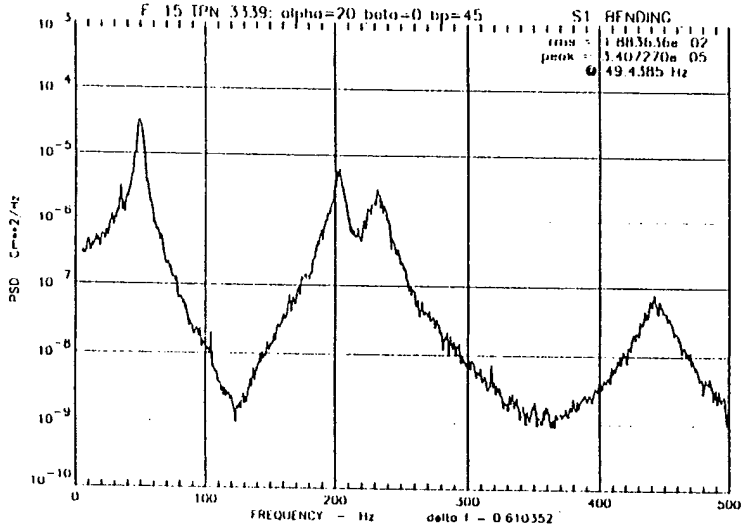

F 15 TPN 3359: alpha=24 beta=4 bp=45
S1 BENDING
rms = 2.476768e 02
peak = 6.435846e 05
@ 52.4902 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

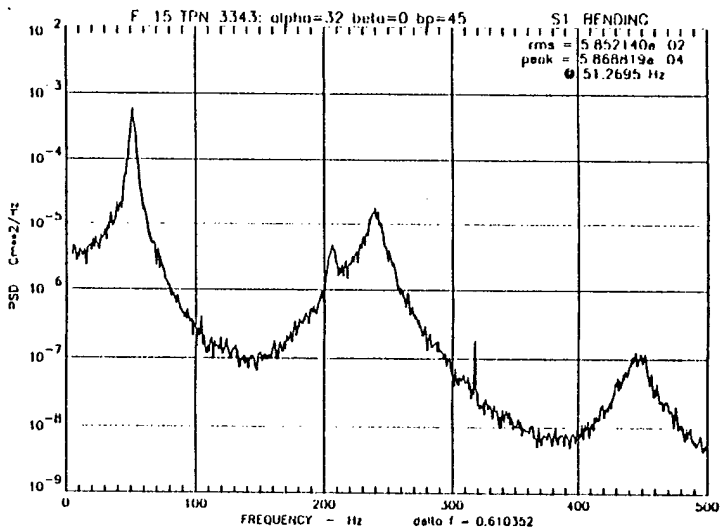

F-15 TPN 3357: alpha=20 beta=4 bp=45
S2 TORSION
rms = 7.963578e 03
peak = 5.076749e 06
@ 203.857 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

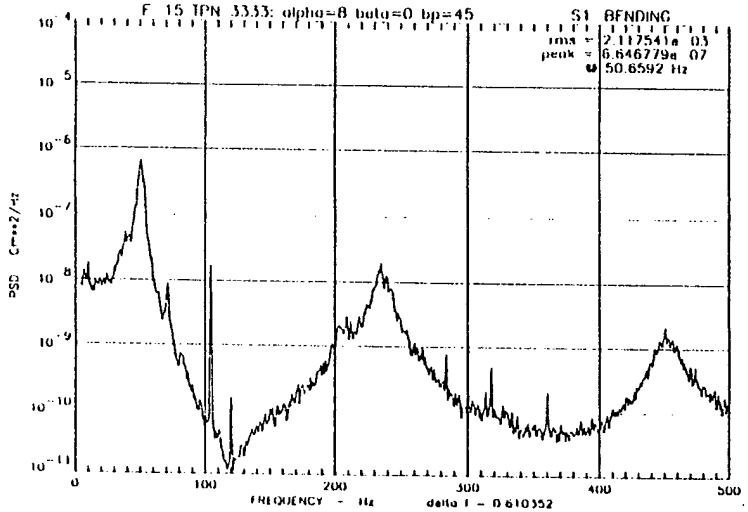

F-15 TPN 3361: alpha=32 beta=4 bp=45
S2 TORSION
rms = 2.009987e 02
peak = 2.689016e 05
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

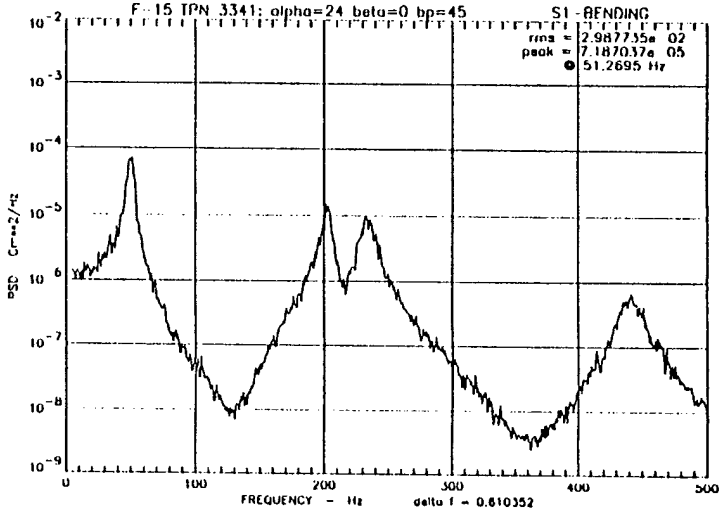

F-15 TPN 3351: alpha=8 beta=4 bp=45
S2 TORSION
rms = 8.423781e 04
peak = 2.355648e 08
@ 455.322 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

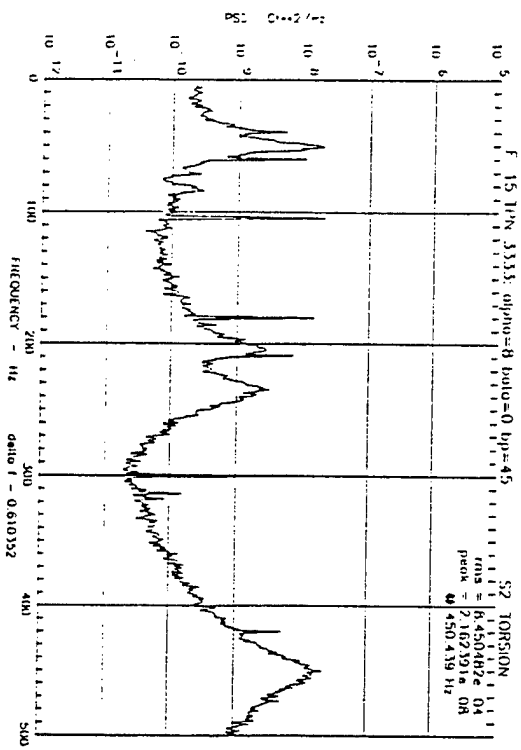

F-15 TPN 3359: alpha=24 beta=4 bp=45
S2 TORSION
rms = 2.088092e 02
peak = 3.511278e 05
@ 203.247 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

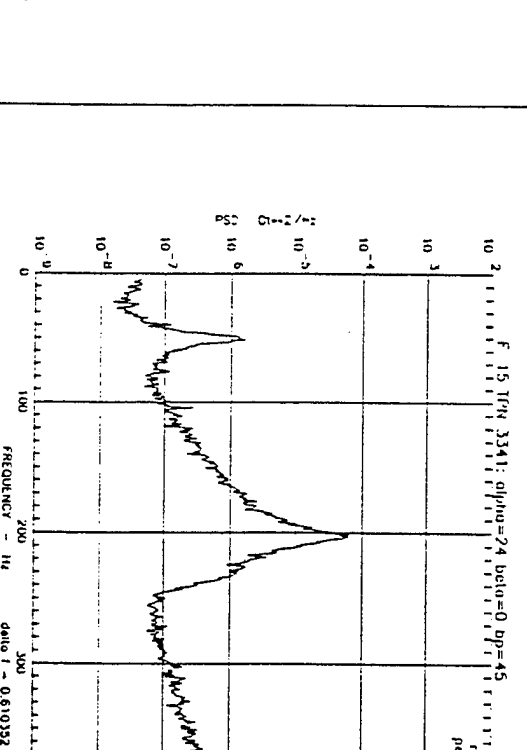

F_15 TPN 3339: alpha=20 beta=0 bp=45
S1 BENDING
rms = 1.883636e 02
peak = 3.407270e 05
@ 49.4385 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

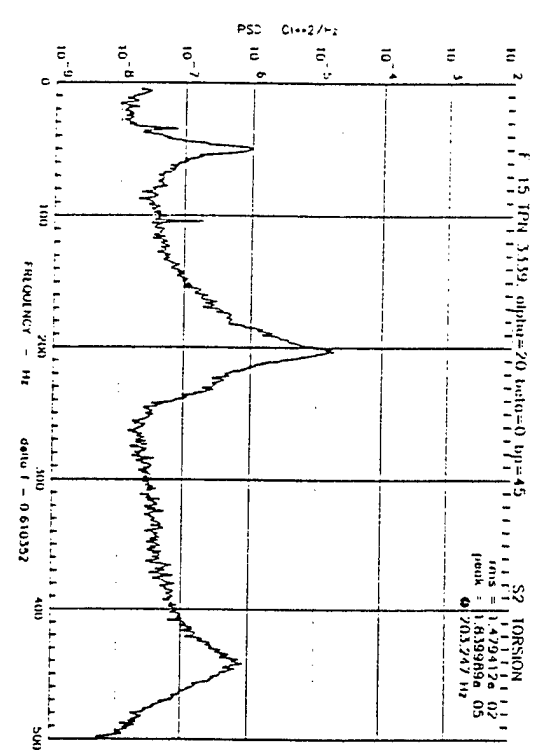

F_15 TPN 3343: alpha=32 beta=0 bp=45
S1 BENDING
rms = 5.852140e 02
peak = 5.868819e 04
@ 51.2695 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F_15 TPN 3333: alpha=8 beta=0 bp=45
S1 BENDING
rms = 2.117541e 03
peak = 6.646779e 07
@ 50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

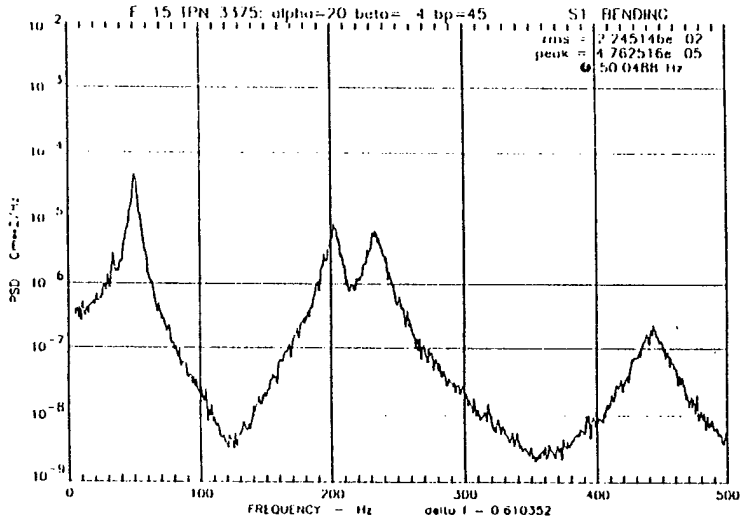

F_15 TPN 3341: alpha=24 beta=0 bp=45
S1 BENDING
rms = 2.987735e 02
peak = 7.187037e 05
@ 51.2695 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

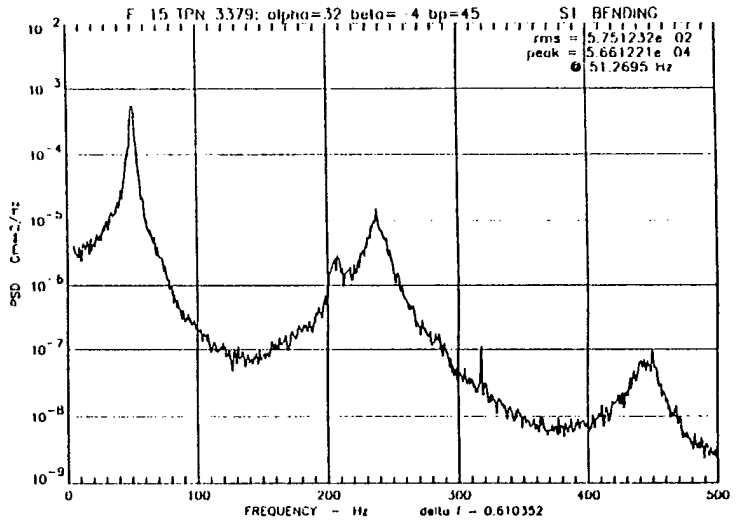

F 15 TPN 3339; alpha=20 beta=0 bp=45
S2 TORSION
rms = 1.479412e 02
peak = 1.839989e 05
@ 203.247 Hz
PSD C**2/Hz
FREQUENCY - Hz
delta f = 0.610352

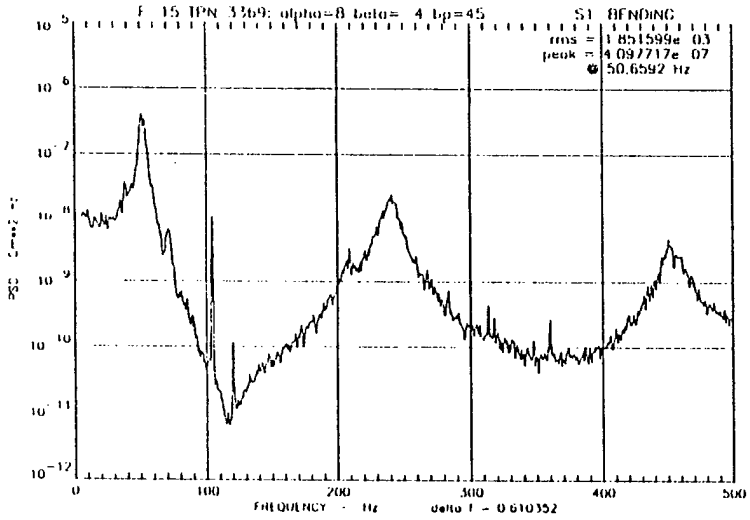

F 15 TPN 3333; alpha=8 beta=0 bp=45
S2 TORSION
rms = 6.450482e 04
peak = 2.162391e 08
@ 450.439 Hz
PSD C**2/Hz
FREQUENCY - Hz
delta f = 0.610352

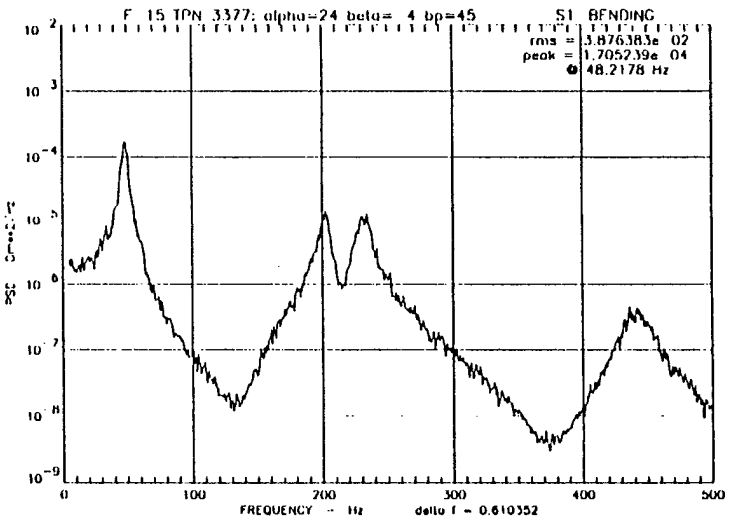

F 15 TPN 3343; alpha=32 beta=0 bp=45
S2 TORSION
rms = 1.458755e 02
peak = 1.520783e 05
@ 205.688 Hz
PSD C**2/Hz
FREQUENCY - Hz
delta f = 0.610352

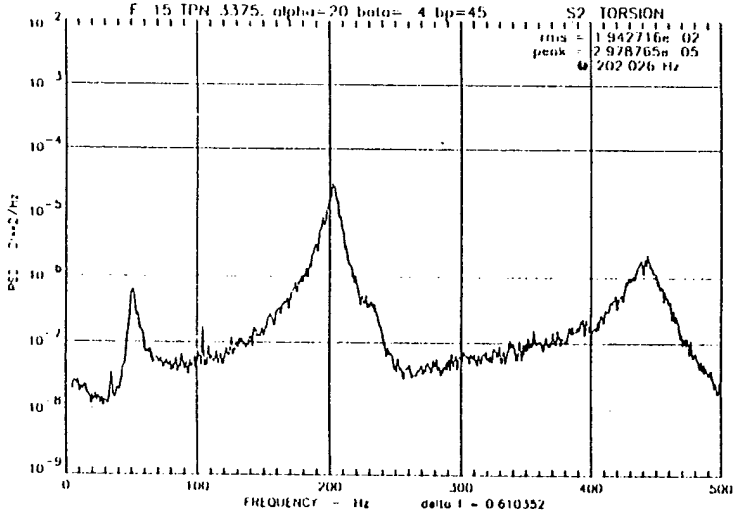
F 15 TPN 3341; alpha=24 beta=0 bp=45
S2 TORSION
rms = 2.946274e 02
peak = 6.318601e 05
@ 201.416 Hz
PSD C**2/Hz
FREQUENCY - Hz
delta f = 0.610352

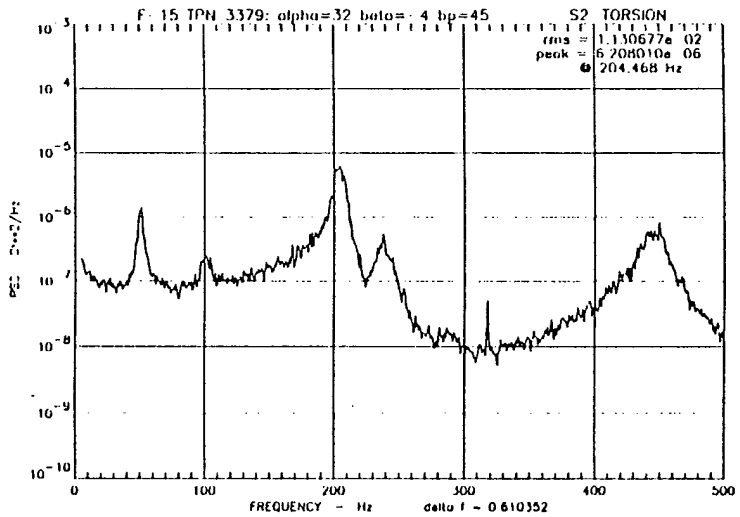

F 15 TPN 3375: alpha=20 beta= 4 bp=45
S1 BENDING
rms = 2.745146e 02
peak = 4.762516e 05
@ 50.0488 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

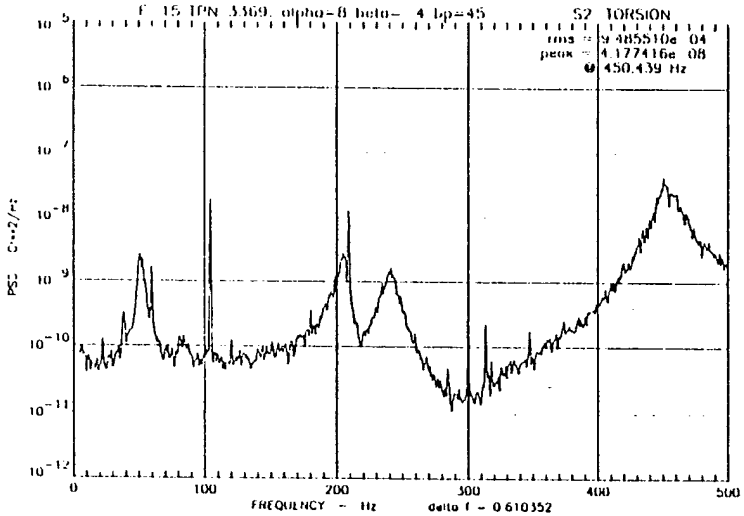

F 15 TPN 3379: alpha=32 beta= 4 bp=45
S1 BENDING
rms = 5.751232e 02
peak = 5.661221e 04
@ 51.2695 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

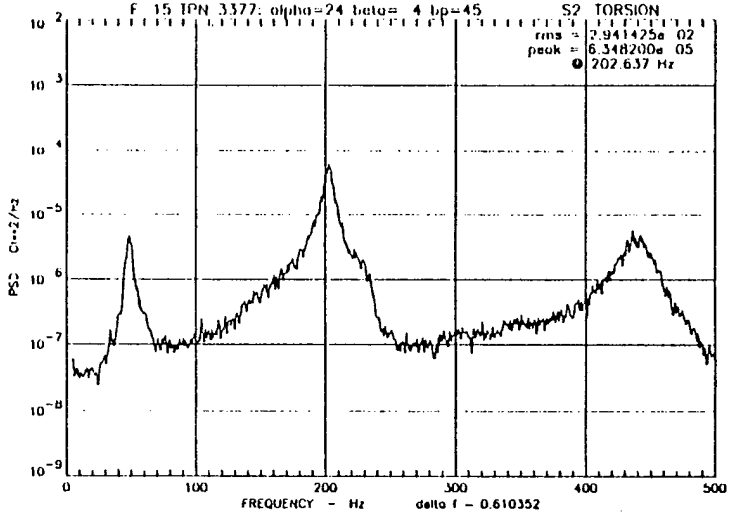

F 15 TPN 3369: alpha=8 beta= 4 bp=45
S1 BENDING
rms = 1.851599e 03
peak = 4.097717e 07
@ 50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

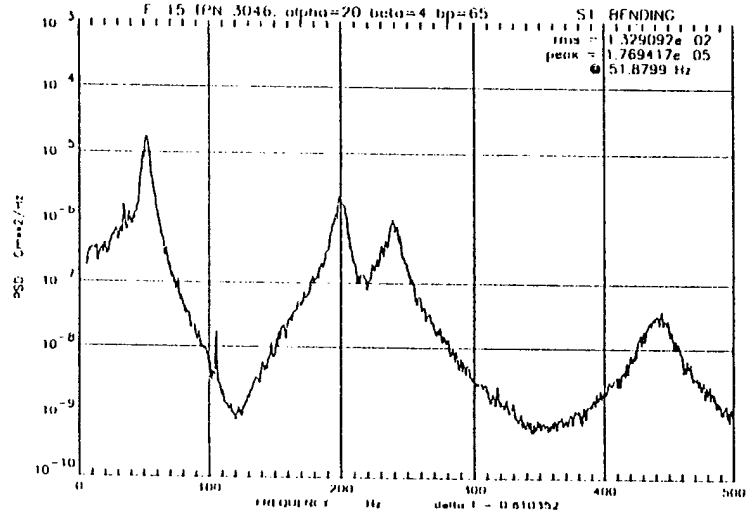

F 15 TPN 3377: alpha=24 beta= 4 bp=45
S1 BENDING
rms = 3.876383e 02
peak = 1.705239e 04
@ 48.2178 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

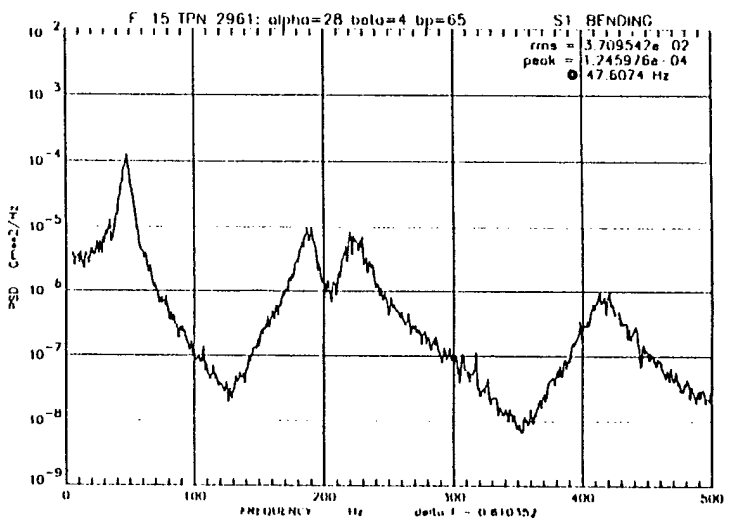

F 15 TPN 3375: alpha=20 beta= 4 bp=45
S2 TORSION
rms = 1.942716e 02
peak = 2.978765e 05
@ 202.026 Hz
FREQUENCY - Hz
delta f = 0.610352

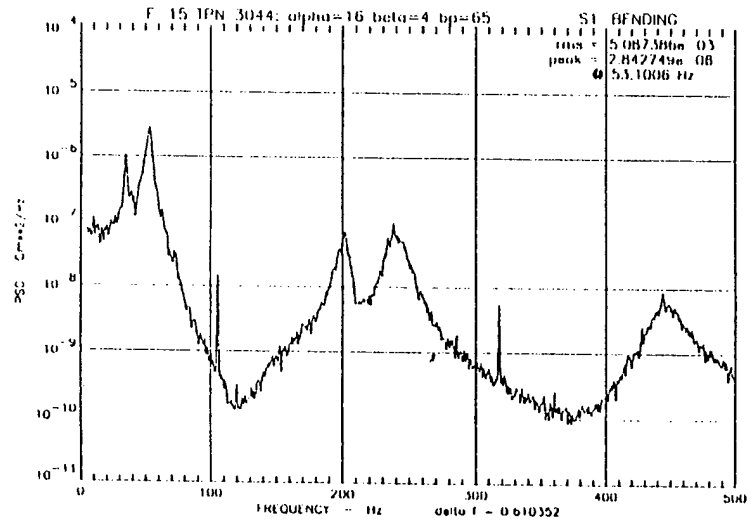

F 15 TPN 3379: alpha=32 beta= 4 bp=45
S2 TORSION
rms = 1.130677e 02
peak = 6.208010e 06
@ 204.468 Hz
FREQUENCY - Hz
delta f = 0.610352

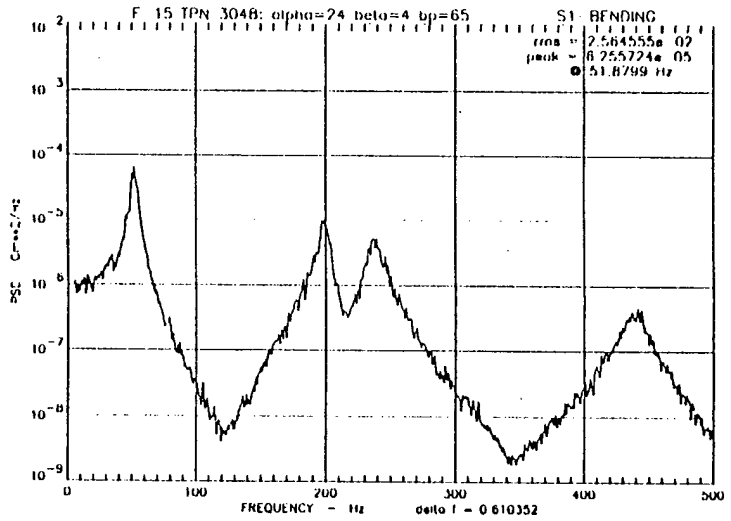

F 15 TPN 3369: alpha=8 beta= 4 bp=45
S2 TORSION
rms = 9.485510e 04
peak = 4.177416e 08
@ 450.439 Hz
FREQUENCY - Hz
delta f = 0.610352

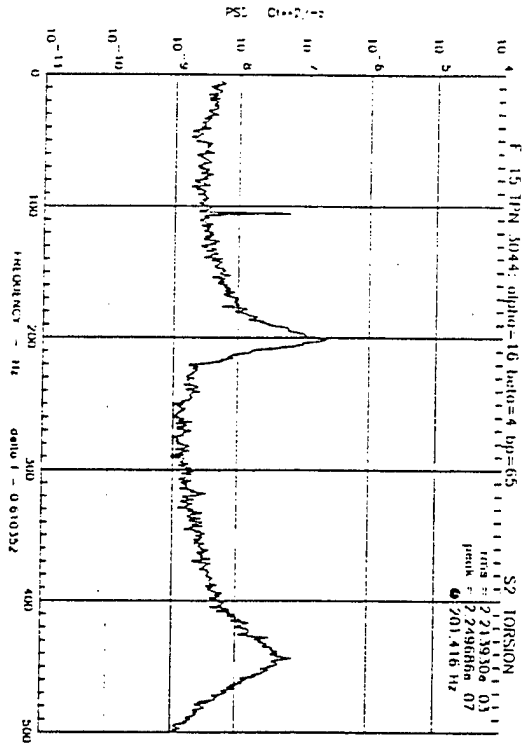

F 15 TPN 3377: alpha=24 beta= 4 bp=45
S2 TORSION
rms = 2.941425e 02
peak = 6.348200e 05
@ 202.637 Hz
FREQUENCY - Hz
delta f = 0.610352


F 15 TPN 3046: alpha=20 beta=4 bp=65
S1 BENDING
rms = 1.329092e 02
peak = 1.769417e 05
@ 51.8799 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

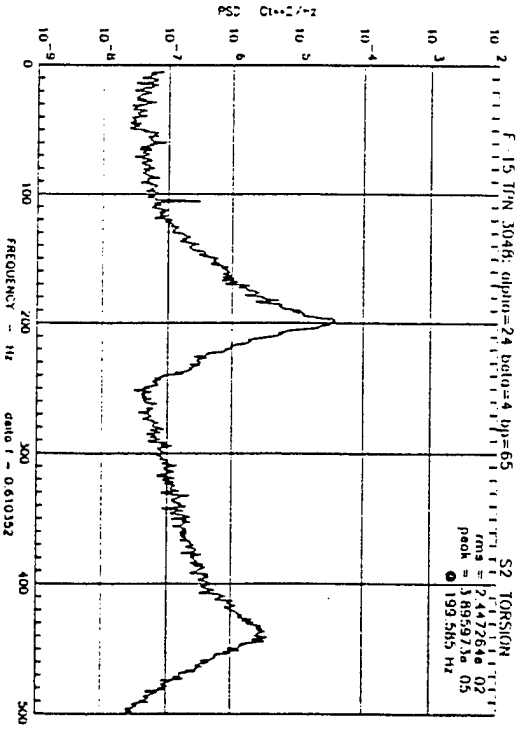

F 15 TPN 2961: alpha=28 beta=4 bp=65
S1 BENDING
rms = 3.709542e 02
peak = 1.245976e 04
@ 47.6074 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F 15 TPN 3044: alpha=16 beta=4 bp=65
S1 BENDING
rms = 5.087386e 03
peak = 2.842749e 08
@ 53.1006 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

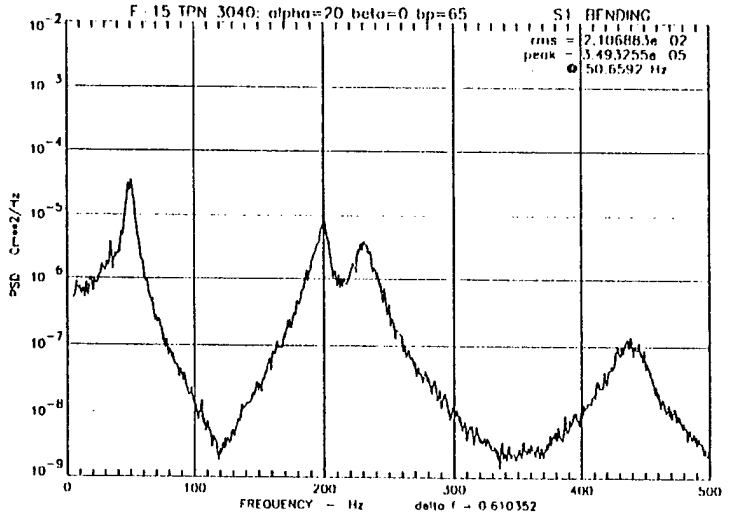

F 15 TPN 3048: alpha=24 beta=4 bp=65
S1 BENDING
rms = 2.564555e 02
peak = 6.255724e 05
@ 51.8799 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

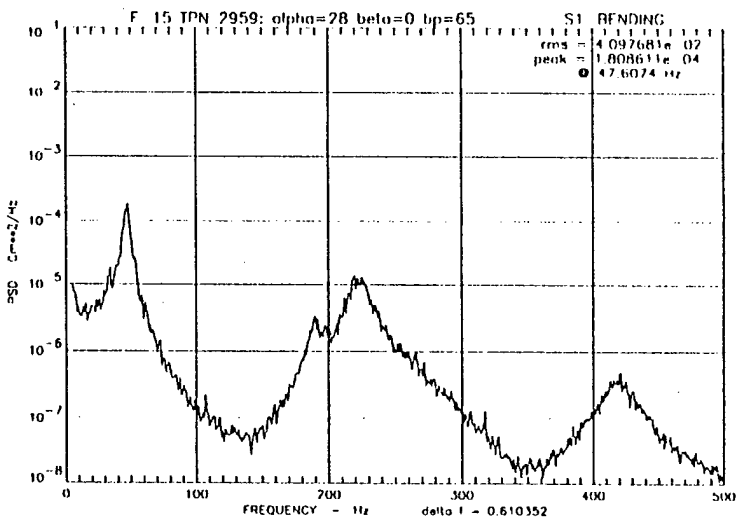

F 15 TPN 3046: alpha=20 beta=4 bp=65
S2 TORSION
rms = 7.5479551e 06
peak = 190.364 Hz
PSD (1**2/Hz
FREQUENCY - Hz
delta f = 0.610352

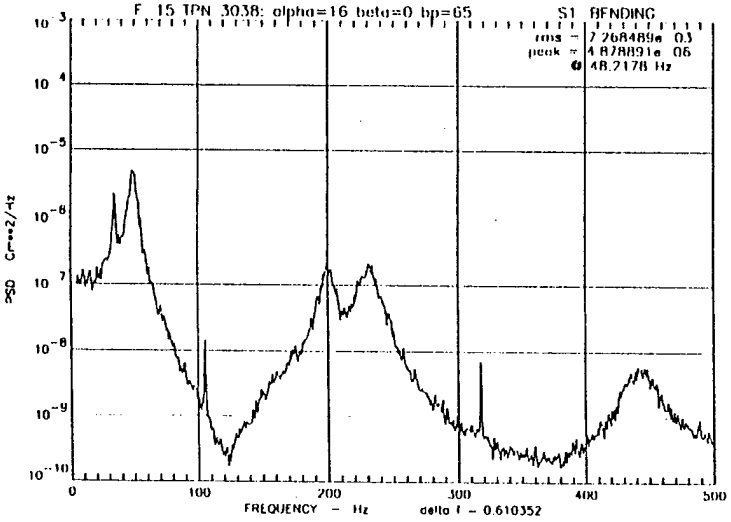
F 15 TPN 3046: alpha=16 beta=4 bp=65
S2 TORSION
rms = 2.2139306e 03
peak = 201.416 Hz
PSD (1**2/Hz
FREQUENCY - Hz
delta f = 0.610352

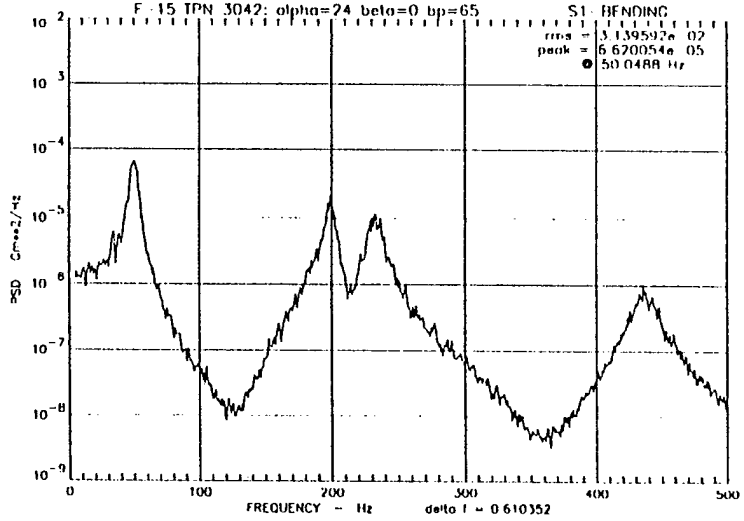

F 15 TPN 2961: alpha=28 beta=4 bp=65
S2-TORSION
rms = 3.3034032e 02
peak = 190.430 Hz
PSD (1**2/Hz
FREQUENCY - Hz
delta f = 0.610352

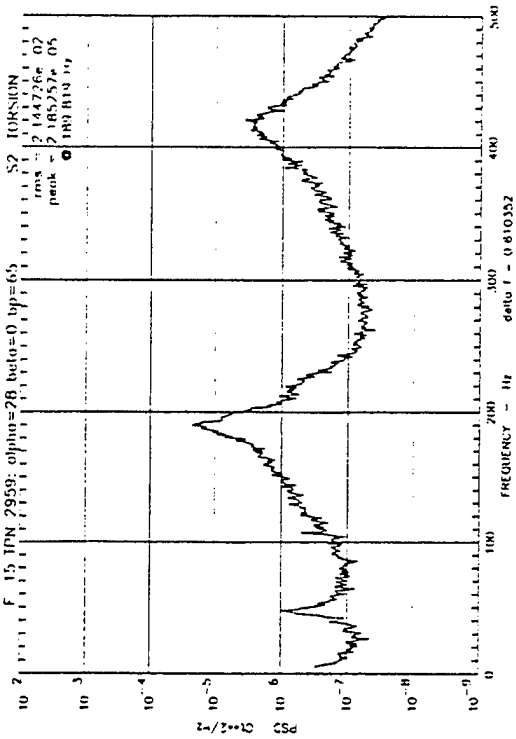
F 15 TPN 3048: alpha=24 beta=4 bp=65
S2 TORSION
rms = 2.4472764e 02
peak = 199.585 Hz
PSD (1**2/Hz
FREQUENCY - Hz
delta f = 0.610352

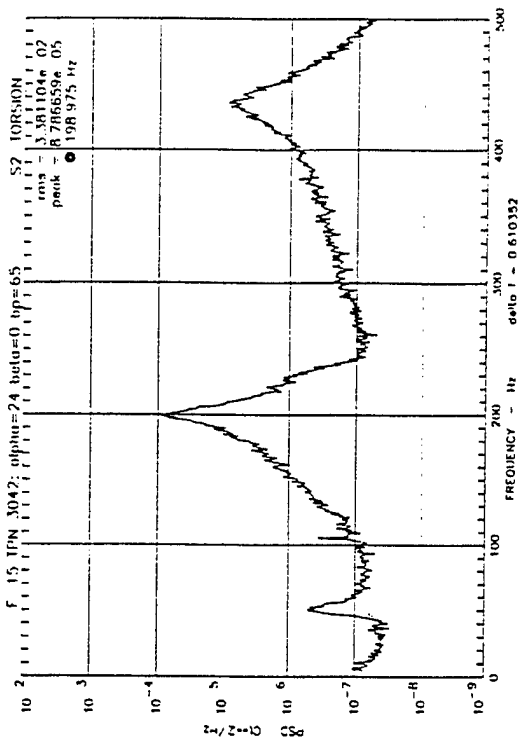

F-15 TPN 3040: alpha=20 beta=0 bp=65
S1 BENDING
rms = 2.106883e 02
peak = 3.493255e 05
@ 50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

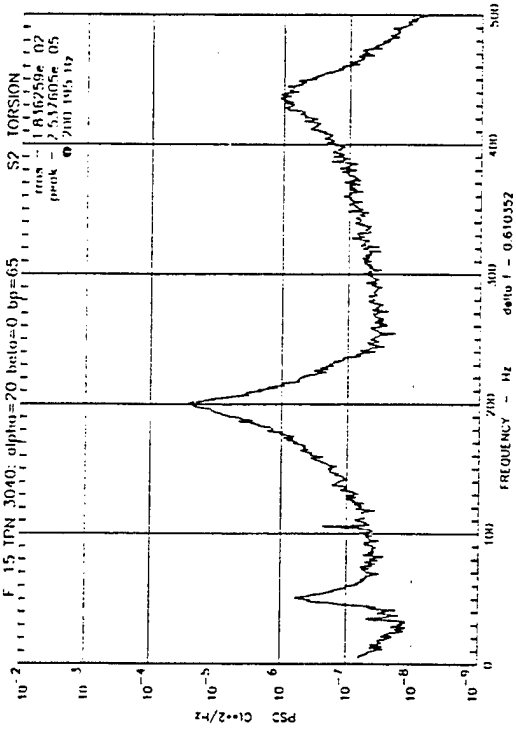

F-15 TPN 2959: alpha=28 beta=0 bp=65
S1 BENDING
rms = 4.097683e 02
peak = 1.808611e 04
@ 47.6074 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

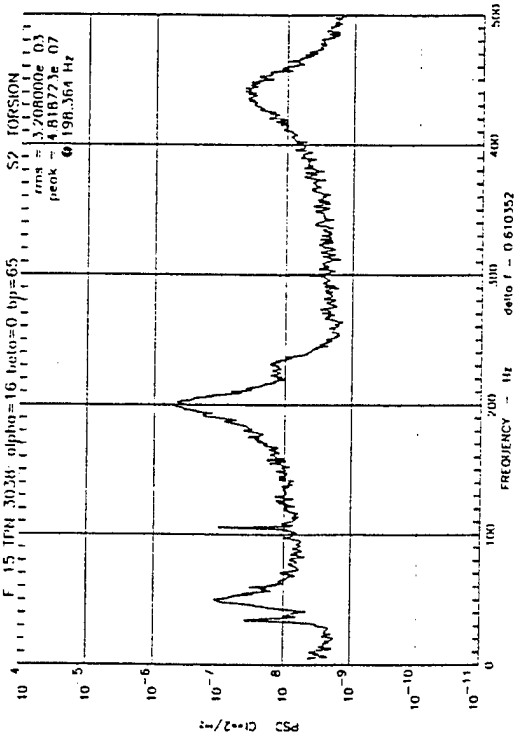

F-15 TPN 3038: alpha=16 beta=0 bp=65
S1 BENDING
rms = 7.268489e 03
peak = 4.878891e 06
@ 48.2178 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

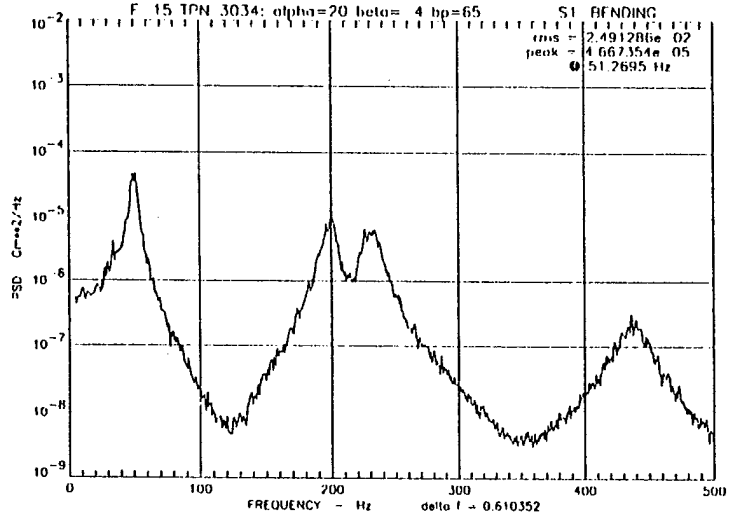

F-15 TPN 3042: alpha=24 beta=0 bp=65
S1 BENDING
rms = 3.139597e 02
peak = 6.620054e 05
@ 50.0488 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

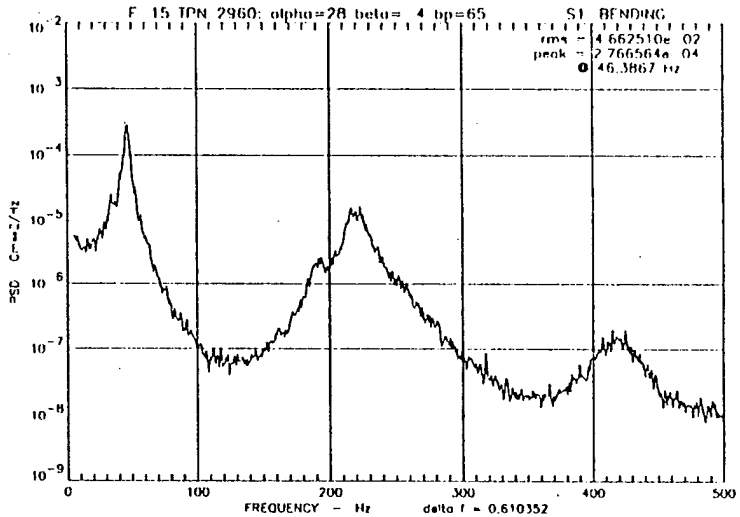

F 15 TPN 2959: alpha=28 beta=0 bp=65
S2 TORSION
FREQUENCY - Hz
delta f = 0.610352
PSD

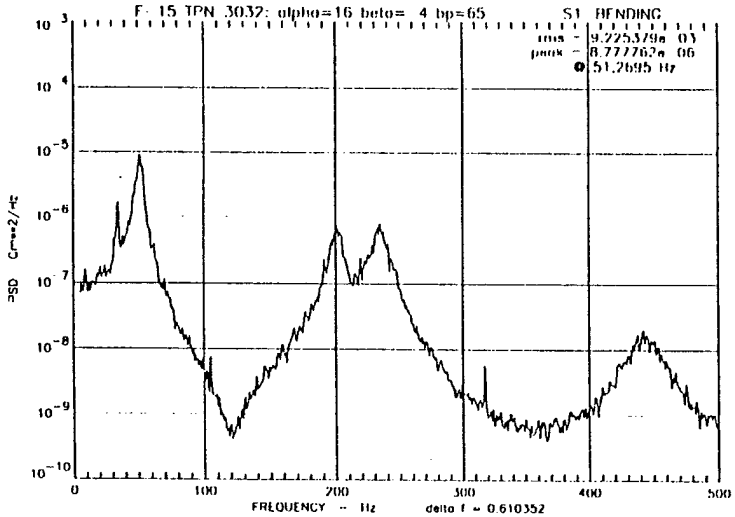

F 15 TPN 3042: alpha=24 beta=0 bp=65
S2 TORSION
FREQUENCY - Hz
delta f = 0.610352
PSD

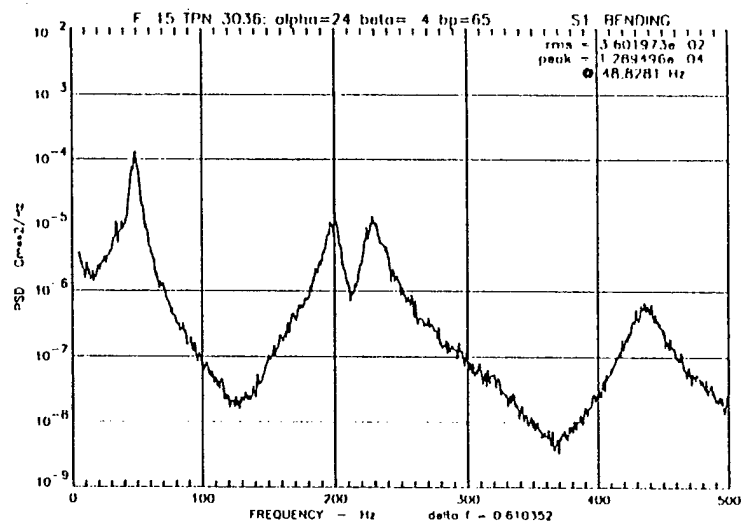

F 15 TPN 3040: alpha=20 beta=0 bp=65
S2 TORSION
FREQUENCY - Hz
delta f = 0.610352
PSD

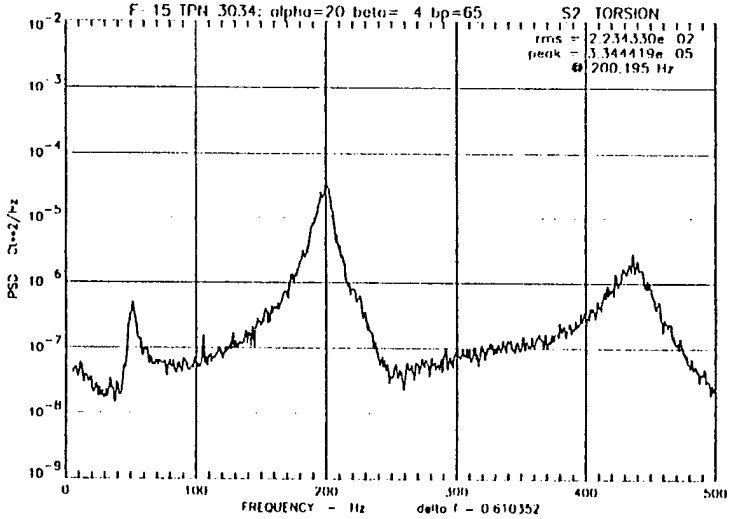

F 15 TPN 3038: alpha=16 beta=0 bp=65
S2 TORSION
FREQUENCY - Hz
delta f = 0.610352
PSD

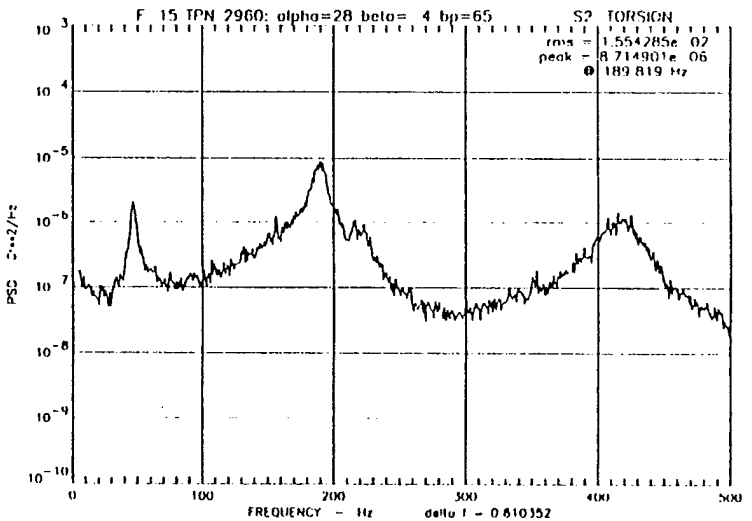

F_15 TPN_3034: alpha=20 beta= 4 bp=65
S1 BENDING
rms = 2.491286e 02
peak = 4.667354e 05
@ 51.2695 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

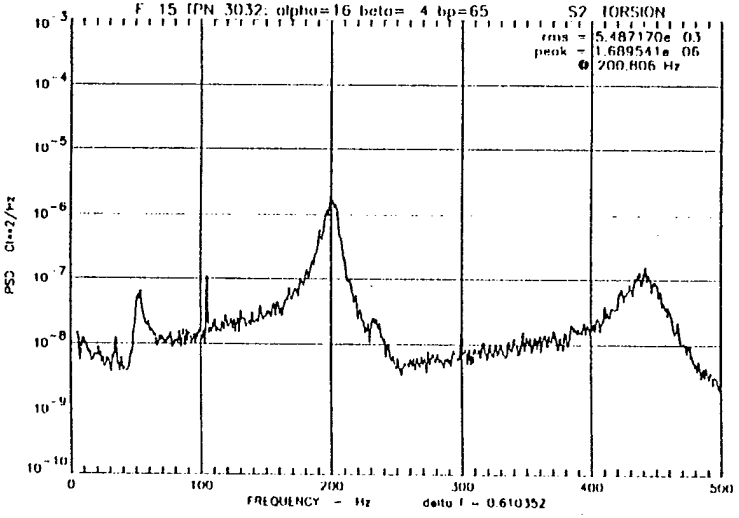

F_15 TPN_2960: alpha=28 beta= 4 bp=65
S1 BENDING
rms = 4.662510e 02
peak = 2.766564e 04
@ 46.3867 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

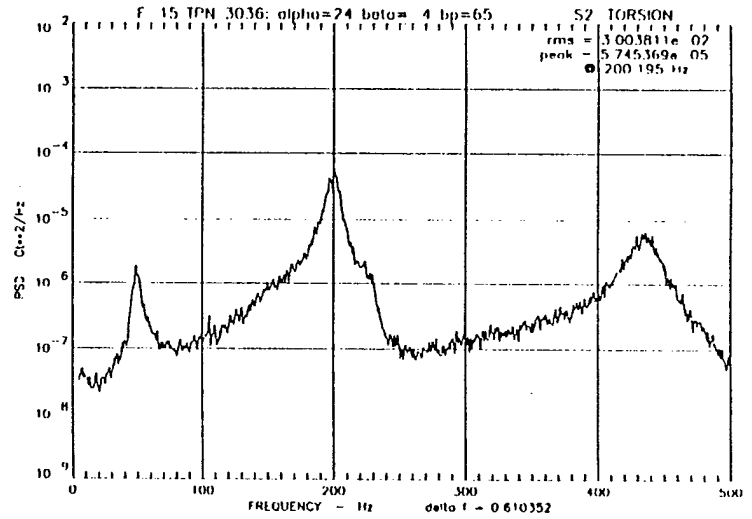

F_15 TPN_3032: alpha=16 beta= 4 bp=65
S1 BENDING
rms = 9.225379e 03
peak = 8.777762e 06
@ 51.2695 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

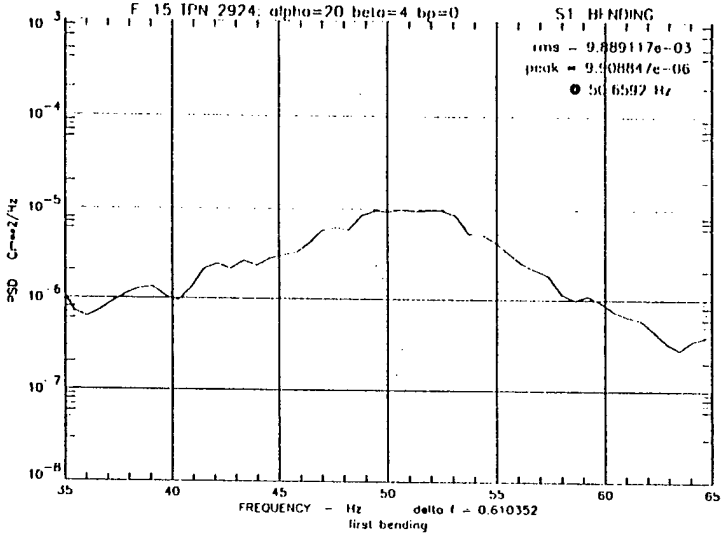

F_15 TPN_3036: alpha=24 beta= 4 bp=65
S1 BENDING
rms = 3.601973e 02
peak = 1.289496e 04
@ 48.8281 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

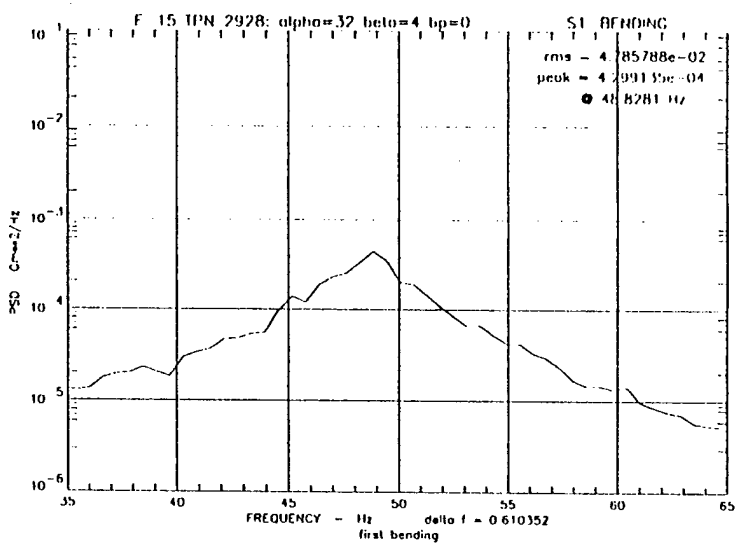

F 15 TPN 3034: alpha=20 beta= 4 bp=65
S2 TORSION
rms = 2.234330e 02
peak = 3.344419e 05
@ 200.195 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

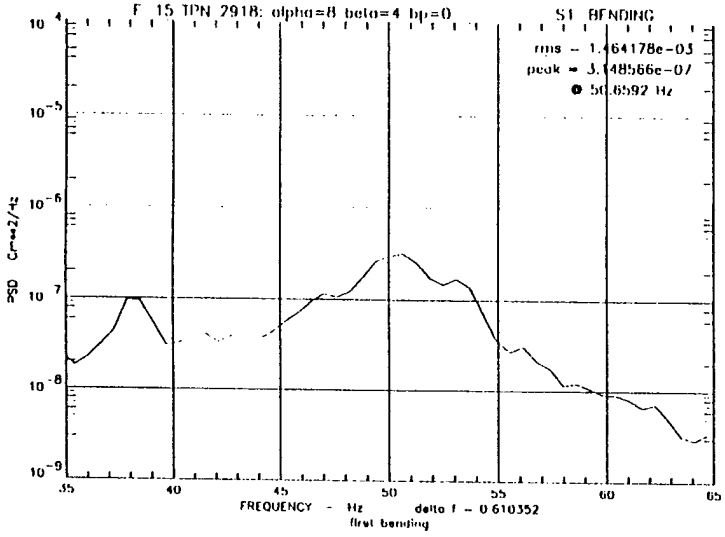

F 15 TPN 2960: alpha=28 beta= 4 bp=65
S2 TORSION
rms = 1.554285e 02
peak = 8.714901e 06
@ 189.819 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

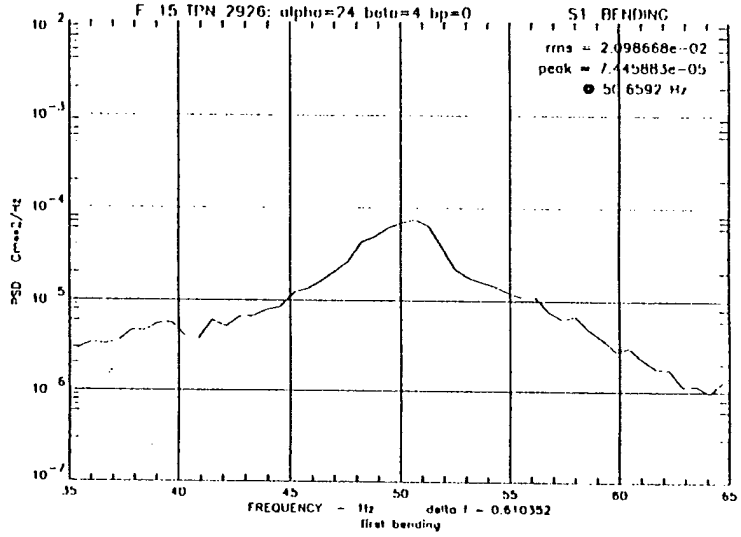

F 15 TPN 3032: alpha=16 beta= 4 bp=65
S2 TORSION
rms = 5.487170e 03
peak = 1.689541e 06
@ 200.806 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

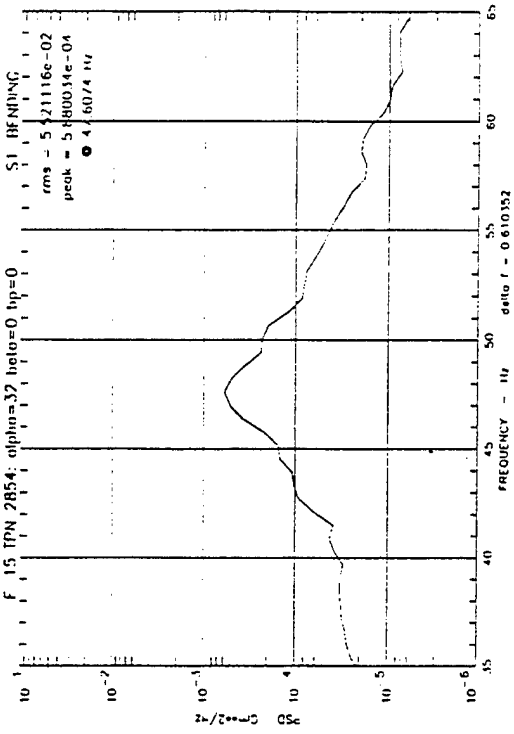

F 15 TPN 3036: alpha=24 beta= 4 bp=65
S2 TORSION
rms = 3.003811e 02
peak = 5.745369e 05
@ 200.195 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

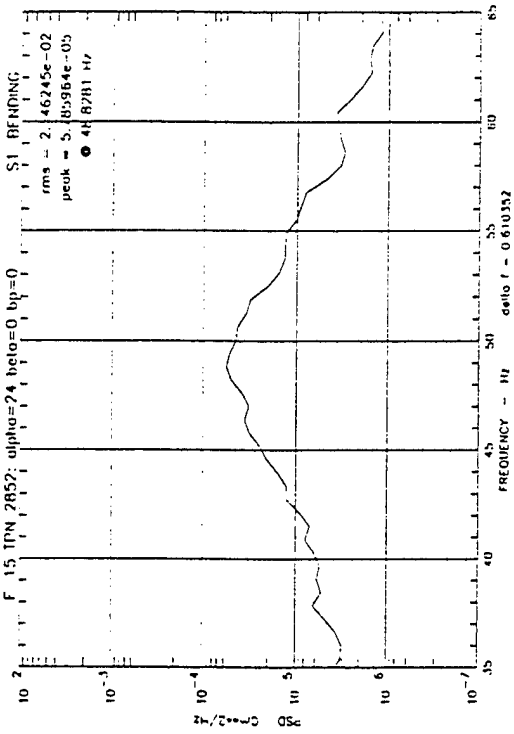

F 15 TPN 2924: alpha=20 beta=4 bp=0
S1 BENDING
rms = 9.889117e-03
peak = 9.908847e-06
50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

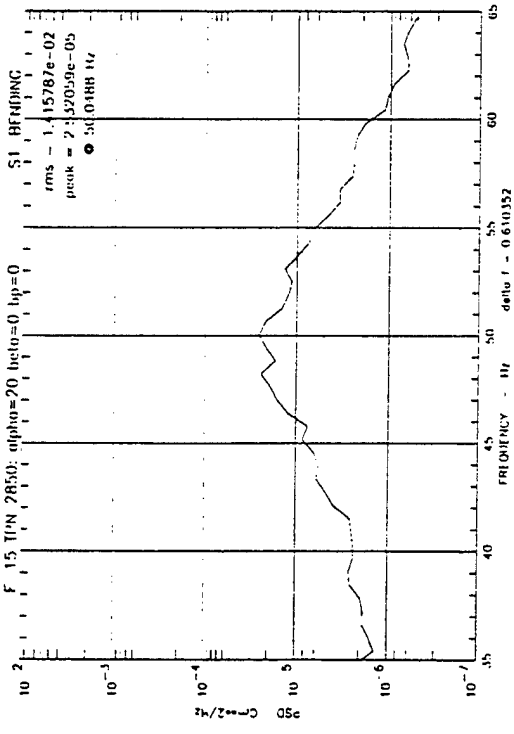

F 15 TPN 2928: alpha=32 beta=4 bp=0
S1 BENDING
rms = 4.785788e-02
peak = 4.299155e-04
48.8281 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

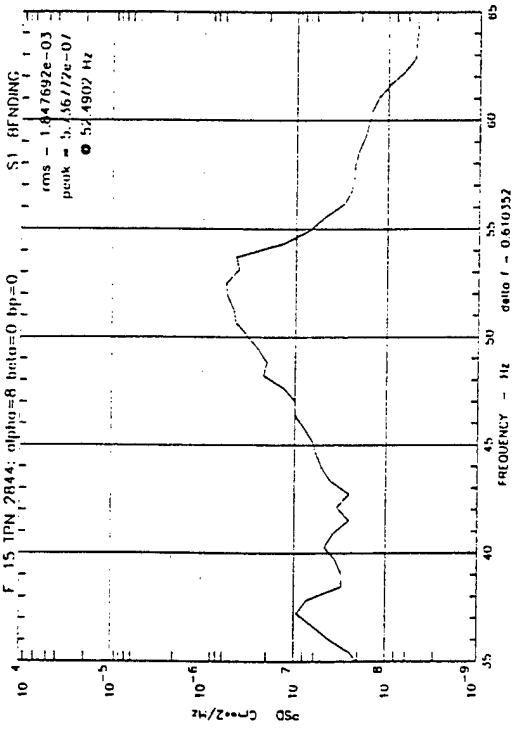

F 15 TPN 2918: alpha=8 beta=4 bp=0
S1 BENDING
rms = 1.464178e-03
peak = 3.148566e-07
50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

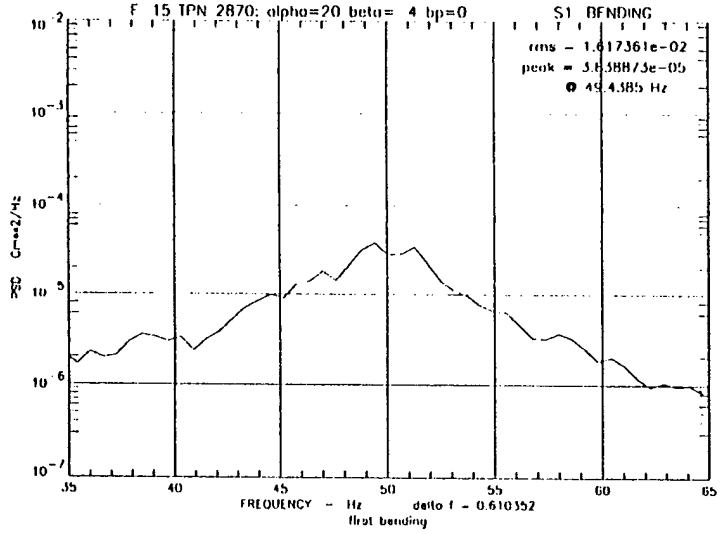

F 15 TPN 2926: alpha=24 beta=4 bp=0
S1 BENDING
rms = 2.098668e-02
peak = 7.445883e-05
50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

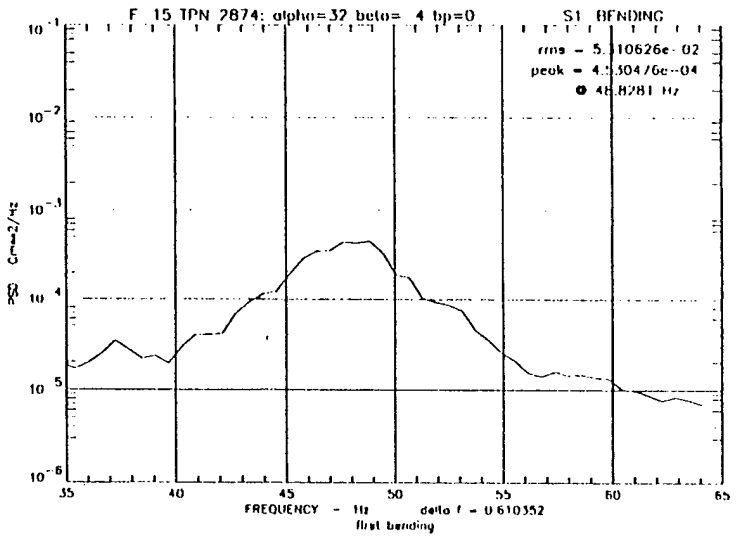

F 15 TPN 2854: alpha=32 beta=0 bp=0
S1 BENDING
rms = 5.221116e-02
peak = 5.880034e-04
4.6074 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

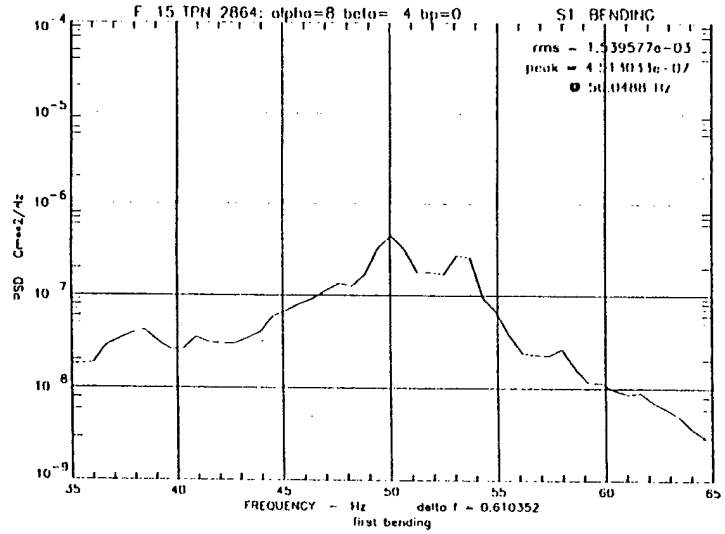

F 15 TPN 2852: alpha=24 beta=0 bp=0
S1 BENDING
rms = 2.146245e-02
peak = 5.059864e-05
4.8781 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

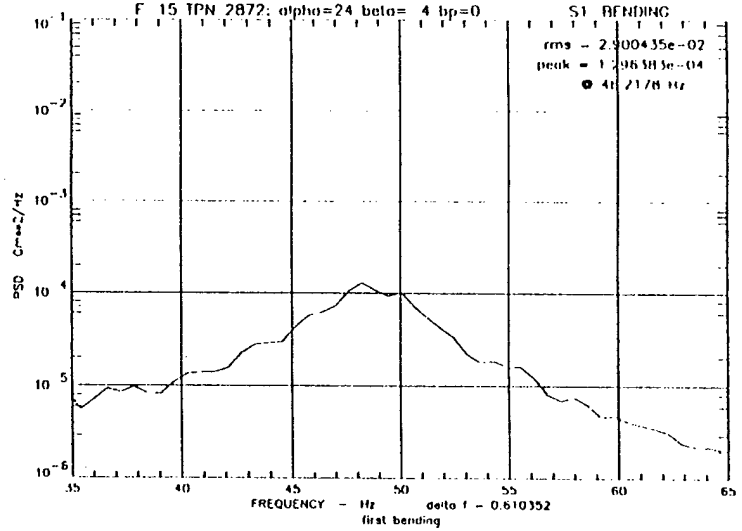

F 15 TPN 2850: alpha=20 beta=0 bp=0
S1 BENDING
rms = 1.415787e-02
peak = 2.320359e-05
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

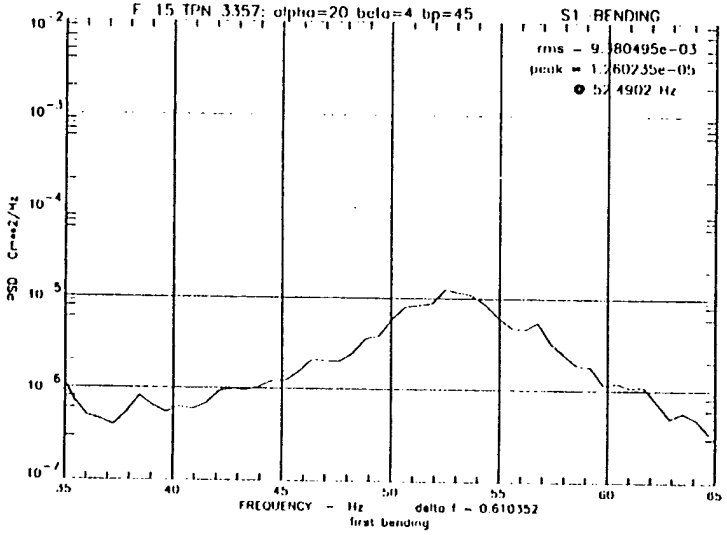

F 15 TPN 2844: alpha=8 beta=0 bp=0
S1 BENDING
rms = 1.847692e-03
peak = 3.436772e-07
5.2402 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

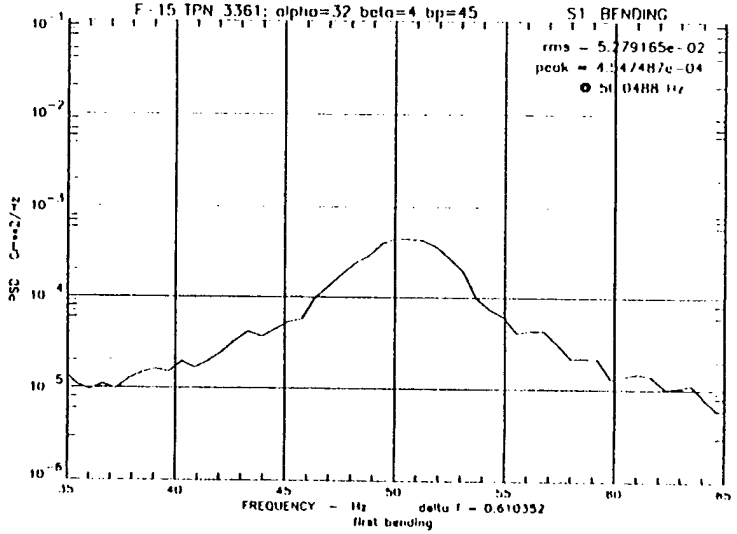

F 15 TPN 2870: alpha=20 beta= 4 bp=0
S1 BENDING
rms = 1.617361e-02
peak = 3.8388[illegible]e-05
@ 49.4385 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

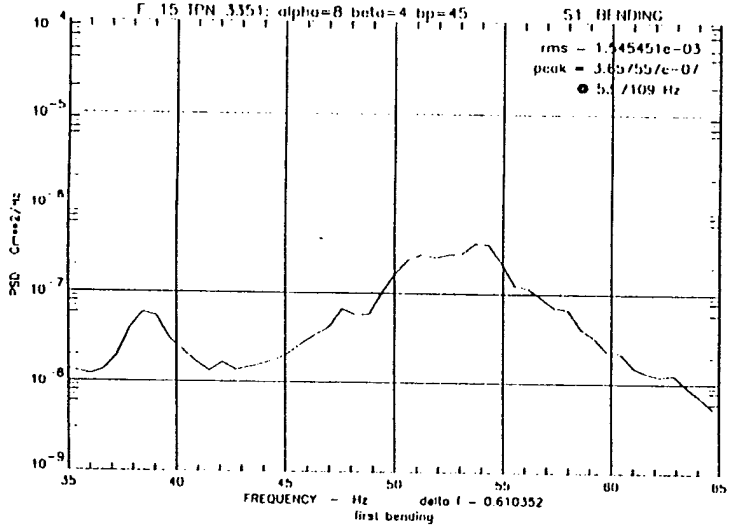

F 15 TPN 2874: alpha=32 beta= 4 bp=0
S1 BENDING
rms = 5.[illegible]10626e-02
peak = 4.[illegible]5304[illegible]6e-04
@ 48.8281 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

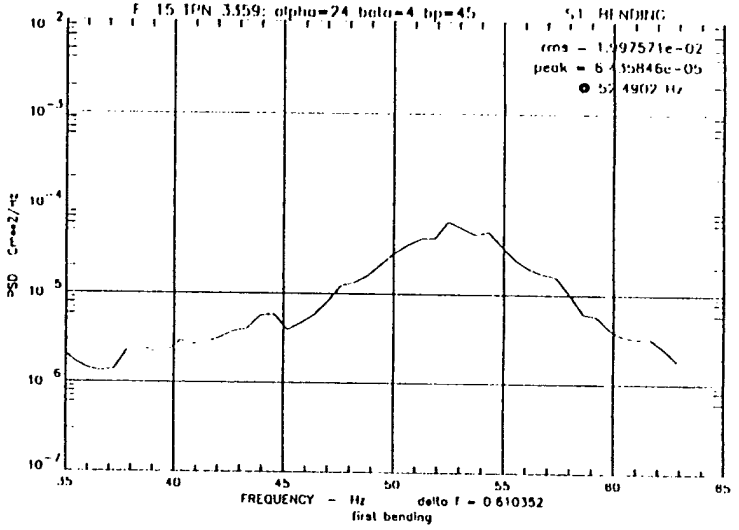

F 15 TPN 2864: alpha=8 beta= 4 bp=0
S1 BENDING
rms = 1.539577e-03
peak = 4.[illegible]9033e-07
@ 50.0488 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

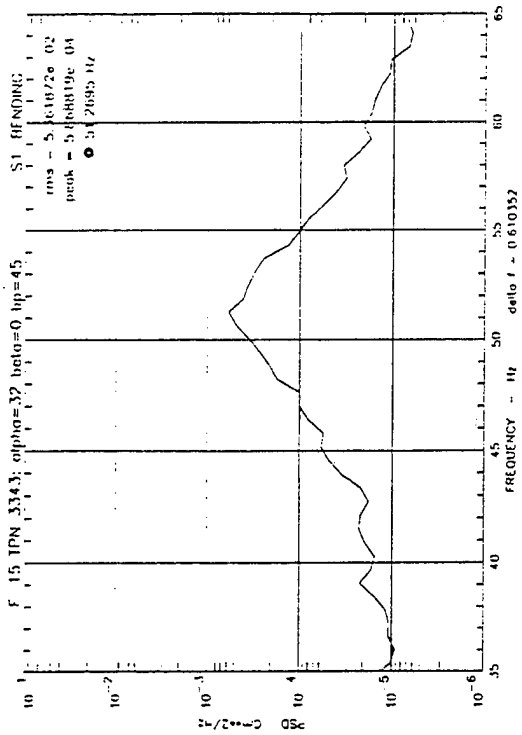

F 15 TPN 2872: alpha=24 beta= 4 bp=0
S1 BENDING
rms = 2.900435e-02
peak = 1.[illegible]96[illegible]3e-04
@ 48.[illegible]2178 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

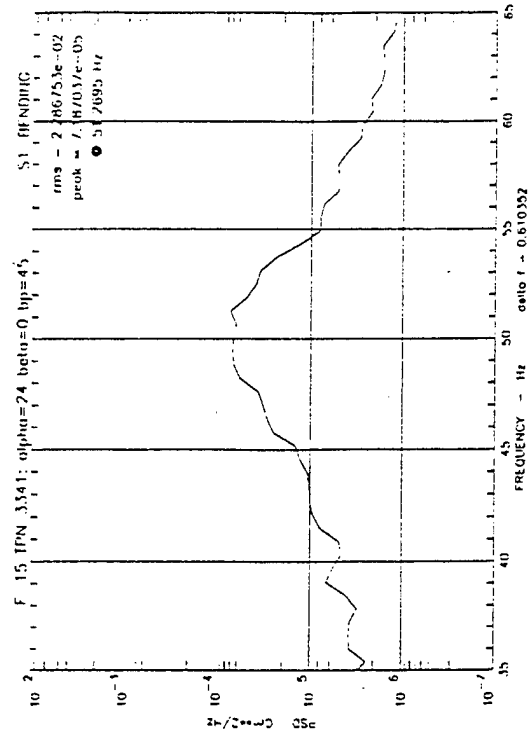

F-15 TPN 3357: alpha=20 beta=4 bp=45
S1 BENDING
rms = 9.380495e-03
peak = 1.260235e-05
@ 52.4902 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

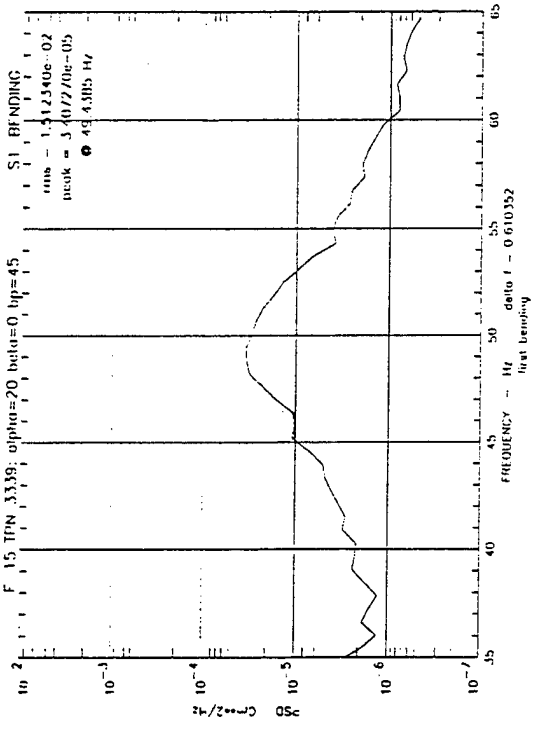

F-15 TPN 3361: alpha=32 beta=4 bp=45
S1 BENDING
rms = 5.279165e-02
peak = 4.547487e-04
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

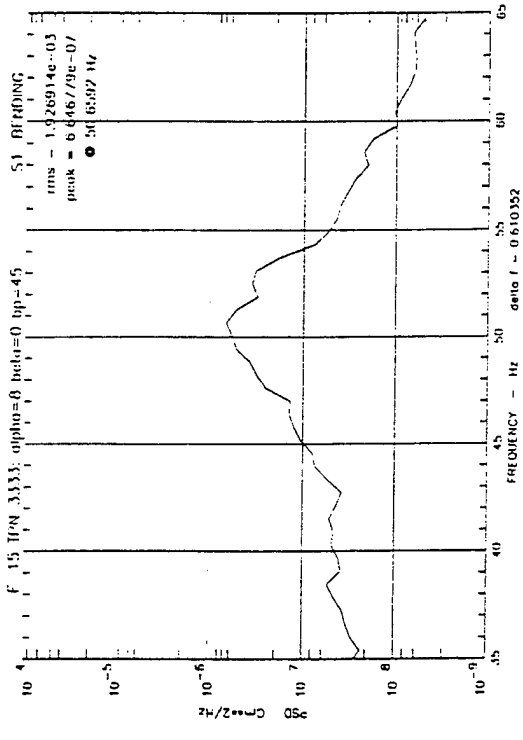

F-15 TPN 3351: alpha=8 beta=4 bp=45
S1 BENDING
rms = 1.545451e-03
peak = 3.657557e-07
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

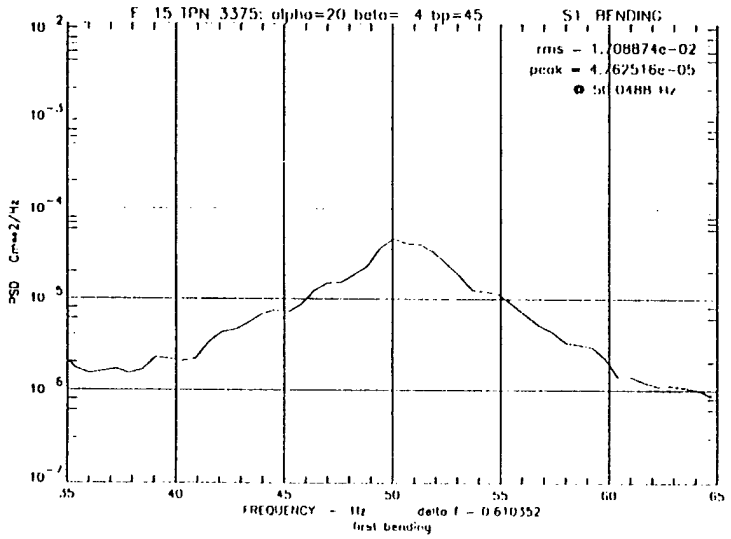

F-15 TPN 3359: alpha=24 beta=4 bp=45
S1 BENDING
rms = 1.997571e-02
peak = 6.135846e-05
@ 52.4902 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

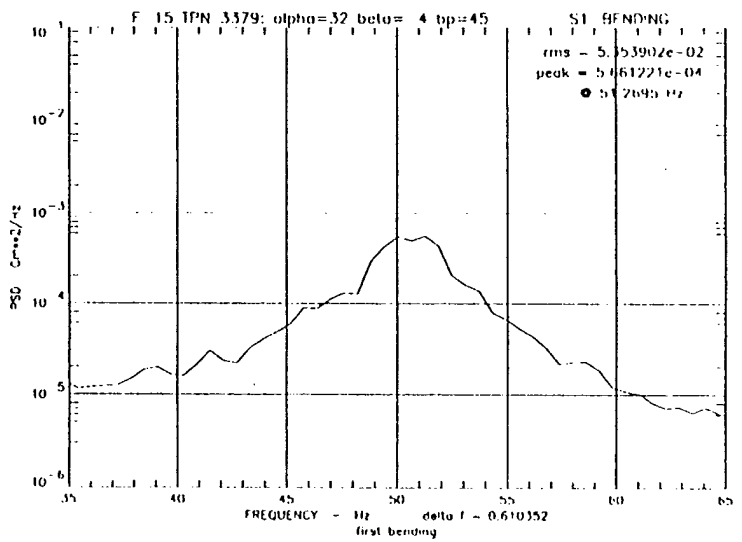

F 15 TPN 3343: alpha=32 beta=0 bp=45
S1 BENDING
rms = 5.618726e-02
peak = 5.688819e-04
@ 51.2695 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

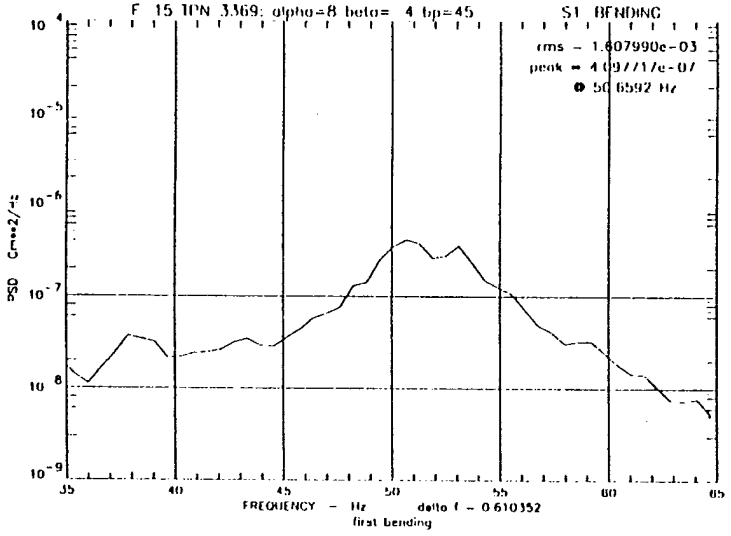

F 15 TPN 3341: alpha=24 beta=0 bp=45
S1 BENDING
rms = 2.286753e-02
peak = 7.810316e-05
@ 51.2695 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

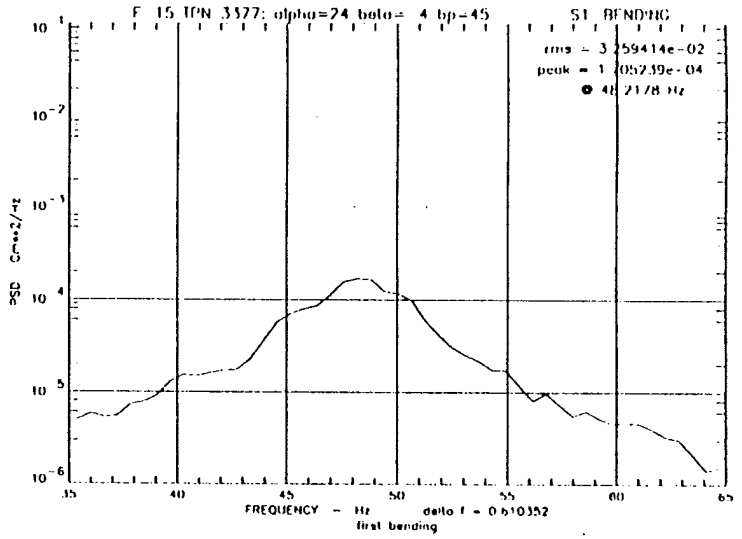

F 15 TPN 3339: alpha=20 beta=0 bp=45
S1 BENDING
rms = 1.512340e-02
peak = 3.407270e-05
@ 49.4385 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

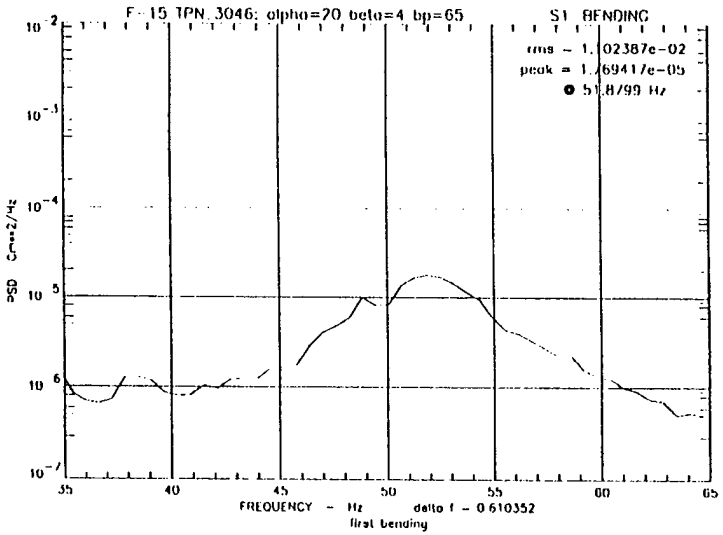

F 15 TPN 3333: alpha=8 beta=0 bp=45
S1 BENDING
rms = 1.926914e-03
peak = 6.646779e-07
@ 51.2695 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

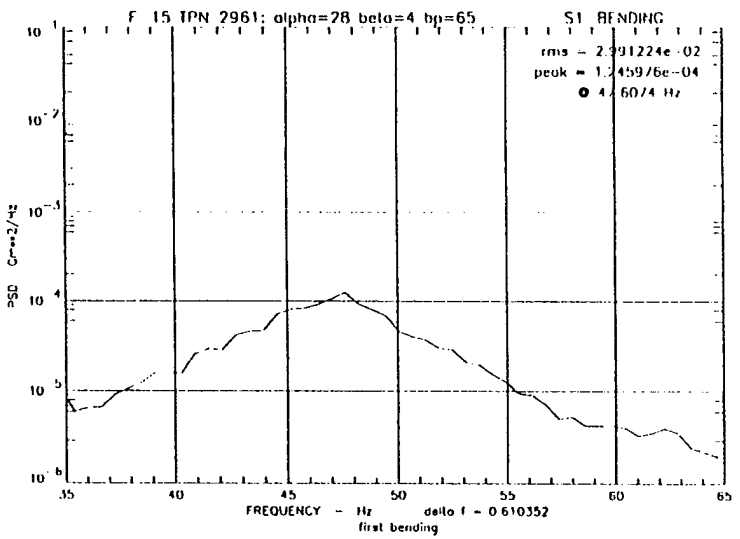

F 15 TPN 3375; alpha=20 beta= 4 bp=45
S1 BENDING
rms = 1.708874e-02
peak = 4.262516e-05
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

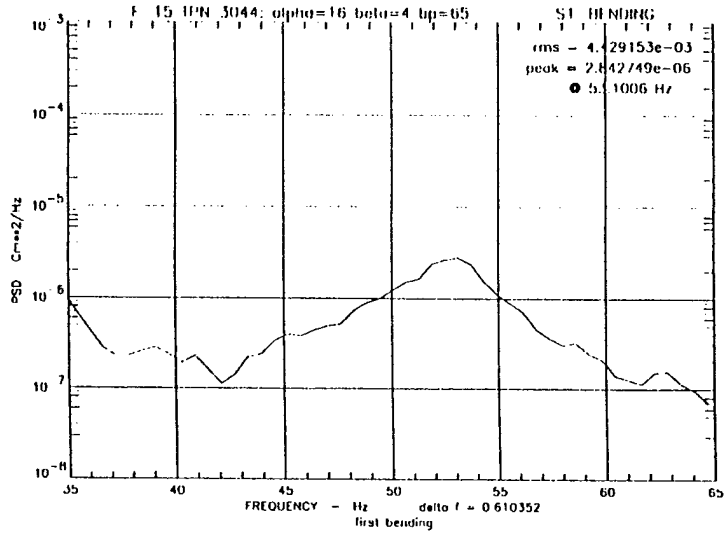

F 15 TPN 3379; alpha=32 beta= 4 bp=45
S1 BENDING
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

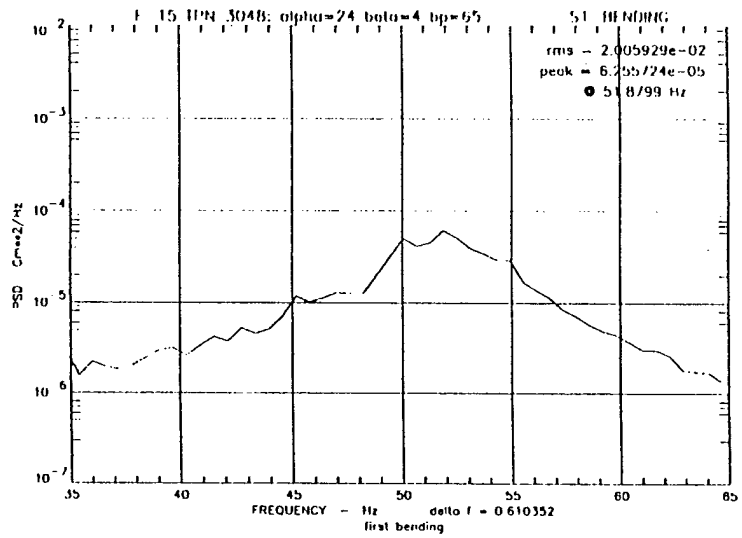

F 15 TPN 3369; alpha=8 beta= 4 bp=45
S1 BENDING
rms = 1.607990e-03
peak = 4.097717e-07
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

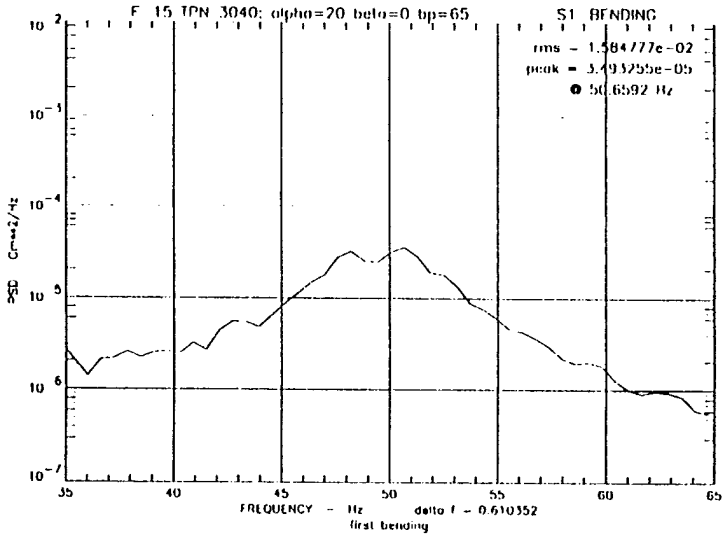

F 15 TPN 3377; alpha=24 beta= 4 bp=45
S1 BENDING
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

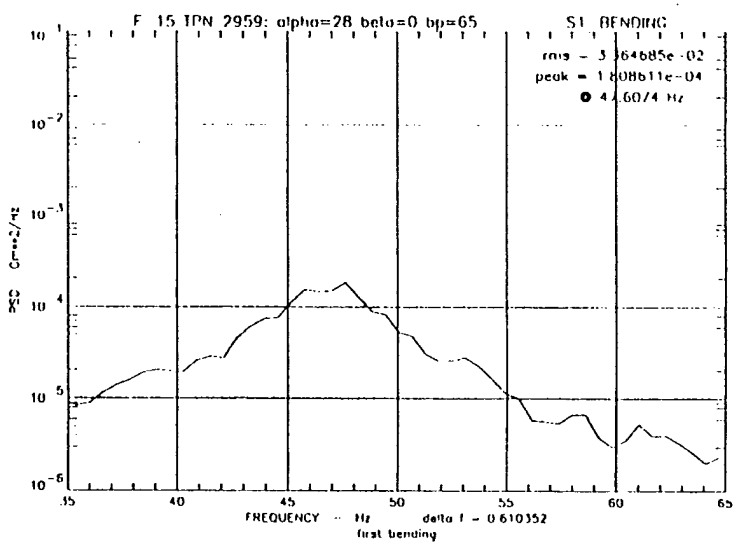

F-15 TPN 3046: alpha=20 beta=4 bp=65
S1 BENDING
rms = 1.102387e-02
peak = 1.769417e-05
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

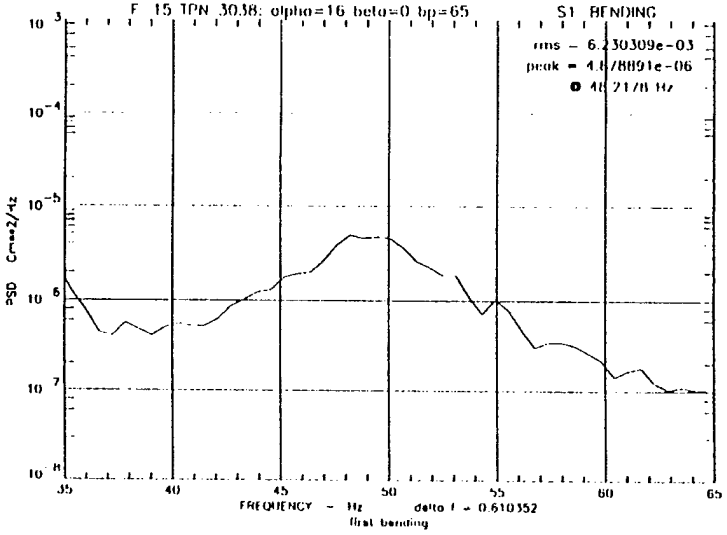

F 15 TPN 2961: alpha=28 beta=4 bp=65
S1 BENDING
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

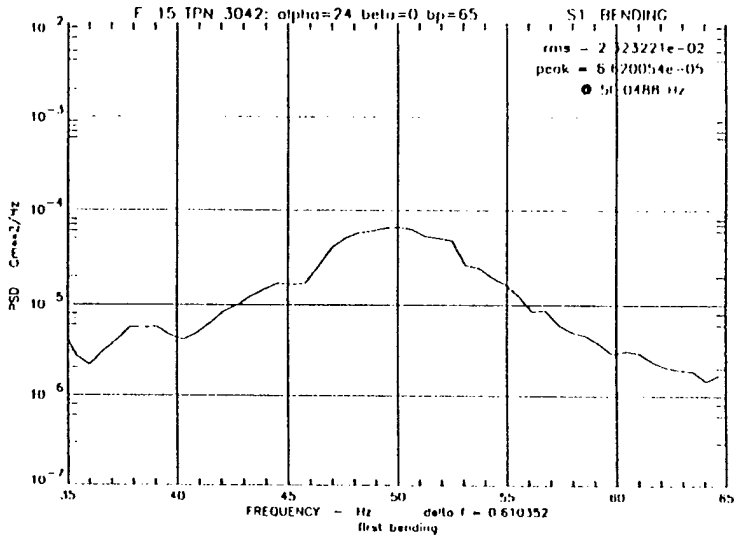

F 15 TPN 3044: alpha=16 beta=4 bp=65
S1 BENDING
rms = 4.429153e-03
peak = 2.842749e-06
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

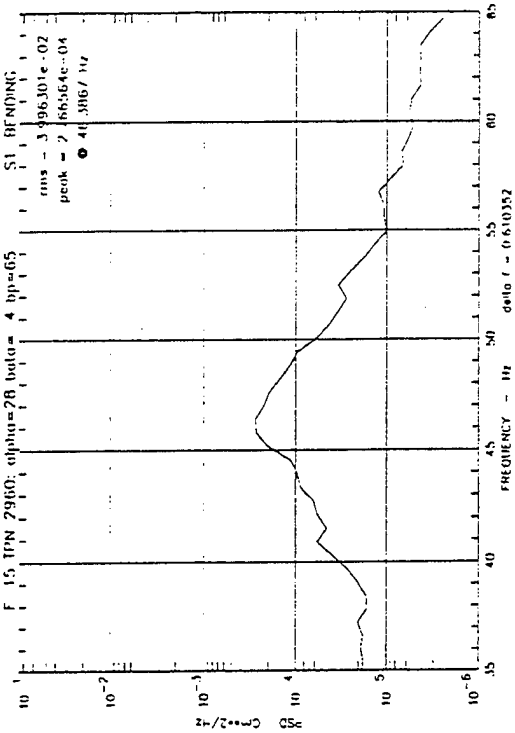

F 15 TPN 3048: alpha=24 beta=4 bp=65
S1 BENDING
rms = 2.005929e-02
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

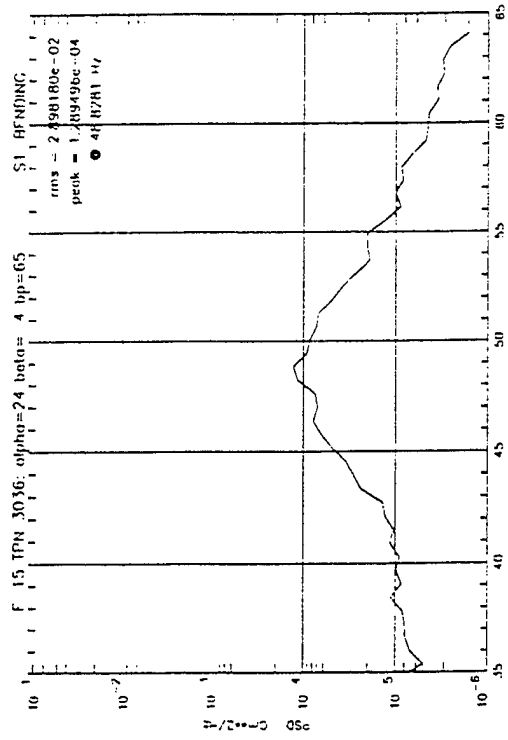

F 15 TPN 3040; alpha=20 beta=0 bp=65
S1 BENDING
rms = 1.584777e-02
peak = 3.493255e-05
@ 50.6592 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

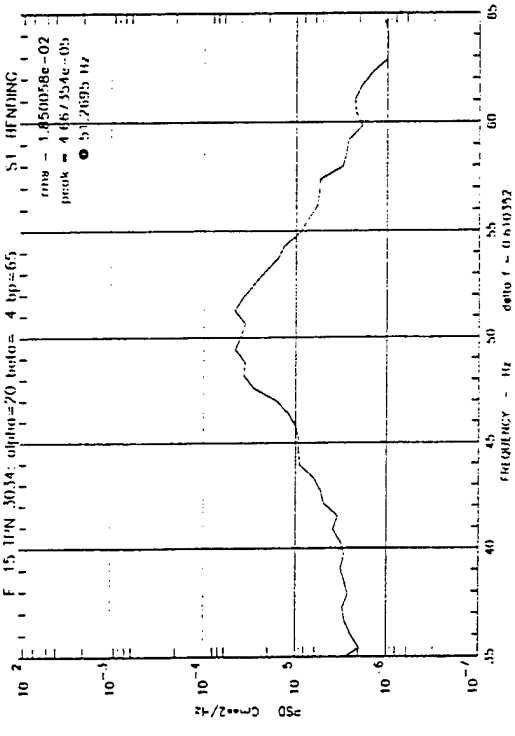

F 15 TPN 2959; alpha=28 beta=0 bp=65
S1 BENDING
rms = 5.364685e-02
peak = 1.808611e-04
@ 44.6074 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

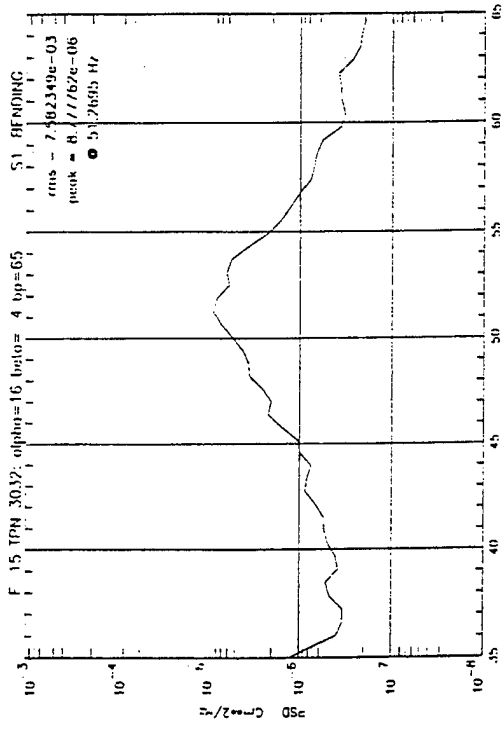

F 15 TPN 3038; alpha=16 beta=0 bp=65
S1 BENDING
rms = 6.230309e-03
peak = 4.878891e-06
@ 48.2178 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

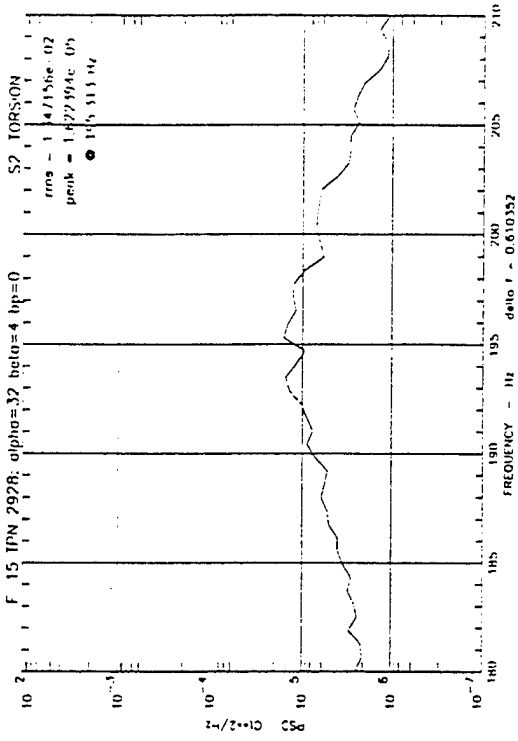

F 15 TPN 3042; alpha=24 beta=0 bp=65
S1 BENDING
rms = 2.323221e-02
peak = 6.620054e-05
@ 50.0488 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

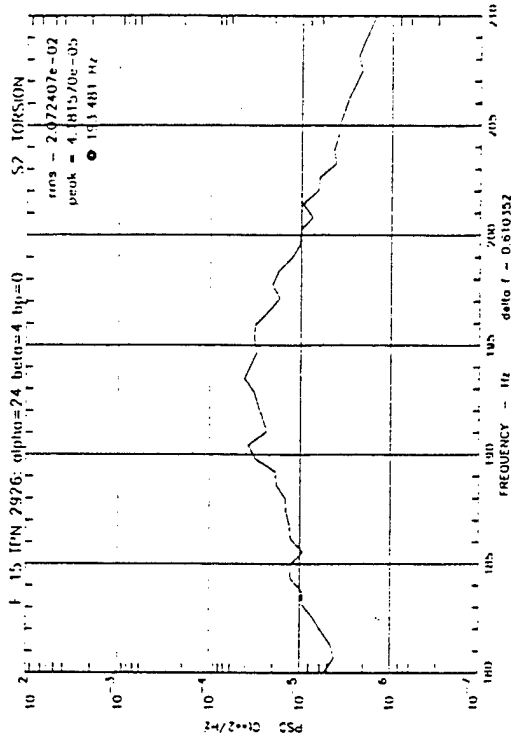

F 15 TPN 2960: alpha=28 beta= 4 bp=65
S1 BENDING
rms = 3.996301e-02
peak = 2.665364e-04
@ 48.3867 Hz
PSD (m**2/s**4)
FREQUENCY - Hz
delta f = 0.610352
first bending

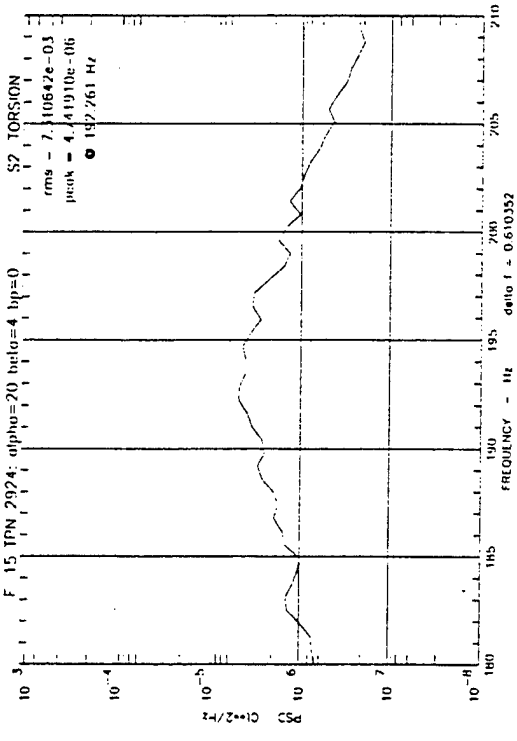

F 15 TPN 3036: alpha=24 beta= 4 bp=65
S1 BENDING
rms = 2.898180e-02
peak = 1.189496e-04
@ 48.8781 Hz
PSD (m**2/s**4)
FREQUENCY - Hz
delta f = 0.610352
first bending

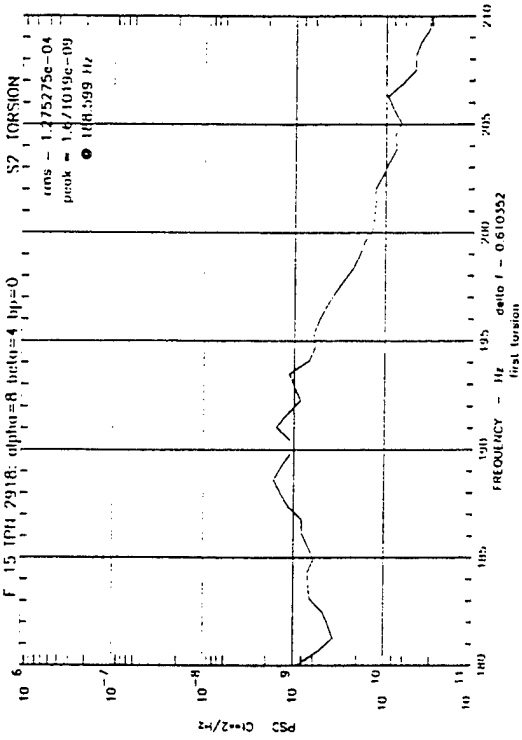

F 15 TPN 3034: alpha=20 beta= 4 bp=65
S1 BENDING
rms = 1.850058e-02
peak = 4.463534e-05
@ 51.2695 Hz
PSD (m**2/s**4)
FREQUENCY - Hz
delta f = 0.610352
first bending

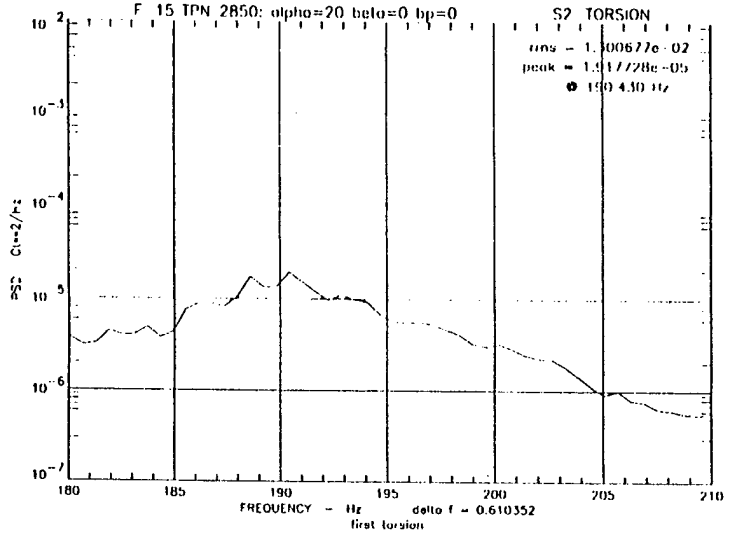

F 15 TPN 3032: alpha=16 beta= 4 bp=65
S1 BENDING
rms = 7.582349e-03
peak = 8.777672e-06
@ 51.2695 Hz
PSD (m**2/s**4)
FREQUENCY - Hz
delta f = 0.610352
first bending

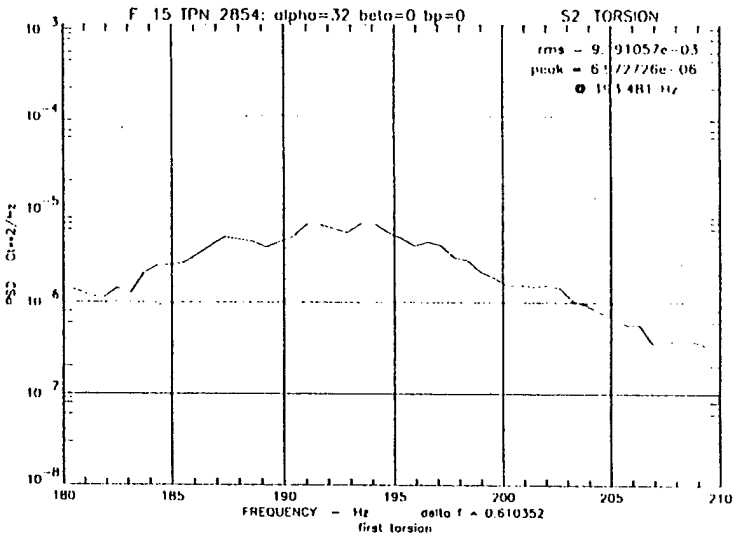

F 15 TPN 2928: alpha=32 beta=4 bp=0
S2 TORSION
FREQUENCY - Hz
delta f = 0.610352
first torsion
PSD

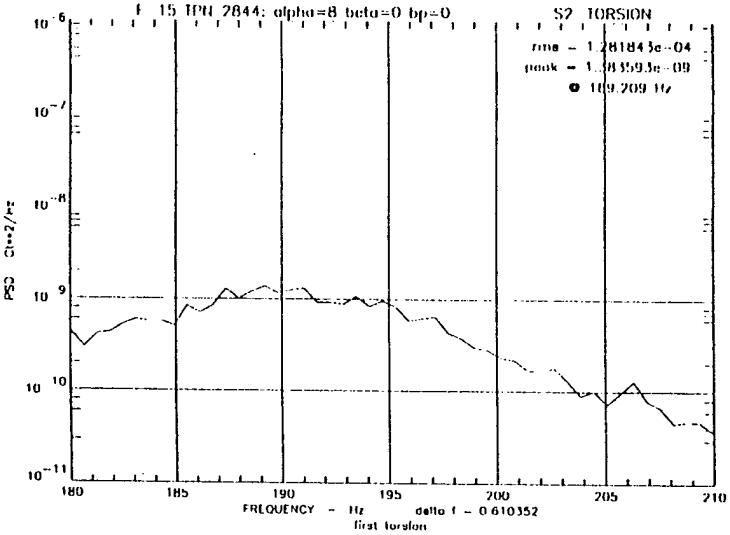

F 15 TPN 2926: alpha=24 beta=4 bp=0
S2 TORSION
FREQUENCY - Hz
delta f = 0.610352
first torsion
PSD

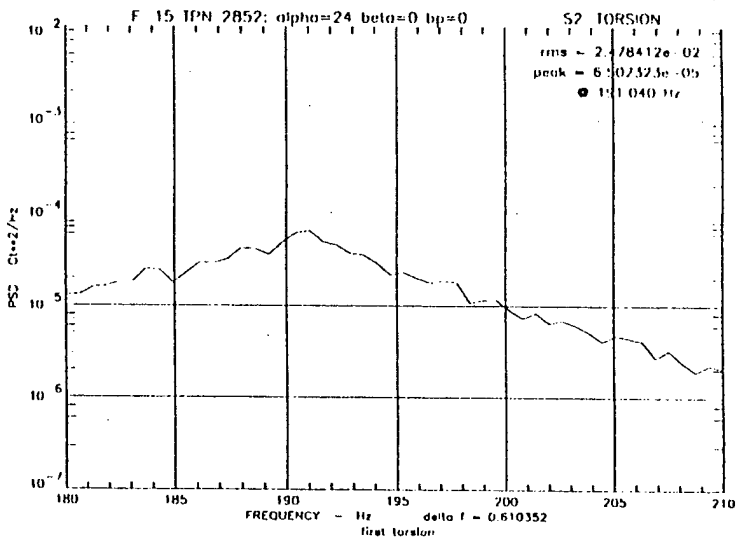

F 15 TPN 2924: alpha=20 beta=4 bp=0
S2 TORSION
FREQUENCY - Hz
delta f = 0.610352
first torsion
PSD

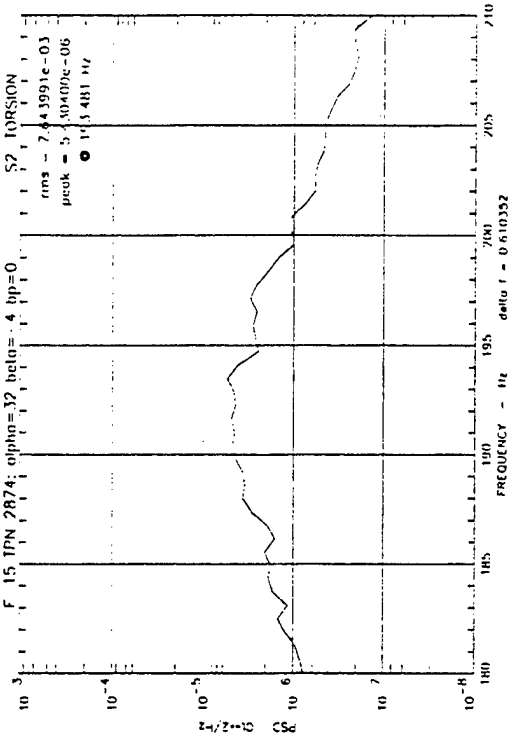

F 15 TPN 2918: alpha=8 beta=4 bp=0
S2 TORSION
FREQUENCY - Hz
delta f = 0.610352
first torsion
PSD

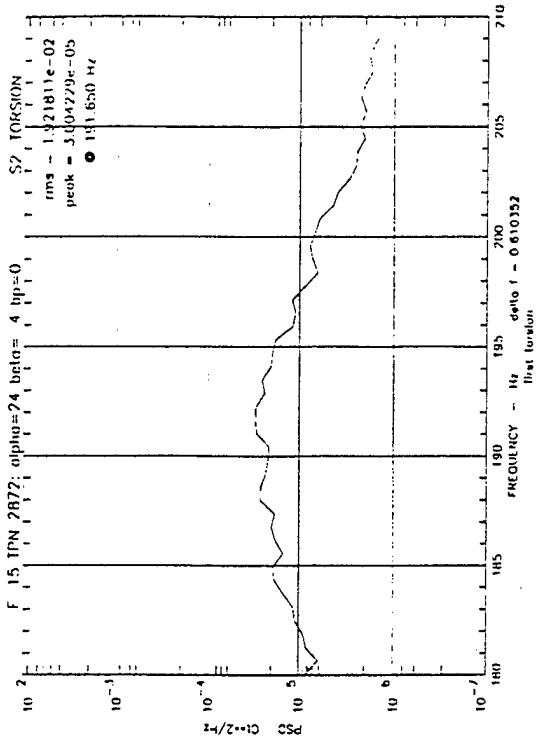

F 15 TPN 2850: alpha=20 beta=0 bp=0
S2 TORSION
rms = 1.500677e-02
peak = 1.917728e-05
@ 190.430 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

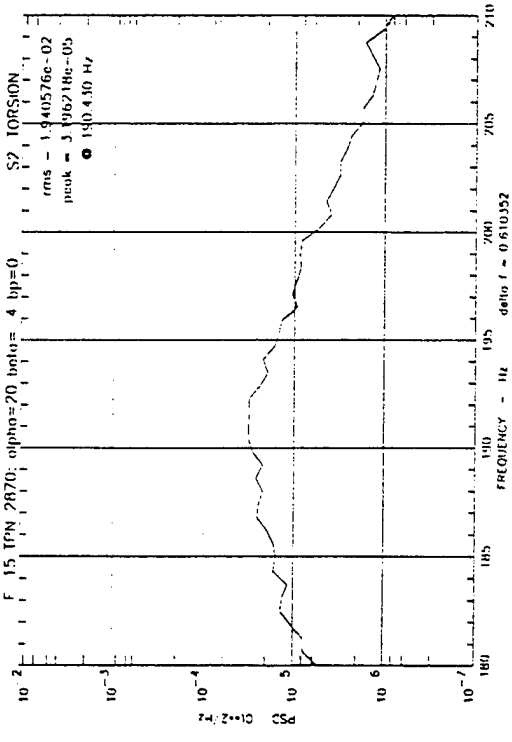

F 15 TPN 2854: alpha=32 beta=0 bp=0
S2 TORSION
rms = 9.91057e-03
peak = 6.177726e-06
@ 191.481 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

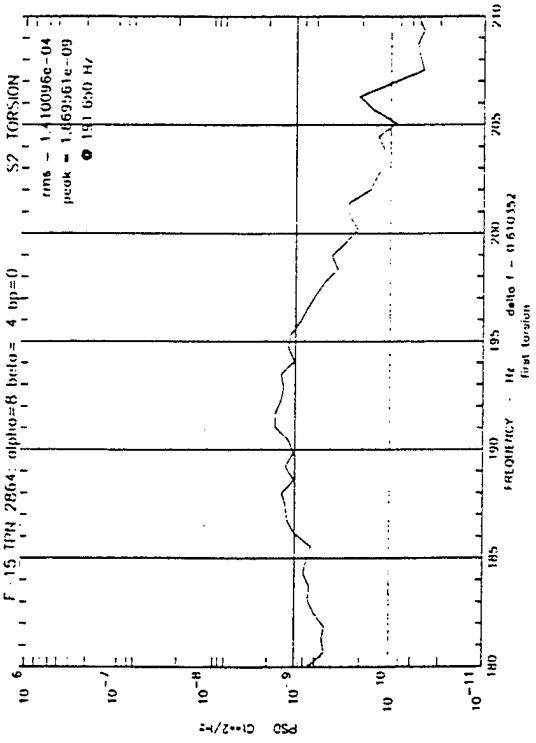

F 15 TPN 2844: alpha=8 beta=0 bp=0
S2 TORSION
rms = 1.281843e-04
peak = 1.638593e-09
@ 189.209 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

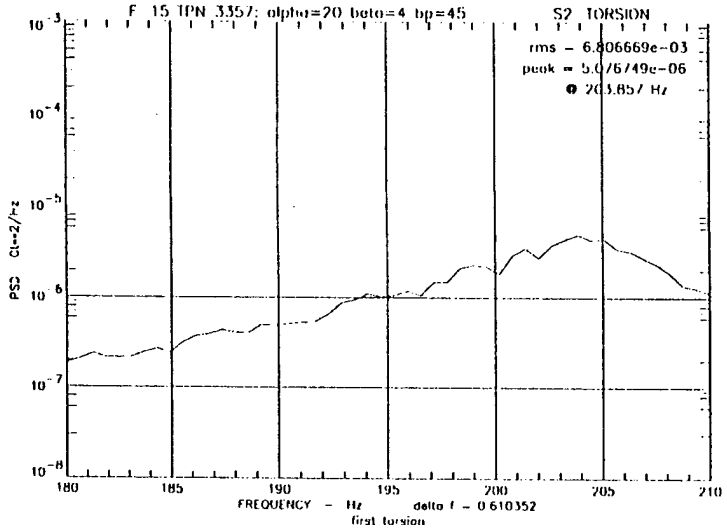

F 15 TPN 2852: alpha=24 beta=0 bp=0
S2 TORSION
rms = 2.478412e-02
peak = 6.307325e-05
@ 191.040 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

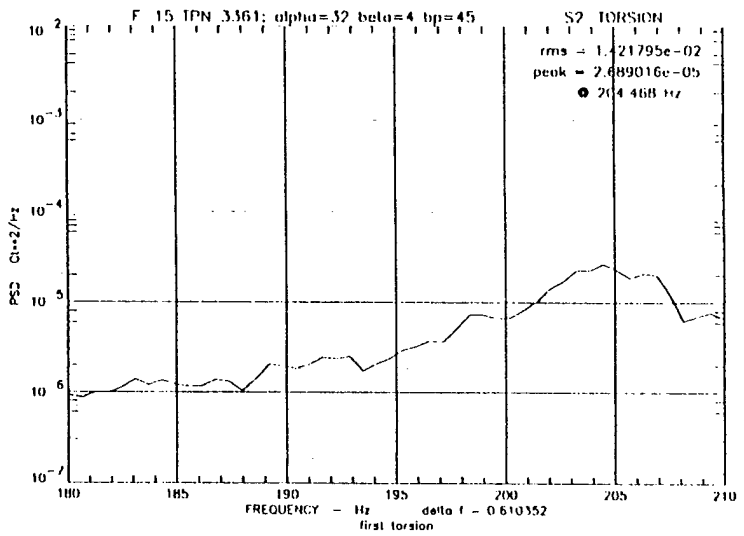

F 15 TPN 2874: alpha=32 beta= 4 bp=0
S2 TORSION
rms = 7.643991e-03
peak = 3.304009e-06
@ 191.481 Hz
PSD (1**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

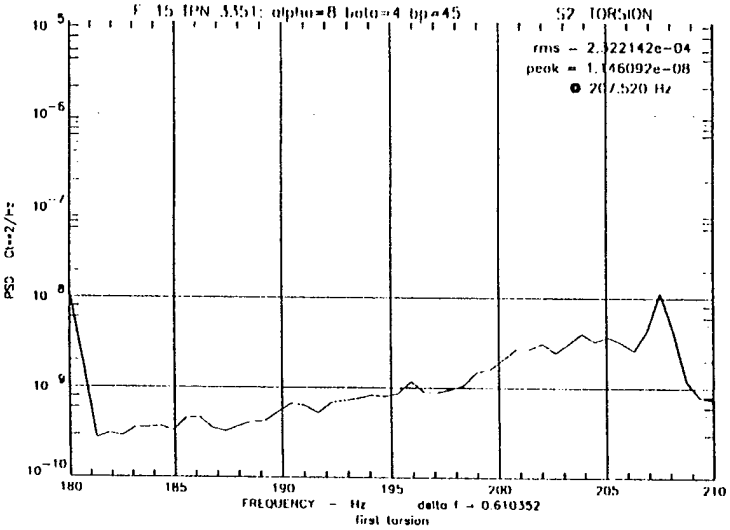

F 15 TPN 2872: alpha=24 beta= 4 bp=0
S2 TORSION
rms = 1.321811e-02
peak = 3.004279e-05
@ 191.650 Hz
PSD (1**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

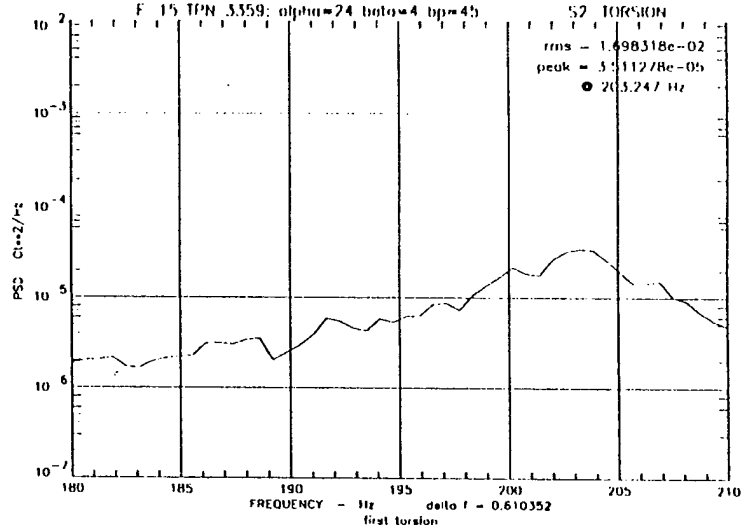

F 15 TPN 2870: alpha=20 beta= 4 bp=0
S2 TORSION
rms = 1.940576e-02
peak = 3.196218e-05
@ 190.430 Hz
PSD (1**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

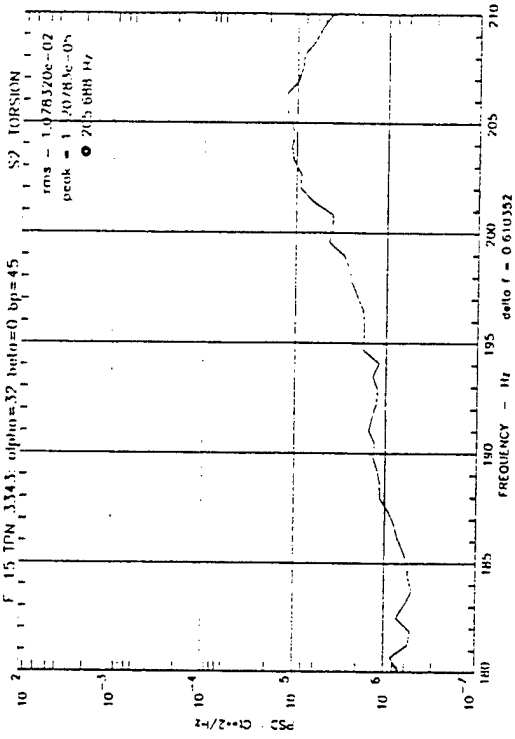

F 15 TPN 2864: alpha=8 beta= 4 bp=0
S2 TORSION
rms = 1.410096e-04
peak = 1.469361e-09
@ 191.650 Hz
PSD (1**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

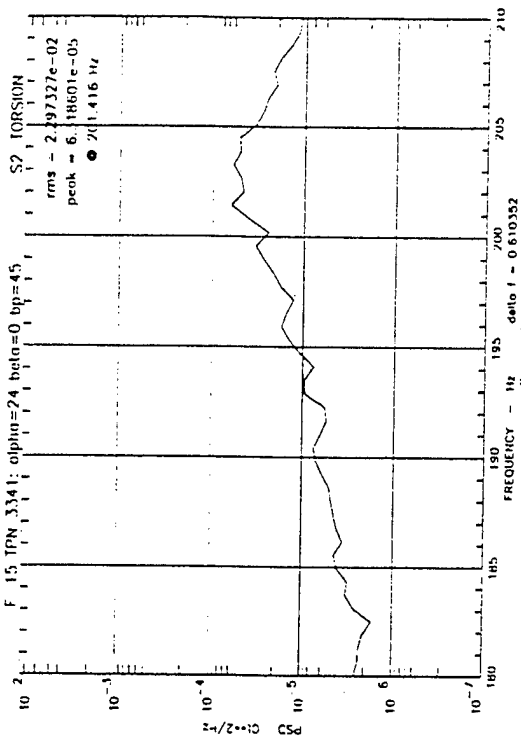

F_15 TPN_3357: alpha=20 beta=4 bp=45
S2 TORSION
rms = 6.806669e-03
peak = 5.076749e-06
@ 203.857 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

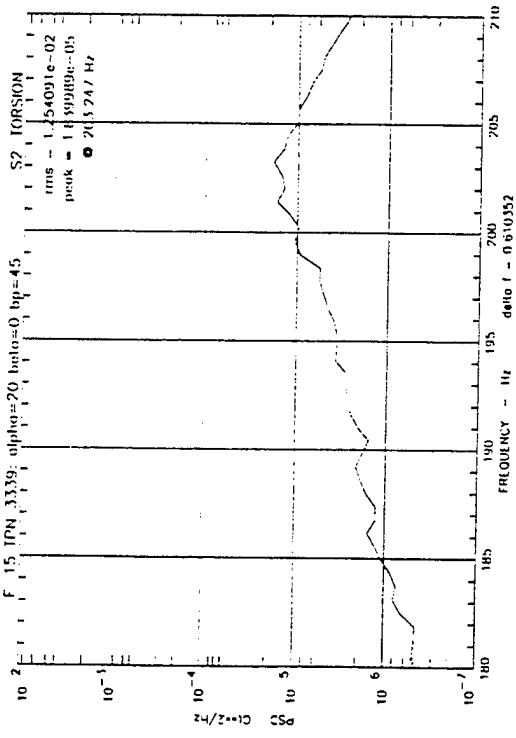

F_15 TPN_3361: alpha=32 beta=4 bp=45
S2 TORSION
rms = 1.421795e-02
peak = 2.689016e-05
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

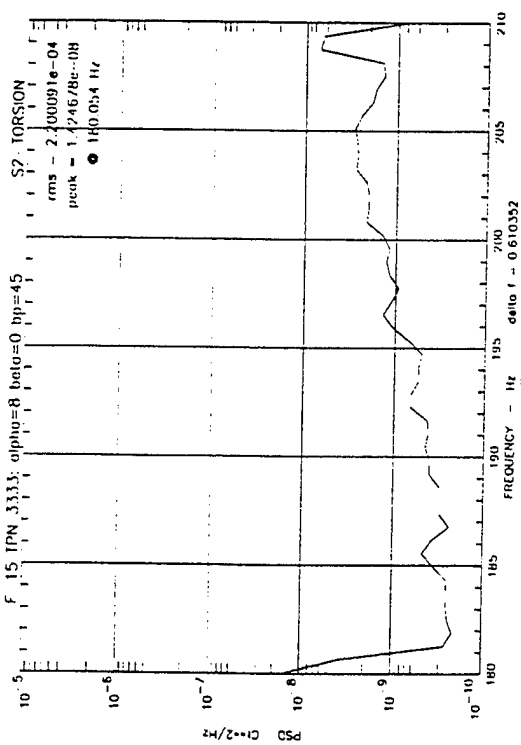

F_15 TPN_3351: alpha=8 beta=4 bp=45
S2 TORSION
rms = 2.322142e-04
peak = 1.146092e-08
@ 207.520 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

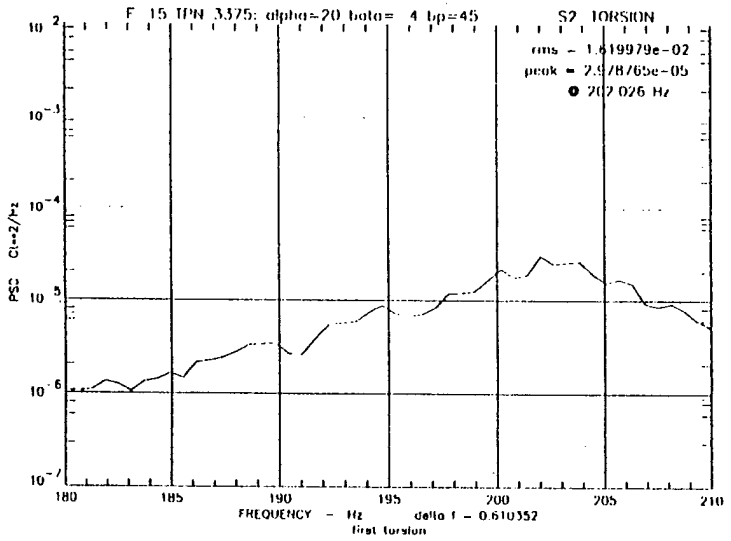

F_15 TPN_3359: alpha=24 beta=4 bp=45
S2 TORSION
rms = 1.698318e-02
peak = 3.511278e-05
@ 203.247 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

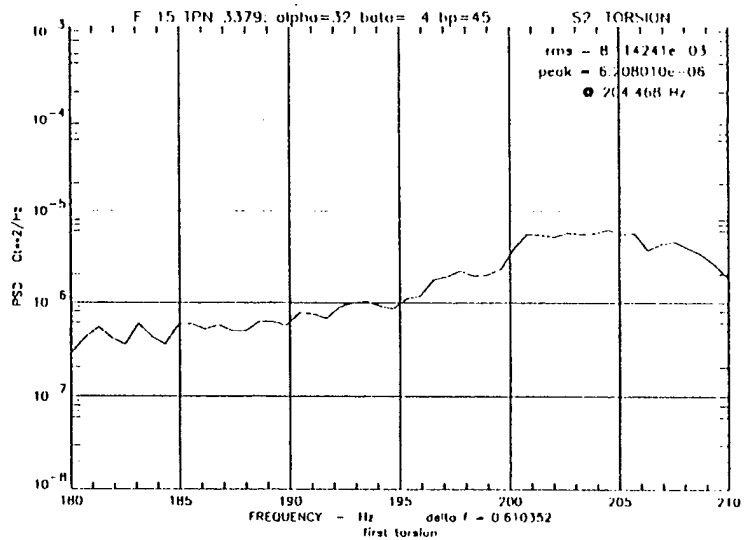

S2 TORSION
F 15 TPN 3343: alpha=32 beta=0 bp=45
rms = 1.078320e-02
peak = 1.207836e-05
@ 205.688 Hz
PSD (in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

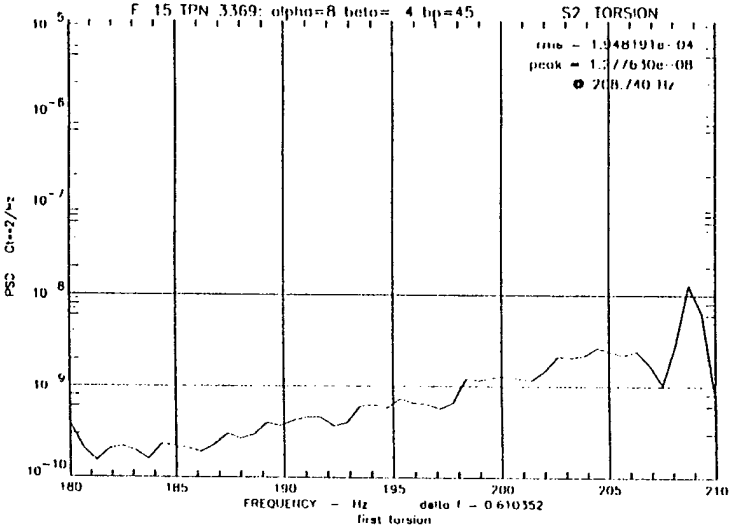

S2 TORSION
F 15 TPN 3341: alpha=24 beta=0 bp=45
rms = 2.297327e-02
peak = 6.118601e-05
@ 201.416 Hz
PSD (in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

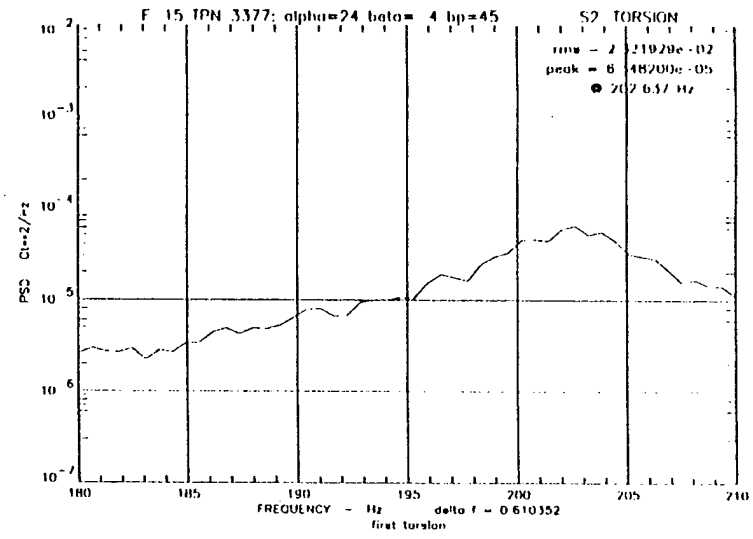

S2 TORSION
F 15 TPN 3339: alpha=20 beta=0 bp=45
rms = 1.254091e-02
peak = 1.899889e-05
@ 205.247 Hz
PSD (in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

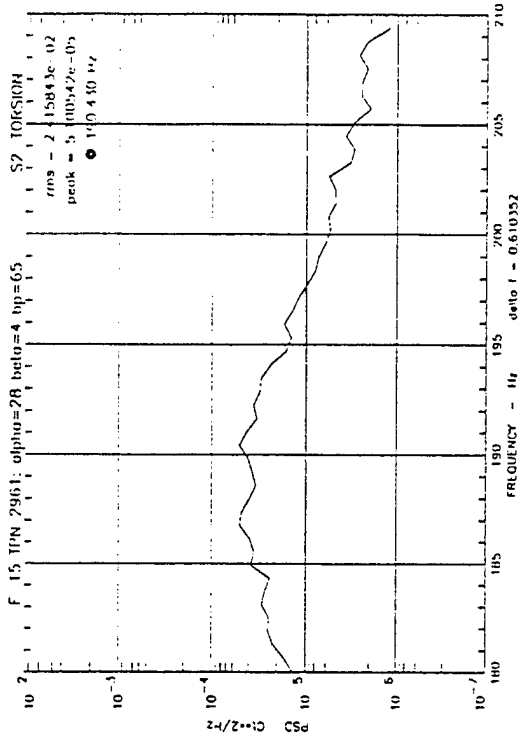

S2 TORSION
F 15 TPN 3333: alpha=8 beta=0 bp=45
rms = 2.000091e-04
peak = 1.424678e-08
@ 180.054 Hz
PSD (in**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

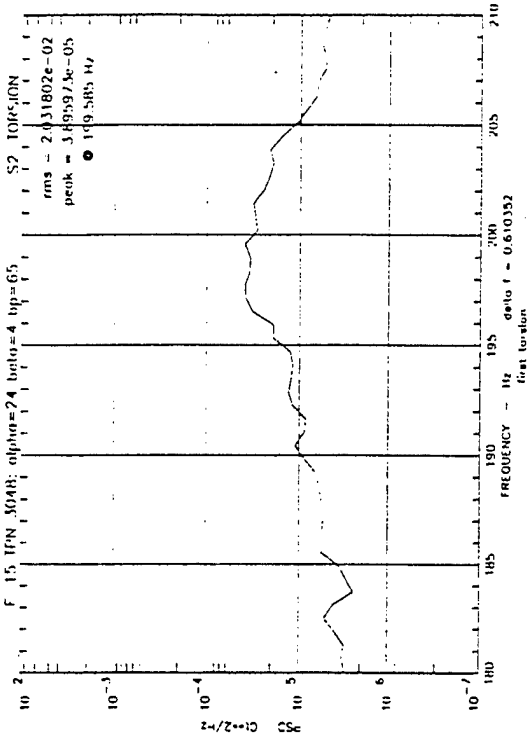

F 15 TPN 3375: alpha=20 beta= 4 bp=45
S2 TORSION
rms = 1.619979e-02
peak = 2.978765e-05
@ 207.026 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

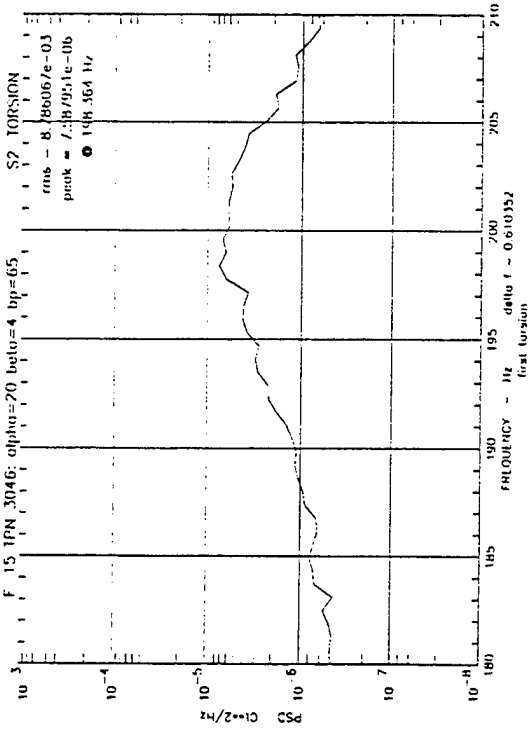

F 15 TPN 3379: alpha=32 beta= 4 bp=45
S2 TORSION
rms = 8.14241e-03
peak = 6.208010e-06
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

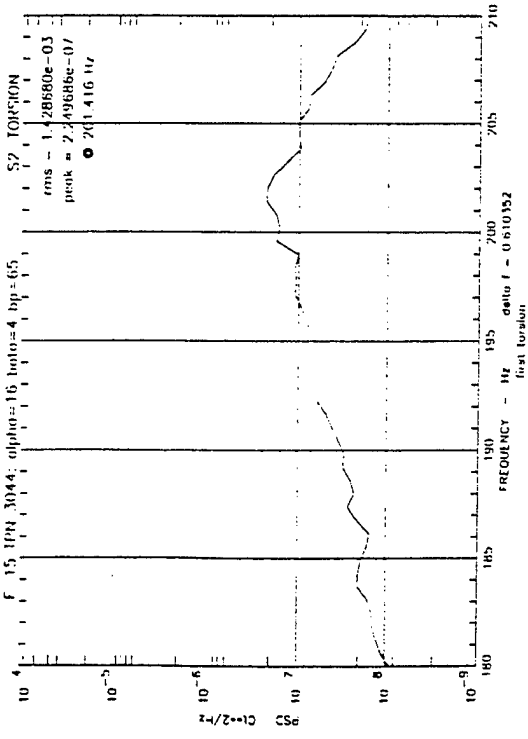

F 15 TPN 3369: alpha=8 beta= 4 bp=45
S2 TORSION
rms = 1.948191e-04
peak = 1.277630e-08
@ 208.740 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

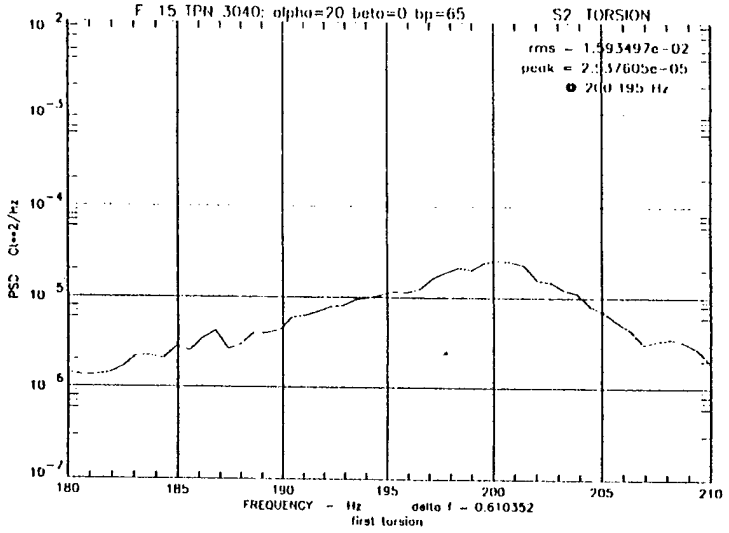

F 15 TPN 3377: alpha=24 beta= 4 bp=45
S2 TORSION
rms = 2.321929e-02
peak = 8.348200e-05
@ 202.637 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

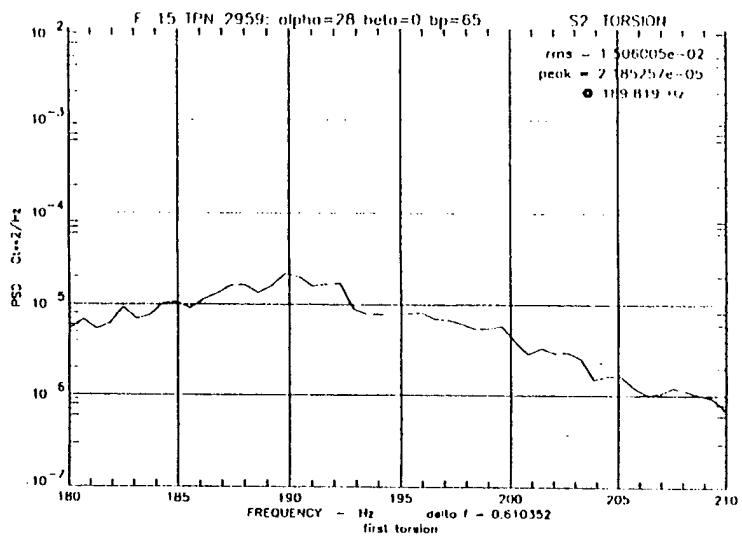

F 15 TPN 2961: alpha=28 beta=4 bp=65
S2 TORSION
rms = 2.415843e-02
peak = 5.010542e-05
@ 149.410 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

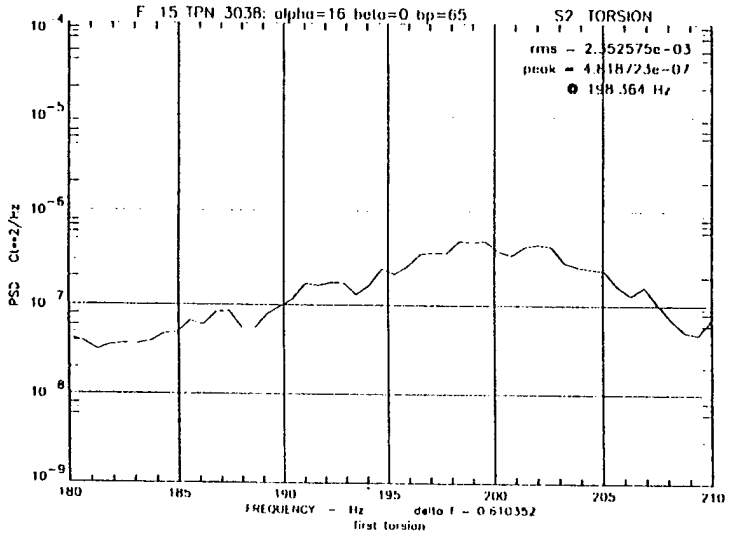

F 15 TPN 3048: alpha=24 beta=4 bp=65
S2 TORSION
rms = 2.031802e-02
peak = 3.695597e-05
@ 149.585 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

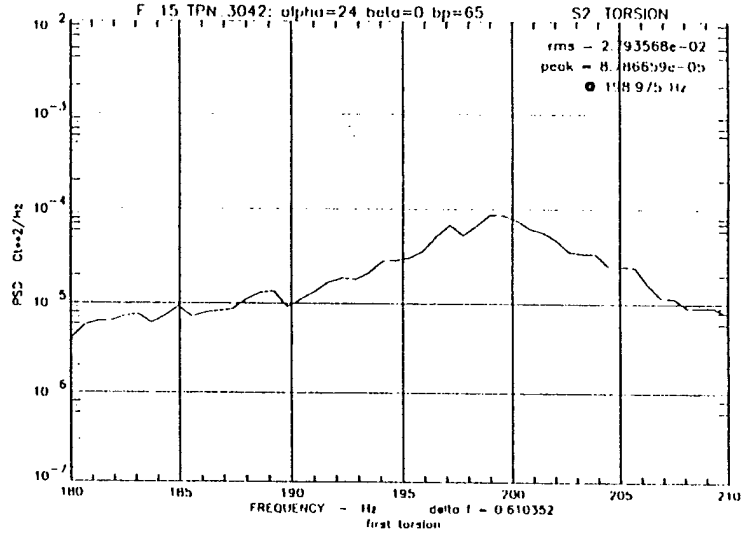

F 15 TPN 3046: alpha=20 beta=4 bp=65
S2 TORSION
rms = 8.178606e-03
peak = 7.118795e-06
@ 149.364 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

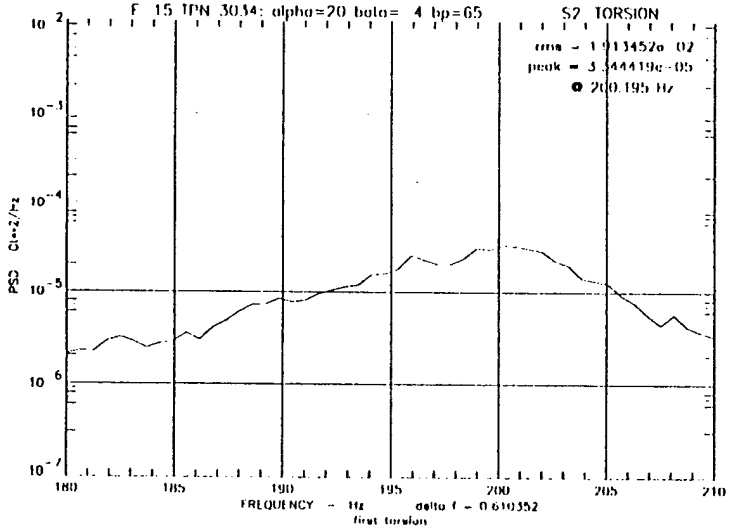

F 15 TPN 3044: alpha=16 beta=4 bp=65
S2 TORSION
rms = 1.428680e-03
peak = 2.249688e-07
@ 201.416 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

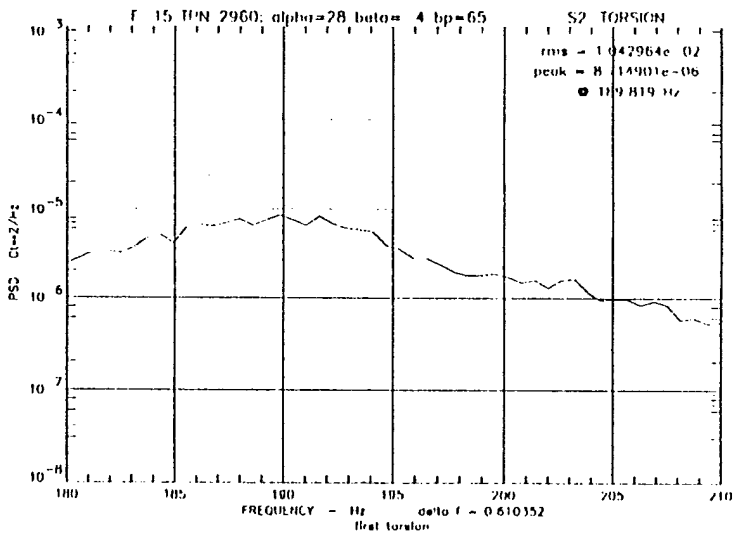

F 15 TPN 3040: alpha=20 beta=0 bp=65
S2 TORSION
rms = 1.593497e-02
peak = 2.537605e-05
@ 200.195 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

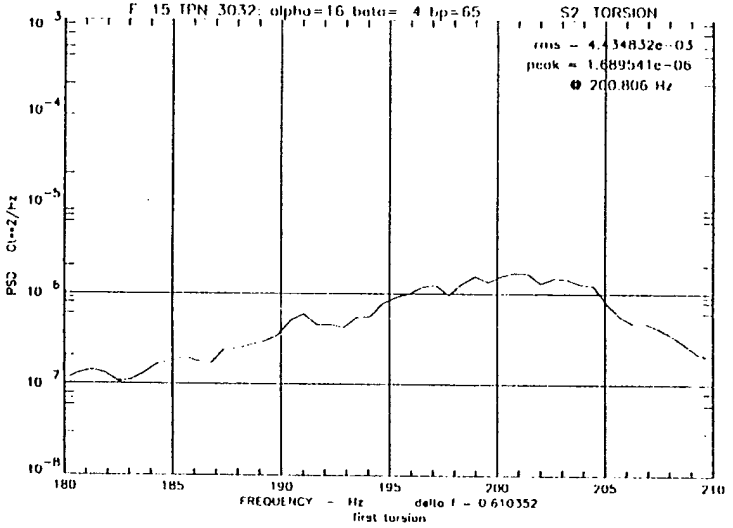

F 15 TPN 2959: alpha=28 beta=0 bp=65
S2 TORSION
rms = 1.506005e-02
peak = 2.185257e-05
@ 199.829 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

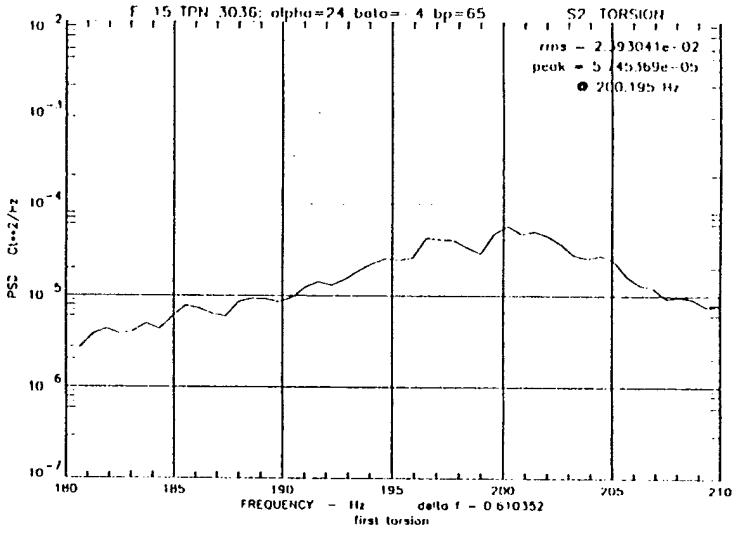

F 15 TPN 3038: alpha=16 beta=0 bp=65
S2 TORSION
rms = 2.352575e-03
peak = 4.818723e-07
@ 198.364 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

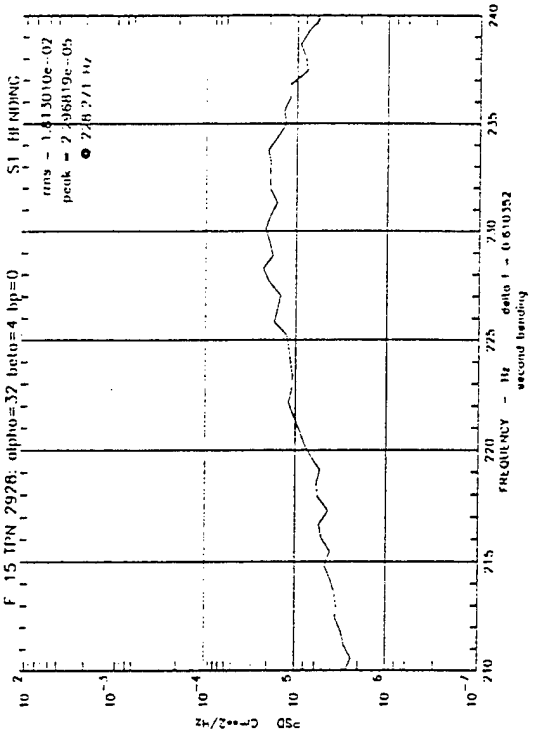

F 15 TPN 3042: alpha=24 beta=0 bp=65
S2 TORSION
rms = 2.193568e-02
peak = 8.486659e-05
@ 198.975 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

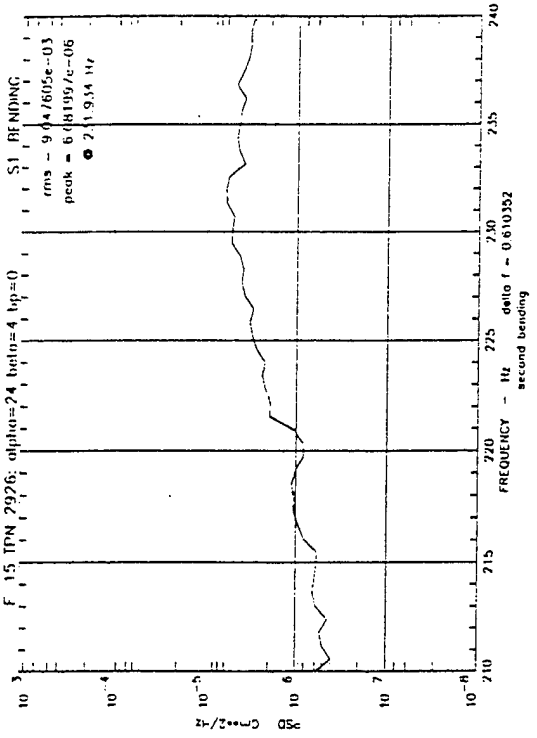

F 15 TPN 3034: alpha=20 beta= 4 bp=65
S2 TORSION
rms = 1.913452e-02
peak = 3.544419e-05
@ 200.195 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

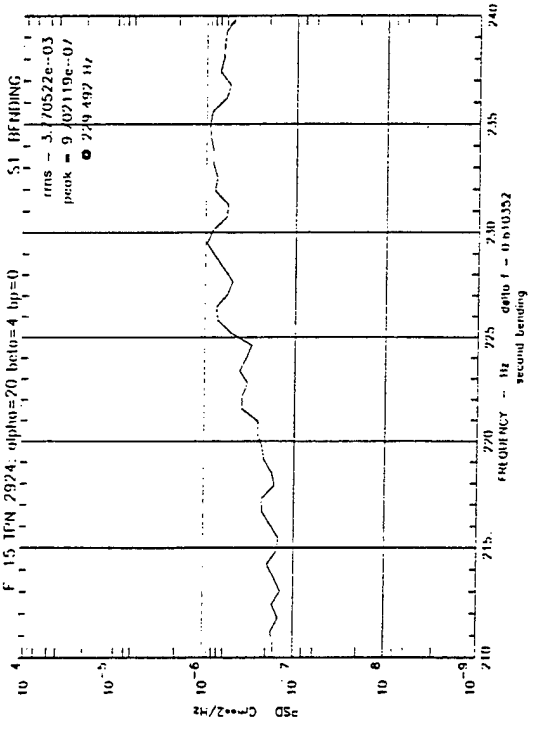

F 15 TPN 2960: alpha=28 beta= 4 bp=65
S2 TORSION
rms = 1.042964e-02
peak = 8.14901e-06
@ 199.819 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

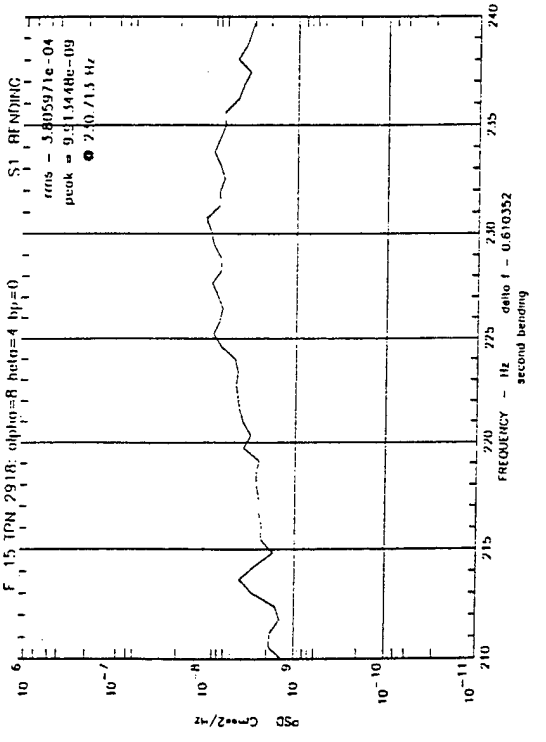

F 15 TPN 3032: alpha=16 beta= 4 bp=65
S2 TORSION
rms = 4.434832e-03
peak = 1.689541e-06
@ 200.806 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

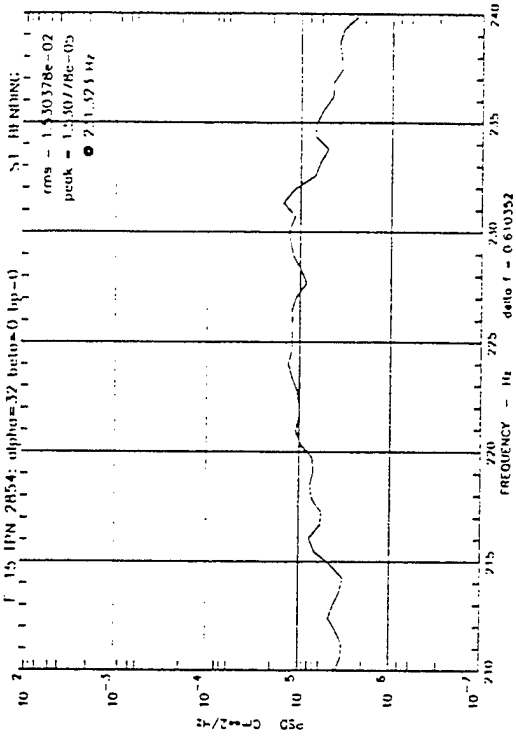

F 15 TPN 3036: alpha=24 beta= 4 bp=65
S2 TORSION
rms = 2.393041e-02
peak = 5.745369e-05
@ 200.195 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

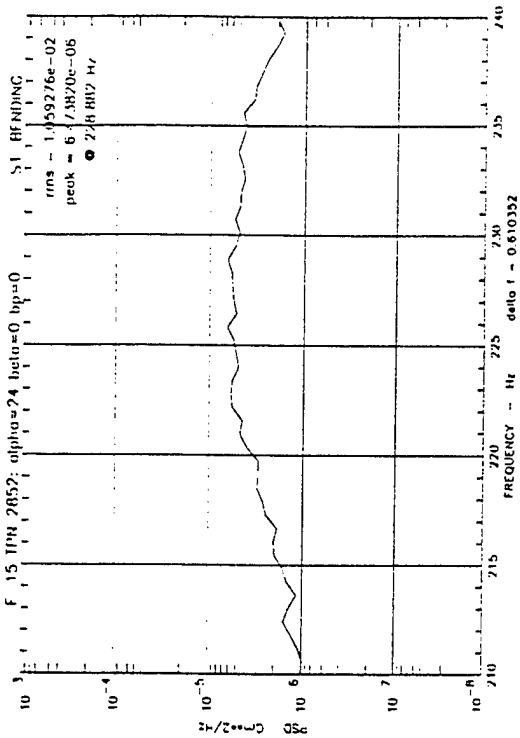

F 15 TPN 2926: alpha=32 beta=4 bp=0
S1 BENDING
rms = 1.813010e-02
peak = 2.368819e-05
@ 218.271 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

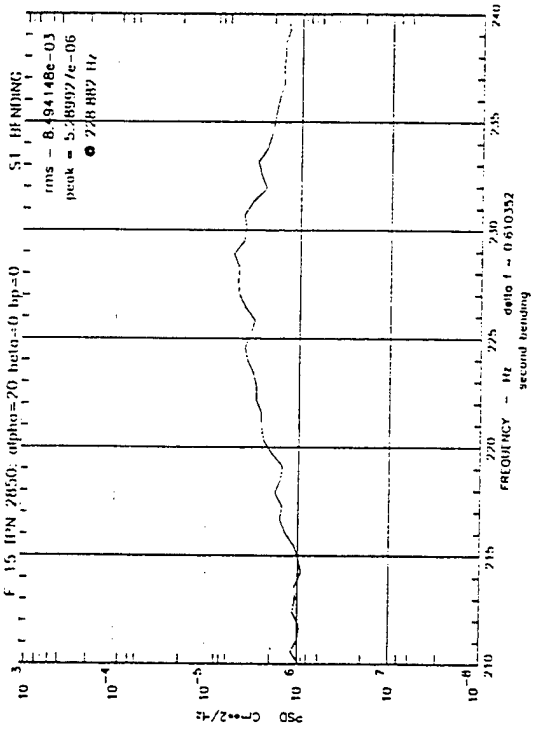

F 15 TPN 2926: alpha=24 beta=4 bp=0
S1 BENDING
rms = 9.947605e-03
peak = 6.081997e-06
@ 211.914 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

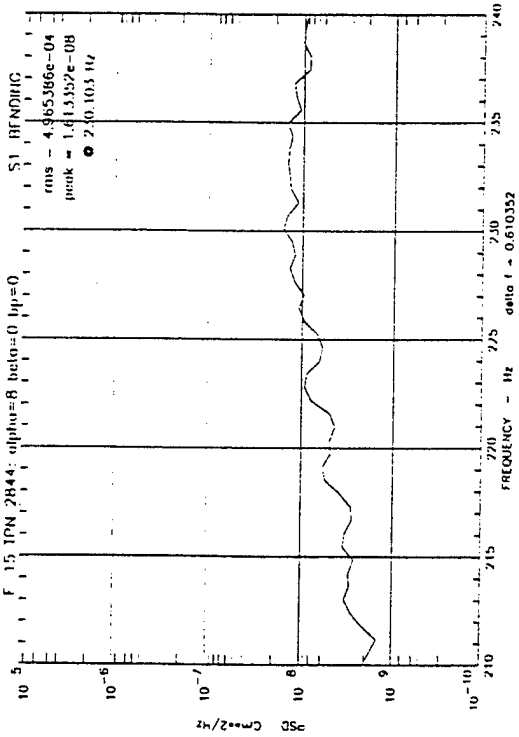

F 15 TPN 2924: alpha=20 beta=4 bp=0
S1 BENDING
rms = 3.770522e-03
peak = 9.402119e-07
@ 220.497 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

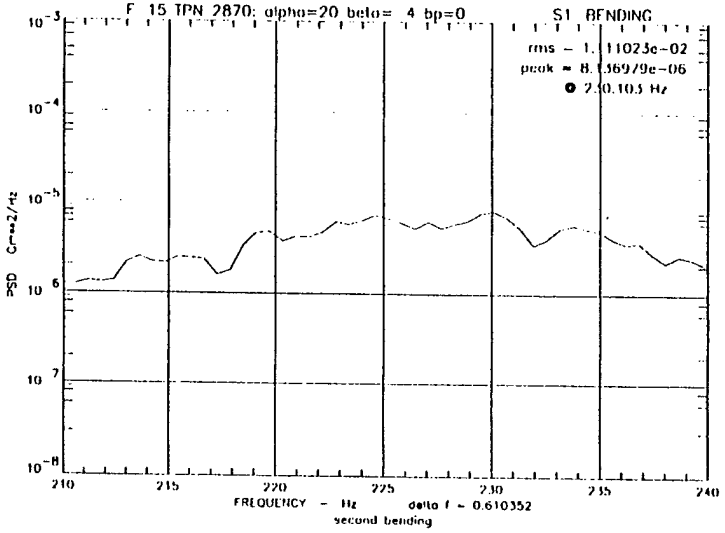

F 15 TPN 2918: alpha=8 beta=4 bp=0
S1 BENDING
rms = 3.805971e-04
peak = 9.511448e-09
@ 230.713 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

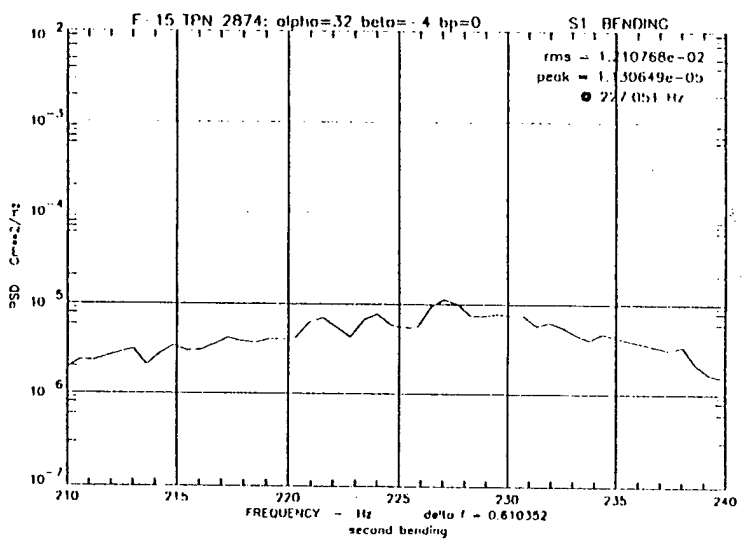

F 15 IPN 2854: alpha=32 beta=0 bp=0
S1 BENDING
rms = 1.303378e-02
peak = 1.307786e-05
@ 211.571 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

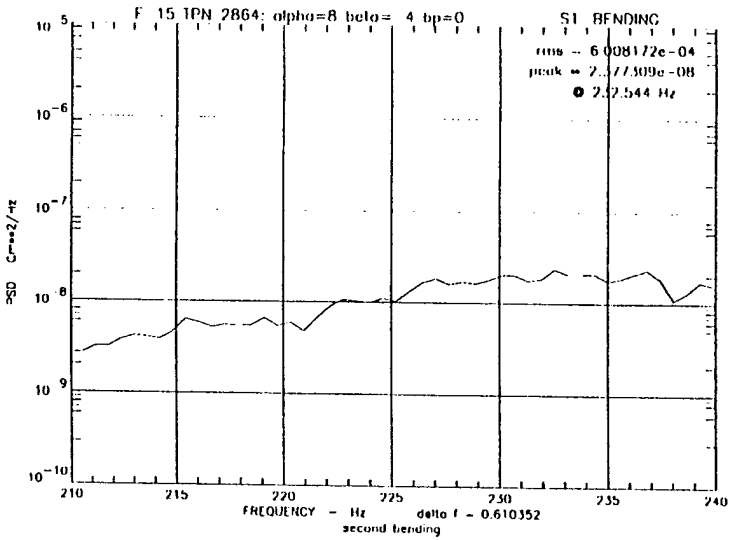

F 15 IPN 2852: alpha=24 beta=0 bp=0
S1 BENDING
rms = 1.059276e-02
peak = 6.738920e-06
@ 228.882 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

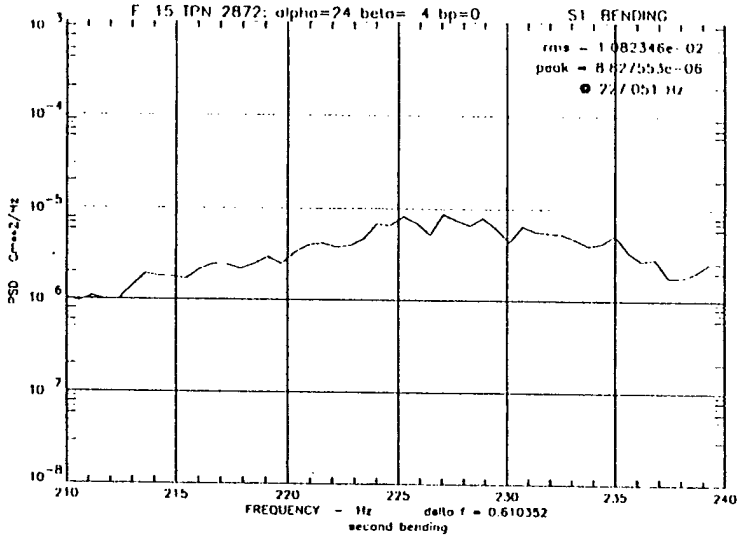

F 15 IPN 2850: alpha=20 beta=0 bp=0
S1 BENDING
rms = 8.494148e-03
peak = 5.489997e-06
@ 228.882 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

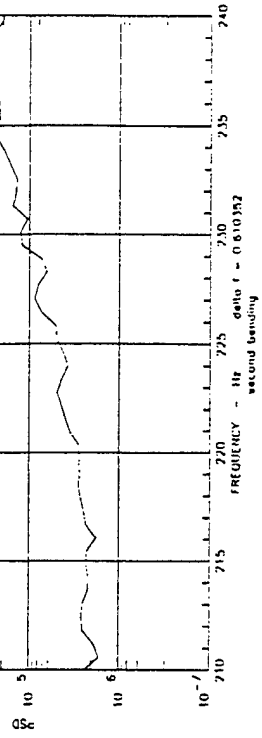

F 15 IPN 2844: alpha=8 beta=0 bp=0
S1 BENDING
rms = 4.965386e-04
peak = 1.613352e-08
@ 240.103 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

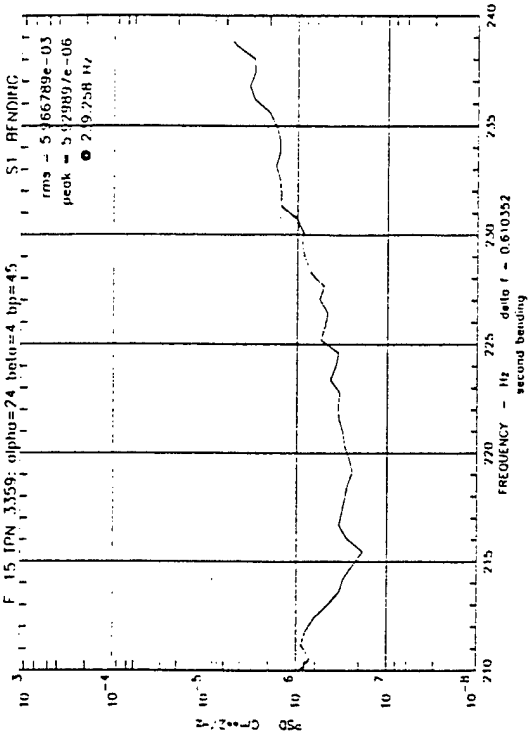

F 15 TPN 2870; alpha=20 beta= 4 bp=0
S1 BENDING
rms = 1.111023e-02
peak = 8.136979e-06
@ 230.103 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

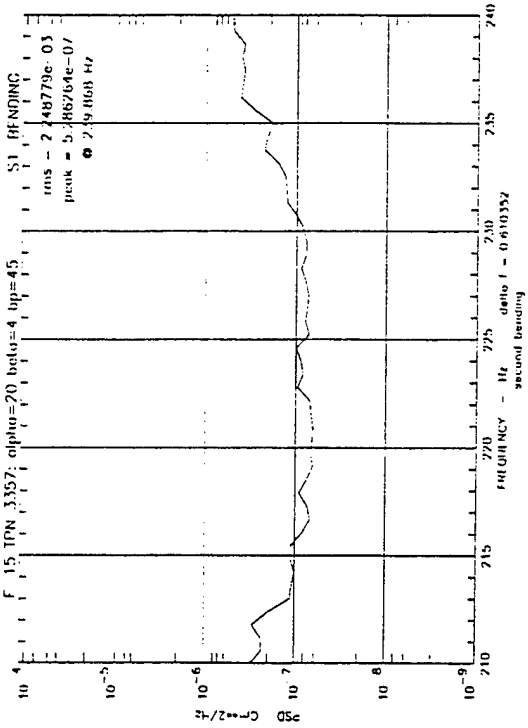

F 15 TPN 2874; alpha=32 beta= 4 bp=0
S1 BENDING
rms = 1.210768e-02
peak = 1.130649e-05
@ 227.051 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

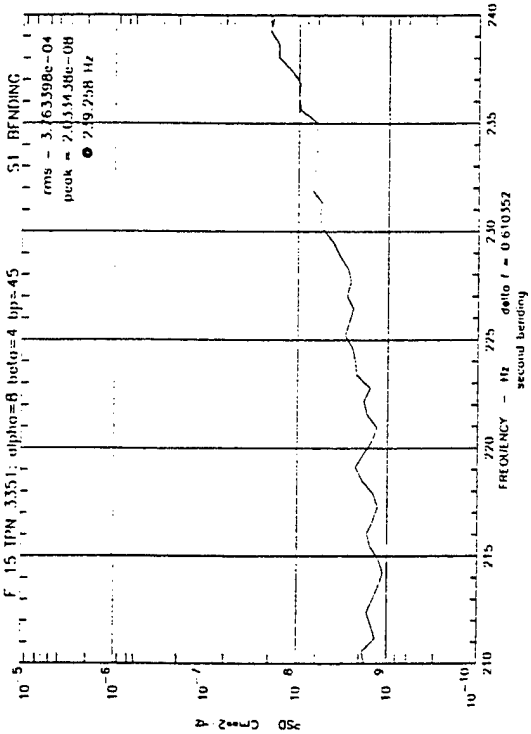

F 15 TPN 2864; alpha=8 beta= 4 bp=0
S1 BENDING
rms = 6.008172e-04
peak = 2.177509e-08
@ 232.544 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

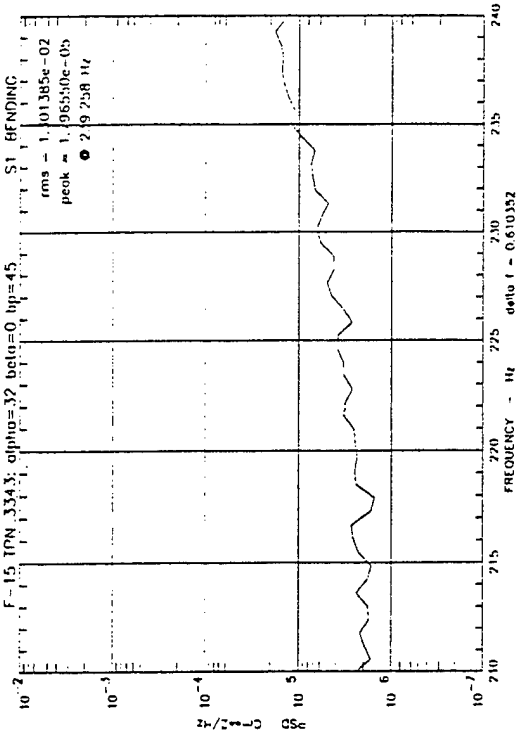

F 15 TPN 2872; alpha=24 beta= 4 bp=0
S1 BENDING
rms = 1.082346e-02
peak = 8.827553e-06
@ 227.051 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

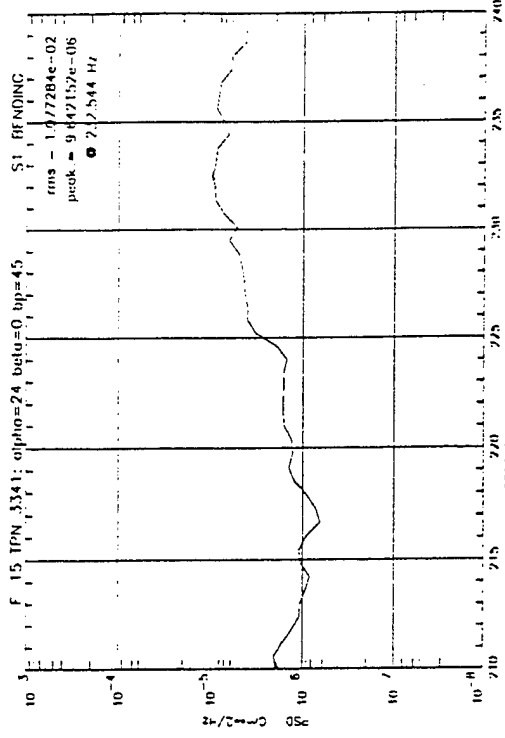

F 15 TFN 3361: alpha=32 beta=4 bp=45
S1 BENDING
rms = 1.482562e-02
peak = 2.122440e-05
@ 219.816 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

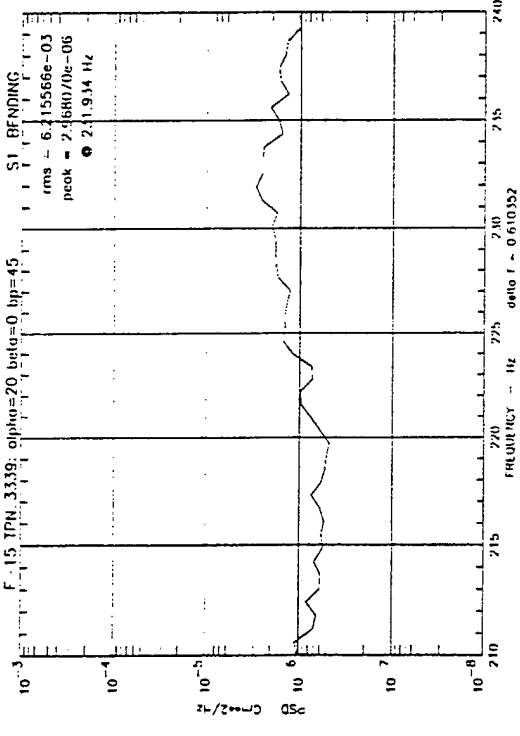

F 15 TFN 3359: alpha=24 beta=4 bp=45
S1 BENDING
rms = 5.966789e-03
peak = 5.129989e-06
@ 219.258 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

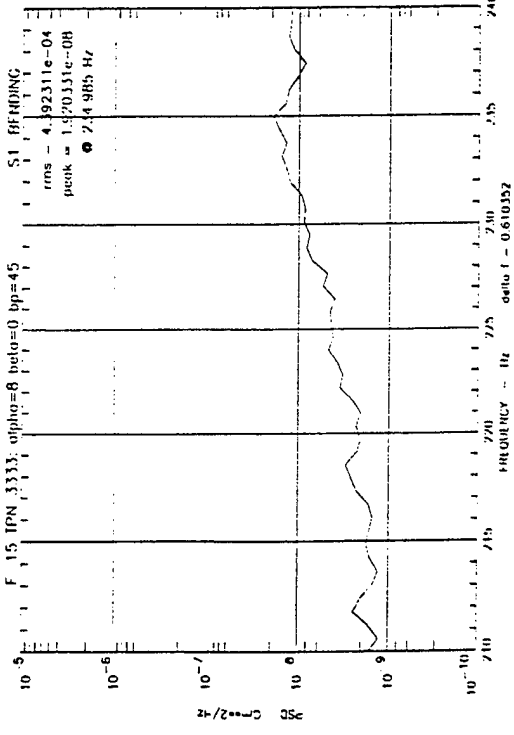

F 15 TFN 3357: alpha=20 beta=4 bp=45
S1 BENDING
rms = 2.248779e-03
peak = 5.286764e-07
@ 219.868 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

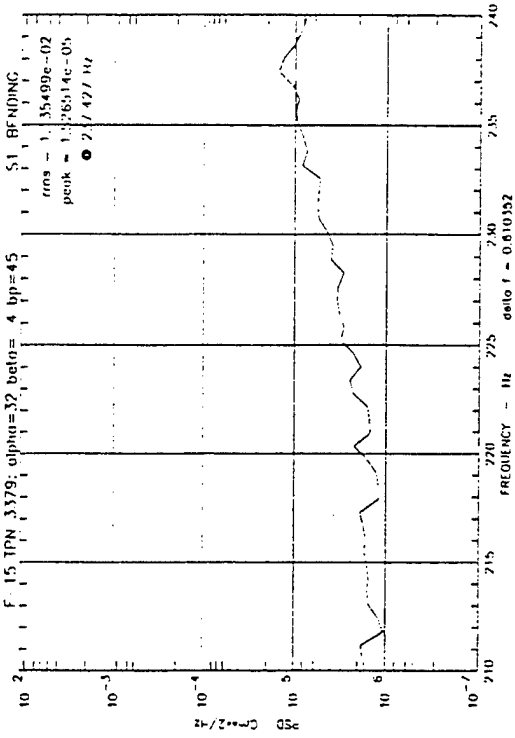

F 15 TFN 3351: alpha=8 beta=4 bp=45
S1 BENDING
rms = 3.763398e-04
peak = 2.033438e-08
@ 219.258 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

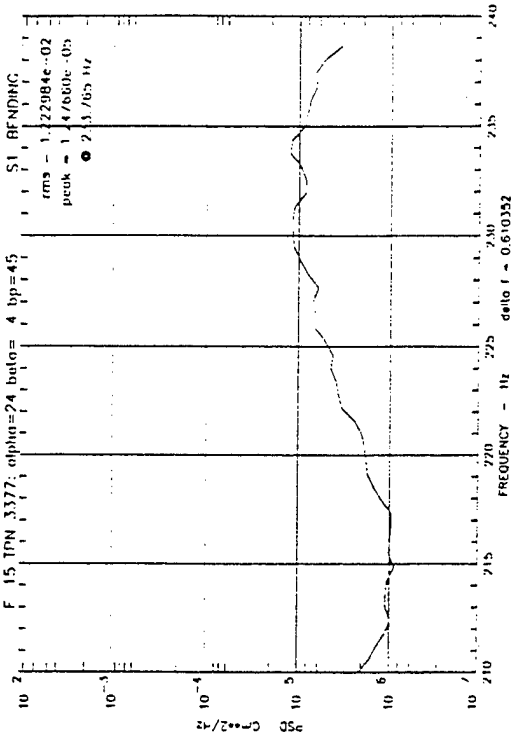

F-15 TPN 3343: alpha=32 beta=0 bp=45
S1 BENDING
rms = 1.101385e-02
peak = 1.965500e-05
@ 29.258 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

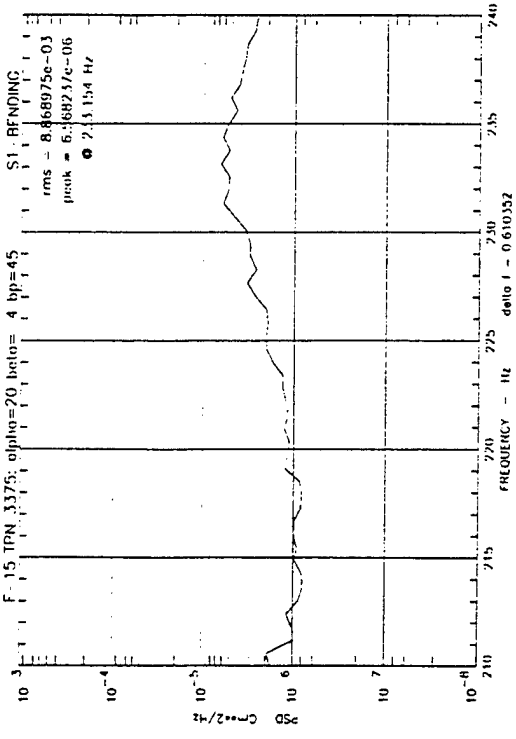

F-15 TPN 3341: alpha=24 beta=0 bp=45
S1 BENDING
rms = 1.977284e-02
peak = 9.442152e-06
@ 21.544 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

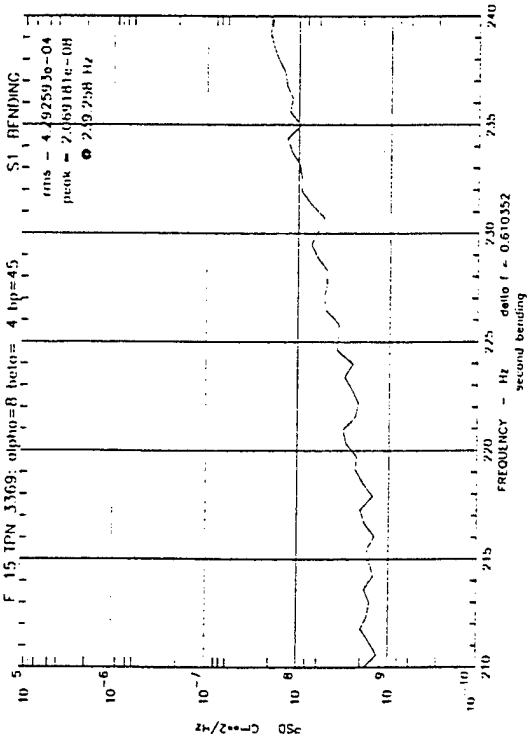

F-15 TPN 3339: alpha=20 beta=0 bp=45
S1 BENDING
rms = 6.215566e-03
peak = 2.968070e-06
@ 21.934 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

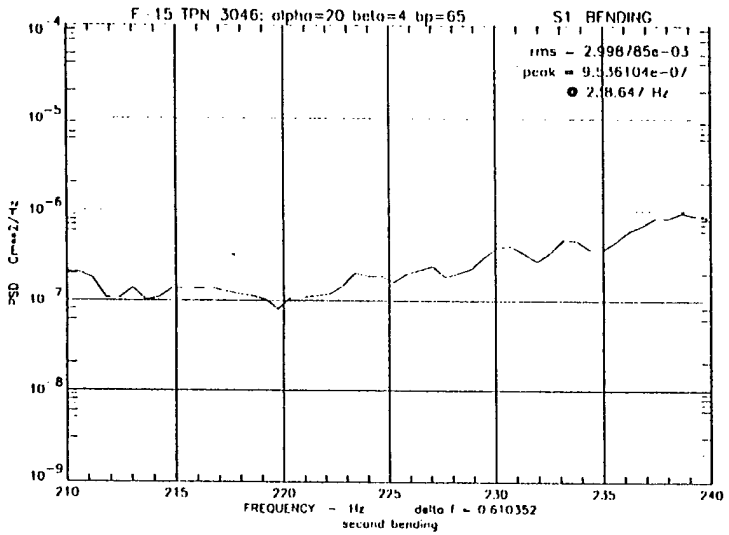

F-15 TPN 3333: alpha=8 beta=0 bp=45
S1 BENDING
rms = 4.392311e-04
peak = 1.520331e-08
@ 24.985 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

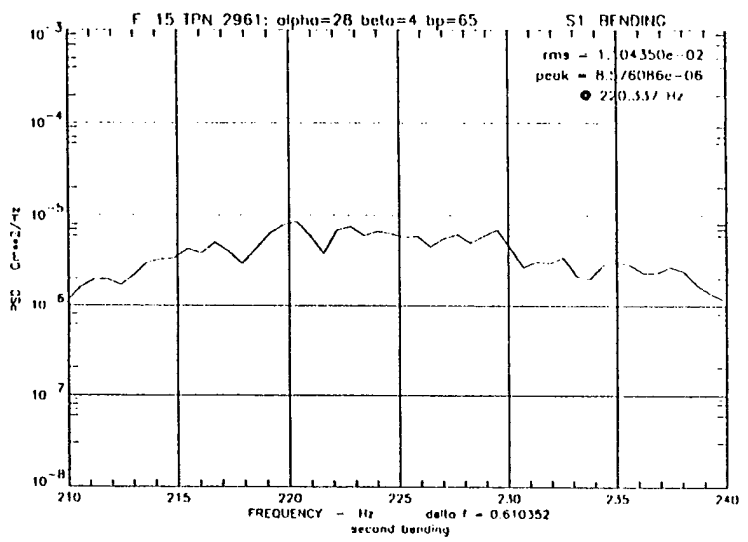

F 15 TPN 3379: alpha=32 beta= 4 bp=45
S1 BENDING
rms = 1.35499e-02
peak = 1.26514e-05
@ 213.427 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

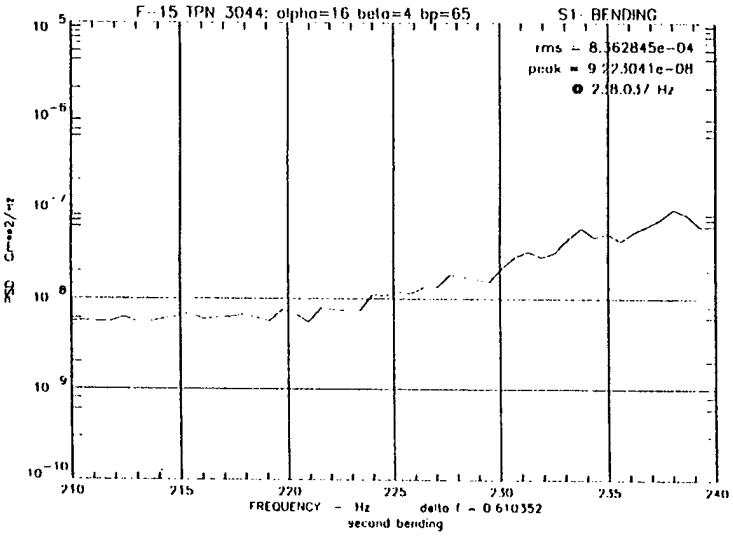

F 15 TPN 3377: alpha=24 beta= 4 bp=45
S1 BENDING
rms = 1.22984e-02
peak = 1.47660e-05
@ 213.763 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

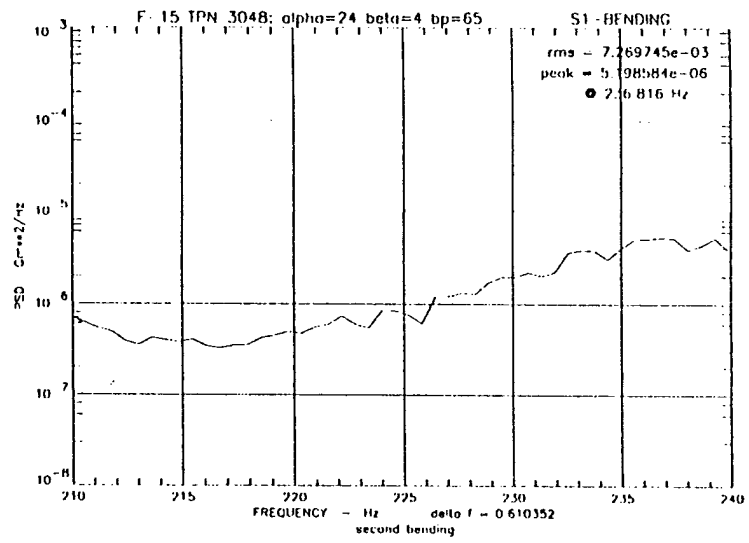

F 15 TPN 3375: alpha=20 beta= 4 bp=45
S1 BENDING
rms = 8.86897e-03
peak = 6.68237e-06
@ 213.154 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

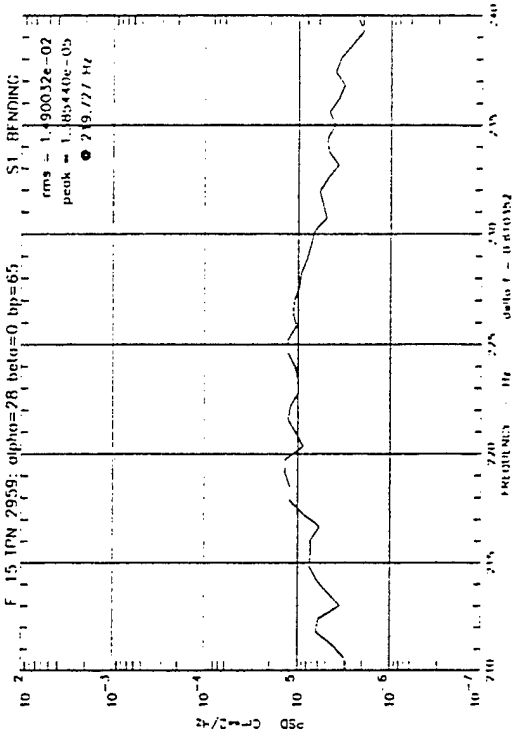

F 15 TPN 3369: alpha=8 beta= 4 bp=45
S1 BENDING
rms = 4.49259e-04
peak = 2.09181e-08
@ 213.298 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

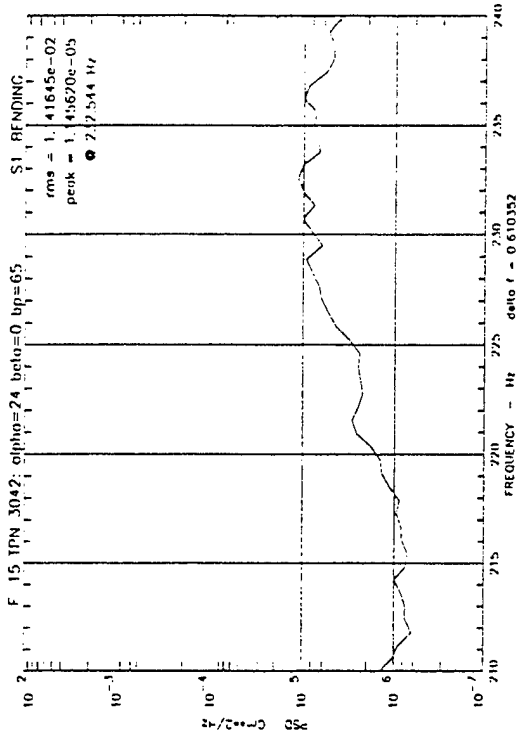

F-15 TPN 3046; alpha=20 beta=4 bp=65
S1 BENDING
rms = 2.998785e-03
peak = 9.536104e-07
@ 238.647 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

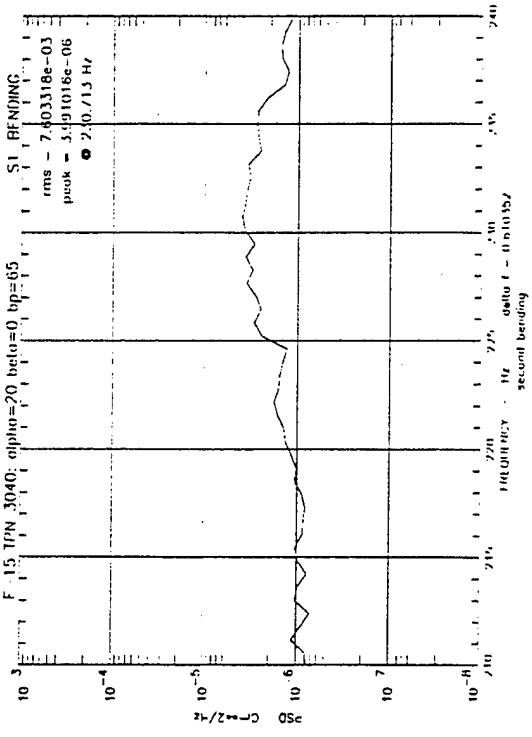

F-15 TPN 2961; alpha=28 beta=4 bp=65
S1 BENDING
rms = 1.104350e-02
peak = 8.760886e-06
@ 230.537 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

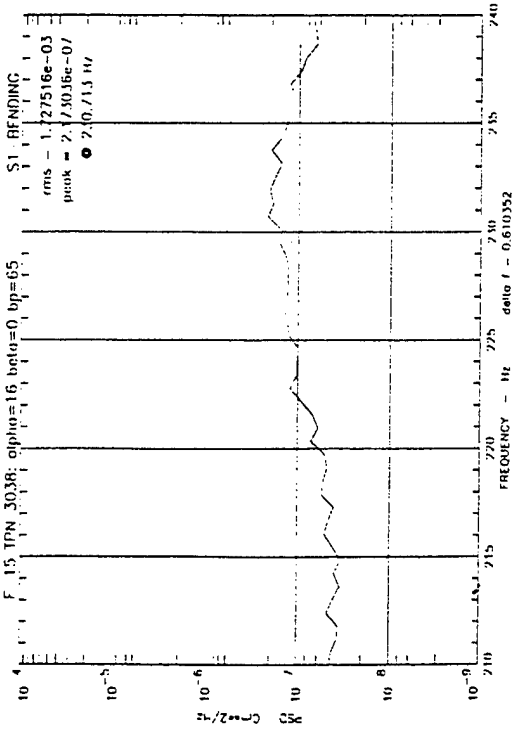

F-15 TPN 3044; alpha=16 beta=4 bp=65
S1 BENDING
rms = 8.362845e-04
peak = 9.223041e-08
@ 238.037 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

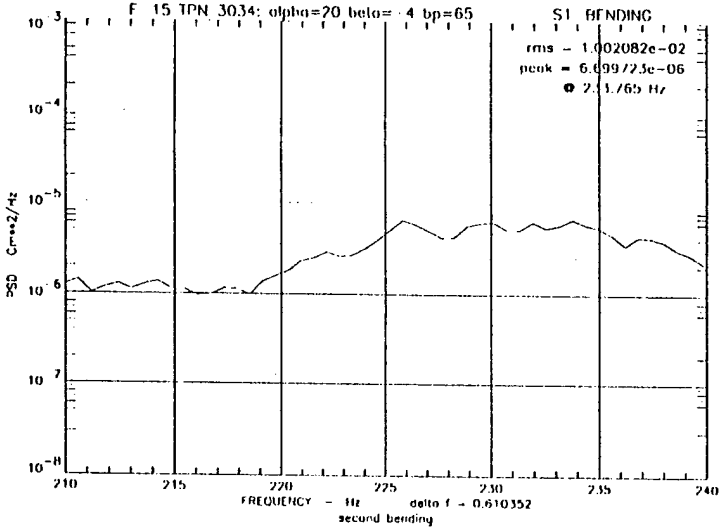

F-15 TPN 3048; alpha=24 beta=4 bp=65
S1 BENDING
rms = 7.269745e-03
peak = 5.198584e-06
@ 236.816 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

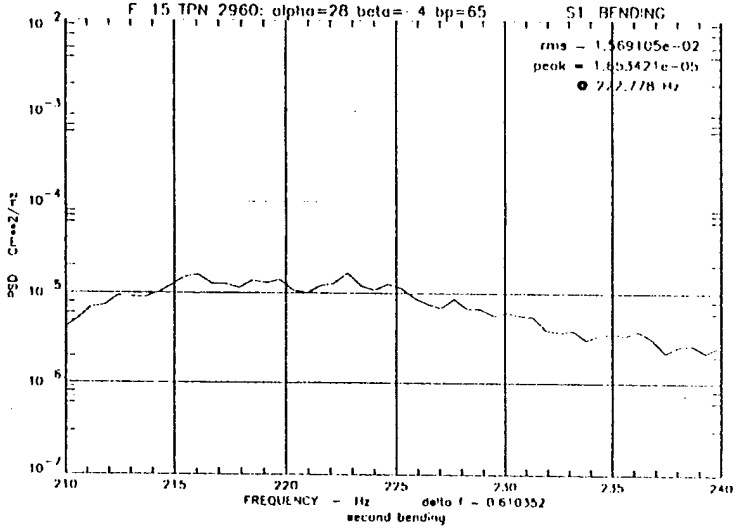

F 15 TFN 2959: alpha=28 beta=0 bp=65
S1 BENDING
rms = 1.490032e-02
peak = 1.
@ 219.777 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

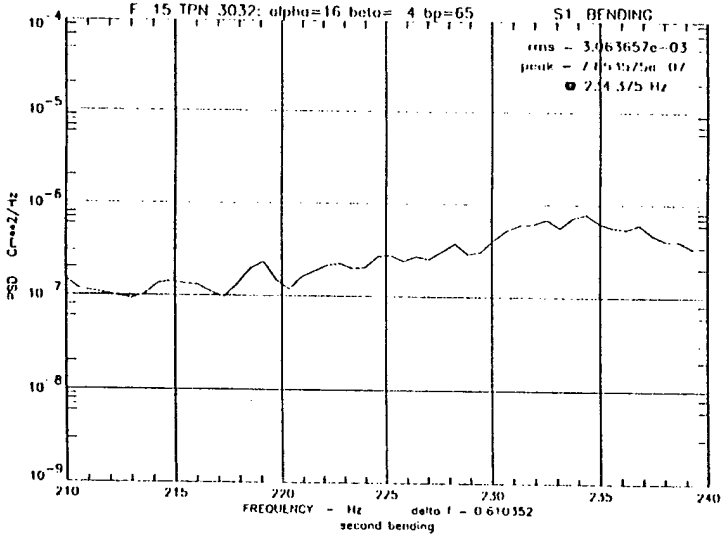

F 15 TFN 3042: alpha=24 beta=0 bp=65
S1 BENDING
rms = 1.41645e-02
peak = 1.
@ 219.544 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

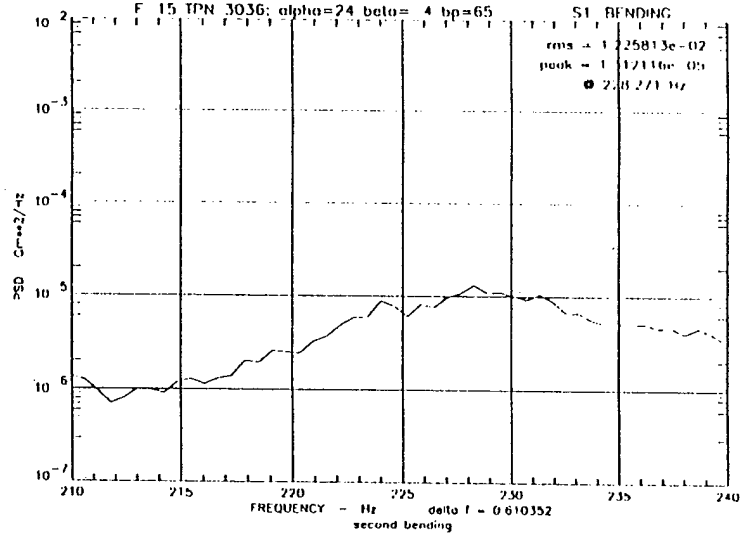

F 15 TFN 3040: alpha=20 beta=0 bp=65
S1 BENDING
rms = 7.603318e-03
peak = 3.
@ 220.113 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending


F 15 TFN 3038: alpha=16 beta=0 bp=65
S1 BENDING
rms = 1.
peak = 2.
@ 220.113 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending


F 15 TPN 3034: alpha=20 beta= 4 bp=65
S1 BENDING
rms = 1.002082e-02
peak = 6.099723e-06
@ 231.765 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F 15 TPN 2960: alpha=28 beta= 4 bp=65
S1 BENDING
rms = 1.569105e-02
peak = 1.653421e-05
@ 222.778 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

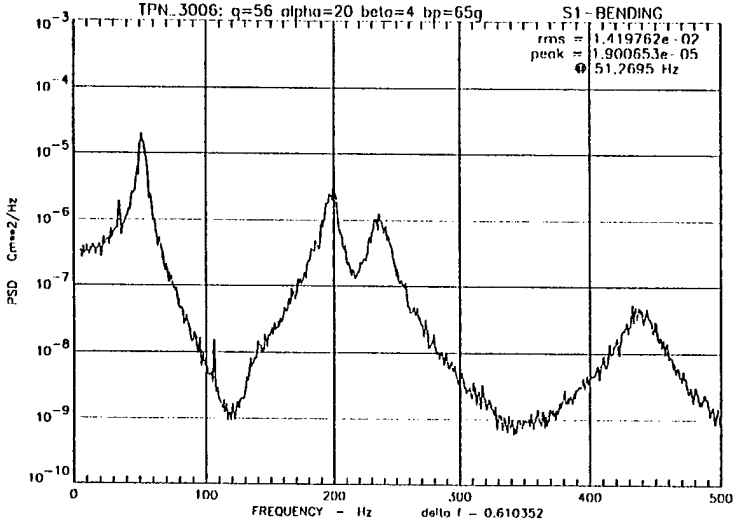

F 15 TPN 3032: alpha=16 beta= 4 bp=65
S1 BENDING
rms = 3.063657e-03
@ 234.375 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F 15 TPN 3036: alpha=24 beta= 4 bp=65
S1 BENDING
rms = 1.225813e-02
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

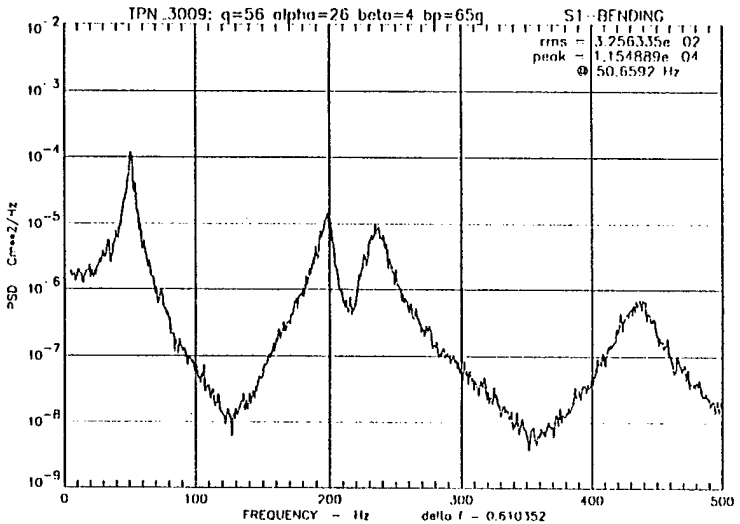
FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

Q= 56PSF
3.1.1.2 GBP = 65 PSI, BETA = 0, +4, -4 DEG, ALPHA=16....28 DEG

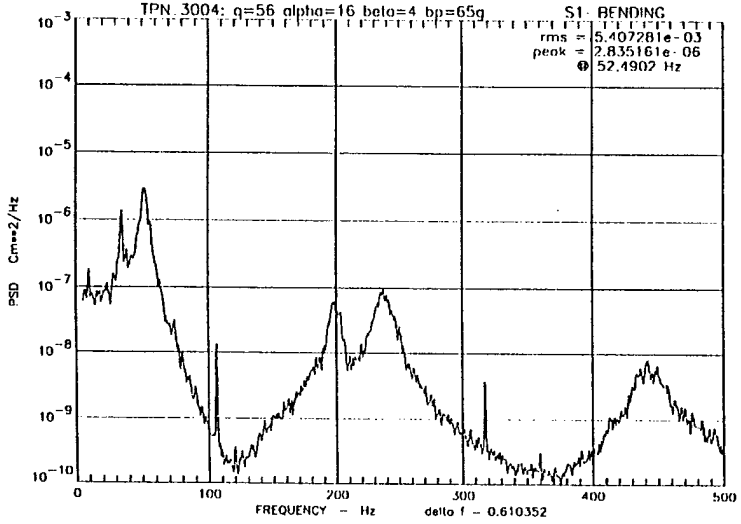
F-15 Tail Buffet Test



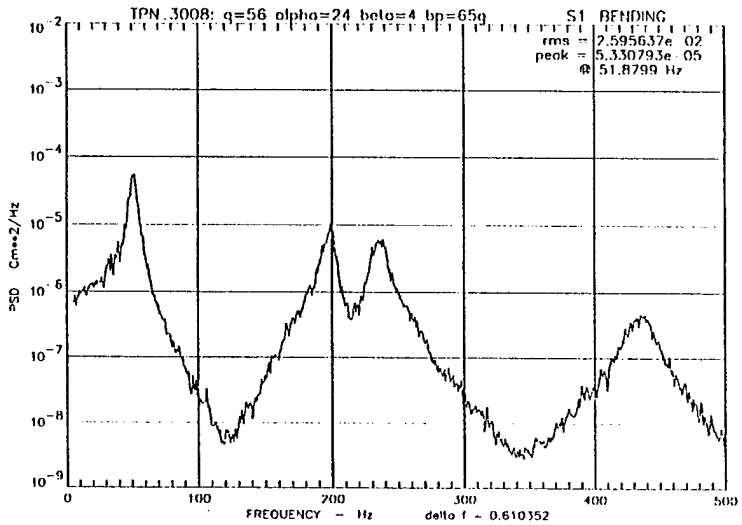
F-15 Tail Buffet Test



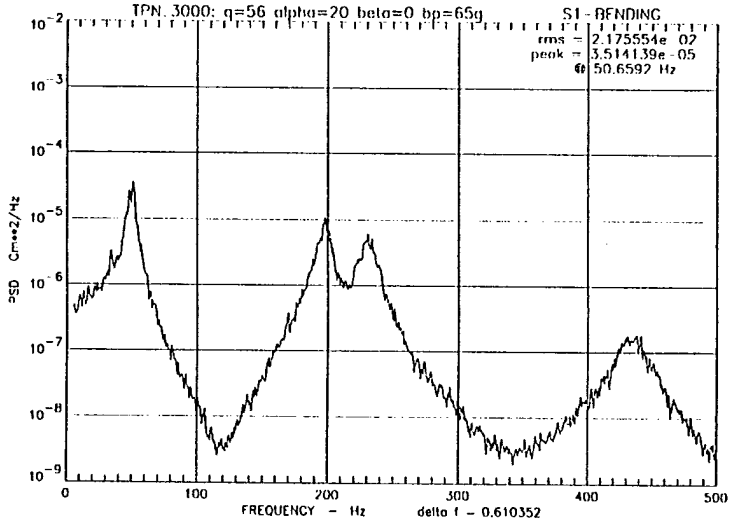
F-15 Tail Buffet Test



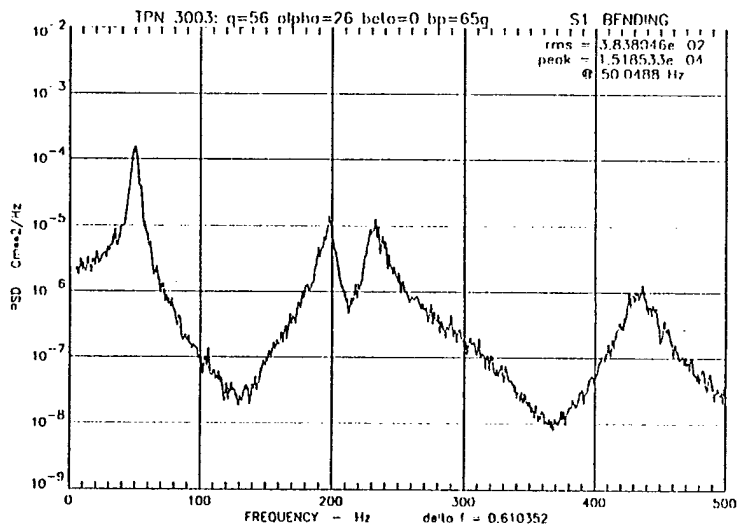
F-15 Tail Buffet Test



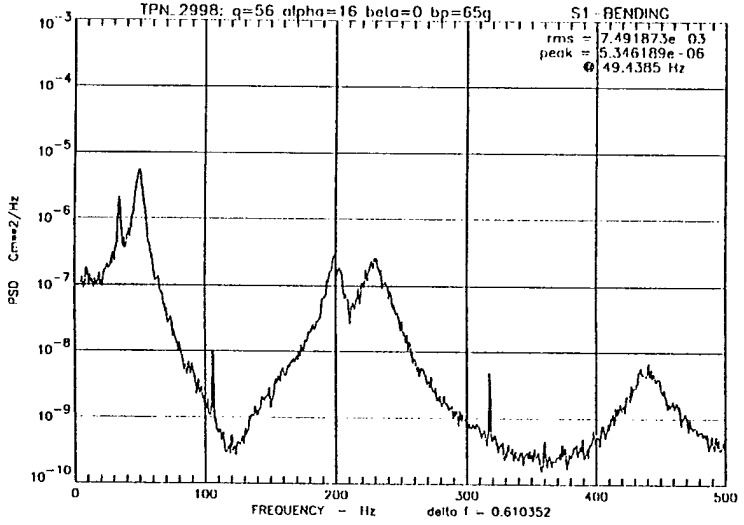
F-15 Tail Buffet Test



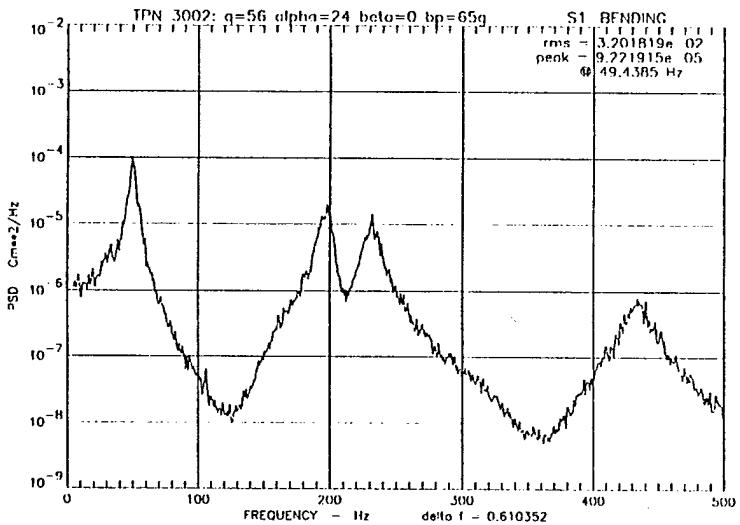
F-15 Tail Buffet Test



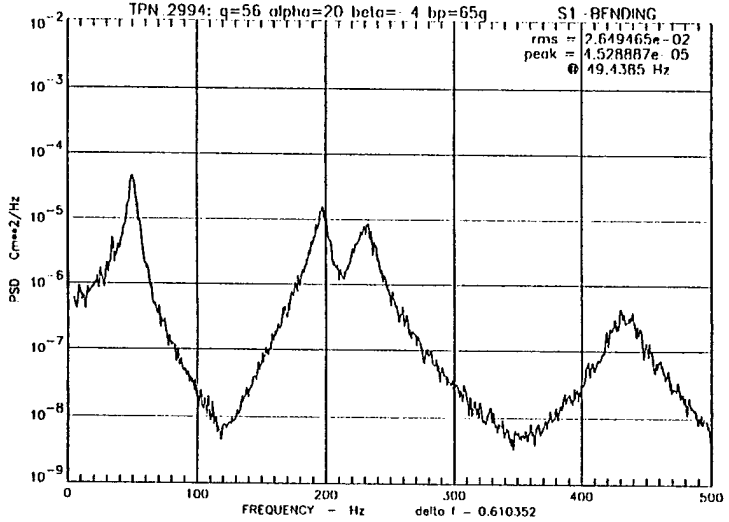
F-15 Tail Buffet Test



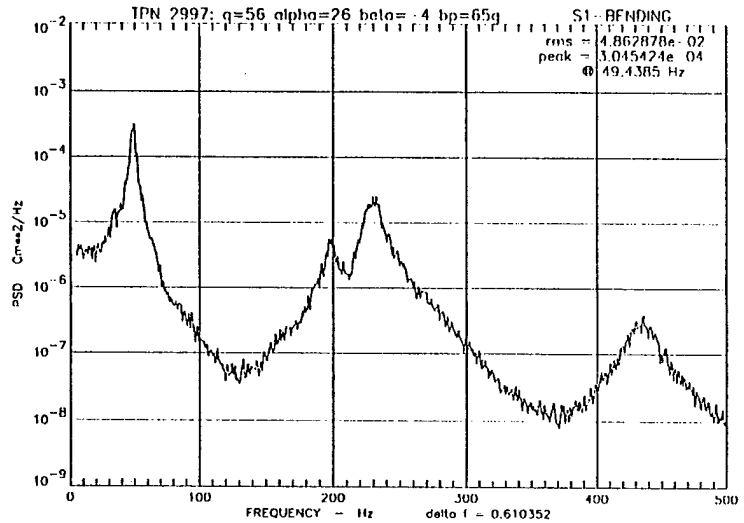
F-15 Tail Buffet Test



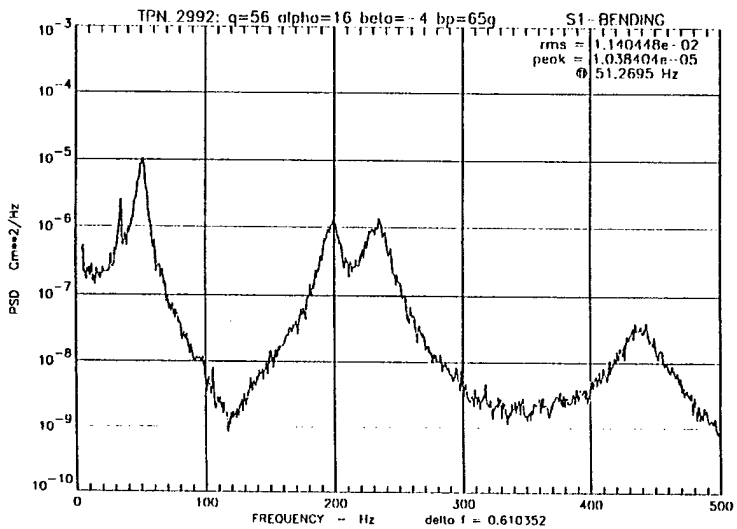
F 15 Tail Buffet Test



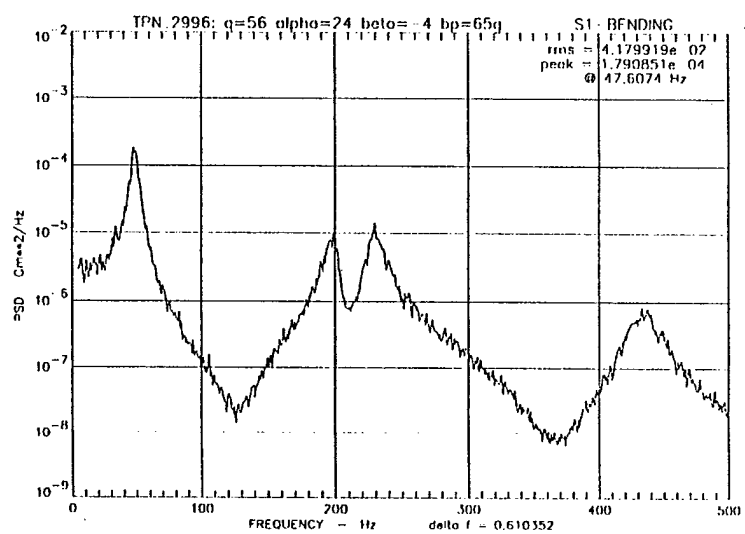
F-15 Tail Buffet Test



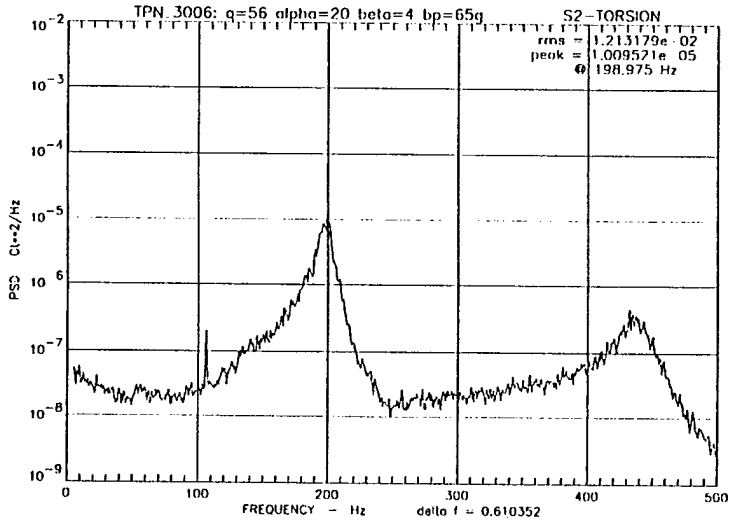
F-15 Tail Buffet Test



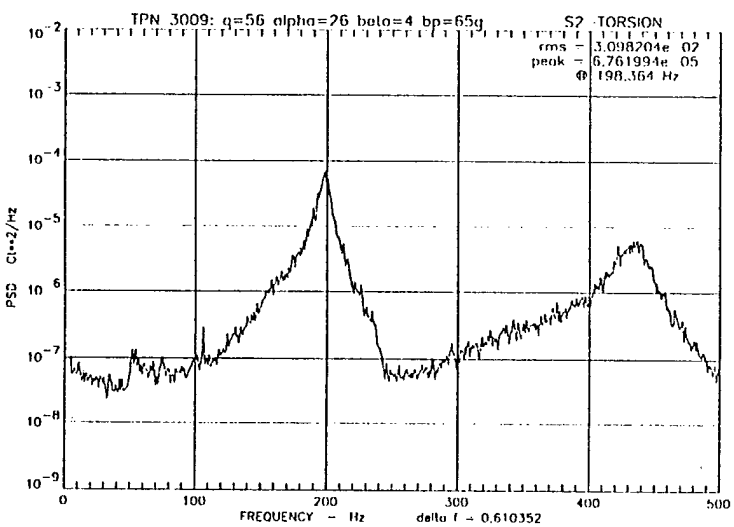
F-15 Tail Buffet Test



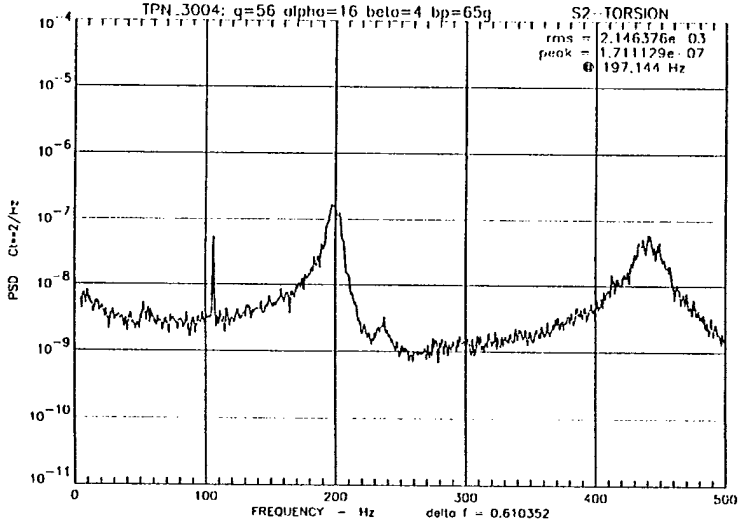
F-15 Tail Buffet Test



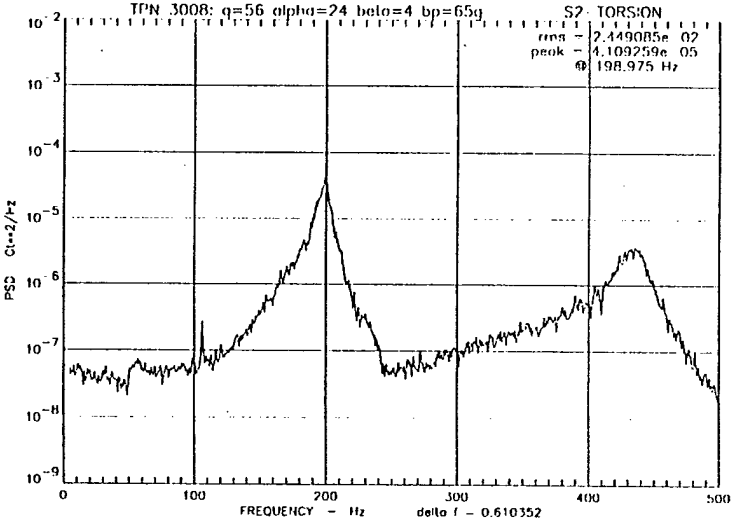
F-15 Tail Buffet Test

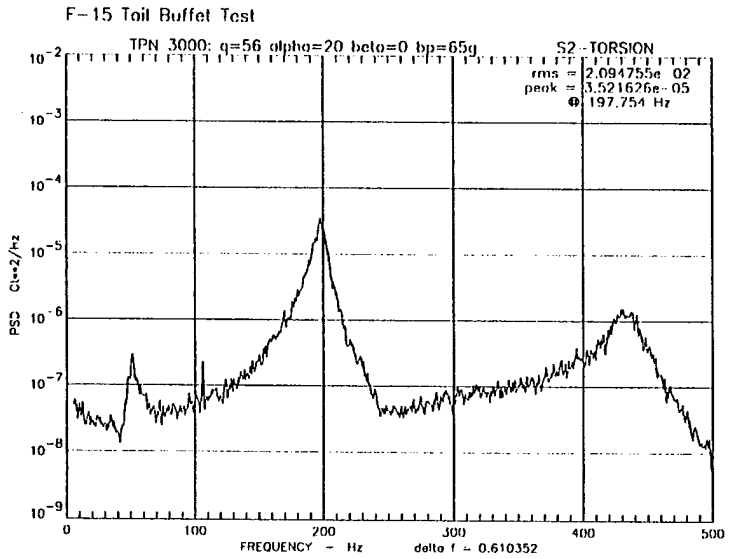


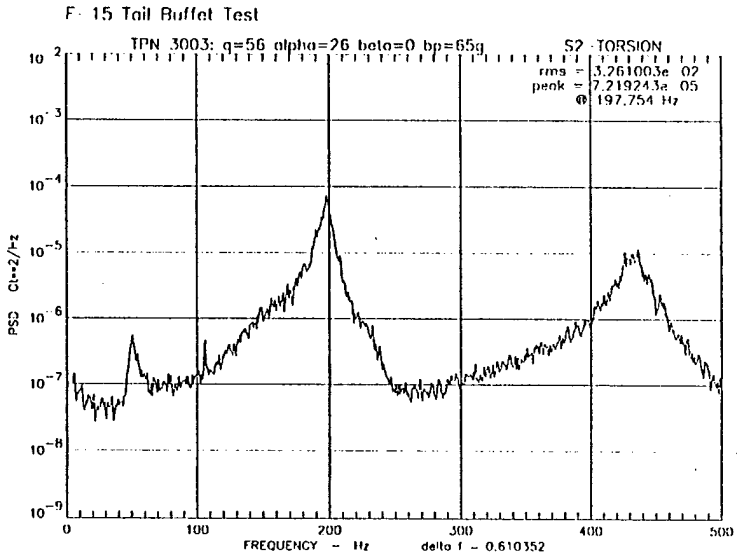
F-15 Tail Buffet Test

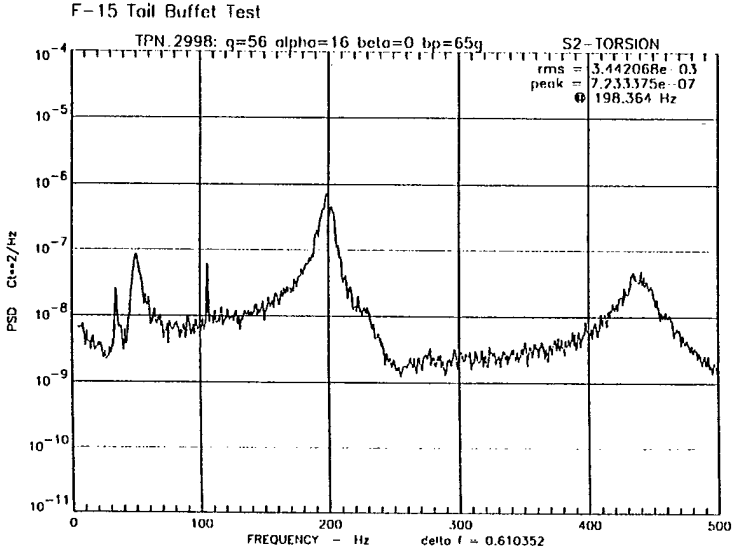


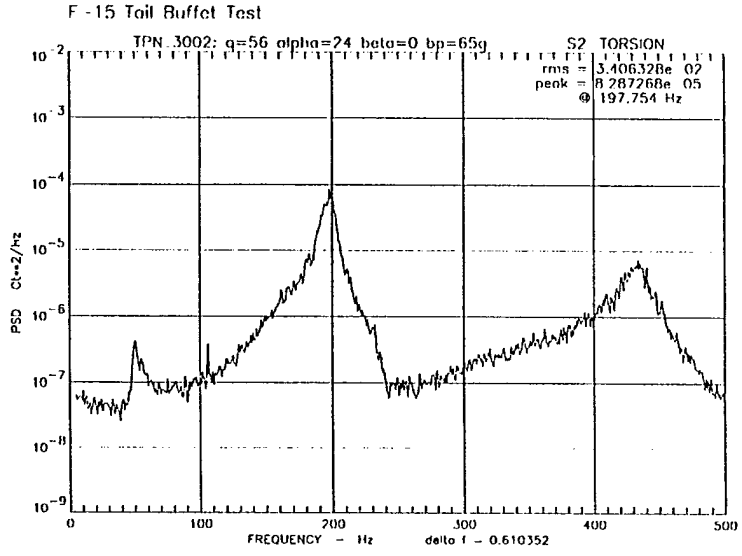
F-15 Tail Buffet Test

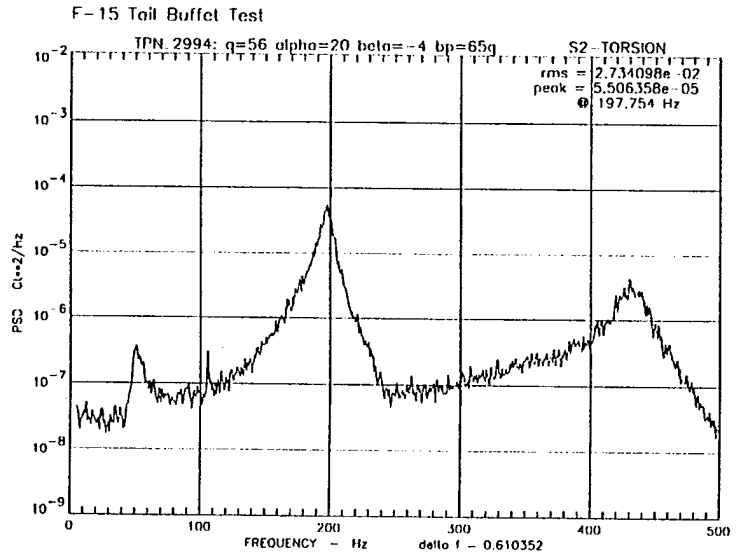


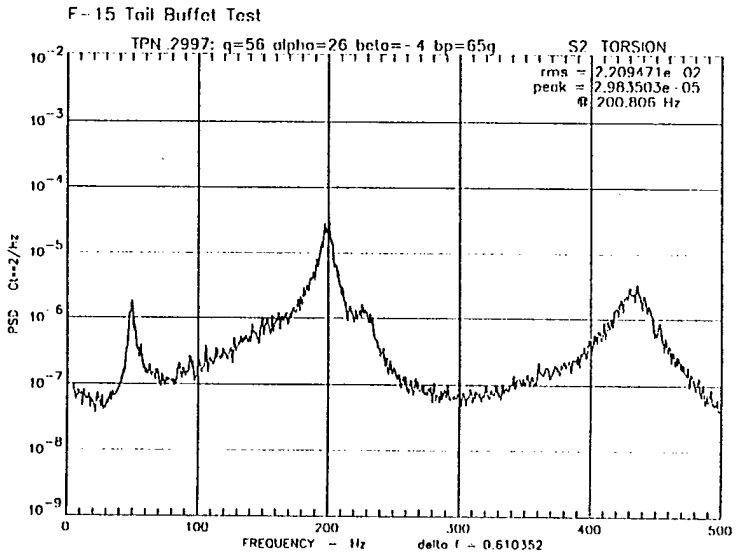

F-15 Tail Buffet Test
TPN 3000: q=56 alpha=20 beta=0 bp=65g
S2 -TORSION
rms = 2.094755e 02
peak = 3.521626e 05
@ 197.754 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

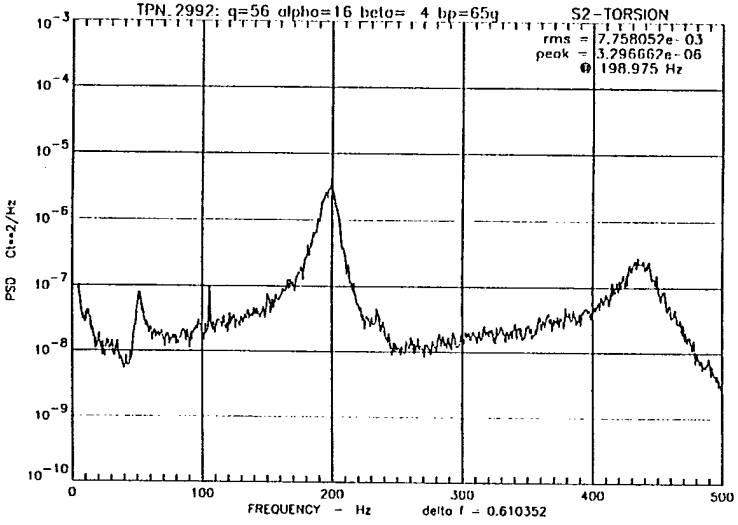

F-15 Tail Buffet Test
TPN 3003: q=56 alpha=26 beta=0 bp=65g
S2 -TORSION
rms = 3.261003e 02
peak = 7.219243e 05
@ 197.754 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

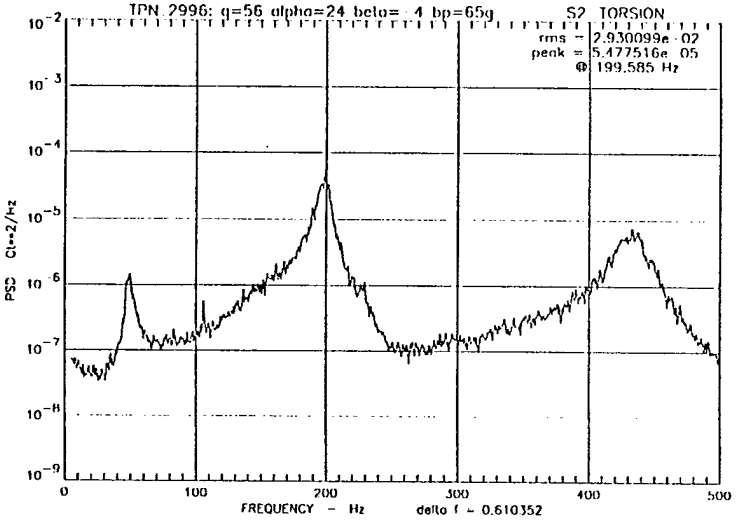

F-15 Tail Buffet Test
TPN 2998: q=56 alpha=16 beta=0 bp=65g
S2-TORSION
rms = 3.442068e 03
peak = 7.233375e 07
@ 198.364 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN 3002: q=56 alpha=24 beta=0 bp=65g
S2 TORSION
rms = 3.406328e 02
peak = 8.287268e 05
@ 197.754 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

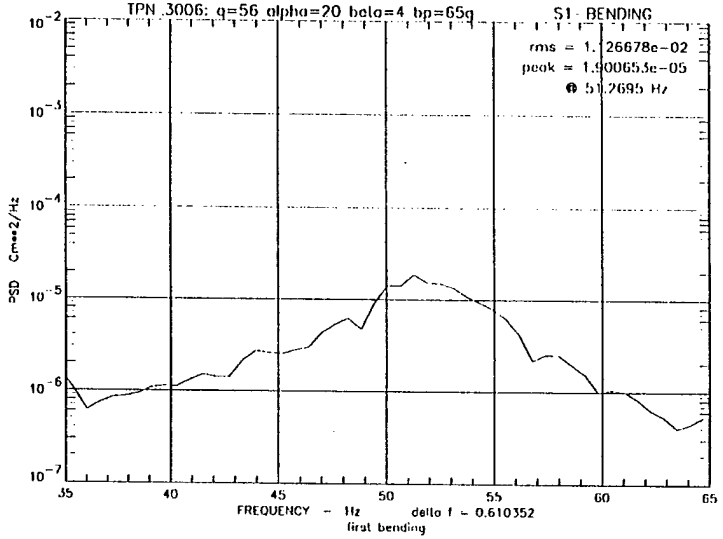

F-15 Tail Buffet Test
TPN 2994: q=56 alpha=20 beta=-4 bp=65g
S2-TORSION
rms = 2.734098e-02
peak = 5.506358e-05
@ 197.754 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN 2997: q=56 alpha=26 beta=-4 bp=65g
S2 TORSION
rms = 2.209471e-02
peak = 2.983503e-05
@ 200.806 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

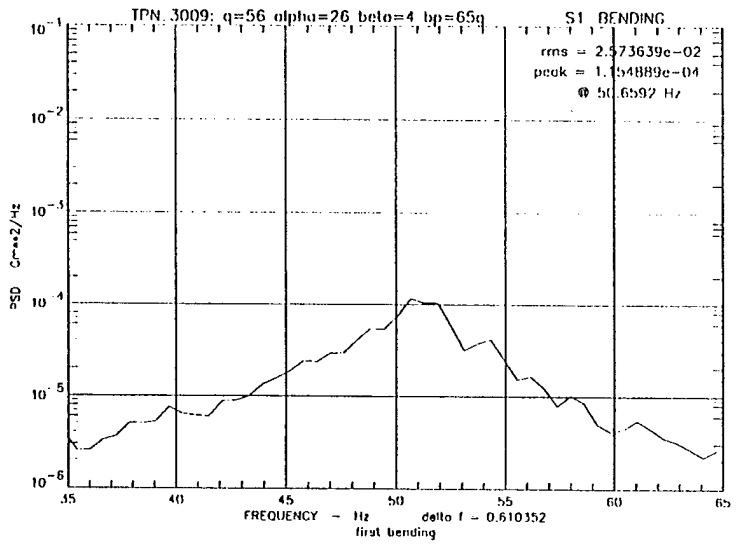

F-15 Tail Buffet Test
TPN 2992: q=56 alpha=16 beta=-4 bp=65g
S2-TORSION
rms = 7.758052e-03
peak = 3.296662e-06
@ 198.975 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN 2996: q=56 alpha=24 beta=-4 bp=65g
S2 TORSION
rms = 2.930099e-02
peak = 5.477516e-05
@ 199.585 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

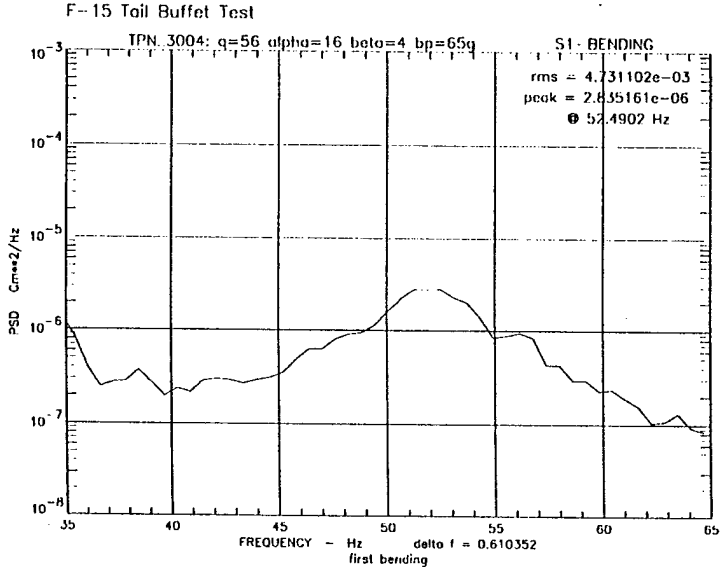
F-15 Tail Buffet Test



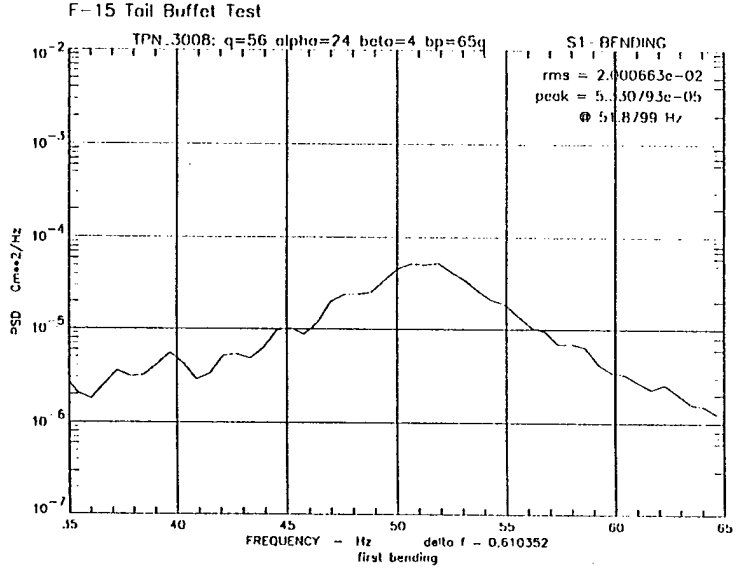
F-15 Tail Buffet Test

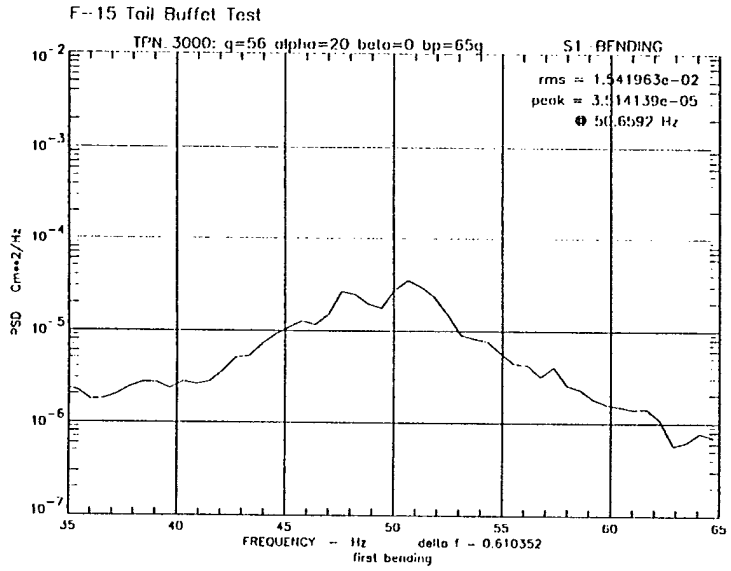


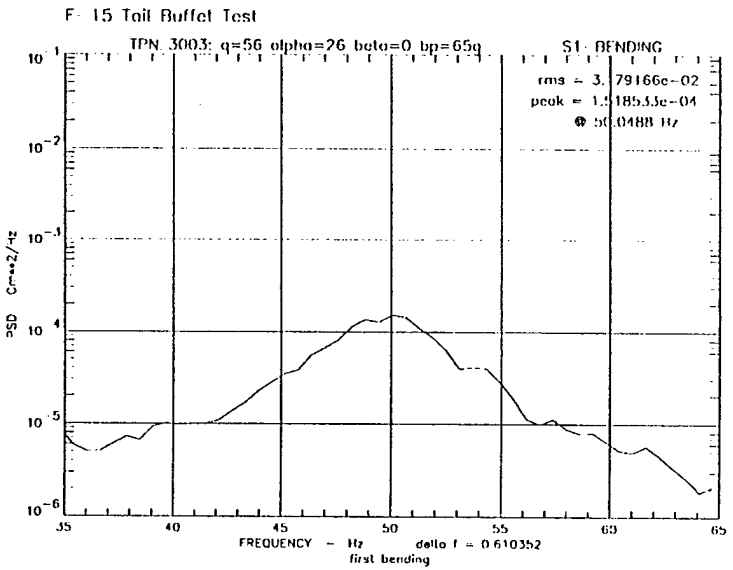
F-15 Tail Buffet Test

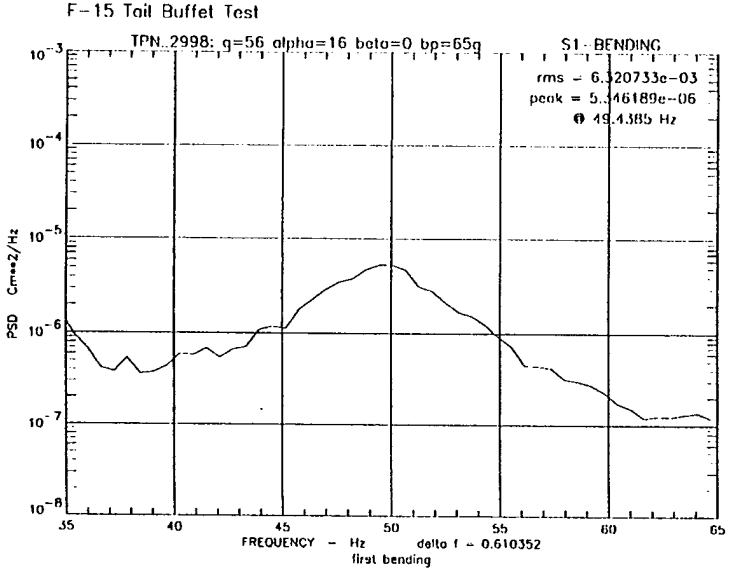


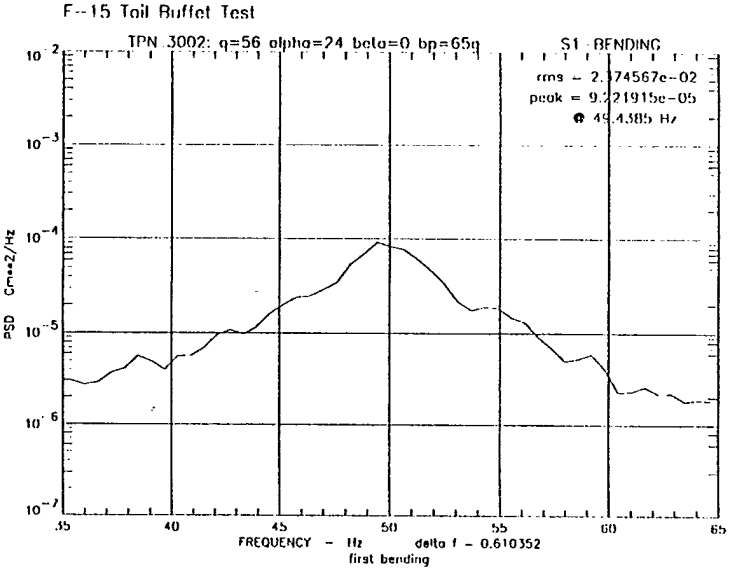
F-15 Tail Buffet Test



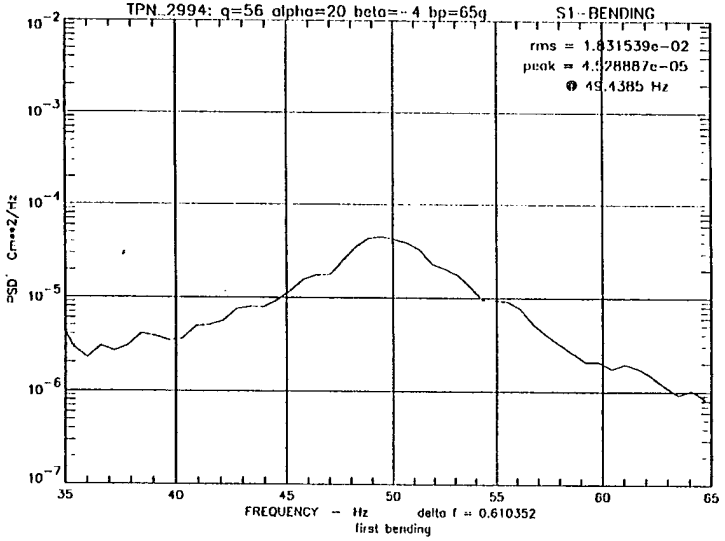

F-15 Tail Buffet Test
TPN 3000: q=56 alpha=20 beta=0 bp=65q
S1 BENDING
rms = 1.541963e-02
peak = 3.514139e-05
@ 50.6592 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
TPN 3003: q=56 alpha=26 beta=0 bp=65q
S1 BENDING
rms = 3.79166e-02
peak = 1.518533e-04
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

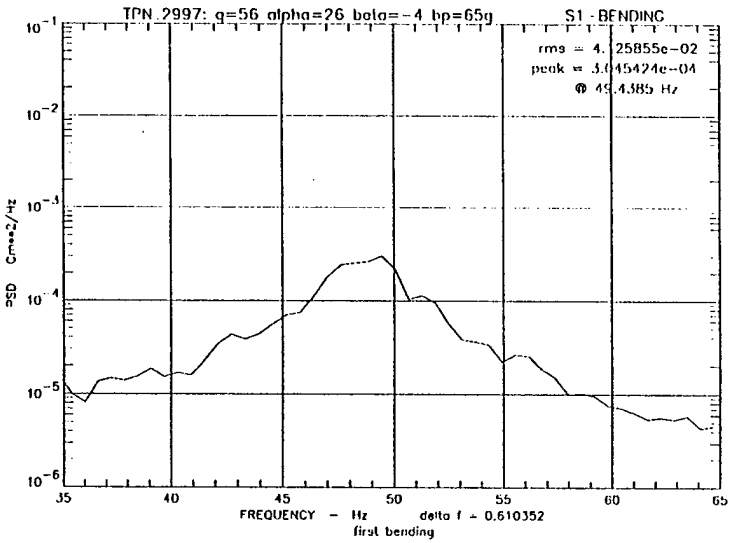

F-15 Tail Buffet Test
TPN 2998: q=56 alpha=16 beta=0 bp=65q
S1 BENDING
rms = 6.320733e-03
peak = 5.346189e-06
@ 49.4385 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending


F-15 Tail Buffet Test
TPN 3002: q=56 alpha=24 beta=0 bp=65q
S1 BENDING
rms = 2.174567e-02
peak = 9.221915e-05
@ 49.4385 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first bending

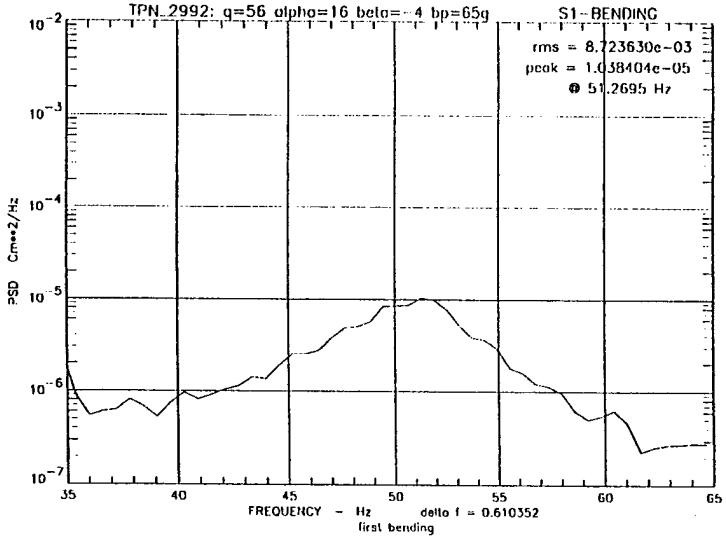
F-15 Tail Buffet Test



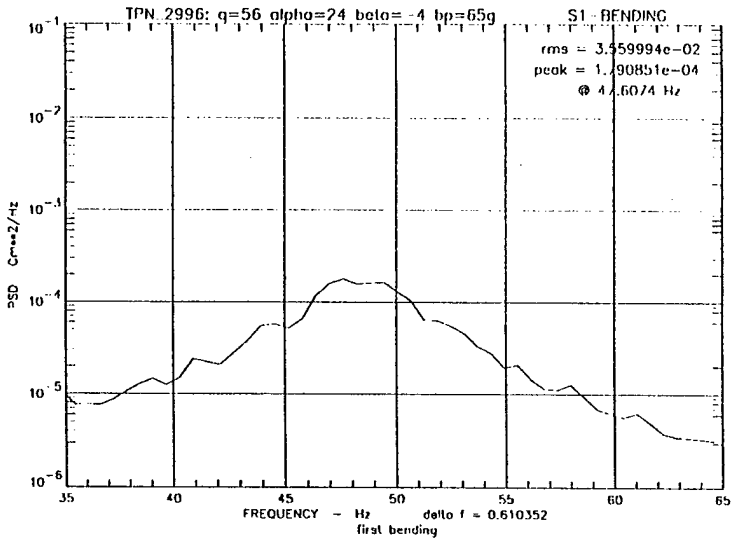
F-15 Tail Buffet Test



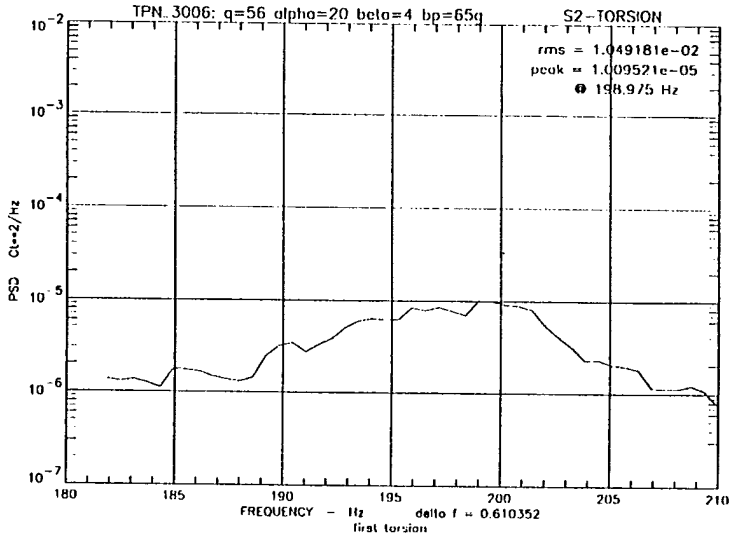
F-15 Tail Buffet Test



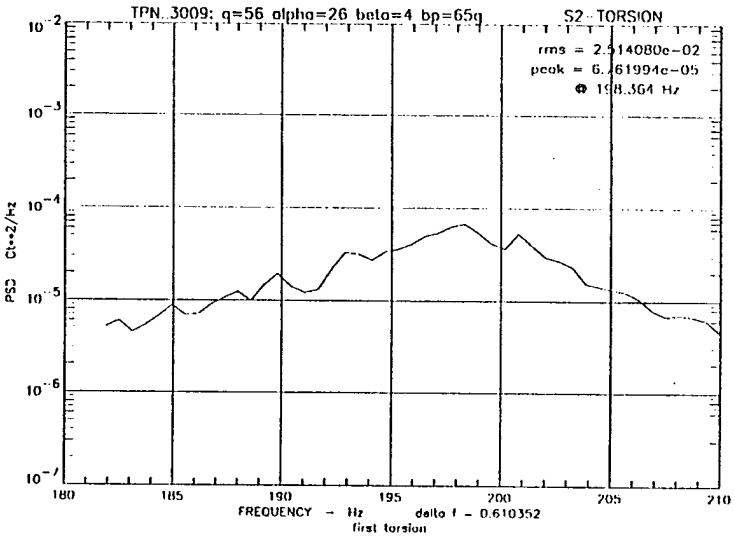
F-15 Tail Buffet Test



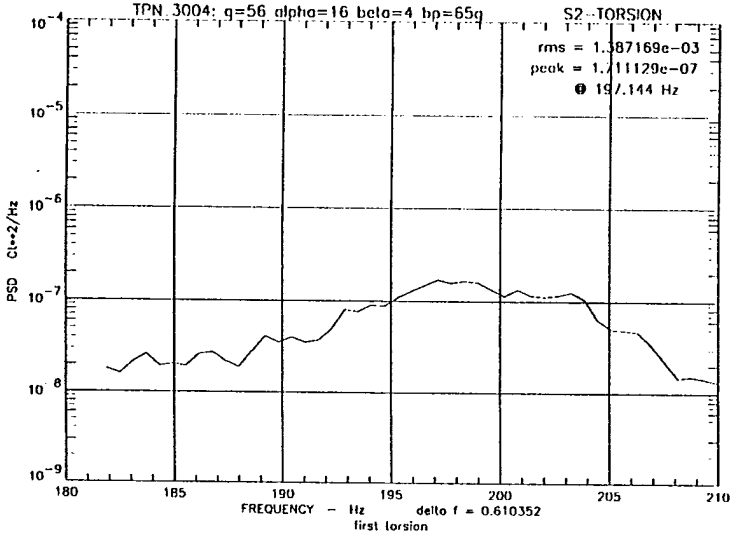
F-15 Tail Buffet Test



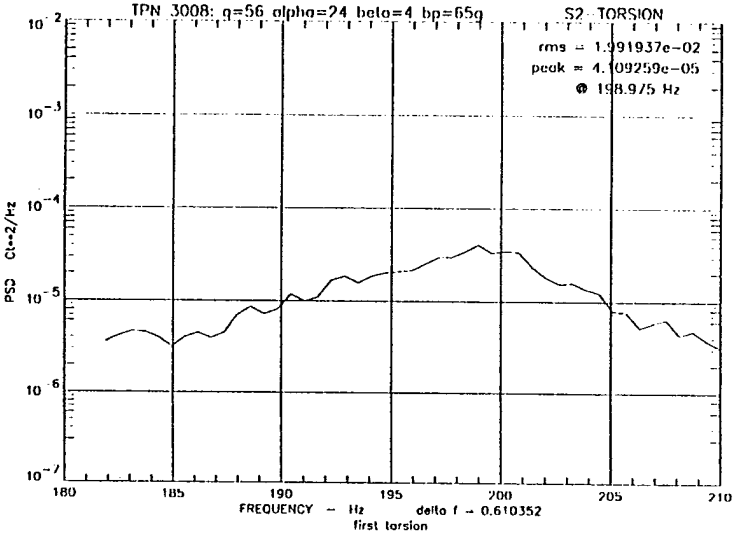
F-15 Tail Buffet Test



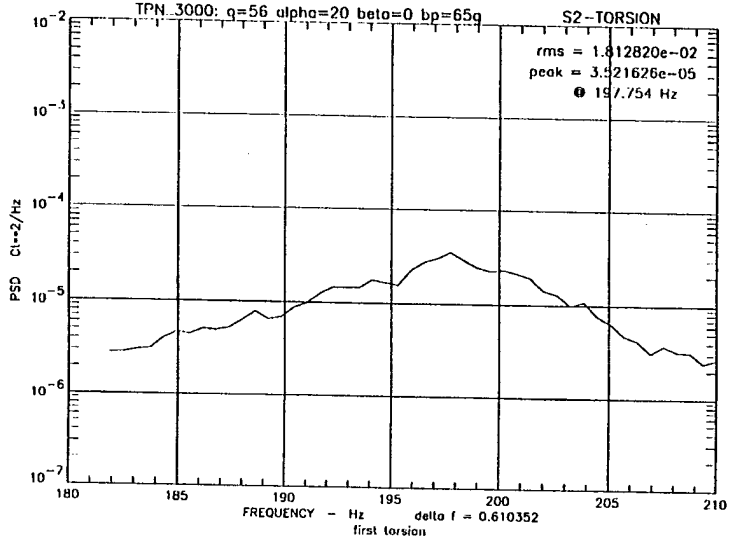
F-15 Tail Buffet Test



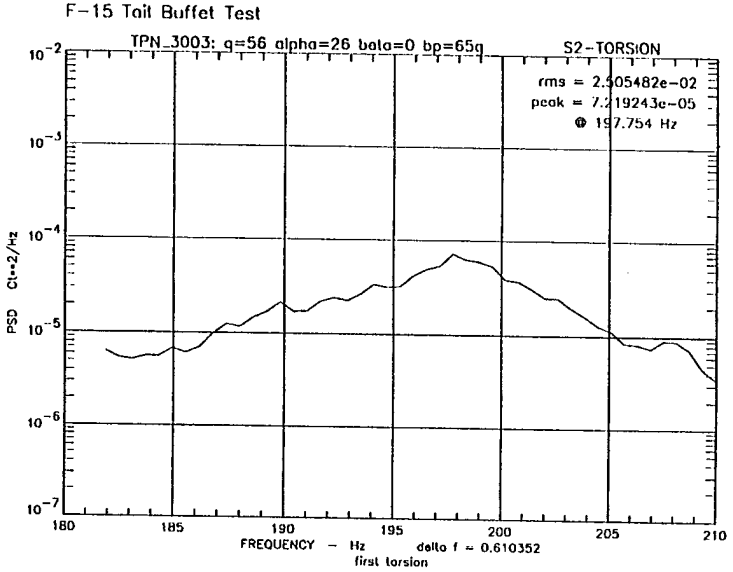
F-15 Tail Buffet Test



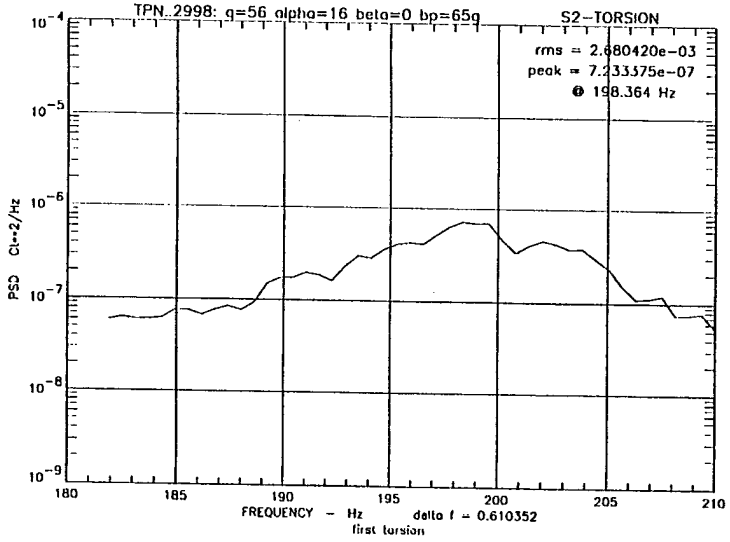
F-15 Tail Buffet Test



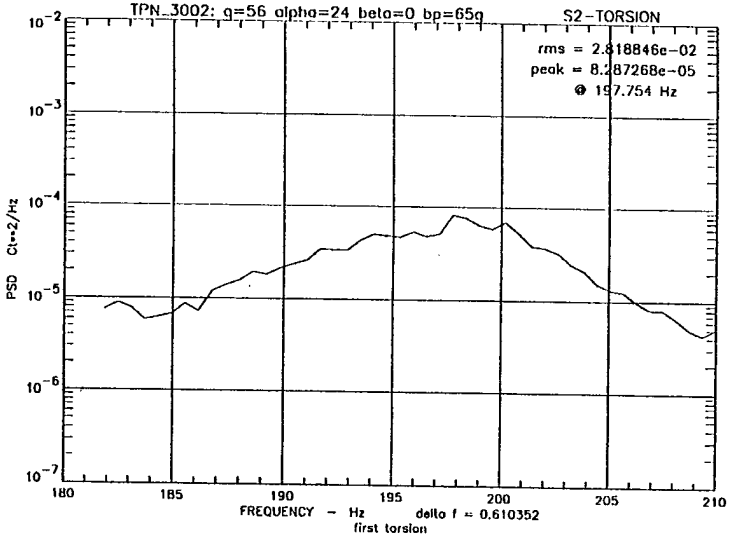
F-15 Tail Buffet Test



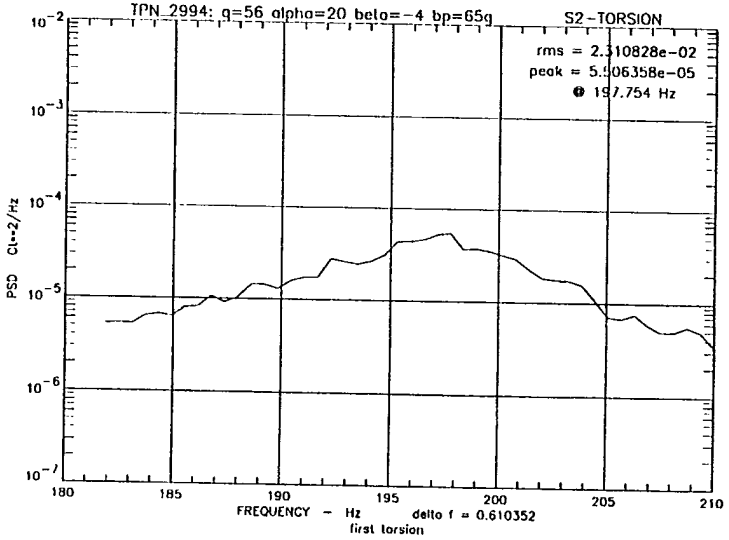
F-15 Tail Buffet Test



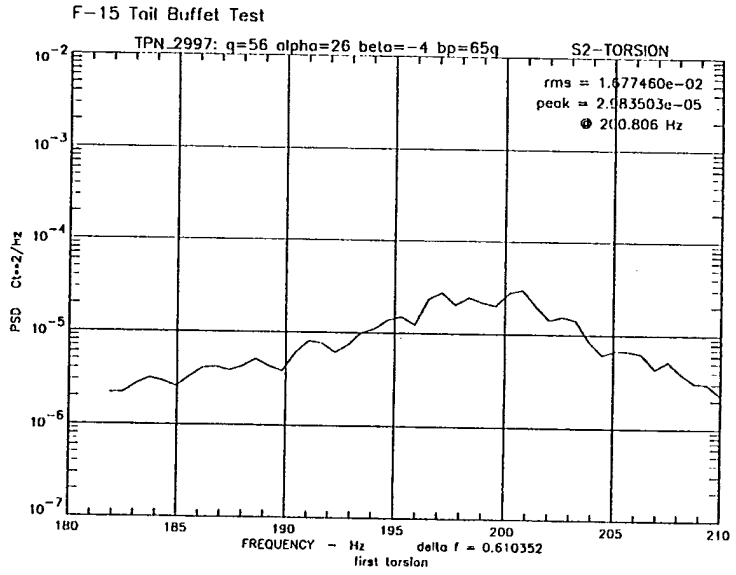
F-15 Tail Buffet Test



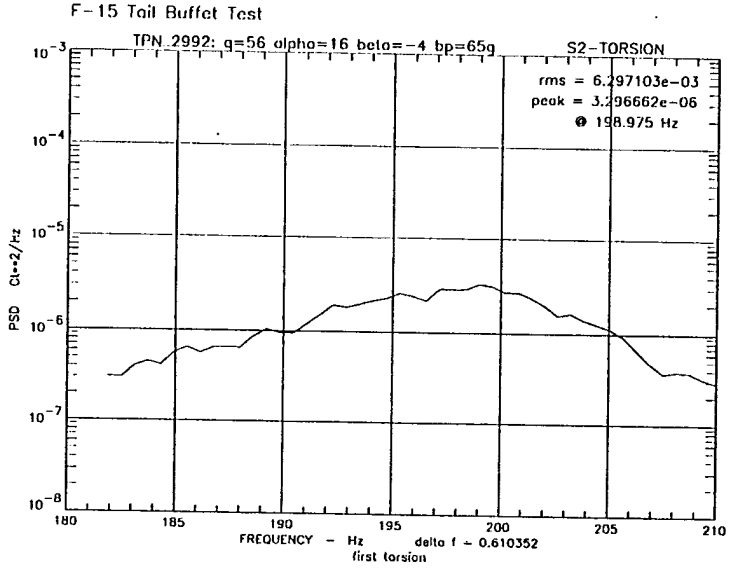
F-15 Tail Buffet Test



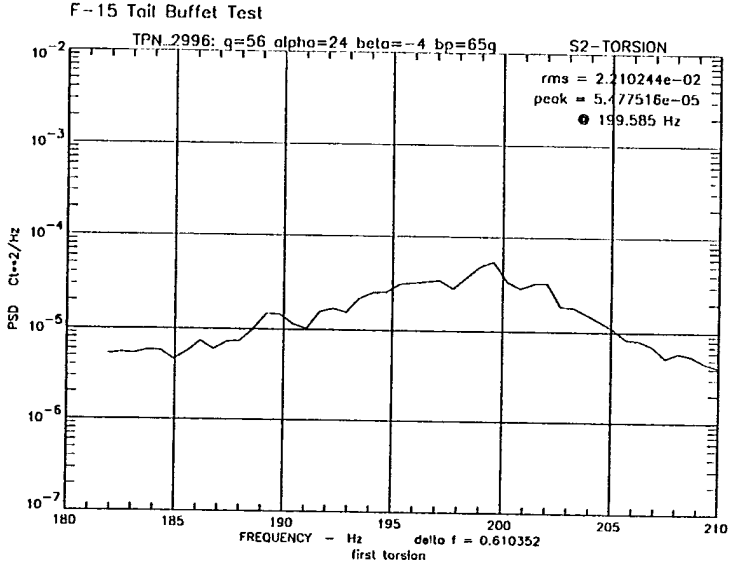
F-15 Tail Buffet Test



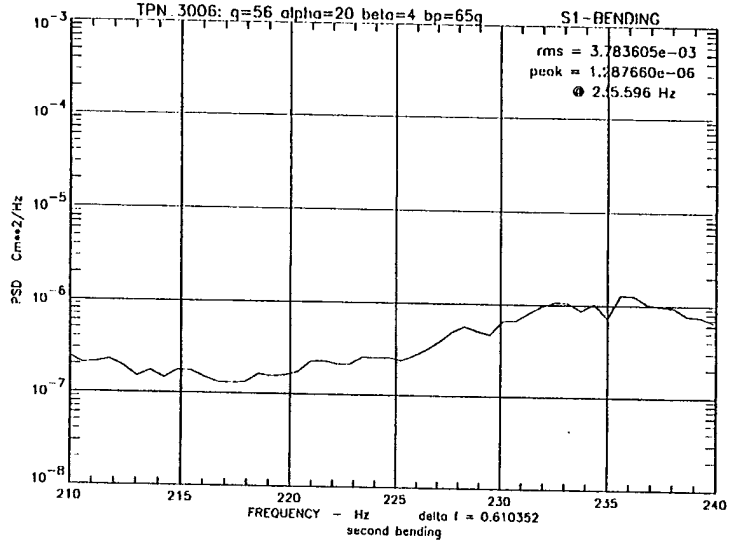
F-15 Tail Buffet Test



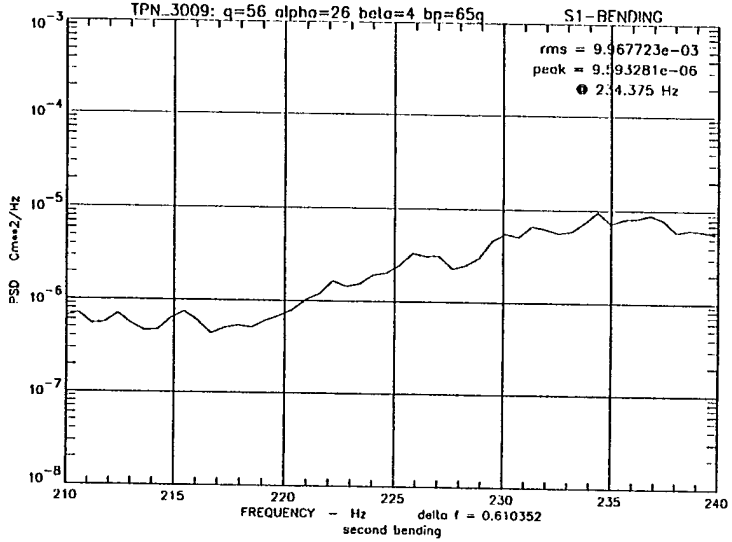
F-15 Tail Buffet Test



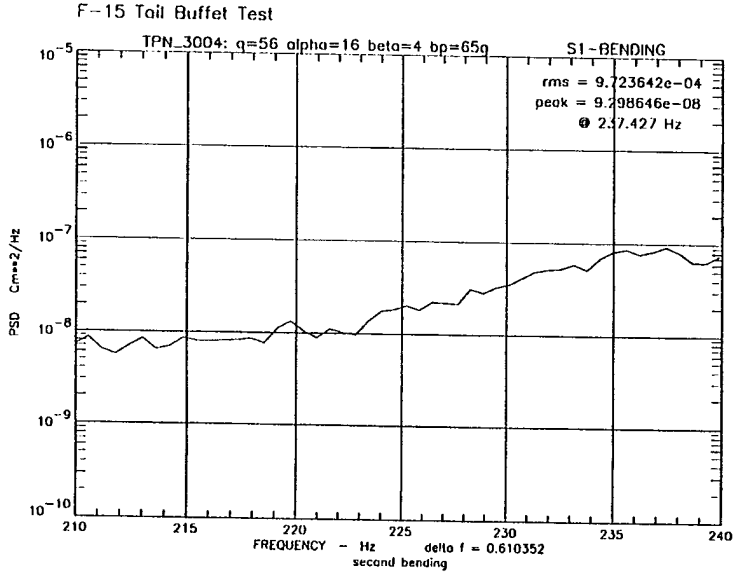
F-15 Tail Buffet Test



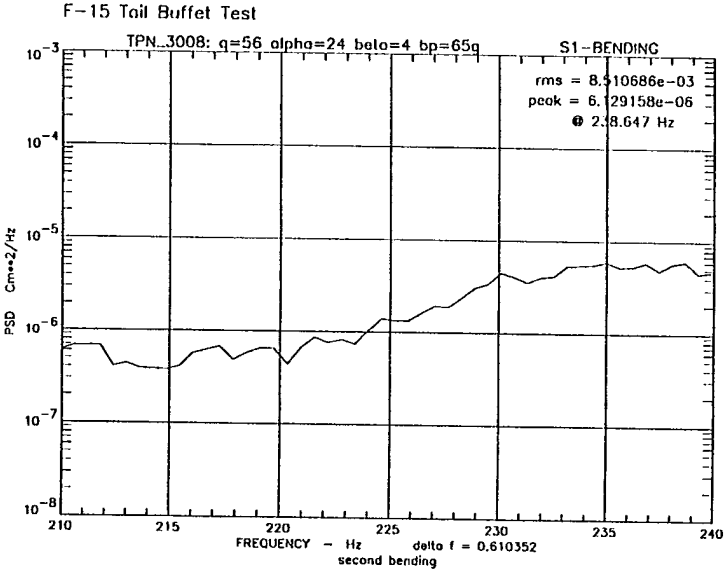
F-15 Tail Buffet Test



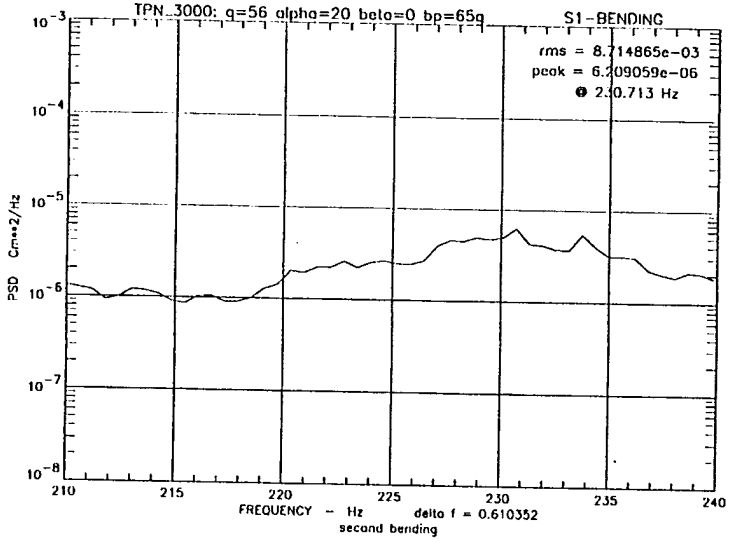
F-15 Tail Buffet Test



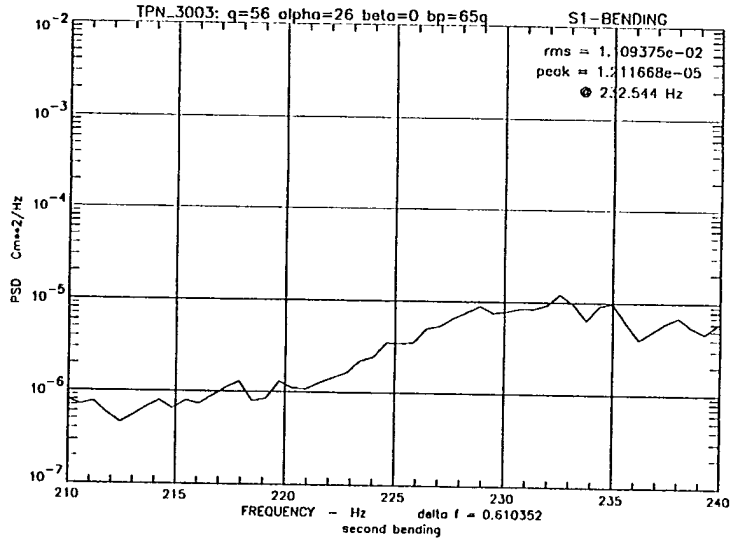
F-15 Tail Buffet Test



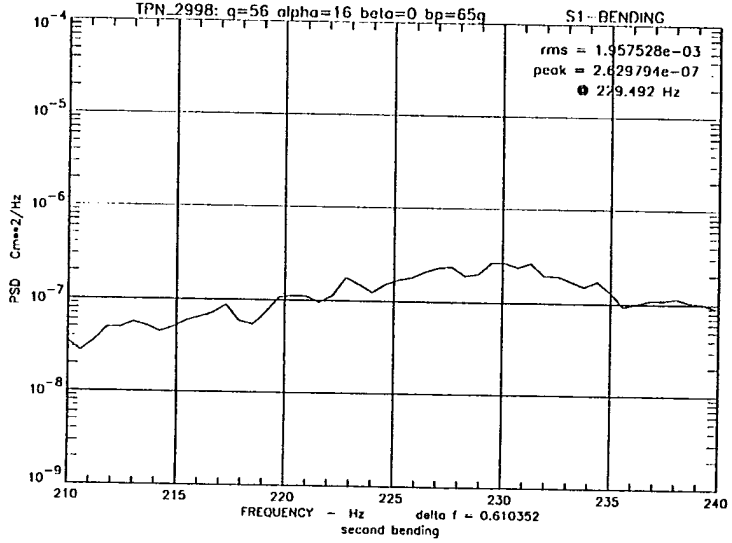
F-15 Tail Buffet Test



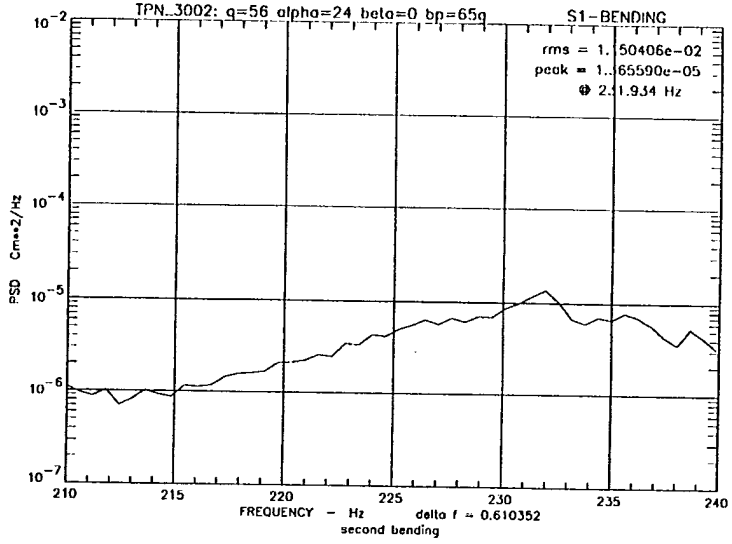
F-15 Tail Buffet Test



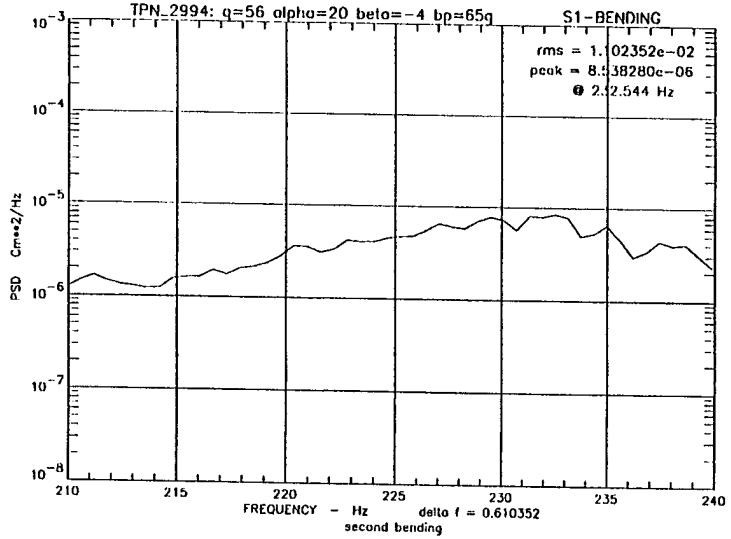
F-15 Tail Buffet Test



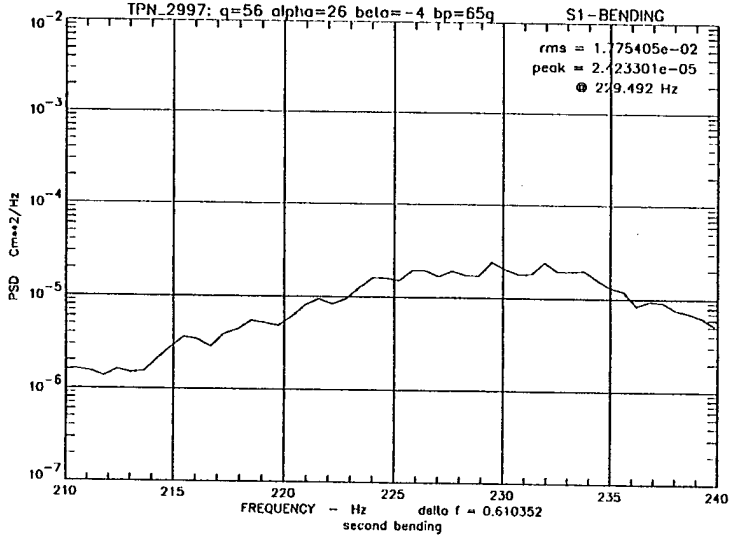
F-15 Tail Buffet Test



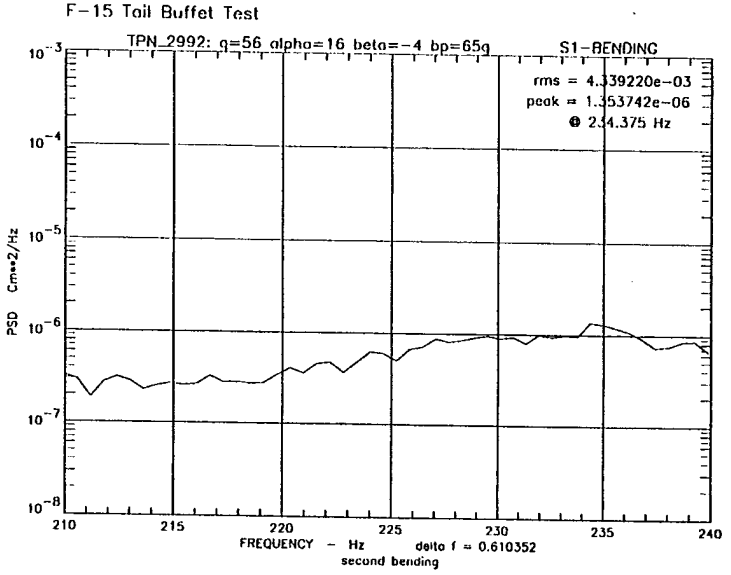
F-15 Tail Buffet Test



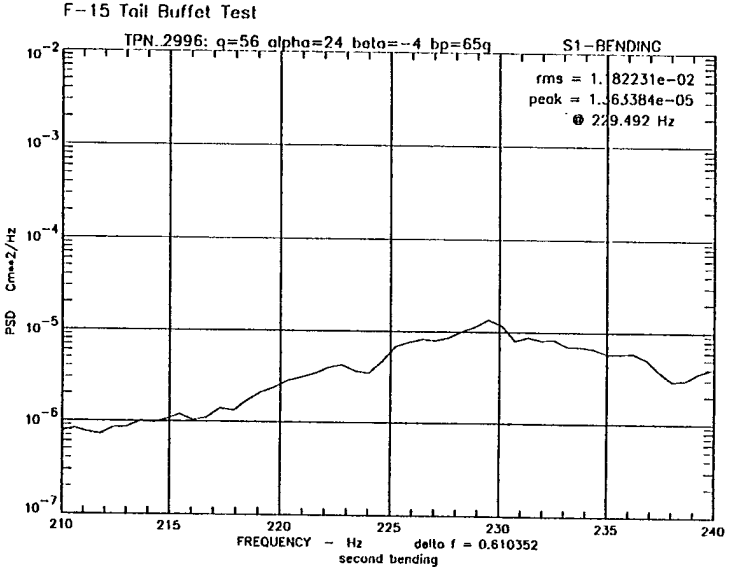
F-15 Tail Buffet Test



F-15 Tail Buffet Test

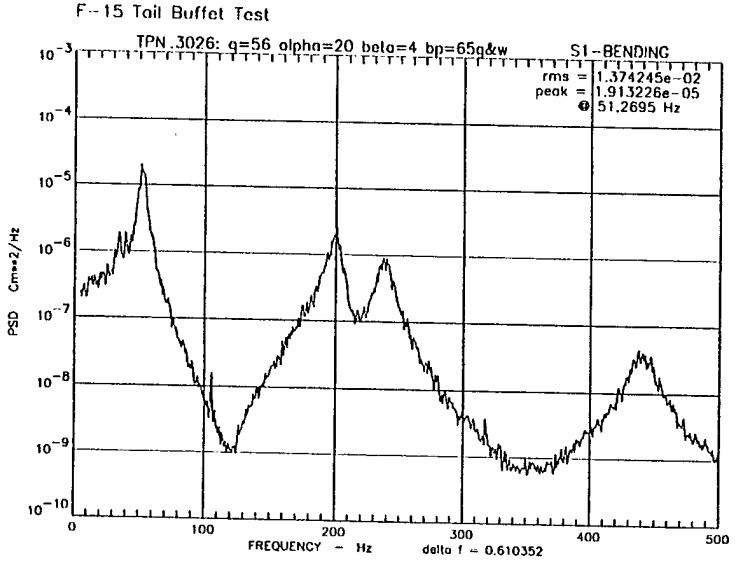


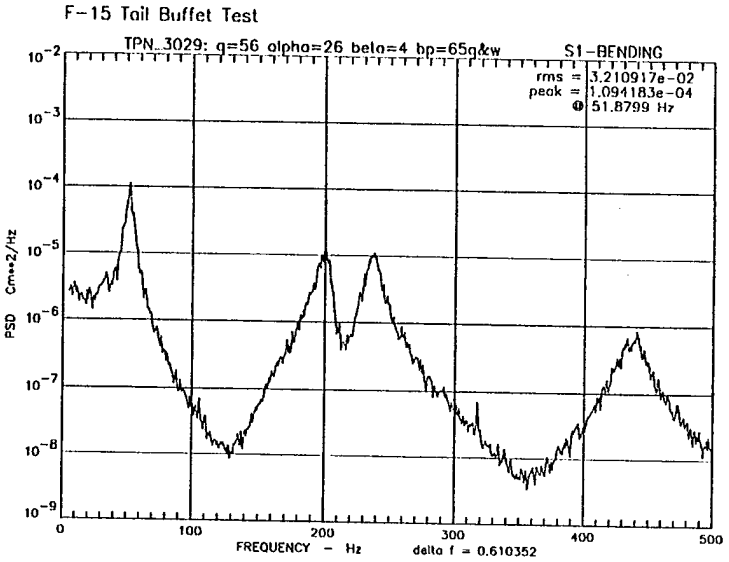
F-15 Tail Buffet Test

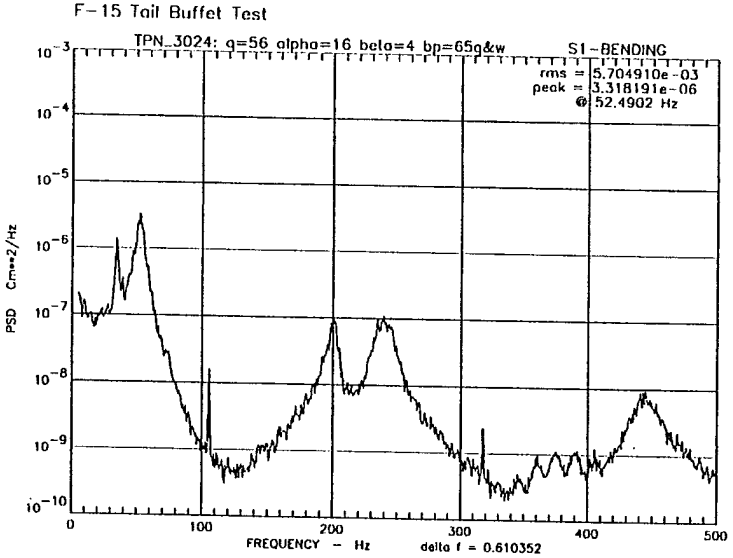


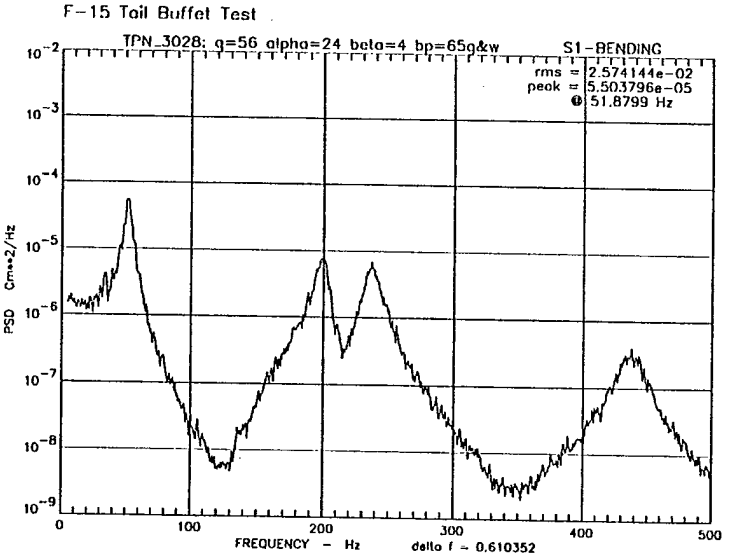
FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

Q= 56PSF
3.1.1.3 GBP = 65PSI, WBP = 65 PSI, BETA = 0, +4, -4 DEG, ALPHA=16....28 DEG

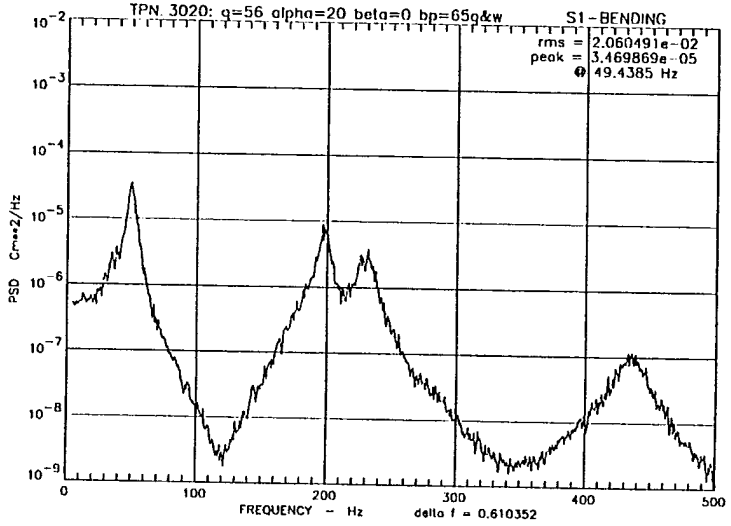

F-15 Tail Buffet Test
TPN_3026: q=56 alpha=20 beta=4 bp=65q&w
S1-BENDING
rms = 1.374245e-02
peak = 1.913226e-05
@ 51.2695 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN_3029: q=56 alpha=26 beta=4 bp=65q&w
S1-BENDING
rms = 3.210917e-02
peak = 1.094183e-04
@ 51.8799 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

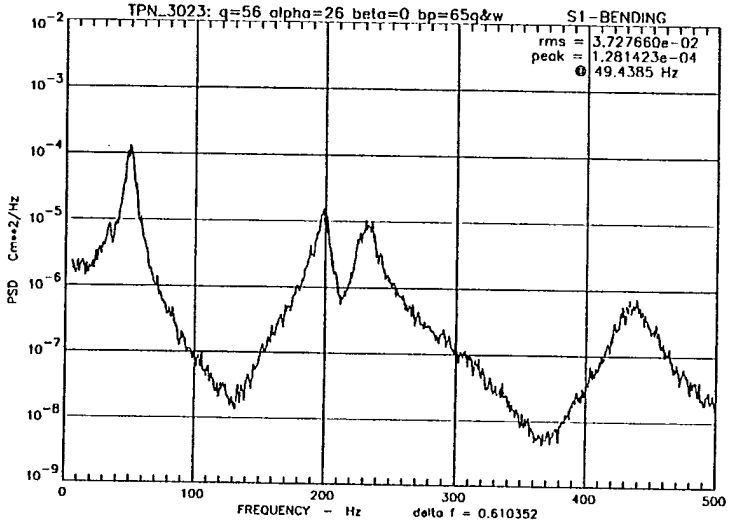

F-15 Tail Buffet Test
TPN_3024: q=56 alpha=16 beta=4 bp=65q&w
S1-BENDING
rms = 5.704910e-03
peak = 3.318191e-06
@ 52.4902 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
TPN_3028: q=56 alpha=24 beta=4 bp=65q&w
S1-BENDING
rms = 2.574144e-02
peak = 5.503796e-05
@ 51.8799 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

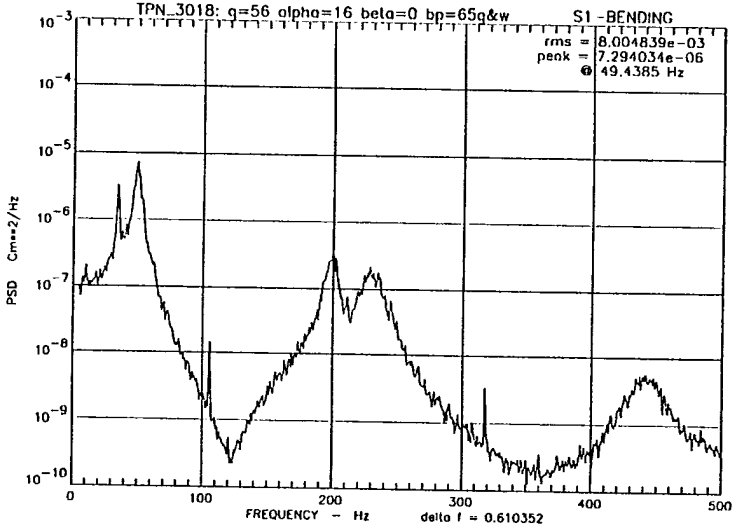
F-15 Tail Buffet Test



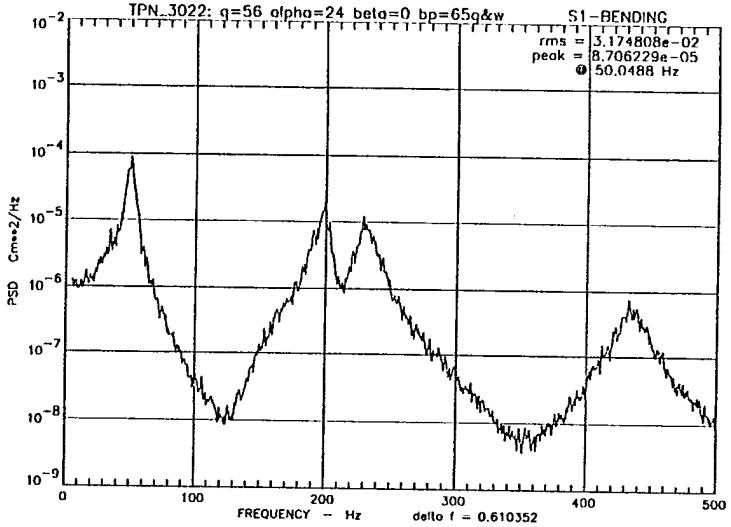
F-15 Tail Buffet Test



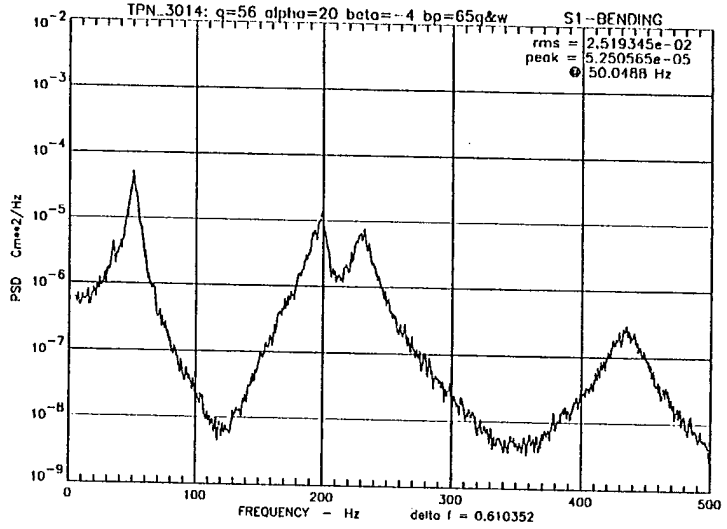
F-15 Tail Buffet Test



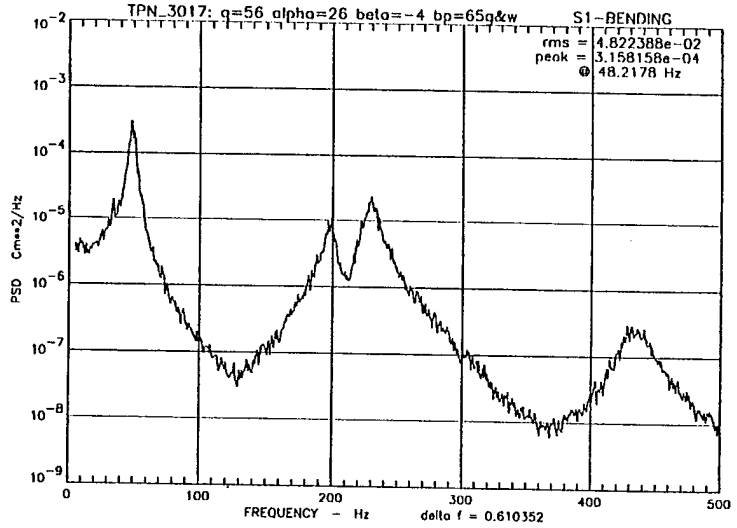
F-15 Tail Buffet Test



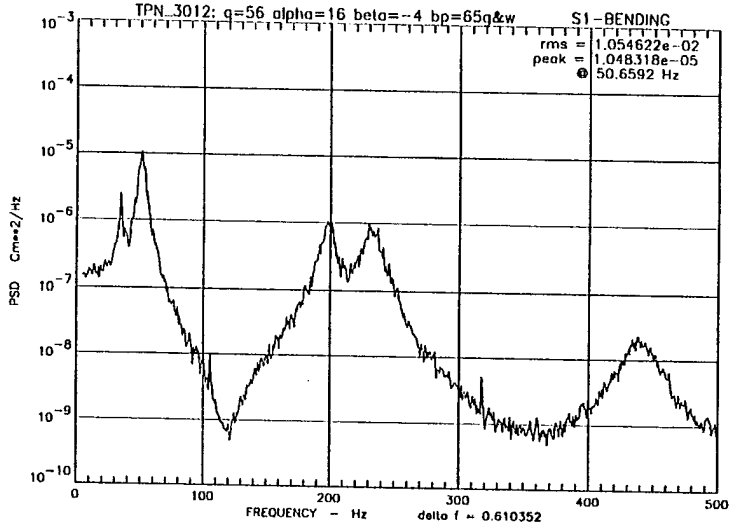
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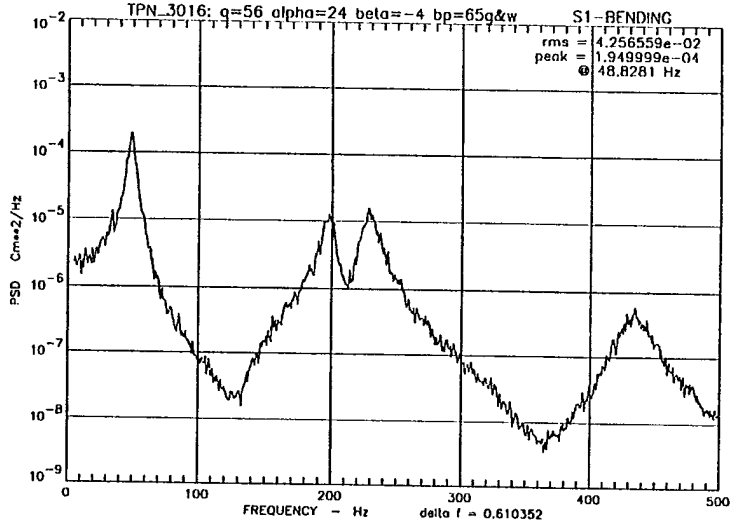
F-15 Tail Buffet Test



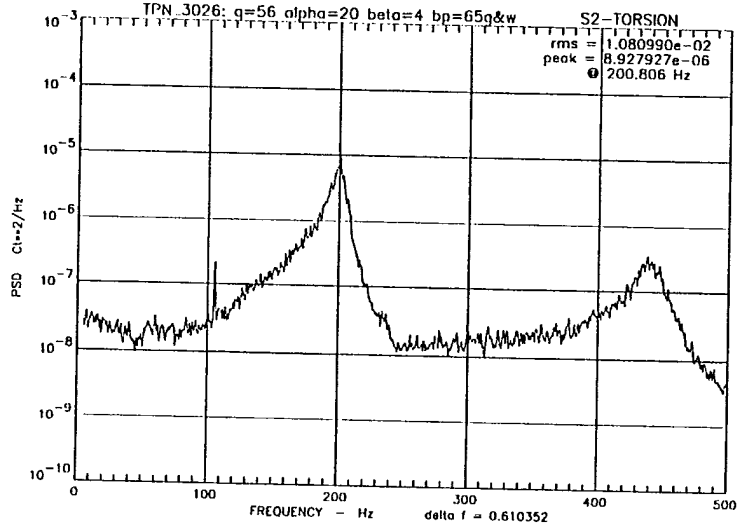
F-15 Tail Buffet Test



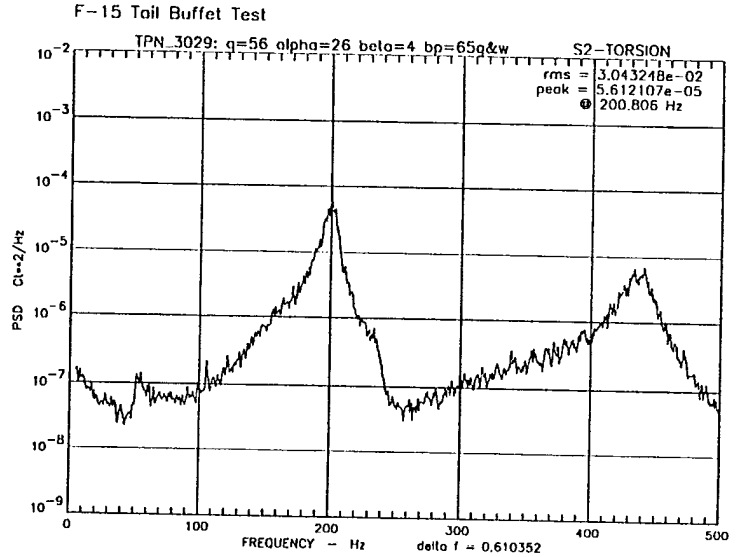
F-15 Tail Buffet Test



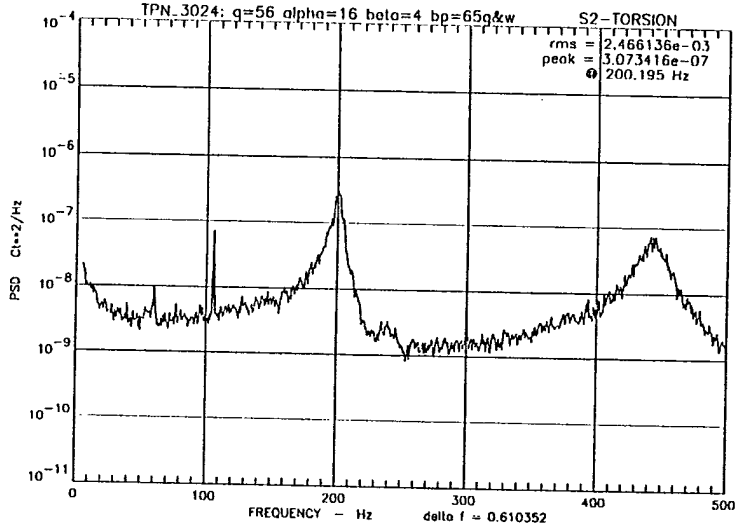
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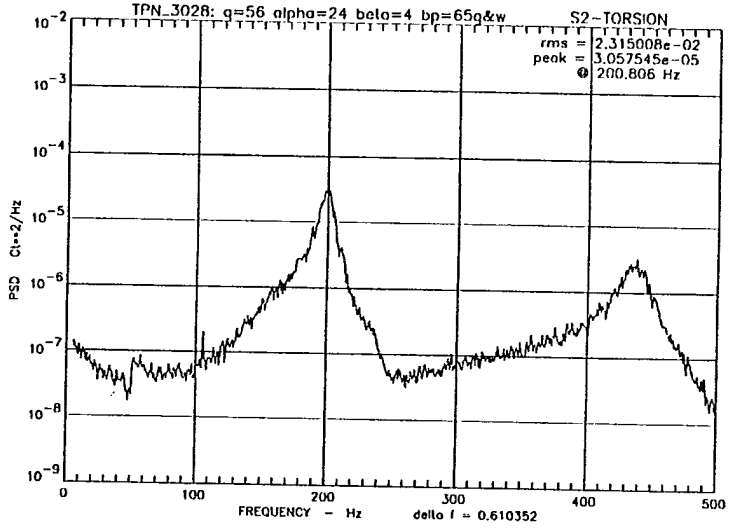
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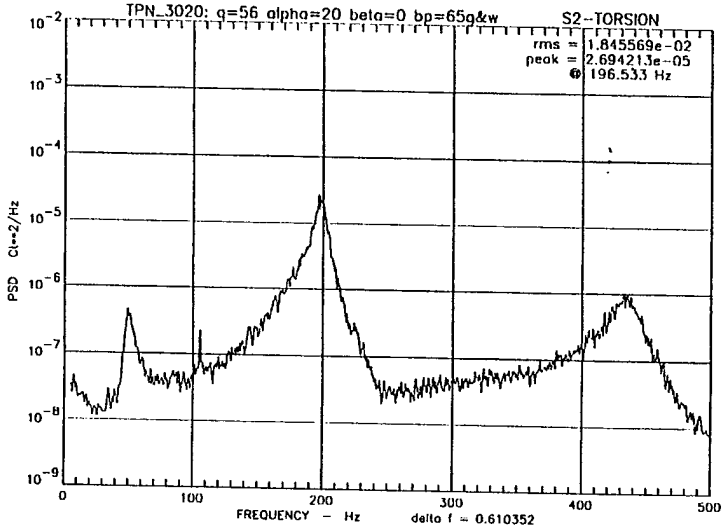
F-15 Tail Buffet Test



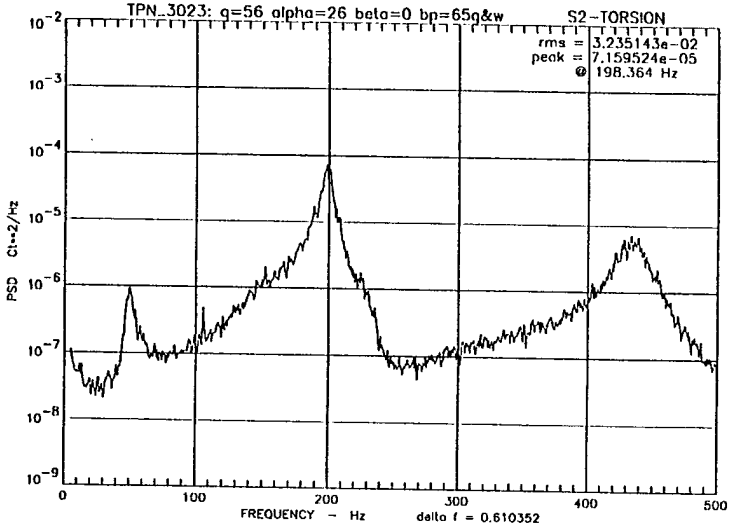
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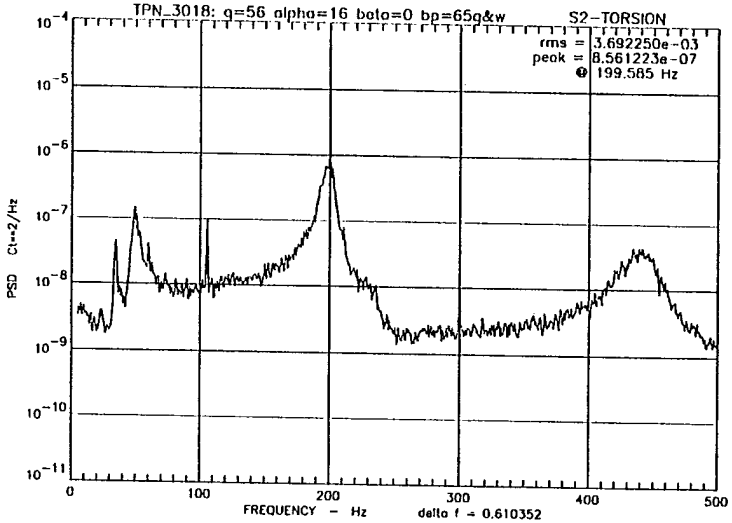
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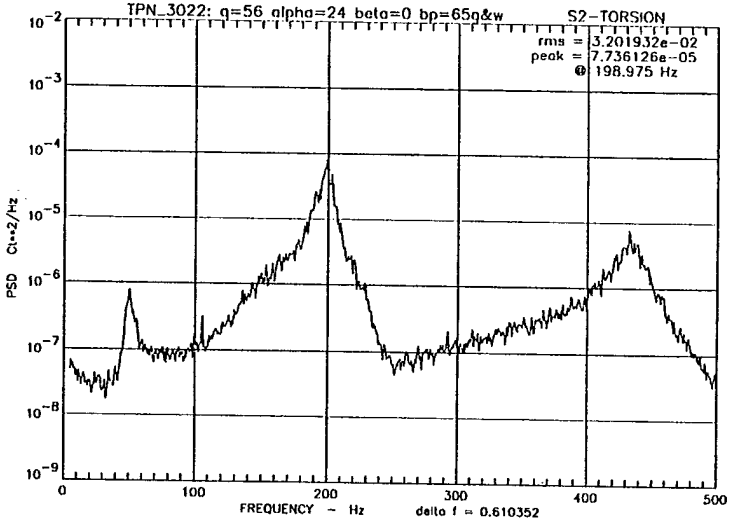
F-15 Tail Buffet Test



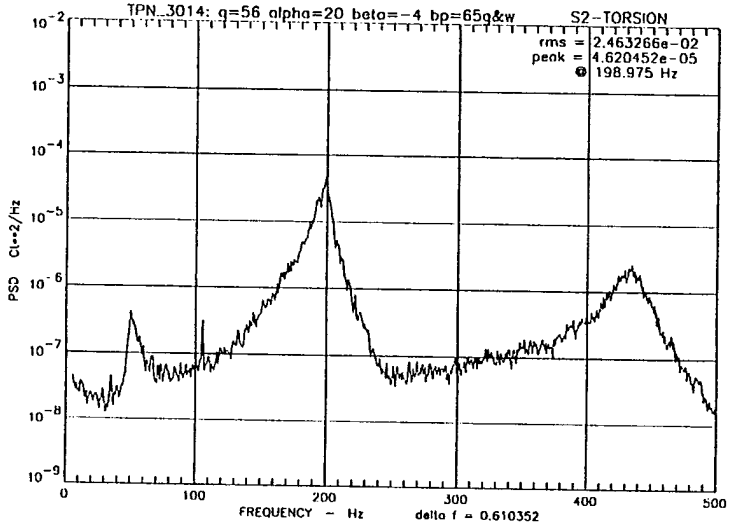
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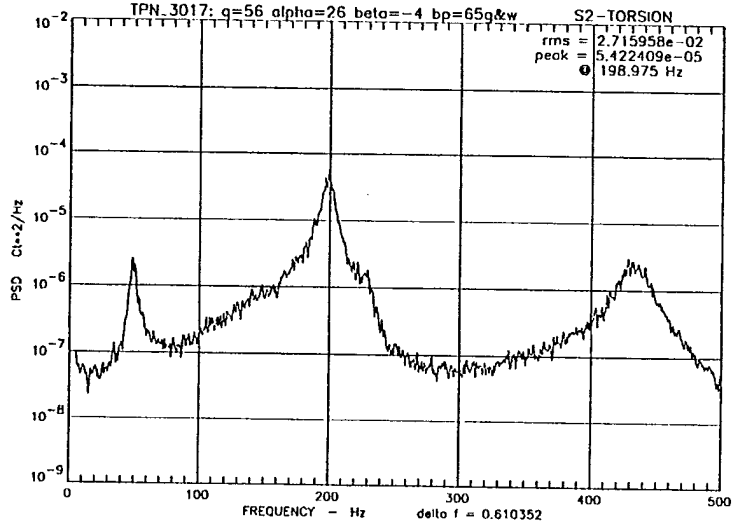
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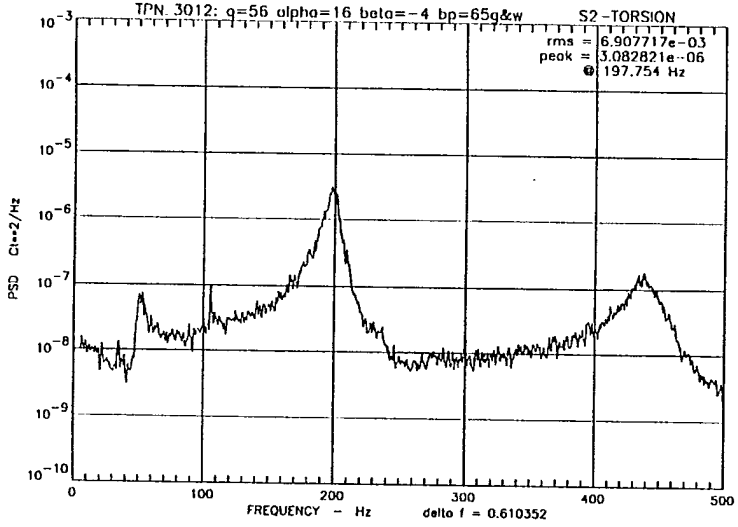
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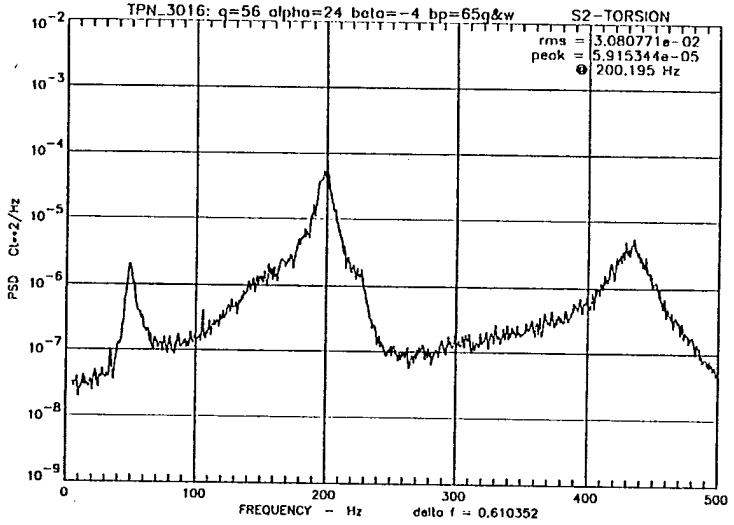
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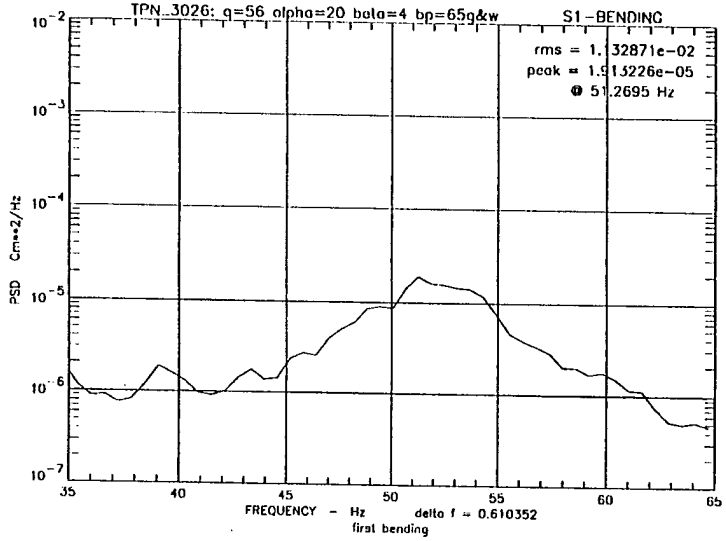
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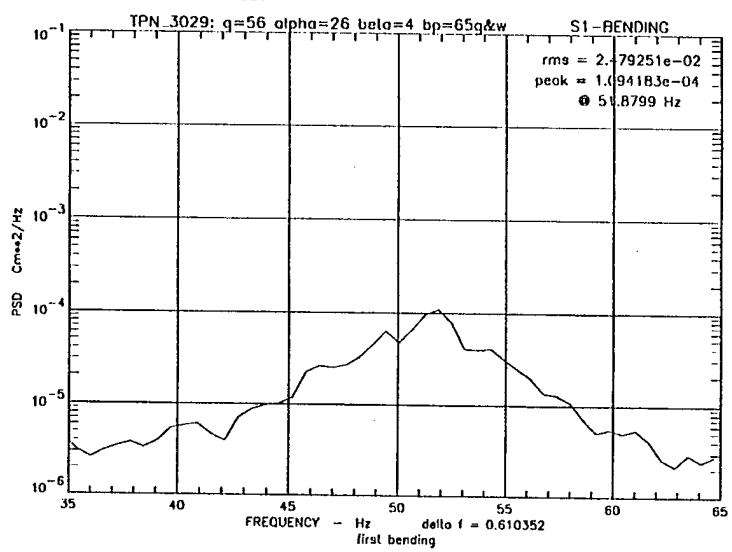
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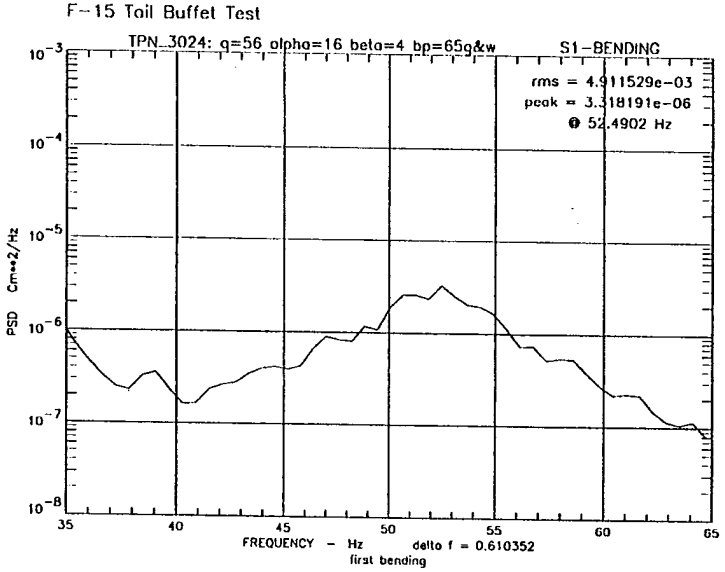
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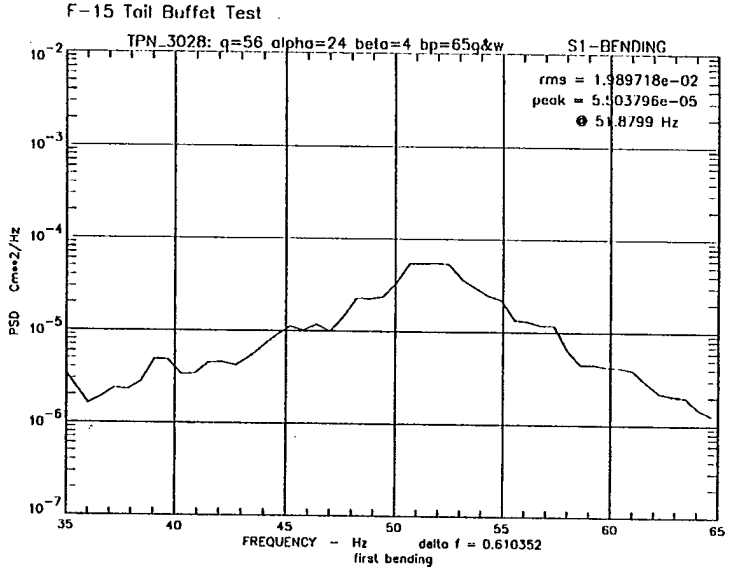
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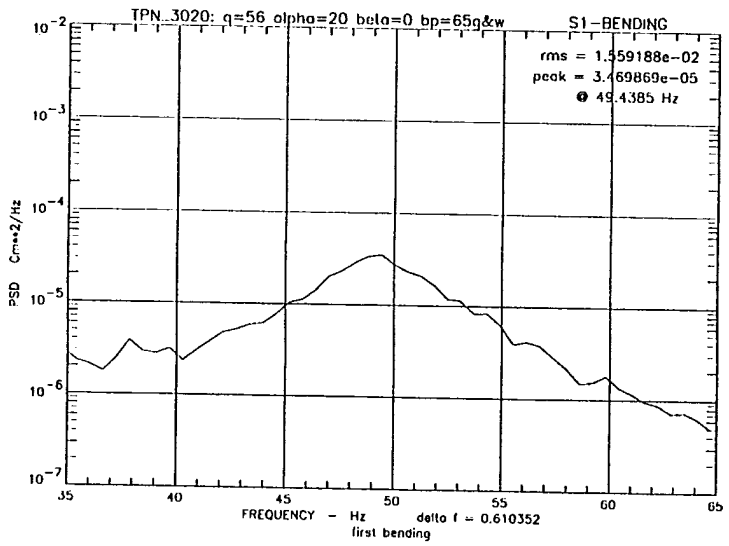
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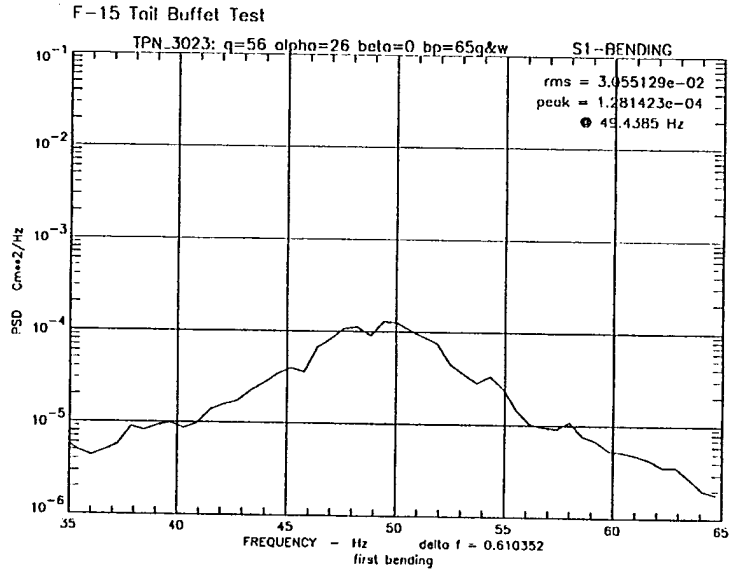
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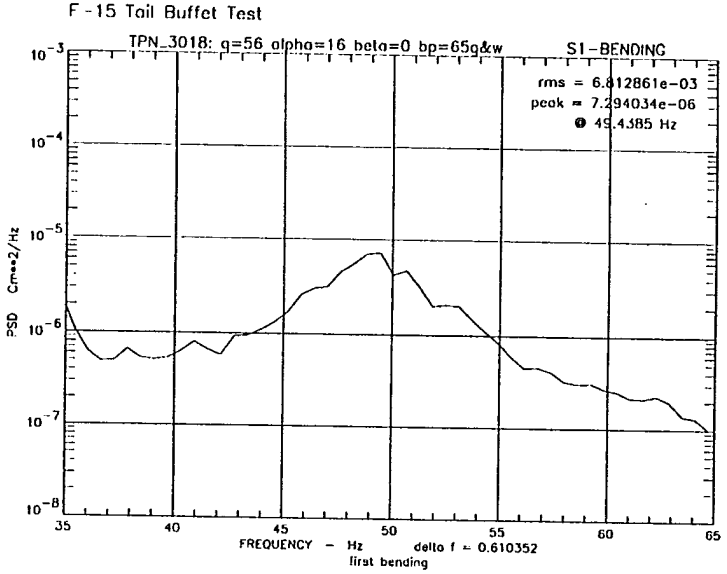
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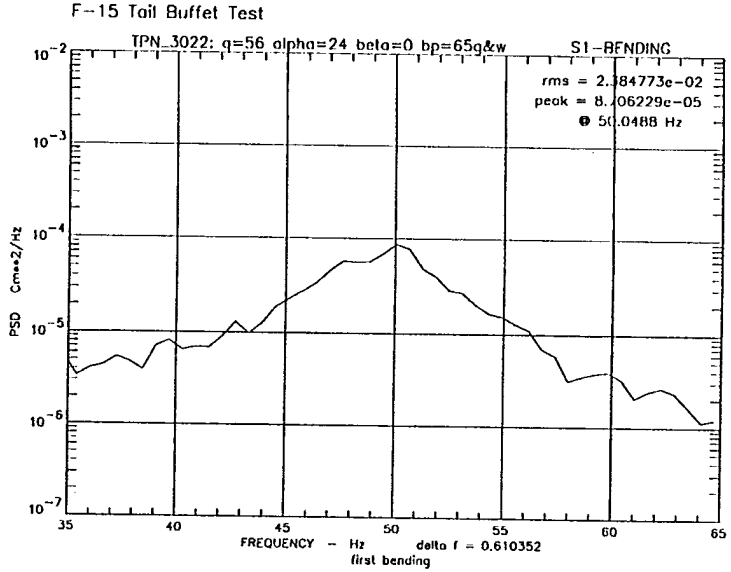
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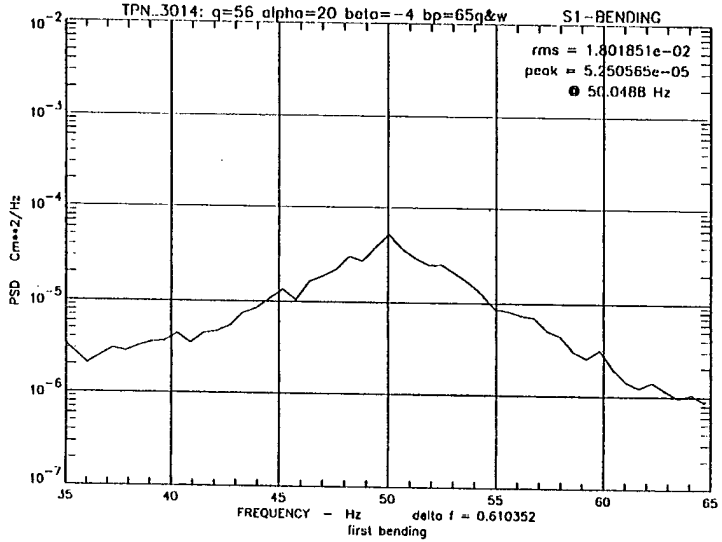
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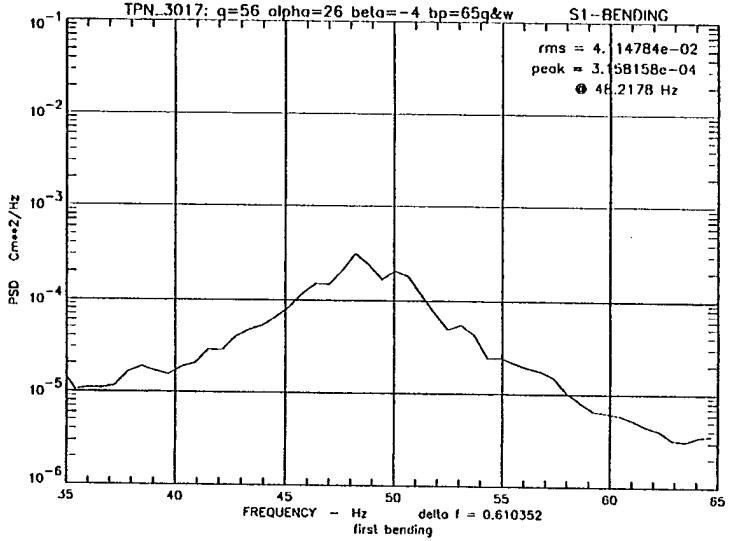
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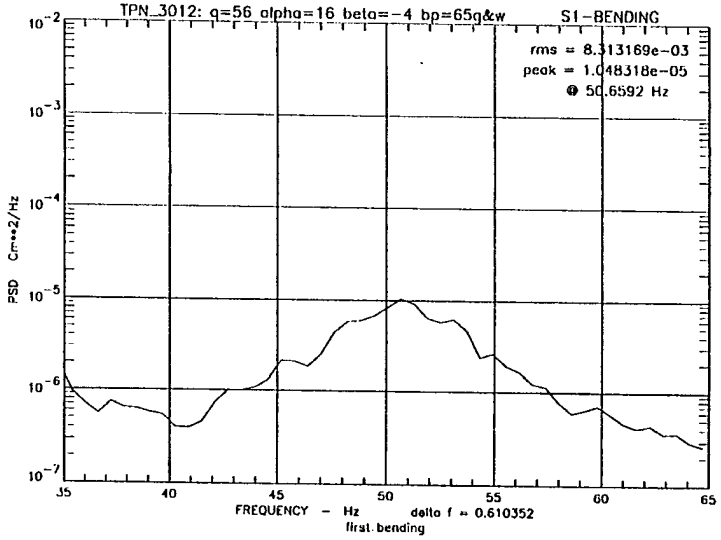
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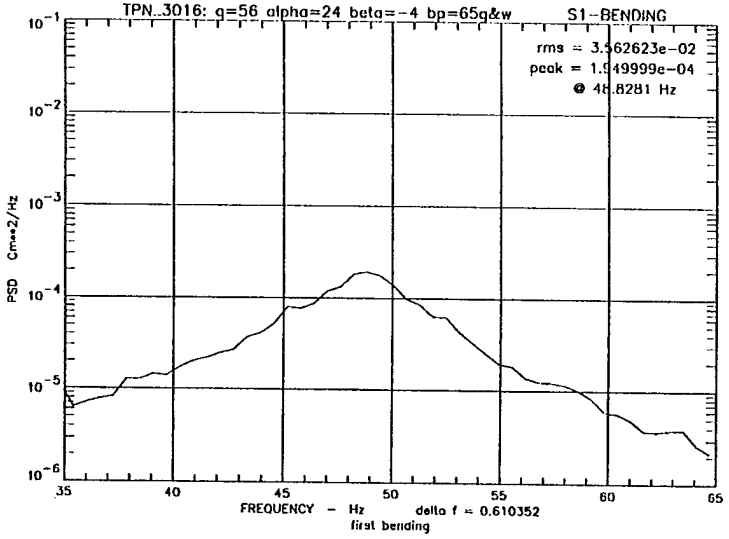
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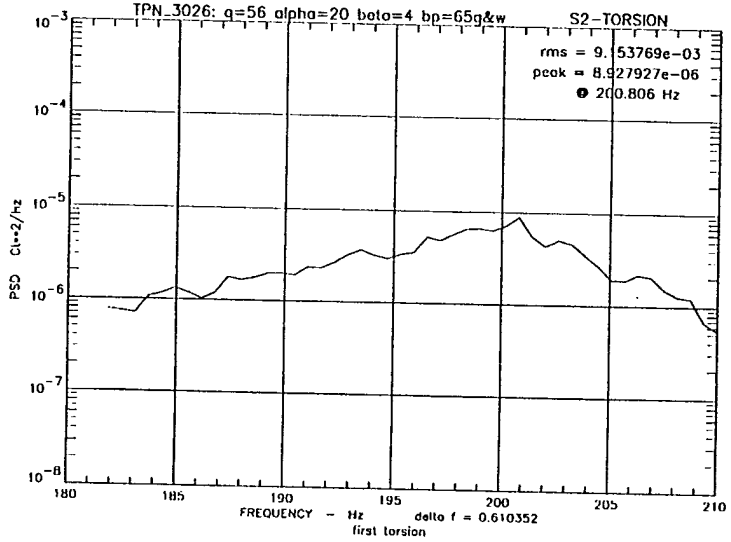
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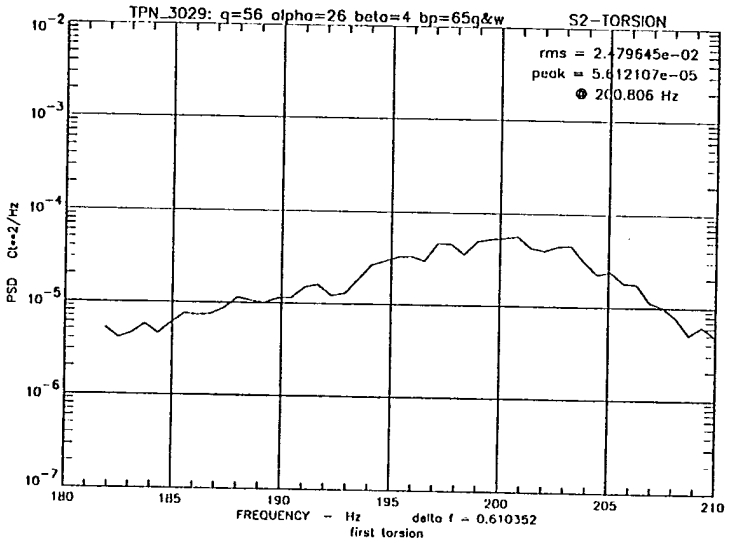
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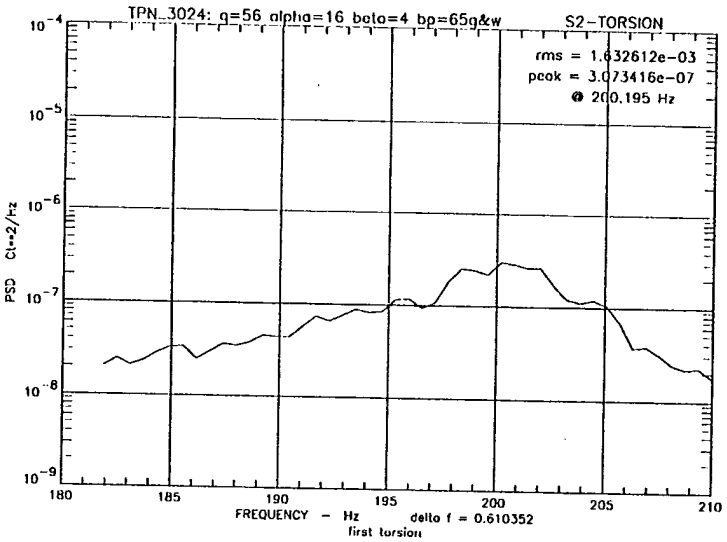
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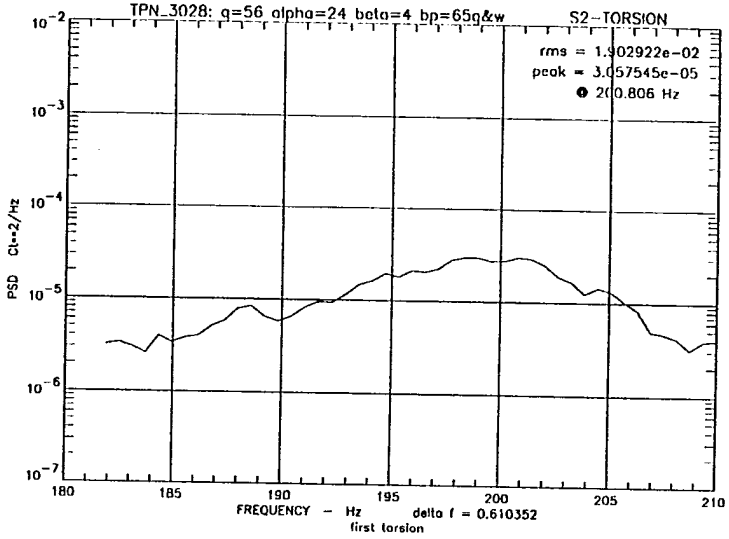
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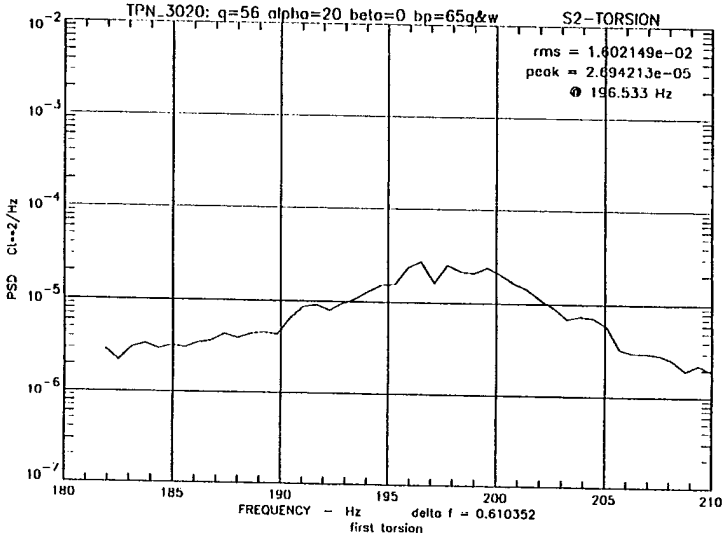
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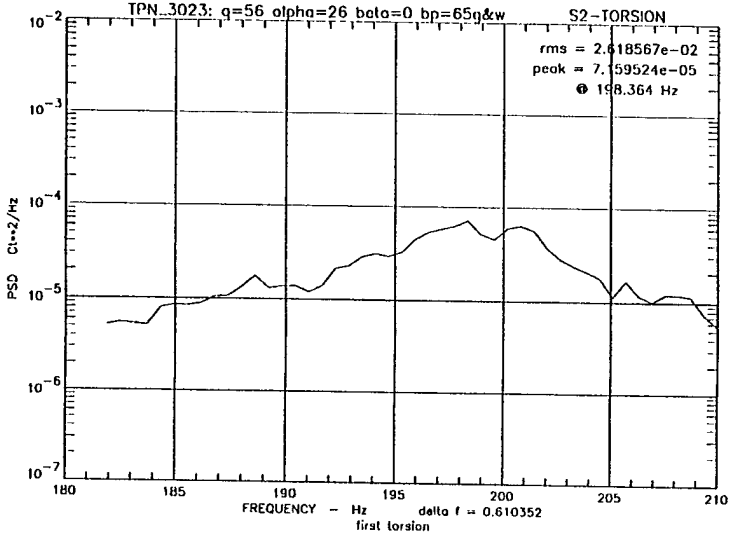
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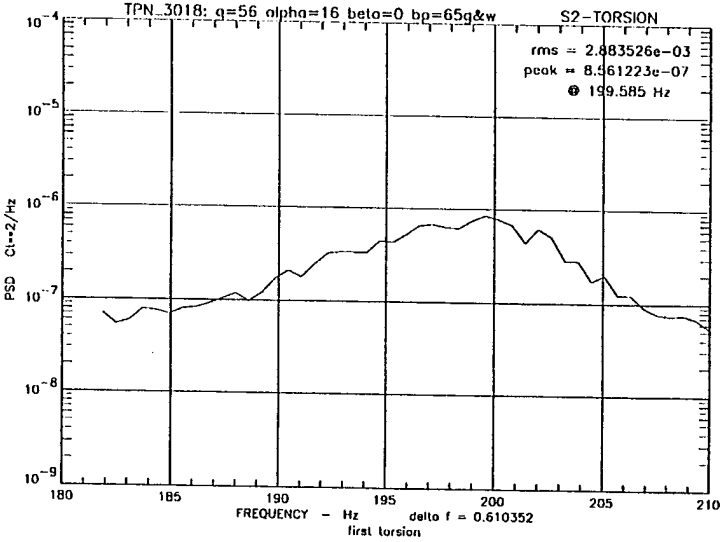
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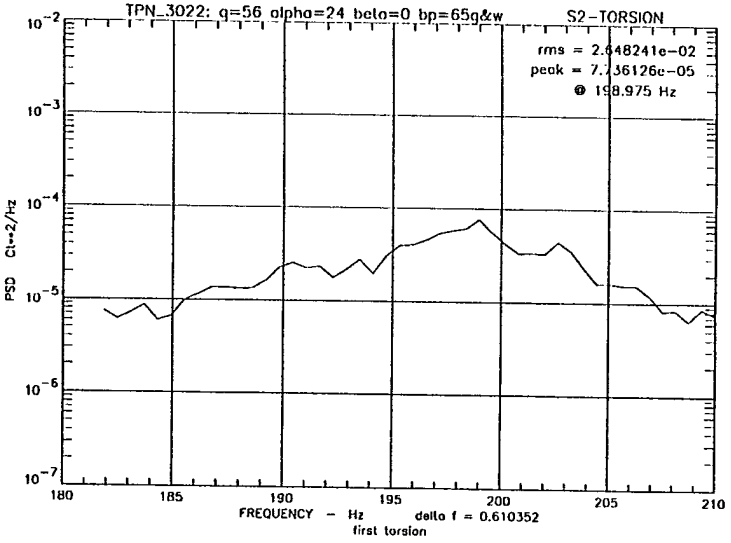
F-15 Tail Buffet Test



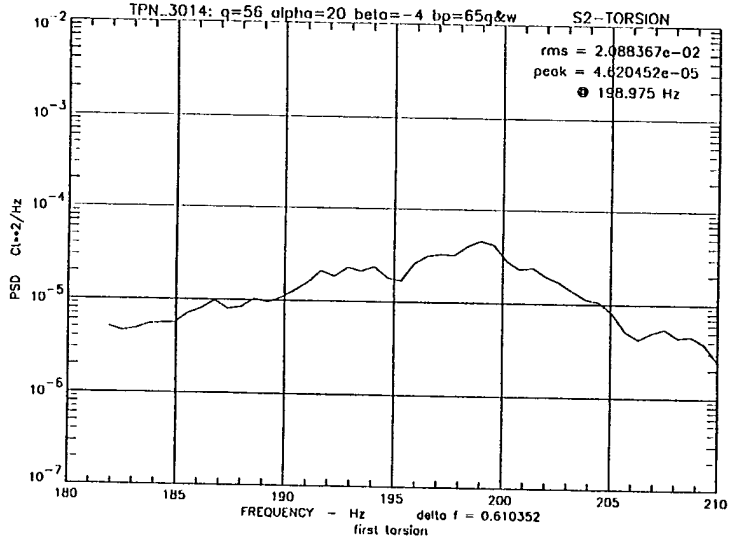
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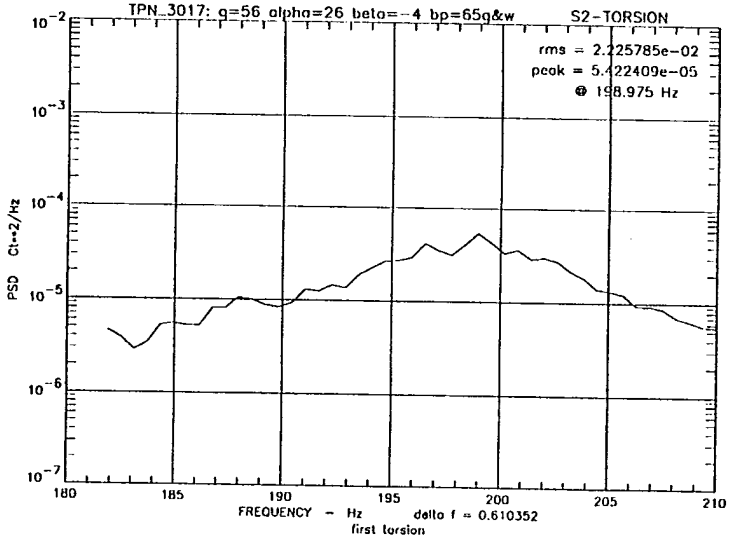
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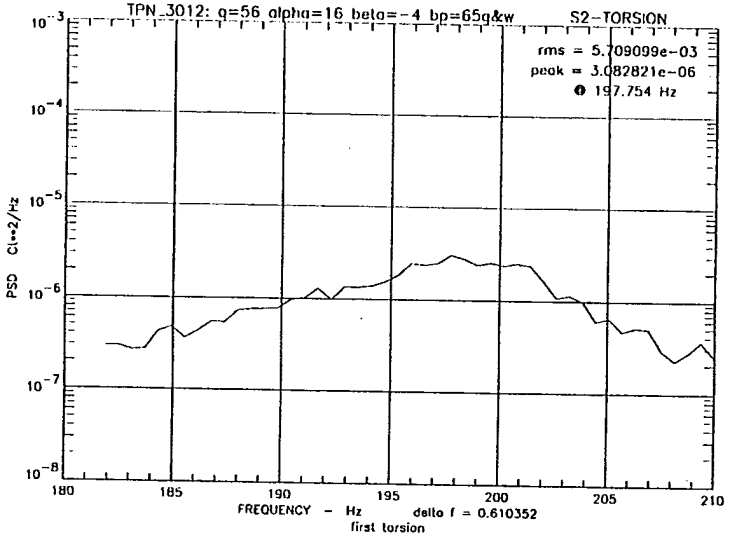
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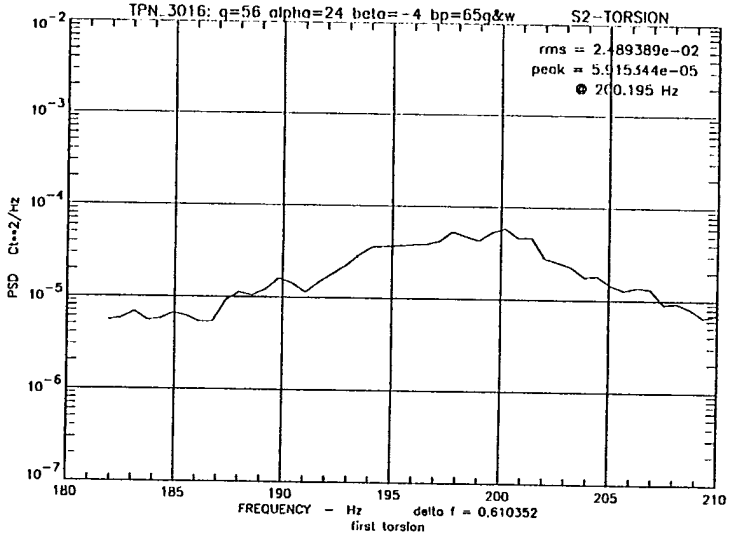
F-15 Tail Buffet Test



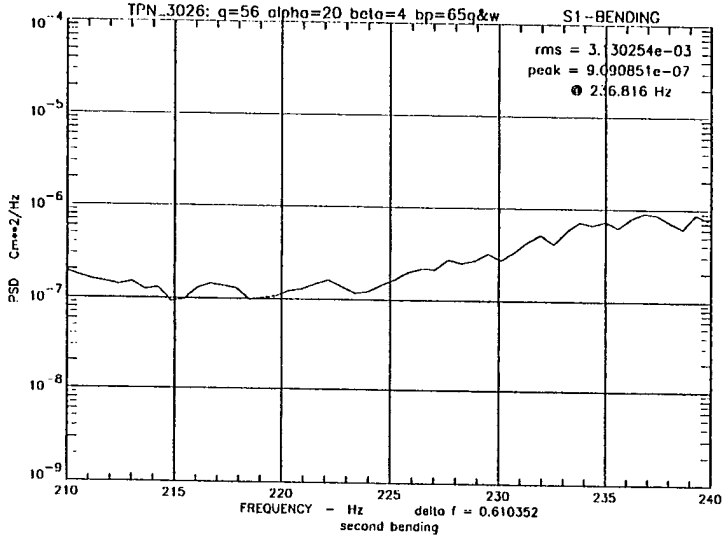
F-15 Tail Buffet Test



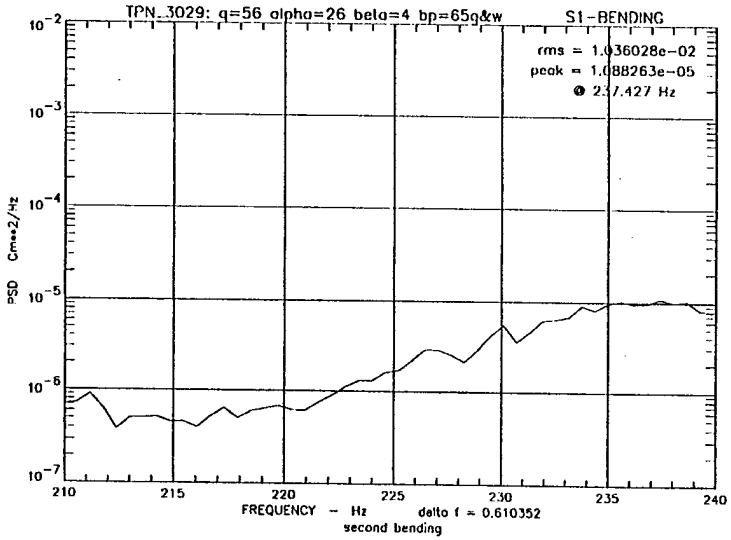
F-15 Tail Buffet Test



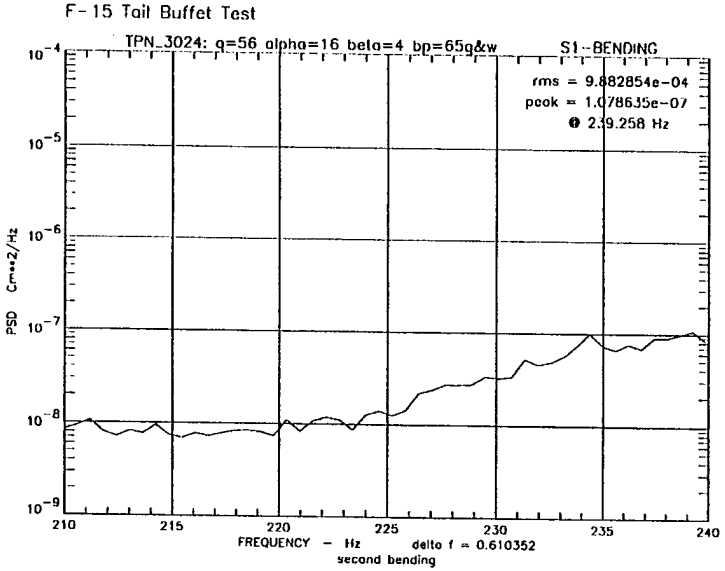
F-15 Tail Buffet Test



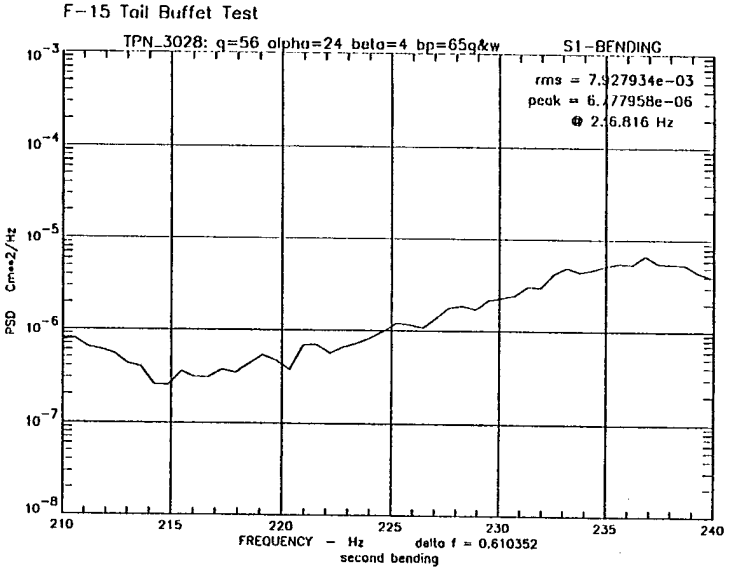
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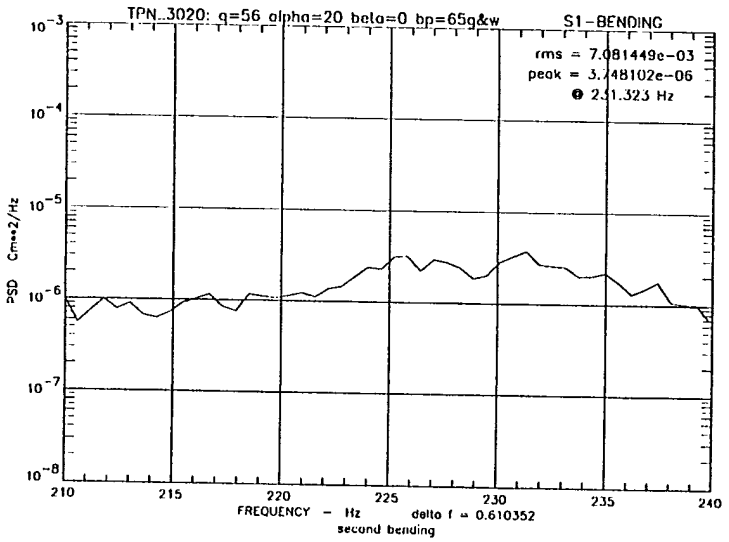
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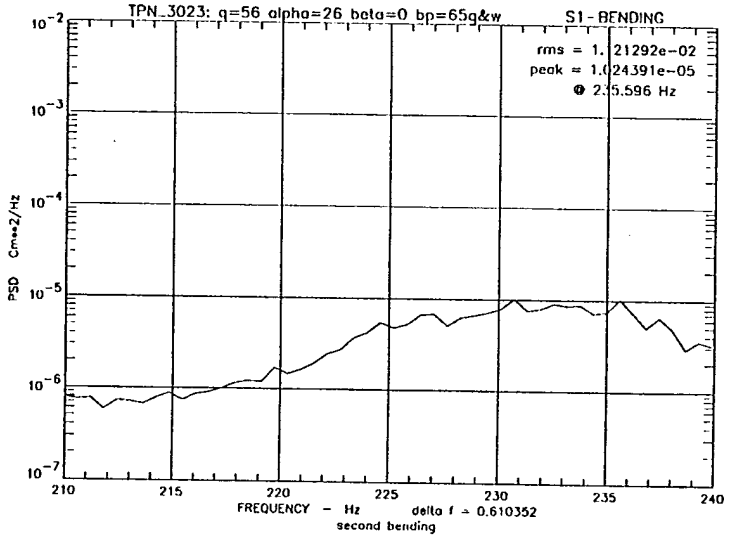
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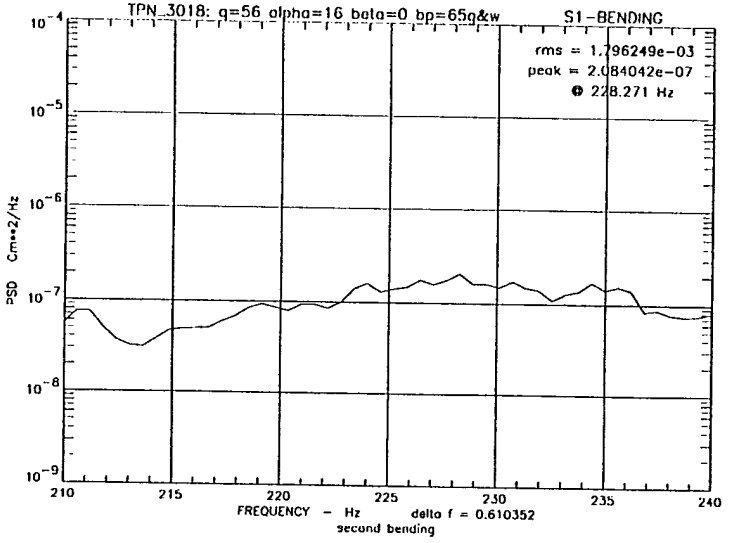
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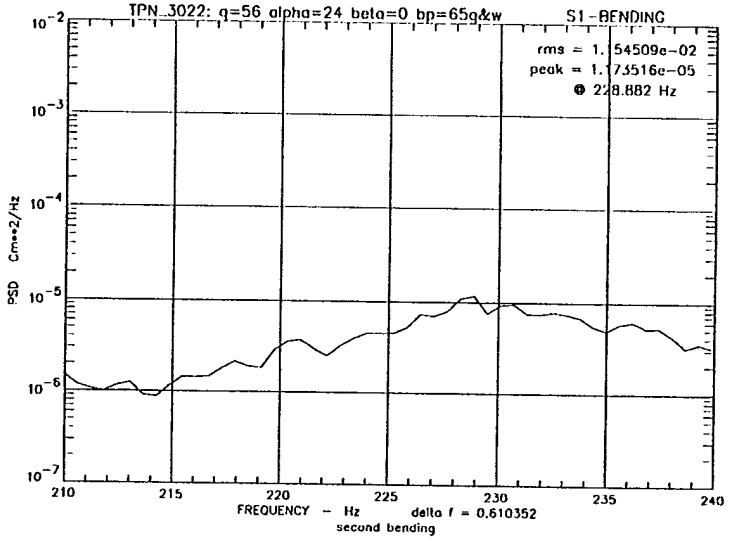
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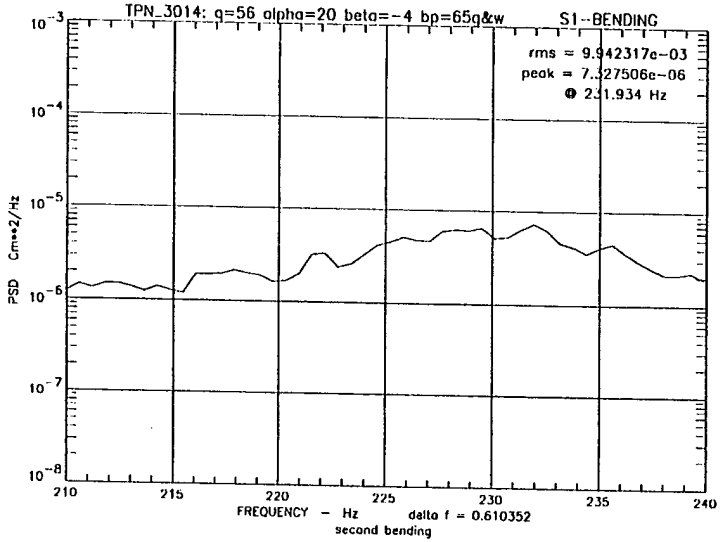
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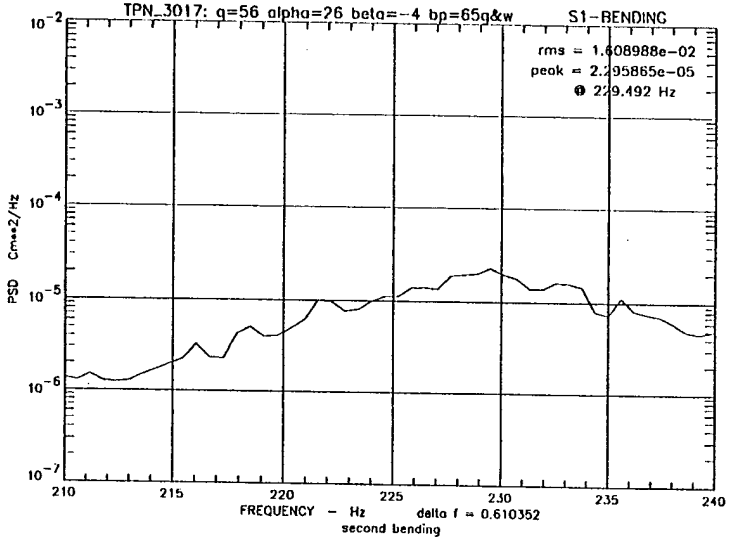
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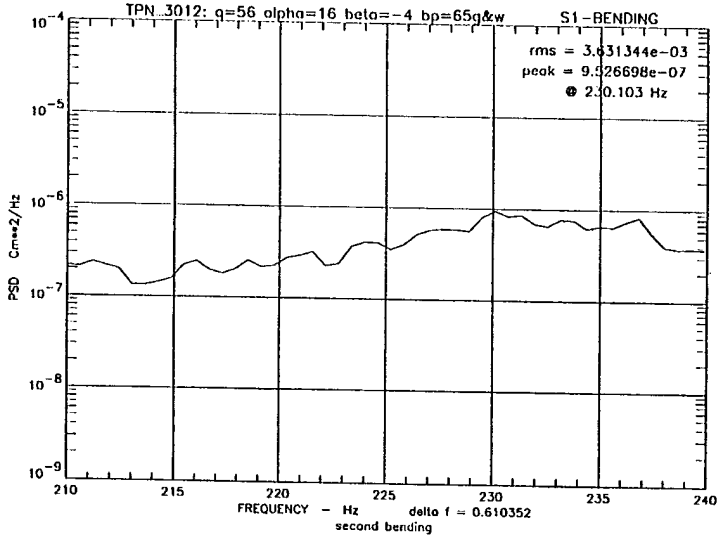
F-15 Tail Buffet Test



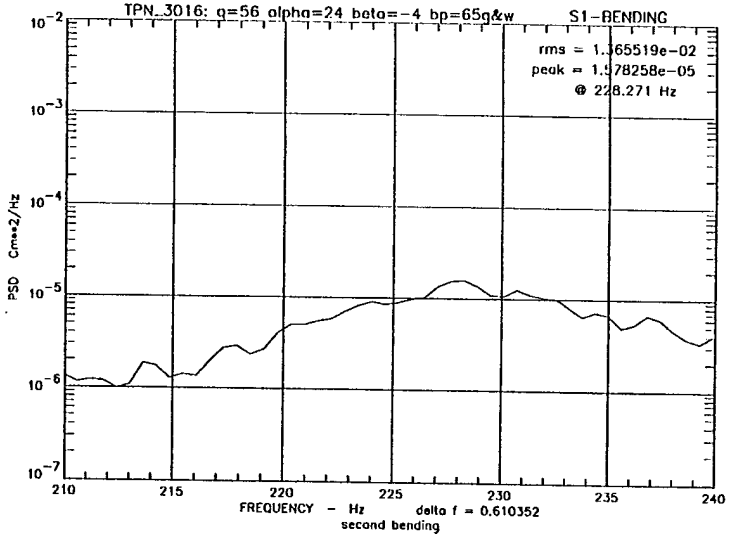
F-15 Tail Buffet Test



F-15 Tail Buffet Test



F-15 Tail Buffet Test

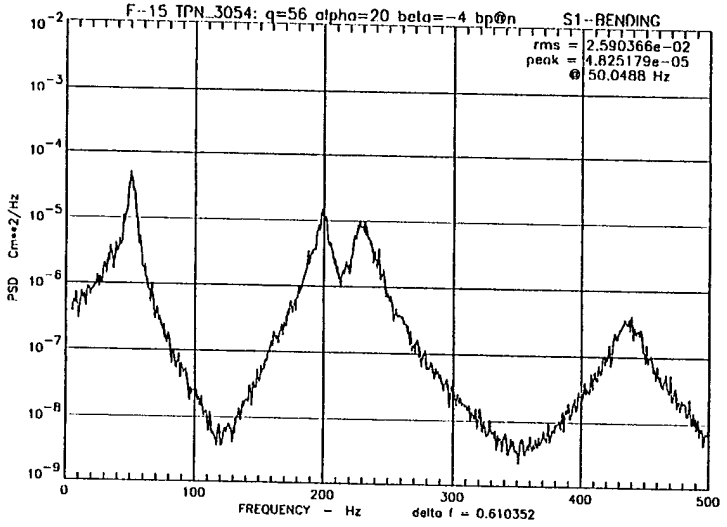


#23

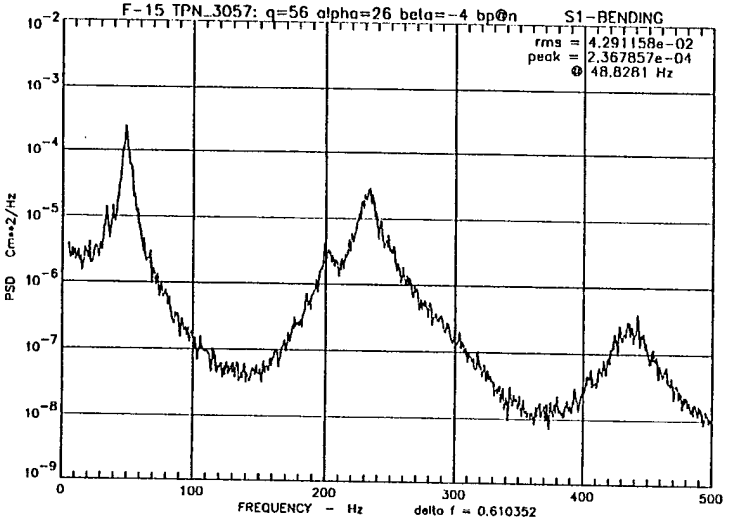
FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

Q= 56PSF
3.1.1.4 NBP = 87 PSI, BETA = 0, +4, -4 DEG, ALPHA=16....26 DEG

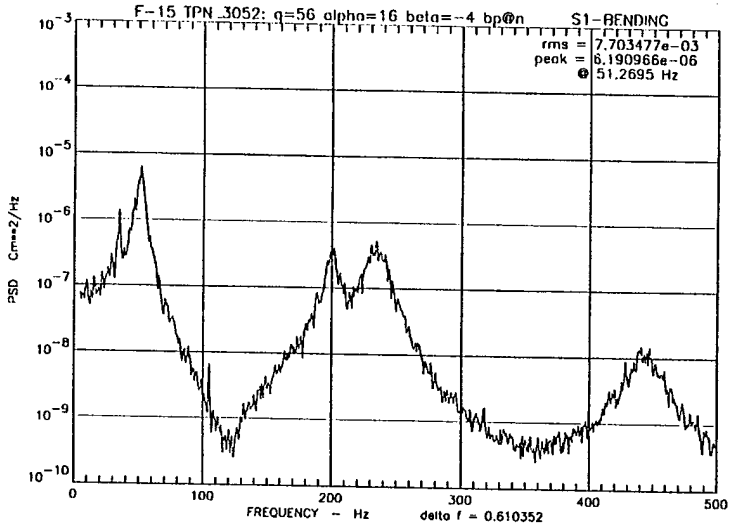
F-15 Tail Buffet Test



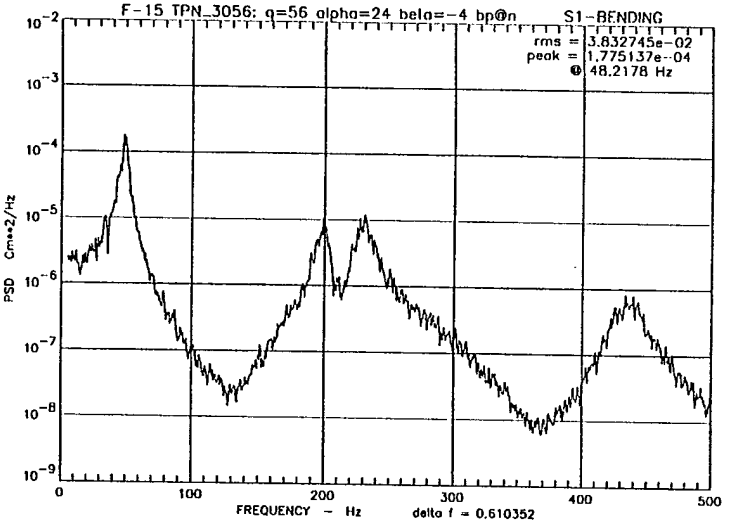
F-15 Tail Buffet Test



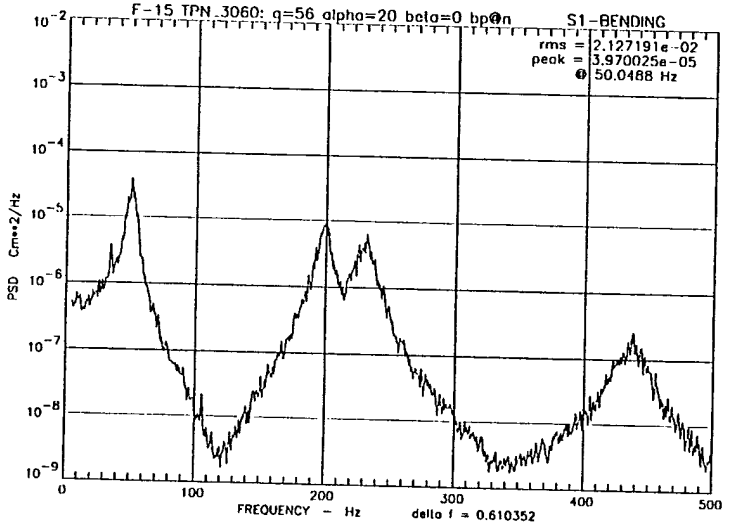
F-15 Tail Buffet Test



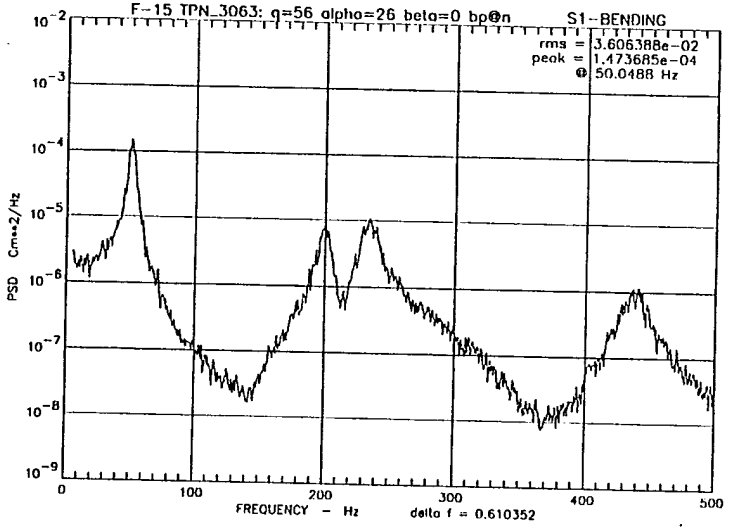
F-15 Tail Buffet Test



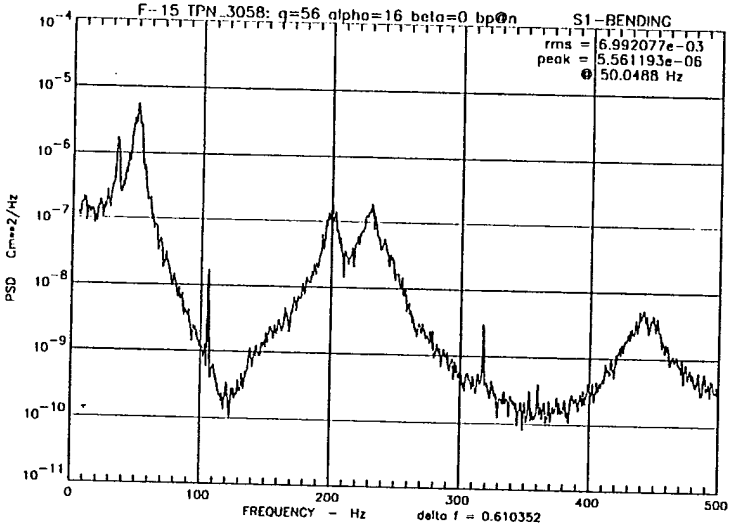
F-15 Tail Buffet Test



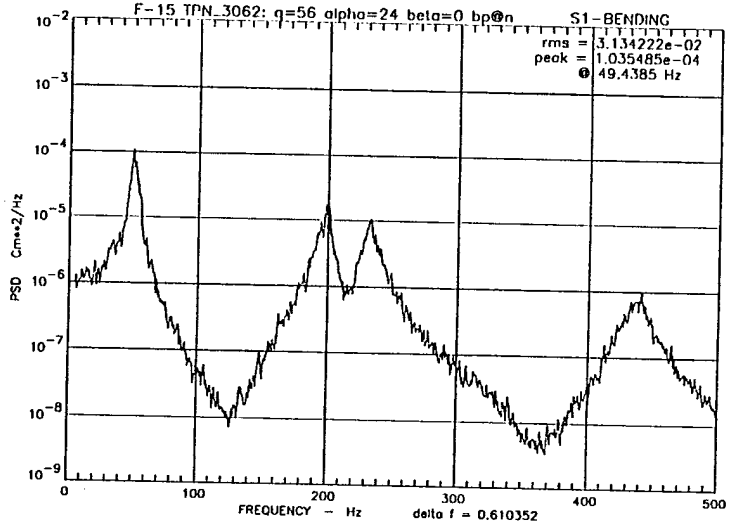
F-15 Tail Buffet Test



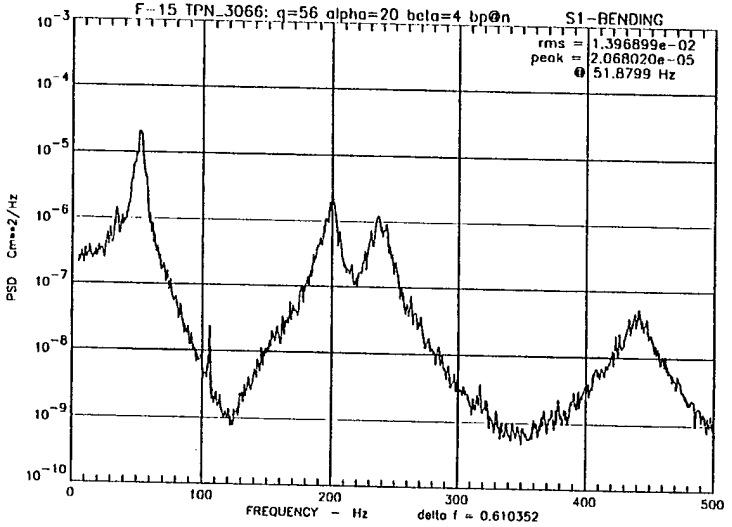
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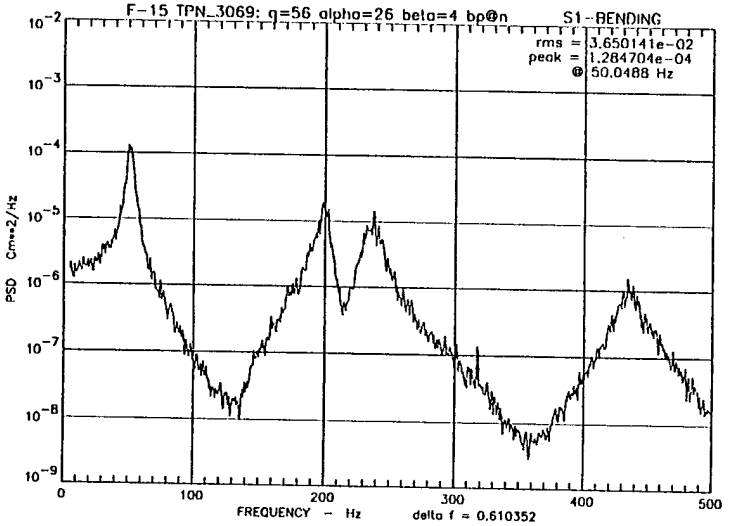
F-15 Tail Buffet Test



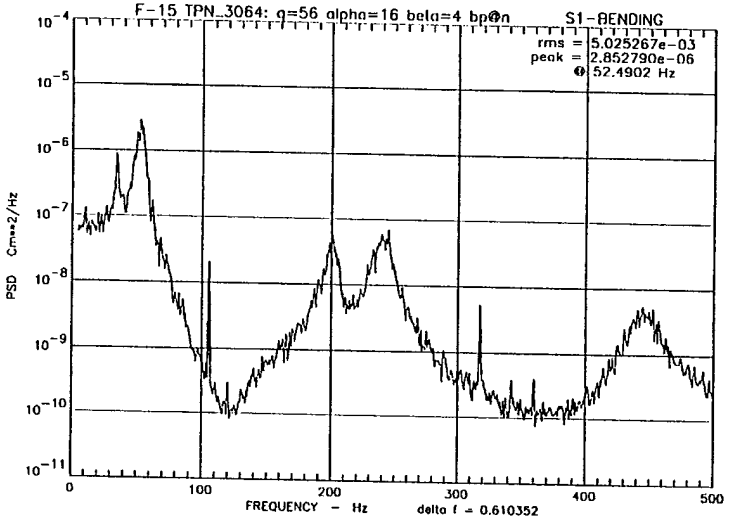
F-15 Tail Buffet Test



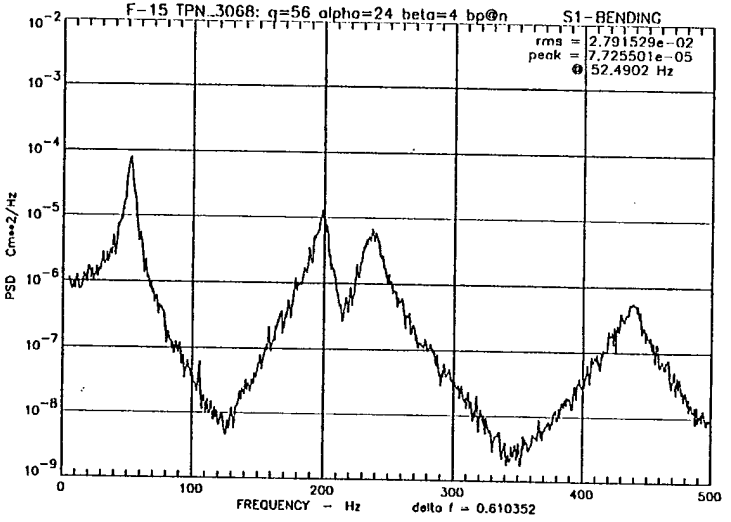
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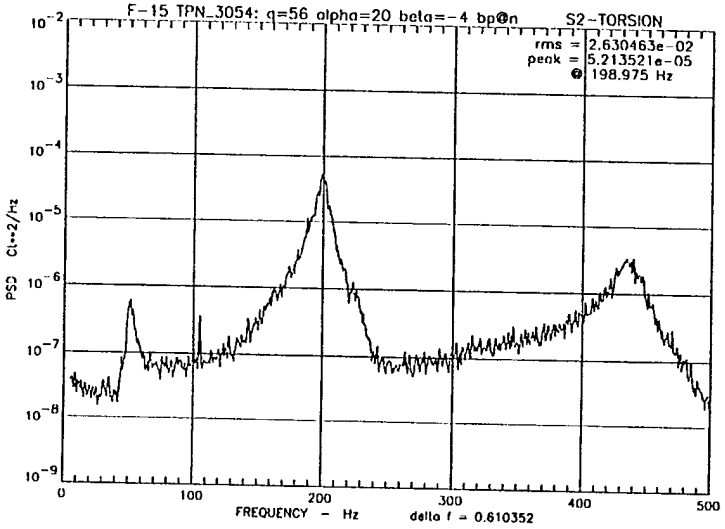
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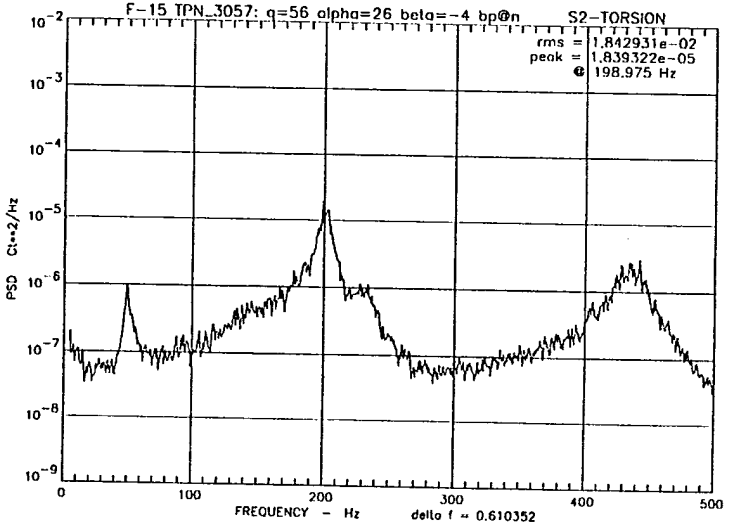
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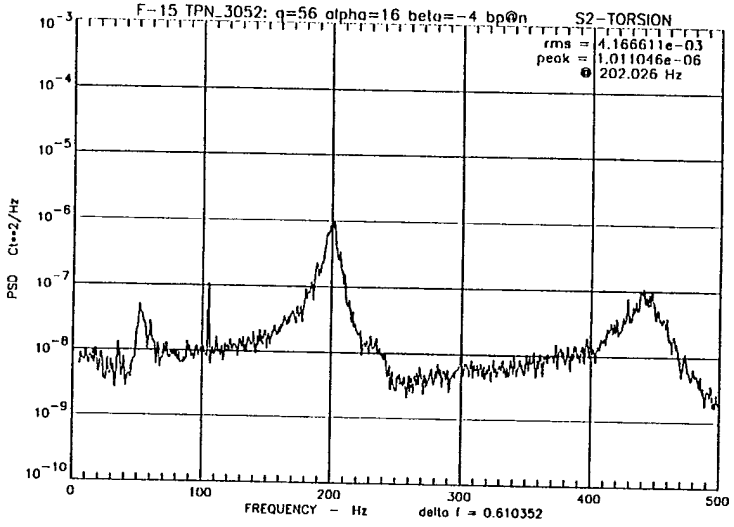
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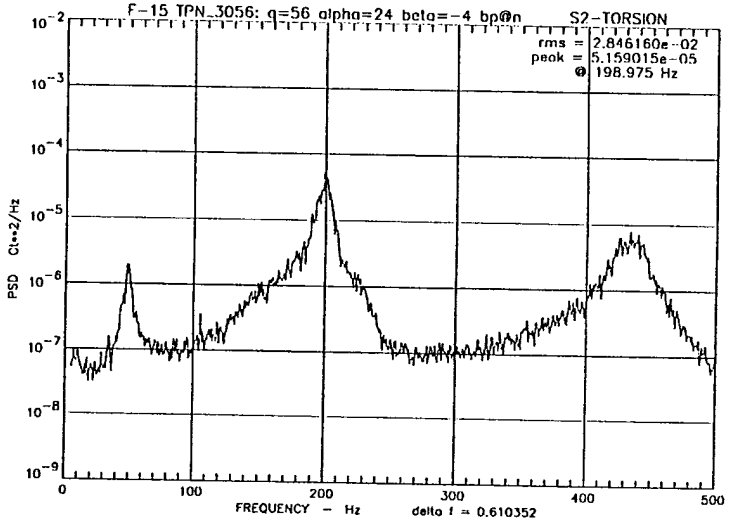
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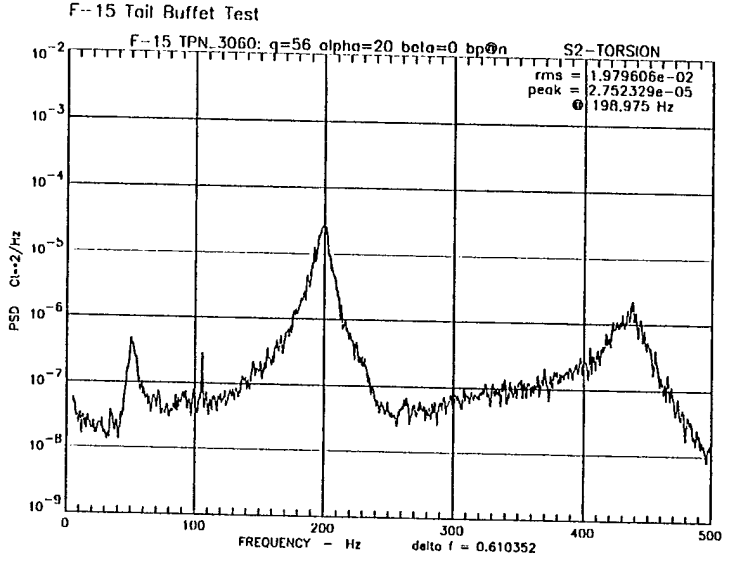


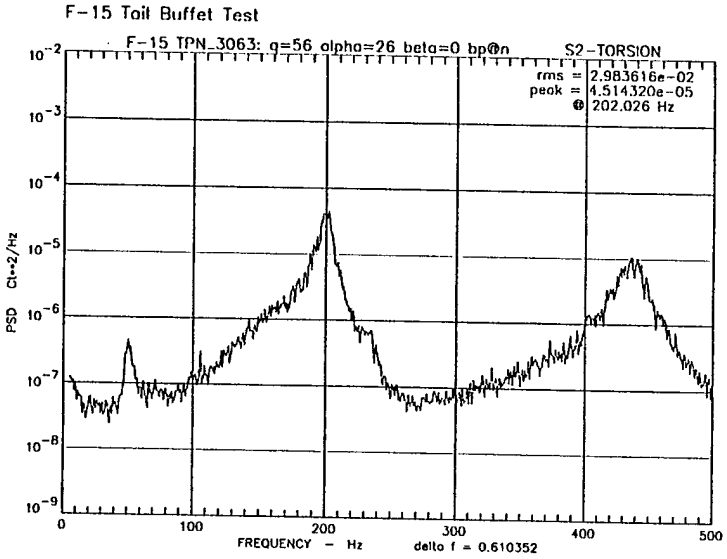
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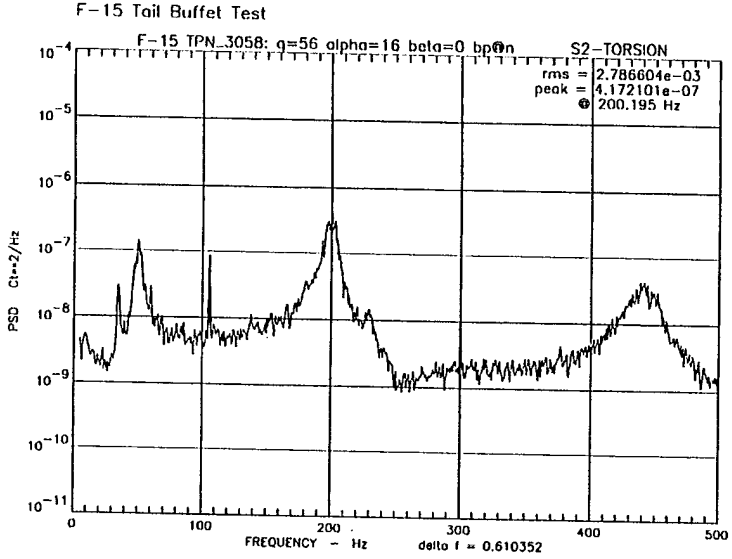


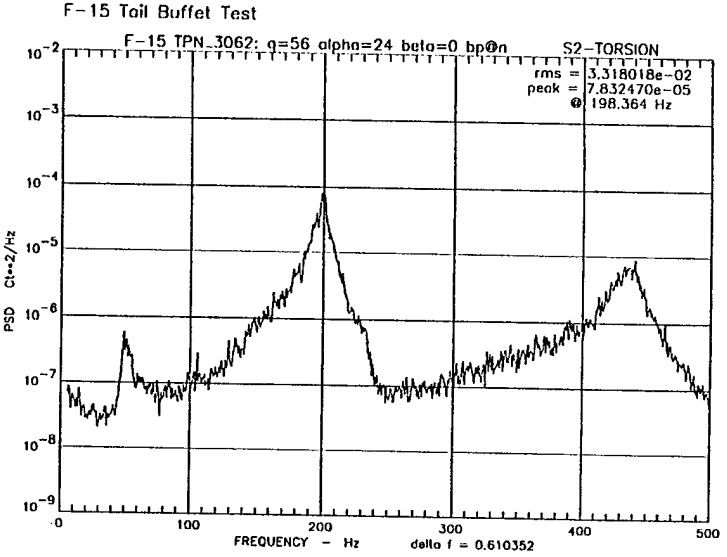
F-15 Tail Buffet Test



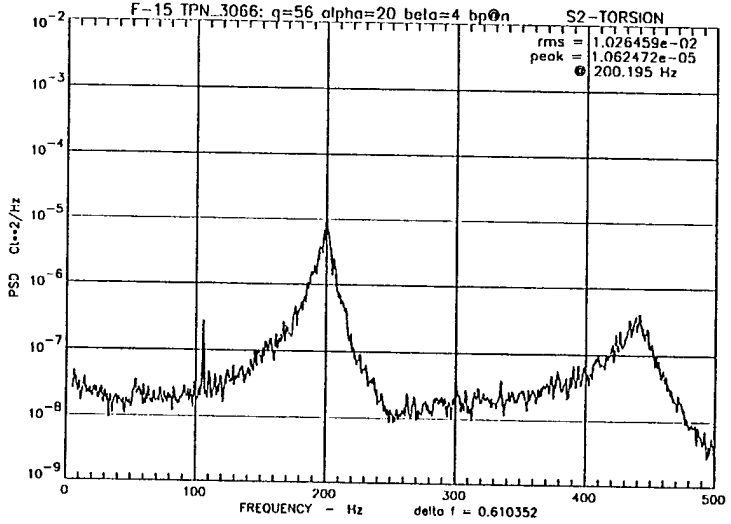

F-15 Tail Buffet Test
F-15 TPN_3060: q=56 alpha=20 beta=0 bp@n
S2-TORSION
rms = 1.979606e-02
peak = 2.752329e-05
@ 198.975 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3063: q=56 alpha=26 beta=0 bp@n
S2-TORSION
rms = 2.983616e-02
peak = 4.514320e-05
@ 202.026 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

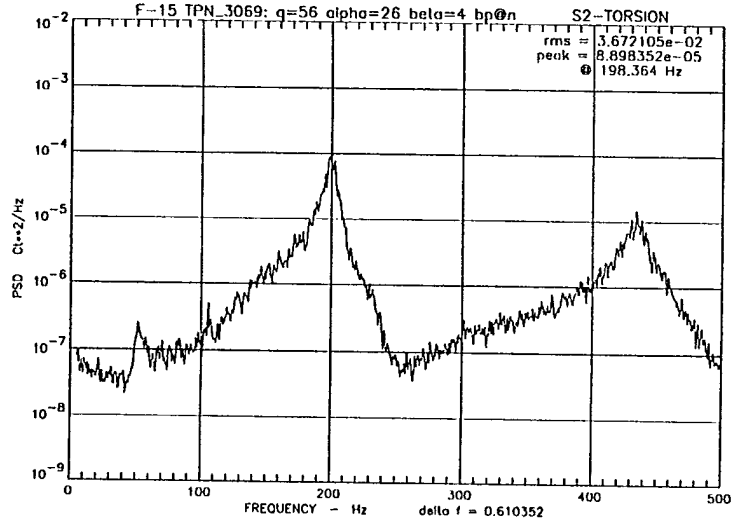

F-15 Tail Buffet Test
F-15 TPN_3058: q=56 alpha=16 beta=0 bp@n
S2-TORSION
rms = 2.786604e-03
peak = 4.172101e-07
@ 200.195 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352


F-15 Tail Buffet Test
F-15 TPN_3062: q=56 alpha=24 beta=0 bp@n
S2-TORSION
rms = 3.318018e-02
peak = 7.832470e-05
@ 198.364 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

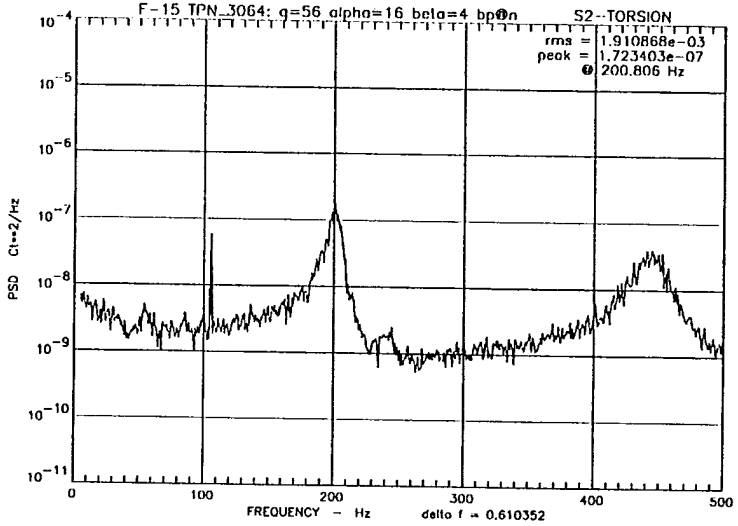
F-15 Tail Buffet Test



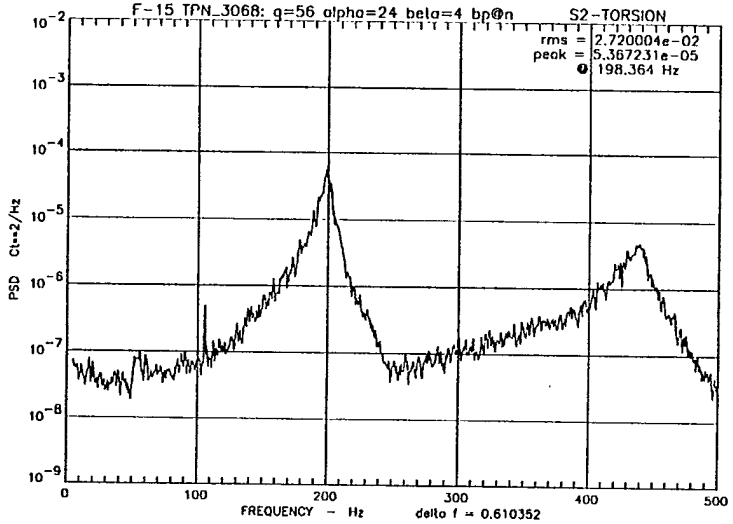
F-15 Tail Buffet Test



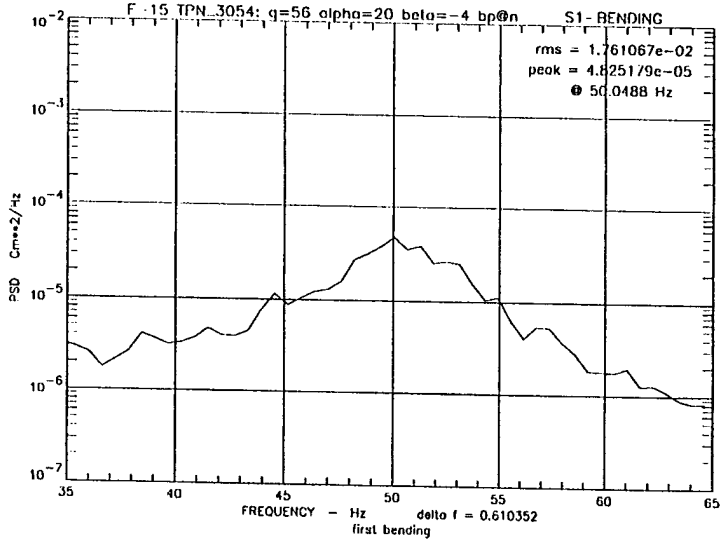
F-15 Tail Buffet Test



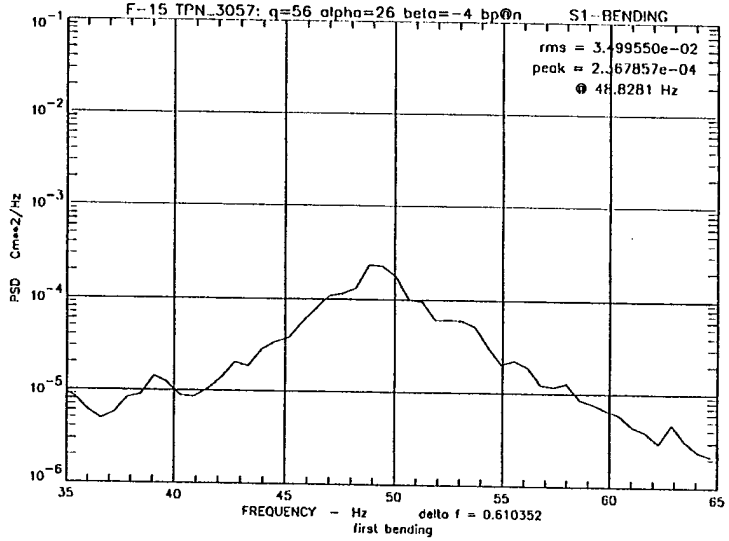
F-15 Tail Buffet Test



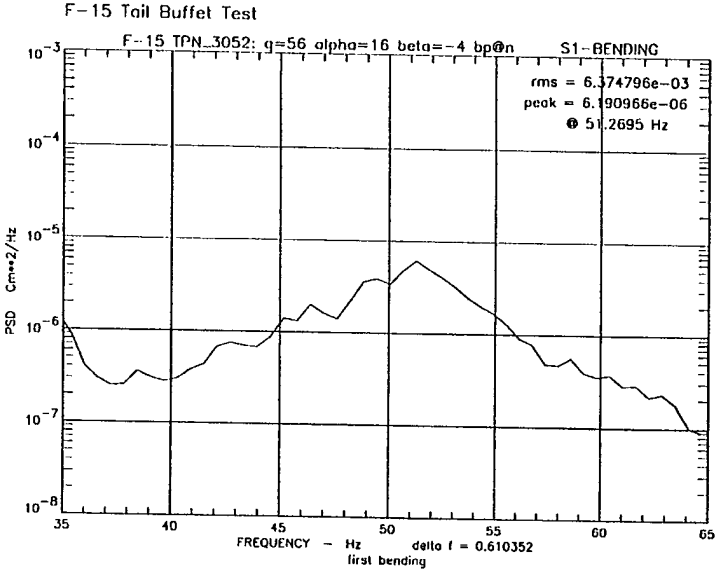
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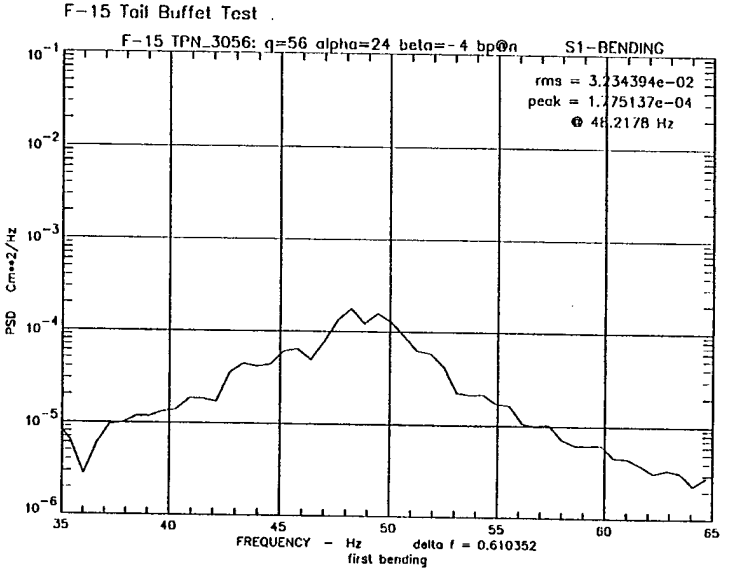
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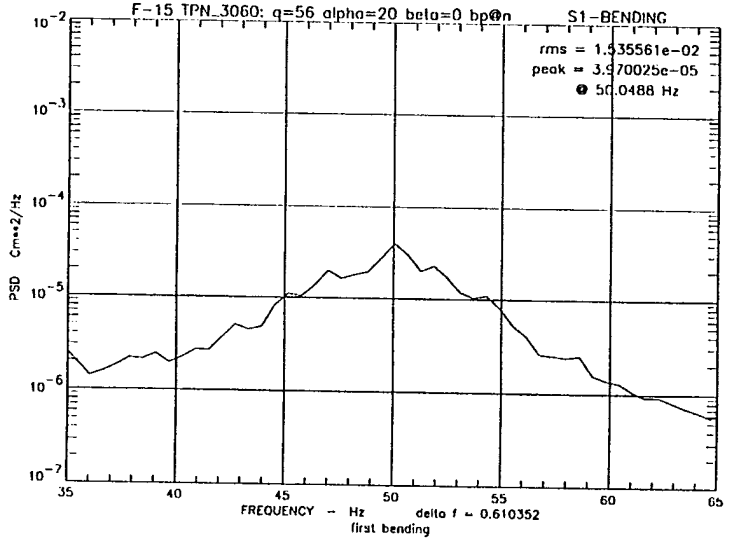
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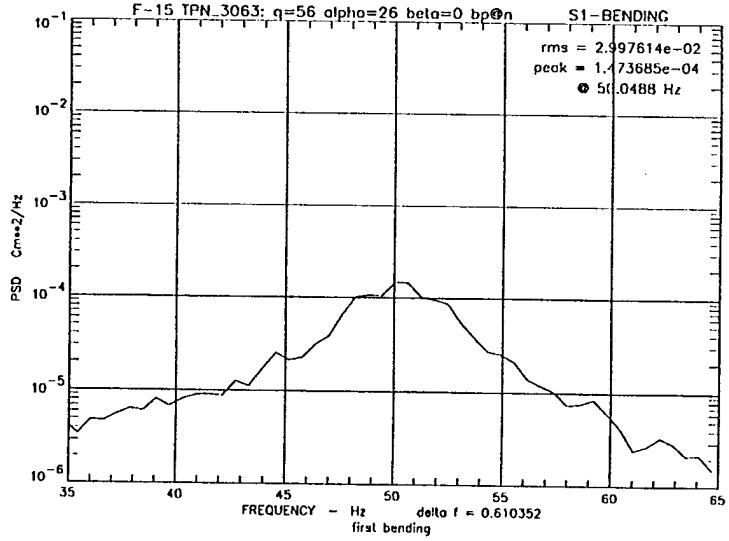
F-15 Tail Buffet Test



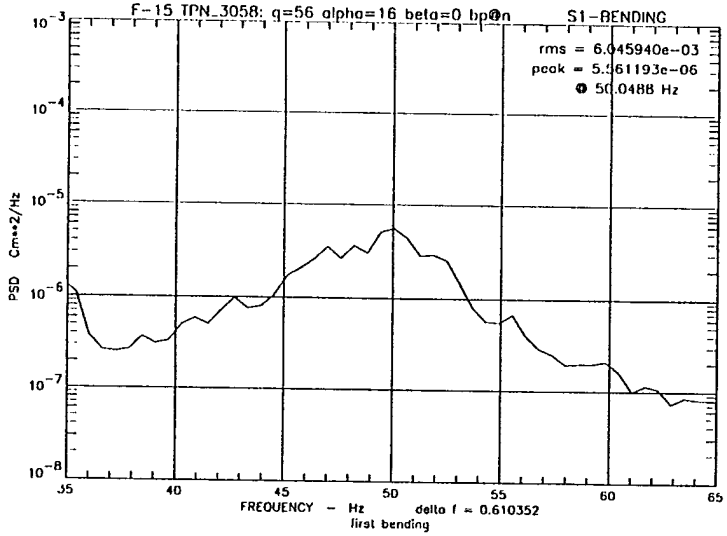
F-15 Tail Buffet Test



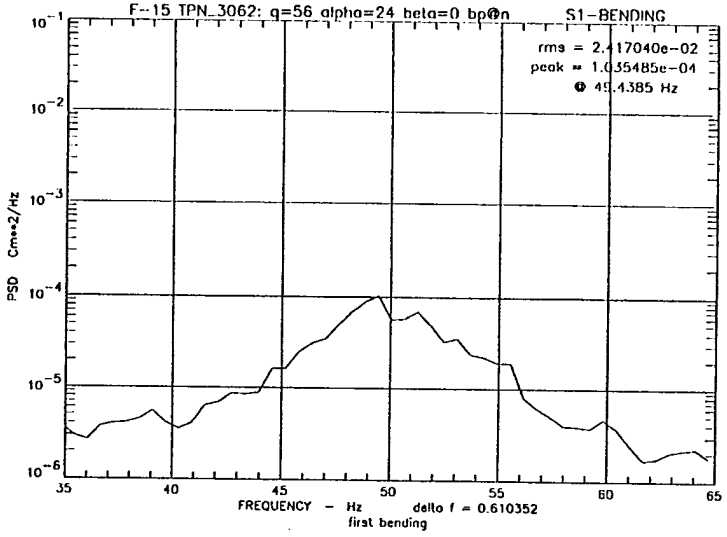
F-15 Tail Buffet Test



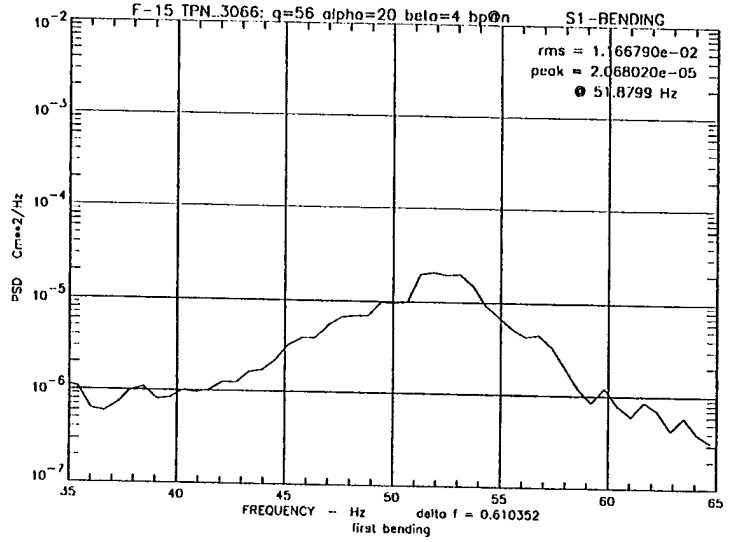
F-15 Tail Buffet Test



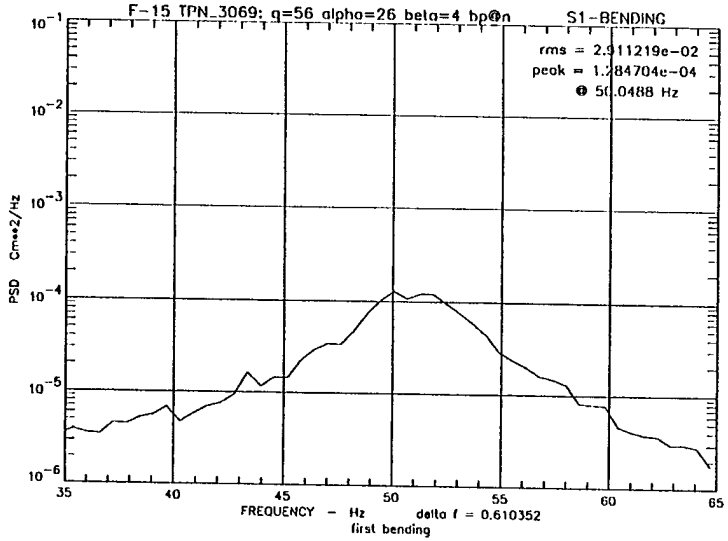
F-15 Tail Buffet Test



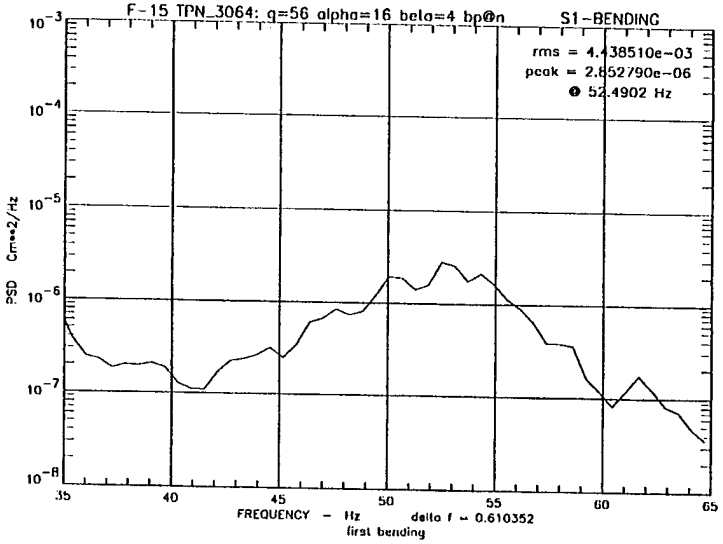
F-15 Tail Buffet Test



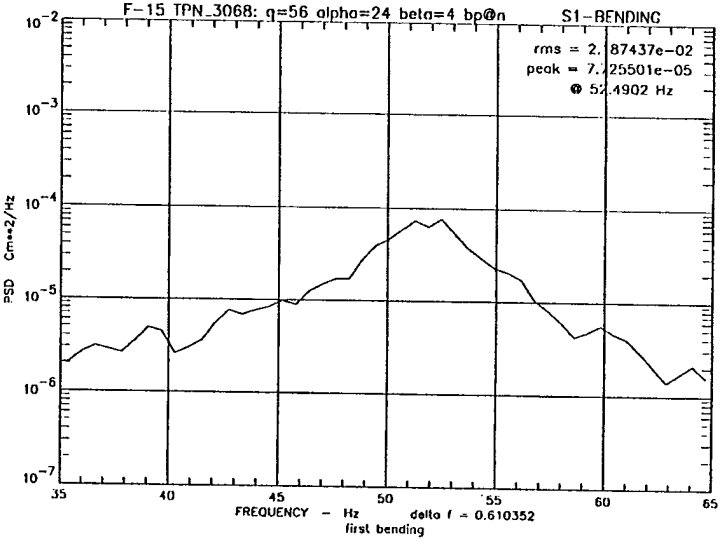
F-15 Tail Buffet Test



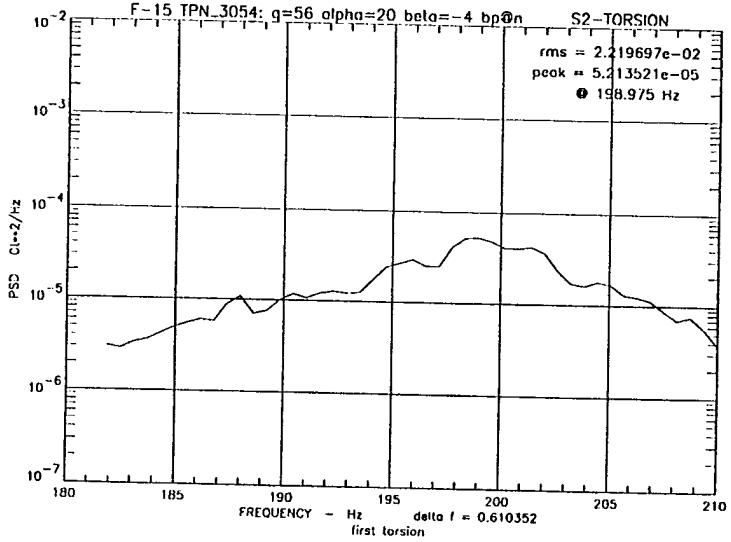
F-15 Tail Buffet Test



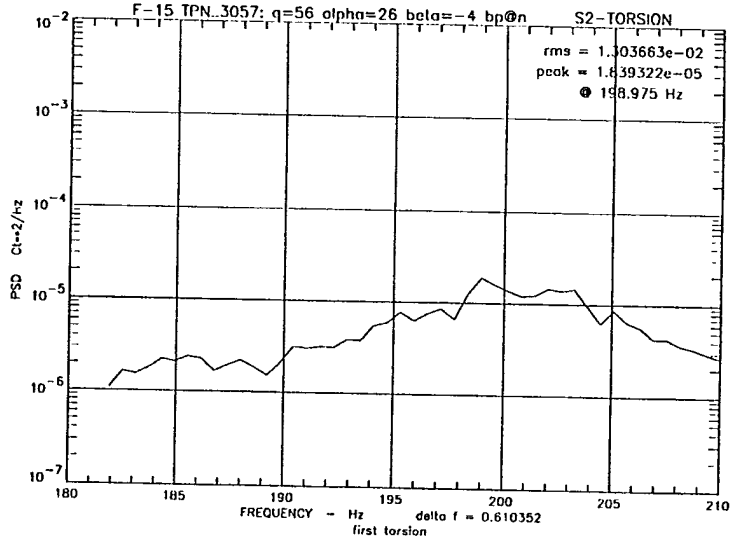
F-15 Tail Buffet Test



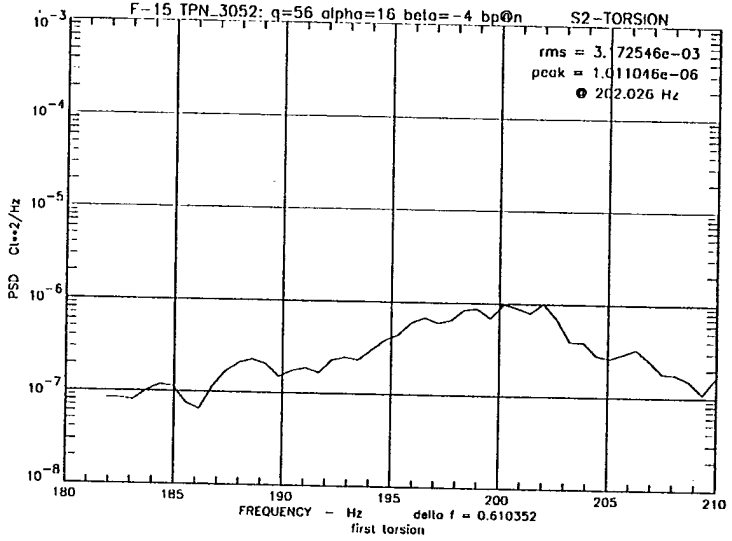
F-15 Tail Buffet Test



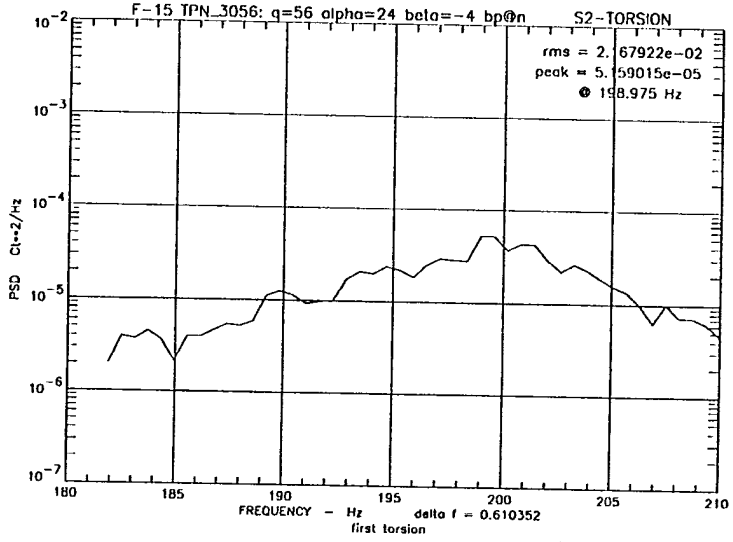
F-15 Tail Buffet Test



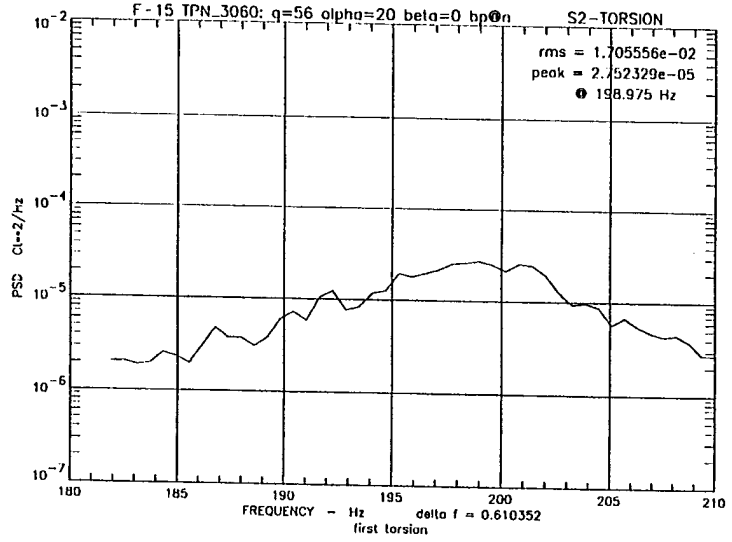
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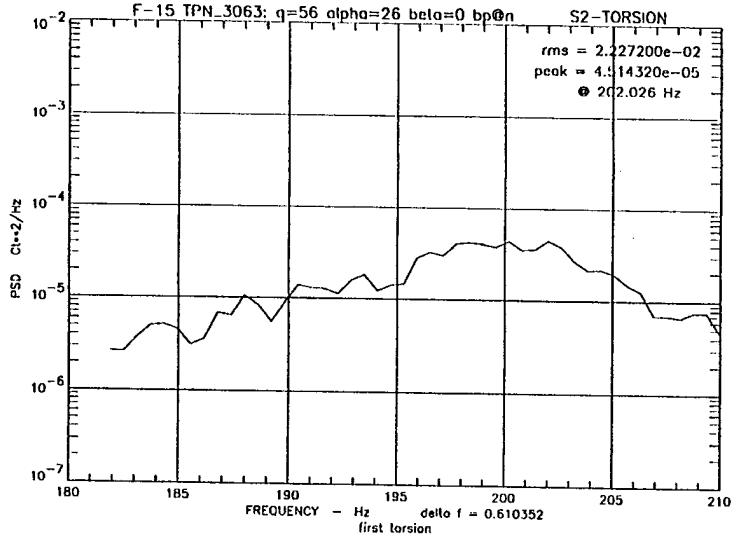
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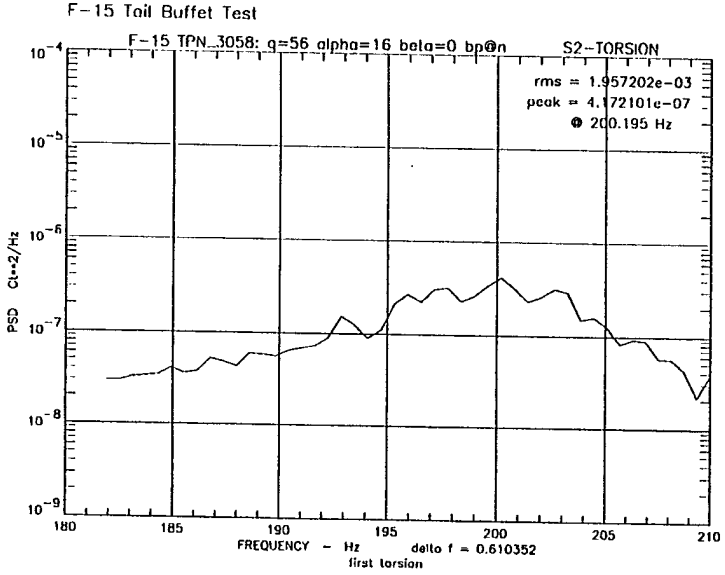
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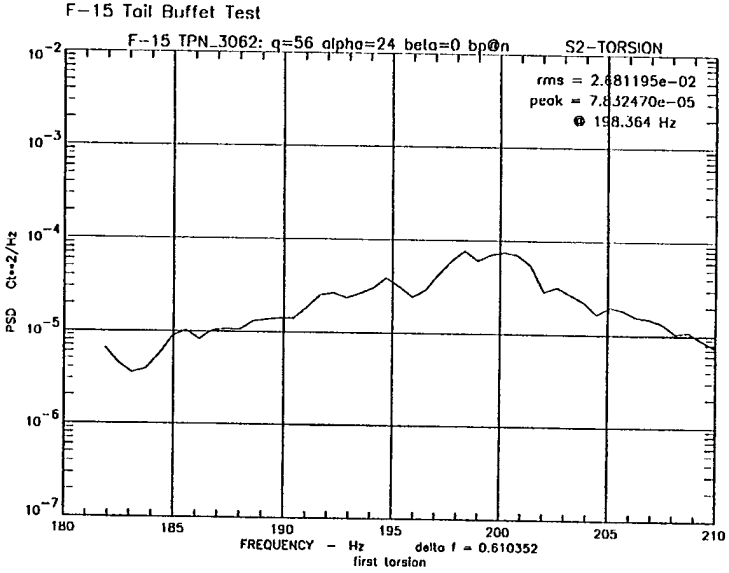
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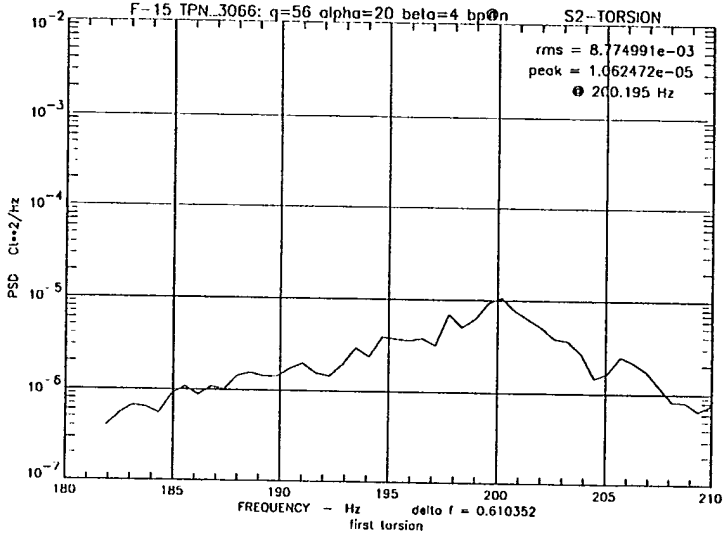
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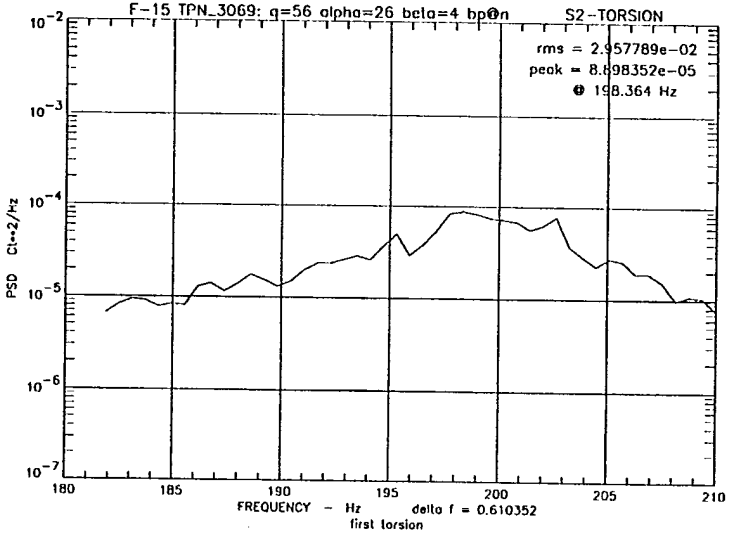
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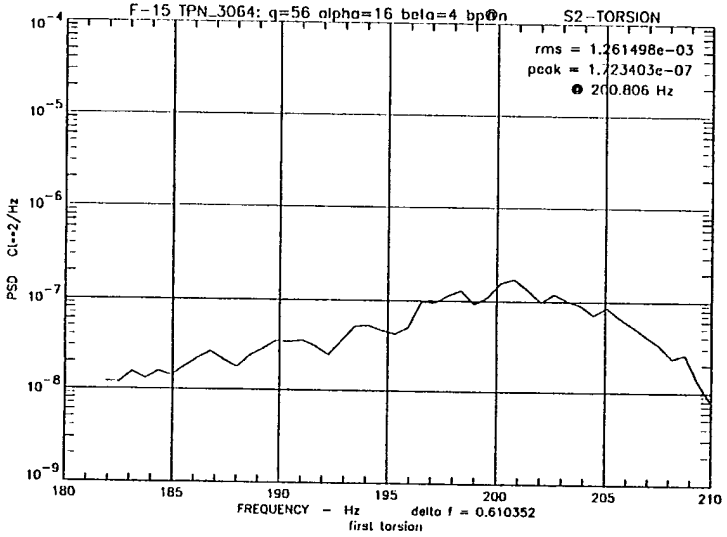
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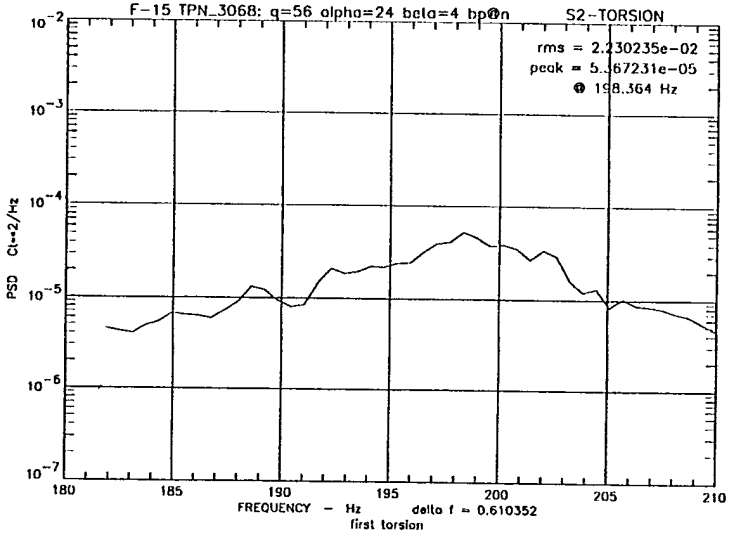
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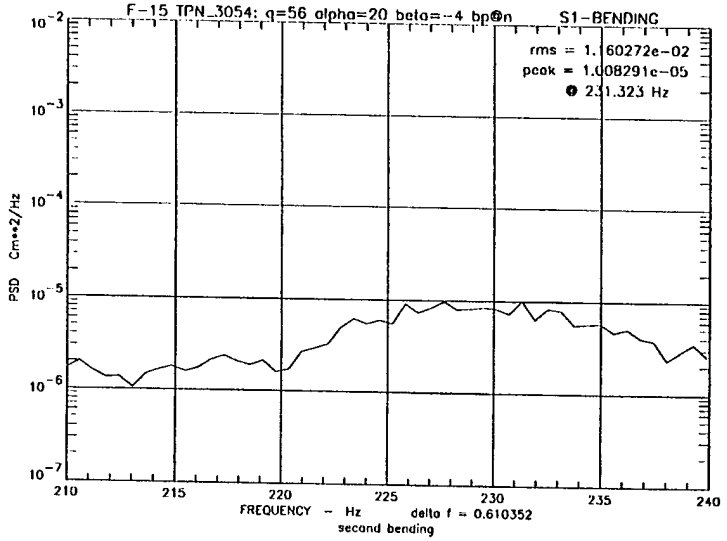
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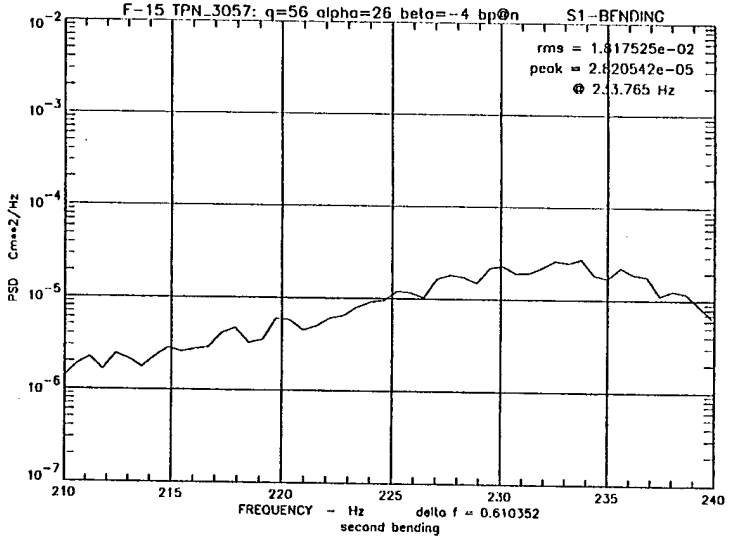
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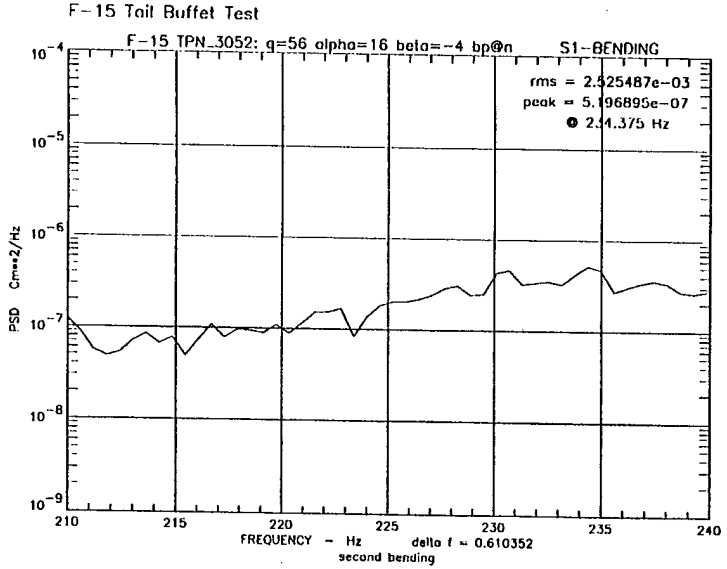
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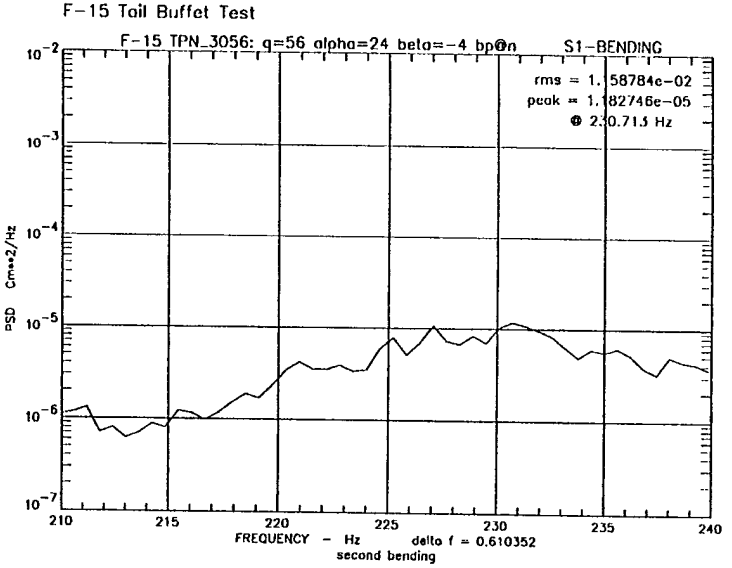
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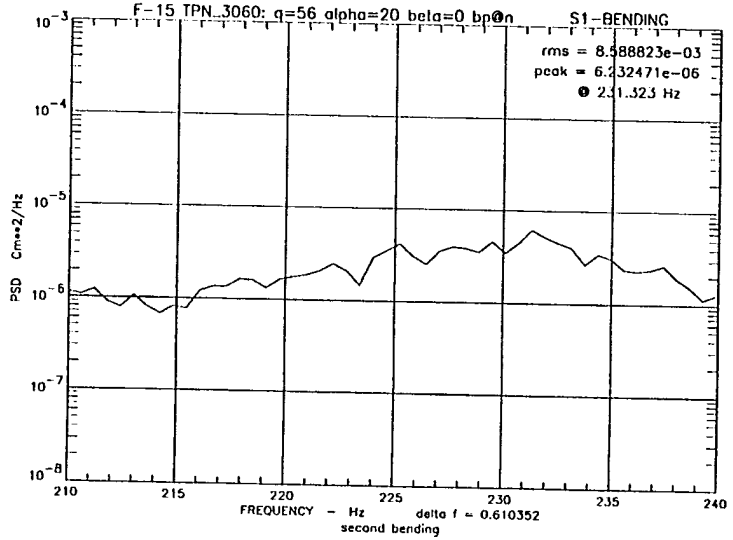
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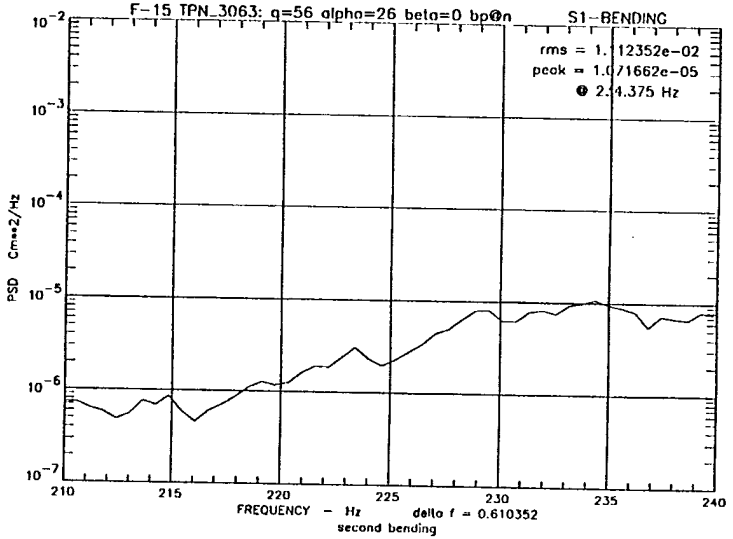
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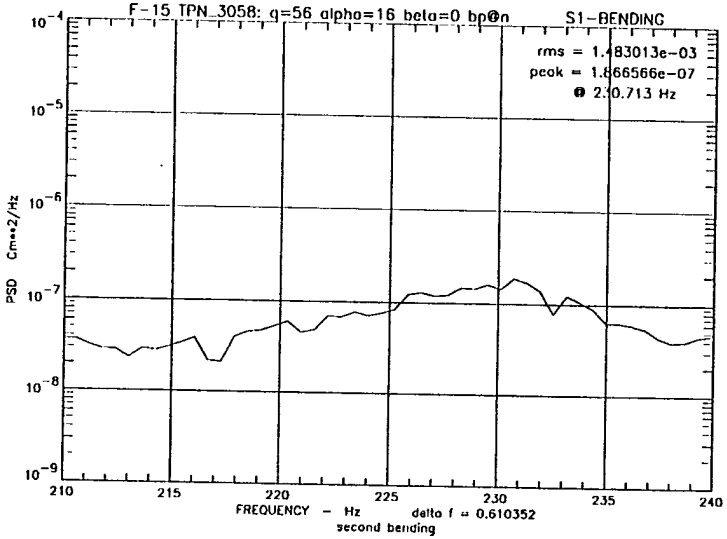
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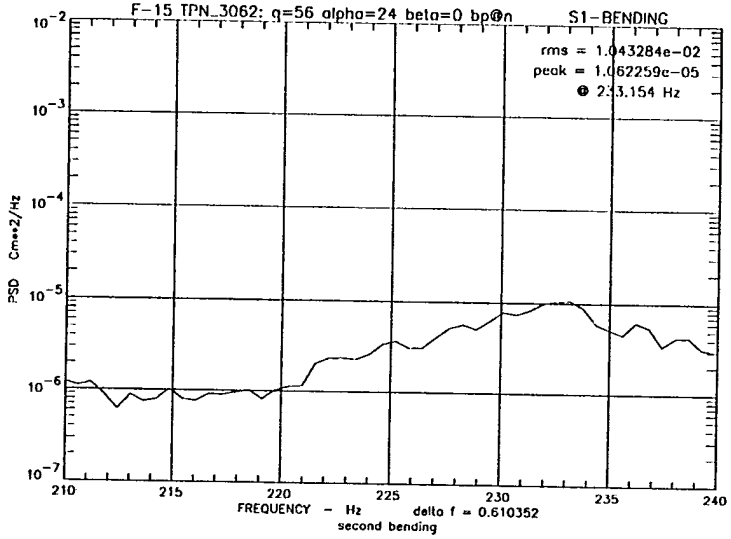
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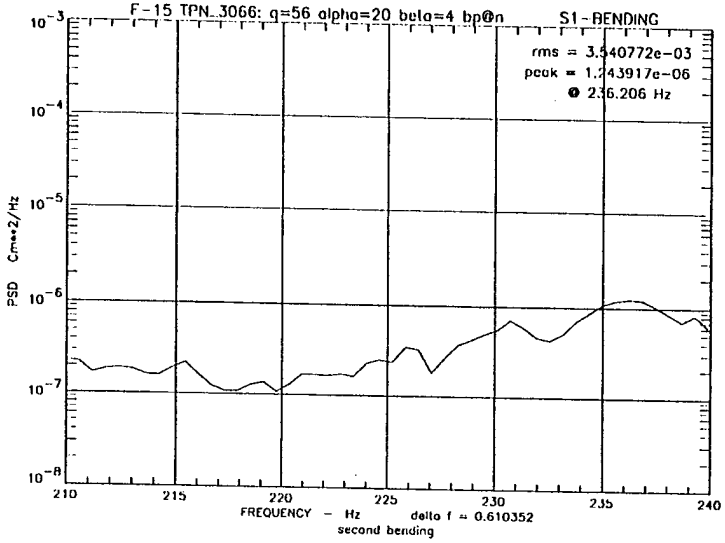
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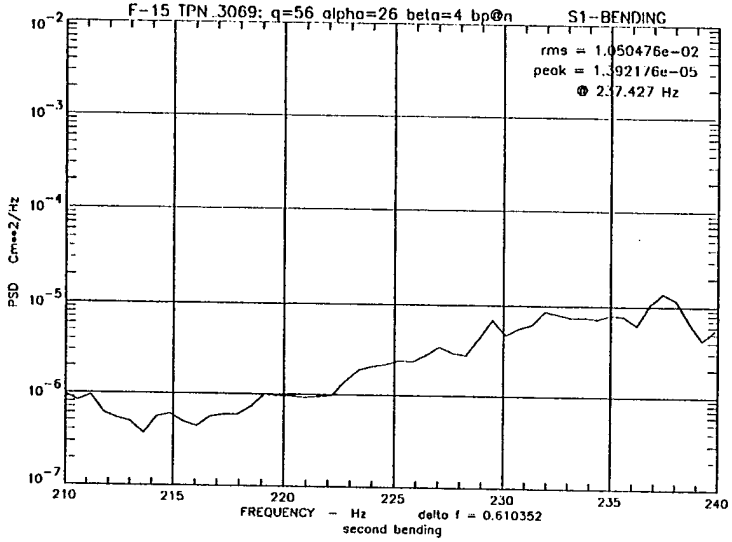
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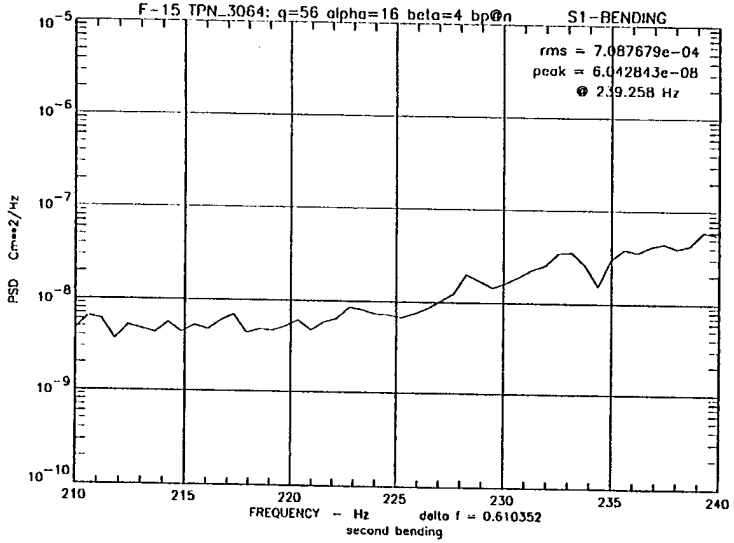
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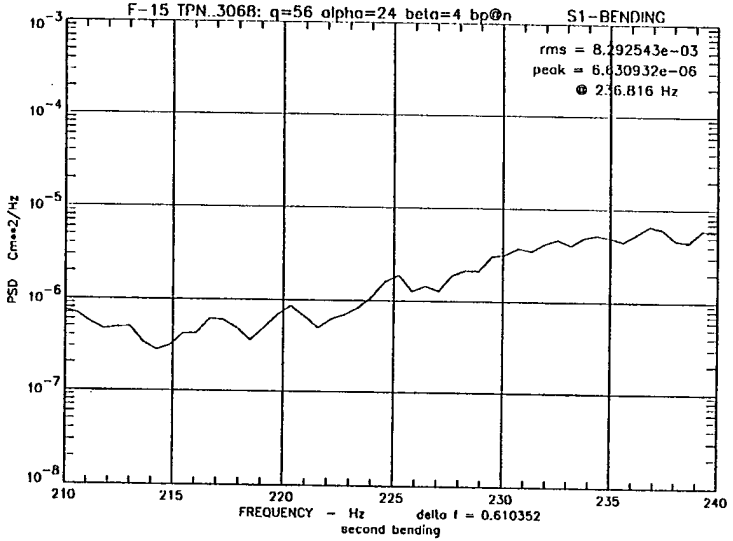
F-15 Tail Buffet Test



F-15 Tail Buffet Test



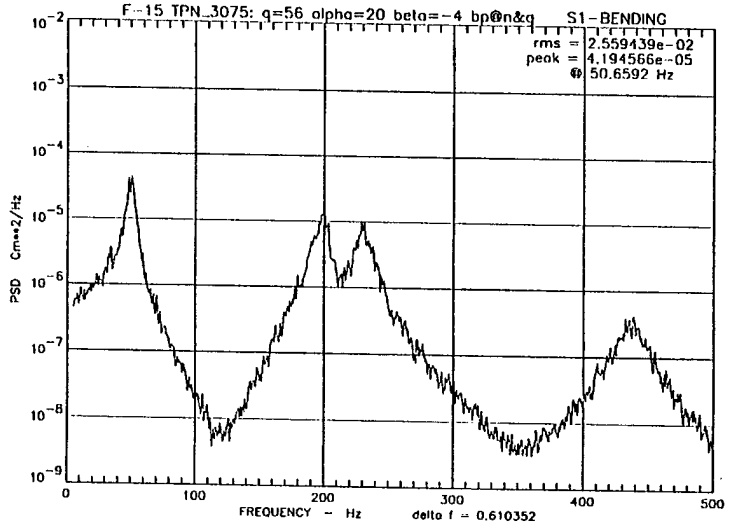
F-15 Tail Buffet Test



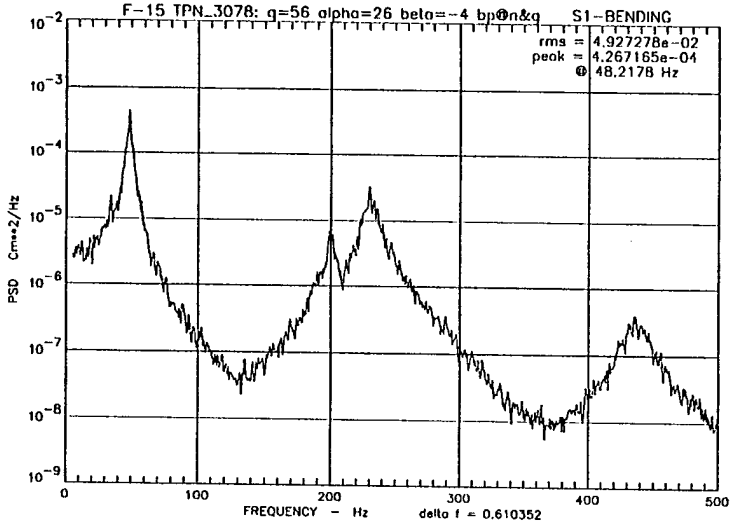
FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

Q= 56PSF
3.1.1.5 NBP = 87 PSI, GBP = 65PSI, BETA = 0, +4, -4 DEG, ALPHA=16....26 DEG

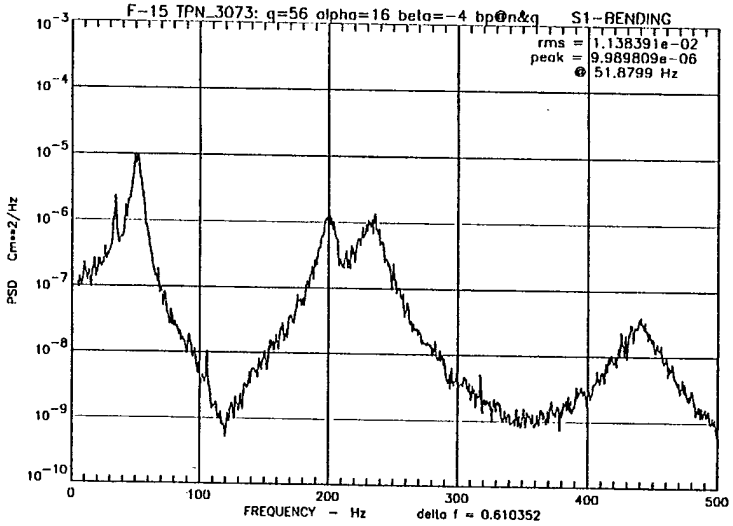
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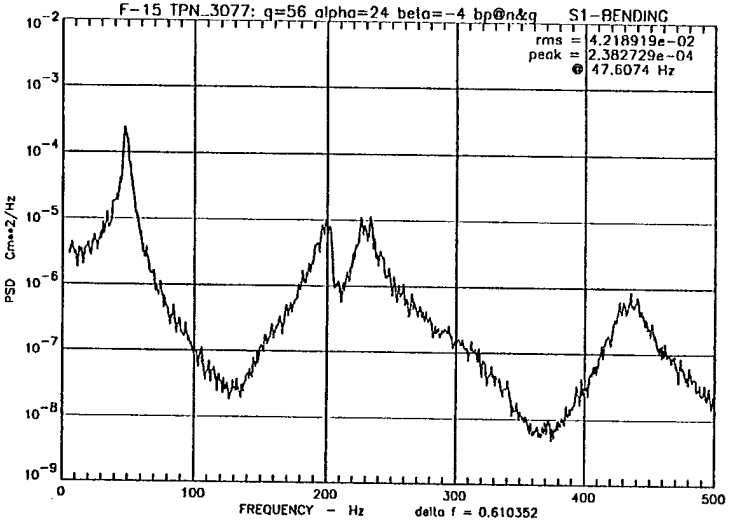
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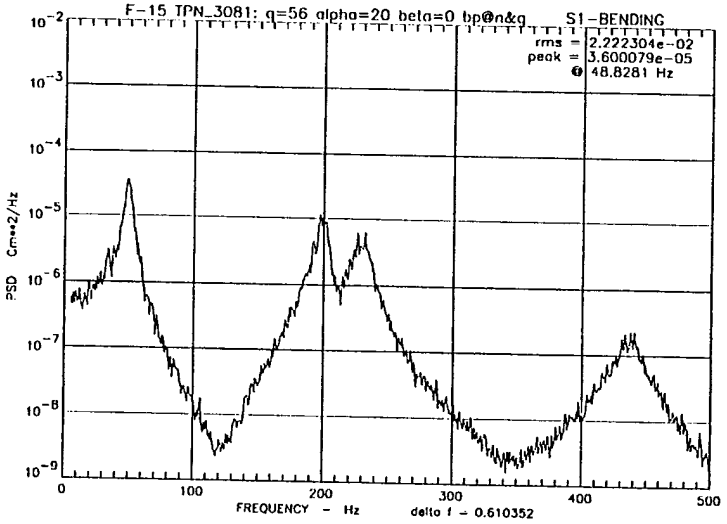
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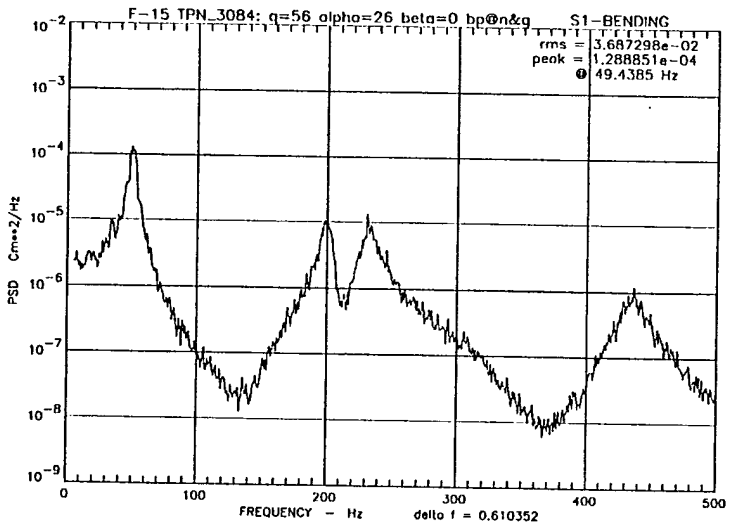
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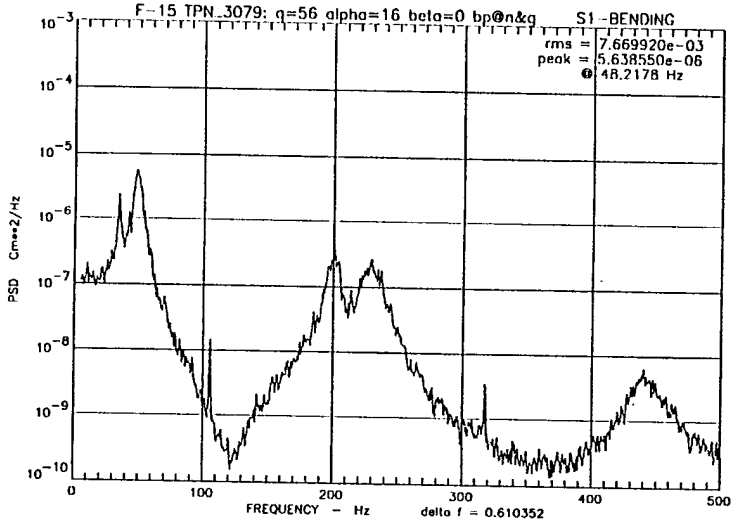
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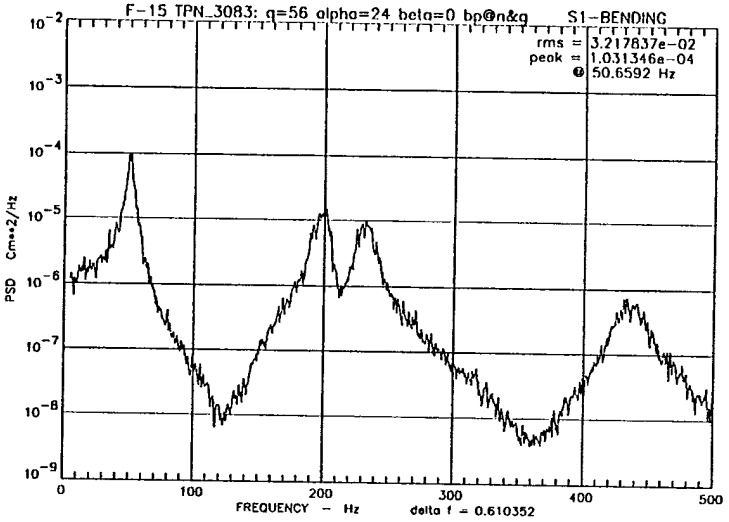
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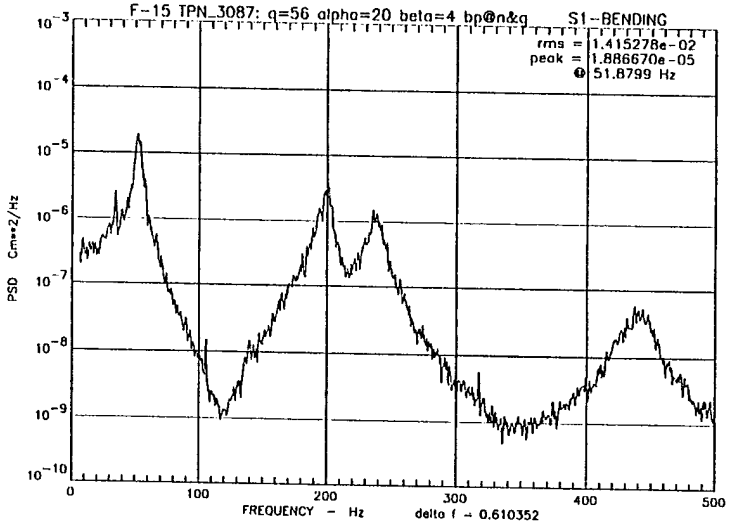
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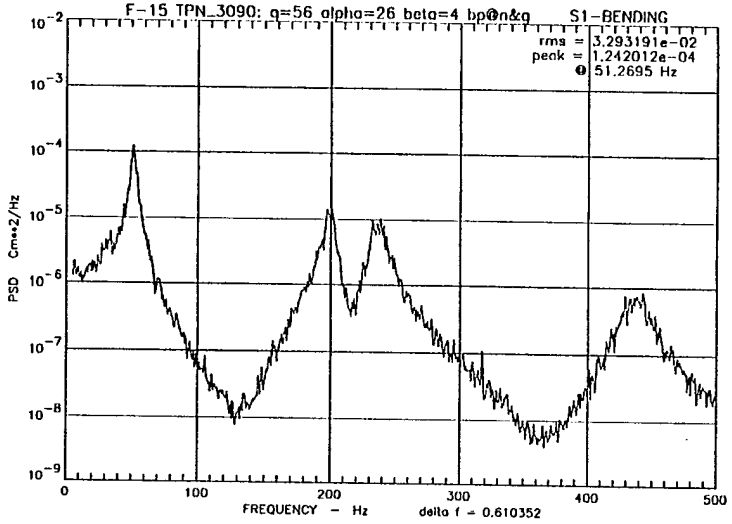
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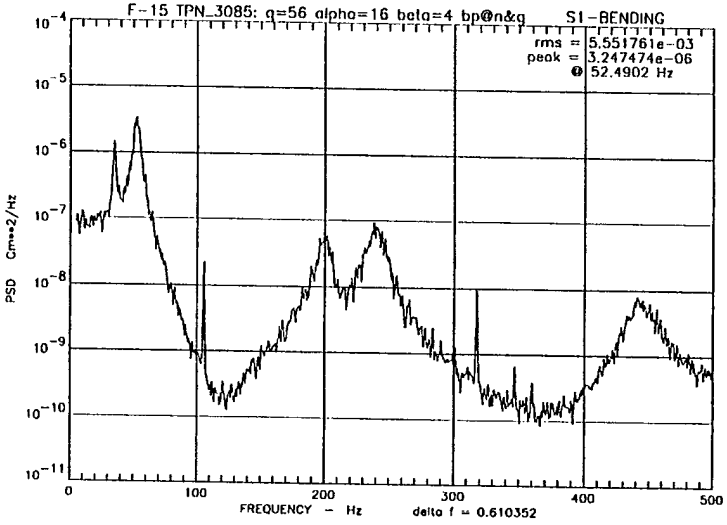
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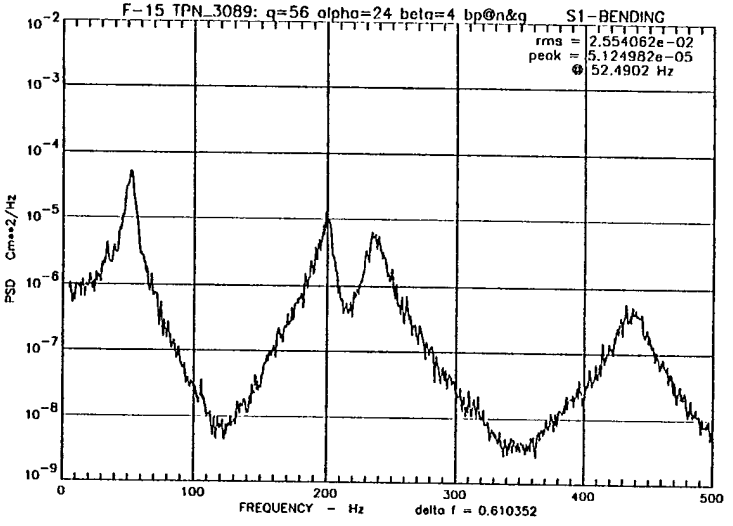
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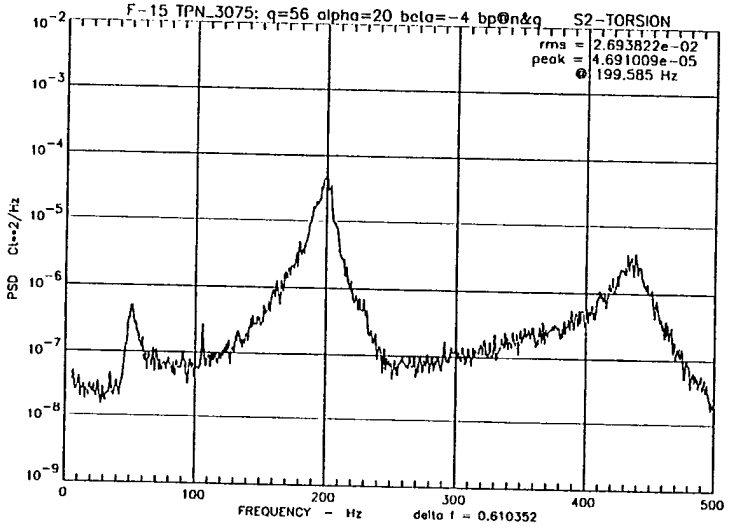
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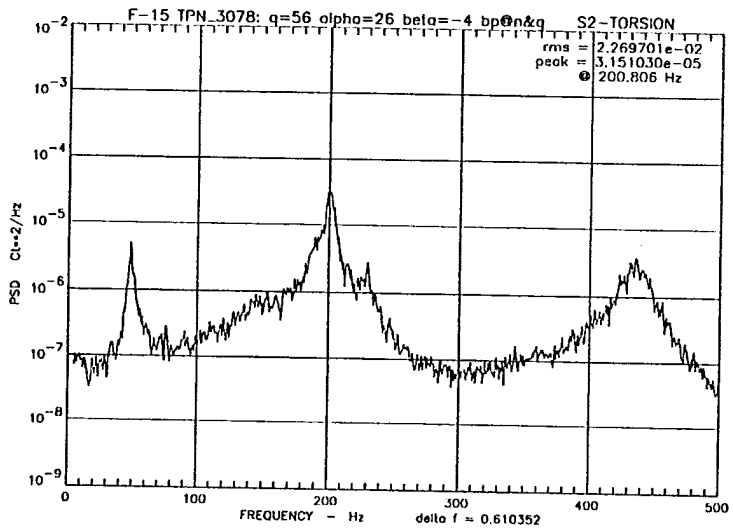
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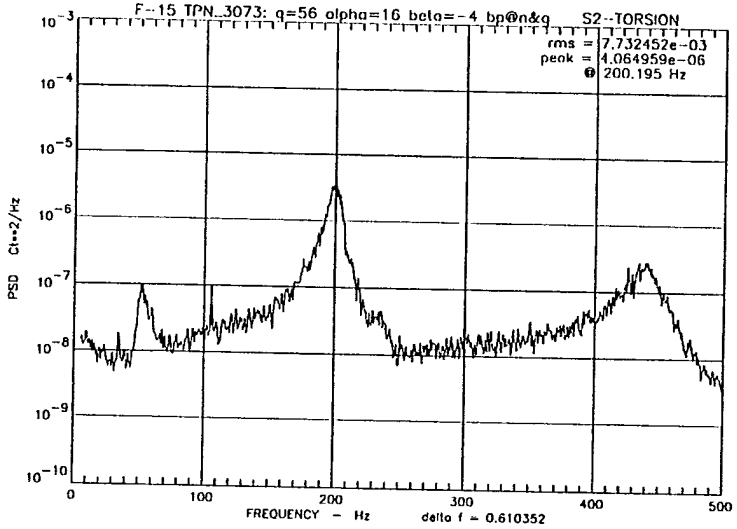
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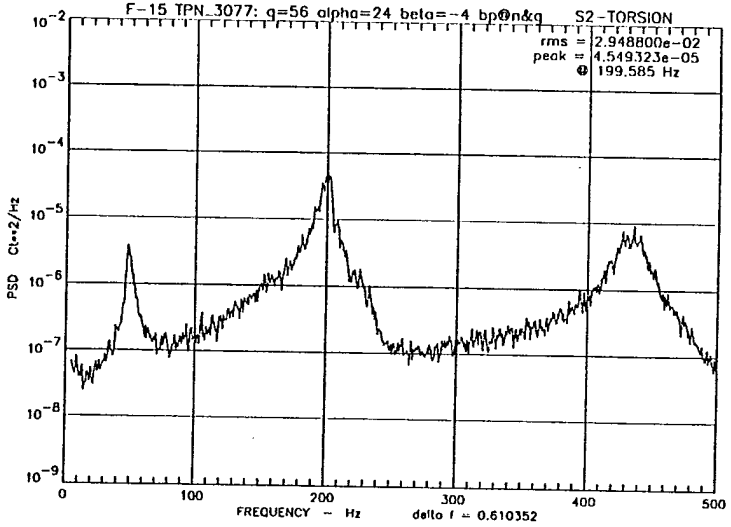
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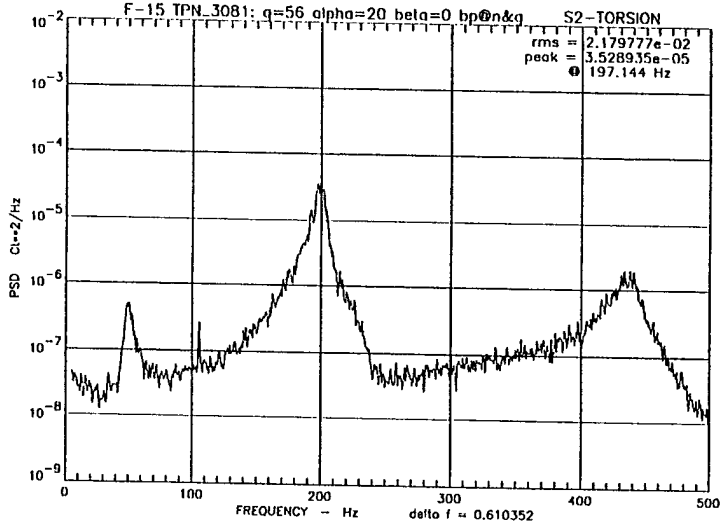
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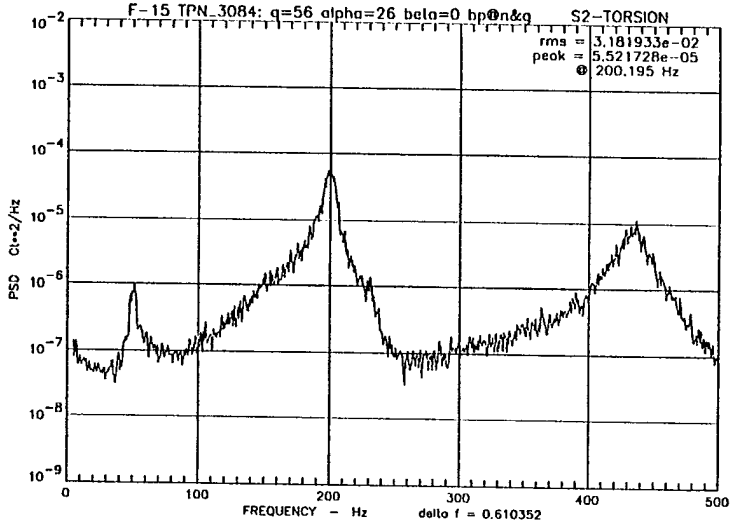
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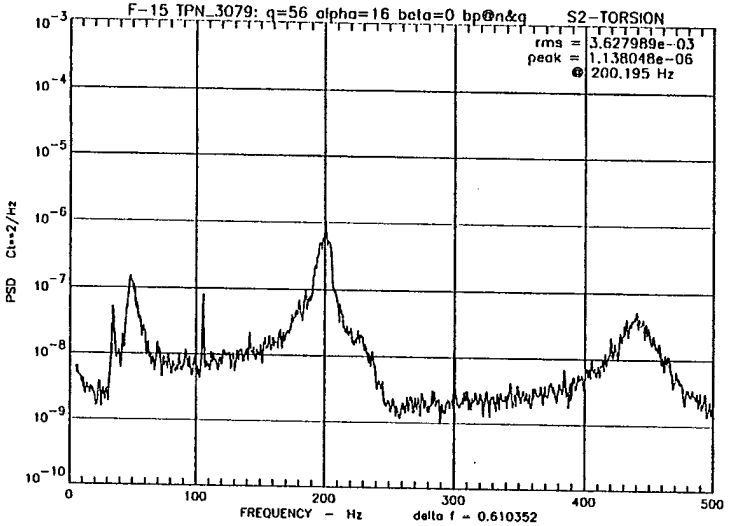
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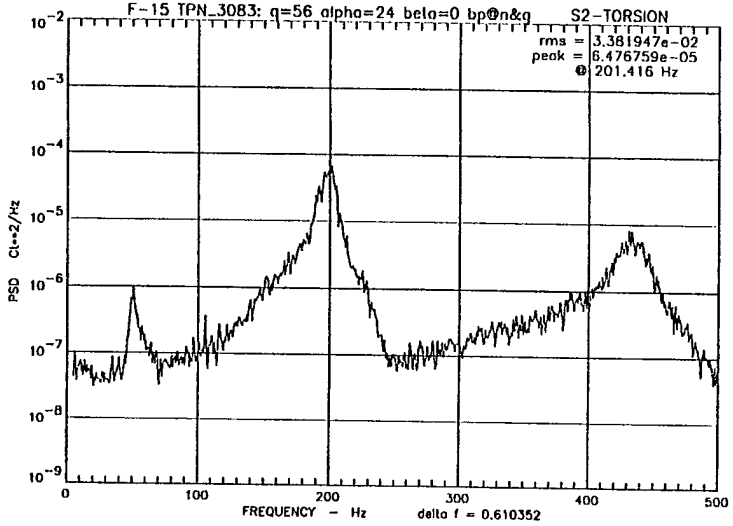
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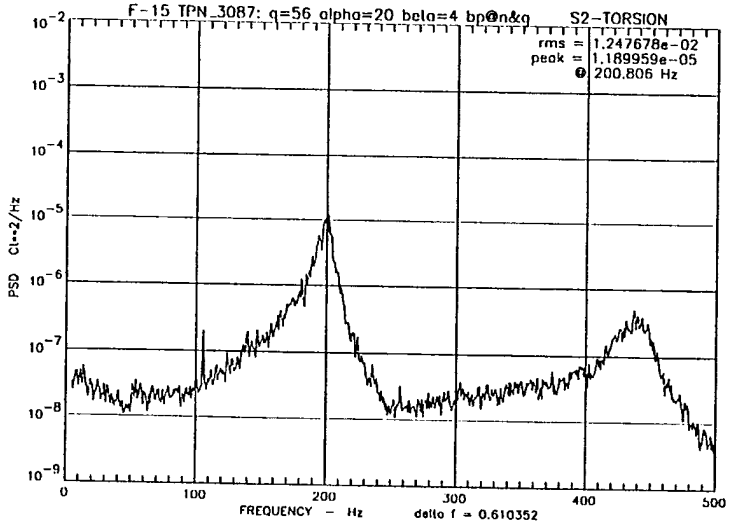
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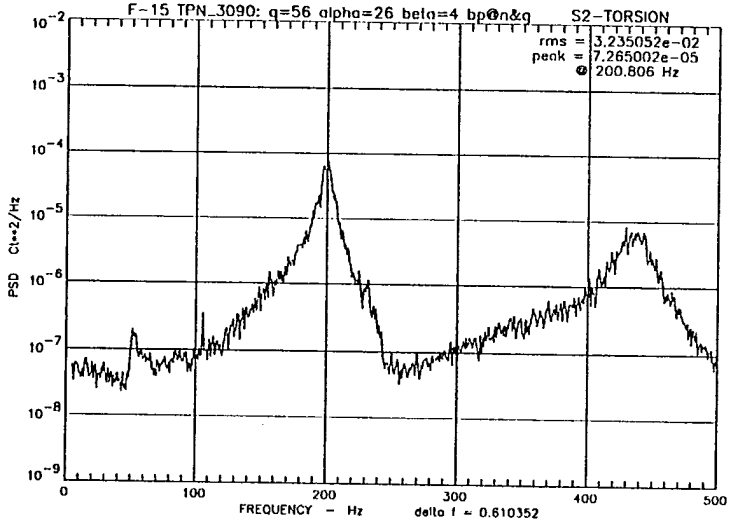
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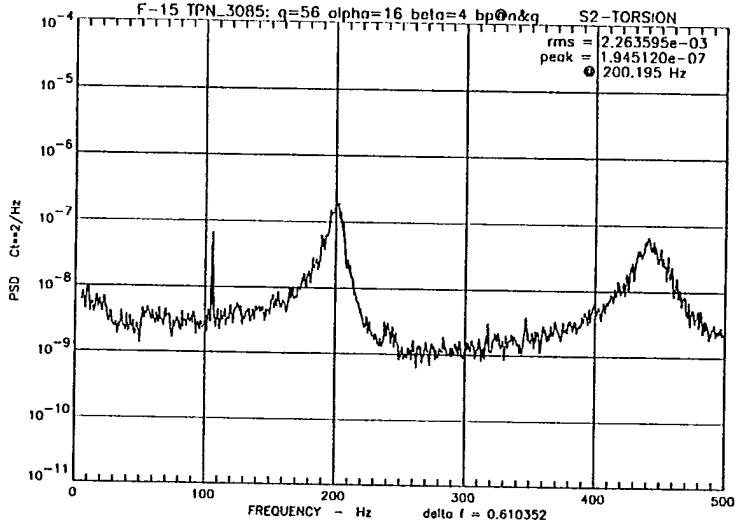
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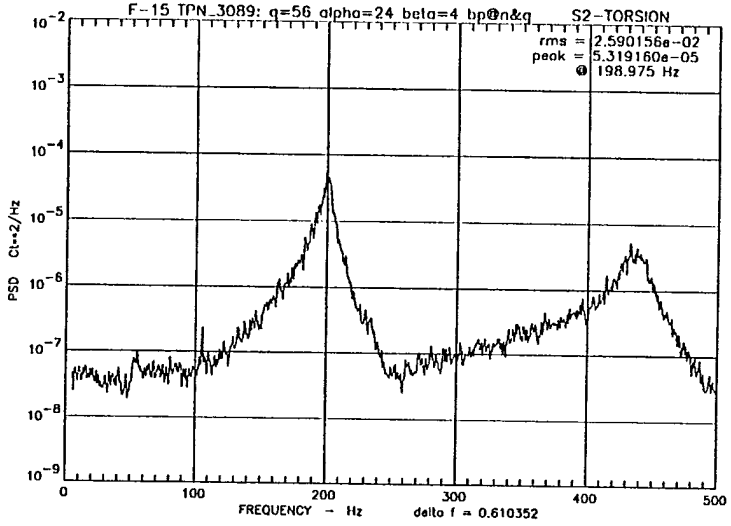
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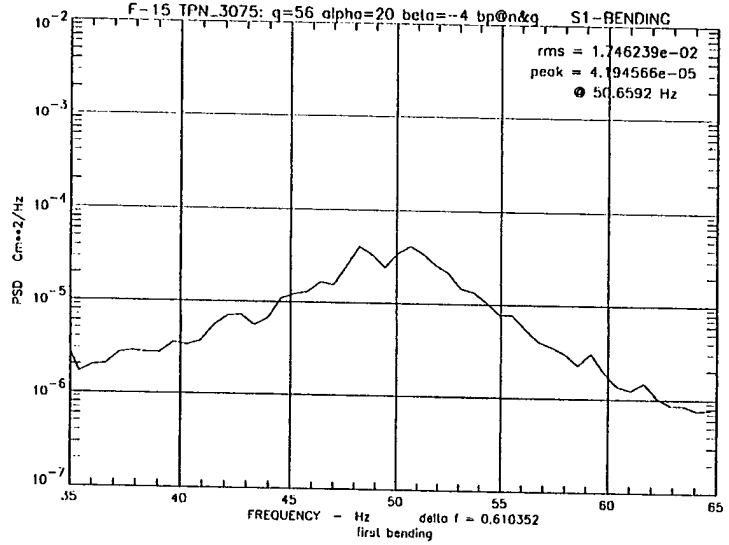
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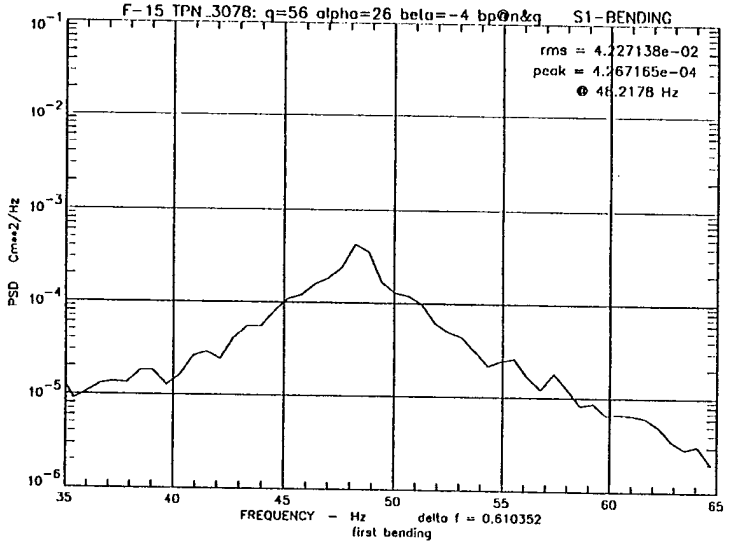
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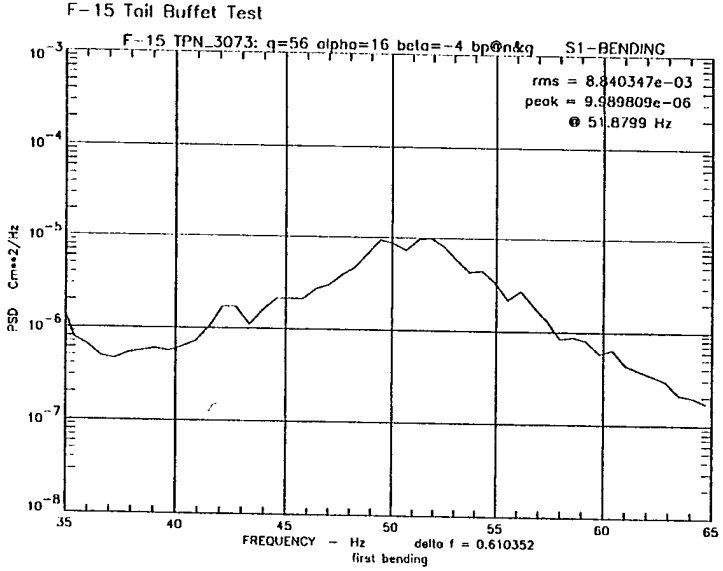
F-15 Tail Buffet Test



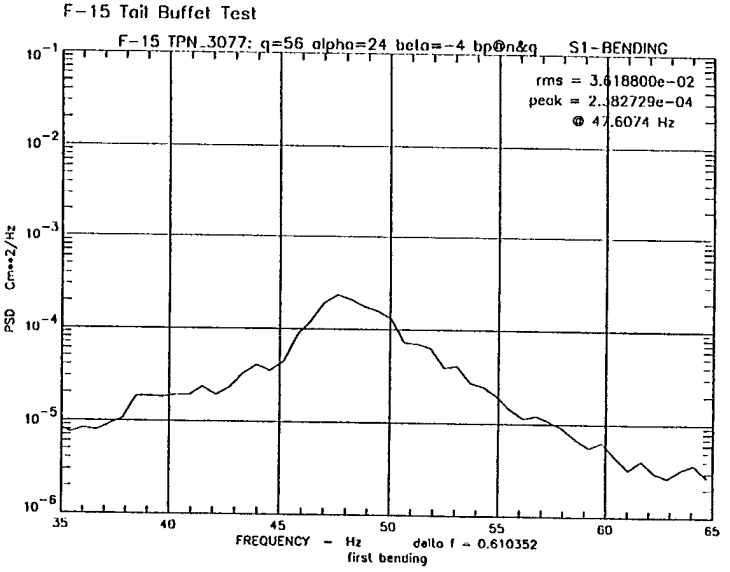
F-15 Tail Buffet Test



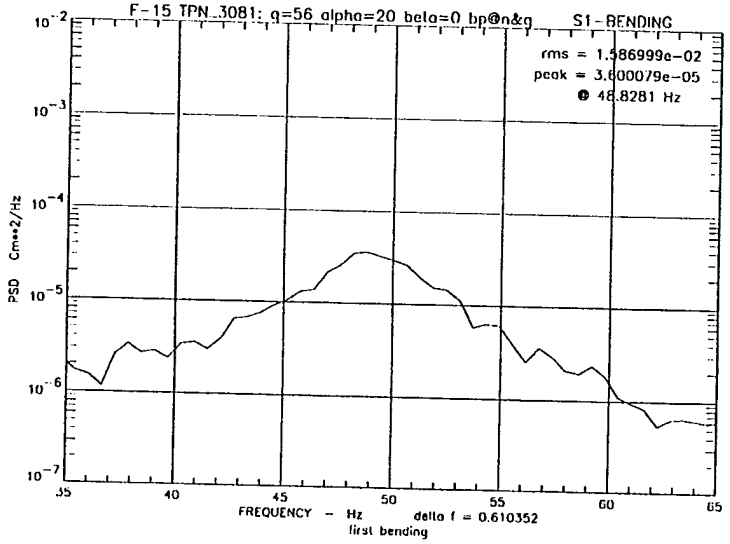
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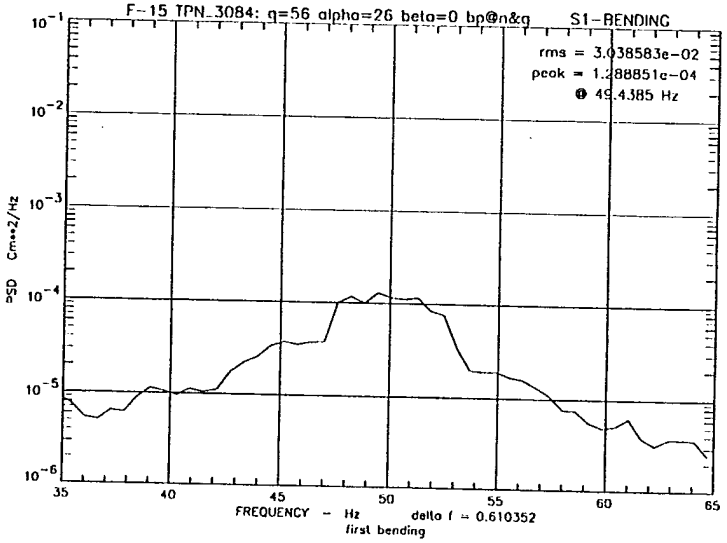
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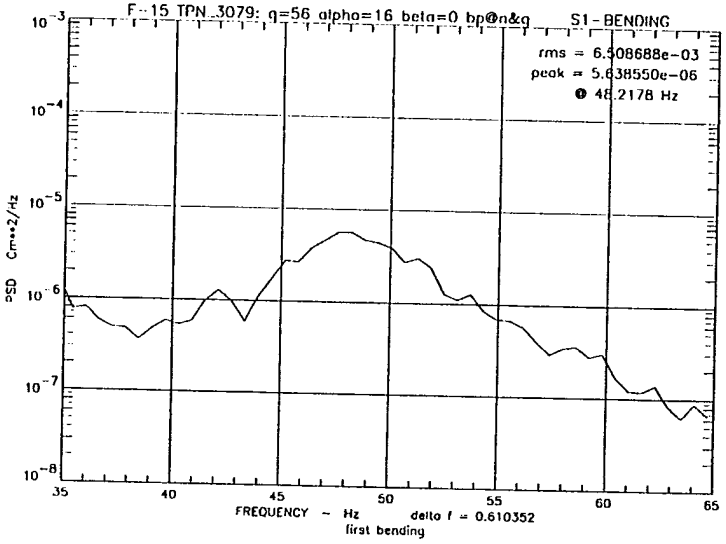
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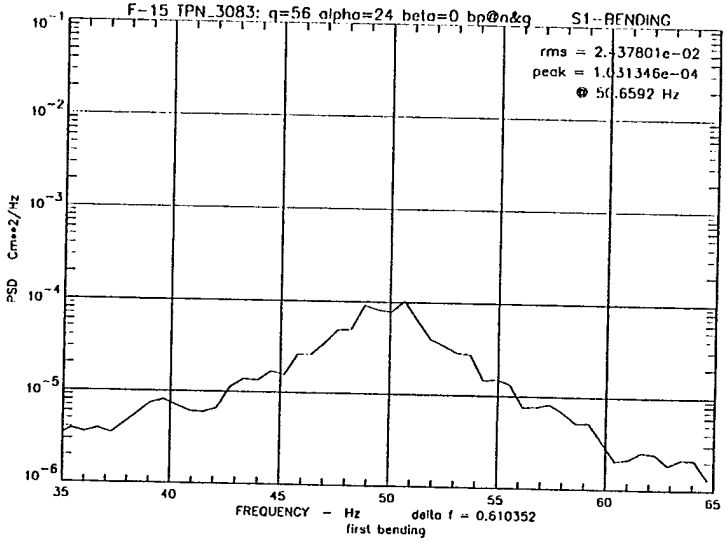
F-15 Tail Buffet Test



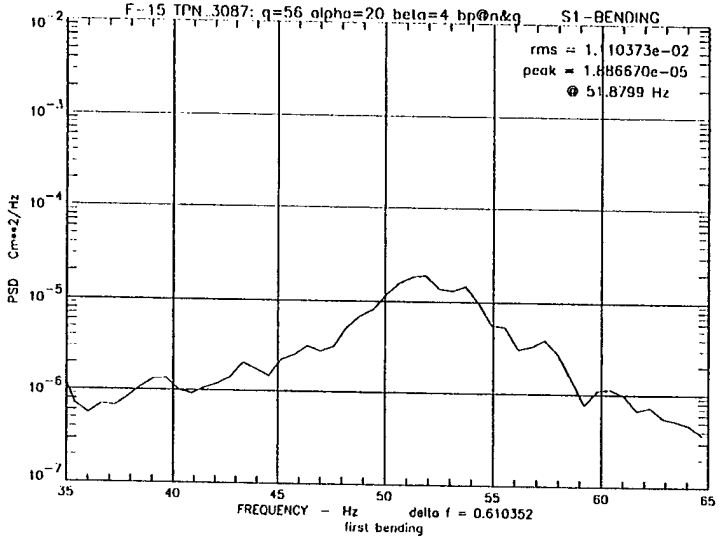
F-15 Tail Buffet Test



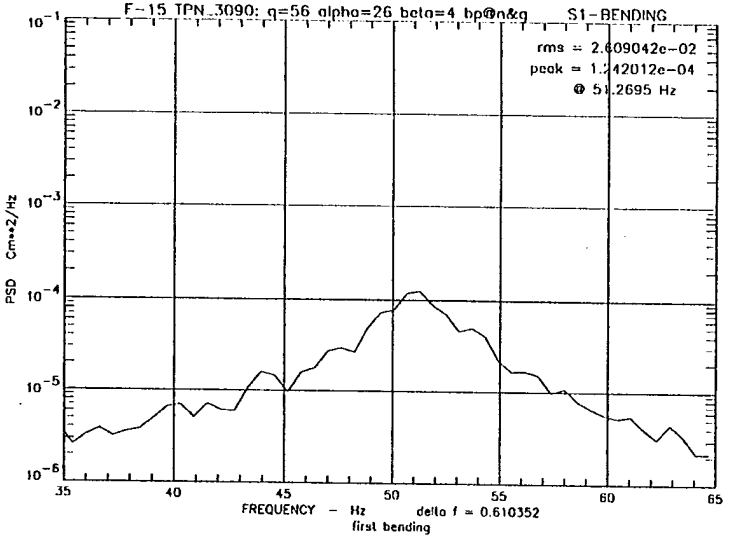
F-15 Tail Buffet Test



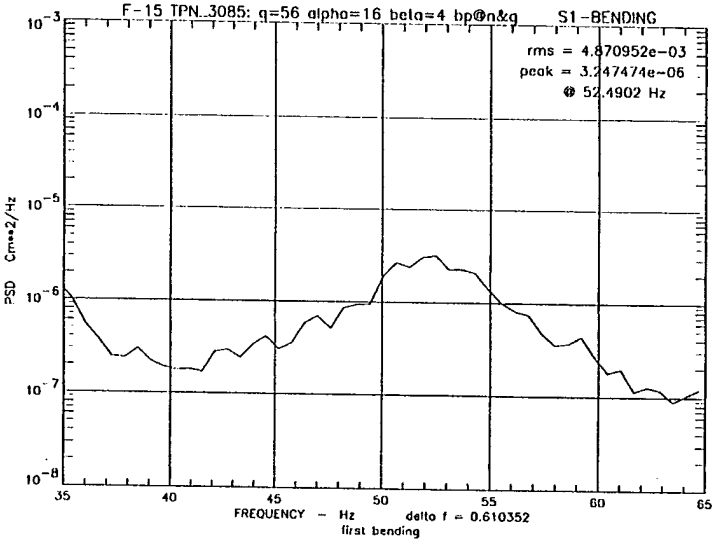
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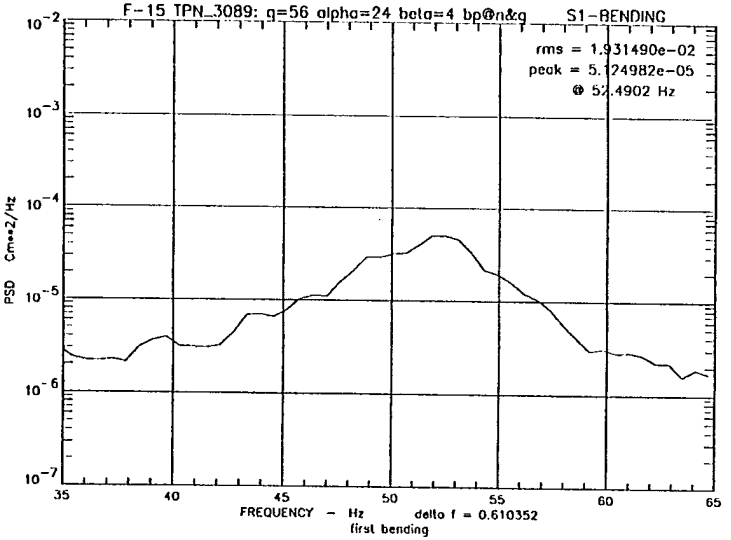
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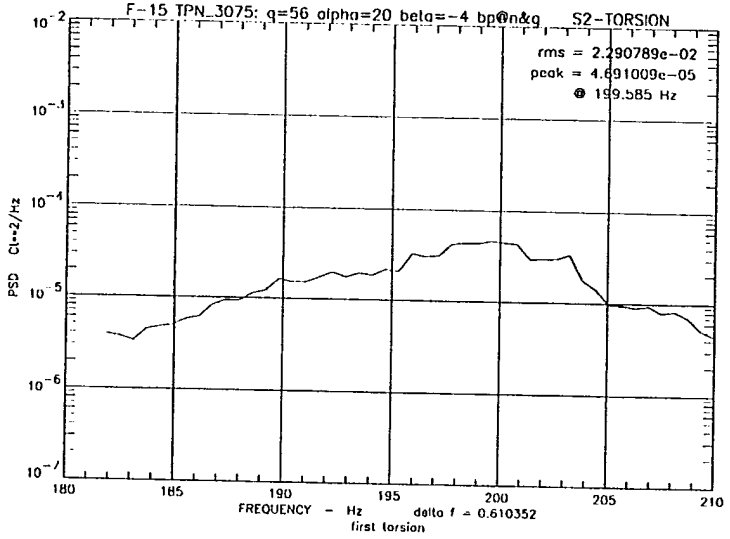
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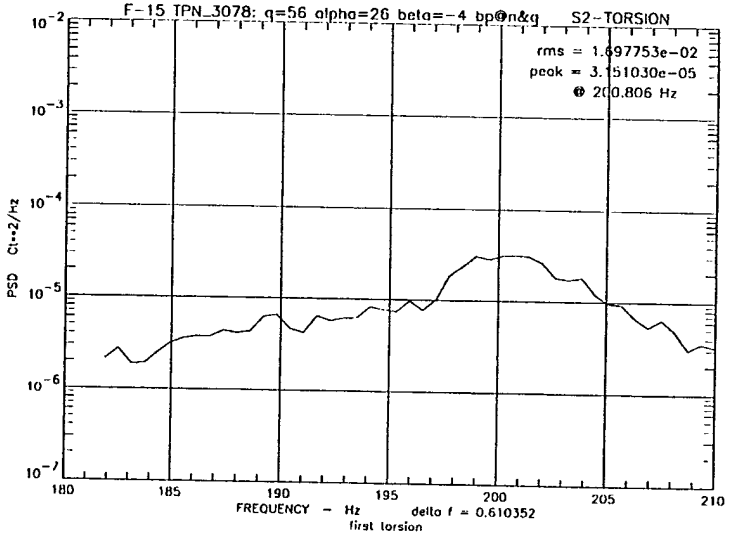
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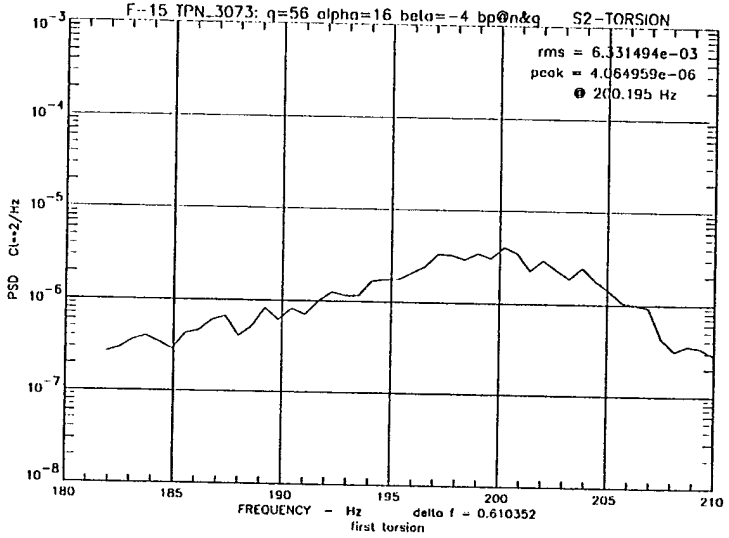
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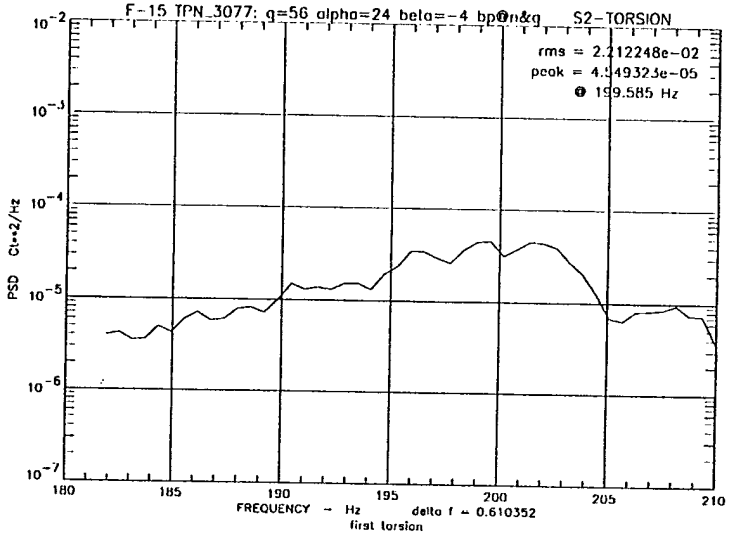
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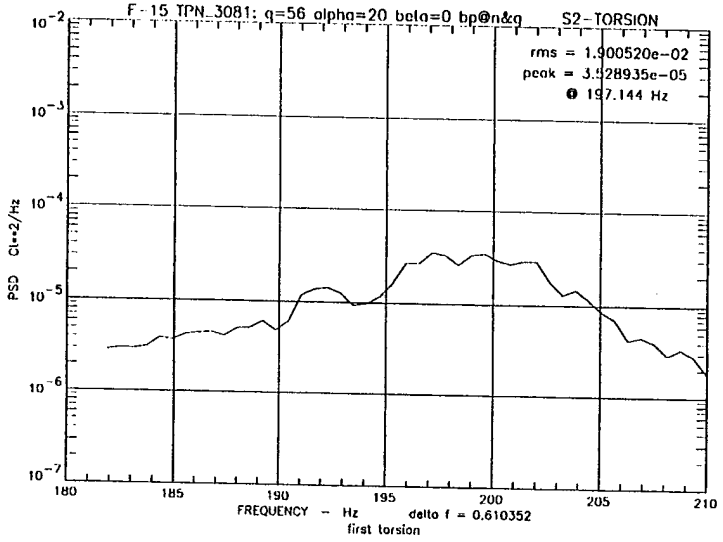
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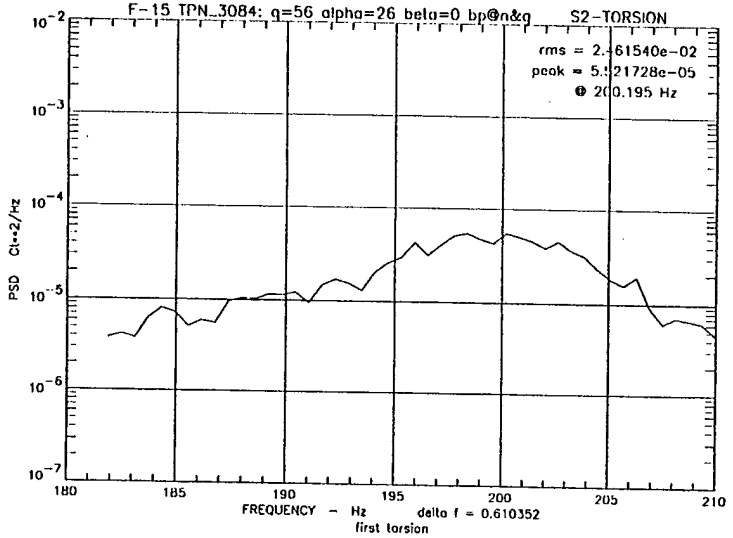
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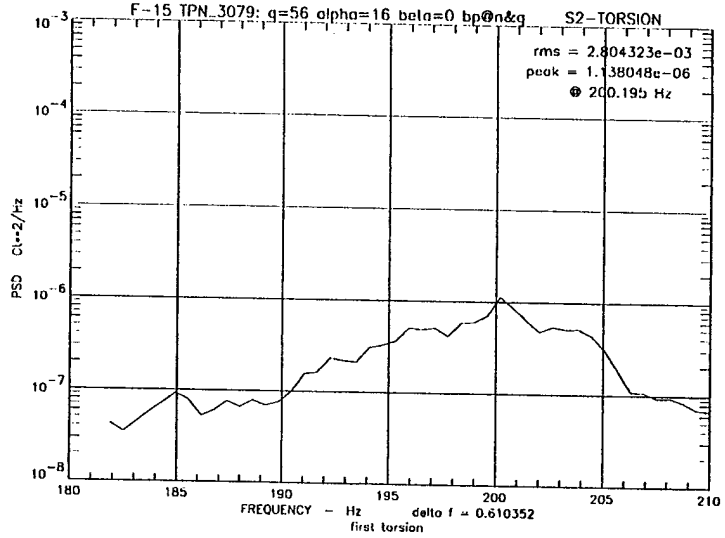
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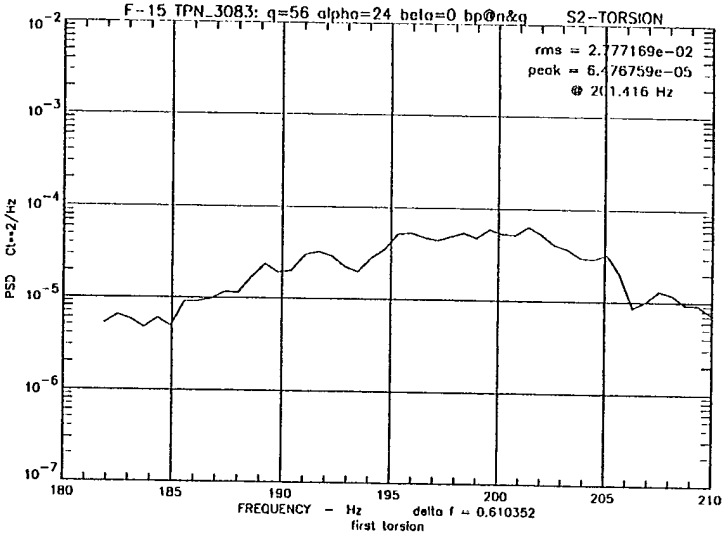
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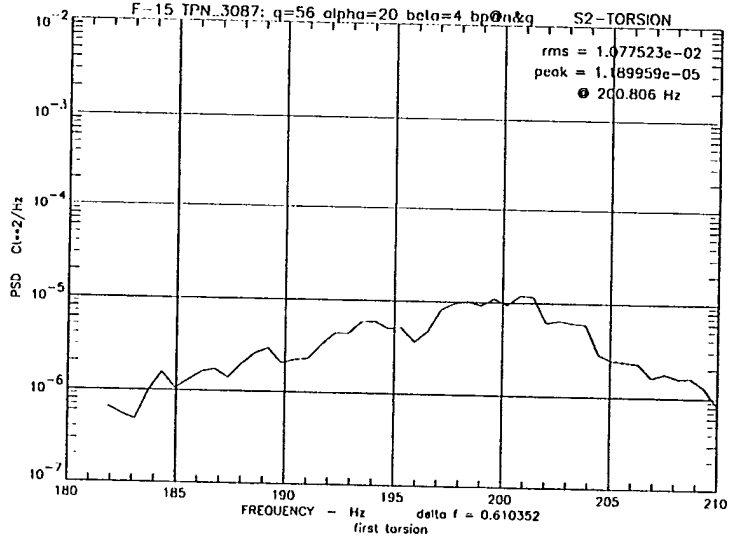
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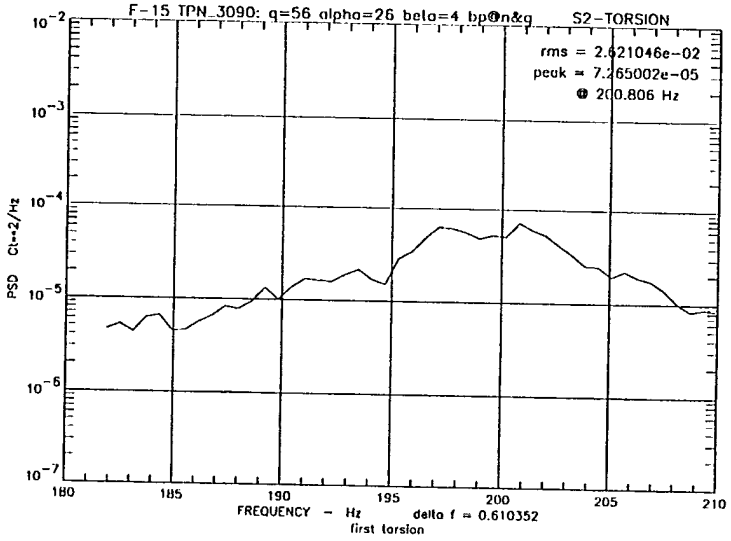
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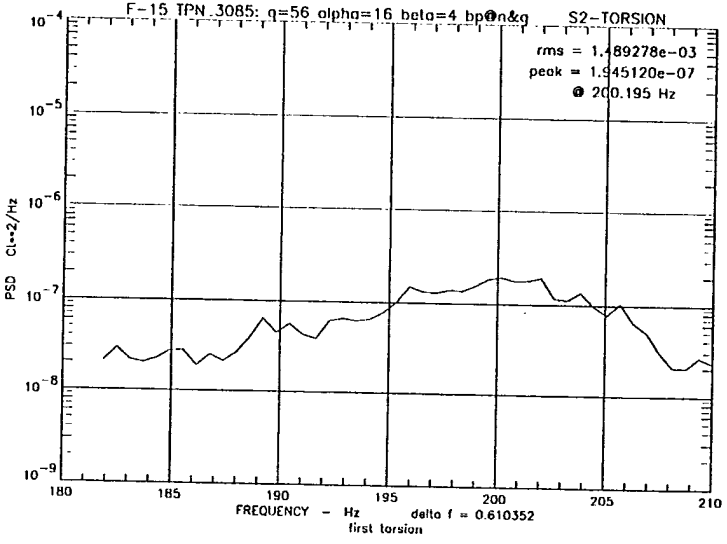
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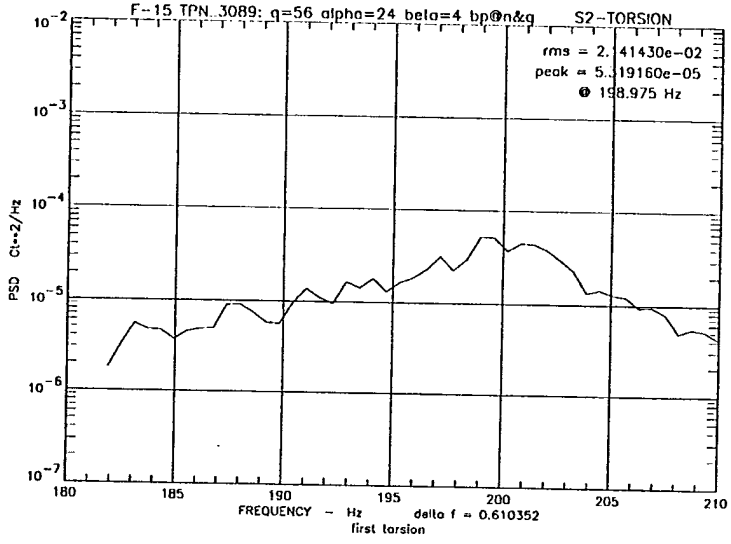
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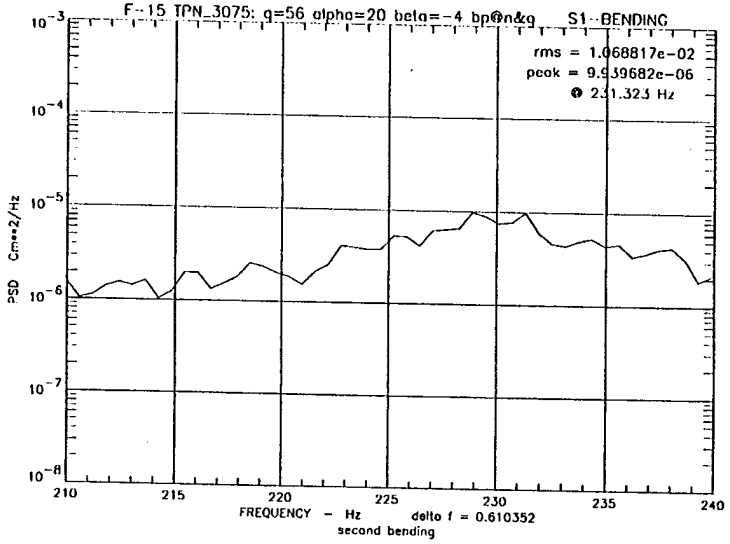
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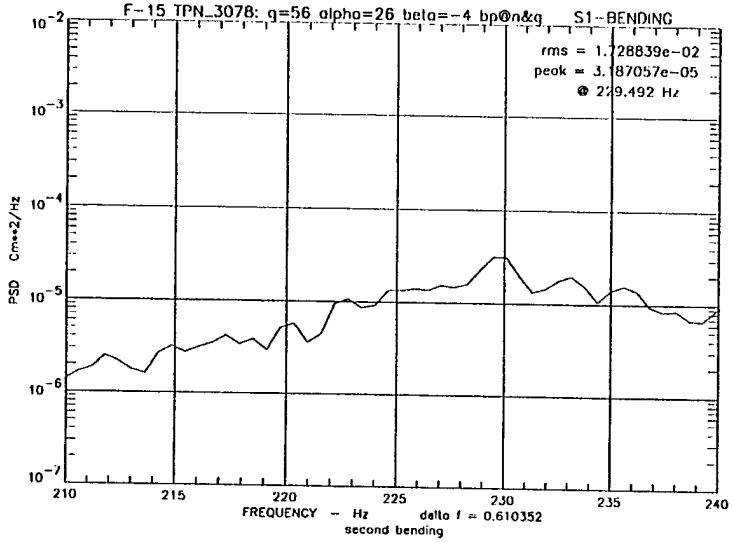
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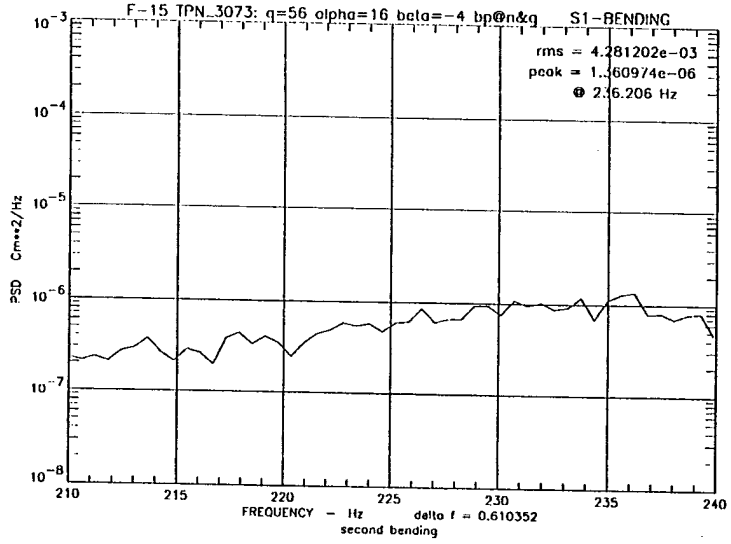
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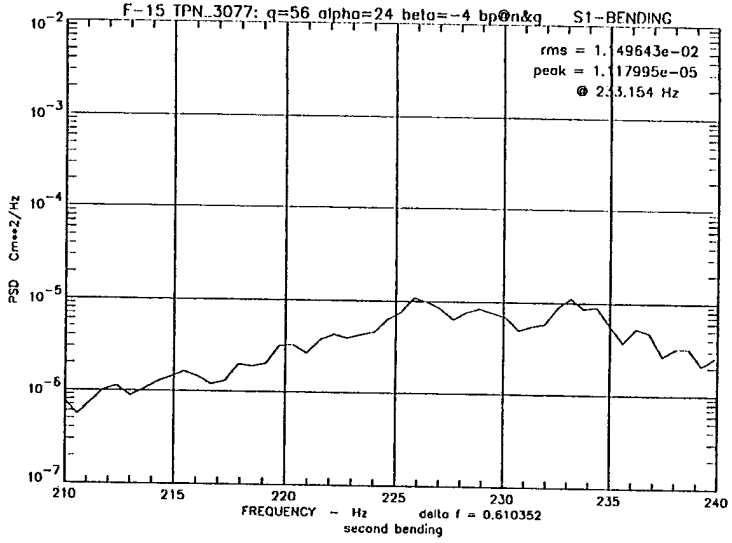
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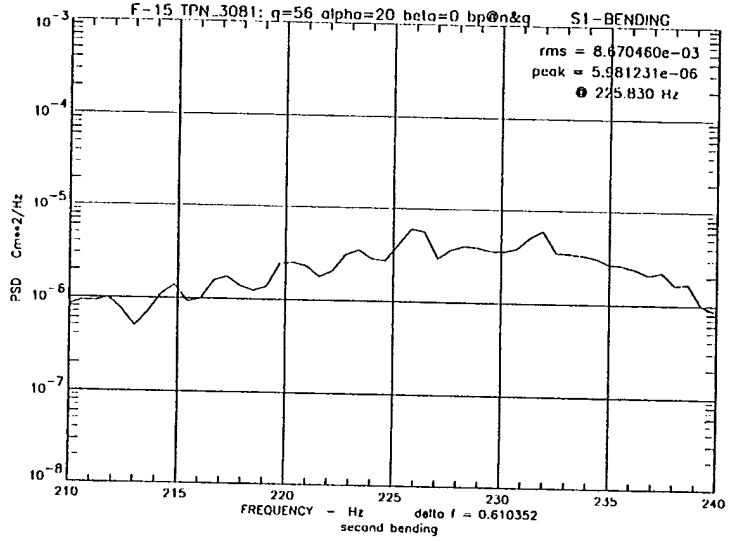
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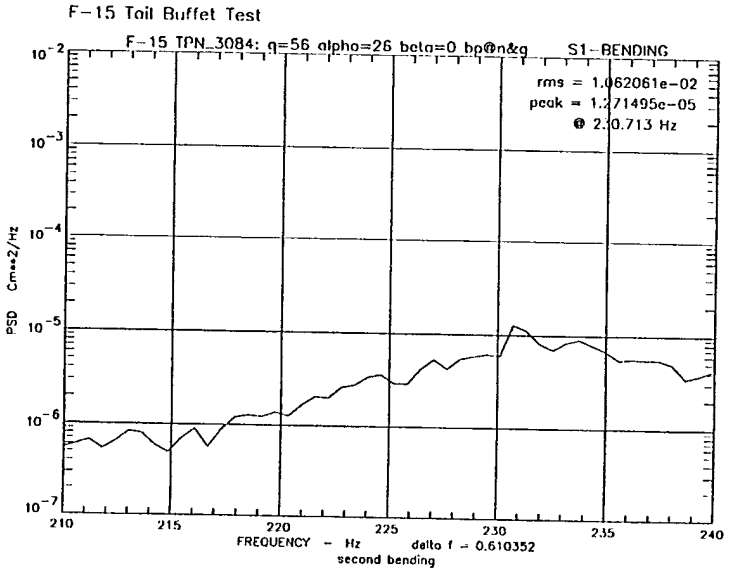
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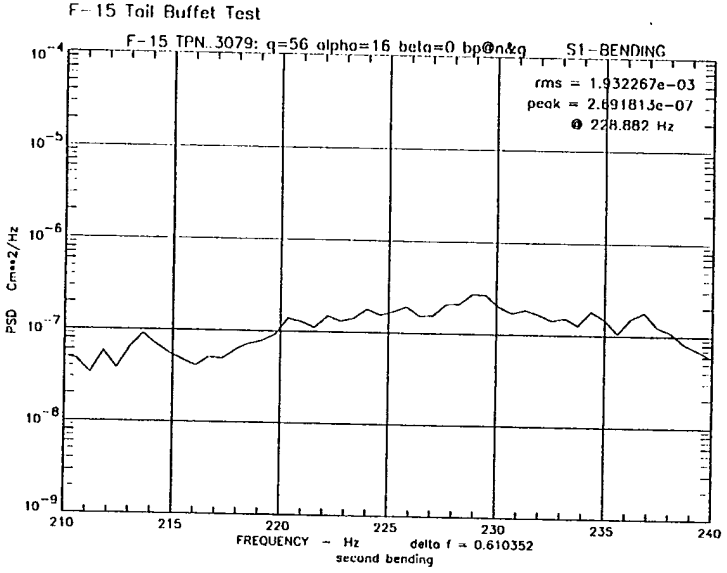
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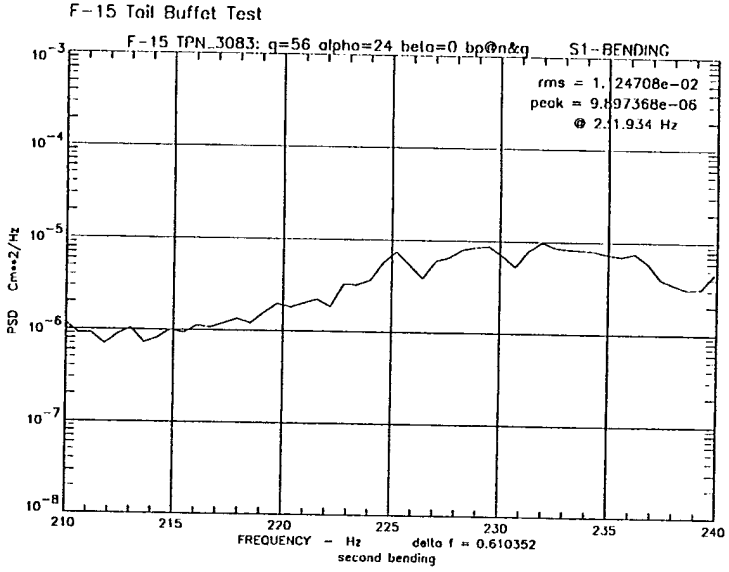
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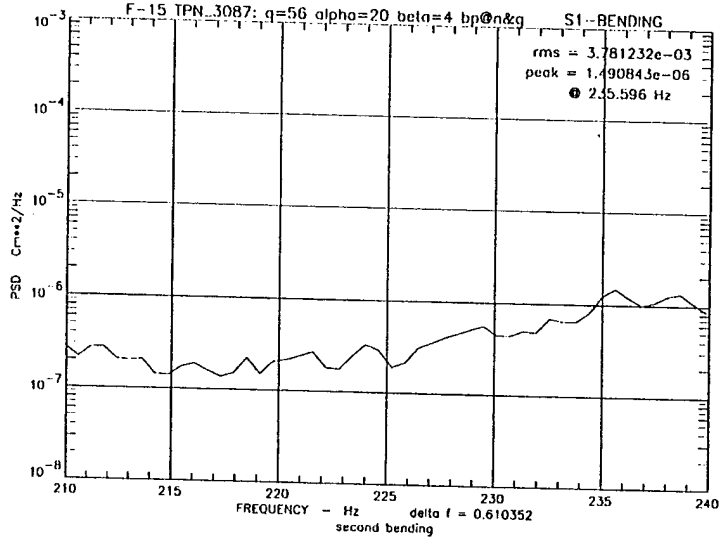
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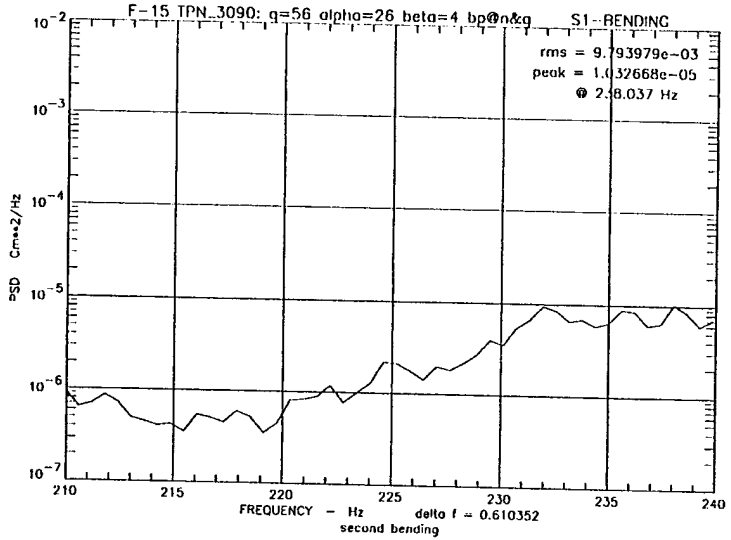
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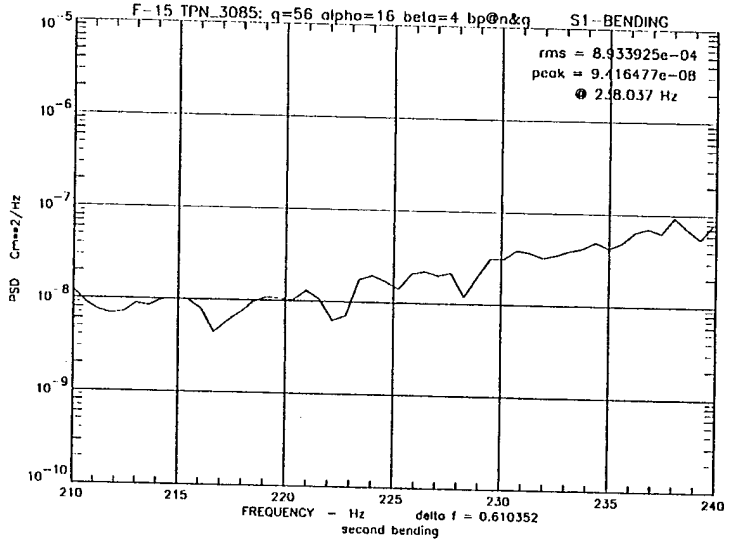
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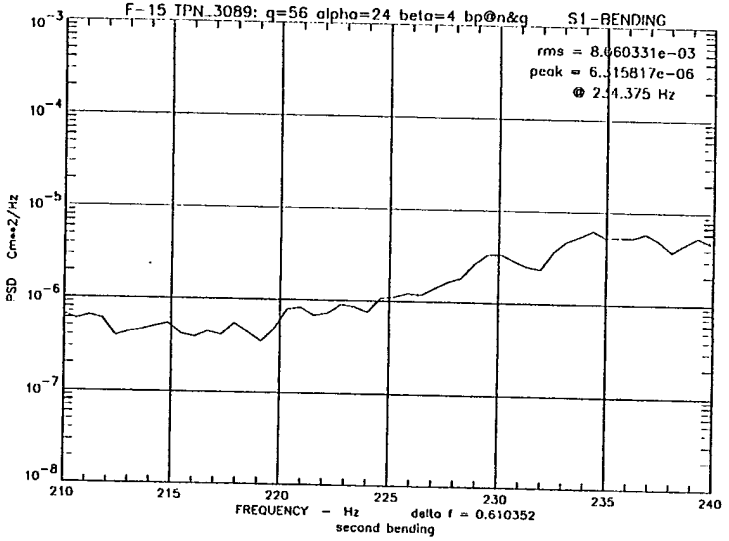
F-15 Tail Buffet Test



F-15 Tail Buffet Test



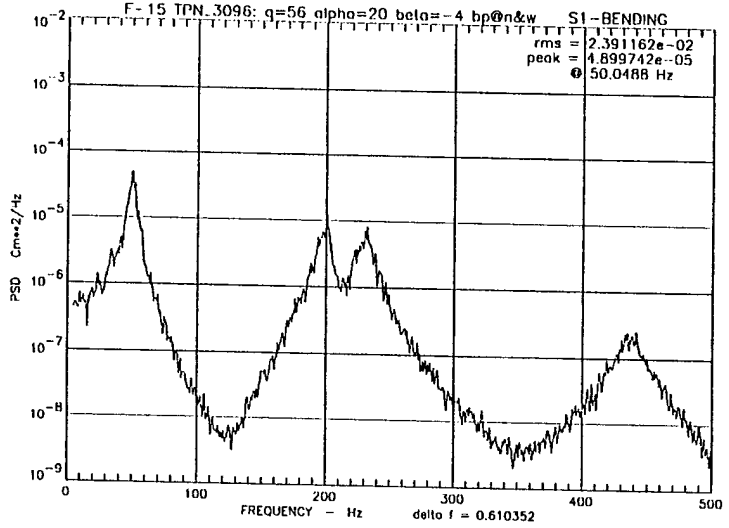
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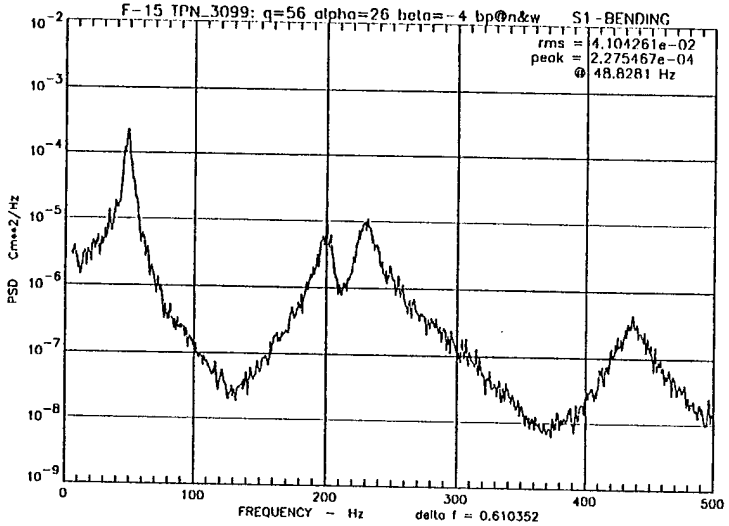
FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION
PSD GRAPHS

Q= 56PSF
3.1.1.6 NBP = 87 PSI, WBP = 65PSI, BETA = 0, +4, -4 DEG, ALPHA=16....26 DEG

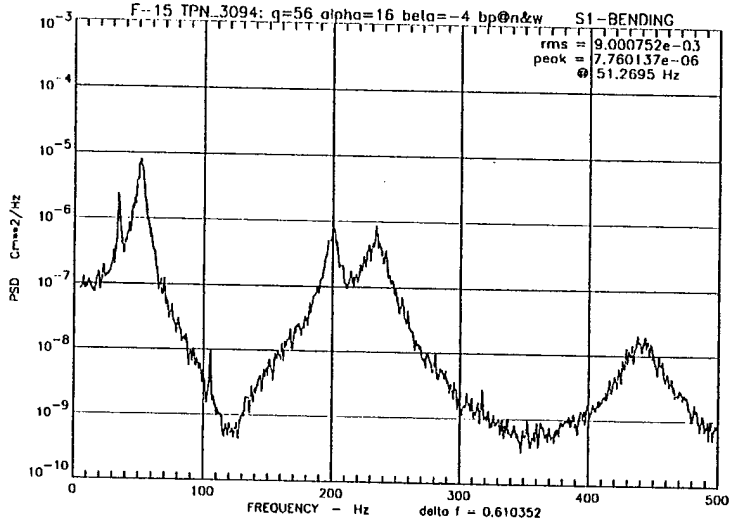
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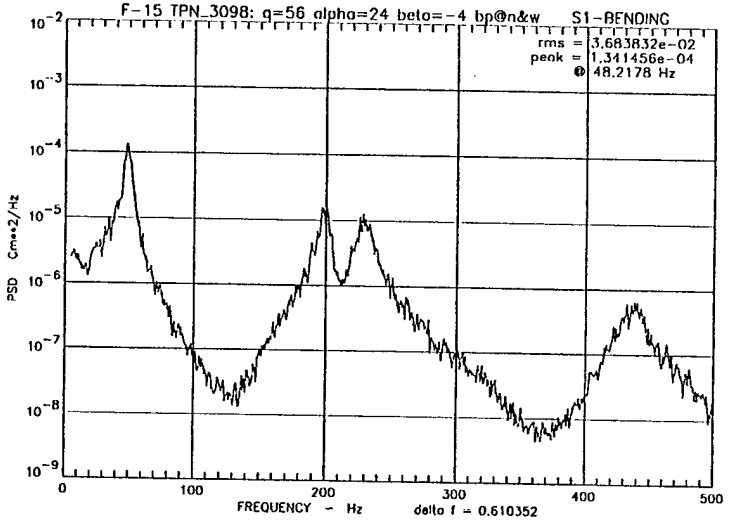
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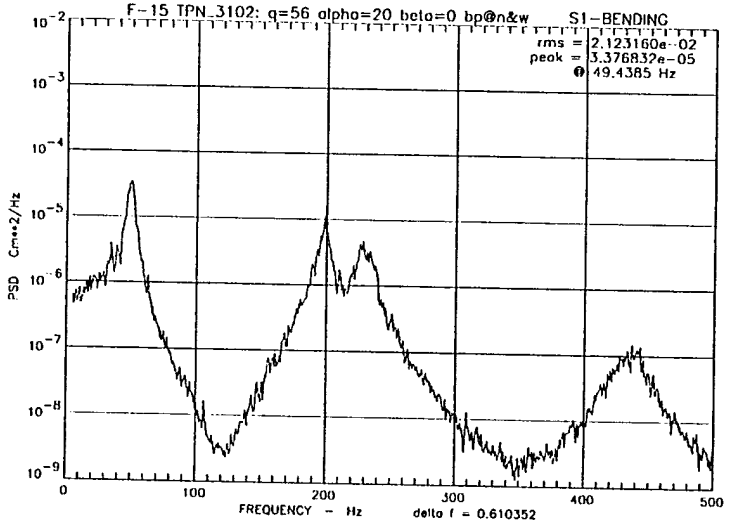
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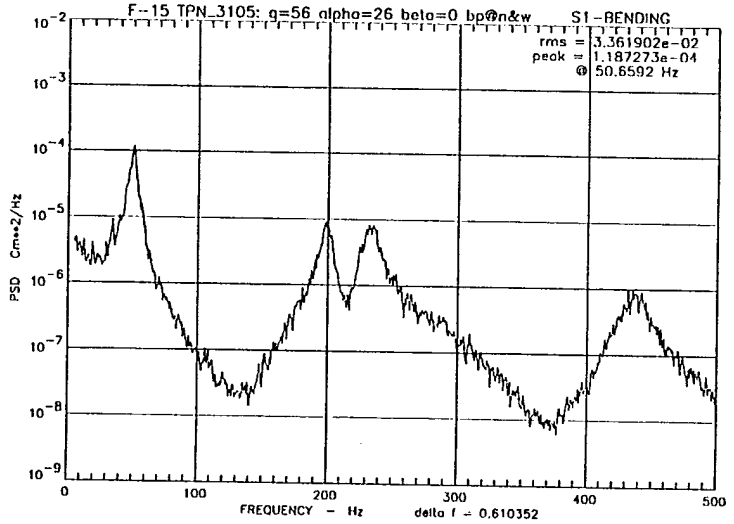
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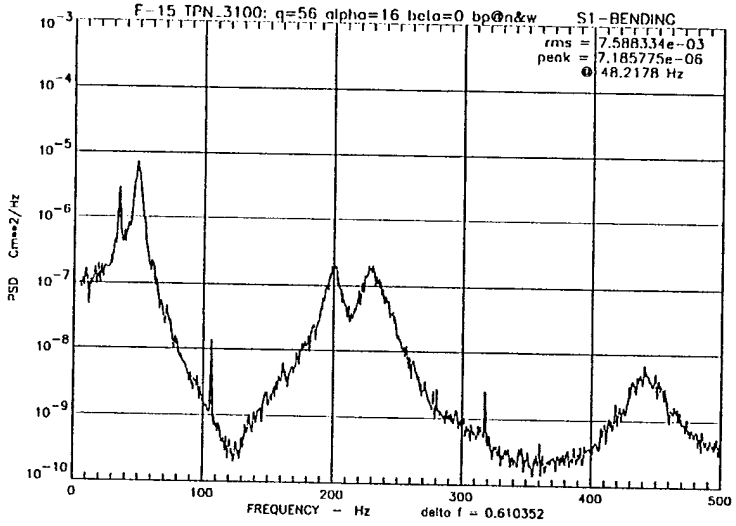
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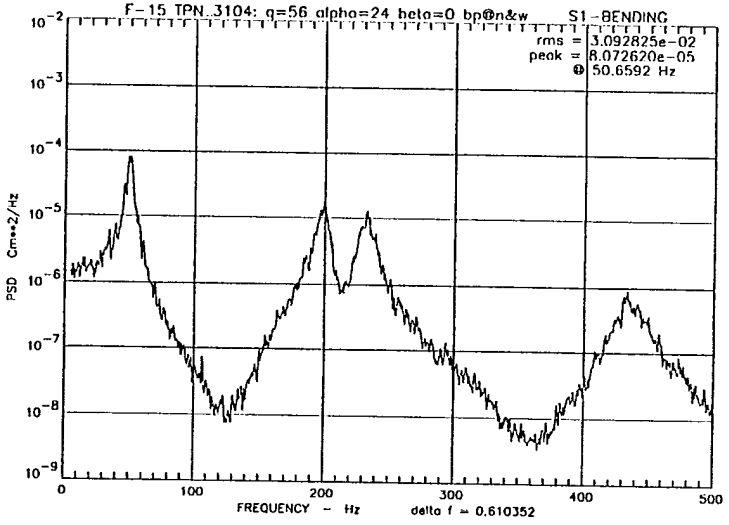
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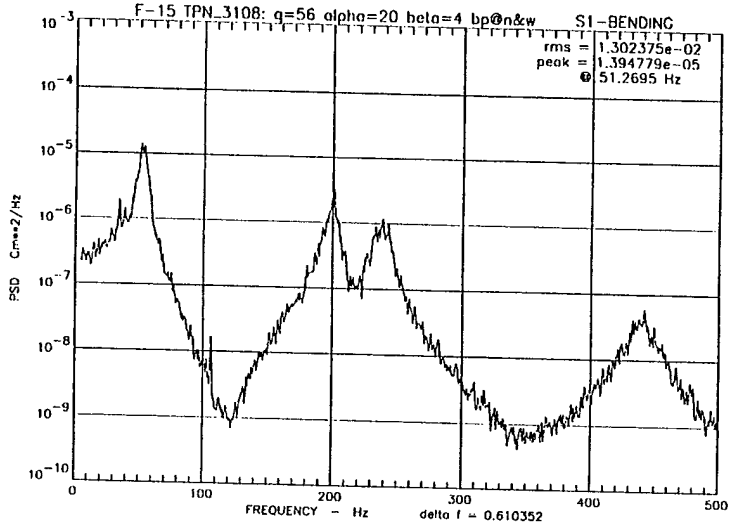
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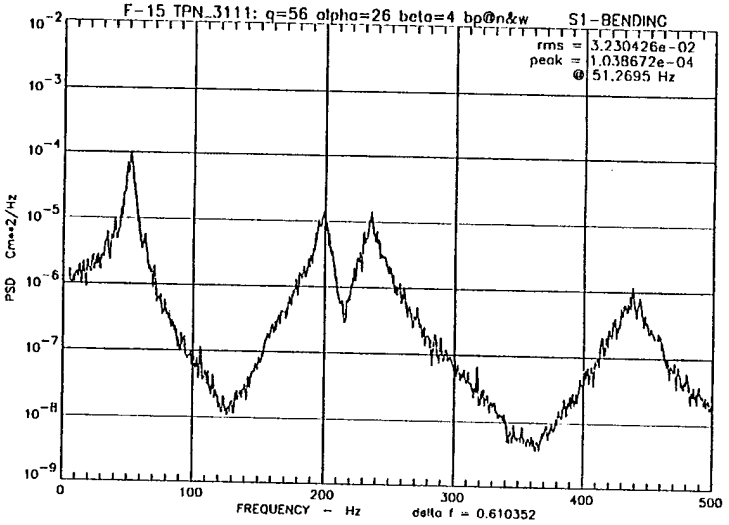
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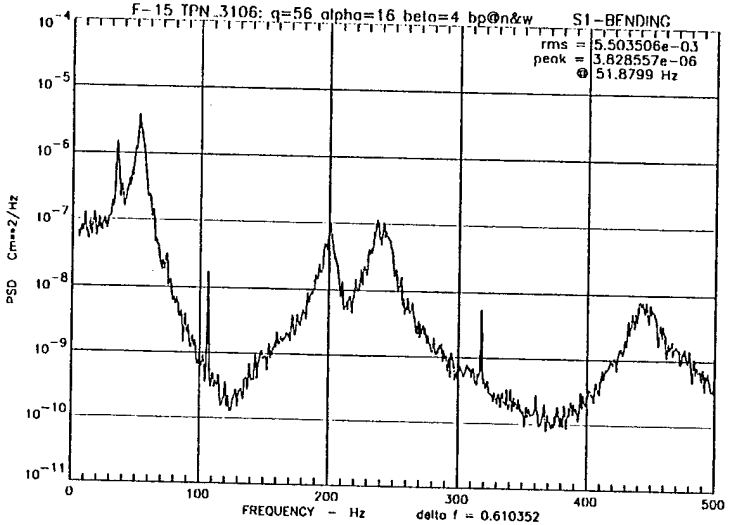
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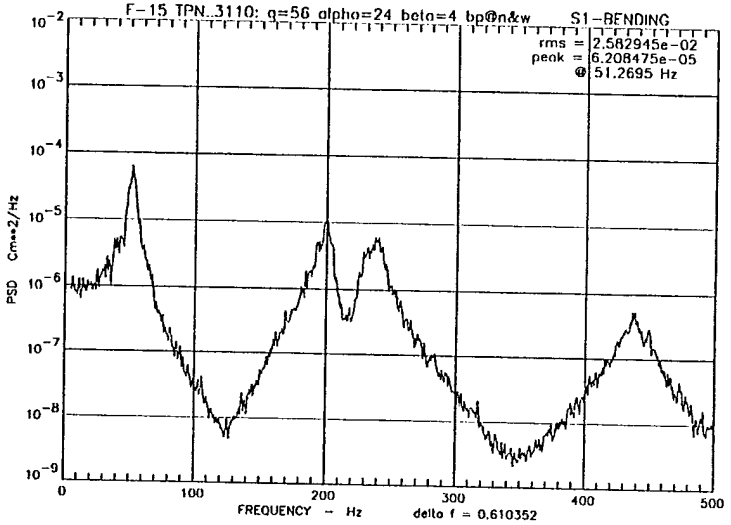
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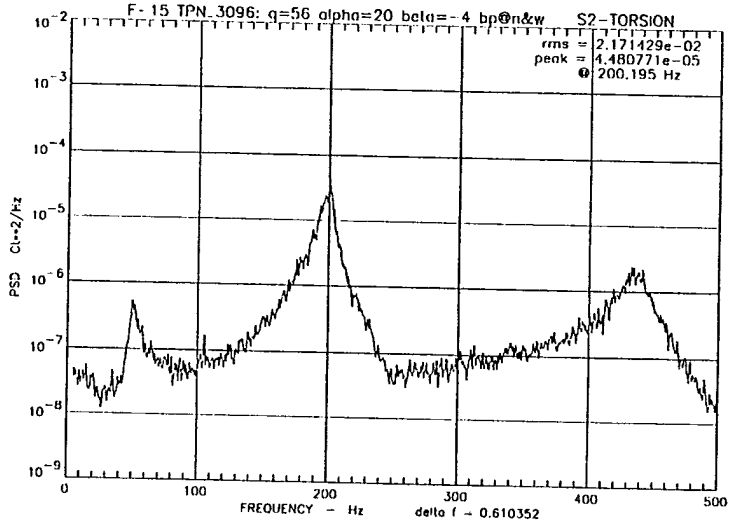
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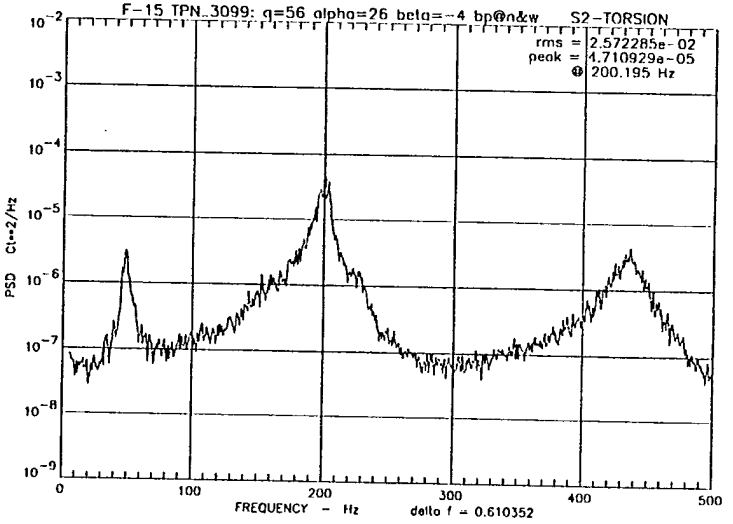
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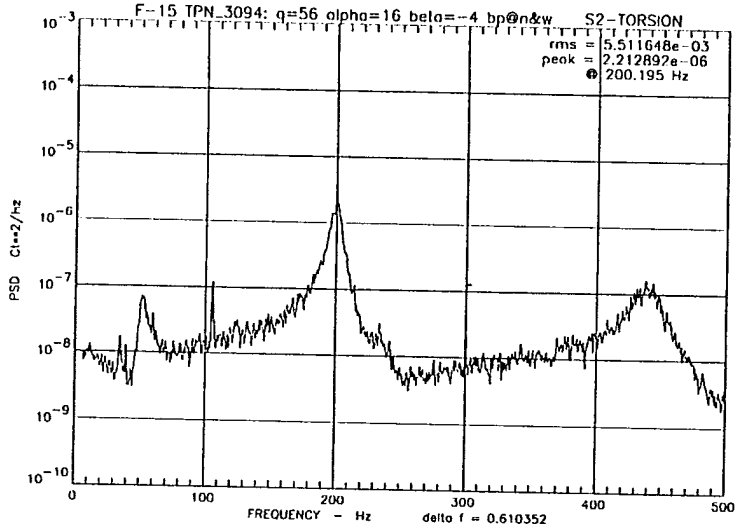
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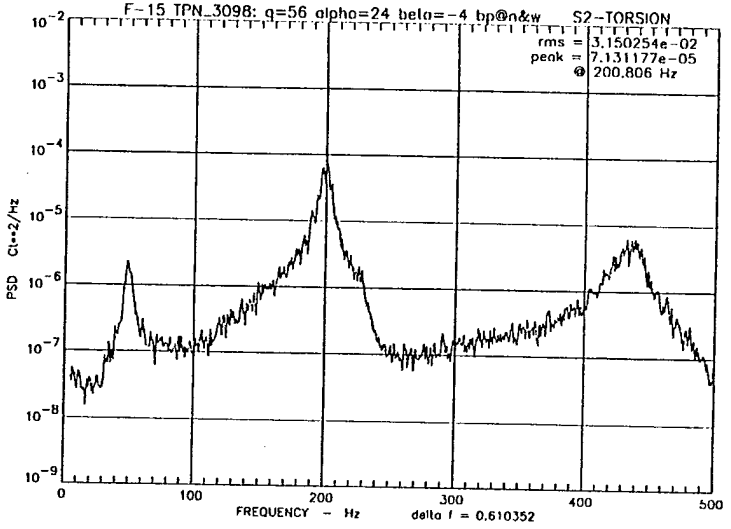
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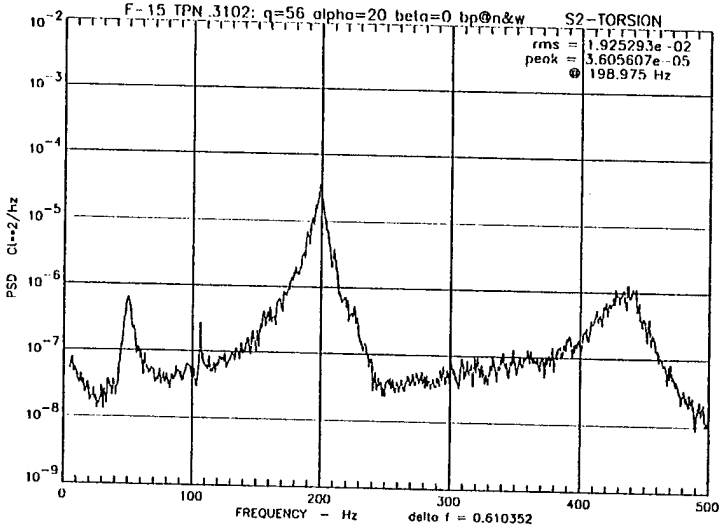
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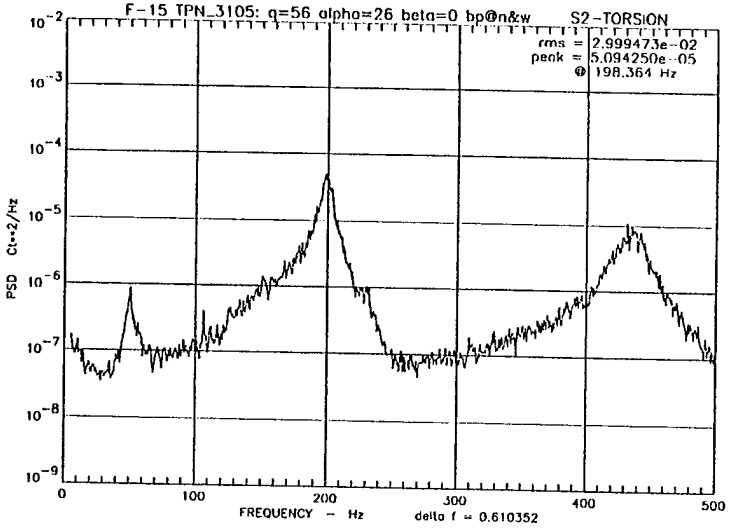
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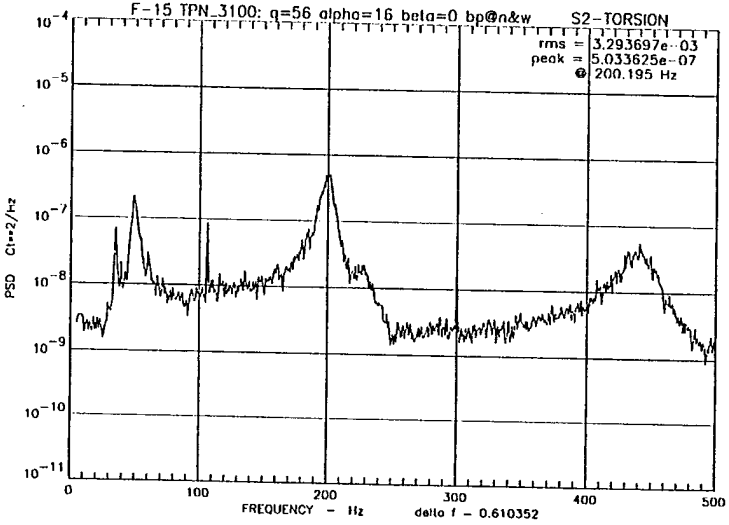
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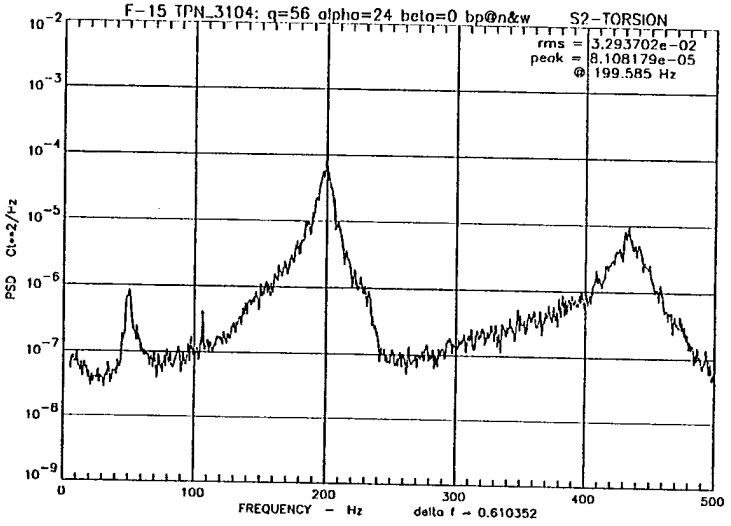
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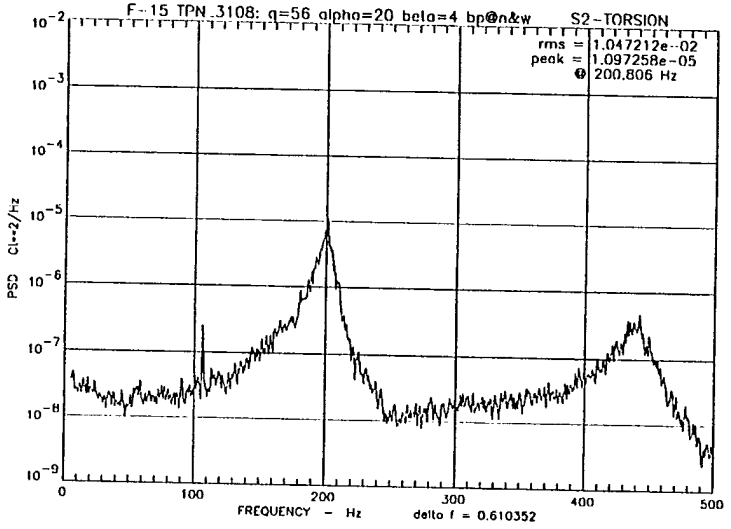
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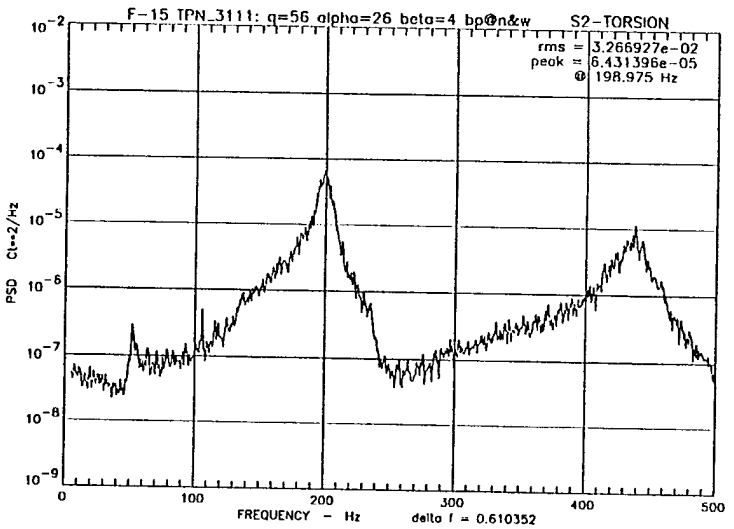
F-15 Tail Buffet Test



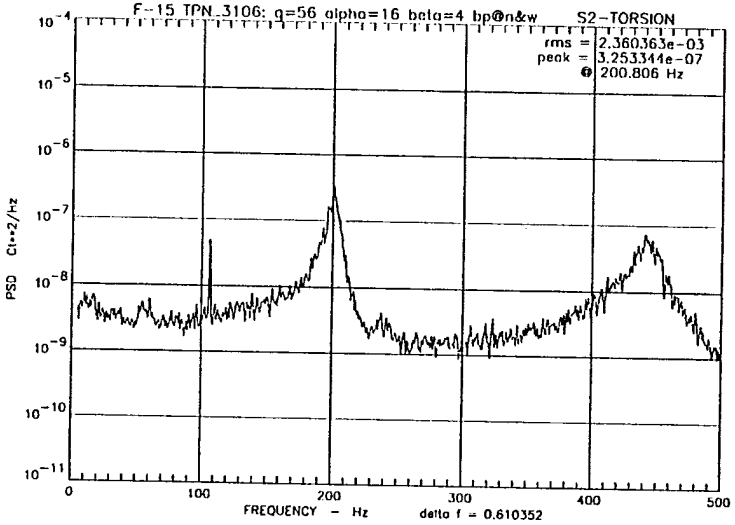
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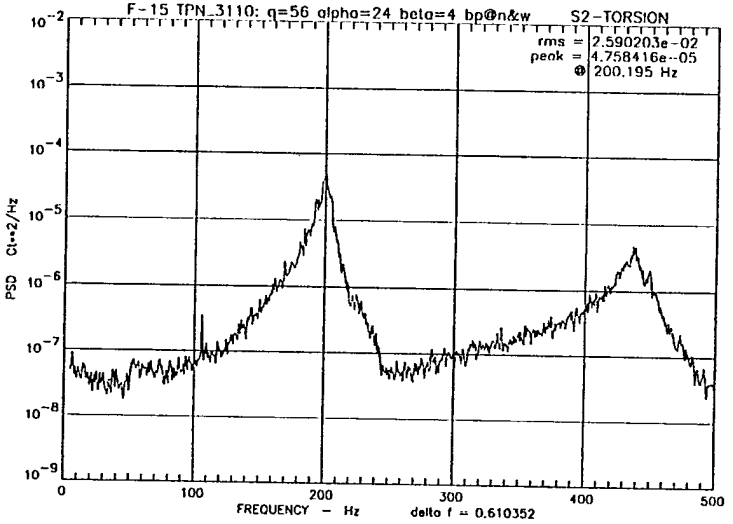
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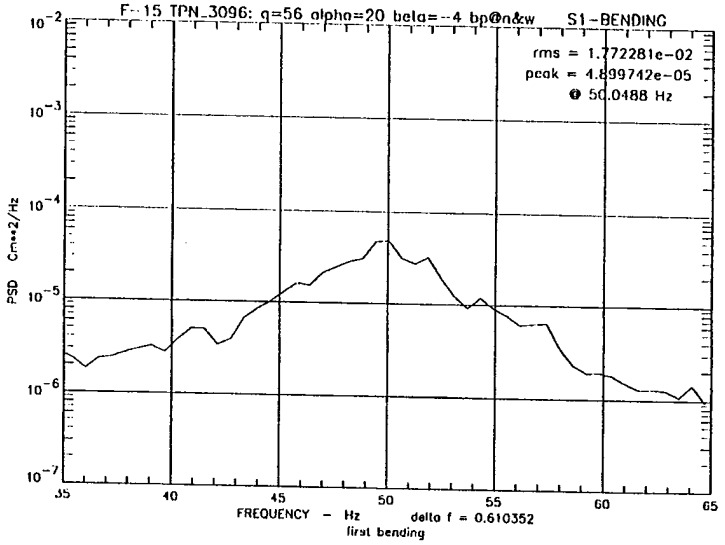
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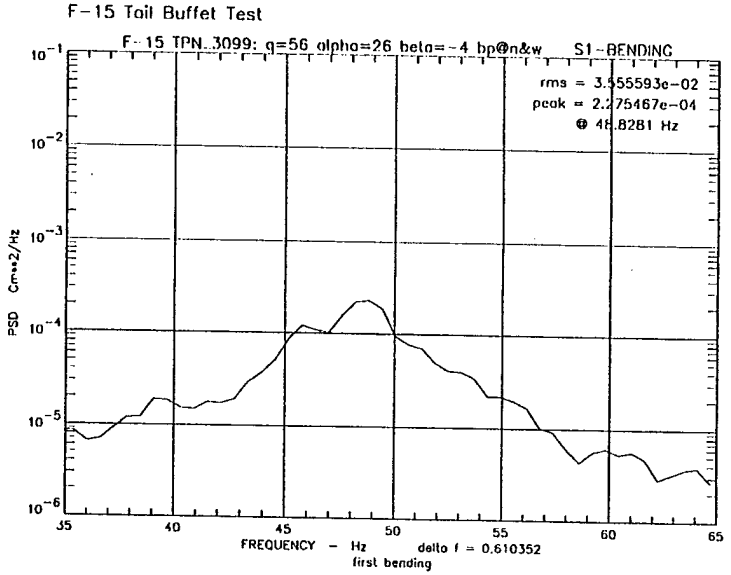
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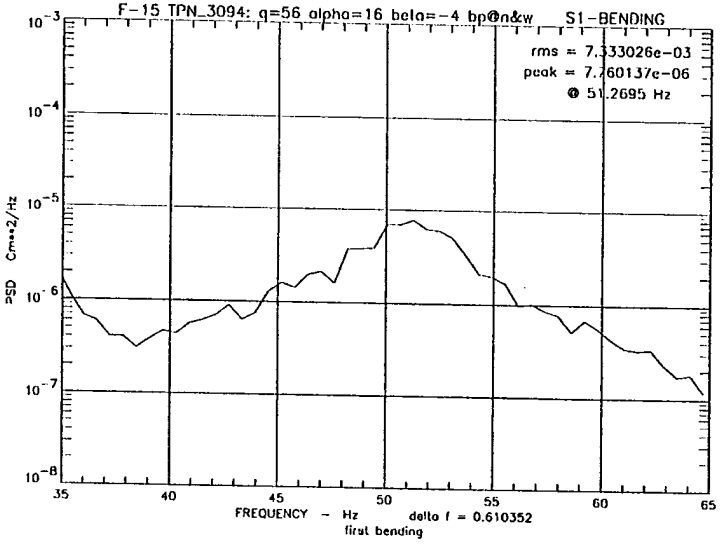
F-15 Tail Buffet Test



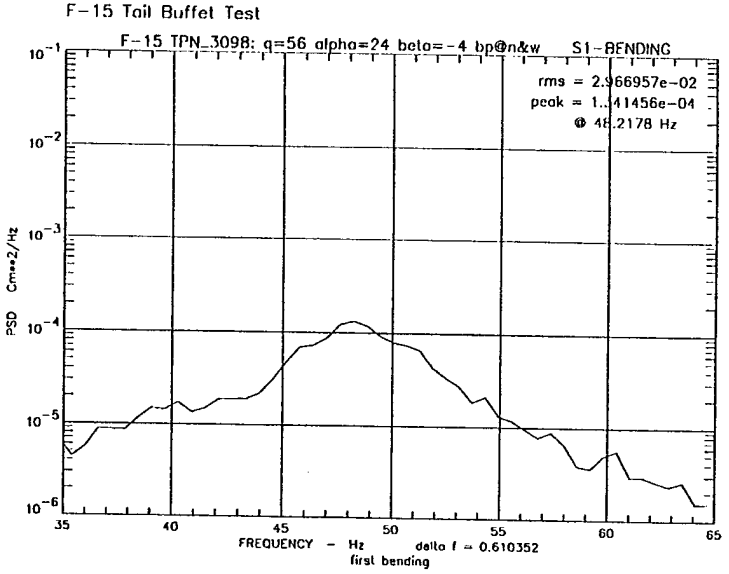
F-15 Tail Buffet Test



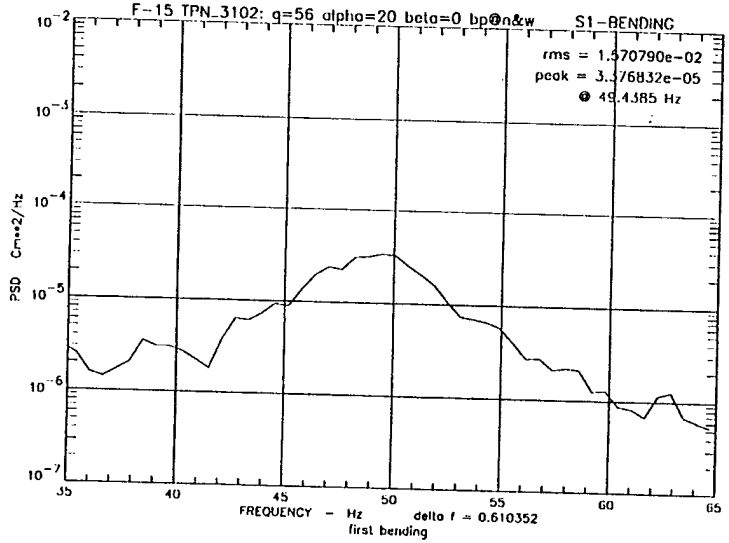
F-15 Tail Buffet Test



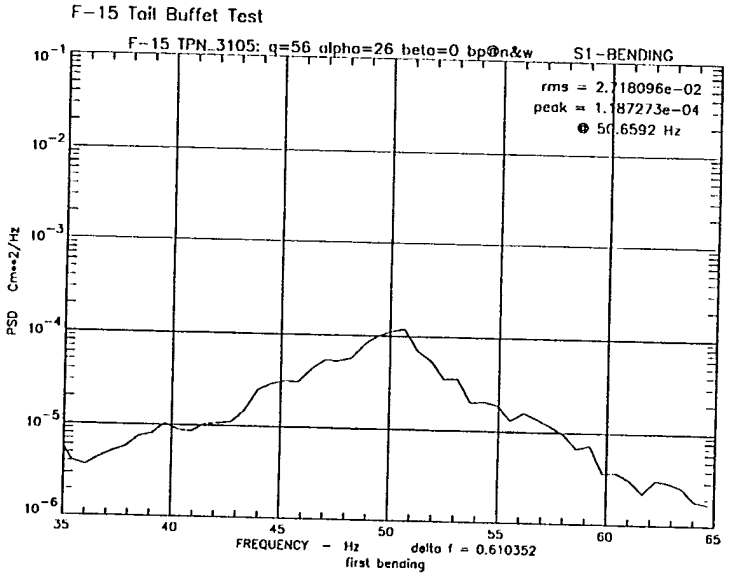
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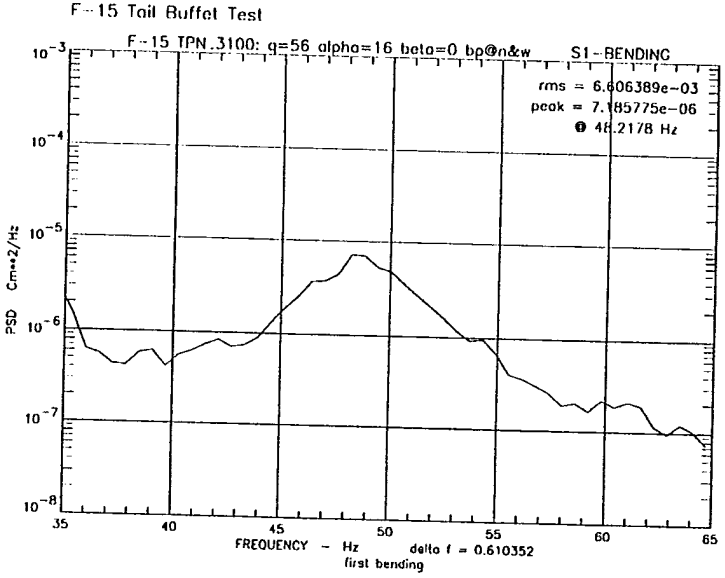
F-15 Tail Buffet Test



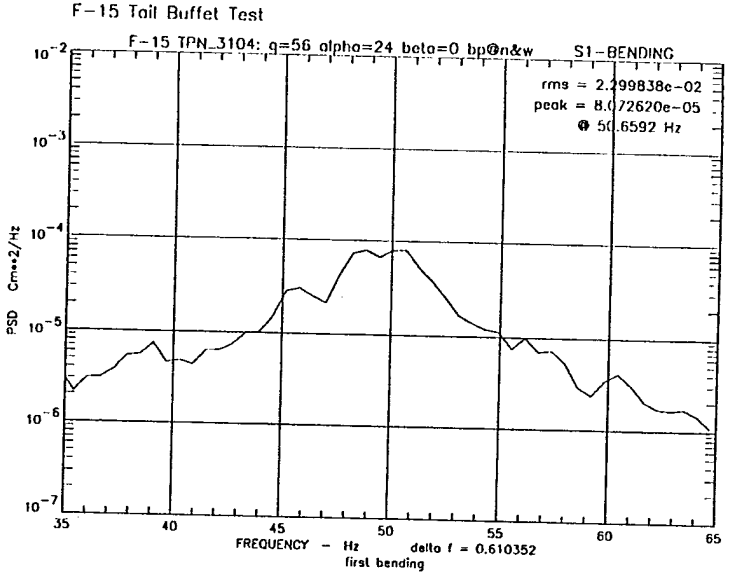
F-15 Tail Buffet Test



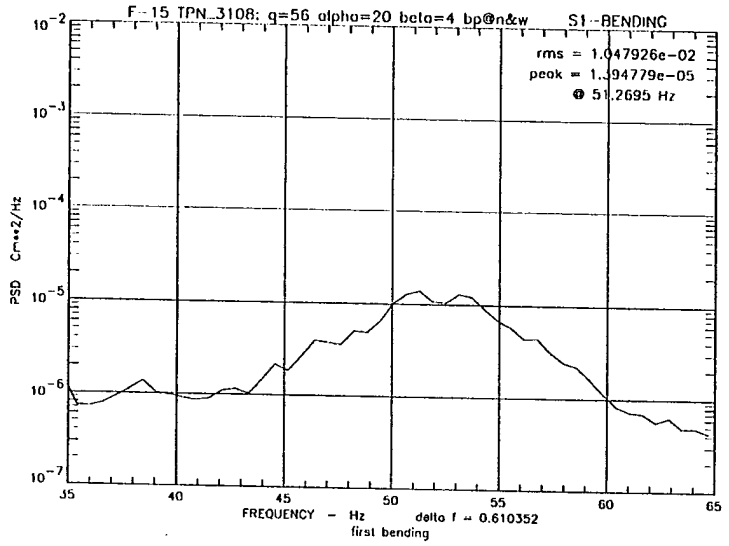
F-15 Tail Buffet Test



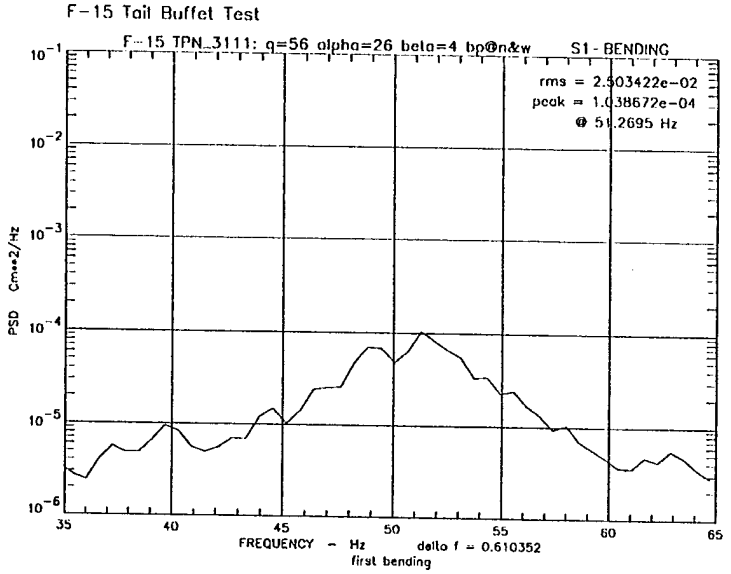
F-15 Tail Buffet Test



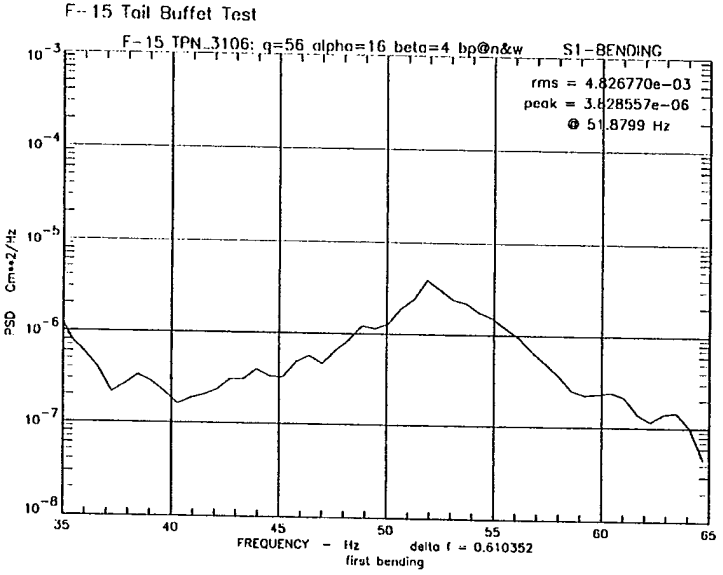
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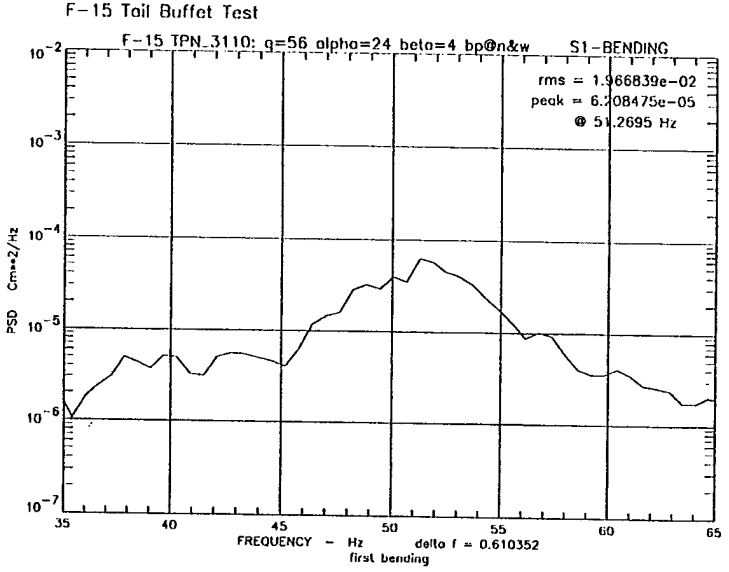
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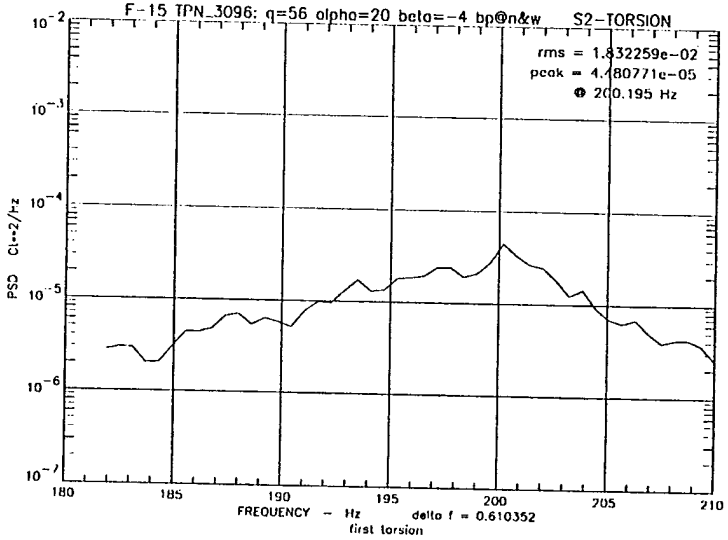
F-15 Tail Buffet Test



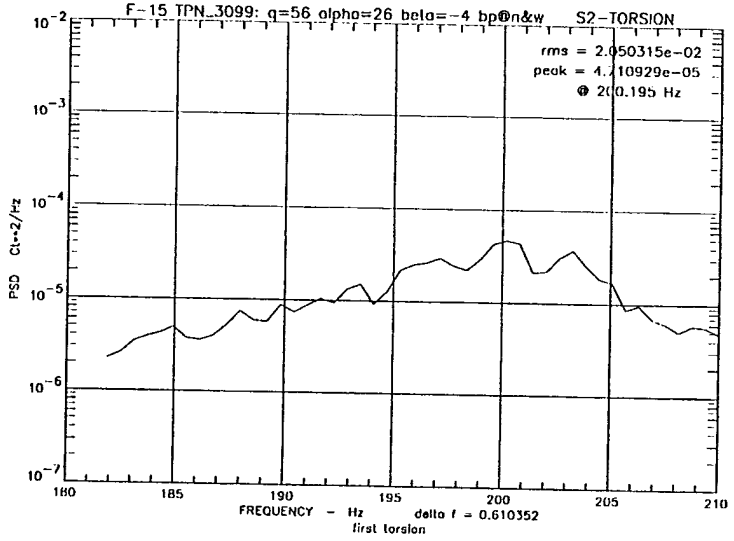
F-15 Tail Buffet Test



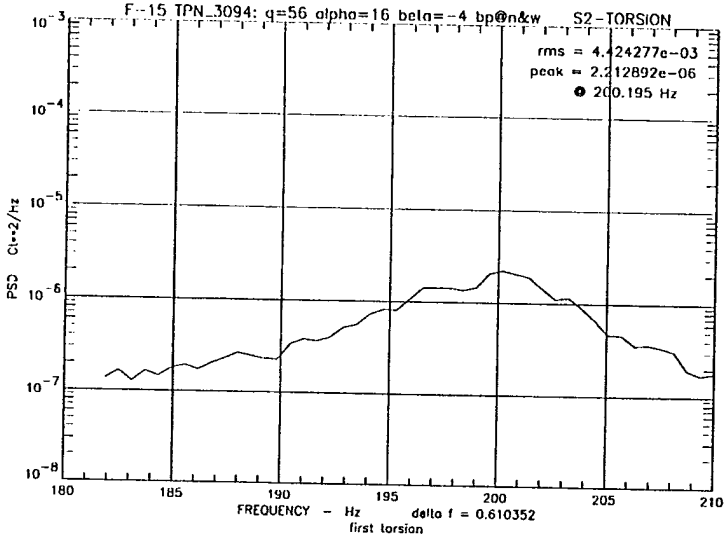
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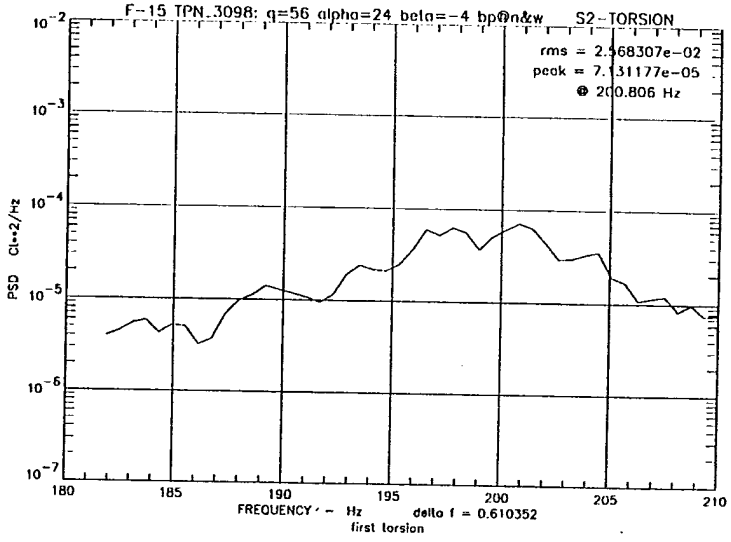
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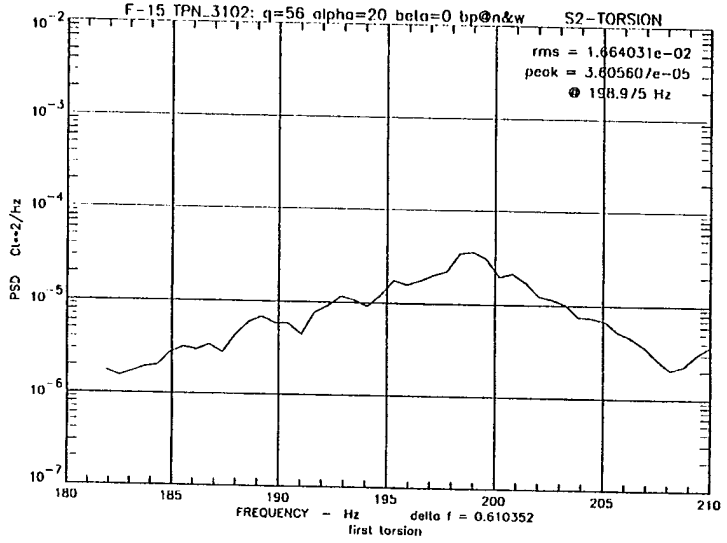
F-15 Tail Buffet Test



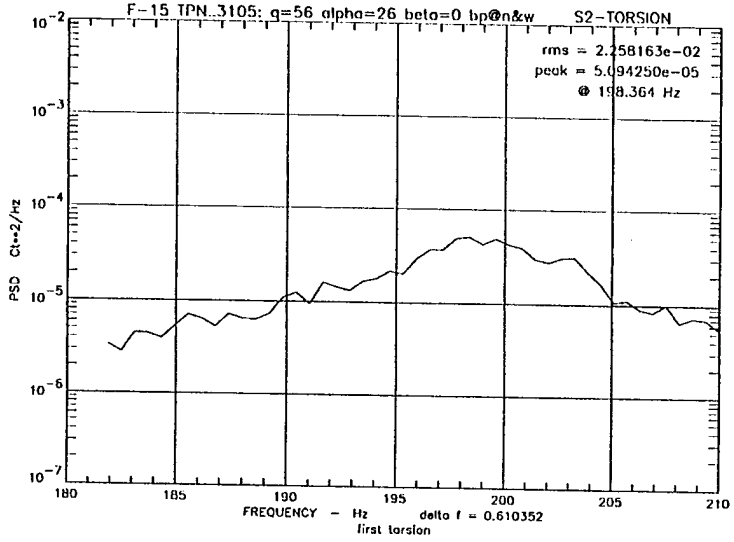
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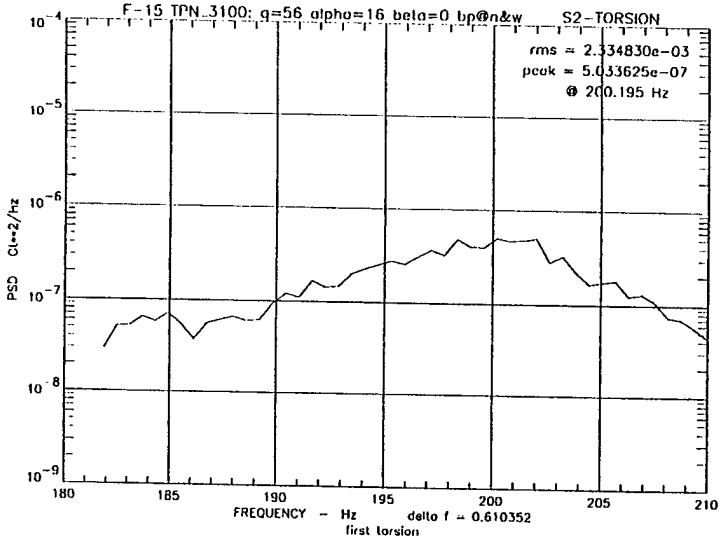
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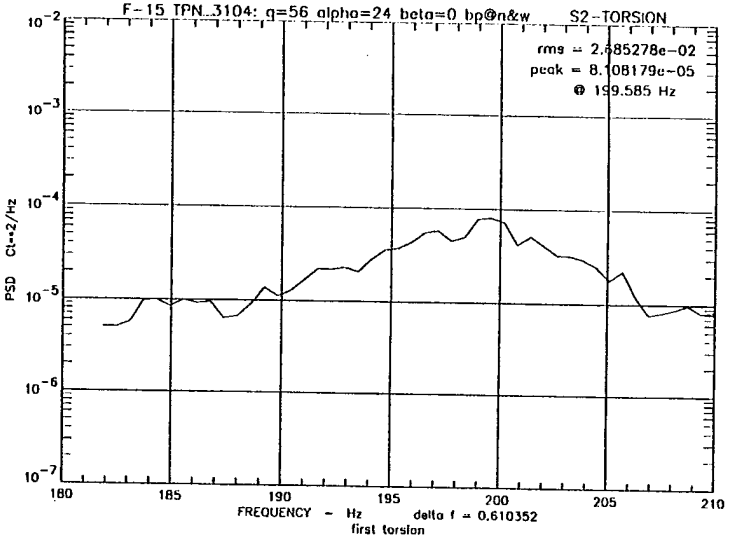
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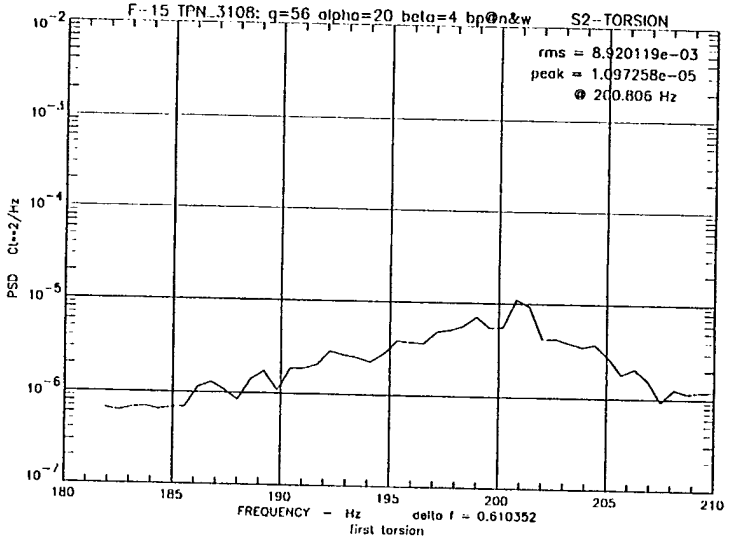
F-15 Tail Buffet Test



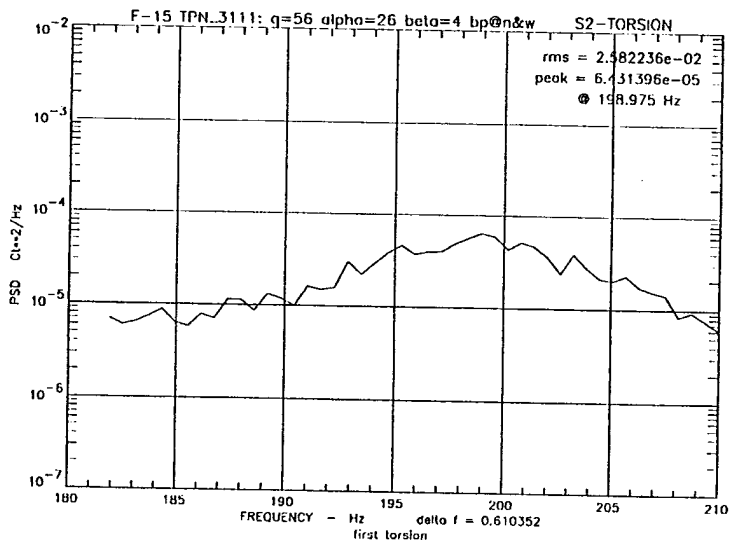
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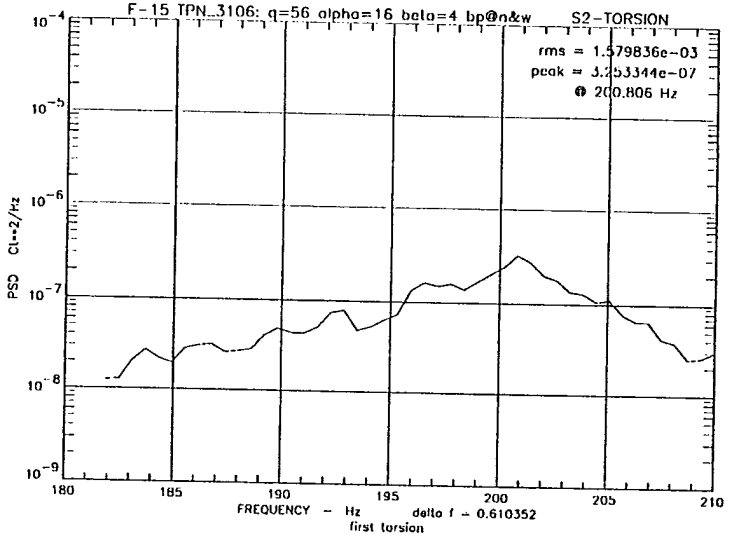
F-15 Tail Buffet Test



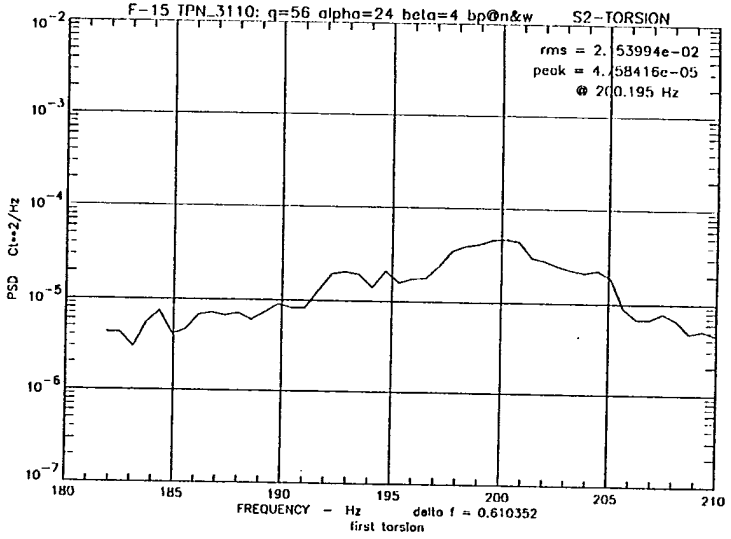
F-15 Tail Buffet Test



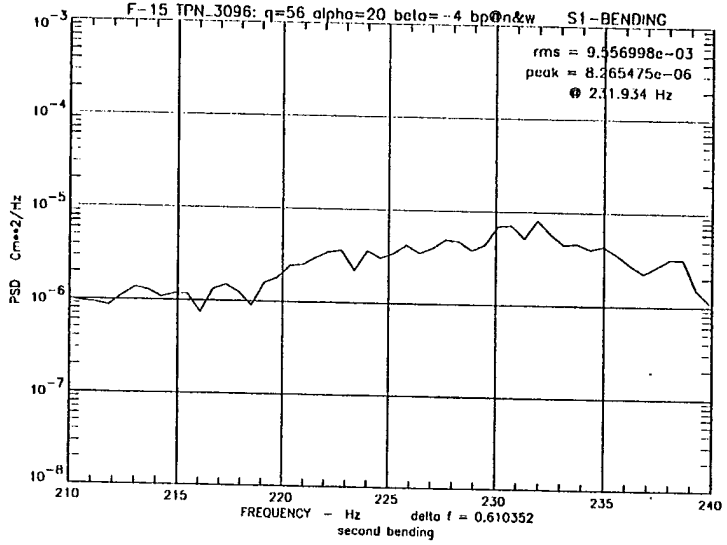
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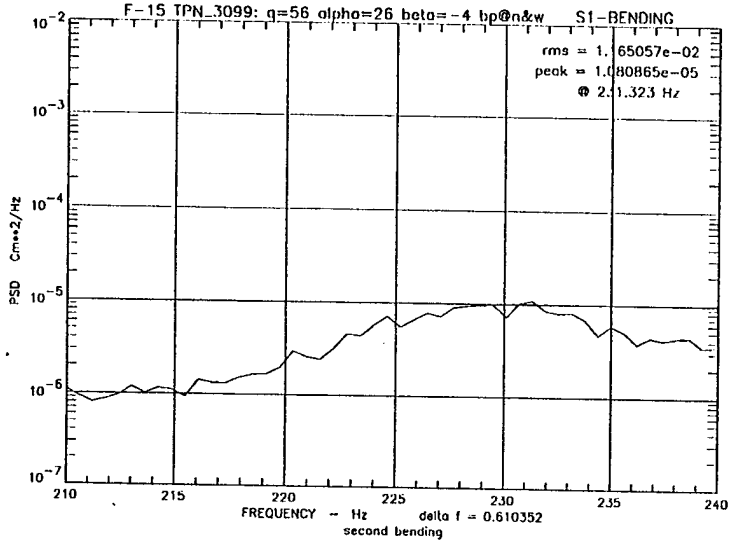
F-15 Tail Buffet Test



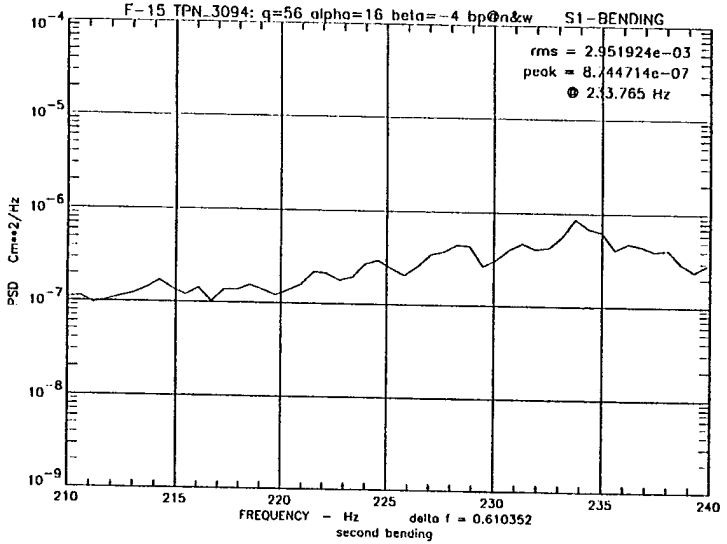
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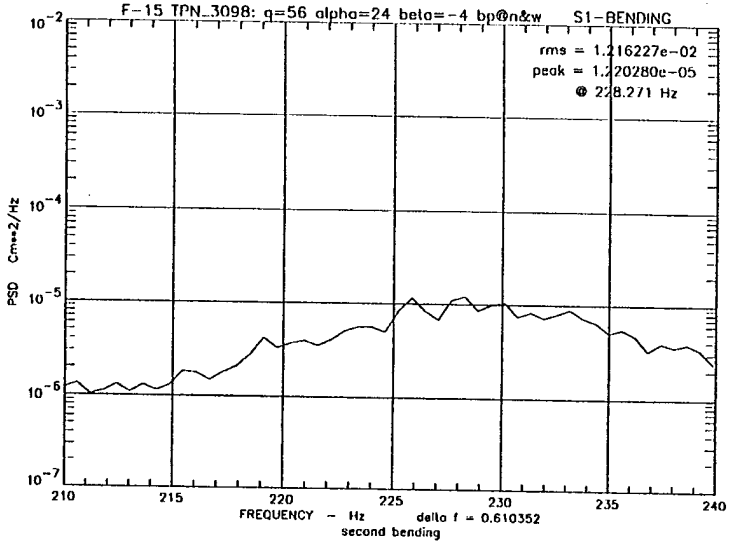
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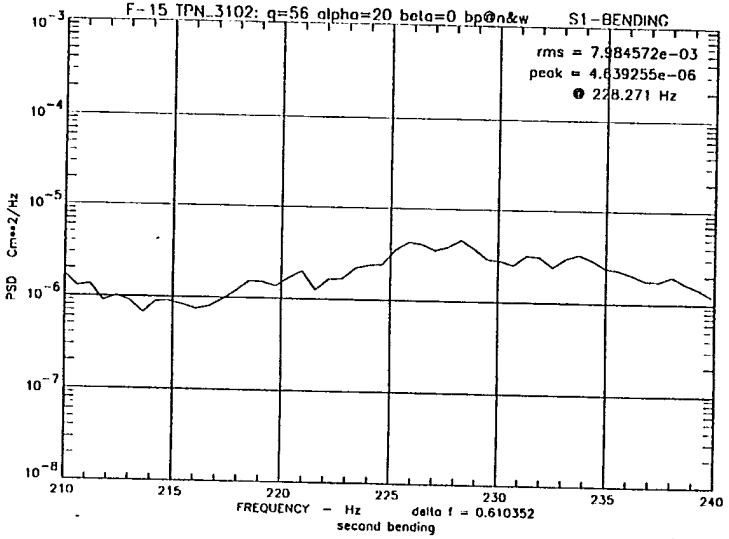
F-15 Tail Buffet Test



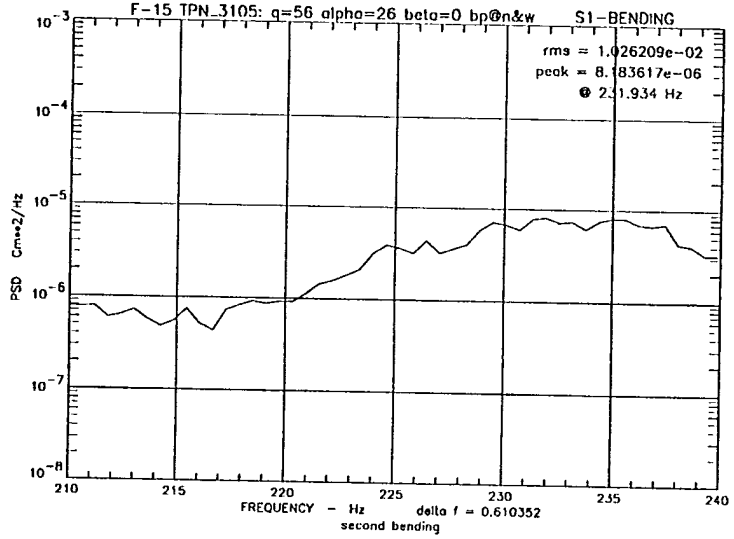
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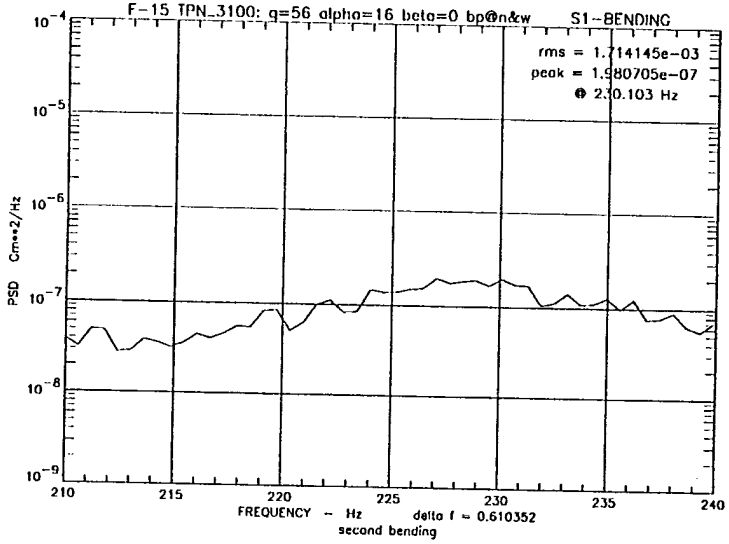
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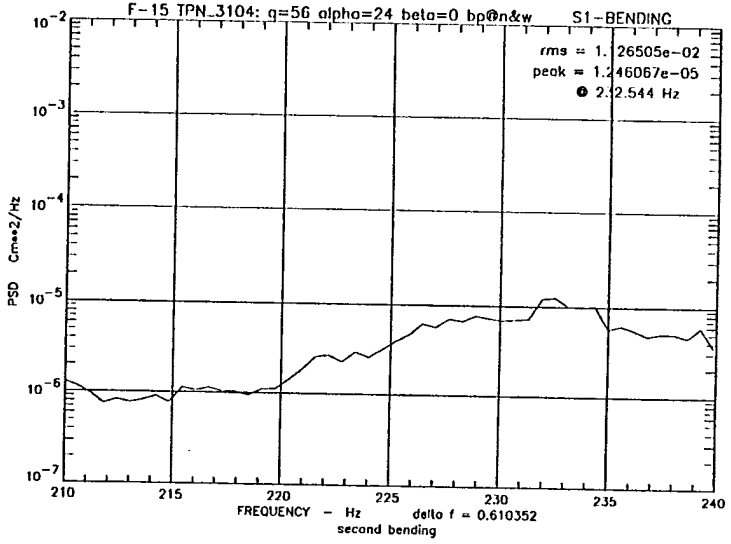
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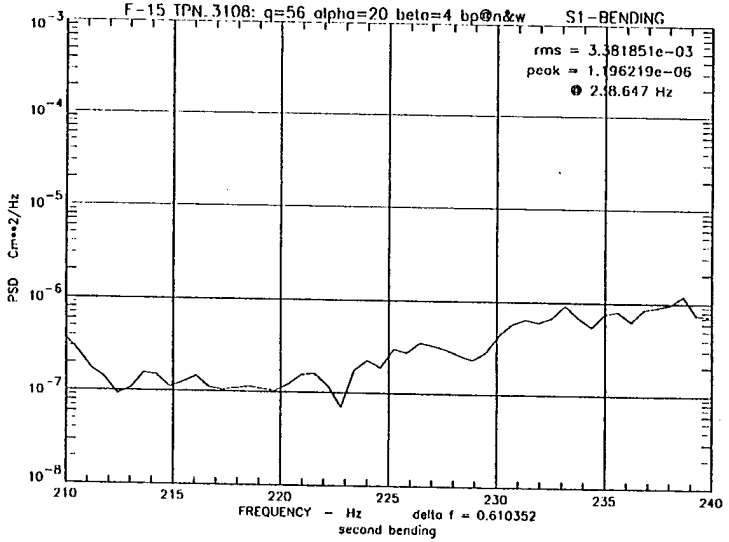
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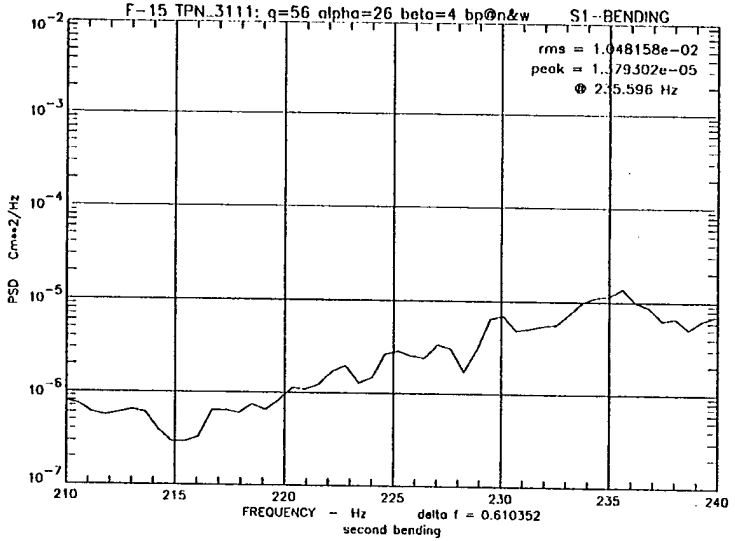
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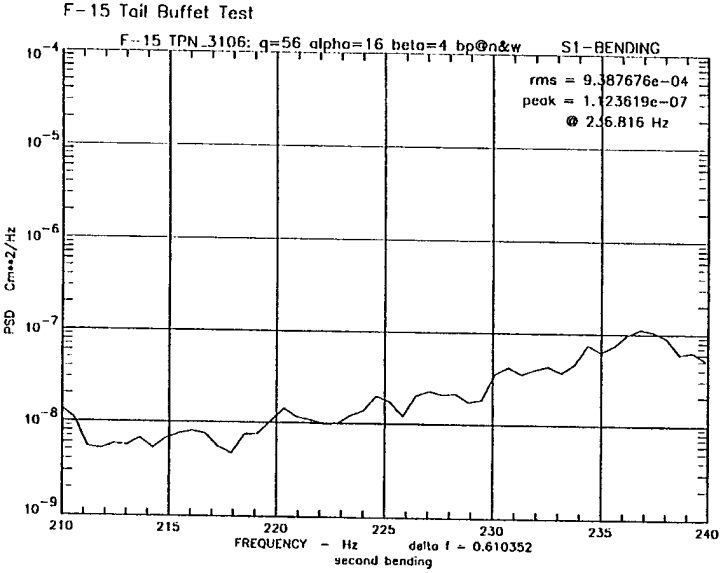
F-15 Tail Buffet Test



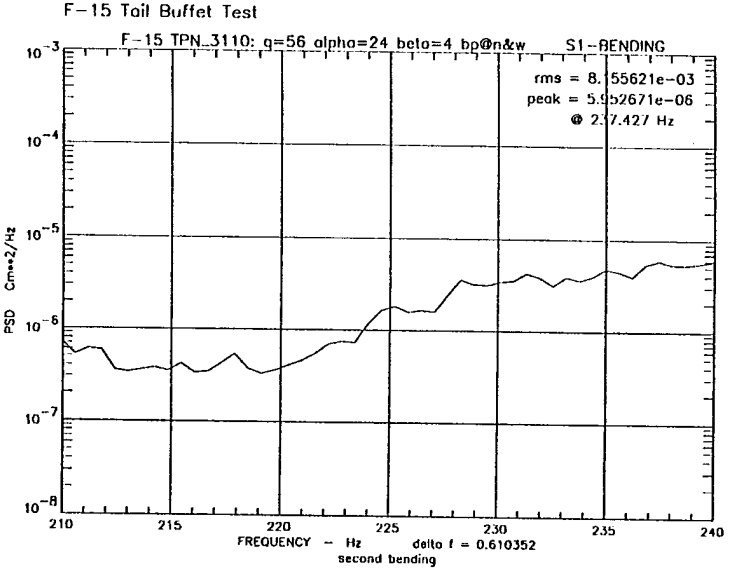
F-15 Tail Buffet Test



F-15 Tail Buffet Test



F-15 Tail Buffet Test



FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION

Q= 56PSF

3.1.2 RMS SUMMARY TABS

F-15 Vertical Tail Buffet Test: Overall RMS (Cm & Ct nondimensional units), Q=56 psi

0 psi blowing pressure:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	8	1.66E-03	5.42E-04	1.46E-03	1.28E-04	3.81E-04
4	20	1.24E-02	8.88E-03	9.89E-03	7.31E-03	3.77E-03
4	24	2.72E-02	2.54E-02	2.10E-02	2.07E-02	9.05E-03
4	32	5.54E-02	1.92E-02	4.79E-02	1.35E-02	1.81E-02
0	8	2.07E-03	6.48E-04	1.85E-03	1.28E-04	4.97E-04
0	20	1.97E-02	1.63E-02	1.42E-02	1.30E-02	8.49E-03
0	24	2.94E-02	3.13E-02	2.15E-02	2.48E-02	1.06E-02
0	32	6.13E-02	1.29E-02	5.52E-02	9.19E-03	1.53E-02
-4	8	1.82E-03	6.32E-04	1.54E-03	1.41E-04	6.01E-04
-4	20	2.43E-02	2.41E-02	1.62E-02	1.94E-02	1.11E-02
-4	24	3.52E-02	2.64E-02	2.90E-02	1.92E-02	1.08E-02
-4	32	5.84E-02	1.07E-02	5.31E-02	7.64E-03	1.21E-02

45 psi blowing pressure:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	8	1.79E-03	8.43E-04	1.55E-03	2.32E-04	3.76E-04
4	20	1.11E-02	7.96E-03	9.38E-03	6.81E-03	2.25E-03
4	24	2.48E-02	2.09E-02	2.00E-02	1.70E-02	5.97E-03
4	32	5.95E-02	2.01E-02	5.28E-02	1.42E-02	1.68E-02
0	8	2.12E-03	8.45E-04	1.93E-03	2.20E-04	4.39E-04
0	20	1.88E-02	1.48E-02	1.51E-02	1.25E-02	6.22E-03
0	24	2.99E-02	2.95E-02	2.29E-02	2.30E-02	1.08E-02
0	32	5.85E-02	1.46E-02	5.36E-02	1.08E-02	1.30E-02
-4	8	1.85E-03	9.49E-04	1.61E-03	1.95E-04	4.29E-04
-4	20	2.25E-02	1.94E-02	1.71E-02	1.62E-02	8.87E-03
-4	24	3.88E-02	2.94E-02	3.26E-02	2.32E-02	1.22E-02
-4	32	5.75E-02	1.13E-02	5.35E-02	8.11E-03	1.14E-02

65 psi blowing pressure:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	5.09E-03	2.21E-03	4.43E-03	1.43E-03	8.36E-04
4	20	1.33E-02	1.01E-02	1.10E-02	8.79E-03	3.00E-03
4	24	2.57E-02	2.45E-02	2.01E-02	2.03E-02	7.27E-03
4	28	3.71E-02	3.30E-02	2.99E-02	2.42E-02	1.10E-02
0	16	7.27E-03	3.21E-03	6.23E-03	2.35E-03	1.73E-03
0	20	2.11E-02	1.84E-02	1.59E-02	1.59E-02	7.60E-03
0	24	3.14E-02	3.38E-02	2.32E-02	2.79E-02	1.14E-02
0	28	4.10E-02	2.15E-02	3.37E-02	1.51E-02	1.49E-02
-4	16	9.23E-03	5.49E-03	7.58E-03	4.44E-03	3.06E-03
-4	20	2.49E-02	2.23E-02	1.85E-02	1.91E-02	1.00E-02
-4	24	3.60E-02	3.00E-02	2.90E-02	2.39E-02	1.23E-02
-4	28	4.66E-02	1.55E-02	4.00E-02	1.04E-02	1.57E-02

F-15 Vertical Tail Buffet Test: Overall RMS (Cm & Ct nondimensional units), Q=56 psi

65 psi blowing pressure at gun only:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.00541	.00215	.00473	.00139	.00097
4	20	.01420	.01213	.01127	.01049	.00378
4	24	.02596	.02449	.02001	.01992	.00851
4	26	.03256	.03098	.02574	.02514	.00997
0	16	.00749	.00344	.00632	.00268	.00196
0	20	.02176	.02095	.01542	.01813	.00872
0	24	.03202	.03406	.02375	.02819	.01150
0	26	.03838	.03261	.03179	.02505	.01109
-4	16	.01140	.00776	.00872	.00630	.00434
-4	20	.02649	.02734	.01832	.02311	.01102
-4	24	.04180	.02930	.03560	.02210	.01182
-4	26	.04863	.02209	.04126	.01677	.01775

65 psi blowing pressure at gun & wing L.E.:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.00571	.00247	.00491	.00163	.00099
4	20	.01374	.01081	.01133	.00915	.00313
4	24	.02574	.02315	.01990	.01903	.00793
4	26	.03211	.03043	.02479	.02480	.01036
0	16	.00801	.00369	.00681	.00288	.00180
0	20	.02060	.01846	.01559	.01602	.00708
0	24	.03175	.03202	.02385	.02648	.01155
0	26	.03728	.03235	.03055	.02619	.01121
-4	16	.01055	.00691	.00831	.00571	.00363
-4	20	.02519	.02463	.01802	.02088	.00994
-4	24	.04257	.03081	.03563	.02489	.01366
-4	26	.04822	.02716	.04115	.02226	.01609

F-15 Vertical Tail Buffet Test: Overall RMS (Cm & Ct nondimensional units), Q=56 psf

87 psi blowing pressure at nose only:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.00503	.00191	.00444	.00126	.00071
4	20	.01397	.01026	.01168	.00878	.00354
4	24	.02792	.02720	.02187	.02230	.00829
4	26	.03650	.03672	.02911	.02958	.01050
0	16	.00699	.00279	.00605	.00196	.00148
0	20	.02127	.01980	.01536	.01706	.00859
0	24	.03134	.03318	.02417	.02681	.01043
0	26	.03606	.02984	.02998	.02227	.01112
-4	16	.00770	.00417	.00638	.00317	.00253
-4	20	.02590	.02630	.01761	.02220	.01160
-4	24	.03833	.02846	.03234	.02168	.01159
-4	26	.04291	.01843	.03500	.01304	.01818

87 psi blowing pressure at nose & 65 psi at gun:

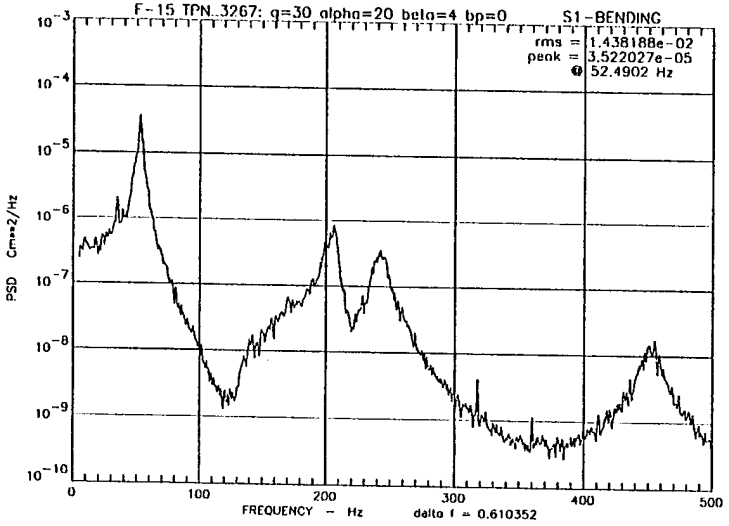
Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.00555	.00226	.00487	.00149	.00089
4	20	.01415	.01248	.01110	.01078	.00378
4	24	.02554	.02590	.01931	.02141	.00806
4	26	.03293	.03235	.02609	.02621	.00979
0	16	.00767	.00363	.00651	.00280	.00193
0	20	.02222	.02180	.01587	.01901	.00867
0	24	.03218	.03382	.02438	.02777	.01125
0	26	.03687	.03182	.03039	.02462	.01062
-4	16	.01138	.00773	.00884	.00633	.00428
-4	20	.02559	.02694	.01746	.02291	.01069
-4	24	.04219	.02949	.03619	.02212	.01150
-4	26	.04927	.02270	.04227	.01698	.01729

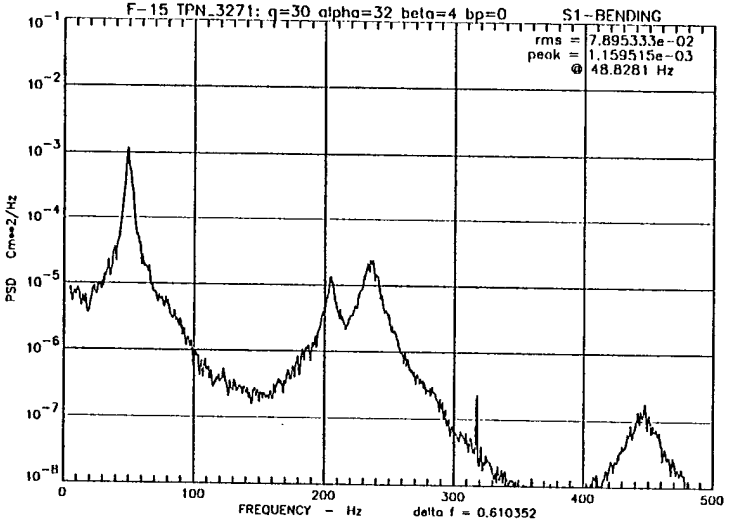
87 psi blowing pressure at nose & 65 psi at wing L.E.:

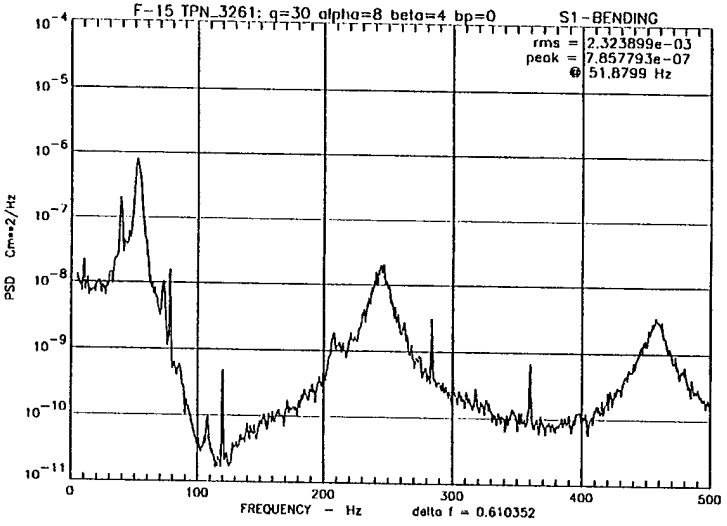
Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	16	.00550	.00236	.00483	.00158	.00094
4	20	.01302	.01047	.01048	.00892	.00338
4	24	.02583	.02590	.01967	.02154	.00816
4	26	.03230	.03267	.02503	.02582	.01048
0	16	.00759	.00329	.00661	.00234	.00171
0	20	.02123	.01925	.01571	.01664	.00799
0	24	.03093	.03294	.02300	.02685	.01127
0	26	.03362	.02999	.02718	.02258	.01026
-4	16	.00900	.00551	.00733	.00442	.00295
-4	20	.02391	.02171	.01772	.01832	.00956
-4	24	.03684	.03150	.02967	.02568	.01216
-4	26	.04104	.02572	.03556	.02050	.01165

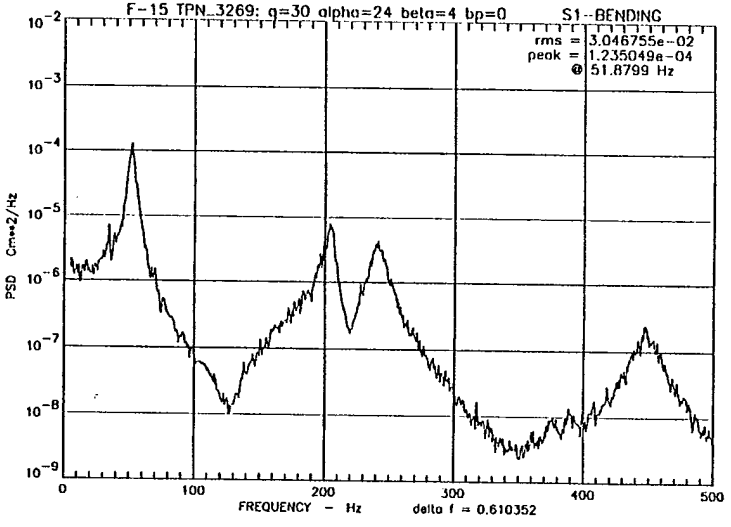
FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION

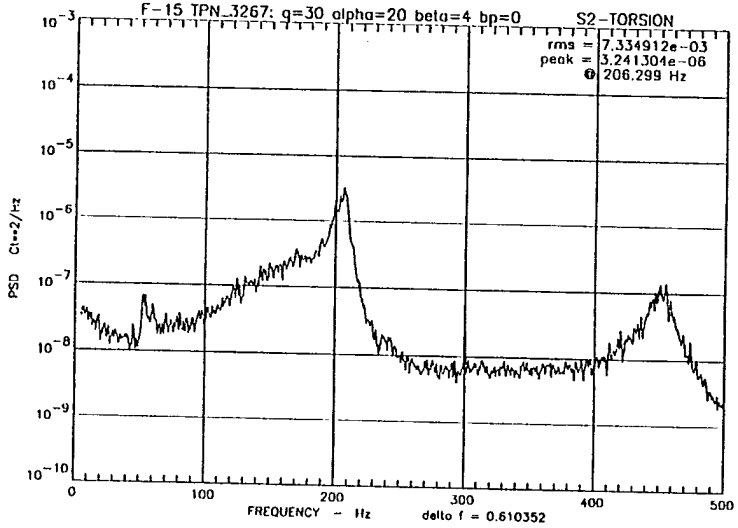
PSD GRAPHS
Q= 30 PSF
3.2.1 WBP = 0, 45 PSI, BETA =0, +4, -4 , ALPHA = 8.....32 DEG

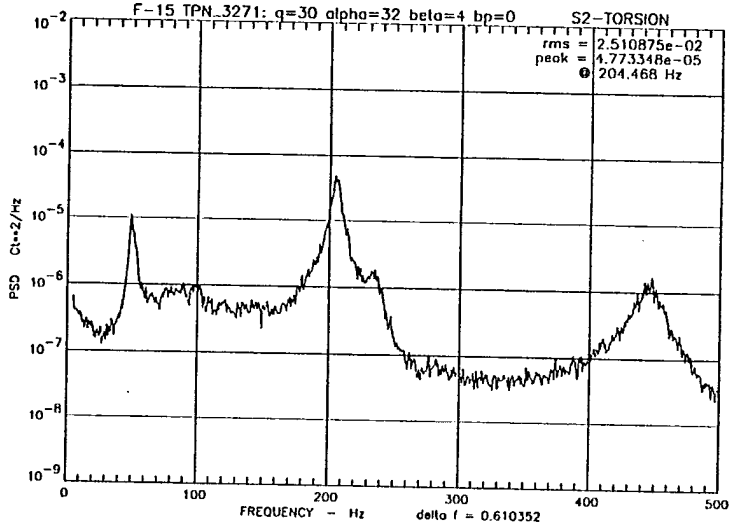

F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0
S1-BENDING
rms = 1.438188e-02
peak = 3.522027e-05
@ 52.4902 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

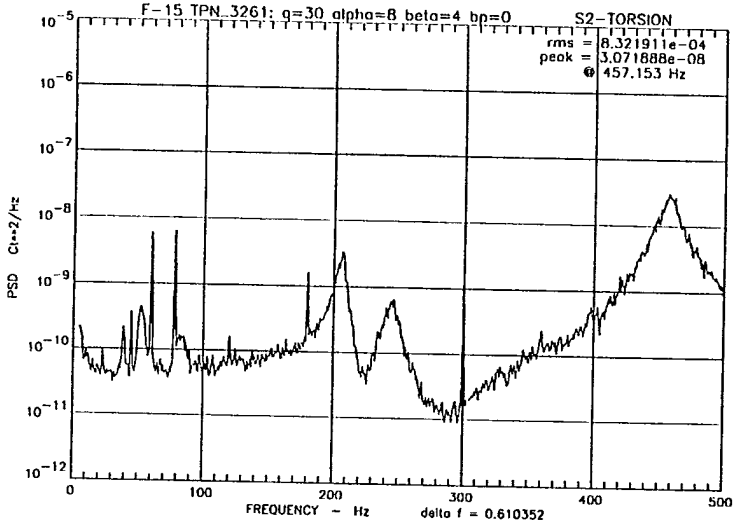

F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0
S1-BENDING
rms = 7.895333e-02
peak = 1.159515e-03
@ 48.8281 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

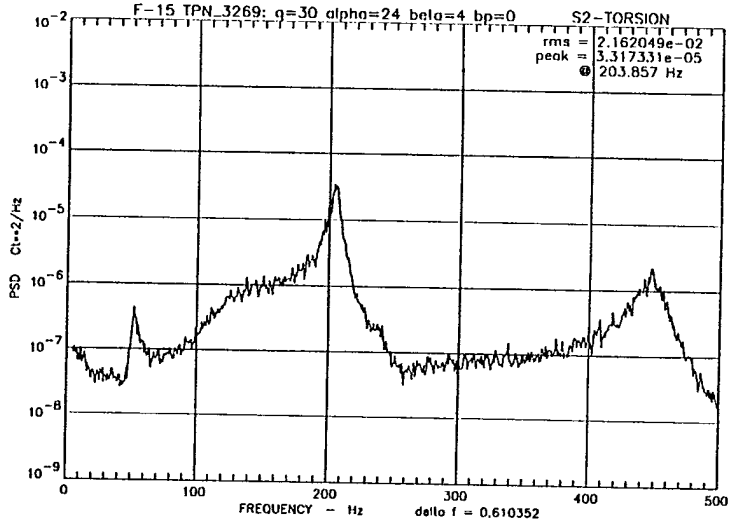

F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0
S1-BENDING
rms = 2.323899e-03
peak = 7.857793e-07
@ 51.8799 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

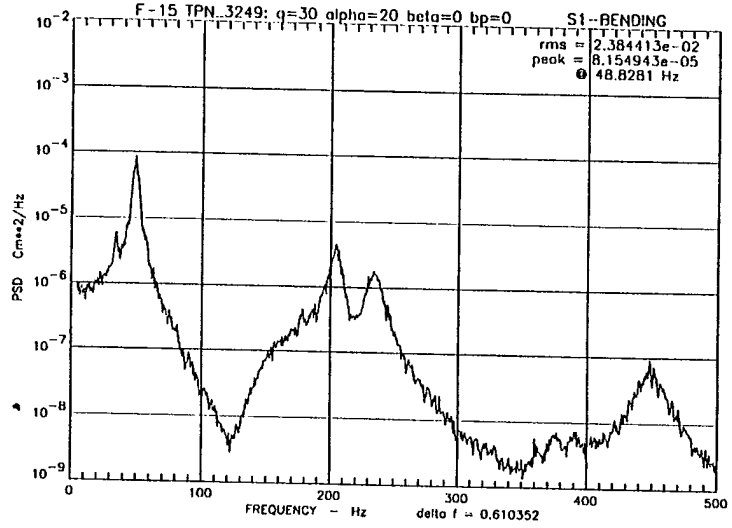

F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0
S1-BENDING
rms = 3.046755e-02
peak = 1.235049e-04
@ 51.8799 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

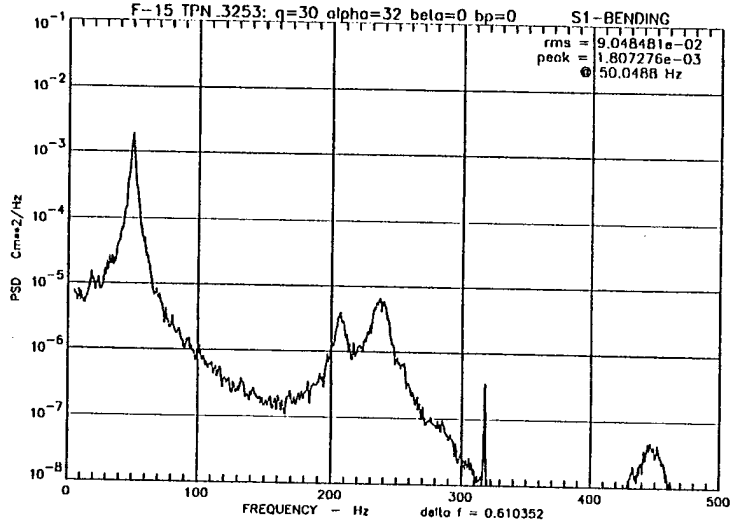

F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0
S2-TORSION
rms = 7.334912e-03
peak = 3.241304e-06
@ 206.299 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

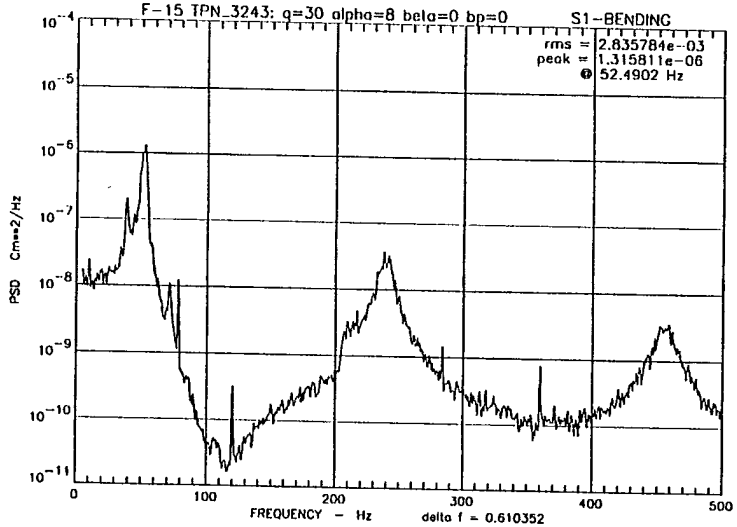

F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0
S2-TORSION
rms = 2.510875e-02
peak = 4.773348e-05
@ 204.468 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

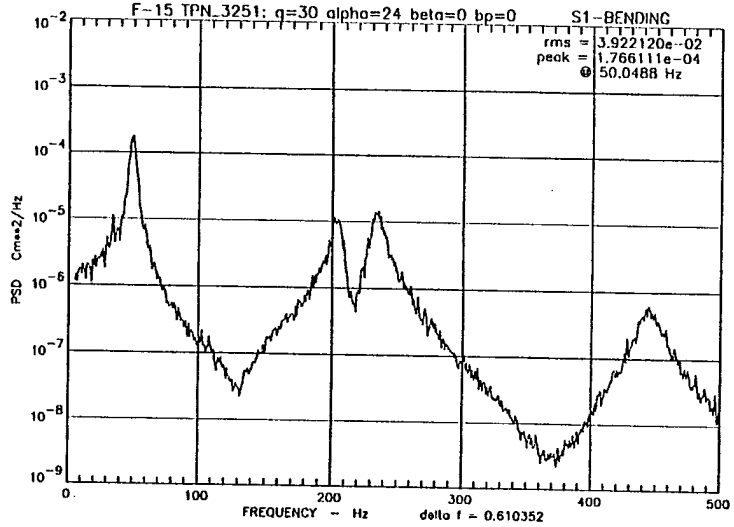

F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0
S2-TORSION
rms = 8.321911e-04
peak = 3.071888e-08
@ 457.153 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

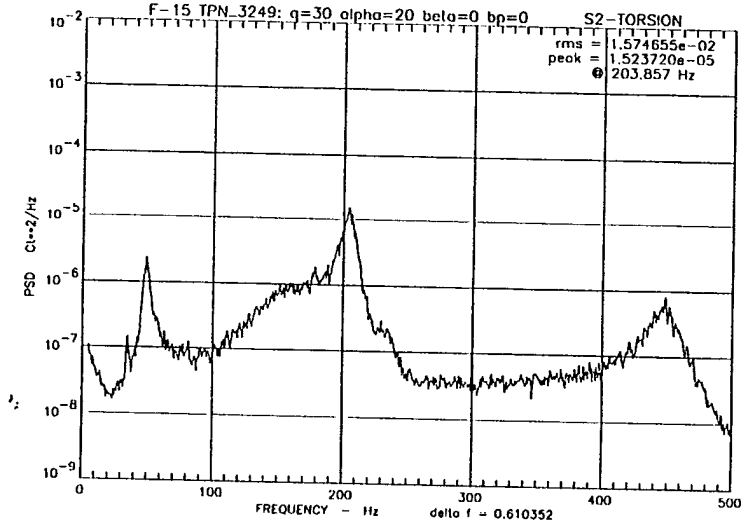

F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0
S2-TORSION
rms = 2.162049e-02
peak = 3.317331e-05
@ 203.857 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

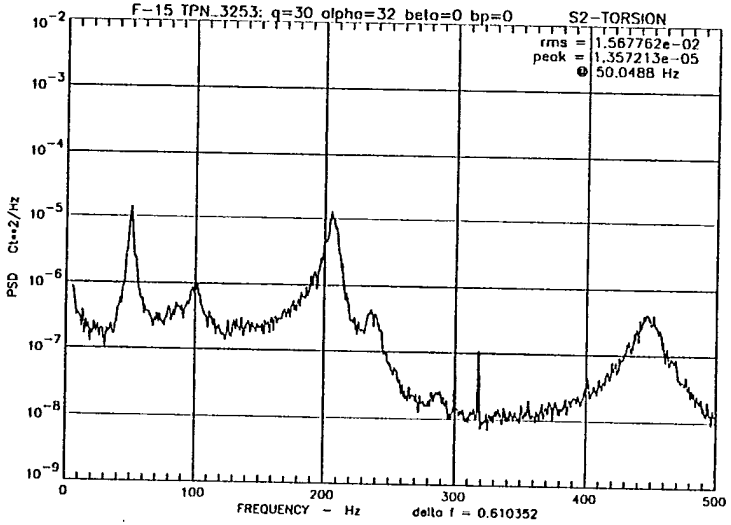

F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0
S1-BENDING
rms = 2.384413e-02
peak = 8.154943e-05
@ 48.8281 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

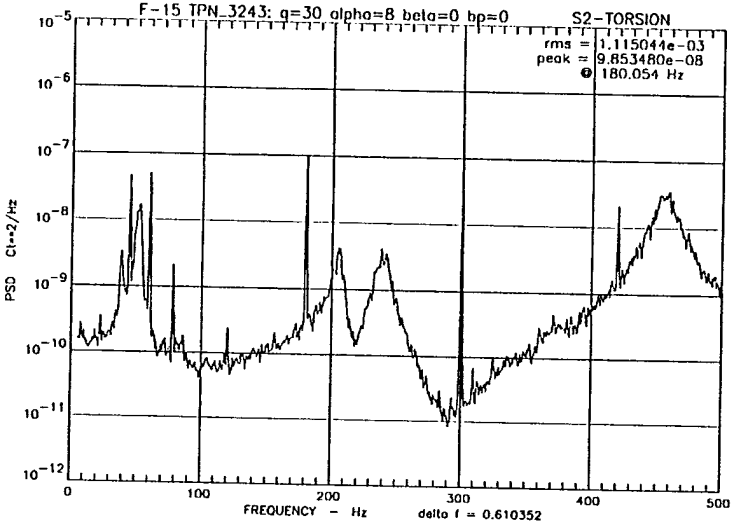

F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0
S1-BENDING
rms = 9.048481e-02
peak = 1.807276e-03
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

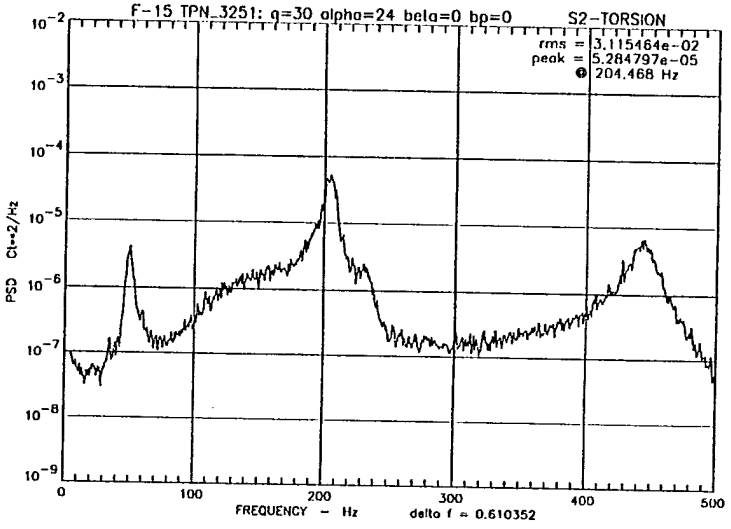

F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0
S1-BENDING
rms = 2.835784e-03
peak = 1.315811e-06
@ 52.4902 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

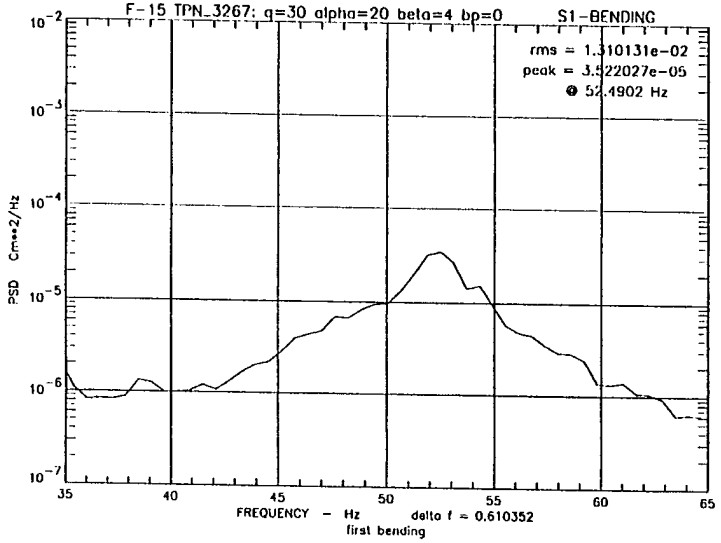

F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0
S1-BENDING
rms = 3.922120e-02
peak = 1.766111e-04
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

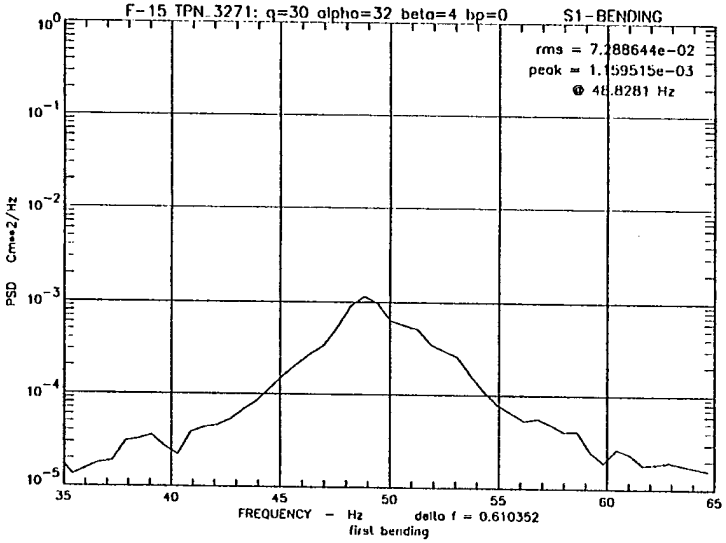

F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0
S2-TORSION
rms = 1.574655e-02
peak = 1.523720e-05
@ 203.857 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

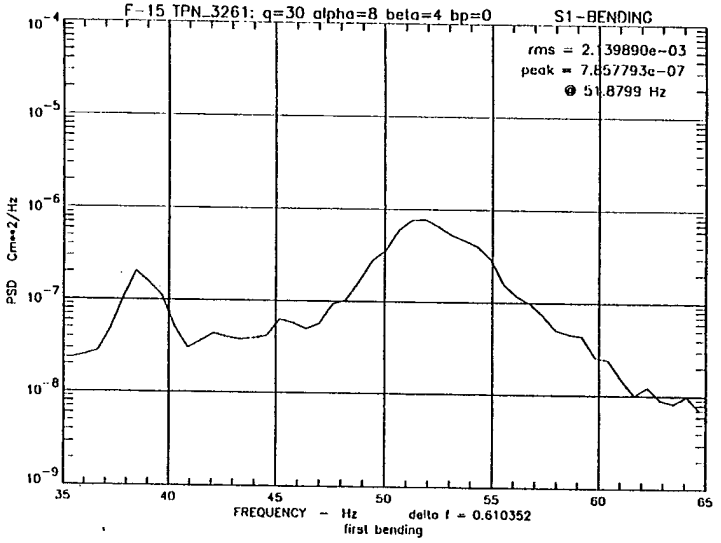

F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0
S2-TORSION
rms = 1.567762e-02
peak = 1.357213e-05
@ 50.0488 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

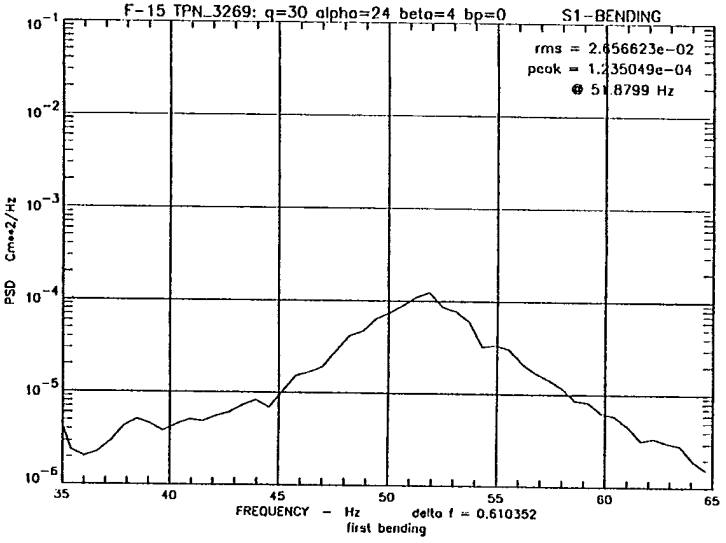

F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0
S2-TORSION
rms = 1.115044e-03
peak = 9.853480e-08
@ 180.054 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

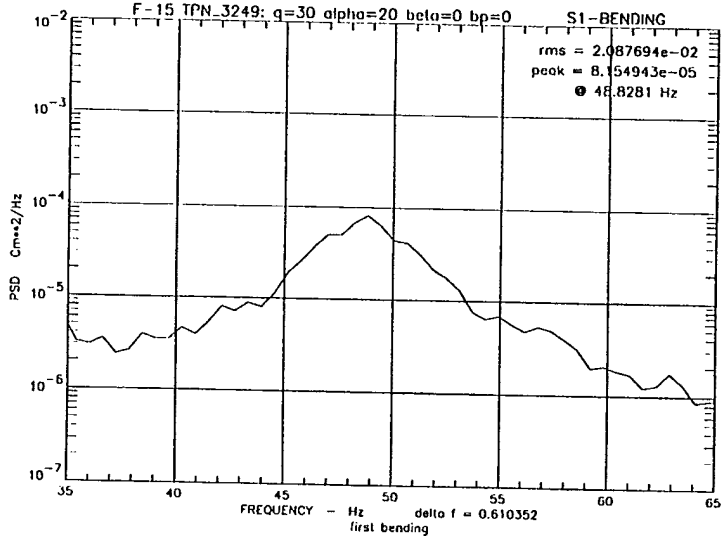

F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0
S2-TORSION
rms = 3.115464e-02
peak = 5.284797e-05
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

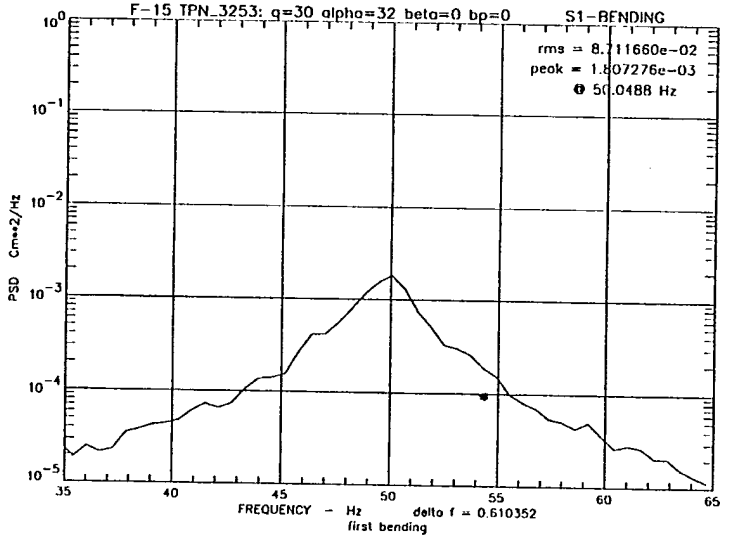

F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0 S1-BENDING
rms = 1.310131e-02
peak = 3.522027e-05
@ 52.4902 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

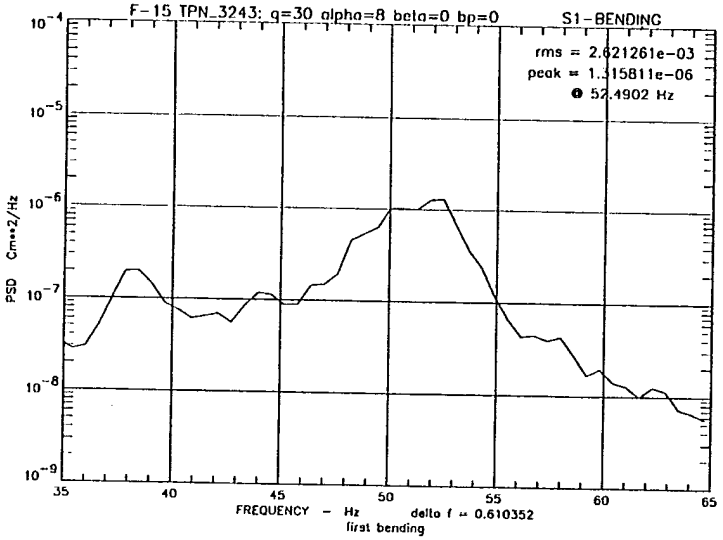

F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0 S1-BENDING
rms = 7.288644e-02
peak = 1.159515e-03
@ 48.8281 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

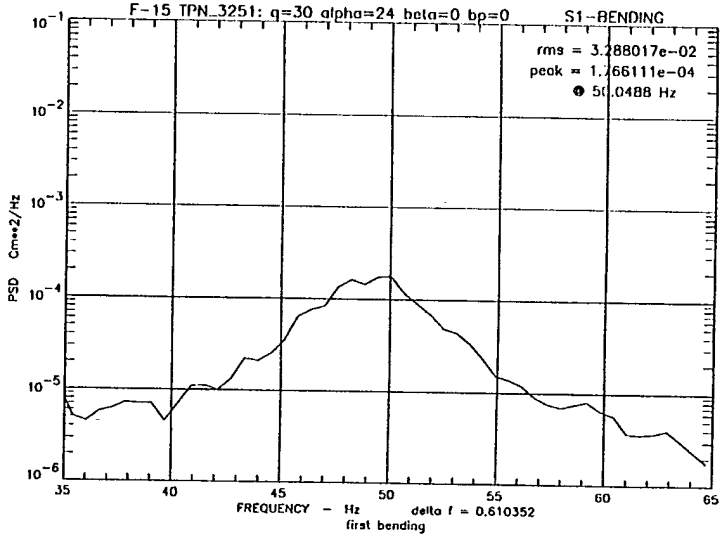

F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0 S1-BENDING
rms = 2.139890e-03
peak = 7.857793e-07
@ 51.8799 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

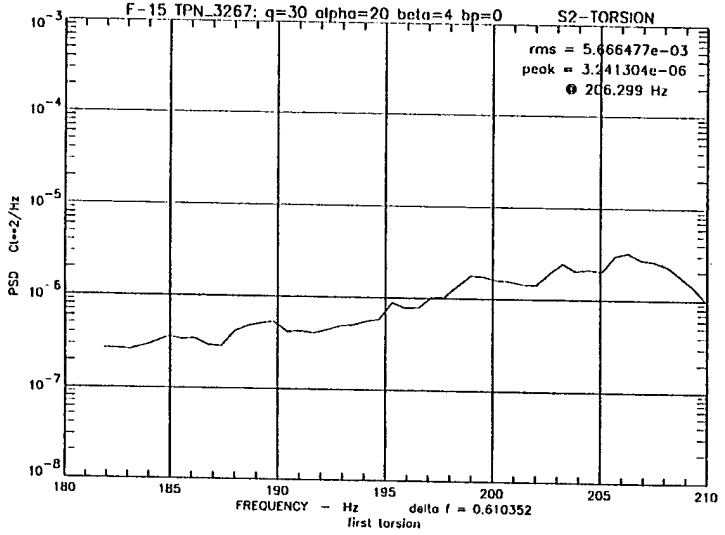

F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0 S1-BENDING
rms = 2.656623e-02
peak = 1.235049e-04
@ 51.8799 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

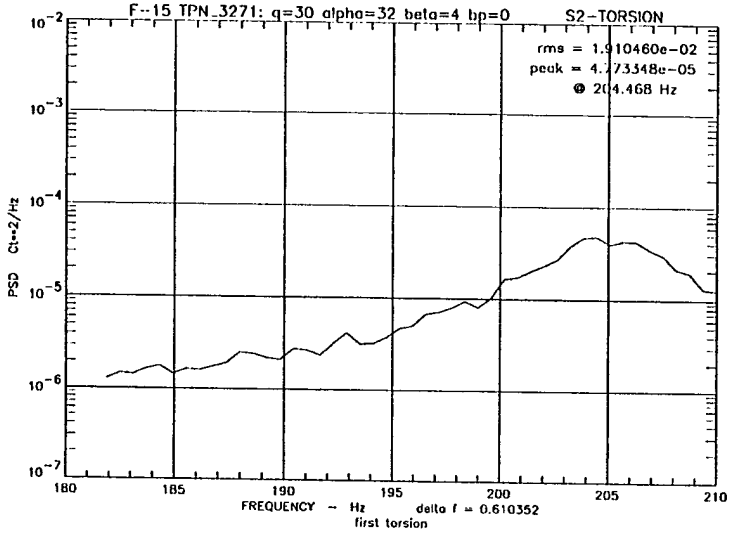

F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0 S1-BENDING
rms = 2.087694e-02
peak = 8.154943e-05
@ 48.8281 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

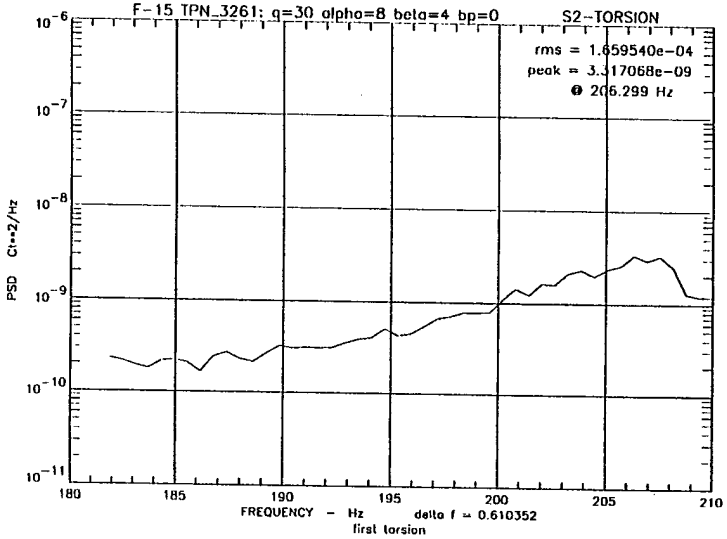

F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0 S1-BENDING
rms = 8.711660e-02
peak = 1.807276e-03
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

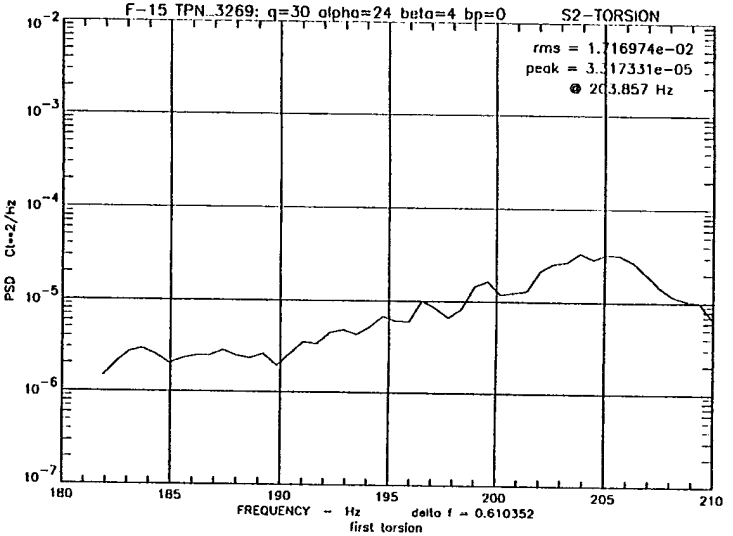

F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0 S1-BENDING
rms = 2.621261e-03
peak = 1.315811e-06
@ 52.4902 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

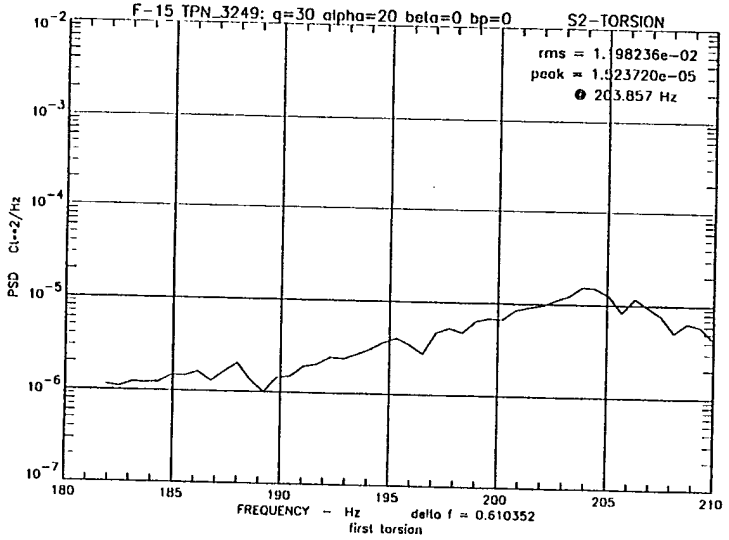

F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0 S1-BENDING
rms = 3.288017e-02
peak = 1.766111e-04
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

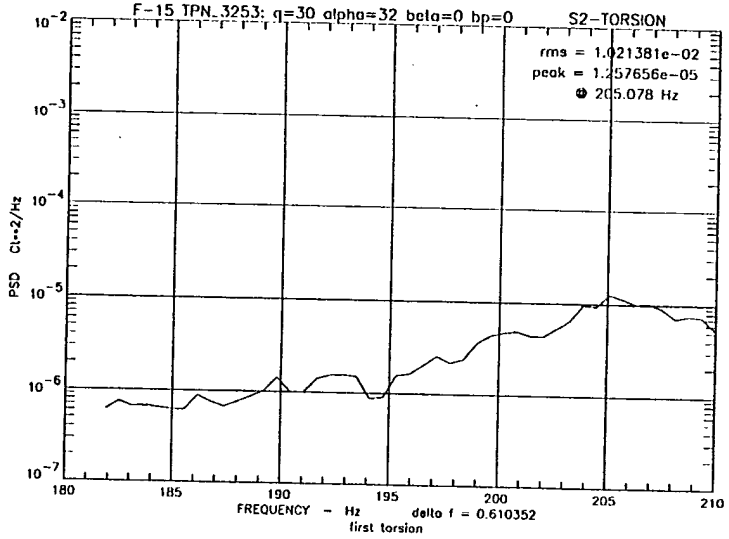

F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0 S2-TORSION
rms = 5.666477e-03
peak = 3.241304e-06
@ 206.299 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

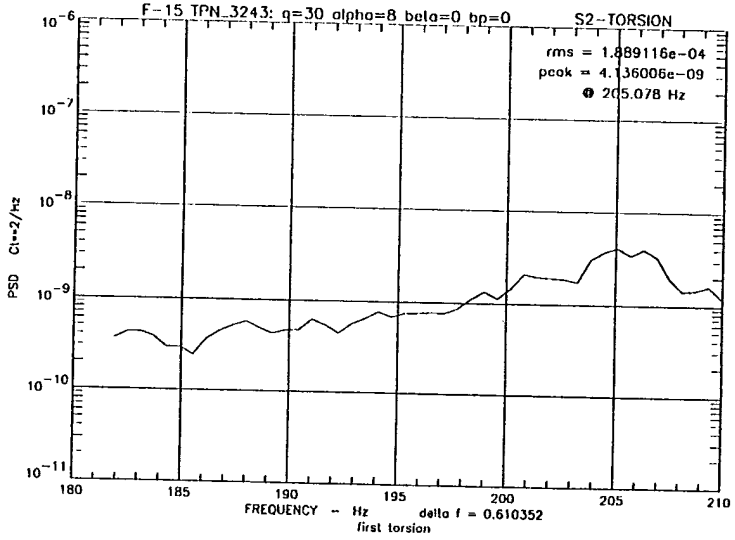

F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0 S2-TORSION
rms = 1.910460e-02
peak = 4.273348e-05
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

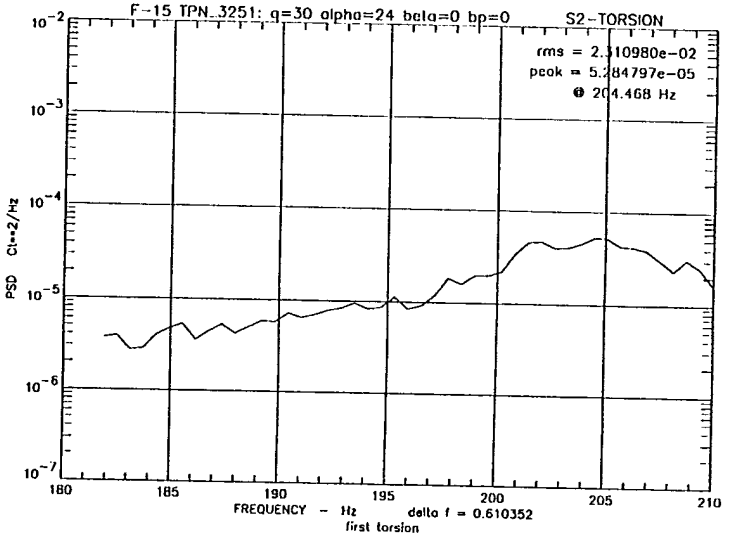

F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0 S2-TORSION
rms = 1.659540e-04
peak = 3.317068e-09
@ 206.299 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

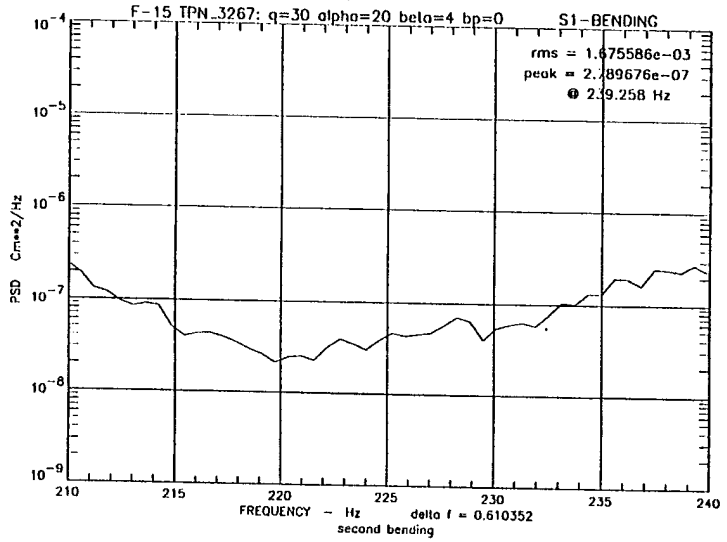

F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0 S2-TORSION
rms = 1.716974e-02
peak = 3.317331e-05
@ 205.857 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

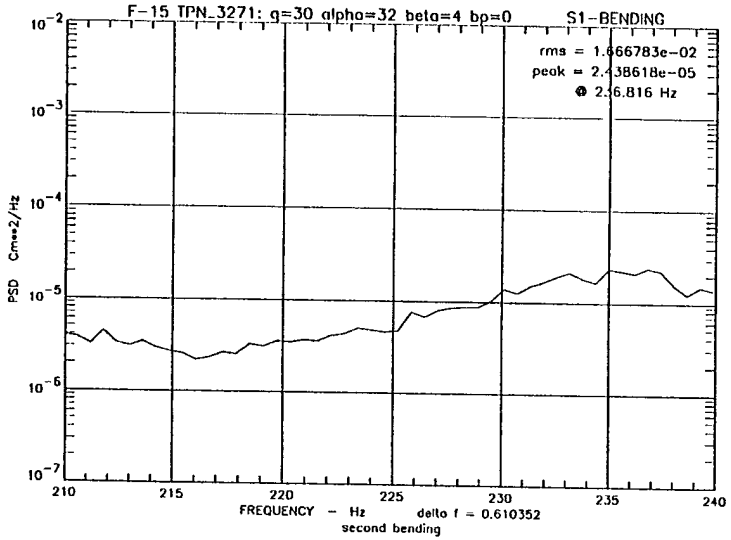

F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0
S2-TORSION
rms = 1.198236e-02
peak = 1.523720e-05
@ 203.857 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

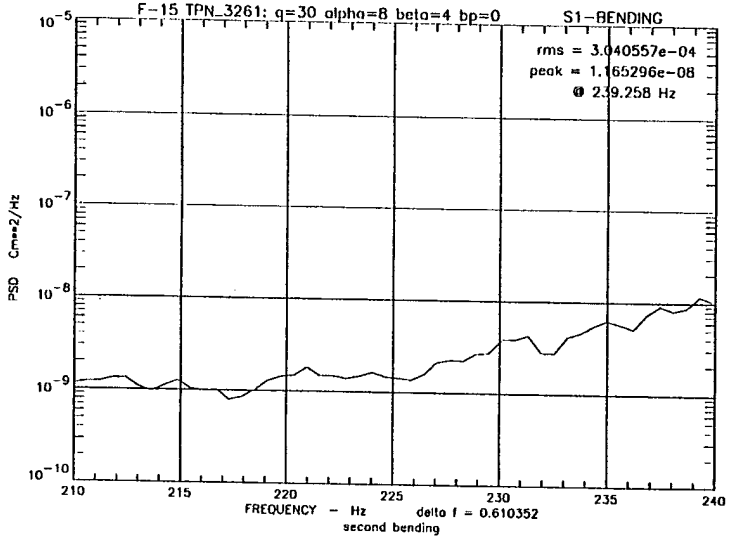

F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0
S2-TORSION
rms = 1.021381e-02
peak = 1.257656e-05
@ 205.078 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

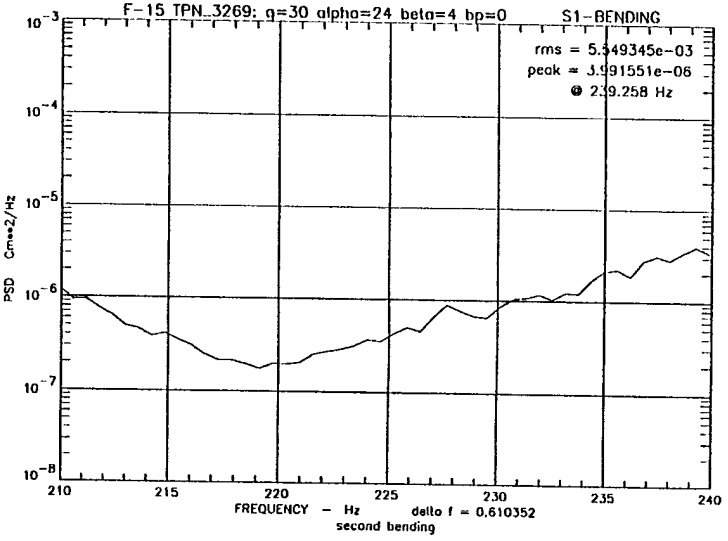

F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0
S2-TORSION
rms = 1.889116e-04
peak = 4.136006e-09
@ 205.078 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

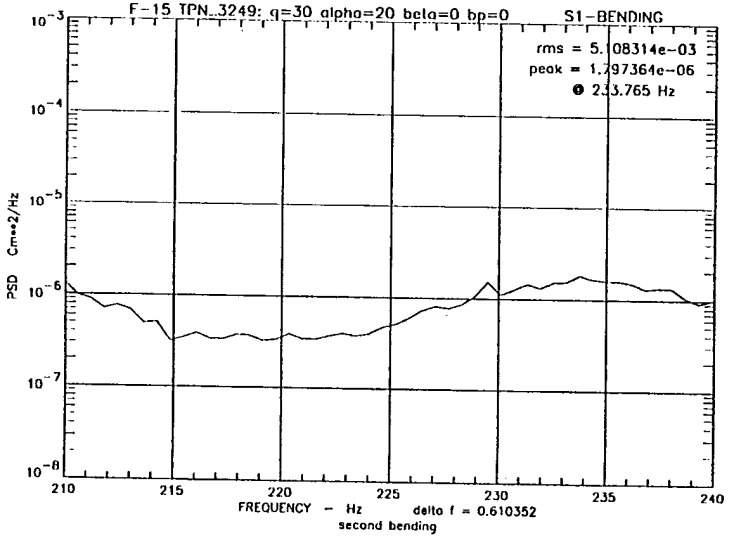

F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0
S2-TORSION
rms = 2.310980e-02
peak = 5.284797e-05
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

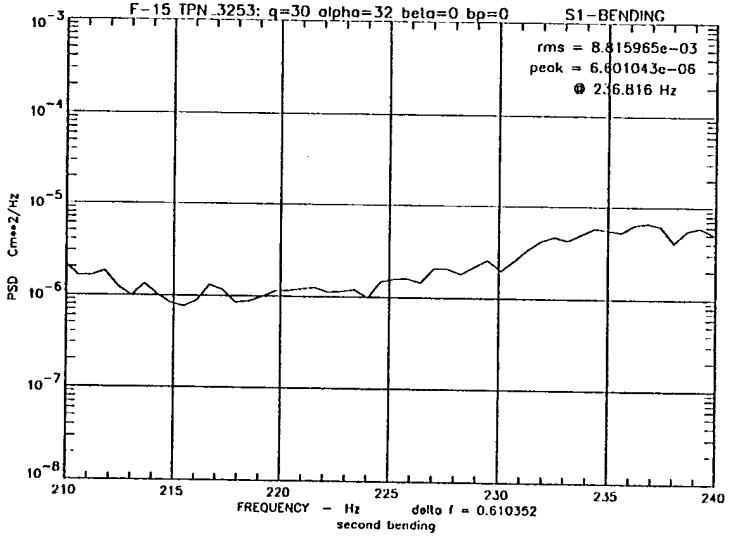

F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0
S1-BENDING
rms = 1.675586e-03
peak = 2.389676e-07
@ 239.258 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

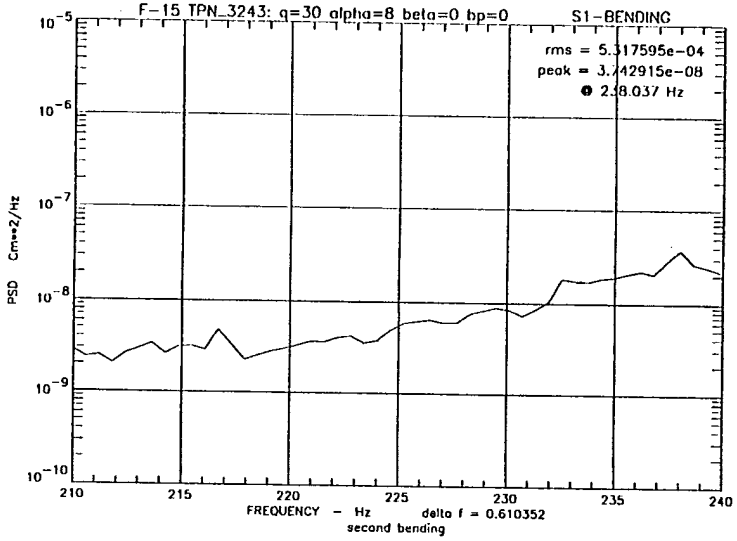

F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0
S1-BENDING
rms = 1.666783e-02
peak = 2.438618e-05
@ 236.816 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

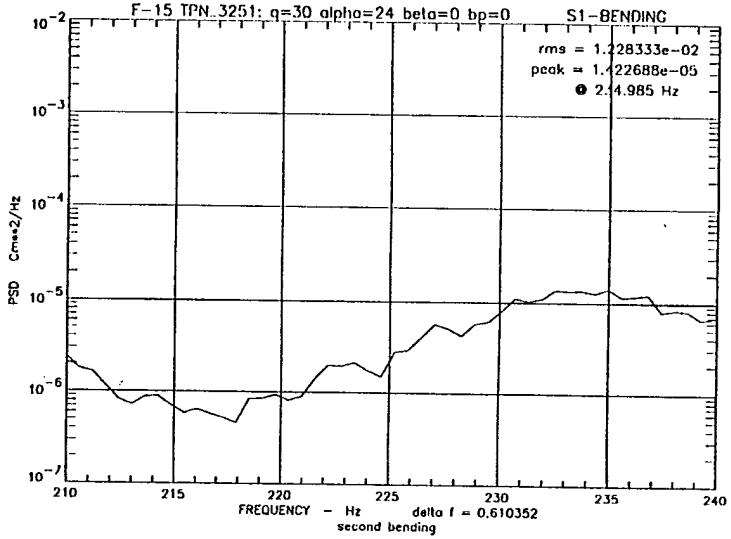

F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0
S1-BENDING
rms = 3.040557e-04
peak = 1.165296e-08
@ 239.258 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

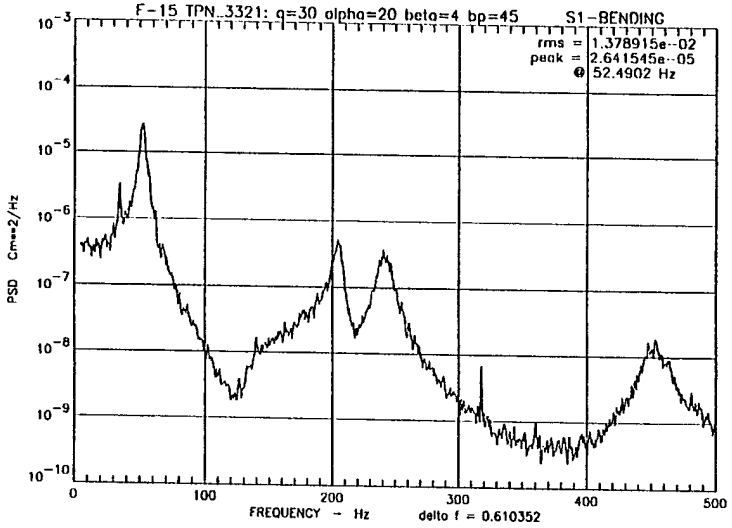

F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0
S1-BENDING
rms = 5.549345e-03
peak = 3.991551e-06
@ 239.258 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352
second bending

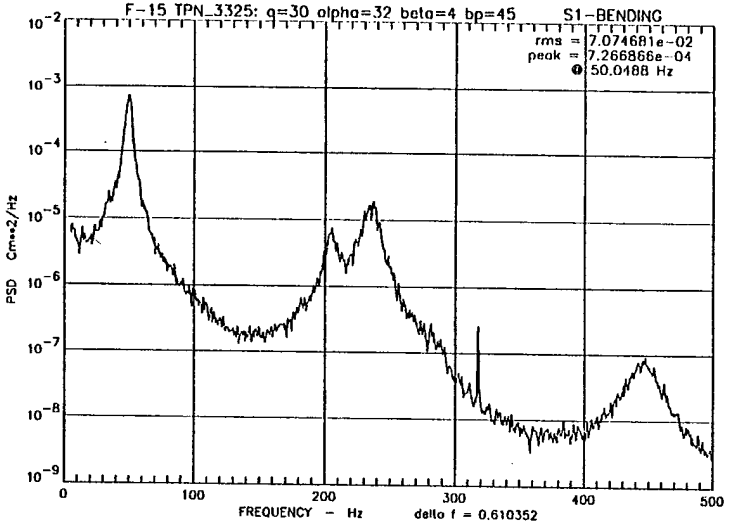

F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0 S1-BENDING
rms = 5.108314e-03
peak = 1.797364e-06
@ 233.765 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

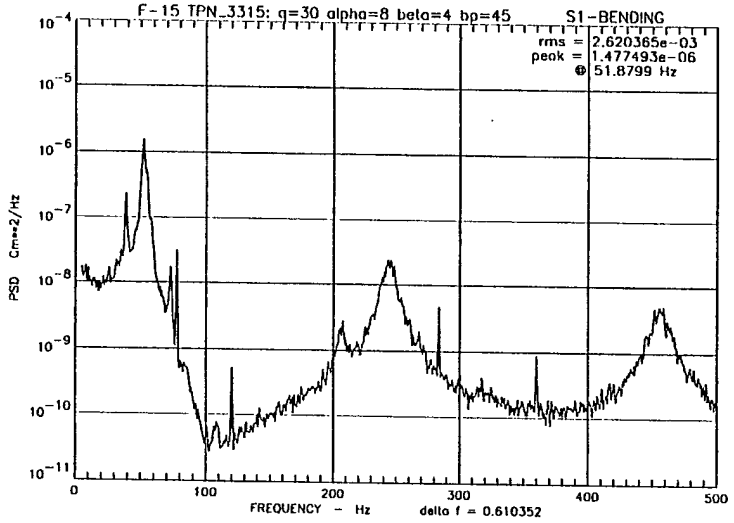

F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0 S1-BENDING
rms = 8.815965e-03
peak = 6.601043e-06
@ 236.816 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

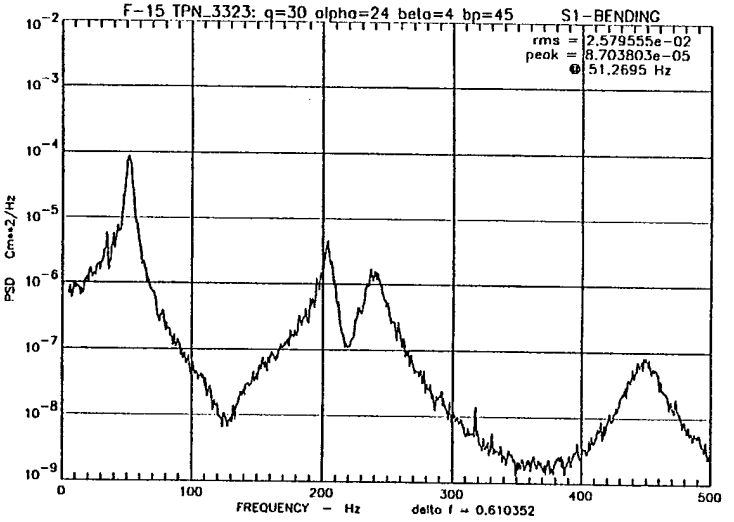

F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0 S1-BENDING
rms = 5.317595e-04
peak = 3.742915e-08
@ 238.037 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

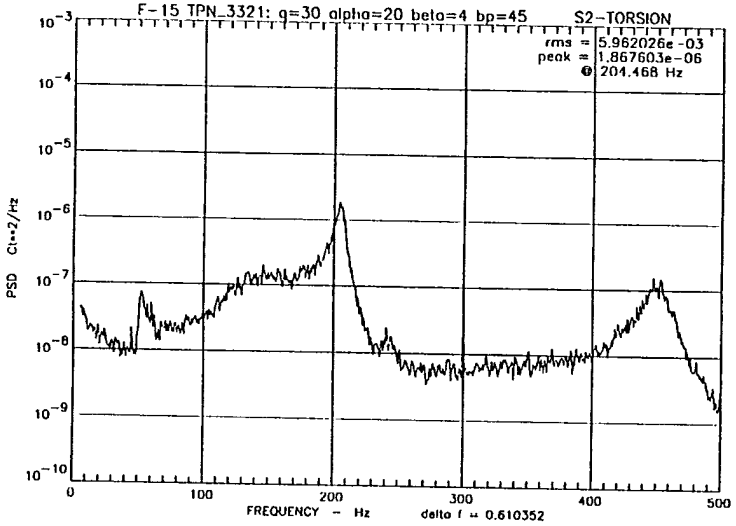

F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0 S1-BENDING
rms = 1.228333e-02
peak = 1.422688e-05
@ 234.985 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

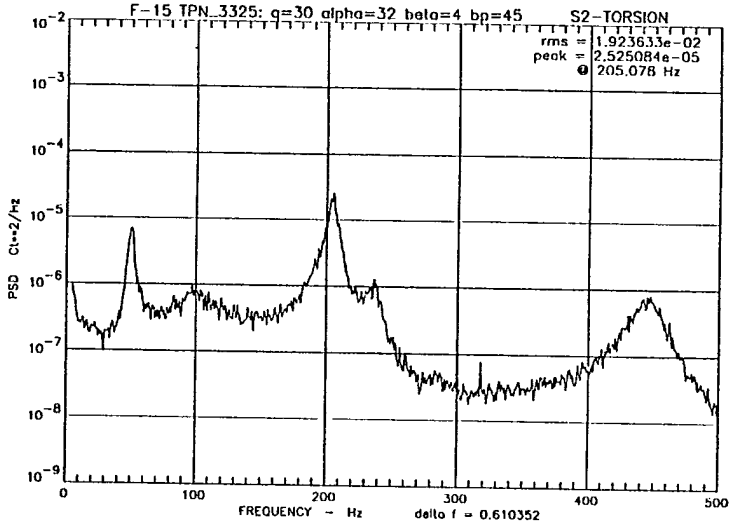

F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45 S1-BENDING
rms = 1.378915e-02
peak = 2.641545e-05
@ 52.4902 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

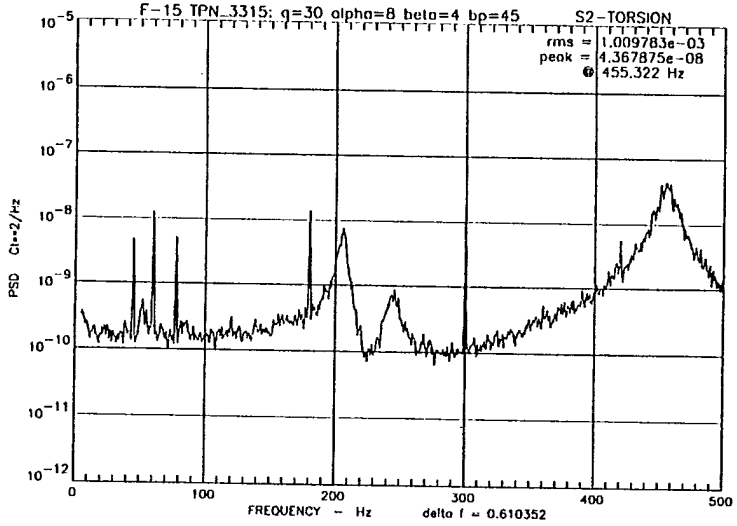

F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45 S1-BENDING
rms = 7.074681e-02
peak = 7.266866e-04
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

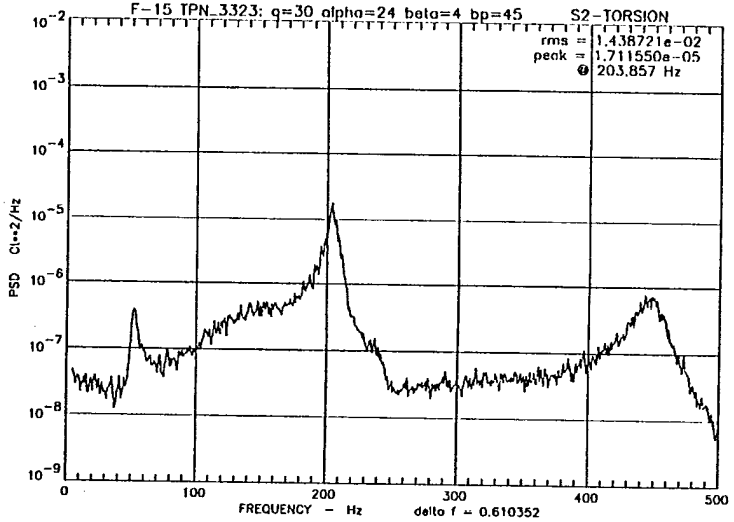

F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45 S1-BENDING
rms = 2.620365e-03
peak = 1.477493e-06
@ 51.8799 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

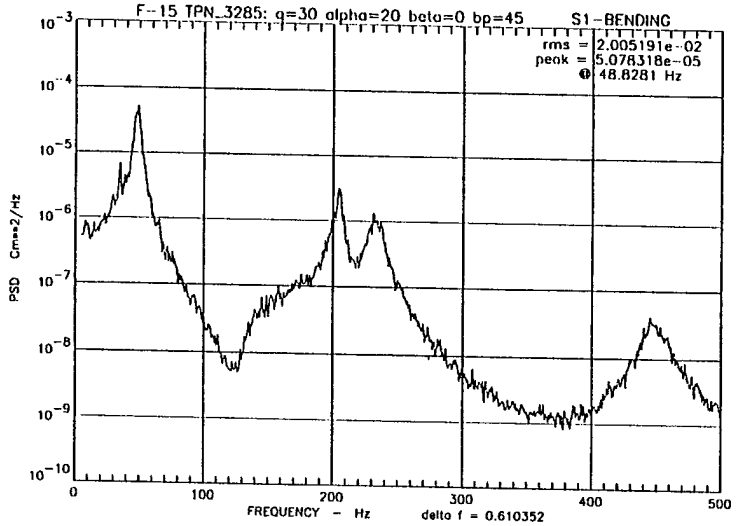

F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45 S1-BENDING
rms = 2.579555e-02
peak = 8.703803e-05
@ 51.2695 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

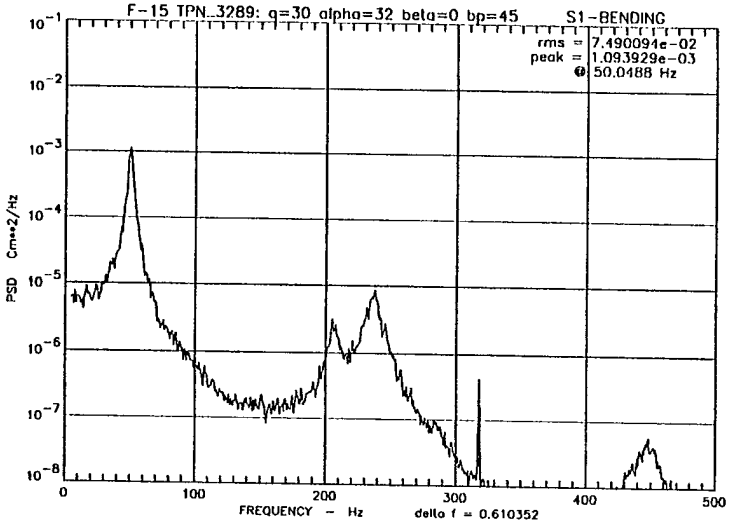

F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45 S2-TORSION
rms = 5.962026e-03
peak = 1.867603e-06
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

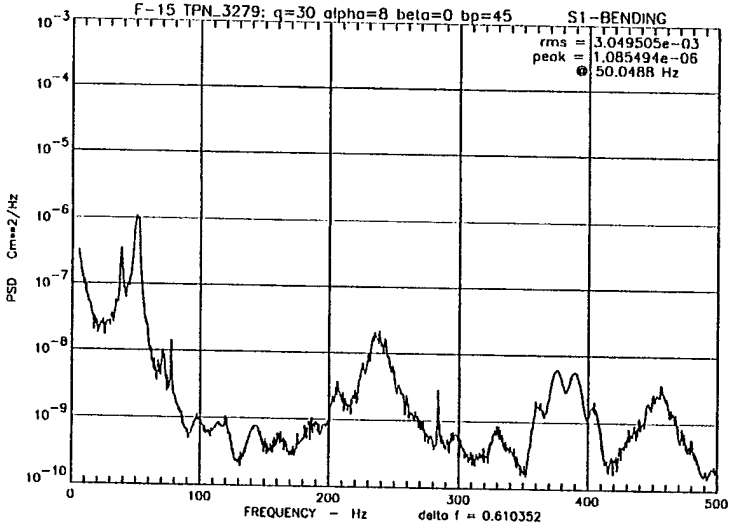

F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45 S2-TORSION
rms = 1.923633e-02
peak = 2.525084e-05
@ 205.078 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

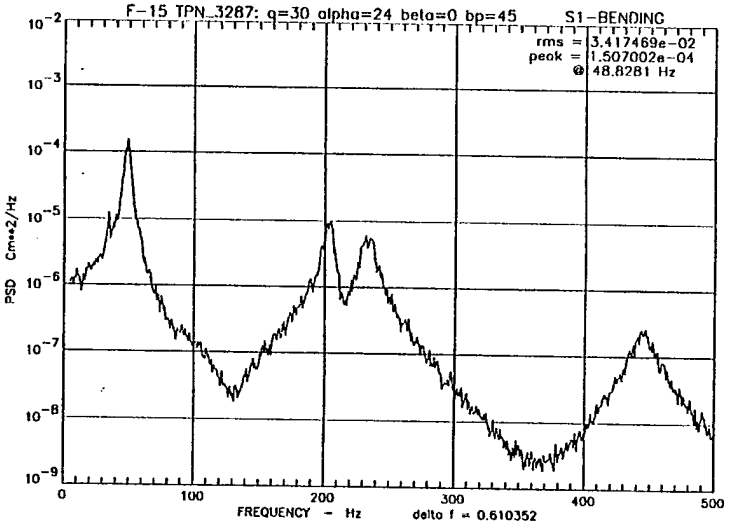

F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45 S2-TORSION
rms = 1.009783e-03
peak = 4.367875e-08
@ 455.322 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

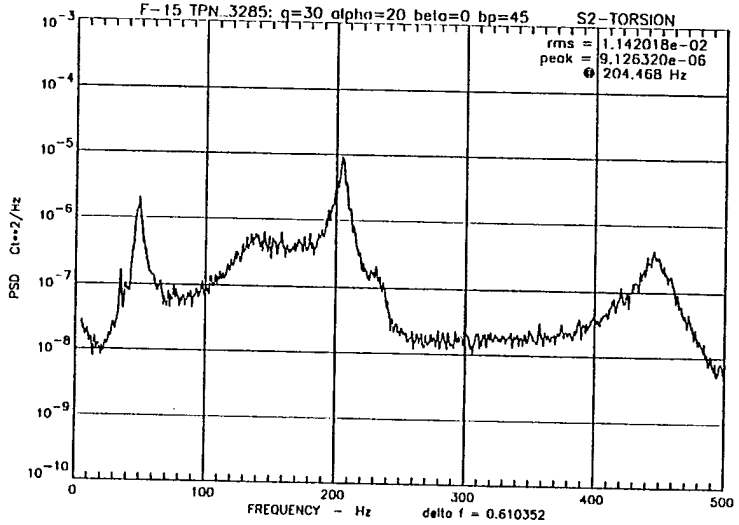

F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45 S2-TORSION
rms = 1.438721e-02
peak = 1.711550e-05
@ 203.857 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352

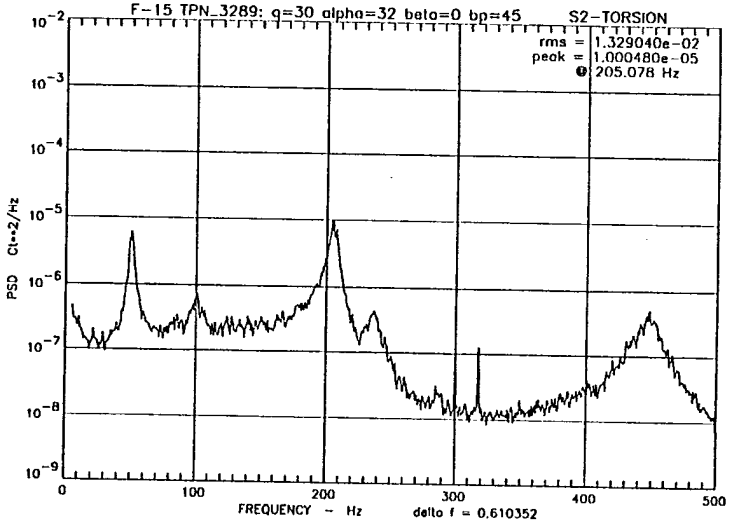

F-15 TPN_3285: q=30 alpha=20 beta=0 bp=45 S1-BENDING
rms = 2.005191e-02
peak = 5.078318e-05
@ 48.8281 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

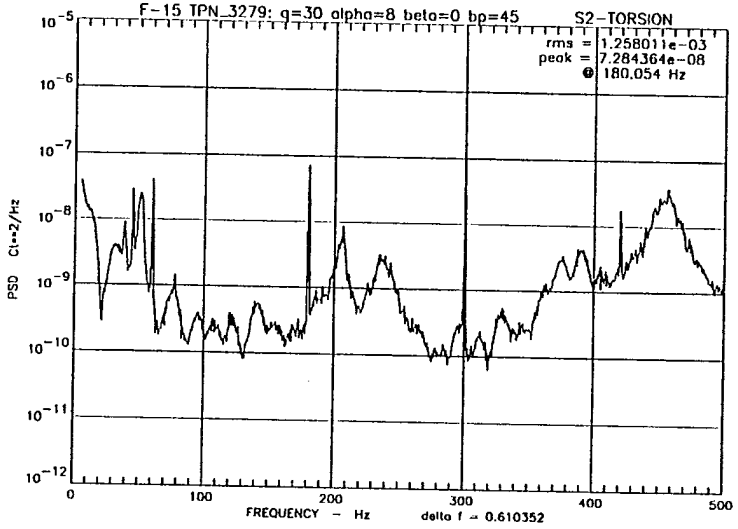

F-15 TPN_3289: q=30 alpha=32 beta=0 bp=45 S1-BENDING
rms = 7.490094e-02
peak = 1.093929e-03
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

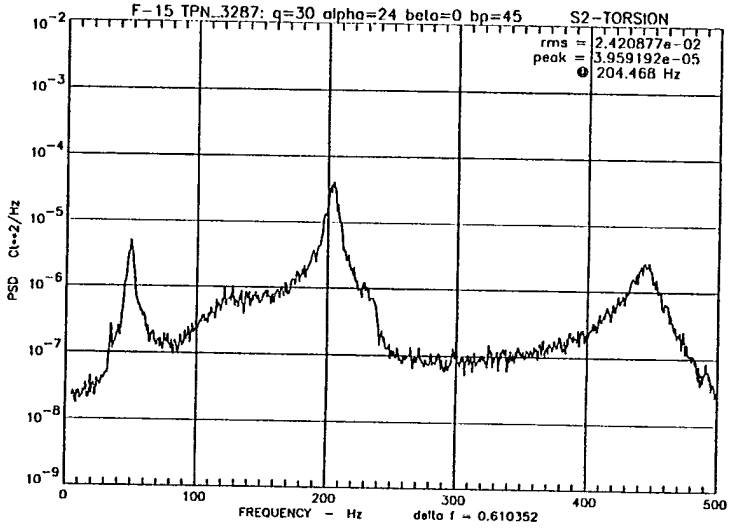

F-15 TPN_3279: q=30 alpha=8 beta=0 bp=45 S1-BENDING
rms = 3.049505e-03
peak = 1.085494e-06
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

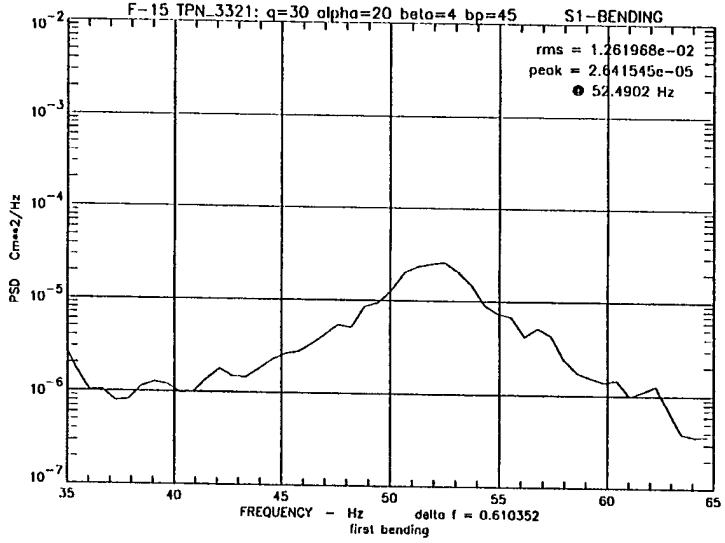

F-15 TPN_3287: q=30 alpha=24 beta=0 bp=45 S1-BENDING
rms = 3.417469e-02
peak = 1.507002e-04
@ 48.8281 Hz
PSD Cm**2/Hz
FREQUENCY - Hz
delta f = 0.610352

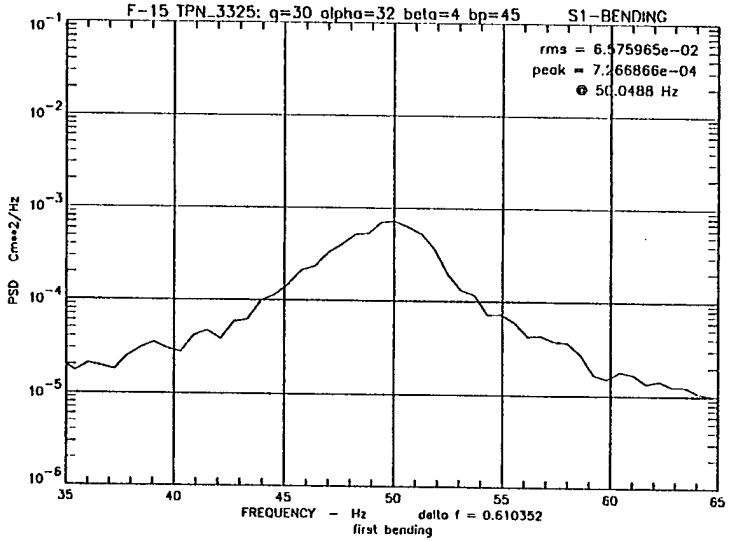

F-15 TPN_3285: q=30 alpha=20 beta=0 bp=45 S2-TORSION
rms = 1.142018e-02
peak = 9.126320e-06
@ 204.468 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

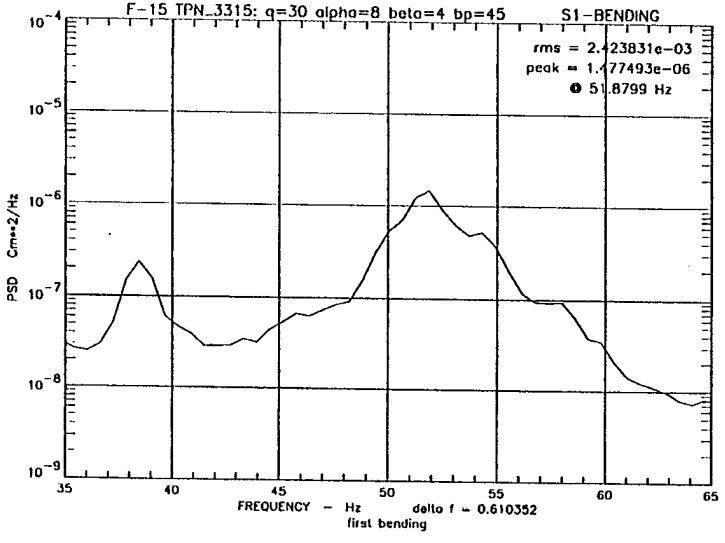

F-15 TPN_3289: q=30 alpha=32 beta=0 bp=45 S2-TORSION
rms = 1.329040e-02
peak = 1.000480e-05
@ 205.078 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

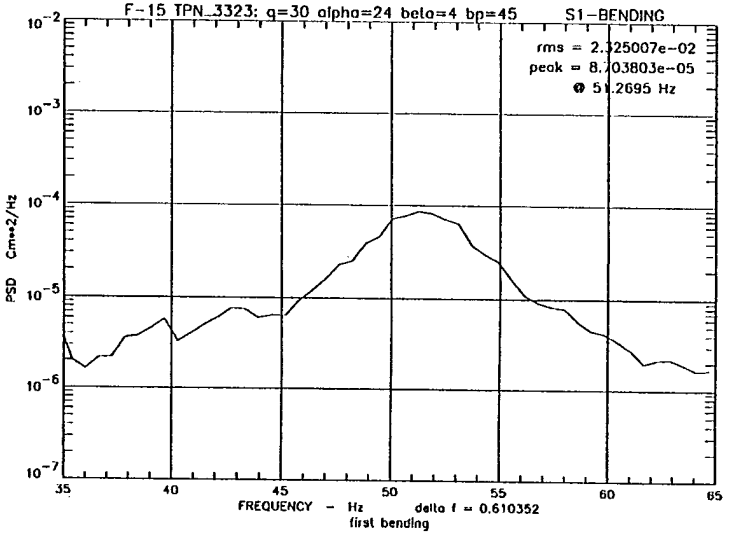

F-15 TPN_3279: q=30 alpha=8 beta=0 bp=45 S2-TORSION
rms = 1.258011e-03
peak = 7.284364e-08
@ 180.054 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

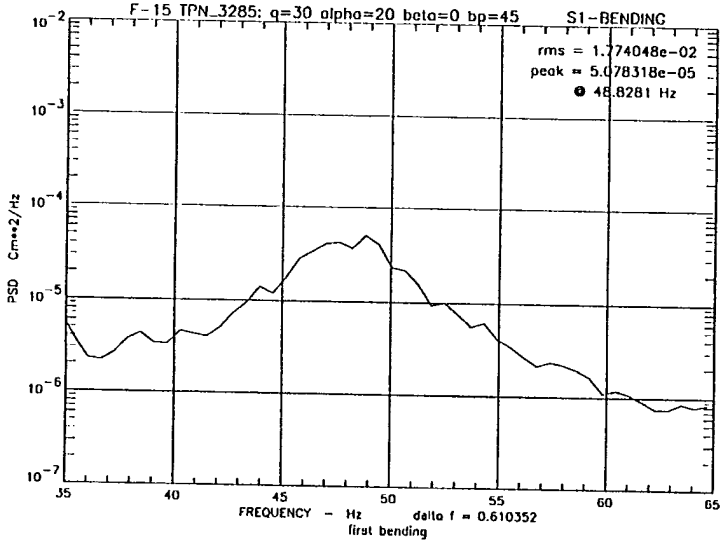

F-15 TPN_3287: q=30 alpha=24 beta=0 bp=45 S2-TORSION
rms = 2.420877e-02
peak = 3.959192e-05
@ 204.468 Hz
PSD Ct**2/Hz
FREQUENCY - Hz
delta f = 0.610352

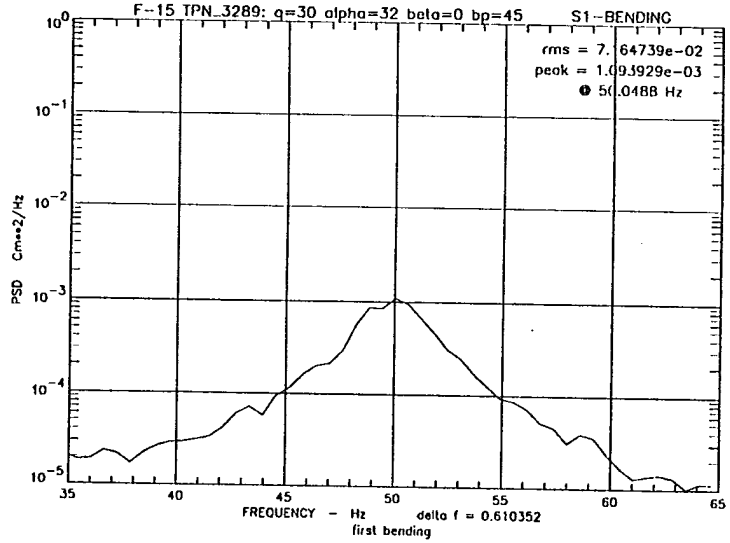

F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45 S1-BENDING
rms = 1.261968e-02
peak = 2.641545e-05
@ 52.4902 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

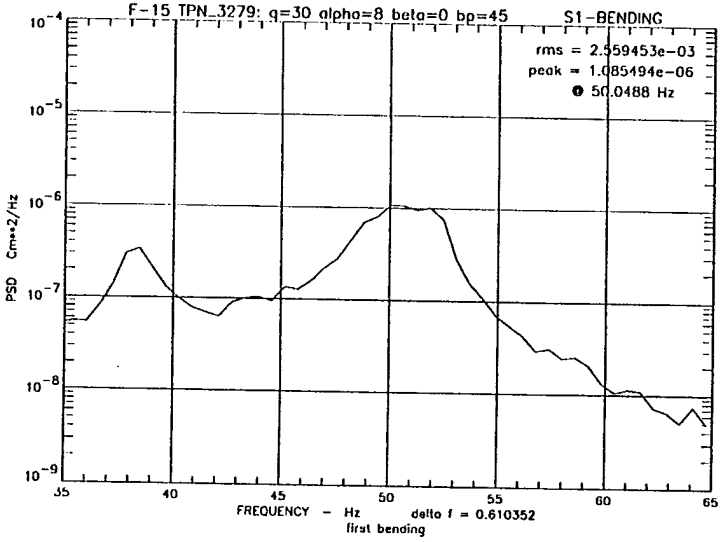

F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45 S1-BENDING
rms = 6.575965e-02
peak = 7.266866e-04
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

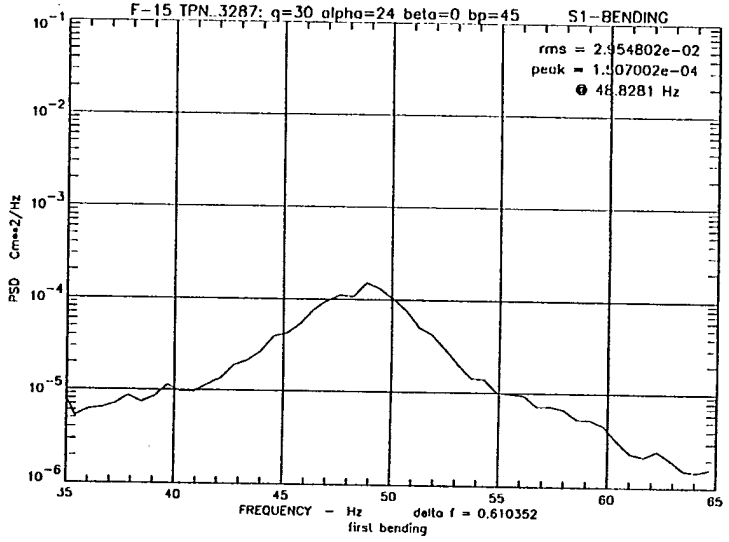

F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45 S1-BENDING
rms = 2.423831e-03
peak = 1.477493e-06
@ 51.8799 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

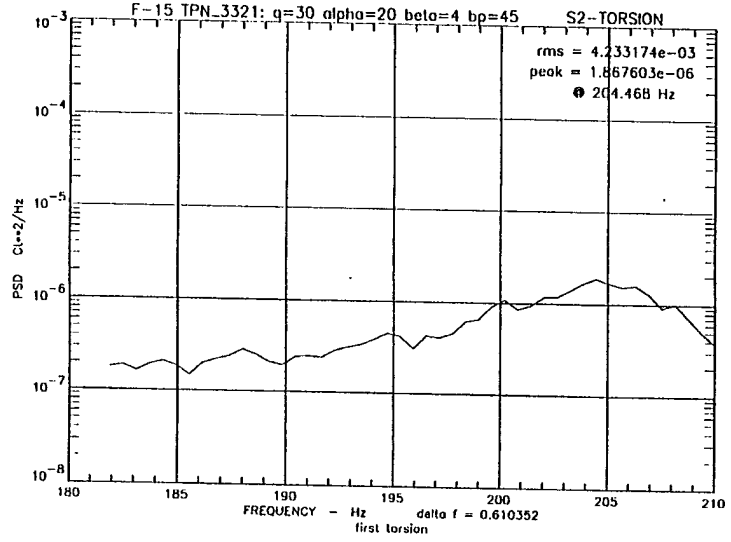

F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45 S1-BENDING
rms = 2.325007e-02
peak = 8.703803e-05
@ 51.2695 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

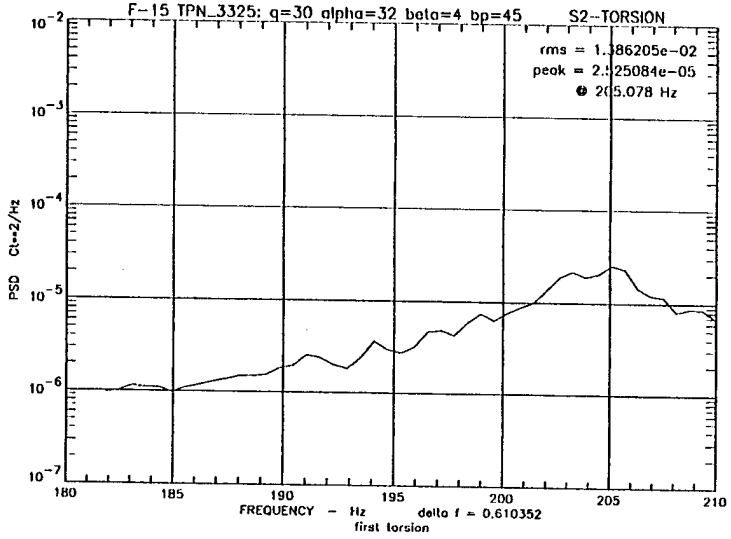

F-15 TPN_3285: q=30 alpha=20 beta=0 bp=45 S1-BENDING
rms = 1.774048e-02
peak = 5.078318e-05
@ 48.8281 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

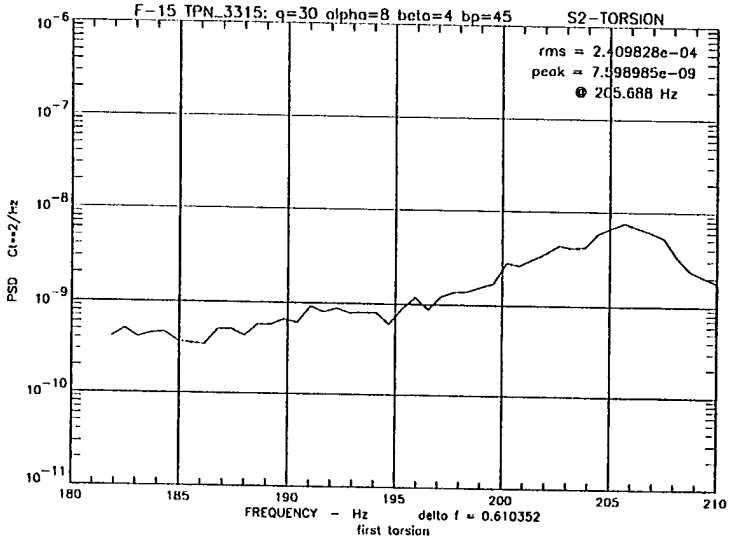

F-15 TPN_3289: q=30 alpha=32 beta=0 bp=45 S1-BENDING
rms = 7.64739e-02
peak = 1.093929e-03
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

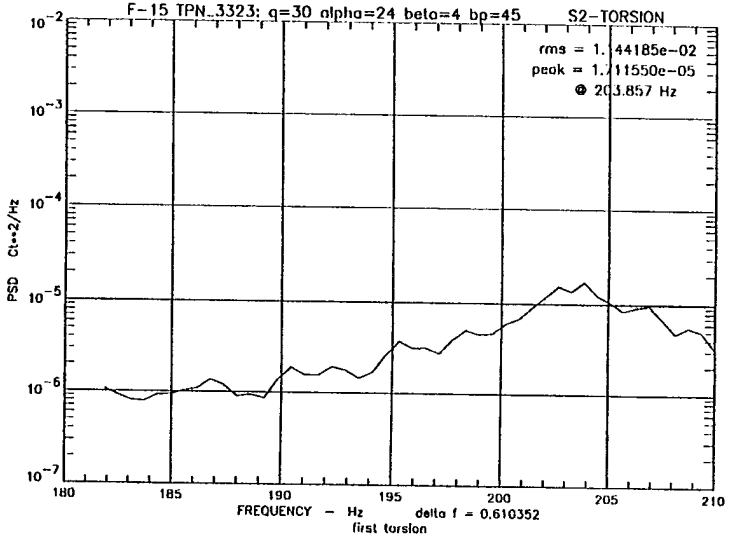

F-15 TPN_3279: q=30 alpha=8 beta=0 bp=45 S1-BENDING
rms = 2.559453e-03
peak = 1.085494e-06
@ 50.0488 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

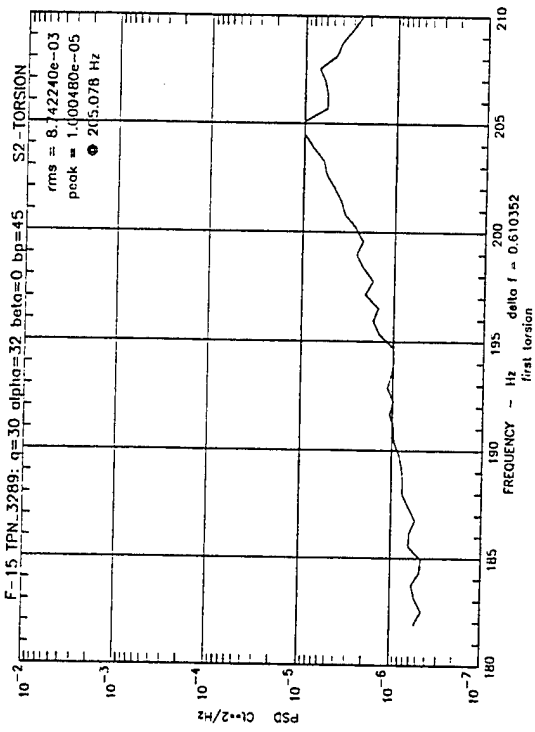

F-15 TPN_3287: q=30 alpha=24 beta=0 bp=45 S1-BENDING
rms = 2.954802e-02
peak = 1.507002e-04
@ 48.8281 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
first bending

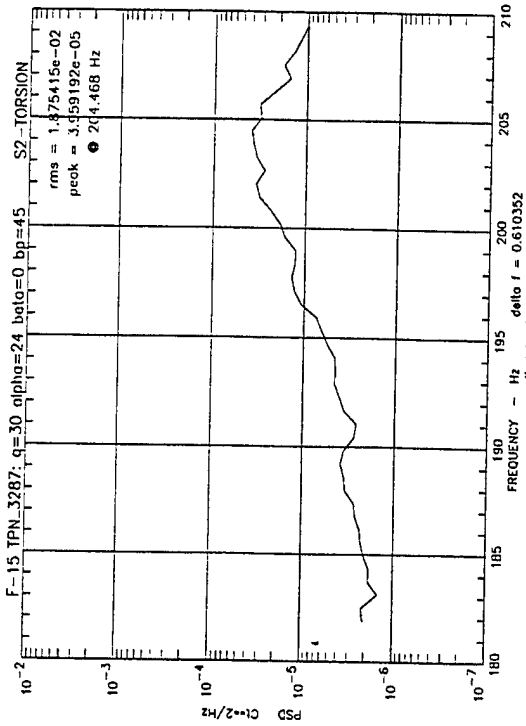

F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45 S2--TORSION
rms = 4.233174e-03
peak = 1.867603e-06
@ 204.468 Hz
PSD Ct**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

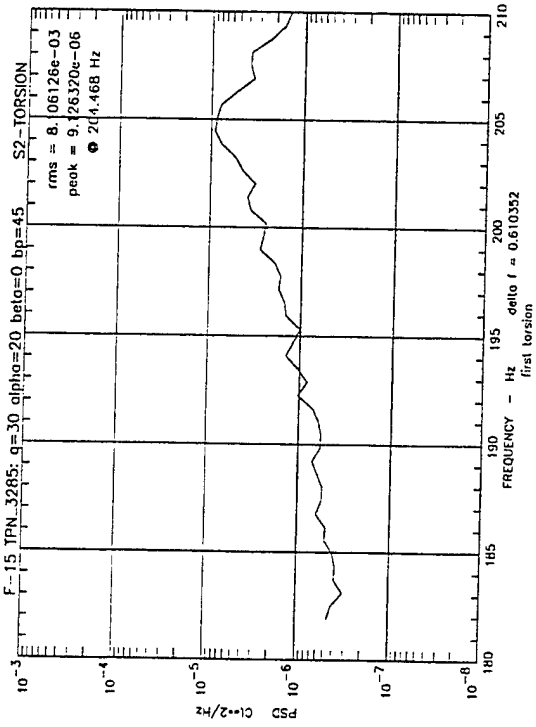

F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45 S2--TORSION
rms = 1.386205e-02
peak = 2.525084e-05
@ 205.078 Hz
PSD Ct**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

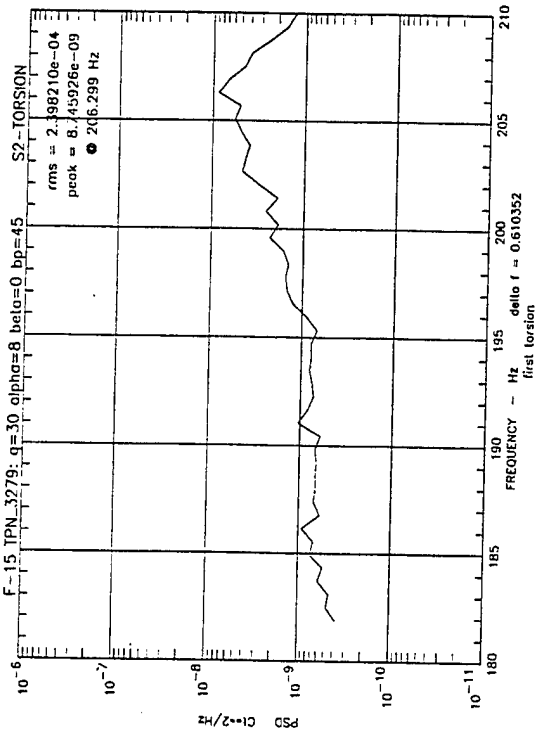

F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45 S2-TORSION
rms = 2.409828e-04
peak = 7.598985e-09
@ 205.688 Hz
PSD Ct**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

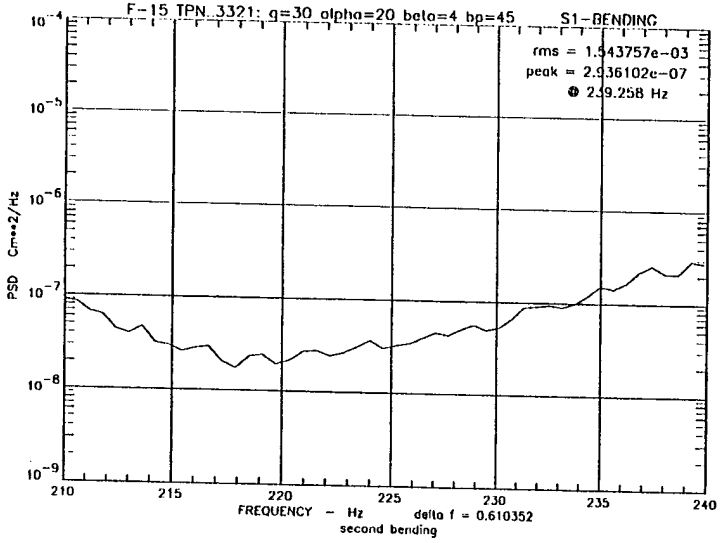

F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45 S2-TORSION
rms = 1.744185e-02
peak = 1.711550e-05
@ 203.857 Hz
PSD Ct**2/Hz
FREQUENCY - Hz delta f = 0.610352
first torsion

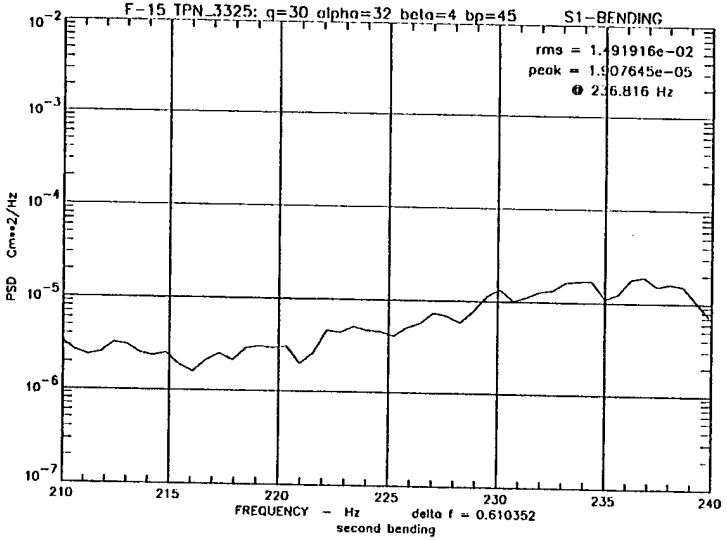

F-15 TPN_3289: q=30 alpha=32 beta=0 bp=45 S2-TORSION
rms = 8.142240e-03
peak = 1.000480e-05
@ 205.078 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

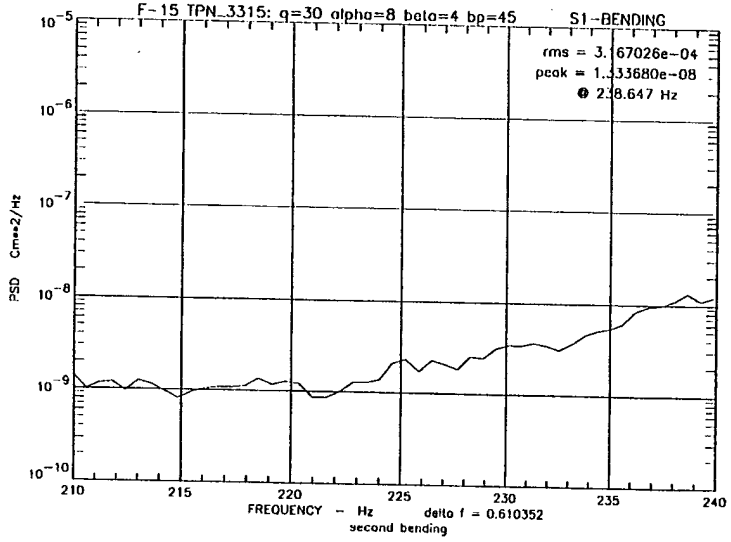

F-15 TPN_3287: q=30 alpha=24 beta=0 bp=45 S2-TORSION
rms = 1.875415e-02
peak = 3.559192e-05
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

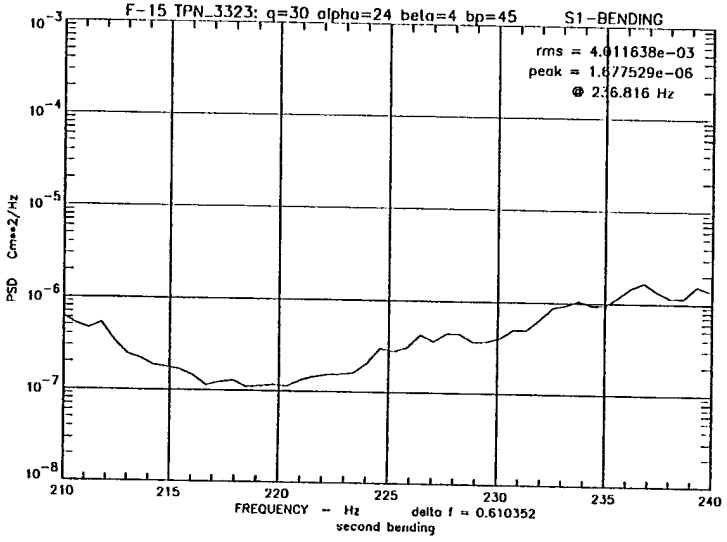

F-15 TPN_3285: q=30 alpha=20 beta=0 bp=45 S2-TORSION
rms = 8.061260e-03
peak = 9.126320e-06
@ 204.468 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

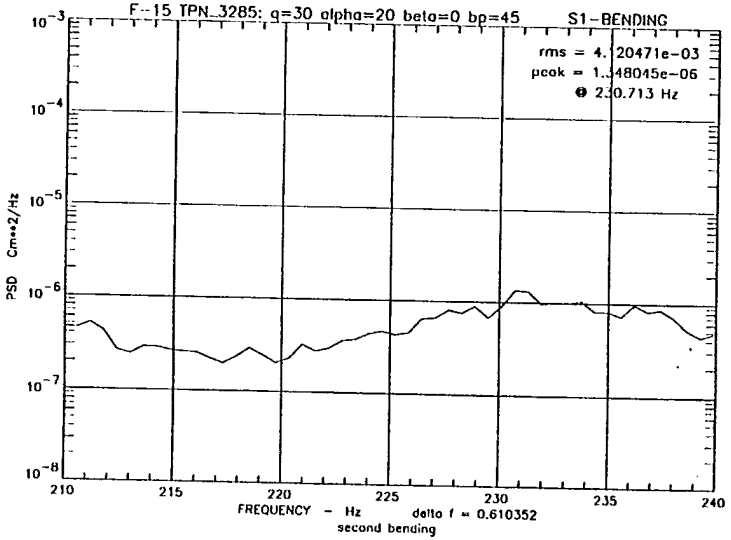

F-15 TPN_3279: q=30 alpha=8 beta=0 bp=45 S2-TORSION
rms = 2.398210e-04
peak = 8.445926e-09
@ 206.299 Hz
PSD G**2/Hz
FREQUENCY - Hz
delta f = 0.610352
first torsion

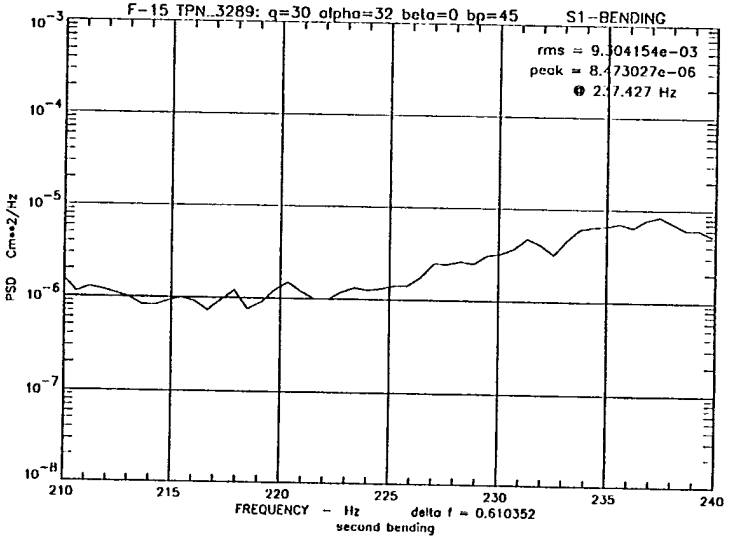

F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45 S1-BENDING
rms = 1.543757e-03
peak = 2.936102e-07
@ 239.258 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

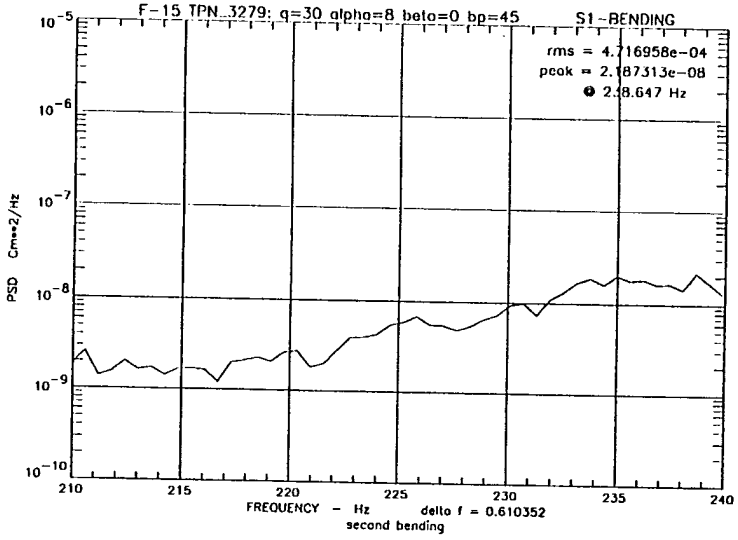

F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45 S1-BENDING
rms = 1.491916e-02
peak = 1.907645e-05
@ 236.816 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

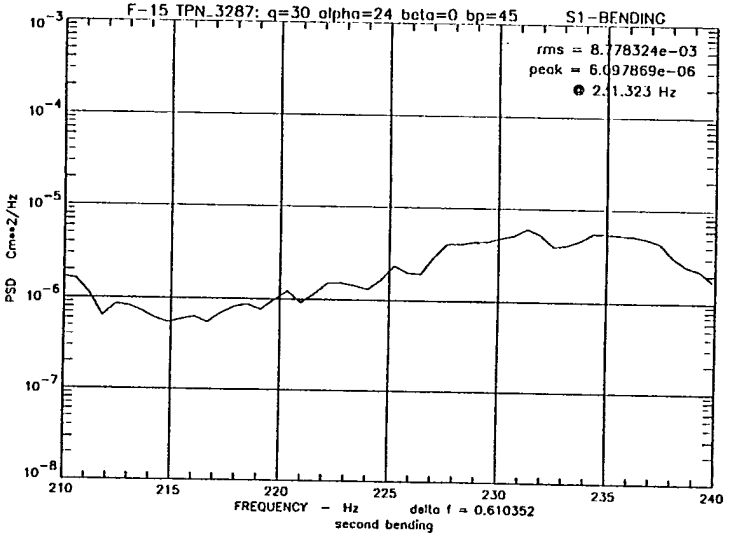

F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45 S1-BENDING
rms = 3.167026e-04
peak = 1.333680e-08
@ 238.647 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45 S1-BENDING
rms = 4.011638e-03
peak = 1.677529e-06
@ 236.816 Hz
PSD G**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 TPN_3285: q=30 alpha=20 beta=0 bp=45 S1-BENDING
rms = 4.120471e-03
peak = 1.348045e-06
@ 230.713 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 TPN_3289: q=30 alpha=32 beta=0 bp=45 S1-BENDING
rms = 9.304154e-03
peak = 8.473027e-06
@ 217.427 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 TPN_3279: q=30 alpha=8 beta=0 bp=45 S1-BENDING
rms = 4.716958e-04
peak = 2.187313e-08
@ 238.647 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending


F-15 TPN_3287: q=30 alpha=24 beta=0 bp=45 S1-BENDING
rms = 8.778324e-03
peak = 6.097869e-06
@ 231.323 Hz
PSD Cm**2/Hz
FREQUENCY - Hz delta f = 0.610352
second bending

FLEXIBLE TAIL RESPONSE
NON DIMENSIONAL BENDING AND TORSION

Q= 30 PSF

3.2.2 RMS SUMMARY TABS

F-15 Vertical Tail Buffet Test: Overall RMS (Cm & Ct nondimensional units), Q=30 psi

0 psi blowing pressure:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	8	.00232	.00083	.00214	.00017	.00030
4	20	.01438	.00734	.01310	.00567	.00168
4	24	.03047	.02162	.02657	.01717	.00555
4	32	.07895	.02511	.07289	.01910	.01667
0	8	.00284	.00112	.00262	.00019	.00053
0	20	.02384	.01575	.02088	.01198	.00511
0	24	.03922	.03115	.03288	.02311	.01228
0	32	.09048	.01568	.08712	.01021	.00882

45 psi blowing pressure:

Beta	Alpha	bending 5-500 Hz	torsion 5-500 Hz	1st bending 35-65 Hz	1st torsion 180-210 Hz	2nd bending 210-240 Hz
4	8	.00262	.00101	.00242	.00024	.00032
4	20	.01379	.00596	.01262	.00423	.00154
4	24	.02580	.01439	.02325	.01144	.00401
4	32	.07075	.01924	.06576	.01386	.01492
0	8	.00305	.00126	.00256	.00024	.00047
0	20	.02005	.01142	.01774	.00811	.00412
0	24	.03417	.02421	.02955	.01875	.00878
0	32	.07490	.01329	.07165	.00874	.00930

FLEXIBLE TAIL RESPONSE

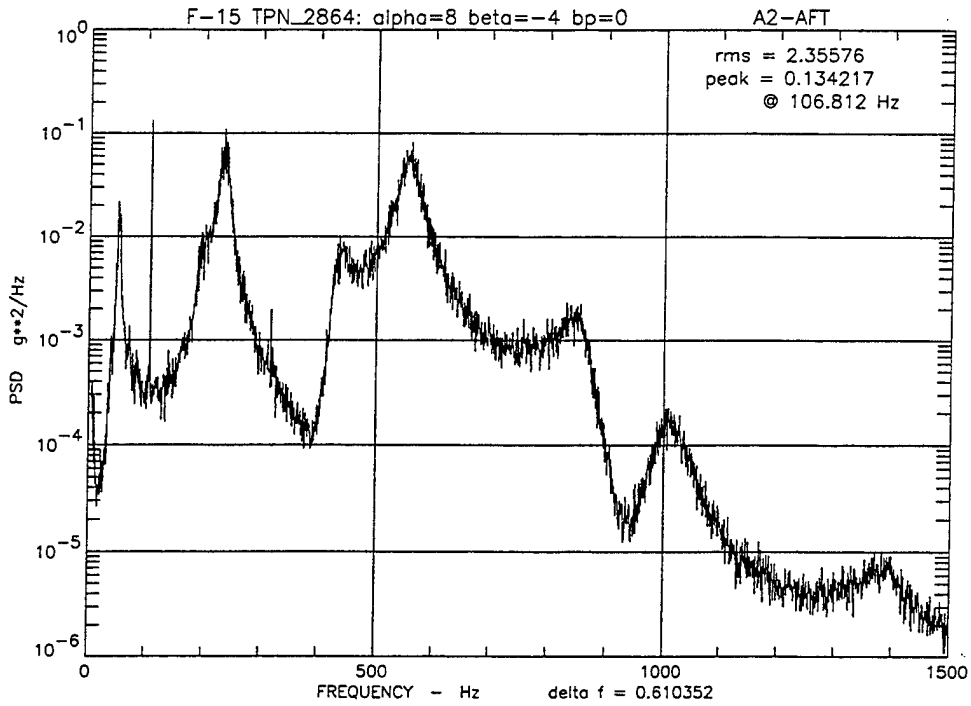
4. ACCELERATION DATA - LINEAR, BENDING AND TORSION
   4.1 PSD GRAPHS
      4.1.1 Q = 56 PSF
         4.1.1.1 FWD AND AFT ACCELS
         4.1.1.2 BENDING (LINEAR at EA)
         4.1.1.3 TORSIONAL (ANGULAR AT EA)
      4.1.2 Q=30PSF
         4.1.2.1 FWD AND AFT ACCELS.- PSDS
         4.1.2.2 BENDING (LINEAR at EA)
         4.1.2.3 TORSIONAL (ANGULAR AT EA
   4.2 RMS SUMMARY TABLES

FLEXIBLE TAIL RESPONSE
ACCELERATION DATA
Q= 56 PSF
PSD GRAPHS

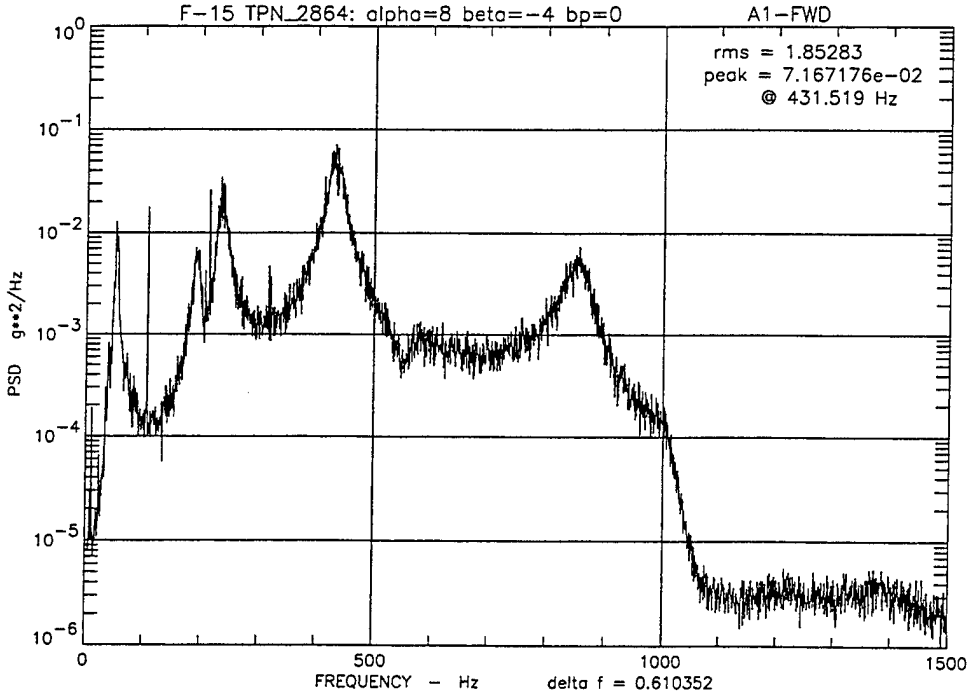
4.1.1.1 FWD AND AFT ACCELS, beta= 0, +4, -4 Deg, WBP = 0, 45, 65 psi
ALPHAS = 8, 20, 24, 32 DEG
(note, the dimensional graph , (in/sec)^2/hz is followed by a graph (g's)^2/hz

data is blocked off by blowing pressures, with beta variation within

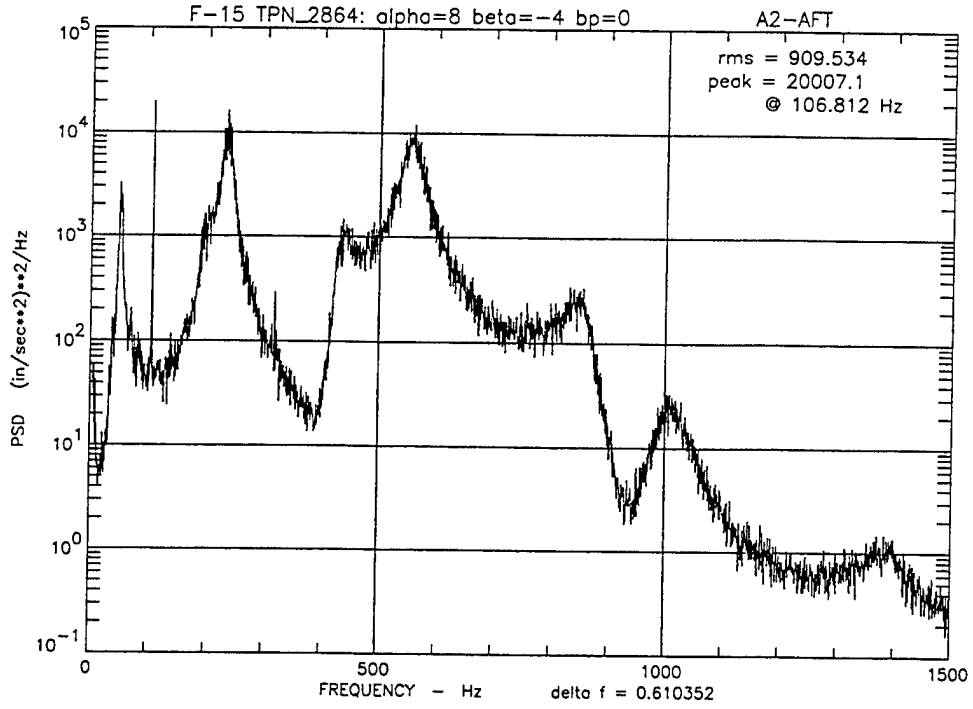
F-15 TPN_2864: alpha=8 beta=-4 bp=0



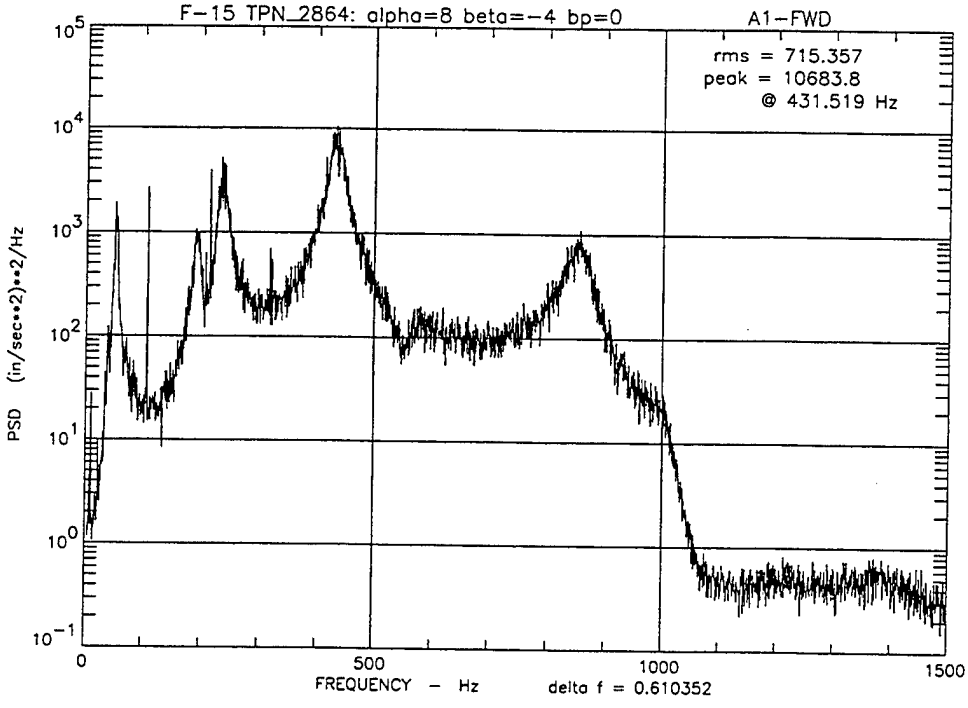
F-15 TPN_2864: alpha=8 beta=-4 bp=0



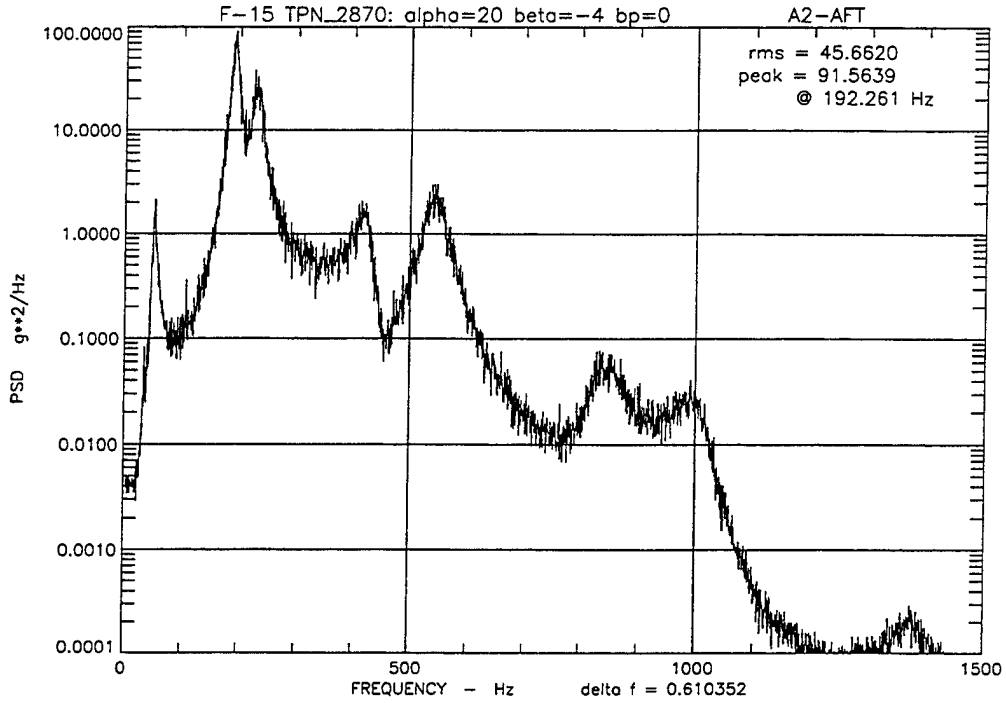
F-15 TPN_2864: alpha=8 beta=-4 bp=0



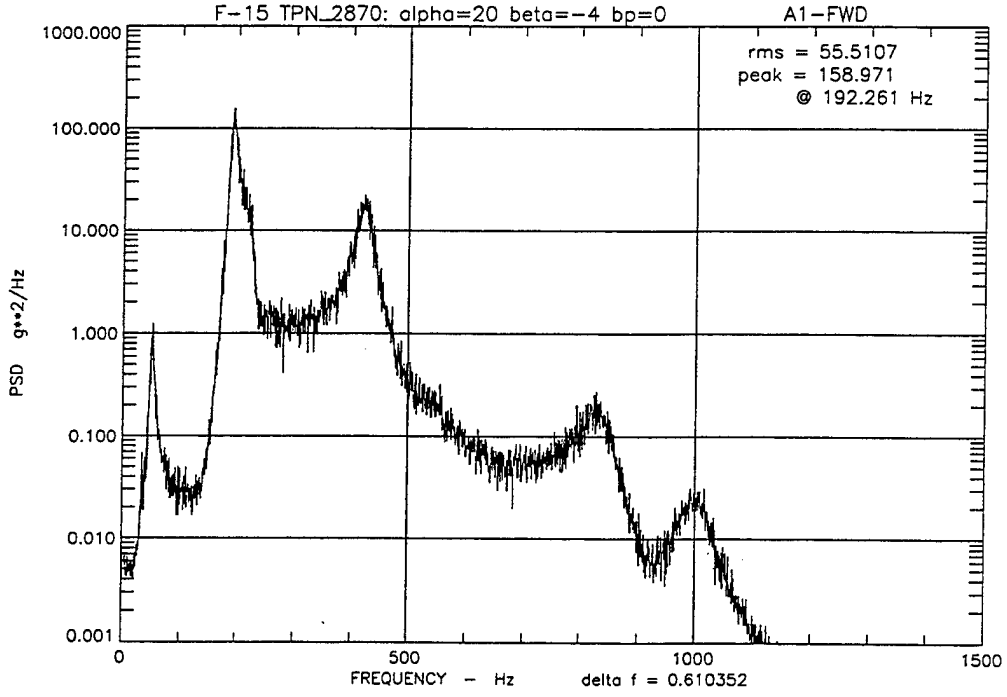
F-15 TPN_2864: alpha=8 beta=-4 bp=0



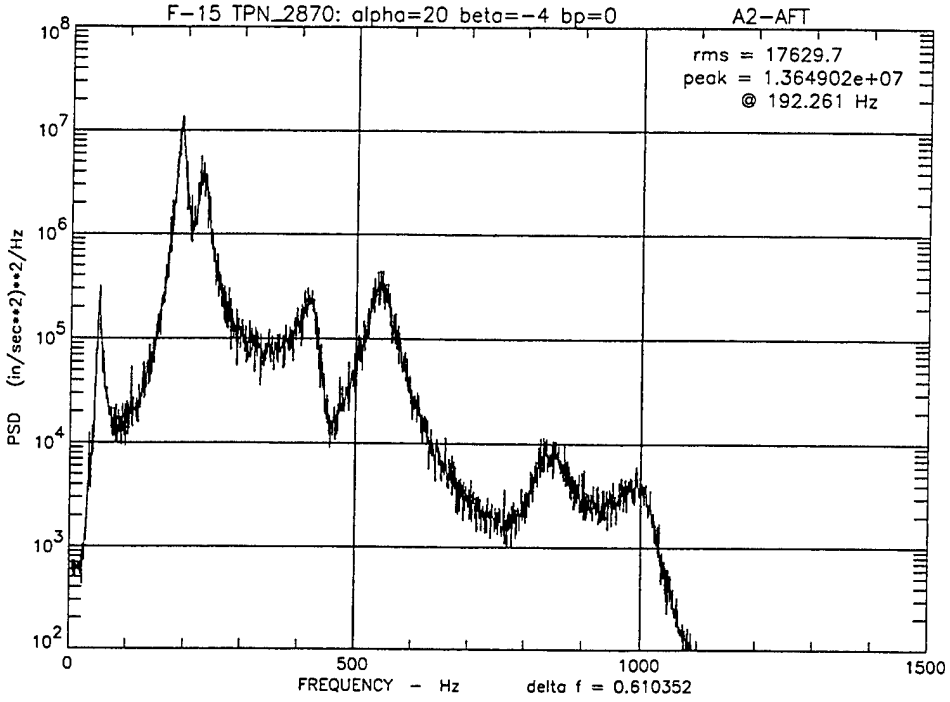
F-15 TPN_2870: alpha=20 beta=-4 bp=0



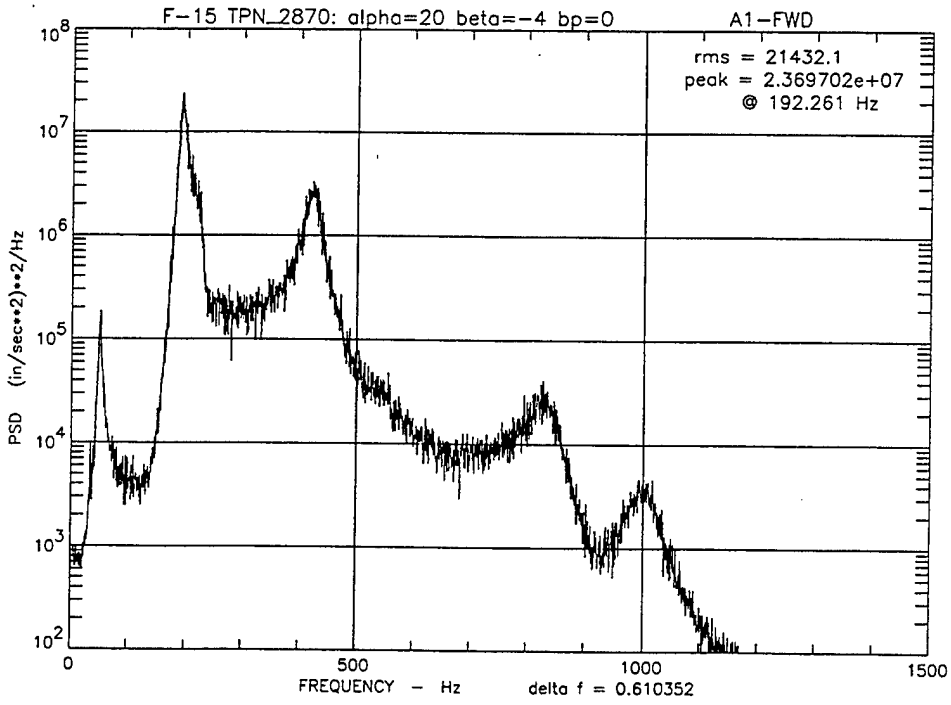
F-15 TPN_2870: alpha=20 beta=-4 bp=0



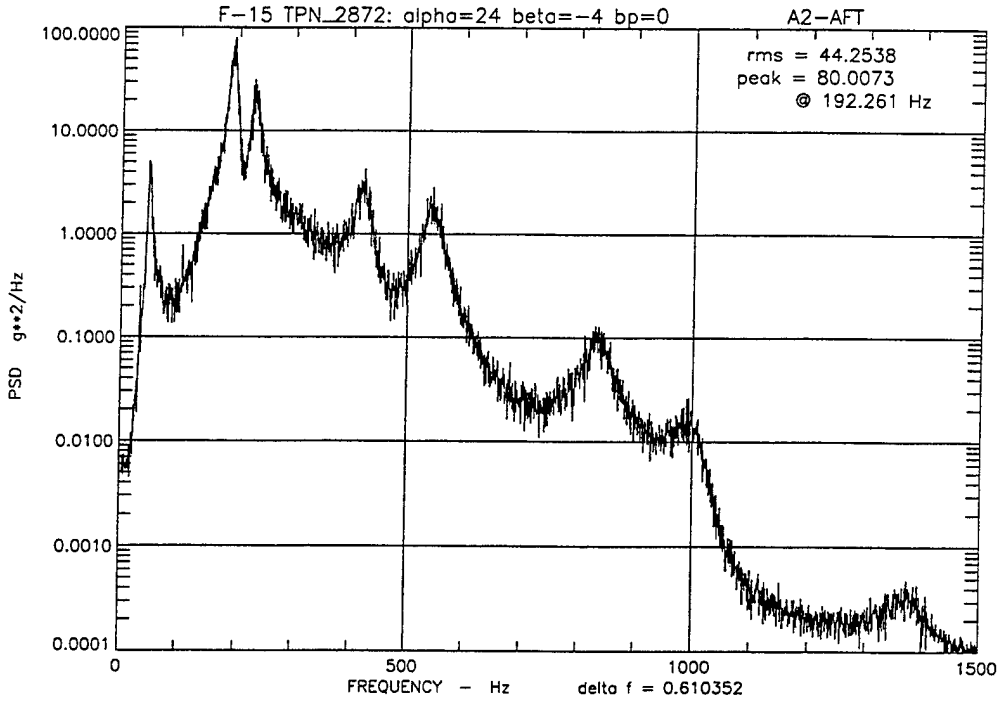
F-15 TPN_2870: alpha=20 beta=-4 bp=0



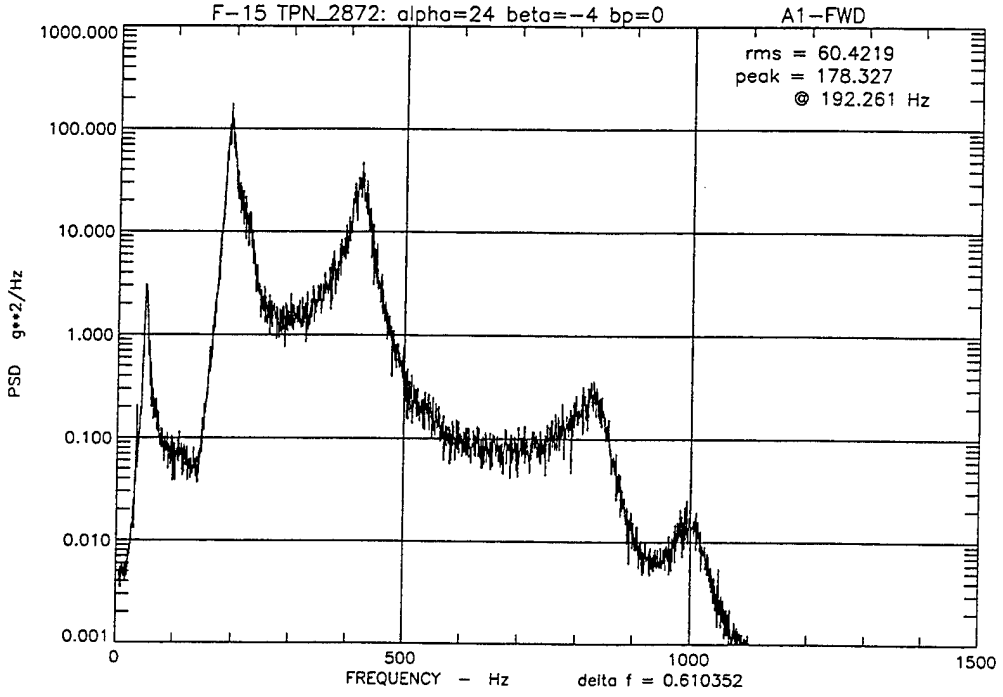
F-15 TPN_2870: alpha=20 beta=-4 bp=0



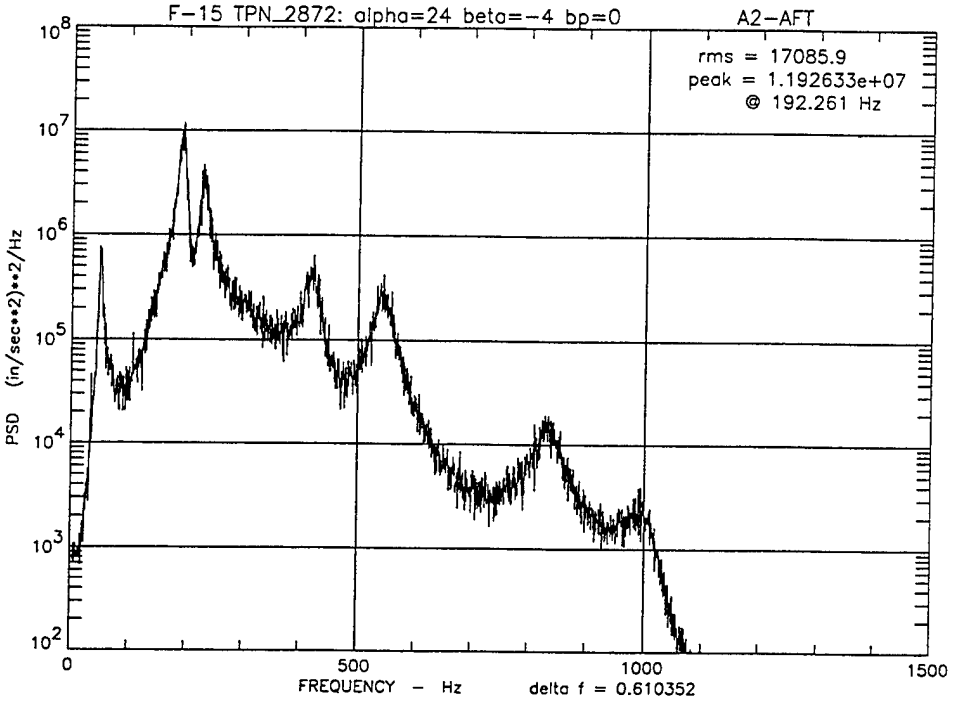
F-15 TPN_2872: alpha=24 beta=-4 bp=0



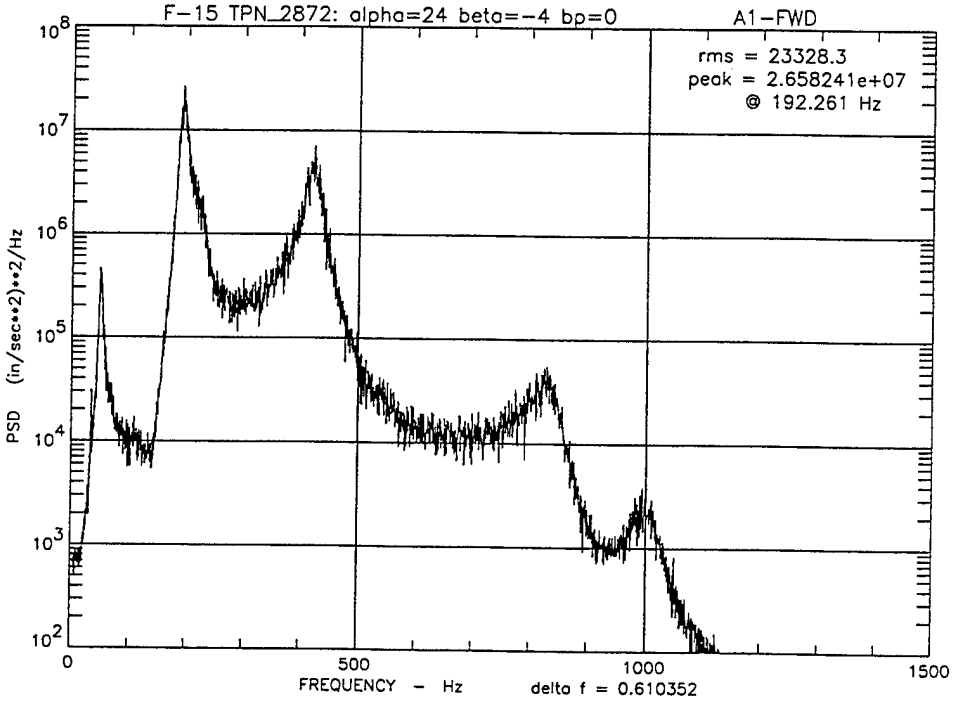
F-15 TPN_2872: alpha=24 beta=-4 bp=0



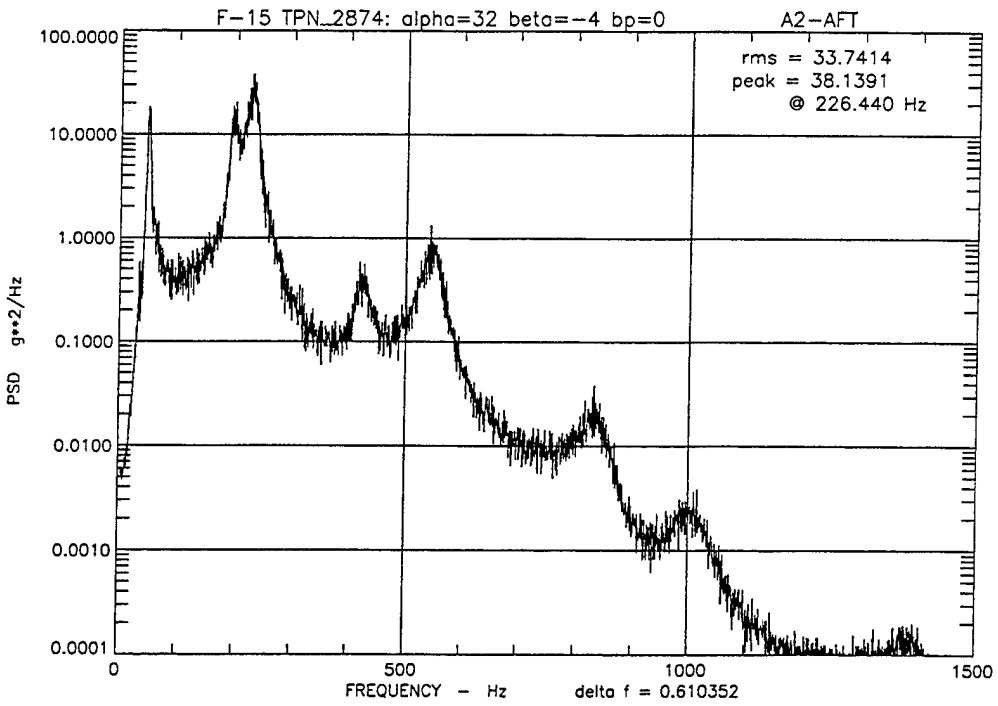
F-15 TPN_2872: alpha=24 beta=-4 bp=0



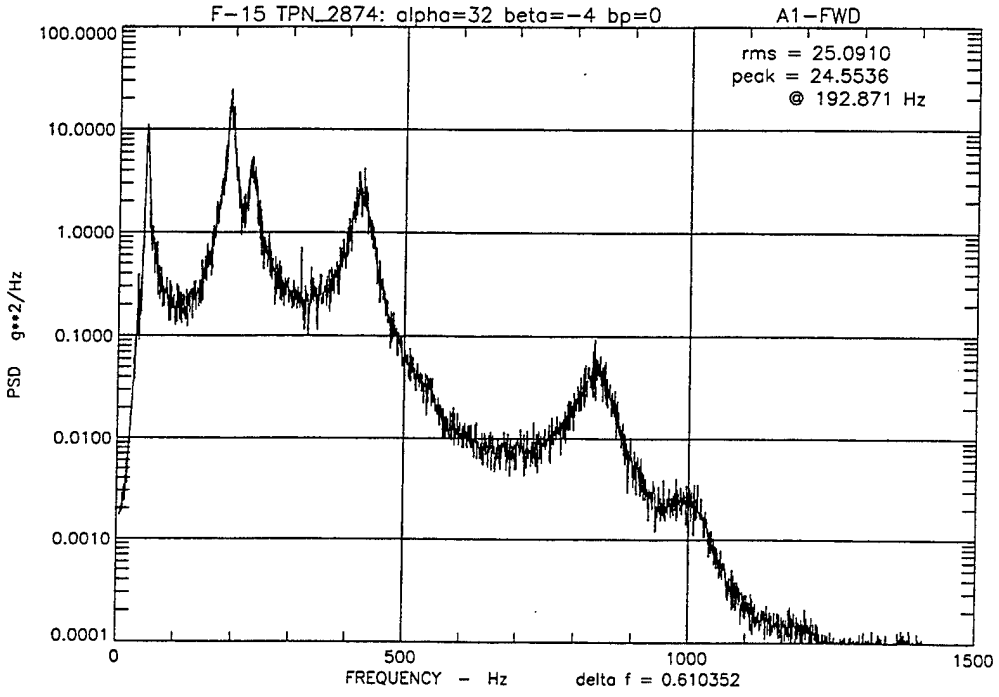
F-15 TPN_2872: alpha=24 beta=-4 bp=0



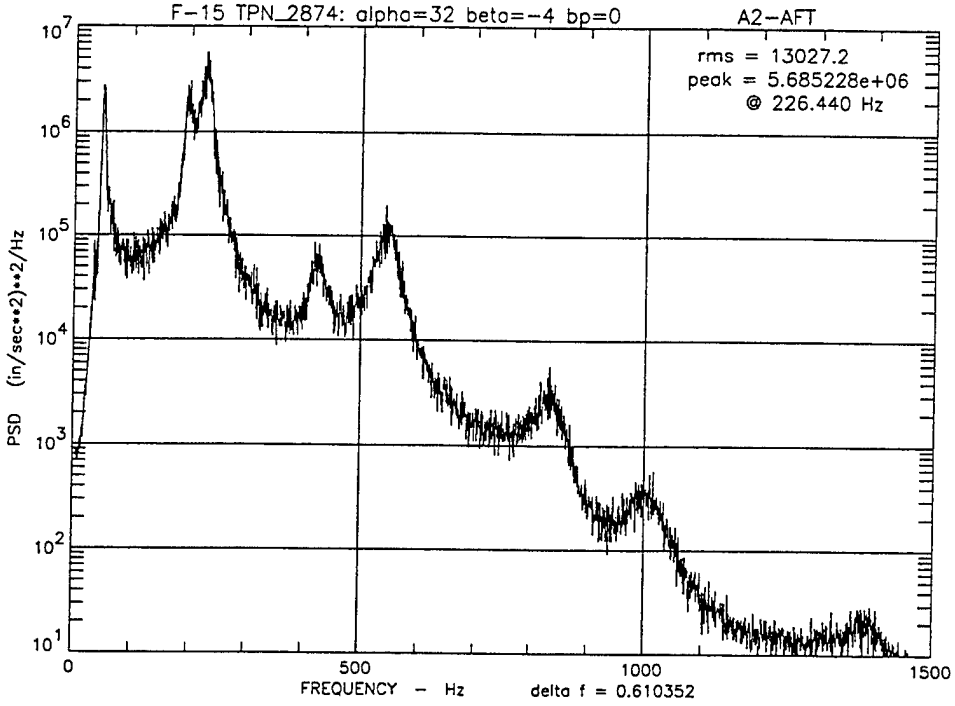
F-15 TPN_2874: alpha=32 beta=-4 bp=0



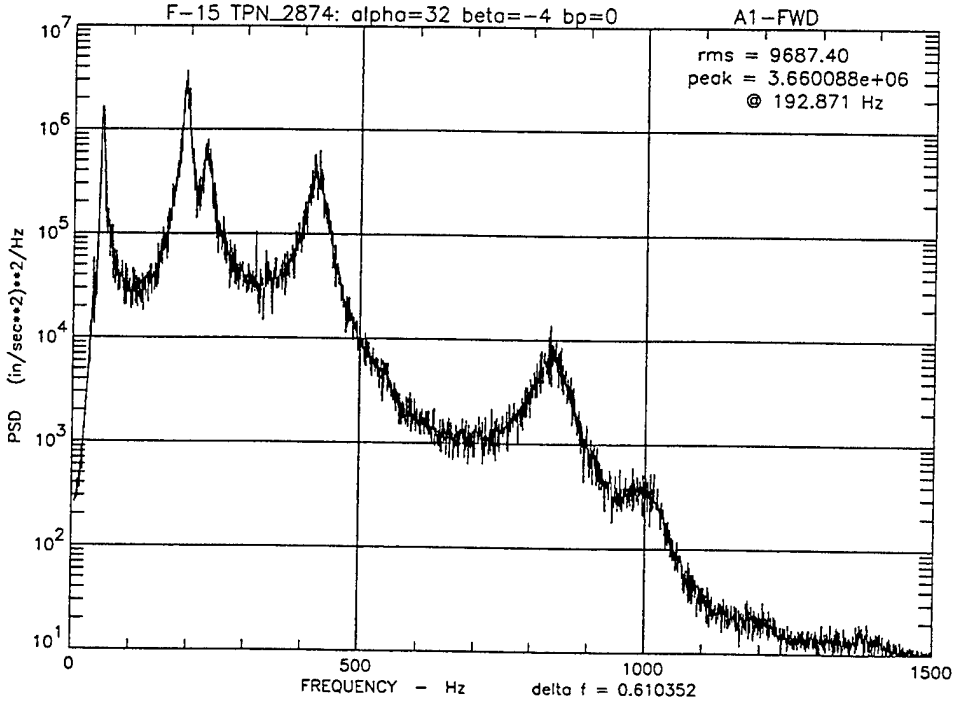
F-15 TPN_2874: alpha=32 beta=-4 bp=0



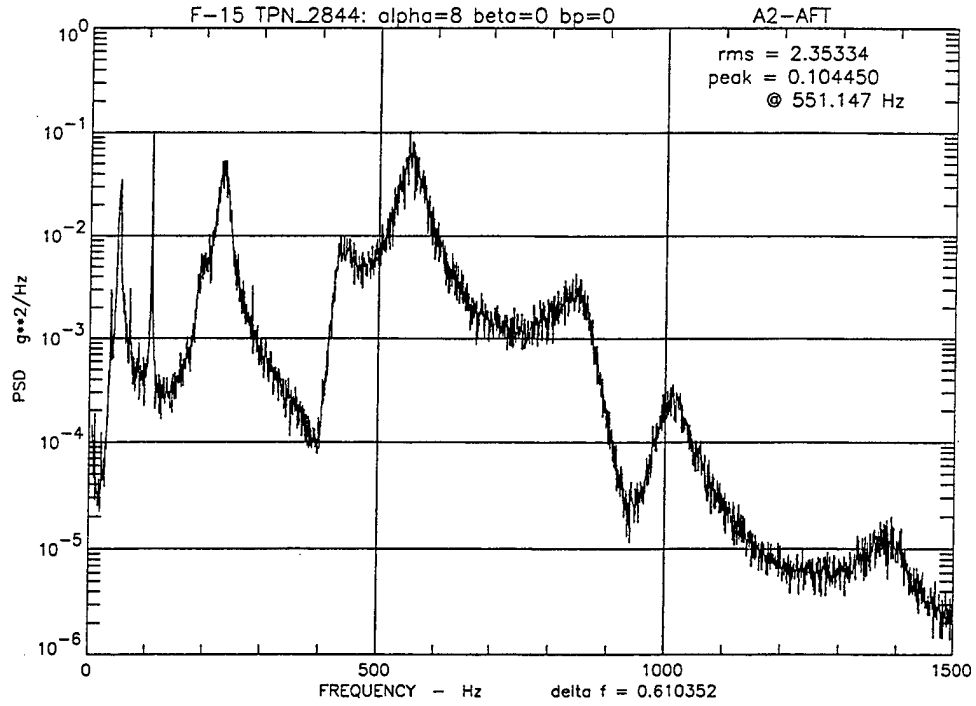
F-15 TPN_2874: alpha=32 beta=-4 bp=0



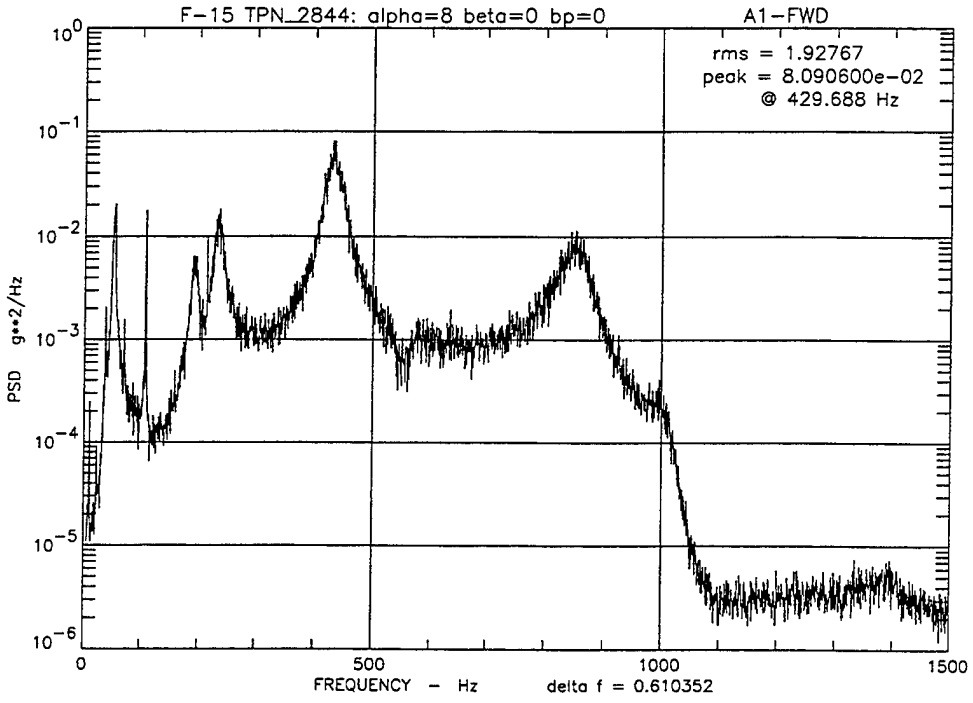
F-15 TPN_2874: alpha=32 beta=-4 bp=0



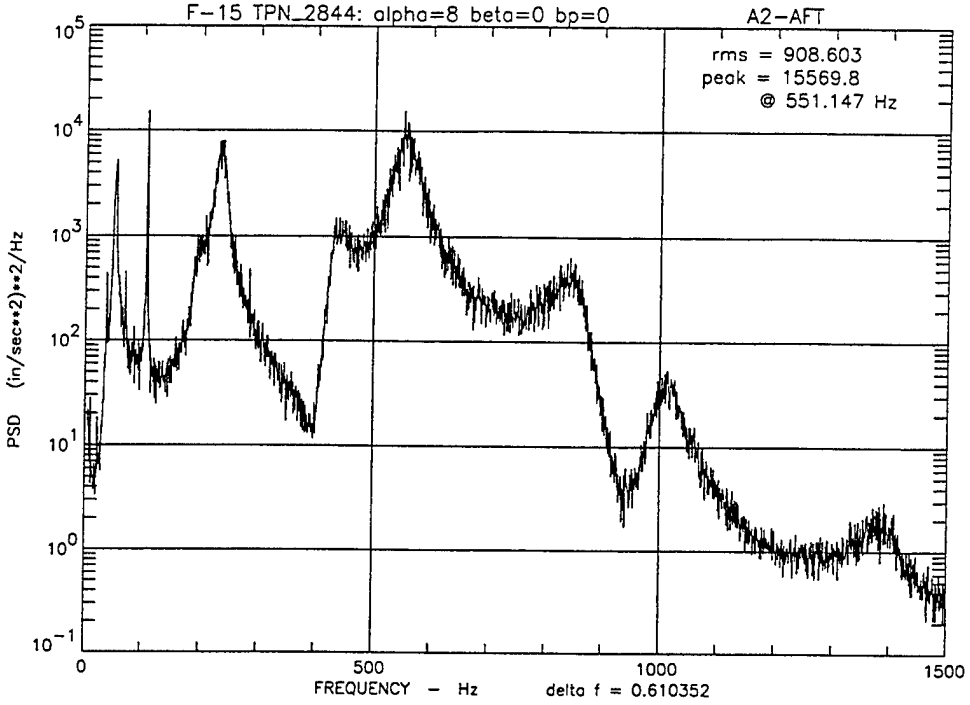
F-15 TPN_2844: alpha=8 beta=0 bp=0



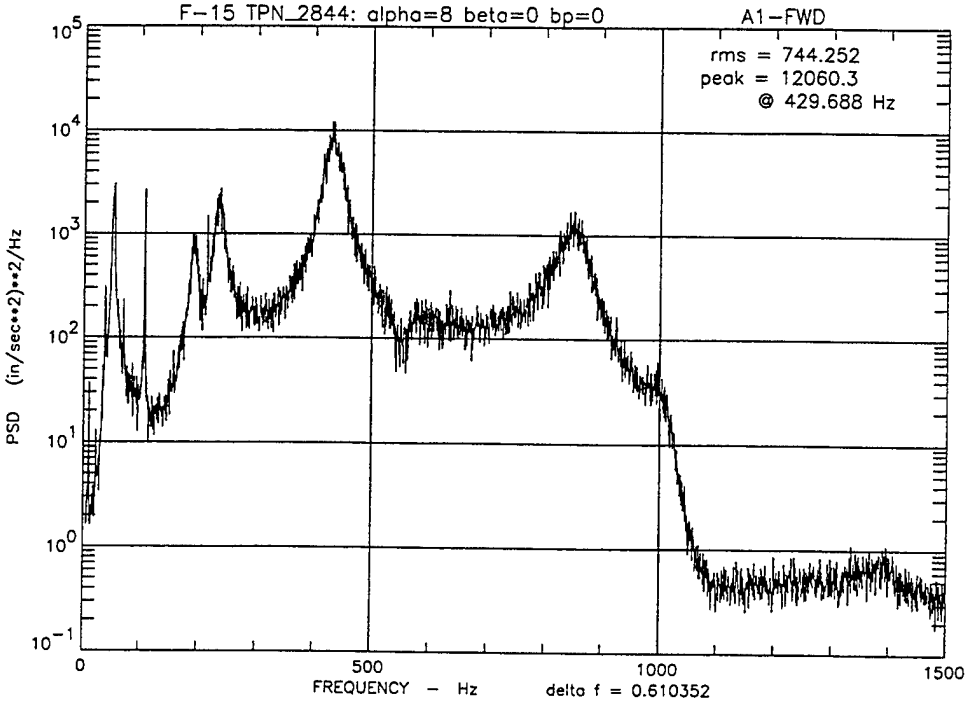
F-15 TPN_2844: alpha=8 beta=0 bp=0



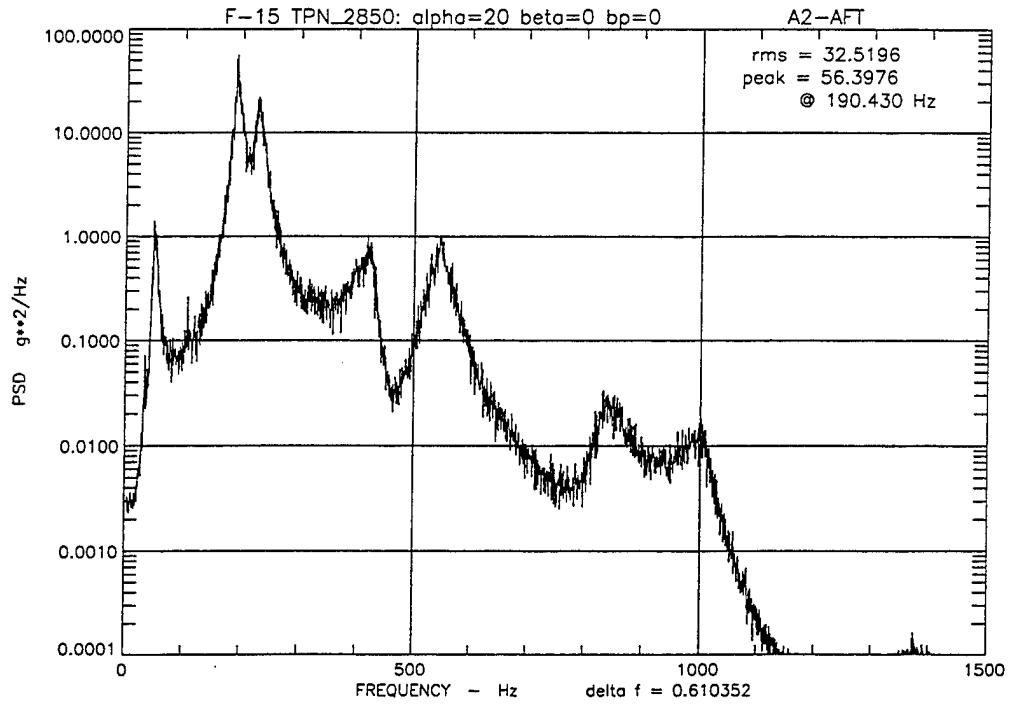
F-15 TPN_2844: alpha=8 beta=0 bp=0



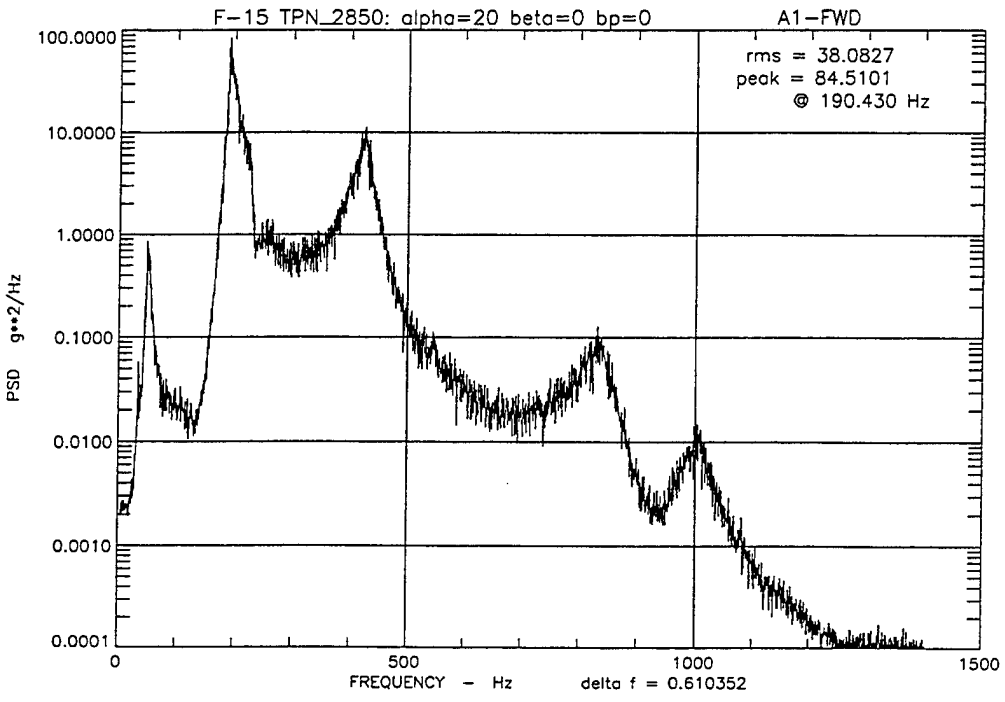
F-15 TPN_2844: alpha=8 beta=0 bp=0



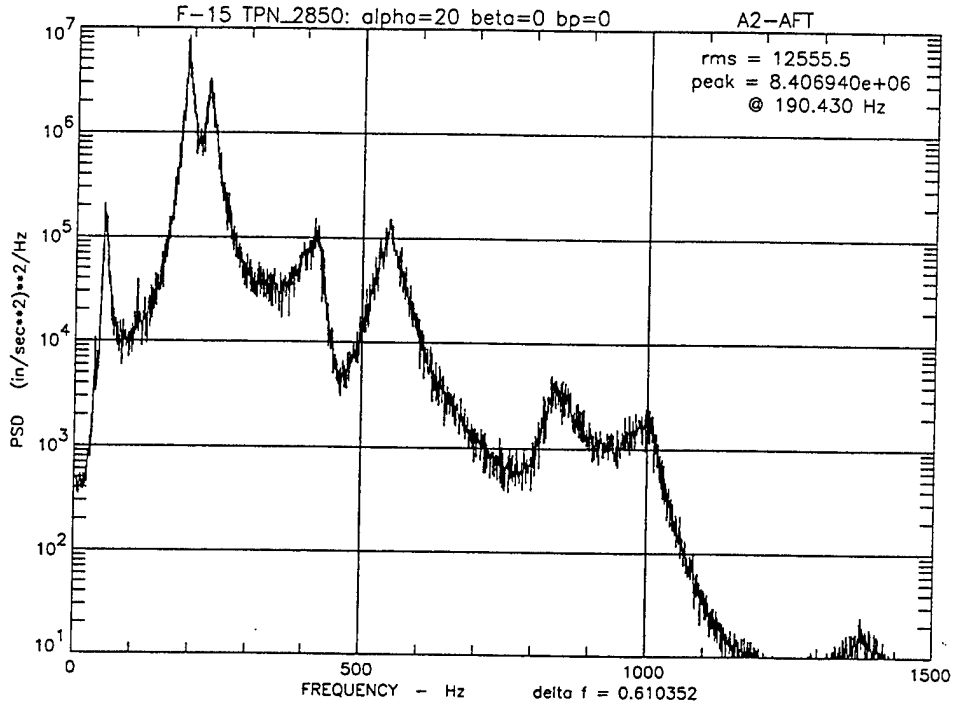
F-15 TPN_2850: alpha=20 beta=0 bp=0



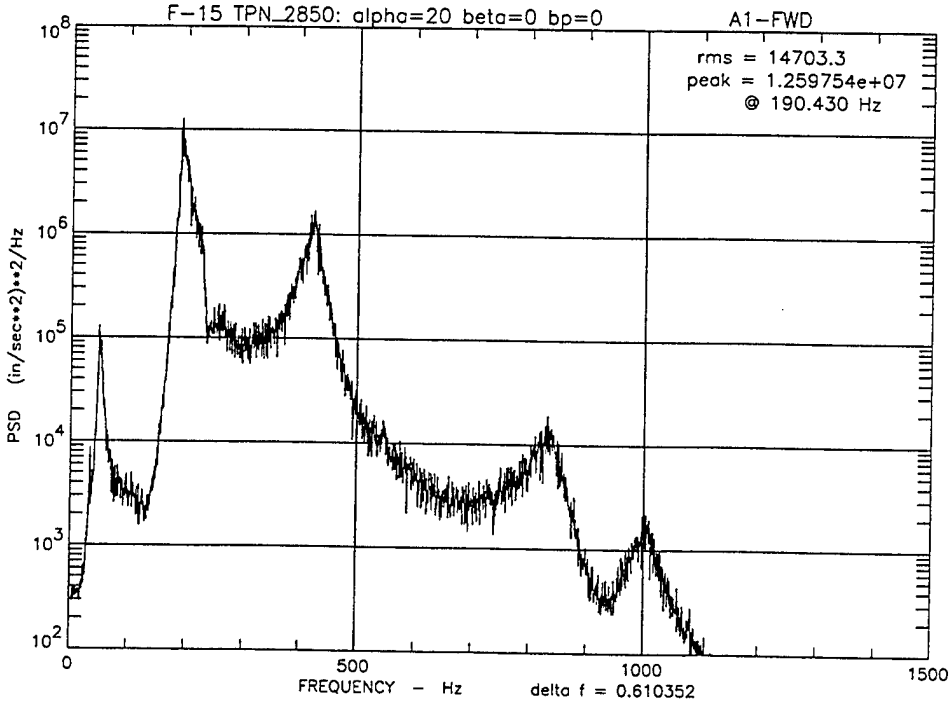
F-15 TPN_2850: alpha=20 beta=0 bp=0



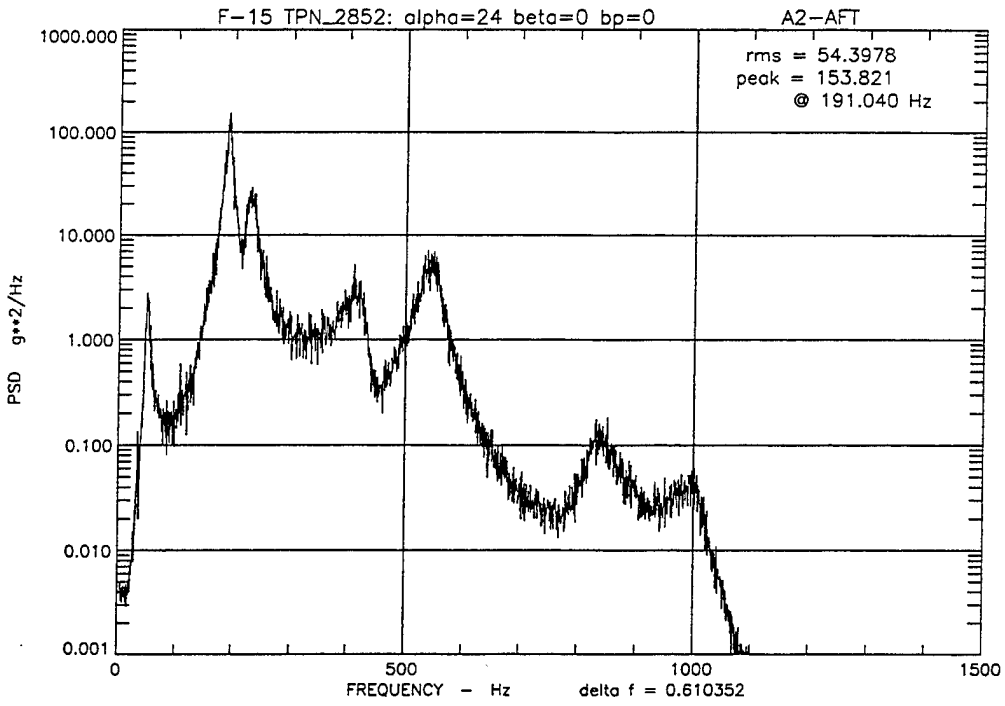
F-15 TPN_2850: alpha=20 beta=0 bp=0



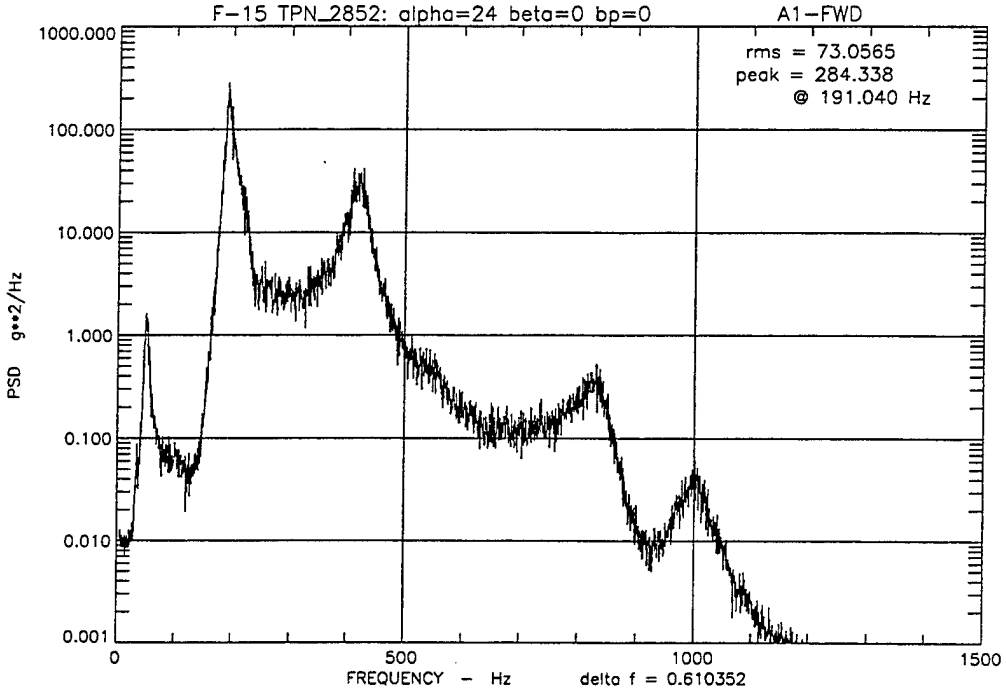
F-15 TPN_2850: alpha=20 beta=0 bp=0



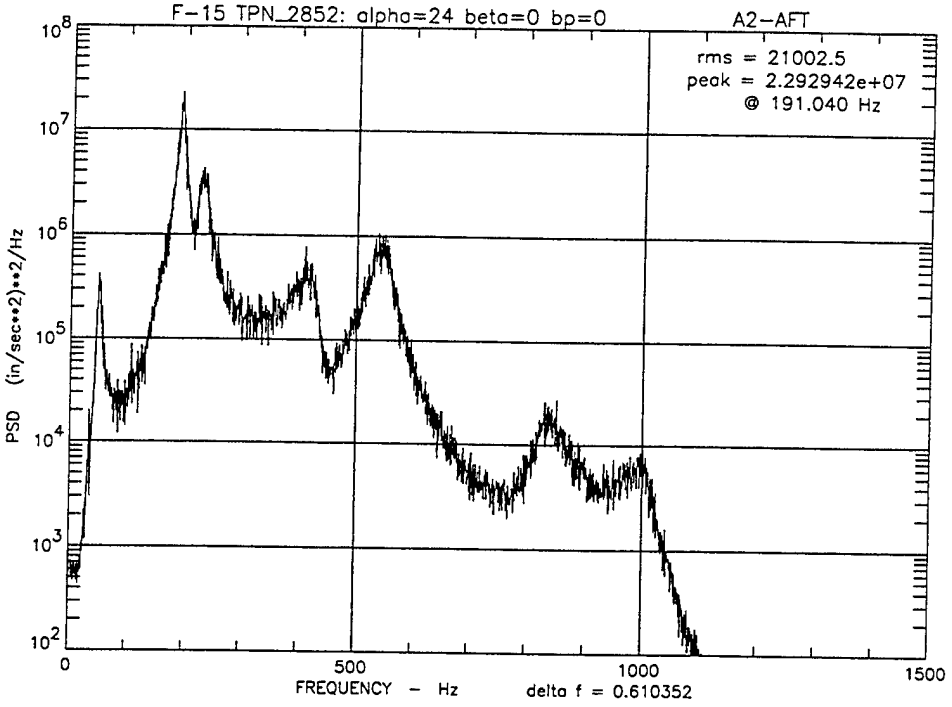
F-15 TPN_2852: alpha=24 beta=0 bp=0



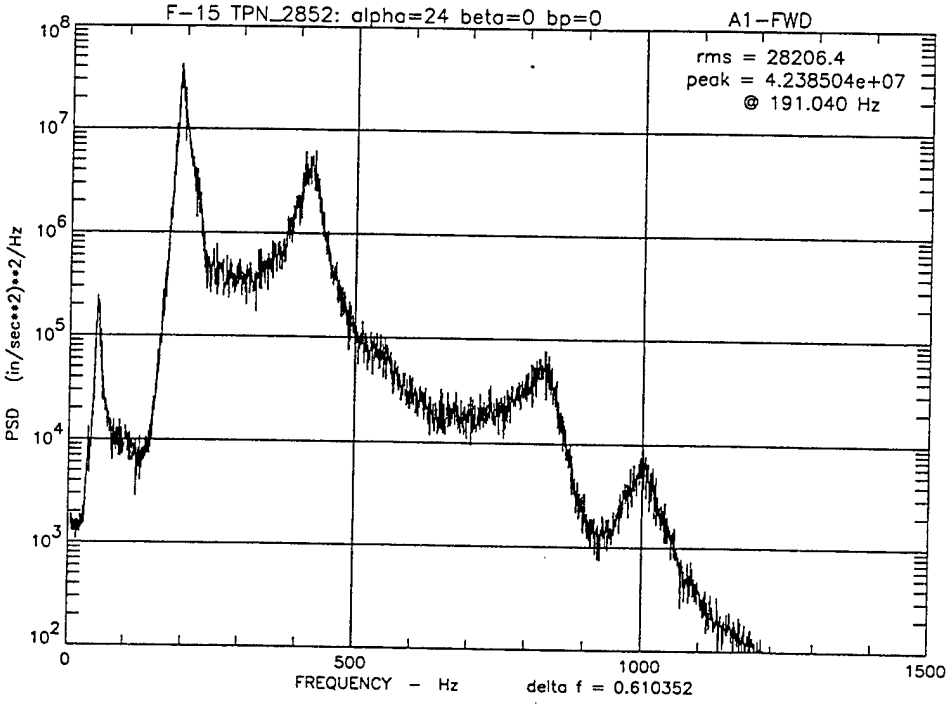
F-15 TPN_2852: alpha=24 beta=0 bp=0



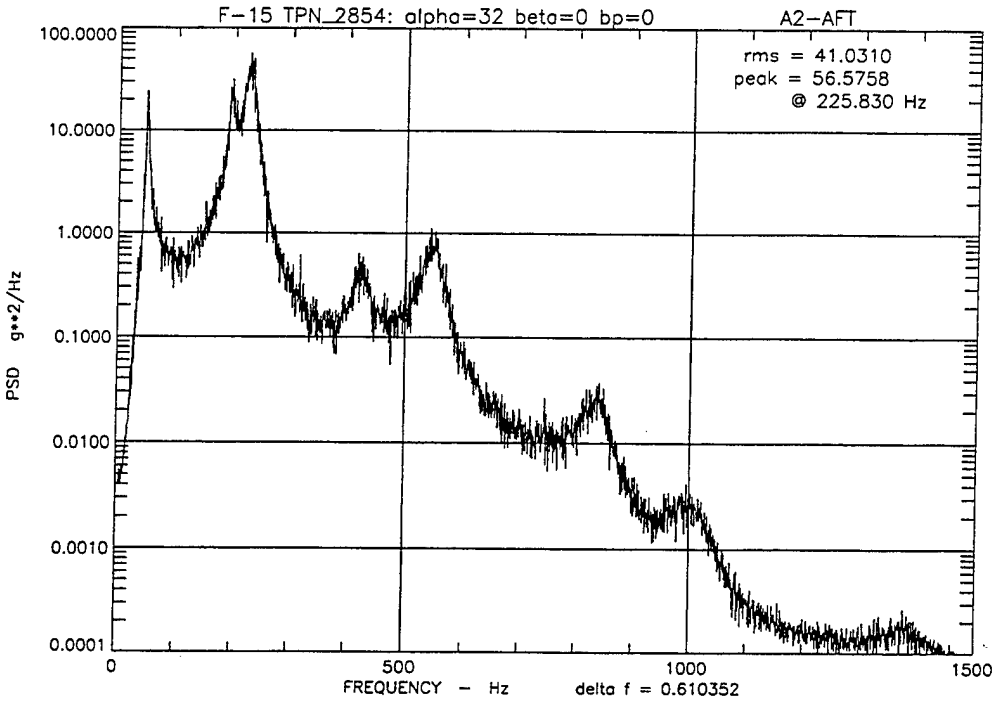
F-15 TPN_2852: alpha=24 beta=0 bp=0



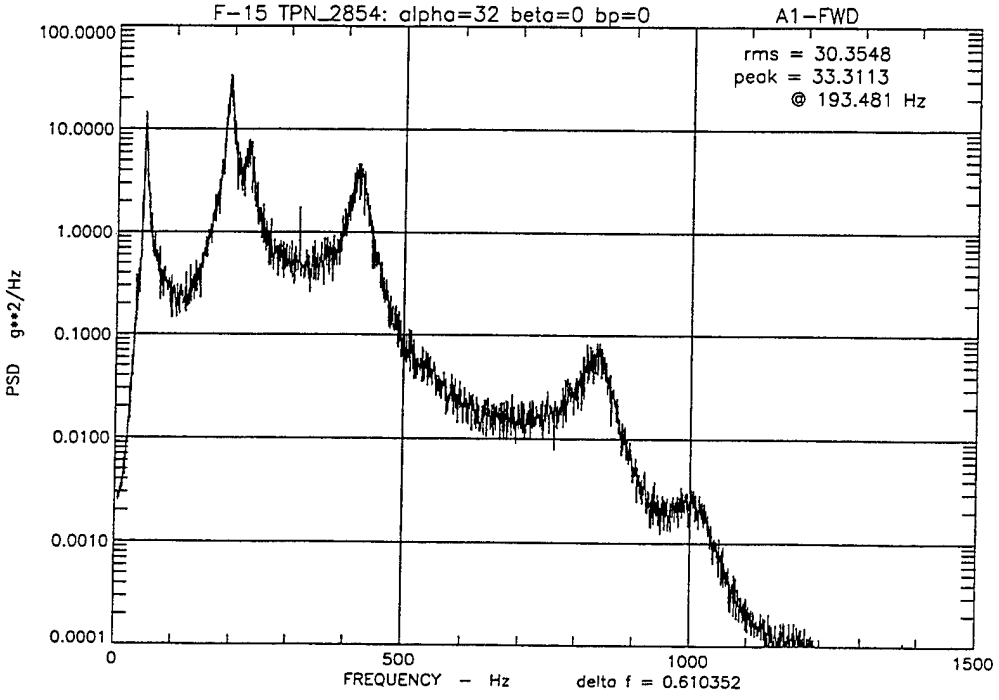
F-15 TPN_2852: alpha=24 beta=0 bp=0



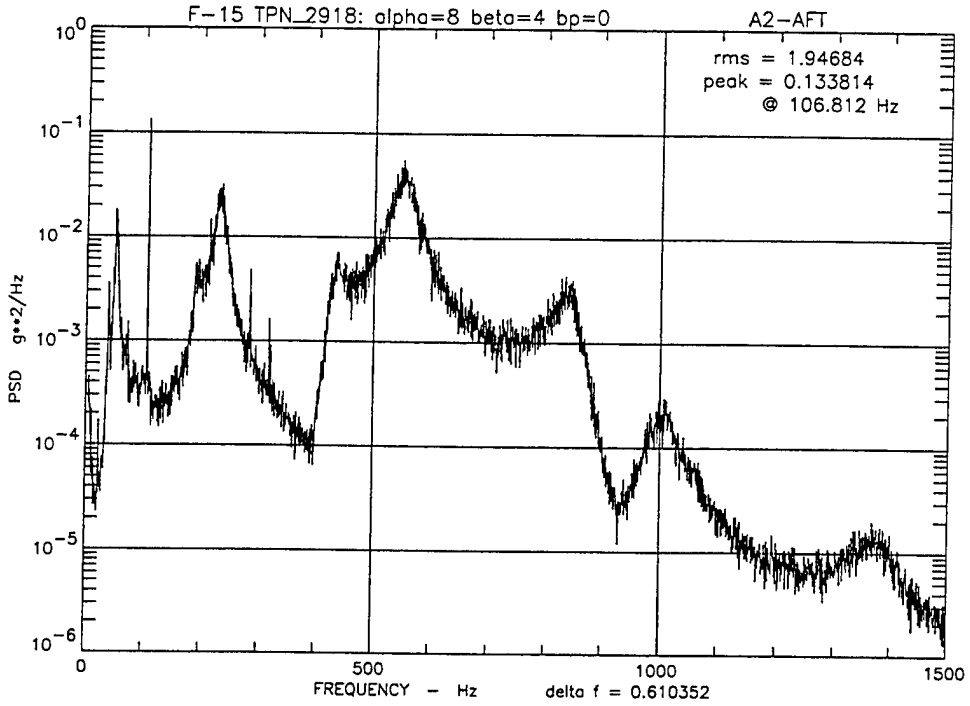
F-15 TPN_2854: alpha=32 beta=0 bp=0



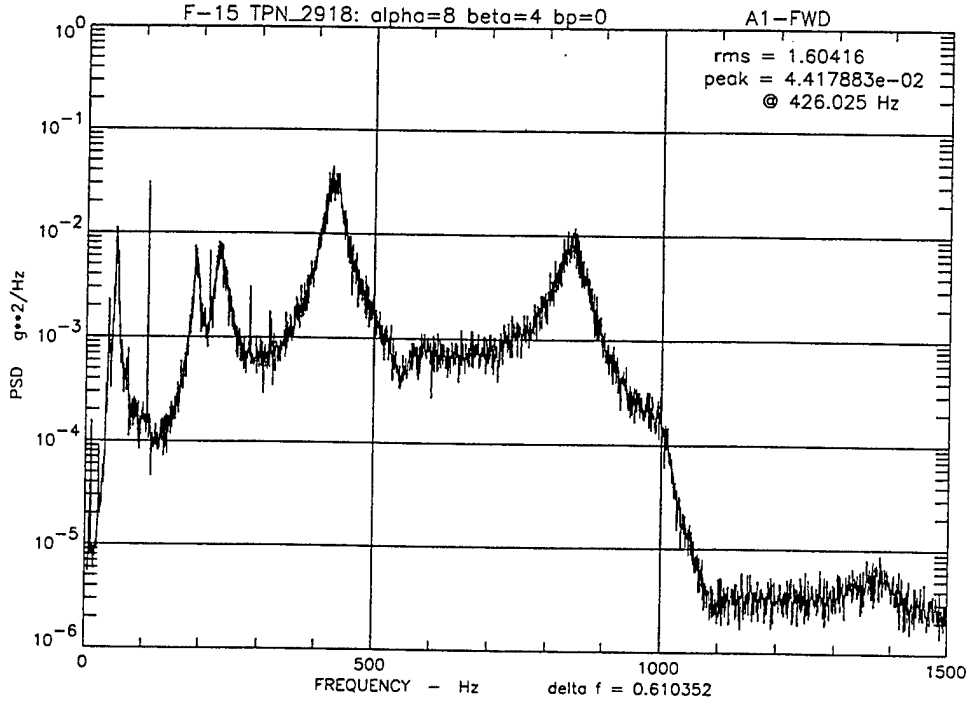
F-15 TPN_2854: alpha=32 beta=0 bp=0



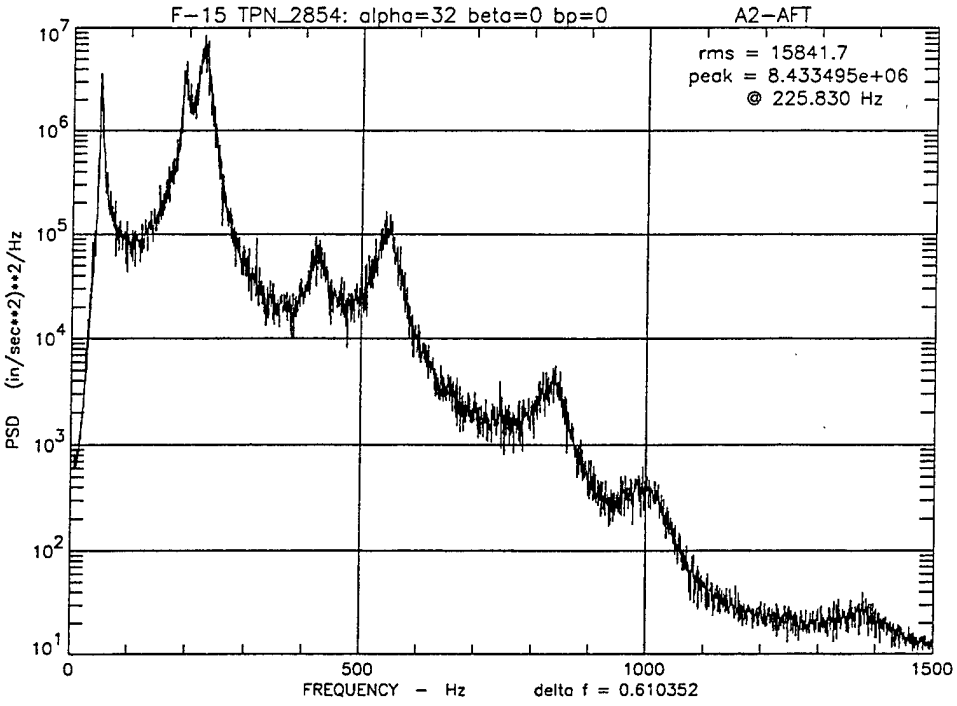
F-15 TPN_2918: alpha=8 beta=4 bp=0



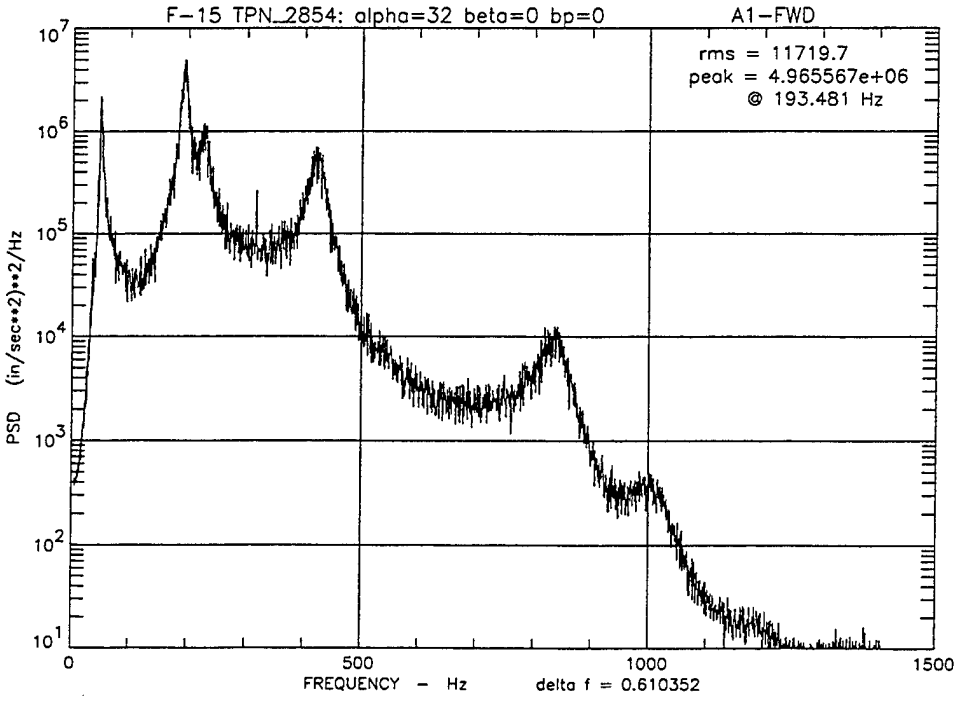
F-15 TPN_2918: alpha=8 beta=4 bp=0



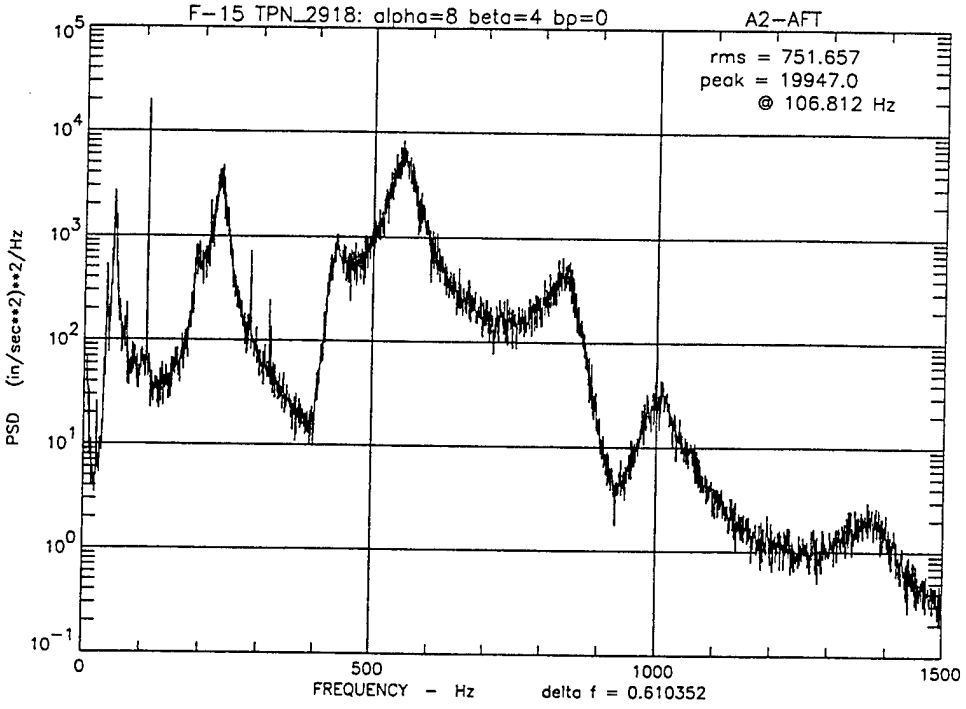
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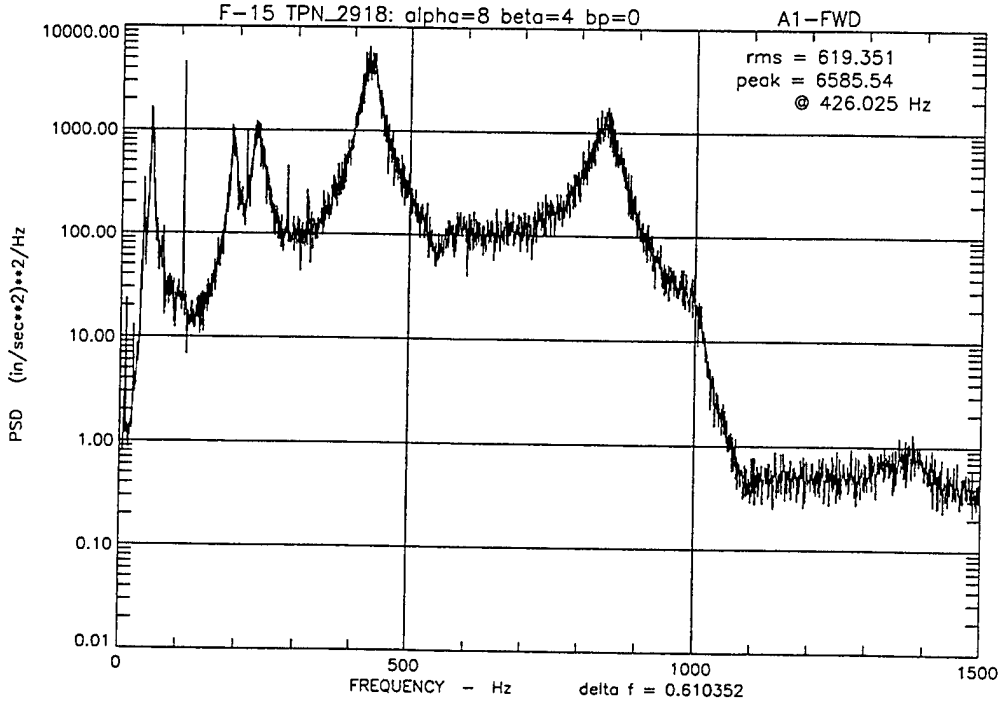
F-15 TPN_2854: alpha=32 beta=0 bp=0



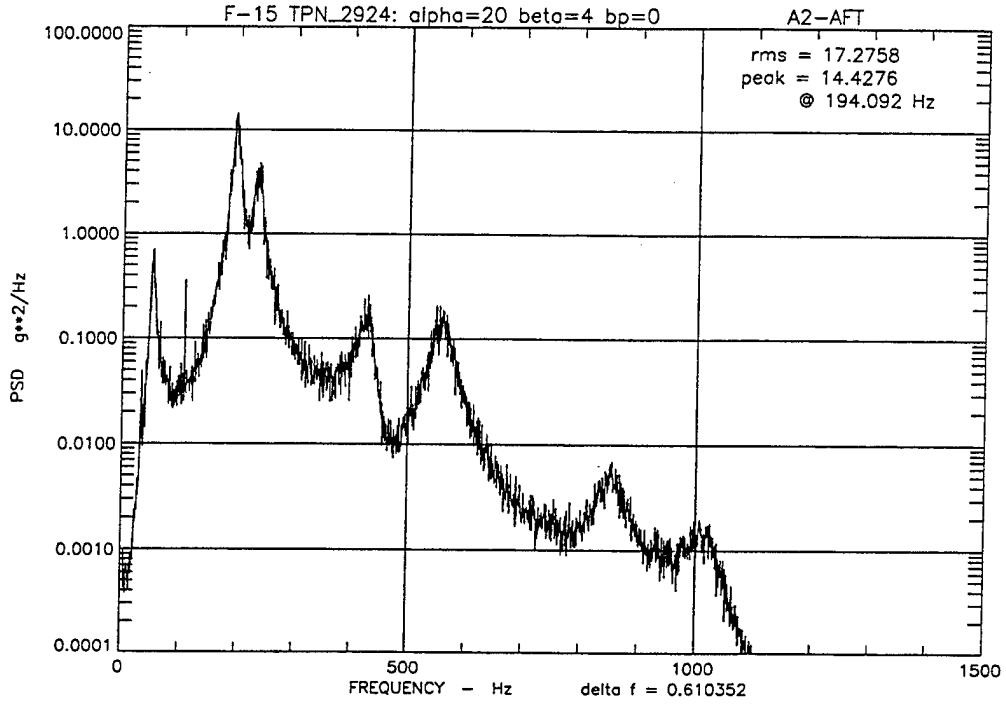
F-15 TPN_2918: alpha=8 beta=4 bp=0



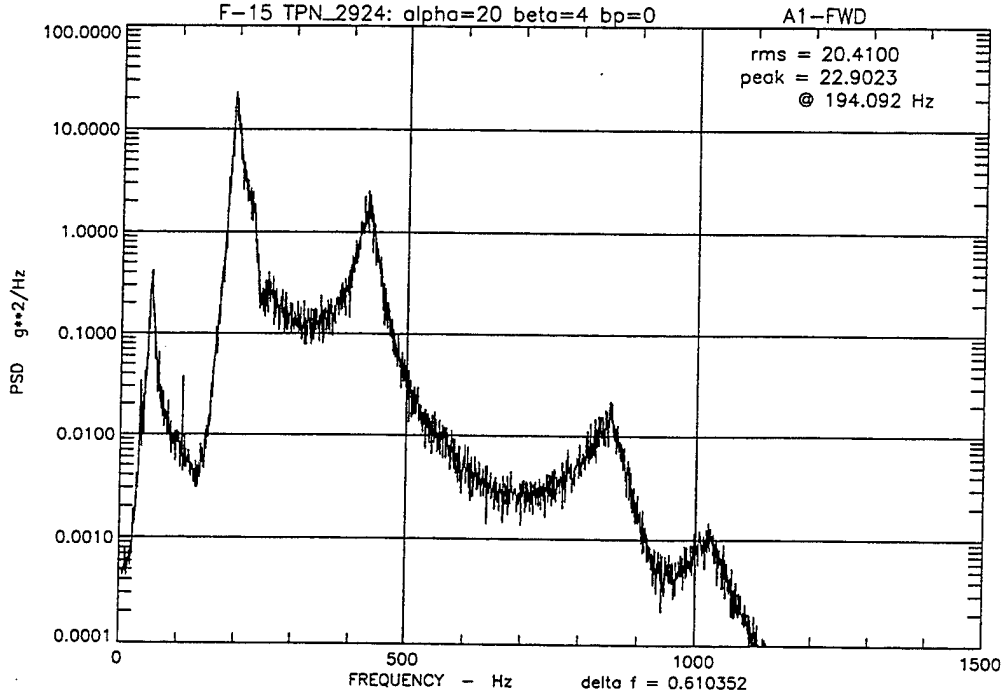
F-15 TPN_2918: alpha=8 beta=4 bp=0



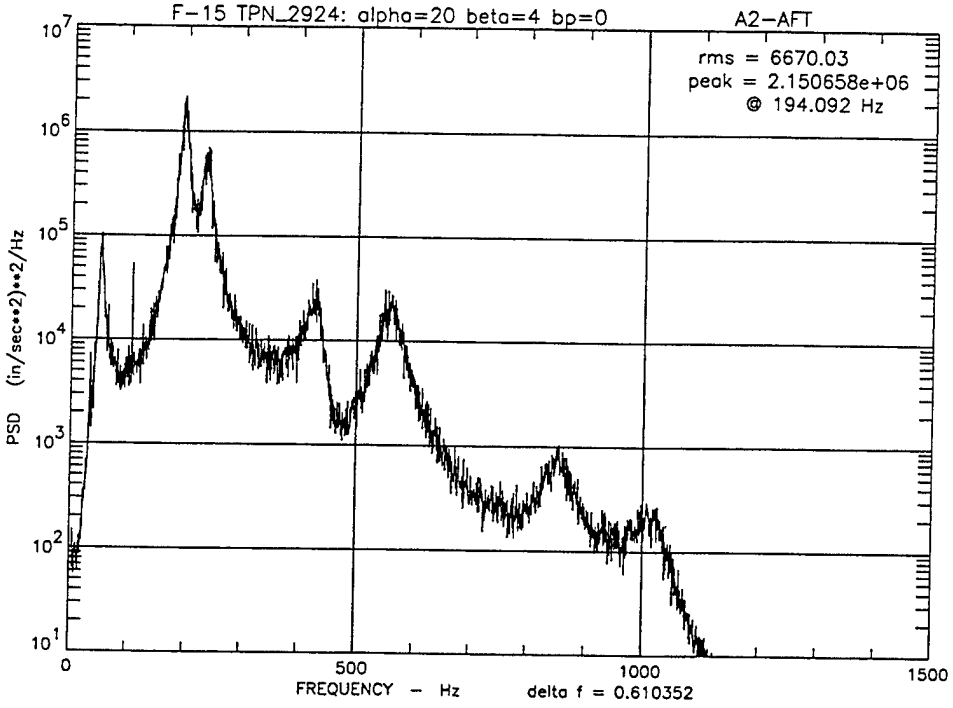
F-15 TPN_2924: alpha=20 beta=4 bp=0



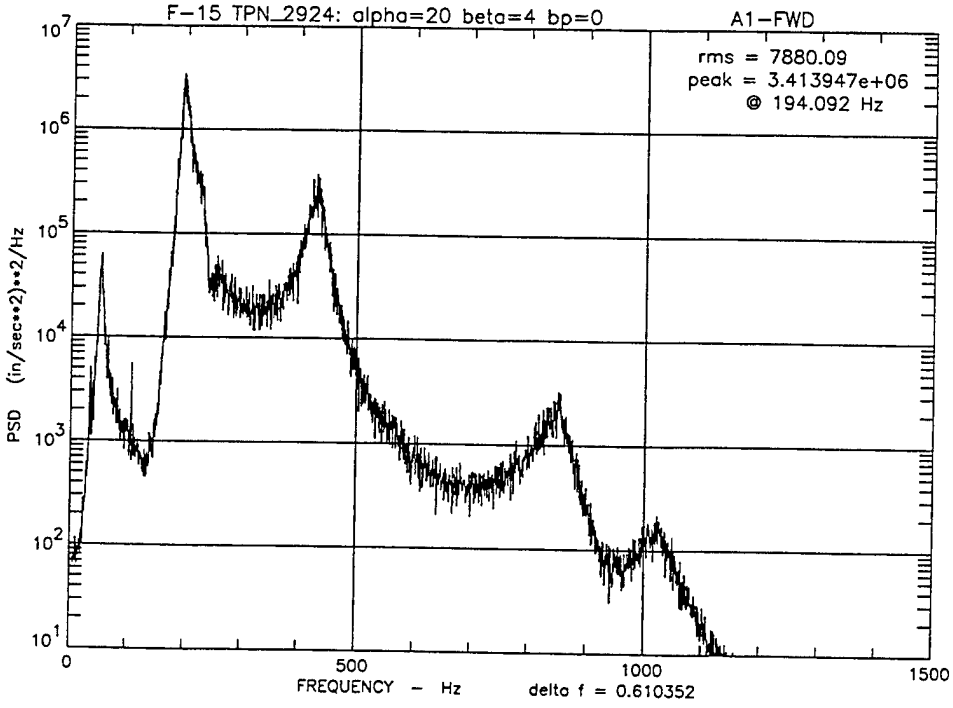
F-15 TPN_2924: alpha=20 beta=4 bp=0



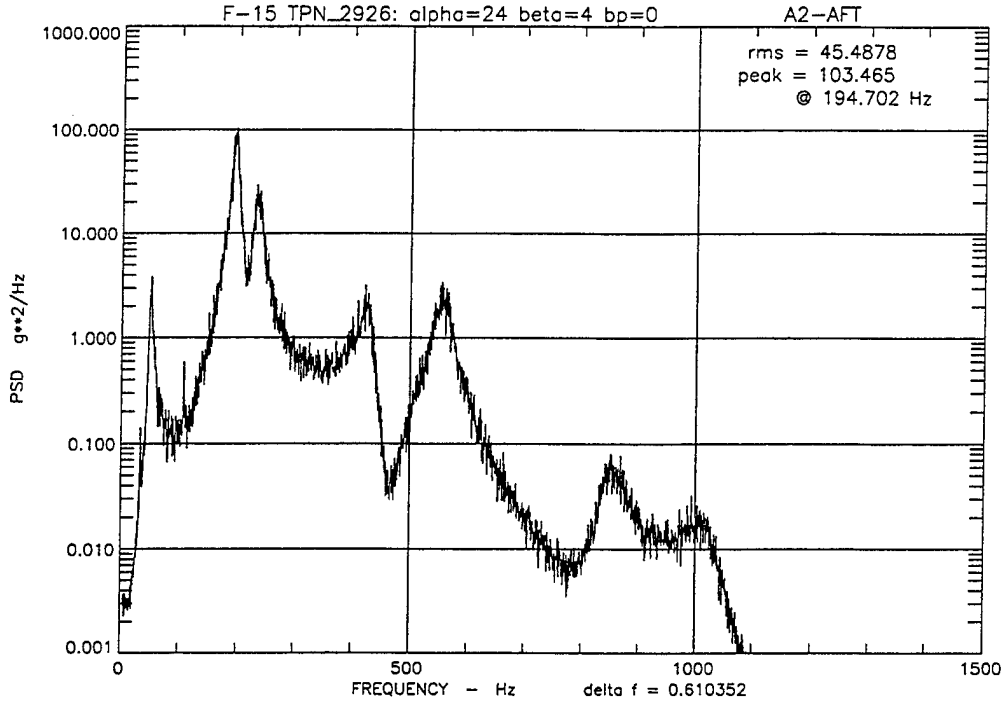
F-15 TPN_2924: alpha=20 beta=4 bp=0



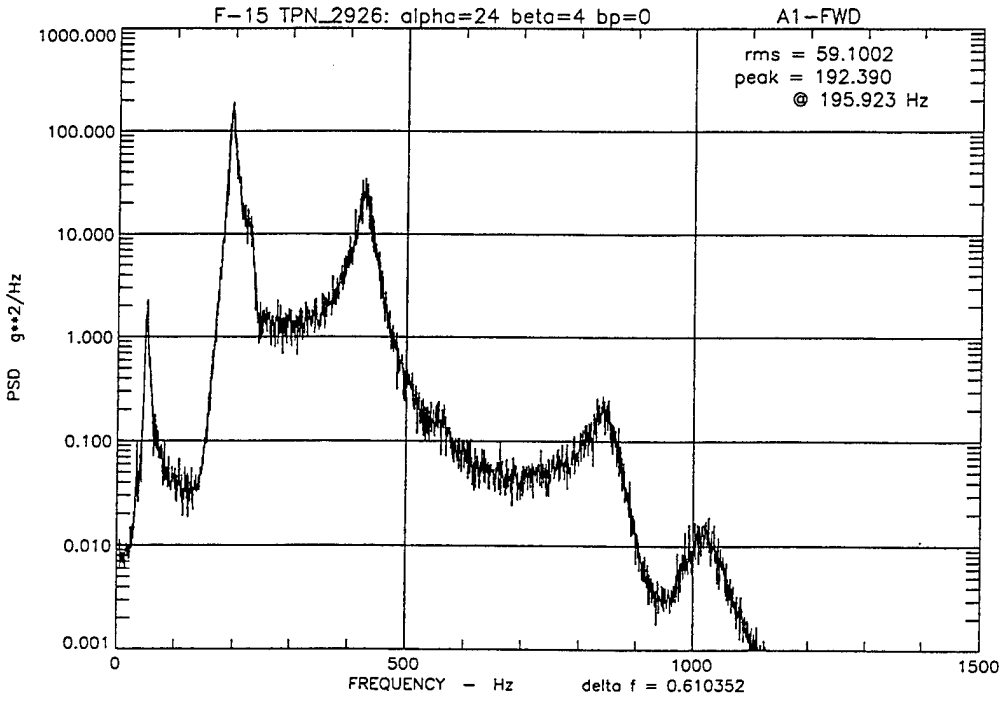
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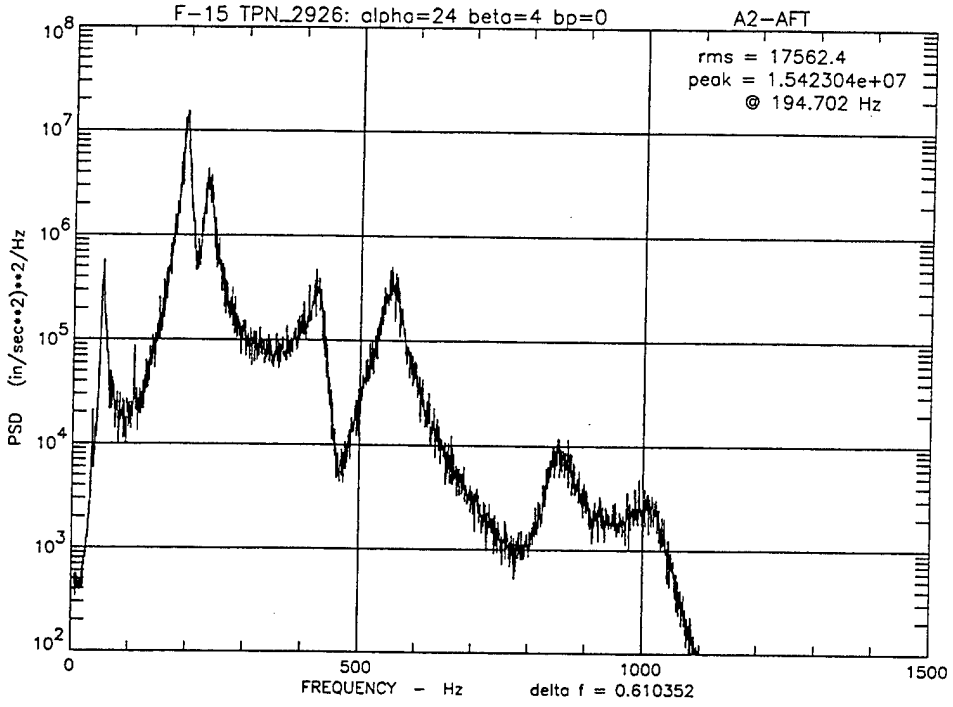
F-15 TPN_2926: alpha=24 beta=4 bp=0



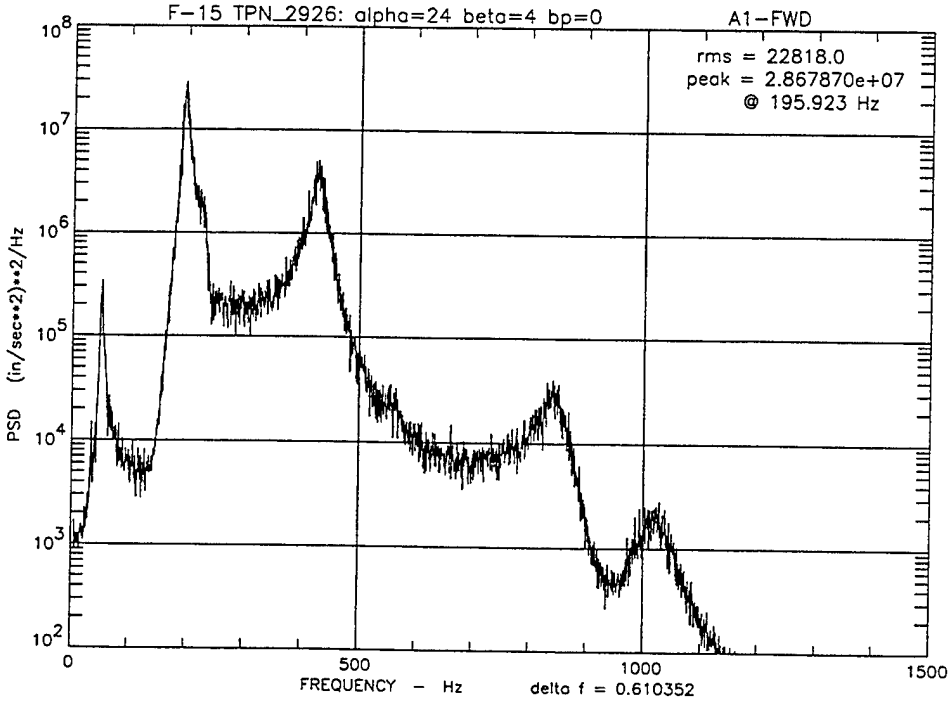
F-15 TPN_2926: alpha=24 beta=4 bp=0



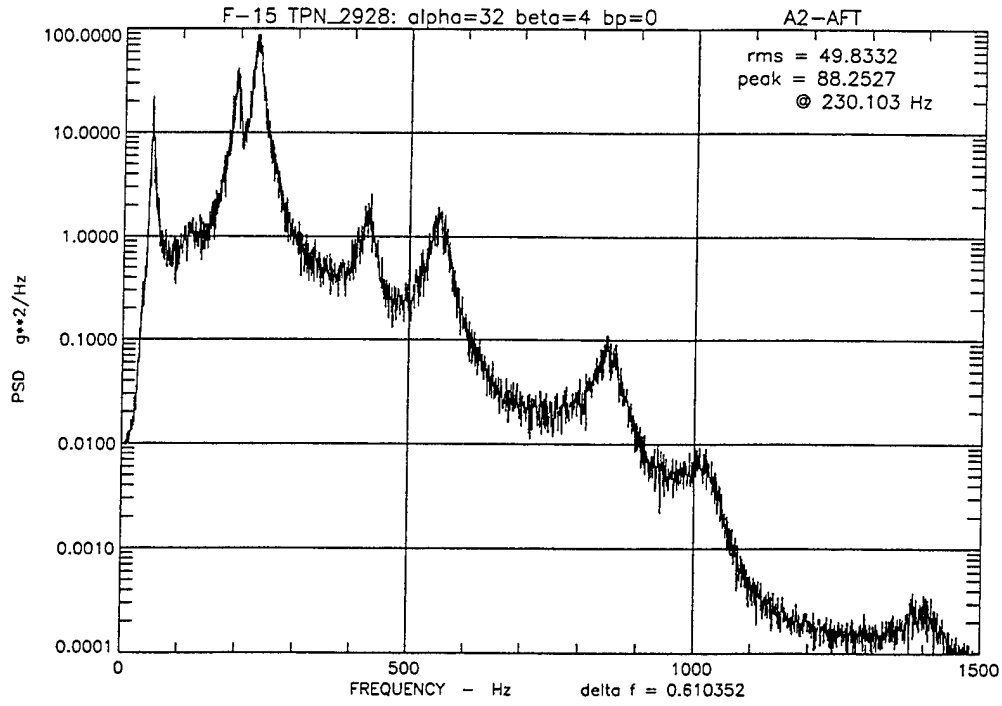
F-15 TPN_2926: alpha=24 beta=4 bp=0



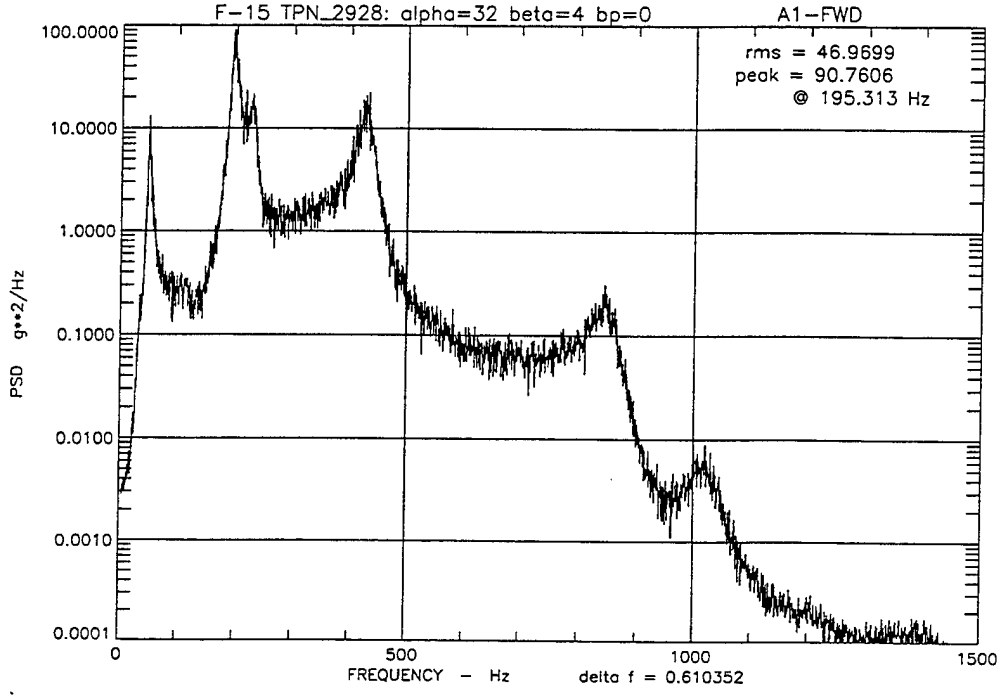
F-15 TPN_2926: alpha=24 beta=4 bp=0



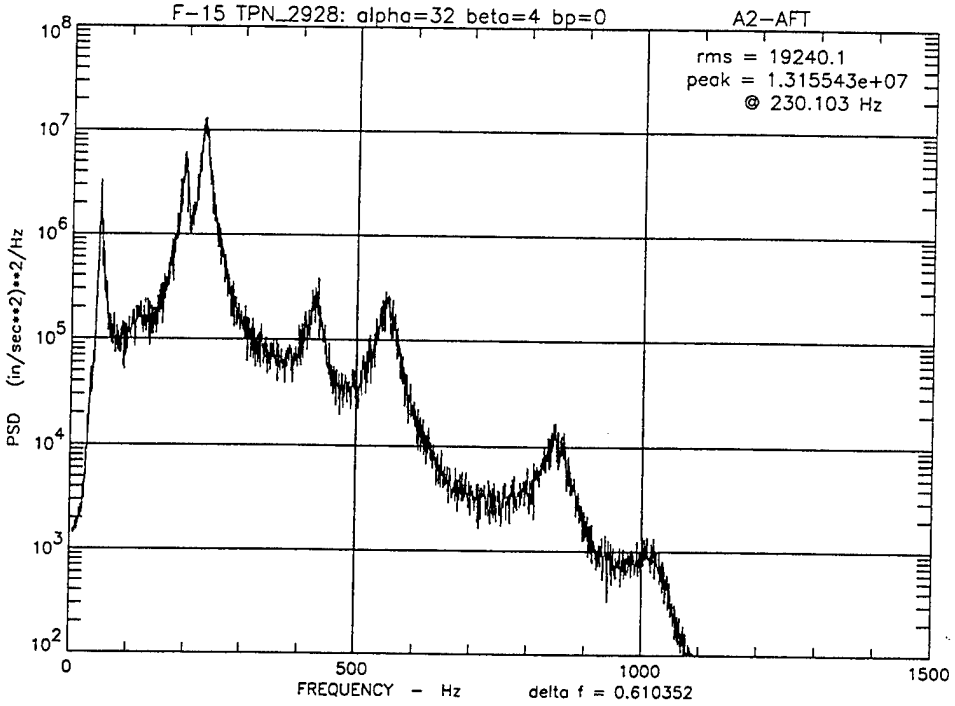
F-15 TPN_2928: alpha=32 beta=4 bp=0



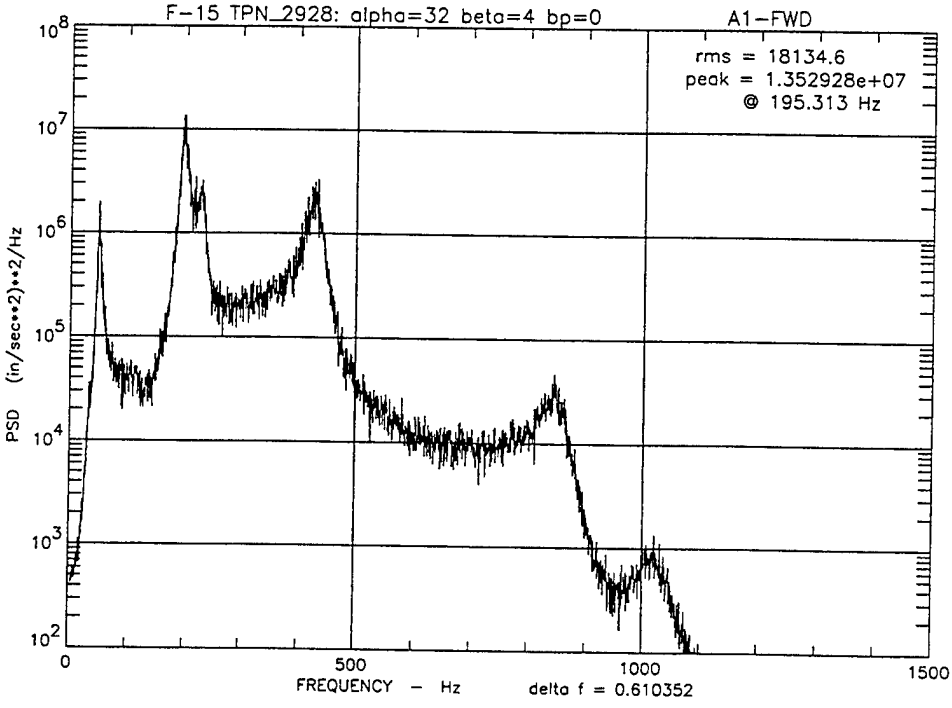
F-15 TPN_2928: alpha=32 beta=4 bp=0



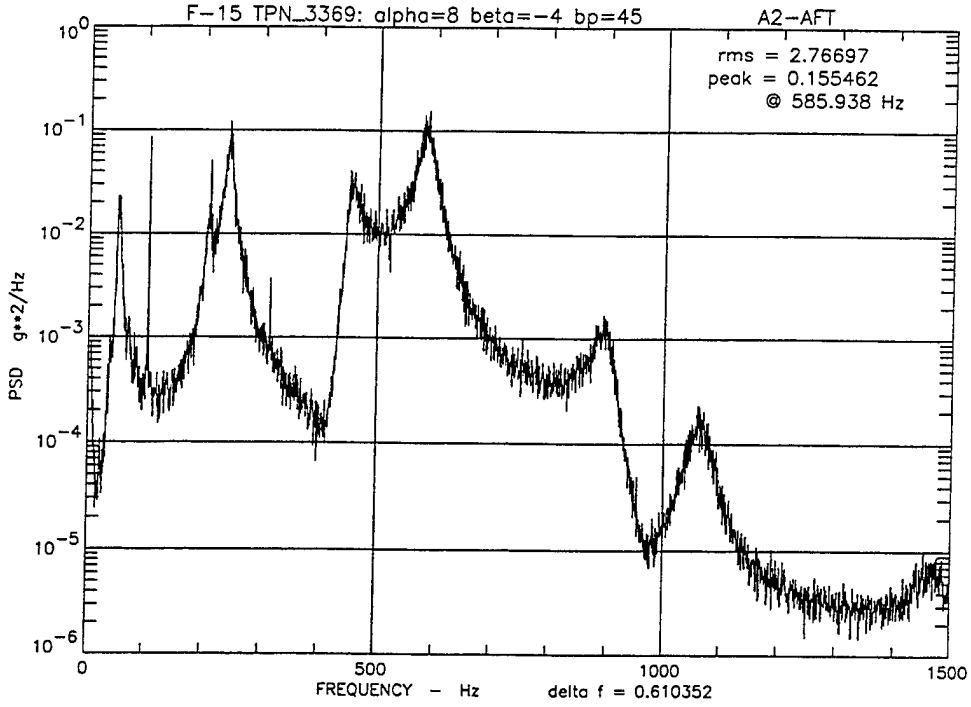
F-15 TPN_2928: alpha=32 beta=4 bp=0



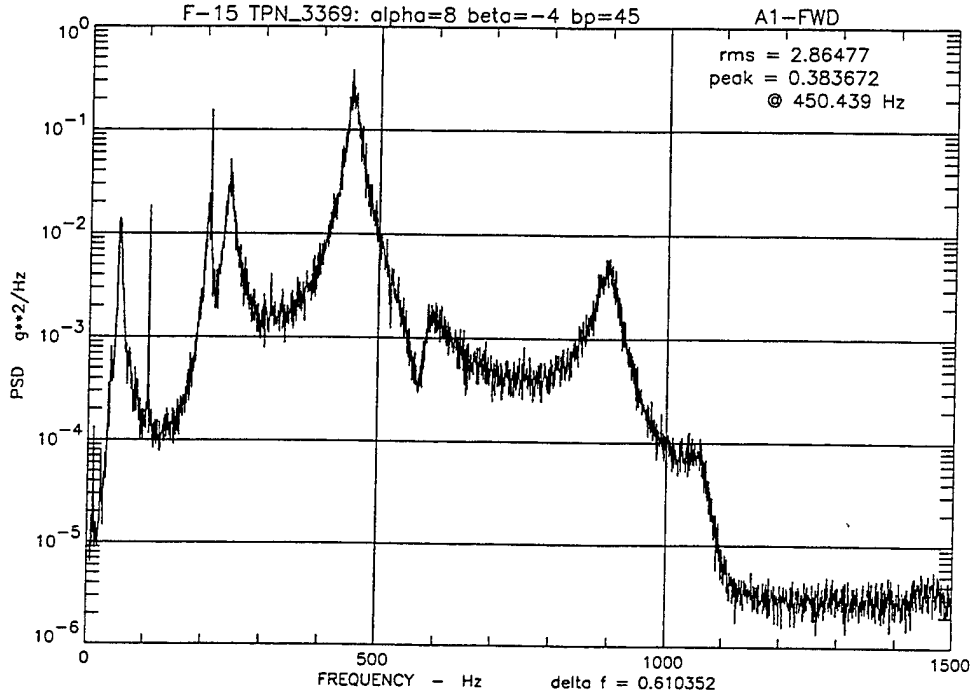
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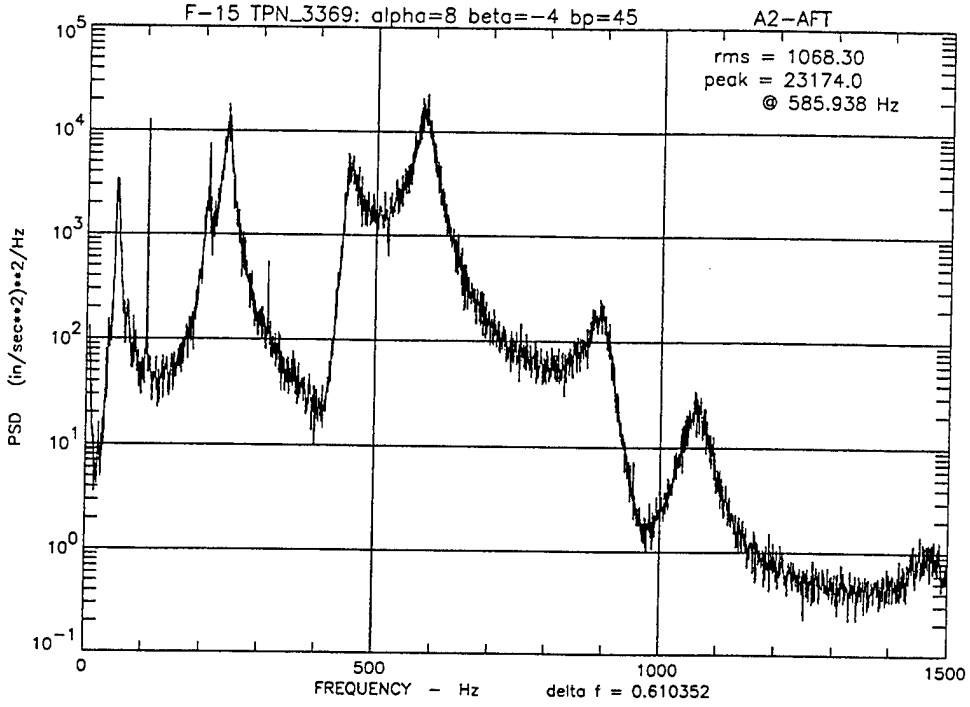
F-15 TPN_3369: alpha=8 beta=-4 bp=45



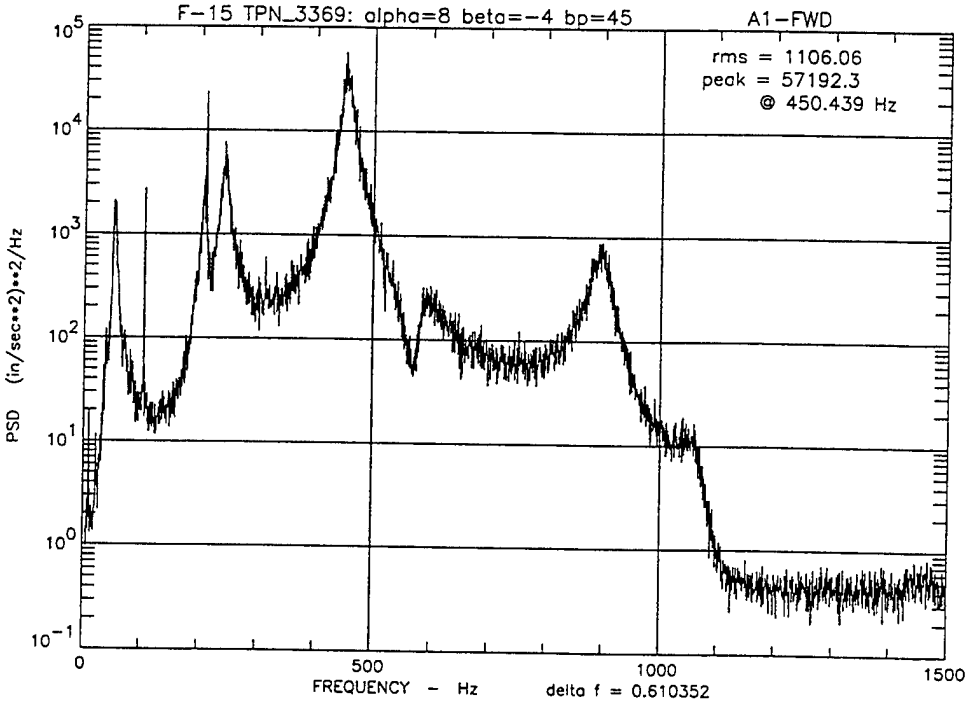
F-15 TPN_3369: alpha=8 beta=-4 bp=45



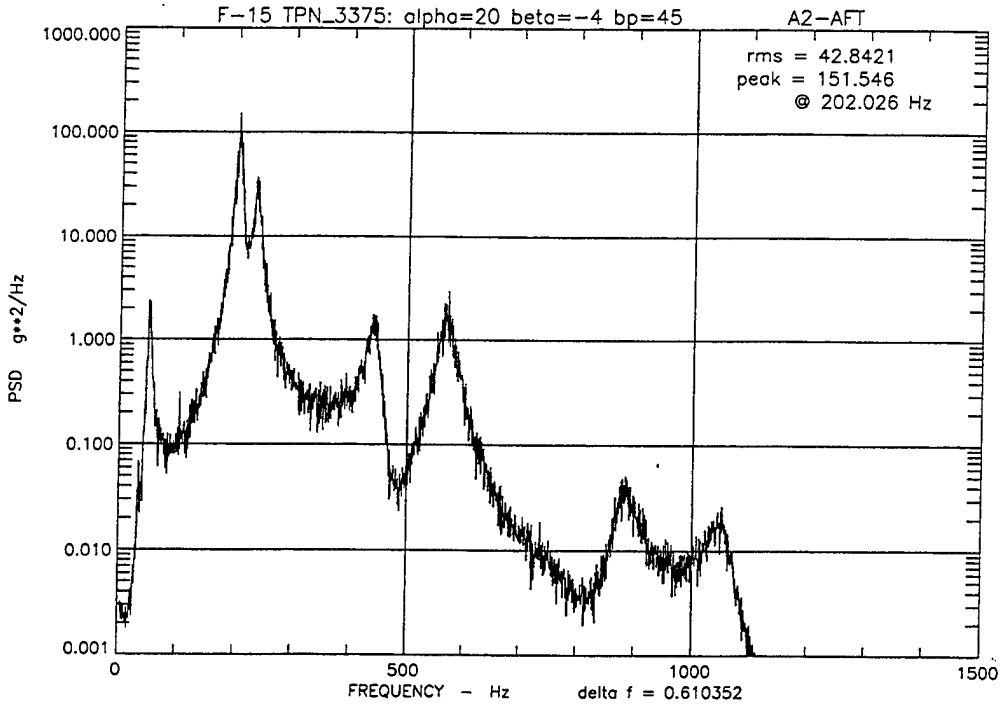
F-15 TPN_3369: alpha=8 beta=-4 bp=45



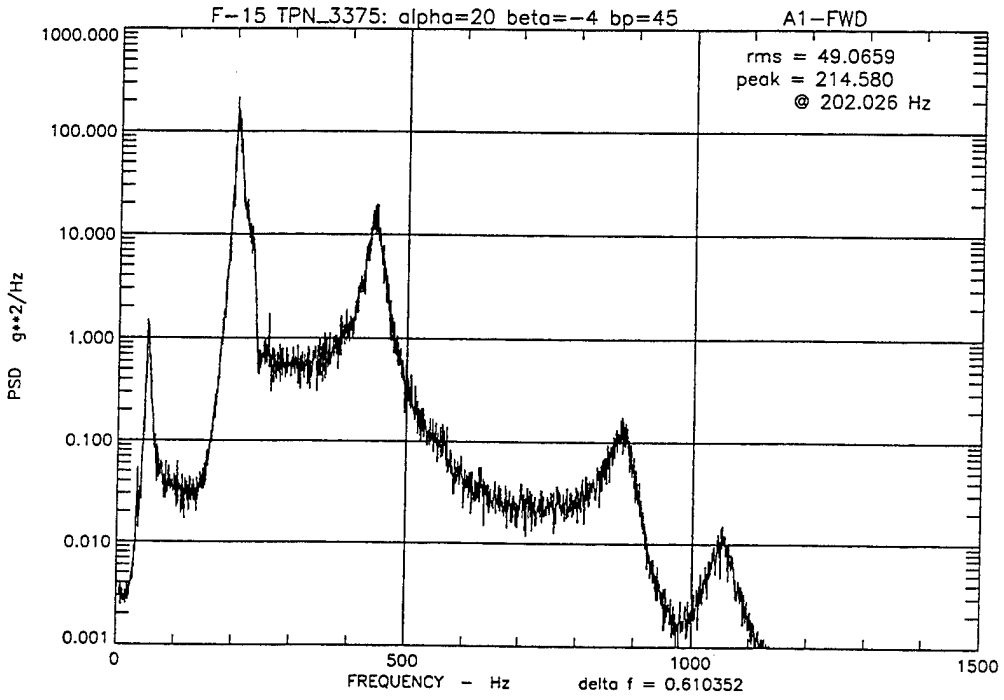
F-15 TPN_3369: alpha=8 beta=-4 bp=45



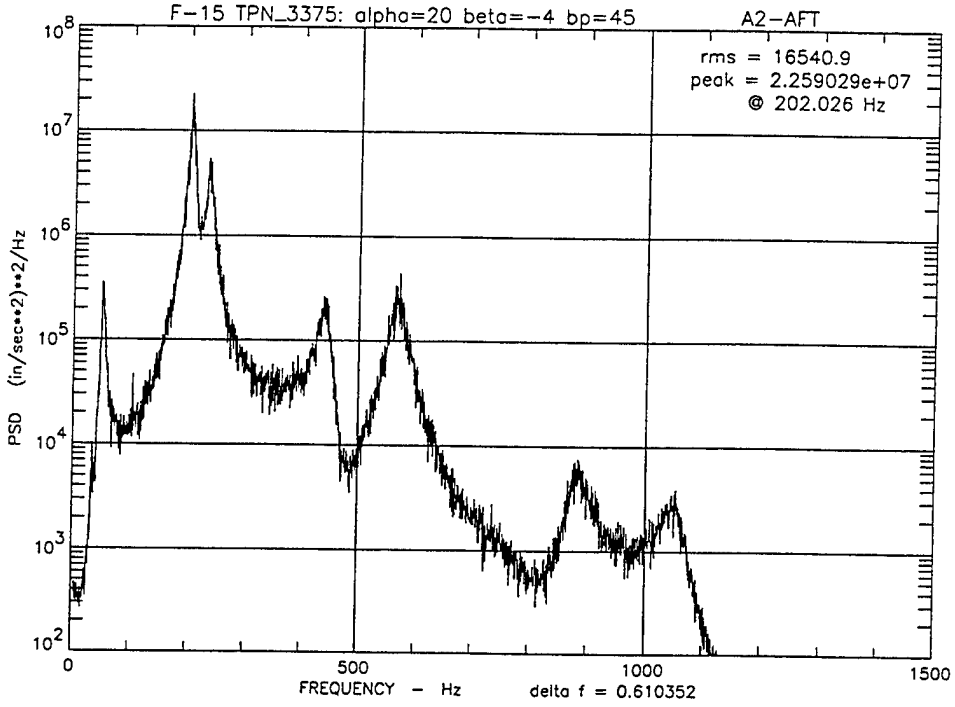
F-15 TPN_3375: alpha=20 beta=-4 bp=45



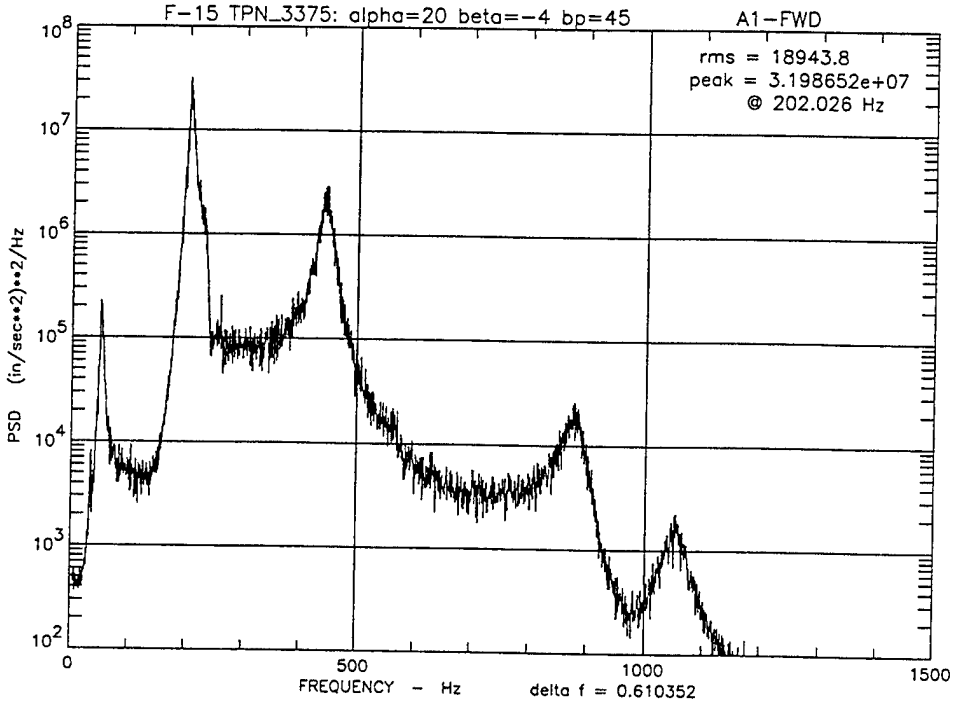
F-15 TPN_3375: alpha=20 beta=-4 bp=45



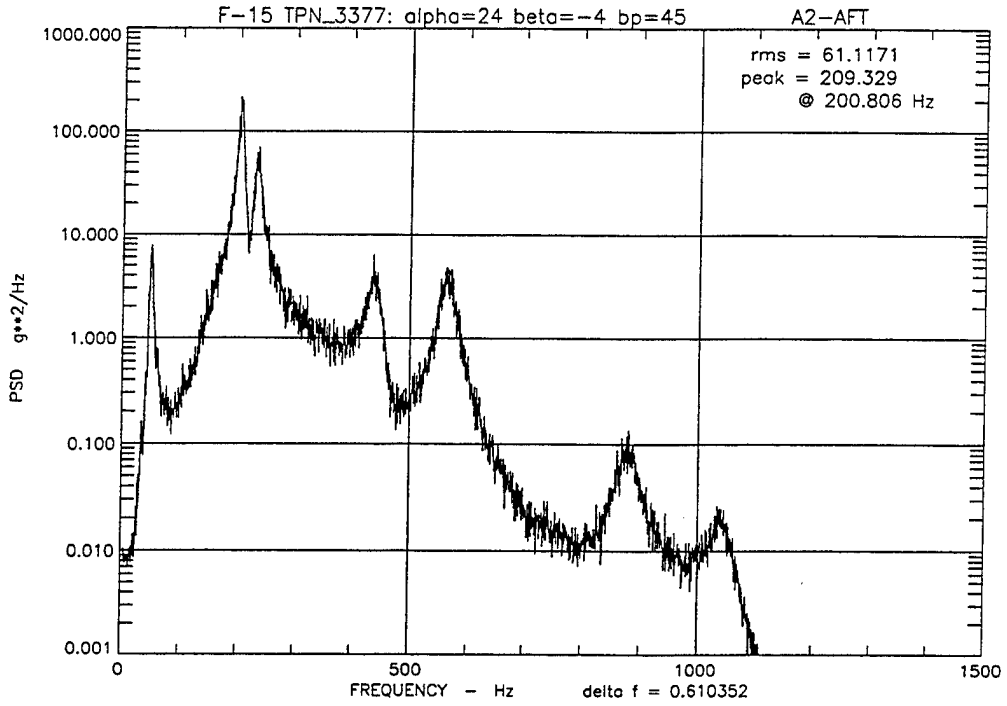
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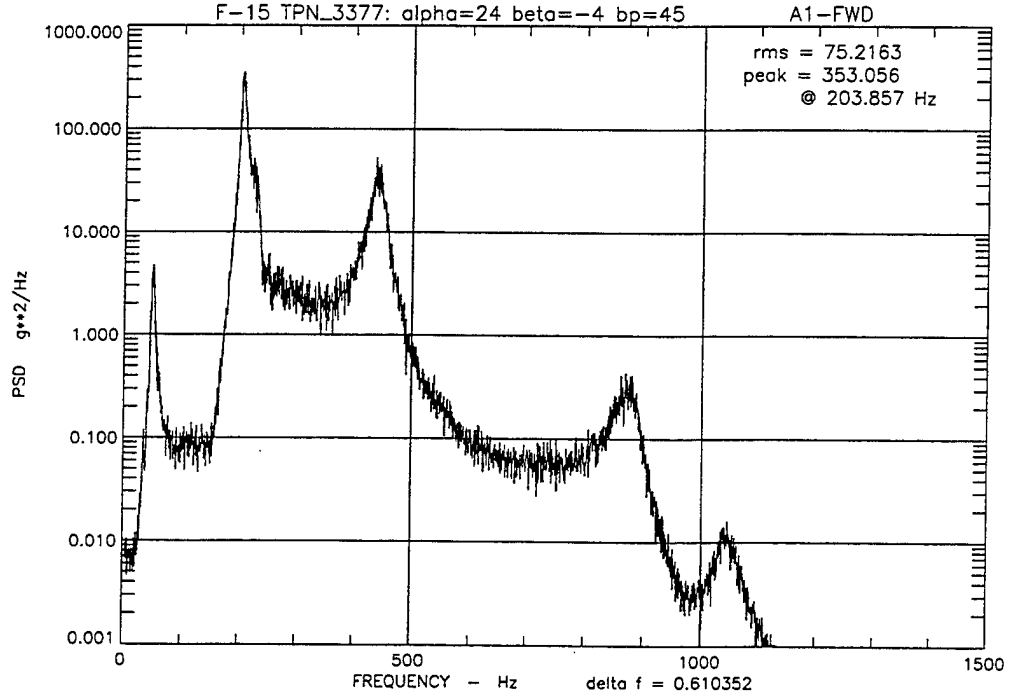
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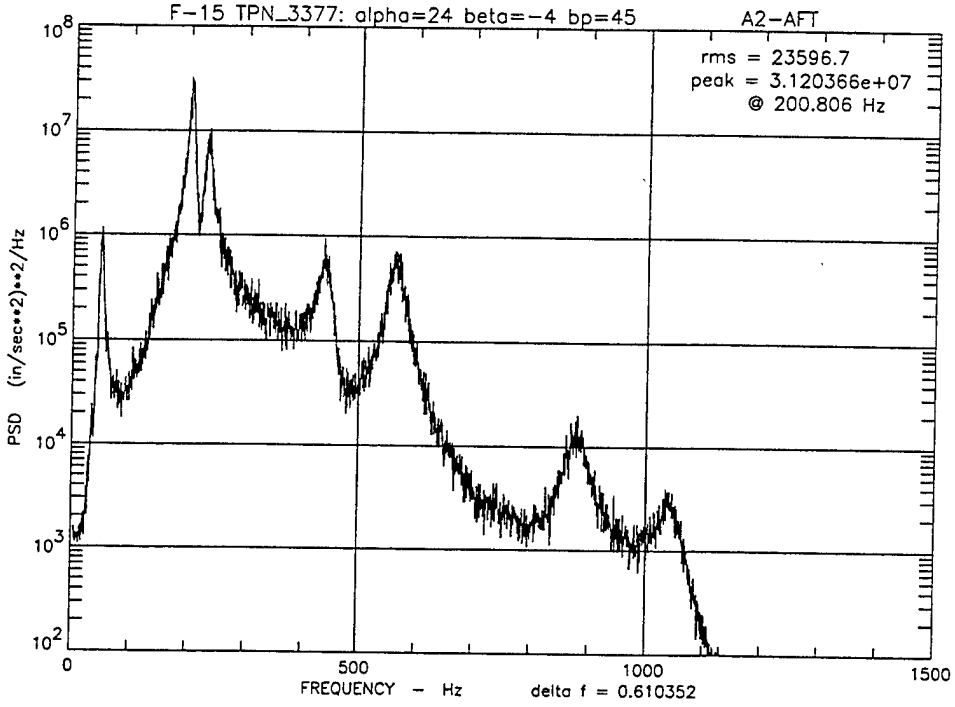
F-15 TPN_3377: alpha=24 beta=-4 bp=45



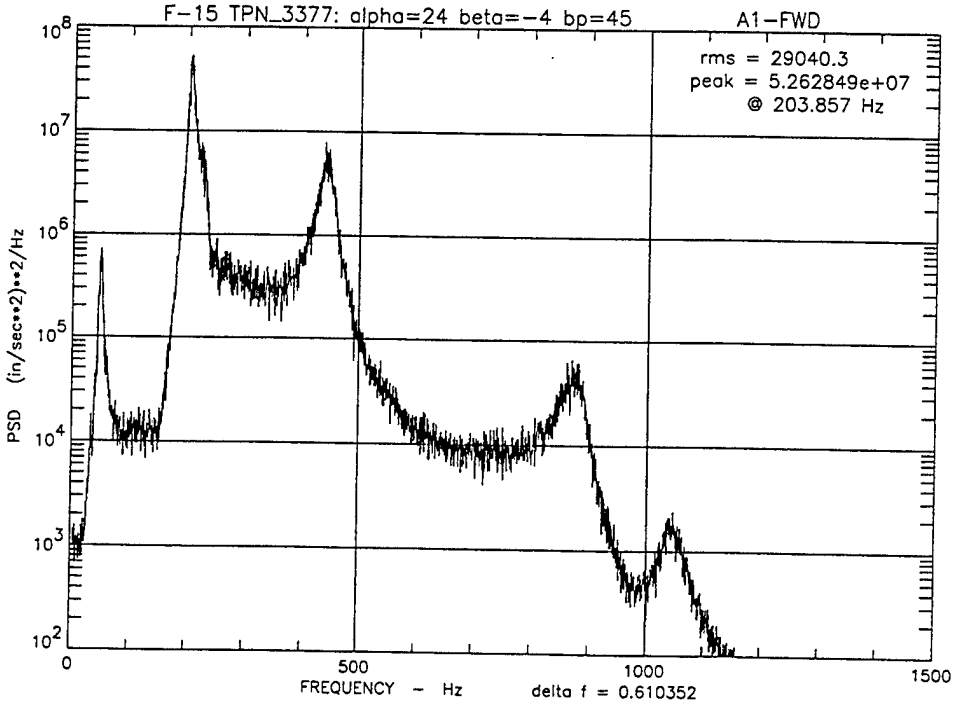
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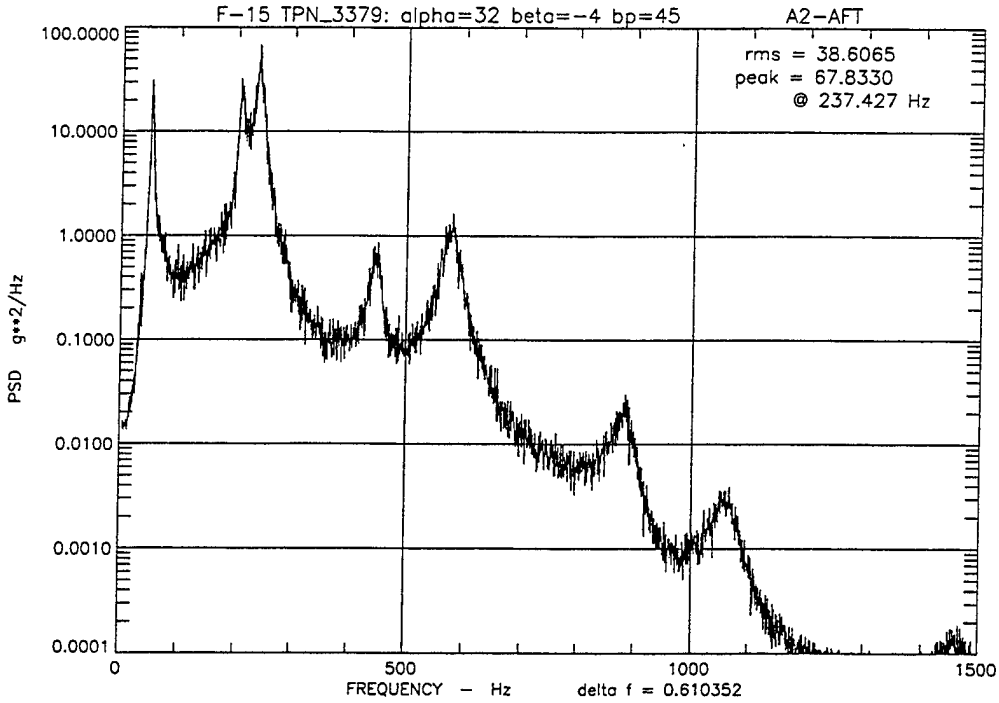
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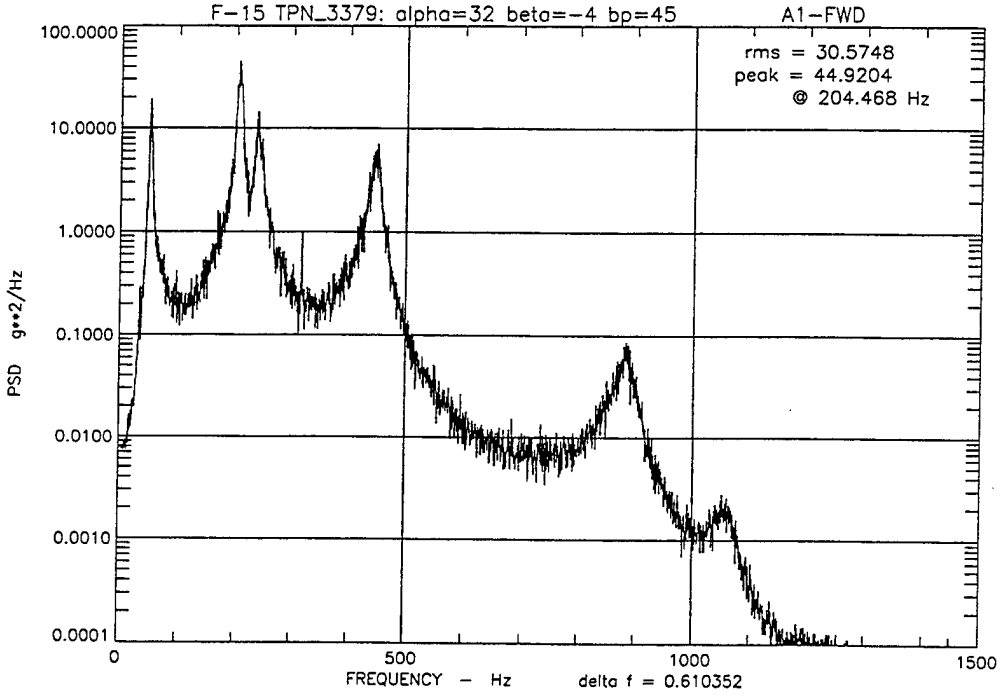
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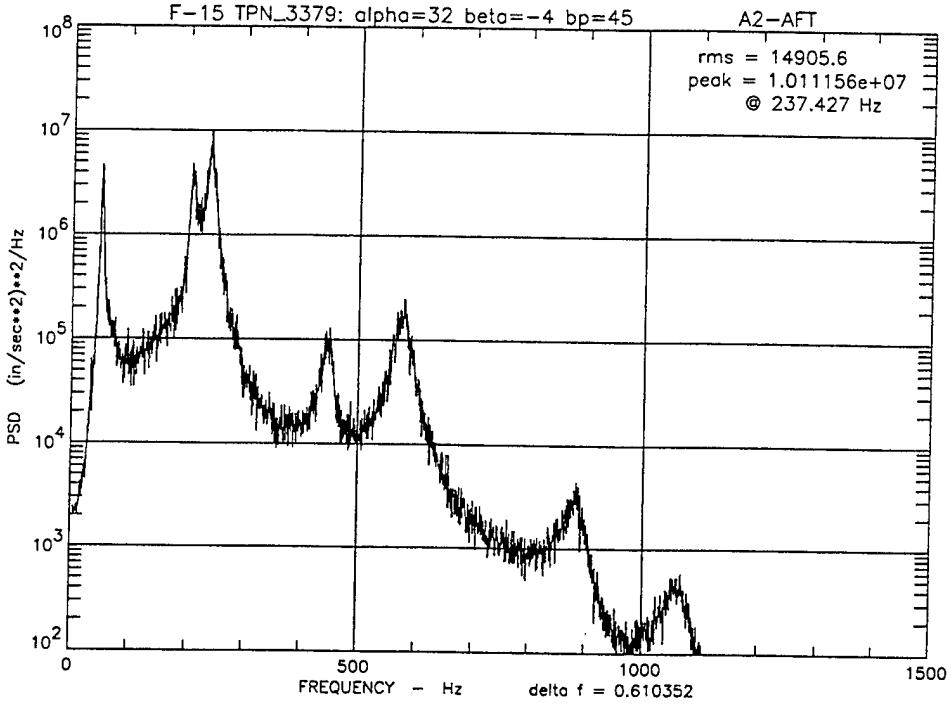
F-15 TPN_3379: alpha=32 beta=-4 bp=45



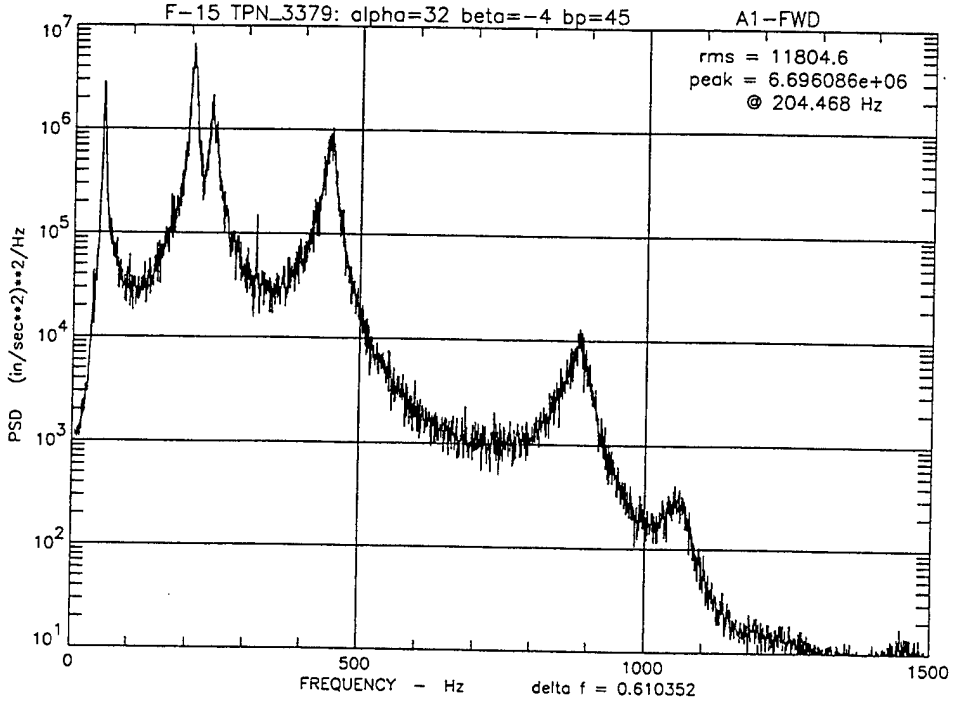
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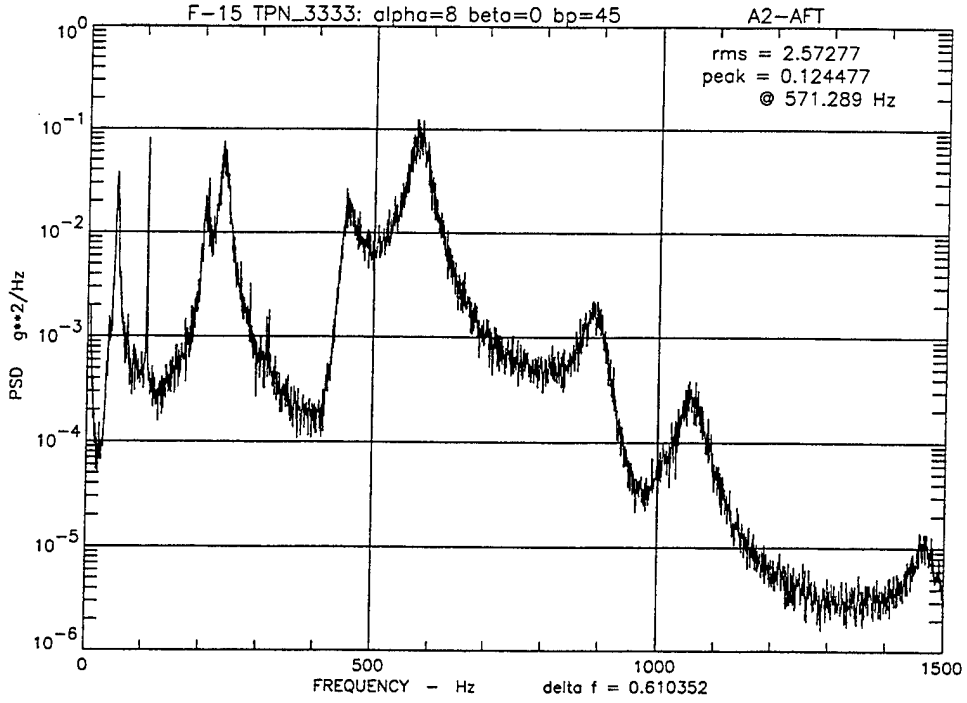
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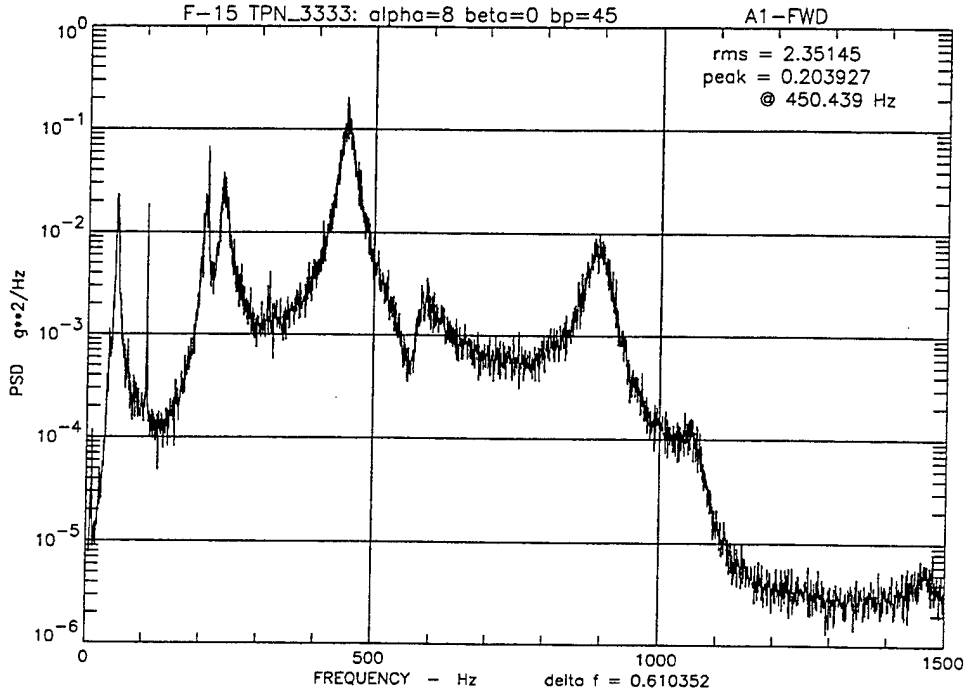
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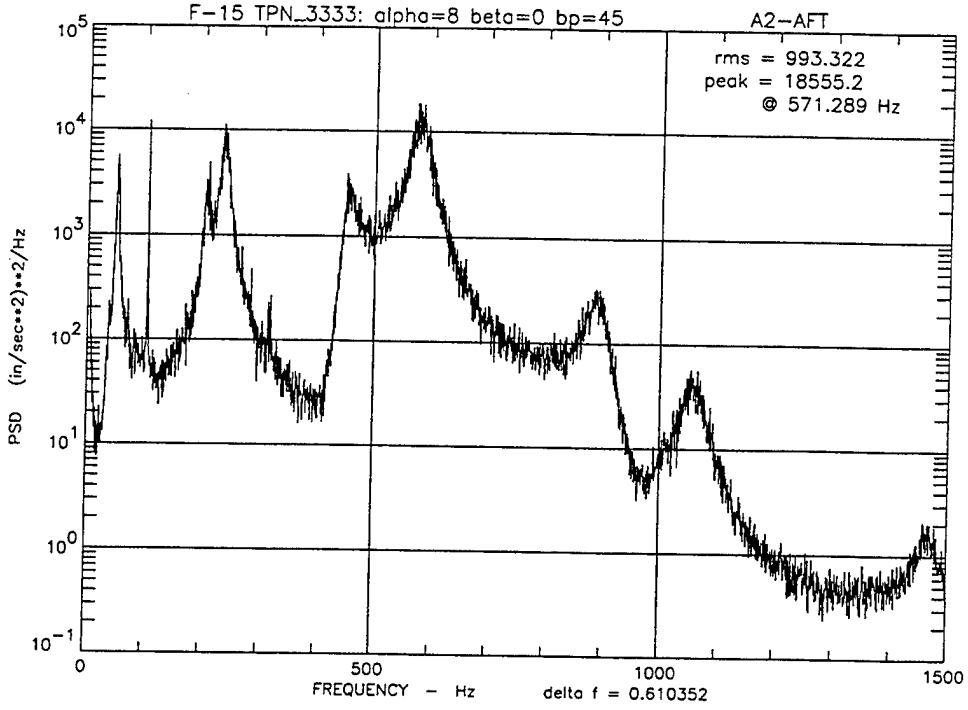
F-15 TPN_3333: alpha=8 beta=0 bp=45



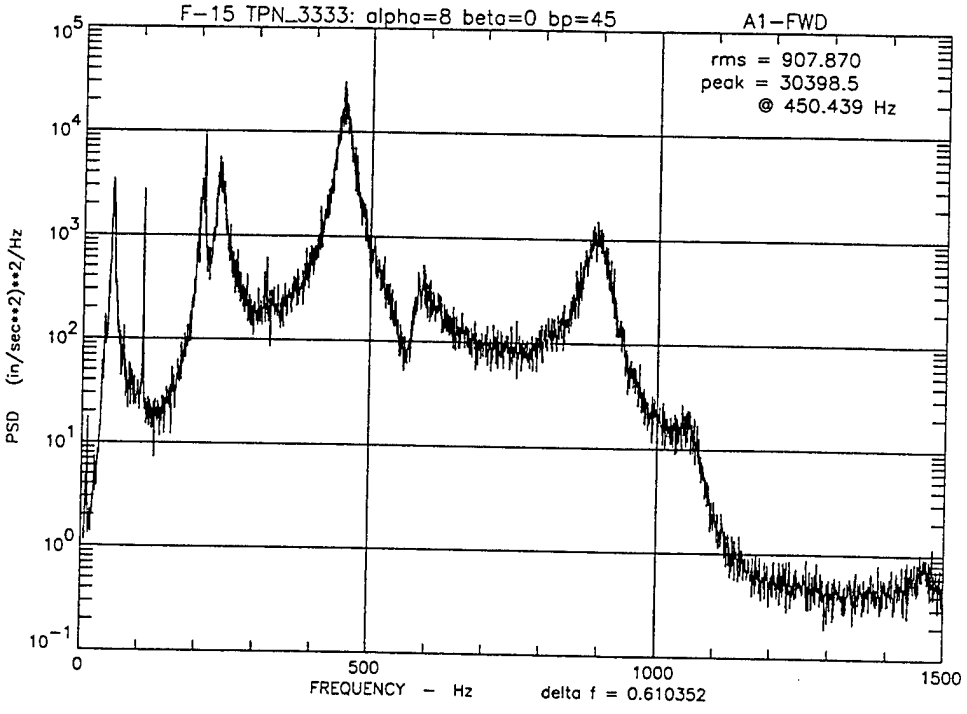
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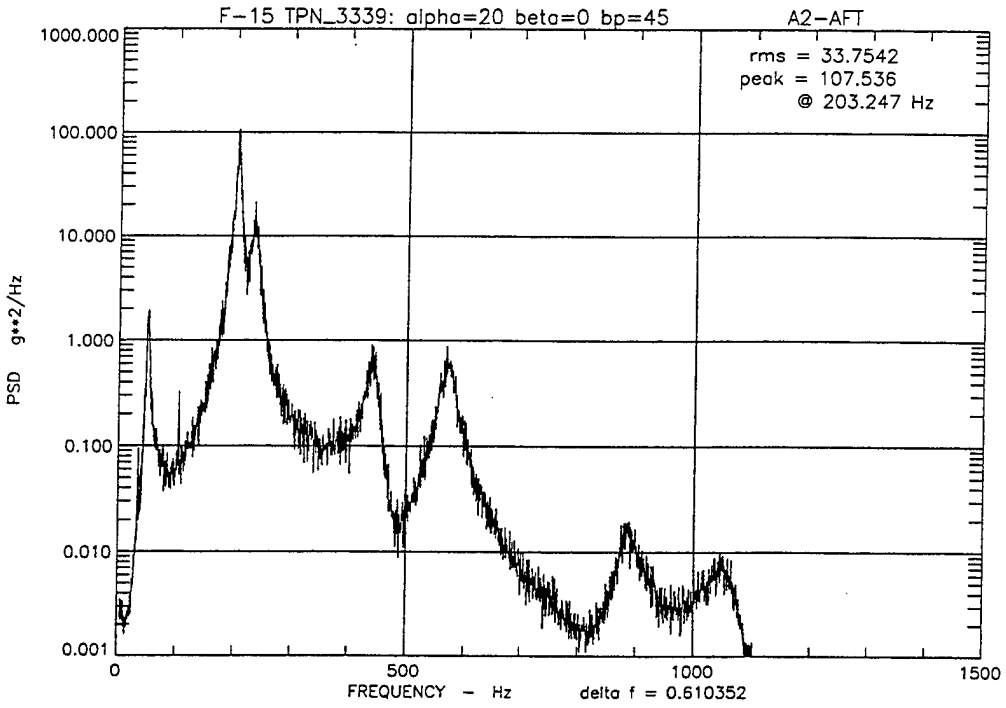
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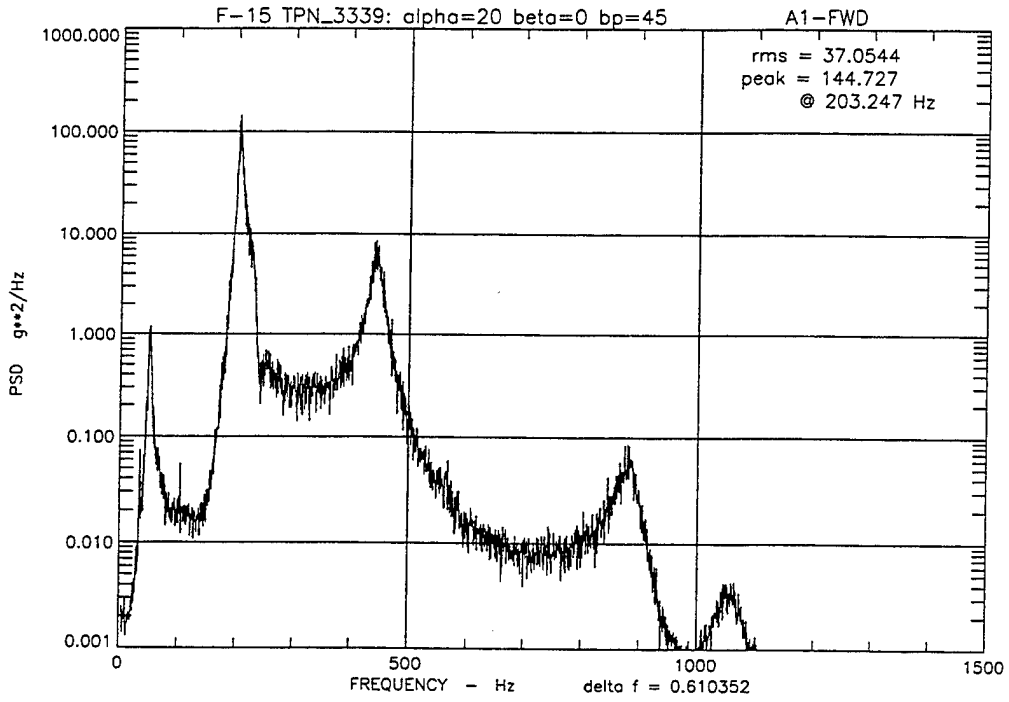
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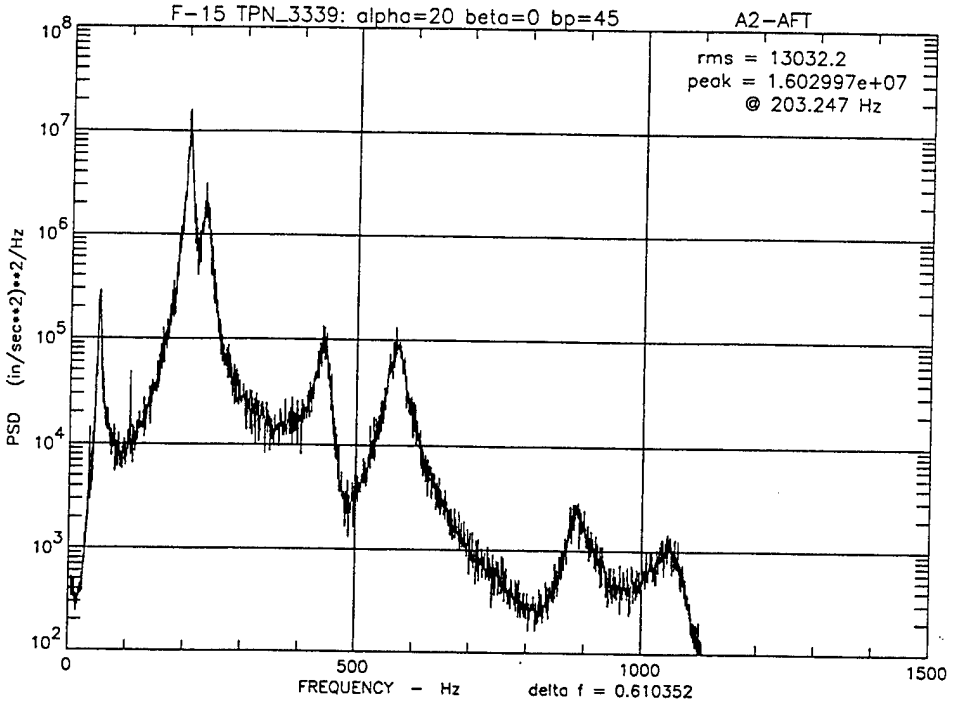
F-15 TPN_3339: alpha=20 beta=0 bp=45



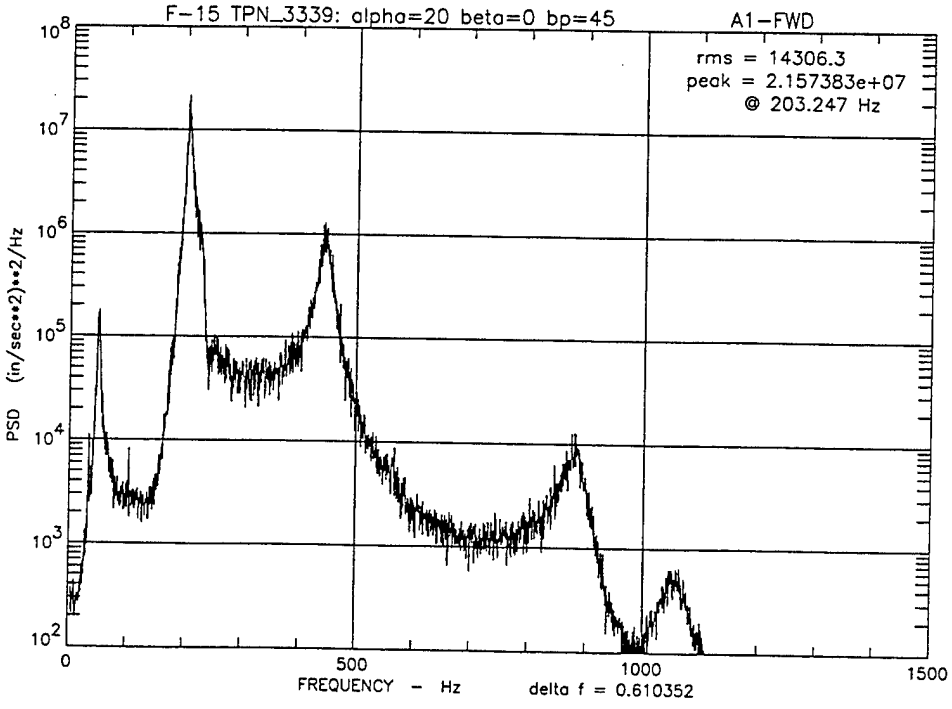
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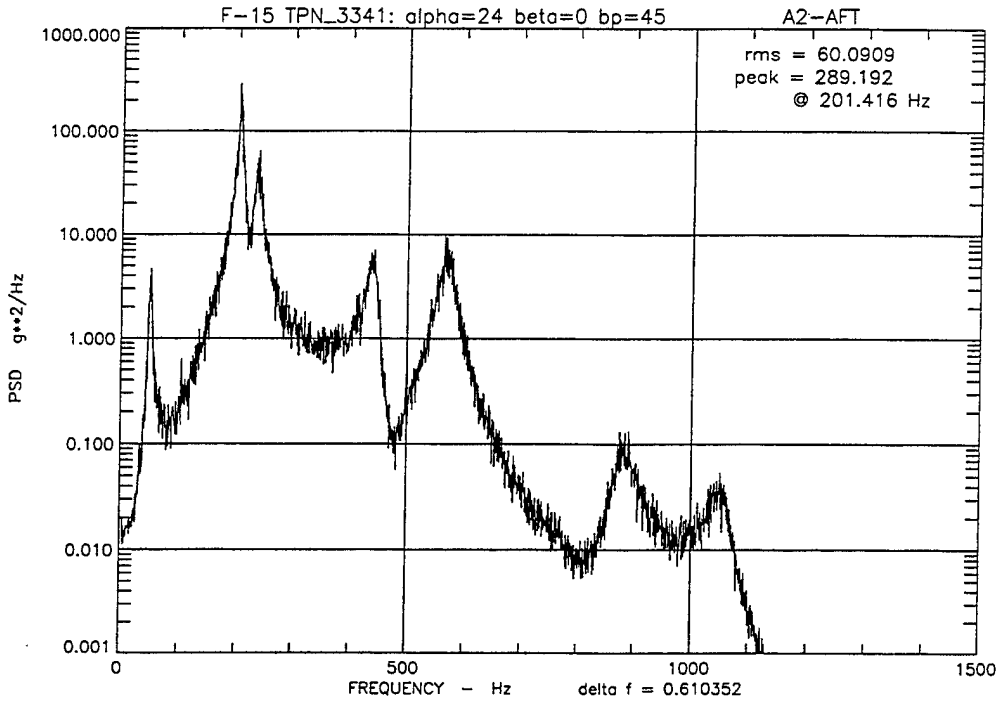
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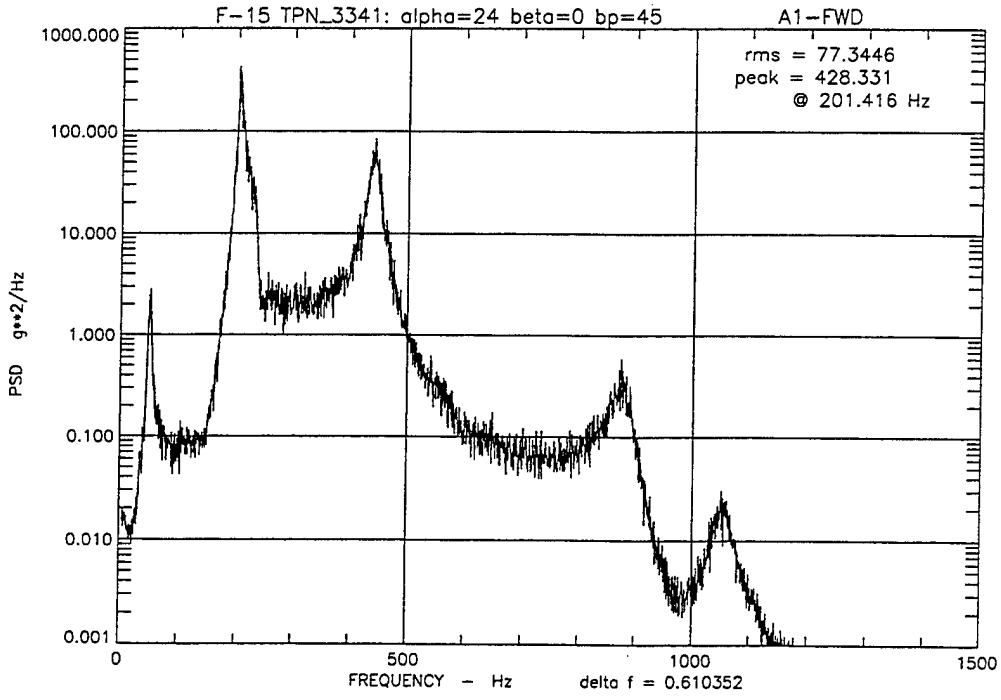
F-15 TPN_3339: alpha=20 beta=0 bp=45



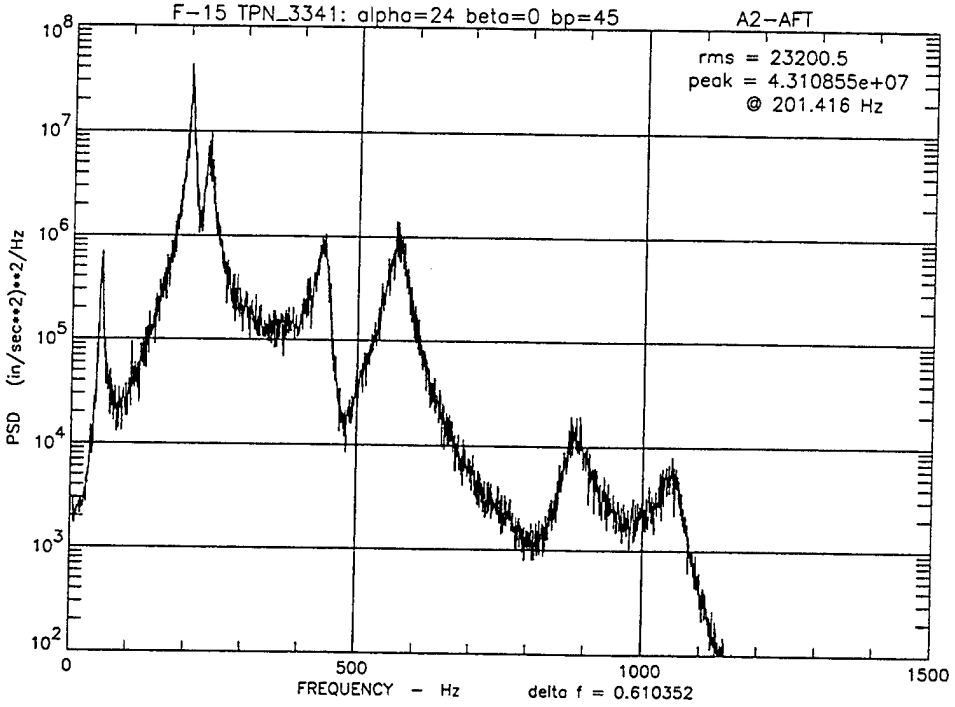
F-15 TPN_3341: alpha=24 beta=0 bp=45



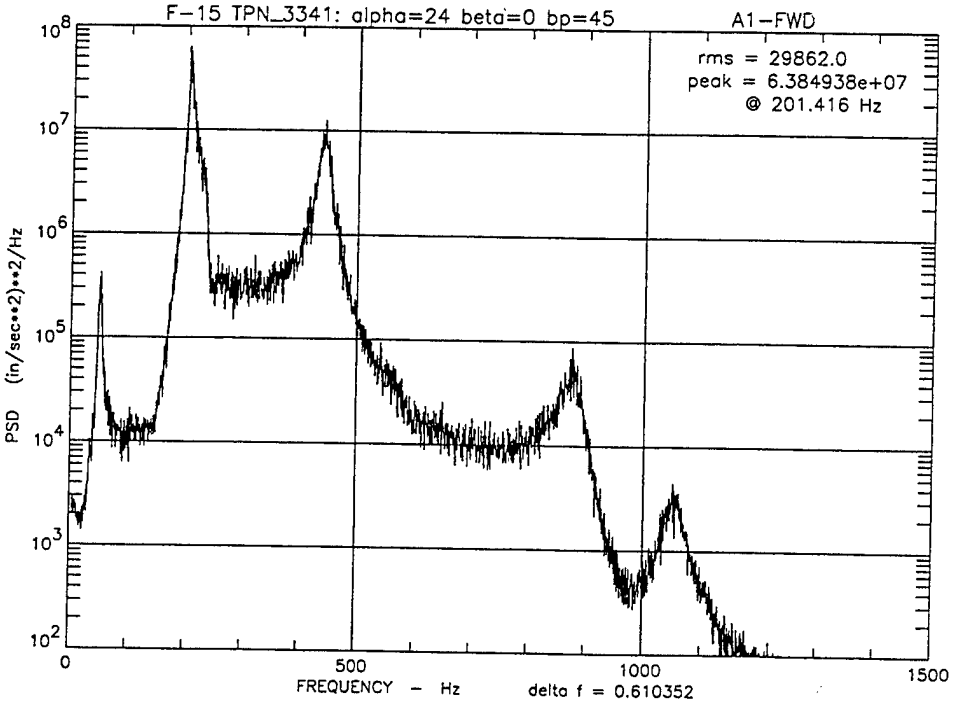
F-15 TPN_3341: alpha=24 beta=0 bp=45



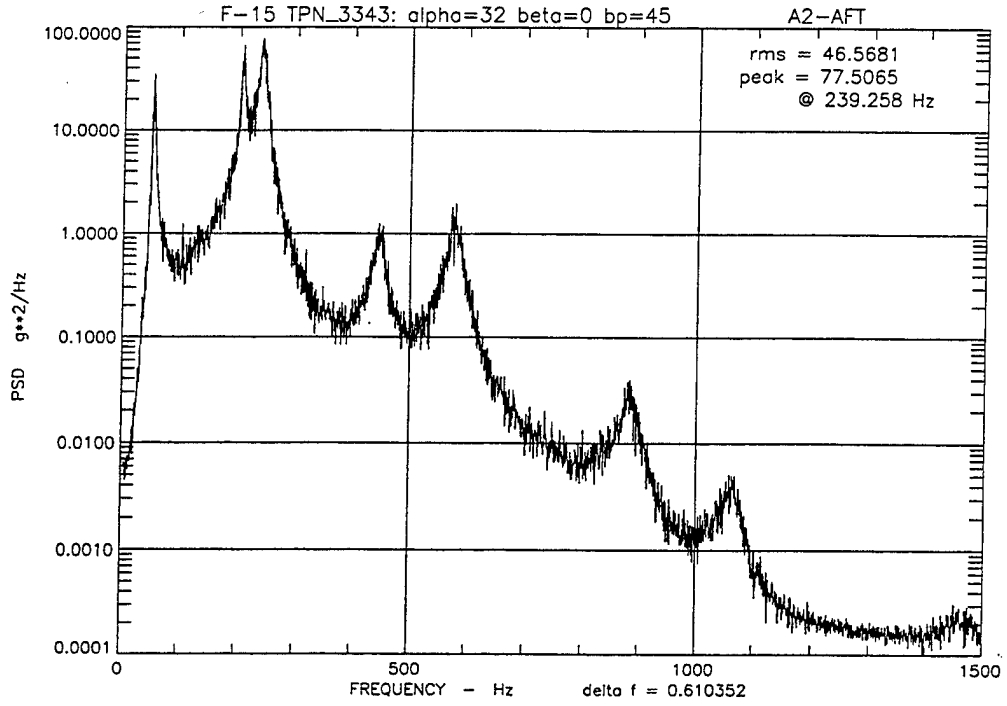
F-15 TPN_3341: alpha=24 beta=0 bp=45



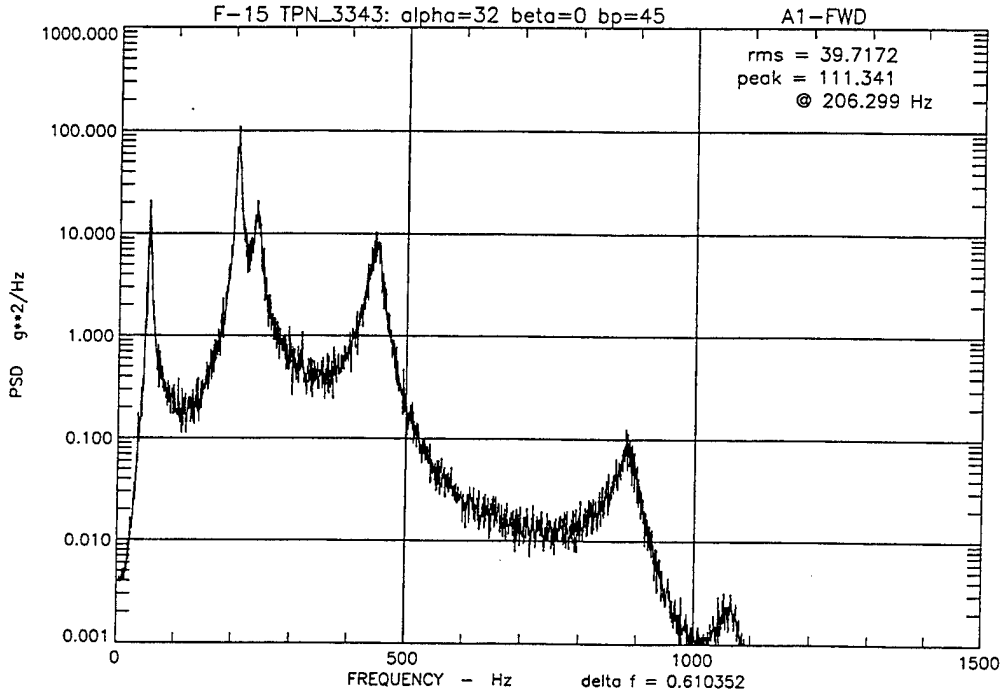
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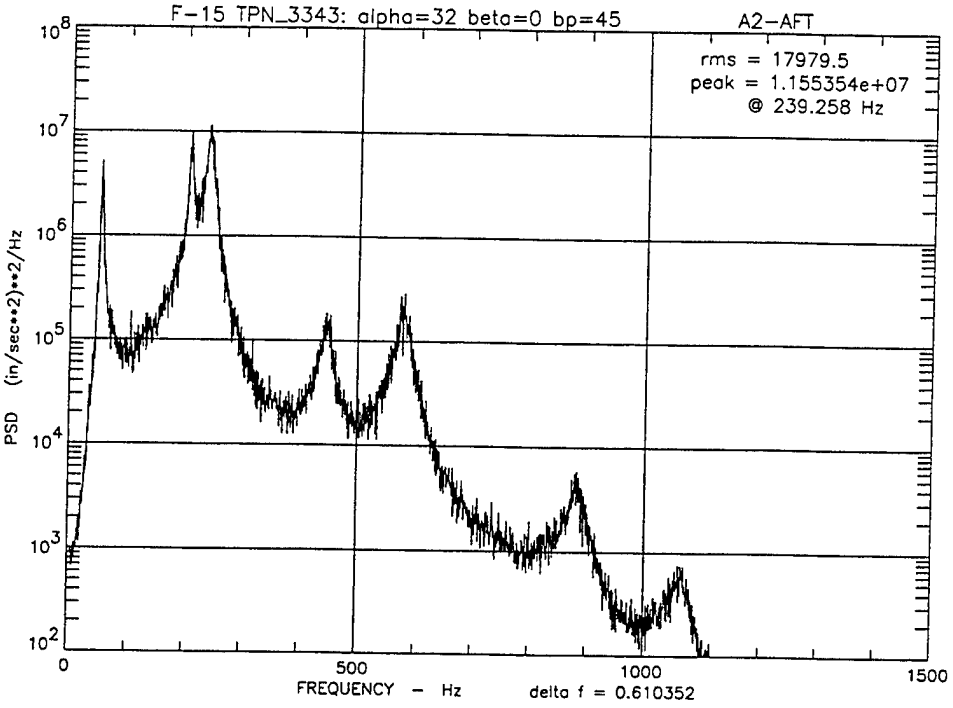
F-15 TPN_3343: alpha=32 beta=0 bp=45



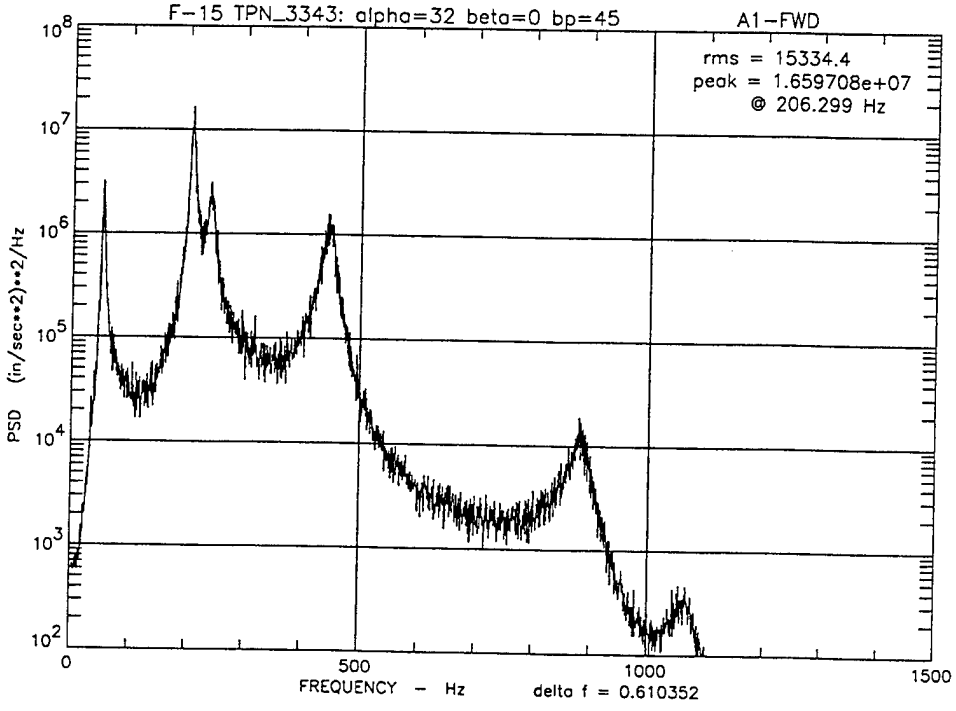
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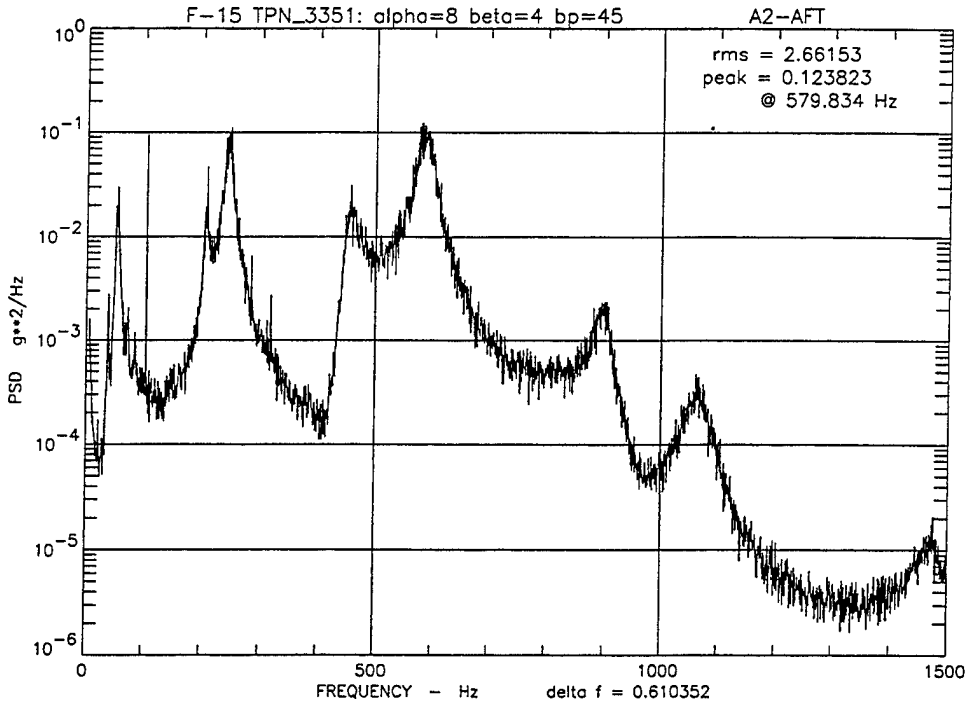
F-15 TPN_3343: alpha=32 beta=0 bp=45



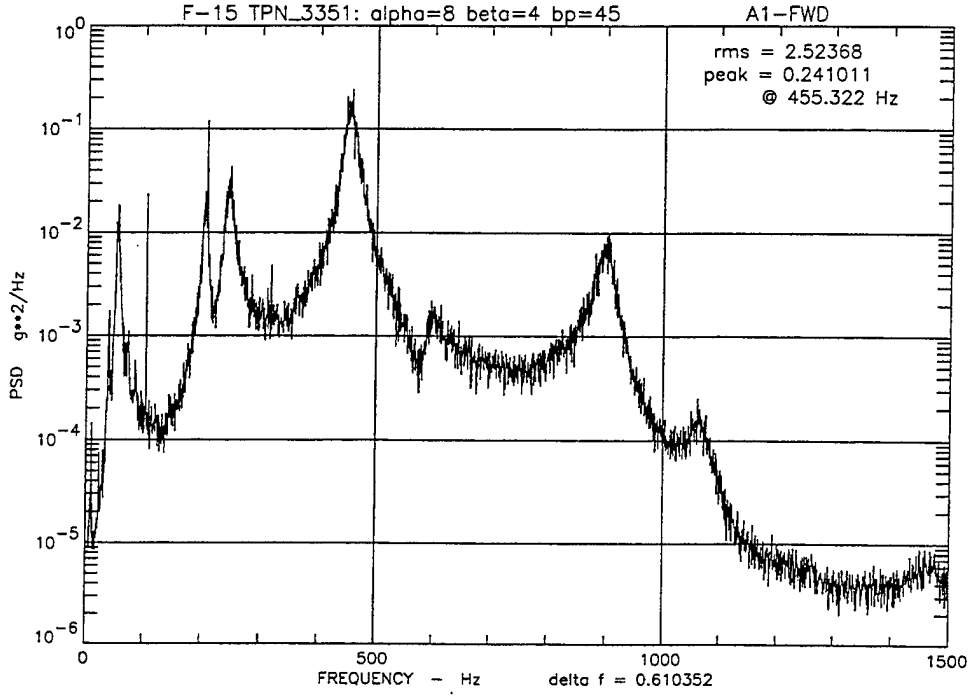
F-15 TPN_3343: alpha=32 beta=0 bp=45



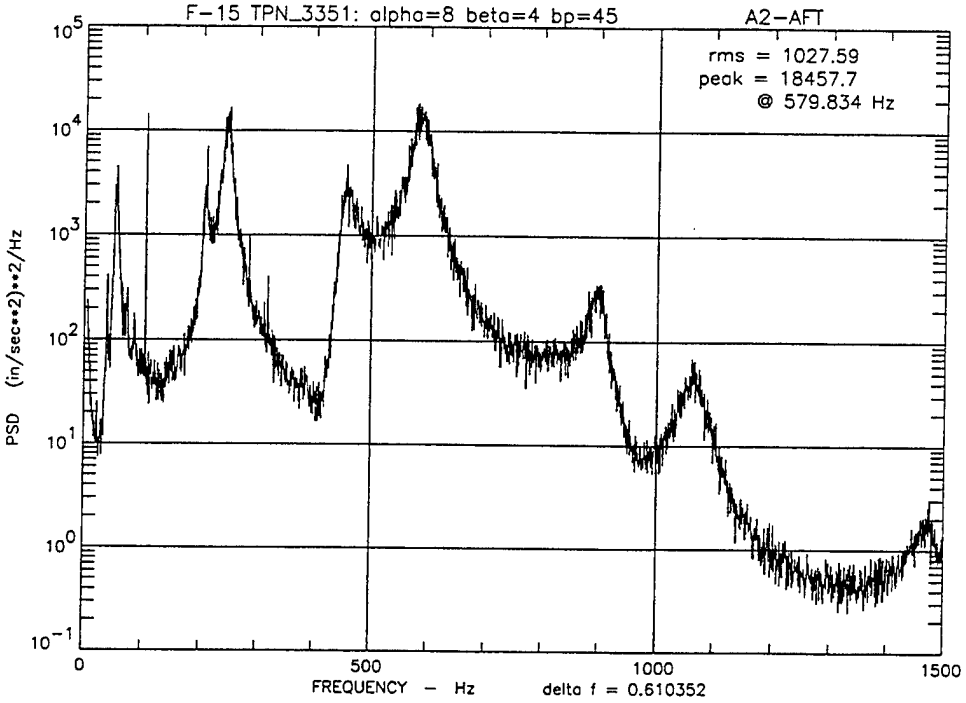
F-15 TPN_3351: alpha=8 beta=4 bp=45



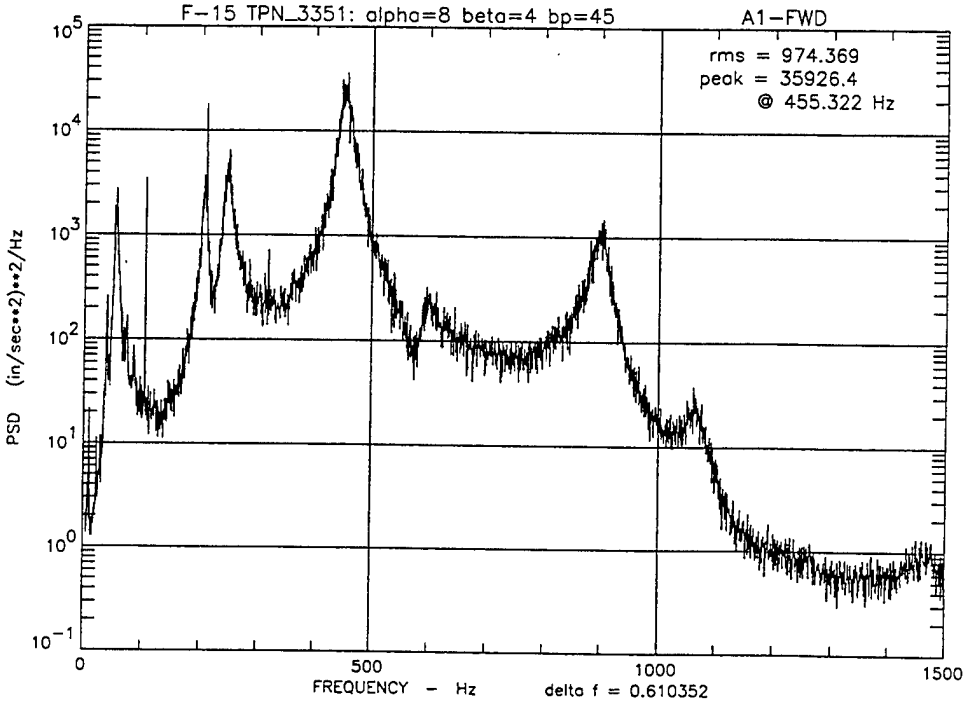
F-15 TPN_3351: alpha=8 beta=4 bp=45



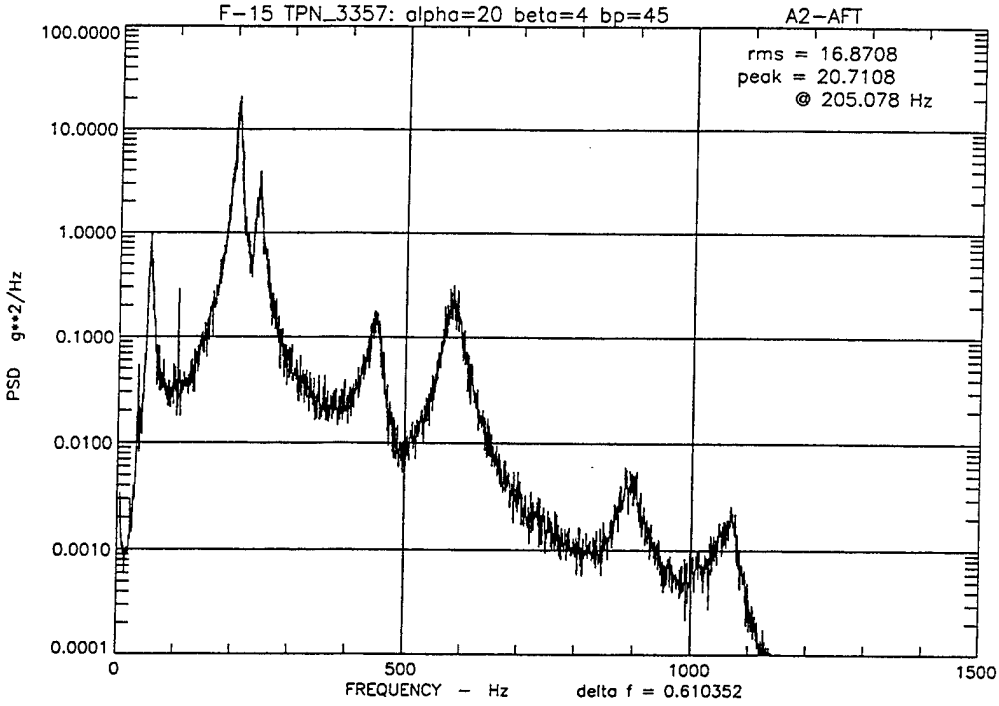
F-15 TPN_3351: alpha=8 beta=4 bp=45



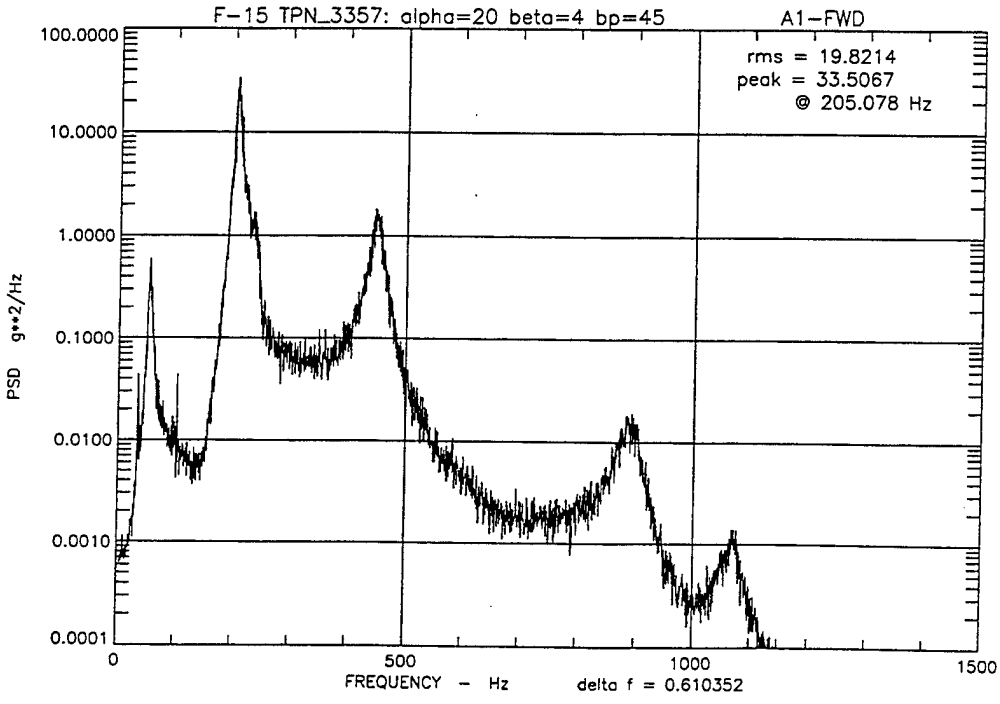
F-15 TPN_3351: alpha=8 beta=4 bp=45



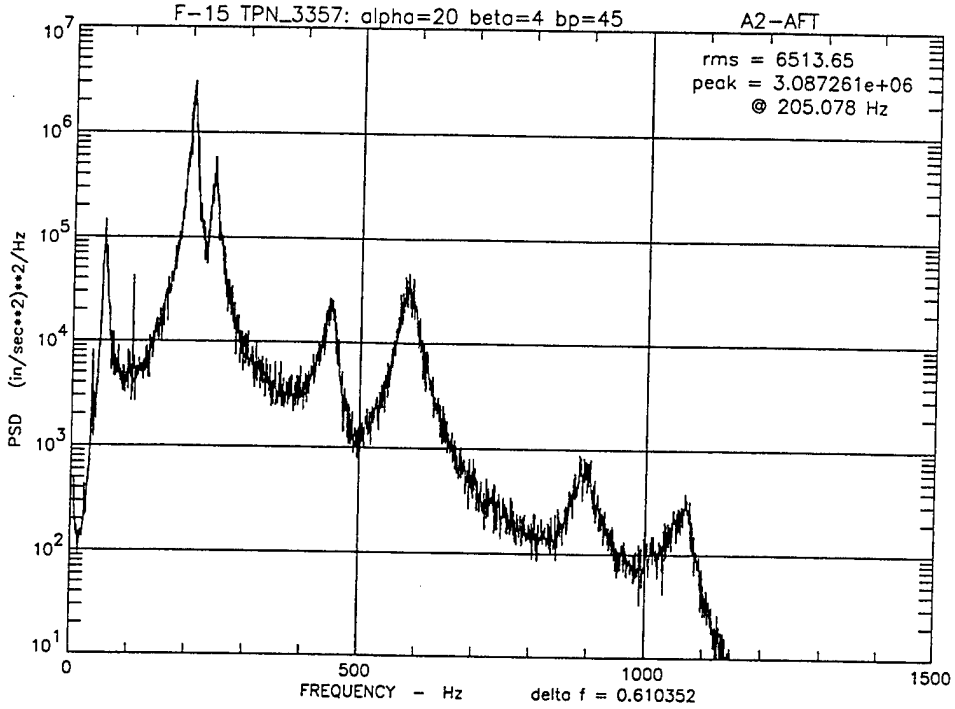
F-15 TPN_3357: alpha=20 beta=4 bp=45



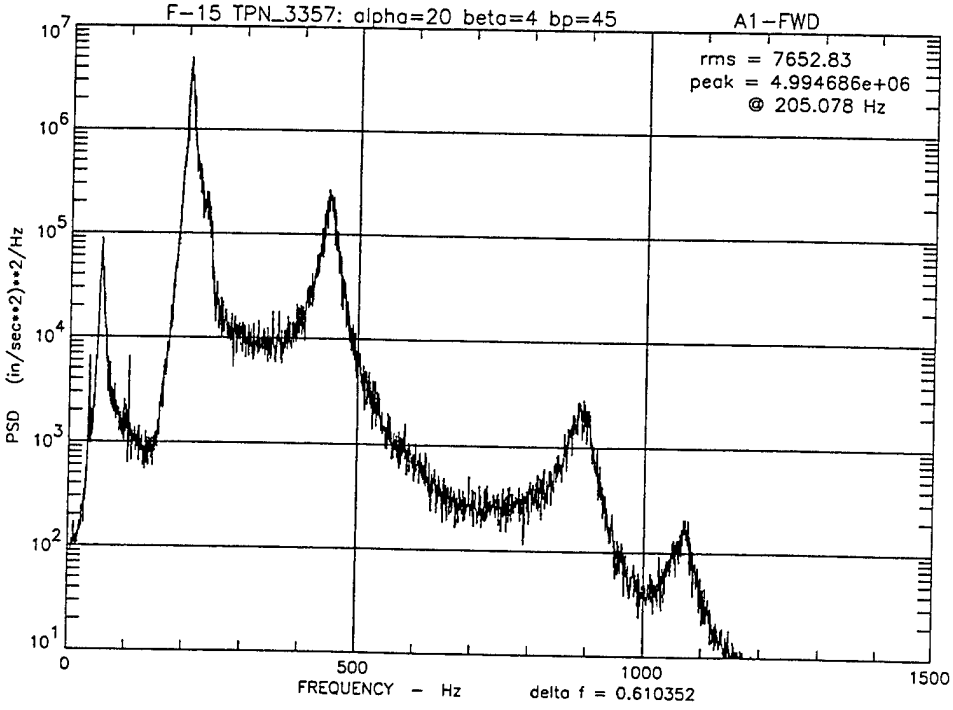
F-15 TPN_3357: alpha=20 beta=4 bp=45



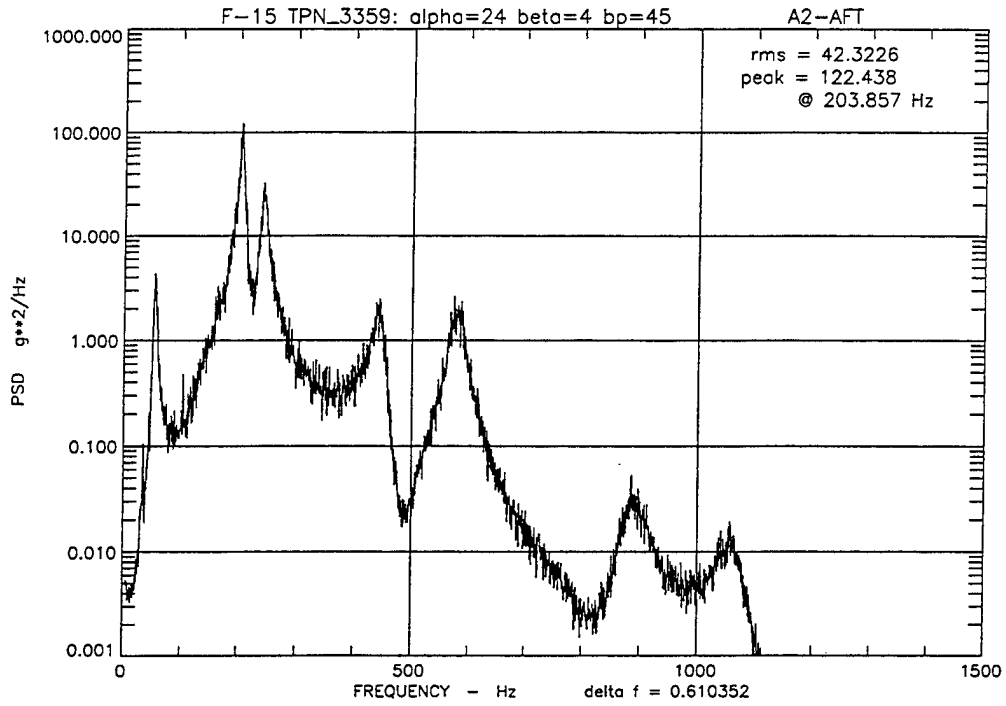
F-15 TPN_3357: alpha=20 beta=4 bp=45



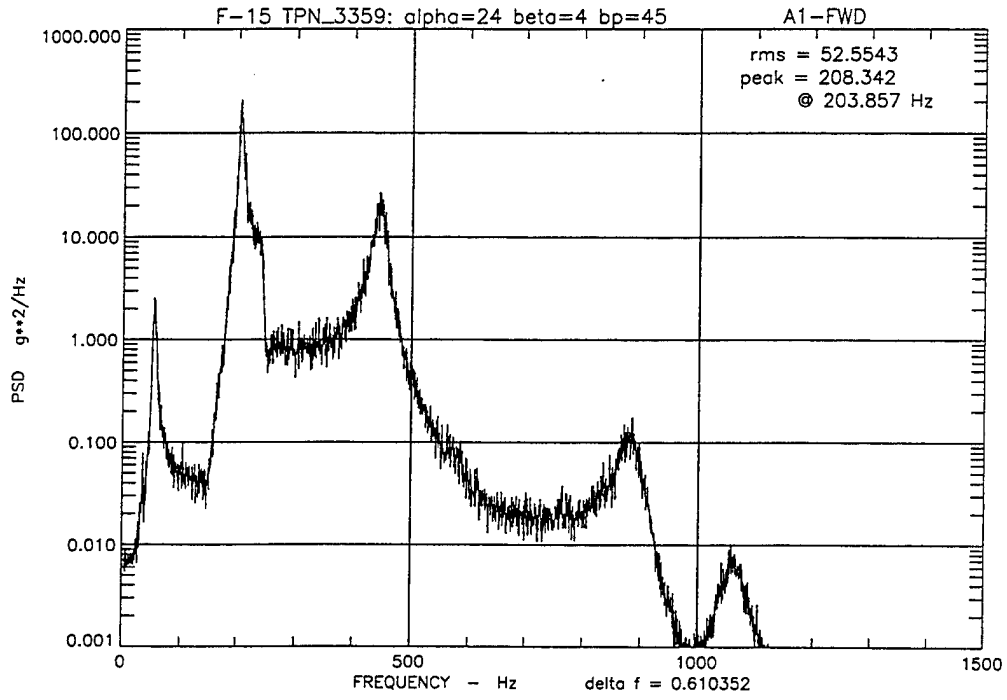
F-15 TPN_3357: alpha=20 beta=4 bp=45



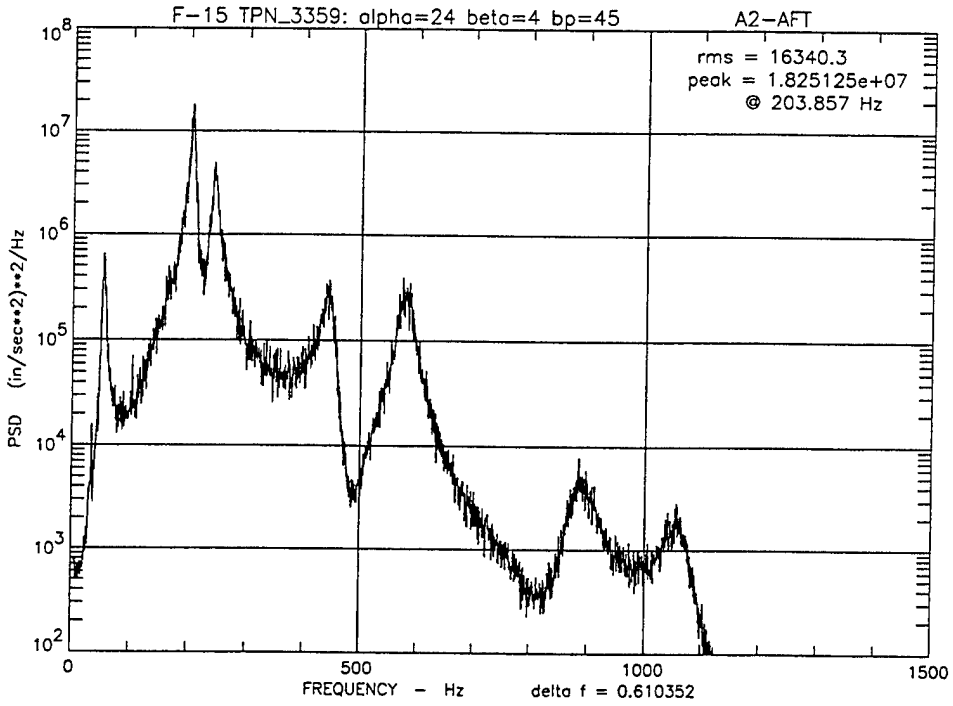
F-15 TPN_3359: alpha=24 beta=4 bp=45



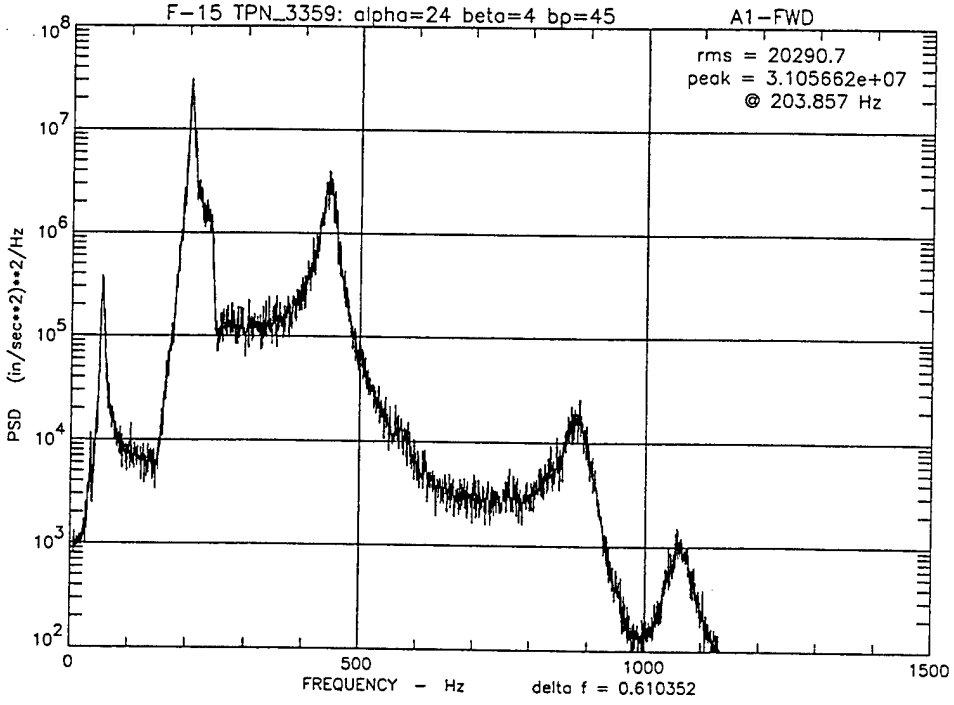
F-15 TPN_3359: alpha=24 beta=4 bp=45



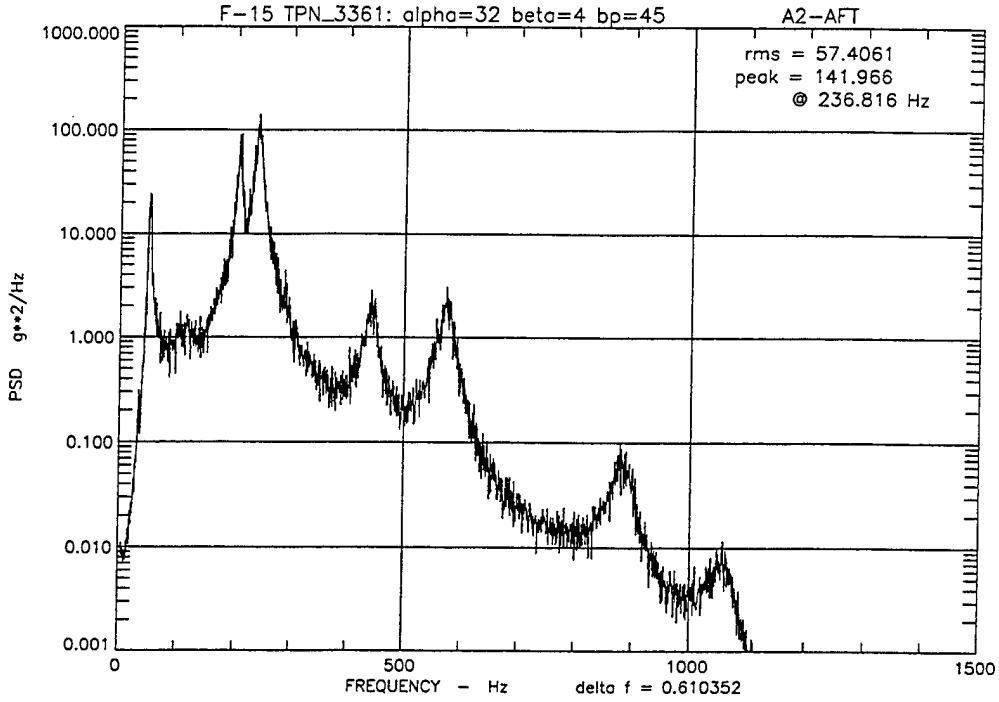
F-15 TPN_3359: alpha=24 beta=4 bp=45



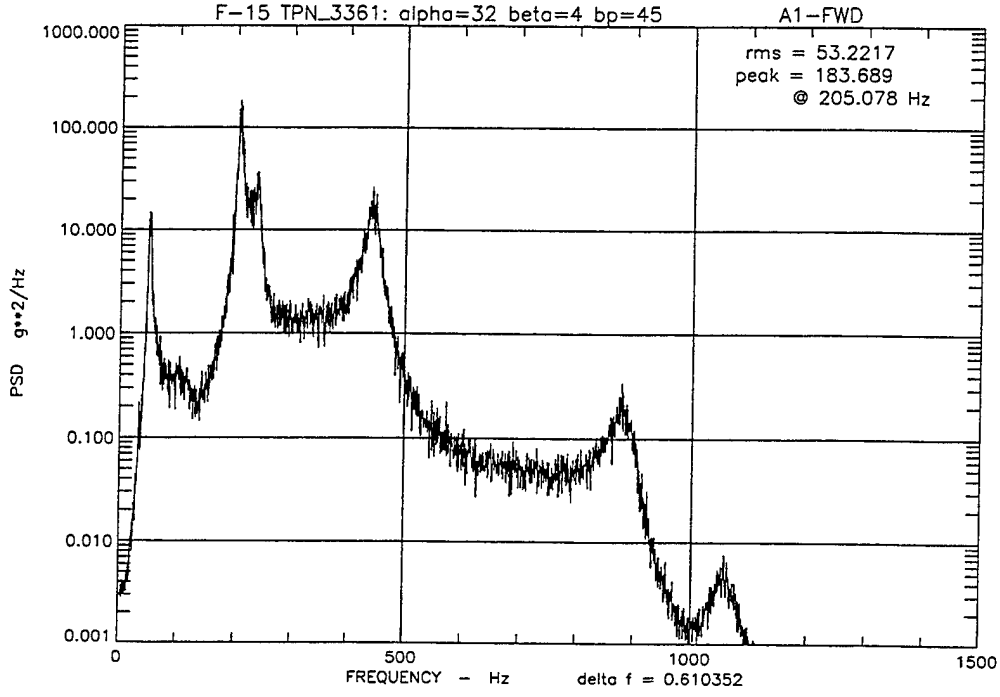
F-15 TPN_3359: alpha=24 beta=4 bp=45



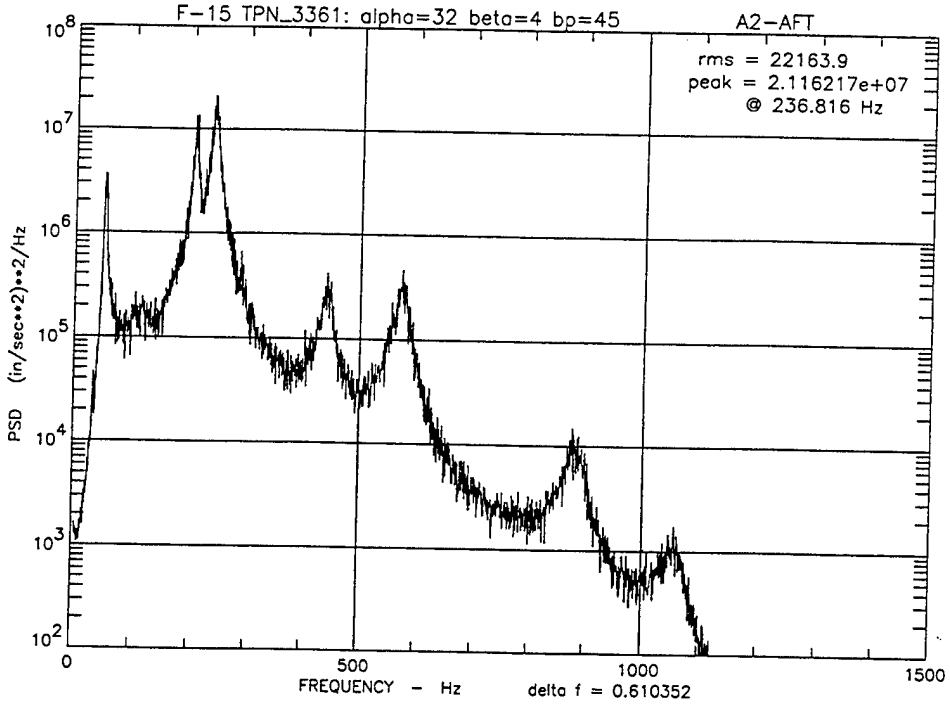
F-15 TPN_3361: alpha=32 beta=4 bp=45



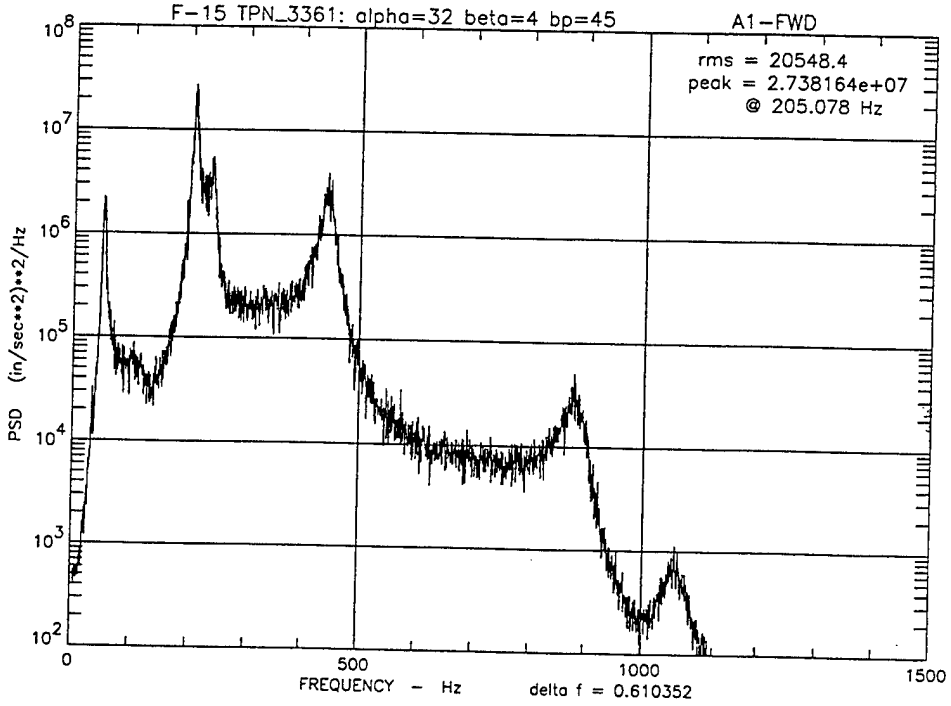
F-15 TPN_3361: alpha=32 beta=4 bp=45



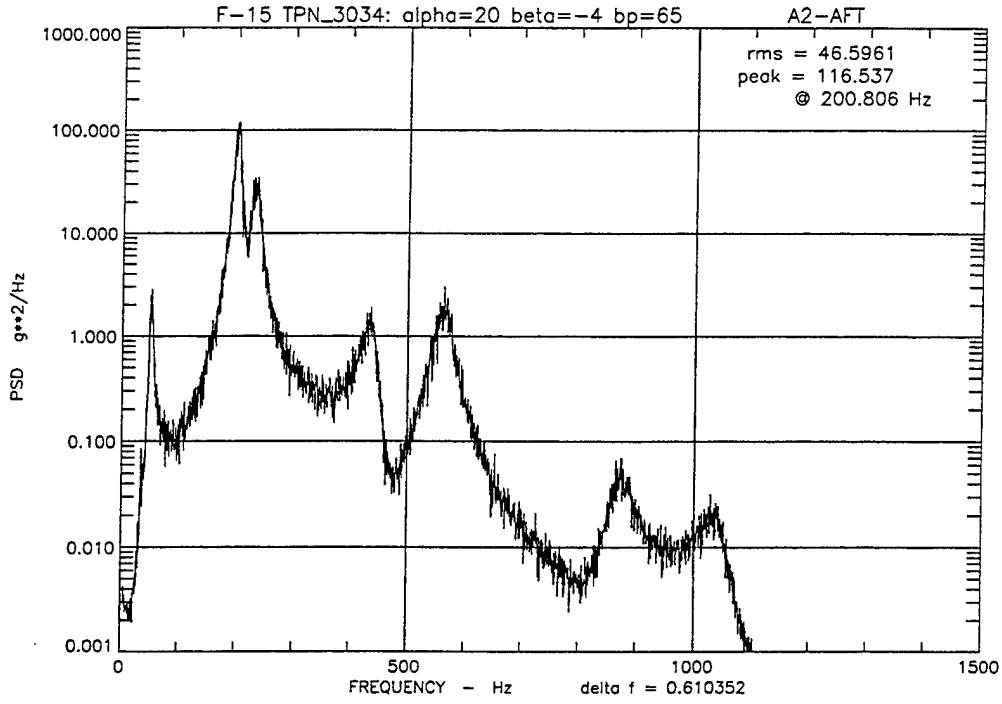
F-15 TPN_3361: alpha=32 beta=4 bp=45



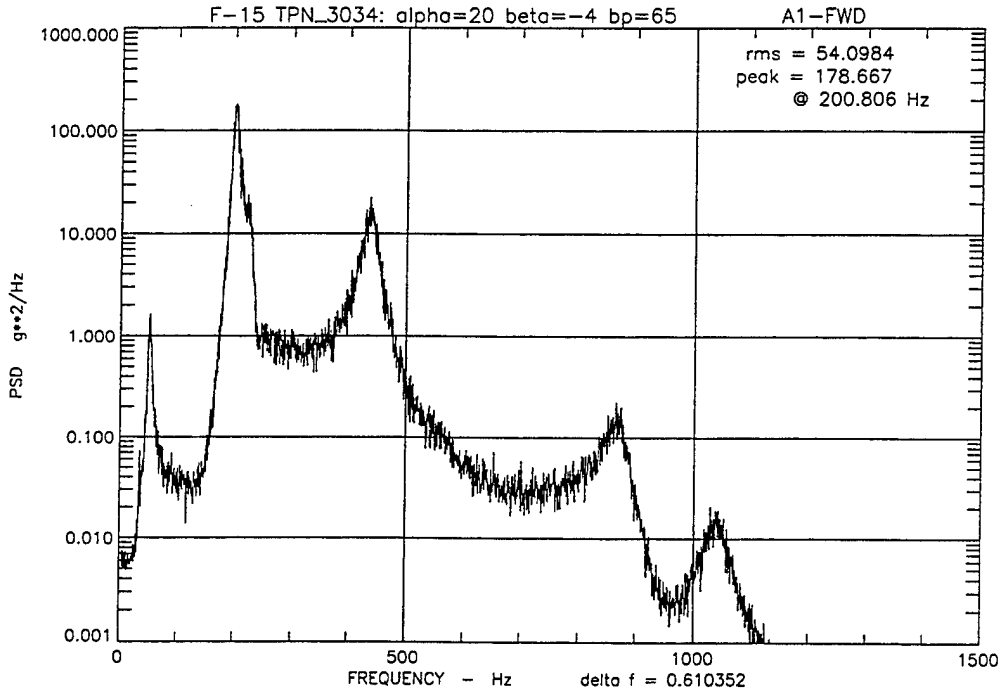
F-15 TPN_3361: alpha=32 beta=4 bp=45



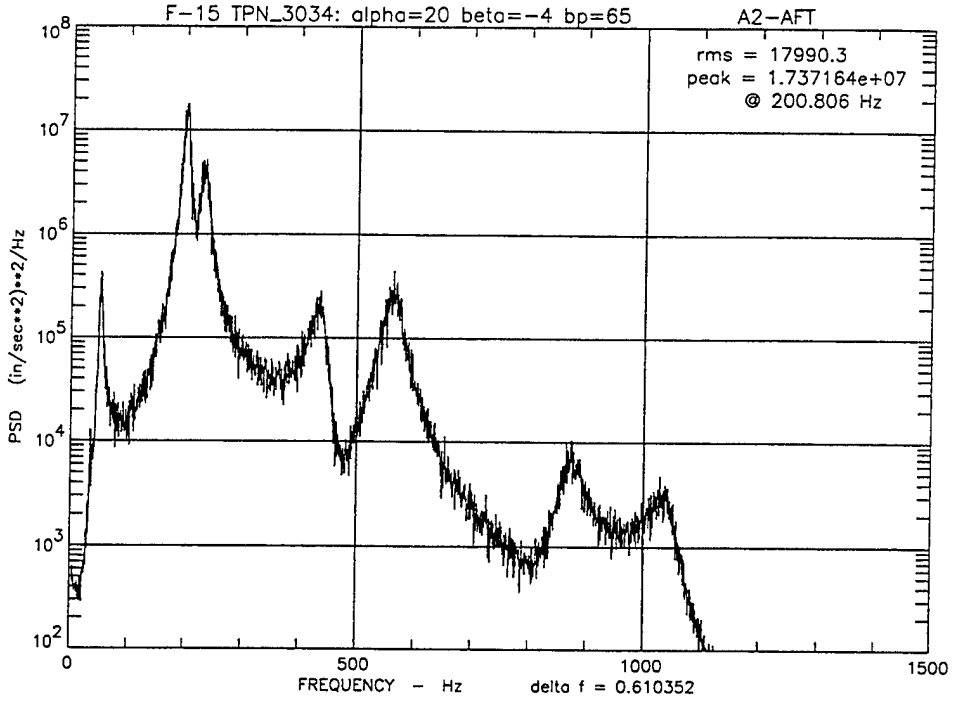
F-15 TPN_3034: alpha=20 beta=-4 bp=65



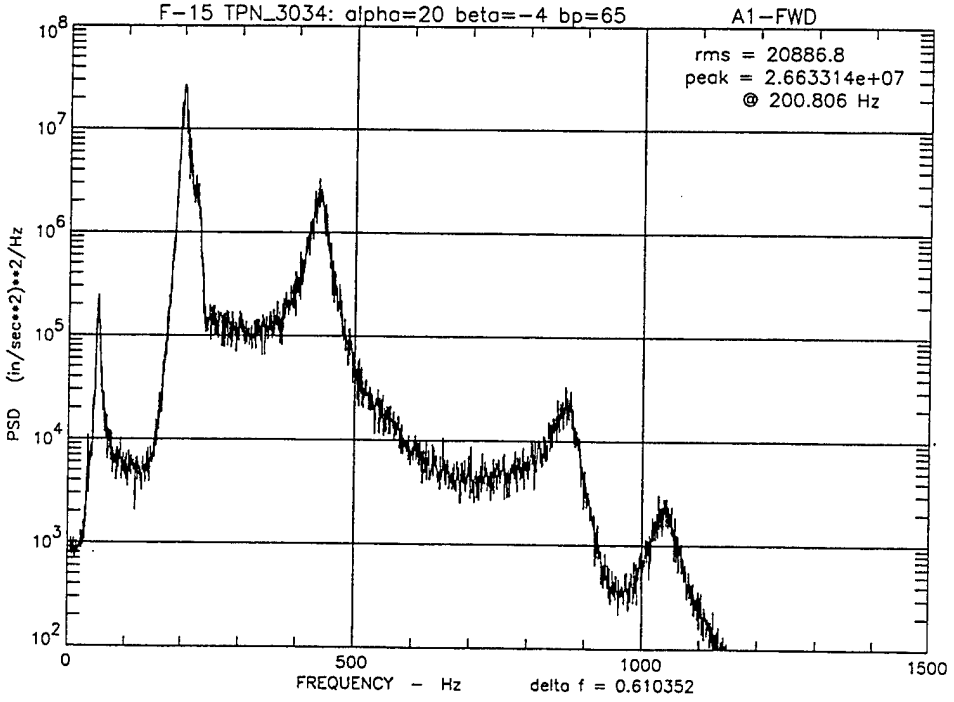
F-15 TPN_3034: alpha=20 beta=-4 bp=65



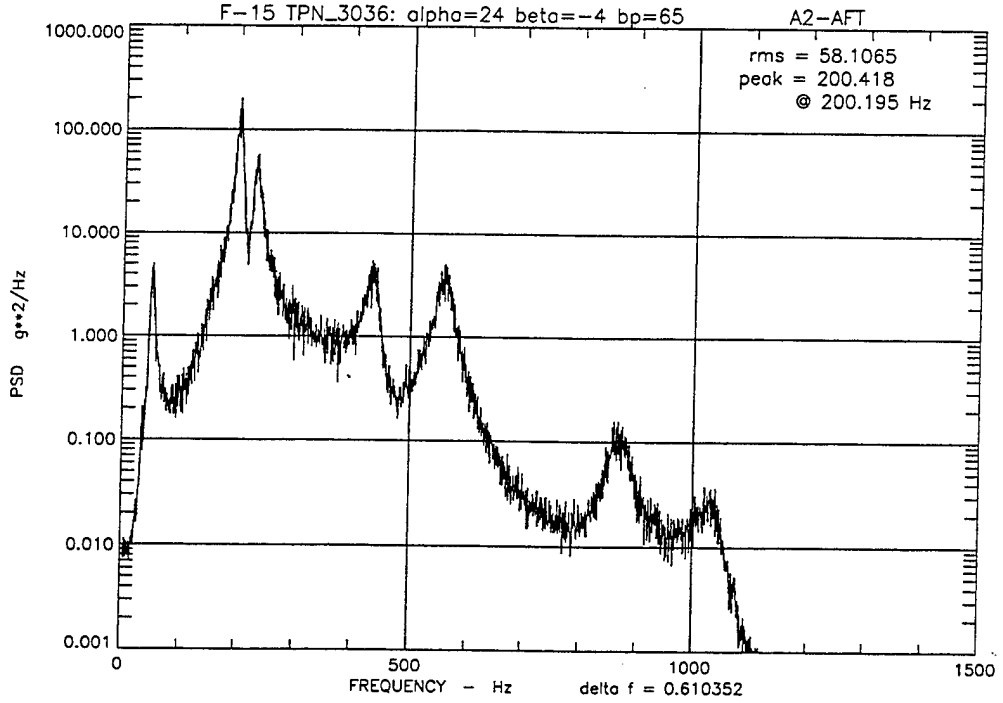
F-15 TPN_3034: alpha=20 beta=-4 bp=65



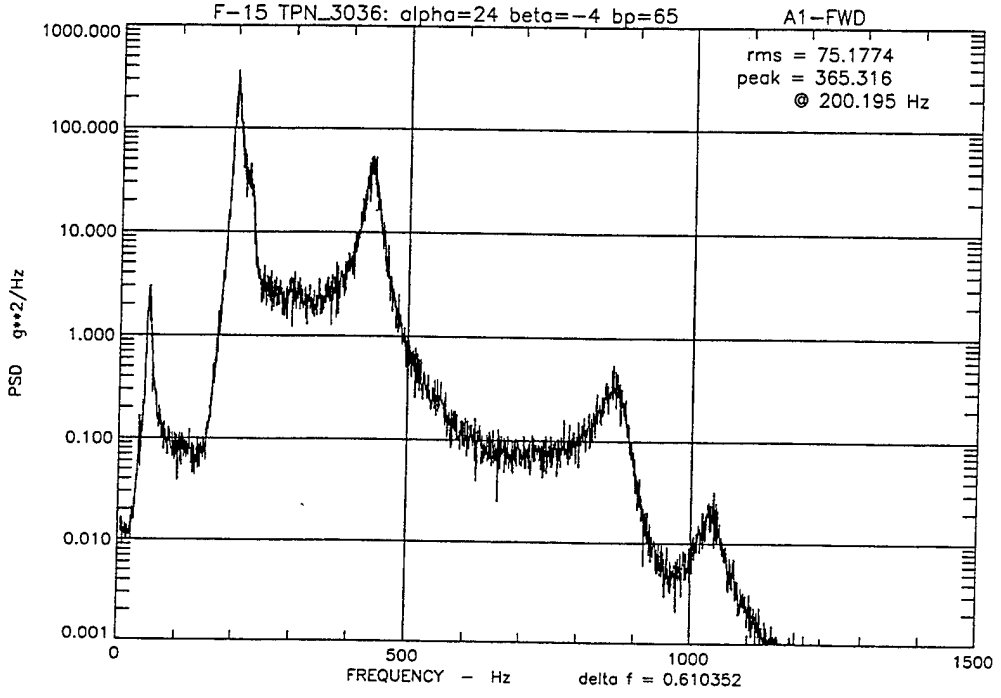
F-15 TPN_3034: alpha=20 beta=-4 bp=65



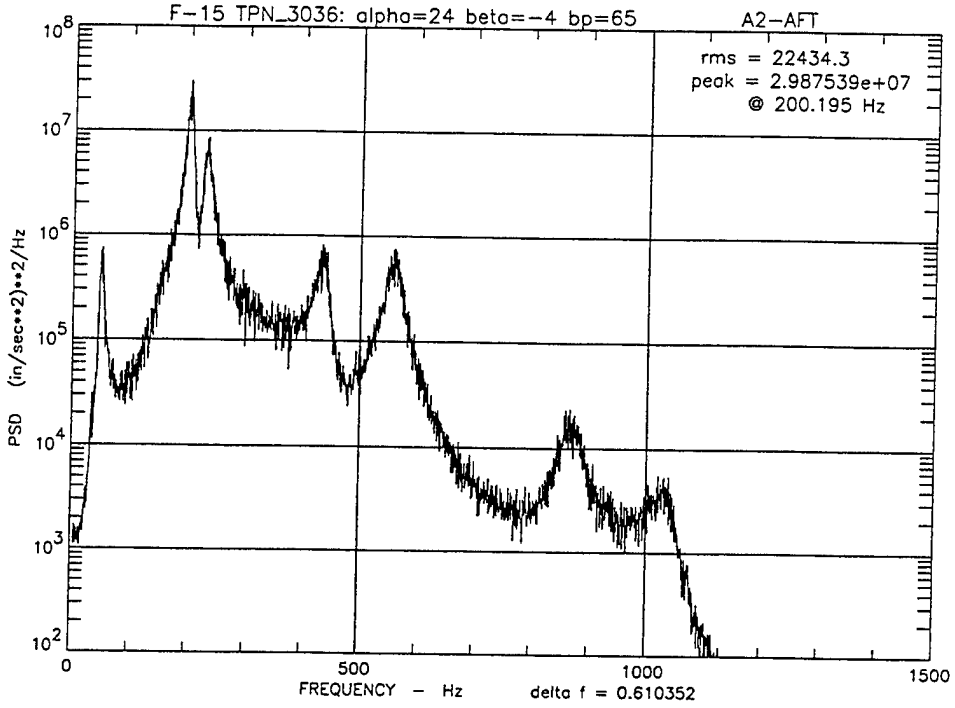
F-15 TPN_3036: alpha=24 beta=-4 bp=65



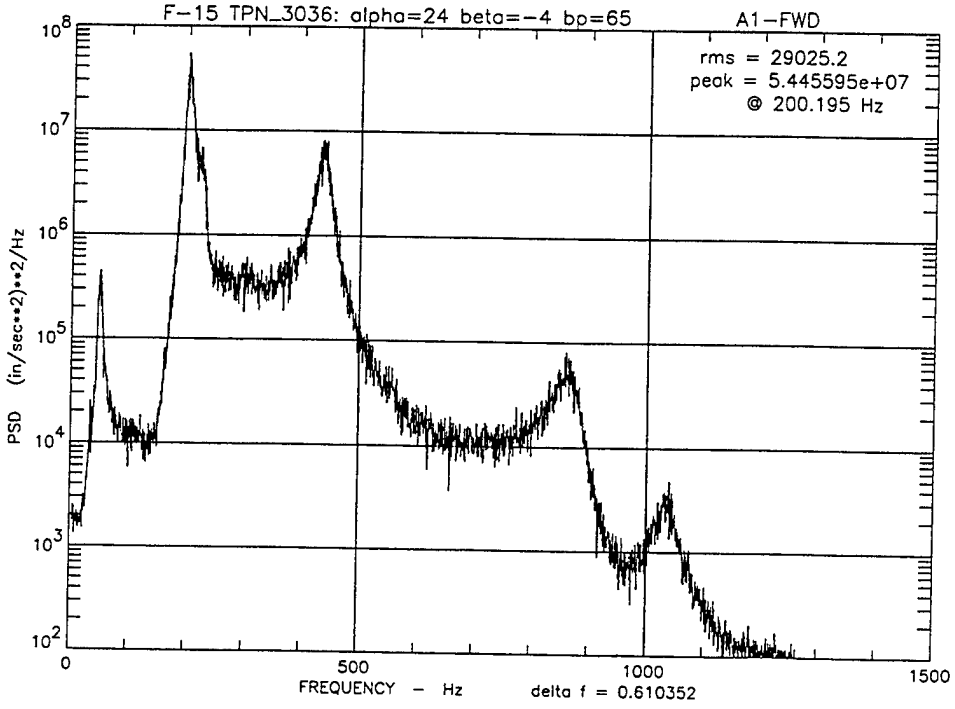
F-15 TPN_3036: alpha=24 beta=-4 bp=65



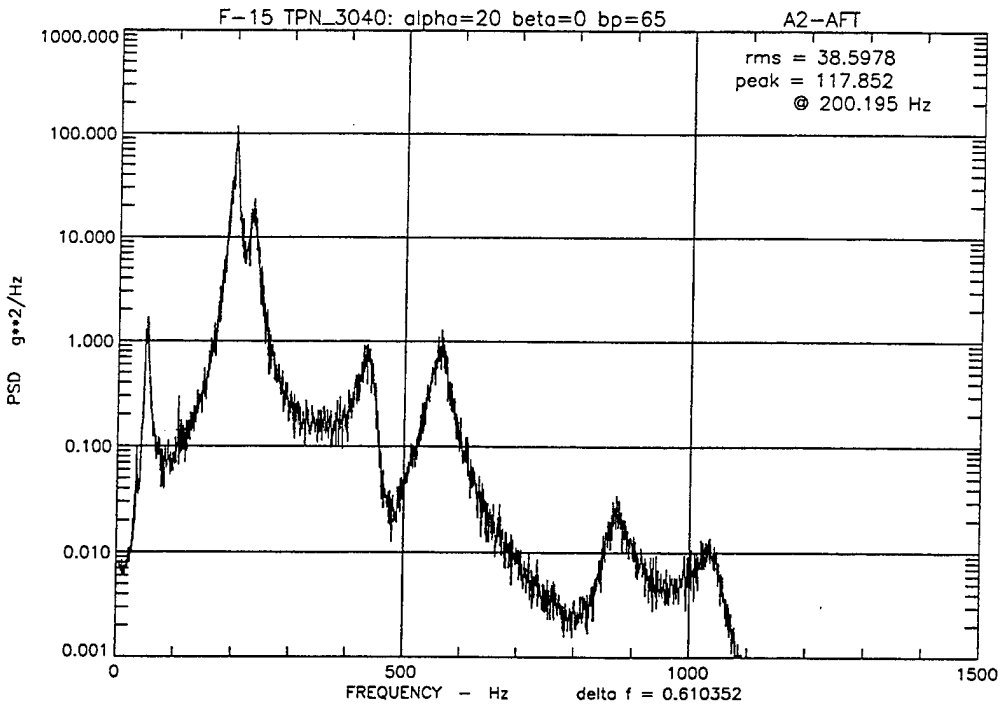
F-15 TPN_3036: alpha=24 beta=-4 bp=65



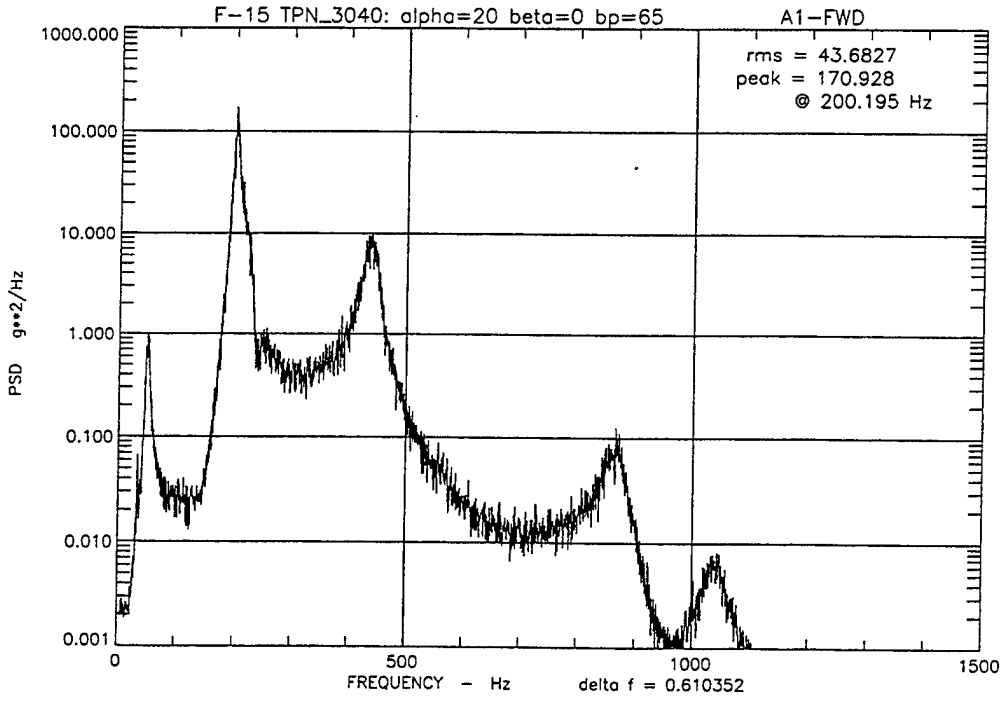
F-15 TPN_3036: alpha=24 beta=-4 bp=65



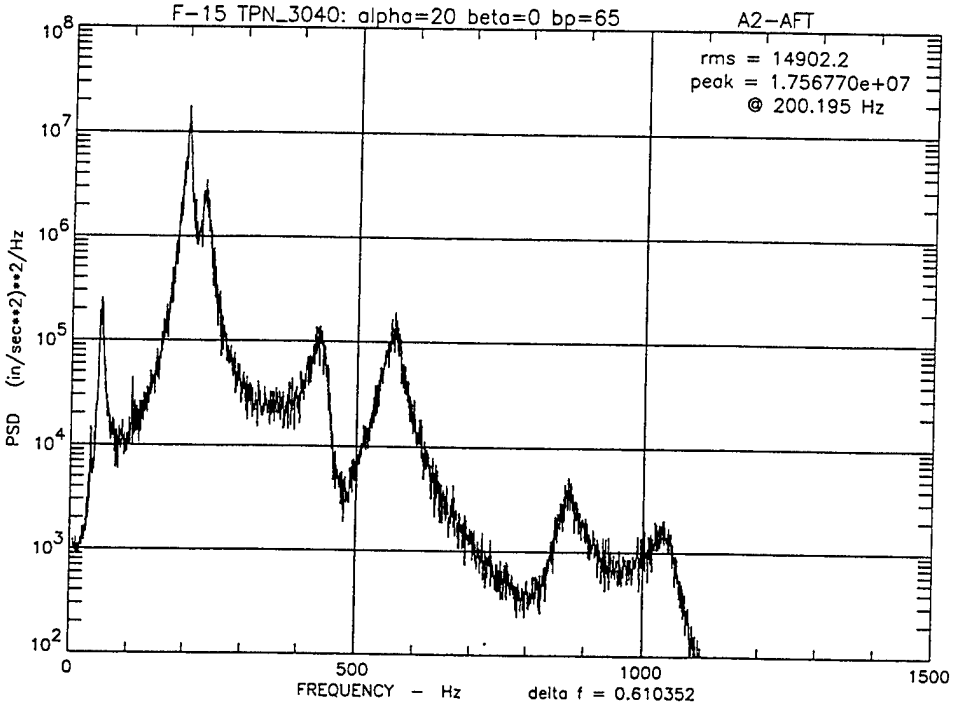
F-15 TPN_3040: alpha=20 beta=0 bp=65



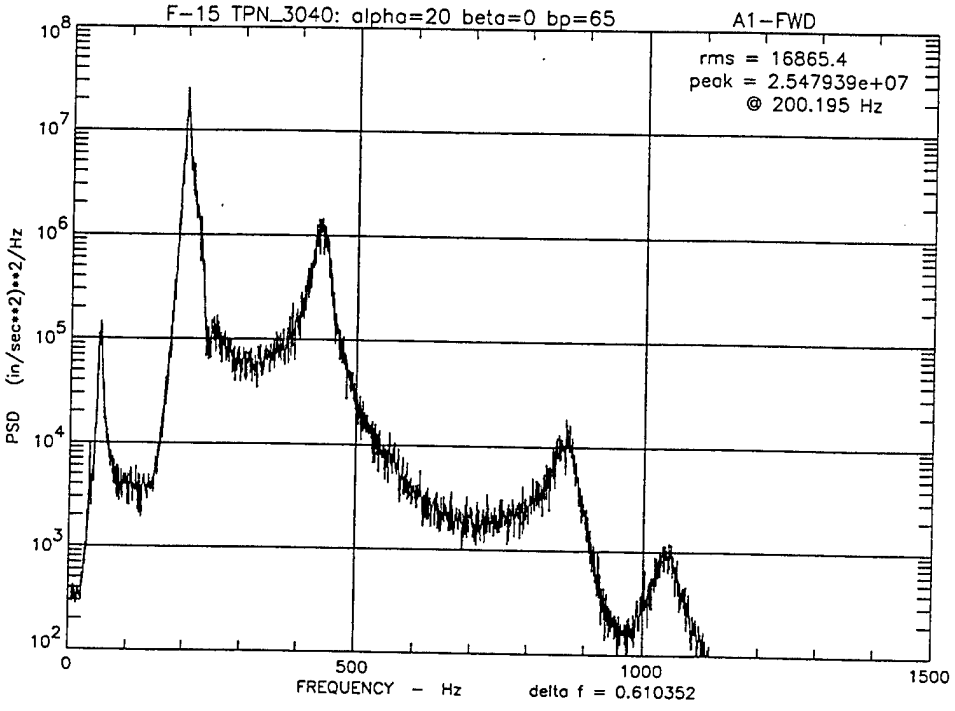
F-15 TPN_3040: alpha=20 beta=0 bp=65



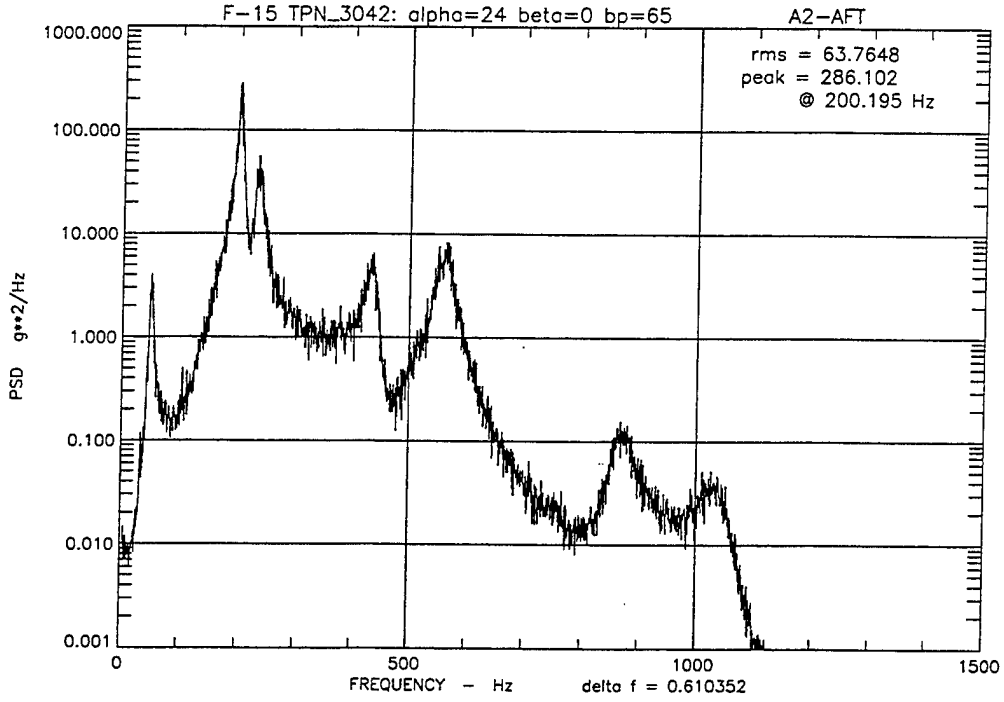
F-15 TPN_3040: alpha=20 beta=0 bp=65



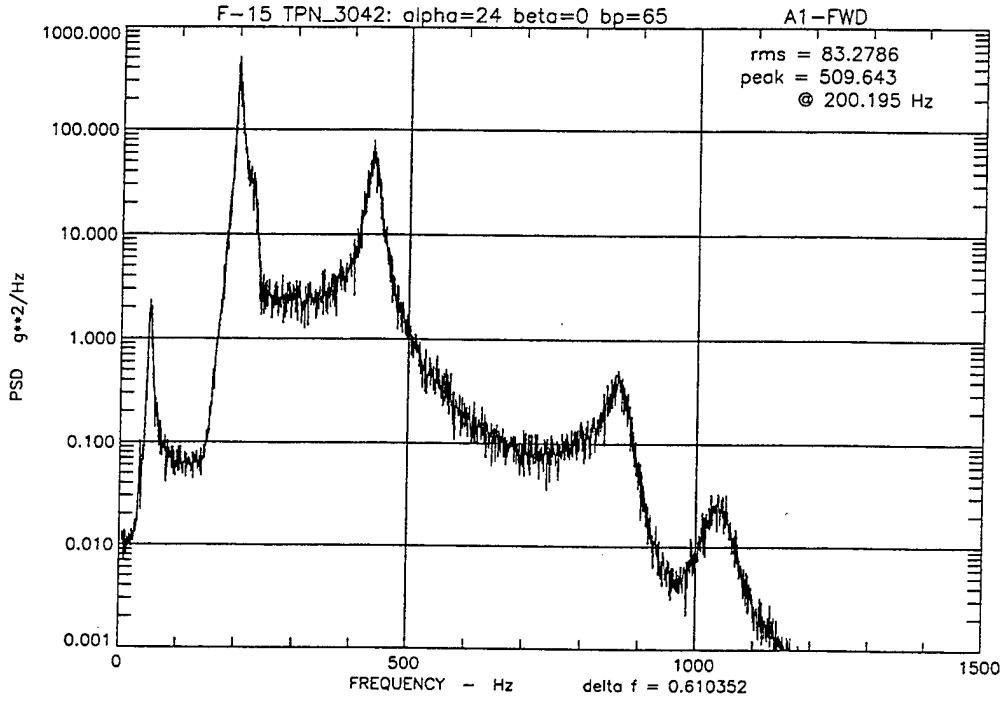
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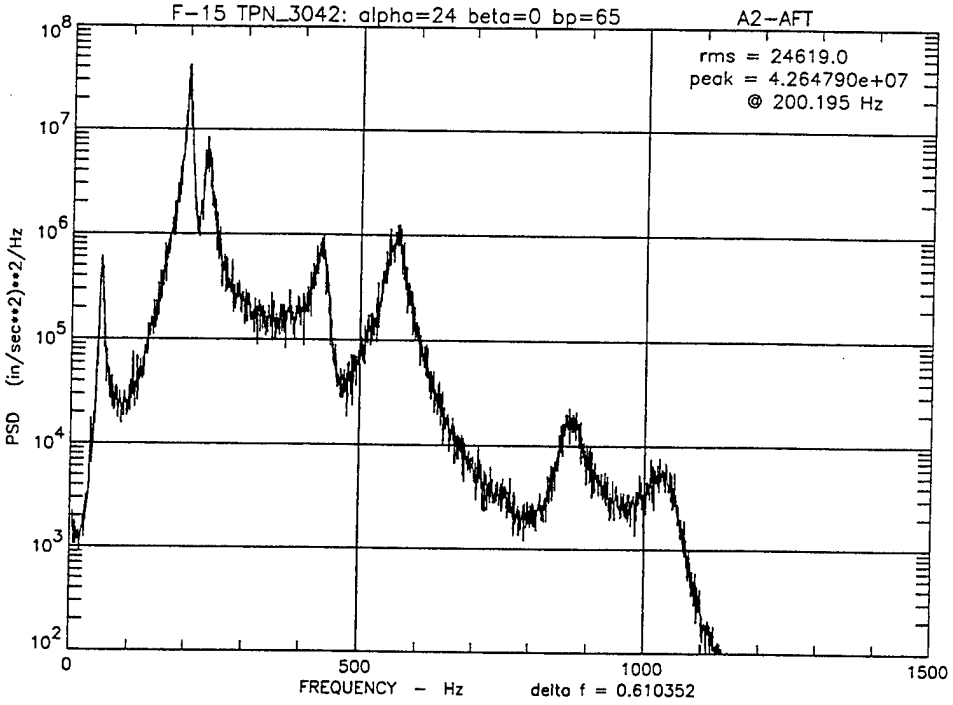
F-15 TPN_3042: alpha=24 beta=0 bp=65



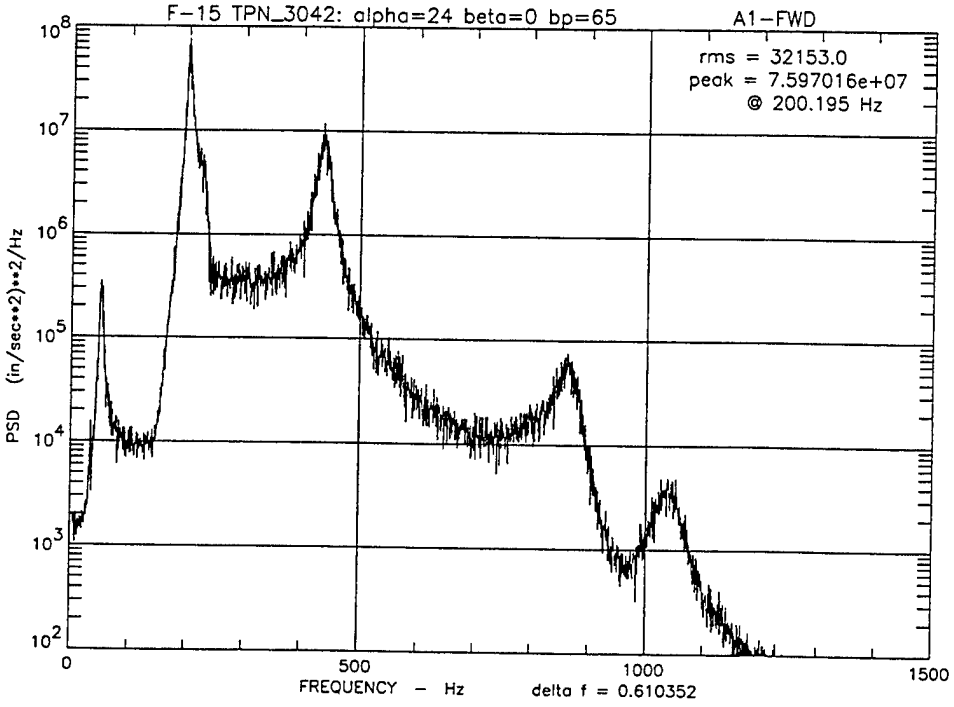
F-15 TPN_3042: alpha=24 beta=0 bp=65



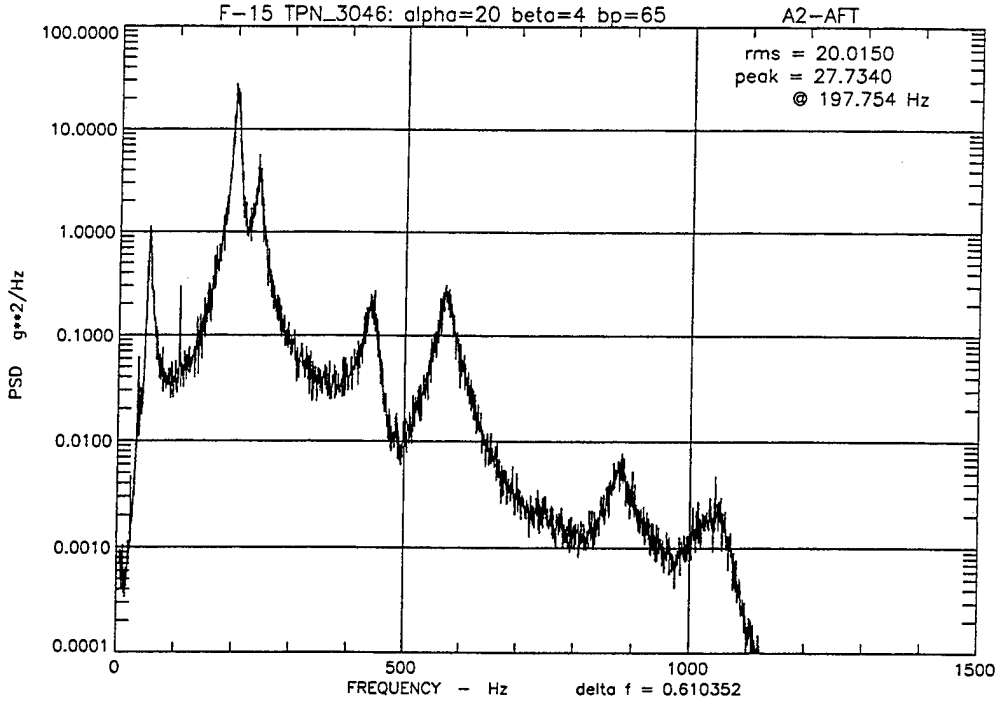
F-15 TPN_3042: alpha=24 beta=0 bp=65



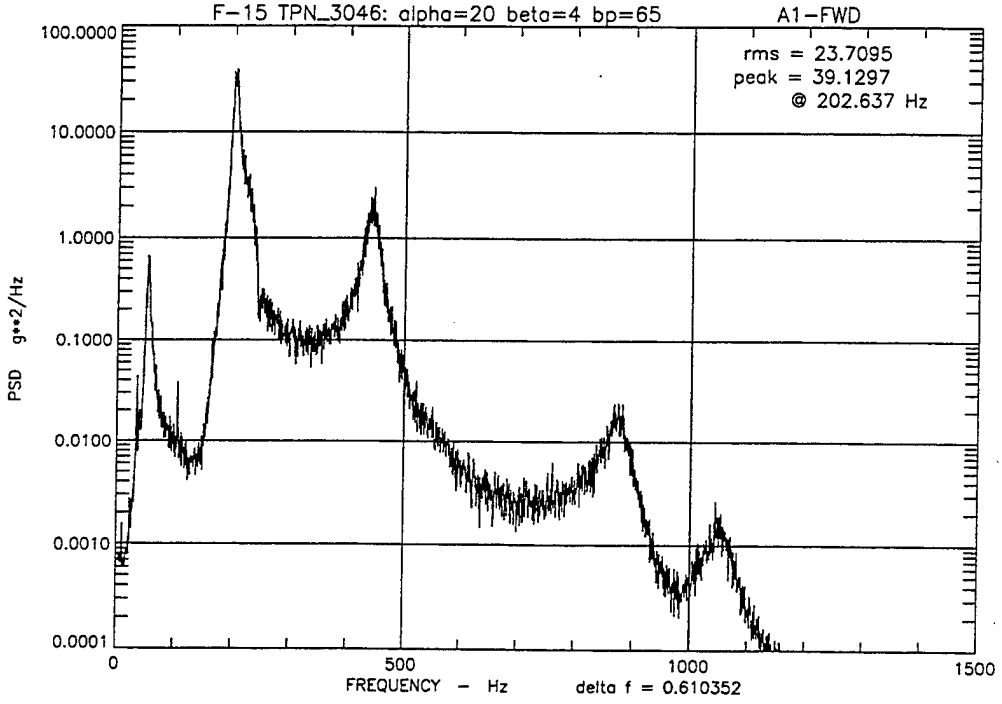
F-15 TPN_3042: alpha=24 beta=0 bp=65



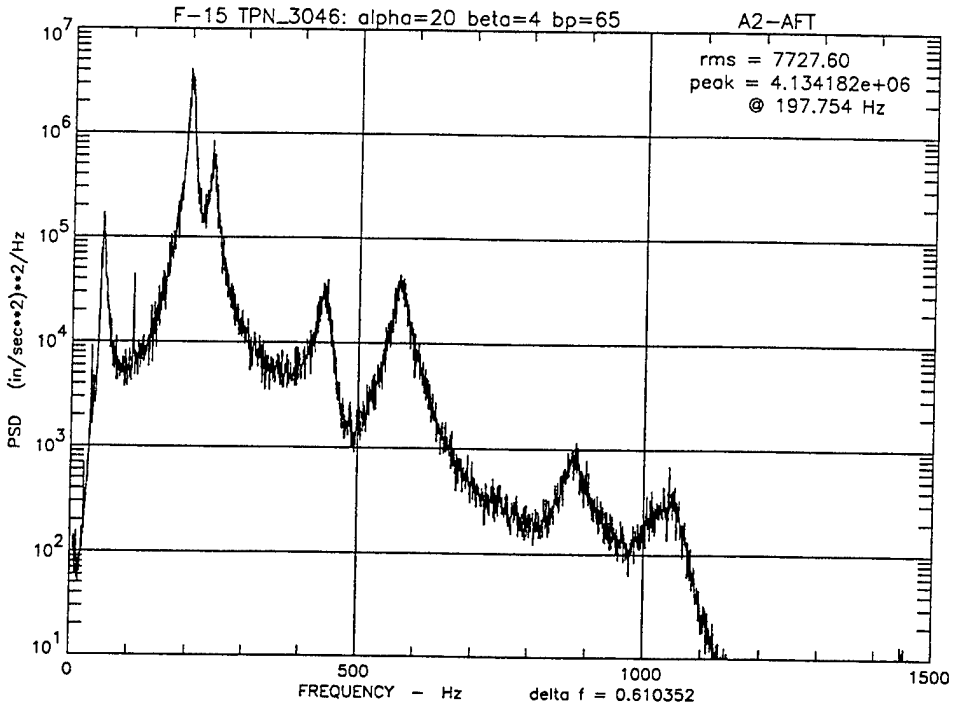
F-15 TPN_3046: alpha=20 beta=4 bp=65



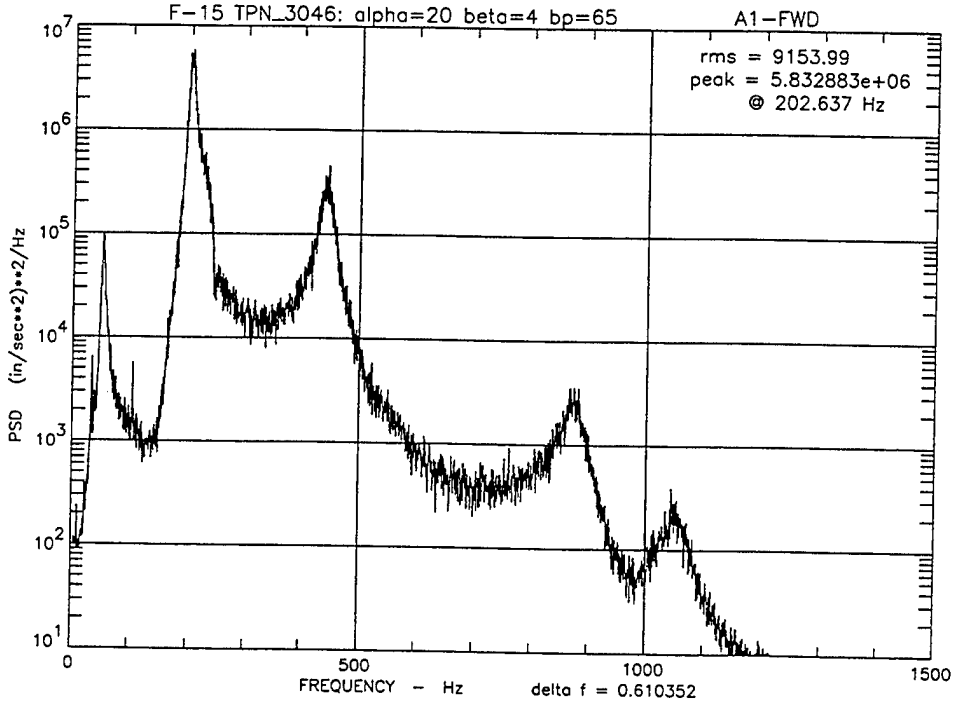
F-15 TPN_3046: alpha=20 beta=4 bp=65



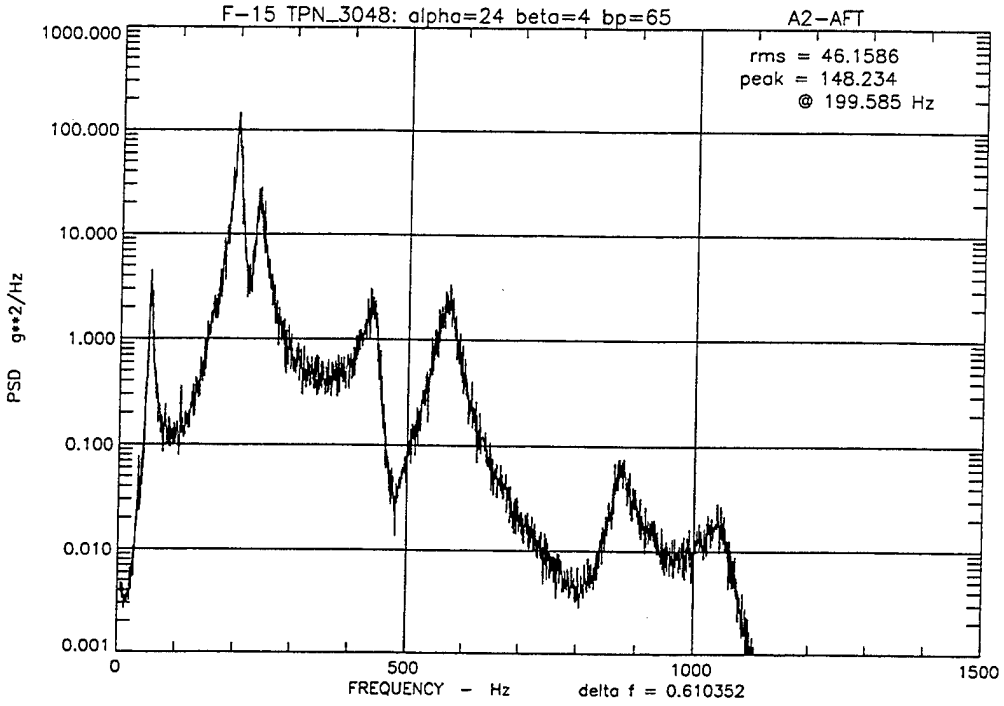
F-15 TPN_3046: alpha=20 beta=4 bp=65



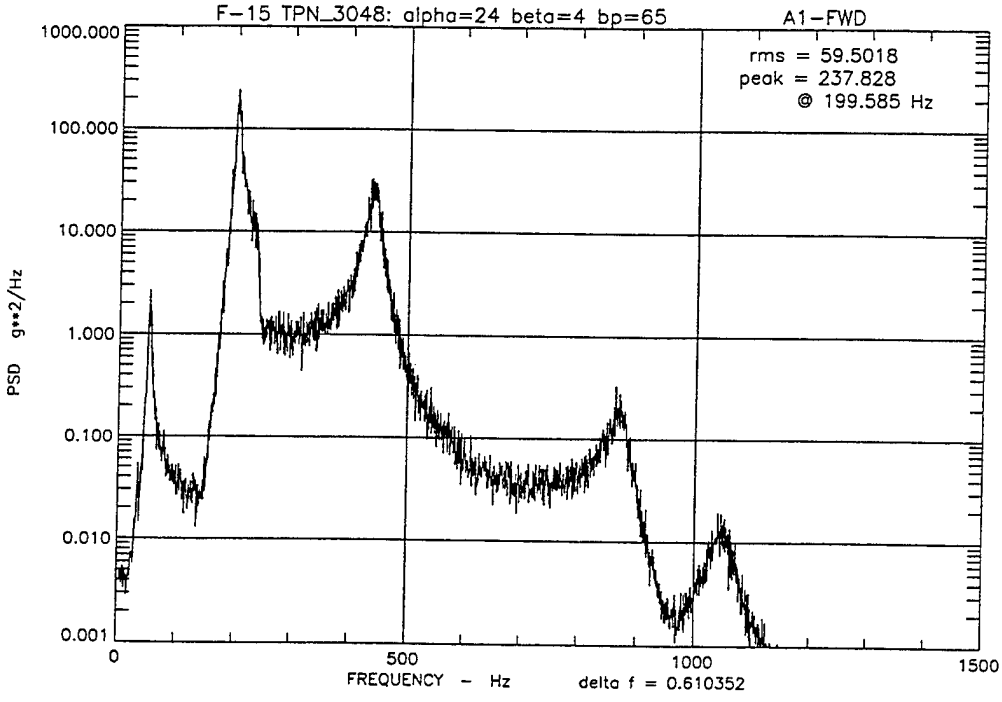
F-15 TPN_3046: alpha=20 beta=4 bp=65



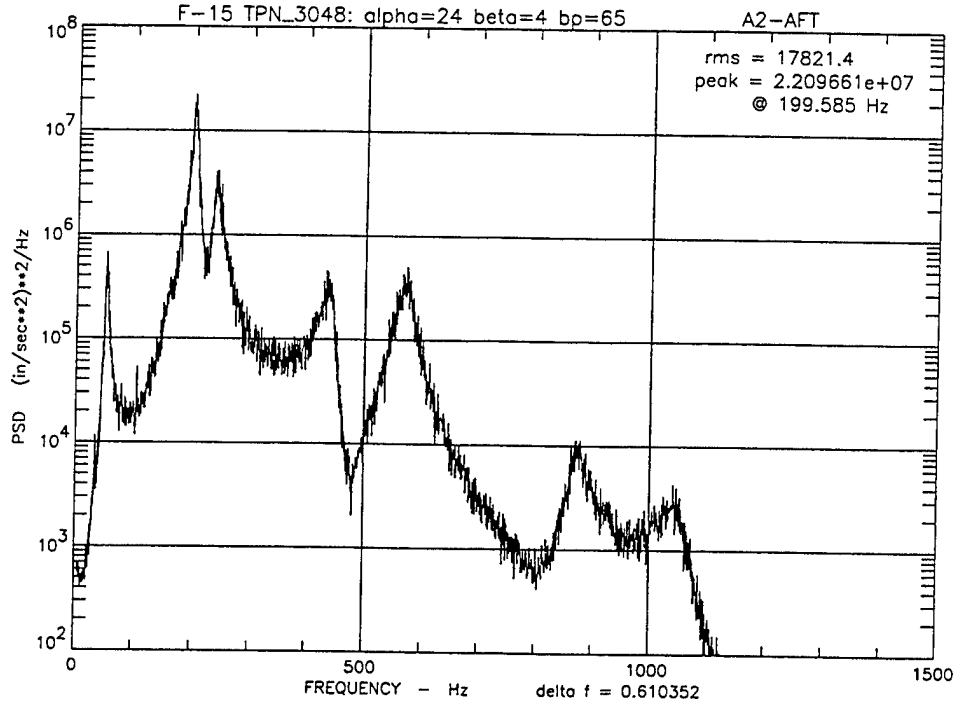
F-15 TPN_3048: alpha=24 beta=4 bp=65



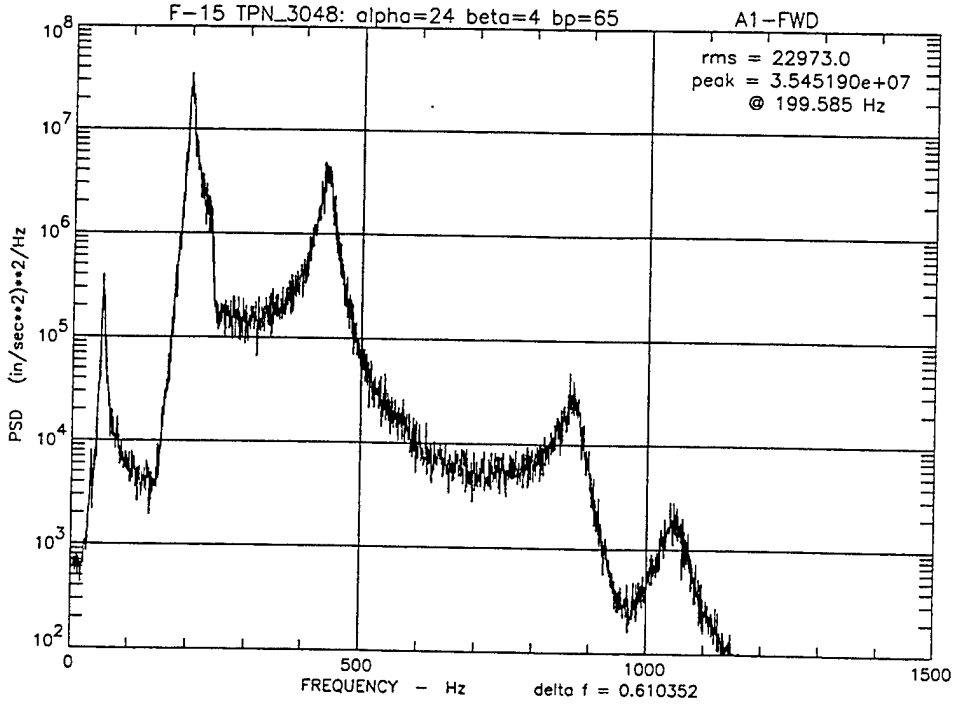
F-15 TPN_3048: alpha=24 beta=4 bp=65



F-15 TPN_3048: alpha=24 beta=4 bp=65



F-15 TPN_3048: alpha=24 beta=4 bp=65

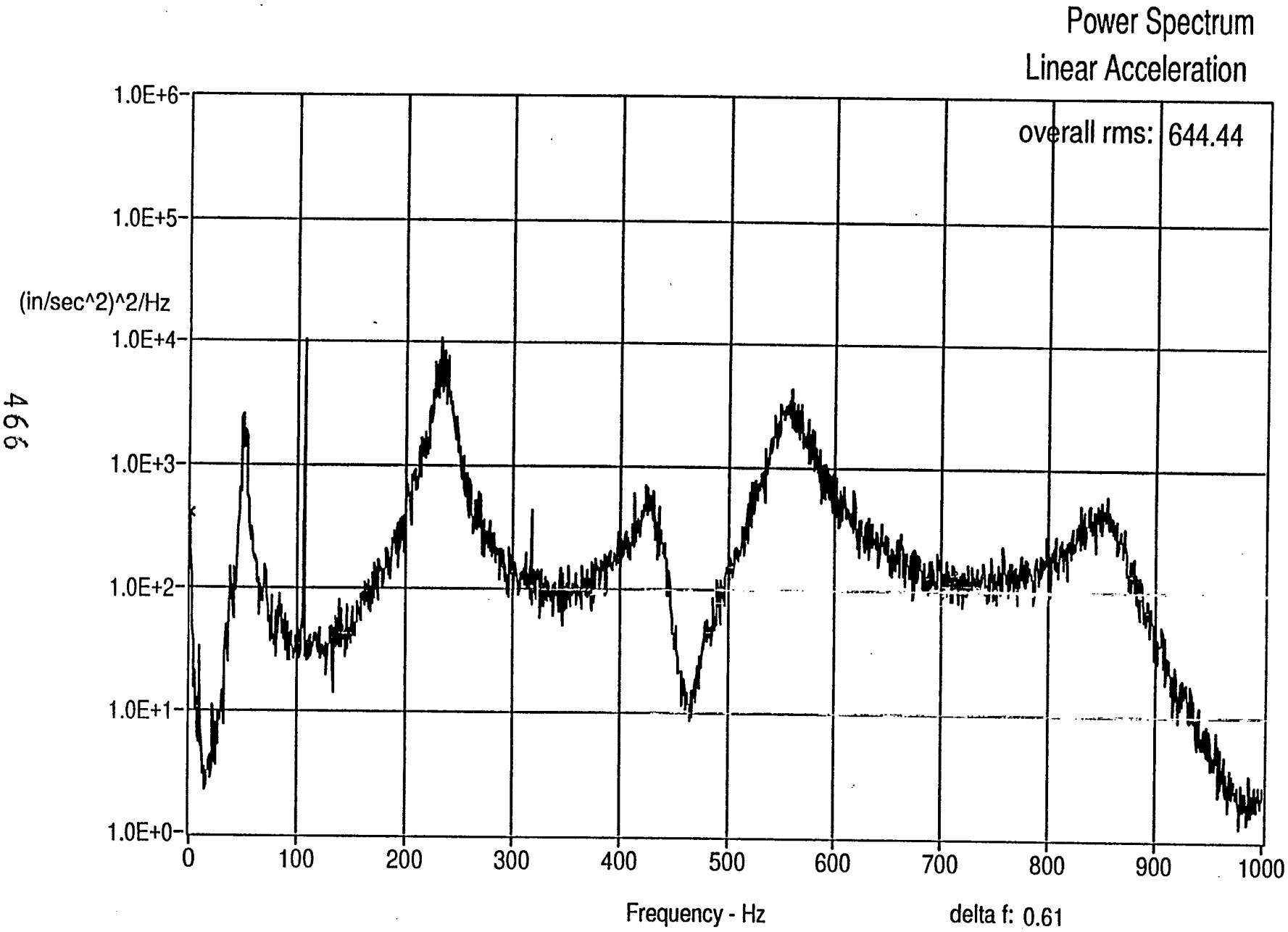


FLEXIBLE TAIL RESPONSE
ACCELERATION DATA
Q= 56 PSF
PSD GRAPHS

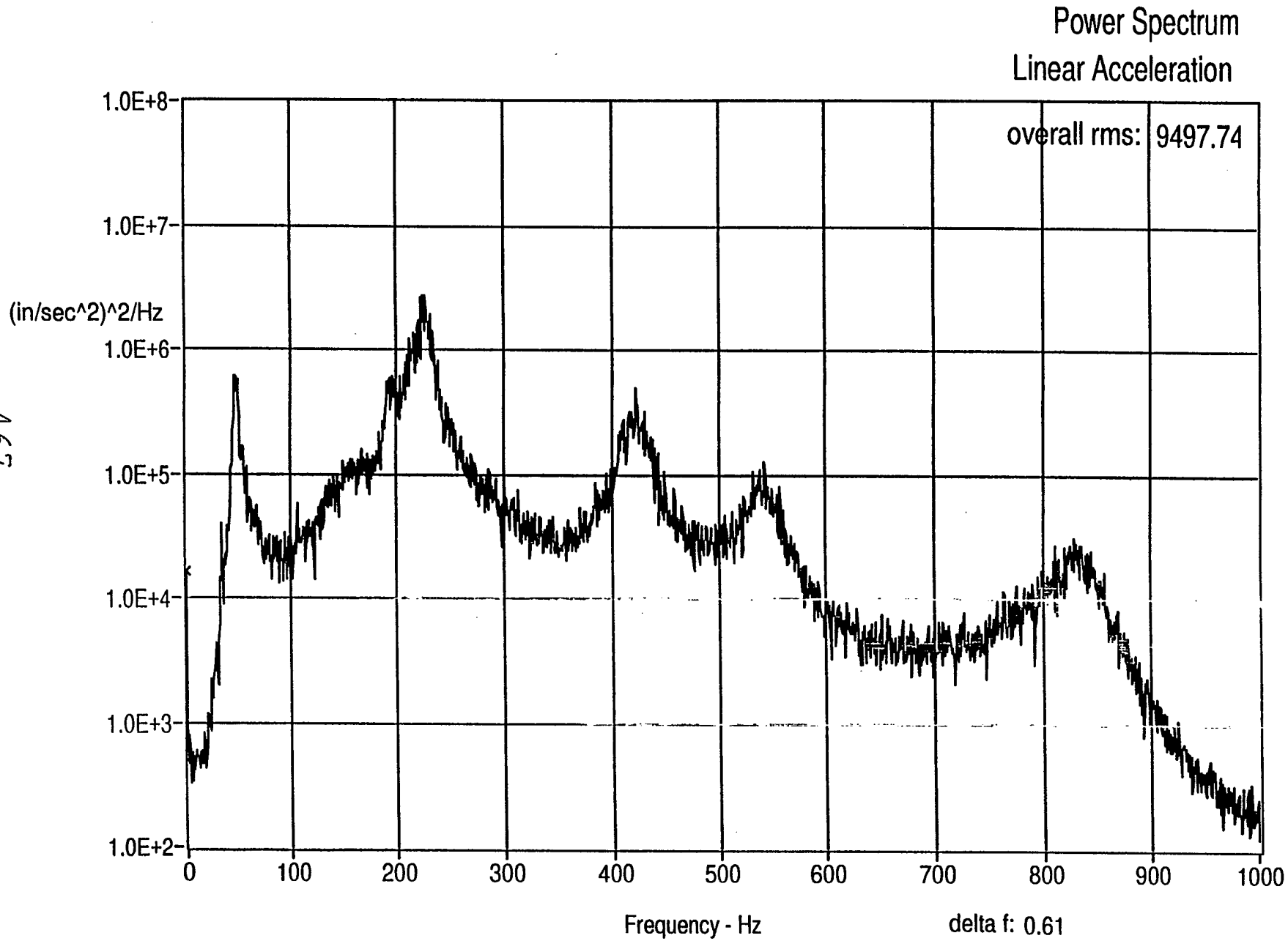
4.1.1.2 BENDING(LINEAR AT EA) beta= 0, +4, -4 Deg, WBP = 0, 45, 65 psi
ALPHAS = 8, 20, 24, 32 DEG

(note, the dimensional graph s, (in/sec)^2/hz are in a block, while the graphs (g's)^2/hz are in a second block. data isfurter blocked blocked off by blowing pressures, with beta variation within.

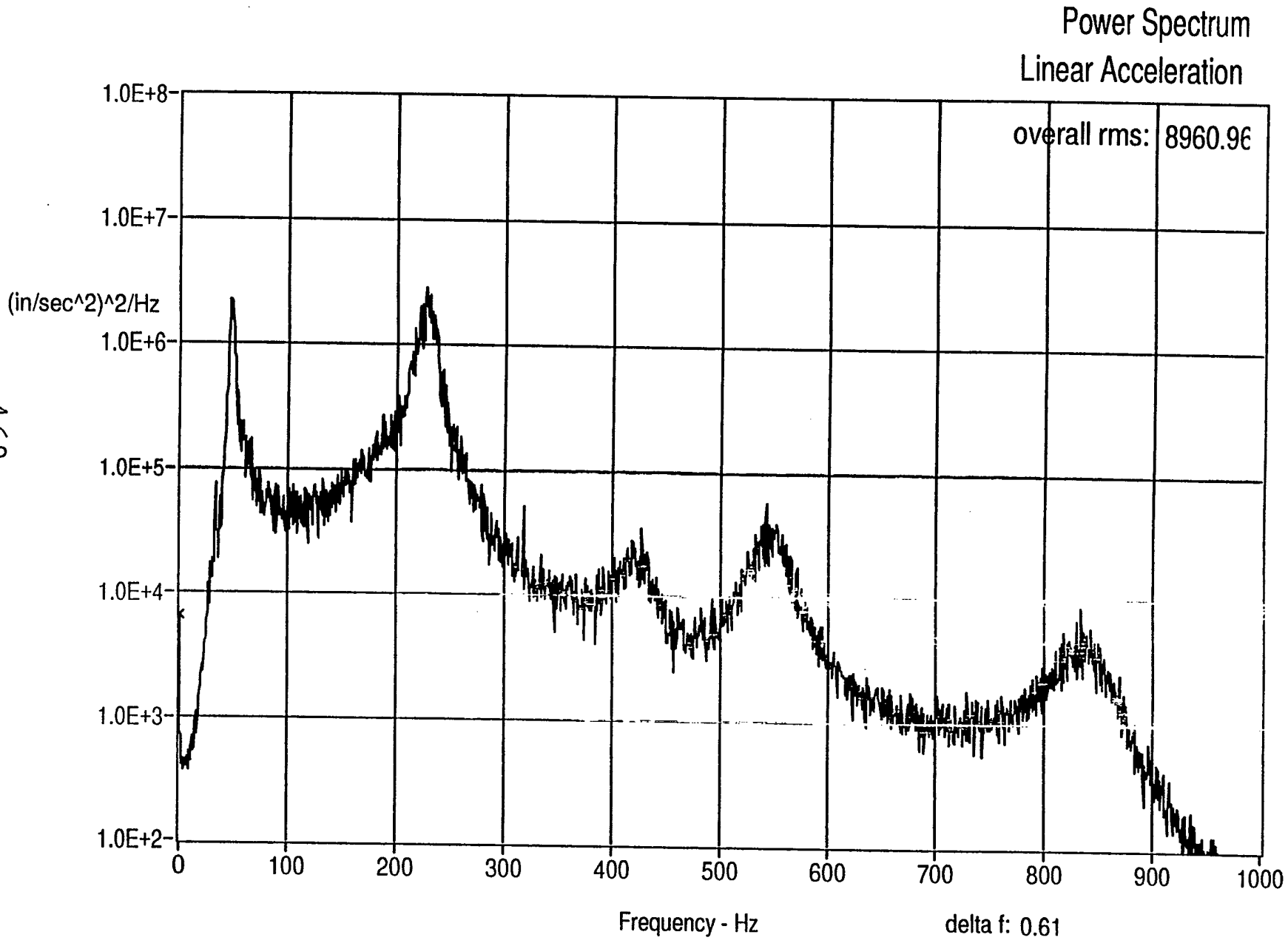
F-15 TPN_2864: alpha=8 beta=-4 bp=0



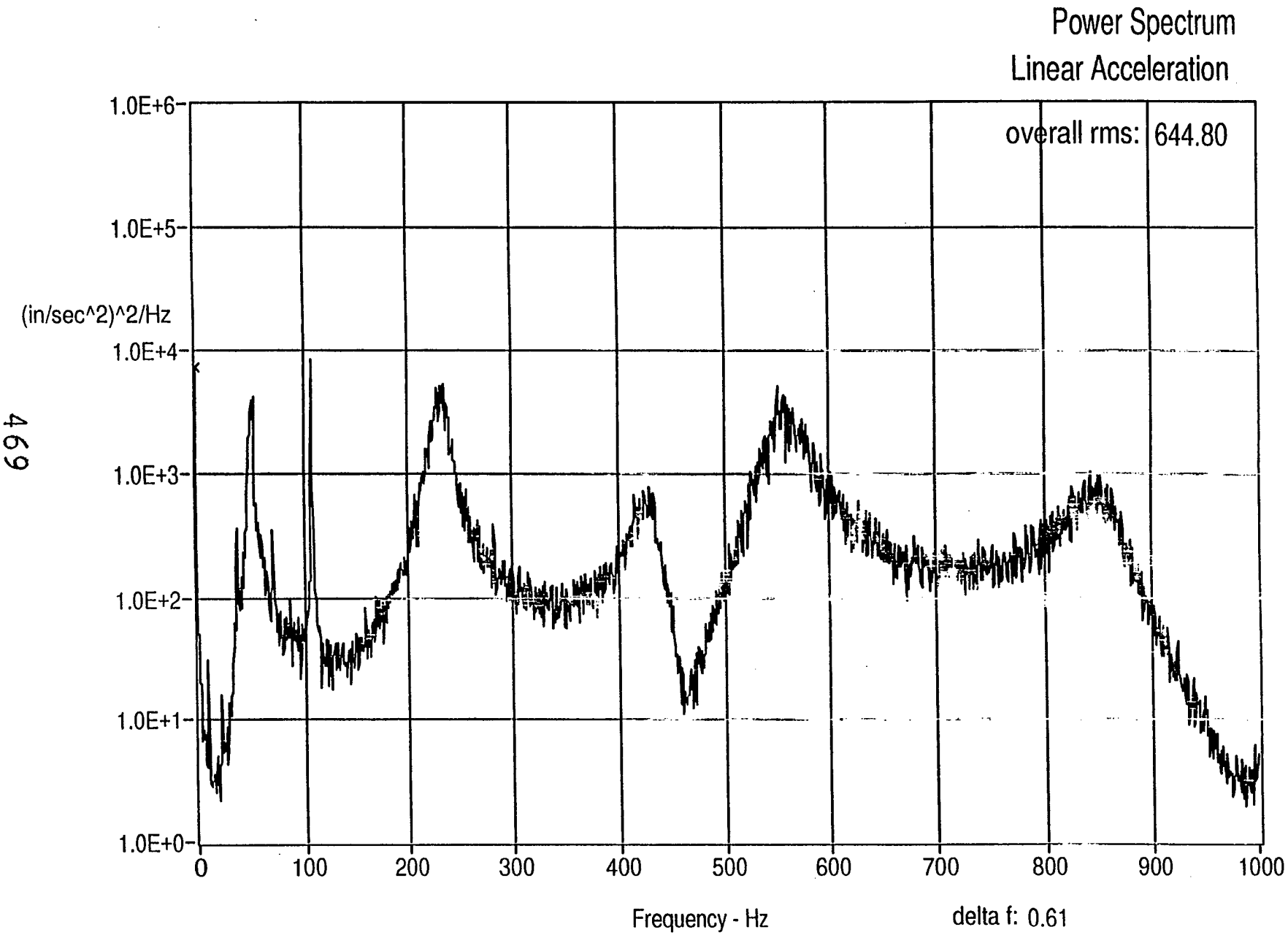
F-15 TPN_2872: alpha=24 beta=-4 bp=0



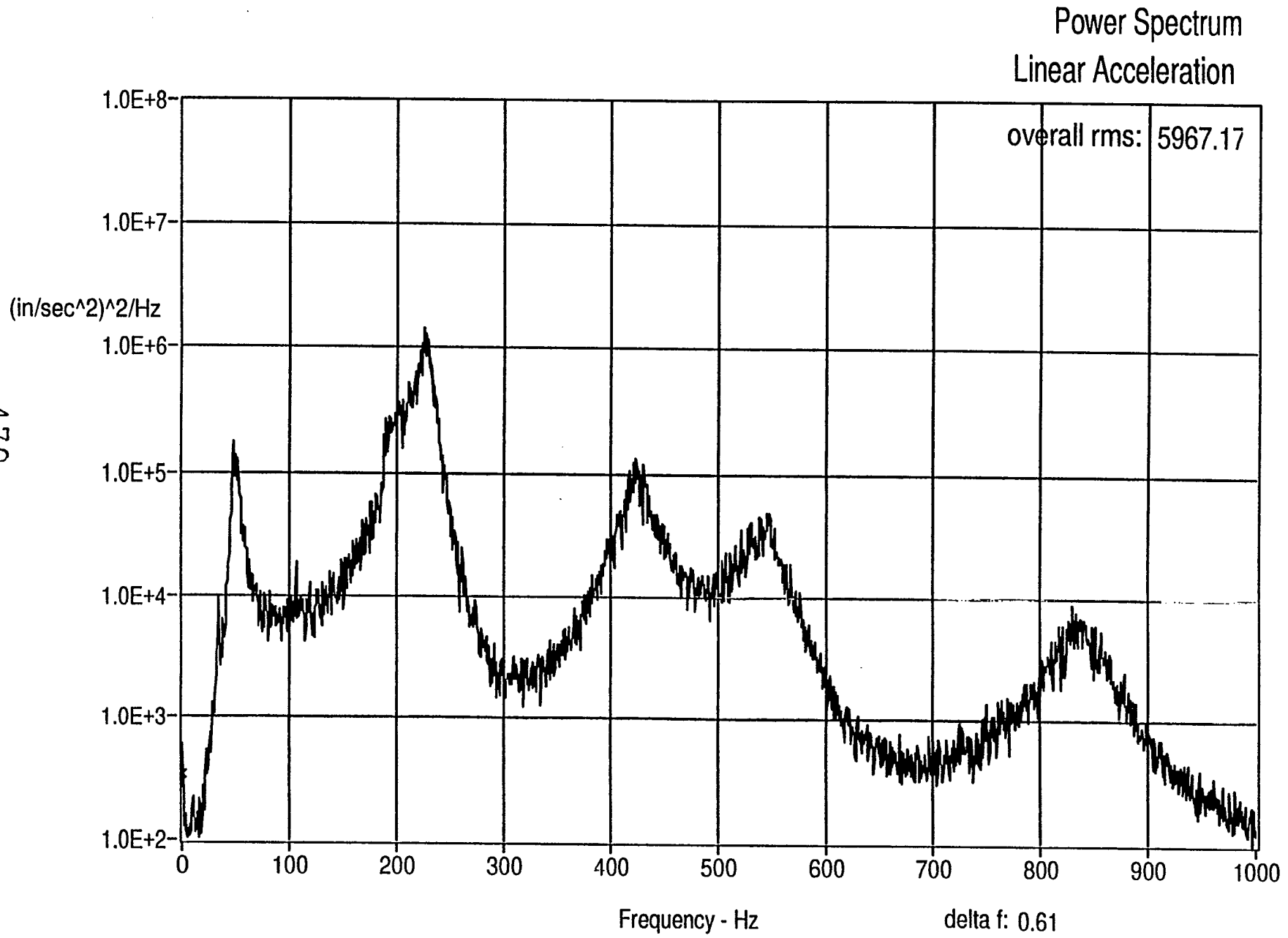
F-15 TPN_2874: alpha=32 beta=-4 bp=0



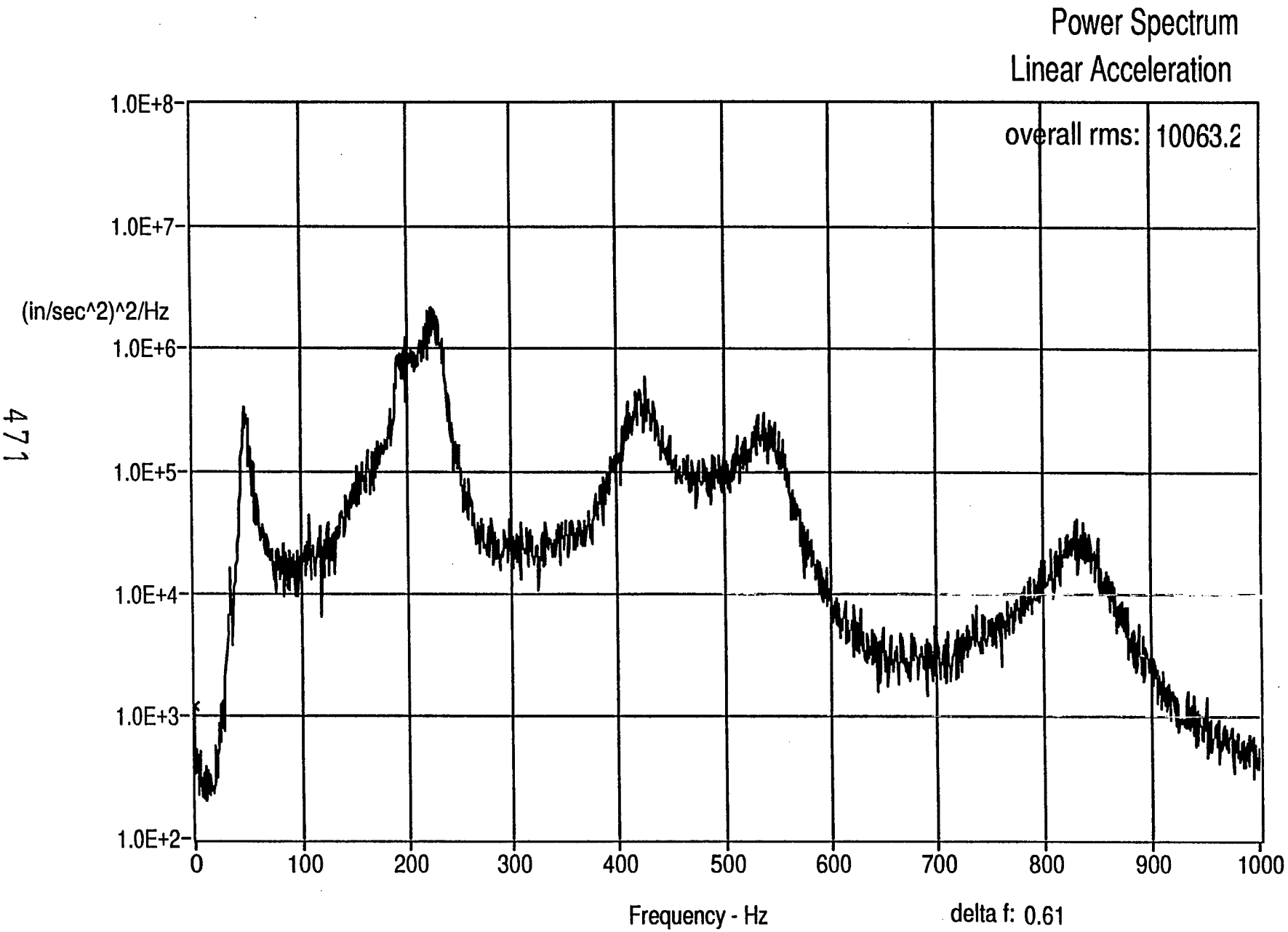
F-15 TPN_2844: alpha=8 beta=0 bp=0



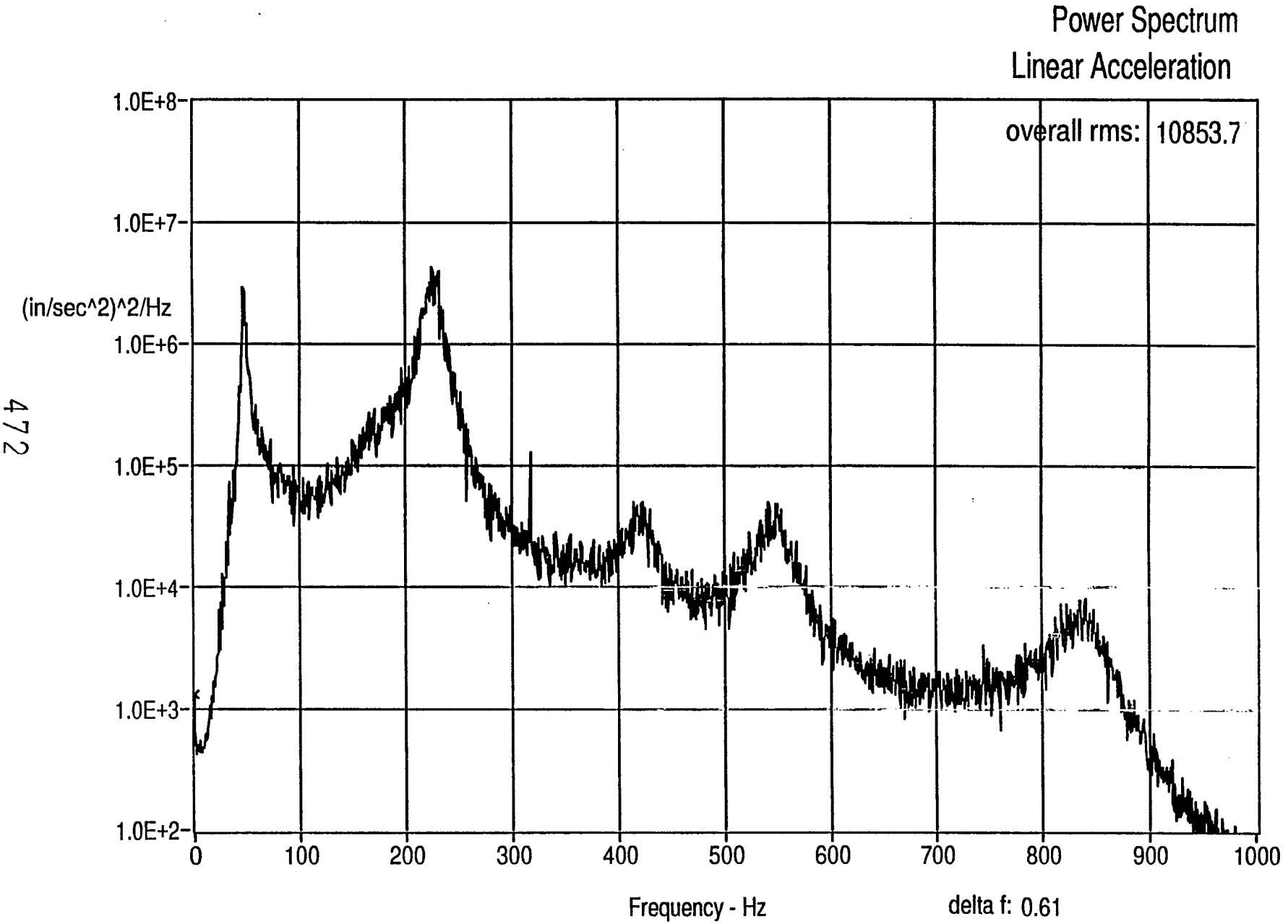
F-15 TPN_2850: alpha=20 beta=0 bp=0



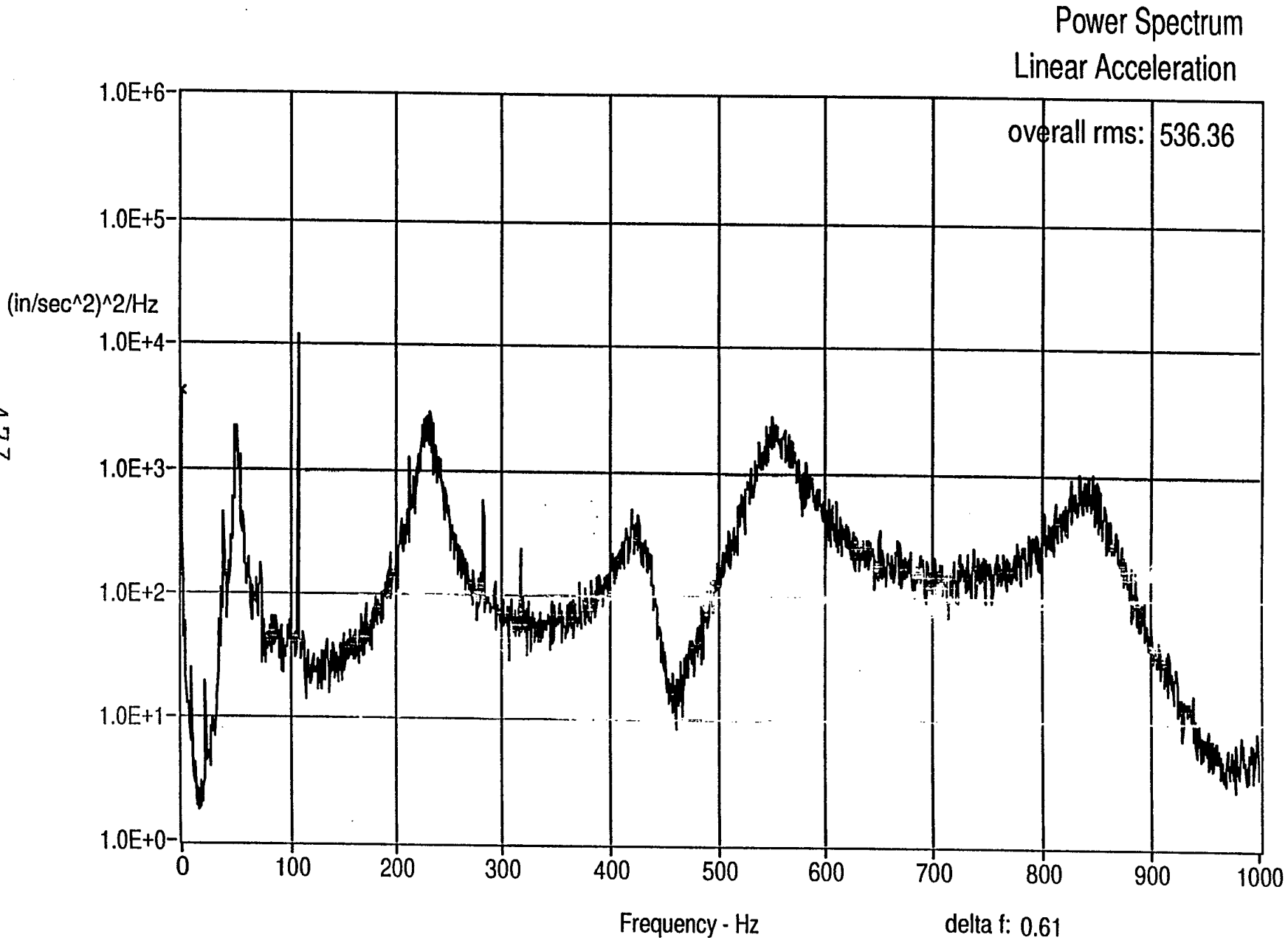
F-15 TPN_2852: alpha=24 beta=0 bp=0



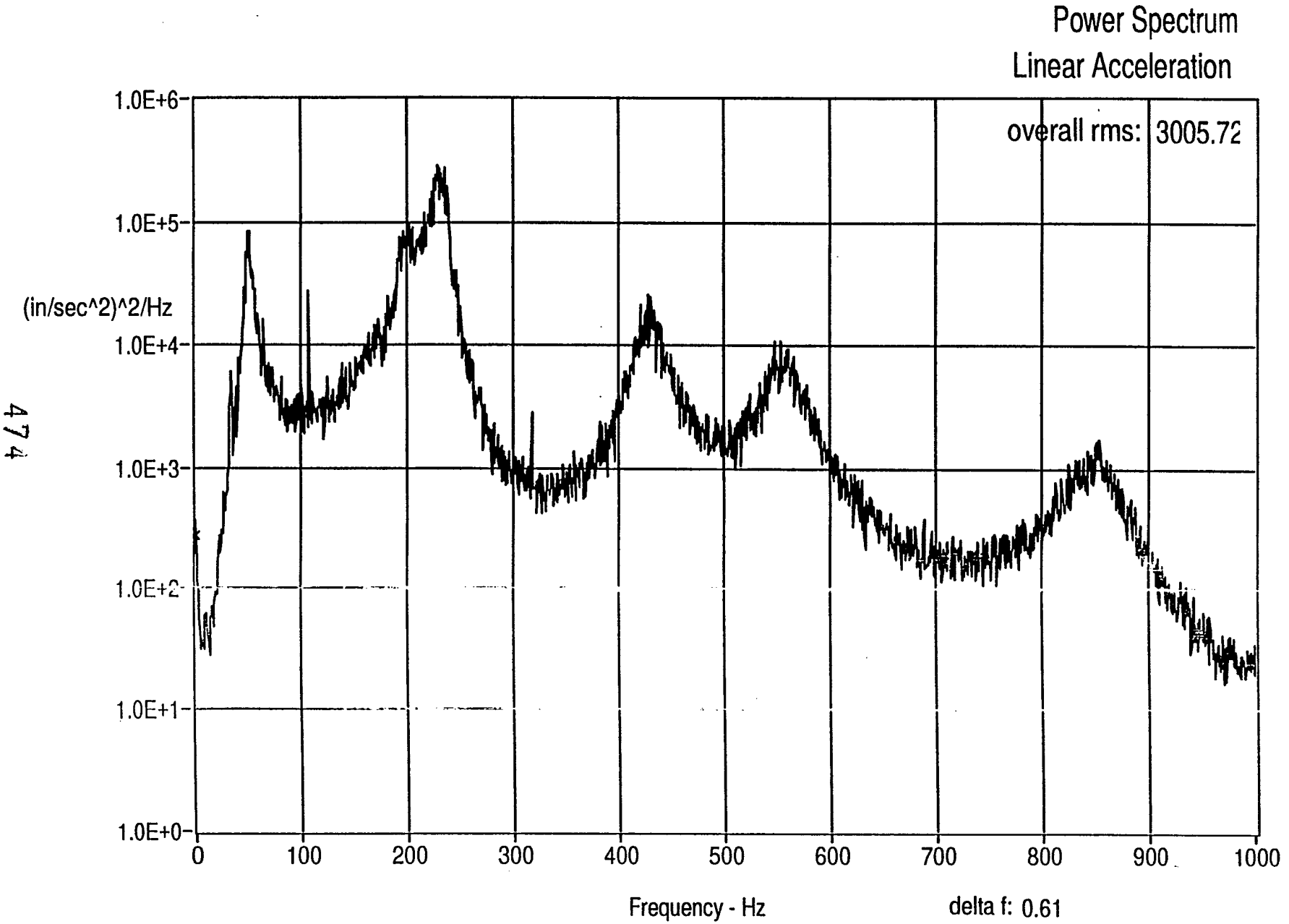
F-15 TPN_2854: alpha=32 beta=0 bp=0



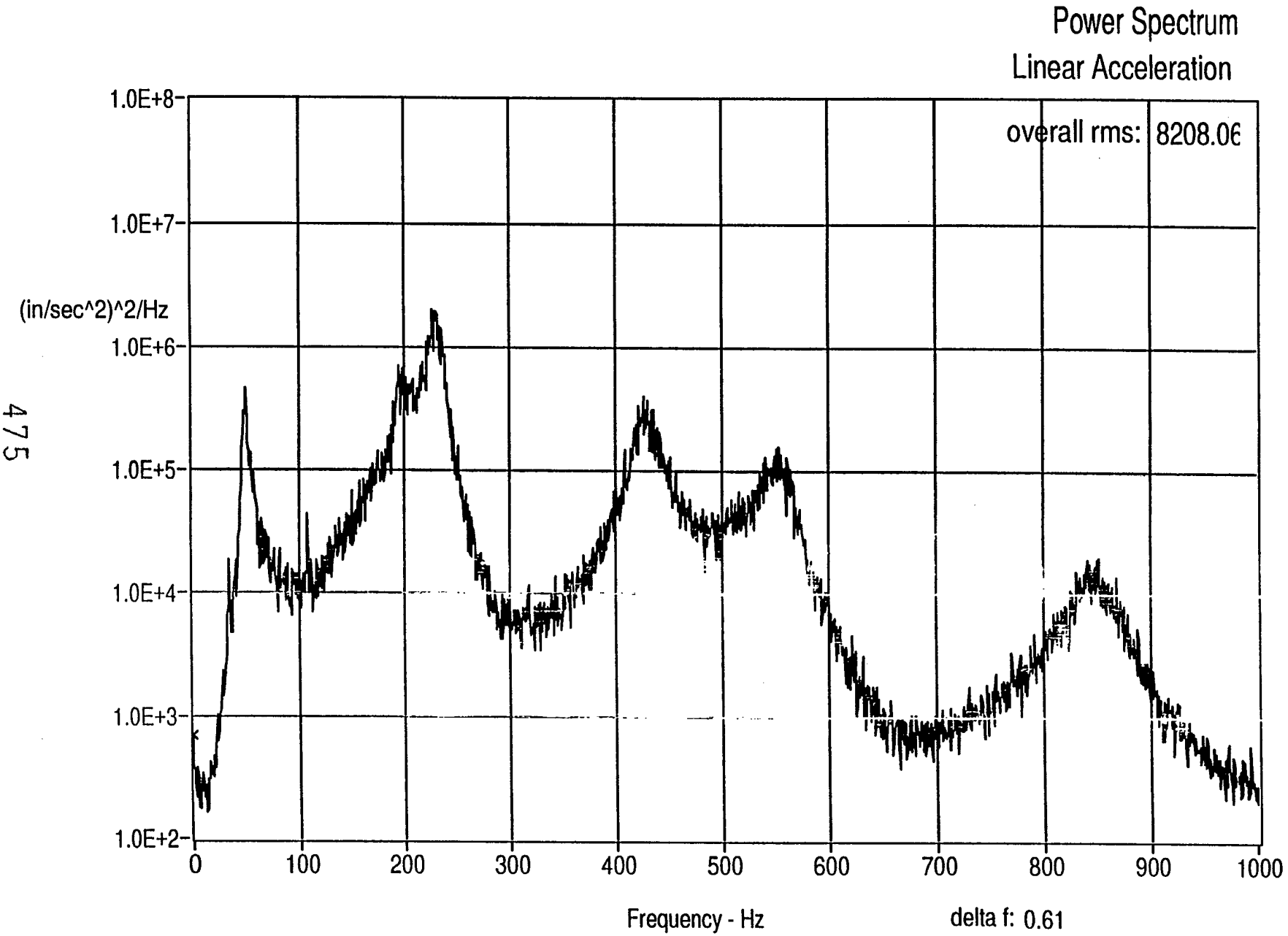
F-15 TPN_2918: alpha=8 beta=4 bp=0



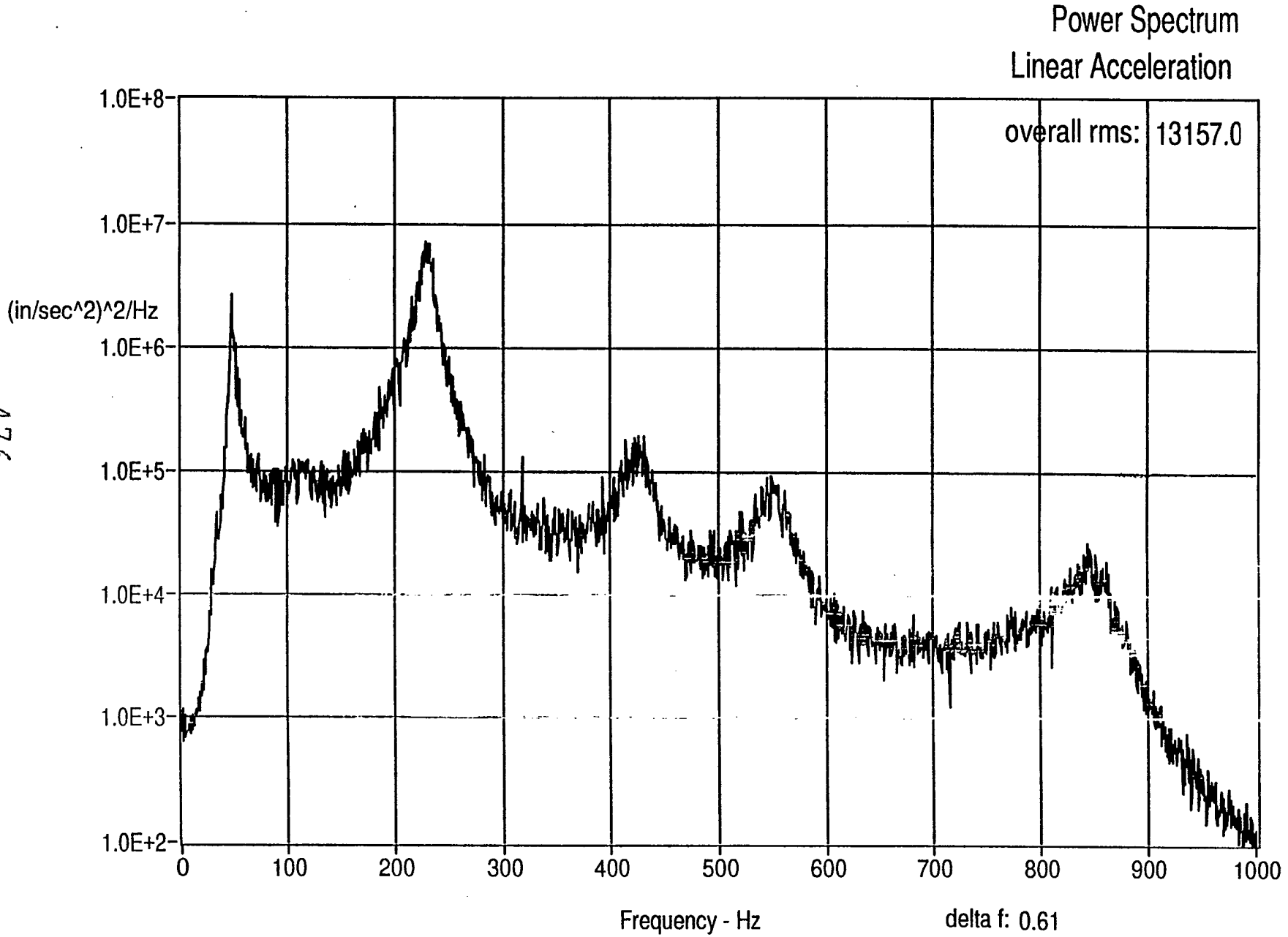
F-15 TPN_2924: alpha=20 beta=4 bp=0



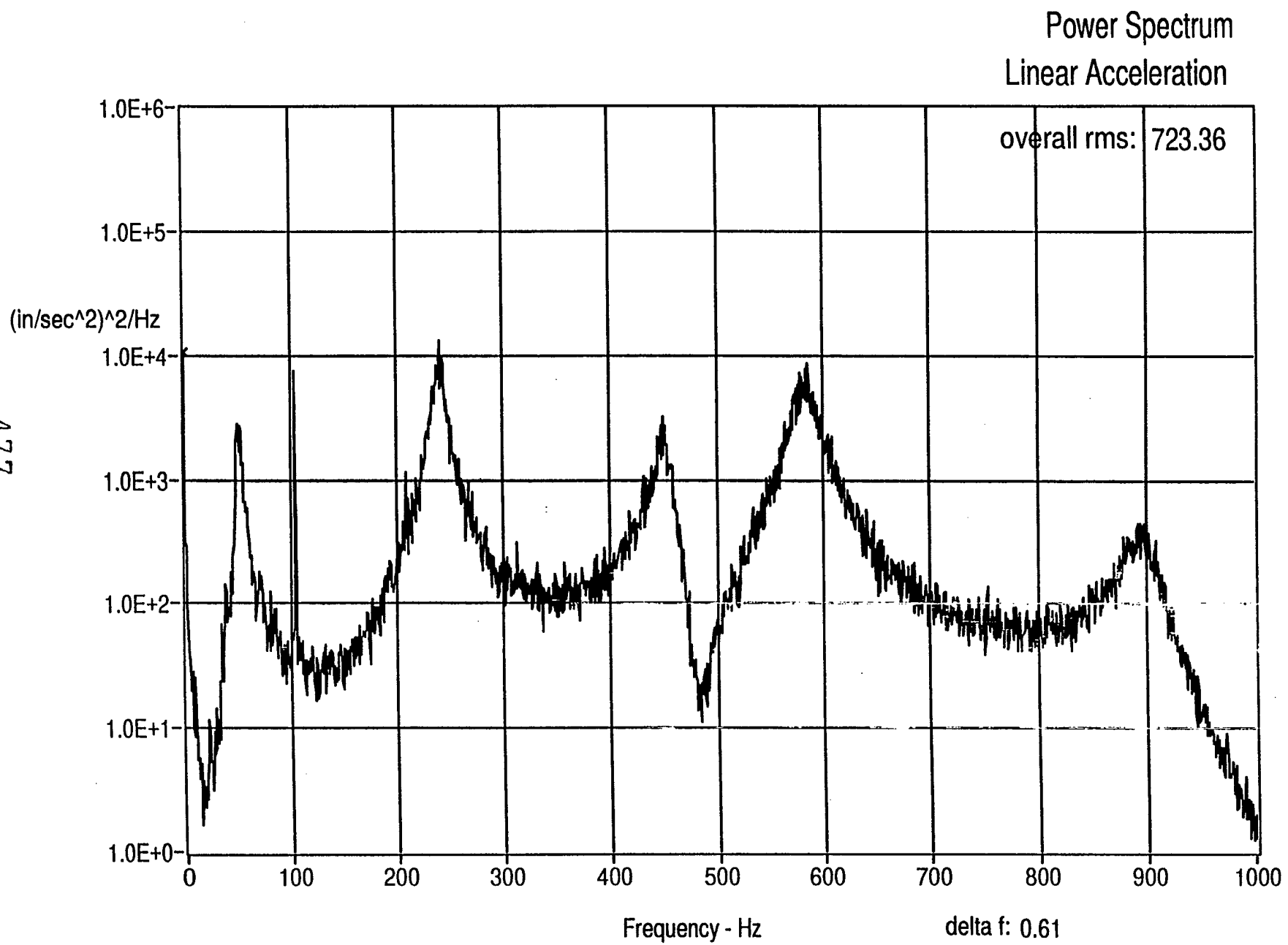
F-15 TPN_2926: alpha=24 beta=4 bp=0



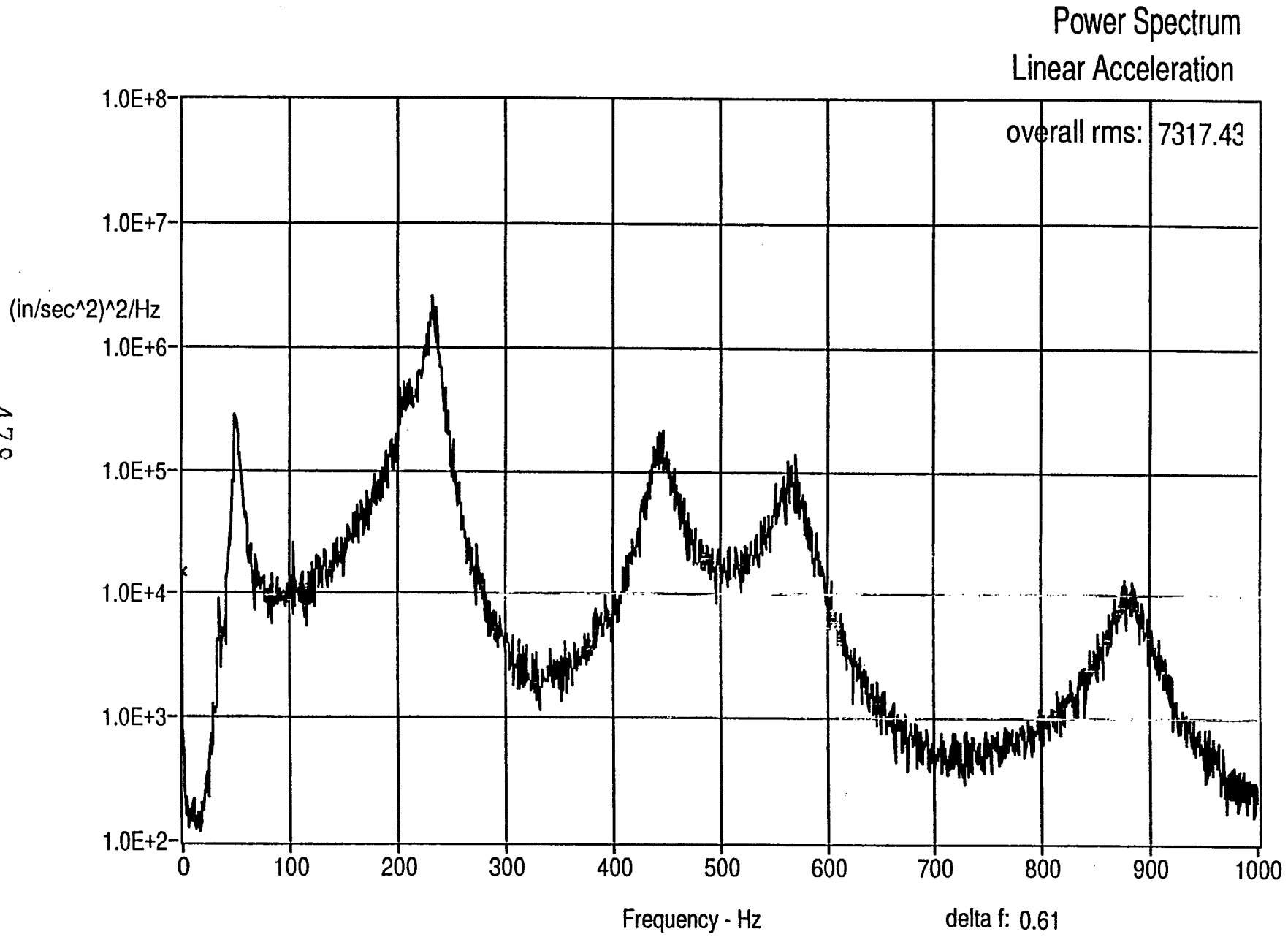
F-15 TPN_2928: alpha=32 beta=4 bp=0



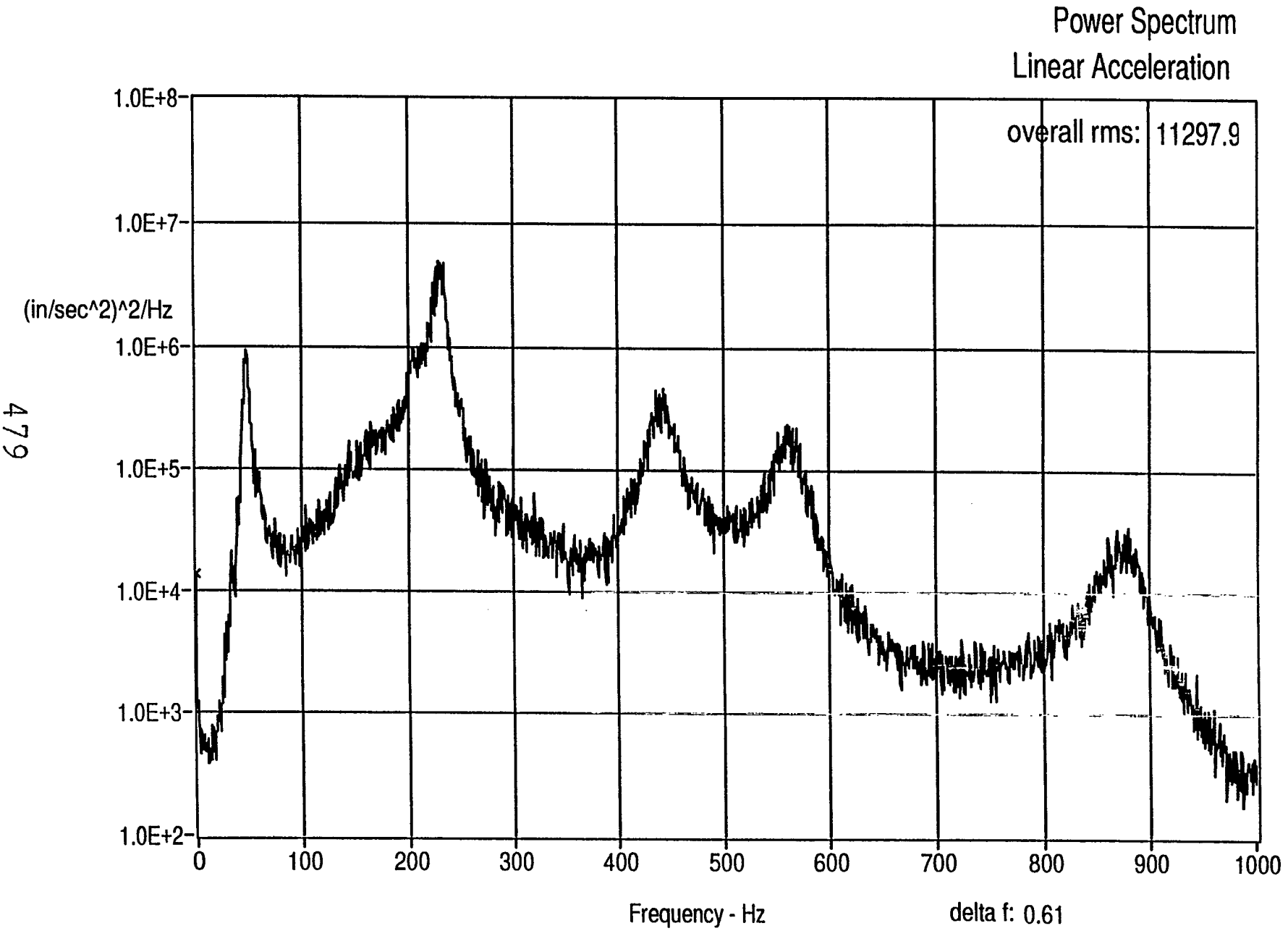
F-15 TPN_3369: alpha=8 beta=-4 bp=45



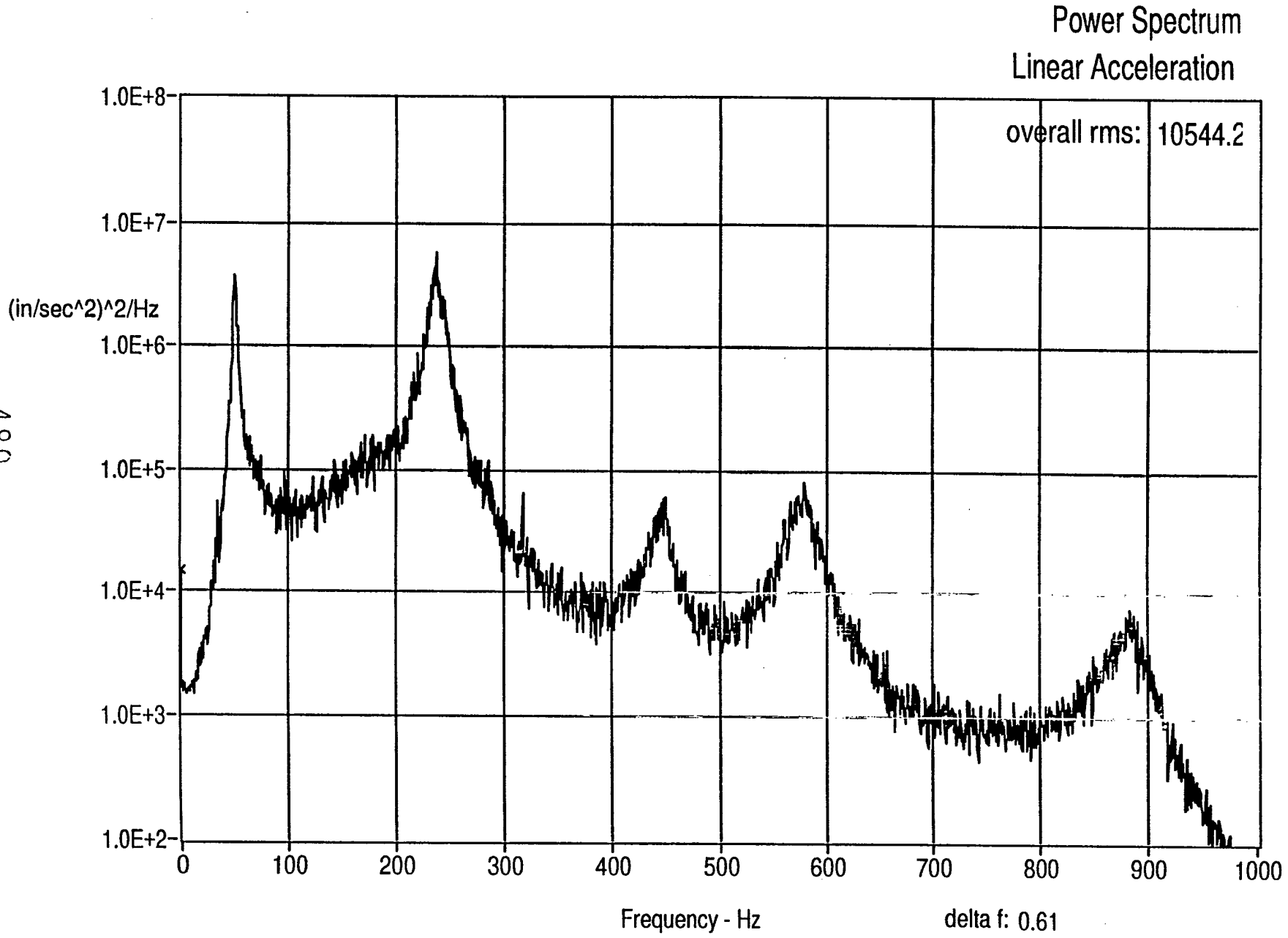
F-15 TPN_3375: alpha=20 beta=-4 bp=45



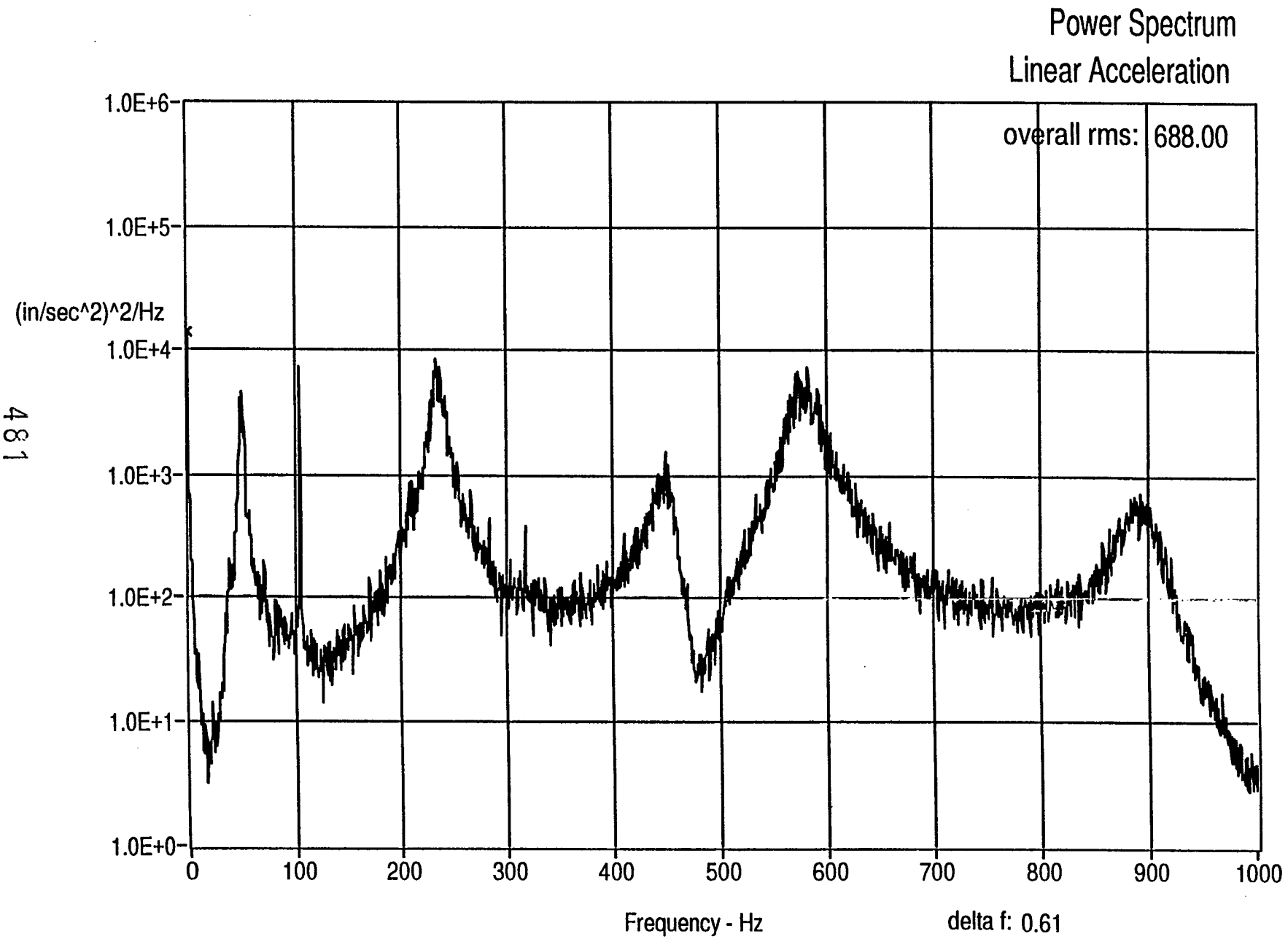
F-15 TPN_3377: alpha=24 beta=-4 bp=45



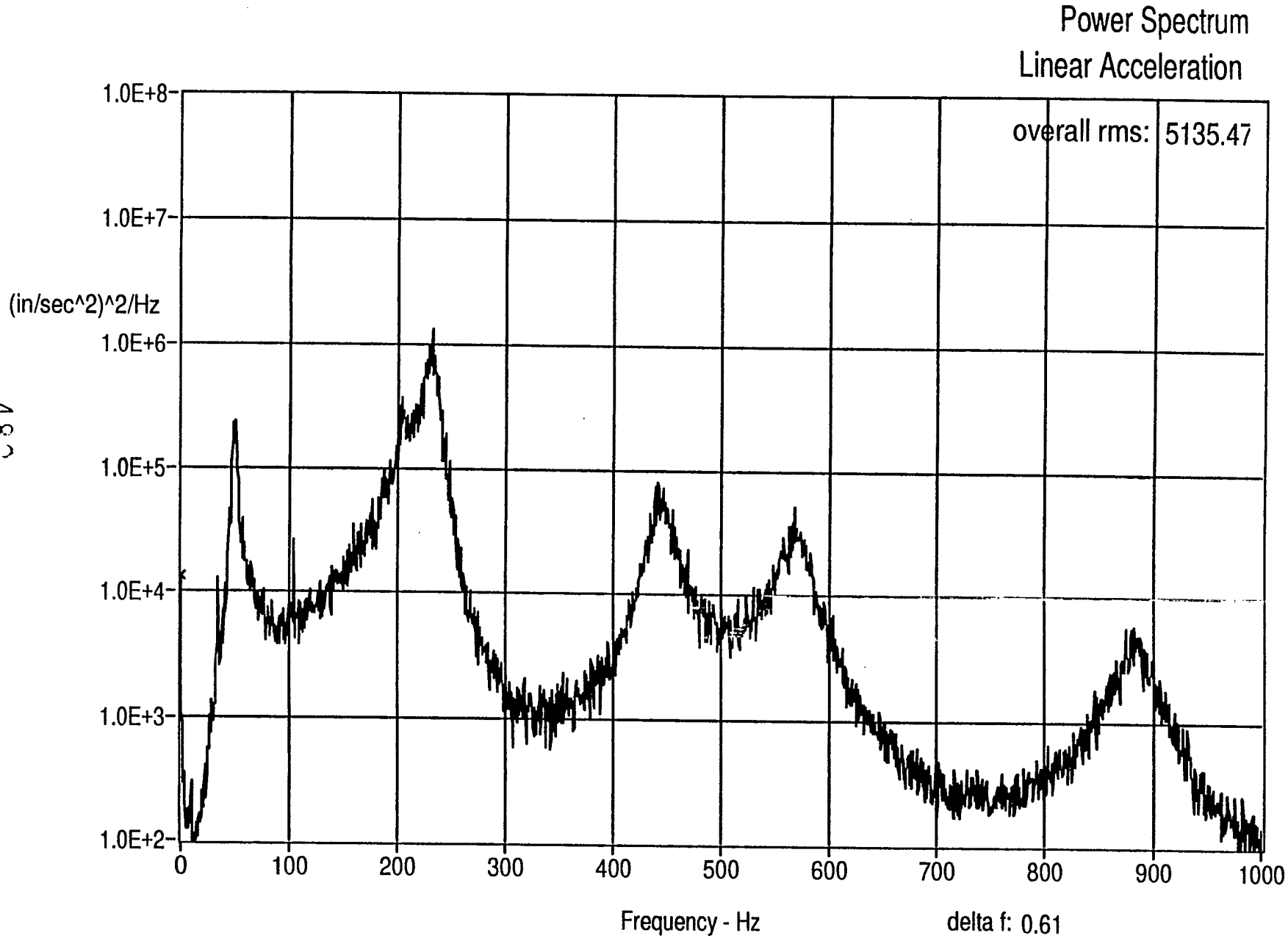
F-15 TPN_3379: alpha=32 beta=-4 bp=45



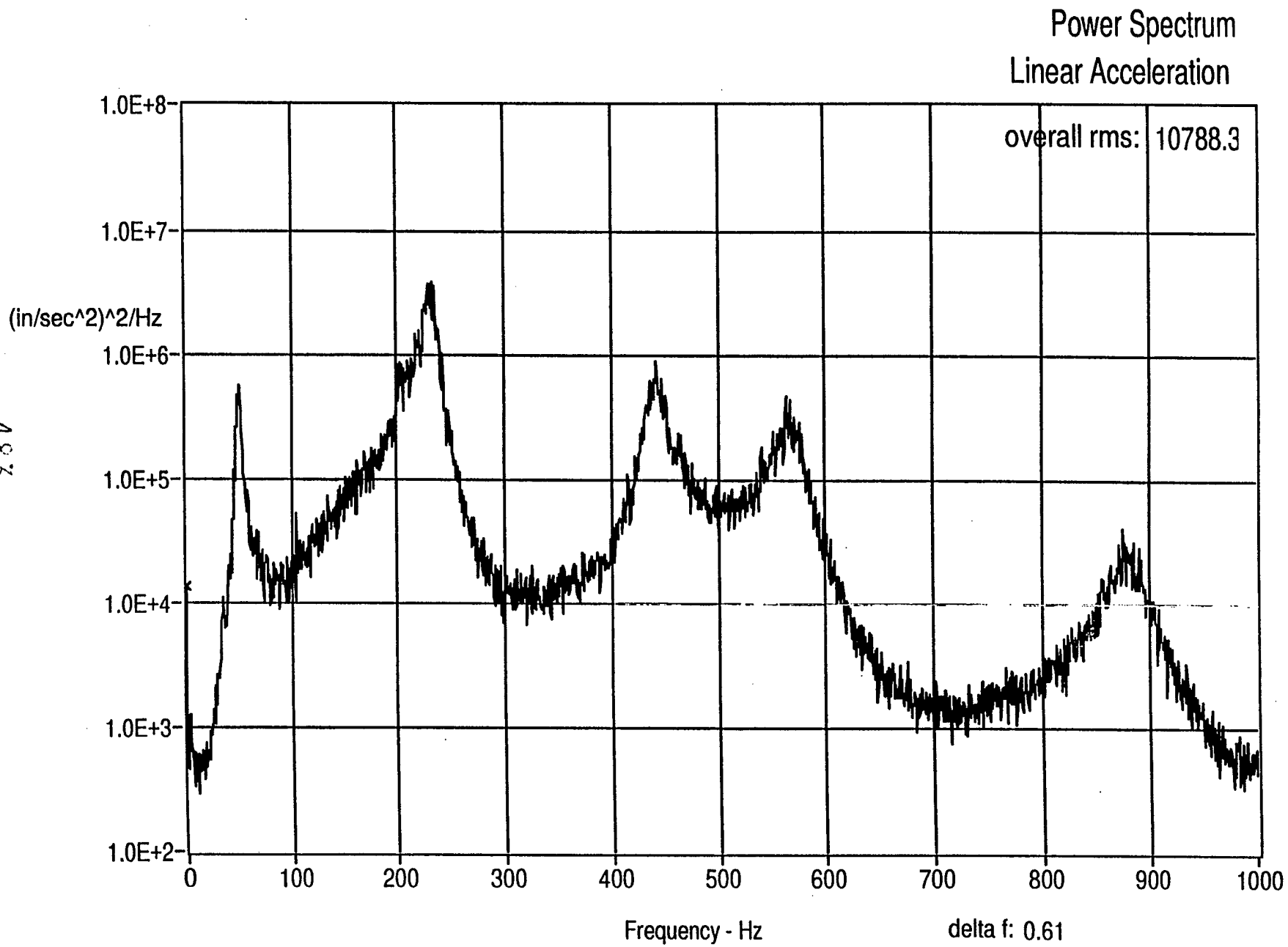
F-15 TPN_3333: alpha=8 beta=0 bp=45



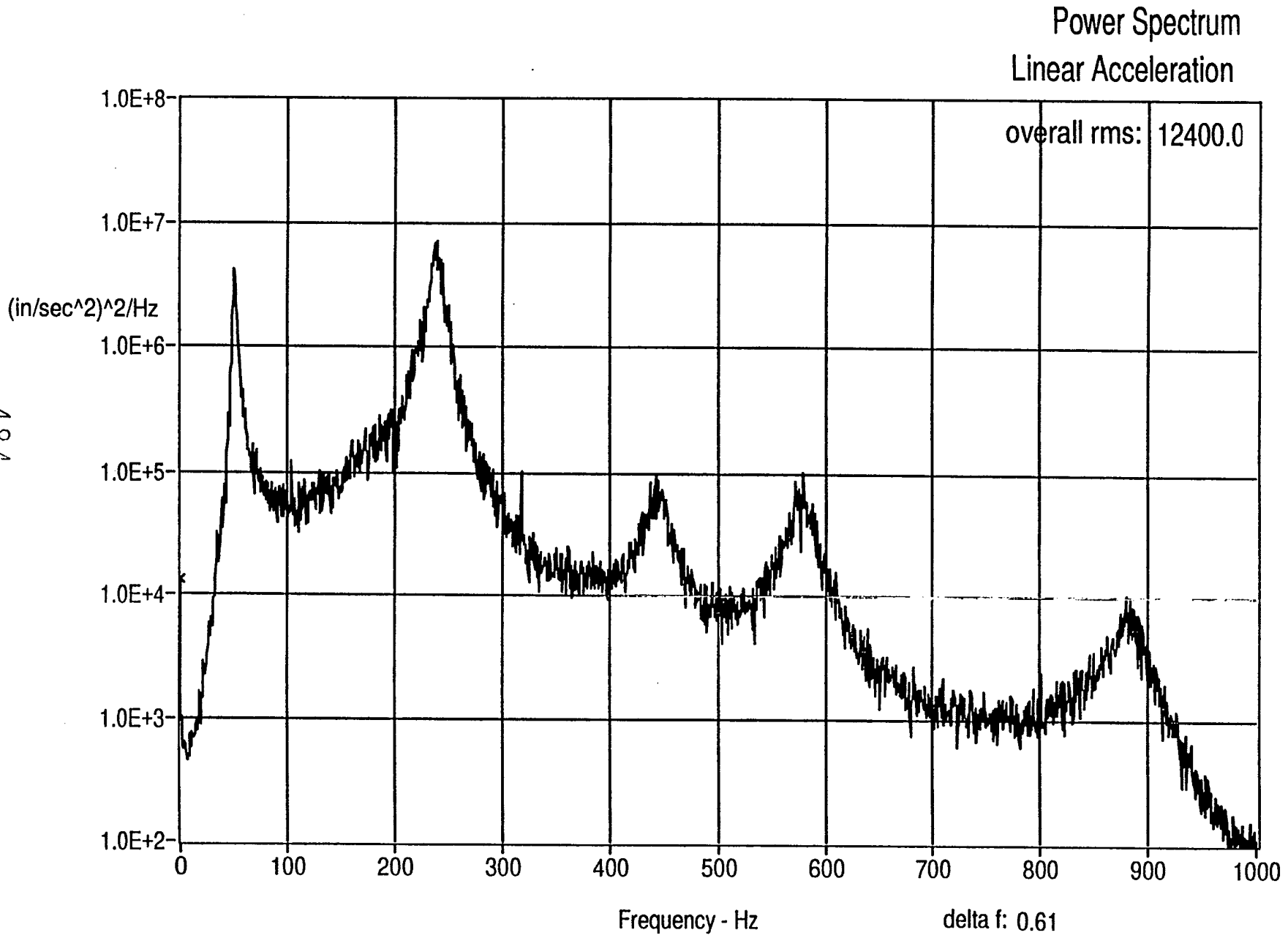
F-15 TPN_3339: alpha=20 beta=0 bp=45



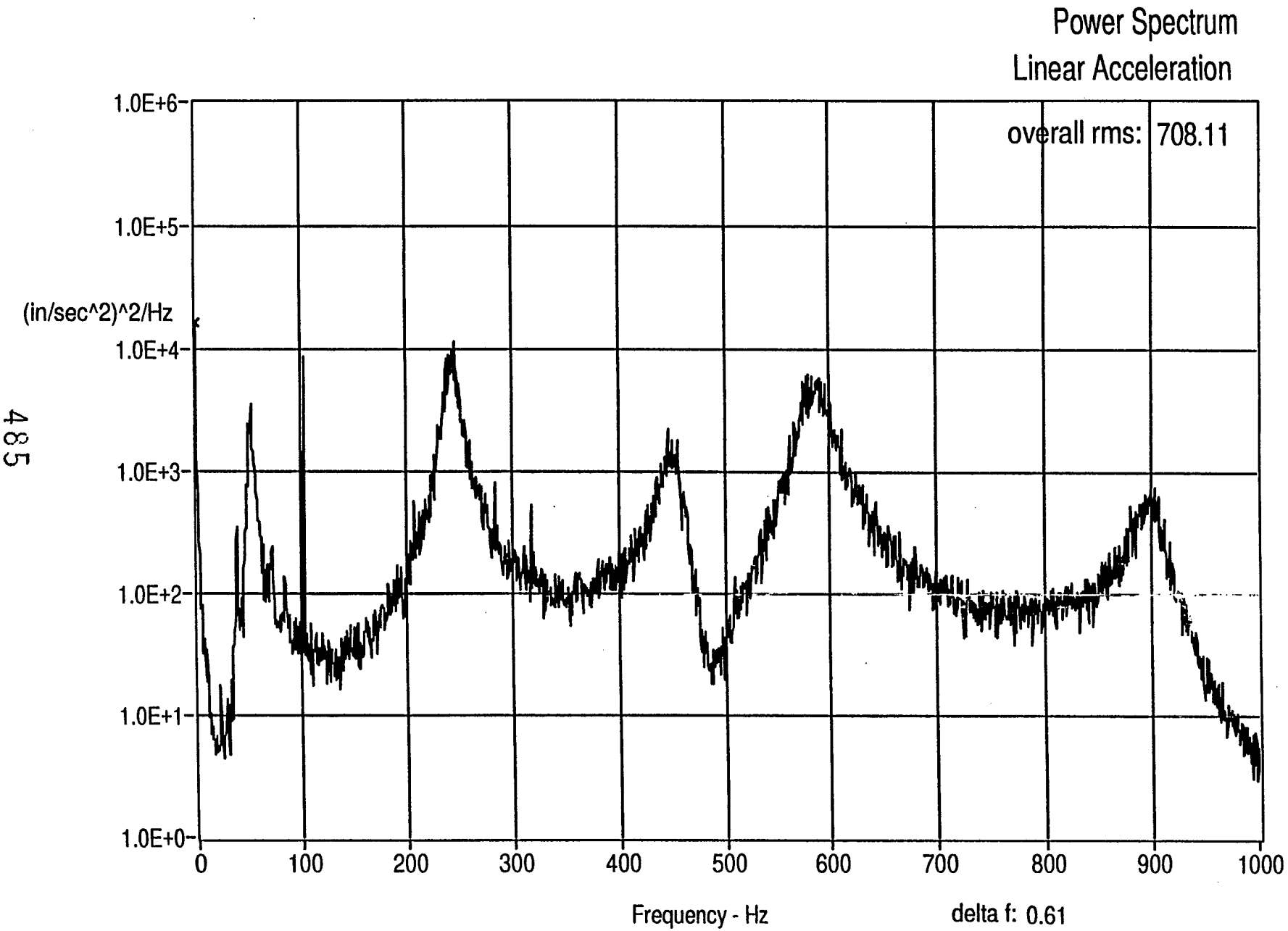
F-15 TPN_3341: alpha=24 beta=0 bp=45



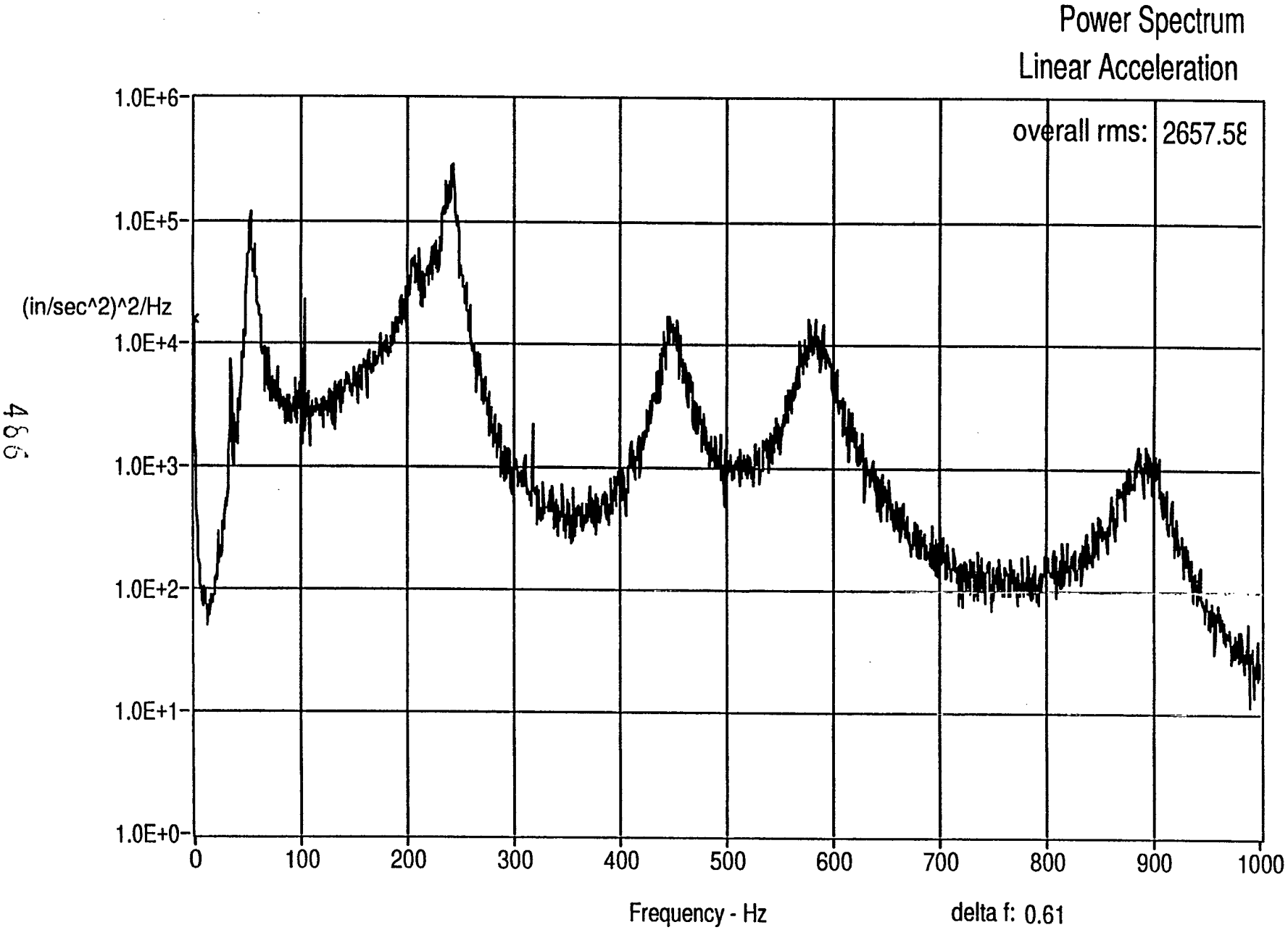
F-15 TPN_3343: alpha=32 beta=0 bp=45



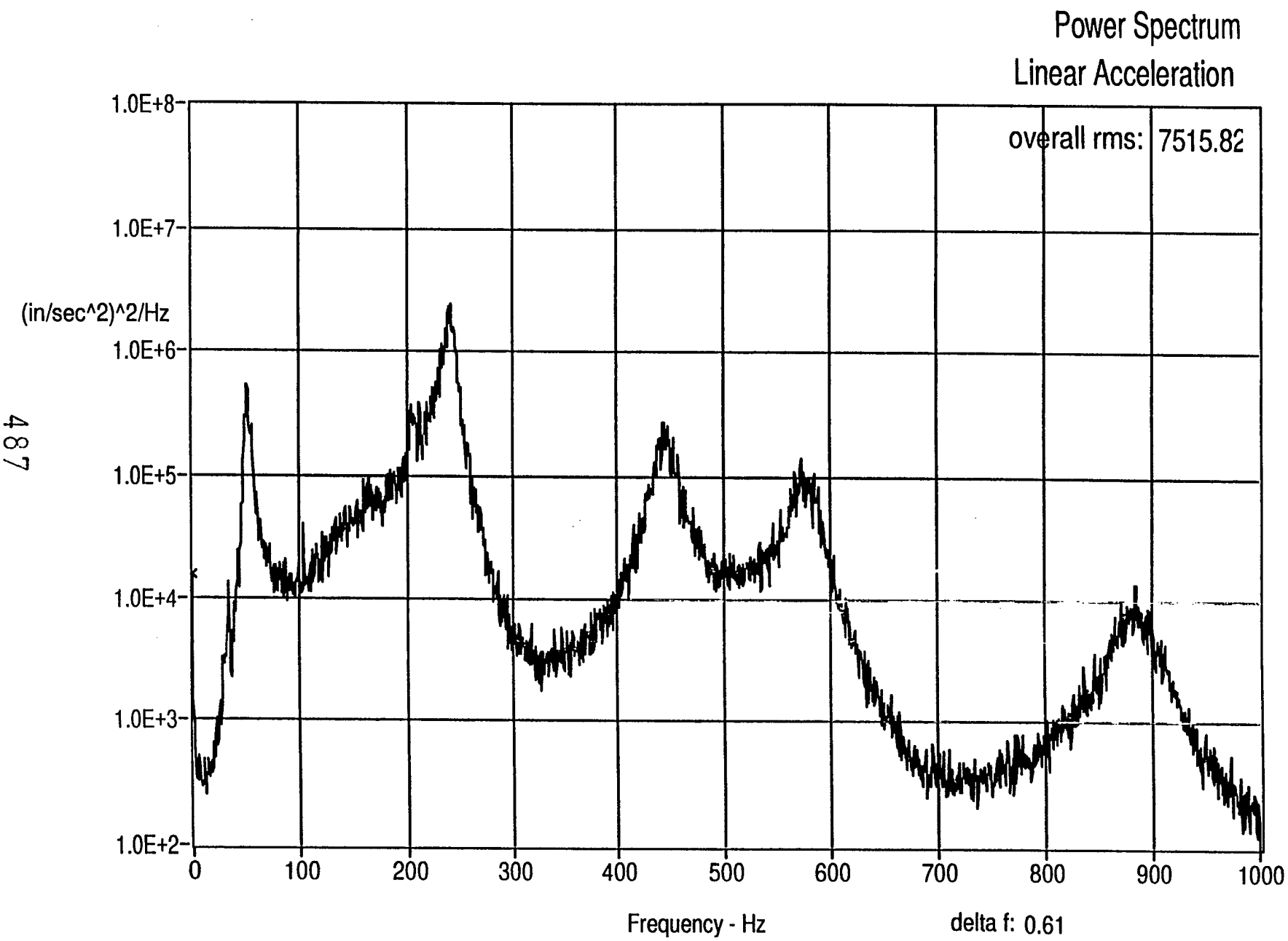
F-15 TPN_3351: alpha=8 beta=4 bp=45



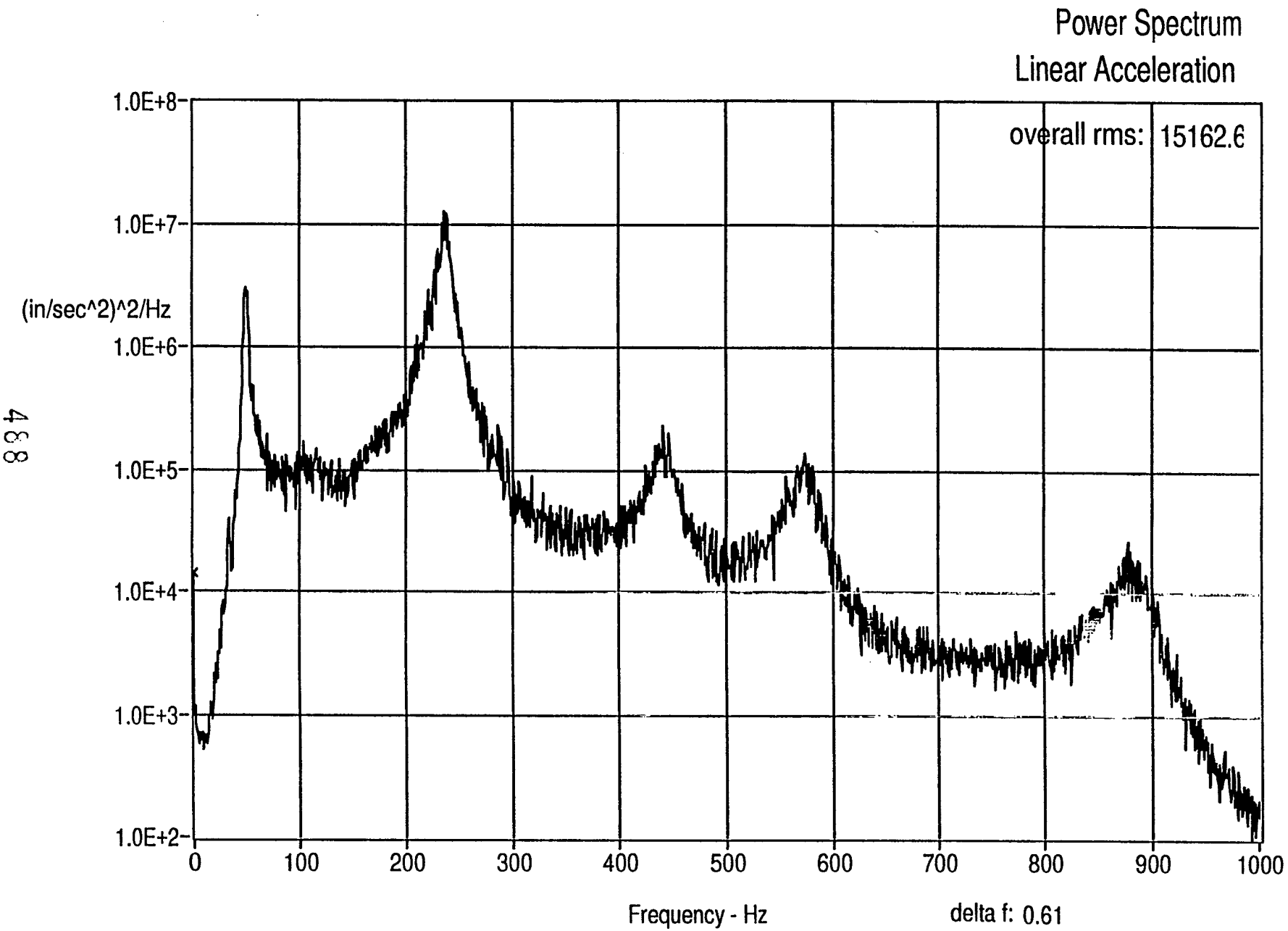
F-15 TPN_3357: alpha=20 beta=4 bp=45



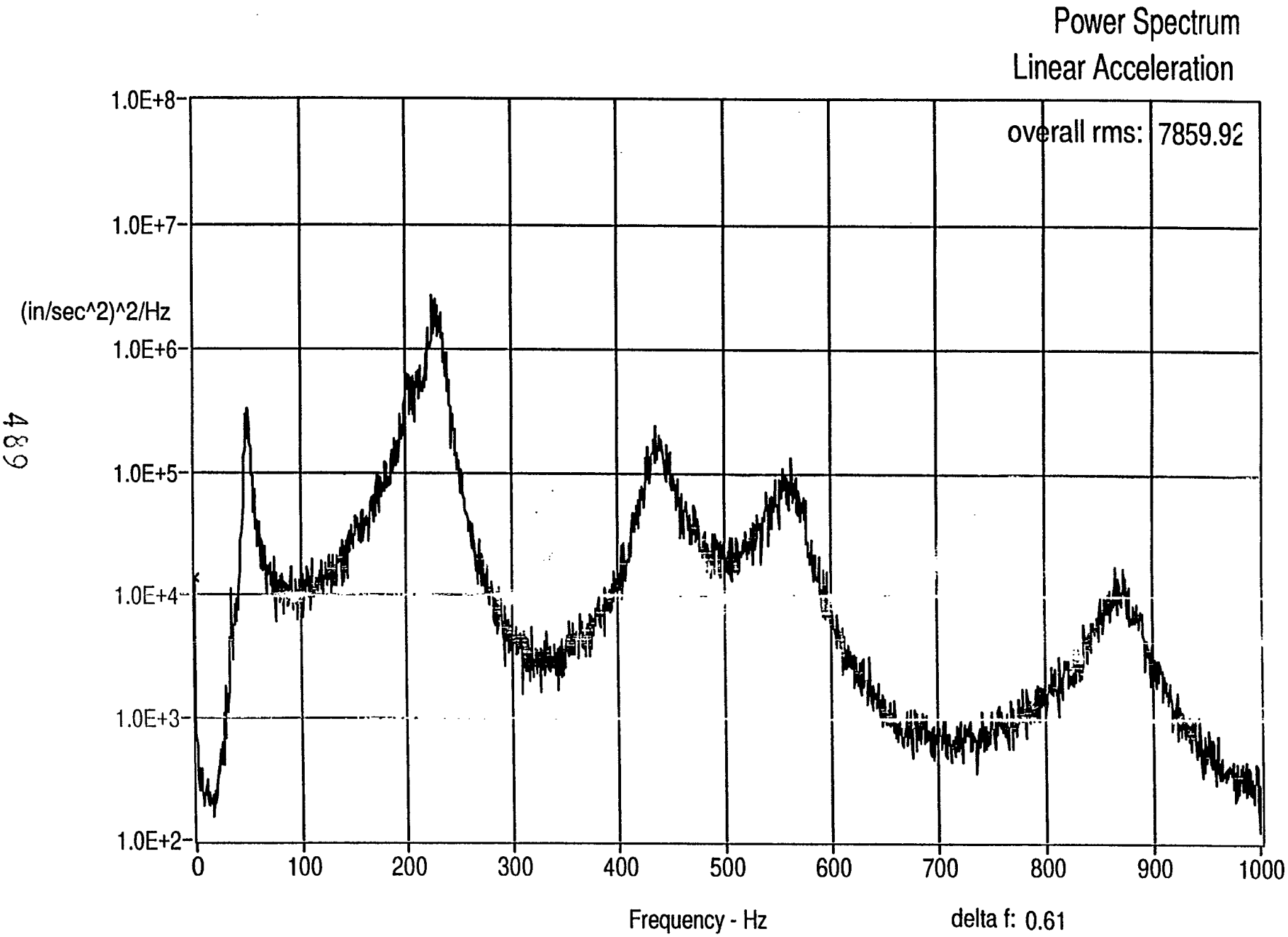
F-15 TPN_3359: alpha=24 beta=4 bp=45



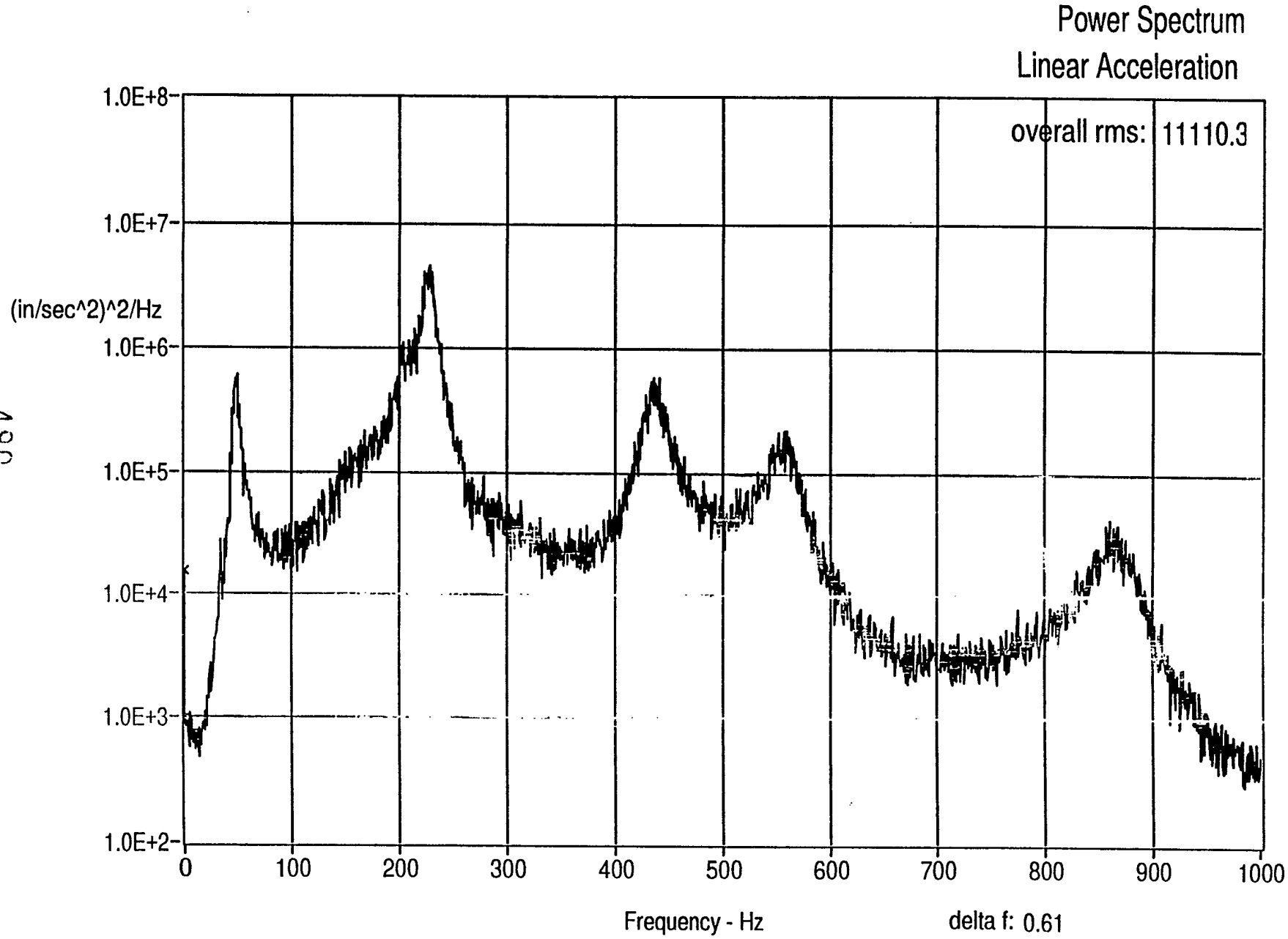
F-15 TPN_3361: alpha=32 beta=4 bp=45



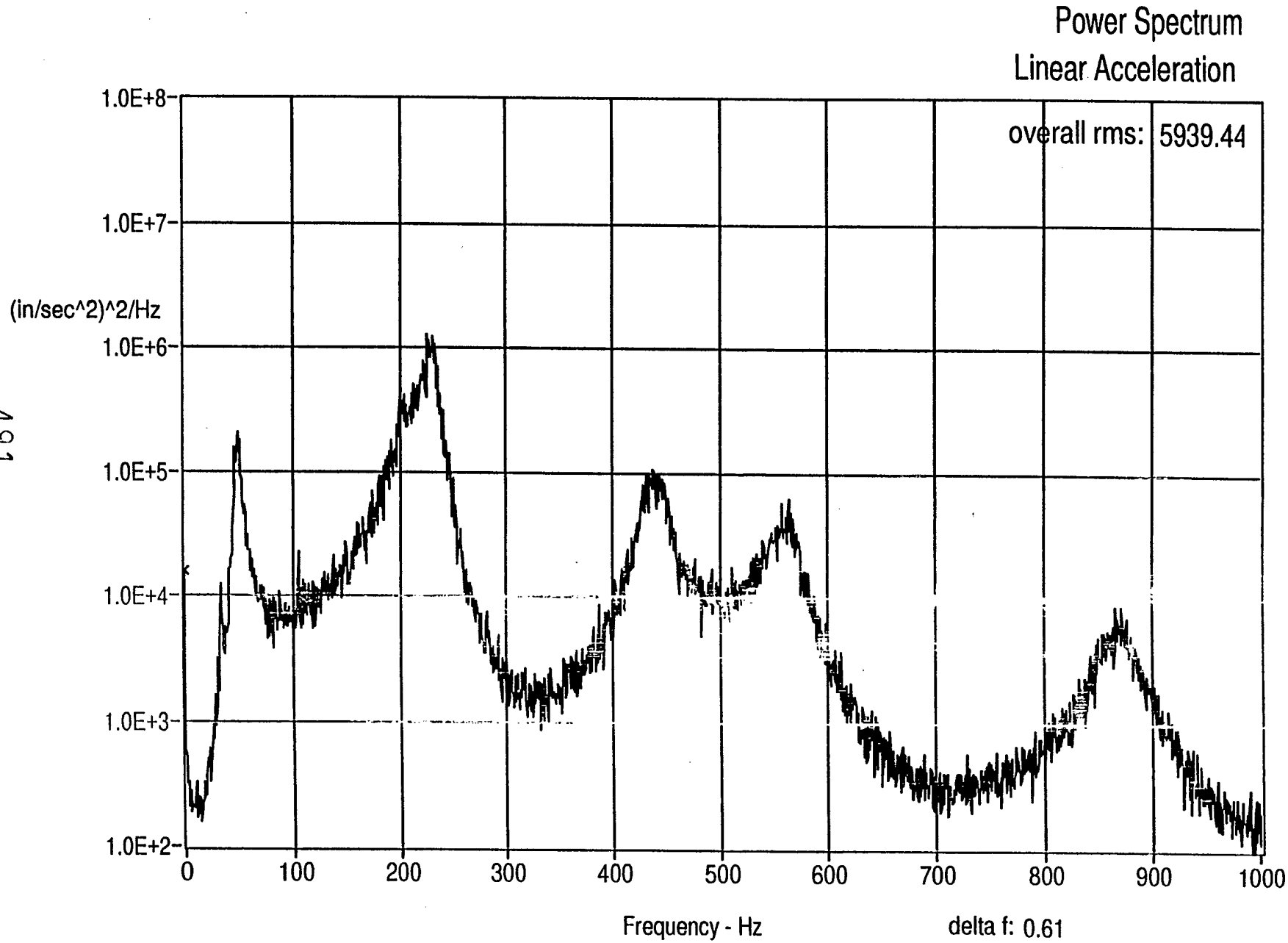
F-15 TPN_3034: alpha=20 beta=-4 bp=65



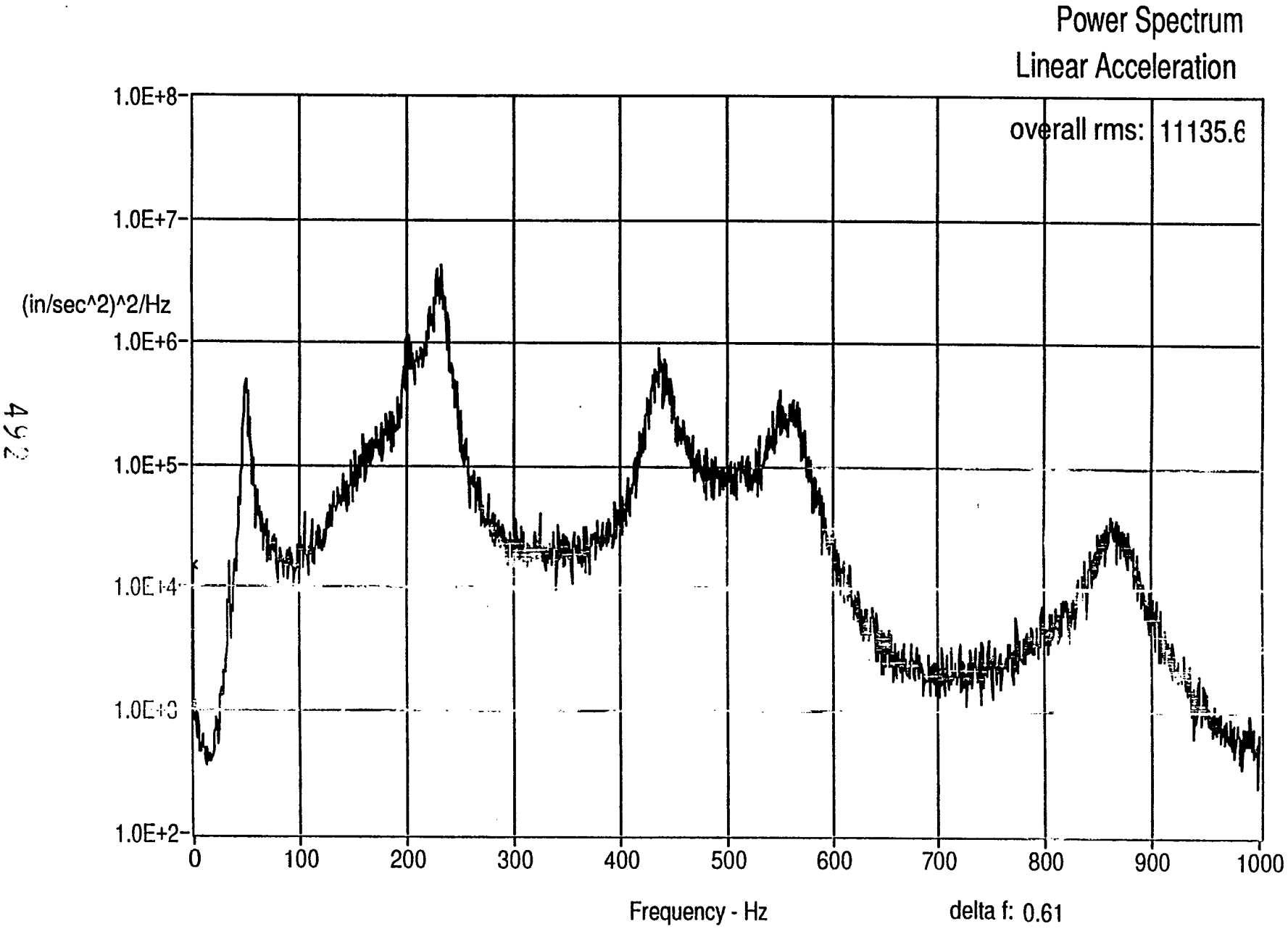
F-15 TPN_3036: alpha=24 beta=-4 bp=65



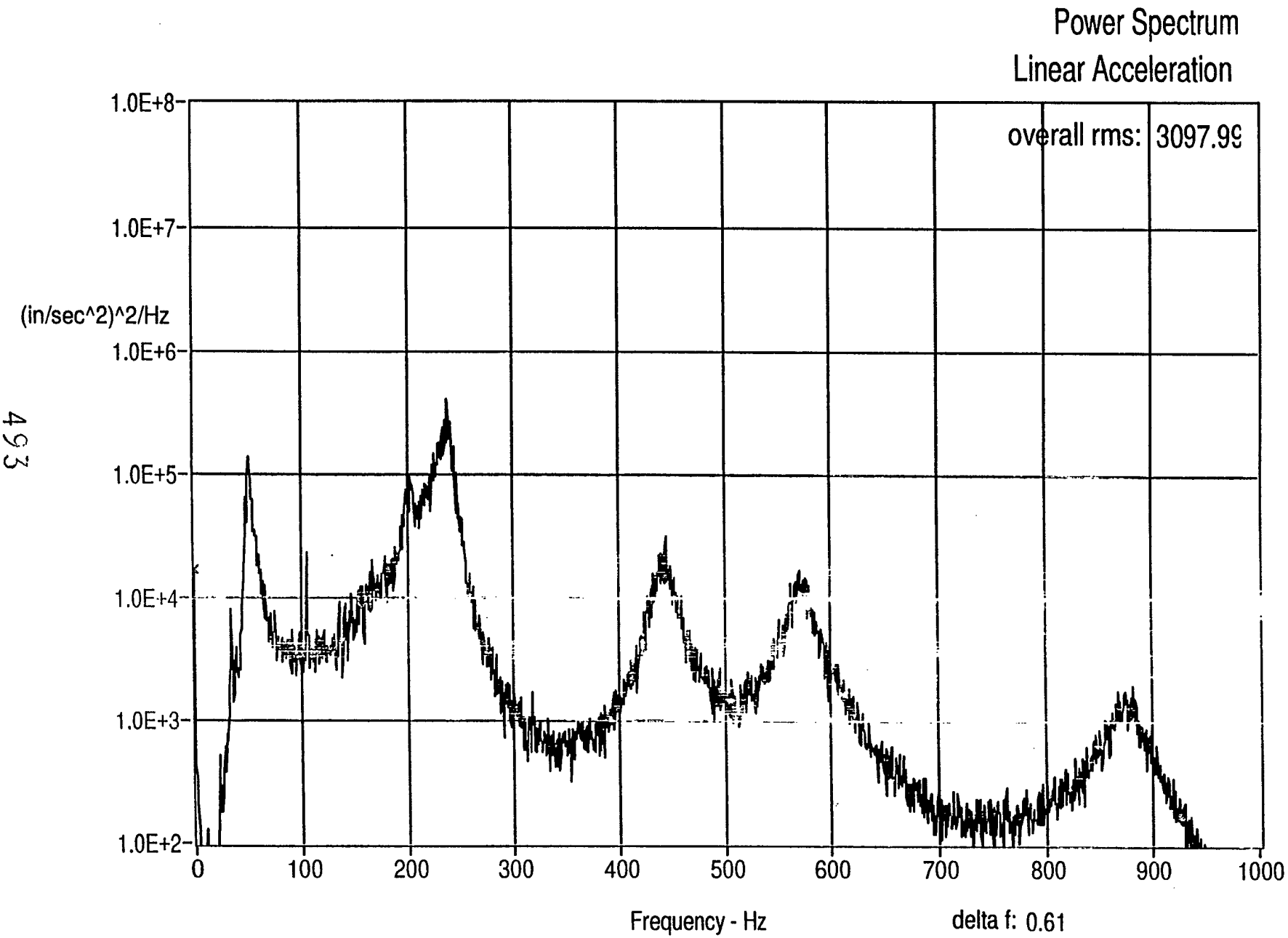
F-15 TPN_3040: alpha=20 beta=0 bp=65



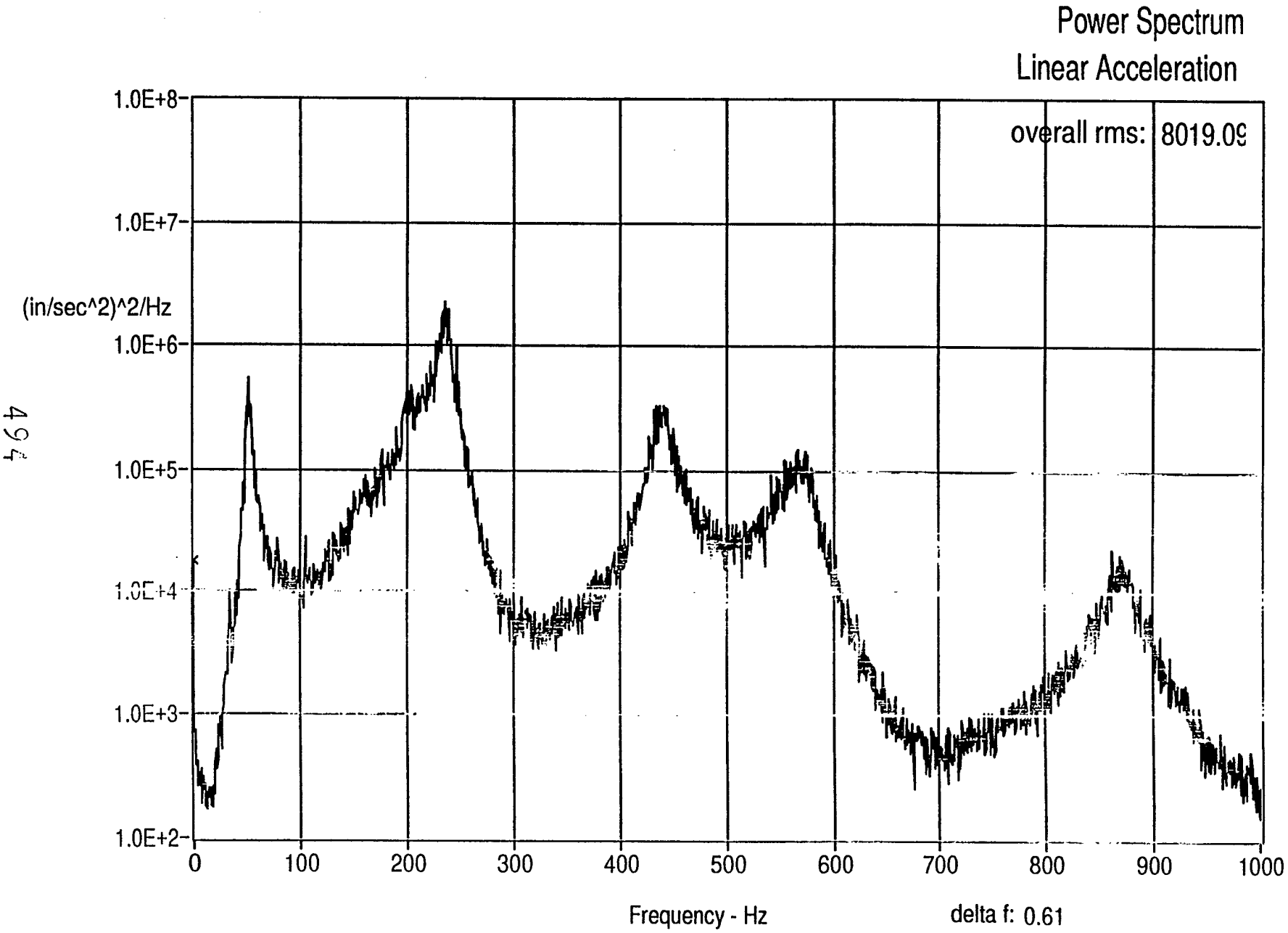
F-15 TPN_3042: alpha=24 beta=0 bp=65



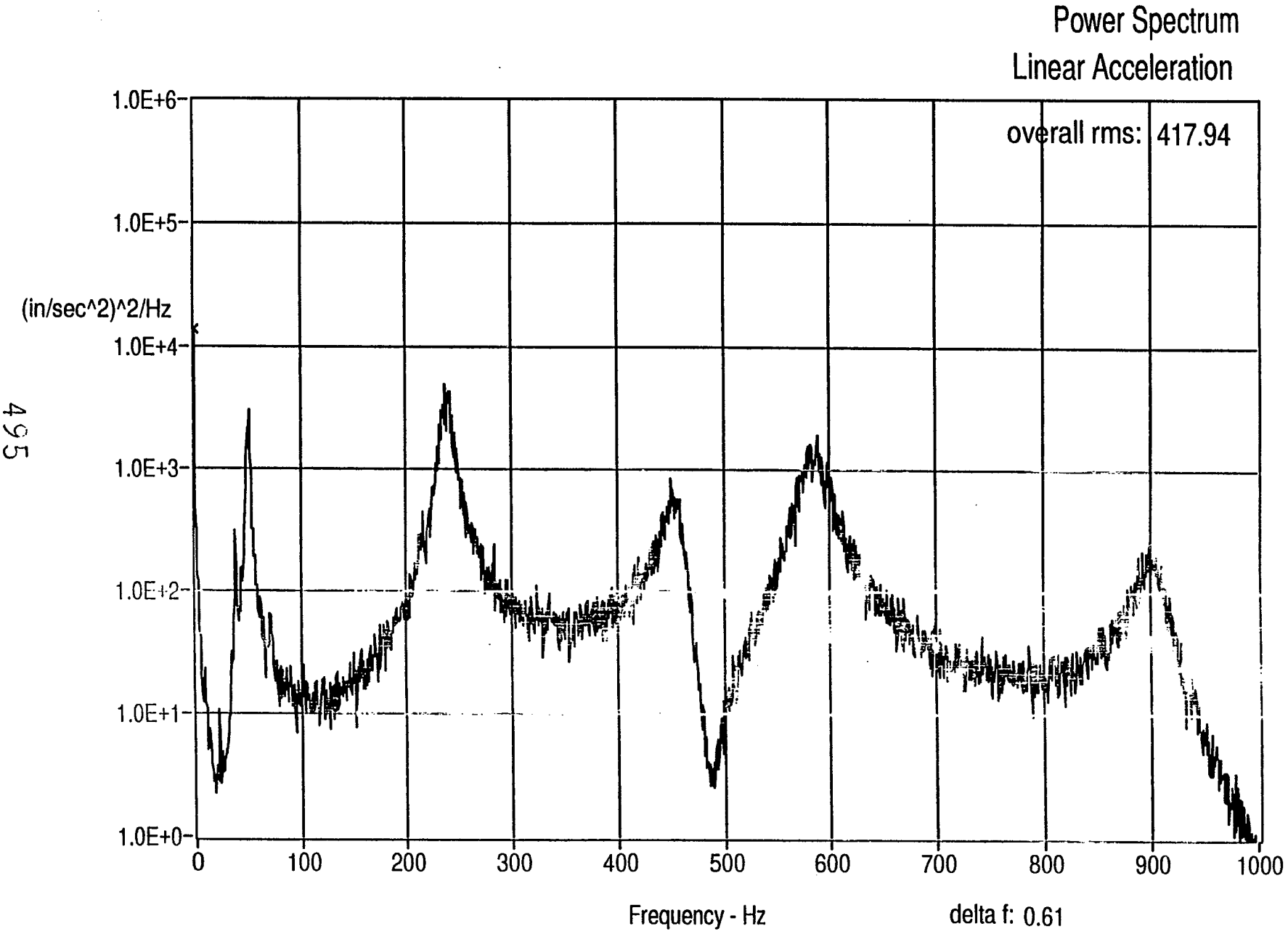
F-15 TPN_3046: alpha=20 beta=4 bp=65



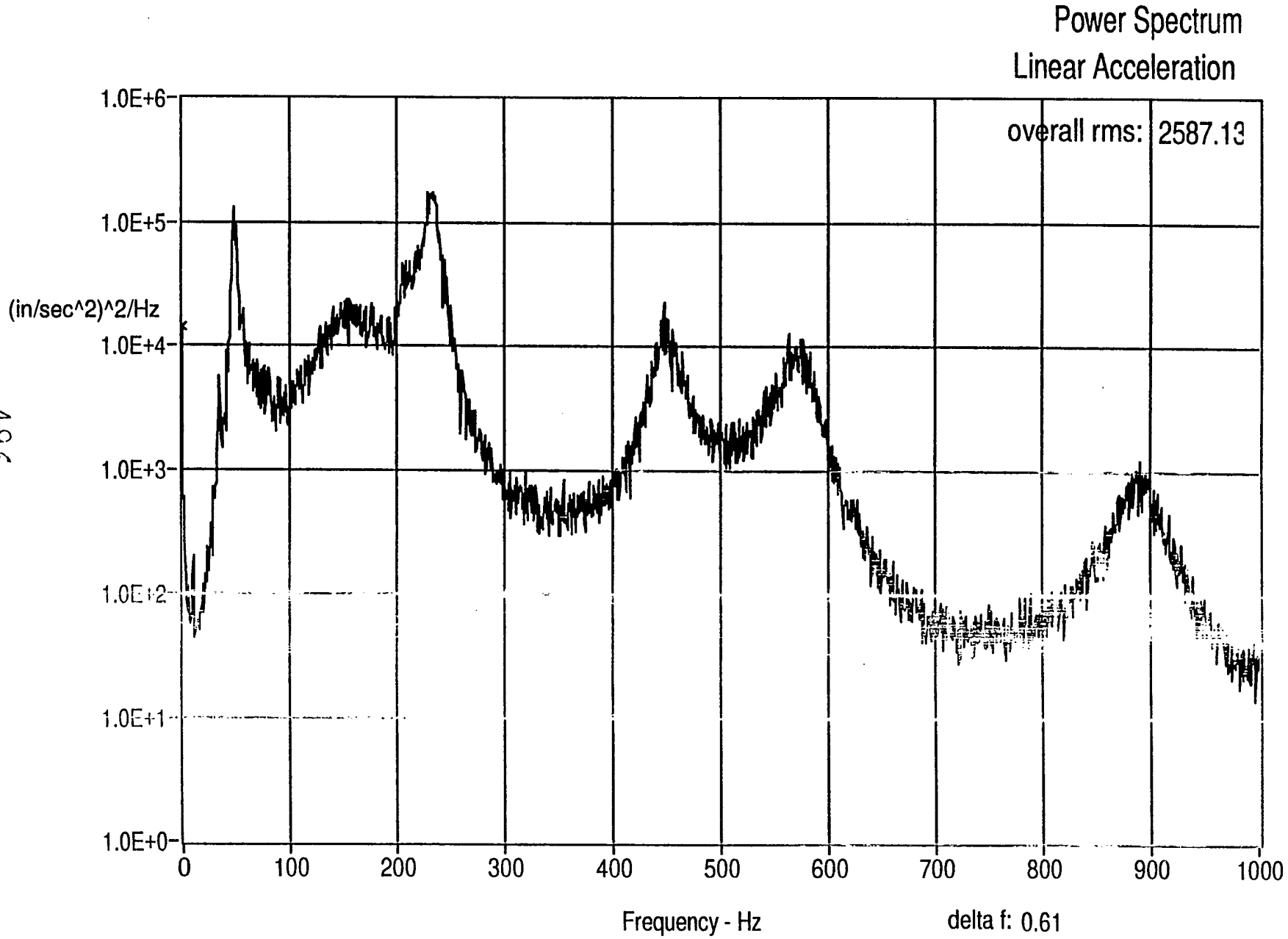
F-15 TPN_3048: alpha=24 beta=4 bp=65



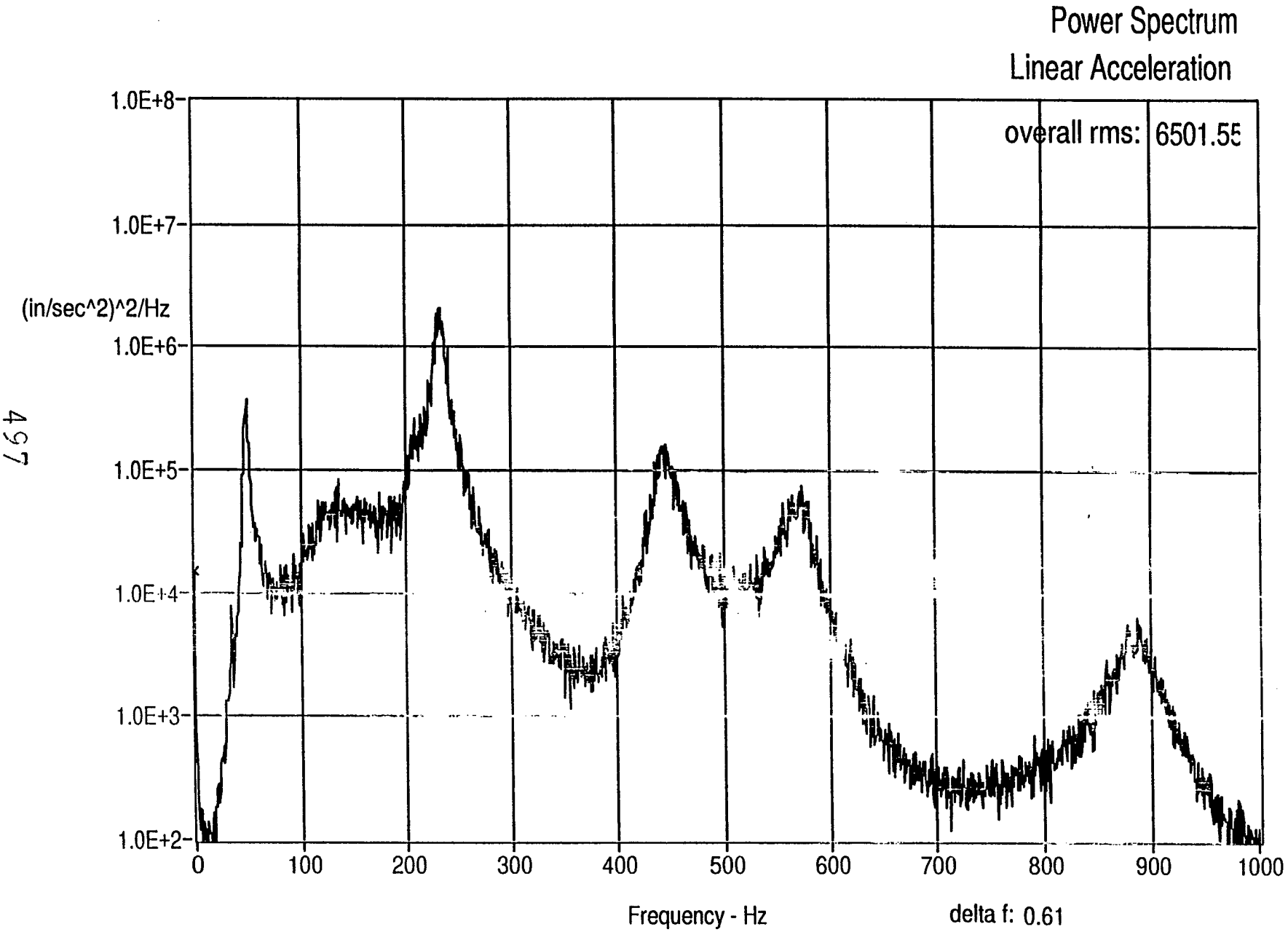
F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0



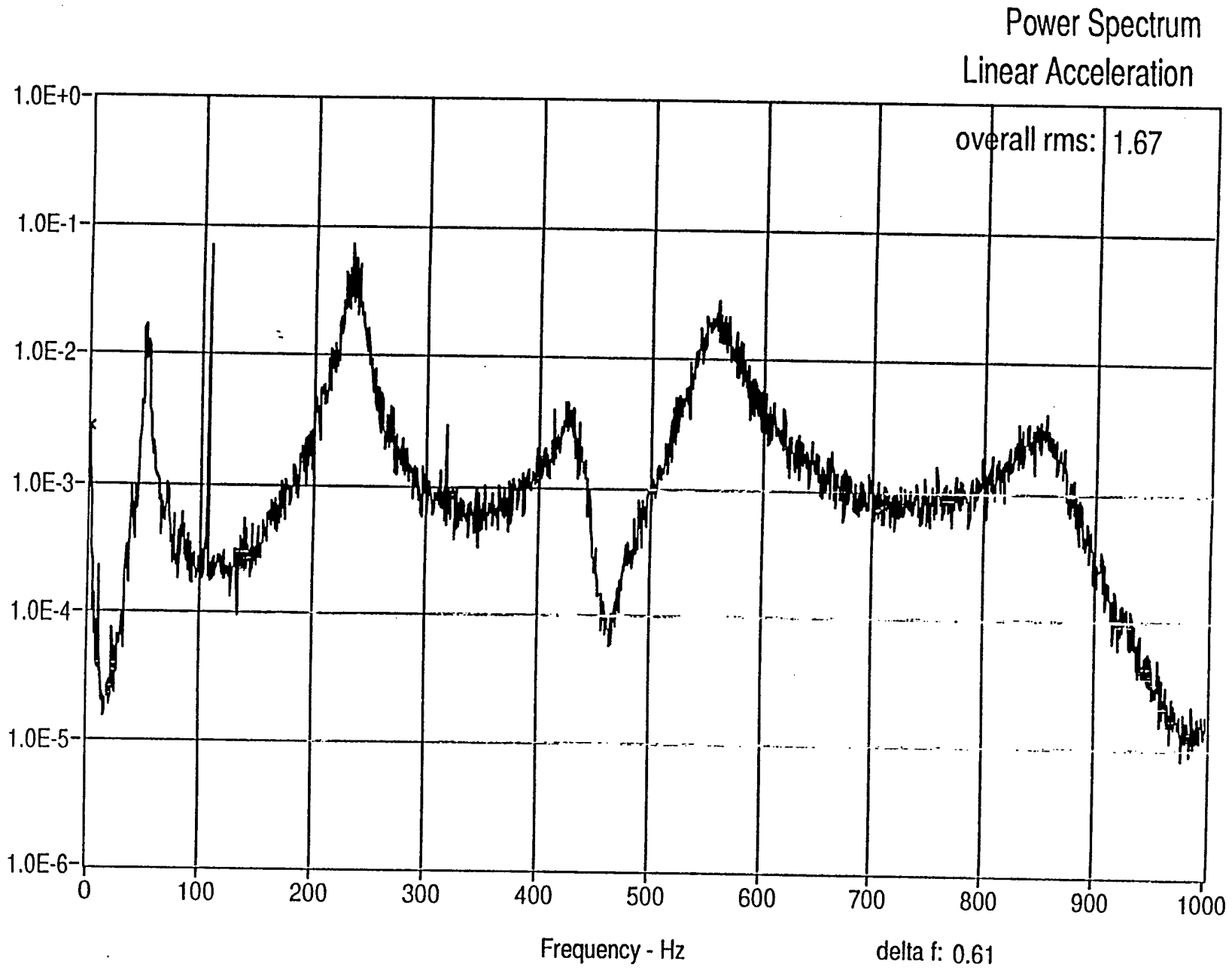
F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0

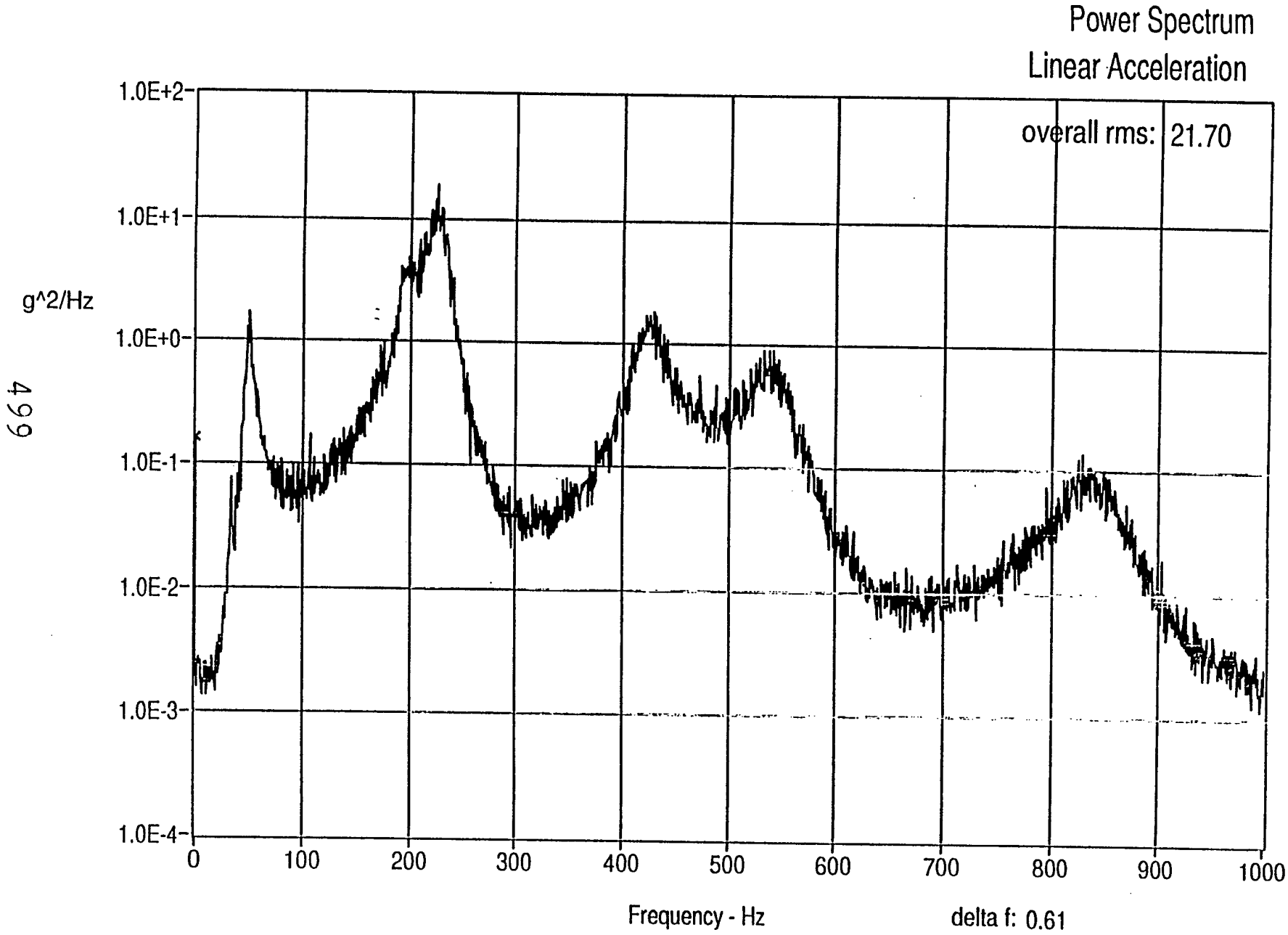


F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0

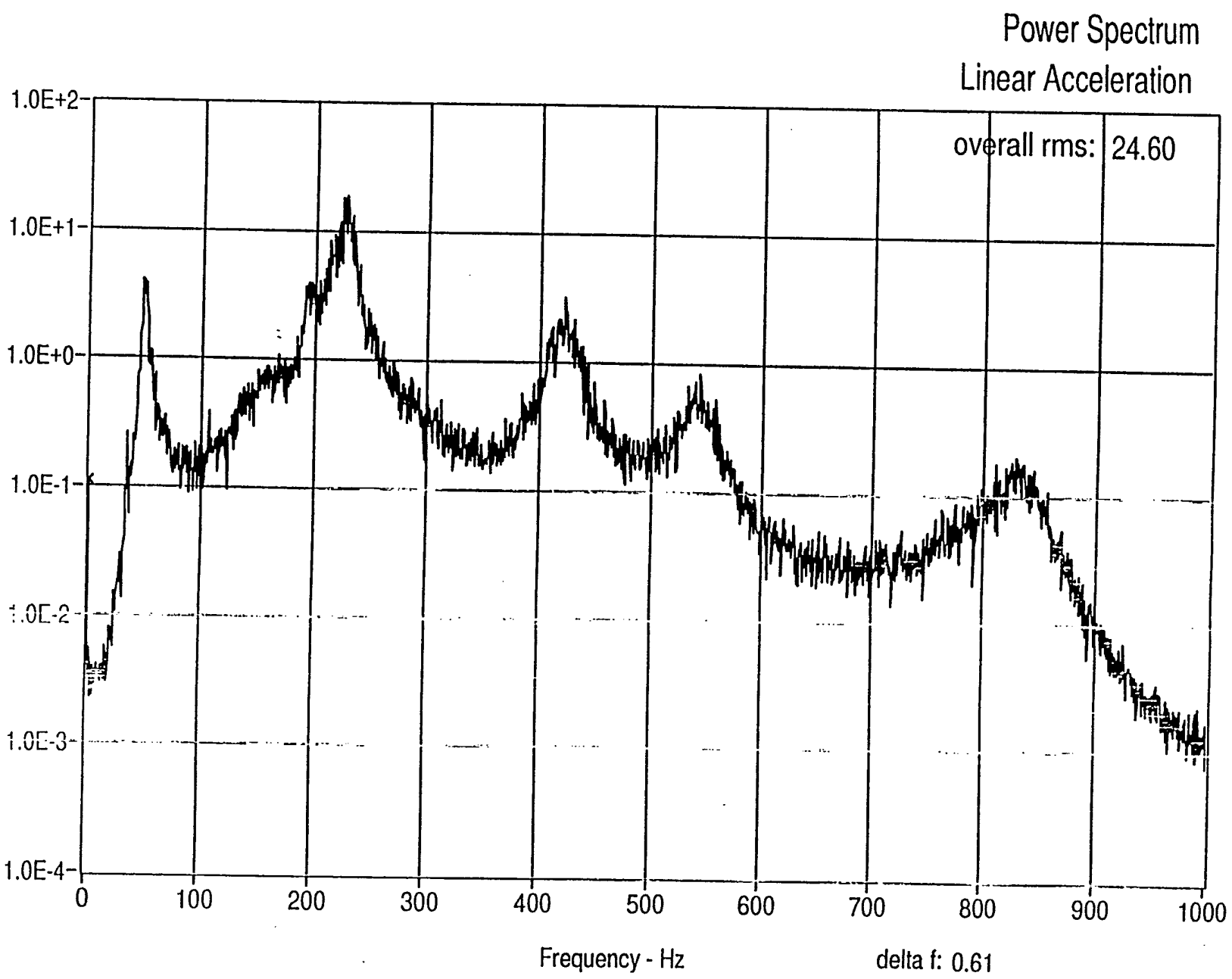


F-15 TPN_2864: alpha=8 beta=-4 bp=0



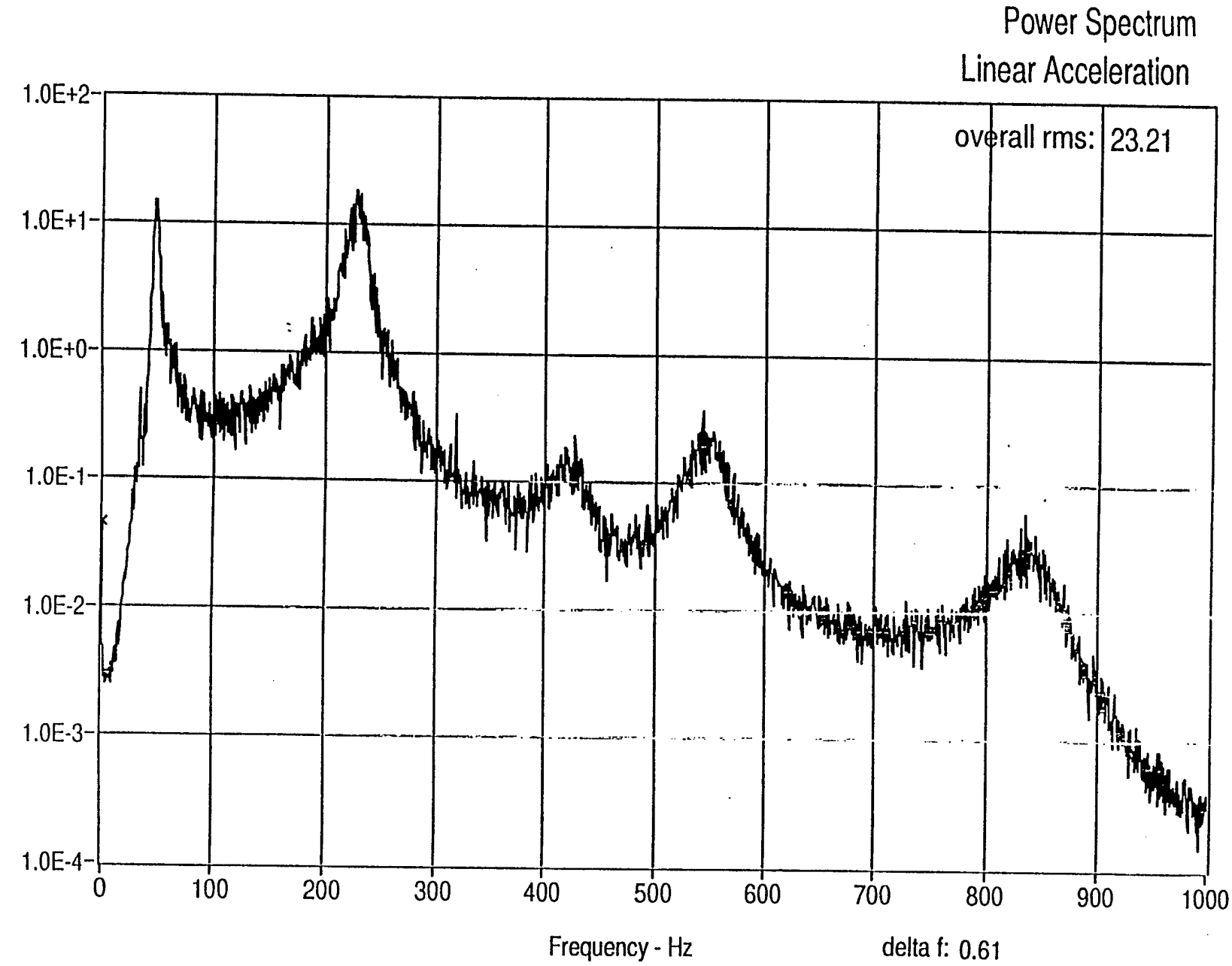

F-15 TPN_2870: alpha=20 beta=-4 bp=0
Power Spectrum
Linear Acceleration
overall rms: 21.70
g^2/Hz
1.0E+2
1.0E+1
1.0E+0
1.0E-1
1.0E-2
1.0E-3
1.0E-4
0
100
200
300
400
500
600
700
800
900
1000
Frequency - Hz
delta f: 0.61

F-15 TPN_2872: alpha=24 beta=-4 bp=0

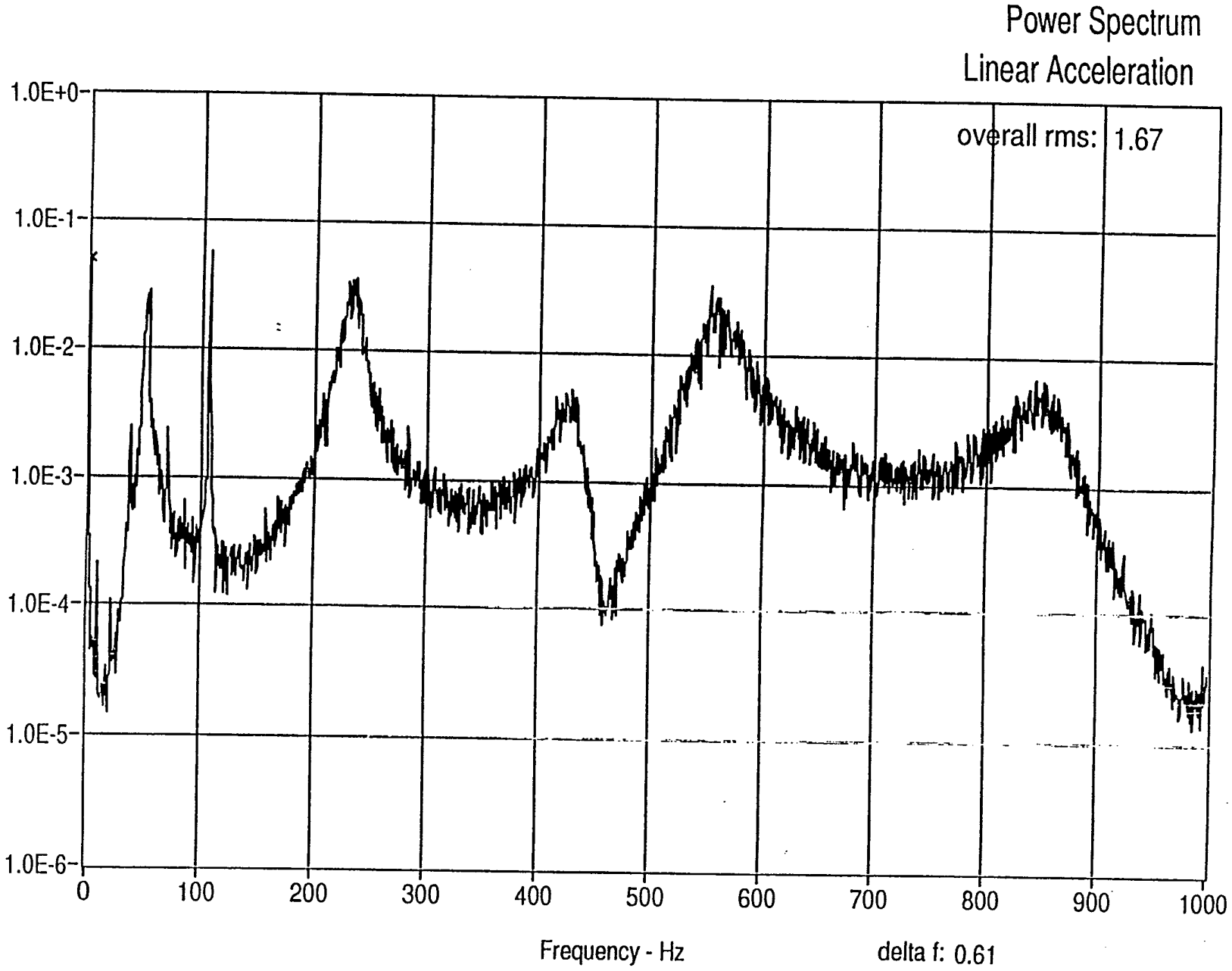


500

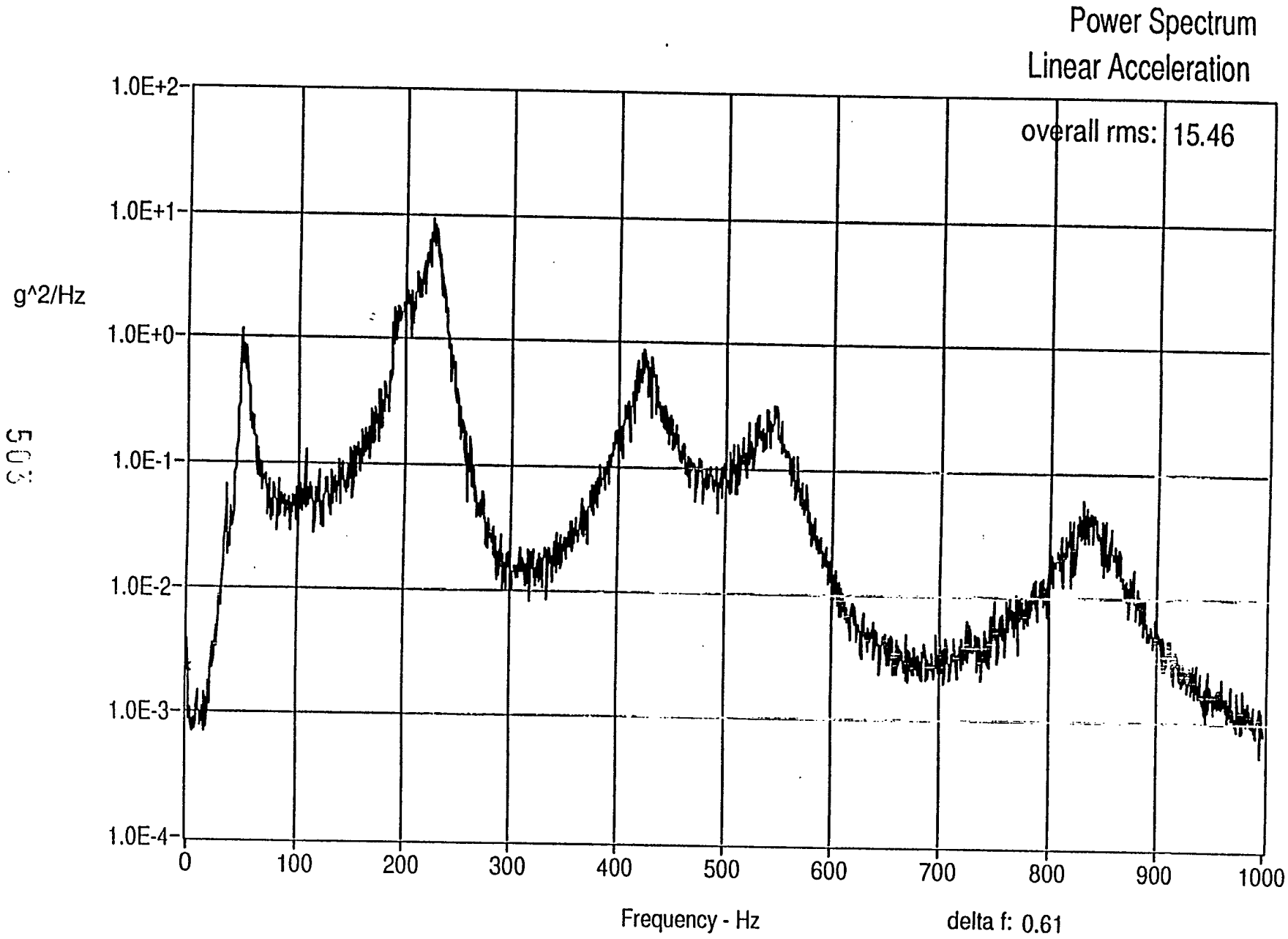
F-15 TPN_2874: alpha=32 beta=-4 bp=0



F-15 TPN_2844: alpha=8 beta=0 bp=0

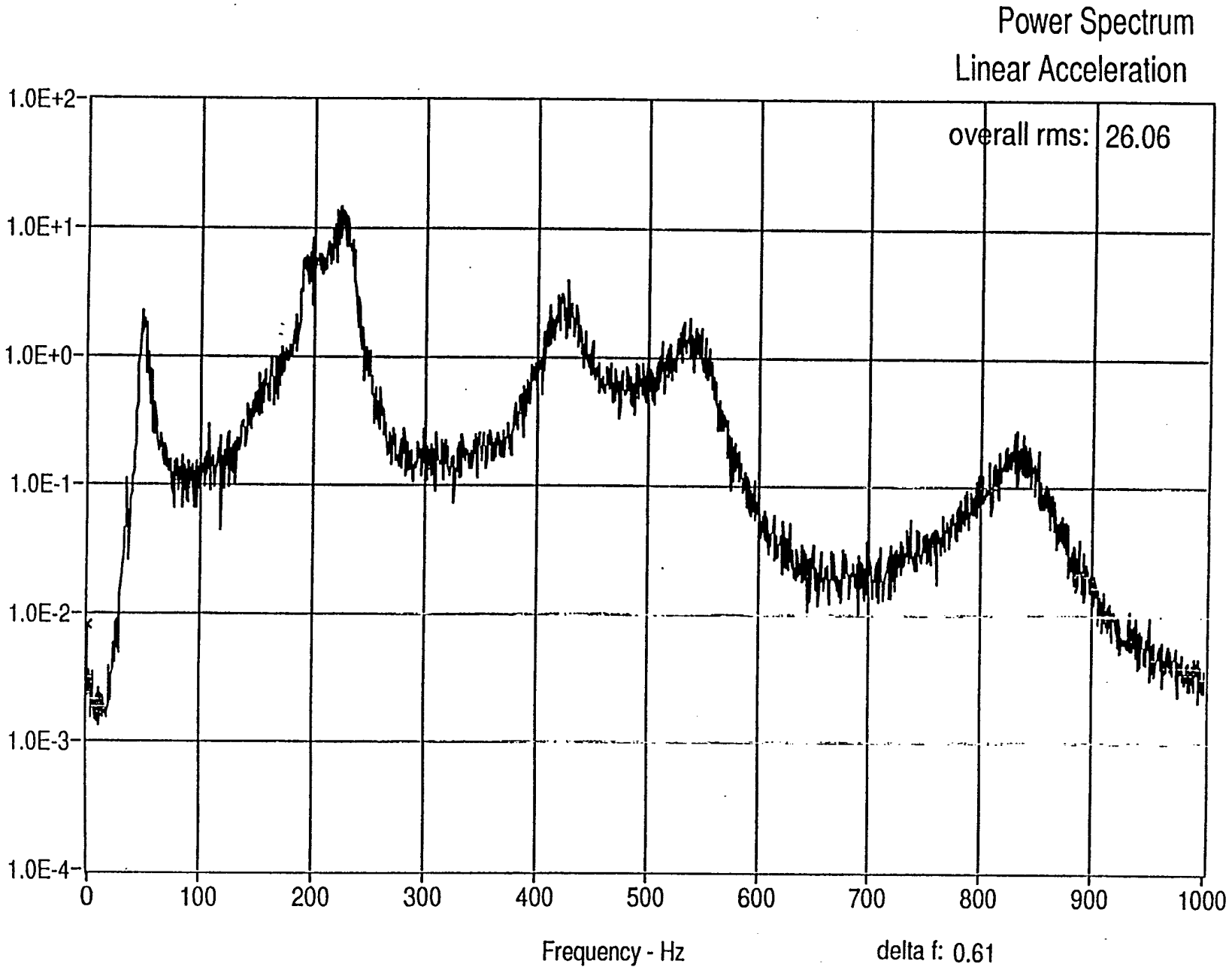


F-15 TPN_2850: alpha=20 beta=0 bp=0

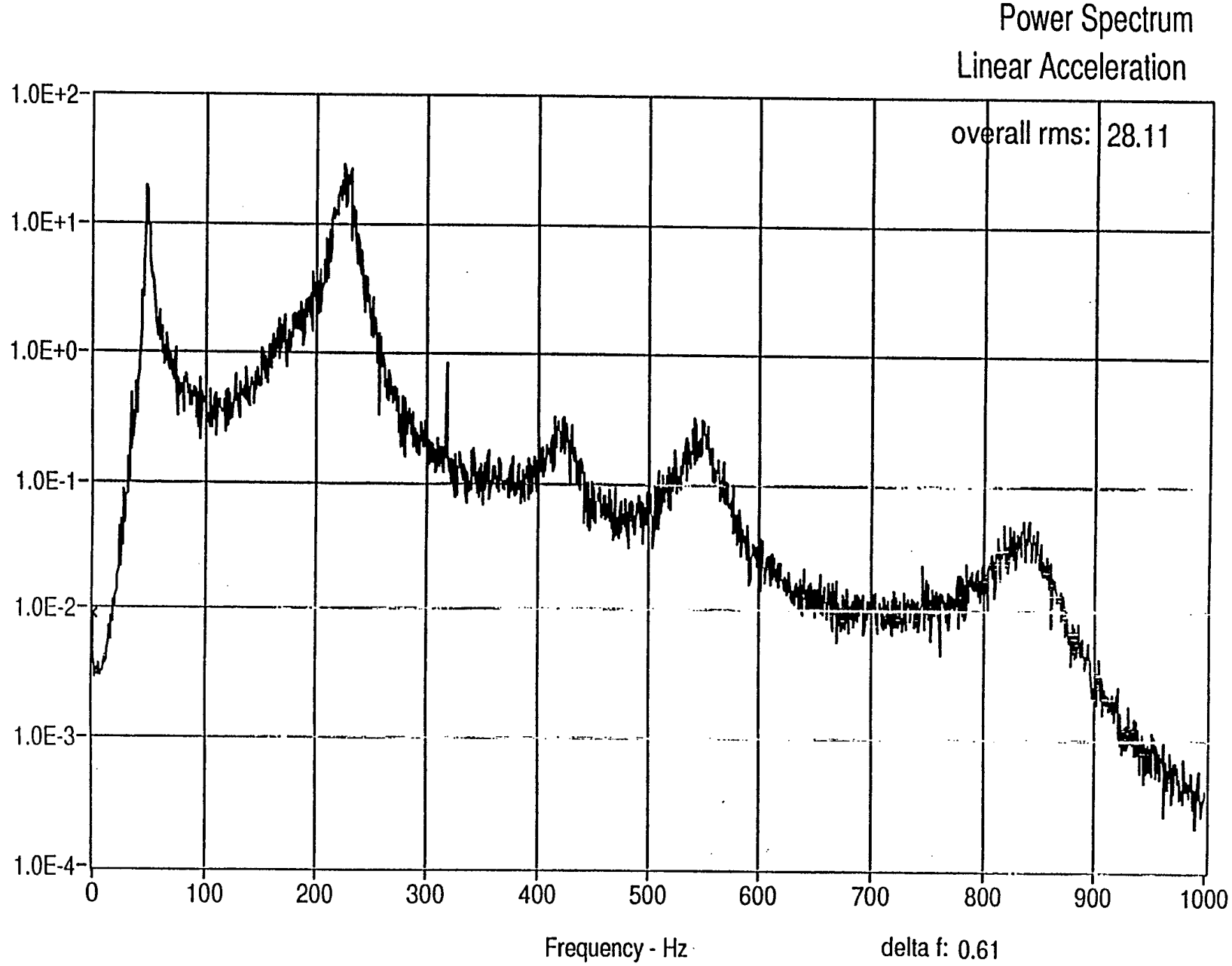


503

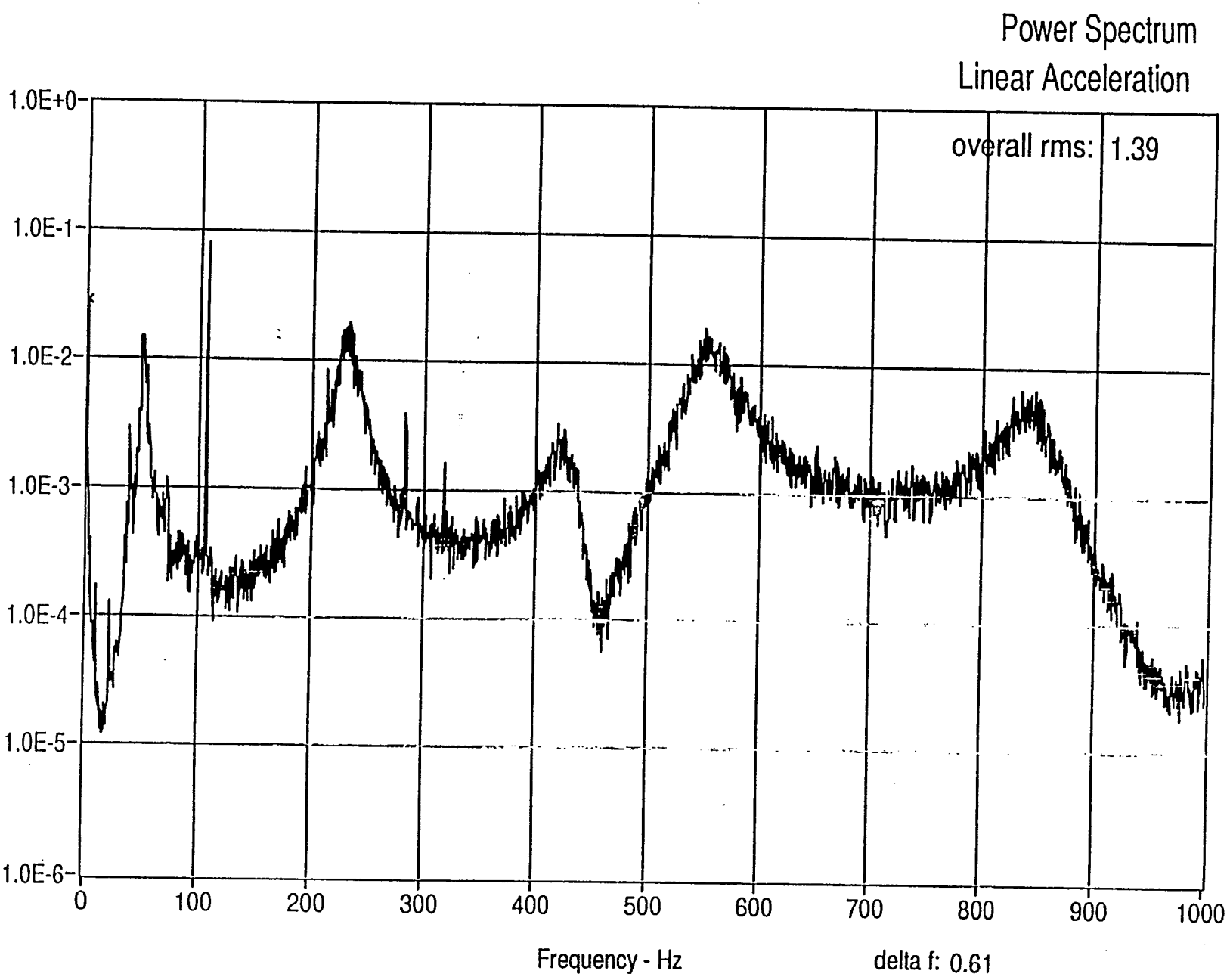
F-15 TPN_2852: alpha=24 beta=0 bp=0



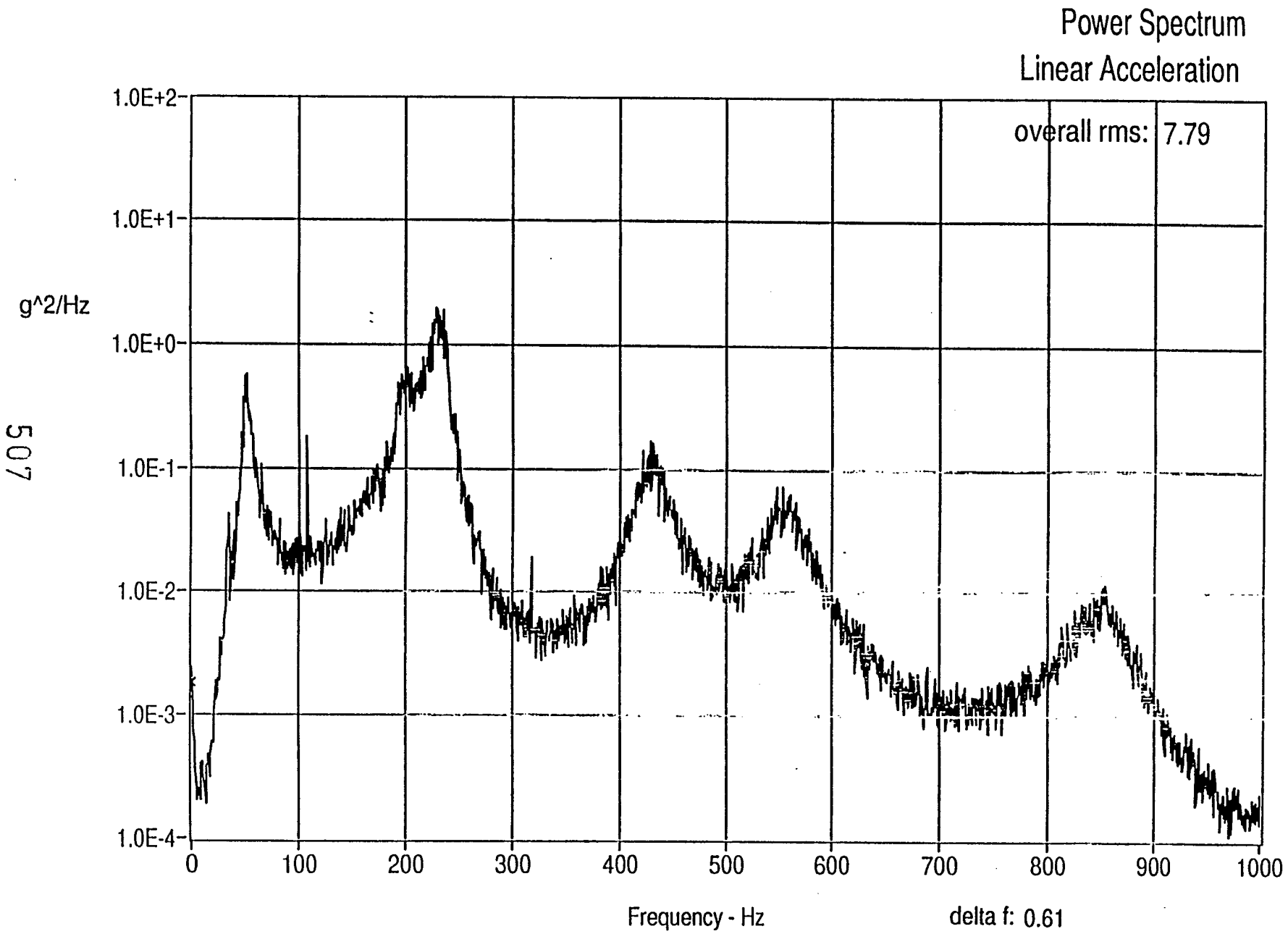
F-15 TPN_2854: alpha=32 beta=0 bp=0



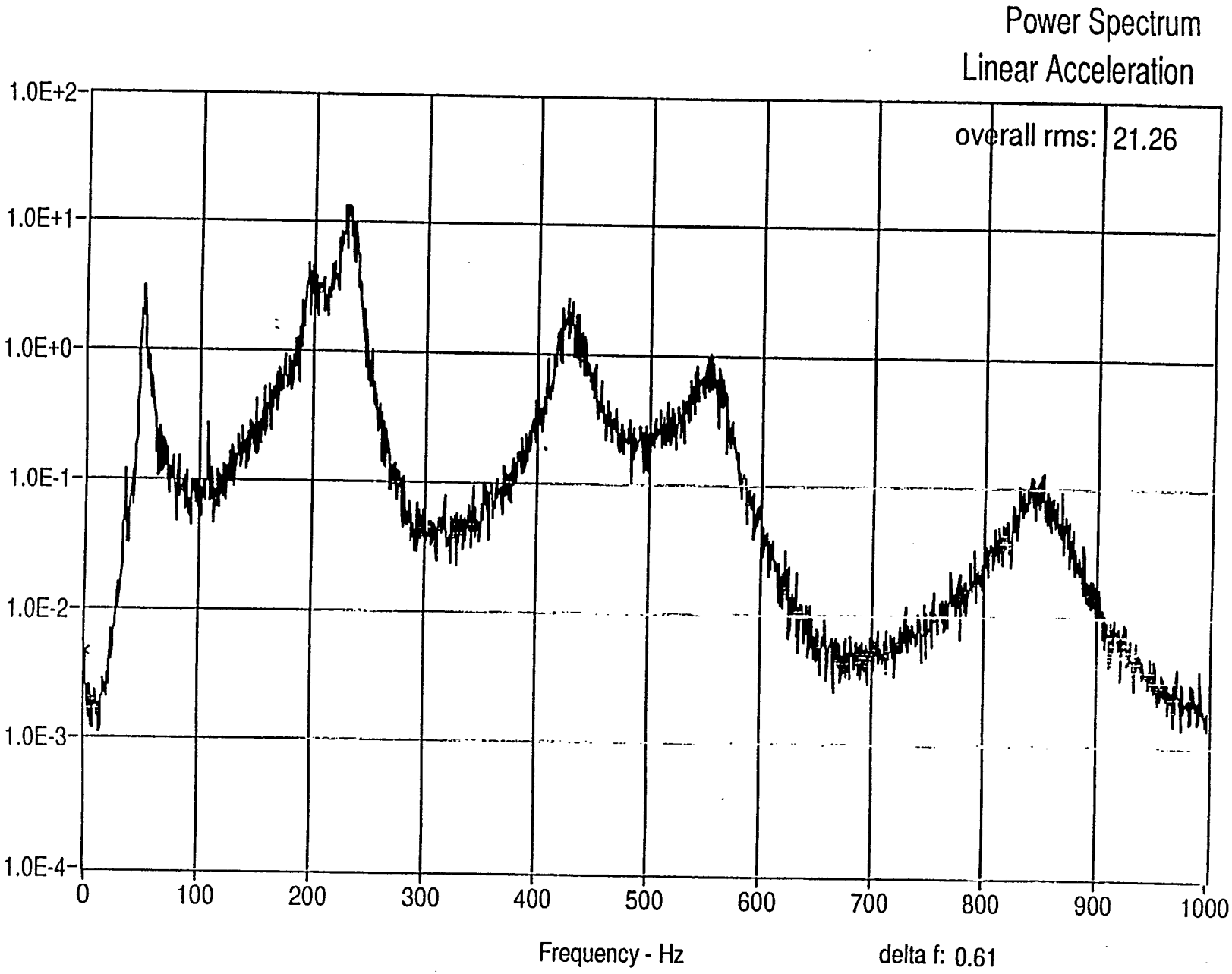
F-15 TPN_2918: alpha=8 beta=4 bp=0



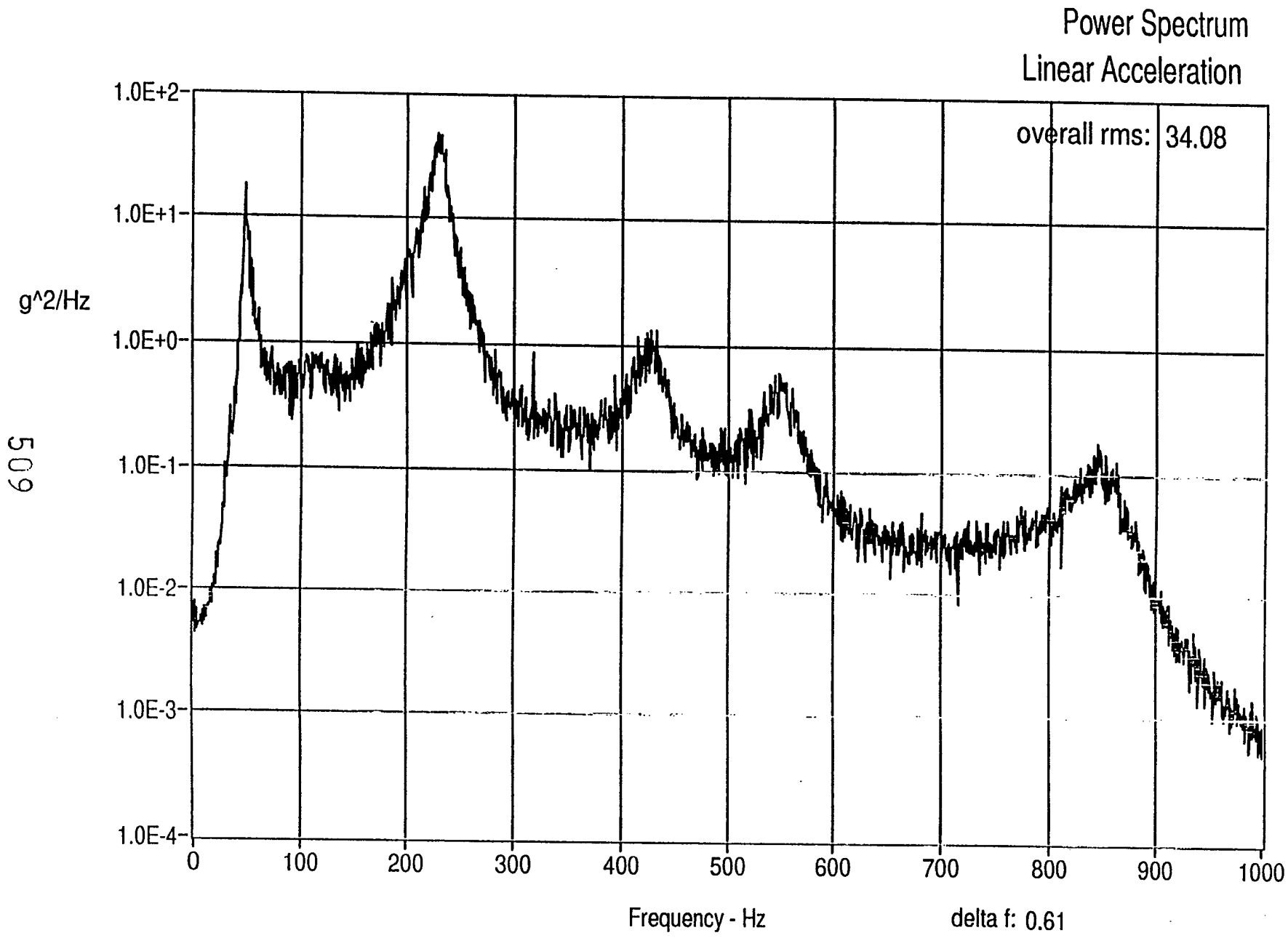
F-15 TPN_2924: alpha=20 beta=4 bp=0



F-15 TPN_2926: alpha=24 beta=4 bp=0

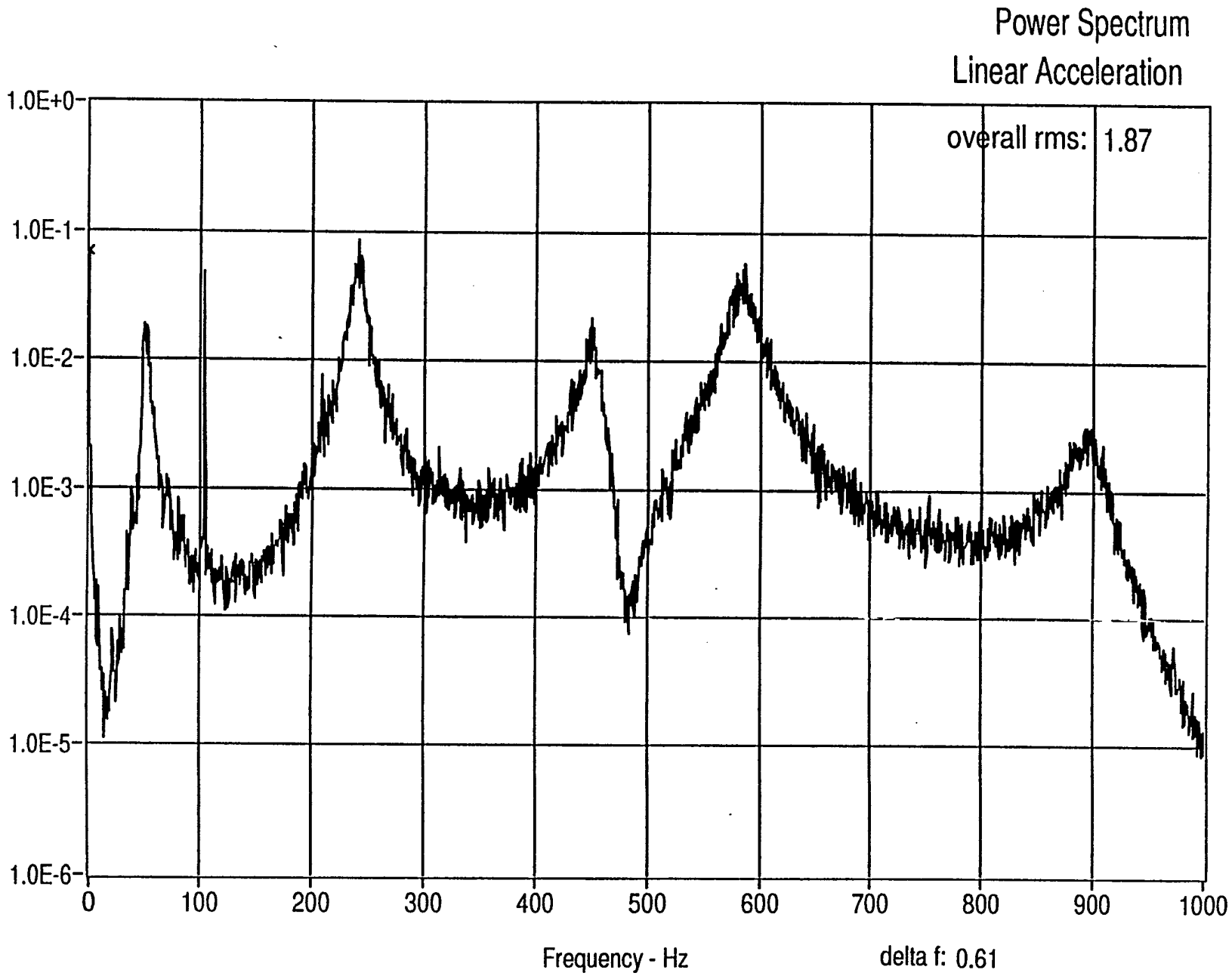


F-15 TPN_2928: alpha=32 beta=4 bp=0

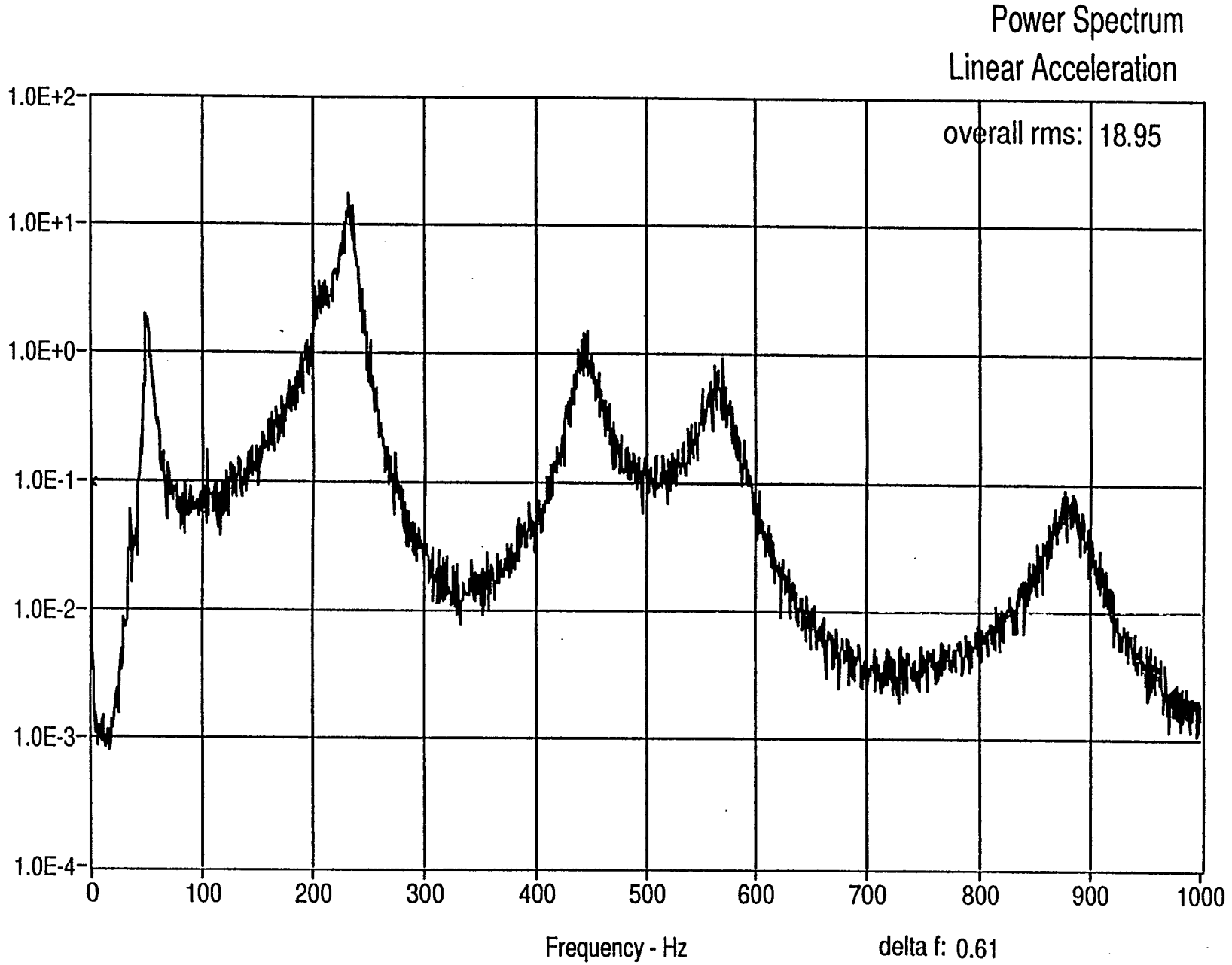


509

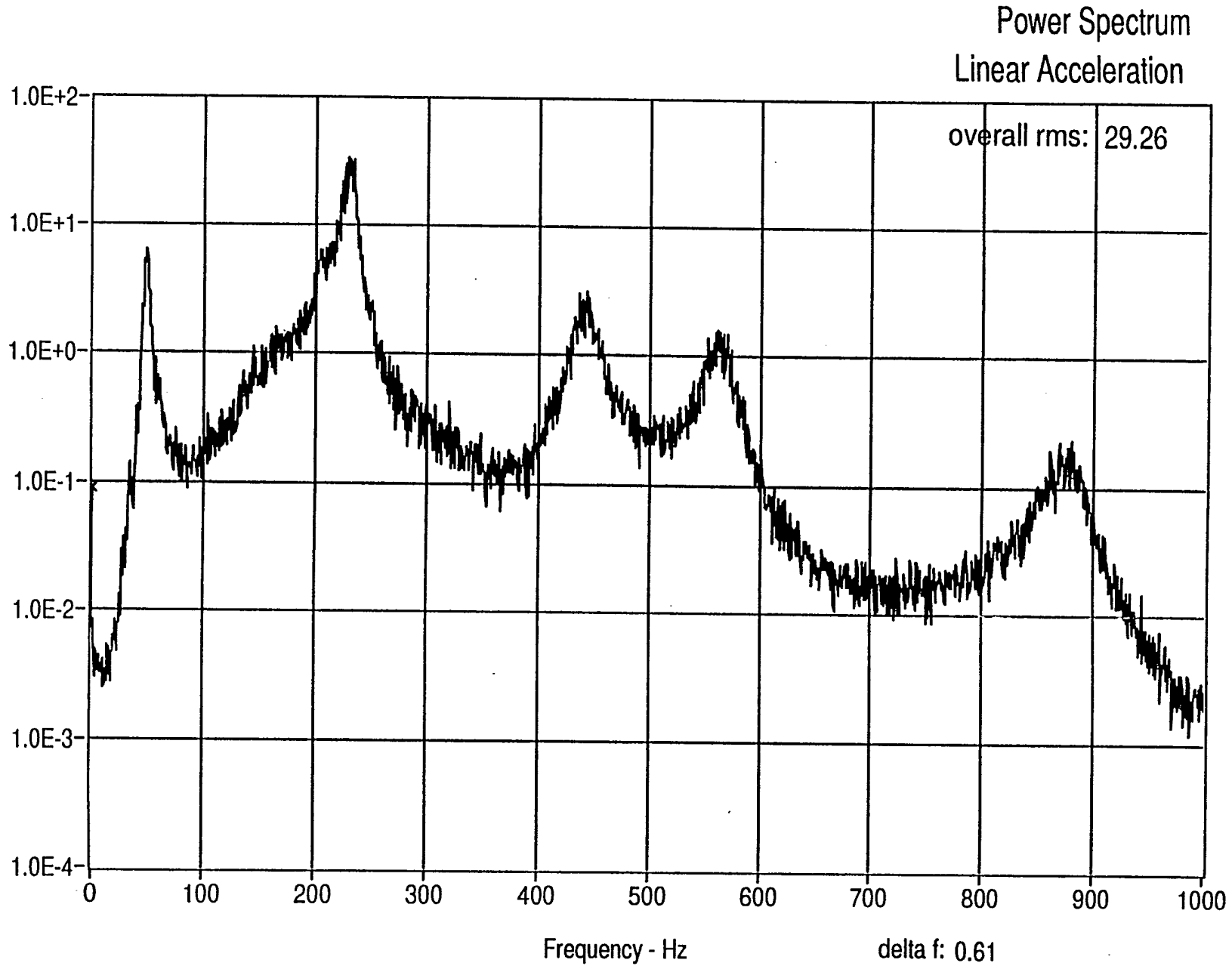
F-15 TPN_3369: alpha=8 beta=-4 bp=45



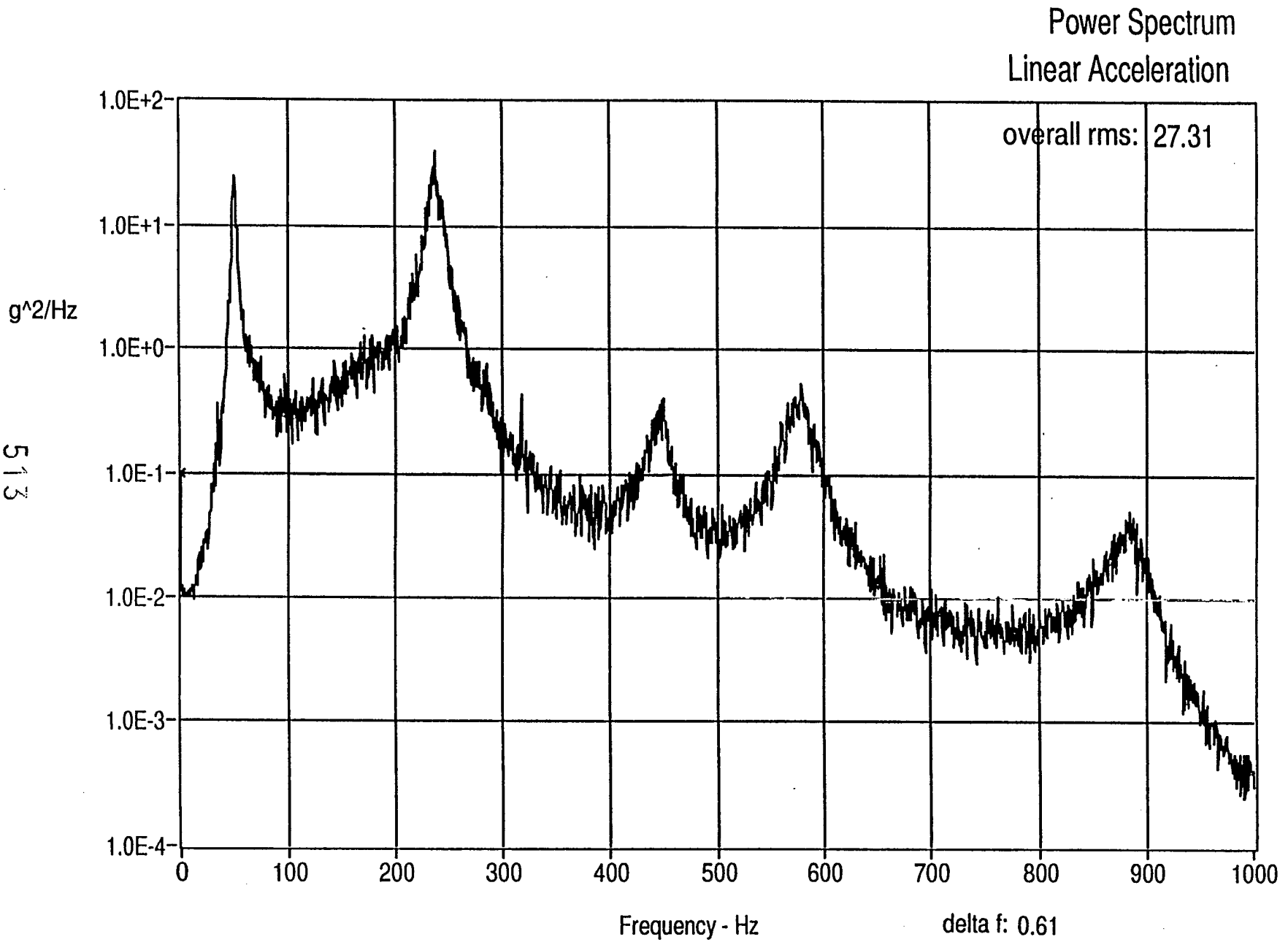
F-15 TPN_3375: alpha=20 beta=-4 bp=45



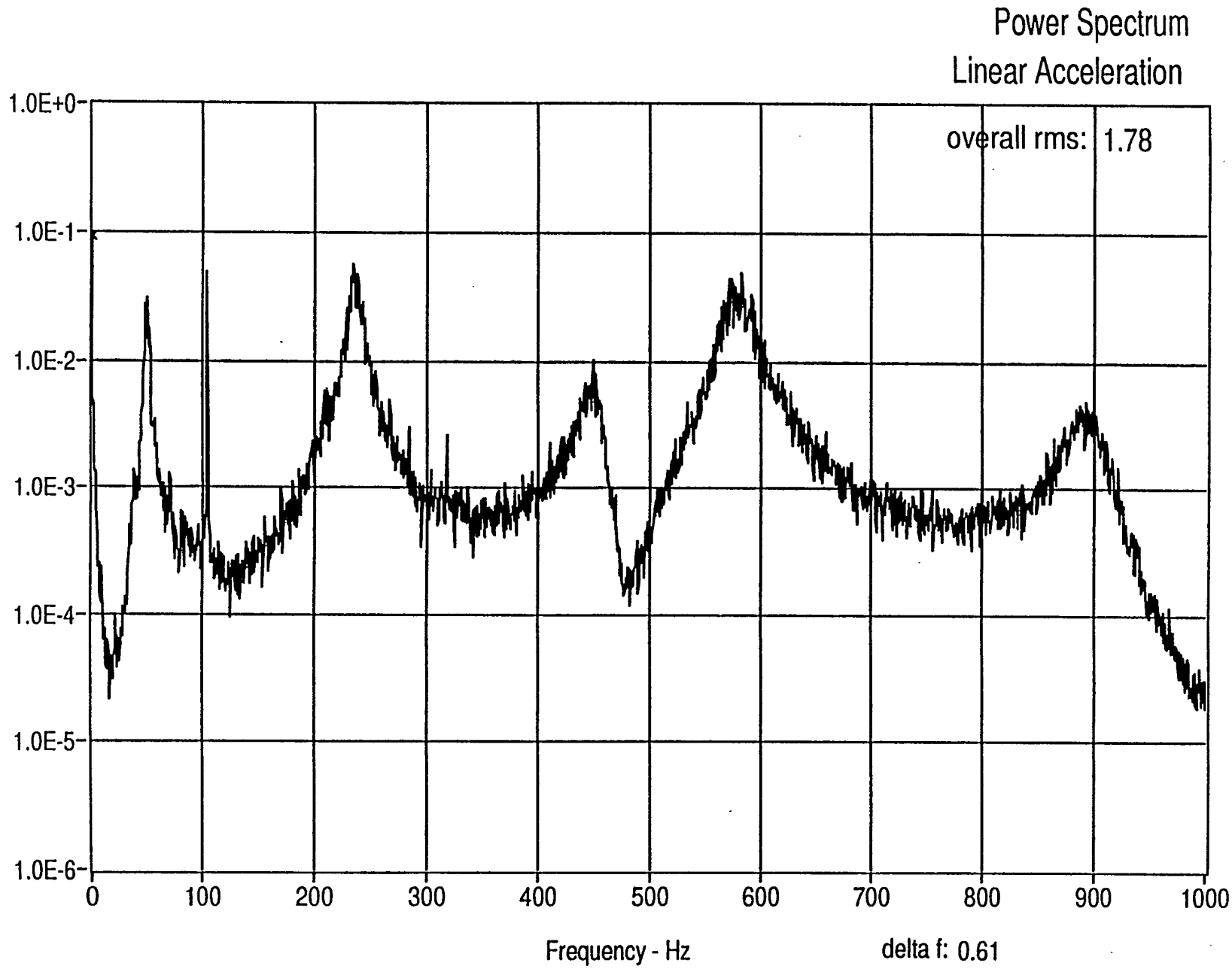
F-15 TPN_3377: alpha=24 beta=-4 bp=45



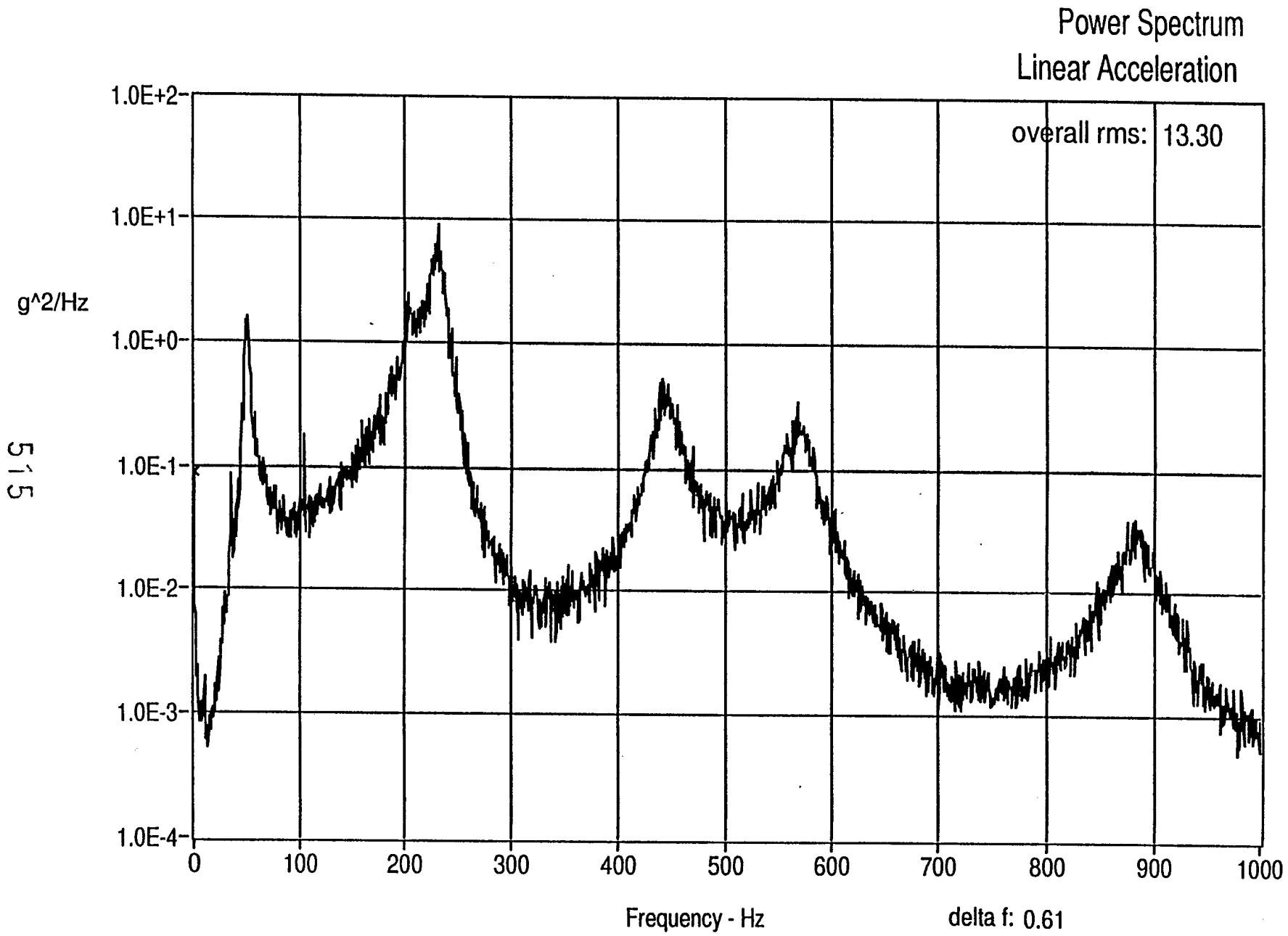
F-15 TPN_3379: alpha=32 beta=-4 bp=45



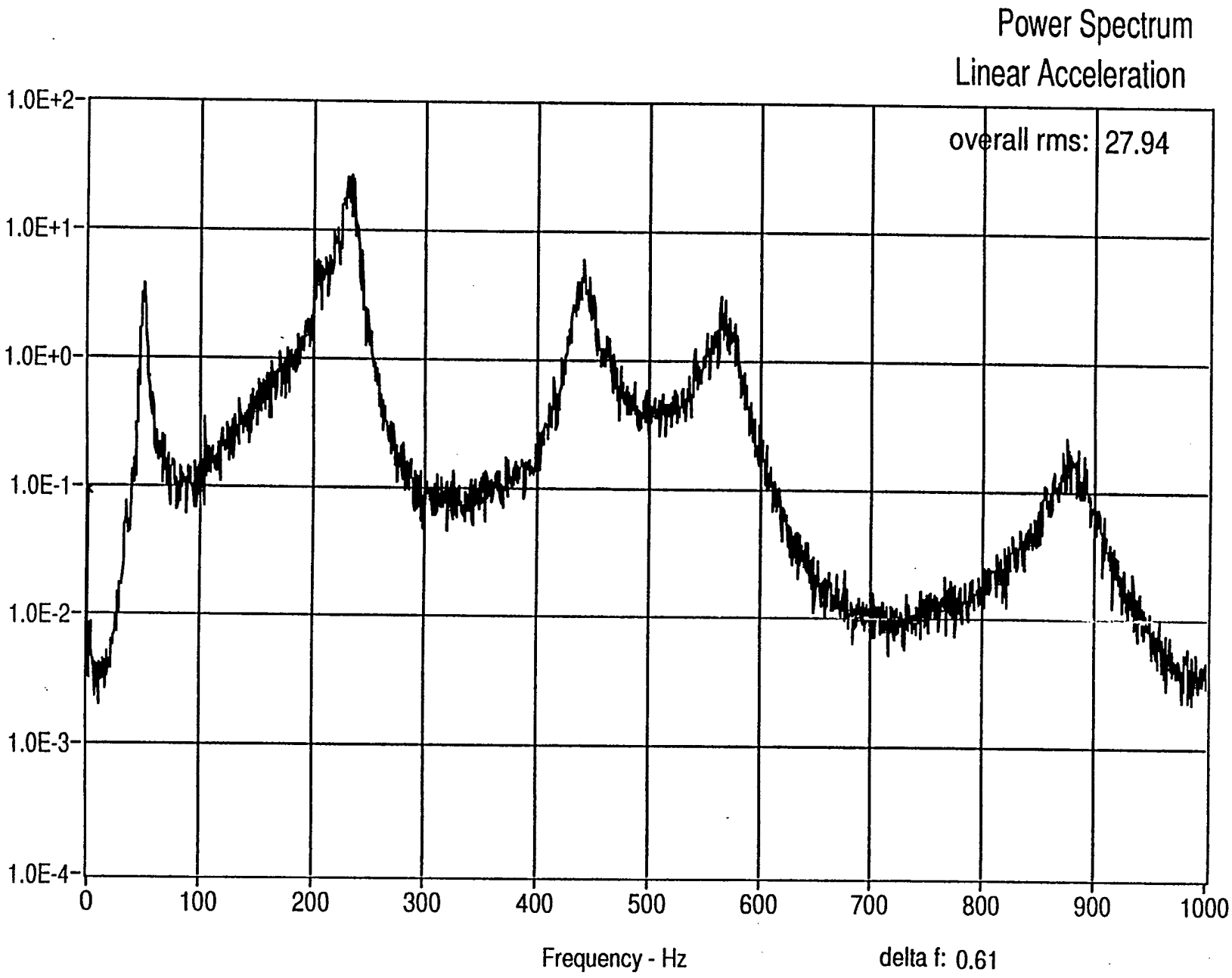
F-15 TPN_3333: alpha=8 beta=0 bp=45



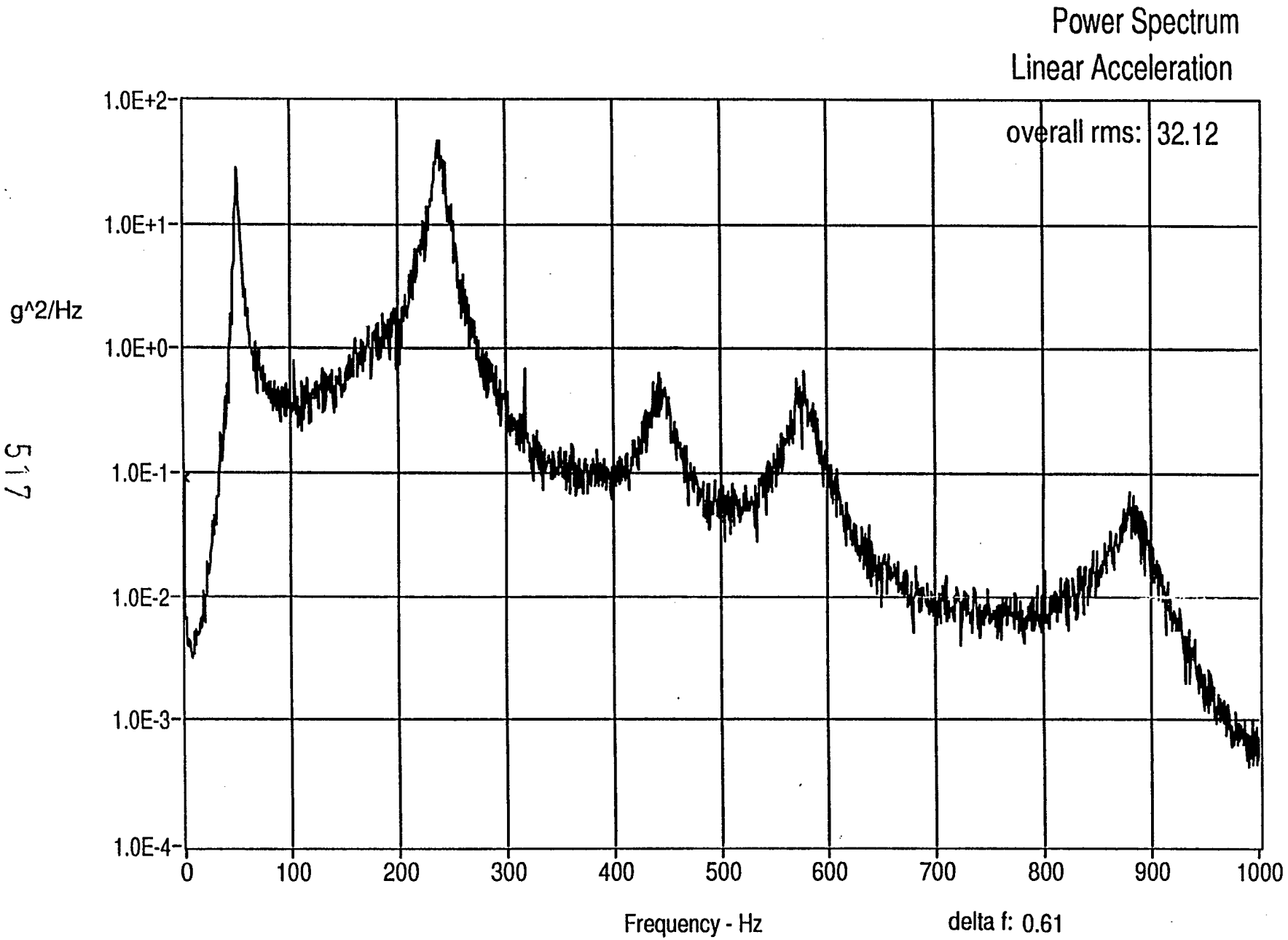
F-15 TPN_3339: alpha=20 beta=0 bp=45



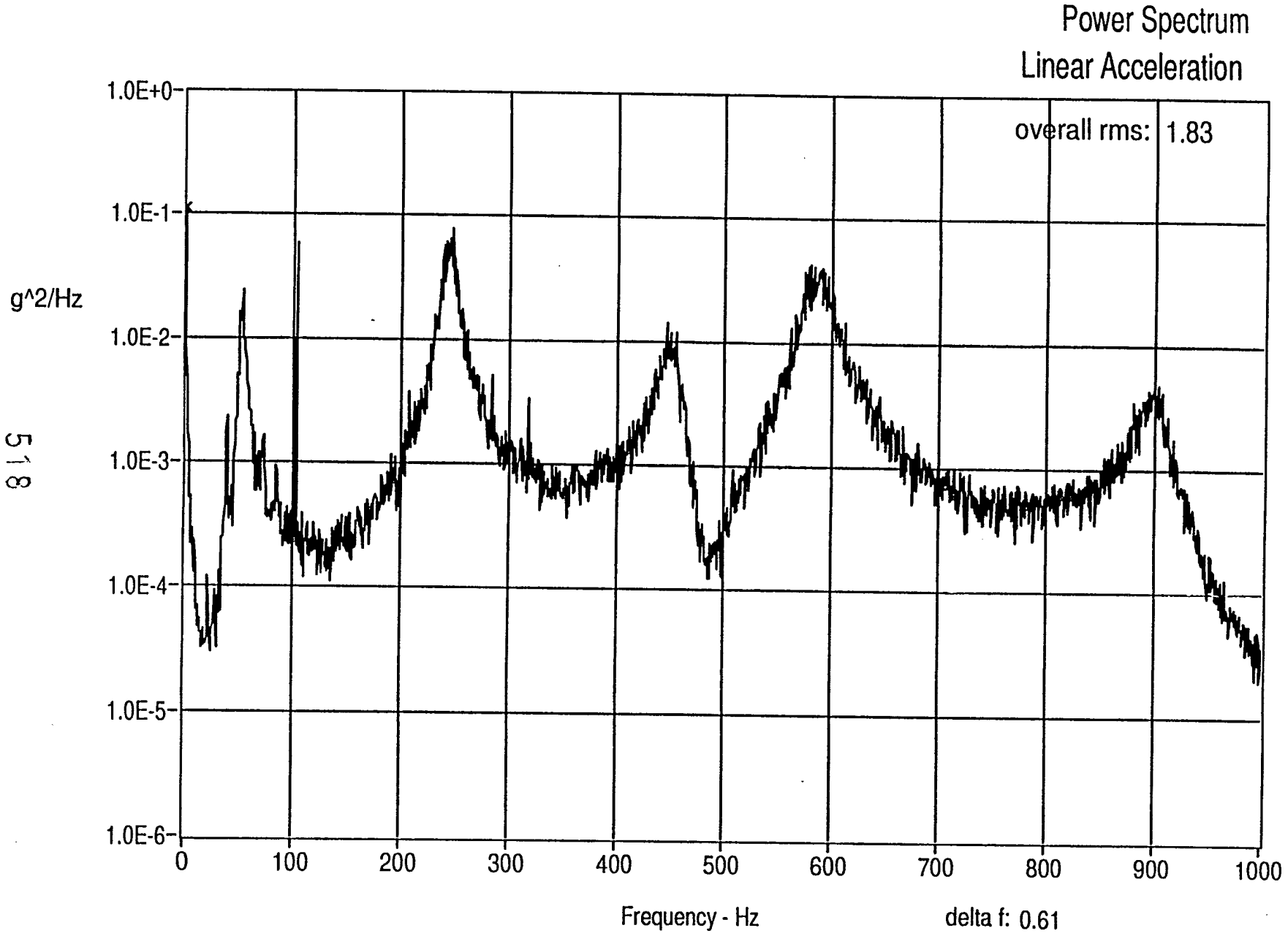
F-15 TPN_3341: alpha=24 beta=0 bp=45



F-15 TPN_3343: alpha=32 beta=0 bp=45

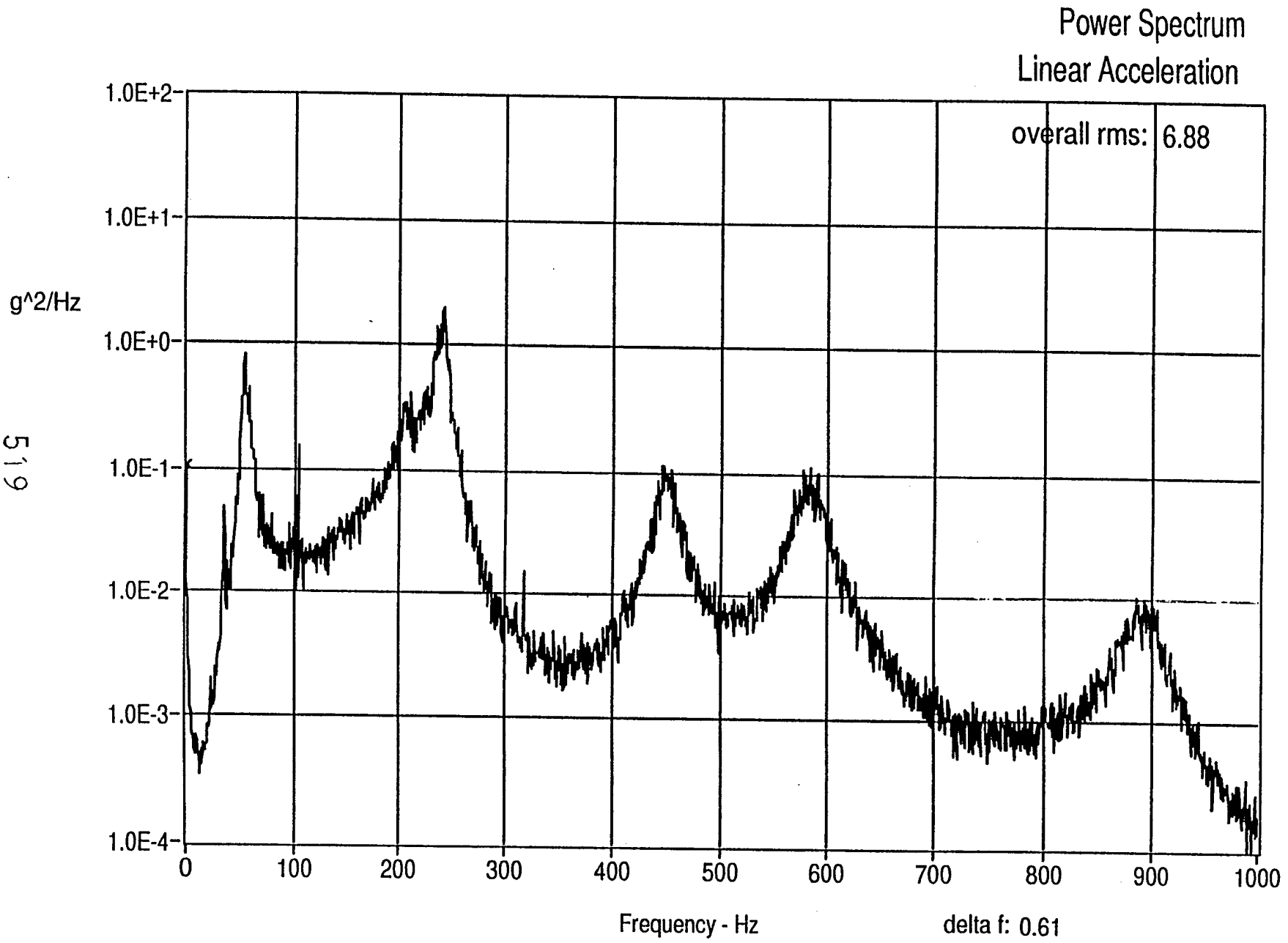


F-15 TPN_3351: alpha=8 beta=4 bp=45

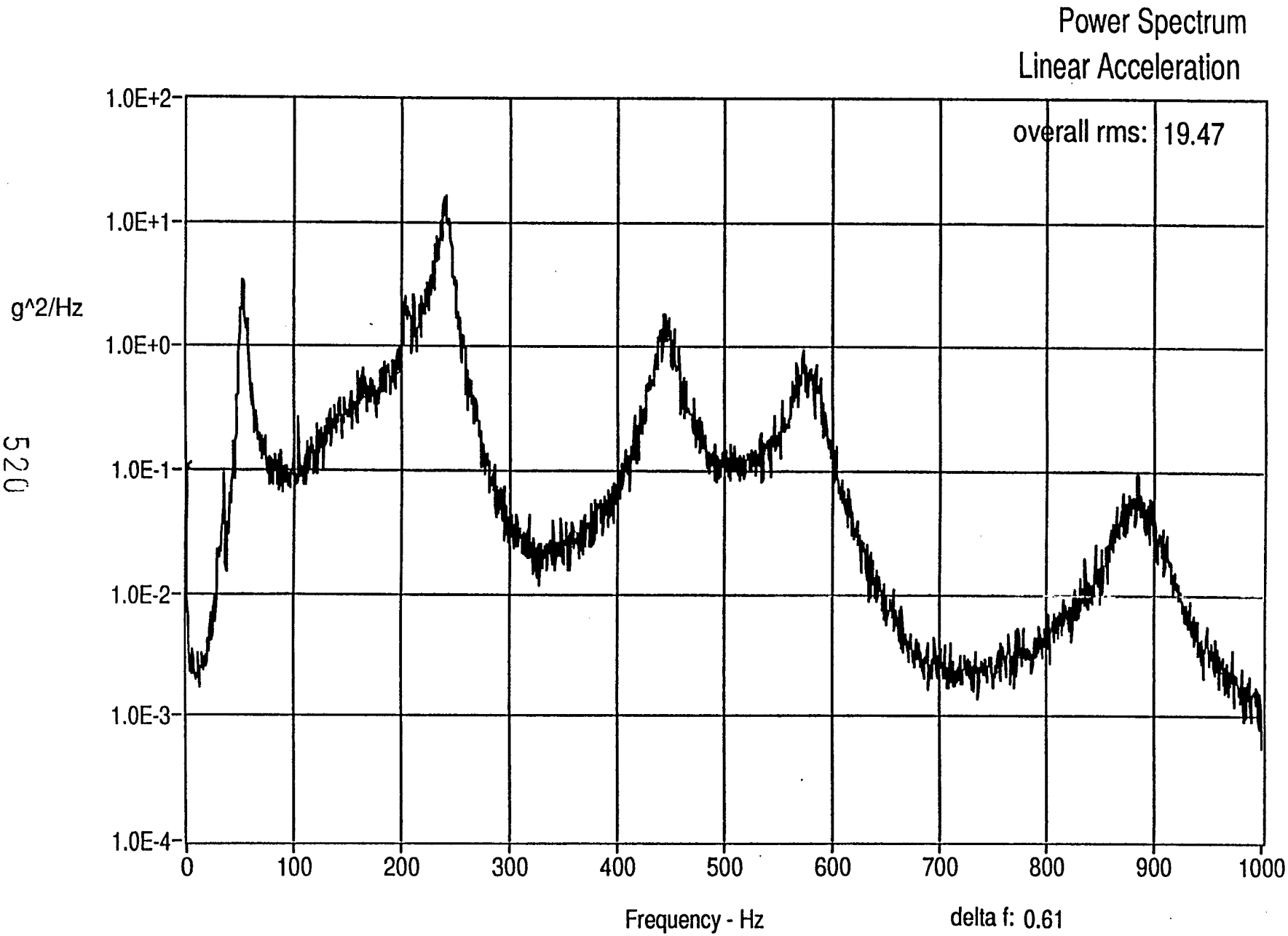


518

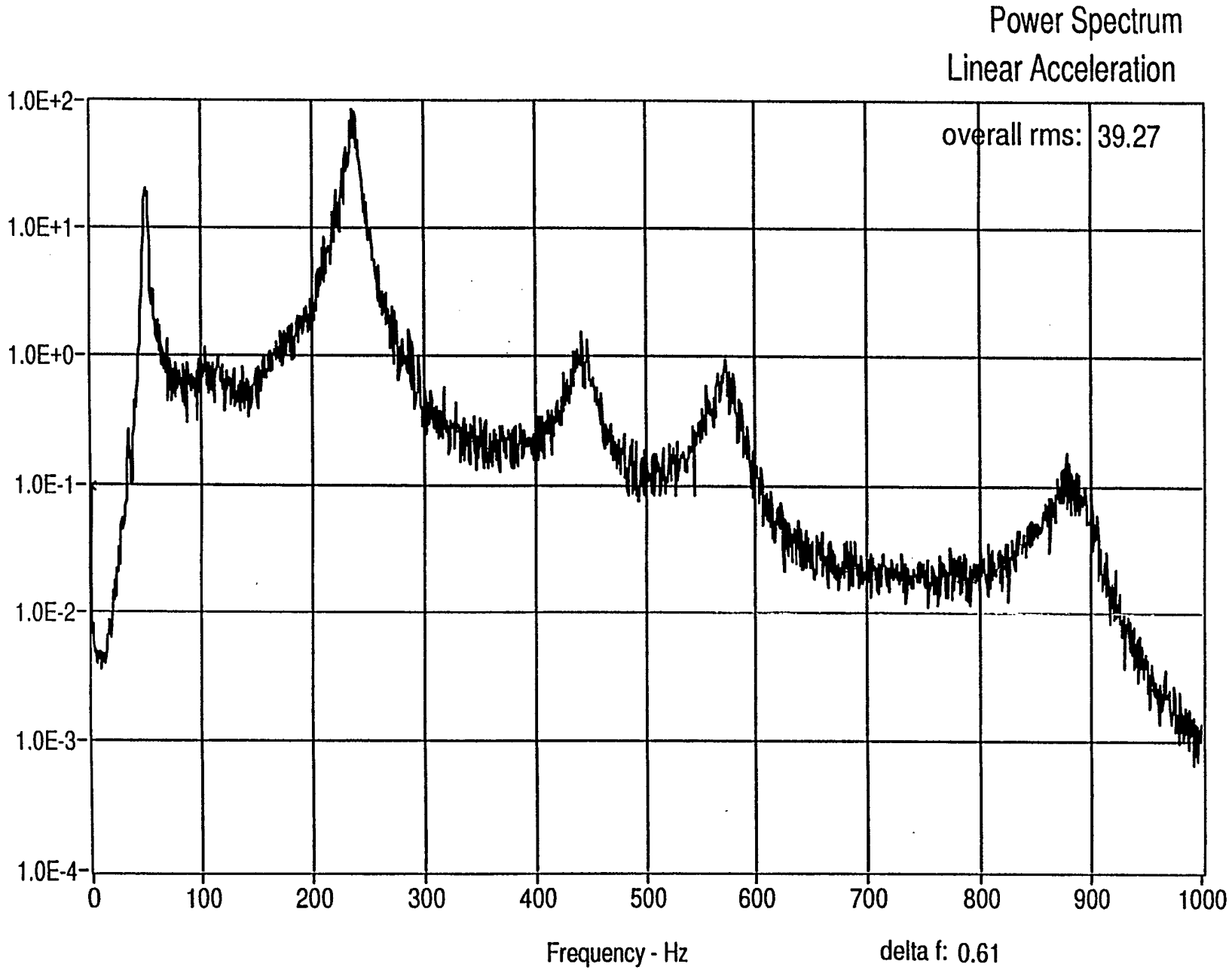
F-15 TPN_3357: alpha=20 beta=4 bp=45



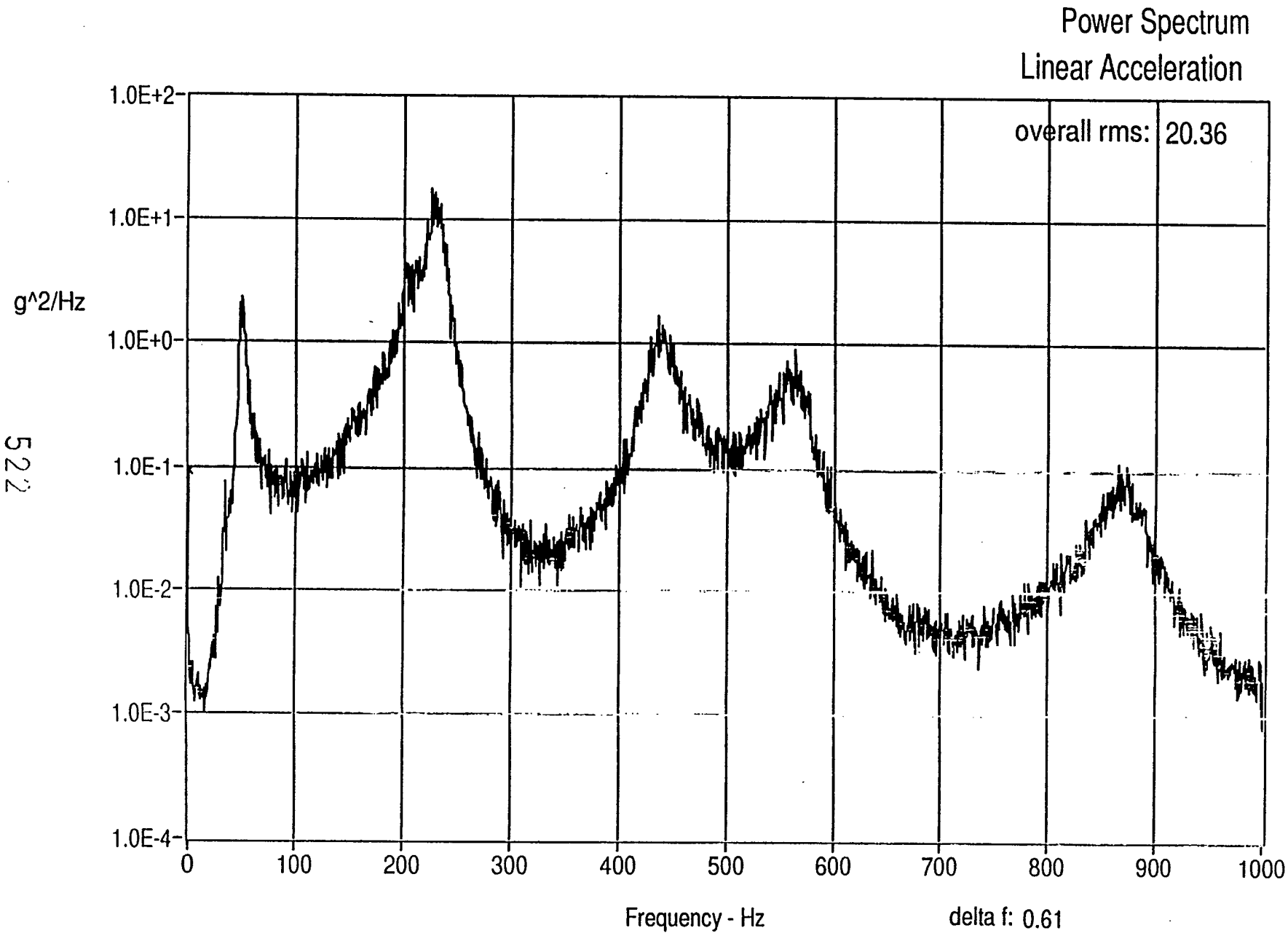
F-15 TPN_3359: alpha=24 beta=4 bp=45

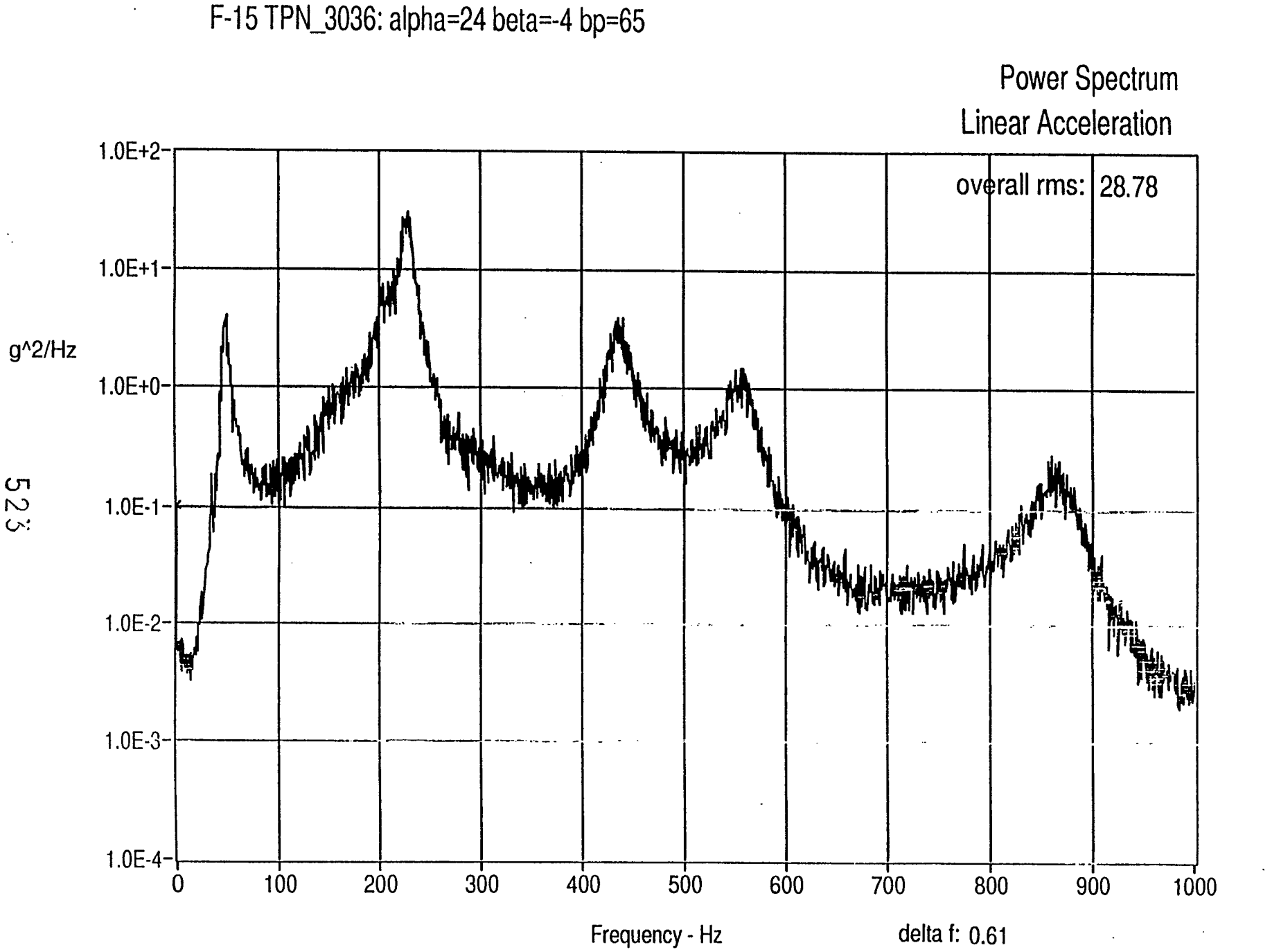


F-15 TPN_3361: alpha=32 beta=4 bp=45

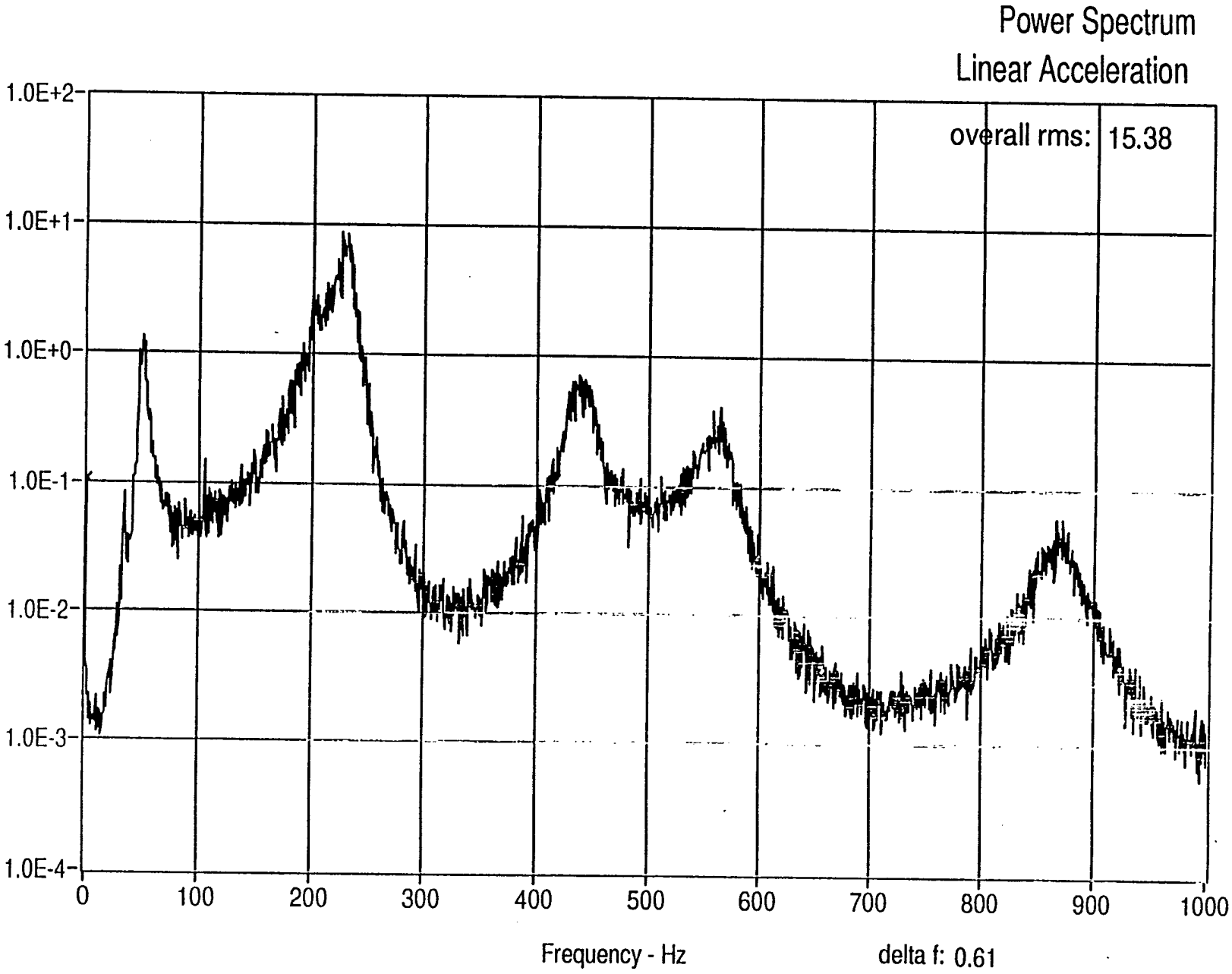


F-15 TPN_3034: alpha=20 beta=-4 bp=65

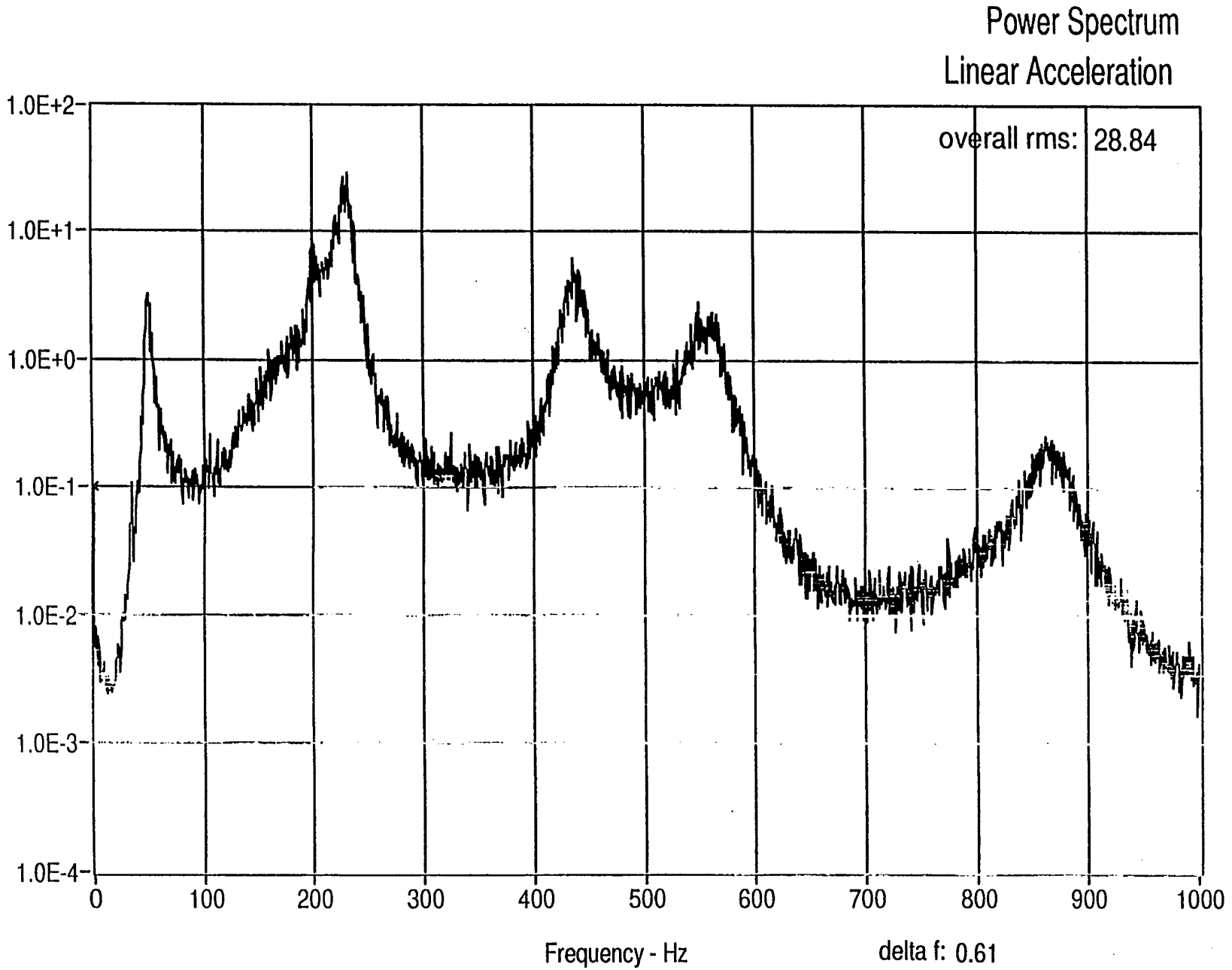



F-15 TPN_3036: alpha=24 beta=-4 bp=65
Power Spectrum
Linear Acceleration
overall rms: 28.78
g^2/Hz
1.0E+2
1.0E+1
1.0E+0
1.0E-1
1.0E-2
1.0E-3
1.0E-4
0
100
200
300
400
500
600
700
800
900
1000
Frequency - Hz
delta f: 0.61

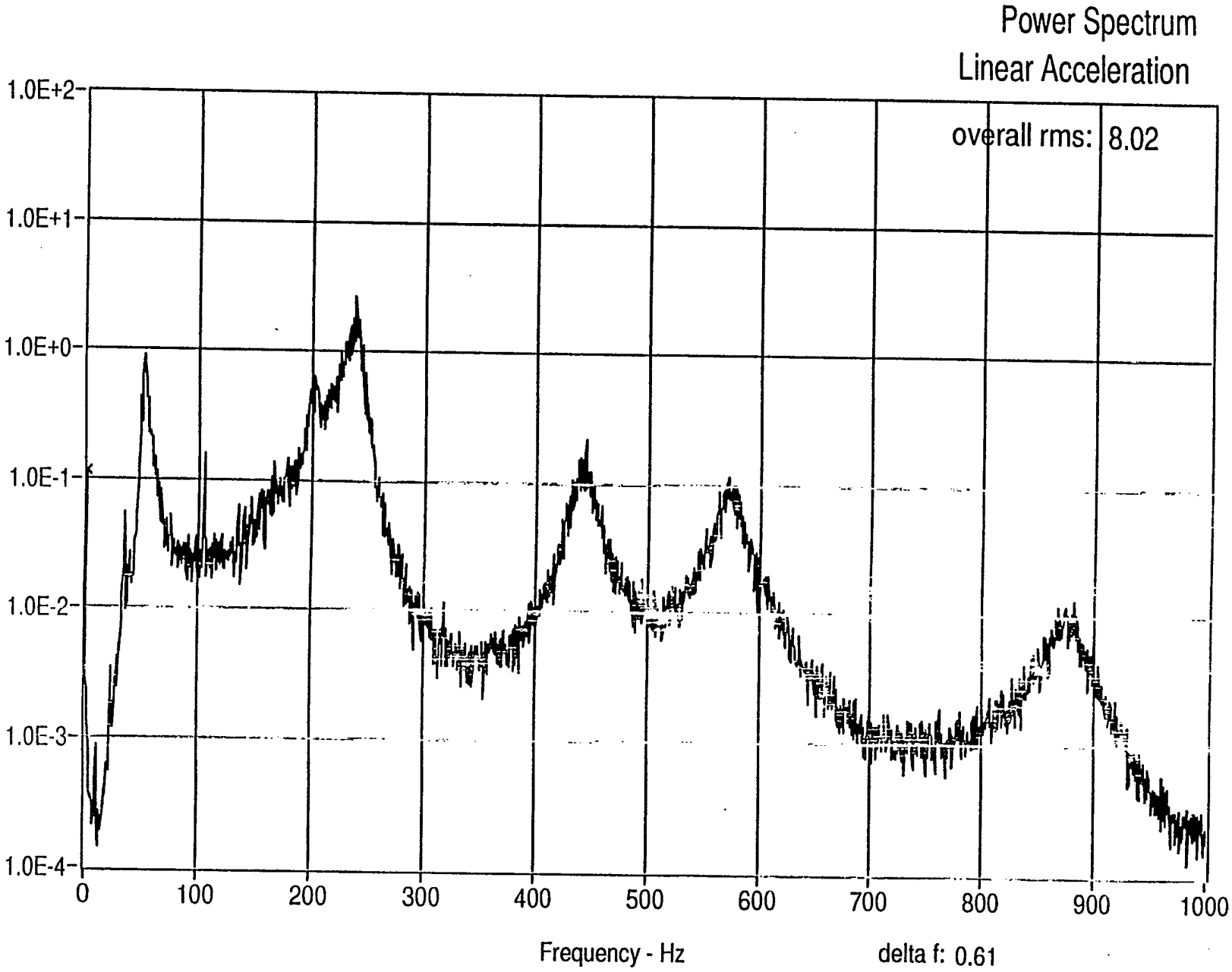
F-15 TPN_3040: alpha=20 beta=0 bp=65



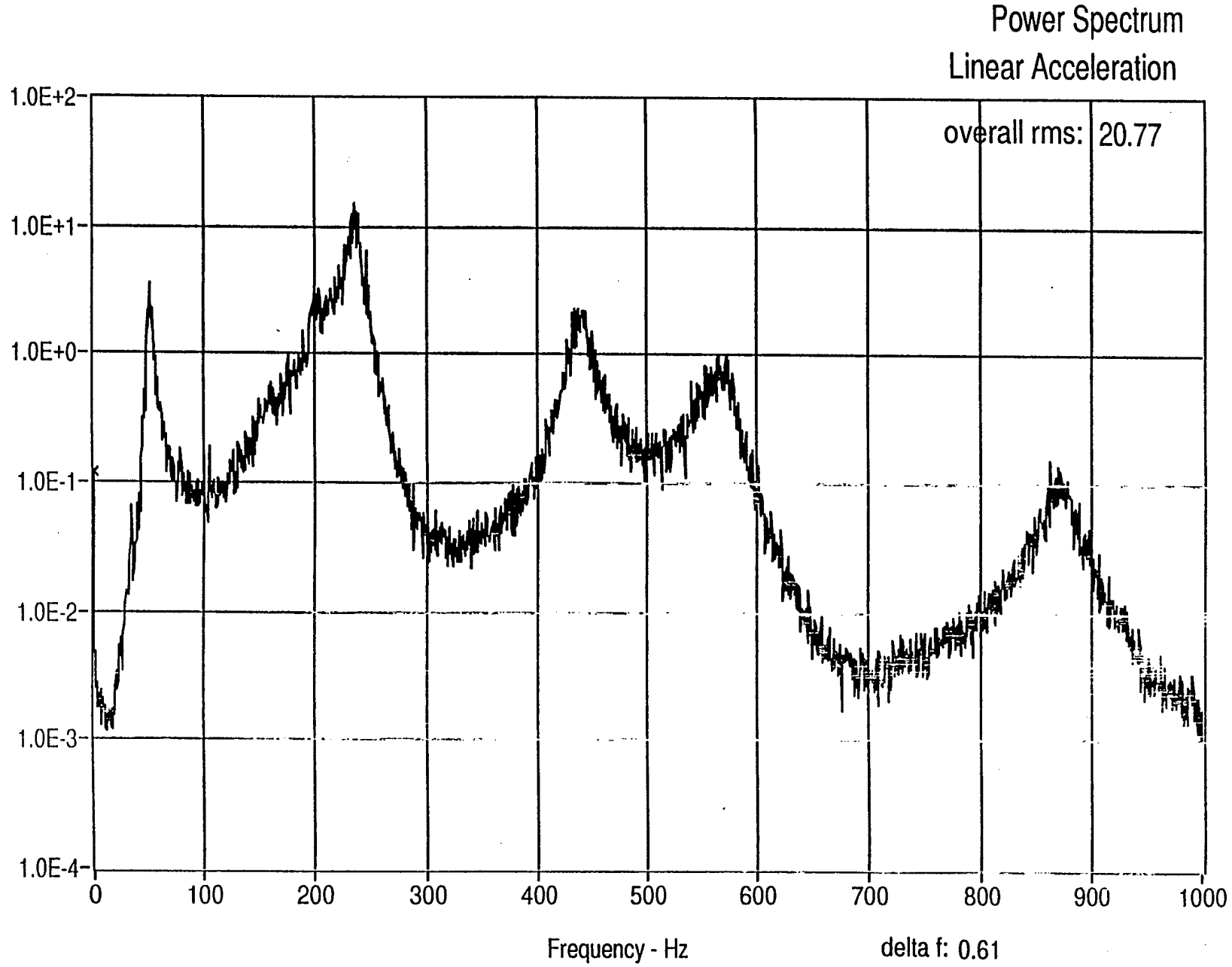
F-15 TPN_3042: alpha=24 beta=0 bp=65



F-15 TPN_3046: alpha=20 beta=4 bp=65



F-15 TPN_3048: alpha=24 beta=4 bp=65

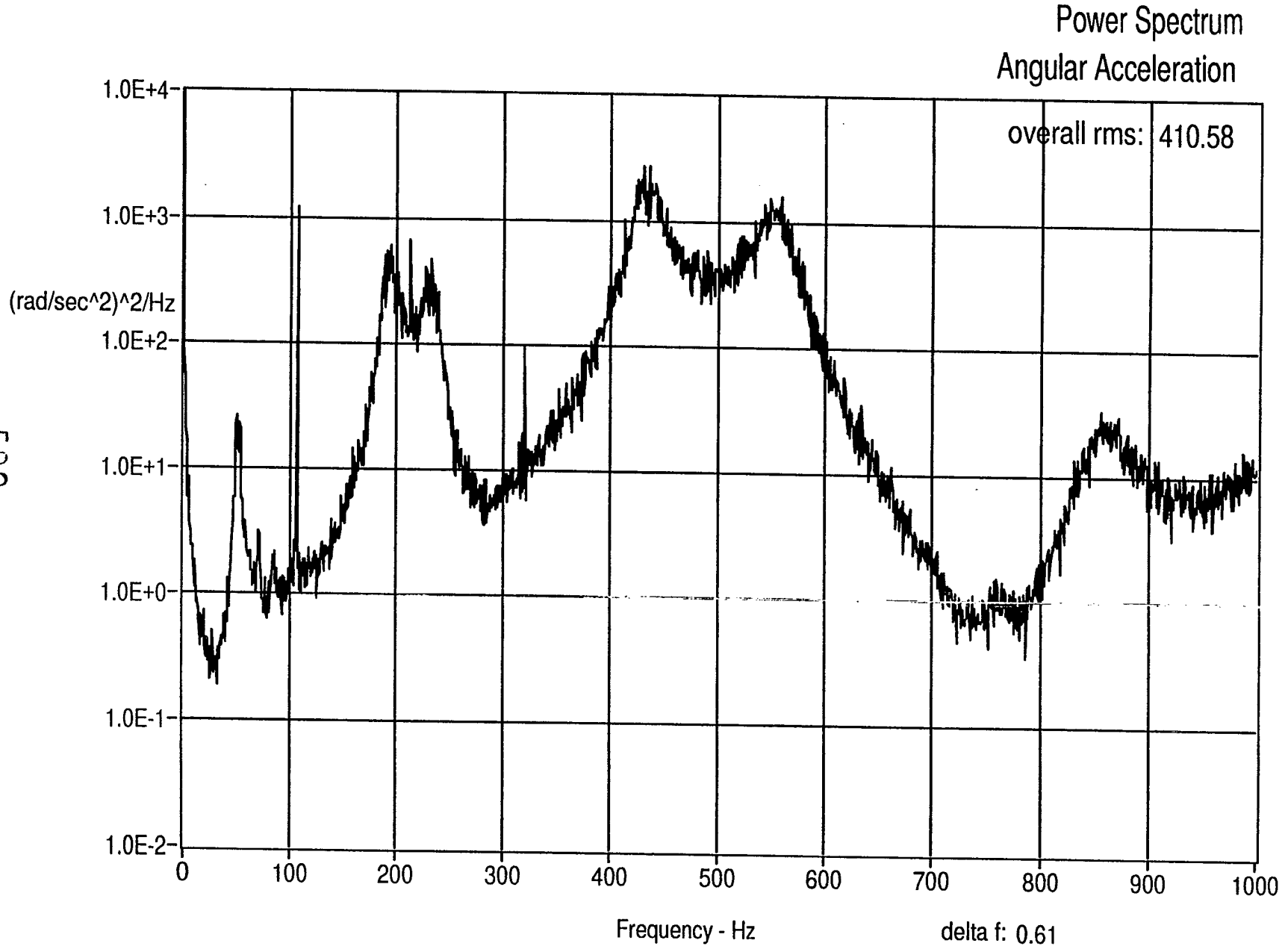


FLEXIBLE TAIL RESPONSE
ACCELERATION DATA
Q= 56 PSF
PSD GRAPHS

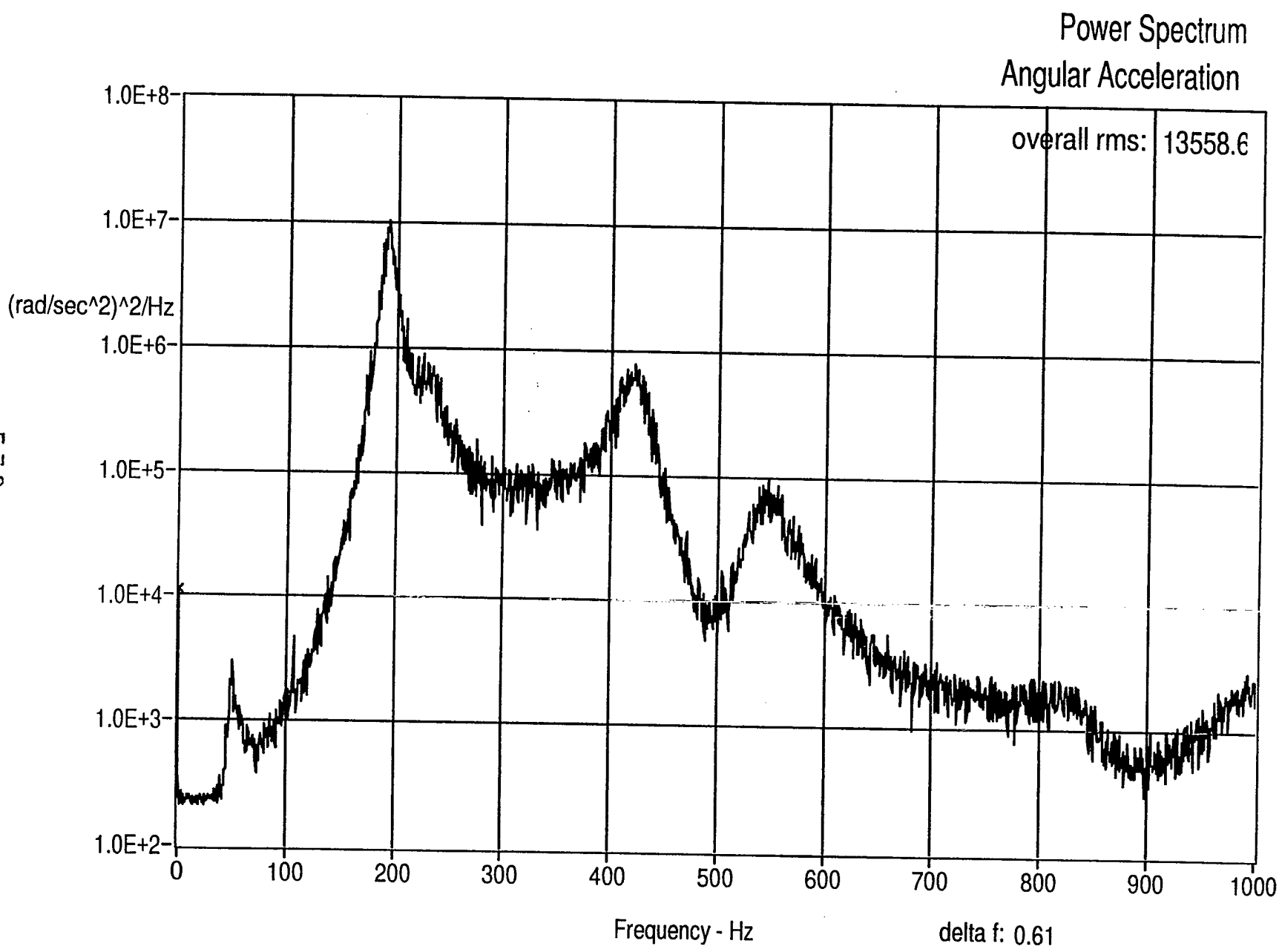
4.1.1.3 TORSIONAL (ANGULAR AT EA) beta= 0, +4, -4 Deg, WBP = 0, 45, 65 psi
ALPHAS = 8, 20, 24, 32 DEG

data isfurter blocked blocked off by blowing pressures, with beta variation within.

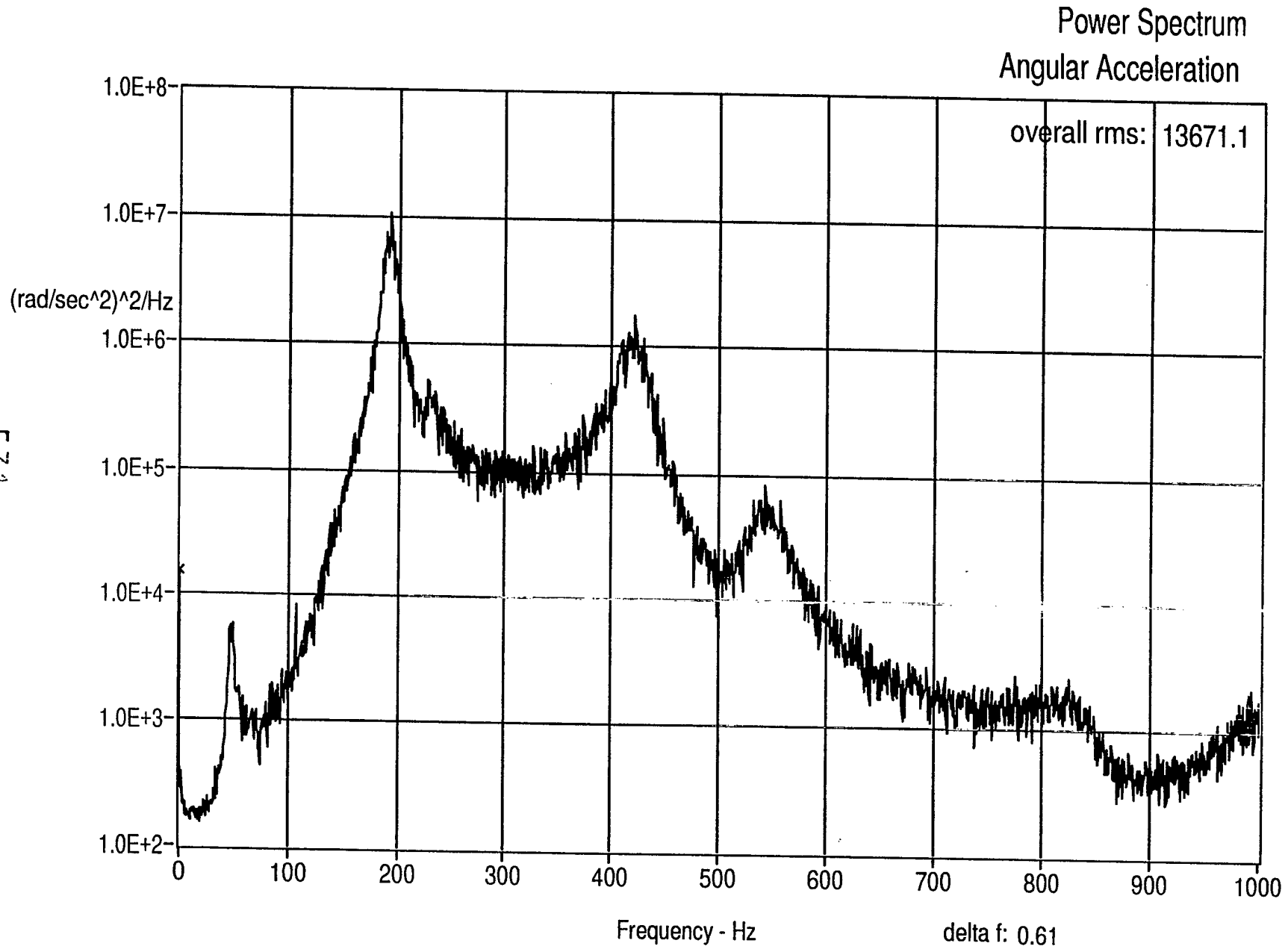
F-15 TPN_2864: alpha=8 beta=-4 bp=0



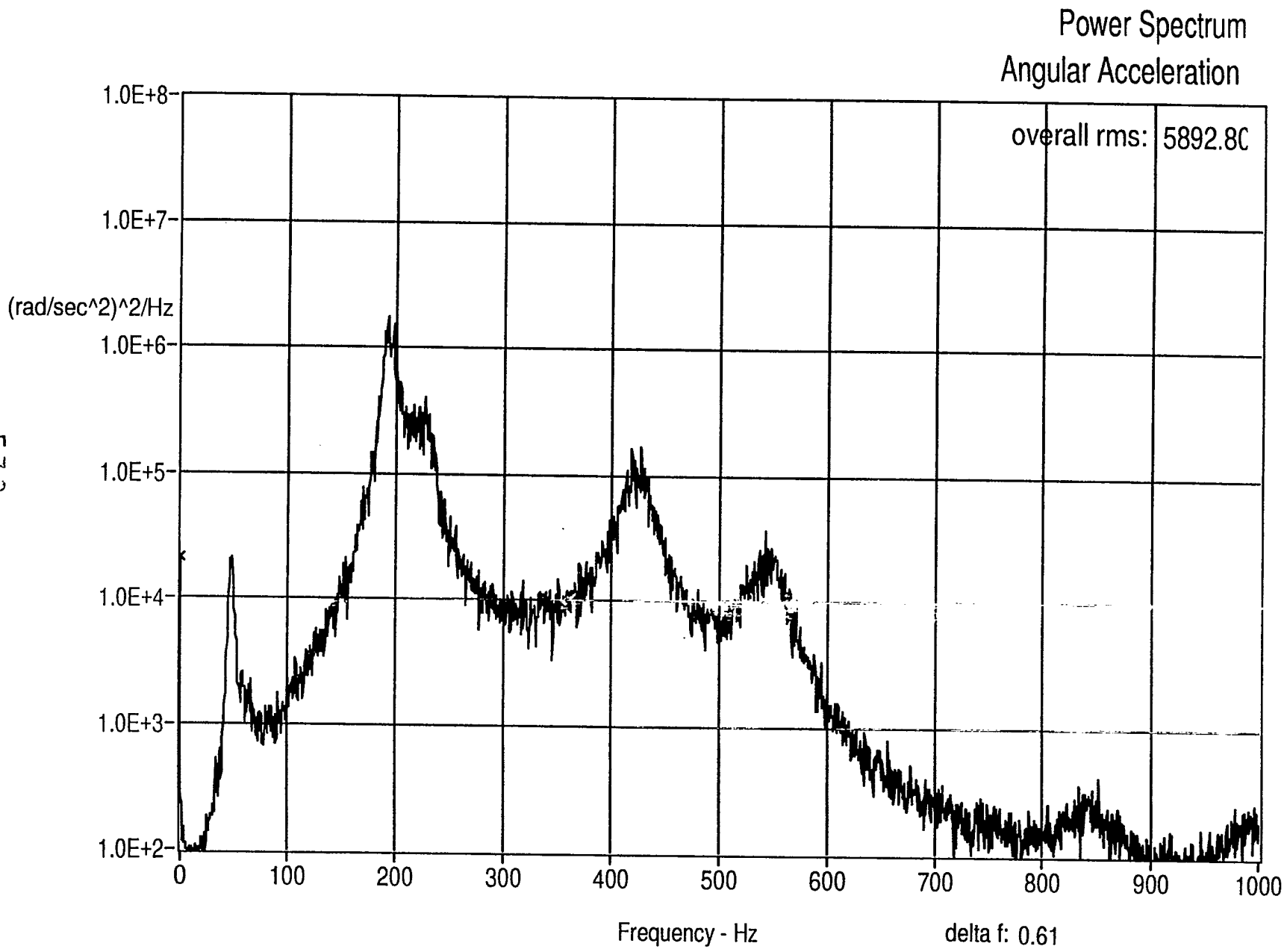
F-15 TPN_2870: alpha=20 beta=-4 bp=0



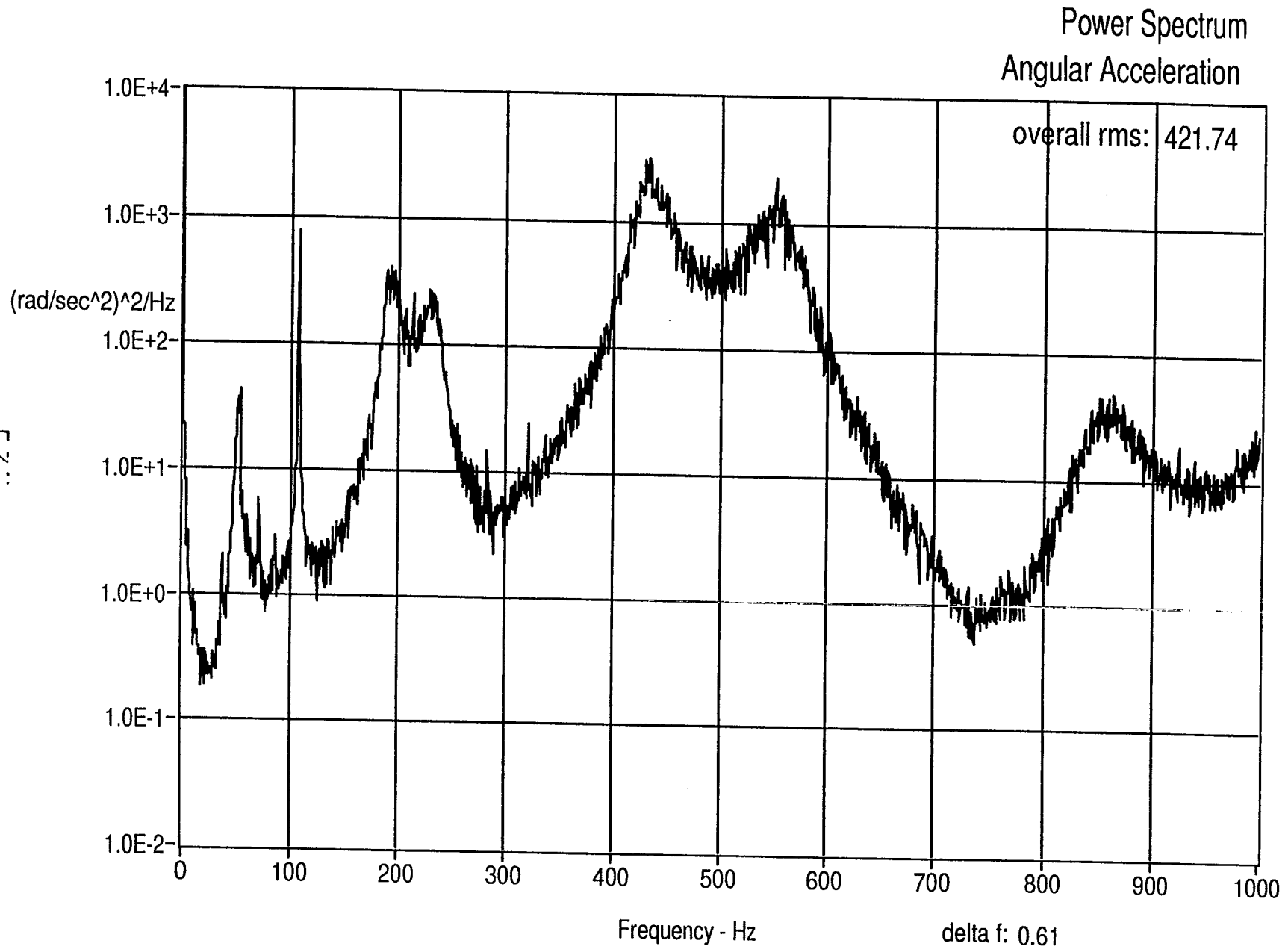
F-15 TPN_2872: alpha=24 beta=-4 bp=0



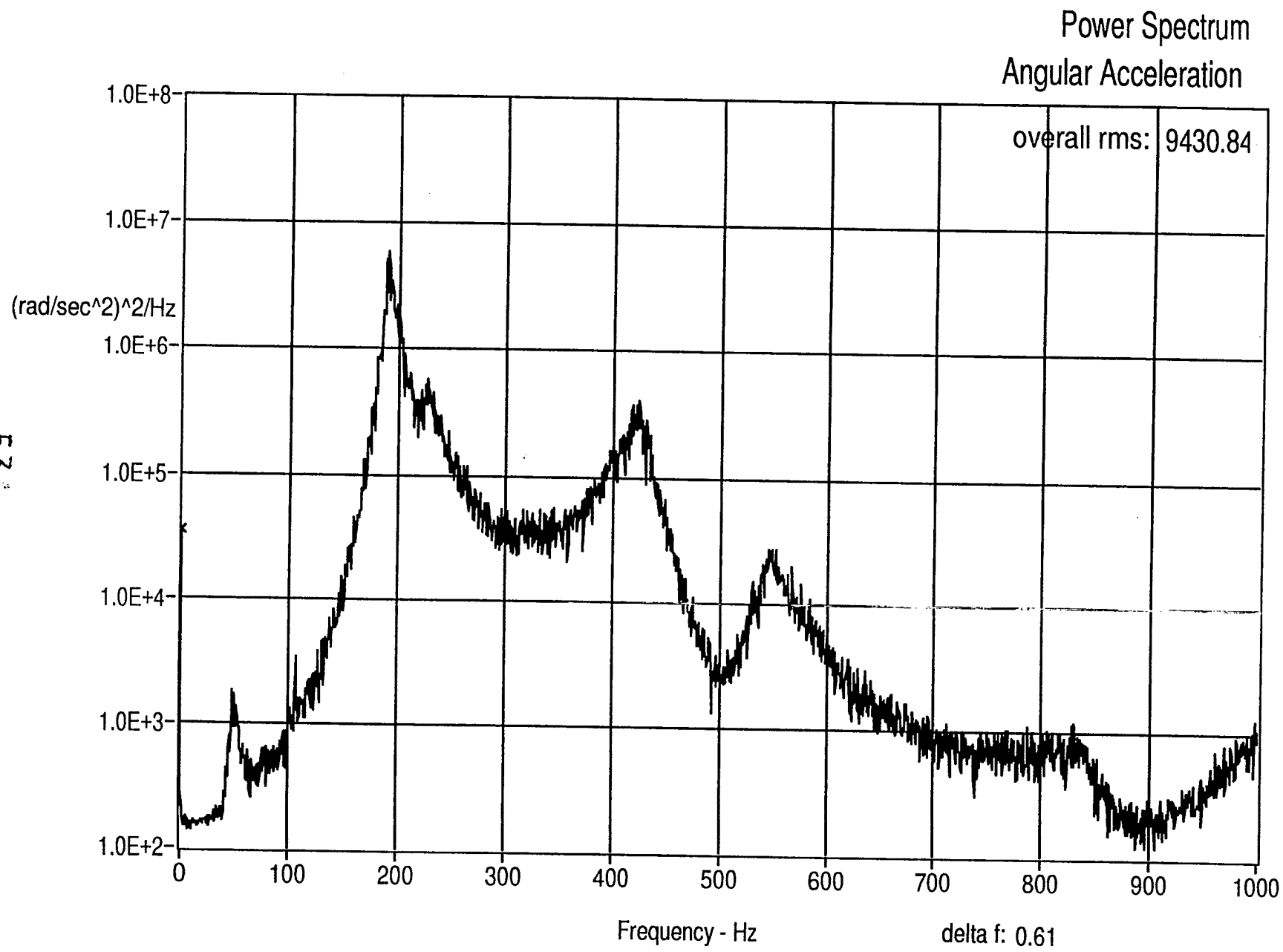
F-15 TPN_2874: alpha=32 beta=-4 bp=0



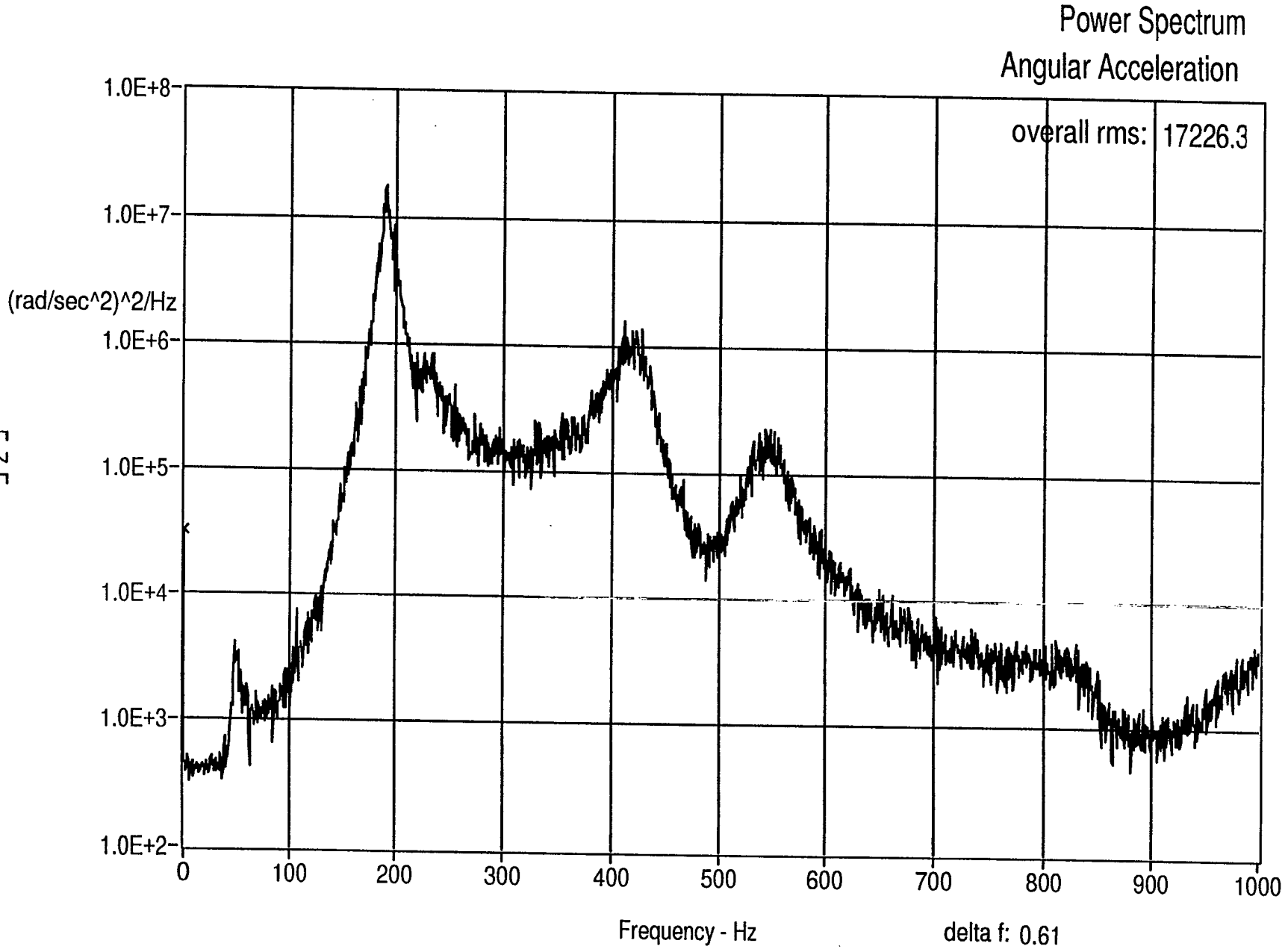
F-15 TPN_2844: alpha=8 beta=0 bp=0



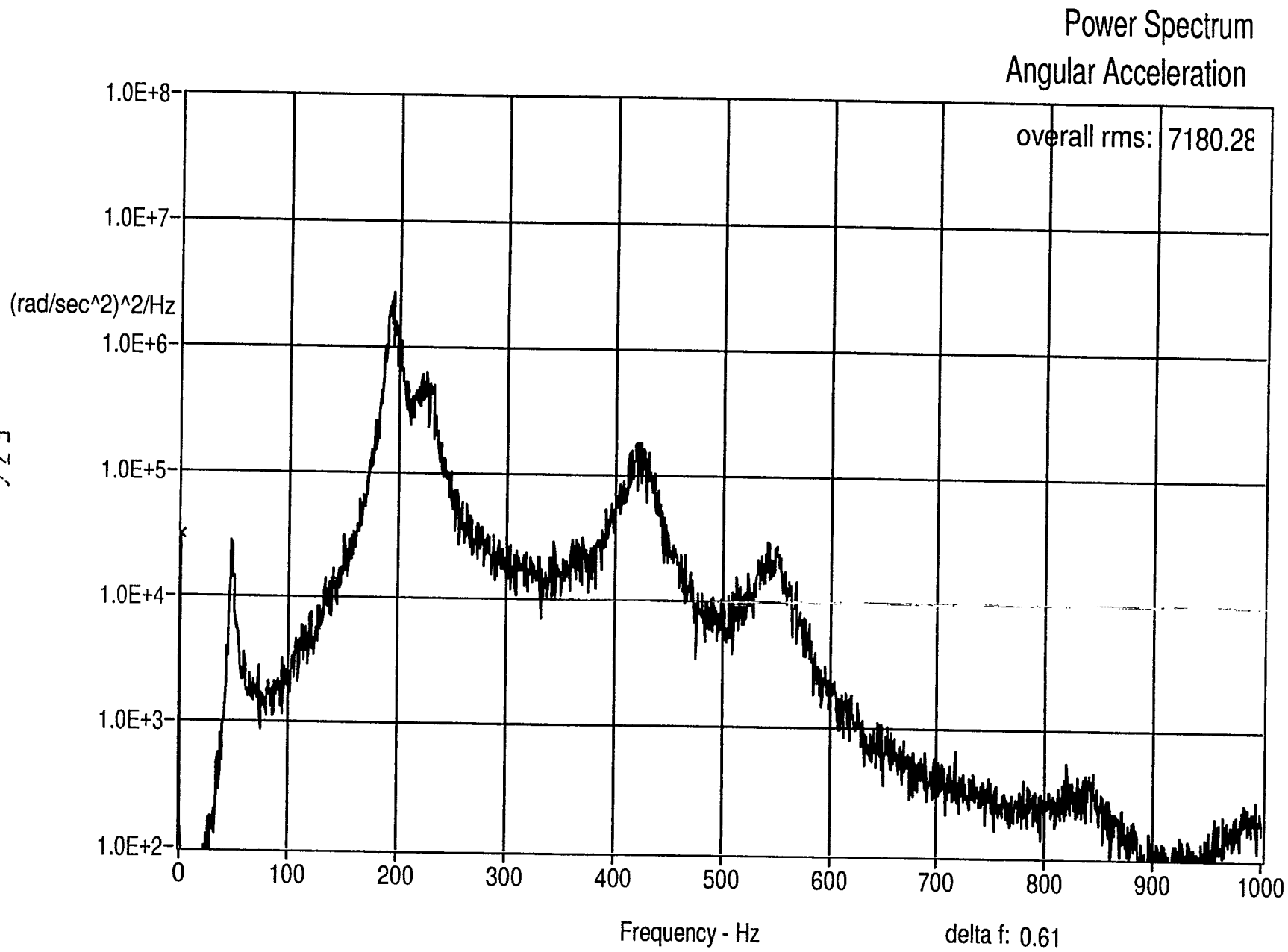
F-15 TPN_2850: alpha=20 beta=0 bp=0



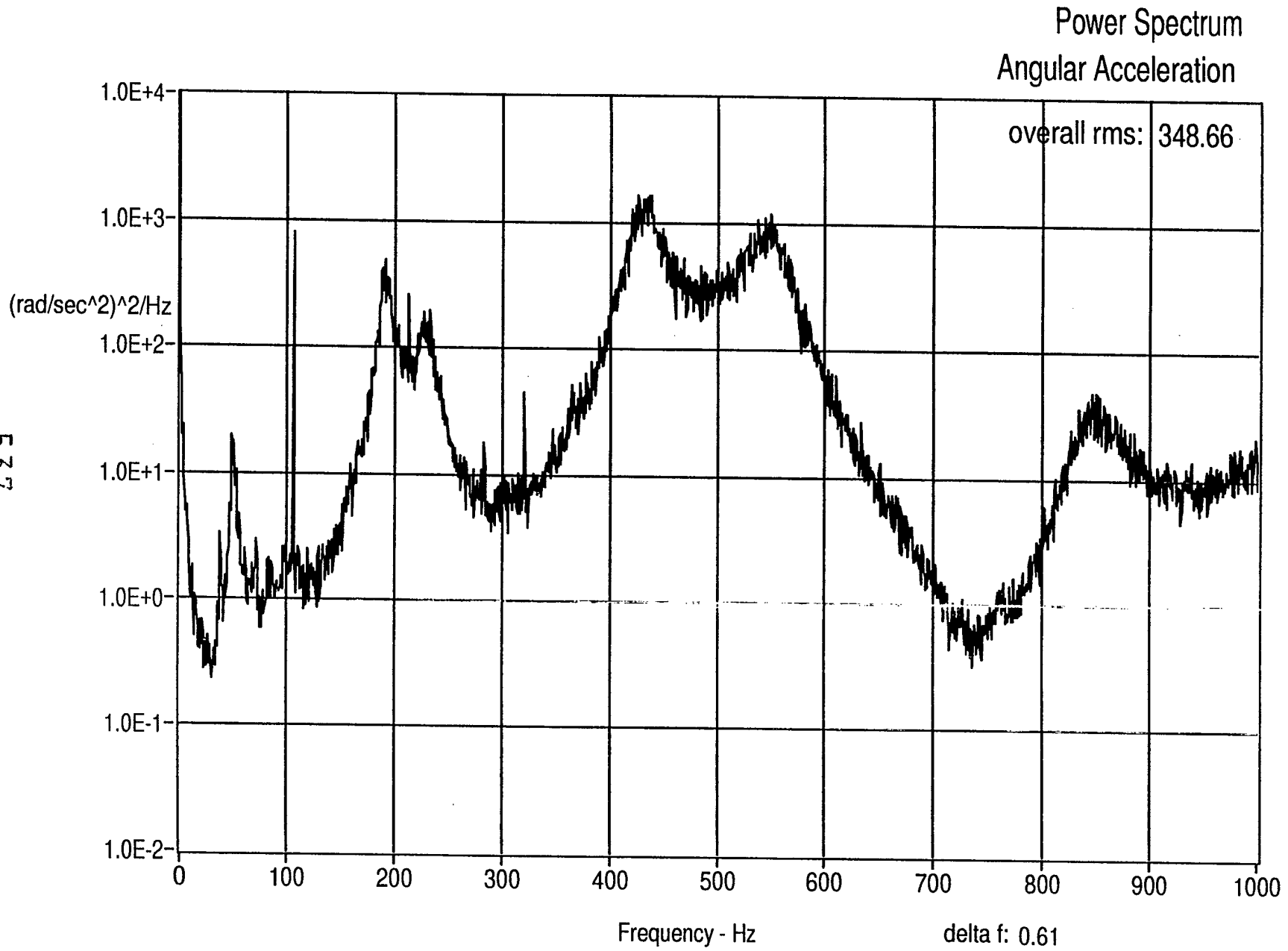
F-15 TPN_2852: alpha=24 beta=0 bp=0



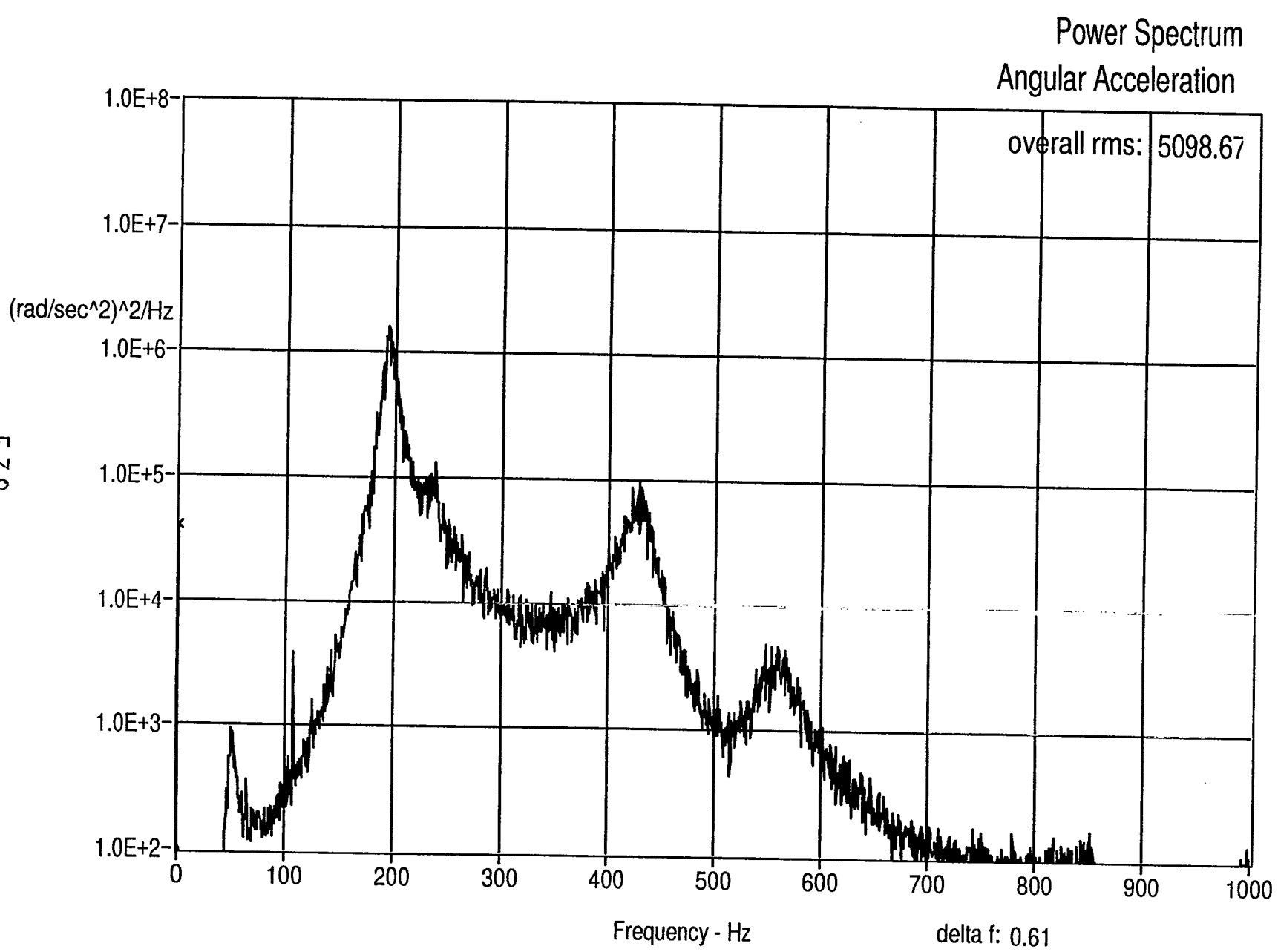
F-15 TPN_2854: alpha=32 beta=0 bp=0



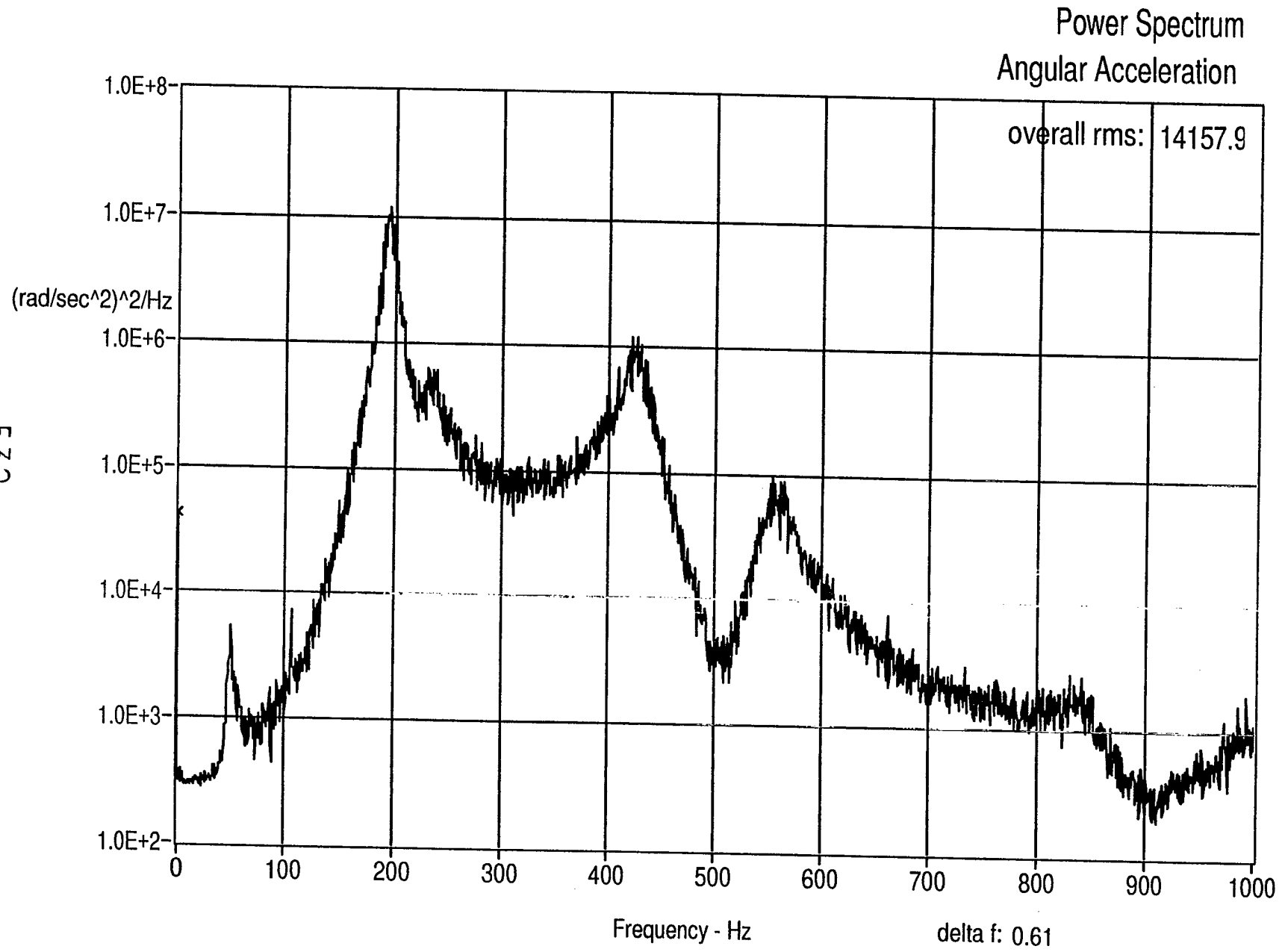
F-15 TPN_2918: alpha=8 beta=4 bp=0



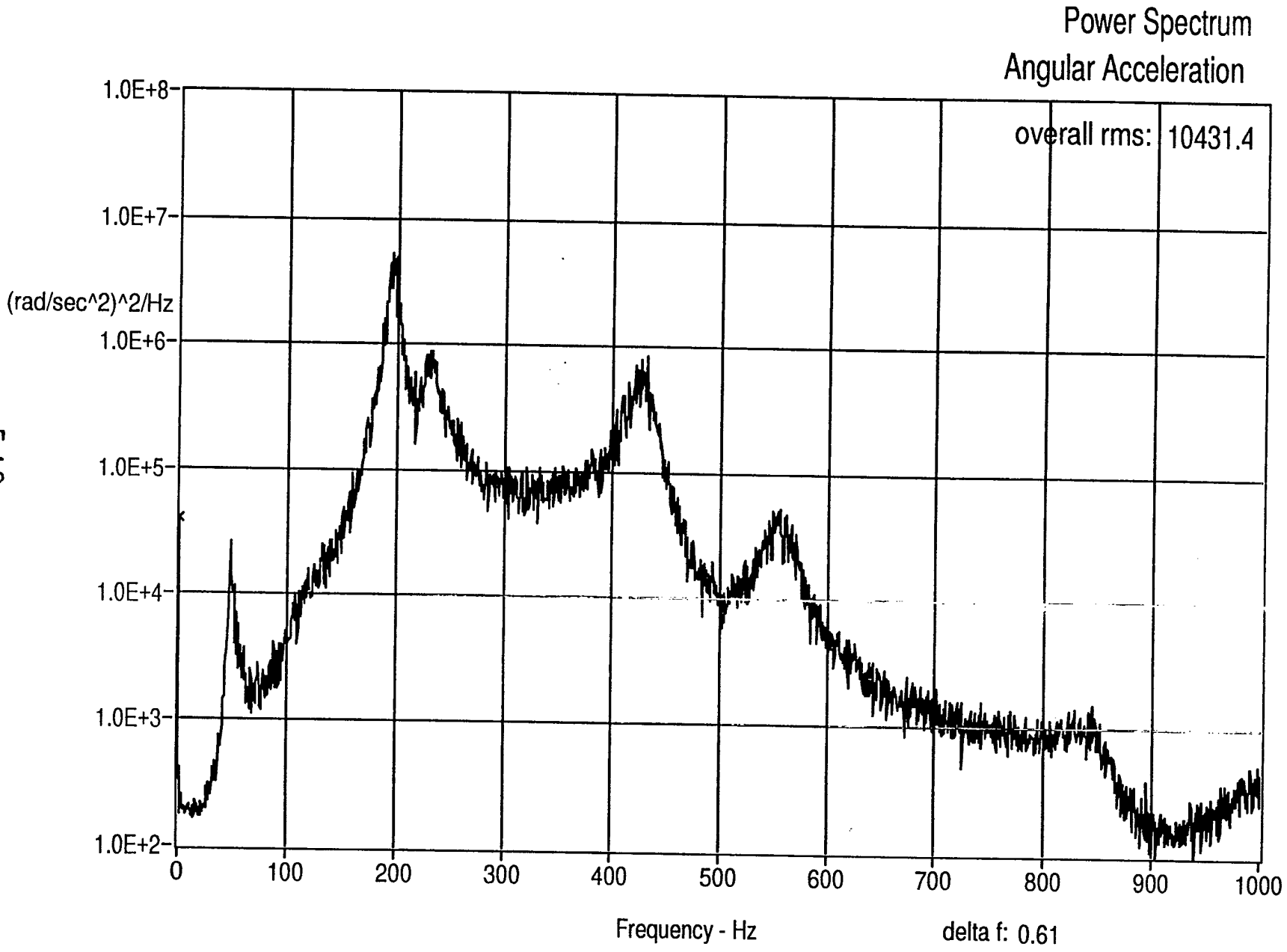
F-15 TPN_2924: alpha=20 beta=4 bp=0



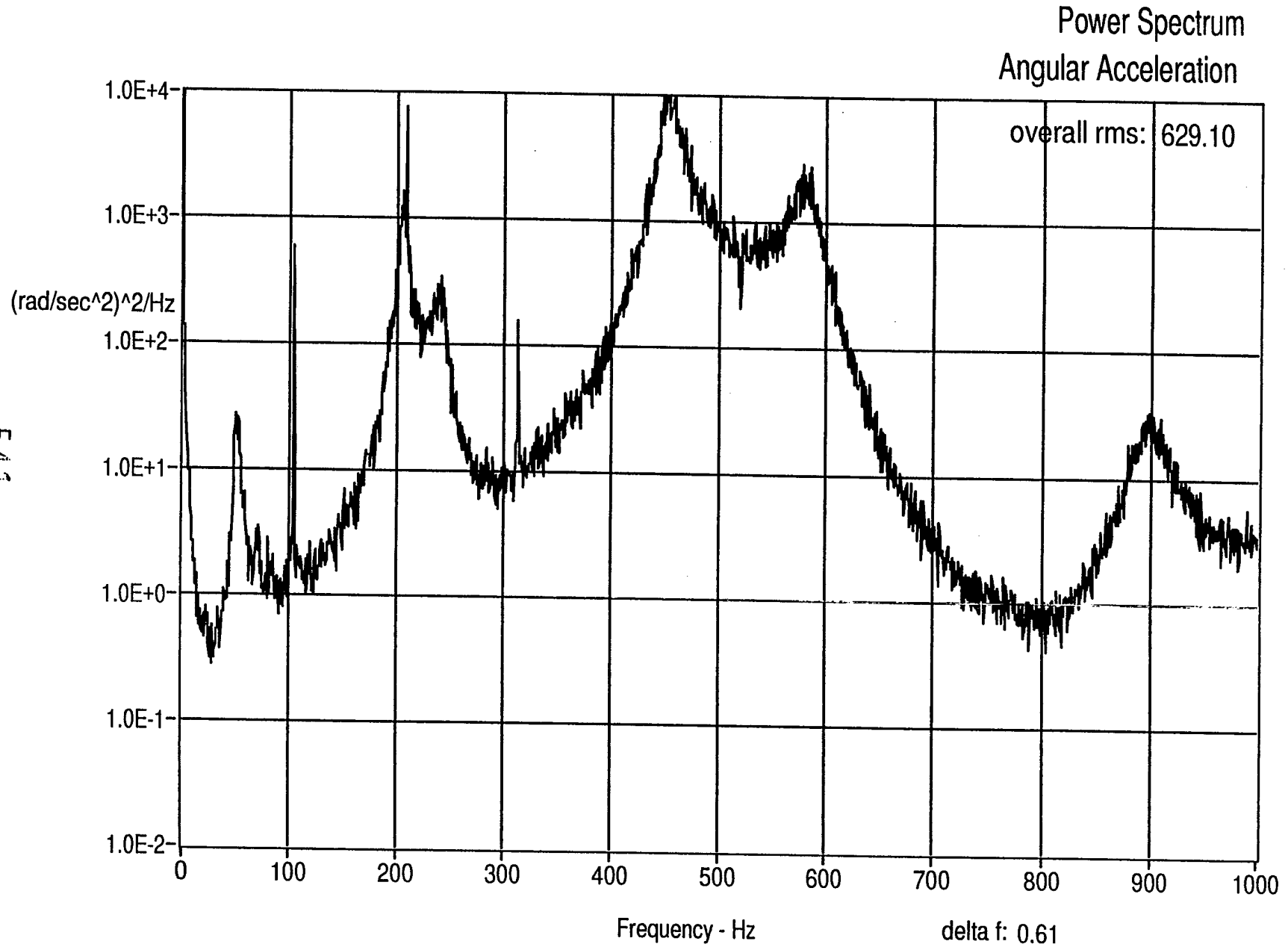
F-15 TPN_2926: alpha=24 beta=4 bp=0



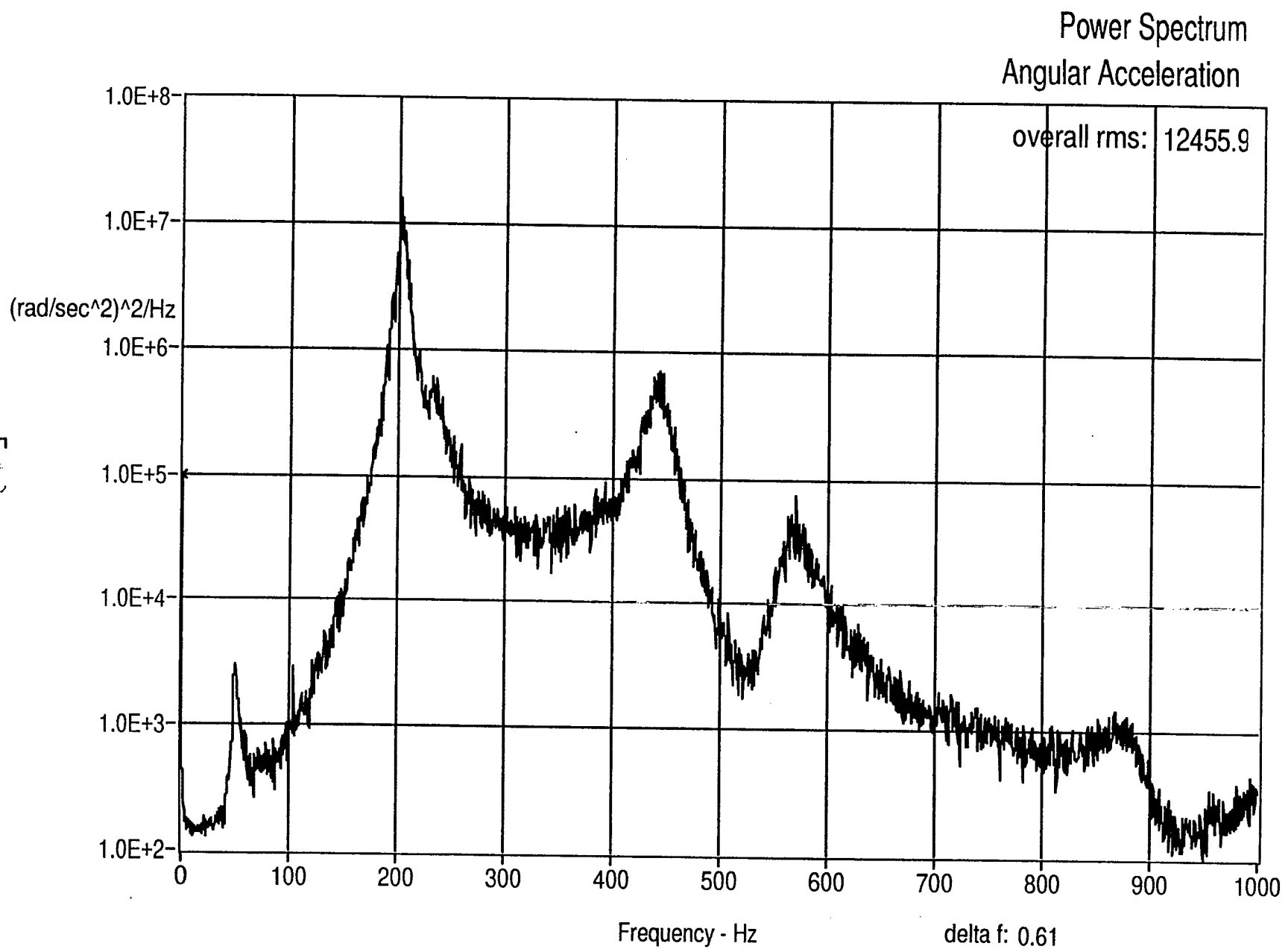
F-15 TPN_2928: alpha=32 beta=4 bp=0



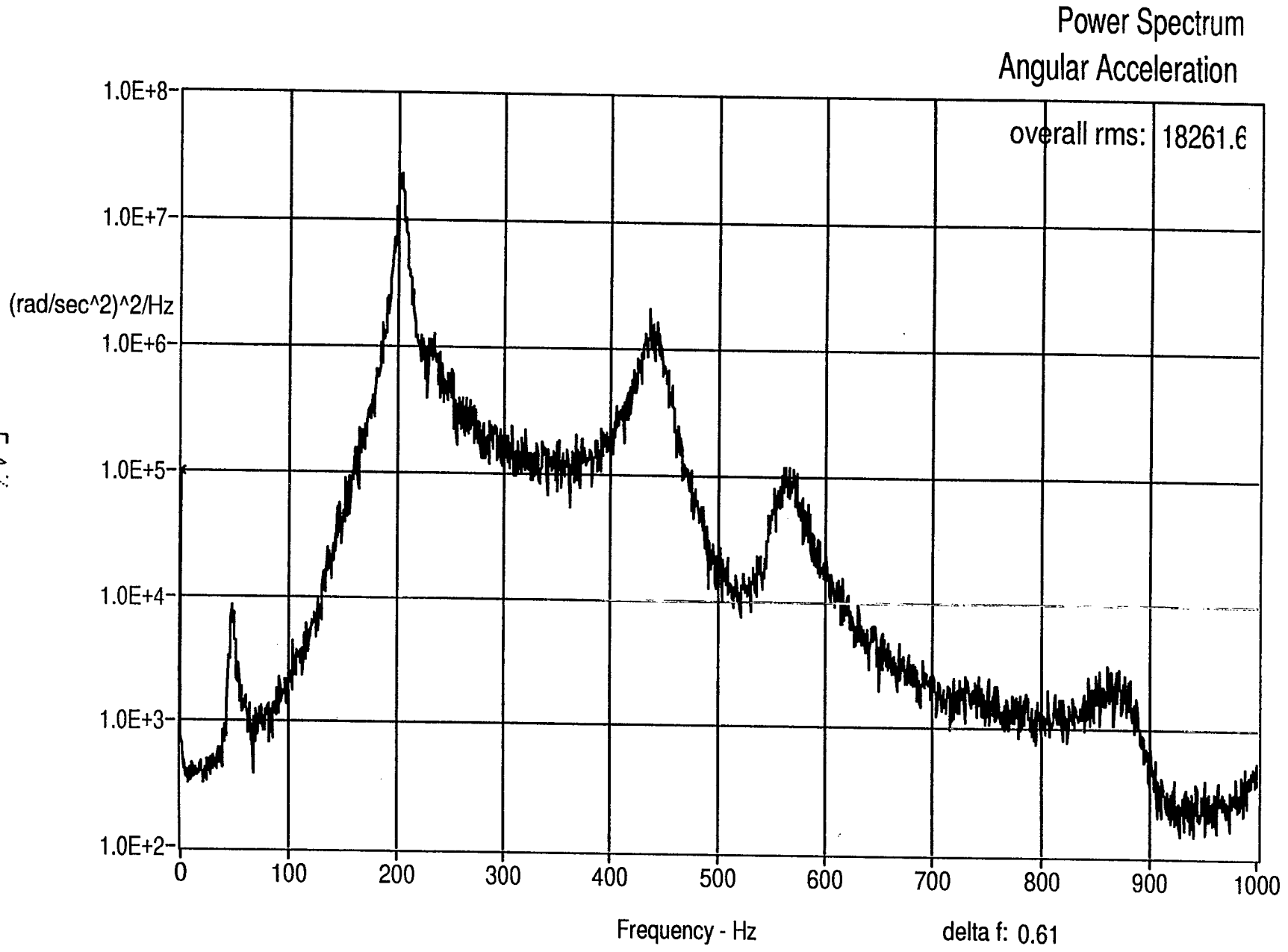
F-15 TPN_3369: alpha=8 beta=-4 bp=45



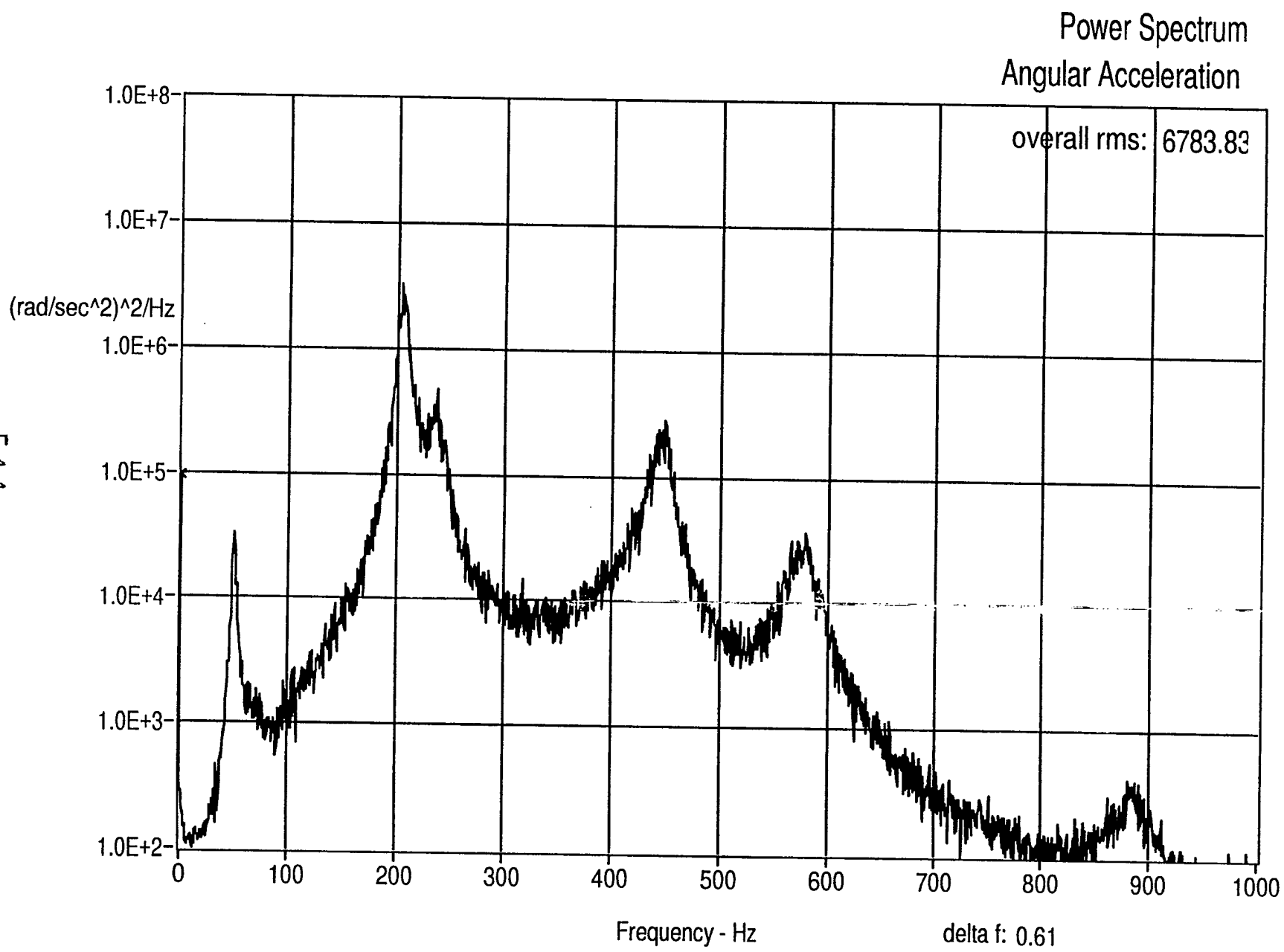
F-15 TPN_3375: alpha=20 beta=-4 bp=45



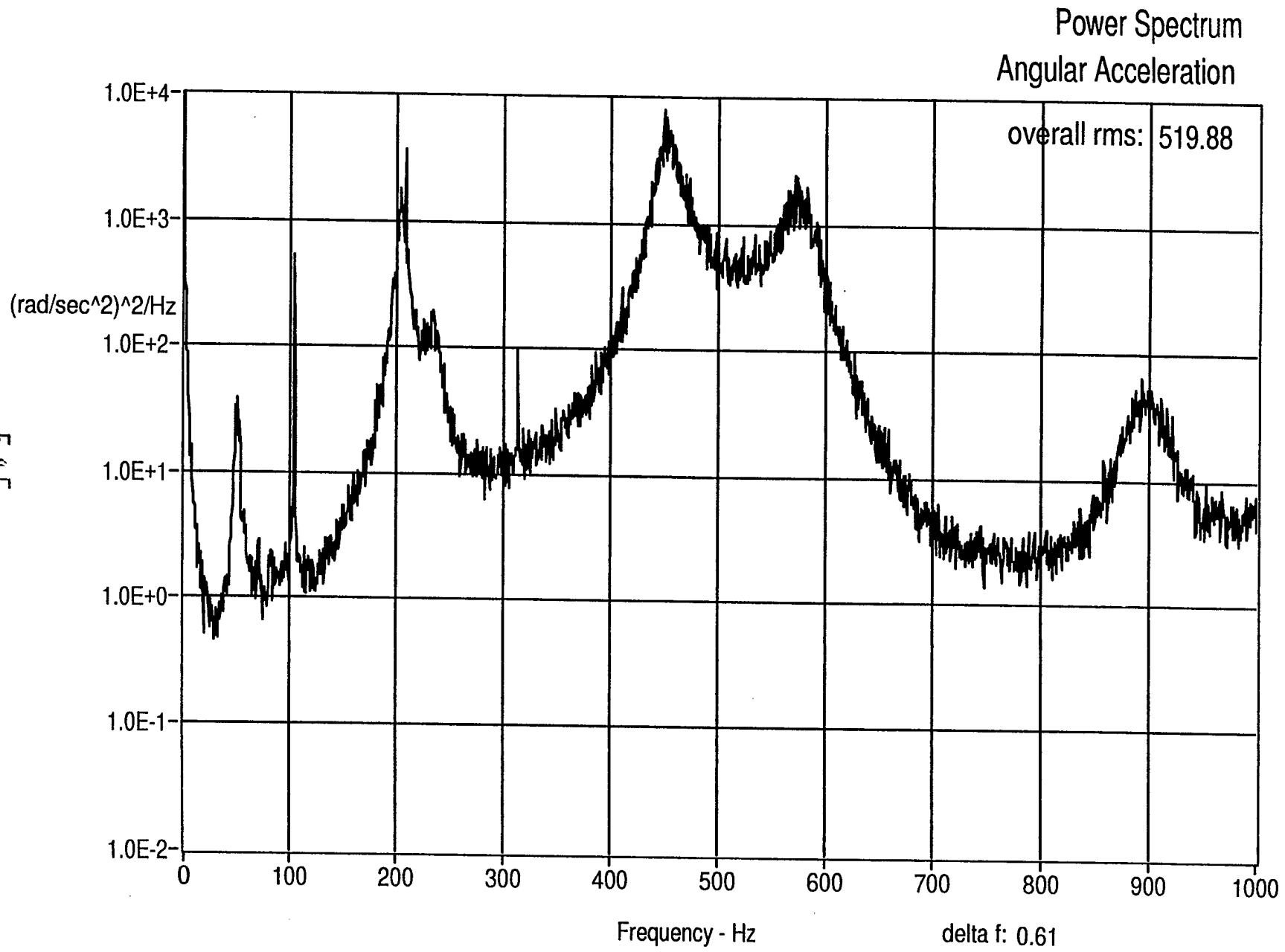
F-15 TPN_3377: alpha=24 beta=-4 bp=45



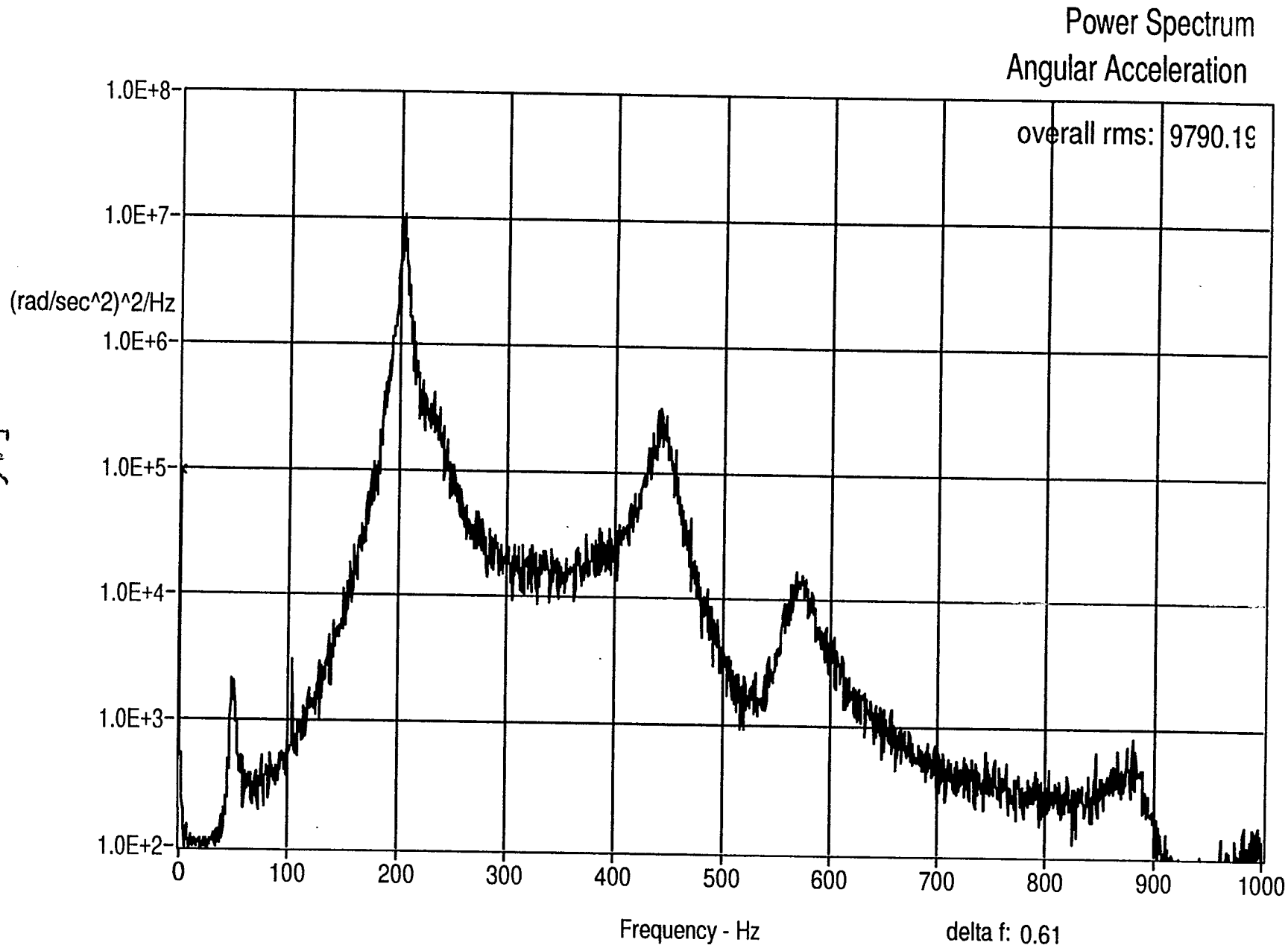
F-15 TPN_3379: alpha=32 beta=-4 bp=45



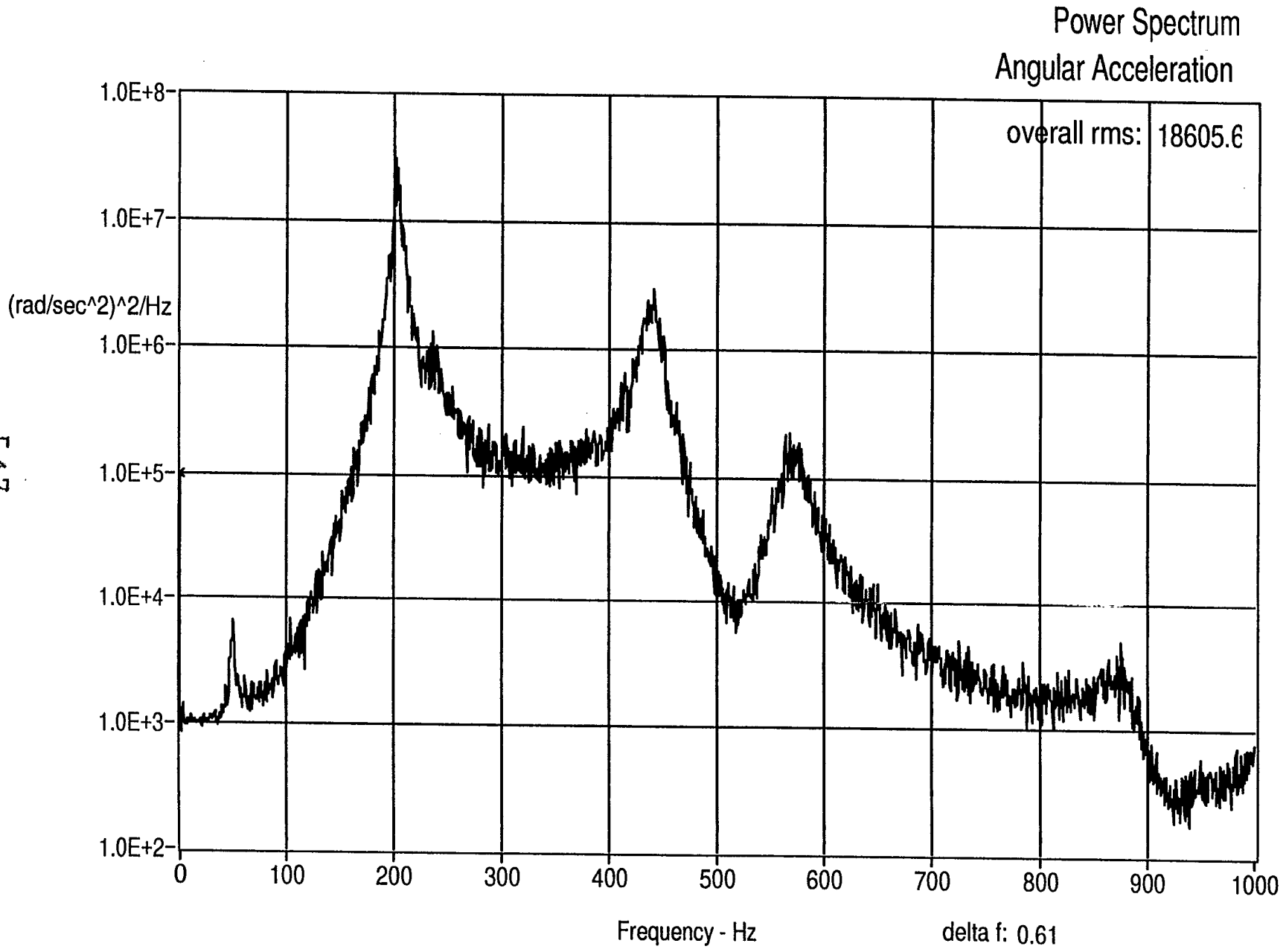
F-15 TPN_3333: alpha=8 beta=0 bp=45



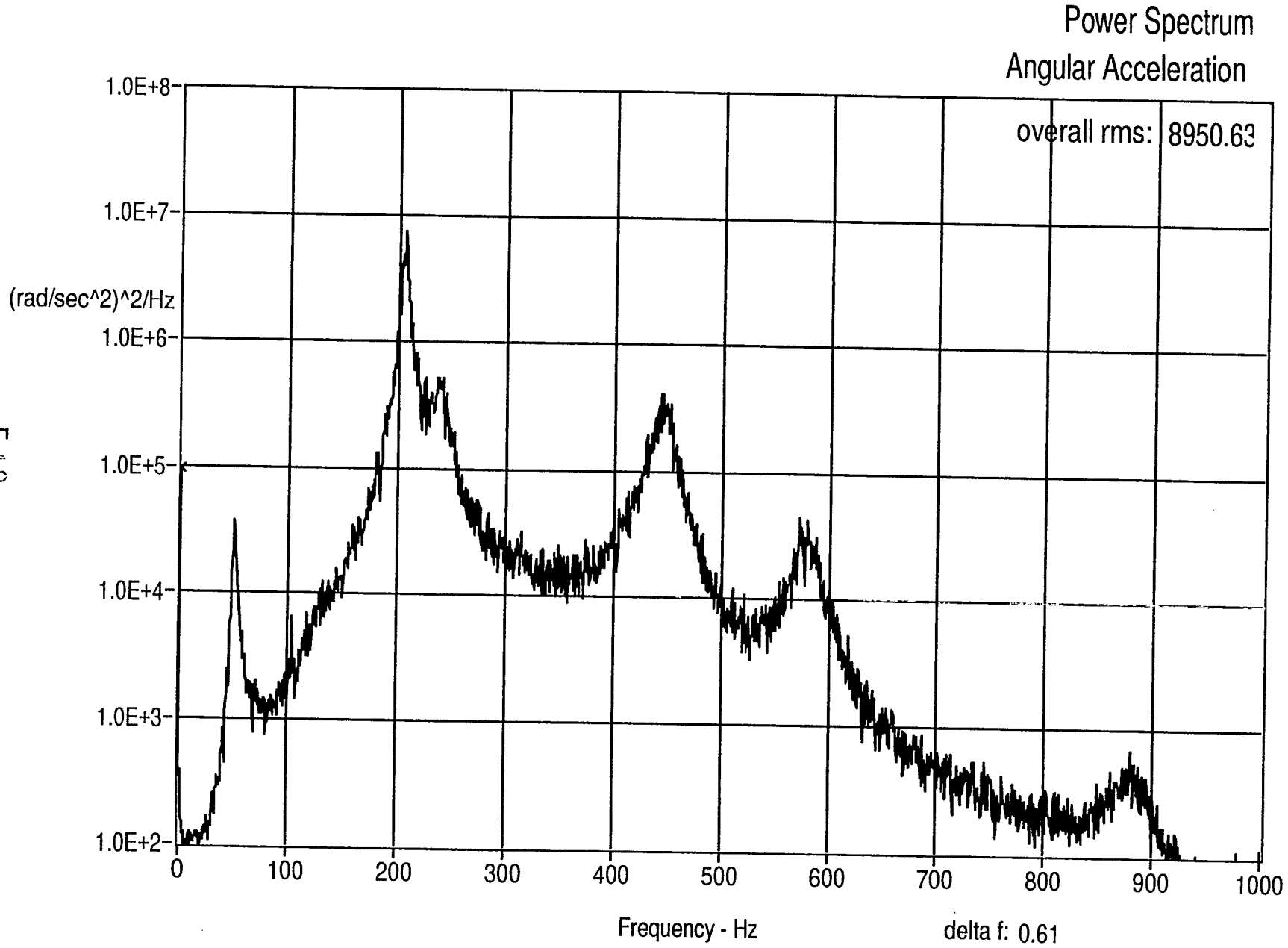
F-15 TPN_3339: alpha=20 beta=0 bp=45



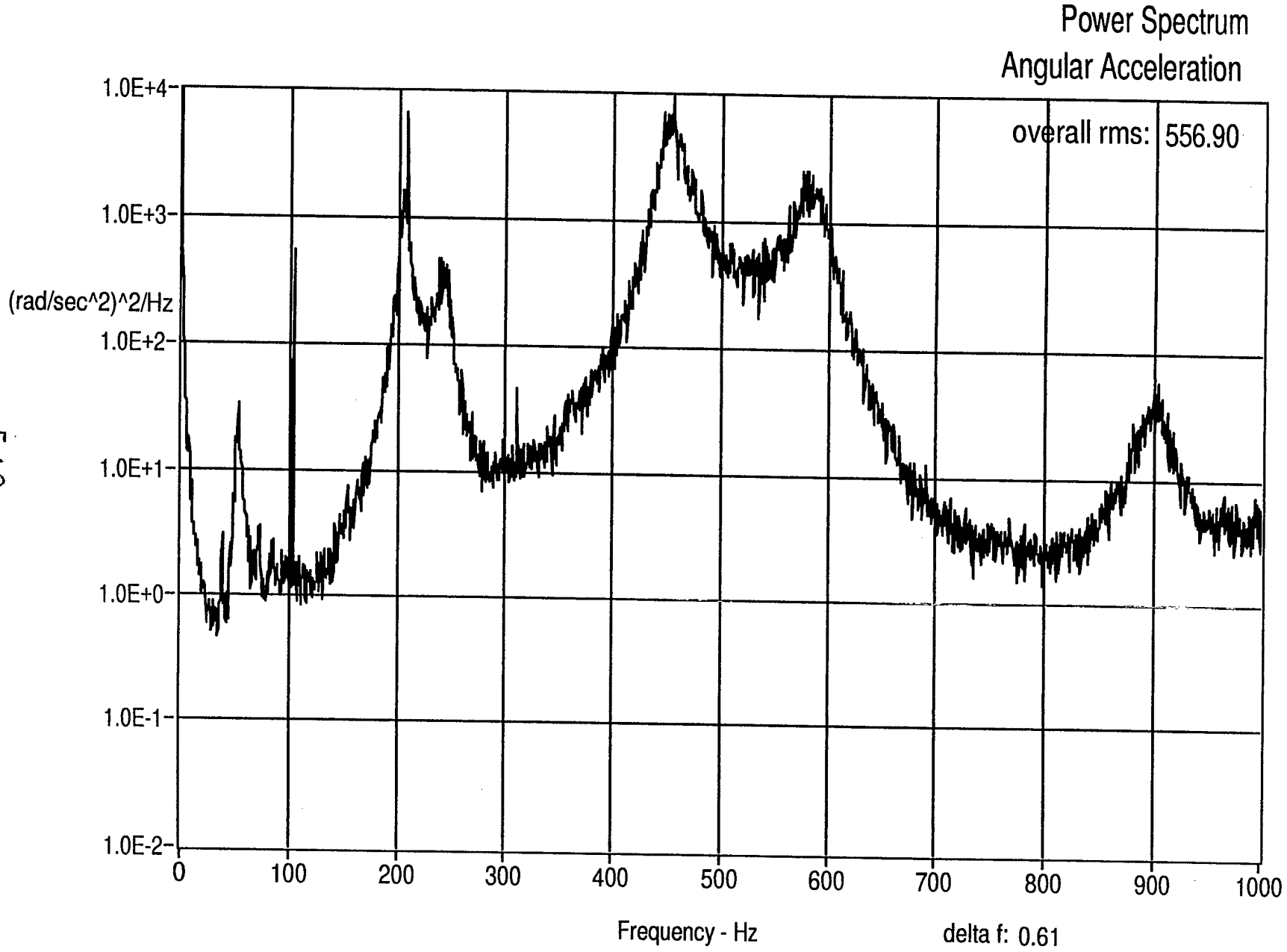
F-15 TPN_3341: alpha=24 beta=0 bp=45



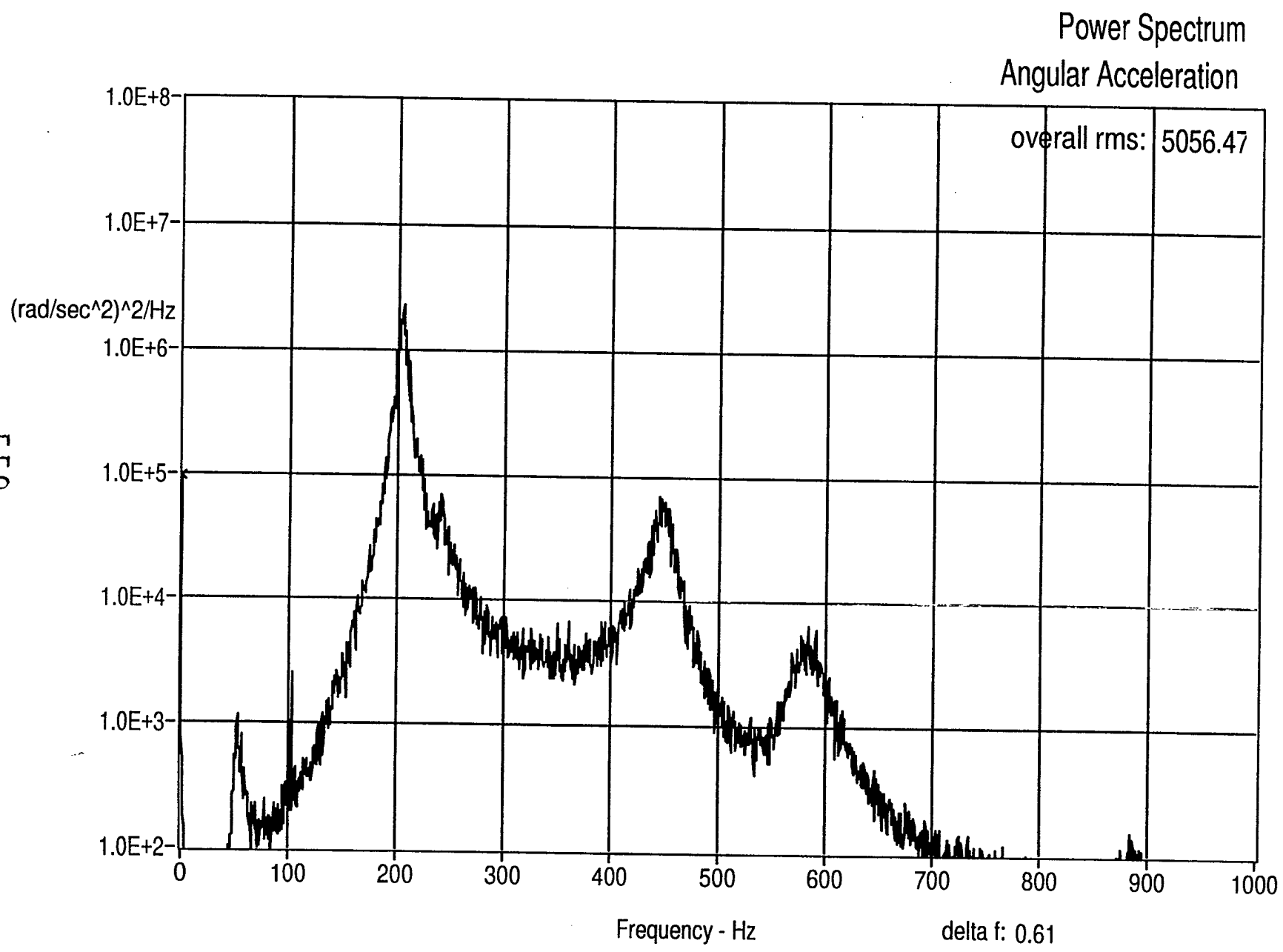
F-15 TPN_3343: alpha=32 beta=0 bp=45



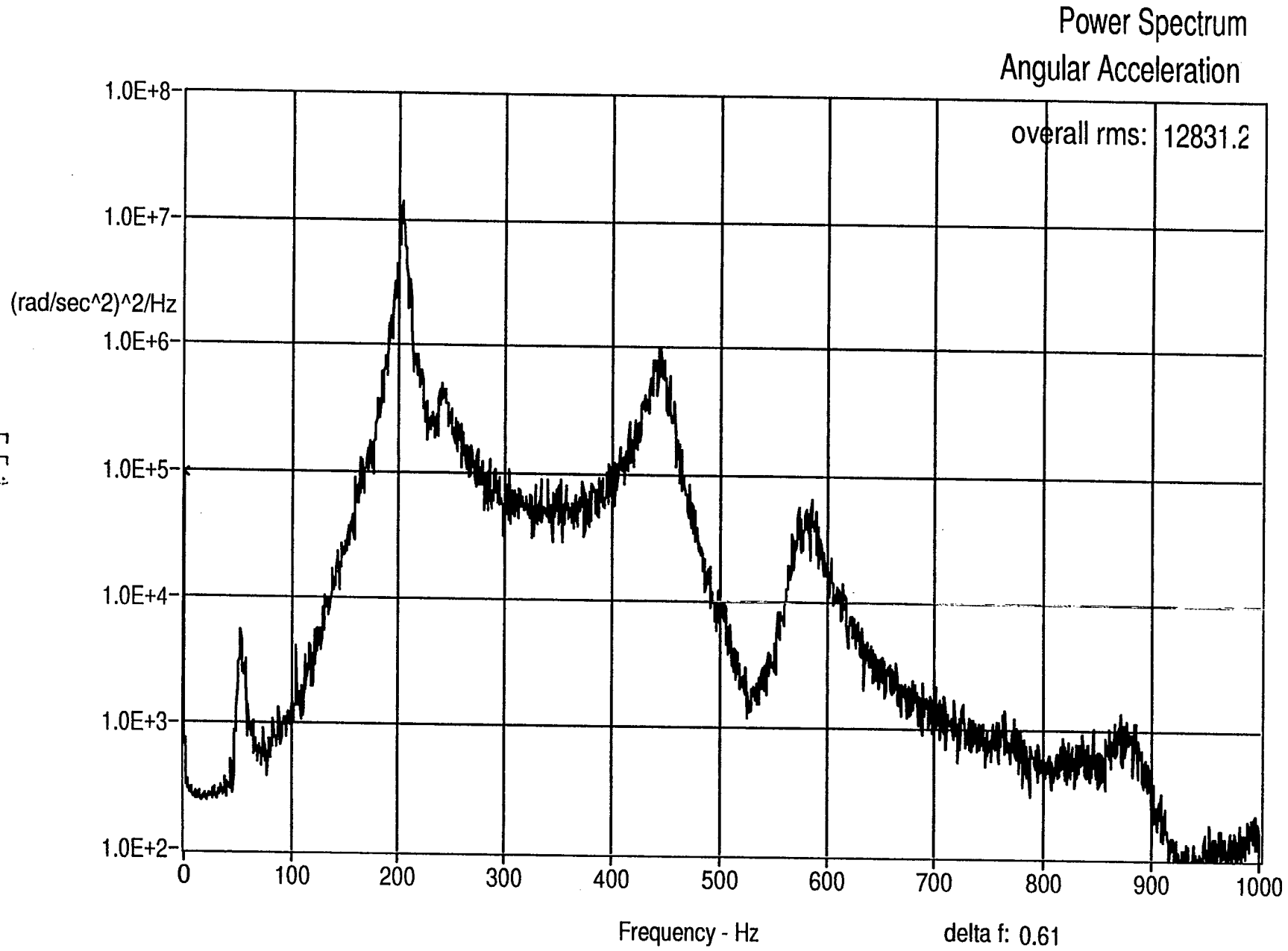
F-15 TPN_3351: alpha=8 beta=4 bp=45



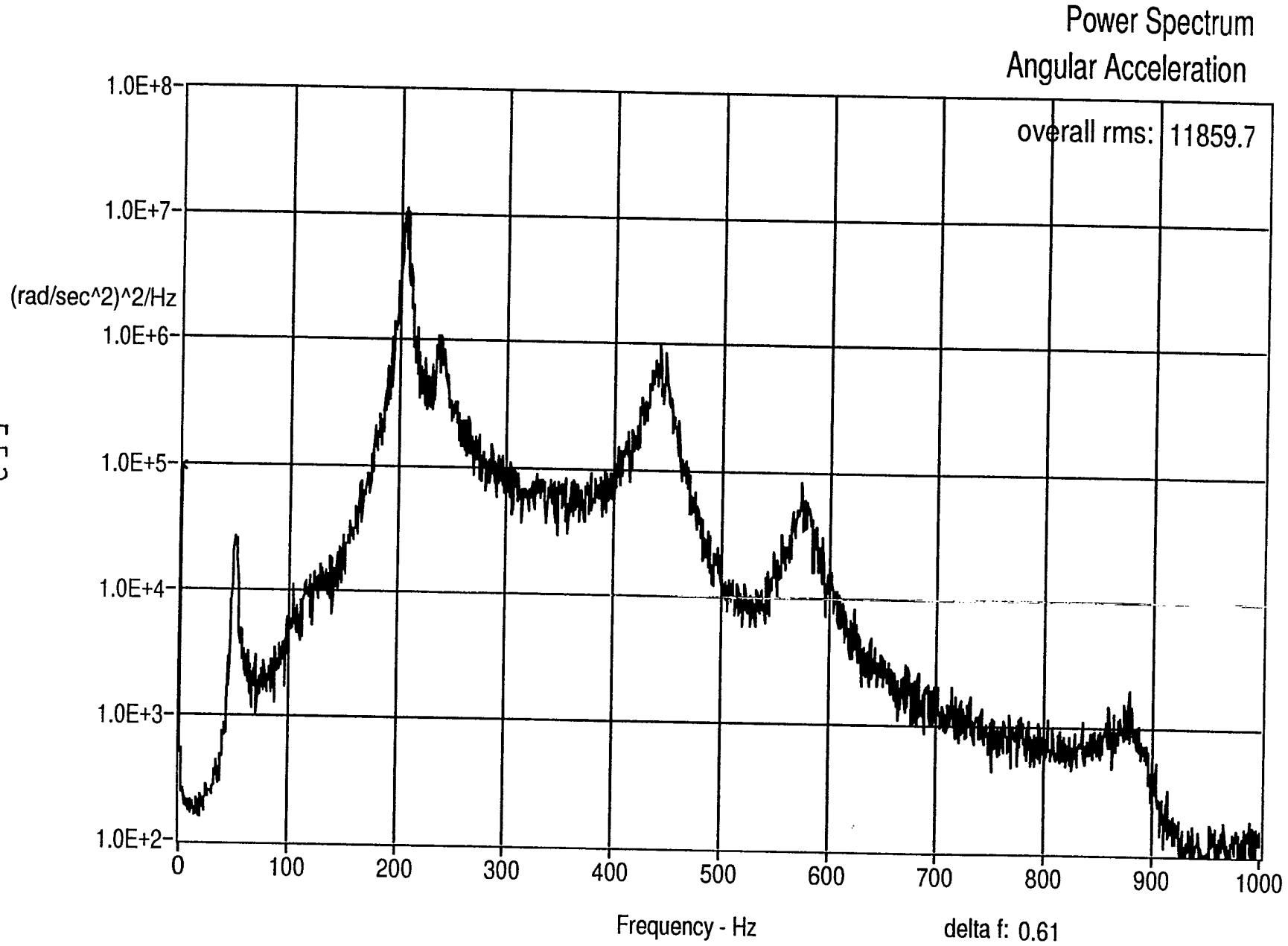
F-15 TPN_3357: alpha=20 beta=4 bp=45



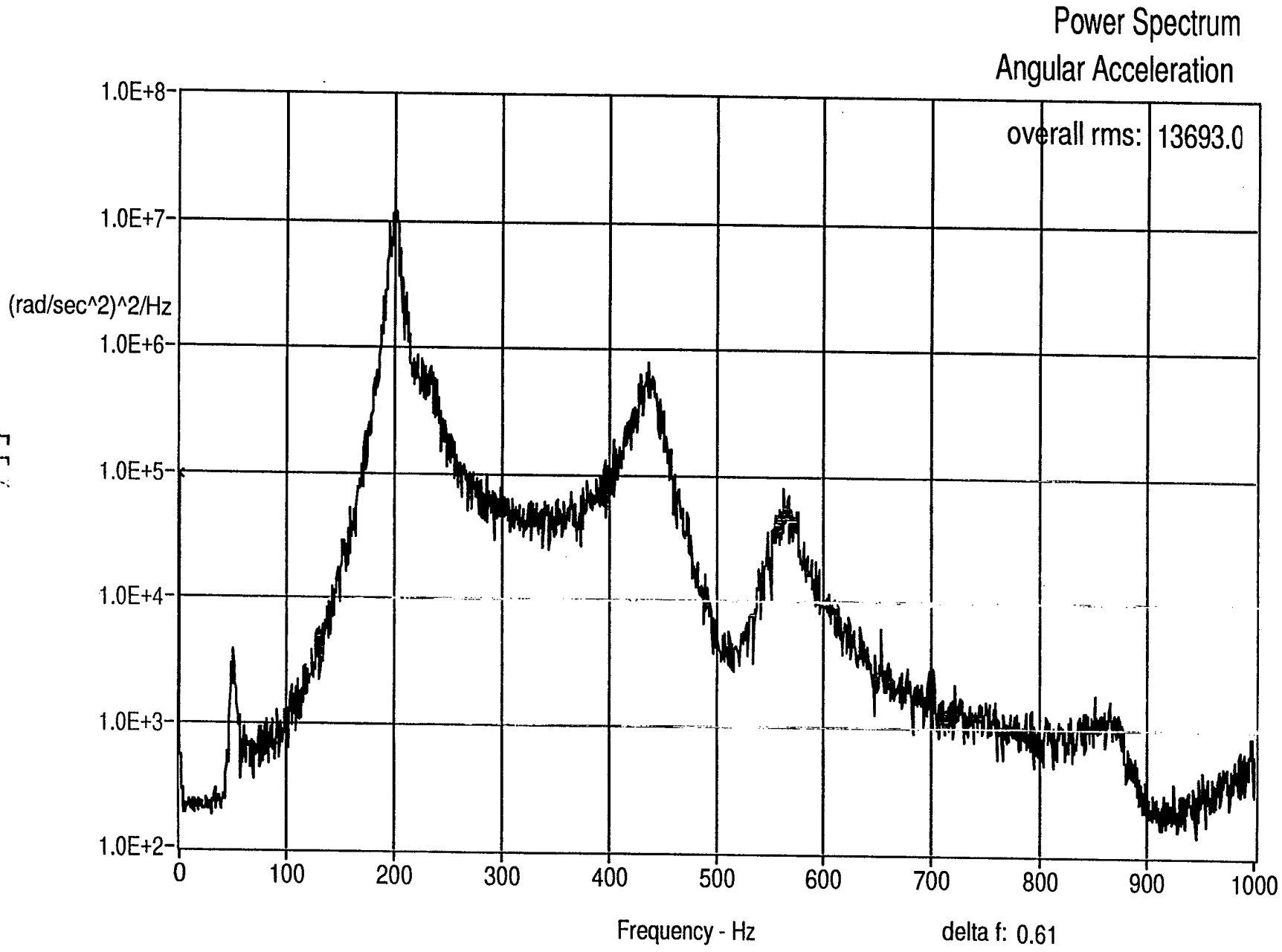
F-15 TPN_3359: alpha=24 beta=4 bp=45



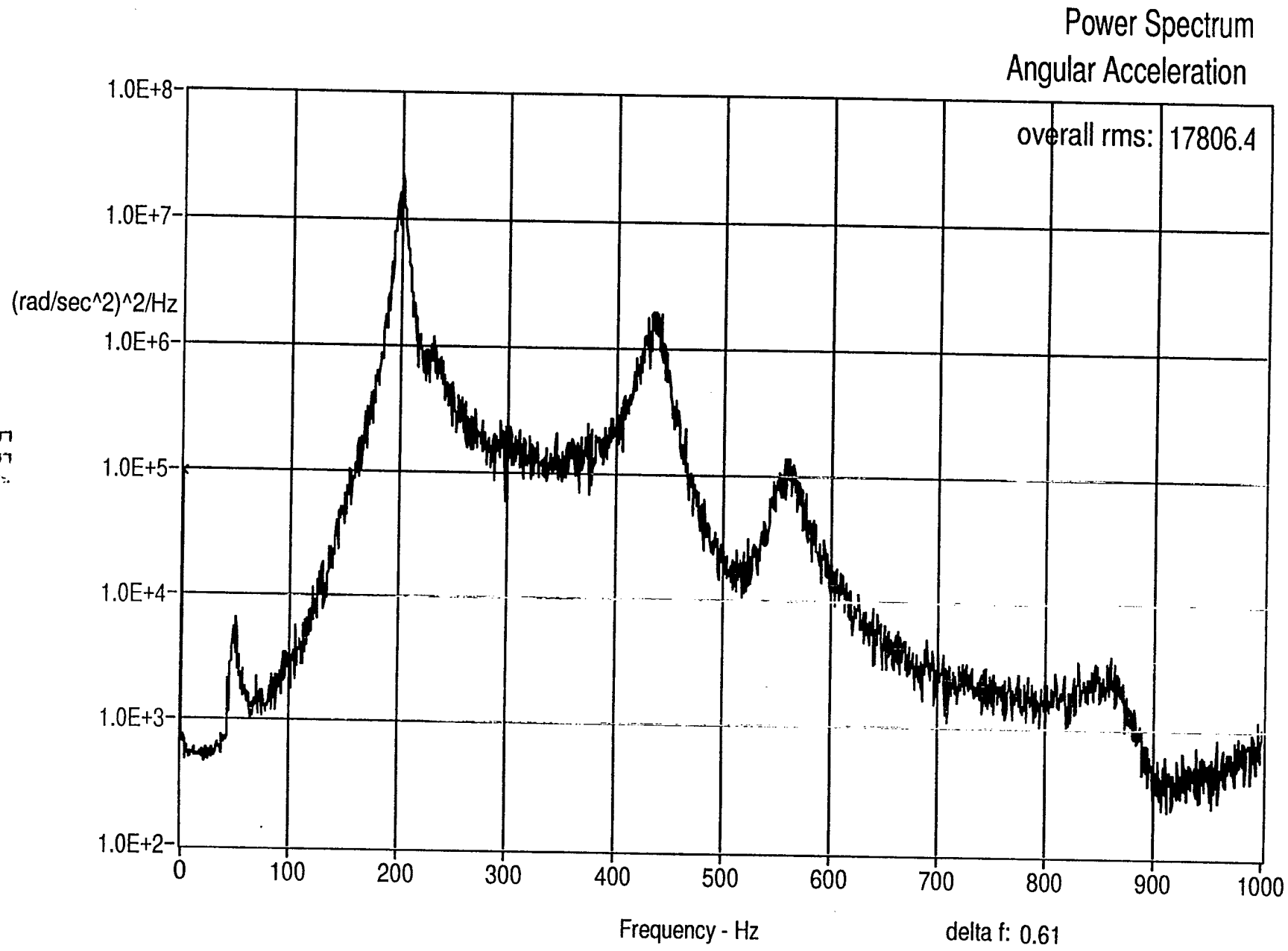
F-15 TPN_3361: alpha=32 beta=4 bp=45



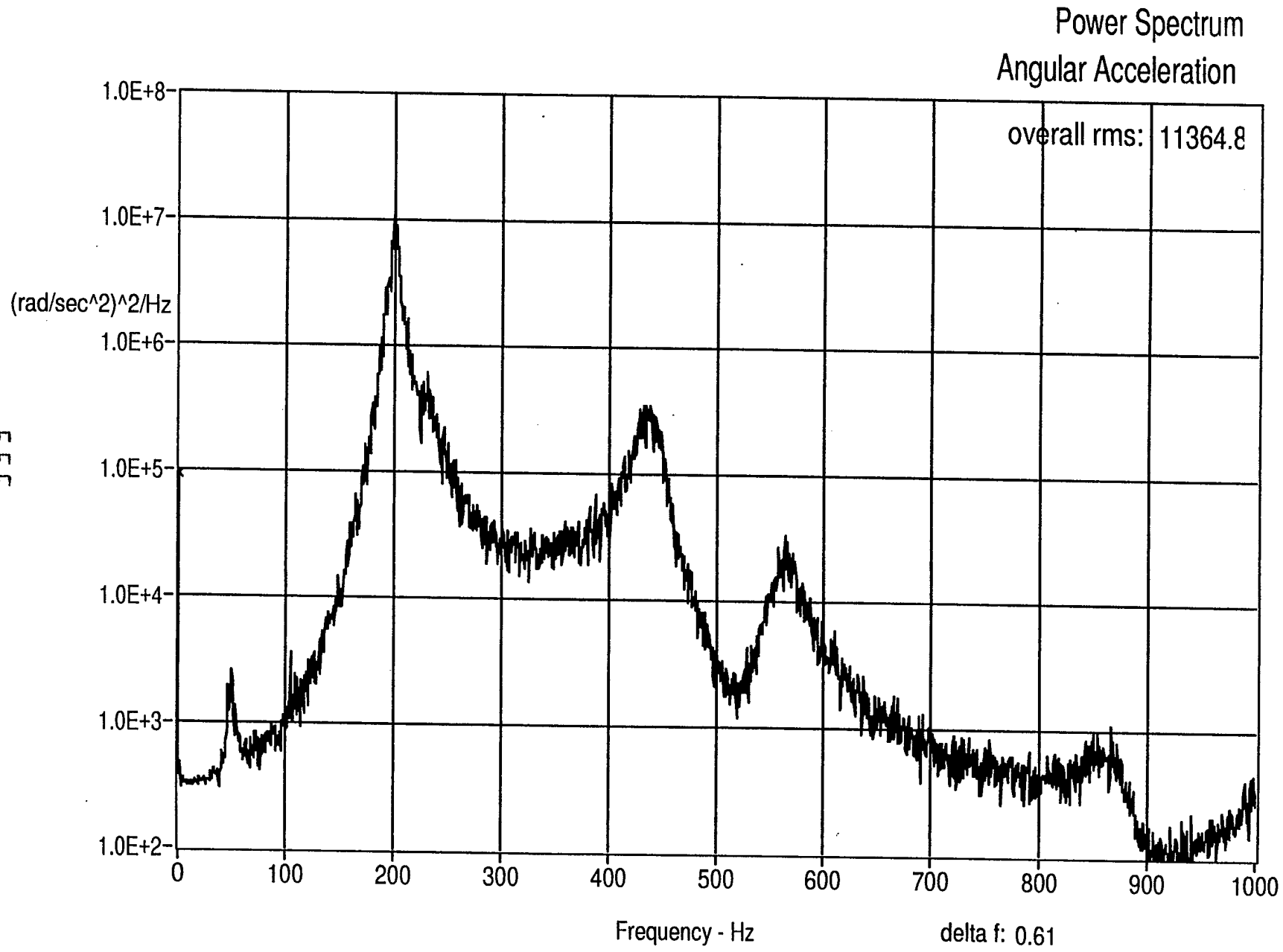
F-15 TPN_3034: alpha=20 beta=-4 bp=65



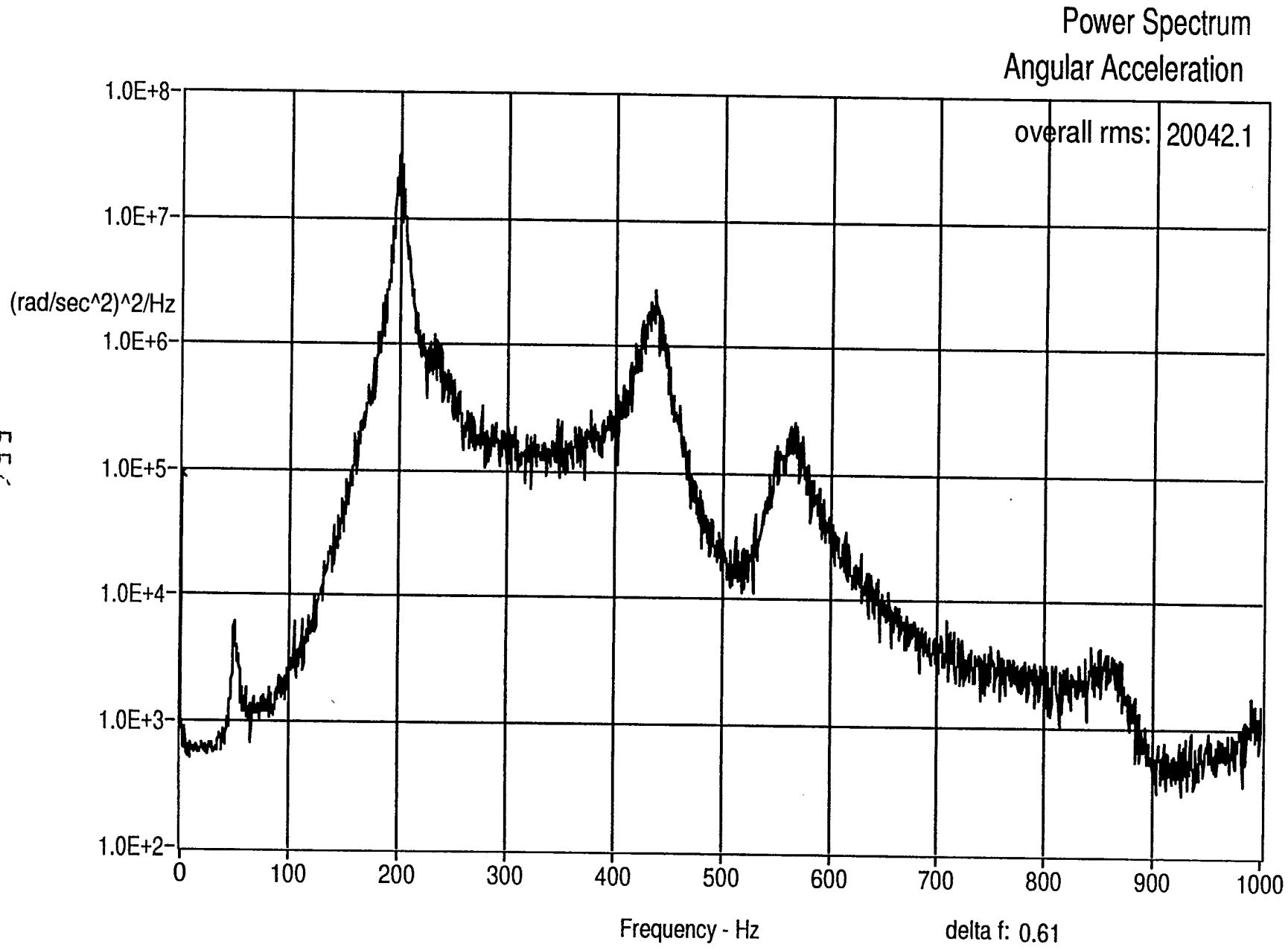
F-15 TPN_3036: alpha=24 beta=-4 bp=65



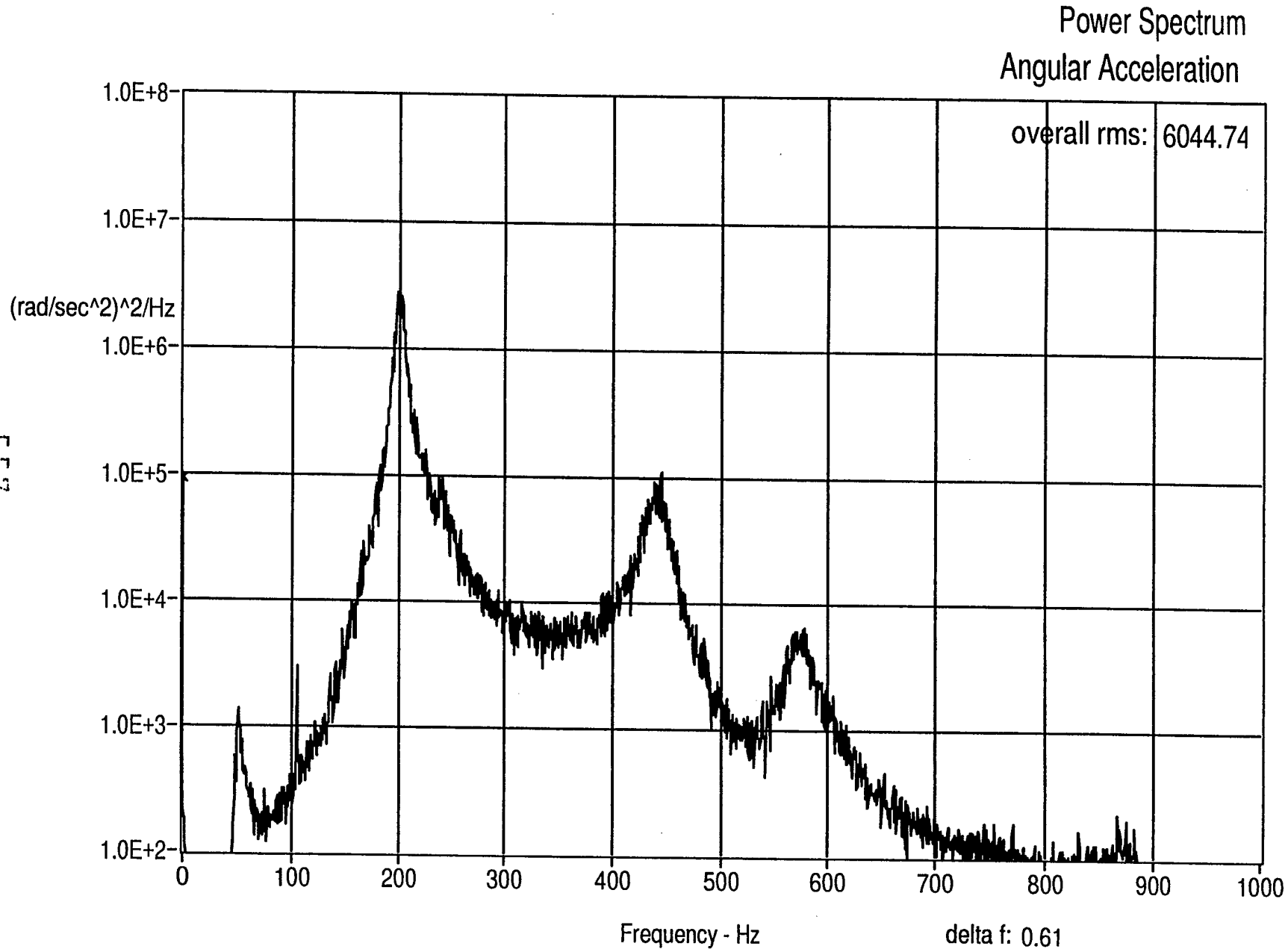
F-15 TPN_3040: alpha=20 beta=0 bp=65



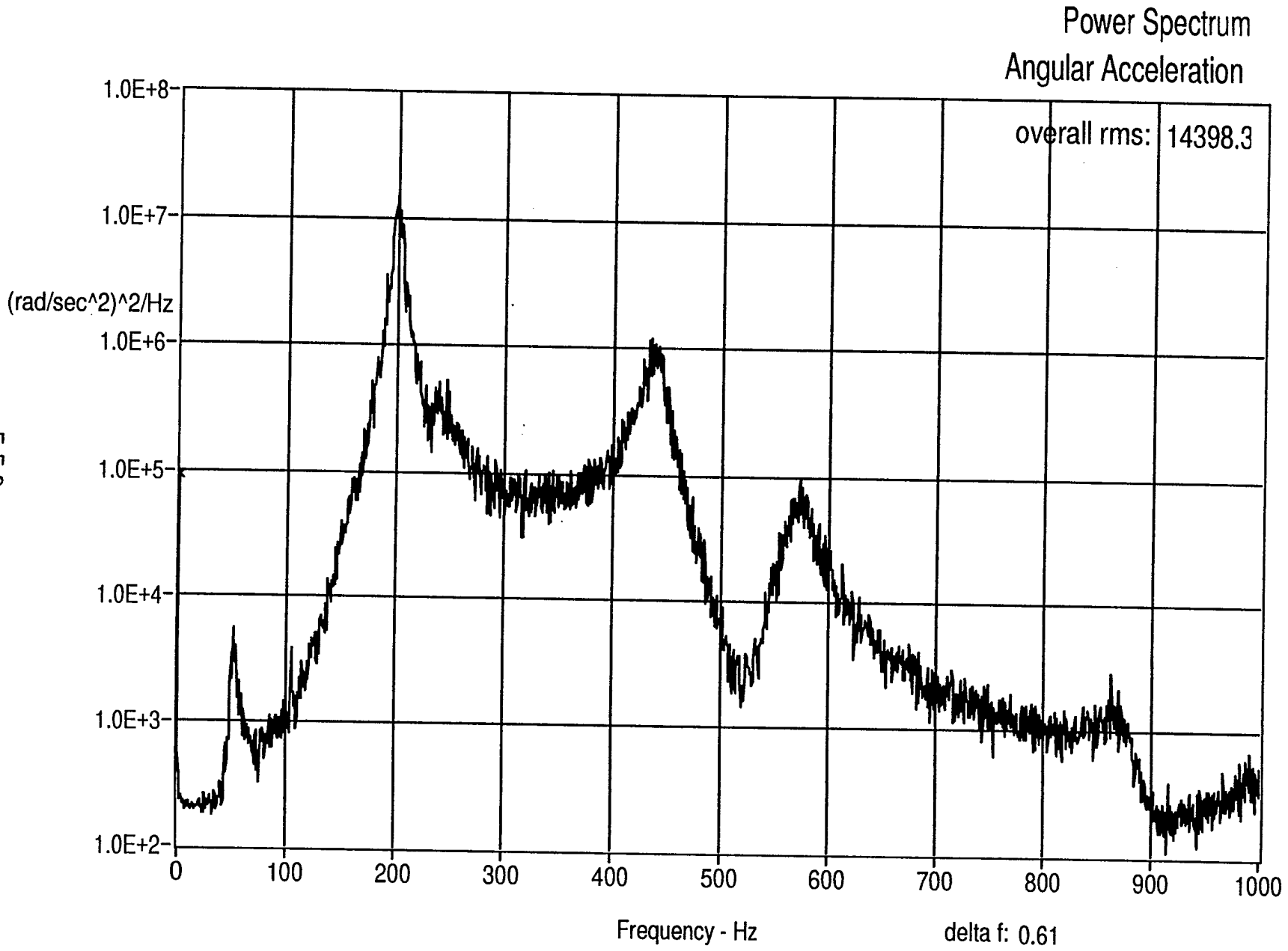
F-15 TPN_3042: alpha=24 beta=0 bp=65



F-15 TPN_3046: alpha=20 beta=4 bp=65



F-15 TPN_3048: alpha=24 beta=4 bp=65

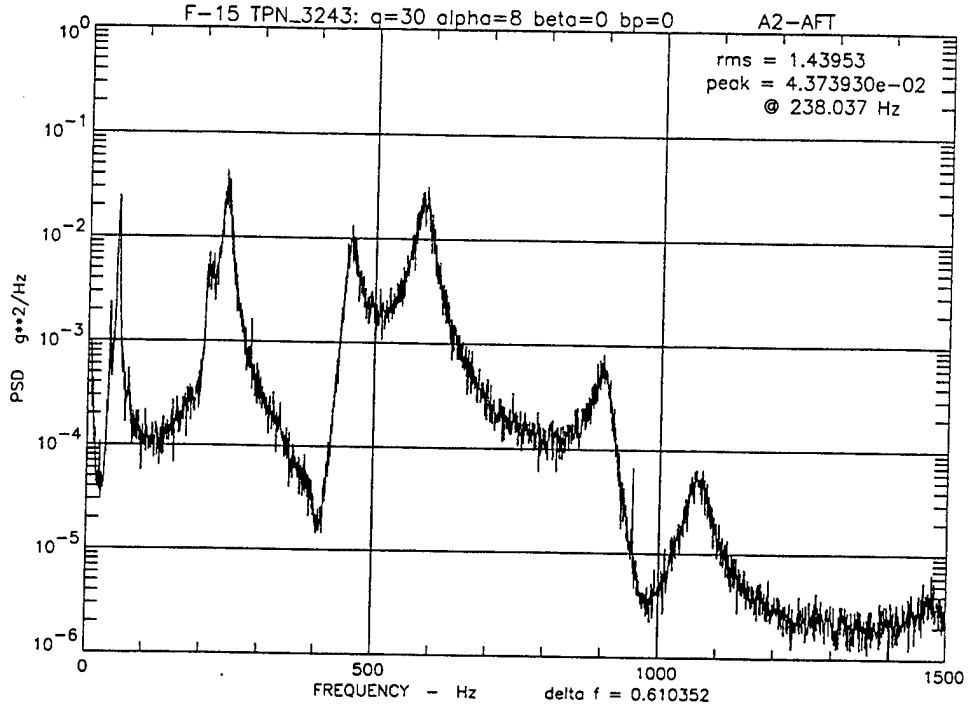


FLEXIBLE TAIL RESPONSE
ACCELERATION DATA
Q= 30 PSF
PSD GRAPHS

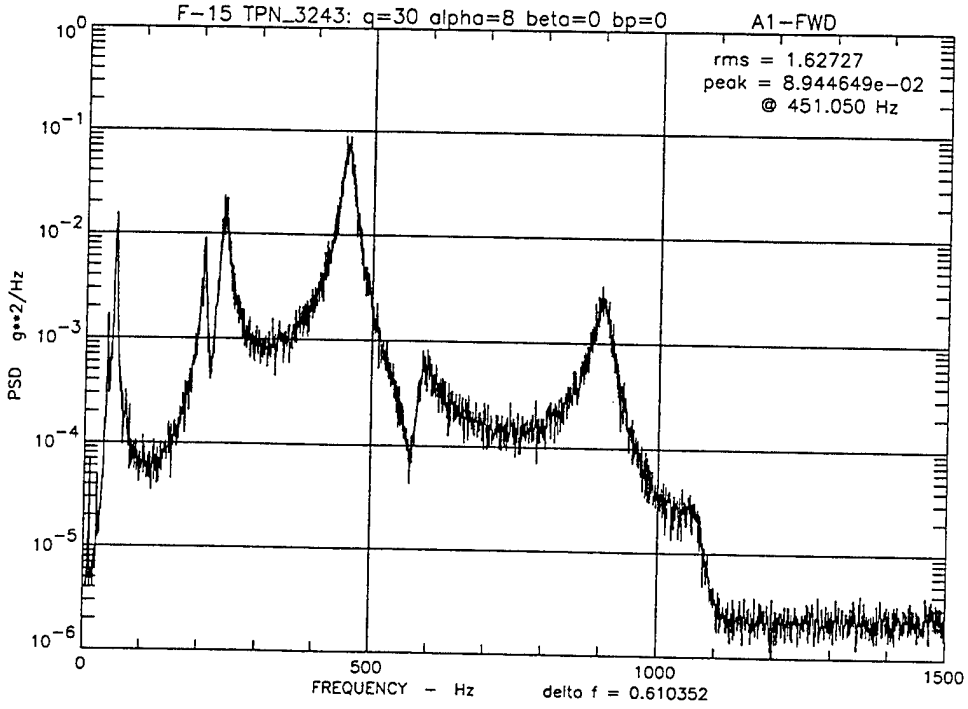
4.1.2.1 FWD AND AFT ACCELS, beta= 0, +4, -4 Deg, WBP = 0, 45, psi
ALPHAS = 8, 20, 24, 32 DEG
(note, the dimensional graph , (in/sec)^2/hz is followed by a graph (g's)^2/hz

data is blocked off by blowing pressures, with beta variation within

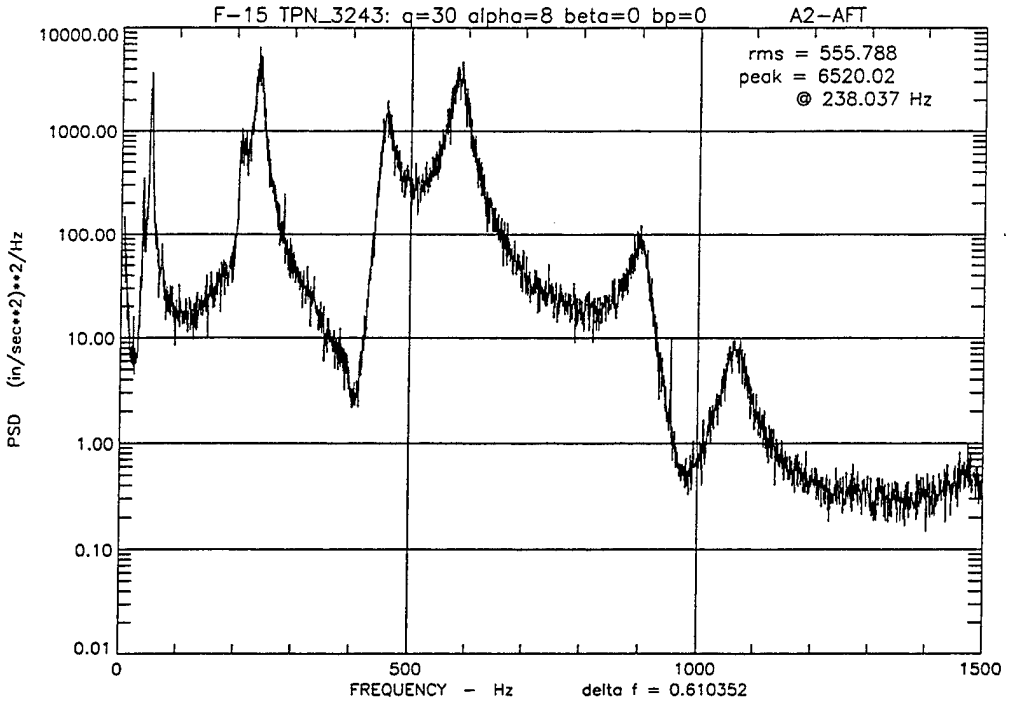
F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0



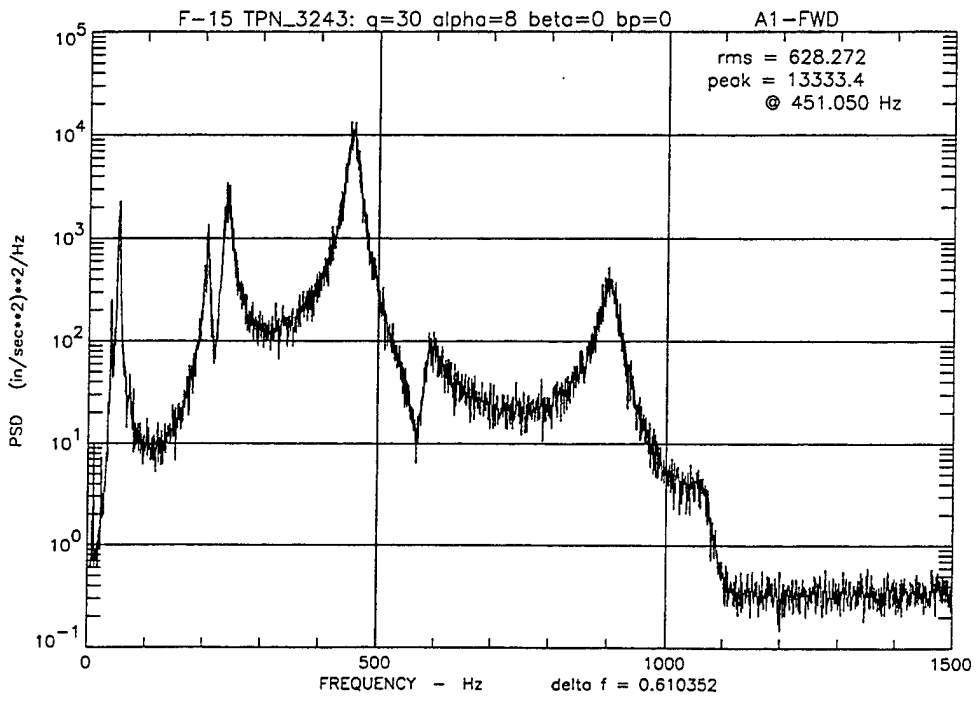
F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0



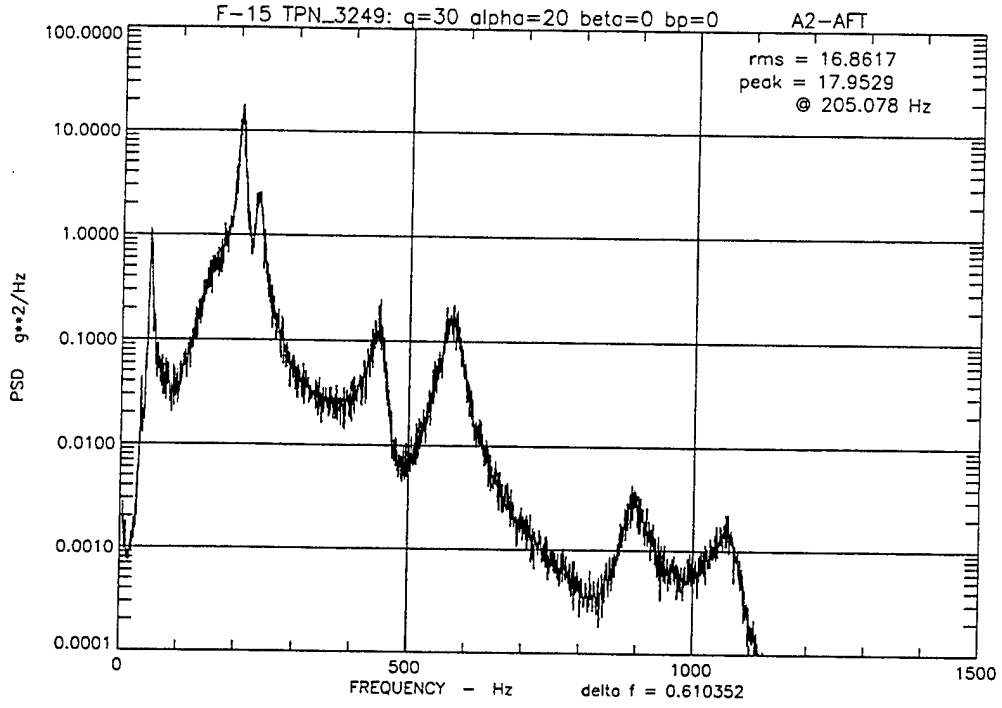
F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0



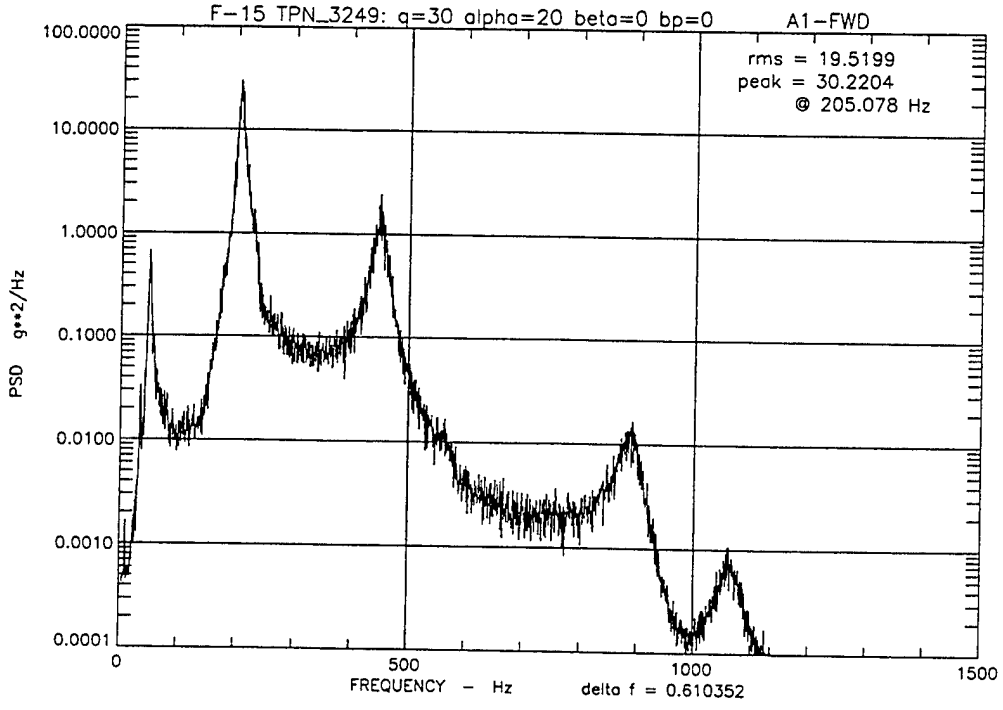
F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0



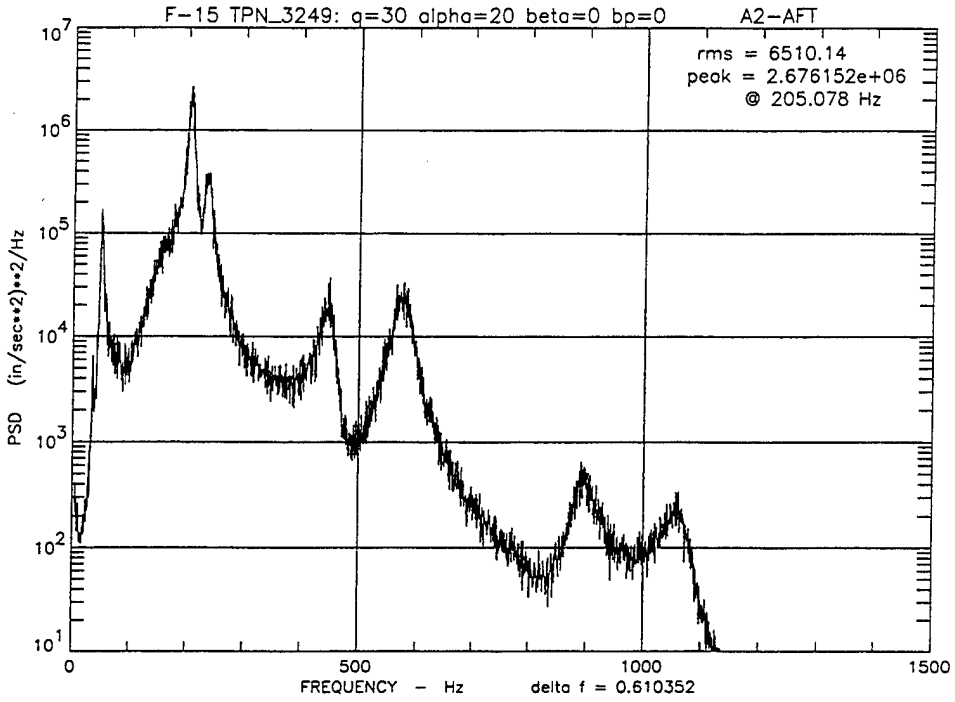
F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0



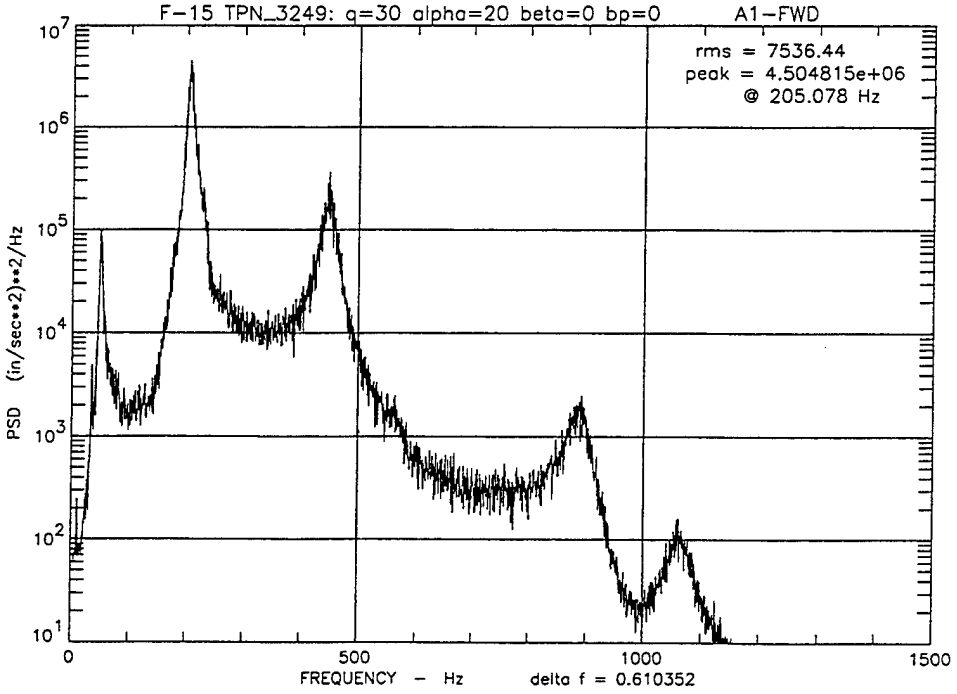
F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0



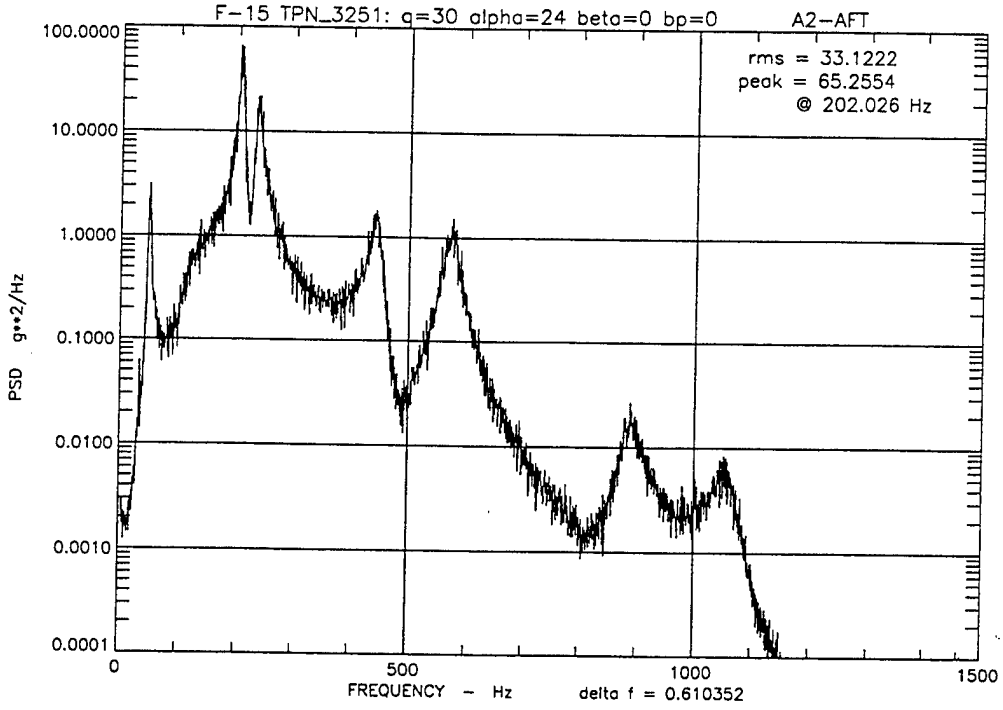
F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0



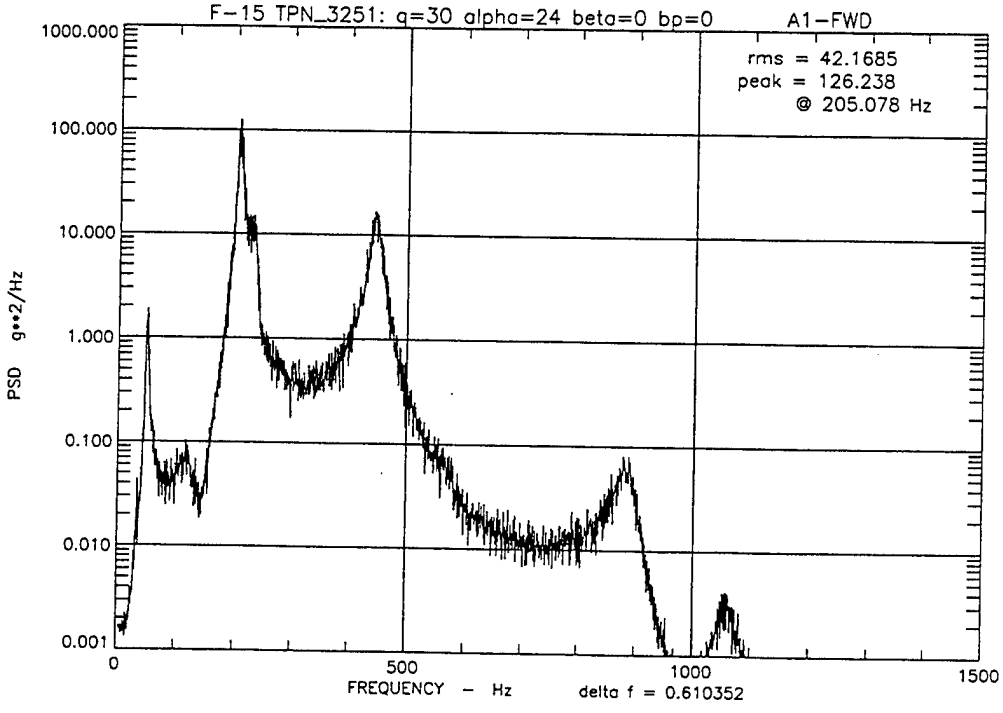
F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0



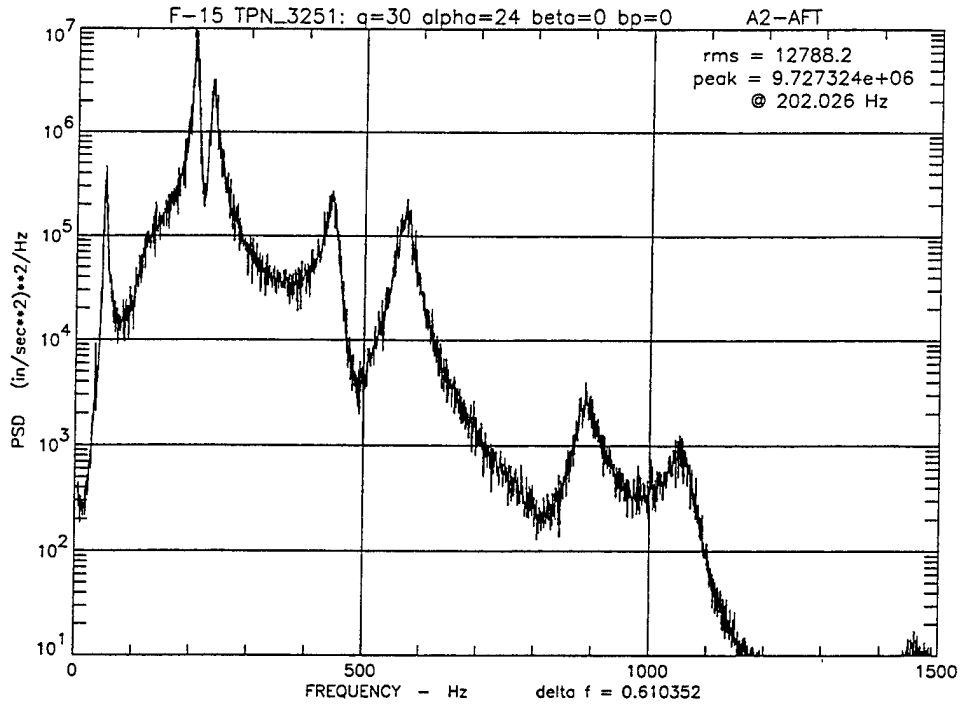
F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0



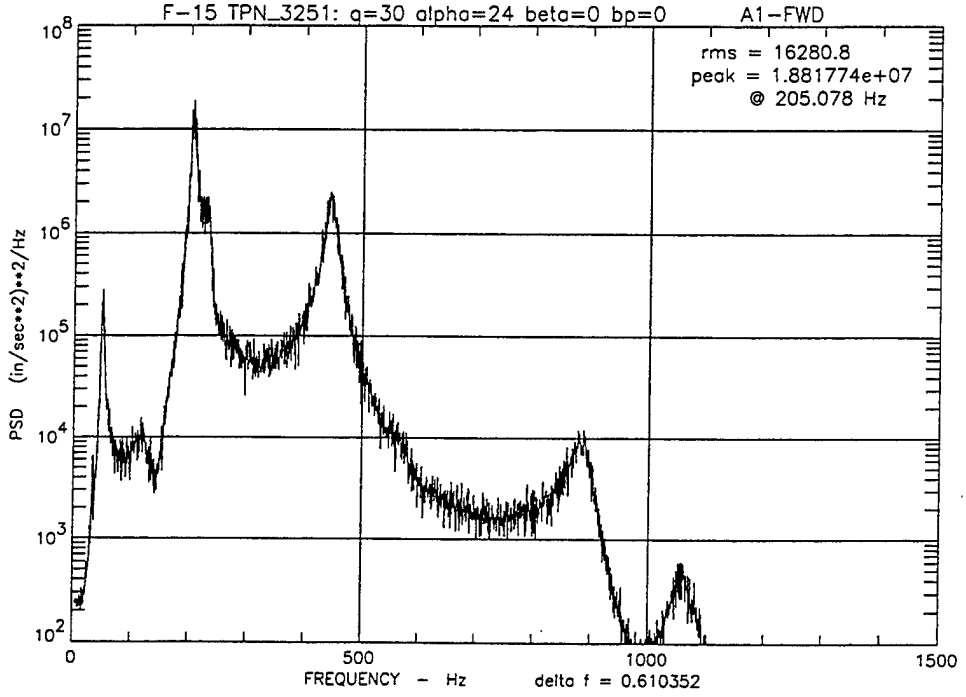
F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0



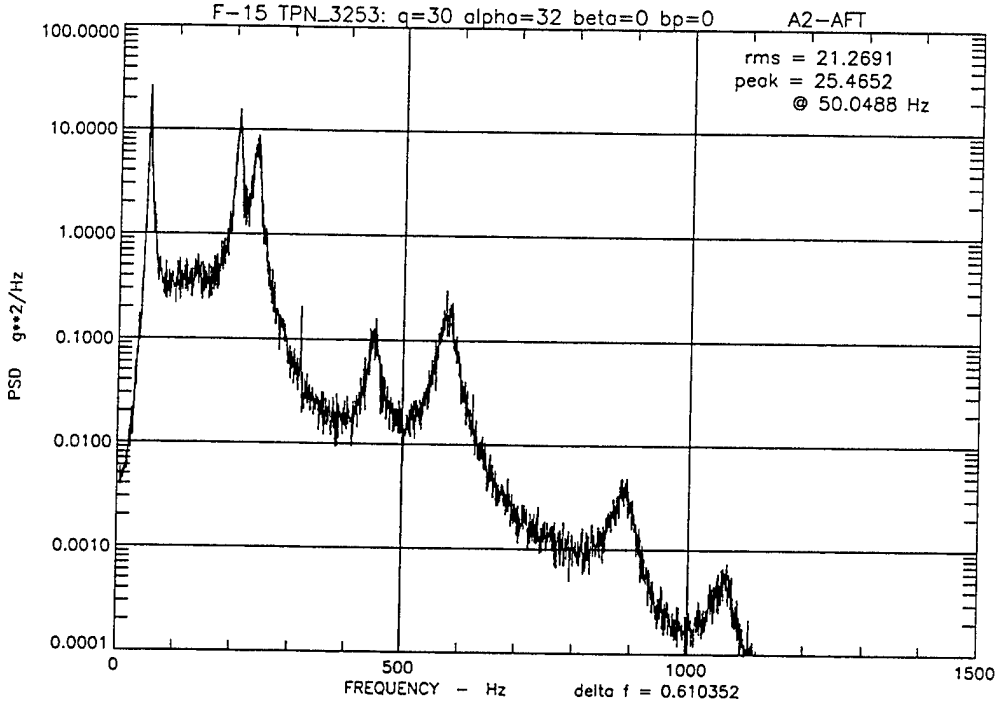
F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0



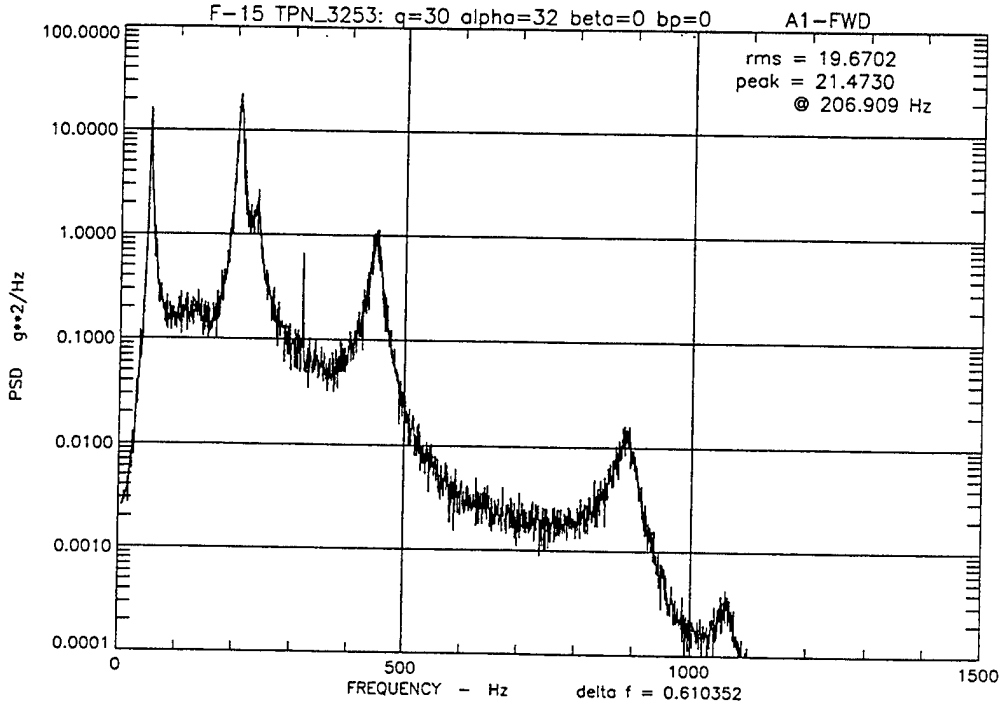
F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0



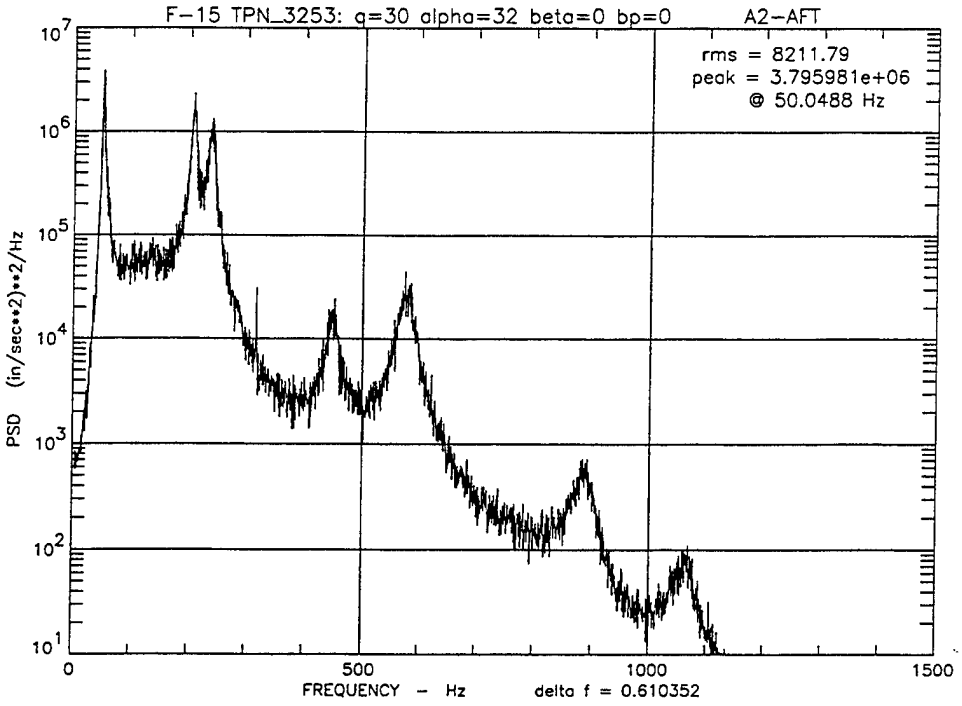
F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0



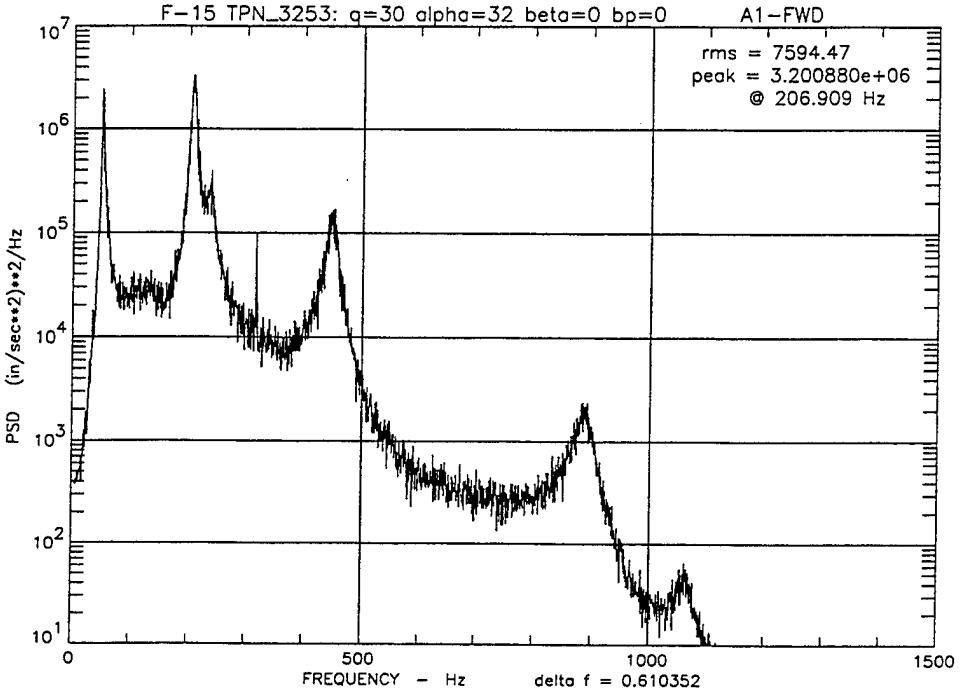
F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0



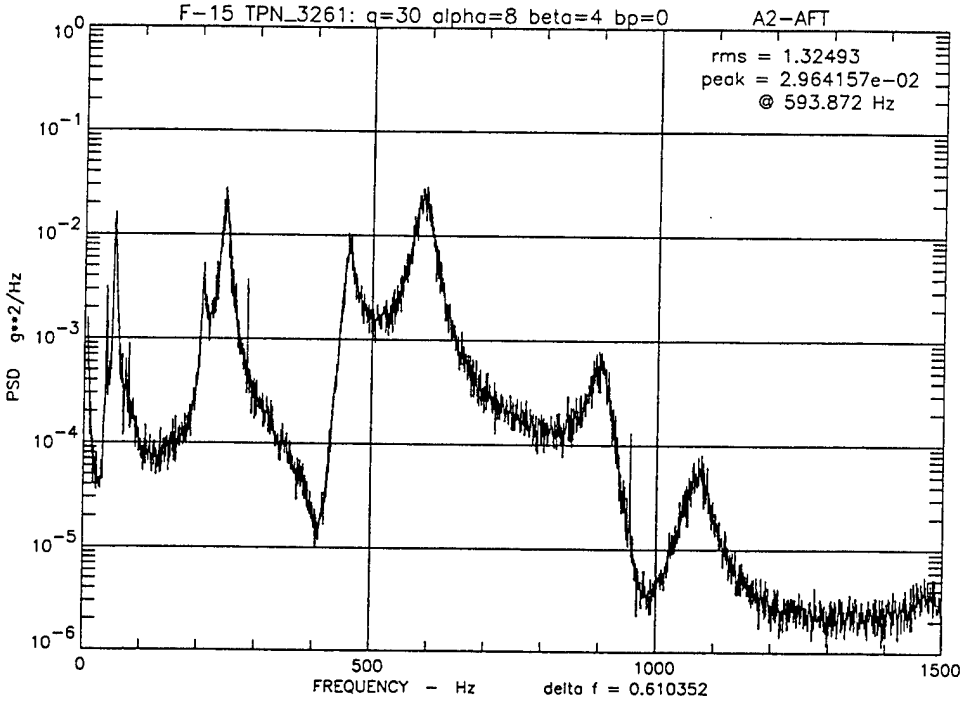
F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0



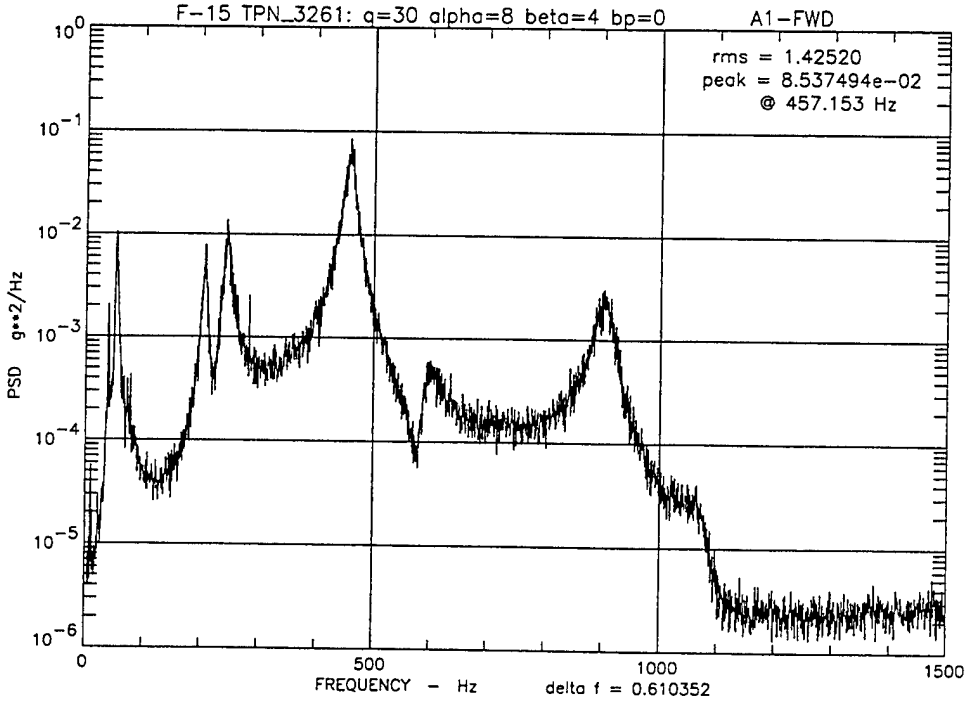
F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0



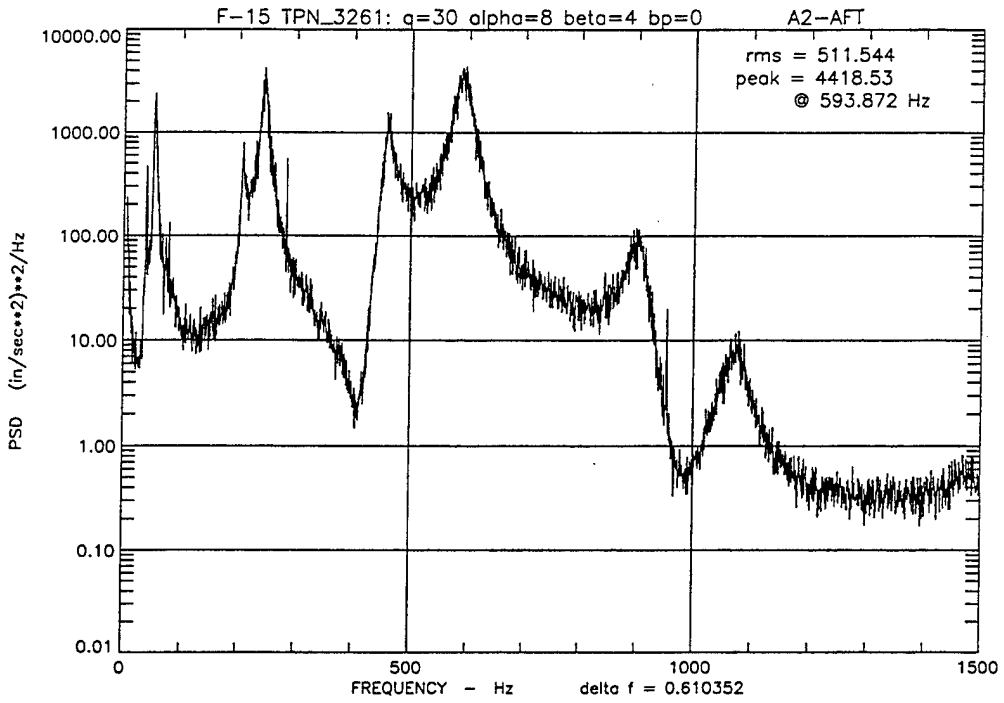
F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0



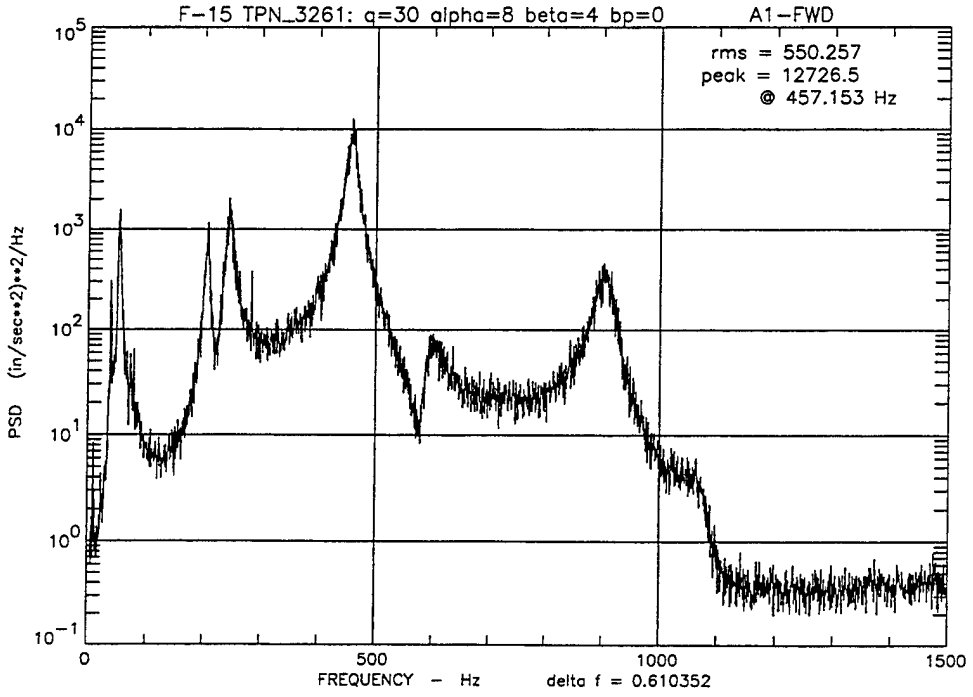
F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0



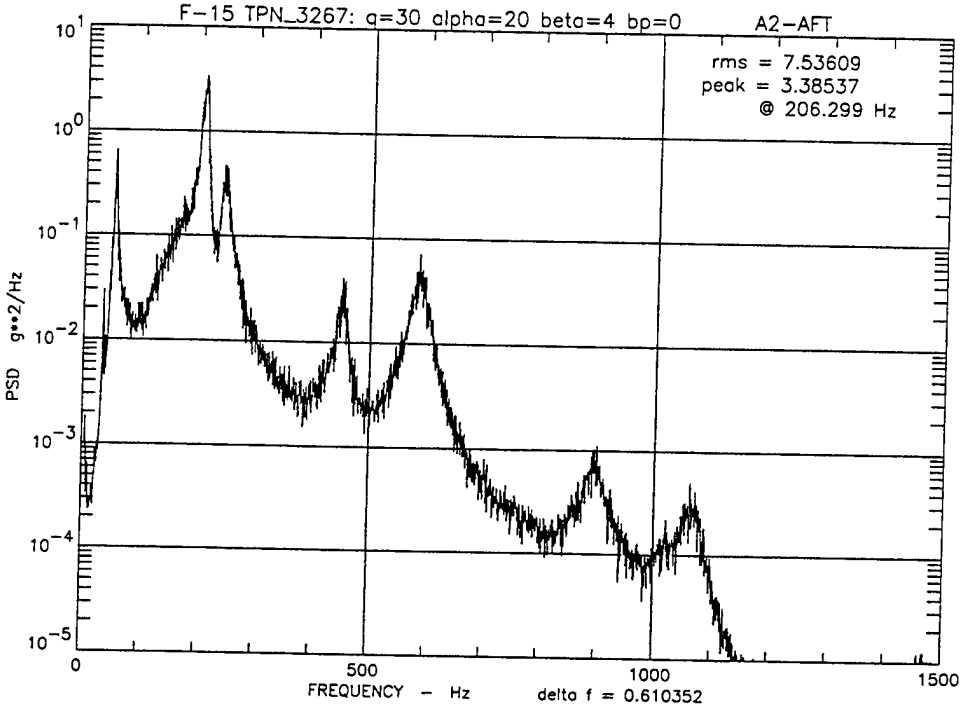
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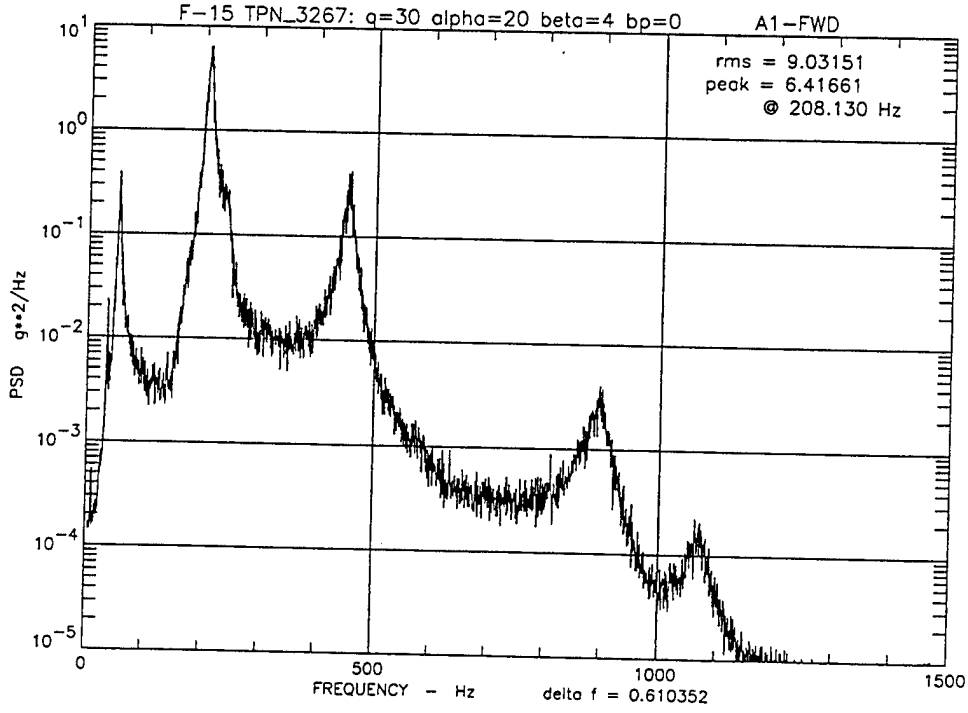
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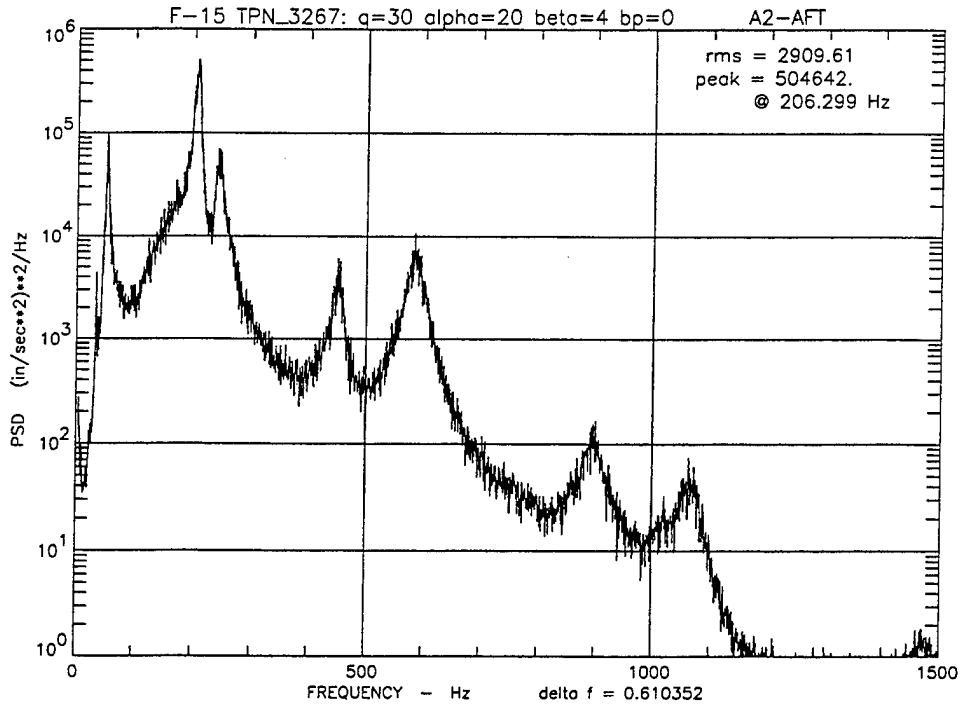
F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0



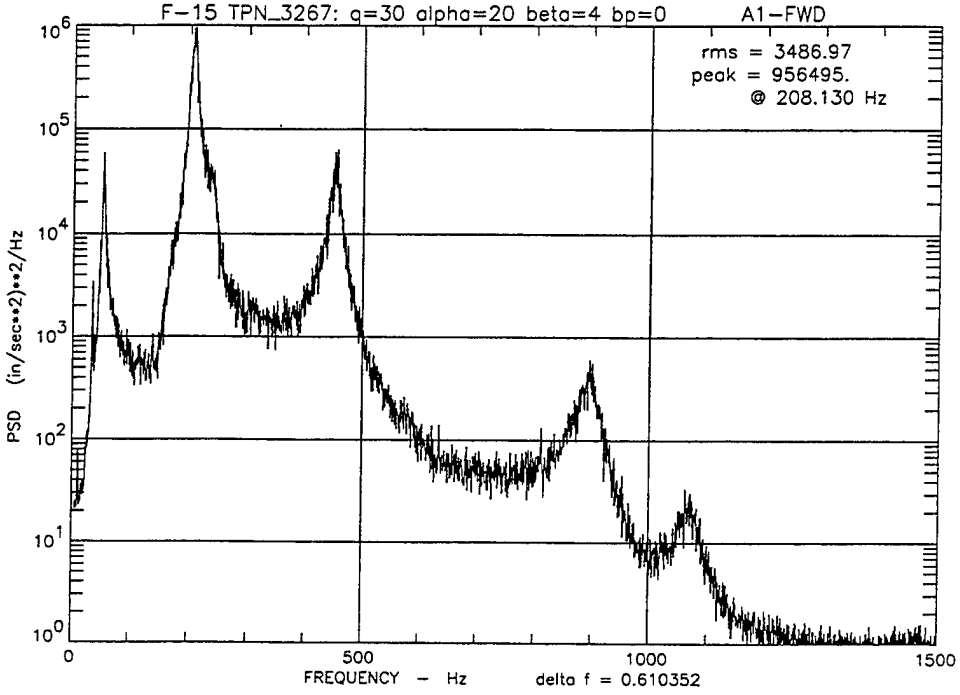
F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0



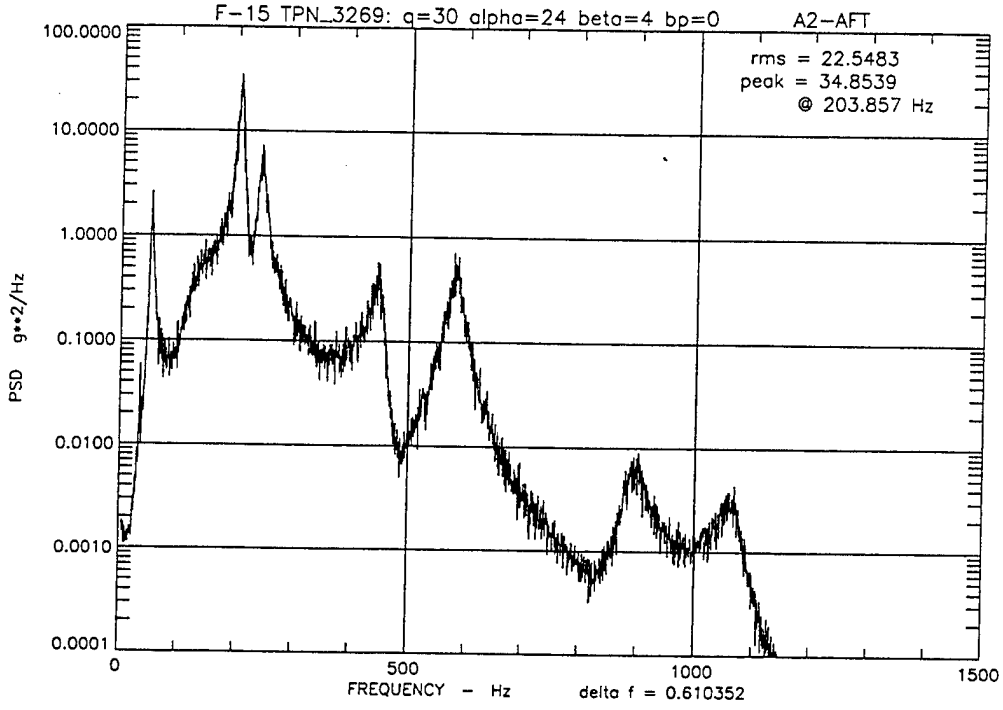
F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0



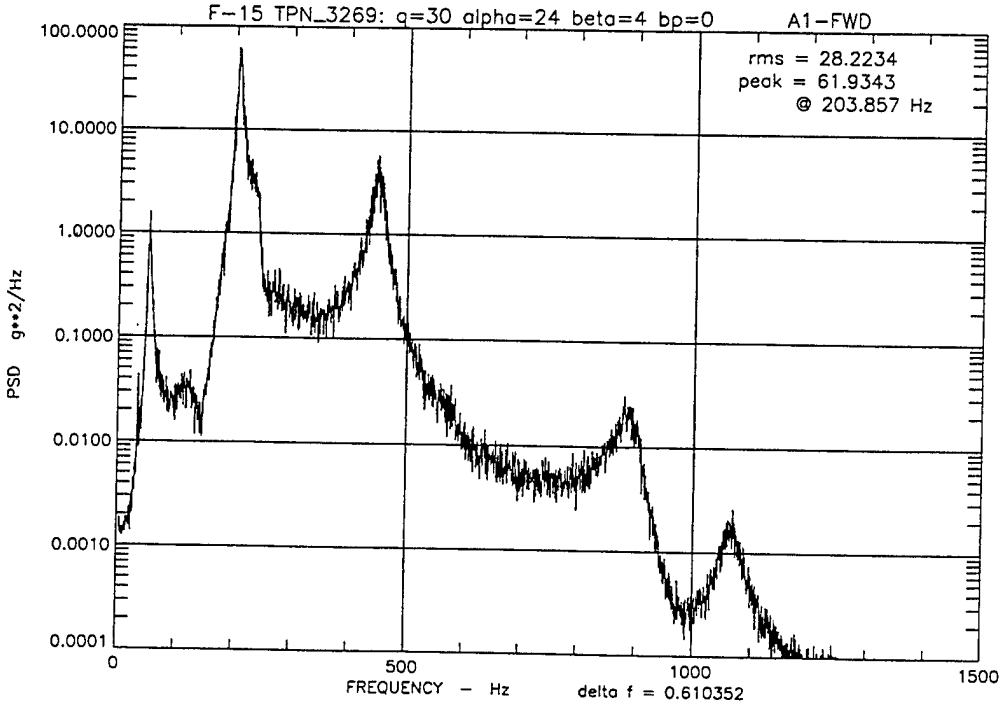
F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0



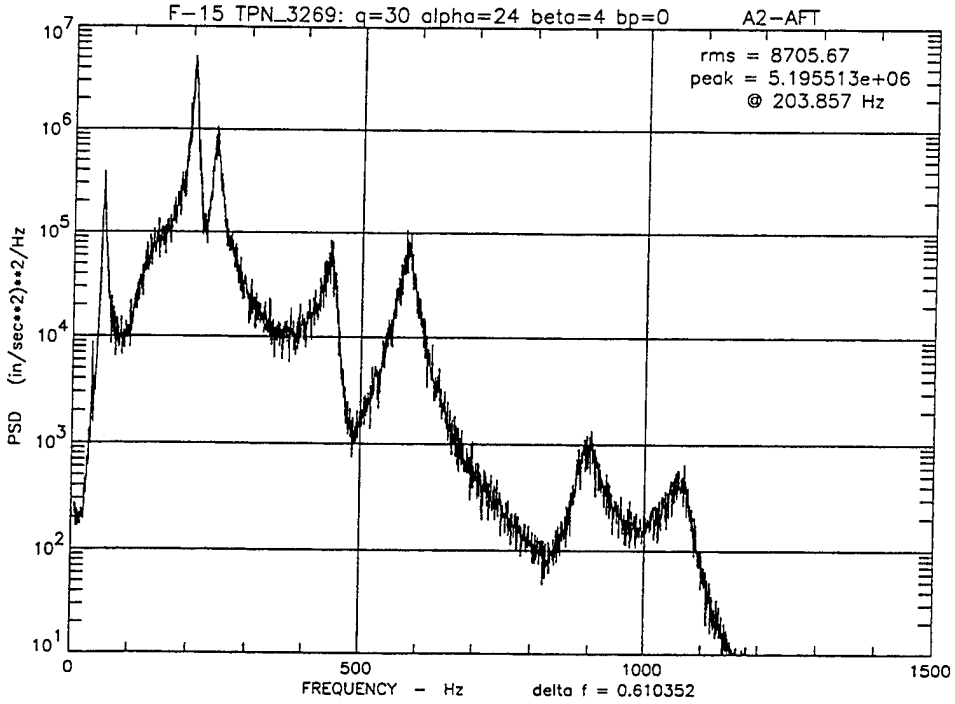
F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0



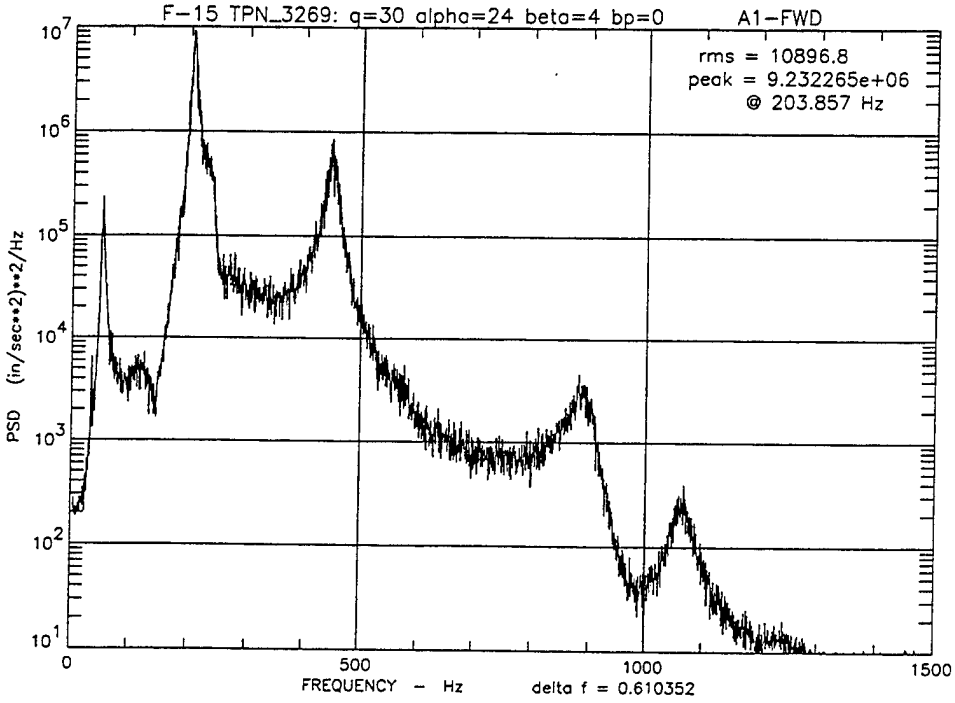
F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0



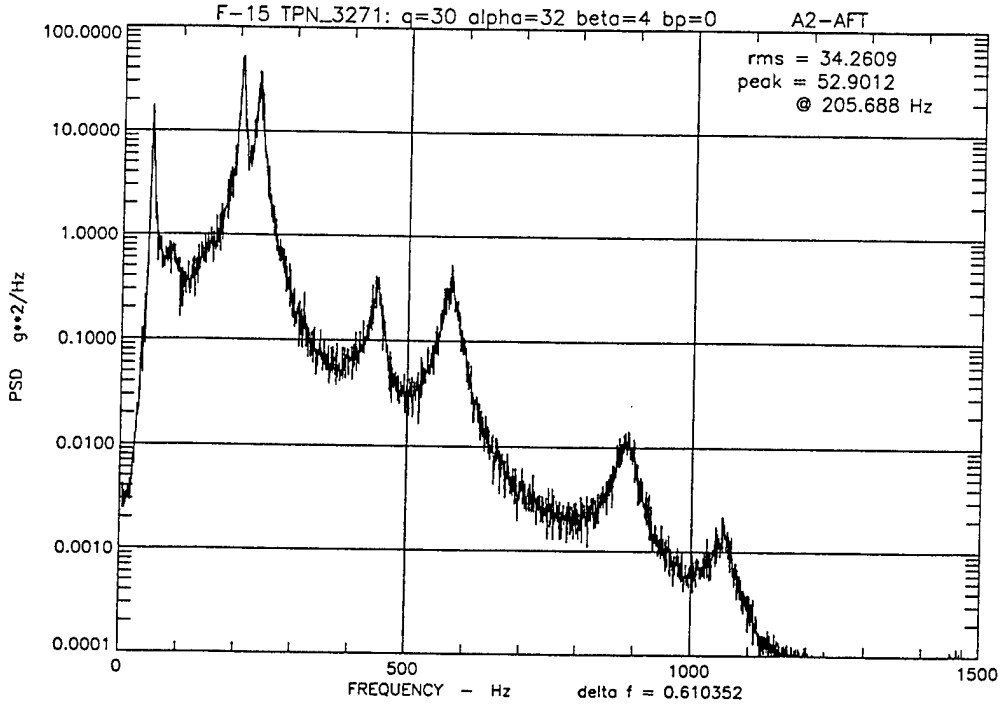
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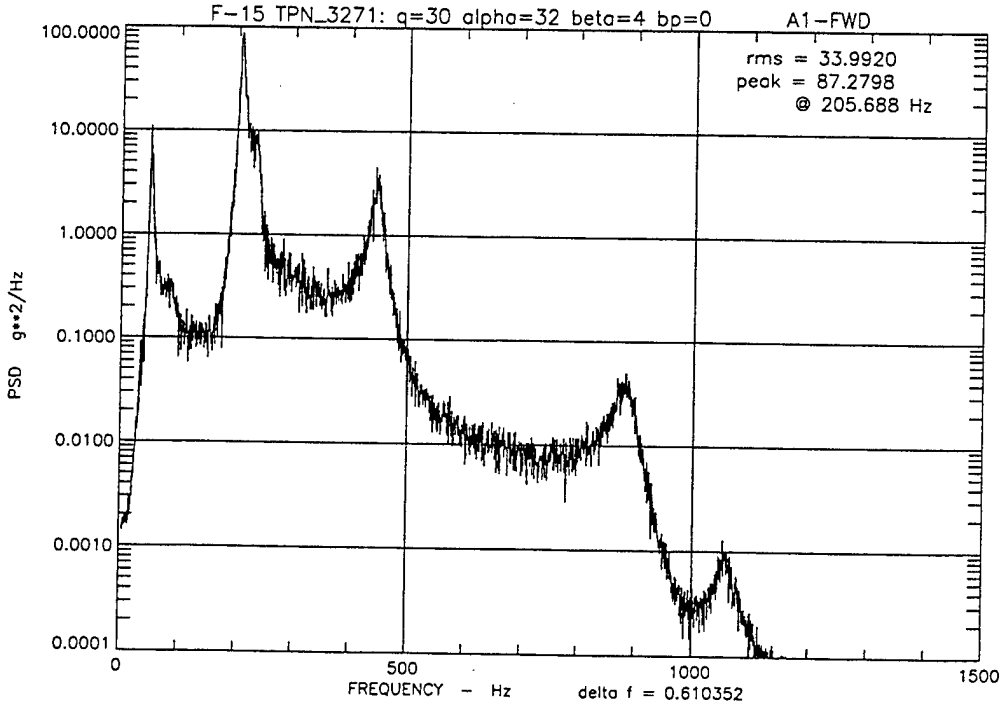
F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0



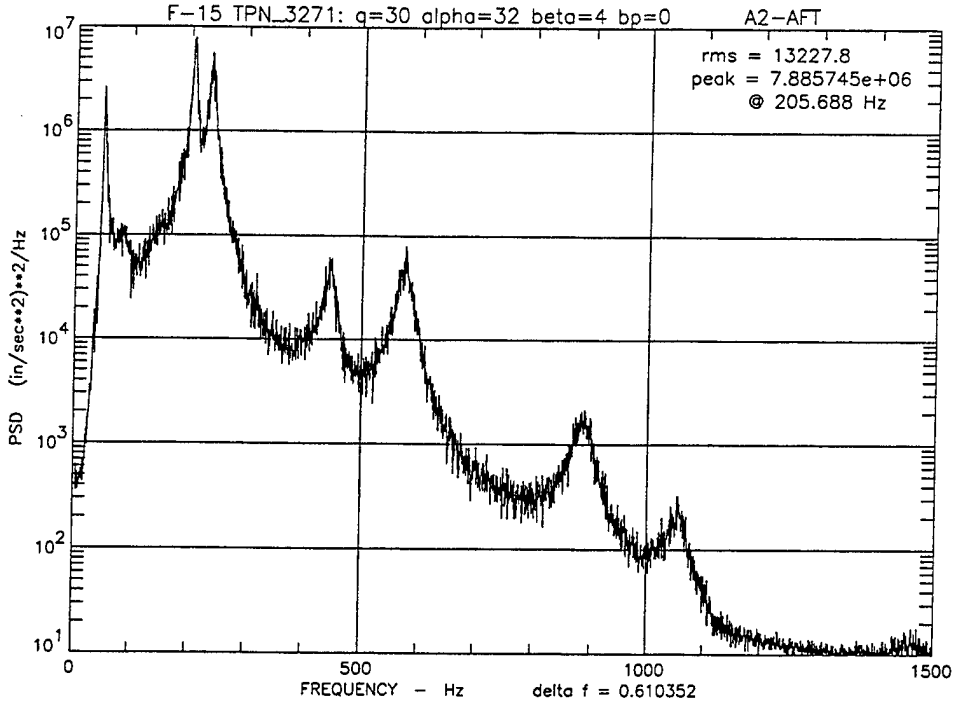
F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0



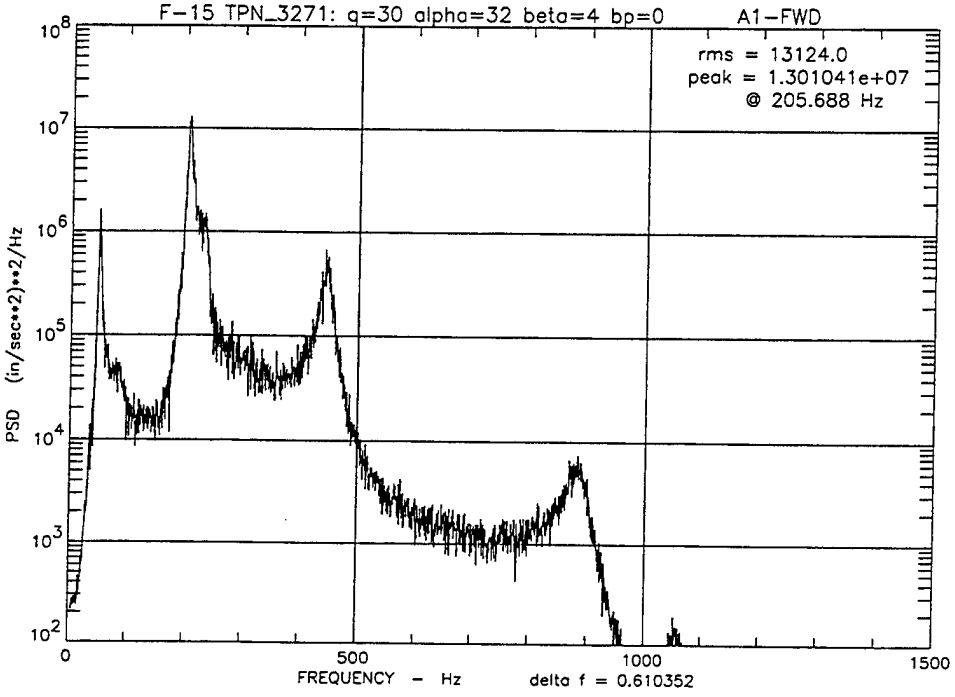
F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0



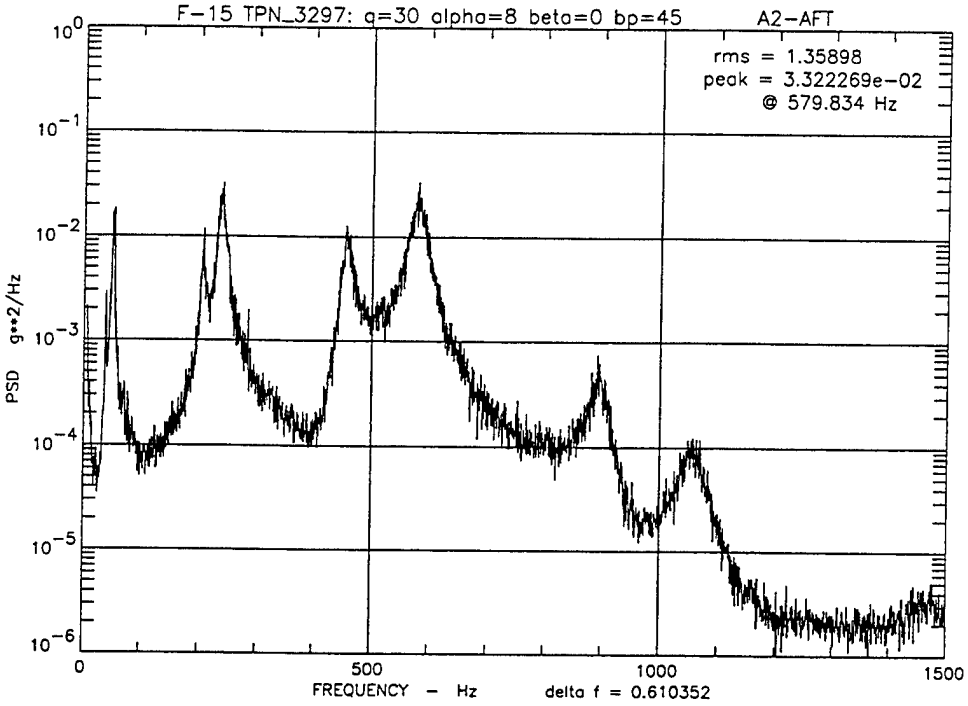
F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0



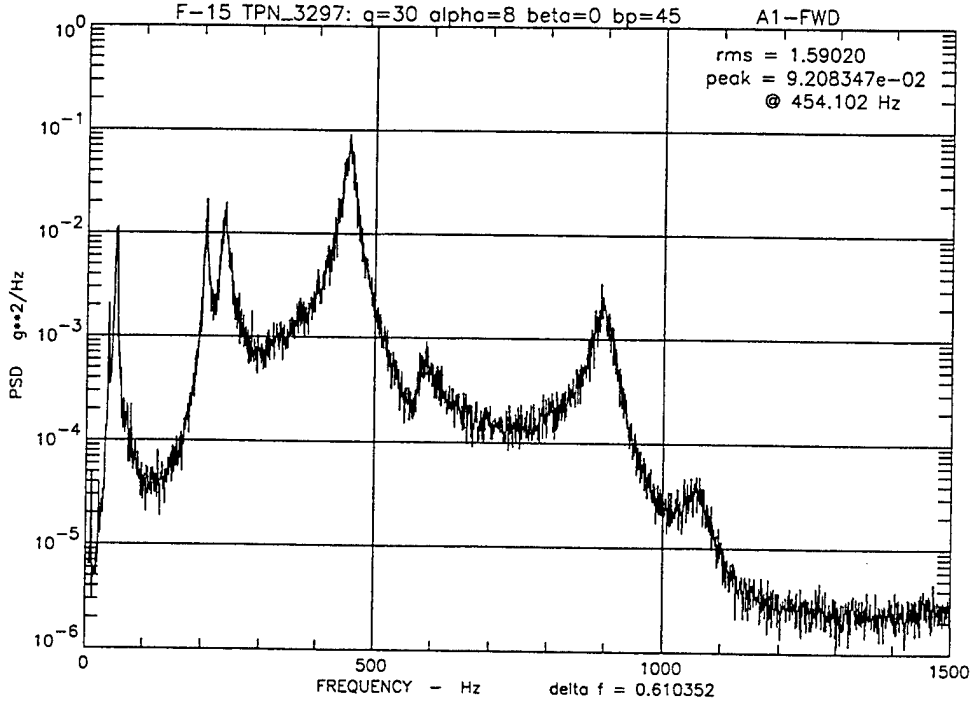
F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0



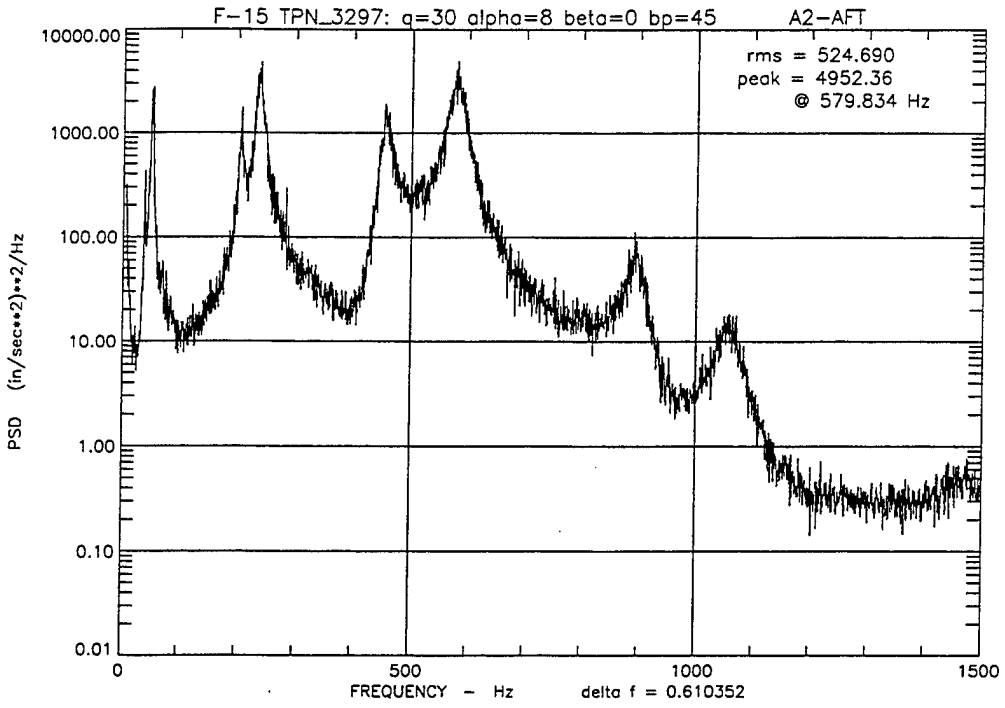
F-15 TPN_3297: q=30 alpha=8 beta=0 bp=45



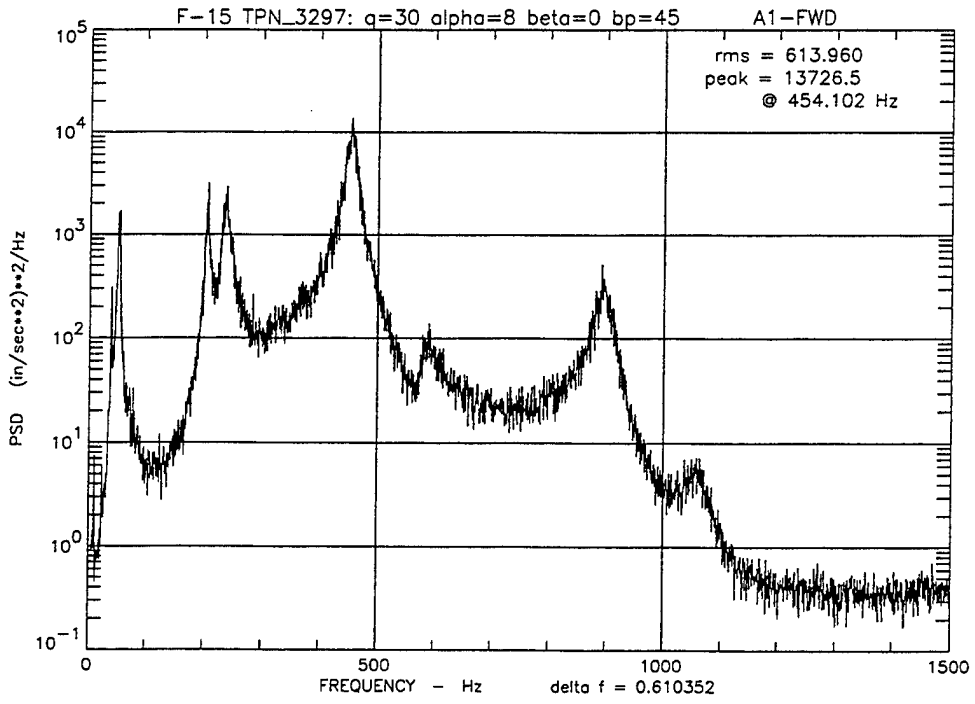
F-15 TPN_3297: q=30 alpha=8 beta=0 bp=45



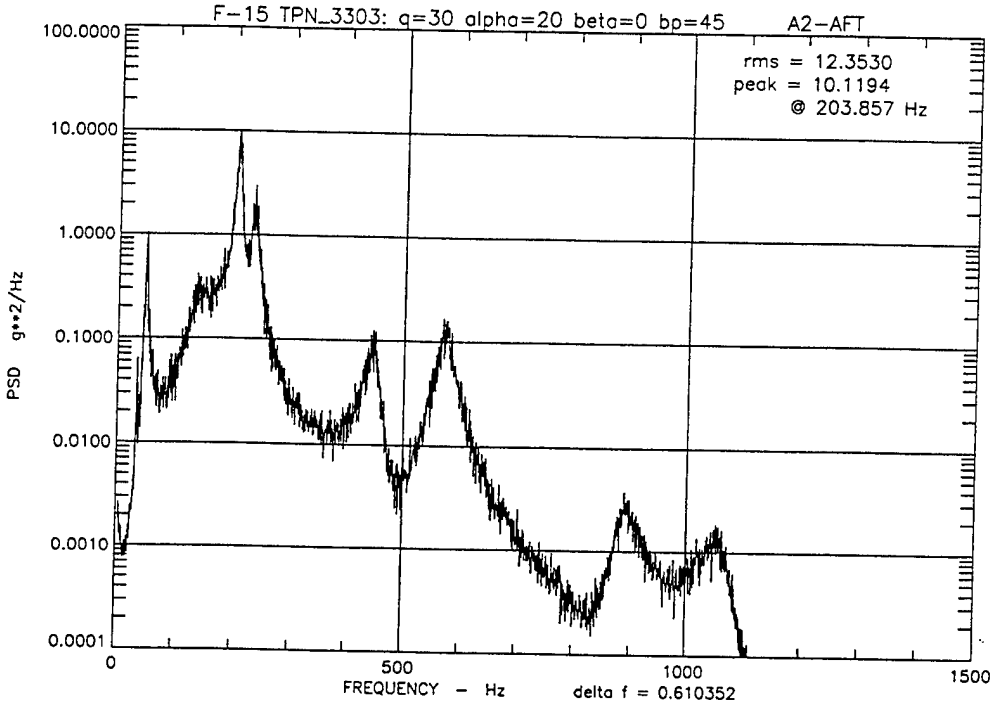
F-15 TPN_3297: q=30 alpha=8 beta=0 bp=45



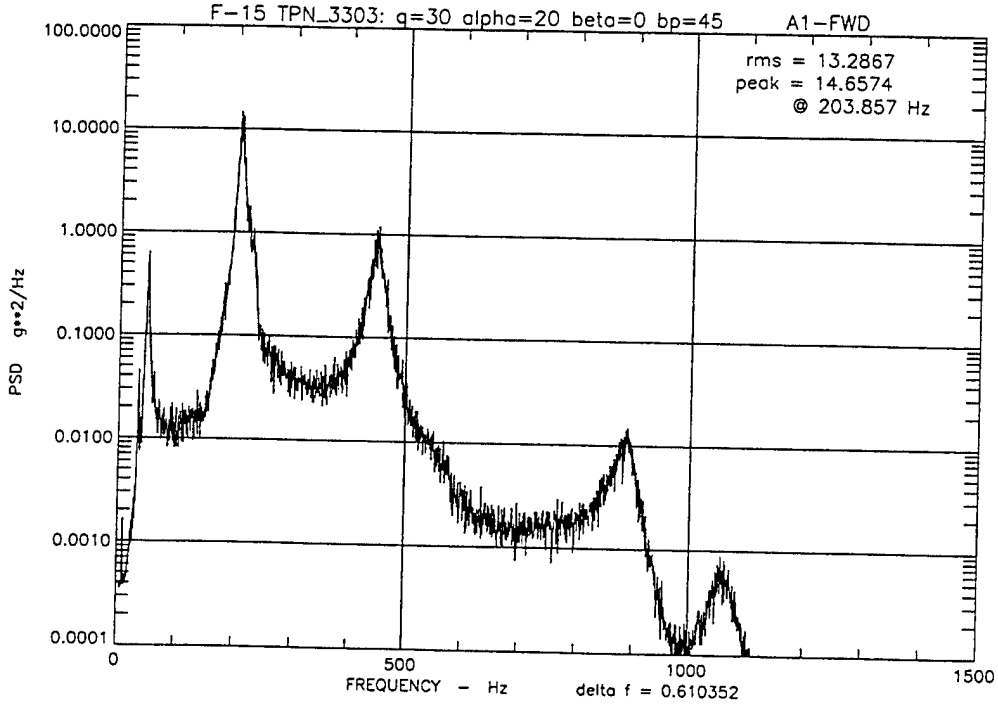
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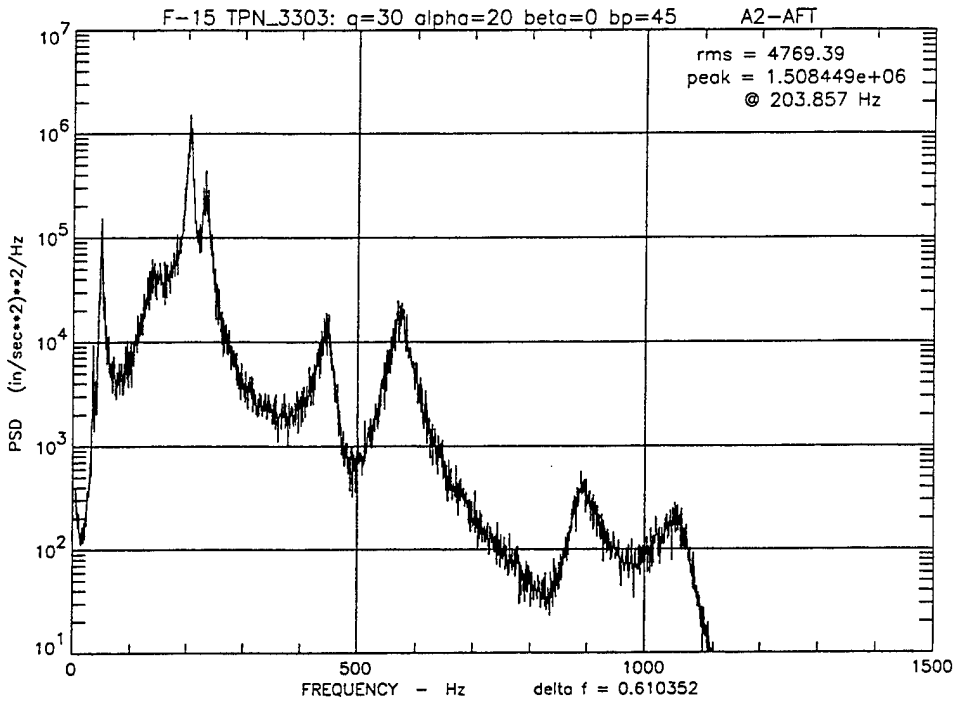
F-15 TPN_3303: q=30 alpha=20 beta=0 bp=45



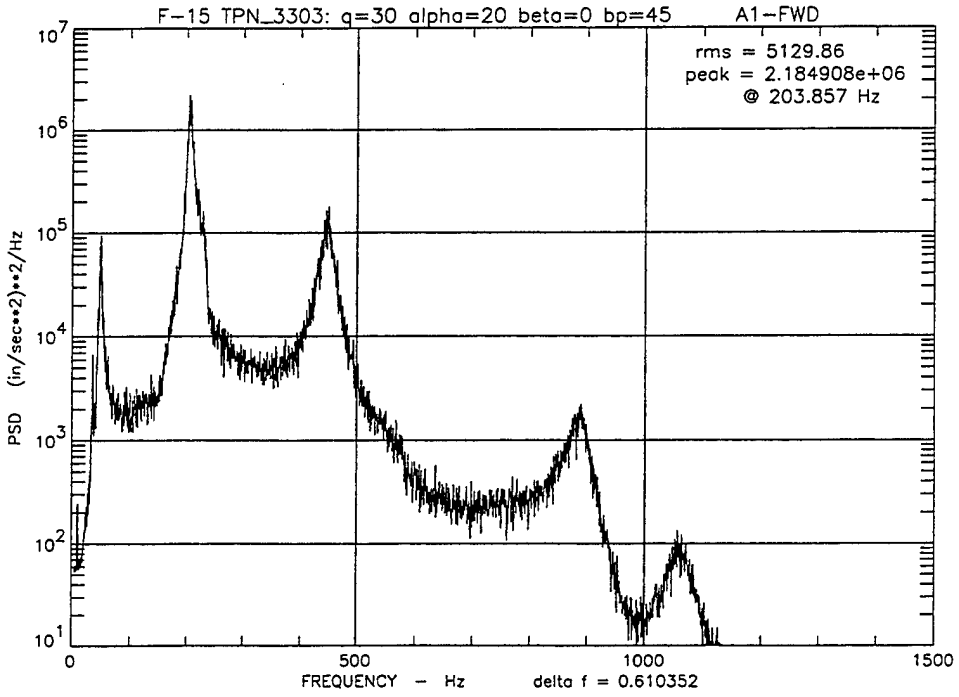
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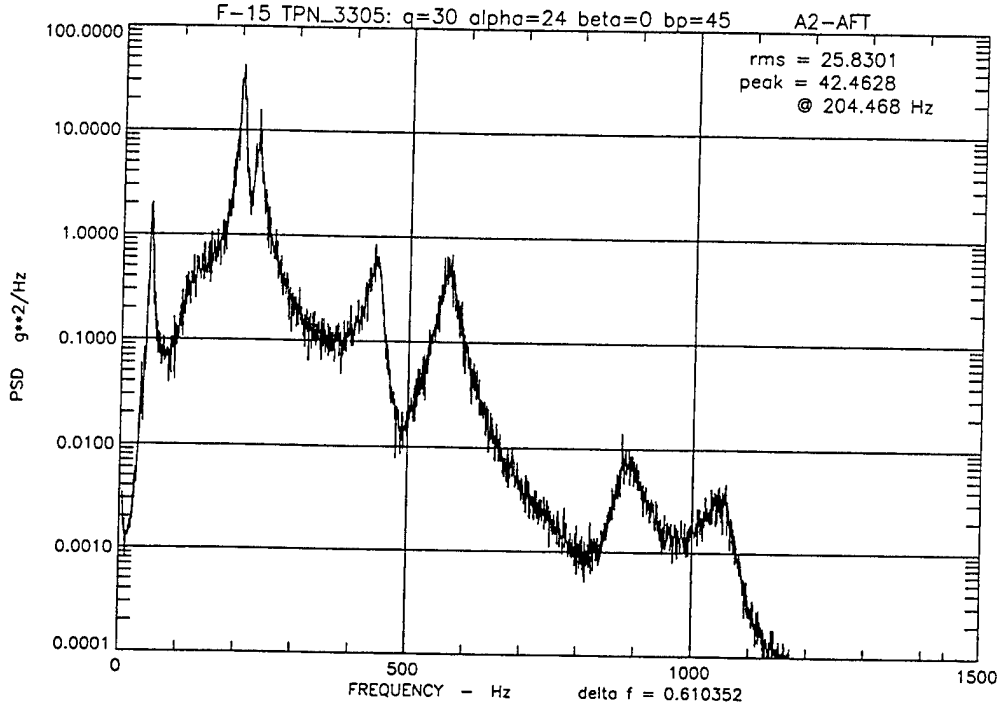
F-15 TPN_3303: q=30 alpha=20 beta=0 bp=45



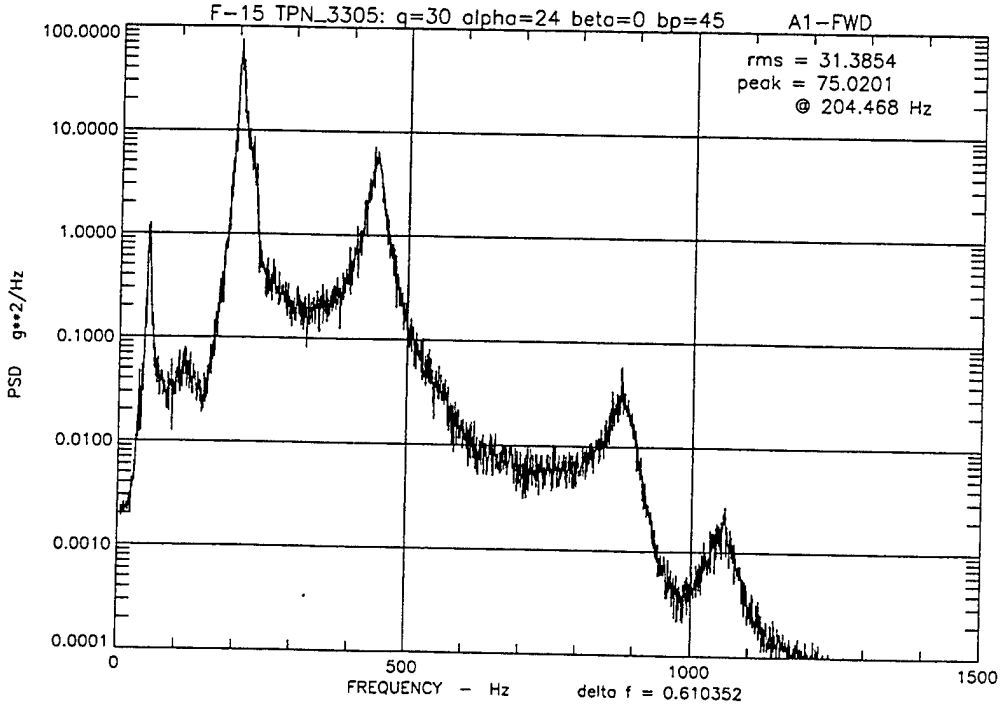
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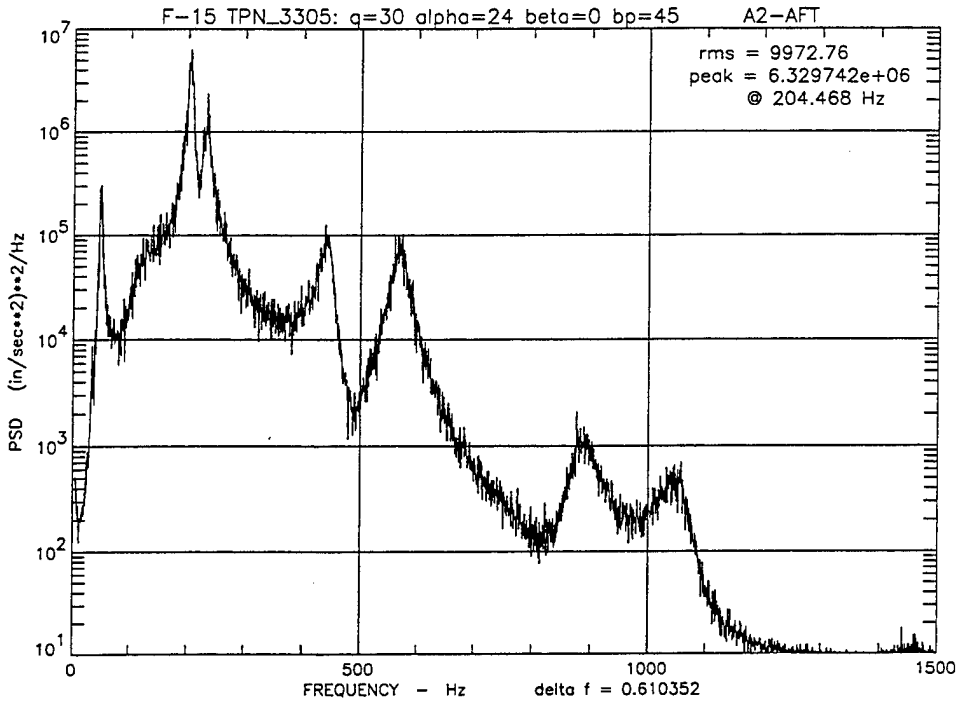
F-15 TPN_3305: q=30 alpha=24 beta=0 bp=45



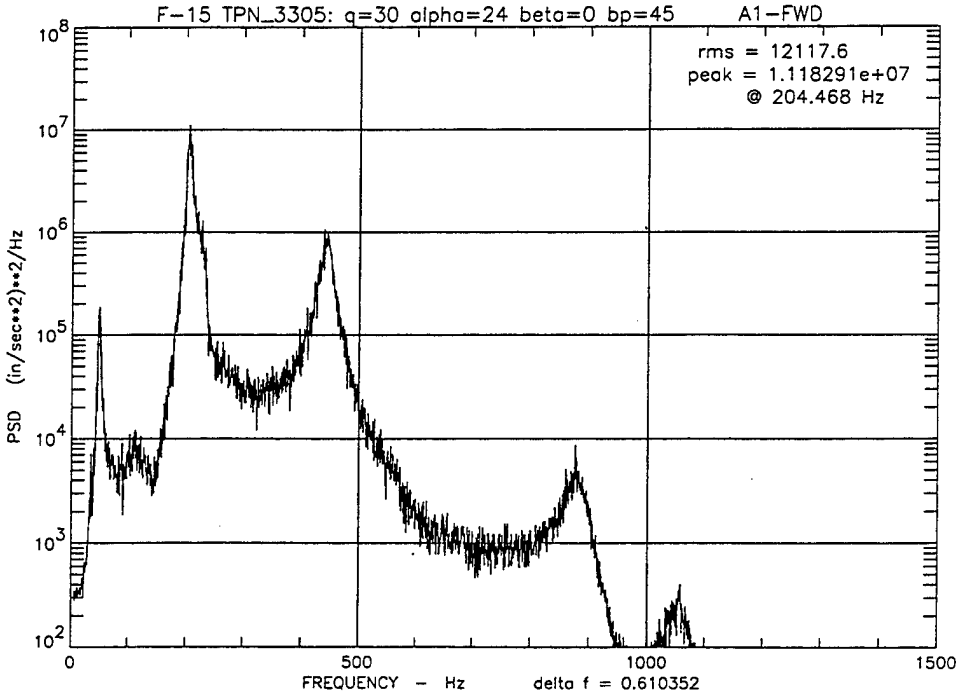
F-15 TPN_3305: q=30 alpha=24 beta=0 bp=45



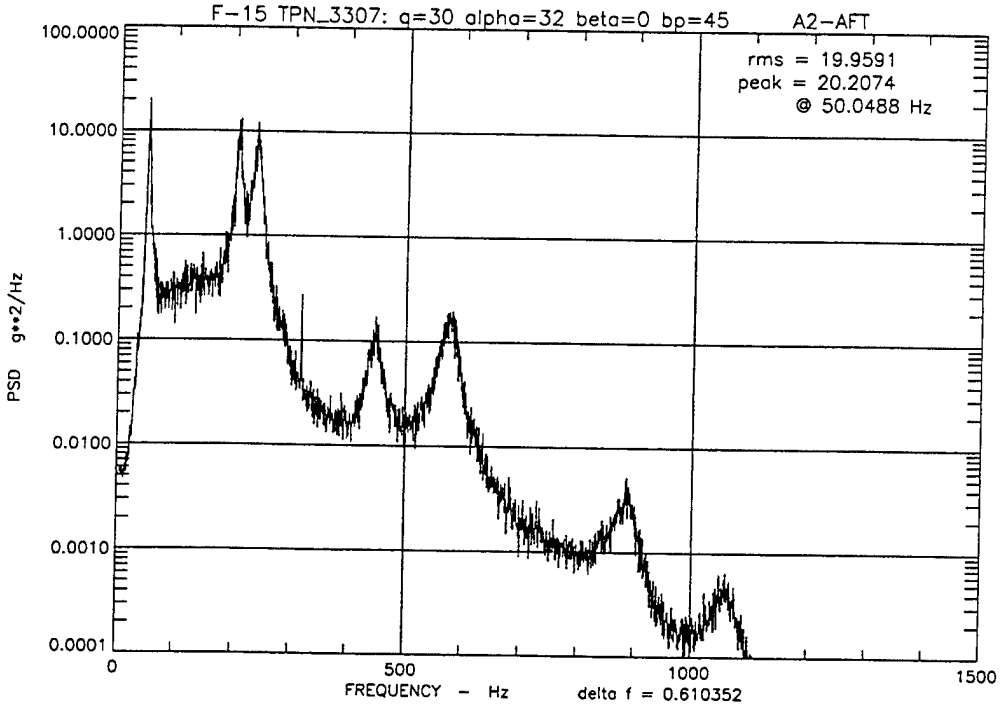
F-15 TPN_3305: q=30 alpha=24 beta=0 bp=45



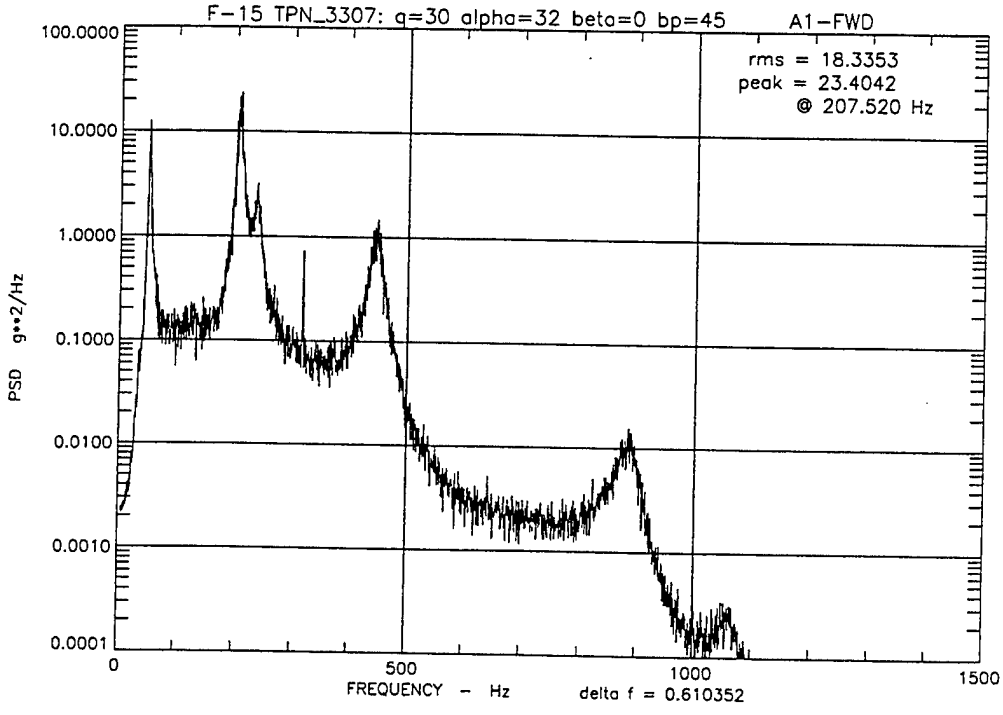
F-15 TPN_3305: q=30 alpha=24 beta=0 bp=45



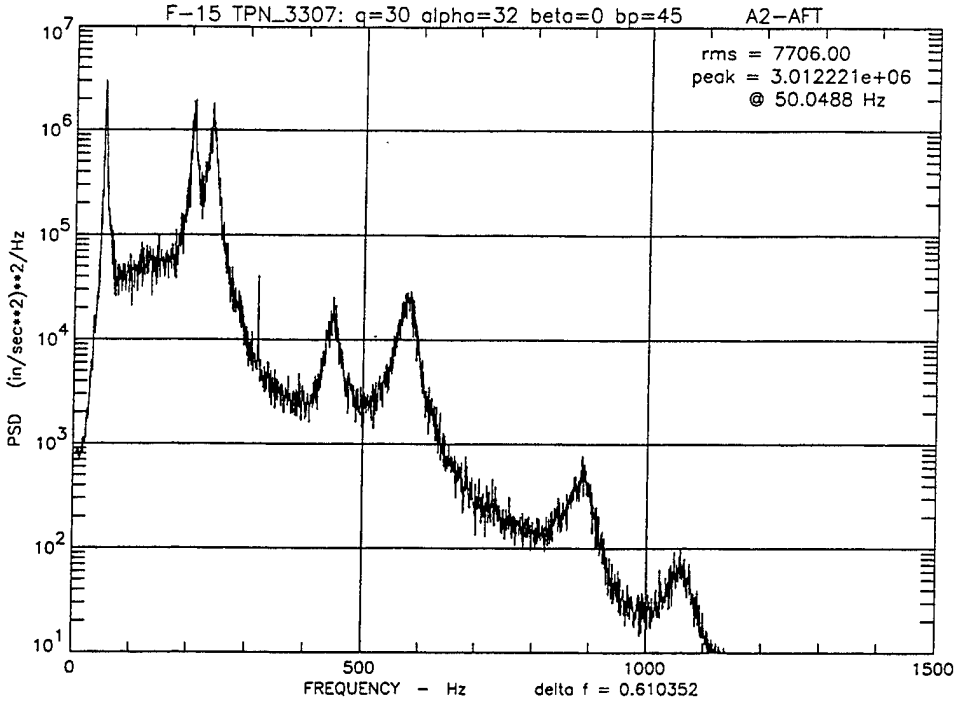
F-15 TPN_3307: q=30 alpha=32 beta=0 bp=45



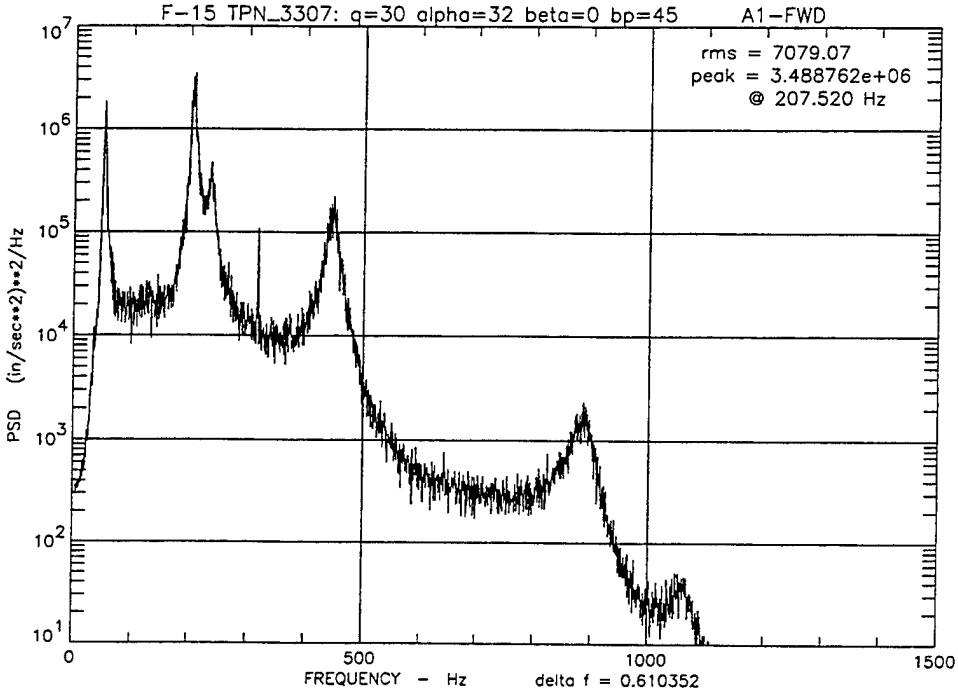
F-15 TPN_3307: q=30 alpha=32 beta=0 bp=45



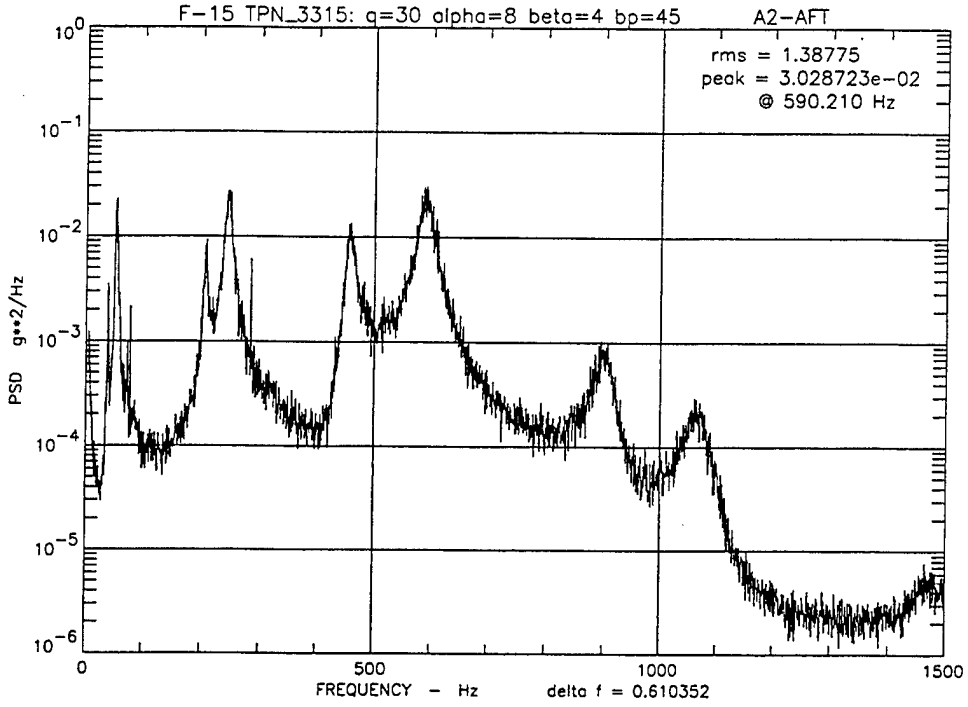
F-15 TPN_3307: q=30 alpha=32 beta=0 bp=45



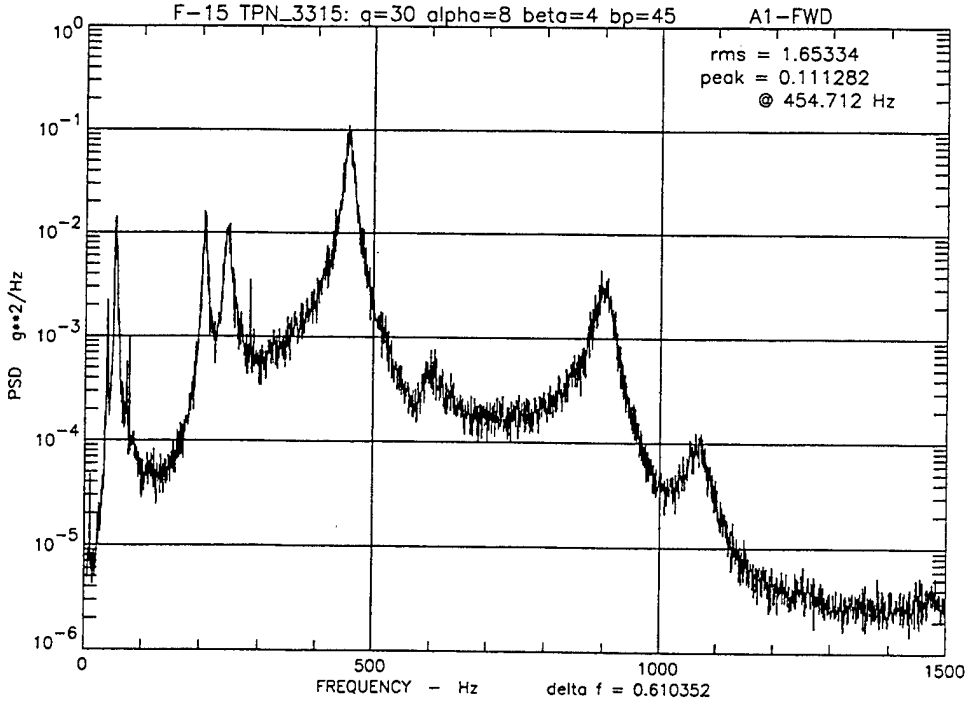
F-15 TPN_3307: q=30 alpha=32 beta=0 bp=45



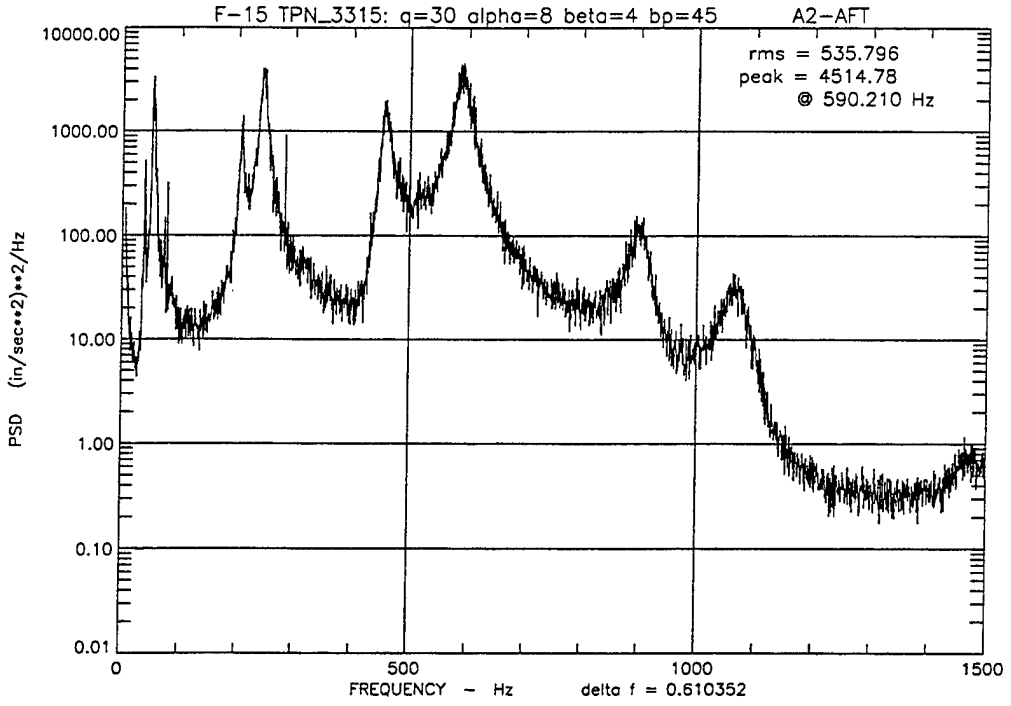
F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45



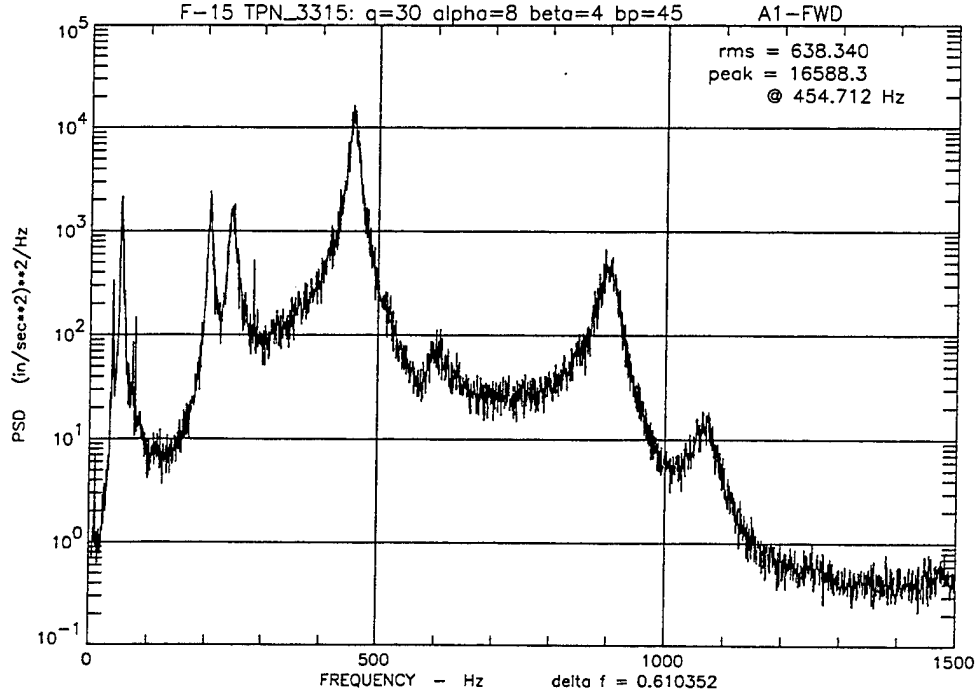
F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45



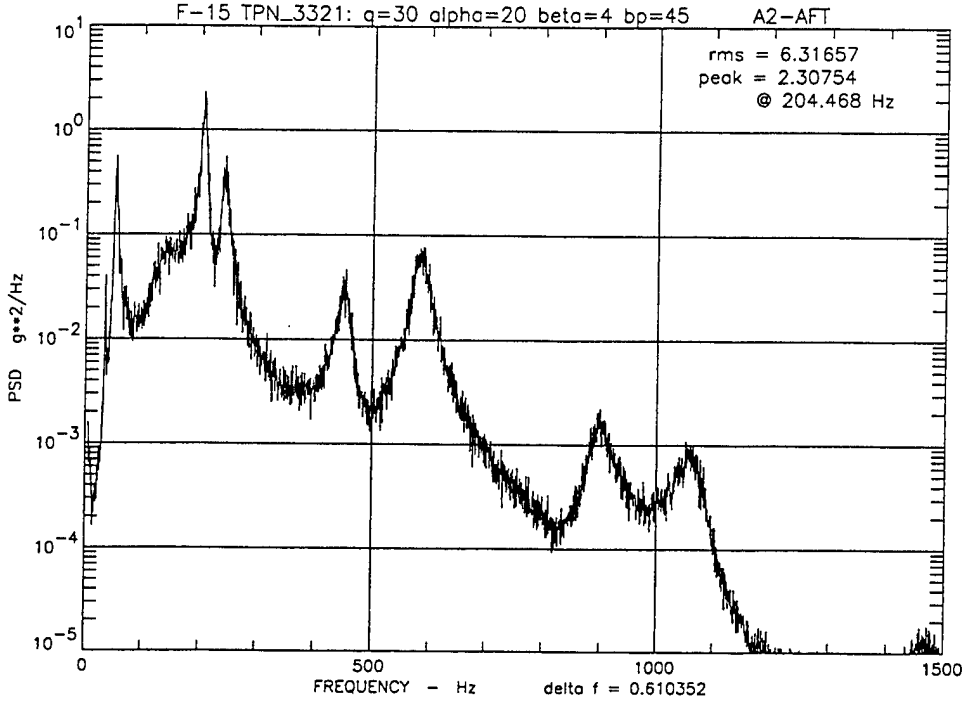
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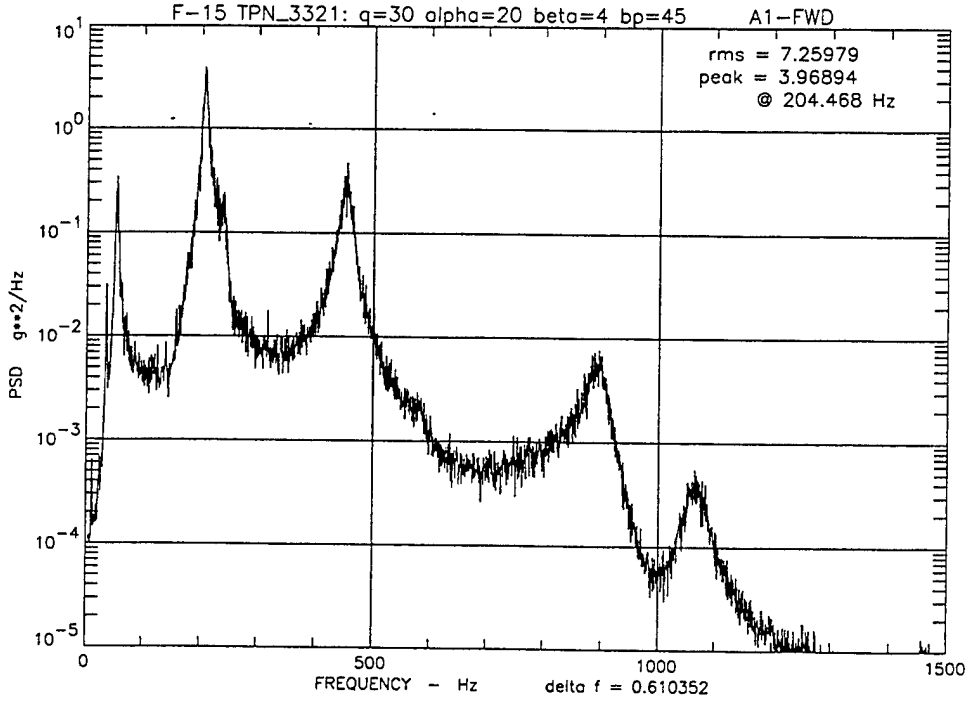
F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45



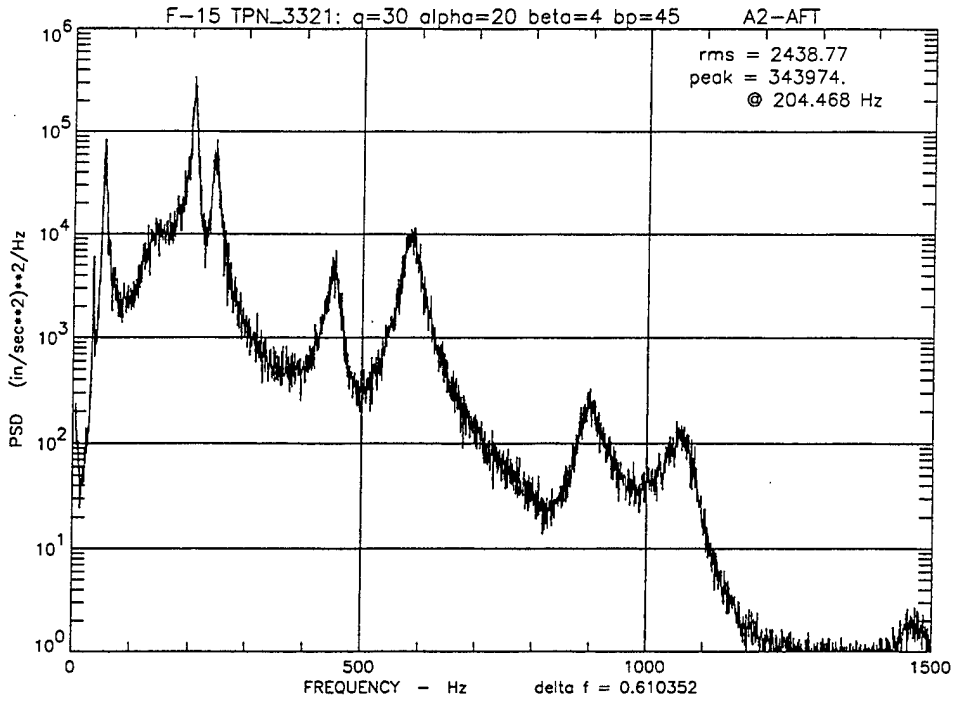
F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45



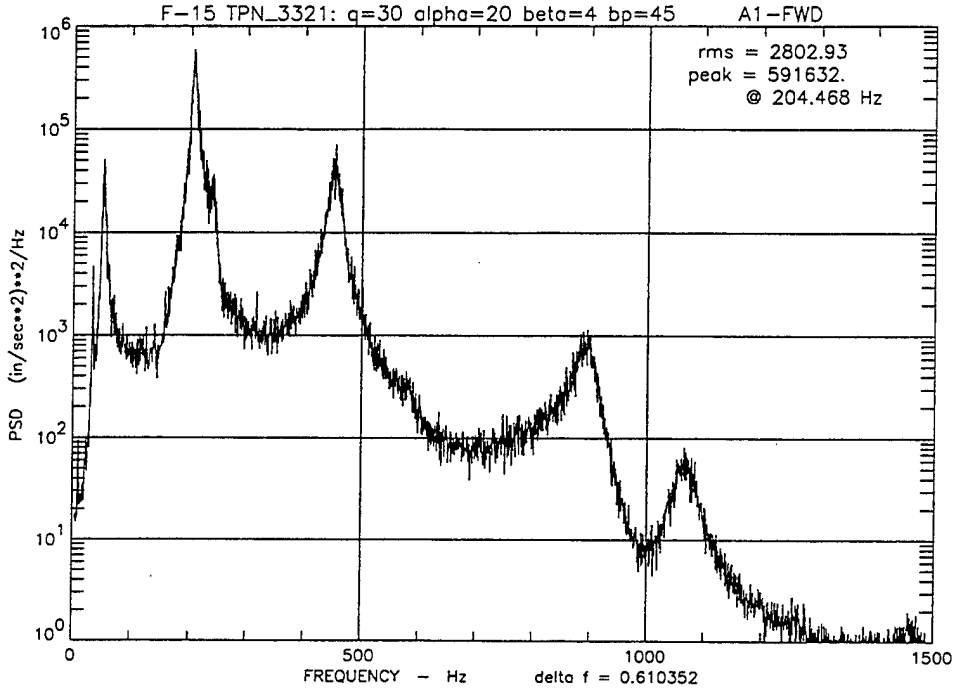
F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45



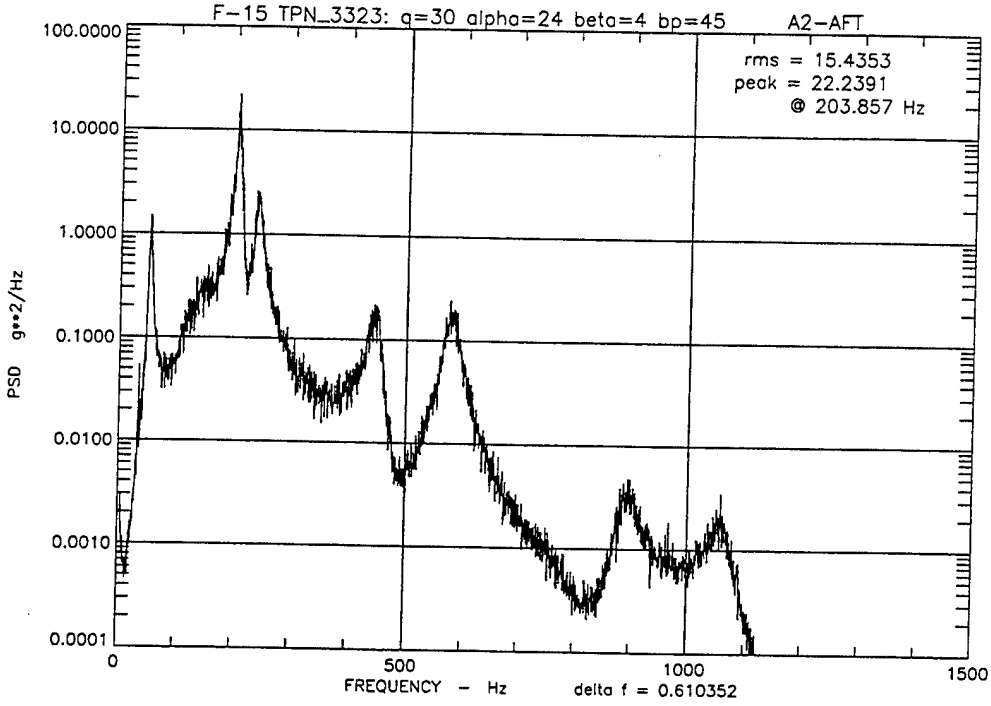
F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45



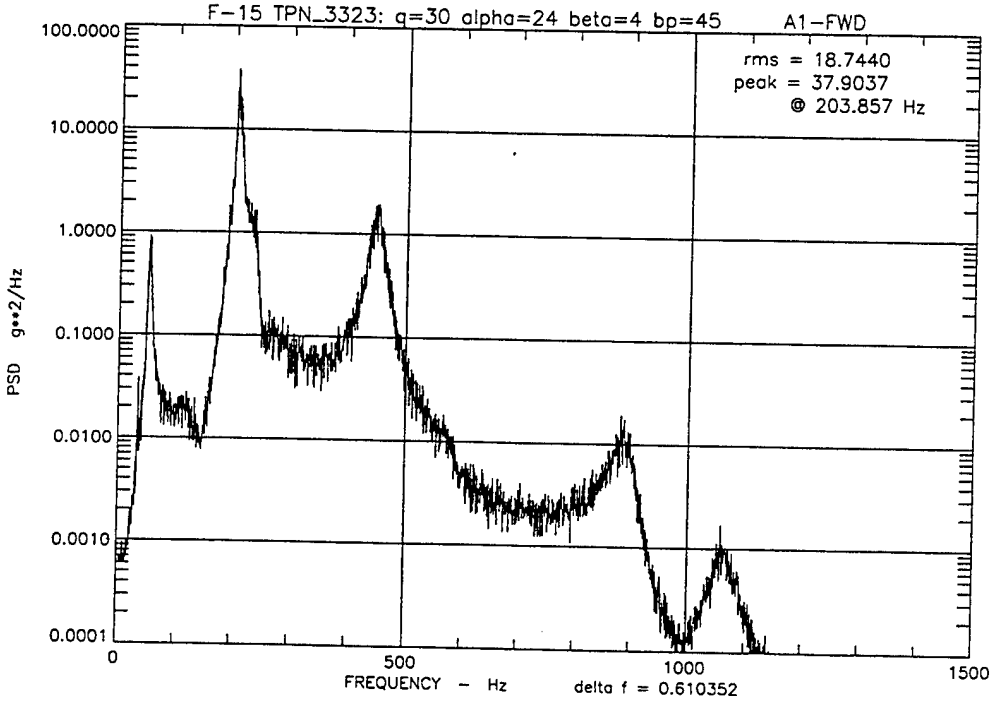
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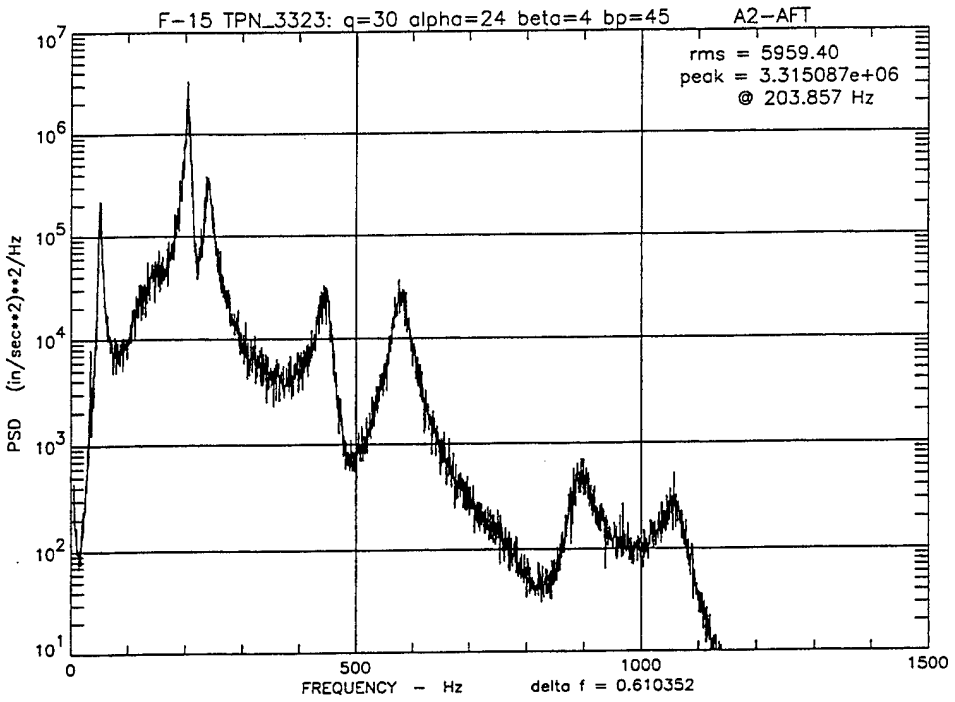
F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45



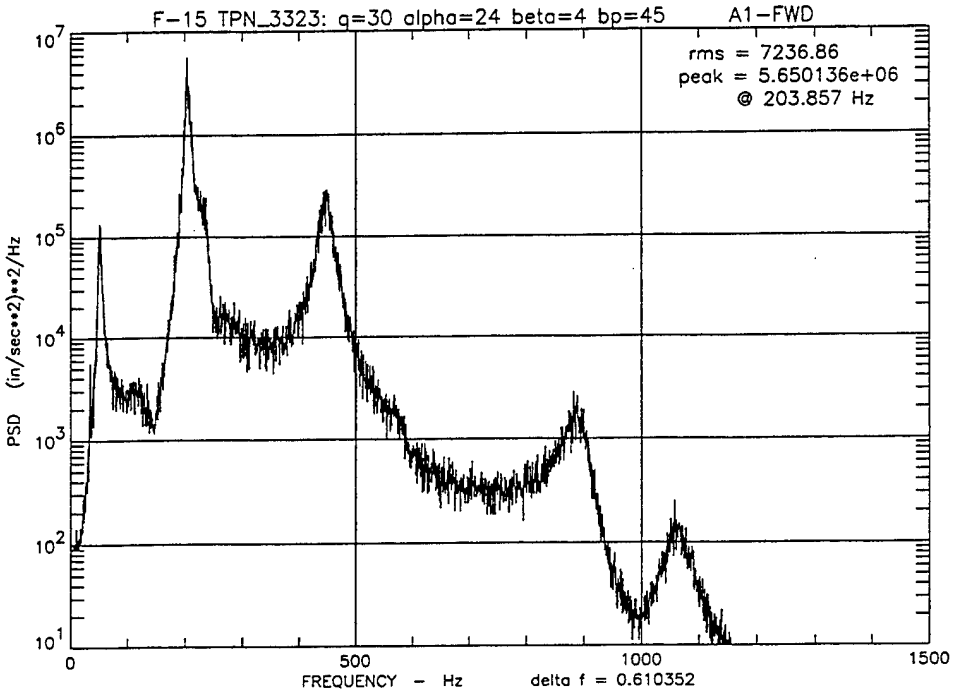
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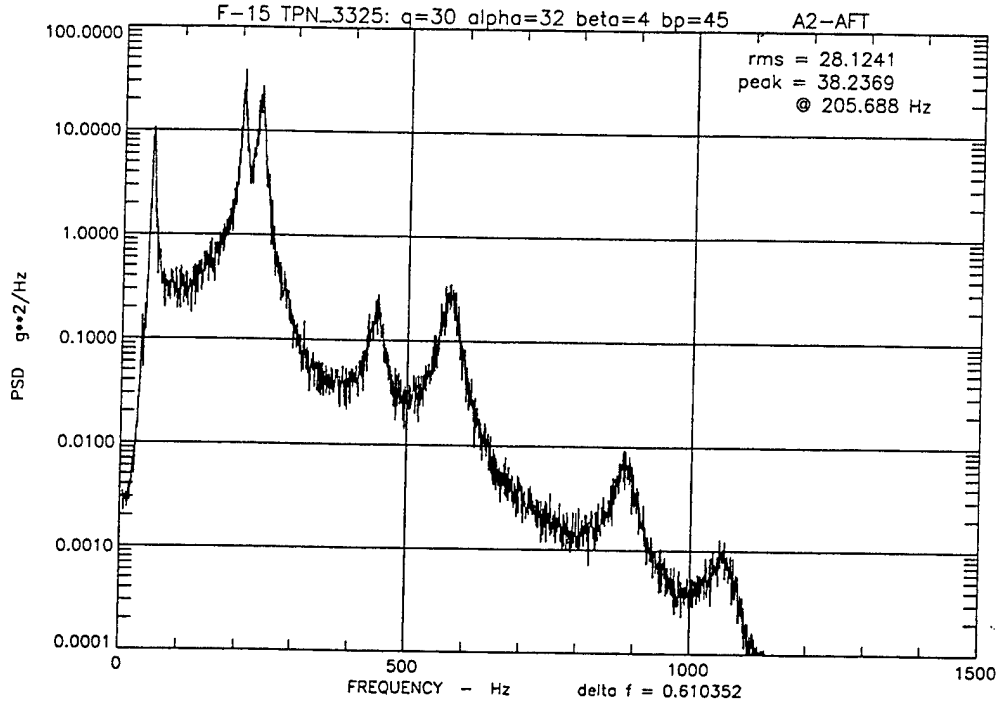
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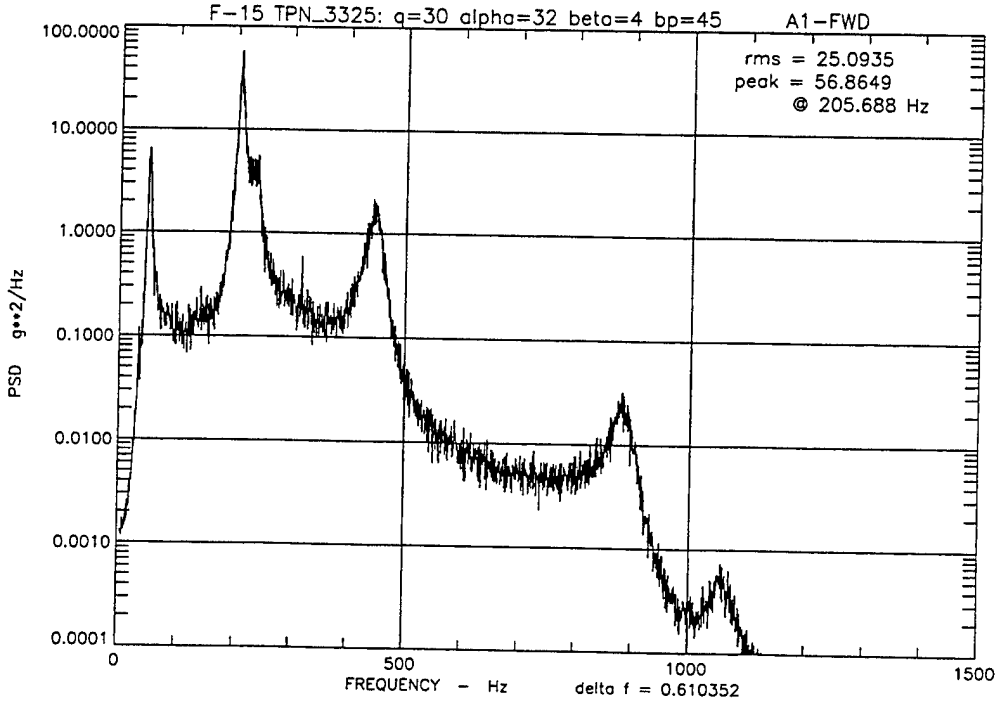
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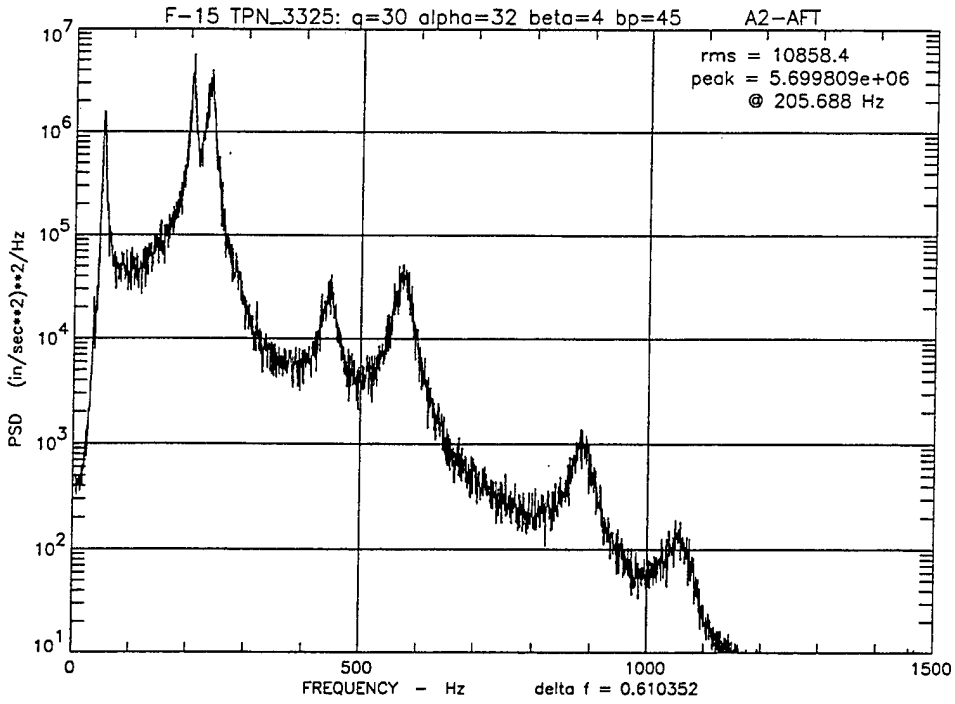
F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45



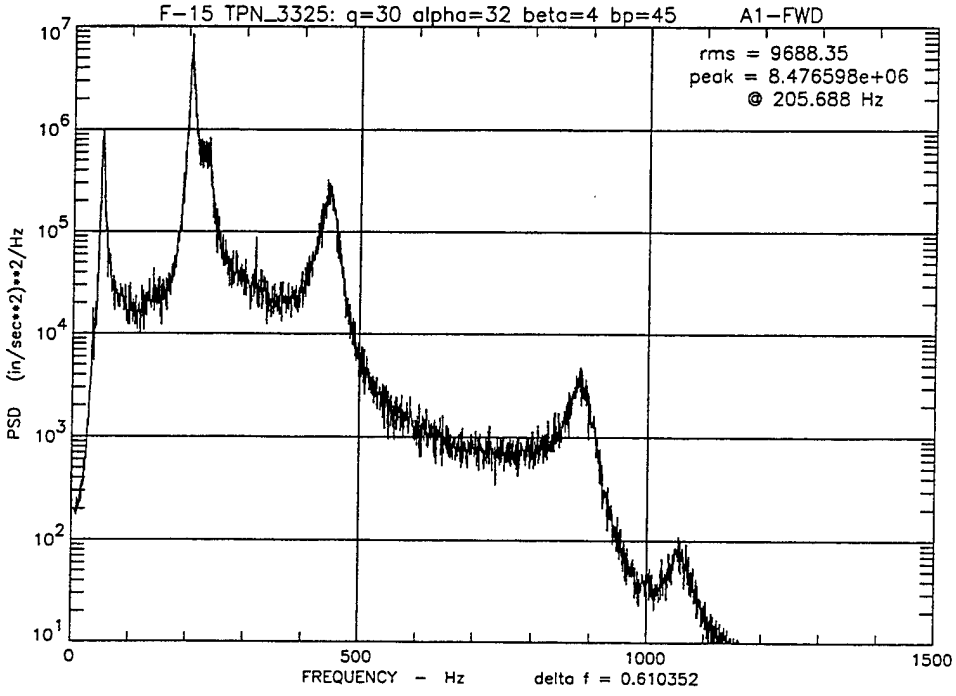
F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45



F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45



F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45

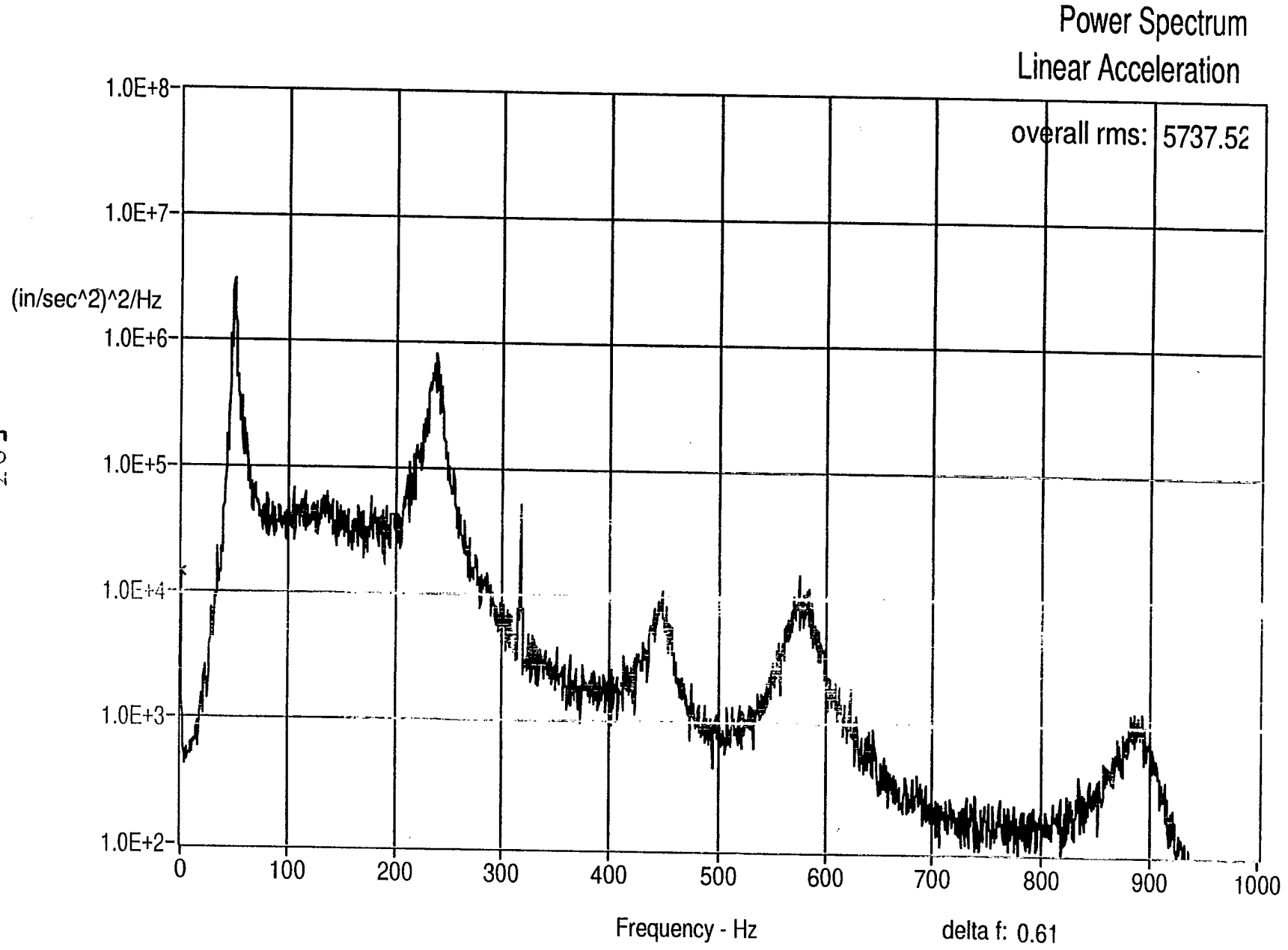


FLEXIBLE TAIL RESPONSE
ACCELERATION DATA
Q= 30 PSF
PSD GRAPHS

4.1.2.2 BENDING(LINEAR AT EA) beta= 0, +4, -4 Deg, WBP = 0, 45 psi
ALPHAS = 8, 20, 24, 32 DEG

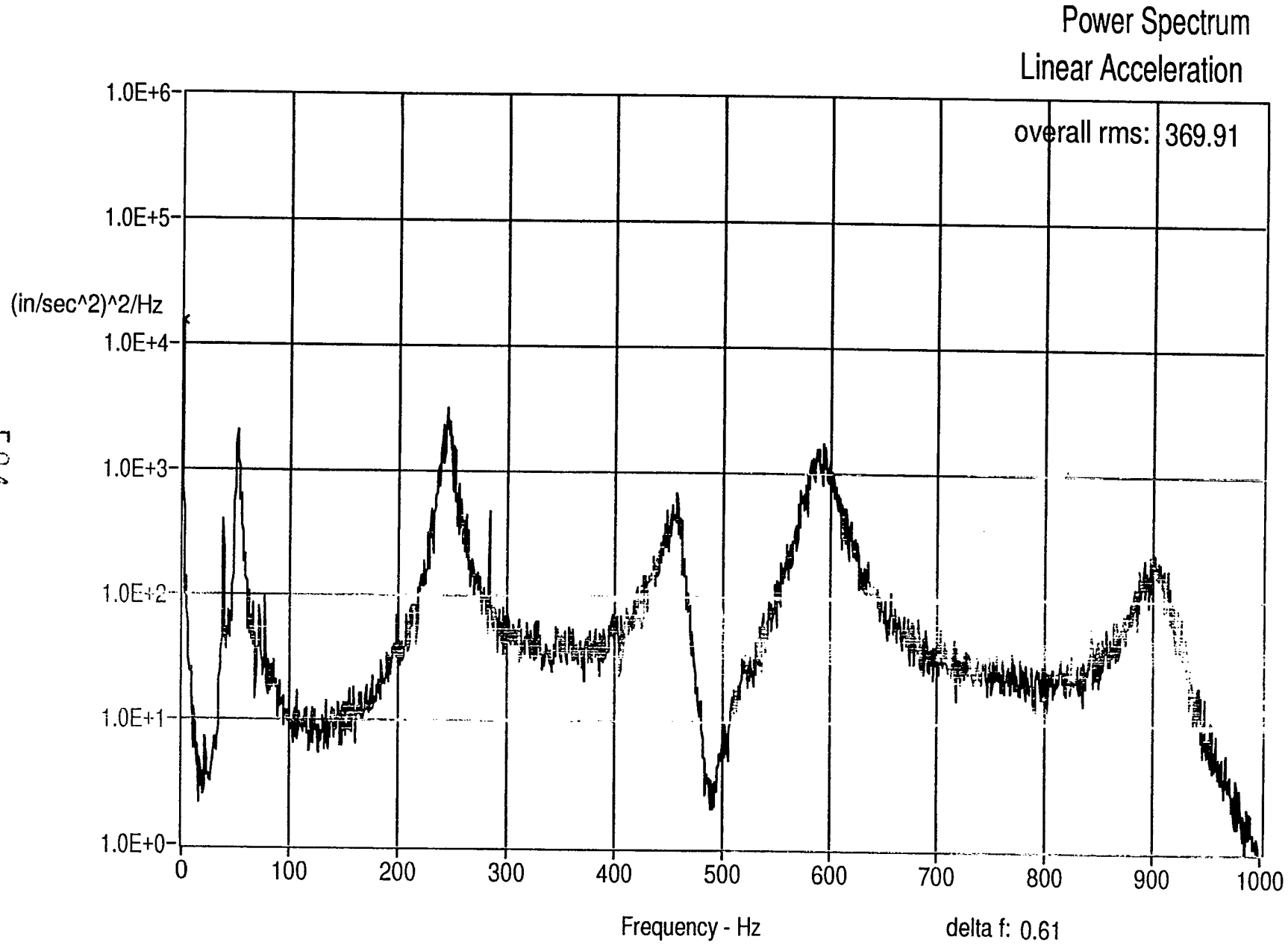
(note, the dimensional graph s, (in/sec)^2/hz are in a block, while the graphs (g's)^2/hz are in a second block. data isfurter blocked blocked off by blowing pressures, with beta variation within.

F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0



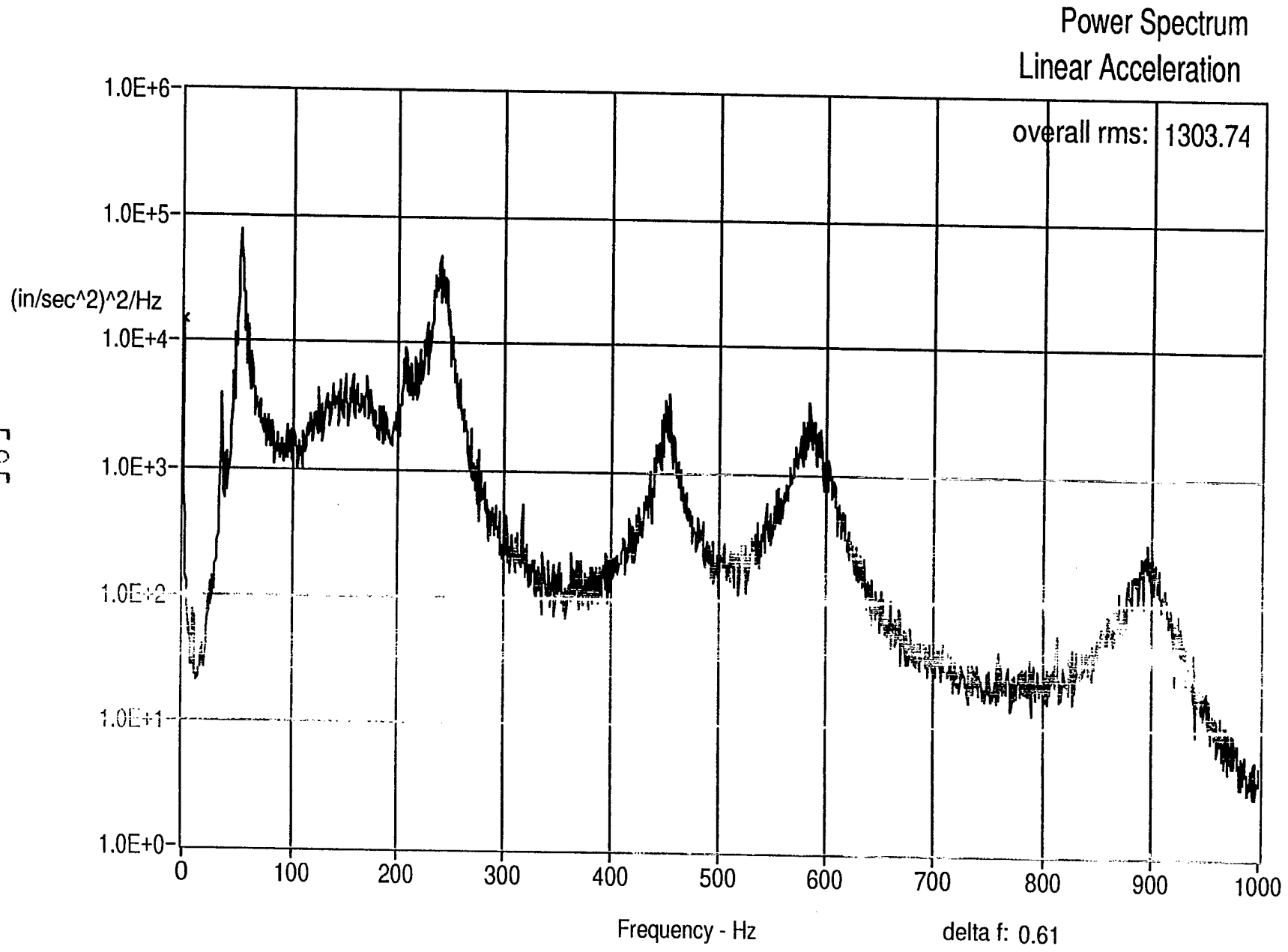
593

F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0

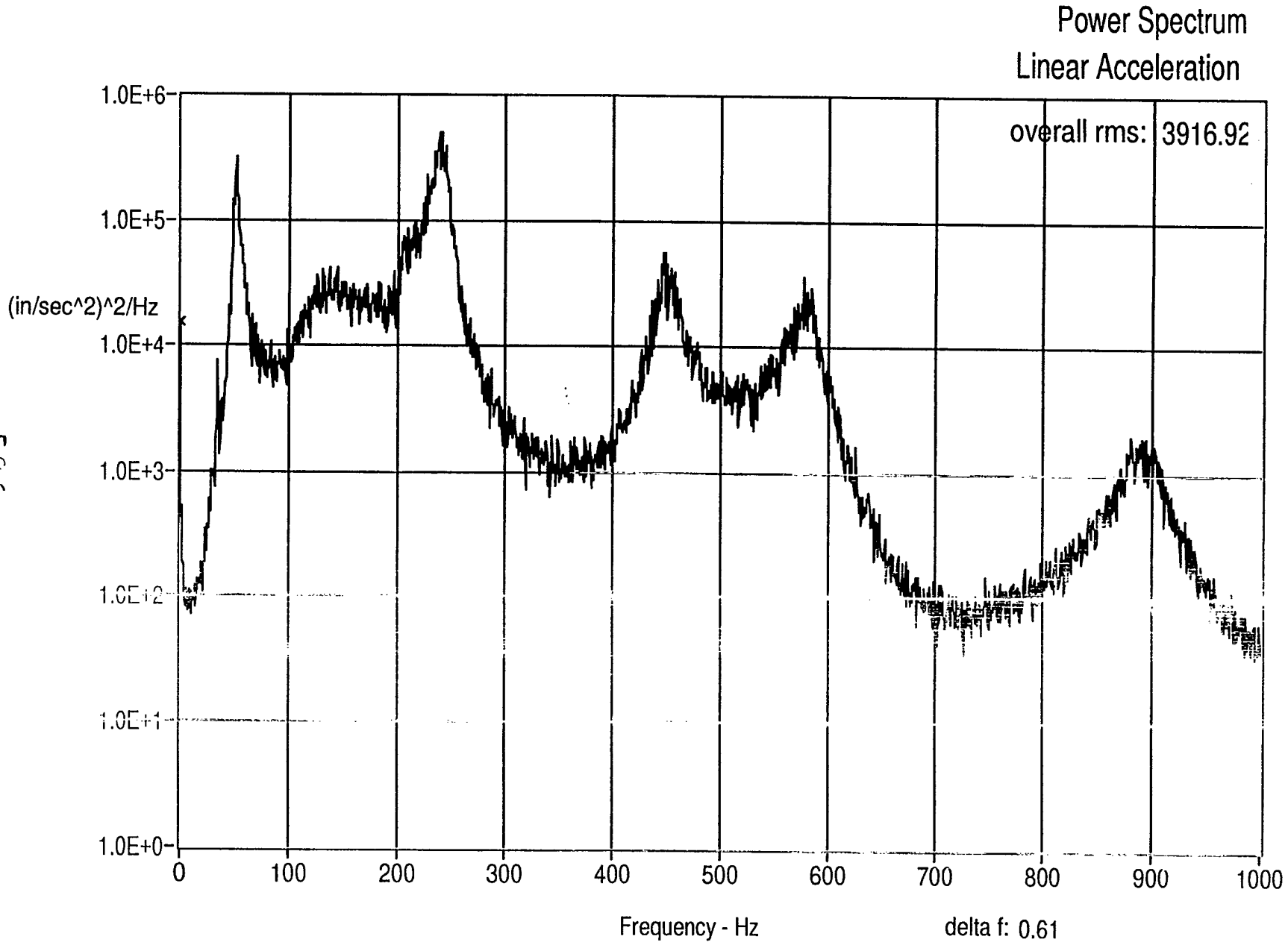


594

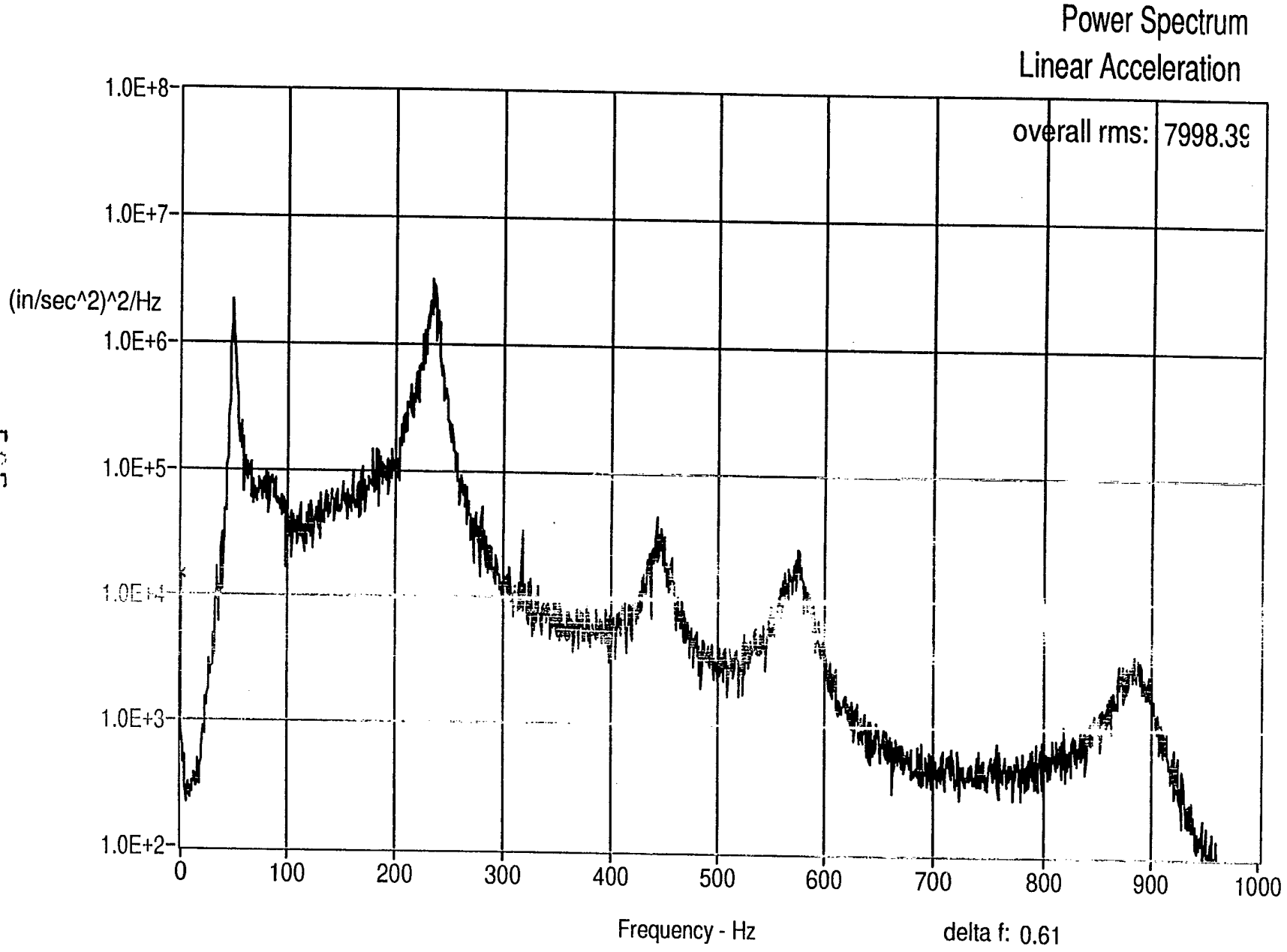
F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0



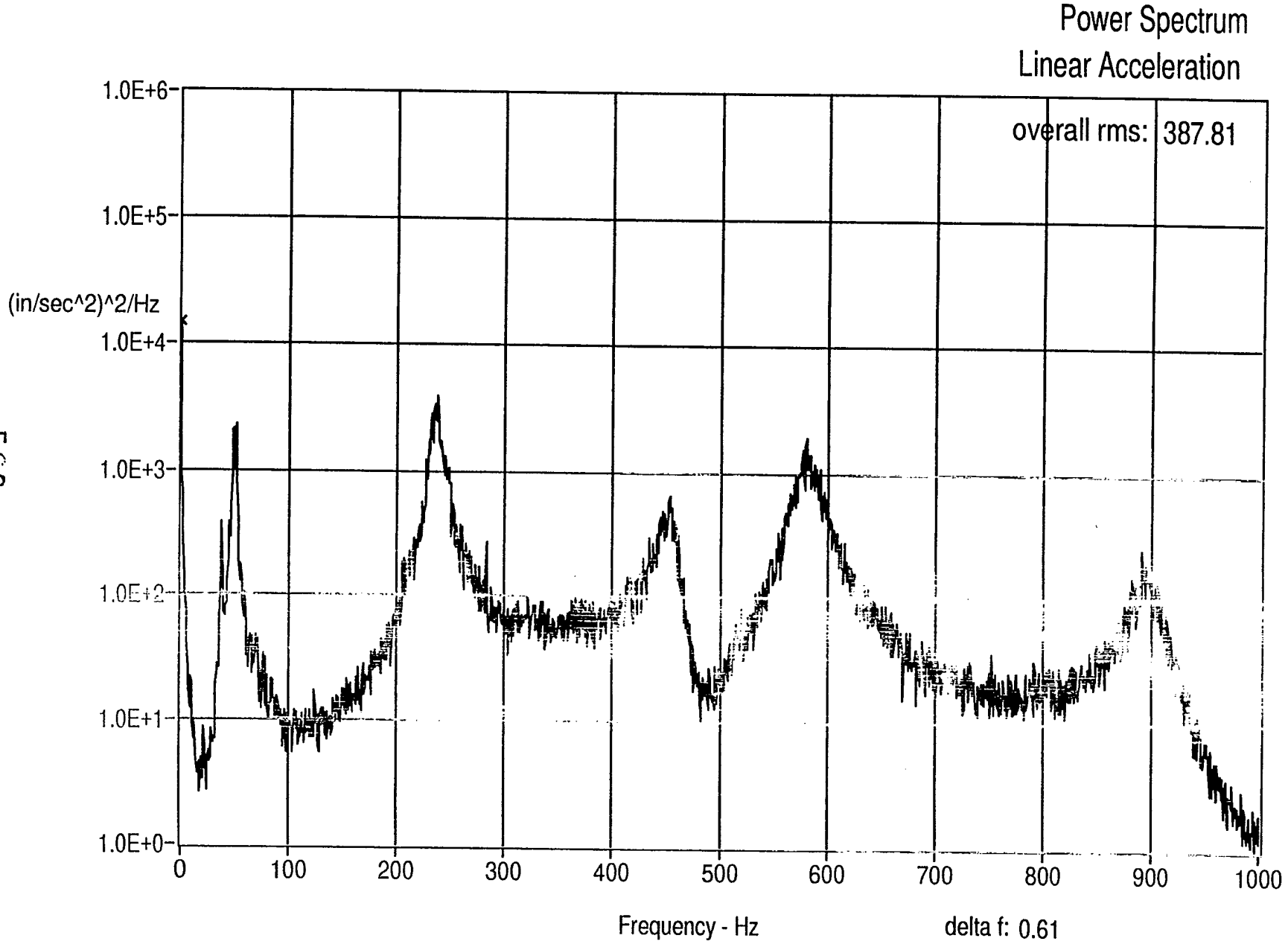
F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0



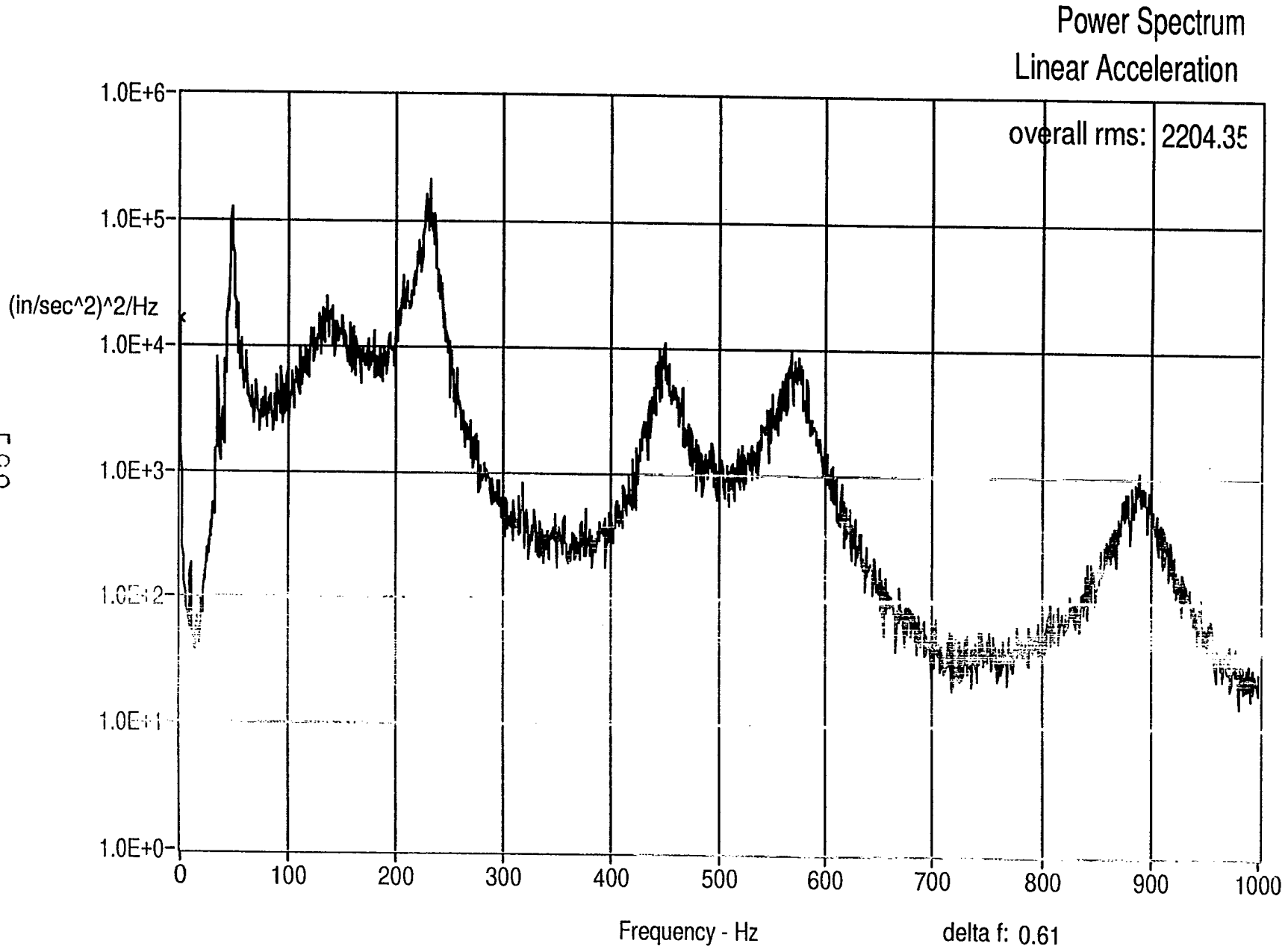
F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0



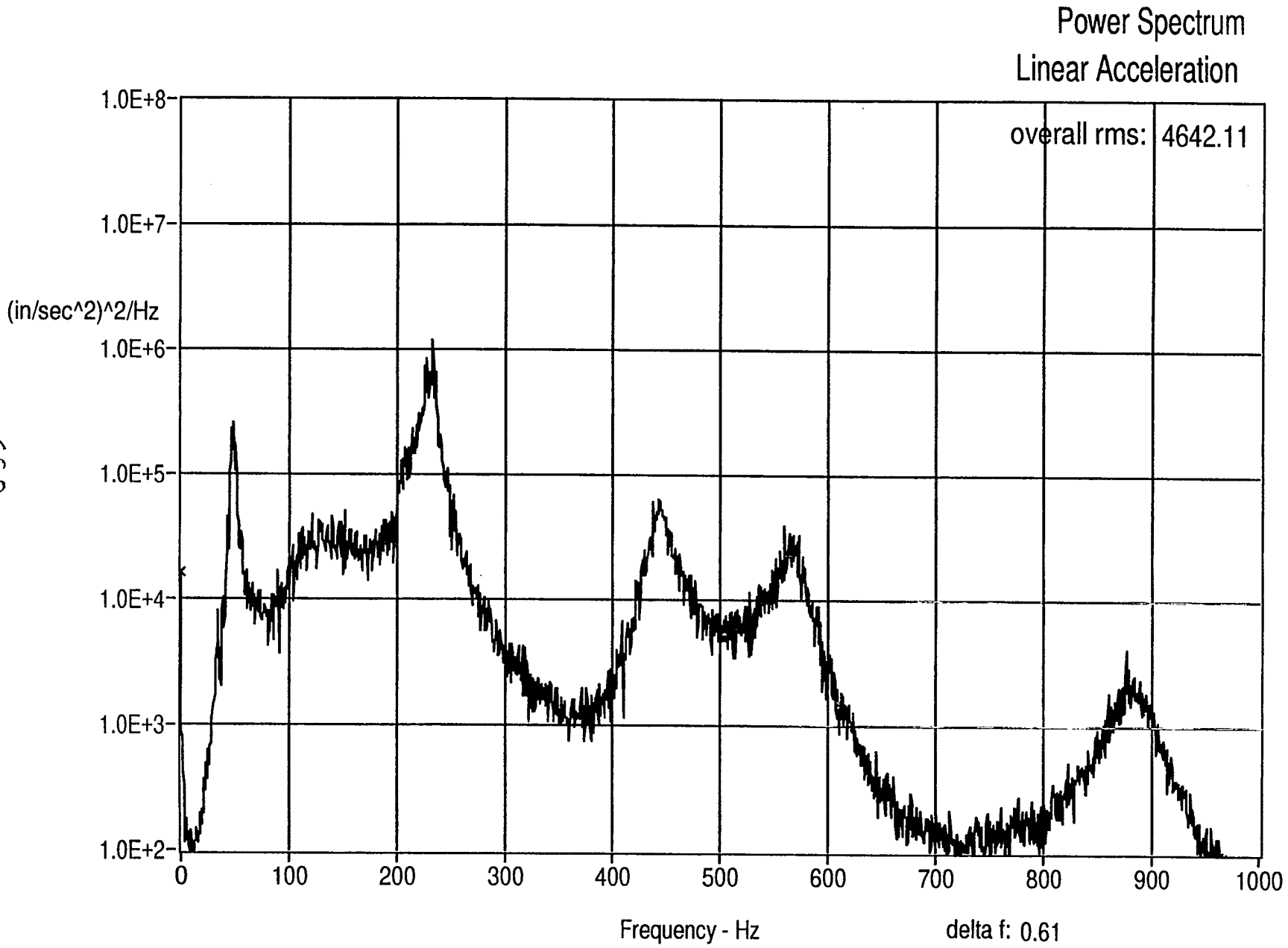
F-15 TPN_3297: q=30 alpha=8 beta=0 bp=45



F-15 TPN_3303: q=30 alpha=20 beta=0 bp=45

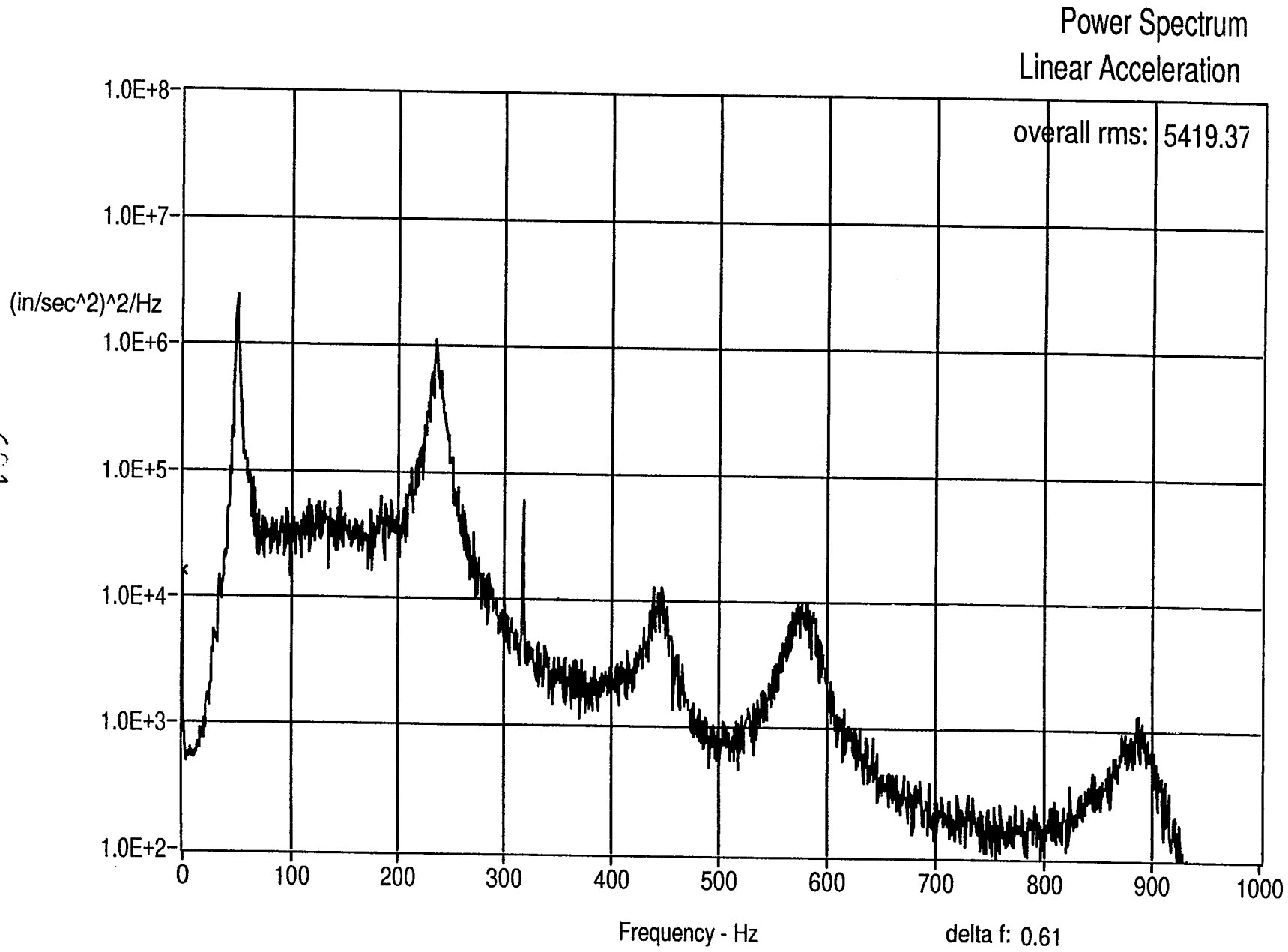


F-15 TPN_3305: q=30 alpha=24 beta=0 bp=45

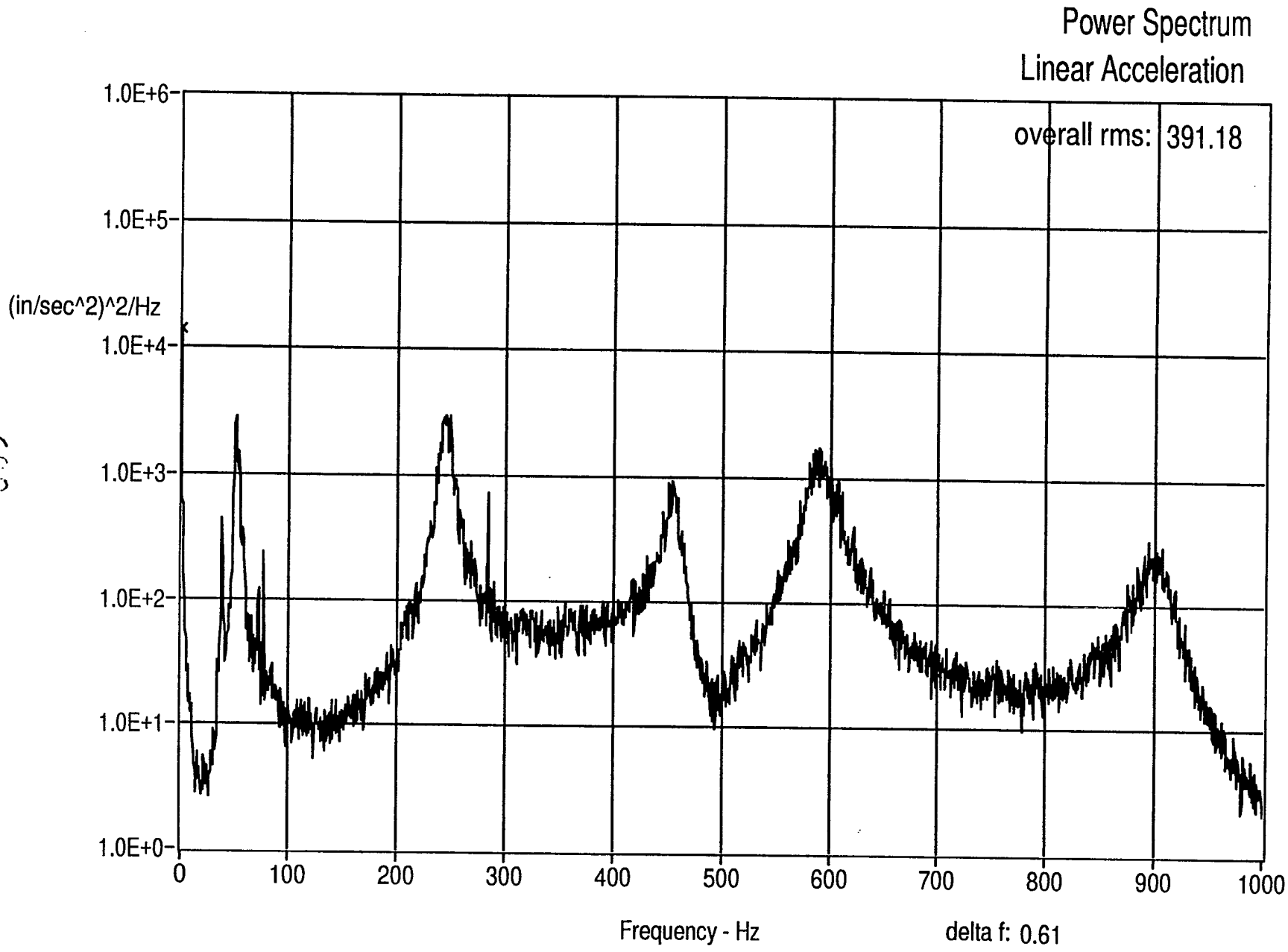


600

F-15 TPN_3307: q=30 alpha=32 beta=0 bp=45

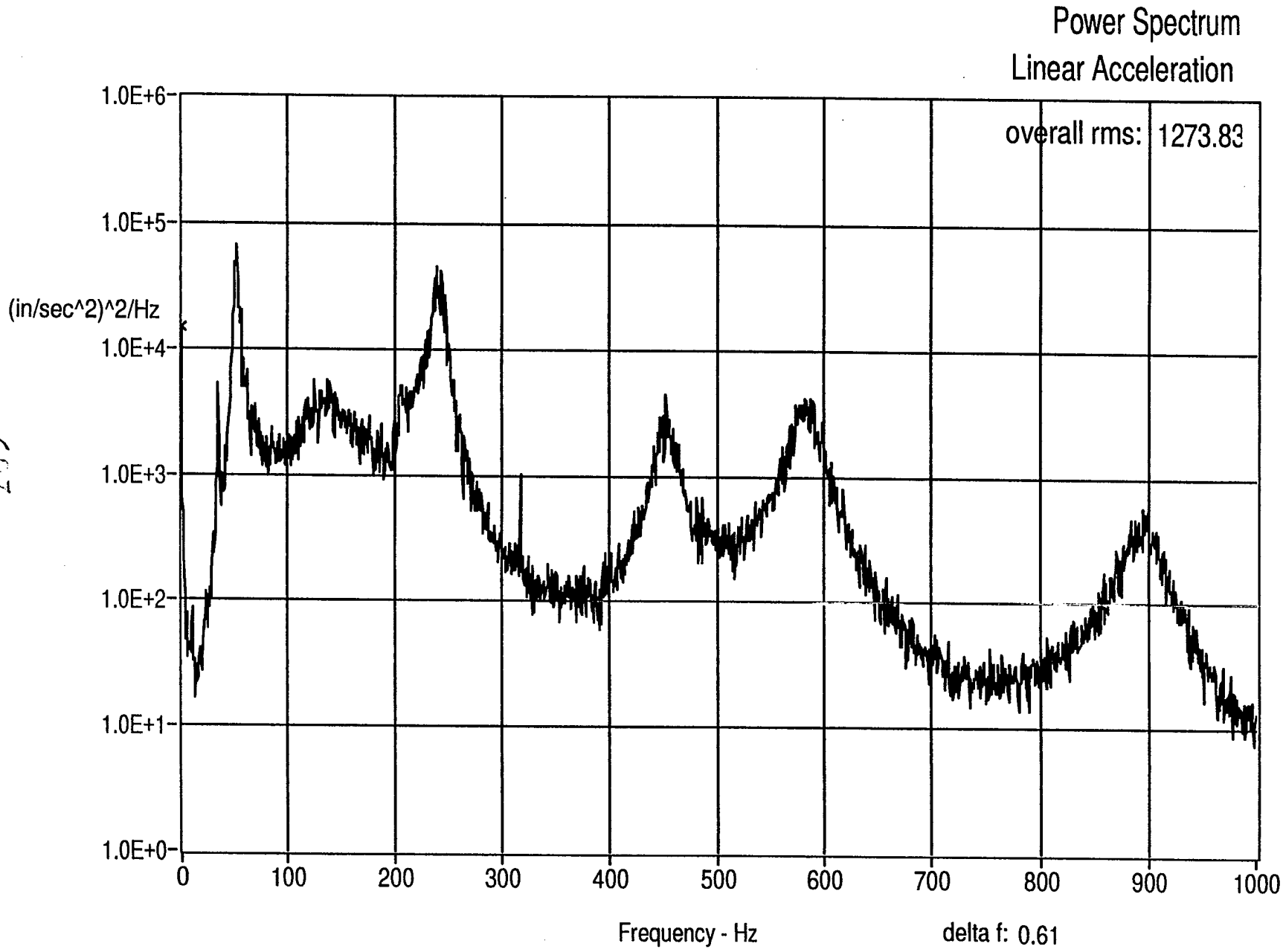


F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45

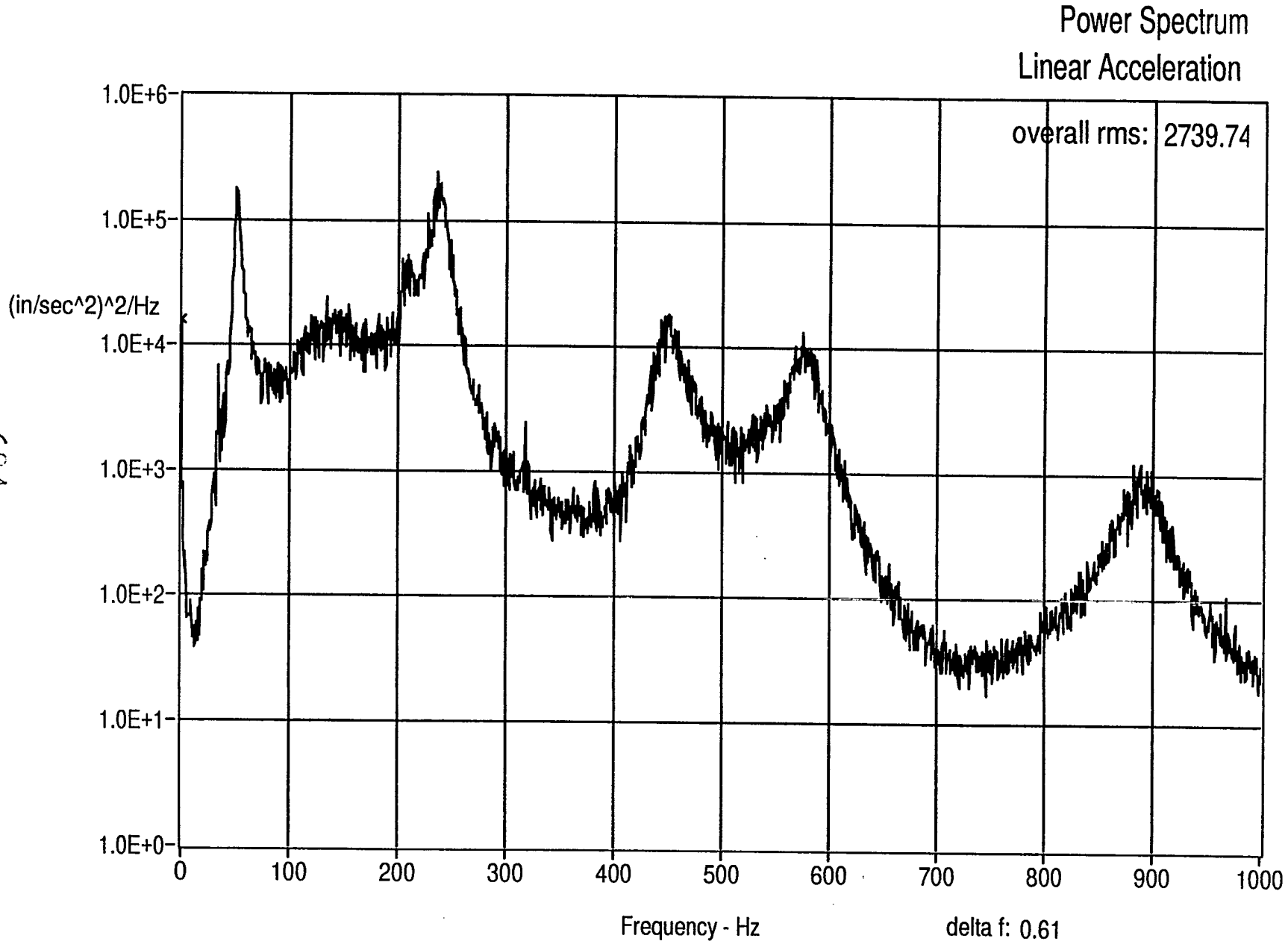


602

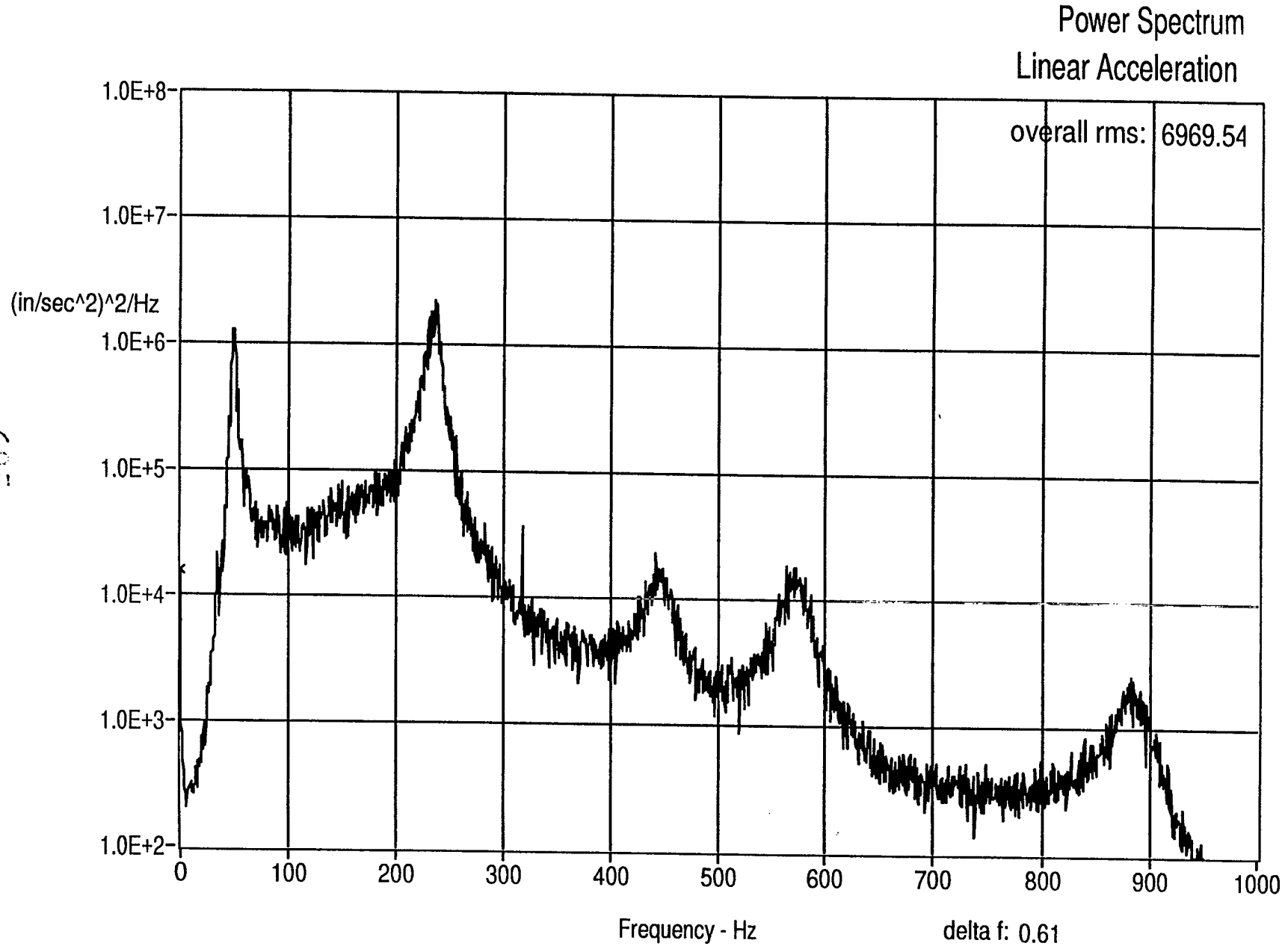
F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45



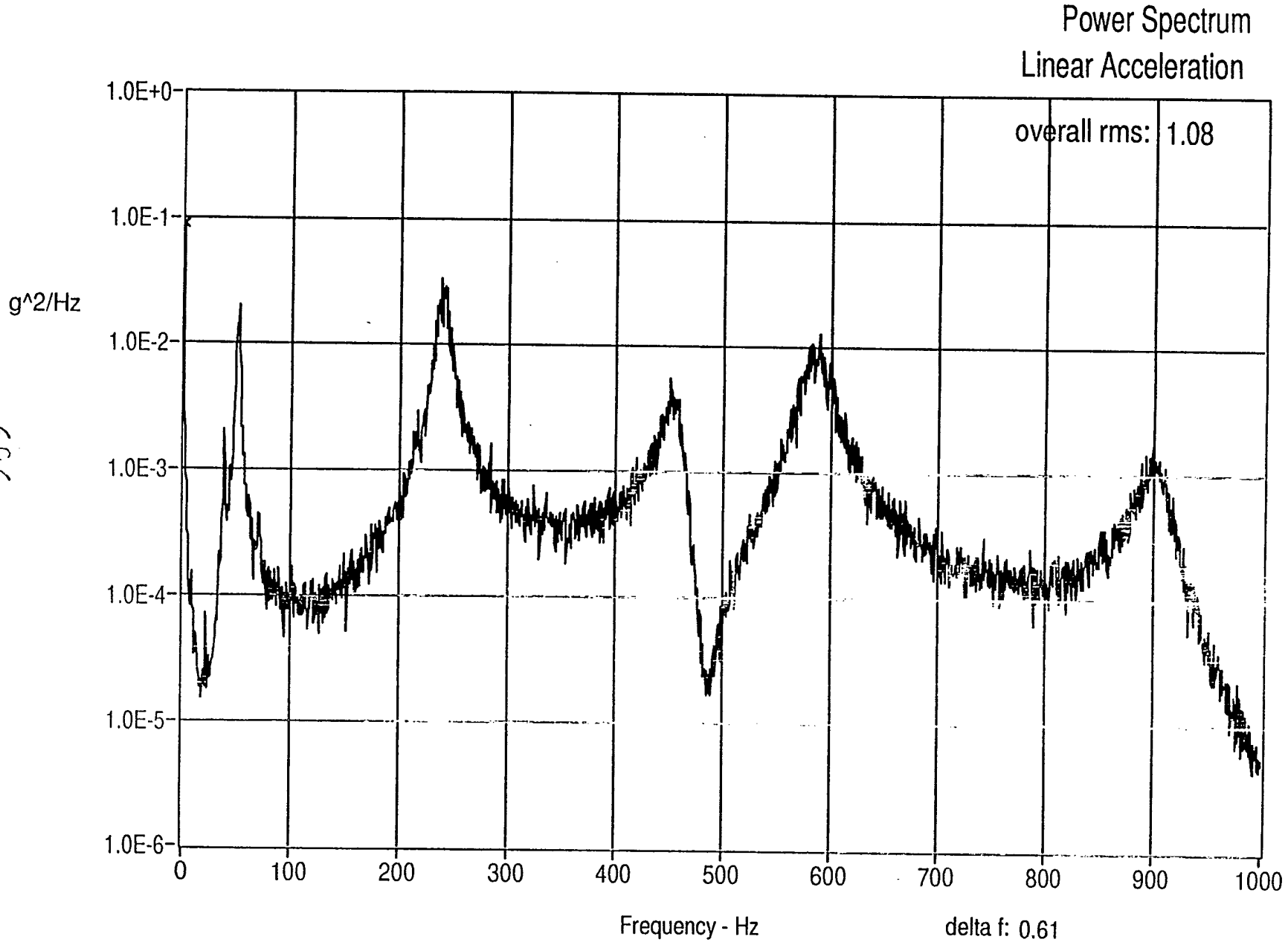
F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45



F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45

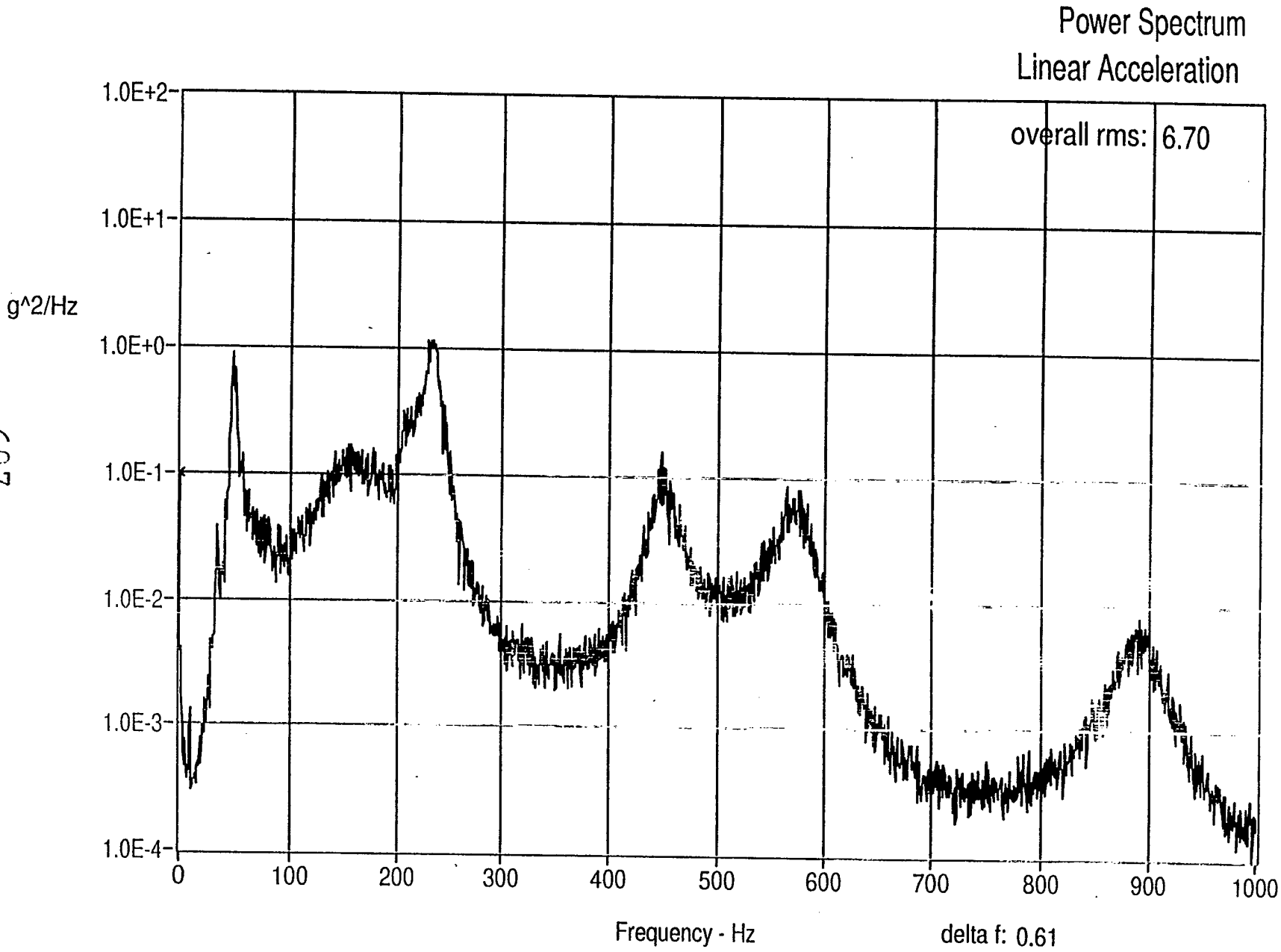


F-15 TPN_3243: q=30 alpha=8 beta=0 bp=0



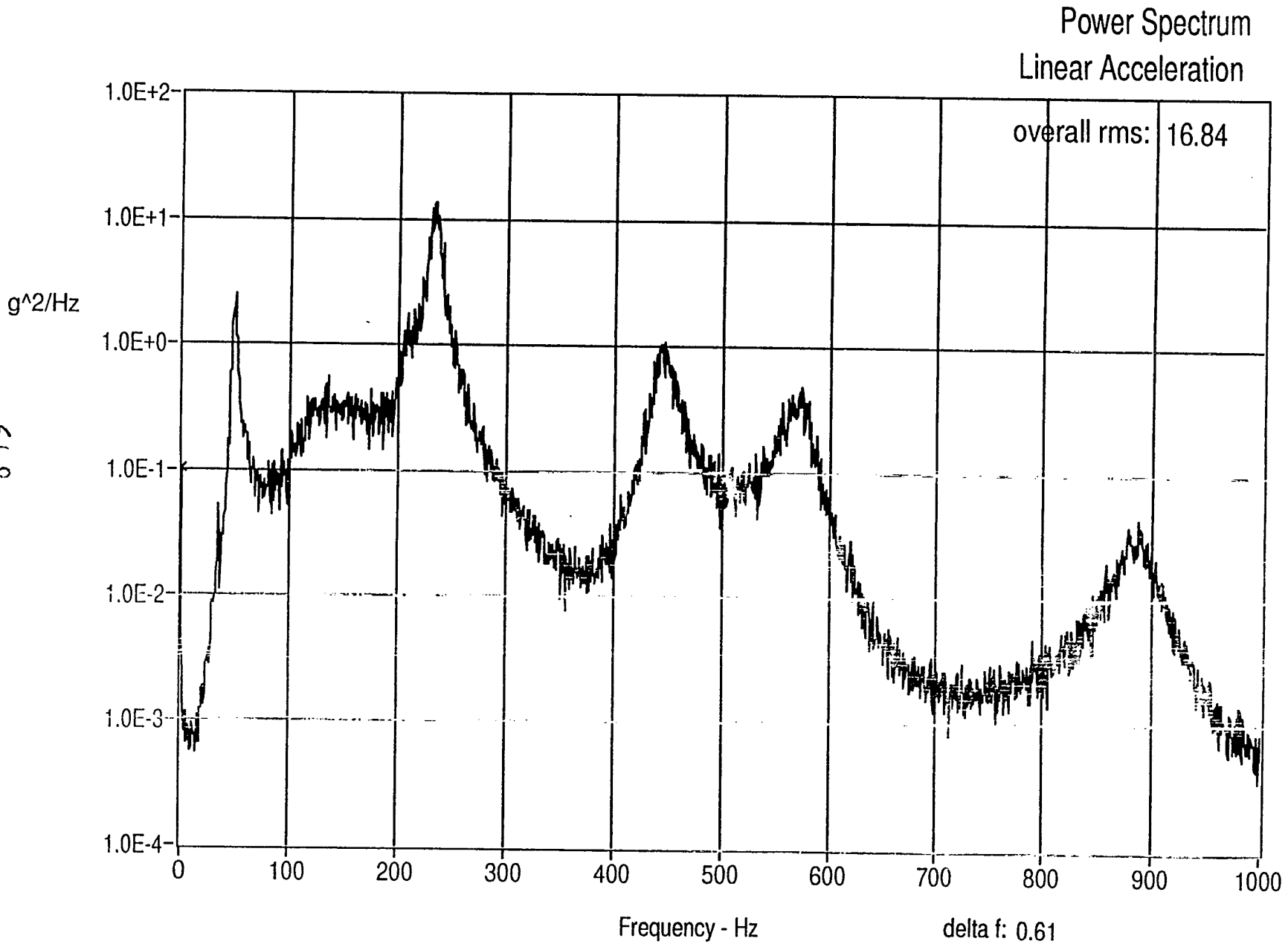
606

F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0

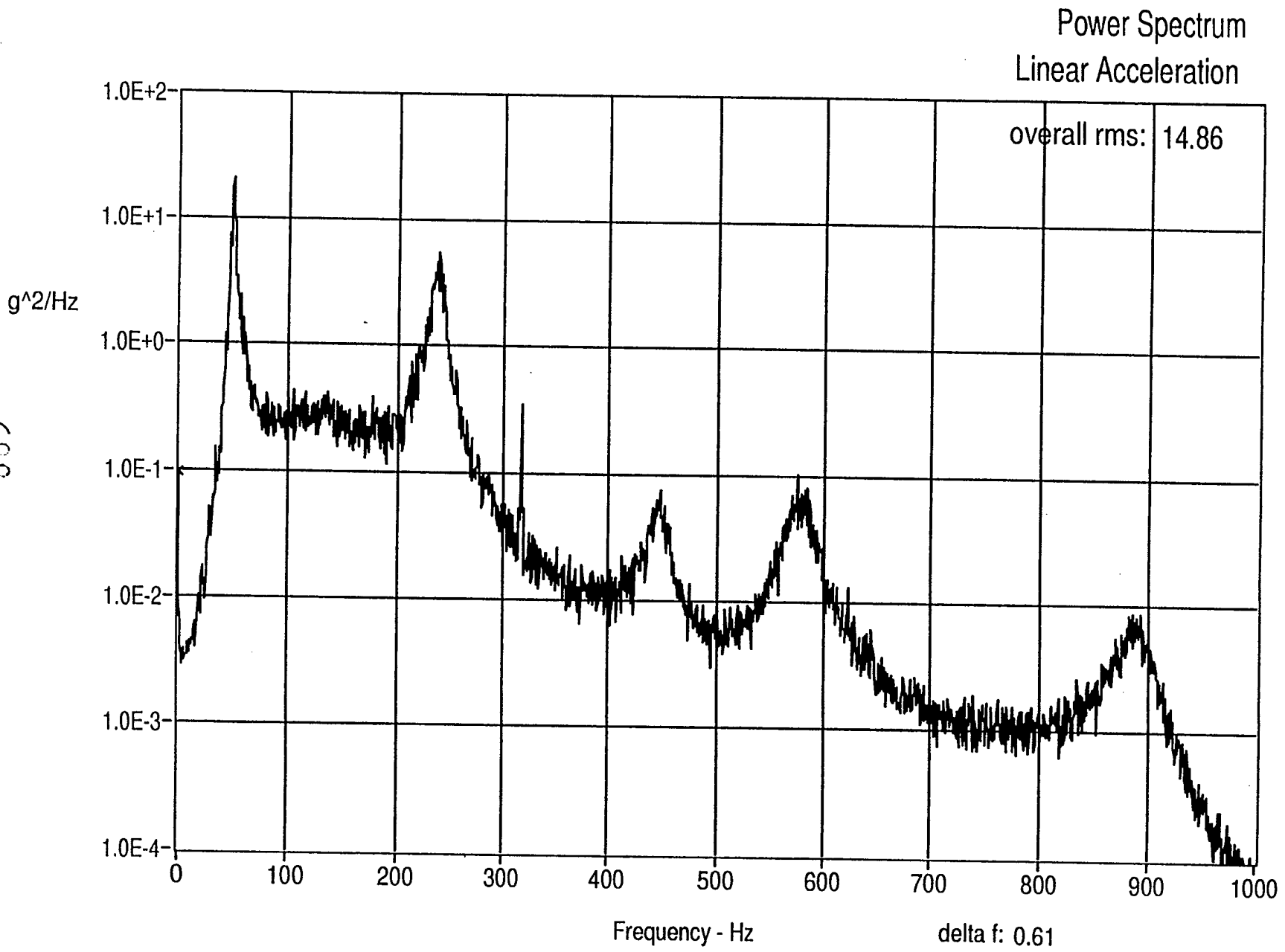


607

F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0

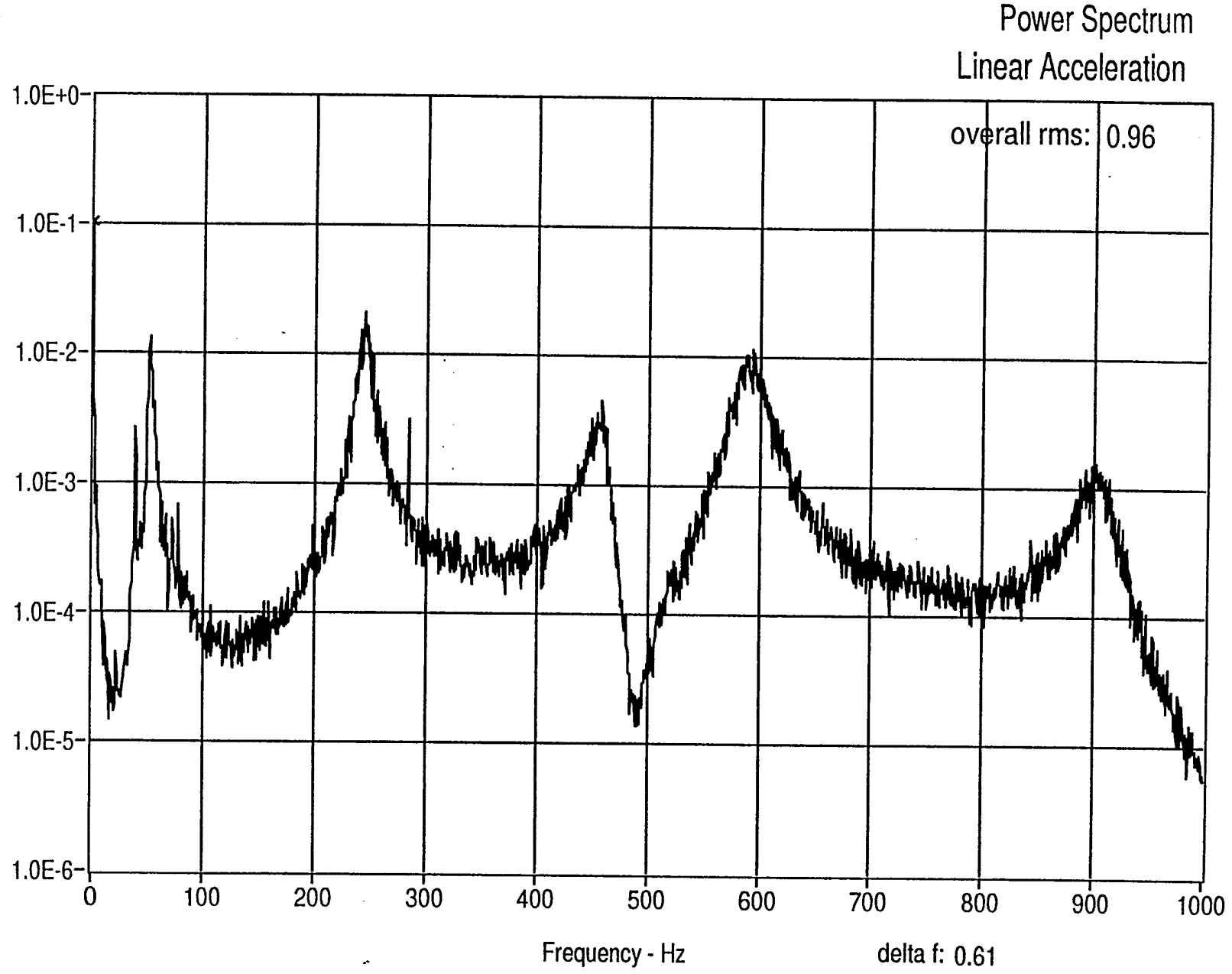


F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0

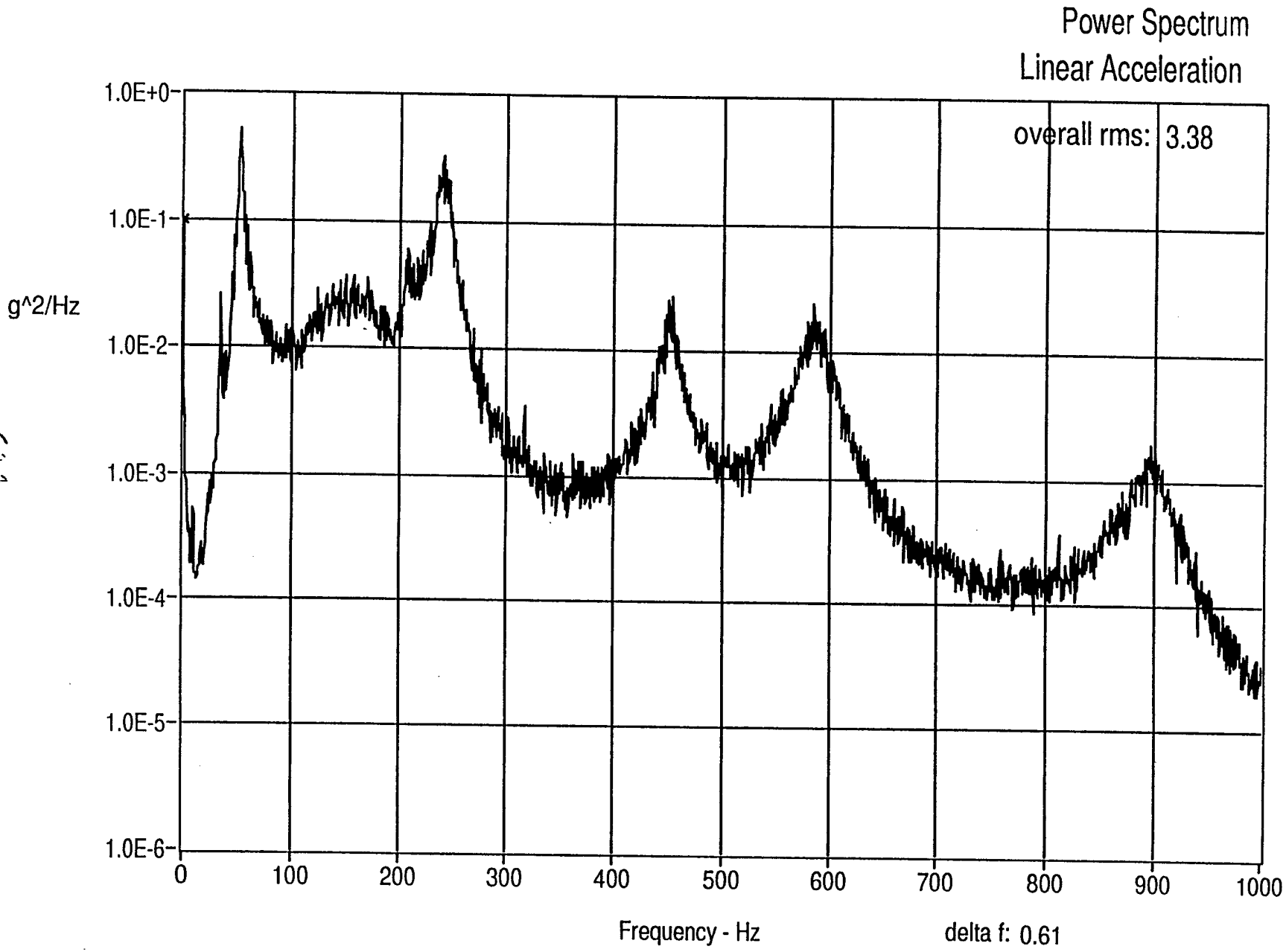


609

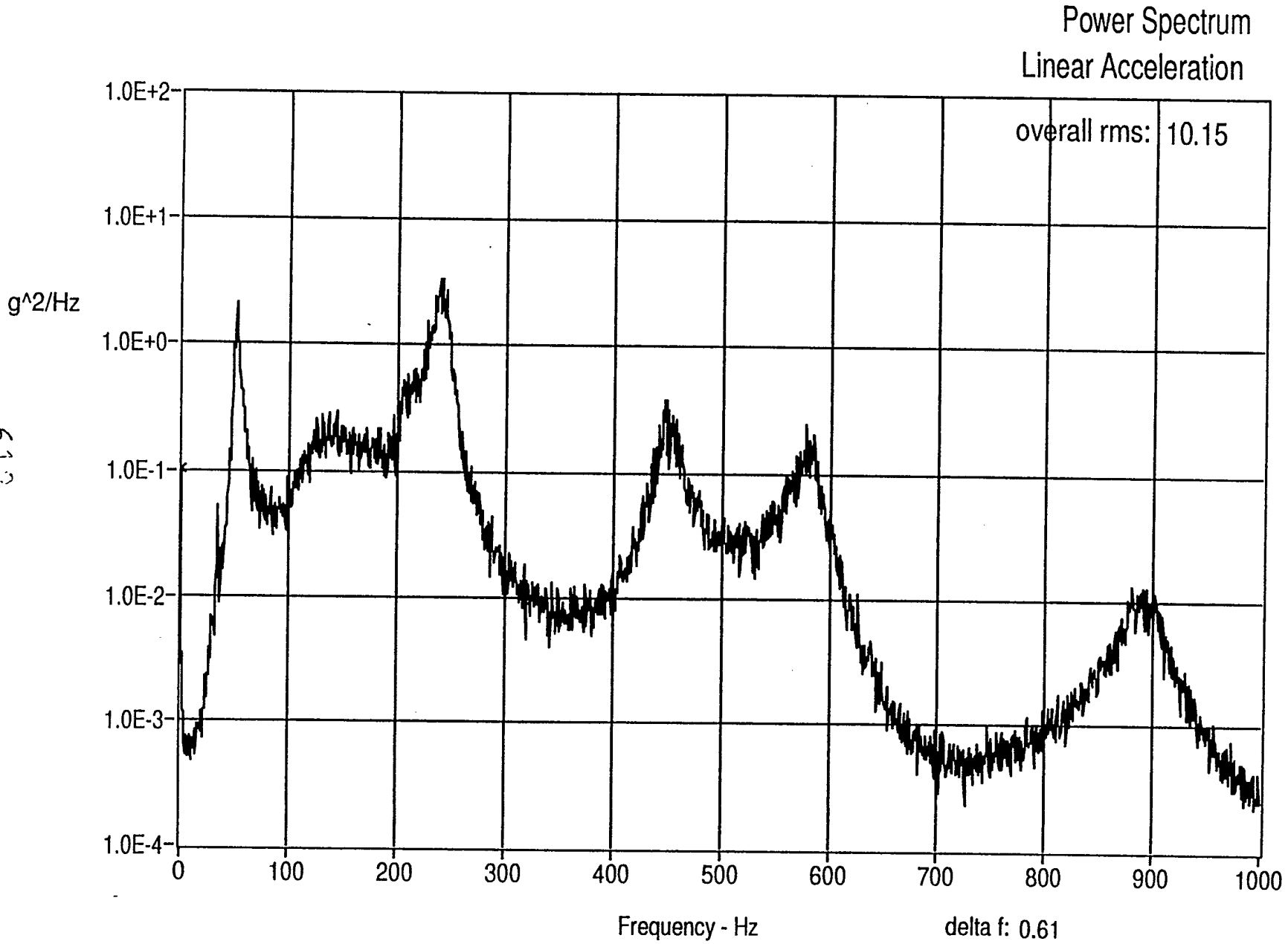
F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0



F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0

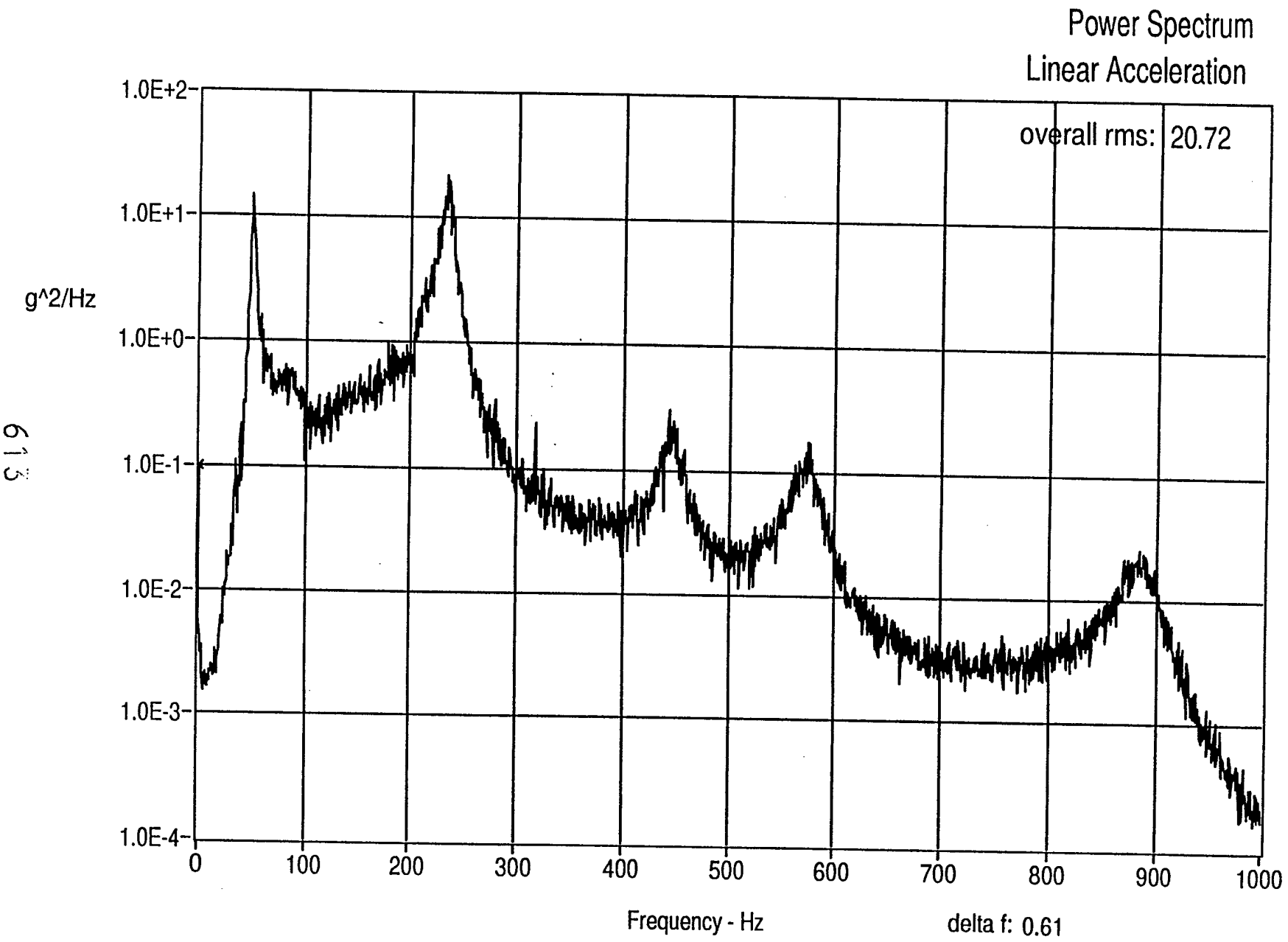


F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0

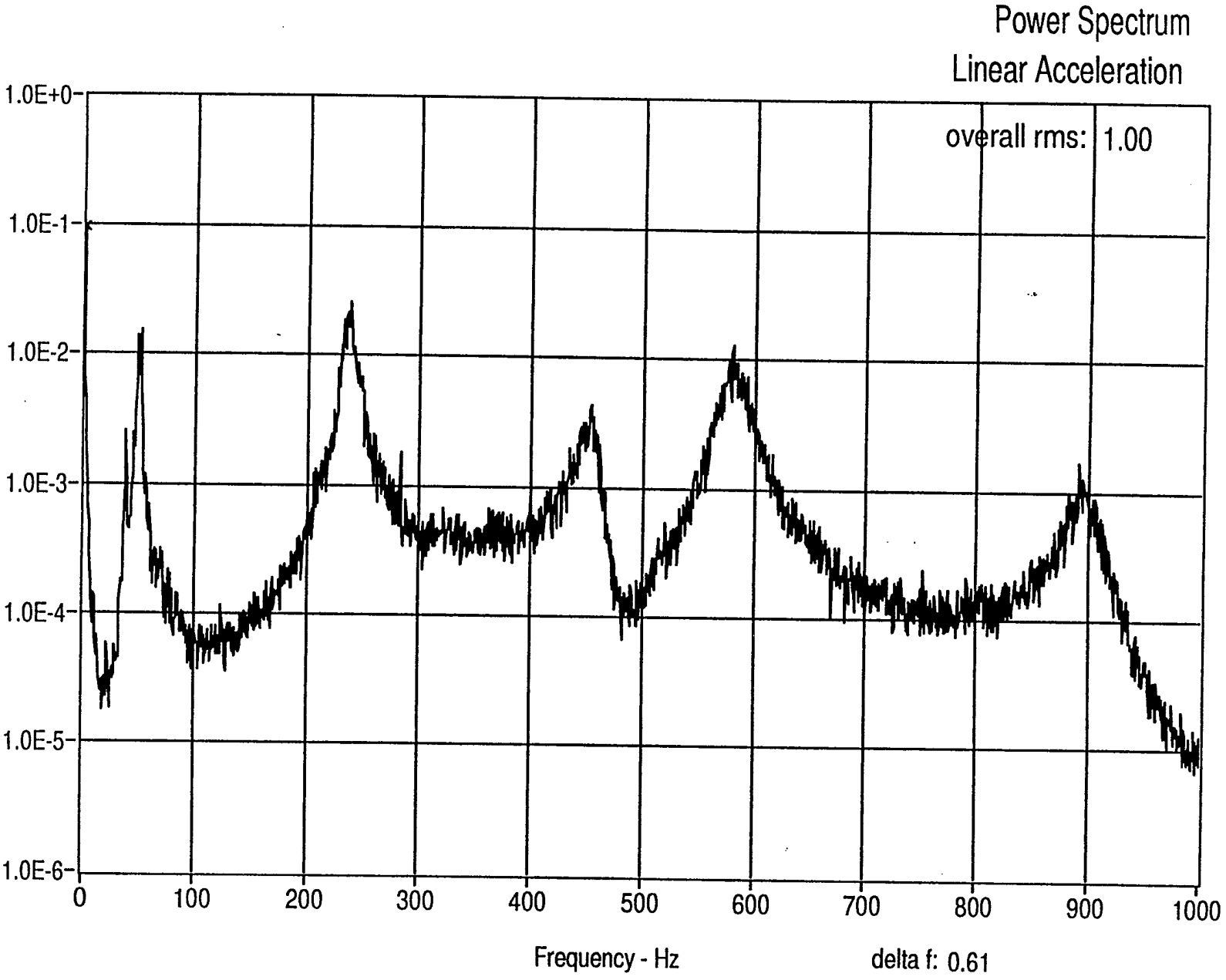


612

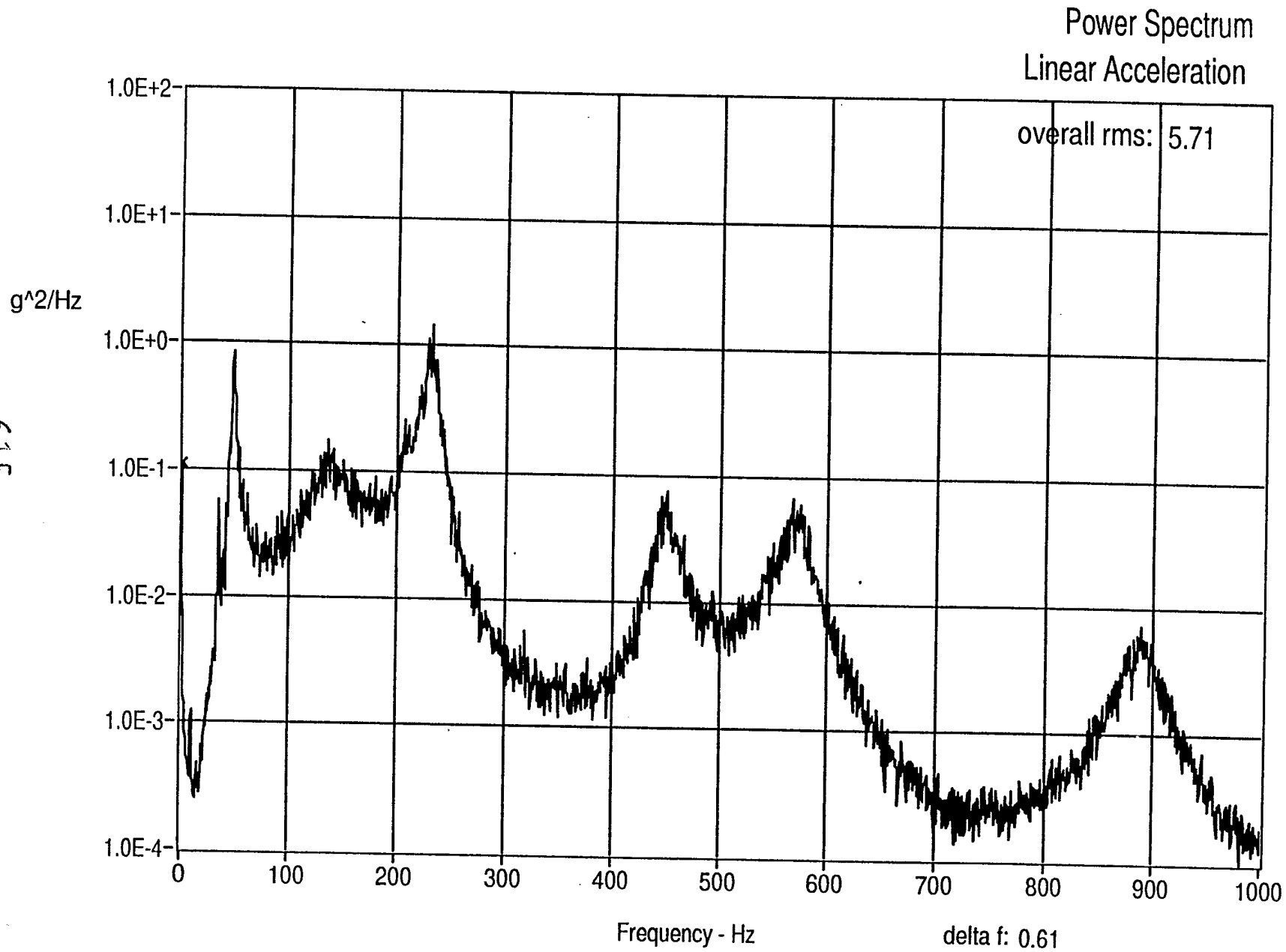
F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0



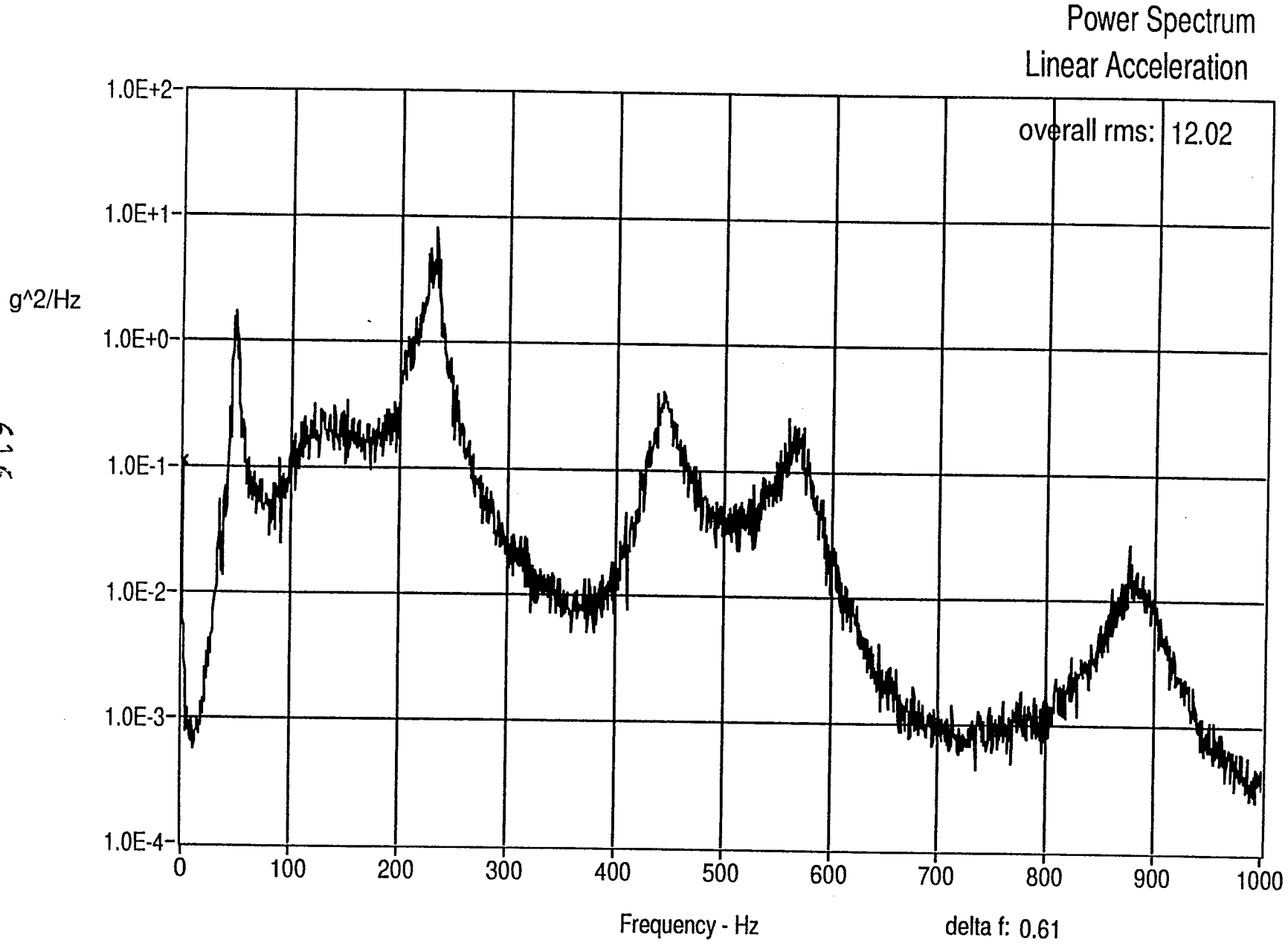
F-15 TPN_3297: q=30 alpha=8 beta=0 bp=45



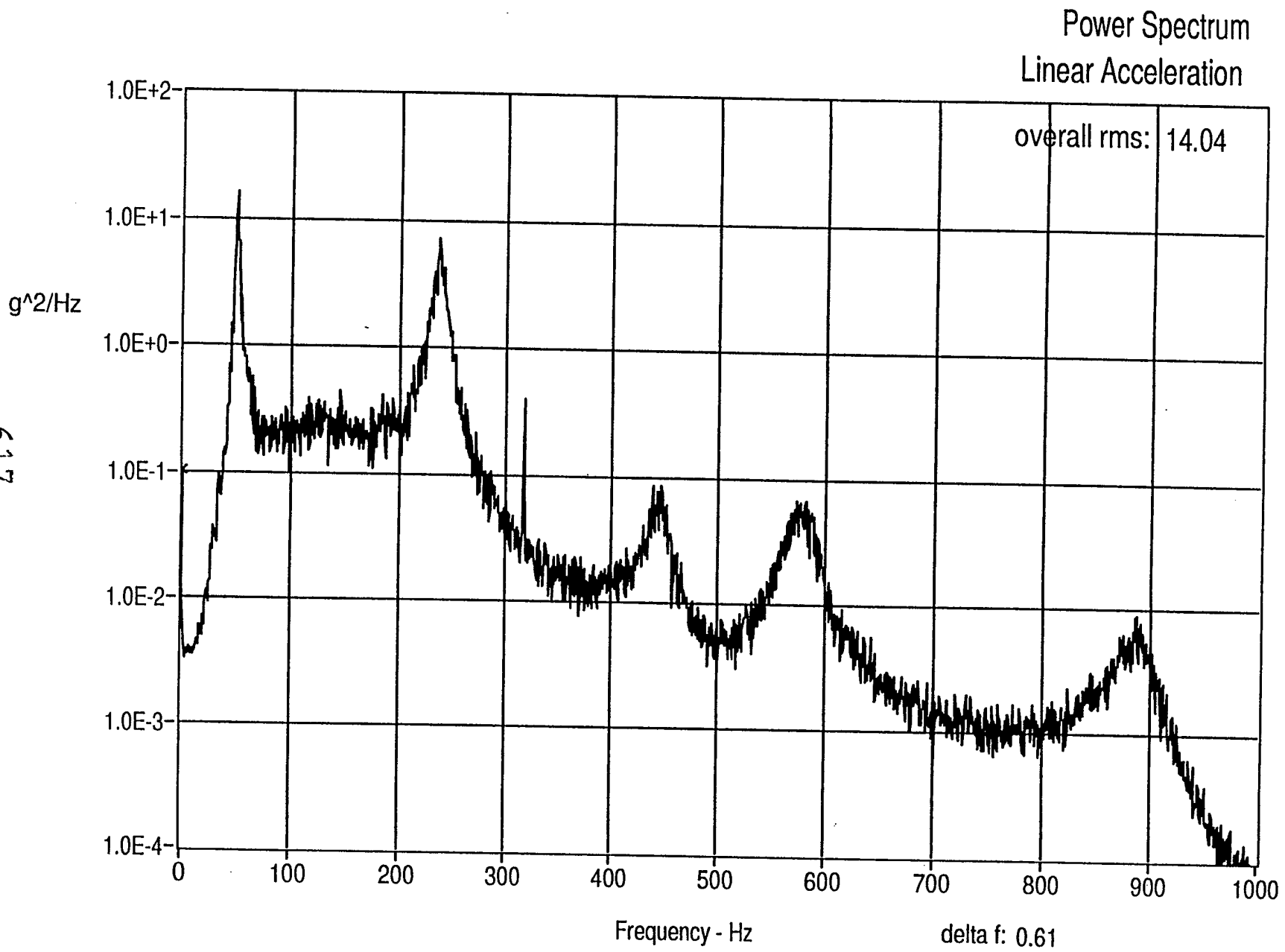
F-15 TPN_3303: q=30 alpha=20 beta=0 bp=45



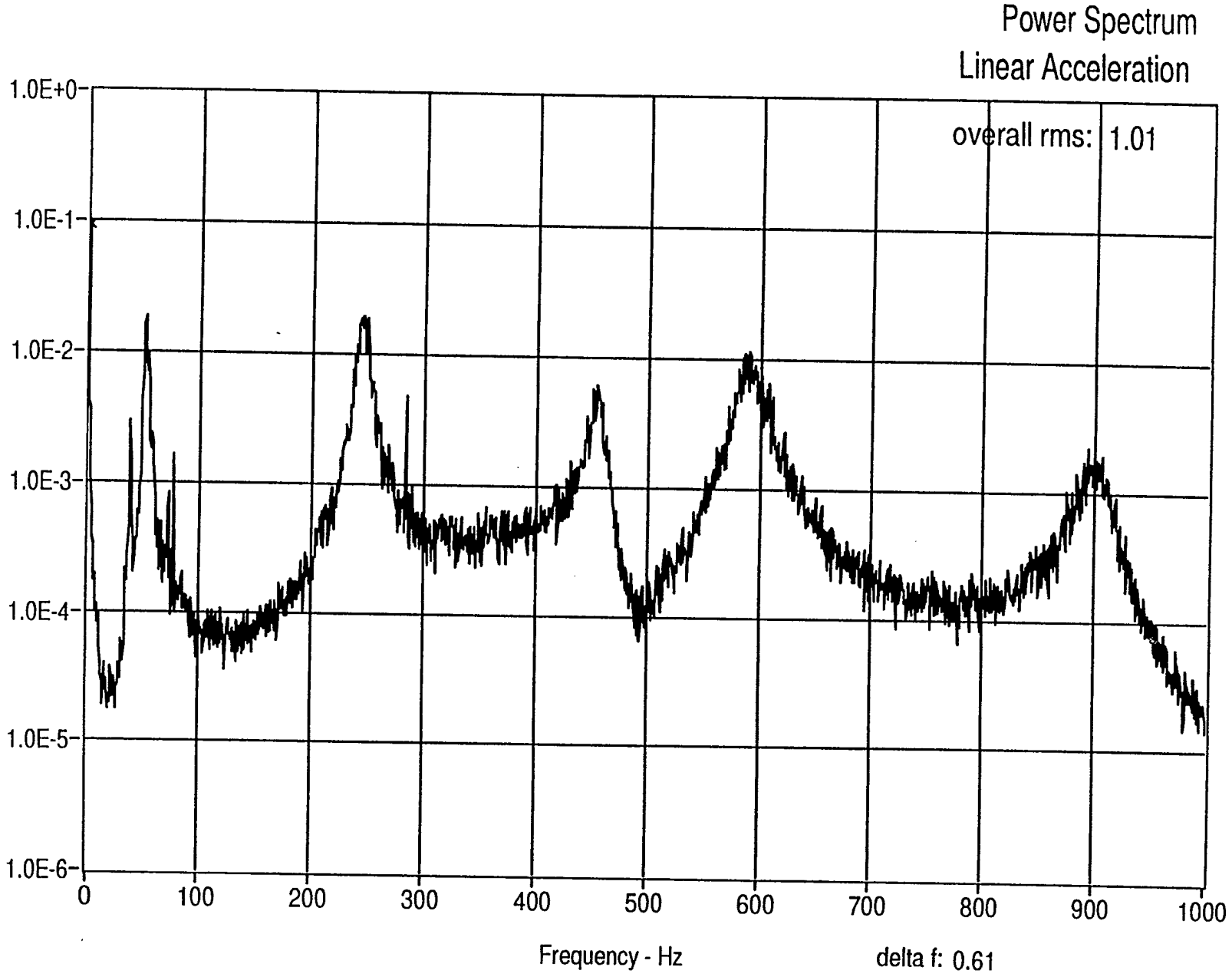
F-15 TPN_3305: q=30 alpha=24 beta=0 bp=45



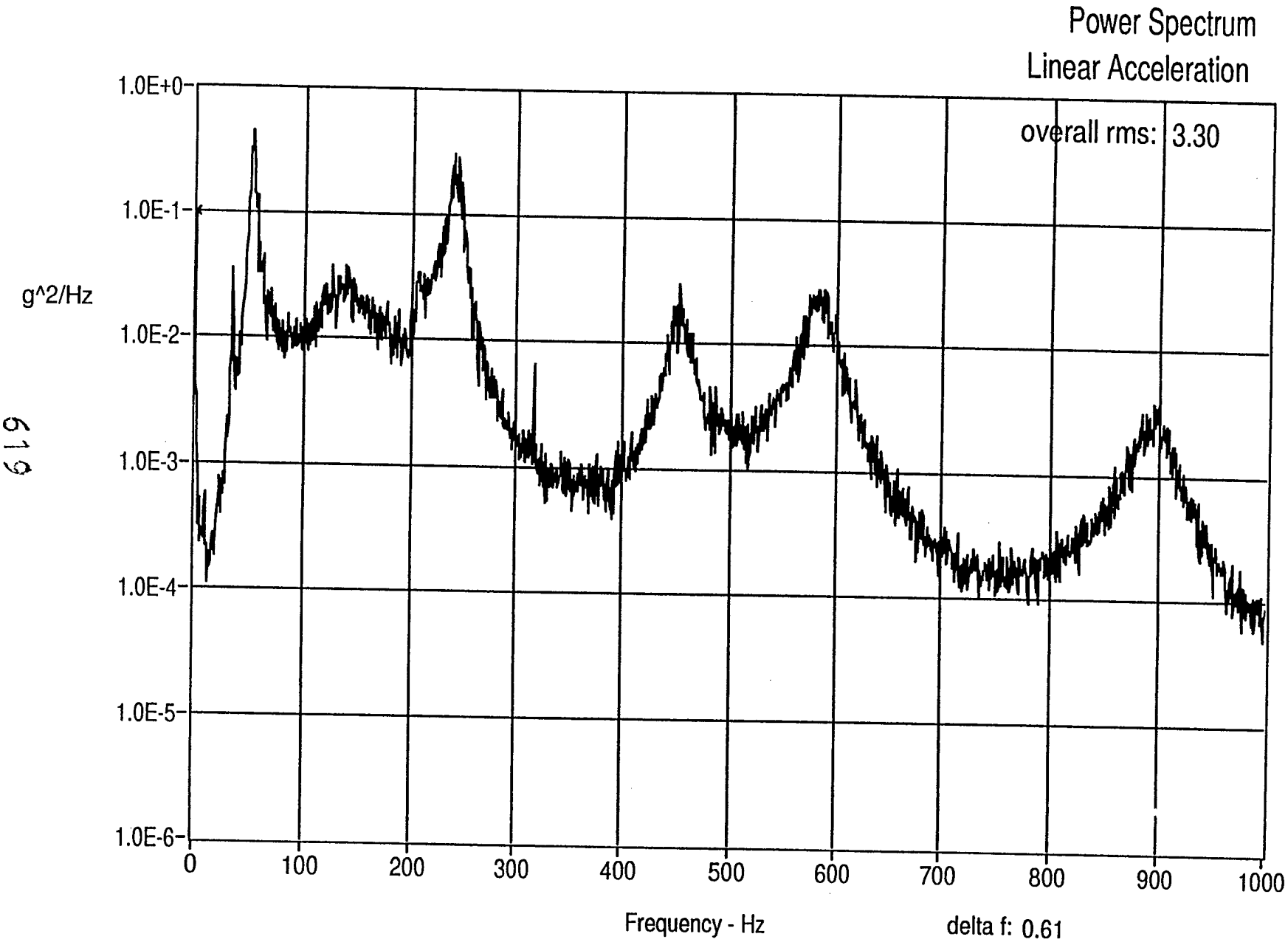
F-15 TPN_3307: q=30 alpha=32 beta=0 bp=45



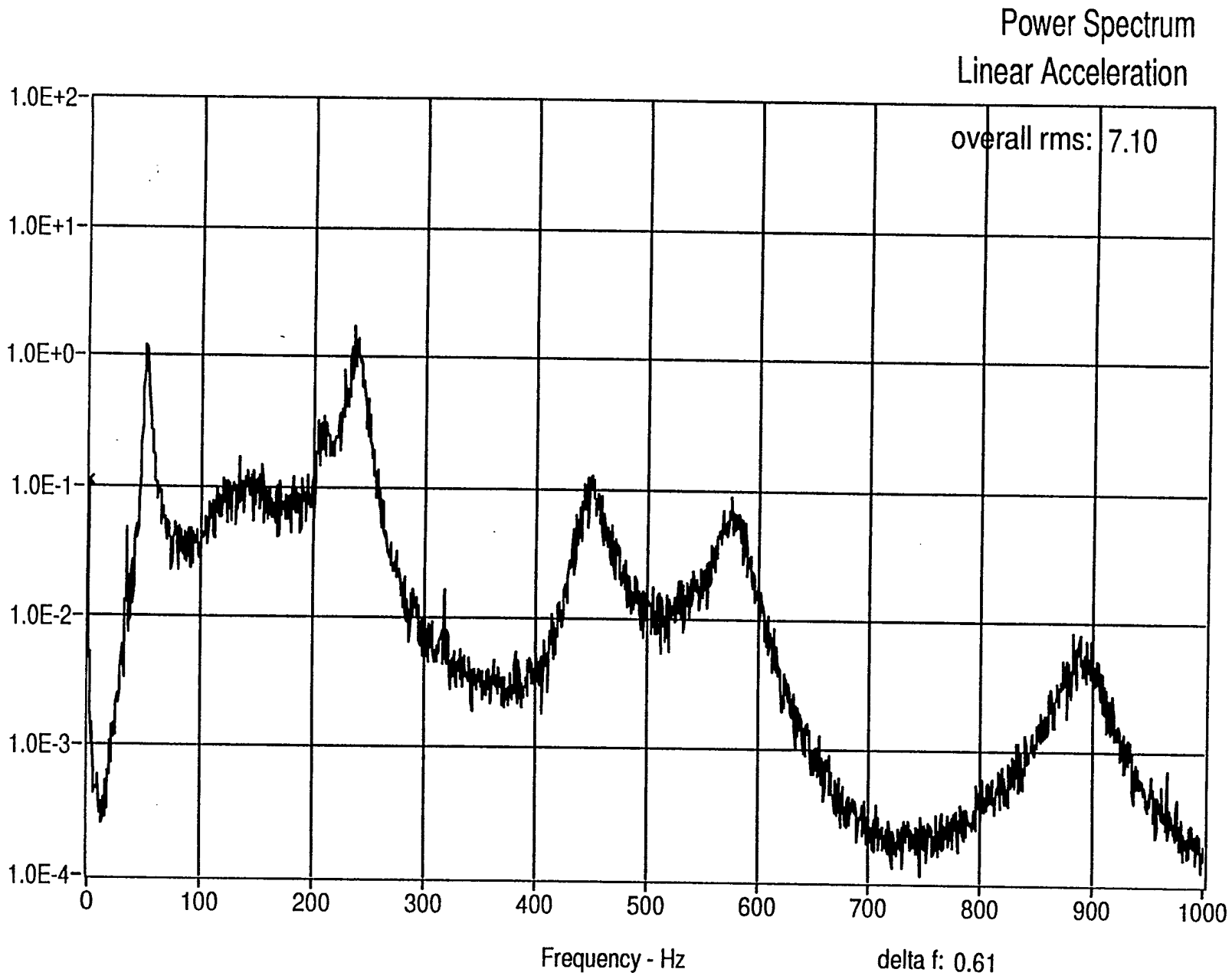
F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45



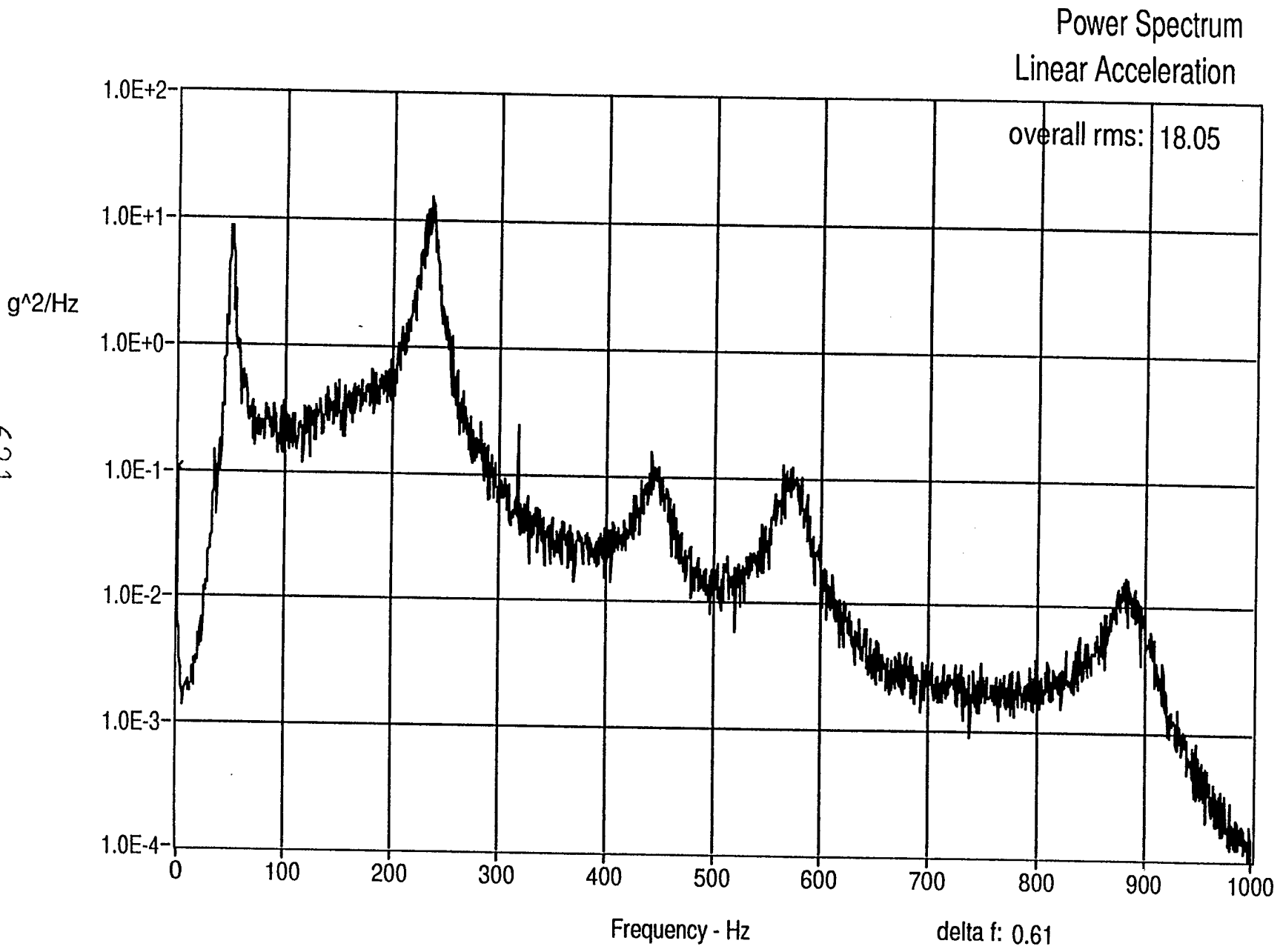
F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45



F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45



F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45



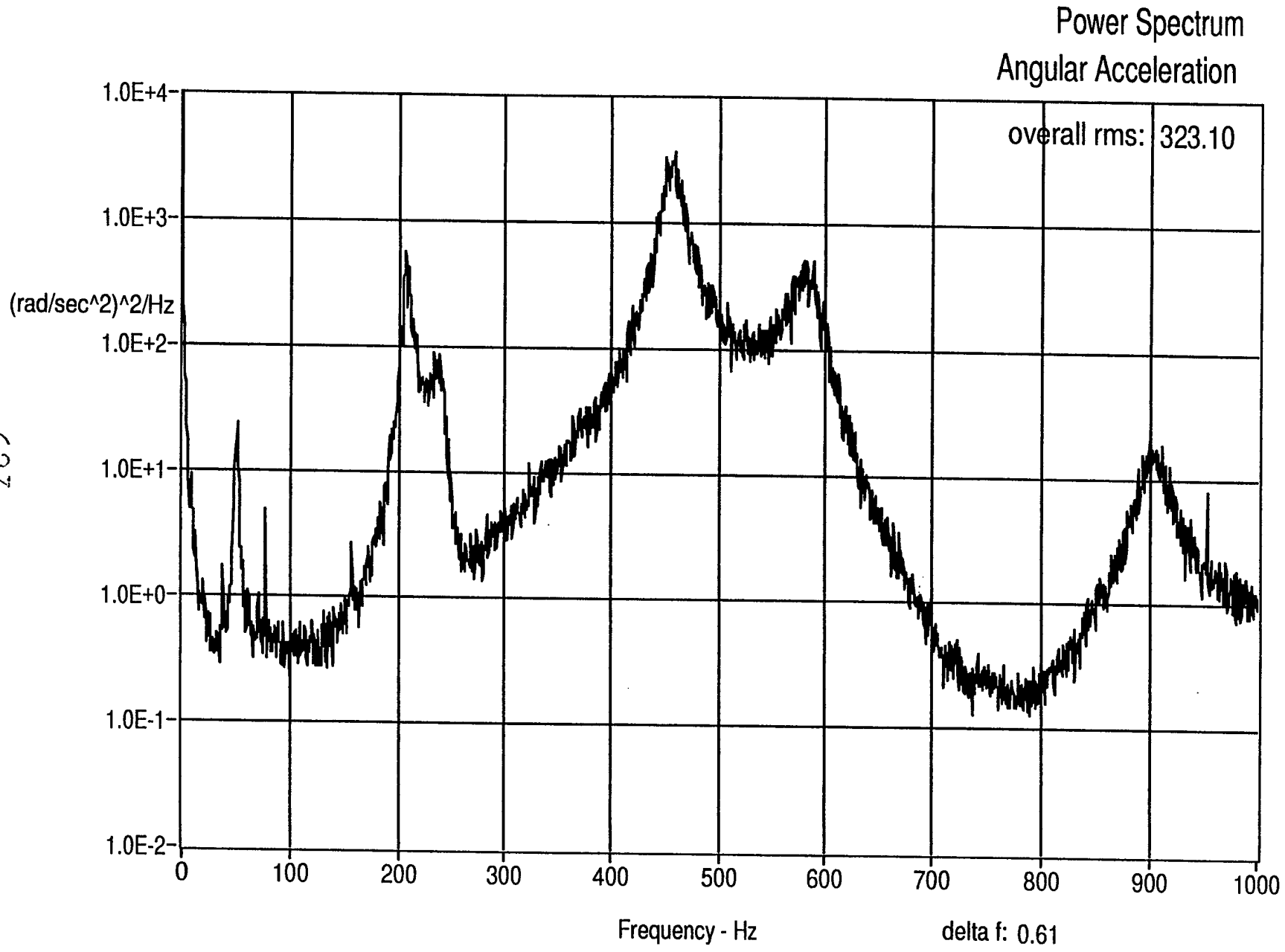
621

FLEXIBLE TAIL RESPONSE
ACCELERATION DATA
Q= 30 PSF
PSD GRAPHS

4.1.2.3 TORSIONAL (ANGULAR AT EA) beta= 0, +4, -4 Deg, WBP = 0, 45, psi
ALPHAS = 8, 20, 24, 32 DEG

data isfurter blocked blocked off by blowing pressures, with beta variation within.

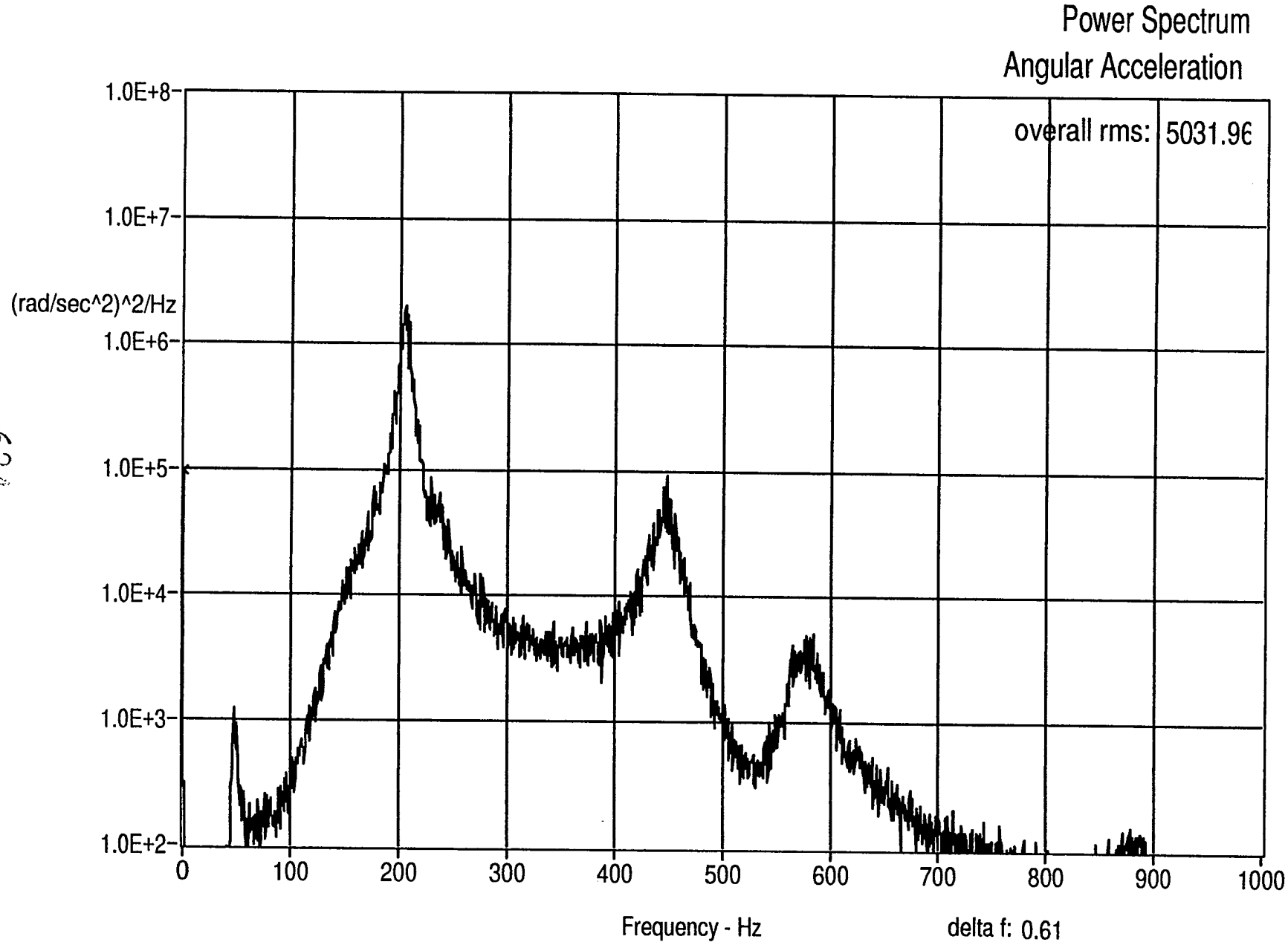
F-15 TPN_3243: q=30 alpha=6 beta=0 bp=0



623

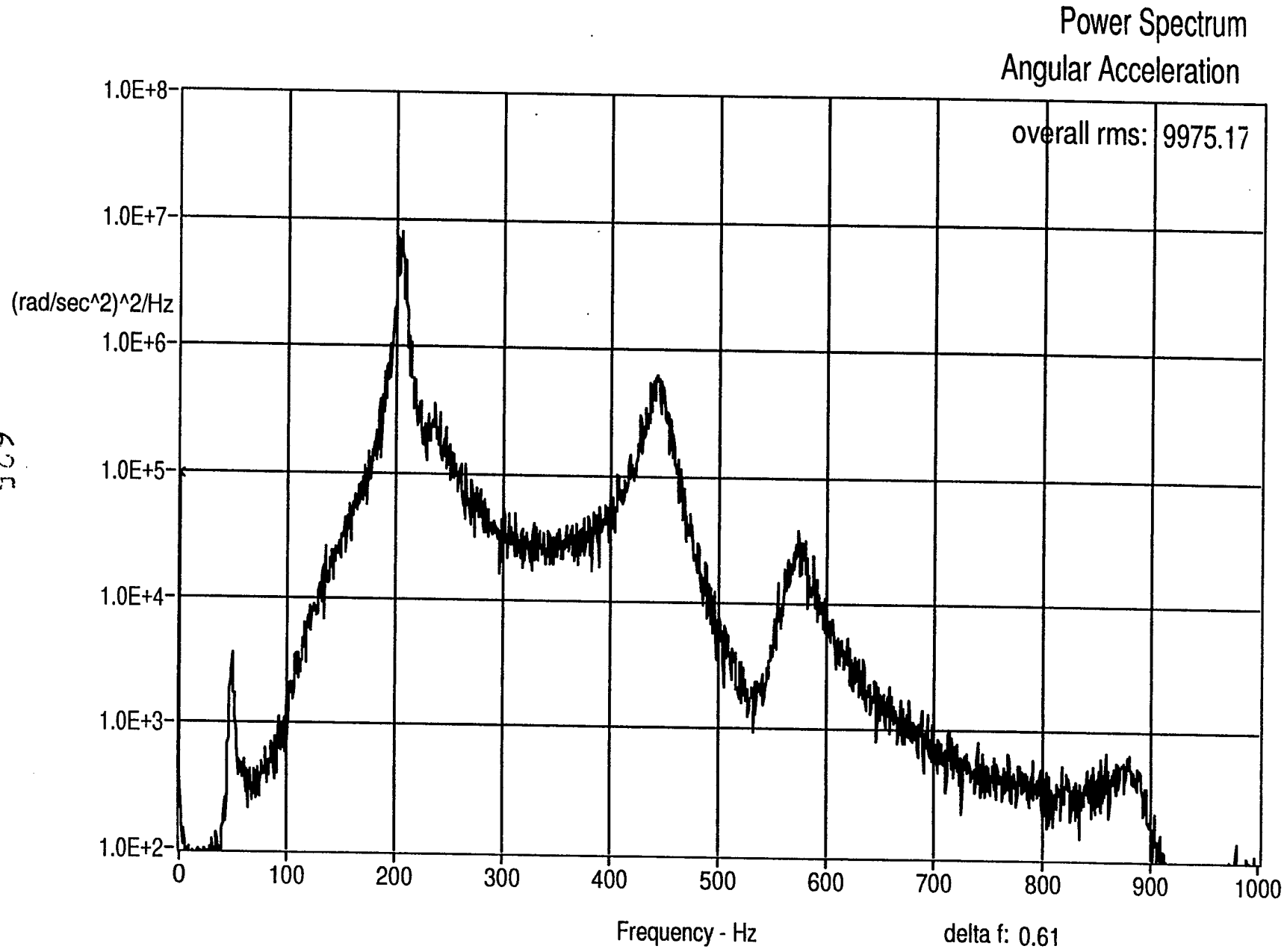
623

F-15 TPN_3249: q=30 alpha=20 beta=0 bp=0



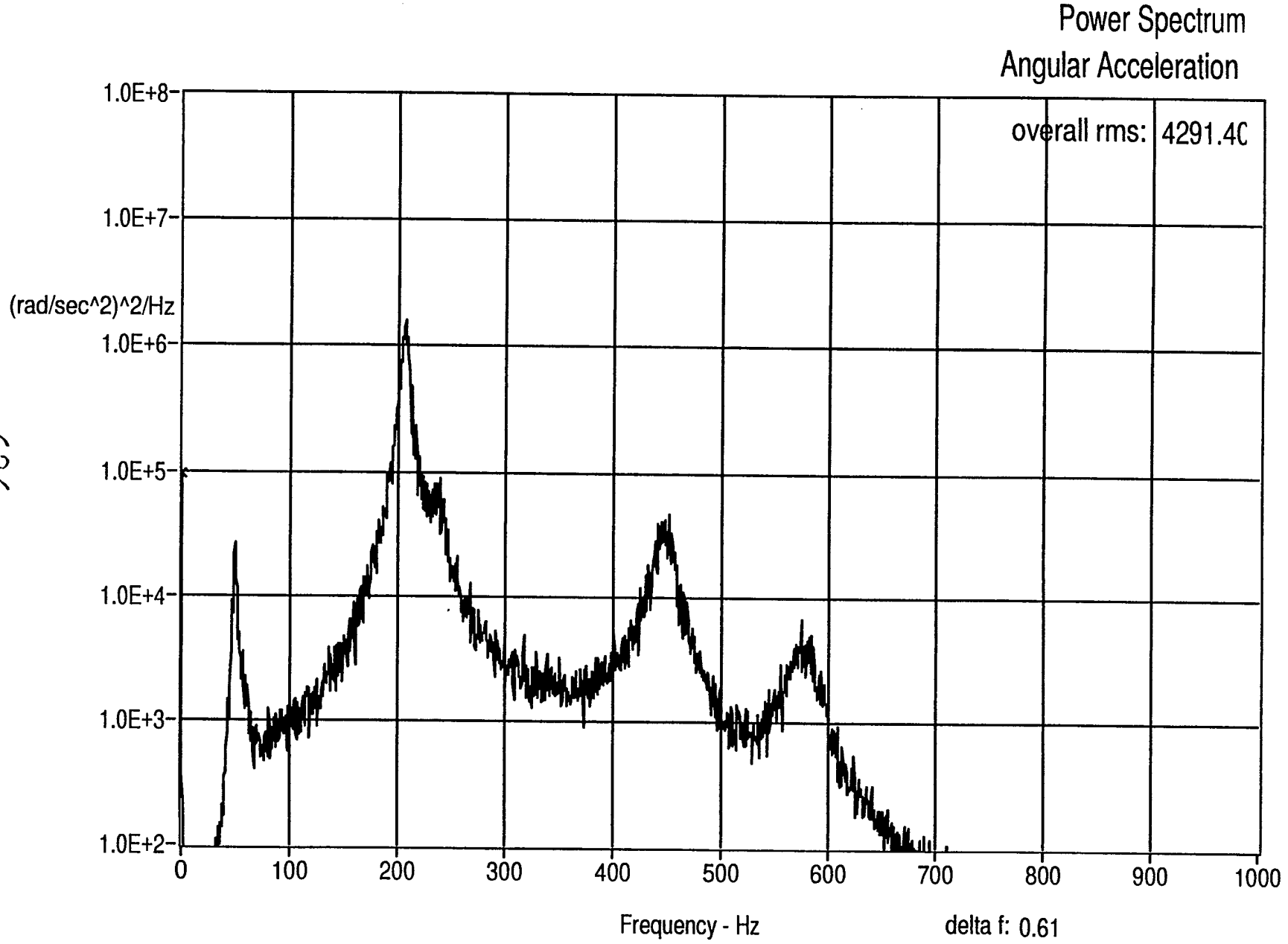
624

F-15 TPN_3251: q=30 alpha=24 beta=0 bp=0



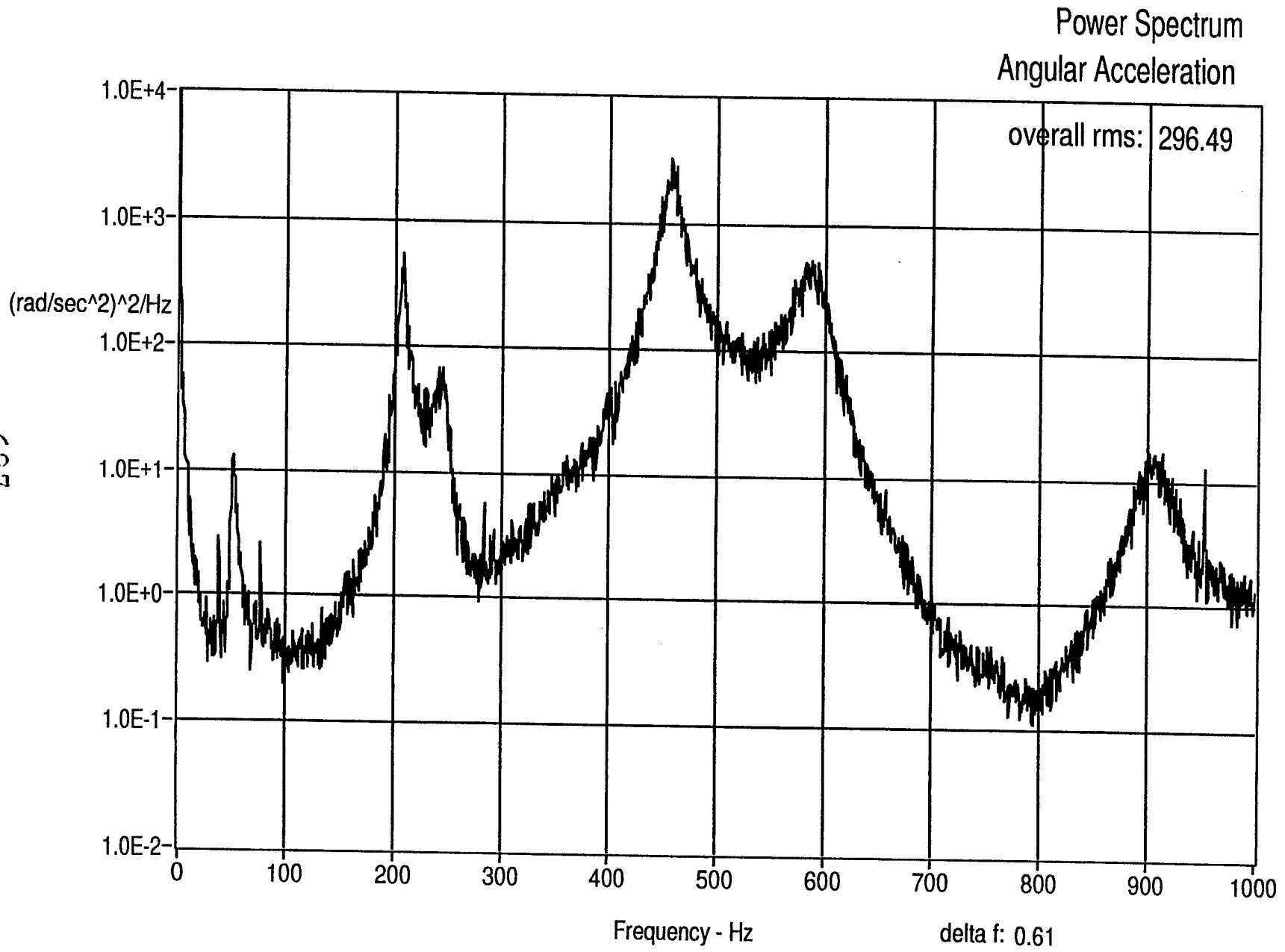
625

F-15 TPN_3253: q=30 alpha=32 beta=0 bp=0

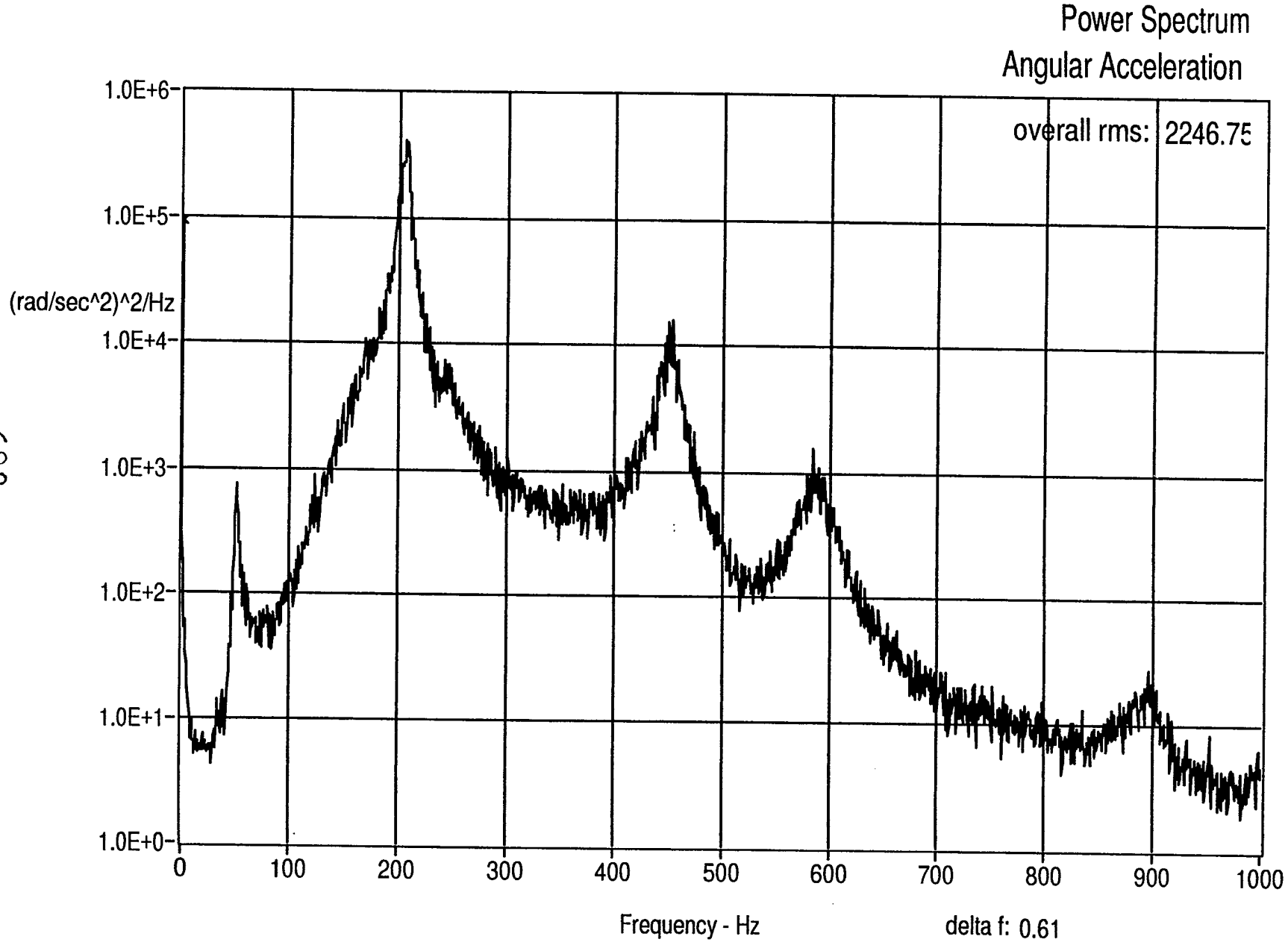


626

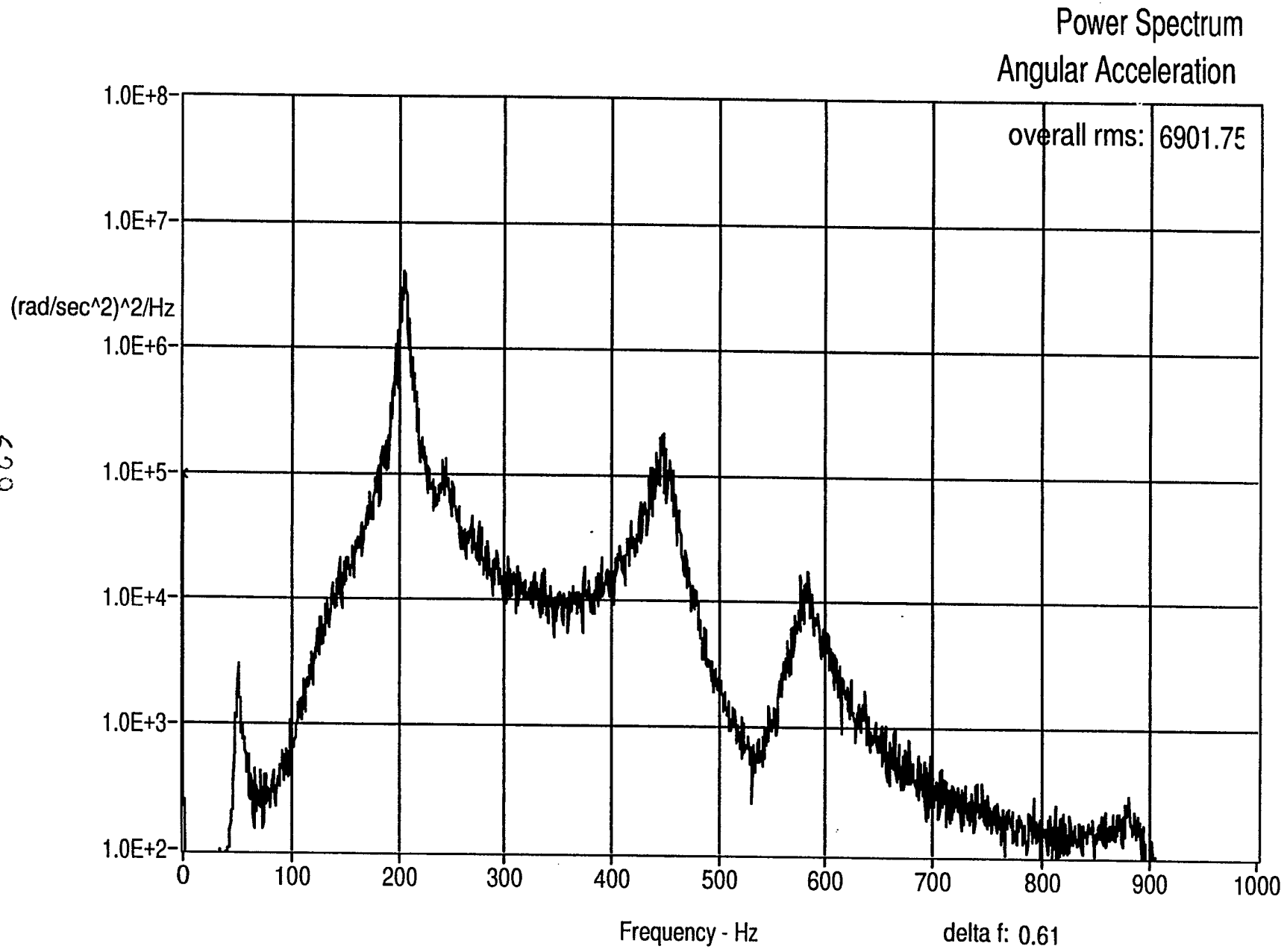
F-15 TPN_3261: q=30 alpha=8 beta=4 bp=0



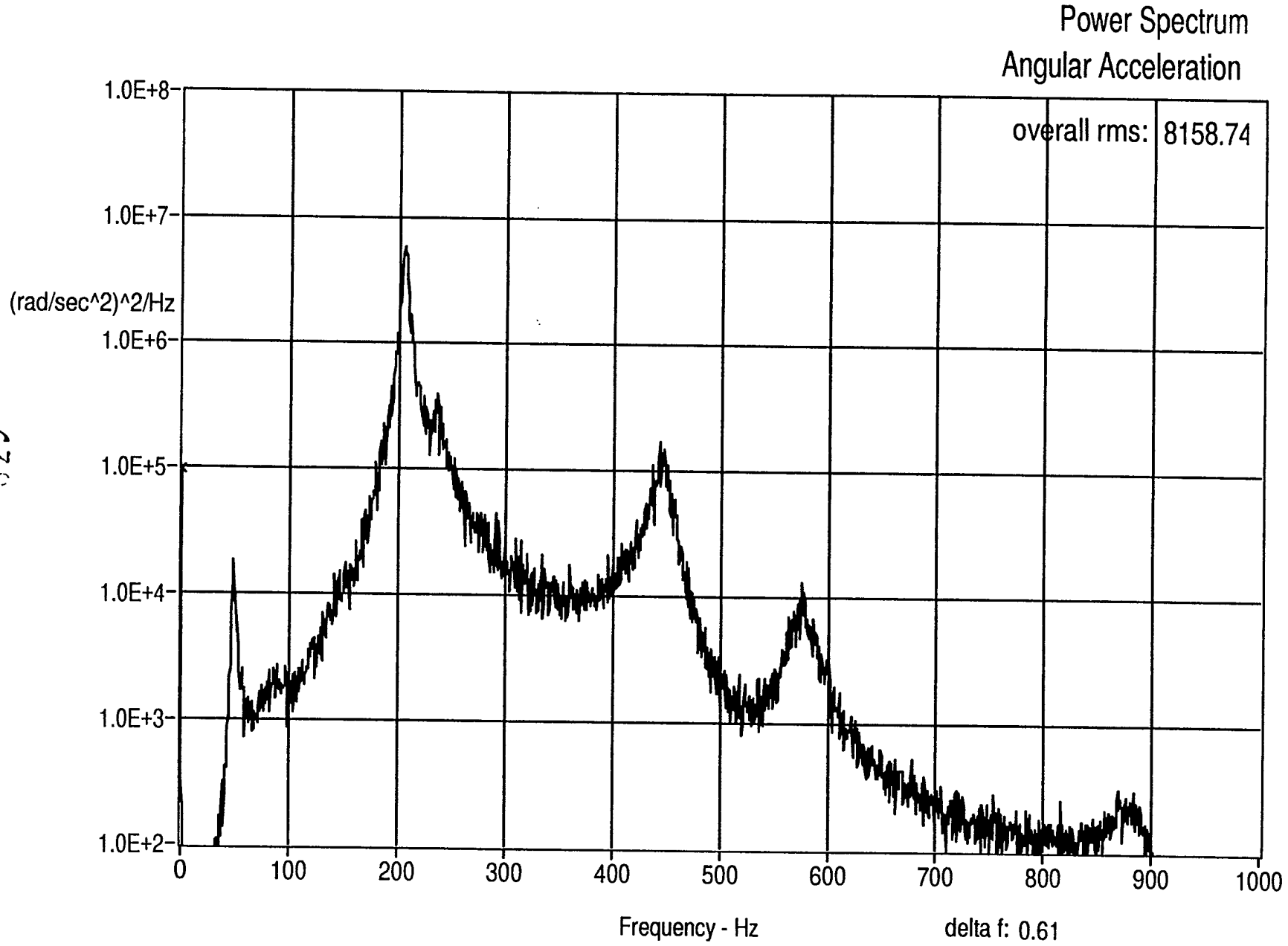
F-15 TPN_3267: q=30 alpha=20 beta=4 bp=0



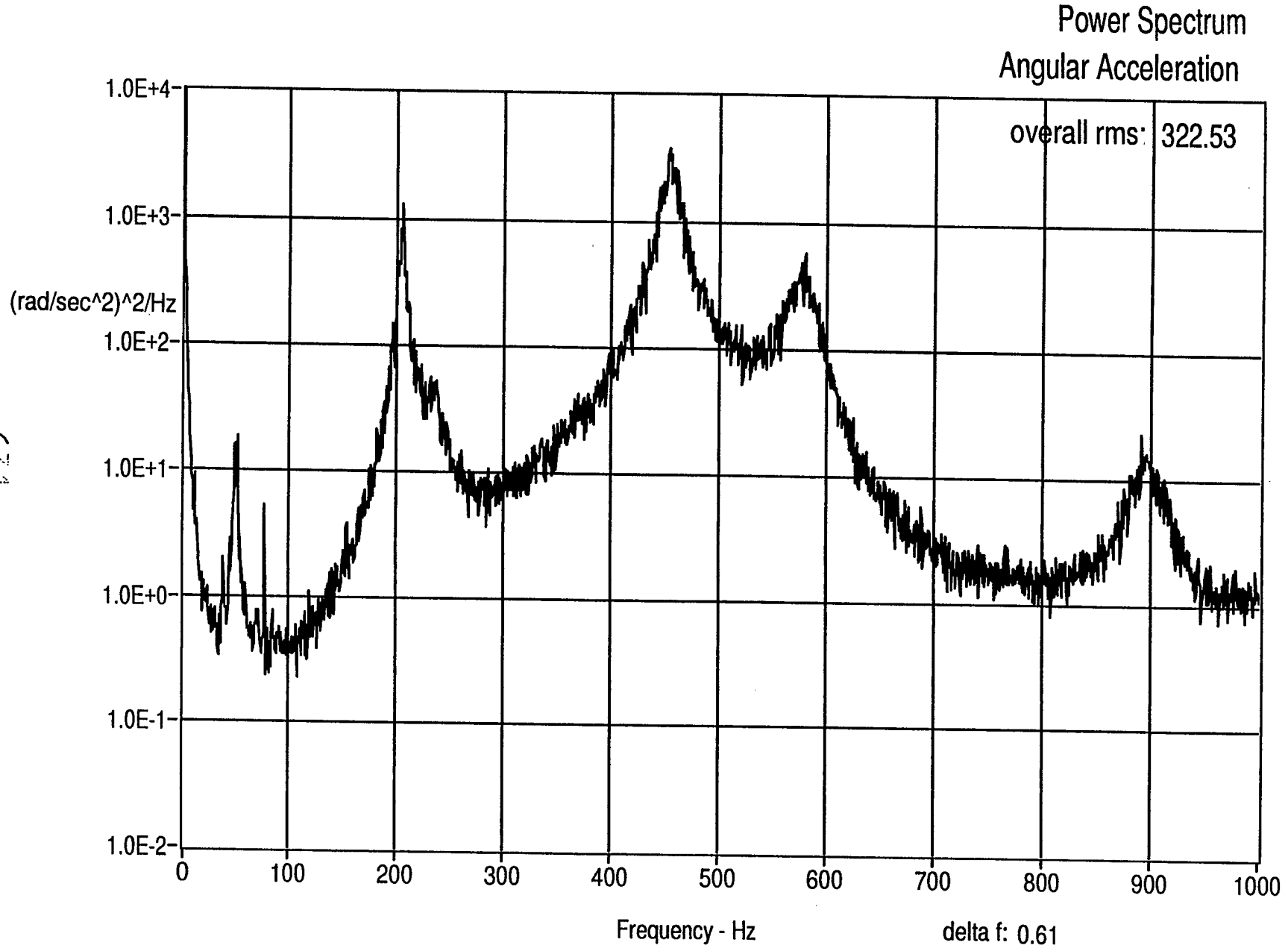
F-15 TPN_3269: q=30 alpha=24 beta=4 bp=0



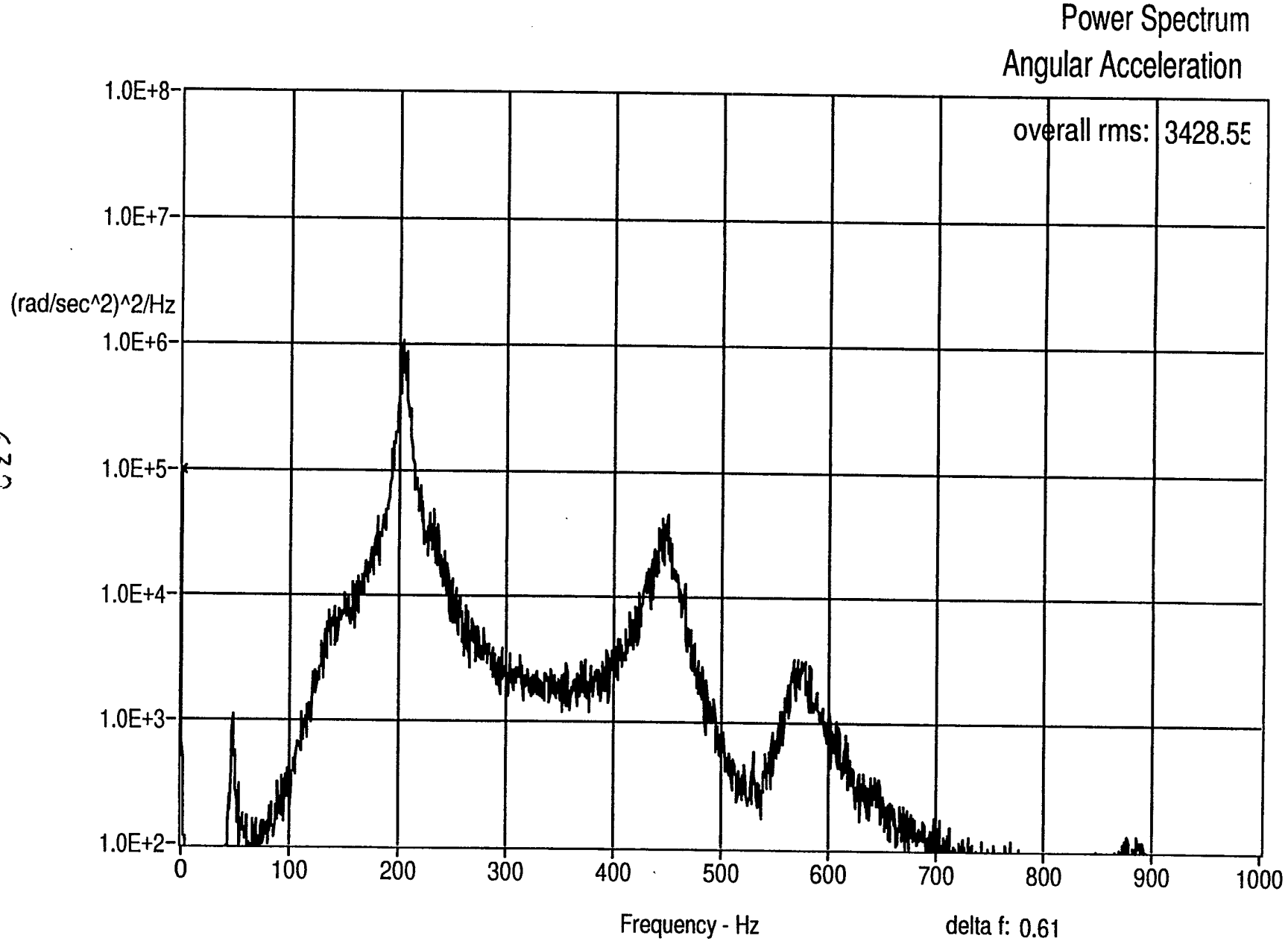
F-15 TPN_3271: q=30 alpha=32 beta=4 bp=0



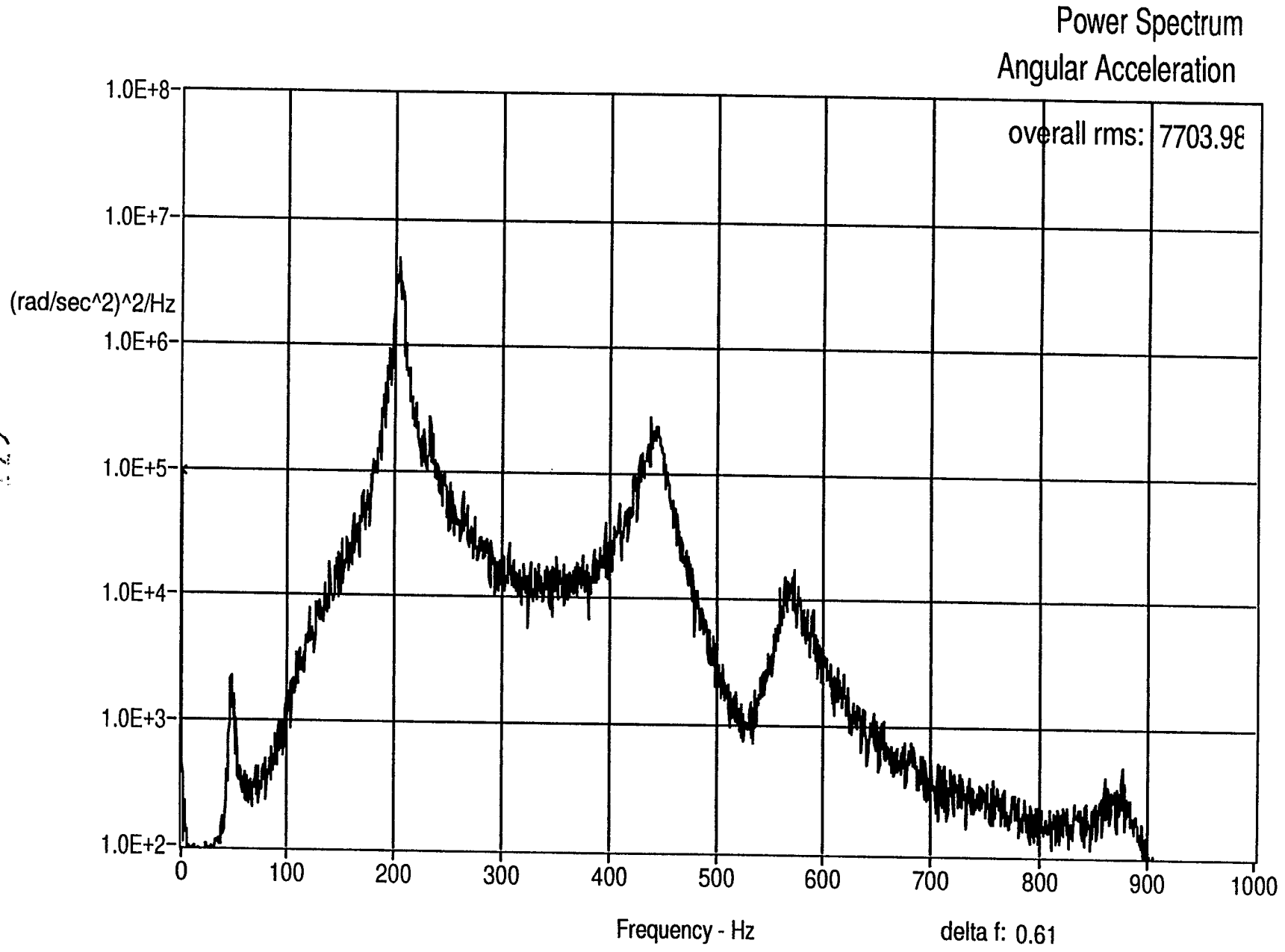
F-15 TPN_3297: q=30 alpha=8 beta=0 bp=45



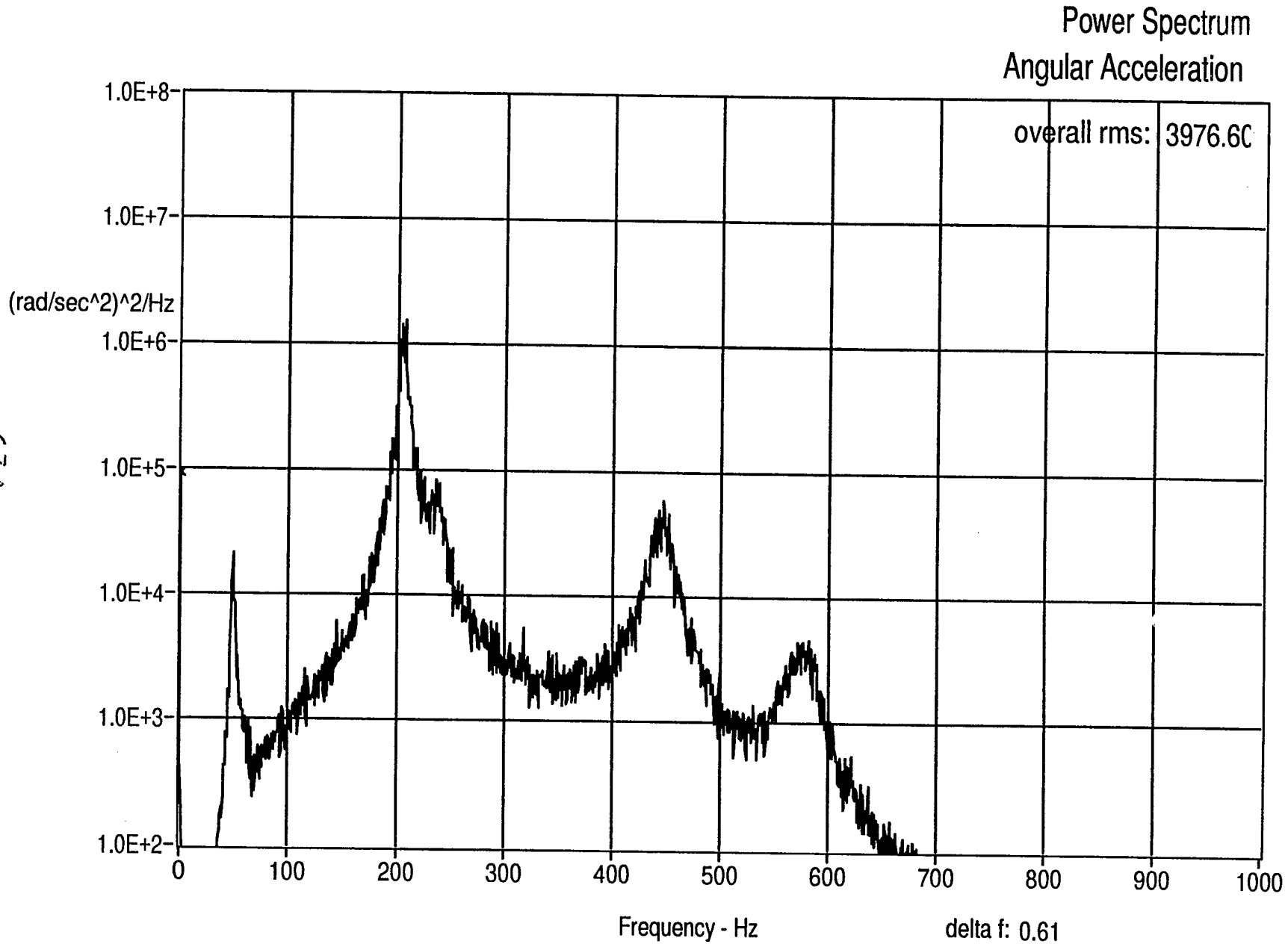
F-15 TPN_3303: q=30 alpha=20 beta=0 bp=45



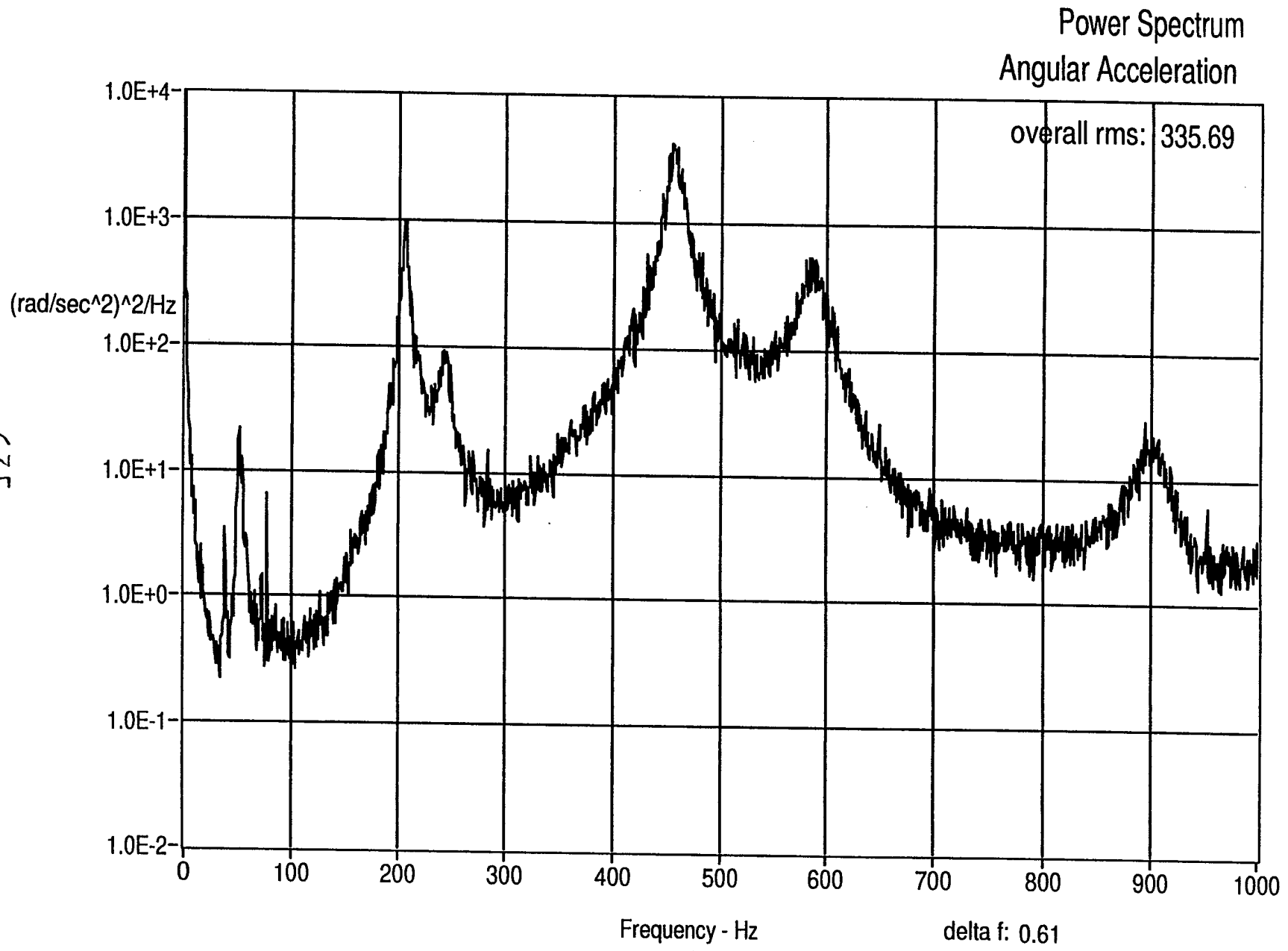
F-15 TPN_3305: q=30 alpha=24 beta=0 bp=45



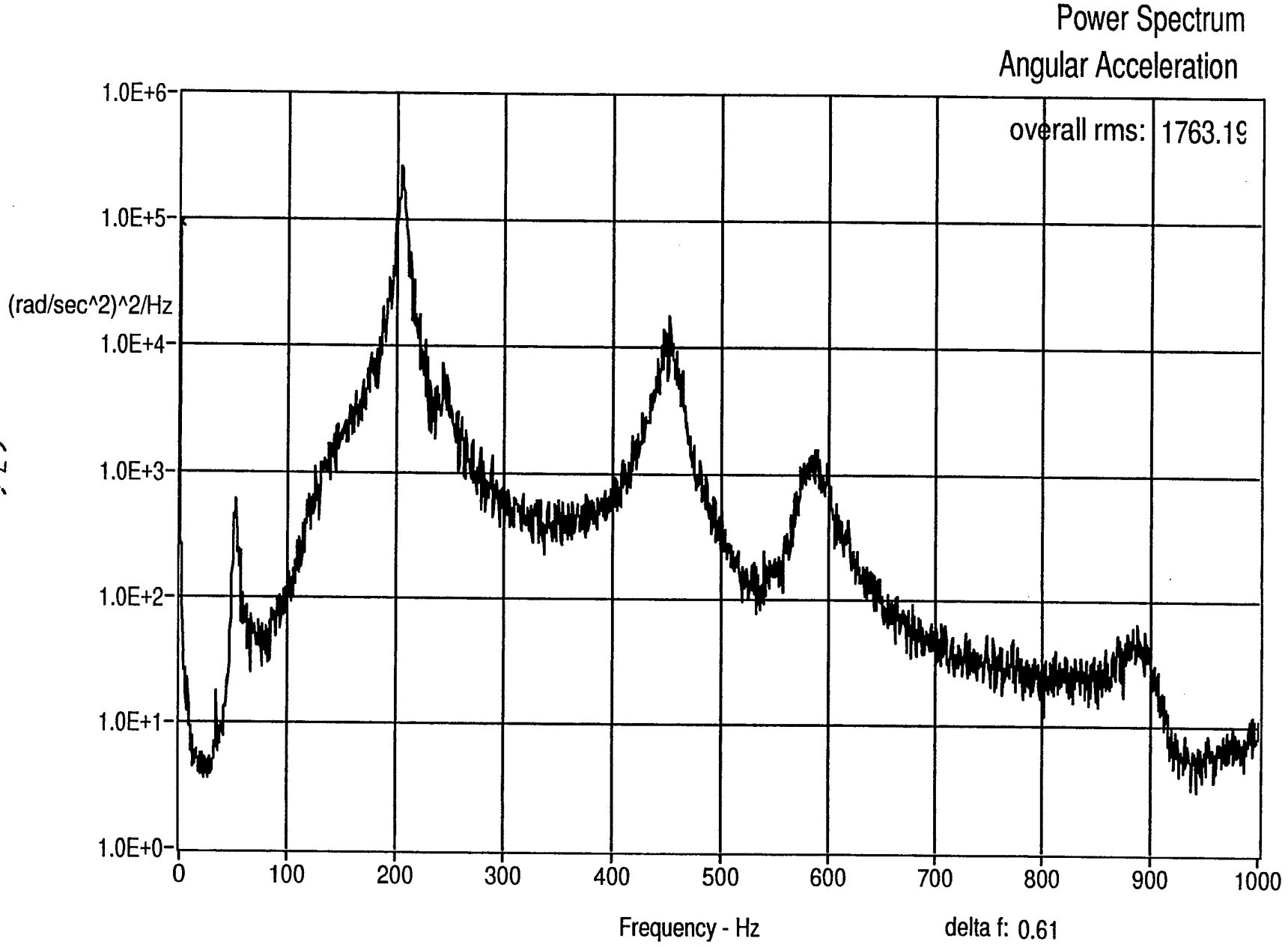
F-15 TPN_3307: q=30 alpha=32 beta=0 bp=45



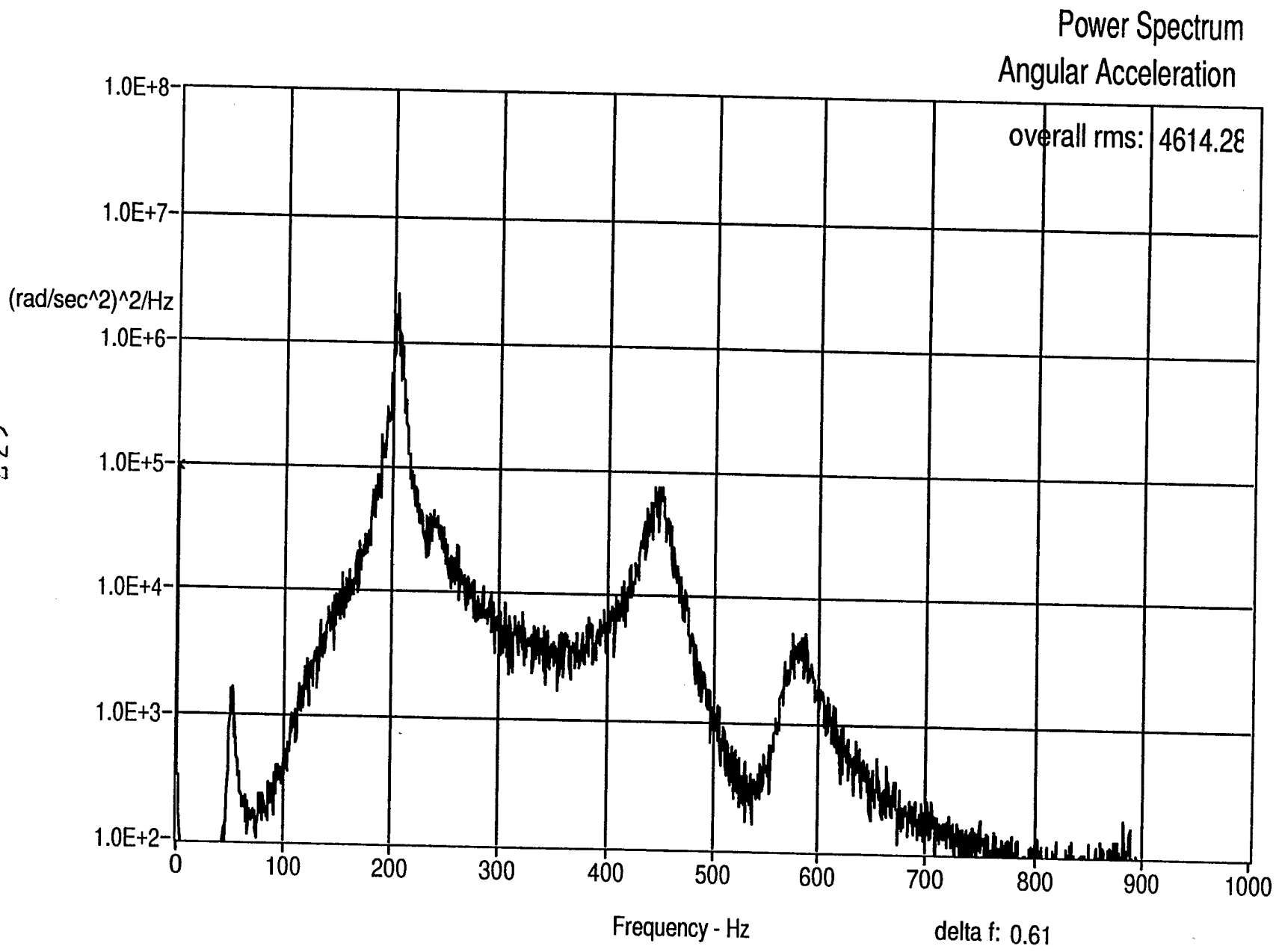
F-15 TPN_3315: q=30 alpha=8 beta=4 bp=45



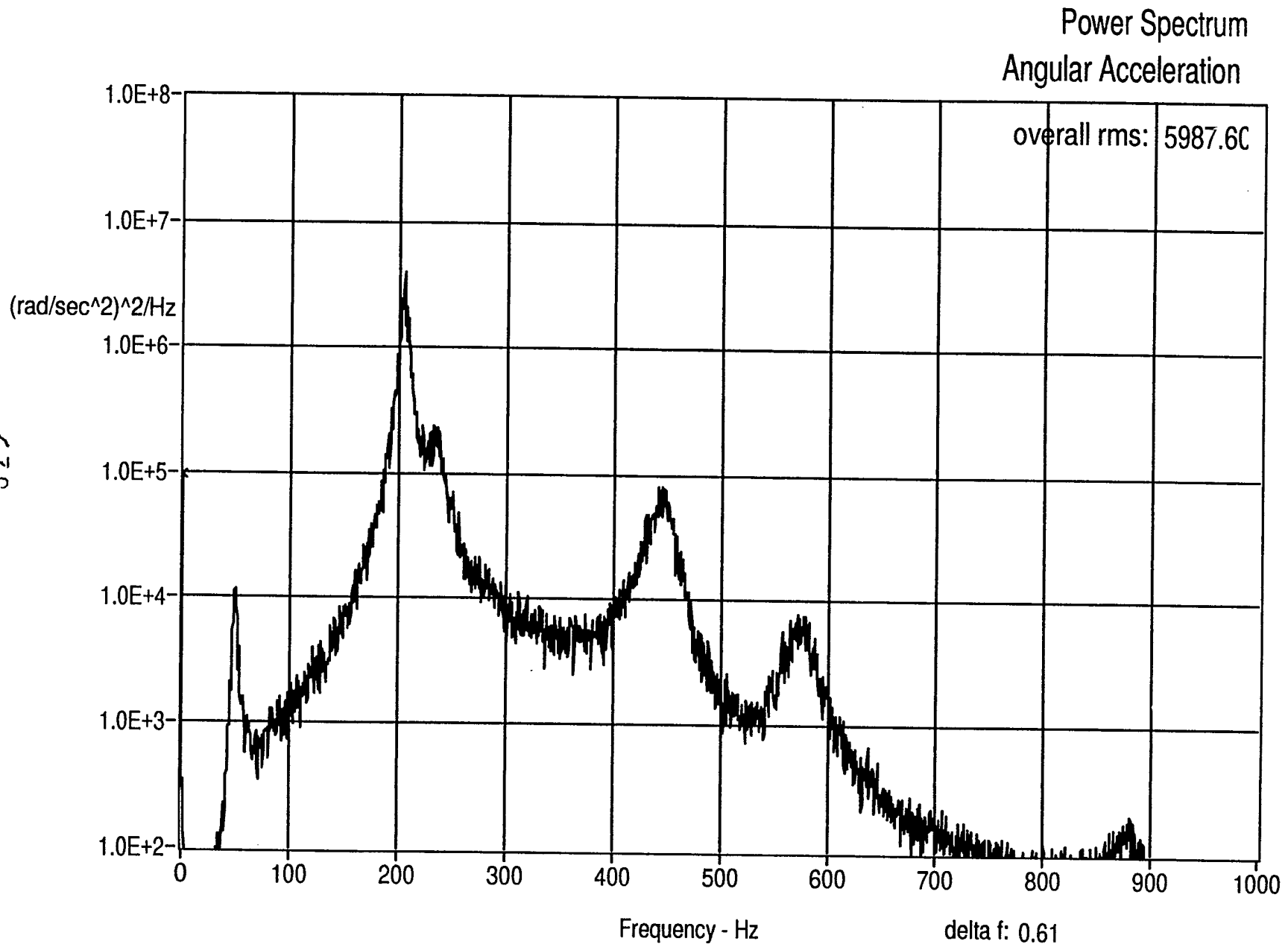
F-15 TPN_3321: q=30 alpha=20 beta=4 bp=45



F-15 TPN_3323: q=30 alpha=24 beta=4 bp=45



F-15 TPN_3325: q=30 alpha=32 beta=4 bp=45



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FLEXIBLE TAIL RESPONSE
ACCELERATION DATA
FLEXIBLE TAIL RESPONSE
ACCELERATION DATA

4.2 RMS SUMMARY TABS , Q = 30, 56 PSF, ALPHAS = 8, 20, 24, 32 DEG, BETA = 0, +4, -4 Deg, WBP = 0, 45, 65* psi

*** only for Q=56**

F-15 Vertical Tail Buffet Test: Overall RMS of acceleration data (g, 1-1000 Hz)

0 psi blowing pressure:

Beta = -4:

Alpha:	Q = 56 psf			
	fwd	aft	linear	angular
8	1.85	2.36	1.67	410.6
20	55.51	45.66	21.70	13558.6
24	60.42	44.25	24.60	13671.1
32	25.09	33.74	23.21	5892.8

Beta = 0:

Alpha:	Q = 56 psf				Q = 30 psf			
	fwd	aft	linear	angular	fwd	aft	linear	angular
8	1.93	2.35	1.67	421.7	1.63	1.44	1.08	323.1
20	38.08	32.52	15.46	9430.8	19.52	16.86	6.70	5032.0
24	73.06	54.40	26.06	17226.3	42.17	33.12	16.84	9975.2
32	30.35	41.03	28.11	7180.3	19.37	21.27	14.84	4291.4

Beta = 4:

Alpha:	Q = 56 psf				Q = 30 psf			
	fwd	aft	linear	angular	fwd	aft	linear	angular
8	1.60	1.95	1.39	348.7	1.43	1.33	.96	296.5
20	20.41	17.28	7.79	5098.7	9.03	7.54	3.38	2246.8
24	59.10	45.49	21.26	14157.9	28.22	22.55	10.15	6901.8
32	46.97	49.83	34.08	10431.4	33.99	34.26	20.72	8158.7

45 psi blowing pressure:

Beta = -4:

Alpha:	Q = 56 psf			
	fwd	aft	linear	angular
8	2.87	2.77	1.87	629.1
20	49.07	42.84	18.95	12455.9
24	75.22	61.12	29.26	18261.6
32	30.57	38.61	27.31	6783.8

Beta = 0:

Alpha:	Q = 56 psf				Q = 30 psf			
	fwd	aft	linear	angular	fwd	aft	linear	angular
8	2.35	2.57	1.78	519.9	1.59	1.36	1.00	322.5
20	37.05	33.75	13.30	9790.2	13.29	12.35	5.71	3428.6
24	77.34	60.09	27.94	18605.6	31.39	25.83	12.02	7704.0
32	39.71	46.57	32.12	8950.6	18.34	19.96	14.04	3976.6

Beta = 4:

Alpha:	Q = 56 psf				Q = 30 psf			
	fwd	aft	linear	angular	fwd	aft	linear	angular
8	2.52	2.66	1.83	556.9	1.65	1.39	1.01	335.7
20	19.82	16.87	6.88	5056.5	7.26	6.32	3.30	1763.2
24	52.55	42.32	19.47	12831.2	18.74	15.44	7.10	4614.3
32	53.22	57.41	39.27	11859.7	25.09	28.12	18.05	5987.6

65 psi blowing pressure:

Beta = -4:

Alpha:	Q = 56 psf fwd	aft	linear	angular
8				
20	54.10	46.60	20.36	13693.0
24	75.18	58.11	28.78	17806.4
32				

Beta = 0:

Alpha:	Q = 56 psf fwd	aft	linear	angular
8				
20	43.68	38.60	15.38	11364.8
24	83.28	63.76	28.84	20042.1
32				

Beta = 4:

Alpha:	Q = 56 psf fwd	aft	linear	angular
8				
20	23.71	20.02	8.02	6044.7
24	59.50	46.16	20.77	14398.3
32				