AD NUMBER

AD802114

LIMITATION CHANGES

TO:

Approved for public release; distribution is unlimited. Document partially illegible.

FROM:

Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; JUL 1966. Other requests shall be referred to Air Force Flight Dynamics Laboratory, FDTR, Wright-Patterson AFB, OH 45433. Document partially illegible. This document contains export-controlled technical data.

AUTHORITY

affdc ltr, 31 may 1973

AFFDL TR-66-57
VOLUME II

KC-135 POWER SPECTRAL VERTICAL GUST LOAD ANALYSIS

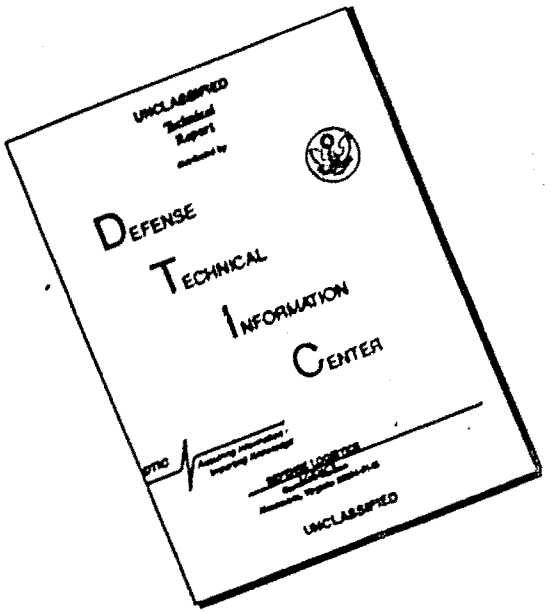
SUPPLEMENT RESULTS VOLUME II

ROBERT N. LATZ
THE BOEING COMPANY

TECHNICAL REPORT AFFDL-TR-66-57, VOLUME II
JULY, 1966

AIR FORCE FLIGHT DYNAMICS LABORATORY
RESEARCH AND TECHNOLOGY DIVISION
AIR FORCE SYSTEMS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

NOTICES

When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Copies of this report should not be returned to the Research and Technology Division unless return is required by security considerations, contractual obligations, or notice on a specific document.

200 - September 1966 5-124

AFFDL TR-66-57
VOLUME II

KC-135 POWER SPECTRAL VERTICAL GUST LOAD ANALYSIS

SUPPLEMENT RESULTS VOLUME II

ROBERT N. LATZ
THE BOEING COMPANY

FOREWORD

The program described in this report was conducted by the Structural Dynamics Unit, Structures Staff, Commercial Airplane Division, The Boeing Company, Renton, Washington. The program was monitored by Mr. Paul Hasty (FDTR), Air Force Flight Dynamics Laboratory, Research and Technology Division, Air Force Systems Command, Wright-Patterson Air Force Base, Ohio, under contract number AF33(615)-2454, "Investigation to Obtain Specific Design Calculations on Proven Transport Aircraft for the Verification of a Gust Design Procedure Based on Proven Spectral Techniques." The program was accomplished under system number 5(611367 62405334), project number 1367, "Structural Design Criteria", task number 136702, "Aerospace Vehicle Structural Loads Criteria." The time period covered by this final technical report is 1 July 1965 to 1 June 1966. The manuscript was released by the author on 1 April 1966 for publication as an RTD technical report.

Supervising consultant was Dr. John C. Houbolt of Aeronautical Research Associates of Princeton. Robert N. Latz conducted the analysis under the supervision of Arthur J. Kamm, Supervisor of the Structural Dynamics Unit.

This report has been given The Boeing Company document number D6-18252.

This technical report has been reviewed and is approved.

FRANCIS J. JANIK, JR.
Chief, Theoretical Mechanics Bran
Structures Division

ABSTRACT

This report presents the results of an analysis to obtain the stress response parameters (level of stress per level of turbulence) and zero-crossing rates at two wing stations and two body stations of the KC-135 airplane where the margins of safety for gusts are minimum. Five combinations of gross weight, speed, and altitude were selected. The results of the computer analysis present the effects of changes in scale of turbulence and upper cutoff frequency on the response parameters and zero-crossing rates. Results indicate a large reduction in stress response parameter and small reduction in zero-crossing rate with increasing scale of turbulence. Variations of upper cutoff frequency above the highest modal frequency used in the analysis indicate negligible change in either stress response parameter or zero-crossing rate. The ratios of incremental limit allowable stress to stress response parameter obtained over a wide range of gross weight, speed, and scale of turbulence result in a minimum value of 53. This document (volume I) presents the analyses and specific results described above. Volume II presents response parameters, zero-crossing rates, frequency response functions, and power spectra of bending moment, shear, and torsion.

(iv Blank)

CONTENTS

ILLUSTRATIONS

ILLUSTRATIONS (Continued)

TABLES

ABBREVIATIONS AND SYMBOLS

A	stress response parameter (rms value of incremental stress for a 1 fps rms random gust) (psi/fps)
N_o	zero-crossing rate (average number of times per second that the incremental stress crosses the 1g mean value with positive slope)
ω	frequency (radians per second)
$\lvert H(\omega) \rvert$	absolute value of frequency response function
$\Phi_I(\omega)$	gust spectrum
ω_c	upper cutoff frequency (radians per second)
Ω	reduced frequency (radians per foot)
L	scale of turbulence (feet)
σ	rms level of turbulence intensity (fps)
$\sigma_{W^{\eta}D}$	measure (fps) of the probability of exceeding limit stress. (It is equal to the ratio of incremental limit allowable stress to stress response parameter.)

SECTION I

INTRODUCTION

A program is being conducted by the U.S. Air Force to establish a simplified procedure to design airplanes for gusts based on power spectral density techniques. To verify the proposed gust procedure, specific design calculations for selected airplanes were obtained from several airplane manufacturers. The Boeing Company was selected to obtain design calculations for the KC-135 airplane and these design calculations are presented in this report.

The specific design calculations presented are stress response parameters (ratio of rms level of stress to rms level of turbulence), zero-crossing rates, and stress frequency response functions. These data are calculated at two wing stations and two body stations where the margins of safety for gusts are minimum. The free-free mode shapes of the airplane are also included.

In volume II are presented response parameters, zero-crossing rates, frequency response functions, and power spectra of bending moment, shear, and torsion.

SECTION II

ANALYSIS

1. Analysis Conditions:

a. The selection of flight conditions for analysis is based on two considerations. First, consideration is given to the gust design conditions used in the basic design of the KC-135 airplane (1). These are based on the use of the gust load formula (2). Second, consideration is given to the flight conditions that would result in minimum pitch stability, that contributes to high loads in random turbulence. The critical gust altitude of 24,000 feet was derived from the design gust analysis, and this altitude is selected for the present analysis. Past power-spectral analyses have shown that low pitch stability results in high loads. The conditions for low pitch stability are a high lift coefficient and an aft center of gravity. Since both of these conditions cannot be achieved simultaneously on the KC-135 airplane, five analysis conditions are selected to represent a wide range of gross weight, center of gravity, and speed.

b. Table I and figure 1 summarize the analysis conditions. Condition 1 is the maximum gross weight, maximum design speed condition and represents the maximum gust force input to the airplane. Using the gust load formula (2), this is the critical gust design condition for the inboard wing. It should be noted that the basic KC-135 wing is designed by maneuver rather than gust conditions. Analysis condition 2 represents a fuel transfer weight of the airplane. Analysis condition 3 represents the airplane with a full body and an empty wing, except for structural reserve fuel. Analysis condition 4 represents the operating-weight-empty airplane plus structural reserve fuel (the condition having the most-aft center of gravity). Analysis condition 5 represents the maximum-gross-weight airplane flying at the slowdown speed for severe gust. At this flight condition, the airplane is flying at maximum lift coefficient.

Table I. Summary of Analysis Conditions

Analysis condition number	Weight condition	Gross weight (lb)	Altitude (ft)	Equivalent airspeed (kn)	Mach number	Body fuel (lb)	Wing fuel (lb)
1	A	297,000	24,000	350	0.85	83,328	109,512
2	B	268,000	24,000	350	0.85	87,927	75,913
3	C	190 590	24,000	350	0.85	83,323	3,100
4	D	107,260	24,000	350	0.85	0	3,100
5	A	297,000	24,000	207	0.50	83,328	109,512

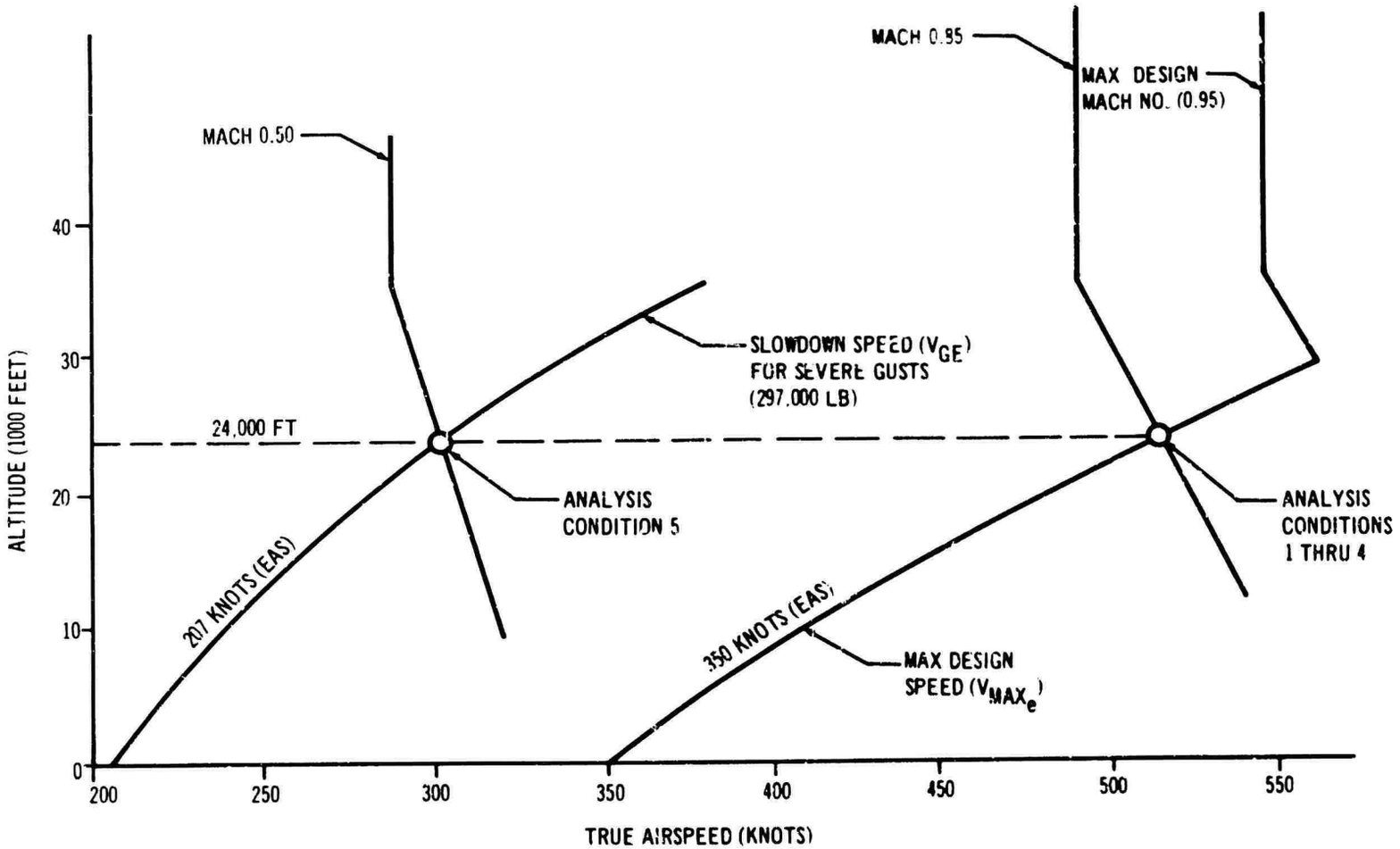


Figure 1. Speed-Altitude Conditions

2. Airplane Representation. The airplane used in this analysis is the KC-135. The airplane has a crew of four: pilot, copilot, navigator, and boom operator. It normally cruises at altitudes from 25,000 to 45,000 feet, gross weights to 297,000 pounds, and speeds to 525 knots (true air speed). The airplane has a wing span of 131 feet and an overall length of 136 feet. A two-view diagram is shown in figure 5, page 12. All major parts of the airplane except the fin and horizontal stabilizer are considered to be elastic in the analysis. Therefore, a rather comprehensive mass and stiffness description of the airplane is required. Simple beam-bending theory is used to represent the stiffness characteristics of the major components of the structure, such as the wing and forward and aft fuselage. The elastic axes are located approximately along the locus of shear centers of each component, except in the inboard portion of the wing where the elastic axis is determined from static tests.

a. Weights Data:

(1) The complete detailed description of panel weights (obtained from reference 3) used in this analysis is given in appendix I. The fuselage is divided into 18 weights panels and the panel weight and pitch inertia is determined for each panel. The wing semispan is divided into ten spanwise panels. Each of these panels are divided into five zones: leading edge, front spar, interspar, rear spar, and trailing edge. The weight and center of gravity are calculated for each zone and summed to give the total panel weight and center of gravity. The total panel-weight moments of inertia are computed by rotation and transfer of zone results into axes located parallel and perpendicular to the wing elastic axis.

(2) The mass properties for each engine, nacelle, and nacelle strut are combined and a lumped center of gravity is determined. Then, the nacelle mass moments of inertia are determined for axes located perpendicular and parallel to the airplane reference axis.

(3) Table II summarizes the weight conditions shown on the gross-weight-versus-center-of-gravity chart in figure 2.

Table II. Summary of Weight Conditions

Weight condition	Gross weight (lb)	CG (percent mac)	Fuel (lb)						
			Wing				Body		
			Outboard mains 1 & 4	Inboard mains 2 & 3	Center section	Outboard reserves	Forward	Aft	Upper
A	297,000	21.4	26,806	29,575	47,489	5,642	37,700	41,457	4,171
B	268,000	23.0	14,212	14,212	47,489	---	37,700	41,457	8,770
C	190,590	28.3	1,550	1,550	---	---	37,700	41,457	4,173
D	107,260	35.1	1,550	1,550	---	---	---	---	---
Capacity of tanks			26,806	29,575	47,489	5,642	37,700	41,457	14 131

Note: Fuel density at 6.5 pounds per gallon

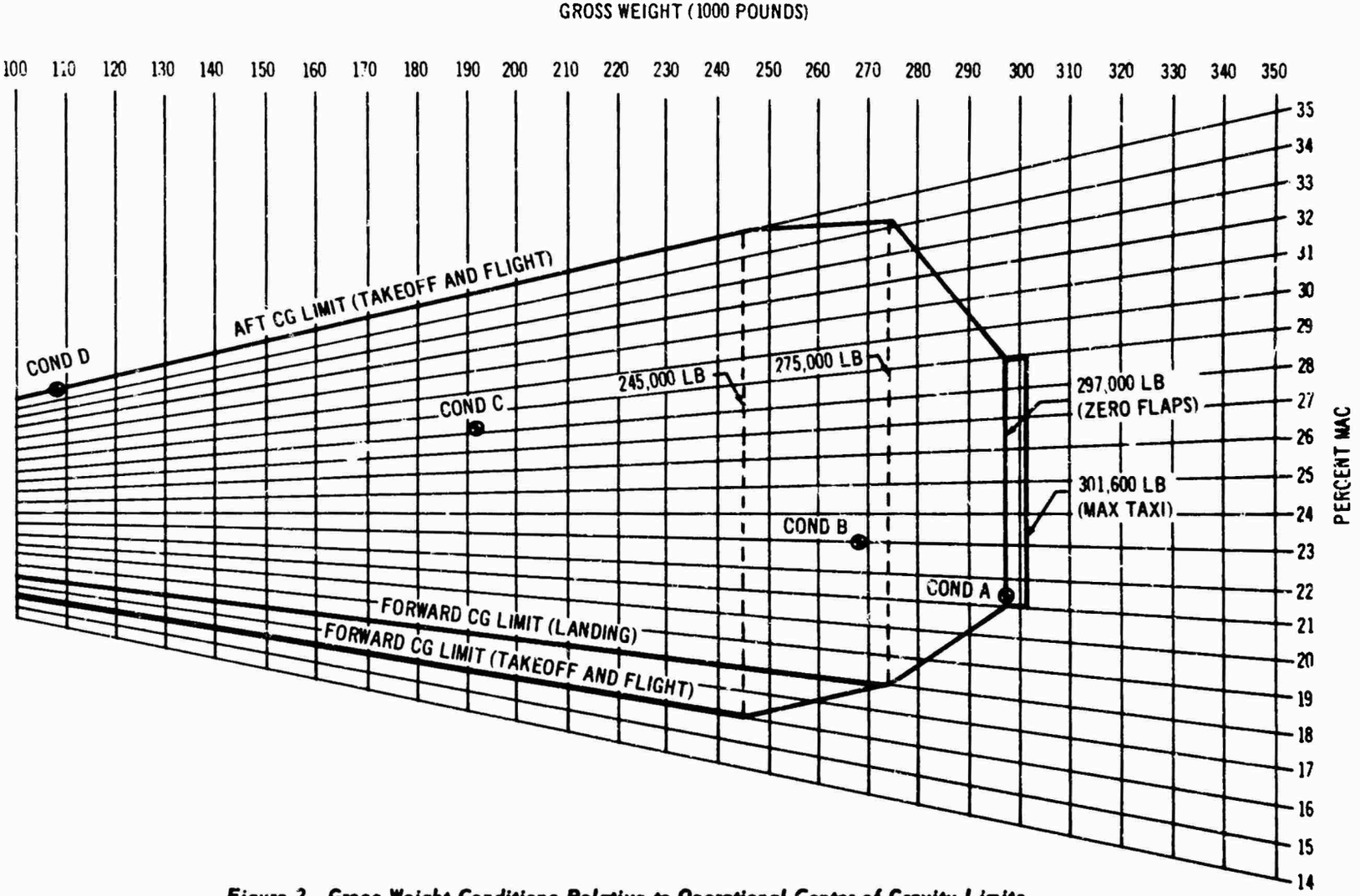


Figure 2. Gross Weight Conditions Relative to Operational Center-of-Gravity Limits

b. Stiffness Data:

(1) The stiffness of each major component of the airplane (except nacelle struts) is described by a distribution of bending stiffness (EI) and torsional stiffness (GJ) along the elastic axis. The wing-section properties are computed using front and rear spar areas and all in-spar skin for both upper and lower surfaces. Values for modulus and shear modulus of elasticity (E and G) are 10.3×10^6 and 3.8×10^6 psi, respectively. The body-section properties are computed using stiffeners with full-skin effective in tension and a portion of skin effective in compression. The body cutout sections are analyzed individually by special analysis. The body center-section stiffness is estimated on the basis of variation of skin thickness, keel beam stiffness, and stringer size from body stations 620 through 820. The body stiffness is for the 2g dive maneuver condition (tension in the upper surface).

(2) The stiffness of the nacelle struts is calculated from the inertia of the nacelle-strut combination and the natural frequency and mode shapes obtained from ground shake tests (4, 5). The detailed stiffness data is given in appendix II.

c. Structural Damping Data:

(1) The structural damping used in this analysis is obtained from the ground vibration test of the 707-320B airplane. These values of damping are considered to be representative of the KC-135 airplane, since the structure of the two airplanes is similar. The values of structural damping coefficient are equal to twice the fraction of critical damping.

Mode	1	2	3	4	5	6	7	8
Structural damping coefficient	0.015	0.045	0.053	0.030	0.025	0.033	0.029	0.028

d. Aerodynamic Data:

(1) All of the basic aerodynamic data required for these analyses are obtained from a series of wind tunnel tests (6). Wind tunnel pressure-model test results are used to establish wing- and fuselage-airload distribution. The aerodynamic coefficients are corrected for model flexibility before they are used for full-scale airplane analysis, and are later refined to obtain final agreement between the aeroelastic analysis and actual airplane flight-load survey measurements.

(2) The unsteady aerodynamics are based on two-dimensional strip theory, based on wind tunnel model-pressure data, and are modified to include aerodynamic induction effects (7). These induction effects account for the aerodynamic pressure carryover between wing panels and between the wing and horizontal tail. This is accomplished by using a downwash matrix based on lifting-line theory. The dynamic downwash matrix includes pressure-carryover and pressure-transmittal functions to provide the proper magnitude and phasing of the carryover pressure. The section (or strip) aerodynamics for zero frequency are made to agree with the comparable aeroelastic solution. Included in the aerodynamics is the effect of gradual penetration into the gust.

(3) Body lift distribution is based on wind tunnel pressure-model data adjusted to make the rigid airplane pitch and lift derivatives match those used in the aeroelastic analysis. Detailed aerodynamic data are given in appendix III. The maximum lift correction due to compressibility occurs at mach 0.85.

3. Atmospheric Turbulence Representation:

a. There are two power spectra that are in current use to represent the atmosphere (8), and the following spectrum was selected by Dr. Houbolt for this analysis:

$$\Phi(\Omega) = \left(\frac{\sigma^2 L}{\pi}\right) \frac{1 + \frac{8}{3}(1.339\,L\Omega)^2}{\left[1 + (1.339\,L\Omega)^2\right]^{11/6}}$$

This power spectrum is plotted in figure 3 for scales of turbulence of 1,000, 3,000, and 5,000 feet. A value of 1 fps was used throughout the analysis for σ.

b. It is assumed that the turbulence is essentially "frozen" in space and is uniform normal to the line of flight of the airplane. The airplane passes over the turbulence much as an automobile would travel over a rough road. This approach assumes that the spanwise variation of turbulence (except for the effect of gradual penetration) is negligible.

4. Equations of Motion:

a. The airplane is represented by ten degrees of freedom: eight symmetrical free-free elastic modes, which are plotted in appendix IV, and rigid-airplane vertical translation and pitch. All flight control surfaces are assumed fixed in the 1g flight position. The response functions and zero-crossing rates are calculated from the following equations:

$$A = \int_0^{\omega_c} |H(\omega)|^2 \, \Phi_i(\omega) \, d\omega$$

$$N_o = \frac{1}{2\pi} \left[\frac{\int_0^{\omega_c} \omega^2 \, |H(\omega)|^2 \, \Phi_i(\omega) \, d\omega}{\int_0^{\omega_c} |H(\omega)|^2 \, \Phi_i(\omega) \, d\omega} \right]^{1/2}$$

b. To check the equations of motion, the loads are obtained from the equations of motion for a 1g gust condition and compared with those obtained from the aeroelastic solution. This is accomplished by first obtaining the

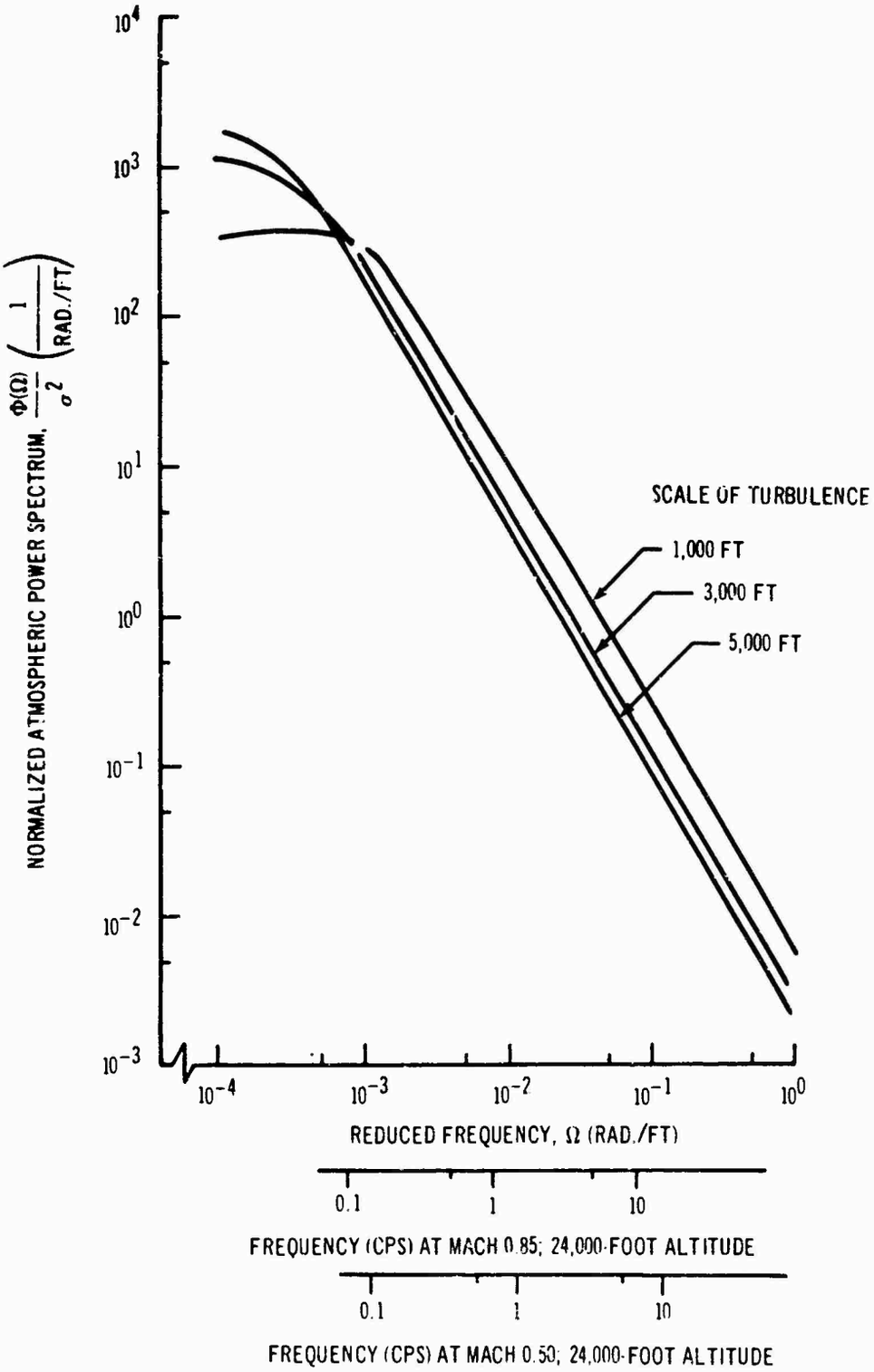
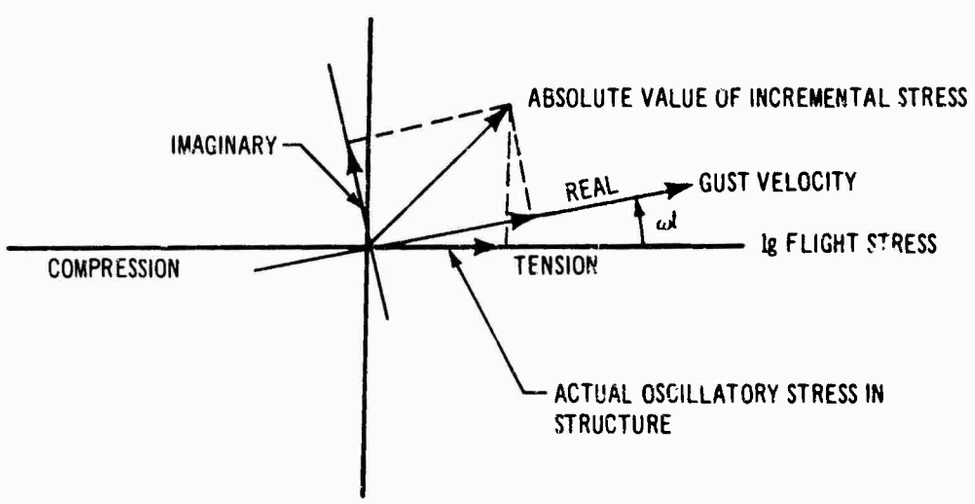


Figure 3. Analyticol Representotion of Atmospheric Spectra

equations of motion for zero-frequency gust input. Then the pitch- and elastic-mode generalized coordinate accelerations, the pitch and translation displacement, and all of the generalized coordinate velocities are equated to zero. The vertical translation acceleration is equated to 1g. To allow for an airplane moment balance, a tail load is added to the equations as an additional unknown. This tail load represents the change in tail lift required to balance the airplane while the airplane is flying through a gust that gives it a 1g acceleration. The solution of these equations gives the elastic mode deflections, the gust angle required for 1g acceleration, and the tail load required to balance the airplane. A comparison of wing loads is shown in figure 4 for analysis condition 1 (table 1).

c. The stress frequency response functions for the airplane structure are obtained from the complex frequency responses of the generalized coordinates. Shear, moment, and torsion coefficients are calculated for unit deflections of the generalized coordinates. These coefficients are multipled by the complex frequency responses of the generalized coordinates to obtain load frequency responses. The load frequency responses are multiplied by stress influence coefficients obtained from the airplane stress analysis to give the complex stress frequency response functions. The absolute value of these stress frequency-response functions is then used to obtain A and N_o. The stress frequency-response functions are given in complex form, and represent the ineremental stress relative to the gust velocity and 1g mean as shown below.



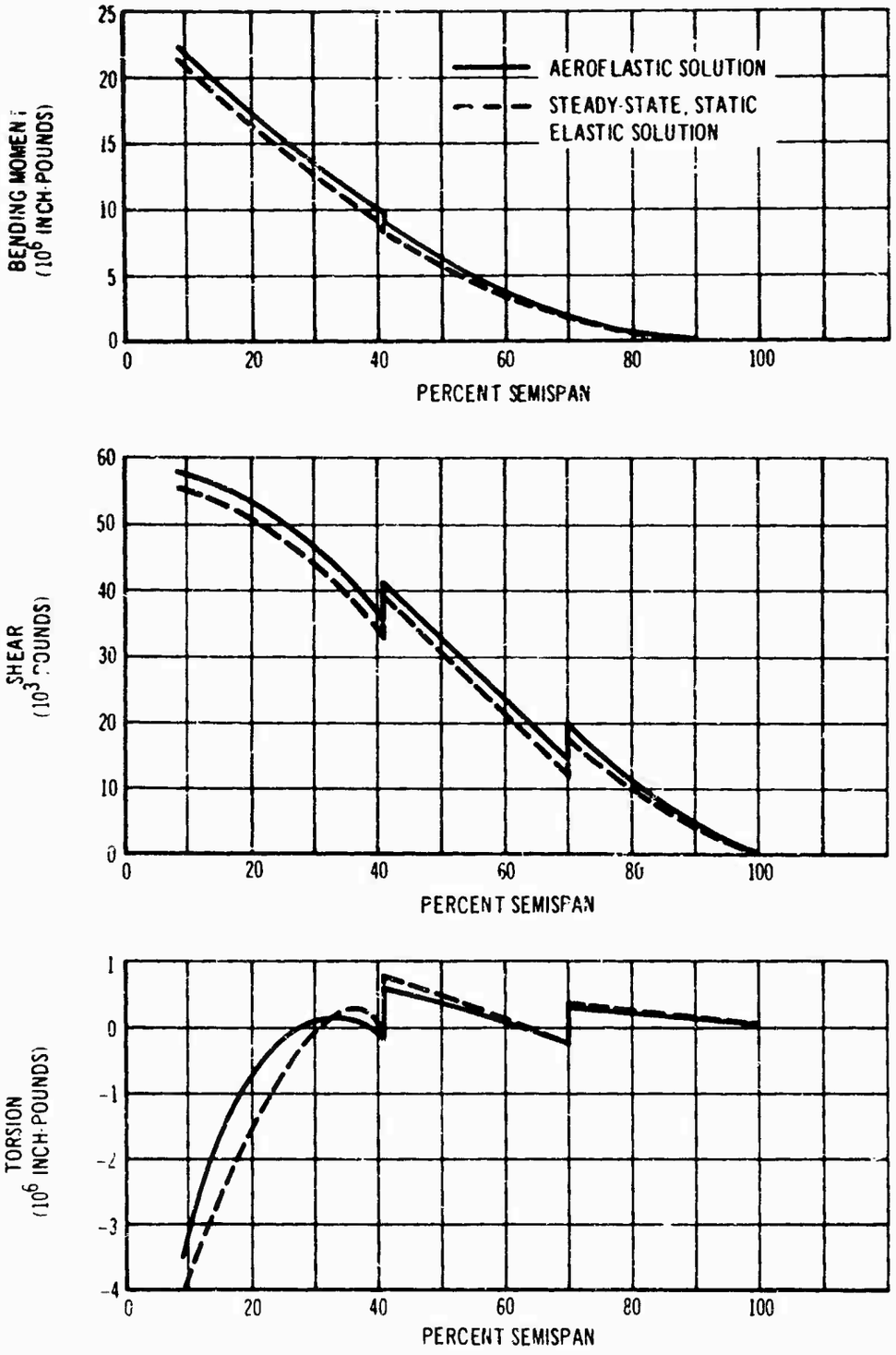


Figure 4. Comparison of Steady-State, Static, Elastic Solution with Aeroelastic Solution (Analysis Condition 1)

SECTION III

RESULTS AND DISCUSSION

Loads are obtained at two wing stations and two body stations where the gust margins are minimum. The margins of safety shown in table III are calculated using the gust load formula (2).

The wing and aft body are designed by maneuver conditions. The forward body is designed by braked-roll and pressurization conditions. However, for flight conditions, the margin of safety for gust for the forward body (which includes alleviation due to pitch) is less than for maneuver conditions. The fuselage and wing margins of safety are given in references 9 and 10, respectively.

Table III. Margins of Safety

Location	Segment number	Type of loading	Gust margins of safety
		WING	
27 percent semispan	10	Combined	0.20
27 percent semispan	14	Primarily tension	0.39
40.06 percent semispan (inboard of nacelle)	8	Combined	0.24
40.06 percent semispan (inboard of nacelle)	107	Combined	0.20
		BODY	
Body balance station 540	S-17	Shear load only	0.20
Body balance station 820	S-1	Tension load only	0.14

Figures 5 and 6 show these locations on the airplane. The curves of margin of safety in figure 6 are included to show the variation along the cross section of the wing. The margins of safety are based on the following equation:

$$\text{Margin of safety} = \frac{\text{Allowable ultimate principal stress}}{\text{Design ultimate principal stress}} - 1$$

The results of this investigation are response parameters A, zero-crossing rates N_0, stress transfer functions, and the ratios of incremental limit allowable stress to stress response parameter. The stress frequency-response functions are tabulated in appendix V.

The effects of variations in scale of turbulence on response parameters A and zero-crossing rates N_0 are shown in figures 7 and 8. The stress response parameters and zero-crossing rates are tabulated for each analysis

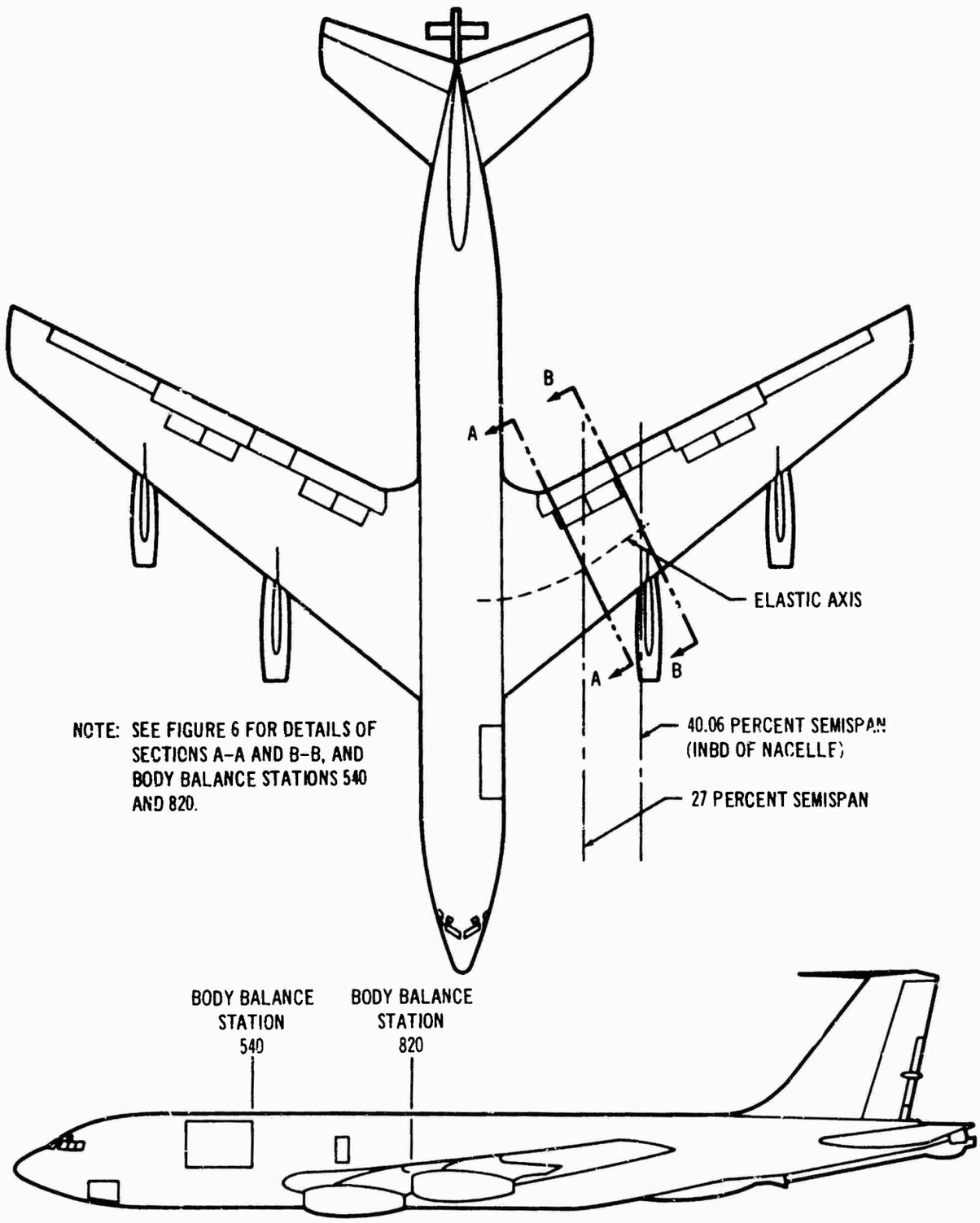


Figure 5. Locations at Which Stresses Are Obtained

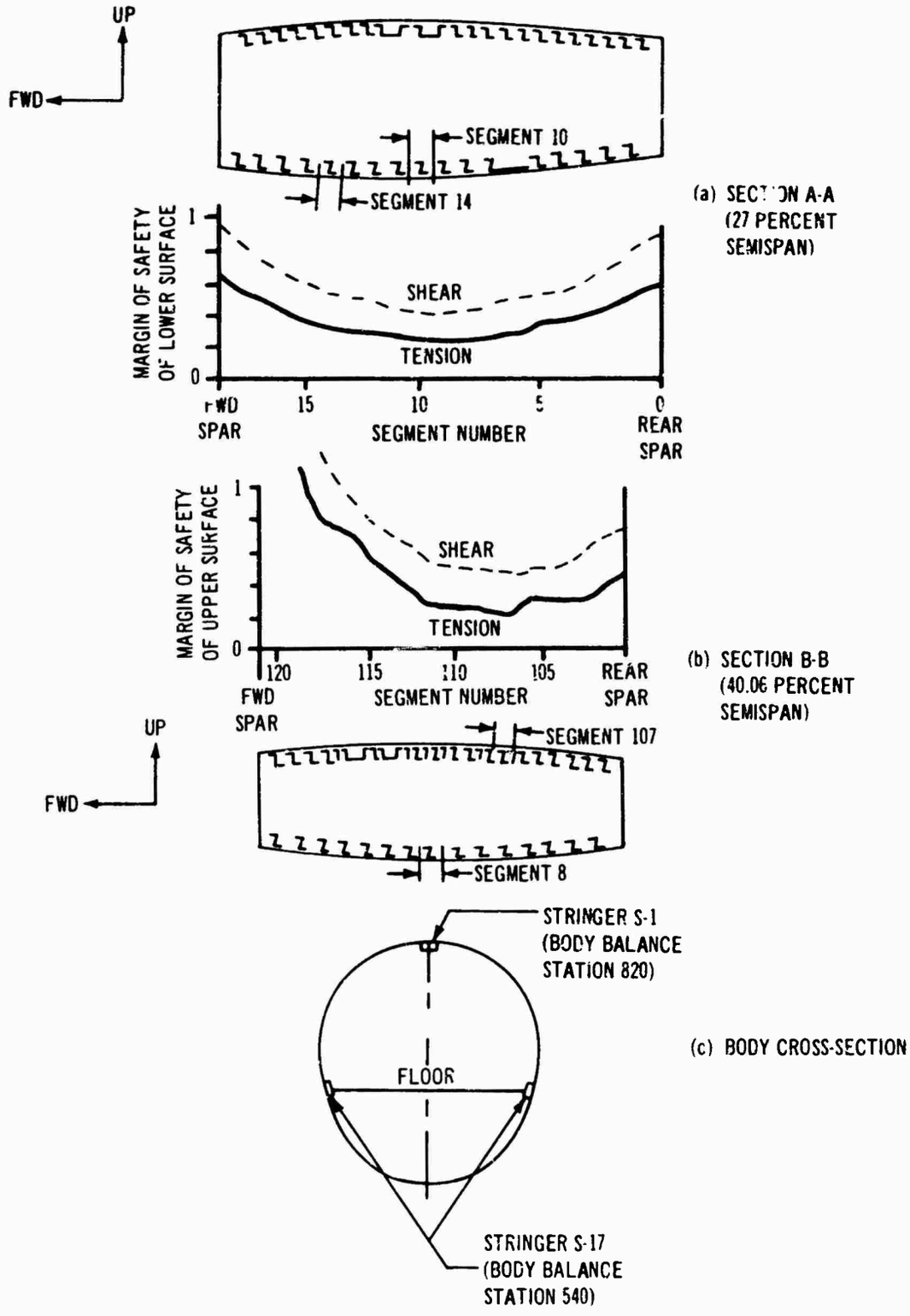
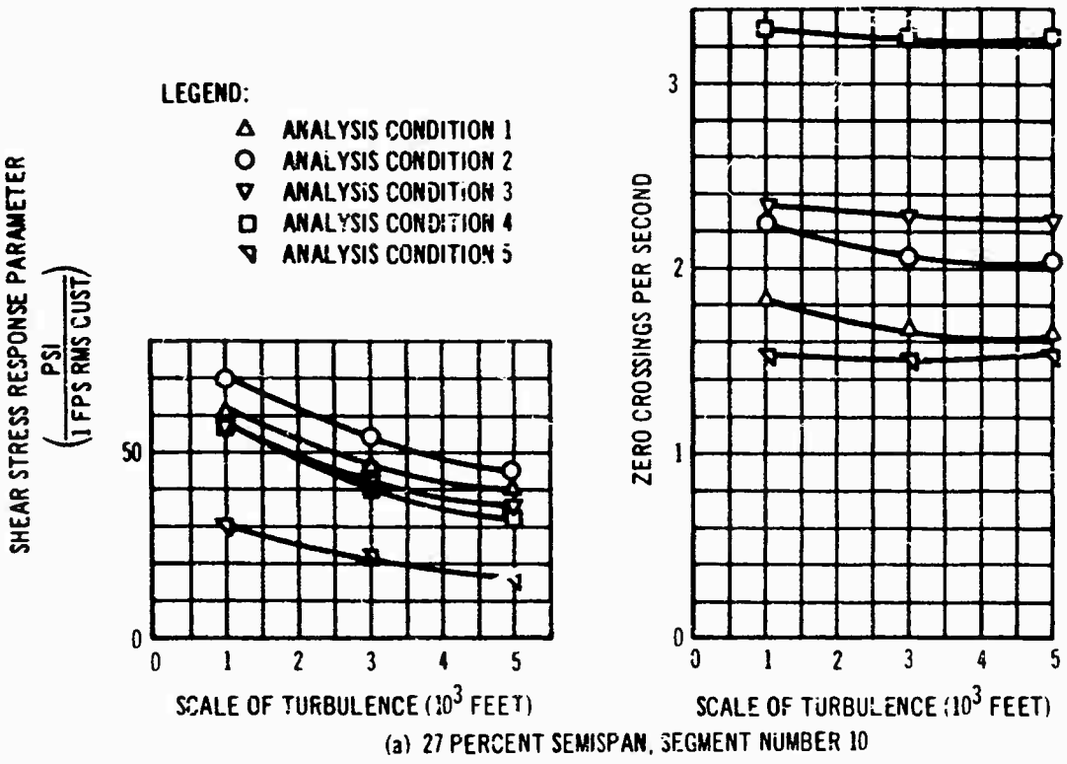
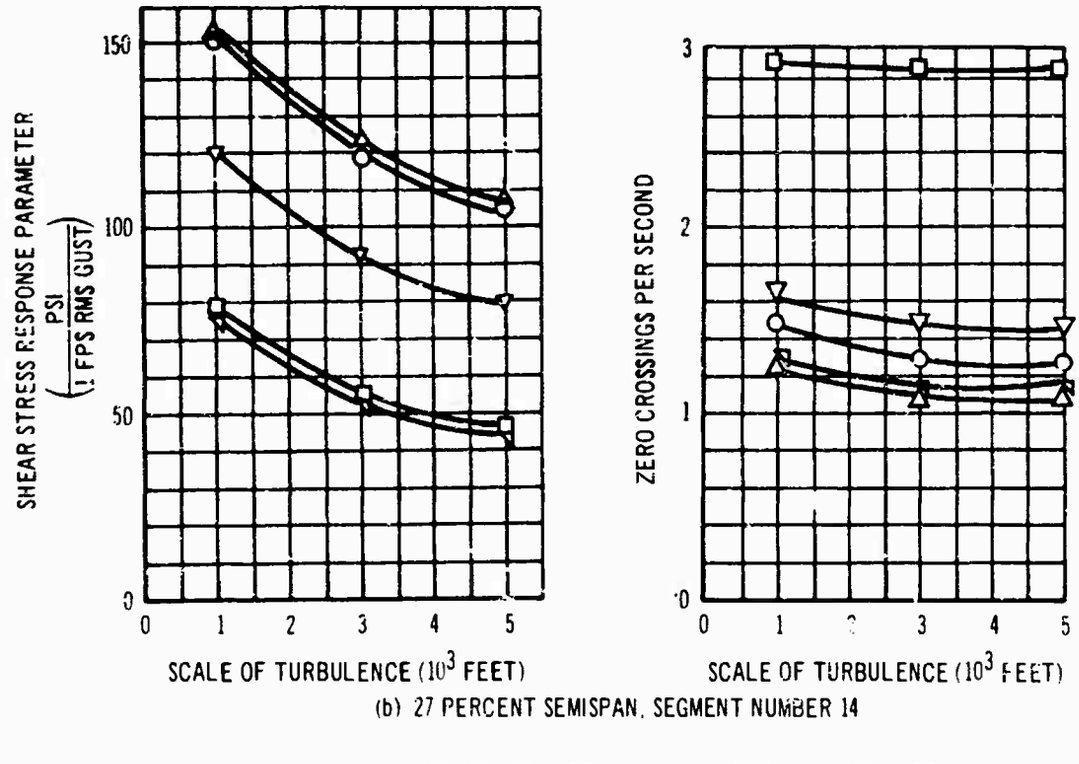


Figure 6. Segment Locations and Typical Distributions of Margins of Safety

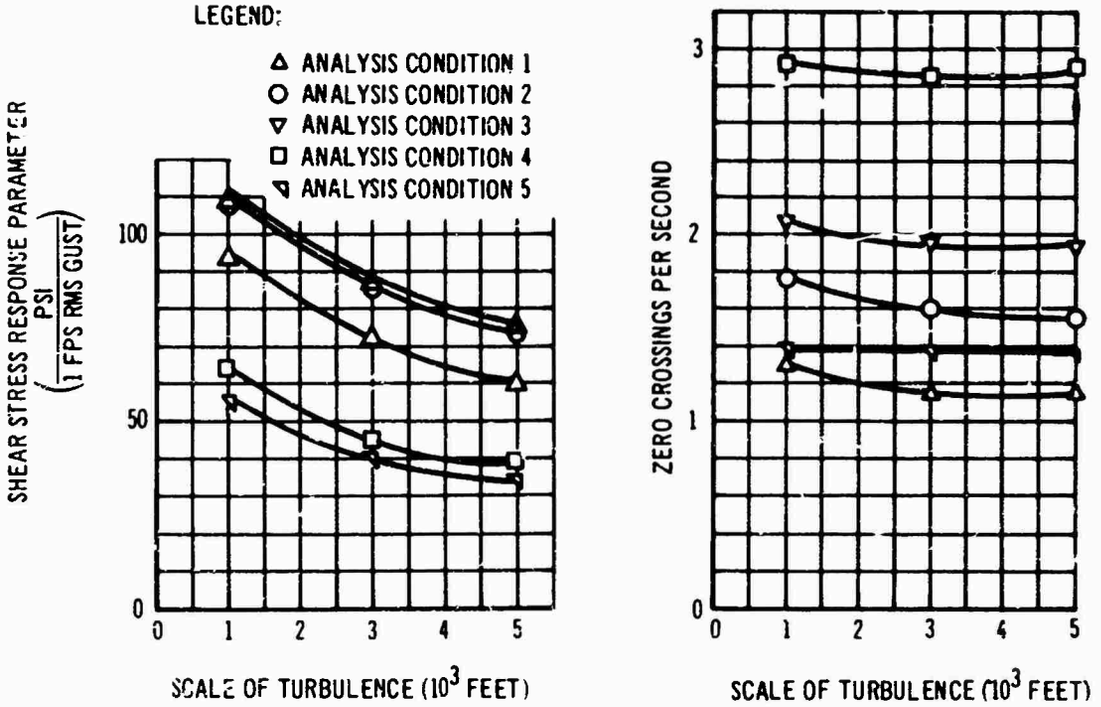


(a) 27 PERCENT SEMISPAN, SEGMENT NUMBER 10

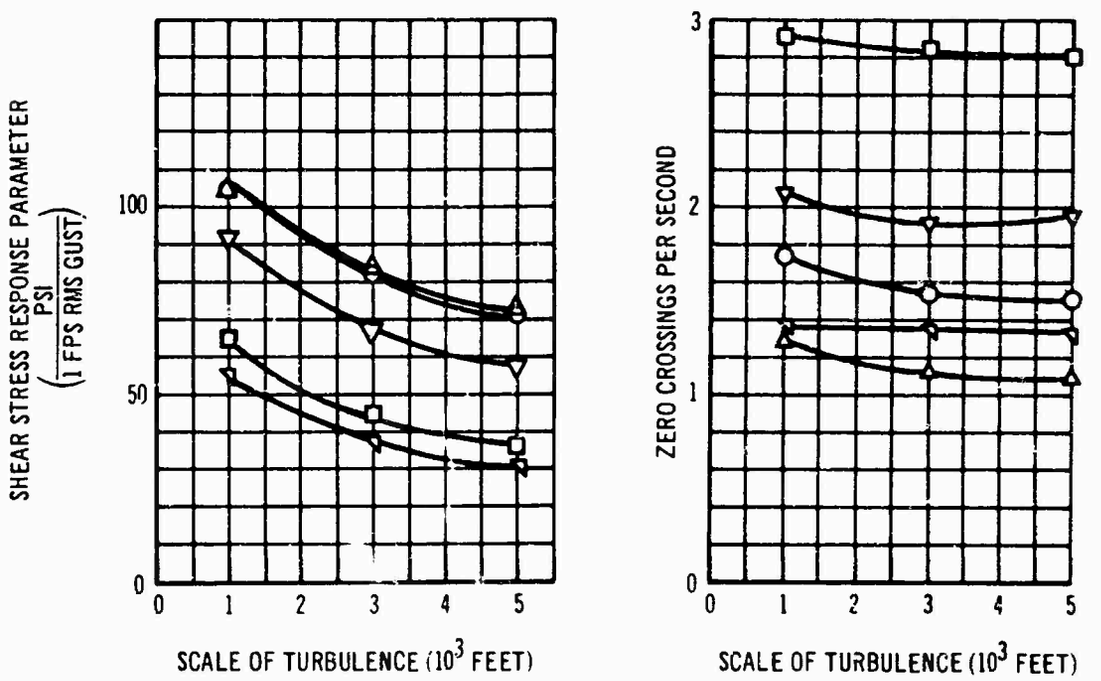


(b) 27 PERCENT SEMISPAN, SEGMENT NUMBER 14

Figure 7. Response Parameters and Zero-Crossing Rates for Shear Stress



(a) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 8



(b) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 107

Figure 7 – – – Continued

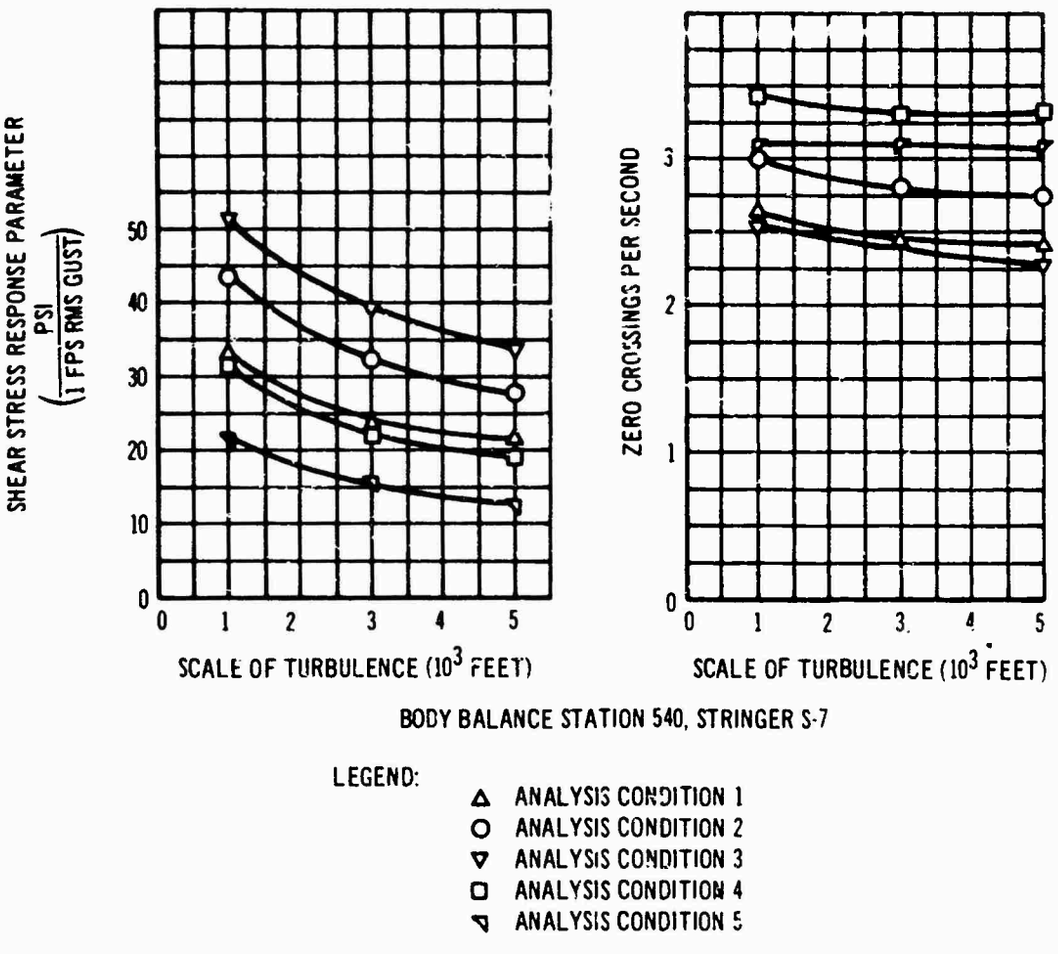
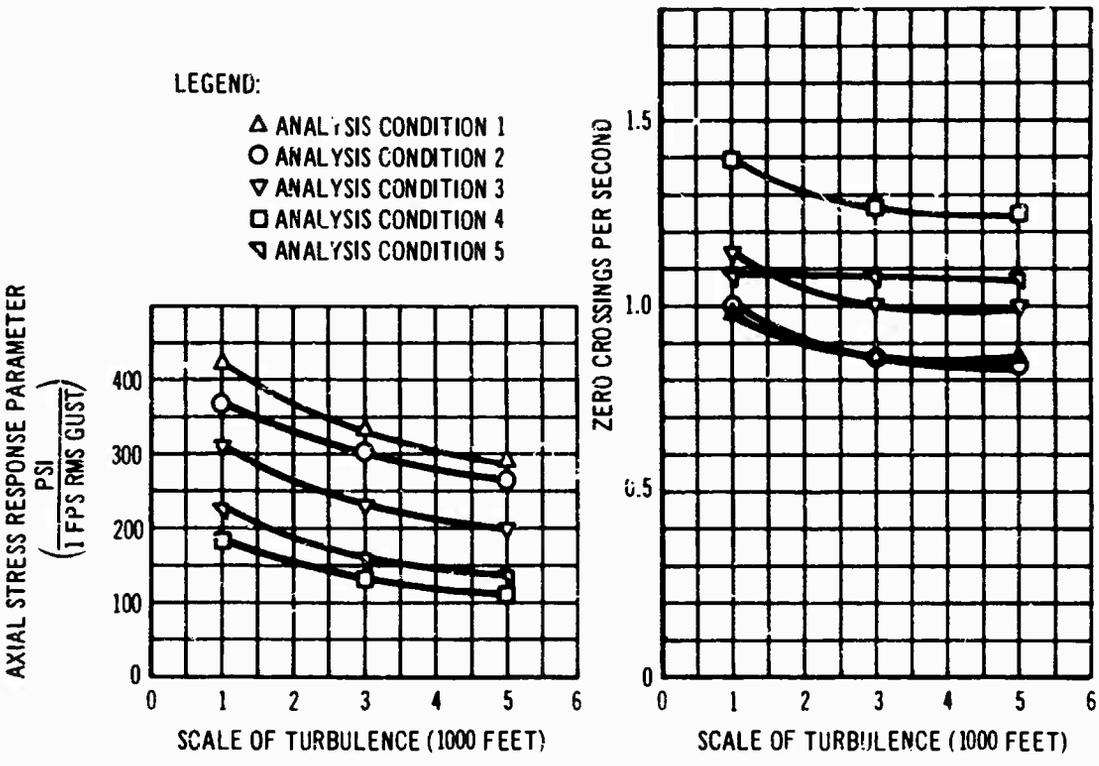
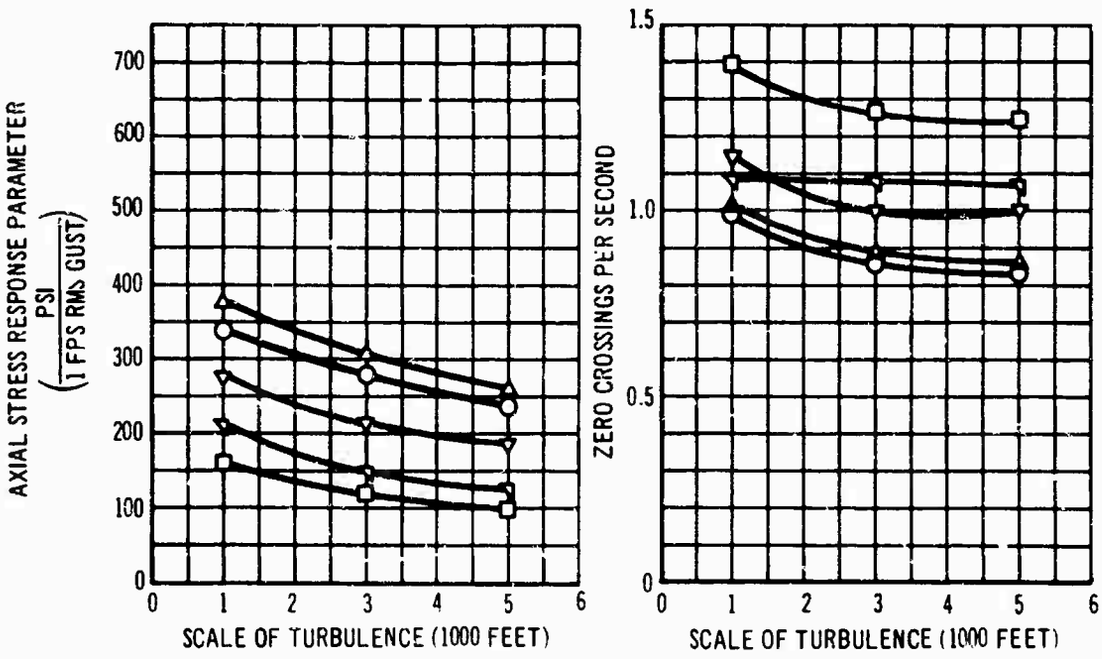


Figure 7 – – – Concluded

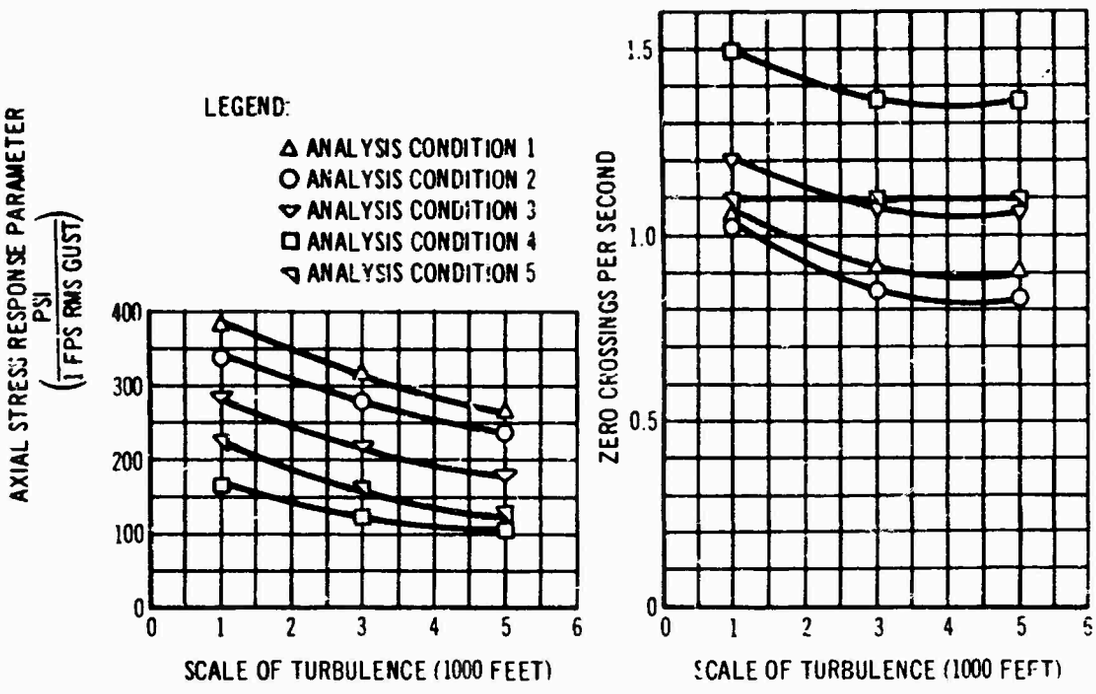


(a) 27 PERCENT SEMISPAN, SEGMENT NUMBER 10

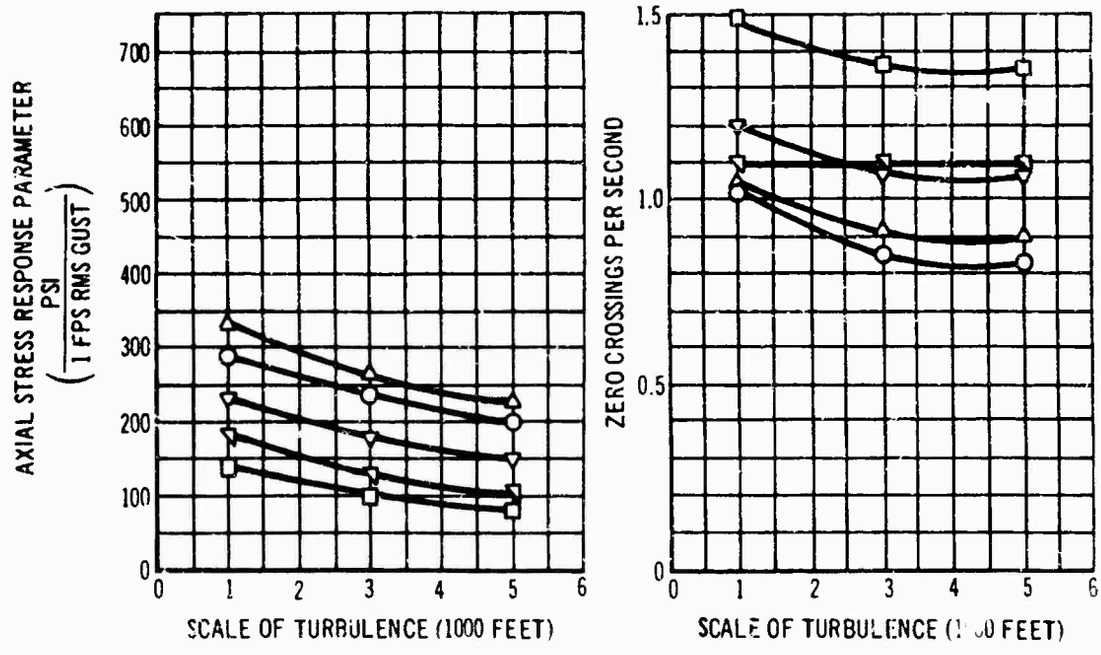


(b) 27 PERCENT SEMISPAN, SEGMENT NUMBER 14

Figure 8. Response Parameters and Zero Crossing Rates for Axial Stress



(a) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 8



(b) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 107

Figure 8 – – – Continued

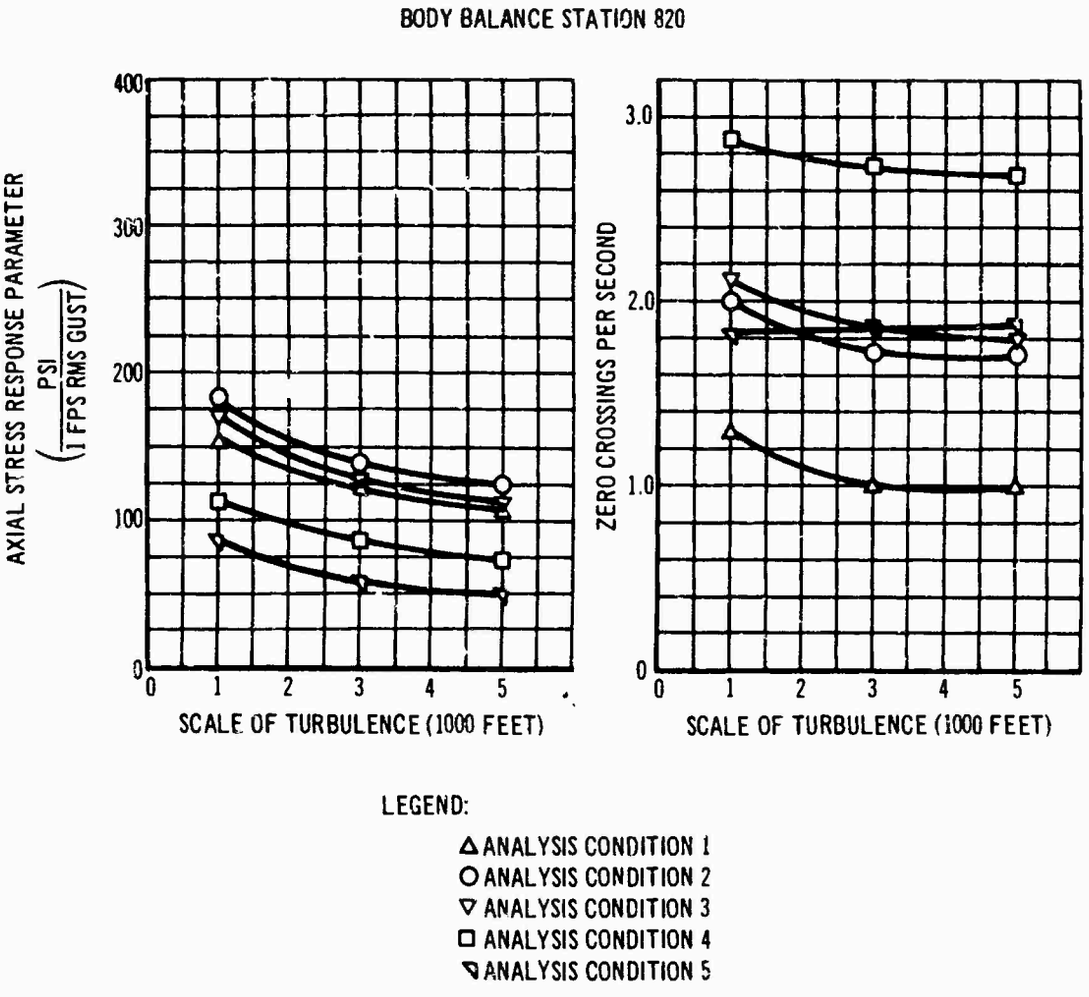


Figure 8 --- Concluded

condition in appendix VI. The tabulated data show that changing the upper cutoff frequency from 10 to 15 and 20 cycles per second, as specified by Dr. Houbolt, has a negligible effect on A and N_o. This is due to the highest elastic modes in the analysis having frequencies less than 10 cps, resulting in little response above that frequency.

Zero-crossing rate versus the ratio of incremental limit allowable stress to stress response parameter is plotted in figures 9 and 10. It should be noted that the critical condition is that of maximum gross weight and high dynamic pressure combined with a scale of turbulence of 1,000 feet. These data are directly comparable to the $\sigma_{W_{D}}$ of reference 11, remembering that in that report the scale of turbulence is 2,500 feet and, whereas the KC-135 airplane is designed to a 2g load factor, the 720 airplane is designed to a 2.5g load factor. The consequence of this is that the KC-135 has lower margins of safety fc gust for the maximum gross weight conditions and a resultingly lower ratio of incremental limit allowable stress to stress response parameter.

The incremental limit allowable stresses tabulated in appendix VII are obtained from the stress interaction diagram for each section for which stresses are desired. few definitions follow:

1. Allowable stress: the maximum stress at which failure will occur

2. Limit allowable stress: the allowable stress divided by 1.50

3. Incremental stress: the increment of stress above the 1g flight stress

A typical stress interaction diagram is shown in figure 11. Curve 1 is a plot of the following equation:

$$\begin{pmatrix}\text{Limit allowable}\\ \text{shear principal stress}\end{pmatrix} = \sqrt{\left(\frac{\text{Axial skin tension stress}}{2}\right)^2 + (\text{Skin shear stress})^2}$$

Curve 2 is a plot of:

$$\begin{pmatrix}\text{Limit allowable}\\ \text{tensile principal stress}\end{pmatrix} = \left(\frac{\text{Axial skin tension stress}}{2}\right) + \sqrt{\left(\frac{\text{Axial skin}}{\text{tension stress}}{2}\right)^2 + \begin{pmatrix}\text{Skin}\\ \text{shear}\\ \text{stress}\end{pmatrix}^2}$$

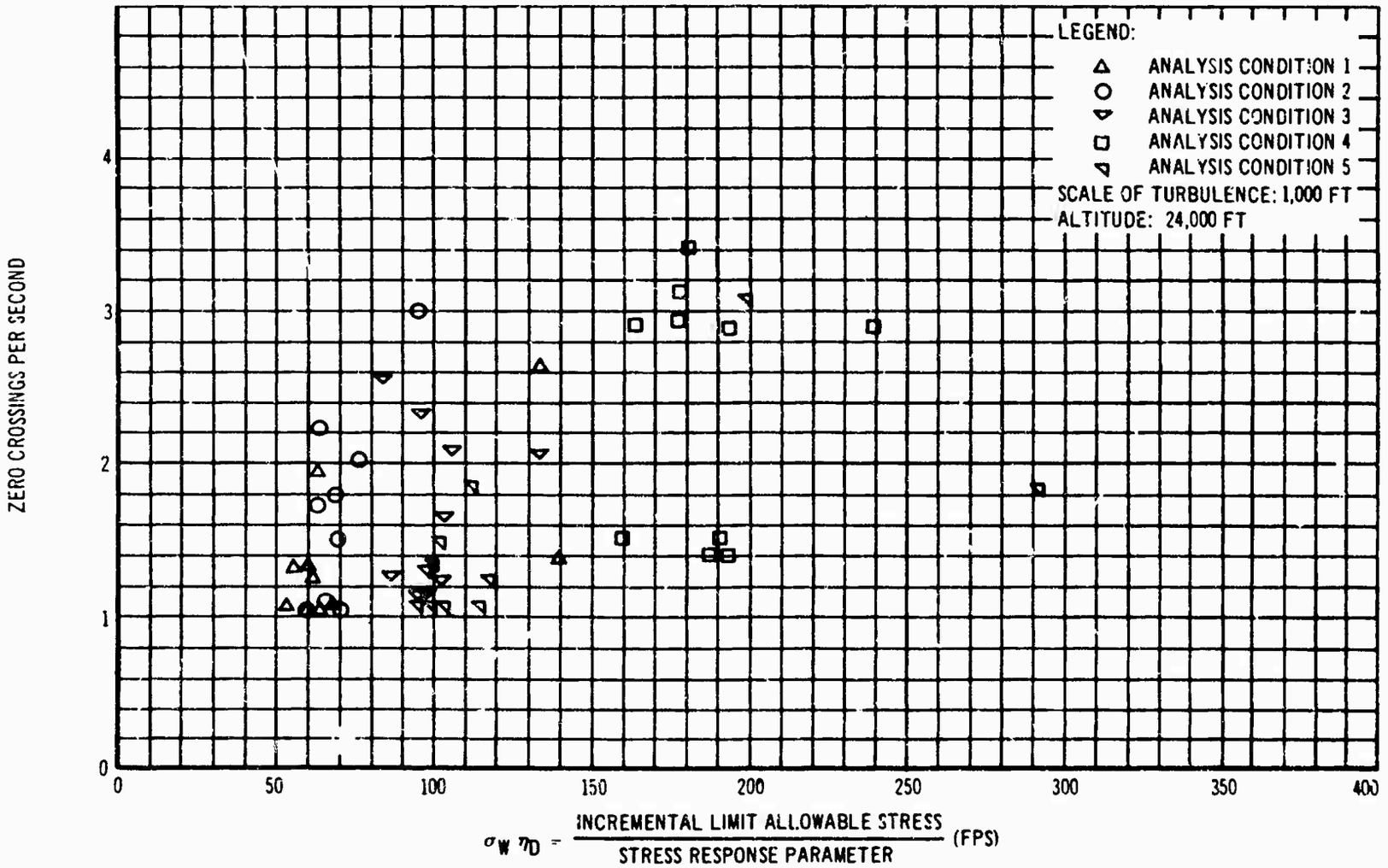


Figure 9. Zero-Crossing Rates Versus $\sigma_W \eta_D$ (Linear Plot)

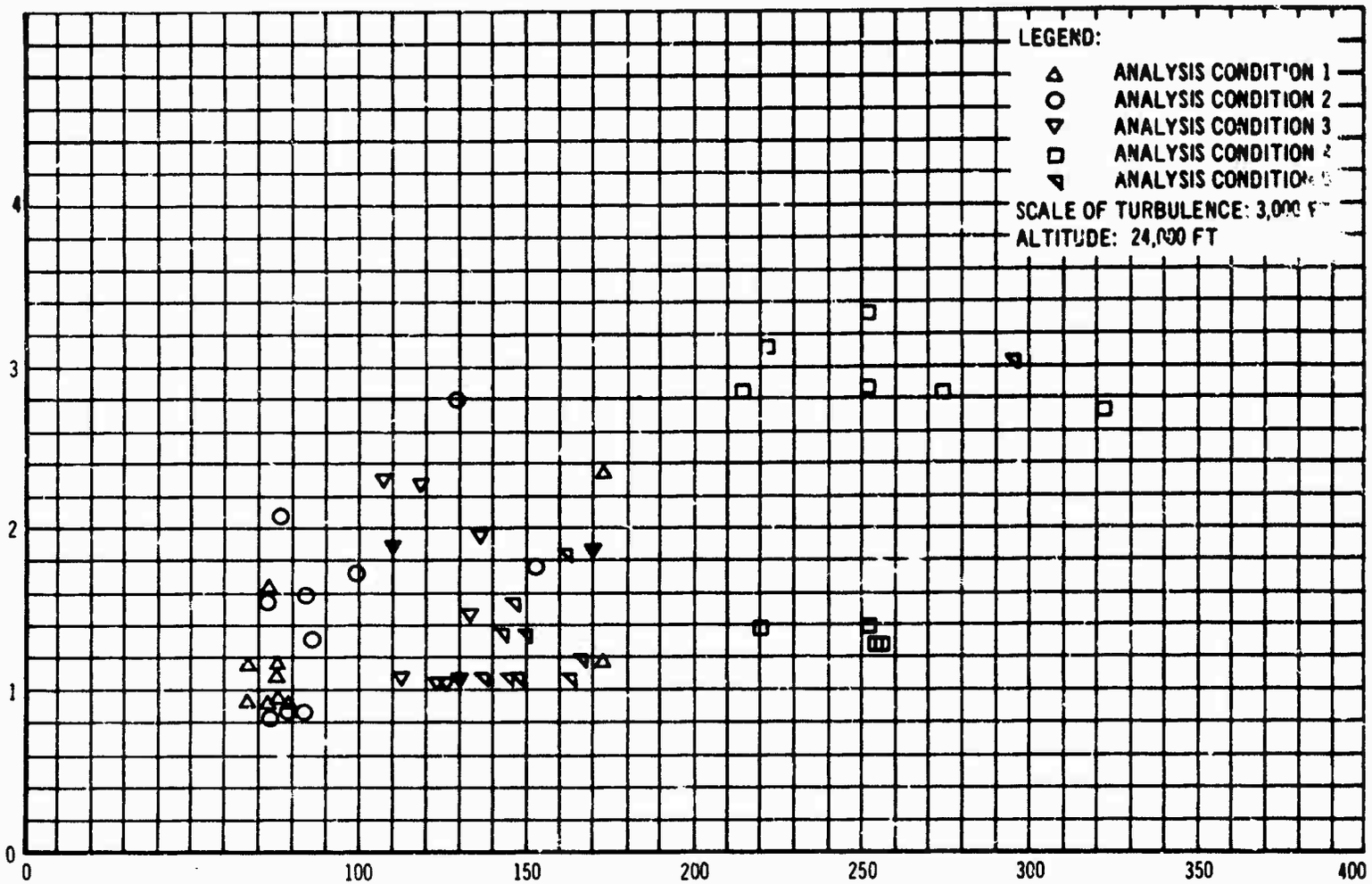


Figure 9 – – – Continued

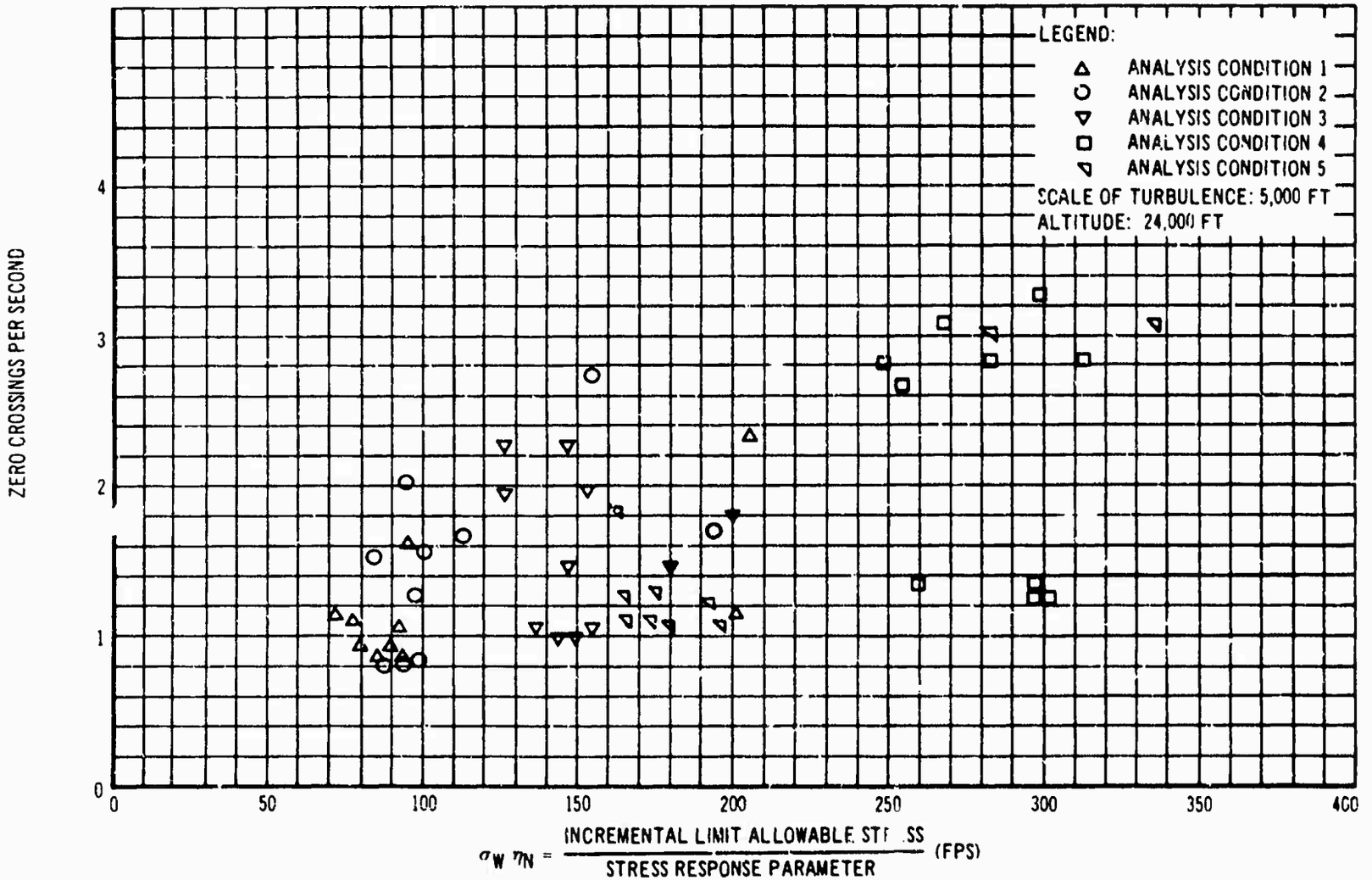


Figure 9 – – – Concluded

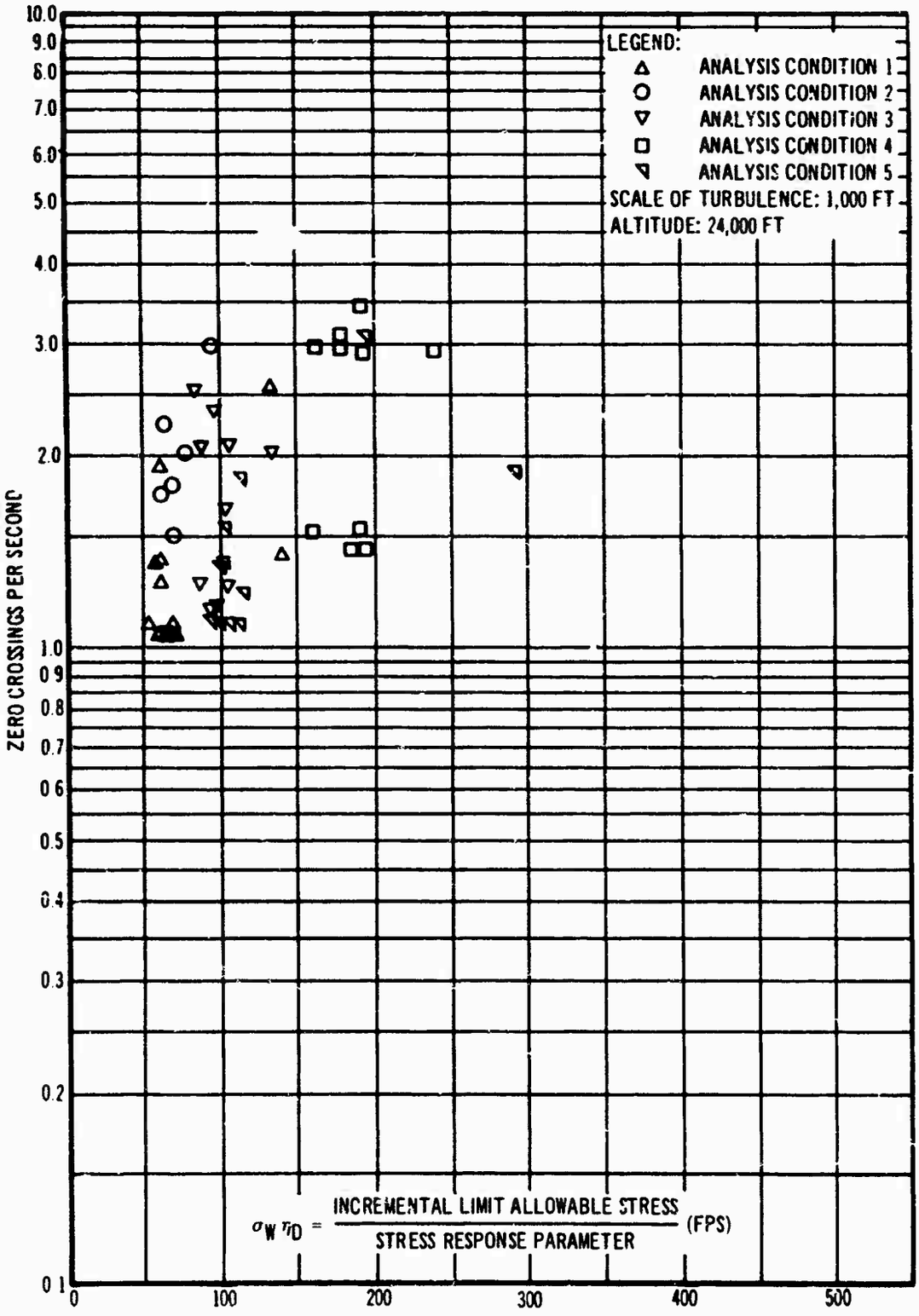


Figure 10. Zero-Crossing Rates Versus $\sigma_W \eta_D$ (Semilog Plot)

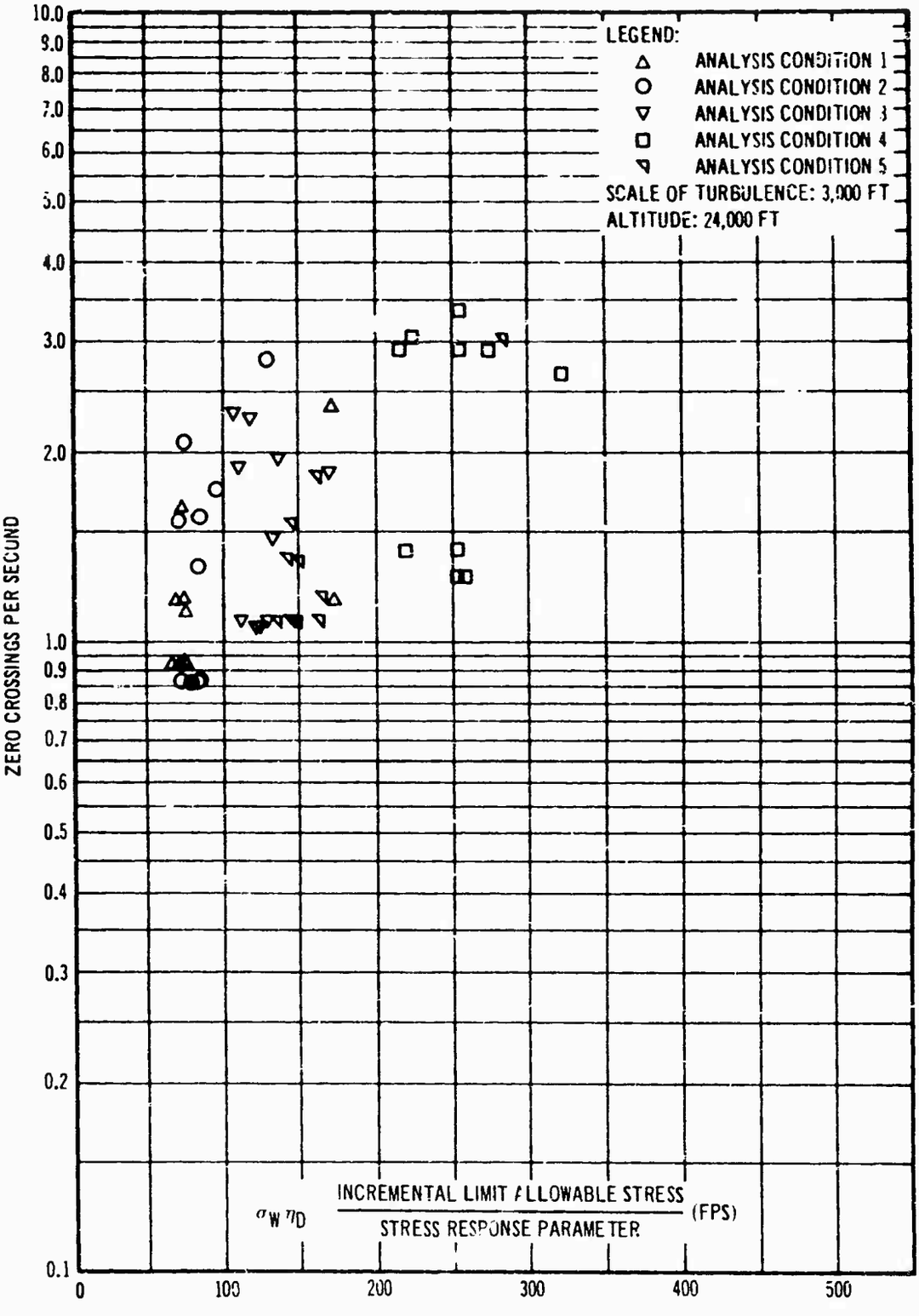


Figure 10 --- Continued

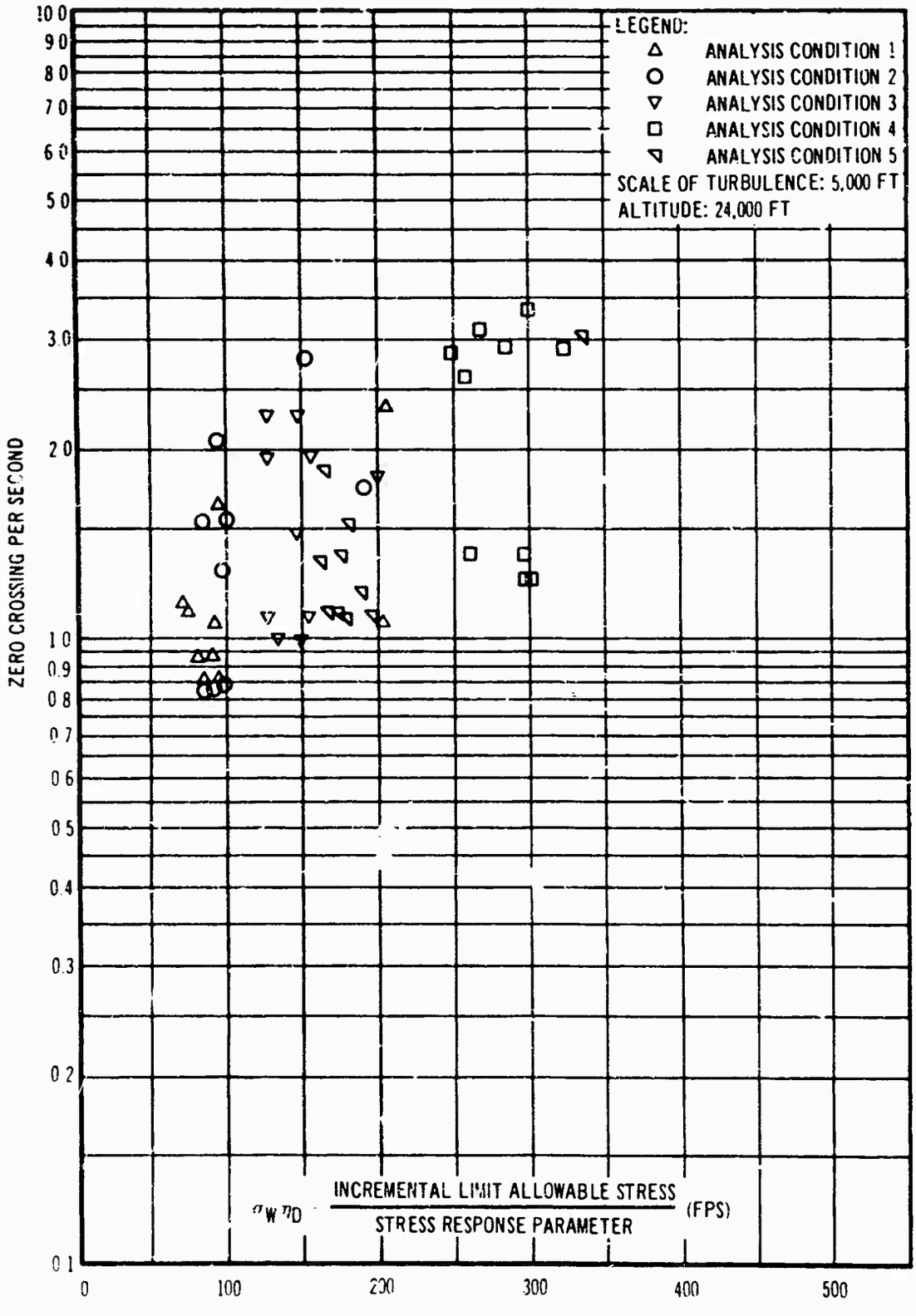


Figure 10 – – – Concluded

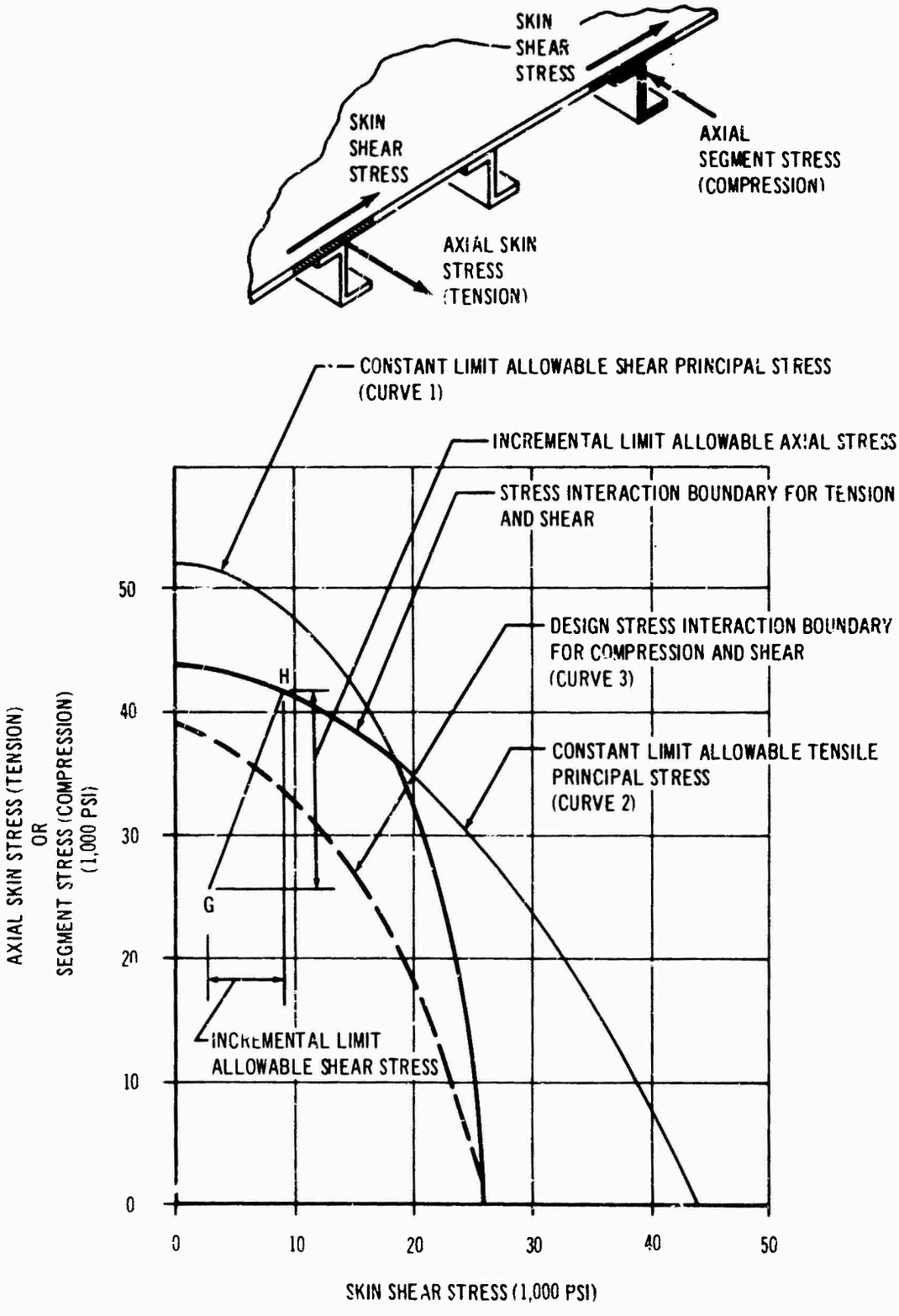


Figure 11. Stress Interaction Diagram

As shown in figure 11, the stress interaction curve used in design is formed by portions of these two curves and represents the combination of axial tension and shear that give the lower of the limit allowable shear or tensile principal stresses. Curve 3, the stress interaction curve for compression and shear, is a plot of:

$$\left(\begin{array}{c}\text{Limit allowable}\\ \text{compression stress}\end{array}\right) = \frac{\left(\begin{array}{c}\text{Axial segment}\\ \text{compression stress}\end{array}\right)}{2} + \sqrt{\left[\frac{\left(\begin{array}{c}\text{Axial segment}\\ \text{compression stress}\end{array}\right)}{2}\right]^2 + \left[\left(\begin{array}{c}\text{Skin}\\ \text{shear}\\ \text{stress}\end{array}\right) \frac{\left(\begin{array}{c}\text{Limit allowable}\\ \text{compression stress}\end{array}\right)}{\left(\begin{array}{c}\text{Limit allowable}\\ \text{shear principal stress}\end{array}\right)}\right]^2}$$

The segment referred to in the equations includes the stringer area in addition to that of the skin; the area of both is used when computing compressive stresses. The limit allowable compressive stress is not a true principal stress, and its equation is an empirical variation of Moher's circle equation for compression principal stress. Knowing the limit allowable shear, tension, and compression stresses, the stress interaction diagram is drawn. The next step is to determine the incremental limit allowable stresses.

The incremental limit allowable stress is derived in the following manner: The 1g flight axial and shear stresses at a particular point in the wing are plotted as point G in figure 11. Point H in figure 11 is determined by drawing a line from point G having a slope equal to the ratio of axial stress response parameter to the shear stress response parameter. The slope of line G-H is based on the assumption of 100-percent correlation between axial and shear stress. The resulting incremental limit allowable axial and shear stresses are shown in the figure. A method of analysis which includes the effect of correlation between stresses is described in reference 11.

SECTION IV

CONCLUSIONS

The minimum value of $\sigma_W \eta_D$ for all the conditions investigated is 53, which is for the maximum-gross-weight high-speed flight condition and the 1,000-foot scale of turbulence.

The most critical (largest) value of stress response parameter is for the 1,000-foot scale of turbulence and the heavy gross weight, high-speed conditions. Reducing the gross weight, lowering the speed, and increasing the scale of turbulence reduces the value of the stress response parameter.

The largest zero-crossing rate is associated with the lowest-gross-weight airplane and is little affected by the scale of turbulence.

The stress response parameter and zero-crossing rate are little affected by the upper cutoff frequency, where the cutoff frequency is above the highest modal frequency included in the analysis.

APPENDIX I
WEIGHT DATA

Table IV. Weight Condition A (Maximum Zero Flap Weight; Gross Weight: 297,000 Pounds)

BODY

Panel number	Body balance station	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg (lb-in.^{2} x 10^{-6})		
			Body balance station	Body buttock line	Body waterline[e]	Pitch	Roll	Yaw
1	130 to 259	2,771	220	0	218	4.45	3.95	3.57
2[a]	259 to 360	5,290	320	↑	207	15.5	14.6	11.3
3	360 to 420	9,810	393		189	12.1	18.1	12.6
4	420 to 480	11,715	450		182	11.9	20.5	15.7
5	480 to 540	11,482	510		181	10.4	18.8	15.3
6	540 to 620	11,633	571		182	12.3	31	15.9
7	620 to 755	3,055	689		210	11	11.2	9.33
8	755 to 820	1,500	802		208	3.68	5.47	2.88
9[b]	820 to 890	9,333	872		185	12.7	27.2	26.5
10	890 to 960	2,037	926		209	5.11	7.43	4.03
11	960 to 1020	11,823	989		183	10.1	18.7	15.9
12	1020 to 1080	10,717	1,050		189	8.61	15.9	13.7
13	1080 to 1140	10,042	1,110		184	8.56	16.3	12.2
14	1140 to 1200	10,004	1,170		189	10.6	18.3	12.4
15	1200 to 1280	5,958	1,223		191	5.47	9.94	7.57
16	1280 to 1360	1,252	1,321		217	2.58	3.79	2.55
17	1360 to 1440	5,035	1,406	↓	220	3.63	6.45	6.85
18[c]	1440 to 1676	9,697	1,569	0	288	130	113	102

WING/SIDE

1	0 to 70.5	14,177	732.2	36.5	182.7	47.1	7.73	51.7
2[d]	70.5 to 157.2	19,774	764.2	112.7	185.8	92.6	15	103
3	157.2 to 235.8	11,893	805.4	195.6	192.4	42.2	6.05	47.4
4	235.8 to 314.4	8,004	855.1	271.1	191.3	18.1	4.04	21
5	314.4 to 393	6,593	897.4	348.6	195.6	12.3	3.82	15.3
6	393.0 to 471.6	4,733	950.1	429.2	205.2	7.56	2.70	9.80
7	471.6 to 550.2	1,798	988.7	496.8	210.7	3.59	0.818	4.23
8	550.2 to 628.8	1,937	1,058.2	595.2	236.7	1.93	1.12	2.44
9	628.8 to 707.4	1,615	1,092	663.9	243.1	1.37	0.911	2.15
10	707.4 to 786.6	1,558	1,149.1	735.2	249.7	0.683	0.314	0.970

Fuel density at 6.5 pounds per gallon

Notes: a Includes nose gear in the UP position
b Includes tires, truck assembly, air, wheels, and side strut of main landing gear in the UP position
c Includes the horizontal tail, vertical tail, and refueling boom
d Includes inner cylinder, outer cylinder, trunnion, and landing gear support structure in wing
e Cruise condition

Table IV --- Concluded

TOTAL AIRPLANE

Airplane section	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg ($lb\text{-}in.^2 \times 10^{-6}$)		
		Body balance station	Body buttock line	Body waterline[e]	Pitch	Roll	Yaw
Body	133,154	858.4	0	196.9	19,200	452	19,200
Wing	142,164	823.8	212.4	192.9	1,770	3,960	5,650
Nacelles	10,938	713.7	322	159	16.9	2.64	15.7
Nacelles	10,744	898.1	552	197	16.2	2.60	15
Total/avg	297,000	837.9	0	193.6	21,400	15,300	35,900

Table V. Weight Condition B (Maximum Transfer Weight; Gross Weight: 268,000 Pounds)

BODY

Panel number	Body balance station	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg ($lb\text{-}in.^2 \times 10^{-6}$)		
			Body balance station	Body buttock line	Body waterline[e]	Pitch	Roll	Yaw
1	130 to 259	2,771	220	0	216	4.45	3.95	3.57
2[a]	259 to 360	5,290	320	↓	207	15.5	14.6	11.3
3	360 to 420	9,810	393		189	12.1	18.1	12.6
4	420 to 480	11,715	450		182	11.9	20.5	15.7
5	480 to 540	11,482	510		181	10.4	18.8	15.3
6	540 to 620	11,633	571		182	12.3	21	15.9
7	620 to 755	3,055	689		210	11	11.2	9.33
8	755 to 820	1,500	802		208	3.68	5.47	2.98
9[b]	820 to 890	9,333	872		185	12.7	7.2	26.5
10	890 to 960	2,037	926		209	5.11	7.43	4.03
11	960 to 1020	11,823	989		183	10.1	18.7	15.9
12	1020 to 1080	10,717	1,050		189	8.61	15.9	13.7
13	1080 to 1140	10,042	1,110		184	8.56	16.3	12.2
14	1140 to 1200	10,004	1,170		189	10.6	16.3	12.4
15	1200 to 1280	5,958	1,223		191	5.47	9.94	7.57
16	1280 to 1360	1,252	1,321		217	2.58	3.79	2.55
17	1360 to 1440	9,273	1,408	↓	233	6.38	11.6	11.8
18[c]	1440 to 1676	10,057	1,564	0	287	136	114	108

WING SIDE

1	0 to 70.5	14,177	732.2	36.5	182.7	47.1	7.73	51.7
2[d]	70.5 to 157.2	18,531	765.4	110.5	181	89	12.8	98.4
3	157.2 to 235.8	7,039	819.3	195.5	177.8	27	4.49	30.9
4	235.8 to 314.4	6,177	868.5	275.9	185.9	12.4	2.95	14.8
5	314.4 to 393	4,521	900	346.6	188.8	8.92	2.45	11.1
6	393.0 to 471.6	1,598	965.6	424.8	197	3.38	0.947	4.24
7	471.6 to 550.2	951	1,016	506.5	205.5	1.60	0.427	1.97
8	550.2 to 628.8	647	1,053.6	580.7	220.1	1.09	0.311	1.37
9	628.8 to 707.4	378	1,098.5	660	233.4	0.690	0.209	0.885
10	707.4 to 786.6	264	1,151.1	744.5	255.9	0.525	0.204	0.721

Fuel density at 6.5 pounds per gallon

Notes: a Includes nose gear in the UP position
b Includes tires, truck assembly, air, wheels, and side strut of main landing gear in the UP position
c Includes the horizontal tail, vertical tail, and refueling boom
d Includes inner cylinder, outer cylinder, trunnion, and landing gear support structure in wing
e Cruise condition

Table V --- Concluded

TOTAL AIRPLANE

Airplane section	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg ($lb\text{-}in.^2 \times 10^{-6}$)		
		Body balance station	Body buttock line	Body waterline[e]	Pitch	Roll	Yaw
Body	137,752	876.9	0	198.7	20,600	468	20,500
Wing	108,566	804.6	169.4	184.3	1,110	2,140	3,220
Nacelles	10,938	713.7	322	159	16.9	2.64	15.7
Nacelles	10,744	898.1	552	197	16.2	2.60	15
Total/avg	268,000	841.8	0	191.2	22,300	10,200	31,800

Table VI Weight Condition C (Intermediate Gross Weight with Structural Reserve Fuel; Gross Weight: 190,590 Pounds)

BODY

Panel number	Body balance station	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg ($lb\text{-}in.^2 \times 10^{-6}$)		
			Body balance station	Body buttock line	Body waterline[e]	Pitch	Roll	Yaw
1	130 to 259	2,771	220	0	218	4.45	3.95	3.57
2[a]	259 to 360	5,290	320	↑	207	15.5	14.6	11.3
3	360 to 420	9,810	393	↑	189	12.1	18.1	12.6
4	420 to 480	11,715	450	↑	182	11.9	20.5	15.7
5	480 to 540	11,482	510	↑	181	10.4	18.8	15.3
6	540 to 620	11,633	571	↑	182	12.3	21	15.9
7	620 to 755	3,055	689	↑	210	11	11.2	9.33
8	755 to 820	1,500	802	↑	208	3.68	5.47	2.88
9[b]	820 to 890	9,333	872	↑	185	12.7	27.2	26.5
10	890 to 960	2,037	926	↑	209	5.11	7.43	4.03
11	960 to 1020	11,023	909	↑	183	10.1	18.7	15.9
12	1020 to 1080	10,717	1,050	↑	189	8.61	15.9	13.7
13	1080 to 1140	10,042	1,110	↑	184	8.56	16.3	12.2
14	1140 to 1200	10,004	1,170	↑	189	10.6	18.3	12.4
15	1200 to 1280	5,956	1,223	↑	191	5.47	9.94	7.57
16	1280 to 1360	1,252	1,321	↑	217	2.58	3.79	2.55
17	1360 to 1440	5,035	1,406	↓	220	3.63	6.45	6.85
18[c]	1440 to 1676	9,699	1,569	0	288	130	113	102

WING/SIDE

1	0 to 70.5	1,645	746.3	45.6	173	6.13	1.10	6.73
2[d]	70.5 to 157.2	5,673	816	115.5	176.3	26.9	4.65	30.6
3	157.2 to 235.8	2,793	842.2	196.6	176.1	13.4	2.62	15.4
4	235.8 to 314.4	2,785	868.7	261	180.8	6.24	1.51	7.50
5	314.4 to 393	1,569	906.3	344.3	186.5	4.47	0.876	5.20
6	393.0 to 471.6	1,171	974.9	432.6	196.5	2.58	0.654	3.16
7	471.6 to 550.2	951	1,016	506.5	205.5	1.60	0.427	1.97
8	550.2 to 628.8	647	1,053.6	580.7	220.1	1.09	0.311	1.37
9	628.8 to 707.4	378	1,098.5	660	233.4	0.690	0.209	0.885
10	707.4 to 786.6	264	1,161.1	744.5	253.9	0.525	0.204	0.721

Fuel density at 6.5 pounds per gallon

Notes: a Includes nose gear in the UP position
b Includes tires, truck assembly, air, wheels, and side strut of main landing gear in the UP position
c Includes the horizontal tail, vertical tail, and refueling boom
d Includes inner cylinder, outer cylinder, trunnion, and landing gear support structure in wing
e Cruise condition

Table VI --- Concluded

TOTAL AIRPLANE

Airplane section	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg ($lb\text{-}in.^2 \times 10^{-6}$)		
		Body balance station	Body buttock line	Body waterline[e]	Pitch	Roll	Yaw
Body	133,156	858.4	0	196.9	19,200	452	19,200
Wing	35,752	870.5	243.7	184.4	422	1,020	1,420
Nacelles	10,938	713.7	322	159	16.9	2.64	15.7
Nacelles	10,744	898.1	552	197	16.2	2.60	15
Total/avg	190,590	854.6	0	192.4	20,000	8,030	27,400

Table VII. Weight Condition D (Operating Weight Empty with Structural Reserve Fuel; Gross Weight: 107,260 Pounds)

BODY

Panel number	Body balance station	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg ($lb\text{-}in.^2 \times 10^{-6}$)		
			Body balance station	Body buttock line	Body waterline[e]	Pitch	Roll	Yaw
1	130 to 259	2,771	220	0	218	4.45	3.95	3.57
2[a]	259 to 360	5,290	320		207	15.5	14.6	11.3
3	360 to 420	2,258	384		215	6.14	9.33	4.78
4	420 to 480	1,495	451		220	3.59	5.45	2.79
5	480 to 540	1,262	513		214	3.03	4.60	2.36
6	540 to 620	1,925	584		212	4.62	7.02	3.60
7	620 to 755	3,055	689		210	11	11.2	9.33
8	755 to 820	1,500	802		208	3.68	5.47	2.88
9[b]	820 to 890	9,333	872		185	12.7	27.2	26.5
10	890 to 960	2,037	926		209	5.11	7.43	4.03
11	960 to 1020	1,806	982		185	4.33	6.59	3.37
12	1020 to 1080	1,104	1,051		211	2.65	4.03	2.06
13	1080 to 1140	1,146	1,110		214	2.63	4.07	2.14
14	1140 to 1200	1,834	1,174		221	3.94	6.26	3.43
15	1200 to 1280	1,197	1,238		215	2.74	3.97	2.52
16	1280 to 1360	1,252	1,321		217	2.58	3.79	2.55
17	1360 to 1440	1,273	1,395		223	2.07	2.83	2.11
18[c]	1440 to 1676	9,288	1,574	0	291	121	111	95.3

WING/SIDE

1	0 to 70.5	1,645	746.3	45.6	173	6.13	1.10	6.73
2[d]	70.5 to 157.2	5,673	816	115.5	176.3	26.9	4.65	30.6
3	157.2 to 235.8	2,793	842.2	196.6	176.1	13.4	2.62	15.4
4	235.8 to 314.4	2,785	868.7	261	180.8	6.24	1.51	7.50
5	314.4 to 393	1,569	906.3	344.3	166.5	4.47	0.876	5.20
6	393.0 to 471.6	1,171	974.9	432.6	196.5	2.58	0.654	3.16
7	471.6 to 550.2	951	1,016	506.5	205.5	1.60	0.427	1.97
8	550.2 to 628.8	647	1,053.6	580.7	220.1	1.09	0.311	1.37
9	628.8 to 707.4	378	1,098.5	660	233.4	0.690	0.209	0.885
10	707.4 to 786.6	264	1,161.1	744.5	253.9	0.525	0.204	0.721

Fuel density at 6.5 pounds per gallon

Notes: a Includes nose gear in the UP position
b Includes tires, truck assembly, air, wheels, and side strut of main landing gear in the UP position
c Includes the horizontal tail, vertical tail, and refueling boom
d Includes inner cylinder, outer cylinder, trunnion, and landing gear support structure in wing
e Cruise condition

Table VII --- Concluded

TOTAL AIRPLANE

Airplane section	Weight (lb)	Center-of-gravity location (in.)			Moment of inertia about cg ($lb\text{-}in.^2 \times 10^{-6}$)		
		Body balance station	Body buttock line	Body waterline[e]	Pitch	Roll	Yaw
Body	49,826	900	0	221.4	9,300	381	9,810
Wing	35,752	870.5	243.7	134.4	422	1,020	1,420
Nacelles	10,938	713.7	322	159	16.9	2.64	15.7
Nacelles	10,744	898.1	552	197	16.2	2.60	15
Total/avg	107,260	871	0	200.3	10,700	7,910	18,100

APPENDIX II
STIFFNESS DATA

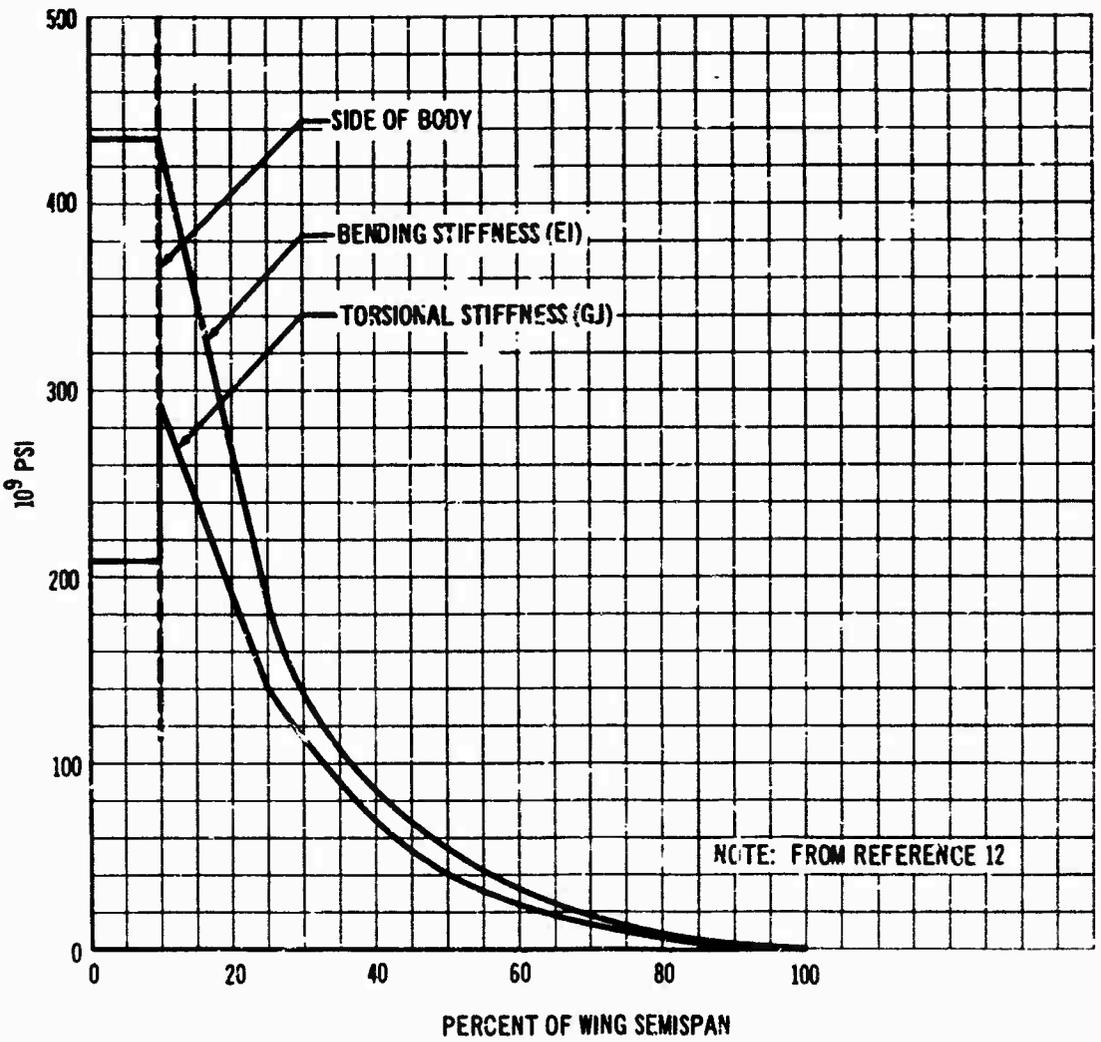


Figure 12. Wing Vertical-Bending and Torsion Stiffness

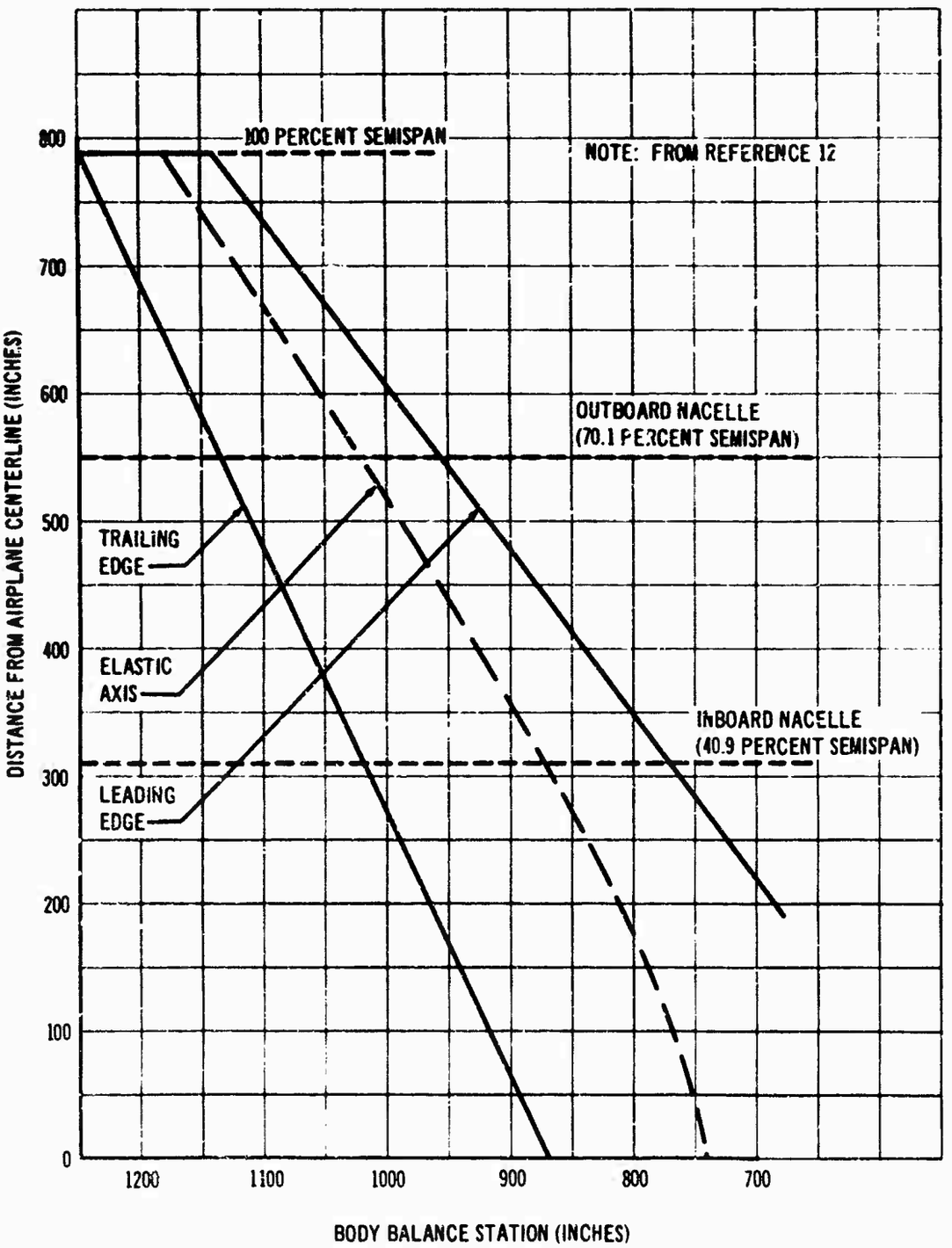


Figure 13. Wing Elastic-Axis Location

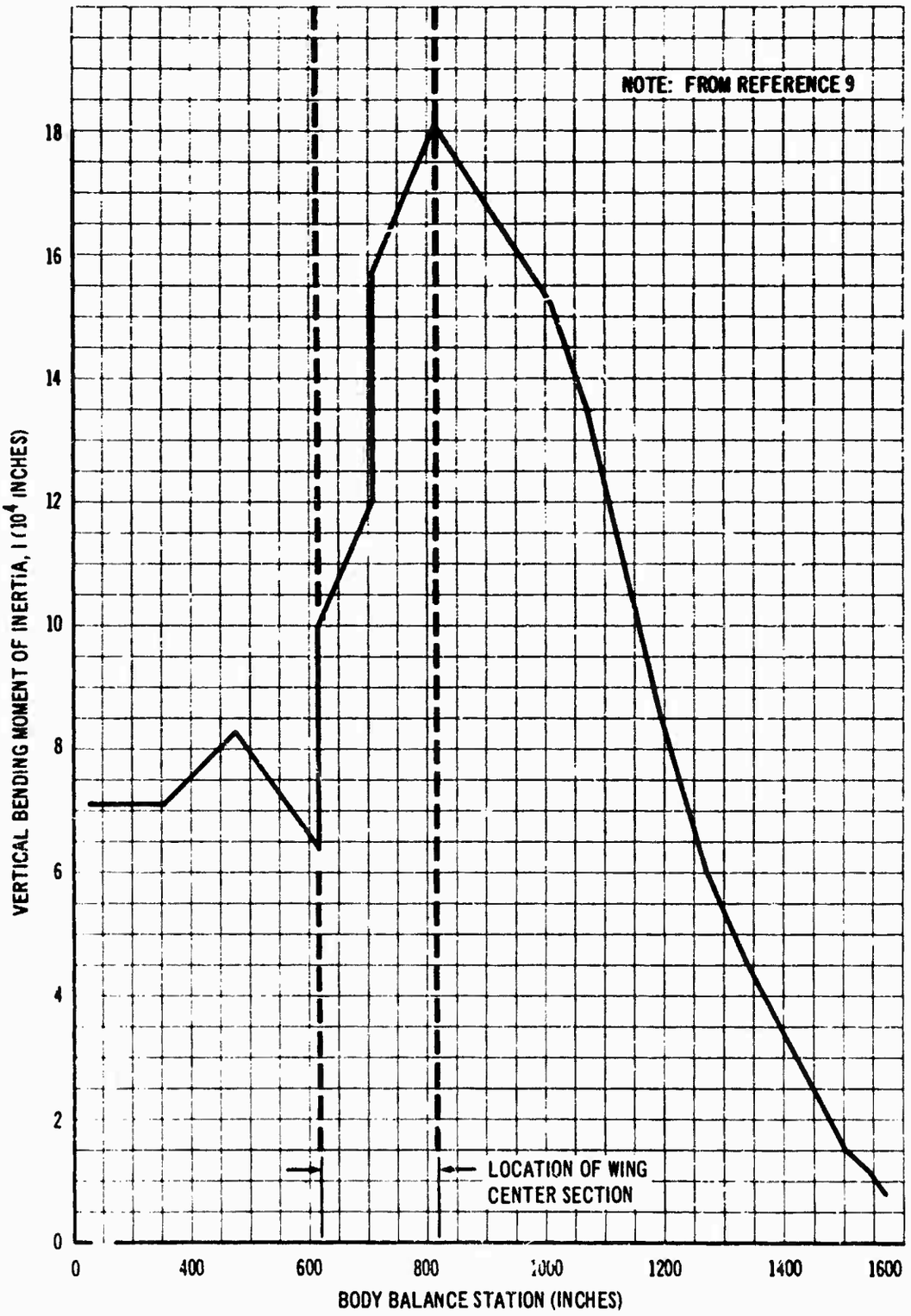


Figure 14. Body Vertical-Bending Section Moment of Inertia

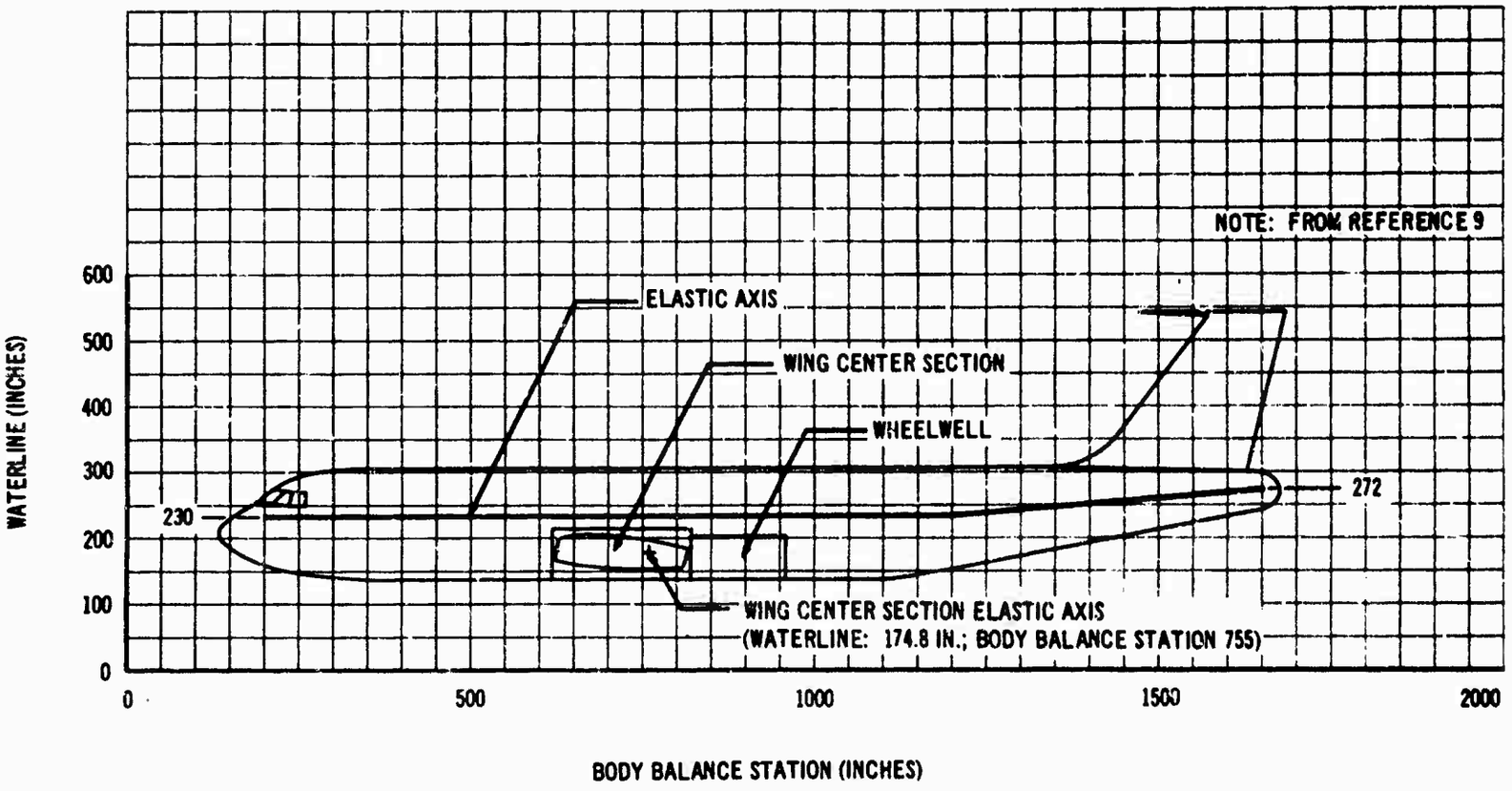
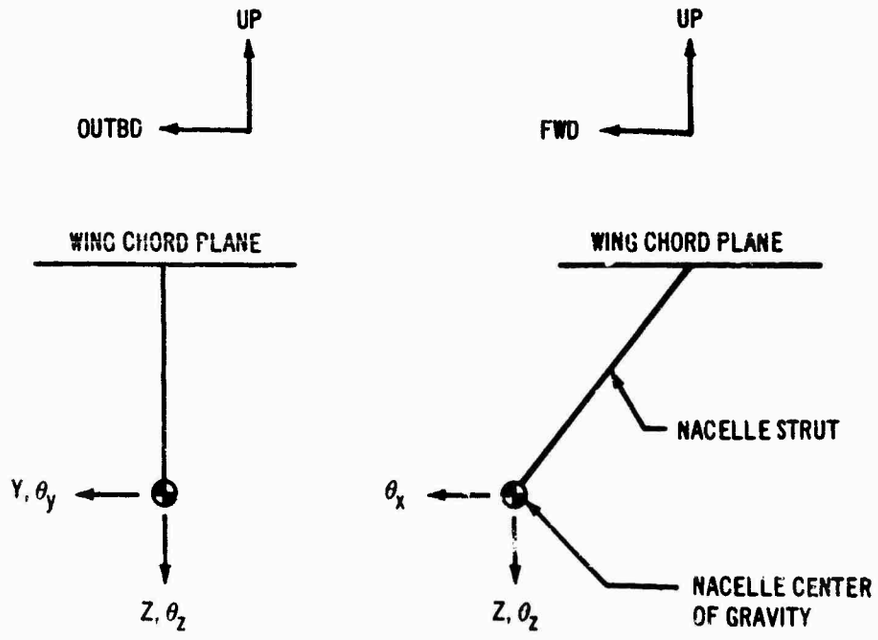


Figure 15. Body Elastic-Axis Location

Table VIII. Nacelle Cantilever Mode Shapes and Frequencies

Location	Vertical bending		Side bending		
	Z (in.)	θ_y (rad.)	Y (in.)	θ_z (rad.)	θ_x (rad.)
MODE SHAPES					
Inboard nacelle	108	−1	1	0.0136	−0.0057
Outboard nacelle	98	−1	1	0.0150	−0.0061
FREQUENCIES (FROM REFERENCE 4)					
Inboard nacelle	4.44 cps		2.31 cps		
Outboard nacelle	4.81 cps		2.50 cps		



APPENDIX III
AERODYNAMIC DATA

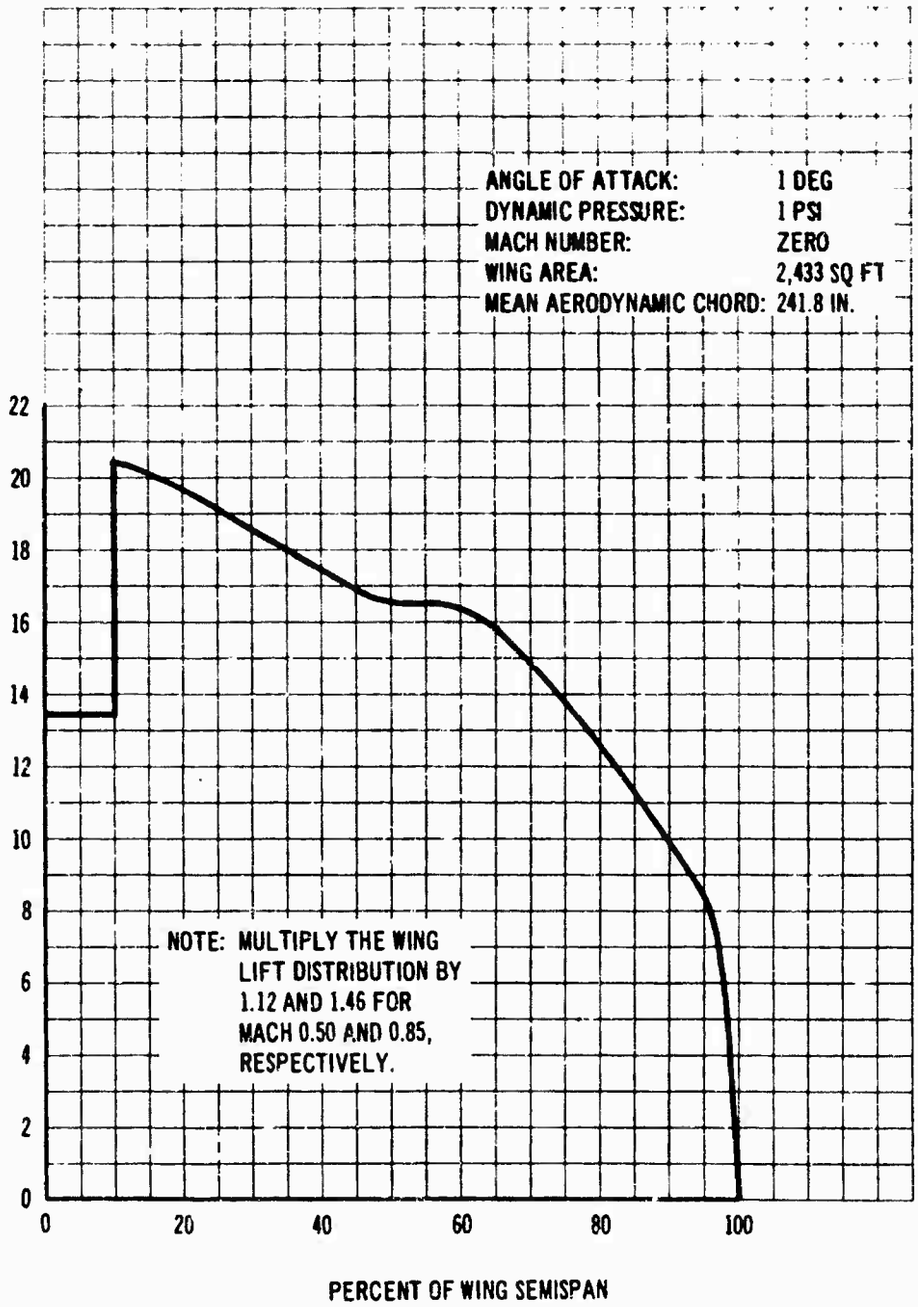


Figure 16. Wing Lift Distribution

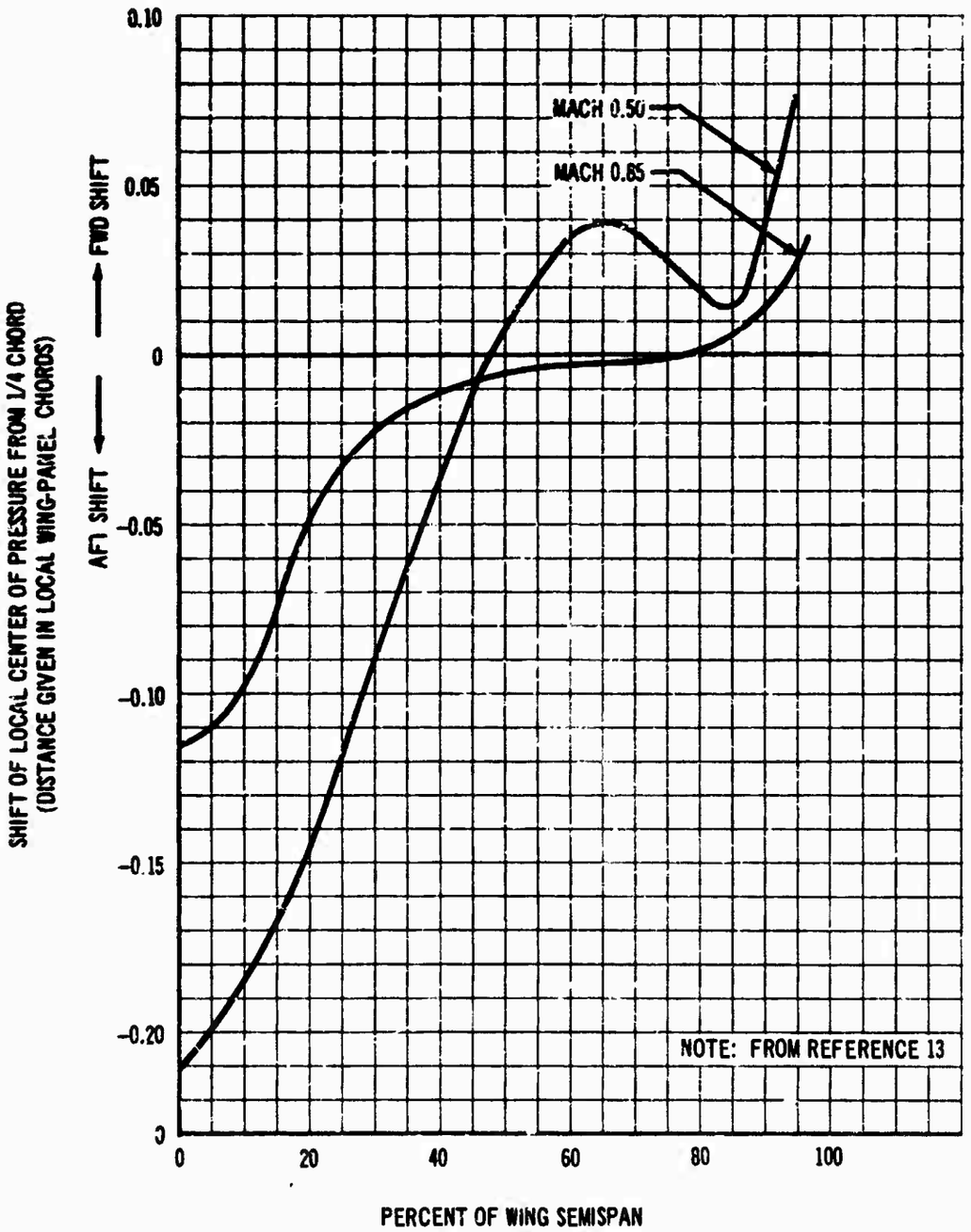


Figure 17. Local Center-of-Pressure Location

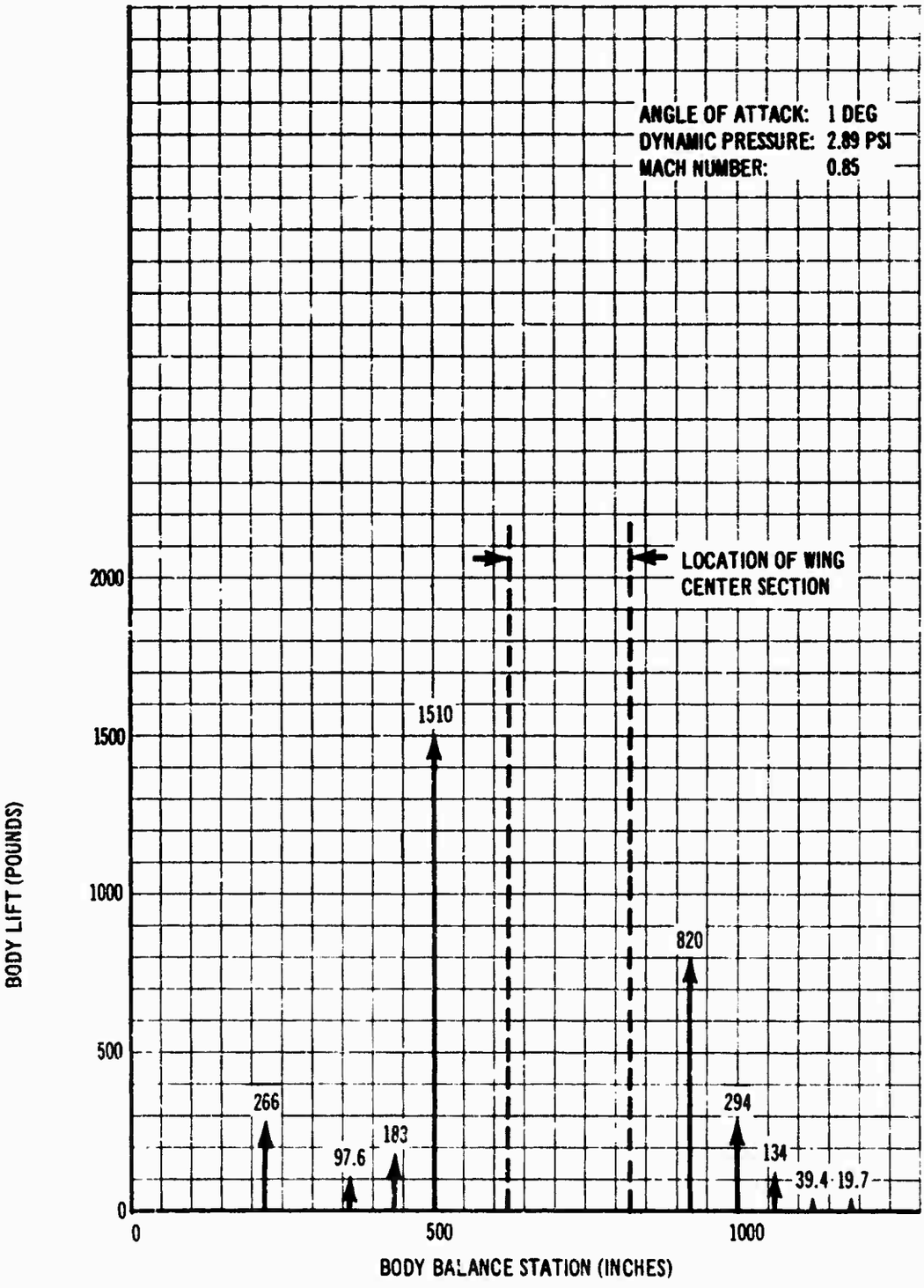


Figure 18. Body Lift Distribution (Mach 0.85)

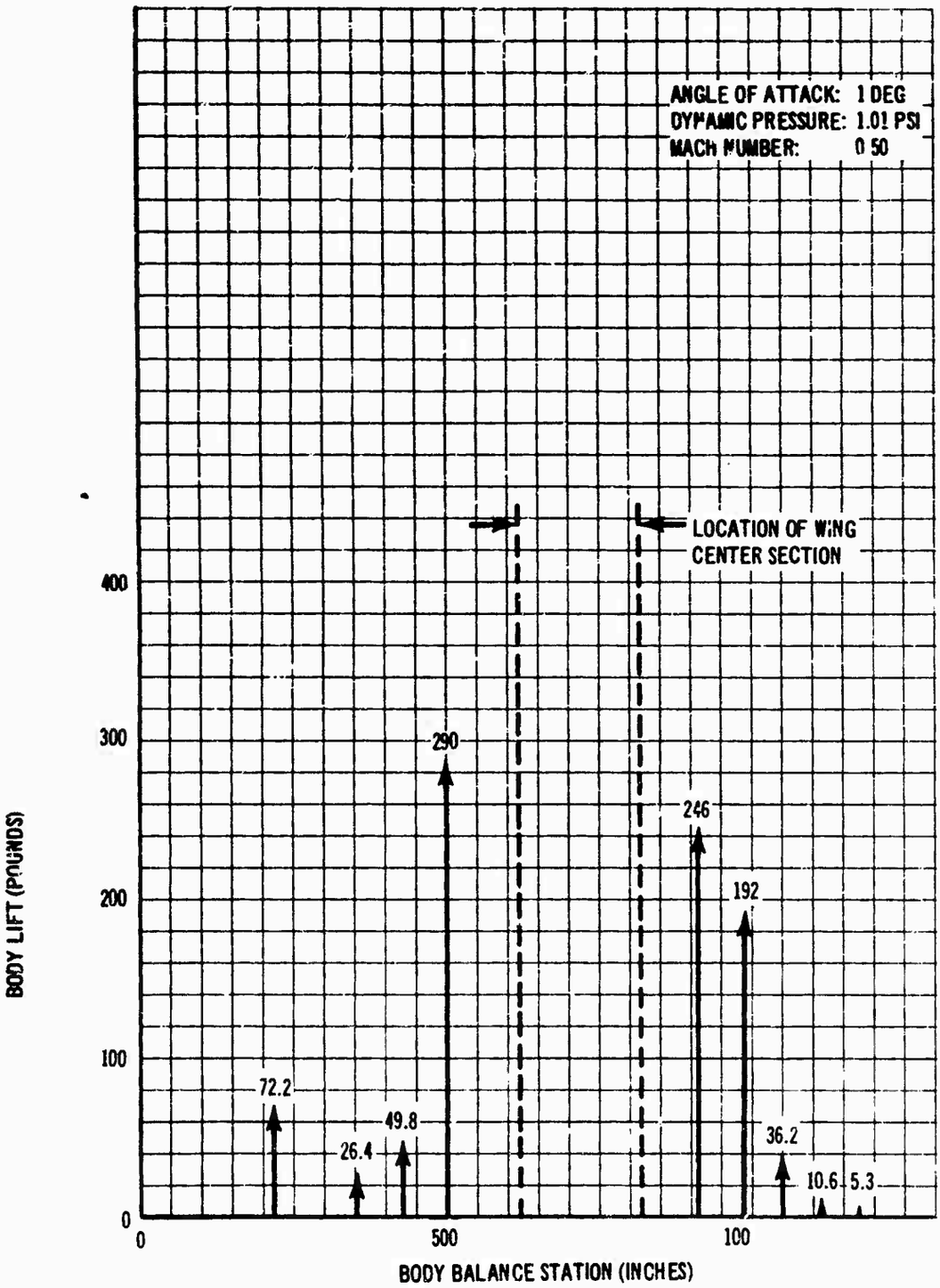


Figure 19. Body Lift Distribution (Mach 0.50)

Table IX. Rigid-Airplane Derivatives $\left(\frac{1}{Radian}\right)$

Mach number	Analysis		Wind tunnel (from reference 6)	
	$C_{L\alpha}$	$C_{M\alpha}$	$C_{L\alpha}$	$C_{M\alpha}$
0.50	5.06	1.51	5.14	1.50
0.85	6.49	1.68	6.71	1.70

$L = qsC_{L\alpha}\alpha$

$M = qs\bar{c}C_{M\alpha}\alpha$

L = lift

M = pitching moment about body station 837.9

q = dynamic pressure

s = wing area = 2,433 square feet

α = angle of attack

c = wing mean aerodynamic chord = 241.8 inches

Table X. Rigid-Horizontal-Stabilizer Lift at 24,000-Foot Altitude

Mach number	Lift (lb/rad.)	For flexible horizontal stabilizer, multiply lift by:
0.50	61,068	0.971
0.80	183,156	0.923

Note: Horizontal stabilizer center of lift is at body balance station 1581.3.

APPENDIX IV
AIRPLANE FREE-FREE MODE SHAPES

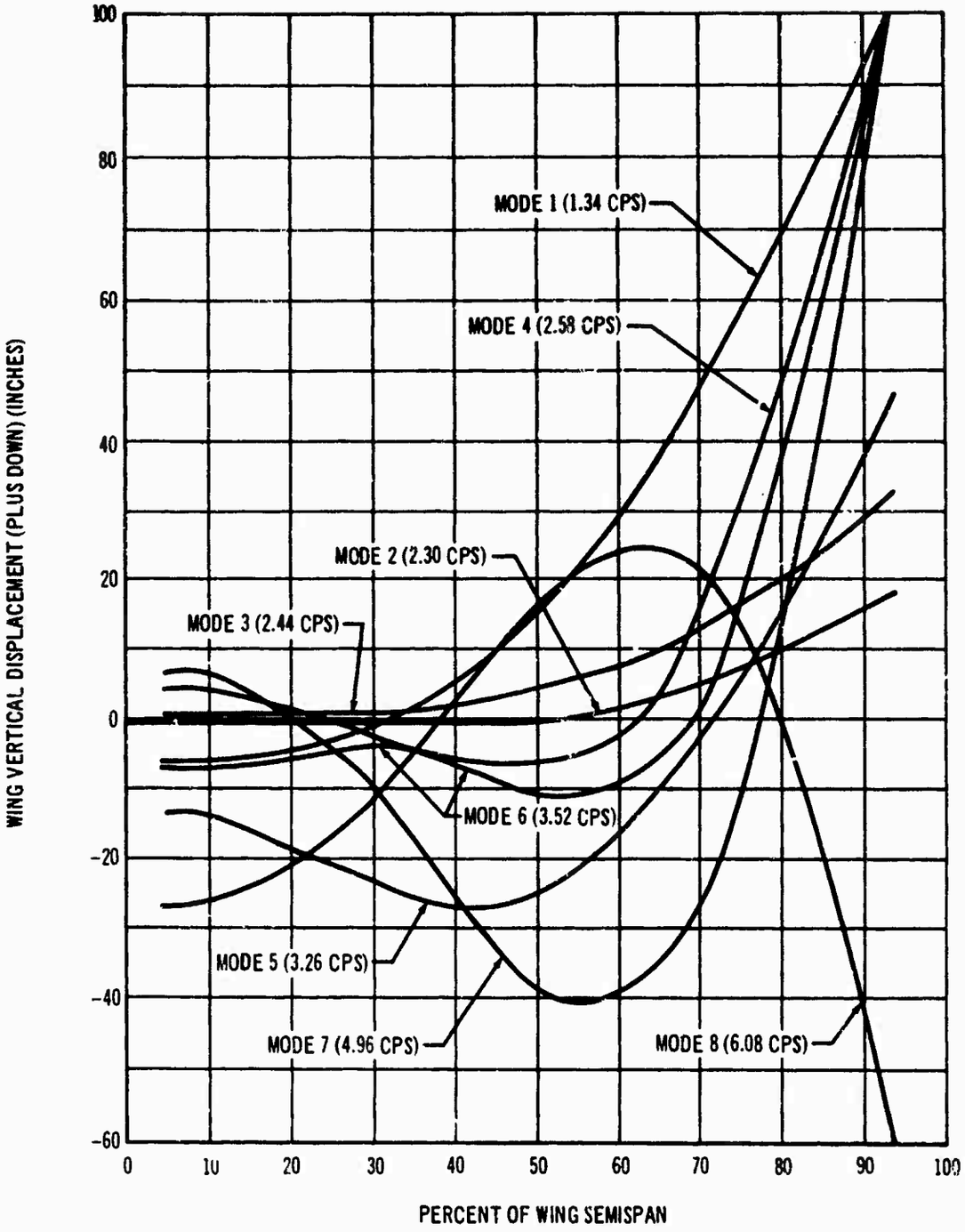


Figure 20. Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)

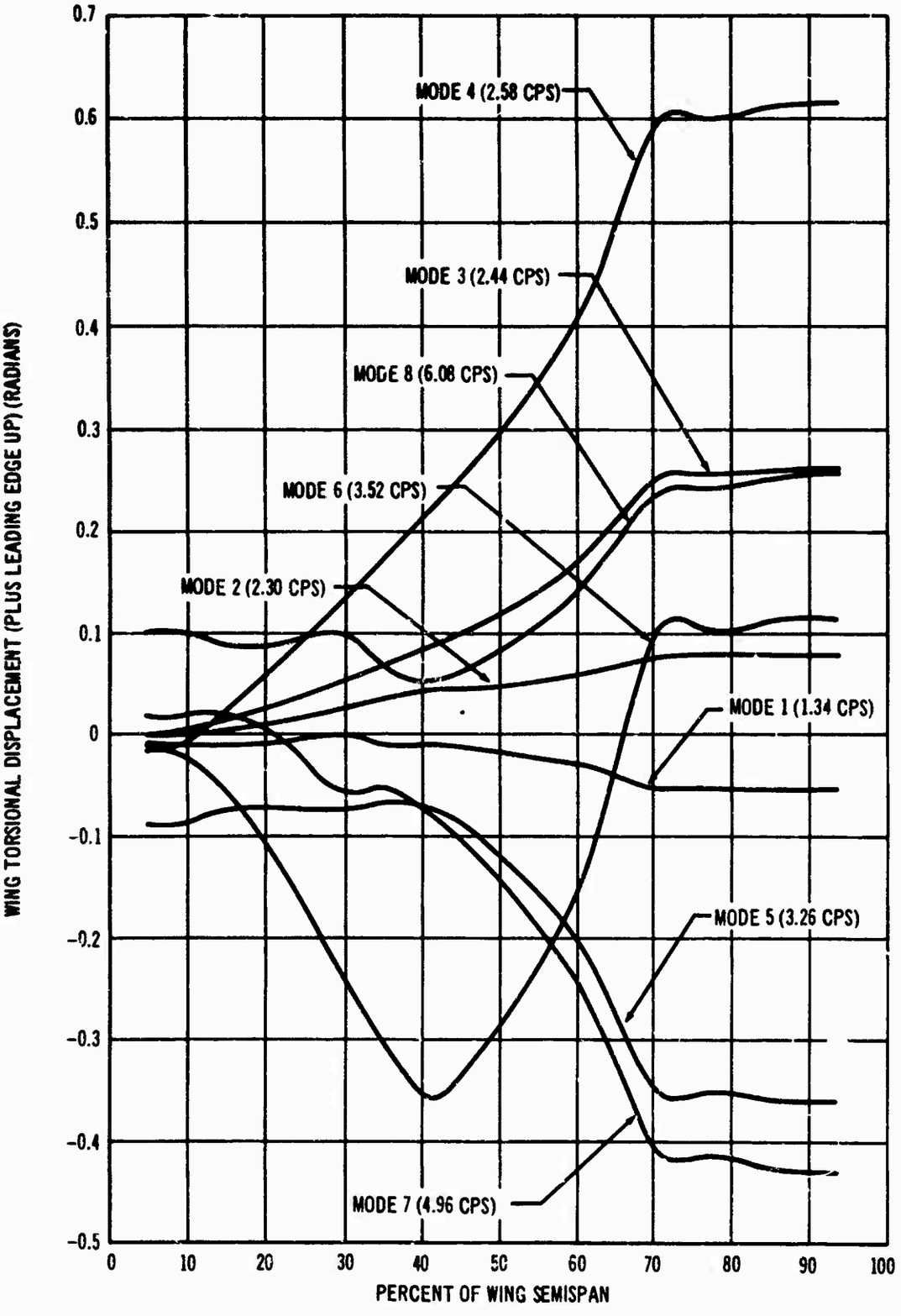


Figure 21. Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)

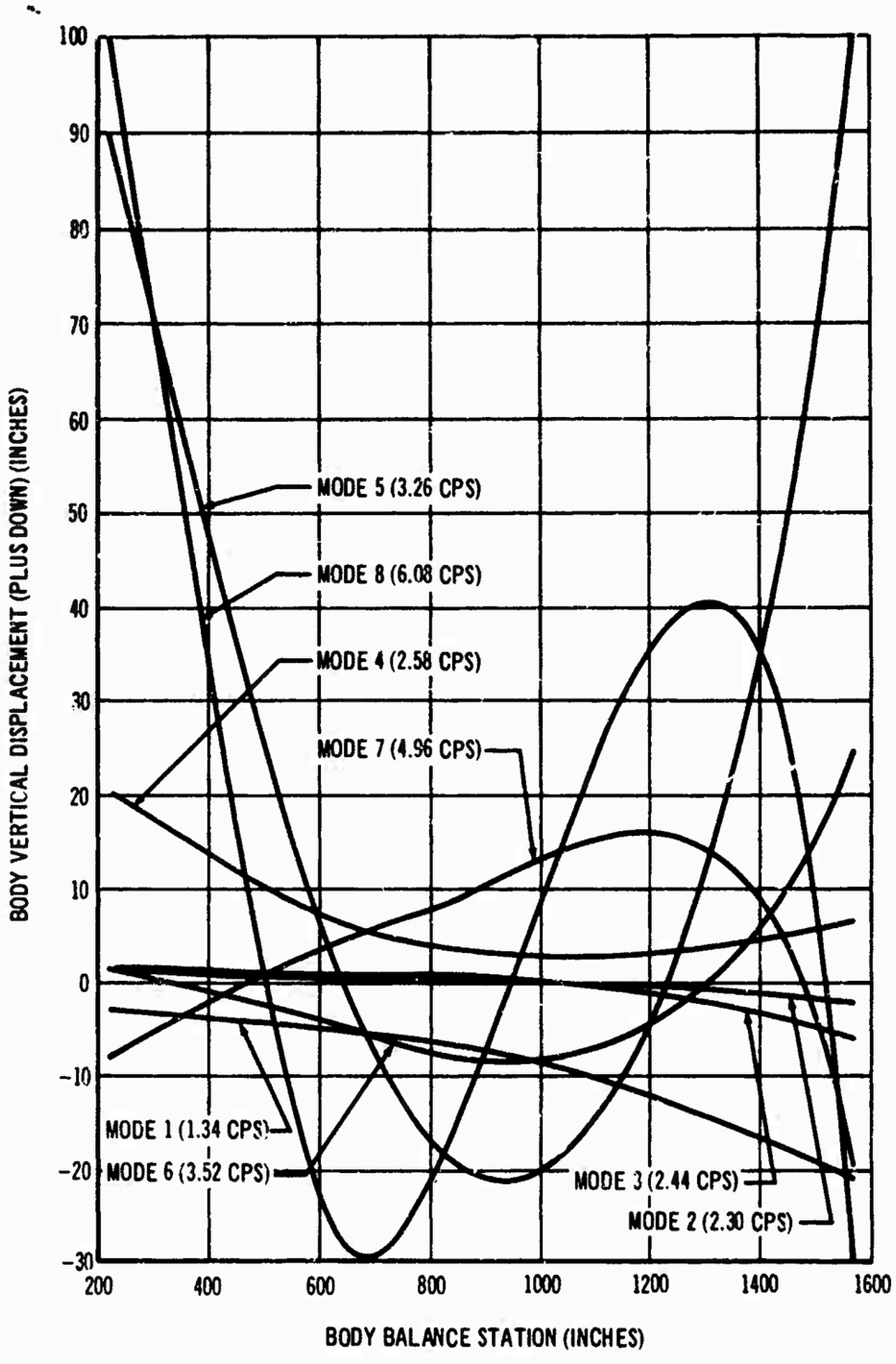


Figure 22. Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 297,000-Pound Gross Weight (Weight Condition A)

Table XI. Nacelle Mode Shapes (Weight Condition A)

Nacelle position	Displacement	Mode number							
		1	2	3	4	5	6	7	8
Inboard	$\bar{x}$	−1.78	−1.68	−3.89	−8.30	+2.31	+15.20	+7.51	−5.05
	$\bar{y}$	−5.42	+74.55	−8.49	−18.88	+0.84	+2.72	−0.16	−0.28
	$\bar{z}$	+0.27	−8.29	−16.25	−51.95	−31.09	+125.88	−6.64	+18.78
	θ_x	+0.0923	−0.4413	+0.0280	+0.0091	+0.0170	+0.0884	−0.0754	+0.0824
	θ_y	+0.0375	+0.0565	+0.1293	+0.3345	+0.0751	−1.0573	−0.1073	−0.2043
	θ_z	−0.0214	+1.0000	−0.1327	−0.3401	+0.0299	+0.1254	−0.0669	+0.0649
Outboard	$\bar{x}$	−3.37	−3.72	−10.29	−28.16	+4.64	−11.00	+8.47	−0.62
	$\bar{y}$	−11.32	+1.70	+70.74	−54.94	+12.57	+4.17	+0.98	+0.58
	$\bar{z}$	+42.33	+6.97	−21.99	−85.85	+41.71	−55.77	+12.70	−3.20
	θ_x	+0.2173	−0.0159	−0.5017	+0.2549	+0.1643	+0.0990	+0.3341	−0.1780
	θ_y	+0.0425	+0.1035	+0.3005	+0.8969	−0.3985	+0.5370	−0.3467	+0.2164
	θ_z	−0.0407	+0.0206	+1.0000	−0.8936	+0.3983	+0.1712	+0.3107	−0.1431

Note: Sign convention for nacelle cg positive displacements

$\bar{x}$	Aft	θ_x	Roll, bottom inboard
$\bar{y}$	Outboard	θ_y	Pitch, nose up
$\bar{z}$	Down	θ_z	Yaw, nose outboard

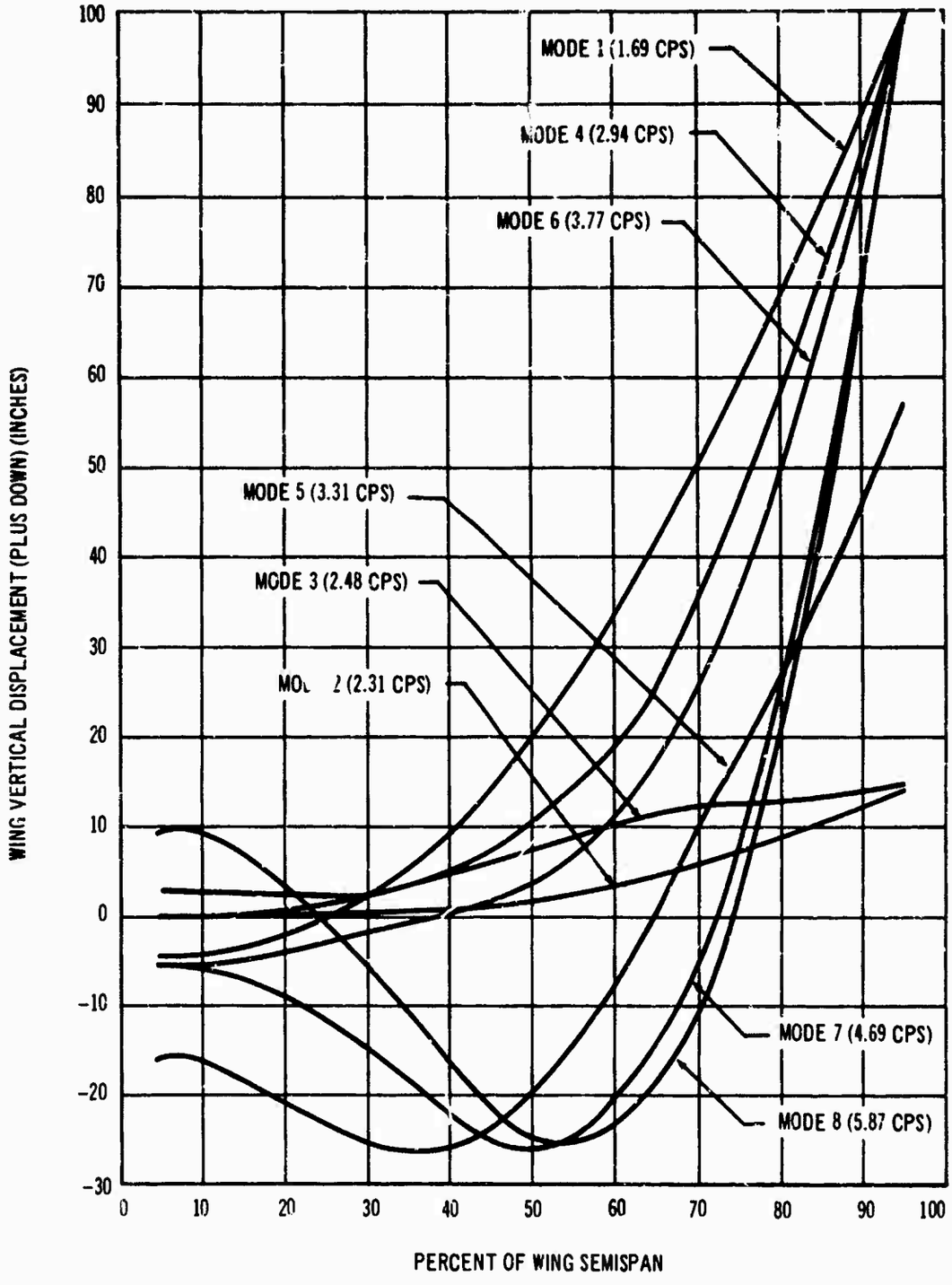


Figure 23. Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)

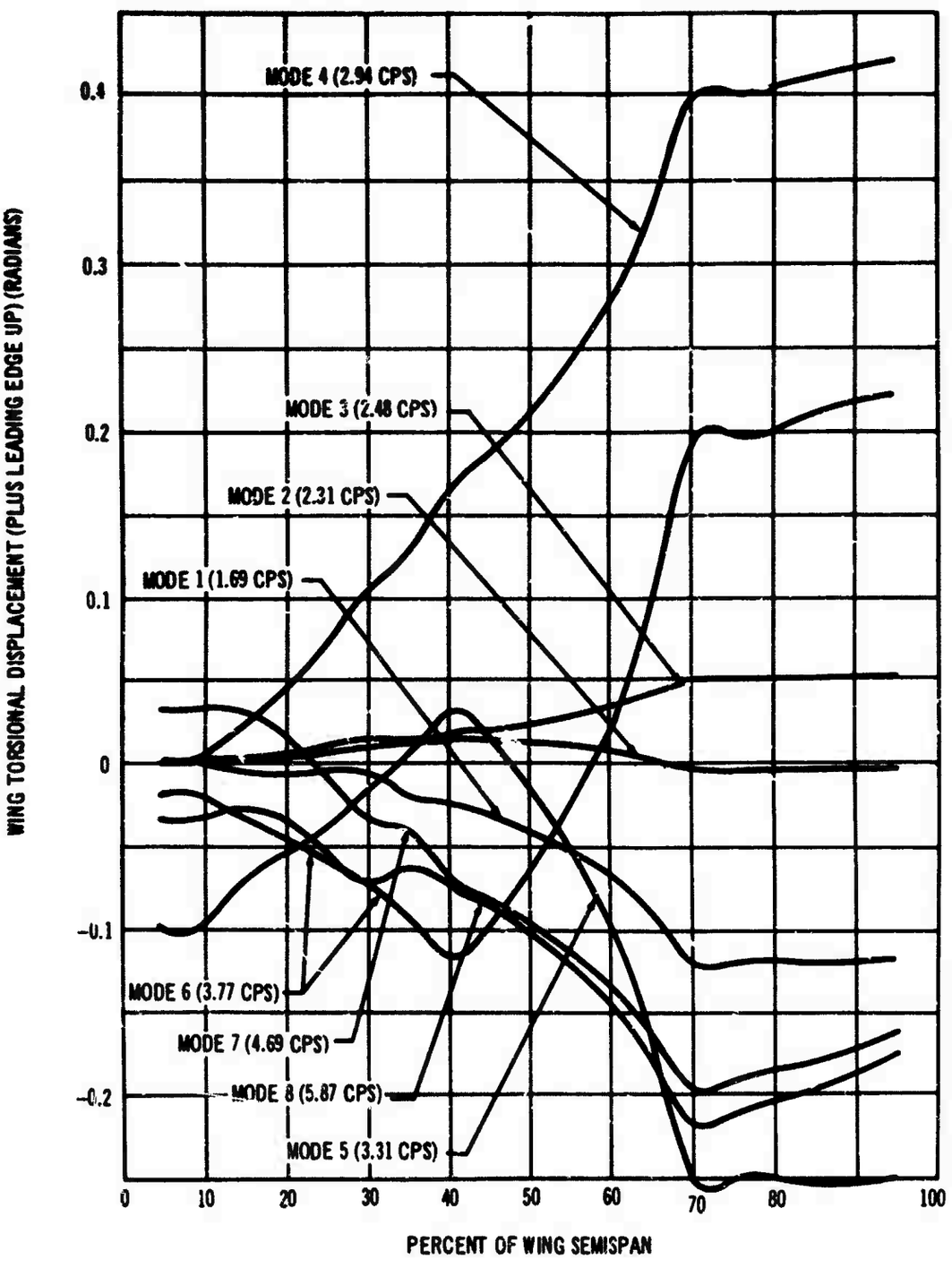


Figure 24. Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)

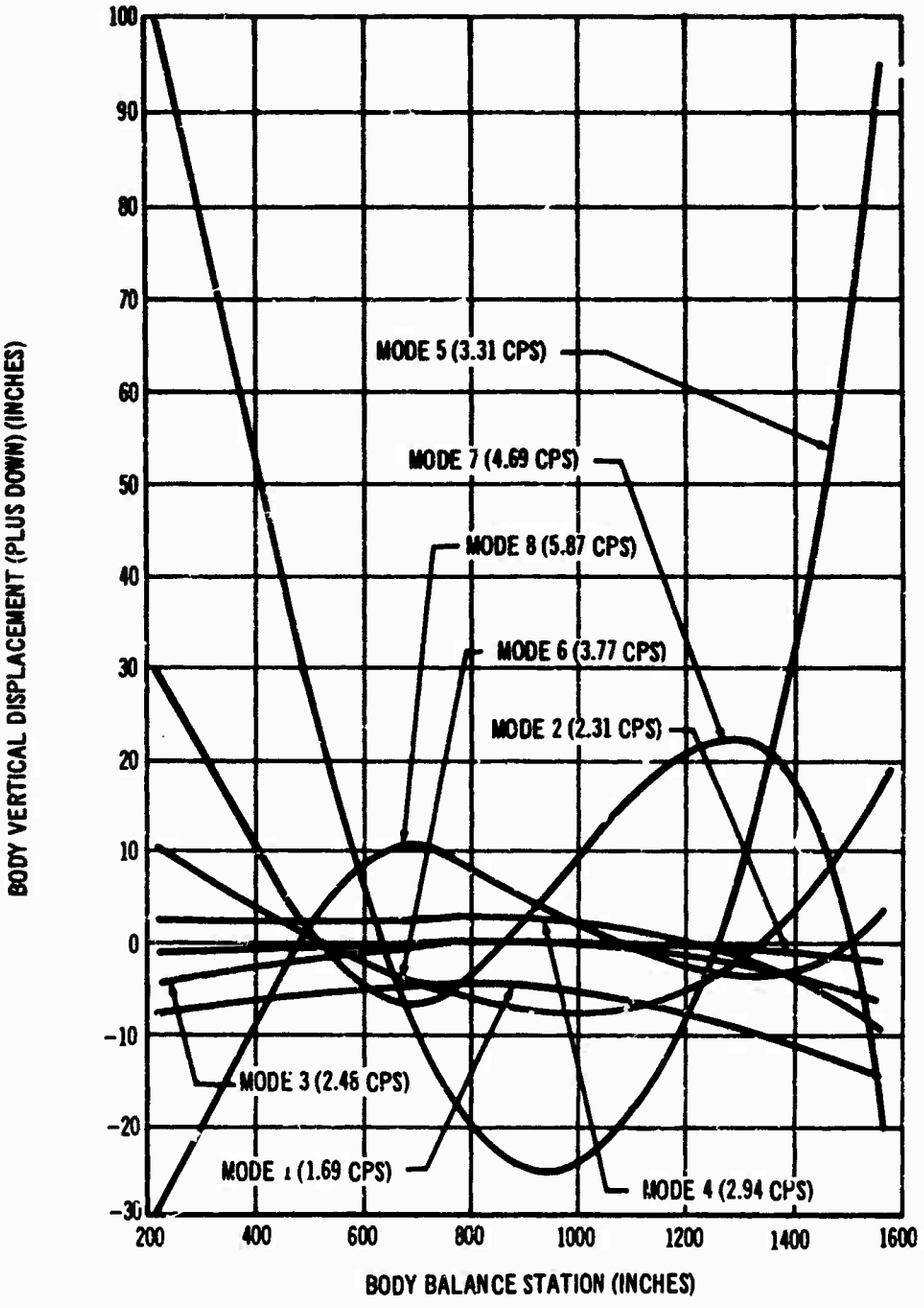


Figure 25. Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 268,000-Pound Gross Weight (Weight Condition B)

Table XII. Nacelle Mode Shapes (Weight Condition B)

Nacelle position	Displacement	Mode number							
		1	2	3	4	5	6	7	8
Inboard	$\bar{x}$	−1.42	−0.73	−1.41	−7.79	−3.03	+3.82	+4.94	+5.54
	$\bar{y}$	−6.81	+73.67	+3.84	−2.47	+0.38	−1.12	+0.04	+0.22
	$\bar{z}$	+5.77	−2.51	−0.97	−39.67	−70.28	+51.44	+3.75	−5.20
	θ_x	+0.1234	−0.4220	−0.0095	−0.0217	+0.0084	+0.0541	−0.0174	−0.0462
	θ_y	+0.0248	+0.0225	+0.0353	+0.3295	+0.3905	−0.4251	−0.1930	−0.0489
	θ_z	−0.0578	+1.0000	+0.0629	−0.0641	+0.0141	+0.0667	−0.0139	−0.0354
Outboard	$\bar{x}$	−0.19	−0.56	−1.76	−19.06	+0.64	−13.20	+2.21	+0.51
	$\bar{y}$	−15.85	−6.20	+67.73	−3.85	+9.75	+1.29	−0.60	−1.11
	$\bar{z}$	+57.66	+5.46	+8.93	−29.74	+45.09	−26.40	+3.84	+3.04
	θ_x	+0.2614	+0.0571	−0.4315	−0.0129	+0.1461	+0.0487	+0.2417	+0.2426
	θ_y	−0.0576	+0.0029	+0.0251	+0.5765	−0.3259	+0.4707	−0.0855	−0.1253
	θ_z	−0.0944	−0.0763	+1.0000	−0.0890	+0.3251	+0.0688	+0.1982	+0.1886

Note: Sign convention for nacelle cg positive displacements

$\bar{x}$ Aft — θ_x Roll, bottom inboard
$\bar{y}$ Outboard — θ_y Pitch, nose up
$\bar{z}$ Down — θ_z Yaw, nose outboard

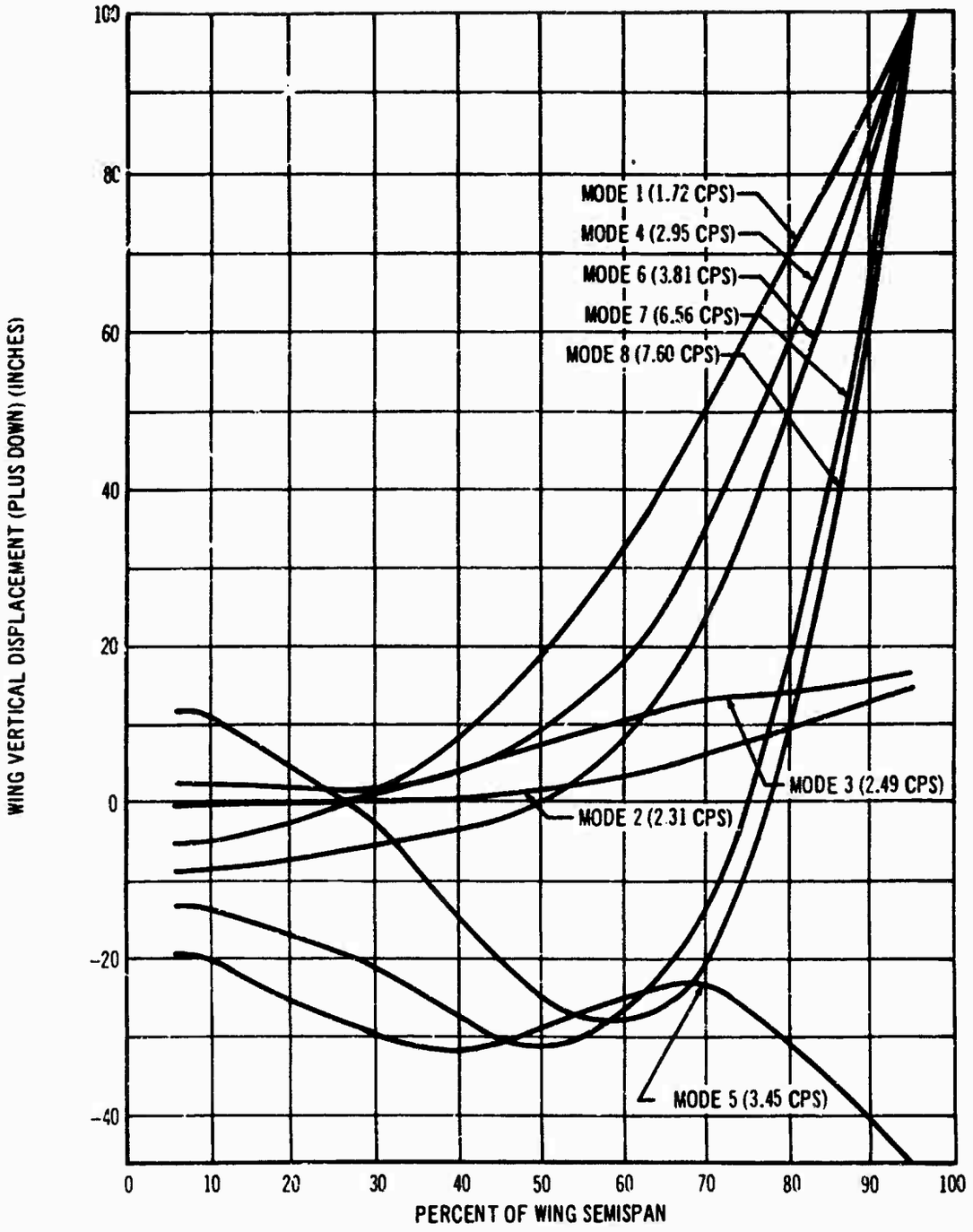


Figure 26. Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)

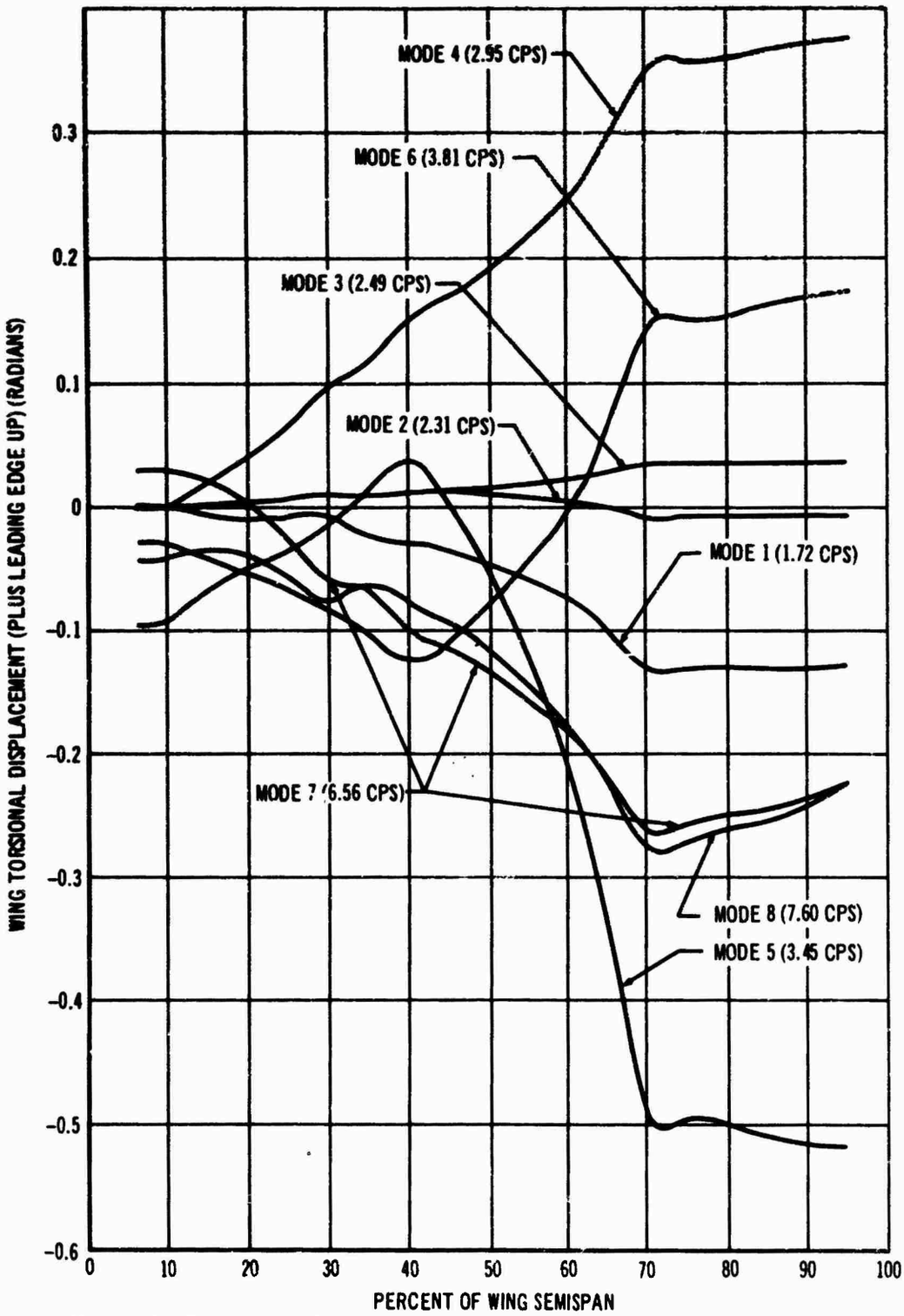


Figure 27. Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)

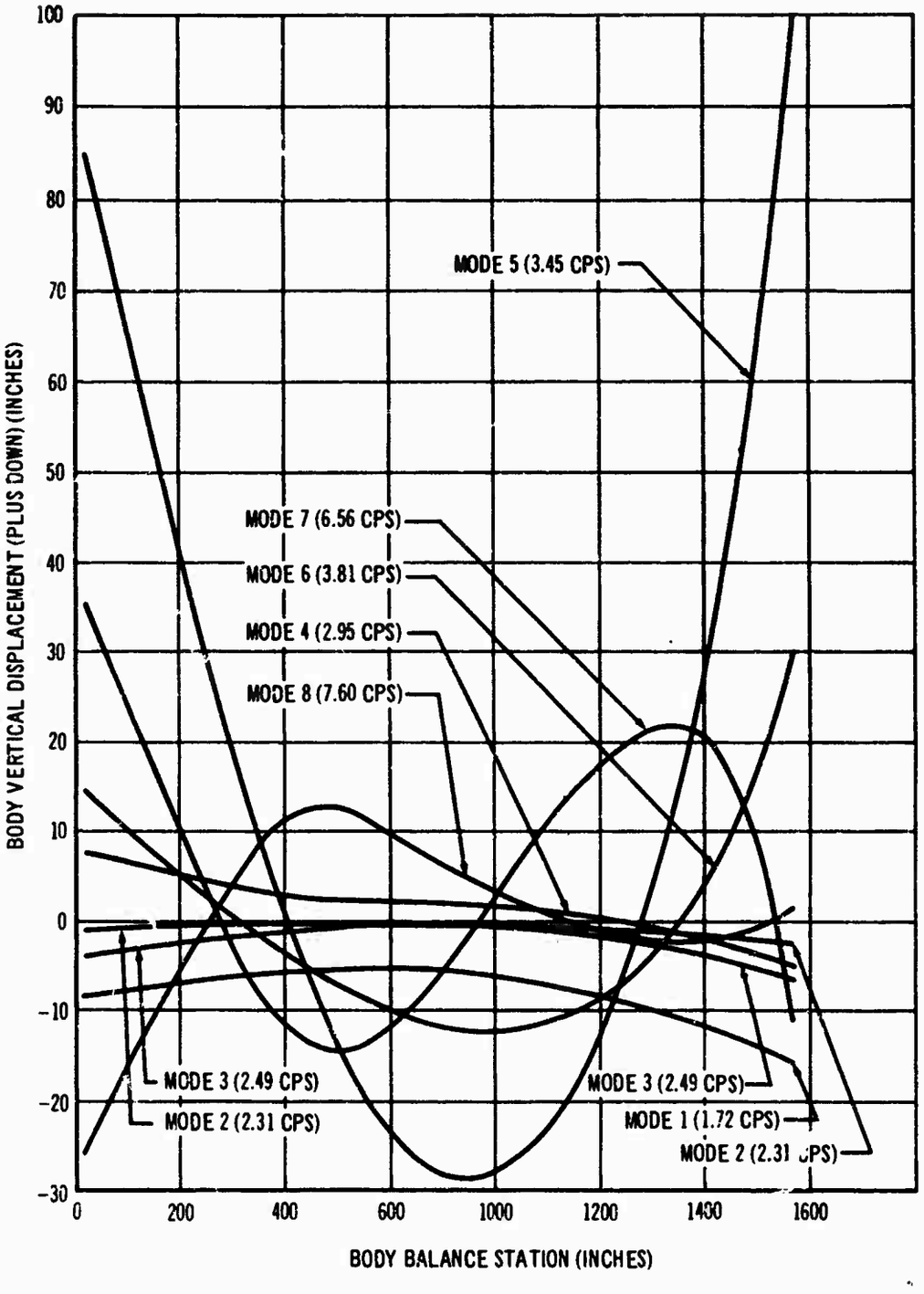


Figure 28. Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 190,590-Pound Gross Weight (Weight Condition C)

Table XIII. Nacelle Mode Shapes (Weight Condition C)

Nacelle position	Displacement	Mode number							
		1	2	3	4	5	6	7	8
Inboard	$\bar{x}$	−1.28	−0.72	−1.25	−7.34	−2.69	+4.01	+5.92	+5.88
	$\bar{y}$	−9.21	−73.66	+4.31	−2.15	−0.18	+1.10	ZERO	+0.35
	$\bar{z}$	+5.35	−2.51	−0.31	−38.49	−90.38	+45.24	+1.88	−4.77
	θ_x	+0.1256	−0.4218	−0.0100	−0.0195	−0.0053	+0.0570	ZERO	−0.0530
	θ_y	+0.0219	+0.0222	+0.0298	+0.3146	+0.5241	−0.3998	−0.2097	−0.0338
	θ_z	−0.0632	+1.0000	+0.0709	−0.0561	−0.0079	+0.0687	−0.0001	−0.0386
Outboard	$\bar{x}$	+0.04	−0.53	−1.37	−17.78	+14.83	−12.19	+4.54	+3.14
	$\bar{y}$	−16.83	−6.91	+67.23	−1.85	+6.36	+1.68	−1.26	−1.68
	$\bar{z}$	+57.98	+5.93	+11.59	−23.53	+62.89	−21.60	+1.54	+0.51
	θ_x	+0.2724	+0.0636	−0.4198	−0.9065	+0.1306	+0.0688	+0.2679	+0.2479
	θ_y	−0.0665	+0.0010	+0.0081	+0.5188	−0.7789	+0.4108	−0.1317	−0.1838
	θ_z	−0.1049	−0.0849	+1.0000	−0.0430	+0.2427	+0.0944	+0.2075	+0.1816

Note: Sign convention for nacelle cg positive displacements

$\bar{x}$	Aft	θ_x	Roll, bottom inboard
$\bar{y}$	Outboard	θ_y	Pitch, nose up
$\bar{z}$	Down	θ_z	Yaw, nose outboard

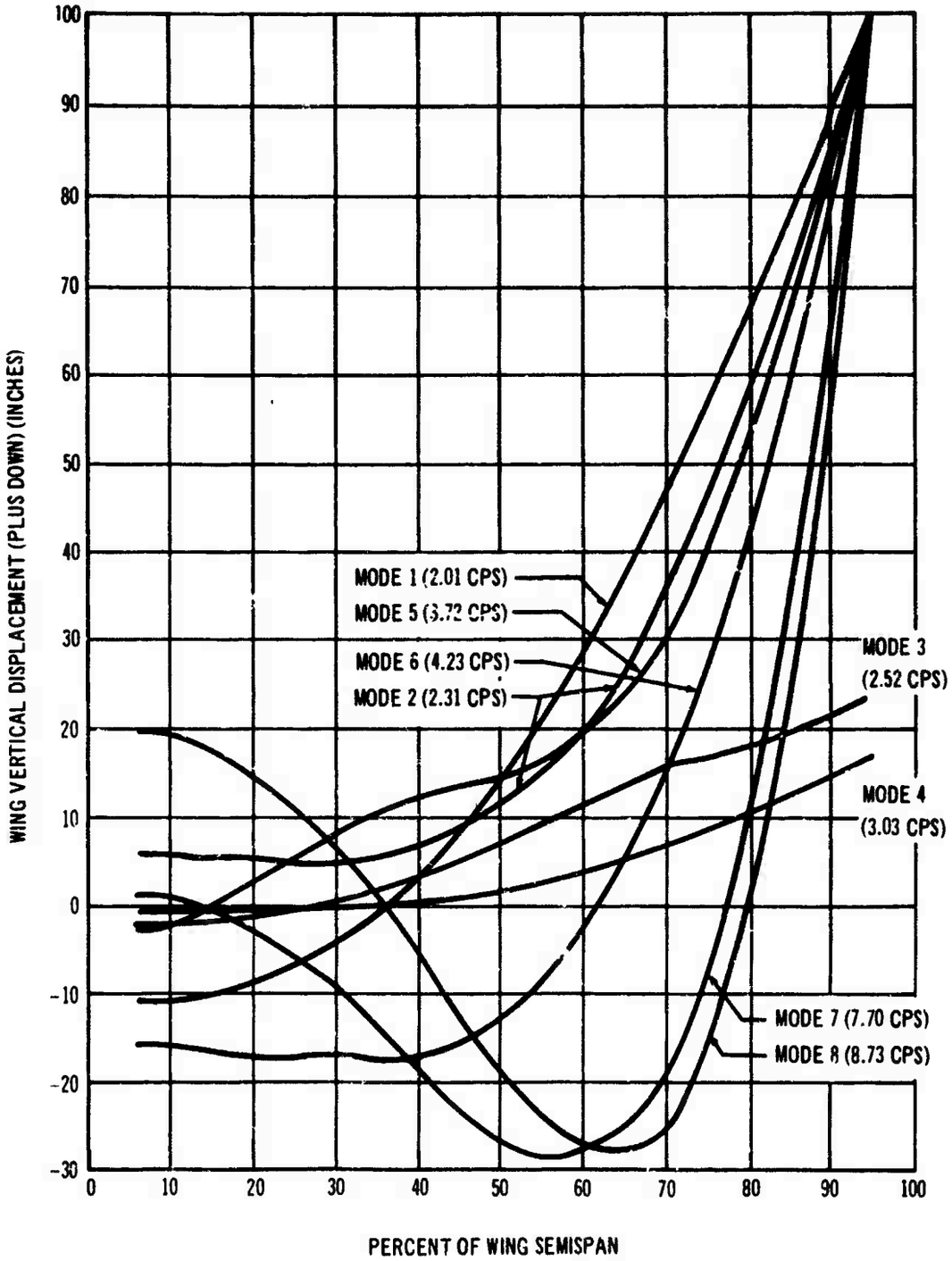


Figure 29. Wing Vertical Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)

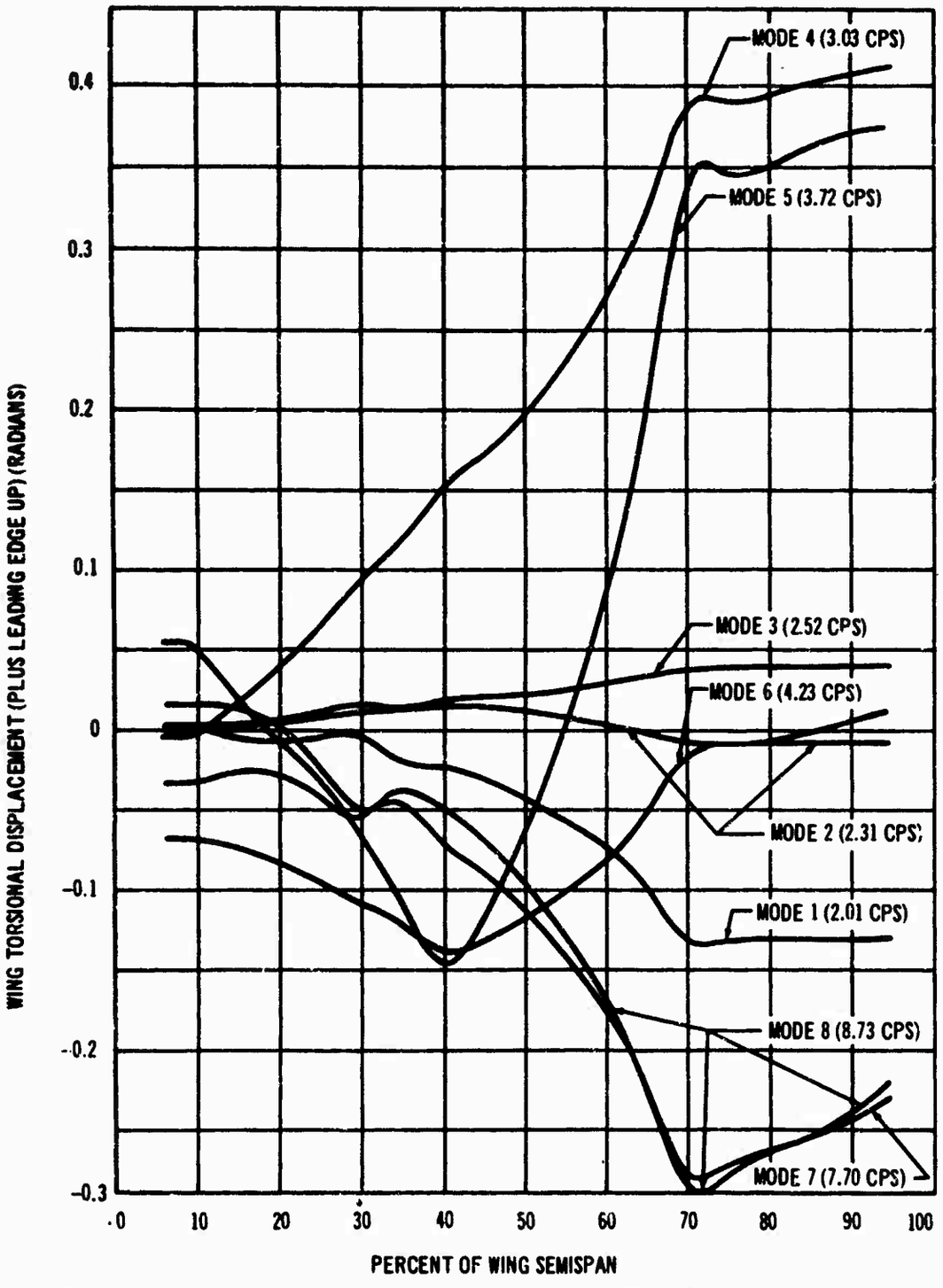


Figure 30. Wing Torsional Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)

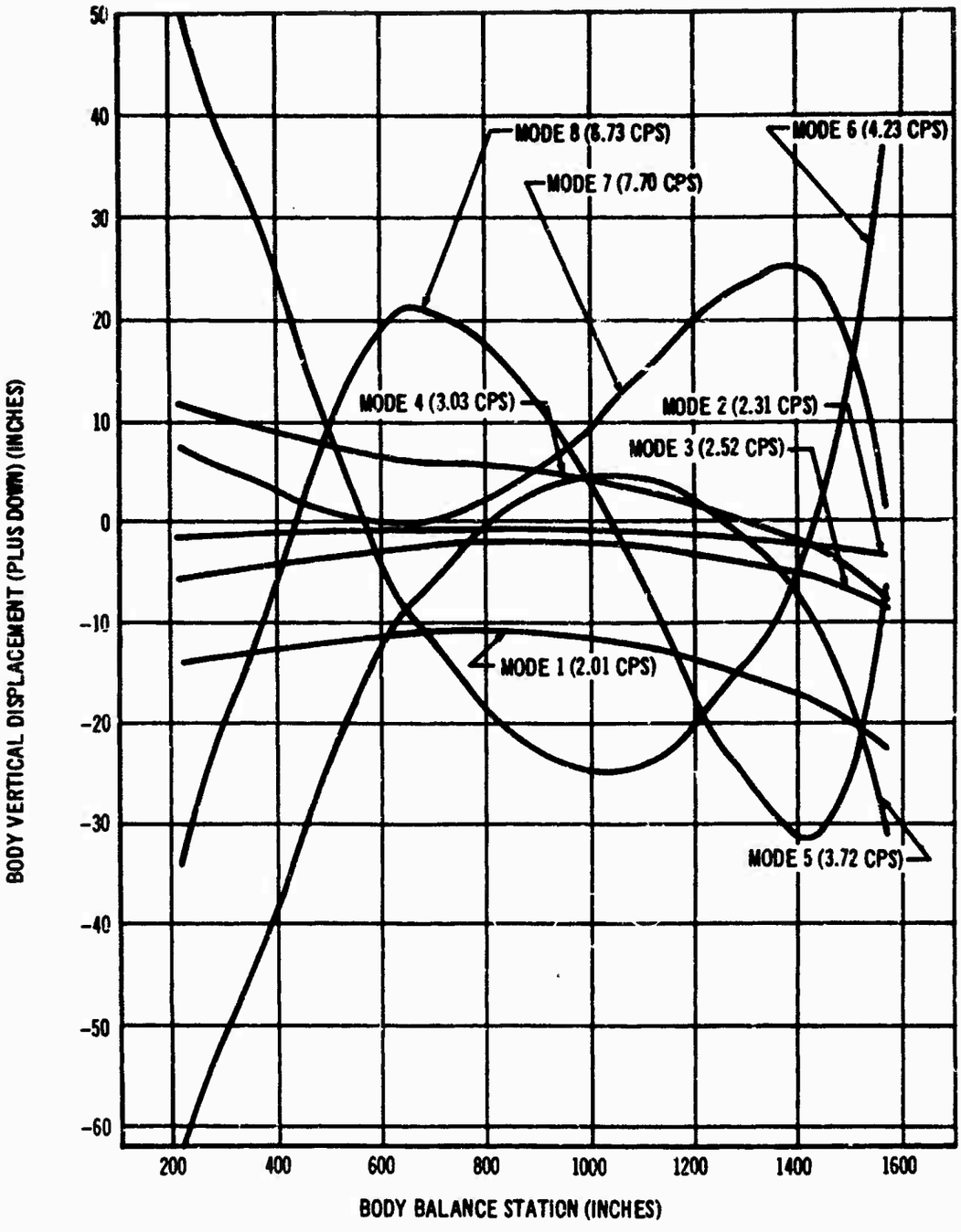


Figure 31. Body Vertical Displacement in the Normalized Free-Free Airplane Modes; 107,260-Pound Gross Weight (Weight Condition D)

Table XIV. Nacelle Mode Shapes (Weight Condition D)

Nacelle position	Displacement	Mode number							
		1	2	3	4	5	6	7	8
Inboard	$\bar{x}$	−1.53	−0.79	−1.64	−7.12	+5.13	+5.05	+5.54	+5.79
	$\bar{y}$	−10.75	+73.58	+4.77	−2.22	+1.48	+0.66	+0.25	+0.59
	$\bar{z}$	−1.92	−3.27	−3.52	−33.41	+94.06	+21.32	−2.44	−5.21
	θ_x	+0.1351	−0.4204	−0.0103	−0.0231	+0.0622	+0.0611	−0.0393	−0.0778
	θ_y	+0.0366	+0.0251	+0.0465	+0.2945	−0.6963	−0.2944	−0.0972	+0.0486
	θ_z	−0.0833	+1.0000	+0.0793	−0.0604	+0.0801	+0.0639	−0.0288	−0.0552
Outboard	$\bar{x}$	−0.16	−0.57	−1.84	− 18.93	−15.69	−7.66	+5.19	+5.52
	$\bar{y}$	−19.48	−8.26	+66.64	−3.14	−0.43	+2.00	−1.66	−1.75
	$\bar{z}$	+54.51	+6.54	+13.17	−28.40	−47.22	−5.98	+0.48	−1.07
	θ_x	+0.2969	+0.0759	−0.4062	−0.0146	−0.0133	+0.1489	+0.2558	+0.2235
	θ_y	−0.0653	+0.0004	+0.0144	+0.5663	+0.7015	+0.1928	−0.1739	−0.2063
	θ_z	−0.1371	−0.1016	+1.0000	−0.0763	−0.0202	+0.1700	+0.1889	+0.1589

Note: Sign convention for nacelle cg positive displacements

$\bar{x}$	Aft	θ_x	Roll, bottom inboard
$\bar{y}$	Outboard	θ_y	Pitch, nose up
$\bar{z}$	Down	θ_z	Yaw, nose outboard

APPENDIX V
STRESS FREQUENCY RESPONSE FUNCTIONS

Table XV Stress Frequency Response Functions (Analysis Condition 1)

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN 27 SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			CPS
0.847215-01	0.35385E 02	-0.60681E 00	0.30363E 03	0.	-0.	0.10
0.24347E 02	0.29947E 02	0.19898E 03	0.26210E 03	-0.	-0.	0.20
0.44132E 02	0.83697E 01	0.37620E 03	0.76906E 02	-0.	-0.	0.30
0.55393E 02	-0.51332E 01	0.47339E 03	-0.79261E 02	-0.	0.	0.40
0.53094E 02	-0.16505E 02	0.45739E 03	-0.14192E 03	-0.	0.	0.50
0.46190E 02	-0.22434E 02	0.40073E 03	-0.19748E 03	-0.	0.	0.60
0.41253E 02	-0.27016E 02	0.35800E 03	-0.24096E 03	-0.	0.	0.70
0.38231E 02	-0.31773E 02	0.32986E 03	-0.28530E 03	-0.	0.	0.80
0.36571E 02	-0.37815E 02	0.31144E 03	-0.33932E 03	-0.	0.	0.90
0.35926E 02	-0.59253E 02	0.29597E 03	-0.51720E 03	-0.	0.	1.00
0.36653E 02	-0.57188E 02	0.27761E 03	-0.80276E 03	-0.	0.	1.10
0.33495E 02	-0.12897E 03	0.20941E 03	-0.10256E 04	0.	0.	1.20
0.22848E 02	-0.16771E 03	0.98360E 02	-0.12780E 04	0.	-0.	1.30
-0.42896E 01	-0.18946E 03	-0.14204E 03	-0.14050E 04	0.	-0.	1.40
-0.32143E 02	-0.20625E 03	-0.36351E 03	-0.14789E 04	0.	-0.	1.47
-0.75685E 02	-0 17111E 03	-0.69482E 03	-0.10976E 04	0.	-0.	1.50
-0.19911E 03	-0.35902E 02	-0.13332E 04	-0.10140E 03	-0.	-0.	1.55
-0.23975E 03	0.46462E 02	-0.16662E 04	0.48830E 03	-0.	0.	1.60
-0.18287E 03	0.70084E 02	-0.11743E 04	0.40670E 03	-0.	0.	1.65
-0.70840E 02	0.66637E 02	-0.36373E 03	0.30779E 03	-0.	0.	1.80
-0.45308E 02	0.62249E 02	-0.20150E 03	0.23180E 03	-0.	0.	1.90
-0.30738E 02	0.63716E 02	-0.12039E 03	0.17513E 03	-0.	0.	2.00
-0.20436E 02	0.69880E 02	-0.77273E 02	0.12793E 03	-0.	0.	2.10
-0.96218E 01	0.74699E 02	-0.54149E 02	0.67179E 02	-0.	0.	2.20
0.14082E 02	0.70093E 02	-0.52018E 02	0.70081E 02	0.	0.	2.30
0.17233E 02	0.77041E 02	-0.52613E 02	0.46193E 02	0.	0.	2.39
0.24472E 02	0.79877E 02	-0.63530E 02	0.36245E 02	0.	0.	2.50
0.34041E 02	0.79724E 02	-0.85646E 02	0.35754E 02	0.	0.	2.60
0.39009E 02	0.72921E 02	-0.97472E 02	0.56486E 02	0.	0.	2.70
0.50533E 02	0.63392E 02	-0.12910E 03	0.10032E 03	0.	0.	2.80
0.50381E 02	0.69316E 02	-0.12646E 03	0.11476E 03	0.	0.	2.90
0.49535E 02	0.84011E 02	-0.84240E 02	0.97083E 02	0.	0.	2.99
0.54631E 02	0.10597E 03	-0.63312E 02	0.66091E 02	0.	0.	3.00
0.10102E 03	0.10496E 03	-0.68865E 02	0.56672E 02	0.	0.	3.05
0.16744E 03	-0.10530E 03	-0.96249E 02	0.14603E 03	0.	-0.	3.10
0.29234E 03	-0.16149E 03	-0.14615E 03	0.14327E 03	0.	-0.	3.20
-0.28309E 02	-0.11812E 03	0.16352E 02	0.11391E 03	-0.	-0.	3.30
-0.56137E 02	-0.93940E 02	0.26914E 32	0.96733E 02	-0.	-0.	3.40
-0.71372E 02	-0.85784E 02	0.30791E 02	0.90310E 02	-0.	-0.	3.50
-0.81036E 02	-0.83382E 02	0.33323E 02	0.87505E 02	-0.	-0.	3.60
-0.88238E 02	-0.82515E 02	0.36221E 02	0.60883E 02	-0.	-0.	3.70
-0.10972E 03	-0.71410E 02	0.43080E 02	0.62441E 02	-0.	-0.	3.80
-0.15204E 03	0.89707E 02	0.53823E 02	0.43047E 02	-0.	0.	3.90
-0.20169E 03	0.16767E 03	0.10323E 02	0.61216E 02	-0.	0.	3.99
-0.16605E 03	0.21643E 03	0.47720E 01	0.77443E 02	-0.	0.	4.00
-0.70035E 02	0.97863E 02	0.14542E 02	0.62131E 02	-0.	0.	4.05
0.75312E 02	0.12316E 02	0.47708E 02	0.42110E 02	0.	-0.	4.10
0.47726E 02	-0.54085E 01	0.47620E 02	0.32363E 02	0.	-0.	4.20
0.24912E 02	-0.10415E 02	0.44216E 02	0.25340E 02	0.	-0.	4.30
0.10327E 02	-0.10380E 02	0.42629E 02	0.18653E 02	0.	-0.	4.40
0.18707E-00	-0.92066E 01	0.41327E 02	0.13468E 02	-0.	-0.	4.50
-0.35289E 01	-0.84821E 01	0.40177E 02	0.20729E 01	-0.	-0.	4.60
-0.49874E 01	-0.67778E 01	0.73033E 02	-0.33318E 02	-0.	0.	4.70
-0.69816E 01	-0.61227E 01	0.95124E 02	-0.82493E 02	-0.	0.	4.80
-0.72581E 01	-0.69439E 01	0.84297E 02	-0.85831E 02	-0.	0.	4.90
-0.70801E 01	-0.44116E 01	-0.17810E 02	-0.36016E 02	0.	0.	5.00
-0.78159E 01	-9.37278E 01	-0.30270E 02	-0.13876E 02	0.	-0.	5.10
-0.91329E 01	-0.25388E 01	-0.22972E 02	-0.77197E 01	-0.	-0.	5.20
-0.10893E 02	-0.11493E 01	-0.20631E 02	-0.36667E 01	-0.	-0.	5.30
-0.13055E 02	0.38635E 01	-0.23939E 02	0.10526E 02	-0.	-0.	5.40
-0.17386E 02	0.60353E 01	-0.35203E 02	0.16962E 02	-0.	0.	5.50
-0.18059E 02	0.89105E 01	-0.37039E 02	0.23569E 02	-0.	0.	5.60
-0.18167E 02	0.12317E 02	-0.37163E 02	0.33000E 02	-0.	0.	5.70
-0.17110E 02	0.13721E 02	-0.33713E 02	0.38920E 02	-0.	0.	5.80
-0.20813E 01	0.49234E 01	0.13415E 02	0.93671E 01	-0.	0.	5.90
-0.14308E 01	0.36368E 01	0.13768E 02	0.31784E 01	-0.	0.	6.00
-0.27608E 01	0.38199E 01	0.11144E 02	0.13424E-00	-0.	0.	6.10
-0.32940E 01	0.43900E 01	0.73713E 01	-0.66774E 00	-0.	0.	6.20
-0.28733E 01	0.51455E 01	0.48944E 01	-0.17366E 01	-0.	0.	6.30
-0.11105E 01	0.48479E 01	0.42603E 01	-0.23299E 01	-0.	0.	6.40
0.81682E 00	0.37366E 01	0.33497E 01	-0.28373E 01	-0.	0.	6.50
0.76789E 01	0.	0.22131E 01	0.	0.	0.	6.60

Table XV - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 C.P.S
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			
0.629636-02	0.107096E 03	-0.732168 00	0.279596 03	0.	-0.	00
0.721592E 02	0.913296E 02	0.180957E 03	0.293705E 03	-0.	-0.	
0.132038E 03	0.264746E 02	0.335994E 03	0.716095E 02	-0.	-0.	
0.146796E 03	-0.144084E 02	0.429959E 03	-0.356299E 02	-0.	-0.	
0.140186E 03	-0.491996E 02	0.415925E 03	-0.128799E 03	-0.	-0.	
0.119227E 03	-0.873136E 02	0.363465E 03	-0.179211E 03	-0.	-0.	
0.123988E 03	-0.811216E 02	0.324088E 03	-0.218644E 03	-0.	-0.	
0.114146E 03	-0.951116E 02	0.299934E 03	-0.250911E 03	-0.	-0.	
0.108607E 03	-0.112356E 03	0.282036E 03	-0.308108E 03	-0.	-0.	
0.104516E 03	-0.170536E 03	0.271316E 03	-0.469356E 03	-0.	-0.	
0.101099E 03	-0.268076E 03	0.251926E 03	-0.728496E 03	-0.	-0.	
0.854056E 02	-0.546896E 03	0.190222E 03	-0.930696E 03	0.	-0.	
0.526996E 02	-0.439776E 03	0.876276E 02	-0.113976E 04	0.	-0.	
-0.222296E 02	-0.489564E 03	-0.128996E 03	-0.127596E 04	0.	-0.	
-0.996356E 02	-0.524116E 03	-0.331696E 03	-0.134216E 04	0.	-0.	
-0.287126E 03	-0.413996E 03	-0.650956E 03	-0.990076E 03	0.	-0.	
-0.507736E 03	-0.745676E 02	-0.139146E 04	-0.920166E 02	-0.	-0.	
-0.583046E 03	0.117496E 03	-0.191286E 04	0.379056E 03	-0.	-0.	
-0.428346E 03	0.147586E 03	-0.106586E 04	0.378096E 03	-0.	-0.	
-0.144046E 03	0.122616E 03	-0.538086E 03	0.279326E 03	-0.	-0.	
-0.880426E 02	0.105296E 03	-0.182866E 03	0.210356E 03	-0.	-0.	
-0.599796E 02	0.955276E 02	-0.109446E 03	0.159036E 03	-0.	-0.	
-0.359816E 02	0.922206E 02	-0.701246E 02	0.116116E 03	-0.	-0.	
-0.195276E 02	0.886466E 02	-0.491396E 02	0.791136E 02	-0.	-0.	
0.498246E 01	0.882906E 02	-0.472056E 02	0.635256E 02	0.	-0.	
0.820116E 01	0.818176E 02	-0.477456E 02	0.419196E 02	0.	-0.	
0.158726E 02	0.820536E 02	-0.594676E 02	0.328916E 02	0.	-0.	
0.178786E 02	0.[illegible] 02	-0.777216E 02	0.324486E 02	0.	-0.	
0.197916E 02	0.803796E 02	-0.886946E 02	0.512996E 02	0.	-0.	
0.224606E 02	0.840926E 02	-0.117166E 03	0.910376E 02	0.	-0.	
0.222146E 02	0.972276E 02	-0.114766E 03	0.104146E 03	0.	-0.	
0.301426E 02	0.109946E 03	-0.764466E 02	0.881026E 02	0.	-0.	
0.483256E 02	0.125146E 03	-0.574346E 02	0.599766E 02	0.	-0.	
0.102826E 03	0.119066E 03	-0.624756E 02	0.514296E 02	0.	-0.	
0.179926E 03	-0.168606E 03	-0.873436E 02	0.134356E 03	0.	-0.	
0.302566E 03	-0.172366E 03	-0.132636E 03	0.139026E 03	0.	-0.	
-0.321336E 02	-0.134276E 03	0.146396E 02	0.103376E 03	-0.	-0.	
-0.678336E 02	-0.119036E 03	0.244266E 02	0.577746E 02	-0.	-0.	
-0.847006E 02	-0.120696E 03	0.279436E 02	0.819546E 02	-0.	-0.	
-0.103966E 03	-0.124186E 03	0.304216E 02	0.794096E 02	-0.	-0.	
-0.120966E 03	-0.128166E 03	0.328706E 02	0.734016E 02	-0.	-0.	
-0.174396E 01	-0.869476E 02	0.409096E 02	0.566646E 02	-0.	-0.	
-0.740916E 03	0.161936E 03	0.488536E 02	0.488886E 02	-0.	0.	
-0.239436E 03	0.294106E 03	0.994966E 01	0.535526E 02	-0.	0.	
-0.203906E 03	0.294756E 03	0.433056E 01	0.702786E 02	-0.	0.	
-0.906716E 02	0.191836E 03	0.131966E 02	0.591056E 02	-0.	0.	
0.834326E 07	0.454706E 02	0.432946E 02	0.382216E 02	0.	-0.	
0.408346E 02	0.194926E 02	0.432146E 02	0.293706E 02	0.	-0.	
0.382866E 07	0.924096E 01	0.401256E 02	0.230036E 02	0.	-0.	
0.248636E 02	0.312206E 01	0.386056E 02	0.169276E 02	0.	-0.	
0.199416E 07	0.732596E 01	0.429486E 02	0.108616E 02	-0.	-0.	
0.252516E 07	-0.158776E 01	0.346096E 02	0.260676E 01	-0.	-0.	
0.321306E 07	-0.334876E 02	0.662946E 02	-0.485676E 02	-0.	0.	
0.444126E 07	-0.500926E 02	0.863226E 02	-0.748606E 02	-0.	0.	
0.984746E 07	-0.314396E 02	0.764976E 02	-0.779076E 02	-0.	0.	
-0.715306E 02	-0.217536E 02	-0.161626E 02	-0.326046E 02	0.	-0.	
-0.288796E 07	-0.830466E 01	-0.274696E 02	-0.336816E 02	0.	-0.	
-0.248046E 02	-0.278176E 01	-0.208466E 02	-0.706906E 01	-0.	-0.	
-0.735126E 02	0.326906E 00	-0.187236E 02	-0.332936E 01	-0.	-0.	
-0.257956E 02	0.107956E 02	-0.217426E 02	0.955236E 01	-0.	-0.	
-0.333186E 02	0.193066E 02	-0.319466E 02	0.133936E 02	-0.	0.	
-0.345786E 02	0.213766E 02	-0.334126E 02	0.232046E 02	-0.	0.	
-0.346806E 02	0.206996E 02	-0.337246E 02	0.324876E 02	-0.	0.	
-0.373466E 02	0.315816E 02	-0.309566E 02	0.395136E 02	-0.	0.	
0.429386E-00	0.118716E 02	0.121746E 02	0.850056E 01	-0.	0.	
0.311066E 01	0.797366E 01	0.142916E 02	0.287976E 01	-0.	0.	
0.821006E 00	0.430266E 01	0.101156E 02	0.121026E-00	-0.	0.	
-0.785916E-00	0.599336E 01	0.668996E 01	-0.707456E 00	-0.	0.	
-0.608166E-01	0.546996E 01	0.334916E 01	-0.137596E 01	-0.	0.	
0.156826E 01	0.599996E 01	0.386616E 01	-0.211436E 01	-0.	0.	
0.299026E 01	0.730676E 01	0.322136E 01	-0.259296E 01	-0.	0.	
0.560006E 01	0.	0.280846E 01	0.	0.	0.	

Table XV --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY CPS
-0.13427E-00	0.73760E 02	-0.12409E 01	0.27097E 03	0.	0.	[illegible]
0.49237E 02	0.63188E 02	0.18950E 03	0.24197E 03	0.	0.	[illegible]
0.90530E 02	0.18692E 02	0.33099E 03	0.79329E 02	0.	0.	[illegible]
0.11400E 03	-0.99961E 01	0.43606E 03	-0.30997E 02	0.	-0.	[illegible]
0.11057E 03	-0.73806E 02	0.42277E 03	-0.13336E 03	0.	-0.	[illegible]
0.96627E 02	-0.46699E 02	0.37131E 03	-0.10676E 03	0.	-0.	[illegible]
0.86442E 02	-0.56777E 02	0.33236E 03	-0.22910E 03	0.	-0.	[illegible]
0.80023E 02	-0.67218E 02	0.30607E 03	-0.27272E 03	0.	-0.	[illegible]
0.76207E 02	-0.80304E 02	0.28059E 03	-0.32993E 03	0.	-0.	[illegible]
0.74177E 02	-0.12327E 03	0.27612E 03	-0.49920E 03	0.	-0.	[illegible]
0.72555E 02	-0.20155E 03	0.25167E 03	-0.77403E 03	0.	-0.	[illegible]
0.60560E 02	-0.26398E 03	0.17001E 03	-0.90754E 03	0.	-0.	[illegible]
0.34717E 02	-0.33621E 03	0.62019E 02	-0.12291E 04	0.	-0.	[illegible]
-0.26606E 02	-0.57509E 03	-0.17309E 03	-0.15415E 04	-0.	-0.	[illegible]
-0.82686E 02	-0.40182E 03	-0.39572E 03	-0.14033E 04	-0.	-0.	[illegible]
-0.17080E 03	-0.31401E 03	-0.71632E 03	-0.10109E 04	-0.	-0.	[illegible]
-0.40766E 03	0.44464E 02	-0.15137E 04	-0.49779E 02	-0.	-0.	[illegible]
-0.46533E 03	0.10899E 03	-0.16147E 04	0.63392E 03	-0.	0.	[illegible]
-0.34223E 03	0.13051E 03	-0.11241E 04	0.40837E 03	-0.	0.	[illegible]
-0.11973E 03	0.11104E 03	-0.34000E 03	0.30449E 03	-0.	0.	[illegible]
-0.71077E 02	0.97544E 02	-0.10770E 03	0.22666E 03	-0.	0.	[illegible]
-0.46094E 02	0.89608E 02	-0.11207E 03	0.16700E 03	-0.	0.	[illegible]
-0.30070E 02	0.85379E 02	-0.74624E 02	0.11651E 03	-0.	0.	[illegible]
-0.18239E 02	0.83926E 02	-0.38672E 02	0.82019E 02	-0.	0.	[illegible]
-0.11048E 02	0.93029E 02	-0.83442E 02	0.86907E 02	0.	0.	[illegible]
-0.40112E 01	0.96363E 02	-0.76420E 02	0.67019E 02	0.	0.	[illegible]
0.79364E 01	0.97221E 02	-0.77310E 02	0.50253E 02	0.	0.	[illegible]
0.16316E 02	0.96724E 02	-0.90500E 02	0.37577E 02	0.	0.	[illegible]
0.20197E 02	0.91623E 02	-0.90331E 02	0.71148E 02	0.	0.	[illegible]
0.29205E 02	0.84823E 02	-0.11753E 03	0.96384E 02	0.	0.	[illegible]
0.30806E 02	0.87224E 02	-0.11170E 03	0.94903E 02	0.	0.	[illegible]
0.29496E 02	0.95293E 02	-0.84900E 02	0.74559E 02	0.	0.	[illegible]
0.36266E 02	0.10797E 03	-0.79607E 02	0.46006E 02	0.	0.	[illegible]
0.65332E 02	0.10666E 03	-0.10917E 03	0.65512E 02	0.	0.	[illegible]
0.10612E 03	-0.13261E 02	-0.15902E 03	0.21397E 03	0.	-0.	[illegible]
0.17038E 03	-0.26027E 02	-0.29263E 03	0.21386E 03	0.	-0.	[illegible]
0.75319E 01	0.11344E 02	0.22971E 02	0.10691E 03	0.	-0.	[illegible]
0.51209E 01	0.47021E 02	0.37666E 02	0.10179E 03	-0.	0.	[illegible]
0.21522E 02	0.73985E 02	0.51011E 02	0.19245E 03	0.	0.	[illegible]
0.46046E 02	0.89867E 02	0.71164E 02	0.20092E 03	0.	0.	[illegible]
0.70777E 02	0.10414E 03	0.93273E 02	0.19993E 03	0.	0.	[illegible]
0.13033E 03	0.52819E 02	0.16767E 03	0.10981E 03	0.	0.	[illegible]
0.25790E 03	-0.19260E 03	0.29555E 03	-0.20114E 02	0.	-0.	[illegible]
0.14869E 03	-0.21970E 03	0.30076E 02	0.35956E 02	0.	-0.	[illegible]
0.10091E 03	-0.22697E 03	0.12440E 02	0.07630E 02	0.	-0.	[illegible]
0.58661E 02	-0.14463E 03	0.63518E 02	0.43297E 02	0.	-0.	[illegible]
-0.58454E 02	-0.75612E 02	0.11690E 03	-0.25020E 01	-0.	-0.	[illegible]
-0.57976E 02	-0.49976E 02	0.07771E 02	-0.11397E 02	-0.	-0.	[illegible]
-0.50930E 02	-0.93457E 02	0.66796E 02	-0.16934E 02	-0.	-0.	[illegible]
-0.46018E 02	-0.19634E 02	0.46906E 02	-0.16609E 02	-0.	-0.	[illegible]
-0.43021E 02	-0.12293E 02	0.20227E 02	-0.11220E 02	-0.	-0.	[illegible]
-0.46140E 02	-0.71800E 01	0.14621E 02	-0.10972E 02	-0.	-0.	[illegible]
-0.49380E 02	0.19053E 02	0.36329E 01	0.25395E 01	-0.	0.	[illegible]
-0.54696E 02	0.23635E 02	-0.10607E 02	0.14795E 02	-0.	0.	[illegible]
-0.50699E 02	0.29904E 02	-0.02012E 01	0.10301E 02	-0.	0.	[illegible]
-0.17279E 02	0.12101E 02	0.30322E 02	-0.30969E 01	-0.	0.	[illegible]
-0.12780E 02	0.77920E 01	0.55239E 02	-0.12940E 02	-0.	0.	[illegible]
-0.14123E 02	0.75495E 01	0.23541E 02	-0.16341E 02	-0.	0.	[illegible]
-0.14088E 02	0.70174E 01	0.10607E 02	-0.17001E 02	-0.	0.	[illegible]
-0.13001E 02	0.63373E 01	0.14196E 02	-0.15503E 02	-0.	0.	[illegible]
-0.10966E 02	0.56913E 01	0.97900E 01	-0.14067E 02	-0.	0.	[illegible]
-0.10104E 02	0.43190E 01	0.92537E 01	-0.13975E 02	-0.	-0.	[illegible]
-0.10007E 02	0.31225E 01	0.09962E 01	-0.13037E 02	-0.	-0.	[illegible]
-0.10561E 02	0.30419E 01	0.91907E 01	-0.14407E 02	-0.	-0.	[illegible]
-0.17259E 02	0.97290E 01	0.11003E 02	-0.16982E 02	-0.	0.	[illegible]
-0.15966E 02	0.11766E 02	0.79820E 01	-0.15306E 02	-0.	-0.	[illegible]
-0.13637E 02	0.13694E 02	0.60050E 01	-0.13903E 02	-0.	0.	[illegible]
-0.96617E 01	0.14439E 02	-0.60294E 00	-0.11334E 02	-0.	0.	[illegible]
-0.61107E 01	0.14214E 02	-0.92339E 01	-0.07263E 01	-0.	0.	[illegible]
-0.73921E-01	0.12040E 02	-0.64070E 01	-0.10090E 01	-0.	0.	[illegible]
0.52006E 01	0.73400E 01	-0.68579E 01	0.19677E 01	0.	0.	[illegible]
0.91311E 01	0.	-0.62096E 01	0.	0.	0.	[illegible]

Table XV — — — Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 107

INCREMENTAL SHEAR STRESS				INCREMENTAL AXIAL STRESS		
REAL	IMAGINARY			REAL	IMAGINARY	FREQUENCY CPS
-0.94903E-01	0.71707E 02	0.	0.	0.10671E 01	-0.23036E 03	0.10
0.48004E 02	0.61323E 02	0.	0.	-0.15429E 03	-0.20674E 03	0.30
0.88023E 02	0.10141E 02	0.	0.	-0.20956E 03	-0.62655E 02	0.36
0.11137E 03	-0.92001E 01	0.	-0.	-0.37259E 05	0.31270E 02	0.44
0.10714E 03	-0.32463E 02	0.	-0.	-0.36123E 03	0.11395E 03	0.50
0.93501E 02	-0.44720E 02	0.	-0.	-0.51726E 03	0.15950E 03	0.60
0.89569E 02	-0.54230E 02	0.	-0.	-0.28381E 05	0.19582E 03	0.70
0.77370E 02	-0.64027E 02	0.		-0.26151E 03	0.23302E 03	0.80
0.73423E 02	-0.76292E 02	0.		-0.24658E 05	0.27849E 03	0.90
0.71499E 02	-0.11051E 03	0.	-0.	-0.23593E 03	0.42654E 03	1.00
0.70455E 02	-0.19030E 03	0.	-0.	-0.21504E 03	0.66204E 03	1.20
0.59906E 02	-0.24886E 03	0.	-0.	-0.15210E 03	0.84379E 03	1.30
0.36214E 02	-0.31807E 03	0.	-0.	-0.52991E 02	0.10467E 04	1.40
-0.10887E 02	-0.35531E 03	-0.	-0.	0.15029E 03	0.11664E 04	1.45
-0.73677E 02	-0.38142E 03	-0.	-0.	0.33811E 03	0.11992E 04	1.47
-0.15500E 03	-0.30200E 03	-0.	-0.	0.61203E 03	0.86337E 03	1.50
-0.37994E 03	-0.47942E 02	-0.	-0.	0.12953E 04	0.37402E 02	1.55
-0.43737E 03	0.96001E 02	-0.	0.	0.13797E 04	-0.37076E 03	1.60
-0.32286E 05	0.12073E 03	-0.	0.	0.96047E 03	-0.34892E 03	1.65
-0.21134E 05	0.10294E 03	-0.	0.	0.29126E 05	-0.26015E 03	1.80
-0.68000E 02	0.90529E 02	-0.	0.	0.16030E 03	-0.19566E 03	1.90
-0.43528E 02	0.83204E 02	-0.	0.	0.96435E 02	-0.14337E 03	2.00
-0.26106E 02	0.79240E 02	-0.	0.	0.63761E 02	-0.99383E 02	2.10
-0.16717E 02	0.79222E 02	-0.	0.	0.50131E 02	-0.70080E 02	2.20
-0.10193E 02	0.85323E 02	0.	0.	0.71294E 02	-0.74324E 02	2.30
-0.31319E 02	0.88129E 02	0.	0.	0.65302E 02	-0.57263E 02	2.35
0.75040E 01	0.88461E 02	0.	0.	0.66227E 02	-0.49776E 02	2.40
0.14571E 02	0.87990E 02	0.	0.	0.77320E 02	-0.49198E 02	2.43
0.17690E 02	0.84172E 02	0.	0.	0.84017E 02	-0.60791E 02	2.44
0.24526E 02	0.80294E 02	0.	0.	0.10044E 03	-0.82205E 02	2.47
0.25736E 02	0.84412E 02	0.	0.	0.95439E 02	-0.81156E 02	2.50
0.26670E 02	0.92077E 02	0.	0.	0.72617E 02	-0.63706E 02	2.54
0.34518E 02	0.10295E 03	0.	0.	0.68018E 02	-0.39377E 02	2.58
0.65066E 02	0.10103E 03	0.	0.	0.93276E 02	-0.38807E 02	2.65
0.10469E 03	-0.17763E 02	0.	-0.	0.13587E 03	-0.18260E 03	2.70
0.17355E 03	-0.29493E 02	0.	-0.	0.19861E 03	-0.18376E 03	2.80
0.67375E 01	0.66228E 01	0.	-0.	-0.19285E 02	-0.15765E 03	3.00
0.47166E 01	0.40020E 02	-0.	0.	-0.32166E 02	-0.15529E 03	3.10
0.14904E 02	0.63513E 02	0.	0.	-0.43535E 02	-0.16442E 03	3.20
0.42423E 02	0.77775E 02	0.	0.	-0.60805E 02	-0.17187E 03	3.26
0.64690E 02	0.91010E 02	0.	0.	-0.79695E 02	-0.17083E 03	3.29
0.13596E 03	0.28895E 02	0.	0.	-0.14326E 03	-0.90406E 02	3.35
0.23356E 03	-0.18190E 03	0.	-0.	-0.21833E 03	0.24021E 02	3.40
0.14575E 03	-0.21045E 03	0.	-0.	-0.53216E 02	-0.30722E 02	3.52
0.10007E 03	-0.22572E 03	0.	-0.	-0.10629E 02	-0.74879E 02	3.56
0.35625E 02	-0.14012E 03	0.	-0.	-0.57103E 02	-0.36943E 02	3.60
-0.65334E 02	-0.69218E 02	-0.	-0.	-0.99948E 02	0.22061E 01	3.70
-0.61337E 02	-0.43994E 02	-0.	-0.	-0.74995E 02	0.10592E 02	3.85
-0.57110E 02	-0.28084E 02	-0.	-0.	-0.53382E 02	0.14469E 02	4.00
-0.45395E 02	-0.14977E 02	-0.	-0.	-0.40140E 02	0.17677E 02	4.20
-0.40652E 02	-0.84663E 01	-0.	-0.	-0.24110E 02	0.18131E 02	4.50
-0.40059E 02	-0.47336E 01	-0.	-0.	-0.12493E 02	0.16211E 02	4.70
-0.40855E 02	0.73862E 01	-0.	0.	-0.46591E 01	-0.21899E 01	4.80
-0.41978E 02	0.12512E 02	-0.	0.	0.91314E 01	-0.12607E 02	4.96
-0.39523E 02	0.14123E 02	-0.	0.	0.70757E 01	-0.15706E 02	5.00
-0.22051E 02	0.82321E 01	-0.	0.	-0.26079E 02	0.26481E 01	5.15
-0.19256E 02	0.73047E 01	-0.	0.	-0.28414E 02	0.11057E 02	5.30
-0.18951E 02	0.51940E 01	-0.	0.	-0.21823E 02	0.13962E 02	[illegible]
-0.17951E 02	0.69575E 01	-0.	0.	-0.15098E 02	0.14526E 02	5.70
-0.16827E 02	0.91622E 01	-0.	0.	-0.12130E 02	0.13313E 02	5.85
-0.15268E 02	0.89938E 01	-0.	0.	-0.83649E 01	0.12703E 02	6.00
-0.15069E 02	0.87355E 01	-0.	-0.	-0.79067E 01	0.11960E 02	6.03
-0.14960E 02	0.84372E 01	-0.	-0.	-0.76866E 01	0.11140E 02	6.06
-0.15048E 02	0.96028E 01	-0.	-0.	-0.78520E 01	0.12310E 02	6.08
-0.16486E 02	0.12237E 02	-0.	0.	-0.10155E 02	0.14493E 02	6.20
-0.14573E 02	0.13465E 02	-0.	0.	-0.64786E 01	0.14009E 02	6.40
-0.12478E 02	0.14763E 02	-0.	0.	-0.34227E 01	0.11980E 02	6.60
-0.85533E 01	0.13110E 02	-0.	0.	0.51474E 00	0.95860E 01	7.00
-0.50057E 01	0.14330E 02	-0.	0.	0.27632E 01	0.57689E 01	7.40
0.97705E 00	0.11604E 02	-0.	0.	0.54743E 01	0.13740E 01	[illegible]
0.60945E 01	0.68956E 01	0.	0.	0.58429E 01	-0.16812E 01	9.00
0.95320E 01	0.	0.	0.	0.35968E 01	0.	10.00

Table XV - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS						
REAL	IMAGINARY					FREQUENCY CPS
-0.415568-01	-0.118918 01	0.	-0.	0.	-0.	0.10
-0.121798 01	-0.778988 00	0.	-0.	0.	-0.	0.30
-0.185568 01	0.911258-01	0.	-0.	0.	-0.	0.50
-0.199068 01	0.504088 00	-0.	-0.	-0.	-0.	0.70
-0.173768 01	0.746258 00	-0.	-0.	-0.	-0.	0.90
-0.135918 01	0.805938 00	-0.	-0.	-0.	-0.	1.10
-0.131798 01	0.874218 00	-0.	-0.	-0.	-0.	1.30
-0.948078 00	0.841298 00	-0.	-0.	-0.	-0.	1.50
-0.903818 00	0.875078 00	-0.	-0.	-0.	-0.	1.70
-0.878778 00	0.107538 01	-0.	-0.	-0.	-0.	1.90
-0.990628 00	0.151508 01	-0.	-0.	-0.	-0.	2.10
-0.564108 00	0.191368 01	0.	-0.	0.	-0.	2.30
-0.921688 00	0.243318 01	0.	-0.	0.	-0.	2.50
-0.668768 00	0.275298 01	-0.	-0.	-0.	-0.	2.70
-0.427738-00	0.304828 01	-0.	-0.	-0.	-0.	2.90
0.495748-01	0.290398 01	-0.	-0.	-0.	-0.	3.10
0.157198 01	0.139658 01	-0.	-0.	-0.	-0.	3.30
0.231278 01	0.311948-00	-0.	-0.	-0.	-0.	3.50
0.190538 01	-0.143338-00	-0.	0.	-0.	0.	3.70
0.450028-00	-0.650908-01	-0.	0.	-0.	0.	3.90
0.753928-01	0.305838-01	-0.	0.	-0.	0.	4.10
-0.170788-00	0.121038-00	-0.	0.	-0.	0.	4.30
-0.361778-00	0.250758-00	-0.	-0.	-0.	-0.	4.50
-0.539198 00	0.451468-00	0.	-0.	0.	-0.	4.70
-0.702188 00	0.586448 00	0.	-0.	0.	-0.	4.90
-0.710118 00	0.703448 00	0.	-0.	0.	-0.	5.10
-0.735068 00	0.790918 00	0.	-0.	0.	-0.	5.30
-0.669408 00	0.813008 00	0.	-0.	0.	-0.	5.50
-0.614898 00	0.733398 00	0.	-0.	0.	-0.	5.70
-0.424468-00	0.524708-00	0.	-0.	0.	-0.	5.90
-0.414178-00	0.202018-00	0.	-0.	0.	-0.	6.10
-0.782088 00	0.238938-00	0.	-0.	0.	-0.	6.30
-0.115478 01	0.452888-00	0.	-0.	0.	-0.	6.50
-0.174898 01	0.770028 00	0.	-0.	0.	-0.	6.70
-0.232108 01	0.289638 01	0.	-0.	0.	-0.	6.90
-0.312408 01	0.460348 01	0.	-0.	0.	-0.	7.10
-0.876788 00	0.572478 01	0.	-0.	0.	-0.	7.30
-0.439408-00	0.793448 01	0.	-0.	0.	-0.	7.50
0.778918 00	0.100058 02	-0.	-0.	-0.	-0.	7.70
0.279268 01	0.113108 02	-0.	-0.	-0.	-0.	7.90
0.499498 01	0.126248 02	-0.	-0.	-0.	-0.	8.10
0.171188 02	0.395138 01	-0.	-0.	-0.	-0.	8.30
0.207498 02	-0.915638 01	-0.	0.	-0.	0.	8.50
0.218398 01	-0.625548 01	-0.	0.	-0.	0.	8.70
-0.559918 00	-0.183748-00	0.	-0.	0.	-0.	8.90
0.957898 00	-0.184678 01	-0.	0.	-0.	0.	9.10
0.426538 01	-0.347288 01	-0.	0.	-0.	0.	9.30
0.319318 01	-0.348538 01	-0.	0.	-0.	0.	9.50
0.176668 01	-0.259878 01	-0.	0.	-0.	0.	9.70
0.778098 00	-0.241618 01	-0.	0.	-0.	0.	9.90
0.728588-01	-0.215068 01	-0.	0.	-0.	0.	10.10
-0.138098-00	-0.209108 01	-0.	0.	-0.	0.	10.30
-0.165578-00	-0.235178 01	-0.	0.	-0.	0.	10.50
-0.199068-00	-0.253138 01	-0.	0.	-0.	0.	10.70
-0.340728-00	-0.238038 01	-0.	0.	-0.	0.	10.90
-0.131328 01	-0.185758 01	0.	0.	0.	0.	11.10
-0.159168 01	-0.155318 01	0.	0.	0.	0.	11.30
-0.186588 01	-0.126818 01	0.	0.	0.	0.	11.50
-0.246558 01	-0.872548 00	0.	0.	0.	0.	11.70
-0.331368 01	0.107378 01	0.	-0.	0.	-0.	11.90
-0.514478 01	0.197158 01	0.	-0.	0.	-0.	12.10
-0.542738 01	0.316948 01	0.	-0.	0.	-0.	12.30
-0.546538 01	0.458778 01	0.	-0.	0.	-0.	12.50
-0.500138 01	0.496018 01	0.	-0.	0.	-0.	12.70
0.142778 01	0.918328 00	-0.	-0.	-0.	-0.	12.90
0.156438 01	0.143748-00	-0.	-0.	-0.	-0.	13.10
0.841138 00	-0.124488-00	-0.	-0.	-0.	-0.	13.30
0.297468-00	-0.121728-00	-0.	-0.	-0.	-0.	13.50
0.418508-01	-0.547308-01	-0.	-0.	-0.	-0.	13.70
-0.212168-01	-0.377648-01	-0.	-0.	-0.	-0.	13.90
0.123748-03	-0.427698-01	-0.	-0.	-0.	-0.	14.10
0.177138-01	0.	-0.	0.	-0.	0.	14.30

Table XV – – – Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

INCREMENTAL AXIAL STRESS

REAL		IMAGINARY				FREQUENCY CPS
0.	0.	0.14020E 01	0.11502E 03	0.	0.	0.00
0.	0.	0.91791E 02	0.90364E 02	0.	0.	0.20
0.	0.	0.13304E 03	0.15400E 02	0.	0.	0.36
0.	-0.	0.10538E 03	-0.27779E 02	0.	-0.	0.44
0.	-0.	0.17321E 03	-0.61920E 02	0.	-0.	0.50
0.	-0.	0.146718 03	-0.77793E 02	0.	-0.	0.60
0.	-0.	0.12893E 03	-0.90059E 02	0.	-0.	0.70
0.	-0.	0.11819E 03	-0.102952 03	0.	-0.	0.80
0.	-0.	0.11194E 03	-0.11949E 03	0.	-0.	0.90
0.	-0.	0.10861E 03	-0.17704E 03	0.	-0.	1.00
0.	-0.	0.10547E 03	-0.27270E 03	0.	-0.	1.10
0.	-0.	0.88204E 02	-0.34835E 03	0.	-0.	1.16
0.	-0.	0.53972E 02	-0.43528E 03	0.	-0.	1.40
-0.	-0.	-0.21706E 02	-0.48013E 03	-0.	-0.	1.45
-0.	-0.	-0.94391E 02	-0.50846E 03	-0.	-0.	1.47
-0.	-0.	-0.20281E 03	-0.39070E 03	-0.	-0.	1.50
-0.	-0.	-0.48503E 03	-0.68810E 02	-0.	-0.	1.53
-0.	0.	-0.53849E 03	0.11326E 03	-0.	0.	1.60
-0.	0.	-0.378618 03	0.11786E 03	-0.	0.	1.65
-0.	0.	-0.10442E 03	0.82115E 02	-0.	0.	1.80
-0.	0.	-0.46515E 02	0.52419E 02	-0.	0.	1.90
-0.	0.	-0.15921E 02	0.26898E 02	-0.	0.	2.00
0.	0.	0.16612E 01	0.865388 00	0.	0.	2.10
0.	-0.	0.111138 02	-0.23298E 02	0.	-0.	2.20
0.	-0.	0.41083E 01	-0.33168E 02	0.	-0.	2.30
0.	-0.	0.336168 01	-0.51983E 02	0.	-0.	2.35
-0.	-0.	-0.34249E 01	-0.61034E 02	-0.	-0.	2.40
-0.	-0.	-0.21615E 02	-0.62007E 02	-0.	-0.	2.45
-0.	-0.	-0.31440E 02	-0.46208E 02	-0.	-0.	2.44
-0.	-0.	-0.58657E 02	-0.98328E 01	-0.	-0.	2.47
-0.	0.	-0.57843E 02	0.23182E 01	-0.	0.	2.50
-0.	-0.	-0.22121E 02	-0.13984E 02	-0.	-0.	2.54
-0.	-0.	-0.28605E 01	-0.47191E 02	-0.	-0.	2.58
-0.	-0.	-0.47438E 01	-0.63847E 02	-0.	-0.	2.65
-0.	-0.	-0.27224E 02	-0.47928E 01	-0.	-0.	2.70
-0.	-0.	-0.80642E 02	-0.46099E 02	-0.	-0.	2.80
0.	-0.	0.39611E 02	-0.12611E 03	0.	-0.	3.00
0.	-0.	0.60151E 02	-0.23312E 03	0.	-0.	3.10
0.	-0.	0.19306E 02	-0.32541E 03	0.	-0.	3.30
-0.	-0.	-0.56971E 02	-0.38009E 03	-0.	-0.	3.36
-0.	-0.	-0.14021E 03	-0.41035E 03	-0.	-0.	3.39
-0.	-0.	-0.41380E 03	-0.95400E 02	-0.	-0.	3.35
-0.	0.	-0.73783E 03	0.34171E 03	-0.	0.	3.40
0.	0.	0.18019E 02	0.11410E 03	0.	0.	3.42
0.	-0.	0.10482E 03	-0.63286E 02	0.	-0.	3.46
0.	0.	0.13287E 01	0.38239E 02	0.	0.	3.60
-0.	0.	-0.22218E 03	0.15803E 03	-0.	0.	3.70
-0.	0.	-0.12256E 03	0.13279E 03	-0.	0.	3.85
-0.	0.	-0.54074E 02	0.13011E 03	-0.	0.	4.00
-0.	0.	-0.10138E 02	0.10090E 03	-0.	0.	4.20
0.	0.	0.24813E 02	0.84378E 02	0.	0.	4.30
0.	0.	0.42422E 02	0.74936E 02	0.	0.	4.70
0.	0.	0.32274E 02	0.44714E 02	0.	0.	4.80
0.	0.	0.67968E 02	0.31256E 02	0.	0.	4.96
0.	0.	0.65695E 02	0.21498E 02	0.	0.	5.00
0.	0.	0.31126E 02	0.34112E 02	0.	0.	5.15
0.	0.	0.30421E 02	0.54783E 02	0.	0.	5.30
0.	0.	0.40272E 02	0.29496E 02	0.	0.	5.45
0.	0.	0.53314E 02	0.21124E 02	0.	0.	5.70
0.	-0.	0.68491E 02	-0.12977E 02	0.	-0.	5.85
0.	-0.	0.98498E 02	-0.27972E 02	0.	-0.	6.00
0.	-0.	0.10297E 03	-0.47796E 02	0.	-0.	6.05
0.	-0.	0.10341E 03	-0.71060E 02	0.	-0.	6.86
0.	-0.	0.95663E 02	-0.97724E 02	0.	-0.	6.08
-0.	-0.	-0.86315E 01	-0.14992E 02	-0.	-0.	5.80
-0.	-0.	-0.10725E 02	-0.31031E 01	-0.	-0.	6.40
0.	-0.	0.121458-01	-0.47990E 01	0.	-0.	6.60
0.	-0.	0.631438 01	-0.73223E 01	0.	-0.	7.00
0.	-0.	0.582318 01	-0.96245E 01	0.	-0.	7.60
0.	-0.	0.43788E-00	-0.83328E 01	0.	-0.	8.20
-0.	-0.	-0.50716E 01	-0.43969E 01	-0.	-0.	9.00
-0.	0.	-0.89544E 01	0.	-0.	0.	10.00

Table XV - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.55

PERCENT SEMISPAN: 27 SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY
0.84721E-01	0.55385E 02	-0.00681E 00	0.30363E 03	0.	-0.	CPS
0.29567E 02	0.29947E 02	0.19898E 03	0.26210E 03	-0.	-0.	
0.44132E 02	0.83492E 01	0.37020E 03	0.78906E 02	-0.	-0.	
0.55139E 02	-0.51952E 01	0.47339E 03	-0.39261E 02	-0.	0.	
0.53096E 02	-0.16509E 02	0.49759E 03	-0.14192E 03	-0.	0.	
0.44196E 02	-0.22436E 02	0.40079E 03	-0.19748E 03	-0.	0.	
0.41255E 02	-0.27016E 02	0.35800E 03	-0.24096E 03	-0.	0.	
0.38231E 02	-0.31773E 02	0.32986E 03	-0.28950E 03	-0.	0.	
0.36471E 02	-0.37815E 02	0.31144E 03	-0.33952E 03	-0.	0.	
0.35926E 02	-0.49253E 02	0.29897E 03	-0.51720E 03	-0.	0.	
0.36453E 02	-0.97188E 02	0.27763E 03	-0.80276E 03	-0.	0.	
0.33495E 02	-0.12897E 03	0.20961E 03	-0.10256E 04	-0.	0.	
0.22844E 02	-0.16771E 03	0.96340E 02	-0.12780E 04	-0.	0.	
-0.42896E 01	-0.18946E 03	-0.14204E 03	-0.14050E 04	-0.	0.	
-0.32143E 02	-0.20629E 03	-0.36951E 03	-0.14780E 04	-0.	0.	
-0.57468E 02	-0.17111E 03	-0.69482E 03	-0.10976E 04	-0.	0.	
-0.19911E 03	-0.34902E 02	-0.15332E 04	-0.10[illegible]0E 03	-0.	0.	
-0.23925E 03	0.46462E 02	-0.16662E 04	0.40[illegible]0E 03	-0.	0.	
-0.18287E 03	0.70086E 02	-0.11743E 04	0.46[illegible]0E 03	-0.	0.	
-0.70840E 02	0.64637E 02	-0.36373E 03	0.30[illegible]0E 03	-0.	0.	
-0.43308E 02	0.62249E 02	-0.20130E 03	0.23180E 03	-0.	0.	
-0.30738E 02	0.63716E 02	-0.12059E 03	0.17913E 03	-0.	0.	
-0.20436E 02	0.69980E 02	-0.77275E 02	0.12795E 03	-0.	0.	
-0.96218E 01	0.74659E 02	-0.34149E 02	0.87179E 02	-0.	0.	
0.16082E 02	0.70093E 02	-0.32018E 02	0.70001E 02	-0.	0.	
0.17233E 02	0.77041E 02	-0.92813E 02	0.46193E 02	-0.	0.	
0.24472E 02	0.79877E 02	-0.65530E 02	0.38245E 02	-0.	0.	
0.34061E 02	0.79724E 02	-0.89646E 02	0.55754E 02	-0.	0.	
0.39009E 02	0.72921E 02	-0.97472E 02	0.56486E 02	-0.	0.	
0.50383E 02	0.63392E 02	-0.12910E 05	0.10052E 03	-0.	0.	
0.50381E 02	0.69316E 02	-0.12646E 03	0.11476E 03	-0.	0.	
0.43933E 02	0.84011E 02	-0.84240E 07	0.97089E 02	-0.	0.	
0.54431E 02	0.10597E 03	-0.63312E 02	0.66091E 02	-0.	0.	
0.10102E 03	0.10496E 03	-0.68845E 02	0.56672E 02	-0.	0.	
0.16764E 03	-0.10330E 03	-0.96249E 02	0.14305E 03	-0.	-0.	
0.29234E 03	-0.16149E 03	-0.14613E 03	0.14927E 03	-0.	-0.	
-0.28309E 02	-0.11812E 03	0.16332E 02	0.11591E 03	-0.	-0.	
-0.36137E 02	-0.93940E 02	0.26914E 02	0.96723E 02	-0.	-0.	
-0.71372E 02	-0.85784E 02	0.30791E 02	0.98310E 02	-0.	-0.	
-0.81034E 02	-0.83382E 02	0.33523E 02	0.87505E 02	-0.	-0.	
-0.88258E 02	-0.82513E 02	0.36221E 02	0.80885E 02	-0.	-0.	
-0.10972E 03	-0.71410E 02	0.45080E 02	0.62441E 02	-0.	-0.	
-0.15204E 03	0.89707E 02	0.53823E 02	0.45047E 02	-0.	0.	
-0.20109E 03	0.10767E 03	0.10525E 02	0.61216E 02	-0.	0.	
-0.16405E 03	0.21643E 03	0.47720E 01	0.77443E 02	-0.	0.	
-0.70035E 02	0.97869E 02	0.14582E 02	0.65131E 02	-0.	0.	
0.79812E 02	0.12316E 02	0.47708E 02	0.42118E 02	-0.	-0.	
0.47726E 02	-0.54085E 01	0.47620E 02	0.32365E 02	-0.	-0.	
0.24912E 02	-0.10415E 02	0.44216E 02	0.25349E 02	-0.	-0.	
0.14322E 02	-0.10380E 02	0.42629E 02	0.18659E 02	-0.	-0.	
0.18[illegible]7C7E-00	-0.92066E 01	0.47527E 02	0.11968E 02	-0.	-0.	
-0.35289E 01	-0.84821E 01	0.60177E 02	0.28725E 01	-0.	-0.	
-0.44424E 01	-0.67778E 01	0.73053E 02	-0.95518E 02	-0.	0.	
-0.69816E 01	-0.61227E 01	0.95124E 02	-0.82493E 02	-0.	0.	
-0.72581E 01	-0.49439E 01	0.84297E 02	-0.85851E 02	-0.	0.	
-0.70801E 01	-0.46116E 01	-0.17[illegible]CE 02	-0.36016E 02	-0.	0.	
-0.78139E 01	-0.37278E 01	-0.30270E 02	-0.15076E 02	-0.	-0.	
-0.91379E 01	-0.25388E 01	-0.22972E 02	-0.77192E 01	-0.	-0.	
-0.10833E 02	-0.11493E 01	-0.20631E 02	-0.36687E 01	-0.	-0.	
-0.13055E 02	0.38635E 01	-0.23939E 02	0.10526E 02	-0.	-0.	
-0.17386E 02	0.60393E 01	-0.35[illegible]3E 02	0.16962E 02	-0.	0.	
-0.18059E 02	0.89109E 01	-0.37034E 02	0.25569E 02	-0.	0.	
-0.18167E 02	0.12910E 02	-0.37163E 02	0.35800E 02	-0.	0.	
-0.17110E 02	0.13721E 02	-0.33713E 02	0.36920E 02	-0.	0.	
-0.20813E 01	0.49234E 01	0.13413E 02	0.93671E 01	-0.	0.	
-0.14308E 01	0.36368E 01	0.15748E 02	0.31734E 01	-0.	0.	
-0.27408E 01	0.32199E 01	0.11146E 02	0.13424E-00	-0.	0.	
-0.32940E 01	0.43906E 01	0.73715E 01	-0.86774E 00	-0.	0.	
-0.28731E 01	0.51495E 01	0.38944E 01	-0.[illegible]7364E 01	-0.	0.	
-0.11105E 01	0.48479E 01	0.42603E 01	-0.23299E 01	-0.	0.	
0.81682E 00	0.37366E 01	0.39497E 01	-0.28913E 01	-0.	0.	
0.26288E 01	0.19723E 01	0.22131E 01	-0.30441E 01	0.	0.	
0.36106E 01	0.23041E-00	0.12966E 01	-0.28343E 01	0.	0.	
0.37481E 01	-0.12214E 01	0.28049E-00	-0.24430E 01	-0.	0.	
0.31242E 01	-0.21871E 01	-0.54565E 00	-0.18949E 01	-0.	-0.	
0.21401E 01	-0.25813E 01	-0.10438E 01	-0.12299E 01	-0.	-0.	
0.97849E 00	0.	-0.14243E 01	0.	0.	0.	

Table XV --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY CPS
0.62963E-02	0.10709E 03	-0.73216E 00	0.27595E 03	0.	-0.	0.10
0.72352E 02	0.91329E 02	0.18097E 03	0.23785E 03	-0.	-0.	0.30
0.13203E 03	0.26474E 02	0.33594E 03	0.71605E 02	-0.	-0.	0.36
0.36670E 03	-0.14406E 02	0.42959E 03	-0.35629E 02	-0.	0.	0.44
0.16010E 03	-0.49199E 02	0.41525E 03	-0.12879E 03	-0.	0.	0.50
0.13927E 03	-0.67313E 02	0.36365E 03	-0.17921E 03	-0.	0.	0.60
0.12398E 03	-0.81123E 02	0.32400E 03	-0.21066E 03	-0.	0.	0.70
0.11416E 03	-0.95111E 02	0.29934E 03	-0.25891E 03	-0.	0.	0.80
0.10807E 03	-0.11235E 03	0.28263E 03	-0.36010E 03	-0.	0.	0.90
0.10451E 03	-0.17053E 03	0.27131E 03	-0.46935E 03	-0.	0.	1.00
0.10109E 03	-0.26837E 03	0.25197E 03	-0.72049E 03	-0.	0.	1.20
0.85405E 02	-0.36609E 03	0.19022E 03	-0.93969E 03	0.	0.	1.30
0.52690E 02	-0.43977E 03	0.87427E 02	-0.31597E 04	0.	-0.	1.40
-0.22229E 02	-0.48954E 03	-0.12890E 03	-0.12750E 04	0.	-0.	1.45
-0.95635E 02	-0.52411E 03	-0.33169E 03	-0.13421E 04	0.	-0.	1.47
-0.20912E 03	-0.41590E 03	-0.63093E 03	-0.99607E 03	0.	-0.	1.50
-0.50773E 03	-0.74567E 02	-0.13914E 04	-0.92016E 02	-0.	-0.	1.55
-0.58304E 03	0.11749E 03	-0.15120E 04	0.37053E 03	-0.	0.	1.60
-0.42834E 03	0.14750E 03	-0.10656E 04	0.37009E 03	-0.	0.	1.65
-0.14404E 03	0.12261E 03	-0.33608E 03	0.27932E 03	-0.	0.	1.80
-0.98042E 02	0.10529E 03	-0.18286E 03	0.23039E 03	-0.	0.	1.90
-0.55979E 02	0.95527E 02	-0.10944E 03	0.15093E 03	-0.	0.	2.00
-0.35941E 02	0.92228E 02	-0.70124E 02	0.11611E 03	-0.	0.	2.10
-0.19527E 02	0.88066E 02	-0.49139E 02	0.79113E 02	-0.	0.	2.20
0.45824E 01	0.90290E 02	-0.47203E 02	0.63524E 02	0.	0.	2.30
0.82011E 01	0.81812E 02	-0.47745E 02	0.41919E 02	0.	0.	2.35
0.13072E 02	0.82053E 02	-0.59467E 02	0.32891E 02	0.	0.	2.40
0.17970E 02	0.81692E 02	-0.77721E 02	0.32446E 02	0.	0.	2.43
0.19791E 02	0.80379E 02	-0.88454E 02	0.31259E 02	0.	0.	2.44
0.22460E 02	0.84092E 02	-0.11716E 03	0.91037E 02	0.	0.	2.47
0.22214E 02	0.97227E 02	-0.11476E 03	0.10414E 03	0.	0.	2.50
0.30142E 02	0.10958E 03	-0.76446E 02	0.88102E 02	0.	0.	2.54
0.44375E 02	0.12536E 03	-0.57434E 02	0.59976E 02	0.	0.	2.58
0.10282E 03	0.11960E 03	-0.62475E 02	0.51429E 02	0.	0.	2.65
0.17392E 03	-0.10660E 03	-0.87343E 02	0.13435E 03	0.	-0.	2.70
0.30256E 03	-0.17236E 03	-0.13263E 03	0.13002E 03	0.	-0.	2.80
-0.32133E 02	-0.13427E 03	0.14839E 02	0.10337E 03	-0.	-0.	3.00
-0.62433E 02	-0.11983E 03	0.24424E 02	0.87774E 02	-0.	-0.	3.10
-0.44700E 02	-0.12069E 03	0.27943E 02	0.81954E 02	-0.	-0.	3.20
-0.10396E 03	-0.12418E 03	0.30421E 02	0.79409E 01	-0.	-0.	3.26
-0.12096E 03	-0.12836E 03	0.32870E 02	0.73401E 02	-0.	-0.	3.29
-0.17459E 03	-0.86947E 02	0.40909E 02	0.36664E 02	-0.	-0.	3.35
-0.26031E 03	0.16193E 03	0.48843E 02	0.40880E 02	-0.	0.	3.40
-0.25943E 03	0.24410E 03	0.95496E 01	0.33332E 02	-0.	0.	3.52
-0.20390E 03	0.29425E 03	0.43305E 01	0.70278E 02	-0.	0.	3.56
-0.90671E 02	0.15183E 03	0.13196E 02	0.39105E 02	-0.	0.	3.60
0.85432E 02	0.45470E 02	0.43294E 02	0.38221E 02	0.	-0.	3.70
0.60834E 02	0.19492E 02	0.43214E 02	0.29370E 02	0.	-0.	3.85
0.38280E 02	0.92409E 01	0.40125E 02	0.23003E 02	0.	-0.	4.00
0.24863E 02	0.51220E 01	0.38685E 02	0.16927E 02	0.	-0.	4.20
0.19441E 02	0.25259E 01	0.42948E 02	0.10861E 02	-0.	-0.	4.50
0.25251E 02	-0.19877E 01	0.54609E 02	0.26067E 01	-0.	-0.	4.70
0.32150E 02	-0.33487E 02	0.66294E 02	-0.48567E 02	-0.	0.	4.80
0.46612E 02	-0.50092E 02	0.86322E 02	-0.74860E 02	-0.	0.	4.96
0.38374E 02	-0.51639E 02	0.76497E 02	-0.77907E 02	-0.	0.	5.00
-0.21204E 02	-0.71751E 02	-0.16162E 02	-0.32684E 02	0.	0.	5.15
-0.28879E 02	-0.43046E 01	-0.27469E 02	-0.13681E 02	-0.	-0.	5.30
-0.24804E 02	-0.27817E 01	-0.20846E 02	-0.70050E 01	-0.	-0.	5.60
-0.23532E 02	0.52690E 00	-0.18723E 02	-0.33292E 01	-0.	-0.	5.70
-0.25752E 02	0.10795E 02	-0.21742E 02	0.95523E 01	-0.	-0.	5.85
-0.33318E 02	0.15306E 02	-0.31946E 02	0.15393E 02	-0.	0.	6.00
-0.34578E 02	0.21326E 02	-0.33612E 02	0.23204E 02	-0.	0.	6.03
-0.34640E 02	0.28499E 02	-0.33724E 02	0.32487E 02	-0.	0.	6.05
-0.32340E 02	0.31583E 02	-0.30596E 02	0.35319E 02	-0.	0.	6.08
0.42938E-00	0.11871E 02	0.12174E 02	0.85005E 01	-0.	0.	6.20
0.31108E 01	0.73793E 01	0.14291E 02	0.28797E 01	-0.	0.	6.40
0.82100E 00	0.63026E 01	0.10173E 02	0.12182E-00	-0.	0.	6.60
-0.24551E-00	0.59333E 01	0.46745E 01	-0.73745E 00	-0.	0.	7.00
-0.60416E-01	0.54699E 01	0.53491E 01	-0.13759E 01	-0.	0.	7.40
0.15692E 01	0.39499E 01	0.38661E 01	-0.21143E 01	-0.	0.	8.20
0.29902E 01	0.73047E 01	0.32213E 01	-0.25929E 01	-0.	0.	9.00
0.36000E 01	0.62232E 00	0.20084E 01	-6.27624E 01	0.	0.	10.00
0.35523E 01	-0.45267E-00	0.11765E 01	-0.25722E 01	0.	0.	11.00
0.29808E 01	-0.96154E 00	0.23638E-00	-0.22170E 01	0.	-0.	12.00
0.22235E 01	-0.17206E 01	-0.49516E-00	-0.17196E 01	0.	-0.	13.00
0.17172E 01	-0.12542E 01	-0.94902E 00	-0.11161E 01	0.	-0.	14.00
0.13756E 01	0.	-0.12925E 01	0.	0.	0.	15.00

Table XV - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY
-0.13427E-00	0.73780E 02	-0.12489E 01	0.27897E 03	0.	0.	
0.49232E 02	0.63188E 02	0.18058E 03	0.24197E 03	0.	0.	
0.90538E 02	0.14492E 02	0.33849E 03	0.72329E 02	0.	0.	
0.11480E 03	-0.9994 1E 01	0.43606E 03	-0.36597E 02	0.	-0.	
0.11057E 03	-0.33806E 02	0.42277E 03	-0.13336E 03	0.	-0.	
0.98627E 02	-0.46699E 02	0.37191E 03	-0.18676E 03	0.	-0.	
0.86442E 02	-0.56777E 02	0.33216E 03	-0.22910E 03	0.	-0.	
0.80023E 02	-0.67218E 02	0.30607E 03	-0.27272E 03	0.	-0.	
0.76207E 02	0.80304E 02	0.28059E 03	-0.32593E 03	0.	-0.	
0.74177E 02	-0.12527E 03	0.27612E 03	-0.49926E 03	0.	-0.	
0.72555E 02	-0.20155E 03	0.25167E 03	-0.77483E 03	0.	-0.	
0.60560E 02	-0.26338E 03	0.17801E 03	-0.98754E 03	0.	-0.	
0.34717E 02	-0.33621E 03	0.62019E 02	-0.12251E 04	0.	-0.	
-0.24606E 02	-0.37509E 03	-0.17589E 03	-0.13415E 04	-0.	-0.	
-0.82686E 02	-0.40182E 3	-0.39572E 03	-0.14035E 04	-0.	-0.	
-0.17040E 03	-0.31481E 03	-0.71632E 03	-0.10105E 04	-0.	-0.	
-0.48766E 03	-0.44464E 02	-0.15157E 04	-0.43774E 02	-0.	-0.	
-0.46553E 03	0.10699E 03	-0.16147E 04	0.43192E 03	-0.	0.	
-0.34223E 03	0.13051E 03	-0.11241E 04	0.40089E 03	-0.	0.	
-0.11975E 03	0.11104E 03	-0.34088E 03	0.33448E 03	-0.	0.	
-0.71077E 02	0.97544E 02	-0.18779E 03	0.27466E 03	-0.	0.	
-0.46094E 02	0.89608E 02	-0.11287E 03	0.19780E 03	-0.	0.	
-0.30070E 02	0.85379E 02	-0.74624E 02	0.11631E 03	-0.	0.	
-0.18259E 02	0.85926E 02	-0.58672E 02	0.82019E 02	-0.	0.	
-0.11848E 02	0.93029E 02	-0.83442E 02	0.86987E 02	-0.	0.	
-0.49112E 01	0.96563E 02	-0.76428E 02	0.67019E 02	-0.	0.	
0.79364E 01	0.97221E 02	-0.77510E 02	0.58233E 02	0.	0.	
0.16316E 02	0.98724E 02	-0.90500E 02	0.57577E 02	0.	0.	
0.20197E 02	0.91623E 02	-0.98951E 02	0.71140E 02	0.	0.	
0.29205E 02	0.84825E 02	-0.11755E 03	0.94304E 02	0.	0.	
0.30806E 02	0.87224E 02	-0.11170E 03	0.94983E 02	0.	0.	
0.29496E 02	0.95293E 02	-0.84988E 02	0.74559E 02	0.	0.	
0.26266E 02	0.10757E 03	-0.79607E 02	0.66086E 02	0.	0.	
0.65852E 02	0.10666E 03	-0.10917E 03	0.63512E 02	0.	0.	
0.10612E 03	-0.13261E 02	-0.15902E 03	0.21357E 03	0.	-0.	
0.17838E 03	-0.26827E 02	-0.23265E 03	0.21506E 03	0.	-0.	
0.75319E 01	0.11344E 02	0.22371E 02	0.18651E 03	0.	-0.	
0.51209E 01	0.47821E 02	0.37644E 02	0.18175E 03	-0.	-0.	
0.21322E 02	0.73985E 02	0.51011E 02	0.19243E 03	0.	-0.	
0.46 02	0.89867E 02	0.71164E 02	0.20093E 03	0.	-0.	
0.7 E 02	0.10414E 03	0.93279E 02	0.19993E 03	0.	0.	
0.15033E 03	0.32819E 02	0.16767E 03	0.10581E 03	0.	0.	
0.25798E 03	-0.19268E 03	0.25553E 03	-0.28114E 02	0.	-0.	
0.14869E 03	-0.21570E 03	0.38076E 02	0.35956E 02	0.	-0.	
0.10091E 03	-0.72697E 03	0.12440E 02	0.87636E 02	0.	-0.	
0.38861E 02	-0.14469E 03	0.43518E 02	0.43237E 02	0.	-0.	
-0.58454E 02	-0.75612E 02	0.11690E 03	-0.25820E 01	-0.	-0.	
-0.57976E 02	-0.49976E 02	0.87771E 02	-0.12397E 02	-0.	-0.	
-0.50998E 02	-0.33437E 02	0.64794E 02	-0.16934E 02	-0.	-0.	
-0.44018E 02	-0.19654E 02	0.46982E 02	-0.20689E 02	-0.	-0.	
-0.43821E 02	-0.12295E 02	0.28227E 02	-0.21220E 02	-0.	-0.	
-0.46140E 02	-0.71800E 01	0.14621E 02	-0.18972E 02	-0.	-0.	
-0.49380E 02	0.13853E 02	0.34529E 01	0.25395E 01	-0.	0.	
-0.54696E 02	0.23633E 02	-0.10607E 02	0.14755E 02	-0.	0.	
-0.50699E 02	0.25984E 02	-0.02812E 01	0.18381E 02	-0.	0.	
-0.17279E 02	0.12101E 02	0.30522E 01	-0.30969E 01	-0.	0.	
-0.12780E 02	0.77928E 01	0.93259E 02	-0.12940E 02	-0.	0.	
-0.14123E 02	0.75495E 01	0.25541E 02	-0.16341E 02	-0.	0.	
-0.14088E 02	0.78174E 01	0.18407E 02	-0.17001E 02	-0.	0.	
-0.13001E 02	0.65373E 01	0.14196E 02	-0.15583E 02	-0.	0.	
-0.10566E 02	0.56913E 01	0.57200E 01	-0.14867E 02	-0.	0.	
-0.10184E 02	0.45190E 01	0.92537E 01	-0.13975E 02	-0.	-0.	
-0.10087E 02	0.31225E 01	0.89962E 01	-0.13037E 02	-0.	-0.	
-0.10561E 02	0.38419E 01	0.91907E 01	-0.14407E 02	-0.	-0.	
-0.12239E 02	0.97290E 01	0.11085E 02	-0.16962E 02	-0.	-0.	
-0.15966E 02	0.11746E 02	0.75824E 01	-0.16396E 02	-0.	-0.	
-0.13617E 02	0.13694E 02	0.40058E 01	-0.13903E 02	-0.	-0.	
-0.96417E 01	0.14435E 02	-0.60244E 00	-0.11334E 02	-0.	-0.	
-0.61107E 01	0.14214E 02	-0.32339E 01	-0.67283E 01	-0.	-0.	
-0.73921E-01	0.12040E 02	-0.64070E 01	-0.16090E 01	-0.	-0.	
0.52006E 01	0.73408F 01	-0.68379E 01	0.19677E 01	0.	-0.	
0.91311E 01	0.20057E 01	-0.42096E 01	0.33020E 01	0.	-0.	
0.10448E 02	-0.28879E 01	-0.11278E 01	0.22374E 01	0.	-0.	
0.94145E 01	-0.64974E 01	0.18304E 01	-0.20539E-00	0.	-0.	
0.65287E 01	-0.80264E 01	0.50311E 01	-0.28541E 01	0.	-0.	
0.25512E 01	-0.77335E 01	0.24030E 01	-0.45381E 01	0.	-0.	
-0.12972E 01	0.	0.11744E-00	0.	-0.	0.	

Table XV --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN 40.06 SEGMENT NUMBER 107

INCREMENTAL SHEAR STRESS				INCREMENTAL AXIAL STRESS		
REAL	IMAGINARY			REAL	IMAGINARY	FREQUENCY
-0.949038E-01	0.717076 02	0.	0.	0.106716 01	-0.238366 03	0.
0.490064 02	0.613236 02	0.	0.	-0.154299 03	-0.206746 03	0.
0.880236 02	0.181416 02	0.	0.	-0.289566 03	-0.626556 02	0.
0.121376 03	-0.929016 01	0.	-0.	-0.372596 03	0.912706 02	0.
0.107146 03	-0.324636 02	0.	-0.	-0.361236 03	0.113996 03	0.
0.949516 02	-0.447286 02	0.	-0.	-0.317266 03	0.139586 03	0.
0.835696 02	-0.542306 02	0.	-0.	-0.283216 03	0.159826 03	0.
0.[illegible] 02	-0.640276 02	0.	-0.	-0.261516 03	0.293026 03	0.
0.736236 02	-0.742976 02	0.	-0.	-0.246586 03	0.278496 03	0.
0.710936 02	-0.118516 03	0.	-0.	-0.235936 03	0.426586 03	0.
0.704596 02	-0.190386 03	0.	-0.	-0.213066 03	0.662066 03	0.
0.599066 02	-0.248886 03	0.	-0.	-0.152106 03	0.843796 03	0.
0.362146 02	-0.318076 03	0.	-0.	-0.529916 02	0.104676 04	0.
-0.188876 02	-0.355316 03	-0.	-0.	0.150796 03	0.114626 04	0.
-0.731776 02	-0.381426 03	-0.	-0.	0.338116 03	0.119926 04	0.
-0.155986 01	-0.382006 03	-0.	-0.	0.612056 03	0.863376 03	0.
-0.879966 03	-0.479426 02	-0.	-0.	0.129316 04	0.374026 02	0.
-0.437376 03	0.960816 02	-0.	0.	0.139796 04	-0.378766 03	0.
-0.322866 03	0.120736 03	-0.	0.	0.966476 03	-0.348926 03	0.
-0.117486 03	0.102946 03	-0.	0.	0.291266 03	-0.260156 03	0.
-0.680886 02	0.905296 02	-0.	0.	0.160386 03	-0.195666 03	0.
-0.435286 02	0.832046 02	-0.	0.	0.964336 02	-0.143376 03	0.
-0.281666 02	0.792466 02	-0.	0.	0.637616 02	-0.993836 02	0.
-0.167176 02	0.782226 02	-0.	0.	0.501316 02	-0.780806 02	0.
-0.101936 02	0.833236 02	-0.	0.	0.712966 02	-0.743246 02	0.
-0.513196 01	0.881296 02	0.	0.	0.653026 02	-0.572636 02	0.
0.756406 01	0.884116 02	0.	0.	0.662276 02	-0.497746 02	0.
0.143716 02	0.879906 02	0.	0.	0.773266 02	-0.491966 02	0.
0.176986 02	0.861726 02	0.	0.	0.840176 02	-0.607916 02	0.
0.245266 02	0.802946 02	0.	0.	0.100446 03	-0.822856 02	0.
0.257346 02	0.844126 02	0.	0.	0.994396 02	-0.811566 02	0.
0.266706 02	0.920776 02	0.	0.	0.726176 02	-0.657066 02	0.
0.349186 02	0.102956 03	0.	0.	0.680186 02	-0.393776 02	0.
0.650666 02	0.101036 03	0.	0.	0.932766 02	-0.388876 02	0.
0.104696 03	-0.177636 02	0.	-0.	0.135876 03	-0.182486 03	0.
0.173356 03	-0.294036 02	0.	-0.	0.198616 03	-0.183766 03	0.
0.673736 01	0.642286 01	0.	-0.	-0.392836 02	-0.137656 03	0.
0.471666 01	0.400206 02	-0.	0.	-0.321666 02	-0.153296 03	0.
0.196046 02	0.635336 02	0.	0.	-0.435856 02	-0.164426 03	0.
0.424236 02	0.777736 02	0.	0.	-0.608056 02	-0.171676 03	0.
0.646906 02	0.910106 02	0.	0.	-0.796956 02	-0.170836 03	0.
0.135966 03	0.788956 02	0.	0.	-0.143766 03	-0.904066 02	0.
0.233566 03	-0.181906 03	0.	-0.	-0.218336 03	0.246216 02	0.
0.145296 03	-0.210456 03	0.	-0.	-0.332166 02	-0.307226 02	0.
0.100076 03	-0.225726 03	0.	-0.	-0.106296 02	-0.748796 02	0.
0.356256 02	-0.140126 03	0.	-0.	-0.371036 02	-0.369436 02	0.
-0.693346 02	-0.692186 02	-0.	-0.	-0.999486 02	0.220616 01	0.
-0.613376 02	-0.439946 02	-0.	-0.	-0.749956 01	0.103926 02	0.
-0.521106 02	-0.280846 02	-0.	-0.	-0.933626 02	0.144696 02	0.
-0.493996 02	-0.149776 02	-0.	-0.	-0.401486 02	0.176776 02	0.
-0.446526 02	-0.848656 01	-0.	-0.	-0.241106 02	0.181316 02	0.
-0.400096 02	-0.473366 01	-0.	-0.	-0.126936 02	0.162116 02	0.
-0.[illegible] 02	0.738826 01	-0.	0.	-0.463916 01	-0.216996 01	0.
-0.419786 02	0.125126 02	-0.	0.	0.913106 01	-0.126076 02	0.
-0.[illegible] 02	0.141256 02	-0.	0.	0.707376 01	-0.157066 02	0.
-0.229516 02	0.823216 01	-0.	0.	-0.260796 02	0.264616 01	0.
-0.192566 02	0.730376 01	-0.	0.	-0.284146 02	0.110576 02	0.
-0.188516 02	0.819406 01	-0.	0.	-0.218236 02	0.139626 02	0.
-0.179916 02	0.895756 01	-0.	0.	-0.138986 02	0.145266 02	0.
-0.166276 02	0.916226 01	-0.	0.	-0.121306 02	0.133136 02	0.
-0.152886 02	0.899386 01	-0.	0.	-0.836496 01	0.127036 02	0.
-0.150696 02	0.873536 01	-0.	-0.	-0.790676 01	0.119406 02	0.
-0.149606 02	0.863726 01	-0.	-0.	-0.768666 01	0.111406 02	0.
-0.150486 02	0.960286 01	-0.	-0.	-0.783206 01	0.123106 02	0.
-0.146866 02	0.122376 02	-0.	0.	-0.101556 02	0.144936 02	0.
-0.145736 02	0.134456 02	-0.	0.	-0.647866 01	0.140066 02	0.
-0.124786 02	0.147636 02	-0.	0.	-0.342276 01	0.118806 02	0.
-0.855336 01	0.151106 02	-0.	0.	0.314746 00	0.968406 01	0.
-0.500576 01	0.143306 02	-0.	0.	0.276326 01	0.574896 01	0.
0.977956 00	0.116846 02	-0.	0.	0.367416 01	0.137486 01	0.
0.609646 01	0.669566 01	0.	0.	0.384256 01	-0.146126 01	0.
0.953286 01	0.136476 01	0.	0.	0.339686 01	-0.282136 01	0.
0.106646 02	-0.330346 01	0.	-0.	0.963306 00	-0.191176 01	0.
0.911006 01	-0.640796 01	0.	-0.	-0.156396 01	0.179376-00	0.
0.611526 01	-0.783806 01	0.	-0.	-0.258996 01	0.243866 01	0.
0.221786 01	-0.748866 01	0.	-0.	-0.203326 01	0.387756 01	0.
-0.140186 01	0.	-0.	0.	-0.100346-00	0.	0.

Table XV -- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS						
REAL	IMAGINARY					
-0.41556E-01	-0.11891E 01	0.	-0.	0.	-0.	
-0.12179E 01	-0.77898E 00	0.	-0.	0.	-0.	
-0.18598E 01	0.91125E-01	0.	-0.	0.	-0.	
-0.19006E 01	0.50408E 00	-0.	-0.	-0.	-0.	
-0.17376E 01	0.74623E 00	-0.	-0.	-0.	-0.	
-0.13591E 01	0.80593E 00	-0.	-0.	-0.	-0.	
-0.11179E 01	0.82621E 00	-0.	-0.	-0.	-0.	
-0.98007E 00	0.84129E 00	-0.	-0.	-0.	-0.	
-0.90381E 00	0.87597E 00	-0.	-0.	-0.	-0.	
-0.87077E 00	0.10753E 01	-0.	-0.	-0.	-0.	
-0.90624E 00	0.15150E 01	-0.	-0.	-0.	-0.	
-0.96810E 00	0.19134E 01	0.	-0.	0.	-0.	
-0.92366E 00	0.24331E 01	0.	-0.	0.	-0.	
-0.69876E 00	0.27529E 01	-0.	-0.	-0.	-0.	
-0.42273E-00	0.30482E 01	-0.	-0.	-0.	-0.	
0.49574E-01	0.29039E 01	-0.	-0.	-0.	-0.	
0.15715E 01	0.13965E 01	-0.	-0.	-0.	-0.	
0.23197E 01	0.31196E-00	-0.	-0.	-0.	-0.	
0.18053E 01	-0.14333E-00	-0.	0.	-0.	0.	
0.45002E-00	-0.65090E-01	-0.	0.	-0.	0.	
0.75592E-01	0.30583E-01	-0.	0.	-0.	0.	
-0.17073E-02	0.13103E-00	-0.	0.	-0.	0.	
-0.36177E-00	0.25075E-00	-0.	-0.	-0.	-0.	
-0.53919E 00	0.49146E-00	0.	-0.	0.	-0.	
-0.70718E 00	0.56544E 00	0.	-0.	0.	-0.	
-0.73011E 00	0.70344E 00	0.	-0.	0.	-0.	
-0.73506E 00	0.79091E 00	0.	-0.	0.	-0.	
-0.66940E 00	0.81300E 00	0.	-0.	0.	-0.	
-0.61489E 00	0.73339E 00	0.	-0.	0.	-0.	
-0.52446E-00	0.42470E-00	0.	-0.	0.	-0.	
-0.41417E-00	0.20201E-00	0.	-0.	0.	-0.	
-0.76706E 00	0.23893E-00	0.	-0.	0.	-0.	
-0.11547E 01	0.45288E-00	0.	-0.	0.	-0.	
-0.17489E 01	0.77602E 00	0.	-0.	0.	-0.	
-0.23210E 01	0.28963E 01	0.	-0.	0.	-0.	
-0.31240E 01	0.46034E 01	0.	-0.	0.	-0.	
-0.87478E 00	0.57242E 01	0.	-0.	0.	-0.	
-0.43960E-00	0.79344E 01	0.	-0.	0.	-0.	
0.77891E 00	0.10065E 02	-0.	-0.	-0.	-0.	
0.21924E 01	0.11310E 02	-0.	-0.	-0.	-0.	
0.49549E 01	0.12024E 02	-0.	-0.	-0.	-0.	
0.12118E 02	0.39513E 01	-0.	-0.	-0.	-0.	
0.20749E 02	-0.91543E 01	-0.	0.	-0.	0.	
0.21839E 01	-0.42554E 01	-0.	0.	-0.	0.	
-0.59691E 00	-0.18374E-00	0.	-0.	0.	-0.	
0.95739E 00	-0.18467E 01	-0.	0.	-0.	0.	
0.52653E 01	-0.36728E 01	-0.	0.	-0.	0.	
0.31931E 01	-0.34853E 01	-0.	0.	-0.	0.	
0.17466E 01	-0.29987E 01	-0.	0.	-0.	0.	
0.77809E 00	-0.24141E 01	-0.	0.	-0.	0.	
0.72858E-01	-0.21506E 01	-0.	0.	-0.	0.	
-0.13809E-00	-0.20910E 01	-0.	0.	-0.	0.	
-0.16757E-00	-0.29517E 01	-0.	0.	-0.	0.	
-0.19904E-00	-0.25313E 01	-0.	0.	-0.	0.	
-0.34072E-00	-0.23803E 01	-0.	0.	-0.	0.	
-0.13132E 01	-0.18525E 01	0.	0.	0.	0.	
-0.15916E 01	-0.15331E 01	0.	0.	0.	0.	
-0.16658E 01	-0.12681E 01	0.	0.	0.	0.	
-0.24453E 01	-0.87254E 00	0.	0.	0.	0.	
-0.33136E 01	0.10737E 01	0.	-0.	0.	-0.	
-0.51447E 01	0.19715E 01	0.	-0.	0.	-0.	
-0.54275E 01	0.31694E 01	0.	-0.	0.	-0.	
-0.54653E 01	0.45877E 01	0.	-0.	0.	-0.	
-0.50013E 01	0.49601E 01	0.	-0.	0.	-0.	
0.14277E 01	0.91832E 00	-0.	-0.	-0.	-0.	
0.15643E 01	0.14376E-00	-0.	-0.	-0.	-0.	
0.84113E 00	-0.12448E-00	-0.	-0.	-0.	-0.	
0.25744E-00	-0.12172E-00	-0.	-0.	-0.	-0.	
0.61850E-01	-0.54738E-01	-0.	-0.	-0.	-0.	
-0.21216E-01	-0.37744E-01	-0.	-0.	-0.	-0.	
0.12324E-03	-0.62769E-01	-0.	-0.	-0.	-0.	
0.17713E-01	-0.96603E-01	-0.	-0.	-0.	-0.	
0.29369E-02	-0.10807E-00	-0.	0.	-0.	0.	
-0.39261E-01	-0.85250E-01	-0.	0.	-0.	0.	
-0.74680E-01	-0.48494E-01	-0.	-0.	-0.	-0.	
-0.98868E-01	-0.17083E-01	-0.	-0.	-0.	-0.	
-0.75923E-01	0.	-0.	0.	-0.	0.	

Table XV - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 15 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

INCREMENTAL AXIAL STRESS

		REAL	IMAGINARY			
0.	0.	0.140208E 01	0.115026E 03	0.	0.	0.0
0.	0.	0.917791E 02	0.903446E 02	0.	0.	0.0
0.	0.	0.155846E 03	0.154006E 02	0.	0.	0.0
-0.	-0.	0.185588E 03	-0.277796E 02	0.	-0.	0.0
-0.	-0.	0.173211E 03	-0.615208E 02	0.	-0.	0.0
-0.	-0.	0.146711E 03	-0.777938E 02	0.	-0.	0.0
-0.	-0.	0.128095E 03	-0.900599E 02	0.	-0.	0.0
-0.	-0.	0.118119E 03	-0.102959E 03	0.	-0.	0.0
-0.	-0.	0.111844E 03	-0.111949E 03	0.	-0.	0.0
-0.	-0.	0.108611E 03	-0.117044E 03	0.	-0.	1.0
-0.	-0.	0.105477E 03	-0.272708E 03	0.	-0.	1.0
-0.	-0.	0.882064E 02	-0.348356E 03	0.	-0.	1.5
-0.	-0.	0.539972E 02	-0.435208E 03	0.	-0.	1.0
-0.	-0.	-0.217846E 02	-0.468136E 03	-0.	-0.	1.0
-0.	-0.	-0.943911E 02	-0.508466E 03	-0.	-0.	1.0
-0.	-0.	-0.202816E 03	-0.399708E 03	-0.	-0.	1.0
-0.	-0.	-0.485056E 03	-0.608106E 02	-0.	-0.	1.0
0.	0.	-0.538649E 03	0.113266E 03	-0.	0.	1.0
0.	0.	-0.378616E 03	0.117066E 03	-0.	0.	1.0
0.	0.	-0.104426E 03	0.821196E 02	-0.	0.	1.0
0.	0.	-0.465156E 02	0.524196E 02	-0.	0.	1.0
0.	0.	-0.159216E 02	0.268906E 02	-0.	0.	1.0
0.	0.	0.166126E 01	0.865396E 00	0.	0.	2.0
-0.	-0.	0.111336E 0.	-0.252906E 02	0.	-0.	2.0
-0.	-0.	0.410836E 01	-0.331606E 02	0.	-0.	2.0
-0.	-0.	0.336166E 01	-0.519836E 02	0.	-0.	2.0
-0.	-0.	-0.942496E 01	-0.616546E 02	-0.	-0.	2.0
-0.	-0.	-0.216156E 02	-0.620076E 02	-0.	-0.	2.0
-0.	-0.	-0.314406E 02	-0.447206E 02	-0.	-0.	2.0
-0.	-0.	-0.586576E 02	-0.983206E 01	-0.	-0.	2.0
0.	0.	-0.578636E 02	0.251026E 01	-0.	0.	2.0
-0.	-0.	-0.221236E 02	-0.139046E 02	-0.	-0.	2.0
-0.	-0.	-0.286056E 01	-0.471916E 02	-0.	-0.	2.0
-0.	-0.	-0.474386E 01	-0.638476E 02	-0.	-0.	2.0
-0.	-0.	-0.272246E 02	-0.479206E 01	-0.	-0.	2.0
-0.	-0.	-0.806426E 02	-0.466996E 02	-0.	-0.	2.0
-0.	-0.	0.596136E 02	-0.126116E 03	0.	-0.	2.0
-0.	-0.	0.601516E 02	-0.233126E 03	0.	-0.	2.0
-0.	-0.	0.193066E 02	-0.325416E 03	0.	-0.	2.0
-0.	-0.	-0.569716E 02	-0.380096E 03	-0.	-0.	2.0
-0.	-0.	-0.140216E 03	-0.410356E 03	-0.	-0.	2.0
-0.	-0.	-0.415806E 03	-0.954006E 02	-0.	-0.	2.0
0.	0.	-0.737036E 03	0.341716E 03	-0.	0.	2.0
0.	0.	0.180196E 02	0.114106E 03	0.	0.	2.0
-0.	-0.	0.104826E 03	-0.632666E 02	0.	-0.	2.0
0.	0.	0.132876E 01	0.582396E 02	0.	0.	2.0
0.	0.	-0.222186E 03	0.158656E 03	-0.	0.	2.0
0.	0.	-0.122566E 03	0.152796E 03	-0.	0.	2.0
0.	0.	-0.548766E 02	0.130116E 03	-0.	0.	2.0
-0.	-0.	-0.101586E 02	0.100906E 03	-0.	0.	2.0
0.	0.	0.240336E 02	0.843706E 02	0.	0.	2.0
0.	0.	0.424226E 02	0.749366E 02	0.	0.	2.0
0.	0.	0.522746E 02	0.447146E 02	0.	0.	2.0
0.	0.	0.479686E 02	0.312566E 02	0.	0.	2.0
0.	0.	0.656496E 02	0.214996E 02	0.	0.	2.0
0.	0.	0.511266E 02	0.341126E 02	0.	0.	2.0
0.	0.	0.304216E 02	0.347056E 02	0.	0.	2.0
0.	0.	0.402726E 02	0.294966E 02	0.	0.	2.0
0.	0.	0.493466E 02	0.211246E 02	0.	0.	2.0
-0.	-0.	0.684936E 02	-0.129776E 02	0.	-0.	2.0
-0.	-0.	0.984986E 02	-0.279726E 02	0.	-0.	2.0
-0.	-0.	0.102976E 03	-0.477866E 02	0.	-0.	2.0
-0.	-0.	0.103416E 03	-0.710886E 02	0.	-0.	2.0
-0.	-0.	0.956636E 02	-0.777246E 02	0.	-0.	2.0
-0.	-0.	-0.863356E 01	-0.149926E 02	-0.	-0.	2.0
-0.	-0.	-0.107256E 02	-0.510316E 01	-0.	-0.	2.0
-0.	-0.	0.121456E-01	-0.479906E 01	0.	-0.	2.0
-0.	-0.	0.631636E 01	-0.722236E 01	0.	-0.	2.0
-0.	-0.	0.902316E 01	-0.962456E 01	0.	-0.	2.0
-0.	-0.	0.457886E-00	-0.853206E 01	0.	-0.	2.0
-0.	-0.	-0.507166E 01	-0.439696E 01	-0.	-0.	2.0
-0.	-0.	-0.896446E 01	-0.123246E-00	-0.	-0.	2.0
0.	0.	-0.942856E 01	0.263506E 01	-0.	0.	2.0
0.	0.	-0.788666E 01	0.567236E 01	-0.	0.	2.0
0.	0.	-0.576886E 01	0.943886E 01	-0.	0.	2.0
0.	0.	-0.412766E 01	0.127966E 01	-0.	0.	2.0
0.	0.	-0.323406E 01	0.	-0.	0.	2.0

Table XV - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMI SPAN: 27 SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS REAL	INCREMENTAL SHEAR STRESS IMAGINARY	INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY			FREQUENCY (CPS)
0.84221E-01	0.35385E 02	-0.80681E 00	0.30565E 05	0.	-0.	0.10
0.24347E 02	0.29947E 02	0.19898E 03	0.26210E 05	-0.	-0.	0.30
0.44132E 02	0.83452E 01	0.37020E 03	0.78906E 02	-0.	-0.	0.36
0.55393E 02	-0.51332E 01	0.47339E 03	-0.59261E 02	-0.	0.	0.44
0.53094E 02	-0.16505E 02	0.45756E 03	-0.14192E 05	-0.	0.	0.50
0.46190E 02	-0.22434E 02	0.40073E 03	-0.19748E 03	-0.	0.	0.60
0.41253E 02	-0.27016E 02	0.35800E 03	-0.24396E 05	-0.	0.	0.70
0.38231E 02	-0.31273E 02	0.32986E 03	-0.28530E 03	-0.	0.	0.80
0.34521E 02	-0.37815E 02	0.31144E 03	-0.33952E 05	-0.	0.	0.90
0.35926E 02	-0.55253E 02	0.25897E 03	-0.51720E 05	-0.	0.	1.00
0.36653E 02	-0.97188E 02	0.27763E 03	-0.80276E 03	-0.	0.	1.20
0.33495E 02	-0.12897E 05	0.20963E 05	-0.10256E 04	0.	0.	1.30
0.22848E 02	-0.16771E 03	0.96540E 02	-0.12780E 04	0.	-0.	1.40
-0.42896E 01	-0.18946E 03	-0.14204E 03	-0.14050E 04	0.	-0.	1.45
-0.32343E 02	-0.29625E 03	-0.36551E 03	-0.14789E 04	0.	-0.	1.47
-0.75495E 02	-0.17111E 03	-0.69482E 03	-0.10976E 04	0.	-0.	1.50
-0.39911E 03	-0.35902E 02	-0.15332E 04	-0.30146E 03	-0.	-0.	1.55
-0.23925E 03	0.46462E 02	-0.16662E 04	0.40830E 03	-0.	0.	1.60
-0.18287E 03	0.70084E 02	-0.11743E 04	0.40870E 03	-0.	0.	1.65
-0.70840E 02	0.64437E 02	-0.56373E 03	0.30739E 03	-0.	0.	1.80
-0.45308E 02	0.62249E 02	-0.20150E 03	0.25180E 03	-0.	0.	1.90
-0.30218E 02	0.63714E 02	-0.12059E 03	0.17513E 03	-0.	0.	2.00
-0.20436E 02	0.65980E 02	-0.77273E 02	0.12795E 03	-0.	0.	2.10
-0.56218E 01	0.74499E 02	-0.54149E 02	0.87179E 02	-0.	0.	2.25
0.34082E 02	0.70093E 02	-0.52018E 02	0.70001E 02	0.	0.	2.30
0.17233E 02	0.27041E 02	-0.52413E 02	0.46193E 02	0.	0.	2.35
0.24472E 02	0.79822E 02	-0.65530E 02	0.56245E 02	0.	0.	2.40
0.34061E 02	0.79724E 02	-0.85646E 02	0.35754E 02	0.	0.	2.43
0.39009E 02	0.72921E 02	-0.97472E 02	0.56486E 02	0.	0.	2.44
0.50533E 02	0.63352E 02	-0.12910E 03	0.10052E 03	0.	0.	2.47
0.50381E 02	0.65314E 02	-0.12646E 05	0.11476E 03	0.	0.	2.50
0.45535E 02	0.84011E 02	-0.84240E 02	0.97085E 02	0.	0.	2.54
0.54631E 02	0.10592E 03	-0.63312E 02	0.66091E 02	0.	0.	2.58
0.10102E 03	0.10456E 03	-0.48845E 02	0.56672E 02	0.	0.	2.65
0.14764E 03	-0.10530E 03	-0.96245E 02	0.14805E 03	0.	-0.	2.70
0.29234E 03	-0.36349E 03	-0.14415E 03	0.14327E 03	0.	-0.	2.80
-0.28309E 02	-0.11812E 03	0.16352E 02	0.11391E 03	-0.	-0.	3.00
-0.56132E 02	-0.93940E 02	0.26914E 02	0.96725E 02	-0.	-0.	3.10
-0.23322E 02	-0.85284E 02	0.30791E 02	0.90310E 02	-0.	-0.	3.20
-0.81036E 02	-0.83382E 02	0.33523E 02	0.87505E 02	-0.	-0.	3.26
-0.88238E 02	-0.82515E 02	0.36221E 02	0.80885E 02	-0.	-0.	3.29
-0.10972E 03	-0.71410E 02	0.45080E 02	0.62441E 02	-0.	-0.	3.35
-0.15204E 03	0.89707E 02	0.53823E 02	0.45047E 02	-0.	0.	3.40
-0.20169E 03	0.16242E 03	0.10523E 02	0.61216E 02	-0.	0.	3.50
-0.16465E 03	0.21643E 03	0.47220E 01	0.77443E 02	-0.	0.	3.55
-0.10039E 02	0.57863E 02	0.14542E 02	0.65131E 02	-0.	0.	3.60
0.75812E 02	0.12316E 02	0.41709E 02	0.42118E 02	0.	-0.	3.70
0.47726E 02	-0.54085E 01	0.47620E 02	0.32365E 02	0.	-0.	3.85
0.74912E 02	-0.30415E 02	0.44214E 02	0.25349E 02	0.	-0.	4.00
0.30327E 02	-0.10380E 02	0.42425E 02	0.39653E 02	0.	-0.	4.20
0.38707E-00	-0.92066E 01	0.47327E 02	0.11968E 02	-0.	-0.	4.50
-0.35285E 01	-0.84821E 01	0.60177E 02	0.78723E 01	-0.	-0.	4.70
-0.49824E 01	-0.62779E 01	0.73053E 02	-0.53518E 02	-0.	0.	4.80
-0.69818E 01	-0.61727E 01	0.95124E 02	-0.82493E 02	-0.	0.	4.96
-0.72581E 01	[illegible]	0.94297E 02	-0.85851E 02	-0.	0.	5.00
-0.70801E 01	[illegible]	-0.12810E 02	-0.36016E 02	0.	0.	5.13
-0.78159E 01	[illegible]	-0.30220E 02	-0.15078E 02	0.	-0.	5.30
-0.91329E 01	[illegible]	-0.22972E 02	-0.77192E 01	-0.	-0.	5.50
-0.10893E 02	-0.11971E 01	-0.20631E 02	-0.36687E 01	-0.	-0.	5.70
-0.13055E 02	0.38635E 01	-0.23959E 02	0.10526E 02	-0.	-0.	5.85
-0.17388E 02	0.60355E 01	-0.35203E 02	0.16962E 02	-0.	0.	6.00
-0.18059E 02	0.89105E 01	-0.37039E 02	0.25569E 02	-0.	0.	6.03
-0.18167E 02	0.12310E 02	-0.37363E 02	0.35800E 02	-0.	0.	6.06
-0.17110E 02	0.13721E 02	-0.33715E 02	0.50920E 02	-0.	0.	6.08
-0.20813E 01	0.49234E 01	0.13415E 02	0.93671E 01	-0.	0.	6.20
-0.14308E 01	0.36368E 01	0.15748E 02	0.21754E 01	-0.	0.	6.40
-0.27608E 01	0.38199E 01	0.11146E 02	0.13424E-00	-0.	0.	6.60
-0.32940E 01	0.43904E 01	0.73215E 01	-0.86774E 00	-0.	0.	7.00
-0.28731E 01	0.51455E 01	0.50944E 01	-0.17360E 01	-0.	0.	7.50
-0.11105E 01	0.48479E 01	0.42603E 01	-0.25299E 01	-0.	0.	8.20
0.81687E 00	0.37366E 01	0.35492E 01	-0.28575E 01	-0.	0.	9.00
0.24288E 01	0.15723E 01	0.22131E 01	-0.30441E 01	0.	0.	10.00
0.36108E 01	0.23041E-00	0.17964E 01	-0.28345E 01	0.	0.	11.00
0.37481E 01	-0.12214E 01	0.26049E-00	-0.24430E 01	0.	-0.	12.00
0.31242E 01	-0.21871E 01	-0.54565E 00	-0.18949E 01	0.	-0.	13.00
0.21401E 01	-0.25813E 01	-0.10458E 01	-0.12299E 01	0.	-0.	14.00
0.97849E 00	-0.25396E 01	-0.14243E 01	-0.66189E 00	0.	-0.	15.00
-0.33640E-00	-0.20754E 01	-0.35827E 01	-0.19647E-01	-0.	-0.	16.00
-0.10099E 01	-0.13980E 01	-0.14200E 01	0.62906E 00	-0.	-0.	17.00
-0.36059E 01	-0.64391E 00	-0.35614E 01	0.12831E 01	-0.	0.	18.00
-0.18238E 01	0.77206E-01	-0.12949E 01	0.19489E 01	-0.	0.	19.00
-0.12591E 01	0.	-0.70691E 00	0.	-0.	0.	20.00

Table XV - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS REAL	INCREMENTAL SHEAR STRESS IMAGINARY	INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY			FREQUENCY CPS
0.629663E-02	0.107C9E 03	0.73216E 00	0.275555E 03	0.	-0.	0.10
0.721529E 02	0.513299E 02	0.180571E 03	0.237185E 03	-0.	-0.	0.30
0.137019E 03	0.266746E 02	0.335946E 03	0.716C5E 32	-0.	-0.	0.50
0.166670E 03	-0.144496E 02	0.429596E 03	-0.356629E 02	-0.	0.	0.70
0.160108E 03	-0.491996E 02	0.415256E 03	-0.128799E 03	-0.	0.	0.90
0.139227E 03	-0.673113E 02	0.363656E 03	-0.179216E 03	-0.	0.	1.10
0.123966E 03	-0.811121E 02	0.324886E 03	-0.211866E 03	-0.	0.	1.30
0.114116E 03	-0.951111E 02	0.299346 03	-0.258091E 03	-0.	0.	1.50
0.108007E 03	-0.112355E 03	0.282636 03	-0.300810E 03	-0.	0.	1.70
0.104521E 03	-0.129053E 03	0.271316 03	-0.469955E 33	-0.	0.	1.90
0.101096E 03	-0.269007E 03	0.251626 03	-0.728696 03	-0.	0.	2.10
0.854096E 02	-0.144E99E 03	0.199222E 03	-0.930696 03	0.	0.	2.30
0.576696E 02	-0.439177E 03	0.874276E 02	-0.115976 04	0.	-0.	2.50
-0.222229E 02	-0.488956E 03	-0.128906 03	-0.127506 04	0.	-0.	2.70
-0.936396E 02	-0.524111 03	-0.331696 03	-0.134216 04	0.	-0.	2.90
-0.207126 01	-0.415906 03	-0.630536 03	-0.996076 03	0.	-0.	3.10
-0.507736 03	-0.745671 02	-0.139146 04	-0.920166 02	-0.	-0.	3.30
-0.583046 03	0.117496 03	-0.151206 04	0.370536 03	-0.	0.	3.50
-0.428346 03	0.147586 03	-0.106566 04	0.370896 03	-0.	0.	3.70
-0.148046 03	0.122616 03	0.730086 03	0.279326 03	-0.	0.	3.90
-0.880626 02	0.105296 03	-0.182866 03	0.210356 03	-0.	0.	4.10
-0.559796 02	0.955276 02	-0.109446 03	0.153936 03	-0.	0.	4.30
-0.356016 02	0.922286 02	-0.701246 02	0.116116 03	-0.	0.	4.50
-0.185226 02	0.8C0466 02	-0.491396 02	0.791136 02	-0.	0.	4.70
0.498246 01	0.AC 906 02	-0.472056 02	0.635246 02	0.	0.	4.90
0.820116 01	0.818226 02	-0.477451 02	0.619196 02	0.	0.	5.10
0.136726 02	0.820536 02	-0.594676 02	0.328916 02	0.	0.	5.30
0.178746 02	0.816926 02	-0.777216 02	0.324466 02	0.	0.	5.50
0.197616 02	0.803796 02	-0.886546 02	0.512596 02	0.	0.	5.70
0.224606 02	0.840926 02	-0.117166 03	0.910376 02	0.	0.	5.90
0.222546 02	0.972276 02	-0.114766 03	0.104146 03	0.	0.	6.10
0.301426 02	0.105586 03	-0.764466 02	0.881026 02	0.	0.	6.30
0.493256 02	0.123766 03	-0.574566 02	0.599761 02	0.	0.	6.50
0.102826 03	0.119626 03	-0.624756 02	0.514296 02	0.	0.	6.70
0.173526 03	-0.106606 03	-0.873436 02	0.134356 03	0.	-0.	6.90
0.302566 03	-0.172366 03	-0.132636 03	0.130026 03	0.	-0.	7.10
-0.321336 02	-0.134276 03	0.146396 02	0.103376 03	-0.	-0.	7.30
-0.628836 02	-0.119836 03	0.264746 02	2.877746 02	-0.	-0.	7.50
-0.867026 02	-0.120696 03	0.279436 02	0.819546 02	-0.	-0.	7.70
-0.103946 03	-0.124186 03	0.304216 02	0.794096 02	-0.	-0.	7.90
-0.120966 03	-0.128366 03	0.328706 02	0.734016 02	-0.	-0.	8.10
-0.174596 03	-0.869476 02	0.409096 02	0.566646 02	-0.	-0.	8.30
-0.260316 03	0.161936 03	0.488436 02	0.408C0E 02	-0.	-0.	8.50
-0.259646 03	0.244106 03	0.954986 01	0.555526 02	-0.	0.	8.70
-0.203906 03	0.294256 03	0.433056 01	0.702786 02	-0.	0.	8.90
-0.606716 02	0.151836 03	0.131966 02	0.591056 02	-0.	0.	9.10
0.A5432E 02	0.454706 02	0.432946 02	0.382216 02	0.	-0.	9.30
0.608346 02	0.1C4926 02	0.432146 02	0.293706 02	0.	-0.	9.50
0.182806 02	0.924C96 01	0.401256 02	0.230036 02	0.	-0.	9.70
0.248616 02	0.512206 01	0.386856 02	0.169276 02	0.	-0.	9.90
0.199416 02	0.252596 01	0.429486 02	0.108616 02	-0.	-0.	10.10
0.252516 02	-0.159776 01	0.546096 02	0.260676 01	-0.	-0.	10.30
0.321306 02	-0.334876 02	0.662946 02	-0.485676 02	-0.	0.	10.50
0.446126 02	-0.500526 02	0.863226 02	-0.748606 02	-0.	0.	10.70
0.383746 02	-0.516396 02	0.766976 02	-0.779076 02	-0.	0.	10.90
-0.212096 02	-0.217536 02	-0.161626 02	-0.326846 02	0.	0.	11.10
-0.288706 02	-0.830466 01	-0.274696 02	-0.136816 02	0.	-0.	11.30
-0.248046 02	-0.278176 01	-0.208466 02	-0.700506 01	-0.	-0.	11.50
-0.235326 02	0.526906 00	-0.187236 02	-0.332936 01	-0.	-0.	11.70
-0.257526 02	0.107956 02	-0.217426 02	0.955236 01	-0.	-0.	11.90
-0.333186 02	0.151666 02	-0.319466 02	0.153936 02	-0.	0.	12.10
-0.345776 02	0.213266 02	-0.336126 02	0.232046 02	-0.	0.	12.30
-0.346806 02	0.284696 02	-0.337246 02	0.324876 02	-0.	0.	12.50
-0.323406 02	0.315836 02	-0.305966 02	0.353196 02	-0.	0.	12.70
0.429336E-00	0.118716 02	0.121746 02	0.850056 01	-0.	0.	12.90
0.311086 01	0.797566 01	0.142916 02	0.267976 01	-0.	0.	13.10
0.821066 00	0.630266 01	0.101156 02	0.121826-06	-0.	0.	13.30
+0.295516-00	0.593336 01	0.668956 01	-0.787456 00	-0.	0.	13.50
-0.608166-01	0.546696 01	0.534916 01	-0.157596 01	-0.	0.	13.70
0.196826 01	0.394996 01	0.386616 01	-0.211436 01	-0.	0.	13.90
0.299026 01	0.230476 01	0.322136 01	-0.259296 01	-0.	0.	14.10
0.360006 01	0.622326 00	0.200846 01	-0.276246 01	0.	0.	14.30
0.355536 01	-0.452676-00	0.117656 01	-0.257226 01	0.	0.	14.50
0.298686 01	-0.961546 00	0.236386-00	-0.221706 01	0.	-0.	14.70
0.222396 01	-0.122066 01	-0.495166-00	-0.171966 01	0.	-0.	14.90
0.171726 01	-0.125426 01	-0.949026 00	-0.111616 01	0.	-0.	15.10
0.137566 01	-0.149716 01	-0.129256 01	-0.600656 00	0.	-0.	15.30
0.113506 01	-0.172836 01	-0.140636 01	-0.178296-01	-0.	-0.	15.50
0.966466 00	-0.203856 01	-0.147026 01	0.570866 00	-0.	-0.	15.70
0.374466-00	-0.222276 01	-0.141696 01	0.116266 01	-0.	0.	15.90
-0.266506-00	-0.209716 01	-0.117506 01	0.176866 01	-0.	0.	16.10
-0.114846 01	0.	-0.719106 00	0.	-0.	0.	16.30

Table XV- - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
ALTITUDE: 24 000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS REAL	INCREMENTAL SHEAR STRESS IMAGINARY	INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY			FREQUENCY RAD
-0.134277E-00	0.737806E 02	-0.124896E 01	0.278976E 03	0.	0.	0.00
0.492326E 02	0.631686E 02	0.180586E 03	0.241976E 03	0.	0.	0.50
0.505306E 02	0.186692E 02	0.338896E 03	0.733296E 02	0.	0.	0.55
0.114806E 03	-0.959616E 01	0.436066E 03	-0.365976E 02	0.	-0.	0.60
0.110576E 03	-0.339066E 02	0.422776E 03	-0.333366E 03	0.	-0.	0.50
0.966276 02	-0.446656E 02	0.373316E 03	-0.386766 03	0.	-0.	0.60
0.866426 02	-0.567776 02	0.332166 03	-0.229386 03	0.	-0.	0.70
0.800236 02	-0.672186 02	0.306076 03	-0.272726 03	0.	-0.	0.80
0.762076 02	-0.803046 02	0.288596 03	-0.325936 03	0.	-0.	0.90
0.741776 02	-0.125276 03	0.276126 03	-0.499266 03	0.	-0.	1.00
0.725546 02	-0.201256 03	0.251676 03	-0.774836 03	0.	-0.	1.10
0.605606 02	-0.263386 03	0.178016 03	-0.987546 03	0.	-0.	1.20
0.367176 02	-0.336216 03	0.620196 02	-0.122516 04	0.	-0.	1.30
-0.246066 02	-0.375096 03	-0.175896 03	-0.336156 04	-0.	-0.	1.40
-0.876866 02	-0.401026 03	-0.395726 03	-0.340356 04	-0.	-0.	1.47
-0.170806 03	-0.314816 03	-0.716326 03	-0.101056 04	-0.	-0.	1.50
-0.407666 03	-0.444646 02	-0.151576 04	-0.637746 02	-0.	-0.	1.55
-0.465536 03	0.125456 03	-0.161476 04	0.433926 03	-0.	0.	1.60
-0.342236 03	0.130526 03	-0.112416 04	0.408376 03	-0.	0.	1.65
-0.115756 03	0.111046 03	-0.340886 03	0.304066 03	-0.	0.	1.80
-0.718776 02	0.675446 02	-0.187706 03	0.226466 03	-0.	0.	1.90
-0.466546 02	0.856086 02	-0.112876 03	0.167806 03	-0.	0.	2.00
-0.300706 02	0.853796 02	-0.746246 02	0.136316 03	-0.	0.	2.10
-0.182596 02	0.859266 02	-0.586726 02	0.820196 02	-0.	0.	2.20
-0.118486 02	0.930796 02	-0.834426 02	0.869876 02	0.	0.	2.30
-0.401126 01	0.965636 02	-0.764286 02	0.670196 02	0.	0.	2.35
0.793446 01	0.972216 02	-0.775106 02	0.582536 02	0.	0.	2.40
0.163146 02	0.967246 02	-0.705006 02	0.575776 02	0.	0.	2.43
0.201576 02	0.951626 02	-0.983316 02	0.711486 02	0.	0.	2.44
0.292076 02	0.848256 02	-0.117556 03	0.961046 02	0.	0.	2.47
0.308066 02	0.872246 02	-0.111706 03	0.949836 02	0.	0.	2.50
0.294666 02	0.952936 02	-0.849886 02	0.745596 02	0.	0.	2.54
0.362666 02	0.107576 03	-0.796076 02	0.466866 02	0.	0.	2.58
0.658526 02	0.106666 03	-0.109176 03	0.455126 02	0.	0.	2.65
0.106126 03	-0.132616 02	-0.159026 03	0.213576 03	0.	-0.	2.70
0.178396 03	-0.268276 02	-0.232456 03	0.215066 03	0.	-0.	2.80
0.753156 01	0.113466 02	0.225716 02	0.384516 03	0.	-0.	3.00
0.512096 01	0.478216 02	0.376446 02	0.181756 03	-0.	0.	3.10
0.213226 02	0.739856 02	0.510116 02	0.192436 03	0.	0.	3.20
0.450446 02	0.898676 02	0.711646 02	0.200926 03	0.	0.	3.26
0.707776 02	0.104146 03	0.933736 02	0.199936 03	0.	0.	3.29
0.150396 03	0.328196 02	0.167676 03	0.105816 03	0.	0	3.35
0.257596 03	-0.192686 03	0.225536 03	-0.281146 02	0.	-0.	3.40
0.148696 03	-0.215706 03	0.388766 02	0.359566 02	0.	-0.	3.50
0.160516 03	-0.226976 03	0.124406 02	0.876366 02	0.	-0.	3.56
0.386616 02	-0.144636 03	0.435186 02	0.432376 02	0.	-0.	3.60
-0.584546 02	-0.796126 02	0.116986 03	-0.298206 01	-0.	-0.	3.70
-0.579766 02	-0.469766 02	0.877716 02	-0.323976 02	-0.	-0.	3.80
-0.509596 02	-0.334376 02	0.647946 02	-0.169346 02	-0.	-0.	4.00
-0.460186 02	-0.196546 02	0.469886 02	-0.204896 02	-0.	-0.	4.20
-0.438216 02	-0.122956 02	0.282276 02	-0.212206 02	-0.	-0.	4.30
-0.461406 02	-0.724006 01	0.146216 02	-0.189726 02	-0.	-0.	4.70
-0.497606 02	0.139536 02	0.545296 01	0.253956 01	-0.	0.	4.80
-0.546566 02	0.236336 02	-0.106876 02	0.147556 02	-0.	0.	4.96
-0.506946 02	0.259846 02	-0.828226 01	0.183816 02	-0.	0.	5.00
-0.172756 02	0.121016 02	0.305226 02	-0.309696 01	-0.	0.	5.15
-0.127806 02	0.779256 01	0.332556 02	-0.129406 02	-0.	0.	5.30
-0.141236 02	0.754956 01	0.255416 02	-0.163416 02	-0.	0.	5.50
-0.140896 02	0.781746 01	0.186076 02	-0.170016 02	-0.	0.	5.70
-0.130016 02	0.653736 01	0.141566 02	-0.155836 02	-0.	0.	5.85
-0.105666 02	0.546916 01	0.979006 01	-0.148676 02	-0.	0.	6.00
-0.101846 02	0.451906 01	0.925376 01	-0.139756 02	-0.	-0.	6.05
-0.100876 02	0.312756 01	0.899626 01	-0.130376 02	-0.	-0.	6.06
-0.105616 02	0.384196 01	0.919076 01	-0.144076 02	-0.	-0.	6.08
-0.172396 02	0.972986 01	0.118856 02	-0.169626 02	-0.	0.	6.20
-0.159666 02	0.117466 02	0.758246 01	-0.163966 02	-0.	0.	6.40
-0.136376 02	0.136966 02	0.400586 01	-0.139036 02	-0.	0.	.60
-0.956176 01	0.144356 02	-0.602466 00	-0.113346 02	-0.	0.	.00
-0.611076 01	0.142146 02	-0.323396 01	-0.672636 01	-0.	0.	7.40
-0.755216-01	0.132406 02	-0.640706 01	-0.160906 01	-0.	0.	8.20
0.520066 01	0.734086 01	-0.683796 01	0.196776 01	0.	0.	9.00
0.913116 01	0.200576 01	-0.479096 01	0.393206 01	0.	0.	10.00
0.106486 02	-0.288796 01	-0.112786 01	0.223746 01	0.	-0.	11.00
0.943456 01	-0.646746 01	0.183046 01	-0.209936-00	0.	-0.	12.00
0.652876 01	-0.802646 01	0.303116 01	0.285416 01	0.	-0.	13.00
0.255126 01	-0.773356 01	0.240306 01	-0.453816 01	0.	-0.	14.00
-0.129726 01	-0.575976 01	0.117446-00	-0.445396 01	-0.	-0.	15.00
-0.426366 01	-0.305516 01	-0.209936 01	-0.250306 01	-0.	-0.	16.00
-0.596726 01	-0.451026-01	-0.555056 01	0.867366 00	-0.	-0.	17.00
-0.613246 01	0.240476 01	-0.682246 01	0.459826 01	-0.	0.	18.00
-0.517996 01	0.402256 01	-0.594696 01	0.758006 01	-0.	0.	19.00
-0.325136 01	0.	-0.308346 01	0.	-0.	0.	20.00

Table XV --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB   CUTOFF FREQUENCY 20 CPS
ALTITUDE: 24,300 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06   SEGMENT NUMBER [illegible]

INCREMENTAL SHEAR STRESS REAL	INCREMENTAL SHEAR STRESS IMAGINARY			INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY	FREQUENCY CPS
-0.94903E-01	0.21767E 02	0.	0.	0.10671E 01	-0.23036E 03	0.10
0.49004E 02	0.61323E 02	0.	0.	-0.15429E 03	-0.20624E 03	0.30
0.28023E 02	0.18141E 02	0.	0.	-0.24956E 03	-0.62655E 02	0.36
0.11117E 03	-0.92001E 01	0.	-0.	-0.37259E 03	0.31270E 02	0.44
0.10714E 03	-0.52463E 02	0.	-0.	-0.36173E 03	0.11395E 03	0.50
0.93501E 02	-0.44720E 02	0.	-0.	-0.31726E 03	0.15950E 03	0.60
0.83569E 02	-0.54230E 02	0.	-0.	-0.29391E 03	0.19582E 03	0.70
0.27320E 02	-0.64027E 02	0.	-0.	-0.24151E 03	0.23302E 03	0.80
0.23625E 02	-0.76292E 02	0.	-0.	-0.24650E 03	0.27049E 03	0.90
0.71693E 02	-0.11051E 03	0.	-0.	-0.22593E 03	0.42650E 03	1.00
0.70435E 02	-0.19038E 03	0.	-0.	-0.21504E 03	0.66204E 03	1.20
0.59906E 02	-0.24806E 03	0.	-0.	-0.15210E 03	0.84379E 03	1.34
0.36214E 02	-0.31802E 03	0.	-0.	-0.52491E 02	0.10467E 04	1.40
-0.10087E 02	-0.35531E 03	-0.	-0.	0.15029E 03	0.11462E 04	1.45
-0.73127E 02	-0.38142E 03	-0.	-0.	0.33911E 03	0.11992E 04	1.47
-0.15508E 03	-0.30203E 03	-0.	-0.	0.61205E 03	0.86332E 03	1.50
-0.32994E 03	-0.47942E 02	-0.	-0.	0.12951E 04	0.37402E 02	1.55
-0.43237E 03	0.96081E 02	-0.	0.	0.13797E 04	-0.37076E 03	1.60
-0.32248E 03	0.12023E 03	-0.	0.	0.96042E 03	-0.34892E 03	1.65
-0.11349E 03	0.10294E 03	-0.	0.	0.29126E 03	-0.26015E 03	1.80
-0.68C08E 02	0.90529E 02	-0.	0.	0.16038E 03	-0.17366E 03	1.90
-0.43528E 02	0.43204E 02	-0.	0.	0.96435E 02	-0.14332E 03	2.00
-0.28166E 02	0.29240E 02	-0.	0.	0.63761E 02	-0.99383E 02	2.10
-0.16717E 02	0.29222E 02	-0.	0.	0.50131E 02	-0.20080E 02	2.20
-0.10193E 02	0.85323E 02	0.	0.	0.71296E 02	-0.24324E 02	2.30
-0.31319E 01	0.88129E [illegible]	0.	0.	0.65302E 02	-0.52263E 02	2.35
0.75040E 01	0.88461E [illegible]	0.	0.	0.66222E 02	-0.49724E 02	2.40
0.14571E 02	0.82990E 02	0.	0.	0.77326E 02	-0.49193E 02	2.43
0.12698E 02	0.84122E 02	0.	0.	0.84012E 02	-0.60791E 02	2.44
0.24526E 02	0.80294E 02	0.	0.	0.10044E 03	-0.82285E 02	2.47
0.25736E 02	0.84412E 02	0.	0.	0.95439E 02	-0.81156E 02	2.50
0.26670E 02	0.92072E 02	0.	0.	0.72612E 02	-0.63706E 02	2.54
0.34518E 02	0.10295E 03	0.	0.	0.65018E 02	-0.39327E 02	2.58
0.65066E 02	0.10103E 03	0.	0.	0.93276E 02	-0.38887E 02	2.65
0.10469E 03	-0.12763E 02	0.	-0.	0.13587E 03	-0.18248E 03	2.70
0.17355E 03	-0.29493E 02	0.	-0.	0.17861E 03	-0.18576E 03	2.80
0.67325E 01	0.66228E 01	0.	-0.	-0.19285E 02	-0.15765E 03	3.00
0.42166E 01	0.40070E 02	-0.	0.	-0.22166E 02	-0.15529E 03	3.10
0.19904E 02	0.63533E 02	0.	0.	-0.43585E 02	-0.16442E 03	3.20
0.42423E 02	0.22773E 02	0.	0.	-0.[illegible]805E 02	-0.17167E 03	3.26
0.64690E 02	0.91010E 02	0.	0.	-0.29649E 02	-0.12063E 03	3.29
0.13596E 03	0.28895E 02	0.	0.	-0.14326E 03	-0.90406E 02	3.35
0.23356E 03	-0.18150E 03	0.	-0.	-0.21833E 03	0.24021E 02	3.40
0.14525E 03	-0.21045E 03	0.	-0.	-0.33214E 02	-0.30222E 02	3.52
0.10007E 03	-0.22522E 03	0.	-0.	-0.10629E 02	-0.74879E 02	3.56
0.35625E 02	-0.14012E 03	0.	-0.	-0.37183E 02	-0.36943E 02	3.60
-0.65334E 02	-0.69218E 02	-0.	-0.	-0.99945E 02	0.22061E 01	3.70
-0.61337E 02	-0.43994E 02	-0.	-0.	-0.74995E 02	0.10592E 02	3.85
-0.52110E 02	-0.28004E 02	-0.	-0.	-0.55362E 02	0.14469E 02	4.00
-0.45395E 02	-0.14977E 02	-0.	-0.	-0.40148E 02	0.17672E 02	4.20
-0.40652E 02	-0.84863E 01	-0.	-0.	-0.24118E 02	0.18131E 02	4.50
-0.40055E 02	-0.42336E 01	-0.	-0.	-0.12493E 02	0.16211E 02	4.70
-0.40855E 02	0.73882E 01	-0.	0.	-0.46591E 01	-0.21699E 01	4.80
-0.41978E 02	0.12512E 02	-0.	0.	0.91316E 01	-0.12607E 02	4.96
-0.39523E 02	0.14125E 02	-0.	0.	0.70257E 01	-0.15706E 02	5.00
-0.22051E 02	0.82321E 01	-0.	0.	-0.26079E 02	0.26461E 01	5.15
-0.19258E 02	0.73037E 01	-0.	0.	-0.28414E 02	0.11057E 02	5.30
-0.19951E 02	0.81940E 01	-0.	0.	-0.21823E 02	0.13962E 02	5.50
-0.17951E 02	0.89525E 01	-0.	0.	-0.15898E 02	0.14526E 02	5.70
-0.16827E 02	0.91622E 01	-0.	0.	-0.12130E 02	0.13315E 02	5.85
-0.15208E 02	0.89938E 01	-0.	0.	-0.83649E 01	0.12703E 02	6.00
-0.15045E 02	0.82355E 01	-0.	-0.	-0.29062E 01	0.11940E 02	6.03
-0.14960E 02	0.84372E 01	-0.	-0.	-0.26066E 01	0.11140E 02	6.06
-0.15048E 02	0.96078E 01	-0.	-0.	-0.28528E 01	0.12310E 02	6.08
-0.16498E 02	0.12232E 02	-0.	0.	-0.10155E 02	0.14493E 02	6.20
-0.14573E 02	0.13445E 02	-0.	0.	-0.64786E 01	0.14009E 02	6.40
-0.12478E 02	0.14763E 02	-0.	0.	-0.34227E 01	0.11880E 02	6.60
-0.85533E 01	0.15110E 02	-0.	0.	0.51474E 00	0.96840E 01	7.00
-0.50057E 01	0.14330E 02	-0.	0.	0.22432E 01	0.57489E 01	7.40
0.57795E 00	0.11684E 02	-0.	0.	0.54743E 01	0.13748E 01	8.20
0.60965E 01	0.66956E 01	0.	0.	0.58473E 01	-0.16812E 01	9.00
0.95328E 01	0.13647E 01	0.	0.	0.55369E 01	-0.28213E 01	10.00
0.10645E 02	-0.33034E 01	0.	-0.	0.96356E 00	-0.19112E 01	11.00
0.91100E 01	-0.66079E 01	0.	-0.	-0.15639E 01	0.17937E-00	12.00
0.61152E 01	-0.78380E 01	0.	-0.	-0.25809E 01	0.24586E 01	13.00
0.72128E 01	-0.73866E 01	0.	-0.	-0.20532E 01	0.38775E 01	14.00
-0.14058E 01	-0.54432E 01	-0.	-0.	-0.10034E-00	0.38055E 01	15.00
-0.40910E 01	-0.28830E 01	-0.	-0.	0.25576E 01	0.21586E 01	16.00
-0.56070E 01	-0.17401E-00	-0.	-0.	0.42423E 01	-0.74110E 00	17.00
-0.57021E 01	0.20822E 01	-0.	0.	0.58293E 01	-0.39289E 01	18.00
-0.48292E 01	0.35629E 01	-0.	0.	0.50812E 01	-0.64766E 01	19.00
-0.32850E 01	0.	-0.	0.	0.26362E 01	0.	20.00

Table XV – – – Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS REAL	IMAGINARY					
-0.41556E-01	-0.11891E 01	0.	-0.	0.	-0.	
-0.12179E 01	-0.77898E 00	0.	-0.	0.	-0.	
-0.18598E 01	0.91125E-01	0.	-0.	0.	-0.	
-0.19906E 01	0.50408E 00	-0.	-0.	-0.	-0.	
-0.17376E 01	0.74625E 00	-0.	-0.	-0.	-0.	
-0.13591E 01	0.80593E 00	-0.	-0.	-0.	-0.	
-0.11179E 01	0.82421E 00	-0.	-0.	-0.	-0.	
-0.98007E 00	0.84129E 00	-0.	-0.	-0.	-0.	
-0.90381E 00	0.87597E 00	-0.	-0.	-0.	-0.	
-0.97077E 00	0.10753E 01	-0.	-0.	-0.	-0.	
-0.90624E 00	0.15150E 01	-0.	-0.	-0.	-0.	
-0.56810E 00	0.19134E 01	0.	-0.	0.	-0.	
-0.92368E 00	0.24331E 01	0.	-0.	0.	-0.	
-0.69876E 00	0.27529E 01	-0.	-0.	-0.	-0.	
-0.42273E-00	0.30482E 01	-0.	-0.	-0.	-0.	
0.49574E-01	0.29039E 01	-0.	-0.	-0.	-0.	
0.15715E 01	0.13955E 01	-0.	-0.	-0.	-0.	
0.23187E 01	0.31194E-00	-0.	-0.	-0.	-0.	
0.18653E 01	-0.14333E-00	-0.	0.	-0.	0.	
0.45002E-00	-0.65059E-01	-0.	0.	-0.	0.	
0.75392E-01	0.30583E-01	-0.	0.	-0.	0.	
-0.17078E-00	0.13103E-00	-0.	0.	-0.	0.	
-0.36177E-00	0.25075E-00	-0.	-0.	-0.	-0.	
-0.53919E 00	0.45146E-00	0.	-0.	0.	-0.	
-0.70218E 00	0.56544E 00	0.	-0.	0.	-0.	
-0.73011E 00	0.70344E 00	0.	-0.	0.	-0.	
-0.73506E 00	0.79091E 00	0.	-0.	0.	-0.	
-0.66940E 00	0.81309E 00	0.	-0.	0.	-0.	
-0.61489E 00	0.73339E 00	0.	-0.	0.	-0.	
-0.42446E-00	0.42470E-00	0.	-0.	0.	-0.	
-0.41417E-00	0.20201E-00	0.	-0.	0.	-0.	
-0.78708E 00	0.23893E-00	0.	-0.	0.	-0.	
-0.11547E 01	0.45288E-00	0.	-0.	0.	-0.	
-0.17459E 01	0.77002E 00	0.	-0.	0.	-0.	
-0.23213E 01	0.28963E 01	0.	-0.	0.	-0.	
-0.31240E 01	0.46034E 03	0.	-0.	0.	-0.	
-0.87678E 00	0.57242E 01	0.	-0.	0.	-0.	
-0.43960E-00	0.79344E 01	0.	-0.	0.	-0.	
0.77891E 00	0.10005E 02	-0.	-0.	-0.	-0.	
0.27924E 01	0.11310E 02	-0.	-0.	-0.	-0.	
0.49545E 01	0.12024E 02	-0.	-0.	-0.	-0.	
0.12111E 02	0.39513E 01	-0.	-0.	-0.	0.	
0.20749E 02	-0.91543E 01	-0.	0.	-0.	0.	
0.21839E 01	-0.42554E 01	-0.	0.	-0.	0.	
-0.55691E 00	-0.18374E-00	0.	-0.	0.	-0.	
0.95789E 00	-0.18467E 01	-0.	0.	-0.	0.	
0.52659E 01	-0.36728E 01	-0.	0.	-0.	0.	
0.31931E 01	-0.36853E 01	-0.	0.	-0.	0.	
0.17466E 01	-0.25987E 01	-0.	0.	-0.	0.	
0.77809E 00	-0.24141E 01	-0.	0.	-0.	0.	
0.72854E-01	-0.21506E 01	-0.	0.	-0.	0.	
-0.13809E-00	-0.20910E 01	-0.	0.	-0.	0.	
-0.16757E-00	-0.23517E 01	-0.	0.	-0.	0.	
-0.19904E-00	-0.25313E 01	-0.	0.	-0.	0.	
-0.34072E-00	-0.23803E 01	-0.	0.	-0.	0.	
-0.13132E 01	-0.18525E 01	0.	0.	0.	0.	
-0.15916E 01	-0.15331E 01	0.	0.	0.	0.	
-0.18658E 01	-0.12681E 01	0.	0.	0.	0.	
-0.24453E 01	-0.87254E 00	0.	0.	0.	0.	
-0.33136E 01	0.10737E 01	0.	-0.	0.	-0.	
-0.51447E 01	0.19715E 01	0.	-0.	0.	-0.	
-0.54273E 01	0.31694E 01	0.	-0.	0.	-0.	
0.54659E 01	0.45877E 01	0.	-0.	0.	-0.	
-0.50013E 01	0.49861E 01	0.	-0.	0.	-0.	
0.14277E 01	0.91832E 00	-0.	-0.	-0.	-0.	
0.13643E 01	0.14376E-00	-0.	-0.	-0.	-0.	
0.84113E 00	-0.17[illegible]E-00	-0.	-0.	-0.	-0.	
0.25734E-00	-0.12172E-00	-0.	-0.	-0.	-0.	
0.61850E-01	-0.54738E-01	-0.	-0.	-0.	-0.	
-0.21216E-01	-0.37764E-01	-0.	-0.	-0.	-0.	
0.12324E-03	-0.62769E-01	-0.	-0.	-0.	-0.	
0.17713E-01	-0.96605E-01	-0.	-0.	-0.	-0.	
0.29369E-02	-0.10807E-00	-0.	0.	-0.	0.	
-0.39261E-01	-0.85250E-01	-0.	0.	-0.	0.	
-0.74680E-01	-0.48464E-01	-0.	-0.	-0.	-0.	
-0.88684E-01	-0.17083E-01	-0.	-0.	-0.	-0.	
-0.75929E-01	-0.72081E-02	-0.	-0.	-0.	-0.	
-0.50305E-01	-0.19938E-01	-0.	0.	-0.	0.	
-0.34450E-03	-0.43249E-01	-0.	0.	-0.	0.	
-0.38823E-01	-0.54482E-01	-0.	0.	-0.	0.	
-0.47129E-01	-0.41010E-01	-0.	0.	-0.	0.	
-0.10530E-00	0.	-0.	0.	-0.	0.	

Table XV --- Concluded

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 20 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

		INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY			FREQUENCY CPS
0.	0.	0.140728E 01	0.115029E 03	0.	0.	0.00
0.	0.	0.917918E 02	0.953964E 02	0.	0.	0.20
0.	0.	0.155884E 03	0.134008E 02	0.	0.	0.40
0.	-0.	0.185588E 03	-0.277799E 02	0.	-0.	0.60
0.	-0.	0.179218E 03	-0.615208E 02	0.	-0.	0.80
0.	-0.	0.146718E 03	-0.779938E 02	0.	-0.	1.00
0.	-0.	0.128958E 03	-0.900598E 02	0.	-0.	1.20
0.	-0.	0.118198E 03	-0.102958E 03	0.	-0.	1.40
0.	-0.	0.111948E 03	-0.113948E 03	0.	-0.	1.60
0.	-0.	0.108818E 03	-0.117848E 03	0.	-0.	1.80
0.	-0.	0.105478E 03	-0.272738E 03	0.	-0.	2.00
0.	-0.	0.882048E 02	-0.348358E 03	0.	-0.	2.20
0.	-0.	0.539728E 02	-0.495268E 03	0.	-0.	2.40
-0.	-0.	-0.217868E 02	-0.468138E 03	-0.	-0.	2.60
-0.	-0.	-0.943918E 02	-0.508468E 03	-0.	-0.	2.80
-0.	-0.	-0.202818E 03	-0.390708E 03	-0.	-0.	3.00
-0.	-0.	-0.485058E 03	-0.608108E 02	-0.	-0.	3.20
-0.	0.	-0.538498E 03	0.113268E 03	-0.	0.	3.40
-0.	0.	-0.578618E 03	0.117888E 03	-0.	0.	3.60
-0.	0.	-0.104428E 03	0.821158E 02	-0.	0.	3.80
-0.	0.	-0.465158E 02	0.524198E 02	-0.	0.	4.00
-0.	0.	-0.159218E 02	0.268988E 02	-0.	0.	4.20
0.	0.	0.366128E 01	0.865388E 00	0.	0.	4.40
0.	-0.	0.111338E 02	-0.252988E 02	0.	-0.	4.60
0.	-0.	0.410838E 01	-0.331688E 02	0.	-0.	4.80
0.	-0.	0.336168E 01	-0.519838E 02	0.	-0.	5.00
-0.	-0.	-0.542498E 01	-0.610548E 02	-0.	-0.	5.20
-0.	-0.	-0.216158E 02	-0.620078E 02	-0.	-0.	5.40
-0.	-0.	-0.314408E 02	-0.462088E 02	-0.	-0.	5.60
-0.	-0.	-0.586578E 02	-0.983288E 01	-0.	-0.	5.80
-0.	0.	-0.578638E 02	0.251828E 01	-0.	0.	6.00
-0.	-0.	-0.221238E 02	-0.139848E 02	-0.	-0.	6.20
-0.	-0.	-0.286058E 01	-0.471918E 02	-0.	-0.	6.40
-0.	-0.	-0.474388E 01	-0.638478E 02	-0.	-0.	6.60
-0.	-0.	-0.272248E 02	-0.479298E 01	-0.	-0.	6.80
-0.	-0.	-0.806428E 02	-0.460998E 02	-0.	-0.	7.00
0.	-0.	0.598138E 02	-0.126118E 02	0.	-0.	7.20
0.	-0.	0.601518E 02	-0.235128E 02	0.	-0.	7.40
0.	-0.	0.193068E 02	-0.325618E 02	0.	-0.	7.60
-0.	-0.	-0.569718E 02	-0.380098E 02	-0.	-0.	7.80
-0.	-0.	-0.140218E 03	-0.430358E 02	-0.	-0.	8.00
-0.	-0.	-0.415808E 03	-0.954088E 02	-0.	-0.	8.20
-0.	0.	-0.737838E 03	0.341718E 03	-0.	0.	8.40
0.	0.	0.180198E 02	0.136108E 03	0.	0.	8.60
0.	-0.	0.104628E 03	-0.632868E 02	0.	-0.	8.80
0.	0.	0.133878E 01	0.582398E 02	0.	0.	9.00
-0.	0.	-0.222188E 03	0.158358E 03	-0.	0.	9.20
-0.	0.	-0.122368E 03	0.132798E 03	-0.	0.	9.40
-0	0.	-0.568748E 02	0.130118E 03	-0.	0.	9.60
-0.	0.	-0.101588E 02	0.100908E 03	-0.	0.	9.80
0.	0.	0.248338E 02	0.843788E 02	0.	0.	10.00
0.	0.	0.424228E 02	0.749368E 02	0.	0.	10.20
0.	0.	0.572748E 02	0.447148E 02	0.	0.	10.40
0.	0.	0.679688E 02	0.312468E 02	0.	0.	10.60
0.	0.	0.656558E 02	0.218988E 02	0.	0.	10.80
0.	0.	0.311268E 02	0.341128E 02	0.	0.	11.00
0.	0.	0.304218E 02	0.347858E 02	0.	0.	11.20
0.	0.	0.402728E 02	0.294968E 02	0.	0.	11.40
0.	0.	0.531468E 02	0.211248E 02	0.	0.	11.60
0.	-0.	0.684938E 02	-0.129778E 02	0.	-0.	11.80
0.	-0.	0.984988E 02	-0.279728E 02	0.	-0.	12.00
0.	-0.	0.102978E 03	-0.477868E 02	0.	-0.	12.20
0.	-0.	0.103418E 03	-0.710808E 02	0.	-0.	12.40
0.	-0.	0.956638E 02	-0.777248E 02	0.	-0.	12.60
-0.	-0.	-0.863358E 01	-0.149928E 02	-0.	-0.	12.80
-0.	-0.	-0.107258E 02	-0.510518E 01	-0.	-0.	13.00
0.	-0.	0.121458E-01	-0.479908E 01	0.	-0.	13.20
0.	-0.	0.431638E 01	-0.722238E 01	0.	-0.	13.40
0.	-0.	0.582318E 01	-0.962458E 01	0.	-0.	13.60
0.	-0.	0.457888E-00	-0.853788E 01	0.	-0.	13.80
-0.	-0.	-0.507168E 01	-0.439698E 01	-0.	-0.	14.00
-0.	-0.	-0.898448E 01	-0.123248E-00	-0.	-0.	14.20
-0.	0.	-0.942858E 01	0.263588E 01	-0.	0.	14.40
-0.	0.	-0.748668E 01	0.567238E 01	-0.	0.	14.60
-0.	0.	-0.576888E 01	0.963888E 01	-0.	0.	14.80
-0.	0.	-0.412768E 01	0.279608E 01	-0.	0.	15.00
-0.	0.	-0.323408E 01	0.219578E 01	-0.	0.	15.20
-0.	0.	-0.283658E 01	0.179498E 01	-0.	0.	15.40
-0.	0.	-0.253748E 01	0.130268E 01	-0.	0.	15.60
-0.	0.	-0.210318E 01	0.355638E-00	-0.	0.	15.80
-0.	-0.	-0.172208E 01	-0.107698E 01	-0.	-0.	16.00
-0.	0.	-0.108338E 01	0.	-0.	0.	16.20

Table XVI Stress Frequency Response Functions (Analysis Condition 2)

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN 27 SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY CPS
1.304477-00	0.33327E 02	0.610316 00	0.298292 03	0.	-0.	
0.339941E 02	0.21879E 02	0.289466 03	0.190226 03	-0.	-0.	
0.445826 02	0.23387E 01	0.428916 03	0.250256 02	-0.	-0.	
0.53714F 02	-0.78171E 01	0.467046 03	-0.650186 02	-0.	0.	
0.506256 02	-0.16911E 02	0.438996 03	-0.145786 03	-0.	0.	
0.450206 02	-0.22383E 02	0.386536 03	-0.192336 03	-0.	0.	
0.411376 02	-0.26967E 02	0.344866 03	-0.228296 03	-0.	0.	
0.386906 02	-0.31709E 02	0.314856 03	-0.262026 03	-0.	0.	
0.371716 02	-0.37361E 02	0.291376 03	-0.298456 03	-0.	0.	
0.362896 02	-0.53894E 02	0.271326 03	-0.391046 03	-0.	0.	
0.355536 02	-0.74831E 02	0.234336 03	-0.493846 03	0.	-0.	
0.342116 02	-0.88353E 02	0.198406 03	-0.555626 03	0.	-0.	
0.323146 02	-0.10306E 03	0.174196 03	-0.620296 03	0.	-0.	
0.291386 02	-0.11197E 03	0.144776 03	-0.658436 03	0.	-0.	
0.266026 02	-0.12219E 03	0.124956 03	-0.701306 03	0.	-0.	
0.230946 02	-0.14740E 03	0.100126 03	-0.803396 03	0.	-0.	
0.113846 02	-0.18019E 03	0.274346 02	-0.920446 03	0.	-0.	
-0.11964F 02	-0.21854E 03	-0.991136 02	-0.105896 04	-0.	-0.	
-0.595436 02	-0.33323E 03	-0.330156 03	-0.110396 03	-0.	-0.	
-0.339276 03	0.13073E 03	-0.137196 04	0.450376 03	-0.	0.	
-0.200676 03	0.13384E 03	-0.693916 03	0.373786 03	-0.	0.	
-0.102786 03	0.11989E 03	-0.306306 03	0.262716 03	-0.	0.	
-0.578296 02	0.10923E 03	-0.152376 03	0.174266 03	-0.	0.	
-0.321226 02	0.99165E 02	-0.841266 02	0.106376 03	-0.	0.	
-0.106036 02	0.90912E 02	-0.644086 02	0.811736 02	-0.	0.	
-0.685246 01	0.88016E 02	-0.388296 02	0.580426 02	0.	0.	
-0.456826 01	0.86493E 02	-0.619916 02	0.533746 02	0.	0.	
-0.346586 01	0.83913E 02	-0.748496 02	0.287176 02	0.	0.	
-0.335336 01	0.854E3E 02	-0.834816 02	0.296836 02	0.	0.	
-0.429736 01	0.88673E 02	-0.112556 03	0.594336 02	0.	0.	
-0.562436 01	0.93866E 02	-0.131996 03	0.977086 02	0.	0.	
-0.161946 01	0.99622E 02	-0.106006 03	0.956986 02	0.	0.	
3.593936 01	0.10232E 03	-0.706766 02	0.477476 02	0.	0.	
0.179106 02	0.10426E 03	-0.437916 02	0.488976 02	0.	0.	
0.261146 02	0.10972E 03	-0.382646 02	0.202736 02	0.	0.	
0.436076 02	0.12033E 03	-0.402366 02	-0.185276 02	0.	0.	
0.102826 03	0.13734E 03	-0.711036 02	-0.291136 02	0.	0.	
0.164326 03	0.11662E 03	-0.103476 03	-0.194376 02	0.	0.	
0.288276 03	0.22209E 02	-0.161716 03	0.275546 02	0.	0.	
0.409816 03	-0.10634E 03	-0.212676 03	0.883336 02	0.	-0.	
0.439256 03	-0.36059E 03	-0.228186 03	0.199666 03	0.	-0.	
9.304536-03	-0.30336E 03	-0.137266 03	0.156906 03	0.	-0.	
0.990366 02	-0.31219E 03	-0.198726 02	0.278086 02	0.	-0.	
0.325916 02	-0.29060E 03	-0.291316 02	0.154026 02	0.	-0.	
-0.436596 02	-0.24686E 03	-0.456906 02	0.701466 01	-0.	-0.	
-0.894936 02	-0.15219E 03	-0.612866 02	-0.184276 01	-0.	-0.	
-0.177346 03	-0.69139E 02	-0.106166 03	0.226266 02	-0.	-0.	
-0.131896 03	0.70296E 00	-0.183416 03	0.149406 03	-0.	-0.	
-0.120686 03	0.53387E 02	-0.273806 03	0.444826 03	-0.	-0.	
-0.317576 02	-0.82666E 01	-0.491966 02	0.157926 03	-0.	-0.	
-0.922926 01	-0.17621E 02	0.208346 03	0.632756 02	-0.	-0.	
-0.156726 02	-0.11747E 02	0.179106 03	0.367036 02	-0.	-0.	
-0.187056 02	-0.90481E 01	0.163986 03	0.721926 01	-0.	-0.	
-0.222156 02	-0.82109E 01	0.143426 03	0.112316 01	-0.	-0.	
-0.279006 02	-0.50006E 01	0.138776 03	-0.172316 02	-0.	-0.	
-0.248496 02	-0.11934E 01	0.124346 03	-0.336[illegible] 02	-0.	0.	
-0.264476 02	0.31097E 01	0.111776 03	-0.346956 02	-0.	0.	
-0.283506 02	0.16766E 02	0.978176 02	-0.842536 02	-0.	0.	
-0.296726 02	0.34278E 02	0.814376 02	-0.117316 03	-0.	0.	
-0.224016 02	0.31057E 02	0.506206 02	-0.999446 02	-0.	0.	
0.142086 02	0.24143E 02	-0.233616 02	-0.880076 02	0.	0.	
0.176106 02	0.17432E 02	-0.266336 02	-0.781436 02	0.	0.	
0.180556 02	0.12222E 02	-0.261556 02	-0.711596 02	0.	0.	
0.169036 02	0.84016E 00	-0.216636 02	-0.660446 02	0.	0.	
0.697386 01	-0.11186E-00	-0.145976 02	-0.798766 02	0.	0.	
-0.319616 01	0.33698E 01	-0.477866 02	-0.221486 01	0.	-0.	
-0.628156 01	0.30833E 01	-0.103776 03	0.321766 02	0.	-0.	
-0.548206 01	0.63166E 01	-0.323476 01	0.118666 02	-0.	-0.	
-0.686086 01	0.77709E 01	0.868616 01	-0.186896 01	-0.	0.	
-0.706786 01	0.74488E 01	0.827086 01	-0.391696 01	-0.	0.	
0.989846 00	0.36939E 01	0.483376 01	-0.378866 01	-0.	0.	
0.387716 01	0.	0.166096 01	0.	0.	0.	

Table XVI – – – Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.95

PERCENT SEMISPAN: 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY CPS
REAL	IMAGINARY	REAL	IMAGINARY			
0.596266E 00	0.305816E 03	0.354822E 00	0.270696E 03	0.	-0.	0.10
0.104988E 03	0.695608E 02	0.262478E 03	0.179888E 03	-0.	-0.	0.20
0.154078 03	0.836508E 01	0.389222E 03	0.234368E 02	-0.	-0.	0.30
0.146838 03	-0.235038E 02	0.423828E 03	-0.590888E 02	-0.	0.	0.40
0.136638 03	-0.515748E 02	0.398378E 03	-0.132298E 03	-0.	0.	0.50
0.137798 03	-0.677348E 02	0.349698E 03	-0.174548E 03	-0.	0.	0.60
0.124078 03	-0.804218E 02	0.312958E 03	-0.207178E 03	-0.	0.	0.70
0.114388 03	-0.926868E 02	0.285728E 03	-0.237788E 03	-0.	0.	0.80
0.107328 03	-0.106438E 03	0.266628E 03	-0.270648E 03	-0.	0.	0.90
0.101828 03	-0.143708E 03	0.246218E 03	-0.354868E 03	-5.	0.	1.00
0.930198 02	-0.198 08E 03	0.222698E 03	-0.448148E 03	0.	-0.	1.10
0.842618E 02	-0.215018E 03	0.180058E 03	-0.586218E 03	0.	-0.	1.20
0.773948E 02	-0.244348E 03	0.158078E 03	-0.562908E 03	0.	-0.	1.30
0.681368E 02	-0.261938E 03	0.131388E 03	-0.597338E 03	0.	-0.	1.40
0.614708E 02	-0.281898E 03	0.113398E 03	-0.636418E 03	0.	-0.	1.50
0.527348E 02	-0.330468E 03	0.988568E 02	-0.729058E 03	0.	-0.	1.60
0.256318E 02	-0.392208E 03	0.248958E 02	-0.842368E 03	0.	-0.	1.70
-0.249588E 02	-0.446168E 03	-0.899448E 02	-0.986958E 03	-0.	-0.	1.80
-0.123068E 03	-0.732328E 02	-0.299608E 03	-0.100178E 03	-0.	-0.	1.90
-0.443388E 03	0.221478 03	-0.125508E 04	0.408708E 03	-0.	0.	2.00
-0.357818E 03	0.210.8E 03	-0.629718E 03	0.339198E 03	-0.	0.	2.10
-0.177838 03	0.172968 03	-0.277968E 03	0.238408E 03	-0.	0.	2.20
-0.925108E 02	0.142318E 03	-0.138448E 03	0.158148E 03	-0.	0.	2.30
-0.508648E 02	0.115718E 03	-0.763428E 02	0.947108E 02	-0.	0.	2.40
-0.262988E 02	0.103428E 03	-0.381588E 02	0.736638E 02	-0.	0.	2.50
-0.214468E 02	0.927118E 02	-0.323868E 02	0.656128E 02	0.	0.	2.60
-0.198838E 02	0.868058E 02	-0.342568E 02	0.304688E 02	0.	0.	2.70
-0.227838E 02	0.849808E 02	-0.680158E 02	0.260668E 02	0.	0.	2.80
-0.242928E 02	0.854278E 02	-0.757578E 02	0.269398E 02	0.	0.	2.90
-0.355058E 02	0.989488E 02	-0.102148E 03	0.339368E 02	0.	0.	2.97
-0.432838E 02	0.119858E 03	-0.119788E 03	0.888688E 02	0.	0.	3.00
-0.311388E 02	0.124448E 03	-0.961948E 02	0.868648E 02	0.	0.	3.10
-0.118478E 02	0.123188E 03	-0.441378E 02	0.614798E 02	0.	0.	3.20
0.999988E 01	0.117278E 03	-0.397418E 02	0.443738E 02	0.	0.	3.30
0.211788E 02	0.115378E 03	-0.347238E 02	0.183978E 02	0.	0.	3.40
0.410738E 02	0.123248E 03	-0.365138E 02	-0.168138E 02	0.	0.	3.50
0.018868 03	0.124938 03	-0.645248E 02	-0.264198E 02	0.	0.	3.60
0.165318 03	0.968518E 02	-0.938978E 02	-0.176388E 02	0.	0.	3.70
0.294678 03	-0.127298E 02	-0.146748E 03	0.258858E 02	0.	0.	3.80
0.422268 03	-0.158378E 03	-0.192998E 03	0.891628E 02	0.	-0.	3.86
0.471808E 03	-0.446848E 03	-0.207078E 03	0.181198 03	0.	-0.	3.90
0.286108E 03	-0.386008E 03	-0.124368E 03	0.142388 03	0.	-0.	3.96
0.326868E 02	-0.314848E 03	-0.180348E 02	0.252338E 02	0.	-0.	3.99
-0.967528E 02	-0.284918E 03	-0.264368E 02	0.139778E 02	0.	-0.	4.00
-0.117598E 03	-0.243328E 03	-0.414638E 02	0.436568E 01	-0.	-0.	4.04
-0.156868E 03	-0.150948E 03	-0.556168E 02	-0.167228E 01	-0.	-0.	4.10
-0.195508E 03	-0.449748E 02	-0.945088E 02	0.205338E 02	-0.	-0.	4.20
-0.229908E 03	0.627218E 02	-0.166448E 03	0.135588E 03	-0.	-0.	4.30
-0.258898E 03	0.230358E 03	-0.248678E 03	0.403468E 03	-0.	-0.	4.40
-0.577538E 02	0.576548E 02	-0.446648E 02	0.163318E 03	-0.	-0.	4.50
0.717508E 02	0.158378E 02	0.189248E 03	0.597628E 02	-0.	-0.	4.60
0.953828E 02	0.579638E 01	0.162538E 03	0.333828E 02	-0.	-0.	4.70
0.477738E 02	-0.440068E 01	0.148818E 03	0.633138E 01	-0.	-0.	4.80
0.186498E 02	-0.440148E 01	0.130158E 03	0.102108E 01	-0.	-0.	4.90
0.367848E 02	-0.123478E 02	0.125938E 03	-0.136558E 02	-0.	-0.	5.00
0.313338E 02	-0.178468E 02	0.112848E 03	-0.303178E 02	-0.	0.	5.10
0.270368E 02	-0.257418E 02	0.101438E 03	-0.496338E 02	-0.	0.	5.20
0.224878E 02	-0.381368E 02	0.887678E 02	-0.764598E 02	-0.	0.	5.30
0.161088E 02	-0.519768E 02	0.739028E 02	-0.106638E 03	-0.	0.	5.40
0.376208E 01	-0.628728E 02	0.449368E 02	-0.906978E 02	-0	0.	5.50
-0.271118E 01	-0.381428E 02	-0.212008E 01	-0.798668E 02	0.	0.	5.60
-0.278318E 02	-0.346528E 02	-0.261698E 02	-0.709138E 02	0.	0.	5.70
-0.271068E 02	-0.323588E 02	-0.237358E 02	-0.663738E 02	0.	0.	5.80
-0.267308E 02	-0.346078E 02	-0.217468E 02	-0.599338E 02	0.	0.	5.90
-0.279518E 02	-0.459498E 02	-0.132448E 02	-0.724868E 02	0.	0.	6.00
-0.497138E 02	0.120478E 02	-0.433648E 02	-0.200988E 01	0.	-0.	6.10
-0.929918E 02	0.411228E 02	-0.941718E 02	0.291998E 02	0.	-0.	6.20
-0.136508E 02	0.259018E 02	-0.295348E 01	0.107688E 02	-0.	-0.	6.30
0.614398E 00	0.139238E 02	0.878998E 01	-0.970008E 00	-0.	0.	7.00
0.487158E 01	0.744018E 01	0.750558E 01	-0.353458E 01	-0.	0.	8.00
0.818728E 01	0.270628E 01	0.438658E 01	-0.363828E 01	-0.	0.	9.00
0.790278E 01	0.	0.198728E 01	0.	0.	0.	10.00

Table XVI --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.8

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			
0.25514E-00	0.66628E 02	-0.24416E-01	0.27159E 03	0.	0.	
0.67833E 02	0.45532E 02	0.26127E 03	0.10101E 03	0.	0.	
0.99953E 02	0.58171E 01	0.38903E 03	0.23330E 02	0.	0.	
0.10877E 03	-0.15047E 02	0.42488E 03	-0.68332E 02	0.	-0.	
0.10256E 03	-0.33733E 02	0.39921E 03	-0.13492E 03	0.	-0.	
0.90993E 02	-0.44660E 02	0.35073E 03	-0.17844E 03	0.	-0.	
0.92594E 02	-0.53954E 02	0.31326E 03	-0.21214E 03	0.	-0.	
0.76193E 02	-0.63673E 02	0.28500E 03	-0.24344E 03	0.	-0.	
0.72918E 02	-0.73601E 02	0.26243E 03	-0.27747E 03	0.	-0.	
0.69965E 02	-0.10300E 03	0.24258E 03	-0.36223E 03	0.	-0.	
0.65407E 02	-0.13863E 03	0.20463E 03	-0.45503E 03	0.	-0.	
0.59659E 02	-0.16104E 03	0.16740E 03	-0.51033E 03	0.	-0.	
0.54861E 02	-0.18510E 03	0.14203E 03	-0.56791E 03	0.	-0.	
0.47754E 02	-0.19955E 03	0.11356E 03	-0.60174E 03	0.	-0.	
0.42506E 02	-0.21598E 03	0.94103E 02	-0.63960E 03	0.	-0.	
0.35561E 02	-0.25600E 03	0.69973E 02	-0.72923E 03	0.	-0.	
0.13627E 02	-0.30693E 03	0.39709E-00	-0.83756E 03	0.	-0.	
-0.27767E 02	-0.36420E 03	-0.31847E 03	-0.94701E 03	-0.	-0.	
-0.10856E 03	-0.41617E 02	-0.33154E 03	-0.37372E 02	-0.	-0.	
-0.53774E 03	0.20257E 03	-0.12366E 04	0.42220E 03	-0.	0.	
-0.29973E 03	0.19305E 03	-0.60791E 03	0.32870E 03	-0.	0.	
-0.14539E 03	0.16062E 03	-0.26348E 03	0.23199E 03	-0.	0.	
-0.78111E 02	0.13232E 03	-0.13106E 03	0.14432E 03	-0.	0.	
-0.44430E 02	0.11204E 03	-0.76822E 02	0.87647E 02	-0.	0.	
-0.39047E 02	0.11852E 03	-0.86203E 02	0.92763E 02	-0.	0.	
-0.30166E 02	0.11201E 03	-0.75352E 02	0.69486E 02	-0.	0.	
-0.18179E 02	0.10699E 03	-0.63436E 02	0.53440E 02	-0.	0.	
-0.15431E 02	0.10509E 03	-0.67709E 02	0.50974E 02	-0.	0.	
-0.15197E 02	0.10248E 03	-0.71829E 02	0.47999E 02	0.	0.	
-0.16899E 02	0.10560E 03	-0.87142E 02	0.62213E 02	0.	0.	
-0.18488E 02	0.11258E 03	-0.96842E 02	0.79548E 02	0.	0.	
-0.12326E 02	0.11298E 03	-0.80160E 02	0.73594E 02	0.	0.	
-0.26409E 01	0.10892E 03	-0.59034E 02	0.51141E 02	0.	0.	
0.92304E 01	0.10609E 03	-0.46233E 02	0.36934E 02	0.	0.	
0.15461E 02	0.10258E 03	-0.46202E 02	0.16323E 02	0.	0.	
0.25469E 02	0.10247E 03	-0.33964E 02	-0.49968E 01	0.	0.	
0.45097E 02	0.10616E 03	-0.92988E 02	-0.22626E 01	0.	0.	
0.56654E 02	0.11452E 03	-0.13006E 03	0.32477E 02	0.	0.	
0.69941E 02	0.12727E 03	-0.19510E 03	0.11381E 03	0.	0.	
0.78267E 02	0.14287E 03	-0.24786E 03	0.20577E 03	0.	0.	
0.85546E 02	0.16599E 03	-0.23412E 03	0.36971E 03	0.	0.	
0.13359E 03	0.18429E 03	-0.90160E 02	0.30049E 03	0.	0.	
0.23602E 03	-0.88743E 02	0.12732E 03	-0.59766E 02	0.	-0.	
0.26845E 03	-0.10154E 03	0.13236E 03	-0.63403E 02	0.	-0.	
0.19899E 03	-0.67747E 02	0.34535E 02	-0.83552E 02	0.	-0.	
0.16050E 03	-0.53533E 02	0.70814E 00	-0.39541E 02	0.	-0.	
0.14089E 03	-0.61555E 02	-0.78477E 02	-0.86823E 01	0.	-0.	
0.17677E 03	-0.15939E 03	-0.15973E 03	0.11728E 03	0.	-0.	
0.22665E 03	-0.36710E 03	-0.22214E 03	0.34063E 03	0.	-0.	
0.21434E 02	-0.12274E 03	-0.16088E 02	0.87302E 02	0.	-0.	
-0.16377E 03	-0.51119E 02	0.14932E 03	0.22172E 02	-0.	-0.	
-0.13721E 03	-0.51644E 02	0.10722E 03	0.72489E 01	-0.	-0.	
-0.17490E 03	-0.10388E 02	0.88297E 02	-0.52309E 01	-0.	-0.	
-0.10870E 03	-0.60998E 01	0.62197E 02	-0.68999E 01	-0.	-0.	
-0.10511E 03	0.65244E 01	0.56401E 02	-0.89379E 01	-0.	0.	
-0.94080E 02	0.12218E 02	0.32199E 02	-0.34680E 01	-0.	0.	
-0.84688E 02	0.29945E 02	0.19536E 02	0.86046E 01	-0.	0.	
-0.74715E 02	0.46288E 02	-0.24234E 00	0.43012E 02	-0.	0.	
-0.64591E 02	0.64364E 02	-0.13830E 02	0.10220E 03	-0.	0.	
-0.44629E 02	0.58020E 02	0.41215E 01	0.86317E 02	-0.	0.	
-0.93065E 01	0.52013E 02	0.11946E 03	0.66528E 02	-0.	0.	
-0.70227E 01	0.46886E 02	0.12642E 03	0.46786E 02	-0.	0.	
-0.67294E 01	0.43109E 02	0.12598E 03	0.31176E 02	-0.	0.	
-0.75866E 01	0.39121E 02	0.12082E 03	0.63733E 01	-0.	0.	
-0.11821E 02	0.44974E 02	0.89145E 02	0.21189E 02	-0.	0.	
0.60610E 00	0.12556E 02	0.91883E 02	-0.64859E 02	0.	0.	
0.27794E 02	0.68152E 01	0.14063E 03	-0.85430E 02	0.	0.	
-0.99091E 01	0.14962E 02	0.23288E 02	-0.58602E 02	-0.	0.	
-0.10278E 02	0.19010E 02	-0.66289E 01	-0.28218E 02	-0.	0.	
-0.19616E 01	0.16923E 02	-0.23609E 02	-0.79133E 01	-0.	0.	
0.60764E 01	0.10529E 02	-0.26913E 02	0.63897E 01	0.	0.	
0.12184E 02	0.	-0.17164E 02	0.	0.	0.	

Table XVI --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMI SPAN: 40.06 SEGMENT NUMBER 107

INCREMENTAL SHEAR STRESS				INCREMENTAL AXIAL STRESS		
REAL	IMAGINARY			REAL	IMAGINARY	FREQUENCY CPS
0.290011E-00	0.67503E 02	0.	0.	0.20062E ·01	-0.23202E 05	0.10
0.66654E 02	0.44623E 02	0.	0.	-0.22327E 03	-0.15466E 03	0.30
0.90047E 02	0.57601E 01	0.	0.	-0.53240E 03	-0.20105E 02	0.36
0.10655E 03	-0.14509E 02	0.	-0.	-0.36303E 03	3.51294E 02	0.44
0.10040E 03	-0.32725E 02	0.	-0.	-0.54153E 03	0.11520E 03	0.50
0.88949E 02	-0.43449E 02	0.	-0.	-0.29960E 03	0.15246E 03	0.60
0.80764E 02	-0.52164E 02	0.	-0.	-0.25766E 03	0.10126E 03	0.70
0.75106E 02	-0.60800E 02	0.	-0.	-0.24352E 03	0.20819E 05	0.80
0.71317E 02	-0.70932E 02	0.	-0.	-0.22421E 03	0.23707E 03	0.90
0.80495E 02	-0.99010E 02	0.	-0.	-0.20727E 03	0.30952E 03	1.00
0.64211E 02	-0.13308E 03	0.	-0.	-0.17484E 03	0.30079E 03	1.20
0.99115E 02	-0.15451E 03	0.	-0.	-0.14303E 05	0.43604E 03	1.36
0.54482E 02	-0.17753E 03	0.	-0.	-0.12204E 05	0.40524E 03	1.40
0.47851E 02	-0.19137E 03	0.	-0.	-0.97027E 02	0.51415E 03	1.45
0.42936E 02	-0.20710E 03	0.	-0.	-0.80404E 02	0.54664E 03	1.47
0.34411E 02	-0.24544E 03	0.	-0.	-0.59707E 02	0.62307E 05	1.50
0.15733E 02	-0.29437E 03	0.	-0.	-0.33920E-00	0.71564E 03	1.55
-0.23440E 02	-0.34957E 03	-0.	-0.	0.10123E 05	0.80915E 03	1.60
-0.10018E 03	-0.44532E 02	-0.	-0.	0.20372E 03	0.49020E 02	1.65
-0.51105E 03	0.10992E 03	-0.	0.	0.10566E 04	-0.36074E 03	1.80
-0.28821E 03	0.18164E 03	-0.	0.	0.51942E 03	-0.20939E 03	1.90
-0.13881E 03	0.15008E 03	-0.	0.	0.22512E 03	-0.19822E 03	2.00
-0.74392E 02	0.12375E 03	-0.	0.	0.11119E 03	-0.12519E 05	2.10
-0.47344E 02	0.10379E 03	-0.	0.	0.65039E 02	-0.74005E 02	2.20
-0.34745E 02	0.10920E 07	-0.	0.	0.73654E 02	-0.79259E 02	2.30
-0.28450E 02	0.10244E 03	-0.	0.	0.64307E 02	-0.59371E 02	2.35
-0.17993E 02	0.97350E 02	-0.	0.	0.54202E 02	-0.47369E 02	2.40
-0.14190E 02	0.95520E 02	-0.	0.	0.57053E 02	-0.43554E 02	2.43
-0.16441E 02	0.93500E 02	0.	0.	0.61373E 02	-0.41011E 02	2.44
-0.19613E 02	0.90321E 02	0.	0.	0.74457E 02	-0.53157E 02	2.47
-0.22416E 02	0.10723E 03	0.	0.	0.82744E 02	-0.67960E 02	2.50
-0.15234E 02	0.10025E 03	0.	0.	0.68491E 02	-0.62081E 02	2.54
-0.42079E 01	0.10375E 03	0.	0.	0.51141E 02	-0.45497E 02	2.58
0.84842E 01	0.10056E 03	0.	0.	0.39947E 02	-0.51550E 02	2.65
0.14863E 02	0.96393E 02	0.	0.	0.39476E 02	-0.13947E 02	2.70
0.24766E 02	0.94570E 02	0.	0.	0.46100E 02	0.42694E 01	2.80
0.43382E 02	0.96087E 02	0.	0.	0.79452E 02	0.19330E 01	3.00
0.53849E 02	0.10325E 03	0.	0.	0.11113E 03	-0.27749E 02	3.10
0.65015E 02	0.11449E 03	0.	0.	0.16670E 03	-0.96558E 02	3.20
0.70926E 02	0.12932E 03	0.	0.	0.21170E 03	-3.17582E 03	3.26
0.78192E 02	0.17171E 03	0.	0.	0.21713E 05	-0.31509E 03	3.29
0.11940E 03	0.17109E 03	0.	0.	0.77036E 02	-0.26054E 03	3.35
0.21455E 03	-0.74991E 02	0.	-0.	-0.10003E 03	0.51065E 02	3.40
0.24592E 03	-0.86632E 02	0.	-0.	-0.11309E 03	0.72971E 02	3.52
0.18470E 03	-0.74771E 02	0.	-0.	-0.46614E 02	0.71309E 02	3.56
0.15119E 03	-0.47735E 02	0.	-0.	-0.60504E 00	0.50874E 02	3.60
0.13566E 03	-0.57072E 02	0.	-0.	0.67053E 02	0.74186E 01	3.72
0.17041E 03	-0.15274E 03	0.	-0.	0.13640E 03	-0.10021E 03	3.85
0.21598E 03	-0.34741E 03	0.	-0.	0.19407E 03	-0.29105E 03	4.00
0.16883E 02	-0.11263E 03	0.	-0.	0.13744E 02	-0.74593E 02	4.20
-0.15412E 03	-0.45029E 02	-0.	-0.	-0.12759E 03	-0.10945E 02	4.50
-0.12704E 03	-0.20004E 02	-0.	-0.	-0.91615E 02	-0.61937E 01	4.70
-0.11472E 03	-0.89511E 01	-0.	-0.	-0.75443E 02	0.44694E 01	4.80
-0.90513E 02	-0.51949E 01	-0.	-0.	-0.93514E 02	0.50955E 01	4.96
-0.94905E 02	0.55711E 01	-0.	0.	-0.40191E 02	0.76360E 01	5.00
-0.81796E 02	0.14164E 02	-0.	0.	-0.31704E 02	0.46721E 01	5.15
-0.74263E 02	0.23403E 02	-0.	0.	-0.16692E 02	-0.73520E 01	5.30
-0.64094E 02	0.33505E 02	-0.	0.	0.63423E 00	-0.30460E 02	[illegible]
-0.54495E 02	0.43256E 02	-0.	0.	0.13525E 02	-0.87393E 02	5.70
-0.43541E 02	0.40046E 02	-0.	0.	-0.35721E 01	-0.75461E 02	5.85
-0.21740E 02	0.37142E 02	-0.	0.	-0.10207E 03	-0.56044E 02	6.00
-0.20370E 02	0.34720E 02	-0.	0.	-0.10001E 03	-0.39976E 02	6.05
-0.19975E 02	0.32994E 02	-0.	0.	-0.10764E 03	-0.26637E 02	6.06
-0.20122E 02	0.31641E 02	-0.	0.	-0.10327E 03	-0.56457E 01	6.08
-0.20703E 02	0.34810E 02	-0.	0.	-0.76160E 02	-0.10105E 02	6.20
-0.11086E 02	0.20085E 02	0.	0.	-0.70508E 02	0.30329E 02	6.40
0.64920E 00	0.16007E 02	0.	0.	-0.12016E 05	0.72994E 02	6.60
-0.12101E 02	0.20623E 02	-0.	0.	-0.19898E 02	0.50071E 02	7.00
-0.87533E 01	0.20909E 02	-0.	0.	0.57067E 01	0.24111E 02	7.40
0.51427E 00	0.17071E 02	-0.	0.	0.20172E 02	0.67631E 01	8.20
0.91871E 01	0.97759E 01	0.	0.	0.21200E 02	-0.53905E 01	9.00
0.13327E 02	0.	0.	0.	0.14664E 02	0.	10.00

Table XVI --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS REAL	INCREMENTAL SHEAR STRESS IMAGINARY					FREQUENCY CPS
-0.499023E-01	-0.[illegible]E 01	0.	-0.	0.	-0.	
-0.172756 01	-0.66[illegible]E 00	0.	-0.	0.	-0.	
-0.228437E 01	0.[illegible]195E-00	0.	-0.	0.	-0.	
-0.225[illegible]E 01	0.551[illegible]E 00	0.	-0.	0.	-0.	
-0.700[illegible]E 01	0.812[illegible]E 00	0.	-0.	0.	-0.	
-0.146[illegible]E 01	0.921[illegible]E 00	0.	-0.	0.	-0.	
-0.146[illegible]E 01	0.[illegible]E 00	0.	-0.	0.	-0.	
-0.130[illegible]E 01	0.10[illegible]E 01	0.	-0.	0.	-0.	
-0.121[illegible]E 01	0.113[illegible]E 01	0.	-0.	0.	-0.	
-0.114[illegible]E 01	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.113[illegible]E 01	0.170[illegible]E 01	0.	-0.	0.	-0.	
-0.112[illegible]E 01	0.191[illegible]E 01	0.	-0.	0.	-0.	
-0.111[illegible]E 01	0.214[illegible]E 01	0.	-0.	0.	-0.	
-0.109[illegible]E 01	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.106[illegible]E 01	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.103[illegible]E 01	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.893[illegible]E 00	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.[illegible]E 00	0.[illegible]E 01	-0.	-0.	-0.	-0.	
0.[illegible]E-01	0.[illegible]E 01	-0.	-0.	-0.	-0.	
0.[illegible]E 01	-0.[illegible]E 00	-0.	0.	-0.	-0.	
0.[illegible]E 01	-0.[illegible]E 00	-0.	0.	-0.	-0.	
0.[illegible]E 00	-0.[illegible]E-00	-0.	0.	-0.	-0.	
0.[illegible]E-00	0.[illegible]E-01	-0.	-0.	-0.	-0.	
-0.[illegible]E-00	0.[illegible]E-00	-0.	-0.	-0.	-0.	
-0.[illegible]E-00	0.[illegible]E 00	-0.	-0.	-0.	-0.	
-0.[illegible]E-00	0.[illegible]E 00	-0.	-0.	-0.	-0.	
-0.[illegible]E-00	0.[illegible]E 01	-0.	-0.	-0.	-0.	
-0.[illegible]E-00	0.[illegible]E 01	-0.	-0.	-0.	-0.	
-0.[illegible]E-01	0.[illegible]E 01	-0.	-0.	-0.	-0.	
0.[illegible]E-00	0.[illegible]E 00	-0.	-0.	-0.	-0.	
0.[illegible]E-00	0.[illegible]E-00	-0.	-0.	-0.	-0.	
0.[illegible]E-00	0.[illegible]E-00	-0.	-0.	-0.	-0.	
-0.[illegible]E-00	0.[illegible]E 00	-0.	-0.	-0.	-0.	
-0.[illegible]E 00	0.[illegible]E 00	0.	-0.	0.	-0.	
-0.[illegible]E 00	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.[illegible]E 01	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.[illegible]E-00	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.[illegible]E-00	0.[illegible]E 02	-0.	-0.	-0.	-0.	
0.[illegible]E-00	0.[illegible]E 02	-0.	-0.	-0.	-0.	
0.[illegible]E 01	0.[illegible]E 02	-0.	-0.	-0.	-0.	
0.[illegible]E 01	0.[illegible]E 02	-0.	-0.	-0.	-0.	
0.[illegible]E 02	-0.[illegible]E 02	-0.	0.	-0.	-0.	
0.[illegible]E 02	-0.[illegible]E 02	-0.	0.	-0.	-0.	
0.[illegible]E 02	-0.[illegible]E 02	-0.	0.	-0.	-0.	
0.[illegible]E 01	-0.[illegible]E 02	-0.	0.	-0.	-0.	
-0.[illegible]E 01	-0.[illegible]E 01	0.	0.	0.	-0.	
-0.[illegible]E 01	-0.[illegible]E 01	0.	0.	0.	-0.	
-0.[illegible]E 01	0.[illegible]E 01	0.	0.	0.	-0.	
-0.[illegible]E 01	-0.[illegible]E 01	-0.	0.	-0.	-0.	
0.[illegible]E 01	-0.[illegible]E 01	-0.	0.	-0.	-0.	
0.[illegible]E 00	-0.[illegible]E 01	-0.	0.	-0.	-0.	
-0.[illegible]E-00	-0.[illegible]E 01	-0.	0.	-0.	-0.	
-0.[illegible]E-01	-0.[illegible]E 01	-0.	0.	-0.	-0.	
-0.[illegible]E-00	-0.[illegible]E 01	-0.	0.	-0.	-0.	
-0.[illegible]E 01	-0.[illegible]E 00	0.	-0.	0.	-0.	
-0.[illegible]E 01	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.[illegible]E 01	0.[illegible]E 01	0.	-0.	0.	-0.	
0.[illegible]E 01	0.[illegible]E 01	-0.	-0.	-0.	-0.	
0.[illegible]E 01	0.[illegible]E 00	-0.	-0.	-0.	-0.	
0.[illegible]E 01	-0.[illegible]E 00	-0.	0.	-0.	-0.	
0.[illegible]E 01	-0.[illegible]E 01	-0.	0.	-0.	-0.	
0.[illegible]E 01	-0.[illegible]E 01	-0.	0.	-0.	-0.	
-0.[illegible]E 01	-0.[illegible]E-00	0.	-0.	0.	-0.	
-0.[illegible]E 01	0.[illegible]E 01	0.	-0.	0.	-0.	
-0.[illegible]E-00	0.[illegible]E-00	-0.	-0.	-0.	-0.	
0.[illegible]E-00	0.[illegible]E-01	-0.	-0.	-0.	-0.	
0.[illegible]E-00	-0.[illegible]E-01	-0.	-0.	-0.	-0.	
0.[illegible]E-01	-0.[illegible]E-00	-0.	-0.	-0.	-0.	
0.[illegible]E-01	0.	-0.	0.	-0.	0.	

Table XVI ---Concluded

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 268,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION 820 SEGMENT NUMBER 1

		INCREMENTAL AXIAL STRESS				
		REAL	IMAGINARY			FREQUENCY CPS
0.	0.	0.198618E 01	0.122028E 03	0.	0.	0.10
0.	0.	0.155708E 05	0.744338E 02	0.	0.	0.20
0.	0.	0.191198E 05	0.125758E-00	0.	0.	0.30
0.	-0.	0.199998E 03	-0.365058E 02	0.	-0.	0.40
0.	-0.	0.184268E 05	-0.666178E 02	0.	-0.	0.50
0.	-0.	0.158748E 03	-0.824778E 02	0.	-0.	0.60
0.	-0.	0.140908E 05	-0.944708E 02	0.	-0.	0.70
0.	-0.	0.128548E 05	-0.105798E 03	0.	-0.	0.80
0.	-0.	0.119628E 03	-0.118338E 03	0.	-0.	0.90
0.	-0.	0.111718E 03	-0.131508E 03	0.	-0.	1.00
0.	-0.	0.101768E 03	-0.189528E 03	0.	-0.	1.10
0.	-0.	0.917578E 02	-0.212478E 03	0.	-0.	1.20
0.	-0.	0.846508E 02	-0.236528E 03	0.	-0.	1.30
0.	-0.	[illegible]532E 02	-0.259718 03	0.	-0.	1.40
0.	-0.	[illegible].79E 02	-0.284668E 03	0.	-0.	1.50
0.	-0.	0.614058E 02	-0.308718E 03	0.	-0.	1.60
0.	-0.	0.374668E 02	-0.351628E 03	0.	-0.	1.70
-0.	-0.	-0.534218E 01	-0.401678E 03	-0.	-0.	1.80
-0.	-0.	-0.051728E 02	-0.807838E 02	-0.	-0.	1.85
-0.	0.	-0.461698E 03	0.128208E 03	-0.	0.	1.80
-0.	0.	-0.224748E 05	0.906148E 02	-0.	0.	1.90
-0.	0.	-0.844718E 02	0.446768E 02	-0.	0.	2.00
-0.	0.	-0.277088E 02	0.254948E 01	-0.	0.	2.10
-0.	-0.	-0.256558E 01	-0.349048E 02	-0.	-0.	2.20
-0.	-0.	-0.485408E 01	-0.432568E 02	-0.	-0.	2.30
-0.	-0.	-0.584078E 01	-0.638658E 02	-0.	-0.	2.35
-0.	-0.	-0.680588E 01	-0.757358E 02	-0.	-0.	2.40
-0.	-0.	-0.175998E 02	-0.792368E 02	-0.	-0.	2.45
-0.	-0.	-0.245948E 02	-0.778008E 02	-0.	-0.	2.44
-0.	-0.	-0.482288E 02	-0.940008E 02	-0.	-0.	2.47
-0.	-0.	-0.641058E 02	-0.242238E 02	-0.	-0.	2.50
-0.	-0.	-0.457548E 02	-0.273808E 02	-0.	-0.	2.54
-0.	-0.	-0.158118E 02	-0.544658E 02	-0.	-0.	2.58
0.	-0.	0.527078E 01	-0.753168E 02	0.	-0.	2.65
0.	-0.	0.952548E 01	-0.116498E 03	0.	-0.	2.77
0.	-0.	0.594998E 01	-0.209228E 03	0.	-0.	2.80
-0.	-0.	-0.356668E 02	-0.275148E 03	-0.	-0.	3.00
-0.	-0.	-0.878058E 02	-0.358468E 03	-0.	-0.	3.10
-0.	-0.	-0.194458E 05	-0.468568E 03	-0.	-0.	3.20
-0.	-0.	-0.518668E 03	-0.419058E 03	-0.	-0.	3.26
-0.	-0.	-0.395978E 03	-0.438688E 03	-0.	-0.	3.29
-0.	-0.	-0.573648E 05	-0.413308E 03	-0.	-0.	3.30
-0.	0.	-0.910308E 03	0.965838E 03	-0.	0.	3.40
-0.	0.	-0.888108E 03	0.100348E 04	-0.	0.	3.50
-0.	0.	-0.455108E 03	0.888948E 03	-0.	0.	3.56
-0.	0.	-0.155348E 03	0.588648E 03	-0.	0.	3.60
0.	0.	0.120508E 03	0.334508E 03	0.	0.	3.70
0.	0.	0.222168E 03	0.142168 03	0.	0.	3.80
0.	-0.	0.244928E 03	-0.246098E 02	0.	-0.	4.00
0.	0.	0.800818E 02	0.834638E 02	0.	0.	4.20
0.	0.	0.235528E 02	0.843148E 02	0.	0.	4.30
0.	0.	0.542398E 02	0.777818E 02	0.	0.	4.70
0.	0.	0.658698E 02	0.638418E 02	0.	0.	4.80
0.	0.	0.[illegible]000E 02	0.597518E 02	0.	0.	4.96
0.	0.	0.845538E 02	0.439718 02	0.	0.	5.00
0.	0.	0.[illegible]579E 02	0.243608E 02	0.	0.	5.15
0.	-0.	0.106938E 01	-0.109868E 02	0.	-0.	5.30
0.	-0.	0.1[illegible]75E 03	-0.827698E 02	0.	-0.	[illegible]
0.	-0.	0.11[illegible]19E 05	-0.195808E 03	0.	-0.	[illegible]
0.	-0.	0.927458E 02	-0.173318E 03	0.	-0.	[illegible]
-0.	-0.	-0.149648E 03	-0.127458E 03	-0.	-0.	6.00
-0.	-0.	-0.167868E 03	-0.842408E 02	-0.	-0.	6.00
-0.	-0.	-0.170078E 03	-0.482878E 02	-0.	-0.	6.00
-0.	0.	-0.161928E 03	0.274338E 02	-0.	0.	6.00
-0.	0.	-0.938568E 02	0.337728E 02	-0.	0.	6.20
-0.	0.	-0.250958E 02	0.159258E 02	-0.	0.	6.40
-0.	0.	-0.990058E 01	0.162318E 02	-0.	0.	6.60
0.	0.	0.220138E 01	0.798788E 01	0.	0.	7.00
0.	-0.	0.956128E 01	-0.388498E 01	0.	-0.	7.40
0.	-0.	0.889148E 01	-0.887798E 01	0.	-0.	8.00
0.	-0.	0.256798E 01	-0.844228E 01	0.	-0.	9.00
-0.	0.	-0.467708E 01	0.	-0.	0.	10.00

Table XVII Stress Frequency Response Functions (Analysis Condition 3)

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT. 390,590 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			
0.144A8E 01	0.16311E 02	0.19029E 02	0.19340E 03	-0.	-0.	
0.23312E 02	0.10499E 02	0.26795E 03	0.12602E 03	-0.	-0.	
0.29978E 02	0.18436E 01	0.33885E 03	0.26623E 02	-0.	-0.	
0.32310E 02	-0.35651E 01	0.36973E 03	-0.38487E 02	-0.	0.	
0.31996E 02	-0.96094E 01	0.34179E 03	-0.10708E 03	-0.	0.	
0.30627E 02	-0.13961E 02	0.33581E 03	-0.15287E 03	-0.	0.	
0.29086E 02	-0.17861E 02	0.31032E 03	-0.18951E 03	-0.	0.	
0.28241E 02	-0.21951E 02	0.28852E 03	-0.22319E 03	-0.	0.	
0.27851E 02	-0.26813E 02	0.26987E 03	-0.25[illegible]3E 03	-0.	0.	
0.27835E 02	-0.41892E 02	0.25298E 03	-0.36250E 03	-0.	0.	
0.28668E 02	-0.58514E 02	0.22065E 03	-0.43195E 03	-0.	0.	
0.28343E 02	-0.69752E 02	0.19955E 03	-0.48371E 03	-0.	-0.	
0.27376E 02	-0.81903E 02	0.17022E 03	-0.53764E 03	0.	-0.	
0.25354E 02	-0.89239E 02	0.14689E 03	-0.56922E 03	0.	-0.	
0.23650E 02	-0.97617E 02	0.13161E 03	-0.60452E 03	0.	-0.	
0.21347E 02	-0.11825E 03	0.11270E 03	-0.68844E 03	0.	-0.	
0.19389E 02	-0.14534E 03	0.98705E 02	-0.79270E 03	0.	-0.	
-0.25248E 01	-0.17904E 03	-0.32451E 02	-0.91156E 03	-0.	-0.	
-0.34974E 02	-0.85746E 02	-0.19561E 03	-0.35480E 03	-0.	-0.	
-0.30621E 03	0.11509E 03	-0.12468E 04	0.37398E 03	-0.	0.	
-0.21299E 03	0.13190E 03	-0.73854E 03	0.34806E 03	-0.	0.	
-0.10779E 03	0.11983E 03	-0.32130E 33	0.29510E 03	-0.	0.	
-0.59644E 02	0.10928E 03	-0.15685E 03	0.16000E 03	-0.	0.	
-0.32394E 02	0.98963E 02	-0.85439E 02	0.92564E 02	-0.	0.	
-0.10713E 02	0.90871E 02	-0.64132E 02	0.70562E 02	-0.	0.	
-0.66259E 01	0.87532E 02	-0.58481E 02	0.60768E 02	0.	0.	
-0.40946E 01	0.85662E 02	-0.60136E 02	0.26295E 02	0.	0.	
-0.30239E 01	0.84923E 02	-0.71197E 02	0.18922E 02	0.	0.	
-0.29662E 01	0.84024E 02	-0.78696E 02	0.15855E 02	0.	0.	
-0.42278E 01	0.87021E 02	-0.10559E 03	0.39935E 02	0.	0.	
-0.64551E 01	0.95449E 02	-0.12971E 03	0.82225E 02	0.	0.	
-0.31523E 01	0.99937E 02	-0.11241E 03	0.85780E 02	0.	0.	
0.52718E 01	0.10202E 03	-0.76893E 02	0.60623E 02	0.	0.	
0.18405E 02	0.10311E 03	-0.47973E 02	0.42636E 02	0.	0.	
0.26948E 02	0.10649E 03	-0.41788E 02	0.35434E 02	0.	0.	
0.44515E 02	0.11789E 03	-0.43386E 02	-0.20305E 02	0.	0.	
0.10112E 03	0.12020E 03	-0.74153E 02	-0.28794E 02	0.	0.	
0.14853E 03	0.87071E 02	-0.10682E 03	-0.14418E 02	0.	0.	
0.27243E 03	-0.23708E 07	-0.16623E 03	0.41240E 02	0.	-0.	
0.37741E 03	-0.14321E 03	-0.21576E 03	0.10878E 03	0.	-0.	
0.40213E 03	-0.38437E 03	-0.22334E 03	0.20511E 03	0.	-0.	
0.14671E 03	-0.29507E 03	-0.11249E 03	0.15194E 03	0.	-0.	
-0.36681E 02	-0.92738E 02	-0.10562E 02	0.35139E 02	-0.	-0.	
-0.58021E 02	-0.17649E 02	-0.94073E 01	0.18592E 02	-0.	0.	
-0.24044E 02	0.35874E-00	-0.22697E 02	0.70359E 01	0.	0.	
0.18882E 02	-0.77998E 02	-0.36277E 02	-0.11750E 02	0.	-0.	
0.13456E 03	-0.19200E 03	-0.73584E 02	0.23942E-00	0.	-0.	
-0.56694E 02	-0.67322E 02	-0.15221E 03	0.87806E 02	-0.	-0.	
-0.11929E 03	0.29333E 02	-0.23117E 03	0.35327E 03	-0.	-0.	
-0.60219E 02	-0.12288E 02	-0.14905E 03	0.18742E 03	-0.	-0.	
-0.78982E 01	-0.16731E 02	0.18127E 03	0.77461E 02	-0.	-0.	
-0.17945E 02	-0.15118E 02	0.16537E 03	0.47579E 02	-0.	-0.	
-0.20643E 02	-0.11236E 02	0.15063E 03	0.16191E 02	-0.	-0.	
-0.23440E 02	-0.10142E 02	0.12865E 03	0.10138E 02	-0.	-0.	
-0.23860E 02	-0.62945E 01	0.12346E 03	-0.67784E 01	-0.	-0.	
-0.24455E 02	-0.24302E 01	0.10700E 03	-0.19493E 02	-0.	0.	
-0.24601E 02	0.22692E 01	0.92136E 02	-0.31396E 02	-0.	0.	
-0.23706E 02	0.69024E 01	0.75443E 02	-0.40357E 02	-0.	0.	
-0.22012E 02	0.10229E 02	0.60075E 02	-0.45416E 02	-0.	0.	
-0.20303E 02	0.13951E 02	0.49704E 02	-0.49940E 02	-0.	0.	
-0.17861E 02	0.14630E 02	0.38804E 02	-0.50655E 02	-0.	0.	
-0.17343E 02	0.15325E 02	0.30888E 02	-0.51393E 02	-0.	0.	
-0.16784E 02	0.16036E 02	0.34947E 02	-0.52037E 02	-0.	0.	
-0.16185E 02	0.19460E 02	0.32976E 02	-0.54905E 02	-0.	0.	
-0.12723E 02	0.25307E 02	0.23487E 02	-0.57259E 02	-0.	0.	
-0.94206E 00	0.89019E 01	0.25455E 01	-0.34020E 02	0.	0.	
0.24026E 02	-0.38088E 01	-0.23228E 02	-0.34045E 02	0.	-0.	
-0.94514E 01	0.54895E 01	-0.68373E 01	-0.27879E 02	-0.	0.	
-0.77424E 01	0.42638E 01	-0.52461E 02	0.19606E 02	0.	-0.	
-0.64885E 01	0.89025E 01	0.23464E 02	-0.45361E 01	-0.	0.	
-0.19673E 01	0.78713E 01	0.12694E 02	-0.63699E 01	-0.	0.	
0.28407E 01	0.	0.33263E 01	0.	0.	0.	

Table XVII --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY CPS
0.54070E 01	0.64912E 02	0.13639E 02	0.17550E 03	-0.	-0.	0.10
0.90784E 02	0.41989E 02	0.24135E 03	0.11436E 03	-0.	-0.	0.30
0.11506E 03	0.79307E 01	0.30733E 03	0.22345E 02	-0.	-0.	0.36
0.12478E 03	-0.11067E 02	0.33461E 03	-0.34926E 02	-0.	0.	0.44
0.12237E 03	-0.35737E 02	0.32031E 03	-0.97169E 02	-0.	0.	0.50
0.11386E 03	-0.50920E 02	0.30474E 03	-0.13072E 03	-0.	0.	0.60
0.10583E 03	-0.63227E 02	0.28161E 03	-0.18197E 03	-0.	0.	0.70
0.99335E 02	-0.74057E 02	0.26103E 03	-0.29254E 03	-0.	0.	0.80
0.94160E 02	-0.87414E 02	0.24490E 03	-0.23434E 03	-0.	0.	0.90
0.89913E 02	-0.11969E 03	0.22757E 03	-0.31081E 03	-0.	0.	1.00
0.82833E 02	-0.15462E 03	0.20024E 03	-0.39159E 03	-0.	0.	1.20
0.76033E 02	-0.17887E 03	0.17242E 03	-0.63095E 03	-0.	-0.	1.34
0.70883E 02	-0.20263E 03	0.15467E 03	-0.60789E 03	0.	-0.	1.40
0.64090E 02	-0.21678E 03	0.13333E 03	-0.51655E 03	0.	-0.	1.45
0.59269E 02	-0.23280E 03	0.11943E 03	-0.34859E 03	0.	-0.	1.47
0.53033E 02	-0.27164E 03	0.10227E 03	-0.62674E 03	0.	-0.	1.50
0.33960E 02	-0.32155E 03	0.33274E 02	-0.71935E 03	0.	-0.	1.55
-0.83919E 00	-0.38168E 03	-0.29448E 02	-0.82722E 03	-0.	-0.	1.60
-0.67411E 02	-0.17702E 03	-0.17751E 03	-0.32190E 03	-0.	-0.	1.65
-0.56721E 03	0.18302E 03	-0.11314E 04	0.33930E 03	-0.	0.	1.80
-0.37109E 03	0.19742E 03	-0.67021E 03	0.31509E 03	-0.	0.	1.90
-0.17714E 03	0.16659E 03	-0.29157E 03	0.22242E 03	-0.	0.	2.00
-0.97932E 02	0.13603E 03	-0.14234E 03	0.16519E 03	-0.	0.	2.10
-0.58202E 02	0.11106E 03	-0.77533E 02	0.84000E 02	-0.	0.	2.20
-0.25263E 02	0.99544E 02	-0.52198E 02	0.64036E 02	-0.	0.	2.30
-0.20033E 02	0.89501E 02	-0.53373E 02	0.36996E 02	0.	0.	2.35
-0.17651E 02	0.83460E 02	-0.54572E 02	0.22047E 02	0.	0.	2.40
-0.19592E 02	0.81647E 02	-0.64633E 02	0.17171E 02	0.	0.	2.43
-0.21621E 02	0.30476E 02	-0.71413E 02	0.14308E 02	0.	0.	2.44
-0.30702E 02	0.91094E 02	-0.96094E 02	0.36240E 02	0.	0.	2.47
-0.39992E 02	0.11313E 03	-0.11771E 03	0.76617E 02	0.	0.	2.50
-0.31035E 02	0.12016E 03	-0.10231E 03	0.77863E 02	0.	0.	2.54
-0.12741E 02	0.11707E 03	-0.69776E 02	0.35014E 02	0.	0.	2.55
0.10140E 02	0.11429E 03	-0.43471E 02	0.30691E 02	0.	0.	2.65
0.21745E 02	0.11212E 03	-0.37922E 02	0.14006E 02	0.	0.	2.70
0.42117E 02	0.11692E 03	-0.39372E 02	-0.10626E 02	0.	0.	2.80
0.10292E 03	0.11647E 03	-0.67292E 02	-0.26130E 02	0.	0.	3.00
0.16343E 03	0.73727E 02	-0.96939E 02	-0.13006E 02	0.	0.	3.10
0.29219E 03	-0.53210E 02	-0.15003E 03	0.37626E 02	0.	-0.	3.20
0.41049E 03	-0.21459E 03	-0.19980E 03	0.98716E 02	0.	-0.	3.26
0.43726E 03	-0.67233E 03	-0.20269E 03	0.10613E 03	0.	-0.	3.29
0.18582E 03	-0.37713E 03	-0.10293E 03	0.13700E 03	0.	-0.	3.35
-0.76967E 02	-0.95432E 02	-0.95894E 01	0.31000E 02	-0.	-0.	3.40
-0.11959E 03	-0.34259E 02	-0.85359E 01	0.16872E 02	-0.	0.	3.52
-0.88949E 02	-0.30726E 02	-0.20597E 02	0.63049E 01	0.	0.	3.56
-0.49939E 02	-0.40111E 02	-0.32921E 02	-0.10663E 02	0.	-0.	3.60
0.55627E 02	-0.10424E 03	-0.66774E 02	0.21727E-00	0.	-0.	3.70
-0.13206E 03	-0.35095E 02	-0.13813E 03	0.79600E 02	-0.	-0.	3.85
-0.21133E 03	0.14493E 03	-0.20973E 03	0.32059E 03	-0.	-0.	4.00
-0.11991E 03	0.49645E 02	-0.13327E 03	0.17005E 03	-0.	-0.	4.20
0.64173E 02	0.90335E 01	0.16450E 03	0.70296E 02	-0.	-0.	4.50
0.30284E 02	0.86373E 00	0.15007E 03	0.43173E 02	-0.	-0.	4.70
0.22917E 02	-0.37043E 01	0.13667E 03	0.14693E 02	-0.	-0.	4.80
0.13767E 02	-0.46571E 01	0.11673E 03	0.92000E 01	-0.	-0.	4.96
0.11835E 02	-0.86646E 01	0.11236E 03	-0.61312E 01	-0.	-0.	5.00
0.63032E 01	-0.94463E 01	0.97130E 02	-0.17689E 02	-0.	0.	5.13
0.20073E 01	-0.96771E 01	0.83611E 02	-0.20689E 02	-0.	0.	5.30
-0.21144E 01	-0.89152E 01	0.68463E 02	-0.30623E 02	-0.	0.	5.60
-0.53395E 01	-0.82731E 01	0.54517E 02	-0.41214E 02	-0.	0.	5.70
-0.72460E 01	-0.73968E 01	0.45105E 02	-0.45319E 02	-0.	0.	5.85
-0.40107E 01	-0.72228E 01	0.35214E 02	-0.43968E 02	-0.	0.	6.00
-0.92943E 01	-0.70408E 01	0.33473E 02	-0.46602E 02	-0.	0.	6.03
-0.95724E 01	-0.68000E 01	0.31714E 02	-0.47222E 02	-0.	0.	6.06
-0.48651E 01	-0.38519E 01	0.29923E 02	-0.49825E 02	-0.	0.	6.08
-0.10998E 02	-0.32944E 01	0.21314E 02	-0.53961E 02	-0.	0.	6.20
-0.12237E 02	-0.12037E 01	0.23133E 01	-0.30872E 02	0.	0.	6.45
-0.37799E 01	-0.87468E 01	-0.21079E 02	-0.30893E 02	0.	-0.	6.60
-0.14781E 02	-0.95591E 00	-0.62044E 01	-0.25300E 02	-0.	0.	7.00
-0.37345E 02	0.25028E 02	-0.47607E 02	0.18792E 02	0.	-0.	7.40
0.86149E 01	0.10340E 02	0.21203E 02	-0.61166E 01	-0.	0.	8.20
0.86886E 01	0.94199E 01	0.13320E 02	-0.58006E 01	-0.	0.	9.00
0.78205E 01	0.	0.30105E 01	0.	0.	0.	10.00

Table XVII - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			CPS
0.326466E 01	0.412206E 02	0.125316E 02	0.169236E 03	0.	0.	0.00
0.570011E 02	0.269366E 02	0.231436E 03	0.110446E 03	0.	0.	0.20
0.726666E 02	0.548186E 01	0.296076E 03	0.211336E 02	0.	0.	0.40
0.793656E 02	-0.791286E 01	0.323346E 03	-0.349496E 02	0.	-0.	0.60
0.785046E 02	-0.226876E 02	0.317936E 03	-0.966176E 02	0.	-0.	0.80
0.737086E 02	-0.329346E 02	0.295336E 03	-0.138466E 03	0.	-0.	1.00
0.696266E 02	-0.417086E 02	0.273736E 03	-0.172436E 03	0.	-0.	1.20
0.661316E 02	-0.503976E 02	0.254576E 03	-0.204006E 03	0.	-0.	1.40
0.637136E 02	-0.601946E 02	0.237036E 03	-0.237036E 03	0.	-0.	1.60
0.619106E 02	-0.866956E 02	0.222656E 03	-0.316566E 03	0.	-0.	1.80
0.598106E 02	-0.111796E 03	0.191586E 03	-0.440176E 03	0.	-0.	2.00
0.455296E 02	-0.137046E 03	0.161026E 03	-0.448946E 03	0.	-0.	2.20
0.517346E 02	-0.157416E 03	0.141166E 03	-0.499146E 03	0.	-0.	2.40
0.466546E 02	-0.169736E 03	0.117086E 03	-0.528446E 03	0.	-0.	2.60
0.427226E 02	-0.183376E 03	0.102616E 03	-0.561126E 03	0.	-0.	2.80
0.376496E 02	-0.217216E 03	0.838756E 02	-0.638426E 03	0.	-0.	3.00
0.217886E 02	-0.240496E 03	0.508136E 02	-0.733576E 03	0.	-0.	3.20
-0.775696E 01	-0.312706E 03	-0.577106E 02	-0.846096E 03	-0.	-0.	3.40
-0.449206E 02	-0.134966E 03	-0.214126E 03	-0.287086E 03	-0.	-0.	3.60
-0.497106E 03	0.177366E 03	-0.117986E 04	0.377206E 03	-0.	0.	3.80
-0.325346E 03	0.188896E 03	-0.681056E 03	0.337766E 03	-0.	0.	4.00
-0.195676E 03	0.158596E 03	-0.281796E 03	0.233466E 03	-0.	0.	4.20
-0.817916E 02	0.130906E 03	-0.142176E 03	0.146306E 03	-0.	0.	4.40
-0.454636E 02	0.108616E 03	-0.813036E 02	0.844096E 02	-0.	0.	4.60
-0.392746E 02	0.114516E 03	-0.883216E 02	0.881616E 02	-0.	0.	4.80
-0.305666E 02	0.107326E 03	-0.776406E 02	0.833336E 02	-0.	0.	5.00
-0.187696E 02	0.101706E 03	-0.637616E 02	0.478636E 02	-0.	0.	5.20
-0.163796E 02	0.995836E 02	-0.703436E 02	0.426246E 02	-0.	0.	5.40
-0.163076E 02	0.962216E 02	-0.747676E 02	0.371896E 02	-0.	0.	5.60
-0.190116E 02	0.994116E 02	-0.922146E 02	0.310416E 02	0.	0.	5.80
-0.227726E 02	0.108886E 03	-0.107376E 03	0.757426E 02	0.	0.	6.00
-0.175596E 02	0.110856E 03	-0.938696E 02	0.733736E 02	0.	0.	6.20
-0.636466E 01	0.105966E 03	-0.694786E 02	0.692306E 02	0.	0.	6.40
0.720376E 01	0.102006E 03	-0.522936E 02	0.520336E 02	0.	0.	6.60
0.137136E 02	0.959166E 02	-0.507416E 02	0.797196E 01	0.	0.	6.80
0.290866E 02	0.879536E 02	-0.593586E 02	-0.236856E 02	0.	0.	7.00
0.363026E 02	0.856246E 02	-0.107466E 03	-0.271876E 02	0.	0.	7.20
0.385496E 02	0.892106E 02	-0.135376E 03	0.625136E 01	0.	0.	7.40
0.299076E 02	0.109486E 03	-0.246696E 03	0.103366E 03	0.	0.	7.60
0.139766E 02	0.139766E 03	-0.321446E 03	0.226726E 03	0.	0.	7.80
0.893756E 01	0.203396E 03	-0.328936E 03	0.375726E 03	0.	0.	8.00
0.591126E 02	0.200756E 03	-0.138366E 03	0.289316E 03	0.	0.	8.20
0.131936E 03	0.152406E 03	0.338976E 02	0.104426E 03	0.	0.	8.40
0.722226E 03	0.137196E 03	0.562386E 02	0.787566E 02	0.	0.	8.60
0.254336E 03	0.114346E 03	0.422326E 02	0.396736E 02	0.	0.	8.80
0.293696E 03	-0.446286E 02	0.320926E 02	0.727266E 01	0.	-0.	9.00
0.385056E 03	-0.191716E 03	0.859736E 01	-0.164086E 02	0.	-0.	9.20
0.170736E 03	-0.165566E 03	-0.121236E 03	0.930946E 02	0.	-0.	9.40
0.161476E 03	-0.313606E 03	-0.216246E 03	0.546126E 03	0.	-0.	9.60
0.826916E 02	-0.155296E 03	-0.116396E 03	0.174066E 03	0.	-0.	9.80
-0.154286E 03	-0.679416E 02	0.202916E 03	0.637426E 02	-0.	-0.	10.00
-0.139086E 03	-0.441736E 02	0.173386E 03	0.378486E 02	-0.	-0.	10.20
-0.127046E 03	-0.139036E 02	0.155896E 03	0.101506E 02	-0.	-0.	10.40
-0.109766E 03	-0.139806E 02	0.130636E 03	0.512896E 01	-0.	-0.	10.60
-0.105766E 03	-0.897926E-01	0.124596E 03	-0.793656E 01	-0.	0.	10.80
-0.931626E 02	0.105276E 02	0.103716E 03	-0.162646E 02	-0.	0.	11.00
-0.819386E 02	0.207096E 02	0.893346E 02	-0.219306E 02	-0.	0.	11.20
-0.695756E 02	0.287236E 02	0.722326E 02	-0.237116E 02	-0.	0.	11.40
-0.586766E 02	0.335446E 02	0.586336E 02	-0.230166E 02	-0.	0.	11.60
-0.509946E 02	0.382036E 02	0.504786E 02	-0.206096E 02	-0.	0.	11.80
-0.431966E 02	0.389836E 02	0.445276E 02	-0.220146E 02	-0.	0.	12.00
-0.418176E 02	0.397616E 02	0.437196E 02	-0.193626E 02	-0.	0.	12.20
-0.406176E 02	0.405386E 02	0.429986E 02	-0.186526E 02	-0.	0.	12.40
-0.388906E 02	0.446036E 02	0.423706E 02	-0.167076E 02	-0.	0.	12.60
-0.320116E 02	0.484146E 02	0.410536E 02	-0.673816E 01	-0.	0.	12.80
-0.155686E 02	0.322656E 02	0.694166E 02	-0.320346E 02	-0.	0.	13.00
0.930376E 01	0.271556E 02	0.796976E 02	-0.489026E 02	0.	0.	13.20
-0.932286E 01	0.291406E 02	0.133396E 02	-0.321936E 02	-0.		13.40
0.149416E 02	0.786016E 01	0.174676E 02	-0.409336E 02	0.		13.60
-0.123396E 02	0.176906E 02	-0.202146E 02	-0.133836E 02	-0.		13.80
-0.557306E 00	0.135396E 02	-0.249266E 02	-0.508096E 00	-0.	0.	14.00
0.966446E 01	0.	-0.180326E 02	0.	0.	0.	14.20

Table XVII - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMI SPAN: 40.06 SEGMENT NUMBER 107

INCREMENTAL SHEAR STRESS REAL	INCREMENTAL SHEAR STRESS IMAGINARY			INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY	FREQUENCY CPS
0.32974E 01	0.41103E 02	0.	0.	-0.10707E 02	-0.14460E 03	0.10
0.57941E 02	0.26906E 02	0.	0.	-0.19770E 03	-0.94366E 02	0.30
0.62544E 02	0.55479E 01	0.	0.	-0.25297E 03	-0.10056E 03	0.36
0.79048E 02	-0.77270E 01	0.	-0.	-0.27629E 03	0.29362E 02	0.44
0.77919E 02	-0.22271E 02	0.	-0.	-0.27167E 03	0.82553E 02	0.50
0.73392E 02	-0.32276E 02	0.	-0.	-0.25277E 03	0.11031E 03	0.60
0.69905E 02	-0.40717E 02	0.	-0.	-0.23380E 03	0.14733E 03	0.70
0.65426E 02	-0.49030E 02	0.	-0.	-0.21751E 03	0.17430E 03	0.80
0.62933E 02	-0.58355E 02	0.	-0.	-0.20327E 03	0.20293E 03	0.90
0.61070E 02	-0.83437E 02	0.	-0.	-0.19007E 03	0.27048E 03	1.00
0.58245E 02	-0.11291E 03	0.	-0.	-0.16369E 03	0.34192E 03	1.20
0.56491E 02	-0.13114E 03	0.	-0.	-0.13758E 03	0.38359E 03	1.30
0.51165E 02	-0.15053E 03	0.	-0.	-0.12061E 03	0.42648E 03	1.40
0.46521E 02	-0.14211E 03	0.	-0.	-0.10072E 03	0.45152E 03	1.45
0.42949E 02	-0.17523E 03	0.	-0.	-0.87676E 02	0.47944E 03	1.47
0.39223E 02	-0.20714E 03	0.	-0.	-0.71666E 02	0.54546E 03	1.50
0.23370E 02	-0.24825E 03	0.	-0.	-0.26329E 02	0.42678E 03	1.55
-0.43341E 01	-0.29796E 03	-0.	-0.	0.49309E 02	0.71780E 03	1.60
-0.58102E 02	-0.13254E 03	-0.	-0.	0.10295E 03	0.24329E 03	1.65
-0.66791E 03	0.16375E 03	-0.	0.	0.10081E 04	-0.32230E 03	1.80
-0.30765E 03	0.17562E 03	-0.	0.	0.38186E 03	-0.28857E 03	1.90
-0.14713E 03	0.14753E 03	-0.	0.	0.24931E 03	-0.19948E 03	2.00
-0.77093E 02	0.12037E 03	-0.	0.	0.12147E 03	-0.12500E 03	2.10
-0.42719E 02	0.99791E 02	-0.	0.	0.69638E 02	-0.72190E 02	2.20
-0.36593E 02	0.10489E 03	-0.	0.	0.75464E 02	-0.75327E 02	2.30
-0.28654E 02	0.97696E 02	-0.	0.	0.66330E 02	-0.54114E 02	2.35
-0.18068E 02	0.92149E 02	-0.	0.	0.56188E 02	-0.40895E 02	2.40
-0.14351E 02	0.90074E 02	-0.	0.	0.60193E 02	-0.36419E 02	2.43
-0.16478E 02	0.97160E 02	-0.	0.	0.63083E 02	-0.31775E 02	2.44
-0.20633E 02	0.91513E 02	0.	0.	0.78791E 02	-0.43611E 02	2.47
-0.25071E 02	0.13272E 03	0.	0.	0.91740E 02	-0.64714E 02	2.50
-0.19565E 02	0.10526E 03	0.	0.	0.80204E 02	-0.62693E 02	2.54
-0.75212E 01	0.10037E 03	0.	0.	0.59364E 02	-0.42063E 02	2.58
0.66895E 01	0.96343E 02	0.	0.	0.44511E 02	-0.28072E 02	2.65
0.13315E 02	0.90197E 02	0.	0.	0.43372E 02	-0.68114E 01	2.70
0.22697E 02	0.81946E 02	0.	0.	0.50717E 02	0.20237E 02	2.80
0.35875E 02	0.79206E 02	0.	0.	0.91321E 02	0.23229E 02	3.00
0.36308E 02	0.81607E 02	0.	0.	0.13361E 03	-0.53413E 01	3.10
0.30320E 02	0.99761E 02	0.	0.	0.21070E 03	-0.80313E 02	3.20
0.14868E 02	0.12787E 03	0.	0.	0.27469E 03	-0.10517E 03	3.26
0.91079E 01	0.10079E 03	0.	0.	0.28109E 03	-0.32103E 03	3.29
0.35365E 02	0.18764E 03	0.	0.	0.11022E 03	-0.24719E 03	3.35
0.12406E 03	0.14217E 03	0.	0.	-0.28963E 02	-0.89220E 02	3.40
0.21068E 03	0.12724E 03	0.	0.	-0.46359E 02	-0.67292E 02	3.52
0.24111E 03	0.10931E 03	0.	0.	-0.36050E 02	-0.50988E 02	3.56
0.27796E 03	-0.43860E 02	0.	-0.	-0.27412E 02	-0.67139E 01	3.60
0.36322E 03	-0.18190E 03	0.	-0.	-0.73458E 01	0.11019E 02	3.70
0.17081E 03	-0.26079E 03	0.	-0.	0.10356E 03	-0.80226E 02	3.85
0.15497E 03	-0.30452E 03	0.	-0.	0.18476E 03	-0.31282E 03	4.00
0.77004E 02	-0.14906E 03	0.	-0.	0.99109E 02	-0.14872E 03	4.20
-0.15323E 03	-0.64483E 02	-0.	-0.	-0.17337E 01	-0.56172E 02	4.50
-0.13609E 03	-0.41406E 02	-0.	-0.	-0.14985E 03	-0.32338E 02	4.70
-0.12397E 03	-0.17514E 02	-0.	-0.	-0.13405E 03	-0.86721E 01	4.80
-0.10672E 03	-0.12854E 02	-0.	-0.	-0.11162E 03	-0.43823E 01	4.95
-0.10274E 03	0.19187E-00	-0.	0.	-0.10645E 03	0.67812E 01	5.00
-0.90233E 02	0.10013E 02	-0.	0.	-0.90321E 02	0.15096E 02	5.15
-0.79206E 02	0.19234E 02	-0.	0.	-0.76347E 02	0.18737E 02	5.30
-0.67176E 02	0.26273E 02	-0.	0.	-0.61734E 02	0.20239E 02	5.50
-0.56527E 02	0.30371E 02	-0.	0.	-0.49927E 02	0.19665E 02	5.70
-0.49594E 02	0.34214E 02	-0.	0.	-0.43301E 02	0.17609E 02	5.89
-0.42517E 02	0.34849E 02	-0.	0.	-0.38045E 02	0.17100E 02	6.00
-0.41292E 02	0.35470E 02	-0.	0.	-0.37334E 02	0.16343E 02	6.03
-0.40057E 02	0.36091E 02	-0.	0.	-0.36737E 02	0.15936E 02	6.06
-0.38806E 02	0.38841E 02	-0.	0.	-0.36202E 02	0.12366E 02	6.08
-0.32845E 02	0.42549E 02	-0.	0.	-0.33077E 02	0.37744E 01	6.20
-0.19300E 02	0.31171E 02	-0.	0.	-0.42222E 02	0.27371E 02	6.40
-0.83571E 00	0.27662E 02	0.	0.	-0.68096E 02	0.41783E 02	6.60
-0.11336E 02	0.28719E 02	-0.	0.	-0.13081E 02	0.27306E 02	7.00
0.74852E 01	0.13463E 02	-0.	0.	-0.15266E 02	0.34631E 02	7.40
-0.78935E 01	0.18373E 02	-0.	0.	0.17209E 02	0.13144E 02	8.20
0.28536E 01	0.12017E 02	-0.	0.	0.20329E 02	0.43413E-00	9.00
0.11437E 02	0.	0.	0.	0.16091E 02	0.	10.00

Table XVII---Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS						
REAL	IMAGINARY					FREQUENCY CPS
-0.334296E 01	-0.27740E 02	0.	0.	0.	0.	0.00
-0.44444E 02	-0.16055E 02	0.	0.	0.	-0.	0.20
-0.53946E 02	-0.43280E 00	0.	-0.	0.	-0.	0.30
-0.55910E 02	0.81572E 01	0.	-0.	0.	-0.	0.40
-0.53027E 02	0.16442E 02	0.	-0.	0.	-0.	0.50
-0.47271E 02	0.21007E 02	0.	-0.	0.	-0.	0.60
-0.42415E 02	0.24020E 02	0.	-0.	0.	-0.	0.70
-0.38831E 02	0.26390E 02	0.	-0.	0.	-0.	0.80
-0.35713E 02	0.28630E 02	0.	-0.	0.	-0.	0.90
-0.33619E 02	0.33825E 02	0.	-0.	0.	-0.	1.00
-0.30272E 02	0.39486E 02	0.	-0.	0.	-0.	1.10
-0.28593E 02	0.42912E 02	0.	-0.	0.	-0.	1.20
-0.27780E 02	0.46530E 02	0.	-0.	0.	-0.	1.30
-0.26871E 02	0.48684E 02	0.	-0.	0.	-0.	1.40
-0.26269E 02	0.51125E 02	0.	-0.	0.	-0.	1.50
-0.25905E 02	0.53078E 02	0.	-0.	0.	-0.	1.60
-0.23189E 02	0.64841E 02	0.	-0.	0.	-0.	1.70
-0.18588E 02	0.74597E 02	0.	-0.	0.	-0.	1.80
-0.10397E 02	0.79150E 02	0.	-0.	0.	-0.	1.90
0.62920E 02	0.29499E 01	-0.	0.	-0.	0.	1.90
0.41647E 02	-0.91740E 00	-0.	0.	-0.	0.	1.90
0.15135E 02	0.38670E 01	-0.	-0.	-0.	-0.	2.00
0.30424E 01	0.93878E 01	-0.	-0.	-0.	-0.	2.10
-0.30149E 01	0.15383E 02	-0.	-0.	-0.	-0.	2.20
-0.47936E 01	0.16946E 02	-0.	-0.	-0.	-0.	2.30
-0.50723E 01	0.20127E 02	-0.	-0.	-0.	-0.	2.40
-0.51403E 01	0.22244E 02	-0.	-0.	-0.	-0.	2.50
-0.37822E 01	0.22987E 02	-0.	-0.	-0.	-0.	2.60
-0.27694E 01	0.23472E 02	-0.	-0.	-0.	-0.	2.70
0.12123E 01	0.19804E 02	-0.	-0.	-0.	-0.	2.80
0.91168E 01	0.12524E 02	-0.	-0.	-0.	-0.	2.90
0.28327E 01	0.11013E 02	-0.	-0.	-0.	-0.	2.90
-0.31547E 01	0.14212E 02	-0.	-0.	-0.	-0.	2.90
-0.84759E 01	0.17070E 02	0.	-0.	0.	-0.	2.90
-0.12062E 02	0.22418E 02	0.	-0.	0.	-0.	2.90
-0.15786E 02	0.34825E 02	0.	-0.	0.	-0.	2.90
-0.29105E 02	0.44944E 02	0.	-0.	0.	-0.	3.00
-0.39952E 02	0.70125E 02	0.	-0.	0.	-0.	3.10
-0.41196E 02	0.11789E 03	0.	-0.	0.	-0.	3.20
-0.84901E 02	0.17108E 03	0.	-0.	0.	-0.	3.30
-0.83635E 02	0.29455E 03	0.	-0.	0.	-0.	3.40
0.84498E 01	0.23261E 03	-0.	-0.	-0.	-0.	3.50
0.10491E 03	0.17010E 03	-0.	-0.	-0.	-0.	3.60
0.19766E 03	0.15581E 03	-0.	-0.	-0.	-0.	3.70
0.23654E 03	0.13112E 03	-0.	-0.	-0.	-0.	3.80
0.28879E 03	-0.98627E 02	-0.	0.	-0.	0.	3.80
0.42353E 03	-0.32151E 03	-0.	0.	-0.	0.	3.70
0.20886E 02	-0.13205E 03	-0.	0.	-0.	0.	3.60
-0.11585E 03	0.27851E 02	0.	0.	0.	-0.	3.50
-0.73891E 02	-0.33063E 01	0.	0.	0.	0.	3.40
0.21205E 02	-0.18675E 02	-0.	0.	-0.	0.	3.30
0.12121E 02	-0.20259E 02	-0.	0.	-0.	0.	3.20
0.76143E 01	-0.19495E 02	-0.	0.	-0.	0.	3.10
0.15380E 01	-0.17216E 02	-0.	0.	-0.	0.	3.00
0.31168E-00	-0.14967E 02	-0.	0.	-0.	0.	2.90
-0.32136E 01	-0.14060E 02	-0.	0.	-0.	0.	2.80
-0.58646E 01	-0.97526E 01	0.	0.	0.	0.	2.70
-0.81363E 01	-0.65393E 01	0.	0.	0.	0.	2.60
-0.92912E 01	-0.47969E-01	0.	0.	0.	0.	2.50
-0.92211E 01	0.57970E 01	0.	0.	0.	-0.	2.40
0.78216E 01	0.89666E 01	0.	0.	0.	-0.	2.30
-0.73685E 01	0.81997E 01	0.	-0.	0.	-0.	2.20
-0.68297E 01	0.94769E 01	0.	-0.	0.	-0.	2.10
-0.61916E 01	0.16150E 02	0.	-0.	0.	-0.	2.00
-0.15726E 01	0.29093E 02	-0.	-0.	-0.	-0.	1.90
0.20643E 02	-0.98080E 01	-0.	0.	-0.	0.	1.80
0.78496E 02	-0.42938E 02	-0.	0.	-0.	0.	1.70
-0.18047E 02	-0.22341E 02	0.	0.	0.	0.	1.60
-0.49864E 02	0.13620E 02	0.	-0.	0.	-0.	1.50
0.95504E 01	0.11442E 01	-0.	-0.	-0.	-0.	1.40
0.36034E 01	-0.13286E 01	-0.	-0.	-0.	-0.	1.30
0.17133E 01	0.	-0.	0.	-0.	0.	1.20

Table XVII – – – Concluded

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 190,590 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

		INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY			FREQUENCY CPS
0.	0.	0.10820E 02	0.10349E 03	0.	0.	0.10
0.	0.	0.15919E 03	0.64263E 02	0.	0.	0.20
0.	0.	0.19794E 03	0.66361E 01	0.	0.	0.30
0.	-0.	0.20835E 03	-0.27207E 02	0.	-0.	0.40
0.	-0.	0.20098E 03	-0.61645E 02	0.	-0.	0.50
0.	-0.	0.18263E 03	-0.82745E 02	0.	-0.	0.60
0.	-0.	0.16635E 03	-0.98404E 02	0.	-0.	0.70
0.	-0.	0.15325E 03	-0.11204E 03	0.	-0.	0.80
0.	-0.	0.14269E 03	-0.12577E 03	0.	-0.	0.90
0.	-0.	0.13383E 03	-0.13878E 03	0.	-0.	1.00
0.	-0.	0.11933E 03	-0.19178E 03	0.	-0.	1.20
0.	-0.	0.10725E 03	-0.21139E 03	0.	-0.	1.30
0.	-0.	0.10022E 03	-0.23156E 03	0.	-0.	1.40
0.	-0.	0.92133E 02	-0.24334E 03	0.	-0.	1.45
0.	-0.	0.86847E 02	-0.25648E 03	0.	-0.	1.47
0.	-0.	0.80352E 02	-0.28768E 03	0.	-0.	1.50
0.	-0.	0.41926E 02	-0.32649E 03	0.	-0.	1.55
0.	-0.	0.30643E 02	-0.37122E 03	0.	-0.	1.60
-0.	-0.	-0.26123E 02	-0.18998E 03	-0.	-0.	1.65
-0.	0.	-0.40201E 03	0.67341E 02	-0.	0.	1.80
-0.	0.	-0.23532E 03	0.47185E 02	-0.	0.	1.90
-0.	0.	-0.83442E 02	0.16329E 02	-0.	0.	2.00
-0.	-0.	-0.25459E 02	-0.21511E 02	-0.	-0.	2.10
-0.	-0.	-0.12175E 01	-0.54631E 02	-0.	-0.	2.20
-0.	-0.	-0.20741E 01	-0.61124E 02	-0.	-0.	2.30
-0.	-0.	-0.21805E 01	-0.78169E 02	-0.	-0.	2.35
-0.	-0.	-0.30228E 01	-0.88525E 02	-0.	-0.	2.40
-0.	-0.	-0.11997E 02	-0.91937E 02	-0.	-0.	2.43
-0.	-0.	-0.17435E 02	-0.93544E 02	-0.	-0.	2.44
-0.	-0.	-0.35945E 02	-0.76598E 02	-0.	-0.	2.47
-0.	-0.	-0.56263E 02	-0.44895E 02	-0.	-0.	2.50
-0.	-0.	-0.43224E 02	-0.44653E 02	-0.	-0.	2.54
-0.	-0.	-0.19055E 02	-0.63860E 02	-0.	-0.	2.58
0.	-0.	0.82100E 00	-0.78791E 02	0.	-0.	2.65
0.	-0.	0.51077E 01	-0.10512E 03	0.	-0.	2.70
0.	-0.	0.44563E 01	-0.15824E 03	0.	-0.	2.80
-0.	-0.	-0.13093E 02	-0.18990E 03	-0.	-0.	2.90
-0.	-0.	-0.27896E 02	-0.23365E 03	-0.	-0.	3.00
-0.	-0.	-0.43217E 02	-0.27969E 03	-0.	-0.	3.10
-0.	-0.	-0.58446E 02	-0.320 E 03	-0.	-0.	3.20
-0.	-0.	-0.76737E 02	-0.98766E 03	-0.	-0.	3.30
-0.	-0.	-0.16296E 03	-0.39898E 03	-0.	-0.	3.50
-0.	-0.	-0.26033E 03	-0.40773E 03	-0.	-0.	3.60
-0.	-0.	-0.50035E 03	-0.39481E 03	-0.	-0.	3.75
-0.	-0.	-0.62089E 03	-0.34068E 03	-0.	-0.	3.85
-0.	0.	-0.79791E 03	0.31623E 03	-0.	0.	3.90
-0.	0.	-0.12327E 04	0.97089E 03	-0.	0.	3.70
-0.	0.	-0.70839E 02	0.42332E 03	-0.	0.	3.85
0.	0.	0.29261E 03	0.56792E 02	0.	0.	4.00
0.	0.	0.17317E 03	0.93933E 02	0.	0.	4.20
0.	0.	0.26537E 02	0.91176E 02	0.	0.	4.50
0.	0.	0.51053E 02	0.81306E 02	0.	0.	4.70
0.	0.	0.59479E 02	0.63799E 02	0.	0.	4.80
0.	0.	0.67729E 02	0.59135E 02	0.	0.	4.95
0.	0.	0.69024E 02	0.43090E 02	0.	0.	5.00
0.	0.	0.71725E 02	0.27133E 02	0.	0.	5.15
0.	0.	0.72029E 02	0.73240E 01	0.	0.	5.30
0.	-0.	0.69562E 02	-0.12331E 02	0.	-0.	5.55
0.	-0.	0.63986E 02	-0.27050E 02	0.	-0.	5.70
0.	-0.	0.57747E 02	-0.44053E 02	0.	-0.	5.85
0.	-0.	0.47970E 02	-0.47223E 02	0.	-0.	6.00
0.	-0.	0.45792E 02	-0.50481E 02	0.	-0.	6.05
0.	-0.	0.43617E 02	-0.53339E 02	0.	-0.	6.08
0.	-0.	0.40814E 02	-0.76352E 02	0.	-0.	6.08
0.	-0.	0.25167E 02	-0.98879E 02	0.	-0.	6.20
-0.	-0.	-0.32324E 02	-0.11754E 02	-0.	-0.	6.40
-0.	0.	-0.15911E 03	0.57432E 02	-0.	0.	6.60
0.	0.	0.24374E 02	0.77446E 01	0.	0.	7.00
0.	0.	0.23203E 02	0.30191E 01	0.	0.	7.40
0.	-0.	0.71905E 02	-0.11644E 02	0.	-0.	8.20
0.	-0.	0.11196E 02	-0.12938E 02	0.	-0.	9.00
-0.	0.	-0.15885E 01	0.	-0.	0.	10.00

Table XVIII Stress Frequency Response Functions (Analysis Condition 4)

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMI SPAN: 27 SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			CPS
-0.154009E 01	-0.632918E 01	0.208236E 02	0.922776E 02	-0.	-0.	0.10
-0.652639E 01	-0.525355E 01	0.133788E 03	0.767876E 02	-0.	-0.	0.30
-0.113948E 02	-0.303476E 01	0.164866E 03	0.462356E 02	-0.	-0.	0.56
-0.129598E 02	-0.123546E 01	0.194146E 03	0.881086E 02	-0.	-0.	0.66
-0.133166E 02	0.126746E 01	0.208166E 03	-0.238576E 02	-0.	0.	0.90
-0.129706E 02	0.297366E 01	0.214106E 03	-0.634956E 02	-0.	0.	0.96
-0.118466E 02	0.396706E 01	0.212806E 03	-0.952326E 02	-0.	0.	0.70
-0.103736E 02	0.476566E 01	0.204116E 03	-0.122656E 03	-0.	0.	0.80
-0.878366E 01	0.391366E 01	0.193296E 03	-0.148096E 03	-0.	0.	0.90
-0.709686E 01	0.985256E 00	0.181696E 03	-0.170806E 03	-0.	0.	1.00
-0.539176E 01	-0.388576E 01	0.158676E 03	-0.263296E 03	-0.	0.	1.20
-0.342926E 01	-0.715646E 01	0.140716E 03	-0.266996E 03	-0.	0.	1.36
-0.499656E 00	-0.107166E 02	0.131486E 03	-0.290226E 03	-0.	0.	1.46
-0.600196E 00	-0.124626E 02	0.122226E 03	-0.303376E 03	-0.	0.	1.46
-0.417986E-00	-0.153056E 02	0.116776E 03	-0.317766E 03	-0.	0.	1.46
-0.450366E-00	-0.212916E 02	0.110566E 03	-0.351086E 03	-0.	0.	1.50
-0.103256E 01	-0.292016E 02	0.969196E 02	-0.392836E 03	-0.	0.	1.56
-0.279526E 01	-0.397506E 02	0.726416E 02	-0.443316E 03	-0.	0.	1.66
-0.479366E 01	-0.869526E 02	0.377286E 02	-0.627856E 03	-0.	-0.	1.66
-0.705206E 01	-0.121266E 02	-0.911126E 03	-0.224856E 03	-0.	0.	1.80
-0.179306E 03	0.989556E 02	-0.758026E 03	0.210886E 03	-0.	0.	1.90
-0.121336E 03	0.108496E 03	-0.629916E 03	0.182396E 03	-0.	0.	2.00
-0.610416E 02	0.103336E 03	-0.183736E 03	0.185296E 03	-0.	0.	2.10
-0.315336E 02	0.971126E 02	-0.882246E 02	0.489876E 02	-0.	0.	2.20
-0.109736E 02	0.917466E 02	-0.604436E 02	0.387856E 02	-0.	0.	2.30
-0.616936E 01	0.903346E 02	-0.539066E 02	0.642686E 01	0.	0.	2.35
-0.279066E 01	0.896036E 02	-0.512166E 02	-0.903996E 01	0.	0.	2.40
-0.817016E 00	0.892666E 02	-0.577936E 02	-0.848556E 02	0.	0.	2.45
-0.156296E-00	0.885776E 02	-0.628666E 02	-0.242426E 02	0.	0.	2.46
0.774176E 00	0.893576E 02	-0.836216E 02	-0.145706E 02	0.	0.	2.47
0.273006E-00	0.947046E 02	-0.110706E 03	0.273746E 02	0.	0.	2.50
0.110026E 01	0.100066E 03	-0.116416E 03	0.465266E 02	0.	0.	2.54
0.459766E 01	0.104736E 03	-0.857366E 02	0.311856E 02	0.	0.	2.58
0.177486E 02	0.107596E 03	-0.509656E 32	0.156856E 02	0.	0.	2.65
0.256886E 02	0.114296E 03	-0.422086E 02	-0.944376E 01	0.	0.	2.70
0.414966E 02	0.136286E 03	-0.405906E 02	-0.456486E 02	0.	0.	2.80
0.912276E 02	0.152406E 03	-0.634716E 02	-0.396276E 02	0.	0.	3.00
0.137766E 03	0.168256E 03	-0.872376E 02	-0.700486E 02	0.	0.	3.10
0.223556E 03	0.165556E 03	-0.127446E 03	-0.693366E 02	0.	0.	3.20
0.318666E 03	0.146926E 03	-0.167626E 03	-0.614556E 02	0.	0.	3.26
0.397476E 03	0.109246E 02	-0.189076E 03	-0.107306E 02	0.	0.	3.29
0.487196E 03	-0.355876E 03	-0.206996E 03	0.123766E 03	0.	-0.	3.35
0.682696E 03	-0.695856E 03	-0.294046E 03	0.140696E 03	0.	-0.	3.46
-0.111726E 03	-0.359816E 03	-0.256566E 02	0.894186E 02	-0.	-0.	3.52
-0.170356E 03	-0.263916E 03	-0.199296E 02	0.552066E 02	-0.	-0.	3.56
-0.191636E 03	-0.125476E 03	-0.300936E 02	0.140906E 02	-0.	-0.	3.60
-0.160116E 03	-0.305876E 02	-0.768116E 02	0.365696E 02	-0.	-0.	3.70
-0.109716E 03	-0.324496E 02	-0.171326E 03	0.210366E 03	-0.	-0.	3.85
-0.327076E 02	-0.382406E 02	-0.170426E 03	0.186216E 03	0.	-0.	4.00
-0.751376E 02	0.386846E 02	-0.265856E 02	0.246546E 03	-0.	0.	4.20
-0.142666E 02	-0.473596E 01	0.110976E 08	0.971736E 02	-0.	-0.	4.50
-0.101686E 01	-0.112726E 02	0.175186E 03	0.536366E 02	-0.	-0.	4.70
-0.563346E 01	-0.124616E 02	0.159286E 03	0.149746E 02	-0.	-0.	4.80
-0.113596E 02	-0.119976E 02	0.132026E 03	0.833076E 01	-0.	-0.	4.96
-0.143046E 02	-0.944906E 01	0.125776E 03	0.902526E 01	-0.	-0.	5.00
-0.178686E 02	-0.639666E 01	0.106636E 03	-0.210386E 02	-0.	-0.	5.15
-0.193826E 02	-0.252786E 01	0.903916E 02	-0.316956E 02	-0.	0.	5.30
-0.197576E 02	0.102446E 01	0.731026E 02	-0.590676E 02	-0.	0.	5.50
-0.190486E 02	0.325906E 01	0.579486E 02	-0.628976E 02	-0.	0.	5.70
-0.181116E 02	0.535496E 01	0.441716E 02	-0.649986E 02	-0.	0.	5.85
-0.168426E 02	0.568926E 01	0.394846E 02	-0.663246E 02	-0.	0.	6.00
-0.165996E 02	0.601616E 01	0.368686E 02	-0.667226E 02	-0.	0.	6.03
-0.163466E 02	0.633566E 01	0.352666E 02	-0.670956E 02	-0.	0.	6.06
-0.160936E 02	0.766406E 01	0.336746E 02	-0.684906E 02	-0.	0.	6.08
-0.144636E 02	0.960356E 01	0.266306E 02	-0.698886E 02	-0.	0.	6.20
-0.125526E 02	0.111626E 02	0.151956E 02	-0.302626E 02	-0.	0.	6.46
-0.979656E 01	0.126796E 02	0.926266E 01	-0.452266E 02	-0.	0.	6.66
-0.197706E 01	-0.116656E 01	-0.270686E 02	0.161056E 02	0.	-0.	7.00
0.879646E 01	0.808646E 01	-0.608626E 02	-0.217236E 02	0.	0.	7.46
-0.106586E 02	0.104886E 02	-0.270756E 02	0.113146E 02	-0.	0.	8.20
-0.939736E 00	0.617556E 01	0.272986E 02	-0.797056E 01	-0.	0.	9.00
0.365706E 01	0.	0.815926E 01	0.	0.	0.	10.00

Table XVIII --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY CPS
0.32198E 01	0.14733E 02	0.18896E 02	0.83739E 02	-0.	-0.	0.10
0.20392E 02	0.11944E 02	0.12231E 03	0.69682E 02	-0.	-0.	0.30
0.25767E 02	0.70627E 01	0.14959E 03	0.41957E 02	-0.	-0.	0.36
0.30411E 02	0.25904E 01	0.17418E 03	0.16432E 02	-0.	-0.	0.44
0.33054E 02	-0.45746E 01	0.18890E 03	-0.23464E 02	-0.	0.	0.50
0.34907E 02	-0.10980E 02	0.19611E 03	-0.37620E 02	-0.	0.	0.60
0.35037E 02	-0.34726E 02	0.19311E 03	-0.86421E 02	-0.	0.	0.70
0.34355E 02	-0.22119E 02	0.19523E 03	-0.11130E 03	-0.	0.	0.80
0.33472E 02	-0.27456E 02	0.17541E 03	-0.13439E 03	-0.	0.	0.90
0.32917E 02	-0.40723E 02	0.16488E 03	-0.18040E 03	-0.	0.	1.00
0.30802E 02	-0.54472E 02	0.14399E 03	-0.22078E 03	-0.	0.	1.20
0.29267E 02	-0.62400E 02	0.12769E 03	-0.24228E 03	-0.	0.	1.34
0.28160E 02	-0.70586E 02	0.11332E 03	-0.26337E 03	-0.	0.	1.40
0.26744E 02	-0.75355E 02	0.11091E 03	-0.27330E 03	-0.	0.	1.45
0.25767E 02	-0.80673E 02	0.10596E 03	-0.28834E 03	-0.	0.	1.47
0.24532E 02	-0.93330E 02	0.10033E 03	-0.31859E 03	-0.	0.	1.50
0.20929E 02	-0.10949E 03	0.86136E 02	-0.35585E 03	-0.	0.	1.55
0.14938E 02	-0.13038E 03	0.65738E 02	-0.40229E 03	-0.	0.	1.60
0.41143E 01	-0.21595E 03	0.34237E 02	-0.56913E 03	-0.	-0.	1.63
-0.12955E 03	-0.62800E 02	-0.28234E 03	-0.20403E 03	-0.	0.	1.80
-0.32996E 03	0.13837E 03	-0.68788E 03	0.19136E 03	-0.	0.	1.90
-0.20697E 01	0.14772E 03	-0.39013E 03	0.16551E 03	-0.	0.	2.00
-0.57760E 02	0.12347E 03	-0.16673E 03	0.10009E 03	-0.	0.	2.10
-0.48746E 02	0.10501E 03	-0.80061E 02	0.44455E 02	-0.	0.	2.20
-0.23155E 02	0.97219E 02	-0.54851E 02	0.28844E 02	-0.	0.	2.30
-0.17039E 02	0.90713E 02	-0.48918E 02	0.58322E 01	0.	0.	2.35
-0.12790E 02	0.86673E 02	-0.46477E 02	-0.82035E 01	0.	0.	2.40
-0.12297E 02	0.95090E 02	-0.52445E 02	-0.13481E 02	0.	0.	2.43
-0.12835E 02	0.82524E 02	-0.57050E 02	-0.21999E 02	0.	0.	2.44
-0.16967E 02	0.86141E 02	-0.75554E 02	-0.13222E 02	0.	0.	2.47
-0.24121E 02	0.10278E 03	-0.10046E 03	0.25022E 02	0.	0.	2.50
-0.24733E 02	0.11386E 03	-0.10564E 03	0.42221E 02	0.	0.	2.54
-0.11343E 02	0.11635E 03	-0.77803E 02	0.28300E 02	0.	0.	2.58
0.94485E 01	0.11632E 03	-0.46252E 02	0.14052E 02	0.	0.	2.65
0.20305E 02	0.11992E 03	-0.38303E 02	-0.85730E 01	0.	0.	2.70
0.39087E 02	0.13715E 03	-0.36834E 02	-0.41261E 02	0.	0.	2.80
0.57175E 02	0.15308E 03	-0.57598E 02	-0.54110E 02	0.	0.	3.00
0.14219E 03	0.16928E 03	-0.79165E 02	-0.63567E 02	0.	0.	3.10
0.23676E 03	0.16548E 03	-0.11565E 03	-0.62919E 02	0.	0.	3.20
0.34238E 03	0.14398E 03	-0.15211E 03	-0.55769E 02	0.	0.	3.26
0.43105E 03	-0.23713E 01	-0.18065E 03	-0.97554E 01	0.	0.	3.29
0.66636E 03	-0.43264E 03	-0.24447E 03	0.11412E 03	0.	-0.	3.35
0.35525E 03	-0.60281E 03	-0.26865E 03	0.12767E 03	0.	-0.	3.40
-0.16867E 03	-0.44775E 03	-0.23282E 02	0.81145E 02	-0.	-0.	3.52
-0.24064E 03	-0.33797E 03	-0.18085E 02	0.50098E 02	-0.	-0.	3.56
-0.25988E 03	-0.17621E 03	-0.27309E 02	0.12786E 02	-0.	-0.	3.60
-0.25706E 03	-0.35099E 02	-0.69704E 02	0.33185E 02	-0.	-0.	3.70
-0.24177E 03	0.87463E 02	-0.15547E 03	0.19089E 03	-0.	-0.	3.85
-0.14433E 03	0.46440E 02	-0.15465E 03	0.16898E 03	0.	-0.	4.00
-0.72318E 02	0.10313E 03	-0.24126E 02	0.22373E 03	-0.	0.	4.20
0.16187E 02	0.24391E 02	0.10071E 03	0.88183E 02	-0.	-0.	4.50
0.45560E 02	0.64374E 01	0.15897E 03	0.48692E 02	-0.	-0.	4.70
0.35596E 02	-0.38361E 01	0.14454E 03	0.13588E 02	-0.	-0.	4.80
0.21674E 02	-0.74086E 01	0.11981E 03	0.73399E 01	-0.	-0.	4.96
0.18842E 02	-0.10495E 02	0.11413E 03	-0.81901E 01	-0.	-0.	5.00
0.10974E 02	-0.11584E 02	0.96769E 02	-0.19110E 02	-0.	-0.	5.15
0.52558E 01	-0.11678E 02	0.82028E 02	-0.28708E 02	-0.	0.	5.30
0.12295E-00	-0.11136E 02	0.66338E 02	-0.35433E 02	-0.	0.	5.50
-0.36458E 01	-0.10566E 02	0.52586E 02	-0.38928E 02	-0.	0.	5.70
-0.57732E 01	-0.98800E 01	0.43714E 02	-0.41654E 02	-0.	0.	5.85
-0.76928E 01	-0.97567E 01	0.34923E 02	-0.42038E 02	-0.	0.	6.00
-0.79951E 01	-0.96323E 01	0.33457E 02	-0.42399E 02	-0.	0.	6.03
-0.82935E 01	-0.95072E 01	0.32003E 02	-0.42738E 02	-0.	0.	6.06
-0.85862E 01	-0.89390E 01	0.37559E 02	-0.44003E 02	-0.	0.	6.08
-0.98490E 01	-0.90079E 01	0.24167E 02	-0.45272E 02	-0.	0.	6.20
-0.11848E 02	-0.70756E 01	0.13789E 02	-0.45611E 02	-0.	0.	6.40
-0.14032E 02	-0.40812E 01	0.29606E 01	-0.41042E 02	-0.	0.	6.60
-0.21000E 02	0.17795E 02	-0.24563E 02	0.14797E 02	0.	-0.	7.00
-0.29564E 02	0.38593E 01	-0.55230E 02	-0.19715E 02	0.	0.	7.40
-0.16094E 02	0.17214E 02	-0.24570E 02	0.10449E 02	-0.	0.	8.20
0.11020E 02	0.53895E 01	0.24772E 02	-0.72330E 01	-0.	0.	9.00
0.88497E 01	0.	0.74043E 01	0.	0.	0.	10.00

Table XVIII - - - Continued

(PSIAPS SINUSOIDAL GUST)

GROSS WEIGHT: 187,260 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMI SPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY CPS
0.322[illegible]E 01	0.15237E 02	0.18733E 02	0.85566E 02	-0.	-0.	0.10
0.716[illegible]E 02	0.12847E 02	0.12404E 03	0.71353E 02	-0.	-0.	0.30
0.246[illegible]E 02	0.80364E 01	0.15218E 03	0.43023E 02	-0.	-0.	0.36
0.316[illegible]E 02	0.35452E 01	0.17987E 03	0.16731E 02	-0.	0.	0.44
0.342[illegible]E 02	-0.36015E 01	0.19334E 03	-0.24724E 02	-0.	0.	0.50
0.360[illegible]E 02	-0.99239E 01	0.20138E 03	-0.60604E 02	-0.	0.	0.60
0.362[illegible]E 02	-0.15544E 02	0.19875E 03	-0.91188E 02	-0.	0.	0.70
0.356[illegible]E 02	-0.20791E 02	0.19087E 03	-0.11787E 03	-0.	0.	0.80
0.346[illegible]E 02	-0.26179E 02	0.18075E 03	-0.14280E 03	0.	-0.	0.90
0.361[illegible]E 02	-0.38992E 02	0.16964E 03	-0.19264E 03	0.	-0.	1.00
0.329[illegible]E 02	-0.52437E 02	0.14685E 03	-0.23612E 03	0.	-0.	1.20
0.319[illegible]E 02	-0.60446E 02	0.12840E 03	-0.25915E 03	0.	-0.	1.39
0.310[illegible]E 02	-0.68564E 02	0.11891E 03	-0.28160E 03	0.	-0.	1.60
0.298[illegible]E 02	-0.73294E 02	0.10916E 03	-0.29428E 03	0.	-0.	1.80
0.290[illegible]E 02	-0.78567E 02	0.10349E 03	-0.30812E 03	0.	-0.	1.97
0.279[illegible]E 02	-0.91114E 02	0.97051E 02	-0.34006E 03	0.	-0.	1.99
0.247[illegible]E 02	-0.10713E 03	0.80[illegible]22E 02	-0.37921E 03	0.	-0.	1.99
0.190[illegible]E 02	-0.12783E 03	0.57973E 02	-0.42770E 03	0.	-0.	1.60
0.[illegible]2[illegible]E 01	-0.21331E 03	0.22955E 02	-0.59674E 03	0.	-0.	1.65
-0.11916E 03	-0.66747E 02	-0.31780E 03	-0.19642E 03	-0.	-0.	1.80
-0.31520E 03	0.12853E 03	-0.73430E 03	0.20950E 03	-0.	0.	1.90
-0.19736E 03	0.13109E 03	-0.49695E 03	0.17217E 03	-0.	0.	2.00
-0.91429E 02	0.10403E 03	-0.17296E 03	0.93428E 02	-0.	0.	2.10
-0.44946E 02	0.87584E 02	-0.86665E 02	0.33463E 02	-0.	0.	2.20
-0.34105E 02	0.92781E 02	-0.82339E 02	0.38539E 02	-0.	0.	2.30
-0.26690E 02	0.86605E 02	-0.73914E 02	0.16811E 02	-0.	0.	2.35
-0.15350E 02	0.81525E 02	-0.61380E 02	0.17927E 01	-0.	0.	2.40
-0.12667E 02	0.79362E 02	-0.64102E 02	-0.38898E 01	-0.	0.	2.43
-0.12466E 02	0.75010E 02	-0.67521E 02	-0.13713E 02	-0.	0.	2.44
-0.15819E 02	0.75486E 02	-0.83081E 02	-0.78881E 01	0.	0.	2.47
-0.20435E 02	0.87515E 02	-0.10400E 03	0.22993E 02	0.	0.	2.50
-0.21204E 02	0.94909E 02	-0.10764E 03	0.34907E 02	0.	0.	2.54
-0.10224E 02	0.93134E 02	-0.83224E 02	0.17964E 02	0.	0.	2.58
0.65273E 01	0.89753E 02	-0.57544E 02	0.26547E 01	0.	0.	2.65
0.14442E 02	0.94185E 02	-0.52796E 02	-0.21773E 02	0.	0.	2.70
0.25641E 02	0.75843E 02	-0.57137E 02	-0.58160E 02	0.	0.	2.80
0.44078E 02	0.71332E 02	-0.94227E 02	-0.72633E 02	0.	0.	3.00
0.52691E 02	0.64806E 02	-0.13009E 03	-0.81549E 02	0.	0.	3.10
0.59558E 02	0.59269E 02	-0.19191E 03	-0.75181E 02	0.	0.	3.20
0.60207E 02	0.54005E 02	-0.25528E 03	-0.58869E 02	0.	0.	3.26
0.575179E 02	0.55547E 02	-0.30558E 03	0.32615E 02	0.	0.	3.29
0.42213E 02	0.84559E 02	-0.41881E 03	0.26983E 03	0.	0.	3.35
0.19062E 02	0.15331E 03	-0.45628E 03	0.30134E 03	0.	0.	3.40
0.11898E 01	0.14343E 03	0.27545E 02	0.21384E 03	0.	0.	3.52
0.15060E 03	0.13297E 03	0.46533E 02	0.15909E 03	0.	0.	3.56
0.17674E 03	0.10217E 03	0.40112E 02	0.88332E 02	0.	0.	3.60
0.24683E 03	-0.26122E 02	-0.14594E 01	0.78183E 02	0.	-0.	3.70
0.39066E 03	-0.42247E 03	-0.68716E 02	0.14944E 03	0.	-0.	3.85
0.29699E 03	-0.27404E 03	-0.74697E 02	0.14956E 03	0.	-0.	4.00
-0.50058E 03	-0.14089E 03	-0.53741E 02	0.28552E 03	-0.	-0.	4.20
-0.11593E 03	-0.69695E 02	0.13803E 03	0.94646E 02	-0.	-0.	4.50
-0.12838E 03	-0.45430E 02	0.20929E 03	0.44911E 02	-0.	-0.	4.70
-0.11957E 03	-0.20335E 02	0.18492E 03	0.43142E 01	-0.	-0.	4.80
-0.10427E 03	-0.15550E 02	0.14735E 03	-0.20169E 01	-0.	-0.	4.96
-0.60058E 01	-0.22293E 01	0.13910E 03	-0.17228E 02	-0.	-0.	5.00
-0.88831E 02	0.77575E 01	0.11464E 03	-0.26173E 02	-0.	0.	5.15
-0.78325E 02	0.17069E 02	0.94959E 02	-0.32366E 02	-0.	0.	5.30
-0.66728E 02	0.23993E 02	0.75529E 02	-0.35334E 02	-0.	0.	5.46
-0.58383E 02	0.27797E 02	0.60245E 02	-0.36186E 02	-0.	0.	5.70
-0.49695E 02	0.31044E 02	0.51425E 02	-0.36313E 02	-0.	0.	5.85
-0.43082E 02	0.31535E 02	0.43566E 02	-0.36271E 02	-0.	0.	6.02
-0.41980E 02	0.32008E 02	0.42344E 02	-0.36211E 02	-0.	0.	6.03
-0.40888E 02	0.32464E 02	0.41159E 02	-0.36136E 02	-0.	0.	6.06
-0.39803E 02	0.34316E 02	0.40007E 02	-0.35614E 02	-0.	0.	6.08
-0.35003E 02	0.36734E 02	0.35234E 02	-0.34201E 02	-0.	0.	6.20
-0.27212E 02	0.38432E 02	0.28719E 02	-0.32245E 02	-0.	0.	6.40
-0.19139E 02	0.38197E 02	0.23836E 02	-0.28438E 02	-0.	0.	6.60
0.2E479E-00	0.87316E 01	0.20843E 02	-0.46723E 02	0.	0.	7.00
0.22146E 02	0.25986E 02	0.28386E 02	-0.26223E 02	0.	0.	7.40
0.45560E 01	0.13445E 02	-0.26153E 02	-0.94046E 01	0.	0.	8.20
-0.33670E 01	0.13788E 02	-0.12173E 02	-0.26803E 01	-0.	0.	9.00
0.93374E 01	0.	-0.11986E 02	0.	0.	0.	10.00

Table XVIII - - - Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB   CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

PERCENT SEMISPAN 40.00   SEGMENT NUMBER 107

INCREMENTAL SHEAR [illegible] REAL	IMAGINARY			[illegible] REAL	IMAGINARY	FREQUENCY CPS
0.33810E 01	0.15610E 02	-0.	-0.	-0.16006E 02	-0.73110E 02	0.10
0.22133E 02	0.13135E 02	-0.	-0.	-0.10599E 03	-0.60968E 02	0.30
0.27303E 02	0.41938E 01	-0.	-0.	-0.13003E 03	-0.36760E 02	0.36
0.32414E 02	0.36163E 01	-0.	0.	-0.15368E 03	-0.14295E 02	0.44
0.36032E 02	-0.36025E 01	-0.	0.	-0.16519E 03	0.21125E 02	0.50
[illegible]	-0.99102E 01	-0.	0.	-0.17206E 03	0.51781E 02	0.60
0.36715E 02	-0.15441E 02	-0.	0.	-0.16982E 03	0.77914E 02	0.70
0.36012E 02	-0.20532E 02	-0.	0.	-0.16308E 03	0.10071E 03	0.80
0.35057E 02	-0.25699E 02	0.	-0.	-0.15443E 03	0.12202E 03	0.90
0.34215E 02	-0.37867E 02	0.	-0.	-0.14455E 03	0.16459E 03	1.00
[illegible]	-0.50627E 02	0.	-0.	-0.12547E 03	0.20175E 03	1.20
0.31849E 02	-0.58066E 02	0.	-0.	-0.10971E 03	0.22141E 03	1.34
0.31069E 02	-0.55743E 02	0.	-0.	-0.10151E 03	0.24061E 03	1.40
[illegible]	-0.70205E 02	0.	-0.	-0.93268E 02	0.25144E 03	1.45
0.25191E 02	-0.75181E 02	0.	-0.	-0.88425E 02	0.26327E 03	1.47
0.28175E 02	-0.97026E 02	0.	-0.	-0.82924E 02	0.29056E 03	1.50
0.29357E 02	-0.10216E 03	0.	-0.	-0.69142E 02	0.32401E 03	1.55
[illegible]	-0.12173E 03	0.	-0.	-0.49534E 02	0.36544E 03	1.60
0.10625E 02	-0.20311E 03	0.	-0.	-0.19614E 02	0.50817E 03	1.65
[illegible]	-0.66239E 02	-0.	-0.	0.27194E 03	0.14783E 03	1.80
[illegible]	0.11852E 03	-0.	0.	0.62741E 03	-0.17993E 03	1.90
-0.19861E 03	0.12154E 03	-0.	0.	0.34771E 03	-0.14711E 03	2.00
[illegible]	0.10001E 03	-0.	0.	0.14777E 03	-0.81537E 02	2.10
-0.41872E 02	0.90556E 02	-0.	0.	0.74033E 02	-0.30301E 02	2.20
[illegible]	0.85106E 02	-0.	0.	0.70353E 02	-0.32929E 02	2.30
[illegible]	0.79195E 02	-0.	0.	0.63154E 02	-0.14364E 02	2.35
[illegible]	0.76031E 02	-0.	0.	0.52445E 02	-0.15918E 01	2.40
-0.11457E 02	0.71923E 02	-0.	0.	0.54771E 02	0.33235E 01	2.45
-0.11555E 02	0.67785E 02	-0.	0.	0.57692E 02	0.11717E 02	2.44
[illegible]	0.69145E 02	0.	0.	0.70987E 02	0.67399E 01	2.47
-0.21105E 02	0.91777E 02	0.	0.	0.80858E 02	-0.19647E 02	2.50
-0.22101E 02	0.89717E 02	0.	0.	0.91969E 02	-0.29826E 02	2.54
-0.10775E 02	0.88096E 02	0.	0.	0.71109E 02	-0.15349E 02	2.58
[illegible]	0.86725E 02	0.	0.	0.49168E 02	-0.22693E 01	2.65
0.16211E 02	0.79171E 02	0.	0.	0.45111E 02	0.18603E 02	2.70
[illegible]	0.70748E 02	0.	0.	0.48820E 02	0.49694E 02	2.80
0.43602E 02	0.66093E 02	0.	0.	0.80511E 02	0.62060E 02	3.00
[illegible]	0.59285E 02	0.	0.	0.11115E 03	0.69674E 02	3.10
0.58724E 02	0.53608E 02	0.	0.	0.16398E 03	0.64237E 02	3.20
0.59490E 02	0.49412E 02	0.	0.	0.21812E 03	0.50300E 02	3.26
[illegible]	0.48180E 02	0.	0.	0.26110E 03	-0.27869E 02	3.29
[illegible]	0.76480E 02	0.	0.	0.35785E 03	-0.23057E 03	3.35
[illegible]	0.14767E 03	0.	0.	0.39986E 03	-0.25747E 03	3.40
[illegible]	0.13662E 03	0.	0.	-0.22535E 02	-0.18442E 03	3.52
[illegible]	0.12435E 03	0.	0.	-0.30759E 02	-0.13593E 03	3.56
[illegible]	0.96193E 02	0.	0.	-0.34273E 02	-0.75474E 02	3.60
[illegible]	0.29681E 02	0.	-0.	0.12469E 01	-0.66902E 02	3.70
[illegible]	-0.40500E 03	0.	-0.	0.58713E 02	-0.12769E 03	3.85
0.27010E 03	-0.26215E 03	0.	-0.	0.63823E 02	-0.12694E 03	4.00
[illegible]	-0.14019E 03	-0.	-0.	0.45918E 02	-0.24396E 03	4.20
[illegible]	-0.66960E 02	-0.	-0.	-0.11794E 03	-0.40969E 02	4.50
-0.12790E 03	0.62861E 02	-0.	-0.	-0.17883E 03	-0.38203E 02	4.70
[illegible]	0.18660E 02	-0.	-0.	-0.15800E 03	-0.36962E 01	4.80
[illegible]	-0.11874E 02	-0.	-0.	-0.12590E 03	0.17233E 01	4.96
[illegible]	-0.12624E 01	-0.	-0.	-0.11885E 03	0.14720E 02	5.00
[illegible]	0.80714E 01	-0.	0.	-0.97954E 02	0.22363E 02	5.15
[illegible]	0.16996E 02	-0.	0.	-0.81136E 02	0.27655E 02	5.30
[illegible]	0.22807E 02	-0.	0.	-0.64534E 02	0.30190E 02	5.50
[illegible]	0.26168E 02	-0.	0.	-0.31475E 02	0.30919E 02	5.70
[illegible]	0.29001E 02	-0.	0.	-0.43039E 02	0.31027E 02	5.85
[illegible]	0.29427E 02	0.	0.	-0.37224E 02	0.30991E 02	6.00
[illegible]	0.29837E 02	-0.	0.	-0.36180E 02	0.30940E 02	6.05
-0.60720E 02	0.30231E 02	-0.	0.	-0.35167E 02	0.30876E 02	6.06
[illegible]	0.31626E 02	-0.	0.	-0.34183E 02	0.30430E 02	6.08
[illegible]	0.33809E 02	-0.	0.	-0.30105E 02	0.29222E 02	6.20
-0.27810E 02	0.35318E 02	-0.	0.	-0.24539E 02	0.27551E 02	6.40
-0.20728E 02	0.35277E 02	-0.	0.	-0.20366E 02	0.24299E 02	6.60
-0.66725E 01	0.16660E 02	0.	0.	-0.17809E 02	0.39494E 02	7.00
[illegible]	0.25496E 02	0.	0.	-0.24254E 02	0.22496E 02	7.40
0.35217E 01	0.15697E 02	0.	0.	0.22354E 02	0.80355E 01	8.20
[illegible]	0.13001E 02	-0.	0.	0.10491E 02	0.22902E 01	9.00
0.11144E 02	0.	0.	0.	0.10242E 02	0.	10.00

Table XVIII --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS						
REAL	IMAGINARY					FREQUENCY CPS
-0.18744E-01	-0.56730E 00	0.	0.	0.	0.	0.10
-0.10561E 01	-0.41030E-00	0.	0.	0.	0.	0.20
-0.12628E 01	-0.15013E-00	0.	0.	0.	0.	0.30
-0.13875E 01	0.61359E-01	0.	-0.	0.	-0.	0.40
-0.14238E 01	0.35005E-00	0.	-0.	0.	-0.	0.50
-0.13790E 01	0.55578E 00	0.	-0.	0.	-0.	0.60
-0.12736E 01	0.69612E 00	0.	-0.	0.	-0.	0.70
-0.11541E 01	0.79702E 00	0.	-0.	0.	-0.	0.80
-0.10431E 01	0.86307E 00	0.	-0.	0.	-0.	0.90
-0.94720E 00	0.91962E 00	0.	-0.	0.	-0.	1.00
-0.81058E 00	0.10819E 01	0.	-0.	0.	-0.	1.10
-0.74640E 00	0.11396E 01	0.	-0.	0.	-0.	1.20
-0.72374E 00	0.11982E 01	0.	-0.	0.	-0.	1.30
-0.70505E 00	0.12322E 01	0.	-0.	0.	-0.	1.40
-0.69518E 00	0.12682E 01	0.	-0.	0.	-0.	1.50
-0.68452E 00	0.13594E 01	0.	-0.	0.	-0.	1.60
-0.65883E 00	0.14793E 01	0.	-0.	0.	-0.	1.70
-0.62177E 00	0.16209E 01	0.	-0.	0.	-0.	1.80
-0.56095E 00	0.22900E 01	0.	-0.	0.	-0.	1.90
0.21512E-00	0.15409E 01	-0.	-0.	-0.	-0.	2.00
0.15780E 01	0.25628E-00	-0.	-0.	-0.	-0.	2.10
0.99722E 00	0.20042E-00	-0.	-0.	-0.	-0.	2.20
0.36559E-00	0.35724E-00	-0.	-0.	-0.	-0.	2.30
0.65785E-01	0.55122E 00	-0.	-0.	-0.	-0.	2.40
-0.52279E-01	0.59644E 00	-0.	-0.	-0.	-0.	2.50
-0.70477E-01	0.68965E 00	-0.	-0.	-0.	-0.	2.59
-0.92722E-01	0.75802E 00	0.	-0.	0.	-0.	2.60
-0.69766E-01	0.78576E 00	-0.	-0.	-0.	-0.	2.63
-0.47820E-01	0.83526E 00	-0.	-0.	-0.	-0.	2.64
0.50328E-01	0.79130E 00	-0.	-0.	-0.	-0.	2.67
0.19333E-00	0.55898E 00	-0.	-0.	-0.	-0.	2.68
0.24186E-00	0.42460E-00	-0.	-0.	-0.	-0.	2.74
0.77424E-01	0.46483E-00	-0.	-0.	-0.	-0.	2.78
-0.15676E-00	0.53391E 00	0.	-0.	0.	-0.	2.65
-0.25236E-00	0.65558E 00	0.	-0.	0.	-0.	2.70
-0.37805E-00	0.83749E 00	0.	-0.	0.	-0.	2.80
-0.68174E 00	0.89972E 00	0.	-0.	0.	-0.	3.00
-0.10167E 01	0.99665E 00	0.	-0.	0.	-0.	3.10
-0.17704E 01	0.12275E 01	0.	-0.	0.	-0.	3.20
-0.27196E 01	0.15811E 01	0.	-0.	0.	-0.	3.26
-0.35629E 01	0.34340E 01	0.	-0.	0.	-0.	3.29
-0.56797E 01	0.84924E 01	0.	-0.	0.	-0.	3.35
-0.49616E 01	0.10881E 02	0.	-0.	0.	-0.	3.45
0.50802E 01	0.92636E 01	-0.	-0.	-0.	-0.	3.52
0.41136E 01	0.81326E 01	-0.	-0.	-0.	-0.	3.56
0.72931E 01	0.62744E 01	-0.	-0.	-0.	-0.	3.60
0.56272E 01	0.12151E 01	-0.	-0.	-0.	-0.	3.70
0.15589E 02	-0.16700E 02	-0.	0.	-0.	0.	3.85
0.17309E 02	-0.94617E 01	-0.	0.	-0.	0.	4.00
-0.88812E 01	0.56045E 01	0.	-0.	0.	-0.	4.20
-0.60395E-00	0.19367E-00	0.	-0.	0.	-0.	4.30
0.25759E 01	-0.82772E 00	-0.	0.	-0.	0.	4.70
0.19428E 01	-0.13196E 01	-0.	0.	-0.	0.	4.80
0.10720E 01	-0.13468E 01	-0.	0.	-0.	0.	4.96
0.90382E 00	-0.13141E 01	-0.	0.	-0.	0.	5.00
-0.48213E-00	-0.11901E 01	-0.	0.	-0.	0.	5.15
0.17549E-00	-0.10032E 01	-0.	0.	-0.	0.	5.30
-0.60646E-01	-0.81876E 00	-0.	0.	-0.	0.	5.45
-0.15725E-00	-0.69857E 00	0.	0.	0.	0.	5.70
-0.19890E-00	-0.58294E 00	0.	0.	0.	0.	5.85
-0.21508E-00	-0.56623E 00	0.	0.	0.	0.	6.00
-0.21537E-00	-0.56588E 00	0.	0.	0.	0.	6.03
-0.21497E-00	-0.52788E 00	0.	0.	0.	0.	6.06
-0.21390E-00	-0.45135E-00	0.	0.	0.	0.	6.08
-0.20107E-00	-0.34159E-00	0.	0.	0.	0.	6.20
-0.15221E-00	-0.25352E-00	0.	0.	0.	0.	6.50
-0.65765E-01	-0.18955E-00	0.	0.	0.	0.	6.60
0.29049E-00	-0.12628E 01	-0.	0.	-0.	0.	7.00
0.10407E 01	-0.81816E 00	-0.	0.	-0.	0.	7.40
-0.24913E 01	0.93176E 00	0.	-0.	0.	-0.	8.20
0.88968E 00	-0.68075E-01	-0.	-0.	-0.	-0.	9.00
0.45398E-00	0.	-0.	0.	-0.	0.	10.00

Table XVIII - - - Concluded

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 107,260 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.85

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

INCREMENTAL AXIAL STRESS						
REAL		IMAGINARY				FREQUENCY CPS
0.	0.	0.12938E 02	0.44903E 02	0.	0.	0.10
0.	0.	0.76771E 02	0.36895E 02	0.	0.	0.30
0.	0.	0.92098E 02	0.18922E 02	0.	0.	0.36
0.	0.	0.10575E 03	0.33791E 01	0.	0.	0.44
0.	-0.	0.11117E 03	-0.19423E 02	0.	-0.	0.50
0.	-0.	0.11209E 03	-0.37300E 02	0.	-0.	0.60
0.	-0.	0.10771E 03	-0.51609E 02	0.	-0.	0.70
0.	-0.	0.10133E 03	-0.62954E 02	0.	-0.	0.80
0.	-0.	0.94472E 02	-0.72893E 02	0.	-0.	0.90
0.	-0.	0.88327E 02	-0.91744E 02	0.	-0.	1.00
0.	-0.	0.77336E 02	-0.10794E 03	0.	-0.	1.20
0.	-0.	0.70429E 02	-0.11643E 03	0.	-0.	1.34
0.	-0.	0.67086E 02	-0.12473E 03	0.	-0.	1.40
0.	-0.	0.63840E 02	-0.12938E 03	0.	-0.	1.45
0.	-0.	0.62006E 02	-0.13445E 03	0.	-0.	1.47
0.	-0.	0.59919E 02	-0.14007E 03	0.	-0.	1.50
0.	-0.	0.56752E 02	-0.14024E 03	0.	-0.	1.55
0.	-0.	0.47449E 02	-0.17771E 03	0.	-0.	1.60
0.	-0.	0.36299E 02	-0.24062E 03	0.	-0.	1.69
-0.	-0.	-0.74462E 02	-0.11736E 03	-0.	-0.	1.80
-0.	0.	-0.21665E 03	0.14138E 02	-0.	0.	1.90
-0.	0.	-0.11427E 03	0.23438E 01	-0.	0.	2.00
-0.	-0.	-0.37579E 02	-0.27002E 02	-0.	-0.	2.10
-0.	-0.	-0.92994E 01	-0.33639E 02	-0.	-0.	2.20
-0.	-0.	-0.81244E 01	-0.38227E 02	-0.	-0.	2.30
-0.	-0.	-0.73869E 01	-0.70743E 02	-0.	-0.	2.35
-0.	-0.	-0.73994E 01	-0.79980E 02	-0.	-0.	2.40
-0.	-0.	-0.11945E 02	-0.82118E 02	-0.	-0.	2.43
-0.	-0.	-0.15127E 02	-0.87229E 02	-0.	-0.	2.44
-0.	-0.	-0.27321E 02	-0.82019E 02	-0.	-0.	2.47
-0.	-0.	-0.43299E 02	-0.59380E 02	-0.	-0.	2.50
-0.	-0.	-0.47462E 02	-0.49909E 02	-0.	-0.	2.54
-0.	-0.	-0.51698E 02	-0.60359E 02	-0.	-0.	2.58
-0.	-0.	-0.14665E 02	-0.71248E 02	-0.	-0.	2.65
-0.	-0.	-0.11443E 02	-0.90096E 02	-0.	-0.	2.70
-0.	-0.	-0.13919E 02	-0.12441E 03	-0.	-0.	2.80
-0.	-0.	-0.35313E 02	-0.14187E 03	-0.	-0.	2.90
-0.	-0.	-0.53425E 02	-0.13914E 03	-0.	-0.	3.00
-0.	-0.	-0.79631E 02	-0.16834E 03	-0.	-0.	3.10
-0.	-0.	-0.10079E 03	-0.17203E 03	-0.	-0.	3.20
-0.	-0.	-0.11498E 03	-0.17178E 03	-0.	-0.	3.26
-0.	-0.	-0.14258E 03	-0.13931E 03	-0.	-0.	3.29
-0.	-0.	-0.16254E 03	-0.19683E 03	-0.	-0.	3.35
-0.	-0.	-0.18403E 03	-0.21296E 03	-0.	-0.	3.46
-0.	-0.	-0.21710E 03	-0.22387E 03	-0.	-0.	3.52
-0.	-0.	-0.25812E 03	-0.22324E 03	-0.	-0.	3.56
-0.	-0.	-0.40206E 03	0.21689E 02	-0.	-0.	3.60
-0.	0.	-0.35924E 03	0.[illegible]701E 03	0.	0.	3.70
-0.	0.	-0.63481E 03	0.[illegible]78F 03	-0.	0.	3.85
0.	-0.	0.47463[illegible] 03	-0.18[illegible] 03	0.	-0.	4.00
0.	0.	0.77330F 02	0.33971E [illegible]	0.	0.	4.20
-0.	0.	-0.47036E 02	0.49872E 02	-0.	0.	4.50
-0.	0.	-0.18377E 02	0.76346E 02	-0.	0.	4.70
0.	0.	0.17586F 02	0.74633E 02	0.	0.	4.80
0.	0.	0.24010E 02	0.43590E 02	0.	0.	4.96
0.	0.	0.39459F 02	0.49948F 02	0.	0.	5.00
0.	0.	0.47425F 02	0.33203E 02	0.	0.	5.15
0.	0.	0.50569E 02	0.18212E 02	0.	0.	5.30
0.	0.	0.48819E 02	0.89888E 01	0.	0.	5.50
0.	0.	0.45827E 02	0.49444E-00	0.	0.	5.70
0.	-0.	0.41318E 02	-0.86580E 00	0.	-0.	5.85
0.	-0.	0.40432F 02	-0.21520E 01	0.	-0.	6.00
0.	-0.	0.39515E 02	-0.34247E 01	0.	-0.	6.03
0.	-0.	0.38569E 02	-0.87508E 01	0.	-0.	6.06
0.	-0.	0.33968E 02	-0.18183E 02	0.	-0.	6.08
0.	-0.	0.24967E 02	-0.22000E 02	0.	-0.	6.20
0.	-0.	0.13719F 02	-0.24904E 02	0.	-0.	6.40
-0.	0.	-0.21693E 02	0.37364F 02	-0.	0.	6.60
-0.	0.	-0.77494F 02	0.12184E 02	-0.	0.	7.00
0.	-0.	0.95470F 02	-0.17787E 02	0.	-0.	7.60
-0.	-0.	-0.15572E 02	-0.10826E 02	-0.	-0.	8.20
-0.	0.	-0.14218E 02	0.	-0.	0.	9.00
						10.00

Table XIX Stress Frequency Response Functions (Analysis Condition 5)

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB   CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.50

PERCENT SEMI SPAN: 27   SEGMENT NUMBER 10

INCREMENTAL SHEAR STRESS REAL	INCREMENTAL SHEAR STRESS IMAGINARY	INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY			FREQUENCY CPS
0.56628F 00	-0.67701E 00	-0.77131F 01	0.56303F 01	0.	-0.	0.10
0.36134F 02	0.91346F 01	0.31923F 03	-0.73260F 02	-0.	0.	0.30
0.23242F 02	-0.12775F 02	0.26271F 03	-0.10975F 03	-0.	0.	0.36
0.22379F 02	-0.1430[illegible] 02	0.21139F 03	-0.12508F 03	-0.	0.	0.44
0.20479F 02	-0.16322F 02	0.18712F 03	-0.14717F 03	-0.	0.	0.50
0.17670F 02	-0.18507E 02	0.1[illegible]E 03	-0.16944F 03	-0.	0.	0.60
0.15947F 02	-0.21278F 02	0.14456F 03	-0.19659F 03	-0.	0.	0.70
0.14474F 02	-0.24988F 02	0.12996F 03	-0.23140F 03	-0.	0.	0.80
0.13110F 02	-0.30516F 02	0.11527F 03	-0.28129F 03	-0.	0.	0.90
0.11560F 02	-0.55160F 02	0.95733E 02	-0.40798F 03	-0.	0.	1.00
0.27358F 01	-0.10760F 03	0.15277E 01	-0.97974F 03	0.	0.	1.20
0.52650F 02	-0.67373F 02	-0.53971E 03	-0.40338F 03	0.	-0.	1.34
0.10794F 03	0.74663F 02	-0.14163F 04	0.57092F 03	0.	-0.	1.40
0.15108F 03	0.86052F 02	-0.11797F 04	0.71232F 03	-0.	-0.	1.45
0.10705F 03	0.87309F 02	-0.81032F 03	0.69746F 03	-0.	0.	1.47
0.73339F 02	0.74150F 02	-0.53774F 03	0.56075F 03	-0.	0.	1.50
0.31992F 02	0.61309F 02	-0.24173F 03	0.43993F 03	-0.	0.	1.55
0.17429F 02	0.51894F 02	-0.11333F 03	0.35272F 03	-0.	0.	1.60
0.79786F 01	0.36582E 02	-0.49315F 02	0.20549F 03	-0.	0.	1.65
0.59860F 02	0.31911F 02	0.23134F 02	0.15407F 03	0.	0.	1.80
0.10253F 02	0.29268F 02	0.34051F 02	0.11025F 03	0.	0.	1.90
0.15544F 02	0.27914F 02	0.43075E 02	0.92340F 02	0.	0.	2.00
0.22744F 02	0.26517E 02	0.41811F 02	0.72640F 02	0.	0.	2.10
0.34908F 02	0.94275E 01	0.40475E 02	0.58396F 02	0.	0.	2.20
0.53559F 02	0.45630F 01	0.34447E 02	0.51100F 02	0.	0.	2.30
0.54134F 02	-0.43307F 01	0.27518F 02	0.52137F 02	0.	-0.	2.35
0.68608F 02	-0.19572F 02	0.17387F 02	0.60084F 02	0.	-0.	2.40
0.76136F 02	-0.29579F 02	0.12239F 02	0.65774F 02	0.	-0.	2.45
0.76535F 02	-0.45843F 02	0.12265F 02	0.77513F 02	0.	-0.	2.44
0.62110F 02	-0.51142F 02	0.21597F 02	0.77895F 02	0.	-0.	2.47
0.57580F 02	-0.57243F 02	0.37919F 02	0.69424F 02	0.	-0.	2.50
0.60458F 02	-0.89034F 02	0.50817E 02	0.52722F 02	0.	-0.	2.54
0.64453F 02	-0.13867F 03	0.53041E 02	0.42978F 02	0.	-0.	2.58
0.36450F 02	-0.76594F 02	0.46435F 02	0.41489F 02	-0.	-0.	2.65
0.78343F 02	-0.19369F 02	0.47278F 02	0.34505F 02	-0.	-0.	2.70
0.63379F 02	0.63818F 01	0.50012F 02	0.23272F 02	-0.	0.	2.80
0.40623F 02	0.11793F 02	0.55563F 02	0.17957F 02	-0.	0.	3.00
0.36625F 02	0.17682F 02	0.53675F 02	0.39528F 01	-0.	0.	3.10
0.48366E 02	0.28034F 02	0.83036F 02	-0.28418F 02	-0.	0.	3.20
0.44307E 02	0.41799F 02	[illegible]97795E 02	-0.[illegible]0647F 02	-0.	0.	3.26
0.46513F 02	0.66518F 02	[illegible]1130E 02	-0.79520F 02	-0.	0.	3.29
0.29038F 02	0.76584F 02	0.32795E 02	-0.55299F 02	-0.	0.	3.35
0.50423F 01	0.46771F 02	0.55093F 01	-0.22451F 02	-0.	0.	3.40
0.92511F 02	-0.13010F 02	0.15965E 01	-0.18227F 02	0.	-0.	3.52
0.87712F 02	-0.37046F 02	0.51[illegible]F 01	-0.17092F 02	0.	-0.	3.56
0.51373F 02	-0.26962F 02	0.74714F 01	-0.16233F 02	0.	-0.	3.60
0.75382F 01	-0.12034F 02	0.89119E 01	-0.16208F 02	-0.	-0.	3.70
0.44483F 01	-0.48194F 01	0.85739E 01	-0.17249F 02	-0.	-0.	3.85
0.64777F 01	-0.43381F-01	0.73474F 01	-0.19498F 02	-0.	0.	4.00
0.61765F 01	0.34509F 01	0.35873E 01	-0.24586F 02	-0.	0.	4.20
0.42946F 01	0.46577F 01	-0.66257F 01	-0.28632F 02	-0.	0.	4.50
0.26847F 01	0.49974E 01	-0.24182F 02	-0.26476F 02	0.	0.	4.70
0.17187F 01	0.43015F 01	-0.43973F 02	0.47680F 02	0.	-0.	4.80
0.80055F-01	0.39381F 01	-0.77695E 02	0.74716F 02	0.	-0.	4.96
0.17928F-00	0.43676F 01	-0.49663F 02	0.47170F 02	0.	-0.	5.00
0.23237F-00	0.46820F 01	0.19753F 02	0.21270F 02	-0.	-0.	5.15
0.71562F 00	0.45639F 01	0.24317E 02	0.81041F 01	-0.	0.	5.30
0.21844F 02	0.39001F 01	0.22363[illegible] 02	0.12734F 01	-0.	0.	[illegible]
0.41044F 01	0.25343F 01	0.22274F 02	-0.42029F 01	-0.	0.	5.70
0.62112F 01	-0.36497F 01	0.25235F 02	-0.23540F 02	-0.	0.	5.85
0.88988F 02	-0.60269F 01	0.30381F 02	-0.30702F 02	0.	0.	6.00
0.83389F 01	-0.86920F 01	0.28237F 02	-0.30291F 02	0.	0.	6.05
0.65789F 01	-0.10106F 02	0.22464E 02	-0.43221F 02	0.	-0.	6.06
0.34491F 01	-0.29170F 01	0.12595F 02	-0.21261F 02	-0.	0.	6.08
0.47896F 01	0.17150F 01	-0.14458F 02	-0.62016F 01	-0.	0.	6.20
0.17082F 01	0.20988E 01	-0.77317E 01	-0.30321F 01	-0.	0.	6.40
0.55424F-02	0.15331F 01	-0.45598F 01	-0.26367F 01	0.	0.	6.60
0.14117F 01	0.76594F 00	-0.29232F 01	-0.15298F 01	0.	0.	7.00
0.18612F 01	-0.48085E-00	-0.26229F 01	0.37609F-01	0.	-0.	7.40
0.16992F 01	-0.10970F 01	-0.20482F 01	0.83313F 00	0.	-0.	8.20
0.97928F 00	-0.11086F 01	-0.10853F 01	0.80100F 00	0.	-0.	9.00
0.16306F-00	0.	-0.16779F-00	0.	-0.	0.	10.00

Table XIX --- Continued

(PSI/FPS SINUSOIDAL GUSTI

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.50

PERCENT SEMI SPAN: 27 SEGMENT NUMBER 14

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				FREQUENCY
REAL	IMAGINARY	REAL	IMAGINARY			CPS
-0.21413E 01	0.24394E-00	-0.49995E 01	0.51093E 01	0.	-0.	0.10
0.10818E 01	-0.23479E 02	0.28954E 01	-0.56482E 02	-0.	0.	0.20
0.49248E 02	-0.37185E 02	0.23941E 03	-0.99592E 02	-0.	0.	0.30
0.70908E 02	-0.42091E 02	0.19234E 03	-0.11423E 03	-0.	0.	0.40
0.62334E 02	-0.48514E 02	0.15981E 03	-0.13356E 03	-0.	0.	0.50
0.53491E 02	-0.55296E 02	0.14692E 03	-0.19376E 03	-0.	0.	0.60
0.48263E 02	-0.63688E 02	0.13125E 03	-0.17840E 03	-0.	0.	0.70
0.43649E 02	-0.74619E 02	0.11792E 03	-0.21006E 03	-0.	0.	0.80
0.39741E 02	-0.90527E 02	0.10463E 03	-0.25527E 03	-0.	0.	0.90
0.33894E 02	-0.15525E 03	0.87763E 02	-0.44283E 03	-0.	0.	1.00
0.57524E 01	-0.29304E 03	0.13844E 31	-0.79834E 03	0.	0.	1.10
-0.14441E 01	-0.17107E 03	-0.48377E 03	-0.43865E 03	0.	-0.	1.20
-0.66096E 01	0.17790E 03	-0.12671E 04	0.51810E 01	0.	-0.	1.30
-0.39513E 01	0.22944E 01	-0.13709E 04	0.64641E 03	-0.	-0.	1.40
-0.27505E 01	0.22927E 03	-0.73577E 03	0.63293E 01	-0.	0.	1.50
-0.19493E 01	0.19750E 03	-0.48817E 31	0.53887E 03	-0.	0.	1.60
-0.84974E 02	0.14983E 03	-0.21935E 03	0.39923E 03	-0.	0.	1.70
-0.60327E 02	0.12761E 03	-0.10259E 03	0.32008E 03	-0.	0.	1.80
-0.17441E 01	0.76512E 02	-0.44752E 02	0.19648E 03	-0.	0.	1.90
0.10491E 02	0.60980E 02	0.18244E 02	0.13981E 03	0.	0.	2.00
0.18802E 02	0.50621E 02	0.30901E 02	0.10731E 03	0.	0.	2.10
0.29724E 02	0.43900E 02	0.36347E 02	0.83605E 02	0.	0.	2.20
0.33541E 02	0.37342E 02	0.37942E 02	0.65738E 02	0.	0.	2.30
0.45887E 02	0.15681E 02	0.36733E 02	0.51178E 02	0.	0.	2.40
0.66104E 02	0.92765E 01	0.31267E 02	0.46372E 02	0.	0.	2.50
0.61585E 02	-0.43501E 00	0.25244E 02	0.47313E 02	0.	-0.	2.60
0.77014E 02	-0.15188E 02	0.19779E 02	0.54525E 02	0.	-0.	2.70
0.83658E 02	-0.23420E 02	0.11136E 02	0.59689E 02	0.	-0.	2.80
0.86088E 02	-0.38899E 02	0.11111E 02	0.70341E 02	0.	-0.	2.90
0.77779E 02	-0.44857E 02	0.19539E 02	0.70688E 02	0.	-0.	3.00
0.71623E 02	-0.54661E 02	0.14410E 02	0.59370E 02	0.	-0.	3.10
0.79428E 02	-0.99629E 02	0.44115E 02	0.47844E 02	0.	-0.	3.20
0.87114E 02	-0.16091E 03	0.48134E 02	0.39002E 02	0.	-0.	3.30
-0.36834E 02	-0.88548E 02	0.42133E 02	0.37650E 02	-0.	-0.	3.40
-0.86276E 02	-0.24137E 02	0.42934E 02	0.31331E 02	-0.	-0.	3.50
-0.70064E 02	0.57482E 00	0.45385E 02	0.21118E 02	-0.	0.	3.60
-0.50714E 02	0.54294E 01	0.50422E 02	0.16296E 02	-0.	0.	3.70
-0.54192E 02	0.17434E 02	0.47284E 02	0.35871E 01	-0.	0.	3.80
-0.73160E 02	0.50534E 02	0.75155E 02	-0.25789E 02	-0.	0.	3.90
-0.99908E 02	0.89906E 02	0.88747E 02	-0.55036E 02	-0.	0.	4.00
-0.92931E 02	0.13375E 03	0.80856E 02	-0.71709E 02	-0.	0.	4.10
-0.32908E 02	0.12794E 03	0.29753E 02	-0.53183E 02	-0.	0.	4.20
0.15367E 02	0.67227E 02	0.50821E 01	-0.20376E 02	-0.	0.	4.30
0.13261E 01	-0.69256E 01	0.14483E 01	-0.16540E 02	0.	-0.	4.40
0.12548E 01	-0.38263E 02	0.46543E 01	-0.15510E 02	0.	-0.	4.50
0.81114E 02	-0.31249E 02	0.67401E 01	-0.14731E 02	0.	-0.	4.60
0.26273E 02	-0.17925E 02	0.60873E 01	-0.14708E 02	-0.	-0.	4.70
0.86497E 01	-0.12662E 02	0.77853E 01	-0.15653E 02	-0.	-0.	4.80
0.13301E 01	-0.99900E 01	0.61954E 01	-0.17694E 02	-0.	-0.	4.90
-0.23904E-00	-0.10458E 02	0.12551E 01	-0.22311E 02	-0.	0.	5.00
-0.58184E 01	-0.12172E 02	-0.60127E 01	-0.25983E 02	-0.	0.	5.10
-0.15305E 02	-0.10692E 02	-0.21945E 02	-0.24026E 02	0.	0.	5.20
-0.24637E 02	0.32698E 02	-0.39932E 02	0.43269E 02	0.	-0.	5.30
-0.45451E 02	0.48479E 02	-0.73537E 02	0.67803E 02	0.	-0.	5.40
-0.28911E 02	0.32326E 02	-0.45069E 02	0.42813E 02	0.	-0.	5.50
0.12220E 02	0.17012E 02	0.17935E 02	0.19309E 02	-0.	-0.	5.60
0.14489E 02	0.95862E 01	0.22067E 02	0.74269E 01	-0.	0.	5.70
0.15103E 02	0.43965E 01	0.20794E 02	0.11556E 01	-0.	0.	5.80
0.13900E 02	0.45885E-00	0.20231E 02	-0.38866E 01	-0.	0.	5.90
0.10419E 02	-0.13037E 02	0.22901E 02	-0.21362E 02	-0.	0.	6.00
0.22431E 02	-0.18089E 02	0.27573E 02	-0.27936E 02	0.	0.	6.10
0.21033E 02	-0.23139E 02	0.25624E 02	-0.34749E 02	0.	0.	6.20
0.17123E 02	-0.26920E 02	0.20385E 02	-0.39222E 02	0.	-0.	6.30
0.10937E 02	-0.11940E 02	0.11433E 02	-0.19296E 02	-0.	0.	6.40
-0.81683E 01	-0.19676E 01	-0.13120E 02	-0.57002E 01	-0.	0.	6.50
-0.32929E 01	-0.63879E 00	-0.70141E 31	-0.34775E 01	-0.	0.	6.60
-0.92626E 00	-0.42853E-00	-0.41389E 01	-0.22108E 31	0.	0.	6.70
0.54355E-00	-0.46600E-00	-0.26501E 01	-0.13882E 01	0.	0.	6.80
0.49492E-00	-0.12562E-00	-0.23932E 01	0.33948E-01	0.	-0.	6.90
0.17053E-00	-0.13961E-00	-0.18764E 31	0.75605E 00	0.	-0.	7.00
0.41144E-00	-0.20479E-00	-0.98685E 00	0.72689E 00	0.	-0.	7.10
0.69494E 00	0.	-0.15226E-00	0.	-0.	0.	7.20

Table XIX --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT:	297,000 LB	CUTOFF FREQUENCY:	10 CPS
ALTITUDE:	24,000 FT		
MACH NUMBER:	0.50		

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 8

INCREMENTAL SHEAR STRESS		INCREMENTAL AXIAL STRESS				
REAL	IMAGINARY	REAL	IMAGINARY			FREQUENCY CPS
-0.14710E 01	0.52893E-01	-0.90156E 01	0.63507E 01	-0.	-0.	0.10
0.73289E 02	-0.16871E 02	0.30788E 03	-0.73698E 02	0.	-0.	0.30
0.57464E 02	-0.24492E 02	0.25355E 03	-0.10686E 03	0.	-0.	0.36
0.46242E 02	-0.27519E 02	0.20492E 03	-0.12303E 03	0.	-0.	0.44
0.38867E 02	-0.32156E 02	0.18074E 03	-0.14436E 03	0.	-0.	0.50
0.35507E 02	-0.37249E 02	0.15593E 03	-0.16552E 03	0.	-0.	0.60
0.32002E 02	-0.43614E 02	0.13857E 03	-0.19334E 03	0.	-0.	0.70
0.29147E 02	-0.51583E 02	0.12372E 03	-0.22759E 03	0.	-0.	0.80
0.26383E 02	-0.63597E 02	0.10851E 03	-0.27625E 03	0.	-0.	0.90
0.22855E 02	-0.11561E 03	0.89475E 02	-0.47702E 03	0.	-0.	1.00
0.23663E 01	-0.22054E 03	-0.46634E 01	-0.85297E 03	0.	-0.	1.20
-0.13033E 03	-0.12838E 03	-0.53393E 03	-0.45666E 03	-0.	-0.	1.30
-0.35900E 03	0.14473E 03	-0.13978E 04	0.56884E 03	-0.	0.	1.40
-0.30922E 03	0.19538E 03	-0.11439E 04	0.70268E 03	-0.	0.	1.45
-0.21585E 03	0.18693E 03	-0.79639E 03	0.68524E 03	-0.	0.	1.47
-0.14569E 03	0.18397E 03	-0.52294E 03	0.54881E 03	-0.	0.	1.50
-0.67565E 02	0.12500E 03	-0.23513E 03	0.42975E 03	-0.	0.	1.55
-0.32408E 02	0.10401E 03	-0.11146E 03	0.34421E 03	-0.	0.	1.60
-0.14189E 02	0.69042E 02	-0.50834E 02	0.20069E 03	-0.	0.	1.65
0.87465E 01	0.57438E 02	0.13501E 02	0.15105E 03	0.	0.	1.80
0.15979E 02	0.49827E 02	0.25283E 02	0.11684E 03	0.	0.	1.90
0.22107E 02	0.44704E 02	0.29371E 02	0.92463E 02	0.	0.	2.00
0.28696E 02	0.40633E 02	0.27421E 02	0.74897E 02	0.	0.	2.10
0.37573E 02	0.33864E 02	0.19567E 02	0.80925E 02	0	0.	2.20
0.50709E 02	0.29967E 02	0.50913E 01	0.79115E 02	0.	0.	2.30
0.60494E 02	0.17849E 02	0.13479E 02	0.76369E 02	0.	0.	2.35
0.75666E 02	0.29372E 01	0.44794E 01	0.82039E 02	0.	-0.	2.40
0.82313E 02	-0.54733E 01	0.15951E 01	0.87641E 02	0.	-0.	2.43
0.82587E 02	-0.21377E 02	0.14839E 01	0.97311E 02	0.	-0.	2.44
0.74838E 02	-0.26266E 02	0.81371E 01	0.98473E 02	0.	-0.	2.47
0.65045E 02	-0.30817E 02	0.18085E 02	0.95793E 02	0.	-0.	2.50
0.66533E 02	-0.55500E 02	0.21229E 02	0.10511E 03	0.	-0.	2.54
0.71118E 02	-0.92197E 02	0.19649E 02	0.12387E 03	0.	-0.	2.58
-0.86452E 01	-0.42873E 02	0.46269E 02	0.94439E 02	-0.	-0.	2.65
-0.38193E 02	0.14516E 01	0.37731E 02	0.65462E 02	-0.	-0.	2.70
-0.20628E 02	0.20395E 02	0.85771E 02	0.52252E 02	-0.	0.	2.80
0.16551E 02	0.21542E 02	0.10034E 03	0.47167E 02	0.	0.	3.00
0.42221E 02	0.34993E 01	0.12872E 03	0.14235E 02	0.	0.	3.10
0.91730E 02	-0.58302E 02	0.19547E 03	-0.82723E 02	0.	-0.	3.20
0.13273E 03	-0.12699E 03	0.24814E 03	-0.18378E 03	0.	-0.	3.26
0.12326E 03	-0.17968E 03	0.22472E 03	-0.24092E 03	0.	-0.	3.29
0.10342E 02	-0.14006E 03	0.47543E 02	-0.16023E 03	0.	-0.	3.35
-0.54359E 02	-0.57208E 02	-0.35619E 02	-0.57533E 02	-0.	-0.	3.40
-0.12058E 03	-0.81974E 01	-0.25153E 02	-0.55510E 02	-0.	-0.	3.52
-0.11277E 03	0.14323E 02	-0.18961E 02	-0.82328E 02	-0.	0.	3.56
-0.84540E 02	0.18320E 02	-0.23957E 02	-0.36603E 02	-0.	0.	3.60
-0.47076E 02	0.16591E 02	-0.22794E 02	-0.22059E 02	-0.	0.	3.70
-0.29987E 02	0.17098E 02	-0.18913E 02	-0.13689E 02	-0.	0.	3.85
-0.21406E 02	0.17853E 02	-0.15218E 02	-0.68018E 01	-0.	0.	4.00
-0.13356E 02	0.19200E 02	-0.11499E 02	0.79393E 00	-0.	0.	4.20
-0.46393E 01	0.19948E 02	-0.54252E 01	0.52423E 01	-0.	0.	4.50
0.37647E 01	0.18926E 02	0.29757E 01	0.55050E 01	0.	0.	4.70
0.11098E 02	-0.45013E 01	0.12072E 02	-0.25587E 02	0.	-0.	4.80
0.22996E 02	-0.12861E 02	0.28351E 02	-0.37370E 02	0.	-0.	4.96
0.14742E 02	0.47937E 01	0.15953E 02	-0.24338E 02	0.	-0.	5.00
-0.50277E 01	0.24339E 01	-0.14372E 02	-0.11730E 02	-0.	-0.	5.19
-0.50032E 01	0.53625E 01	-0.15733E 02	-0.47366E 01	-0.	0.	5.30
-0.27882E 01	0.61499E 01	-0.13354E 02	-0.11045E 01	-0.	0.	[illegible]
-0.11371E 01	0.64852E 01	-0.10765E 02	0.98607E-01	-0.	0.	5.70
-0.62599E 00	0.86119E 01	-0.87793E 01	-0.69476E 00	-0.	0.	5.85
-0.56117E 00	0.95252E 01	-0.68731E 01	-0.12024E 01	-0.	0.	6.00
-0.10430E-00	0.10463E 02	-0.69394E 01	-0.16571E 01	-0.	0.	6.05
0.84755E 00	0.11031E 02	-0.74163E 01	-0.20857E 01	-0.	0.	6.06
0.23759E 01	0.72579E 01	-0.33573E 01	0.15486E 01	-0.	0.	6.08
0.46255E 01	0.41138E 01	-0.[illegible]17E 01	0.39618E 01	0.	0.	6.20
0.61338E 01	0.27863E 01	-0.72257E 01	0.46345E 01	0.	0.	6.40
0.59680E 01	0.65931E 00	-0.52143E 01	0.48206E 01	0.	0.	6.60
0.57753E 01	-0.11220E 01	-0.27534E 01	0.42198E 01	0.	-0.	7.00
0.52070E 01	-0.34939E 01	0.14034E-00	0.19333E 01	0.	-0.	7.40
0.29862E 01	-0.39543E 01	0.71444E 01	-0.57253E 00	0.	-0.	8.20
0.24449E-00	-0.24656E 01	0.22519E 01	-0.23255E 01	0.	-0.	9.00
-0.20721E 01	0.	0.13129E-00	0.	-0.	0.	10.00

Table XIX --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.50

PERCENT SEMISPAN: 40.06 SEGMENT NUMBER 107

INCREMENTAL SHEAR STRESS REAL	INCREMENTAL SHEAR STRESS IMAGINARY			INCREMENTAL AXIAL STRESS REAL	INCREMENTAL AXIAL STRESS IMAGINARY	FREQUENCY CPS
-0.13469E 01	-0.10457E-01	-0.	-0.	0.68494E 01	-0.54262E 01	0.10
0.67748E 02	-0.16107E 02	0.	-0.	-0.26303E 03	0.60407E 02	0.30
0.56918E 02	-0.23292E 02	0.	-0.	-0.21692E 03	0.91302E 02	0.36
0.44179E 02	-0.26619E 02	0.	-0.	-0.17509E 03	0.10512E 03	0.44
0.39016E 02	-0.30630E 02	0.	-0.	-0.15443E 03	0.12335E 03	0.50
0.33936E 02	-0.35198E 02	0.	-0.	-0.13323E 03	0.14228E 03	0.60
0.30625E 02	-0.40968E 02	0.	-0.	-0.11849E 03	0.16519E 03	0.70
0.27953E 02	-0.48627E 02	0.	-0.	-0.10571E 03	0.19446E 03	0.80
0.25790E 02	-0.59900E 02	0.	-0.	-0.92801E 02	[illegible]	0.90
0.22139E 02	-0.10845E 03	0.	-0.	-0.26450E 02	0.40758E 03	1.00
0.31462E 01	-0.20801E 03	0.	-0.	0.58694E 01	0.72580E 03	1.20
-0.12099E 03	-0.12243E 03	-0.	-0.	0.44130E 03	0.59018E 03	1.34
-0.33618E 03	0.13474E 03	-0.	0.	0.11900E 04	-0.48606E 03	1.40
-0.29057E 03	0.17293E 03	-0.	0.	0.98161E 03	-0.60039E 03	1.45
-0.20303E 03	0.17281E 03	-0.	0.	0.67243E 03	-0.58549E 03	1.47
-0.13710E 03	0.14395E 03	-0.	0.	0.44606E 03	-0.46892E 03	1.50
-0.63540E 02	0.11695E 03	-0.	0.	0.20095E 03	-0.36719E 03	1.55
-0.30357E 02	0.97285E 02	-0.	0.	0.95234E 02	-0.29411E 03	1.60
-0.13120E 02	0.64455E 02	-0.	0.	0.43410E 02	-0.17640E 03	1.65
0.86775E 01	0.53474E 02	0.	0.	-0.11623E 02	-0.12706E 03	1.80
0.15609E 02	0.46227E 02	0.	0.	-0.21602E 02	-0.99878E 02	1.90
0.21497E 02	0.41279E 02	0.	0.	-0.24711E 02	0.79004E 02	2.00
0.27835E 02	0.37241E 02	0.	0.	-0.23431E 02	-0.63994E 02	2.10
0.36381E 02	0.30197E 02	0.	0.	-0.16701E 02	-0.69059E 02	2.20
0.48571E 02	0.26249E 02	0.	0.	-0.43499E 01	-0.67590E 02	2.30
0.57718E 02	0.14997E 02	0.	0.	-0.11517E 02	-0.65251E 02	2.35
0.71740E 02	0.11992E 01	0.	-0.	-0.55362E 01	-0.20750E 02	2.40
0.77867E 02	-0.65290E 01	0.	-0.	-0.14492E 01	-0.74883E 02	2.43
0.78143E 02	-0.21062E 02	0.	-0.	-0.12679E 01	-0.83145E 02	2.44
0.71296E 02	-0.25715E 02	0.	-0.	-0.69269E 01	-0.84139E 02	2.47
0.63013E 02	-0.31136E 02	0.	-0.	-0.15452E 02	[illegible]	2.50
0.65579E 02	-0.56598E 02	0.	-0.	-0.18138E 02	-0.89809E 02	2.54
0.70274E 02	-0.93762E 02	0.	-0.	-0.16789E 02	-0.10584E 03	2.58
-0.97309E 01	-0.44742E 02	-0.	-0.	-0.56623E 02	-0.80691E 02	2.65
-0.39305E 02	-0.11581E 01	-0.	-0.	-0.74960E 02	-0.55953E 02	2.70
-0.27248E 02	0.16751E 02	-0.	0.	-0.74140E 02	-0.44646E 02	2.80
0.17423E 02	0.17724E 02	0.	0.	-0.85737E 02	-0.40301E 02	3.00
0.35251E 02	0.19343E 01	0.	0.	-0.10990E 03	-0.12163E 02	3.10
0.78724E 02	-0.51994E 02	0.	-0.	-0.16701E 03	0.20581E 02	3.20
0.11498E 03	-0.11228E 03	0.	-0.	-0.21202E 03	0.15703E 03	3.26
0.10730E 03	-0.16001E 03	0.	-0.	-0.19158E 03	0.20585E 03	3.29
0.94986E 01	-0.12751E 03	0.	-0.	-0.40619E 02	0.13691E 03	3.35
-0.68799E 02	-0.53179E 02	-0.	-0.	0.31288E 02	0.49158E 02	3.40
-0.11667E 03	-0.40681E 01	-0.	-0.	0.22352E 02	0.57430E 02	3.52
-0.10933E 03	0.18149E 02	-0.	0.	0.15183E 02	0.44711E 02	3.56
-0.80686E 02	0.20362E 02	-0.	0.	0.17904E 02	0.31274E 02	3.60
-0.43023E 02	0.17244E 02	-0.	0.	0.19476E 02	0.18848E 02	3.70
-0.26571E 02	0.16379E 02	-0.	0.	0.16182E 02	0.11697E 02	3.85
-0.18701E 02	0.16149E 02	-0.	0.	0.13020E 02	0.58116E 01	4.00
-0.12177E 02	0.16086E 02	-0.	0.	0.98169E 01	-0.67656E 00	4.20
-0.48090E 01	0.15921E 02	-0.	0.	0.46355E 01	-0.44792E 01	4.50
0.61803E 00	0.15140E 02	0.	0.	-0.25436E 01	-0.47057E 01	4.70
0.46778E 01	0.36237E 01	0.	-0.	-0.10315E 02	0.21862E 02	4.80
0.10977E 02	0.36062E-00	0.	-0.	-0.23967E 02	0.31930E 02	4.96
0.72560E 01	0.31355E 01	0.	-0.	-0.13628E 02	0.20795E 02	5.00
-0.17913E 01	0.60459E 01	-0.	-0.	0.12280E 02	0.10022E 02	5.15
-0.61687E 00	0.67482E 01	-0.	0.	0.13414E [illegible]	0.40471E 01	5.30
0.11132E 01	0.63819E 01	-0.	0.	0.11410E 02	0.10121E 01	[illegible]
0.24817E 01	0.59507E 01	-0.	0.	0.91819E 01	-0.84253E-01	5.70
0.31352E 01	0.59110E 01	-0.	0.	0.25002E 01	0.59363E 00	5.85
0.36236E 01	0.60362E 01	-0.	0.	0.50288E 01	0.10958E 01	6.00
0.38169E 01	0.61581E 01	-0.	0.	0.59027E 01	0.15868E 01	6.03
0.41471E 01	0.61688E 01	-0.	0.	0.63367E 01	0.17821E 01	6.06
0.46071E 01	0.46182E 01	-0.	0.	0.21405E 01	-0.13232E 01	6.08
0.58486E 01	0.30282E 01	0.	0.	0.85201E 01	-0.33051E 01	6.20
0.55752E 01	0.19066E 01	0.	0.	[illegible]	-0.39599E 01	6.40
0.58863E 01	-0.56629E-01	0.	0.	0.44550E 01	[illegible]	6.60
0.56081E 01	-0.14618E 01	0.	-0.	0.19254E 01	0.76036E 01	7.00
0.48842E 01	-0.36287E 01	0.	-0.	0.12034E-00	0.16519E 01	7.40
0.25490E 01	-0.37856E 01	0.	-0.	[illegible]	0.55919E-00	8.20
-0.58005E-01	-0.21893E 01	0.	-0.	[illegible]	0.19870E 01	9.00
-0.20821E 01	0.	-0.	0.	[illegible]	0.	10.00

Table XIX --- Continued

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 3 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.50

BODY BALANCE STATION: 540 SEGMENT NUMBER 17

INCREMENTAL SHEAR STRESS

REAL	IMAGINARY					FREQUENCY CPS
-0.413A2E-00	0.218**E 01	0.	-0.	0.	-0.	0.10
-0.170556 02	0.475256 01	0.	-0.	0.	-0.	0.20
-0.123536 02	0.510646 01	0.	-0.	0.	-0.	0.30
-0.101396 02	0.501926 01	0.	-0.	0.	-0.	0.40
-0.917326 01	0.46****E 01	0.	-0.	0.	-0.	0.50
-0.842876 01	0.4****E 01	0.	-0.	0.	-0.	0.60
-0.829776 01	0.446096 01	0.	-0.	0.	-0.	0.70
-0.843126 01	0.487836 01	0.	-0.	0.	-0.	0.80
-0.888226 01	0.867**E 01	0.	-0.	0.	-0.	0.90
-0.893326 01	0.150416 02	0.	-0.	0.	-0.	1.00
-0.617706 01	0.272506 02	0.	-0.	0.	-0.	1.10
0.394876 01	0.195916 02	-0.	-0.	-0.	-0.	1.14
0.265866 02	-0.687906 01	-0.	0.	-0.	0.	1.20
0.223256 02	-0.108306 02	-0.	0.	-0.	0.	1.25
0.131566 02	-0.106606 02	-0.	0.	-0.	0.	1.27
0.816096 01	-0.706196 01	-0.	0.	-0.	0.	1.30
-0.176556 01	-0.368726 01	0.	0.	0.	0.	1.35
-0.535926 01	-0.410926 00	0.	-0.	0.	-0.	1.40
-0.723716 01	0.565396 01	0.	-0.	0.	-0.	1.45
-0.937666 01	0.930756 01	0.	-0.	0.	-0.	1.50
-0.961316 01	0.120246 02	0.	-0.	0.	-0.	1.55
-0.949476 01	0.151116 02	0.	-0.	0.	-0	2.00
-0.913096 01	0.183916 02	0.	-0.	0.	-0	2.10
-0.872596 01	0.231426 02	0.	-0.	0.	-0.	2.20
-0.811136 01	0.253156 02	0.	-0.	0.	-0.	2.30
-0.690026 01	0.276706 02	0.	-0.	0.	-0.	2.35
-0.627266 01	0.292456 02	0.	-0.	0.	-0.	2.40
-0.577006 01	0.299396 02	0.	-0.	0.	-0.	2.43
-0.550436 01	0.311976 02	0.	-0.	0.	-0.	2.44
-0.519026 01	0.329356 02	0.	-0.	0.	-0.	2.47
-0.582206 01	0.3*0386 02	0.	-0.	0.	-0.	2.50
-0.757166 01	0.494066 02	0.	-0.	0.	-0.	2.56
-0.72**6E 01	0.627**E 02	0.	-0.	0.	-0.	2.58
0.191336 02	0.522476 02	-0.	-0.	-0.	-0.	2.65
0.311206 02	0.659656 02	-0.	-0.	-0.	-0.	2.70
0.369496 02	0.721876 02	-0.	-0.	-0.	-0.	2.80
0.484216 02	0.727326 02	-0.	-0.	-0.	-0.	3.00
0.108766 03	0.183646 02	-0.	-0.	-0.	-0.	3.10
0.196316 03	-0.975356 02	-0.	0.	-0.	0.	3.20
0.266616 03	-0.221576 03	-0.	0.	-0.	0.	3.26
0.241276 03	-0.297036 03	-0.	0.	-0.	0.	3.29
0.272966 02	-0.200646 03	-0.	0.	-0.	0.	3.35
-0.782476 02	-0.682546 02	0.	0.	0.	0.	3.40
-0.784186 02	-0.551496 02	0.	0.	0.	0.	3.52
-0.679866 02	-0.666496 02	0.	0.	0.	0.	3.56
-0.633416 02	-0.770726 02	0.	0.	0.	0.	3.60
-0.551736 02	-0.101556 02	0.	0.	0.	0.	3.70
-0.439356 02	-0.487936-00	0.	-0.	0.	-0.	3.85
-0.367686 02	0.656656 01	0.	-0.	0.	-0.	4.00
-0.255706 02	0.114956 02	0.	-0.	0.	-0.	4.20
-0.156016 02	0.126516 02	0.	-0.	0.	-0.	4.30
-0.110716 02	0.131706 02	0.	-0.	0.	-0.	4.35
-0.101266 02	0.202256 02	0.	-0.	0.	-0.	4.40
-0.914796 01	0.228146 02	0.	-0.	0.	-0.	4.46
-0.544816 01	0.199996 02	0.	-0.	0.	-0.	4.60
0.504636 01	0.166986 02	-0.	-0.	-0.	-0.	5.00
0.971956 01	0.135336 02	-0.	-0.	-0.	-0.	5.15
0.154196 02	0.874496 01	-0.	-0.	-0.	-0.	5.30
0.250656 02	0.886656-01	-0.	-0.	-0.	-0.	5.40
0.367956 02	-0.398416 02	-0.	0.	-0.	0.	5.85
0.524796 02	-0.553556 02	-0.	0.	-0.	0.	6.00
0.486096 02	-0.713866 02	-0.	0.	-0.	0.	6.05
0.365026 02	-0.818006 02	-0.	0.	-0.	0.	6.06
0.157966 02	-0.335916 02	-0.	0.	-0.	0.	6.08
-0.397336 02	-0.160246 01	0.	0.	0.	-0.	6.08
-0.711466 02	0.266406 01	0.	0.	0.	-0.	6.20
-0.112656 02	0.275496 01	0.	0.	0.	-0.	6.60
-0.382706 01	0.159696 01	-0.	-0.	-0.	-0.	6.80
-0.145896 01	0.226406-00	-0.	-0.	-0.	-0.	7.00
-0.606306 00	0.337796-01	-0.	-0.	-0.	-0.	8.00
-0.616476 00	-0.209416-01	-0.	-0.	-0.	-0.	9.00
-0.626906-00	0.	-0.	0.	-0.	0.	10.00

Table XIX – – – Concluded

(PSI/FPS SINUSOIDAL GUST)

GROSS WEIGHT: 297,000 LB CUTOFF FREQUENCY: 10 CPS
ALTITUDE: 24,000 FT
MACH NUMBER: 0.50

BODY BALANCE STATION: 820 SEGMENT NUMBER 1

		INCREMENTAL AXIAL STRESS				FREQUENCY
		REAL	IMAGINARY			CPS
-0.	-0.	-0.665327E 00	-0.373947E 01	-0.	-0.	0.10
0.	-0.	0.111113E 03	-0.273427E 02	0.	-0.	0.30
0.	-0.	0.894632E 02	-0.365707E 02	0.	-0.	0.50
0.	-0.	0.727351E 02	-0.403611E 02	0.	-0.	0.64
0.	-0.	0.667756E 02	-0.459865E 02	0.	-0.	0.90
0.	-0.	0.582756E 02	-0.528307E 02	0.	-0.	0.60
0.	-0.	0.564931E 02	-0.621099E 02	0.	-0.	0.70
0.	-0.	0.526777E 02	-0.747311E 02	0.	-0.	0.80
0.	-0.	0.501895E 02	-0.931736E 02	0.	-0.	0.90
0.	-0.	0.456033E 02	-0.169799E 03	0.	-0.	1.00
0.	-0.	0.184322E 02	-0.308810E 03	0.	-0.	1.20
-0.	-0.	-0.166453E 03	-0.173677E 03	-0.	-0.	1.34
-0.	0.	-0.465556E 03	0.186899E 03	-0.	0.	1.40
-0.	0.	-0.382335E 03	0.234277E 03	-0.	0.	1.45
-0.	0.	-0.254728E 03	0.227888E 03	-0.	0.	1.47
-0.	0.	-0.150518E 03	0.178246E 03	-0.	0.	1.50
-0.	0.	-0.594449E 02	0.134008E 03	-0.	0.	1.55
-0.	0.	-0.139178E 02	0.101218E 03	-0.	0.	1.60
0.	0.	0.809951E 01	0.413278E 02	0.	0.	1.65
0.	0.	0.311338E 02	0.168678E 02	0.	0.	1.80
0.	-0.	0.361338E 02	-0.299208E 01	0.	-0.	1.90
0.	-0.	0.331078E 02	-0.220648E 02	0.	-0.	2.00
0.	-0.	0.288058E 02	-0.355158E 02	0.	-0.	2.10
0.	-0.	0.270278E 02	-0.436788E 02	0.	-0.	2.20
0.	-0.	0.533978E 01	-0.486638E 02	0.	-0.	2.30
-0.	-0.	-0.790358E-01	-0.495048E 02	-0.	-0.	2.35
-0.	-0.	-0.169358E 02	-0.461748E 02	-0.	-0.	2.40
-0.	-0.	-0.215938E 02	-0.399228E 02	-0.	-0.	2.43
-0.	-0.	-0.226158E 02	-0.246398E 02	-0.	-0.	2.44
-0.	-0.	-0.162598E 02	-0.262198E 02	-0.	-0.	2.47
0.	-0.	0.586138E 00	-0.421318E 02	0.	-0.	2.50
0.	-0.	0.968138E 01	-0.577218E 02	0.	-0.	2.54
0.	-0.	0.659338E 01	-0.733098E 02	0.	-0.	2.58
-0.	-0.	-0.170118E 02	-0.801018E 02	-0.	-0.	2.65
-0.	-0.	-0.123478E 02	-0.972178E 02	-0.	-0.	2.70
-0.	-0.	-0.614098E 02	-0.131618E 03	-0.	-0.	2.80
-0.	-0.	-0.136638E 03	-0.137538E 03	-0.	-0.	3.00
-0.	-0.	-0.239338E 03	-0.557568E 02	-0.	-0.	3.10
-0.	0.	-0.459558E 03	0.228718E 03	-0.	0.	3.20
-0.	0.	-0.493558E 03	0.532288E 03	-0.	0.	3.26
-0.	0.	-0.566658E 03	0.705448E 03	-0.	0.	3.29
-0.	0.	-0.602938E 03	0.857558E 03	-0.	0.	3.35
0.	0.	0.209338E 03	0.142428E 03	0.	0.	3.45
0.	0.	0.157118E 03	0.140958E 03	0.	0.	3.52
0.	0.	0.133538E 03	0.130768E 03	0.	0.	3.56
0.	0.	0.141238E 03	0.751648E 02	0.	0.	3.60
0.	0.	0.142488E 03	0.236998E 02	0.	0.	3.70
0.	-0.	0.119378E 03	-0.518258E 01	0.	-0.	3.85
0.	-0.	0.963738E 02	-0.263778E 02	0.	-0.	4.00
0.	-0.	0.885558E 02	-0.426448E 02	0.	-0.	4.20
0.	-0.	0.859138E 02	-0.479468E 02	0.	-0.	4.30
0.	-0.	0.831568E 02	-0.475518E 02	0.	-0.	4.70
-0.	-0.	-0.226338E 01	-0.142638E 02	-0.	-0.	4.80
-0.	-0.	-0.264378E 02	-0.211998E 01	-0.	-0.	4.96
-0.	-0.	-0.166558E 02	-0.133588E 02	-0.	-0.	5.00
0.	-0.	0.629128E 01	-0.226288E 02	0.	-0.	5.15
0.	-0.	0.176988E-00	0.241668E 02	0.	-0.	5.30
-0.	-0.	-0.116768E 02	-0.198038E 02	-0.	-0.	5.50
-0.	-0.	-0.255568E 02	-0.100338E 02	-0.	-0.	5.70
-0.	0.	-0.409328E 02	0.336828E 02	-0.	0.	5.85
-0.	0.	-0.585298E 02	0.503608E 02	-0.	0.	6.00
-0.	0.	-0.563668E 02	0.675728E 02	-0.	0.	6.09
-0.	0.	-0.417238E 02	0.761108E 02	-0.	0.	6.06
-0.	0.	-0.196798E 02	0.275648E 02	-0.	0.	6.00
0.	-0.	0.389118E 02	-0.505598E 01	0.	-0.	6.20
0.	-0.	0.171768E 02	-0.818178E 01	0.	-0.	6.40
0.	-0.	0.603698E 01	-0.864038E 01	0.	-0.	6.60
-0.	-0.	-0.207348E 01	-0.971718E 01	-0.	-0.	7.00
-0.	-0.	-0.419768E 01	-0.952368E 00	-0.	-0.	7.60
-0.	-0.	-0.426518E 01	-0.784878E-02	-0.	-0.	8.20
-0.	0.	-0.416538E 01	0.134608E 01	-0.	0.	9.80
-0.	0.	-0.382208E 01	0.	-0.	0.	10.00

APPENDIX VI
STRESS RESPONSE PARAMETERS AND ZERO-CROSSING RATES

Table XX. Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 1)

GROSS WEIGHT: 297,000 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N_0 (Zero crossings per second)	A (psi)	N_0 (Zero crossings per second)
SCALE OF TURBULENCE: 1,000 FT CUTOFF FREQUENCY 10 CPS						
---	27	10	421	1.02	62	1.81
---	27	14	382	1.02	152	1.25
---	40.06	8	397	1.06	111	1.32
---	40.06	107	359	1.06	106	1.30
540	---	S-17	0	0	31.17	2.64
820	---	S-1	159	1.38	0	0
SCALE OF TURBULENCE: 3,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	339	0.896	47.5	1.64
---	27	14	308	0.886	122	1.09
---	40.06	8	318	0.921	87.6	1.16
---	40.06	107	272	0.921	84.1	1.15
540	---	S-17	0	0	24.09	2.37
820	---	S-1	128	1.19	0	0
SCALE OF TURBULENCE: 5,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	293	0.863	40.7	1.62
---	27	14	266	0.863	105	1.06
---	40.06	8	274	0.903	75.4	1.14
---	40.06	107	234	0.903	72.4	1.12
540	---	S-17	0	0	20.67	2.33
820	---	S-1	111	1.16	0	0

Table XX --- Concluded

GROSS WEIGHT: 297,000 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N_0 (Zero crossings per second)	A (psi)	N_0 (Zero crossings per second)
SCALE OF TURBULENCE: 1,000 CUTOFF FREQUENCY: 15 CPS						
---	27	10	421	1.02	62	1.82
---	27	14	382	1.02	152	1.25
---	40.06	8	397	1.06	111	1.33
---	40.06	107	339	1.06	106	1.31
540	---	S-17	0	0	31.17	2.64
820	---	S-1	159	1.38	0	0
SCALE OF TURBULENCE: 1,000 FT CUTOFF FREQUENCY: 20 CPS						
---	27	10	421	1.04	62	1.82
---	27	14	382	1.04	152	1.22
---	40.06	8	397	1.04	111	1.30
---	40.06	107	339	1.04	106	1.30
540	---	S-17	0	0	31.17	2.61
820	---	S-1	159	1.39	0	0

Table XXI. Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 2)

GROSS WEIGHT: 268,000 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N_0 (Zero crossings per second)	A (psi)	N_0 (Zero crossings per second)
SCALE OF TURBULENCE: 1,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	377	1.03	71	2.21
---	27	14	342	1.03	152	1.50
---	40.06	8	342	1.03	111	1.79
---	40.06	107	293	1.03	107	1.75
540	---	S-17	0	0	43.56	3
820	---	S-1	179	2.02	0	0
SCALE OF TURBULENCE: 3,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	312	0.868	52.9	2.06
---	27	14	283	0.868	121	1.30
---	40.06	8	283	0.863	86.6	1.59
---	40.06	107	242	0.863	83.6	1.55
540	---	S-17	0	0	32.44	2.80
820	---	S-1	143	1.76	0	0
SCALE OF TURBULENCE: 5,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	270	0.846	45.1	2.03
---	27	14	245	0.846	105	1.28
---	40.06	8	245	0.841	74.3	1.56
---	40.06	107	210	0.841	71.9	1.52
540	---	S-17	0	0	27.69	2.76
820	---	S-1	123	1.73	0	0

Table XXII. Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 3)

GROSS WEIGHT: 190,590 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N_0 (Zero crossings per second)	A (psi)	N_0 (Zero crossings per second)
SCALE OF TURBULENCE: 1,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	304	1.15	58.1	2.34
---	27	14	276	1.15	121	1.62
---	40.06	8	274	1.22	95.2	2.09
---	40.06	107	234	1.22	91.6	2.08
540	---	S-17	0	0	51.4	2.55
820	---	S-1	177	2.07	0	0
SCALE OF TURBULENCE: 3,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	239	1.02	41.5	2.28
---	27	14	217	1.02	92.1	1.48
---	40.06	8	215	1.09	70.3	1.97
---	40.06	107	183	1.09	68	1.95
540	---	S-17	0	0	39.2	2.32
820	---	S-1	138	1.85	0	0
SCALE OF TURBULENCE: 5,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	206	1	35.1	2.27
---	27	14	187	1	78.8	1.45
---	40.06	8	184	1.07	59.9	1.95
---	40.06	107	157	1.07	58	1.92
540	---	S-17	0	0	33.6	2.28
820	---	S-1	118	1.82	0	0

Table XXIII Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 4)

GROSS WEIGHT: 107,260 LB
MACH NUMBER: 0.85
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	K_0 (Zero crossings per second)	A (psi)	N_0 (Zero crossings per second)
SCALE OF TURBULENCE: 1,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	177	1.39	58.1	3.14
---	27	14	161	1.39	77.9	2.89
---	40.06	8	169	1.50	63.2	2.93
---	40.06	107	145	1.50	60.5	2.91
540	---	S-17	0	0	31.25	3.46
820	---	S-1	116	2.90	0	0
SCALE OF TURBULENCE: 3,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	135	1.27	40.5	3.12
---	27	14	122	1.27	54.8	2.85
---	40.06	8	128	1.37	44.8	2.86
---	40.06	107	110	1.37	43.1	2.84
540	---	S-17	0	0	22.39	3.34
820	---	S-1	85.8	2.73	0	0
SCALE OF TURBULENCE: 5,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	115	1.25	34.2	3.12
---	27	14	105	1.25	46.3	2.85
---	40.06	8	110	1.36	38	2.85
---	40.06	107	93.8	1.36	36.5	2.82
540	---	S-17	0	0	18.99	3.33
820	---	S-1	73.1	2.70	0	0

Table XXIV. Stress Response Parameters and Zero-Crossing Rates (Analysis Condition 5)

GROSS WEIGHT: 297,000 LB
MACH NUMBER: 0.50
ALTITUDE: 24,000 FT

Location		Segment number	Axial stress		Shear stress	
Body station	Percent semispan		A (psi)	N_0 (Zero crossings per second)	A (psi)	N_0 (Zero crossings per second)
SCALE OF TURBULENCE: 1,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	226	1.08	29.5	1.53
---	27	14	205	1.08	76.7	1.21
---	40.06	8	221	1.10	56.6	1.34
---	40.06	107	189	1.10	53.3	1.33
540	---	S-17	0	0	21.1	3.08
820	---	S-1	88.1	1.87	0	0
SCALE OF TURBULENCE: 3,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	158	1.08	20.6	1.54
---	27	14	144	1.08	53.6	1.18
---	40.06	8	154	1.08	39.5	1.34
---	40.06	107	132	1.08	37.2	1.34
540	---	S-17	0	0	14.68	3.08
820	---	S-1	61.5	1.85	0	0
SCALE OF TURBULENCE: 5,000 FT CUTOFF FREQUENCY: 10 CPS						
---	27	10	133	1.07	17.3	1.52
---	27	14	121	1.07	45.3	1.20
---	40.06	8	130	1.10	33.3	1.34
---	40.06	107	111	1.10	31.4	1.31
540	---	S-17	0	0	12.4	3.06
820	---	S-1	59.9	1.86	0	0

Table XXV. Incremental Limit Allowable Stresses

Location		Segment number	Analysis condition 1 Gross wt: 297,000 lb Mach number: 0.85		2 Gross wt: 268,000 lb Mach number: 0.85		3 Gross wt: 190,590 lb Mach number: 0.85		4 Gross wt: 107,000 lb Mach number: 0.85		5 Gross wt: 297,000 lb Mach number: 0.50	
Body station	Percent semispan		Axial stress (psi)	Shear stress (psi)	Axial stress (psi)	Shear stress (psi)	Axial stress (psi)	Shear stress (psi)	Axial stress (psi)	Shear stress (psi)	Axial stress (psi)	Shear stress (psi)
SCALE OF TURBULENCE: 1,000 FEET												
---	27	10	24,700	3,800	24,400	4,500	29,400	5,600	33,500	10,300	23,500	3,000
---	27	14	24,100	9,500	23,600	10,500	27,200	12,500	31,000	15,100	23,500	9,000
---	40.06	8	24,100	6,600	23,600	7,600	27,700	10,000	32,400	11,100	22,300	5,700
---	40.06	107	18,000	5,800	17,500	6,500	20,400	7,900	23,200	9,900	18,200	5,300
540	---	S-17	---	4,190	---	4,190	---	4,190	---	5,635	---	4,190
820	---	S-1	22,100	---	21,900	---	23,400	---	27,700	---	25,700	---
SCALE OF TURBULENCE: 3,000 FEET												
---	27	10	24,800	3,500	24,500	4,100	29,600	4,900	34,300	9,000	23,500	3,000
---	27	14	24,000	9,500	23,400	10,500	27,400	12,400	31,100	15,100	23,500	9,000
---	40.06	8	24,000	6,700	23,600	7,300	27,800	9,600	32,300	11,300	22,300	5,900
---	40.06	107	18,300	5,700	17,800	6,100	20,900	7,500	24,200	9,300	18,200	5,300
540	---	S-17	---	4,190	---	4,190	---	4,190	---	5,635	---	4,190
820	---	S-1	22,100	---	21,900	---	23,400	---	27,700	---	25,700	---
SCALE OF TURBULENCE: 5,000 FEET												
---	27	10	24,700	3,800	24,500	4,200	29,500	5,100	34,100	9,100	23,500	3,100
---	27	14	24,100	9,500	23,800	10,100	27,900	11,600	31,500	14,400	23,600	8,600
---	40.06	8	24,300	5,300	23,700	7,300	28,200	9,100	32,600	10,700	22,300	5,800
---	40.06	107	18,300	5,500	17,900	6,000	21,100	7,300	24,300	9,000	18,200	5,100
540	---	S-17	---	4,190	---	4,190	---	4,190	---	5,635	---	4,190
820	---	S-1	22,100	---	21,900	---	23,400	---	27,700	---	25,700	---

APPENDIX VIII
CORRELATION COEFFICIENTS BETWEEN AXIAL AND SHEAR STRESSES

Table XXVI. Correlation Coefficients Between Axial and Shear Stresses

Location		W_c = 10 cps			W_c = 15 cps	W_c = 20 cps
Percent wing semispan	Segment number	L = 1,000 ft	L = 3,000 ft	L = 5,000 ft	L = 1,000 ft	L = 1,000 ft
		ANALYSIS CONDITION 1				
27	10	0.835	0.866	0.871	−0.835	−0.835
27	14	0.961	0.971	0.972	0.961	0.961
40.06	8	0.962	0.971	0.972	0.962	0.962
40.06	107	−0.962	−0.971	−0.972	−0.962	−0.962
		ANALYSIS CONDITION 2				
27	10	0.746	0.780	0.786	---	
27	14	0.941	0.956	0.958		
40.06	8	0.887	0.910	0.913		
40.06	107	−0.894	−0.916	−0.919		
		ANALYSIS CONDITION 3				
27	10	0.673	0.687	0.689	---	
27	14	0.922	0.935	0.937		
40.06	8	0.831	0.851	0.854		
40.06	107	−0.837	−0.859	−0.862		
		ANALYSIS CONDITION 4				
27	10	−0.0127	−0.0490	−0.0558	---	
27	14	0.475	0.493	0.495		
40.06	8	0.575	0.598	0.602		
40.06	107	−0.585	−0.611	−0.615		
		ANALYSIS CONDITION 5				
27	10	0.904	0.905	0.905	---	
27	14	0.975	0.975	0.975		
40.06	8	0.972	0.972	0.972		
40.06	107	−0.972	−0.972	−0.972		

APPENDIX IX
STRESS INFLUENCE COEFFICIENTS

(a) 27 PERCENT WING SEMISPAN, SEGMENT NUMBER 10

$$\begin{Bmatrix} \text{Skin Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0.00107 \ \frac{PSI}{In\text{-}Lb} & 0 & 0 \\ 77 \times 10^{-6} \ \frac{PSI}{In\text{-}Lb} & 0.0228 \ \frac{PSI}{Lb} & 865 \times 10^{-6} \ \frac{PSI}{In\text{-}Lb} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \\ \text{Torsion} \end{Bmatrix}$$

(b) 27 PERCENT WING SEMISPAN, SEGMENT NUMBER 14

$$\begin{Bmatrix} \text{Skin Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0.000971 \ \frac{PSI}{In\text{-}Lb} & 0 & 0 \\ 188 \times 10^{-6} \ \frac{PSI}{In\text{-}Lb} & 0.0655 \ \frac{PSI}{Lb} & 865 \times 10^{-6} \ \frac{PSI}{In\text{-}Lb} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \\ \text{Torsion} \end{Bmatrix}$$

(c) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 8

$$\begin{Bmatrix} \text{Skin Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0.00158 \ \frac{PSI}{In\text{-}Lb} & 0 & 0 \\ 123 \times 10^{-6} \ \frac{PSI}{In\text{-}Lb} & 0.0359 \ \frac{PSI}{Lb} & 1370 \times 10^{-6} \ \frac{PSI}{In\text{-}Lb} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \\ \text{Torsion} \end{Bmatrix}$$

(d) 40.06 PERCENT SEMISPAN, SEGMENT NUMBER 107

$$\begin{Bmatrix} \text{Segment Stress} \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} -0.00135 \ \frac{PSI}{In\text{-}Lb} & 0 & 0 \\ 43.4 \times 10^{-6} \ \frac{PSI}{In\text{-}Lb} & 0.0525 \ \frac{PSI}{Lb} & 1286 \times 10^{-6} \ \frac{PSI}{In\text{-}Lb} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \text{Shear} \\ \text{Torsion} \end{Bmatrix}$$

(e) BODY BALANCE STATION 540, STRINGER S-7

$$\begin{Bmatrix} \text{Axial Stress} \\ \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0 & 0 \\ \\ 0 & 0.0516 \ \frac{\text{PSI}}{\text{Lb}} \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \\ \text{Shear} \end{Bmatrix}$$

(f) BODY BALANCE STATION 820, STRINGER S-1

$$\begin{Bmatrix} \text{Axial Stress} \\ \\ \text{Shear Stress} \end{Bmatrix} = \begin{bmatrix} 0.000302 \ \frac{\text{PSI}}{\text{In-Lb}} & 0 \\ \\ 0 & 0 \end{bmatrix} \begin{Bmatrix} \text{Bending Moment} \\ \\ \text{Shear} \end{Bmatrix}$$

Sign Convention

+ Segment Stress – Tension
+ Bending Moment – Tension in lower skin
+ Shear – Outboard wing sheared up relative to inboard wing
+ Torsion – Leading edge up

REFERENCES

1. D. Espey and A. Laier, External Loads Criteria, D-16809, Vol. I, The Boeing Company, April 1956

2. Military Specification, Airplane Strength and Rigidity, MIL-A-8860 (ASG), U. S. Air Force, May 1960

3. R. E. Baum and J. R. Newell, Jr., Mass Properties for Power Spectral Gust Analysis, D6-18249, The Boeing Company, September 1965

4. D. O. Neilson and E. Plunkett, Ground Vibration Test of the KC-135 Airplane, T6-1044, The Boeing Company, December 1957

5. D. R. Magee and W. W. Bingham, Ground Vibration Test of the 707-321 Airplane, T6-1588, The Boeing Company, June 1959

6. J. T. Rogers, Review of 707 Design Aeroelastic Analysis Based on Comparison with Measured Flight Loads on the KC-135 Airplane, D6-1042, The Boeing Company, September 1958

7. L. D. Richmond, A Rational Method of Obtaining Three-Dimensional Unsteady Aerodynamic Derivatives of Intersecting Airfoils in Subsonic Flow, D6-7401, The Boeing Company, April 1962

8. J. C. Houbolt, R. Steiner, and K. G. Pratt, Dynamic Response of Airplanes to Atmospheric Turbulence Including Flight Data on Input and Response, TR R-199, National Aeronautics and Space Administration, 1965

9. R. Coffman, G. Gillette, G. Houlihan, Fuselage Stress Analysis, D-16811, Vol. II, The Boeing Company, May 1957

10. A. R. Wright, Wing Stress Analysis, D6-16810, Vol. I, The Boeing Company, January 1957

11. J. R. Fuller et al., Contribution to the Development of a Power Spectral Gust Design Procedure for Civil Aircraft, FAA-ADS-54, Contract FA-WA-4768, January 1966

12. T. A. Montgomery, External and Internal Loads for C-135 Airplane, D6-7267, Vol. II, The Boeing Company, April 1961

13. A. W. Byrski, Design Loads Criteria for Growth 707-100/200 Series Airplanes, D6-3212, Vol. II, The Boeing Company, July 1959

DOCUMENT CONTROL DATA–R&D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1 ORIGINATING ACTIVITY (Corporate author)
The Boeing Company
Commercial Airplane Division
Renton, Washington

2a REPORT SECURITY CLASSIFICATION
unclassified

2b GROUP
none

3 REPORT TITLE
Volume 1.
KC-135 Power Spectral Vertical Gust Load Analysis
Detailed Analysis and Results

4 DESCRIPTIVE NOTES (Type of report and inclusive dates)
Final Report July 1965 to March 1966

5 AUTHOR(S) (Last name, first name, initial)
Latz, Robert N.

6 REPORT DATE	7a TOTAL NO. OF PAGES	7b NO. OF REFS.
July 1966	121	13

8a CONTRACT OR GRANT NO.	9a ORIGINATOR'S REPORT NUMBER(S)
AF 33 (615) - 2454	AFFDL-TR-66-57, Vol. I
b PROJECT NO. System No. 5 (611367 62405334)	
c Project No. 1367	9b OTHER REPORT NO.(S) (Any other numbers that may be assigned this report)
d Task No. 136702	D6-18252

10 AVAILABILITY/LIMITATION NOTICES
This document is subject to special export controls and each transmittal to foreign governments or foreing nationals may be made only with proper approval of the Air Force Flight Dynamics Laboratory (FDTR), Wright-Patterson AFB, Ohio 45433.

11 SUPPLEMENTARY NOTES

12 SPONSORING MILITARY ACTIVITY
Air Force Flight Dynamics Laboratory, Research and Technology Division, Air Force Systems Command, Wright-Patterson AFB, Ohio

13 ABSTRACT

This report presents the results of an aniysis to obtain the stress response parameters (level of stress per level of turbulence) and zero-crossing rates at two wing stations and two body stations of the KC-135 airplane where the margins of safety for gusts are minimum. Five combinations of gross weight, speed, and altitude were selected. The results of the computer analysis pre sent the effects of changes in scale of turbulence and upper cutoff frequency on the response parameters and zero-crossing rates. Results indicate a large reduction in stress response parameter and small reduction in zero-crossing rate with increasing scale of turbulence. Variatons of upper cutoff frequence above the highest modal frequency used in the analysis indicate negligible change in eigher stress response parameter or zero-crossing rates. The ratios of incremental limit allowable stress to stress response parameter obtained over a wide range of gross weight, speed, and scale of turbulence result in a minimum value of 53. This document (volume I) presents the analyses and specific results described above. Volume II presents response parameters, zero-crossing rates, frequency response functions, and power spectra of bending moment, shear, and torsion.

DD FORM 1 JAN 64 1473

14 KEY WORDS	LINK A ROLE	LINK A WT	LINK B ROLE	LINK B WT	LINK C ROLE	LINK C WT
Gust Loads **Power Spectra** **Stresses** **Response Parameters** **Zero Crossings** **Analysis**						

INSTRUCTIONS

1. ORIGINATING ACTIVITY: Enter the name and address of the contractor, subcontractor, grantee, Department of Defense activity or other organization *(corporate author)* issuing the report.

2*a*. REPORT SECURITY CLASSIFICATION: Enter the overall security classification of the report. Indicate whether "Restricted Data" is included. Marking is to be in accordance with appropriate security regulations.

2*b*. GROUP: Automatic downgrading is specified in DoD Directive 5200.10 and Armed Forces Industrial Manual. Enter the group number. Also, when applicable, show that optional markings have been used for Group 3 and Group 4 as authorized.

3. REPORT TITLE: Enter the complete report title in all capital letters. Titles in all cases should be unclassified. If a meaningful title cannot be selected without classification, show title classification in all capitals in parenthesis immediately following the title.

4. DESCRIPTIVE NOTES: If appropriate, enter the type of report, e.g., interim, progress, summary, annual, or final. Give the inclusive dates when a specific reporting period is covered.

5. AUTHOR(S): Enter the name(s) of author(s) as shown on or in the report. Enter last name, first name, middle initial. If military, show rank and branch of service. The name of the principal author is an absolute minimum requirement.

6. REPORT DATE: Enter the date of the report as day, month, year; or month, year. If more than one date appears on the report, use date of publication.

7*a*. TOTAL NUMBER OF PAGES: The total page count should follow normal pagination procedures, i.e., enter the number of pages containing information.

7*b*. NUMBER OF REFERENCES: Enter the total number of references cited in the report.

8*a*. CONTRACT OR GRANT NUMBER: If appropriate, enter the applicable number of the contract or grant under which the report was written.

8*b*, 8*c*, & 8*d*. PROJECT NUMBER: Enter the appropriate military department identification, such as project number, subproject number, system numbers, task number, etc.

9*a*. ORIGINATOR'S REPORT NUMBER(S): Enter the official report number by which the document will be identified and controlled by the originating activity. This number must be unique to this report.

9*b*. OTHER REPORT NUMBER(S): If the report has been assigned any other report numbers *(either by the originator or by the sponsor)*, also enter this number(s).

10. AVAILABILITY/LIMITATION NOTICES: Enter any limitations on further dissemination of the report, other than those imposed by security classification, using standard statements such as.

(1) "Qualified requesters may obtain copies of this report from DDC."

(2) "Foreign announcement and dissemination of this report by DDC is not authorized."

(3) "U. S. Government agencies may obtain copies of this report directly from DDC. Other qualified DDC users shall request through _____."

(4) "U. S. military agencies may obtain copies of this report directly from DDC. Other qualified users shall request through _____."

(5) "All distribution of this report is controlled. Qualified DDC users shall request through _____."

If the report has been furnished to the Office of Technical Services, Department of Commerce, for sale to the public, indicate this fact and enter the price, if known.

11. SUPPLEMENTARY NOTES: Use for additional explanatory notes.

12. SPONSORING MILITARY ACTIVITY: Enter the name of the departmental project office or laboratory sponsoring *(paying for)* the research and development. Include address.

13. ABSTRACT: Enter an abstract giving a brief and factual summary of the document indicative of the report, even though it may also appear elsewhere in the body of the technical report. If additional space is required, a continuation sheet shall be attached.

It is highly desirable that the abstract of classified reports be unclassified. Each paragraph of the abstract shall end with an indication of the military security classification of the information in the paragraph, represented as *(TS)*, *(S)*, *(C)*, *or (U)*.

There is no limitation on the length of the abstract. However, the suggested length is from 150 to 225 words.

14. KEY WORDS: Key words are technically meaningful terms or short phrases that characterize a report and may be used as index entries for cataloging the report. Key words must be selected so that no security classification is required. Identifiers, such as equipment model designation, trade name, military project code name, geographic location, may be used as key words but will be followed by an indication of technical context. The assignment of links, rules, and weights is optional.

SUPPLEMENTARY

INFORMATION

Errata

AFFDL TR-66-57
VOLUME I

KC-135 POWER SPECTRAL VERTICAL GUST LOAD ANALYSIS

DETAILED ANALYSIS AND RESULTS VOLUME I

ROBERT N. LATZ
THE BOEING COMPANY