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FLIGHT MEASUREMENTS OF LIFTING PRESSURES FOR A THIN LOW-ASPECT-RATIO WING AT SUBSONIC, TRANSONIC, AND LOW SUPERSONIC SPEEDS

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16. Abstract

Flight measurements were made of the lifting pressures on a thin low-aspect-ratio wing at subsonic, transonic, and low supersonic Mach numbers at angles of attack up to about 8°. Pressure distributions in the form of differential pressure coefficients are presented for several wing chordwise and spanwise stations. Also presented are the results of limited analysis which show aircraft configuration effects, Mach number effects on the local wing loadings, comparisons of selected measured wing pressures with predicted pressures, and comparisons of wing loadings during right-turn and left-turn maneuvers.

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SUMMARY

Flight measurements were made of the lifting pressures on a thin low-aspect-ratio wing at subsonic, transonic, and low supersonic Mach numbers. Pressure distributions are presented in the form of differential pressure coefficients for several wing chordwise and spanwise stations for a range of Mach numbers from about 0.60 to 1.26 and for angles of attack up to about 8°. An external fuel tank located on the lower surface of the fuselage for the initial portion of the flight had a large effect on the differential pressures measured for the inboard half of the exposed wing panel. For the tank-on configuration, the data indicated a significant reduction of lifting pressures at several wing locations for Mach numbers greater than 0.90. For the tank-off configuration, there was a moderate reduction of the lifting pressures at some locations and a small reduction of the lifting pressures at other locations throughout the Mach number range. A finite element theoretical method of analysis predicted the general trend of the flight-measured pressures but was insensitive to local effects. Identical measurements of chordwise and spanwise wing loadings were obtained for both right-turn and left-turn maneuvers at Mach numbers of about 1.00 and 1.12.

INTRODUCTION

Techniques to calculate the transonic flow about a wing or wing-body, including embedded supersonic regions and shocks, have been formulated by several investigators during the past several years (refs. 1 to 4). Assessments of these methods usually have been made through comparison of their predicted values with experimental results such as wind-tunnel pressure-distribution data (refs. 5 to 7) or flight-measured pressure-distribution data (refs. 8 to 12). This approach is adequate where the flow is steady and subsonic, or perhaps slightly supercritical. However, when the flow is highly supercritical or the result of aircraft dynamic motions, the data are either scarce (dynamic data, for example) or influenced by unknown wind-tunnel wall effects. In recognition of these difficulties, a drone flight program (ref. 13) was initiated to obtain steady-state and dynamic measurements of wing pressures free from wind-tunnel wall interference for a variety of wing geometries.

The Firebee II drone aircraft was selected as the test vehicle for this research effort because it is a highly maneuverable, supersonic aircraft designed for relatively high load factors. The aircraft was equipped with a thin low-aspect-ratio wing which was chosen for the initial flight tests. This wing provided an opportunity to obtain, at low cost, valuable operational experience and, at the same time, pressure measurements on a wing similar in many respects to that of contemporary fighter aircraft. The drone flight-test technique can also be used to test more flexible, higher aspect-ratio wings with thicker airfoil sections that are typical of advanced transport aircraft.

The purpose of this report is to document pressure measurements obtained on the standard wing of the research vehicle for a variety of test conditions. These data thus provide for evaluation of numerical and theoretical prediction techniques. Although data were obtained for both steady-state and dynamic conditions, this report is concerned primarily with the former. The pressure measurements are presented in graphical form as differential pressure coefficients for several wing chordwise and spanwise locations over a range of Mach numbers from 0.60 to 1.26.

A tabulation of wing local differential pressure coefficients and the corresponding aircraft flight-and-performance data are required for complete documentation. Since these data are of limited interest, they are included in a "Supplement to NASA TM X-3405" which is available upon request. A request form is enclosed at the back of this paper.

SYMBOLS

Measurements were taken in U.S. Customary Units. They are presented herein in the International System of Units (SI) with the equivalent values given parenthetically in the U.S. Customary Units.

Algebraic	FORTRAN	
a_z	VERT ACCEL	vertical acceleration, measured normal to fuselage-horizontal reference plane 0.87 m (2.85 ft) forward of $0.25\bar{c}$, g units
b	B	exposed wing semispan, m (ft)
c	C	local chord, m (ft)

Algebraic	FORTRAN	
$\bar{c}$		mean aerodynamic chord, m (ft)
M		Mach number
p_l		local pressure on wing lower surface, Pa (lb/ft^2)
p_u		local pressure on wing upper surface, Pa (lb/ft^2)
q	DYN PRESSURE	free-stream dynamic pressure, Pa (lb/ft^2)
q_{av}		average dynamic pressure, Pa (lb/ft^2)
R	RE NO	Reynolds number based on mean aerodynamic chord
x	X	chordwise distance from wing leading edge, m (ft)
y	Y	spanwise distance from wing-fuselage juncture, m (ft)
α	ALPHA	angle of attack, deg
ΔC_p		differential pressure coefficient, $\frac{p_u - p_l}{q}$, Pa (lb/ft^2)
$\delta_{h,L}$	DELHL	left horizontal tail deflection, deg
$\delta_{h,R}$	DELHR	right horizontal tail deflection, deg
δ_r	DELRUD	rudder deflection, deg
θ	THETA	pitch attitude, deg
σ	ST DEV	standard deviation
ϕ	PHI	roll attitude, deg

TEST VEHICLE AND INSTRUMENTATION

The test vehicle used for measurement of the wing loadings was a turbojet-powered, supersonic, drone aircraft used as an aerial target. Shown in figure 1 are the schematics and mathematical model of the vehicle. Some pertinent dimensional data for the wing and control surfaces are presented in table I. It should be noted that the wing itself has no control surfaces. Longitudinal and directional control of the test vehicle is achieved by use of the horizontal tail surfaces as elevons. Also shown in figure 1(a) is the location of the external fuel tank which can be used for an extended flight plan.

The wing used for this research flight test was identical in planform to the standard wing of the test vehicle. However, it was a new wing that was modified during the fabrication process to allow for installation of the pressure-measurement instrumentation. Features of the wing fabrication and instrumentation are shown in figure 2. The wing construction consisted of a full-depth aluminum honeycomb core sandwiched by stainless steel skins that were tapered in thickness normal to the trailing edge to provide optimun stiffness distribution. The tapered skins were bonded to the honeycomb core and were bounded by aluminum ribs at the root and tip, and aluminum closure members at the leading and trailing edges. Adhesive and rivets were used to attach the skins to the ribs and closure members. The outer end of the panel was a removable wing tip which was fabricated from aluminum alloy and bolted to the outboard rib. The left- and right-wing panels were joined by a rigid, built-up structural member that provided for wing-fuselage attachment.

The right panel of the test wing was instrumented to measure differential pressures between the wing upper and lower surfaces at 29 locations (see fig. 3). The pressure orifices were located in the wing upper and lower surfaces at identical chordwise and spanwise stations and were connected by tubing to individual pressure transducers. The transducer locations and the length of tubing connecting the pressure orifices were selected to provide equal response capability. Diaphragm pressure transducers which had a range of ±69 kPa (±10 psid) were positioned in the wing with the plane of the diaphragm perpendicular to the wing chord plane to reduce or eliminate the effect of acceleration vertical to the fuselage center line.

TEST

The flight test consisted of a predetermined schedule of flight conditions that was verified by use of a computer simulation program. This flight plan was employed in the drone aircraft capability study reported in reference 13. Included in the schedule were climbs, dives, straight and level flight, and both right- and left-turn steady-state maneuvers. The flight test which occurred during a period of approximately 30 min covered a range of load factors from 0 to about 6 g, a range of Mach numbers from 0 to 1.26, a range of altitudes from sea level to about 12.8 km (42×10^3 ft), and a range of dynamic pressures from 0 to 52.67 kPa (1100 lb/ft^2). For this flight test, the range of Reynolds numbers, based on the 1962 standard atmosphere tables, is presented in figure 4. The research vehicle can be air launched from a drop aircraft or ground launched from a zero-length launch rail with the aid of a rocket-assist-take-off bottle. For this flight test the vehicle was ground launched from a zero-length launch rail. Fuel from the external fuel tank was used during the initial phase of the flight when most of data at subsonic Mach numbers were obtained. When this fuel was expended, the tank was jettisoned, and data for both subsonic and supersonic Mach numbers were obtained using fuel from the main fuselage tank. At the end of the flight, a helicopter retrieved the vehicle and returned it to base. A typical flight-test operation is presented in reference 13 in which similar flight operation and the research vehicle are discussed in detail.

During the flight test, the outputs of the differential pressure transducers were amplified and commutated onboard the aircraft, and then telemetered to ground stations where the data were simultaneously recorded on magnetic tape and strip charts. Onboard measurements of vehicle performance and orientation data such as aircraft Mach number, vertical acceleration, barometric altitude, dynamic pressure, angle of attack, pitch attitude, roll attitude, and control surface deflection were also telemetered continuously to the ground stations and recorded on magnetic tape and strip charts. In addition to the measurements made onboard the test vehicle, two ground-base radar systems were used to obtain aircraft space-position data. Mach number data derived from the radar measurements are included herein since at times the presence of shock wave (which affects pitot-static tube pressure measurements) and other factors influence onboard Mach number measurements. The Mach number interval for this influence is discussed in references 13 and 14.

It should be noted that the flight measurement system onboard the test vehicle was developed to provide operational data of the vehicle as an aerial target and, as such, did not provide flight measurements having the optimum accuracy that is generally available for research efforts. In the table below an estimation of maximum value for the root-sum-square error of the various measurements is given with appropriate considerations for instrument errors, pressure-lag errors, position errors, and data transmission errors of the FM/FM telemetry system (refs. 14 to 19).

Measurement	Estimated error
Angle of attack:	
$M \leq 0.95$ and $\alpha = 2.5^{\circ}$	$\pm 0.6^{\circ}$
$M > 0.95$ and $\alpha = 2.5^{\circ}$	$\pm 1.1^{\circ}$
Pitch attitude	$\pm 3.6^{\circ}$
Roll attitude	$\pm 5.2^{\circ}$
Left elevon deflection	$\pm 0.7^{\circ}$
Right elevon deflection	$\pm 0.7^{\circ}$
Rudder deflection	$\pm 0.8^{\circ}$
Mach number	$\pm 0.04^{\circ}$
Dynamic pressure	±3.4 kPa (±70 lb/ft^2)
Vertical acceleration	±0.4 g
Flight time	±0.03 sec
Barometric altitude:	
0 to 1.5 km (5000 ft)	±51 m (±168 ft)
0 to 22.9 km (75 000 ft)	±0.73 km (±2400 ft)
Wing differential pressure	±2.8 kPa (±57.6 lb/ft^2)

DATA

The measured wing differential pressures and the vehicle performance and attitude were recorded on magnetic tape and, thereafter, converted to engineering units by digital computers through the use of calibration data obtained prior to the flight test. The wing differential pressure measurements were reduced to coefficient form ΔC_p by calculating the ratio of the differential pressure to the free-stream dynamic pressure. Time-history records for all data channels were reviewed and sections for data analysis were selected. No usable pressure measurements were obtained from orifices 13, 24, and 27 throughout the entire flight test because of instrumentation difficulties. Pressure measurements from orifices 12 and 16 were intermittedly unusable due to a loss of telemetry signal as evidenced by sporadic off-scale values. All data channels, in general, contained low levels of high frequency noise which provided an undesirable degree of scatter particularly when the measured differential pressures were near a zero value. To alleviate this condition, average values of data were computed using a 21-point averaging technique, with samples of data taken at 1/6-second intervals (i.e., 10 samples before, 10 samples afterward, and 1 sample at the specified flight time). The standard deviation was computed for each resulting data point to indicate the degree of variation or fluctuation for the measurements during the sampling interval.

RESULTS AND DISCUSSION

The results of flight test measurements of the aerodynamic loading for a thin low-aspect-ratio wing panel are presented in graphical form as local differential pressure coefficients. These data are presented to show the local differential pressure distributions for selected chordwise and spanwise stations for several steady-state and quasi-steady maneuver flight conditions. Table II is an index of the results presented in figures 5 to 20 and shows the data as a function of aircraft configuration and flight Mach numbers. Pressure-distribution data for the tank-on configuration at subsonic Mach numbers are shown in figures 5 to 9 and data for the tank-off configuration at subsonic Mach numbers are shown in figures 10 to 15. The pressure-distribution data obtained at supersonic Mach numbers for the tank-off configuration are shown in figures 16 to 19 and selected data at subsonic/supersonic Mach numbers for the tank-off configuration are shown in figure 20. Also listed in the table are figures 21 to 25 which present pressure measurements selected for the analysis sections that follow. A tabulation of all measurements for the data of figures 5 to 25 is available as a supplement to this report.

Aircraft Configuration Effects

The projected frontal and side views in figure 1 show that the external fuel tank comprised a significant part of the overall areas of the test vehicle. The vehicle thus undergoes a considerable configuration change when the fuel tank is jettisoned. Examples of the effects of the configuration change on spanwise wing loading are presented in figure 21. The data of figure 21 show spanwise variations of $\Delta C_p/\alpha$ at the 20 percent chord station for the tank-on and tank-off aircraft configurations at selected Mach numbers from 0.70 to 0.95. Noted in the figure are values of dynamic pressure when the data were obtained. For Mach numbers from 0.70 to 0.80 the absolute values of $\Delta C_p/\alpha$ for the tank-on configuration are substantially smaller than those for the tank-off configuration at the inboard sections of the wing semispan, whereas for Mach numbers from 0.85 to 0.95 there is only a small difference in these values.

The effective depth of the fuselage in the vicinity of the wing for the tank-on configuration is larger than that for the tank-off configuration. The increase in fuselage depth has the same effect as would translating the wing vertically toward the fuselage upper surface. Thus, the data of figure 21 indicate an effect on wing loading due to a vertical shift of the wing on the fuselage. Similar results are found in reference 20 which presents data for wing-body combinations having low, mid, and high wing locations.

The data for the tank-on configuration (fig. 21) were obtained at free-stream dynamic pressures that were considerably larger than those for the tank-off configuration. At the larger dynamic pressures, aeroelastic effects are sometimes important; however, since the test wing was quite rigid, these effects were assumed to be small. Thus, the primary effect on the pressure distributions was attributed to the tank-on and tank-off aircraft configuration changes.

Mach Number Effects on Local Wing Loadings

The effects of Mach number on the local wing pressures $\Delta C_p/\alpha$ are shown for the tank-on and tank-off aircraft configurations in figures 22 and 23, respectively. These data were selected for a nominal range of angle of attack and dynamic pressure which provided the largest range of high subsonic and transonic Mach numbers. Data for the tank-on configuration were obtained at an average angle of attack of 2.4° and an average dynamic pressure of 39.0 kPa (814.4 lb/ft^2), and data for the tank-off configuration were obtained at an average angle of attack of 2.3° and an average dynamic pressure of 16.4 kPa (342.1 lb/ft^2). In each figure the wing chordwise and spanwise locations of the pressure orifices are indicated.

For the tank-on configuration (fig. 22), the local wing differential pressures are, in general, unaffected by Mach number for values up to about 0.90, but for values greater than 0.90, there are significant Mach number effects at some locations on the wing. A comparison of the variations of differential pressure coefficients with Mach number for locations near the fuselage (y/b = 0.08) with the variations near the wing tip (y/b = 0.95) for comparable chordwise locations indicates different Mach number effects. The local pressures near the root chord are affected by the flow near the fuselage and those near the tip chord are affected by the three-dimensional flow near the wing tip.

For the tank-off configuration (fig. 23), local wing loadings were relatively insensitive to values of Mach numbers that were less than about 0.90 and greater than about 1.10. However, for Mach numbers between 0.90 and 1.10, there was a gradual increase in wing loading to a maximum level as the Mach number was increased and a subsequent decrease in wing loading to a lower level at supersonic speeds. This variation of wing loading with Mach number is generally characteristic of selected regions over the wing panel (i.e., y/b = 0.08, x/c = 0.35; y/b = 0.80, x/c = 0.75). However, the data for other regions do not show a distinct peak in wing loading for the range of Mach numbers from 0.90 to 1.10. In these instances there is a gradual increase of wing loading from a lower level established for Mach numbers less than 0.90 to a higher level for Mach numbers greater than about 1.00 (i.e., y/b = 0.29, x/c = 0.20; y/b = 0.95, x/c = 0.10 and 0.20) and a virtual absence of Mach number effect indicated for the region near the leading edge of the root chord (i.e., y/b = 0.80, x/c = 0.10). The data of figure 23 indicate, in general, a gradual increase and subsequent decrease in the magnitude of the local wing pressures as the Mach number was increased from high subsonic values to low supersonic values.

Comparisons of Selected Flight Measurements With Theoretical Predictions

Flight measurements of wing differential pressure distributions and theoretical predictions of them are compared in figure 24. The aerodynamic model representation of the research vehicle (fig. 1(c)) was used with a finite-element method of analysis (ref. 21) for the prediction of steady aerodynamic pressure distributions. Since this method is known to be invalid in the transonic flow region, comparisons are presented for a subsonic Mach number of 0.70 and a supersonic Mach number of 1.24. The data of figure 24 indicate that the results of the prediction technique were in general lower than the measured data. However, the overall trend of the distributions was adequately predicted. The predictions appear totally insensitive to local effects, particularly for chordwise distributions near the wing root and for spanwise distribution at the 75 percent chord station. It is felt that an improvement in the prediction might be obtained if a better aerodynamic representation of the fuselage-area distribution were employed as opposed to the cone-cylinder representation which was used.

Comparisons of Wing Loadings During Right- and Left-Turn Maneuvers

Comparisons were made of wing loadings for coordinated right- and left-turn maneuvers for the tank-off configuration to evaluate wing-loading symmetry. The load distributions for three spanwise and three chordwise stations are presented in figure 25. Figure 25(a) presents data obtained at a Mach number of 1.00, and figure 25(b) presents data obtained at a Mach number of 1.12. Identical loadings were developed on the wing panels when the test vehicle performed either coordinated left- or right-turn maneuvers. The results suggest that for wings which do not have control surfaces for lateral control, the coordinated-turn maneuver is an acceptable method of obtaining symmetrical wing loadings at the higher ranges of aircraft load factor and/or high angles of attack.

CONCLUDING REMARKS

Flight measurements of aerodynamic loading distributions for a thin low-aspect-ratio wing at subsonic, transonic, and low supersonic Mach numbers are presented to provide data for the evaluation of the prediction capability of numerical and theoretical techniques. A limited analysis of selected data from the test flight indicated the following results:

(a) The presence of the external fuel tank significantly reduced wing loadings at inboard stations up to about 50 percent of the exposed wing semispan for Mach numbers from 0.70 to 0.80.

(b) For the tank-on configuration, the local loading coefficients indicate a significant reduction of lifting pressures at some wing locations for Mach numbers greater than 0.90.

(c) For the tank-off configuration, a gradual transition in the magnitude of the local loading was indicated for the transonic Mach number range.

(d) The finite-element theoretical method of analysis predicted the general trend of the flight-measured loading distributions, but was insensitive to local effects.

(e) Identical chordwise and spanwise measurements of wing loadings were obtained for both right- and left-turn maneuvers.

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REFERENCES

1. Schmidt, W.; and Vanino, R.: The Analysis of Arbitrary Wingbody Combinations in Transonic Flow Using a Relaxation Method. Symposium Transsonicum II, K. Oswatitsch and D. Rues, eds., Springer-Verlag, 1976, pp. 523-532.

2. Klunker, E. B.; and Newman, P. A.: Computation of Transonic Flow About Lifting Wing-Cylinder Combinations. J. Aircraft, vol. 11, no. 4, Apr. 1974, pp. 254-256.

3. Newman, Perry A.; and Klunker, E. B.: Numerical Modeling of Tunnel-Wall and Body-Shape Effects on Transonic Flow Over Finite Lifting Wings. Aerodynamic Analyses Requiring Advanced Computers, Part II, NASA SP-347, 1975, pp. 1189-1212.

4. Bailey, F. R.; and Ballhaus, W. F.: Comparisons of Computer and Experimental Pressures for Transonic Flows About Isolated Wings and Wing-Fuselage Configurations. Aerodynamic Analyses Requiring Advanced Computers, Part II, NASA SP-347, 1975, pp. 1213-1231.

5. Mugler, John P., Jr.: Basic Pressure Measurements at Transonic Speeds on a Thin 45° Sweptback Highly Tapered Wing With Systematic Spanwise Twist Variations. Wing With Cubic Spanwise Twist Variation. NASA MEMO 5-12-59L, 1959.

6. Loving, Donald L.; and Estabrooks, Bruce B.: Transonic-Wing Investigation in the Langley 8-Foot High-Speed Tunnel at High Subsonic Mach Numbers and at a Mach Number of 1.2. Analysis of Pressure Distribution of Wing-Fuselage Configuration Having a Wing of 45° Sweepback, Aspect Ratio 4, Taper Ratio 0.6, and NACA 65A006 Airfoil Section. NACA RM L51F07, 1951.

7. Cahill, Jones F.; Treon, Stuart L.; and Hofstetter, William R.: Feasibility of Testing a Large-Chord, Swept-Panel Model To Determine Wing Shock Location at Flight Reynolds Number. Facilities and Techniques for Aerodynamic Testing at Transonic Speeds and High Reynolds Number, AGARD-CP-83-71, Aug. 1971, pp. 17-1 – 17-11.

8. Keener, Earl R.; Peele, James R.; and Woodbridge, Julia B.: Tabulated Pressure Coefficients and Aerodynamic Characteristics Measured in Flight on the Wing of the Douglas D-558-I Airplane Throughout the Normal-Force-Coefficient Range at Mach Numbers of 0.67, 0.74, 0.78, and 0.82. NACA RM L50L12a, 1951.

9. Keener, Earl R.: Wing Pressure Distributions at Low Lift for the XF-92A Delta-Wing Airplane at Transonic Speeds. NACA RM H54H06, 1954.

10. Keener, Earl R.; and Jordan, Gareth H.: Wing Loads and Load Distributions Throughout the Lift Range of the Douglas X-3 Research Airplane at Transonic Speeds. NACA RM H56G13, 1956.

11. Keener, Earl R.: Pressure Measurements Obtained in Flight at Transonic Speeds for a Conically Cambered Delta Wing. NASA TM X-48, 1959.

12. Pyle, Jon S.: Flight-Measured Wing Surface Pressures and Loads for the X-15 Airplane at Mach Numbers From 1.2 to 6.0. NASA TN D-2602, 1965.

13. Eckstrom, Clinton V.; and Peele, Ellwood L.: Flight Assessment of a Large Supersonic Drone Aircraft for Research Use. NASA TM X-3259, 1975.

14. Gladstone, V. M.: Evaluation of the BQM-34E Production Target System: Test and Evaluation and Missile-to-Target Firing Program. Tech. Publ. TP-73-30, Naval Missile Center, June 19, 1973.

15. Pearson, Albin O.; and Brown, Harold A.: Calibration of a Combined Pitot-Static Tube and Vane-Type Flow Angularity Indicator at Transonic Speeds and at Large Angles of Attack or Yaw. NACA RM L52F24, 1952.

16. Rogallo, Vernon L.: Effects of Wing Sweep on the Upwash at the Propeller Planes of Multiengine Airplanes. NACA TN 2795, 1952.

17. Larson, Terry J.; Stillwell, Wendell H.; and Armistead, Katharine H.: Static-Pressure Error Calibrations for Nose-Boom Airspeed Installations of 17 Airplanes. NACA RM H57A02, 1957.

18. Gracey, William: Wind-Tunnel Investigation of a Number of Total-Pressure Tubes at High Angles of Attack – Subsonic, Transonic, and Supersonic Speeds. NACA Rep. 1303, 1957. (Supersedes NACA TN 3641.)

19. Richardson, Norman R.; and Pearson, Albin O.: Wind-Tunnel Calibrations of a Combined Pitot-Static Tube, Vane-Type Flow-Direction Transmitter, and Stagnation-Temperature Element at Mach Numbers From 0.60 to 2.87. NASA TN D-122, 1959.

20. Gapcynski, John P.; and Landrum, Emma Jean: Tabulated Data From a Pressure-Distribution Investigation at Mach Number 2.01 of a 45° Sweptback-Wing Airplane Model at Combined Angles of Attack and Sideslip. NASA MEMO 10-15-58L, 1958.

21. Carmichael, Ralph L.; Castellano, Charles R.; and Chen, Chuan F.: The Use of Finite Element Methods for Predicting the Aerodynamics of Wing-Body Combinations. Analytic Methods in Aircraft Aerodynamics, NASA SP-228, 1970, pp. 37-51.

TABLE I.- WING AND CONTROL SURFACES DIMENSIONAL DATA

Property	Wing	Horizontal control surface	Vertical control surface
Airfoil section (streamwise)	[a]NACA 65-003 modified	[a]NACA 65-003.5 to 5.0 modified	[a]NACA 65-003 modified
Theoretical planform area, m^2 (ft^2)	2.97 (32.00)	0.85 (9.10)	[b]0.80 (8.65)
Exposed planform area, m^2 (ft^2)	2.15 (23.10)	0.51 (5.51)	0.63 (6.80)
Span	2.72 (8.94)	1.71 (5.61)	[c]0.83 (2.72)
Aspect ratio, $(Span)^2/Area$	2.5	2.5	[d]1.1
Theoretical mean aerodynamic chord, m (ft)	1.19 (3.92)	0.52 (1.70)	-------------
Exposed mean aerodynamic chord, m (ft)	1.05 (3.44)	0.44 (1.45)	0.82 (2.71)
Taper ratio	0.30	0.40	0.30
Dihedral angle, deg	0	0	-------------
Incidence angle, deg	0	--------------	-------------
Leading-edge sweep, deg	53.0	45.0	53.0
Quarter-chord sweep, deg	48.0	41.5	47.5
Theoretical root chord, m (ft)	1.68 (5.50)	0.70 (2.29)	[e]1.27 (4.17)
Exposed root chord, m (ft)	1.45 (4.76)	--------------	1.14 (3.75)
Tip chord, m (ft)	0.50 (1.65)	0.28 (0.92)	0.38 (1.25)

[a]Modified by connecting a straight line from a finite thickness trailing-edge tangent to the airfoil surface. Total thickness of trailing edge was 0.06 percent of local chord.

[b]Area between tip of vertical control surface to chord plane of horizontal control surface.

[c]Distance from tip of vertical control surface to top of fuselage.

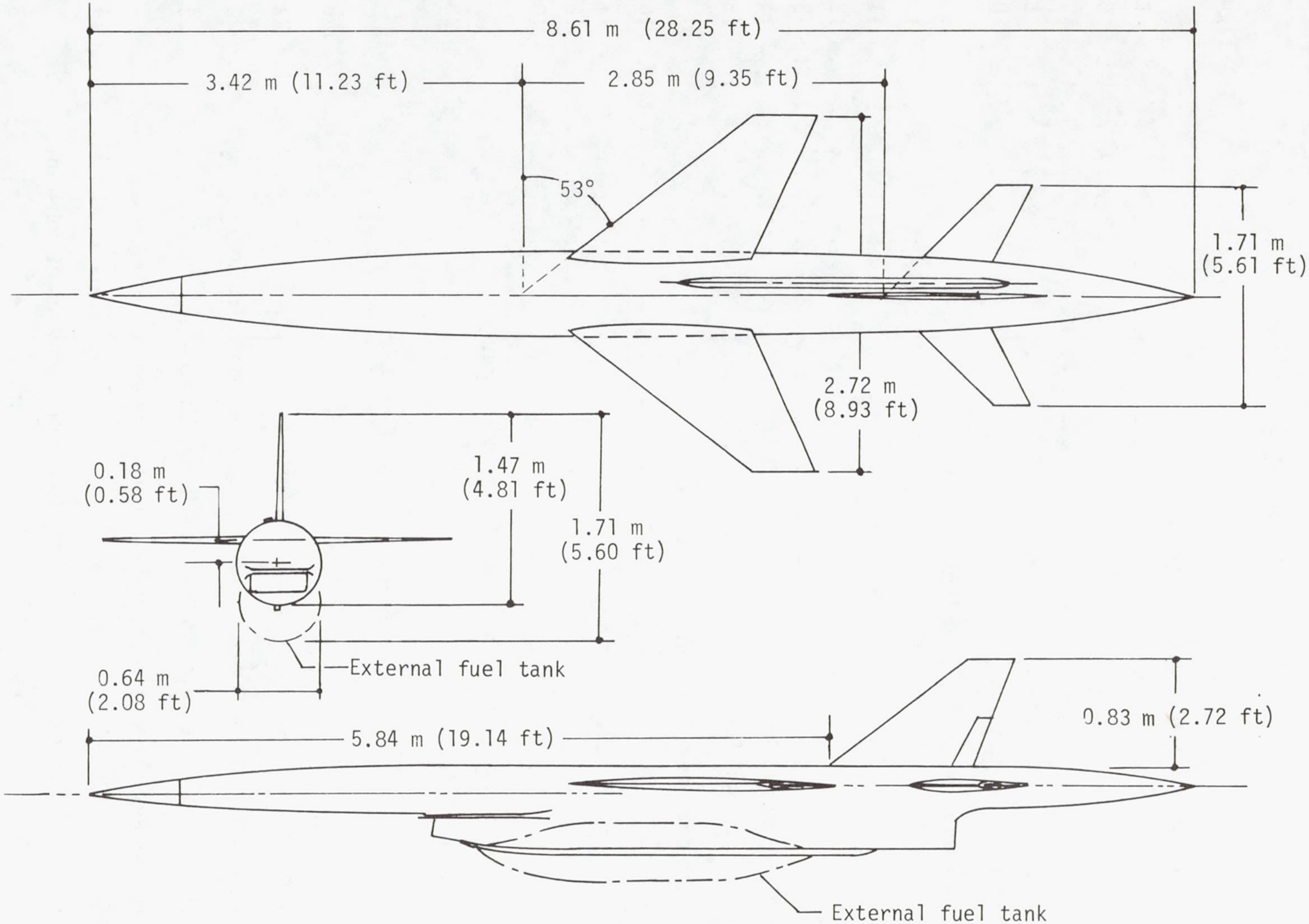
[d]Exposed surface aspect ratio.

[e]Distance from tip of vertical control surface to chord plane of horizontal control surface.

TABLE II.- INDEX OF DATA

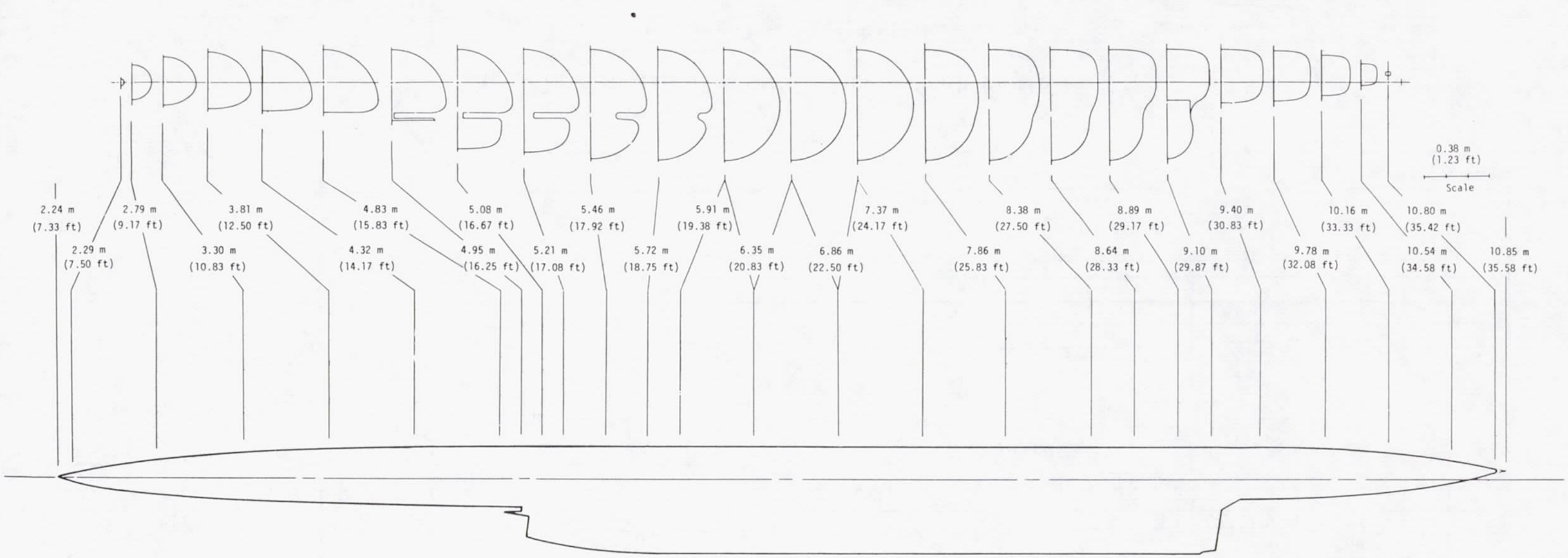
(a) Flight test conditions

(b) Analysis



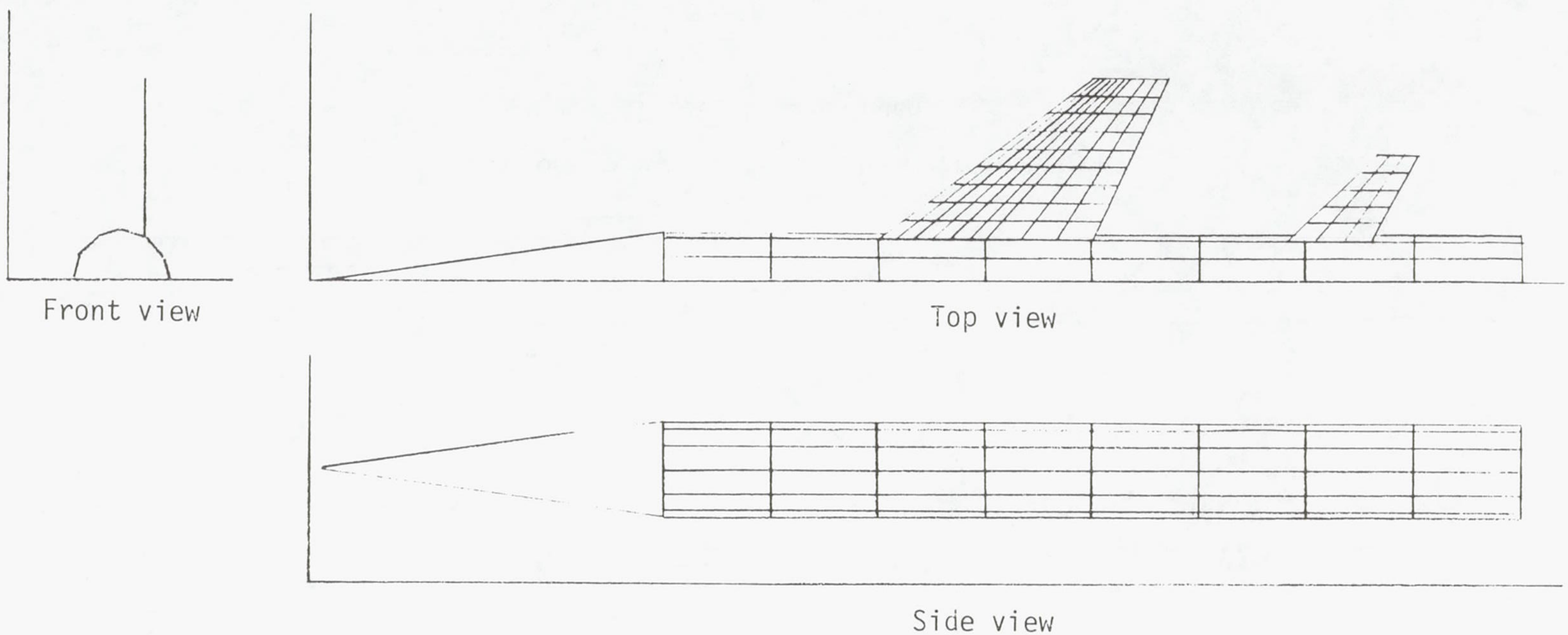
(a) General arrangement.

Figure 1.- Research vehicle.



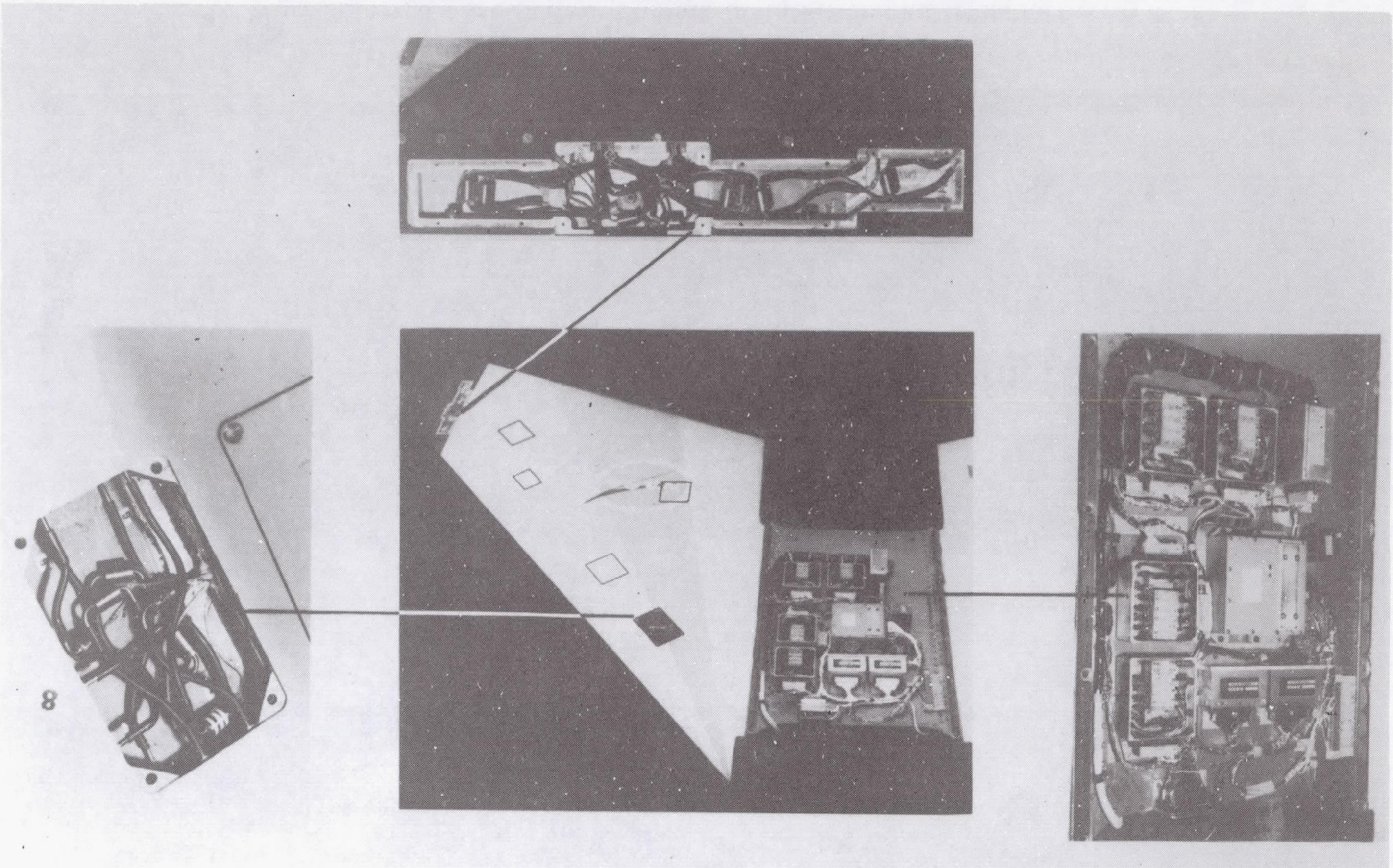
(b) Cross-sectional views of fuselage geometry.

Figure 1.- Continued.



(c) Mathematical model of research vehicle.

Figure 1.- Concluded.



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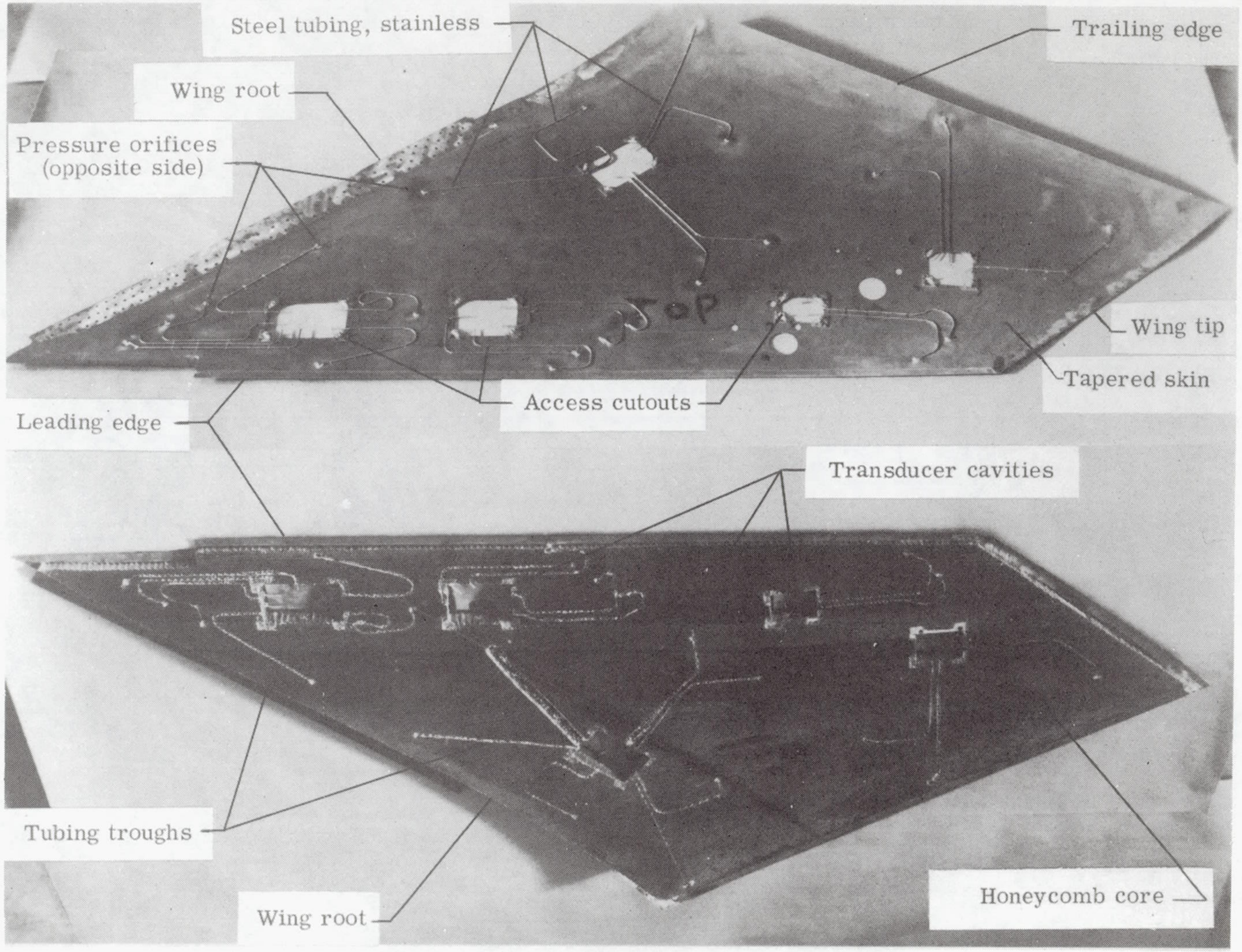
(a) Wing cavities with pressure transducers installed and instrumentation on center section.

Figure 2.- Research wing fabrication and instrumentation.



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(b) Wing skin and core showing tubing installation and transducer cavities.

Figure 2.- Concluded.

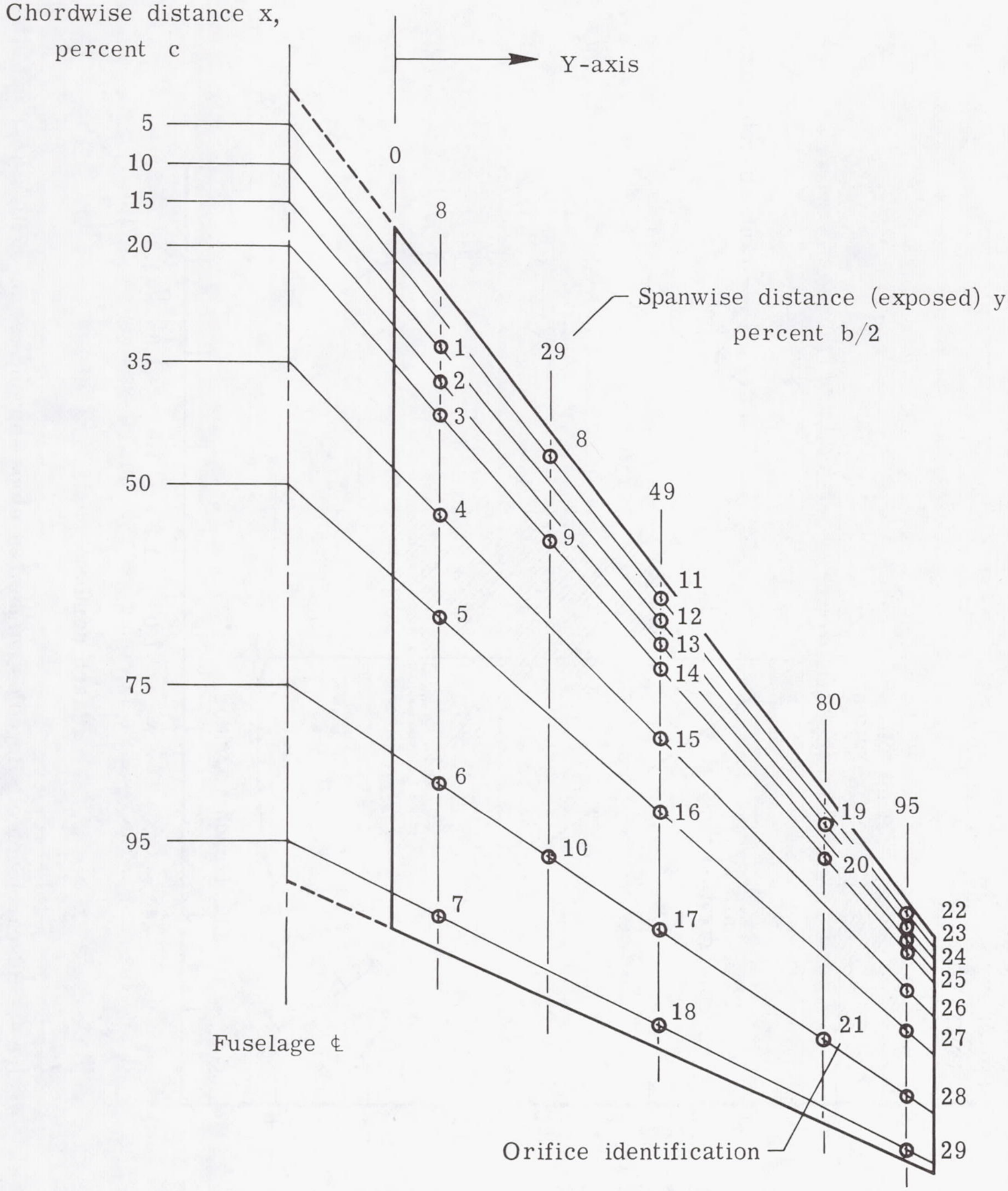


Figure 3.- Identification and location of wing pressure orifices.

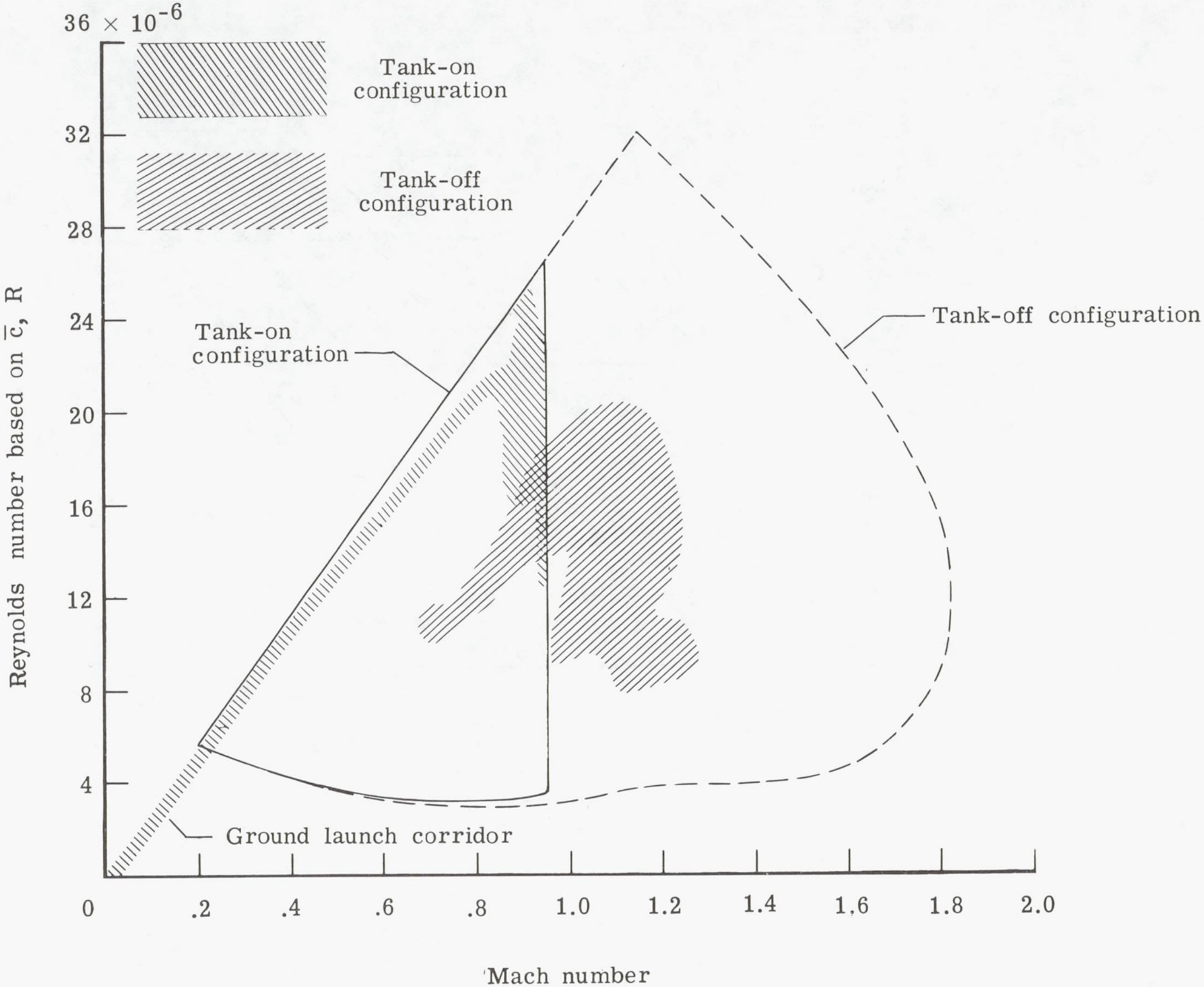
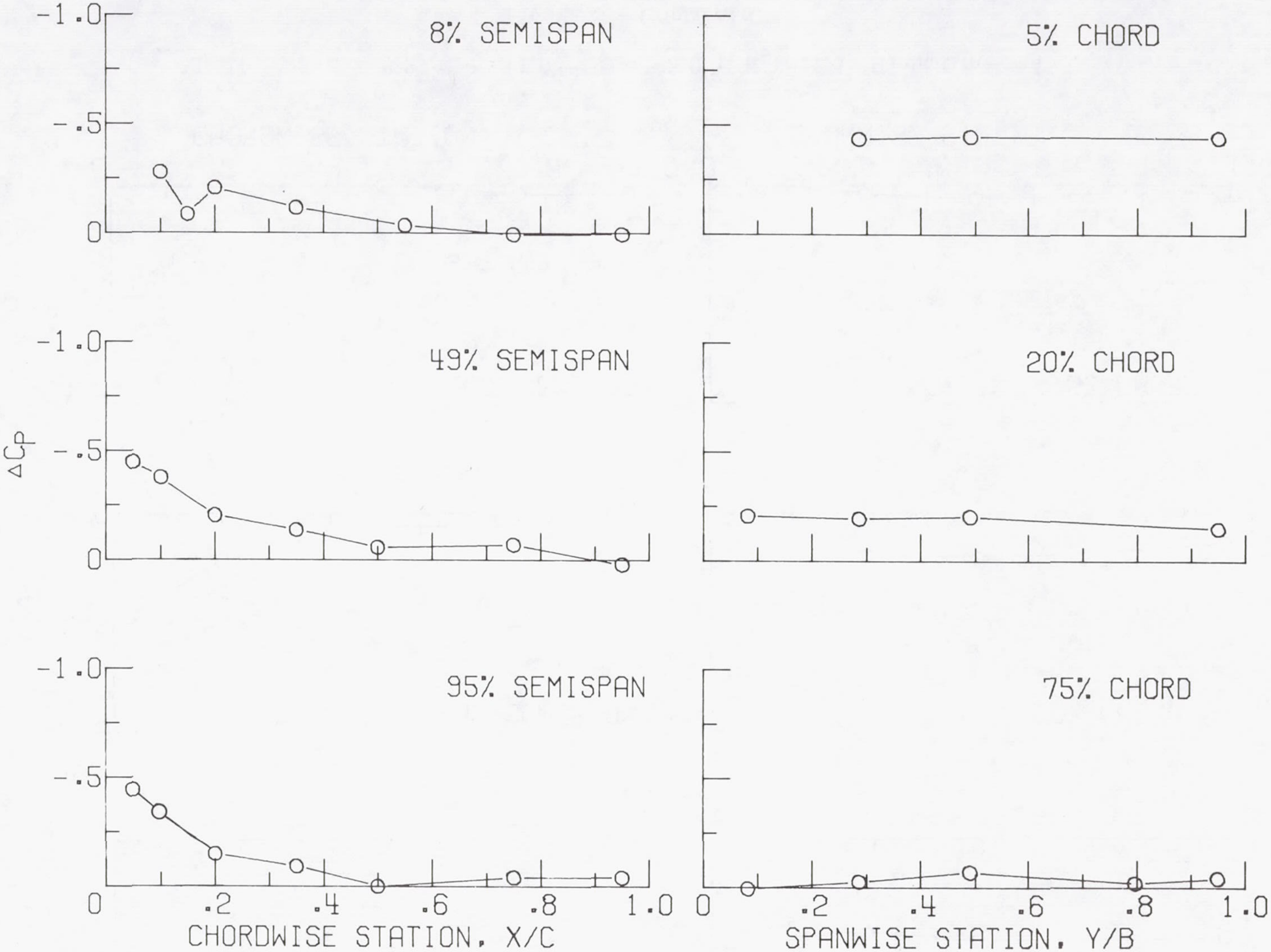
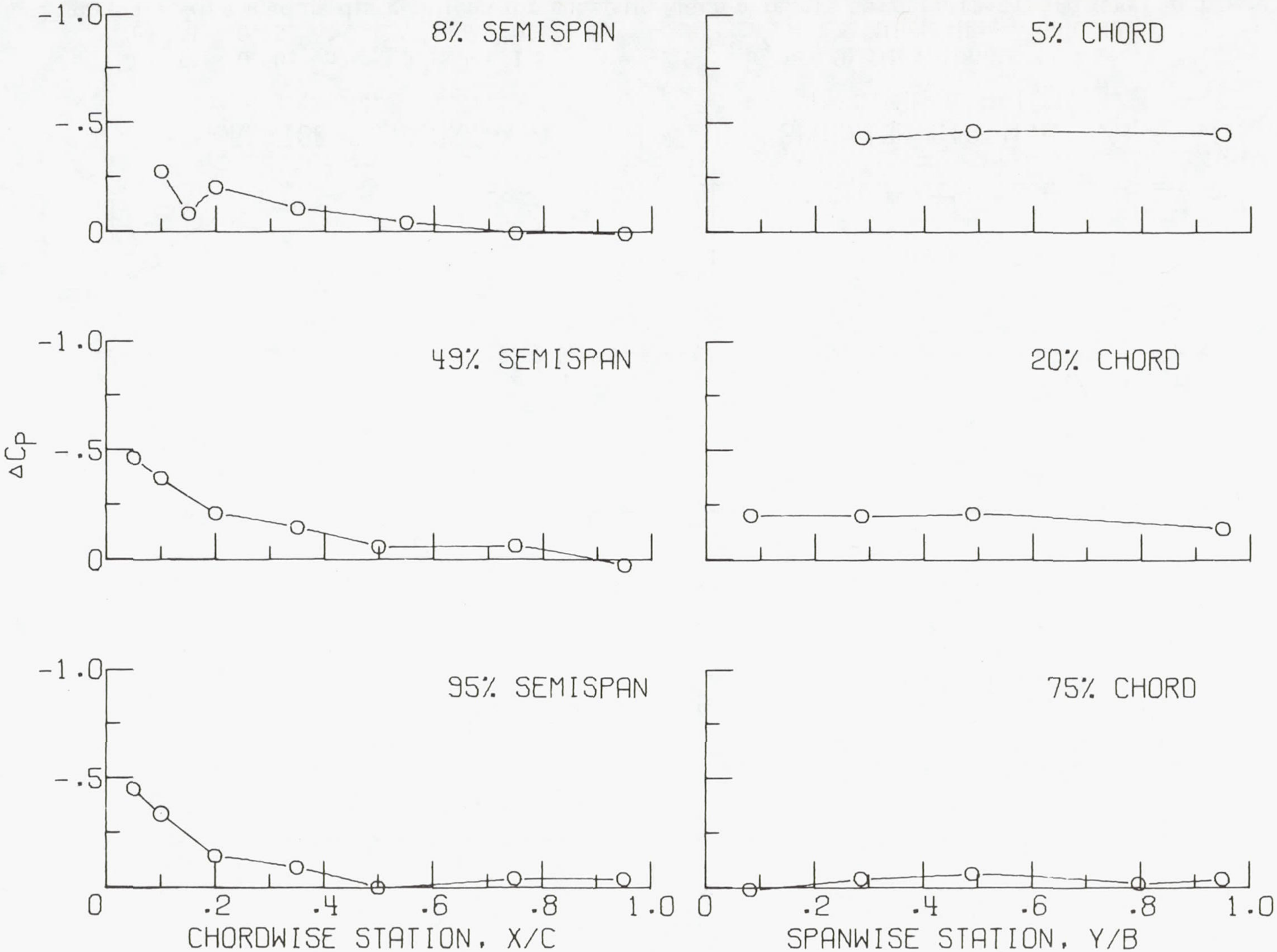


Figure 4.- Research vehicle Reynolds number envelope showing region of flight test.



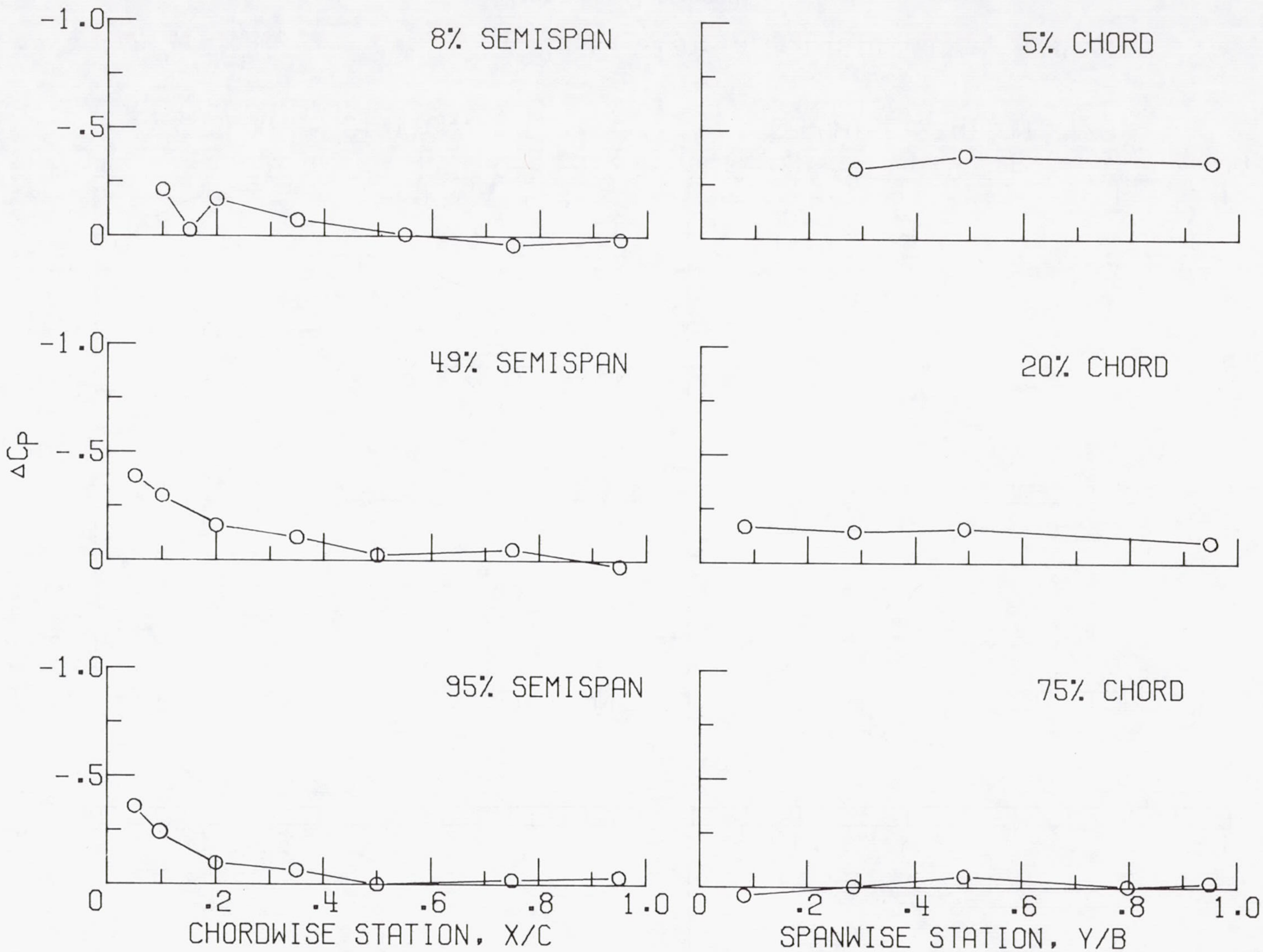
(a) M = 0.59; α = 3.3°; θ = 1.5°; ϕ = -2.9°; a_z = 0.9; flight time = 41.9 sec.

Figure 5.- Wing loading distributions for subsonic Mach numbers during straight and level flight for tank-on configuration.



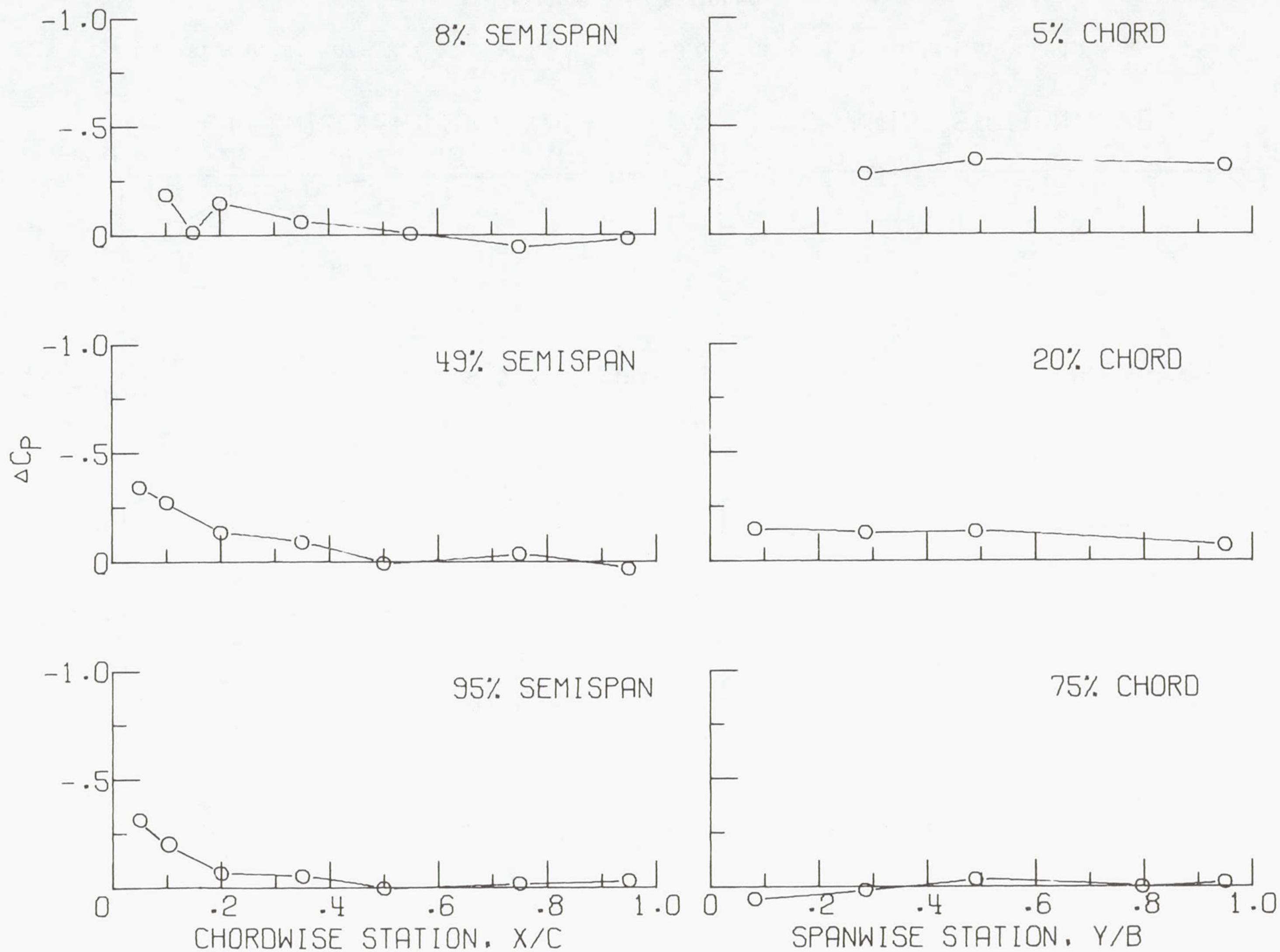
(b) M = 0.63; $\alpha = 3.3^{\circ}$; $\theta = 1.6^{\circ}$; $\phi = -3.0^{\circ}$; $a_z = 1.1$; flight time = 45.6 sec.

Figure 5.- Continued.



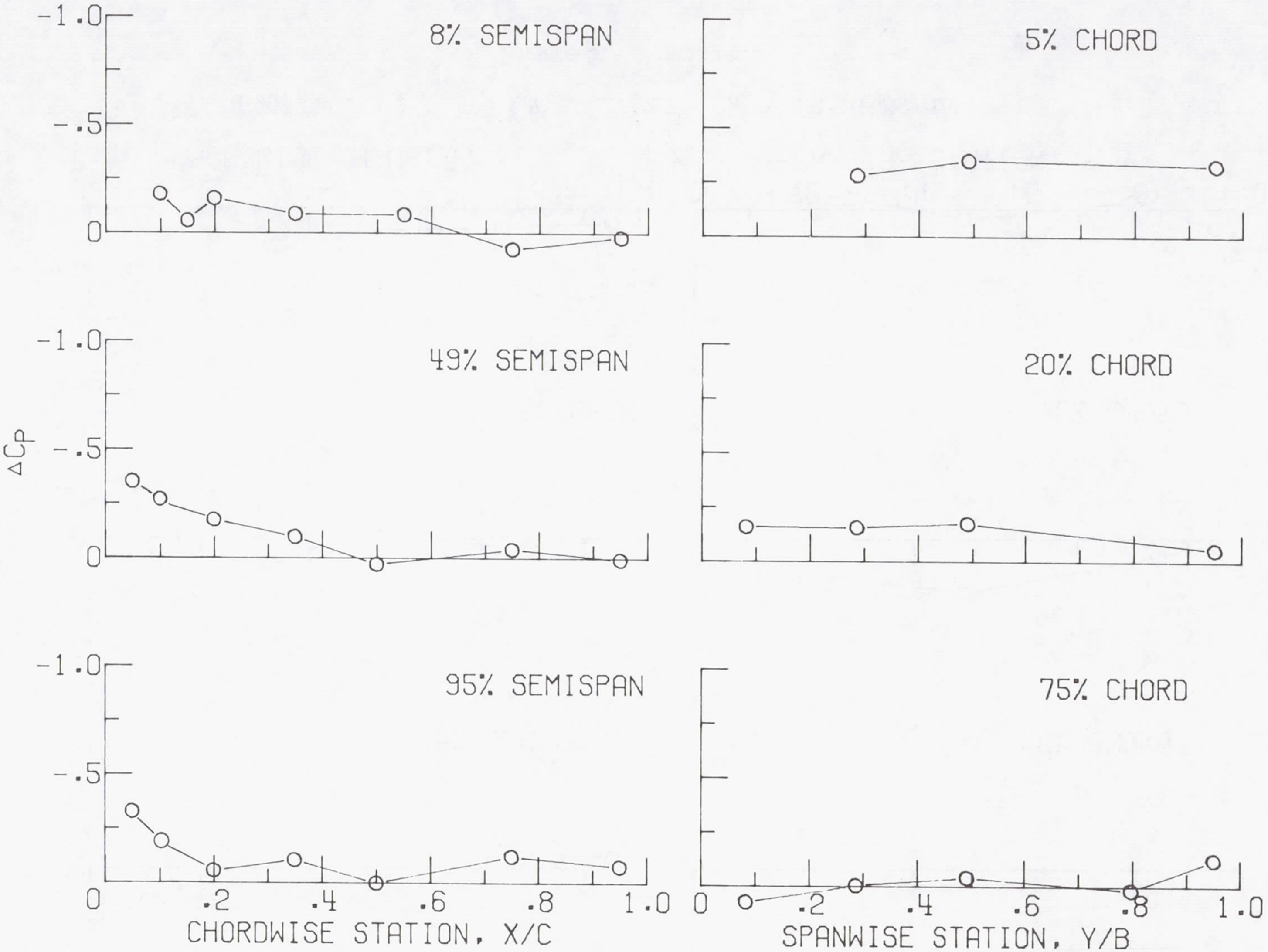
(c) M = 0.73; α = 2.7°; θ = 3.8°; ϕ = -3.6°; a_z = 1.1; flight time = 64.0 sec.

Figure 5.- Continued.



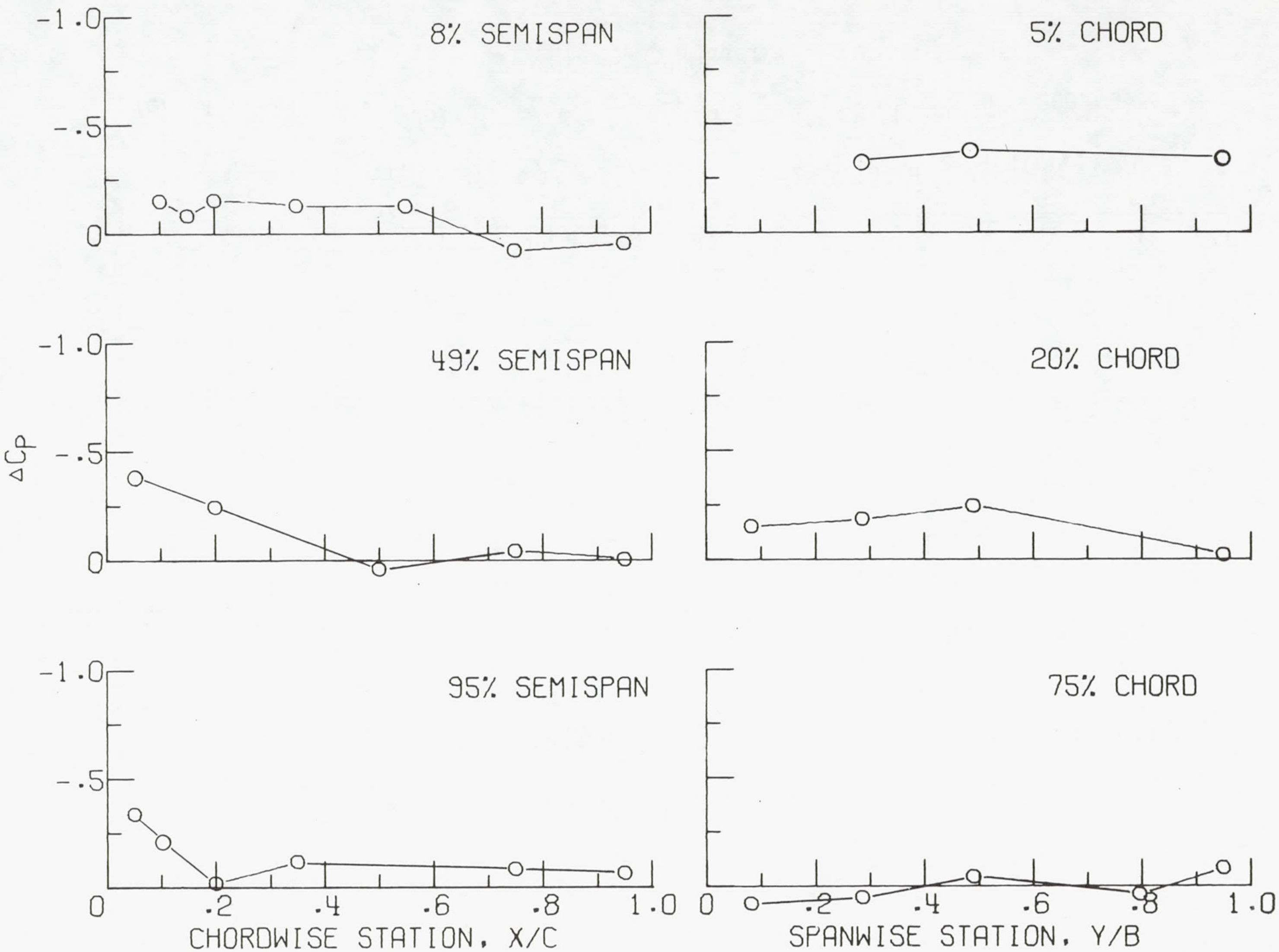
(d) M = 0.80; α = 2.3°; θ = 5.1°; ϕ = -3.0°; a_z = 1.1; flight time = 92.0 sec.

Figure 5.- Continued.



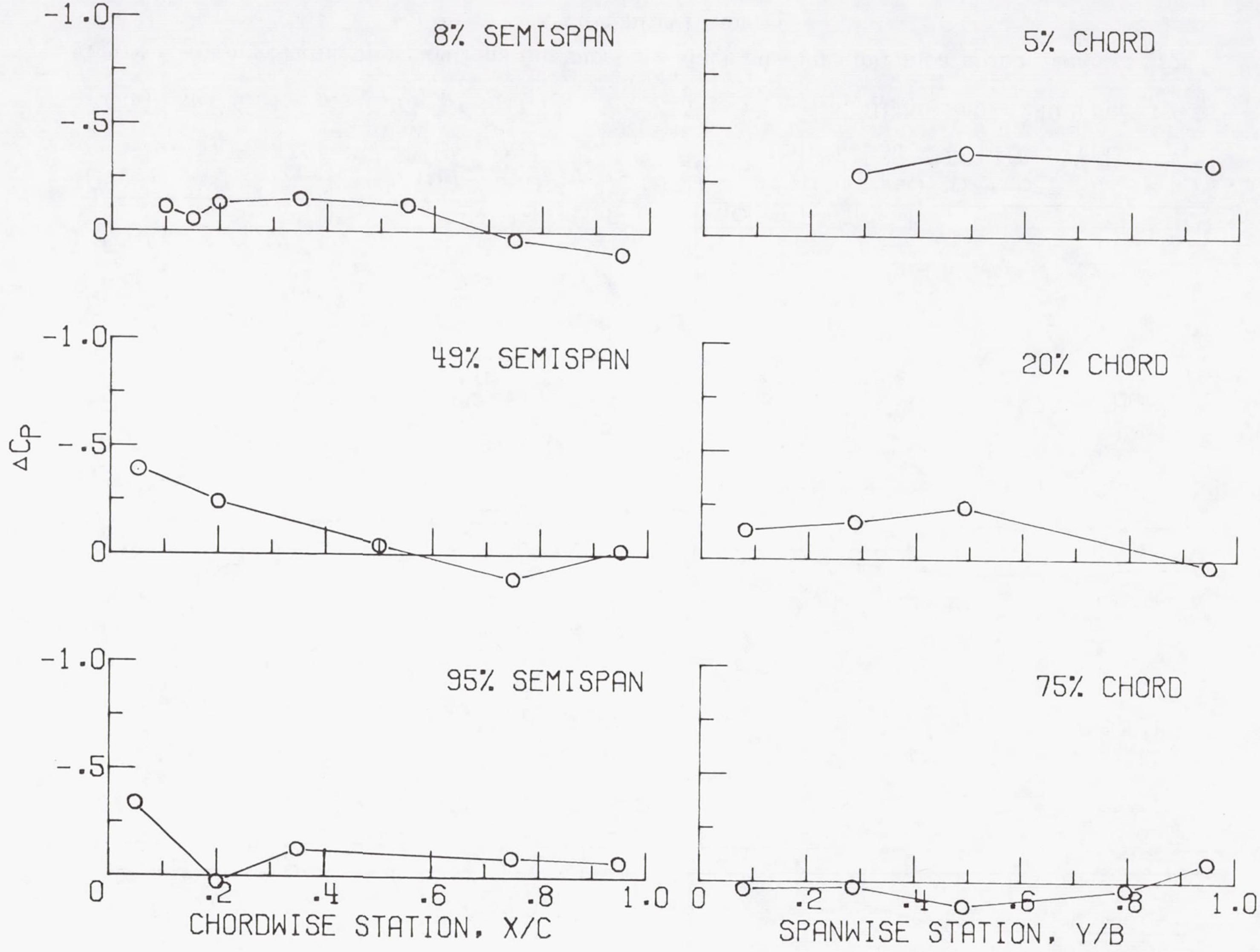
(e) M = 0.84; α = 2.3°; θ = 2.7°; ϕ = -4.5°; a_z = 1.1; flight time = 296.9 sec.

Figure 5.- Continued.



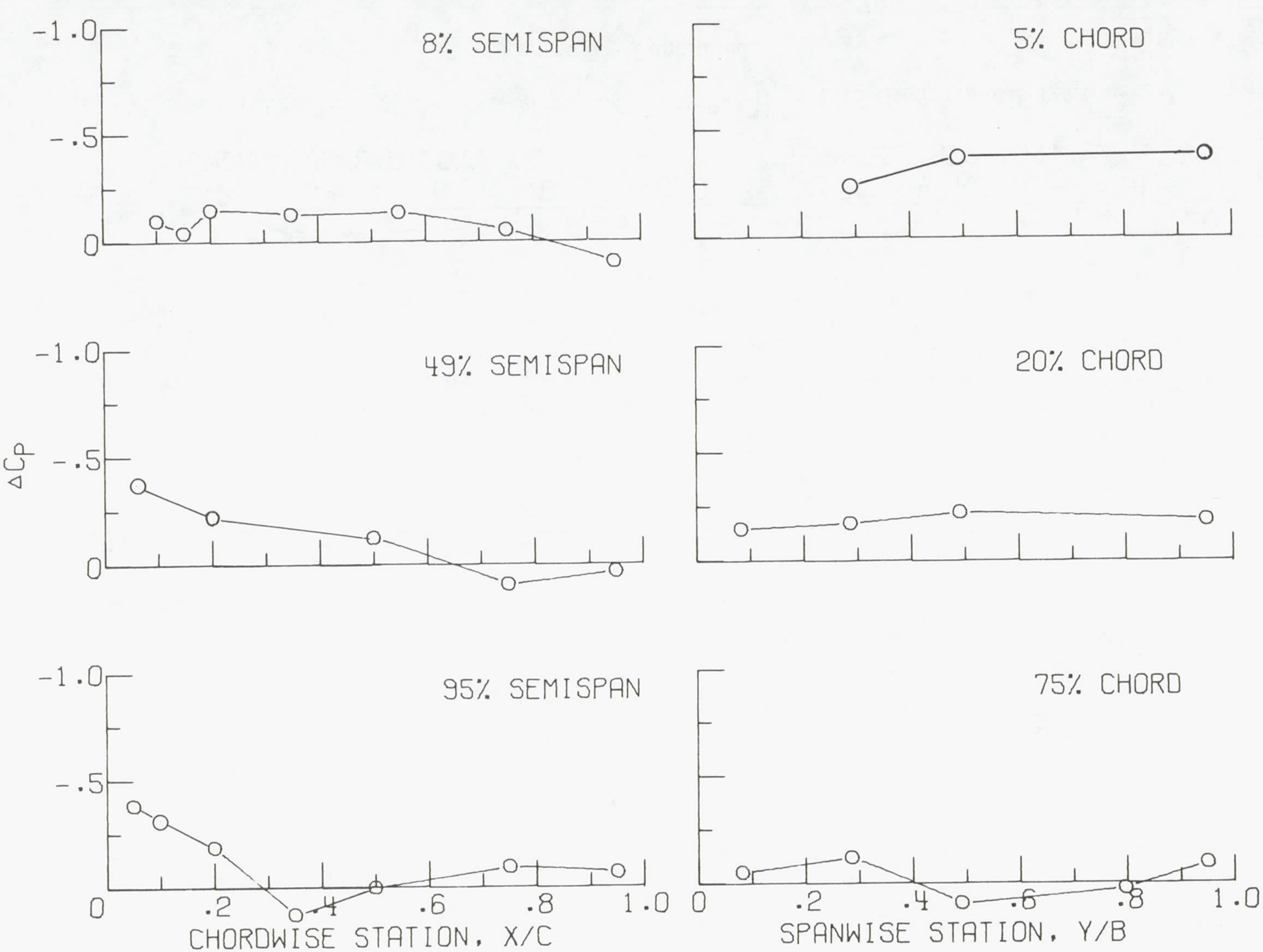
(f) M = 0.90; α = 2.3°; θ = 1.7°; ϕ = 2.7°; a_z = 1.1; flight time = 426.0 sec.

Figure 5.- Continued.



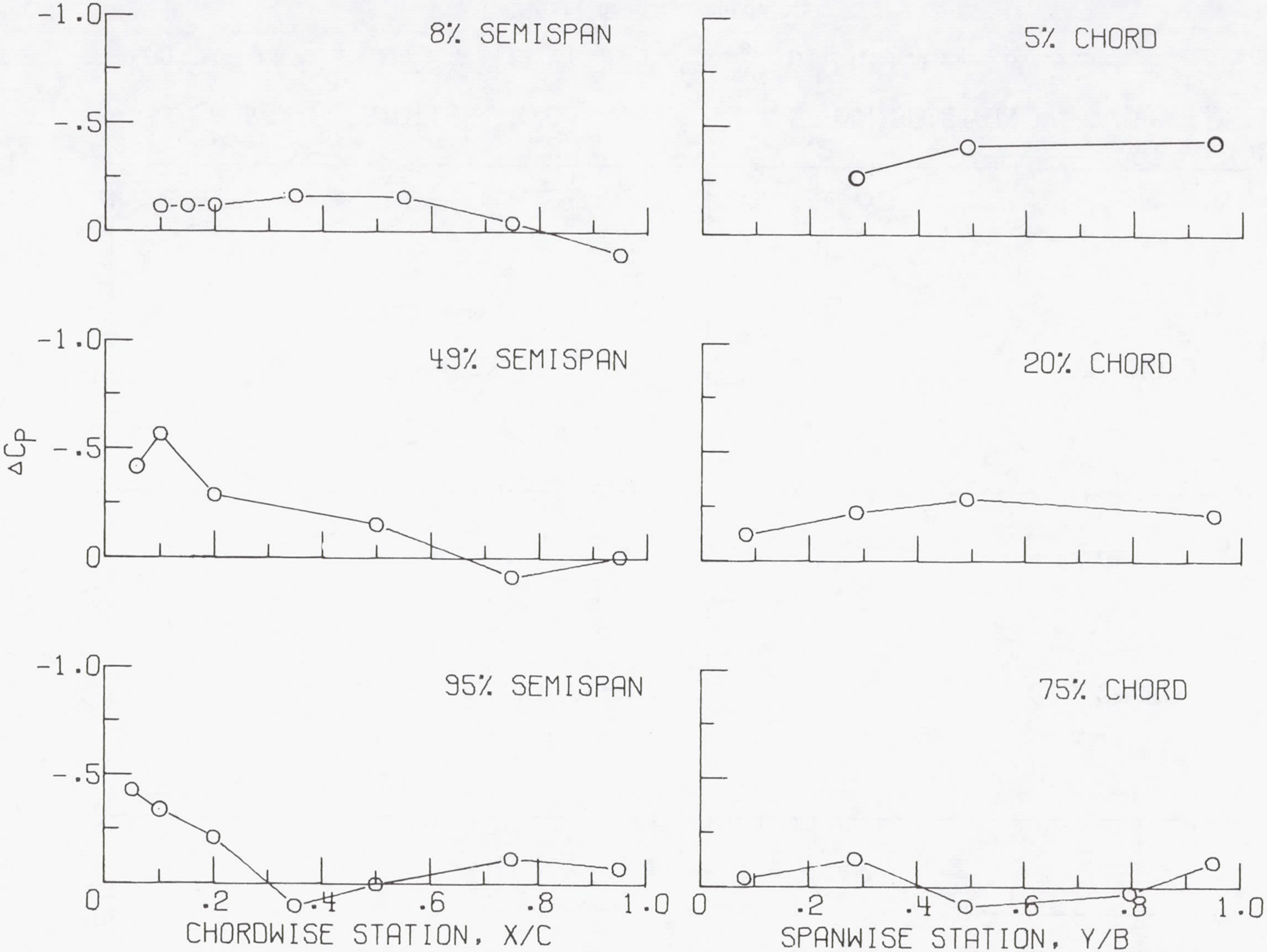
(g) M = 0.92; α = 2.1°; θ = -0.2°; ϕ = -5.3°; a_z = 1.1; flight time = 524.9 sec.

Figure 5.- Concluded.



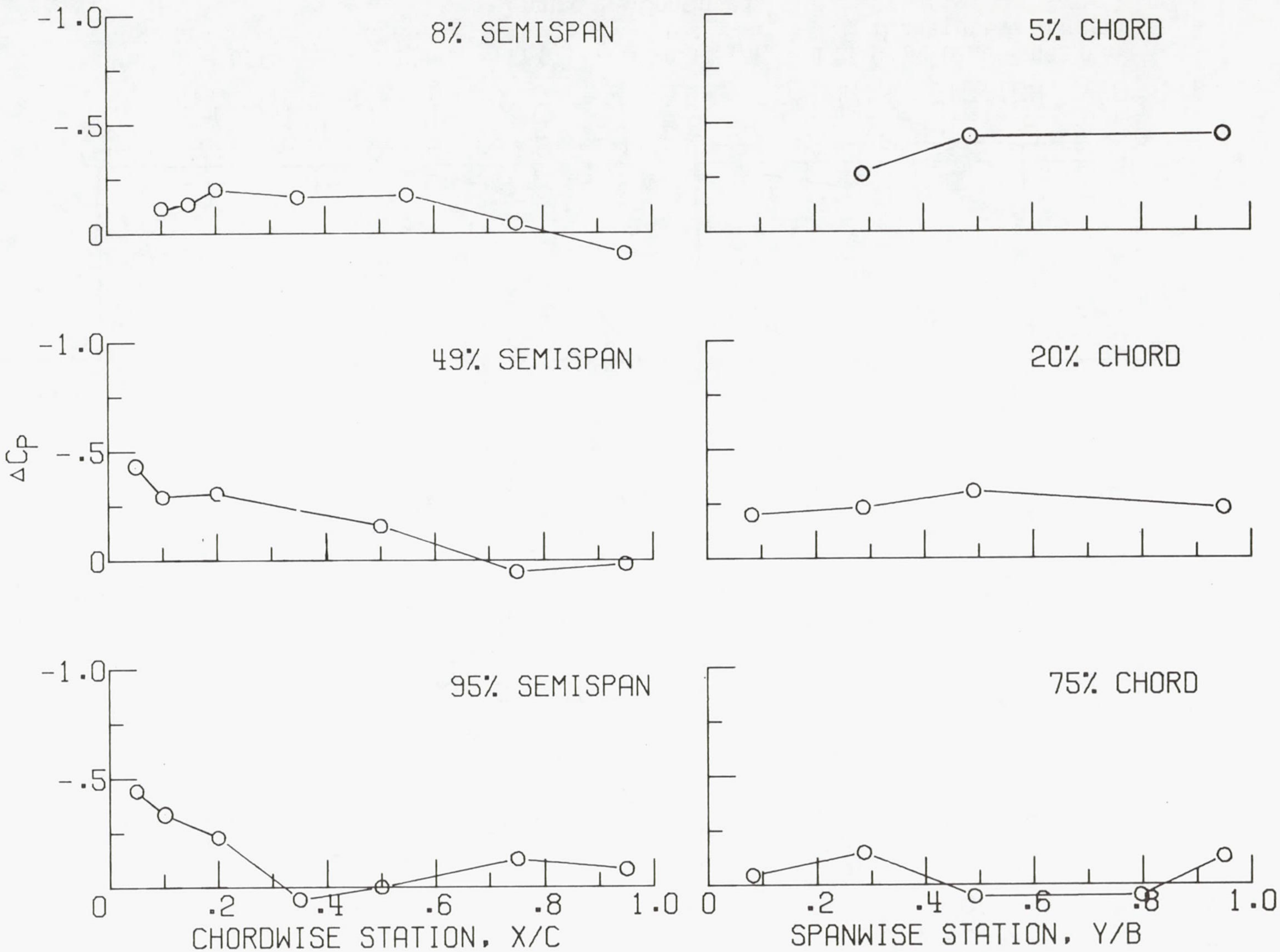
(a) M = 0.94; α = 1.9°; θ = 11.7°; ϕ = -5.7°; a_z = 1.3; flight time = 549.9 sec.

Figure 6.- Wing loading distributions for subsonic Mach numbers during a climb maneuver for tank-on configuration.



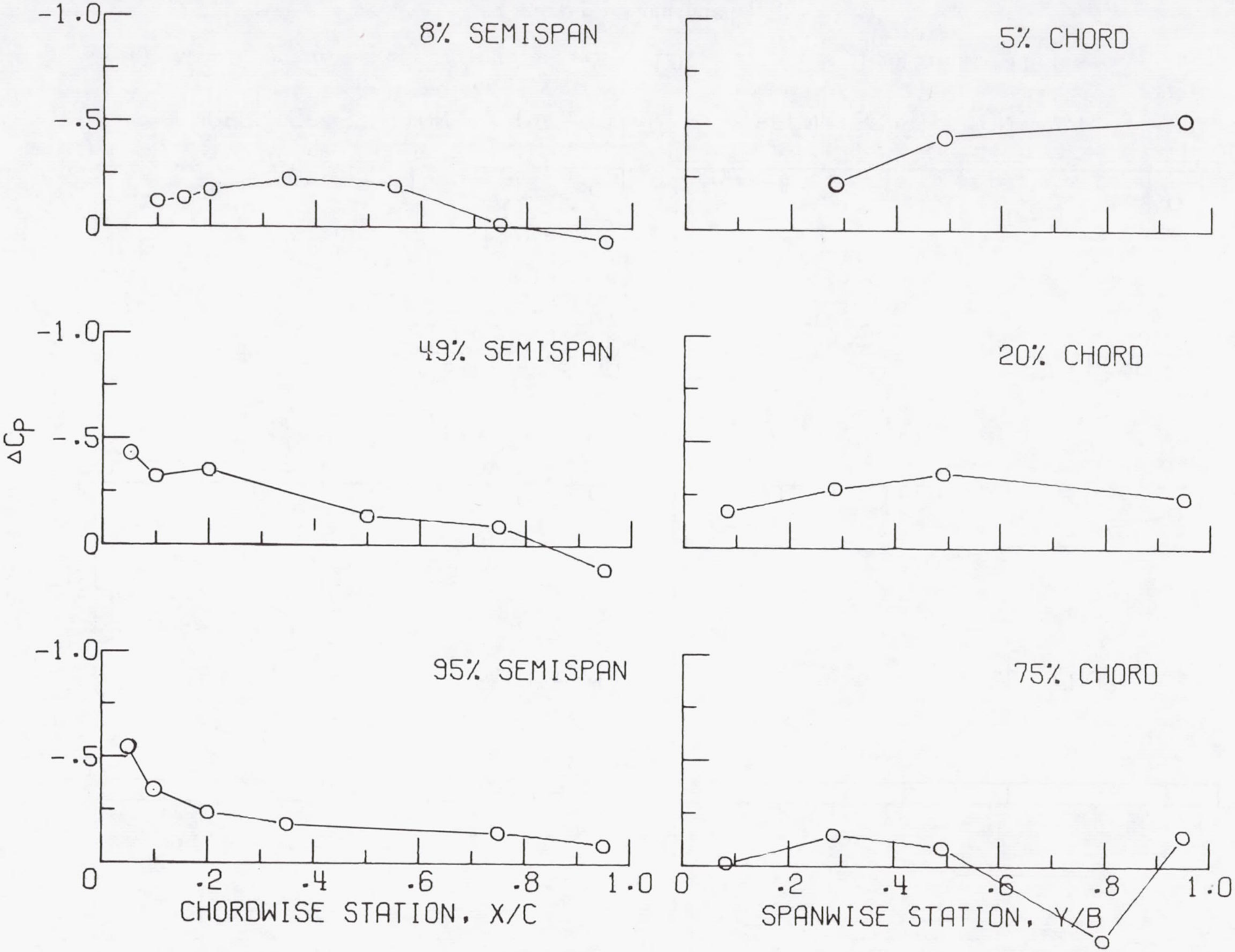
(b) M = 0.94; α = 2.2°; θ = 11.9°; ϕ = -0.5°; a_z = 1.2; flight time = 682.0 sec.

Figure 6.- Continued.



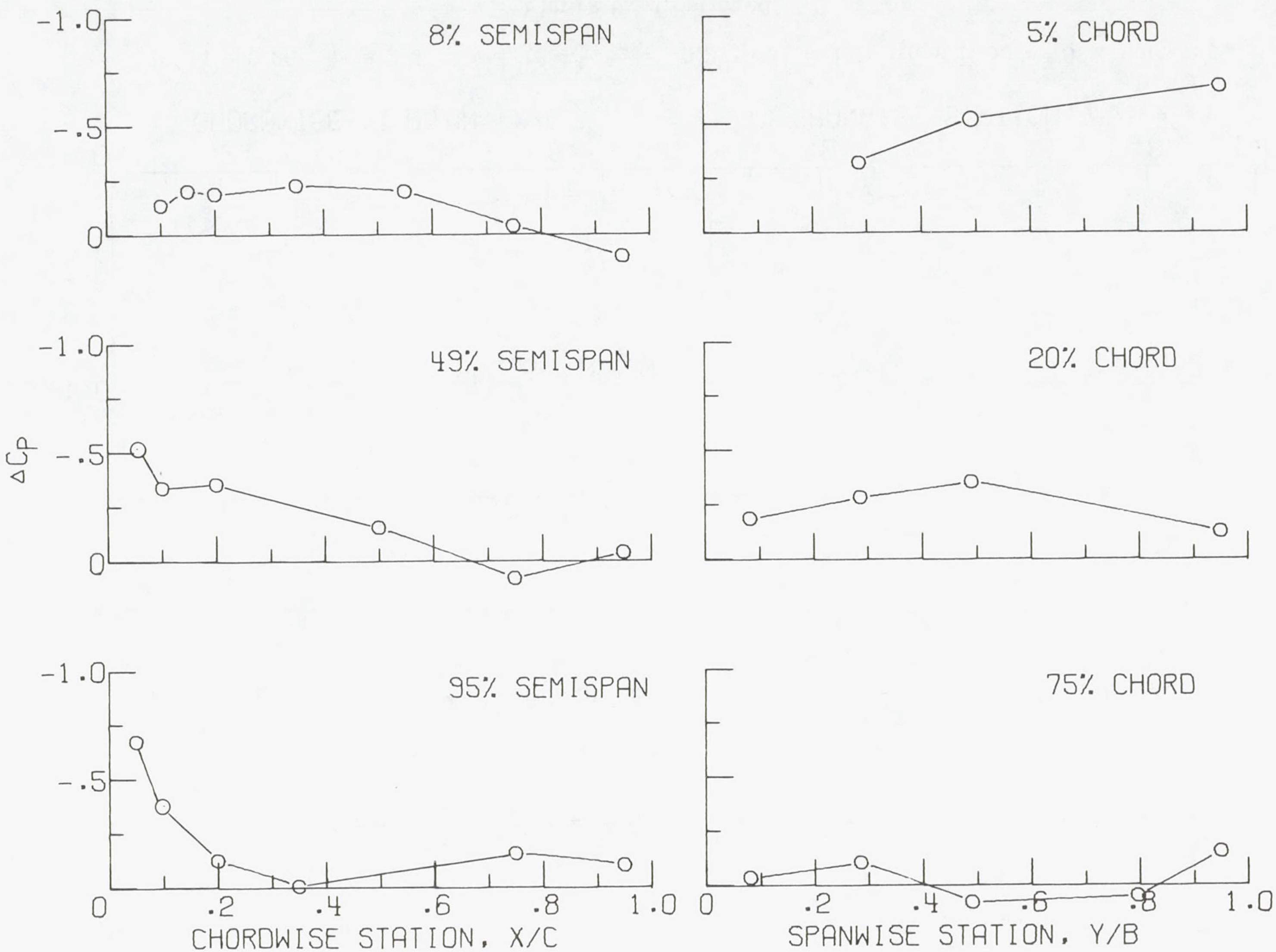
(c) M = 0.95; $\alpha = 2.2^{\circ}$; $\theta = 13.3^{\circ}$; $\phi = 0.6^{\circ}$; $a_z = 1.11$; flight time = 698.9 sec.

Figure 6.- Continued.



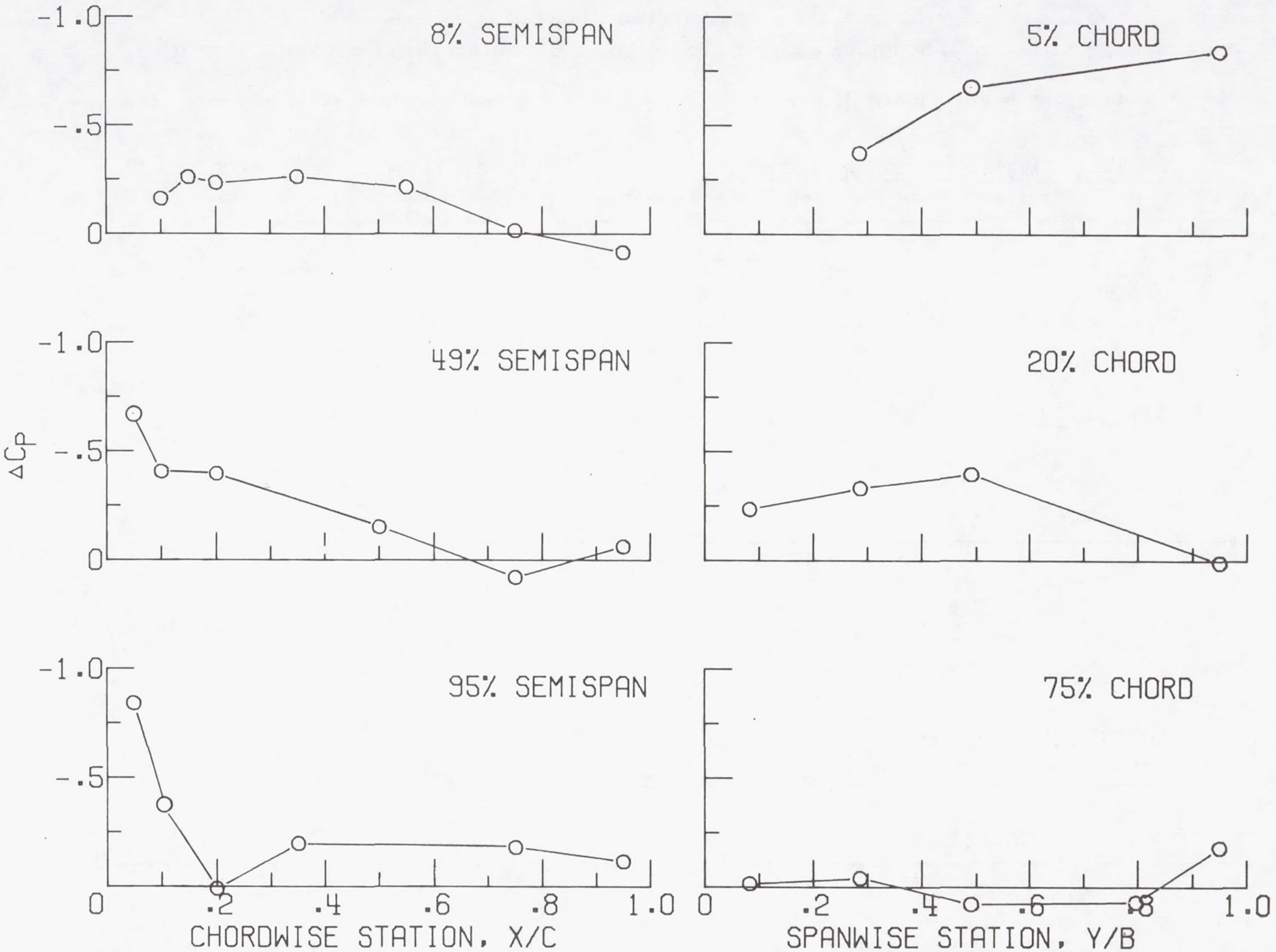
(d) M = 0.96; α = 2.3°; θ = 13.4°; ϕ = -0.2°; a_z = 1.1; flight time = 709.9 sec.

Figure 6.- Continued.



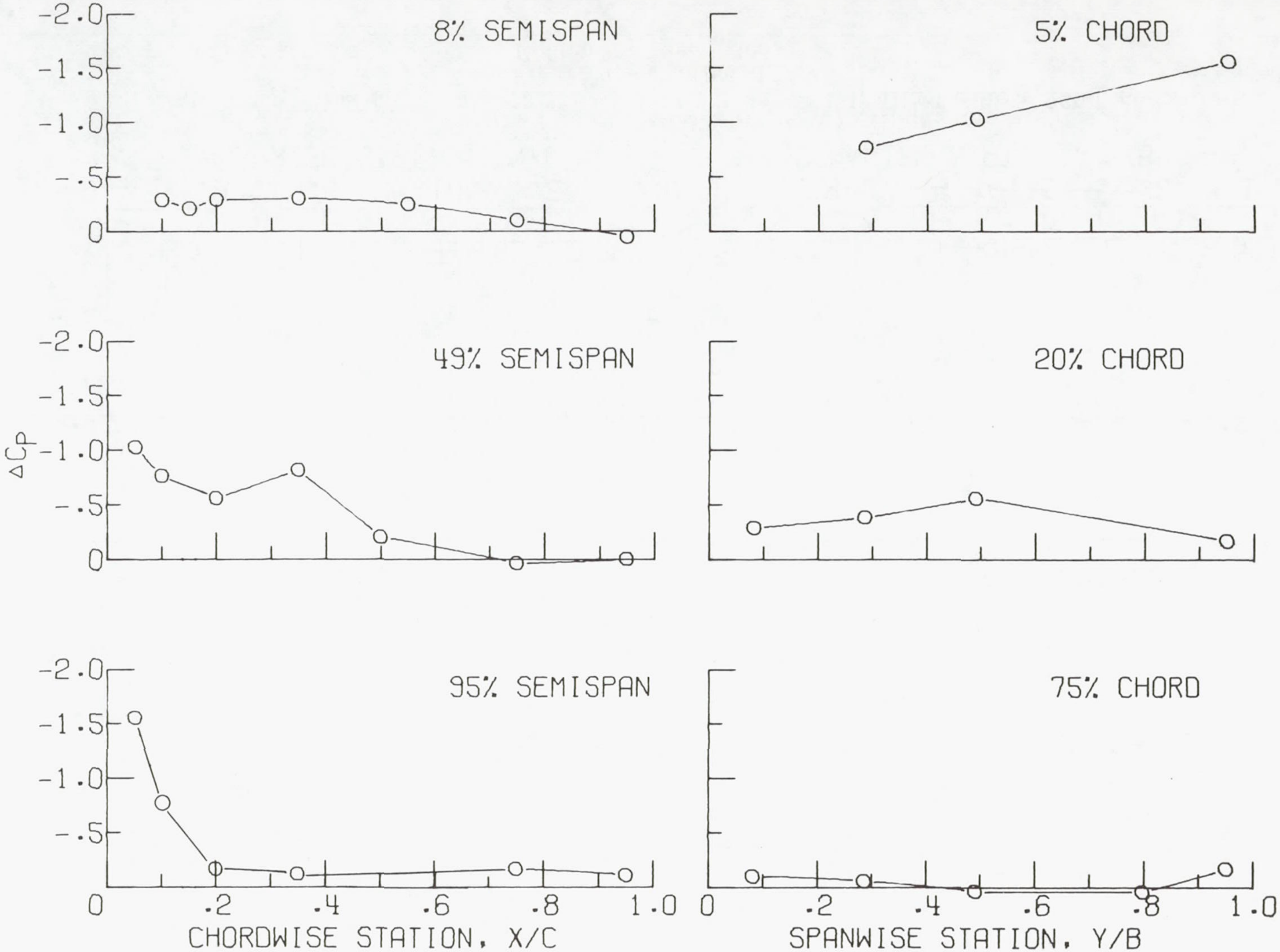
(e) M = 0.95; α = 2.6°; θ = 13.3°; ϕ = -1.0°; a_z = 1.1; flight time = 719.9 sec.

Figure 6.- Continued.



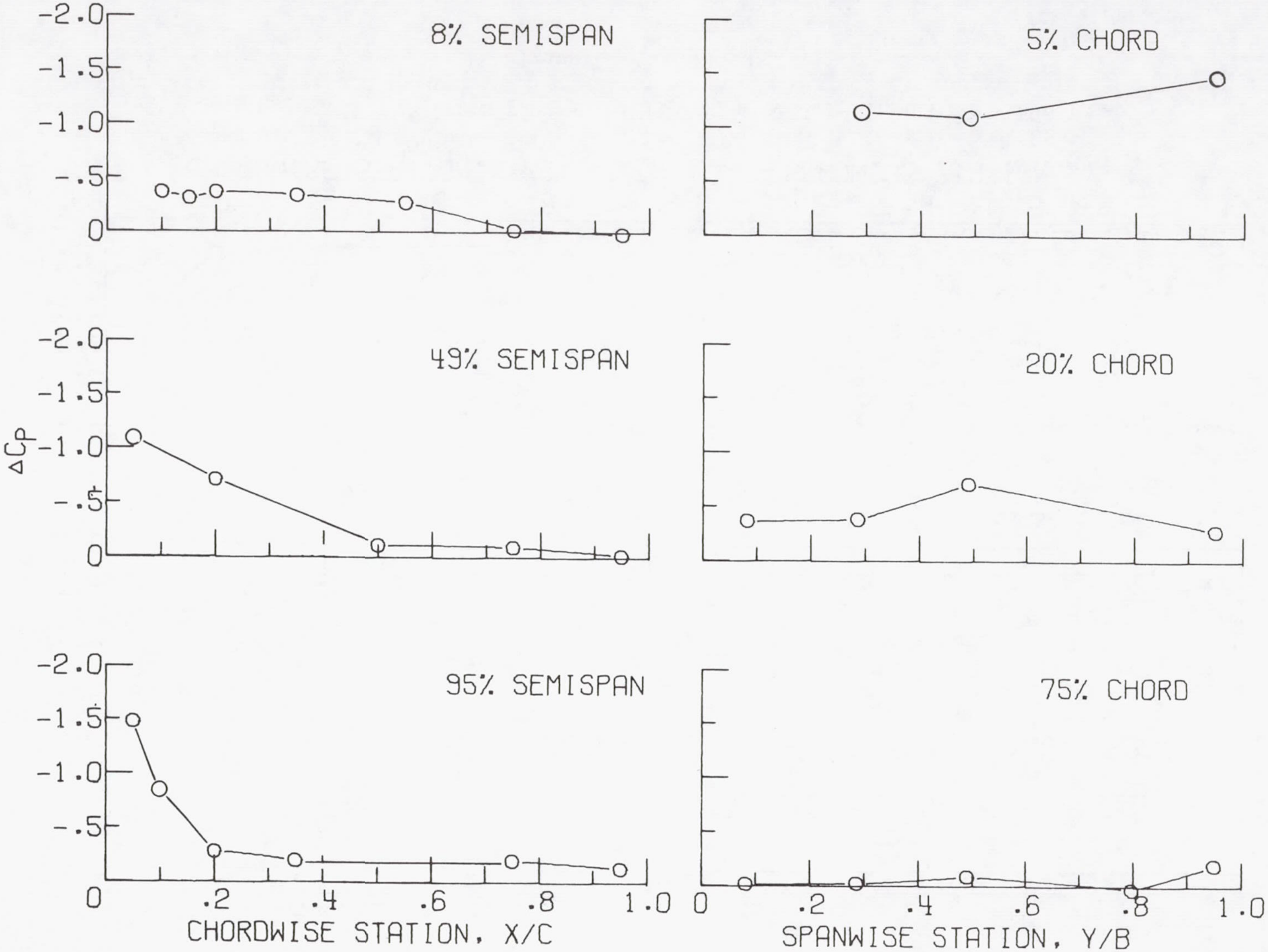
(f) $M = 0.94$; $\alpha = 3.0^{\circ}$; $\theta = 13.3^{\circ}$; $\phi = -1.2^{\circ}$; $a_z = 1.1$; flight time = 730.0 sec.

Figure 6.- Concluded.



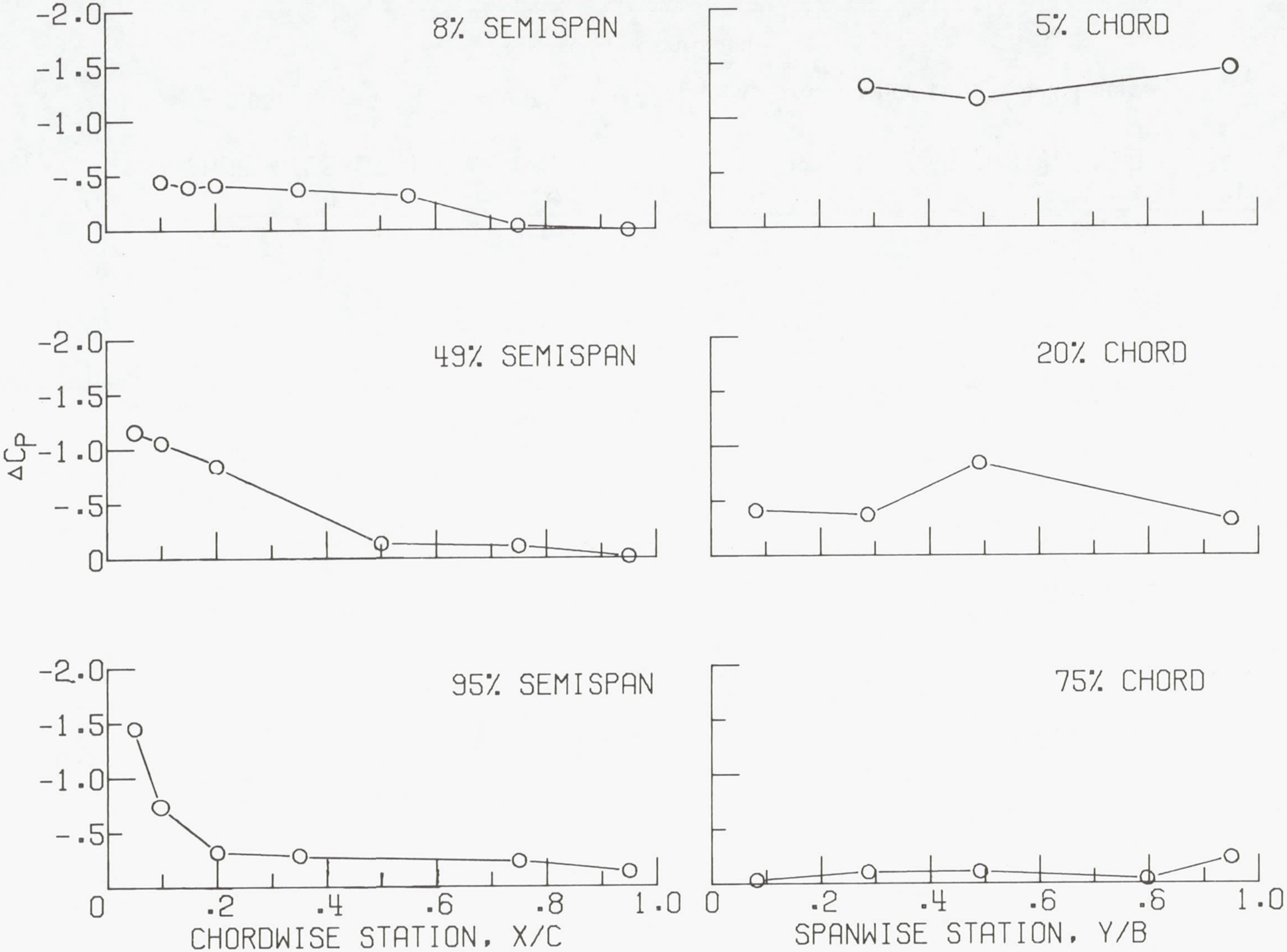
(a) M = 0.91; α = 4.6°; θ = 3.4°; ϕ = 71.8°; a_z = 3.3; flight time = 388.1 sec.

Figure 7.- Wing loading distributions for subsonic Mach numbers during a right-turn maneuver for tank-on configuration.



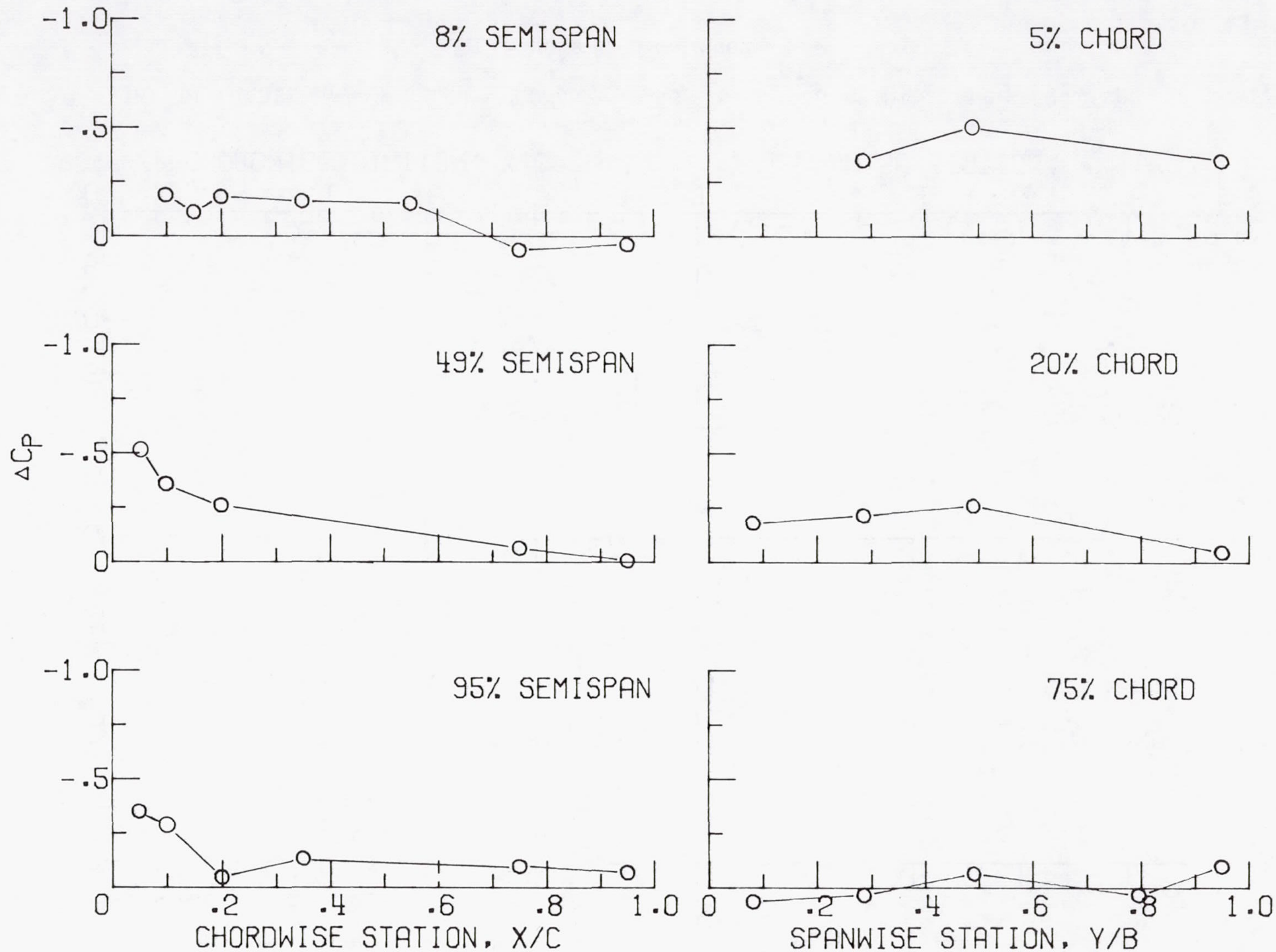
(b) M = 0.90; α = 5.3°; θ = 3.9°; ϕ = 83.4°; a_z = 3.7; flight time = 392.1 sec.

Figure 7.- Continued.



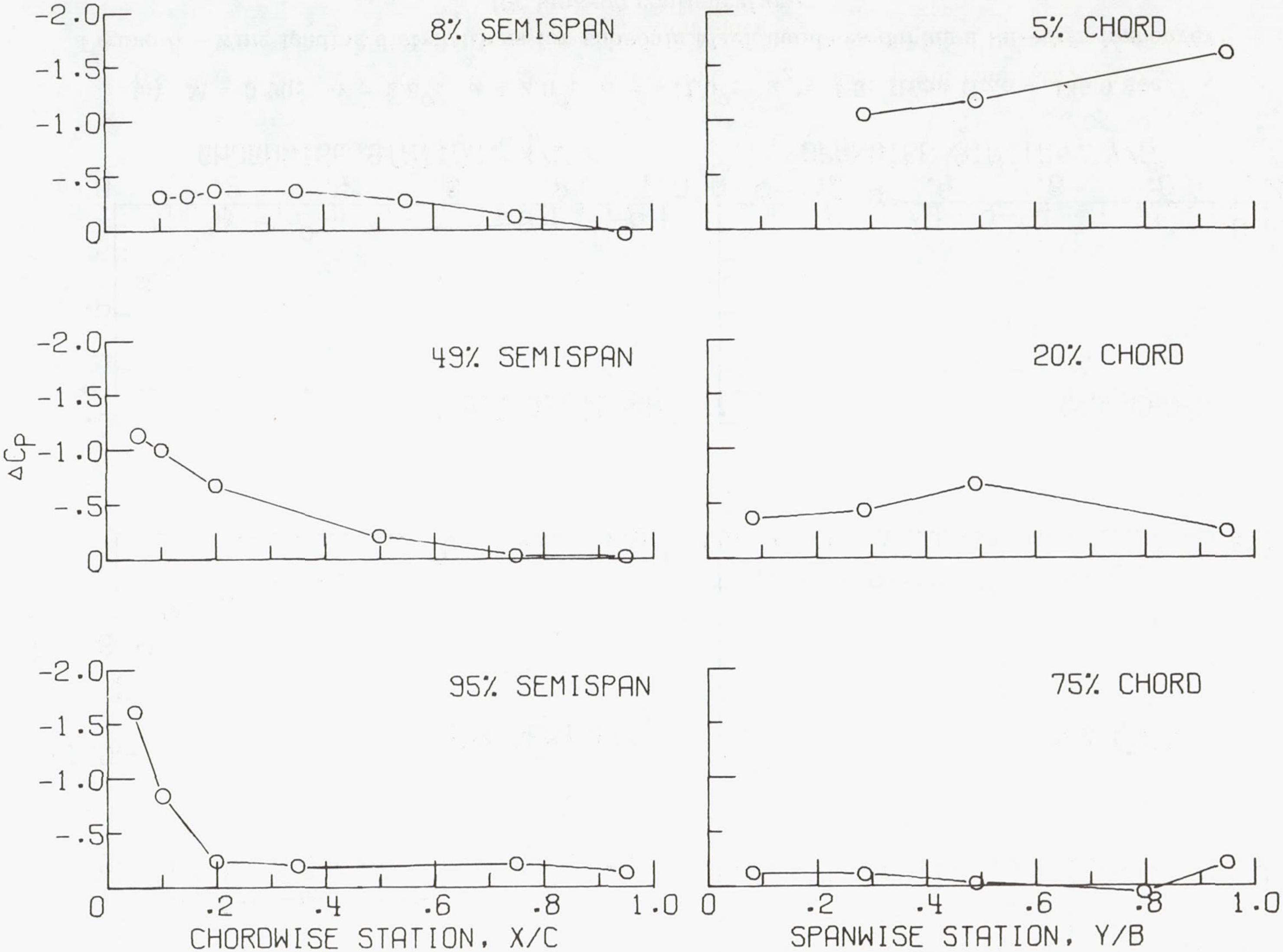
(c) M = 0.89; α = 6.1°; θ = 2.3°; ϕ = 89.9°; a_z = 4.1; flight time = 396.1 sec.

Figure 7.- Concluded.



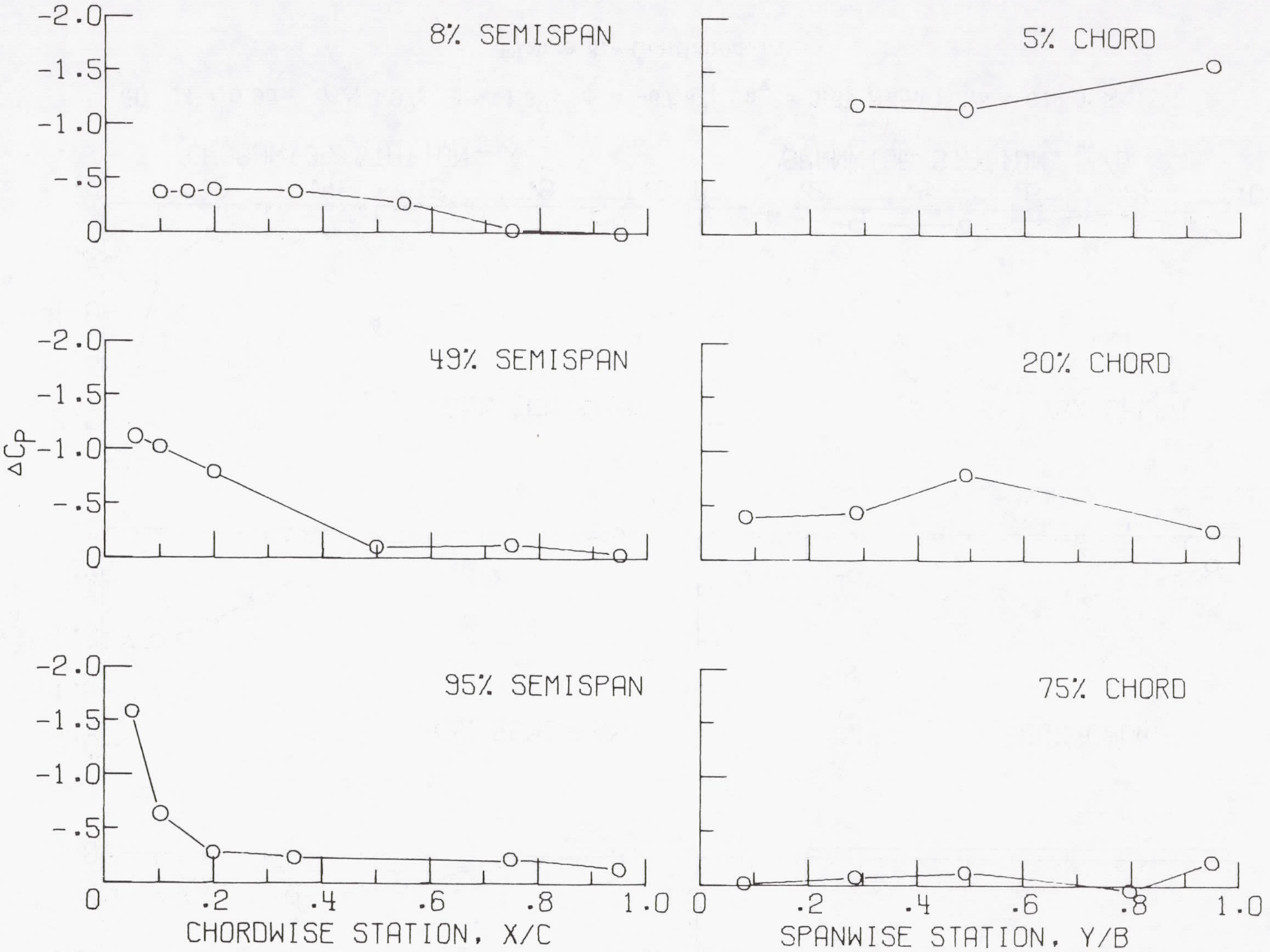
(a) M = 0.90; α = 2.8^{o}; θ = 2.0^{o}; ϕ = -41.0^{o}; a_z = 1.5; flight time = 436.0 sec.

Figure 8.- Wing loading distributions for subsonic Mach numbers during a left-turn maneuver for tank-on configuration.



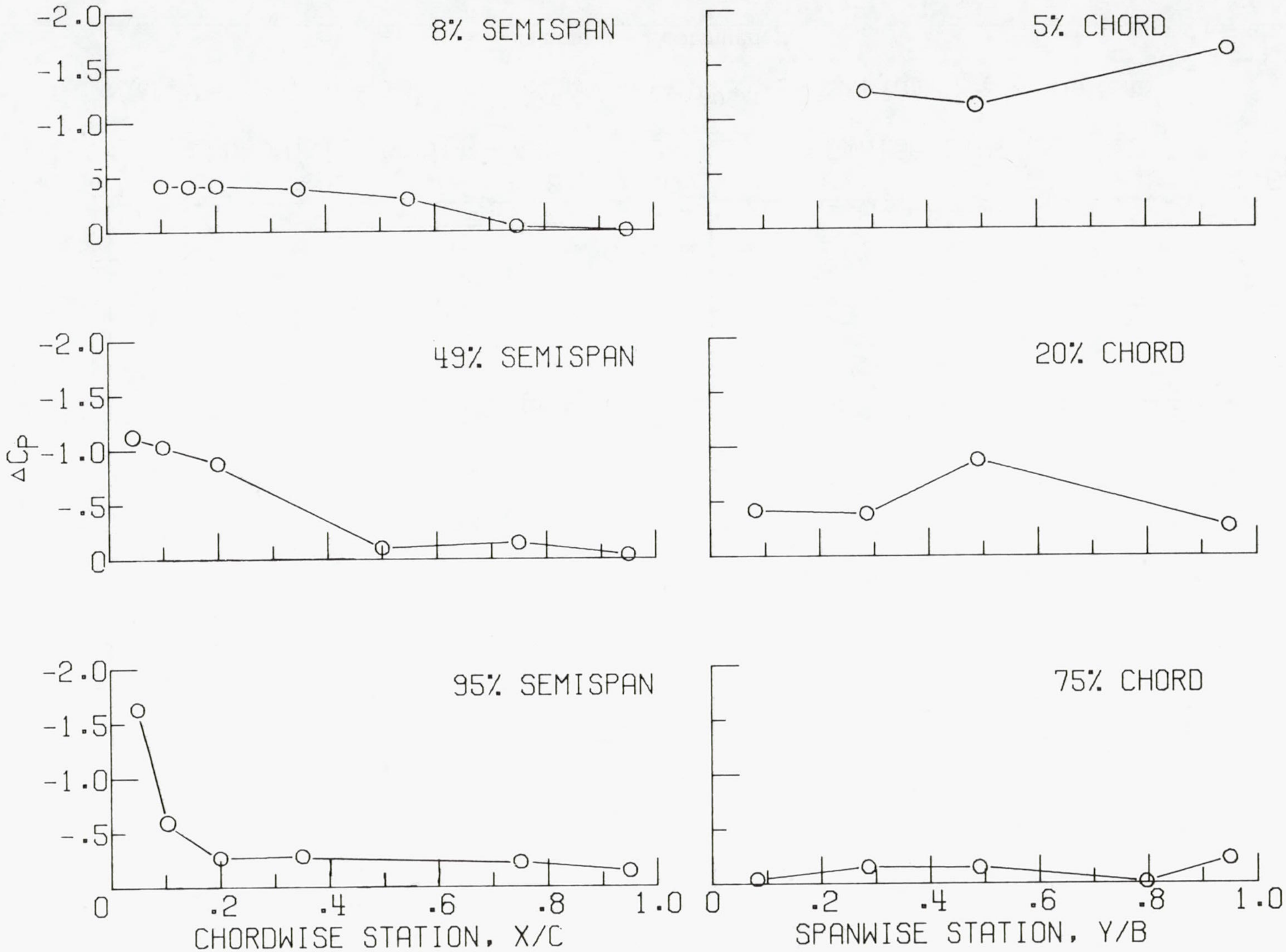
(b) M = 0.93; α = 4.9°; θ = 2.0°; ϕ = -56.8°; a_z = 3.5; flight time = 603.7 sec.

Figure 8.- Continued.



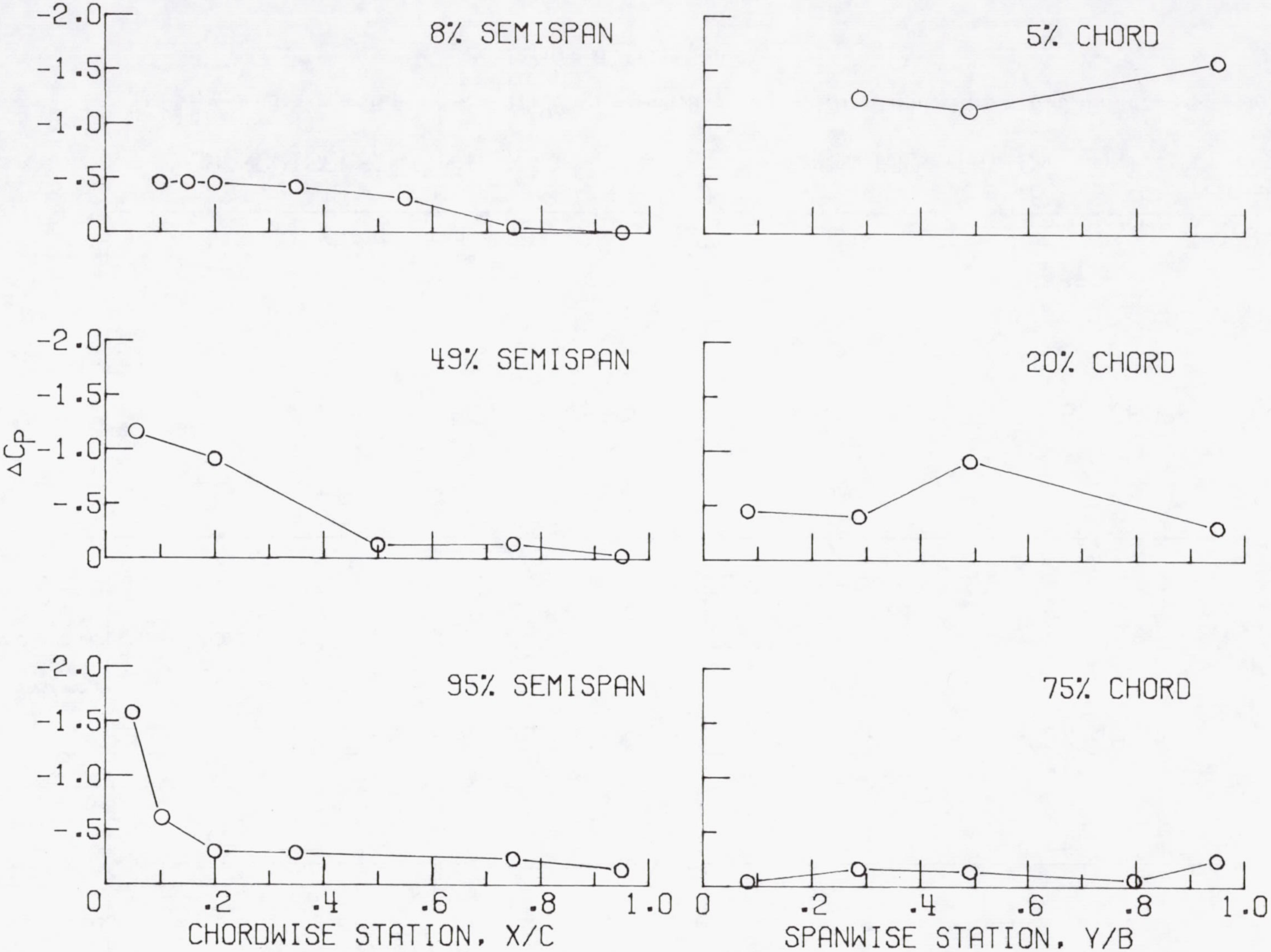
(c) M = 0.90; α = 5.4°; θ = 3.2°; ϕ = -49.7°; a_z = 3.5; flight time = 610.1 sec.

Figure 8.- Continued.



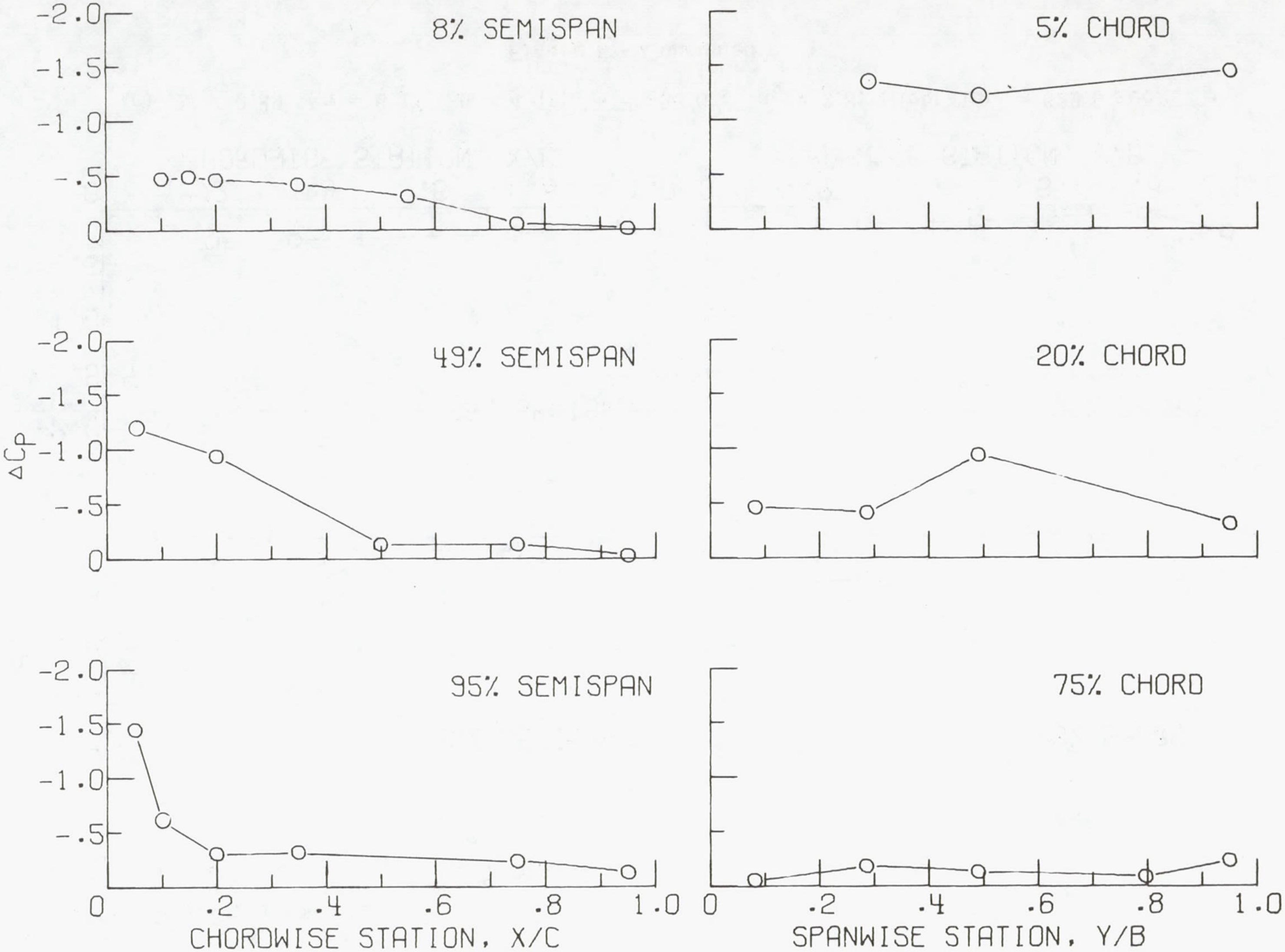
(d) M = 0.90; α = 5.8°; θ = 4.3°; ϕ = -67.8°; a_z = 3.6; flight time = 619.9 sec.

Figure 8.- Continued.



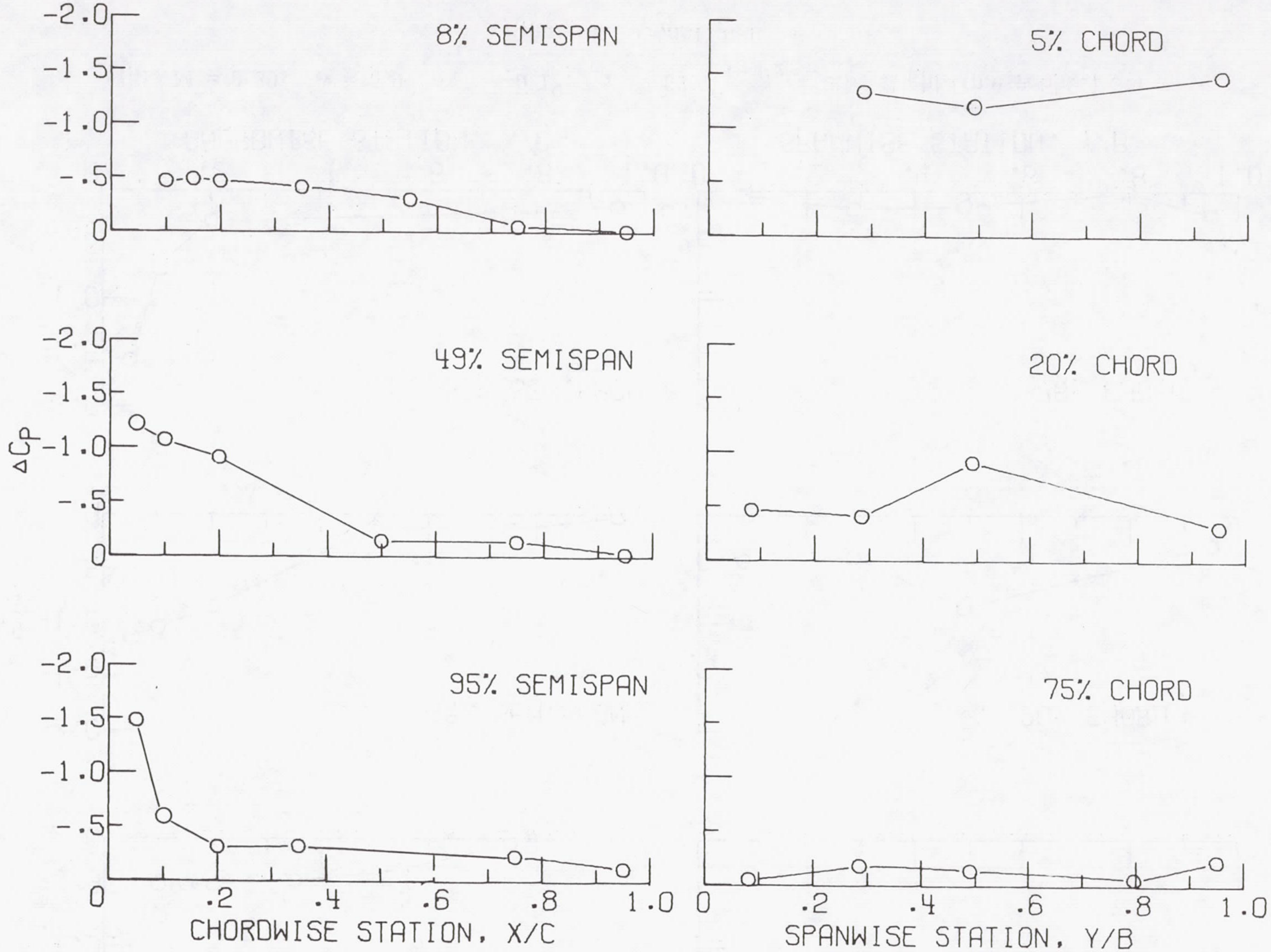
(e) M = 0.89; α = 6.1°; θ = 4.0°; ϕ = -55.0°; a_z = 3.8; flight time = 629.9 sec.

Figure 8.- Continued.



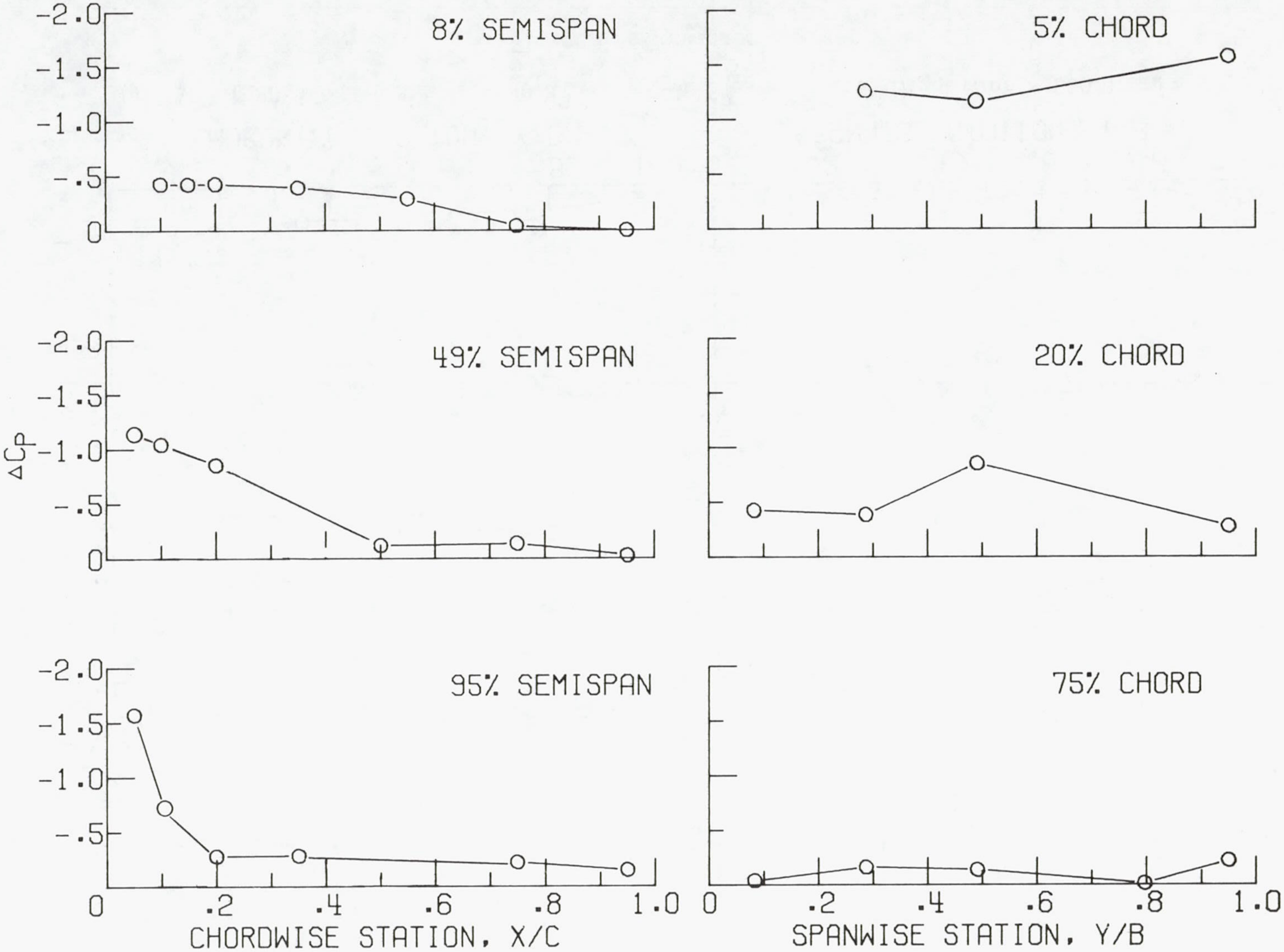
(f) M = 0.88; α = 6.4°; θ = 1.7°; ϕ = -54.9°; a_z = 4.0; flight time = 639.9 sec.

Figure 8.- Continued.



(g) M = 0.88; α = 6.3°; θ = -0.3°; ϕ = -66.8°; a_z = 3.8; flight time = 650.0 sec.

Figure 8.- Continued.



(h) $M = 0.89$; $\alpha = 5.9^{\circ}$; $\theta = -0.1^{\circ}$; $\phi = -62.7^{\circ}$; $a_z = 3.6$; flight time = 659.1 sec.

Figure 8.- Concluded.

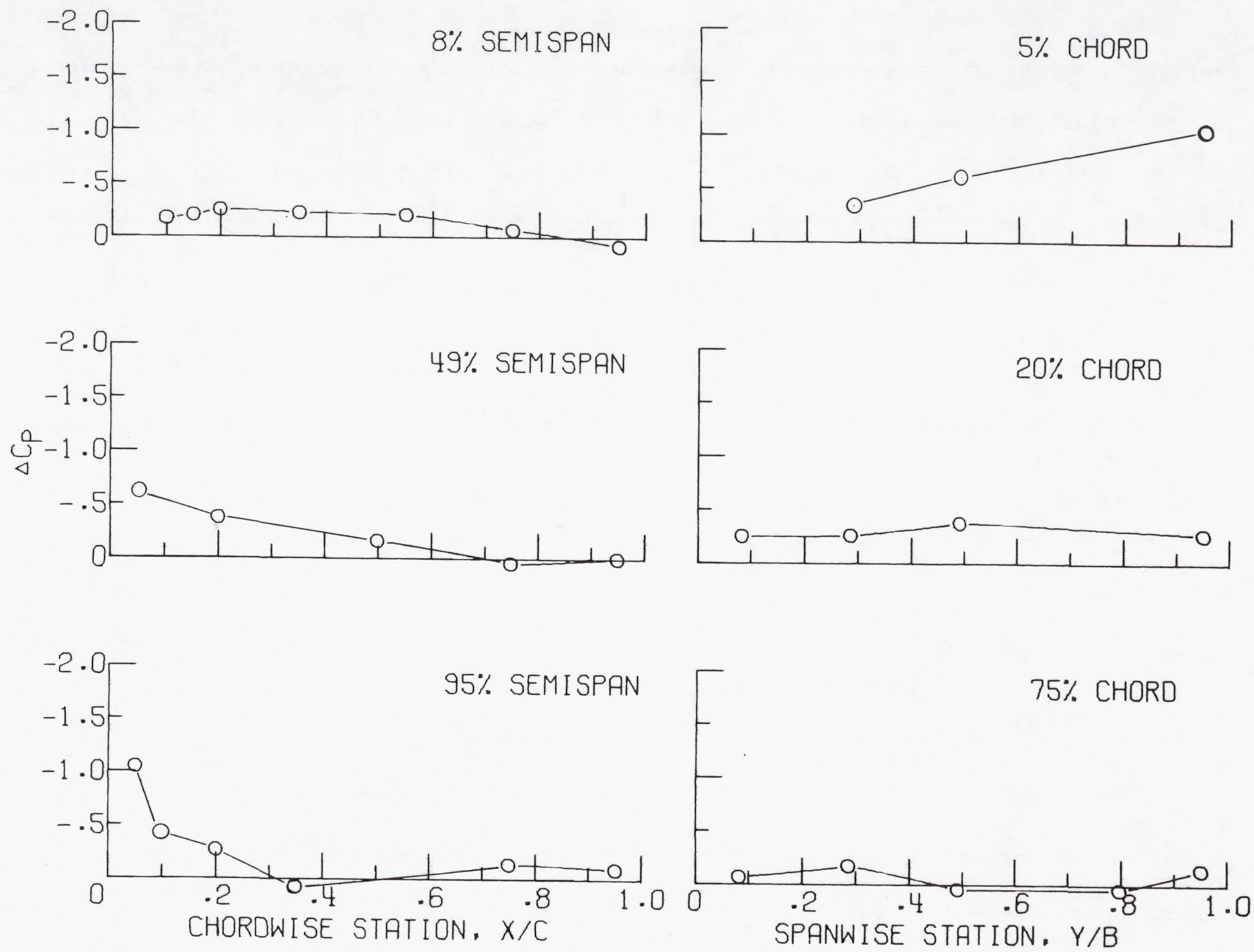
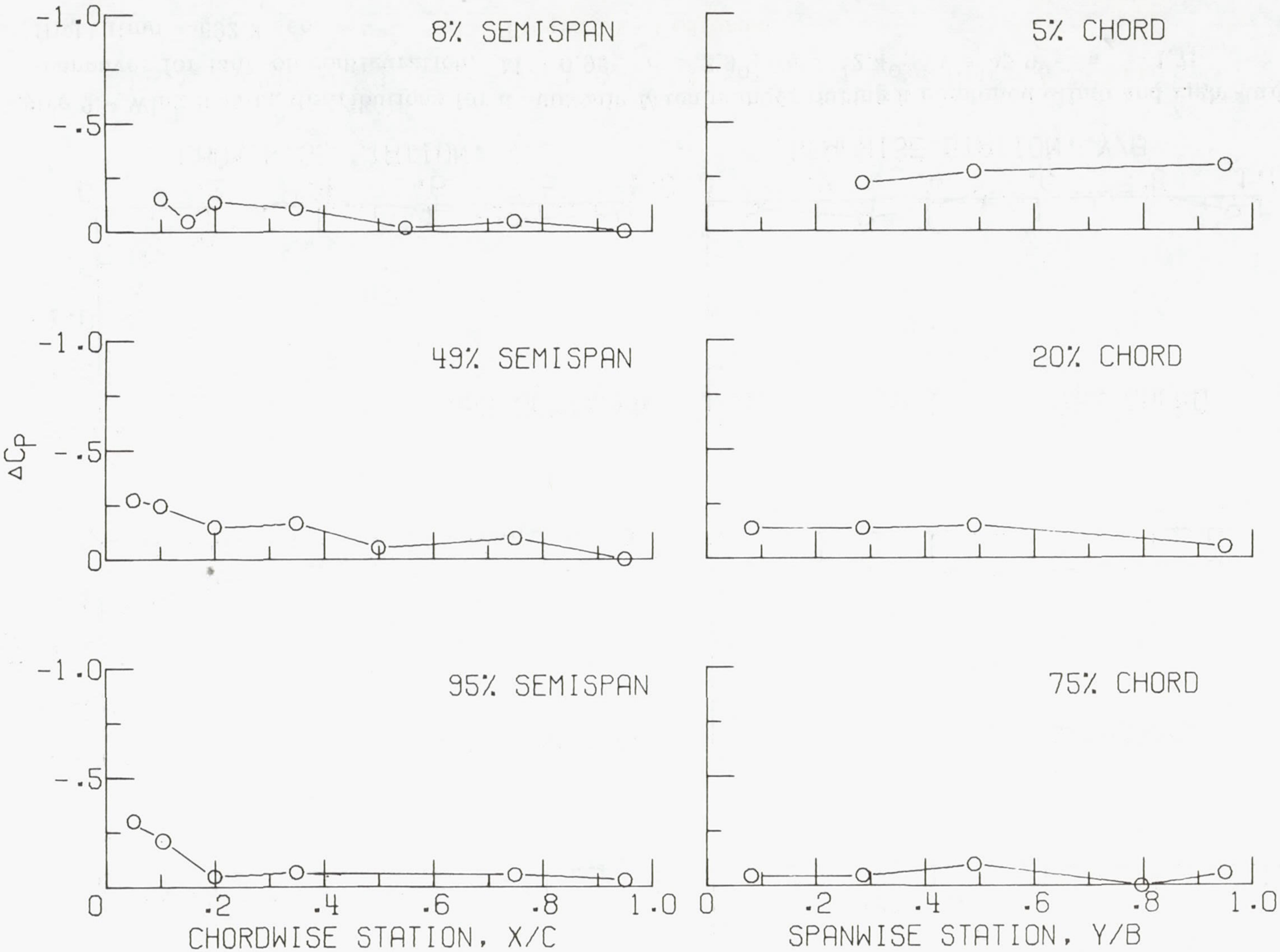
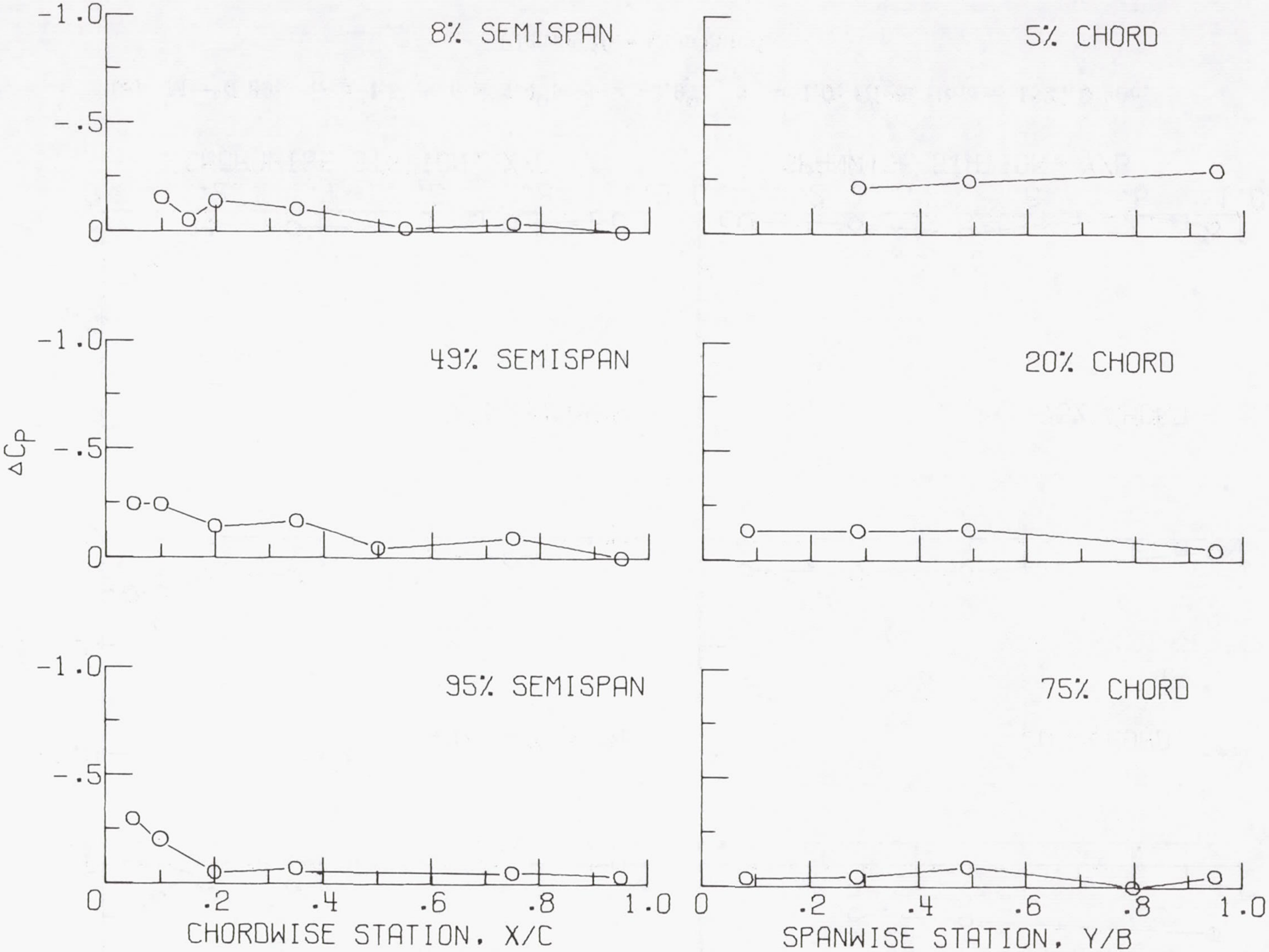


Figure 9.- Wing loading distributions for a subsonic Mach number during a combined climb and right-turn maneuver for tank-on configuration. M = 0.95; α = 2.9°; θ = 12.4°; ϕ = 45.9°; a_z = 1.7; flight time = 692.2 sec.



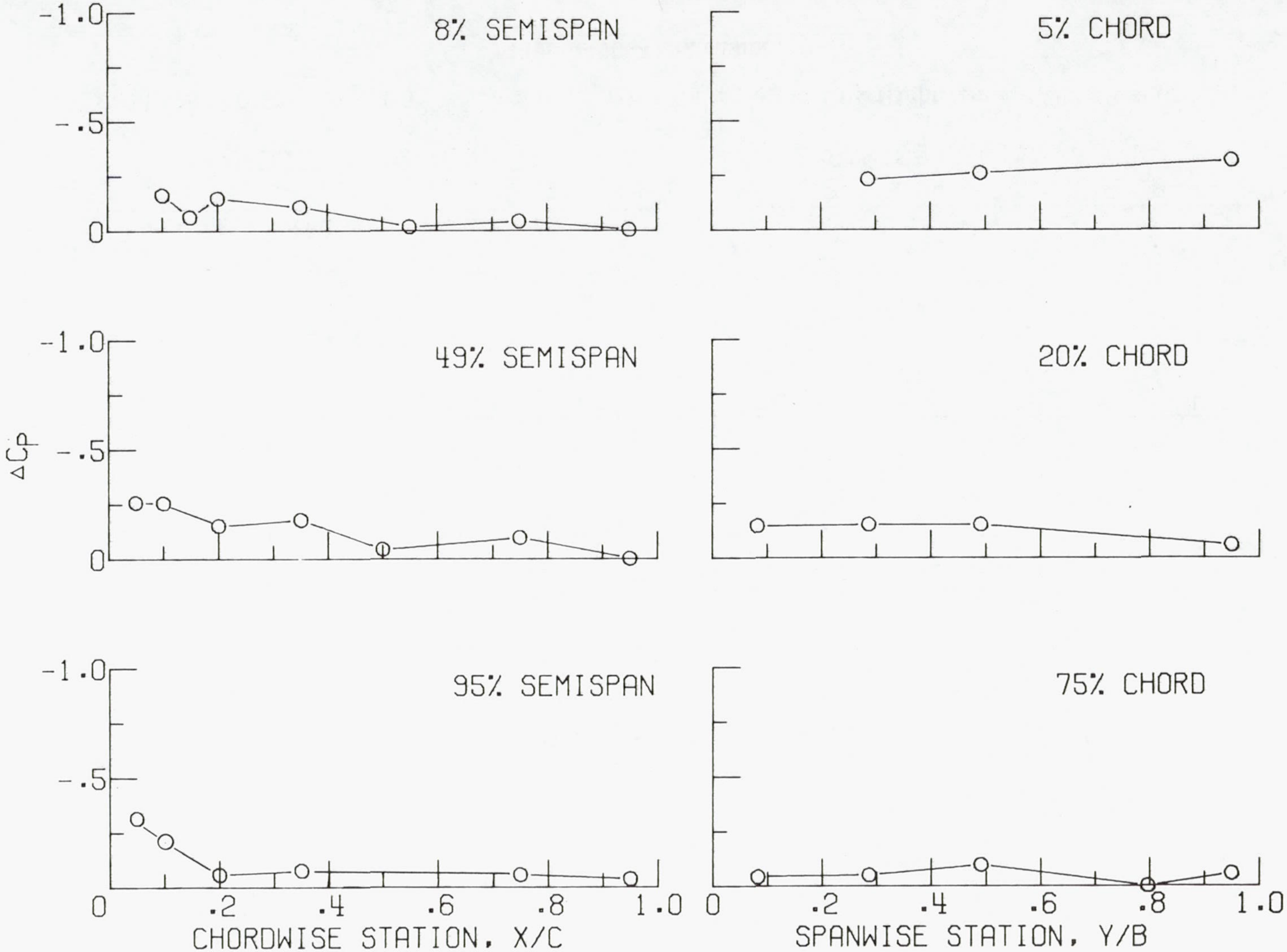
(a) $M = 0.92$; $\alpha = 1.5^{\circ}$; $\theta = 5.8^{\circ}$; $\phi = -3.0^{\circ}$; $a_z = 1.1$; flight time = 1619.9 sec.

Figure 10.- Wing loading distributions for subsonic Mach numbers during straight and level flight for tank-off configuration.



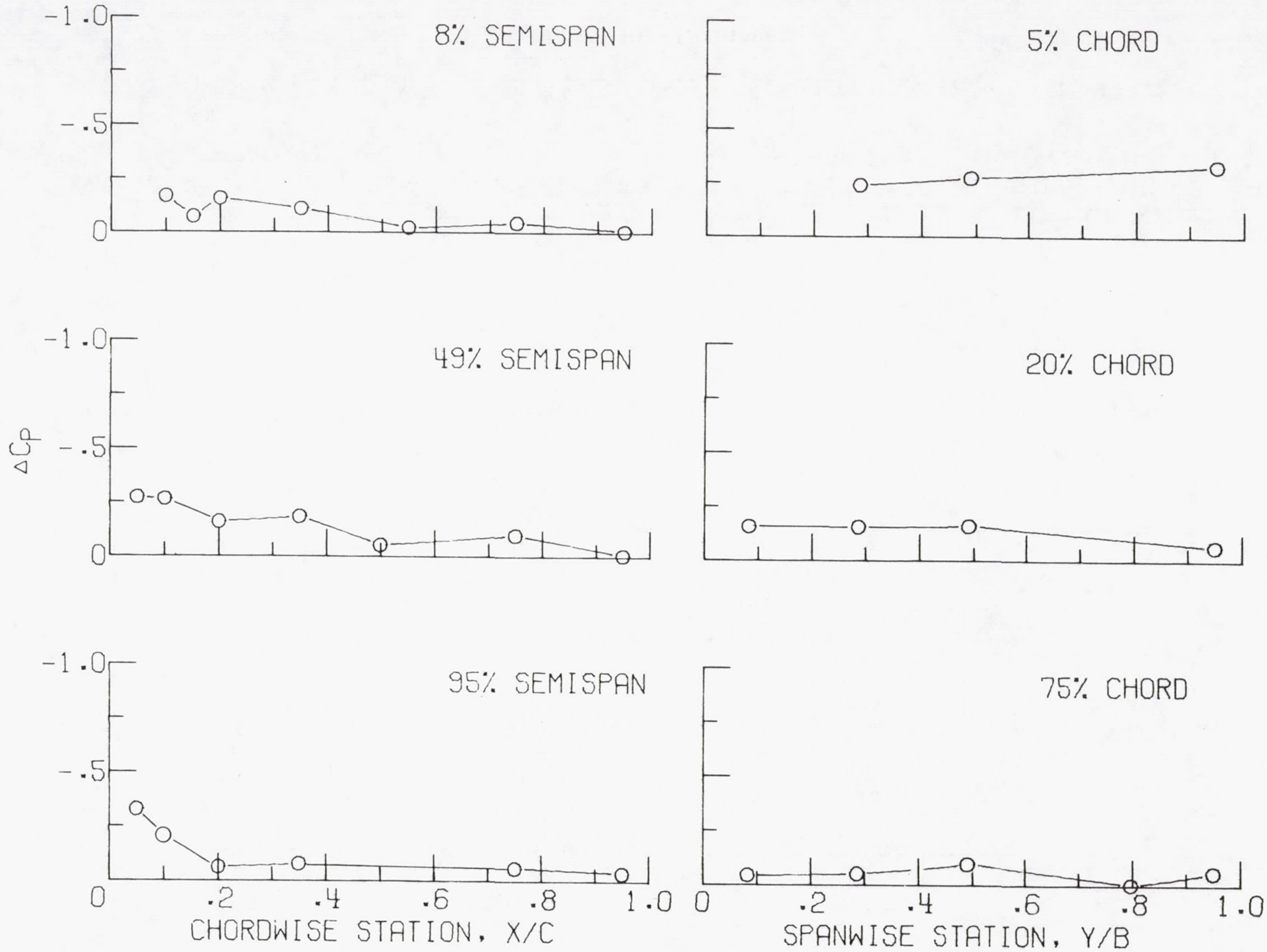
(b) M = 0.90; α = 1.5°; θ = 5.0°; ϕ = -3.4°; a_z = 1.0; flight time = 1623.9 sec.

Figure 10.- Continued.



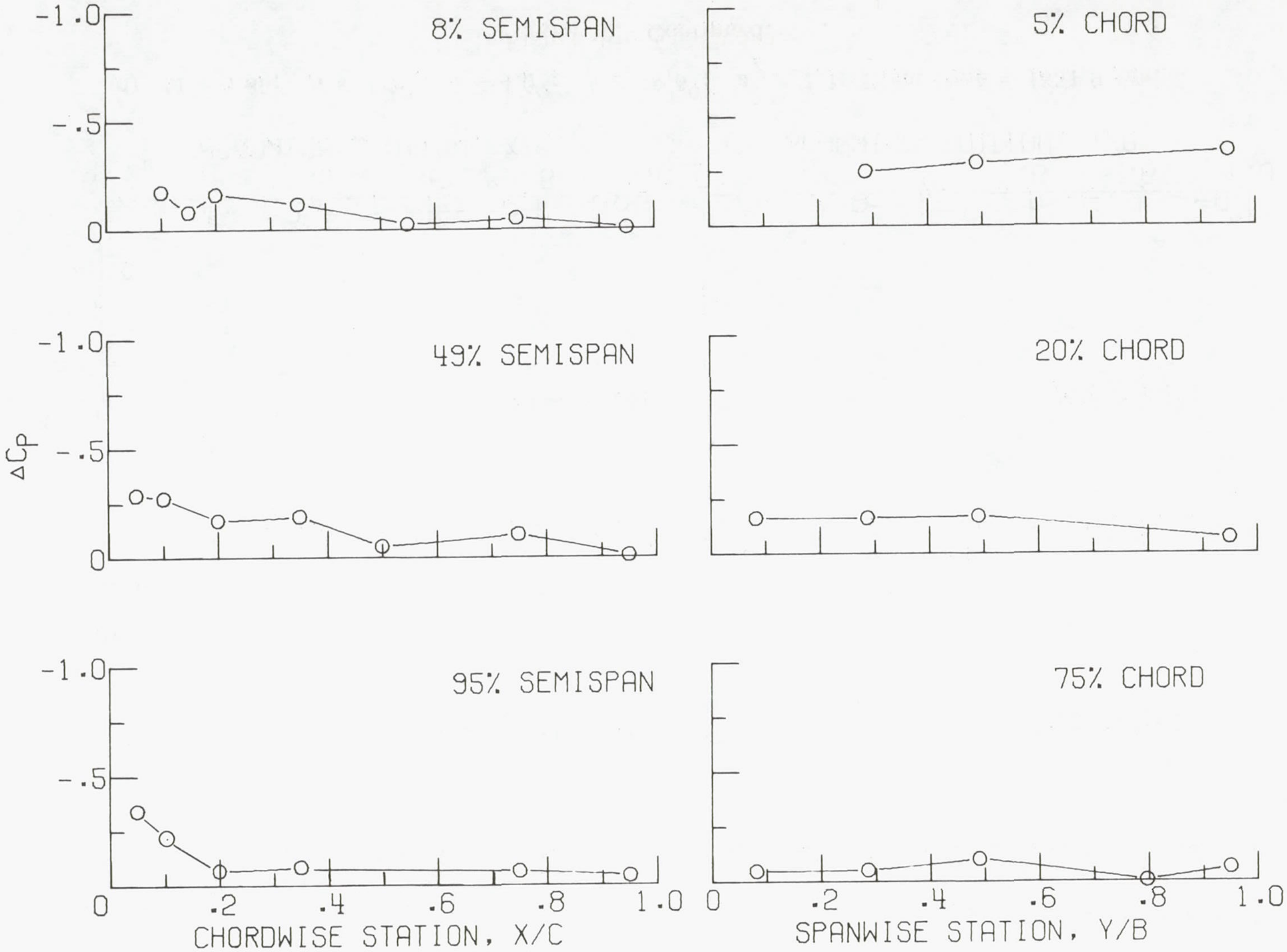
(c) M = 0.89; α = 1.5°; θ = 4.4°; ϕ = -3.9°; a_z = 1.0; flight time = 1627.9 sec.

Figure 10.- Continued.



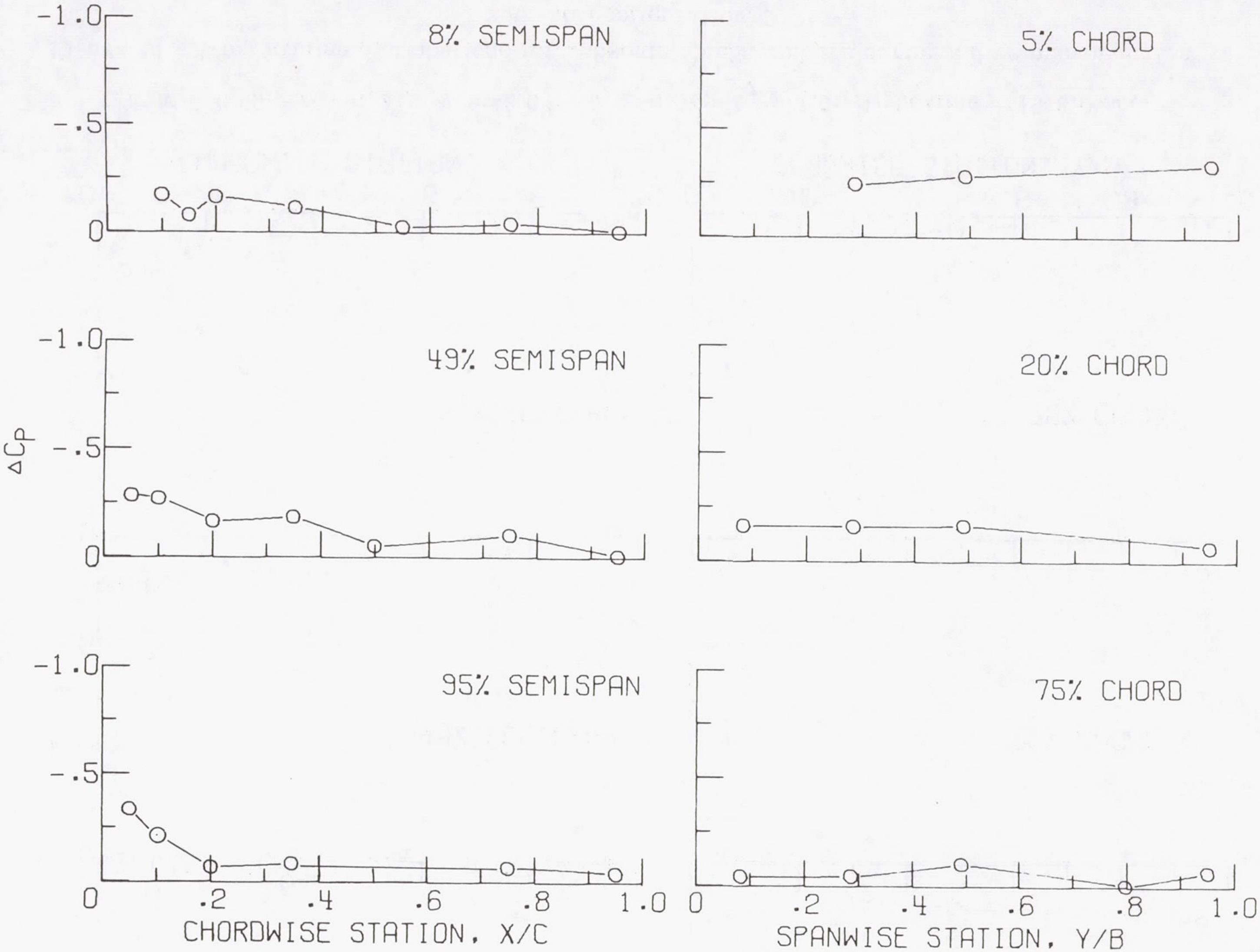
(d) M = 0.88; α = 1.7°; θ = 4.0°; ϕ = -4.6°; a_z = 1.1; flight time = 1631.9 sec.

Figure 10.- Continued.



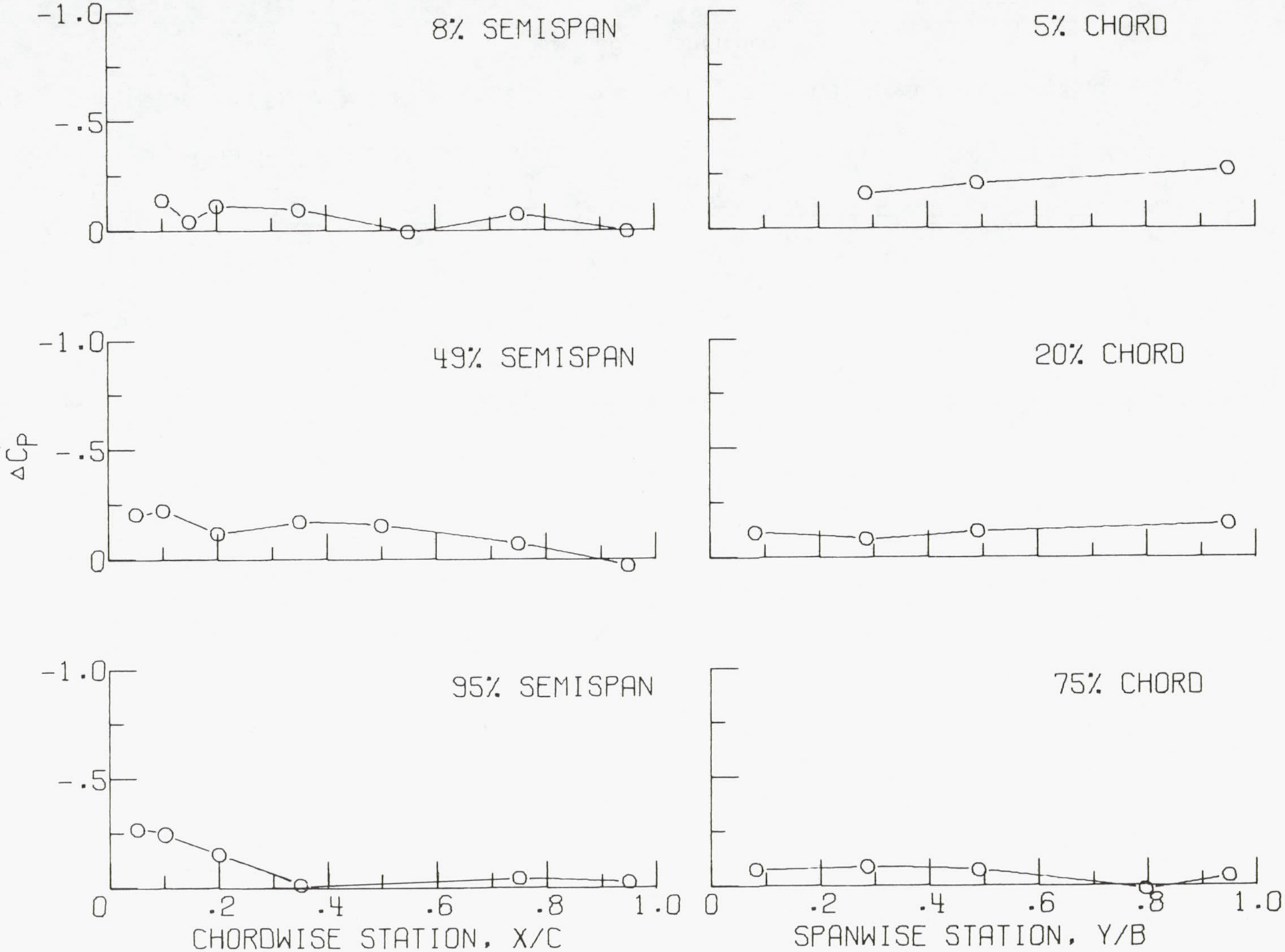
(e) M = 0.87; α = 1.8°; θ = 3.9°; ϕ = -4.4°; a_z = 1.1; flight time = 1635.9 sec.

Figure 10.- Continued.



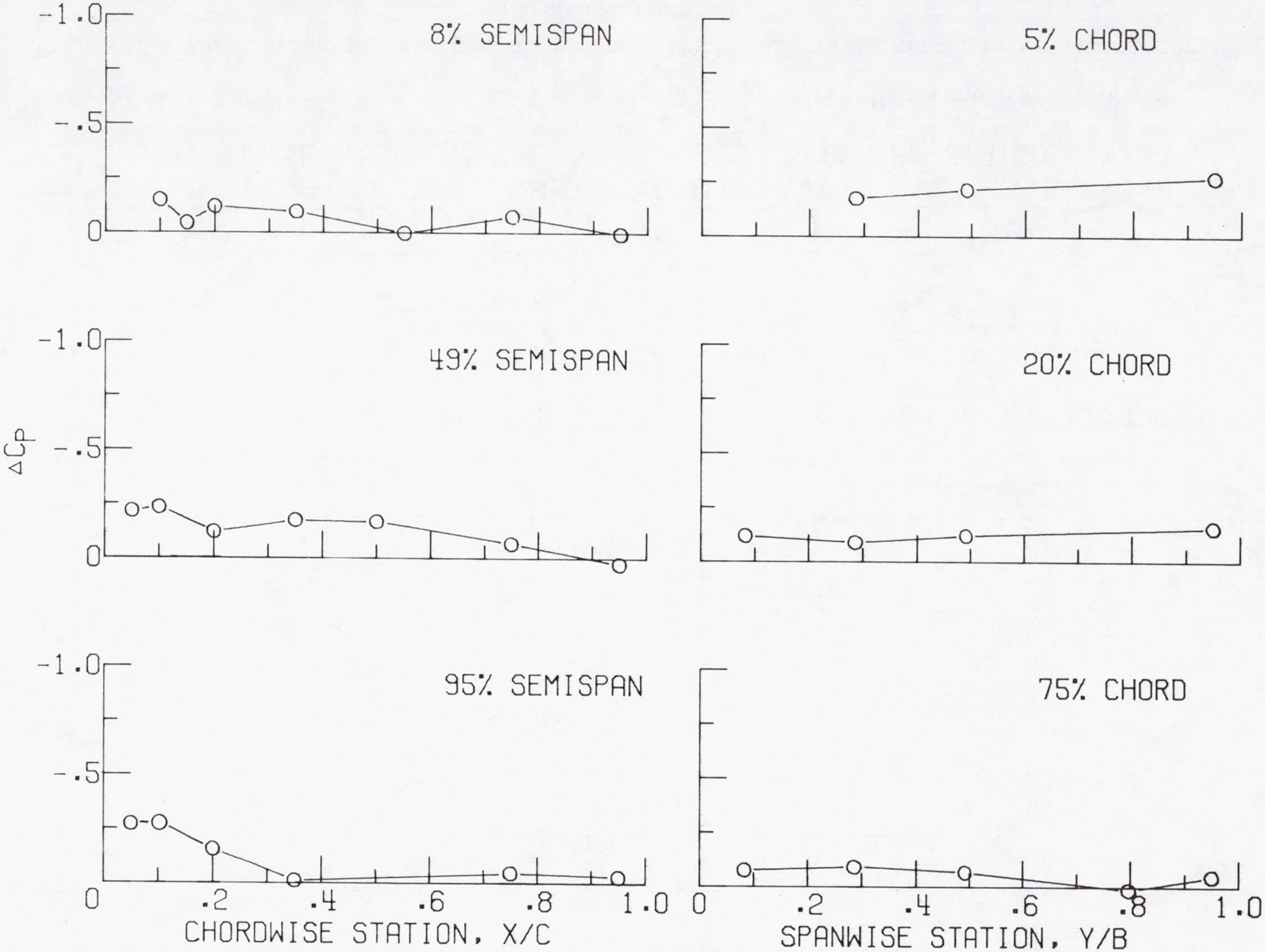
(f) M = 0.86; α = 1.8°; θ = 3.8°; ϕ = -4.3°; a_z = 1.1; flight time = 1639.9 sec.

Figure 10.- Concluded.



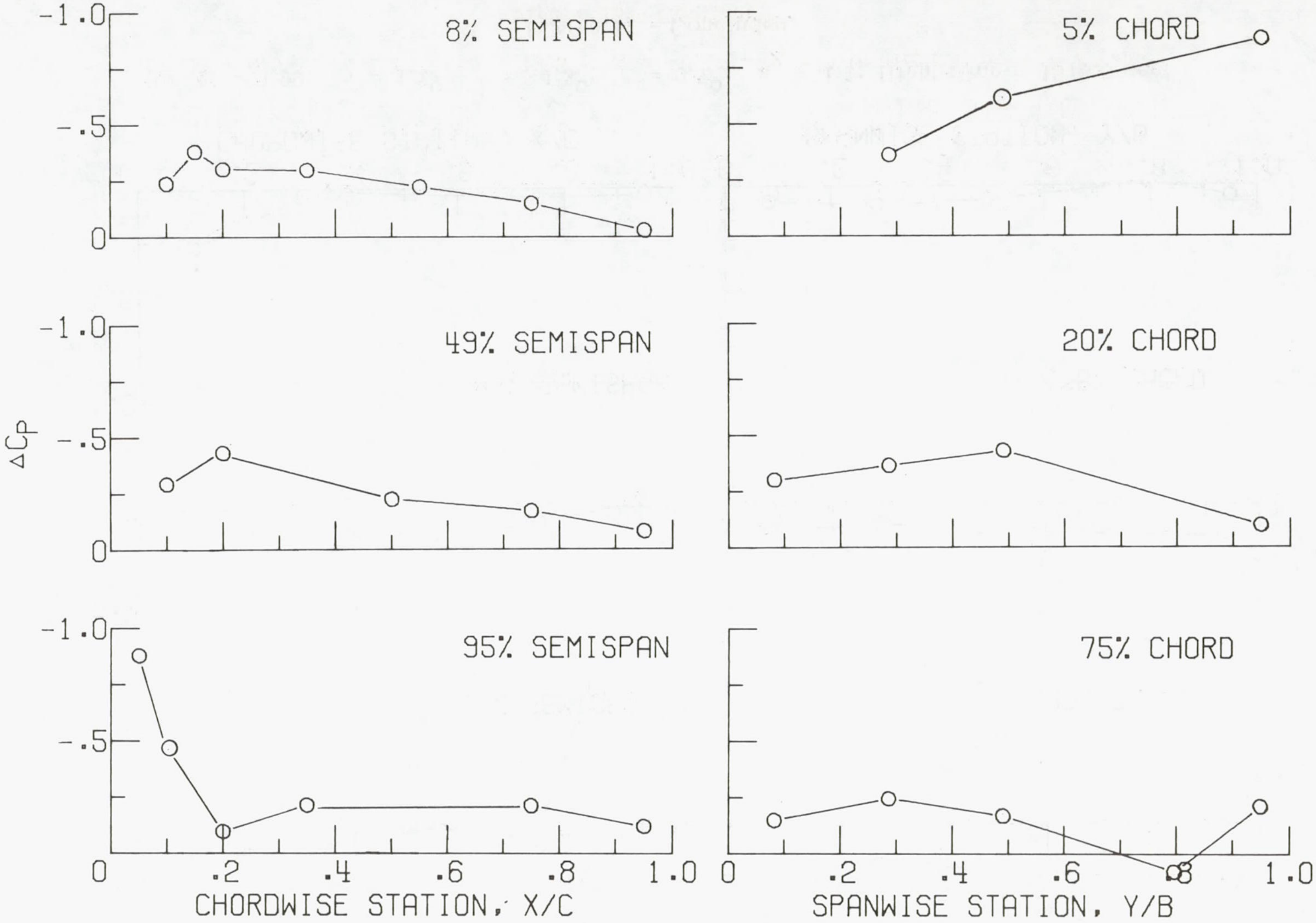
(a) M = 0.99; α = 1.2°; θ = -3.0°; ϕ = -1.5°; a_z = 1.0; flight time = 1568.0 sec.

Figure 11.- Wing loading distributions for subsonic Mach numbers during a dive maneuver for tank-off configuration.



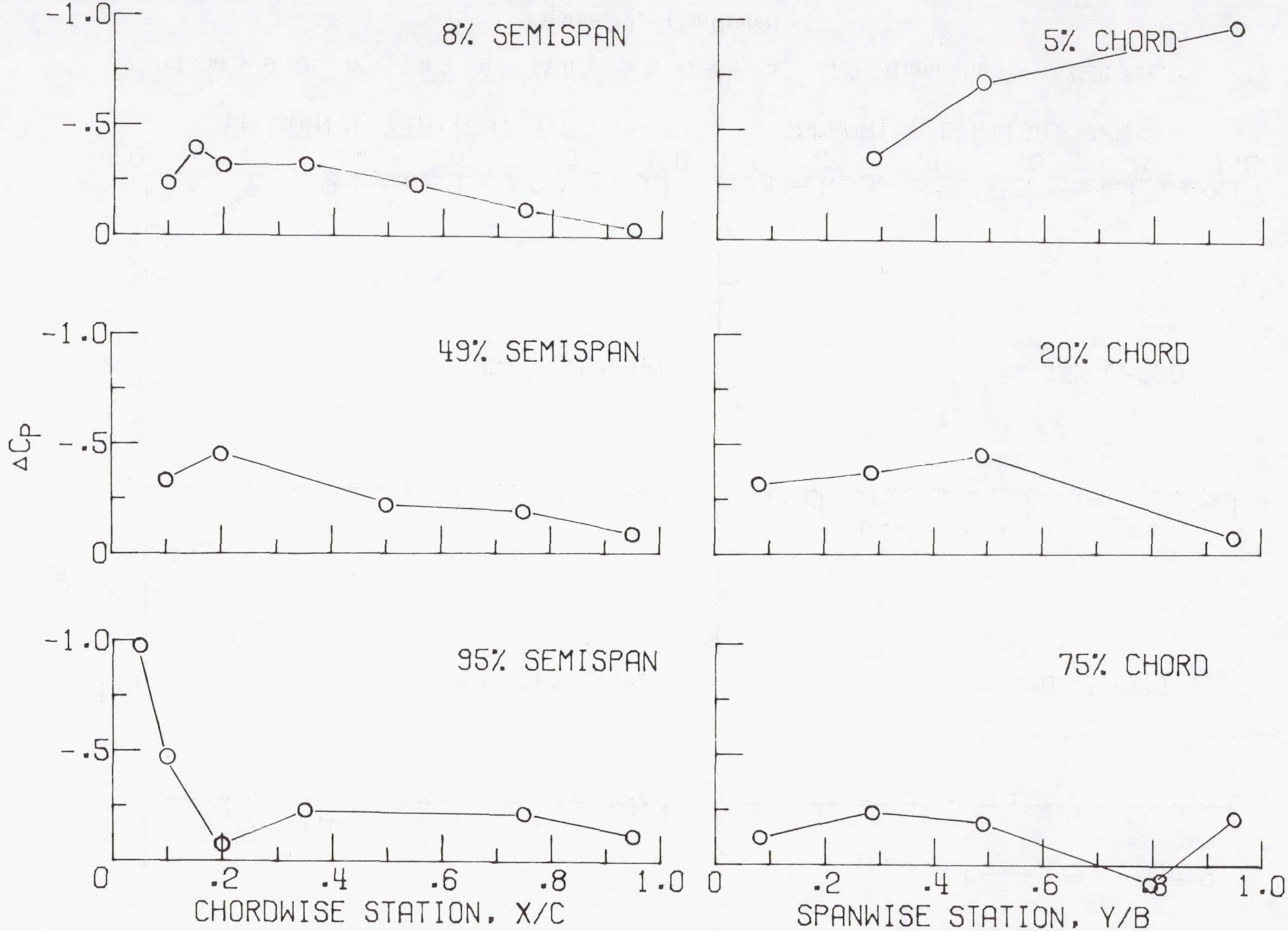
(b) M = 0.99; α = 1.2°; θ = -4.3°; ϕ = 0.7°; a_z = 1.1; flight time = 1578.0 sec.

Figure 11.- Concluded.



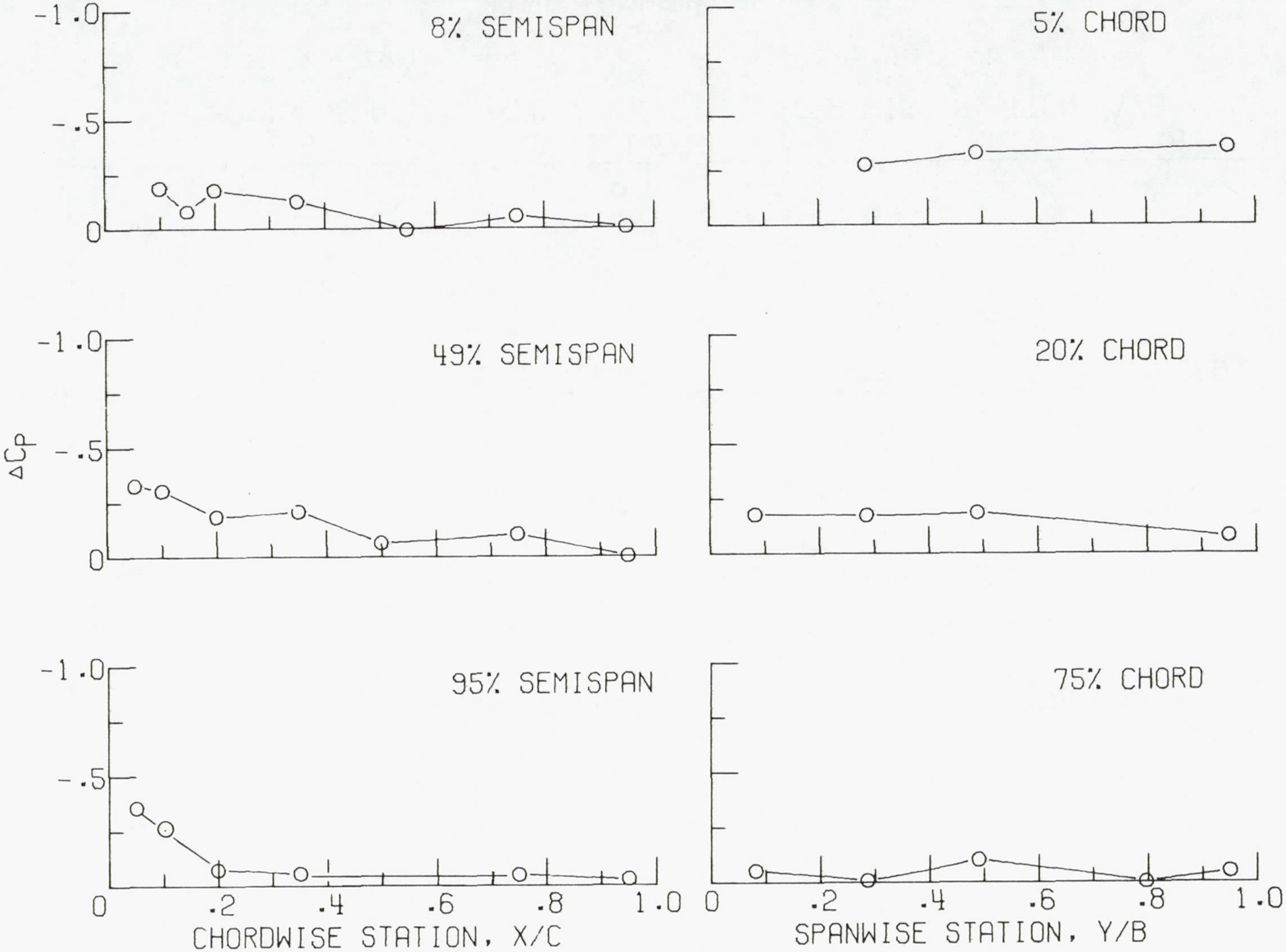
(a) M = 0.97; α = 2.5^{o}; θ = 13.2^{o}; ϕ = -0.5^{o}; a_z = 1.1; flight time = 763.7 sec.

Figure 12.- Wing loading distributions for subsonic Mach numbers during a climb maneuver for tank-off configuration.



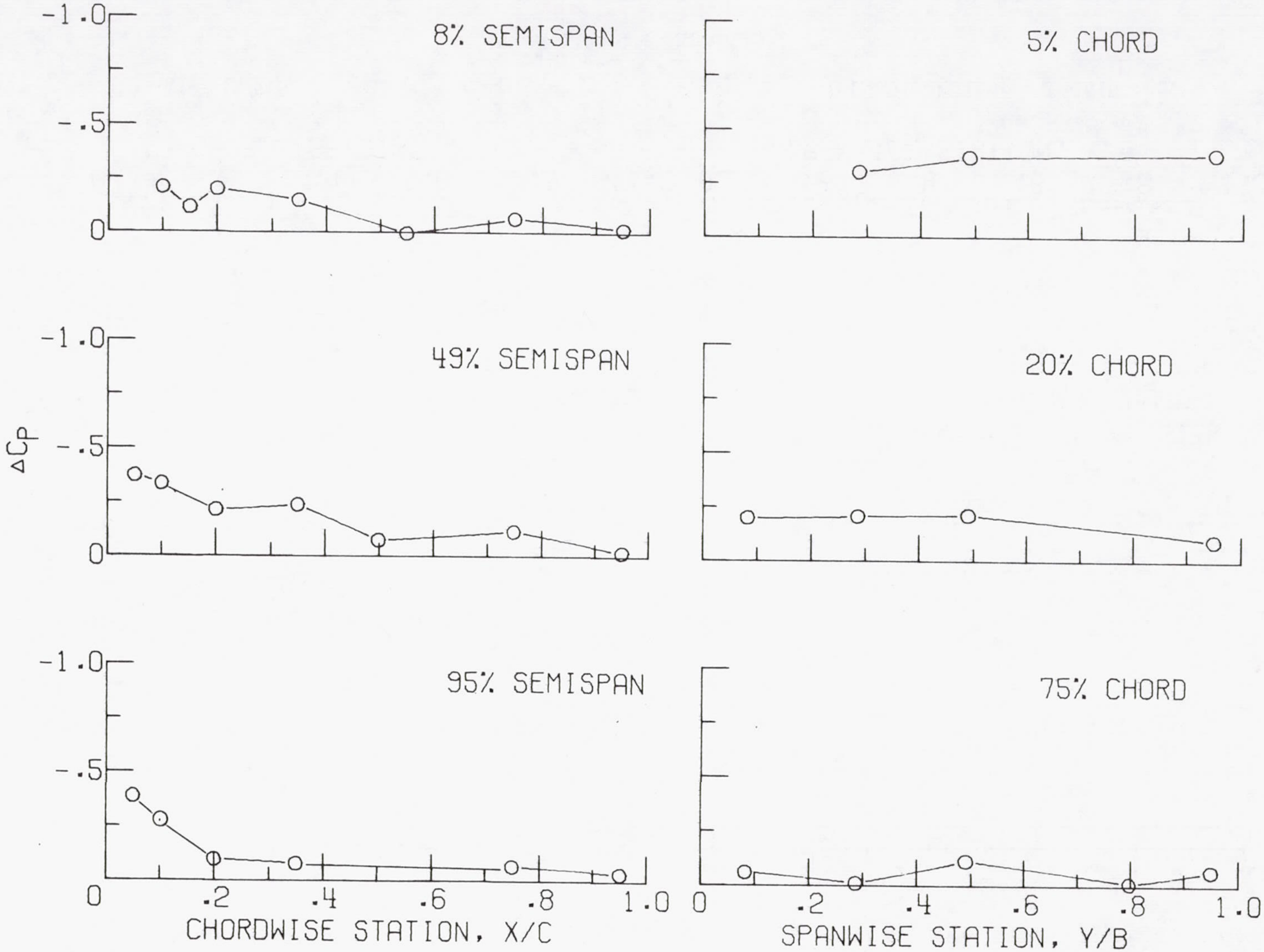
(b) M = 0.95; α = 2.7°; θ = 13.3°; ϕ = -0.1°; a_z = 1.0; flight time = 767.4 sec.

Figure 12.- Continued.



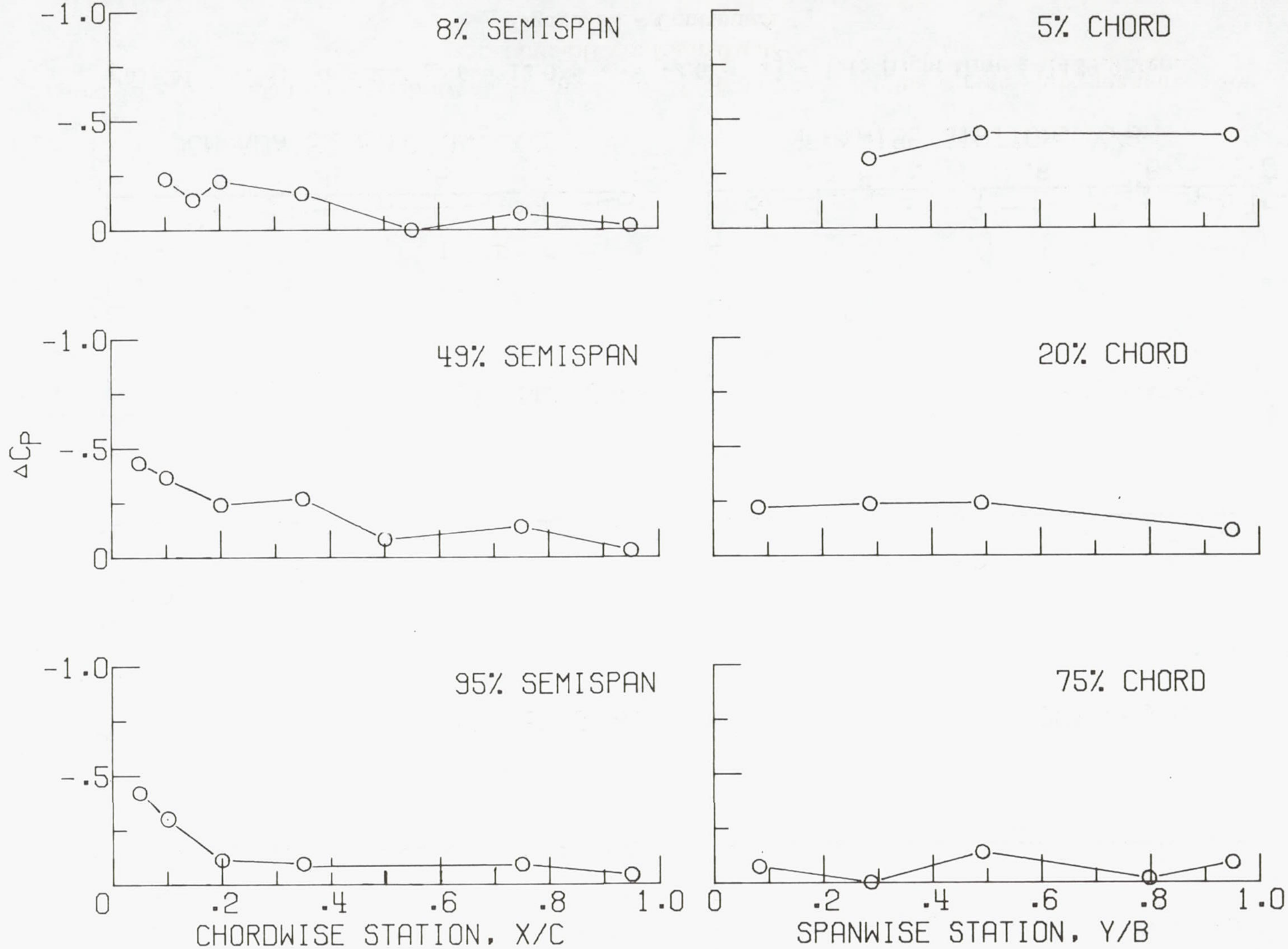
(c) M = 0.89; α = 1.9°; θ = 11.0°; ϕ = -3.9°; a_z = 1.2; flight time = 1428.0 sec.

Figure 12.- Continued.



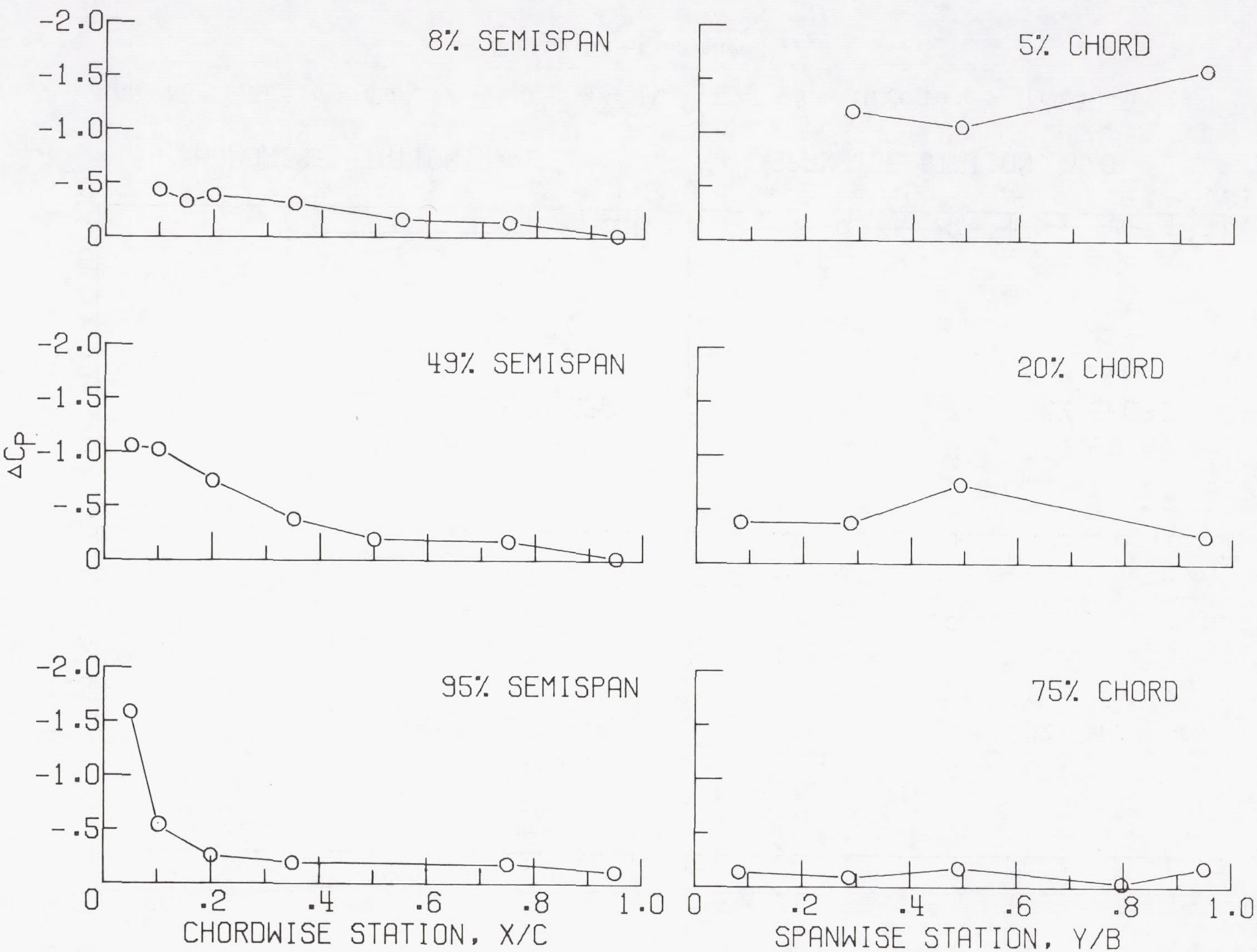
(d) M = 0.84; α = 2.2°; θ = 12.0°; ϕ = -2.6°; a_z = 1.1; flight time = 1439.9 sec.

Figure 12.- Continued.



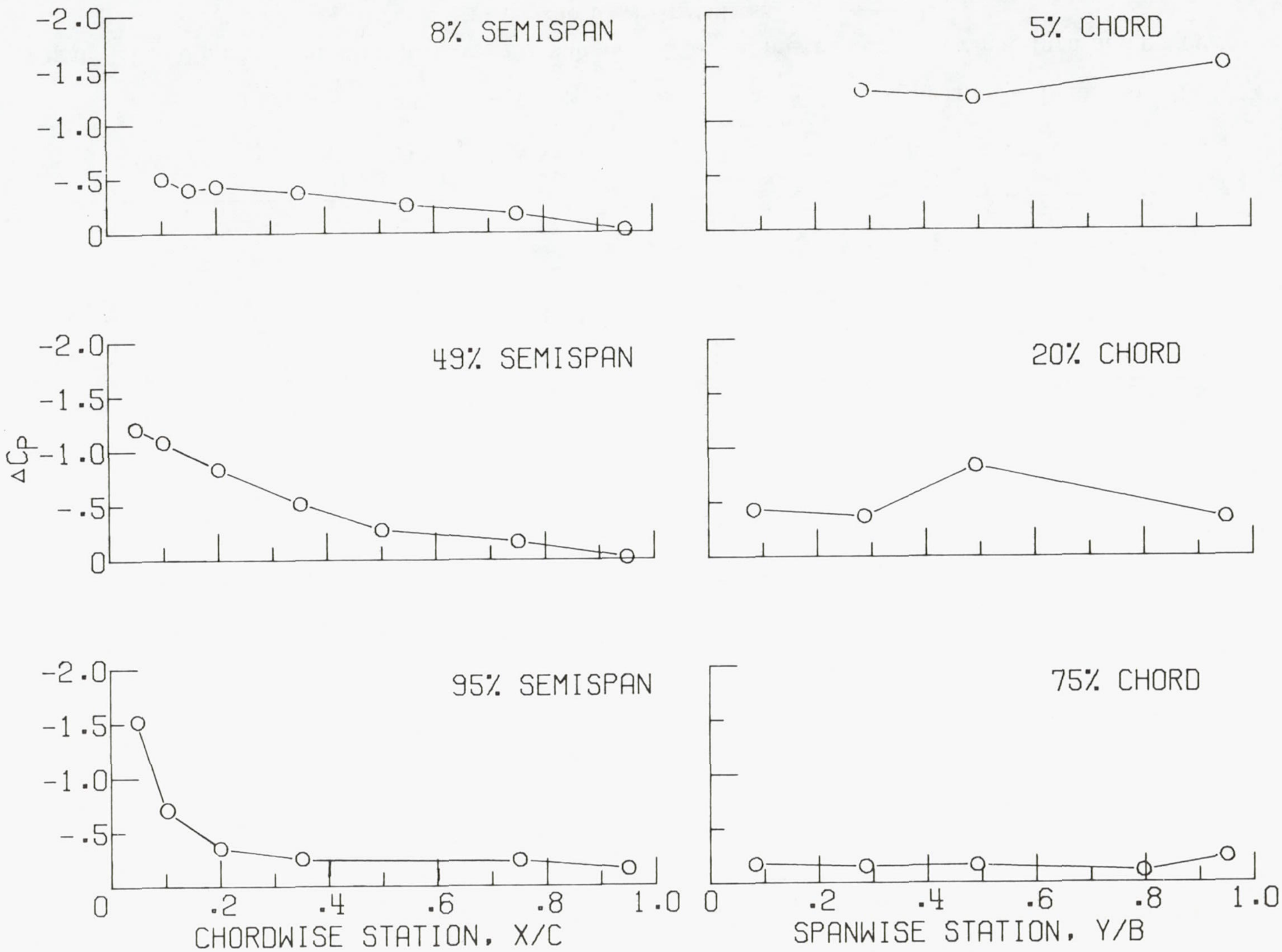
(e) M = 0.80; α = 2.46°; θ = 12.4°; ϕ = -2.0°; a_z = 1.1; flight time = 1446.8 sec.

Figure 12.- Concluded.



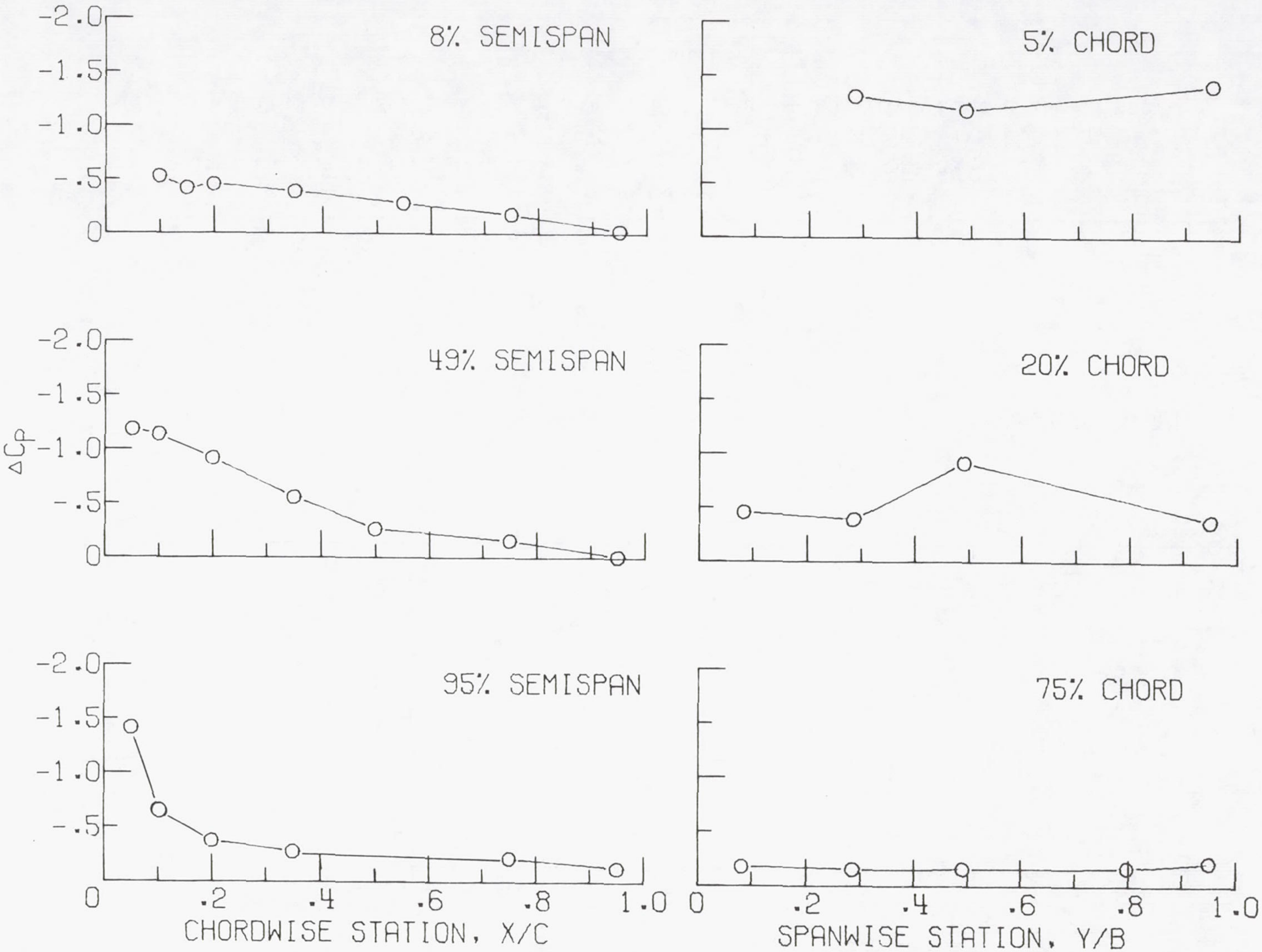
(a) M = 0.88; α = 4.9°; θ = 2.2°; ϕ = 55.2°; a_z = 3.1; flight time = 1515.0 sec.

Figure 13.- Wing loading distributions for subsonic Mach numbers during a right-turn maneuver for tank-off configuration.



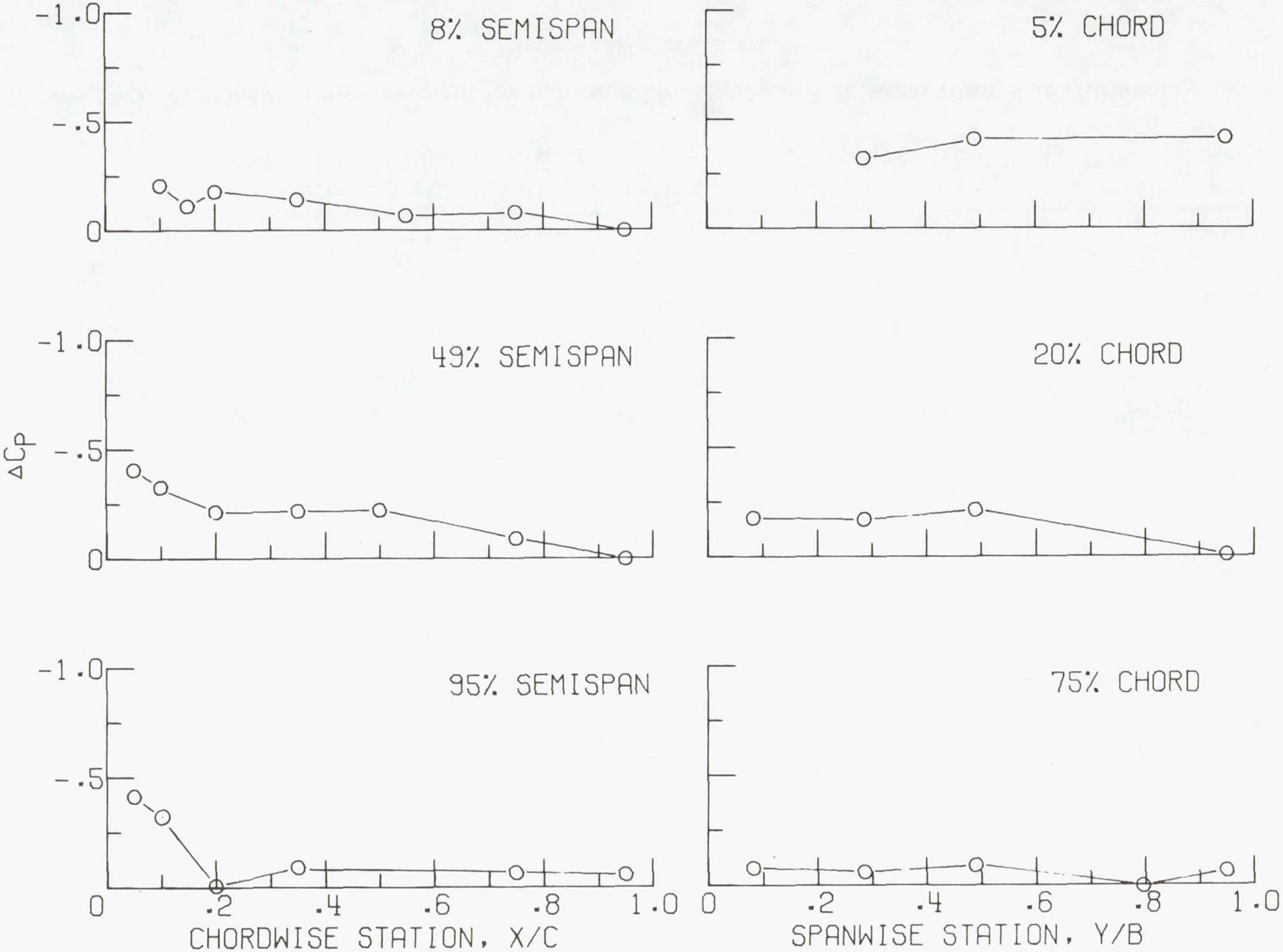
(b) M = 0.91; α = 5.7°; θ = 5.3°; ϕ = 84.4°; a_z = 5.4; flight time = 1655.5 sec.

Figure 13.- Continued.



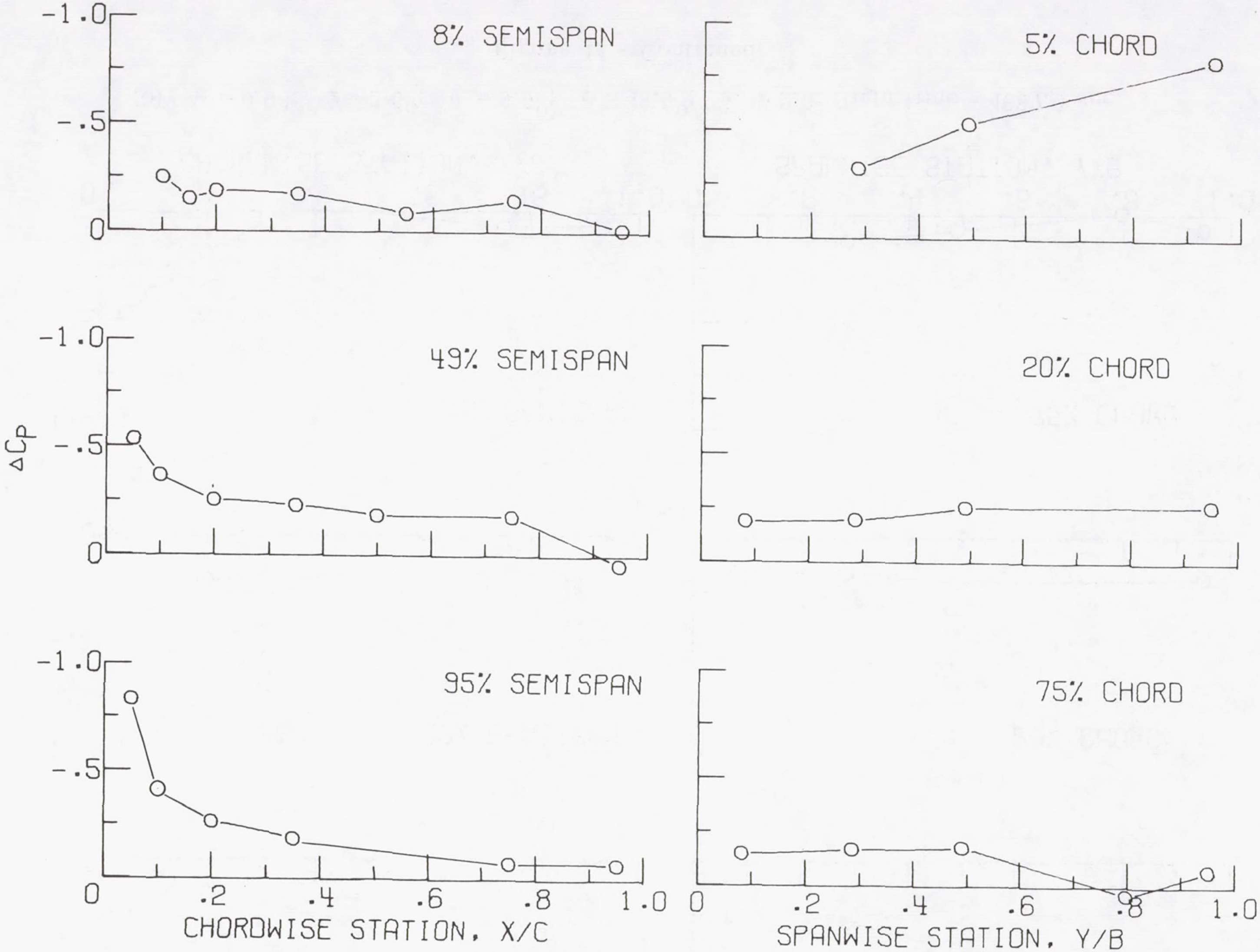
(c) M = 0.91; α = 6.1°; θ = 5.8°; ϕ = 85.6°; a_z = 5.7; flight time = 1657.6 sec.

Figure 13.- Continued.



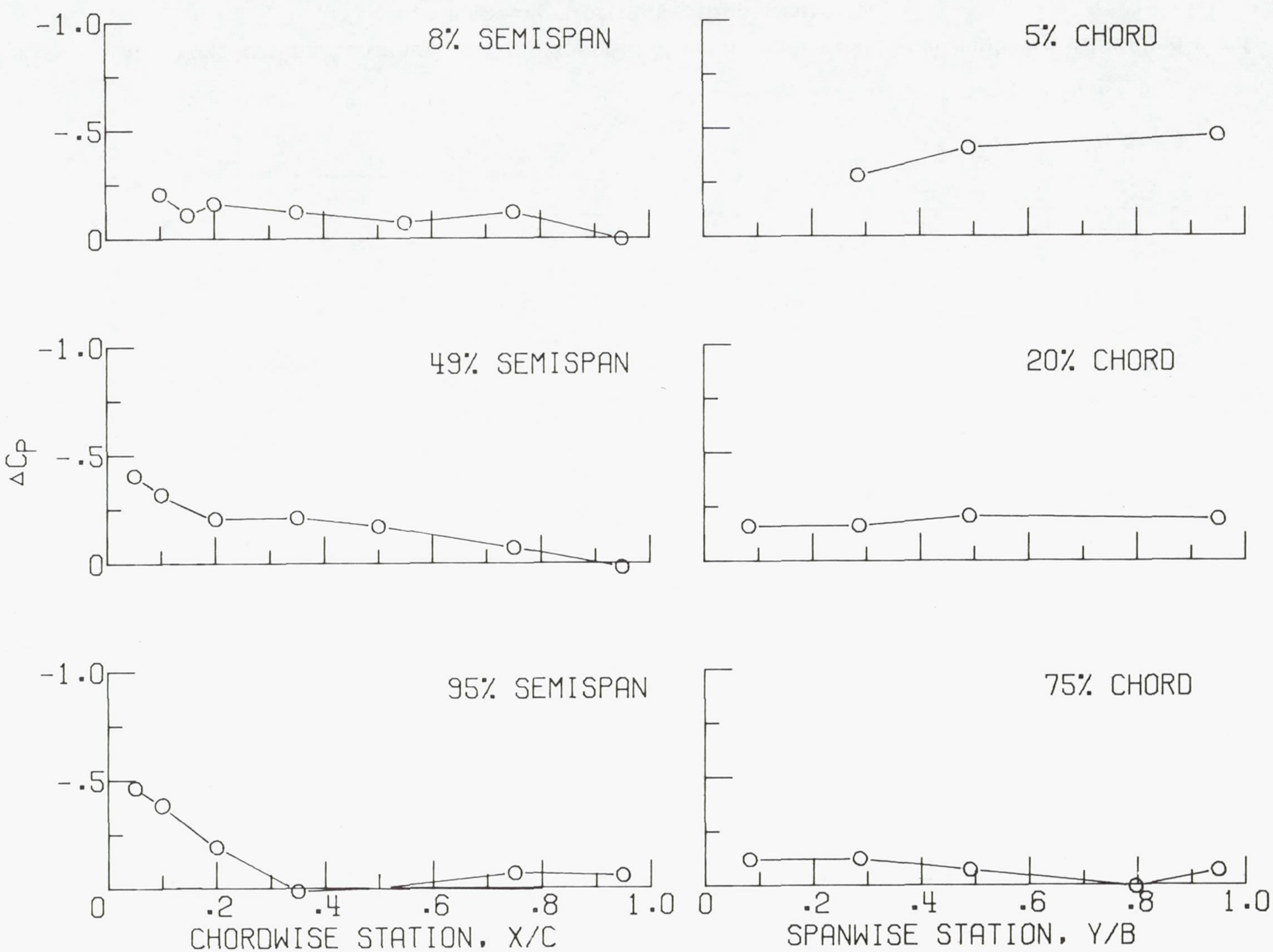
(d) M = 0.96; α = 2.1°; θ = 3.4°; ϕ = 70.9°; a_z = 2.1; flight time = 1668.7 sec.

Figure 13.- Concluded.



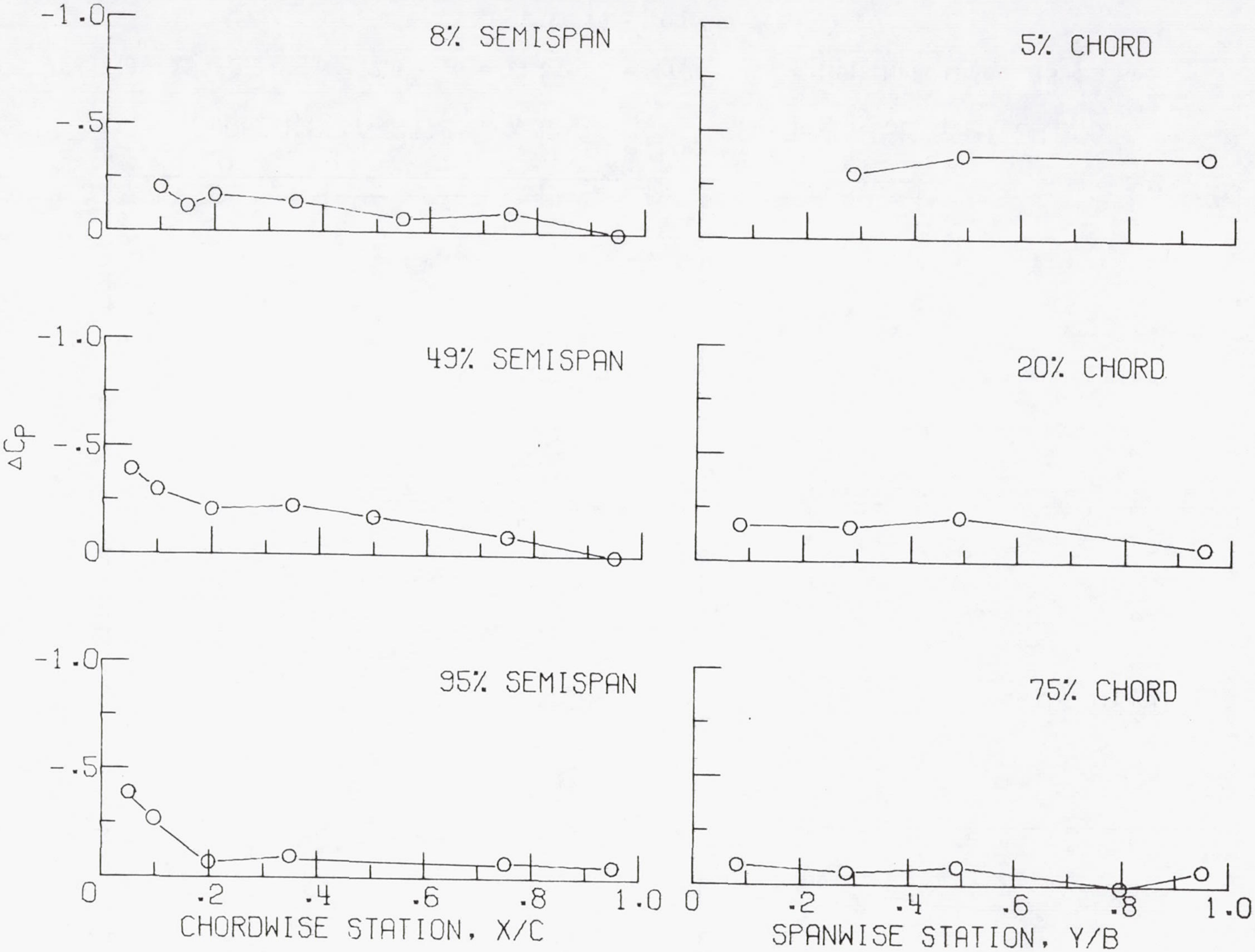
(a) M = 0.99; α = 2.4°; θ = 5.6°; ϕ = 52.8°; a_z = 2.9; flight time = 1679.7 sec.

Figure 14.- Wing loading distributions for subsonic Mach numbers during a combined climb and right-turn maneuver for tank-off configuration.



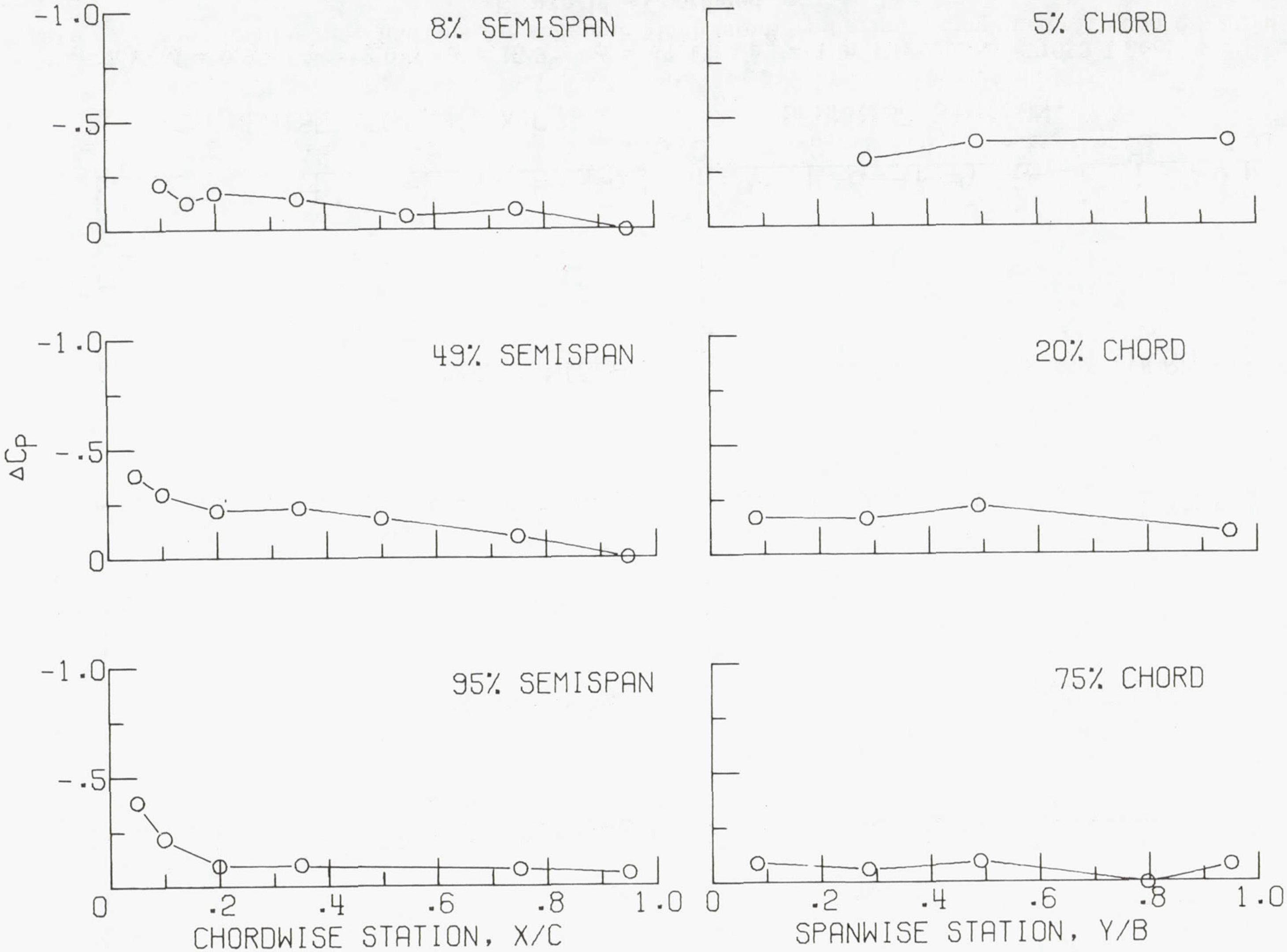
(b) M = 0.98; $\alpha = 2.0^{\circ}$; $\theta = 9.9^{\circ}$; $\phi = 48.7^{\circ}$; $a_z = 2.0$; flight time = 1687.0 sec.

Figure 14.- Continued.



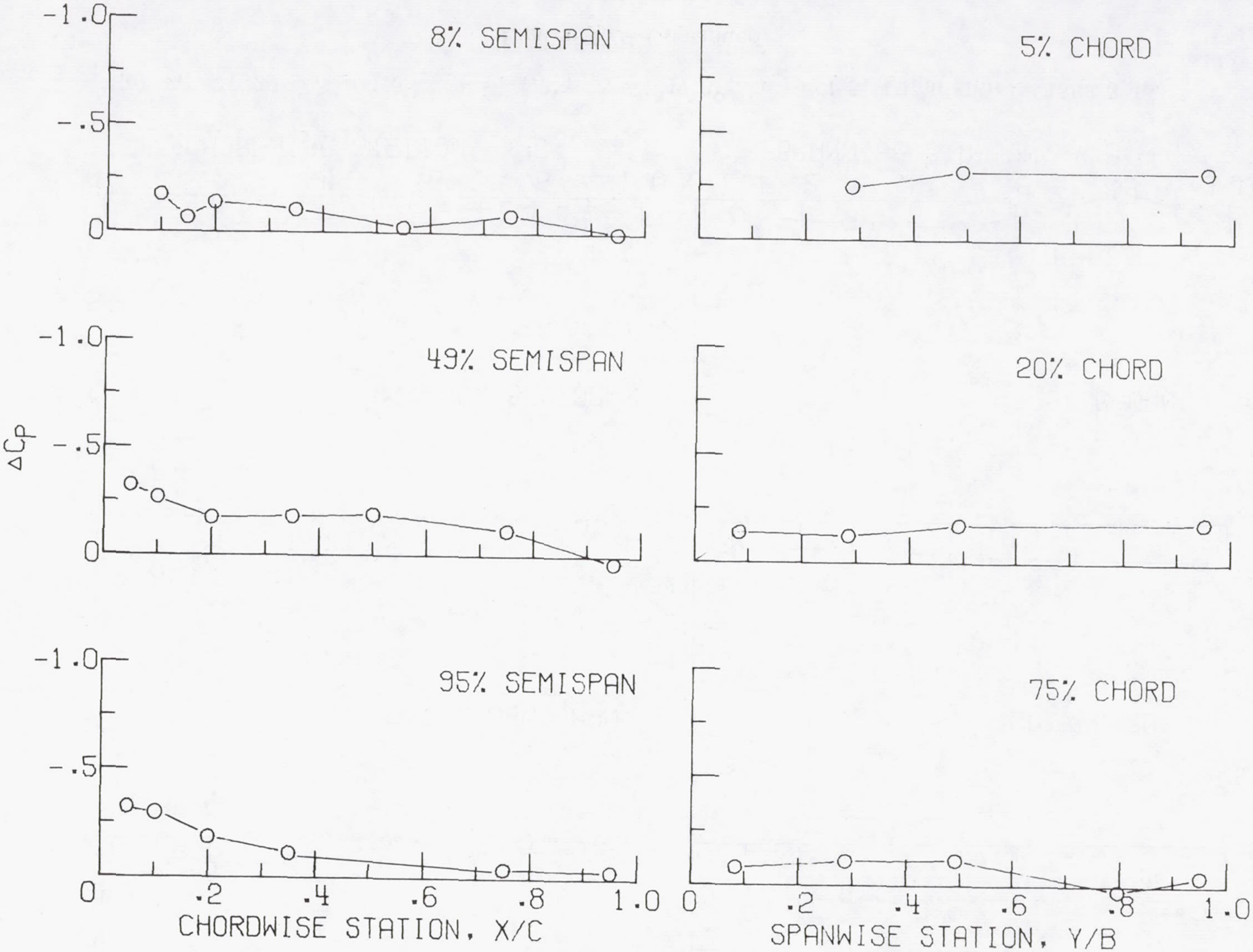
(c) M = 0.96; α = 2.0°; θ = 10.9°; ϕ = 47.1°; a_z = 1.9; flight time = 1690.7 sec.

Figure 14.- Continued.



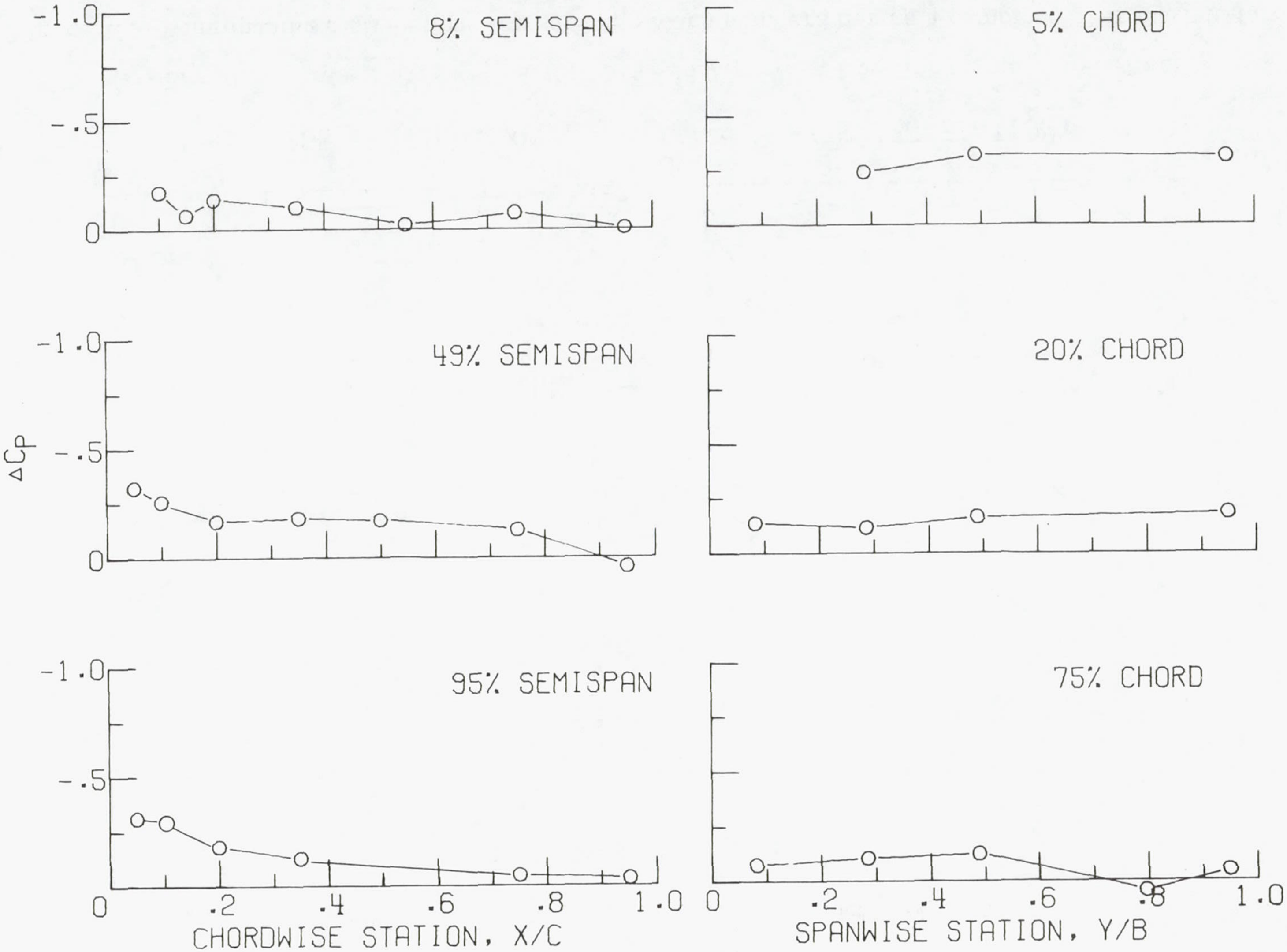
(d) M = 0.97; α = 2.0°; θ = 11.3°; ϕ = 47.0°; a_z = 1.9; flight time = 1694.4 sec.

Figure 14.- Concluded.



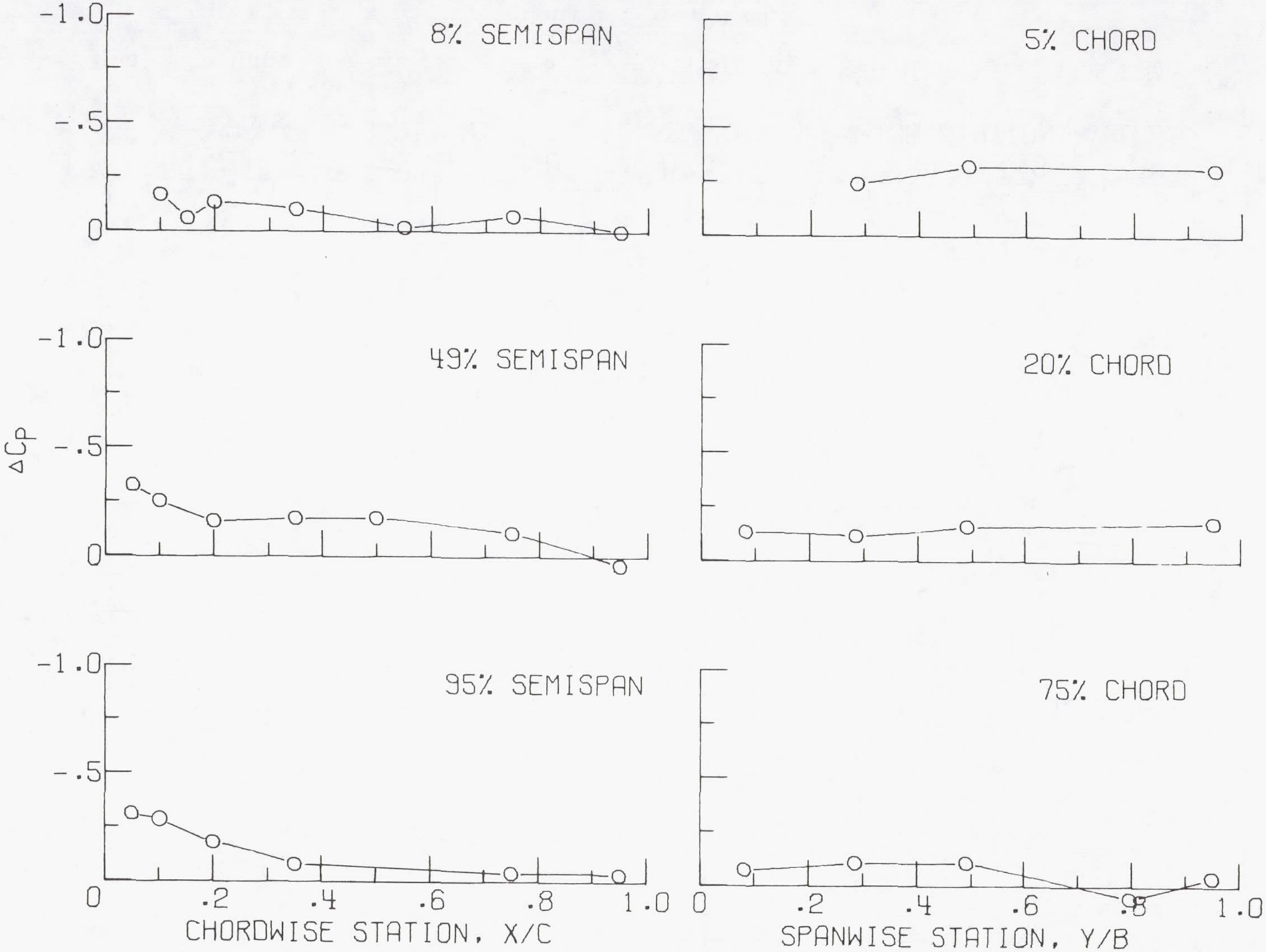
(a) M = 0.99; α = 1.5°; θ = -4.4°; ϕ = -46.7°; a_z = 1.5; flight time = 1584.7 sec.

Figure 15.- Wing loading distributions for subsonic Mach numbers during a combined dive and left-turn maneuver for tank-off configuration.



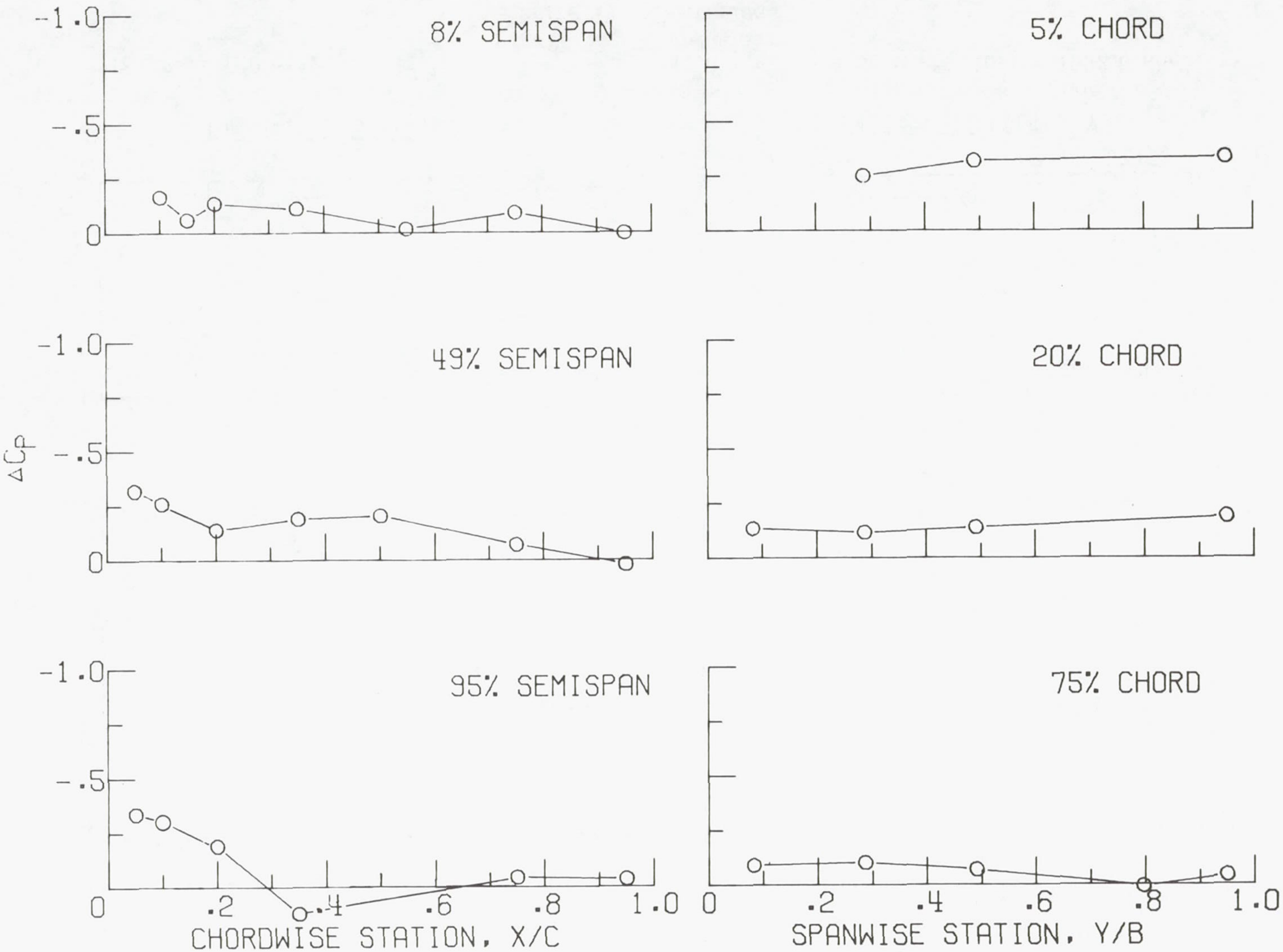
(b) M = 0.99; α = 1.5°; θ = -4.6°; ϕ = -47.6°; a_z = 1.5; flight time = 1588.3 sec.

Figure 15.- Continued.



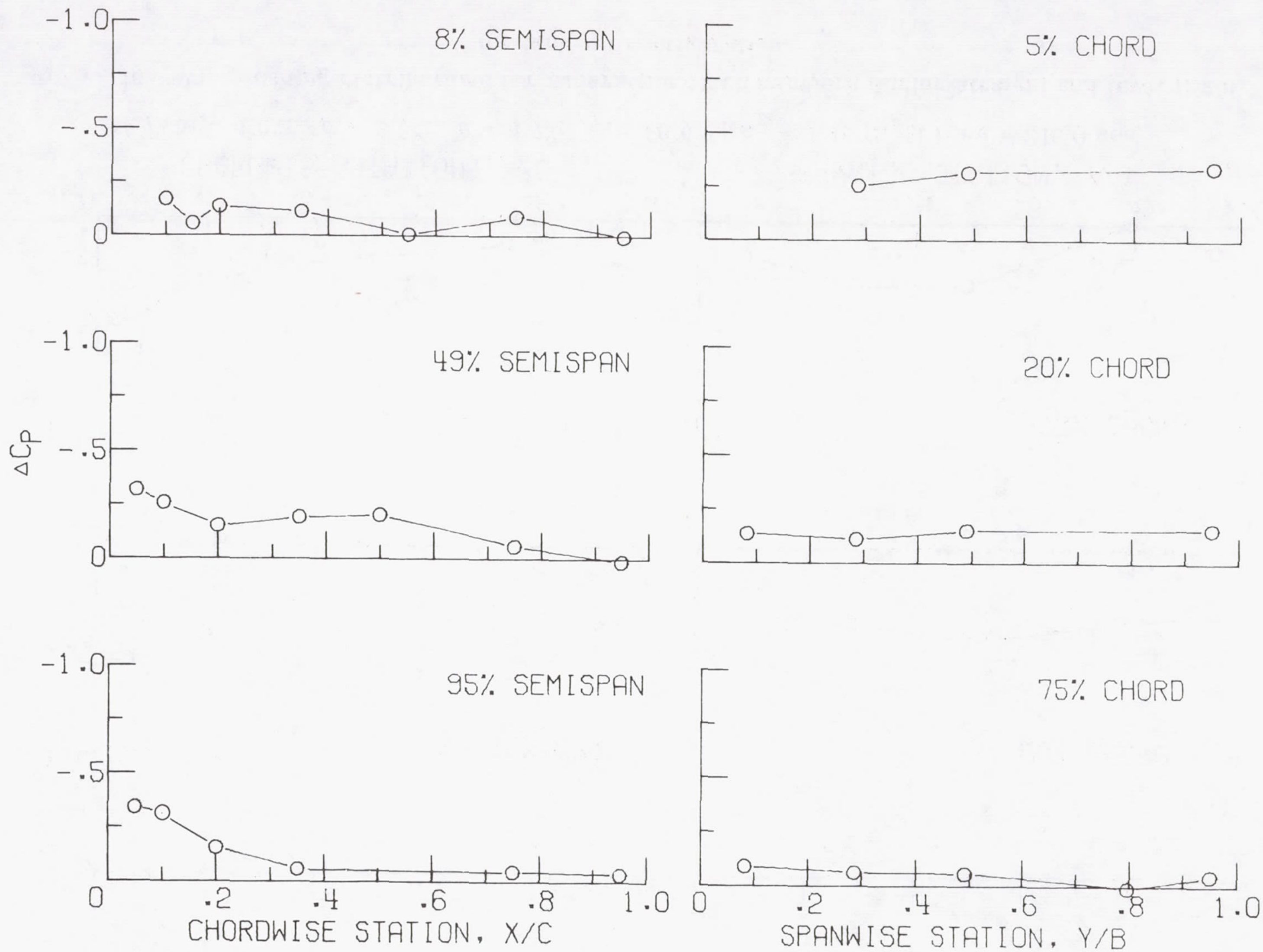
(c) M = 0.99; α = 1.5°; θ = -4.4°; ϕ = -47.8°; a_z = 1.5; flight time = 1592.0 sec.

Figure 15.- Continued.



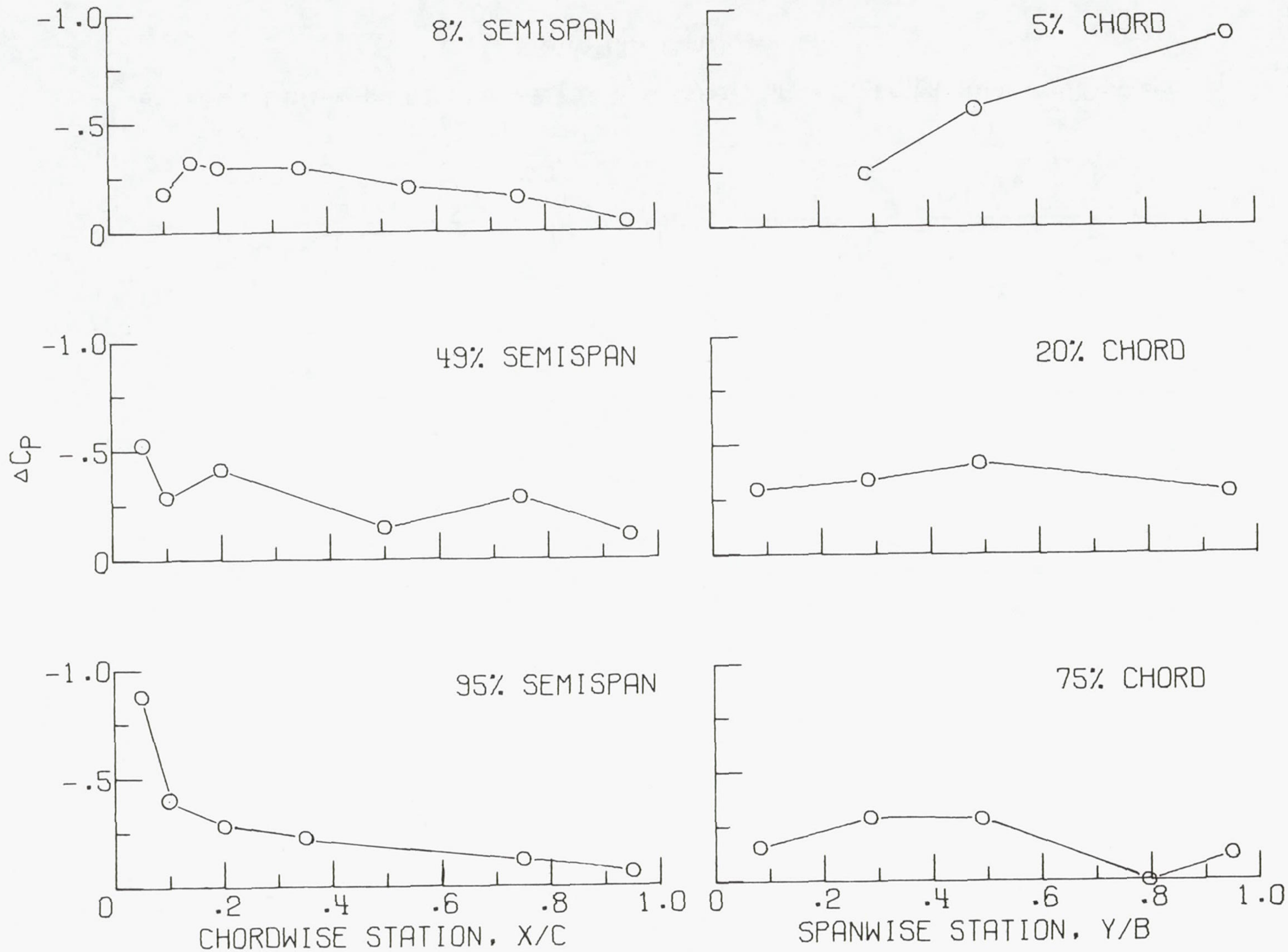
(d) M = 0.99; α = 1.5°; θ = -4.5°; ϕ = -37.5°; a_z = 1.5; flight time = 1595.7 sec.

Figure 15.- Continued.



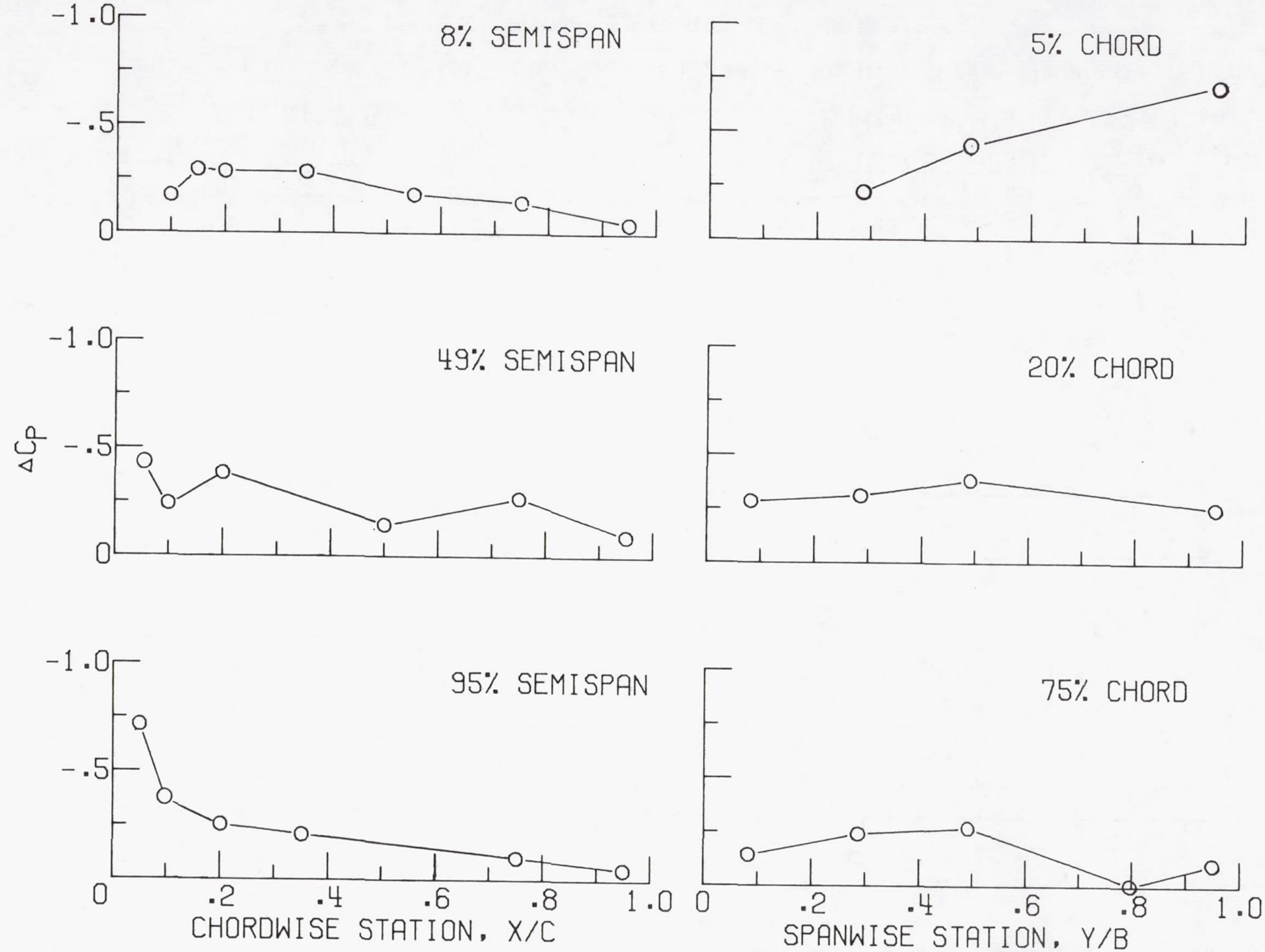
(e) M = 0.99; $\alpha = 1.6^{o}$; $\theta = -4.7^{o}$; $\phi = -33.0^{o}$; $a_z = 1.5$; flight time = 1600.0 sec.

Figure 15.- Concluded.



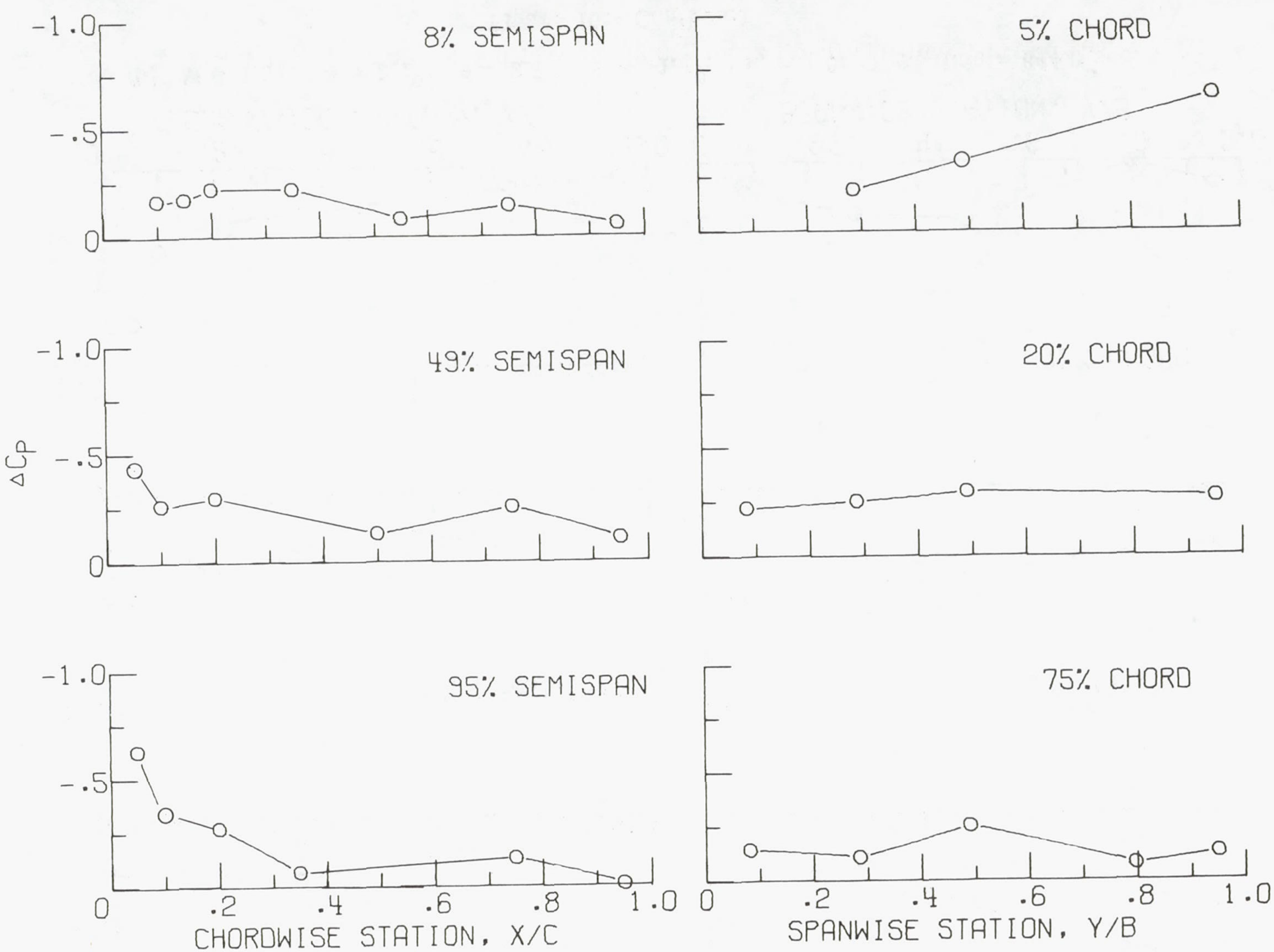
(a) $M = 1.07$; $\alpha = 2.3^{\circ}$; $\theta = 4.7^{\circ}$; $\phi = -0.6^{\circ}$; $a_z = 1.1$; flight time = 818.0 sec.

Figure 16.- Wing loading distributions for supersonic Mach numbers during straight and level flight for tank-off configuration.



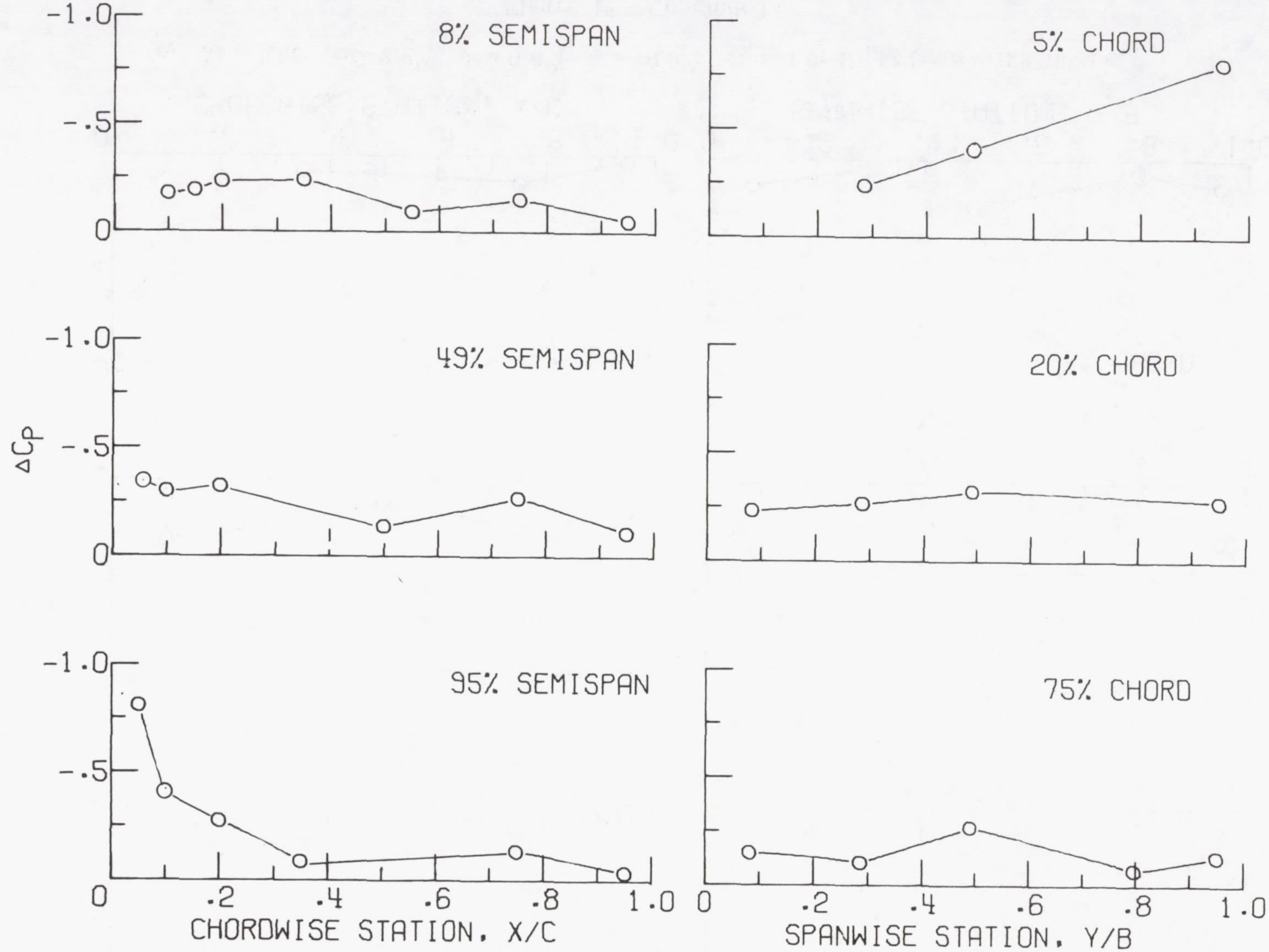
(b) M = 1.07; α = 2.1°; θ = 2.7°; ϕ = -1.1°; a_z = 1.0; flight time = 844.0 sec.

Figure 16.- Continued.



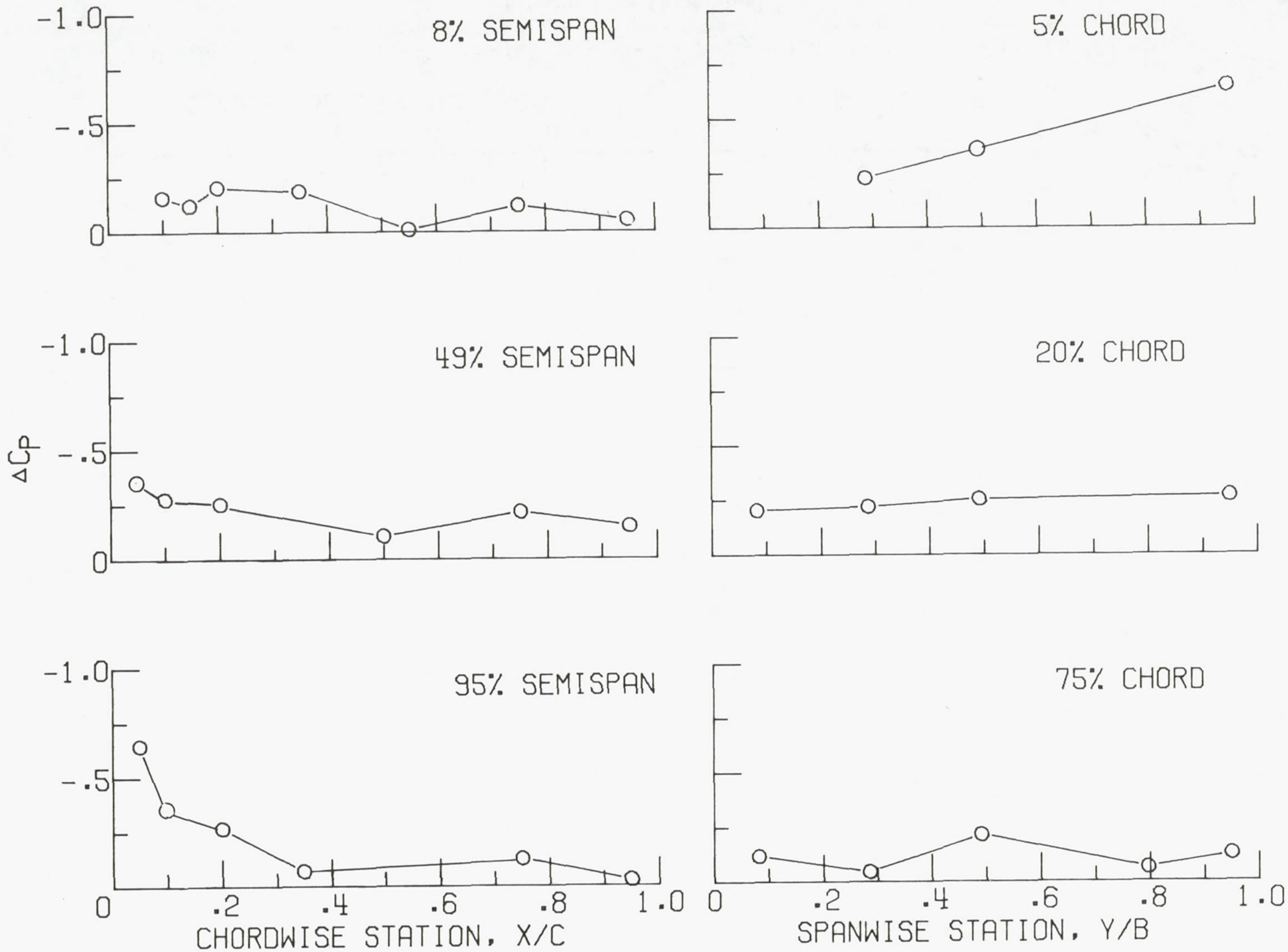
(c) M = 1.14; α = 2.1°; θ = 1.9°; ϕ = -2.7°; a_z = 1.0; flight time = 1100.0 sec.

Figure 16.- Continued.



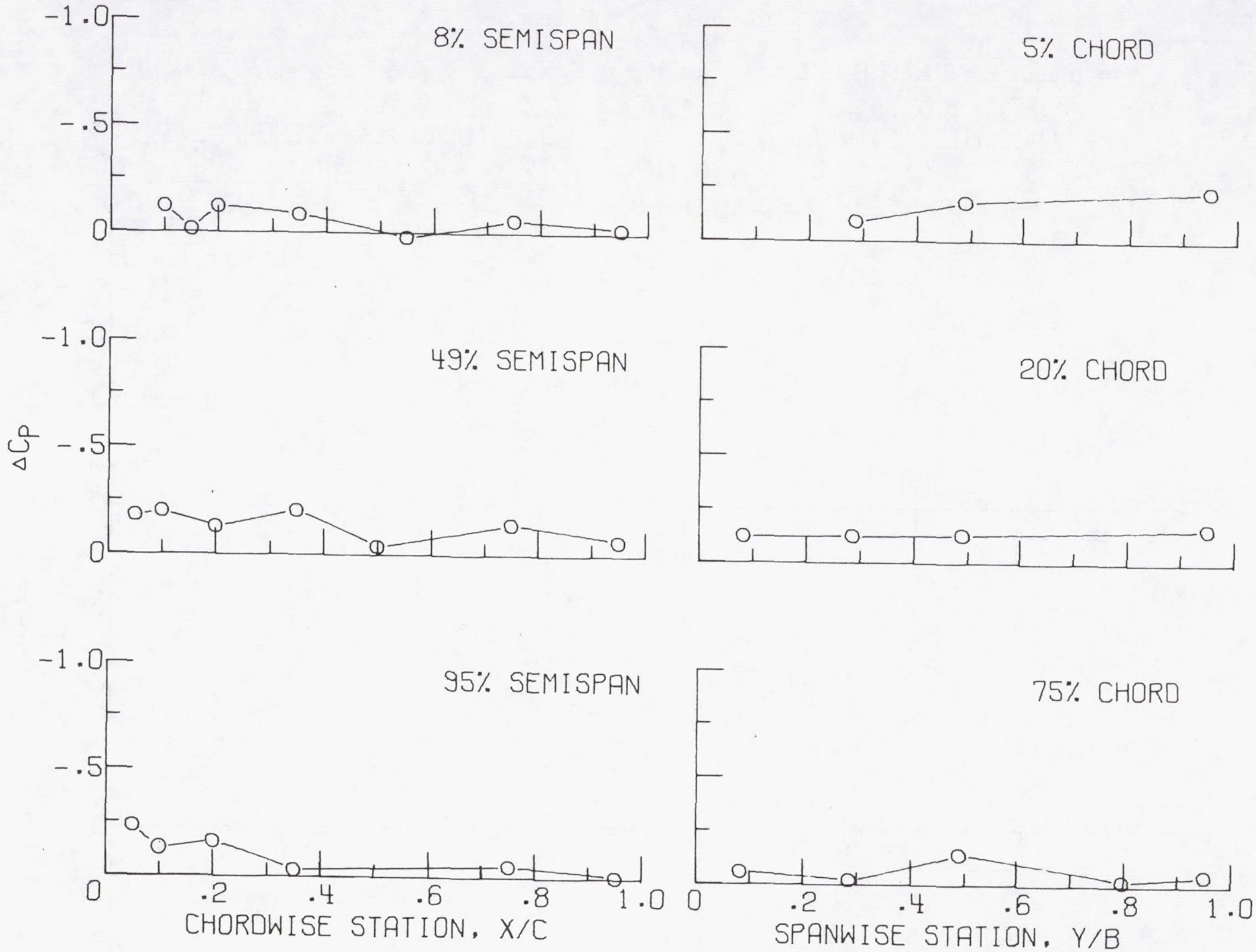
(d) M = 1.14; $\alpha = 2.4^{\circ}$; $\theta = 0.7^{\circ}$; $\phi = -2.0^{\circ}$; $a_z = 1.2$; flight time = 1115.9 sec.

Figure 16.- Continued.



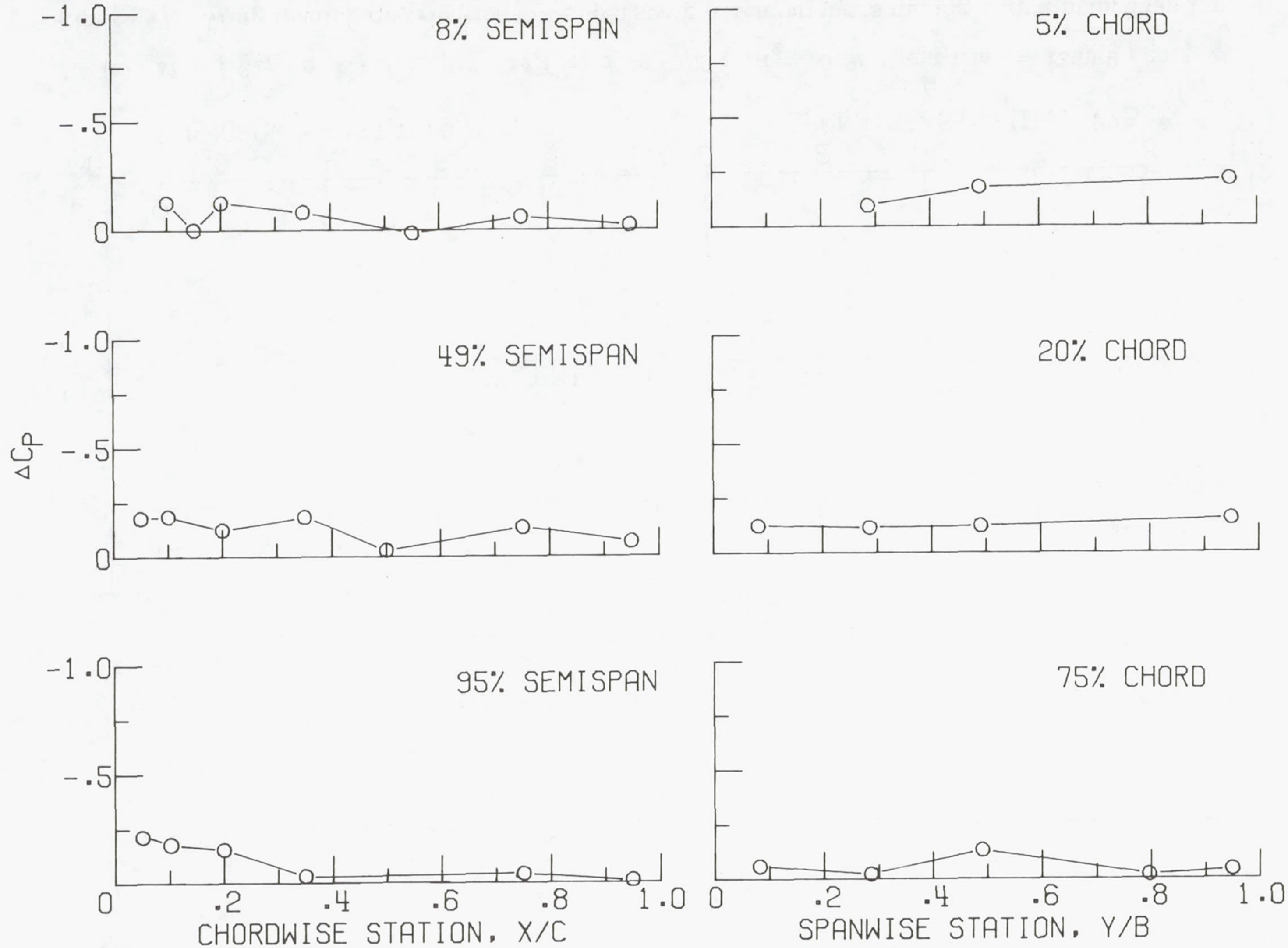
(e) M = 1.23; $\alpha = 2.4^{\circ}$; $\theta = 0.8^{\circ}$; $\phi = -0.9^{\circ}$; $a_z = 1.0$; flight time = 1285.9 sec.

Figure 16.- Concluded.



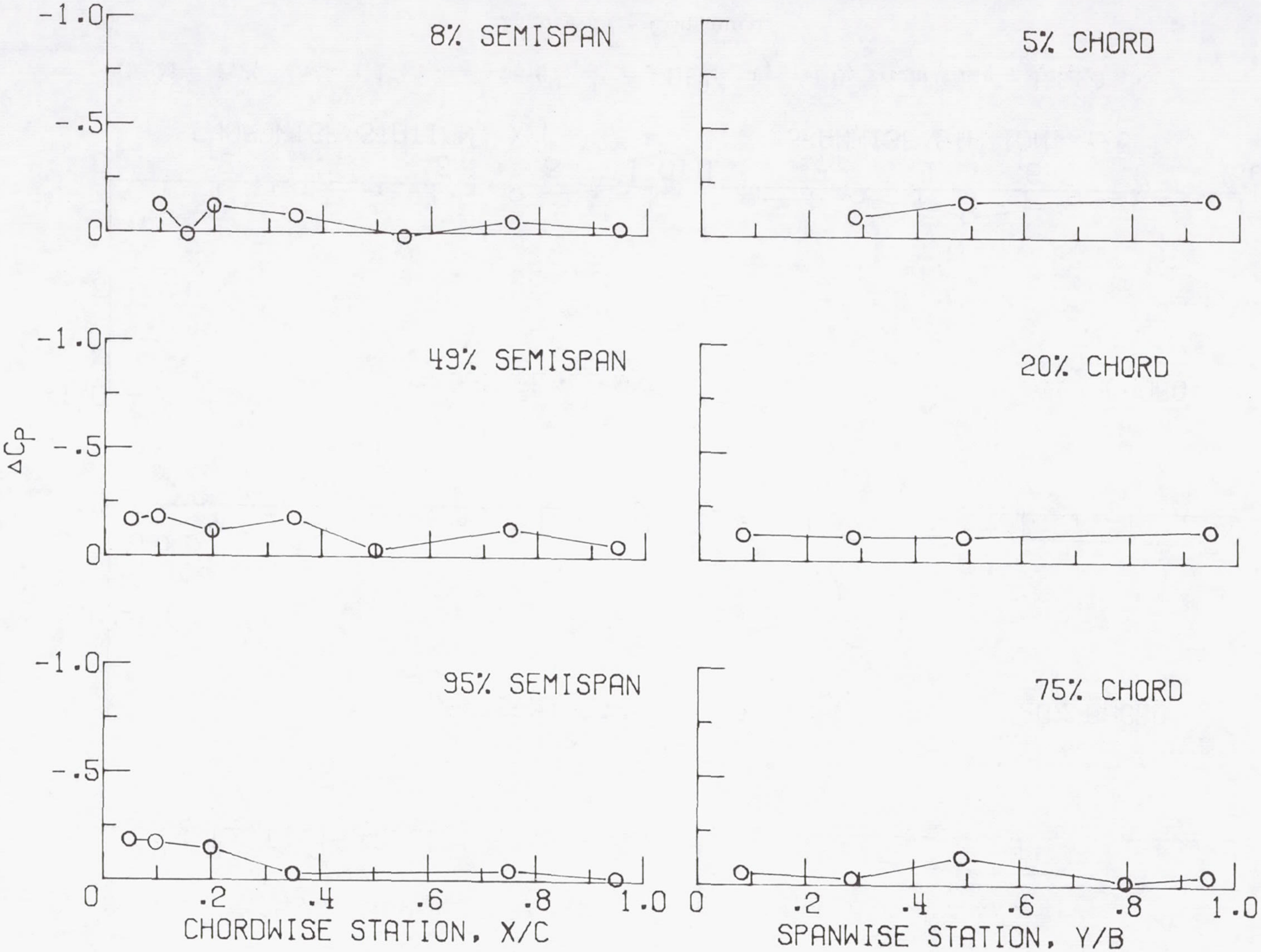
(a) M = 1.21; α = 1.3°; θ = -24.9°; ϕ = -0.2°; a_z = 0.9; flight time = 1369.9 sec.

Figure 17.- Wing loading distributions at supersonic Mach numbers during a dive maneuver for tank-off configuration.



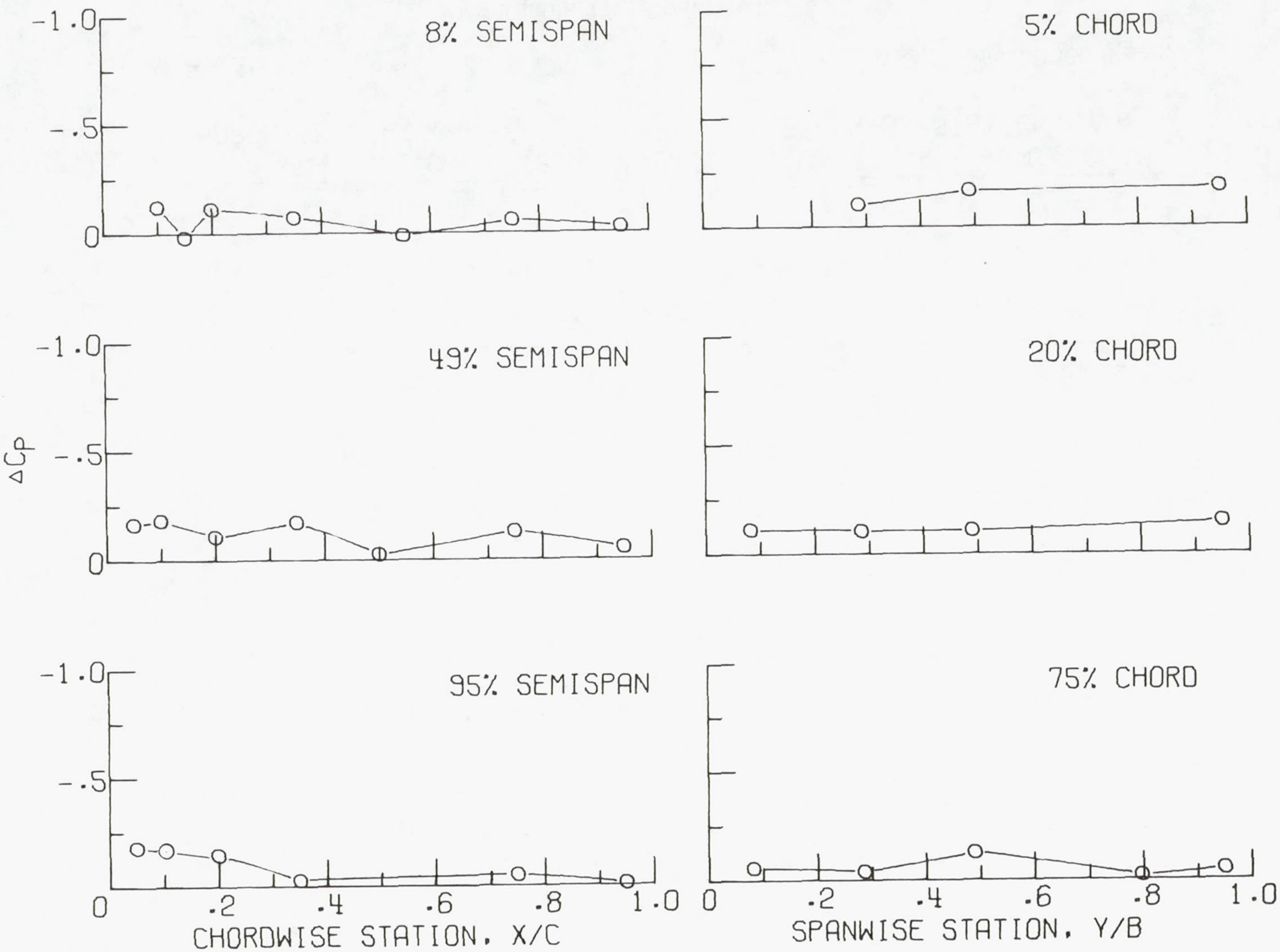
(b) M = 1.22; $\alpha = 1.2^{\circ}$; $\theta = -25.4^{\circ}$; $\phi = -0.6^{\circ}$; $a_z = 1.0$; flight time = 1376.9 sec.

Figure 17.- Continued.



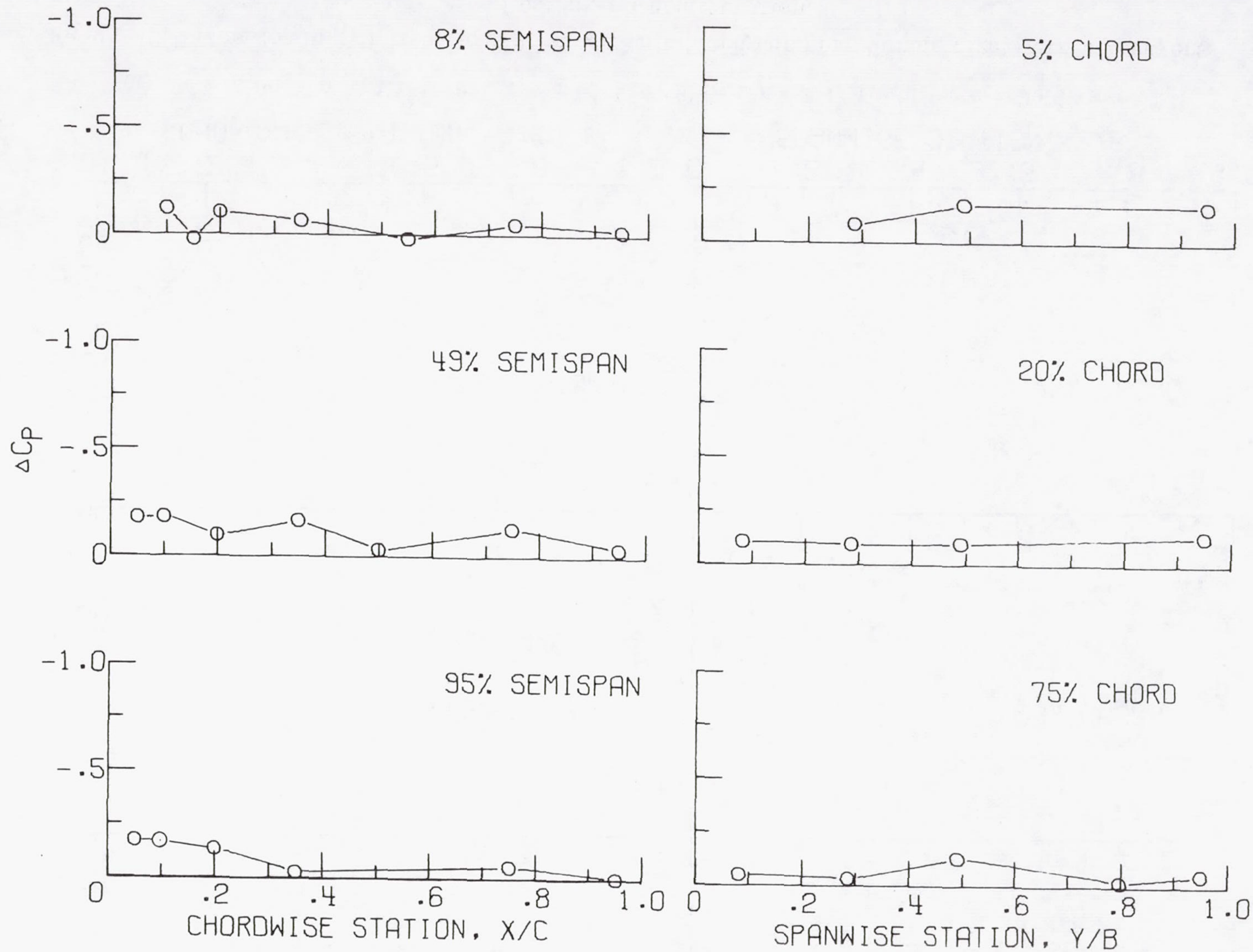
(c) M = 1.21; α = 1.1°; θ = -25.6°; ϕ = -1.7°; a_z = 1.0; flight time = 1380.6 sec.

Figure 17.- Continued.



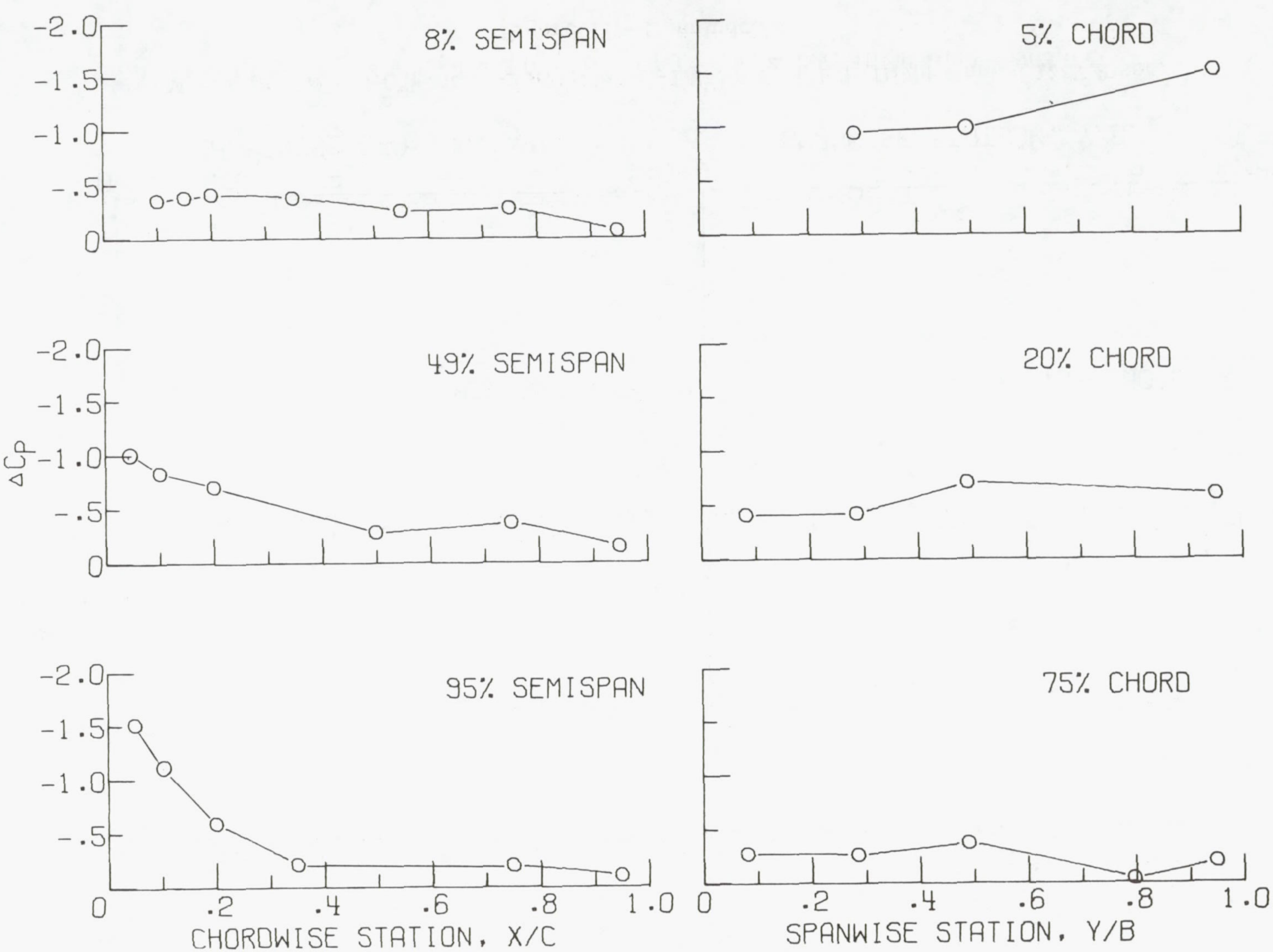
(d) $M = 1.20$; $\alpha = 1.1^{\circ}$; $\theta = -25.6^{\circ}$; $\phi = -1.8^{\circ}$; $a_z = 1.0$; flight time = 1384.3 sec.

Figure 17.- Continued.



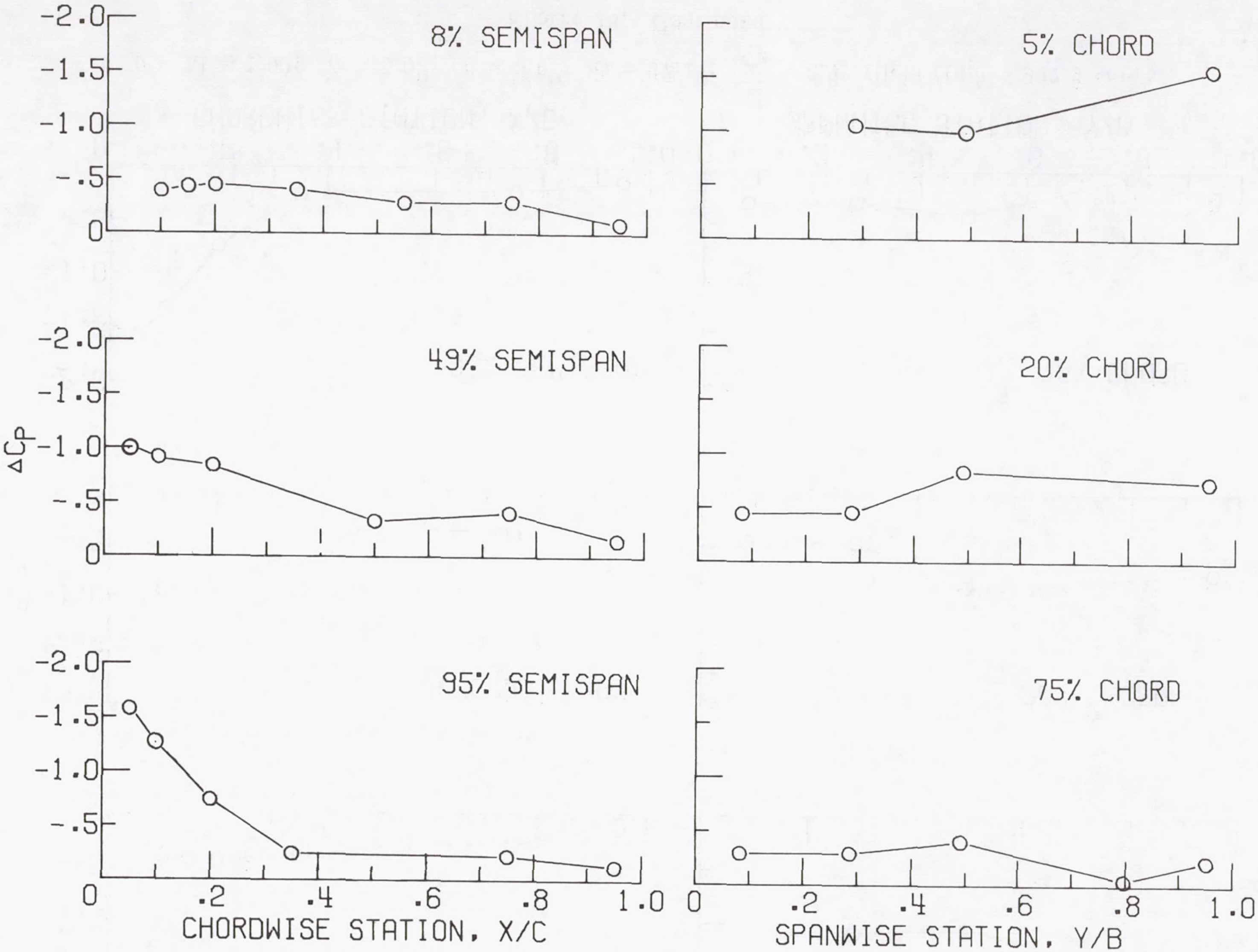
(e) M = 1.19; α = 1.0°; θ = -25.5°; ϕ = -1.8°; a_z = 1.0; flight time = 1387.9 sec.

Figure 17.- Concluded.



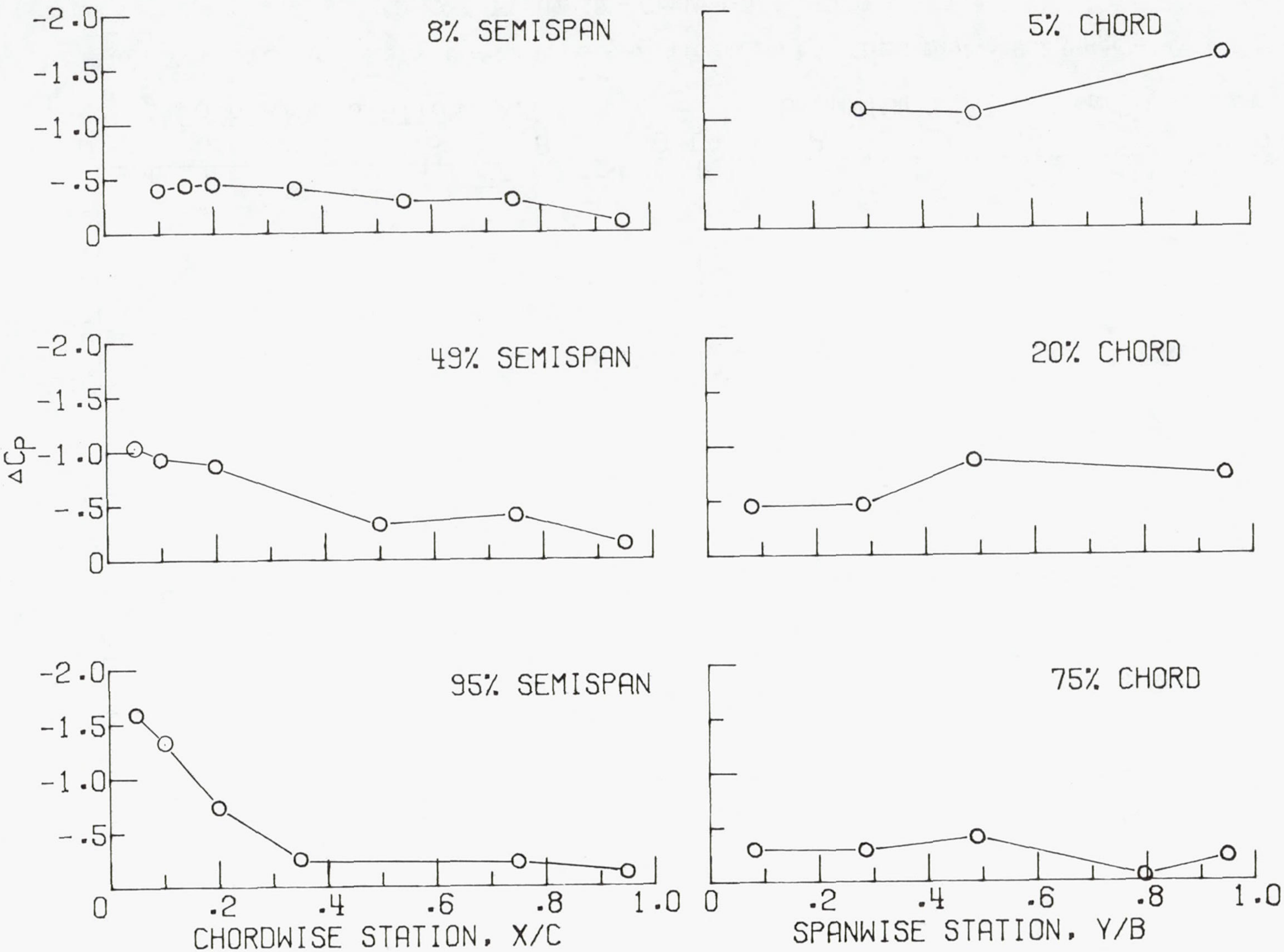
(a) M = 1.04; α = 4.3°; θ = 2.4°; ϕ = 67.8°; a_z = 2.4; flight time = 959.9 sec.

Figure 18.- Wing loading distributions at supersonic Mach numbers during right-turn maneuvers for tank-off configuration.



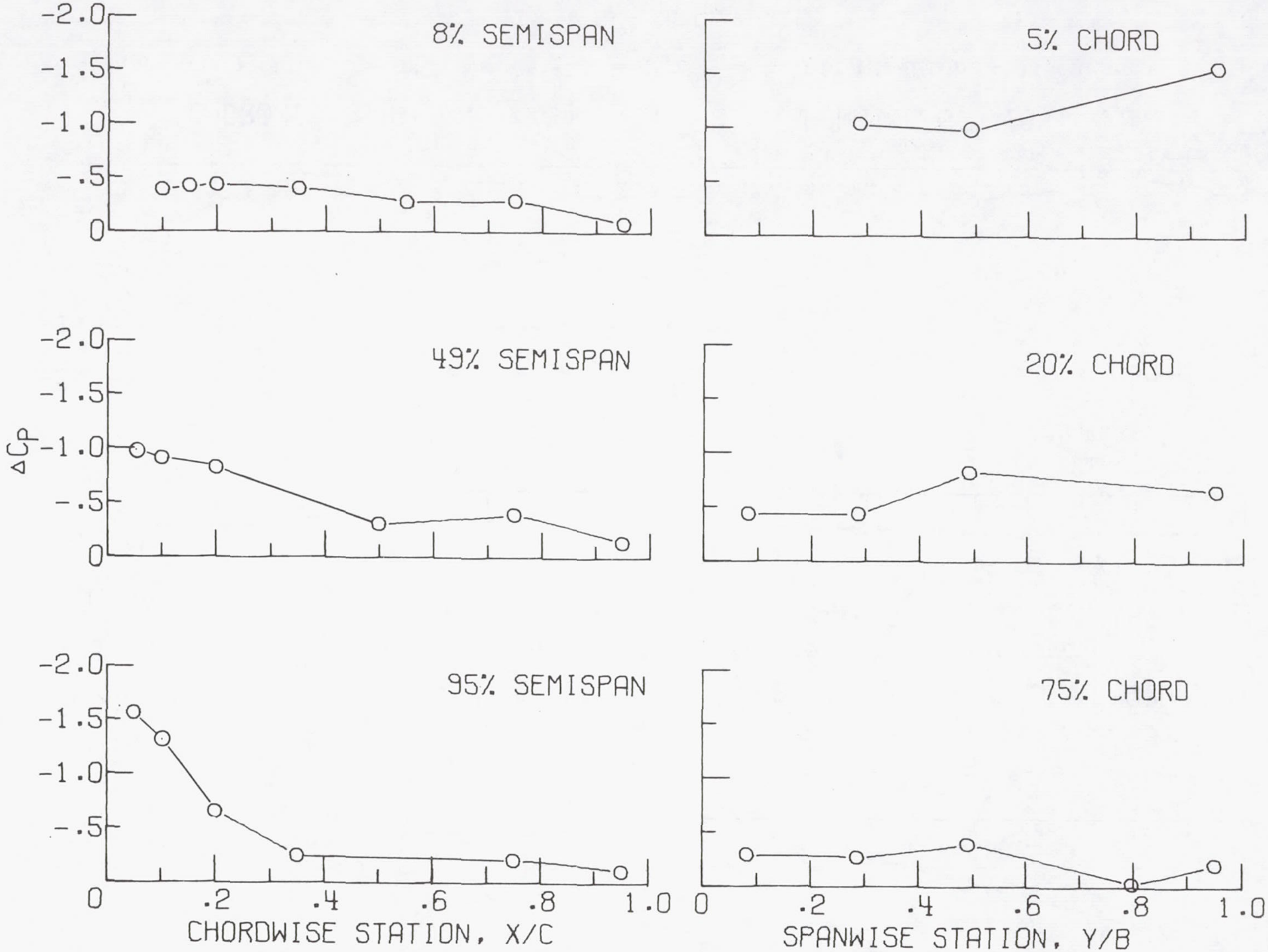
(b) M = 1.01; α = 4.9°; θ = 3.0°; ϕ = 67.7°; a_z = 2.7; flight time = 963.9 sec.

Figure 18.- Continued.



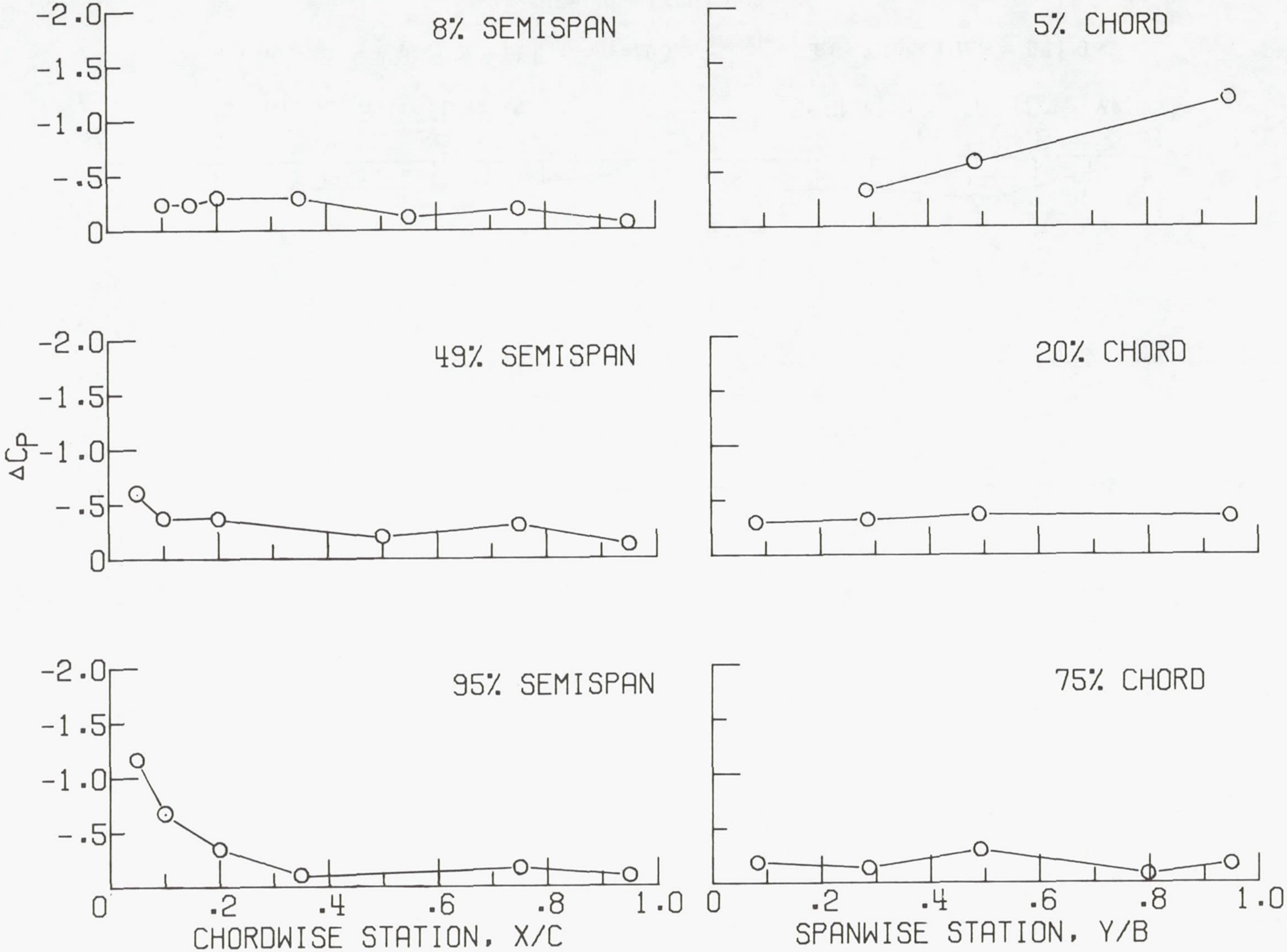
(c) M = 1.00; α = 5.0°; θ = 3.6°; ϕ = 67.1°; a_z = 2.7; flight time = 967.9 sec.

Figure 18.- Continued.



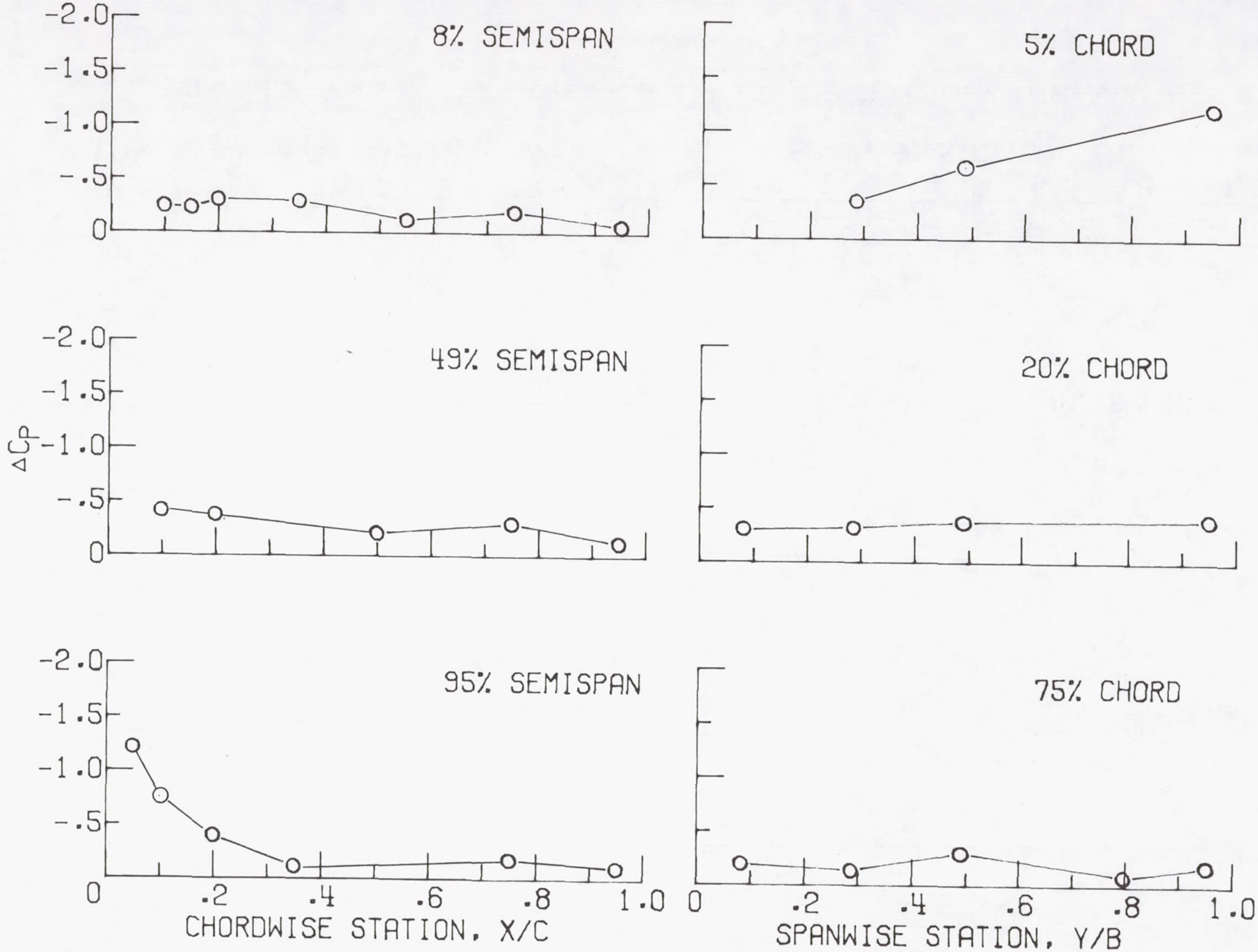
(d) M = 1.00; α = 4.8°; θ = 4.2°; ϕ = 65.2°; a_z = 2.6; flight time = 971.9 sec.

Figure 18.- Continued.



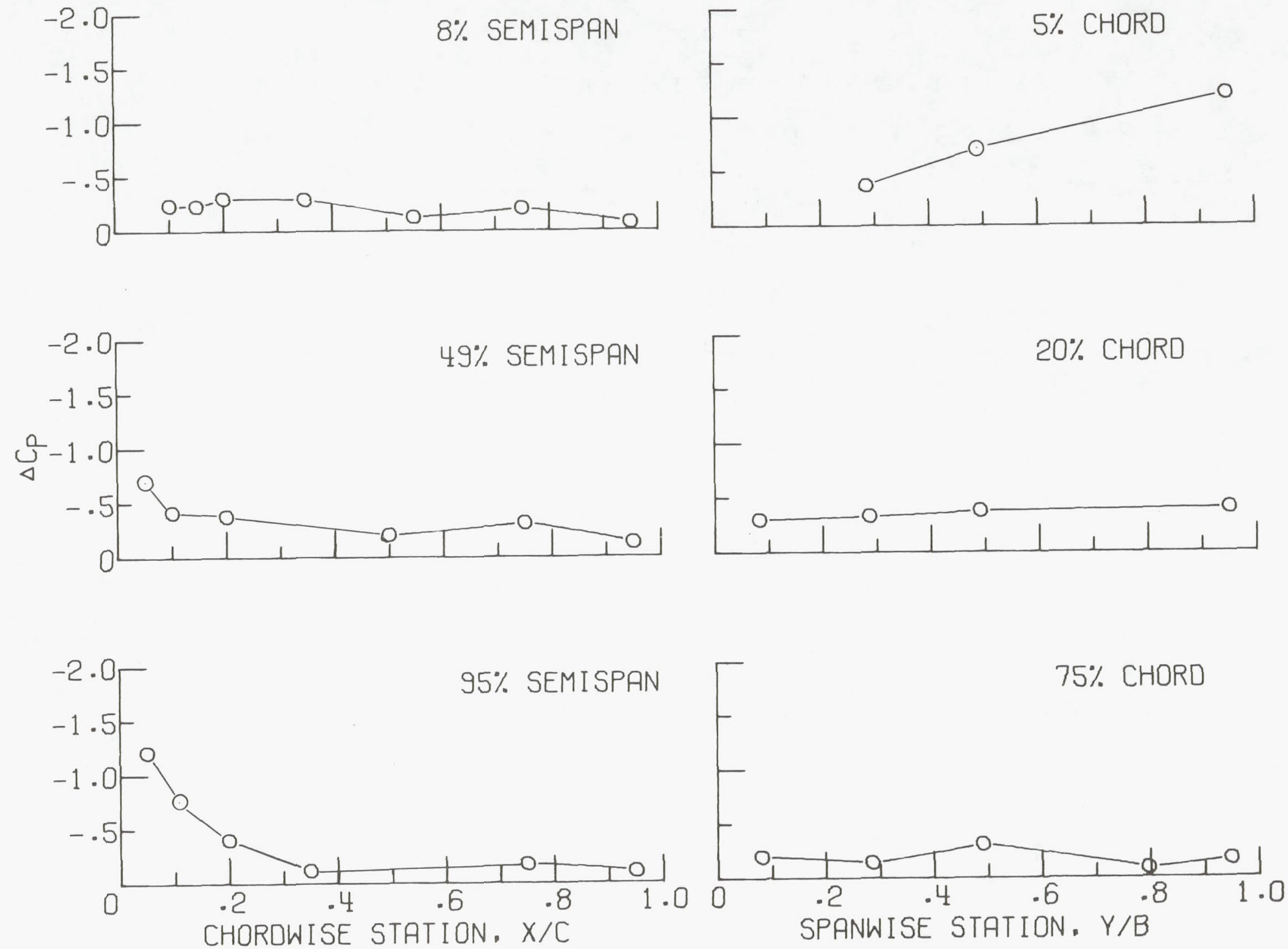
(e) M = 1.11; α = 3.0°; θ = 2.7°; ϕ = 46.2°; a_z = 1.5; flight time = 1164.0 sec.

Figure 18.- Continued.



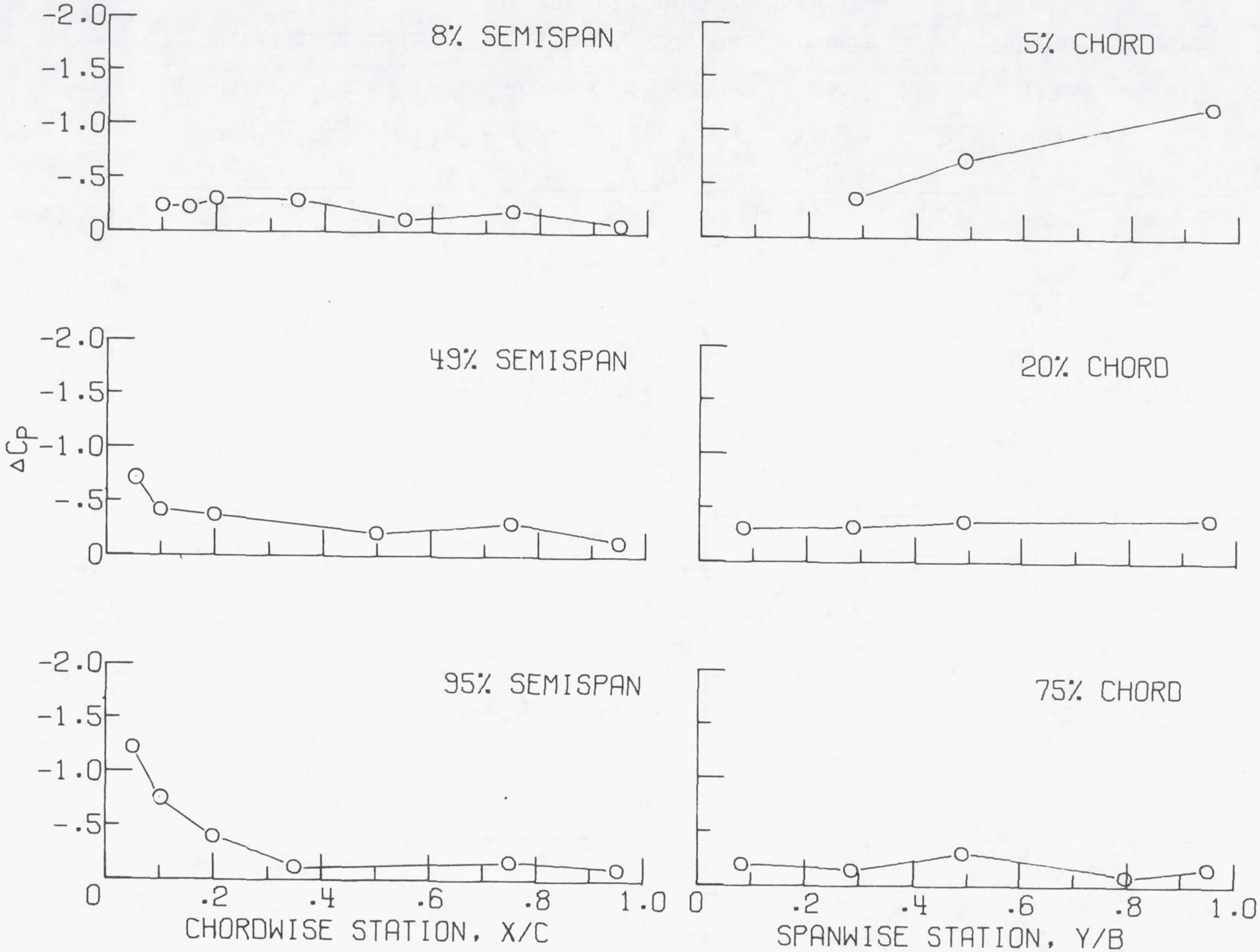
(f) M = 1.12; α = 3.2°; θ = 2.3°; ϕ = 46.1°; a_z = 1.6; flight time = 1175.7 sec.

Figure 18.- Continued.



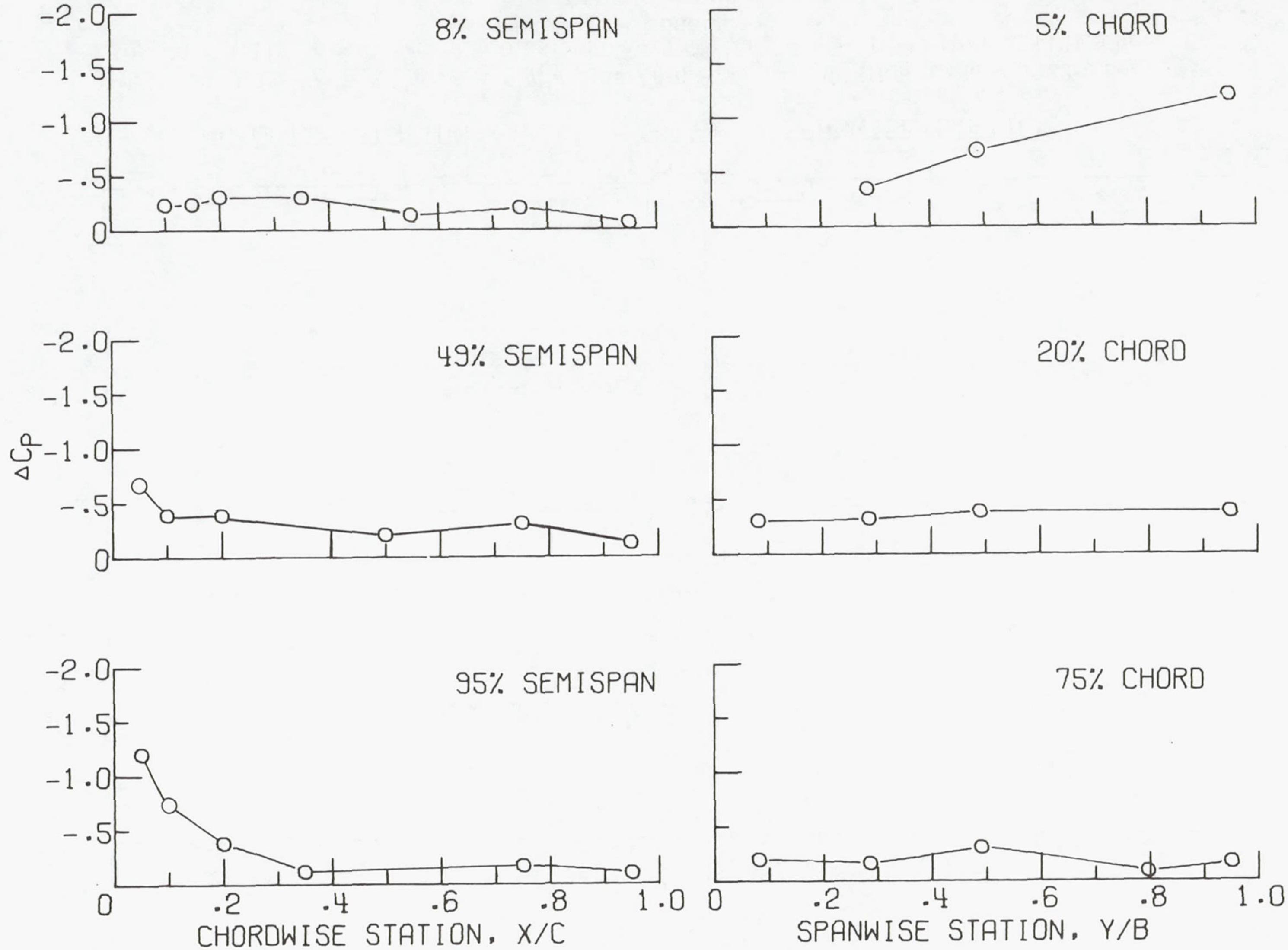
(g) M = 1.12; $\alpha = 3.3^{\circ}$; $\theta = 2.4^{\circ}$; $\phi = 46.5^{\circ}$; $a_z = 1.6$; flight time = 1179.4 sec.

Figure 18.- Continued.



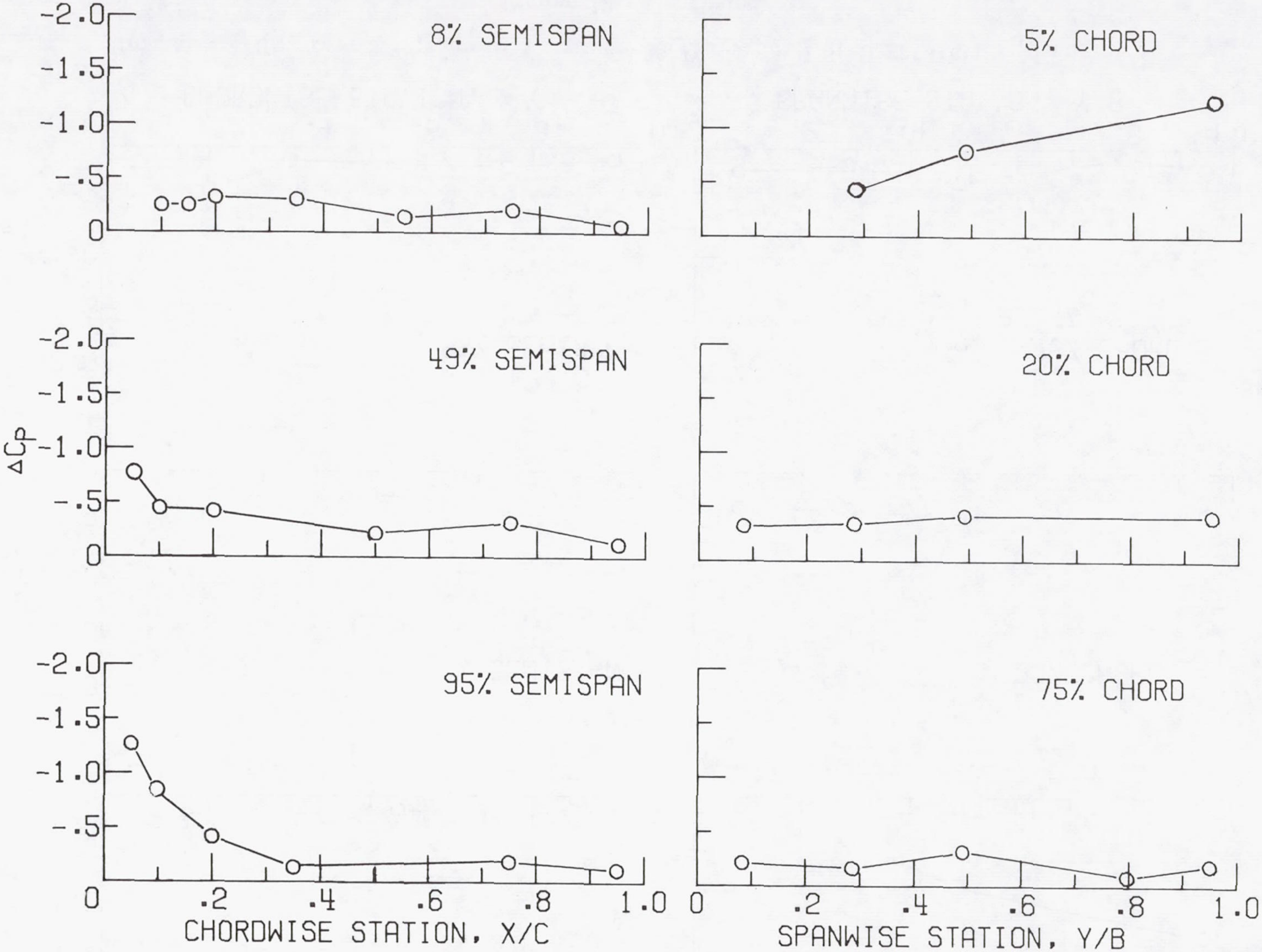
(h) M = 1.12; α = 3.3°; θ = 2.7°; ϕ = 46.0°; a_z = 1.6; flight time = 1183.0 sec.

Figure 18.- Concluded.



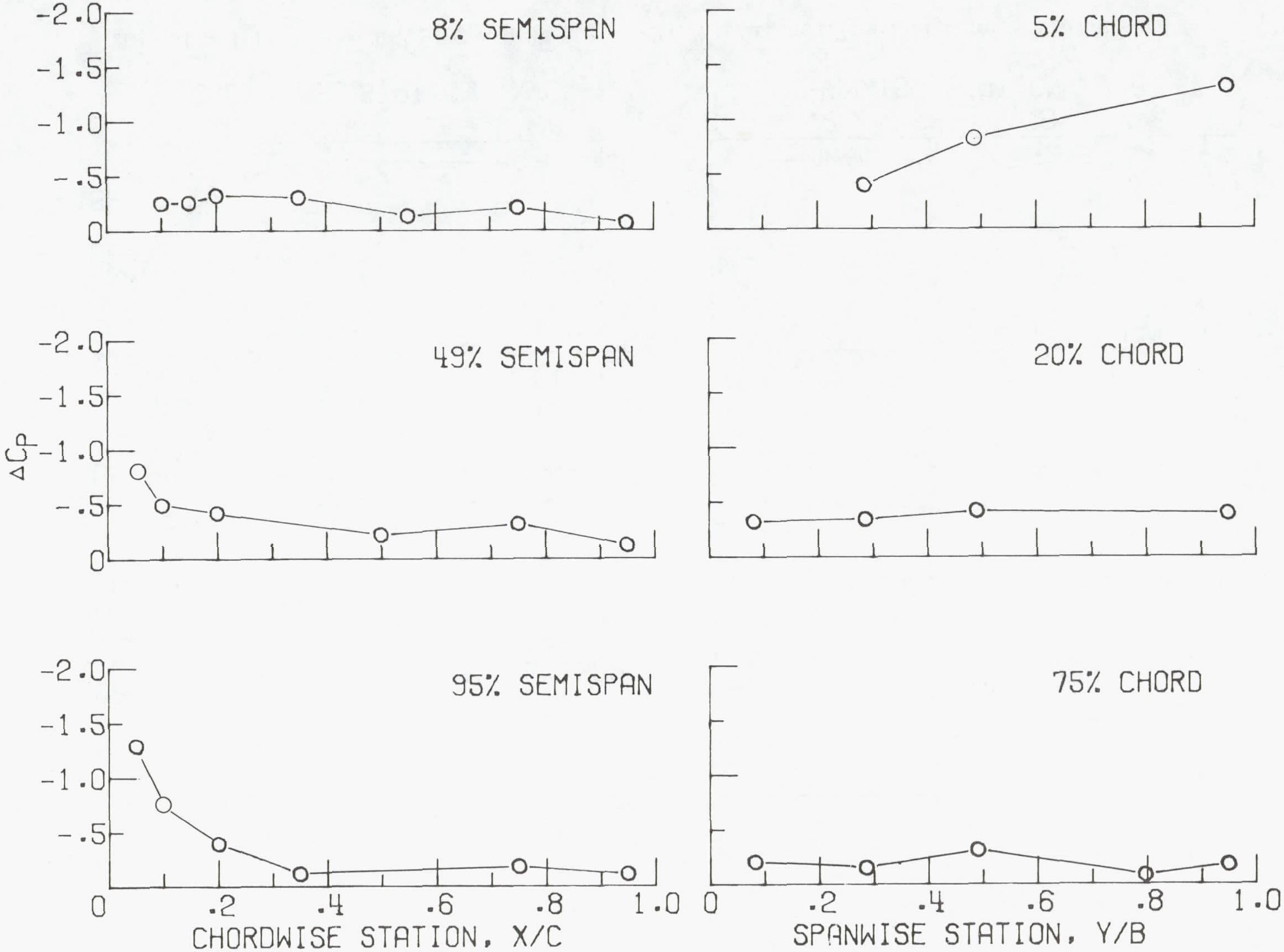
(a) M = 1.12; α = 3.2°; θ = -0.0°; ϕ = -24.9°; a_z = 1.6; flight time = 1127.9 sec.

Figure 19.- Wing loading distributions for supersonic Mach numbers during a left-turn maneuver for tank-off configuration.



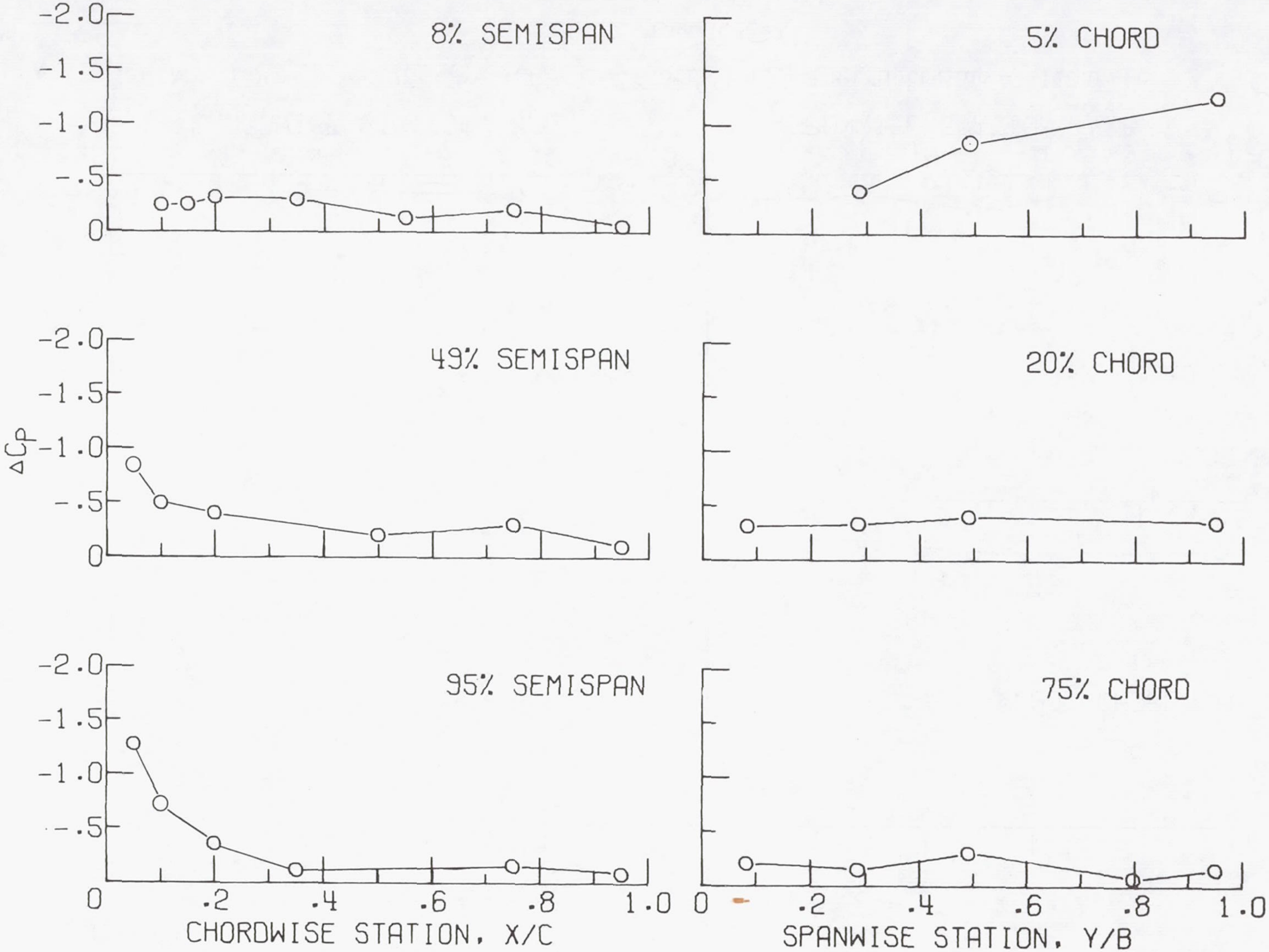
(b) M = 1.11; α = 3.4°; θ = 0.3°; ϕ = -27.7°; a_z = 1.7; flight time = 1131.9 sec.

Figure 19.- Continued.



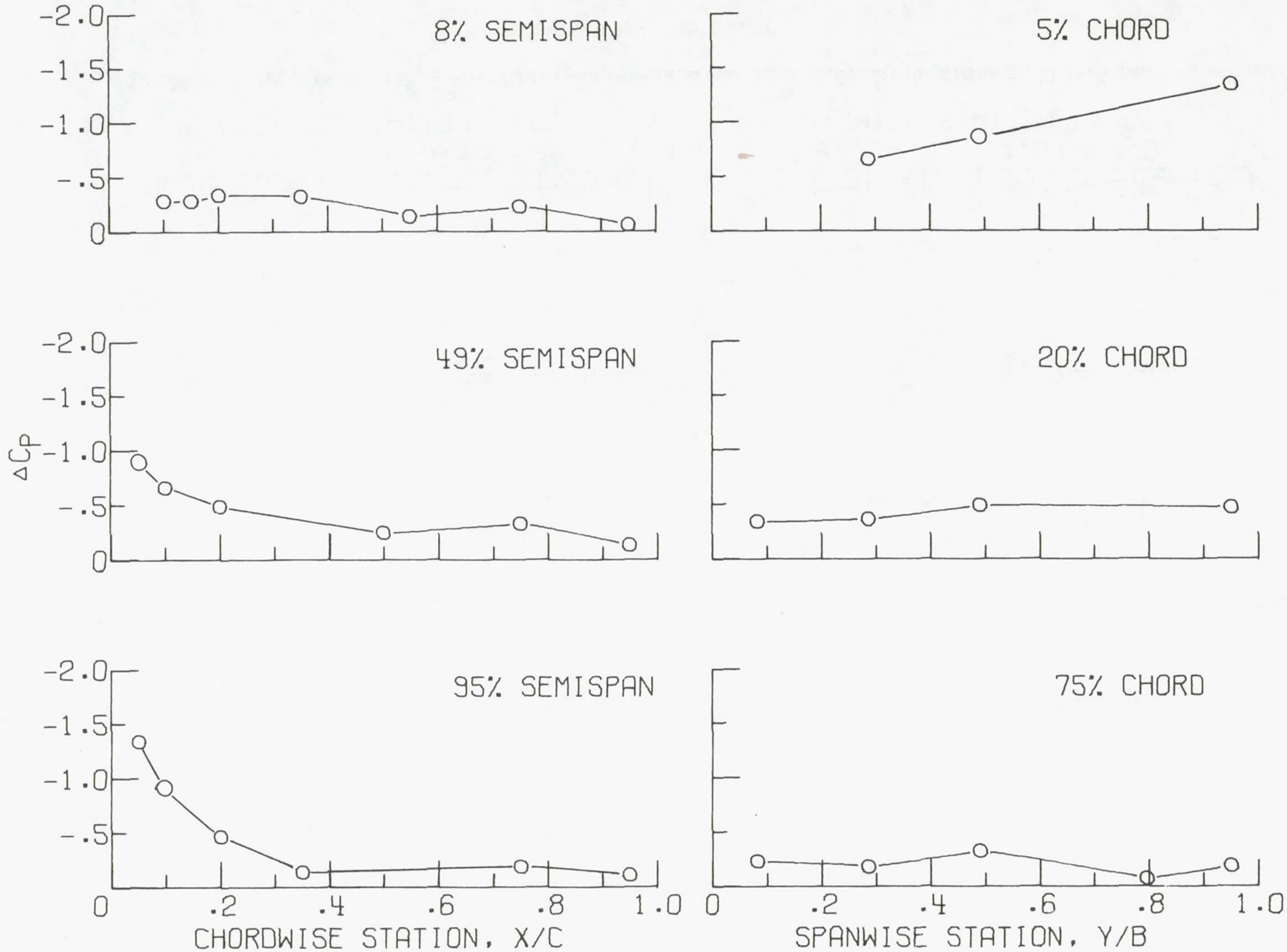
(c) M = 1.10; α = 3.3°; θ = 0.3°; ϕ = -36.7°; a_z = 1.6; flight time = 1135.9 sec.

Figure 19.- Continued.



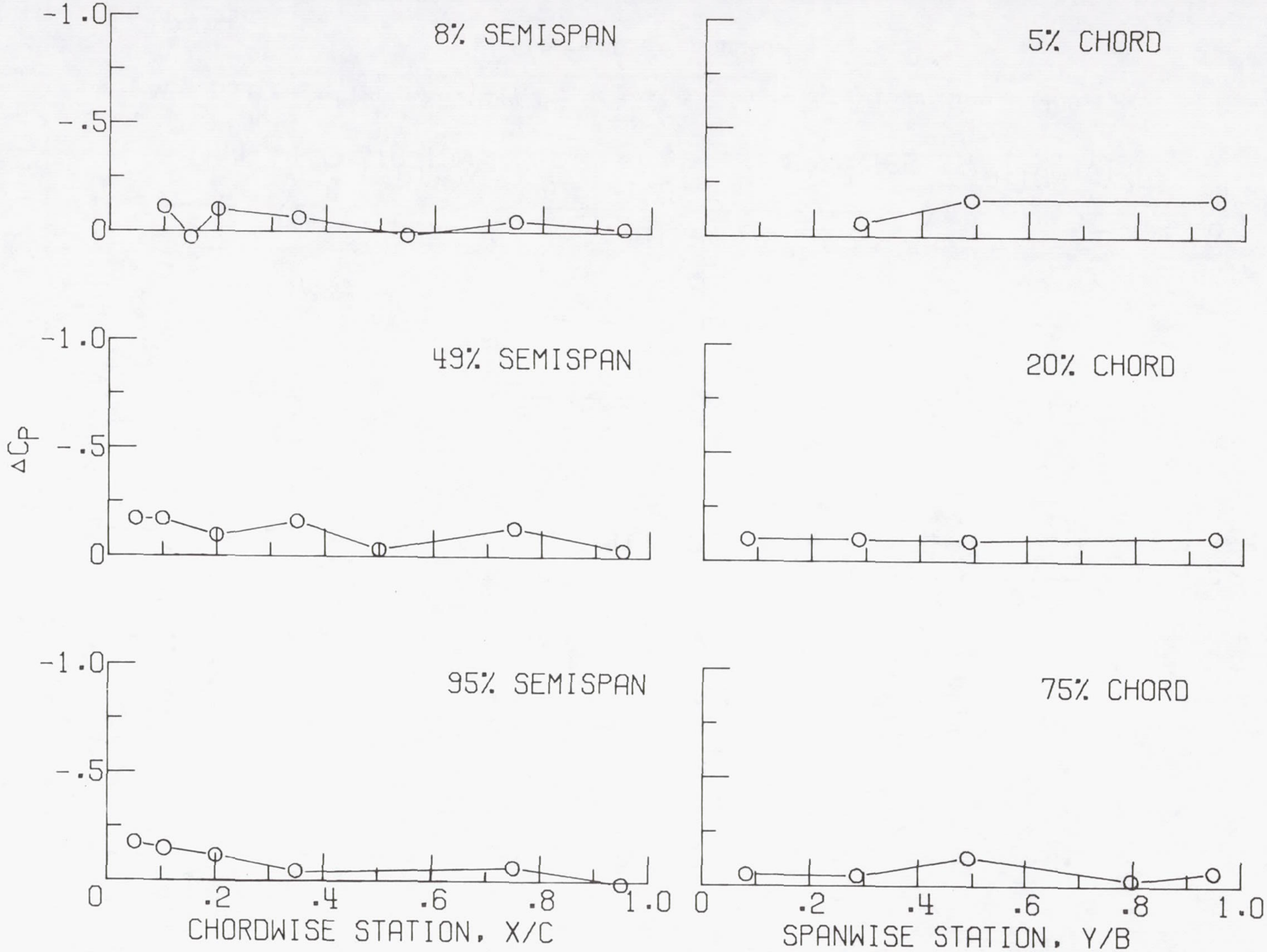
(d) M = 1.09; α = 3.2°; θ = 0.1°; ϕ = -42.2°; a_z = 1.5; flight time = 1139.6 sec.

Figure 19.- Continued.



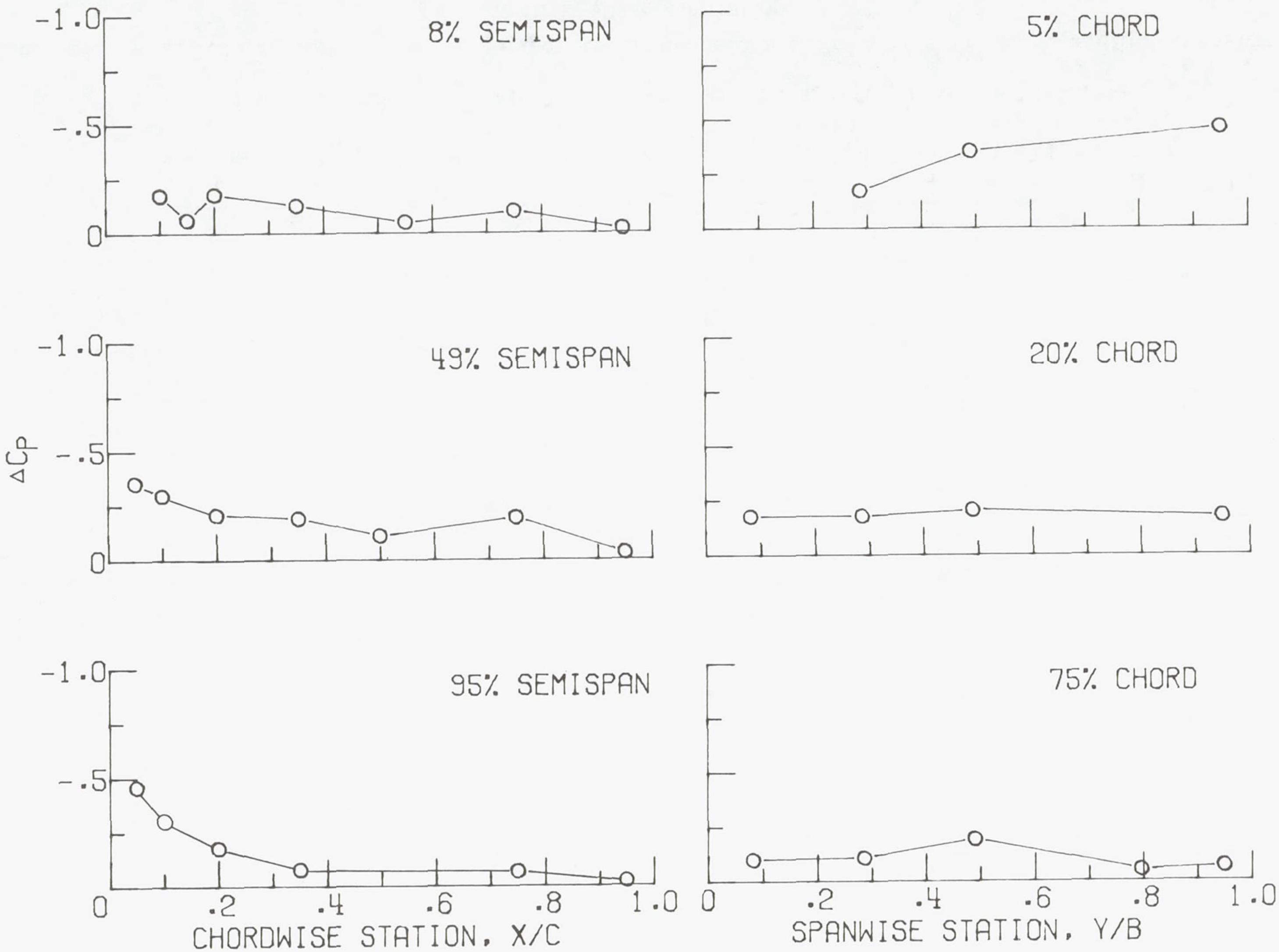
(e) M = 1.09; α = 3.7°; θ = 1.5°; ϕ = -43.1°; a_z = 1.8; flight time = 1148.0 sec.

Figure 19.- Concluded.



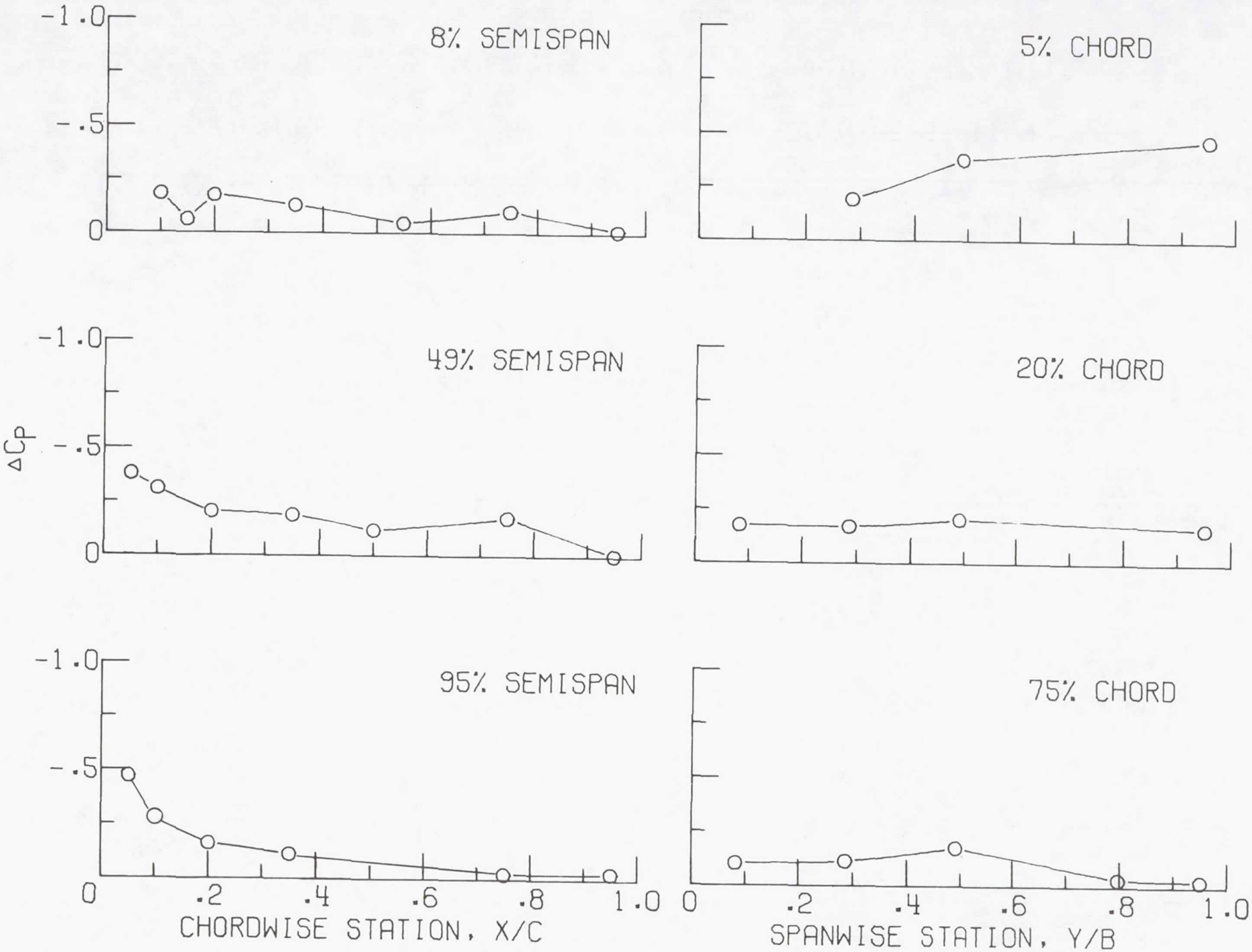
(a) M = 1.17; $\alpha = 0.9^{o}$; $\theta = -25.5^{o}$; $\phi = -2.7^{o}$; $a_z = 1.0$; flight time = 1391.9 sec.

Figure 20.- Wing loading distributions for supersonic/subsonic Mach numbers during dive-climb transition for tank-off configuration.



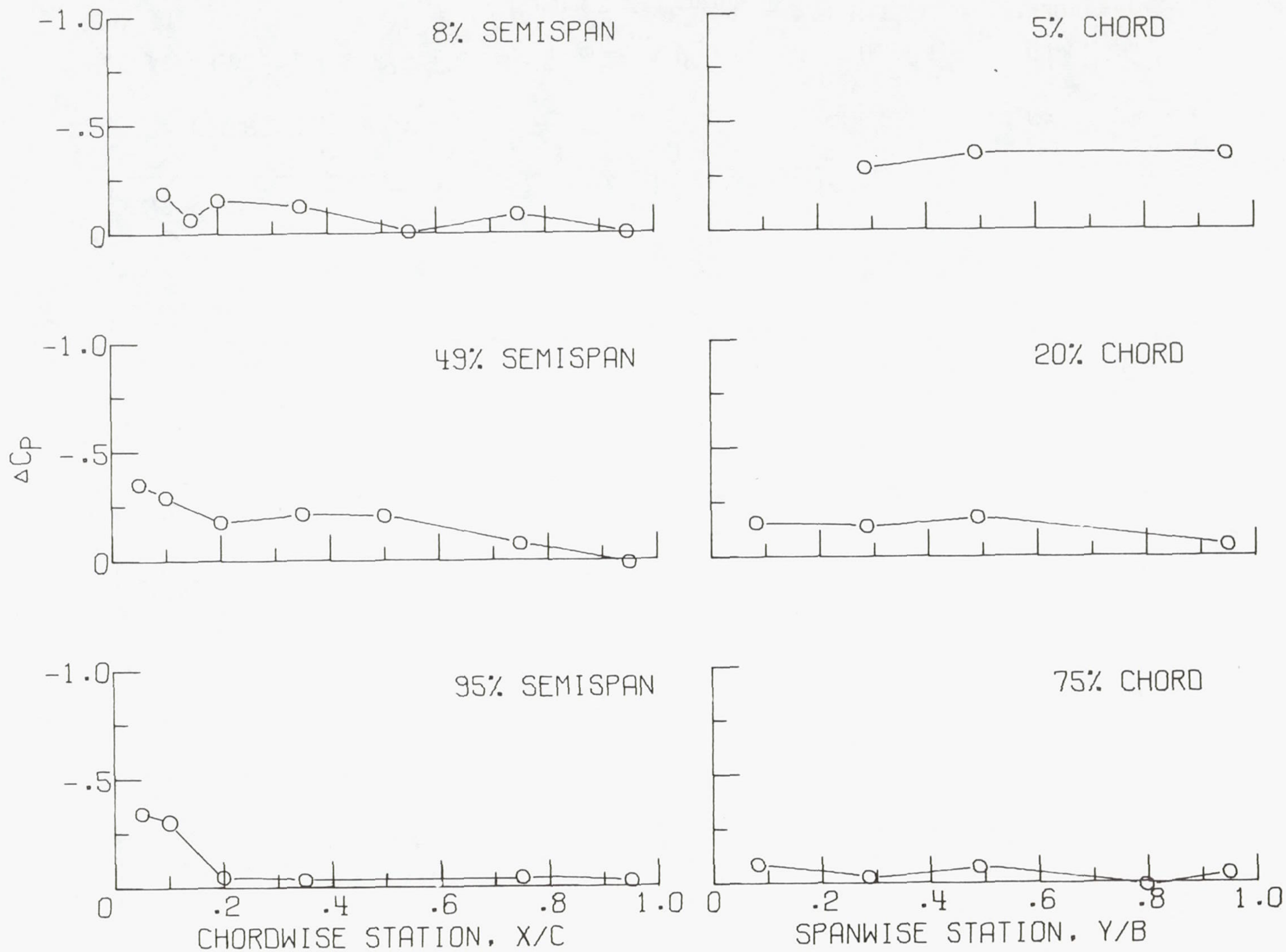
(b) M = 1.11; α = 1.9°; θ = -17.4°; ϕ = -4.3°; a_z = 2.5; flight time = 1400.1 sec.

Figure 20.- Continued.



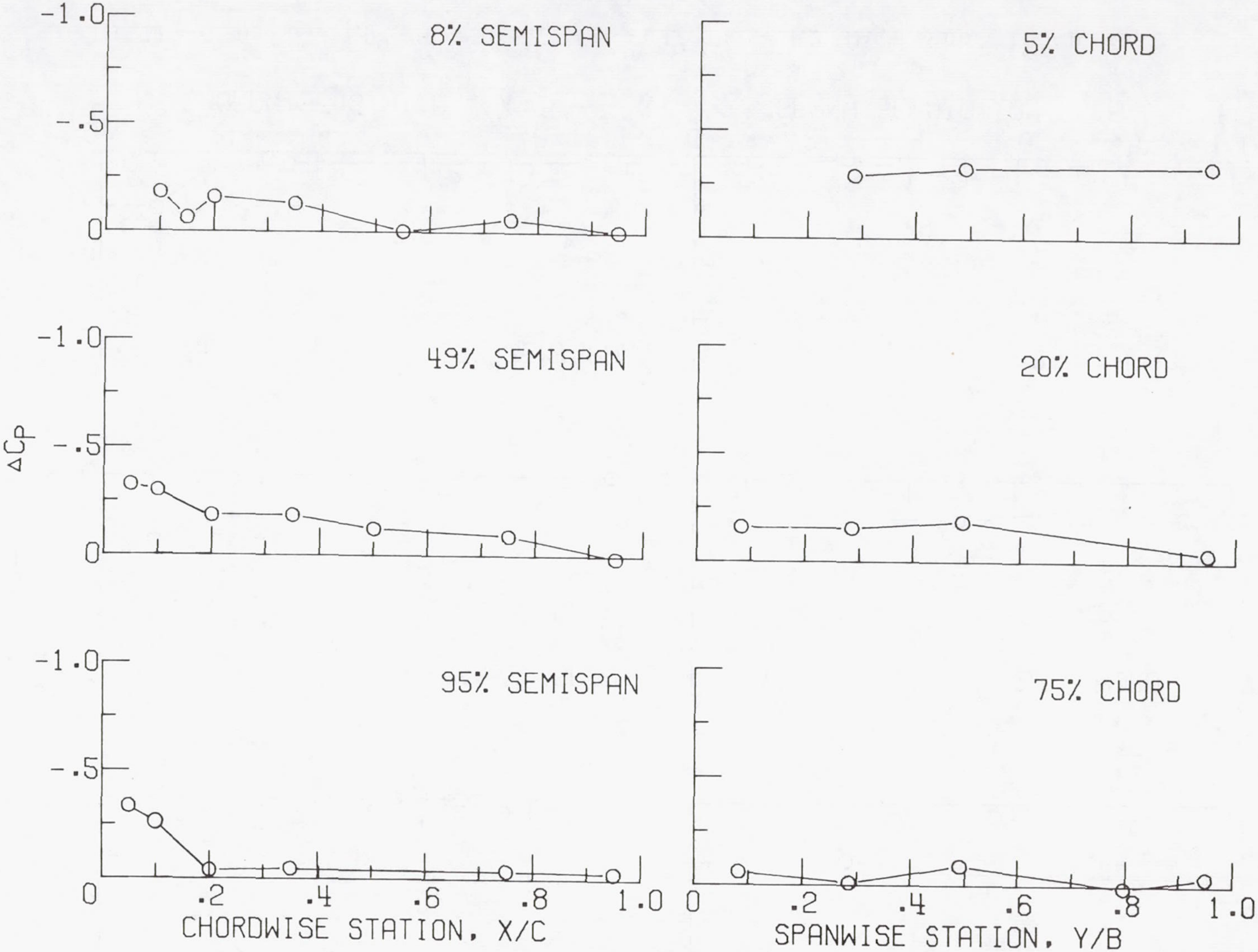
(c) M = 1.08; α = 1.8°; θ = -9.5°; ϕ = -4.4°; a_z = 2.5; flight time = 1404.0 sec.

Figure 20.- Continued.



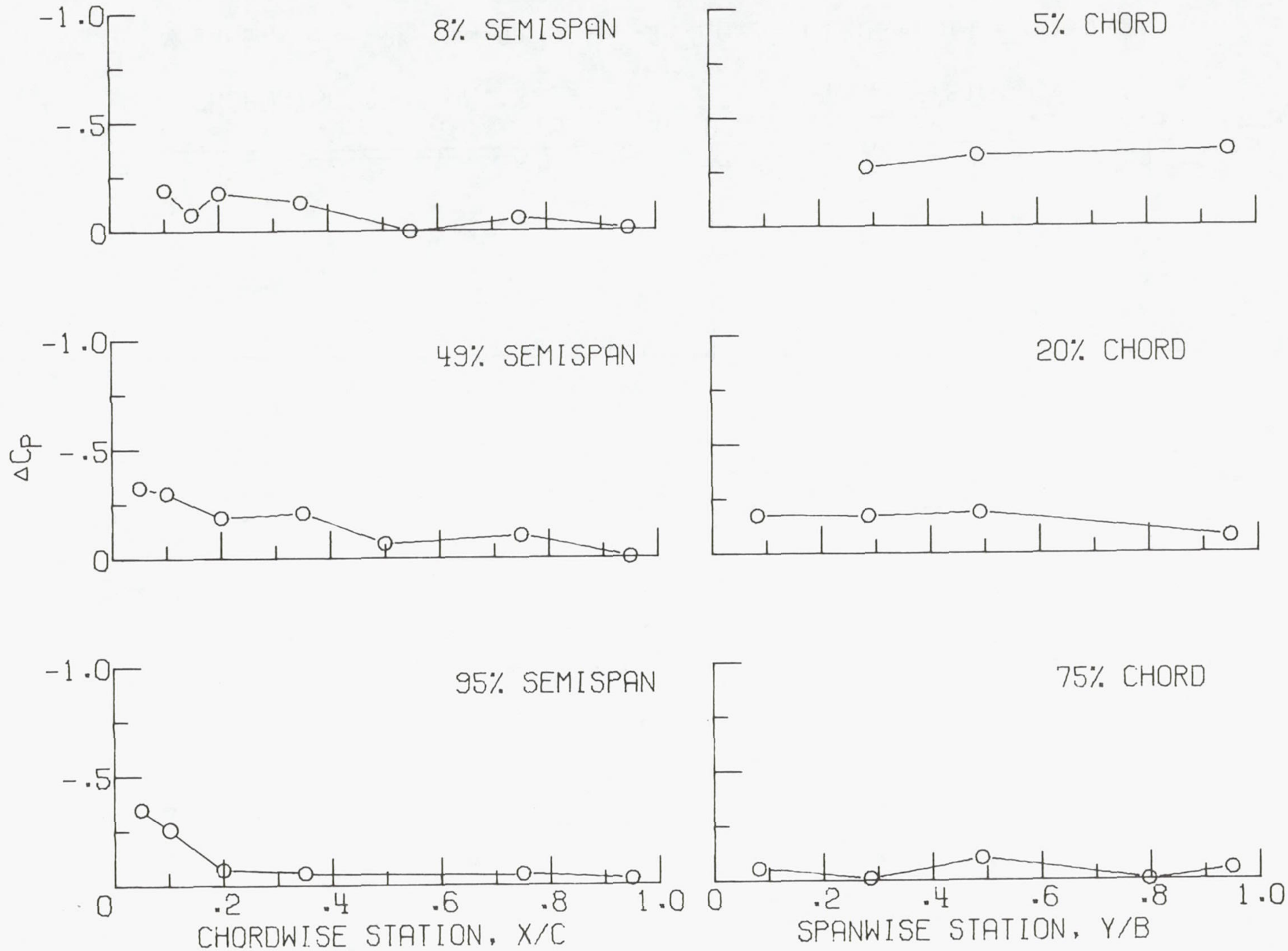
(d) M = 0.97; α = 1.9°; θ = 5.8°; ϕ = -4.9°; a_z = 1.8; flight time = 1416.0 sec.

Figure 20.- Continued.



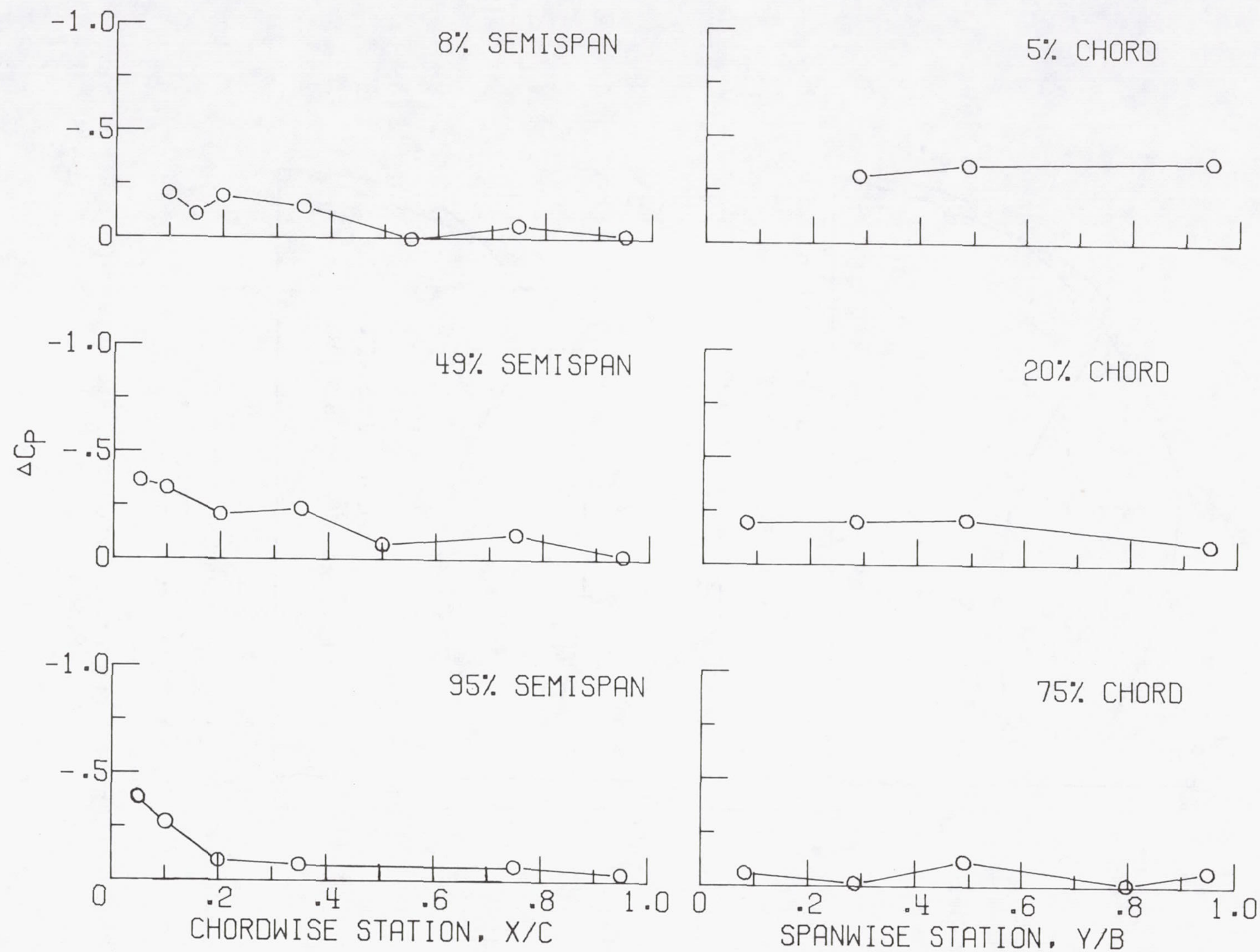
(e) M = 0.94; α = 1.8°; θ = 8.6°; ϕ = -3.9°; a_z = 1.5; flight time = 1420.0 sec.

Figure 20.- Continued.



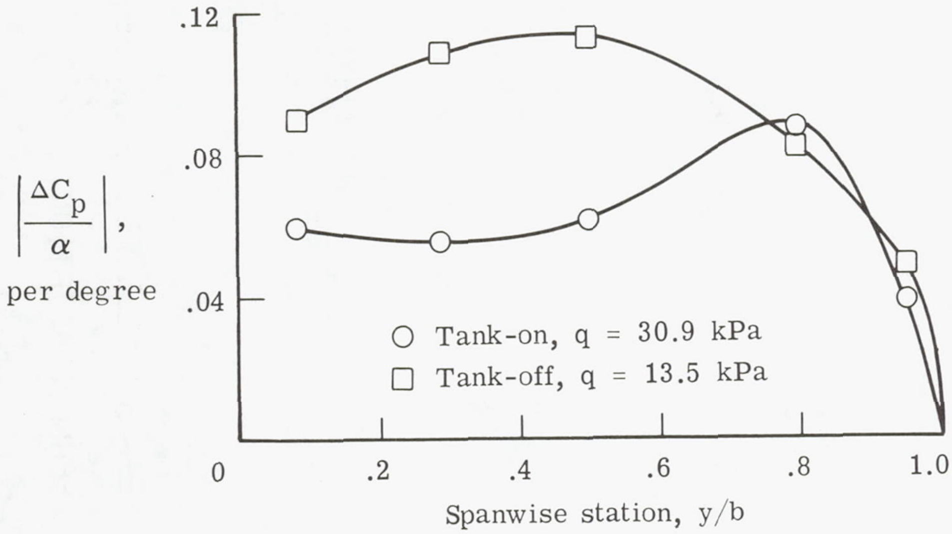
(f) M = 0.90; α = 1.9°; θ = 10.9°; ϕ = -4.1°; a_z = 1.2; flight time = 1427.0 sec.

Figure 20.- Continued.

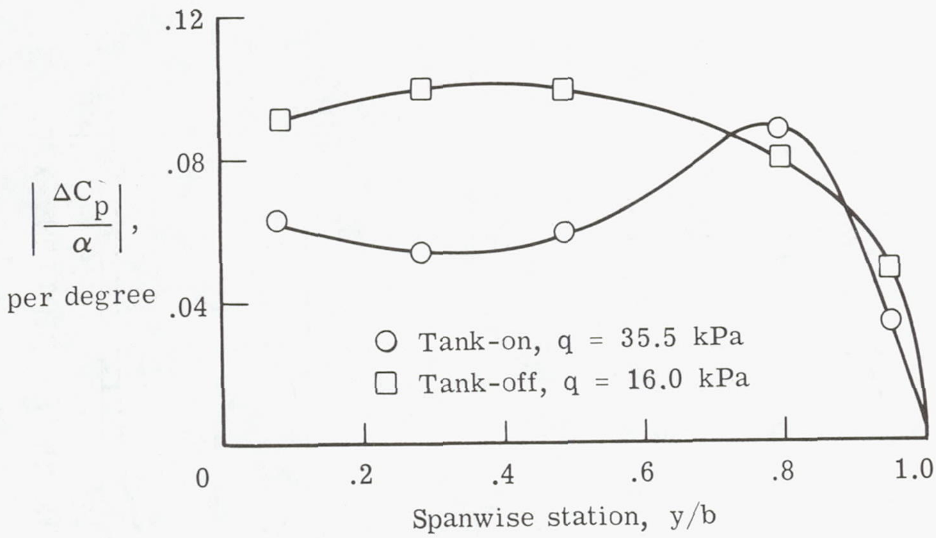


(g) M = 0.85; α = 2.2°; θ = 12.1°; ϕ = -2.4°; a_z = 1.1; flight time = 1438.0 sec.

Figure 20.- Concluded.

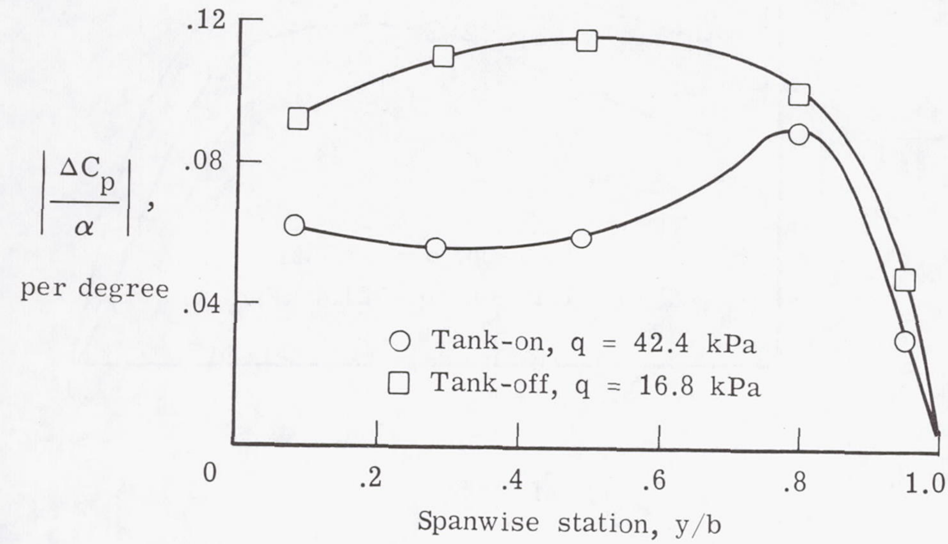


(a) M = 0.70.

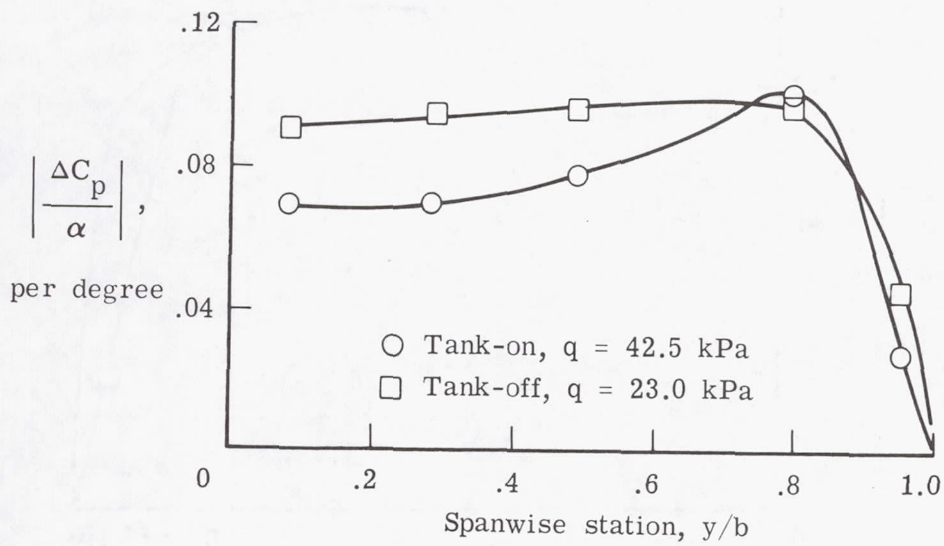


(b) M = 0.75.

Figure 21.- Effect of vehicle configuration and dynamic pressure on the spanwise wing loading, x/c = 0.20.

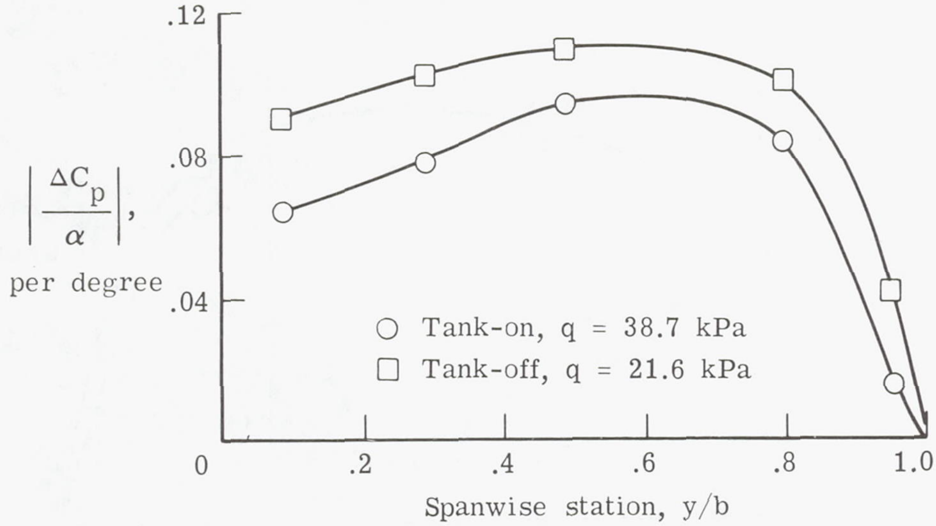


(c) M = 0.80.

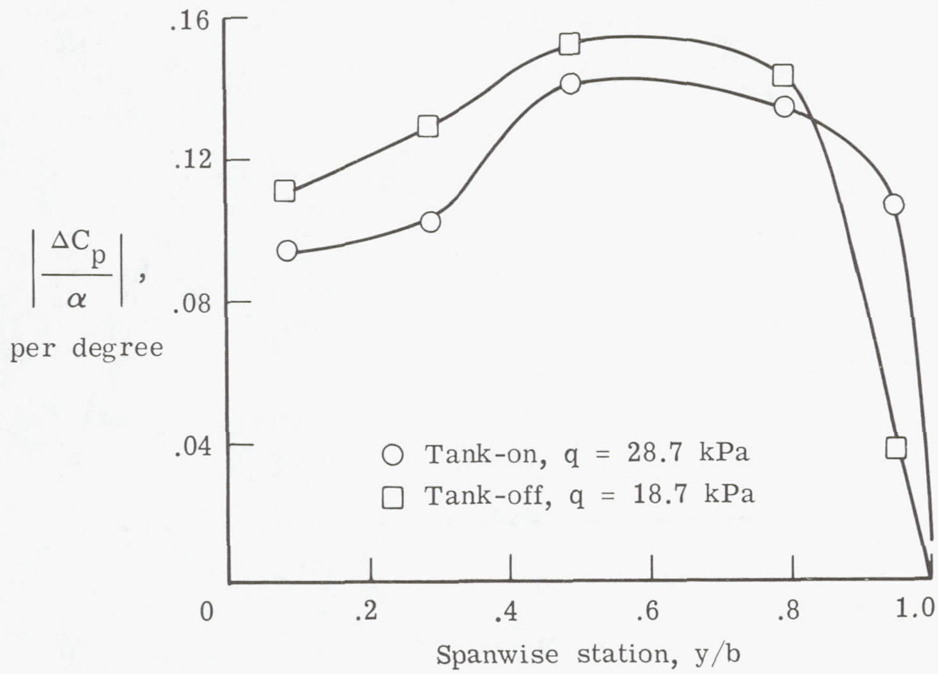


(d) M = 0.85.

Figure 21.- Continued.

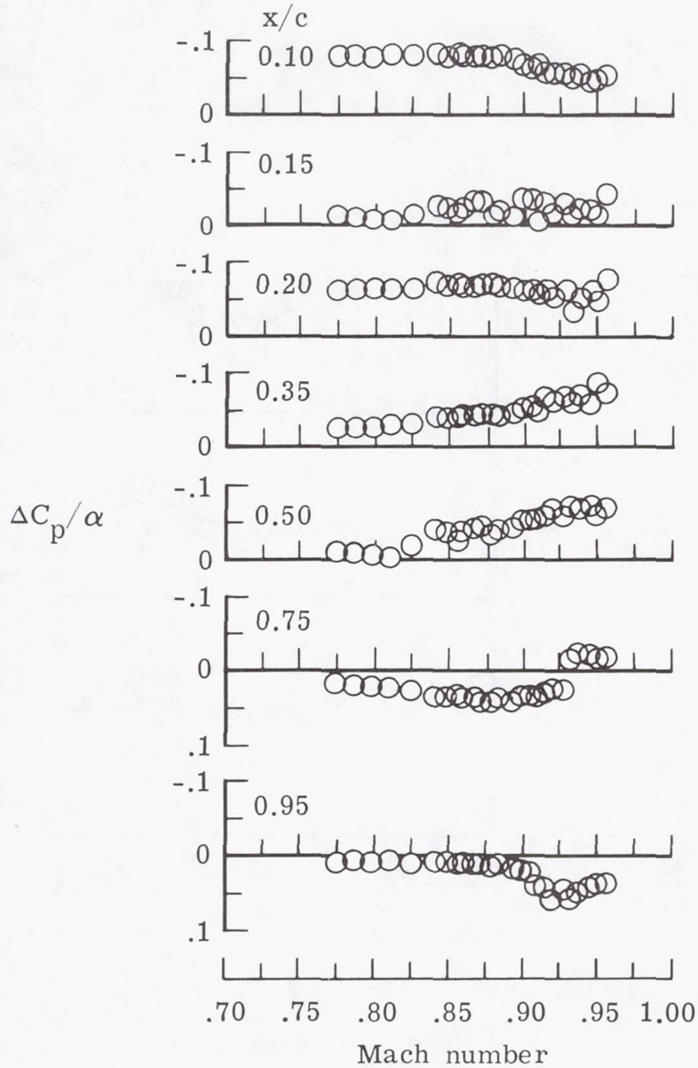


(e) M = 0.90.



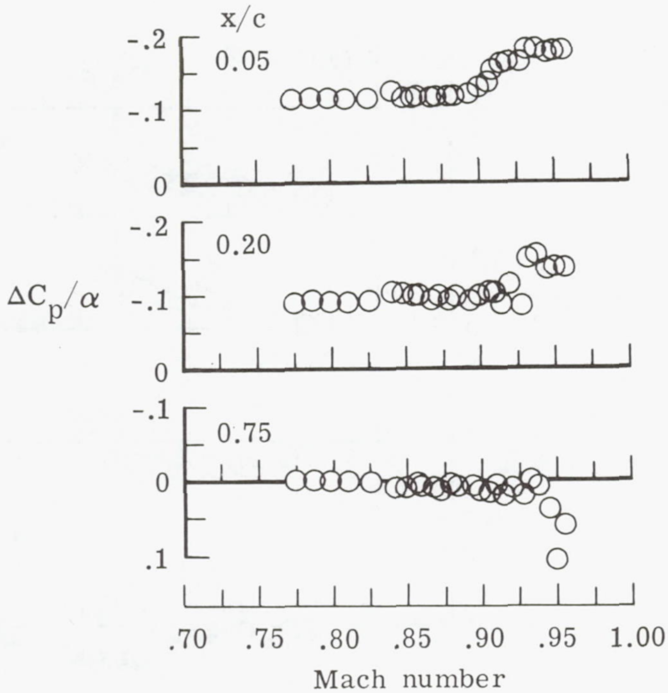
(f) M = 0.95.

Figure 21.- Concluded.



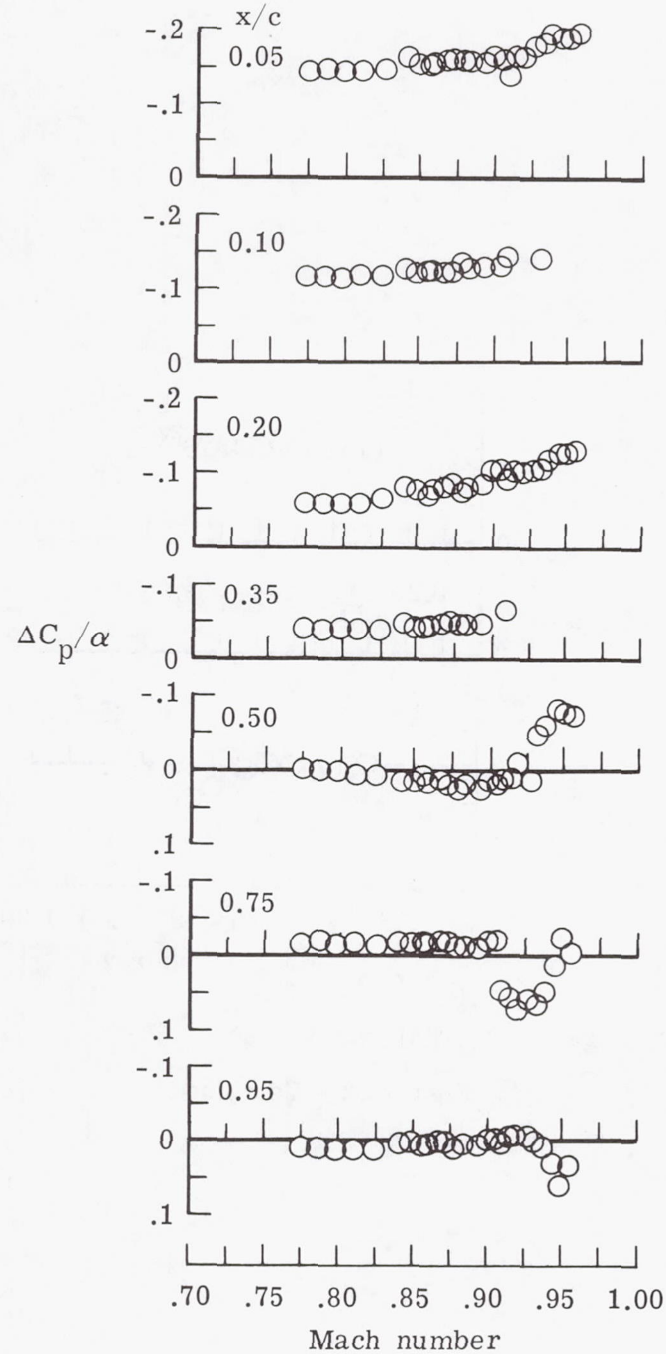
(a) y/b = 0.08.

Figure 22.- Effect of Mach number on the local wing differential pressure for the tank-on configuration. $\alpha = 2.4^{\circ}$, $q_{av} = 39.0$ kPa (814.4 lb/ft^2).



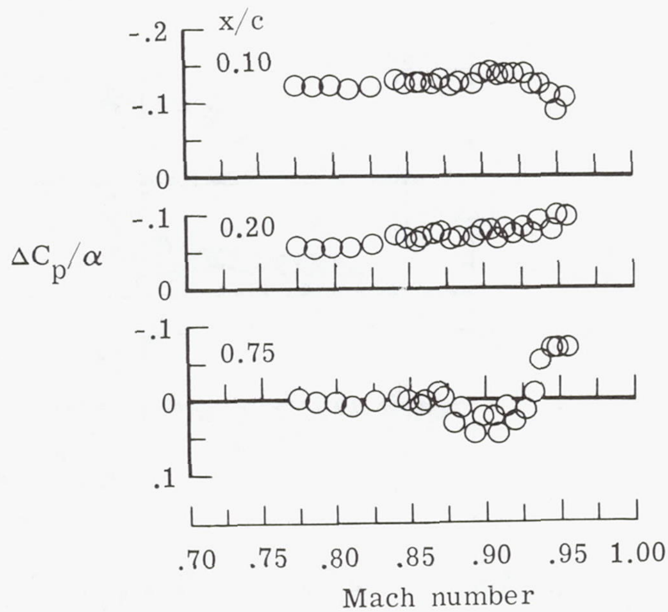
(b) y/b = 0.29.

Figure 22.- Continued.



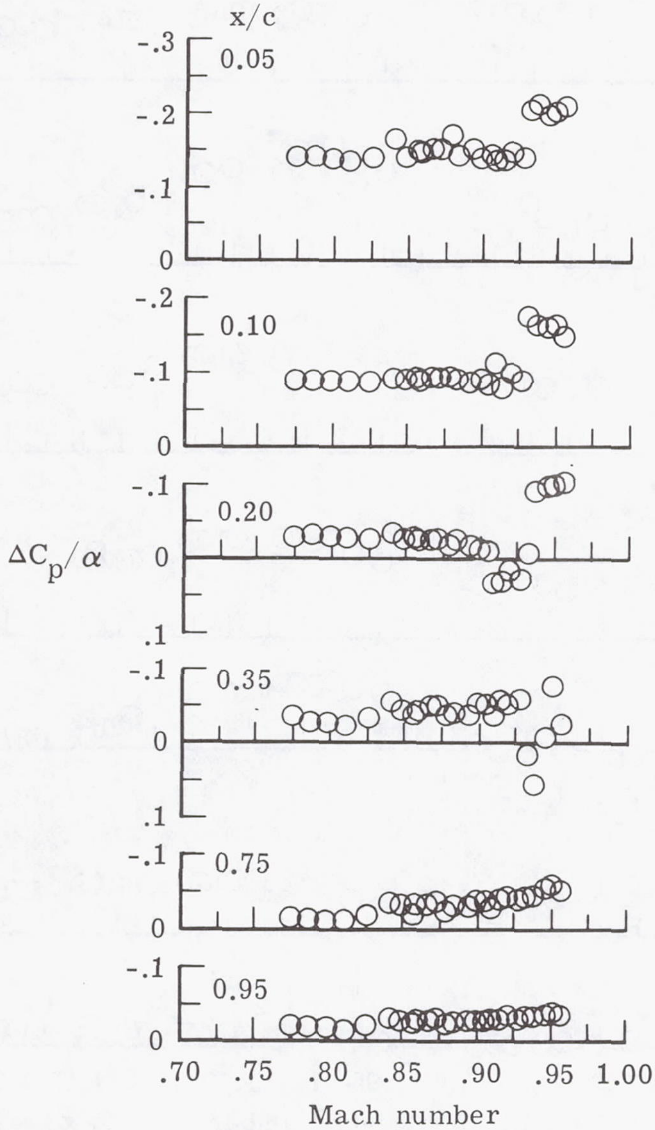
(c) y/b = 0.49.

Figure 22.- Continued.



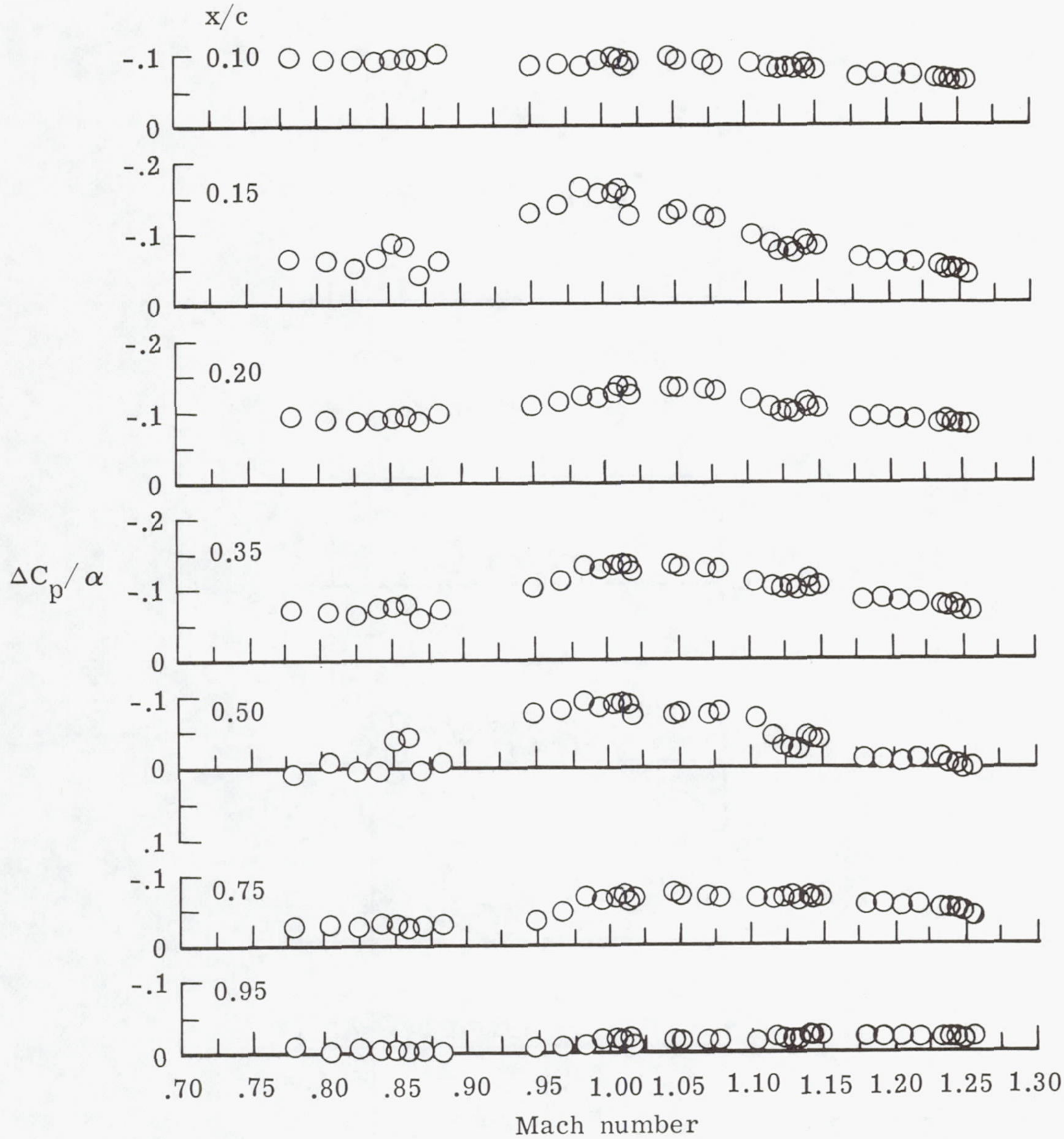
(d) y/b = 0.80.

Figure 22.- Continued.



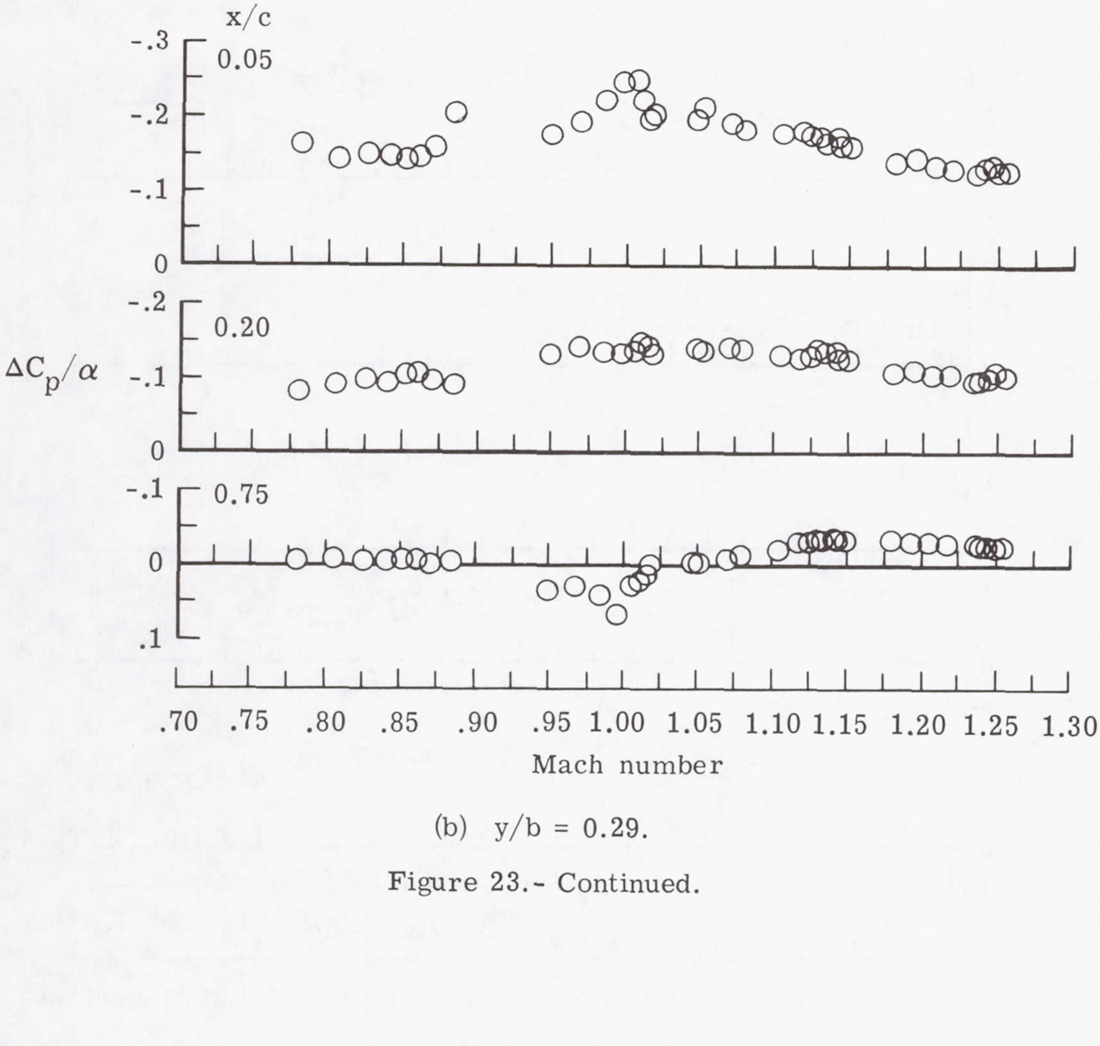
(e) y/b = 0.95.

Figure 22.- Concluded.



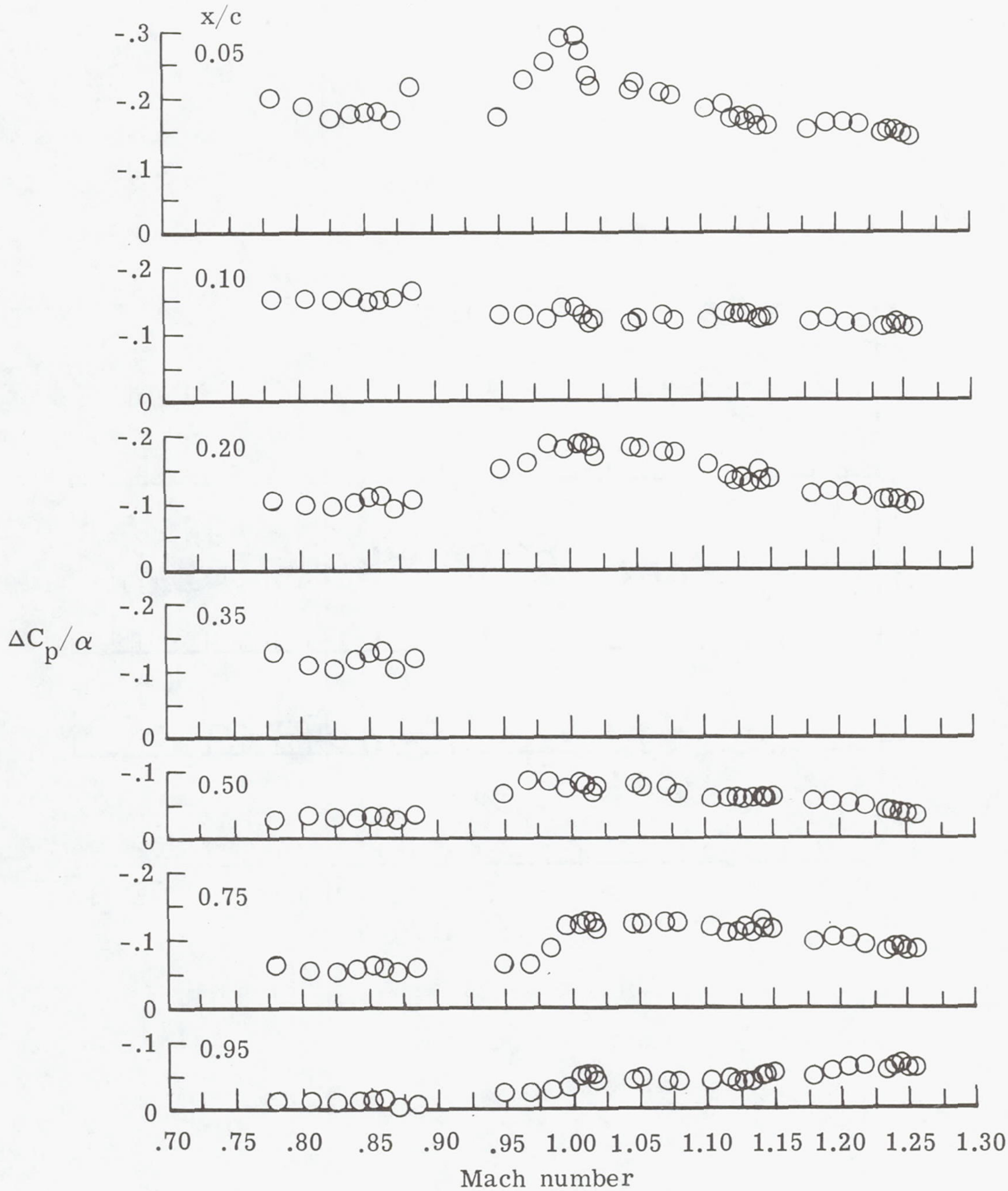
(a) y/b = 0.08.

Figure 23.- Effect of Mach number on the local wing differential pressure for the tank-off configuration. $\alpha = 2.3^{\circ}$, $q_{av} = 16.4$ kPa (342.1 lb/ft^2).



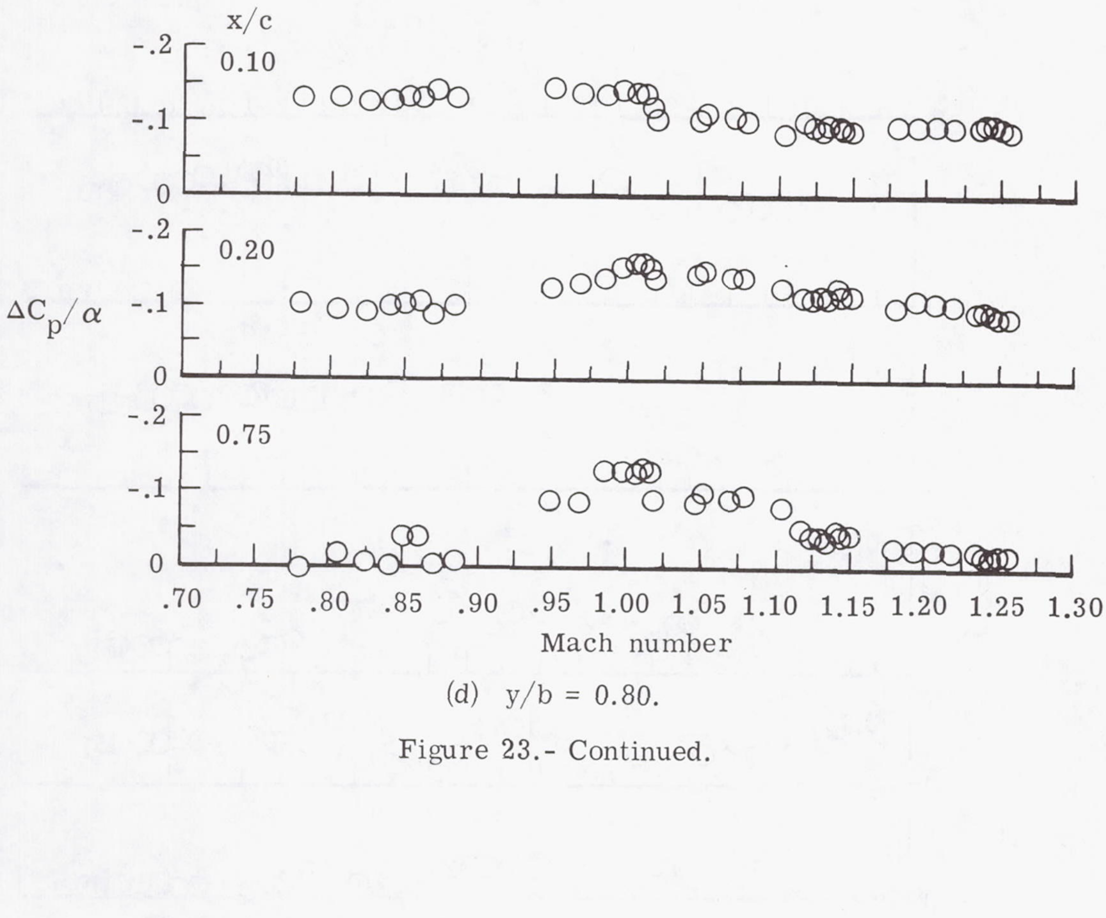
(b) y/b = 0.29.

Figure 23.- Continued.



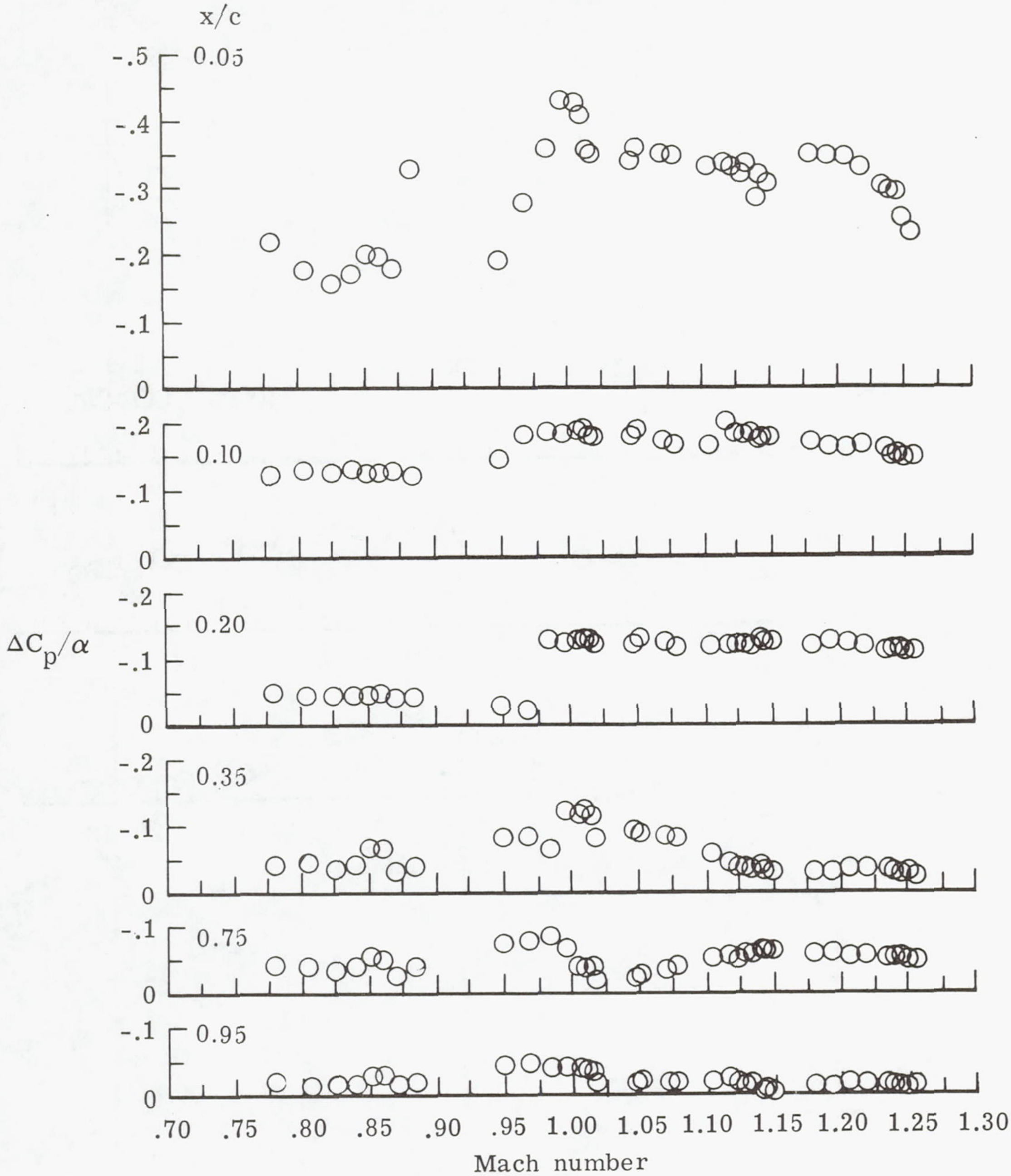
(c) y/b = 0.49.

Figure 23.- Continued.



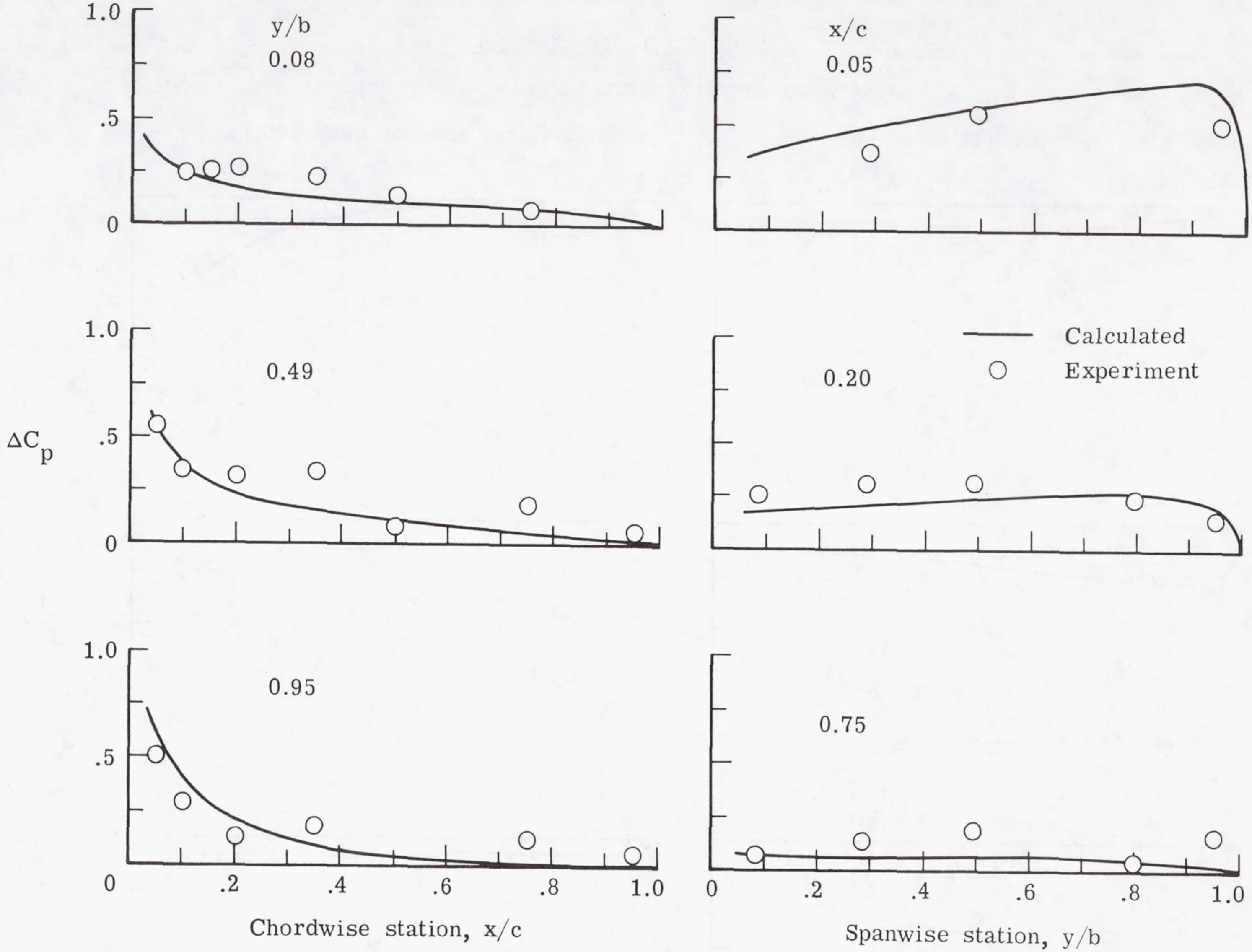
(d) y/b = 0.80.

Figure 23.- Continued.



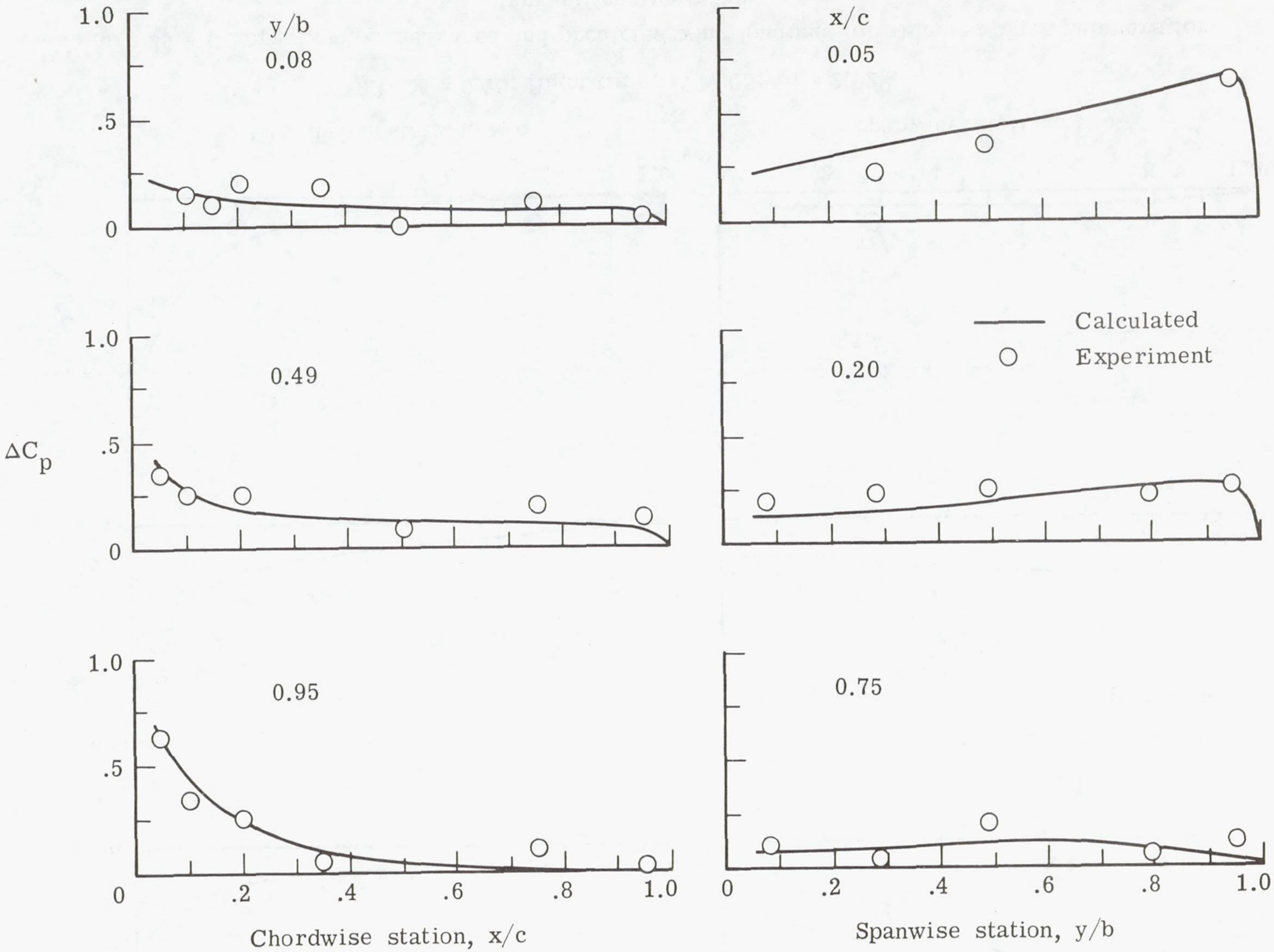
(e) y/b = 0.95.

Figure 23.- Concluded.



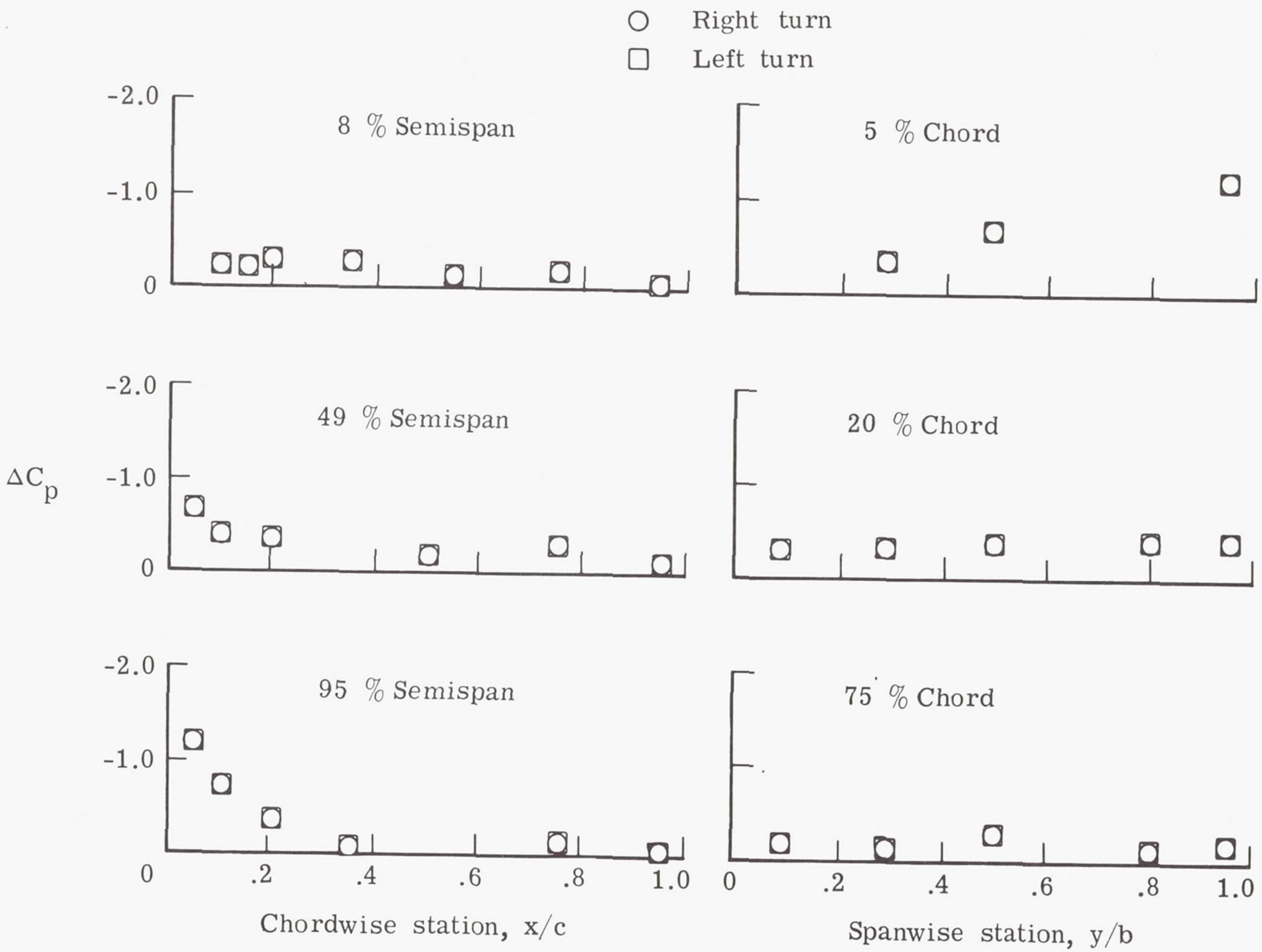
(a) M = 0.70; flight time, 1777.05; $\alpha = 2.92^{\circ}$.

Figure 24.- Comparison of measured and predicted wing loadings for selected Mach numbers for tank-off configuration.



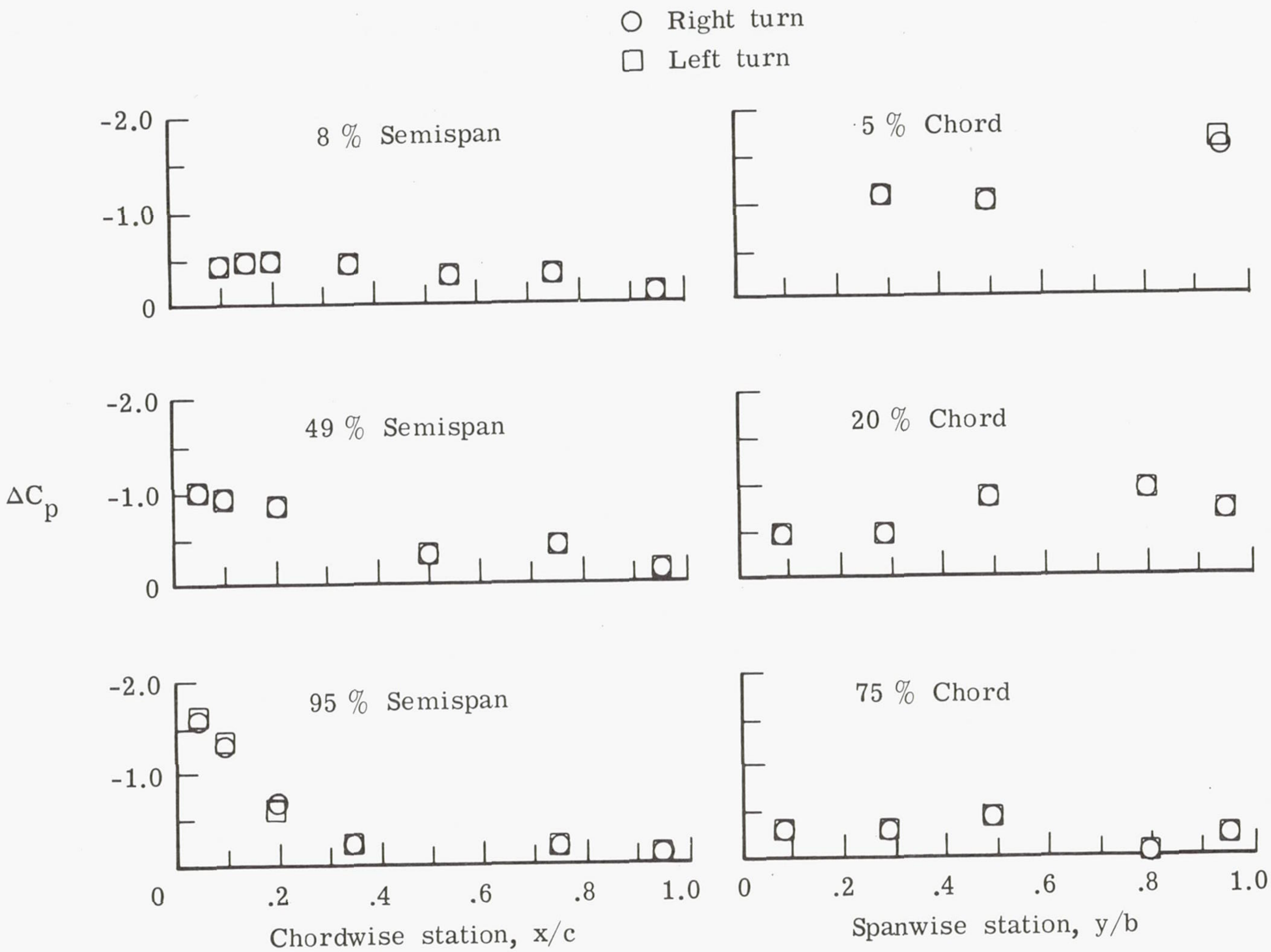
(b) M = 1.24; flight time, 1279.22; $\alpha = 2.36^{\circ}$.

Figure 24.- Concluded.



(a) Right turn: M = 1.00; flight time, 969.9; $\alpha = 4.9^{\circ}$.
Left turn: M = 1.00; flight time, 990.0; $\alpha = 4.6^{\circ}$.

Figure 25.- Comparison of wing loadings during right- and left-turn maneuvers for subsonic and supersonic Mach numbers.



(b) Right turn: M = 1.12; flight time, 1175.7; $\alpha = 3.2^{\circ}$.
Left turn: M = 1.12; flight time, 1127.9; $\alpha = 3.2^{\circ}$.

Figure 25.- Concluded.

NASA-Langley, 1977 L-10722

A tabulation of wing local differential pressure coefficients and the corresponding aircraft flight-and-performance data required for complete documentation are included in a "Supplement to NASA TM X-3405."

Copies of this "Supplement to NASA TM X-3405" will be furnished upon request. Request for the supplement should be addressed to:

NASA Langley Research Center
Mail Stop 243
Hampton, VA 23665

Attention: T. A. Byrdsong

CUT

Date________________

Please forward "Supplement to NASA TM X-3405" to

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Attention: Mr.______________________________

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SUPPLEMENT TO NASA TECHNICAL MEMORANDUM X-3405

FLIGHT MEASUREMENTS OF LIFTING PRESSURES FOR A THIN LOW-ASPECT-RATIO WING AT SUBSONIC, TRANSONIC, AND LOW SUPERSONIC SPEEDS

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

FLIGHT MEASUREMENTS OF LIFTING PRESSURES FOR A THIN LOW-ASPECT-RATIO WING AT SUBSONIC, TRANSONIC, AND LOW SUPERSONIC SPEEDS

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INTRODUCTION

Flight test measurements of lifting pressure distribution for a thin low-aspect-ratio wing at subsonic, transonic, and supersonic speeds are presented in graphical form in NASA TM X-3405. The data show local differential pressure distributions for selected chordwise and spanwise stations for several steady-state and quasi-steady maneuver flight conditions. Data are presented also for the analysis section. Tabulation of all flight-test pressure measurements and aircraft flight-and-performance data was required for complete documentation. However, the tabulation was considered to be of interest to only a limited group of readers. This supplement to NASA TM X-3405 presents tabulated differential pressure coefficients as a function of aircraft speed and configuration for all flight test conditions and for the analysis. The tabulated data are cross referenced with the figures of NASA TM X-3405 and the organization of the tabulated data is given.

CONTENTS AND ORGANIZATION OF TABULATED DATA

(a) Index of data for flight test conditions and analysis

[a]Figure number refers to data of NASA TM X-3405.

(b) Organization of tabulated differential pressure coefficients and standard deviations presented in tables S1 to S21 for wing pressure orifice locations shown in figure 3 of NASA TM X-3405

Orifice 1	Orifice 2	Orifice 3	Orifice 4	Orifice 5	Orifice 6	Orifice 7	
ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	
σ	σ	σ	σ	σ	σ	σ	
Orifice 8	Orifice 9	Orifice 10					
ΔC_p	ΔC_p	ΔC_p					
σ	σ	σ					
Orifice 11	Orifice 12	Orifice 13	Orifice 14	Orifice 15	Orifice 16	Orifice 17	Orifice 18
ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p
σ	σ	σ	σ	σ	σ	σ	σ
Orifice 19	Orifice 20	Orifice 21					
ΔC_p	ΔC_p	ΔC_p					
σ	σ	σ					
Orifice 22	Orifice 23	Orifice 24	Orifice 25	Orifice 26	Orifice 27	Orifice 28	Orifice 29
ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p	ΔC_p
σ	σ	σ	σ	σ	σ	σ	σ

TABLE S1.- FLIGHT AND PRESSURE DATA FOR STRAIGHT AND LEVEL FLIGHT AT SUBSONIC MACH NUMBERS FOR TANK-ON CONFIGURATION (FIG. 5).

(a) MACH NUMBER, .60 (ST DEV, .03), FLIGHT TIME, 41.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.3	DELHL =	3.2	RADAR MACH NO =	.59
ST DEV=	.0	ST DEV =	3.0	ST DEV =	.01
THETA =	1.6	DELHR =	-.3	DYN PRESSURE =	22278 NSM (465 PSF)
ST DEV=	.3	ST DEV =	.3	ST DEV =	1271 NSM (27 PSF)
PHI =	-3.0	DELRUD =	.5	VERT ACCEL =	.9
ST DEV=	2.1	ST DEV =	.3	ST DEV =	.1
		RE NO =	15323174		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.28	-.08	-.21	-.12	-.03	.01	.01	
.02	.02	.01	.02	.01	.02	.01	
-.44	-.19	-.03					
.03	.01	.04					
-.45	-.38	0.00	-.20	-.14	-.06	-.07	.02
.03	.03	0.00	.02	.02	.02	.01	.02
-.38	-.28	-.02					
.03	.02	.02					
-.44	-.34	0.00	-.15	-.09	0.00	-.04	-.04
.02	.02	0.00	.02	.02	0.00	.02	.02

TABLE S1.- CONTINUED.

(b) MACH NUMBER, .63 (ST DEV, .02), FLIGHT TIME, 45.59 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.3	DELHL =	.9	RADAR MACH NO =	.63
ST DEV=	.1	ST DEV =	.7	ST DEV =	.01
THETA =	1.7	DELHR =	-.5	DYN PRESSURE =	24908 NSM (520 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	1186 NSM (25 PSF)
PHI =	-3.1	DELRUD =	.5	VERT ACCEL =	1.1
ST DEV=	1.9	ST DEV =	.2	ST DEV =	.1
		RE NO =	16256775		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.28	-.08	-.20	-.11	-.04	.01	.01	
.03	.02	.02	.01	.01	.02	.02	
-.43	-.20	-.04					
.02	.02	.02					
-.47	-.37	0.00	-.21	-.15	-.06	-.06	.02
.03	.02	0.00	.02	.02	.01	.02	.01
-.39	-.29	-.02					
.02	.02	.02					
-.45	-.34	0.00	-.15	-.09	0.00	-.04	-.04
.02	.02	0.00	.02	.01	0.00	.02	.02

TABLE S1.- CONTINUED.

(c) MACH NUMBER, .74 (ST DEV, .02), FLIGHT TIME, 63.96 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.7	DELHL =	.4	RADAR MACH NO =	.74
ST DEV=	.0	ST DEV =	.9	ST DEV =	.00
THETA =	3.8	DELHR =	-1.1	DYN PRESSURE =	34773 NSM (726 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	781 NSM (16 PSF)
PHI =	-3.6	DELRUD =	-.1	VERT ACCEL =	1.1
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1

RE NO = 19088254

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.03	-.17	-.07	-.01	.04	.01	
.01	.01	.01	.01	.01	.02	.01	
-.32	-.14	-.00					
.01	.01	.03					
-.39	-.30	0.00	-.16	-.11	-.02	-.05	.03
.01	.01	0.00	.01	.02	.01	.01	.02
-.30	-.23	-.00					
.01	.01	.01					
-.36	-.24	0.00	-.10	-.06	0.00	-.02	-.03
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S1.- CONTINUED.

(d) MACH NUMBER, .81 (ST DEV, .01), FLIGHT TIME, 92.02 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELFL =	.5	RADAR MACH NO =	.81
ST DEV=	.1	ST DEV =	2.1	ST DEV =	.00
THETA =	5.2	DELFR =	-1.1	DYN PRESSURE =	42457 NSM (887 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	453 NSM (9 PSF)
PHI =	-3.1	DELRUD =	-.2	VERT ACCEL =	1.1
ST DEV=	.9	ST DEV =	.0	ST DEV =	.1
		RE NO =	20815160		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.01	-.15	-.06	-.01	.05	.02	
.01	.01	.01	.01	.01	.01	.01	
-.28	-.13	.01					
.01	.01	.01					
-.34	-.27	0.00	-.14	-.09	.01	-.04	.03
.01	.01	0.00	.01	.01	.01	.01	.01
-.26	-.21	-.00					
.01	.01	.01					
-.32	-.21	0.00	-.07	-.06	0.00	-.02	-.03
.01	.01	0.00	.00	.01	0.00	.01	.01

TABLE S1.- CONTINUED.

(e) MACH NUMBER, .84 (ST DEV, .01), FLIGHT TIME, 296.93 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.0	RADAR MACH NO =	.86
ST DEV=	.0	ST DEV =	1.3	ST DEV =	.00
THETA =	2.7	DELHR =	-1.6	DYN PRESSURE =	42296 NSM (883 PSF)
ST DEV=	.1	ST DEV =	.2	ST DEV =	476 NSM (10 PSF)
PHI =	-4.6	DELRUD =	-.3	VERT ACCEL =	1.1
ST DEV=	1.1	ST DEV =	.1	ST DEV =	.0
		RE NO =	20040512		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.06	-.16	-.09	-.09	.07	.02	
.01	.01	.01	.01	.01	.01	.01	
-.28	-.16	-.01					
.01	.00	.01					
-.35	-.27	0.00	-.18	-.10	.03	-.04	.01
.01	.01	0.00	.01	.01	.01	.01	.01
-.27	-.22	.02					
.01	.02	.00					
-.33	-.19	0.00	-.06	-.11	0.00	-.12	-.08
.02	.02	0.00	.01	.03	0.00	.05	.01

TABLE S1.- CONTINUED.

(f) MACH NUMBER, .90 (ST DEV, .03), FLIGHT TIME, 426.02 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	1.1	RADAR MACH NO =	.91
ST DEV=	.1	ST DEV =	3.1	ST DEV =	.00
THETA =	1.8	DELHR =	-1.2	DYN PRESSURE =	38478 NSM (804 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	564 NSM (12 PSF)
PHI =	2.7	DELRUD =	-.4	VERT ACCEL =	1.1
ST DEV=	1.8	ST DEV =	.1	ST DEV =	.0
		RE NO =	18307064		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.15	-.08	-.15	-.13	-.13	.08	.05	
.01	.01	.01	.01	.00	.01	.01	
-.33	-.19	.05					
.01	.01	.01					
-.38	0.00	0.00	-.25	0.00	.04	-.04	-.01
.01	0.00	0.00	.01	0.00	.01	.01	.01
-.32	-.24	.04					
.01	.01	.00					
-.34	-.20	0.00	-.02	-.12	0.00	-.09	-.07
.02	.02	0.00	.01	.02	0.00	.01	.00

TABLE S1.- CONCLUDED.

(g) MACH NUMBER, .92 (ST DEV, .03), FLIGHT TIME, 524.88 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	3.2	RADAR MACH NO =	.93
ST DEV=	.0	ST DEV =	3.9	ST DEV =	.00
THETA =	-.2	DELHR =	-1.3	DYN PRESSURE =	41994 NSM (877 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	571 NSM (12 PSF)
PHI =	-5.3	DELRUD =	-.6	VERT ACCEL =	1.1
ST DEV=	.9	ST DEV =	.1	ST DEV =	.1
		RE NO =	19339993		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.11	-.05	-.13	-.15	-.12	.04	.10	
.01	.01	.01	.01	.01	.01	.01	
-.28	-.17	.03					
.01	.01	.01					
-.39	0.00	0.00	-.24	0.00	-.04	.11	-.02
.02	0.00	0.00	.01	0.00	.02	.01	.01
-.35	-.24	.04					
.01	.03	.00					
-.34	-.22	0.00	.03	-.12	0.00	-.09	-.07
.02	.02	0.00	.02	.01	0.00	.01	.01

TABLE S2.- FLIGHT AND PRESSURE DATA FOR CLIMB MANEUVERS AT SUBSONIC MACH NUMBERS FOR TANK-ON CONFIGURATION (FIG. 6).

(a) MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 549.93 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.9	DELHL =	1.7	RADAR MACH NO =	.95
ST DEV=	.0	ST DEV =	2.0	ST DEV =	.00
THETA =	11.8	DELHR =	-1.1	DYN PRESSURE =	41289 NSM (862 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	381 NSM (8 PSF)
PHI =	-5.7	DELRUD =	-.9	VERT ACCEL =	1.3
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	19588922		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.10	-.04	-.15	-.13	-.14	-.05	.10	
.01	.01	.01	.01	.00	.01	.01	
-.23	-.17	-.12					
.01	.01	.01					
-.37	0.00	0.00	-.23	0.00	-.13	.09	.03
.01	0.00	0.00	.01	0.00	.01	.01	.01
-.36	-.29	.02					
.01	.01	.01					
-.39	-.33	0.00	-.19	.12	0.00	-.10	-.07
.02	.01	0.00	.01	.01	0.00	.00	.00

TABLE S2.- CONTINUED.

(b) MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 682.03 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	.2	RADAR MACH NO =	.95
ST DEV=	.1	ST DEV =	.1	ST DEV =	.00
THETA =	12.0	DELHR =	-.8	DYN PRESSURE =	32690 NSM (683 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	369 NSM (8 PSF)
PHI =	-.6	DELRUD =	-.4	VERT ACCEL =	1.2
ST DEV=	.8	ST DEV =	.1	ST DEV =	.1
		RE NO =	16563027		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	-.12	-.12	-.17	-.16	-.04	.10	
.01	.01	.04	.01	.01	.01	.01	
-.27	-.23	-.13					
.01	.01	.01					
-.42	-.57	0.00	-.29	0.00	-.15	.09	-.01
.01	.07	0.00	.01	0.00	.01	.02	.01
-.39	-.29	.03					
.01	.01	.01					
-.43	-.34	0.00	-.21	.10	0.00	-.12	-.07
.02	.01	0.00	.01	.01	0.00	.01	.01

TABLE S2.- CONTINUED.

(c) MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 698.89 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	.4	RADAR MACH NO =	.94
ST DEV=	.1	ST DEV =	.6	ST DEV =	.00
THETA =	13.4	DELHR =	-.7	DYN PRESSURE =	28950 NSM (605 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	485 NSM (10 PSF)
PHI =	.6	DELRUD =	-.3	VERT ACCEL =	1.1
ST DEV=	1.2	ST DEV =	.2	ST DEV =	.0
		RE NO =	15266097		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	-.13	-.20	-.16	-.17	-.04	.09	
.01	.01	.01	.01	.01	.01	.01	
-.26	-.23	-.15					
.01	.02	.01					
-.43	-.29	0.00	-.31	0.00	-.16	.05	.02
.01	.02	0.00	.01	0.00	.01	.03	.02
-.41	-.29	.05					
.01	.01	.02					
-.44	-.34	0.00	-.23	.06	0.00	-.13	-.08
.03	.01	0.00	.01	.07	0.00	.01	.01

TABLE S2.- CONTINUED.

(d) MACH NUMBER, .96 (ST DEV, .01), FLIGHT TIME, 709.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.7	RADAR MACH NO =	.95
ST DEV=	.0	ST DEV =	1.8	ST DEV =	.01
THETA =	13.4	DELHR =	-.5	DYN PRESSURE =	26782 NSM (559 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	594 NSM (12 PSF)
PHI =	-.3	DELRUD =	-.2	VERT ACCEL =	1.1
ST DEV=	1.1	ST DEV =	.2	ST DEV =	.0
		RE NO =	14312773		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	-.14	-.17	-.23	-.19	-.01	.06	
.01	.01	.01	.02	.02	.02	.01	
-.22	-.28	-.15					
.01	.01	.02					
-.44	-.32	0.00	-.35	0.00	-.14	-.09	.11
.01	.01	0.00	.02	0.00	.02	.01	.01
-.41	-.30	.35					
.01	.01	.03					
-.53	-.34	0.00	-.24	-.18	0.00	-.15	-.09
.03	.01	0.00	.01	.01	0.00	.01	.01

TABLE S2.- CONTINUED.

(e) MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 719.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.6	DELHL =	1.4	RADAR MACH NO =	.95
ST DEV=	.1	ST DEV =	1.9	ST DEV =	.00
THETA =	13.3	DELHR =	-.6	DYN PRESSURE =	23602 NSM (493 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	808 NSM (17 PSF)
PHI =	-1.1	DELRUD =	-.1	VERT ACCEL =	1.1
ST DEV=	.9	ST DEV =	.1	ST DEV =	.1
		RE NO =	13475658		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.14	-.20	-.19	-.23	-.20	-.04	.10	
.01	.02	.03	.02	.01	.02	.01	
-.32	-.28	-.11					
.03	.02	.05					
-.52	-.34	0.00	-.35	0.00	-.16	.08	-.04
.03	.01	0.00	.01	0.00	.01	.02	.02
-.46	-.33	.05					
.01	.01	.01					
-.67	-.37	0.00	-.13	-.01	0.00	-.16	-.10
.04	.01	0.00	.14	.11	0.00	.00	.01

TABLE S2.- CONCLUDED.

(f) MACH NUMBER, .94 (ST DEV, .01), FLIGHT TIME, 729.96 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.0	DELHL =	1.1	RADAR MACH NO =	.94
ST DEV=	.1	ST DEV =	2.0	ST DEV =	.00
THETA =	13.3	DELHR =	-.4	DYN PRESSURE =	21145 NSM (442 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	805 NSM (17 PSF)
PHI =	-1.2	DELRUD =	-.0	VERT ACCEL =	1.1
ST DEV=	1.5	ST DEV =	.2	ST DEV =	.1
		RE NO =	12552524		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.26	-.23	-.26	-.21	-.02	.08	
.01	.02	.01	.02	.01	.02	.01	
-.37	-.33	-.04					
.01	.02	.02					
-.68	-.41	0.00	-.40	0.00	-.15	.08	-.06
.03	.02	0.00	.01	0.00	.01	.01	.01
-.62	-.35	.07					
.03	.02	.01					
-.84	-.36	0.00	.01	-.20	0.00	-.18	-.12
.09	.02	0.00	.02	.02	0.00	.01	.01

TABLE S3.- FLIGHT AND PRESSURE DATA FOR A RIGHT-TURN MANEUVER AT SUBSONIC MACH NUMBERS FOR TANK-ON CONFIGURATION (FIG. 7).

(a) MACH NUMBER, .91 (ST DEV, .02), FLIGHT TIME, 388.11 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	4.6	DELHL =	.8	RADAR MACH NO =	.94
ST DEV=	.2	ST DEV =	1.0	ST DEV =	.01
THETA =	3.4	DELHR =	.3	DYN PRESSURE =	39960 NSM (835 PSF)
ST DEV=	.6	ST DEV =	.2	ST DEV =	425 NSM (9 PSF)
PHI =	71.9	DELRUD =	-.3	VERT ACCEL =	3.3
ST DEV=	3.8	ST DEV =	.1	ST DEV =	.1
		RE NO =	18764682		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.29	-.21	-.29	-.30	-.25	-.10	.05	
.02	.03	.02	.02	.01	.02	.02	
-.77	-.39	-.06					
.19	.01	.07					
-1.03	-.77	0.00	-.56	-.82	-.21	.03	-.00
.03	.05	0.00	.03	.11	.01	.08	.01
-1.09	-.73	.04					
.02	.04	.01					
-1.56	-.78	0.00	-.17	-.13	0.00	-.17	-.11
.03	.12	0.00	.06	.09	0.00	.02	.02

TABLE S3.- CONTINUED.

(b) MACH NUMBER, .90 (ST DEV, .02), FLIGHT TIME, 392.12 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	5.3	DELHL =	.8	RADAR MACH NO =	.92
ST DEV=	.3	ST DEV =	1.5	ST DEV =	.01
THETA =	3.9	DELHR =	.7	DYN PRESSURE =	38081 NSM (795 PSF)
ST DEV=	.3	ST DEV =	.3	ST DEV =	650 NSM (14 PSF)
PHI =	83.4	DELRUD =	-.1	VERT ACCEL =	3.7
ST DEV=	5.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	18427931		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.37	-.31	-.37	-.34	-.27	-.02	.02	
.03	.02	.02	.02	.01	.02	.01	
-1.14	-.39	-.03					
.07	.01	.03					
-1.10	0.00	0.00	-.71	0.00	-.11	-.09	-.02
.02	0.00	0.00	.06	0.00	.04	.02	.01
-1.15	-.87	.02					
.04	.04	.01					
-1.48	-.84	0.00	-.28	-.20	0.00	-.20	-.13
.08	.12	0.00	.05	.05	0.00	.03	.01

TABLE S3.- CONCLUDED.

(c) MACH NUMBER, .89 (ST DEV, .01), FLIGHT TIME, 396.12 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	6.1	DELHL =	2.3	RADAR MACH NO =	.89
ST DEV=	.2	ST DEV =	4.0	ST DEV =	.01
THETA =	2.3	DELHR =	1.1	DYN PRESSURE =	36070 NSM (753 PSF)
ST DEV=	.6	ST DEV =	.2	ST DEV =	732 NSM (15 PSF)
PHI =	89.9	DELRUD =	-.1	VERT ACCEL =	4.1
ST DEV=	3.2	ST DEV =	.1	ST DEV =	.1
		RE NO =	18060303		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.45	-.39	-.41	-.37	-.31	-.03	.01	
.03	.03	.02	.01	.01	.02	.01	
-1.29	-.37	-.11					
.03	.01	.02					
-1.17	-1.06	0.00	-.84	0.00	-.13	-.11	-.01
.04	.03	0.00	.03	0.00	.04	.01	.01
-1.02	-.89	-.04					
.03	.03	.04					
-1.45	-.72	0.00	-.32	-.29	0.00	-.23	-.13
.08	.04	0.00	.03	.06	0.00	.04	.03

TABLE S4.- FLIGHT AND PRESSURE DATA FOR LEFT-TURN MANEUVERS AT SUBSONIC MACH NUMBER FOR TANK-ON CONFIGURATION (FIG. 8).

(a) MACH NUMBER, .90 (ST DEV, .01), FLIGHT TIME, 436.04 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.8	DELHL =	1.6	RADAR MACH NO =	.91
ST DEV=	.0	ST DEV =	2.5	ST DEV =	.00
THETA =	2.1	DELHR =	-1.1	DYN PRESSURE =	38603 NSM (806 PSF)
ST DEV=	.1	ST DEV =	.1	ST DEV =	235 NSM (5 PSF)
PHI =	-41.0	DELRUD =	-.3	VERT ACCEL =	1.5
ST DEV=	11.3	ST DEV =	.1	ST DEV =	.0
		RE NO =	18399145		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.11	-.18	-.16	-.15	.06	.04	
.00	.01	.01	.01	.00	.01	.01	
-.35	-.22	.03					
.01	.01	.01					
-.51	-.36	0.00	-.26	0.00	.01	-.06	-.01
.02	.01	0.00	.01	0.00	.01	.01	.01
-.39	-.23	.03					
.01	.01	.01					
-.35	-.29	0.00	-.05	-.13	0.00	-.10	-.07
.03	.01	0.00	.01	.01	0.00	.01	.01

TABLE S4.- CONTINUED.

(b) MACH NUMBER, .93 (ST DEV, .02), FLIGHT TIME, 603.70 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	4.9	DELHL =	1.6	RADAR MACH NO =	.93
ST DEV=	.1	ST DEV =	2.6	ST DEV =	.01
THETA =	2.1	DELHR =	.4	DYN PRESSURE =	34327 NSM (717 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	297 NSM (6 PSF)
PHI =	-56.8	DELRUD =	-.3	VERT ACCEL =	3.5
ST DEV=	26.8	ST DEV =	.1	ST DEV =	.0

RE NO = 17250103

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.31	-.32	-.37	-.36	-.27	-.12	.03	
.02	.01	.02	.01	.01	.02	.01	
-1.05	-.44	-.11					
.03	.01	.06					
-1.14	-1.00	0.00	-.68	0.00	-.21	-.03	-.02
.02	.01	0.00	.03	0.00	.02	.07	.01
-1.17	-.89	.06					
.01	.02	.02					
-1.61	-.83	0.00	-.24	-.20	0.00	-.21	-.14
.04	.14	0.00	.03	.02	0.00	.02	.02

TABLE S4.- CONTINUED.

(c) MACH NUMBER, .91 (ST DEV, .01), FLIGHT TIME, 610.05 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	5.4	DELHL =	1.3	RADAR MACH NO =	.90
ST DEV=	.1	ST DEV =	1.7	ST DEV =	.00
THETA =	3.2	DELHR =	.5	DYN PRESSURE =	32766 NSM (684 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	480 NSM (10 PSF)
PHI =	-49.7	DELRUD =	-.2	VERT ACCEL =	3.5
ST DEV=	33.5	ST DEV =	.1	ST DEV =	.0
		RE NO =	16604541		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.37	-.38	-.40	-.38	-.27	-.02	.01	
.02	.01	.01	.01	.01	.01	.01	
-1.20	-.44	-.08					
.02	.01	.02					
-1.11	-1.02	0.00	-.79	0.00	-.10	-.12	-.03
.02	.02	0.00	.02	0.00	.04	.02	.01
-1.19	-.90	.04					
.03	.03	.02					
-1.58	-.62	0.00	-.28	-.24	0.00	-.23	-.14
.03	.04	0.00	.04	.03	0.00	.02	.02

TABLE S4.- CONTINUED.

(d) MACH NUMBER, .90 (ST DEV, .01), FLIGHT TIME, 619.90 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 5.8	DELHL = 1.7	RADAR MACH NO = .89
ST DEV= .1	ST DEV = 2.0	ST DEV = 0.00
THETA = 4.4	DELHR = .8	DYN PRESSURE = 31344 NSM (655 PSF)
ST DEV= .2	ST DEV = .1	ST DEV = 524 NSM (11 PSF)
PHI = -67.9	DELRUD = -.2	VERT ACCEL = 3.6
ST DEV= 26.1	ST DEV = .2	ST DEV = .1
	RE NO = 16683044	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.42	-.41	-.42	-.39	-.29	-.04	-.01	
.01	.01	.01	.01	.01	.01	.01	
-1.25	-.39	-.15					
.03	.01	.01					
-1.12	-1.03	0.00	-.88	0.00	-.10	-.15	-.03
.02	.02	0.00	.02	0.00	.01	.01	.01
-1.07	-.86	-.01					
.03	.03	.04					
-1.63	-.59	0.00	-.27	-.28	0.00	-.23	-.14
.04	.02	0.00	.03	.03	0.00	.01	.02

TABLE S4.- CONTINUED.

(e) MACH NUMBER, .89 (ST DEV, .01), FLIGHT TIME, 629.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	6.1	DELHL =	2.9	RADAR MACH NO =	.89
ST DEV=	.1	ST DEV =	3.3	ST DEV =	.00
THETA =	4.1	DELHR =	1.1	DYN PRESSURE =	30729 NSM (642 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	871 NSM (18 PSF)
PHI =	-55.0	DELRUD =	-.2	VERT ACCEL =	3.8
ST DEV=	37.5	ST DEV =	.2	ST DEV =	.1
		RE NO =	16532527		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.46	-.46	-.45	-.41	-.31	-.04	-.01	
.02	.01	.02	.01	.01	.01	.01	
-1.32	-.40	-.16					
.04	.02	.01					
-1.19	0.00	0.00	-.92	0.00	-.13	-.14	-.03
.03	0.00	0.00	.02	0.00	.01	.01	.01
-.98	-.88	-.06					
.03	.03	.03					
-1.58	-.61	0.00	-.30	-.29	0.00	-.24	-.14
.04	.03	0.00	.05	.03	0.00	.03	.03

FIGURE S4.- CONTINUED.

(f) MACH NUMBER, .89 (ST DEV, .01), FLIGHT TIME, 639.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 6.4	DELHL = 3.9	RADAR MACH NO = .84	
ST DEV= .0	ST DEV = 2.8	ST DEV = .02	
THETA = 1.8	DELHR = 1.4	DYN PRESSURE = 30415 NSM (635 PSF)	
ST DEV= .4	ST DEV = .2	ST DEV = 658 NSM (14 PSF)	
PHI = -55.0	DELRUD = -.2	VERT ACCEL = 4.0	
ST DEV= 27.6	ST DEV = .1	ST DEV = .0	
	RE NO = 16304279		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.48	-.49	-.47	-.42	-.31	-.06	-.01	
.01	.01	.01	.01	.01	.01	.01	
-1.34	-.42	-.19					
.03	.02	.01					
-1.21	0.00	0.00	-.94	0.00	-.13	-.13	-.03
.03	0.00	0.00	.02	0.00	.02	.02	.01
-.94	-.85	-.09					
.04	.03	.03					
-1.45	-.59	0.00	-.31	-.32	0.00	-.24	-.13
.04	.04	0.00	.03	.03	0.00	.03	.03

TABLE S4.- CONTINUED.

(g) MACH NUMBER, .89 (ST DEV, .01), FLIGHT TIME, 649.96 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	6.3	DELHL =	1.0	RADAR MACH NO =	.88
ST DEV=	.0	ST DEV =	.4	ST DEV =	.01
THETA =	-.3	DELHR =	1.3	DYN PRESSURE =	29933 NSM (625 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	381 NSM (8 PSF)
PHI =	-66.9	DELRUD =	-.2	VERT ACCEL =	3.8
ST DEV=	20.7	ST DEV =	.1	ST DEV =	.0
		RE NO =	16175291		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.47	-.49	-.47	-.41	-.30	-.05	-.01	
.01	.01	.01	.01	.01	.01	.01	
-1.34	-.41	-.18					
.02	.02	.01					
-1.21	-1.07	0.00	-.91	0.00	-.15	-.14	-.03
.02	.02	0.00	.02	0.00	.02	.01	.01
-.97	-.88	-.07					
.04	.03	.05					
-1.48	-.60	0.00	-.32	-.32	0.00	-.23	-.12
.03	.04	0.00	.03	.03	0.00	.03	.03

TABLE S4.- CONCLUDED.

(h) MACH NUMBER, .89 (ST DEV, .01), FLIGHT TIME, 659.15 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	5.9	DELHL =	1.6	RADAR MACH NO =	.87
ST DEV=	.1	ST DEV =	1.2	ST DEV =	.01
THETA =	-.1	DELHR =	1.0	DYN PRESSURE =	30964 NSM (647 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	641 NSM (13 PSF)
PHI =	-62.8	DELRUD =	-.2	VERT ACCEL =	3.6
ST DEV=	28.2	ST DEV =	.1	ST DEV =	.0
		RE NO =	16334036		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.43	-.42	-.43	-.39	-.29	-.04	-.00	
.02	.02	.01	.01	.01	.01	.01	
-1.26	-.39	-.16					
.03	.01	.02					
-1.14	-1.05	0.00	-.86	0.00	-.12	-.14	-.03
.04	.04	0.00	.03	0.00	.02	.02	.01
-1.05	-.85	-.01					
.03	.04	.04					
-1.57	-.61	0.00	-.28	-.28	0.00	-.22	-.15
.04	.03	0.00	.05	.03	0.00	.03	.03

TABLE S5.- FLIGHT AND PRESSURE DATA FOR COMBINED CLIMB AND RIGHT-TURN MANEUVER AT A SUBSONIC MACH NUMBER FOR TANK-ON CONFIGURATION (FIG. 9).

MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 692.21 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.9	DELHL =	.4	RADAR MACH NC =	.94
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	12.5	DELHR =	-.3	DYN PRESSURE =	30393 NSM (635 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	570 NSM (12 PSF)
PHI =	46.0	DELRUD =	-.3	VERT ACCEL =	1.7
ST DEV=	1.0	ST DEV =	.1	ST DEV =	.1

RE NO = 15786857

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.20	-.25	-.23	-.21	-.07	.08	
.01	.01	.01	.01	.01	.01	.01	
-.35	-.26	-.18					
.01	.01	.01					
-.61	0.00	0.00	-.38	0.00	-.17	.04	-.00
.03	0.00	0.00	.01	0.00	.01	.01	.01
-.60	-.37	.04					
.02	.01	.01					
-1.05	-.41	0.00	-.27	.07	0.00	-.14	-.10
.04	.01	0.00	.01	.01	0.00	.00	.01

TABLE S6.- FLIGHT AND PRESSURE DATA FOR STRAIGHT AND LEVEL FLIGHT AT SUBSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 10).

(a) MACH NUMBER, .92 (ST DEV, .01), FLIGHT TIME, 1619.90 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.5	DELFL =	-.7	RADAR MACH NO =	.90
ST DEV=	.0	ST DEV =	.1	ST DEV =	.01
THETA =	5.9	DELHR =	-1.4	DYN PRESSURE =	33134 NSM (692 PSF)
ST DEV=	.4	ST DEV =	.4	ST DEV =	498 NSM (10 PSF)
PHI =	-3.0	DELRUD =	.6	VERT ACCEL =	1.1
ST DEV=	.6	ST DEV =	.1	ST DEV =	.1
		RE NO =	17652767		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.15	-.05	-.14	-.10	-.02	-.05	-.00	
.01	.01	.01	.01	.01	.01	.01	
-.22	-.14	-.05					
.01	.01	.01					
-.27	-.25	0.00	-.15	-.17	-.05	-.09	.00
.02	.01	0.00	.01	.01	.01	.01	.01
-.25	-.17	.00					
.01	.01	.00					
-.30	-.21	0.00	-.05	-.07	0.00	-.05	-.03
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S6.- CONTINUED.

(b) MACH NUMBER, .91 (ST DEV, .01), FLIGHT TIME, 1623.91 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.5	DELHL =	-.7	RADAR MACH NO =	.88
ST DEV=	.0	ST DEV =	.1	ST DEV =	.01
THETA =	5.1	DELHR =	-1.5	DYN PRESSURE =	32227 NSM (673 PSF)
ST DEV=	.3	ST DEV =	.3	ST DEV =	531 NSM (11 PSF)
PHI =	-3.5	DELRUD =	.7	VERT ACCEL =	1.0
ST DEV=	.5	ST DEV =	.1	ST DEV =	.0
		RE NO =	17239744		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.05	-.14	-.10	-.02	-.04	.00	
.01	.01	.01	.01	.01	.01	.01	
-.22	-.14	-.05					
.01	.01	.01					
-.25	-.24	0.00	-.15	-.17	-.05	-.09	-.00
.01	.01	0.00	.01	.01	.01	.01	.01
-.25	-.17	-.00					
.01	.01	.01					
-.30	-.20	0.00	-.05	-.07	0.00	-.05	-.04
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S6.- CONTINUED.

(c) MACH NUMBER, .90 (ST DEV, .01), FLIGHT TIME, 1627.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.5	DELHL =	-.6	RADAR MACH NO =	.86
ST DEV=	.1	ST DEV =	.1	ST DEV =	.00
THETA =	4.5	DELHR =	-1.4	DYN PRESSURE =	30904 NSM (645 PSF)
ST DEV=	.4	ST DEV =	.4	ST DEV =	686 NSM (14 PSF)
PHI =	-3.9	DELRUD =	.7	VERT ACCEL =	1.0
ST DEV=	1.3	ST DEV =	.1	ST DEV =	.1
		RE NO =	17043282		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.06	-.15	-.11	-.02	-.04	-.01	
.01	.01	.01	.01	.01	.01	.01	
-.23	-.15	-.05					
.01	.01	.01					
-.26	-.26	0.00	-.15	-.18	-.04	-.10	-.00
.01	.01	0.00	.01	.02	.01	.01	.00
-.26	-.17	.00					
.01	.01	.01					
-.32	-.21	0.00	-.06	-.08	0.00	-.06	-.04
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S6.- CONTINUED.

(d) MACH NUMBER, .88 (ST DEV, .01), FLIGHT TIME, 1631.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.7	DELHL =	-.7	RADAR MACH NO =	.85
ST DEV=	.0	ST DEV =	.1	ST DEV =	.00
THETA =	4.1	DELHR =	-1.5	DYN PRESSURE =	30616 NSM (639 PSF)
ST DEV=	.2	ST DEV =	.4	ST DEV =	444 NSM (9 PSF)
PHI =	-4.6	DELRUD =	.8	VERT ACCEL =	1.1
ST DEV=	1.2	ST DEV =	.1	ST DEV =	.0

RE NO = 16923220

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.07	-.16	-.11	-.02	-.04	-.01	
.01	.01	.01	.01	.00	.01	.01	
-.24	-.16	-.05					
.01	.01	.01					
-.27	-.27	0.00	-.16	-.18	-.05	-.10	-.01
.01	.01	0.00	.01	.02	.01	.01	.01
-.27	-.18	-.00					
.01	.01	.00					
-.33	-.22	0.00	-.06	-.08	0.00	-.06	-.04
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S6.- CONTINUED.

(e) MACH NUMBER, .87 (ST DEV, .01), FLIGHT TIME, 1635.93 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.8	DELHL =	-.5	RADAR MACH NO =	.84
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	4.0	DELHR =	-1.4	DYN PRESSURE =	29678 NSM (620 PSF)
ST DEV=	.2	ST DEV =	.5	ST DEV =	596 NSM (12 PSF)
PHI =	-4.4	DELRUD =	.8	VERT ACCEL =	1.1
ST DEV=	2.0	ST DEV =	.1	ST DEV =	.1
		RE NO =	16530275		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.08	-.16	-.12	-.02	-.05	-.00	
.01	.01	.01	.01	.01	.01	.01	
-.25	-.16	-.05					
.01	.01	.01					
-.29	-.27	0.00	-.17	-.19	-.05	-.10	-.01
.01	.01	0.00	.01	.02	.01	.01	.01
-.28	-.19	-.00					
.01	.01	.01					
-.34	-.22	0.00	-.07	-.09	0.00	-.06	-.04
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S6.- CONCLUDED.

(f) MACH NUMBER, .87 (ST DEV, .01), FLIGHT TIME, 1639.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.8	DELHL =	-.5	RADAR MACH NO =	.83
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	3.8	DELHR =	-1.6	DYN PRESSURE =	29182 NSM (609 PSF)
ST DEV=	.3	ST DEV =	.3	ST DEV =	411 NSM (9 PSF)
PHI =	-4.3	DELRUD =	.9	VERT ACCEL =	1.1
ST DEV=	1.1	ST DEV =	.1	ST DEV =	.0
		RE NO =	16365223		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.08	-.16	-.12	-.03	-.04	-.01	
.01	.01	.01	.01	.01	.01	.01	
-.25	-.16	-.05					
.01	.01	.01					
-.29	-.27	0.00	-.17	-.19	-.05	-.11	-.01
.01	.01	0.00	.01	.02	.01	.01	.01
-.28	-.18	-.01					
.01	.01	.01					
-.34	-.22	0.00	-.07	-.09	0.00	-.07	-.04
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S7.- FLIGHT AND PRESSURE DATA FOR A DIVE MANEUVER AT SUBSONIC MACH NUMBER FOR TANK-OFF CONFIGURATION (FIG. 11).

(a) MACH NUMBER, .99 (ST DEV, .01), FLIGHT TIME, 1567.96 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.2	DELHL =	-.5	RADAR MACH NO =	.98
ST DEV=	.1	ST DEV =	.2	ST DEV =	.01
THETA =	-3.0	DELHR =	-1.1	DYN PRESSURE =	30693 NSM (641 PSF)
ST DEV=	.3	ST DEV =	.3	ST DEV =	655 NSM (14 PSF)
PHI =	1.6	DELRUD =	.2	VERT ACCEL =	1.0
ST DEV=	2.1	ST DEV =	.1	ST DEV =	.1
		RE NO =	15813213		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.14	-.04	-.11	-.09	.01	-.08	.00	
.01	.01	.01	.01	.01	.01	.01	
-.16	-.08	-.09					
.01	.01	.01					
-.21	-.22	0.00	-.12	-.17	-.15	-.07	.03
.01	.01	0.00	.02	.01	.01	.01	.01
-.25	-.15	.02					
.01	.01	.01					
-.27	-.24	0.00	-.15	-.01	0.00	-.04	-.03
.01	.01	0.00	.01	.09	0.00	.01	.01

TABLE S7.- CONCLUDED.

(b) MACH NUMBER, 1.00 (ST DEV, .01), FLIGHT TIME, 1577.98 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.2	DELHL =	-.7	RADAR MACH NO =	.98
ST DEV=	.0	ST DEV =	.1	ST DEV =	.01
THETA =	-4.3	DELHR =	-1.2	DYN PRESSURE =	32860 NSM (686 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	428 NSM (9 PSF)
PHI =	.8	DELRUD =	.2	VERT ACCEL =	1.1
ST DEV=	.9	ST DEV =	.1	ST DEV =	.1
		RE NO =	16704137		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.15	-.04	-.12	-.10	.00	-.07	.00	
.01	.01	.01	.01	.01	.01	.01	
-.18	-.09	-.09					
.01	.01	.01					
-.22	-.23	0.00	-.12	-.17	-.17	-.07	.03
.01	.01	0.00	.01	.01	.01	.01	.01
-.26	-.16	.01					
.01	.01	.01					
-.27	-.25	0.00	-.16	-.01	0.00	-.05	-.03
.01	.01	0.00	.01	.06	0.00	.01	.01

TABLE S8.- FLIGHT AND PRESSURE DATA FOR A CLIMB MANEUVER AT SUBSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 12).

(a) MACH NUMBER, .97 (ST DEV, .01), FLIGHT TIME, 763.69 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.5	DELHL =	.2	RADAR MACH NO =	.94
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	13.3	DELHR =	-.4	DYN PRESSURE =	16013 NSM (334 PSF)
ST DEV=	.5	ST DEV =	.2	ST DEV =	640 NSM (13 PSF)
PHI =	-.6	DELRUD =	.5	VERT ACCEL =	1.1
ST DEV=	1.0	ST DEV =	.2	ST DEV =	.1
		RE NO =	10143456		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.38	-.30	-.30	-.22	-.15	-.03	
.01	.02	.02	.02	.02	.02	.01	
-.36	-.37	-.25					
.02	.02	.02					
-.66	-.29	0.00	-.43	0.00	-.22	-.17	-.08
.04	.02	0.00	.02	0.00	.02	.01	.02
-.55	-.37	.08					
.05	.02	.01					
-.88	-.46	0.00	-.10	-.21	0.00	-.21	-.12
.04	.02	0.00	.09	.02	0.00	.01	.01

TABLE S8.- CONTINUED.

(b) MACH NUMBER, .96 (ST DEV, .01), FLIGHT TIME, 767.36 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.7	DELHL =	.6	RADAR MACH NO =	.94
ST DEV=	.1	ST DEV =	1.2	ST DEV =	.01
THETA =	13.4	DELHR =	-.5	DYN PRESSURE =	15425 NSM (322 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	433 NSM (9 PSF)
PHI =	-.1	DELRUD =	.7	VERT ACCEL =	1.0
ST DEV=	1.0	ST DEV =	.2	ST DEV =	.0
		RE NO =	9843500		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.40	-.32	-.32	-.23	-.12	-.04	
.01	.02	.01	.01	.01	.01	.01	
-.37	-.37	-.24					
.02	.01	.02					
-.73	-.33	0.00	-.45	0.00	-.22	-.19	-.09
.03	.02	0.00	.02	0.00	.01	.01	.02
-.65	-.36	.08					
.04	.01	.01					
-.98	-.47	0.00	-.07	-.23	0.00	-.22	-.12
.06	.01	0.00	.02	.01	0.00	.01	.01

TABLE S8.- CONTINUED.

(c) MACH NUMBER, .90 (ST DEV, .01), FLIGHT TIME, 1428.02 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	-.6	RADAR MACH NO =	.87
ST DEV=	.1	ST DEV =	.1	ST DEV =	.01
THETA =	11.1	DELHR =	-1.2	DYN PRESSURE =	27756 NSM (580 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	676 NSM (14 PSF)
PHI =	-4.0	DELRUD =	.7	VERT ACCEL =	1.2
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	15905461		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.08	-.18	-.13	.01	-.05	-.01	
.01	.01	.01	.01	.01	.01	.01	
-.27	-.17	-.01					
.01	.01	.01					
-.33	-.30	0.00	-.19	-.21	-.06	-.10	-.00
.01	.01	0.00	.01	.01	.01	.01	.01
-.33	-.20	-.00					
.01	.01	.01					
-.36	-.26	0.00	-.08	-.06	0.00	-.05	-.03
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S8.- CONTINUED.

(d) MACH NUMBER, .84 (ST DEV, .01), FLIGHT TIME, 1439.87 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	-.5	RADAR MACH NO =	.82
ST DEV=	.1	ST DEV =	.3	ST DEV =	.00
THETA =	12.1	DELHR =	-1.4	DYN PRESSURE =	22800 NSM (476 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	505 NSM (11 PSF)
PHI =	-2.6	DELRUD =	1.1	VERT ACCEL =	1.1
ST DEV=	1.2	ST DEV =	.1	ST DEV =	.0
		RE NO =	13978023		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.11	-.20	-.15	.01	-.06	-.01	
.01	.01	.01	.01	.01	.01	.01	
-.30	-.21	-.01					
.02	.01	.02					
-.37	-.33	0.00	-.21	-.24	-.07	-.11	-.02
.01	.02	0.00	.02	.02	.01	.01	.01
-.35	-.21	-.01					
.01	.01	.01					
-.39	-.28	0.00	-.10	-.08	0.00	-.07	-.04
.01	.01	0.00	.01	.02	0.00	.02	.01

TABLE S8.- CONCLUDED.

(e) MACH NUMBER, .81 (ST DEV, .01), FLIGHT TIME, 1446.89 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.5	DELHL =	-.2	RADAR MACH NO =	.78
ST DEV=	.0	ST DEV =	.1	ST DEV =	.01
THETA =	12.5	DELHR =	-1.4	DYN PRESSURE =	19380 NSM (405 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	725 NSM (15 PSF)
PHI =	-2.0	DELRUD =	1.0	VERT ACCEL =	1.1
ST DEV=	1.4	ST DEV =	.1	ST DEV =	.0
		RE NO =	12904301		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.23	-.14	-.22	-.17	.00	-.07	-.02	
.01	.02	.01	.02	.01	.02	.01	
-.32	-.24	-.00					
.02	.01	.02					
-.43	-.37	0.00	-.24	-.27	-.08	-.14	-.03
.02	.03	0.00	.01	.02	.02	.01	.02
-.37	-.23	-.02					
.02	.01	.01					
-.42	-.30	0.00	-.11	-.09	0.00	-.09	-.04
.04	.01	0.00	.01	.02	0.00	.02	.01

TABLE S9.- FLIGHT AND PRESSURE DATA FOR RIGHT-TURN MANEUVERS AT SUBSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 13).

(a) MACH NUMBER, .88 (ST DEV, .01), FLIGHT TIME, 1515.02 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	4.9	DELHL =	.3	RADAR MACH NO =	.85
ST DEV=	.0	ST DEV =	.2	ST DEV =	.01
THETA =	2.2	DELHR =	-.2	DYN PRESSURE =	22987 NSM (480 PSF)
ST DEV=	1.5	ST DEV =	.2	ST DEV =	459 NSM (10 PSF)
PHI =	55.3	DELRUD =	.9	VERT ACCEL =	3.1
ST DEV=	2.2	ST DEV =	.1	ST DEV =	.1
		RE NO =	13657966		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.44	-.33	-.39	-.32	-.16	-.14	-.02	
.01	.01	.01	.01	.01	.02	.01	
-1.20	-.38	-.09					
.03	.01	.02					
-1.06	-1.02	0.00	-.74	-.38	-.20	-.18	-.02
.02	.03	0.00	.03	.03	.02	.01	.02
-1.16	-.80	-.04					
.03	.03	.02					
-1.59	-.55	0.00	-.26	-.20	0.00	-.19	-.11
.04	.03	0.00	.02	.03	0.00	.02	.01

TABLE S9.- CONTINUED.

(b) MACH NUMBER, .91 (ST DEV, .01), FLIGHT TIME, 1655.47 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	5.7	DELHL =	1.4	RADAR MACH NO =	.84
ST DEV=	.2	ST DEV =	1.5	ST DEV =	.01
THETA =	5.4	DELHR =	.8	DYN PRESSURE =	32345 NSM (676 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	657 NSM (14 PSF)
PHI =	84.5	DELRUD =	.7	VERT ACCEL =	5.4
ST DEV=	3.7	ST DEV =	.1	ST DEV =	.2
		RE NO =	17417856		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.50	-.40	-.43	-.37	-.26	-.17	-.02	
.02	.02	.01	.01	.01	.01	.01	
-1.27	-.37	-.15					
.03	.01	.02					
-1.21	-1.08	0.00	-.83	-.51	-.27	-.16	-.01
.04	.05	0.00	.04	.04	.02	.02	.01
-1.06	-.93	-.11					
.05	.03	.05					
-1.52	-.69	0.00	-.35	-.25	0.00	-.24	-.15
.07	.05	0.00	.05	.03	0.00	.03	.02

TABLE S9.- CONTINUED.

(c) MACH NUMBER, .91 (ST DEV, .01), FLIGHT TIME, 1657.64 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	6.1	DELHL =	1.3	RADAR MACH NO =	.83
ST DEV=	.2	ST DEV =	.2	ST DEV =	.01
THETA =	5.8	DELHR =	1.1	DYN PRESSURE =	32374 NSM (676 PSF)
ST DEV=	.5	ST DEV =	.2	ST DEV =	428 NSM (9 PSF)
PHI =	85.7	DELRUD =	.8	VERT ACCEL =	5.7
ST DEV=	3.3	ST DEV =	.1	ST DEV =	.3
		RE NO =	17308591		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.53	-.42	-.45	-.39	-.28	-.18	-.02	
.03	.02	.02	.01	.02	.01	.01	
-1.31	-.39	-.15					
.04	.04	.02					
-1.18	-1.14	0.00	-.92	-.56	-.26	-.16	-.01
.02	.03	0.00	.06	.05	.03	.02	.01
-1.00	-.90	-.17					
.04	.02	.07					
-1.42	-.68	0.00	-.38	-.28	0.00	-.22	-.13
.07	.05	0.00	.06	.03	0.00	.02	.03

TABLE S9.- CONCLUDED.

(d) MACH NUMBER, .97 (ST DEV, .02), FLIGHT TIME, 1668.66 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	1.8	RADAR MACH NO =	.93
ST DEV=	.1	ST DEV =	2.8	ST DEV =	.01
THETA =	3.5	DELHR =	-1.1	DYN PRESSURE =	36116 NSM (754 PSF)
ST DEV=	.9	ST DEV =	.1	ST DEV =	729 NSM (15 PSF)
PHI =	71.0	DELRUD =	.8	VERT ACCEL =	2.1
ST DEV=	3.3	ST DEV =	.1	ST DEV =	.0

RE NO = 18109566

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.11	-.18	-.14	-.07	-.08	.00	
.01	.01	.01	.01	.01	.01	.01	
-.32	-.17	-.06					
.02	.01	.01					
-.41	-.33	0.00	-.21	-.22	-.22	-.09	.00
.03	.02	0.00	.01	.02	.01	.01	.01
-.38	-.29	.00					
.02	.02	.01					
-.41	-.32	0.00	-.01	-.09	0.00	-.07	-.06
.02	.07	0.00	.04	.01	0.00	.01	.01

TABLE S10.- FLIGHT AND PRESSURE DATA FOR A COMBINED CLIMB AND RIGHT-TURN MANEUVER AT SUBSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 14).

(a) MACH NUMBER, 1.00 (ST DEV, .02), FLIGHT TIME, 1679.69 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.1	RADAR MACH NO =	.95
ST DEV=	.1	ST DEV =	.8	ST DEV =	.01
THETA =	5.6	DELHR =	-.8	DYN PRESSURE =	37677 NSM (787 PSF)
ST DEV=	1.2	ST DEV =	.2	ST DEV =	475 NSM (10 PSF)
PHI =	52.9	DELRUD =	.5	VERT ACCEL =	2.9
ST DEV=	1.3	ST DEV =	.2	ST DEV =	.2
		RE NO =	18717769		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.25	-.15	-.19	-.18	-.09	-.15	-.01	
.01	.01	.01	.01	.01	.01	.01	
-.33	-.20	-.17					
.01	.02	.01					
-.54	-.37	0.00	-.26	-.23	-.19	-.18	.04
.02	.02	0.00	.01	.02	.01	.02	.01
-.48	-.35	.04					
.02	.01	.01					
-.83	-.41	0.00	-.27	-.19	0.00	-.08	-.07
.04	.01	0.00	.01	.01	0.00	.01	.01

TABLE S10.- CONTINUED.

(b) MACH NUMBER, .98 (ST DEV, .02), FLIGHT TIME, 1687.03 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	-.1	RADAR MACH NO =	.99
ST DEV=	.1	ST DEV =	.2	ST DEV =	.04
THETA =	9.9	DELHR =	-1.1	DYN PRESSURE =	35929 NSM (750 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	670 NSM (14 PSF)
PHI =	48.7	DELRUD =	.7	VERT ACCEL =	2.0
ST DEV=	1.3	ST DEV =	.1	ST DEV =	.2
		RE NO =	17939825		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.11	-.16	-.12	-.07	-.12	.00	
.01	.01	.01	.01	.01	.01	.01	
-.28	-.16	-.12					
.01	.01	.03					
-.41	-.32	0.00	-.21	-.21	-.17	-.07	.02
.02	.01	0.00	.01	.02	.01	.01	.01
-.39	-.30	.01					
.01	.01	.01					
-.47	-.37	0.00	-.19	.01	0.00	-.07	-.06
.03	.01	0.00	.07	.11	0.00	.01	.01

TABLE S10.- CONTINUED.

(c) MACH NUMBER, .96 (ST DEV, .01), FLIGHT TIME, 1690.71 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	-.1	RADAR MACH NO =	.94
ST DEV=	.1	ST DEV =	.4	ST DEV =	.00
THETA =	11.0	DELHR =	-1.1	DYN PRESSURE =	34079 NSM (712 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	329 NSM (7 PSF)
PHI =	47.1	DELRUD =	.7	VERT ACCEL =	1.9
ST DEV=	1.3	ST DEV =	.1	ST DEV =	.1

RE NO = 17188101

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.12	-.17	-.14	-.06	-.09	.00	
.01	.01	.01	.01	.01	.01	.01	
-.30	-.16	-.06					
.01	.01	.01					
-.39	-.30	0.00	-.21	-.23	-.18	-.09	.00
.01	.01	0.00	.01	.02	.01	.01	.01
-.40	-.29	.00					
.01	.01	.01					
-.39	-.28	0.00	-.07	-.10	0.00	-.07	-.06
.03	.05	0.00	.04	.01	0.00	.01	.01

TABLE S10.- CONCLUDED.

(d) MACH NUMBER, .97 (ST DEV, .C2), FLIGHT TIME, 1694.38 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	-.1	RADAR MACH NU =	.94
ST DEV=	.0	ST DEV =	.6	ST DEV =	.C1
THETA =	11.3	DELHR =	-1.1	DYN PRESSURE =	33044 NSM (690 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	348 NSM (7 PSF)
PHI =	47.1	DELRUD =	.6	VERT ACCEL =	1.9
ST DEV=	1.4	ST DEV =	.1	ST DEV =	.C

RE NU = 17C60680

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.12	-.17	-.14	-.C6	-.09	.00	
.01	.01	.01	.01	.01	.01	.01	
-.31	-.16	-.06					
.01	.C1	.C1					
-.38	-.30	0.00	-.22	-.23	-.18	-.09	.00
.01	.01	0.CC	.00	.02	.01	.01	.01
-.39	-.29	.C1					
.01	.01	.01					
-.39	-.22	0.00	-.10	-.10	0.00	-.08	-.06
.01	.04	0.CC	.01	.01	0.00	.01	.01

TABLE S11.- FLIGHT AND PRESSURE DATA FOR A COMBINED DIVE AND LEFT-TURN MANEUVER AT SUBSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 15).

(a) MACH NUMBER, 1.00 (ST DEV, .01), FLIGHT TIME, 1584.66 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 1.5	DELHL = -.5	RADAR MACH NO = .96
ST DEV= .0	ST DEV = .1	ST DEV = .01
THETA = -4.5	DELHR = -1.2	DYN PRESSURE = 34070 NSM (712 PSF)
ST DEV= .4	ST DEV = .5	ST DEV = 711 NSM (15 PSF)
PHI = -46.7	DELRUD = .5	VERT ACCEL = 1.5
ST DEV= .8	ST DEV = .2	ST DEV = .1
	RE NO = 17094175	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.07	-.14	-.11	-.02	-.08	-.00	
.01	.01	.01	.01	.01	.01	.01	
-.25	-.12	-.11					
.01	.01	.01					
-.32	-.27	0.00	-.17	-.18	-.19	-.12	.03
.01	.01	0.00	.01	.01	.01	.01	.01
-.31	-.20	.02					
.01	.01	.01					
-.32	-.30	0.00	-.19	-.11	0.00	-.04	-.03
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S11.- CONTINUED.

(b) MACH NUMBER, 1.00 (ST DEV, .01), FLIGHT TIME, 1588.34 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.5	DELHL =	-.6	RADAR MACH NO =	.99
ST DEV=	.1	ST DEV =	.1	ST DEV =	.01
THETA =	-4.7	DELHR =	-1.2	DYN PRESSURE =	35314 NSM (738 PSF)
ST DEV=	.3	ST DEV =	.4	ST DEV =	831 NSM (17 PSF)
PHI =	-47.7	DELRUD =	.3	VERT ACCEL =	1.5
ST DEV=	1.1	ST DEV =	.1	ST DEV =	.1
		RE NO =	17422084		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.06	-.14	-.10	-.02	-.07	-.00	
.01	.01	.01	.01	.00	.01	.01	
-.24	-.12	-.10					
.01	.01	.01					
-.32	-.26	0.00	-.17	-.18	-.17	-.13	.04
.01	.01	0.00	.01	.02	.01	.01	.01
-.30	-.19	.04					
.01	.01	.02					
-.31	-.29	0.00	-.18	-.12	0.00	-.05	-.03
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S11.- CONTINUED.

(c) MACH NUMBER, 1.00 (ST DEV, .01), FLIGHT TIME, 1592.01 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.5	DELHL =	-.6	RADAR MACH NO =	.96
ST DEV=	.1	ST DEV =	.1	ST DEV =	.01
THETA =	-4.5	DELHR =	-1.1	DYN PRESSURE =	35900 NSM (750 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	275 NSM (6 PSF)
PHI =	-47.8	DELRUD =	.2	VERT ACCEL =	1.5
ST DEV=	.8	ST DEV =	.1	ST DEV =	.1
		RE NO =	17998757		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.06	-.13	-.10	-.02	-.07	-.00	
.01	.01	.01	.01	.01	.01	.01	
-.24	-.12	-.11					
.01	.01	.01					
-.33	-.25	0.00	-.16	-.18	-.18	-.11	.04
.01	.01	0.00	.01	.01	.02	.02	.01
-.30	-.19	.05					
.01	.01	.06					
-.31	-.29	0.00	-.18	-.08	0.00	-.04	-.04
.01	.01	0.00	.01	.08	0.00	.01	.01

TABLE S11.- CONTINUED.

(d) MACH NUMBER, 1.00 (ST DEV, .01), FLIGHT TIME, 1595.68 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.5	DELHL =	-.6	RADAR MACH NO =	.95
ST DEV=	.0	ST DEV =	.1	ST DEV =	.01
THETA =	-4.5	DELHR =	-1.2	DYN PRESSURE =	36180 NSM (756 PSF)
ST DEV=	.3	ST DEV =	.4	ST DEV =	558 NSM (12 PSF)
PHI =	-37.5	DELRUD =	.2	VERT ACCEL =	1.5
ST DEV=	18.3	ST DEV =	.1	ST DEV =	.0
		RE NO =	18069596		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.06	-.13	-.11	-.02	-.09	.00	
.01	.01	.01	.01	.00	.01	.01	
-.25	-.12	-.10					
.01	.01	.02					
-.32	-.26	0.00	-.14	-.19	-.20	-.07	.02
.01	.01	0.00	.01	.01	.01	.01	.01
-.31	-.19	.01					
.01	.01	.01					
-.34	-.30	0.00	-.19	.12	0.00	-.04	-.03
.01	.01	0.00	.01	.02	0.00	.01	.01

TABLE S11.- CONCLUDED.

(e) MACH NUMBER, .99 (ST DEV, .01), FLIGHT TIME, 1600.03 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.6	DELHL =	-.7	RADAR MACH NO =	.98
ST DEV=	.0	ST DEV =	.1	ST DEV =	.02
THETA =	-4.7	DELHR =	-1.7	DYN PRESSURE =	36524 NSM (763 PSF)
ST DEV=	.3	ST DEV =	.5	ST DEV =	596 NSM (12 PSF)
PHI =	-33.1	DELRUD =	.3	VERT ACCEL =	1.5
ST DEV=	22.1	ST DEV =	.1	ST DEV =	.0
		RE NO =	18339671		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.06	-.14	-.11	-.01	-.09	.01	
.01	.01	.01	.01	.00	.01	.01	
-.26	-.11	-.06					
.01	.01	.01					
-.32	-.26	0.00	-.15	-.19	-.20	-.06	.01
.01	.01	0.00	.01	.02	.01	.01	.01
-.32	-.20	.01					
.01	.01	.01					
-.34	-.31	0.00	-.16	-.06	0.00	-.05	-.04
.01	.01	0.00	.02	.01	0.00	.01	.01

TABLE S12.- FLIGHT AND PRESSURE DATA FOR STRAIGHT AND LEVEL FLIGHT AT SUPERSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 16).

(a) MACH NUMBER, 1.08 (ST DEV, .02), FLIGHT TIME, 817.97 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.1	RADAR MACH NO =	1.04
ST DEV=	.1	ST DEV =	.4	ST DEV =	.00
THETA =	4.7	DELHR =	-.4	DYN PRESSURE =	16809 NSM (351 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	490 NSM (10 PSF)
PHI =	-.6	DELRUD =	.9	VERT ACCEL =	1.1
ST DEV=	.4	ST DEV =	.1	ST DEV =	.1
		RE NO =	9917765		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.32	-.30	-.30	-.20	-.16	-.04	
.02	.02	.01	.01	.01	.02	.01	
-.24	-.34	-.29					
.01	.01	.02					
-.53	-.29	0.00	-.42	0.00	-.15	-.28	-.11
.02	.01	0.00	.02	0.00	.02	.01	.02
-.46	-.33	.00					
.02	.01	.01					
-.88	-.40	0.00	-.28	-.23	0.00	-.12	-.07
.04	.02	0.00	.01	.02	0.00	.01	.01

FIGURE S12.- CONTINUED.

(b) MACH NUMBER, 1.07 (ST DEV, .02), FLIGHT TIME, 844.02 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	-.2	RADAR MACH NO =	1.04
ST DEV=	.0	ST DEV =	.4	ST DEV =	.00
THETA =	2.8	DELHR =	-.7	DYN PRESSURE =	16778 NSM (350 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	413 NSM (9 PSF)
PHI =	-1.1	DELRUD =	.6	VERT ACCEL =	1.0
ST DEV=	1.0	ST DEV =	.1	ST DEV =	.0
		RE NO =	9795191		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.29	-.28	-.28	-.18	-.14	-.04	
.01	.02	.01	.02	.01	.01	.01	
-.22	-.31	-.24					
.01	.01	.01					
-.44	-.24	0.00	-.39	0.00	-.15	-.27	-.10
.02	.01	0.00	.01	0.00	.01	.01	.01
-.39	-.30	-.01					
.01	.01	.01					
-.72	-.35	0.00	-.25	-.21	0.00	-.10	-.05
.02	.01	0.00	.01	.02	0.00	.02	.01

FIGURE S12.- CONTINUED.

(c) MACH NUMBER, 1.15 (ST DEV, .02), FLIGHT TIME, 1100.03 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	.0	RADAR MACH NO =	1.11
ST DEV=	.0	ST DEV =	1.6	ST DEV =	.00
THETA =	1.9	DELHR =	-.4	DYN PRESSURE =	17604 NSM (368 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	331 NSM (7 PSF)
PHI =	-2.8	DELRUD =	.3	VERT ACCEL =	1.0
ST DEV=	1.4	ST DEV =	.1	ST DEV =	.0
		RE NO =	9797915		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.18	-.22	-.22	-.08	-.14	-.06	
.01	.01	.01	.01	.01	.01	.01	
-.19	-.25	-.11					
.01	.01	.03					
-.34	-.26	0.00	-.30	0.00	-.13	-.25	-.11
.01	.02	0.00	.02	0.00	.02	.01	.01
-.34	-.28	-.08					
.01	.01	.01					
-.63	-.37	0.00	-.27	-.07	0.00	-.13	-.01
.02	.02	0.00	.01	.02	0.00	.01	.01

FIGURE S12.- CONTINUED.

(d) MACH NUMBER, 1.14 (ST DEV, .02), FLIGHT TIME, 1115.89 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-.4	RADAR MACH NO =	1.10
ST DEV=	.0	ST DEV =	.1	ST DEV =	.00
THETA =	.8	DELHR =	-.8	DYN PRESSURE =	17199 NSM (359 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	407 NSM (9 PSF)
PHI =	-2.1	DELRUD =	.1	VERT ACCEL =	1.2
ST DEV=	.6	ST DEV =	.1	ST DEV =	.1
		RE NO =	9807441		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.19	-.23	-.24	-.09	-.15	-.05	
.01	.01	.01	.02	.01	.03	.02	
-.24	-.27	-.11					
.02	.01	.02					
-.39	-.30	0.00	-.32	0.00	-.14	-.27	-.11
.02	.02	0.00	.02	0.00	.02	.01	.02
-.38	-.32	-.07					
.01	.01	.01					
-.81	-.42	0.00	-.28	-.09	0.00	-.14	-.04
.03	.01	0.00	.01	.02	0.00	.02	.01

FIGURE S12.- CONCLUDED.

(e) MACH NUMBER, 1.24 (ST DEV, .02), FLIGHT TIME, 1285.90 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-.3	RADAR MACH NO =	1.20
ST DEV=	.1	ST DEV =	.5	ST DEV =	.00
THETA =	.8	DELHR =	-.8	DYN PRESSURE =	17310 NSM (362 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	520 NSM (11 PSF)
PHI =	-.9	DELRUD =	.5	VERT ACCEL =	1.0
ST DEV=	1.4	ST DEV =	.1	ST DEV =	.0
		RE NO =	8894263		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.12	-.20	-.19	-.01	-.12	-.05	
.01	.02	.01	.01	.01	.01	.02	
-.23	-.22	-.04					
.02	.01	.02					
-.36	-.28	0.00	-.25	0.00	-.10	-.21	-.15
.01	.01	0.00	.01	0.00	.01	.01	.01
-.33	-.23	-.06					
.01	.03	.01					
-.65	-.35	0.00	-.27	-.07	0.00	-.12	-.03
.06	.01	0.00	.01	.02	0.00	.01	.01

TABLE S13.- FLIGHT AND PRESSURE DATA FOR A DIVE MANEUVER AT SUPERSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 17).

(a) MACH NUMBER, 1.22 (ST DEV, .01), FLIGHT TIME, 1369.90 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.3	DELHL =	-1.4	RADAR MACH NO =	1.17
ST DEV=	.0	ST DEV =	.1	ST DEV =	.00
THETA =	-25.0	DELHR =	-1.8	DYN PRESSURE =	29408 NSM (614 PSF)
ST DEV=	.3	ST DEV =	.3	ST DEV =	1029 NSM (21 PSF)
PHI =	-.2	DELRUD =	.2	VERT ACCEL =	.9
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	13750828		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	-.01	-.12	-.09	.02	-.06	-.02	
.01	.01	.01	.01	.01	.01	.01	
-.09	-.12	-.02					
.01	.01	.01					
-.18	-.20	0.00	-.13	-.21	-.04	-.14	-.07
.01	.01	0.00	.01	.01	.01	.00	.01
-.20	-.18	-.02					
.01	.01	.00					
-.24	-.20	0.00	-.16	-.03	0.00	-.05	-.01
.01	.01	0.00	.01	.01	0.00	.02	.00

TABLE S13.- CONTINUED.

(b) MACH NUMBER, 1.22 (ST DEV, .01), FLIGHT TIME, 1376.91 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.2	DELHL =	-1.7	RADAR MACH NO =	1.18
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	-25.5	DELHR =	-1.9	DYN PRESSURE =	34071 NSM (712 PSF)
ST DEV=	.2	ST DEV =	.3	ST DEV =	628 NSM (13 PSF)
PHI =	-.7	DELRUD =	.0	VERT ACCEL =	1.0
ST DEV=	1.6	ST DEV =	.1	ST DEV =	.0
		RE NO =	15366385		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.13	-.00	-.13	-.08	.01	-.06	-.02	
.01	.01	.01	.01	.01	.01	.01	
-.10	-.12	-.02					
.01	.01	.02					
-.18	-.19	0.00	-.12	-.18	-.03	-.13	-.07
.00	.01	0.00	.01	.01	.01	.00	.01
-.20	-.18	-.02					
.00	.01	.01					
-.21	-.18	0.00	-.16	-.03	0.00	-.04	-.01
.01	.01	0.00	.01	.01	0.00	.01	.00

TABLE S13.- CONTINUED.

(c) MACH NUMBER, 1.21 (ST DEV, .01), FLIGHT TIME, 1380.59 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 1.1	DELHL = -1.7	RADAR MACH NO = 1.18
ST DEV= .0	ST DEV = .2	ST DEV = .00
THETA = -25.7	DELHR = -2.0	DYN PRESSURE = 36561 NSM (764 PSF)
ST DEV= .2	ST DEV = .2	ST DEV = 778 NSM (16 PSF)
PHI = -1.7	DELRUD = -.0	VERT ACCEL = 1.0
ST DEV= 1.2	ST DEV = .1	ST DEV = .0
	RE NO = 16085599	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.13	.01	-.12	-.08	.02	-.06	-.02	
.01	.01	.00	.01	.01	.01	.00	
-.09	-.11	-.03					
.01	.01	.01					
-.17	-.18	0.00	-.12	-.18	-.03	-.13	-.05
.00	.01	0.00	.01	.01	.01	.01	.01
-.19	-.17	-.02					
.01	.01	.00					
-.18	-.17	0.00	-.15	-.03	0.00	-.05	-.01
.01	.00	0.00	.00	.01	0.00	.01	.00

TABLE S13.- CONTINUED.

(d) MACH NUMBER, 1.21 (ST DEV, .01), FLIGHT TIME, 1384.26 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.1	DELHL =	-1.7	RADAR MACH NO =	1.18
ST DEV=	.0	ST DEV =	.3	ST DEV =	.01
THETA =	-25.7	DELHR =	-2.1	DYN PRESSURE =	38926 NSM (813 PSF)
ST DEV=	.2	ST DEV =	.4	ST DEV =	861 NSM (18 PSF)
PHI =	-1.9	DELRUD =	-.0	VERT ACCEL =	1.0
ST DEV=	1.4	ST DEV =	.1	ST DEV =	.0
		RE NO =	17033404		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	.02	-.11	-.07	.01	-.06	-.02	
.01	.01	.00	.01	.01	.01	.00	
-.10	-.11	-.04					
.01	.00	.01					
-.17	-.18	0.00	-.11	-.17	-.03	-.13	-.05
.01	.01	0.00	.01	.01	.00	.01	.01
-.18	-.17	-.02					
.00	.01	.00					
-.18	-.17	0.00	-.15	-.03	0.00	-.05	-.01
.01	.00	0.00	.00	.01	0.00	.01	.01

TABLE S13.- CONCLUDED.

(e) MACH NUMBER, 1.19 (ST DEV, .01), FLIGHT TIME, 1387.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.0	DELHL =	-1.8	RADAR MACH NO =	1.15
ST DEV=	.0	ST DEV =	.3	ST DEV =	.01
THETA =	-25.6	DELHR =	-2.1	DYN PRESSURE =	41254 NSM (862 PSF)
ST DEV=	.3	ST DEV =	.4	ST DEV =	937 NSM (20 PSF)
PHI =	-1.8	DELRUD =	-.1	VERT ACCEL =	1.0
ST DEV=	1.4	ST DEV =	.1	ST DEV =	.1
		RE NO =	17588247		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	.02	-.11	-.07	.02	-.05	-.02	
.01	.01	.01	.01	.01	.01	.01	
-.09	-.10	-.04					
.01	.01	.01					
-.18	-.18	0.00	-.10	-.17	-.03	-.13	-.04
.01	.01	0.00	.01	.01	.01	.01	.00
-.21	-.16	-.02					
.01	.01	.00					
-.17	-.16	0.00	-.14	-.03	0.00	-.06	-.01
.01	.01	0.00	.01	.01	0.00	.01	.00

TABLE S14.- FLIGHT AND PRESSURE DATA FOR RIGHT-TURN MANEUVERS AT SUPERSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 18).

(a) MACH NUMBER, 1.04 (ST DEV, .02), FLIGHT TIME, 959.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 4.3	DELHL = 1.7	RADAR MACH NO = 1.01
ST DEV= .3	ST DEV = .6	ST DEV = .00
THETA = 2.4	DELHR = 1.5	DYN PRESSURE = 18388 NSM (384 PSF)
ST DEV= .4	ST DEV = .3	ST DEV = 495 NSM (10 PSF)
PHI = 67.8	DELRUD = .3	VERT ACCEL = 2.4
ST DEV= 2.4	ST DEV = .1	ST DEV = .2
	RE NO = 10588891	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.36	-.38	-.41	-.38	-.25	-.28	-.07	
.02	.03	.02	.02	.02	.02	.02	
-.94	-.42	-.26					
.07	.02	.03					
-.98	-.84	0.00	-.71	0.00	-.29	-.37	-.15
.03	.06	0.00	.07	0.00	.02	.02	.01
-1.08	-.80	-.04					
.06	.07	.01					
-1.52	-1.10	0.00	-.60	-.21	0.00	-.20	-.11
.06	.10	0.00	.09	.04	0.00	.03	.01

TABLE S14.- CONTINUED.

(b) MACH NUMBER, 1.02 (ST DEV, .01), FLIGHT TIME, 963.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	4.9	DELHL =	2.1	RADAR MACH NO =	1.01
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	3.1	DELHR =	2.1	DYN PRESSURE =	18302 NSM (382 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	243 NSM (5 PSF)
PHI =	67.7	DELRUD =	.3	VERT ACCEL =	2.7
ST DEV=	1.7	ST DEV =	.1	ST DEV =	.1

RE NO = 10357032

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.39	-.43	-.44	-.40	-.28	-.29	-.09	
.01	.01	.01	.02	.01	.02	.01	
-1.05	-.46	-.29					
.02	.01	.02					
-1.00	-.92	0.00	-.84	0.00	-.33	-.41	-.15
.02	.01	0.00	.02	0.00	.02	.01	.02
-1.15	-.92	-.05					
.02	.03	.01					
-1.58	-1.28	0.00	-.74	-.24	0.00	-.22	-.12
.03	.03	0.00	.02	.02	0.00	.01	.01

TABLE S14.- CONTINUED.

(c) MACH NUMBER, 1.01 (ST DEV, .01), FLIGHT TIME, 967.93 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	5.0	DELHL =	2.2	RADAR MACH NO =	.99
ST DEV=	.0	ST DEV =	.1	ST DEV =	.00
THETA =	3.7	DELHR =	2.2	DYN PRESSURE =	18110 NSM (378 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	236 NSM (5 PSF)
PHI =	67.2	DELRUD =	.4	VERT ACCEL =	2.7
ST DEV=	2.5	ST DEV =	.1	ST DEV =	.0
		RE NO =	10342140		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.40	-.44	-.45	-.41	-.28	-.30	-.09	
.01	.01	.01	.02	.01	.01	.01	
-1.09	-.46	-.29					
.02	.01	.02					
-1.02	-.93	0.00	-.87	0.00	-.32	-.41	-.14
.02	.02	0.00	.02	0.00	.01	.01	.01
-1.16	-.94	-.05					
.02	.02	.01					
-1.59	-1.31	0.00	-.74	-.25	0.00	-.22	-.12
.03	.03	0.00	.03	.01	0.00	.01	.02

TABLE S14.- CONTINUED.

(d) MACH NUMBER, 1.00 (ST DEV, .01), FLIGHT TIME, 971.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	4.8	DELHL =	2.0	RADAR MACH NO =	1.00
ST DEV=	.1	ST DEV =	.3	ST DEV =	.00
THETA =	4.2	DELHR =	2.0	DYN PRESSURE =	18018 NSM (376 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	291 NSM (6 PSF)
PHI =	65.2	DELRUD =	.4	VERT ACCEL =	2.6
ST DEV=	2.5	ST DEV =	.3	ST DEV =	.1
		RE NO =	10339894		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.39	-.43	-.44	-.41	-.28	-.29	-.08	
.01	.01	.01	.01	.01	.01	.02	
-1.04	-.44	-.27					
.02	.01	.02					
-.99	-.91	0.00	-.83	0.00	-.31	-.40	-.14
.02	.03	0.00	.02	0.00	.02	.01	.01
-1.13	-.91	-.03					
.02	.02	.01					
-1.57	-1.31	0.00	-.66	-.25	0.00	-.21	-.11
.03	.03	0.00	.03	.02	0.00	.02	.01

TABLE S14.- CONTINUED.

(e) MACH NUMBER, 1.12 (ST DEV, .01), FLIGHT TIME, 1163.99 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.0	DELHL =	1.0	RADAR MACH NO =	1.07
ST DEV=	.1	ST DEV =	1.4	ST DEV =	.00
THETA =	2.7	DELHR =	.5	DYN PRESSURE =	16637 NSM (347 PSF)
ST DEV=	.1	ST DEV =	.1	ST DEV =	383 NSM (8 PSF)
PHI =	46.3	DELRUD =	.4	VERT ACCEL =	1.5
ST DEV=	1.2	ST DEV =	.1	ST DEV =	.1
		RE NO =	9502455		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.23	-.23	-.30	-.29	-.12	-.19	-.06	
.02	.02	.02	.02	.01	.02	.01	
-.33	-.32	-.14					
.02	.01	.02					
-.60	-.37	0.00	-.37	0.00	-.20	-.30	-.12
.04	.01	0.00	.02	0.00	.01	.01	.02
-.52	-.36	-.08					
.02	.01	.01					
-1.17	-.68	0.00	-.35	-.11	0.00	-.17	-.09
.04	.03	0.00	.02	.02	0.00	.02	.02

TABLE S14.- CONTINUED.

(f) MACH NUMBER, 1.12 (ST DEV, .01), FLIGHT TIME, 1175.68 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.2	DELHL =	.6	RADAR MACH NO =	1.08
ST DEV=	.0	ST DEV =	.3	ST DEV =	.00
THETA =	2.4	DELHR =	.6	DYN PRESSURE =	16749 NSM (350 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	207 NSM (4 PSF)
PHI =	46.1	DELRUD =	.4	VERT ACCEL =	1.6
ST DEV=	.5	ST DEV =	.1	ST DEV =	.0
		RE NO =	9471017		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.23	-.31	-.29	-.12	-.20	-.07	
.02	.02	.01	.02	.01	.02	.01	
-.36	-.32	-.14					
.01	.01	.03					
-.68	-.41	0.00	-.38	0.00	-.21	-.30	-.13
.03	.02	0.00	.02	0.00	.02	.01	.01
-.57	-.39	-.09					
.02	.02	.01					
-1.21	-.75	0.00	-.40	-.12	0.00	-.18	-.11
.02	.02	0.00	.02	.02	0.00	.02	.01

TABLE S14.- CONTINUED.

(g) MACH NUMBER, 1.12 (ST DEV, .01), FLIGHT TIME, 1179.35 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.3	DELFL =	.6	RADAR MACH NO =	1.08
ST DEV=	.0	ST DEV =	.4	ST DEV =	.00
THETA =	2.5	DELFR =	.7	DYN PRESSURE =	16775 NSM (350 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	243 NSM (5 PSF)
PHI =	46.6	DELRUD =	.4	VERT ACCEL =	1.6
ST DEV=	1.7	ST DEV =	.1	ST DEV =	.1
		RE NO =	9566123		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.24	-.30	-.29	-.13	-.20	-.07	
.02	.01	.01	.01	.01	.02	.01	
-.37	-.33	-.15					
.01	.01	.03					
-.71	-.42	0.00	-.38	0.00	-.21	-.31	-.13
.02	.02	0.00	.01	0.00	.01	.02	.01
-.60	-.39	-.09					
.01	.01	.01					
-1.21	-.77	0.00	-.41	-.12	0.00	-.17	-.11
.02	.01	0.00	.01	.01	0.00	.02	.01

TABLE S14.- CONCLUDED.

(h) MACH NUMBER, 1.12 (ST DEV, .01), FLIGHT TIME, 1183.03 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.3	DELHL =	.7	RADAR MACH NO =	1.08
ST DEV=	.0	ST DEV =	.6	ST DEV =	.00
THETA =	2.7	DELHR =	.6	DYN PRESSURE =	16695 NSM (349 PSF)
ST DEV=	.5	ST DEV =	.3	ST DEV =	326 NSM (7 PSF)
PHI =	46.1	DELRUD =	.5	VERT ACCEL =	1.6
ST DEV=	1.9	ST DEV =	.2	ST DEV =	.1
		RE NO =	9575244		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.23	-.31	-.29	-.12	-.20	-.07	
.01	.02	.01	.02	.01	.02	.02	
-.37	-.33	-.15					
.02	.02	.02					
-.71	-.42	0.00	-.38	0.00	-.21	-.31	-.14
.03	.02	0.C0	.01	0.00	.02	.01	.02
-.59	-.39	-.09					
.02	.01	.01					
-1.22	-.76	0.00	-.40	-.12	0.00	-.17	-.11
.03	.03	0.00	.02	.02	0.00	.02	.01

TABLE S15.- FLIGHT AND PRESSURE DATA FOR A LEFT-TURN MANEUVER AT SUPERSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 19).

(a) MACH NUMBER, 1.12 (ST DEV, .02), FLIGHT TIME, 1127.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 3.2	DELHL = .2	RADAR MACH NO = 1.07
ST DEV= .1	ST DEV = .2	ST DEV = .00
THETA = -.0	DELHR = -.0	DYN PRESSURE = 16825 NSM (351 PSF)
ST DEV= .1	ST DEV = .2	ST DEV = 242 NSM (5 PSF)
PHI = -25.0	DELRUD = .2	VERT ACCEL = 1.6
ST DEV= 20.2	ST DEV = .1	ST DEV = .1
	RE NO = 9622985	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.23	-.24	-.31	-.30	-.13	-.20	-.06	
.02	.02	.01	.02	.02	.02	.01	
-.35	-.32	-.16					
.03	.01	.02					
-.68	-.39	0.00	-.39	0.00	-.20	-.31	-.13
.07	.03	0.00	.02	0.00	.01	.01	.01
-.57	-.38	-.09					
.06	.02	.01					
-1.20	-.73	0.00	-.38	-.12	0.00	-.17	-.10
.04	.06	0.00	.03	.02	0.00	.02	.02

TABLE S15.- CONTINUED.

(b) MACH NUMBER, 1.11 (ST DEV, .02), FLIGHT TIME, 1131.93 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.4	DELHL =	.3	RADAR MACH NO =	1.07
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	.3	DELHR =	.1	DYN PRESSURE =	16515 NSM (345 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	392 NSM (8 PSF)
PHI =	-27.8	DELRUD =	.1	VERT ACCEL =	1.7
ST DEV=	21.1	ST DEV =	.1	ST DEV =	.0
		RE NO =	9442201		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.25	-.25	-.32	-.30	-.14	-.21	-.06	
.02	.01	.01	.02	.01	.02	.01	
-.43	-.35	-.16					
.02	.01	.02					
-.78	-.45	0.00	-.42	0.00	-.22	-.32	-.12
.02	.03	0.00	.02	0.00	.02	.01	.02
-.65	-.40	-.09					
.02	.01	.01					
-1.27	-.84	0.00	-.42	-.13	0.00	-.19	-.12
.03	.02	0.00	.01	.02	0.00	.02	.01

TABLE S15.- CONTINUED.

(c) MACH NUMBER, 1.11 (ST DEV, .02), FLIGHT TIME, 1135.93 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.3	DELHL =	.2	RADAR MACH NO =	1.06
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	.4	DELHR =	.0	DYN PRESSURE =	16226 NSM (339 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	379 NSM (8 PSF)
PHI =	-36.7	DELRUD =	.2	VERT ACCEL =	1.6
ST DEV=	17.8	ST DEV =	.1	ST DEV =	.1
		RE NO =	9372268		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.25	-.25	-.32	-.30	-.13	-.21	-.07	
.02	.02	.01	.01	.01	.02	.01	
-.40	-.34	-.15					
.02	.02	.02					
-.81	-.49	0.00	-.42	0.00	-.22	-.31	-.12
.05	.03	0.00	.01	0.00	.01	.01	.02
-.63	-.41	-.08					
.03	.01	.01					
-1.29	-.76	0.00	-.39	-.12	0.00	-.18	-.11
.03	.03	0.00	.01	.02	0.00	.02	.01

TABLE S15.- CONTINUED.

(d) MACH NUMBER, 1.10 (ST DEV, .02), FLIGHT TIME, 1139.61 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.2	DELHL =	.2	RADAR MACH NO =	1.05
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	.2	DELHR =	.0	DYN PRESSURE =	16343 NSM (341 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	326 NSM (7 PSF)
PHI =	-42.2	DELRUD =	.1	VERT ACCEL =	1.5
ST DEV=	13.0	ST DEV =	.1	ST DEV =	.1
		RE NO =	9284392		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.25	-.25	-.32	-.30	-.13	-.21	-.06	
.01	.01	.01	.01	.01	.02	.01	
-.40	-.34	-.15					
.02	.01	.02					
-.84	-.50	0.00	-.41	0.00	-.21	-.31	-.11
.02	.02	0.00	.02	0.00	.01	.01	.01
-.64	-.40	-.08					
.05	.02	.02					
-1.28	-.72	0.00	-.36	-.12	0.00	-.16	-.09
.03	.02	0.00	.01	.01	0.00	.02	.02

TABLE S15.- CONCLUDED.

(e) MACH NUMBER, 1.10 (ST DEV, .01), FLIGHT TIME, 1147.96 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.7	DELHL =	.8	RADAR MACH NO =	1.05
ST DEV=	.0	ST DEV =	.5	ST DEV =	.00
THETA =	1.6	DELHR =	.9	DYN PRESSURE =	16254 NSM (339 PSF)
ST DEV=	.5	ST DEV =	.2	ST DEV =	260 NSM (5 PSF)
PHI =	-43.2	DELRUD =	.2	VERT ACCEL =	1.8
ST DEV=	9.6	ST DEV =	.1	ST DEV =	.0
		RE NO =	9391233		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.29	-.29	-.34	-.33	-.14	-.23	-.06	
.02	.02	.01	.01	.01	.02	.01	
-.66	-.37	-.18					
.02	.01	.03					
-.89	-.66	0.00	-.49	0.00	-.25	-.33	-.13
.02	.03	0.00	.02	0.00	.02	.01	.01
-.91	-.52	-.08					
.02	.02	.01					
-1.34	-.90	0.00	-.47	-.14	0.00	-.19	-.11
.03	.02	0.00	.02	.01	0.00	.02	.02

TABLE S16.- FLIGHT AND PRESSURE DATA FOR DIVE-CLIMB TRANSITION AT SUPERSONIC/SUBSONIC MACH NUMBERS FOR TANK-OFF CONFIGURATION (FIG. 20).

(a) MACH NUMBER, 1.18 (ST DEV, .01), FLIGHT TIME, 1391.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = .9	DELHL = -1.9	RADAR MACH NO = 1.15
ST DEV= .1	ST DEV = .3	ST DEV = .00
THETA = -25.6	DELHR = -2.0	DYN PRESSURE = 43796 NSM (915 PSF)
ST DEV= .2	ST DEV = .1	ST DEV = 936 NSM (20 PSF)
PHI = -2.7	DELRUD = -.1	VERT ACCEL = 1.0
ST DEV= .4	ST DEV = .1	ST DEV = .1
	RE NO = 18753790	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.11	.03	-.10	-.06	.02	-.05	-.02	
.01	.00	.00	.01	.01	.01	.00	
-.06	-.10	-.05					
.01	.00	.01					
-.17	-.17	0.00	-.09	-.16	-.03	-.13	-.03
.01	.01	0.00	.01	.01	.01	.01	.01
-.20	-.15	-.03					
.01	.01	.00					
-.17	-.14	0.00	-.11	-.04	0.00	-.06	.01
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S16.- CONTINUED.

(b) MACH NUMBER, 1.12 (ST DEV, .01), FLIGHT TIME, 1400.13 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 1.9	DELHL = -1.4	RADAR MACH NO = 1.10
ST DEV= .1	ST DEV = .2	ST DEV = .01
THETA = -17.5	DELHR = -1.4	DYN PRESSURE = 45875 NSM (958 PSF)
ST DEV= 2.5	ST DEV = .4	ST DEV = 607 NSM (13 PSF)
PHI = -4.3	DELRUD = -.0	VERT ACCEL = 2.5
ST DEV= .5	ST DEV = .1	ST DEV = .1
	RE NO = 19716736	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.06	-.18	-.12	-.05	-.10	-.02	
.00	.01	.01	.01	.00	.01	.01	
-.17	-.18	-.11					
.01	.01	.01					
-.35	-.30	0.00	-.21	-.19	-.11	-.19	-.03
.00	.01	0.00	.01	.01	.01	.01	.01
-.35	-.28	-.05					
.01	.01	.00					
-.46	-.30	0.00	-.18	-.08	0.00	-.07	-.02
.02	.01	0.00	.02	.01	0.00	.01	.01

TABLE S16.- CONTINUED.

(c) MACH NUMBER, 1.09 (ST DEV, .01), FLIGHT TIME, 1403.97 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.8	DELHL =	-1.3	RADAR MACH NO =	1.07
ST DEV=	.0	ST DEV =	.2	ST DEV =	.01
THETA =	-9.6	DELHR =	-1.4	DYN PRESSURE =	44984 NSM (940 PSF)
ST DEV=	2.3	ST DEV =	.4	ST DEV =	850 NSM (18 PSF)
PHI =	-4.4	DELRUD =	-.0	VERT ACCEL =	2.5
ST DEV=	.7	ST DEV =	.1	ST DEV =	.1
		RE NO =	19924334		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.06	-.17	-.13	-.05	-.10	-.01	
.01	.01	.01	.01	.01	.01	.01	
-.19	-.17	-.11					
.01	.00	.01					
-.38	-.31	0.00	-.20	-.19	-.12	-.18	-.01
.02	.01	0.00	.01	.01	.01	.01	.01
-.35	-.26	-.03					
.01	.01	.01					
-.47	-.28	0.00	-.16	-.11	0.00	-.03	-.03
.01	.01	0.00	.01	.01	0.00	.02	.00

TABLE S16.- CONTINUED.

(d) MACH NUMBER, .97 (ST DEV, .01), FLIGHT TIME, 1415.99 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 1.9	DELHL = -.8	RADAR MACH NO = .96
ST DEV= .0	ST DEV = .1	ST DEV = .01
THETA = 5.9	DELHR = -1.1	DYN PRESSURE = 36660 NSM (766 PSF)
ST DEV= 1.1	ST DEV = .4	ST DEV = 693 NSM (14 PSF)
PHI = -4.9	DELRUD = .3	VERT ACCEL = 1.8
ST DEV= 1.6	ST DEV = .1	ST DEV = .1
	RE NO = 18207051	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.07	-.16	-.13	-.01	-.09	-.00	
.01	.01	.01	.01	.01	.02	.01	
-.28	-.14	-.03					
.01	.01	.03					
-.35	-.29	0.00	-.18	-.21	-.20	-.07	.01
.05	.01	0.00	.01	.01	.02	.01	.01
-.36	-.25	.01					
.02	.01	.01					
-.34	-.30	0.00	-.05	-.03	0.00	-.04	-.03
.05	.07	0.00	.09	.02	0.00	.01	.01

TABLE S16.- CONTINUED.

(e) MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 1420.00 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.8	DELHL =	-.7	RADAR MACH NO =	.93
ST DEV=	.0	ST DEV =	.2	ST DEV =	.01
THETA =	8.7	DELHR =	-1.2	DYN PRESSURE =	33504 NSM (700 PSF)
ST DEV=	.7	ST DEV =	.3	ST DEV =	949 NSM (20 PSF)
PHI =	-4.0	DELRUD =	.4	VERT ACCEL =	1.5
ST DEV=	.6	ST DEV =	.1	ST DEV =	.1
		RE NO =	17564850		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.07	-.16	-.13	-.00	-.06	-.01	
.01	.01	.00	.01	.00	.02	.01	
-.29	-.16	-.01					
.01	.01	.01					
-.33	-.30	0.00	-.19	-.19	-.12	-.09	.01
.01	.01	0.00	.01	.01	.06	.01	.01
-.33	-.21	.01					
.02	.02	.01					
-.33	-.27	0.00	-.04	-.05	0.00	-.04	-.03
.02	.01	0.00	.01	.01	0.00	.01	.01

TABLE S16.- CONTINUED.

(f) MACH NUMBER, .90 (ST DEV, .01), FLIGHT TIME, 1427.01 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	1.9	DELHL =	-.6	RADAR MACH NO =	.88		
ST DEV=	.1	ST DEV =	.1	ST DEV =	.01		
THETA =	10.9	DELHR =	-1.2	DYN PRESSURE =	28399 NSM (593 PSF)		
ST DEV=	.3	ST DEV =	.2	ST DEV =	845 NSM (18 PSF)		
PHI =	-4.1	DELRUD =	.7	VERT ACCEL =	1.2		
ST DEV=	.2	ST DEV =	.1	ST DEV =	.1		
		RE NO =	16106566				

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.08	-.17	-.13	.01	-.06	-.01	
.01	.01	.01	.01	.01	.01	.00	
-.27	-.17	-.01					
.01	.01	.01					
-.33	-.30	0.00	-.19	-.21	-.07	-.10	-.00
.01	.01	0.00	.01	.01	.01	.01	.01
-.32	-.20	-.00					
.02	.01	.00					
-.35	-.26	0.00	-.07	-.06	0.00	-.05	-.03
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S16.- CONCLUDED.

(g) MACH NUMBER, .85 (ST DEV, .01), FLIGHT TIME, 1438.04 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	-.5	RADAR MACH NO =	.82
ST DEV=	.0	ST DEV =	.3	ST DEV =	.01
THETA =	12.1	DELHR =	-1.4	DYN PRESSURE =	23477 NSM (490 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	606 NSM (13 PSF)
PHI =	-2.4	DELRUD =	1.0	VERT ACCEL =	1.1
ST DEV=	1.0	ST DEV =	.1	ST DEV =	.0
		RE NO =	14174813		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.11	-.19	-.14	.00	-.06	-.01	
.01	.01	.01	.01	.01	.02	.01	
-.31	-.20	-.01					
.01	.01	.02					
-.37	-.33	0.00	-.21	-.23	-.07	-.12	-.02
.01	.02	0.00	.01	.01	.01	.01	.01
-.35	-.21	-.01					
.01	.01	.01					
-.39	-.27	0.00	-.09	-.08	0.00	-.07	-.04
.01	.01	0.00	.01	.01	0.00	.02	.01

TABLE S17.- SELECTED FLIGHT DATA FOR CONFIGURATION EFFECTS ON SPANWISE WING LOADING (FIG. 21).

(a) MACH NUMBER, .70 (ST DEV, .02), FLIGHT TIME, 53.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.0	DELHL =	-.2	RADAR MACH NO =	.69
ST DEV=	.1	ST DEV =	1.7	ST DEV =	.01
THETA =	3.1	DELHR =	-1.1	DYN PRESSURE =	30922 NSM (646 PSF)
ST DEV=	.4	ST DEV =	.5	ST DEV =	824 NSM (17 PSF)
PHI =	-2.7	DELRUD =	.2	VERT ACCEL =	1.1
ST DEV=	1.0	ST DEV =	.3	ST DEV =	.1

RE NO = 18085690

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.23	-.05	-.18	-.08	-.03	.02	.01	
.02	.01	.01	.02	.01	.02	.01	
-.37	-.17	-.01					
.02	.01	.02					
-.43	-.33	0.00	-.18	-.12	-.04	-.06	.02
.02	.01	0.00	.01	.02	.01	.01	.01
-.34	-.26	-.01					
.02	.02	.01					
-.39	-.29	0.00	-.11	-.07	0.00	-.03	-.03
.02	.01	0.00	.01	.01	0.00	.01	.01

TABLE S17.- CONTINUED.

(b) MACH NUMBER, .69 (ST DEV, .01), FLIGHT TIME, 1778.38 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 3.0	DELHL = -.8	RADAR MACH NO = .67
ST DEV= .0	ST DEV = .1	ST DEV = .01
THETA = -13.1	DELHR = -2.4	DYN PRESSURE = 13533 NSM (283 PSF)
ST DEV= .5	ST DEV = .1	ST DEV = 260 NSM (5 PSF)
PHI = -3.1	DELRUD = 1.5	VERT ACCEL = .9
ST DEV= .3	ST DEV = .1	ST DEV = .0
	RE NO = 10299574	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.26	-.26	-.26	-.23	-.13	-.08	-.02	
.02	.01	.01	.02	.02	.01	.02	
-.38	-.32	-.16					
.02	.02	.02					
-.57	-.36	0.00	-.33	-.34	-.09	-.19	-.07
.03	.02	0.00	.02	.03	.01	.02	.02
-.45	-.24	-.03					
.04	.01	.01					
-.53	-.31	0.00	-.14	-.20	0.00	-.17	-.07
.04	.01	0.00	.02	.01	0.00	.01	.01

TABLE S17.- CONTINUED.

(c) MACH NUMBER, .74 (ST DEV, .02), FLIGHT TIME, 65.96 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 2.7	DELHL = .6	RADAR MACH NO = .74
ST DEV= .1	ST DEV = .6	ST DEV = .00
THETA = 3.9	DELHR = -1.5	DYN PRESSURE = 35469 NSM (741 PSF)
ST DEV= .3	ST DEV = .4	ST DEV = 601 NSM (13 PSF)
PHI = -10.9	DELRUD = -.1	VERT ACCEL = 1.1
ST DEV= 12.2	ST DEV = .1	ST DEV = .1
	RE NO = 19209160	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.03	-.17	-.07	-.01	.05	.01	
.01	.01	.01	.01	.01	.01	.01	
-.32	-.14	-.00					
.01	.01	.02					
-.38	-.30	0.00	-.16	-.10	-.02	-.05	.02
.01	.01	0.00	.01	.01	.02	.02	.01
-.29	-.23	-.00					
.01	.01	.01					
-.35	-.25	0.00	-.09	-.07	0.00	-.02	-.03
.01	.02	0.00	.01	.01	0.00	.01	.01

TABLE S17.- CONTINUED.

(d) MACH NUMBER, .75 (ST DEV, .01), FLIGHT TIME, 1541.91 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.8	DELHL =	.6	RADAR MACH NO =	.61
ST DEV=	.1	ST DEV =	.8	ST DEV =	.04
THETA =	4.3	DELHR =	-.7	DYN PRESSURE =	16016 NSM (334 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	621 NSM (13 PSF)
PHI =	10.3	DELRUD =	.9	VERT ACCEL =	1.1
ST DEV=	1.9	ST DEV =	.1	ST DEV =	.0
		RE NO =	11341853		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.27	-.20	-.26	-.20	-.04	-.09	-.02	
.02	.02	.01	.02	.01	.02	.02	
-.38	-.28	-.05					
.03	.02	.03					
-.55	-.41	0.00	-.28	-.30	-.09	-.16	-.05
.04	.03	0.00	.03	.02	.02	.02	.02
-.45	-.22	-.03					
.04	.02	.02					
-.49	-.36	0.00	-.14	-.13	0.00	-.12	-.05
.02	.02	0.00	.02	.02	0.00	.02	.01

TABLE S17.- CONTINUED.

(e) MACH NUMBER, .81 (ST DEV, .01), FLIGHT TIME, 93.69 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.0	RADAR MACH NO =	.81
ST DEV=	.1	ST DEV =	1.0	ST DEV =	.00
THETA =	5.2	DELHR =	-1.1	DYN PRESSURE =	42738 NSM (893 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	307 NSM (6 PSF)
PHI =	-3.1	DELRUD =	-.2	VERT ACCEL =	1.1
ST DEV=	.7	ST DEV =	.1	ST DEV =	.1
		RE NO =	20985882		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.01	-.15	-.06	-.01	.06	.02	
.01	.01	.00	.01	.01	.01	.01	
-.28	-.13	.01					
.01	.01	.01					
-.35	-.28	0.00	-.14	-.09	.00	-.04	.03
.01	.01	0.00	.01	.01	.01	.01	.01
-.27	-.21	-.00					
.01	.01	.00					
-.32	-.21	0.00	-.07	-.06	0.00	-.02	-.04
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S17.- CONTINUED.

(f) MACH NUMBER, .80 (ST DEV, .01), FLIGHT TIME, 1758.34 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-1.0	RADAR MACH NO =	.82
ST DEV=	.1	ST DEV =	.1	ST DEV =	.02
THETA =	-.5	DELHR =	-2.0	DYN PRESSURE =	16789 NSM (351 PSF)
ST DEV=	.6	ST DEV =	.1	ST DEV =	439 NSM (9 PSF)
PHI =	-3.4	DELRUD =	1.3	VERT ACCEL =	.9
ST DEV=	.6	ST DEV =	.1	ST DEV =	.1
		RE NO =	11367629		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.22	-.21	-.22	-.19	-.10	-.07	-.01	
.02	.01	.02	.02	.01	.01	.01	
-.32	-.27	-.12					
.02	.02	.02					
-.44	-.36	0.00	-.28	-.28	-.07	-.16	-.05
.04	.02	0.00	.02	.02	.01	.01	.01
-.35	-.25	-.02					
.04	.01	.01					
-.47	-.29	0.00	-.12	-.17	0.00	-.14	-.07
.08	.02	0.00	.01	.01	0.00	.01	.01

TABLE S17.- CONTINUED.

(g) MACH NUMBER, .86 (ST DEV, .02), FLIGHT TIME, 292.42 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.2	RADAR MACH NO =	.86
ST DEV=	.1	ST DEV =	1.6	ST DEV =	.00
THETA =	2.9	DELHR =	-1.6	DYN PRESSURE =	42507 NSM (888 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	464 NSM (10 PSF)
PHI =	-4.5	DELRUD =	-.2	VERT ACCEL =	1.1
ST DEV=	1.0	ST DEV =	.1	ST DEV =	.1

RE NO = 20541552

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.06	-.16	-.09	-.08	.07	.02	
.01	.01	.01	.01	.00	.01	.00	
-.29	-.16	-.00					
.01	.00	.01					
-.35	-.27	0.00	-.18	-.10	.03	-.04	.01
.00	.01	0.00	.01	.00	.01	.01	.00
-.26	-.23	.02					
.01	.01	.00					
-.32	-.21	0.00	-.06	-.10	0.00	-.08	-.06
.02	.01	0.00	.01	.01	0.00	.01	.01

TABLE S17.- CONTINUED.

(h) MACH NUMBER, .85 (ST DEV, .01), FLIGHT TIME, 1439.37 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	-.4	RADAR MACH NO =	.82
ST DEV=	.1	ST DEV =	.3	ST DEV =	.00
THETA =	12.1	DELHR =	-1.4	DYN PRESSURE =	23001 NSM (480 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	523 NSM (11 PSF)
PHI =	-2.5	DELRUD =	1.0	VERT ACCEL =	1.1
ST DEV=	1.0	ST DEV =	.1	ST DEV =	.0

RE NO = 14042031

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.11	-.20	-.15	.01	-.06	-.01	
.01	.01	.01	.01	.01	.01	.01	
-.31	-.21	-.01					
.01	.01	.02					
-.37	-.33	0.00	-.21	-.24	-.07	-.12	-.02
.01	.01	0.00	.01	.02	.01	.01	.01
-.35	-.21	-.01					
.01	.01	.01					
-.39	-.28	0.00	-.10	-.08	0.00	-.07	-.03
.01	.01	0.00	.01	.01	0.00	.02	.01

TABLE S17.- CONTINUED.

(i) MACH NUMBER, .90 (ST DEV, .01), FLIGHT TIME, 435.37 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.8	DELHL =	1.3	RADAR MACH NO =	.91
ST DEV=	.0	ST DEV =	2.3	ST DEV =	.00
THETA =	2.0	DELHR =	-1.1	DYN PRESSURE =	38662 NSM (807 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	317 NSM (7 PSF)
PHI =	-42.4	DELRUD =	-.3	VERT ACCEL =	1.6
ST DEV=	10.3	ST DEV =	.1	ST DEV =	.0
		RE NO =	18370524		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.11	-.18	-.16	-.15	.06	.04	
.00	.01	.01	.01	.00	.01	.01	
-.35	-.22	.03					
.01	.01	.01					
-.52	-.36	0.00	-.26	0.00	.00	-.06	-.01
.01	.02	0.00	.01	0.00	.01	.01	.01
-.39	-.23	.03					
.01	.01	.01					
-.36	-.29	0.00	-.04	-.13	0.00	-.10	-.07
.03	.01	0.00	.01	.01	0.00	.01	.01

TABLE S17.- CONTINUED.

(j) MACH NUMBER, .88 (ST DEV, .01), FLIGHT TIME, 1715.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.8	DELHL =	-.5	RADAR MACH NO =	.88
ST DEV=	.1	ST DEV =	.1	ST DEV =	.01
THETA =	11.9	DELHR =	-1.2	DYN PRESSURE =	21553 NSM (450 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	798 NSM (17 PSF)
PHI =	45.6	DELRUD =	.6	VERT ACCEL =	1.5
ST DEV=	.8	ST DEV =	.2	ST DEV =	.1
		RE NO =	13391583		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.28	-.22	-.25	-.20	-.11	-.08	-.01	
.02	.02	.02	.01	.01	.01	.01	
-.40	-.28	-.10					
.03	.02	.01					
-.64	-.43	0.00	-.30	-.30	-.11	-.15	-.03
.08	.03	0.00	.02	.02	.01	.01	.01
-.56	-.28	-.01					
.06	.01	.01					
-.99	-.30	0.00	-.12	-.15	0.00	-.13	-.08
.07	.02	0.00	.01	.01	0.00	.01	.01

TABLE S17.- CONTINUED.

(k) MACH NUMBER, .96 (ST DEV, .01), FLIGHT TIME, 699.90 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	.5	RADAR MACH NO =	.94
ST DEV=	.0	ST DEV =	1.4	ST DEV =	.00
THETA =	13.3	DELHR =	-.4	DYN PRESSURE =	28659 NSM (599 PSF)
ST DEV=	.3	ST DEV =	.5	ST DEV =	711 NSM (15 PSF)
PHI =	5.9	DELRUD =	-.3	VERT ACCEL =	1.1
ST DEV=	11.4	ST DEV =	.2	ST DEV =	.0
		RE NO =	15180167		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	-.14	-.21	-.17	-.17	-.04	.09	
.01	.01	.01	.01	.01	.01	.01	
-.26	-.22	-.16					
.01	.02	.02					
-.43	-.30	0.00	-.31	0.00	-.16	.03	.03
.02	.02	0.00	.02	0.00	.01	.03	.02
-.41	-.29	.06					
.01	.02	.02					
-.48	-.34	0.00	-.23	-.00	0.00	-.13	-.08
.09	.01	0.00	.01	.09	0.00	.01	.01

TABLE S17.- CONCLUDED.

(l) MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 743.98 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.7	RADAR MACH NO =	.94
ST DEV=	.0	ST DEV =	1.5	ST DEV =	.00
THETA =	13.4	DELHR =	-.5	DYN PRESSURE =	18711 NSM (391 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	511 NSM (11 PSF)
PHI =	-2.8	DELRUD =	.4	VERT ACCEL =	1.0
ST DEV=	1.3	ST DEV =	.2	ST DEV =	.0
		RE NO =	11428495		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.32	-.27	-.26	-.20	-.08	-.02	
.01	.02	.01	.01	.01	.01	.01	
-.35	-.31	-.23					
.01	.01	.02					
-.47	-.31	0.00	-.37	0.00	-.17	-.17	-.07
.02	.02	0.00	.02	0.00	.01	.01	.01
-.41	-.35	.07					
.02	.02	.01					
-.50	-.31	0.00	-.09	-.20	0.00	-.18	-.11
.02	.03	0.00	.02	.01	0.00	.01	.01

TABLE S18.- DATA FOR MACH NUMBER EFFECTS ON LOCAL WING LOADINGS FOR TANK-ON CONFIGURATION (FIG. 22).

(a-1) MACH NUMBER, .78 (ST DEV, .01), FLIGHT TIME, 141.95 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-1.2	RADAR MACH NO =	.78
ST DEV=	.0	ST DEV =	2.1	ST DEV =	.00
THETA =	3.9	DELHR =	-1.2	DYN PRESSURE =	38996 NSM (814 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	427 NSM (9 PSF)
PHI =	-5.9	DELRUD =	-.2	VERT ACCEL =	1.1
ST DEV=	1.1	ST DEV =	.1	ST DEV =	.0
		RE NO =	19975980		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.03	-.15	-.06	-.03	.04	.02	
.01	.00	.01	.01	.01	.01	.01	
-.30	-.14	-.01					
.00	.01	.01					
-.35	-.28	0.00	-.15	-.10	-.01	-.04	.02
.01	.01	0.00	.01	.01	.01	.01	.01
-.28	-.21	-.00					
.00	.01	.00					
-.34	-.22	0.00	-.07	-.09	0.00	-.04	-.05
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-2) MACH NUMBER, .79 (ST DEV, .01), FLIGHT TIME, 129.59 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-.1	RADAR MACH NO =	.79
ST DEV=	.0	ST DEV =	1.0	ST DEV =	.00
THETA =	4.4	DELHR =	-1.3	DYN PRESSURE =	40395 NSM (844 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	719 NSM (15 PSF)
PHI =	-6.0	DELRUD =	-.1	VERT ACCEL =	1.1
ST DEV=	.7	ST DEV =	.1	ST DEV =	.1

RE NO = 20304019

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.03	-.15	-.06	-.02	.04	.01	
.01	.01	.01	.01	.00	.01	.00	
-.29	-.13	.01					
.01	.01	.01					
-.35	-.28	0.00	-.14	-.09	-.00	-.05	.02
.01	.01	0.00	.01	.01	.01	.01	.01
-.27	-.22	-.00					
.01	.01	.00					
-.33	-.21	0.00	-.08	-.07	0.00	-.04	-.05
.01	.01	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-3) MACH NUMBER, .80 (ST DEV, .01), FLIGHT TIME, 119.24 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-.3	RADAR MACH NO =	.81
ST DEV=	.1	ST DEV =	1.7	ST DEV =	.01
THETA =	4.7	DELHR =	-1.2	DYN PRESSURE =	41725 NSM (871 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	860 NSM (18 PSF)
PHI =	-5.5	DELRUD =	-.1	VERT ACCEL =	1.1
ST DEV=	.9	ST DEV =	.1	ST DEV =	.1
		RE NO =	20635941		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.02	-.15	-.06	-.02	.04	.02	
.01	.01	.01	.01	.01	.01	.01	
-.29	-.14	.01					
.01	.01	.01					
-.35	-.27	0.00	-.14	-.10	-.00	-.04	.03
.01	.01	0.00	.01	.01	.01	.01	.01
-.27	-.21	-.00					
.01	.01	.00					
-.33	-.21	0.00	-.07	-.07	0.00	-.03	-.05
.01	.01	0.00	.00	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-4) MACH NUMBER, .81 (ST DEV, .02), FLIGHT TIME, 98.20 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.1	RADAR MACH NO =	.82
ST DEV=	.0	ST DEV =	.6	ST DEV =	.00
THETA =	5.3	DELHR =	-1.2	DYN PRESSURE =	43490 NSM (908 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	505 NSM (11 PSF)
PHI =	-4.2	DELRUD =	-.3	VERT ACCEL =	1.1
ST DEV=	.6	ST DEV =	.1	ST DEV =	.1
		RE NO =	20971428		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.02	-.15	-.07	-.01	.05	.02	
.01	.01	.00	.01	.01	.01	.00	
-.28	-.13	.02					
.00	.00	.02					
-.34	-.28	0.00	-.14	-.09	.01	-.04	.03
.01	.01	0.00	.01	.01	.01	.01	.01
-.27	-.21	-.00					
.01	.01	.00					
-.32	-.21	0.00	-.07	-.06	0.00	-.03	-.04
.01	.01	0.00	.02	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-5) MACH NUMBER, .83 (ST DEV, .01), FLIGHT TIME, 188.88 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.2	RADAR MACH NO =	.83
ST DEV=	.1	ST DEV =	1.4	ST DEV =	.01
THETA =	4.5	DELHR =	-1.3	DYN PRESSURE =	44881 NSM (937 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	547 NSM (11 PSF)
PHI =	-5.6	DELRUD =	-.2	VERT ACCEL =	1.2
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	21270377		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.03	-.16	-.08	-.04	.06	.02	
.01	.01	.01	.01	.00	.01	.01	
-.29	-.14	.00					
.01	.01	.02					
-.35	-.28	0.00	-.16	-.09	.01	-.04	.02
.01	.01	0.00	.01	.01	.01	.01	.01
-.27	-.22	.00					
.01	.01	.00					
-.33	-.21	0.00	-.06	-.08	0.00	-.05	-.05
.01	.01	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-6) MACH NUMBER, .84 (ST DEV, .02), FLIGHT TIME, 303.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	-.5	RADAR MACH NO =	.86
ST DEV=	.1	ST DEV =	1.7	ST DEV =	.01
THETA =	2.3	DELHR =	-1.5	DYN PRESSURE =	42057 NSM (878 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	626 NSM (13 PSF)
PHI =	-4.7	DELRUD =	-.3	VERT ACCEL =	1.1
ST DEV=	1.1	ST DEV =	.1	ST DEV =	.0
		RE NO =	20152752		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.06	-.16	-.09	-.09	.07	.02	
.01	.01	.01	.01	.01	.01	.01	
-.28	-.16	-.01					
.01	.00	.02					
-.35	-.27	0.00	-.17	-.10	.03	-.04	.00
.01	.01	0.00	.01	.01	.01	.01	.01
-.27	-.22	.02					
.01	.01	.00					
-.35	-.20	0.00	-.07	-.12	0.00	-.08	-.07
.02	.01	0.00	.01	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-7) MACH NUMBER, .85 (ST DEV, .02), FLIGHT TIME, 288.41 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	.4	RADAR MACH NO =	.86
ST DEV=	.0	ST DEV =	1.0	ST DEV =	.00
THETA =	2.9	DELHR =	-1.4	DYN PRESSURE =	42951 NSM (897 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	522 NSM (11 PSF)
PHI =	-4.5	DELRUD =	-.2	VERT ACCEL =	1.1
ST DEV=	.7	ST DEV =	.1	ST DEV =	.1
		RE NO =	20369460		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.05	-.16	-.09	-.08	.07	.02	
.01	.00	.01	.01	.00	.01	.01	
-.28	-.15	.00					
.01	.00	.02					
-.35	-.27	0.00	-.18	-.10	.03	-.03	.01
.01	.01	0.00	.01	.01	.01	.01	.01
-.26	-.22	.02					
.01	.01	.00					
-.31	-.20	0.00	-.06	-.10	0.00	-.07	-.06
.01	.01	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-8) MACH NUMBER, .86 (ST DEV, .01), FLIGHT TIME, 230.29 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	2.1	RADAR MACH NO =	.85
ST DEV=	.1	ST DEV =	1.9	ST DEV =	.00
THETA =	10.0	DELHR =	-1.0	DYN PRESSURE =	45667 NSM (954 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	599 NSM (13 PSF)
PHI =	-5.6	DELRUD =	-.2	VERT ACCEL =	1.3
ST DEV=	1.3	ST DEV =	.1	ST DEV =	.1
		RE NO =	21582110		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.05	-.16	-.09	-.07	.07	.02	
.01	.01	.01	.01	.01	.01	.01	
-.29	-.15	.02					
.01	.00	.01					
-.36	-.29	0.00	-.17	-.10	.02	-.04	.02
.01	.01	0.00	.01	.01	.01	.01	.00
-.27	-.23	.01					
.01	.02	.00					
-.35	-.22	0.00	-.06	-.09	0.00	-.06	-.06
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-9) MACH NUMBER, .86 (ST DEV, .02), FLIGHT TIME, 283.23 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.1	RADAR MACH NO =	.87
ST DEV=	.0	ST DEV =	.3	ST DEV =	.00
THETA =	3.2	DELHR =	-1.3	DYN PRESSURE =	43220 NSM (903 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	436 NSM (9 PSF)
PHI =	-4.5	DELRUD =	-.3	VERT ACCEL =	1.1
ST DEV=	.7	ST DEV =	.1	ST DEV =	.1
		RE NO =	20561010		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.05	-.15	-.10	-.08	.08	.02	
.01	.01	.01	.01	.01	.01	.01	
-.29	-.16	.01					
.01	.00	.02					
-.35	-.28	0.00	-.18	-.10	.03	-.04	.01
.01	.01	0.00	.01	.01	.01	.01	.01
-.26	-.22	.02					
.00	.01	.00					
-.33	-.20	0.00	-.06	-.10	0.00	-.08	-.06
.02	.01	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-10) MACH NUMBER, .87 (ST DEV, .02), FLIGHT TIME, 344.35 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	2.4	RADAR MACH NO =	.88
ST DEV=	.0	ST DEV =	2.5	ST DEV =	.00
THETA =	11.7	DELHR =	-1.2	DYN PRESSURE =	40793 NSM (852 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	754 NSM (16 PSF)
PHI =	-6.7	DELRUD =	-.4	VERT ACCEL =	1.2
ST DEV=	.8	ST DEV =	.1	ST DEV =	.1
		RE NO =	19836283		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.08	-.17	-.10	-.10	.08	.02	
.01	.01	.01	.01	.00	.01	.01	
-.30	-.18	-.02					
.01	.01	.02					
-.38	-.29	0.00	-.20	-.11	.03	-.05	.00
.01	.01	0.00	.01	.01	.01	.01	.01
-.28	-.23	.02					
.01	.01	.00					
-.37	-.22	0.00	-.06	-.12	0.00	-.08	-.07
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-11) MACH NUMBER, .87 (ST DEV, .01), FLIGHT TIME, 349.53 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	1.5	RADAR MACH NO =	.88
ST DEV=	.1	ST DEV =	1.8	ST DEV =	.00
THETA =	12.1	DELHR =	-1.2	DYN PRESSURE =	40012 NSM (836 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	191 NSM (4 PSF)
PHI =	-6.8	DELRUD =	-.4	VERT ACCEL =	1.1
ST DEV=	.6	ST DEV =	.1	ST DEV =	.1
		RE NO =	19331939		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.08	-.16	-.11	-.10	.09	.02	
.01	.01	.01	.01	.00	.01	.01	
-.30	-.17	-.01					
.01	.00	.02					
-.37	-.28	0.00	-.20	-.11	.04	-.04	-.00
.01	.01	0.00	.01	.01	.01	.01	.01
-.27	-.22	.03					
.01	.01	.00					
-.35	-.21	0.00	-.06	-.12	0.00	-.08	-.07
.01	.00	0.00	.01	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-12) MACH NUMBER, .88 (ST DEV, .01), FLIGHT TIME, 235.47 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	1.8	RADAR MACH NO =	.88
ST DEV=	.1	ST DEV =	2.4	ST DEV =	.01
THETA =	11.4	DELHR =	-1.0	DYN PRESSURE =	47368 NSM (989 PSF)
ST DEV=	.5	ST DEV =	.2	ST DEV =	476 NSM (10 PSF)
PHI =	-5.7	DELRUD =	-.4	VERT ACCEL =	1.2
ST DEV=	1.7	ST DEV =	.1	ST DEV =	.1
		RE NO =	21797889		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.03	-.15	-.10	-.08	.09	.03	
.01	.00	.01	.01	.01	.01	.01	
-.27	-.15	.06					
.01	.00	.04					
-.34	-.29	0.00	-.17	-.10	.05	-.03	.02
.01	.01	0.00	.01	.01	.01	.01	.01
-.25	-.20	.01					
.01	.01	.00					
-.37	-.20	0.00	-.04	-.09	0.00	-.05	-.06
.02	.02	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-13) MACH NUMBER, .88 (ST DEV, .01), FLIGHT TIME, 278.05 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	-.1	RADAR MACH NO =	.89
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	3.2	DELHR =	-1.2	DYN PRESSURE =	44363 NSM (927 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	468 NSM (10 PSF)
PHI =	-4.9	DELRUD =	-.4	VERT ACCEL =	1.2
ST DEV=	.4	ST DEV =	.1	ST DEV =	.1

RE NO = 21038084

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.05	-.15	-.10	-.09	.08	.02	
.01	.01	.01	.01	.01	.01	.01	
-.29	-.16	.02					
.01	.01	.01					
-.36	-.29	0.00	-.18	-.10	.04	-.03	.01
.01	.01	0.00	.00	.01	.01	.01	.01
-.27	-.22	.02					
.01	.01	.00					
-.32	-.21	0.00	-.06	-.09	0.00	-.07	-.06
.01	.01	0.00	.01	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-14) MACH NUMBER, .89 (ST DEV, .01), FLIGHT TIME, 272.88 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	-.3	RADAR MACH NO =	.90
ST DEV=	.1	ST DEV =	.4	ST DEV =	.00
THETA =	3.4	DELHR =	-1.1	DYN PRESSURE =	46573 NSM (973 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	856 NSM (18 PSF)
PHI =	-5.6	DELRUD =	-.5	VERT ACCEL =	1.1
ST DEV=	1.2	ST DEV =	.1	ST DEV =	.1
		RE NO =	21254863		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.03	-.14	-.10	-.10	.09	.04	
.01	.01	.01	.01	.00	.01	.01	
-.27	-.15	.10					
.01	.00	.02					
-.34	-.28	0.00	-.19	-.10	.05	-.02	.01
.01	.01	0.00	.01	.01	.01	.01	.01
-.26	-.20	.02					
.02	.01	.00					
-.33	-.19	0.00	-.04	-.08	0.00	-.07	-.06
.03	.01	0.00	.01	.01	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-15) MACH NUMBER, .90 (ST DEV, .02), FLIGHT TIME, 421.51 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	1.2	RADAR MACH NO =	.91
ST DEV=	.0	ST DEV =	2.4	ST DEV =	.00
THETA =	1.2	DELHR =	-1.2	DYN PRESSURE =	38049 NSM (795 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	429 NSM (9 PSF)
PHI =	4.7	DELRUD =	-.3	VERT ACCEL =	1.2
ST DEV=	.7	ST DEV =	.1	ST DEV =	.1
		RE NO =	18411327		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.09	-.16	-.13	-.13	.08	.04	
.01	.01	.01	.01	.01	.01	.01	
-.34	-.19	.05					
.01	.00	.01					
-.40	0.00	0.00	-.25	0.00	.04	-.05	-.00
.01	0.00	0.00	.01	0.00	.01	.01	.01
-.31	-.24	.04					
.01	.01	.01					
-.34	-.22	0.00	-.03	-.13	0.00	-.09	-.07
.01	.01	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-16) MACH NUMBER, .91 (ST DEV, .03), FLIGHT TIME, 426.68 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	1.0	RADAR MACH NO =	.91
ST DEV=	.0	ST DEV =	2.5	ST DEV =	.00
THETA =	1.8	DELHR =	-1.2	DYN PRESSURE =	38480 NSM (804 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	542 NSM (11 PSF)
PHI =	2.6	DELRUD =	-.4	VERT ACCEL =	1.1
ST DEV=	1.6	ST DEV =	.1	ST DEV =	.0
		RE NO =	18318460		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.15	-.08	-.15	-.13	-.13	.08	.05	
.01	.01	.01	.01	.00	.01	.01	
-.33	-.19	.05					
.01	.01	.01					
-.38	-.31	0.00	-.24	0.00	.04	-.05	-.01
.01	.00	0.00	.01	0.00	.01	.01	.01
-.31	-.24	.04					
.01	.01	.00					
-.33	-.20	0.00	-.02	-.12	0.00	-.09	-.07
.02	.02	0.00	.01	.02	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-17) MACH NUMBER, .91 (ST DEV, .01), FLIGHT TIME, 267.70 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	-.5	RADAR MACH NO =	.92
ST DEV=	.0	ST DEV =	1.2	ST DEV =	.00
THETA =	3.2	DELHR =	-1.2	DYN PRESSURE =	48201 NSM (*1. PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	481 NSM (10 PSF)
PHI =	-5.5	DELRUD =	-.8	VERT ACCEL =	1.1
ST DEV=	1.3	ST DEV =	.1	ST DEV =	.0
		RE NO =	21676997		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.14	-.01	-.12	-.10	-.11	.07	.08	
.02	.01	.01	.01	.00	.01	.01	
-.28	-.14	.09					
.01	.01	.01					
-.29	-.29	0.00	-.19	-.13	.03	.09	.01
.02	.01	0.00	.01	.01	.01	.06	.01
-.32	-.21	.02					
.01	.02	.01					
-.28	-.23	0.00	.07	-.08	0.00	-.06	-.06
.01	.01	0.00	.06	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-18) MACH NUMBER, .91 (ST DEV, .02), FLIGHT TIME, 505.34 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	1.3	RADAR MACH NO =	.93
ST DEV=	.0	ST DEV =	3.5	ST DEV =	.00
THETA =	.1	DELHR =	-1.2	DYN PRESSURE =	40086 NSM (837 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	435 NSM (9 PSF)
PHI =	-6.0	DELRUD =	-.5	VERT ACCEL =	1.0
ST DEV=	1.0	ST DEV =	.1	ST DEV =	.1
		RE NO =	18899707		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	-.07	-.14	-.14	-.12	.06	.09	
.01	.01	.01	.01	.00	.01	.01	
-.29	-.17	.02					
.01	.01	.01					
-.36	0.00	0.00	-.22	0.00	.02	.12	-.02
.01	0.00	0.00	.01	0.00	.00	.01	.01
-.34	-.19	.04					
.00	.01	.01					
-.29	-.17	0.00	.06	-.12	0.00	-.09	-.07
.01	.01	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-19) MACH NUMBER, .92 (ST DEV, .02), FLIGHT TIME, 373.91 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	2.2	RADAR MACH NO =	.94
ST DEV=	.1	ST DEV =	3.0	ST DEV =	.00
THETA =	2.7	DELHR =	-1.4	DYN PRESSURE =	39826 NSM (832 PSF)
ST DEV=	.5	ST DEV =	.1	ST DEV =	720 NSM (15 PSF)
PHI =	-5.7	DELRUD =	-.7	VERT ACCEL =	.9
ST DEV=	1.0	ST DEV =	.2	ST DEV =	.1
		RE NO =	18682503		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.11	-.03	-.11	-.12	-.13	.04	.12	
.01	.01	.01	.01	.01	.02	.01	
-.27	-.15	.05					
.01	.00	.02					
-.32	0.00	0.00	-.20	-.27	-.02	.14	-.02
.05	0.00	0.00	.02	.03	.06	.01	.01
-.32	-.22	.02					
.02	.05	.01					
-.29	-.20	0.00	.03	-.10	0.00	-.08	-.07
.06	.02	0.00	.05	.03	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-20) MACH NUMBER, .93 (ST DEV, .03), FLIGHT TIME, 510.52 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	1.2	RADAR MACH NO =	.93
ST DEV=	.0	ST DEV =	4.1	ST DEV =	.00
THETA =	-.1	DELHR =	-1.2	DYN PRESSURE =	40335 NSM (842 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	574 NSM (12 PSF)
PHI =	-6.0	DELRUD =	-.5	VERT ACCEL =	1.1
ST DEV=	1.0	ST DEV =	.1	ST DEV =	.1
		RE NO =	19305099		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	-.06	-.14	-.15	-.12	.05	.09	
.01	.01	.01	.01	.01	.01	.01	
-.29	-.18	.02					
.01	.01	.01					
-.38	0.00	0.00	-.22	0.00	.03	.12	-.02
.02	0.00	0.00	.01	0.00	.01	.01	.01
-.34	-.18	.04					
.01	.01	.01					
-.30	-.19	0.00	.06	-.13	0.00	-.09	-.06
.01	.01	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-21) MACH NUMBER, .93 (ST DEV, .01), FLIGHT TIME, 379.59 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	2.3	RADAR MACH NO =	.95
ST DEV=	.0	ST DEV =	2.5	ST DEV =	.00
THETA =	2.6	DELHR =	-1.4	DYN PRESSURE =	40905 NSM (854 PSF)
ST DEV=	.5	ST DEV =	.1	ST DEV =	378 NSM (8 PSF)
PHI =	-5.5	DELRUD =	-.7	VERT ACCEL =	1.1
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	18938250		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.10	-.03	-.07	-.12	-.14	-.03	.11	
.01	.01	.01	.01	.00	.01	.01	
-.25	-.15	-.02					
.01	.00	.03					
-.37	-.28	0.00	-.21	-.42	-.10	.13	-.00
.00	.00	0.00	.01	.03	.01	.00	.01
-.36	-.30	-.00					
.01	.01	.01					
-.41	-.35	0.00	-.02	.03	0.00	-.09	-.07
.01	.01	0.00	.10	.02	0.00	.01	.00

TABLE S18.- CONTINUED.

(a-22) MACH NUMBER, .94 (ST DEV, .02), FLIGHT TIME, 544.25 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 2.0	DELHL = 1.1	RADAR MACH NC = .95
ST DEV= .0	ST DEV = 3.0	ST DEV = .00
THETA = 10.3	DELHR = -1.1	DYN PRESSURE = 42674 NSM (891 PSF)
ST DEV= .7	ST DEV = .1	ST DEV = 694 NSM (15 PSF)
PHI = -5.5	DELRUD = -.9	VERT ACCEL = 1.4
ST DEV= .8	ST DEV = .1	ST DEV = .1
	RE NO = 19840712	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.11	-.05	-.11	-.15	-.14	-.05	.10	
.01	.01	.03	.01	.01	.01	.01	
-.25	-.19	-.11					
.01	.01	.02					
-.40	0.00	0.00	-.24	0.00	-.12	.10	.01
.01	0.00	0.00	.01	0.00	.01	.01	.01
-.37	-.31	.01					
.01	.01	.01					
-.43	-.34	0.00	-.19	.11	0.00	-.09	-.07
.03	.01	0.00	.01	.01	0.00	.00	.00

TABLE S18.- CONTINUED.

(a-23) MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 585.00 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	1.8	RADAR MACH NO =	.95
ST DEV=	.0	ST DEV =	2.7	ST DEV =	.00
THETA =	1.8	DELHR =	-1.2	DYN PRESSURE =	35779 NSM (747 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	319 NSM (7 PSF)
PHI =	-4.4	DELRUD =	-.6	VERT ACCEL =	1.1
ST DEV=	.4	ST DEV =	.1	ST DEV =	.1
		RE NO =	17362107		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.10	-.04	-.13	-.12	-.15	-.04	.08	
.01	.01	.01	.01	.01	.01	.01	
-.23	-.16	-.14					
.01	.01	.01					
-.39	0.00	0.00	-.26	0.00	-.16	.02	.06
.01	0.00	0.00	.01	0.00	.01	.01	.01
-.36	-.27	.08					
.01	.00	.01					
-.40	-.33	0.00	-.20	-.02	0.00	-.11	-.07
.01	.01	0.00	.01	.03	0.00	.01	.01

TABLE S18.- CONTINUED.

(a-24) MACH NUMBER, .95 (ST DEV, .02), FLIGHT TIME, 579.82 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	.8	RADAR MACH NO =	.95
ST DEV=	.1	ST DEV =	2.5	ST DEV =	.00
THETA =	1.8	DELHR =	-1.1	DYN PRESSURE =	35790 NSM (748 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	593 NSM (12 PSF)
PHI =	-4.7	DELRUD =	-.6	VERT ACCEL =	1.1
ST DEV=	.7	ST DEV =	.1	ST DEV =	.1
		RE NO =	17424313		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.09	-.03	-.10	-.17	-.12	-.03	.07	
.01	.01	.02	.01	.01	.01	.01	
-.18	-.19	-.14					
.02	.02	.01					
-.37	0.00	0.00	-.25	0.00	-.15	-.05	.11
.02	0.00	0.00	.02	0.00	.01	.01	.02
-.35	-.27	.21					
.01	.01	.06					
-.40	-.32	0.00	-.19	-.15	0.00	-.12	-.08
.02	.01	0.00	.01	.01	0.00	.01	.00

TABLE S18.- CONCLUDED.

(a-25) MACH NUMBER, .96 (ST DEV, .01), FLIGHT TIME, 679.19 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	.2	RADAR MACH NO =	.96
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	11.2	DELHR =	-.7	DYN PRESSURE =	33628 NSM (702 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	679 NSM (14 PSF)
PHI =	-.4	DELRUD =	-.5	VERT ACCEL =	1.3
ST DEV=	.6	ST DEV =	.2	ST DEV =	.1
		RE NO =	16889294		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.12	-.09	-.17	-.17	-.15	-.04	.08	
.01	.02	.03	.03	.02	.01	.01	
-.23	-.21	-.16					
.03	.03	.01					
-.43	0.00	0.00	-.29	0.00	-.16	-.01	.07
.02	0.00	0.00	.02	0.00	.01	.06	.05
-.39	-.30	.13					
.01	.01	.11					
-.46	-.33	0.00	-.22	-.06	0.00	-.12	-.08
.02	.01	0.00	.01	.12	0.00	.01	.01

TABLE S19.- DATA FOR MACH NUMBER EFFECTS ON LOCAL WING LOADINGS FOR TANK-OFF CONFIGURATION (FIG. 23).

(a-1) MACH NUMBER, .78 (ST DEV, .02), FLIGHT TIME, 1464.76 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.1	RADAR MACH NO =	.75
ST DEV=	.6	ST DEV =	.4	ST DEV =	.01
THETA =	7.7	DELHR =	-1.0	DYN PRESSURE =	16382 NSM (342 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	474 NSM (10 PSF)
PHI =	-1.1	DELRUD =	.9	VERT ACCEL =	.8
ST DEV=	.5	ST DEV =	.1	ST DEV =	.3
		RE NO =	11382401		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.22	-.15	-.22	-.17	.02	-.06	-.02	
.05	.06	.04	.04	.03	.03	.02	
-.30	-.23	.00					
.09	.05	.03					
-.46	-.35	0.00	-.24	-.29	-.07	-.14	-.03
.17	.10	0.00	.06	.02	.04	.02	.02
-.37	-.19	-.01					
.12	.05	.01					
-.50	-.28	0.00	-.11	-.10	0.00	-.10	-.05
.21	.06	0.00	.02	.02	0.00	.03	.01

FIGURE S19.- CONTINUED.

(a-2) MACH NUMBER, .80 (ST DEV, .02), FLIGHT TIME, 1546.75 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.6	DELHL =	.4	RADAR MACH NO =	.76
ST DEV=	.1	ST DEV =	.1	ST DEV =	.01
THETA =	4.3	DELHR =	-.8	DYN PRESSURE =	18434 NSM (385 PSF)
ST DEV=	.2	ST DEV =	.2	ST DEV =	798 NSM (17 PSF)
PHI =	7.8	DELRUD =	.9	VERT ACCEL =	1.1
ST DEV=	1.1	ST DEV =	.1	ST DEV =	.0

RE NO = 12206617

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.16	-.24	-.18	-.03	-.08	-.01	
.02	.02	.01	.01	.01	.01	.01	
-.34	-.25	-.05					
.02	.01	.02					
-.49	-.39	0.00	-.25	-.28	-.09	-.14	-.03
.03	.02	0.00	.02	.03	.02	.01	.01
-.38	-.24	-.02					
.02	.01	.01					
-.46	-.34	0.00	-.12	-.12	0.00	-.11	-.04
.03	.01	0.00	.01	.01	0.00	.01	.01

FIGURE S19.- CONTINUED.

(a-3) MACH NUMBER, .83 (ST DEV, .01), FLIGHT TIME, 1443.38 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	-.4	RADAR MACH NO =	.80
ST DEV=	.0	ST DEV =	.2	ST DEV =	.01
THETA =	12.2	DELHR =	-1.4	DYN PRESSURE =	21021 NSM (439 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	847 NSM (18 PSF)
PHI =	-2.2	DELRUD =	1.0	VERT ACCEL =	1.1
ST DEV=	1.3	ST DEV =	.1	ST DEV =	.0
		RE NO =	13431880		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.22	-.12	-.21	-.15	.00	-.07	-.02	
.01	.01	.01	.01	.01	.02	.01	
-.29	-.22	-.02					
.01	.01	.02					
-.40	-.35	0.00	-.23	-.24	-.08	-.12	-.03
.02	.02	0.00	.02	.02	.01	.02	.01
-.35	-.23	-.01					
.01	.02	.01					
-.37	-.30	0.00	-.10	-.09	0.00	-.08	-.04
.02	.01	0.00	.01	.02	0.00	.02	.01

FIGURE S19.- CONTINUED.

(a-4) MACH NUMBER, .84 (ST DEV, .C1), FLIGHT TIME, 1482.63 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELFL =	-.3	RADAR MACH NC =	.8C
ST DEV=	.1	ST DEV =	.1	ST DEV =	.0C.
THETA =	-1.9	DELFR =	-1.6	DYN PRESSURE =	17966 NSM (375 PSF)
ST DEV=	.4	ST DEV =	.3	ST DEV =	414 NSM (9 PSF)
PHI =	-1.6	DELRUD =	.9	VERT ACCEL =	.9
ST DEV=	.6	ST DEV =	.1	ST DEV =	.1
		RE NO =	11859645		

DIFFERENTIAL PRESSURE CCEFFICIENTS AND STANCARD DEVIATIONS

-.21	-.14	-.20	-.17	.C0	-.07	-.02	
.02	.02	.01	.02	.01	.02	.01	
-.28	-.22	-.01					
.02	.01	.02					
-.39	-.34	C.0C	-.23	-.26	-.07	-.13	-.03
.02	.02	0.00	.02	.02	.02	.01	.01
-.33	-.21	-.C1					
.01	.01	.01					
-.38	-.29	0.00	-.10	-.09	0.00	-.09	-.04
.02	.02	C.0C	.01	.02	0.00	.02	.01

FIGURE S19.- CONTINUED.

(a-5) MACH NUMBER, .85 (ST DEV, .02), FLIGHT TIME, 1738.30 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.0	RADAR MACH NO =	.81
ST DEV=	.1	ST DEV =	.2	ST DEV =	.01
THETA =	-2.5	DELHR =	-1.5	DYN PRESSURE =	18893 NSM (395 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	433 NSM (9 PSF)
PHI =	-1.1	DELRUD =	1.2	VERT ACCEL =	1.1
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	12092896		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.23	-.21	-.22	-.19	-.10	-.07	-.02	
.01	.02	.01	.01	.01	.02	.02	
-.32	-.25	-.10					
.02	.01	.01					
-.43	-.36	0.00	-.26	-.31	-.08	-.15	-.04
.01	.01	0.00	.02	.02	.01	.01	.01
-.35	-.25	-.02					
.02	.01	.01					
-.48	-.30	0.00	-.11	-.16	0.00	-.13	-.07
.07	.01	0.00	.01	.01	0.00	.02	.01

FIGURE S19.- CONTINUED.

(a-6) MACH NUMBER, .86 (ST DEV, .01), FLIGHT TIME, 1742.81 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.1	RADAR MACH NO =	.83
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	-1.9	DELHR =	-1.6	DYN PRESSURE =	19567 NSM (409 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	366 NSM (8 PSF)
PHI =	-1.6	DELRUD =	1.2	VERT ACCEL =	1.2
ST DEV=	.4	ST DEV =	.1	ST DEV =	.0
		RE NO =	12244982		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.23	-.19	-.22	-.19	-.10	-.06	-.01	
.02	.01	.01	.01	.01	.01	.01	
-.31	-.25	-.10					
.01	.01	.02					
-.43	-.36	0.00	-.26	-.31	-.08	-.14	-.04
.02	.01	0.00	.01	.02	.01	.01	.01
-.35	-.26	-.02					
.01	.01	.01					
-.47	-.30	0.00	-.11	-.16	0.00	-.12	-.07
.04	.01	0.00	.01	.01	0.00	.01	.01

FIGURE S19. - CONTINUED.

(a-7) MACH NUMBER, .87 (ST DEV, .01), FLIGHT TIME, 1434.03 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	-.4	RADAR MACH NO =	.85
ST DEV=	.1	ST DEV =	.3	ST DEV =	.01
THETA =	11.9	DELHR =	-1.4	DYN PRESSURE =	25263 NSM (528 PSF)
ST DEV=	.3	ST DEV =	.3	ST DEV =	1255 NSM (26 PSF)
PHI =	-3.2	DELRUD =	.9	VERT ACCEL =	1.2
ST DEV=	.5	ST DEV =	.2	ST DEV =	.1

RE NO = 14891598

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.09	-.19	-.13	.00	-.06	-.01	
.02	.01	.01	.02	.01	.01	.01	
-.29	-.19	-.01					
.02	.01	.02					
-.35	-.32	0.00	-.20	-.22	-.06	-.11	-.01
.01	.02	0.00	.01	.01	.01	.01	.01
-.33	-.21	-.00					
.01	.02	.00					
-.37	-.27	0.00	-.09	-.07	0.00	-.06	-.03
.02	.01	0.00	.01	.01	0.00	.01	.01

FIGURE S19.- CONTINUED.

(a-8) MACH NUMBER, .88 (ST DEV, .01), FLIGHT TIME, 1501.50 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	-.6	RADAR MACH NO =	.88
ST DEV=	1.1	ST DEV =	.2	ST DEV =	.01
THETA =	-15.6	DELHR =	-1.3	DYN PRESSURE =	21790 NSM (455 PSF)
ST DEV=	1.3	ST DEV =	.3	ST DEV =	786 NSM (16 PSF)
PHI =	-2.9	DELRUD =	.8	VERT ACCEL =	1.1
ST DEV=	1.8	ST DEV =	.2	ST DEV =	.7
		RE NO =	13019160		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.12	-.20	-.15	-.01	-.06	-.01	
.09	.09	.07	.05	.06	.04	.02	
-.27	-.21	-.02					
.15	.10	.04					
-.44	-.33	0.00	-.22	-.24	-.08	-.12	-.02
.31	.20	0.00	.11	.05	.06	.03	.01
-.42	-.19	-.01					
.31	.09	.01					
-.66	-.25	0.00	-.08	-.08	0.00	-.08	-.04
.52	.09	0.00	.04	.02	0.00	.03	.02

FIGURE S19.- CONTINUED.

(a-9) MACH NUMBER, .95 (ST DEV, .01), FLIGHT TIME, 740.14 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	1.5	RADAR MACH NO =	.94
ST DEV=	.0	ST DEV =	2.2	ST DEV =	.00
THETA =	13.5	DELHR =	-.5	DYN PRESSURE =	19277 NSM (403 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	495 NSM (10 PSF)
PHI =	-1.9	DELRUD =	.3	VERT ACCEL =	1.1
ST DEV=	1.4	ST DEV =	.2	ST DEV =	.1

RE NO = 17450573

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.31	-.27	-.25	-.19	-.09	-.02	
.01	.01	.01	.01	.01	.01	.01	
-.35	-.31	-.22					
.01	.01	.02					
-.42	-.32	0.00	-.37	0.00	-.17	-.16	-.06
.02	.01	0.00	.01	0.00	.01	.01	.01
-.43	-.33	.08					
.03	.02	.01					
-.46	-.35	0.00	-.07	-.20	0.00	-.18	-.11
.02	.02	0.00	.01	.02	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-10) MACH NUMBER, .97 (ST DEV, .01), FLIGHT TIME, 753.34 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.2	RADAR MACH NO =	.95
ST DEV=	.0	ST DEV =	.1	ST DEV =	.00
THETA =	13.2	DELHR =	-.5	DYN PRESSURE =	17672 NSM (369 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	444 NSM (9 PSF)
PHI =	-1.2	DELRUD =	.5	VERT ACCEL =	1.1
ST DEV=	.8	ST DEV =	.1	ST DEV =	.1
		RE NO =	10782946		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.21	-.35	-.28	-.27	-.20	-.12	-.03	
.01	.01	.01	.01	.01	.01	.01	
-.34	-.32	-.22					
.01	.01	.02					
-.56	-.31	0.00	-.39	0.00	-.21	-.16	-.07
.02	.03	0.00	.02	0.00	.01	.02	.01
-.48	-.35	.07					
.02	.02	.01					
-.67	-.44	0.00	-.06	-.21	0.00	-.19	-.12
.05	.01	0.00	.05	.02	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-11) MACH NUMBER, 1.01 (ST DEV, .01), FLIGHT TIME, 794.75 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.5	DELHL =	.6	RADAR MACH NO =	.99
ST DEV=	.0	ST DEV =	.6	ST DEV =	.00
THETA =	3.9	DELHR =	.1	DYN PRESSURE =	15320 NSM (320 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	543 NSM (11 PSF)
PHI =	.0	DELRUD =	.7	VERT ACCEL =	1.2
ST DEV=	.6	ST DEV =	.2	ST DEV =	.1
		RE NO =	9781647		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.39	-.32	-.33	-.22	-.17	-.05	
.01	.02	.01	.02	.01	.01	.01	
-.34	-.39	-.32					
.02	.02	.03					
-.72	-.34	0.00	-.46	0.00	-.21	-.31	-.12
.03	.02	0.00	.02	0.00	.01	.01	.01
-.62	-.34	.06					
.03	.02	.01					
-1.04	-.46	0.00	-.31	-.28	0.00	-.10	-.10
.03	.02	0.00	.02	.02	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-12) MACH NUMBER, 1.01 (ST DEV, .01), FLIGHT TIME, 799.43 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.5	RADAR MACH NO =	1.01
ST DEV=	.1	ST DEV =	.3	ST DEV =	.01
THETA =	4.3	DELHR =	.1	DYN PRESSURE =	15512 NSM (324 PSF)
ST DEV=	.1	ST DEV =	.1	ST DEV =	500 NSM (10 PSF)
PHI =	-.1	DELRUD =	.9	VERT ACCEL =	1.1
ST DEV=	.6	ST DEV =	.1	ST DEV =	.1
		RE NO =	9778036		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.22	-.38	-.32	-.32	-.22	-.16	-.05	
.01	.02	.01	.02	.01	.02	.01	
-.32	-.38	-.31					
.01	.02	.03					
-.64	-.30	0.00	-.44	0.00	-.19	-.30	-.12
.03	.01	0.00	.02	0.00	.01	.01	.01
-.52	-.35	.05					
.03	.01	.01					
-.95	-.44	0.00	-.30	-.28	0.00	-.09	-.09
.04	.01	0.00	.01	.02	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-13) MACH NUMBER, .98 (ST DEV, .01), FLIGHT TIME, 784.57 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.2	RADAR MACH NO =	.96
ST DEV=	.4	ST DEV =	.5	ST DEV =	.00
THETA =	2.5	DELHR =	-.7	DYN PRESSURE =	14541 NSM (304 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	410 NSM (9 PSF)
PHI =	.9	DELRUD =	.5	VERT ACCEL =	.9
ST DEV=	.3	ST DEV =	.1	ST DEV =	.2
		RE NO =	9424591		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.39	-.29	-.32	-.23	-.16	-.03	
.04	.04	.03	.03	.03	.03	.02	
-.33	-.33	-.32					
.03	.03	.04					
-.61	-.29	0.00	-.45	0.00	-.20	-.21	-.07
.17	.09	0.00	.05	0.00	.03	.06	.02
-.54	-.32	.09					
.18	.05	.01					
-.84	-.44	0.00	-.30	-.15	0.00	-.20	-.10
.37	.05	0.00	.06	.10	0.00	.02	.02

TABLE S19.- CONTINUED.

(a-14) MACH NUMBER, 1.00 (ST DEV, .01), FLIGHT TIME, 790.41 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.6	DELHL =	.3	RADAR MACH NO =	.98
ST DEV=	.1	ST DEV =	.5	ST DEV =	.01
THETA =	3.2	DELHR =	.1	DYN PRESSURE =	15069 NSM (315 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	410 NSM (9 PSF)
PHI =	.5	DELRUD =	.4	VERT ACCEL =	1.1
ST DEV=	.4	ST DEV =	.1	ST DEV =	.1
		RE NO =	9459486		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.40	-.31	-.34	-.22	-.17	-.05	
.01	.02	.01	.02	.01	.02	.02	
-.37	-.40	-.34					
.02	.02	.03					
-.75	-.36	0.00	-.47	0.00	-.20	-.32	-.09
.03	.02	0.00	.02	0.00	.02	.02	.03
-.64	-.35	.17					
.03	.02	.05					
-1.11	-.47	0.00	-.32	-.31	0.00	-.18	-.11
.06	.02	0.00	.01	.02	0.00	.04	.02

TABLE S19.- CONTINUED.

(a-15) MACH NUMBER, 1.02 (ST DEV, .01), FLIGHT TIME, 803.77 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELFL =	.5	RADAR MACH NO =	1.01
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	4.5	DELHR =	.1	DYN PRESSURE =	16657 NSM (348 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	377 NSM (8 PSF)
PHI =	-.2	DELRUD =	1.0	VERT ACCEL =	1.1
ST DEV=	1.0	ST DEV =	.1	ST DEV =	.0
		RE NO =	9794478		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.34	-.30	-.30	-.20	-.14	-.05	
.01	.02	.01	.02	.01	.01	.01	
-.26	-.34	-.29					
.02	.01	.03					
-.52	-.26	0.00	-.41	0.00	-.16	-.28	-.12
.02	.01	0.00	.01	0.00	.02	.01	.02
-.45	-.32	.03					
.01	.01	.01					
-.79	-.40	0.00	-.28	-.25	0.00	-.09	-.08
.03	.01	0.00	.01	.01	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-16) MACH NUMBER, 1.02 (ST DEV, .01), FLIGHT TIME, 885.60 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	-.1	RADAR MACH NO =	1.02
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	.6	DELHR =	-.7	DYN PRESSURE =	17246 NSM (360 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	454 NSM (9 PSF)
PHI =	1.1	DELRUD =	.6	VERT ACCEL =	1.1
ST DEV=	2.2	ST DEV =	.2	ST DEV =	.1
		RE NO =	9961426		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.28	-.29	-.29	-.17	-.15	-.03	
.01	.02	.01	.01	.01	.02	.01	
-.24	-.31	-.21					
.02	.01	.02					
-.50	-.27	0.00	-.39	0.00	-.17	-.27	-.10
.03	.02	0.00	.02	0.00	.01	.01	.01
-.47	-.31	-.00					
.04	.01	.01					
-.79	-.40	0.00	-.28	-.19	0.00	-.05	-.04
.06	.02	0.00	.01	.01	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-17) MACH NUMBER, 1.05 (ST DEV, .02), FLIGHT TIME, 890.11 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	.1	RADAR MACH NO =	1.02
ST DEV=	.0	ST DEV =	.3	ST DEV =	.00
THETA =	.4	DELHR =	-.3	DYN PRESSURE =	17360 NSM (363 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	554 NSM (12 PSF)
PHI =	-.8	DELRUD =	.5	VERT ACCEL =	1.1
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	10132062		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.26	-.28	-.28	-.16	-.15	-.04	
.01	.02	.01	.02	.01	.02	.01	
-.21	-.30	-.19					
.02	.01	.02					
-.44	-.24	0.00	-.38	0.00	-.17	-.26	-.09
.02	.02	0.00	.02	0.00	.01	.01	.01
-.41	-.29	-.01					
.02	.01	.01					
-.70	-.37	0.00	-.25	-.19	0.00	-.05	-.04
.03	.01	0.00	.01	.01	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-18) MACH NUMBER, 1.05 (ST DEV, .01), FLIGHT TIME, 878.09 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 2.2	DELHL = -.3	RADAR MACH NO = 1.02
ST DEV= .0	ST DEV = .2	ST DEV = .00
THETA = .7	DELHR = -.7	DYN PRESSURE = 16812 NSM (351 PSF)
ST DEV= .2	ST DEV = .1	ST DEV = 347 NSM (7 PSF)
PHI = -1.4	DELRUD = .4	VERT ACCEL = 1.1
ST DEV= .9	ST DEV = .1	ST DEV = .0
	RE NO = 10074816	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.29	-.30	-.29	-.17	-.16	-.04	
.02	.01	.01	.01	.01	.02	.01	
-.24	-.33	-.22					
.01	.01	.02					
-.49	-.27	0.00	-.40	0.00	-.17	-.27	-.10
.01	.01	0.00	.01	0.00	.01	.01	.02
-.47	-.31	-.00					
.01	.02	.01					
-.78	-.41	0.00	-.28	-.19	0.00	-.06	-.05
.02	.01	0.00	.01	.01	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-19) MACH NUMBER, 1.07 (ST DEV, .01), FLIGHT TIME, 894.45 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA = 2.1	DELHL = .1	RADAR MACH NO = 1.03
ST DEV= .0	ST DEV = .4	ST DEV = .00.
THETA = .4	DELHR = -.2	DYN PRESSURE = 17862 NSM (373 PSF)
ST DEV= .3	ST DEV = .1	ST DEV = 531 NSM (11 PSF)
PHI = -1.0	DELRUD = .6	VERT ACCEL = 1.1
ST DEV= .7	ST DEV = .1	ST DEV = .1
	RE NO = 10354681	

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.26	-.28	-.27	-.16	-.15	-.04	
.01	.01	.01	.02	.01	.01	.01	
-.22	-.29	-.20					
.02	.01	.01					
-.43	-.26	0.00	-.37	0.00	-.16	-.26	-.09
.01	.02	0.00	.01	0.00	.01	.01	.02
-.41	-.30	-.02					
.02	.01	.01					
-.72	-.36	0.00	-.26	-.17	0.00	-.07	-.04
.03	.02	0.00	.01	.01	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-20) MACH NUMBER, 1.08 (ST DEV, .01), FLIGHT TIME, 898.79 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	.4	RADAR MACH NO =	1.04
ST DEV=	.0	ST DEV =	1.3	ST DEV =	.00
THETA =	.6	DELHR =	-.3	DYN PRESSURE =	18382 NSM (384 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	544 NSM (11 PSF)
PHI =	-.9	DELRUD =	.6	VERT ACCEL =	1.1
ST DEV=	.9	ST DEV =	.1	ST DEV =	.1
		RE NO =	10462799		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.25	-.26	-.26	-.16	-.14	-.04	
.01	.02	.01	.02	.01	.01	.01	
-.21	-.29	-.21					
.02	.01	.02					
-.42	-.25	0.00	-.36	0.00	-.14	-.26	-.08
.02	.02	0.00	.02	0.00	.02	.01	.01
-.38	-.29	-.03					
.01	.02	.01					
-.70	-.34	0.00	-.24	-.17	0.00	-.08	-.04
.02	.02	0.00	.01	.01	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-21) MACH NUMBER, 1.10 (ST DEV, .02), FLIGHT TIME, 928.19 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	-.4	RADAR MACH NO =	1.06
ST DEV=	.2	ST DEV =	.3	ST DEV =	.00
THETA =	4.1	DELHR =	-.8	DYN PRESSURE =	20314 NSM (424 PSF)
ST DEV=	.5	ST DEV =	.2	ST DEV =	429 NSM (9 PSF)
PHI =	-.4	DELRUD =	.3	VERT ACCEL =	1.2
ST DEV=	.5	ST DEV =	.1	ST DEV =	.2
		RE NO =	11163010		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.21	-.25	-.23	-.15	-.14	-.04	
.02	.02	.02	.01	.01	.02	.02	
-.18	-.27	-.17					
.05	.01	.03					
-.39	-.26	0.00	-.33	0.00	-.13	-.25	-.09
.02	.03	0.00	.02	0.00	.02	.02	.01
-.38	-.28	-.05					
.02	.02	.01					
-.69	-.34	0.00	-.25	-.12	0.00	-.11	-.04
.12	.05	0.00	.03	.01	0.00	.02	.02

TABLE S19.- CONTINUED.

(a-22) MACH NUMBER, 1.12 (ST DEV, .01), FLIGHT TIME, 1084.16 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.5	DELHL =	.4	RADAR MACH NO =	1.07
ST DEV=	.7	ST DEV =	.2	ST DEV =	.00
THETA =	5.8	DELHR =	.5	DYN PRESSURE =	17143 NSM (358 PSF)
ST DEV=	.5	ST DEV =	.7	ST DEV =	320 NSM (7 PSF)
PHI =	-12.3	DELRUD =	-.0	VERT ACCEL =	1.2
ST DEV=	13.6	ST DEV =	.5	ST DEV =	.4
		RE NO =	9946074		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.20	-.21	-.26	-.26	-.11	-.16	-.06	
.05	.04	.05	.04	.04	.04	.02	
-.25	-.28	-.13					
.12	.05	.04					
-.47	-.32	0.00	-.35	0.00	-.16	-.28	-.11
.17	.09	0.00	.06	0.00	.06	.04	.02
-.45	-.32	-.07					
.13	.06	.02					
-.82	-.49	0.00	-.30	-.11	0.00	-.14	-.06
.35	.22	0.00	.09	.02	0.00	.05	.05

TABLE S19.- CONTINUED.

(a-23) MACH NUMBER, 1.12 (ST DEV, .01), FLIGHT TIME, 1187.04 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.4	RADAR MACH NO =	1.08
ST DEV=	.3	ST DEV =	.8	ST DEV =	.00
THETA =	3.1	DELHR =	-.2	DYN PRESSURE =	16551 NSM (346 PSF)
ST DEV=	.5	ST DEV =	.2	ST DEV =	371 NSM (8 PSF)
PHI =	5.0	DELRUD =	.7	VERT ACCEL =	1.1
ST DEV=	5.7	ST DEV =	.3	ST DEV =	.1
		RE NO =	9500833		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.19	-.18	-.24	-.24	-.07	-.16	-.05	
.02	.02	.02	.03	.02	.02	.01	
-.22	-.26	-.10					
.05	.03	.03					
-.40	-.31	0.00	-.32	0.00	-.15	-.27	-.10
.04	.04	0.00	.03	0.00	.02	.02	.02
-.42	-.31	-.07					
.05	.03	.01					
-.77	-.43	0.00	-.28	-.09	0.00	-.12	-.04
.22	.06	0.00	.03	.02	0.00	.03	.02

TABLE S19.- CONTINUED.

(a-24) MACH NUMBER, 1.13 (ST DEV, .01), FLIGHT TIME, 1191.54 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	.3	RADAR MACH NO =	1.09
ST DEV=	.2	ST DEV =	.8	ST DEV =	.00
THETA =	2.4	DELHR =	-.2	DYN PRESSURE =	16777 NSM (350 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	418 NSM (9 PSF)
PHI =	.4	DELRUD =	.6	VERT ACCEL =	1.0
ST DEV=	.9	ST DEV =	.1	ST DEV =	.1
		RE NO =	9375227		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.17	-.22	-.22	-.06	-.15	-.04	
.02	.02	.02	.02	.02	.03	.01	
-.19	-.25	-.09					
.03	.02	.02					
-.37	-.28	0.00	-.30	0.00	-.13	-.26	-.09
.02	.04	0.00	.02	0.00	.02	.02	.02
-.38	-.30	-.07					
.02	.02	.01					
-.68	-.38	0.00	-.26	-.08	0.00	-.12	-.03
.16	.06	0.00	.02	.02	0.00	.01	.02

TABLE S19.- CONTINUED.

(a-25) MACH NUMBER, 1.13 (ST DEV, .01), FLIGHT TIME, 1197.89 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.4	RADAR MACH NO =	1.10
ST DEV=	.1	ST DEV =	.8	ST DEV =	.00
THETA =	3.2	DELHR =	-.1	DYN PRESSURE =	16818 NSM (351 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	252 NSM (5 PSF)
PHI =	.9	DELRUD =	.7	VERT ACCEL =	1.1
ST DEV=	1.4	ST DEV =	.1	ST DEV =	.1
		RE NO =	9413412		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.17	-.23	-.23	-.06	-.15	-.04	
.02	.02	.01	.02	.01	.02	.02	
-.22	-.26	-.09					
.02	.01	.02					
-.38	-.30	0.00	-.30	0.00	-.15	-.26	-.09
.02	.02	0.00	.02	0.00	.03	.01	.01
-.39	-.32	-.08					
.01	.01	.01					
-.77	-.42	0.00	-.27	-.08	0.00	-.13	-.04
.12	.02	0.00	.02	.01	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-26) MACH NUMBER, 1.14 (ST DEV, .01), FLIGHT TIME, 1093.52 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.0	DELHL =	.1	RADAR MACH NO =	1.10
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	2.7	DELHR =	-.1	DYN PRESSURE =	17288 NSM (361 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	234 NSM (5 PSF)
PHI =	-3.3	DELRUD =	.3	VERT ACCEL =	1.0
ST DEV=	1.7	ST DEV =	.1	ST DEV =	.0
		RE NO =	9818543		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.18	-.22	-.23	-.08	-.14	-.05	
.01	.01	.01	.01	.01	.02	.01	
-.18	-.25	-.10					
.01	.01	.02					
-.35	-.24	0.00	-.29	0.00	-.12	-.26	-.10
.01	.02	0.00	.02	0.00	.02	.01	.02
-.34	-.27	-.07					
.01	.01	.01					
-.55	-.34	0.00	-.25	-.08	0.00	-.13	-.01
.02	.01	0.00	.01	.02	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-27) MACH NUMBER, 1.14 (ST DEV, .01), FLIGHT TIME, 1106.71 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.2	DELHL =	-.4	RADAR MACH NO =	1.11
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	1.4	DELHR =	-.8	DYN PRESSURE =	17635 NSM (368 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	369 NSM (8 PSF)
PHI =	-1.9	DELRUD =	.2	VERT ACCEL =	1.1
ST DEV=	.8	ST DEV =	.1	ST DEV =	.1
		RE NO =	9719939		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.18	-.23	-.22	-.09	-.14	-.05	
.01	.02	.01	.01	.01	.02	.01	
-.20	-.26	-.10					
.02	.01	.02					
-.35	-.27	0.00	-.30	0.00	-.14	-.26	-.11
.01	.01	0.00	.01	0.00	.01	.01	.01
-.36	-.28	-.08					
.01	.02	.01					
-.69	-.38	0.00	-.27	-.07	0.00	-.14	-.02
.07	.02	0.00	.02	.02	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-28) MACH NUMBER, 1.15 (ST DEV, .03), FLIGHT TIME, 1102.20 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.1	DELHL =	-.2	RADAR MACH NO =	1.11
ST DEV=	.0	ST DEV =	1.7	ST DEV =	.00
THETA =	1.8	DELHR =	-.6	DYN PRESSURE =	17688 NSM (369 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	436 NSM (9 PSF)
PHI =	-2.6	DELRUD =	.2	VERT ACCEL =	1.1
ST DEV=	1.8	ST DEV =	.1	ST DEV =	.0
		RE NO =	9861022		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.17	-.23	-.23	-.08	-.14	-.05	
.01	.01	.01	.01	.01	.01	.01	
-.19	-.25	-.10					
.01	.01	.02					
-.34	-.27	0.00	-.30	0.00	-.14	-.25	-.12
.01	.01	0.00	.02	0.00	.02	.01	.01
-.35	-.27	-.07					
.01	.01	.01					
-.65	-.38	0.00	-.27	-.07	0.00	-.13	-.01
.02	.01	0.00	.01	.02	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-29) MACH NUMBER, 1.18 (ST DEV, .01), FLIGHT TIME, 1246.15 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.6	DELHL =	.4	RADAR MACH NO =	1.13
ST DEV=	.1	ST DEV =	.1	ST DEV =	.01
THETA =	2.9	DELHR =	.3	DYN PRESSURE =	15666 NSM (327 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	345 NSM (7 PSF)
PHI =	-.2	DELRUD =	.7	VERT ACCEL =	1.1
ST DEV=	.4	ST DEV =	.1	ST DEV =	.1
		RE NO =	8425363		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.17	-.24	-.22	-.04	-.15	-.06	
.02	.02	.02	.02	.01	.02	.02	
-.25	-.27	-.08					
.02	.02	.02					
-.40	-.31	0.00	-.30	0.00	-.15	-.26	-.13
.02	.03	0.00	.02	0.00	.02	.02	.02
-.37	-.29	-.09					
.02	.02	.01					
-.90	-.44	0.00	-.31	-.08	0.00	-.15	-.03
.05	.04	0.00	.01	.02	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-30) MACH NUMBER, 1.19 (ST DEV, .01), FLIGHT TIME, 1250.50 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	.3	RADAR MACH NO =	1.15
ST DEV=	.1	ST DEV =	.1	ST DEV =	.01
THETA =	2.4	DELHR =	.1	DYN PRESSURE =	16054 NSM (335 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	282 NSM (6 PSF)
PHI =	-.4	DELRUD =	.7	VERT ACCEL =	1.0
ST DEV=	.8	ST DEV =	.2	ST DEV =	.1
		RE NO =	8453077		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.14	-.22	-.21	-.03	-.13	-.05	
.01	.01	.01	.01	.01	.02	.02	
-.22	-.26	-.07					
.02	.01	.02					
-.38	-.29	0.00	-.28	0.00	-.14	-.25	-.13
.01	.01	0.00	.01	0.00	.02	.01	.01
-.34	-.27	-.07					
.01	.01	.01					
-.80	-.38	0.00	-.29	-.07	0.00	-.14	-.03
.03	.01	0.00	.01	.01	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-31) MACH NUMBER, 1.21 (ST DEV, .01), FLIGHT TIME, 1254.84 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	.2	RADAR MACH NO =	1.16
ST DEV=	.1	ST DEV =	.1	ST DEV =	.00
THETA =	2.0	DELHR =	.1	DYN PRESSURE =	16443 NSM (343 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	258 NSM (5 PSF)
PHI =	.0	DELRUD =	.6	VERT ACCEL =	1.0
ST DEV=	1.3	ST DEV =	.1	ST DEV =	.0
		RE NO =	8483692		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.17	-.14	-.22	-.20	-.03	-.13	-.06	
.01	.02	.01	.01	.01	.01	.01	
-.23	-.26	-.07					
.02	.02	.01					
-.39	-.28	0.00	-.28	0.00	-.13	-.25	-.15
.01	.02	0.00	.02	0.00	.02	.01	.01
-.33	-.26	-.08					
.01	.01	.01					
-.82	-.38	0.00	-.29	-.08	0.00	-.13	-.04
.02	.01	0.00	.01	.02	0.00	.01	.02

TABLE S19.- CONTINUED.

(a-32) MACH NUMBER, 1.22 (ST DEV, .01), FLIGHT TIME, 1259.18 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.5	DELHL =	.2	RADAR MACH NO =	1.18
ST DEV=	.0	ST DEV =	.1	ST DEV =	.00
THETA =	2.1	DELHR =	-.0	DYN PRESSURE =	16551 NSM (346 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	358 NSM (7 PSF)
PHI =	.1	DELRUD =	.6	VERT ACCEL =	1.1
ST DEV=	1.2	ST DEV =	.1	ST DEV =	.0
		RE NO =	8706390		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.15	-.23	-.21	-.03	-.14	-.05	
.01	.02	.01	.01	.01	.01	.02	
-.24	-.27	-.06					
.02	.01	.02					
-.41	-.29	0.00	-.28	0.00	-.13	-.25	-.17
.02	.02	0.00	.01	0.00	.02	.01	.02
-.34	-.27	-.08					
.02	.01	.01					
-.83	-.42	0.00	-.30	-.09	0.00	-.14	-.04
.02	.02	0.00	.01	.02	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-33) MACH NUMBER, 1.23 (ST DEV, .01), FLIGHT TIME, 1270.03 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.6	DELHL =	.2	RADAR MACH NO =	1.19
ST DEV=	.1	ST DEV =	.7	ST DEV =	.00
THETA =	3.2	DELHR =	-.1	DYN PRESSURE =	17100 NSM (357 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	402 NSM (8 PSF)
PHI =	-.3	DELRUD =	.7	VERT ACCEL =	1.1
ST DEV=	.4	ST DEV =	.2	ST DEV =	.1
		RE NO =	8928102		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.18	-.15	-.23	-.21	-.03	-.14	-.06	
.01	.02	.01	.02	.01	.02	.01	
-.25	-.26	-.06					
.01	.01	.02					
-.39	-.29	0.00	-.28	0.00	-.12	-.23	-.16
.02	.02	0.00	.01	0.00	.01	.01	.02
-.34	-.26	-.08					
.01	.02	.01					
-.79	-.42	0.00	-.29	-.09	0.00	-.14	-.04
.05	.02	0.00	.01	.02	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-34) MACH NUMBER, 1.24 (ST DEV, .01), FLIGHT TIME, 1274.71 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.5	DELHL =	-.3	RADAR MACH NO =	1.20
ST DEV=	.0	ST DEV =	.4	ST DEV =	.00
THETA =	2.7	DELHR =	-.5	DYN PRESSURE =	17126 NSM (358 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	322 NSM (7 PSF)
PHI =	-.4	DELRUD =	.7	VERT ACCEL =	1.0
ST DEV=	.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	8876109		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.12	-.22	-.19	-.02	-.13	-.05	
.01	.01	.01	.02	.01	.01	.01	
-.24	-.24	-.05					
.01	.01	.02					
-.37	-.28	0.00	-.26	0.00	-.11	-.22	-.15
.01	.02	0.00	.01	0.00	.01	.01	.01
-.33	-.24	-.07					
.01	.01	.01					
-.72	-.36	0.00	-.28	-.07	0.00	-.13	-.03
.02	.01	0.00	.01	.02	0.00	.02	.01

TABLE S19.- CONTINUED.

(a-35) MACH NUMBER, 1.24 (ST DEV, .02), FLIGHT TIME, 1283.39 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-.2	RADAR MACH NO =	1.20
ST DEV=	.1	ST DEV =	.7	ST DEV =	.00
THETA =	1.1	DELHR =	-.7	DYN PRESSURE =	17223 NSM (360 PSF)
ST DEV=	.4	ST DEV =	.1	ST DEV =	533 NSM (11 PSF)
PHI =	-.7	DELRUD =	.6	VERT ACCEL =	1.0
ST DEV=	1.3	ST DEV =	.1	ST DEV =	.0
		RE NO =	8894162		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.12	-.20	-.19	-.01	-.12	-.05	
.01	.02	.01	.01	.01	.01	.01	
-.23	-.22	-.04					
.02	.01	.02					
-.36	-.28	0.00	-.25	0.00	-.10	-.21	-.16
.02	.01	0.00	.01	0.00	.01	.01	.02
-.33	-.24	-.06					
.02	.02	.01					
-.69	-.35	0.00	-.27	-.06	0.00	-.13	-.03
.03	.01	0.00	.01	.02	0.00	.01	.01

TABLE S19.- CONTINUED.

(a-36) MACH NUMBER, 1.25 (ST DEV, .01), FLIGHT TIME, 1308.28 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-.7	RADAR MACH NO =	1.21
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	-3.9	DELHR =	-1.1	DYN PRESSURE =	19081 NSM (399 PSF)
ST DEV=	.2	ST DEV =	.1	ST DEV =	421 NSM (9 PSF)
PHI =	-1.7	DELRUD =	.6	VERT ACCEL =	1.1
ST DEV=	.4	ST DEV =	.1	ST DEV =	.0
		RE NO =	9894799		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.15	-.11	-.20	-.17	.00	-.11	-.05	
.01	.01	.01	.01	.01	.01	.01	
-.22	-.21	-.05					
.01	.01	.02					
-.35	-.27	0.00	-.24	0.00	-.10	-.20	-.14
.01	.01	0.00	.01	0.00	.01	.01	.01
-.31	-.26	-.06					
.01	.01	.01					
-.60	-.34	0.00	-.26	-.07	0.00	-.12	-.03
.02	.01	0.00	.01	.01	0.00	.01	.01

TABLE S19.- CONCLUDED.

(a-37) MACH NUMBER, 1.26 (ST DEV, .01), FLIGHT TIME, 1303.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.3	DELHL =	-.7	RADAR MACH NO =	1.21
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	-3.5	DELHR =	-1.1	DYN PRESSURE =	19026 NSM (397 PSF)
ST DEV=	.5	ST DEV =	.2	ST DEV =	420 NSM (9 PSF)
PHI =	-1.2	DELRUD =	.6	VERT ACCEL =	1.0
ST DEV=	.3	ST DEV =	.2	ST DEV =	.1
		RE NO =	9580388		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.15	-.10	-.19	-.16	-.00	-.10	-.05	
.01	.02	.01	.01	.01	.02	.01	
-.21	-.21	-.04					
.02	.01	.02					
-.33	-.25	0.00	-.24	0.00	-.09	-.20	-.14
.01	.02	0.00	.01	0.00	.02	.01	.02
-.30	-.24	-.06					
.01	.01	.01					
-.54	-.34	0.00	-.26	-.06	0.00	-.11	-.03
.02	.01	0.00	.01	.01	0.00	.02	.01

TABLE S20.- EXPERIMENTAL DATA FOR COMPARISON OF MEASURED AND PREDICTED DIFFERENTIAL PRESSURE DISTRIBUTIONS FOR TANK-OFF CONFIGURATION (FIG. 24).

(a) MACH NUMBER, .70 (ST DEV, .00), FLIGHT TIME, 1777.05 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.9	DELHL =	-.8	RADAR MACH NO =	.68
ST DEV=	.0	ST DEV =	.1	ST DEV =	.00
THETA =	-12.5	DELHR =	-2.4	DYN PRESSURE =	13491 NSM (282 PSF)
ST DEV=	.6	ST DEV =	.1	ST DEV =	241 NSM (5 PSF)
PHI =	-2.9	DELRUD =	1.5	VERT ACCEL =	.9
ST DEV=	.4	ST DEV =	.0	ST DEV =	.0
		RE NO =	10357326		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.25	-.25	-.26	-.23	-.13	-.07	-.02	
.02	.02	.01	.01	.02	.01	.02	
-.37	-.32	-.15					
.02	.02	.02					
-.55	-.35	0.00	-.32	-.34	-.08	-.19	-.07
.02	.01	0.00	.02	.03	.01	.01	.02
-.42	-.25	-.03					
.03	.01	.01					
-.51	-.30	0.00	-.14	-.20	0.00	-.17	-.07
.03	.01	0.00	.02	.02	0.00	.02	.01

TABLE S20.- CONCLUDED.

(b) MACH NUMBER, 1.24 (ST DEV, .01), FLIGHT TIME, 1279.22 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	2.4	DELHL =	-.3	RADAR MACH NO =	1.20
ST DEV=	.0	ST DEV =	.2	ST DEV =	.00
THETA =	2.1	DELHR =	-.7	DYN PRESSURE =	17319 NSM (362 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	406 NSM (8 PSF)
PHI =	-.6	DELRUD =	.6	VERT ACCEL =	1.0
ST DEV=	.4	ST DEV =	.1	ST DEV =	.1
		RE NO =	8799797		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.16	-.11	-.20	-.19	-.01	-.11	-.05	
.01	.02	.01	.01	.01	.01	.01	
-.23	-.23	-.04					
.01	.01	.02					
-.36	-.27	0.00	-.26	0.00	-.10	-.21	-.15
.01	.02	0.00	.01	0.00	.01	.01	.02
-.32	-.23	-.06					
.01	.01	.01					
-.65	-.35	0.00	-.27	-.06	0.00	-.12	-.03
.03	.01	0.00	.01	.02	0.00	.02	.01

TABLE S21.- SELECTED FLIGHT DATA FOR COMPARISON OF WING LOADINGS FOR RIGHT- AND LEFT-TURN MANEUVERS AT SUBSONIC AND SUPERSONIC MACH NUMBERS (FIG. 25).

(a) Right turn: MACH NUMBER, 1.01 (ST DEV, .01), FLIGHT TIME, 969.94 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	4.9	DELHL =	2.2	RADAR MACH NO =	.99
ST DEV=	.1	ST DEV =	.3	ST DEV =	.01
THETA =	4.0	DELHR =	2.1	DYN PRESSURE =	18031 NSM (377 PSF)
ST DEV=	.3	ST DEV =	.2	ST DEV =	240 NSM (5 PSF)
PHI =	65.9	DELRUD =	.3	VERT ACCEL =	2.6
ST DEV=	3.1	ST DEV =	.3	ST DEV =	.1
		RE NO =	10366600		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.40	-.43	-.45	-.41	-.28	-.29	-.09	
.01	.02	.01	.01	.01	.01	.01	
-1.07	-.46	-.28					
.03	.02	.02					
-1.01	-.92	0.00	-.85	0.00	-.32	-.40	-.14
.02	.02	0.00	.03	0.00	.01	.01	.01
-1.15	-.93	-.04					
.02	.03	.01					
-1.58	-1.31	0.00	-.69	-.25	0.00	-.22	-.12
.02	.03	0.00	.04	.02	0.00	.02	.01

TABLE S21.- CONTINUED.

Left turn: MACH NUMBER, 1.00 (ST DEV, .01), FLIGHT TIME, 989.98 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	4.6	DELHL =	2.1	RADAR MACH NO =	.99
ST DEV=	.0	ST DEV =	.1	ST DEV =	.00
THETA =	4.3	DELHR =	1.8	DYN PRESSURE =	16418 NSM (343 PSF)
ST DEV=	.4	ST DEV =	.2	ST DEV =	530 NSM (11 PSF)
PHI =	-53.1	DELRUD =	.4	VERT ACCEL =	2.4
ST DEV=	36.5	ST DEV =	.1	ST DEV =	.1
		RE NO =	9876250		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.39	-.42	-.46	-.42	-.28	-.29	-.08	
.02	.02	.02	.02	.01	.02	.01	
-1.06	-.46	-.27					
.04	.02	.03					
-1.04	-.94	0.00	-.83	0.00	-.32	-.40	-.14
.03	.04	0.00	.03	0.00	.02	.01	.02
-1.19	-.92	-.03					
.04	.04	.01					
-1.65	-1.39	0.00	-.63	-.25	0.00	-.21	-.10
.06	.05	0.00	.03	.02	0.00	.02	.02

TABLE S21.- CONTINUED.

(b) Right turn: MACH NUMBER, 1.12 (ST DEV, .01), FLIGHT TIME, 1175.68 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.2	DELHL =	.6	RADAR MACH NO =	1.08
ST DEV=	.0	ST DEV =	.3	ST DEV =	.00
THETA =	2.4	DELHR =	.6	DYN PRESSURE =	16749 NSM (350 PSF)
ST DEV=	.3	ST DEV =	.1	ST DEV =	207 NSM (4 PSF)
PHI =	46.1	DELRUD =	.4	VERT ACCEL =	1.6
ST DEV=	.5	ST DEV =	.1	ST DEV =	.0
		RE NO =	9471017		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.24	-.23	-.31	-.29	-.12	-.20	-.07	
.02	.02	.01	.02	.01	.02	.01	
-.36	-.32	-.14					
.01	.01	.03					
-.68	-.41	0.00	-.38	0.00	-.21	-.30	-.13
.03	.02	0.00	.02	0.00	.02	.01	.01
-.57	-.39	-.09					
.02	.02	.01					
-1.21	-.75	0.00	-.40	-.12	0.00	-.18	-.11
.02	.02	0.00	.02	.02	0.00	.02	.01

TABLE S21.- CONCLUDED.

Left turn: MACH NUMBER, 1.12 (ST DEV, .02), FLIGHT TIME, 1127.92 SEC

AIRCRAFT FLIGHT AND PERFORMANCE DATA

ALPHA =	3.2	DELHL =	.2	RADAR MACH NO =	1.07
ST DEV=	.1	ST DEV =	.2	ST DEV =	.00
THETA =	-.0	DELHR =	-.0	DYN PRESSURE =	16825 NSM (351 PSF)
ST DEV=	.1	ST DEV =	.2	ST DEV =	242 NSM (5 PSF)
PHI =	-25.0	DELRUD =	.2	VERT ACCEL =	1.6
ST DEV=	20.2	ST DEV =	.1	ST DEV =	.1
		RE NO =	9622985		

DIFFERENTIAL PRESSURE COEFFICIENTS AND STANDARD DEVIATIONS

-.23	-.24	-.31	-.30	-.13	-.20	-.06	
.02	.02	.01	.02	.02	.02	.01	
-.35	-.32	-.16					
.03	.01	.02					
-.68	-.39	0.00	-.39	0.00	-.20	-.31	-.13
.07	.03	0.00	.02	0.00	.01	.01	.01
-.57	-.38	-.09					
.06	.02	.01					
-1.20	-.73	0.00	-.38	-.12	0.00	-.17	-.10
.04	.06	0.00	.03	.02	0.00	.02	.02