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INVESTIGATION AT TRANSONIC SPEEDS
OF LOADING OVER A 30° SWEPTBACK WING OF ASPECT
RATIO 3, TAPER RATIO 0.2, AND NACA 65A004 AIRFOIL
SECTION MOUNTED ON A BODY

By Donald D. Arabian

Langley Aeronautical Laboratory
Langley Field, Va.

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**NATIONAL ADVISORY COMMITTEE
FOR AERONAUTICS**

WASHINGTON

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SUMMARY

The aerodynamic load characteristics of a wing-body combination were determined experimentally from 0.80 to 1.03 Mach number for angles of attack up to 26 degrees. Two wings, both with 30° sweep of the quarter-chord line, taper ratio 0.2, aspect ratio 3, and thickness of 4 percent chord, but of different types of construction, were tested. One wing was of solid steel and the other was of plastic with an inner steel core.

The load distributions for both wings were similar, but loads on the more flexible wing were somewhat reduced. The twist distributions for both wings were calculated. Some typical flow studies of the boundary layer are presented.

INTRODUCTION

Satisfactory stability characteristics have been obtained at subsonic speeds for thin low-aspect-ratio wings with moderate leading-edge sweep (ref. 1). In order to evaluate in detail the load and stability characteristics of this type of wing on a body of revolution throughout the transonic speed range, a wing with an aspect ratio of 3, a taper ratio of 0.2, 30° sweepback of the quarter-chord line, and with NACA 65A004 airfoil sections was selected and the load characteristics are presented. The longitudinal stability characteristics are presented in reference 2. This wing is one of several wings being studied in a general program at the Langley 16-foot transonic tunnel. To date, the load characteristics of other wings in the program have been published in references 3, 4, 5, and 6. Data were obtained at Mach numbers from 0.80

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to 1.03 for angles of attack up to about 26° for two wings of the same geometry but constructed of different materials. One wing was made of steel and plastic in an attempt to devise a cheaper and faster method of wing construction. The other was a solid steel wing used for comparison to check the effect of aeroelasticity and to establish the validity of data obtained with the less-rigid reinforced plastic wing. The twist distribution due to aerodynamic loading was calculated for both wings. Some typical flow studies of the boundary layer are also presented.

SYMBOLS

b	wing span
c	wing chord parallel to the plane of symmetry
\bar{c}	average wing chord
c'	mean aerodynamic chord
c_n	wing section normal-force coefficient
c_m	section pitching-moment coefficient about the wing mean aerodynamic chord
C_N	wing-panel normal-force coefficient, $\int_{0.16}^{1.0} c_n \frac{c}{\bar{c}} d\left(\frac{2y}{b}\right)$
C_m	wing-panel pitching-moment coefficient about $0.25c'$, $\int_{0.16}^{1.0} c_m \frac{c^2}{\bar{c}c'} d\left(\frac{2y}{b}\right)$
C_p	pressure coefficient, $\frac{\Delta p}{q}$
M	Mach number
Δp	local static pressure minus the free-stream static pressure
q	dynamic pressure
x	distance parallel to the center line
y	distance normal to the plane of symmetry

α model angle of attack

θ angle of twist of the chord line measured in planes parallel to the plane of symmetry

Subscripts:

L wing lower surface

U wing upper surface

MODEL DESCRIPTION

The general arrangement of the model is shown in figure 1(a). The wing was mounted to the same steel body of revolution used in references 4 and 5. The fuselage had a fineness ratio of 11, an ogive nose, cylindrical center section and a boattail afterbody. The wing was swept 30° at the quarter-chord line with a taper ratio of 0.2, and aspect ratio of 3, and NACA 65A004 sections parallel to the plane of symmetry. Two wings were constructed of different materials. Figure 1(b) shows typical cross sections of both wings. One was constructed entirely of steel with a leading-edge section and a trailing-edge section which was tongue and grooved to a center section. The spaces left in the grooves were used as ducts for the pressure tubes to the orifices. The other wing was constructed in such manner that a steel core with a thin brass plate at the trailing edge was surrounded with the wing pressure tubes, and then polyester resin was poured about the structure to form the wing contour. This wing hereinafter is called the plastic wing.

The twist characteristics for these wings were determined by the method described in appendix A. The steel wing was found to be less than half as flexible as the plastic wing. The influence coefficients A_{ij} and B_{ij} (see appendix A) used to calculate the twist were as follows:

For the steel wing:

i	$A_{ij} \times 10^{-5}$ at $j = -$				
	1	2	3	4	5
1	0	0	0	-1	-4
2	-2	6	-2	-8	-13
3	-2	5	9	-9	-28
4	1	4	7	11	-27
5	1	4	5	12	-5

i	$B_{ij} \times 10^{-5}$ at $j = -$				
	1	2	3	4	5
1	0	0.1	0.1	0.2	-0.3
2	-.1	1.3	1.1	.9	.3
3	-.1	1.7	3.9	3.2	.3
4	.3	1.7	4.9	11.5	10.5
5	.3	1.8	4.8	14.1	37.9

For the plastic wing:

i	$A_{ij} \times 10^{-5}$ at $j = -$				
	1	2	3	4	5
1	0	-2	-3	-6	-11
2	-1	7	-7	-22	-34
3	1	9	8	-31	-78
4	2	9	14	-2	-100
5	2	9	14	6	-69

i	$B_{ij} \times 10^{-5}$ at $j = -$				
	1	2	3	4	5
1	0	0.3	1.0	0.8	1.1
2	-0.1	1.9	1.8	0	3.1
3	.1	3.3	7.0	7.3	7.6
4	.2	3.5	10.4	23.1	33.4
5	.2	3.5	11.1	30.2	90.8

where A_{ij} and B_{ij} represent the twist in degrees measured parallel to the angle-of-attack plane at the i th station due to a load or moment at the j th station, respectively. The five spanwise stations chosen were located as follows:

Station	$\frac{y}{b/2}$
1	0.245
2	.412
3	.580
4	.750
5	.915

A better comparison of the twist characteristics, however, of the steel and plastic wing is shown in figures 2(a) and (b). The plots show the effect of a unit loading applied at any spanwise station (abscissa), on the particular spanwise stations 1 through 5, for loadings at the 25- and 65-percent-chord lines. The main difference between the two plots results from a change in the stiffness and a shift of the elastic-axis location of the two wings. If the elastic axis is defined as that point of the local chord which gives zero twist when a load is applied at the point, then figure 2 indicates the position of the elastic axis. The plots show that the elastic axis of the plastic wing passes through the 0.25c at about the 0.75b/2 station, while that of the steel wing passes through the 0.25c at the 0.85b/2 station. Inboard of these spanwise stations the elastic axis lies behind the 0.25c line (positive values of twist), and outboard the axis lies ahead of the 0.25c line (negative values of twist).

The rows of pressure orifices were located at 16, 25, 40, 60, 75, and 95 percent semispan stations for both the steel and plastic wings. In each row on both the upper and lower surfaces, the orifices were

located at 1, 2, 5, 7, 10 percent c and at intervals of every 5 percent chord thereafter up to the 95-percent-chord station.

TESTS AND TECHNIQUES

The tests were conducted in the Langley 16-foot transonic tunnel, which is described in reference 7. The Mach number range extended from 0.80 to 1.03, which corresponded to a Reynolds number range from about 7×10^6 to 8×10^6 (based on the wing mean aerodynamic chord). The maximum angle-of-attack range extended from -2° to 26° in 2° increments.

The pressure data were obtained simultaneously with the force data presented in reference 2. The wing pressures were recorded by photographing mercury manometer boards. The data were then processed by electronic calculating machines, which plotted and tabulated the results.

At the termination of the pressure program, a study was made of the flow in the boundary layer of the plastic wing for a reduced Mach number and angle-of-attack range. The technique used in reference 5 was employed to render the flow visible. The technique entails painting the wing surface black and then applying a white ground-glass paint similar to china clay. The wing therefore appears white when dry. Wetting with a clear fluid causes the black sublayer to become visible. Thus, by emitting fluid from a point source on the wing in a stream, the fluid path in the boundary layer is traced. As the fluid trace changes with time, the history of the trace disappears as a result of the evaporation of the fluid, so that the existing trace represents an average flow for a short interval of time. For these tests clear varsol was used as the liquid agent. The point sources were particular pressure orifices through which the fluid was forced. The locations of the sources were as follows:

$\frac{x}{c}$ at -				
$0.25 \frac{b}{2}$	$0.40 \frac{b}{2}$	$0.60 \frac{b}{2}$	$0.75 \frac{b}{2}$	$0.95 \frac{b}{2}$
0.5	0.5	0.5	0.5	0.5
.10	----	----	----	----
.15	.15	----	----	----
.20	.20	----	----	----
.25	.25	.25	.25	----
----	.35	----	----	----
.45	.45	.45	.45	.45
.65	.65	.65	.65	----
.80	.80	.80	.80	.80
.90	.90	.90	.90	----

The flow studies were recorded photographically.

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ACCURACY OF MEASUREMENTS

Sufficient time was allowed after a particular test condition was reached for the pressure manometer tubes to settle within about 1 percent of the ultimate value of the manometer level.

The indicated angle of attack was corrected for tunnel-flow angularity. Based on readout accuracy and repeatability, the angle of attack and Mach number are believed to be accurate within the following limits:

α , deg	• • • • •	± 0.01
M	• • • • •	± 0.005

RESULTS AND DISCUSSION

Flow studies.-- Sample photographs of the flow on the right plastic wing are presented in figure 3. No general discussion of swept-wing flow is attempted here. Only those features of the flow studies which represent significant characteristics to be noted in the following wing pressure discussion are covered. A general discussion of the flow over swept wings may be found in references 8, 9, and 10.

Some of the features of the boundary flow which can be noted in the photographs of figure 3 are the indications of shock waves, the indications of flow separation, and the indications of vortex-type flow.

Shock waves are frequently indicated by the fluid path where there are abrupt changes of the streamlines. Note in figure 3(a) at $M = 0.94$ that shadowgraph traces of the waves are visible at angles of attack of 2° and 4° (indicated by the arrows on the figure), and note how the fluid lines are altered where they intersect the wave. The location of the waves is more obvious at the higher angles of attack by the more abrupt turning of the flow.

Separation first appears as an irregular darkened region generally increasing in area with increasing angle of attack. For this wing there appear to be two different areas where separation may commence, depending on the Mach number. At $M = 0.80$ for example, figure 3(a) at $\alpha = 4^\circ$ shows the separation to start along the leading edge near the wing tip. This results from a combination of a swept leading edge, a small leading-edge radius, and a thin wing. At the higher Mach numbers leading-edge separation as such occurs only at much higher angles of attack. (Compare 0.80 with 0.94 and 1.03 Mach numbers of fig. 3(a) for $\alpha = 6^\circ$.) However, separation does start near the tip at the trailing edge before the leading-edge separation occurs. See figure 3(a) at $\alpha = 6^\circ$ for

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$M = 0.94$ and figure 3(b) at $\alpha = 10^\circ$ for $M = 1.03$. This separation appears to stem from the intersection, in the vicinity of the wing tip, of the shocks originating at the leading edge and near the trailing edge of the wing-body juncture. Both types of separation extend inboard with increasing angle of attack.

Once separation occurs, the existence of vorticity in the flow above the wing is indicated in the boundary-layer traces by the circulation of the fluid lines in a counterclockwise direction. For example, observe the photographs for $M = 0.80$ at the higher angles of attack. A line through the aftermost points along each of the indicated streamlines should coincide with the projection of the vortex core on the wing surface. Note that at $\alpha = 6^\circ$, the vortex cone sheds near the tip and the point of shedding progresses inboard with increasing angle of attack, as does the separation. At $\alpha = 19^\circ$ (fig. 3(c)) the vortex appears to shed at about $0.25b/2$. The vortex strength at this angle of attack is much greater than at the lower angles of attack, as is shown by the accumulation of the fluid near the vortex origin.

The origin of the vorticity at $M = 0.94$ and $M = 1.03$ appears to be in the vicinity of the intersection of the shock waves where the separation forms. Vorticity is permitted at the shock intersection since different entropy changes occur inboard and outboard of the intersection. The angle of attack at which this vortex forms increases with Mach number. With increasing angle of attack at the higher Mach numbers, the vortex flow finally reverts to a vortex generated along the leading edge once the leading-edge separation occurs at the higher angles of attack.

Chordwise pressure distributions. - A tabulation of the chordwise pressure coefficients for all test conditions for the steel wing is presented in table I. Figure 4 presents a comparison between the chordwise pressure distributions for the plastic and steel wings. As is noted, there are minor differences in the angles of attack for the two wings. In general these differences are of the order of the accuracy of measurements of these angles ($\pm 0.10^\circ$). The differences in the pressure coefficient with one exception may therefore be considered to be caused principally by aeroelastic effects. A significant difference in the variation of the chordwise pressure distributions exists between the two wings at angles of attack from about 2° to 8° at a Mach number of 0.80. As this Mach number was the first for which data were obtained, the discrepancy suggests a temporary difference in the leading-edge surface conditions for the two wings. The plastic-wing flow studies of figure 3(a), which were taken after the pressure tests, for angles of attack of 4° and 6° at a Mach number of 0.80 indicated separation at the outer spanwise stations, but the pressure distributions of the plastic wings indicated attached flow. The outboard stations of the plastic wing generally show the effect of decreased local angles of attack due to load when compared to the steel wing.

For either wing at the low angles of attack the increase in load coefficient progressing toward the tip illustrates the effective spanwise increase of angle of attack induced by the trailing vortices of a highly tapered swept wing. Consequently, the separation appears first at the tip and progresses inboard with increasing angle of attack as indicated by the flow studies of figure 3.

The pressure distributions on the upper surface are fairly constant over most of the wing panel at an angle of attack of about 20° , which of course indicates separation. Increasing the angle above 20° produces more negative pressure coefficients and, in addition, the innermost station shows signs of the streamlines being turned downward toward the wing surface; that is, the pressures near the trailing edge begin to recover or increase in a positive sense. As the angle of attack is further increased this effect tends to progress outboard. These pressure changes are believed to be caused by the change in location and the increasing strength of the vortex that is shown in figure 3 at $M = 0.80$. At $M = 0.94$ to 1.03 for the high angles of attack, the distributions near the root are also influenced by the strong shock wave shown by the chordwise distributions.

Spanwise load distributions.- It is apparent from the chordwise pressures that the type of wing construction, with some exceptions, has only minor effects on load distribution; therefore, the spanwise load distributions are presented only for the steel wing in figure 5. The distributions are nearly elliptical at the low angles of attack, but as the angle of attack increases, the load distributions tend to become triangular, with the triangular loading commencing at the tip. The triangular distribution spreads inboard as separation forms with further increase of angle of attack. At the angles of attack where the load distribution is elliptical inboard and triangular outboard, increasing Mach number tended to reduce the extent of the triangular loading. The implication is that increasing Mach number at a high constant angle of attack extends the attached flow region outboard. This implication is verified by the flow studies (fig. 3(c)). Note that at angles of attack of 15° and 17° , the higher the Mach number, the larger the region of attached flow.

Panel loads.- The variation of the integrated wing loads with angle of attack is shown in figure 6 for the test Mach number range. If compressibility effects are considered, the load-carrying capacity per unit angle of attack should increase to a maximum at approximately $M = 1.00$.

The data show that, for C_N values up to about 0.6, the maximum load-carrying capacity per unit angle of attack occurred at $M \approx 0.94$. For C_N values from 0.6 to the highest test value, the maximum load-carrying capacity occurred at $M \approx 0.98$.

A comparison of the variation of the panel pitching-moment coefficient about the $0.25c'$ with normal-force coefficient and the wing-body pitching-moment data of reference 2 is shown in figure 7. The changes of the slopes $\frac{dC_m}{dC_N}$ with normal-force coefficient agree in general with those of the data of reference 2. The absolute differences in $\frac{dC_m}{dC_N}$ at a given normal-force coefficient are due to the absence of the fuselage stability contribution in the present data.

Center of loads.-- Figure 8 presents the exposed panel load centers and the local section load centers for the angle-of-attack and Mach number range of the tests. The spanwise center of load was located at approximately 50 percent of the semispan for all test conditions. The most rearward position was at about 46 percent of the mean aerodynamic chord for the panel load centers and 46 percent of the local chord for the section load centers.

Increasing angle of attack up to about 20° tended to shift the panel center of load rearward and inboard. The single data point for α above 20° shows a tendency for the center of load to become invariant with the higher angles of attack. In general the effects of changes in angle of attack on the center of load decrease with increasing Mach number; this result is to be expected since the chordwise load distribution becomes more rectangular as the flow becomes supersonic over most of the wing.

Twist distribution.-- Combining the influence coefficients and the integrated normal forces and moments in the manner described in appendix A or by the method of reference 5 yields the wing spanwise twist distributions. The dynamic pressures corresponding to the measured loads are presented in figure 9 for the test Mach number range. Calculations were made for both wings at angles of attack of 4° , 8° , and 20° and for $M = 0.80$ and 1.00 . A comparison of the resulting spanwise twist distributions for the steel and plastic wings is presented in figures 10(a) and 10(b). At $\alpha = 20^\circ$ and $M = 1.0$ the calculated twist angle of the tip of the plastic wing was -0.9° as compared to -0.4° for the steel wing.

CONCLUDING REMARKS

The following remarks are drawn from the loads investigation of an all steel wing and a geometrically identical reinforced plastic wing. Both wings have 30° sweepback of the quarter chord, a taper ratio of 0.2, and embody NACA 65A004 airfoil sections.

The chordwise pressure distributions for the steel and plastic wings were similar for the test range with some exceptions at Mach number 0.80.

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However the type of construction had only minor effects on the chordwise and spanwise load distributions. The order of magnitude of the tip twist was calculated at a Mach number of 1.0 and an angle of attack of 20° to be -0.9° for the plastic wing as compared to -0.4° for the steel wing. The spanwise load distributions were nearly elliptical at the low angles of attack, but at the higher angles the distributions tended to become triangular commencing at the tip. The center of load on the wing panels moved rearward and inboard with increasing angle of attack for all Mach numbers. The movement of the load center with angle of attack decreased considerably with increasing Mach number.

Langley Aeronautical Laboratory,
National Advisory Committee for Aeronautics,
Langley Field, Va., June 19, 1957.

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APPENDIX A

METHOD OF COMPUTING WING TWIST DUE TO AERODYNAMIC LOADING.

If the spanwise and chordwise distribution of aerodynamic loading of an elastic wing are known, the twist distribution of the wing can be calculated, as follows

$$\{\theta\} = [A] \{l\} + [B] \{m\}$$

where the influence coefficients are defined as the elements of the square matrices $[A]$ and $[B]$.

The elements A_{ij} and B_{ij} represent the twist at the i th spanwise station due to a load or moment at the j th station.

The spanwise load distribution and the spanwise pitching-moment distribution are elements of the column matrices $\{l\}$ and $\{m\}$, respectively, where the elements l_j and m_j are the integrated loads and moments respectively over the j th spanwise segment; that is,

$$l_j = q \bar{c} \frac{b}{2} \int_{(j-1)/n}^{j/n} c_n \frac{c}{\bar{c}} d\left(\frac{2y}{b}\right)$$

and

$$m_j = q c' \bar{c} \frac{b}{2} \int_{(j-1)/n}^{j/n} c_m \frac{c^2}{c' \bar{c}} d\left(\frac{2y}{b}\right)$$

where

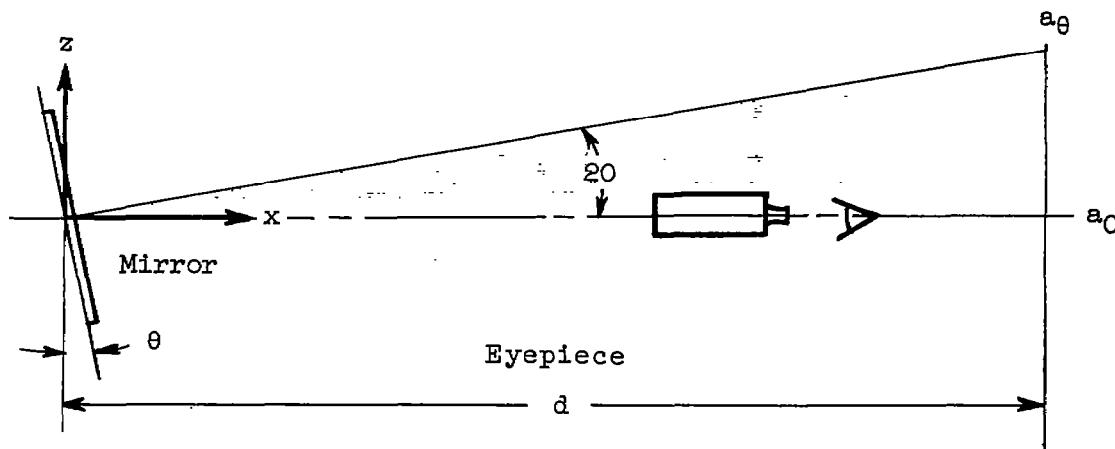
n number of spanwise stations

c' mean aerodynamic chord

\bar{c} average chord

c local chord

The setup for measuring twist with mirrors is shown in figure 11. The technique employed for obtaining the influence coefficients involved principally the use of mirrors, linear scales, and a transit. Loads were applied at the desired points along the wing. A diagram illustrating the twist measurements is shown below:



where

a_0 zero twist reading

a_θ reading due to twist θ

A change in the angle θ of the mirror required a change in the scale reading as sighted through the eyepiece. Small translations of the mirror up or down have little effect on the scale reading. Thus, only twist about the y-axis (perpendicular to the plane of the paper) is observed.

Loading at the j th spanwise station of the $0.25c$ yields the influence coefficients due to normal force of the i th spanwise station. Thus

$$A_{ij} = \frac{\theta_i}{(\text{Load})_j} \frac{\text{deg}}{\text{lb}}$$

where

$$\theta_i = \frac{1}{2} \tan^{-1} \frac{(a_{\theta j} - a_{0j})}{d}$$

Loading at the jth spanwise station of the 0.65c yields the influence coefficients due to a moment about the y-axis through the 0.25c of the ith station; thus,

$$B_{ij} = \frac{\frac{\theta_{ij}0.65c}{\text{Load } j} - A_{ij}}{(0.65c - 0.25c)_j} \frac{\text{deg}}{\text{in-lb}}$$

where

$$\theta_{ij}0.65c = \frac{1}{2} \tan^{-1} \frac{(a_{\theta j} - a_{0j})0.65c}{d}$$

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**TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER**

Pressure coefficient, P_c , at													
		0.16b/2						0.25b/2					
Percent	c	M = 0.80	$\alpha = -1.94^\circ$					M = 0.80	$\alpha = -0.04^\circ$				
Upper surface	0.00	.041	.669	.510	.454	.279		.050	.677	.640	.661	.624	.675
	1.25	.290	.223	.257	.287	.288		.161	.001	-.009	-.026	-.048	-.068
Lower surface	2.50	.238	.132	.148	.178	.203	.193	.120	-.049	-.050	-.086	-.070	-.086
	5.00	.164	.099	.096	.109	.114	.145	.031	-.049	-.050	-.071	-.088	-.083
Upper surface	7.50	.145	.082	.085	.065	.067	.085	.034	-.049	-.056	-.089	-.109	-.107
	10.00	.092	.046	.045	.038	.037	.033	.012	-.042	-.079	-.120	-.109	-.124
Lower surface	12.50	.061	.010	.003	.007	.006	.005	.002	-.073	-.102	-.137	-.137	-.145
	15.00	.022	-.017	-.025	-.014	-.020	-.072	-.059	-.094	-.116	-.112	-.126	-.145
Upper surface	17.50	-.006	-.020	-.041	-.048	-.053	-.109	.071	-.096	-.118	-.115	-.151	-.156
	20.00	-.024	-.042	-.051	-.061	-.068	-.103	-.075	-.104	-.124	-.137	-.152	-.156
Lower surface	25.00	-.054	-.061	-.069	-.069	-.085	-.114	.104	-.120	-.136	-.139	-.158	-.161
	30.00	-.068	-.065	-.080	-.090	-.093	-.152	-.113	-.120	-.139	-.149	-.158	-.175
Upper surface	35.00	-.068	-.073	-.093	-.100	-.114	-.130	-.110	-.120	-.143	-.149	-.166	-.145
	40.00	-.054	-.084	-.099	-.108	-.119	-.134	-.092	-.120	-.144	-.149	-.161	-.141
Lower surface	45.00	-.083	-.091	-.103	-.108	-.125	-.126	-.088	-.124	-.143	-.146	-.158	-.127
	50.00	-.087	-.092	-.107	-.103	-.114	-.100	-.112	-.124	-.131	-.136	-.138	-.094
Upper surface	55.00	-.079	-.086	-.099	-.099	-.112	-.105	-.095	-.113	-.114	-.109	-.110	-.106
	60.00	-.072	-.073	-.072	-.072	-.072	-.047	-.079	-.076	-.072	-.069	-.092	-.058
Lower surface	65.00	-.066	-.085	-.058	-.058	-.058	-.055	-.079	-.076	-.072	-.064	-.055	-.053
	70.00	-.056	-.050	-.034	-.030	-.034	-.034	-.063	-.059	-.049	-.038	-.036	-.022
Upper surface	75.00	-.051	-.028	-.017	-.011	-.007	-.015	-.056	-.033	-.024	-.011	-.005	-.005
	80.00	-.021	-.016	-.007	-.017	-.021	-.003	-.015	-.013	-.001	-.011	-.030	-.019
Lower surface	85.00	-.014	-.006	-.032	-.043	-.021	-.008	-.023	-.009	-.033	-.049	-.037	-.019
Upper surface	90.00	-.032	-.038	-.048	-.048	-.048	-.048	-.135	-.008	-.038	-.072	-.081	-.108
	95.00	-.077	-.262	-.331	-.456	-.547	-.646	-.076	-.044	-.063	-.079	-.085	-.103
Lower surface	10.00	-.094	-.188	-.238	-.317	-.403	-.545	-.044	-.027	-.061	-.073	-.081	-.104
	15.00	-.107	-.187	-.242	-.317	-.407	-.542	-.044	-.027	-.061	-.073	-.081	-.114
Upper surface	20.00	-.137	-.178	-.216	-.301	-.380	-.519	-.044	-.027	-.061	-.073	-.081	-.126
	25.00	-.137	-.172	-.201	-.250	-.290	-.294	-.044	-.027	-.061	-.073	-.081	-.143
Lower surface	30.00	-.159	-.151	-.201	-.253	-.272	-.249	-.063	-.048	-.112	-.141	-.154	-.156
	35.00	-.154	-.171	-.190	-.228	-.243	-.220	-.057	-.038	-.112	-.136	-.134	-.145
Upper surface	40.00	-.148	-.181	-.219	-.229	-.243	-.181	-.077	-.108	-.132	-.149	-.158	-.119
	45.00	-.169	-.176	-.196	-.223	-.225	-.191	-.097	-.113	-.141	-.155	-.147	-.141
Lower surface	50.00	-.149	-.185	-.195	-.221	-.221	-.187	-.084	-.122	-.146	-.162	-.156	-.147
	55.00	-.178	-.186	-.193	-.218	-.207	-.177	-.121	-.132	-.141	-.162	-.167	-.141
Upper surface	60.00	-.172	-.178	-.193	-.184	-.194	-.192	-.117	-.117	-.143	-.154	-.154	-.119
	65.00	-.162	-.146	-.145	-.157	-.160	-.152	-.112	-.122	-.129	-.135	-.136	-.101
Lower surface	70.00	-.154	-.150	-.163	-.151	-.150	-.143	-.102	-.110	-.114	-.125	-.122	-.093
	75.00	-.124	-.124	-.138	-.118	-.116	-.098	-.083	-.094	-.096	-.098	-.084	-.071
Upper surface	80.00	-.101	-.090	-.101	-.066	-.066	-.063	-.073	-.067	-.061	-.051	-.044	-.035
	85.00	-.078	-.061	-.073	-.031	-.041	-.021	-.055	-.043	-.027	-.021	-.023	-.005
Lower surface	90.00	-.044	-.034	-.038	-.003	-.001	-.021	-.025	-.019	-.006	-.009	-.011	-.005
	95.00	-.009	-.006	-.014	-.024	-.030	-.017	-.012	-.004	-.034	-.026	-.037	-.037
Upper surface	0.00	M = 0.80	$\alpha = 1.94^\circ$					M = 0.80	$\alpha = 3.90^\circ$				
	1.25	.025	.561	.447	.449	.419	.406	.030	.341	.191	.124	.067	.505
Lower surface	2.50	.027	-.339	-.484	-.667	-.797	-.557	-.236	-.100	-.908	-.104	-.008	-.671
	5.00	-.061	-.304	-.357	-.459	-.576	-.660	-.256	-.736	-.815	-.948	-.981	-.733
Upper surface	7.50	-.028	-.249	-.285	-.352	-.423	-.543	-.367	-.578	-.715	-.902	-.932	-.718
	10.00	-.158	-.196	-.247	-.300	-.329	-.385	-.335	-.379	-.588	-.844	-.881	-.704
Lower surface	12.50	-.148	-.201	-.240	-.265	-.301	-.314	-.255	-.319	-.401	-.603	-.722	-.656
	15.00	-.143	-.211	-.245	-.254	-.285	-.268	-.226	-.307	-.367	-.466	-.607	-.619
Upper surface	17.50	-.143	-.211	-.245	-.254	-.285	-.268	-.227	-.307	-.337	-.386	-.507	-.574
	20.00	-.143	-.211	-.245	-.254	-.285	-.268	-.228	-.307	-.337	-.386	-.507	-.574
Lower surface	25.00	-.173	-.204	-.228	-.253	-.273	-.223	-.250	-.294	-.317	-.343	-.343	-.325
	30.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Upper surface	35.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	40.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Lower surface	45.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	50.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Upper surface	55.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	60.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Lower surface	65.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	70.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Upper surface	75.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	80.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Lower surface	85.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	90.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Upper surface	95.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	100.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Lower surface	105.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	110.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Upper surface	115.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	120.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Lower surface	125.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	130.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Upper surface	135.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	140.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Lower surface	145.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
	150.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325
Upper surface	155.00	-.143	-.196	-.228	-.258	-.246	-.246	-.228	-.294	-.317	-.343	-.343	-.325

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:													
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent c	$M = 0.80$						$M = 0.80$						
	$H = 0.80$	$a = 5.92^\circ$					$H = 0.80$	$a = 7.95^\circ$					
Upper surface	0.00	.039	+.107	-.054	+.160	-.197	.396	-.029	-.182	-.343	-.468	-.447	.247
	1.25	-.465	-.173	-.130	-.014	-.104	-.515	-.142	-.142	-.428	-.728	-.700	-.475
	2.50	-.504	-.126	-.108	-.044	-.084	-.574	-.154	-.158	-.428	-.697	-.654	-.475
	3.75	-.514	-.104	-.083	-.007	-.077	-.546	-.184	-.147	-.342	-.613	-.589	-.479
	5.00	-.510	-.081	-.067	-.003	-.075	-.546	-.180	-.121	-.323	-.603	-.582	-.479
	6.25	-.502	-.072	-.067	-.003	-.077	-.549	-.172	-.102	-.312	-.590	-.577	-.479
	7.50	-.511	-.053	-.053	-.002	-.082	-.542	-.162	-.093	-.293	-.580	-.562	-.479
	8.75	-.502	-.041	-.041	-.001	-.087	-.546	-.154	-.084	-.283	-.573	-.553	-.479
	10.00	-.481	-.032	-.032	-.007	-.095	-.549	-.142	-.072	-.273	-.563	-.542	-.479
	11.25	-.511	-.023	-.023	-.002	-.100	-.549	-.132	-.062	-.263	-.553	-.532	-.479
Lower surface	0.00	-.371	-.393	-.053	-.962	-.760	-.551	-.513	-.522	-.121	-.869	-.668	-.426
	1.25	-.390	-.393	-.042	-.888	-.742	-.549	-.442	-.475	-.107	-.847	-.657	-.426
	2.50	-.371	-.360	-.058	-.818	-.716	-.542	-.485	-.429	-.889	-.827	-.642	-.425
	3.75	-.359	-.353	-.052	-.703	-.688	-.530	-.423	-.407	-.588	-.795	-.624	-.425
	5.00	-.351	-.345	-.046	-.606	-.660	-.515	-.412	-.386	-.587	-.766	-.604	-.425
	6.25	-.322	-.318	-.040	-.486	-.620	-.499	-.397	-.352	-.585	-.733	-.583	-.425
	7.50	-.310	-.296	-.035	-.400	-.582	-.476	-.389	-.337	-.580	-.703	-.568	-.425
	8.75	-.288	-.263	-.032	-.352	-.502	-.440	-.347	-.318	-.580	-.654	-.545	-.425
	10.00	-.241	-.240	-.028	-.247	-.462	-.415	-.283	-.285	-.257	-.580	-.511	-.424
	11.25	-.205	-.207	-.016	-.204	-.413	-.388	-.242	-.243	-.233	-.518	-.489	-.424
Upper surface	12.50	-.182	-.179	-.168	-.166	-.369	-.364	-.226	-.220	-.206	-.460	-.468	-.429
	13.75	-.159	-.150	-.143	-.139	-.324	-.349	-.197	-.191	-.189	-.417	-.451	-.423
	15.00	-.127	-.119	-.106	-.089	-.281	-.328	-.160	-.157	-.159	-.374	-.432	-.416
	16.25	-.107	-.084	-.077	-.067	-.237	-.307	-.139	-.121	-.120	-.325	-.408	-.398
	17.50	-.059	-.051	-.057	-.054	-.185	-.295	-.090	-.086	-.082	-.283	-.380	-.317
	18.75	-.011	-.018	-.006	-.005	-.156	-.281	-.047	-.045	-.045	-.223	-.369	-.241
	20.00	.351	.347	.336	.570	.592	.466	.657	.638	.615	.621	.629	.500
	21.25	.472	.430	.448	.475	.494	.394	.593	.529	.540	.550	.537	
	22.50	.406	.343	.350	.364	.384	.326	.515	.436	.439	.437	.449	.374
	23.75	.348	.282	.285	.302	.321	.254	.444	.367	.371	.375	.387	.299
Lower surface	25.00	.292	.247	.249	.236	.263	.198	.493	.331	.328	.326	.327	.247
	26.25	.235	.193	.187	.196	.205	.110	.318	.267	.260	.268	.263	.191
	27.50	.182	.174	.147	.143	.153	.040	.251	.237	.211	.198	.207	.074
	28.75	.149	.129	.114	.105	.109	-.010	.212	.189	.173	.164	.157	.021
	30.00	.125	.102	.092	.083	.083	-.049	.194	.171	.151	.151	.153	.015
	31.25	.070	.064	.064	.064	.064	-.027	.080	.091	.077	.063	.056	.074
	32.50	.064	.053	.054	.054	.054	-.027	.080	.091	.077	.063	.056	.074
	33.75	.004	-.002	-.005	-.026	-.024	-.124	.043	.039	.030	.009	-.003	-.130
	35.00	-.010	-.016	-.011	-.023	-.050	-.124	.022	.020	.018	-.003	-.037	-.133
	36.25	-.010	-.025	-.026	-.039	-.059	-.124	.022	.004	-.002	-.020	-.056	-.141
Upper surface	37.50	-.020	-.029	-.026	-.049	-.072	-.133	.003	-.006	-.011	-.038	-.075	-.154
	38.75	-.013	-.029	-.024	-.041	-.064	-.121	.001	-.011	-.017	-.039	-.075	-.155
	40.00	-.049	-.031	-.028	-.040	-.065	-.124	-.027	-.021	-.025	-.049	-.086	-.161
	41.25	-.036	-.027	-.018	-.031	-.056	-.121	-.028	-.021	-.024	-.051	-.101	-.149
	42.50	-.020	-.017	-.006	-.013	-.039	-.101	-.028	-.021	-.024	-.053	-.101	-.149
	43.75	-.015	-.006	-.007	-.005	-.024	-.084	-.020	-.012	-.012	-.050	-.137	-.204
	45.00	-.010	-.005	-.008	-.009	-.017	-.041	-.010	-.009	-.009	-.085	-.187	-.224
	46.25	.409	.409	.407	.407	.407	.407	.487	.475	.462	.462	.460	
	47.50	.378	.378	.374	.374	.374	.374	.450	.435	.432	.432	.435	
	48.75	.384	.384	.387	.387	.387	.387	.453	.420	.406	.406	.422	
Lower surface	50.00	.361	.357	.357	.357	.357	.357	.397	.359	.359	.359	.359	
	51.25	.351	.347	.347	.347	.347	.347	.397	.359	.359	.359	.359	
	52.50	.350	.346	.346	.346	.346	.346	.397	.359	.359	.359	.359	
	53.75	.345	.341	.341	.341	.341	.341	.397	.359	.359	.359	.359	
	55.00	.343	.341	.341	.341	.341	.341	.397	.359	.359	.359	.359	
	56.25	.342	.340	.340	.340	.340	.340	.397	.359	.359	.359	.359	
	57.50	.341	.339	.339	.339	.339	.339	.397	.359	.359	.359	.359	
	58.75	.340	.338	.338	.338	.338	.338	.397	.359	.359	.359	.359	
	60.00	.339	.337	.337	.337	.337	.337	.397	.359	.359	.359	.359	
	61.25	.338	.336	.336	.336	.336	.336	.397	.359	.359	.359	.359	
Upper surface	62.50	.337	.335	.335	.335	.335	.335	.397	.359	.359	.359	.359	
	63.75	.336	.334	.334	.334	.334	.334	.397	.359	.359	.359	.359	
	65.00	.335	.333	.333	.333	.333	.333	.397	.359	.359	.359	.359	
	66.25	.334	.332	.332	.332	.332	.332	.397	.359	.359	.359	.359	
	67.50	.333	.331	.331	.331	.331	.331	.397	.359	.359	.359	.359	
	68.75	.332	.330	.330	.330	.330	.330	.397	.359	.359	.359	.359	
	70.00	.331	.329	.329	.329	.329	.329	.397	.359	.359	.359	.359	
	71.25	.330	.328	.328	.328	.328	.328	.397	.359	.359	.359	.359	
	72.50	.329	.327	.327	.327	.327	.327	.397	.359	.359	.359	.359	
	73.75	.328	.327	.327	.327	.327	.327	.397	.359	.359	.359	.359	
Lower surface	75.00	.327	.326	.326	.326	.326	.326	.397	.359	.359	.359	.359	
	76.25	.326	.325	.325	.325	.325	.325	.397	.359	.359	.359	.359	
	77.50	.325	.324	.324	.324	.324	.324	.397	.359	.359	.359	.359	
	78.75	.324	.323	.323	.323	.323	.323	.397	.359	.359	.359	.359	
	80.00	.323	.322	.322	.322	.322	.322	.397	.359	.359	.359	.359	
	81.25	.322	.321	.321	.321	.321	.321	.397	.359	.359	.359	.359	
	82.50	.321	.320	.320	.320	.320	.320	.397	.359	.359	.359	.359	
	83.75	.320	.319	.319	.319	.319	.319	.397	.359	.359	.359	.359	
	85.00	.319	.318	.318	.318	.318	.318	.397	.359	.359	.359	.359	
	86.25	.318	.317	.317	.317	.317	.317	.397	.359	.359	.359	.359	
Upper surface	87.50	.317	.316	.316	.316	.316	.316	.397	.359	.359	.359	.359	
	88.75	.316	.315	.315	.315	.315	.315	.397	.359	.359	.359	.359	
	90.00	.315	.314	.314	.314	.314	.314	.397	.359	.359	.359	.359	
	91.25	.314	.313	.313	.313	.313	.313	.397	.359	.359	.359	.359	
	92.50	.313	.312	.312	.312	.312	.312	.397	.359	.359	.359	.359	
	93.75	.312	.311	.311	.311	.311	.311	.397	.359	.359	.359	.359	
	95.00	.311	.310	.310	.310	.310	.310	.397	.359	.359	.359	.359	
	96												

TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:													
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.76b/2	0.85b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent													
c	M = 0.80	a = 13.95°		M = 0.80	a = 17.24°								
Upper surface	0.00	.022	-.089	-1.079	-1.081	-.665	-.333	.002	-1.047	-1.017	-.753	-.646	-.573
	1.25	-1.106	-1.338	-1.009	-.724	-.622	-.495	-.849	-.879	-.795	-.729	-.623	-.541
	2.50	-1.265	-1.380	-1.035	-.703	-.621	-.491	-.826	-.884	-.785	-.701	-.627	-.541
	3.75	-1.293	-1.328	-.973	-.659	-.617	-.491	-.840	-.885	-.795	-.692	-.624	-.540
	5.00	-1.290	-1.279	-.947	-.698	-.611	-.491	-.856	-.906	-.799	-.690	-.617	-.541
	6.25	-1.098	-1.248	-.937	-.698	-.611	-.491	-.867	-.896	-.809	-.687	-.621	-.541
	7.50	-1.097	-1.247	-.937	-.698	-.611	-.491	-.875	-.897	-.809	-.687	-.621	-.541
	8.75	-1.740	-1.089	-.894	-.695	-.600	-.492	-.884	-.897	-.801	-.686	-.617	-.546
	10.00	-1.674	-1.079	-.873	-.689	-.598	-.492	-.872	-.855	-.773	-.680	-.610	-.547
Lower surface	25.00	-1.677	-1.063	-.855	-.680	-.595	-.494	-.875	-.829	-.761	-.674	-.605	-.549
	35.00	-1.576	-1.077	-.856	-.673	-.593	-.495	-.875	-.808	-.756	-.674	-.604	-.557
	45.00	-1.533	-1.075	-.810	-.661	-.593	-.498	-.835	-.773	-.750	-.674	-.602	-.554
	55.00	-1.511	-1.078	-.861	-.691	-.500	-.537	-.858	-.748	-.743	-.670	-.607	-.559
	65.00	-1.504	-1.060	-.749	-.650	-.590	-.504	-.802	-.569	-.659	-.636	-.610	-.560
	75.00	-1.441	-1.025	-.725	-.645	-.588	-.507	-.572	-.688	-.729	-.666	-.608	-.562
	85.00	-1.465	-1.021	-.672	-.630	-.588	-.509	-.560	-.673	-.719	-.658	-.612	-.566
	95.00	-1.444	-1.017	-.672	-.630	-.588	-.509	-.512	-.651	-.705	-.657	-.612	-.572
	0.00	.846	.790	.722	.674	.642	.550	.906	.826	.738	.675	.624	.541
Upper surface	2.50	.871	.731	.690	.663	.634	.514	.965	.800	.736	.690	.654	.528
	5.00	.870	.730	.691	.664	.635	.515	.967	.731	.677	.646	.620	.506
	7.50	.855	.757	.654	.626	.592	.446	.974	.741	.681	.659	.617	.579
	10.00	.867	.728	.508	.485	.466	.359	.969	.616	.580	.554	.519	.459
	15.00	.854	.757	.433	.414	.400	.273	.804	.542	.513	.484	.461	.326
	20.00	.840	.715	.372	.345	.340	.195	.824	.492	.451	.419	.405	.252
	25.00	.885	.754	.328	.295	.289	.137	.849	.437	.401	.373	.354	.186
	30.00	.840	.703	.280	.258	.247	.092	.823	.384	.354	.329	.308	.123
	35.00	.824	.759	.238	.215	.197	.049	.834	.337	.309	.282	.257	.092
	40.00	.847	.725	.205	.176	.166	.005	.819	.298	.269	.241	.225	.034
Lower surface	45.00	.828	.788	.170	.132	.123	.058	.297	.256	.230	.198	.183	.023
	50.00	.813	.749	.111	.081	.085	.089	.228	.215	.188	.160	.141	.055
	55.00	.813	.718	.104	.077	.073	.039	.181	.112	.119	.130	.102	.079
	60.00	.812	.809	.069	.058	.004	.125	.173	.107	.120	.106	.051	.103
	65.00	.077	.061	.047	.005	.026	.132	.122	.108	.092	.055	.013	.049
	70.00	.047	.042	.025	.012	.042	.141	.081	.084	.057	.030	.003	.147
	75.00	.025	.012	-.009	-.042	-.074	.182	.050	.041	.022	-.005	-.042	.170
	80.00	-.006	-.007	-.051	-.065	-.097	.197	-.019	-.010	-.009	-.037	-.073	-.198
	85.00	-.038	-.035	-.053	-.095	-.137	.188	-.013	-.024	-.041	-.072	-.119	-.194
	90.00	-.068	-.057	-.100	-.142	-.176	.256	-.047	-.068	-.100	-.122	-.162	-.257
	95.00	-.099	-.111	-.144	-.226	-.246	.280	-.163	-.151	-.171	-.217	-.240	-.286
Percent		M = 0.80	a = 19.29°		M = 0.80	a = 21.30°							
c	0.00	-.017	-.711	-.719	-.697	-.627	-.601	-.059	-.779	-.771	-.744	-.697	-.660
Upper surface	1.25	-.698	-.687	-.719	-.691	-.618	-.574	-.786	-.768	-.762	-.738	-.691	-.635
	2.50	-.691	-.693	-.694	-.673	-.621	-.572	-.771	-.769	-.758	-.734	-.692	-.634
	5.00	-.657	-.699	-.701	-.670	-.621	-.571	-.742	-.775	-.762	-.729	-.670	-.623
	7.50	-.658	-.702	-.694	-.666	-.616	-.574	-.753	-.780	-.756	-.727	-.686	-.635
	10.00	-.667	-.707	-.702	-.665	-.620	-.577	-.758	-.780	-.762	-.727	-.688	-.636
	15.00	-.685	-.713	-.705	-.655	-.618	-.580	-.768	-.785	-.765	-.726	-.687	-.637
	20.00	-.675	-.718	-.704	-.662	-.613	-.581	-.772	-.787	-.766	-.724	-.684	-.638
	25.00	-.699	-.717	-.710	-.667	-.614	-.583	-.774	-.788	-.764	-.723	-.683	-.639
	30.00	-.697	-.717	-.709	-.657	-.613	-.585	-.747	-.789	-.767	-.720	-.683	-.640
	35.00	-.681	-.717	-.707	-.657	-.614	-.589	-.742	-.785	-.769	-.720	-.684	-.642
	40.00	-.669	-.714	-.707	-.660	-.618	-.589	-.723	-.780	-.766	-.723	-.684	-.643
	45.00	-.648	-.714	-.704	-.659	-.613	-.591	-.693	-.775	-.766	-.722	-.684	-.645
	50.00	-.658	-.706	-.704	-.661	-.622	-.596	-.701	-.766	-.764	-.723	-.688	-.644
	55.00	-.653	-.700	-.700	-.661	-.623	-.598	-.687	-.760	-.763	-.723	-.688	-.651
	60.00	-.623	-.693	-.698	-.655	-.628	-.602	-.686	-.756	-.761	-.715	-.690	-.654
	65.00	-.615	-.686	-.686	-.653	-.630	-.587	-.681	-.746	-.756	-.715	-.692	-.657
	70.00	-.623	-.682	-.682	-.652	-.632	-.611	-.688	-.751	-.717	-.689	-.657	
	75.00	-.599	-.676	-.688	-.654	-.634	-.587	-.687	-.747	-.726	-.700	-.682	
	80.00	-.597	-.670	-.680	-.652	-.633	-.617	-.684	-.715	-.724	-.704	-.680	
	85.00	-.594	-.669	-.672	-.651	-.632	-.623	-.688	-.693	-.726	-.705	-.688	
	90.00	-.588	-.637	-.666	-.647	-.624	-.626	-.616	-.672	-.715	-.700	-.677	
	95.00	-.531	-.610	-.658	-.641	-.629	-.629	-.534	-.627	-.706	-.693	-.660	
Percent		M = 0.80	a = 19.29°		M = 0.80	a = 21.30°							
c	1.25	.920	.842	.741	.666	.603	.525	.859	.848	.736	.646	.566	.502
Upper surface	2.50	.909	.834	.758	.696	.656	.525	1.005	.858	.768	.702	.651	.514
	5.00	.922	.711	.715	.686	.636	.513	.944	.813	.743	.691	.655	.517
	7.50	.913	.710	.666	.656	.603	.476	.858	.757	.704	.658	.600	.489
	10.00	.754	.665	.623	.590	.562	.422	.641	.641	.616	.585	.525	.452
	15.00	.657	.593	.557	.523	.494	.333	.693	.641	.603	.588	.530	.400
	20.00	.580	.525	.501	.460	.444	.291	.615	.573	.544	.507	.480	.312
	25.00	.523	.487	.446	.411	.393	.218	.564	.530	.490	.461	.433	.247
	30.00	.477	.432	.402	.372	.348	.155	.514	.478	.443	.415	.386	.184
	35.00	.367	.385	.353	.323	.297	.120	.431	.428	.401	.366	.326	.143
	40.00	.375	.340	.314	.281	.264	.063	.418	.392	.357	.324	.301	.091
	45.00	.375	.306	.273	.258	.221	.001	.385	.342	.318	.282	.259	.026
	50.00	.275	.228	.232	.193	.178	-.030	.310	.300	.294	.246	.216	-.006
	55.00	.239	.241	.209	.178	.158	.036	.268	.263	.240	.209	.164	-.036
	60.00	.214	.185	.157	.130	.084	-.084	.246	.219	.198	.164	.117	-.063
	65.00	.163	.141	.128	.066	.046	-.122	.132	.104	.111	.123	.011	-.096
	70.00	.115	.116	.092	.058	.027	-.137	.137	.148	.124	.084	.057	-.155
	75.00	.095	.071	.052	.019	.017	-.101	.106	.097	.082	.093	.012	-.181
	80.00	.042	.036	.016	-.015	-.013	-.053	.066	.063	.042	.011	-.027	-.183
	85.00	.001	-.003	-.020	-.054	-.093	-.193	.013	.023	.005	-.024	-.073	-.182
	90.00	-.036	-.035	-.079	-.103	-.145	-.260	-.042	-.033	-.060	-.085	-.129	-.259
	95.00	-.165	-.147	-.161	-.204	-.227	-.287	-.096	-.121	-.143	-.192	-.214	-.289

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient, P_c , at:												
		0.10b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.90b/2		0.10b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.90b/2
Percent c	M = 0.80	$\alpha = 23.46^\circ$						M = 0.80	$\alpha = 25.45^\circ$					
Upper surface	0.00	-0.134	-0.955	-0.746	-0.906	-0.875	-0.823	-0.191	-1.032	-1.028	-1.029	-0.964	-0.865	
	1.25	-0.957	-0.951	-0.942	-0.923	-0.865	-0.778	-1.049	-1.032	-1.029	-1.017	-0.950	-0.812	
	2.50	-0.949	-0.951	-0.936	-0.913	-0.865	-0.776	-1.032	-1.032	-1.023	-1.001	-0.950	-0.811	
	5.00	-0.932	-0.932	-0.941	-0.909	-0.863	-0.773	-1.021	-1.035	-1.029	-0.995	-0.947	-0.809	
	7.50	-0.942	-0.935	-0.935	-0.907	-0.858	-0.774	-1.026	-1.035	-1.022	-0.995	-0.940	-0.808	
	10.00	-0.944	-0.934	-0.944	-0.906	-0.855	-0.773	-1.030	-1.032	-1.020	-0.984	-0.956	-0.807	
	12.50	-0.946	-0.936	-0.946	-0.905	-0.856	-0.773	-1.030	-1.032	-1.021	-0.981	-0.956	-0.807	
	15.00	-0.940	-0.938	-0.946	-0.902	-0.854	-0.772	-1.022	-1.041	-1.021	-0.987	-0.954	-0.806	
	20.00	-0.940	-0.938	-0.946	-0.902	-0.854	-0.772	-0.984	-1.039	-1.031	-0.984	-0.950	-0.801	
	25.00	-0.928	-0.939	-0.944	-0.900	-0.852	-0.772	-0.932	-1.032	-1.030	-0.983	-0.927	-0.803	
	30.00	-0.901	-0.933	-0.944	-0.898	-0.849	-0.773	-0.865	-1.021	-1.030	-0.981	-0.925	-0.805	
	35.00	-0.841	-0.948	-0.942	-0.899	-0.848	-0.777	-0.800	-0.954	-1.025	-0.977	-0.919	-0.807	
	40.00	-0.801	-0.931	-0.943	-0.899	-0.847	-0.778	-0.732	-0.888	-1.019	-0.975	-0.918	-0.807	
	45.00	-0.775	-0.919	-0.941	-0.895	-0.847	-0.779	-0.687	-0.814	-1.007	-0.971	-0.912	-0.806	
	50.00	-0.753	-0.887	-0.940	-0.895	-0.846	-0.780	-0.637	-0.738	-0.981	-0.958	-0.905	-0.803	
	55.00	-0.724	-0.860	-0.934	-0.892	-0.845	-0.781	-0.577	-0.695	-0.955	-0.956	-0.905	-0.801	
	60.00	-0.717	-0.831	-0.927	-0.881	-0.845	-0.780	-0.547	-0.679	-0.955	-0.956	-0.904	-0.800	
	65.00	-0.690	-0.806	-0.918	-0.861	-0.839	-0.771	-0.526	-0.656	-0.955	-0.956	-0.903	-0.799	
	70.00	-0.640	-0.740	-0.903	-0.821	-0.824	-0.778	-0.496	-0.629	-0.955	-0.956	-0.902	-0.798	
	75.00	-0.596	-0.692	-0.866	-0.849	-0.837	-0.778	-0.451	-0.586	-0.941	-0.955	-0.898	-0.792	
	80.00	-0.555	-0.652	-0.842	-0.866	-0.856	-0.774	-0.417	-0.559	-0.933	-0.955	-0.895	-0.786	
	85.00	-0.523	-0.568	-0.830	-0.862	-0.827	-0.774	-0.382	-0.500	-0.774	-0.918	-0.885	-0.783	
	90.00	-0.449	-0.506	-0.781	-0.858	-0.820	-0.771	-0.315	-0.384	-0.678	-0.896	-0.871	-0.781	
	95.00	-0.340	-0.409	-0.712	-0.854	-0.766	-0.766	-0.263	-0.351	-0.566	-0.871	-0.885	-0.775	
Lower surface	0.00	-0.852	-0.837	-0.715	-0.609	-0.511	-0.471	-0.813	-0.833	-0.702	-0.581	-0.476	-0.452	
	1.25	-0.957	-0.917	-0.712	-0.685	-0.555	-0.497	-0.987	-0.944	-0.778	-0.677	-0.626	-0.489	
	2.50	-0.970	-0.849	-0.768	-0.666	-0.519	-0.479	-0.926	-0.899	-0.772	-0.711	-0.677	-0.526	
	5.00	-0.988	-0.799	-0.740	-0.684	-0.519	-0.478	-0.824	-0.879	-0.772	-0.711	-0.677	-0.524	
	7.50	-0.934	-0.761	-0.705	-0.657	-0.525	-0.472	-0.867	-0.803	-0.746	-0.691	-0.659	-0.508	
	10.00	-0.834	-0.761	-0.705	-0.657	-0.525	-0.472	-0.779	-0.737	-0.693	-0.643	-0.607	-0.441	
	12.50	-0.737	-0.690	-0.644	-0.602	-0.570	-0.409	-0.716	-0.682	-0.641	-0.592	-0.567	-0.382	
	15.00	-0.669	-0.637	-0.588	-0.545	-0.521	-0.442	-0.682	-0.630	-0.592	-0.548	-0.524	-0.323	
	20.00	-0.612	-0.577	-0.541	-0.501	-0.477	-0.282	-0.611	-0.583	-0.546	-0.505	-0.477	-0.263	
	25.00	-0.569	-0.527	-0.491	-0.461	-0.432	-0.215	-0.538	-0.516	-0.496	-0.459	-0.432	-0.224	
	30.00	-0.483	-0.479	-0.447	-0.410	-0.381	-0.179	-0.519	-0.493	-0.463	-0.418	-0.399	-0.164	
	35.00	-0.461	-0.437	-0.409	-0.367	-0.347	-0.119	-0.482	-0.448	-0.419	-0.379	-0.357	-0.101	
	40.00	-0.454	-0.395	-0.365	-0.326	-0.305	-0.055	-0.417	-0.402	-0.381	-0.355	-0.325	-0.066	
	50.00	-0.363	-0.349	-0.324	-0.283	-0.261	-0.021	-0.372	-0.365	-0.343	-0.305	-0.263	-0.032	
	55.00	-0.310	-0.289	-0.250	-0.206	-0.176	-0.012	-0.332	-0.320	-0.298	-0.260	-0.215	-0.001	
	60.00	-0.261	-0.249	-0.225	-0.196	-0.161	-0.044	-0.290	-0.262	-0.244	-0.214	-0.170	-0.032	
	65.00	-0.239	-0.223	-0.209	-0.185	-0.158	-0.074	-0.250	-0.226	-0.204	-0.181	-0.147	-0.044	
	70.00	-0.186	-0.194	-0.174	-0.132	-0.096	-0.107	-0.219	-0.201	-0.181	-0.157	-0.137	-0.044	
	75.00	-0.154	-0.145	-0.127	-0.099	-0.067	-0.137	-0.208	-0.197	-0.183	-0.159	-0.136	-0.100	
	80.00	-0.116	-0.114	-0.088	-0.049	-0.004	-0.172	-0.157	-0.162	-0.140	-0.093	-0.051	-0.134	
	85.00	-0.062	-0.074	-0.049	-0.007	-0.047	-0.175	-0.106	-0.121	-0.099	-0.046	-0.002	-0.141	
	90.00	-0.010	-0.018	-0.011	-0.059	-0.105	-0.254	-0.043	-0.066	-0.037	-0.019	-0.064	-0.223	
	95.00	-0.049	-0.047	-0.200	-0.173	-0.200	-0.262	-0.031	-0.000	-0.044	-0.195	-0.164	-0.264	

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TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:												
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2
Percent c												
	M = 0.90	c = -2.02°					M = 0.90	c = -0.01°				
Upper surface												
0.00	.037	.676	.613	.574	.509	.371	.057	.702	.659	.654	.605	.623
1.00	.311	.251	.248	.273	.269	.288	.236	.101	.099	.110	.075	.130
2.00	.249	.139	.146	.167	.183	.171	.172	.047	.032	.029	.035	.019
3.00	.111	.094	.104	.104	.104	.111	.107	.033	.010	.006	.016	.037
4.00	.146	.072	.079	.073	.049	.042	.101	.001	.008	.022	.034	.073
5.00	.101	.049	.027	.027	.017	.014	.045	.003	.004	.007	.026	.104
6.00	.073	.017	.014	.004	.021	.073	.026	.029	.001	.008	.009	.117
7.00	.030	.017	.039	.033	.043	.151	.005	.060	.086	.082	.114	.204
8.00	.001	.029	.057	.067	.080	.232	.037	.066	.091	.121	.145	.251
9.00	.061	.043	.073	.090	.099	.223	.110	.083	.104	.124	.154	.221
10.00	.056	.071	.093	.107	.123	.214	.089	.106	.127	.140	.174	.206
11.00	.076	.082	.113	.130	.145	.247	.104	.119	.144	.184	.186	.246
12.00	.088	.095	.135	.148	.171	.205	.119	.125	.162	.176	.210	.212
13.00	.103	.114	.146	.164	.188	.192	.101	.156	.174	.190	.219	.193
14.00	.082	.131	.121	.175	.200	.169	.103	.156	.184	.193	.230	.166
15.00	.126	.136	.138	.187	.187	.182	.110	.156	.174	.191	.205	.146
16.00	.115	.121	.142	.145	.141	.158	.129	.159	.175	.186	.202	.116
17.00	.108	.112	.120	.120	.116	.079	.111	.217	.121	.103	.102	.063
18.00	.093	.097	.098	.088	.082	.062	.094	.093	.088	.064	.042	.041
19.00	.076	.069	.067	.053	.044	.035	.068	.062	.051	.018	.025	.016
20.00	.063	.039	.035	.023	.005	.013	.050	.024	.016	.002	.011	.010
21.00	.020	.020	.008	.009	.029	.005	.009	.007	.014	.034	.048	.028
22.00	.017	.010	.026	.045	.038	.005	.030	.024	.048	.071	.057	.030
Lower surface												
0.00	.018	.297	.464	.822	.987	.1047	.338	.067	.147	.423	.423	.493
1.00	.036	.234	.308	.525	.832	.999	.068	.079	.125	.146	.146	.495
2.00	.060	.168	.253	.310	.424	.899	.037	.042	.094	.145	.195	.392
3.00	.078	.172	.243	.313	.332	.751	.009	.069	.118	.168	.181	.335
4.00	.118	.174	.233	.321	.347	.576	.025	.082	.134	.174	.184	.274
5.00	.126	.177	.226	.297	.353	.415	.047	.091	.128	.169	.193	.261
6.00	.152	.162	.235	.297	.342	.399	.083	.091	.147	.200	.209	.288
7.00	.171	.173	.230	.282	.324	.291	.080	.124	.156	.200	.224	.256
8.00	.147	.192	.238	.288	.327	.252	.143	.178	.212	.247	.255	.205
9.00	.171	.229	.238	.288	.327	.252	.143	.178	.212	.247	.255	.205
10.00	.207	.212	.257	.320	.345	.247	.135	.168	.210	.247	.255	.207
11.00	.180	.231	.260	.339	.356	.247	.119	.175	.210	.255	.264	.252
12.00	.234	.259	.301	.349	.350	.228	.175	.194	.223	.265	.264	.207
13.00	.245	.268	.298	.326	.320	.186	.182	.207	.223	.250	.264	.165
14.00	.254	.264	.284	.284	.253	.145	.194	.207	.211	.220	.212	.137
15.00	.228	.225	.234	.220	.161	.128	.169	.178	.180	.158	.104	.046
16.00	.192	.176	.168	.138	.098	.104	.143	.141	.137	.122	.091	.076
17.00	.172	.146	.125	.102	.075	.086	.143	.122	.101	.082	.065	.056
18.00	.141	.103	.085	.059	.041	.065	.094	.082	.065	.042	.031	.033
19.00	.077	.040	.042	.024	.016	.011	.061	.051	.019	.007	.005	.022
20.00	.036	.026	.011	.013	.021	.016	.016	.019	.012	.016	.032	.034
21.00	.006	.007	.026	.039	.035	.026	.022	.019	.046	.056	.067	.017
	M = 0.90	c = 1.96°					M = 0.90	c = 3.91°				
Upper surface												
0.00	.060	.642	.542	.557	.528	.642	.041	.531	.390	.388	.342	.564
1.00	.071	.231	.314	.644	.765	.737	.065	.697	.831	.986	-1.045	.970
2.00	.011	.214	.289	.582	.644	.896	.129	.416	.739	.833	.959	.1356
3.00	.042	.214	.221	.280	.349	.544	.246	.532	.496	.674	.777	.1082
4.00	.095	.140	.140	.140	.140	.140	.140	.140	.140	.140	.140	.1003
5.00	.124	.137	.210	.275	.311	.582	.232	.248	.314	.354	.745	.303
6.00	.088	.157	.209	.254	.311	.598	.182	.252	.323	.362	.641	.362
7.00	.091	.176	.225	.254	.313	.352	.182	.252	.323	.362	.543	.826
8.00	.148	.170	.222	.261	.308	.297	.242	.259	.322	.372	.425	.737
9.00	.238	.192	.228	.262	.313	.246	.335	.383	.424	.424	.613	.483
10.00	.194	.213	.235	.273	.323	.224	.283	.344	.382	.446	.448	.483
11.00	.202	.210	.248	.287	.326	.258	.301	.312	.360	.409	.447	.326
12.00	.182	.212	.257	.300	.342	.245	.283	.345	.384	.427	.457	.257
13.00	.197	.224	.270	.309	.342	.255	.263	.343	.383	.428	.451	.208
14.00	.177	.248	.283	.309	.342	.274	.336	.392	.400	.423	.451	.121
15.00	.234	.248	.262	.264	.221	.125	.336	.392	.382	.286	.326	.126
16.00	.199	.204	.209	.170	.130	.121	.299	.308	.326	.280	.148	.126
17.00	.163	.197	.148	.104	.085	.077	.241	.227	.202	.129	.080	.087
18.00	.119	.112	.094	.064	.056	.057	.161	.143	.115	.065	.046	.077
19.00	.078	.073	.054	.026	.023	.051	.103	.091	.072	.030	.020	.061
20.00	.057	.035	.014	.004	.016	.005	.075	.052	.032	.001	.013	.042
21.00	.010	.008	.016	.035	.049	.016	.030	.025	.002	.027	.037	.029
Lower surface												
0.00	.299	.247	.233	.257	.293	.412	.389	.368	.352	.393	.429	.352
1.00	.236	.161	.165	.181	.182	.156	.321	.248	.276	.293	.307	.362
2.00	.190	.129	.120	.124	.130	.100	.267	.216	.211	.208	.228	.193
3.00	.147	.082	.070	.078	.093	.045	.215	.195	.148	.152	.177	.125
4.00	.111	.057	.034	.048	.053	.010	.175	.123	.103	.119	.127	.080
5.00	.073	.032	.015	.005	.007	.066	.127	.091	.081	.076	.074	.010
6.00	.033	.007	.012	.036	.029	.140	.081	.080	.042	.014	.034	.092
7.00	.016	.002	.021	.056	.057	.193	.059	.048	.015	.009	.010	.167
8.00	.016	.048	.049	.094	.109	.173	.011	.011	.010	.036	.035	.199
9.00	.045	.039	.083	.114	.122	.194	.015	.033	.058	.078	.087	.248
10.00	.038	.087	.105	.141	.144	.194	.010	.062	.080	.107	.116	.274
11.00	.093	.108	.124	.154	.164	.176	.070	.084	.104	.128	.138	.247
12.00	.102	.121	.128	.149	.151	.143	.092	.099	.108	.128	.163	.229
13.00	.116	.125	.130	.145	.164	.119	.097	.106	.117	.128	.143	.179
14.00	.102	.113	.117	.133	.146	.109	.090	.103	.111	.128	.161	.139
15.00	.092	.094	.098	.103	.094	.082	.083	.088	.095	.110	.117	.100
16.00	.046	.094	.085	.083	.075	.061	.016	.095	.090	.093	.095	.081
17.00	.077	.064	.042	.042	.037	.011	.016	.017	.022	.043	.025	.035
18.00	.081	.040	.017	.007	.011	.013	.011	.022	.004	.043	.025	.035
19.00	.013	.007	.011	.024	.025	.005	.031	.021	.002	.010	.008	.020
20.00	.028	.020	.042	.047	.057	.042	.014	.004	.024	.033	.035	.018

~~CONFIDENTIAL~~

TABLE L - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:														
		0.16b/2	0.25b/2	0.40b/2	0.50b/2	0.75b/2	0.90b/2		0.16b/2	0.25b/2	0.40b/2	0.50b/2	0.75b/2	0.90b/2
Percent	c	$M = 0.90$ $\alpha = 5.86^\circ$						$M = 0.90$ $\alpha = 7.82^\circ$						
Upper surface	0.00	.048	.395	.235	.184	.100	.448	.044	.222	.044	.046	.197	.308	
	1.85	-.205	-1.051	-1.139	-1.198	-1.240	-0.79	-.355	-1.262	-1.309	-1.318	-1.059	-1.118	
	2.50	-.266	-.817	-.1055	-.1110	-.1131	-.007	-.124	-.111	-.1239	-.1251	-.1036	-.1156	
	5.00	-.410	-.616	-.909	-.990	-.949	-.566	-.580	-.863	-.6152	-.6177	-.676	-.632	
	7.50	-.390	-.592	-.724	-.847	-.1022	-.511	-.510	-.800	-.1032	-.1026	-.950	-.1048	
	10.00	-.244	-.360	-.601	-.687	-.943	-.517	-.512	-.800	-.1006	-.1007	-.945	-.1045	
	15.00	-.272	-.346	-.516	-.518	-.931	-.505	-.500	-.800	-.1003	-.1003	-.945	-.1045	
	20.00	-.253	-.359	-.419	-.621	-.878	-.574	-.508	-.800	-.1077	-.1090	-.872	-.1043	
	25.00	-.315	-.336	-.399	-.528	-.772	-.844	-.509	-.833	-.504	-.762	-.841	-.1057	
	30.00	-.402	-.359	-.407	-.467	-.748	-.780	-.484	-.852	-.492	-.626	-.820	-.1059	
Lower surface	35.00	-.348	-.378	-.417	-.464	-.697	-.656	-.438	-.666	-.490	-.569	-.785	-.1046	
	40.00	-.374	-.386	-.456	-.479	-.557	-.665	-.466	-.675	-.500	-.552	-.705	-.1034	
	45.00	-.389	-.389	-.444	-.492	-.551	-.567	-.466	-.675	-.503	-.540	-.674	-.1012	
	50.00	-.370	-.389	-.445	-.504	-.497	-.504	-.461	-.671	-.495	-.544	-.629	-.1033	
	55.00	-.332	-.408	-.469	-.514	-.469	-.475	-.415	-.685	-.483	-.544	-.599	-.1031	
	60.00	-.412	-.433	-.476	-.514	-.476	-.493	-.493	-.687	-.487	-.540	-.580	-.1030	
	65.00	-.365	-.450	-.486	-.519	-.486	-.498	-.470	-.690	-.490	-.528	-.580	-.1029	
	70.00	-.246	-.349	-.433	-.509	-.490	-.536	-.413	-.690	-.430	-.534	-.573	-.1013	
	75.00	-.245	-.215	-.163	-.095	-.152	-.357	-.301	-.280	-.305	-.344	-.430	-.1023	
	80.00	-.126	-.107	-.045	-.040	-.093	-.315	-.184	-.180	-.176	-.283	-.391	-.1049	
Upper surface	85.00	-.070	-.052	-.020	-.004	-.050	-.260	-.118	-.111	-.093	-.232	-.357	-.1043	
	90.00	-.017	-.018	-.015	-.024	-.015	-.260	-.058	-.069	-.045	-.179	-.322	-.1042	
	95.00	.026	.017	.043	.059	.012	-.239	-.009	-.023	-.007	-.147	-.287	-.1039	
	1.85	.916	.508	.489	.515	.545	.445	.630	.621	.590	.605	.617	.508	
	5.00	.453	.403	.406	.416	.432	.369	.584	.521	.515	.521	.524	.442	
	7.85	.394	.352	.322	.329	.351	.301	.540	.436	.422	.436	.437	.377	
	10.00	.244	.244	.241	.252	.286	.235	.540	.356	.354	.356	.357	.308	
	15.00	.227	.188	.204	.220	.253	.180	.387	.329	.309	.314	.325	.254	
	20.00	.149	.166	.125	.098	.123	.001	.317	.272	.256	.259	.258	.157	
	25.00	.140	.125	.086	.068	.078	-.077	.248	.249	.205	.185	.202	.073	
Lower surface	30.00	.124	.088	.065	.040	.046	-.123	.192	.194	.133	.148	.154	.002	
	35.00	.064	.054	.036	.012	.009	-.134	.118	.121	.107	.095	.077	-.049	
	40.00	.055	.034	.013	-.014	-.013	-.190	.115	.098	.078	.053	.051	-.123	
	45.00	.055	.004	-.011	-.045	-.040	-.230	.107	.059	.050	.028	.026	-.171	
	50.00	-.191	-.144	-.148	-.165	-.167	-.244	.104	.168	.168	-.016	-.016	-.096	
	55.00	-.025	-.040	-.049	-.071	-.098	-.122	.019	.009	.004	-.019	-.011	-.139	
	60.00	-.039	-.034	-.043	-.081	-.113	-.232	.003	-.009	-.018	-.034	-.076	-.203	
	65.00	-.039	-.054	-.059	-.090	-.123	-.201	-.004	-.019	-.025	-.057	-.097	-.218	
	70.00	-.032	-.045	-.059	-.084	-.100	-.260	-.004	-.019	-.033	-.057	-.085	-.193	
	75.00	-.072	-.057	-.056	-.075	-.091	-.145	-.047	-.037	-.043	-.062	-.100	-.193	
Upper surface	80.00	-.049	-.041	-.043	-.050	-.070	-.124	-.042	-.032	-.034	-.058	-.093	-.189	
	85.00	-.038	-.021	-.018	-.021	-.049	-.069	-.037	-.025	-.020	-.046	-.102	-.141	
	90.00	-.008	-.001	-.004	-.004	-.017	-.098	-.023	-.019	-.013	-.041	-.094	-.181	
	95.00	.028	.018	.037	.024	.003	-.088	.007	-.004	-.005	-.051	-.114	-.174	
	1.85	$M = 0.90$ $\alpha = 9.87^\circ$						$M = 0.90$ $\alpha = 11.82^\circ$						
	5.00	.037	.024	.174	.324	.481	.124	.025	.211	.442	.434	.784	.111	
	7.85	-.492	-1.377	-1.387	-1.093	-1.826	-.584	-.451	-.435	-1.171	-.907	-.790	-.579	
	10.00	.572	-1.251	-1.333	-1.065	-1.832	-.592	-.472	-.434	-1.149	-.892	-.793	-.577	
	15.00	.690	-.874	-.181	-.191	-.798	-.579	-.572	-.574	-1.147	-.895	-.757	-.573	
	20.00	.653	-.799	-.126	-.102	-.811	-.579	-.850	-.147	-1.115	-.890	-.748	-.565	
Lower surface	25.00	.525	-.730	-.928	-.963	-.800	-.579	-.673	-.614	-1.007	-.882	-.760	-.565	
	30.00	.476	-.619	-.805	-.914	-.782	-.579	-.586	-.861	-.948	-.873	-.753	-.565	
	35.00	.489	-.519	-.712	-.846	-.774	-.584	-.598	-.610	-.877	-.857	-.797	-.566	
	40.00	.551	-.692	-.670	-.781	-.745	-.592	-.599	-.528	-.830	-.839	-.751	-.570	
	45.00	.522	-.502	-.599	-.713	-.735	-.593	-.575	-.542	-.776	-.790	-.727	-.576	
	50.00	.497	-.498	-.585	-.676	-.718	-.593	-.548	-.534	-.758	-.754	-.720	-.580	
	55.00	-.497	-.481	-.575	-.650	-.692	-.591	-.500	-.541	-.713	-.714	-.704	-.583	
	60.00	-.437	-.487	-.568	-.640	-.677	-.589	-.597	-.554	-.688	-.692	-.699	-.556	
	65.00	-.494	-.509	-.551	-.621	-.649	-.583	-.535	-.555	-.684	-.671	-.692	-.585	
	70.00	-.487	-.498	-.523	-.588	-.639	-.573	-.520	-.515	-.617	-.649	-.677	-.588	
Upper surface	75.00	-.465	-.465	-.497	-.545	-.609	-.568	-.440	-.470	-.574	-.630	-.687	-.588	
	80.00	-.413	-.403	-.440	-.539	-.584	-.576	-.440	-.470	-.570	-.630	-.687	-.580	
	85.00	-.229	-.235	-.352	-.556	-.594	-.534	-.375	-.389	-.486	-.590	-.627	-.590	
	90.00	-.141	-.163	-.225	-.416	-.508	-.559	-.280	-.304	-.432	-.546	-.607	-.594	
	95.00	-.073	-.106	-.163	-.484	-.550	-.550	-.184	-.230	-.374	-.527	-.598	-.587	
	1.85	.735	.709	.660	.653	.542	.614	.815	.773	.713	.689	.668	.565	
	5.00	.701	.610	.595	.585	.484	.635	.799	.690	.663	.645	.626	.518	
	7.85	.624	.525	.508	.493	.428	.610	.719	.600	.576	.557	.551	.471	
	10.00	.546	.454	.440	.423	.440	.360	.631	.529	.511	.493	.494	.409	
	15.00	.480	.414	.394	.381	.384	.309	.537	.485	.472	.452	.441	.339	
Lower surface	20.00	.327	.311	.270	.246	.243	.181	.395	.245	.245	.242	.242	.181	
	25.00	.290	.259	.231	.203	.212	.066	.352	.320	.297	.276	.269	.119	
	30.00	.259	.218	.194	.177	.174	.020	.314	.275	.260	.237	.228	.063	
	35.00	.179	.182	.160	.138	.150	.019	.227	.235	.221	.194	.180	.032	
	40.00	.173	.152	.128	.108	.100	.027	.225	.204	.188	.159	.150	.034	
	45.00	.165	.114	.100	.071	.067	.027	.211	.163	.149	.120	.114	.062	
	50.00	.095	.081	.071	.058	.029	.036	.143	.129	.117	.090	.072	.119	
	55.00	.066	.057	.046	.021	.024	.034	.105	.100	.091	.089	.081	.128	
	60.00	.056	.035	.021	-.003	-.041	-.183	.101	.073	.065	.040	-.001	-.151	
	65.00	.035	.014	.009	-.051	-.067	-.204	.068	.049	.046	.003	-.029	-.175	
Upper surface	70.00	.020	.010	-.008	-.043	-.087	-.192	.042	.037	.028	-.001	-.037	-.170	
	75.00	.016	.005	-.026	-.056	-.103	-.203	.032	-.001	-.006	-.013	-.040	-.191	
	80.00	.004	-.024	-.024	-.049	-.046	-.203	.030	-.030	-.018	-.024	-.051	-.155	
	85.00	-.034	-.024	-.031	-.062	-.1								

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at											
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2
Percent c						$M = 0.90 \quad \alpha = 15.46^\circ$					
Upper surface											
0.00	.026	-.674	-.899	-.1011	-.691	-.492		.010	-.814	-.967	-.787
1.25	-.880	-1.177	-.924	-.785	-.659	-.560		-.813	-.862	-.789	-.757
2.50	-1.004	-1.200	-.916	-.730	-.659	-.560		-.799	-.867	-.786	-.715
5.00	-1.149	-1.180	-.930	-.716	-.654	-.558		-.807	-.872	-.794	-.696
7.50	-1.076	-1.150	-.923	-.710	-.648	-.559		-.810	-.875	-.792	-.691
10.00	-.982	-1.120	-.910	-.710	-.647	-.559		-.813	-.870	-.818	-.687
12.50	-.945	-1.068	-.909	-.710	-.645	-.561		-.810	-.869	-.819	-.686
15.00	-.728	-1.028	-.882	-.717	-.640	-.560		-.780	-.857	-.797	-.661
25.00	-.479	-.961	-.852	-.717	-.638	-.560		-.742	-.838	-.766	-.685
35.00	-.641	-.874	-.826	-.710	-.635	-.560		-.711	-.822	-.780	-.681
45.00	-.602	-.803	-.807	-.704	-.635	-.562		-.654	-.804	-.756	-.680
55.00	-.583	-.724	-.788	-.699	-.632	-.563		-.625	-.779	-.751	-.680
65.00	-.541	-.678	-.773	-.692	-.632	-.566		-.586	-.753	-.745	-.678
75.00	-.552	-.634	-.764	-.688	-.631	-.567		-.589	-.722	-.736	-.677
85.00	-.567	-.610	-.750	-.682	-.628	-.568		-.583	-.696	-.729	-.672
90.00	-.560	-.599	-.729	-.671	-.628	-.570		-.589	-.684	-.724	-.666
95.00	-.551	-.586	-.704	-.653	-.626	-.572		-.583	-.674	-.714	-.654
70.00	-.521	-.565	-.696	-.623	-.616	-.572		-.585	-.656	-.708	-.632
75.00	-.548	-.557	-.682	-.603	-.622	-.575		-.559	-.644	-.697	-.633
80.00	-.488	-.547	-.665	-.648	-.620	-.578		-.559	-.638	-.691	-.635
85.00	-.494	-.533	-.654	-.645	-.613	-.581		-.560	-.625	-.684	-.627
90.00	-.471	-.512	-.635	-.611	-.604	-.582		-.554	-.612	-.675	-.653
95.00	-.371	-.464	-.613	-.637	-.612	-.581		-.484	-.582	-.663	-.625
Upper surface						$M = 0.90 \quad \alpha = 17.43^\circ$					
0.00	.928	.851	.775	.719	.678	.586		.959	.876	.788	.724
1.25	.964	.799	.751	.712	.684	.562		1.014	.844	.779	.737
2.50	.872	.724	.682	.650	.634	.534		.918	.712	.726	.693
5.00	.769	.660	.625	.596	.594	.486		.815	.743	.746	.629
7.50	.797	.611	.582	.550	.544	.497		.750	.640	.631	.508
10.00	.603	.543	.513	.485	.478	.394		.654	.590	.565	.436
12.50	.527	.500	.451	.422	.422	.277		.578	.546	.504	.476
15.00	.471	.435	.402	.378	.373	.211		.522	.487	.456	.431
20.00	.431	.384	.360	.338	.328	.146		.477	.441	.414	.370
25.00	.336	.343	.319	.294	.260	.119		.388	.393	.370	.323
35.00	.312	.269	.246	.217	.210	.005		.382	.354	.306	.292
45.00	.245	.227	.207	.179	.172	.033		.355	.318	.297	.267
55.00	.204	.194	.179	.156	.125	.035		.288	.273	.257	.226
60.00	.180	.158	.145	.125	.107	.037		.242	.204	.186	.164
65.00	.150	.128	.120	.088	.052	.101		.182	.170	.162	.133
70.00	.111	.111	.094	.068	.042	.113		.142	.150	.134	.111
75.00	.088	.075	.063	.041	.012	.127		.118	.108	.100	.078
80.00	.061	.052	.039	.020	.009	.144		.084	.077	.057	.020
85.00	.030	.028	.021	.003	.037	.131		.052	.058	.032	.031
90.00	.007	-.002	-.022	-.033	-.061	-.174		.014	.022	.008	-.006
95.00	-.053	-.059	-.068	-.098	-.112	-.180		-.018	-.040	-.043	-.078
Lower surface						$M = 0.90 \quad \alpha = 19.50^\circ$					
Upper surface											
0.00	-.014	-.814	-.778	-.771	-.726	-.667		-.092	-.830	-.828	-.814
1.25	-.752	-.755	-.758	-.762	-.695	-.653		-.819	-.819	-.821	-.807
2.50	-.735	-.752	-.755	-.746	-.694	-.654		-.808	-.824	-.813	-.800
5.00	-.725	-.752	-.759	-.730	-.694	-.654		-.800	-.825	-.819	-.795
7.50	-.730	-.753	-.749	-.730	-.692	-.654		-.808	-.827	-.810	-.775
10.00	-.734	-.753	-.753	-.730	-.683	-.655		-.808	-.828	-.817	-.772
12.50	-.742	-.769	-.759	-.728	-.692	-.658		-.814	-.833	-.819	-.772
15.00	-.752	-.769	-.759	-.723	-.694	-.658		-.817	-.831	-.821	-.771
20.00	-.752	-.764	-.764	-.726	-.690	-.657		-.811	-.833	-.811	-.770
25.00	-.752	-.764	-.767	-.726	-.694	-.657		-.815	-.833	-.822	-.769
30.00	-.752	-.764	-.767	-.726	-.694	-.657		-.743	-.831	-.822	-.769
35.00	-.713	-.768	-.760	-.723	-.691	-.651		-.738	-.824	-.821	-.767
40.00	-.692	-.765	-.760	-.726	-.691	-.661		-.709	-.820	-.821	-.771
45.00	-.661	-.759	-.759	-.726	-.694	-.658		-.709	-.811	-.821	-.785
50.00	-.646	-.749	-.755	-.725	-.695	-.661		-.709	-.811	-.821	-.766
55.00	-.647	-.740	-.754	-.723	-.697	-.667		-.718	-.801	-.815	-.776
60.00	-.662	-.733	-.724	-.718	-.700	-.667		-.705	-.787	-.813	-.777
65.00	-.647	-.731	-.749	-.714	-.697	-.664		-.693	-.780	-.810	-.761
70.00	-.621	-.709	-.739	-.714	-.694	-.669		-.676	-.767	-.805	-.726
75.00	-.621	-.709	-.739	-.714	-.694	-.678		-.676	-.767	-.805	-.726
80.00	-.624	-.703	-.737	-.714	-.695	-.677		-.681	-.754	-.799	-.720
85.00	-.622	-.694	-.735	-.714	-.688	-.674		-.684	-.753	-.795	-.724
90.00	-.626	-.688	-.726	-.709	-.682	-.661		-.675	-.747	-.783	-.729
95.00	-.553	-.651	-.719	-.715	-.689	-.685		-.562	-.770	-.771	-.727
Upper surface						$M = 0.90 \quad \alpha = 21.59^\circ$					
0.00	.971	.898	.893	.712	.642	.567		.948	.891	.783	.695
1.25	1.048	.885	.807	.741	.698	.570		1.050	.908	.816	.743
2.50	.968	.850	.768	.714	.684	.567		.990	.860	.793	.698
5.00	.879	.769	.719	.677	.652	.533		.908	.803	.754	.713
7.50	.848	.742	.621	.389	.368	.192		.840	.767	.704	.647
10.00	.806	.725	.679	.645	.613	.495		.840	.767	.719	.674
12.50	.714	.653	.616	.584	.553	.422		.749	.691	.659	.622
15.00	.638	.580	.537	.523	.506	.353		.678	.629	.605	.565
20.00	.581	.540	.516	.487	.428	.288		.612	.556	.526	.497
30.00	.538	.502	.466	.438	.415	.257		.576	.542	.508	.479
35.00	.448	.482	.421	.389	.368	.192		.489	.494	.463	.405
40.00	.441	.413	.385	.391	.337	.153		.480	.452	.420	.387
45.00	.414	.374	.343	.310	.296	.069		.448	.413	.389	.314
50.00	.347	.332	.306	.270	.257	.036		.381	.365	.346	.312
55.00	.304	.293	.274	.246	.210	.007		.339	.330	.316	.286
60.00	.291	.260	.238	.209	.189	-.021		.325	.297	.277	.247
65.00	.237	.224	.205	.171	.132	-.043		.271	.254	.242	.210
70.00	.192	.201	.176	.148	.114	-.068		.220	.227	.215	.184
75.00	.147	.160	.143	.117	.080	-.088		.188	.184	.177	.149
80.00	.132	.152	.141	.108	.082	-.102		.156	.154	.145	.117
85.00	.092	.096	.087	.075	.021	-.103		.109	.114	.112	.086
90.00	.043	.059	.039	.022	-.016	-.159		.058	.074	.063	.043
95.00	-.005	-.013	-.020	-.055	-.079	-.167		-.012	-.002	-.004	-.045
Lower surface						$M = 0.90 \quad \alpha = 21.59^\circ$					
Upper surface											
0.00	-.014	-.814	-.778	-.771	-.726	-.667		-.092	-.830	-.828	-.814
1.25	-.752	-.755	-.758	-.762	-.695	-.653		-.819	-.819	-.821	-.807
2.50	-.735	-.752	-.755	-.746	-.694	-.654		-.808	-.824	-.813	-.800
5.00	-.725	-.752	-.759	-.730	-.694	-.654		-.800	-.825	-.810	-.778
7.50	-.730	-.753	-.749	-.730	-.692	-.654		-.808	-.827	-.810	-.771
10.00	-.734	-.753	-.753	-.730	-.683	-.655		-.808	-.828	-.817	-.772
12.50	-.742	-.769	-.759	-.728	-.692	-.658		-.814	-.833	-.819	

TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:													
Percent c	$M = 0.90$						$M = 25.70^*$						
	0.16b/2	0.35b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Upper surface													
0.00	-0.246	-0.998	-0.991	-0.975	-0.947	-0.898		-0.310	-1.093	-1.082	-1.062	-1.033	-0.956
1.00	-0.983	-0.991	-0.986	-0.970	-0.934	-0.859		-1.082	-1.093	-1.086	-1.061	-1.021	-0.932
2.00	-0.970	-0.990	-0.979	-0.960	-0.931	-0.857		-1.070	-1.086	-1.083	-1.058	-1.014	-0.920
3.00	-0.969	-0.993	-0.985	-0.951	-0.928	-0.853		-1.070	-1.087	-1.089	-1.047	-1.010	-0.916
4.00	-0.971	-0.992	-0.974	-0.952	-0.923	-0.854		-1.075	-1.088	-1.076	-1.047	-1.007	-0.917
5.00	-0.972	-0.991	-0.971	-0.951	-0.920	-0.854		-1.076	-1.089	-1.077	-1.048	-1.008	-0.918
6.00	-0.979	-1.004	-0.985	-0.950	-0.923	-0.853		-1.077	-1.092	-1.081	-1.053	-1.009	-0.914
7.00	-0.975	-1.004	-0.985	-0.942	-0.925	-0.850		-1.064	-1.098	-1.061	-1.039	-1.009	-0.913
8.00	-0.931	-0.998	-0.981	-0.946	-0.921	-0.850		-0.952	-1.087	-1.082	-1.044	-1.002	-0.908
9.00	-0.889	-0.994	-0.983	-0.943	-0.920	-0.849		-0.894	-1.085	-1.087	-1.039	-1.002	-0.903
10.00	-0.820	-0.990	-0.980	-0.941	-0.919	-0.849		-0.857	-1.075	-1.087	-1.037	-1.000	-0.900
11.00	-0.793	-0.974	-0.980	-0.941	-0.915	-0.854		-0.833	-1.067	-1.080	-1.037	-0.993	-0.907
12.00	-0.773	-0.948	-0.977	-0.938	-0.915	-0.853		-0.787	-0.990	-1.081	-1.031	-0.995	-0.904
13.00	-0.738	-0.918	-0.973	-0.937	-0.913	-0.853		-0.740	-0.923	-1.071	-1.032	-0.990	-0.903
14.00	-0.714	-0.888	-0.970	-0.932	-0.910	-0.856		-0.715	-0.853	-1.062	-1.024	-0.987	-0.906
15.00	-0.731	-0.856	-0.964	-0.918	-0.909	-0.856		-0.695	-0.803	-1.051	-1.012	-0.985	-0.904
16.00	-0.696	-0.824	-0.954	-0.908	-0.892	-0.856		-0.676	-0.744	-1.040	-1.003	-0.977	-0.904
17.00	-0.685	-0.780	-0.951	-0.918	-0.901	-0.852		-0.654	-0.677	-1.007	-0.992	-0.949	-0.893
18.00	-0.665	-0.753	-0.938	-0.914	-0.898	-0.855		-0.598	-0.628	-0.966	-1.000	-0.945	-0.897
19.00	-0.656	-0.735	-0.920	-0.914	-0.896	-0.851		-0.574	-0.578	-0.826	-0.992	-0.949	-0.892
20.00	-0.652	-0.694	-0.901	-0.914	-0.884	-0.848		-0.545	-0.511	-0.876	-0.982	-0.945	-0.880
21.00	-0.611	-0.649	-0.866	-0.908	-0.876	-0.846		-0.465	-0.455	-0.817	-0.948	-0.921	-0.863
22.00	-0.465	-0.551	-0.786	-0.900	-0.890	-0.842		-0.357	-0.375	-0.681	-0.943	-0.940	-0.878
Lower surface													
1.00	.913	.893	.774	.669	.569	.516		.871	.890	.762	.641	.534	.489
2.00	1.046	.928	.830	.740	.684	.544		1.034	.942	.831	.731	.671	.531
3.00	1.042	.897	.795	.760	.712	.588		1.024	.927	.842	.771	.721	.567
4.00	0.948	.851	.795	.718	.620	.558		0.914	.850	.742	.715	.718	.546
5.00	0.881	.812	.743	.713	.677	.531		0.913	.855	.799	.741	.702	.548
6.00	0.792	.748	.703	.661	.622	.571		0.831	.791	.745	.698	.654	.495
7.00	0.723	.686	.651	.609	.577	.411		0.767	.736	.693	.646	.614	.438
8.00	0.669	.640	.604	.567	.537	.352		0.714	.686	.646	.603	.574	.385
9.00	0.622	.591	.560	.522	.494	.293		0.669	.638	.605	.567	.534	.327
10.00	0.545	.542	.515	.480	.447	.255		0.592	.593	.543	.523	.491	.216
11.00	0.529	.506	.476	.439	.417	.196		0.574	.556	.527	.486	.459	.231
12.00	0.495	.456	.436	.401	.377	.130		0.543	.511	.484	.441	.419	.168
13.00	0.456	.416	.395	.359	.337	.099		0.478	.447	.444	.402	.381	.135
14.00	0.388	.357	.344	.321	.307	.052		0.437	.431	.408	.375	.332	.079
15.00	0.370	.339	.321	.292	.246	.032		0.392	.389	.384	.358	.328	.039
16.00	0.308	.299	.290	.252	.206	.000		0.361	.347	.374	.346	.350	.035
17.00	0.258	.273	.251	.224	.188	-.032		0.300	.320	.303	.268	.228	-.004
18.00	0.211	.226	.218	.191	.146	-.053		0.274	.270	.260	.225	.185	-.027
19.00	0.193	.193	.181	.157	.109	-.002		0.233	.238	.225	.193	.147	-.057
20.00	0.138	.155	.148	.122	.070	-.002		0.180	.200	.190	.153	.105	-.057
21.00	0.085	.110	.096	.072	.025	-.146		0.123	.150	.133	.100	.054	-.128
22.00	0.001	.036	.024	-.018	-.049	-.168		0.039	.079	.056	.002	-.024	-.150

TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:														
Percent		0.16b/2	0.25b/2	0.40b/2	0.80b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.80b/2	0.75b/2	0.95b/2
$M = 0.94$ $\alpha = -2.02^\circ$														
Upper surface	c	.041	.701	.645	.699	.549	.456		.056	.730	.678	.685	.648	.685
	0.00	.323	.238	.257	.271	.236	.290		.217	.098	.021	-.024	-.058	.060
	1.25	.266	.146	.162	.170	.174	.165		.152	-.013	-.029	-.065	-.093	-.118
	2.50	.201	.125	.108	.101	.093	.113		.088	-.016	-.027	-.074	-.115	-.120
	5.00	.167	.089	.076	.059	.046	.068		.060	-.016	-.046	-.091	-.133	-.145
	10.00	.132	.061	.040	.032	.015	.023		.033	-.025	-.067	-.111	-.142	-.161
	15.00	.090	.030	.002	.010	-.024	-.060		.013	-.049	-.086	-.109	-.156	-.197
	20.00	.040	-.022	-.046	-.048	-.058	-.139		-.004	-.073	-.115	-.153	-.181	-.235
	25.00	.014	-.022	-.046	-.048	-.058	-.139		-.003	-.073	-.115	-.154	-.189	-.238
	30.00	-.041	-.058	-.060	-.089	-.101	-.268		-.151	-.106	-.136	-.171	-.199	-.258
	35.00	-.046	-.066	-.084	-.110	-.134	-.285		-.104	-.133	-.144	-.189	-.222	-.294
	40.00	-.049	-.076	-.108	-.137	-.155	-.353		-.122	-.133	-.172	-.209	-.241	-.340
	45.00	-.083	-.093	-.134	-.163	-.188	-.346		-.142	-.147	-.187	-.229	-.265	-.334
	50.00	-.073	-.115	-.162	-.186	-.219	-.366		-.124	-.161	-.214	-.250	-.293	-.358
	55.00	-.092	-.152	-.190	-.217	-.252	-.368		-.124	-.198	-.240	-.274	-.313	-.368
	60.00	-.158	-.173	-.193	-.226	-.278	-.348		-.206	-.228	-.259	-.296	-.339	-.393
	65.00	-.154	-.166	-.194	-.230	-.278	-.367		-.207	-.223	-.264	-.312	-.344	-.371
	70.00	-.165	-.170	-.193	-.230	-.298	-.320		-.229	-.230	-.249	-.301	-.373	-.331
	75.00	-.149	-.170	-.188	-.210	-.283	-.311		-.141	-.170	-.200	-.244	-.304	-.344
	80.00	-.129	-.139	-.152	-.137	-.203	-.215		-.162	-.180	-.179	-.245	-.301	-.341
	85.00	-.093	-.060	-.052	-.044	-.036	-.027		-.098	-.052	-.040	-.019	-.009	-.018
	90.00	-.022	-.019	-.005	-.027	-.049	-.051		-.011	-.000	-.029	-.068	-.095	-.078
	95.00	.022	.016	.043	.072	.071	.046		.044	.041	.073	.108	.118	.100
$M = 0.94$ $\alpha = 0^\circ$														
Lower surface	c	.058	.248	-.401	.727	-.874	.936		.203	.066	.006	-.037	-.038	-.101
	0.00	.003	.195	-.263	.551	.742	.873		.138	.005	-.026	-.056	-.068	-.100
	1.25	-.024	.131	-.208	.261	.421	.774		.101	.019	-.028	-.057	-.085	-.114
	2.50	-.045	.138	-.228	.268	.491	.717		.071	-.008	-.028	-.088	-.116	-.156
	5.00	-.031	.131	-.204	.281	.492	.800		.031	-.027	-.064	-.099	-.120	-.165
	10.00	-.096	.146	-.201	.285	.415	.815		.005	-.040	-.073	-.111	-.139	-.178
	15.00	-.123	.145	-.202	.284	.432	.806		.028	-.060	-.102	-.137	-.163	-.240
	20.00	-.144	.149	-.199	.245	.314	.394		.049	-.049	-.103	-.146	-.174	-.280
	25.00	-.125	.167	-.217	.273	.317	.335		.035	-.079	-.119	-.157	-.183	-.293
	30.00	-.148	.202	-.239	.291	.329	.311		.087	-.107	-.137	-.183	-.213	-.265
	40.00	-.198	.202	-.239	.292	.346	.346		.104	-.101	-.158	-.200	-.227	-.308
	45.00	-.169	.208	-.258	.317	.343	.373		.083	-.132	-.187	-.232	-.252	-.337
	50.00	-.219	.246	-.286	.343	.376	.394		.146	-.170	-.214	-.258	-.281	-.359
	60.00	-.239	.268	-.298	.361	.380	.411		.187	-.188	-.233	-.269	-.315	-.374
	70.00	-.240	.321	-.321	.360	.410	.422		.201	-.217	-.211	-.242	-.314	-.374
	75.00	-.284	.325	-.321	.397	.450	.419		.209	-.220	-.256	-.316	-.359	-.376
	80.00	-.292	.287	-.329	.383	.438	.391		.214	-.211	-.250	-.291	-.355	-.327
	85.00	-.339	.320	-.335	.385	.411	.328		.287	-.231	-.247	-.291	-.336	-.232
	90.00	-.305	.309	-.320	.319	.354	.224		.205	-.202	-.220	-.217	-.190	-.106
	95.00	-.213	.195	-.171	.113	.065	.037		.115	-.089	-.073	-.042	-.010	-.036
$M = 0.94$ $\alpha = 1.92^\circ$														
Upper surface	c	.039	.658	.559	.569	.547	.643		.044	.542	.414	.388	.359	.598
	0.00	.078	-.232	-.341	-.757	-.867	-.714		.058	-.945	-.107	-.158	-.174	-.923
	1.25	.018	-.229	-.291	-.458	-.764	-.916		.122	-.510	-.954	-.1042	-.1099	-.1163
	2.50	-.078	.191	-.223	.310	.423	.846		.247	-.401	-.757	-.961	-.1013	-.1099
	5.00	-.089	.151	-.218	.300	.370	.768		.239	-.266	-.315	-.901	-.953	-.1027
	10.00	-.100	.151	-.224	.296	.361	.702		.230	-.269	-.325	-.842	-.936	-.984
	15.00	-.085	.155	-.223	.280	.353	.503		.173	-.246	-.321	-.390	-.885	-.966
	20.00	-.089	.187	-.234	.297	.347	.407		.166	-.269	-.344	-.402	-.787	-.938
	25.00	-.154	.177	-.236	.290	.358	.405		.234	-.262	-.325	-.380	-.485	-.927
	30.00	-.089	.187	-.234	.297	.347	.348		.150	-.301	-.413	-.454	-.579	-.797
	35.00	-.196	.144	-.244	.294	.341	.348		.267	-.303	-.346	-.392	-.426	-.803
	40.00	-.222	.235	-.295	.337	.376	.394		.299	-.310	-.345	-.419	-.445	-.818
	45.00	-.245	.246	-.290	.339	.394	.394		.319	-.322	-.375	-.430	-.460	-.774
	50.00	-.224	.252	-.298	.356	.410	.419		.297	-.322	-.382	-.446	-.485	-.722
	55.00	-.203	.280	-.320	.371	.427	.428		.269	-.346	-.400	-.463	-.505	-.605
	60.00	-.284	.308	-.340	.383	.438	.410		.353	-.374	-.415	-.468	-.527	-.499
	65.00	-.292	.305	-.348	.398	.434	.436		.360	-.374	-.421	-.478	-.521	-.480
	70.00	-.308	.309	-.344	.401	.452	.411		.373	-.374	-.416	-.479	-.538	-.458
	75.00	-.301	.321	-.355	.395	.424	.348		.366	-.386	-.424	-.475	-.536	-.459
	80.00	-.288	.313	-.351	.372	.368	.216		.357	-.403	-.424	-.505	-.597	-.354
	85.00	-.215	.190	-.168	.118	.064	.083		.361	-.357	-.348	-.438	-.548	-.354
	90.00	-.075	.058	-.018	.014	.028	.006		.184	-.173	-.148	-.201	-.343	-.190
	95.00	.015	.009	.052	.076	.081	.044		.023	-.038	.003	.024	.030	.077
$M = 0.94$ $\alpha = 3.86^\circ$														
Lower surface	c	.314	.282	.263	.315	.231	.436		.431	.416	.438	.456	.384	
	0.00	.248	.166	.170	.188	.217	.167		.382	.323	.342	.374	.311	
	1.25	.204	.133	.121	.128	.126	.114		.328	.262	.253	.252	.270	
	2.50	.163	.090	.074	.081	.090	.055		.277	.209	.197	.198	.214	
	5.00	.123	.061	.046	.045	.046	.016		.228	.173	.164	.154	.127	
	10.00	.063	.035	.019	.003	.005	.057		.183	.158	.126	.109	.104	
	15.00	.045	.025	.017	.010	.010	.030		.154	.137	.107	.084	.037	
	20.00	.024	.008	.027	.081	.221	.078		.108	.091	.051	.023	.022	
	25.00	.020	.018	.045	.087	.264	.098		.055	.025	-.005	-.005	-.178	
	30.00	-.021	-.055	-.069	-.113	-.125	-.258		.037	-.022	-.002	-.036	-.044	-.178
	40.00	-.043	-.067	-.092	-.138	-.148	-.319		.021	-.002	-.030	-.064	-.124	-.254
	45.00	-.040	-.094	-.125	-.168	-.180	-.359		.021	-.027	-.039	-.092	-.100	-.308
	50.00	-.105	-.131	-.156	-.194	-.207	-.379		.1040	-.1058	-.1088	-.1122	-.1129	-.338
	55.00	-.124	-.150	-.175	-.212	-.250	-.384		.067	-.083	-.104	-.137	-.173	-.342

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P, at:														
		0.16b/3	0.25b/2	0.40b/2	0.60b/1	0.75b/3	0.95b/2		0.16b/3	0.25b/2	0.40b/3	0.60b/1	0.75b/2	0.95b/3
Percent	C	M = 0.94						M = 0.94						
Upper surface	0.00													
	1.25	.052	.411	.282	.191	.114	.470	.052	.427	.073	.192	.196	.283	
	2.50	-.190	-.1386	-.1251	-.1305	-.1324	-.1088	-.334	-.1336	-.1385	-.1389	-.1364	-.1325	
	3.75	-.260	-.1059	-.1119	-.1200	-.1260	-.1320	-.412	-.1237	-.1273	-.1339	-.1364	-.1422	
	5.00	-.407	-.750	-.1030	-.1120	-.1168	-.1240	-.508	-.1054	-.1204	-.1263	-.1305	-.1368	
	6.25	-.384	-.408	-.966	-.1063	-.1035	-.1179	-.536	-.1069	-.1130	-.1210	-.1244	-.1320	
	7.50	-.361	-.383	-.898	-.1020	-.1091	-.1144	-.503	-.1079	-.1095	-.1165	-.1223	-.1287	
	8.75	-.278	-.346	-.840	-.1040	-.1111	-.1111	-.412	-.1091	-.1091	-.1181	-.1254		
	10.00	-.257	-.347	-.846	-.905	-.983	-.1076	-.378	-.1162	-.1162	-.1133	-.1218		
	11.25	-.213	-.513	-.538	-.400	-.672	-.947	-.1061	-.407	-.440	-.543	-.1027	-.1097	
Lower surface	12.50	-.572	-.349	-.400	-.515	-.507	-.1022	-.455	-.440	-.491	-.595	-.1076	-.1169	
	13.75	-.359	-.368	-.511	-.507	-.507	-.939	-.451	-.458	-.502	-.783	-.1062	-.1077	
	15.00	-.372	-.355	-.426	-.470	-.525	-.946	-.452	-.452	-.501	-.783	-.1062	-.1077	
	16.25	-.373	-.382	-.640	-.480	-.678	-.911	-.437	-.470	-.519	-.493	-.1047	-.1047	
	17.50	-.364	-.386	-.452	-.499	-.600	-.911	-.445	-.470	-.527	-.635	-.1040	-.1053	
	18.75	-.330	-.408	-.482	-.521	-.585	-.910	-.415	-.487	-.539	-.626	-.999	-.1052	
	20.00	-.414	-.452	-.476	-.528	-.585	-.995	-.501	-.512	-.546	-.614	-.874	-.1044	
	21.25	-.422	-.454	-.484	-.543	-.577	-.996	-.501	-.512	-.555	-.626	-.795	-.1055	
	22.50	-.428	-.436	-.477	-.540	-.585	-.909	-.512	-.522	-.548	-.623	-.771	-.1057	
	23.75	-.417	-.449	-.486	-.538	-.592	-.904	-.491	-.532	-.580	-.612	-.745	-.1057	
Upper surface	25.00	-.445	-.463	-.485	-.536	-.592	-.886	-.520	-.546	-.561	-.612	-.711	-.1057	
	26.25	-.459	-.454	-.485	-.534	-.495	-.767	-.545	-.545	-.561	-.612	-.629	-.1058	
	27.50	-.343	-.357	-.394	-.355	-.426	-.576	-.500	-.522	-.546	-.596	-.488	-.1020	
	28.75	-.310	-.310	-.424	-.398	-.426	-.529	-.487	-.500	-.524	-.576	-.488	-.1020	
	30.00	-.318	-.327	-.402	-.483	-.575	-.103	-.225	-.185	-.167	-.145	-.132	-.045	
	31.25	-.304	-.318	-.402	-.483	-.575	-.103	-.145	-.145	-.132	-.132	-.132	-.045	
	32.50	-.294	-.304	-.402	-.483	-.575	-.103	-.145	-.145	-.132	-.132	-.132	-.045	
	33.75	-.289	-.304	-.402	-.483	-.575	-.103	-.145	-.145	-.132	-.132	-.132	-.045	
	35.00	-.280	-.304	-.402	-.483	-.575	-.103	-.145	-.145	-.132	-.132	-.132	-.045	
	36.25	-.274	-.304	-.402	-.483	-.575	-.103	-.145	-.145	-.132	-.132	-.132	-.045	
Lower surface	37.50	-.094	-.093	-.075	-.046	-.035	-.118	-.145	-.145	-.145	-.145	-.145	-.145	
	38.75	-.090	-.069	-.040	-.018	-.009	-.119	-.145	-.121	-.099	-.097	-.061	-.114	
	40.00	-.086	-.040	-.014	-.017	-.029	-.147	-.134	-.091	-.072	-.040	-.029	-.100	
	41.25	-.019	-.007	-.019	-.051	-.062	-.179	-.063	-.057	-.040	-.011	-.011	-.235	
	42.50	-.006	-.015	-.040	-.085	-.104	-.104	-.034	-.029	-.009	-.009	-.037	-.084	
	43.75	-.017	-.036	-.080	-.089	-.128	-.315	-.028	-.009	-.009	-.009	-.037	-.129	
	45.00	-.033	-.052	-.070	-.113	-.163	-.348	-.005	-.018	-.023	-.063	-.120	-.317	
	46.25	-.038	-.052	-.070	-.113	-.163	-.348	-.002	-.018	-.023	-.063	-.124	-.308	
	47.50	-.039	-.052	-.070	-.113	-.163	-.348	-.002	-.018	-.023	-.063	-.124	-.308	
	48.75	-.038	-.052	-.070	-.113	-.163	-.348	-.002	-.018	-.023	-.063	-.124	-.308	
Upper surface	50.00	-.047	-.042	-.044	-.077	-.132	-.355	-.068	-.058	-.054	-.060	-.095	-.166	-.278
	51.25	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	52.50	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	53.75	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	55.00	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	56.25	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	57.50	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	58.75	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	60.00	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	61.25	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
Lower surface	62.50	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	63.75	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	65.00	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	66.25	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	67.50	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	68.75	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	70.00	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	71.25	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	72.50	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
	73.75	-.017	-.028	-.018	-.049	-.088	-.205	-.049	-.049	-.075	-.071	-.112	-.157	
Upper surface	75.00	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	76.25	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	77.50	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	78.75	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	80.00	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	81.25	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	82.50	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	83.75	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	85.00	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	86.25	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
Lower surface	87.50	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	88.75	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	90.00	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	91.25	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	92.50	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	93.75	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	95.00	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	96.25	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	97.50	-.022	-.015	-.025	-.057	-.109	-.222	-.039	-.039	-.075	-.075	-.120	-.164	
	98.75	-.022	-.015	-.025	-.057	-.109	-.222	-.03						

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TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, $P_1 / \rho_1 V^2$															
		M = 0.94						M = 0.94							
Percent c		$\alpha = 15.66^\circ$						$\alpha = 17.76^\circ$							
		.018b/2	.025b/2	.040b/2	.060b/2	.075b/2	.095b/2	.018b/2	.025b/2	.040b/2	.060b/2	.075b/2	.095b/2		
Upper surface															
0.00		.039	-.569	-.790	-1.037	-1.104	-.840	.044	-.744	-.962	-.948	-.821	-.733		
1.25		-.819	-1.420	-1.181	-.998	-.843	-.724	-.916	-1.243	-.1007	-.875	-.799	-.723		
2.50		-.925	-1.420	-1.161	-.971	-.850	-.718	-.905	-1.233	-.1007	-.857	-.799	-.719		
3.75		-.949	-1.390	-1.181	-.973	-.849	-.718	-.912	-1.219	-.1029	-.841	-.792	-.719		
5.00		-.905	-1.347	-1.168	-.973	-.839	-.716	-.907	-1.210	-.1011	-.839	-.787	-.719		
6.25		-.968	-1.324	-1.183	-.972	-.880	-.716	-.905	-1.188	-.1017	-.839	-.786	-.719		
7.50		-.916	-1.420	-1.181	-.973	-.849	-.718	-.912	-1.219	-.1029	-.841	-.792	-.719		
8.75		-.885	-1.476	-1.064	-.975	-.846	-.723	-.906	-1.210	-.1011	-.839	-.787	-.719		
10.00		-.656	-1.025	-1.041	-.959	-.852	-.716	-.692	-1.056	-.929	-.857	-.777	-.718		
11.25		-.629	-1.025	-1.041	-.959	-.852	-.716	-.656	-.973	-.931	-.832	-.775	-.718		
12.50		-.636	-1.025	-1.002	-.950	-.856	-.720	-.612	-.862	-.928	-.824	-.774	-.716		
13.75		-.607	-1.016	-1.025	-.956	-.852	-.724	-.564	-.769	-.918	-.821	-.771	-.716		
15.00		-.619	-1.024	-1.025	-.958	-.853	-.722	-.500	-.722	-.904	-.812	-.770	-.718		
16.25		-.632	-1.025	-1.002	-.926	-.796	-.720	-.460	-.688	-.887	-.804	-.767	-.719		
17.50		-.671	-1.054	-1.025	-.963	-.803	-.719	-.420	-.681	-.863	-.796	-.765	-.723		
18.75		-.654	-1.025	-1.041	-.959	-.852	-.716	-.376	-.657	-.688	-.859	-.778	-.763		
20.00		-.627	-1.025	-1.025	-.957	-.852	-.717	-.334	-.553	-.677	-.817	-.775	-.760		
21.25		-.589	-1.025	-1.025	-.956	-.852	-.718	-.294	-.564	-.680	-.774	-.737	-.723		
22.50		-.599	-1.032	-1.027	-.766	-.787	-.715	-.254	-.570	-.746	-.756	-.726	-.723		
23.75		-.589	-1.024	-1.025	-.757	-.764	-.718	-.214	-.529	-.670	-.784	-.755	-.725		
25.00		-.545	-1.020	-1.025	-.742	-.744	-.727	-.174	-.520	-.652	-.772	-.766	-.743		
26.25		-.491	-1.025	-1.025	-.745	-.744	-.727	-.134	-.465	-.505	-.757	-.760	-.723		
27.50		-.431	-1.025	-1.025	-.745	-.744	-.727	-.094	-.414	-.454	-.707	-.726	-.723		
28.75		-.431	-1.025	-1.025	-.745	-.744	-.727	-.054	-.374	-.414	-.667	-.707	-.723		
30.00		-.431	-1.025	-1.025	-.745	-.744	-.727	-.014	-.334	-.374	-.629	-.667	-.723		
Lower surface															
0.00		.957	.880	.803	.748	.699	.609	.986	.907	.813	.750	.683	.612		
1.25		.989	.828	.783	.745	.707	.588	1.038	.871	.813	.765	.723	.603		
2.50		.895	.750	.718	.685	.665	.565	.953	.807	.762	.724	.698	.590		
3.75		.975	.662	.641	.617	.587	.518	.984	.745	.715	.685	.660	.551		
5.00		.722	.632	.622	.601	.571	.472	.984	.739	.711	.645	.622	.499		
6.25		.624	.570	.549	.533	.509	.392	.951	.630	.608	.560	.540	.395		
7.50		.552	.527	.495	.469	.452	.312	.917	.580	.553	.517	.499	.365		
8.75		.464	.447	.422	.406	.345	.245	.866	.534	.500	.474	.454	.297		
10.00		.458	.422	.406	.386	.367	.187	.824	.478	.440	.424	.413	.230		
11.25		.368	.375	.365	.341	.321	.131	.836	.438	.416	.392	.368	.200		
12.50		.366	.342	.330	.306	.288	.084	.830	.397	.385	.355	.336	.135		
13.75		.345	.307	.294	.266	.251	.026	.803	.364	.338	.314	.297	.076		
15.00		.275	.261	.258	.226	.213	-.003	.830	.321	.308	.281	.260	.041		
16.25		.271	.251	.240	.226	.213	-.003	.827	.290	.278	.255	.215	.015		
17.50		.233	.202	.196	.173	.130	-.037	.822	.248	.244	.220	.186	-.033		
18.75		.186	.172	.172	.140	.094	-.080	.845	.223	.220	.184	.141	-.036		
20.00		.149	.154	.151	.120	.084	-.097	.895	.203	.195	.166	.127	-.057		
21.25		.128	.115	.120	.096	.056	-.107	.875	.163	.159	.137	.096	-.074		
22.50		.102	.102	.099	.076	.034	-.127	.817	.147	.144	.137	.114	-.092		
23.75		.086	.076	.082	.058	.012	-.097	.810	.110	.117	.113	.091	-.071		
25.00		.043	.047	.052	.035	-.008	-.153	.875	.089	.081	.058	.021	-.128		
26.25		.022	-.001	-.005	-.028	-.055	-.144	.845	.029	-.007	-.030	-.131			
Upper surface															
0.00		M = 0.94	$\alpha = 19.85^\circ$						M = 0.94	$\alpha = 21.85^\circ$					
1.25		.023	-.931	-1.104	-.949	-.848	-.806	-.022	-1.003	-.944	-.936	-.894	-.860		
2.50		-.002	-1.118	-.978	-.832	-.835	-.778	-.824	-.953	-.927	-.916	-.883	-.832		
3.75		-.019	-1.110	-.974	-.889	-.854	-.776	-.824	-.955	-.943	-.906	-.883	-.829		
5.00		-.066	-1.109	-.906	-.872	-.831	-.773	-.824	-.955	-.951	-.905	-.876	-.829		
6.25		-.088	-1.107	-.997	-.868	-.827	-.774	-.829	-.955	-.950	-.908	-.879	-.829		
7.50		-.049	-1.097	-.999	-.867	-.825	-.774	-.833	-.955	-.959	-.908	-.874	-.829		
8.75		-.060	-1.097	-.998	-.862	-.827	-.774	-.839	-.952	-.942	-.904	-.879	-.831		
10.00		-.060	-1.097	-.998	-.862	-.827	-.774	-.839	-.952	-.942	-.904	-.879	-.831		
11.25		-.070	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.830		
12.50		-.070	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
13.75		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
15.00		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
16.25		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
17.50		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
18.75		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
20.00		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
21.25		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
22.50		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
23.75		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
25.00		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
26.25		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
27.50		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
28.75		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
30.00		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
31.25		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
32.50		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
33.75		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
35.00		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
36.25		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
37.50		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
38.75		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
40.00		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
41.25		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
42.50		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
43.75		-.078	-1.077	-.972	-.859	-.824	-.774	-.838	-.958	-.942	-.907	-.881	-.828		
45.00		-.078	-1.077	-.972	-.859										

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:											
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2
Percent c											
	M = 0.94	c = 23.90°					M = 0.94	c = 25.95°			
Upper surface											
0.00	-0.90	-1.009	-0.984	-0.944	-0.946	-0.905	-0.912	-1.120	-1.100	-1.081	-1.003
1.16	-0.92	-0.994	-0.982	-0.929	-0.939	-0.877	-1.004	-1.123	-1.110	-1.089	-1.050
2.32	-0.976	-0.995	-0.979	-0.957	-0.938	-0.883	-1.092	-1.114	-1.102	-1.078	-1.040
5.00	-0.973	-0.996	-0.979	-0.955	-0.936	-0.880	-1.091	-1.122	-1.115	-1.070	-1.034
7.50	-0.978	-0.999	-0.969	-0.952	-0.930	-0.881	-1.101	-1.119	-1.095	-1.070	-1.037
10.00	-0.982	-1.001	-0.979	-0.952	-0.931	-0.883	-1.109	-1.116	-1.103	-1.073	-1.031
15.00	-0.980	-1.000	-0.981	-0.950	-0.932	-0.881	-1.099	-1.126	-1.106	-1.066	-1.037
20.00	-0.982	-0.999	-0.981	-0.945	-0.931	-0.881	-1.017	-1.126	-1.110	-1.058	-1.041
25.00	-0.926	-0.997	-0.981	-0.947	-0.929	-0.879	-0.869	-1.111	-1.103	-1.065	-1.034
30.00	-0.892	-0.999	-0.980	-0.945	-0.928	-0.879	-0.843	-1.108	-1.103	-1.056	-1.039
35.00	-0.817	-0.980	-0.980	-0.945	-0.928	-0.879	-0.807	-1.108	-1.103	-1.055	-1.031
40.00	-0.717	-0.976	-0.980	-0.943	-0.925	-0.872	-0.724	-1.044	-1.055	-1.034	-1.020
45.00	-0.786	-0.965	-0.977	-0.940	-0.925	-0.862	-0.797	-0.997	-1.087	-1.050	-1.027
50.00	-0.779	-0.966	-0.974	-0.940	-0.924	-0.863	-0.768	-0.928	-1.087	-1.048	-1.023
55.00	-0.744	-0.929	-0.971	-0.918	-0.921	-0.865	-0.745	-0.975	-1.081	-1.044	-1.020
60.00	-0.819	-0.921	-0.969	-0.920	-0.921	-0.865	-0.741	-0.948	-1.070	-1.027	-1.019
65.00	-0.826	-0.897	-0.964	-0.924	-0.918	-0.882	-0.720	-0.798	-1.056	-1.024	-1.012
70.00	-0.780	-0.882	-0.960	-0.927	-0.915	-0.883	-0.688	-0.757	-1.043	-1.020	-1.003
75.00	-0.777	-0.872	-0.956	-0.923	-0.919	-0.885	-0.669	-0.724	-1.015	-1.023	-0.999
80.00	-0.822	-0.870	-0.948	-0.923	-0.918	-0.885	-0.644	-0.704	-0.993	-1.018	-0.996
85.00	-0.818	-0.848	-0.935	-0.924	-0.900	-0.879	-0.634	-0.683	-0.963	-1.010	-0.978
90.00	-0.805	-0.886	-0.924	-0.922	-0.892	-0.880	-0.614	-0.673	-0.930	-0.991	-0.942
95.00	-0.693	-0.812	-0.893	-0.918	-0.910	-0.878	-0.524	-0.623	-0.877	-0.985	-0.971
Lower surface											
1.25	.934	.926	.806	.700	.603	.554	.913	.925	.794	.680	.571
2.50	1.070	.960	.856	.774	.716	.581	1.071	.978	.867	.766	.704
5.00	1.038	.930	.857	.789	.744	.606	1.061	.960	.874	.802	.756
7.50	.971	.888	.829	.771	.776	.598	1.002	.924	.858	.794	.752
10.00	.914	.847	.794	.750	.712	.575	.950	.890	.831	.777	.734
15.00	.823	.784	.740	.696	.659	.518	.863	.828	.780	.735	.690
20.00	.783	.727	.676	.648	.616	.459	.803	.775	.730	.684	.651
25.00	.770	.678	.641	.604	.578	.405	.788	.757	.717	.666	.634
30.00	.663	.630	.597	.569	.538	.393	.711	.682	.646	.607	.574
35.00	.581	.584	.558	.524	.492	.368	.635	.635	.605	.566	.531
40.00	.566	.543	.518	.480	.461	.247	.618	.596	.568	.527	.501
45.00	.536	.502	.476	.444	.424	.185	.590	.561	.528	.488	.454
50.00	.473	.458	.439	.409	.387	.153	.527	.513	.491	.451	.425
55.00	.432	.422	.409	.377	.358	.120	.484	.475	.456	.421	.378
60.00	.362	.347	.337	.299	.260	.058	.413	.437	.421	.383	.335
65.00	.413	.385	.367	.339	.297	.090	.386	.392	.368	.345	.298
70.00	.307	.277	.275	.242	.202	.028	.346	.352	.317	.280	.081
75.00	.276	.275	.264	.242	.202	.029	.229	.251	.210	.202	.041
80.00	.240	.246	.236	.209	.167	.024	.188	.205	.178	.202	.003
85.00	.191	.210	.202	.177	.132	.020	.138	.254	.242	.211	.002
90.00	.137	.164	.152	.132	.088	.005	.182	.204	.187	.164	.063
95.00	.054	.087	.086	.046	.021	.000	.080	.122	.119	.072	.041

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at												
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent												
c	H = 0.98	a = -2.00°					H = 0.98	a = -0.08°				
Upper surface												
0.00	.029	.718	.668	.630	.570	.485	.081	.761	.714	.711	.673	.705
1.25	.345	.259	.173	.284	.271	.307	.268	.107	.085	.062	.024	.120
2.50	.288	.179	.175	.186	.191	.181	.205	.060	.038	.029	.011	.055
5.00	.226	.149	.130	.114	.113	.140	.147	.052	.035	.004	.041	.067
7.50	.205	.115	.095	.079	.063	.089	.119	.047	.015	.025	.070	.084
10.00	.159	.089	.063	.056	.039	.046	.091	.033	.006	.045	.069	.101
15.00	.113	.052	.022	.026	.003	.029	.065	.006	.032	.057	.092	.150
20.00	.052	.017	.015	.013	.003	.102	.056	.024	.061	.054	.115	.165
25.00	.037	.003	.024	.048	.066	.205	.005	.035	.064	.111	.133	.242
30.00	.005	.021	.041	.063	.084	.240	.072	.057	.085	.119	.139	.242
35.00	.005	.046	.056	.120	.112	.159	.150	.070	.100	.126	.161	.240
40.00	.052	.051	.049	.120	.114	.127	.056	.101	.121	.153	.184	.192
45.00	.061	.069	.113	.143	.144	.152	.103	.103	.152	.149	.207	.281
50.00	.049	.092	.143	.169	.194	.230	.078	.106	.153	.194	.231	.304
55.00	.072	.132	.174	.199	.223	.154	.083	.141	.184	.218	.259	.314
60.00	.143	.163	.188	.216	.256	.358	.158	.176	.203	.239	.275	.303
65.00	.147	.139	.187	.227	.263	.364	.161	.176	.209	.250	.280	.330
70.00	.160	.170	.198	.228	.292	.366	.178	.183	.218	.258	.306	.334
75.00	.156	.181	.211	.232	.307	.357	.183	.193	.223	.259	.321	.325
80.00	.158	.200	.211	.241	.315	.346	.198	.214	.226	.254	.323	.315
85.00	.209	.190	.211	.245	.307	.321	.229	.208	.226	.253	.304	.299
90.00	.177	.182	.198	.240	.289	.301	.195	.203	.217	.235	.275	.277
95.00	.147	.178	.195	.230	.277	.309	.145	.188	.204	.239	.272	.285
Lower surface												
1.25	.091	.-206	.-377	.-682	.-859	.-915	.423	.090	.019	.-033	.-078	.-138
2.50	.029	.-167	.-225	.-594	.-732	.-844	.171	.042	.002	.-056	.-105	.-122
5.00	.006	.-094	.-179	.-241	.-434	.-766	.137	.055	.005	.-034	.-073	.-127
7.50	.-016	.-108	.-184	.-253	.-268	.-693	.104	.026	.-019	.-060	.-077	.-136
10.00	.-054	.-116	.-183	.-252	.-294	.-601	.070	.008	.-040	.-073	.-089	.-132
15.00	.-070	.-120	.-181	.-243	.-289	.-597	.041	.-005	.-042	.-085	.-101	.-146
20.00	.-099	.-120	.-187	.-265	.-309	.-577	.001	.-019	.-087	.-116	.-125	.-193
25.00	.-124	.-110	.-184	.-248	.-288	.-577	.-017	.-019	.-078	.-111	.-124	.-141
30.00	.-141	.-140	.-250	.-325	.-365	.-555	.-021	.-021	.-049	.-113	.-142	.-144
35.00	.-126	.-179	.-217	.-277	.-313	.-591	.-036	.-085	.-096	.-130	.-149	.-218
40.00	.-182	.-186	.-226	.-288	.-320	.-529	.-082	.-086	.-100	.-157	.-179	.-259
45.00	.-151	.-190	.-236	.-300	.-341	.-361	.-051	.-095	.-133	.-194	.-207	.-289
50.00	.-200	.-224	.-268	.-326	.-360	.-385	.-112	.-129	.-167	.-223	.-235	.-311
55.00	.-220	.-245	.-284	.-339	.-381	.-401	.-131	.-152	.-180	.-233	.-271	.-329
60.00	.-255	.-272	.-303	.-360	.-399	.-407	.-166	.-182	.-208	.-253	.-291	.-334
65.00	.-268	.-279	.-316	.-377	.-422	.-411	.-175	.-192	.-217	.-275	.-308	.-340
70.00	.-275	.-267	.-314	.-365	.-414	.-405	.-183	.-180	.-217	.-265	.-307	.-340
75.00	.-324	.-302	.-321	.-375	.-426	.-390	.-238	.-215	.-223	.-270	.-328	.-325
80.00	.-328	.-323	.-350	.-382	.-405	.-394	.-240	.-233	.-244	.-280	.-328	.-334
85.00	.-342	.-326	.-351	.-369	.-398	.-357	.-235	.-234	.-244	.-271	.-332	.-277
90.00	.-319	.-321	.-281	.-334	.-382	.-376	.-234	.-239	.-244	.-289	.-327	.-312
95.00	.-223	.-274	.-293	.-313	.-334	.-343	.-170	.-211	.-252	.-277	.-269	.-273
	H = 0.98	a = 1.96°					H = 0.98	a = 3.88°				
Upper surface												
0.00	.064	.713	.606	.618	.600	.580	.069	.610	.488	.465	.458	.645
1.25	.150	.-153	.-260	.-614	.-701	.-584	.021	.-779	.-887	.-932	.-982	.-782
2.50	.087	.-145	.-224	.-372	.-612	.-764	.-041	.-386	.-795	.-861	.-904	.-976
5.00	.010	.-107	.-170	.-246	.-342	.-599	.-162	.-303	.-641	.-772	.-850	.-942
7.50	.-027	.-077	.-160	.-248	.-384	.-537	.-153	.-288	.-622	.-732	.-844	.-927
10.00	.-027	.-051	.-155	.-245	.-345	.-515	.-110	.-250	.-590	.-754	.-848	.-915
15.00	.-022	.-056	.-175	.-220	.-279	.-530	.-110	.-181	.-246	.-302	.-734	.-830
20.00	.-024	.-119	.-185	.-240	.-285	.-333	.-099	.-201	.-271	.-307	.-688	.-808
25.00	.-084	.-115	.-187	.-237	.-274	.-347	.-168	.-195	.-255	.-307	.-427	.-792
30.00	.-165	.-139	.-199	.-247	.-280	.-292	.-246	.-211	.-262	.-311	.-341	.-740
35.00	.-153	.-166	.-218	.-263	.-297	.-275	.-207	.-238	.-276	.-319	.-353	.-664
40.00	.-163	.-174	.-235	.-290	.-313	.-328	.-253	.-248	.-297	.-346	.-349	.-700
45.00	.-181	.-188	.-250	.-298	.-331	.-329	.-258	.-261	.-308	.-359	.-390	.-656
50.00	.-160	.-187	.-256	.-318	.-352	.-354	.-237	.-261	.-316	.-374	.-414	.-646
55.00	.-143	.-214	.-276	.-351	.-372	.-368	.-205	.-282	.-334	.-386	.-438	.-580
60.00	.-224	.-241	.-297	.-339	.-385	.-358	.-294	.-312	.-312	.-347	.-389	.-443
65.00	.-243	.-240	.-303	.-352	.-389	.-388	.-311	.-353	.-383	.-407	.-462	.-385
70.00	.-245	.-264	.-312	.-355	.-391	.-383	.-311	.-324	.-359	.-407	.-445	.-384
75.00	.-245	.-264	.-312	.-355	.-391	.-383	.-311	.-324	.-359	.-407	.-445	.-384
80.00	.-269	.-282	.-316	.-350	.-371	.-368	.-334	.-342	.-361	.-404	.-463	.-381
85.00	.-299	.-282	.-316	.-350	.-348	.-349	.-359	.-342	.-361	.-404	.-418	.-383
90.00	.-266	.-280	.-305	.-358	.-317	.-350	.-335	.-342	.-350	.-393	.-362	.-384
95.00	.-181	.-249	.-287	.-300	.-300	.-335	.-237	.-312	.-341	.-363	.-338	.-401
Lower surface												
1.25	.351	.306	.267	.284	.337	.261	.469	.459	.445	.463	.504	.411
2.50	.297	.218	.202	.213	.241	.204	.414	.357	.359	.375	.393	.341
5.00	.023	.154	.149	.150	.163	.153	.364	.298	.295	.289	.300	.280
7.50	.217	.139	.104	.125	.152	.102	.265	.216	.212	.217	.217	.215
10.00	.176	.112	.074	.057	.058	.068	.269	.210	.202	.194	.196	.168
15.00	.136	.086	.045	.036	.036	.000	.221	.176	.170	.153	.141	.085
20.00	.098	.055	.017	.010	.001	.-080	.174	.176	.120	.093	.104	.002
25.00	.076	.044	.009	.028	.027	.-154	.150	.131	.095	.065	.064	.081
30.00	.067	.021	.-011	.-045	.-051	.-201	.133	.094	.070	.043	.035	.131
35.00	.025	.-005	.-040	.-078	.-079	.-196	.075	.063	.041	.010	.001	.158
40.00	.004	.-020	.-058	.-100	.-098	.-260	.061	.051	.011	.-019	.-055	.-258
45.00	.010	.-040	.-051	.-134	.-131	.-330	.063	.011	.-019	.-055	.-055	.-258
50.00	.-074	.-043	.-142	.-162	.-159	.-344	.-005	.-047	.-046	.-045	.-059	.-312
60.00	.-108	.-124	.-166	.-199	.-221	.-327	.-062	.-068	.-085	.-117	.-165	.-325
65.00	.-115	.-137	.-172	.-221	.-252	.-335	.-060	.-080	.-094	.-135	.-165	.-300
70.00	.-117	.-126	.-175	.-210	.-253	.-329	.-064	.-079	.-090	.-134	.-187	.-343
75.00	.-179	.-152	.-191	.-228	.-277	.-321	.-130	.-116	.-127	.-157	.-214	.-343
80.00	.-179	.-178	.-207	.-240	.-293	.-327	.-135	.-127	.-139	.-180	.-232	.-348
85.00	.-195	.-178	.-207	.-244	.-308	.-275	.-134	.-127	.-137	.-185	.-249	.-297
90.00	.-172	.-181	.-207	.-247	.-300	.-314	.-132	.-132	.-141	.-185	.-249	.-345
95.00	.-130	.-159	.-198	.-254	.-277	.-273	.-108	.-122	.-137</td			

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , alt.														
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent	c	M = 0.98	a = 5.93*					M = 0.98	a = 7.92*				
Upper surface	0.30	-0.071	+0.72	+0.27	+0.267	+0.208	+0.536		+0.075	+0.319	+0.162	+0.057	+0.059	+0.377
	1.25	-0.122	-0.1010	-1.097	-1.142	-1.144	-0.944		+0.230	-1.171	-1.234	-1.269	-1.276	-1.100
	2.50	-0.168	-0.907	-0.992	-1.058	-1.010	-1.158		+0.473	-0.079	-1.132	-1.193	-1.223	-1.281
	5.00	-0.333	-0.638	-0.919	-0.979	-1.010	-1.105		+0.473	-0.063	-1.118	-1.154	-1.227	
	7.50	-0.316	-0.331	-0.846	-0.931	-0.962	-1.036		+0.473	-0.057	-0.993	-1.070	-1.121	-1.167
	10.00	-0.298	-0.23	-0.795	-0.902	-0.936	-1.008		+0.473	-0.053	-0.966	-1.030	-1.084	-1.139
	15.00	-0.216	-0.266	-0.745	-0.821	-0.878	-0.918		+0.235	-0.045	-0.847	-0.964	-1.043	-1.106
	20.00	-0.157	-0.255	-0.740	-0.808	-0.870	-0.900		+0.296	-0.036	-0.834	-0.937	-1.002	-1.082
	25.00	-0.097	-0.280	-0.740	-0.861	-0.827	-0.938		+0.327	-0.033	-0.842	-0.911	-0.981	-1.062
	30.00	-0.322	-0.291	-0.745	-0.801	-0.819	-0.897		+0.381	-0.037	-0.820	-0.883	-0.948	-1.032
	35.00	-0.281	-0.309	-0.558	-0.415	-0.801	-0.819		+0.356	-0.038	-0.820	-0.739	-0.935	-0.947
	40.00	-0.317	-0.324	-0.575	-0.415	-0.774	-0.839		+0.304	-0.039	-0.455	-0.613	-0.929	-0.954
	45.00	-0.324	-0.328	-0.589	-0.423	-0.670	-0.805		+0.368	-0.039	-0.449	-0.575	-0.928	-0.921
	50.00	-0.310	-0.330	-0.599	-0.441	-0.548	-0.809		+0.375	-0.043	-0.463	-0.558	-0.923	-0.930
	60.00	-0.280	-0.355	-0.411	-0.461	-0.523	-0.808		+0.349	-0.049	-0.474	-0.547	-0.917	-0.930
	65.00	-0.362	-0.377	-0.424	-0.468	-0.519	-0.793		+0.422	-0.044	-0.484	-0.540	-0.839	-0.923
	70.00	-0.364	-0.381	-0.426	-0.462	-0.516	-0.800		+0.424	-0.044	-0.484	-0.540	-0.839	-0.923
	75.00	-0.364	-0.390	-0.433	-0.482	-0.521	-0.807		+0.416	-0.048	-0.497	-0.542	-0.683	-0.937
	80.00	-0.396	-0.408	-0.433	-0.482	-0.527	-0.801		+0.453	-0.047	-0.497	-0.545	-0.644	-0.937
	85.00	-0.417	-0.408	-0.435	-0.482	-0.509	-0.789		+0.473	-0.047	-0.499	-0.547	-0.599	-0.936
	90.00	-0.398	-0.410	-0.425	-0.476	-0.450	-0.787		+0.456	-0.047	-0.488	-0.540	-0.910	-0.940
	95.00	-0.513	-0.384	-0.422	-0.455	-0.403	-0.775		+0.373	-0.044	-0.488	-0.524	-0.414	-0.950
Lower surface	0.30	+0.583	+0.589	+0.557	+0.571	+0.600	+0.501		+0.692	+0.685	+0.642	+0.642	+0.657	+0.554
	1.25	+0.559	+0.482	+0.473	+0.482	+0.497	+0.431		+0.652	+0.583	+0.567	+0.568	+0.571	+0.492
	2.50	+0.400	+0.406	+0.397	+0.393	+0.403	+0.372		+0.500	+0.449	+0.444	+0.444	+0.447	+0.428
	5.00	+0.400	+0.406	+0.397	+0.393	+0.403	+0.372		+0.519	+0.431	+0.419	+0.404	+0.416	+0.345
	7.50	+0.367	+0.315	+0.292	+0.284	+0.289	+0.250		+0.499	+0.398	+0.382	+0.363	+0.343	+0.311
	10.00	+0.307	+0.265	+0.245	+0.250	+0.233	+0.160		+0.391	+0.357	+0.321	+0.307	+0.299	+0.217
	15.00	+0.255	+0.245	+0.197	+0.172	+0.181	+0.074		+0.332	+0.310	+0.263	+0.243	+0.249	+0.134
	20.00	+0.223	+0.196	+0.161	+0.133	+0.140	+0.007		+0.293	+0.260	+0.226	+0.203	+0.204	+0.059
	30.00	+0.199	+0.160	+0.129	+0.109	+0.108	+0.059		+0.263	+0.222	+0.197	+0.173	+0.170	+0.003
	40.00	+0.126	+0.127	+0.097	+0.072	+0.070	+0.070		+0.184	+0.186	+0.164	+0.133	+0.127	+0.020
	45.00	+0.121	+0.105	+0.079	+0.043	+0.043	+0.044		+0.164	+0.158	+0.128	+0.101	+0.098	+0.098
	50.00	+0.117	+0.102	+0.079	+0.043	+0.043	+0.044		+0.141	+0.138	+0.107	+0.070	+0.064	+0.159
	55.00	+0.096	+0.096	+0.068	+0.040	+0.040	+0.040		+0.103	+0.100	+0.090	+0.070	+0.064	+0.185
	60.00	+0.076	+0.071	+0.059	+0.039	+0.039	+0.039		+0.074	+0.063	+0.049	+0.020	+0.013	+0.187
	65.00	+0.010	+0.009	+0.035	+0.063	+0.094	+0.273		+0.066	+0.041	+0.019	+0.007	+0.002	+0.137
	70.00	+0.007	+0.024	+0.047	+0.084	+0.124	+0.301		+0.047	+0.023	+0.004	+0.032	+0.078	+0.274
	75.00	+0.015	+0.027	+0.059	+0.091	+0.129	+0.308		+0.039	+0.017	+0.009	+0.043	+0.085	+0.274
	80.00	+0.079	+0.062	+0.087	+0.125	+0.166	+0.310		+0.017	+0.015	+0.034	+0.069	+0.128	+0.276
	85.00	+0.082	+0.073	+0.095	+0.137	+0.182	+0.318		+0.027	+0.024	+0.042	+0.078	+0.130	+0.290
	90.00	+0.096	+0.076	+0.094	+0.137	+0.200	+0.272		+0.037	+0.031	+0.040	+0.079	+0.140	+0.248
	95.00	+0.085	+0.077	+0.097	+0.135	+0.194	+0.325		+0.037	+0.039	+0.046	+0.074	+0.132	+0.297
	98.00	+0.088	+0.085	+0.097	+0.140	+0.183	+0.290		+0.059	+0.055	+0.058	+0.097	+0.129	+0.262
Upper surface	0.30	M = 0.98	a = 9.91*						M = 0.98	a = 13.68*				
	1.25	+0.070	+0.147	+0.027	+0.199	+0.372	+0.154		+0.040	+0.229	+0.081	+0.704	+0.680	+0.402
	2.50	+0.357	+0.255	+0.127	+0.104	+0.311	+1.194		+0.584	+1.084	+1.257	+1.241	+1.278	+1.282
	5.00	+0.447	+0.179	+0.120	+0.266	+0.280	+1.320		+0.691	+1.254	+1.232	+1.242	+1.273	+1.319
	7.50	+0.601	+0.989	+0.158	+0.193	+1.224	+1.278		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	10.00	+0.531	+0.679	+0.166	+0.120	+1.155	+1.217		+0.743	+1.098	+1.177	+1.217	+1.254	+1.292
	15.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.311
	20.00	+0.576	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	30.00	+0.574	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	40.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	50.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	60.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	70.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	80.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	90.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	95.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
	98.00	+0.531	+0.570	+0.188	+0.149	+1.175	+1.244		+0.787	+1.142	+1.201	+1.255	+1.247	+1.305
Lower surface	0.30	+0.785	+0.761	+0.712	+0.702	+0.699	+0.599		+0.929	+0.874	+0.805	+0.768	+0.726	+0.437
	1.25	+0.529	+0.668	+0.645	+0.611	+0.532	+0.547		+0.929	+0.808	+0.766	+0.754	+0.712	+0.405
	2.50	+0.400	+0.569	+0.562	+0.547	+0.497	+0.547		+0.929	+0.724	+0.689	+0.666	+0.632	+0.372
	5.00	+0.400	+0.569	+0.562	+0.547	+0.497	+0.547		+0.929	+0.724	+0.689	+0.666	+0.632	+0.372
	7.50	+0.400	+0.569	+0.562	+0.547	+0.497	+0.547		+0.929	+0.724	+0.689	+0.666	+0.632	+0.372
	10.00	+0.400	+0.569	+0.562	+0.547	+0.497	+0.547		+0.929	+0.724	+0.689	+0.666	+0.632	+0.372
	15.00	+0.446	+0.476	+0.459	+0.436	+0.440	+0.379		+0.694	+0.614	+0.590	+0.568	+0.550	+0.475
	20.00	+0.402	+0.378	+0.342	+0.312	+0.320	+0.201		+0.604	+0.538	+0.520	+0.506	+0.489	+0.384
	30.00	+0.359	+0.324	+0.296	+0.277	+0.271	+0.129		+0.479	+0.448	+0.462	+0.442	+0.432	+0.307
	40.00	+0.325	+0.281	+0.265	+0.245	+0.235	+0.064		+0.441	+0.392	+0.379	+0.364	+0.346	+0.170
	50.00	+0.325	+0.281	+0.265	+0.245	+0.235	+0.064		+0.352	+0.356	+0.340	+0.321	+0.303	+0.139
	60.00	+0.325	+0.281	+0.265	+0.245	+0.235	+0.064		+0.352	+0.356	+0.340	+0.321	+0.303	+0.139
	70.00	+0.325	+0.281	+0.265	+0.245	+0.235	+0.064		+0.352	+0.356	+0.340	+0.321	+0.303	+0.139
	80.00	+0.325	+0.281	+0.265	+0.245	+0.235	+0.064		+0.352	+0.356	+0.340	+0.321	+0.303	+0

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at											
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2
Percent C	M = 0.98	a = 15.01°						M = 0.98	a = 17.97°		
Upper surface											
0.00	.024	-1.474	.+696	-1.943	-1.065	-1.716		.011	-1.680	-1.872	-1.076
1.25	.712	-1.344	-1.293	-1.231	-1.123	-1.011		.830	-1.324	-1.276	-1.133
2.50	.823	-1.345	-1.263	-1.228	-1.128	-1.004		.949	-1.306	-1.254	-1.122
5.00	.946	-1.292	-1.293	-1.224	-1.124	-1.000		1.045	-1.300	-1.275	-1.114
7.50	.906	-1.253	-1.266	-1.224	-1.115	-0.994		1.012	-1.291	-1.245	-1.114
10.00	.856	-1.203	-1.266	-1.231	-1.123	-0.994		0.979	-1.266	-1.244	-1.114
12.50	.744	-1.150	-1.207	-1.222	-1.120	-0.994		.833	-1.223	-1.251	-1.109
15.00	.652	-1.105	-1.160	-1.199	-1.210	-0.994		.691	-1.184	-1.229	-1.091
17.50	.589	-1.01	-1.121	-1.189	-1.105	-0.994		.660	-1.117	-1.208	-1.067
20.00	.514	-1.027	-1.146	-1.184	-1.104	-0.995		.643	-1.074	-1.188	-1.056
25.00	.380	-1.059	-1.148	-1.185	-1.061	-0.997		.626	-1.038	-1.177	-1.047
30.00	.353	-1.079	-1.056	-1.132	-1.067	-0.996		.616	-1.028	-1.153	-1.037
35.00	.271	-1.084	-1.117	-1.105	-1.067	-0.990		.587	-1.017	-1.156	-1.000
40.00	.251	-1.093	-1.035	-1.102	-1.040	-0.983		.640	-1.050	-1.144	-0.979
45.00	.226	-1.007	-1.083	-1.024	-1.020	-0.971		.657	-1.071	-1.118	-0.983
50.00	.196	-1.068	-1.035	-1.024	-1.020	-0.963		.700	-1.099	-1.033	-0.964
55.00	.166	-1.029	-1.007	-1.083	-1.020	-0.957		.667	-1.121	-1.080	-0.956
60.00	.136	-1.053	-1.049	-1.065	-1.020	-0.951		.667	-1.120	-1.070	-0.950
65.00	.106	-1.053	-1.049	-1.065	-1.020	-0.949		.604	-1.120	-1.070	-0.949
70.00	.076	-1.053	-1.049	-1.065	-1.020	-0.949		.512	-1.120	-1.070	-0.949
75.00	.046	-1.053	-1.049	-1.065	-1.020	-0.949		.477	-1.120	-1.070	-0.949
80.00	.016	-1.053	-1.049	-1.065	-1.020	-0.949		.447	-1.120	-1.070	-0.949
85.00	.016	-1.053	-1.049	-1.065	-1.020	-0.949		.401	-1.120	-1.070	-0.949
90.00	.016	-1.053	-1.049	-1.065	-1.020	-0.949		.364	-1.120	-1.070	-0.949
95.00	.016	-1.053	-1.049	-1.065	-1.020	-0.949		.312	-1.120	-1.070	-0.949
Lower surface											
0.00	.977	.+908	.+828	.+775	.+719	.+635		1.015	.+936	.+846	.+778
1.25	1.010	.+859	.+806	.+767	.+732	.+618		1.073	.+909	.+843	.+756
2.50	.919	.+780	.+741	.+712	.+689	.+597		.981	.+841	.+793	.+758
5.00	.830	.+718	.+688	.+662	.+647	.+553		.887	.+784	.+743	.+698
7.50	.754	.+671	.+650	.+624	.+602	.+512		.819	.+739	.+703	.+680
10.00	.663	.+601	.+579	.+563	.+540	.+427		.725	.+669	.+636	.+614
12.50	.589	.+567	.+525	.+496	.+484	.+351		.652	.+617	.+583	.+557
15.00	.512	.+525	.+475	.+455	.+437	.+300		.501	.+572	.+536	.+513
17.50	.442	.+525	.+475	.+455	.+437	.+225		.557	.+572	.+536	.+513
20.00	.379	.+413	.+376	.+375	.+358	.+192		.448	.+476	.+456	.+431
25.00	.307	.+379	.+362	.+318	.+325	.+128		.464	.+442	.+420	.+393
30.00	.244	.+347	.+327	.+298	.+289	.+064		.440	.+407	.+383	.+355
35.00	.222	.+306	.+291	.+263	.+253	.+032		.380	.+365	.+349	.+319
40.00	.211	.+281	.+263	.+243	.+209	.-002		.330	.+299	.+284	.+268
45.00	.206	.+232	.+210	.+208	.+181	.+137		.284	.+267	.+260	.+237
50.00	.194	.+198	.+185	.+162	.+130	.-076		.241	.+252	.+238	.+217
55.00	.173	.+165	.+159	.+138	.+101	.-085		.222	.+215	.+207	.+187
60.00	.150	.+140	.+120	.+100	.+080	.-012		.184	.+171	.+164	.+147
65.00	.117	.+124	.+125	.+101	.+086	.-071		.154	.+145	.+144	.+109
70.00	.095	.+100	.+097	.+080	.+041	.-123		.118	.+135	.+151	.+115
75.00	.062	.+056	.+057	.+023	.-001	.-310		.075	.+084	.+083	.+051
Lower surface								M = 0.98	a = 20.13°		
0.00	-.027	-1.850	-1.047	-1.159	-1.047	-.931		-.104	-1.987	-1.141	-1.055
1.25	-.971	-1.333	-1.288	-1.106	-1.004	-.908		-.052	-1.265	-1.190	-1.043
2.50	-.072	-1.413	-1.265	-1.104	-1.004	-.908		-.133	-1.235	-1.195	-1.044
5.00	-.072	-1.413	-1.265	-1.104	-1.004	-.908		-.182	-1.232	-1.195	-1.044
7.50	-.107	-1.309	-1.259	-1.101	-1.004	-.908		-.133	-1.225	-1.172	-1.039
10.00	-.1070	-1.296	-1.281	-1.099	-1.004	-.908		-.134	-1.223	-1.172	-1.039
12.50	-.922	-1.274	-1.281	-1.089	-1.004	-.908		-.991	-1.234	-1.172	-1.035
15.00	-.922	-1.274	-1.281	-1.089	-1.004	-.908		-.786	-1.206	-1.168	-1.020
17.50	-.752	-1.236	-1.270	-1.075	-1.000	-.908		-.739	-1.189	-1.128	-1.031
20.00	-.709	-1.227	-1.231	-1.075	-1.003	-.907		-.724	-1.076	-1.128	-1.021
25.00	-.700	-1.222	-1.212	-1.062	-1.000	-.906		-.684	-1.081	-1.128	-1.019
30.00	-.688	-1.218	-1.201	-1.060	-1.000	-.904		-.694	-1.066	-1.128	-1.018
35.00	-.675	-1.218	-1.181	-1.060	-1.000	-.904		-.659	-1.074	-1.104	-1.021
40.00	-.675	-1.218	-1.181	-1.060	-1.000	-.904		-.659	-1.074	-1.104	-1.021
45.00	-.705	-1.218	-1.181	-1.060	-1.000	-.904		-.694	-1.066	-1.128	-1.018
50.00	-.695	-1.218	-1.181	-1.060	-1.000	-.904		-.659	-1.074	-1.104	-1.021
55.00	-.673	-1.209	-1.181	-1.060	-1.000	-.904		-.687	-1.065	-1.128	-1.021
60.00	-.678	-1.057	-1.055	-1.014	-1.004	-.906		-.760	-1.035	-1.063	-1.028
65.00	-.725	-1.035	-1.035	-1.004	-1.004	-.906		-.786	-1.034	-1.046	-1.002
70.00	-.695	-1.008	-1.009	-1.001	-1.004	-.908		-.751	-1.026	-1.030	-.998
75.00	-.645	-1.028	-1.086	-1.087	-1.004	-.903		-.756	-1.026	-1.007	-1.000
80.00	-.635	-1.046	-1.092	-1.081	-1.004	-.906		-.817	-1.027	-.991	-.996
85.00	-.703	-1.077	-1.016	-1.078	-1.004	-.904		-.790	-1.035	-1.022	-1.000
90.00	-.721	-1.082	-1.088	-1.077	-1.004	-.900		-.790	-1.035	-1.022	-1.000
95.00	-.729	-1.082	-1.087	-1.067	-1.004	-.902		-.780	-1.005	-.979	-.919
Lower surface											
0.00	1.021	.947	.845	.764	.687	.521		1.002	.957	.846	.747
1.25	1.101	.942	.845	.802	.754	.630		1.006	.971	.882	.755
2.50	1.025	.888	.827	.780	.748	.633		1.053	.932	.861	.769
5.00	.939	.832	.785	.746	.722	.606		.977	.884	.826	.773
7.50	.870	.793	.747	.715	.688	.572		.913	.840	.791	.752
10.00	.870	.793	.747	.715	.688	.572		.824	.774	.734	.747
12.50	.779	.722	.688	.658	.629	.504		.756	.734	.681	.667
15.00	.712	.656	.633	.602	.583	.439		.756	.734	.681	.673
20.00	.655	.622	.586	.561	.542	.379		.705	.669	.633	.602
30.00	.610	.575	.540	.524	.499	.316		.662	.623	.592	.568
35.00	.550	.531	.501	.488	.455	.206		.584	.585	.552	.500
40.00	.492	.442	.406	.443	.442	.222		.544	.544	.509	.411
45.00	.496	.457	.420	.403	.388	.159		.542	.548	.478	.453
50.00	.428	.414	.393	.369	.349	.127		.684	.446	.441	.406
55.00	.391	.380	.363	.343	.305	.093		.438	.427	.410	.386
60.00	.382	.344	.326	.304	.266	.064		.425	.394	.372	.350
65.00	.332	.309	.300	.270	.231	.040		.377	.359	.343	.314
70.00	.288	.292	.273	.253	.219	.014		.323	.336	.316	.275
75.00	.242	.253	.241	.223	.182	-.005		.299	.297	.282	.258
80.00	.230	.230	.218	.195	.156	-.028		.263	.268	.251	.194
85.00	.185	.201	.192	.172	.127	-.016		.218	.236	.226	.203
90.00	.146	.183	.135	.138	.097	-.068		.175	.199	.185	.132
95.00	.093	.103	.059	.059	.043	-.071		.104	.129	.121	.090

TABLE L - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_a :													
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	
Percent C	$M = 0.98 \quad \alpha = 24.37^\circ$						$M = 0.98 \quad \alpha = 26.48^\circ$						
Upper surface	0.00	-1.159	-1.095	-1.225	-1.100	-1.072	-1.001	-1.227	-1.164	-1.189	-1.132	-1.107	-1.058
	1.25	-1.131	-1.226	-1.171	-1.090	-1.055	-0.974	-1.169	-1.195	-1.167	-1.129	-1.095	-1.031
	2.50	-1.169	-1.200	-1.153	-1.089	-1.053	-0.973	-1.171	-1.184	-1.152	-1.122	-1.091	-1.030
	5.00	-1.256	-1.204	-1.170	-1.082	-1.050	-0.970	-1.214	-1.189	-1.169	-1.125	-1.089	-1.026
	7.50	-1.233	-1.205	-1.146	-1.082	-1.044	-0.970	-1.206	-1.181	-1.146	-1.115	-1.082	-1.025
	10.00	-1.210	-1.202	-1.087	-1.042	-0.968	-0.970	-1.197	-1.180	-1.137	-1.118	-1.078	-1.023
	12.50	-1.074	-1.207	-1.155	-1.077	-1.044	-0.968	-1.129	-1.189	-1.161	-1.111	-1.084	-1.028
	15.00	-0.889	-1.196	-1.153	-1.067	-1.045	-0.966	-0.951	-1.185	-1.163	-1.099	-1.059	-1.025
	17.50	-0.810	-1.179	-1.142	-1.072	-1.040	-0.965	-0.854	-1.179	-1.150	-1.109	-1.081	-1.020
	20.00	-0.780	-1.157	-1.121	-1.068	-1.037	-0.961	-0.820	-1.155	-1.129	-1.091	-1.057	-1.019
	25.00	-0.779	-1.126	-1.139	-1.065	-1.034	-0.959	-0.809	-1.140	-1.122	-1.099	-1.067	-1.011
	30.00	-0.777	-1.045	-1.140	-1.065	-1.028	-0.960	-0.861	-1.080	-1.154	-1.098	-1.073	-1.017
	35.00	-0.743	-0.974	-1.127	-1.064	-1.029	-0.957	-0.830	-1.015	-1.148	-1.095	-1.073	-1.013
	40.00	-0.750	-0.923	-1.113	-1.061	-1.021	-0.955	-0.823	-0.971	-1.134	-1.092	-1.068	-1.011
	45.00	-0.740	-0.893	-1.104	-1.054	-1.017	-0.955	-0.809	-0.936	-1.130	-1.098	-1.067	-1.011
	50.00	-0.805	-0.885	-1.095	-1.052	-1.014	-0.952	-0.850	-0.935	-1.126	-1.063	-1.043	-1.008
	55.00	-0.825	-0.869	-1.085	-1.052	-1.007	-0.945	-0.864	-0.919	-1.117	-1.065	-1.059	-1.000
	60.00	-0.786	-0.857	-1.079	-1.051	-1.001	-0.947	-0.826	-0.899	-1.111	-1.064	-1.052	-1.000
	65.00	-0.785	-0.857	-1.069	-1.028	-0.977	-0.947	-0.805	-0.881	-1.095	-1.064	-1.047	-1.000
	70.00	-0.785	-0.857	-1.069	-1.028	-0.977	-0.947	-0.796	-0.869	-1.095	-1.064	-1.047	-1.000
	75.00	-0.782	-0.854	-1.059	-1.022	-0.973	-0.944	-0.762	-0.866	-1.065	-1.032	-1.000	-1.000
	80.00	-0.782	-0.854	-1.059	-1.022	-0.940	-0.962	-0.762	-0.866	-1.067	-1.053	-1.021	-0.982
	85.00	-0.784	-0.860	-1.011	-1.014	-0.956	-0.941	-0.668	-0.899	-1.046	-1.052	-1.001	-0.993
	90.00	-0.798	-0.845	-0.999	-1.002	-0.938	-0.928	-0.620	-0.864	-1.029	-1.017	-0.994	
Lower surface	0.00	.968	.956	.839	.738	.689	.592	.932	.956	.828	.715	.608	.566
	1.25	1.100	.991	.894	.811	.751	.622	1.090	1.007	.895	.803	.739	.604
	2.50	1.070	.965	.890	.831	.785	.649	1.084	.990	.907	.840	.791	.643
	5.00	1.000	.918	.854	.812	.784	.682	1.031	.957	.889	.831	.785	.646
	7.50	1.008	.938	.844	.820	.790	.682	1.019	.926	.881	.816	.761	.671
	10.00	1.008	.938	.844	.820	.790	.682	1.019	.926	.881	.816	.761	.671
	12.50	1.033	.921	.833	.740	.705	.659	1.097	.942	.886	.775	.733	.589
	15.00	1.033	.921	.833	.740	.705	.659	1.094	.942	.886	.775	.733	.589
	20.00	.796	.764	.729	.692	.664	.511	1.034	.813	.769	.729	.695	.532
	25.00	.749	.718	.686	.651	.625	.455	1.070	.745	.727	.688	.656	.483
	30.00	.708	.673	.643	.614	.586	.398	1.046	.720	.686	.656	.617	.428
	35.00	.632	.633	.602	.571	.542	.364	1.073	.678	.646	.613	.577	.393
	40.00	.615	.589	.568	.535	.513	.307	1.053	.639	.609	.576	.547	.335
	45.00	.587	.554	.530	.495	.478	.245	1.029	.600	.573	.536	.511	.277
	50.00	.526	.513	.491	.460	.439	.213	1.067	.555	.534	.498	.476	.243
	55.00	.482	.474	.460	.430	.396	.179	1.027	.520	.503	.471	.428	.210
	60.00	.460	.459	.424	.393	.354	.147	1.053	.483	.463	.433	.388	.178
	65.00	.416	.404	.369	.357	.320	.120	1.036	.443	.432	.396	.353	.149
	70.00	.364	.375	.353	.328	.295	.085	1.016	.417	.402	.372	.324	.117
	75.00	.336	.334	.325	.296	.263	.063	1.046	.371	.359	.329	.294	.087
	80.00	.297	.304	.293	.268	.232	.038	1.032	.339	.327	.302	.257	.058
	85.00	.252	.266	.264	.237	.196	.041	1.080	.302	.294	.270	.219	.059
	90.00	.206	.224	.216	.196	.158	-.017	1.028	.252	.243	.225	.178	-.003
	95.00	.119	.157	.134	.116	.091	-.034	1.031	.180	.176	.135	.107	-.021

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TABLE L - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P , at:													
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent c	M = 1.00	$\alpha = -2.00^\circ$					M = 1.00	$\alpha = -0.04^\circ$					
Upper surface													
0.00	.074	.758	.708	.575	.616	.539	.067	.768	.722	.697	.724		
1.25	.374	.497	.427	.328	.306	.243	.260	.088	.079	.015	.022	.103	
2.50	.325	.420	.329	.220	.221	.217	.205	.402	.033	-.013	.058	.082	
5.00	.273	.192	.179	.170	.150	.154	.151	.041	.033	-.022	.068	.089	
7.50	.242	.162	.147	.131	.106	.130	.126	.041	.015	-.035	.084	.099	
10.00	.211	.139	.134	.104	.074	.091	.100	.032	-.008	-.051	.094	.116	
12.50	.148	.107	.080	.080	.042	.014	.072	.014	.029	-.059	-.105	.140	
20.00	.105	.074	.048	.041	.014	-.054	.044	.016	-.055	-.087	.113	.185	
25.00	.092	.057	.029	.011	-.017	-.151	.005	-.030	-.065	-.100	-.130	.232	
30.00	.058	.041	.019	-.010	-.030	-.182	-.053	-.045	-.086	-.118	-.138	.236	
35.00	.030	.012	-.008	-.030	-.060	-.204	-.045	-.074	-.102	-.123	-.164	.233	
40.00	.006	.003	-.020	-.068	-.085	-.245	-.002	-.059	-.113	-.134	-.184	.205	
45.00	.001	-.001	-.051	-.112	-.222	-.242	.057	-.047	-.144	-.165	-.202	.142	
55.00	.009	.054	-.081	-.110	-.244	-.266	.063	-.097	-.148	-.179	-.240	.105	
60.00	.029	.072	-.113	-.140	-.171	-.294	.088	-.133	-.178	-.211	-.251	.306	
65.00	.083	.103	-.128	-.156	-.199	-.283	.144	-.169	-.198	-.228	-.270	.295	
70.00	.101	.113	-.136	-.176	-.236	-.311	.168	-.178	-.207	-.250	-.275	.322	
75.00	.106	.125	-.154	-.176	-.250	-.298	.169	-.192	-.222	-.255	-.317	.317	
80.00	.129	.148	-.154	-.162	-.261	-.291	.190	-.211	-.222	-.251	-.317	.305	
85.00	.155	.156	-.154	-.189	-.254	-.272	.220	-.203	-.223	-.246	-.297	.287	
90.00	.125	.151	-.143	-.188	-.233	-.254	.188	-.200	-.213	-.246	-.286	.269	
95.00	.100	.131	-.143	-.181	-.243	-.264	.139	-.189	-.205	-.233	-.268	.266	
Lower surface													
0.00	.145	.129	-.301	-.567	-.707	-.745	.251	.127	.049	.031	.035	.053	
1.25	.091	.102	-.154	-.432	-.588	-.709	.154	.067	.041	.008	.001	.035	
2.50	.046	.035	-.104	-.162	-.320	-.636	.149	.077	.036	.008	-.026	.082	
5.00	.048	.044	-.113	-.174	-.204	-.569	.136	.053	.015	-.021	-.039	.074	
10.00	.012	.052	-.109	-.183	-.224	-.467	.102	.034	.001	-.044	-.094	.084	
15.00	-.002	-.052	-.111	-.167	-.220	-.315	.072	.020	-.014	-.054	-.074	.112	
20.00	.031	-.053	-.115	-.187	-.241	-.310	.043	.004	-.040	-.077	-.100	.164	
25.00	.049	-.062	-.106	-.168	-.221	-.310	.020	-.003	-.047	-.080	-.108	.213	
30.00	.036	-.072	-.120	-.177	-.227	-.257	.025	-.023	-.054	-.056	-.120	.227	
35.00	.054	-.110	-.149	-.204	-.246	-.233	.011	-.057	-.075	-.115	-.147	.197	
40.00	.107	-.124	-.141	-.224	-.253	-.269	.017	-.061	-.057	-.157	-.160	.243	
45.00	.177	-.148	-.167	-.222	-.272	-.299	.023	-.072	-.118	-.187	-.276		
50.00	.125	-.155	-.198	-.281	-.287	-.322	.082	-.107	-.153	-.196	-.214	.296	
55.00	.150	-.174	-.212	-.266	-.314	-.341	.104	-.128	-.172	-.207	-.248	.313	
60.00	.180	-.202	-.233	-.288	-.334	-.344	.138	-.156	-.189	-.229	-.269	.318	
65.00	.193	-.211	-.244	-.305	-.354	-.344	.147	-.165	-.199	-.246	-.291	.322	
70.00	.200	-.201	-.244	-.292	-.347	-.340	.153	-.158	-.199	-.235	-.287	.322	
75.00	-.253	-.234	-.253	-.306	-.358	-.327	.210	-.194	-.205	-.246	-.308	.310	
80.00	-.257	-.254	-.264	-.314	-.342	-.338	.215	-.215	-.217	-.256	-.314	.320	
85.00	-.271	-.262	-.266	-.303	-.341	-.280	.228	-.218	-.222	-.248	-.318	.262	
90.00	-.258	-.266	-.271	-.295	-.327	-.319	.214	-.221	-.222	-.248	-.303	.296	
95.00	-.179	-.232	-.253	-.278	-.291	-.288	.157	-.201	-.206	-.261	-.285	.256	
Upper surface													
0.00	M = 1.00	$\alpha = 1.90^\circ$					M = 1.00	$\alpha = 3.93^\circ$					
1.25	.093	.734	.646	.453	.430	.473	.089	.623	.482	.463	.668		
2.50	.179	.097	-.183	-.572	-.678	-.556	.050	-.784	-.899	-.975	-.994	.746	
5.00	.118	.109	-.168	-.293	-.589	-.723	.008	.117	.784	.871	.923	.981	
7.50	.054	.072	-.105	-.206	-.287	-.456	.121	.305	.639	.795	.848	.919	
10.00	.036	.043	-.100	-.196	-.254	-.584	.120	.178	.205	.741	.797	.858	
15.00	.017	.040	-.107	-.189	-.264	-.518	.118	.162	.215	.699	.785	.821	
20.00	.020	.043	-.112	-.159	-.249	-.352	.072	.146	.208	.288	.745	.810	
25.00	.145	.152	-.124	-.183	-.242	-.279	.155	.163	.232	.240	.240	.260	
30.00	.047	.068	-.124	-.184	-.247	-.311	.128	.144	.247	.279	.417	.479	
35.00	.116	.092	-.138	-.186	-.233	-.256	.197	.174	.222	.277	.310	.375	
40.00	.089	.120	-.156	-.199	-.251	-.248	.158	.197	.237	.264	.322	.369	
45.00	.115	.126	-.171	-.227	-.268	-.292	.191	.204	.258	.311	.340	.382	
50.00	.136	.142	-.187	-.238	-.288	-.328	.208	.218	.269	.322	.356	.447	
55.00	.115	.143	-.194	-.250	-.307	-.321	.191	.218	.279	.339	.380	.537	
60.00	.126	.173	-.218	-.264	-.329	-.331	.198	.242	.293	.355	.401	.572	
65.00	.180	.204	-.212	-.275	-.337	-.314	.251	.271	.309	.362	.419	.451	
70.00	.185	.204	-.247	-.292	-.331	-.344	.257	.272	.318	.373	.417	.405	
75.00	.203	.241	-.241	-.344	-.344	-.346	.268	.277	.312	.375	.428	.367	
80.00	.229	.242	-.254	-.291	-.330	-.328	.290	.304	.325	.374	.431	.353	
85.00	.257	.238	-.254	-.289	-.307	-.304	.316	.304	.325	.371	.386	.365	
90.00	.227	.237	-.246	-.276	-.281	-.289	.296	.306	.316	.341	.335	.360	
95.00	.151	.215	-.237	-.242	-.265	-.294	.207	.279	.310	.333	.312	.373	
Lower surface													
0.00	.377	.340	.318	.330	.371	.329	.492	.502	.482	.499	.551	.428	
1.25	.329	.249	.248	.260	.278	.234	.451	.394	.401	.409	.425	.373	
2.50	.269	.216	.201	.204	.194	.189	.408	.337	.331	.321	.329	.313	
5.00	.253	.179	.161	.161	.160	.135	.359	.286	.241	.240	.242	.246	
7.50	.213	.151	.151	.124	.124	.100	.314	.293	.241	.240	.242	.241	
10.00	.176	.147	.147	.101	.053	.038	.225	.216	.143	.134	.132	.057	
15.00	.111	.059	.059	.047	.035	.043	.223	.216	.143	.134	.132	.057	
20.00	.120	.086	.061	.026	.006	.122	.198	.172	.132	.102	.095	.045	
25.00	.110	.062	.045	.012	-.012	-.166	.178	.134	.110	.080	.064	.094	
30.00	.066	.037	.020	-.020	-.049	-.198	.114	.102	.077	.045	.029	.125	
40.00	.042	.025	-.001	.043	-.064	-.218	.105	.085	.054	.017	.006	.163	
45.00	.051	.001	-.032	-.052	-.095	-.237	.095	.058	.020	-.017	-.028	.218	
50.00	-.012	-.032	-.062	-.103	-.120	-.277	.039	.022	-.010	-.042	-.053	.248	
55.00	-.034	-.055	-.082	-.120	-.157	-.290	.013	-.004	-.028	-.057	-.099	.272	
60.00	-.064	-.080	-.109	-.140	-.184	-.290	.008	-.023	-.048	-.080	-.124	.268	
65.00	-.074	-.089	-.112	-.159	-.216	-.291	.018	-.037	-.059	-.101	-.155	.304	
70.00	-.076	-.088	-.118	-.149	-.242	-.291	.022	-.037	-.067	-.102	-.156	.308	
75.00	-.127	-.142	-.145	-.149	-.249	-.288	.005	-.053	-.100	-.144	-.144	.308	
80.00	-.141	-.141	-.148	-.180	-.255	-.289	.091	-.086	-.104	-.143	-.203	.314	
85.00	-.136	-.139	-.144	-.183	-.267	-.235	.104	-.086	-.102	-.149	-.217	.261	
90.00	-.135	-.139	-.146	-.187	-.263	-.272	.098	-.092	-.108	-.151	-.217	.310	
95.00	-.097	-.123	-.143	-.201	-.244	-.234	.070	-.083	-.103	-.160	-.211		

TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:															
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
Percent	c	M = 1.00	$\alpha = 5.90^\circ$						M = 1.00	$\alpha = 7.90^\circ$					
Upper surface	0.00	.088	.504	.308	.253	.577		.062	.139	.191	.088	.038	.400		
	1.25	-.073	-.976	-1.062	-1.117	-1.137	-.997	-.210	-1.117	-1.197	-1.227	-1.253	-1.065		
	2.50	-.139	-.866	-.943	-1.022	-1.073	-1.127	-.287	-1.070	-1.090	-1.168	-1.218	-1.256		
	3.75	-.272	-.588	-.868	-.939	-.988	-1.062	-.436	-.798	-1.019	-1.078	-1.137	-1.204		
	5.00	-.256	-.282	-.808	-.885	-.930	-.976	-.407	-.556	-.957	-.108	-.074	-.143		
	6.25	-.161	-.265	-.761	-.842	-.912	-.955	-.327	-.444	-.928	-.998	-1.064	-1.110		
	7.50	-.117	-.238	-.725	-.878	-.935	-.965	-.295	-.373	-.851	-.927	-1.019	-1.064		
	8.75	-.144	-.237	-.597	-.760	-.839	-.907	-.255	-.356	-.840	-.917	-1.044	-1.094		
	10.00	-.202	-.231	-.292	-.596	-.798	-.899	-.267	-.331	-.422	-.866	-.935	-.934		
Lower surface	11.25	-.262	-.243	-.291	-.408	-.778	-.864	-.343	-.531	-.139	-.846	-.916	-.907		
	12.50	-.229	-.266	-.304	-.367	-.767	-.789	-.373	-.549	-.170	-.717	-.897	-.872		
	13.75	-.263	-.277	-.525	-.564	-.739	-.801	-.347	-.557	-.389	-.881	-.898	-.924		
	15.00	-.272	-.284	-.336	-.373	-.618	-.769	-.336	-.563	-.403	-.859	-.895	-.895		
	16.25	-.254	-.284	-.347	-.391	-.505	-.772	-.336	-.566	-.410	-.819	-.893	-.905		
	17.50	-.264	-.307	-.358	-.410	-.482	-.772	-.346	-.589	-.428	-.811	-.888	-.901		
	18.75	-.240	-.332	-.370	-.416	-.477	-.760	-.352	-.597	-.457	-.808	-.882	-.892		
	20.00	-.234	-.336	-.375	-.417	-.477	-.776	-.340	-.595	-.455	-.806	-.878	-.892		
	21.25	-.234	-.347	-.375	-.430	-.482	-.773	-.381	-.627	-.455	-.856	-.925	-.934		
Upper surface	22.50	-.311	-.347	-.384	-.430	-.482	-.773	-.381	-.627	-.455	-.856	-.925	-.934		
	23.75	-.347	-.367	-.385	-.434	-.487	-.770	-.420	-.645	-.492	-.859	-.928	-.934		
	25.00	-.372	-.367	-.387	-.430	-.469	-.767	-.444	-.642	-.494	-.858	-.923	-.913		
	26.25	-.353	-.367	-.376	-.422	-.411	-.760	-.424	-.644	-.495	-.848	-.914	-.914		
	27.50	-.371	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	28.75	-.347	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	30.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	31.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	32.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
Lower surface	33.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	35.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	36.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	37.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	38.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	40.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	41.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	42.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	43.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
Upper surface	45.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	46.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	47.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	48.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	50.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	51.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	52.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	53.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	55.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
Lower surface	56.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	57.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	58.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	60.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	61.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	62.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	63.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	65.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	66.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
Upper surface	67.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	68.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	70.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	71.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	72.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	73.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	75.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	76.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	77.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
Lower surface	78.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	80.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	81.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	82.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	83.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	85.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	86.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	87.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	88.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
Upper surface	90.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	91.25	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	92.50	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	93.75	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		
	95.00	-.328	-.350	-.376	-.405	-.470	-.742	-.434	-.644	-.494	-.848	-.914	-.914		

CONFIDENTIAL

TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at:															
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
Percent	c	$M = 1.00 \quad \alpha = 15.83^\circ$							$M = 1.00 \quad \alpha = 18.03^\circ$						
Upper surface	0.00	-0.054	-0.423	-0.645	-0.888	-1.008	-0.663	-0.072	-0.613	-0.824	-1.042	-1.124	-0.879		
	1.25	-0.057	-1.280	-1.231	-1.171	-1.059	-0.985	-0.787	-1.299	-1.254	-1.111	-1.012	-0.905		
	2.50	-0.778	-1.271	-1.202	-1.172	-1.088	-0.979	-0.908	-1.287	-1.225	-1.105	-1.013	-0.902		
	5.00	-0.898	-1.232	-1.228	-1.172	-1.087	-0.969	-1.006	-1.275	-1.252	-1.098	-1.019	-0.895		
	7.50	-0.861	-1.186	-1.204	-1.172	-1.078	-0.964	-0.974	-1.263	-1.223	-1.096	-1.020	-0.896		
	10.00	-0.822	-1.145	-1.203	-1.181	-1.080	-0.964	-0.942	-1.236	-1.246	-1.094	-1.029	-0.895		
	12.50	-0.891	-1.079	-1.149	-1.170	-1.078	-0.964	-0.802	-1.185	-1.222	-1.087	-1.043	-0.892		
	25.00	-0.517	-1.039	-1.102	-1.145	-1.172	-0.964	-0.655	-1.138	-1.195	-1.075	-1.052	-0.890		
	37.50	-0.547	-1.021	-1.074	-1.104	-1.144	-0.964	-0.687	-1.085	-1.182	-1.170	-1.047	-0.885		
	50.00	-0.566	-1.077	-1.028	-1.113	-1.057	-0.964	-0.608	-1.086	-1.136	-1.042	-1.026	-0.887		
Lower surface	5.00	-0.539	-0.515	-1.012	-1.094	-1.047	-0.964	-0.599	-0.624	-0.686	-0.734	-0.784	-0.887		
	10.00	-0.546	-0.537	-0.998	-1.077	-1.033	-0.962	-0.615	-0.593	-0.620	-0.672	-0.707	-0.882		
	15.00	-0.542	-0.548	-0.991	-1.063	-1.024	-0.957	-0.596	-0.608	-0.610	-0.604	-0.612	-0.876		
	20.00	-0.572	-0.562	-0.984	-1.049	-1.011	-0.951	-0.616	-0.620	-0.610	-0.599	-0.600	-0.873		
	25.00	-0.593	-0.587	-0.956	-1.030	-0.997	-0.942	-0.645	-0.642	-0.691	-0.794	-0.868	-0.873		
	30.00	-0.609	-0.608	-0.904	-1.002	-0.977	-0.930	-0.665	-0.664	-1.047	-0.953	-0.975	-0.869		
	37.50	-0.617	-0.602	-0.988	-0.958	-0.922	-0.930	-0.673	-0.673	-0.932	-0.941	-0.953	-0.861		
	50.00	-0.604	-0.625	-0.857	-0.970	-0.940	-0.918	-0.641	-0.681	-0.722	-0.930	-0.937	-0.860		
	75.00	-0.594	-0.632	-0.882	-0.936	-0.921	-0.918	-0.637	-0.686	-0.791	-0.915	-0.922	-0.862		
	100.00	-0.581	-0.632	-0.882	-0.921	-0.918	-0.918	-0.682	-0.681	-0.782	-0.907	-0.905	-0.859		
Upper surface	5.00	-0.545	-0.649	-0.857	-0.875	-0.868	-0.921	-0.646	-0.645	-0.743	-0.896	-0.911	-0.853	-0.859	
	10.00	-0.526	-0.645	-0.578	-0.820	-0.835	-0.926	-0.635	-0.619	-0.635	-0.881	-0.883	-0.853	-0.859	
	15.00	-0.553	-0.552	-0.571	-0.765	-0.836	-0.924	-0.646	-0.557	-0.659	-0.871	-0.864	-0.859	-0.859	
	20.00	1.001	.927	.848	.791	.738	.657	1.027	.949	.859	.791	.731	.658		
	25.00	1.034	.873	.826	.783	.750	.640	1.082	.923	.858	.806	.771	.654		
	30.00	.948	.808	.783	.726	.705	.619	.991	.858	.805	.768	.744	.684		
	37.50	.780	.675	.708	.679	.645	.577	.903	.796	.758	.721	.713	.610		
	50.00	.780	.693	.672	.643	.622	.534	.830	.751	.718	.689	.674	.570		
	75.00	.614	.525	.603	.574	.540	.443	.741	.681	.657	.624	.610	.497		
	100.00	.614	.566	.566	.559	.507	.435	.866	.629	.594	.549	.558	.427		
Lower surface	5.00	.567	.529	.502	.474	.424	.312	.537	.465	.435	.395	.371	.324		
	10.00	.523	.481	.460	.439	.421	.254	.575	.540	.514	.489	.475	.399		
	15.00	.533	.442	.418	.397	.377	.221	.488	.423	.473	.444	.432	.347		
	20.00	.453	.407	.386	.361	.349	.154	.483	.458	.439	.410	.402	.303		
	25.00	.411	.371	.350	.322	.310	.092	.462	.422	.402	.371	.345	.140		
	30.00	.347	.332	.316	.291	.275	.060	.396	.382	.367	.336	.328	.108		
	37.50	.303	.299	.292	.267	.229	.032	.354	.351	.339	.312	.284	.078		
	50.00	.306	.274	.256	.234	.196	.004	.348	.319	.306	.278	.247	.052		
	75.00	.239	.246	.233	.204	.181	.024	.302	.288	.246	.214	.208	.028		
	100.00	.208	.201	.184	.159	.128	.059	.255	.242	.205	.172	.162	.009		
Upper surface	5.00	.198	.201	.184	.159	.128	.059	.247	.244	.226	.191	.172	.009		
	10.00	.174	.180	.165	.142	.107	.071	.209	.214	.185	.181	.148	.028		
	15.00	.144	.155	.154	.130	.084	.037	.169	.190	.186	.161	.124	.013		
	20.00	.118	.130	.126	.109	.068	.084	.139	.160	.154	.134	.099	.058		
	25.00	.081	.087	.088	.053	.033	.078	.095	.109	.109	.071	.095	.057		
	30.00	$M = 1.00 \quad \alpha = 20.15^\circ$							$M = 1.00 \quad \alpha = 22.28^\circ$						
	37.50	-0.121	-0.786	-0.980	-1.113	-1.001	-0.909	-0.211	-0.935	-1.112	-1.084	-0.988	-0.932		
	50.00	-0.902	-1.289	-1.248	-1.080	-0.989	-0.880	-1.009	-1.284	-1.233	-1.042	-0.983	-0.915		
	75.00	-0.101	-1.274	-1.214	-1.083	-0.984	-0.874	-1.028	-1.267	-1.218	-1.083	-1.078	-0.914		
	100.00	-0.095	-1.270	-1.204	-1.081	-0.982	-0.875	-1.028	-1.261	-1.202	-1.056	-1.072	-0.914		
	12.50	-0.109	-1.257	-1.238	-1.080	-0.985	-0.875	-1.097	-1.255	-1.217	-1.056	-1.073	-0.915		
	15.00	-0.872	-1.222	-1.232	-1.073	-1.004	-0.875	-0.953	-1.241	-1.209	-1.051	-1.076	-0.916		
	20.00	-0.704	-1.177	-1.220	-1.056	-1.006	-0.873	-0.755	-1.216	-1.195	-1.044	-1.076	-0.916		
	25.00	-0.657	-1.182	-1.194	-1.061	-0.995	-0.870	-0.705	-1.211	-1.167	-1.050	-1.074	-0.914		
	30.00	-0.642	-0.877	-1.178	-1.044	-0.992	-0.868	-0.589	-1.148	-1.042	-0.971	-0.914	-0.914		
	37.50	-0.535	-0.683	-1.163	-1.031	-0.987	-0.866	-0.578	-1.129	-1.039	-0.969	-0.913	-0.913		
Lower surface	5.00	-0.652	-0.650	-1.146	-1.017	-0.979	-0.864	-0.586	-1.111	-1.039	-0.964	-0.915	-0.915		
	10.00	-0.526	-0.654	-1.129	-0.999	-0.975	-0.865	-0.647	-1.092	-1.053	-0.964	-0.914	-0.914		
	15.00	-0.635	-0.635	-1.059	-0.985	-0.963	-0.864	-0.639	-1.073	-1.053	-0.957	-0.915	-0.915		
	20.00	-0.568	-0.650	-1.046	-0.968	-0.960	-0.865	-0.624	-1.054	-1.051	-0.957	-0.915	-0.915		
	25.00	-0.587	-0.607	-0.907	-0.947	-0.954	-0.864	-0.633	-1.034	-1.022	-0.956	-0.909	-0.909		
	30.00	-0.703	-0.712	-0.962	-0.944	-0.942	-0.859	-0.700	-1.024	-1.006	-0.952	-0.911	-0.911		
	37.50	-0.698	-0.931	-0.942	-0.929	-0.920	-0.860	-0.703	-1.008	-1.003	-0.948	-0.914	-0.914		
	50.00	-0.668	-0.677	-0.891	-0.931	-0.923	-0.861	-0.718	-0.979	-0.998	-0.944	-0.911	-0.911		
	75.00	-0.685	-0.687	-0.849	-0.929	-0.916	-0.860	-0.786	-0.807	-0.968	-0.992	-0.942	-0.908		
	100.00	-0.643	-0.697	-0.818	-0.929	-0.896	-0.858	-0.776	-0.800	-0.944	-0.991	-0.924	-0.910		
Upper surface	5.00	-0.625	-0.703	-0.780	-0.917	-0.877	-0.858	-0.765	-0.795	-0.918	-0.983	-0.908	-0.910		
	10.00	-0.638	-0.707	-0.754	-0.907	-0.898	-0.858	-0.728	-0.778	-0.929	-0.971	-0.929	-0.910		
	15.00	1.017	.971	.885	.786	.710	.645	1.020	.973	.862	.767	.685	.629		
	20.00	1.114	.963	.885	.822	.776	.655	1.114	.987	.896	.822	.774	.648		
	25.00	1.038	.909	.850	.801	.749	.658	1.045	.944	.879	.821	.787	.645		
	30.00	.954	.854	.808	.768	.742	.631	1.050	.895	.844	.792	.829	.648		
	37.50	.814	.771	.731	.708	.600	.524	1.029	.858	.814	.766	.770	.621		
	50.00	.798	.742	.710	.683	.653	.532	1.039	.790	.754	.714	.689	.561		
	75.00	.729	.683	.657	.628	.609	.469	1.073	.728	.701	.662	.645	.501		
	100.00	.676	.642	.614	.587	.567	.408	1.023	.688	.656	.619	.605	.446		
Lower surface	5.00	.633	.601	.571	.550	.529	.348	.678	.647	.612	.584	.564	.384		
	10.00	.551	.556	.532	.506	.483	.310	.603	.602	.572	.541	.522	.351		
	15.00	.545	.521	.497	.470	.455	.293	.588	.566	.538	.504	.492	.311		
	20.00	.544	.486	.451	.421	.									

TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued.

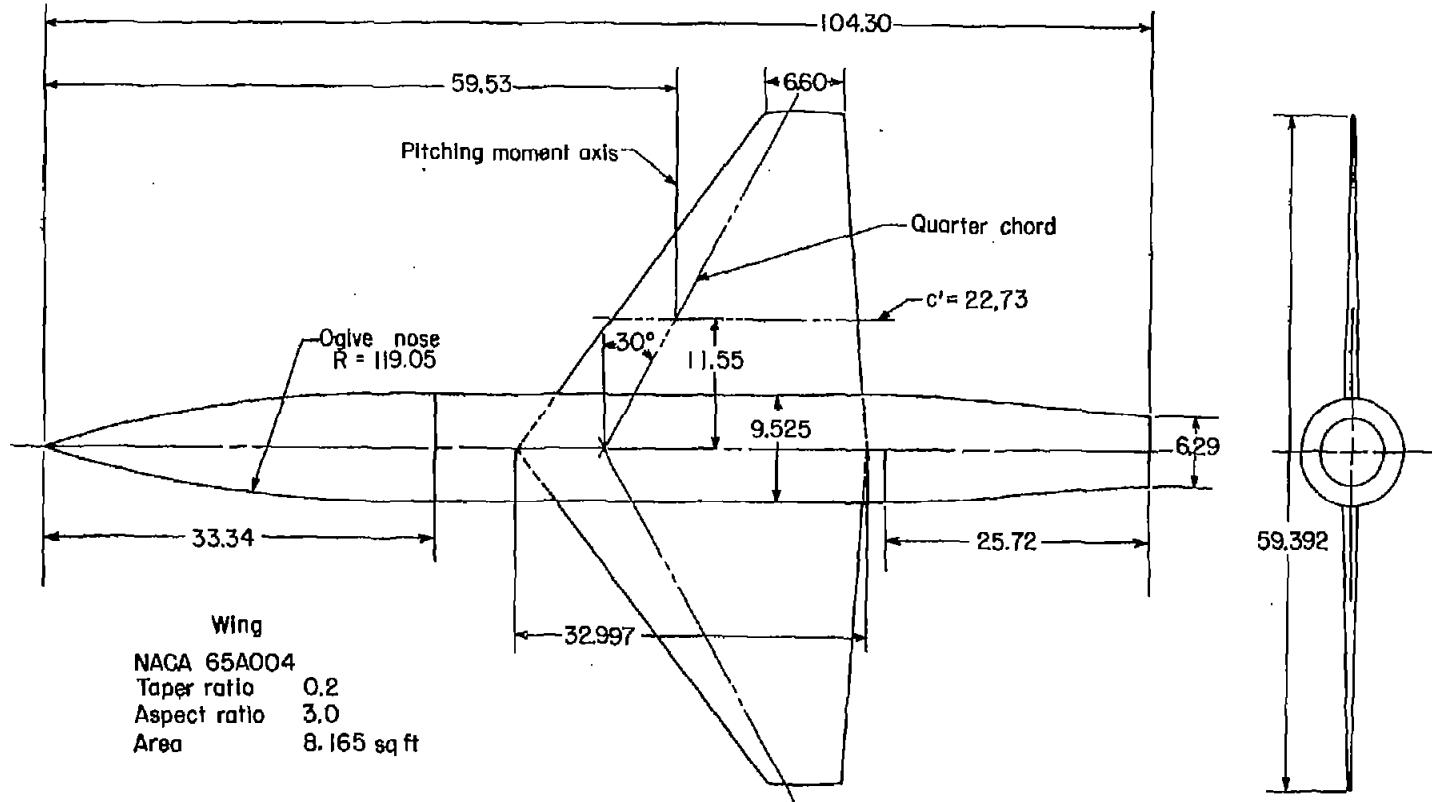
Pressure coefficient, P_c , at:													
	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent c													
	M = 1.03	a = -2.02°						M = 1.03	a = -0.06°				
Upper surface													
0.00	-0.019	.737	.695	.667	.616	.560		-.001	.758	.722	.725	.694	.739
1.50	.012	.245	.281	.298	.327	.344		.008	.265	.240	.244	.203	.247
3.50	.022	.145	.170	.164	.200	.214		.014	.163	.143	.144	.101	.163
5.00	.023	.146	.143	.147	.146	.159		.018	.025	.034	.005	.026	.051
7.50	.0185	.120	.107	.103	.102	.153		.0085	.025	.012	.016	.052	.059
10.00	.018	.094	.078	.077	.072	.112		.007	.015	.005	.038	.053	.078
15.00	.0121	.064	.046	.045	.039	.044		.000	.000	.030	.044	.076	.100
20.00	.056	.037	.015	.013	.011	.023		.007	.027	.059	.068	.095	.114
25.00	.055	.027	.003	-.007	-.009	.122		.008	.042	.057	.085	.111	.193
30.00	.023	.011	-.012	-.025	-.023	.153		.031	.051	.073	.100	.121	.201
35.00	-.001	-.022	-.032	-.036	-.051	.176		-.055	-.076	-.094	.116	.145	.201
40.00	-.039	-.033	-.049	-.063	-.067	.239		-.086	-.098	-.117	.146	.163	.251
45.00	-.016	-.033	-.058	-.080	-.095	.239		-.086	-.109	-.132	.158	.185	.239
50.00	-.016	-.042	-.081	-.098	-.127	.249		-.045	-.097	-.127	.177	.210	.245
55.00	-.042	-.042	-.097	-.100	-.119	.249		-.042	-.152	-.162	.180	.200	.245
60.00	-.088	-.108	-.125	-.144	-.174	.243		-.132	-.159	-.180	.202	.244	.244
65.00	-.090	-.105	-.128	-.158	-.178	.285		-.138	-.155	-.187	.216	.237	.288
70.00	-.092	-.109	-.129	-.159	-.212	.288		-.144	-.161	-.188	.222	.255	.296
75.00	-.098	-.116	-.140	-.159	-.223	.273		-.152	-.168	-.194	.227	.267	.285
80.00	-.129	-.128	-.137	-.160	-.236	.263		-.180	-.184	-.193	.224	.280	.289
85.00	-.138	-.116	-.134	-.162	-.230	.243		-.201	-.182	-.198	.219	.263	.247
90.00	-.105	-.109	-.116	-.161	-.209	.227		-.165	-.179	-.185	.210	.242	.230
95.00	-.077	-.107	-.112	-.152	-.220	.236		-.150	-.174	-.180	.201	.247	.235
Lower surface													
1.25	.086	-.180	-.428	-.587	-.741	-.787		.192	.067	.017	-.008	-.027	-.080
2.50	.019	-.154	-.189	-.492	-.618	-.722		.131	.012	.002	-.031	-.060	-.073
5.00	-.007	-.093	-.147	-.183	-.454	-.646		.098	.033	.008	-.014	-.042	-.082
7.50	.022	-.101	-.198	-.205	-.263	-.593		.074	.007	-.017	-.036	-.052	-.097
10.00	.050	-.111	-.156	-.223	-.250	-.540		.044	-.009	-.036	-.056	-.063	-.096
15.00	.056	-.107	-.150	-.210	-.239	-.419		.024	-.009	-.046	-.063	-.078	-.109
20.00	.083	-.112	-.169	-.234	-.269	-.319		-.001	-.040	-.061	-.096	-.107	-.139
25.00	.105	-.111	-.149	-.198	-.243	-.306		-.013	-.050	-.057	-.091	-.111	-.184
30.00	-.088	-.115	-.152	-.196	-.253	-.272		-.005	-.040	-.070	-.102	-.126	-.201
35.00	-.100	-.141	-.172	-.214	-.247	-.213		-.048	-.067	-.079	-.124	-.149	-.172
40.00	-.117	-.165	-.217	-.254	-.294	-.237		-.073	-.114	-.141	-.157	-.169	-.213
45.00	-.119	-.151	-.201	-.254	-.284	-.248		-.048	-.124	-.142	-.160	-.178	-.211
50.00	-.158	-.185	-.218	-.275	-.298	-.286		-.098	-.114	-.149	-.182	-.195	-.243
55.00	-.184	-.204	-.232	-.281	-.328	-.307		-.114	-.131	-.167	-.196	-.223	-.279
60.00	-.209	-.226	-.256	-.295	-.345	-.319		-.144	-.161	-.182	-.219	-.242	-.283
65.00	-.220	-.239	-.260	-.315	-.357	-.323		-.149	-.169	-.191	-.236	-.262	-.285
70.00	-.220	-.224	-.263	-.303	-.339	-.330		-.149	-.157	-.195	-.228	-.254	-.284
75.00	-.268	-.252	-.269	-.309	-.352	-.317		-.200	-.182	-.197	-.237	-.272	-.289
80.00	-.268	-.260	-.273	-.316	-.342	-.328		-.203	-.199	-.205	-.246	-.287	-.278
85.00	-.269	-.269	-.273	-.311	-.348	-.321		-.193	-.201	-.209	-.247	-.280	-.221
90.00	-.262	-.269	-.272	-.297	-.315	-.315		-.203	-.216	-.205	-.223	-.280	-.262
95.00	-.166	-.229	-.248	-.277	-.328	-.282		-.151	-.192	-.198	-.229	-.256	-.225
Upper surface								M = 1.03	a = 1.96°				
0.00	-.009	.722	.665	.666	.654	.727		-.025	.652	.560	.523	.514	.692
1.50	.119	-.108	.256	-.473	-.559	-.459		.036	-.685	-.779	-.841	-.877	-.685
3.50	.058	-.158	.184	.329	-.476	-.628		.032	-.421	-.692	-.764	-.804	-.901
5.00	-.008	-.125	-.158	-.190	-.321	-.575		.042	-.314	-.607	-.693	-.750	-.853
7.50	-.020	-.090	-.130	-.192	-.241	-.524		.049	-.205	-.488	-.653	-.707	-.789
10.00	.041	-.124	-.156	-.210	-.240	-.410		.055	-.192	-.426	-.517	-.611	-.811
15.00	.041	-.124	-.156	-.210	-.240	-.322		.046	-.186	-.325	-.423	-.503	-.746
20.00	.047	-.110	-.158	-.200	-.250	-.293		.046	-.186	-.242	-.328	-.464	-.725
25.00	-.088	-.108	-.150	-.193	-.239	-.293		.160	-.183	-.237	-.270	-.354	-.711
30.00	-.134	-.122	-.156	-.193	-.229	-.270		.215	-.193	-.223	-.273	-.344	-.606
35.00	-.121	-.147	-.173	-.203	-.245	-.234		.185	-.214	-.244	-.277	-.316	-.601
40.00	-.154	-.161	-.198	-.232	-.261	-.271		.219	-.229	-.266	-.303	-.322	-.624
45.00	-.164	-.174	-.209	-.243	-.279	-.260		.229	-.238	-.278	-.309	-.337	-.587
50.00	-.138	-.169	-.219	-.258	-.300	-.287		.201	-.233	-.288	-.327	-.359	-.590
55.00	-.152	-.194	-.234	-.278	-.326	-.300		.214	-.257	-.297	-.347	-.380	-.590
60.00	-.159	-.223	-.248	-.316	-.336	-.285		.260	-.278	-.311	-.352	-.394	-.547
65.00	-.151	-.223	-.253	-.285	-.310	-.316		.263	-.280	-.316	-.361	-.393	-.486
70.00	-.211	-.221	-.252	-.290	-.341	-.325		.270	-.285	-.320	-.387	-.449	-.566
75.00	-.215	-.228	-.257	-.294	-.342	-.345		.270	-.285	-.320	-.387	-.449	-.534
80.00	-.245	-.242	-.257	-.291	-.336	-.308		.298	-.298	-.314	-.356	-.414	-.531
85.00	-.264	-.244	-.257	-.290	-.309	-.291		.314	-.299	-.316	-.356	-.503	-.523
90.00	-.241	-.243	-.248	-.275	-.277	-.280		.293	-.295	-.302	-.344	-.323	-.517
95.00	-.165	-.235	-.243	-.254	-.276	-.289		.202	-.275	-.299	-.319	-.307	-.538
Lower surface													
1.25	.291	.261	.262	.291	.332	.285		.420	.450	.440	.478	.534	.435
2.50	.155	.173	.195	.223	.240	.236		.186	.199	.241	.304	.322	.390
5.00	.055	.153	.135	.171	.212	.187		.347	.288	.276	.311	.330	.332
7.50	.174	.117	.117	.124	.141	.143		.306	.337	.246	.258	.278	.270
10.00	.140	.092	.082	.098	.108	.110		.263	.207	.210	.224	.231	.222
15.00	.112	.074	.062	.058	.061	.052		.222	.184	.181	.187	.181	.145
20.00	.081	.042	.038	.018	.027	.019		.180	.183	.146	.153	.145	.085
25.00	.066	.045	.023	.004	.004	.086		.162	.147	.121	.109	.112	.008
30.00	.066	.023	.006	.003	.012	.141		.153	.116	.102	.090	.082	.062
35.00	.008	-.010	-.012	-.026	-.043	-.134		.080	.089	.075	.056	.053	.092
40.00	-.004	-.010	-.012	-.047	-.057	-.192		.090	.076	.056	.036	.031	.130
45.00	-.018	-.018	-.046	-.013	-.046	-.235		.076	.050	.043	-.002	-.002	.184
50.00	-.037	-.075	-.110	-.117	-.117	-.277		.053	.050	.043	-.002	-.002	.239
55.00	-.065	-.075	-.090	-.122	-.147	-.277		.053	.058	.047	-.017	-.017	.239
60.00	-.080	-.097	-.117	-.143	-.168	-.279		.002	-.022	-.034	-.053	-.091	.255
65.00	-.050	-.108	-.125	-.163	-.192	-.278		.015	-.031	-.038	-.072	-.120	.266
70.00	-.083	-.097	-.123	-.155	-.193	-.279		.028	-.032	-.044	-.071	-.122	.274
75.00	-.125	-.122	-.131	-.162	-.217	-.266		.042	-.052	-.062	-.092</		

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient, P_c , at													
	0.15b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.15b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent	c	M = 1.03	a = 5.95°					M = 1.03	a = 7.92°				
Upper surface													
0.00	-0.93	.475	.399	.342	.290	.601		-.058	.386	.236	.125	.031	.448
1.25	-1.00	.746	.765	-1.006	-1.026	-.834		-.136	-1.030	-1.081	-1.113	-1.123	-.963
2.50	-1.02	.881	.873	-.932	-.976	-1.049		-.222	.946	-.994	-1.051	-1.072	-1.134
5.00	-1.13	.625	.508	-.855	-.908	-.993		-.367	.716	.952	-.977	-1.012	-1.079
7.50	-1.14	.352	-.746	-.813	-.842	-.927		-.357	.519	-.871	-.933	-.966	-1.031
10.00	-1.15	.338	-.716	-.791	-.838	-.900		-.347	.386	-.846	-.906	-.942	-1.005
15.00	-1.24	.314	-.350	-.730	-.814	-.874		-.423	.338	-.777	-.852	-.916	-.977
20.00	-1.23	.304	-.299	-.667	-.782	-.851		-.427	.310	-.488	-.818	-.885	-.953
25.00	-1.27	.303	-.290	-.673	-.747	-.845		-.426	.299	-.401	-.799	-.847	-.935
30.00	-1.33	.306	-.287	-.453	-.728	-.799		-.438	.299	-.355	-.767	-.832	-.900
35.00	-1.29	.334	-.294	-.367	-.721	-.723		-.427	.316	-.346	-.734	-.824	-.823
40.00	-1.35	.344	-.310	-.349	-.714	-.744		-.415	.299	-.357	-.565	-.816	-.838
45.00	-1.31	.347	-.323	-.349	-.714	-.744		-.414	.328	-.350	-.509	-.815	-.835
50.00	-1.34	.351	-.341	-.578	-.713	-.733		-.420	.350	-.380	-.487	-.809	-.813
65.00	-1.32	.369	-.380	-.497	-.714	-.744		-.303	.345	-.389	-.473	-.807	-.814
68.00	-1.370	.394	-.354	-.387	-.646	-.705		-.346	.361	-.400	-.460	-.803	-.807
70.00	-1.371	.389	-.352	-.299	-.444	-.714		-.345	.366	-.399	-.456	-.704	-.811
75.00	-1.376	.385	-.354	-.397	-.445	-.714		-.345	.364	-.399	-.453	-.625	-.819
80.00	-1.373	.391	-.361	-.397	-.445	-.716		-.342	.367	-.405	-.452	-.587	-.823
85.00	-1.401	.402	-.356	-.395	-.449	-.712		-.366	.375	-.401	-.451	-.566	-.821
90.00	-1.414	.403	-.353	-.395	-.435	-.701		-.377	.375	-.400	-.451	-.513	-.815
95.00	-1.385	.398	-.340	-.386	-.381	-.704		-.355	.375	-.385	-.443	-.425	-.822
98.00	-1.273	.369	-.334	-.367	-.324	-.710		-.256	.364	-.383	-.426	-.333	-.833
Lower surface													
1.25	.535	.562	.393	.619	.642	.555		.705	.714	.687	.693	.703	.611
2.50	.513	.491	.511	.532	.545	.490		.696	.614	.613	.618	.621	.548
5.00	.472	.383	.435	.440	.453	.433		.638	.535	.522	.525	.532	.489
7.50	.413	.327	.377	.384	.395	.363		.575	.476	.471	.466	.475	.427
10.00	.361	.298	.345	.347	.345	.316		.511	.442	.438	.426	.421	.375
15.00	.300	.249	.294	.297	.286	.225		.441	.381	.373	.368	.359	.284
20.00	.250	.229	.249	.256	.240	.145		.383	.360	.325	.306	.309	.204
25.00	.216	.187	.221	.205	.203	.078		.352	.313	.291	.270	.270	.141
30.00	.195	.152	.194	.180	.172	.016		.317	.278	.260	.242	.235	.074
35.00	.109	.124	.159	.144	.153	.016		.227	.245	.225	.213	.205	.025
40.00	.121	.105	.148	.148	.110	.016		.225	.221	.199	.172	.171	.035
45.00	.124	.102	.106	.057	.074	.124		.235	.186	.166	.134	.131	.075
50.00	.047	.037	.080	.057	.044	.153		.170	.149	.135	.109	.100	.105
55.00	.021	.012	.043	.041	.004	.182		.138	.127	.118	.091	.061	.136
60.00	.028	.006	.041	.018	.022	.197		.138	.106	.091	.066	.028	.154
65.00	.004	.023	.026	.002	.051	.213		.106	.085	.071	.043	.003	.186
70.00	.025	.027	.021	.006	.052	.230		.075	.079	.064	.032	.009	.190
75.00	.039	.056	.004	.034	.089	.228		.065	.052	.041	.004	.042	.190
80.00	.054	.065	.013	.050	.109	.238		.048	.051	.031	.004	.056	.208
85.00	.075	.067	.013	.050	.120	.192		.028	.036	.031	.004	.068	.185
90.00	.082	.073	.014	.048	.120	.238		.022	.030	.031	.002	.061	.212
95.00	.066	.081	.019	.062	.111	.210		.024	.017	.018	.022	.057	.182
Upper surface													
0.00	-0.91	.406	.044	-.108	-.270	-.239		-1.121	-.159	-.406	-.598	-.760	-.290
1.25	-1.136	-.163	.145	-.165	-.183	-.074		-1.483	-.133	-.1087	-.1046	-.1065	-.102
2.50	-1.048	-.1084	.136	-.136	-.155	-.190		-1.594	-.092	-.1073	-.1052	-.1044	-.120
5.00	-1.313	-.036	-.072	-.072	-.109	-.161		-1.721	-.053	-.1093	-.1034	-.1044	-.114
7.50	-.496	-.974	-.028	-.058	-.128	-.128		-1.680	-.956	-.1044	-.1040	-.1043	-.101
10.00	-.479	-.611	-.058	-.003	-.038	-.107		-1.640	-.931	-.1040	-.1038	-.1000	-.101
15.00	-.359	-.510	-.044	-.044	-.044	-.046		-1.543	-.863	-.1043	-.1043	-.1043	-.104
20.00	-.352	-.463	-.073	-.011	-.082	-.046		-1.521	-.805	-.1043	-.1062	-.1020	-.1080
25.00	-.342	-.426	-.078	-.004	-.043	-.024		-1.415	-.837	-.860	-.988	-.997	-.1054
30.00	-.373	-.387	-.512	-.872	-.929	-.1001		-1.438	-.344	-.822	-.922	-.978	-.1028
35.00	-.333	-.371	-.478	-.857	-.921	-.922		-1.412	-.395	-.810	-.902	-.960	-.975
40.00	-.364	-.371	-.430	-.808	-.912	-.924		-1.427	-.420	-.794	-.882	-.941	-.991
45.00	-.369	-.371	-.414	-.661	-.912	-.899		-1.435	-.435	-.774	-.868	-.934	-.959
50.00	-.355	-.373	-.419	-.624	-.909	-.909		-1.444	-.447	-.748	-.858	-.918	-.950
55.00	-.366	-.391	-.431	-.620	-.909	-.903		-1.456	-.465	-.715	-.846	-.902	-.944
60.00	-.403	-.419	-.442	-.603	-.910	-.903		-1.483	-.494	-.672	-.827	-.883	-.931
65.00	-.407	-.417	-.440	-.590	-.897	-.903		-1.488	-.500	-.607	-.812	-.859	-.905
70.00	-.407	-.418	-.445	-.577	-.861	-.914		-1.498	-.504	-.543	-.803	-.798	-.869
75.00	-.424	-.437	-.454	-.540	-.844	-.822		-1.521	-.525	-.500	-.793	-.714	-.885
80.00	-.424	-.438	-.454	-.527	-.559	-.922		-1.530	-.530	-.505	-.777	-.666	-.877
85.00	-.424	-.438	-.443	-.505	-.507	-.927		-1.518	-.530	-.504	-.657	-.618	-.907
90.00	-.325	-.426	-.443	-.472	-.467	-.946		-1.443	-.479	-.510	-.548	-.597	-.908
Lower surface													
1.25	.805	.803	.757	.749	.741	.646		.958	.914	.844	.807	.771	.685
2.50	.803	.716	.694	.689	.678	.595		.979	.850	.808	.777	.754	.657
5.00	.742	.622	.611	.596	.594	.541		.902	.767	.735	.708	.693	.618
7.50	.663	.562	.555	.542	.540	.480		.818	.674	.677	.647	.646	.587
10.00	.597	.452	.441	.449	.420	.427		.641	.640	.614	.602	.520	
15.00	.516	.463	.448	.435	.427	.335		.657	.595	.570	.554	.541	.438
20.00	.449	.429	.394	.376	.373	.260		.586	.557	.515	.492	.488	.366
25.00	.410	.378	.359	.340	.333	.195		.538	.501	.475	.455	.445	.301
30.00	.376	.338	.323	.308	.292	.125		.496	.458	.435	.417	.405	.236
35.00	.281	.303	.287	.268	.252	.112		.403	.416	.397	.378	.360	.204
40.00	.292	.272	.258	.237	.227	.037		.409	.366	.365	.345	.331	.159
45.00	.284	.241	.222	.195	.187	.024		.393	.333	.329	.308	.294	.078
50.00	.218	.203	.193	.170	.156	.057		.427	.310	.299	.273	.258	.048
55.00	.176	.178	.173	.151	.113	.083		.494	.279	.275	.252	.217	.028
60.00	.185	.158	.146	.123	.104	.049		.494	.237	.237	.224	.211	.044
65.00	.177	.133	.128	.094	.044	.041		.505	.237	.221	.192	.149	.037
70.00	.113	.126	.114	.086	.047	.141		.205	.218	.204	.181	.144	.044
75.00	.102	.096	.090	.062	.014	.149		.194	.184	.180	.157	.117	.056
80.00	.083	.085	.080	.055	.001	.167		.173	.172	.166	.146	.103	.069
85.00	.062	.078	.080	.054	-.005	.125		.140	.158	.155	.134	.086	.041
90.00	.050	.066	.068	.050	-.005	.164		.120	.136	.134	.123	.075	.079
95.00	.041	.044	.049	.022	-.012								

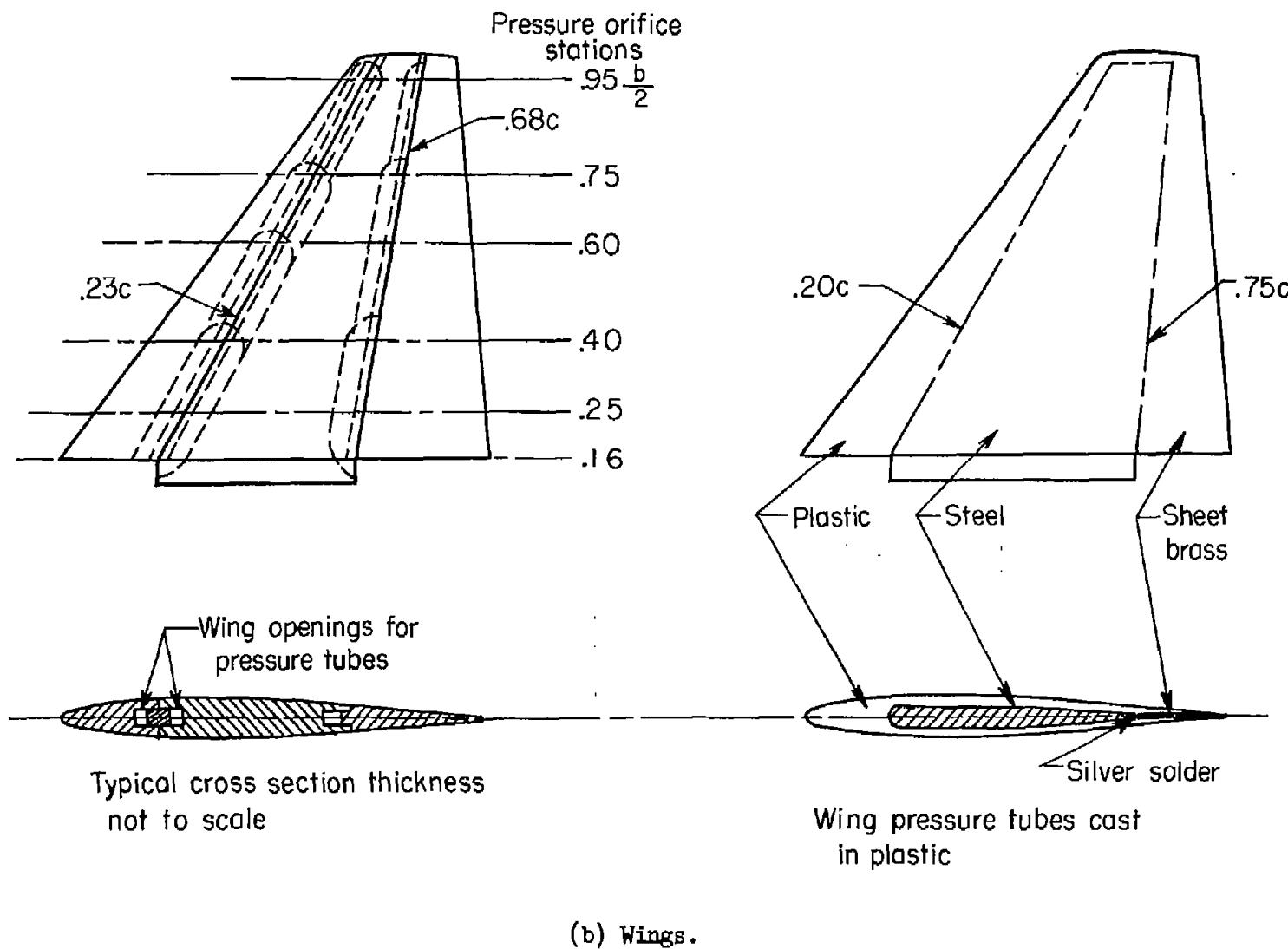
TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Concluded

Pressure coefficient, P_c , at:														
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent c		$M = 1.03$						$M = 1.09$						
		$\alpha = 15.85^\circ$						$\alpha = 17.97^\circ$						
Upper surface		-1.152	-0.578	-0.580	-0.618	-0.732	-0.800	-1.172	-0.550	-0.765	-0.865	-1.062	-0.830	
		-0.604	-1.188	-1.129	-1.072	-1.005	-0.918	-0.709	-1.245	-1.193	-1.047	-0.973	-0.810	
		-0.713	-1.179	-1.108	-1.076	-1.003	-0.909	-0.833	-1.233	-1.186	-1.042	-0.973	-0.846	
		-0.827	-1.144	-1.132	-1.068	-1.002	-0.901	-0.936	-1.213	-1.196	-1.057	-0.979	-0.861	
		-0.794	-1.107	-1.107	-1.072	-1.003	-0.904	-0.952	-1.203	-1.182	-1.036	-0.977	-0.861	
		-0.761	-1.064	-1.103	-1.080	-0.985	-0.894	-0.868	-1.176	-1.170	-1.033	-0.989	-0.860	
		-0.602	-1.016	-1.064	-1.073	-0.992	-0.894	-0.733	-1.118	-1.158	-1.026	-1.002	-0.859	
		-0.517	-0.977	-1.023	-1.049	-0.990	-0.896	-0.610	-1.073	-1.125	-1.016	-1.007	-0.856	
		-0.493	-0.743	-0.984	-1.049	-0.981	-0.891	-0.561	-1.021	-1.098	-1.015	-1.004	-0.853	
		-0.506	-0.414	-0.936	-1.022	-0.976	-0.889	-0.565	-0.973	-1.074	-1.003	-0.984	-0.851	
		-0.476	-0.404	-0.949	-1.005	-0.970	-0.884	-0.545	-0.959	-1.048	-1.015	-0.974	-0.850	
		-0.466	-0.478	-0.929	-1.022	-0.960	-0.870	-0.522	-0.944	-1.048	-1.013	-0.977	-0.849	
		-0.457	-0.493	-0.920	-0.977	-0.933	-0.879	-0.533	-0.960	-1.039	-0.965	-0.971	-0.844	
		-0.513	-0.503	-0.909	-0.966	-0.940	-0.872	-0.574	-0.971	-1.035	-0.950	-0.959	-0.841	
		-0.528	-0.527	-0.883	-0.953	-0.926	-0.866	-0.587	-0.992	-1.025	-0.935	-0.948	-0.837	
		-0.531	-0.552	-0.810	-0.927	-0.914	-0.858	-0.607	-0.915	-0.999	-0.913	-0.924	-0.835	
		-0.553	-0.561	-0.721	-0.910	-0.896	-0.847	-0.613	-0.820	-0.911	-0.899	-0.914	-0.828	
		-0.553	-0.566	-0.580	-0.874	-0.872	-0.843	-0.601	-0.624	-0.703	-0.884	-0.896	-0.828	
		-0.542	-0.573	-0.517	-0.873	-0.855	-0.843	-0.594	-0.632	-0.509	-0.864	-0.880	-0.828	
		-0.587	-0.585	-0.513	-0.844	-0.839	-0.843	-0.625	-0.643	-0.466	-0.855	-0.866	-0.825	
		-0.593	-0.589	-0.526	-0.812	-0.804	-0.845	-0.641	-0.621	-0.517	-0.847	-0.859	-0.824	
		-0.579	-0.587	-0.522	-0.754	-0.772	-0.852	-0.618	-0.575	-0.549	-0.827	-0.811	-0.826	
		-0.507	-0.509	-0.518	-0.696	-0.773	-0.851	-0.491	-0.484	-0.580	-0.613	-0.620	-0.826	
Lower surface		1.013	0.950	0.876	0.822	0.769	0.688	1.047	0.974	0.882	0.818	0.755	0.682	
		1.048	0.908	0.855	0.855	0.781	0.674	1.103	0.943	0.852	0.834	0.792	0.678	
		0.967	0.850	0.795	0.761	0.741	0.650	1.019	0.885	0.832	0.793	0.768	0.670	
		0.877	0.767	0.742	0.713	0.698	0.609	0.928	0.823	0.785	0.754	0.733	0.635	
		0.804	0.727	0.706	0.677	0.655	0.566	0.861	0.778	0.746	0.718	0.699	0.596	
		0.720	0.660	0.638	0.613	0.599	0.487	0.772	0.710	0.685	0.657	0.634	0.525	
		0.645	0.614	0.595	0.566	0.538	0.418	0.697	0.660	0.626	0.599	0.584	0.456	
		0.609	0.599	0.557	0.537	0.500	0.435	0.647	0.617	0.577	0.553	0.511	0.396	
		0.557	0.514	0.497	0.480	0.463	0.292	0.604	0.567	0.543	0.523	0.501	0.229	
		0.462	0.475	0.437	0.437	0.417	0.259	0.515	0.526	0.503	0.483	0.459	0.299	
		0.465	0.444	0.425	0.402	0.388	0.195	0.515	0.489	0.469	0.443	0.429	0.236	
		0.448	0.404	0.390	0.363	0.352	0.136	0.494	0.455	0.434	0.407	0.393	0.176	
		0.380	0.366	0.354	0.330	0.318	0.102	0.431	0.412	0.398	0.374	0.358	0.142	
		0.342	0.334	0.331	0.308	0.278	0.074	0.388	0.362	0.370	0.352	0.314	0.114	
		0.339	0.309	0.297	0.279	0.242	0.047	0.382	0.352	0.337	0.320	0.277	0.089	
		0.295	0.260	0.278	0.247	0.205	0.022	0.339	0.319	0.313	0.284	0.245	0.062	
		0.260	0.264	0.235	0.232	0.206	0.003	0.269	0.306	0.291	0.271	0.236	0.037	
		0.247	0.232	0.207	0.186	0.160	0.009	0.211	0.267	0.244	0.242	0.204	0.035	
		0.209	0.214	0.210	0.181	0.153	0.023	0.246	0.241	0.214	0.179	0.166	0.026	
		0.179	0.197	0.197	0.179	0.133	0.004	0.207	0.229	0.229	0.203	0.156	0.023	
		0.151	0.173	0.170	0.156	0.115	-0.041	0.178	0.109	0.192	0.178	0.134	-0.021	
		0.110	0.126	0.135	0.105	0.081	-0.032	0.125	0.150	0.130	0.118	0.092	-0.019	



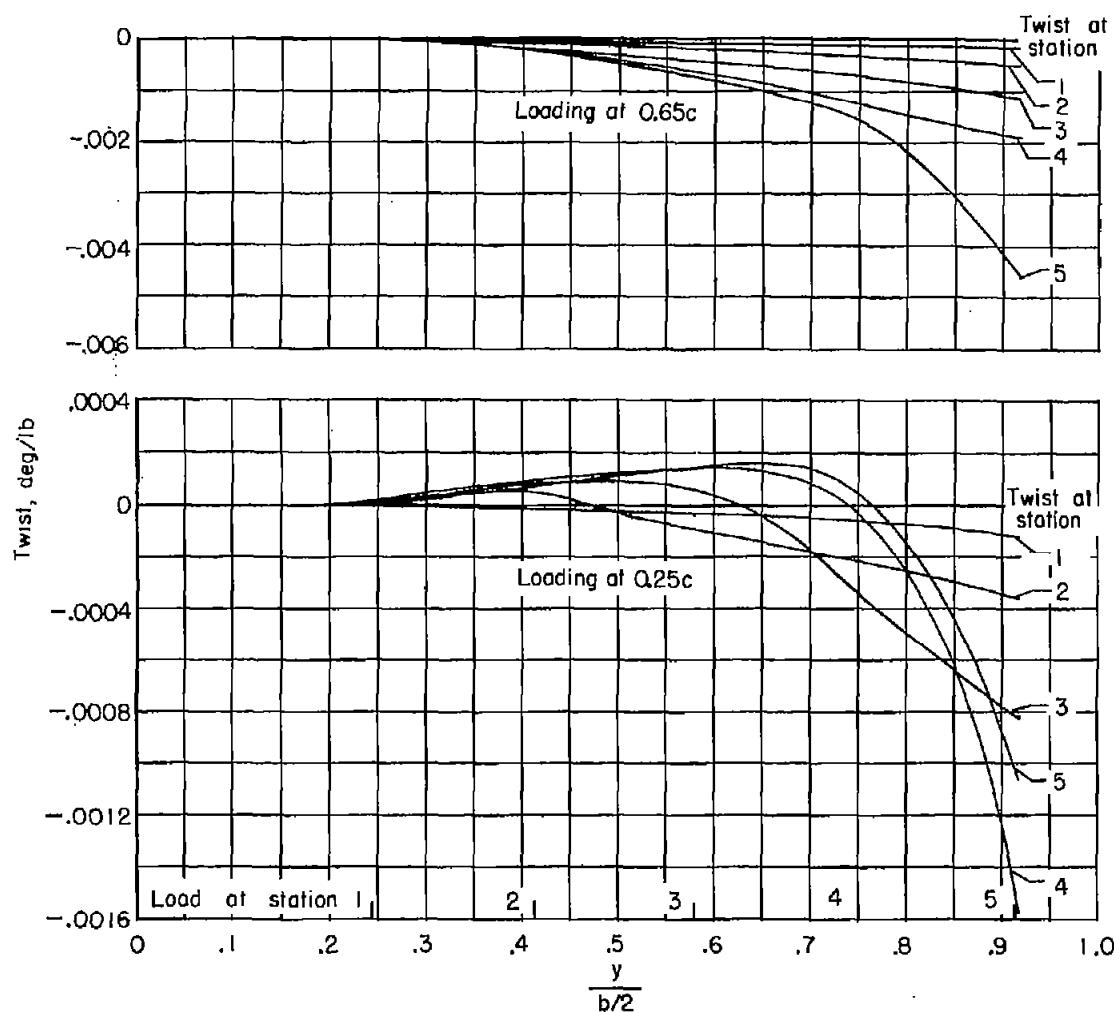
(a) Complete model.

Figure 1.- General model arrangement. All dimensions in inches.



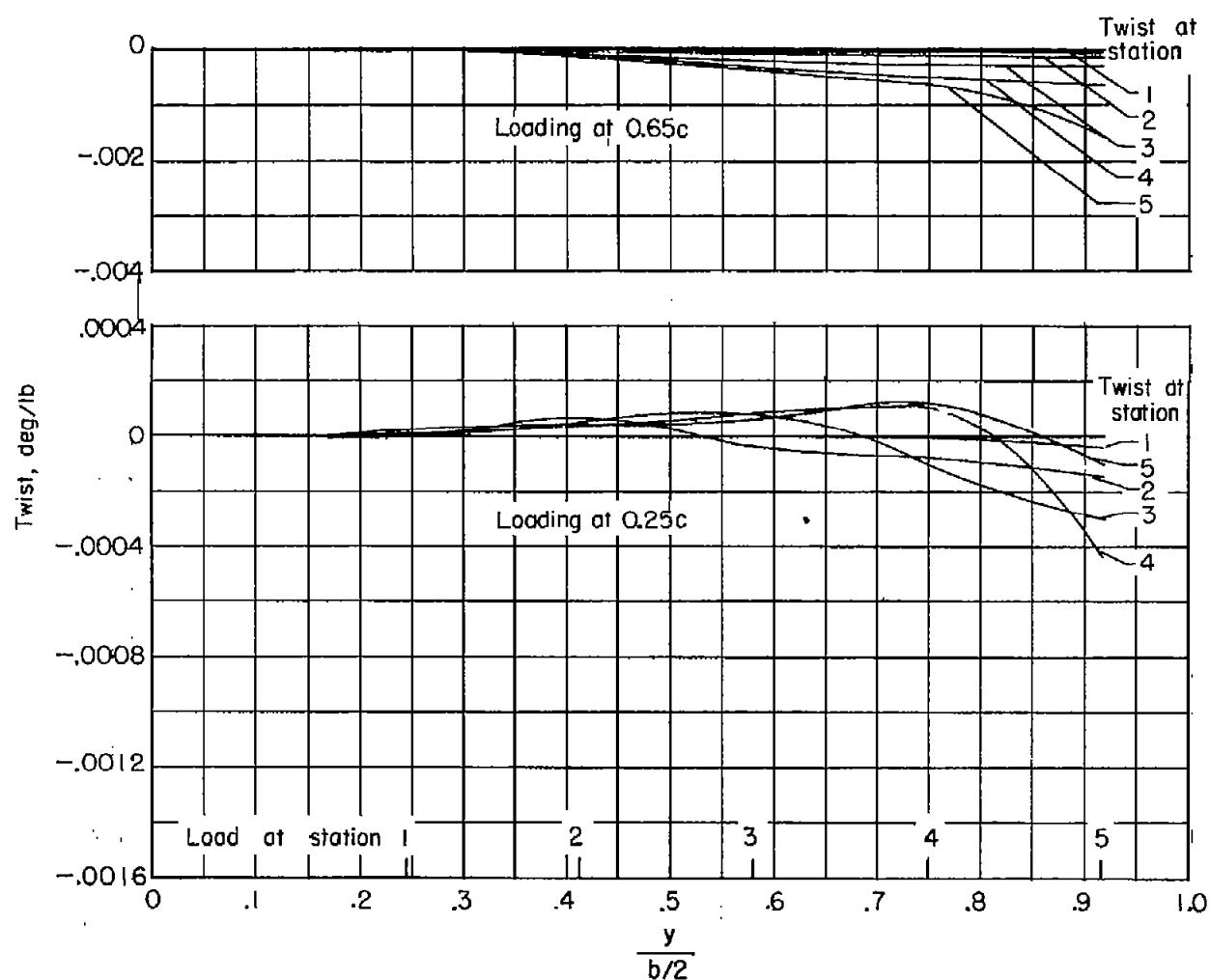
(b) Wings.

Figure 1--Concluded.



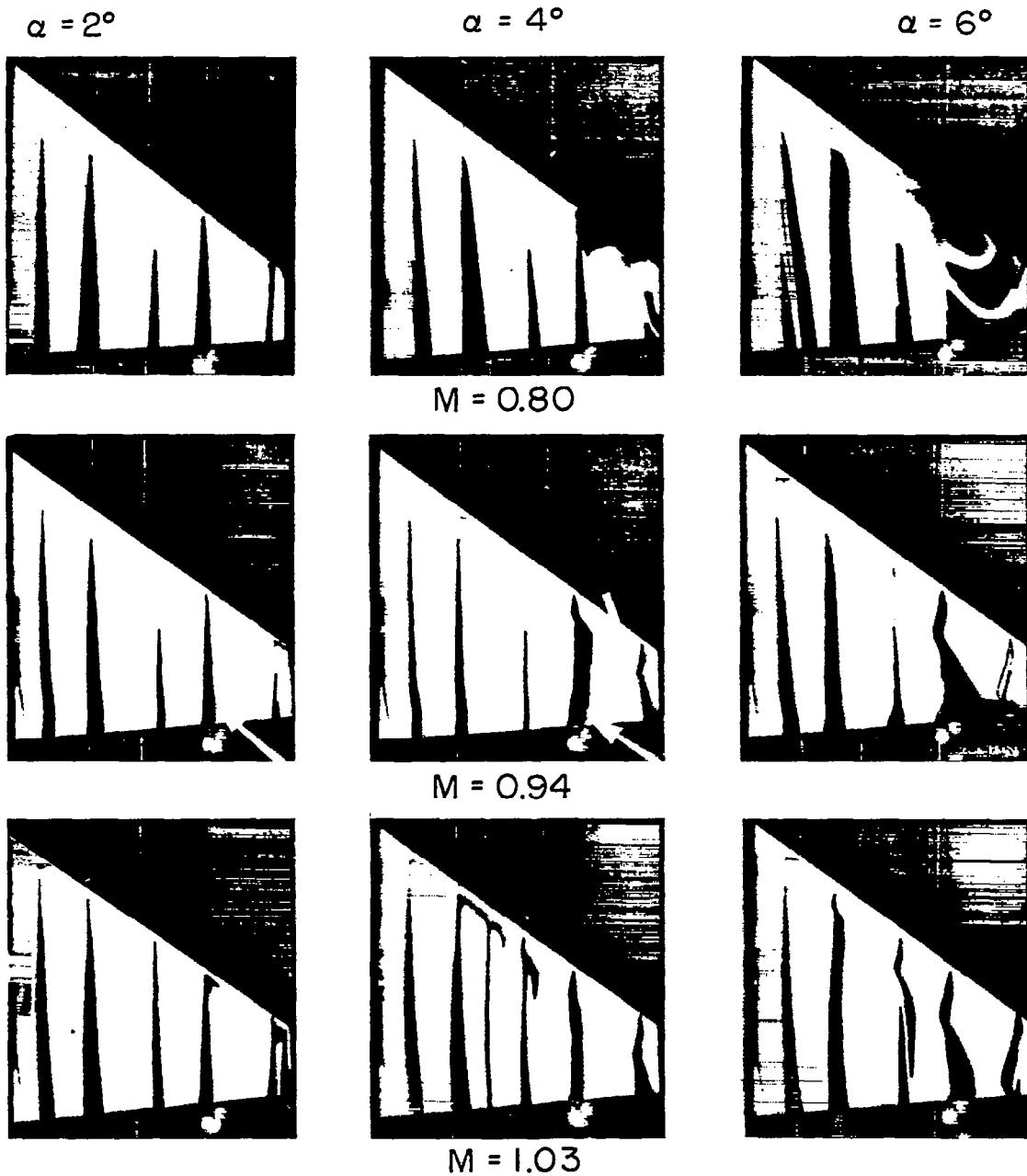
(a) Plastic wing.

Figure 2.- Wing elastic characteristics obtained experimentally, from which the influence coefficients were determined for twist in the angle-of-attack plane about 0.25c.



(b) Steel wing.

Figure 2.- Concluded.

(a) $\alpha = 2^\circ$ to 6° .

L-57-1639

Figure 3.- Typical flow study photographs for a range of Mach number and angle of attack, plastic wing.

~~CONFIDENTIAL~~ $\alpha = 8^\circ$  $\alpha = 10^\circ$  $\alpha = 13^\circ$  $M = 0.80$  $M = 0.94$  $M = 1.03$ (b) $\alpha = 8^\circ$ to 13° .

L-57-1640

Figure 3.- Continued.

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$\alpha = 15^\circ$  $\alpha = 17^\circ$  $\alpha = 19^\circ$  $M = 0.80$ $\alpha = 15^\circ$  $\alpha = 17^\circ$  $M = 0.94$ $\alpha = 15^\circ$  $M = 1.03$ (c) $\alpha = 15^\circ$ to 19° .

L-57-1641

Figure 3.- Concluded.

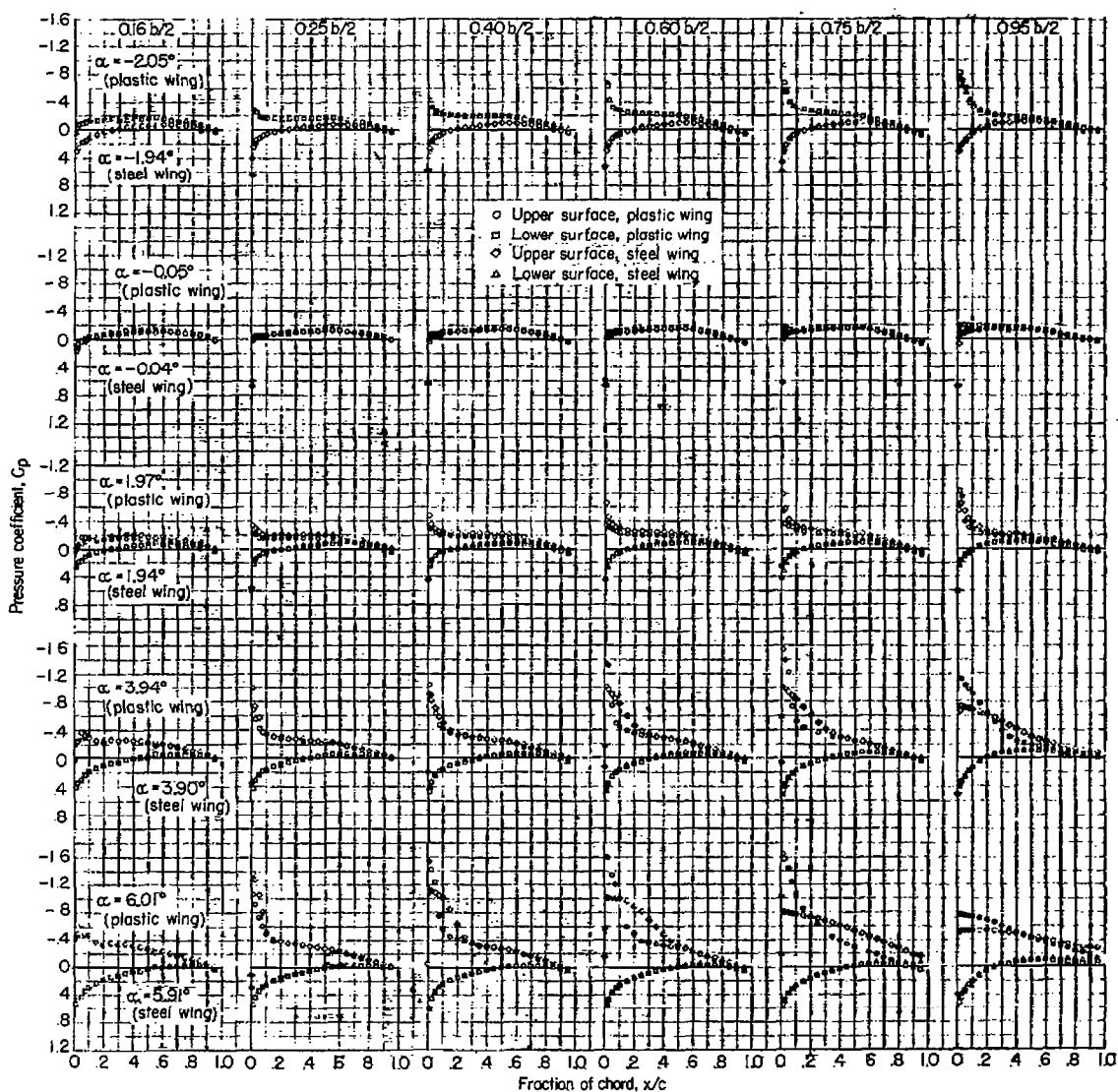
(a) $M = 0.80$.

Figure 4.- Comparison of chordwise pressure distributions for steel and plastic wings.

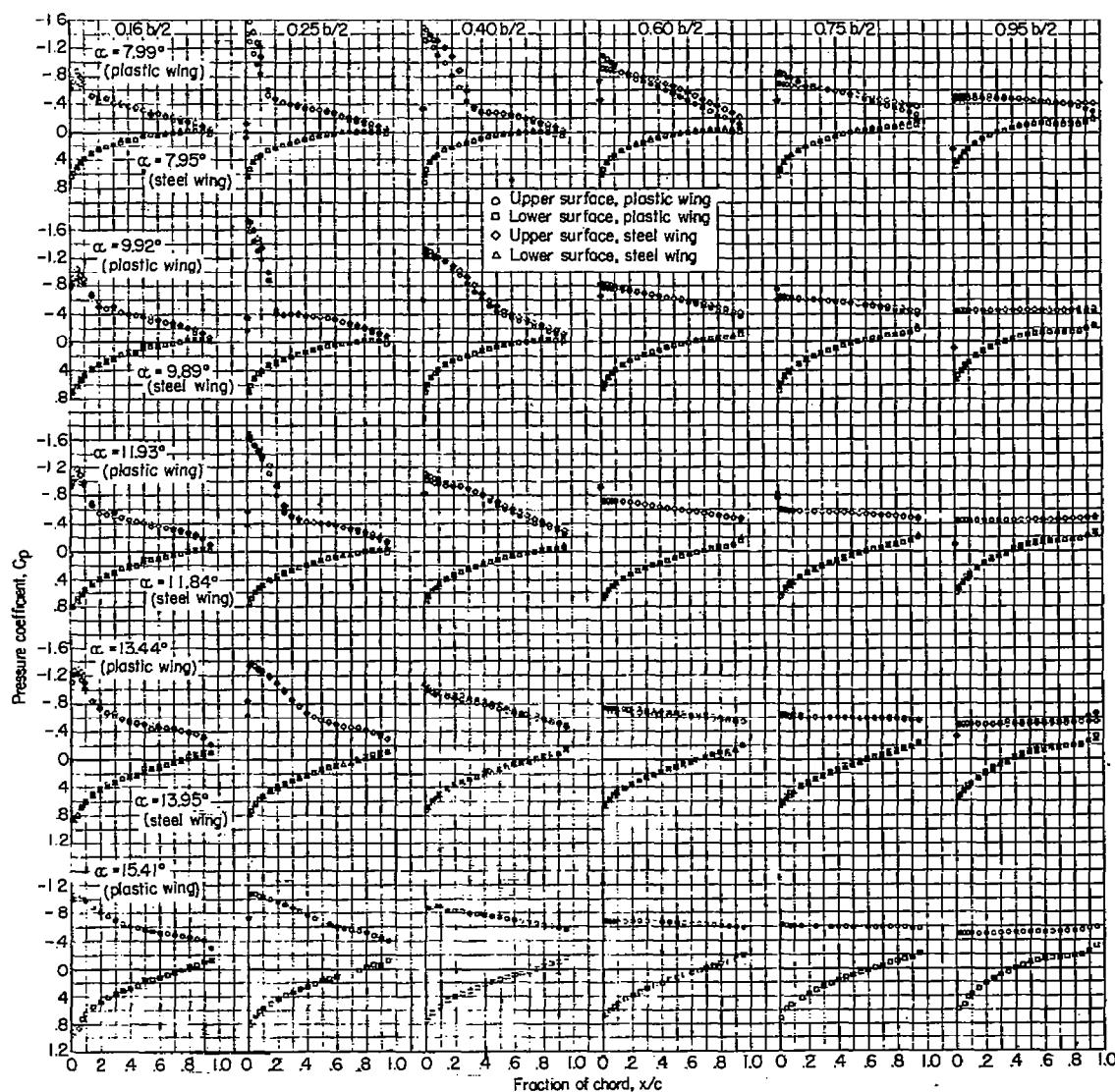
(a) $M = 0.80$, continued.

Figure 4.- Continued.

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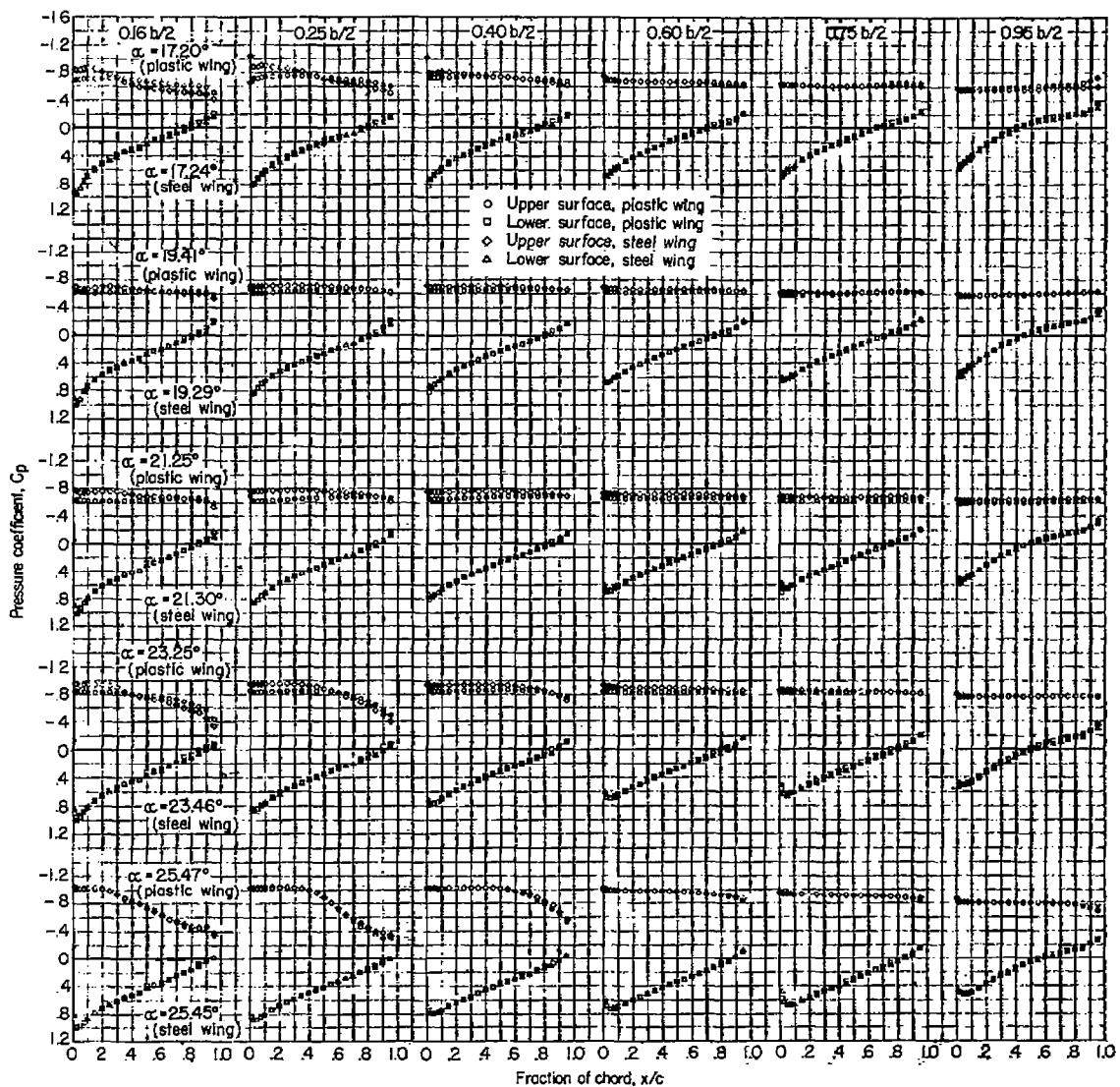
(a) $M = 0.80$, concluded.

Figure 4.- Continued.

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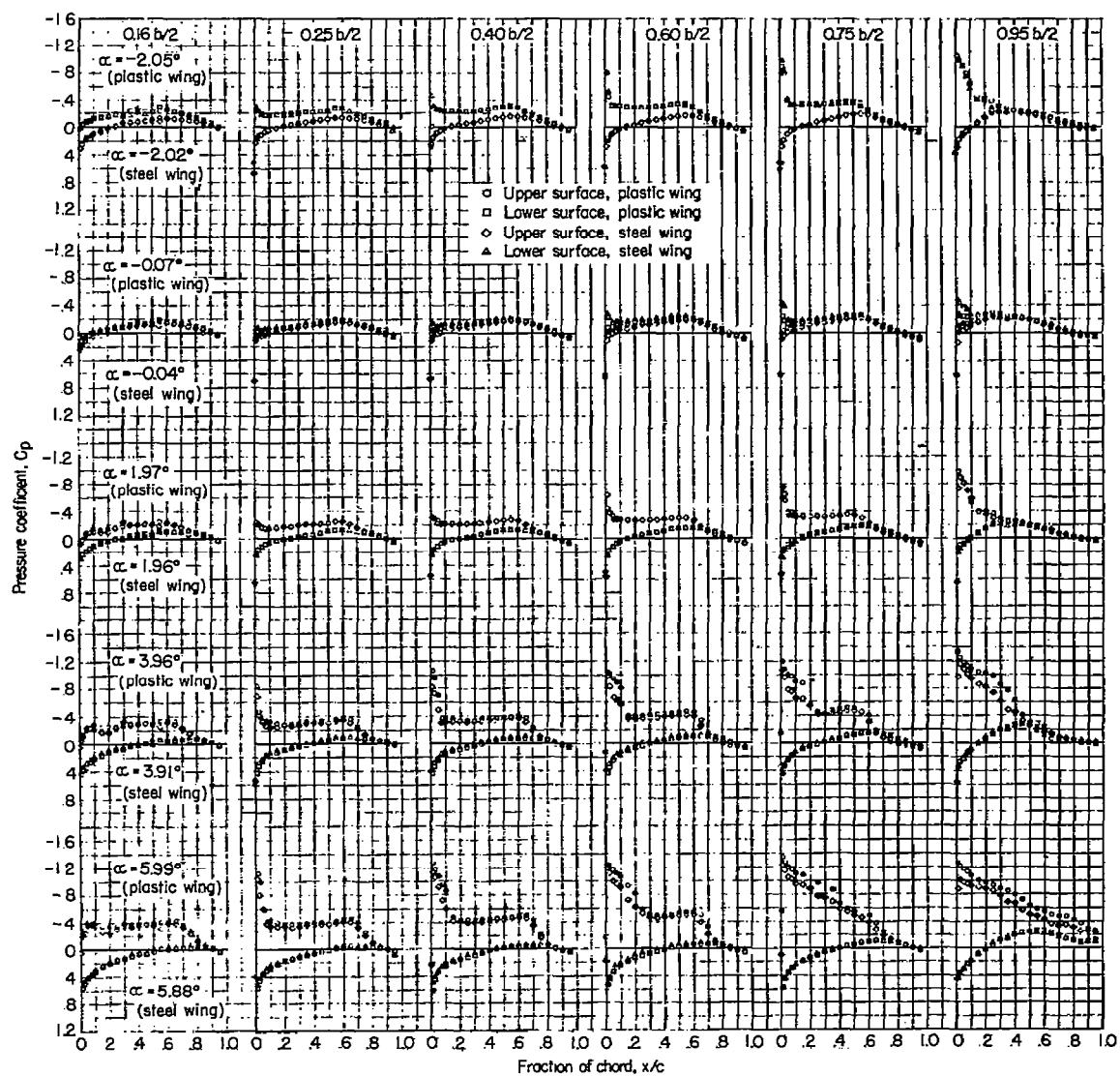
(b) $M = 0.90$.

Figure 4.- Continued.

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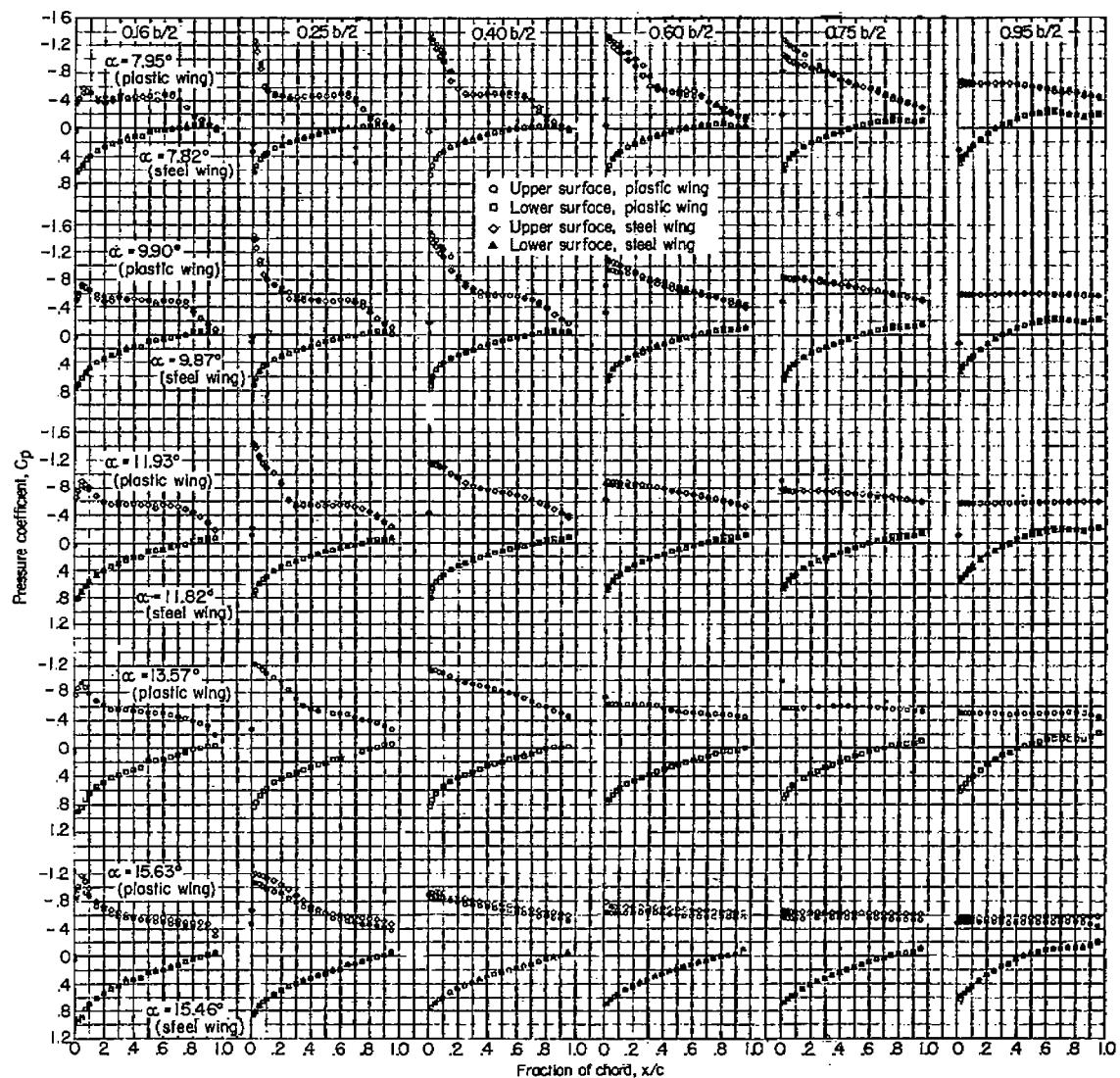
(b) $M = 0.90$, continued.

Figure 4.- Continued.

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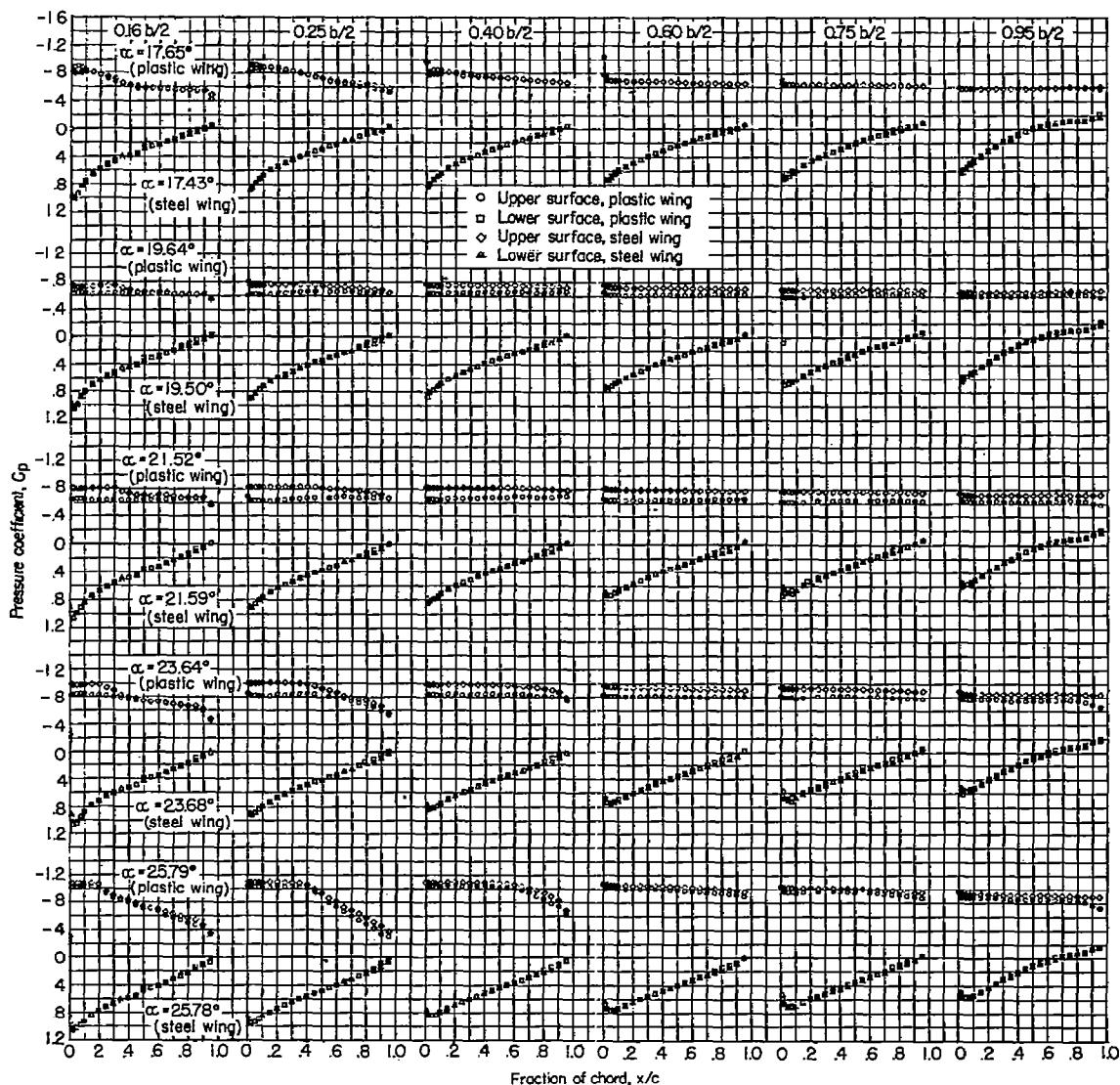
(b) $M = 0.90$, concluded.

Figure 4.- Continued.

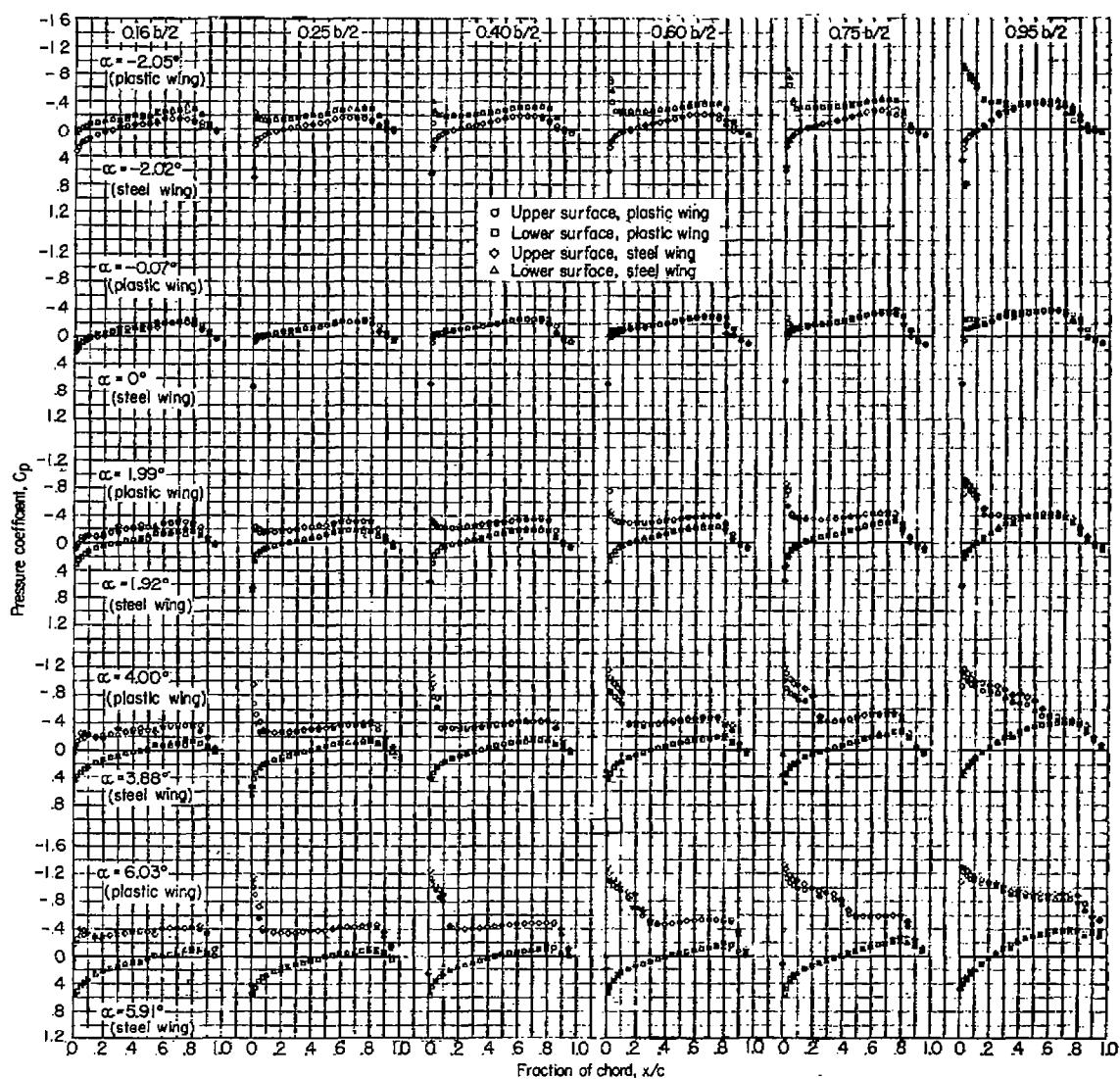
(c) $M = 0.94$.

Figure 4.- Continued.

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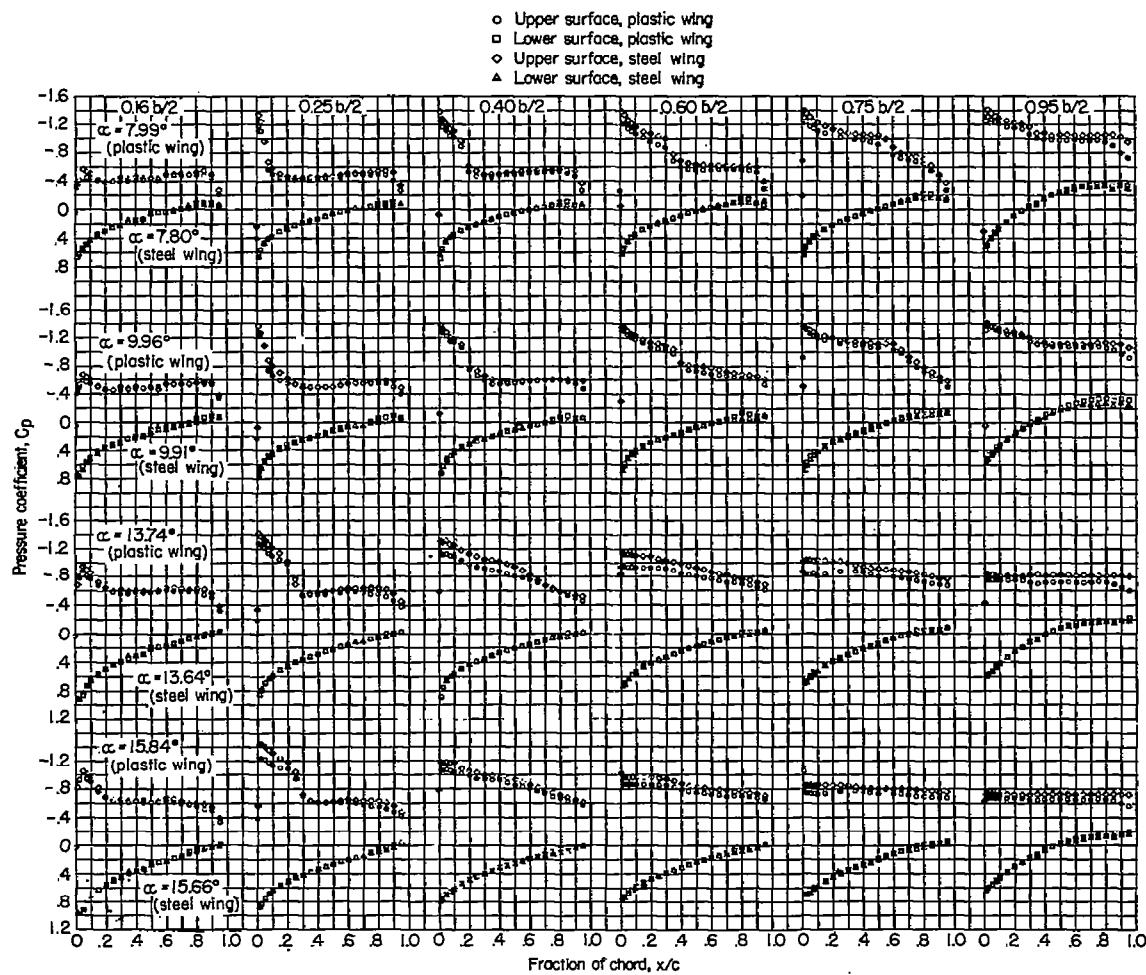
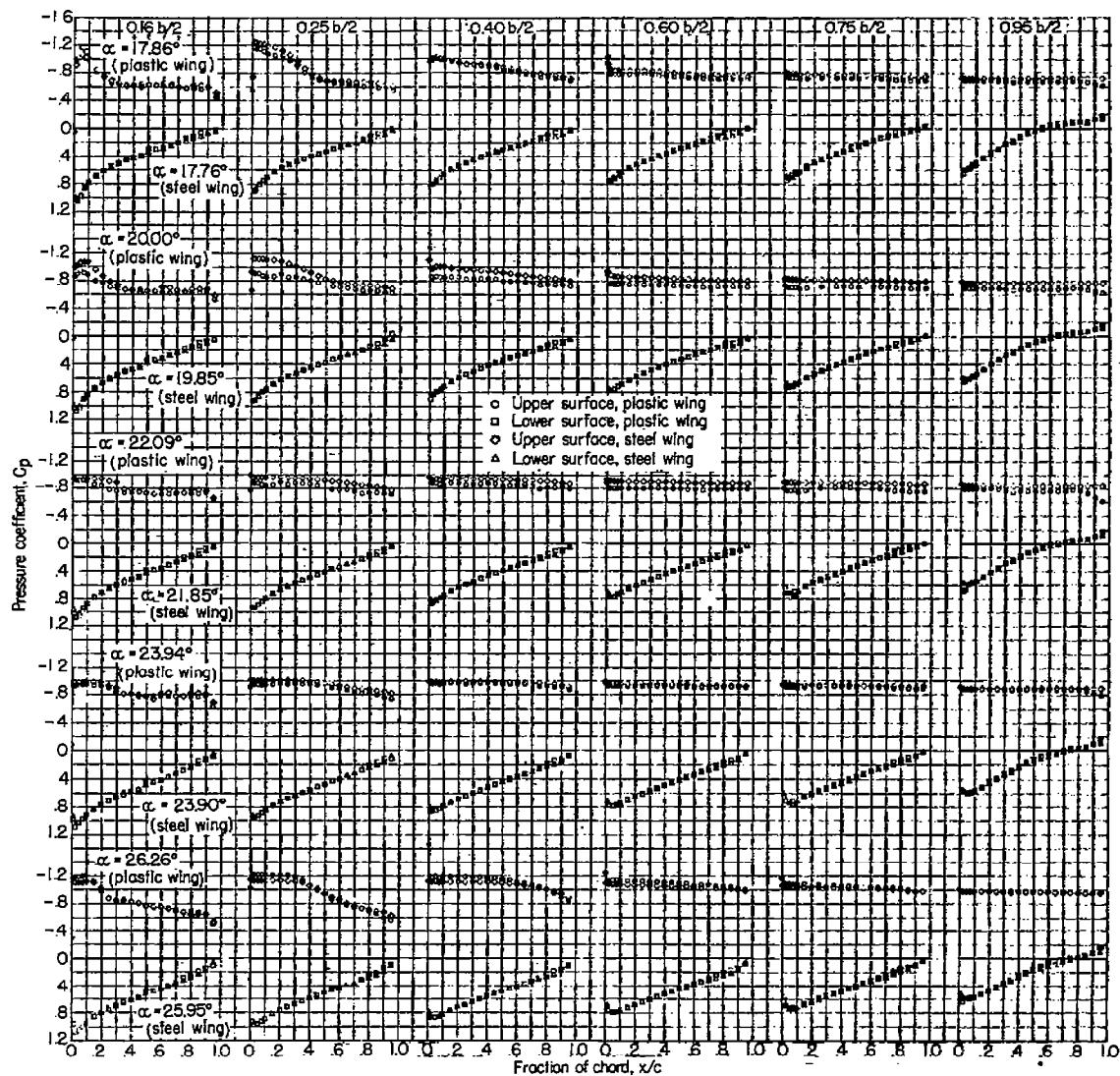
(c) $M = 0.94$, continued.

Figure 4.- Continued.



(c) $M = 0.94$, concluded.

Figure 4.- Continued.

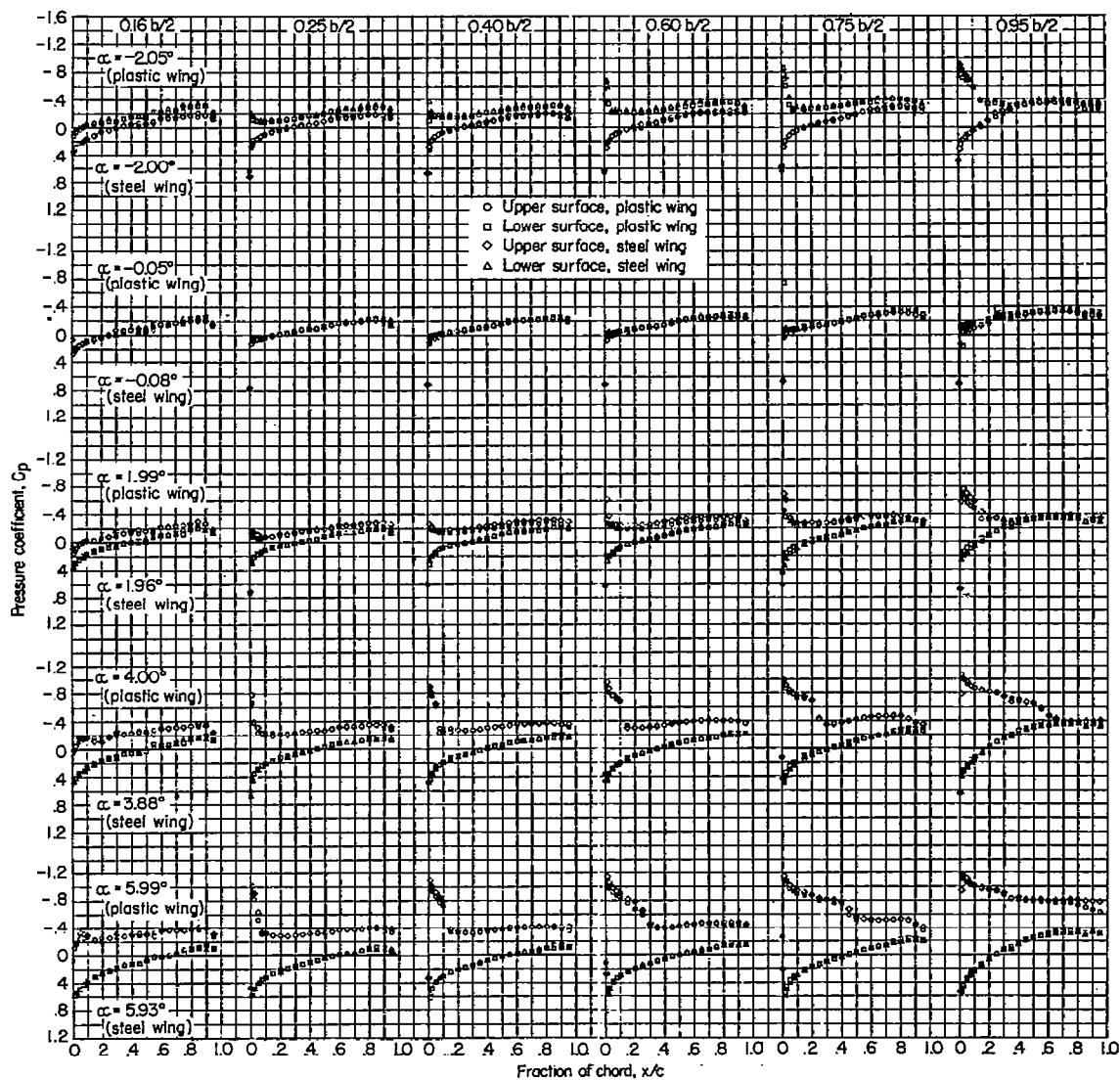
(d) $M = 0.98$.

Figure 4.- Continued.

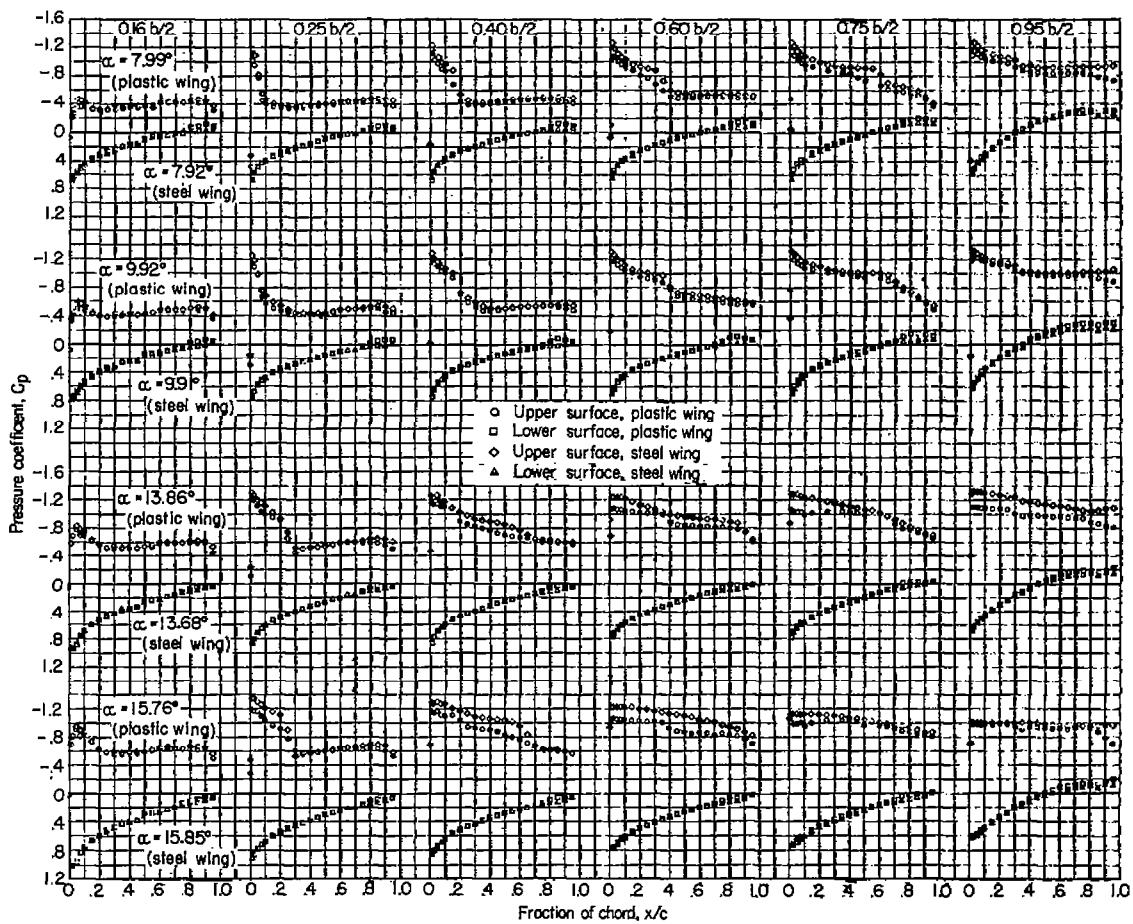
(d) $M = 0.98$, continued.

Figure 4.- Continued.

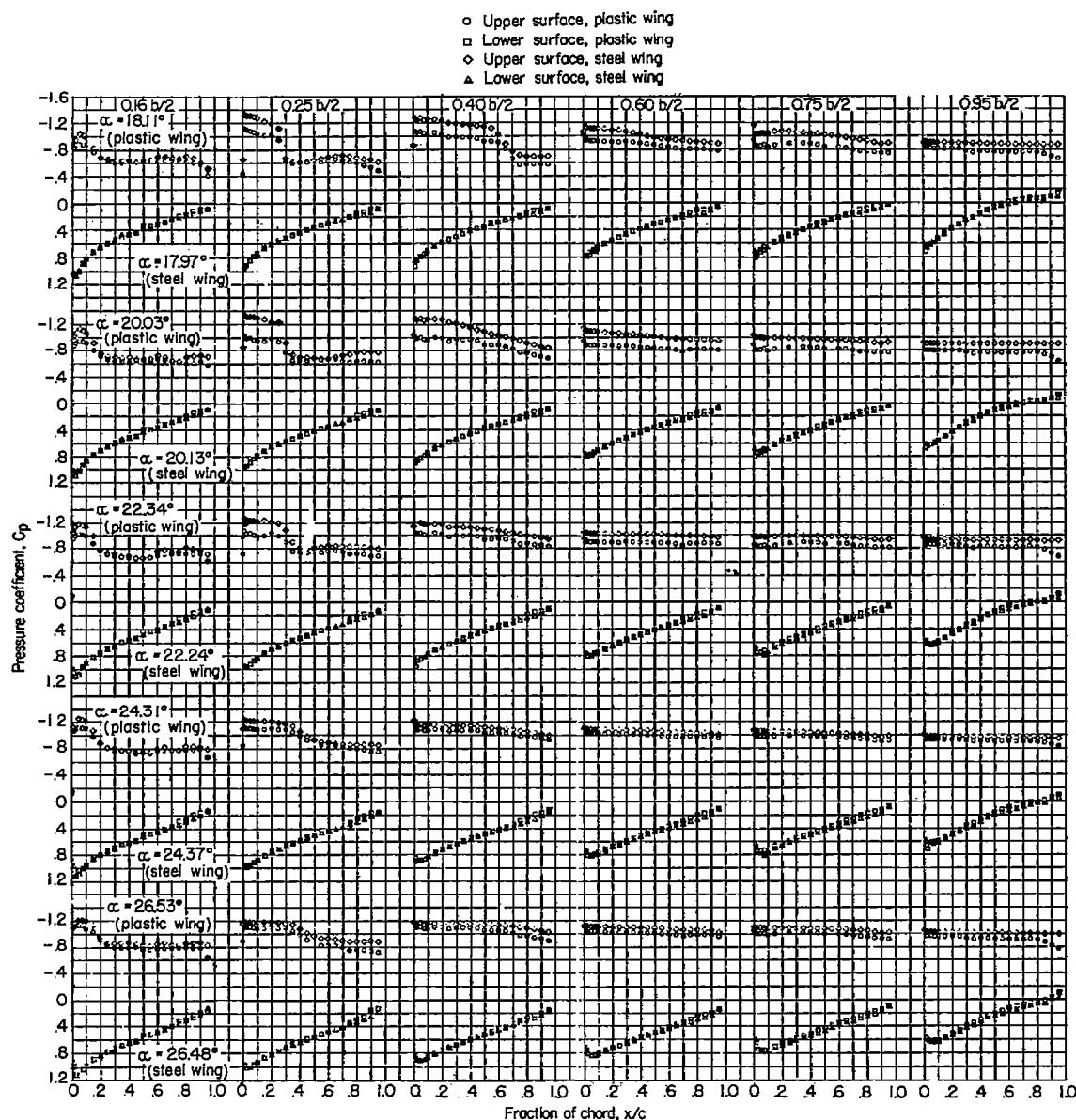
(d) $M = 0.98$, concluded.

Figure 4.- Continued.

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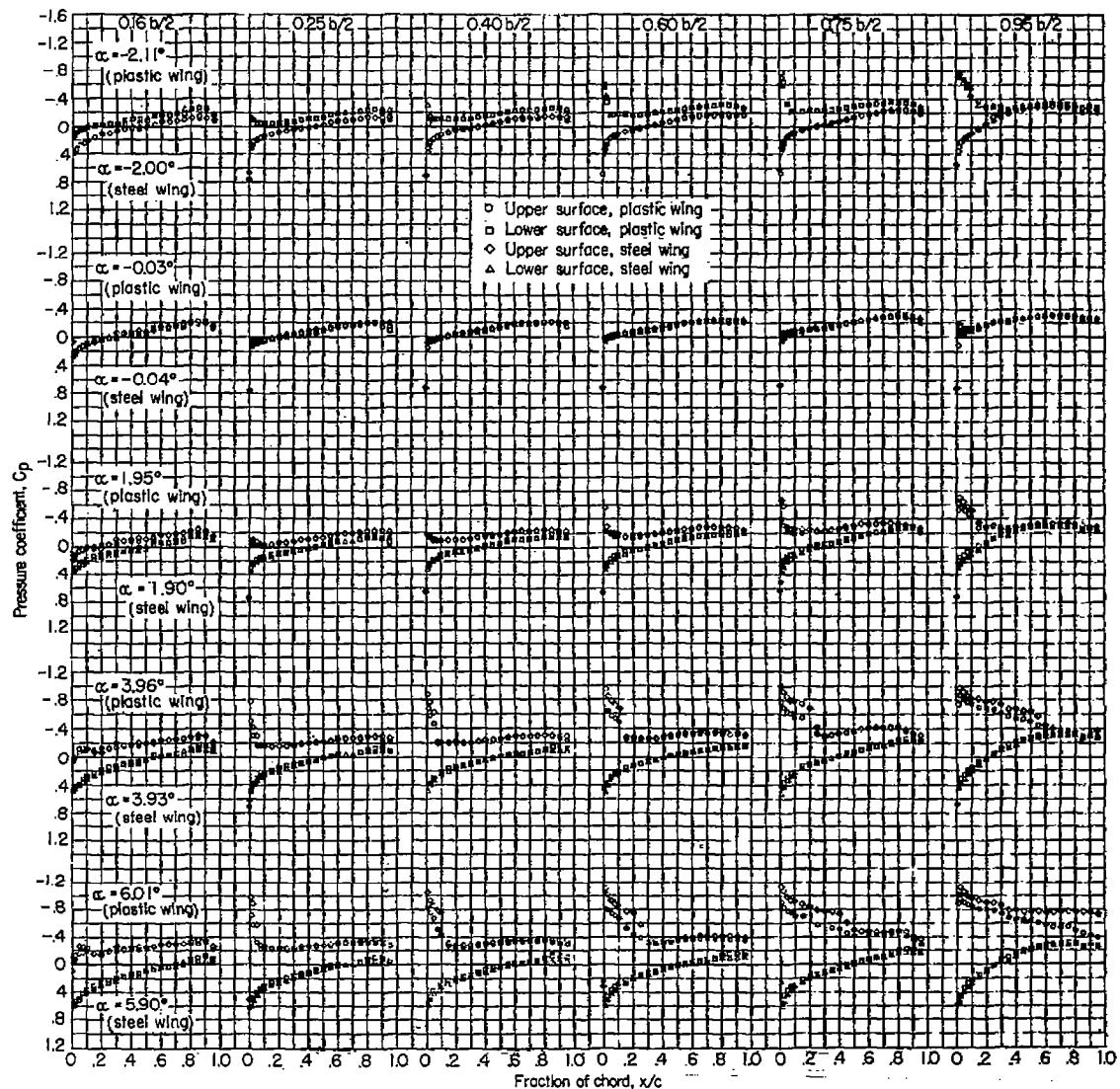
(e) $M = 1.00$.

Figure 4.-- Continued.

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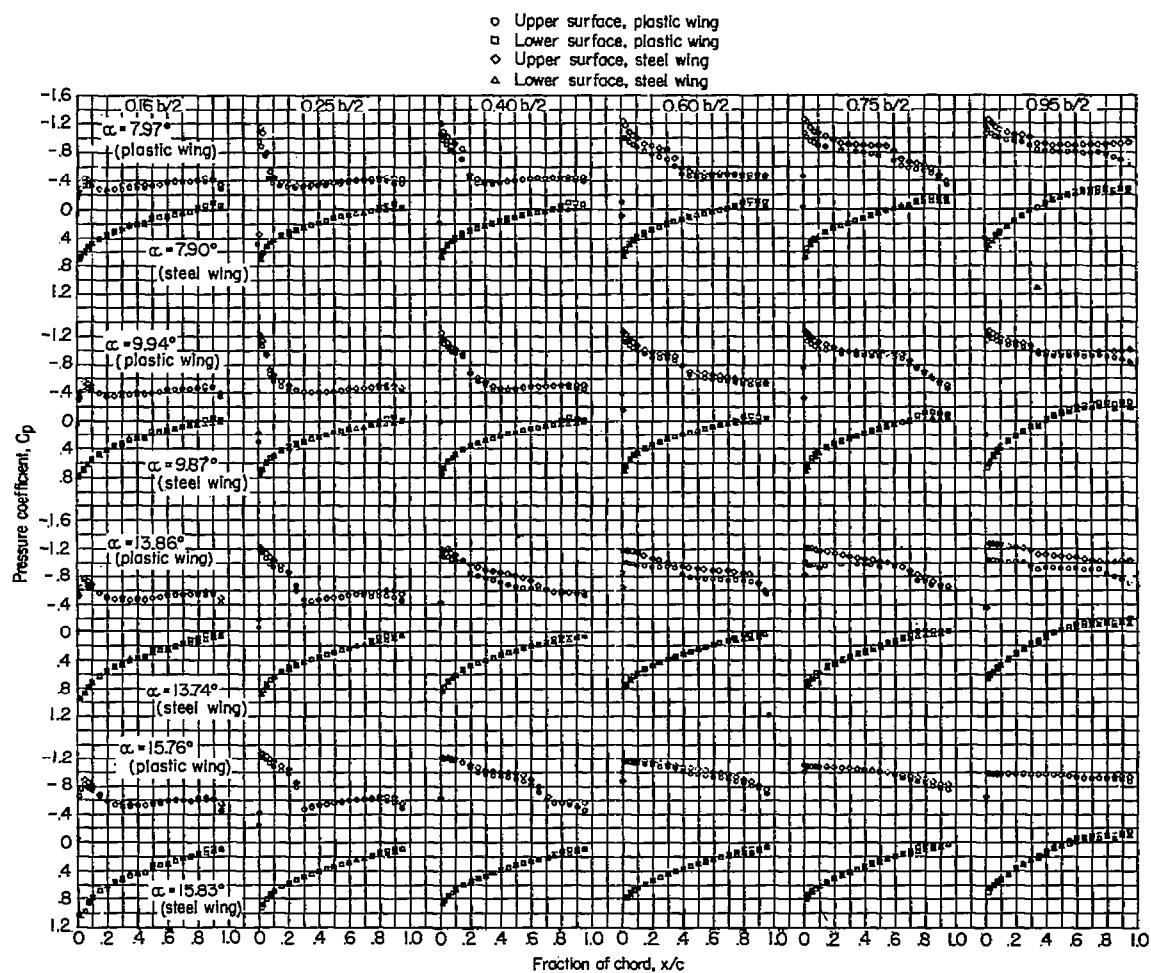
(e) $M = 1.00$, continued.

Figure 4.- Continued.

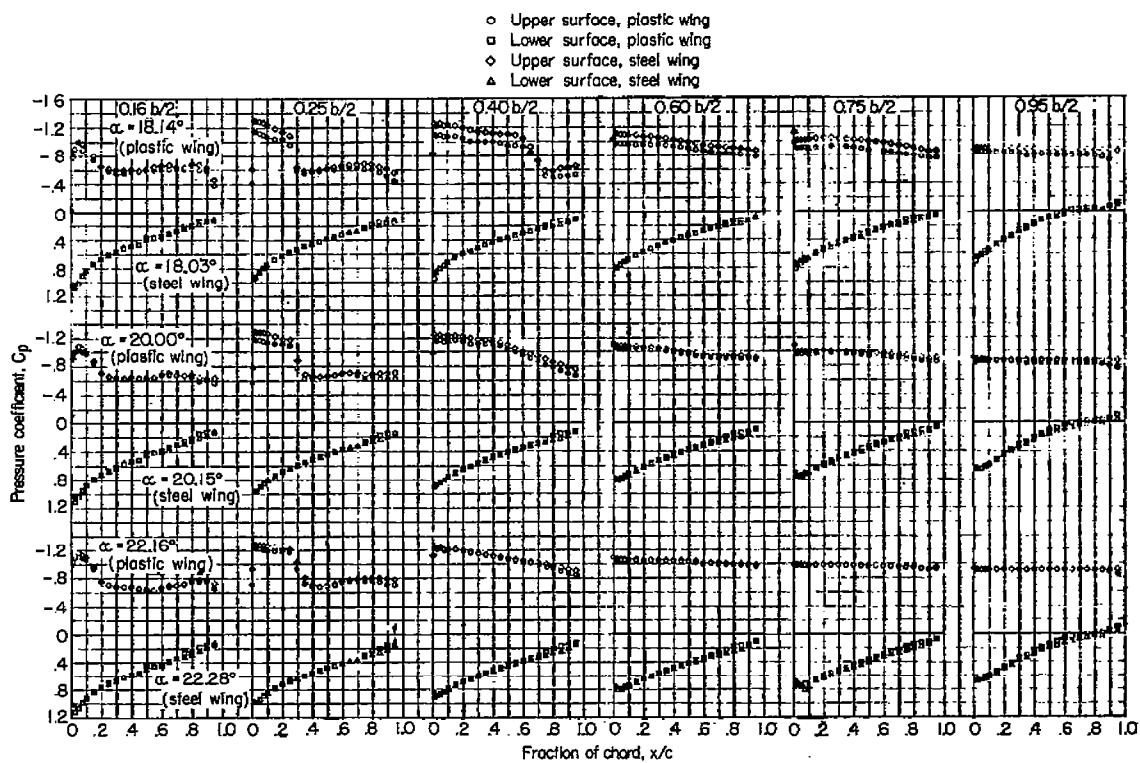
(e) $M = 1.00$, concluded.

Figure 4.- Continued.

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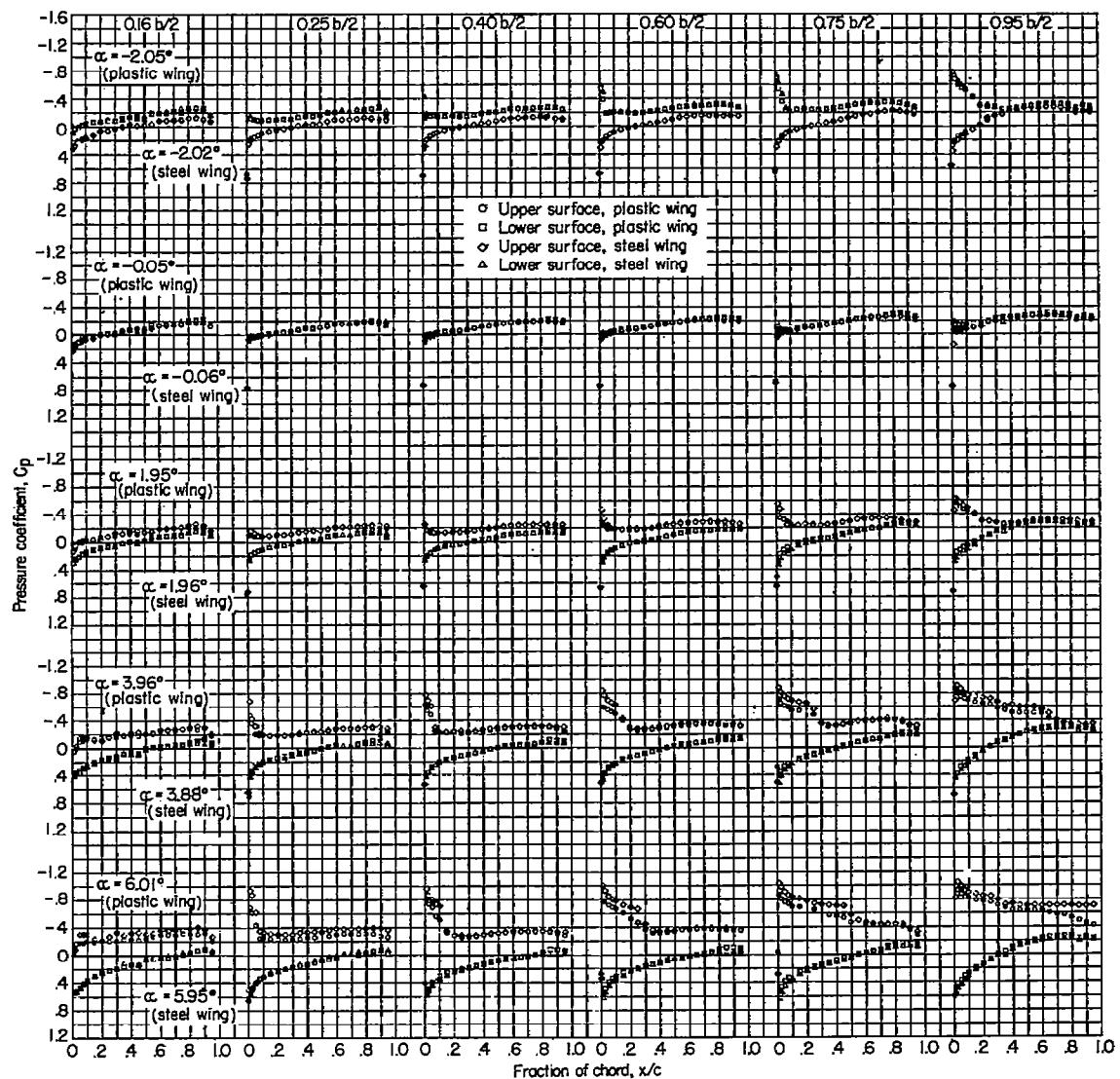
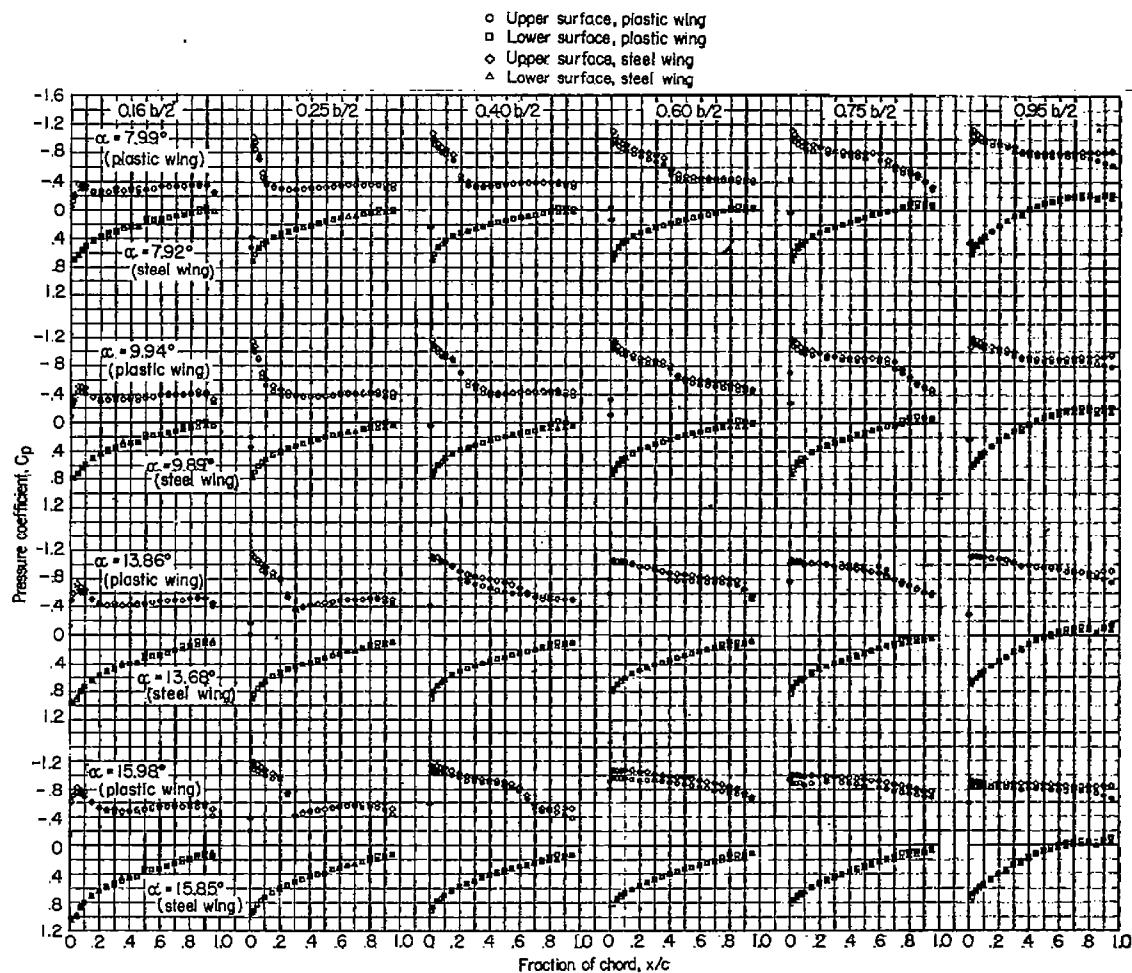
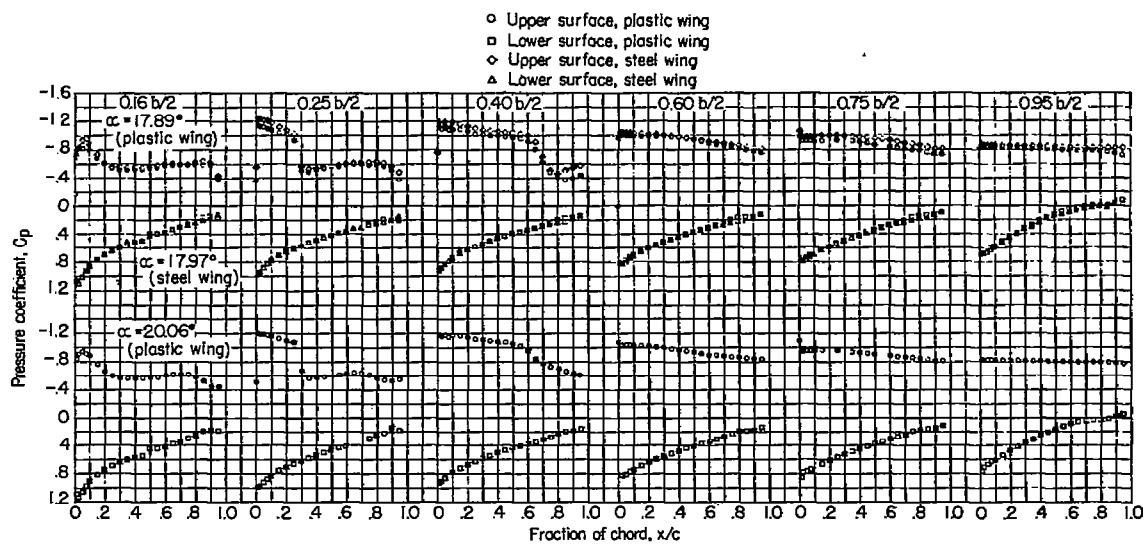
(f) $M = 1.03$.

Figure 4.- Continued.



(f) $M = 1.03$, continued.

Figure 4.- Continued.



(f) $M = 1.03$, concluded.

Figure 4.- Concluded.

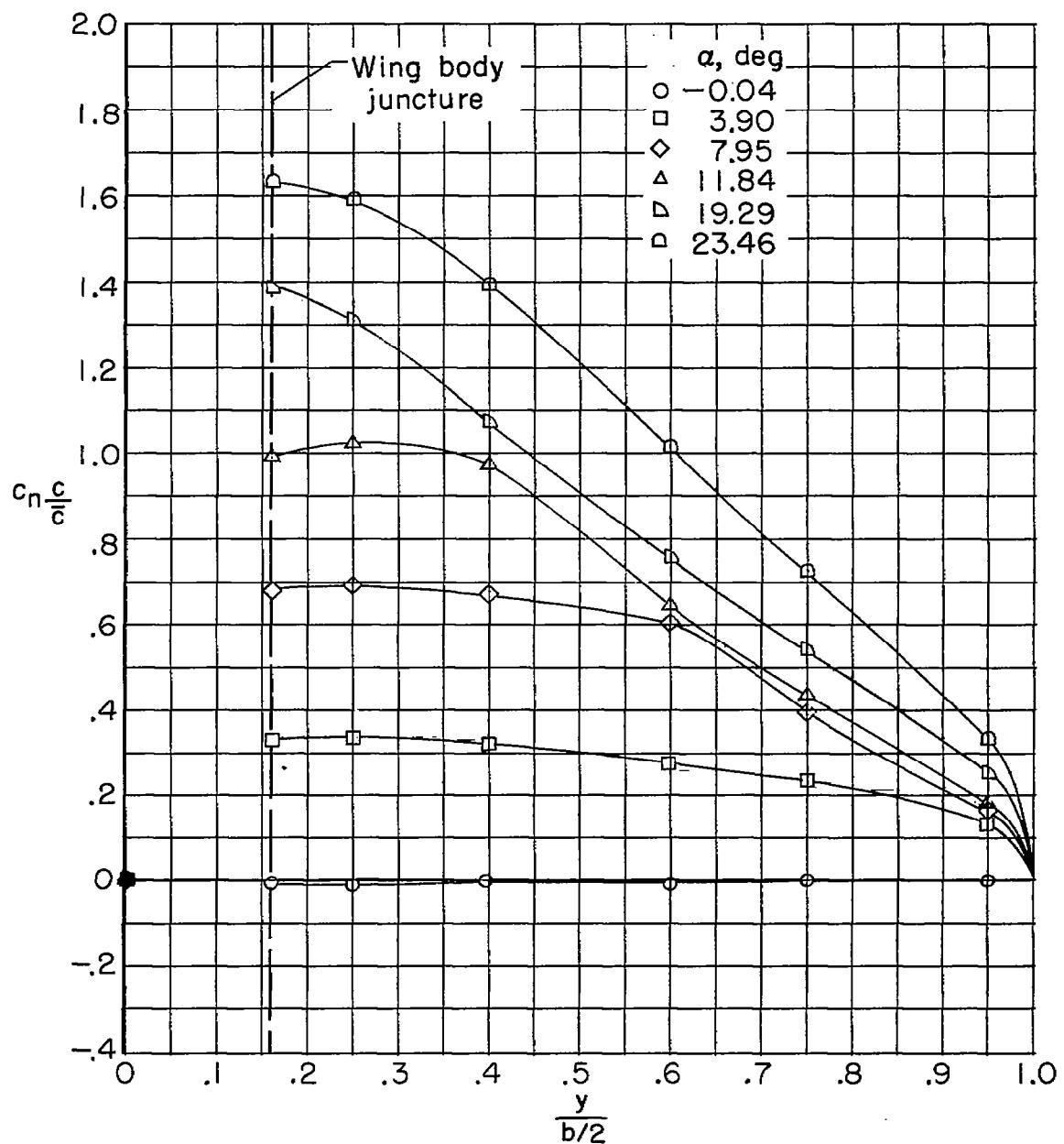
(a) $M = 0.80$.

Figure 5.- Spanwise variation of normal-load parameter for steel wing at various angles of attack and Mach numbers.

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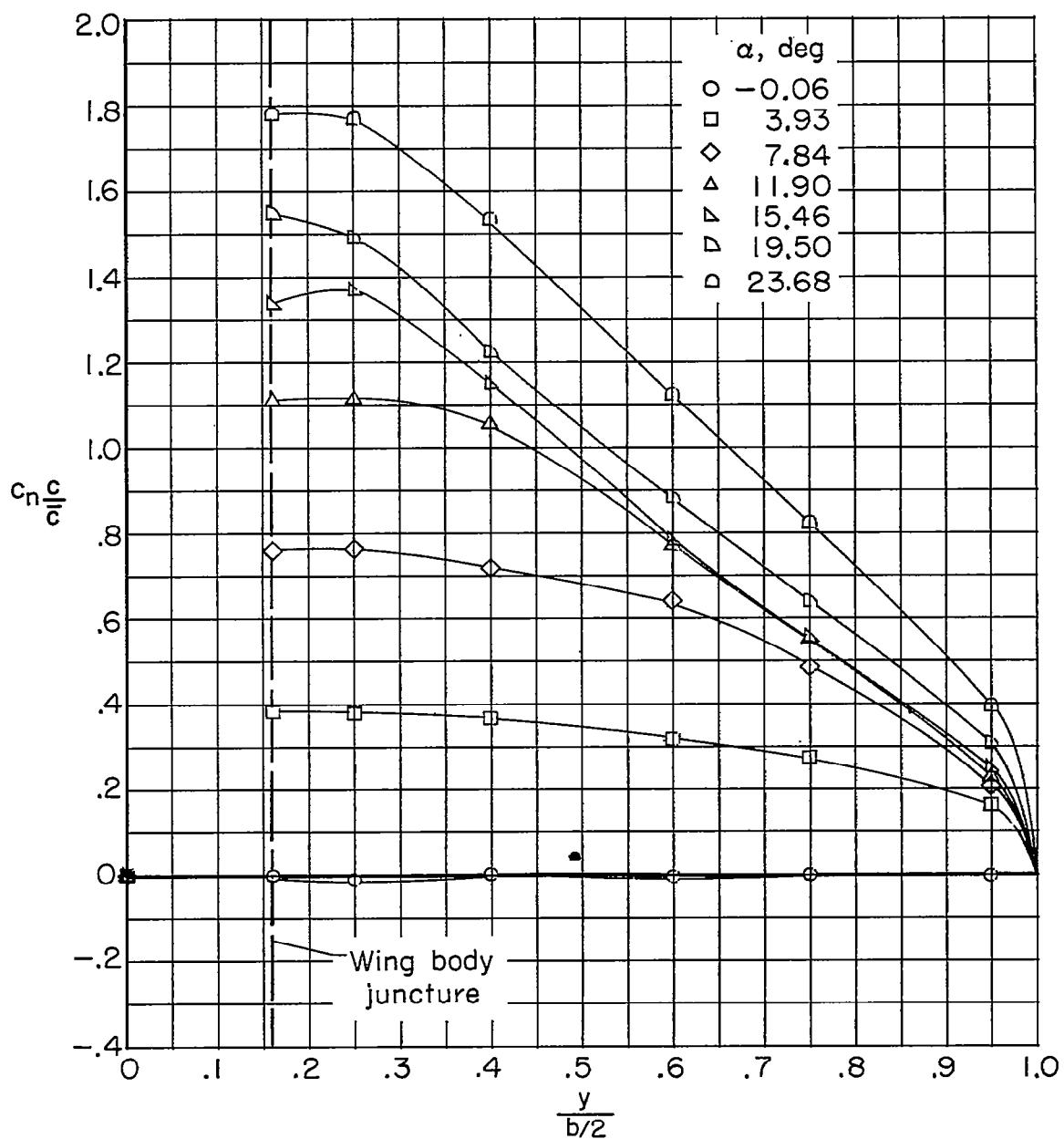
(b) $M = 0.90$.

Figure 5.- Continued.

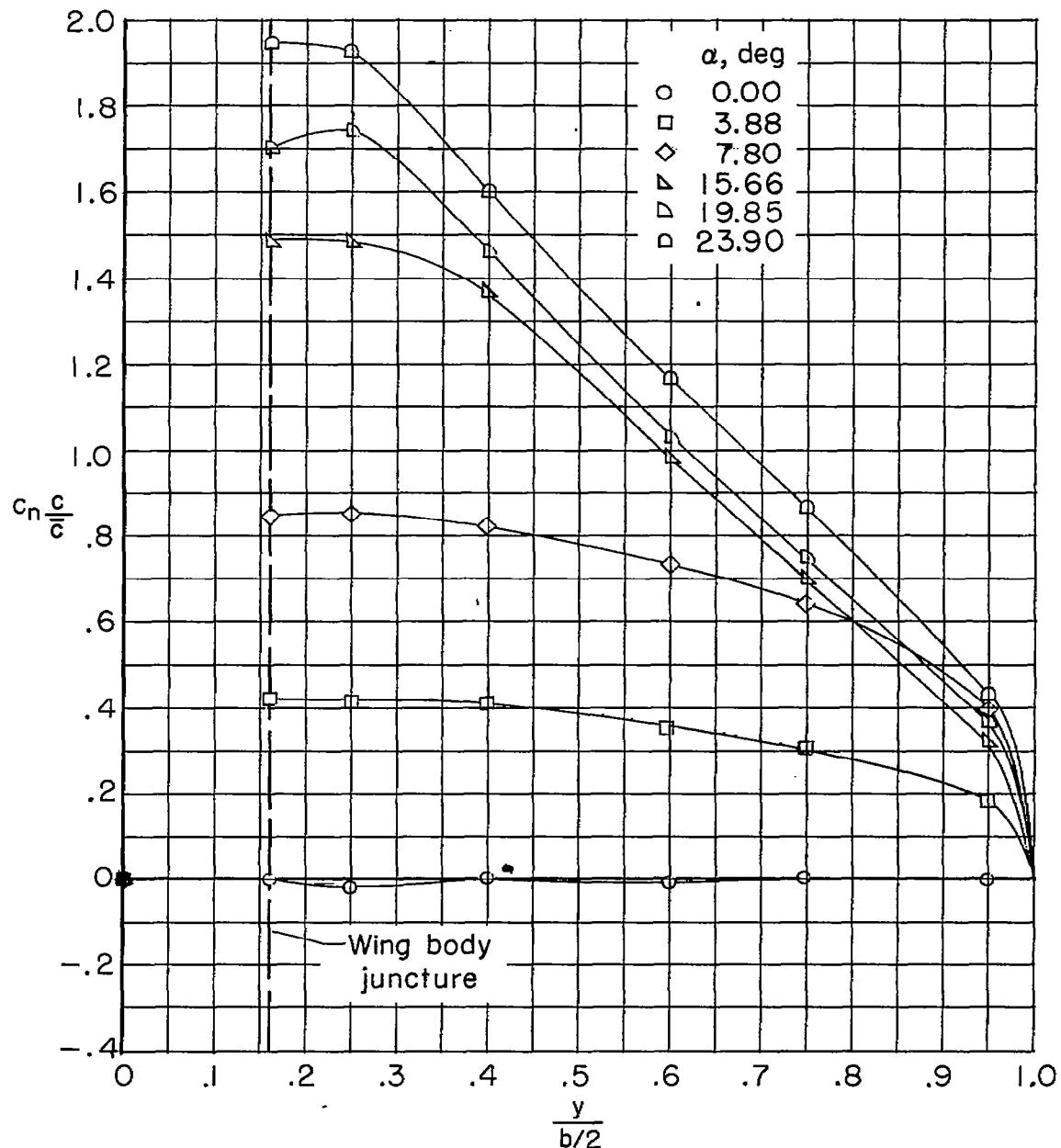
(c) $M = 0.94$.

Figure 5.- Continued.

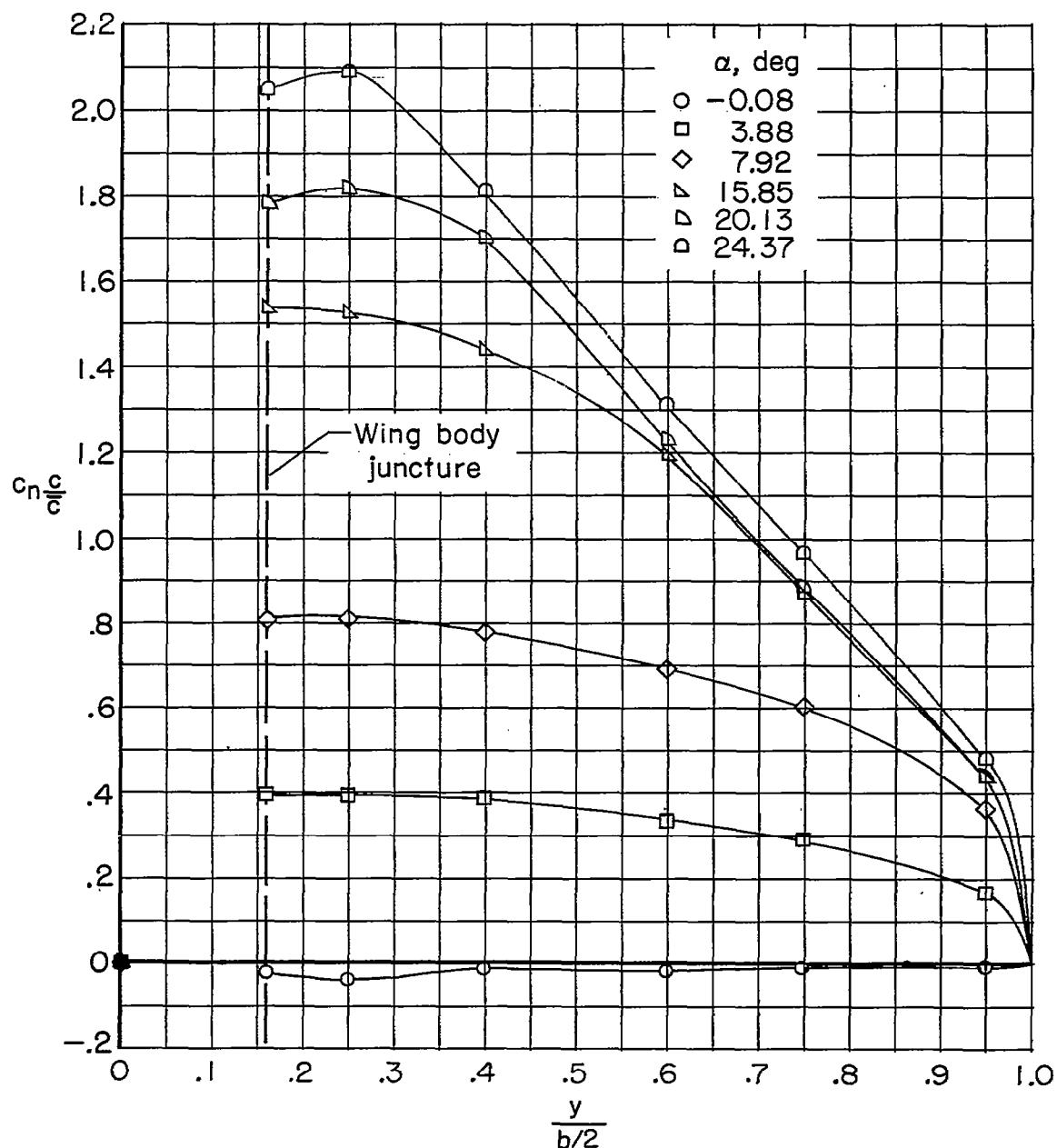
(d) $M = 0.98$.

Figure 5.- Continued.

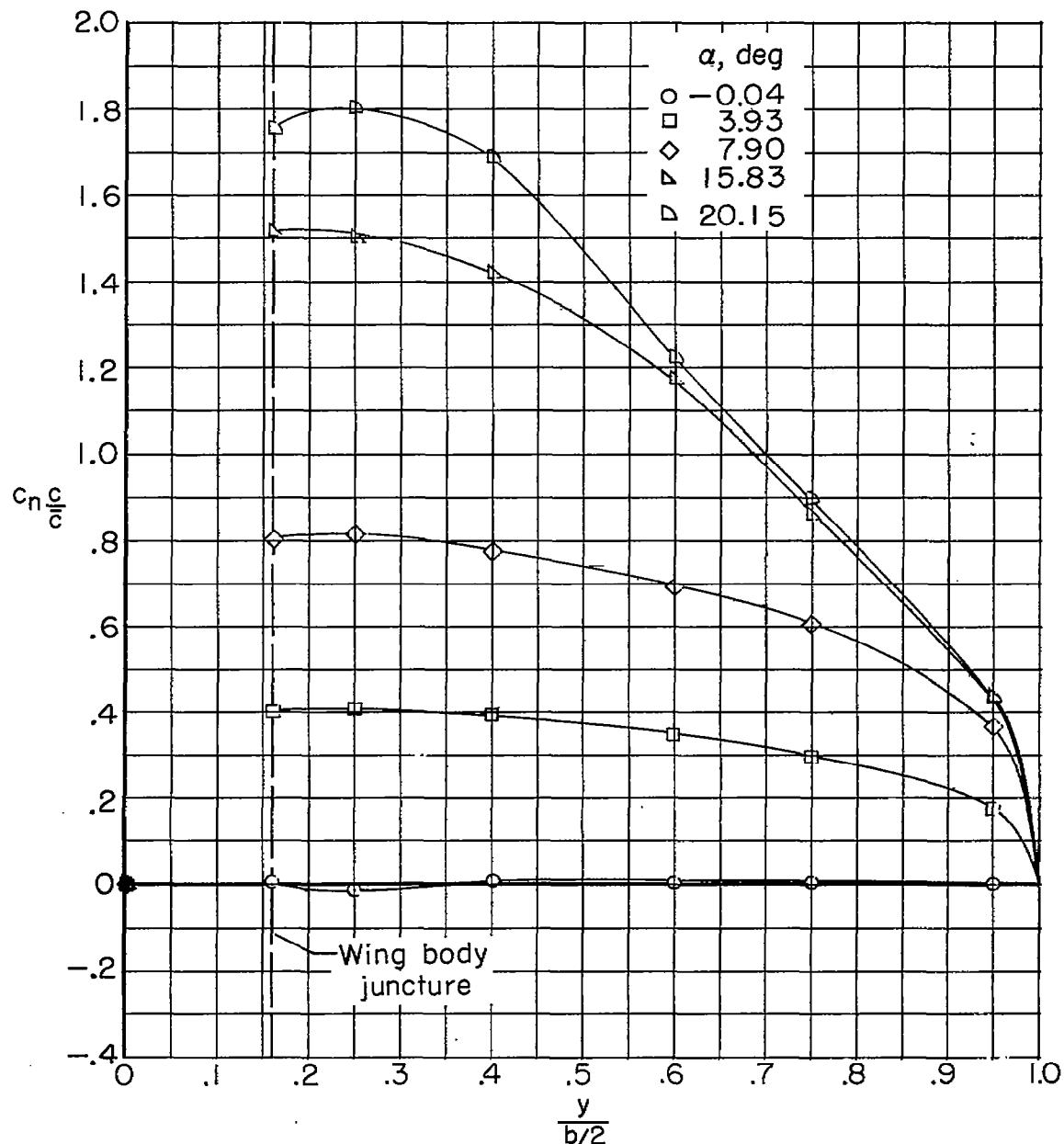
(e) $M = 1.00$.

Figure 5.- Continued.

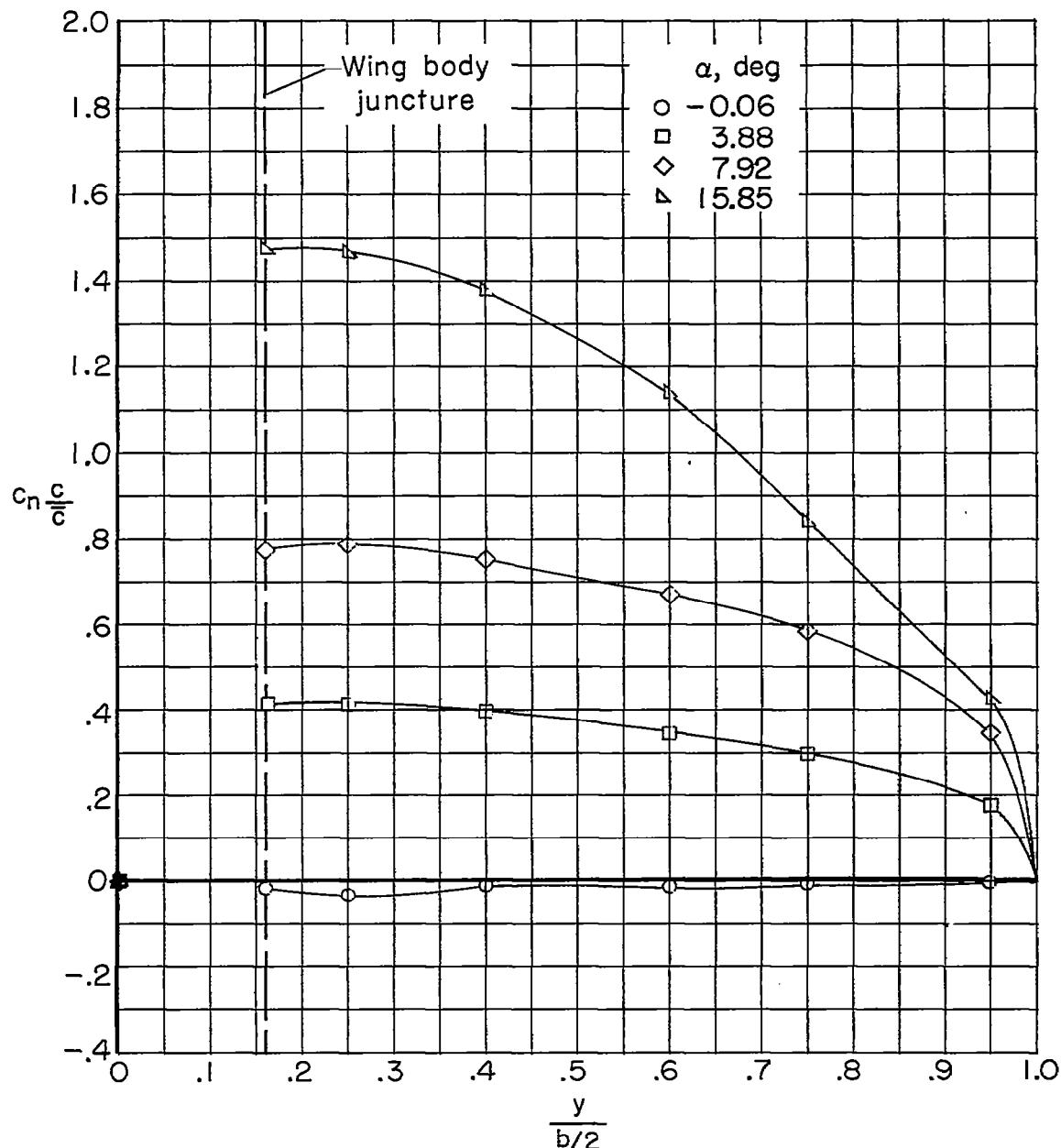
(f) $M = 1.03$.

Figure 5.- Concluded.

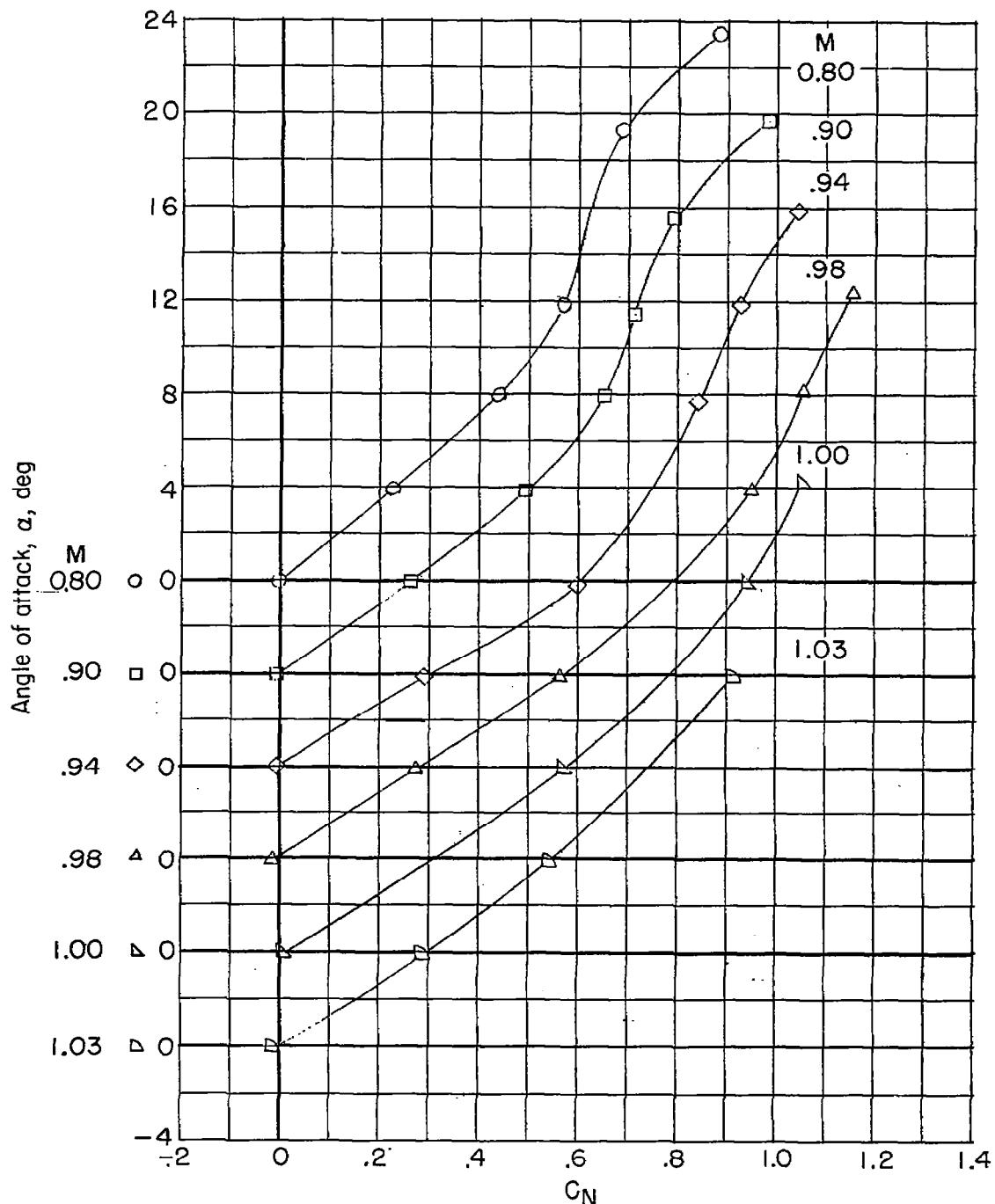


Figure 6.- Variation of angle of attack with wing normal-force coefficient for several Mach numbers. Steel wing.

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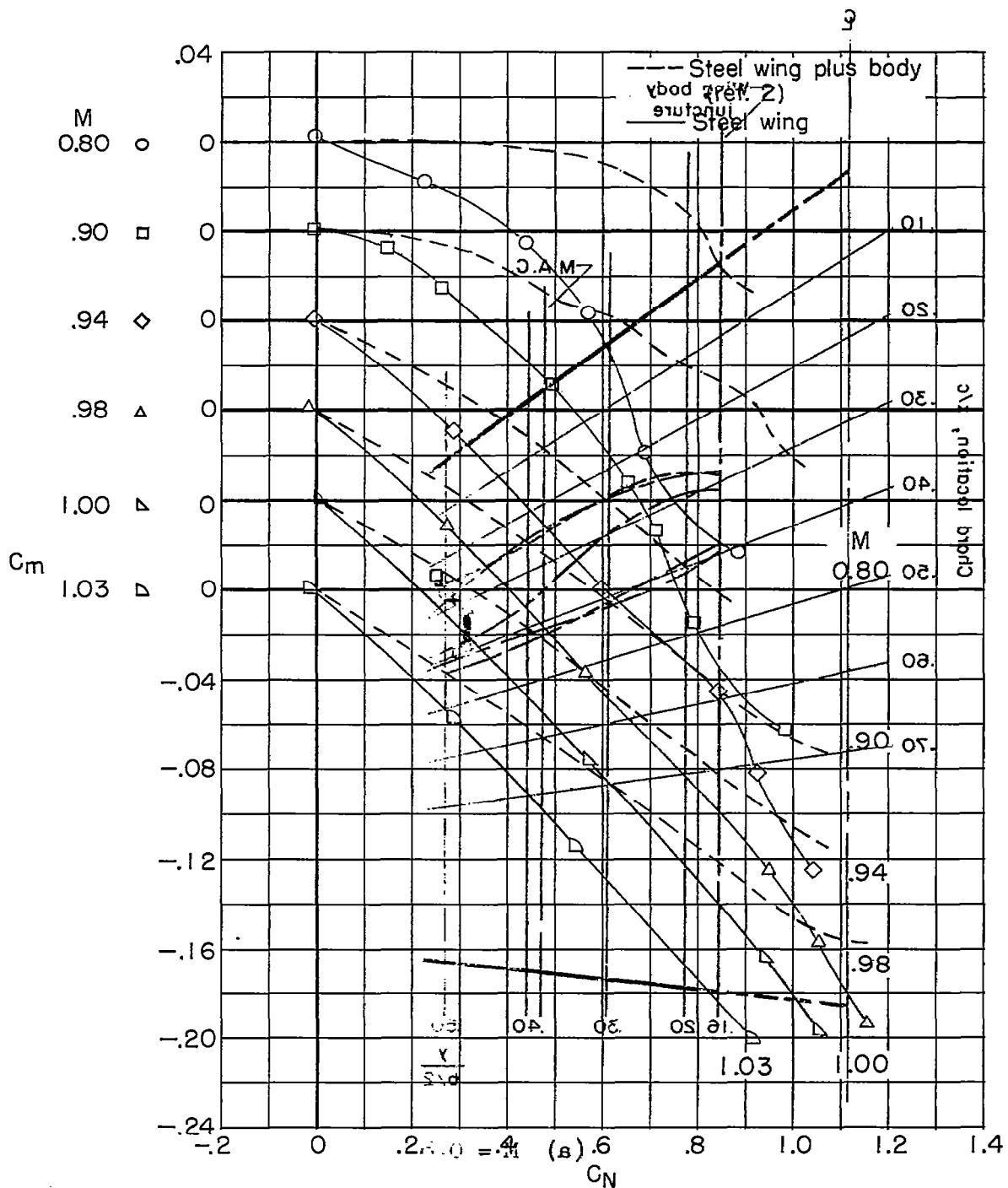


Figure 7.- Variation of wing pitching-moment coefficient with wing normal-force coefficient for several Mach numbers. Steel wings 2

Figures 7-9 show the variation of wing pitching-moment coefficient with wing normal-force coefficient for several Mach numbers.

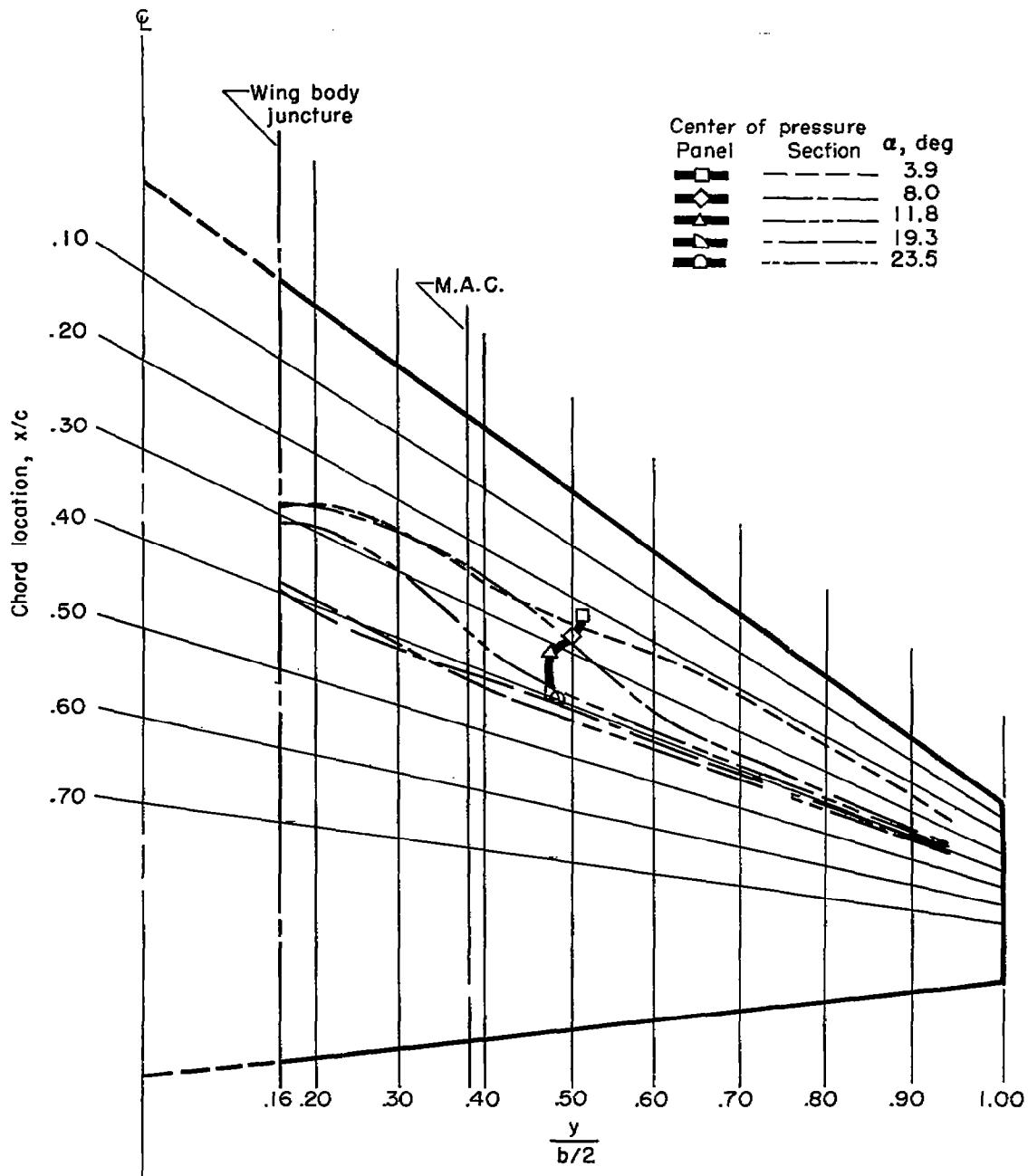
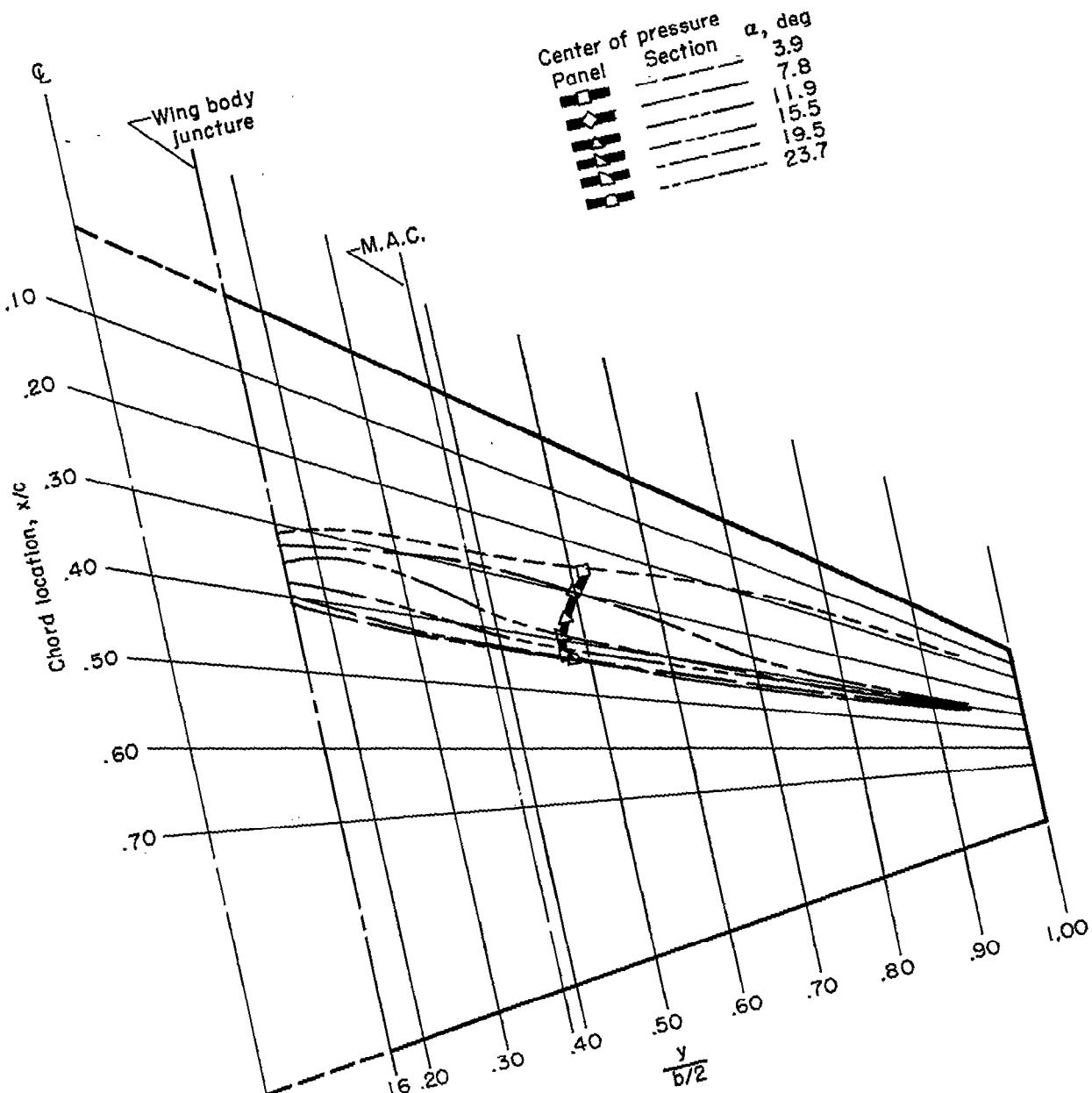
(a) $M = 0.80$.

Figure 8.- Variation of center-of-pressure location for wing panel and for local sections with angle of attack for several Mach numbers.
Steel wing.

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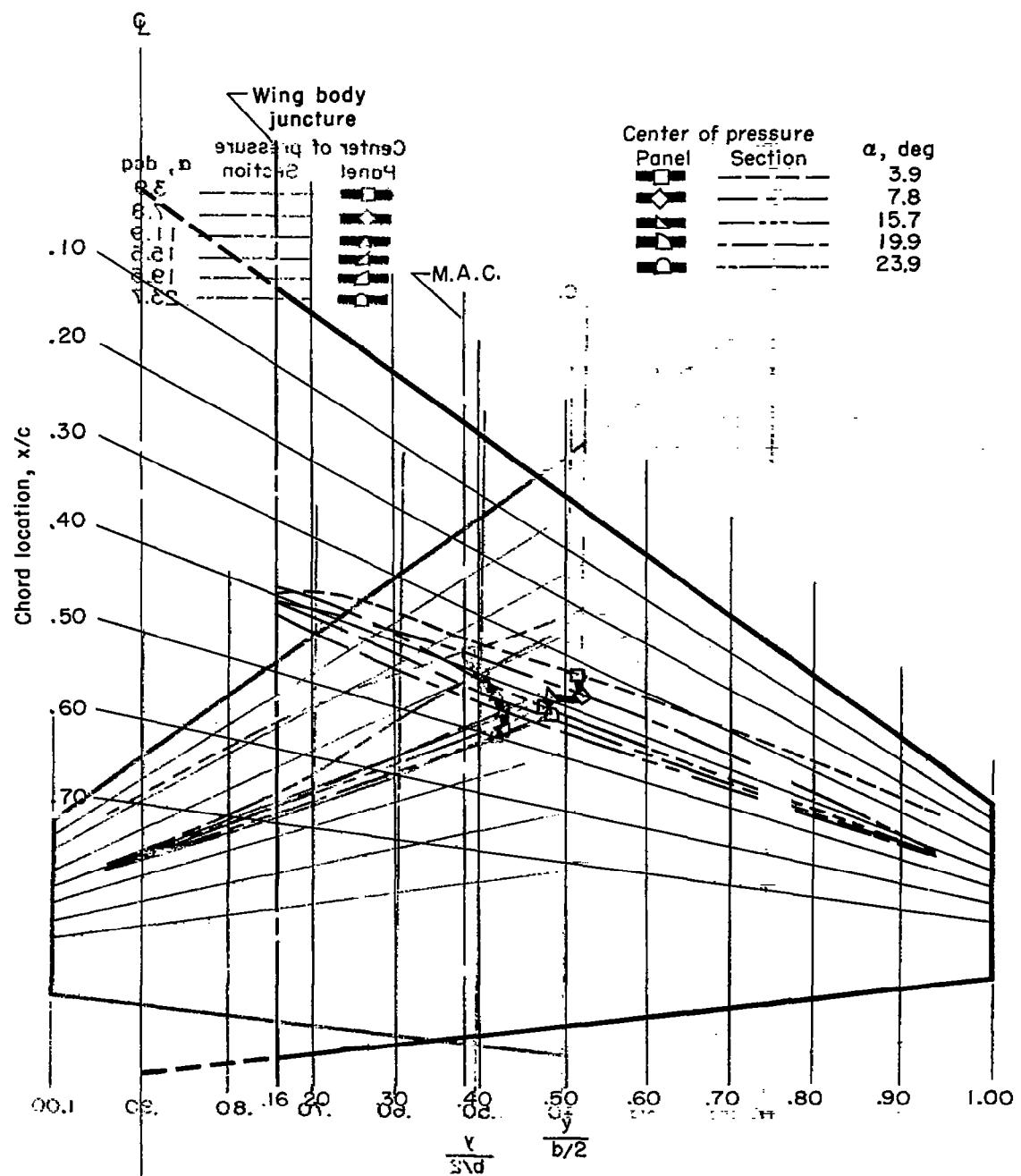
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71



(b) $M = 0.90$.

Figure 8.- Continued.



$$(e), M = 0.94.$$

Figure 8.- Continued.

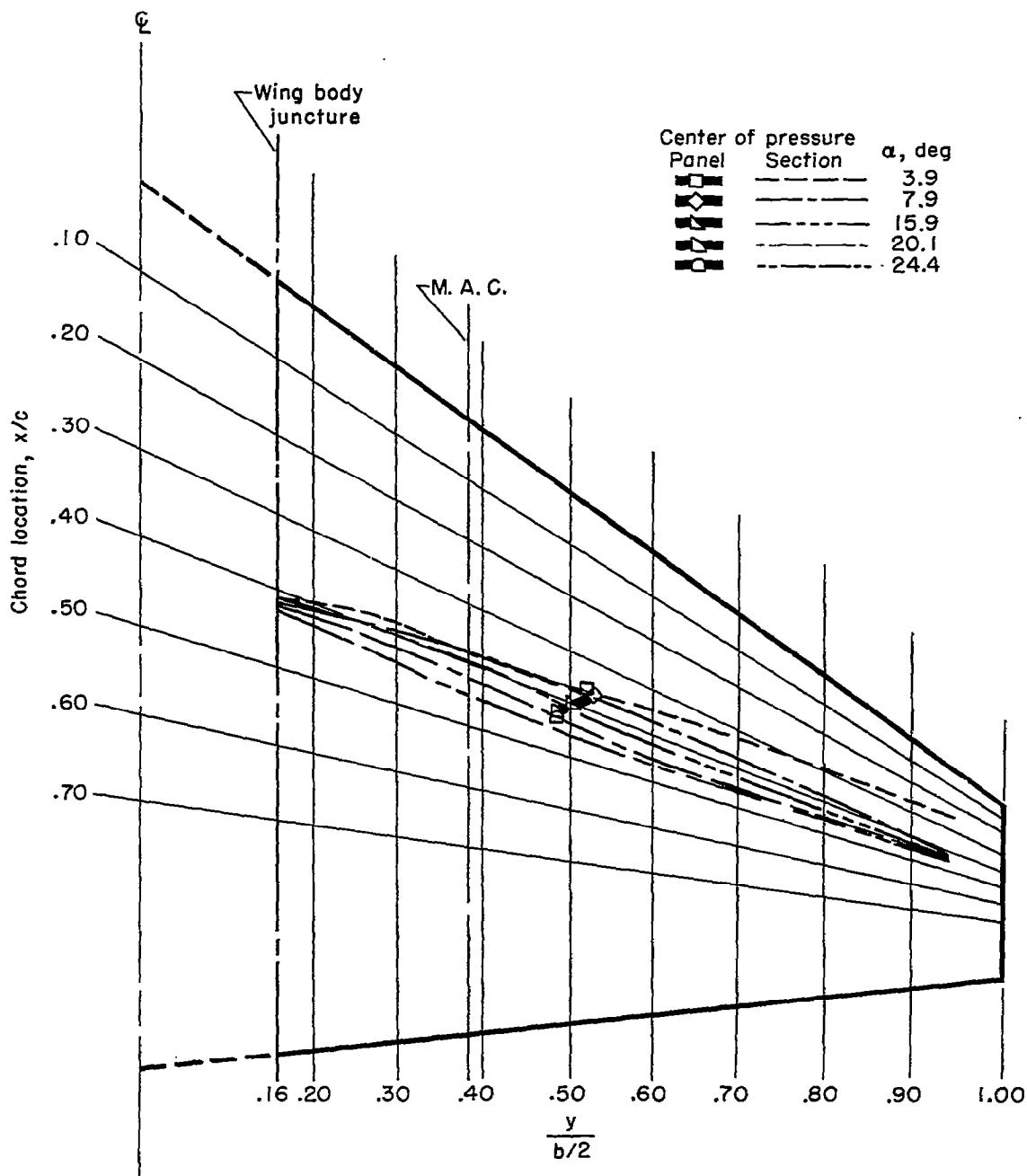
(d) $M = 0.98$.

Figure 8.- Continued.

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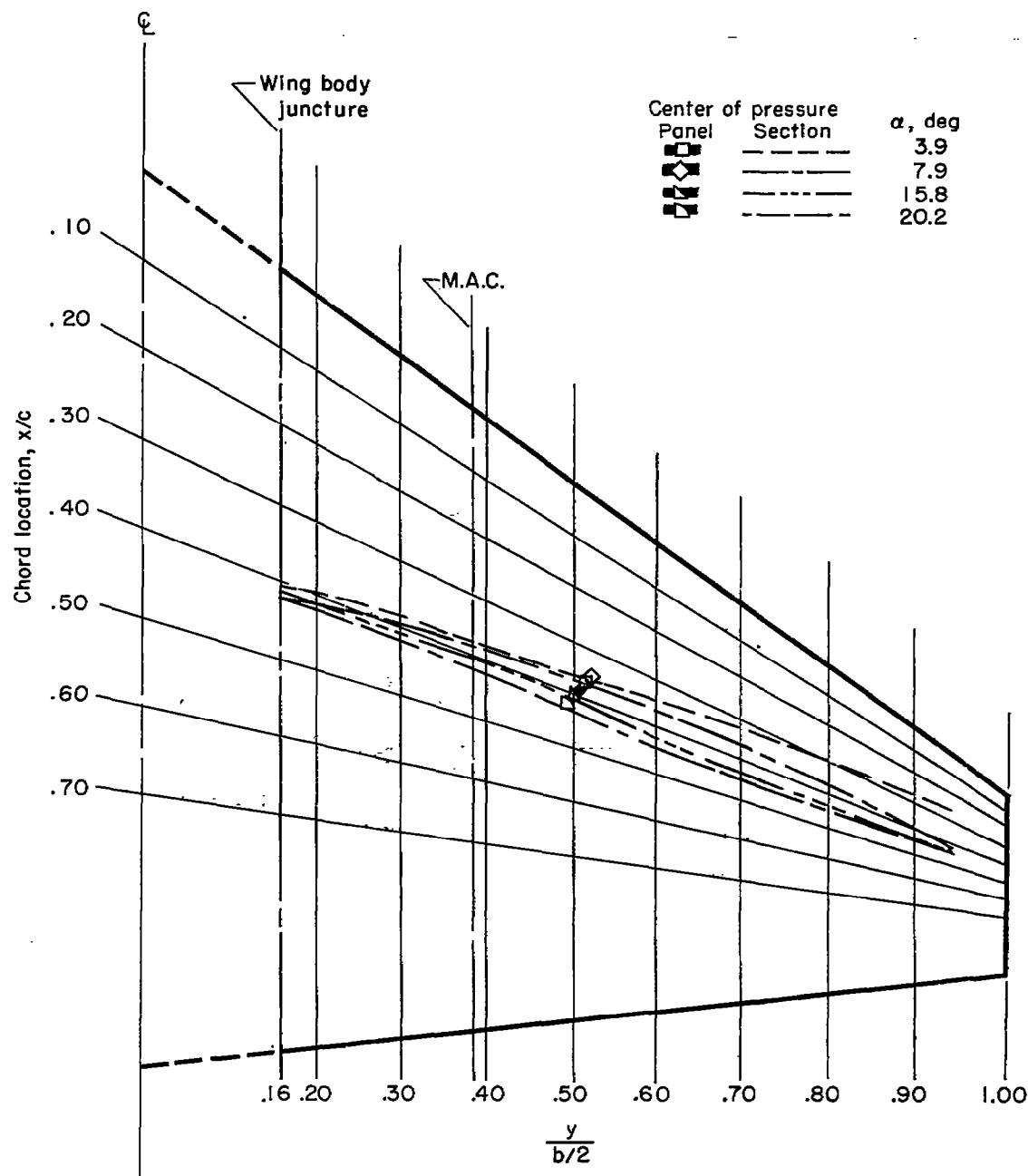


Figure 8.- Continued.

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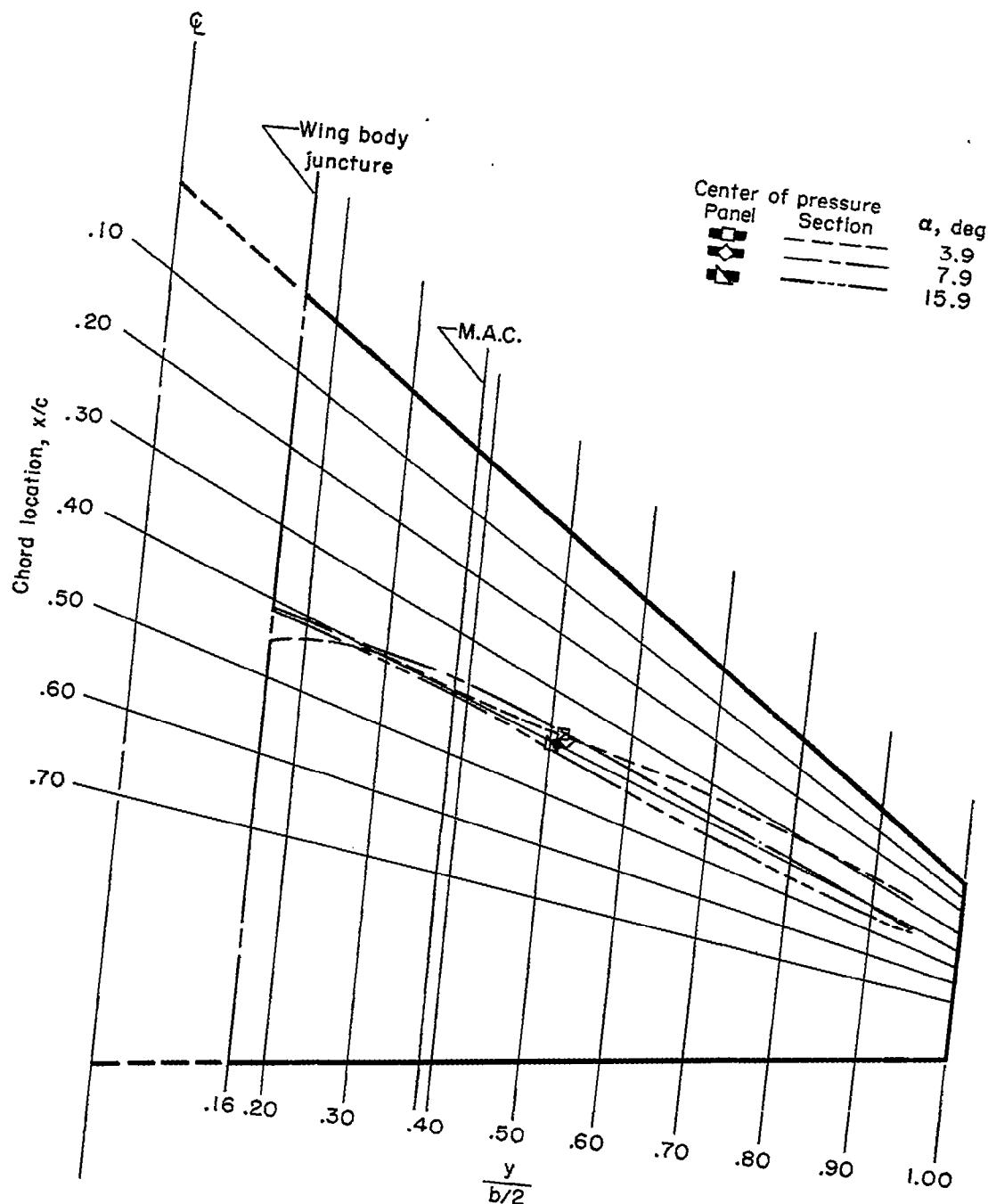
(f) $M = 1.03$.

Figure 8.- Concluded.

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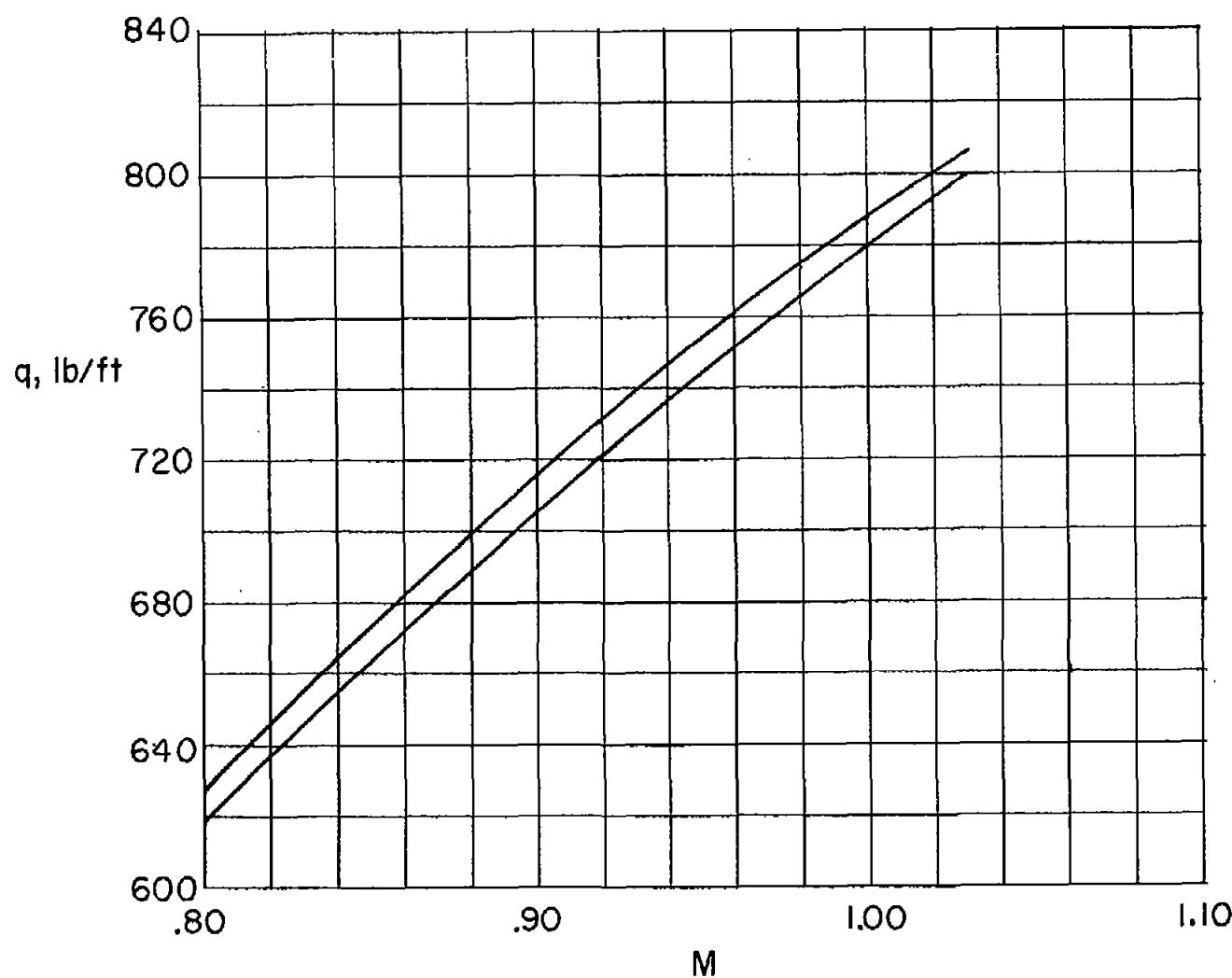


Figure 9.- Range of dynamic pressures for both steel and plastic wings for these tests.

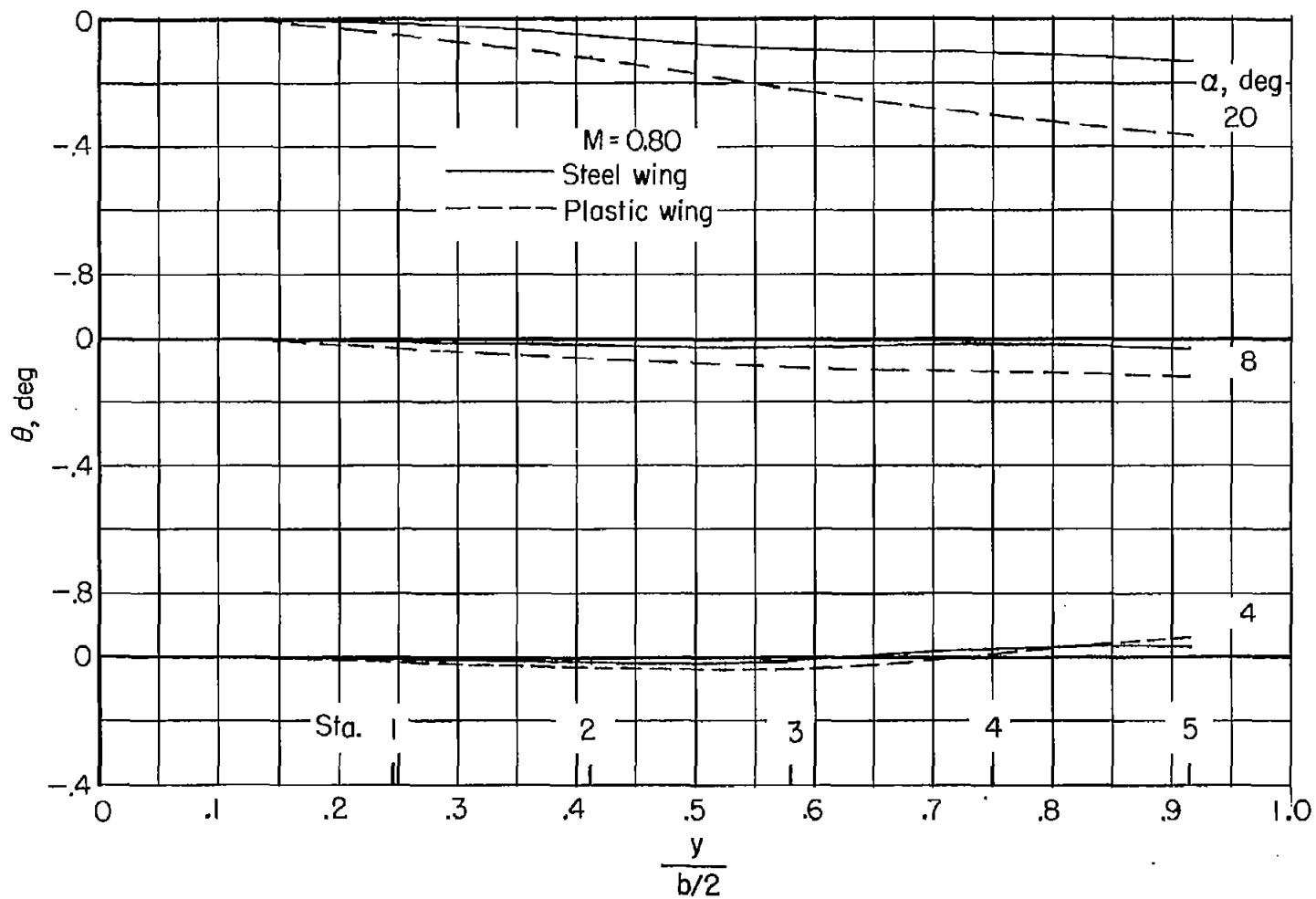
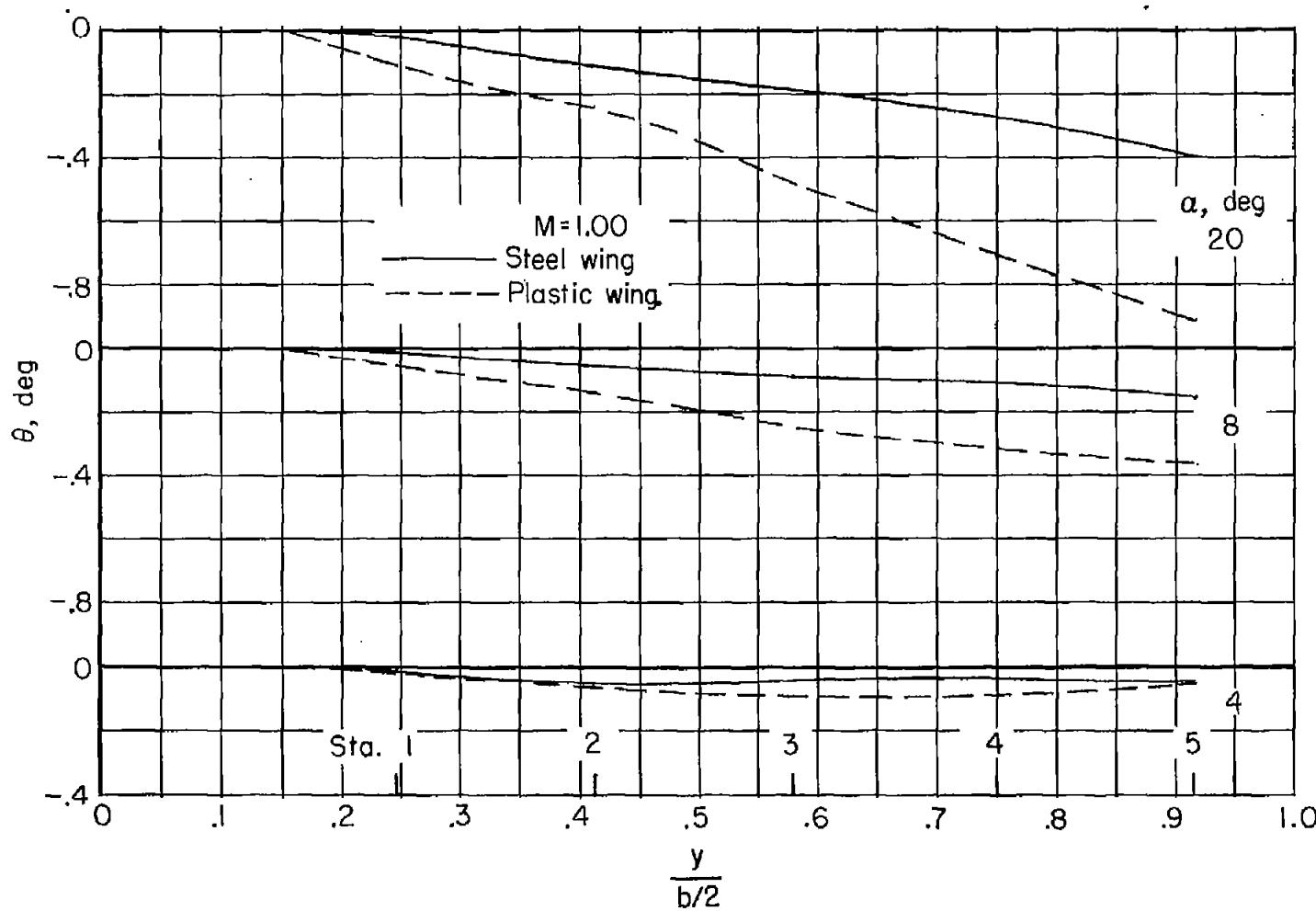
(a) $M = 0.80$.

Figure 10.- Comparison of the calculated twist distribution due to experimental aerodynamic forces and moments, measured parallel to the angle-of-attack plane.



(b) M = 1.00.

Figure 10.- Concluded.

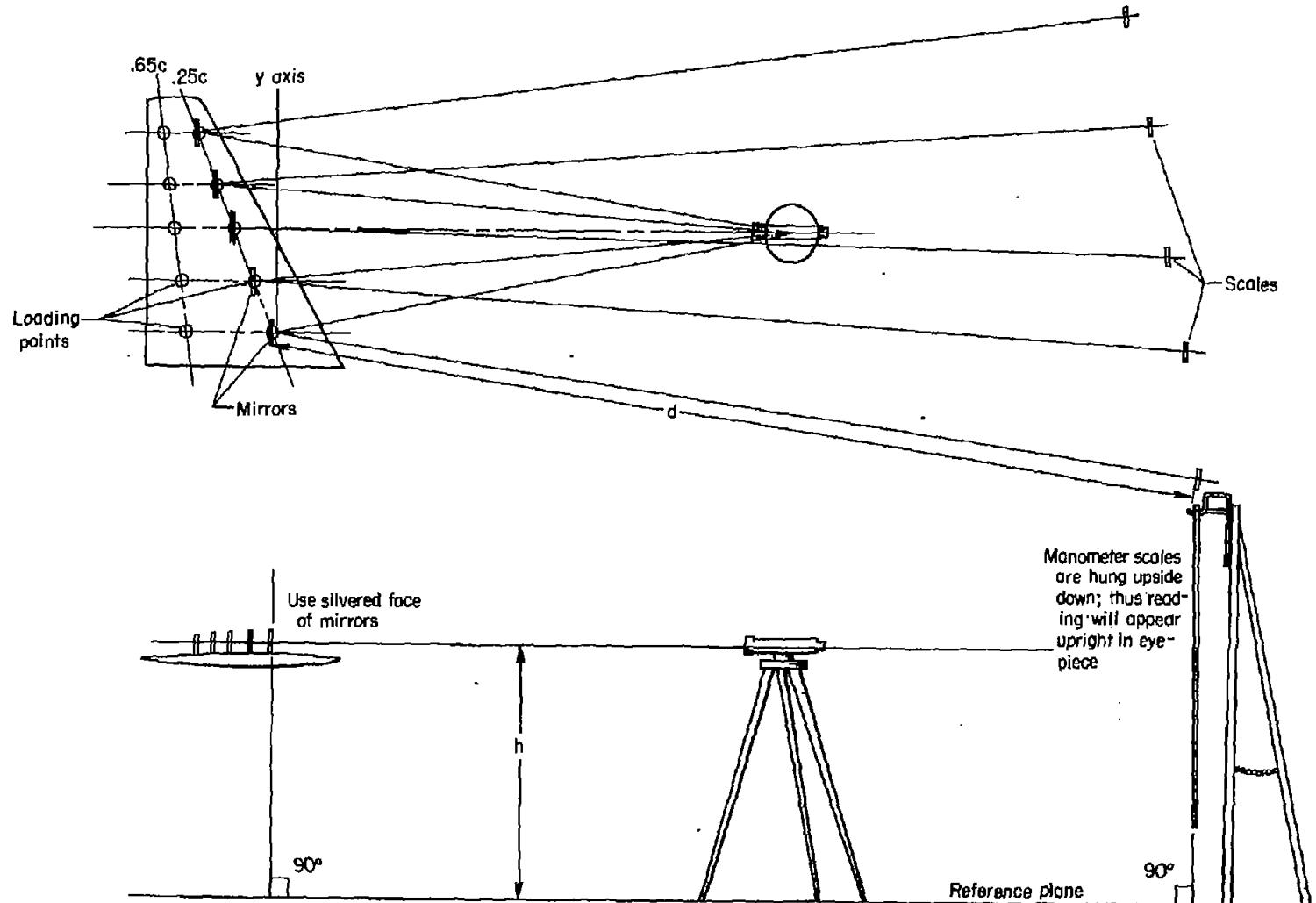


Figure 11.- Typical setup for measuring twist with mirrors.