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RESEARCH MEMORANDUM

AERODYNAMIC LOAD DISTRIBUTION OVER A 45° SWEPT WING HAVING A SPOILER-SLOT-DEFLECTOR AILERON AND OTHER SPOILER AILERONS FOR MACH NUMBERS FROM 0.60 TO 1.03

By F. E. West, Jr., Charles F. Whitcomb,
and James W. Schmeer

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CLASSIFIED DOCUMENT

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NATIONAL ADVISORY COMMITTEE
FOR AERONAUTICS

WASHINGTON
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SUMMARY

A loads investigation was made with flap spoiler ailerons, deflector ailerons, and a spoiler-slot-deflector aileron on a 45° swept-wing—body combination. These controls were located in the vicinity of the 70-percent wing chord line and extended outboard to 87 percent of the wing semispan. Control projection was varied only for the deflector ailerons. The wing had an aspect ratio of 4, a taper ratio of 0.60, and NACA 65A006 airfoil sections parallel to the plane of symmetry. Static pressures were measured on the wing and some of the controls at several spanwise stations for Mach numbers from 0.60 to 1.03, Reynolds numbers from 5.05×10^6 to 6×10^6, and an angle-of-attack range of about 0° to 20°.

This investigation is a closely related extension of a pressure study (see NACA RM L54C17a) of retractable spoiler ailerons. The results of these two investigations indicate that the effects of flap spoiler ailerons and retractable spoiler ailerons on the wing pressures are generally similar. Adding a slot deflector to a spoiler-aileron configuration creates low pressures on the deflector rear surface and the subsequent wing lower surface which have a favorable effect on rolling moment, particularly at high angles of attack. At low angles of attack the low pressures associated with a slot deflector have their largest effects on the spanwise and chordwise loadings for a swept wing at the inboard stations. These low pressures tend to be of the same magnitude as the upper-surface pressures behind a spoiler which are lowest at the inboard stations. At high angles of attack where a spoiler has a rather small effect on wing loading, the low pressures associated with a

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slot deflector affect the loading over most of the wing span. The control spanwise load distributions were similar in shape for the spoiler aileron and the spoiler and deflector components of the spoiler-slot-deflector aileron at low angles of attack.

INTRODUCTION

Very few pressure data for spoiler-aileron configurations have been available at transonic speeds for use in load calculations or in studying the effects of spoiler ailerons on the flow about wings. A test program was, therefore, initiated in the Langley 16-foot transonic tunnel to provide static-pressure data for various spoiler-aileron configurations in the transonic speed range for a large angle-of-attack range.

The initial results of this test program (see ref. 1) were for a 45° swept-wing—body combination having retractable and plug spoiler ailerons. The most recent phase of this test program, reported herein, was primarily the investigation at 0° yaw of spoiler-slot-deflector ailerons and flap spoiler ailerons on essentially the same model used in the initial phase. These controls were located in the vicinity of the 70-percent wing chord line and extended from the vicinity of the body to 87 percent of the wing semispan (same as the spoiler ailerons used in the initial phase of the investigation).

In this paper the wing normal-force characteristics, centers of load, and span-load and chordwise pressure distributions for one of the spoiler-slot-deflector aileron configurations and one of the flap spoiler-aileron configurations are compared with those for the basic model. Tabulated wing pressure coefficients and spoiler and deflector loading characteristics are also given for these two control configurations. The effects of wing leading-edge chord-extensions on the spoiler-slot-deflector loads are also included. There are shown, in addition, the effects of varying projection of a deflector aileron and of removing inboard segments of the flap spoiler aileron on the wing chordwise pressure distributions. Except for the configurations having only a deflector aileron, control projection was not varied.

A few of these pressure data results have been presented in reference 2 and six-component force balance data obtained simultaneously with the present pressure data have been presented in reference 3.

SYMBOLS

All chords are parallel to the vertical plane of symmetry. Wing coefficients include contribution of controls.

b	wing span
b_i	inboard-end location of various controls
c	local basic wing chord
$\bar{c}$	average basic wing chord
c'	basic wing mean aerodynamic chord
c_d	local chord of deflector rear face
$\bar{c}_d$	average chord of deflector rear face
c_s	local chord of spoiler front face
$\bar{c}_s$	average chord of spoiler front face
c_n	wing section normal-force coefficient, $\frac{\text{Wing section normal force}}{qc}$
c_{n_d}	deflector section normal-force coefficient, $\frac{\text{Deflector section normal force}}{qc_d}$
c_{n_s}	spoiler section normal-force coefficient, $\frac{\text{Spoiler section normal force}}{qc_s}$
C_N	wing-panel normal-force coefficient, $\int_{0.135}^{1.0} c_n \frac{c}{\bar{c}} \, d\left(\frac{y}{b/2}\right)$
C_p	pressure coefficient, $\frac{p_1 - p}{q}$

[redacted]

d	distance along c_d measured from deflector leading edge
d_{cp}	distance along c_d measured from deflector leading edge to deflector section center of load
M	free-stream Mach number
p	free-stream static pressure
p_l	local static pressure
q	free-stream dynamic pressure
s	distance along c_s measured from spoiler hinge line
s_{cp}	distance along c_s measured from spoiler hinge line to spoiler section center of load
S	total wing area
x	distance along c measured from wing leading edge, positive downstream
x_{cp}	longitudinal location of wing section center of load measured from wing leading edge, positive downstream
X_{cp}	longitudinal location of wing panel center of load measured from leading edge along c', positive downstream
y	lateral distance from plane of symmetry
Y_{cp}	lateral location of wing panel center of load measured from plane of symmetry
α	angle of attack
δ_d	projection of deflector into airstream, fraction of c, measured from wing surface perpendicular to wing chord line
δ_s	projection of spoiler into airstream, fraction of c, measured from wing surface perpendicular to wing chord line

APPARATUS

Tunnel and Model

The investigation was conducted in the Langley 16-foot transonic tunnel, the airflow and power characteristics of which are presented in reference 4. Figure 1 presents the geometric details of the sting-supported model. The steel wing had a quarter-chord line sweep of 45°, a taper ratio of 0.60, an aspect ratio of 4.0, and NACA 65A006 airfoil sections parallel to the plane of symmetry. The wing had no geometric incidence, dihedral, or twist, and was mounted in a midwing position on the fuselage. The steel fuselage was a body of revolution with a fineness ratio of 10. (See ref. 1 for fuselage ordinates.) The quarter-chord point of the wing mean aerodynamic chord was located at the longitudinal position of the maximum fuselage diameter.

Lateral-Control and Chord-Extension Configurations

Figure 2 shows some of the geometry of the lateral-control and chord-extension configurations used in the test program. More extensive geometric sectional details for the spoiler-slot-deflector aileron and one of the deflector ailerons are shown in figure 1. All the control devices were made of steel and were mounted on the left wing.

Except for modifications involving the removal of small inboard segments, the same spoiler was used for all configurations that included a spoiler. It was projected 7.8 percent of the wing local chord above the wing upper surface and was hinged at the 68.1-percent wing chord line. (See fig. 1(b).) In the undeflected position, this spoiler would extend over 12 percent of the wing chord. When the inboard end of the spoiler extended to the fuselage $\left(b_i \approx 0.14\frac{b}{2}\right)$, the fuselage-spoiler juncture was sealed. The wing slot (3.8 percent of the local wing chord) extended from 15 to 87 percent of the semispan. Ribs, which had a height of 2.4 percent of the local wing chord and a width of 0.25 inch, were located in the wing slot parallel to the plane of symmetry at the 20-, 30-, 39-, 48-, 57-, 66-, 75-, and 83-percent-semispan stations. Braces for the flap-type spoiler were mounted on top of these ribs. (See fig. 1(b).)

The deflector of the spoiler-slot-deflector aileron projected 5.5 percent of the local wing chord below the wing lower surface with the inboard end located at the fuselage. In its undeflected position, this deflector would extend over 8.6 percent of the wing chord. The deflector was hinged at the 73.8-percent wing chord line and was fastened to the wing by seven braces. (See fig. 1(b).)

The configurations having only a deflector utilized a deflector that had a chord length of about 7.8 percent of the local wing chord when in the undeflected position. Although this deflector extended inboard to the fuselage, it was not contoured to fit the fuselage closely. For the deflector configurations having a gap between the deflector and wing surface, spacers with a height of 2 percent of the local wing chord and a width of 5/16 inch were located at seven semispan stations. (See fig. 1(c).)

The leading-edge chord-extensions, which are similar to those discussed in references 5 and 6, extended forward 15 percent of the local wing chord from the 65-percent-semispan station to the wing tip. The chord extensions had the same section ordinates back to their maximum thickness as did the basic airfoil sections at corresponding spanwise stations. The airfoil contour paralleled the wing chord line between the maximum thickness of the chord extensions and the maximum thickness of the wing.

Pressure Instrumentation

Static-pressure orifices were distributed parallel to the vertical plane of symmetry at the 13.5- (average), 25-, 40-, 55-, 70-, 85-, and 95-percent-semispan stations on the left wing panel. A total of 45 orifices were located on the upper and lower wing surfaces at each spanwise station. The orifices at the wing-fuselage juncture (average 0.135 semispan station) were actually located on the fuselage 0.1 inch from the wing surface. Orifices located on the front and rear faces of the spoiler (with and without the slot deflector) and the deflector used in the spoiler-slot-deflector combination were only utilized for pressure measurements when the controls extended inboard to the fuselage. These orifices were distributed parallel to the vertical plane of symmetry at the 14-, 25-, 40-, 55-, 70-, and 85-percent wing semispan stations. Eight orifices and six orifices were located on the spoiler and deflector, respectively, at each spanwise station. (See fig. 1(b).) The pressures were transmitted by means of small tubing through the model and its support system to mercury manometer boards.

TESTS

The configurations shown in figure 2 were generally tested through an angle-of-attack range from 0° to approximately 21.5° for Mach numbers from 0.60 to 0.94 and up to angles of 19.4°, 15.4°, and 13.2° for Mach numbers of 0.98, 1.00, and 1.03, respectively. These maximum angles were not attained for all of the configurations because of model stress

or tunnel power limitations. The variation of Reynolds number (based on wing mean aerodynamic chord) with Mach number is presented in figure 3.

DATA REDUCTION

The pressure data were generally reduced by the methods described in reference 1. For some conditions, however, the normally used rectangular-step integration did not provide sufficiently accurate section pitching-moment coefficients for the spoiler or deflector. Hence, for these conditions the moments were obtained by manually integrating the faired pressure distributions for the controls.

No corrections have been applied to the data. Sting interference effects on the flow over the relatively remote wing and lateral controls are believed to be negligible. Also tunnel wall effects are small for the present test Mach number range. (See ref. 7.) Angle-of-attack accuracy is estimated to be within $\pm 0.1^{\circ}$.

RESULTS

Wing static-pressure coefficients are given for the configuration with the spoiler aileron extending to the fuselage in table I and for the spoiler-slot-deflector aileron configuration in table II. Tabulated basic wing pressure coefficients are available in reference 1.

Wing chordwise pressure distributions showing the effects of lateral control projection or the effects of changes in lateral control configuration are shown in figures 4 to 10. In figure 4 the upper-surface pressure coefficients for the spoiler-aileron configuration are based on both wing pressures and the pressures obtained on the front surface of the spoiler aileron. The pressures on the spoiler aileron rear surface and on the portion of the wing surface over which the spoiler aileron extends were not utilized in obtaining the pressure distributions. These latter spoiler aileron and wing pressures tend to be equal. They have, therefore, been omitted to simplify the pressure distributions. Their values were approximately equal to the upper-surface wing pressures obtained immediately downstream of the spoiler.

For the spoiler-slot-deflector aileron configuration in figure 7, the pressures on the front surface of the spoiler and on the rear surface of the deflector have been utilized in the chordwise pressure distributions. In this case the pressures between the wing and controls have been omitted.

Since control pressures were obtained only for the two configurations where the lateral controls extended into the body, control pressures are not available for the chordwise pressure distributions shown for the remaining control configurations in figures 5, 6, 8, 9, and 10. For these configurations the pressure distributions have not been extended over the control portion of the wing.

Wing spanwise load distributions and wing section center-of-pressure locations are presented in figures 11 and 12, respectively, for the basic model, for the spoiler-slot-deflector configuration, and for the configuration with the spoiler aileron extending to the fuselage. Wing-panel normal-force characteristics, lateral center-of-pressure locations, and longitudinal center-of-pressure locations for these three configurations are presented in figures 13 to 15, respectively.

Control load characteristics are shown in figures 16 to 21 for the spoiler-slot-deflector aileron. These characteristics are with and without the leading-edge chord-extensions added to the model. Figures 16, 18, and 19 also include the control load characteristics for the spoiler aileron that extended to the fuselage.

In figures which show comparisons at one angle of attack, the angle given is an average for the compared configurations. The maximum deviation from this angle is $\pm 0.1^{\circ}$.

DISCUSSION

Wing Chordwise Pressure Distributions

Spoiler ailerons.- At $M = 0.60$, figure 4(a) shows that at low angles of attack the addition of the spoiler aileron to the model caused an increase in the upper-surface pressures ahead of the spoiler, a decrease in the upper-surface pressures behind the spoiler, and a decrease in the lower-surface pressures. The effects were about the same as those shown in reference 1 with retractable spoilers deflected 0.04c. In both cases the flow was separated ahead of and behind the spoilers. The primary difference was that, behind the retractable spoiler aileron, complete recovery of the flow generally occurred before the flow reached the wing trailing edge at $\frac{y}{b/2} = 0.135$ and 0.25. In the present case similar flow recovery was not obtained probably because of the higher deflection of the spoiler aileron above the wing surface.

The region of fairly large pressure rise ahead of the spoiler aileron extended forward of the spoiler in approximately the shape of a

spanwise wedge with the apex and the highest pressure occurring at $\frac{y}{b/2} = 0.135$. The peculiar shape of the pressure distribution upstream of the spoiler-aileron top edge at $\frac{y}{b/2} = 0.25$ was a result of the pressures near the leading-edge front surface of the spoiler aileron being less than either the immediately preceding wing pressures or the following spoiler-aileron pressures. This pressure pattern is believed to be associated with a vortex-type flow lying in the separated region ahead of the spoiler-aileron trailing edge. (See ref. 1.)

As the angle of attack was increased for $M = 0.60$, the effect of the spoiler aileron on the wing pressures did not change appreciably until angles of attack were reached where flow separation on the basic wing began to progress inboard from the wing tip. (See fig. 4(a).) At these angles of attack the spoiler-aileron influence was reduced, as would be expected, since the spoiler aileron was in a separated flow region where the local flow was predominantly spanwise. (A discussion pertaining to flow separation and other flow phenomena over the basic wing may be found in ref. 6.)

Figure 4 shows that, as the Mach number was increased from 0.60 to 1.03, the influence of the spoiler aileron on the lower-surface pressures became confined to the trailing-edge region. This confinement probably occurred because shocks on the lower surface opposed the upstream transmission of pressure changes. On the upper surface, the forward extent of the spoiler-aileron influence became more confined at the inboard stations, and at $\frac{y}{b/2} = 0.135$ some pressure recovery occurred behind the spoiler aileron at the higher Mach numbers. The confinement on the upper surface was probably caused by the presence of a shock wave associated with the separation point ahead of the spoiler aileron. The presence of this shock would have opposed the upstream transmission of the spoiler pressure field except outboard where the boundary layer was thickened.

Figure 4 also shows some unexplained effects of increasing Mach number from 0.60 at angles of attack of about 8.5° and 13°. At an angle of attack of about 8.5° and Mach numbers of 0.80 and 0.90, the spoiler aileron has much less effect on the upper-surface pressures for a short distance upstream of its trailing edge at $\frac{y}{b/2} = 0.55$ than at $\frac{y}{b/2} = 0.40$ or 0.70. A similar effect occurs at $\frac{y}{b/2} = 0.70$ for the higher Mach numbers. At an angle of attack of about 13° and some of the higher Mach numbers, the addition of the spoiler aileron to the model caused an increase in normal force at the two outboard stations where flow

separation existed on the basic model. With increasing Mach number this normal-force increase reached a maximum at a Mach number of about 0.94 and then decreased to a very low value at a Mach number of 1.00. Although the reasons for the normal-force increase are not known, the relative projection of the spoiler to the boundary-layer thickness must certainly be a factor.

Since inboard lateral controls do not usually extend into the fuselage on actual aircraft, inboard portions of the spoiler aileron were removed to determine the fuselage end-plate effect on the wing pressures. The results for the inboard stations are presented without discussion in figures 5 and 6 for two representative Mach numbers. Since moving the inboard end location to 0.16b/2 or 0.22b/2 had negligible effects on the wing pressures at the outboard stations, these pressures are not shown. The effects of inboard end location on the rolling moments were small, as shown in reference 3.

The qualitative effects on rolling-moment effectiveness of the usual pressure changes due to the spoiler ailerons were as follows: The pressure rise on the upper surface ahead of the spoiler-aileron trailing edge and the pressure reduction on the lower surface decreased normal force and thus contributed to a favorable rolling moment. The pressure reduction on the upper surface behind the spoiler aileron, however, was adverse. At higher angles of attack rolling-moment effectiveness decreased because of wing flow separation. The actual rolling-moment coefficients resulting from the pressure changes are available in reference 3.

Spoiler-slot-deflector aileron.- In figure 7 the compression region on the lower surface, which is due to deflector projection, is shown as terminating at about the 70-percent chord line. This chordwise position corresponds to the deflector leading edge. The compression region on the upper surface, which is due to spoiler projection, is shown as terminating at about the 74-percent chord line. This position corresponds to the spoiler trailing edge.

Comparison of figures 4 and 7 shows that adding the slot deflector to the spoiler generally had negligible effects on the upper-surface pressures ahead of the spoiler. Behind the spoiler at the 0.135b/2 station, the addition generally resulted in more upper-surface pressure recovery for the lower Mach numbers. In many cases, for stations outboard of 0.25b/2, the effect of the addition was also to reduce slightly the upper-surface pressures behind the spoiler.

The unexplained effects on the pressures which were discussed for a spoiler-aileron configuration at angles of attack of about 8.5° and 13° also occurred for the spoiler-slot-deflector aileron configuration.

As shown in figure 7(a), the lower-surface pressures ahead of the deflector became more positive. Figure 7(a) also shows for a Mach number of 0.60 that on the lower surface behind the deflector there was considerable pressure recovery at the 0.135b/2 station for all angles of attack and at the 0.25b/2 station for the higher angles of attack. At the other spanwise stations flow separation apparently existed over the deflector rear surface and the following wing surface for all angles of attack. In the outboard portion of this separated region, the pressures approached those existing on the upper surface behind the spoiler.

The unusual shape of the pressure pattern existing over the deflector rear surface and the downstream wing surface at the 0.25b/2 station may be associated with a separated vortex-type flow such as that believed to occur ahead of the spoiler and also discussed in reference 1. Increasing angle of attack or Mach number generally had very little effect on the type of flow existing on the lower surface of the spoiler-slot-deflector configuration. (See fig. 7.)

With respect to rolling-moment effectiveness, the most important pressure changes due to the addition of the slot deflector to the spoiler-aileron configuration were on the wing lower surface. The pressure rise on the wing surface ahead of the deflector was detrimental; whereas, the pressure reduction on the deflector rear surface and the following wing surface was beneficial. Unpublished results show that the magnitude of the pressure rise, which corresponded to an increase in normal force, was reduced appreciably by decreasing the deflector chord so that its deflection was 0.04c instead of 0.055c. If the deflector chord is decreased so that its leading edge is at the slot leading edge for the unprojected case, then the pressure rise can probably be eliminated. (See ref. 8.)

At low angles of attack the pressure reduction on the deflector rear surface and the subsequent wing lower surface resulted in increased rolling moment as it caused the normal-force load over the wing trailing-edge region to decrease from a positive to an almost negligible value. The magnitude of the pressure reduction was largest at the inboard stations. At high angles of attack the pressure reduction resulted in the wing trailing-edge loading decreasing considerably over the entire span of the aileron.

Deflector ailerons.- One of the problems often associated with spoiler-slot-deflector ailerons is that the yawing moments due to control projection, although favorable, are larger than desirable. A possible method of reducing these yawing moments is to project the deflector part of the control on one wing panel simultaneously with projection of the complete control on the opposite wing panel. A shortcoming in this solution, however, is that the roll contribution of the deflector part of the control would probably be reversed at moderately high angles

of attack. The effects on this reversal problem of deflector projection and of a gap between the deflector trailing edge and the wing surface were, therefore, studied in a brief investigation.

Results presented in figure 8 at a Mach number of 0.90 for a low deflector projection ($\delta_d = 0.016c$) show an expected favorable pressure rise on the lower wing surface ahead of the deflector. On the lower wing surface behind the deflector the pressures were decreased by adding the deflector. The flow in this region, however, was not generally separated. As the angle of attack was increased, the region of pressure reduction became larger at the outboard stations and the region of pressure rise tended to become smaller. These pressure changes resulted in rolling-moment reversal at moderate angles of attack as shown by the force data of reference 3.

As would be expected from the chordwise pressure distributions of figure 9, the force data presented in reference 3 also show reversals in rolling-moment effectiveness at moderately high angles of attack when the deflector projection was increased to 0.045c. The effects on the wing pressures of adding a 0.02c gap between the deflector trailing edge and the wing (see fig. 10) were also too small to prevent reversals in rolling-moment effectiveness at the moderately high angles of attack. (See ref. 3.)

Wing-Section Loading

At $M = 0.60$ for low angles of attack, figure 11(a) shows that the addition of the spoiler aileron to the model caused the largest reductions in the semispan load distributions between 40 and 80 percent of the wing semispan. Apparently, the large reduction in pressure which occurred on the wing surface behind the spoiler caused considerable reduction in control effectiveness inboard of $\frac{y}{b/2} = 0.40$. (See fig. 4.) Increasing Mach number caused the region of maximum load change at low angles to shift outboard to about $\frac{y}{b/2} = 0.80$. (See fig. 11.) As indicated in the discussion of the chordwise pressure distributions, the reduction in loading due to the spoiler aileron was much smaller at high angles of attack than at the low angles.

For low angles of attack, figure 11 shows that adding the spoiler-slot-deflector aileron to the model caused larger decreases in loading at the inboard stations and smaller decreases in loading at the outboard stations than did the spoiler aileron. At high angles of attack, the spoiler-slot-deflector aileron caused a reduction in the outboard loading which was as large or larger than that caused by the spoiler aileron.

Reasons for these reductions were indicated in the pressure-distribution discussion of figure 7.

At several Mach numbers and angles near 13°, figure 11 also shows load increases over about the outboard 20 percent of the wing semispan that were caused by adding either lateral control to the model. These increases were also considered in the discussion of figures 4 and 7.

Figure 12 shows that, below an angle of attack of about 8°, addition of the spoiler aileron to the model usually caused the section centers of pressure to shift forward at stations outboard of $\frac{y}{b/2} = 0.25$. This shift occurred because the wing loading behind the spoiler aileron became progressively less across the wing semispan. (See fig. 4.) At high angles of attack where its effectiveness was considerably reduced the addition of the spoiler aileron had only small effects on the section center-of-pressure locations.

Addition of the spoiler-slot-deflector aileron to the model generally caused a larger forward shift of the section centers of pressure than did the addition of the spoiler aileron. This shift generally occurred at all spanwise stations for all angles of attack except those near 0°. The larger forward shift resulted primarily because the addition of the slot deflector greatly reduced the trailing-edge loading.

Wing-Panel Loading

The effects of the spoiler aileron and spoiler-slot-deflector aileron on the wing-panel loading characteristics are analogous to their effects on the section pressures and loadings. These characteristics (see figs. 13 to 15) are, therefore, presented without discussion.

Spoiler and Deflector Pressure Distributions

The pressure distributions of figure 16 show that the pressures on the front of the spoiler decreased from positive values at low angles of attack to negative values at high angles. This trend seemed to be influenced mainly by wing flow separation spreading inboard from the wing tip as angle of attack was increased. The chord-extension effects on wing flow separation (see ref. 6) delayed the trend in the spoiler pressures at the outboard station for angles of attack of about 12° to 17°. With this exception, figure 16 shows very little effect of configuration on the pressures over the front of the spoiler.

At low angles of attack the spoiler front-face pressures at the inboard stations were apparently influenced considerably by circulation in the separated flow upstream of the spoiler trailing edge. As indicated in the discussion of figure 4, this circulatory flow probably resulted in the pressures in the region of the spoiler base being less than the immediately preceding wing pressures or the pressures at about the midchord of the spoiler. A somewhat similar pressure pattern is shown in reference 1 for a spoiler which essentially extended perpendicular to the wing surface. This reference shows, however, that the two high-pressure regions occurred at the top and bottom of the spoiler front face. This effect of spoiler deflection angle on the pressures also agrees with results obtained at supersonic speeds. (See ref. 9.) It seems probable that the position of the high-pressure region nearest the upper edge of the spoilers gives an indication of the height of the separated flow.

Figure 16 also shows that the negative pressures on the rear face of the spoiler were affected by the addition of the slot deflector; that is, flow through the slot caused the pressures nearest to the wing to increase.

The pressure distributions for the deflector, as shown in figure 17, were only slightly affected by angle-of-attack changes. Also, adding the chord-extensions had very little effect on these distributions. The positive pressures on the front of the deflector usually decreased as the distance to the wing became less probably because of flow through the slot. On the rear face of the deflector the pressure variations shown in figure 17 at the two inboard stations were probably caused by the separated flow phenomena indicated in the discussion of figure 7.

Spoiler and Deflector Spanwise Loading

Some of the results for the spoiler and deflector span-load distributions shown in figures 18 and 19, respectively, have been summarized in reference 2. This reference shows that at low angles of attack the shape of the load distributions was similar for the deflector and the spoiler (with and without the slot deflector added to the model). It also indicates that Mach number had very little effect on the shape of the span-load distributions.

The large loads at the inboard stations of the spoiler and deflector (see figs. 18 and 19) occurred because the typical effects of sweep did not exist at these stations. Similar results have also been found at supersonic speeds. (See ref. 9.) The spoiler loads decreased with increasing angle of attack primarily because wing-flow separation caused the spoiler front-face pressures to decrease. (See fig. 16.) The effect of the flow through the slot was to reduce the spoiler loads at all angles

of attack. The chord-extensions caused a slight increase in the spoiler loading at the outboard stations for angles of attack from about 12° to 17°. Chord-extension effects on deflector loading, however, were negligible. The unexplained flow phenomena noted at an angle of attack of 8.5° in the discussion of the chordwise pressure distributions of figures 4 and 7 resulted in decreased spoiler loads as shown in figure 18.

With regard to total control normal force, reference 2 indicates that, for large control deflections, tests need only be made at low angles of attack to establish the maximum control loads; that is, the spoiler loads decreased and the deflector loads varied only slightly with increasing angle of attack. Increasing Mach number caused small increases in the total control normal-force coefficients (ref. 2).

Although no methods are known for estimating the control loads, references 10 and 1 show that, for retractable spoiler ailerons, spoiler load at any spanwise position can be determined by measurement at the wing surface of the pressure drop across the spoiler. Studies utilizing the wing orifices at 0.65c and 0.75c indicate that this statement also generally applies to the spoiler aileron of this paper. It does not apply, however, in the case of the spoiler and deflector of a spoiler-slot-deflector aileron. In these cases, flow through the wing slot, as previously indicated, has a large effect on the control pressure distributions. This effect will probably vary with control geometry.

In figure 20, spoiler center-of-pressure locations for the spoiler configuration have been omitted in many cases at the higher angles of attack because the spoiler loads became very small. For the spoiler (without the slot deflector on the model) or the deflector (see figs. 20 and 21, respectively), the section center-of-pressure locations generally varied only slightly across the control span. In both cases these center-of-pressure locations were usually slightly ahead of the control 50-percent chord line.

The addition of the slot deflector to the spoiler configuration, however, caused large rearward shifts in the spoiler center-of-pressure locations below an angle of attack of about 8° (see fig. 20); these shifts were caused by the flow through the wing slot. (See fig. 16.) At higher angles where the spoiler loads were small, inconsistent shifts were caused by both wing flow separation and the flow through the wing slot.

Adding the chord-extensions to the spoiler-slot-deflector configurations had a small effect on the spoiler center-of-pressure locations except for angles of attack where the spoiler loads became small. In the case of the deflector, however, the effect was negligible through the angle-of-attack and Mach number range.

CONCLUSIONS

An investigation was made with spoiler ailerons, deflector ailerons, and a spoiler-slot-deflector aileron mounted on a 45° swept-wing—fuselage combination. These controls were located in the vicinity of the 70-percent wing chord line and extended outboard to 87 percent of the wing semispan. Pressures were measured on the wing and some of the control components at several spanwise stations for Mach numbers from 0.60 to 1.03 and for an angle-of-attack range of about 0° to 20°. This investigation is a closely related extension of a previously reported study of retractable spoiler ailerons (NACA RM L54C17a).

1. Effects of flap spoiler ailerons and retractable spoiler ailerons on the wing pressures are generally similar.

2. Adding a slot deflector to a spoiler-aileron configuration creates low pressures on the rear surface of the deflector and the subsequent wing lower surface, which have a favorable effect on rolling moment, particularly at high angles of attack.

3. At low angles of attack the low pressures associated with a slot deflector have their largest effects on the spanwise and chordwise loadings for a swept wing at the inboard stations. These low pressures tend to be of the same magnitude as the upper-surface pressures behind a spoiler which are lowest at the inboard stations.

4. At high angles of attack where a spoiler has a rather small effect on wing loading, the low pressures associated with a slot deflector affect the loadings over most of the wing span.

5. Flow through the wing slot had a large effect on the chordwise loadings of the spoiler and deflector, but at low angles of attack the spanwise load distributions were similar in shape for the spoiler aileron and the spoiler and deflector components of the spoiler-slot-deflector aileron.

Langley Aeronautical Laboratory,
National Advisory Committee for Aeronautics,
Langley Field, Va., September 12, 1957.

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TABLE I. - WING WITH SPOILER

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.60		α = 0.26°					M = 0.60		α = 4.26°				
Upper surface	0.0	.194	.459	.447	.415	.252	.344	-.110	.187	.042	.121	.101	.248	.222	.391
	1.2	.116	-.007	.081	.191	.232	.283	.254	-.189	-.793	-.818	-.709	-.630	-.522	-.443
	2.4	.079	-.046	.049	.108	.173	.198	.157	-.206	-.634	-.509	-.434	-.350	-.317	-.308
	5.0	.031	-.035	.029	.084	.126	.140	.094	-.224	-.373	-.336	-.269	-.230	-.207	-.208
	7.5	.007	-.041	.029	.063	.097	.114	.048	-.224	-.305	-.257	-.222	-.197	-.183	-.171
	10.0	-.016	-.048	.013	.051	.074	.086	.021	-.229	-.286	-.229	-.195	-.177	-.145	-.152
	15.0	-.029	-.048	.013	.046	.067	.077	-.004	-.216	-.244	-.171	-.137	-.128	-.107	-.113
	19.6	-.036	-.048	.006	.056	.082	.105	-.011	-.197	-.214	-.147	-.079	-.074	-.043	-.072
	24.5	-.055	-.025	.049	.063	.084	.076	-.023	-.198	-.166	-.082	-.059	-.046	-.038	-.064
	29.5	-.020	-.006	.066	.078	.093	.083	-.023	-.147	-.128	-.038	-.023	-.015	-.008	-.048
	34.5	-.040	.021	.089	.109	.117	.092	-.023	-.158	-.085	.009	.020	.027	.028	-.037
	39.5	-.026	.062	.122	.136	.148	.110	-.026	-.128	-.020	.064	.072	.081	.070	-.030
	44.5	-.018	.130	.164	.177	.184	.135	-.033	-.111	.069	.129	.132	.135	.116	-.024
	49.5	.017	.211	.229	.226	.232	.171	-.056	-.065	.175	.180	.185	.192	.163	-.032
	54.5	.082	.309	.293	.295	.296	.223	-.074	.005	.264	.205	.213	.224	.184	-.040
	59.5	.200	.374	.321	.345	.326	.249	-.084	.129	.277	.196	.221	.234	.175	-.047
	64.5	.348	.353	.317	.360	.325	.228	-.093	.313	.067	.183	.225	.230	.150	-.067
	69.6	-.741						-.096	-.716						-.067
	74.6	-.760	-.742	-.426	-.366	-.311	-.223	-.115	-.734	-.726	-.443	-.372	-.303	-.214	-.086
	79.5	-.760	-.734	-.426	-.356	-.309	-.231	-.120	-.738	-.719	-.439	-.358	-.305	-.223	-.086
	84.6	-.697	-.735	-.455	-.371	-.299	-.222	-.126	-.683	-.719	-.459	-.372	-.297	-.215	-.091
	89.6	-.734	-.722	-.476	-.372	-.295	-.205	-.130	-.725	-.719	-.483	-.379	-.291	-.205	-.091
	94.6	-.741	-.619	-.464	-.369	-.296	-.195	-.118	-.748	-.656	-.465	-.374	-.293	-.200	-.082
Lower surface	1.3	.138	-.073	-.151	-.271	-.420	-.517	-.431	.313	.370	.365	.334	.292	.266	.205
	2.6	.092	-.093	-.151	-.252	-.288	-.325	-.327	.269	.302	.276	.243	.199	.199	.128
	5.0	.035	-.079	-.122	-.172	-.224	-.243	-.286	.234	.198	.193	.163	.140	.110	.070
	7.6	-.003	-.083	-.140	-.175	-.212	-.249	-.250	.196	.149	.125	.104	.082	.061	.019
	10.1	-.020	-.098	-.125	-.188	-.219	-.236	-.235	.166	.109	.094	.060	.041	.043	-.025
	15.1	-.056	-.120	-.165	-.199	-.228	-.244	-.225	.122	.066	.052	.021	-.004	-.016	-.075
	19.6	-.085	-.124	-.179	-.188	-.252	-.245	-.203	.082	.034	.006	.001	-.044	-.044	-.085
	24.5	-.088	-.159	-.201	-.219	-.242	-.250	-.214	.046	-.008	-.035	-.047	-.080	-.075	-.114
	29.5	-.114	-.172	-.212	-.230	-.251	-.250	-.194	.031	.038	-.062	-.077	-.088	-.100	-.110
	34.5	-.129	-.190	-.238	-.246	-.256	-.243	-.190	.001	-.064	-.100	-.110	-.110	-.118	-.117
	39.5	-.146	-.204	-.252	-.247	-.260	-.247	-.194	-.022	-.086	-.128	-.122	-.126	-.140	-.130
	44.5	-.168	-.220	-.251	-.259	-.265	-.247	-.194	-.052	-.112	-.140	-.145	-.146	-.160	-.141
	49.5	-.176	-.233	-.262	-.272	-.226	-.250	-.194	-.067	-.136	-.152	-.170	-.195	-.172	-.141
	54.5	-.194	-.217	-.270	-.267	-.269	-.244	-.185	-.085	-.126	-.181	-.177	-.176	-.178	-.135
	59.5	-.194	-.232	-.263	-.252	-.257	-.228	-.164	-.097	-.149	-.178	-.183	-.173	-.173	-.129
	64.5	-.194	-.233	-.256	-.243	-.249	-.214	-.154	-.106	-.160	-.183	-.190	-.179	-.171	-.123
	69.5	-.186						-.132	-.108						-.117
	74.6	-.185	-.236	-.250	-.228	-.213	-.194	-.148	-.127	-.185	-.194	-.176	-.165	-.160	-.119
	79.6	-.237	-.230	-.252	-.232	-.213	-.173	-.126	-.165	-.193	-.214	-.189	-.174	-.150	-.096
	84.6	-.110	-.253	-.243	-.226	-.210	-.180	-.119	-.072	-.223	-.213	-.191	-.187	-.163	-.082
	89.7	-.231	-.283	-.265	-.226	-.214	-.156	-.111	-.178	-.263	-.249	-.198	-.185	-.137	-.074
	94.6	-.284	-.336	-.298	-.244	-.230	-.150	-.049	-.265	-.319	-.291	-.229	-.209	-.125	-.053
		M = 0.60		α = 6.30°					M = 0.60		α = 8.33°				
Upper surface	0.0	.164	-.380	-.203	-.529	-.351	-.467	.056	.125	-.705	-.565	-1.031	-.713	-.535	-.136
	1.2	-.373	-1.071	-.733	-1.011	-1.290	-1.076	-.954	-.596	-1.045	-.820	-1.089	-.993	-.634	-.636
	2.4	-.386	-.975	-.673	-.759	-.666	-.642	-.650	-.601	-1.007	-.788	-1.021	-.922	-.595	-.592
	5.0	-.387	-.723	-.601	-.532	-.479	-.440	-.429	-.615	-.913	-.748	-1.002	-.787	-.547	-.531
	7.5	-.364	-.588	-.523	-.426	-.378	-.343	-.341	-.551	-.852	-.686	-.791	-.736	-.494	-.519
	10.0	-.359	-.506	-.472	-.351	-.319	-.289	-.276	-.524	-.832	-.641	-.558	-.631	-.462	-.485
	15.0	-.333	-.404	-.361	-.257	-.226	-.195	-.183	-.466	-.738	-.562	-.345	-.395	-.408	-.466
	19.6	-.295	-.332	-.294	-.175	-.164	-.122	-.121	-.406	-.607	-.511	-.275	-.277	-.371	-.399
	24.5	-.289	-.266	-.211	-.143	-.110	-.089	-.093	-.384	-.455	-.410	-.258	-.203	-.337	-.295
	29.5	-.223	-.206	-.146	-.103	-.064	-.047	-.065	-.315	-.334	-.335	-.231	-.176	-.289	-.207
	34.5	-.228	-.150	-.085	-.060	-.013	-.003	-.045	-.315	-.239	-.261	-.173	-.143	-.238	-.144
	39.5	-.192	-.075	-.036	-.009	.038	.039	-.034	-.271	-.156	-.193	-.140	-.099	-.182	-.104
	44.5	-.172	.017	.022	.042	.077	.070	-.027	-.243	-.072	-.125	-.115	-.059	-.122	-.078
	49.5	-.120	.115	.068	.090	.118	.102	-.036	-.182	.011	-.071	-.092	-.025	-.063	-.078
	54.5	-.032	.207	.120	.128	.149	.124	-.046	-.092	.112	-.025	-.068	-.005	-.011	-.084
	59.5	.088	.226	.143	.148	.168	.131	-.055	.050	.149	.003	-.049	.014	.027	-.093
	64.5	.289	.064	.164	.165	.179	.124	-.076	.240	.035	.030	-.021	.028	.041	-.109
	69.6	-.703						-.084	-.708						-.109
	74.6	-.718	-.699	-.447	-.362	-.288	-.217	-.100	-.719	-.676	-.436	-.344	-.276	-.195	-.130
	79.5	-.723	-.690	-.446	-.349	-.285	-.210	-.107	-.719	-.672	-.433	-.336	-.275	-.207	-.131
	84.6	-.668	-.703	-.458	-.368	-.273	-.203	-.119	-.671	-.700	-.451	-.356	-.274	-.197	-.131
	89.6	-.716	-.712	-.483	-.376	-.279	-.196	-.119	-.718	-.708	-.477	-.370	-.278	-.188	-.128
	94.6	-.739	-.657	-.459	-.371	-.283	-.190	-.107	-.742	-.641	-.446	-.366	-.286	-.183	-.122
Lower surface	1.3	.369	.450	.442	.443	.432	.425	.359	.400	.491	.474	.476	.470	.456	.404
	2.6	.320	.407	.374	.359	.351	.348	.280	.343	.472	.445	.435	.426	.414	.342
	5.0	.311	.298	.291	.280	.274	.263	.200	.362	.386	.370	.365	.364	.329	.276
	7.6	.286	.249	.224	.211	.211	.197	.131	.363	.334	.302	.299	.302	.273	.205
	10.1	.261	.205	.193	.170	.162	.156	.077	.350	.289	.275	.263	.263	.227	.146
	15.1	.211	.148	.134	.115	.107	.091	-.003	.295	.231	.204	.199	.186	.164	.057
	19.6	.162	.109	.083	.084	.045	.007	-.009	.247	.180	.158	.159	.134	.119	.004
	24.5	.137	.061	.040	.027	.028	.005	-.066	.217	.133	.112	.103	.103	.080	-.028
	29.5	.101	.028	.007	-.010	-.009	-.030	-.077	.175	.097	.075	.063	.061	.034	-.038
	34.5	.071	.000	-.036	-.043	-.042	-.053	-.090	.140	.066	.030	.025	.029	.007	-.052
	39.5	.039	-.029	-.062	-.065	-.061	-.084	-.102	.102	.034	-.007	.003	.005	-.025	-.066
	44.5	.009	-.057	-.083	-.086	-.087	-.103	-.114	.070	.005	-.023	-.025	-.025	-.053	-.080
	49.5	-.015	-.083	-.101	-.111	-.152	-.120	-.119	.036	-.025	-.047	-.056	-.103	-.080	-.090
	54.5	-.027	-.077	-.126	-.127	-.127	-.140	-.117	.036	-.025	-.076	-.070	-.074	-.097	-.085
	59.5	-.049	-.107	-.134	-.148	-.131	-.157	-.113	.004	-.053	-.086	-.072	-.080	-.096	-.082
	64.5	-.059	-.123	-.146	-.152	-.140	-.142	-.105	-.010	-.071	-.099	-.103	-.093	-.107	-.079
	69.5	-.074						-.093	-.050						-.075
	74.6	-.094	-.150	-.166	-.149	-.134	-.139	-.105	-.066	-.107	-.126	-.106	-.096	-.113	-.084
	79.6	-.131	-.173	-.184	-.163	-.146	-.128	-.083	-.087	-.127	-.145	-.122	-.108	-.106	-.068
	84.6	-.058	-.202	-.193	-.169	-.146	-.147	-.076	-.040	-.161	-.156	-.134	-.117	-.129	-.067
	89.7	-.148	-.243	-.232	-.178	-.171	-.123	-.072	-.128	-.209	-.191	-.148	-.142	-.110	-.067
	94.6	-.244	-.304	-.273	-.212	-.189		-.063	-.216	-.270	-.230	-.181	-.173	-.110	-.066

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.60		α = 12.32°					M = 0.60		α = 16.40°				
Upper surface	0.0	-.018	-1.717	-1.193	-.951	-.656	-.352	-.211	-.230	-2.098	-1.292	-.725	-.651	-.516	-.404
	1.2	-1.110	-1.631	-1.010	-.736	-.560	-.473	-.312	-1.863	-1.917	-1.088	-.673	-.508	-.427	-.378
	2.4	-1.156	-1.661	-1.014	-.747	-.589	-.525	-.308	-1.946	-1.908	-1.091	-.676	-.524	-.432	-.381
	5.0	-1.313	-1.717	-1.024	-.757	-.649	-.430	-.308	-2.099	-1.890	-1.100	-.668	-.535	-.439	-.381
	7.5	-1.120	-1.756	-1.015	-.778	-.664	-.402	-.312	-1.710	-1.916	-1.084	-.670	-.543	-.445	-.381
	10.0	-.965	-1.844	-1.031	-.794	-.573	-.395	-.310	-1.338	-1.974	-1.088	-.668	-.546	-.449	-.381
	15.0	-.799	-1.791	-1.043	-.769	-.438	-.406	-.310	-1.165	-1.955	-1.068	-.675	-.553	-.452	-.381
	19.6	-.676	-1.583	-1.150	-.737	-.405	-.411	-.325	-.985	-1.908	-1.092	-.680	-.556	-.456	-.384
	24.5	-.617	-1.014	-1.160	-.743	-.405	-.423	-.328	-.825	-1.772	-1.080	-.694	-.552	-.454	-.386
	29.5	-.523	-.329	-1.175	-.748	-.411	-.430	-.325	-.718	-1.568	-1.094	-.700	-.552	-.453	-.390
	34.5	-.489	-.143	-1.148	-.802	-.419	-.429	-.321	-.673	-1.278	-1.095	-.709	-.544	-.454	-.394
	39.5	-.418	-.109	-1.078	-.836	-.440	-.421	-.312	-.587	-.946	-1.088	-.713	-.533	-.448	-.396
	44.5	-.362	-.060	-.942	-.831	-.472	-.413	-.302	-.531	-.647	-1.045	-.697	-.522	-.443	-.393
	49.5	-.277	.019	-.746	-.810	-.486	-.397	-.290	-.425	-.436	-.985	-.675	-.502	-.436	-.392
	54.5	-.148	.129	-.545	-.758	-.489	-.380	-.271	-.305	-.271	-.898	-.655	-.489	-.433	-.386
	59.5	-.030	.184	-.414	-.693	-.479	-.359	-.256	-.212	-.210	-.820	-.639	-.478	-.429	-.369
	64.5	.068	.164	-.326	-.608	-.465	-.334	-.248	-.143	-.267	-.763	-.624	-.468	-.426	-.368
	69.6	-.713						-.238	-.934						-.341
	74.6	-.708	-.671	-.377	-.430	-.348	-.282	-.229	-.927	-.840	-.602	-.470	-.433	-.371	-.342
	79.5	-.682	-.665	-.384	-.445	-.338	-.285	-.225	-.907	-.825	-.597	-.469	-.436	-.378	-.331
	84.6	-.656	-.656	-.424	-.527	-.355	-.278	-.219	-.745	-.836	-.652	-.501	-.417	-.379	-.314
	89.6	-.708	-.677	-.447	-.505	-.360	-.262	-.211	-.845	-.828	-.617	-.512	-.428	-.369	-.298
	94.6	-.723	-.641	-.426	-.418	-.355	-.253	-.205	-.827	-.655	-.542	-.509	-.426	-.354	-.278
Lower surface	1.3	.414	.463	.475	.478	.490	.483	.422	.356	.374	.423	.442	.454	.445	.411
	2.6	.398	.530	.525	.514	.501	.467	.398	.396	.524	.539	.531	.505	.473	.418
	5.0	.429	.518	.497	.493	.455	.419	.347	.439	.587	.559	.535	.499	.443	.382
	7.6	.496	.479	.439	.430	.406	.373	.279	.594	.574	.525	.489	.435	.410	.325
	10.1	.314	.434	.418	.391	.362	.328	.298	.638	.539	.511	.462	.425	.374	.279
	15.1	.448	.367	.335	.317	.296	.251	.128	.576	.474	.432	.387	.356	.298	.172
	19.6	.402	.315	.284	.281	.232	.194	.073	.504	.418	.378	.344	.308	.237	.116
	24.5	.364	.267	.236	.224	.205	.160	.032	.464	.372	.331	.298	.286	.200	.054
	29.5	.310	.226	.194	.180	.157	.116	.005	.408	.333	.289	.254	.216	.156	.025
	34.5	.270	.186	.143	.142	.121	.073	-.020	.365	.289	.243	.211	.174	.110	-.014
	39.5	.231	.155	.111	.108	.091	.037	-.045	.322	.252	.199	.173	.140	.065	-.040
	44.5	.190	.116	.084	.076	.059	.000	-.068	.287	.214	.177	.133	.099	.023	-.069
	49.5	.155	.083	.052	.046	.004	-.029	-.086	.246	.177	.140	.100	.040	-.017	-.088
	54.5	.152	.080	.021	.026	.000	-.052	-.094	.234	.169	.104	.066	.023	-.049	-.099
	59.5	.113	.043	-.001	-.010	-.020	-.073	-.098	.191	.129	.080	.028	.000	-.073	-.110
	64.5	.084	.020	-.018	-.010	-.048	-.086	-.105	.164	.101	.057	.083	-.029	-.108	-.116
	69.5	.053						-.111	.123						-.131
	74.6	.004	-.027	-.053	-.022	-.068	-.110	-.128	.067	.050	.010	-.040	-.083	-.134	-.152
	79.6	.040	-.047	-.079	-.041	-.091	-.114	-.114	.108	.021	-.023	-.079	-.112	-.144	-.141
	84.6	-.004	-.100	-.094	-.058	-.036	-.147	-.127	.036	-.017	-.047	-.117	-.139	-.189	-.156
	89.7	-.029	-.152	-.122	-.076	-.148	-.135	-.128	.014	-.068	-.104	-.165	-.185	-.189	-.161
	94.6	-.144	-.230	-.166	-.123	-.195	-.150	-.140	-.048	-.136	-.176	-.232	-.289	-.200	-.153
		M = 0.60		α = 0.26°					M = 0.80		α = 4.29°				
Upper surface	0.0	.241	.498	.509	.481	.383	.411	-.048	.223	.176	.197	.155	.245	.236	.398
	1.2	.290	-.008	.057	.182	.227	.284	.277	.013	-1.037	-1.036	-.871	-.788	-.667	-.542
	2.4	.121	-.046	.031	.103	.175	.208	.184	-.160	-.676	-.586	-.493	-.401	-.376	-.364
	5.0	.062	-.028	.027	.090	.133	.149	.114	-.208	-.399	-.404	-.296	-.266	-.245	-.244
	7.5	.033	-.034	.046	.073	.104	.119	.071	-.221	-.333	-.303	-.249	-.230	-.195	-.213
	10.0	.003	-.045	.025	.062	.086	.099	.034	-.234	-.318	-.264	-.206	-.197	-.174	-.185
	15.0	-.013	-.039	.030	.062	.081	.094	.000	-.234	-.281	-.185	-.148	-.139	-.127	-.126
	19.6	-.021	-.041	.023	.107	.107	.121	.001	-.215	-.246	-.154	-.085	-.083	-.060	-.081
	24.5	-.042	-.012	.086	.094	.107	.094	-.003	-.225	-.187	-.070	-.060	-.055	-.048	-.067
	29.5	-.006	.010	.103	.103	.118	.099	-.005	-.172	-.143	-.021	-.023	-.013	-.014	-.048
	34.5	-.031	.048	.128	.126	.142	.112	-.011	-.182	-.081	.033	.027	.027	.027	-.031
	39.5	-.013	.104	.164	.158	.174	.133	-.015	-.155	.004	.090	.080	.092	.082	-.021
	44.5	-.003	.180	.213	.201	.214	.161	-.029	-.134	.114	.145	.135	.148	.131	-.021
	49.5	.038	.276	.275	.252	.263	.201	-.053	-.076	.234	.181	.175	.189	.167	-.035
	54.5	.120	.387	.326	.324	.324	.247	-.077	.016	.303	.188	.199	.210	.171	-.054
	59.5	.255	.423	.332	.360	.343	.252	-.086	.157	.290	.171	.208	.218	.162	-.073
	64.5	.444	.367	.320	.371	.340	.231	-.109	.339	.054	.161	.215	.207	.136	-.097
	69.6	-.736						-.114	-.721						-.107
	74.6	-.728	-.705	-.448	-.371	-.304	-.252	-.125	-.717	-.712	-.491	-.384	-.330	-.247	-.116
	79.5	-.710	-.712	-.443	-.357	-.300	-.235	-.133	-.705	-.722	-.491	-.374	-.326	-.249	-.118
	84.6	-.668	-.658	-.457	-.364	-.290	-.226	-.149	-.673	-.708	-.498	-.385	-.319	-.243	-.125
	89.6	-.677	-.689	-.485	-.371	-.291	-.210	-.147	-.693	-.704	-.520	-.394	-.319	-.236	-.125
	94.6	-.667	-.640	-.475	-.366	-.290	-.199	-.128	-.710	-.679	-.505	-.394	-.318	-.229	-.114
Lower surface	1.3	.184	-.012	-.078	-.203	-.374	-.524	-.468	.325	.380	.377	.369	.318	.287	.231
	2.6	.147	-.038	-.091	-.196	-.258	-.318	-.362	.288	.312	.290	.260	.226	.212	.135
	5.0	.078	-.038	-.080	-.130	-.209	-.271	-.327	.254	.211	.204	.186	.152	.118	.069
	7.6	.038	-.041	-.105	-.148	-.203	-.257	-.292	.212	.167	.141	.127	.090	.076	.014
	10.1	.017	-.062	-.097	-.171	-.213	-.253	-.277	.188	.127	.120	.093	.049	.049	-.039
	15.1	-.015	-.090	-.142	-.193	-.233	-.264	-.254	.134	.083	.062	.039	.008	-.018	-.104
	19.6	-.050	-.094	-.162	-.185	-.266	-.270	-.247	.092	.047	.015	.008	-.049	-.048	-.127
	24.5	-.062	-.136	-.189	-.220	-.260	-.281	-.238	.073	.001	-.025	-.042	-.073	-.096	-.150
	29.5	-.087	-.155	-.207	-.239	-.271	-.281	-.212	.038	-.026	-.060	-.077	-.105	-.127	-.148
	34.5	-.109	-.176	-.235	-.262	-.281	-.278	-.209	.011	-.054	-.099	-.112	-.133	-.152	-.158
	39.5	-.132	-.192	-.253	-.268	-.290	-.278	-.209	-.014	-.081	-.126	-.135	-.152	-.174	-.166
	44.5	-.152	-.215	-.259	-.286	-.304	-.278	-.217	-.044	-.104	-.147	-.162	-.181	-.200	-.174
	49.5	-.164	-.231	-.276	-.303		-.278	-.216	-.069	-.132	-.167	-.190	-.131	-.216	-.178
	54.5	-.186	-.211	-.290	-.297	-.305	-.263	-.200	-.083	-.124	-.195	-.202	-.215	-.223	-.169
	59.5	-.195	-.234	-.281	-.290	-.290	-.254	-.174	-.100	-.154	-.203	-.211	-.218	-.217	-.160
	64.5	-.195	-.237	-.284	-.298	-.279	-.233	-.158	-.110	-.163	-.211	-.223	-.221	-.214	-.143
	69.5	-.185						-.150	-.114						-.139
	74.6	-.144	-.244	-.280	-.257	-.212	-.196	-.154	-.125	-.187	-.234	-.208	-.200	-.195	-.143
	79.6	-.247	-.248	-.280	-.256	-.227	-.181	-.118	-.178	-.207	-.249	-.221	-.212	-.180	-.115
	84.6	-.103	-.266	-.269	-.245	-.223	-.182	-.120	-.075	-.233	-.253	-.221	-.221	-.195	-.105
	89.7	-.230	-.307	-.290	-.240	-.217	-.159	-.112	-.175	-.292	-.284	-.225	-.219	-.167	-.097
	94.6	-.264	-.367	-.313	-.256	-.225	-.120	-.102	-.239	-.366	-.317	-.254	-.240	-.170	-.082

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.80 α = 6.29°							M = 0.80 α = 8.33°						
Upper surface	0.0	.228	-.053	-.013	-.198	-.044	-.154	.172	.210	-.315	-.371	-.489	-.370	-.443	.049
	1.2	-.075	-.983	-.744	-.974	-.954	-.949	-.880	-.165	-1.091	-1.044	-.891	-.930	-.826	-.503
	2.4	-.307	-.903	-.681	-.769	-.738	-.701	-.715	-.494	-1.047	-1.004	-.859	-.885	-.824	-.478
	5.0	-.355	-.730	-.611	-.583	-.567	-.550	-.557	-.654	-.944	-.988	-.971	-.813	-.761	-.452
	7.5	-.350	-.631	-.537	-.503	-.484	-.437	-.454	-.542	-.884	-.967	-.676	-.856	-.651	-.424
	10.0	-.357	-.561	-.489	-.410	-.408	-.362	-.351	-.526	-.876	-.973	-.436	-.806	-.593	-.394
	15.0	-.344	-.448	-.403	-.257	-.262	-.256	-.188	-.493	-.810	-.980	-.297	-.505	-.536	-.333
	19.6	-.313	-.367	-.335	-.160	-.173	-.161	-.112	-.428	-.679	-1.013	-.246	-.323	-.489	-.323
	24.5	-.318	-.295	-.231	-.139	-.114	-.113	-.087	-.410	-.517	-.810	-.251	-.238	-.449	-.287
	29.5	-.231	-.221	-.164	-.104	-.077	-.074	-.065	-.348	-.367	-.432	-.241	-.209	-.392	-.259
	34.5	-.260	-.141	-.098	-.068	-.039	-.029	-.052	-.389	-.240	-.004	-.231	-.179	-.336	-.244
	39.5	-.221	-.051	-.040	-.025	.003	.011	-.044	-.342	-.129	.072	-.239	-.138	-.267	-.228
	44.5	-.193	.049	.016	.012	.041	.046	-.044	-.294	-.034	.083	-.261	-.114	-.192	-.223
	49.5	-.127	.158	.067	.035	.080	.082	-.059	-.209	.064	.103	-.287	-.092	-.119	-.222
	54.5	-.022	.255	.112	.063	.109	.109	-.079	-.082	.162	.125	-.302	-.068	-.048	-.221
	59.5	.125	.260	.130	.083	.132	.115	-.091	.089	.157	.135	-.316	-.043	.004	-.211
	64.5	.328	.105	.145	.107	.145	.107	-.113	.239	.048	.157	-.306	-.019	.036	-.215
	69.6	-.697						-.122	-.715						-.199
	74.6	-.697	-.688	-.483	-.369	-.308	-.241	-.131	-.705	-.682	-.500	-.356	-.347	-.223	-.193
	79.5	-.686	-.688	-.481	-.362	-.306	-.230	-.131	-.691	-.682	-.497	-.356	-.335	-.224	-.181
	84.6	-.659	-.681	-.485	-.371	-.300	-.224	-.134	-.656	-.684	-.505	-.391	-.322	-.217	-.179
	89.6	-.686	-.688	-.500	-.384	-.304	-.216	-.128	-.701	-.696	-.520	-.416	-.328	-.213	-.172
	94.6	-.700	-.668	-.487	-.382	-.308	-.208	-.117	-.715	-.667	-.497	-.405	-.315	-.209	-.165
Lower surface	1.3	.390	.469	.457	.454	.428	.414	.355	.425	.521	.501	.484	.477	.478	.409
	2.6	.346	.416	.388	.369	.341	.341	.270	.369	.490	.463	.433	.426	.427	.343
	5.0	.341	.309	.304	.294	.266	.259	.195	.406	.396	.385	.347	.357	.347	.277
	7.6	.308	.268	.240	.226	.205	.187	.123	.393	.345	.320	.303	.300	.289	.206
	10.1	.280	.227	.222	.188	.168	.153	.063	.374	.312	.304	.267	.251	.240	.151
	15.1	.227	.167	.139	.130	.097	.081	-.027	.316	.247	.217	.199	.186	.162	.045
	19.6	.178	.121	.094	.091	.046	.013	-.058	.261	.196	.163	.155	.125	.115	.004
	24.5	.154	.080	.048	.039	.013	-.011	-.107	.232	.150	.119	.106	.090	.067	-.052
	29.5	.119	.048	.014	.003	-.022	-.048	-.115	.190	.115	.080	.065	.053	.027	-.067
	34.5	.084	.017	-.031	-.038	-.055	-.081	-.125	.152	.083	.035	.023	.022	-.010	-.082
	39.5	.053	-.013	-.063	-.061	-.084	-.114	-.138	.120	.051	.003	-.004	-.010	-.047	-.097
	44.5	.023	-.042	-.085	-.091	-.113	-.144	-.148	.082	.018	-.023	-.034	-.043	-.083	-.109
	49.5	-.006	-.066	-.105	-.128	-.127	-.170	-.153	.052	-.008	-.048	-.066	-.097	-.109	-.118
	54.5	-.015	-.065	-.134	-.142	-.156	-.182	-.143	.052	-.008	-.081	-.087	-.093	-.131	-.113
	59.5	-.042	-.092	-.147	-.160	-.163	-.180	-.138	.015	-.038	-.098	-.109	-.102	-.136	-.107
	64.5	-.054	-.110	-.161	-.168	-.175	-.179	-.123	-.001	-.058	-.111	-.122	-.119	-.142	-.098
	69.5	-.062						-.119	-.021						-.095
	74.6	-.091	-.139	-.192	-.165	-.164	-.173	-.125	-.057	-.096	-.150	-.125	-.118	-.144	-.103
	79.6	-.121	-.158	-.211	-.180	-.176	-.161	-.101	-.077	-.108	-.173	-.142	-.133	-.134	-.091
	84.6	-.046	-.194	-.219	-.186	-.189	-.173	-.094	-.025	-.161	-.186	-.149	-.132	-.154	-.095
	89.7	-.135	-.255	-.257	-.193	-.196	-.150	-.087	-.099	-.220	-.227	-.160	-.160	-.137	-.110
	94.6	-.212	-.331	-.294	-.225	-.222		-.075	-.184	-.301	-.271	-.193	-.190	-.150	-.110
		M = 0.80 α = 12.34°							M = 0.80 α = 16.83°						
Upper surface	0.0	.165	-.817	-.879	-.730	-.409	-.777	-.347	.043	-1.284	-1.284	-.759	-.611	-.570	-.429
	1.2	-.314	-1.666	-.978	-.630	-.424	-.787	-.602	-.556	-1.494	-1.066	-.709	-.509	-.501	-.446
	2.4	-.799	-1.657	-.968	-.617	-.465	-.882	-.596	-1.113	-1.497	-1.053	-.702	-.521	-.507	-.431
	5.0	-.862	-1.648	-.968	-.602	-.559	-.741	-.590	-1.148	-1.447	-1.046	-.692	-.532	-.510	-.432
	7.5	-.970	-1.659	-.959	-.590	-.564	-.709	-.587	-1.347	-1.450	-1.023	-.685	-.542	-.514	-.436
	10.0	-.922	-1.675	-.971	-.581	-.448	-.734	-.578	-1.297	-1.431	-1.016	-.678	-.552	-.516	-.439
	15.0	-.894	-1.609	-.972	-.559	-.332	-.738	-.559	-1.159	-1.401	-.997	-.668	-.564	-.514	-.441
	19.6	-.765	-1.526	-.988	-.563	-.340	-.695	-.556	-.962	-1.390	-.977	-.664	-.571	-.515	-.449
	24.5	-.735	-1.326	-.960	-.601	-.363	-.680	-.535	-.854	-1.364	-.954	-.684	-.574	-.512	-.492
	29.5	-.635	-.670	-.978	-.651	-.394	-.648	-.524	-.818	-1.319	-.939	-.701	-.577	-.511	-.453
	34.5	-.589	-.240	-1.005	-.699	-.417	-.621	-.506	-.807	-1.263	-.942	-.706	-.575	-.504	-.454
	39.5	-.476	-.260	-1.035	-.705	-.441	-.583	-.499	-.732	-1.201	-.945	-.699	-.575	-.500	-.456
	44.5	-.409	-.166	-1.005	-.678	-.466	-.544	-.481	-.720	-1.092	-.924	-.679	-.571	-.501	-.450
	49.5	-.305	-.018	-.912	-.636	-.474	-.505	-.462	-.616	-.958	-.889	-.660	-.564	-.500	-.444
	54.5	-.171	.097	-.774	-.600	-.479	-.464	-.447	-.470	-.827	-.845	-.638	-.559	-.491	-.431
	59.5	-.059	.110	-.648	-.572	-.472	-.428	-.404	-.339	-.715	-.803	-.628	-.551	-.488	-.406
	64.5	.045	.065	-.491	-.553	-.469	-.389	-.389	-.213	-.520	-.769	-.607	-.556	-.489	-.408
	69.6	-.721						-.354	-.892						-.392
	74.6	-.702	-.693	-.451	-.474	-.403	-.329	-.340	-.882	-.847	-.644	-.537	-.484	-.401	-.382
	79.5	-.684	-.703	-.469	-.466	-.403	-.349	-.325	-.863	-.856	-.644	-.532	-.484	-.409	-.369
	84.6	-.648	-.675	-.515	-.484	-.387	-.374	-.313	-.743	-.822	-.656	-.541	-.476	-.417	-.354
	89.6	-.692	-.680	-.549	-.477	-.382	-.374	-.292	-.804	-.733	-.655	-.544	-.474	-.405	-.338
	94.6	-.719	-.660	-.513	-.465	-.369	-.340	-.268	-.818	-.580	-.640	-.541	-.466	-.384	-.321
Lower surface	1.3	.466	.555	.522	.528	.507	.483	.439	.451	.513	.486	.479	.481	.462	.426
	2.6	.381	.579	.542	.531	.497	.469	.415	.331	.596	.568	.548	.530	.492	.438
	5.0	.310	.534	.500	.500	.446	.417	.363	.576	.607	.565	.554	.506	.469	.400
	7.6	.354	.495	.444	.436	.392	.364	.297	.685	.583	.530	.510	.469	.434	.345
	10.1	.550	.449	.424	.391	.348	.328	.249	.695	.545	.516	.474	.434	.396	.305
	15.1	.486	.382	.339	.325	.276	.248	.125	.610	.482	.440	.415	.368	.323	.184
	19.6	.416	.328	.288	.279	.225	.199	.073	.534	.427	.391	.369	.318	.271	.124
	24.5	.378	.281	.239	.225	.186	.152	.004	.488	.379	.340	.316	.278	.219	.044
	29.5	.327	.245	.197	.180	.140	.106	-.032	.440	.337	.301	.273	.227	.164	.001
	34.5	.283	.207	.150	.131	.108	.063	-.065	.393	.298	.252	.226	.186	.120	-.038
	39.5	.247	.170	.112	.101	.074	.024	-.092	.353	.265	.211	.188	.147	.072	-.074
	44.5	.207	.138	.081	.065	.038	-.020	-.118	.307	.225	.183	.148	.105	.024	-.104
	49.5	.168	.104	.052	.028	-.013	-.060	-.136	.269	.186	.146	.107	.104	-.020	-.134
	54.5	.169	.097	.014	.005	-.028	-.092	-.141	.264	.178	.105	.075	.027	-.064	-.145
	59.5	.128	.063	-.007	-.003	-.047	-.112	-.141	.218	.134	.083	.046	-.008	-.097	-.155
	64.5	.101	.037	-.033	-.037	-.075	-.129	-.140	.185	.107	.053	.005	-.042	-.126	-.164
	69.5	.068						-.148	.142						-.170
	74.6	.008	-.007	-.079	-.054	-.101	-.158	-.159	.095	.051	-.006	-.042	-.091	-.168	-.199
	79.6	.052	-.035	-.109	-.082	-.127	-.150	-.138	.124	.018	-.048	-.085	-.129	-.181	-.182
	84.6	.008	-.089	-.125	-.101	-.143	-.179	-.146	.045	-.030	-.075	-.122	-.150	-.225	-.199
	89.7	-.007	-.156	-.167	-.131	-.184	-.167	-.148	.031	-.089	-.141	-.170	-.211	-.218	-.204
	94.6	-.080	-.250	-.208	-.194	-.225	-.180	-.141	-.028	-.160	-.231	-.240	-.267	-.240	-.198

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.90		α = 0.45°					M = 0.90		α = 4.46°				
Upper surface	0.0	.241	.499	.525	.498	.363	.432	.032	.244	.268	.262	.201	.287	.233	.382
	1.2	.201	-.046	-.003	.131	.155	.220	.230	.091	-.912	-.898	-.825	-.864	-.793	-.643
	2.4	.127	-.082	-.021	.067	.111	.149	.134	-.092	-.856	-.734	-.635	-.701	-.481	-.465
	5.0	.049	-.056	-.011	.039	.077	.102	.076	-.155	-.370	-.503	-.307	-.290	-.293	-.291
	7.5	.033	-.066	-.007	.047	.051	.074	.032	-.185	-.329	-.373	-.255	-.254	-.237	-.263
	10.0	.004	-.072	-.011	.037	.039	.051	-.006	-.207	-.344	-.289	-.217	-.221	-.204	-.240
	15.0	-.023	-.072	.017	.040	.038	.049	-.046	-.223	-.313	-.187	-.158	-.173	-.153	-.147
	19.6	-.034	-.075	.027	.083	.064	.089	-.051	-.213	-.286	-.141	-.090	-.112	-.077	-.102
	24.5	-.045	-.040	.080	.076	.071	.056	-.051	-.243	-.229	-.049	-.072	-.076	-.067	-.083
	29.5	-.032	-.009	.107	.085	.084	.064	-.034	-.201	-.150	.005	-.038	-.032	-.026	-.056
	34.5	-.054	.040	.133	.107	.108	.073	-.036	-.225	-.065	.058	.008	.020	.021	-.040
	39.5	-.037	.108	.171	.140	.145	.098	-.040	-.195	.042	.116	.056	.081	.066	-.030
	44.5	-.024	.202	.223	.184	.188	.127	-.037	-.157	.167	.159	.109	.130	.114	-.037
	49.5	.027	.309	.281	.241	.245	.174	-.097	-.075	.286	.182	.151	.182	.148	-.064
	54.5	.120	.421	.316	.310	.298	.218	-.133	.043	.334	.177	.188	.203	.158	-.098
	59.5	.274	.441	.311	.339	.314	.233	-.146	.191	.297	.162	.207	.209	.155	-.118
	64.5	.390	.293	.293	.353	.320	.213	-.163	.388	.079	.154	.220	.201	.133	-.147
	69.6	-.765						-.147	-.775						-.154
	74.6	-.780	-.765	-.543	-.418	-.363	-.283	-.182	-.760	-.753	-.561	-.433	-.357	-.258	-.183
	79.5	-.773	-.776	-.534	-.411	-.360	-.283	-.189	-.740	-.763	-.561	-.425	-.355	-.271	-.164
	84.6	-.708	-.767	-.538	-.412	-.354	-.276	-.203	-.704	-.751	-.561	-.428	-.349	-.268	-.170
	89.6	-.693	-.750	-.549	-.417	-.350	-.265	-.191	-.704	-.737	-.576	-.433	-.347	-.262	-.168
	94.6	-.672	-.722	-.543	-.415	-.353	-.259	-.173	-.711	-.726	-.570	-.430	-.349	-.257	-.156
Lower surface	1.3	.204	.014	-.025	-.138	-.306	-.459	-.468	.342	.384	.377	.372	.315	.289	.223
	2.6	.167	-.011	-.062	-.135	-.226	-.308	-.386	.308	.316	.298	.271	.225	.214	.159
	5.0	.098	-.026	-.053	-.099	-.214	-.284	-.355	.278	.223	.213	.196	.157	.123	.072
	7.6	.056	-.035	-.085	-.135	-.209	-.281	-.337	.233	.177	.154	.132	.097	.077	.004
	10.1	.036	-.051	-.081	-.164	-.230	-.282	-.353	.205	.144	.135	.099	.054	.044	-.055
	15.1	-.002	-.077	-.134	-.192	-.260	-.321	-.436	.155	.097	.071	.051	.004	-.031	-.168
	19.6	-.042	-.089	-.155	-.187	-.296	-.340	-.385	.112	.061	.027	.019	-.048	-.053	-.188
	24.5	-.094	-.133	-.190	-.231	-.292	-.343	-.338	.093	.019	-.014	-.036	-.078	-.117	-.223
	29.5	-.079	-.154	-.214	-.257	-.308	-.360	-.312	.058	-.011	-.046	-.071	-.117	-.153	-.220
	34.5	-.101	-.178	-.246	-.283	-.330	-.411	-.283	.027	-.041	-.087	-.110	-.151	-.188	-.226
	39.5	-.126	-.200	-.272	-.299	-.353	-.434	-.266	.002	-.067	-.119	-.136	-.184	-.229	-.233
	44.5	-.152	-.227	-.282	-.318	-.393	-.468	-.258	-.031	-.096	-.137	-.170	-.217	-.268	-.235
	49.5	-.176	-.250	-.306	-.339	-.249	-.472	-.263	-.056	-.120	-.158	-.205	-.250	-.301	-.239
	54.5	-.194	-.238	-.323	-.343	-.451	-.382	-.251	-.070	-.115	-.184	-.230	-.271	-.311	-.226
	59.5	-.210	-.256	-.315	-.363	-.454	-.296	-.223	-.093	-.136	-.195	-.244	-.277	-.303	-.205
	64.5	-.218	-.271	-.308	-.379	-.455	-.241	-.197	-.101	-.149	-.203	-.274	-.285	-.287	-.181
	69.5	-.212						-.199	-.107						-.175
	74.6	-.199	-.273	-.315	-.376	-.338	-.249	-.196	-.130	-.161	-.244	-.278	-.246	-.243	-.175
	79.6	-.283	-.261	-.336	-.385	-.312	-.229	-.162	-.149	-.166	-.273	-.295	-.273	-.217	-.150
	84.6	-.123	-.259	-.345	-.373	-.273	-.233	-.156	-.063	-.190	-.285	-.289	-.279	-.227	-.134
	89.7	-.256	-.294	-.384	-.345	-.264	-.206	-.152	-.152	-.250	-.334	-.280	-.292	-.200	-.126
	94.6	-.267	-.263	-.421	-.326	-.272	-.190	-.132	-.192	-.324	-.381	-.288	-.289	-.200	-.123
		M = 0.90		α = 6.47°					M = 0.90		α = 8.54°				
Upper surface	0.0	.260	.097	.050	-.062	.044	-.051	.211	.281	-.081	-.175	-.336	-.213	-.304	.070
	1.2	.122	-1.157	-1.191	-1.009	-1.117	-.793	-.815	.054	-1.205	-1.362	-.941	-1.049	-.756	-.562
	2.4	-.204	-1.092	-1.139	-.759	-.848	-.675	-.688	-.327	-1.190	-1.317	-.929	-.973	-.742	-.524
	5.0	-.336	-.716	-1.041	-.576	-.615	-.549	-.547	-.464	-1.065	-1.272	-.953	-.926	-.732	-.507
	7.5	-.292	-.588	-.902	-.510	-.500	-.462	-.504	-.435	-.958	-1.168	-.910	-.957	-.684	-.491
	10.0	-.315	-.549	-.684	-.435	-.490	-.405	-.452	-.449	-.869	-1.031	-.660	-.915	-.658	-.449
	15.0	-.326	-.490	-.363	-.273	-.351	-.338	-.318	-.442	-.756	-.884	-.357	-.483	-.628	-.425
	19.6	-.308	-.452	-.244	-.185	-.222	-.290	-.234	-.410	-.676	-.817	-.299	-.273	-.602	-.398
	24.5	-.332	-.410	-.108	-.168	-.149	-.246	-.177	-.426	-.606	-.566	-.310	-.243	-.578	-.363
	29.5	-.283	-.268	-.030	-.140	-.111	-.201	-.137	-.378	-.524	-.234	-.296	-.250	-.538	-.342
	34.5	-.332	-.106	.027	-.108	-.081	-.156	-.100	-.405	-.324	-.081	-.275	-.242	-.489	-.322
	39.5	-.313	.001	.070	-.074	-.042	-.113	-.078	-.402	-.128	.001	-.261	-.220	-.431	-.315
	44.5	-.275	.122	.108	-.043	-.009	-.061	-.068	-.441	.013	.049	-.234	-.198	-.364	-.312
	49.5	-.127	.239	.134	-.026	.023	-.004	-.078	-.338	.123	.068	-.257	-.173	-.267	-.310
	54.5	.009	.307	.146	-.002	.047	.046	-.096	-.057	.204	.071	-.260	-.152	-.165	-.312
	59.5	.171	.297	.145	.007	.074	.077	-.109	.109	.189	.070	-.267	-.123	-.074	-.294
	64.5	.342	.143	.145	.032	.088	.092	-.129	.243	.107	.073	-.263	-.098	-.038	-.291
	69.6	-.746						-.134	-.753						-.264
	74.6	-.735	-.726	-.548	-.407	-.351	-.256	-.154	-.751	-.748	-.563	-.400	-.363	-.261	-.252
	79.5	-.708	-.740	-.548	-.403	-.351	-.263	-.156	-.729	-.765	-.567	-.405	-.358	-.267	-.242
	84.6	-.681	-.727	-.548	-.406	-.345	-.260	-.161	-.690	-.744	-.567	-.421	-.356	-.264	-.233
	89.6	-.698	-.715	-.556	-.414	-.348	-.254	-.154	-.717	-.739	-.576	-.440	-.363	-.261	-.224
	94.6	-.707	-.703	-.552	-.411	-.348	-.246	-.146	-.730	-.724	-.566	-.434	-.354	-.254	-.215
Lower surface	1.3	.407	.479	.461	.459	.420	.405	.351	.452	.543	.509	.503	.477	.469	.405
	2.6	.368	.427	.394	.376	.341	.334	.274	.401	.503	.463	.447	.430	.415	.347
	5.0	.348	.328	.308	.301	.262	.253	.203	.449	.413	.391	.395	.359	.333	.281
	7.6	.334	.279	.249	.236	.203	.181	.127	.429	.363	.327	.321	.298	.275	.207
	10.1	.306	.233	.242	.197	.167	.143	.067	.407	.324	.307	.281	.248	.234	.154
	15.1	.248	.188	.157	.143	.096	.072	-.065	.351	.263	.226	.213	.173	.149	.026
	19.6	.205	.144	.111	.105	.042	.015	-.118	.290	.215	.175	.175	.124	.112	-.037
	24.5	.181	.099	.068	.053	.007	-.026	-.170	.260	.170	.134	.121	.082	.056	-.102
	29.5	.139	.068	.032	.012	-.037	-.070	-.167	.216	.136	.097	.079	.040	.010	-.117
	34.5	.104	.037	-.008	-.026	-.071	-.107	-.183	.177	.104	.056	.037	.004	-.031	-.135
	39.5	.075	.009	-.042	-.057	-.109	-.147	-.190	.145	.073	.021	.004	-.031	-.076	-.145
	44.5	.041	-.021	-.066	-.093	-.142	-.194	-.189	.111	.042	-.002	-.034	-.070	-.122	-.154
	49.5	.008	-.047	-.085	-.131	-.228	-.238	-.190	.073	.013	-.027	-.067	-.164	-.163	-.160
	54.5	.004	-.045	-.115	-.158	-.199	-.260	-.182	.078	.013	-.060	-.096	-.126	-.184	-.149
	59.5	-.023	-.069	-.152	-.181	-.211	-.251	-.172	.035	-.018	-.077	-.117	-.142	-.193	-.140
	64.5	-.036	-.084	-.146	-.205	-.224	-.244	-.150	.020	-.033	-.097	-.152	-.162	-.196	-.128
	69.5	-.048						-.143	.002						-.122
	74.6	-.083	-.104	-.191	-.213	-.217	-.211	-.144	-.040	-.058	-.149	-.166	-.164	-.181	-.135
	79.6	-.105	-.110	-.222	-.236	-.235	-.195	-.124	-.043	-.067	-.184	-.190	-.185	-.170	-.121
	84.6	-.029	-.149	-.239	-.240	-.240	-.206	-.117	-.007	-.111	-.203	-.201	-.193	-.184	-.127
	89.7	-.100	-.207	-.293	-.240	-.253	-.187	-.107	-.054	-.176	-.261	-.208	-.212	-.165	-.130
	94.6	-.155	-.290	-.342	-.261	-.265		-.096	-.118	-.259	-.310	-.236	-.234	-.155	-.128

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.90		α = 12.53°					M = 0.90		α = 16.98°				
Upper surface	0.0	.234	-.497	-.632	-.555	-.404	-.723	-.333	.150	-.884	-1.019	-.829	-.568	-.559	-.407
	1.2	-.125	-1.438	-1.114	-.498	-.518	-.833	-.850	-.308	-1.419	-.974	-.767	-.519	-.504	-.434
	2.4	-.567	-1.431	-1.095	-.489	-.579	-.908	-.849	-.805	-1.419	-.956	-.761	-.522	-.508	-.430
	5.0	-.895	-1.415	-1.088	-.480	-.723	-.869	-.854	-.891	-1.397	-.956	-.748	-.529	-.514	-.427
	7.5	-.794	-1.392	-1.060	-.486	-.681	-.776	-.863	-1.048	-1.379	-.945	-.739	-.537	-.513	-.429
	10.0	-.738	-1.343	-1.052	-.485	-.465	-.773	-.861	-1.023	-1.367	-.948	-.729	-.546	-.515	-.433
	15.0	-.732	-1.259	-1.022	-.475	-.355	-.797	-.841	-.985	-1.309	-.936	-.712	-.538	-.511	-.444
	19.6	-.657	-1.223	-.999	-.495	-.359	-.821	-.820	-.897	-1.260	-.947	-.696	-.564	-.514	-.448
	24.5	-.641	-1.192	-.971	-.559	-.388	-.859	-.765	-.805	-1.213	-.921	-.714	-.566	-.511	-.454
	29.5	-.592	-1.095	-.942	-.611	-.410	-.883	-.734	-.740	-1.167	-.913	-.722	-.570	-.509	-.461
	34.5	-.608	-.890	-.918	-.640	-.432	-.893	-.715	-.700	-1.122	-.897	-.719	-.568	-.506	-.466
	39.5	-.575	-.436	-.900	-.640	-.460	-.867	-.699	-.633	-1.079	-.904	-.708	-.563	-.503	-.475
	44.5	-.599	-.082	-.884	-.626	-.487	-.796	-.687	-.620	-.994	-.884	-.690	-.559	-.504	-.475
	49.5	-.489	.061	-.835	-.614	-.511	-.680	-.676	-.591	-.878	-.857	-.674	-.535	-.504	-.469
	54.5	-.300	.127	-.730	-.598	-.527	-.534	-.648	-.501	-.745	-.833	-.652	-.533	-.503	-.463
	59.5	-.220	.099	-.618	-.582	-.526	-.425	-.583	-.388	-.724	-.809	-.651	-.545	-.503	-.439
	64.5	-.112	.041	-.436	-.578	-.519	-.363	-.535	-.237	-.917	-.760	-.645	-.548	-.503	-.451
	69.6	-.803						-.488	-.857						-.434
	74.6	-.797	-.800	-.532	-.546	-.455	-.361	-.460	-.857	-.836	-.663	-.574	-.513	-.447	-.423
	79.5	-.765	-.820	-.545	-.529	-.465	-.399	-.440	-.817	-.844	-.670	-.563	-.514	-.454	-.414
	84.6	-.723	-.791	-.590	-.537	-.458	-.440	-.413	-.729	-.800	-.670	-.564	-.505	-.459	-.398
	89.6	-.742	-.772	-.619	-.537	-.455	-.458	-.376	-.778	-.780	-.664	-.566	-.510	-.481	-.386
	94.6	-.756	-.755	-.579	-.530	-.440	-.419	-.325	-.792	-.672	-.651	-.563	-.498	-.436	-.363
Lower surface	1.3	.487	.587	.540	.534	.501	.475	.424	.504	.595	.536	.505	.502	.478	.440
	2.6	.389	.592	.542	.525	.482	.453	.403	.351	.653	.597	.564	.548	.502	.452
	5.0	.549	.534	.490	.491	.430	.400	.351	.653	.646	.587	.569	.523	.487	.418
	7.6	.579	.492	.436	.428	.376	.350	.282	.745	.618	.544	.523	.487	.448	.367
	10.1	.572	.447	.417	.385	.332	.308	.235	.742	.580	.536	.487	.452	.412	.322
	15.1	.502	.382	.334	.316	.264	.229	.100	.654	.515	.459	.429	.390	.339	.201
	19.6	.426	.326	.285	.271	.208	.169	.001	.574	.465	.408	.387	.343	.293	.129
	24.5	.384	.281	.238	.215	.170	.126	-.060	.532	.420	.363	.336	.294	.241	.044
	29.5	.333	.241	.202	.172	.128	.080	-.099	.478	.379	.324	.293	.246	.186	-.005
	34.5	.292	.200	.155	.126	.085	.033	-.143	.431	.337	.278	.245	.208	.139	-.035
	39.5	.252	.166	.114	.090	.048	-.015	-.174	.390	.303	.236	.213	.170	.090	-.101
	44.5	.214	.137	.087	.050	.013	-.064	-.202	.350	.266	.209	.171	.127	.038	-.143
	49.5	.173	.101	.057	.010	-.069	-.114	-.225	.307	.227	.170	.127	.185	-.015	-.183
	54.5	.177	.094	.016	-.020	-.039	-.158	-.224	.303	.219	.129	.097	.044	-.060	-.198
	59.5	.128	.060	-.005	-.045	-.081	-.188	-.221	.257	.177	.104	.048	.013	-.104	-.213
	64.5	.104	.037	-.033	-.079	-.104	-.220	-.206	.225	.150	.072	.025	-.025	-.139	-.232
	69.5	.068						-.214	.181						-.245
	74.6	.009	.002	-.093	-.097	-.141	-.248	-.217	.138	.098	.005	-.022	-.073	-.201	-.281
	79.6	.054	-.024	-.133	-.121	-.180	-.248	-.209	.163	.061	-.035	-.063	-.120	-.226	-.256
	84.6	.007	-.073	-.159	-.142	-.202	-.272	-.212	.074	.014	-.061	-.103	-.140	-.281	-.271
	89.7	-.001	-.142	-.216	-.170	-.253	-.237	-.198	.070	-.059	-.121	-.143	-.207	-.283	-.269
	94.6	-.037	-.241	-.269	-.235	-.305	-.240	-.198	.027	-.162	-.199	-.216	-.269	-.300	-.257
		M = 0.94		α = 0.45°					M = 0.94		α = 4.46°				
Upper surface	0.0	.258	.521	.543	.521	.396	.456	.115	.271	.310	.301	.240	.302	.231	.385
	1.2	.200	-.037	-.016	.124	.140	.197	.200	.098	-.838	-.969	-.727	-.833	-.831	-.687
	2.4	.157	-.072	-.030	.065	.096	.131	.115	-.044	-.797	-.914	-.541	-.720	-.723	-.573
	5.0	.088	-.042	-.013	.062	.072	.091	.057	-.113	-.384	-.396	-.325	-.306	-.289	-.313
	7.5	.054	-.048	-.003	.053	.049	.068	.017	-.143	-.295	-.374	-.242	-.250	-.237	-.286
	10.0	.024	-.061	-.007	.045	.041	.047	-.014	-.173	-.300	-.251	-.188	-.204	-.238	-.250
	15.0	-.006	-.065	.031	.050	.040	.046	-.071	-.189	-.315	-.099	-.133	-.179	-.170	-.255
	19.6	-.018	-.070	.046	.087	.064	.090	-.078	-.184	-.292	-.086	-.062	-.117	-.089	-.102
	24.5	-.052	-.032	.107	.086	.070	.058	-.070	-.214	-.285	.002	-.042	-.080	-.081	-.078
	29.5	-.021	.002	.128	.093	.085	.069	-.047	-.180	-.196	.033	-.013	-.042	-.047	-.058
	34.5	-.048	.058	.157	.114	.104	.083	-.044	-.221	-.016	.105	.029	.012	-.005	-.042
	39.5	-.029	.133	.196	.145	.144	.100	-.048	-.225	.090	.153	.071	.071	.048	-.032
	44.5	-.016	.231	.243	.191	.188	.133	-.064	-.200	.210	.195	.116	.123	.094	-.041
	49.5	.041	.343	.298	.246	.247	.175	-.114	-.052	.320	.205	.155	.165	.131	-.074
	54.5	.144	.448	.327	.315	.304	.224	-.168	.080	.360	.193	.192	.193	.147	-.118
	59.5	.295	.468	.320	.338	.315	.240	-.192	.221	.308	.176	.206	.204	.145	-.148
	64.5	.407	.301	.299	.351	.324	.227	-.214	.383	.120	.171	.219	.201	.127	-.173
	69.6	-.793						-.212	-.800						-.165
	74.6	-.809	-.807	-.588	-.460	-.369	-.279	-.216	-.800	-.808	-.602	-.481	-.376	-.286	-.172
	79.5	-.809	-.801	-.583	-.448	-.369	-.278	-.216	-.797	-.808	-.602	-.463	-.379	-.284	-.173
	84.6	-.746	-.807	-.577	-.444	-.363	-.273	-.223	-.745	-.800	-.600	-.455	-.373	-.282	-.179
	89.6	-.694	-.792	-.582	-.443	-.359	-.266	-.204	-.728	-.788	-.608	-.458	-.368	-.274	-.174
	94.6	-.633	-.751	-.580	-.440	-.356	-.258	-.185	-.705	-.763	-.605	-.454	-.366	-.266	-.166
Lower surface	1.3	.232	.050	.026	-.080	-.230	-.367	-.384	.360	.393	.390	.397	.330	.301	.287
	2.6	.193	.024	-.010	-.104	-.166	-.266	-.341	.328	.331	.310	.299	.242	.225	.171
	5.0	.126	.008	-.013	-.056	-.165	-.229	-.310	.298	.244	.230	.227	.173	.133	.104
	7.6	.086	-.008	-.046	-.092	-.168	-.228	-.291	.259	.196	.175	.165	.113	.092	.046
	10.1	.068	-.023	-.043	-.131	-.191	-.244	-.297	.229	.162	.154	.131	.067	.060	-.015
	15.1	.025	-.046	-.098	-.157	-.223	-.286	-.385	.101	.116	.094	.078	.021	-.016	-.135
	19.6	-.015	-.058	-.121	-.159	-.269	-.305	-.372	.135	.082	.054	.049	-.033	-.058	-.212
	24.5	-.027	-.099	-.156	-.196	-.274	-.331	-.376	.116	.038	.011	-.005	-.060	-.104	-.276
	29.5	-.051	-.121	-.183	-.222	-.290	-.347	-.351	.080	.011	-.022	-.039	-.097	-.143	-.269
	34.5	-.074	-.147	-.218	-.254	-.310	-.360	-.357	.048	-.020	-.061	-.074	-.132	-.178	-.273
	39.5	-.098	-.169	-.245	-.274	-.334	-.388	-.375	.022	-.045	-.093	-.099	-.164	-.214	-.298
	44.5	-.122	-.196	-.256	-.307	-.366	-.422	-.386	-.009	-.074	-.113	-.130	-.199	-.267	-.307
	49.5	-.141	-.225	-.276	-.341		-.466	-.421	-.047	-.099	-.129	-.165	-.227	-.323	-.330
	54.5	-.165	-.211	-.299	-.350	-.412	-.506	-.441	-.081	-.096	-.152	-.189	-.268	-.377	-.340
	59.5	-.182	-.234	-.303	-.350	-.410	-.498	-.413	-.071	-.117	-.161	-.214	-.280	-.402	-.325
	64.5	-.192	-.243	-.313	-.360	-.428	-.485	-.319	-.081	-.129	-.166	-.235	-.296	-.412	-.268
	69.5	-.191						-.210	-.089						-.214
	74.6	-.175	-.245	-.392	-.341	-.378	-.423	-.242	-.223	-.157	-.199	-.243	-.293	-.386	-.144
	79.6	-.264	-.249	-.309	-.350	-.401	-.347	-.113	-.150	-.140	-.227	-.265	-.317	-.357	-.106
	84.6	-.110	-.251	-.306	-.346	-.402	-.254	-.126	-.048	-.150	-.241	-.274	-.338	-.327	-.109
	89.7	-.248	-.271	-.339	-.356	-.412	-.161	-.150	-.132	-.199	-.283	-.291	-.339	-.233	-.117
	94.6	-.260	-.324	-.374	-.382	-.415	-.155	-.167	-.159	-.272	-.327	-.330	-.389	-.210	-.122

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.94		α = 6.47°					M = 0.94		α = 8.54°				
Upper surface	0.0	.282	.156	.108	-.036	.058	-.033	.203	.291	-.001	-.084	-.265	-.140	-.242	.068
	1.2	.072	-1.125	-1.219	-.704	-1.097	-.806	-.960	.095	-1.230	-1.327	-.991	-.946	-.739	-.773
	2.4	-.158	-1.103	-1.189	-.655	-.969	-.700	-.860	-.265	-1.212	-1.305	-.987	-.883	-.707	-.711
	5.0	-.299	-.827	-1.098	-.570	-.611	-.567	-.653	-.390	-1.046	-1.253	-.921	-.838	-.699	-.662
	7.5	-.250	-.533	-1.015	-.518	-.497	-.471	-.571	-.376	-.801	-1.195	-.863	-.871	-.660	-.644
	10.0	-.279	-.476	-.942	-.479	-.464	-.418	-.514	-.401	-.706	-1.152	-.818	-.828	-.635	-.620
	15.0	-.298	-.442	-.483	-.411	-.369	-.361	-.399	-.399	-.622	-1.035	-.728	-.368	-.610	-.543
	19.6	-.281	-.417	-.096	-.348	-.221	-.323	-.275	-.367	-.583	-.723	-.666	-.227	-.592	-.486
	24.5	-.312	-.399	.009	-.296	-.128	-.287	-.194	-.387	-.550	-.263	-.646	-.217	-.576	-.425
	29.5	-.269	-.401	.042	-.222	-.096	-.258	-.153	-.349	-.520	-.086	-.576	-.206	-.542	-.382
	34.5	-.309	-.288	.074	-.136	-.069	-.240	-.134	-.382	-.479	.007	-.463	-.185	-.504	-.348
	39.5	-.309	.008	.111	-.060	-.043	-.204	-.119	-.374	-.218	.054	-.301	-.167	-.454	-.325
	44.5	-.341	.152	.143	.004	-.023	-.139	-.112	-.408	.001	.077	-.122	-.164	-.382	-.310
	49.5	-.282	.263	.155	.062	-.007	-.063	-.113	-.420	.145	.080	.006	-.166	-.294	-.305
	54.5	-.018	.321	.147	.124	.008	.005	-.127	-.158	.213	.076	.079	-.178	-.176	-.302
	59.5	.166	.295	.142	.171	.015	.042	-.137	.046	.174	.071	.134	-.191	-.067	-.283
	64.5	.334	.154	.140	.204	.018	.073	-.153	.229	.116	.063	.180	-.212	-.024	-.288
	69.4	-.829						-.171	-.823						-.268
	74.6	-.804	-.806	-.614	-.508	-.371	-.292	-.182	-.822	-.814	-.622	-.520	-.387	-.306	-.264
	79.5	-.779	-.815	-.615	-.484	-.371	-.291	-.189	-.783	-.829	-.619	-.501	-.389	-.319	-.259
	84.6	-.754	-.803	-.612	-.477	-.369	-.292	-.196	-.758	-.812	-.621	-.494	-.408	-.317	-.255
	89.6	-.742	-.793	-.619	-.476	-.372	-.288	-.191	-.757	-.803	-.630	-.494	-.413	-.313	-.249
	94.6	-.729	-.771	-.615	-.468	-.374	-.275	-.179	-.749	-.780	-.625	-.485	-.415	-.293	-.233
Lower surface	1.3	.419	.486	.463	.471	.433	.409	.355	.460	.546	.509	.499	.482	.461	.399
	2.6	.384	.432	.398	.391	.357	.319	.285	.414	.508	.459	.441	.431	.405	.342
	5.0	.383	.334	.314	.321	.278	.263	.211	.440	.417	.380	.375	.365	.326	.274
	7.6	.350	.285	.255	.255	.219	.190	.142	.440	.366	.324	.313	.305	.266	.202
	10.1	.323	.261	.246	.218	.184	.151	.083	.414	.327	.297	.288	.257	.228	.145
	15.1	.268	.196	.165	.162	.115	.080	-.049	.357	.272	.227	.222	.182	.148	.014
	19.6	.216	.151	.117	.124	.057	.022	-.150	.298	.220	.180	.181	.125	.095	-.071
	24.5	.190	.106	.076	.072	.025	-.021	-.236	.265	.173	.136	.130	.090	.049	-.156
	29.5	.151	.075	.044	.033	-.022	-.063	-.263	.225	.139	.103	.090	.047	.006	-.193
	34.5	.116	.043	.003	-.006	-.057	-.103	-.290	.183	.106	.058	.049	.004	-.038	-.225
	39.5	.087	.015	-.027	-.036	-.091	-.145	-.311	.147	.074	.027	.017	-.032	-.085	-.257
	44.5	.053	-.013	-.046	-.071	-.130	-.197	-.302	.115	.043	.002	-.020	-.065	-.137	-.258
	49.5	.017	-.041	-.070	-.108	-.204	-.260	-.310	.073	.015	-.017	-.058	-.171	-.198	-.269
	54.5	.016	-.037	-.096	-.135	-.196	-.317	-.307	.084	.015	-.049	-.087	-.137	-.249	-.256
	59.5	-.015	-.063	-.108	-.161	-.211	-.346	-.280	.041	-.010	-.065	-.106	-.159	-.273	-.225
	64.5	-.028	-.074	-.121	-.188	-.232	-.378	-.218	.024	-.027	-.081	-.142	-.186	-.302	-.172
	69.5	-.041						-.164	.003						-.139
	74.6	-.072	-.089	-.165	-.200	-.248	-.384	-.130	-.041	-.046	-.132	-.163	-.206	-.311	-.139
	79.6	-.098	-.095	-.196	-.226	-.275	-.349	-.117	-.034	-.044	-.164	-.195	-.237	-.284	-.129
	84.6	-.023	-.120	-.208	-.243	-.303	-.298	-.124	-.003	-.092	-.183	-.218	-.254	-.264	-.148
	89.7	-.083	-.175	-.261	-.265	-.331	-.199	-.130	-.043	-.152	-.237	-.243	-.291	-.206	-.154
	94.6	-.132	-.252	-.308	-.305	-.355		-.130	-.096	-.232	-.289	-.292	-.319	-.190	-.143
		M = 0.94		α = 13.00°					M = 0.94		α = 17.18°				
Upper surface	0.0	.262	-.413	-.546	-.659	-.392	-.667	-.315	.196	-.741	-.906	-.746	-.594	-.565	-.420
	1.2	-.071	-1.337	-1.136	-.619	-.497	-.792	-.859	-.211	-1.369	-1.033	-.692	-.559	-.511	-.441
	2.4	-.498	-1.337	-1.104	-.605	-.591	-.846	-.857	-.686	-1.368	-1.020	-.688	-.569	-.518	-.441
	5.0	-.508	-1.327	-1.089	-.584	-.638	-.855	-.858	-.748	-1.358	-1.017	-.688	-.580	-.523	-.441
	7.5	-.671	-1.296	-1.040	-.569	-.666	-.772	-.873	-.931	-1.351	-.998	-.688	-.595	-.527	-.444
	10.0	-.674	-1.242	-1.032	-.562	-.516	-.756	-.881	-.916	-1.339	-.987	-.683	-.609	-.526	-.448
	15.0	-.664	-1.168	-1.043	-.542	-.376	-.774	-.886	-.886	-1.292	-.986	-.676	-.612	-.527	-.455
	19.4	-.600	-1.133	-1.053	-.573	-.362	-.795	-.876	-.808	-1.257	-.975	-.680	-.613	-.529	-.457
	24.5	-.581	-1.102	-1.042	-.651	-.390	-.828	-.794	-.729	-1.231	-.927	-.712	-.614	-.527	-.463
	29.5	-.541	-1.044	-1.033	-.712	-.423	-.849	-.757	-.676	-1.203	-.920	-.730	-.619	-.525	-.471
	34.5	-.557	-.895	-1.025	-.738	-.449	-.862	-.727	-.662	-1.144	-.898	-.730	-.617	-.525	-.480
	39.5	-.521	-.604	-1.034	-.722	-.483	-.856	-.708	-.613	-1.091	-.898	-.723	-.613	-.523	-.489
	44.5	-.551	-.168	-1.015	-.690	-.521	-.822	-.693	-.638	-.898	-.884	-.713	-.605	-.518	-.492
	49.5	-.520	.059	-.939	-.661	-.555	-.766	-.679	-.580	-.576	-.853	-.701	-.589	-.518	-.495
	54.5	-.317	.124	-.758	-.638	-.580	-.674	-.648	-.443	-.376	-.821	-.681	-.576	-.520	-.495
	59.5	-.225	.087	-.573	-.618	-.585	-.595	-.578	-.372	-.345	-.789	-.678	-.566	-.522	-.478
	64.5	-.148	.066	-.382	-.612	-.581	-.527	-.537	-.241	-.312	-.767	-.676	-.558	-.521	-.492
	69.6	-.850						-.506	-.931						-.478
	74.6	-.829	-.826	-.578	-.595	-.518	-.429	-.491	-.925	-.879	-.676	-.609	-.549	-.491	-.472
	79.5	-.790	-.848	-.582	-.586	-.525	-.473	-.483	-.859	-.894	-.688	-.598	-.554	-.499	-.468
	84.6	-.761	-.817	-.616	-.593	-.518	-.523	-.461	-.744	-.845	-.692	-.598	-.549	-.504	-.453
	89.6	-.749	-.814	-.649	-.590	-.514	-.540	-.436	-.779	-.851	-.683	-.594	-.552	-.500	-.442
	94.6	-.758	-.792	-.620	-.586	-.502	-.497	-.391	-.775	-.761	-.666	-.587	-.544	-.486	-.422
Lower surface	1.3	.512	.614	.563	.549	.521	.495	.443	.532	.632	.568	.536	.515	.499	.455
	2.6	.409	.620	.565	.545	.506	.478	.424	.369	.684	.625	.589	.561	.523	.471
	5.0	.388	.561	.518	.515	.456	.426	.370	.691	.675	.612	.592	.541	.507	.438
	7.6	.620	.520	.461	.451	.406	.378	.310	.779	.646	.571	.546	.503	.473	.389
	10.1	.611	.477	.443	.411	.359	.336	.262	.774	.608	.563	.511	.471	.439	.348
	15.1	.538	.416	.364	.345	.295	.259	.131	.679	.547	.487	.455	.410	.366	.231
	19.6	.461	.362	.312	.303	.239	.209	.008	.604	.494	.441	.412	.363	.333	.124
	24.5	.424	.312	.268	.251	.195	.161	-.037	.561	.447	.396	.363	.320	.272	.077
	29.5	.372	.274	.230	.207	.153	.114	-.089	.508	.408	.355	.321	.276	.221	.014
	34.5	.326	.237	.186	.161	.115	.069	-.136	.462	.369	.311	.276	.236	.175	-.039
	39.5	.288	.204	.148	.125	.077	.025	-.173	.424	.333	.272	.241	.197	.125	-.085
	44.5	.249	.169	.123	.084	.038	-.022	-.211	.381	.294	.243	.203	.156	.076	-.128
	49.5	.208	.137	.092	.042	.047	-.082	-.246	.340	.262	.208	.159	.193	.022	-.171
	54.5	.213	.129	.056	.013	-.034	-.125	-.264	.335	.253	.165	.129	.081	-.023	-.198
	59.5	.165	.095	.034	-.016	-.051	-.162	-.278	.289	.211	.144	.092	.049	-.071	-.222
	64.5	.139	.075	.006	-.031	-.070	-.197	-.283	.256	.186	.111	.039	.015	-.115	-.244
	69.5	.099						-.298	.212						-.272
	74.6	.048	.040	-.055	-.086	-.100	-.248	-.325	.162	.140	.045	.021	-.046	-.177	-.314
	79.6	.090	-.001	-.094	-.119	-.136	-.270	-.309	.198	.109	.003	-.019	-.084	-.205	-.300
	84.6	.034	-.024	-.122	-.144	-.163	-.325	-.328	.100	.041	-.029	-.033	-.121	-.266	-.334
	89.7	.030	-.091	-.179	-.157	-.218	-.320	-.330	.104	-.006	-.090	-.096	-.176	-.274	-.350
	94.6	-.002	-.182	-.242	-.175	-.280	-.340	-.327	.064	-.105	-.155	-.168	-.237	-.300	-.380

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.98		α = 0.45°					M = 0.98		α = 4.46°				
Upper surface	0.0	.280	.533	.563	.541	.426	.477	.161	.295	.377	.356	.295	.357	.303	.418
	1.2	.231	-.008	-.002	.153	.168	.210	.217	.150	-.708	-.882	-.708	-.730	-.708	-.591
	2.4	.186	-.047	-.012	.094	.128	.140	.132	.015	-.662	-.827	-.618	-.617	-.604	-.484
	5.0	.123	-.023	.007	.091	.097	.102	.073	-.053	-.287	-.574	-.183	-.229	-.225	-.256
	7.5	.087	-.030	.018	.083	.073	.076	.039	-.086	-.250	-.338	-.148	-.207	-.205	-.235
	10.0	.053	-.046	.020	.076	.066	.055	.005	-.116	-.247	-.330	-.121	-.165	-.180	-.216
	15.0	.019	-.054	.057	.080	.063	.057	-.062	-.137	-.265	-.143	-.077	-.127	-.146	-.212
	19.6	.006	-.060	.070	.117	.084	.100	-.107	-.137	-.246	.018	-.015	-.067	-.044	-.146
	24.5	-.034	-.023	.138	.113	.086	.064	-.089	-.168	-.247	.072	-.008	-.041	-.043	-.075
	29.5	-.001	.020	.155	.120	.098	.072	-.056	-.137	-.262	.109	.012	-.001	-.012	-.049
	34.5	-.031	.084	.187	.140	.118	.085	-.052	-.180	-.072	.156	.044	.044	.023	-.036
	39.5	-.017	.160	.224	.166	.152	.099	-.049	-.189	.139	.200	.086	.097	.049	-.030
	44.5	.002	.256	.273	.209	.195	.127	-.075	-.221	.267	.231	.154	.150	.117	-.046
	49.5	.071	.366	.326	.263	.249	.167	-.126	-.117	.359	.229	.178	.192	.149	-.095
	54.5	.179	.475	.354	.329	.307	.218	-.204	.093	.387	.207	.218	.219	.162	-.157
	59.5	.332	.495	.344	.346	.323	.235	-.276	.245	.273	.190	.232	.231	.158	-.218
	64.5	.434	.410	.319	.358	.327	.223	-.332	.396	.175	.179	.243	.229	.138	-.283
	69.6	-.893						-.333	-.885						-.294
	74.6	-.907	-.887	-.675	-.576	-.482	-.396	-.342	-.893	-.885	-.657	-.567	-.488	-.389	-.309
	79.5	-.915	-.875	-.664	-.564	-.483	-.395	-.327	-.880	-.877	-.652	-.554	-.490	-.391	-.298
	84.6	-.855	-.862	-.658	-.568	-.473	-.392	-.333	-.841	-.865	-.658	-.555	-.481	-.391	-.298
	89.6	-.705	-.870	-.664	-.565	-.470	-.383	-.329	-.742	-.869	-.671	-.558	-.476	-.383	-.303
	94.6	-.609	-.846	-.657	-.560	-.470	-.372	-.306	-.644	-.823	-.669	-.558	-.474	-.372	-.298
Lower surface	1.3	.234	.070	.034	-.046	-.211	-.333	-.335	.376	.400	.384	.402	.335	.311	.260
	2.6	.217	.042	.016	-.072	-.151	-.243	-.308	.348	.339	.304	.304	.251	.239	.184
	5.0	.154	.027	.012	-.028	-.139	-.212	-.283	.317	.251	.228	.232	.186	.150	.125
	7.6	.109	.012	-.021	-.062	-.144	-.205	-.255	.277	.209	.176	.172	.127	.111	.064
	10.1	.089	-.001	-.018	-.099	-.170	-.210	-.259	.250	.174	.150	.135	.086	.078	.009
	15.1	.050	-.025	-.072	-.128	-.202	-.256	-.339	.199	.133	.098	.087	.040	.009	-.102
	19.6	.011	-.033	-.094	-.139	-.243	-.268	-.345	.155	.099	.058	.058	-.008	-.029	-.181
	24.5	-.001	-.076	-.128	-.172	-.245	-.303	-.372	.135	.054	.019	.004	-.033	-.074	-.252
	29.5	-.024	-.096	-.152	-.195	-.263	-.322	-.356	.100	.023	-.013	-.030	-.063	-.111	-.254
	34.5	-.048	-.121	-.190	-.229	-.282	-.338	-.360	.070	-.002	-.048	-.068	-.101	-.140	-.271
	39.5	-.070	-.145	-.219	-.247	-.308	-.367	-.378	.044	-.030	-.081	-.094	-.132	-.176	-.293
	44.5	-.093	-.171	-.236	-.275	-.343	-.406	-.395	.012	-.060	-.101	-.118	-.168	-.219	-.303
	49.5	-.115	-.197	-.257	-.309	-.155	-.446	-.424	-.026	-.082	-.125	-.144	-.180	-.270	-.322
	54.5	-.135	-.186	-.274	-.328	-.405	-.479	-.441	-.031	-.078	-.148	-.162	-.233	-.324	-.335
	59.5	-.154	-.208	-.278	-.327	-.397	-.490	-.439	-.034	-.098	-.156	-.179	-.244	-.355	-.338
	64.5	-.163	-.216	-.295	-.340	-.407	-.482	-.428	-.063	-.114	-.156	-.208	-.258	-.376	-.323
	69.5	-.164						-.401	-.071						-.323
	74.6	-.156	-.241	-.283	-.318	-.348	-.424	-.396	-.090	-.128	-.168	-.217	-.249	-.367	-.325
	79.6	-.234	-.232	-.285	-.317	-.369	-.393	-.365	-.136	-.121	-.189	-.232	-.271	-.352	-.314
	84.6	-.083	-.230	-.274	-.311	-.365	-.391	-.350	-.028	-.125	-.200	-.239	-.286	-.363	-.317
	89.7	-.222	-.243	-.309	-.315	-.371	-.360	-.334	-.116	-.160	-.242	-.256	-.301	-.338	-.316
	94.6	-.232	-.286	-.329	-.343	-.388	-.350	-.312	-.144	-.225	-.283	-.293	-.340	-.340	-.312
		M = 0.98		α = 6.49°					M = 0.98		α = 8.54°				
Upper surface	0.0	.311	.223	.184	.033	.124	.025	.260	.320	.079	.002	-.137	-.116	-.185	.118
	1.2	.095	-1.019	-1.098	-1.051	-.929	-.618	-.922	.058	-1.181	-1.221	-1.202	-.952	-.570	-.639
	2.4	-.093	-.992	-1.070	-1.031	-.715	-.561	-.847	-.201	-1.160	-1.200	-1.187	-.906	-.565	-.772
	5.0	-.236	-.810	-.991	-.944	-.555	-.493	-.831	-.314	-1.079	-1.140	-1.143	-.868	-.548	-.724
	7.5	-.193	-.456	-.908	-.895	-.487	-.458	-.519	-.313	-.866	-1.097	-1.103	-.884	-.532	-.793
	10.0	-.220	-.403	-.857	-.647	-.462	-.395	-.456	-.346	-.587	-1.073	-.921	-.902	-.526	-.714
	15.0	-.243	-.380	-.314	-.345	-.342	-.356	-.382	-.339	-.507	-1.019	-.657	-.534	-.535	-.574
	19.6	-.229	-.359	-.403	-.167	-.213	-.323	-.269	-.318	-.473	-.808	-.573	-.213	-.544	-.453
	24.5	-.261	-.344	-.010	-.060	-.119	-.292	-.170	-.337	-.446	-.447	-.518	-.179	-.559	-.360
	29.5	-.226	-.359	.083	-.013	-.074	-.259	-.135	-.305	-.437	-.044	-.446	-.178	-.565	-.320
	34.5	-.261	-.351	.134	.019	-.045	-.214	-.116	-.338	-.440	.058	-.356	-.165	-.560	-.294
	39.5	-.261	-.078	.173	.048	-.012	-.153	-.110	-.329	-.318	.092	-.244	-.135	-.532	-.282
	44.5	-.295	.152	.199	.083	.014	-.080	-.120	-.360	.008	.122	-.094	-.134	-.475	-.287
	49.5	-.312	.278	.199	.121	.034	-.012	-.152	-.383	.174	.123	.066	-.151	-.387	-.313
	54.5	-.090	.334	.185	.166	.046	.043	-.196	-.174	.244	.116	.162	-.197	-.266	-.337
	59.5	.143	.238	.173	.204	.042	.075	-.240	.023	.184	.110	.227	-.244	-.159	-.345
	64.5	.324	.186	.167	.234	.024	.091	-.290	.173	.158	.102	.277	-.296	-.124	-.374
	69.6	-.924						-.311	-.958						-.381
	74.6	-.906	-.904	-.669	-.584	-.510	-.417	-.321	-.940	-.926	-.695	-.604	-.558	-.490	-.388
	79.5	-.888	-.901	-.665	-.571	-.507	-.416	-.316	-.894	-.932	-.687	-.594	-.558	-.507	-.380
	84.6	-.850	-.890	-.670	-.571	-.501	-.416	-.319	-.878	-.923	-.692	-.592	-.578	-.494	-.377
	89.6	-.784	-.890	-.687	-.577	-.499	-.412	-.311	-.804	-.919	-.713	-.596	-.601	-.476	-.373
	94.6	-.706	-.830	-.684	-.577	-.498	-.405	-.299	-.755	-.845	-.708	-.596	-.604	-.453	-.363
Lower surface	1.3	.438	.505	.474	.470	.456	.429	.384	.476	.568	.523	.515	.491	.485	.426
	2.6	.407	.452	.409	.389	.383	.362	.313	.437	.529	.470	.450	.442	.429	.370
	5.0	.409	.354	.326	.319	.309	.288	.251	.482	.435	.393	.385	.376	.352	.304
	7.6	.374	.306	.268	.258	.245	.220	.185	.461	.384	.336	.327	.316	.297	.238
	10.1	.349	.282	.254	.222	.211	.177	.132	.441	.348	.318	.300	.269	.256	.189
	15.1	.289	.219	.177	.171	.142	.109	.002	.377	.291	.245	.234	.201	.180	.065
	19.6	.241	.177	.131	.136	.090	.043	-.110	.321	.242	.195	.198	.147	.122	-.039
	24.5	.219	.126	.090	.090	.053	.014	-.187	.290	.195	.154	.148	.112	.080	-.121
	29.5	.178	.098	.060	.056	.014	-.025	-.225	.248	.159	.119	.111	.072	.038	-.162
	34.5	.144	.065	.019	.020	-.022	-.063	-.262	.209	.129	.079	.073	.035	-.006	-.204
	39.5	.112	.038	-.010	-.006	-.058	-.100	-.298	.176	.097	.048	.044	-.001	-.043	-.243
	44.5	.079	.007	-.030	-.039	-.096	-.146	-.303	.139	.064	.025	.019	-.037	-.098	-.268
	49.5	.034	-.018	-.049	-.073	-.159	-.207	-.311	.093	.036	.004	-.025	-.122	-.154	-.293
	54.5	.041	-.018	-.070	-.099	-.158	-.257	-.310	.107	.037	-.023	-.051	-.101	-.202	-.303
	59.5	.009	-.044	-.078	-.137	-.179	-.295	-.311	.062	.007	-.034	-.079	-.120	-.241	-.303
	64.5	-.006	-.056	-.084	-.152	-.193	-.327	-.295	.044	-.006	-.051	-.107	-.150	-.278	-.290
	69.5	-.019						-.298	.024						-.288
	74.6	-.049	-.063	-.123	-.164	-.199	-.353	-.306	-.028	-.018	-.096	-.123	-.166	-.315	-.297
	79.6	-.080	-.065	-.153	-.186	-.225	-.353	-.295	-.003	-.025	-.129	-.150	-.192	-.324	-.284
	84.6	-.003	-.080	-.164	-.196	-.245	-.370	-.305	.018	-.085	-.141	-.167	-.217	-.354	-.291
	89.7	-.061	-.127	-.208	-.215	-.273	-.342	-.312	-.036	-.110	-.190	-.190	-.252	-.339	-.300
	94.6	-.098	-.201	-.255	-.258	-.317		-.323	-.063	-.187	-.240	-.238	-.300	-.340	-.313

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.98		α = 13.21°					M = 0.98		α = 17.47°				
Upper surface	0.0	.303	-.311	-.434	-.585	-.418	-.598	-.255	.217	-.657	-.816	-.882	-.577	-.788	-.546
	1.2	.000	-1.233	-1.089	-.621	-.654	-.749	-.921	-.138	-1.318	-1.165	-.783	-.497	-.715	-.592
	2.4	-.401	-1.228	-1.070	-.615	-.683	-.791	-.930	-.612	-1.317	-1.147	-.778	-.517	-.724	-.603
	5.0	-.407	-1.202	-1.070	-.601	-.745	-.834	-.940	-.691	-1.309	-1.152	-.762	-.532	-.738	-.614
	7.5	-.572	-1.163	-1.045	-.595	-.833	-.756	-.961	-.856	-1.312	-1.126	-.759	-.553	-.730	-.616
	10.0	-.591	-1.114	-1.050	-.600	-.757	-.737	-.950	-.847	-1.289	-1.126	-.754	-.573	-.725	-.622
	15.0	-.580	-1.045	-1.045	-.607	-.499	-.763	-.986	-.823	-1.250	-1.130	-.735	-.616	-.701	-.623
	19.6	-.522	-1.004	-1.042	-.688	-.411	-.793	-.983	-.742	-1.223	-1.122	-.725	-.662	-.690	-.626
	24.5	-.512	-.977	-.987	-.786	-.379	-.838	-.907	-.670	-1.200	-1.088	-.743	-.698	-.686	-.626
	29.5	-.471	-.939	-.949	-.861	-.404	-.880	-.780	-.619	-1.186	-1.091	-.771	-.720	-.688	-.632
	34.5	-.483	-.818	-.917	-.910	-.439	-.911	-.758	-.610	-1.168	-1.084	-.809	-.738	-.687	-.636
	39.5	-.447	-.593	-.906	-.974	-.470	-.921	-.746	-.562	-1.156	-1.082	-.829	-.741	-.684	-.640
	44.5	-.482	-.254	-.915	-1.010	-.534	-.885	-.745	-.595	-.983	-1.078	-.886	-.740	-.683	-.637
	49.5	-.470	.074	-.915	-1.003	-.598	-.803	-.746	-.604	-.451	-1.151	-.796	-.736	-.679	-.631
	54.5	-.281	.149	-.760	-.910	-.633	-.705	-.738	-.480	-.138	-1.121	-.791	-.729	-.673	-.623
	59.5	-.186	.115	-.540	-.813	-.647	-.636	-.681	-.389	-.089	-1.072	-.795	-.723	-.667	-.597
	64.5	-.135	.108	-.337	-.764	-.635	-.578	-.657	-.281	-.067	-1.013	-.795	-.724	-.656	-.610
	69.6	-.948						-.625	-.982						-.592
	74.6	-.924	-.917	-.687	-.636	-.573	-.594	-.598	-.961	-.942	-.696	-.703	-.686	-.615	-.591
	79.5	-.897	-.914	-.680	-.649	-.579	-.607	-.589	-.898	-.935	-.743	-.696	-.681	-.617	-.586
	84.6	-.853	-.914	-.680	-.657	-.589	-.614	-.585	-.786	-.919	-.865	-.727	-.665	-.616	-.576
	89.6	-.786	-.910	-.685	-.688	-.598	-.625	-.584	-.786	-.930	-.849	-.730	-.660	-.608	-.567
	94.6	-.742	-.852	-.665	-.653	-.593	-.620	-.571	-.774	-.858	-.715	-.724	-.652	-.594	-.557
Lower surface	1.3	.538	.650	.591	.568	.538	.519	.473	.546	.659	.589	.554	.533	.505	.469
	2.6	.440	.653	.589	.562	.526	.502	.453	.375	.706	.642	.603	.573	.532	.494
	5.0	.628	.594	.541	.533	.479	.450	.406	.727	.699	.626	.606	.553	.517	.464
	7.6	.653	.552	.483	.468	.433	.404	.349	.812	.668	.587	.560	.516	.487	.418
	10.1	.645	.507	.467	.430	.390	.362	.298	.799	.630	.577	.529	.482	.455	.379
	15.1	.568	.446	.385	.368	.324	.287	.169	.703	.569	.502	.474	.422	.388	.265
	19.6	.496	.392	.338	.328	.271	.255	.083	.629	.514	.455	.432	.379	.333	.173
	24.5	.459	.345	.294	.275	.231	.192	-.010	.586	.468	.411	.385	.340	.295	.098
	29.5	.407	.307	.256	.233	.188	.144	-.067	.533	.430	.374	.341	.294	.252	.043
	34.5	.362	.271	.215	.193	.149	.106	-.114	.486	.393	.330	.297	.255	.204	-.011
	39.5	.324	.235	.180	.160	.115	.059	-.165	.447	.357	.292	.264	.212	.158	-.061
	44.5	.284	.201	.154	.120	.074	.010	-.202	.405	.319	.263	.225	.178	.109	-.110
	49.5	.243	.170	.126	.080	.076	-.045	-.240	.363	.283	.229	.184	.182	.094	-.152
	54.5	.248	.163	.090	.052	.004	-.096	-.255	.364	.274	.192	.153	.106	.008	-.183
	59.5	.201	.131	.073	.021	-.021	-.136	-.271	.314	.237	.167	.116	.079	-.029	-.209
	64.5	.174	.111	.047	-.013	-.051	-.172	-.272	.285	.211	.137	.082	.044	-.074	-.235
	69.5	.134						-.273	.230						-.264
	74.6	.074	.083	-.010	-.042	-.086	-.227	-.289	.171	.169	.071	.039	-.009	-.144	-.309
	79.6	.127	.046	-.047	-.078	-.119	-.236	-.283	.225	.139	.030	.003	-.038	-.172	-.308
	84.6	.095	.024	-.071	-.102	-.151	-.269	-.320	.077	.097	-.003	-.028	-.071	-.231	-.341
	89.7	.058	-.037	-.131	-.131	-.189	-.262	-.354	.113	.030	-.066	-.063	-.130	-.241	-.374
	94.6	.034	-.123	-.188	-.188	-.247	-.280	-.378	.076	-.064	-.131	-.119	-.196	-.280	-.422
		M = 1.00		α = 0.26°					M = 1.00		α = 4.22°				
Upper surface	0.0	.298	.557	.584	.558	.426	.487	.163	.310	.383	.365	.269	.334	.294	.417
	1.2	.257	.023	.022	.182	.198	.235	.244	.159	-.734	-.898	-.559	-.780	-.777	-.652
	2.4	.217	-.014	.011	.124	.159	.165	.158	.028	-.686	-.850	-.410	-.673	-.690	-.556
	5.0	.154	.008	.032	.122	.128	.131	.107	-.041	-.276	-.685	-.303	-.227	-.223	-.257
	7.5	.119	.001	.045	.114	.104	.104	.069	-.072	-.241	-.328	-.239	-.208	-.193	-.223
	10.0	.085	-.016	.045	.104	.095	.082	.039	-.105	-.238	-.324	-.175	-.187	-.179	-.207
	15.0	.054	-.030	.085	.112	.091	.085	-.025	-.127	-.252	-.321	-.089	-.114	-.137	-.194
	19.6	.039	-.037	.102	.150	.111	.125	-.078	-.127	-.231	.008	-.022	-.065	-.046	-.134
	24.5	-.002	.004	.166	.145	.115	.091	-.070	-.158	-.237	.112	.003	-.028	-.030	-.054
	29.5	.023	.047	.187	.149	.125	.099	-.027	-.127	-.251	.152	.024	.005	.008	-.032
	34.5	-.006	.112	.216	.168	.145	.109	-.027	-.169	-.199	.189	.061	.053	.042	-.018
	39.5	.006	.192	.252	.195	.179	.125	-.026	-.178	.131	.226	.100	.108	.084	-.013
	44.5	.023	.289	.300	.238	.221	.149	-.052	-.212	.274	.249	.149	.156	.126	-.028
	49.5	.095	.398	.353	.291	.270	.186	-.106	-.173	.359	.240	.198	.200	.160	-.077
	54.5	.203	.502	.380	.348	.325	.235	-.190	.071	.390	.212	.232	.229	.178	-.148
	59.5	.335	.525	.372	.369	.340	.251	-.271	.239	.220	.195	.252	.244	.174	-.219
	64.5	.453	.439	.345	.380	.351	.238	-.350	.385	.204	.183	.260	.247	.152	-.290
	69.6	-.907						-.355	-.892						-.309
	74.6	-.910	-.886	-.664	-.562	-.513	-.441	-.361	-.906	-.892	-.656	-.583	-.502	-.422	-.335
	79.5	-.914	-.872	-.665	-.565	-.510	-.444	-.361	-.891	-.883	-.649	-.572	-.501	-.425	-.326
	84.6	-.833	-.852	-.644	-.565	-.505	-.432	-.360	-.846	-.864	-.656	-.570	-.488	-.420	-.324
	89.6	-.681	-.857	-.648	-.568	-.497	-.418	-.361	-.732	-.872	-.670	-.575	-.493	-.409	-.319
	94.6	-.587	-.847	-.648	-.568	-.499	-.404	-.353	-.634	-.829	-.670	-.578	-.493	-.402	-.312
Lower surface	1.3	.275	.094	.082	-.018	-.183	-.318	-.310	.393	.421	.407	.429	.366	.338	.293
	2.6	.240	.066	.045	-.043	-.118	-.225	-.278	.366	.364	.326	.334	.281	.268	.217
	5.0	.180	.054	.040	.001	-.116	-.188	-.253	.339	.277	.248	.261	.204	.178	.153
	7.6	.137	.043	.008	-.032	-.115	-.184	-.229	.299	.231	.196	.201	.157	.144	.095
	10.1	.121	.029	.011	-.070	-.140	-.184	-.225	.274	.196	.174	.169	.110	.106	.047
	15.1	.081	.005	-.042	-.102	-.175	-.228	-.304	.222	.154	.120	.116	.067	.033	-.061
	19.6	.039	-.004	-.064	-.102	-.216	-.243	-.315	.176	.119	.076	.086	.015	-.003	-.153
	24.5	.028	-.044	-.097	-.141	-.221	-.276	-.340	.157	.075	.039	.032	-.009	-.047	-.217
	29.5	.004	-.065	-.121	-.167	-.236	-.291	-.326	.121	.047	.008	-.005	-.039	-.085	-.229
	34.5	-.018	-.090	-.156	-.194	-.255	-.314	-.329	.090	.018	-.029	-.041	-.074	-.116	-.248
	39.5	-.041	-.112	-.188	-.218	-.274	-.338	-.349	.062	-.010	-.056	-.065	-.104	-.151	-.272
	44.5	-.064	-.140	-.202	-.246	-.310	-.372	-.365	.031	-.039	-.074	-.094	-.141	-.195	-.280
	49.5	-.085	-.164	-.227	-.275	-.073	-.409	-.401	-.010	-.063	-.101	-.120	-.130	-.246	-.301
	54.5	-.103	-.156	-.242	-.290	-.377	-.452	-.420	-.010	-.063	-.122	-.132	-.200	-.297	-.312
	59.5	-.123	-.177	-.244	-.301	-.368	-.466	-.413	-.038	-.082	-.129	-.149	-.218	-.329	-.313
	64.5	-.134	-.186	-.260	-.308	-.379	-.457	-.402	-.046	-.094	-.132	-.174	-.232	-.354	-.301
	69.5	-.136						-.382	-.056						-.292
	74.6	-.125	-.210	-.253	-.287	-.317	-.401	-.383	-.082	-.108	-.143	-.184	-.219	-.345	-.304
	79.6	-.201	-.198	-.256	-.282	-.338	-.369	-.342	-.119	-.102	-.163	-.199	-.244	-.332	-.293
	84.6	-.066	-.200	-.242	-.273	-.333	-.358	-.332	-.022	-.105	-.172	-.207	-.235	-.342	-.304
	89.7	-.193	-.211	-.267	-.279	-.336	-.335	-.327	-.097	-.138	-.213	-.222	-.274	-.321	-.311
	94.6	-.201	-.248	-.295	-.304	-.355	-.320	-.280	-.126	-.201	-.253	-.258	-.313	-.320	-.315

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 1.00		α = 6.47°					M = 1.00		α = 8.52°				
Upper surface	0.0	.327	.255	.220	.076	.113	.047	.283	.345	.127	.053	-.104	-.067	-.139	.154
	1.2	.222	-.991	-1.056	-1.019	-.919	-.847	-.647	.173	-1.113	-1.154	-1.140	-.937	-.525	-.713
	2.4	-.063	-.960	-1.040	-1.012	-.705	-.767	-.585	-.157	-1.103	-1.135	-1.139	-.898	-.512	-.632
	5.0	-.203	-.786	-.971	-.955	-.502	-.530	-.516	-.266	-1.020	-1.096	-1.086	-.861	-.507	-.601
	7.5	-.166	-.423	-.889	-.901	-.430	-.407	-.478	-.264	-.871	-1.032	-1.047	-.836	-.476	-.615
	10.0	-.192	-.373	-.846	-.785	-.460	-.358	-.446	-.299	-.526	-1.008	-.972	-.843	-.470	-.595
	15.0	-.213	-.352	-.482	-.377	-.346	-.309	-.404	-.296	-.444	-.948	-.593	-.631	-.479	-.489
	19.6	-.201	-.333	-.401	-.124	-.203	-.266	-.373	-.277	-.417	-.795	-.505	-.225	-.496	-.409
	24.5	-.231	-.314	-.020	-.019	-.106	-.228	-.277	-.294	-.392	-.430	-.434	-.149	-.521	-.335
	29.5	-.200	-.324	.098	.031	-.065	-.153	-.197	-.263	-.389	-.028	-.363	-.146	-.532	-.310
	34.5	-.235	-.334	.155	.061	-.037	-.086	-.131	-.297	-.393	.095	-.286	-.129	-.526	-.297
	39.5	-.239	-.101	.193	.082	-.001	-.043	-.091	-.291	-.316	.130	-.203	-.104	-.502	-.300
	44.5	-.270	.159	.216	.109	.032	-.001	-.090	-.323	.032	.158	-.095	-.096	-.452	-.312
	49.5	-.291	.287	.214	.144	.057	.033	-.128	-.343	.200	.160	.037	-.109	-.367	-.339
	54.5	-.099	.342	.199	.186	.074	.055	-.185	-.147	.272	.147	.151	-.150	-.252	-.375
	59.5	.150	.223	.185	.217	.079	.066	-.254	.044	.210	.136	.233	-.205	-.150	-.380
	64.5	.321	.201	.178	.244	.073	.063	-.289	.191	.191	.125	.292	-.264	-.113	-.408
	69.6	-.917						-.317	-.929						-.415
	74.6	-.908	-.907	-.661	-.593	-.517	-.431	-.345	-.919	-.908	-.676	-.605	-.564	-.519	-.424
	79.5	-.879	-.901	-.656	-.582	-.514	-.442	-.343	-.891	-.908	-.670	-.597	-.566	-.531	-.418
	84.6	-.853	-.890	-.662	-.577	-.504	-.431	-.349	-.858	-.901	-.673	-.593	-.596	-.521	-.419
	89.6	-.752	-.890	-.682	-.582	-.509	-.423	-.343	-.770	-.896	-.697	-.594	-.615	-.502	-.406
	94.6	-.685	-.826	-.679	-.583	-.509	-.414	-.328	-.719	-.817	-.693	-.593	-.621	-.481	-.397
Lower surface	1.3	.449	.515	.488	.481	.471	.443	.400	.497	.587	.543	.528	.505	.491	.446
	2.6	.426	.460	.419	.400	.397	.379	.336	.459	.546	.488	.465	.453	.440	.391
	5.0	.423	.367	.339	.330	.322	.304	.270	.503	.452	.412	.400	.387	.364	.325
	7.6	.389	.319	.282	.270	.257	.238	.210	.483	.406	.354	.340	.336	.306	.262
	10.1	.362	.295	.265	.231	.234	.199	.161	.460	.367	.339	.312	.288	.267	.210
	15.1	.307	.231	.194	.181	.166	.132	.027	.397	.312	.264	.251	.218	.200	.091
	19.6	.258	.188	.148	.149	.119	.077	-.068	.342	.262	.213	.214	.167	.142	.000
	24.5	.233	.144	.107	.101	.078	.042	-.158	.313	.218	.175	.169	.131	.107	-.092
	29.5	.196	.111	.074	.069	.040	-.001	-.195	.271	.182	.136	.131	.093	.063	-.136
	34.8	.158	.077	.035	.036	.003	-.034	-.232	.232	.150	.100	.091	.054	.024	-.176
	39.5	.128	.050	.005	.013	-.030	-.073	-.263	.198	.119	.069	.064	.019	-.017	-.219
	44.5	.092	.020	-.016	-.018	-.069	-.120	-.272	.162	.086	.049	.032	-.016	-.066	-.238
	49.5	.048	-.009	-.034	-.049	-.107	-.172	-.287	.113	.058	.029	-.006	-.077	-.122	-.258
	54.5	.059	-.007	-.055	-.073	-.133	-.218	-.288	.131	.057	.000	-.030	-.076	-.167	-.270
	59.5	.023	-.032	-.058	-.088	-.147	-.257	-.290	.085	.031	-.008	-.053	-.093	-.209	-.278
	64.5	.004	-.048	-.064	-.124	-.165	-.290	-.278	.065	.017	-.023	-.085	-.118	-.240	-.267
	69.5	-.012						-.275	.037						-.275
	74.6	-.058	-.056	-.096	-.139	-.170	-.317	-.291	-.021	.007	-.067	-.098	-.138	-.278	-.286
	79.6	-.054	-.050	-.126	-.160	-.195	-.320	-.279	.038	-.006	-.097	-.123	-.164	-.289	-.270
	84.6	-.012	-.062	-.136	-.170	-.206	-.337	-.291	.002	-.020	-.110	-.139	-.178	-.319	-.279
	89.7	-.049	-.105	-.180	-.187	-.238	-.313	-.307	.005	-.073	-.156	-.162	-.215	-.302	-.300
	94.6	-.078	-.178	-.226	-.231	-.276		-.319	-.013	-.149	-.205	-.206	-.259	-.320	-.302
		M = 1.00		α = 13.25°					M = 1.00		α = 17.37°				
Upper surface	0.0	.308	-.290	-.410	-.559	-.406	-.588	-.243	.239	-.601	-.758	-.852	-.582	-.819	-.540
	1.2	.016	-1.207	-1.069	-.597	-.683	-.793	-.938	-.089	-1.269	-1.150	-.769	-.506	-.759	-.600
	2.4	-.382	-1.203	-1.051	-.590	-.702	-.832	-.946	-.560	-1.269	-1.130	-.765	-.511	-.778	-.605
	5.0	-.386	-1.176	-1.049	-.574	-.769	-.881	-.959	-.457	-1.261	-1.148	-.796	-.519	-.799	-.604
	7.5	-.547	-1.131	-1.022	-.572	-.868	-.815	-.983	-.806	-1.264	-1.127	-.771	-.527	-.805	-.606
	10.0	-.574	-1.083	-1.031	-.578	-.813	-.780	-.995	-.794	-1.233	-1.148	-.778	-.536	-.808	-.616
	15.0	-.565	-1.019	-1.022	-.588	-.541	-.787	-.993	-.771	-1.196	-1.132	-.786	-.543	-.798	-.639
	19.6	-.508	-.978	-1.015	-.674	-.434	-.817	-.985	-.691	-1.172	-1.118	-.842	-.574	-.766	-.662
	24.5	-.493	-.953	-.960	-.771	-.429	-.858	-.886	-.626	-1.148	-1.068	-.916	-.633	-.747	-.673
	29.5	-.461	-.917	-.920	-.847	-.444	-.900	-.780	-.574	-1.134	-1.046	-.959	-.699	-.722	-.673
	34.5	-.469	-.806	-.886	-.900	-.480	-.933	-.753	-.565	-1.120	-1.040	-.954	-.752	-.715	-.671
	39.5	-.433	-.597	-.873	-.960	-.517	-.943	-.745	-.518	-1.110	-1.040	-.954	-.768	-.714	-.664
	44.5	-.466	-.260	-.881	-1.000	-.560	-.898	-.746	-.551	-.955	-1.043	-.925	-.771	-.711	-.658
	49.5	-.456	.083	-.893	-.996	-.626	-.810	-.753	-.567	-.444	-1.149	-.877	-.767	-.704	-.650
	54.5	-.289	.155	-.760	-.960	-.660	-.723	-.762	-.474	-.115	-1.133	-.813	-.766	-.698	-.646
	59.5	-.208	.112	-.550	-.895	-.662	-.642	-.721	-.372	-.057	-1.079	-.796	-.761	-.690	-.620
	64.5	-.122	.097	-.340	-.819	-.620	-.574	-.712	-.253	-.032	-1.026	-.792	-.757	-.680	-.631
	69.6	-.976						-.664	-1.040						-.613
	74.6	-.951	-.943	-.706	-.684	-.590	-.642	-.649	-1.002	-.978	-.732	-.686	-.725	-.630	-.613
	79.5	-.924	-.934	-.701	-.693	-.595	-.647	-.639	-.920	-.943	-.739	-.678	-.716	-.637	-.608
	84.6	-.879	-.927	-.701	-.704	-.609	-.645	-.634	-.801	-.915	-.871	-.738	-.696	-.639	-.599
	89.6	-.804	-.927	-.707	-.747	-.624	-.647	-.638	-.805	-.926	-.925	-.738	-.681	-.628	-.590
	94.6	-.739	-.858	-.688	-.698	-.618	-.642	-.633	-.770	-.874	-.797	-.734	-.667	-.615	-.579
Lower surface	1.3	.541	.654	.599	.569	.539	.518	.475	.563	.678	.606	.566	.551	.523	.485
	2.6	.440	.658	.593	.564	.529	.500	.456	.388	.725	.655	.614	.592	.549	.507
	5.0	.635	.598	.542	.536	.479	.450	.407	.750	.715	.643	.617	.571	.534	.482
	7.6	.664	.557	.488	.476	.433	.403	.347	.827	.685	.605	.572	.536	.503	.437
	10.1	.652	.515	.470	.430	.389	.361	.303	.817	.647	.592	.539	.501	.471	.399
	15.1	.576	.451	.393	.369	.323	.293	.173	.724	.583	.519	.485	.442	.406	.287
	19.6	.502	.397	.344	.328	.274	.247	.071	.646	.531	.470	.444	.400	.366	.201
	24.5	.464	.351	.301	.281	.235	.200	-.002	.604	.486	.429	.399	.353	.314	.126
	29.5	.412	.312	.265	.240	.193	.153	-.062	.553	.447	.391	.357	.314	.268	.072
	34.5	.369	.276	.222	.195	.155	.110	-.113	.508	.408	.346	.314	.275	.225	.015
	39.5	.331	.242	.187	.162	.114	.063	-.161	.467	.373	.311	.279	.239	.183	-.036
	44.5	.289	.207	.161	.125	.081	.019	-.200	.426	.336	.281	.243	.201	.136	-.084
	49.5	.248	.175	.134	.088	.074	-.036	-.236	.381	.303	.251	.204	.186	.082	-.123
	54.5	.253	.167	.101	.056	.011	-.085	-.258	.385	.292	.214	.172	.126	.043	-.151
	59.5	.204	.137	.080	.008	-.015	-.127	-.275	.335	.256	.190	.129	.096	-.001	-.180
	64.5	.176	.117	.056	-.006	-.045	-.165	-.289	.303	.231	.162	.104	.062	-.044	-.203
	69.5	.134						-.305	.247						-.269
	74.6	.070	.090	.002	-.057	-.087	-.224	-.327	.185	.191	.095	.058	.006	-.108	-.278
	79.6	.130	.071	-.034	-.068	-.110	-.241	-.315	.246	.169	.056	.023	-.011	-.136	-.278
	84.6	.024	.036	-.058	-.092	-.133	-.290	-.333	.075	.120	.024	-.009	-.048	-.197	-.315
	89.7	.044	-.024	-.117	-.122	-.181	-.289	-.357	.135	.055	-.037	-.044	-.088	-.205	-.346
	94.6	.026	-.110	-.173	-.177	-.238	-.340	-.392	.093	-.038	-.103	-.110	-.150	-.264	-.388

TABLE I. - WING WITH SPOILER - Continued

	Percent chord	Pressure coefficient												
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 1.03 α = 0.45°							M = 1.03 α = 4.48°						
Upper surface	0.0	.229	.553	.590	.591	.510	.529	.213	.244	.401	.385	.286	.376	.312	.439
	1.2	.198	.009	.003	.214	.243	.281	.293	.124	-.691	-.824	-.715	-.721	-.722	-.600
	2.4	.173	-.026	.003	.160	.203	.214	.209	.010	-.655	-.789	-.609	-.623	-.645	-.515
	5.0	.116	-.006	.039	.156	.172	.174	.157	-.072	-.220	-.695	-.348	-.225	-.201	-.238
	7.5	.079	-.017	.077	.151	.151	.145	.119	-.081	-.236	-.341	-.211	-.174	-.159	-.189
	10.0	.046	-.037	.087	.144	.142	.129	.088	-.123	-.243	-.312	-.106	-.158	-.134	-.165
	15.0	.020	-.051	.124	.151	.136	.129	.020	-.147	-.249	-.317	-.028	-.093	-.099	-.158
	19.6	.015	-.057	.130	.195	.154	.174	-.033	-.135	-.257	-.172	.030	-.038	-.013	-.099
	24.5	-.026	-.033	.196	.181	.153	.138	-.030	-.163	-.231	.123	.047	.001	-.003	-.021
	29.5	-.002	.044	.222	.187	.165	.144	.012	-.135	-.249	.192	.064	.041	.036	.003
	34.5	-.032	.149	.251	.208	.184	.153	.016	-.167	-.254	.237	.094	.085	.074	.018
	39.5	-.028	.227	.288	.233	.218	.168	.016	-.178	.096	.270	.132	.134	.109	.022
	44.5	-.002	.321	.335	.276	.260	.191	-.009	-.209	.273	.278	.187	.182	.153	.006
	49.5	.108	.429	.385	.327	.310	.228	-.061	-.218	.347	.257	.234	.226	.189	-.045
	54.5	.236	.533	.411	.384	.364	.276	-.148	.021	.367	.230	.270	.257	.210	-.121
	59.5	.388	.557	.407	.401	.379	.289	-.234	.219	.152	.201	.287	.274	.209	-.189
	64.5	.510	.477	.387	.409	.385	.276	-.316	.369	.247	.178	.295	.273	.188	-.264
	69.6	-.852						-.333	-.849						-.290
	74.6	-.861	-.837	-.592	-.522	-.474	-.404	-.346	-.852	-.849	-.613	-.548	-.483	-.409	-.313
	79.5	-.868	-.814	-.585	-.523	-.470	-.405	-.353	-.836	-.838	-.607	-.538	-.482	-.415	-.302
	84.6	-.759	-.776	-.581	-.523	-.461	-.400	-.329	-.790	-.819	-.613	-.536	-.472	-.403	-.304
	89.6	-.597	-.787	-.585	-.525	-.458	-.382	-.328	-.690	-.831	-.630	-.542	-.473	-.388	-.296
	94.6	-.565	-.782	-.591	-.525	-.459	-.371	-.323	-.609	-.790	-.627	-.546	-.473	-.380	-.290
Lower surface	1.3	.224	.096	.108	.013	-.159	-.277	-.282	.328	.407	.403	.431	.400	.349	.320
	2.6	.195	.061	.067	-.015	-.097	-.180	-.244	.317	.349	.327	.338	.309	.298	.248
	5.0	.143	.044	.063	.023	-.071	-.145	-.214	.311	.262	.252	.272	.239	.211	.186
	7.6	.107	.034	.028	-.007	-.079	-.143	-.190	.276	.221	.202	.218	.187	.175	.150
	10.1	.084	.026	.032	-.039	-.101	-.138	-.196	.254	.193	.180	.191	.145	.141	.079
	15.1	.049	.002	-.020	-.072	-.137	-.182	-.264	.209	.149	.127	.144	.097	.066	-.022
	19.6	.022	-.010	-.040	-.075	-.176	-.201	-.274	.166	.115	.087	.112	.048	.028	-.070
	24.5	.013	-.042	-.072	-.112	-.173	-.230	-.296	.152	.074	.048	.064	.023	-.012	-.185
	29.5	-.006	-.061	-.093	-.136	-.194	-.243	-.281	.118	.047	.022	.035	-.004	-.049	-.196
	34.5	-.028	-.081	-.128	-.166	-.211	-.261	-.287	.087	.019	-.014	-.006	-.037	-.083	-.211
	39.5	-.045	-.098	-.156	-.184	-.233	-.289	-.305	.062	-.005	-.038	-.030	-.071	-.114	-.237
	44.5	-.069	-.120	-.174	-.214	-.267	-.323	-.318	.032	-.032	-.057	-.057	-.101	-.154	-.246
	49.5	-.090	-.144	-.190	-.244		-.366	-.355	.001	-.059	-.072	-.082		-.205	-.266
	54.5	-.093	-.135	-.208	-.257	-.330	-.410	-.377	.008	-.053	-.088	-.093	-.168	-.256	-.274
	59.5	-.114	-.147	-.208	-.268	-.325	-.416	-.377	-.027	-.073	-.094	-.116	-.179	-.286	-.279
	64.5	-.1125	-.1151	-.1221	-.1274	-.1335	-.1408	-.363	-.045	-.085	-.095	-.129	-.196	-.312	-.267
	69.5	-.132						-.344	-.060						-.262
	74.6	-.150	-.169	-.210	-.251	-.280	-.357	-.344	-.125	-.089	-.101	-.142	-.193	-.306	-.270
	79.6	-.162	-.153	-.211	-.246	-.288	-.318	-.299	-.052	-.072	-.120	-.161	-.209	-.297	-.259
	84.6	-.098	-.155	-.195	-.238	-.281	-.306	-.291	-.049	-.073	-.129	-.167	-.219	-.309	-.268
	89.7	-.157	-.168	-.222	-.242	-.285	-.288	-.274	-.079	-.100	-.171	-.184	-.235	-.288	-.274
	94.6	-.167	-.203	-.248	-.267	-.303	-.280	-.251	-.087	-.164	-.206	-.220	-.269	-.280	-.282
		M = 1.03 α = 6.47°													
Upper surface	0.0	.287	.288	.246	.107	.141	.079	.307							
	1.2	.183	-.941	-1.006	-.988	-.858	-.942	-.624							
	2.4	-.046	-.926	-.988	-.982	-.685	-.873	-.561							
	5.0	-.176	-.798	-.928	-.921	-.483	-.527	-.490							
	7.5	-.155	-.411	-.850	-.867	-.392	-.352	-.449							
	10.0	-.183	-.349	-.811	-.780	-.403	-.295	-.415							
	15.0	-.199	-.325	-.552	-.388	-.311	-.239	-.389							
	19.6	-.189	-.308	-.373	-.125	-.176	-.199	-.360							
	24.5	-.217	-.293	-.010	-.011	-.086	-.177	-.254							
	29.5	-.185	-.298	.134	.061	-.042	-.111	-.154							
	34.5	-.214	-.308	.195	.099	-.012	-.056	-.086							
	39.5	-.219	-.103	.232	.116	.023	-.019	-.030							
	44.5	-.249	.178	.249	.139	.055	.013	-.053							
	49.5	-.270	.308	.244	.172	.082	.045	-.095							
	54.5	-.095	.363	.225	.213	.093	.068	-.153							
	59.5	.162	.218	.204	.246	.102	.078	-.203							
	64.5	.325	.230	.187	.276	.095	.077	-.259							
	69.6	-.844						-.280							
	74.6	-.855	-.858	-.614	-.560	-.495	-.424	-.313							
	79.5	-.838	-.855	-.611	-.552	-.493	-.431	-.318							
	84.6	-.798	-.539	-.619	-.550	-.489	-.417	-.327							
	89.6	-.715	-.843	-.638	-.554	-.486	-.402	-.322							
	94.6	-.638	-.773	-.638	-.557	-.487	-.392	-.310							
Lower surface	1.3	.399	.327	.306	.498	.487	.467	.424							
	2.6	.389	.473	.461	.418	.418	.403	.364							
	5.0	.420	.379	.362	.349	.344	.330	.298							
	7.6	.396	.335	.305	.291	.291	.264	.235							
	10.1	.375	.312	.292	.252	.259	.225	.190							
	15.1	.324	.246	.219	.203	.192	.157	.058							
	19.6	.273	.207	.176	.169	.141	.111	-.071							
	24.5	.253	.166	.137	.125	.107	.070	-.123							
	29.5	.213	.136	.104	.091	.070	.026	-.165							
	34.5	.179	.104	.066	.059	.030	-.009	-.198							
	39.5	.149	.076	.038	.037	.000	-.045	-.232							
	44.5	.118	.049	.017	.008	-.037	-.090	-.240							
	49.5	.082	.024	-.005	-.023		-.137	-.255							
	54.5	.091	.024	-.025	-.048	-.105	-.188	-.258							
	59.5	.049	-.005	-.025	-.062	-.116	-.225	-.259							
	64.5	.032	-.008	-.027	-.096	-.132	-.256	-.249							
	69.5	.008						-.248							
	74.6	-.071	-.022	-.056	-.112	-.145	-.283	-.261							
	79.6		-.024	-.086	-.131	-.157	-.289	-.249							
	84.6	-.032	-.021	-.100	-.142	-.178	-.308	-.260							
	89.7	-.027	-.059	-.141	-.161	-.201	-.288	-.277							
	94.6	-.033	-.132	-.183	-.202	-.238		-.286							

TABLE I. - WING WITH SPOILER - Concluded

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 1.03		α = 8.54°					M = 1.03		α = 13.13°				
Upper surface	0.0	.313	.162	.091	-.061	-.015	-.086	.188	.330	-.227	-.340	-.479	-.339	-.522	-.181
	1.2	.149	-1.047	-1.089	-1.078	-.871	-.469	-.653	.052	-1.136	-.993	-.527	-.632	-.782	-.894
	2.4	-.107	-1.047	-1.068	-1.075	-.838	-.453	-.572	-.320	-1.131	-.975	-.515	-.652	-.816	-.904
	5.0	-.218	-.977	-1.029	-1.025	-.798	-.445	-.543	-.330	-1.102	-.975	-.499	-.723	-.869	-.913
	7.5	-.236	-.900	-.969	-.982	-.769	-.415	-.556	-.485	-1.061	-.951	-.499	-.833	-.818	-.929
	10.0	-.270	-.689	-.950	-.924	-.774	-.411	-.542	-.519	-1.011	-.963	-.505	-.760	-.765	-.935
	15.0	-.281	-.390	-.905	-.549	-.573	-.418	-.459	-.507	-.950	-.949	-.520	-.483	-.754	-.924
	19.6	-.254	-.370	-.823	-.458	-.203	-.432	-.398	-.455	-.913	-.939	-.612	-.420	-.778	-.909
	24.5	-.266	-.349	-.407	-.389	-.111	-.457	-.325	-.432	-.884	-.881	-.704	-.405	-.815	-.813
	29.5	-.242	-.350	-.076	-.330	-.107	-.472	-.294	-.400	-.856	-.848	-.776	-.426	-.853	-.735
	34.5	-.266	-.356	.132	-.265	-.094	-.474	-.272	-.406	-.756	-.815	-.829	-.457	-.883	-.710
	39.5	-.264	-.310	.177	-.193	-.069	-.451	-.268	-.370	-.549	-.796	-.893	-.499	-.891	-.699
	44.5	-.293	.096	.202	-.098	-.066	-.400	-.278	-.405	-.197	-.810	-.932	-.544	-.838	-.703
	49.5	-.314	.220	.200	.026	-.082	-.328	-.301	-.403	.139	-.828	-.932	-.599	-.749	-.705
	54.5	-.113	.295	.184	.168	-.131	-.221	-.329	-.248	.208	-.704	-.917	-.629	-.679	-.722
	59.5	.055	.233	.171	.263	-.193	-.127	-.342	-.167	.150	-.509	-.884	-.624	-.592	-.694
	64.5	.203	.222	.155	.329	-.246	-.094	-.365	-.055	.137	-.292	-.812	-.544	-.508	-.694
	69.6	-.872						-.379	-.934						-.866
	74.6	-.861	-.857	-.623	-.565	-.525	-.488	-.391	-.909	-.900	-.660	-.665	-.557	-.625	-.836
	79.5	-.835	-.857	-.618	-.555	-.529	-.501	-.385	-.886	-.890	-.660	-.677	-.559	-.619	-.620
	84.6	-.795	-.848	-.625	-.554	-.550	-.493	-.381	-.840	-.884	-.658	-.700	-.586	-.613	-.616
	89.6	-.719	-.846	-.647	-.557	-.585	-.477	-.375	-.756	-.881	-.668	-.752	-.593	-.609	-.621
	94.6	-.663	-.761	-.647	-.553	-.593	-.451	-.368	-.682	-.813	-.656	-.685	-.588	-.605	-.625
Lower surface	1.3	.447	.603	.565	.552	.537	.517	.475	.560	.685	.632	.602	.566	.545	.507
	2.6	.425	.561	.516	.489	.490	.466	.417	.465	.687	.624	.593	.556	.527	.487
	5.0	.513	.472	.437	.424	.420	.386	.355	.668	.630	.574	.541	.512	.477	.437
	7.6	.504	.424	.381	.367	.367	.335	.292	.694	.589	.521	.502	.461	.429	.383
	10.1	.485	.387	.363	.339	.320	.297	.246	.682	.548	.502	.480	.419	.393	.339
	15.1	.425	.333	.293	.276	.252	.228	.132	.606	.483	.424	.400	.352	.319	.216
	19.6	.365	.287	.247	.240	.201	.183	.016	.535	.431	.379	.360	.303	.275	.114
	24.5	.337	.242	.206	.194	.166	.138	-.053	.496	.384	.334	.311	.269	.231	.043
	29.5	.294	.211	.172	.157	.127	.099	-.099	.447	.344	.300	.271	.225	.185	-.018
	34.5	.254	.178	.134	.123	.091	.062	-.140	.399	.311	.256	.228	.188	.144	-.067
	39.5	.225	.150	.100	.094	.054	.022	-.182	.366	.277	.223	.195	.151	.099	-.114
	44.5	.190	.118	.083	.062	.024	-.029	-.204	.326	.240	.197	.160	.118	.058	-.151
	49.5	.148	.088	.061	.026	.040	-.075	-.230	.283	.209	.170	.123	.101	.004	-.185
	54.5	.160	.086	.038	-.001	-.035	-.127	-.237	.288	.203	.138	.093	.051	-.044	-.212
	59.5	.116	.062	.029	-.020	-.054	-.162	-.244	.241	.170	.120	.065	.024	-.081	-.232
	64.5	.093	.048	.014	-.052	-.079	-.199	-.238	.212	.153	.094	.034	-.008	-.121	-.245
	69.5	.061						-.239	.163						-.260
	74.6	-.016	.039	-.024	-.066	-.102	-.234	-.254	.100	.128	.042	.006	-.047	-.175	-.284
	79.6	.078	.033	-.057	-.092	-.119	-.246	-.242	.166	.105	.006	-.028	-.066	-.197	-.277
	84.6	-.001	.020	-.071	-.107	-.139	-.278	-.250	.041	.076	-.015	-.049	-.102	-.243	-.301
	89.7	.020	-.029	-.114	-.130	-.168	-.265	-.268	.078	.017	-.072	-.076	-.132	-.242	-.324
	94.6	.012	-.103	-.164	-.176	-.213	-.260	-.278	.060	-.064	-.124	-.133	-.187	-.300	-.343

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.60		α = -0.06°					M = 0.60		α = 4.02°				
Upper surface	0.0	.204	.444	.460	.439	.361	.440	.176	.200	.097	-.165	.102	.206	.082	.302
	1.2	.262	.033	.112	.198	.212	.222	.194	.090	-.752	-.775	-.681	-.671	-.639	-.568
	2.4	.116	-.010	.072	.123	.164	.157	.119	-.159	-.620	-.440	-.412	-.353	-.348	-.341
	5.0	.055	-.005	.057	.100	.127	.114	.061	-.203	-.346	-.302	-.244	-.219	-.229	-.232
	7.5	.051	-.013	.057	.080	.096	.086	.032	-.203	-.282	-.223	-.197	-.184	-.177	-.195
	10.0	.003	-.027	.042	.068	.081	.068	.009	-.211	-.263	-.193	-.162	-.155	-.155	-.166
	15.0	-.008	-.027	.042	.062	.073	.068	.001	-.180	-.221	-.137	-.116	-.108	-.107	-.116
	19.6	-.017	-.024	.029	.073	.086	.091	-.002	-.180	-.194	-.153	-.037	-.059	-.046	-.072
	24.5	-.032	.001	.076	.079	.091	.091	-.012	-.184	-.141	-.049	-.037	-.031	-.026	-.060
	29.5	-.012	.017	.096	.090	.103	.078	-.012	-.146	-.109	-.009	-.006	-.002	-.001	-.040
	34.5	-.027	.046	.116	.122	.125	.091	-.015	-.150	-.061	.038	.040	.045	.038	-.030
	39.5	-.006	.091	.147	.140	.156	.110	-.010	-.114	.008	.096	.086	.094	.081	-.020
	44.5	.009	.155	.194	.182	.192	.136	-.021	-.088	.097	.157	.144	.147	.127	-.015
	49.5	.046	.238	.250	.231	.244	.172	-.049	-.043	.203	.205	.191	.197	.170	-.028
	54.5	.107	.336	.314	.302	.303	.223	-.070	.031	.287	.223	.219	.220	.179	-.045
	59.5	.253	.401	.327	.342	.322	.234	-.085	.151	.302	.209	.224	.228	.175	-.078
	64.5	.381	.375	.324	.352	.322	.237	-.108	.323	.079	.190	.229	.225	.146	-.094
	69.6	.011						-.106	.001						-.108
	74.6	-.944	-.784	-.570	-.455	-.359	-.288	-.123	-.887	-.769	-.539	-.436	-.369	-.273	-.125
	79.5	-.883	-.756	-.595	-.449	-.377	-.288	-.119	-.845	-.742	-.554	-.426	-.382	-.269	-.130
	84.6	-.780	-.747	-.625	-.494	-.364	-.281	-.119	-.772	-.728	-.588	-.466	-.377	-.263	-.137
	89.6	-.698	-.731	-.641	-.506	-.372	-.271	-.117	-.710	-.714	-.609	-.467	-.377	-.252	-.137
	94.6	-.637	-.684	-.606	-.512	-.363	-.259	-.110	-.672	-.653	-.583	-.472	-.376	-.243	-.128
Lower surface	1.3	.131	-.095	-.137	-.203	-.249	-.242	-.196	.308	.367	.374	.362	.342	.347	.278
	2.6	.087	-.099	-.130	-.182	-.156	-.154	-.155	.269	.301	.292	.269	.262	.276	.204
	5.0	.025	-.074	-.087	-.100	-.099	-.118	-.129	.231	.199	.213	.201	.202	.199	.144
	7.6	-.011	-.070	-.101	-.106	-.093	-.101	-.111	.193	.157	.155	.147	.153	.149	.087
	10.1	-.032	-.086	-.081	-.115	-.098	-.090	-.098	.159	.127	.129	.116	.122	.120	.053
	15.1	-.052	-.108	-.106	-.114	-.097	-.090	-.101	.119	.080	.088	.074	.094	.090	.002
	19.6	-.076	-.103	-.106	-.086	-.096	-.073	-.109	.081	.052	.063	.077	.064	.067	.005
	24.5	-.082	-.124	-.111	-.099	-.082	-.074	-.088	.062	.020	.035	.046	.059	.051	-.033
	29.5	-.099	-.124	-.102	-.087	-.068	-.058	-.060	.034	.001	.023	.036	.049	.045	-.025
	34.5	-.109	-.124	-.088	-.075	-.045	-.035	-.054	.018	-.008	.018	.031	.049	.045	-.032
	39.5	-.120	-.110	-.067	-.045	-.013	-.017	-.055	.000	-.007	.020	.040	.059	.047	-.045
	44.5	-.128	-.088	-.034	-.016	.022	.019	-.062	-.020	.001	.033	.052	.077	.064	-.056
	49.5	-.117	-.050	.012	.030	.082	.071	-.071	-.029	.022	.063	.081	.103	.097	-.074
	54.5	-.093	.034	.085	.100	.144	.133	-.079	-.005	.088	.122	.136	.159	.147	-.090
	59.5	-.013	.127	.173	.157	.204	.194	-.089	.045	.157	.194	.184	.221	.220	-.102
	64.5	.152	.204	.213	.245	.210	.183	-.095	.204	.234	.228	.275	.260	.229	-.116
	69.5	.311						-.089	.404						-.120
	74.6	-1.383	-.846	-.679	-.502	-.357	-.294	-.098	-1.400	-.821	-.656	-.517	-.384	-.273	-.121
	79.6	-.894	-1.015	-.683	-.524	-.370	-.302	-.097	-.874	-.999	-.656	-.537	-.388	-.292	-.121
	84.6	-.415	-1.187	-.675	-.531	-.355	-.293	-.092	-.333	-1.216	-.653	-.546	-.381	-.282	-.118
	89.7	-.332	-1.047	-.662	-.556	-.371	-.276	-.094	-.248	-.996	-.630	-.561	-.384	-.269	-.120
	94.6	-.156	-.738	-.654	-.584	-.369	-.266	-.083	-.114	-.579	-.631	-.581	-.384	-.258	-.128
		M = 0.60		α = 6.04°					M = 0.60		α = 8.05°				
Upper surface	0.0	.168	-.340	-.183	-.552	-.364	-.547	.032	.137	-.649	-.504	-1.077	-.737	-.669	-.133
	1.2	-.059	-1.067	-.741	-1.016	-1.188	-.979	-.675	-.257	-1.059	-.755	-1.169	-.952	-.798	-.524
	2.4	-.326	-.951	-.666	-.748	-.670	-.674	-.584	-.525	-1.020	-.724	-1.067	-.892	-.781	-.498
	5.0	-.343	-.664	-.586	-.507	-.478	-.470	-.488	-.578	-.911	-.682	-.833	-.771	-.648	-.470
	7.5	-.345	-.528	-.500	-.403	-.382	-.360	-.421	-.521	-.837	-.623	-.641	-.733	-.561	-.443
	10.0	-.341	-.457	-.436	-.324	-.321	-.307	-.357	-.498	-.801	-.579	-.521	-.631	-.539	-.415
	15.0	-.298	-.362	-.325	-.234	-.229	-.225	-.254	-.436	-.683	-.483	-.359	-.383	-.488	-.379
	19.6	-.274	-.301	-.265	-.160	-.155	-.159	-.177	-.379	-.527	-.439	-.253	-.253	-.459	-.346
	24.5	-.271	-.236	-.171	-.129	-.110		-.123	-.357	-.387	-.349	-.247	-.189	-.399	-.294
	29.5	-.220	-.181	-.111	-.084	-.063	-.078	-.089	-.295	-.282	-.277	-.201	-.165	-.366	-.255
	34.5	-.220	-.121	-.051	-.039	-.020	-.035	-.067	-.296	-.198	-.204	-.154	-.131	-.283	-.223
	39.5	-.181	-.046	.000	.002	.031	.003	-.052	-.251	-.118	-.142	-.118	-.081	-.186	-.209
	44.5	-.143	.043	.052	.056	.075	.039	-.044	-.212	-.040	-.084	-.089	-.048	-.090	-.186
	49.5	-.095	.149	.105	.097	.114	.077	-.059	-.152	.049	-.035	-.044	-.018	-.017	-.193
	54.5	-.015	.234	.145	.129	.140	.108	-.079	-.063	.153	.003	-.037	-.002	.036	-.200
	59.5	.113	.247	.154	.153	.159	.115	-.096	.088	.187	.032	-.007	.014	.075	-.207
	64.5	.306	.083	.164	.168	.170	.108	-.125	.266	.076	.052	.020	.025	.093	-.219
	69.6	-.007						-.143	-.008						-.219
	74.6	-.855	-.747	-.532	-.430	-.371	-.272	-.155	-.809	-.694	-.501	-.402	-.353	-.253	-.219
	79.5	-.819	-.725	-.542	-.419	-.387	-.269	-.163	-.769	-.672	-.511	-.392	-.369	-.253	-.209
	84.6	-.762	-.717	-.574	-.457	-.364	-.263	-.169	-.723	-.661	-.538	-.430	-.369	-.248	-.202
	89.6	-.705	-.697	-.593	-.457	-.384	-.253	-.163	-.675	-.649	-.555	-.430	-.377	-.238	-.194
	94.6	-.677	-.641	-.574	-.461	-.384	-.248	-.151	-.656	-.602	-.536	-.433	-.373	-.232	-.183
Lower surface	1.3	.363	.454	.446	.452	.455	.444	.335	.401	.495	.476	.476	.475	.480	.394
	2.6	.317	.407	.380	.375	.380	.377	.295	.348	.479	.448	.446	.443	.445	.351
	5.0	.306	.300	.302	.304	.312	.298	.235	.356	.395	.373	.384	.394	.377	.288
	7.6	.280	.266	.241	.242	.253	.241	.165	.356	.350	.318	.326	.344	.322	.225
	10.1	.244	.224	.210	.208	.222	.207	.114	.334	.305	.305	.285	.302	.286	.181
	15.1	.201	.158	.157	.164	.167	.158	.045	.291	.232	.227	.234	.236	.223	.091
	19.6	.156	.126	.120	.146	.128	.129	-.004	.238	.195	.184	.207	.198	.194	.054
	24.5	.136	.082	.087	.100	.116	.100	-.012	.209	.152	.150	.159	.175	.158	.013
	29.5	.104	.061	.070	.082	.093	.084	-.013	.170	.125	.126	.138	.151	.130	.006
	34.5	.079	.043	.056	.072	.090	.075	-.029	.141	.104	.107	.121	.136	.116	-.013
	39.5	.053	.035	.056	.072	.092	.067	-.045	.114	.093	.100	.118	.136	.104	-.026
	44.5	.027	.039	.063	.080	.102	.079	-.061	.085	.093	.100	.121	.137	.113	-.043
	49.5	.014	.054	.086	.106	.113	.102	-.075	.065	.100	.112	.136	.145	.124	-.043
	54.5	.043	.111	.130	.145	.171	.141	-.091	.092	.131	.155	.172	.190	.158	-.080
	59.5	.078	.180	.199	.221	.231	.216	-.109	.116	.207	.219	.232	.246	.223	-.099
	64.5	.232	.250	.234	.285	.265	.214	-.121	.259	.280	.253	.302	.280	.228	-.115
	69.5	.455						-.128	.527						-.120
	74.6	-1.431	-.822	-.652	-.542	-.391	-.294	-.130	-1.523	-.790	-.633	-.527	-.367	-.280	-.126
	79.6	-.859	-1.009	-.658	-.550	-.405	-.301	-.132	-.806	-.992	-.639	-.538	-.392	-.287	-.130
	84.6	-.287	-1.219	-.650	-.552	-.385	-.291	-.132	-.243	-1.180	-.634	-.538	-.371	-.275	-.129
	89.7	-.203	-.960	-.627	-.563	-.401	-.275	-.138	-.142	-.876	-.609	-.546	-.387	-.259	-.134
	94.6	-.087	-.501	-.624	-.582	-.399	-.259	-.151	-.052	-.394	-.602	-.556	-.388	-.238	-.144

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.60		α = 12.02°					M = 0.60		α = 16.05°				
Upper surface	0.0	-.002	-1.649	-1.129	-.976	-.692	-.547	-.253	-.187	-2.093	-1.235	-.685	-.587	-.498	-.393
	1.2	-.778	-1.589	-.973	-.778	-.529	-.480	-.341	-1.207	-1.853	-1.029	-.613	-.456	-.434	-.349
	2.4	-1.029	-1.599	-.973	-.784	-.569	-.474	-.336	-1.732	-1.840	-1.037	-.614	-.445	-.429	-.360
	5.0	-1.239	-1.645	-.982	-.802	-.643	-.422	-.336	-2.023	-1.849	-1.046	-.606	-.488	-.427	-.360
	7.5	-1.037	-1.693	-.975	-.796	-.621	-.409	-.336	-1.646	-1.873	-1.036	-.606	-.496	-.423	-.360
	10.0	-.937	-1.787	-.985	-.771	-.510	-.415	-.329	-1.335	-1.939	-1.036	-.606	-.502	-.433	-.359
	15.0	-.783	-1.708	-.992	-.698	-.372	-.431	-.328	-1.129	-1.908	-1.021	-.614	-.510	-.441	-.359
	19.6	-.648	-1.468	-1.094	-.650	-.346	-.437	-.358	-.941	-1.845	-1.049	-.620	-.518	-.444	-.359
	24.5	-.585	-.879	-1.081	-.665	-.351	-.437	-.339	-.792	-1.691	-1.037	-.640	-.522		-.359
	29.5	-.492	-.246	-1.102	-.694	-.359	-.461	-.344	-.667	-1.476	-1.058	-.655	-.532	-.452	-.359
	34.5	-.461	-.126	-1.076	-.739	-.366	-.458	-.344	-.613	-1.138	-1.069	-.682	-.537	-.445	-.359
	39.5	-.389	-.094	-1.003	-.776	-.386	-.446	-.341	-.530	-.811	-1.064	-.695	-.529	-.440	-.357
	44.5	-.326	-.029	-.862	-.787	-.422	-.430	-.330	-.463	-.525	-1.034	-.682	-.521	-.430	-.348
	49.5	-.238	.054	-.653	-.766	-.449	-.413	-.317	-.361	-.316	-.973	-.667	-.507	-.420	-.341
	54.5	-.108	.173	-.460	-.726	-.466	-.397	-.303	-.240	-.169	-.870	-.640	-.494	-.410	-.331
	59.5	.000	.219	-.330	-.663	-.456	-.377	-.284	-.152	-.111	-.780	-.613	-.479	-.400	-.308
	64.5	.092	.188	-.247	-.560	-.451	-.343	-.279	-.078	-.146	-.704	-.586	-.469	-.383	-.297
	69.6	-.021						-.268	-.022						-.282
	74.6	-.744	-.658	-.481	-.457	-.333	-.271	-.259	-.864	-.727	-.490	-.384	-.339	-.293	-.264
	79.5	-.714	-.638	-.512	-.477	-.356	-.311	-.251	-.784	-.693	-.538	-.395	-.367	-.339	-.257
	84.6	-.668	-.617	-.575	-.558	-.362	-.303	-.243	-.727	-.654	-.670	-.458	-.382	-.330	-.244
	89.6	-.623	-.601	-.616	-.571	-.377	-.288	-.238	-.639	-.649	-.643	-.458	-.379	-.305	-.236
	94.6	-.614	-.566	-.523	-.530	-.363	-.273	-.224	-.631	-.604	-.497	-.458	-.368	-.287	-.231
Lower surface	1.3	.410	.473	.482	.480	.494	.492	.418	.360	.391	.437	.457	.471	.465	.417
	2.6	.396	.538	.530	.512	.502	.485	.397	.400	.532	.548	.535	.521	.490	.431
	5.0	.426	.516	.499	.491	.467	.441	.355	.441	.586	.557	.539	.509	.474	.396
	7.6	.486	.485	.446	.434	.421	.397	.297	.583	.565	.526	.498	.466	.439	.342
	10.1	.494	.434	.424	.398	.387	.356	.248	.620	.526	.512	.486	.437	.404	.311
	15.1	.458	.374	.344	.334	.319	.292	.150	.569	.468	.433	.406	.375	.344	.207
	19.6	.393	.325	.299	.304	.277	.276	.117	.499	.410	.382	.370	.337	.303	.162
	24.5	.355	.278	.260	.255	.251	.219	.063	.455	.373	.339	.329	.304	.263	.092
	29.5	.309	.246	.227	.223	.219	.190	.048	.408	.335	.306	.283	.263	.225	.069
	34.5	.271	.217	.199	.200	.197	.166	.018	.367	.301	.273	.255	.236	.194	.032
	39.5	.238	.197	.183	.182	.191	.146	-.005	.326	.272	.249	.228	.221	.170	.006
	44.5	.202	.188	.173	.173	.184	.145	-.037	.287	.258	.229	.213	.208	.158	-.024
	49.5	.175	.188	.176	.179	.185	.149	-.067	.258	.246	.219	.208	.205	.153	-.064
	54.5	.191	.224	.202	.204	.210	.175	-.094	.248	.275	.234	.221	.220	.177	-.088
	59.5	.204	.263	.251	.256	.261	.222	-.115	.272	.299	.273	.277	.261	.212	-.109
	64.5	.327	.322	.284	.317	.300	.229	-.138	.379	.349	.300	.332	.310	.223	-.132
	69.5	.586						-.139	.596						-.142
	74.6	-1.373	-.704	-.595	-.508	-.421	-.335	-.150	-1.098	-.628	-.648	-.618	-.495	-.356	-.152
	79.6	-.632	-.920	-.600	-.527	-.413	-.324	-.150	-.499	-.782	-.684	-.650	-.502	-.356	-.157
	84.6	-.155	-1.072	-.590	-.554	-.424	-.312	-.150	-.081	-.988	-.690	-.691	-.495	-.347	-.157
	89.7	-.026	-.715	-.545	-.604	-.441	-.291	-.166	.093	-.547	-.609	-.729	-.483	-.323	-.167
	94.6	.017	-.247	-.531	-.595	-.438	-.253	-.174	.081	-.098	-.562	-.665	-.463	-.317	-.183
		M = 0.60		α = 21.00°					M = 0.80		α = 0.21°				
Upper surface	0.0	-.260	-1.030	-.987	-.764	-.720	-.613	-.872	.245	.498	.516	.497	.474	.487	.234
	1.2	-.842	-1.029	-.909	-.742	-.687	-.606	-.547	.291	.013	.082	.184	.195	.219	.192
	2.4	-1.117	-1.026	-.897	-.747	-.682	-.609	-.507	.148	-.023	.051	.115	.154	.155	.116
	5.0	-1.103	-1.022	-.893	-.741	-.684	-.614	-.498	.086	-.013	.049	.102	.121	.118	.072
	7.5	-1.090	-1.022	-.883	-.741	-.686	-.622	-.498	.042	-.022	.061	.085	.098	.093	.040
	10.0	-1.063	-1.022	-.888	-.740	-.686	-.622	-.498	.015	-.033	.044	.074	.084	.076	.014
	15.0	-1.033	-1.027	-.874	-.740	-.690	-.615	-.498	.008	-.027	.049	.074	.081	.079	-.009
	19.6	-1.025	-1.027	-.883	-.733	-.686	-.613	-.503	-.013	-.030	.042	.095	.110	.107	-.003
	24.5	-1.013	-1.016	-.868	-.739	-.684	-.613	-.511	-.036	.001	.105	.099	.106	.111	-.009
	29.5	-.997	-1.008	-.864	-.735	-.678	-.607	-.512	-.015	.025	.121	.116	.116	.093	-.007
	34.5	-.977	-1.007	-.859	-.733	-.672	-.603	-.511	-.029	.062	.148	.141	.140	.109	-.002
	39.5	-.943	-.996	-.849	-.729	-.665	-.591	-.506	-.010	.119	.184	.164	.176	.127	-.004
	44.5	-.930	-.973	-.832	-.723	-.657	-.574	-.504	.025	.199	.232	.208	.216	.155	-.020
	49.5	-.902	-.953	-.821	-.719	-.645	-.561	-.497	.053	.298	.291	.268	.268	.197	-.051
	54.5	-.873	-.925	-.800	-.710	-.645	-.556	-.471	.134	.412	.334	.332	.325	.246	-.088
	59.5	-.832	-.893	-.783	-.710	-.652	-.559	-.426	.271	.428	.329	.355	.339	.269	-.107
	64.5	-.676	-.851	-.761	-.705	-.659	-.563	-.403	.449	.321	.315	.360	.336	.256	-.141
	69.6	-.038						-.369	.016						-.141
	74.6	-.993	-.822	-.615	-.589	-.443	-.368	-.355	-.927	-.806	-.598	-.462	-.370	-.298	-.144
	79.5	-.928	-.808	-.641	-.567	-.447	-.403	-.341	-.857	-.780	-.621	-.447	-.375	-.299	-.149
	84.6	-.844	-.802	-.666	-.595	-.434	-.399	-.326	-.771	-.653	-.639	-.475	-.369	-.292	-.152
	89.6	-.765	-.784	-.666	-.578	-.434	-.376	-.315	-.707	-.741	-.651	-.484	-.370	-.279	-.152
	94.6	-.710	-.725	-.666	-.539	-.422	-.353	-.301	-.664	-.715	-.631	-.490	-.359	-.268	-.142
Lower surface	1.3	.304	.385	.364	.350	.374	.382	.364	.177	-.028	-.057	-.116	-.185	-.194	-.187
	2.6	.199	.532	.518	.499	.504	.479	.434	.136	-.046	-.068	-.111	-.099	-.125	-.151
	5.0	.534	.622	.569	.543	.527	.496	.424	.069	-.036	-.046	-.045	-.074	-.096	-.136
	7.6	.698	.611	.551	.526	.506	.481	.387	.029	-.037	-.064	-.065	-.074	-.082	-.116
	10.1	.713	.586	.547	.504	.486	.458	.356	.004	-.055	-.050	-.082	-.077	-.078	-.106
	15.1	.634	.533	.488	.458	.433	.396	.251	-.013	-.080	-.075	-.088	-.081	-.081	-.107
	19.6	.584	.481	.446	.420	.398	.363	.166	-.057	-.077	-.082	-.065	-.084	-.063	-.101
	24.5	.536	.446	.401	.373	.359	.318	.129	-.060	-.100	-.084	-.076	-.069	-.065	-.085
	29.5	.491	.410	.365	.335	.313	.277	.088	-.078	-.100	-.073	-.064	-.055	-.051	-.054
	34.5	.456	.372	.325	.298	.287	.242	.050	-.093	-.095	-.064	-.049	-.034	-.029	-.048
	39.5	.411	.344	.292	.263	.264	.208	.011	-.100	-.075	-.043	-.024	-.001	-.006	-.046
	44.5	.373	.317	.268	.241	.240	.188	-.036	-.111	-.041	-.006	.009	.036	.034	-.058
	49.5	.339	.298	.246	.224	.227	.178	-.067	-.102	.006	.040	.062	.238	.088	-.079
	54.5	.339	.315	.246	.229	.242	.187	-.110	-.061	.101	.114	.140	.169	.161	-.092
	59.5	.335	.328	.269	.278	.271	.221	-.144	.039	.176	.208	.195	.223	.225	-.100
	64.5	.436	.360	.288	.320	.316	.224	-.168	.211	.239	.253	.263	.232	.192	-.116
	69.5	.623						-.190	.370						-.118
	74.6	-.974	-.574	-.800	-.748	-.565	-.453	-.203	-1.070	-.960	-.511	-.475	-.350	-.308	-.131
	79.6	-.371	-.757	-.866	-.779	-.547	-.438	-.203	-.753	-.963	-.669	-.484	-.361	-.309	-.118
	84.6	-.031	-.930	-.866	-.800	-.551	-.434	-.200	-.528	-.966	-.670	-.477	-.356	-.302	-.124
	89.7	.189	-.421	-.726	-.772	-.560	-.426	-.215	-.487	-.924	-.662	-.482	-.359	-.289	-.127
	94.6	.091	-.054	-.612	-.686	-.530	-.416	-.209	-.341	-.815	-.662	-.506	-.348	-.277	-.131

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.80		α = 4.17°					M = 0.80		α = 6.17°				
Upper surface	0.0	.233	.221	.231	.157	.238	.116	.319	.237	-.021	.010	-.208	-.087	-.229	.106
	1.2	.160	-.899	-.938	-.816	-.835	-.799	-.684	.064	-.979	-.699	-1.031	-.900	-.836	-.785
	2.4	-.102	-.622	-.525	-.441	-.380	-.391	-.416	-.242	-.897	-.643	-.750	-.725	-.697	-.658
	5.0	-.151	-.346	-.350	-.239	-.250	-.264	-.274	-.291	-.701	-.570	-.550	-.559	-.573	-.538
	7.5	-.184	-.283	-.261	-.209	-.209	-.205	-.222	-.315	-.588	-.500	-.449	-.494	-.438	-.473
	10.0	-.200	-.272	-.220	-.172	-.178	-.178	-.186	-.329	-.512	-.446	-.354	-.407	-.356	-.380
	15.0	-.188	-.235	-.148	-.121	-.123	-.122	-.117	-.287	-.402	-.358	-.233	-.238	-.246	-.231
	19.6	-.181	-.204	-.143	-.057	-.065	-.058	-.069	-.282	-.327	-.287	-.134	-.143	-.167	-.146
	24.5	-.198	-.147	-.036	-.034	-.036	-.020	-.055	-.292	-.254	-.178	-.110	-.090	-.107	-.104
	29.5	-.158	-.102	.015	.002	.001	-.001	-.024	-.235	-.185	-.108	-.081	-.052	-.084	-.077
	34.5	-.162	-.041	.068	.049	.048	.044	-.011	-.237	-.105	-.046	-.042	-.018	-.048	-.058
	39.5	-.128	.043	.127	.100	.107	.090	-.002	-.196	-.015	.012	.001	.022	-.013	-.048
	44.5	-.085	.154	.184	.157	.155	.135	-.004	-.147	.092	.062	.058	.060	.025	-.051
	49.5	-.040	.271	.213	.188	.194	.163	-.030	-.091	.204	.113	.066	.096	.058	-.073
	54.5	.051	.340	.213	.209	.213	.170	-.065	.012	.289	.149	.090	.119	.082	-.100
	59.5	.185	.325	.191	.215	.218	.160	-.093	.156	.284	.160	.125	.139	.098	-.125
	64.5	.360	.082	.172	.220	.210	.134	-.127	.349	.125	.169	.139	.151	.107	-.152
	69.6	.014						-.142	.012						-.170
	74.6	-.879	-.772	-.597	-.471	-.394	-.295	-.163	-.829	-.741	-.568	-.453	-.377	-.281	-.181
	79.5	-.822	-.755	-.604	-.463	-.401	-.296	-.169	-.783	-.724	-.573	-.442	-.382	-.281	-.184
	84.6	-.762	-.734	-.620	-.487	-.395	-.290	-.179	-.737	-.708	-.588	-.466	-.372	-.277	-.186
	89.6	-.692	-.715	-.630	-.487	-.398	-.282	-.177	-.648	-.685	-.592	-.466	-.383	-.267	-.177
	94.6	-.686	-.670	-.616	-.489	-.396	-.275	-.169	-.671	-.653	-.578	-.466	-.385	-.262	-.168
Lower surface	1.3	.331	.390	.396	.398	.371	.368	.305	.395	.476	.475	.478	.467	.462	.395
	2.6	.294	.327	.314	.297	.287	.299	.229	.352	.427	.410	.401	.397	.400	.330
	5.0	.263	.230	.233	.233	.219	.214	.169	.348	.327	.328	.329	.327	.318	.260
	7.6	.219	.186	.180	.178	.171	.165	.110	.315	.289	.270	.274	.275	.264	.198
	10.1	.181	.165	.153	.146	.136	.151	.070	.275	.244	.247	.236	.243	.232	.144
	15.1	.146	.110	.112	.110	.107	.102	.007	.237	.183	.190	.193	.190	.185	.069
	19.6	.105	.083	.081	.101	.076	.090	.014	.191	.149	.149	.173	.154	.160	.013
	24.5	.089	.052	.059	.064	.066	.055	-.035	.171	.115	.126	.131	.137	.121	-.002
	29.5	.062	.036	.044	.051	.055	.046	-.026	.138	.095	.107	.114	.119	.104	-.002
	34.5	.039	.029	.040	.046	.059	.043	-.034	.110	.083	.095	.102	.112	.092	-.014
	39.5	.023	.036	.046	.054	.067	.047	-.040	.086	.084	.093	.104	.116	.087	-.028
	44.5	.004	.053	.062	.070	.091	.065	-.054	.063	.095	.100	.111	.130	.098	-.040
	49.5	-.001	.083	.091	.104	.130	.100	-.063	.053	.121	.126	.135	.151	.123	-.071
	54.5	.034	.153	.146	.163	.179	.156	-.105	.088	.180	.173	.180	.202	.172	-.095
	59.5	.101	.215	.222	.221	.242	.231	-.127	.138	.235	.240	.254	.257	.241	-.118
	64.5	.278	.266	.248	.289	.259	.215	-.141	.311	.286	.280	.311	.285	.236	-.132
	69.5	.467						-.141	.521						-.139
	74.6	-1.099	-.817	-.669	-.523	-.415	-.318	-.150	-1.129	-.751	-.635	-.514	-.401	-.296	-.146
	79.6	-.767	-.922	-.658	-.528	-.419	-.314	-.155	-.801	-.902	-.623	-.516	-.408	-.301	-.150
	84.6	-.458	-1.029	-.650	-.528	-.416	-.307	-.155	-.406	-1.052	-.616	-.516	-.404	-.294	-.150
	89.7	-.322	-.994	-.634	-.542	-.418	-.295	-.169	-.252	-1.013	-.609	-.530	-.409	-.283	-.166
	94.6	-.233	-.785	-.633	-.580	-.414	-.282	-.169	-.178	-.744	-.604	-.563	-.404	-.281	-.166
		M = 0.80		α = 8.20°					M = 0.80		α = 12.19°				
Upper surface	0.0	.226	-.274	-.337	-.493	-.389	-.514	-.039	.163	-.818	-.915	-.735	-.465	-.669	-.333
	1.2	-.052	-1.086	-.978	-.969	-.879	-.892	-.511	-.306	-1.625	-1.054	-.638	-.452	-.618	-.508
	2.4	-.401	-1.050	-.944	-.983	-.846	-.896	-.499	-.685	-1.612	-1.042	-.632	-.485	-.681	-.498
	5.0	-.500	-.946	-.930	-.805	-.799	-.783	-.484	-.817	-1.544	-1.037	-.622	-.538	-.600	-.494
	7.5	-.497	-.883	-.916	-.589	-.825	-.543	-.470	-.929	-1.540	-1.018	-.613	-.559	-.578	-.487
	10.0	-.483	-.864	-.914	-.368	-.751	-.484	-.451	-.917	-1.534	-1.016	-.604	-.496	-.577	-.479
	15.0	-.434	-.745	-.917	-.226	-.438	-.447	-.423	-.833	-1.496	-.997	-.589	-.370	-.599	-.443
	19.6	-.402	-.581	-.922	-.192	-.283	-.420	-.414	-.750	-1.388	-1.012	-.589	-.334	-.599	-.463
	24.5	-.389	-.434	-.728	-.205	-.211	-.383	-.378	-.714	-1.222	-.981	-.617	-.351	-.599	-.484
	29.5	-.332	-.297	-.319	-.190	-.182	-.370	-.353	-.629	-.787	-.981	-.672	-.378	-.607	-.446
	34.5	-.344	-.181	.067	-.182	-.150	-.335	-.316	-.574	-.337	-.979	-.731	-.409	-.594	-.436
	39.5	-.293	-.084	.121	-.190	-.115	-.275	-.287	-.504	-.177	-.979	-.765	-.439	-.549	-.423
	44.5	-.231	.016	.134	-.208	-.095	-.193	-.266	-.450	-.076	-.950	-.735	-.477	-.542	-.411
	49.5	-.159	.117	.151	-.225	-.073	-.120	-.259	-.291	.042	-.848	-.732	-.506	-.515	-.395
	54.5	-.032	.207	.156	-.228	-.051	-.055	-.257	-.153	.114	-.703	-.698	-.519	-.490	-.381
	59.5	.141	.183	.154	-.228	-.024	-.014	-.251	-.047	.110	-.552	-.646	-.517	-.463	-.356
	64.5	.253	.136	.166	-.213	-.003	.012	-.255	.059	.075	-.348	-.578	-.512	-.419	-.339
	69.6	.006						-.244	-.012						-.333
	74.6	-.797	-.700	-.546	-.435	-.346	-.287	-.234	-.749	-.675	-.556	-.492	-.391	-.334	-.320
	79.5	-.749	-.684	-.554	-.422	-.358	-.285	-.226	-.714	-.640	-.599	-.506	-.404	-.379	-.309
	84.6	-.709	-.666	-.559	-.446	-.357	-.280	-.222	-.679	-.641	-.720	-.543	-.412	-.385	-.296
	89.6	-.645	-.645	-.555	-.450	-.363	-.272	-.217	-.634	-.622	-.690	-.549	-.416	-.377	-.283
	94.6	-.650	-.617	-.540	-.457	-.360	-.265	-.210	-.630	-.596	-.470	-.531	-.408	-.362	-.270
Lower surface	1.3	.434	.534	.524	.505	.501	.506	.440	.458	.549	.524	.521	.516	.489	.443
	2.6	.379	.503	.485	.458	.465	.467	.389	.385	.571	.545	.529	.511	.479	.429
	5.0	.413	.419	.410	.397	.405	.402	.328	.504	.530	.507	.502	.467	.436	.389
	7.6	.399	.376	.352	.339	.353	.344	.267	.539	.486	.455	.444	.422	.395	.329
	10.1	.367	.330	.328	.307	.312	.314	.212	.530	.442	.437	.404	.380	.358	.283
	15.1	.325	.265	.262	.253	.255	.247	.114	.476	.378	.360	.341	.323	.295	.177
	19.6	.271	.224	.220	.227	.216	.218	.075	.407	.332	.316	.317	.283	.255	.127
	24.5	.245	.184	.183	.182	.191	.178	.027	.369	.291	.275	.264	.250	.217	.067
	29.5	.208	.162	.163	.161	.170	.152	.018	.323	.262	.247	.254	.219	.188	.042
	34.5	.174	.149	.146	.144	.157	.135	-.003	.284	.237	.224	.212	.200	.164	.009
	39.5	.150	.143	.139	.142	.157	.124	-.015	.251	.224	.205	.198	.188	.140	-.019
	44.5	.126	.148	.139	.147	.164	.127	-.039	.220	.220	.196	.192	.186	.137	-.055
	49.5	.106	.163	.155	.164	.177	.145	-.069	.195	.225	.201	.197	.193	.142	-.094
	54.5	.142	.216	.196	.204	.224	.185	-.093	.222	.263	.224	.222	.224	.171	-.130
	59.5	.179	.263	.260	.246	.278	.247	-.117	.246	.300	.276	.273	.278	.223	-.162
	64.5	.344	.313	.294	.329	.307	.244	-.132	.391	.347	.312	.331	.307	.224	-.180
	69.5	.598						-.137	.665						-.182
	74.6	-1.235	-.707	-.607	-.510	-.384	-.292	-.143	-1.148	-.641	-.579	-.519	-.429	-.370	-.193
	79.6	-.784	-.853	-.599	-.512	-.386	-.297	-.144	-.689	-.829	-.576	-.528	-.449	-.370	-.193
	84.6	-.383	-1.064	-.593	-.507	-.374	-.291	-.145	-.337	-1.019	-.562	-.558	-.460	-.359	-.193
	89.7	-.253	-1.000	-.587	-.523	-.384	-.278	-.167	-.177	-.883	-.554	-.604	-.451	-.344	-.210
	94.6	-.149	-.632	-.574	-.545	-.378	-.263	-.162	-.042	-.446	-.540	-.615	-.443	-.322	-.208

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.80		α = 16.73°					M = 0.80		α = 20.95°				
Upper surface	0.0	.065	-1.256	-1.225	-.658	-.529	-.529	-.421	-.052	-.875	-.876	-.732	-.692	-.642	-.928
	1.2	-.536	-1.371	-.977	-.614	-.465	-.492	-.389	-.591	-.851	-.821	-.714	-.660	-.629	-.579
	2.4	-1.024	-1.378	-.969	-.610	-.473	-.497	-.389	-.910	-.851	-.811	-.714	-.660	-.637	-.526
	5.0	-1.177	-1.347	-.963	-.601	-.485	-.497	-.386	-.880	-.848	-.811	-.710	-.660	-.637	-.511
	7.5	-1.267	-1.336	-.947	-.598	-.495	-.493	-.389	-.868	-.848	-.803	-.707	-.660	-.633	-.511
	10.0	-1.228	-1.324	-.935	-.592	-.507	-.497	-.394	-.874	-.848	-.803	-.706	-.661	-.642	-.509
	15.0	-1.062	-1.303	-.928	-.584	-.524	-.499	-.402	-.854	-.850	-.803	-.702	-.663	-.640	-.500
	19.6	-.891	-1.289	-.909	-.578	-.531	-.503	-.407	-.859	-.850	-.797	-.698	-.663	-.626	-.503
	24.5	-.834	-1.266	-.879	-.611	-.537	-.492	-.415	-.852	-.851	-.794	-.698	-.663	-.612	-.506
	29.5	-.799	-1.222	-.871	-.630	-.543	-.499	-.421	-.845	-.851	-.789	-.693	-.663	-.617	-.510
	34.5	-.780	-1.165	-.864	-.645	-.546	-.488	-.424	-.838	-.851	-.782	-.687	-.662	-.614	-.512
	39.5	-.731	-1.107	-.864	-.646	-.546	-.474	-.428	-.813	-.849	-.775	-.685	-.660	-.600	-.514
	44.5	-.688	-1.011	-.845	-.688	-.543	-.467	-.421	-.826	-.842	-.763	-.678	-.655	-.580	-.515
	49.5	-.577	-.901	-.813	-.626	-.536	-.461	-.410	-.819	-.844	-.751	-.672	-.648	-.560	-.507
	54.5	-.447	-.791	-.769	-.611	-.534	-.458	-.394	-.806	-.834	-.736	-.669	-.648	-.546	-.488
	59.5	-.317	-.688	-.719	-.599	-.523	-.453	-.365	-.785	-.821	-.727	-.667	-.653	-.553	-.453
	64.5	-.175	-.489	-.673	-.579	-.525	-.430	-.371	-.725	-.803	-.708	-.665	-.658	-.565	-.446
	69.6	-.006						-.353	-.036						-.423
	74.6	-.895	-.830	-.531	-.517	-.411	-.355	-.340	-.845	-.792	-.615	-.577	-.470	-.401	-.408
	79.5	-.853	-.800	-.590	-.519	-.415	-.374	-.332	-.815	-.787	-.625	-.573	-.472	-.427	-.397
	84.6	-.778	-.705	-.619	-.541	-.409	-.371	-.317	-.777	-.762	-.632	-.573	-.463	-.427	-.381
	89.6	-.710	-.769	-.597	-.519	-.416	-.357	-.307	-.756	-.752	-.632	-.564	-.461	-.415	-.366
	94.6	-.663	-.705	-.601	-.495	-.401	-.341	-.299	-.746	-.728	-.621	-.551	-.451	-.399	-.357
Lower surface	1.3	.466	.536	.501	.492	.494	.478	.426	.383	.514	.460	.420	.426	.411	.381
	2.6	.367	.618	.584	.562	.552	.515	.458	.204	.628	.578	.539	.534	.493	.449
	5.0	.596	.630	.585	.547	.531	.501	.428	.648	.682	.609	.577	.550	.515	.445
	7.6	.696	.602	.549	.526	.498	.472	.380	.789	.668	.590	.552	.531	.505	.412
	10.1	.696	.565	.539	.491	.466	.440	.344	.781	.638	.585	.528	.501	.479	.379
	15.1	.628	.506	.470	.434	.411	.377	.242	.709	.587	.521	.479	.452	.418	.276
	19.6	.550	.457	.421	.399	.369	.344	.174	.637	.537	.477	.443	.416	.385	.199
	24.5	.510	.417	.382	.350	.332	.295	.115	.596	.493	.439	.398	.381	.337	.148
	29.5	.461	.380	.349	.314	.298	.256	.082	.541	.458	.402	.361	.342	.296	.099
	34.5	.416	.349	.319	.279	.267	.224	.039	.499	.424	.369	.326	.307	.258	.048
	39.5	.379	.328	.291	.256	.251	.198	.005	.460	.396	.340	.299	.285	.226	.006
	44.5	.346	.311	.271	.239	.239	.184	-.046	.423	.370	.315	.272	.264	.206	-.049
	49.5	.316	.305	.257	.229	.281	.179	-.092	.389	.358	.291	.256	.263	.193	-.107
	54.5	.329	.332	.266	.245	.257	.198	-.132	.397	.376	.294	.260	.265	.200	-.158
	59.5	.341	.352	.302	.287	.304	.237	-.163	.403	.390	.315	.297	.299	.233	-.207
	64.5	.467	.384	.332	.345	.341	.250	-.192	.514	.414	.341	.347	.335	.247	-.242
	69.5	.681						-.213	.681						-.269
	74.6	-.931	-.588	-.703	-.678	-.430	-.385	-.222	-.868	-.530	-.790	-.704	-.546	-.458	-.278
	79.6	-.520	-.749	-.831	-.665	-.466	-.384	-.213	-.400	-.687	-.621	-.759	-.561	-.458	-.278
	84.6	-.171	-.910	-.825	-.648	-.469	-.381	-.210	-.083	-.852	-.800	-.785	-.555	-.457	-.268
	89.7	.015	-.651	-.731	-.632	-.462	-.373	-.225	.192	-.522	-.702	-.775	-.562	-.452	-.283
	94.6	.140	-.221	-.635	-.592	-.450	-.352	-.219	.164	-.144	-.583	-.695	-.537	-.426	-.283
		M = 0.90		α = 0.26°					M = 0.90		α = 4.22°				
Upper surface	0.0	.261	.520	.549	.545	.424	.504	.280	.264	.283	.281	.180	.257	.128	.320
	1.2	.311	-.006	.047	.156	.153	.186	.170	.200	-.875	-.844	-.814	-.894	-.890	-.723
	2.4	.167	-.043	.025	.096	.125	.135	.098	-.047	-.812	-.682	-.538	-.644	-.539	-.559
	5.0	.099	-.018	.033	.093	.099	.102	.057	-.117	-.342	-.440	-.294	-.280	-.303	-.366
	7.5	.061	-.024	.037	.083	.079	.081	.029	-.159	-.303	-.322	-.239	-.233	-.240	-.301
	10.0	.034	-.039	.034	.075	.075	.061	.002	-.180	-.314	-.250	-.188	-.203	-.204	-.248
	15.0	.016	-.032	.060	.077	.076	.067	-.016	-.179	-.272	-.148	-.126	-.145	-.135	-.118
	19.6	-.002	-.034	.065	.094	.100	.104	-.012	-.185	-.242	-.113	-.053	-.088	-.069	-.062
	24.5	-.034	.003	.114	.100	.098	.097	-.012	-.216	-.177	-.010	-.033	-.051	-.043	-.048
	29.5	-.010	.031	.152	.115	.112	.090	-.002	-.181	-.109	.048	.001	-.008	-.010	-.024
	34.5	-.024	.082	.178	.149	.136	.106	.004	-.194	-.028	.099	.045	.043	.034	-.009
	39.5	.001	.153	.214	.175	.171	.127	.006	-.153	.077	.156	.087	.105	.079	-.004
	44.5	.022	.239	.261	.218	.214	.154	-.017	-.101	.198	.203	.136	.152	.122	-.019
	49.5	.075	.345	.320	.274	.266	.197	-.063	-.031	.317	.222	.175	.193	.157	-.052
	54.5	.167	.453	.362	.340	.325	.249	-.108	.079	.368	.214	.206	.220	.174	-.105
	59.5	.317	.481	.360	.366	.342	.275	-.154	.221	.327	.200	.221	.225	.173	-.148
	64.5	.445	.415	.344	.374	.346	.262	-.186	.384	.110	.188	.294	.220	.156	-.190
	69.6	.092						-.186	.036						-.203
	74.6	-.939	-.812	-.652	-.493	-.435	-.331	-.196	-.905	-.807	-.638	-.528	-.410	-.325	-.228
	79.5	-.865	-.796	-.660	-.504	-.430	-.330	-.189	-.838	-.796	-.636	-.530	-.414	-.325	-.220
	84.6	-.761	-.777	-.669	-.514	-.424	-.327	-.198	-.777	-.785	-.645	-.530	-.407	-.322	-.224
	89.6	-.703	-.772	-.678	-.517	-.423	-.318	-.192	-.703	-.763	-.651	-.527	-.412	-.317	-.217
	94.6	-.632	-.737	-.658	-.515	-.419	-.309	-.182	-.689	-.721	-.641	-.525	-.411	-.312	-.207
Lower surface	1.3	.224	.037	.029	-.034	-.119	-.157	-.155	.356	.399	.417	.422	.388	.381	.324
	2.6	.185	.013	-.014	-.051	-.061	-.097	-.130	.319	.339	.338	.330	.308	.316	.250
	5.0	.121	.009	.003	.005	-.047	-.063	-.121	.290	.248	.261	.259	.243	.234	.183
	7.6	.078	-.001	-.017	-.024	-.052	-.075	-.109	.252	.202	.209	.208	.193	.192	.119
	10.1	.047	-.015	-.006	-.042	-.065	-.070	-.114	.213	.167	.184	.175	.153	.163	.074
	15.1	.026	-.039	-.035	-.055	-.070	-.076	-.111	.175	.129	.145	.136	.124	.116	-.004
	19.6	-.014	-.045	-.035	-.035	-.070	-.074	-.088	.131	.101	.116	.120	.098	.086	
	24.5	-.021	-.071	-.041	-.052	-.065	-.072	-.078	.117	.067	.093	.086	.080	.065	-.047
	29.5	-.043	-.073	-.031	-.044	-.051	-.057	-.050	.085	.058	.081	.072	.067	.053	-.033
	34.5	-.062	-.064	-.018	-.034	-.030	-.034	-.040	.082	.055	.076	.065	.067	.046	-.037
	39.5	-.074	-.035	.001	-.010	-.003	-.010	-.036	.044	.065	.079	.070	.074	.048	-.045
	44.5	-.083	.009	.030	.026	.037	.031	-.047	.025	.091	.091	.086	.095	.065	-.057
	49.5	-.069	.069	.075	.077	.114	.088	-.079	.025	.129	.120	.120	.126	.100	-.097
	54.5	-.018	.159	.146	.147	.172	.163	-.117	.068	.199	.173	.170	.189	.161	-.140
	59.5	.097	.240	.238	.203	.227	.230	-.147	.142	.257	.246	.216	.245	.237	-.173
	64.5	.267	.306	.267	.264	.235	.207	-.160	.327	.292	.266	.289	.261	.215	-.189
	69.5	.413						-.154	.521						-.191
	74.6	-.961	-.954	-.691	-.521	-.421	-.346	-.160	-.964	-.880	-.673	-.573	-.450	.223	-.194
	79.6	-.727	-.936	-.684	-.518	-.419	-.341	-.163	-.762	-.917	-.662	-.567	-.456	-.338	-.204
	84.6	-.525	-.925	-.673	-.510	-.422	-.337	-.159	-.500	-.950	-.654	-.555	-.451	-.335	-.208
	89.7	-.464	-.940	-.652	-.513	-.421	-.322	-.170	-.370	-.975	-.637	-.554	-.448	-.322	-.226
	94.6	-.365	-.836	-.652	-.532	-.416	-.305	-.168	-.271	-.832	-.631	-.580	-.443	-.306	-.218

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued

	Percent chord	Pressure coefficient												
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.90		α = 6.20°					M = 0.90		α = 8.25°				
Upper surface	0.0	.260	.091	.026	-.115	-.060	-.160	.114	.266	-.094	-.197	-.405	-.268	-.402	-.008
	1.2	.120	-1.211	-1.213	-1.004	-1.085	-.639	-.763	.042	-1.307	-1.407	-.981	-.953	-.752	-.527
	2.4	-.176	-1.178	-1.151	-.779	-.801	-.584	-.692	-.279	-1.278	-1.342	-.972	-.885	-.774	-.514
	5.0	-.286	-.723	-1.047	-.605	-.648	-.552	-.627	-.423	-1.040	-1.322	-1.035	-.879	-.749	-.497
	7.5	-.293	-.565	-.851	-.555	-.536	-.488	-.594	-.432	-.865	-1.193	-.920	-.934	-.629	-.488
	10.0	-.317	-.520	-.607	-.452	-.536	-.446	-.536	-.453	-.795	-.955	-.463	-.900	-.583	-.475
	15.0	-.302	-.475	-.304	-.241	-.358	-.400	-.364	-.422	-.496	-.803	-.314	-.496	-.553	-.454
	19.6	-.304	-.431	-.196	-.149	-.213	-.369	-.251	-.410	-.640	-.734	-.277	-.305	-.537	-.448
	24.5	-.337	-.369	-.069	-.141	-.136	-.314	-.181	-.430	-.580	-.382	-.287	-.259	-.523	-.424
	29.5	-.298	-.206	-.004	-.118	-.100	-.286	-.135	-.396	-.466	-.011	-.262	-.245	-.516	-.411
	34.5	-.334	-.094	.053	-.091	-.074	-.229	-.116	-.428	-.234	.044	-.241	-.219	-.487	-.400
	39.5	-.294	.007	.094	-.062	-.036	-.160	-.100	-.412	-.077	.064	-.229	-.188	-.454	-.394
	44.5	-.210	.122	.127	-.035	-.006	-.083	-.103	-.406	.046	.076	-.221	-.171	-.374	-.385
	49.5	-.102	.235	.139	-.014	.020	-.018	-.120	-.218	.147	.074	-.217	-.149	-.289	-.383
	54.5	.025	.303	.134	.007	.042	.039	-.156	-.009	.205	.064	-.211	-.133	-.206	-.380
	59.5	.183	.276	.127	.025	.068	.078	-.180	.125	.179	.049	-.200	-.111	-.140	-.360
	64.5	.343	.148	.115	.045	.082	.095	-.215	.246	.144	.036	-.183	-.092	-.102	-.353
	69.6	.000						-.222	-.006						-.332
	74.6	-.877	-.799	-.632	-.508	-.403	-.338	-.238	-.842	-.779	-.623	-.487	-.394	-.343	-.317
	79.5	-.831	-.787	-.631	-.508	-.409	-.340	-.240	-.811	-.766	-.623	-.490	-.404	-.347	-.308
	84.6	-.783	-.777	-.635	-.510	-.409	-.336	-.244	-.769	-.755	-.632	-.492	-.404	-.343	-.297
	89.6	-.709	-.750	-.635	-.509	-.415	-.331	-.239	-.713	-.729	-.632	-.491	-.413	-.337	-.287
	94.6	-.709	-.720	-.625	-.507	-.419	-.324	-.234	-.697	-.701	-.610	-.490	-.415	-.330	-.278
Lower surface	1.3	.402	.482	.484	.483	.461	.451	.387	.442	.538	.516	.504	.498	.496	.437
	2.6	.364	.432	.421	.413	.398	.390	.327	.392	.504	.476	.460	.457	.455	.389
	5.0	.366	.333	.343	.345	.327	.300	.262	.440	.411	.405	.398	.400	.387	.352
	7.6	.332	.283	.287	.286	.269	.256	.203	.421	.363	.349	.341	.345	.337	.288
	10.1	.296	.251	.265	.251	.232	.216	.149	.388	.324	.322	.309	.304	.301	.221
	15.1	.253	.202	.212	.206	.189	.174	.051	.338	.271	.266	.256	.248	.238	.107
	19.6	.202	.160	.176	.181	.156	.142	-.003	.284	.227	.226	.225	.215	.208	.043
	24.5	.183	.127	.146	.144	.134	.109	-.032	.256	.190	.194	.184	.187	.165	.008
	29.5	.148	.111	.129	.125	.113	.089	-.028	.215	.170	.172	.164	.162	.141	-.001
	34.5	.117	.104	.118	.112	.104	.075	-.036	.183	.157	.155	.146	.152	.122	-.021
	39.5	.098	.108	.115	.109	.108	.067	-.045	.155	.157	.146	.139	.149	.106	-.035
	44.5	.071	.127	.120	.119	.120	.078	-.067	.129	.166	.149	.142	.152	.111	-.057
	49.5	.066	.156	.144	.145	.144	.100	-.104	.115	.186	.161	.162	.168	.124	-.101
	54.5	.109	.216	.187	.188	.197	.157	-.144	.159	.239	.197	.203	.218	.170	-.140
	59.5	.166	.267	.255	.234	.253	.226	-.175	.198	.284	.260	.256	.270	.237	-.177
	64.5	.344	.303	.289	.308	.274	.211	-.188	.389	.321	.299	.317	.291	.230	-.187
	69.5	.564						-.188	.638						-.189
	74.6	-1.002	-.818	-.659	-.570	-.448	-.343	-.198	-.990	-.769	-.665	-.571	-.432	-.348	-.192
	79.6	-.785	-.878	-.652	-.567	-.453	-.351	-.208	-.772	-.895	-.658	-.569	-.443	-.348	-.204
	84.6	-.491	-.972	-.652	-.553	-.446	-.346	-.214	-.505	-1.033	-.648	-.561	-.439	-.344	-.210
	89.7	-.367	-1.020	-.637	-.551	-.446	-.334	-.231	-.434	-1.021	-.629	-.569	-.439	-.329	-.228
	94.6	-.246	-.795	-.626	-.571	-.446	-.315	-.227	-.183	-.674	-.611	-.588	-.436	-.316	-.223
		M = 0.90		α = 12.20°					M = 0.90		α = 17.02°				
Upper surface	0.0	.250	-.473	-.607	-.660	-.435	-.664	-.343	.158	-.889	-1.013	-.747	-.528	-.539	-.429
	1.2	-.108	-1.379	-1.126	-.593	-.504	-.654	-.649	-.302	-1.378	-.947	-.711	-.477	-.502	-.410
	2.4	-.456	-1.373	-1.110	-.585	-.545	-.696	-.645	-.743	-1.382	-.931	-.705	-.483	-.507	-.412
	5.0	-.546	-1.319	-1.103	-.570	-.601	-.682	-.641	-.884	-1.356	-.931	-.692	-.491	-.512	-.411
	7.5	-.701	-1.285	-1.072	-.566	-.626	-.648	-.693	-1.008	-1.349	-.921	-.684	-.502	-.513	-.411
	10.0	-.705	-1.236	-1.061	-.565	-.545	-.658	-.618	-.995	-1.338	-.915	-.673	-.513	-.515	-.414
	15.0	-.659	-1.191	-1.030	-.560	-.389	-.676	-.585	-.937	-1.287	-.926	-.653	-.528	-.516	-.412
	19.6	-.624	-1.093	-1.017	-.562	-.335	-.683	-.572	-.864	-1.228	-.914	-.638	-.538	-.518	-.410
	24.5	-.609	-1.058	-.969	-.607	-.343	-.684	-.545	-.791	-1.181	-.889	-.662	-.547	-.509	-.411
	29.5	-.572	-.964	-.939	-.666	-.381	-.702	-.532	-.737	-1.193	-.883	-.673	-.558	-.515	-.415
	34.5	-.581	-.813	-.923	-.723	-.406	-.692	-.522	-.712	-1.077	-.884	-.673	-.562	-.510	-.421
	39.5	-.546	-.534	-.911	-.740	-.433	-.663	-.510	-.658	-1.042	-.866	-.670	-.562	-.502	-.427
	44.5	-.559	-.207	-.887	-.731	-.472	-.624	-.500	-.627	-.965	-.841	-.658	-.558	-.494	-.428
	49.5	-.453	.000	-.801	-.715	-.500	-.572	-.493	-.574	-.847	-.813	-.630	-.554	-.486	-.428
	54.5	-.306	.069	-.649	-.684	-.521	-.529	-.480	-.472	-.725	-.783	-.632	-.553	-.482	-.421
	59.5	-.233	.055	-.485	-.635	-.526	-.489	-.440	-.384	-.694	-.748	-.625	-.544	-.479	-.404
	64.5	-.058	.071	-.308	-.574	-.532	-.432	-.420	-.244	-.499	-.684	-.606	-.551	-.464	-.415
	69.6	-.011						-.402	-.027						-.400
	74.6	-.763	-.734	-.596	-.524	-.421	-.387	-.387	-.884	-.868	-.610	-.526	-.456	-.403	-.393
	79.5	-.757	-.723	-.635	-.542	-.432	-.414	-.376	-.901	-.845	-.628	-.526	-.458	-.413	-.392
	84.6	-.728	-.715	-.727	-.549	-.432	-.423	-.363	-.875	-.760	-.648	-.536	-.450	-.413	-.383
	89.6	-.669	-.683	-.676	-.555	-.439	-.419	-.350	-.760	-.798	-.642	-.529	-.457	-.406	-.370
	94.6	-.650	-.663	-.545	-.553	-.433	-.404	-.336	-.717	-.765	-.607	-.517	-.445	-.394	-.366
Lower surface	1.3	.490	.596	.551	.537	.522	.500	.440	.511	.598	.545	.508	.503	.485	.442
	2.6	.403	.600	.557	.537	.514	.485	.430	.368	.658	.611	.571	.556	.520	.470
	5.0	.555	.542	.514	.505	.474	.427	.383	.658	.655	.604	.580	.539	.507	.442
	7.6	.581	.497	.462	.448	.427	.400	.323	.749	.626	.566	.539	.508	.480	.392
	10.1	.562	.458	.444	.414	.387	.365	.288	.737	.588	.557	.508	.472	.449	.361
	15.1	.502	.395	.374	.354	.331	.301	.170	.662	.528	.486	.451	.414	.385	.250
	19.6	.434	.344	.330	.317	.293	.255	.123	.584	.480	.444	.418	.377	.359	.192
	24.5	.393	.306	.297	.275	.260	.224	.059	.538	.439	.403	.369	.341	.307	.118
	29.5	.346	.282	.266	.246	.229	.193	.025	.487	.407	.370	.335	.304	.266	.079
	34.5	.307	.260	.247	.221	.209	.170	-.001	.444	.379	.341	.302	.277	.236	.034
	39.5	.274	.248	.228	.206	.198	.146	-.031	.410	.360	.316	.276	.258	.211	-.002
	44.5	.240	.248	.221	.198	.193	.139	-.073	.377	.344	.298	.254	.243	.191	-.053
	49.5	.221	.253	.221	.207	.203	.142	-.131	.345	.340	.285	.249	.293	.185	-.121
	54.5	.255	.296	.244	.232	.234	.175	-.185	.363	.368	.293	.262	.258	.205	-.189
	59.5	.281	.327	.293	.274	.280	.228	-.224	.376	.386	.329	.305	.300	.247	-.244
	64.5	.429	.362	.323	.338	.312	.232	-.241	.511	.414	.356	.359	.336	.260	-.282
	69.5	.712						-.237	.731						-.299
	74.6	-.847	-.622	-.692	-.549	-.468	-.402	-.244	-.781	-.548	-.723	-.732	-.512	-.432	-.310
	79.6	-.708	-.777	-.682	-.561	-.486	-.398	-.246	-.533	-.678	-.816	-.717	-.517	-.437	-.295
	84.6	-.397	-.958	-.661	-.572	-.475	-.390	-.246	-.199	-.830	-.772	-.703	-.510	-.432	-.293
	89.7	-.250	-.889	-.620	-.606	-.475	-.376	-.260	.053	-.679	-.691	-.695	-.505	-.427	-.307
	94.6	.074	-.515	-.570	-.626	-.467	-.359	-.256	.213	-.327	-.604	-.650	-.490	-.415	-.306

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued.

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.90		α = 21.20°					M = 0.94		α = 0.26°				
Upper surface	0.0	.040	-.895	-.872	-.737	-.603	-.607	-.972	.275	.535	.547	.543	.485	.525	.297
	1.2	-.444	-.867	-.838	-.716	-.635	-.604	-.591	.324	.005	.040	.264	.196	.183	.178
	2.4	-.814	-.867	-.826	-.716	-.630	-.603	-.550	.191	-.032	.029	.109	.131	.131	.101
	5.0	-.856	-.867	-.826	-.709	-.628	-.606	-.528	.123	-.008	.041	.106	.108	.103	.069
	7.5	-.838	-.866	-.816	-.708	-.627	-.609	-.528	.081	-.019	.049	.099	.087	.086	.027
	10.0	-.849	-.868	-.809	-.703	-.629	-.613	-.528	.049	-.028	.049	.090	.084	.064	-.001
	15.0	-.856	-.865	-.828	-.695	-.631	-.617	-.528	.025	-.028	.072	.095	.085	.072	-.035
	19.6	-.859	-.863	-.816	-.685	-.630	-.650	-.528	.020	-.031	.083	.110	.105	.108	-.024
	24.5	-.854	-.867	-.804	-.695	-.628	-.634	-.528	-.025	.008	.141	.118	.102	.094	-.018
	29.5	-.849	-.867	-.810	-.693	-.628	-.668	-.534	-.004	.040	.170	.131	.117	.094	-.003
	34.5	-.844	-.857	-.803	-.693	-.627	-.662	-.537	-.018	.099	.198	.167	.140	.109	.013
	39.5	-.809	-.859	-.800	-.692	-.627	-.640	-.542	.005	.172	.235	.187	.174	.129	.013
	44.5	-.809	-.849	-.786	-.688	-.627	-.619	-.537	.033	.265	.281	.231	.216	.160	-.008
	49.5	-.797	-.854	-.771	-.688	-.623	-.602	-.530	.087	.372	.340	.285	.270	.205	-.061
	54.5	-.771	-.841	-.749	-.674	-.627	-.587	-.516	.186	.479	.376	.348	.326	.258	-.133
	59.5	-.715	-.836	-.734	-.670	-.623	-.585	-.484	.334	.505	.371	.370	.342	.281	-.190
	64.5	-.598	-.807	-.718	-.650	-.624	-.585	-.494	.471	.499	.353	.376	.345	.270	-.242
	69.6	-.066						-.479	.029						-.248
	74.6	-.868	-.821	-.841	-.616	-.526	-.445	-.437	-.963	-.837	-.680	-.540	-.458	-.358	-.295
	79.5	-.846	-.811	-.658	-.609	-.526	-.466	-.450	-.899	-.816	-.688	-.544	-.484	-.359	-.247
	84.6	-.815	-.737	-.666	-.602	-.518	-.466	-.435	-.780	-.805	-.694	-.549	-.451	-.359	-.245
	89.6	-.768	-.778	-.672	-.595	-.513	-.459	-.421	-.696	-.800	-.702	-.548	-.446	-.352	-.234
	94.6	-.749	-.754	-.655	-.586	-.501	-.443	-.413	-.595	-.755	-.683	-.547	-.444	-.346	-.221
Lower surface	1.3	.401	.574	.508	.456	.449	.434	.380	.244	.063	.048	.001	-.088	-.139	-.158
	2.6	.202	.677	.615	.568	.554	.508	.463	.205	.036	.012	-.020	-.043	-.081	-.152
	5.0	.714	.722	.644	.607	.571	.529	.453	.143	.027	.024	.035	-.019	-.061	-.122
	7.6	.838	.708	.624	.581	.552	.515	.422	.099	.015	.004	.002	-.033	-.070	-.113
	10.1	.824	.679	.620	.558	.524	.490	.393	.066	.001	.015	-.014	-.051	-.067	-.127
	15.1	.751	.625	.559	.511	.478	.432	.294	.039	-.020	-.013	-.028	-.058	-.077	-.193
	19.6	.683	.580	.519	.476	.441	.405	.227	.003	-.029	-.011	-.009	-.058	-.067	-.144
	24.5	.639	.538	.479	.432	.402	.351	.152	-.005	-.061	-.015	-.029	-.033	-.074	-.082
	29.5	.591	.502	.445	.395	.362	.310	.103	-.027	-.061	-.007	-.023	-.043	-.066	-.050
	34.5	.548	.470	.415	.358	.330	.275	.033	-.047	-.047	.007	-.014	-.028	-.047	-.038
	39.5	.511	.446	.386	.333	.305	.243	.009	-.060	-.012	.028	.009	-.003	-.023	-.030
	44.5	.473	.422	.362	.304	.281	.219	-.048	-.074	.039	.096	.043	.033	.021	-.037
	49.5	.440	.412	.342	.290	.319	.204	-.132	-.058	.099	.099	.094	.101	.083	-.069
	54.5	.450	.433	.342	.292	.281	.212	-.204	-.002	.189	.163	.158	.172	.164	-.126
	59.5	.456	.440	.366	.312	.311	.246	-.265	.120	.272	.253	.218	.230	.244	-.184
	64.5	.578	.462	.384	.362	.340	.260	-.318	.290	.337	.293	.269	.231	.230	-.212
	69.5	.731						-.344	.432						-.199
	74.6	-.727	-.447	-.653	-.772	-.586	-.495	-.360	-.907	-.929	-.710	-.560	-.467	-.355	-.210
	79.6	-.331	-.570	-.723	-.673	-.614	-.497	-.347	-.935	-.933	-.707	-.565	-.447	-.341	-.205
	84.6	-.070	-.698	-.689	-.911	-.588	-.490	-.351	-.498	-.948	-.707	-.558	-.444	-.358	-.197
	89.7	.233	-.432	-.609	-.853	-.583	-.482	-.353	-.407	-.972	-.680	-.555	-.464	-.344	-.209
	94.6	.254	-.098	-.547	-.678	-.545	-.472	-.358	-.290	-.884	-.653	-.577	-.458	-.321	-.197
		M = 0.94		α = 4.24°					M = 0.94		α = 6.22°				
Upper surface	0.0	.270	.320	.303	.213	.277	.142	.328	.293	.176	.116	-.048	.051	-.084	.165
	1.2	.218	-.814	-.953	-.727	-.834	-.890	-.750	.168	-1.052	-1.162	-.615	-1.005	-.643	-.723
	2.4	-.017	-.767	-.887	-.515	-.667	-.773	-.610	-.106	-1.029	-1.134	-.568	-.772	-.584	-.647
	5.0	-.089	-.338	-.519	-.304	-.291	-.294	-.380	-.220	-.696	-1.022	-.509	-.583	-.521	-.575
	7.5	-.137	-.287	-.277	-.236	-.217	-.233	-.321	-.226	-.485	-.920	-.478	-.487	-.443	-.551
	10.0	-.163	-.299	-.176	-.187	-.209	-.233	-.280	-.257	-.441	-.831	-.439	-.463	-.393	-.525
	15.0	-.187	-.305	-.115	-.109	-.150	-.153	-.173	-.253	-.412	-.266	-.366	-.304	-.359	-.465
	19.6	-.174	-.280	-.084	-.037	-.093	-.087	-.064	-.257	-.386	-.056	-.290	-.174	-.247	-.358
	24.5	-.210	-.247	.017	-.016	-.057	-.051	-.052	-.288	-.373	.031	-.258	-.107	-.338	-.233
	29.5	-.188	-.090	.073	.018	-.015	-.034	-.029	-.260	-.364	.065	-.187	-.071	-.327	-.179
	34.5	-.218	-.003	.119	.037	.037	.010	-.016	-.295	-.127	.104	-.107	-.049	-.268	-.116
	39.5	-.195	.102	.172	.098	.092	.037	-.010	-.287	.056	.144	-.032	-.018	-.175	-.078
	44.5	-.117	.219	.216	.141	.140	.106	-.025	-.283	.184	.162	.031	.001	-.078	-.073
	49.5	-.021	.334	.227	.172	.181	.144	-.066	-.169	.283	.156	.083	.020	-.004	-.100
	54.5	.098	.380	.215	.201	.207	.162	-.126	.043	.338	.148	.130	.033	.051	-.146
	59.5	.238	.336	.200	.218	.214	.163	-.180	.207	.271	.144	.166	.044	.081	-.181
	64.5	.392	.127	.187	.226	.212	.149	-.236	.363	.174	.134	.197	.044	.103	-.222
	69.6	.009						-.258	.012						-.235
	74.6	-.966	-.847	-.678	-.572	-.445	-.362	-.279	-.903	-.821	-.654	-.541	-.437	-.352	-.255
	79.5	-.880	-.834	-.679	-.571	-.445	-.364	-.278	-.858	-.806	-.651	-.541	-.436	-.356	-.258
	84.6	-.803	-.824	-.684	-.570	-.443	-.364	-.279	-.793	-.797	-.660	-.541	-.436	-.355	-.262
	89.6	-.720	-.809	-.692	-.566	-.443	-.361	-.269	-.706	-.777	-.664	-.537	-.442	-.352	-.257
	94.6	-.678	-.766	-.679	-.559	-.442	-.358	-.259	-.682	-.741	-.650	-.534	-.443	-.347	-.252
Lower surface	1.3	.359	.393	.413	.427	.390	.372	.315	.421	.495	.487	.499	.468	.455	.392
	2.6	.324	.333	.335	.398	.307	.302	.243	.385	.441	.425	.427	.401	.394	.328
	5.0	.299	.245	.261	.269	.243	.200	.184	.390	.344	.348	.359	.339	.309	.265
	7.6	.296	.202	.212	.213	.190	.180	.122	.354	.296	.293	.303	.279	.259	.201
	10.1	.215	.169	.189	.183	.153	.155	.071	.316	.267	.277	.266	.237	.222	.148
	15.1	.176	.128	.150	.146	.121	.103	-.031	.270	.213	.223	.221	.197	.180	.042
	19.6	.136	.099	.125	.129	.097	.088	-.066	.222	.179	.191	.196	.167	.154	.007
	24.5	.122	.067	.101	.092	.076	.051	-.064	.202	.142	.164	.156	.142	.117	-.063
	29.5	.091	.057	.090	.078	.064	.036	-.049	.169	.127	.148	.135	.122	.094	-.042
	34.5	.064	.056	.085	.070	.060	.029	-.048	.138	.121	.138	.123	.114	.077	-.037
	39.5	.046	.070	.088	.073	.070	.029	-.048	.118	.129	.134	.120	.114	.069	-.037
	44.5	.025	.101	.100	.091	.087	.044	-.061	.092	.153	.141	.129	.125	.074	-.053
	49.5	.027	.143	.127	.123	.115	.078	-.101	.086	.182	.158	.135	.146	.100	-.096
	54.5	.079	.214	.177	.172	.184	.149	-.161	.137	.244	.202	.197	.207	.161	-.158
	59.5	.159	.267	.251	.217	.236	.222	-.217	.196	.291	.272	.254	.261	.231	-.213
	64.5	.341	.301	.270	.290	.249	.200	-.240	.377	.326	.295	.312	.273	.213	-.231
	69.5	.336						-.234	.389						-.224
	74.6	-.977	-.894	-.693	-.600	-.471	-.380	-.246	-.955	-.856	-.672	-.590	-.455	-.344	-.232
	79.6	-.842	-.939	-.682	-.607	-.481	-.372	-.253	-.789	-.935	-.662	-.598	-.477	-.358	-.241
	84.6	-.499	-.995	-.682	-.599	-.473	-.370	-.261	-.484	-1.006	-.652	-.588	-.468	-.356	-.247
	89.7	-.395	-1.049	-.673	-.588	-.473	-.358	-.280	-.394	-1.018	-.640	-.577	-.467	-.345	-.259
	94.6	-.238	-.902	-.658	-.605	-.473	-.346	-.273	-.190	-.786	-.625	-.592	-.464	-.306	-.250

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.94		α = 8.25°					M = 0.94		α = 12.73°				
Upper surface	0.0	.302	.008	-.089	-.315	-.160	-.307	.016	.279	-.414	-.563	-.699	-.467	-.569	-.268
	1.2	.102	-1.208	-1.280	-.765	-.768	-.681	-.613	-.061	-1.304	-1.133	-.697	-.556	-.508	-.462
	2.4	-.200	-1.182	-1.259	-.760	-.726	-.697	-.592	-.403	-1.299	-1.108	-.652	-.564	-.521	-.455
	5.0	-.330	-1.046	-1.202	-.726	-.765	-.686	-.579	-.494	-1.244	-1.102	-.641	-.582	-.534	-.451
	7.5	-.357	-.775	-1.131	-.720	-.874	-.571	-.579	-.682	-1.191	-1.075	-.645	-.600	-.533	-.446
	10.0	-.385	-.663	-1.091	-.721	-.767	-.542	-.575	-.662	-1.128	-1.069	-.649	-.601	-.533	-.437
	15.0	-.368	-.578	-.929	-.709	-.319	-.534	-.554	-.618	-1.059	-1.046	-.652	-.524	-.539	-.423
	19.6	-.352	-.536	-.568	-.676	-.202	-.544	-.523	-.587	-1.021	-1.028	-.661	-.461	-.537	-.428
	24.5	-.376	-.505	-.336	-.684	-.169	-.537	-.471	-.570	-.996	-.969	-.722	-.440	-.531	-.425
	29.5	-.343	-.482	-.131	-.631	-.157	-.555	-.436	-.534	-.949	-.936	-.779	-.461	-.540	-.426
	34.5	-.374	-.424	.053	-.542	-.139	-.529	-.415	-.543	-.841	-.908	-.822	-.480	-.537	-.423
	39.5	-.360	-.149	.115	-.385	-.126	-.472	-.405	-.502	-.676	-.902	-.830	-.503	-.529	-.417
	44.5	-.372	.050	.132	-.159	-.126	-.373	-.402	-.526	-.384	-.896	-.816	-.540	-.522	-.407
	49.5	-.371	.175	.127	.018	-.129	-.239	-.412	-.489	-.133	-.852	-.799	-.560	-.510	-.399
	54.5	-.086	.224	.116	.108	-.148	-.094	-.427	-.328	-.041	-.739	-.760	-.567	-.497	-.388
	59.5	.058	.167	.100	.163	-.178	.020	-.411	-.253	-.032	-.571	-.702	-.559	-.482	-.367
	64.5	.227	.175	.084	.198	-.221	.071	-.415	-.125	.018	-.402	-.617	-.554	-.456	-.373
	69.6	.009						.013	-.010						-.366
	74.6	-.867	-.805	-.635	-.505	-.441	-.344	-.356	-.831	-.799	-.641	-.553	-.448	-.387	-.335
	79.5	-.843	-.792	-.638	-.507	-.440	-.353	-.333	-.831	-.782	-.663	-.572	-.455	-.402	-.347
	84.6	-.785	-.778	-.645	-.510	-.438	-.350	-.318	-.797	-.738	-.718	-.588	-.485	-.399	-.340
	89.6	-.717	-.754	-.648	-.507	-.448	-.347	-.309	-.718	-.746	-.715	-.599	-.466	-.390	-.334
	94.6	-.674	-.723	-.628	-.505	-.457	-.343	-.293	-.681	-.721	-.629	-.588	-.458	-.378	-.326
Lower surface	1.3	.463	.561	.532	.527	.514	.501	.437	.514	.628	.578	.547	.534	.516	.466
	2.6	.418	.523	.487	.479	.469	.458	.408	.426	.636	.585	.554	.588	.506	.455
	5.0	.467	.432	.418	.418	.416	.386	.337	.598	.583	.542	.530	.496	.488	.414
	7.6	.447	.384	.365	.363	.360	.339	.276	.628	.539	.493	.475	.454	.428	.399
	10.1	.411	.347	.342	.333	.317	.303	.225	.612	.497	.477	.436	.412	.388	.317
	15.1	.363	.293	.285	.278	.259	.240	.104	.547	.436	.405	.378	.353	.325	.202
	19.6	.308	.252	.247	.251	.228	.214	-.004	.476	.390	.364	.347	.317	.289	.145
	24.5	.281	.214	.217	.208	.197	.170	-.004	.436	.350	.329	.300	.283	.251	.075
	29.5	.245	.194	.197	.186	.171	.144	-.011	.390	.320	.300	.272	.249	.215	.045
	34.5	.207	.181	.181	.167	.158	.122	-.024	.350	.302	.277	.244	.226	.188	.016
	39.5	.183	.184	.172	.158	.155	.109	-.032	.320	.290	.260	.226	.214	.166	-.013
	44.5	.154	.197	.174	.162	.159	.110	-.055	.284	.288	.251	.216	.208	.155	-.053
	49.5	.143	.218	.187	.179	.174	.125	-.101	.265	.294	.249	.219	.232	.157	-.113
	54.5	.190	.273	.221	.214	.226	.175	-.169	.295	.333	.268	.242	.248	.187	-.189
	59.5	.233	.316	.284	.257	.276	.242	-.219	.323	.360	.315	.284	.291	.246	-.251
	64.5	.406	.346	.307	.331	.294	.238	-.235	.471	.390	.339	.348	.319	.252	-.281
	69.5	.643						-.002	.749						-.276
	74.6	-.920	-.775	-.715	-.595	-.451	-.343	-.220	-.772	-.577	-.765	-.642	-.521	-.446	-.273
	79.6	-.778	-.870	-.715	-.599	-.440	-.352	-.232	-.674	-.746	-.772	-.651	-.527	-.421	-.268
	84.6	-.474	-1.008	-.695	-.590	-.456	-.351	-.238	-.354	-.921	-.737	-.641	-.521	-.409	-.274
	89.7	-.395	-.972	-.664	-.582	-.455	-.342	-.252	-.192	-.788	-.649	-.648	-.514	-.393	-.290
	94.6	-.144	-.636	-.641	-.586	-.455	-.315			-.441	-.561	-.639	-.503	-.365	-.293
		M = 0.94		α = 17.16°					M = 0.94		α = 21.35°				
Upper surface	0.0	.200	-.750	-.912	-.707	-.549	-.530	-.450	.070	-1.008	-1.052	-.791	-.609	-.612	-.893
	1.2	-.207	-1.329	-1.021	-.658	-.505	-.496	-.432	-.368	-1.102	-.940	-.761	-.623	-.604	-.616
	2.4	-.625	-1.329	-1.002	-.655	-.515	-.502	-.438	-.835	-1.106	-.925	-.757	-.623	-.605	-.583
	5.0	-.771	-1.317	-1.006	-.654	-.527	-.509	-.437	-.966	-1.077	-.930	-.748	-.623	-.605	-.565
	7.5	-.903	-1.320	-.986	-.651	-.540	-.509	-.437	-1.068	-1.072	-.920	-.743	-.624	-.608	-.561
	10.0	-.886	-1.304	-.971	-.642	-.551	-.513	-.438	-1.073	-1.072	-.913	-.735	-.627	-.612	-.561
	15.0	-.823	-1.254	-.977	-.634	-.560	-.518	-.438	-1.001	-1.053	-.923	-.721	-.633	-.609	-.587
	19.6	-.771	-1.214	-.961	-.642	-.565	-.523	-.436	-.934	-1.040	-.911	-.705	-.635	-.613	-.561
	24.5	-.713	-1.188	-.918	-.679	-.572	-.518	-.434	-.876	-1.044	-.890	-.709	-.635	-.613	-.563
	29.5	-.647	-1.157	-.904	-.694	-.583	-.528	-.434	-.819	-1.034	-.891	-.710	-.635	-.629	-.568
	34.5	-.658	-1.110	-.877	-.696	-.589	-.525	-.435	-.800	-1.010	-.883	-.715	-.634	-.632	-.571
	39.5	-.619	-1.053	-.871	-.692	-.586	-.519	-.441	-.745	-1.002	-.872	-.719	-.634	-.626	-.577
	44.5	-.624	-.892	-.857	-.684	-.582	-.513	-.441	-.759	-.977	-.851	-.722	-.632	-.619	-.573
	49.5	-.555	-.545	-.827	-.673	-.570	-.506	-.441	-.745	-.956	-.833	-.725	-.629	-.612	-.569
	54.5	-.438	-.323	-.784	-.654	-.557	-.499	-.439	-.661	-.970	-.812	-.721	-.628	-.607	-.561
	59.5	-.379	-.290	-.739	-.642	-.547	-.494	-.423	-.589	-.953	-.795	-.713	-.622	-.609	-.557
	64.5	-.253	-.307	-.698	-.622	-.547	-.485	-.436	-.540	-.854	-.767	-.696	-.624	-.615	-.547
	69.6	-.029						-.425	-.087						-.530
	74.6	-.883	-.850	-.650	-.544	-.475	-.422	-.420	-1.004	-.914	-.723	-.655	-.580	-.521	-.521
	79.5	-.896	-.828	-.671	-.544	-.480	-.434	-.420	-.971	-.899	-.745	-.655	-.582	-.535	-.514
	84.6	-.874	-.772	-.684	-.550	-.475	-.431	-.413	-.931	-.832	-.749	-.655	-.577	-.538	-.502
	89.6	-.749	-.791	-.688	-.543	-.479	-.423	-.410	-.777	-.871	-.749	-.644	-.577	-.532	-.490
	94.6	-.681	-.762	-.657	-.535	-.470	-.417	-.408	-.739	-.826	-.750	-.633	-.566	-.520	-.474
Lower surface	1.3	.537	.638	.577	.534	.518	.500	.450	.408	.606	.530	.478	.470	.446	.407
	2.6	.387	.691	.636	.594	.570	.531	.479	.214	.703	.638	.587	.572	.522	.480
	5.0	.696	.685	.628	.600	.556	.520	.452	.746	.752	.649	.628	.590	.559	.479
	7.6	.780	.657	.593	.559	.523	.495	.408	.866	.735	.650	.606	.572	.530	.449
	10.1	.767	.618	.583	.527	.492	.462	.375	.853	.706	.648	.584	.545	.506	.422
	15.1	.689	.561	.515	.473	.436	.400	.267	.783	.655	.589	.538	.496	.452	.318
	19.6	.612	.511	.471	.441	.400	.368	.203	.710	.611	.548	.505	.464	.420	.266
	24.5	.569	.472	.435	.395	.359	.320	.127	.669	.570	.509	.461	.425	.371	.176
	29.5	.520	.440	.402	.357	.325	.282	.089	.622	.536	.476	.423	.386	.330	.126
	34.5	.477	.412	.374	.327	.297	.247	.046	.579	.508	.446	.390	.353	.294	.072
	39.5	.444	.393	.351	.303	.277	.220	.007	.541	.480	.415	.361	.329	.258	.026
	44.5	.412	.381	.334	.285	.261	.202	-.047	.505	.461	.393	.337	.305	.230	-.030
	49.5	.376	.378	.321	.277	.290	.193	-.109	.474	.447	.373	.319	.314	.212	-.111
	54.5	.400	.406	.329	.285	.274	.214	-.198	.485	.464	.372	.316	.298	.219	-.216
	59.5	.415	.423	.364	.322	.312	.258	-.280	.493	.474	.393	.349	.324	.257	-.316
	64.5	.549	.451	.387	.375	.326	.273	-.328	.612	.495	.411	.386	.345	.272	-.384
	69.5	.763						-.349	.758						-.406
	74.6	-.663	-.465	-.710	-.780	-.594	-.464	-.364	-.666	-.387	-.626	-.797	-.663	-.616	-.417
	79.6	-.504	-.600	-.753	-.801	-.609	-.470	-.350	-.283	-.508	-.669	-.881	-.683	-.611	-.403
	84.6	-.156	-.756	-.706	-.835	-.601	-.464	-.347	-.043	-.622	-.634	-.911	-.725	-.595	-.403
	89.7	.111	-.627	-.670	-.809	-.586	-.458	-.358	.300	-.391	-.577	-.830	-.776	-.563	-.419
	94.6	.263	-.284	-.581	-.724	-.538	-.447	-.354	.292	-.040	-.544	-.631	-.672	-.553	-.424

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued

	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.98		α = 0.26°					M = 0.98		α = 4.22°				
Upper surface	0.0	.293	.548	.581	.580	.478	.523	.331	.295	.362	.342	.224	.280	.165	.342
	1.2	.337	.014	.043	.174	.165	.183	.173	.250	-.757	-.930	-.812	-.802	-.857	-.716
	2.4	.211	-.021	.031	.123	.141	.132	.106	.024	-.709	-.875	-.678	-.640	-.771	-.600
	5.0	.142	.000	.049	.123	.119	.109	.070	-.051	-.297	-.711	-.254	-.300	-.296	-.390
	7.5	.101	-.008	.060	.114	.101	.086	.040	-.094	-.258	-.345	-.181	-.243	-.227	-.326
	10.0	.068	-.020	.059	.109	.099	.071	.010	-.131	-.258	-.329	-.146	-.186	-.185	-.276
	15.0	.036	-.023	.091	.113	.100	.079	-.049	-.112	-.272	-.036	-.078	-.133	-.152	-.220
	19.6	.027	-.027	.108	.130	.122	.118	-.045	-.144	-.231	.004	-.014	-.072	-.080	-.085
	24.5	-.015	.016	.168	.135	.119	.118	-.023	-.178	-.247	.067	-.002	-.030	-.049	-.032
	29.5	.007	.054	.190	.154	.131	.100	-.006	-.159	-.258	.112	.025	.013	-.022	-.009
	34.5	-.011	.118	.221	.179	.155	.114	.033	-.195	.007	.159	.057	.087	.017	.003
	39.5	.015	.194	.260	.205	.188	.131	.024	-.191	.152	.211	.096	.107	.059	.005
	44.5	.041	.291	.306	.248	.230	.161	-.003	-.196	.274	.246	.139	.147	.106	-.013
	49.5	.105	.396	.361	.300	.281	.200	-.053	-.059	.369	.252	.177	.186	.149	-.060
	54.5	.210	.504	.394	.361	.334	.256	-.139	.120	.400	.295	.205	.210	.173	-.133
	59.5	.360	.527	.390	.380	.353	.280	-.227	.261	.317	.219	.221	.219	.175	-.204
	64.5	.480	.452	.372	.385	.358	.270	-.302	.396	.173	.207	.232	.221	.161	-.278
	69.6	.036						-.327	.020						-.317
	74.6	-.951	-.844	-.684	-.603	-.500	-.450	-.353	-.969	-.857	-.703	-.620	-.529	-.429	-.349
	79.5	-.947	-.828	-.708	-.614	-.512	-.453	-.339	-.921	-.838	-.715	-.626	-.529	-.428	-.335
	84.6	-.800	-.815	-.733	-.619	-.503	-.452	-.331	-.815	-.832	-.734	-.627	-.524	-.425	-.360
	89.6	-.645	-.809	-.760	-.623	-.505	-.448	-.317	-.703	-.821	-.761	-.624	-.523	-.422	-.350
	94.6	-.542	-.777	-.723	-.619	-.502	-.441	-.305	-.613	-.781	-.758	-.622	-.521	-.420	-.340
Lower surface	1.3	.263	.085	.075	.042	-.041	-.099	-.112	.379	.417	.428	.451	.414	.397	.345
	2.6	.226	.057	.035	.014	-.001	-.051	-.093	.350	.356	.353	.365	.336	.329	.271
	5.0	.166	.047	.048	.068	.018	-.037	-.087	.327	.272	.279	.297	.271	.238	.211
	7.6	.123	.031	.025	.036	.001	-.041	-.081	.285	.226	.232	.244	.221	.208	.153
	10.1	.092	.019	.037	.017	-.019	-.045	-.089	.248	.194	.210	.209	.180	.181	.103
	15.1	.062	-.003	.012	.003	-.030	-.055	-.158	.209	.158	.179	.173	.148	.127	.001
	19.6	.024	-.013	.016	.019	-.030	-.050	-.187	.163	.128	.155	.155	.123	.108	-.067
	24.5	.016	-.047	.016	.000	-.030	-.058	-.122	.150	.094	.134	.118	.099	.074	-.125
	29.5	-.003	-.049	.027	.004	-.022	-.051	-.028	.120	.086	.124	.101	.086	.041	-.073
	34.5	-.028	-.031	.041	.009	-.011	-.033	-.018	.091	.087	.121	.092	.081	.049	-.034
	39.5	-.044	.011	.058	.031	.015	-.021	-.012	.074	.107	.123	.096	.084	.043	-.033
	44.5	-.060	.071	.088	.063	.044	.001	-.018	.054	.141	.134	.107	.099	.048	-.040
	49.5	-.045	.131	.123	.115	.116	.063	-.049	.056	.184	.158	.140	.131	.072	-.083
	54.5	.024	.223	.190	.173	.182	.160	-.121	.107	.255	.207	.186	.195	.139	-.160
	59.5	.153	.304	.274	.222	.244	.246	-.216	.191	.309	.274	.243	.246	.221	-.250
	64.5	.318	.364	.306	.275	.242	.246	-.282	.377	.335	.292	.300	.258	.202	-.298
	69.5	.455						-.295	.568						-.289
	74.6	-.919	-1.016	-.778	-.673	-.523	-.447	-.311	-.922	-.934	-.798	-.667	-.542	-.453	-.314
	79.6	-.770	-1.013	-.755	-.681	-.542	-.450	-.302	-.707	-.951	-.769	-.674	-.550	-.444	-.322
	84.6	-.478	-1.007	-.738	-.669	-.530	-.450	-.291	-.460	-.984	-.748	-.670	-.539	-.438	-.327
	89.7	-.412	-1.072	-.722	-.672	-.531	-.440	-.291	-.353	-1.004	-.731	-.665	-.533	-.424	-.345
	94.6	-.227	-.953	-.701	-.691	-.528	-.408	-.286	-.180	-.827	-.711	-.680	-.532	-.403	-.343
		M = 0.98		α = 6.26°					M = 0.98		α = 8.27°				
Upper surface	0.0	.306	.219	.165	-.040	.077	-.058	.185	.330	.083	-.009	-.235	-.144	-.260	.052
	1.2	.192	-1.002	-1.095	-.979	-.933	-.596	-.778	.149	-1.129	-1.187	-1.087	-.783	-.658	-.637
	2.4	-.066	-.975	-1.069	-.942	-.722	-.541	-.697	-.135	-1.106	-1.167	-1.074	-.745	-.675	-.616
	5.0	-.203	-.784	-.988	-.765	-.559	-.479	-.612	-.272	-1.027	-1.119	-.971	-.778	-.670	-.605
	7.5	-.186	-.460	-.883	-.644	-.478	-.418	-.585	-.280	-.781	-1.052	-.860	-.859	-.564	-.609
	10.0	-.224	-.399	-.827	-.568	-.466	-.386	-.533	-.328	-.579	-1.022	-.777	-.810	-.534	-.603
	15.0	-.223	-.376	-.477	-.475	-.294	-.366	-.464	-.319	-.493	-.955	-.679	-.303	-.527	-.593
	19.6	-.227	-.357	-.245	-.339	-.154	-.361	-.347	-.301	-.467	-.645	-.622	-.153	-.526	-.503
	24.5	-.263	-.344	.041	-.170	-.091	-.348	-.252	-.320	-.439	-.383	-.605	-.131	-.528	-.444
	29.5	-.238	-.351	.107	-.003	-.057	-.342	-.193	-.297	-.426	-.109	-.548	-.149	-.540	-.410
	34.5	-.271	-.330	.151	.058	-.035	-.271	-.137	-.326	-.422	.056	-.458	-.132	-.522	-.391
	39.5	-.264	.001	.188	.083	-.010	-.169	-.088	-.314	-.237	.123	-.269	-.118	-.482	-.389
	44.5	-.276	.178	.200	.115	.010	-.074	-.073	-.327	.041	.146	.006	-.120	-.411	-.396
	49.5	-.294	.286	.186	.149	.028	-.006	-.104	-.360	.176	.141	.145	-.137	-.306	-.415
	54.5	-.030	.339	.170	.184	.027	.048	-.164	-.128	.237	.135	.183	-.183	-.166	-.438
	59.5	.174	.226	.158	.215	.009	.082	-.216	.042	.159	.123	.217	-.232	-.046	-.438
	64.5	.339	.194	.141	.242	-.024	.098	-.274	.213	.183	.104	.252	-.275	.015	-.455
	69.6	.016						-.297	.020						-.429
	74.6	-.939	-.848	-.681	-.592	-.533	-.425	-.329	-.903	-.824	-.661	-.574	-.561	-.440	-.418
	79.5	-.909	-.828	-.689	-.595	-.542	-.424	-.334	-.882	-.805	-.671	-.585	-.580	-.450	-.403
	84.6	-.819	-.819	-.703	-.597	-.566	-.420	-.344	-.801	-.793	-.682	-.592	-.593	-.440	-.396
	89.6	-.718	-.807	-.730	-.594	-.573	-.415	-.337	-.723	-.778	-.705	-.588	-.620	-.429	-.390
	94.6	-.645	-.766	-.730	-.589	-.587	-.416	-.330	-.647	-.744	-.694	-.580	-.632	-.423	-.379
Lower surface	1.3	.434	.507	.497	.501	.487	.470	.404	.482	.576	.549	.536	.522	.510	.452
	2.6	.401	.456	.435	.434	.422	.407	.346	.441	.536	.502	.484	.480	.465	.411
	5.0	.407	.362	.360	.370	.352	.319	.282	.490	.445	.432	.424	.427	.395	.355
	7.6	.373	.314	.307	.314	.300	.278	.222	.470	.398	.380	.370	.372	.349	.292
	10.1	.335	.286	.297	.282	.261	.240	.168	.434	.340	.361	.342	.329	.311	.247
	15.1	.293	.231	.240	.236	.215	.198	.067	.387	.310	.304	.290	.270	.247	.125
	19.6	.241	.194	.207	.212	.186	.170	.014	.331	.268	.264	.242	.237	.202	.020
	24.5	.223	.161	.184	.177	.159	.131	-.080	.305	.230	.239	.222	.207	.176	-.012
	29.5	.187	.146	.168	.156	.138	.109	-.078	.266	.212	.219	.198	.182	.147	-.022
	34.5	.156	.142	.159	.139	.127	.089	-.060	.231	.202	.205	.179	.167	.126	-.033
	39.5	.135	.152	.157	.135	.124	.080	-.049	.206	.206	.198	.170	.159	.108	-.037
	44.5	.111	.177	.164	.142	.133	.078	-.050	.178	.222	.199	.172	.160	.103	-.052
	49.5	.105	.210	.181	.165	.154	.092	-.090	.169	.247	.209	.186	.177	.111	-.100
	54.5	.157	.274	.222	.204	.208	.146	-.170	.216	.299	.245	.220	.221	.156	-.186
	59.5	.220	.318	.286	.253	.260	.224	-.252	.263	.340	.304	.279	.272	.232	-.284
	64.5	.401	.347	.305	.315	.276	.216	-.293	.437	.367	.324	.332	.286	.231	-.332
	69.5	.609						-.295	.681						-.316
	74.6	-.904	-.849	-.818	-.679	-.541	-.434	-.302	-.857	-.754	-.825	-.737	-.592	-.502	-.323
	79.6	-.699	-.901	-.804	-.676	-.544	-.438	-.310	-.686	-.827	-.822	-.739	-.599	-.498	-.305
	84.6	-.458	-.974	-.793	-.673	-.539	-.427	-.318	-.438	-.950	-.791	-.724	-.592	-.486	-.303
	89.7	-.356	-.972	-.751	-.660	-.535	-.410	-.335	-.357	-.916	-.737	-.711	-.602	-.441	-.320
	94.6	-.152	-.729	-.697	-.664	-.540	-.392	-.322	-.112	-.617	-.655	-.699	-.620	-.445	-.318

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued

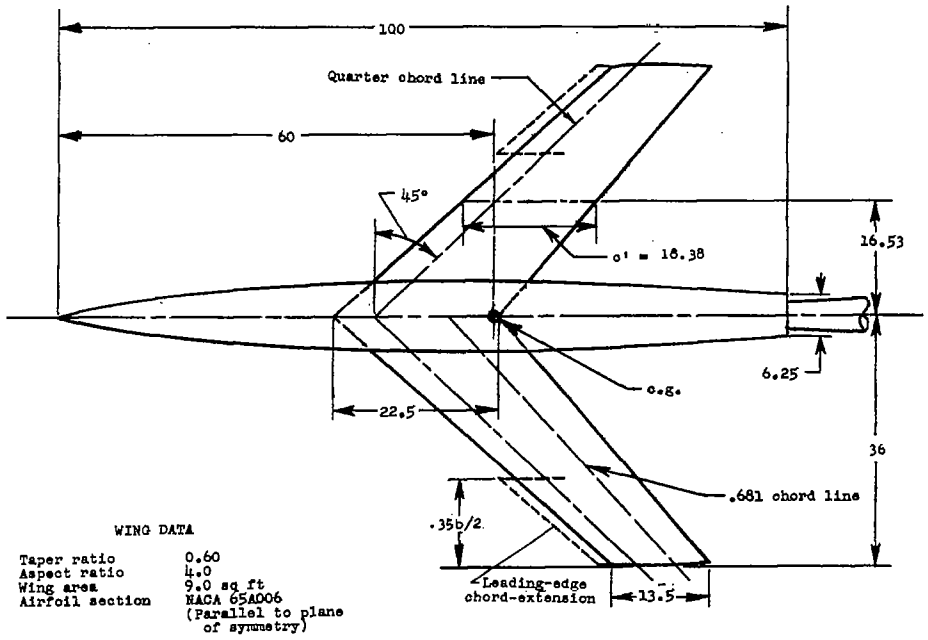
	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 0.98		α = 12.82°					M = 0.98		α = 17.34°				
Upper surface	0.0	.307	-.329	-.460	-.643	-.473	-.605	-.273	.226	-.660	-.834	-.839	-.526	-.701	-.532
	1.2	-.002	-1.209	-1.153	-.669	-.670	-.565	-.500	-.129	-1.277	-1.117	-.748	-.437	-.463	-.530
	2.4	-.355	-1.204	-1.121	-.669	-.673	-.570	-.500	-.549	-1.277	-1.101	-.738	-.454	-.475	-.540
	5.0	-.414	-1.141	-1.125	-.661	-.691	-.585	-.495	-.694	-1.266	-1.096	-.718	-.476	-.479	-.549
	7.5	-.584	-1.079	-1.096	-.667	-.715	-.576	-.495	-.826	-1.275	-1.068	-.709	-.502	-.470	-.549
	10.0	-.590	-.998	-1.075	-.671	-.731	-.581	-.490	-.818	-1.248	-1.062	-.696	-.532	-.472	-.549
	15.0	-.558	-.902	-1.027	-.689	-.661	-.585	-.486	-.767	-1.196	-1.058	-.672	-.384	-.456	-.549
	19.6	-.524	-.860	-.975	-.719	-.574	-.585	-.484	-.711	-1.173	-1.058	-.655	-.616	-.447	-.549
	24.5	-.507	-.839	-.884	-.778	-.525	-.591	-.480	-.654	-1.151	-1.051	-.680	-.635	-.433	-.546
	29.5	-.473	-.837	-.829	-.812	-.522	-.590	-.482	-.609	-1.130	-1.080	-.727	-.655	-.439	-.551
	34.5	-.481	-.766	-.789	-.828	-.525	-.589	-.482	-.601	-1.118	-1.076	-.768	-.673	-.438	-.554
	39.5	-.446	-.620	-.765	-.833	-.533	-.583	-.478	-.561	-1.092	-1.072	-.784	-.684	-.435	-.563
	44.5	-.469	-.412	-.749	-.838	-.559	-.576	-.466	-.579	-.978	-1.065	-.775	-.690	-.428	-.563
	49.5	-.469	-.195	-.707	-.842	-.589	-.569	-.453	-.582	-.494	-1.097	-.767	-.686	-.422	-.556
	54.5	-.311	-.115	-.612	-.834	-.606	-.559	-.443	-.468	-.139	-1.049	-.758	-.680	-.413	-.545
	59.5	-.225	-.100	-.475	-.798	-.609	-.550	-.418	-.393	-.102	-.955	-.749	-.669	-.410	-.513
	64.5	-.098	-.012	-.339	-.705	-.604	-.521	-.427	-.264	-.085	-.834	-.733	-.672	-.398	-.519
	69.6	-.051						-.422	-.179						-.510
	74.6	-.887	-.827	-.660	-.593	-.501	-.456	-.411	-.918	-.843	-.712	-.604	-.554	-.522	-.495
	79.5	-.884	-.805	-.676	-.619	-.516	-.489	-.410	-.912	-.828	-.741	-.636	-.580	-.565	-.492
	84.6	-.856	-.761	-.693	-.646	-.525	-.480	-.401	-.893	-.799	-.771	-.660	-.583	-.552	-.486
	89.6	-.729	-.770	-.715	-.670	-.526	-.464	-.400	-.731	-.795	-.780	-.652	-.588	-.532	-.485
	94.6	-.654	-.747	-.668	-.649	-.512	-.451	-.396	-.652	-.763	-.721	-.639	-.576	-.514	-.484
Lower surface	1.3	.537	.653	.600	.567	.545	.528	.479	.553	.667	.597	.547	.540	.506	.466
	2.6	.445	.658	.603	.570	.551	.520	.467	.392	.717	.654	.607	.586	.543	.500
	5.0	.627	.602	.559	.537	.511	.494	.424	.730	.712	.646	.614	.575	.533	.477
	7.6	.657	.555	.510	.488	.468	.444	.368	.811	.682	.610	.576	.539	.505	.436
	10.1	.638	.517	.492	.454	.428	.406	.333	.792	.648	.600	.544	.507	.477	.398
	15.1	.575	.462	.431	.401	.370	.342	.220	.716	.586	.533	.491	.451	.418	.294
	19.6	.502	.414	.387	.366	.333	.324	.156	.638	.540	.493	.460	.416	.381	.252
	24.5	.467	.375	.355	.325	.298	.264	.080	.596	.500	.457	.413	.380	.338	.146
	29.5	.419	.347	.328	.294	.268	.229	.046	.545	.468	.424	.379	.346	.298	.101
	34.5	.377	.327	.306	.268	.244	.202	.012	.504	.442	.397	.346	.316	.267	.058
	39.5	.347	.317	.289	.252	.225	.176	-.019	.470	.424	.373	.324	.294	.236	.021
	44.5	.316	.317	.280	.240	.220	.162	-.051	.435	.412	.356	.303	.277	.212	-.027
	49.5	.293	.324	.280	.242	.242	.158	-.107	.404	.408	.344	.295	.283	.197	-.096
	54.5	.326	.363	.300	.262	.256	.185	-.202	.428	.434	.351	.301	.285	.214	-.195
	59.5	.351	.389	.346	.312	.298	.251	-.307	.444	.450	.385	.347	.316	.261	-.319
	64.5	.503	.416	.366	.357	.318	.255	-.364	.576	.476	.403	.383	.334	.273	-.383
	69.5	.775						-.374	.782						-.430
	74.6	-.720	-.537	-.746	-.765	-.667	-.527	-.366	-.693	-.403	-.706	-.848	-.710	-.604	-.437
	79.6	-.629	-.677	-.759	-.804	-.667	-.511	-.337	-.452	-.543	-.716	-.876	-.721	-.602	-.426
	84.6	-.329	-.879	-.719	-.840	-.646	-.499	-.326	-.165	-.715	-.667	-.921	-.726	-.582	-.413
	89.7	-.119	-.732	-.647	-.840	-.644	-.481	-.343	.167	-.570	-.609	-.884	-.743	-.565	-.420
	94.6	.127	-.384	-.583	-.793	-.597	-.455	-.341	.291	-.226	-.572	-.760	-.701	-.550	-.420
		M = 1.00		α = 0.26°					M = 1.00		α = 4.22°				
Upper surface	0.0	.296	.560	.598	.589	.514	.540	.345	.315	.386	.364	.234	.282	.174	.357
	1.2	.348	.034	.063	.192	.185	.203	.195	.270	-.737	-.895	-.645	-.786	-.853	-.723
	2.4	.229	-.006	.047	.139	.160	.151	.130	.048	-.689	-.846	-.495	-.620	-.766	-.612
	5.0	.164	.016	.066	.142	.139	.128	.094	-.025	-.268	-.708	-.312	-.301	-.284	-.381
	7.5	.123	.006	.076	.133	.120	.106	.063	-.064	-.232	-.330	-.206	-.233	-.221	-.308
	10.0	.087	-.008	.080	.128	.120	.094	.036	-.100	-.232	-.308	-.147	-.184	-.185	-.259
	15.0	.053	-.014	.111	.131	.118	.098	-.027	-.108	-.244	-.175	-.068	-.108	-.120	-.196
	19.6	.043	-.017	.125	.148	.138	.136	-.040	-.114	-.225	.046	.005	-.051	-.064	-.074
	24.5	.002	.026	.192	.154	.138	.128	-.015	-.150	-.224	.115	.023	-.005	-.014	-.016
	29.5	.022	.066	.210	.172	.148	.116	.003	-.131	-.241	.150	.048	.040	-.001	.009
	34.5	-.002	.130	.240	.198	.170	.130	.038	-.171	-.076	.196	.083	.082	.039	.024
	39.5	.025	.210	.279	.222	.205	.144	.042	-.166	.166	.239	.122	.128	.080	.027
	44.5	.054	.305	.324	.243	.245	.169	.017	-.182	.296	.270	.169	.164	.123	.010
	49.5	.121	.414	.379	.316	.298	.209	-.039	-.105	.380	.272	.209	.201	.163	-.039
	54.5	.228	.518	.412	.375	.352	.265	-.123	.118	.416	.252	.237	.226	.188	-.110
	59.5	.376	.540	.407	.392	.367	.290	-.219	.272	.286	.238	.254	.239	.190	-.178
	64.5	.503	.466	.390	.396	.368	.282	-.315	.401	.205	.224	.262	.243	.180	-.250
	69.6	.002						-.348	-.018						-.290
	74.6	-.944	-.837	-.677	-.631	-.551	-.473	-.374	-.925	-.835	-.666	-.608	-.531	-.430	-.320
	79.5	-.958	-.823	-.711	-.646	-.563	-.478	-.365	-.911	-.811	-.684	-.616	-.540	-.426	-.326
	84.6	-.829	-.812	-.739	-.650	-.560	-.474	-.365	-.796	-.801	-.700	-.619	-.531	-.411	-.336
	89.6	-.600	-.806	-.771	-.661	-.561	-.465	-.357	-.661	-.792	-.734	-.619	-.542	-.399	-.327
	94.6	-.526	-.782	-.725	-.663	-.555	-.455	-.344	-.580	-.753	-.736	-.615	-.542	-.396	-.320
Lower surface	1.3	.279	.099	.092	.058	-.026	-.084	-.094	.400	.440	.451	.486	.445	.421	.368
	2.6	.243	.071	.052	.031	.013	-.034	-.075	.372	.382	.374	.401	.370	.357	.301
	5.0	.185	.060	.062	.085	.037	-.024	-.065	.351	.296	.305	.334	.301	.272	.238
	7.6	.140	.046	.044	.054	.018	-.028	-.062	.310	.252	.259	.281	.253	.238	.185
	10.1	.111	.033	.053	.037	-.005	-.032	-.068	.277	.218	.239	.246	.212	.208	.138
	15.1	.080	.008	.030	.022	-.013	-.044	-.137	.234	.184	.208	.208	.181	.155	.032
	19.6	.042	-.003	.036	.041	-.013	-.040	-.140	.188	.150	.185	.192	.155	.141	-.017
	24.5	.033	-.037	.038	.019	-.013	-.043	-.126	.176	.119	.165	.157	.130	.100	-.099
	29.5	.011	-.042	.049	.023	-.006	-.034	-.045	.144	.110	.157	.140	.115	.087	-.083
	34.5	-.014	-.020	.064	.028	.004	-.018	.004	.117	.112	.153	.127	.109	.075	-.017
	39.5	-.031	.027	.083	.047	.024	-.003	.008	.097	.131	.156	.131	.112	.069	-.009
	44.5	-.049	.090	.110	.079	.056	.011	-.001	.078	.168	.167	.141	.126	.069	-.018
	49.5	-.040	.150	.149	.128	.119	.063	-.033	.078	.208	.191	.171	.154	.089	-.057
	54.5	.041	.243	.208	.187	.195	.161	-.104	.136	.279	.236	.214	.217	.153	-.137
	59.5	.168	.320	.292	.236	.261	.253	-.208	.213	.333	.303	.271	.267	.235	-.238
	64.5	.335	.384	.321	.290	.258	.256	-.291	.403	.358	.319	.325	.274	.218	-.296
	69.5	.474						-.230	.593						-.292
	74.6	-.882	-.997	-.805	-.687	-.583	-.491	-.381	-.884	-.894	-.798	-.658	-.566	-.458	-.300
	79.6	-.716	-.993	-.799	-.699	-.564	-.494	-.344	-.637	-.918	-.782	-.665	-.585	-.465	-.293
	84.6	-.466	-.986	-.779	-.695	-.557	-.493	-.327	-.441	-.938	-.774	-.661	-.564	-.456	-.296
	89.7	-.393	-1.045	-.750	-.711	-.559	-.475	-.325	-.319	-.951	-.727	-.651	-.566	-.434	-.317
	94.6	-.209	-.918	-.723	-.733	-.551	-.468	-.307	-.149	-.779	-.697	-.658	-.573	-.413	-.312

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Continued

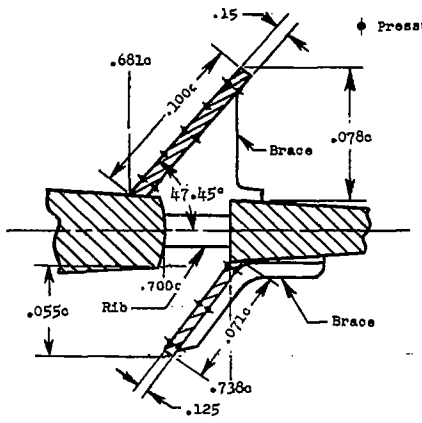
	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 1.00 α = 6.22°							M = 1.00 α = 8.25°						
Upper surface	0.0	.333	.258	.204	.002	.085	-.032	.214	.349	.110	.030	-.196	-.141	-.239	.085
	1.2	.228	-.957	-1.043	-.999	-.812	-.508	-.755	.173	-1.096	-1.141	-1.115	-.782	-.560	-.636
	2.4	-.030	-.931	-1.023	-.950	-.634	-.460	-.679	-.113	-1.080	-1.123	-1.090	-.752	-.599	-.625
	5.0	-.155	-.766	-.950	-.902	-.535	-.416	-.586	-.237	-1.012	-1.080	-1.043	-.777	-.563	-.623
	7.5	-.146	-.424	-.855	-.723	-.486	-.378	-.549	-.256	-.808	-1.019	-.902	-.849	-.479	-.630
	10.0	-.184	-.358	-.805	-.557	-.471	-.363	-.514	-.303	-.551	-.995	-.761	-.840	-.471	-.622
	15.0	-.181	-.334	-.467	-.408	-.315	-.348	-.420	-.284	-.460	-.945	-.638	-.345	-.484	-.543
	19.6	-.187	-.318	-.353	-.265	-.155	-.354	-.308	-.276	-.437	-.714	-.583	-.155	-.499	-.476
	24.5	-.221	-.306	.037	-.100	-.072	-.348	-.213	-.293	-.409	-.385	-.560	-.138	-.518	-.405
	29.5	-.200	-.313	.127	.028	-.035	-.337	-.158	-.274	-.398	-.117	-.520	-.130	-.553	-.364
	34.5	-.232	-.315	.180	.074	-.013	-.251	-.116	-.300	-.399	.069	-.459	-.115	-.556	-.350
	39.5	-.226	-.021	.217	.097	.014	-.142	-.072	-.286	-.265	.144	-.326	-.098	-.524	-.350
	44.5	-.242	.188	.229	.127	.035	-.050	-.059	-.303	.041	.163	-.050	-.108	-.443	-.365
	49.5	-.272	.304	.218	.162	.054	.017	-.085	-.337	.188	.157	.153	-.138	-.316	-.394
	54.5	-.039	.354	.200	.197	.053	.066	-.144	-.128	.248	.153	.214	-.195	-.176	-.424
	59.5	.183	.226	.183	.229	.038	.102	-.196	.043	.165	.138	.249	-.252	-.063	-.440
	64.5	.346	.220	.161	.257	.010	.116	-.254	.205	.202	.113	.286	-.305	-.007	-.466
	69.6	-.031						-.280	-.048						-.456
	74.6	-.898	-.812	-.647	-.584	-.538	-.433	-.311	-.882	-.805	-.634	-.560	-.582	-.481	-.458
	79.5	-.885	-.795	-.659	-.596	-.553	-.433	-.318	-.870	-.785	-.644	-.571	-.622	-.508	-.443
	84.6	-.794	-.781	-.673	-.601	-.563	-.419	-.333	-.804	-.767	-.656	-.582	-.637	-.490	-.434
	89.6	-.675	-.770	-.702	-.598	-.579	-.407	-.329	-.689	-.754	-.679	-.580	-.671	-.479	-.429
	94.6	-.599	-.732	-.700	-.593	-.587	-.402	-.325	-.616	-.720	-.669	-.572	-.682	-.472	-.422
Lower surface	1.3	.457	.530	.520	.520	.514	.494	.438	.498	.595	.569	.555	.538	.532	.476
	2.6	.427	.478	.458	.454	.451	.434	.379	.460	.556	.523	.505	.498	.491	.431
	5.0	.434	.386	.387	.392	.385	.355	.318	.511	.472	.453	.445	.444	.423	.377
	7.6	.399	.338	.334	.339	.332	.307	.257	.489	.419	.403	.392	.390	.375	.312
	10.1	.365	.311	.323	.307	.292	.268	.209	.459	.381	.382	.365	.349	.337	.271
	15.1	.322	.257	.268	.261	.244	.229	.106	.409	.330	.329	.314	.290	.272	.150
	19.6	.270	.220	.238	.239	.216	.201	.013	.354	.291	.292	.288	.257	.238	.066
	24.5	.249	.185	.214	.204	.186	.162	-.045	.326	.254	.265	.247	.230	.200	.007
	29.5	.216	.173	.198	.184	.164	.138	-.052	.288	.236	.244	.223	.200	.171	-.011
	34.5	.186	.168	.190	.169	.155	.118	-.043	.252	.226	.230	.203	.186	.147	-.021
	39.5	.162	.178	.187	.165	.152	.110	-.033	.227	.230	.223	.196	.179	.129	-.030
	44.5	.140	.206	.194	.169	.159	.104	-.025	.201	.244	.226	.196	.179	.122	-.041
	49.5	.134	.242	.213	.191	.179	.112	-.063	.189	.269	.236	.211	.198	.125	-.084
	54.5	.188	.301	.253	.228	.232	.166	-.146	.237	.323	.269	.240	.240	.169	-.172
	59.5	.248	.348	.314	.265	.282	.245	-.251	.282	.365	.329	.284	.284	.242	-.298
	64.5	.430	.373	.332	.337	.293	.236	-.311	.457	.390	.346	.347	.298	.245	-.375
	69.5	.640						-.306	.708						-.387
	74.6	-.858	-.807	-.798	-.701	-.592	-.476	-.309	-.823	-.719	-.800	-.777	-.661	-.542	-.400
	79.6	-.627	-.866	-.793	-.698	-.589	-.480	-.297	-.633	-.797	-.792	-.783	-.661	-.542	-.360
	84.6	-.431	-.927	-.782	-.689	-.579	-.471	-.297	-.423	-.916	-.760	-.787	-.660	-.538	-.328
	89.7	-.303	-.913	-.724	-.673	-.586	-.447	-.315	-.294	-.874	-.699	-.806	-.665	-.518	-.334
	94.6	-.106	-.681	-.655	-.669	-.604	-.428	-.309	-.054	-.578	-.622	-.783	-.663	-.508	-.326
		M = 1.00 α = 12.80°							M = 1.00 α = 17.34°						
Upper surface	0.0	.321	-.287	-.418	-.603	-.452	-.614	-.309	.242	-.616	-.780	-.809	-.542	-.801	-.598
	1.2	.025	-1.177	-1.158	-.638	-.636	-.614	-.650	-.092	-1.241	-1.135	-.749	-.445	-.744	-.626
	2.4	-.302	-1.169	-1.126	-.638	-.663	-.625	-.649	-.509	-1.241	-1.113	-.743	-.447	-.763	-.624
	5.0	-.388	-1.118	-1.132	-.632	-.688	-.649	-.646	-.650	-1.229	-1.128	-.733	-.468	-.780	-.609
	7.5	-.551	-1.046	-1.104	-.635	-.717	-.640	-.646	-.791	-1.236	-1.109	-.749	-.473	-.785	-.601
	10.0	-.561	-.962	-1.077	-.641	-.732	-.644	-.646	-.783	-1.204	-1.119	-.761	-.481	-.800	-.593
	15.0	-.537	-.862	-1.012	-.661	-.640	-.653	-.639	-.733	-1.159	-1.117	-.761	-.497	-.791	-.601
	19.6	-.496	-.822	-.945	-.710	-.543	-.661	-.626	-.675	-1.133	-1.105	-.786	-.556	-.774	-.630
	24.5	-.481	-.806	-.855	-.769	-.498	-.680	-.603	-.624	-1.109	-1.066	-.850	-.606	-.744	-.646
	29.5	-.451	-.807	-.794	-.803	-.499	-.692	-.586	-.581	-1.089	-1.042	-.916	-.643	-.728	-.654
	34.5	-.456	-.751	-.754	-.822	-.512	-.697	-.574	-.567	-1.078	-1.030	-.940	-.683	-.703	-.654
	39.5	-.421	-.617	-.733	-.836	-.519	-.696	-.571	-.533	-1.063	-1.028	-.933	-.712	-.691	-.650
	44.5	-.444	-.380	-.719	-.847	-.544	-.688	-.560	-.546	-.973	-1.031	-.933	-.727	-.687	-.641
	49.5	-.456	-.123	-.687	-.851	-.574	-.677	-.549	-.557	-.836	-1.098	-.885	-.731	-.684	-.627
	54.5	-.309	-.041	-.603	-.851	-.604	-.642	-.532	-.472	-.140	-1.081	-.826	-.732	-.682	-.612
	59.5	-.213	-.041	-.480	-.822	-.619	-.649	-.503	-.378	-.093	-.983	-.787	-.732	-.679	-.578
	64.5	-.073	.032	-.336	-.732	-.619	-.621	-.509	-.242	-.051	-.871	-.748	-.725	-.657	-.577
	69.6	-.149						-.497	-.280						-.560
	74.6	-.893	-.812	-.658	-.609	-.524	-.542	-.488	-.901	-.822	-.688	-.586	-.545	-.577	-.552
	79.5	-.887	-.792	-.677	-.646	-.549	-.594	-.486	-.896	-.803	-.717	-.643	-.589	-.626	-.541
	84.6	-.863	-.764	-.697	-.678	-.561	-.587	-.481	-.881	-.787	-.748	-.691	-.605	-.614	-.532
	89.6	-.727	-.758	-.724	-.703	-.566	-.569	-.485	-.685	-.773	-.757	-.701	-.605	-.591	-.524
	94.6	-.622	-.735	-.674	-.683	-.557	-.555	-.483	-.638	-.747	-.631	-.687	-.601	-.571	-.516
Lower surface	1.3	.546	.672	.613	.576	.557	.538	.485	.563	.680	.613	.561	.553	.516	.475
	2.6	.456	.674	.612	.577	.560	.533	.476	.401	.731	.670	.620	.600	.551	.511
	5.0	.642	.615	.565	.543	.523	.498	.439	.747	.725	.660	.626	.592	.543	.490
	7.6	.668	.568	.520	.498	.478	.453	.384	.826	.696	.623	.588	.555	.517	.450
	10.1	.648	.530	.499	.462	.440	.418	.342	.807	.659	.612	.558	.521	.490	.416
	15.1	.584	.479	.442	.411	.381	.357	.232	.727	.597	.546	.506	.469	.428	.310
	19.6	.514	.430	.400	.380	.346	.325	.146	.650	.553	.506	.474	.433	.394	.230
	24.5	.477	.390	.368	.335	.310	.279	.082	.608	.515	.471	.429	.398	.352	.163
	29.5	.429	.364	.339	.304	.279	.240	.040	.559	.481	.441	.397	.358	.314	.116
	34.5	.389	.344	.319	.278	.254	.215	.012	.518	.455	.414	.364	.332	.281	.070
	39.5	.356	.334	.302	.263	.238	.188	-.016	.484	.436	.391	.340	.308	.250	.031
	44.5	.326	.334	.295	.251	.231	.173	-.046	.451	.427	.374	.323	.292	.226	-.017
	49.5	.306	.340	.295	.254	.244	.165	-.103	.421	.424	.363	.315	.293	.211	-.082
	54.5	.340	.379	.313	.272	.262	.193	-.199	.445	.447	.369	.320	.301	.227	-.189
	59.5	.364	.407	.359	.306	.302	.251	-.330	.460	.465	.401	.354	.330	.278	-.333
	64.5	.513	.437	.379	.365	.321	.257	-.410	.594	.491	.422	.403	.345	.286	-.426
	69.5	.788						-.422	.796						-.447
	74.6	-.708	-.513	-.741	-.809	-.737	-.605	-.442	-.639	-.370	-.682	-.786	-.697	-.645	-.464
	79.6	-.629	-.681	-.738	-.836	-.739	-.602	-.410	-.386	-.536	-.683	-.828	-.733	-.642	-.452
	84.6	-.323	-.854	-.699	-.889	-.733	-.588	-.381	-.194	-.697	-.636	-.879	-.784	-.635	-.431
	89.7	-.032	-.709	-.640	-.886	-.730	-.573	-.391	.183	-.530	-.574	-.850	-.845	-.601	-.439
	94.6	.153	-.353	-.565	-.834	-.708	-.556	-.391	.299	-.192	-.524	-.763	-.754	-.571	-.435

TABLE II. - WING WITH SPOILER-SLOT-DEFLECTOR - Concluded

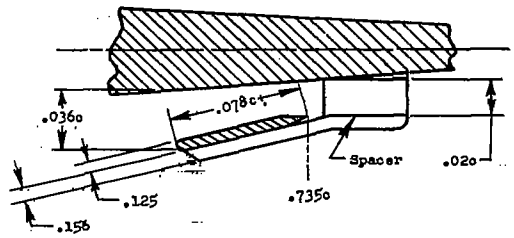
	Percent chord	Pressure coefficient													
		0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2	0.135b/2	0.25b/2	0.40b/2	0.55b/2	0.70b/2	0.85b/2	0.95b/2
		M = 1.03		α = 0.26°					M = 1.03		α = 4.22°				
Upper surface	0.0	.234	.550	.592	.624	.564	.579	.386	.254	.404	.392	.232	.292	.190	.281
	1.2	.339	.010	.017	.233	.223	.249	.242	.234	-.699	-.557	-.438	-.763	-.815	-.703
	2.4	.188	-.030	.015	.180	.200	.198	.180	.040	-.660	-.797	-.491	-.594	-.723	-.589
	5.0	.123	-.012	.057	.185	.183	.177	.141	-.050	-.212	-.712	-.300	-.294	-.264	-.351
	7.5	.081	-.024	.090	.177	.165	.156	.112	-.072	-.231	-.413	-.226	-.199	-.183	-.277
	10.0	.047	-.043	.109	.171	.163	.142	.086	-.111	-.236	-.291	-.165	-.162	-.158	-.224
	15.0	.036	-.055	.147	.174	.165	.146	.024	-.115	-.234	-.295	-.065	-.079	-.092	-.156
	19.6	.014	-.061	.181	.197	.180	.185	.003	-.124	-.224	-.042	.015	-.014	-.036	-.046
	24.5	-.024	-.040	.222	.197	.181	.181	.031	-.154	-.217	.139	.056	.036	-.005	.011
	29.5	-.010	.047	.247	.218	.193	.165	.047	-.136	-.236	.213	.091	.080	.025	.028
	34.5	-.047	.166	.278	.244	.213	.180	.083	-.168	-.225	.253	.130	.121	.062	.053
	39.5	-.029	.243	.318	.267	.246	.192	.083	-.165	.146	.289	.168	.156	.097	.059
	44.5	.032	.340	.364	.311	.286	.215	.062	-.177	.301	.300	.217	.189	.137	.042
	49.5	.128	.451	.414	.362	.358	.256	.009	-.182	.378	.287	.252	.223	.179	-.004
	54.5	.257	.548	.437	.416	.388	.308	-.073	.078	.401	.266	.276	.249	.210	-.074
	59.5	.400	.563	.429	.430	.407	.334	-.170	.254	.179	.246	.289	.259	.219	-.138
	64.5	.537	.408	.412	.433	.412	.324	-.271	.380	.267	.224	.293	.263	.219	-.208
	69.6	-.079						-.312	-.087						-.231
	74.6	-.885	-.766	-.621	-.576	-.502	-.434	-.332	-.860	-.772	-.606	-.560	-.496	-.401	-.281
	79.5	-.874	-.757	-.654	-.593	-.540	-.440	-.325	-.854	-.749	-.627	-.571	-.507	-.399	-.284
	84.6	-.778	-.723	-.656	-.599	-.533	-.433	-.322	-.745	-.733	-.647	-.576	-.507	-.381	-.297
	89.6	-.559	-.737	-.720	-.610	-.546	-.423	-.315	-.621	-.725	-.686	-.574	-.513	-.367	-.291
	94.6	-.486	-.715	-.675	-.612	-.542	-.413	-.303	-.521	-.688	-.682	-.569	-.512	-.340	-.283
Lower surface	1.3	.219	.084	.103	.098	.013	-.033	-.045	.335	.426	.457	.508	.488	.442	.410
	2.6	.190	.052	.065	.073	.044	.014	-.027	.324	.372	.387	.430	.414	.398	.344
	5.0	.139	.038	.059	.124	.053	.038	-.018	.324	.284	.319	.369	.347	.319	.283
	7.6	.102	.026	.038	.094	.056	.020	-.013	.291	.247	.274	.320	.299	.280	.230
	10.1	.071	.012	.044	.079	.038	.018	-.024	.261	.213	.259	.284	.261	.251	.184
	15.1	.052	-.010	.027	.065	.029	.004	-.086	.228	.180	.230	.252	.229	.202	.086
	19.6	.016	-.021	.043	.083	.031	.002	-.079	.183	.153	.210	.234	.205	.180	-.011
	24.5	.012	-.052	.083	.067	.029	.008	-.082	.175	.124	.194	.199	.177	.147	-.035
	29.5	-.008	-.063	.094	.069	.038	.016	-.019	.147	.120	.188	.182	.163	.130	-.052
	34.5	-.030	-.073	.105	.073	.049	.031	.050	.119	.125	.188	.169	.156	.119	.004
	39.5	-.047	-.011	.126	.093	.065	.046	.052	.106	.153	.195	.173	.157	.113	.025
	44.5	-.071	.128	.154	.123	.097	.058	.046	.087	.194	.206	.184	.168	.112	.020
	49.5	-.081	.190	.193	.170	.163	.100	.015	.090	.238	.229	.211	.199	.125	-.017
	54.5	-.002	.274	.253	.231	.233	.202	-.057	.156	.308	.274	.253	.235	.186	-.097
	59.5	.172	.356	.331	.278	.296	.293	-.166	.240	.360	.341	.302	.306	.268	-.206
	64.5	.348	.418	.349	.331	.296	.299	-.256	.430	.385	.352	.359	.314	.254	-.271
	69.5	.481						-.288	.621						-.272
	74.6	-.798	-.912	-.672	-.625	-.518	-.466	-.324	-.812	-.833	-.737	-.618	-.547	-.433	-.272
	79.6	-.624	-.907	-.747	-.637	-.539	-.471	-.308	-.608	-.851	-.726	-.623	-.556	-.440	-.282
	84.6	-.428	-.901	-.722	-.638	-.530	-.467	-.290	-.409	-.846	-.724	-.616	-.549	-.435	-.260
	89.7	-.337	-.958	-.693	-.657	-.533	-.445	-.287	-.260	-.886	-.717	-.606	-.537	-.411	-.274
	94.6	-.163	-.846	-.668	-.681	-.523	-.437	-.274	-.098	-.721	-.657	-.612	-.543	-.399	-.271
		M = 1.03		α = 6.26°					M = 1.03		α = 8.23°				
Upper surface	0.0	.287	.292	.238	.036	.080	-.015	.238	.316	.155	.072	-.149	-.113	-.187	.103
	1.2	.200	-.905	-.982	-.981	-.702	-.493	-.634	.166	-1.033	-1.088	-1.076	-.726	-.493	-.594
	2.4	-.013	-.894	-.968	-.951	-.547	-.445	-.577	-.067	-1.038	-1.072	-1.043	-.693	-.531	-.584
	5.0	-.134	-.794	-.910	-.904	-.478	-.409	-.519	-.171	-.966	-1.032	-1.000	-.721	-.499	-.584
	7.5	-.144	-.451	-.829	-.836	-.475	-.379	-.498	-.219	-.868	-.949	-.861	-.799	-.418	-.596
	10.0	-.182	-.344	-.784	-.580	-.497	-.366	-.471	-.264	-.552	-.944	-.712	-.790	-.422	-.586
	15.0	-.179	-.313	-.576	-.345	-.294	-.348	-.410	-.248	-.405	-.903	-.584	-.298	-.439	-.493
	19.6	-.177	-.296	-.380	-.199	-.148	-.328	-.327	-.244	-.377	-.747	-.442	-.119	-.458	-.421
	24.5	-.208	-.281	.036	-.069	-.059	-.273	-.227	-.259	-.336	-.341	-.309	-.097	-.478	-.345
	29.5	-.189	-.288	.163	.030	-.023	-.234	-.164	-.242	-.351	-.129	-.474	-.089	-.513	-.317
	34.5	-.217	-.296	.217	.081	-.003	-.159	-.109	-.269	-.356	.110	-.419	-.070	-.517	-.306
	39.5	-.209	-.045	.255	.107	.031	-.087	-.066	-.253	-.223	.192	-.316	-.051	-.485	-.311
	44.5	-.224	.202	.257	.141	.054	-.022	-.052	-.268	.081	.207	-.074	-.063	-.405	-.330
	49.5	-.257	.314	.240	.178	.071	.028	-.083	-.299	.224	.198	.168	-.097	-.275	-.366
	54.5	-.067	.354	.222	.213	.069	.070	-.138	-.109	.272	.188	.251	-.163	-.127	-.399
	59.5	.178	.174	.194	.251	.056	.102	-.185	.071	.174	.172	.293	-.225	-.015	-.420
	64.5	.342	.256	.148	.279	.031	.120	-.239	.234	.245	.144	.334	-.281	.041	-.451
	69.6	-.100						-.258	-.125						-.446
	74.6	-.849	-.762	-.596	-.544	-.518	-.420	-.303	-.842	-.759	-.586	-.523	-.556	-.466	-.447
	79.5	-.838	-.740	-.613	-.555	-.538	-.424	-.312	-.831	-.739	-.600	-.538	-.602	-.493	-.435
	84.6	-.760	-.719	-.631	-.563	-.544	-.407	-.329	-.790	-.716	-.613	-.546	-.626	-.477	-.425
	89.6	-.629	-.707	-.670	-.560	-.544	-.393	-.326	-.634	-.700	-.639	-.546	-.665	-.465	-.417
	94.6	-.546	-.671	-.686	-.556	-.576	-.390	-.321	-.553	-.667	-.628	-.540	-.675	-.459	-.410
Lower surface	1.3	.395	.539	.538	.549	.543	.520	.465	.436	.614	.591	.576	.561	.555	.496
	2.6	.388	.488	.481	.484	.487	.466	.407	.431	.575	.545	.529	.520	.514	.452
	5.0	.430	.397	.407	.422	.421	.389	.348	.521	.487	.476	.470	.470	.445	.396
	7.6	.404	.350	.359	.370	.371	.338	.287	.511	.440	.428	.419	.413	.400	.339
	10.1	.373	.328	.350	.339	.354	.300	.239	.480	.400	.407	.390	.375	.344	.292
	15.1	.334	.275	.295	.294	.281	.264	.143	.435	.354	.355	.340	.317	.299	.178
	19.6	.284	.238	.267	.271	.252	.238	.068	.377	.314	.321	.314	.286	.271	.116
	24.5	.267	.211	.244	.237	.223	.197	-.013	.351	.279	.291	.275	.255	.227	.033
	29.5	.234	.197	.231	.219	.201	.172	-.029	.312	.261	.272	.251	.231	.201	.012
	34.5	.203	.195	.223	.203	.189	.156	-.024	.275	.253	.242	.232	.214	.179	.003
	39.5	.184	.209	.222	.201	.185	.142	-.017	.253	.254	.253	.225	.208	.161	-.005
	44.5	.162	.236	.229	.206	.191	.136	-.004	.230	.277	.255	.225	.208	.151	-.014
	49.5	.158	.273	.248	.225	.215	.142	-.034	.217	.301	.267	.239	.227	.154	-.052
	54.5	.213	.333	.287	.241	.243	.193	-.121	.264	.354	.302	.268	.267	.196	-.143
	59.5	.277	.380	.347	.307	.311	.270	-.238	.312	.394	.359	.325	.311	.270	-.268
	64.5	.463	.404	.342	.368	.320	.263	-.306	.483	.420	.377	.370	.322	.271	-.355
	69.5	.686						-.406	.723						-.372
	74.6	-.802	-.746	-.751	-.673	-.572	-.458	-.325	-.779	-.465	-.750	-.736	-.632	-.528	-.399
	79.6	-.587	-.803	-.741	-.649	-.582	-.468	-.303	-.571	-.742	-.745	-.758	-.636	-.526	-.363
	84.6	-.389	-.872	-.728	-.657	-.573	-.465	-.289	-.385	-.867	-.713	-.779	-.631	-.523	-.322
	89.7	-.241	-.848	-.716	-.653	-.579	-.446	-.302	-.188	-.816	-.646	-.802	-.631	-.504	-.318
	94.6	-.096	-.624	-.599	-.650	-.585	-.426	-.251	.013	-.525	-.579	-.764	-.622	-.491	-.312



(a) Model.



(b) Spoiler-slot-deflector. (Section parallel to plane of symmetry.)



(c) Deflector. (Section parallel to plane of symmetry.)

Figure 1.- Diagram and dimensional details of wing-fuselage model and cross-sectional detail of two different type spoiler control configurations. (All linear dimensions are in inches, except as noted.)

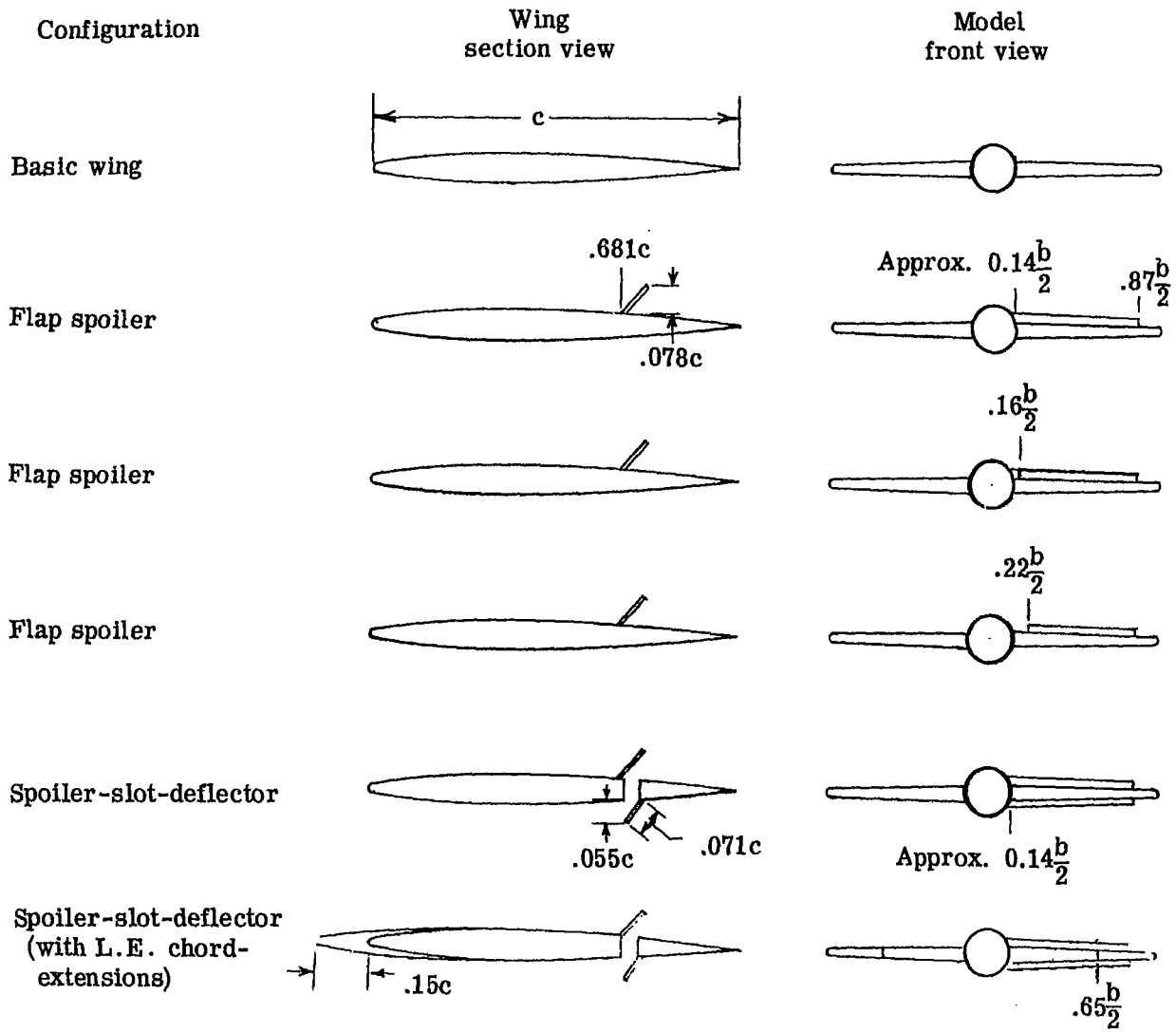


Figure 2.- Geometry of test configurations. (Not to scale.)

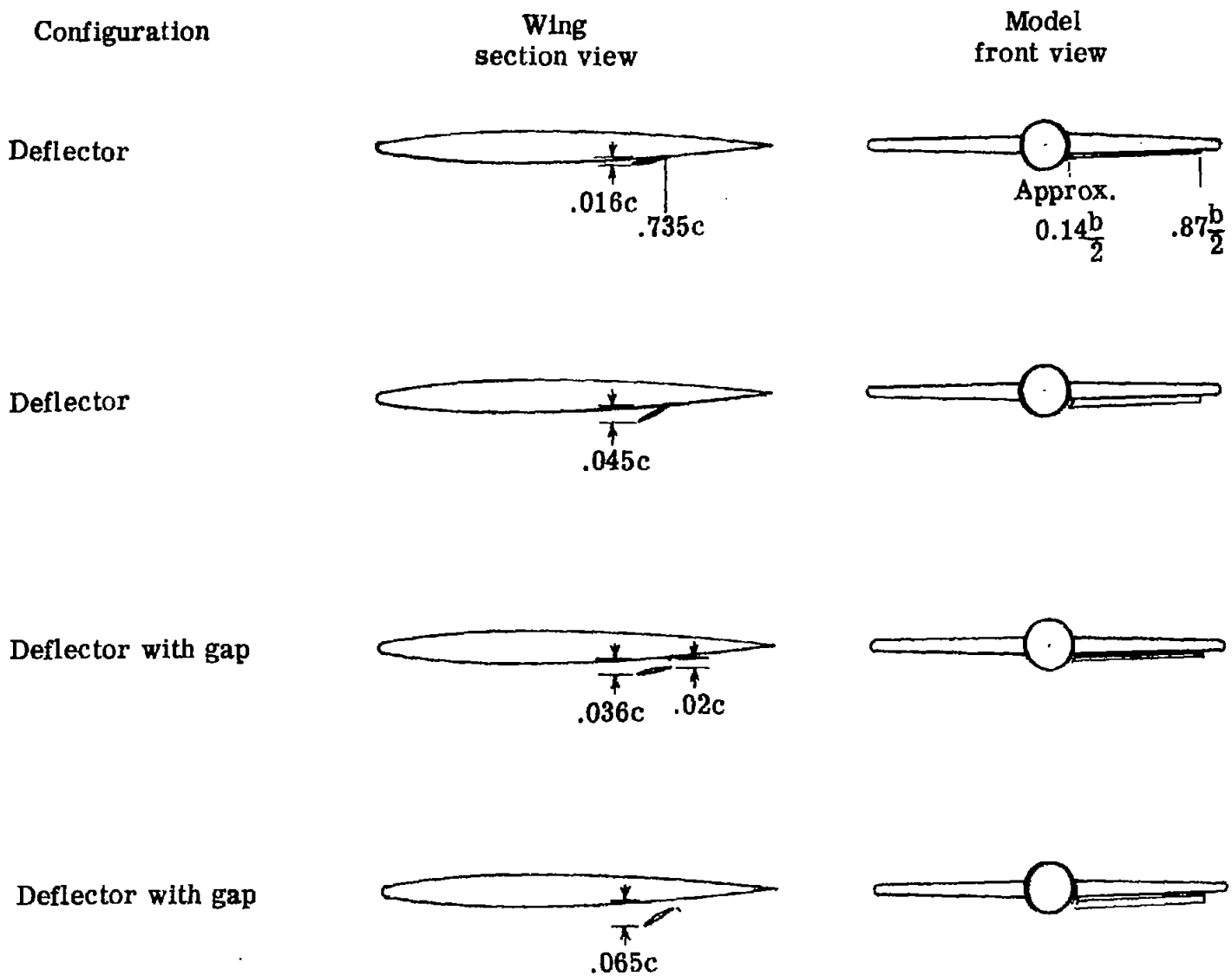


Figure 2.- Concluded.

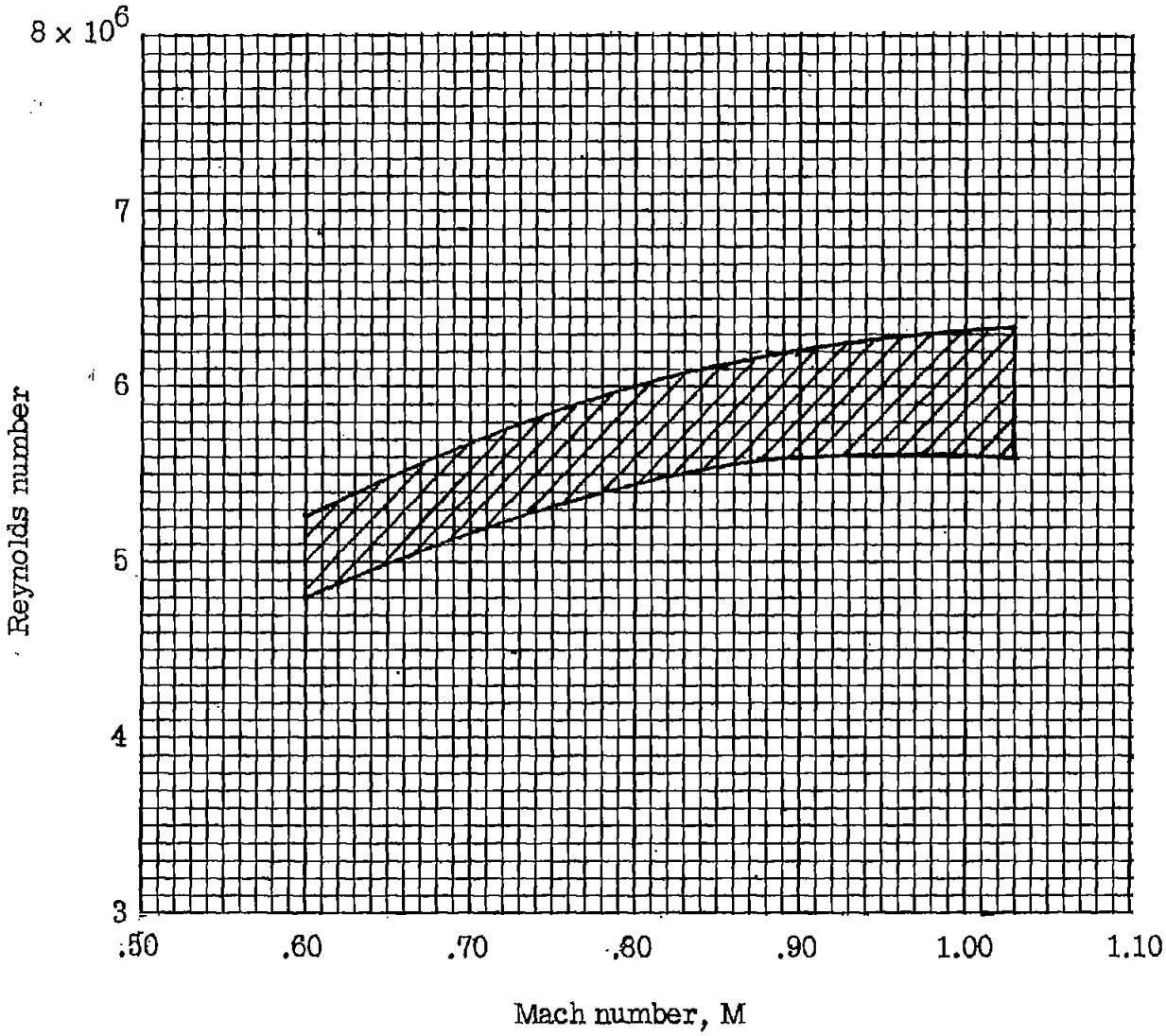
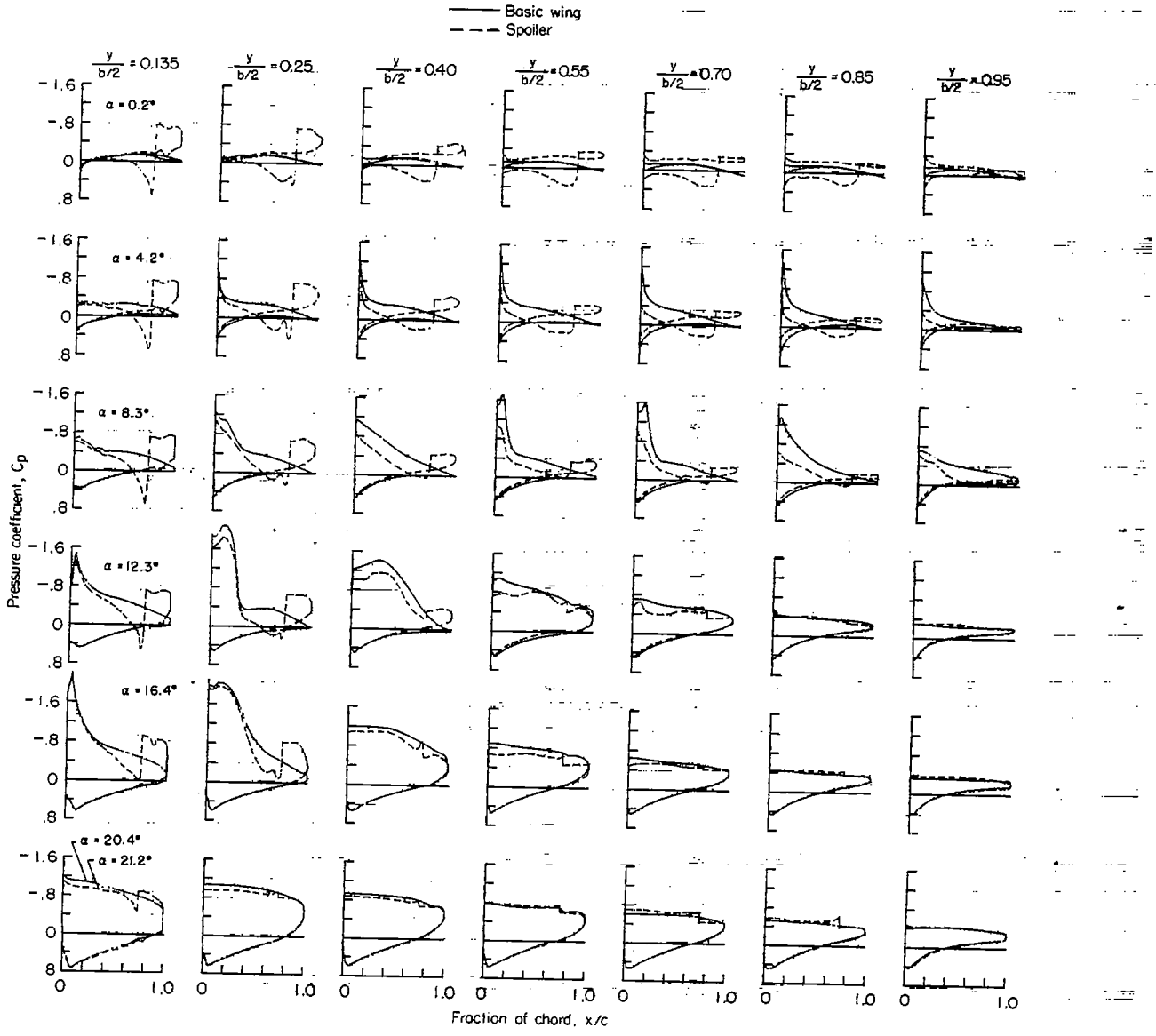
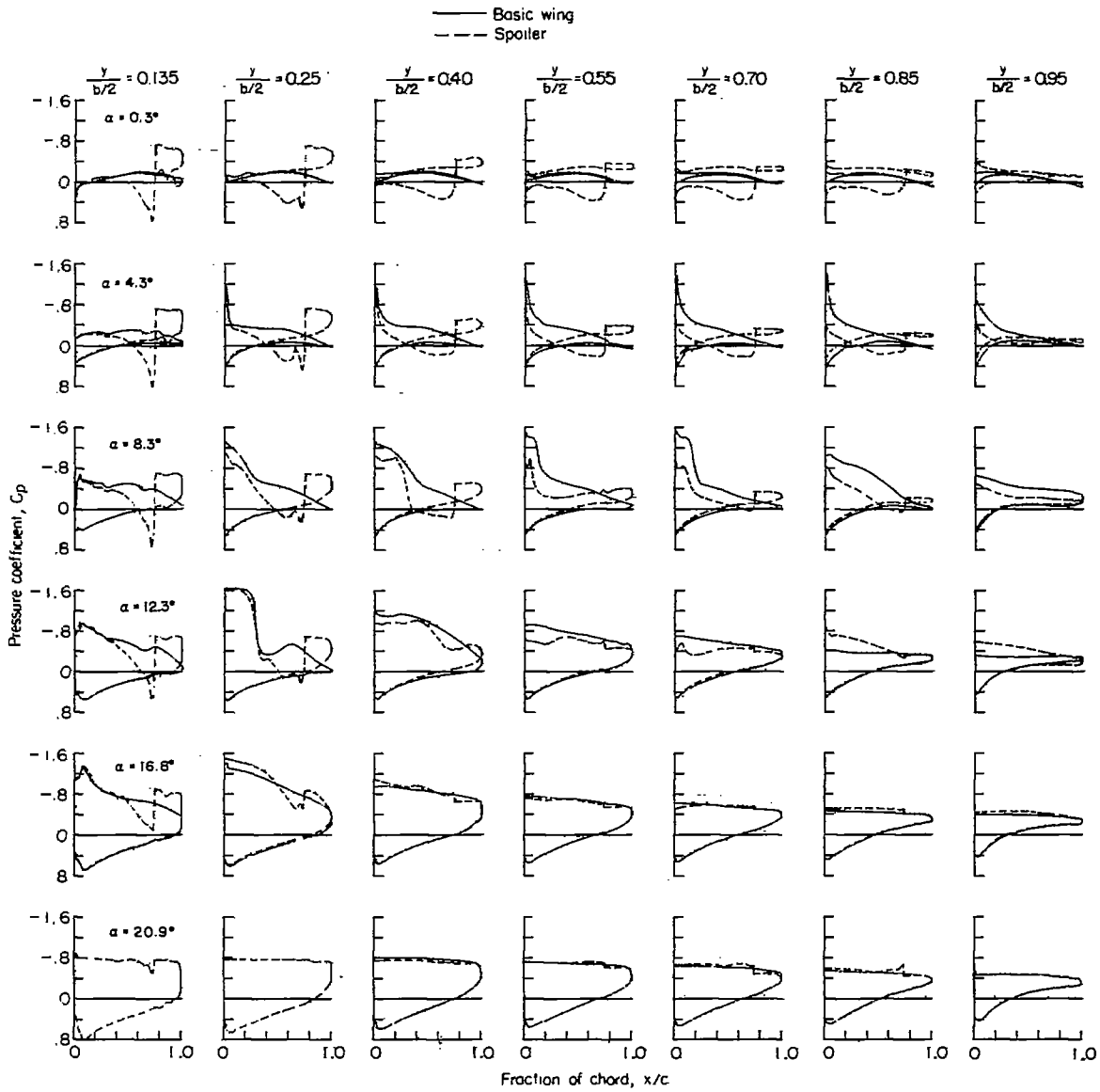


Figure 3.- Variation of Reynolds number (based on wing mean aerodynamic chord) with Mach number.



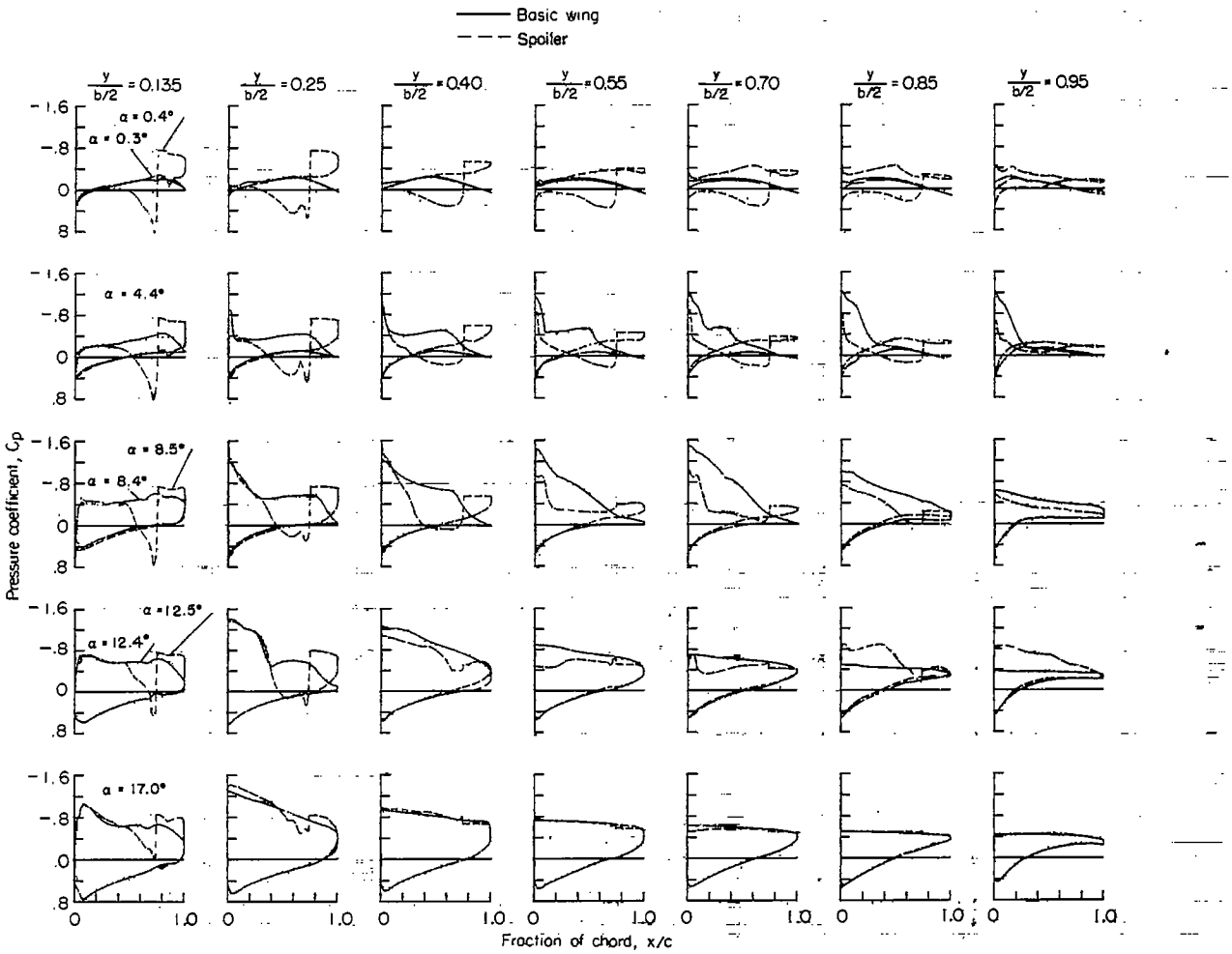
(a) M = 0.60.

Figure 4.- Wing chordwise pressure distributions for the basic model and a spoiler aileron configuration.



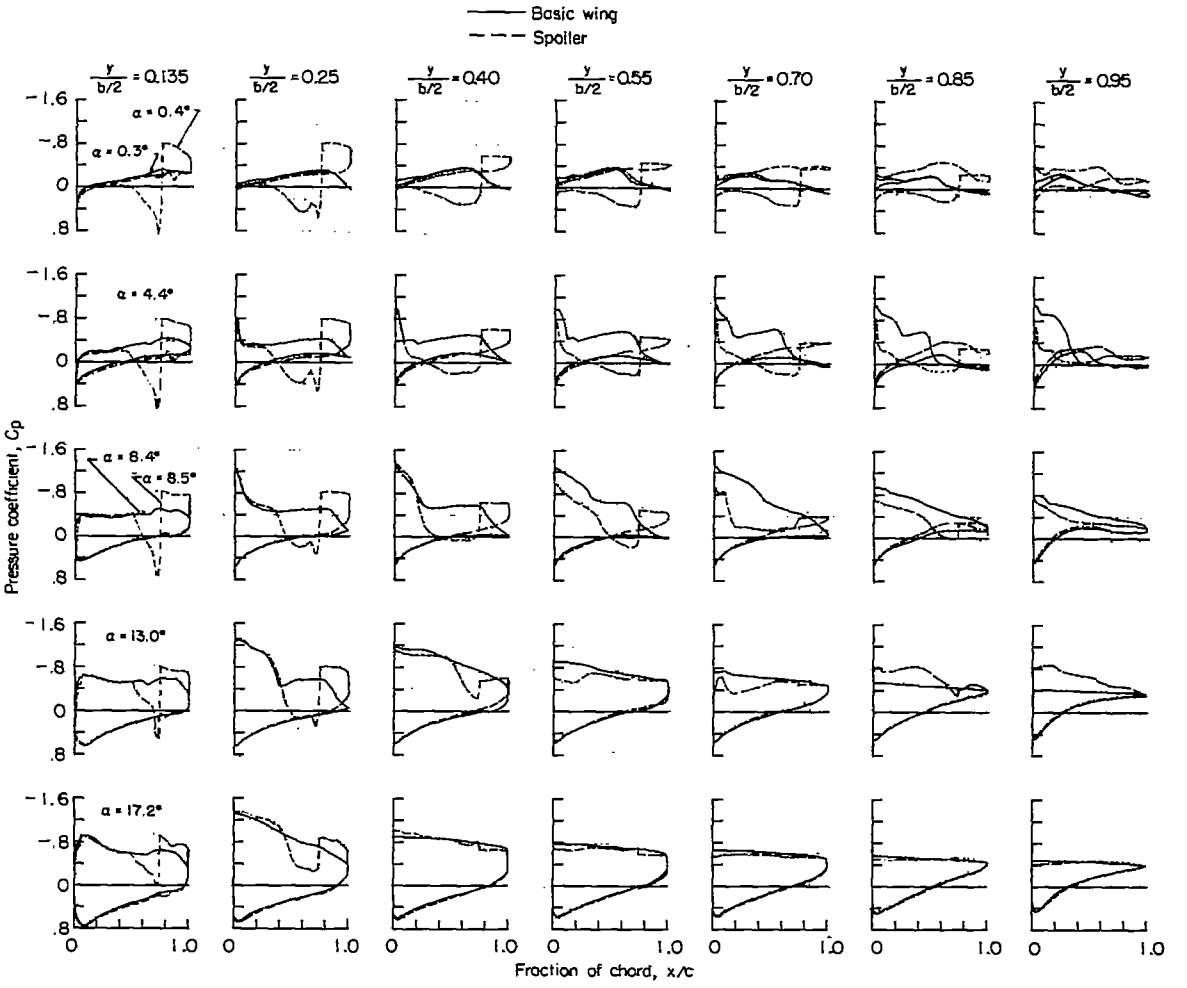
(b) M = 0.80.

Figure 4.- Continued.



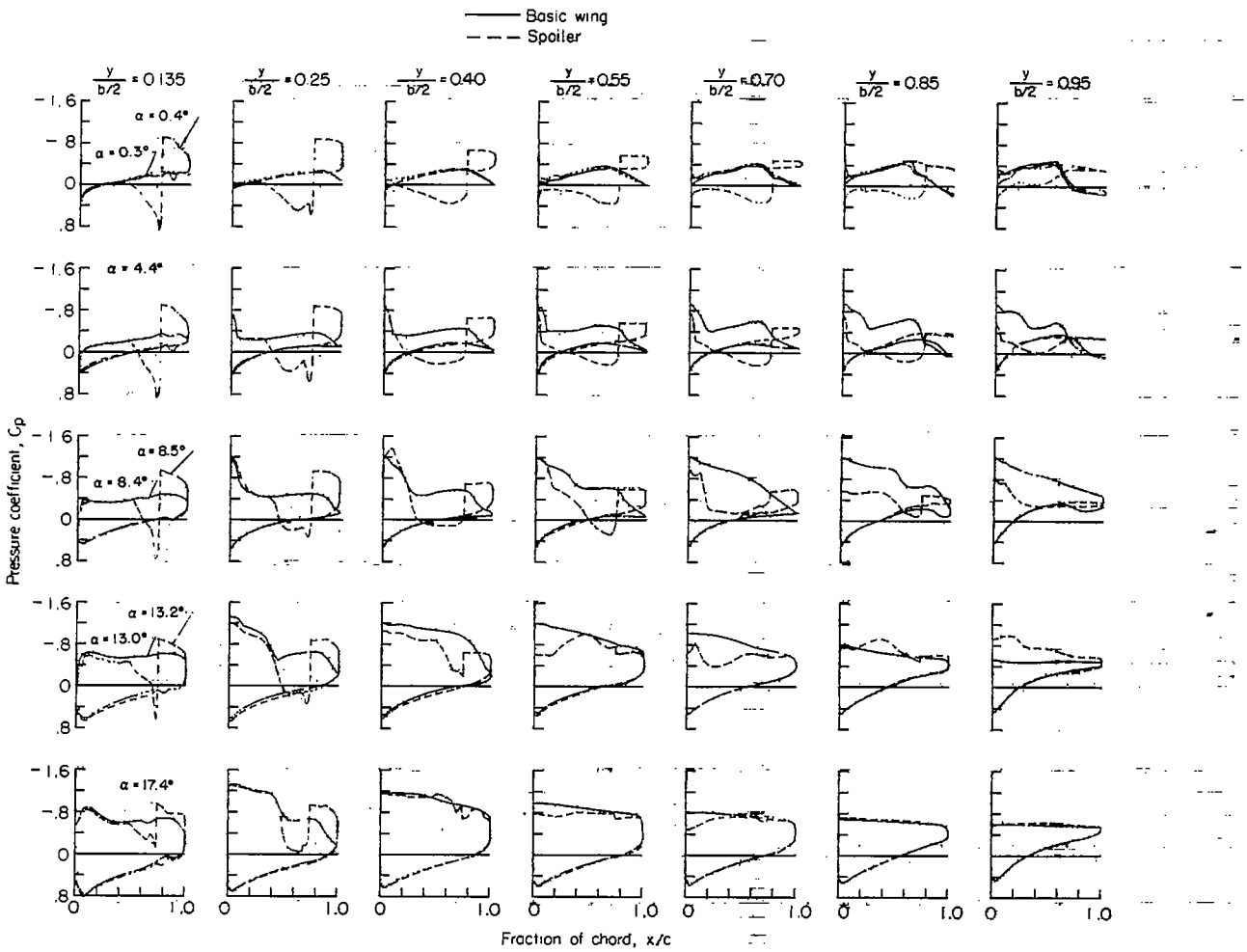
(c) M = 0.90.

Figure 4.- Continued.



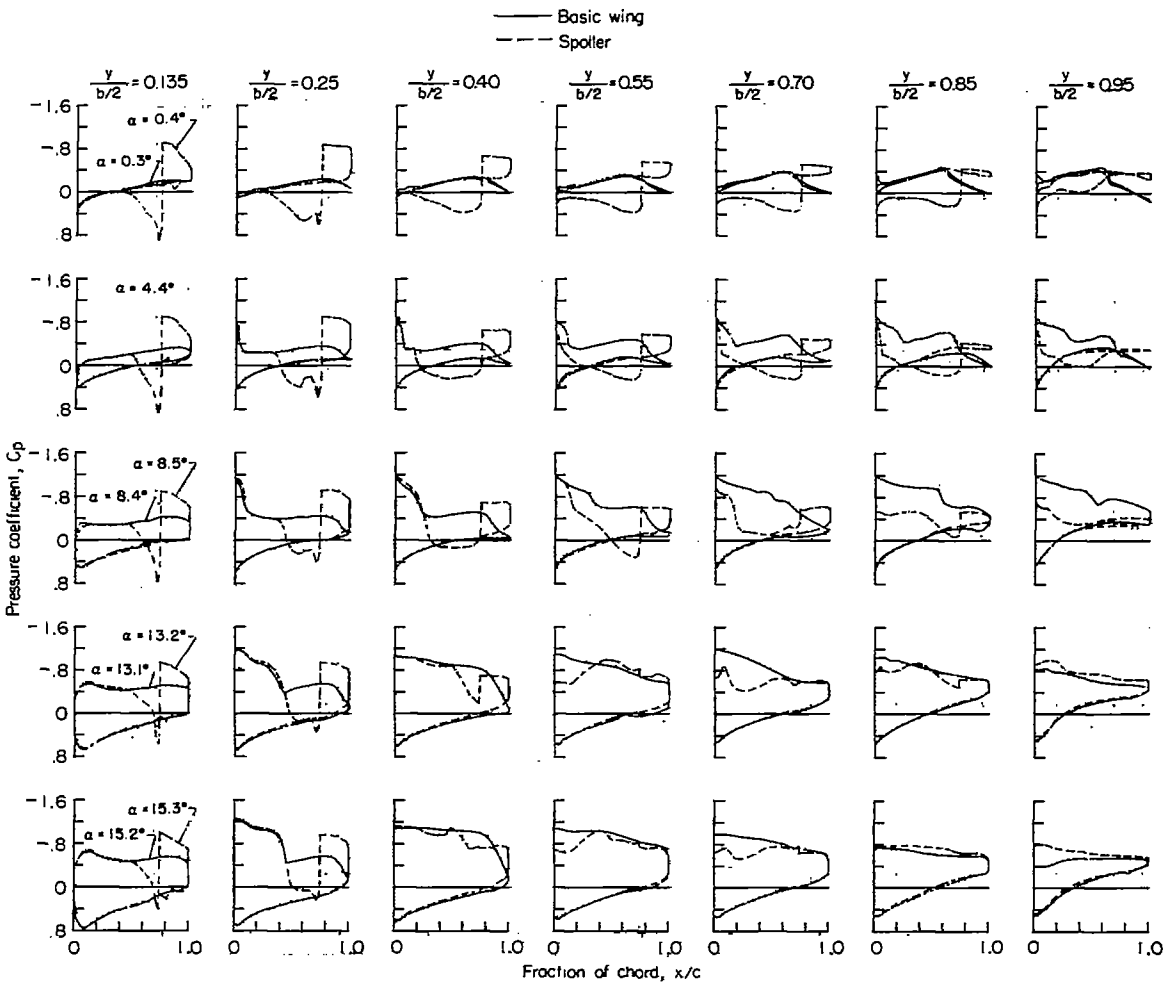
(d) M = 0.94.

Figure 4.- Continued.



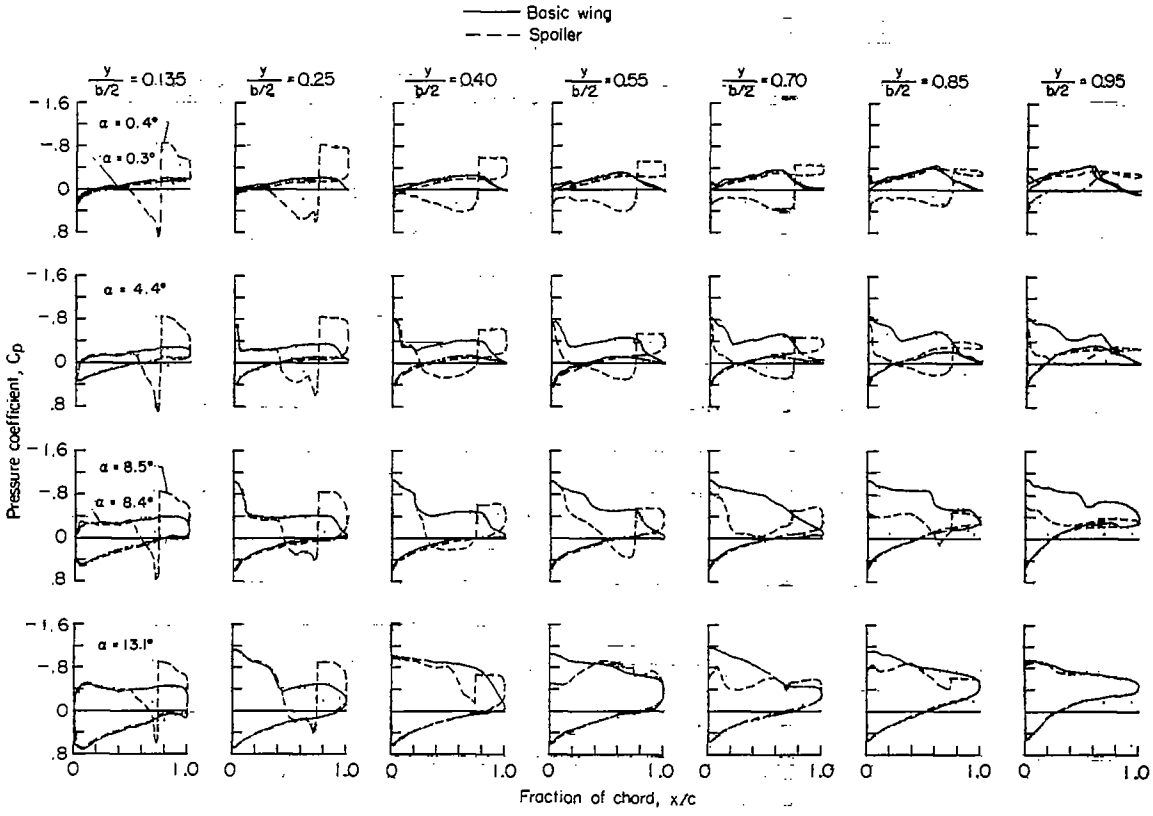
(e) M = 0.98.

Figure 4.- Continued.



(f) M = 1.00.

Figure 4.- Continued.



(g) M = 1.03.

Figure 4.- Concluded.

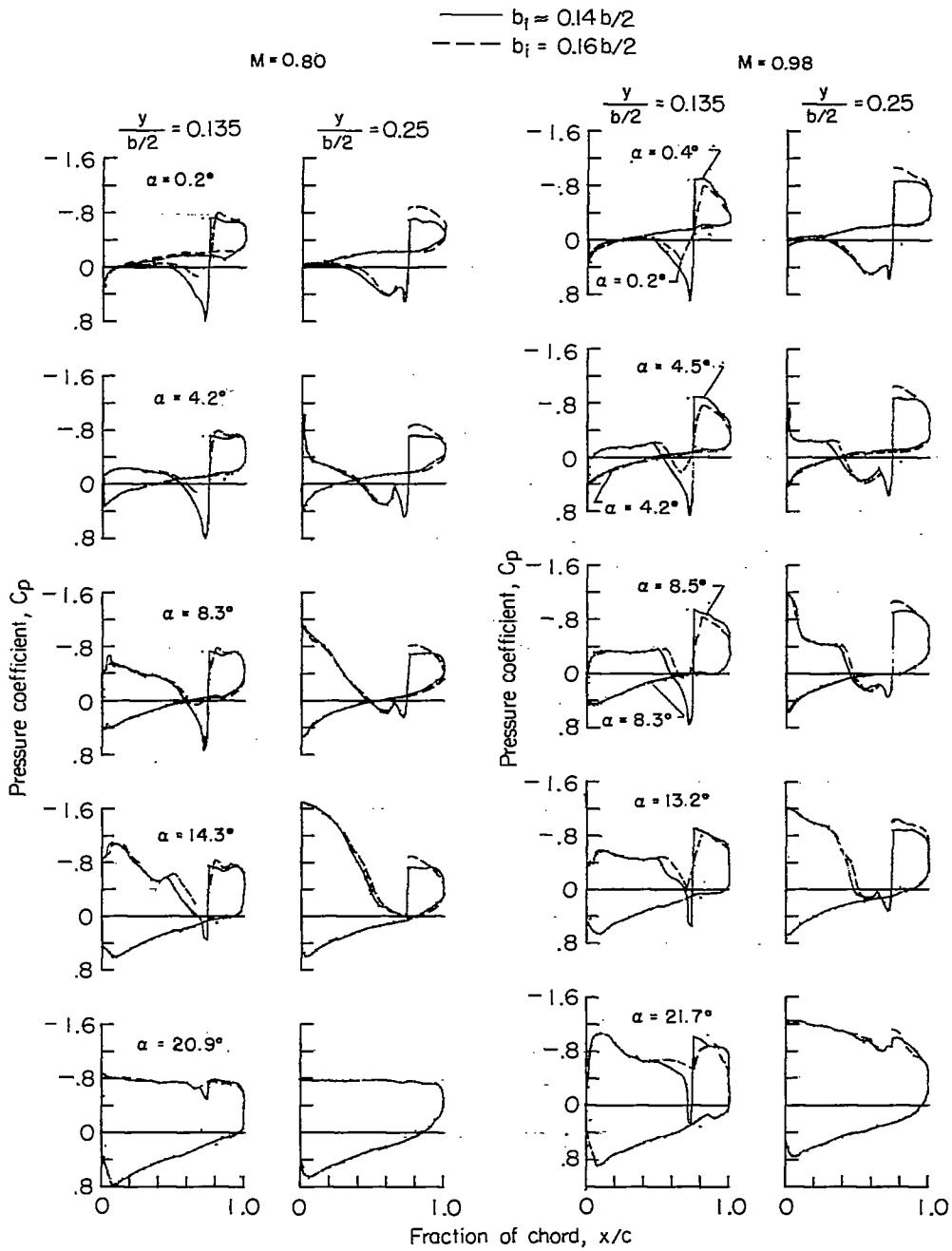


Figure 5.- Wing chordwise pressure distributions showing the effect of changing the inboard end position of a spoiler aileron from approximately 14 to 16 percent of the semispan.

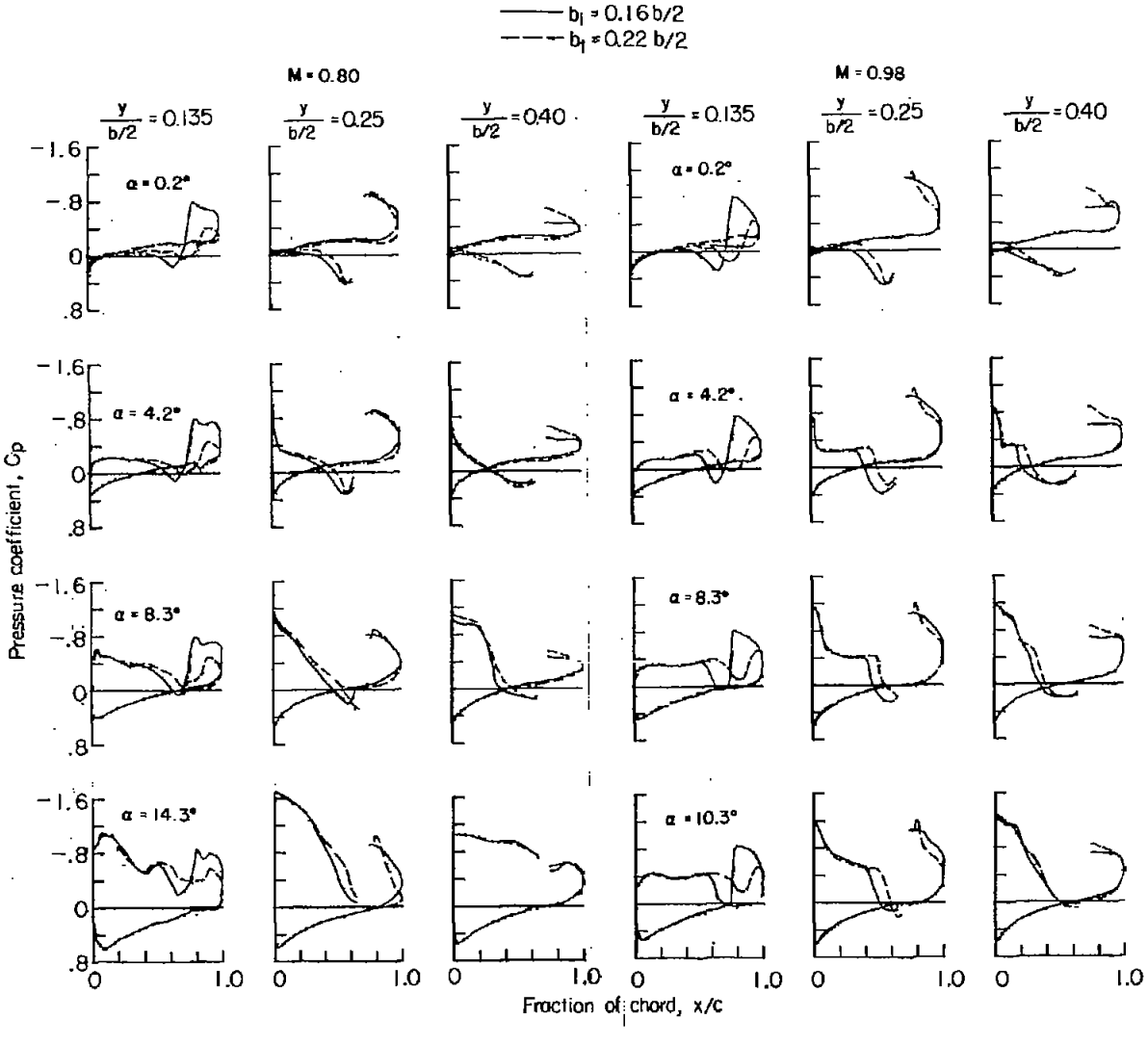
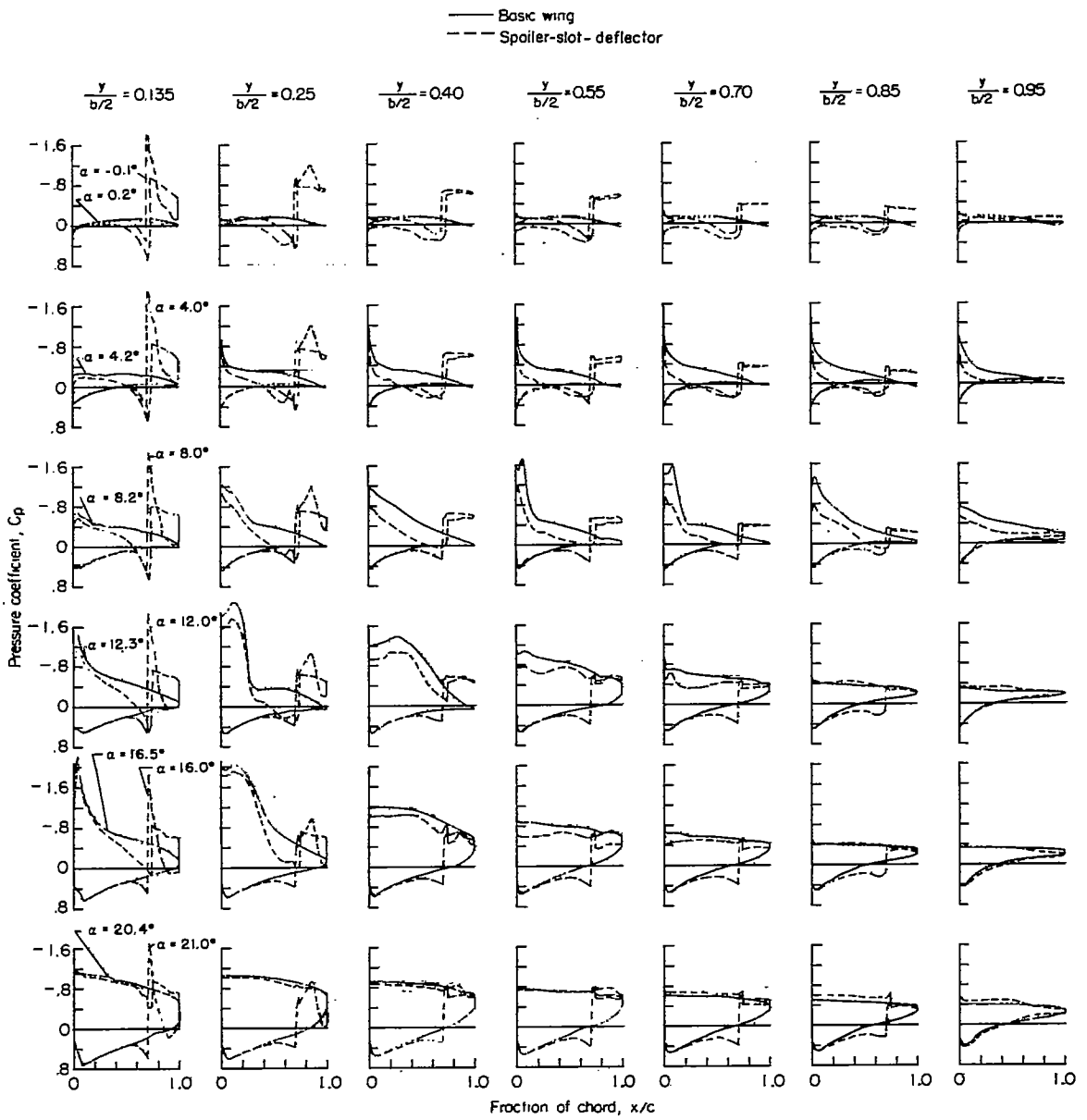
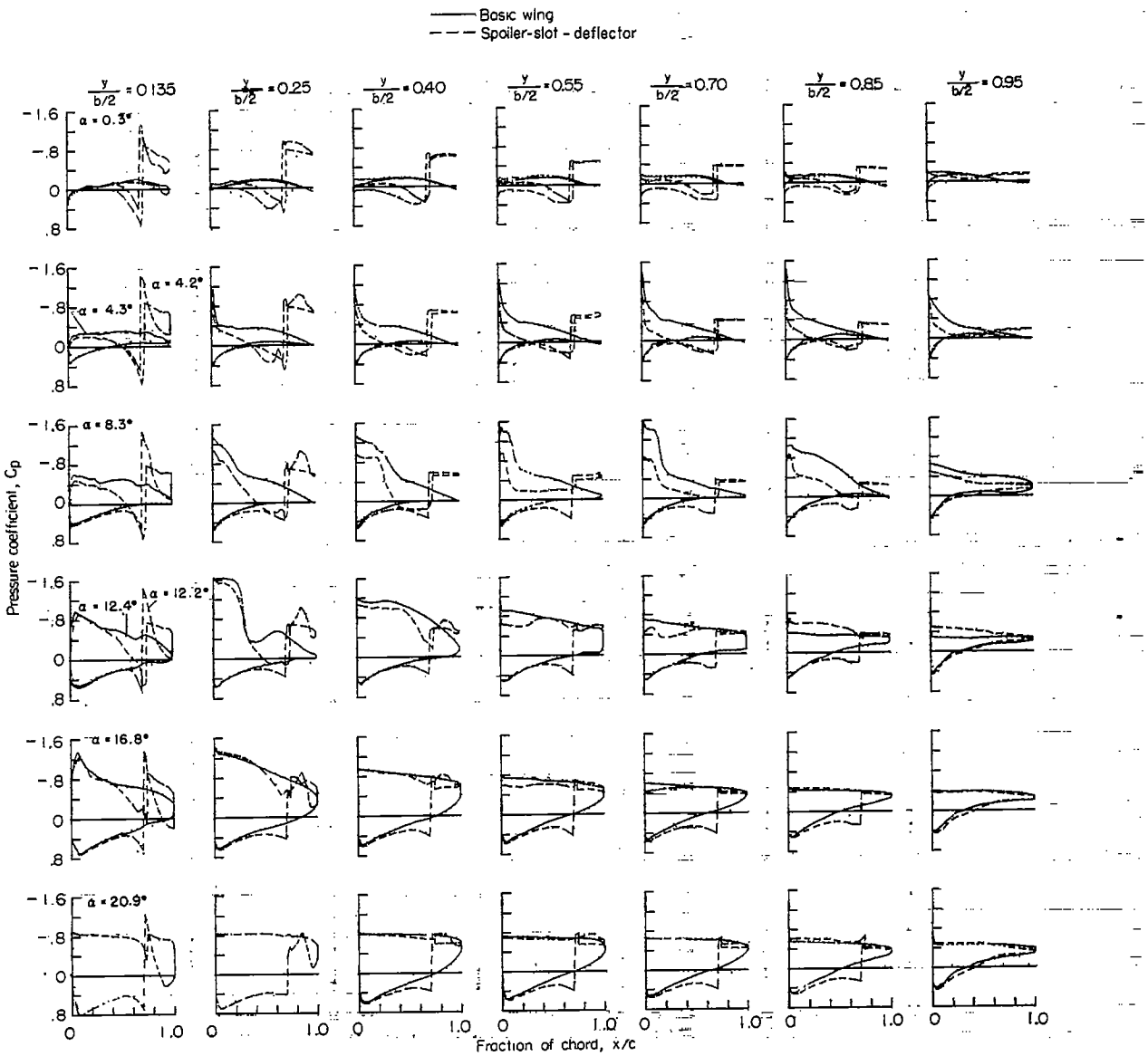


Figure 6.- Wing chordwise pressure distributions showing the effect of changing the inboard end position of a spoiler aileron from 16 to 22 percent of the semispan.



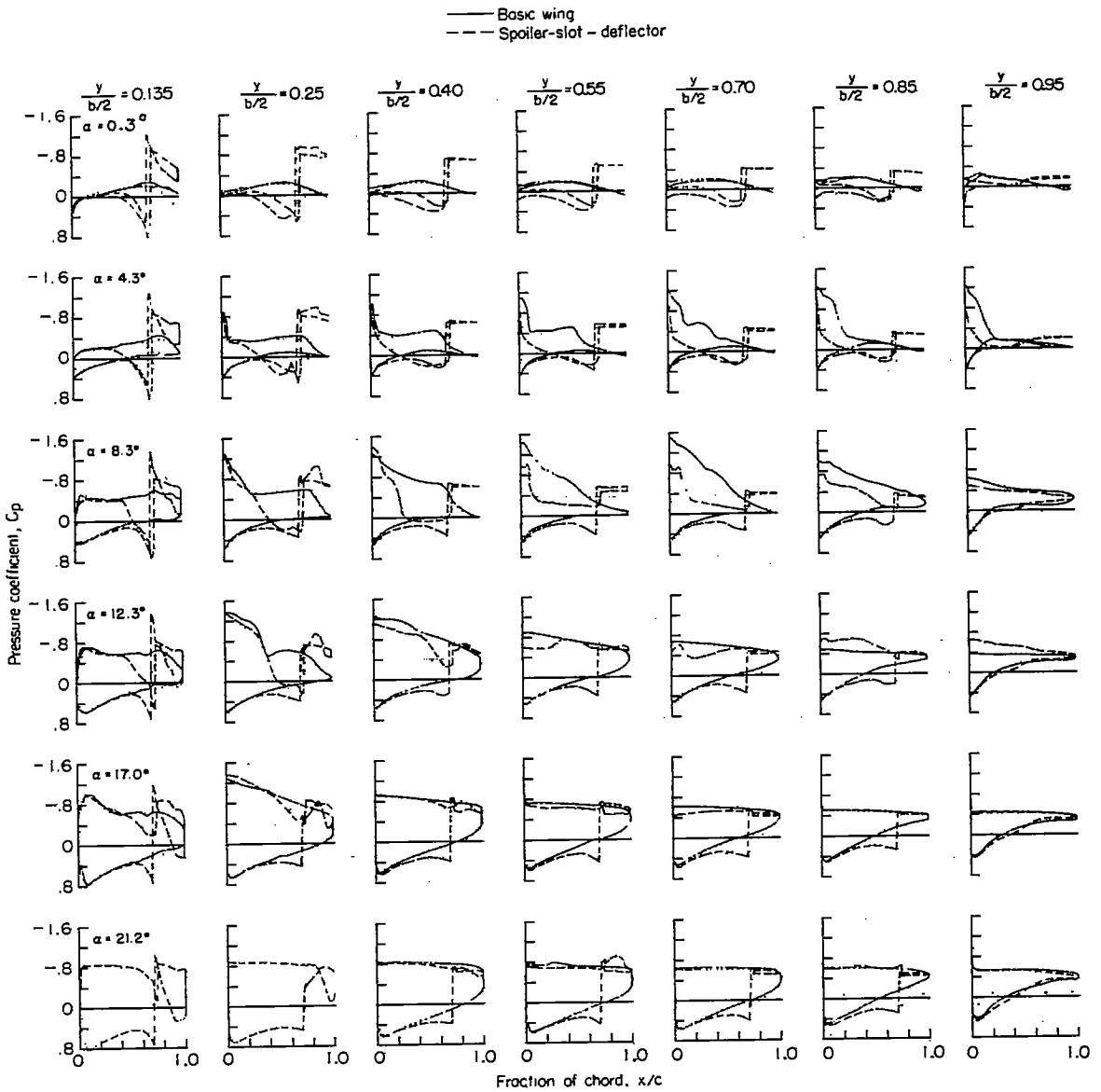
(a) M = 0.60.

Figure 7.- Wing chordwise pressure distributions for the basic model and a spoiler-slot-deflector aileron configuration.



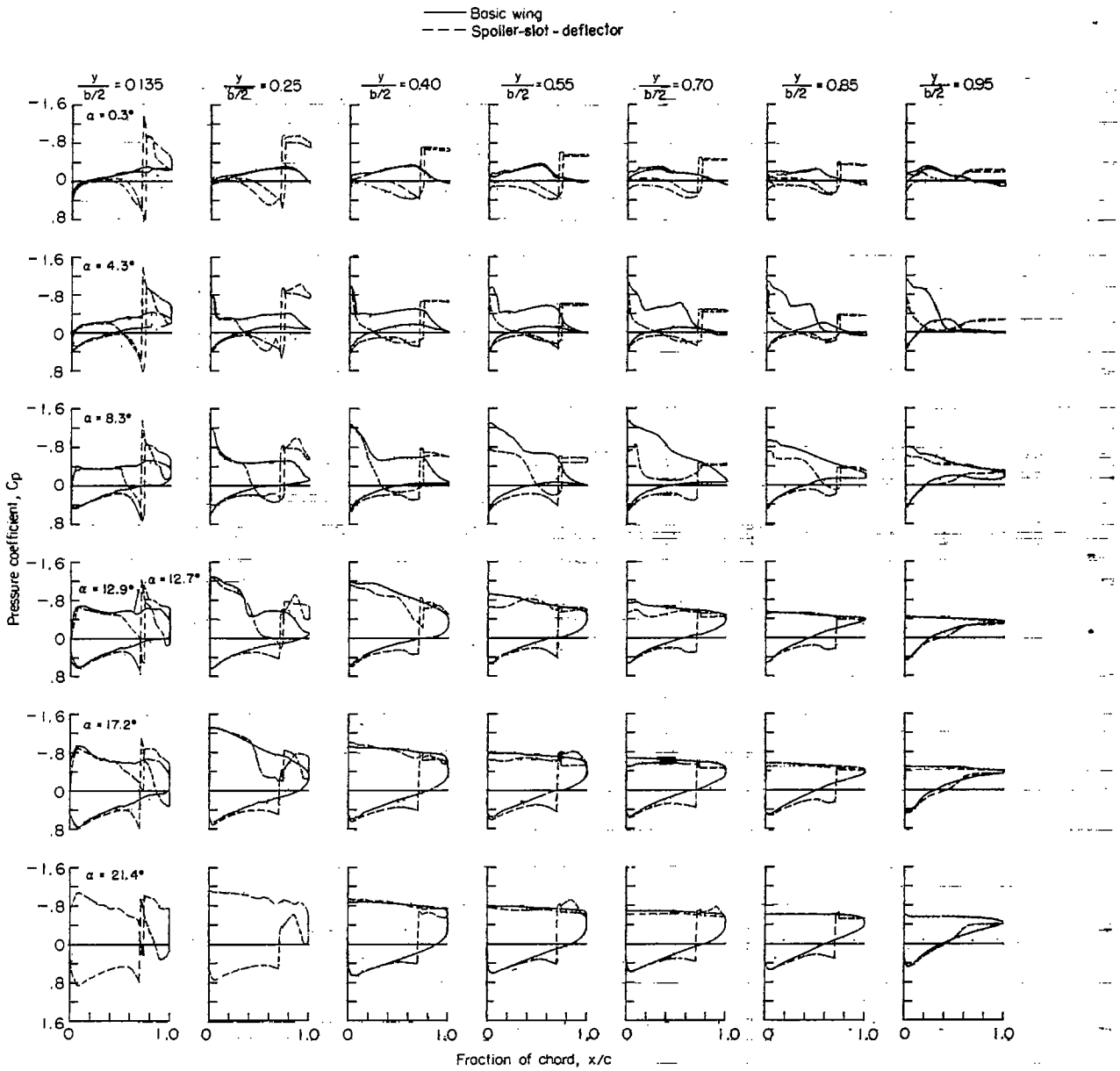
(b) M = 0.80.

Figure 7.- Continued.



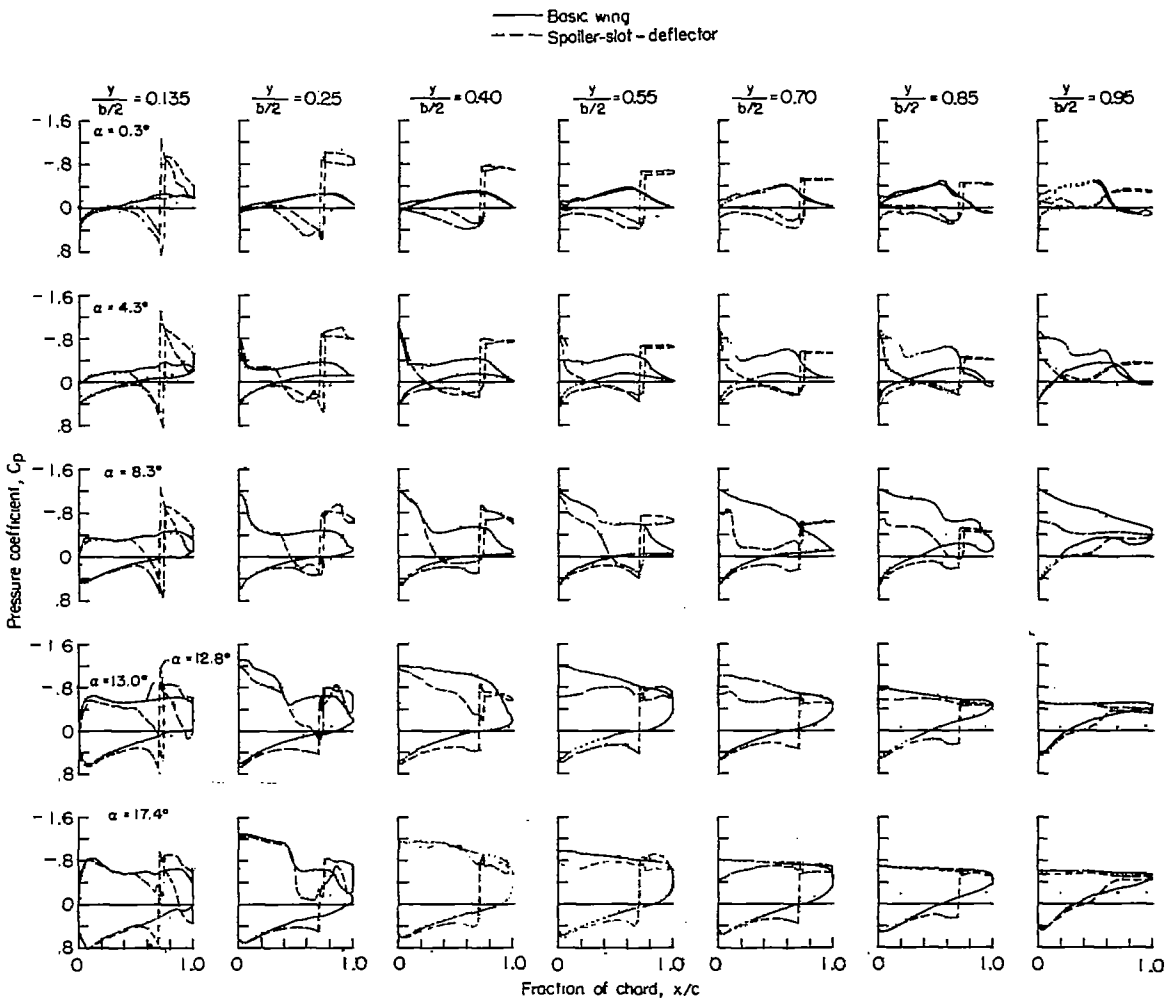
(c) M = 0.90.

Figure 7.- Continued.



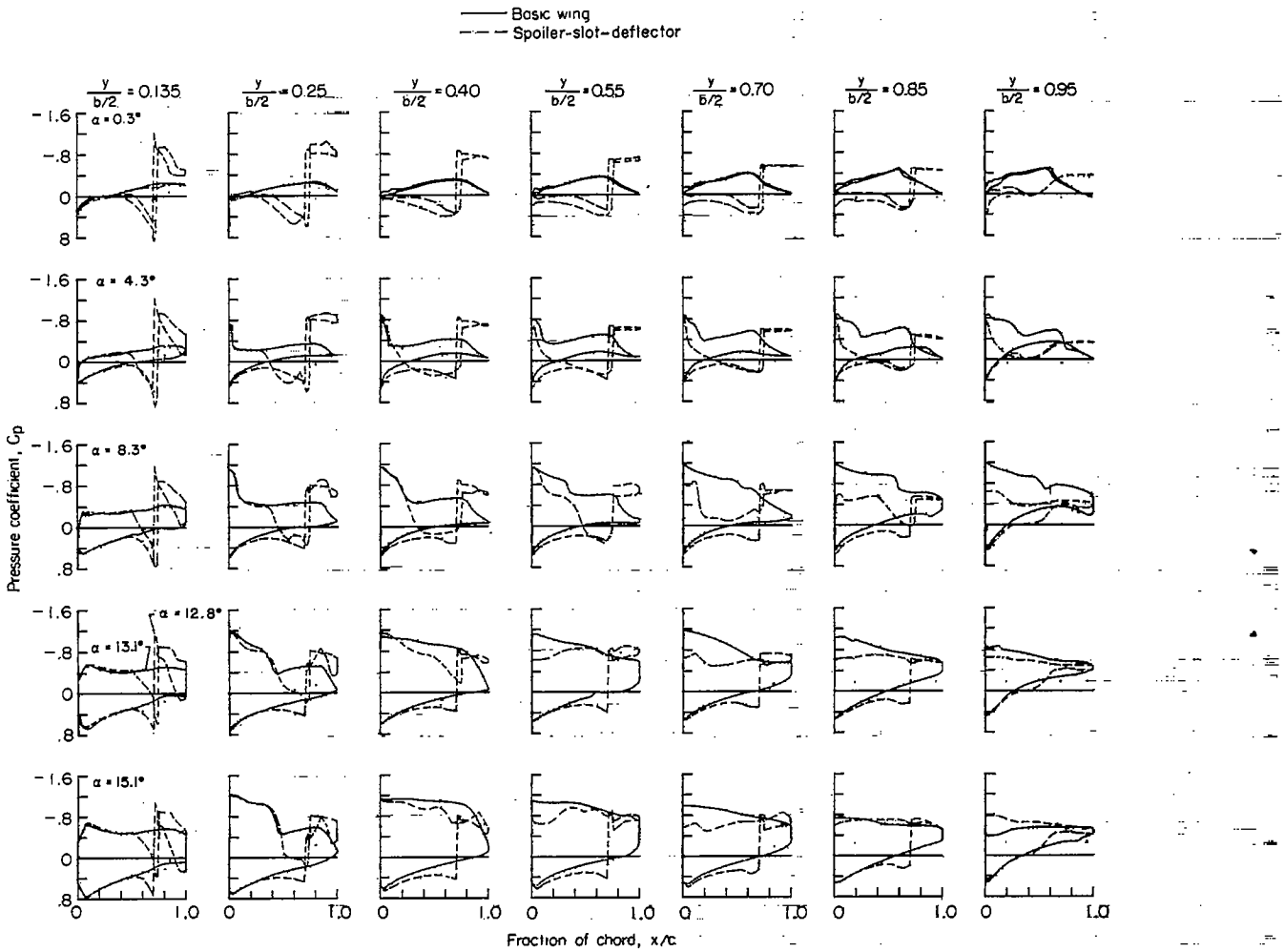
(d) M = 0.94.

Figure 7.- Continued.



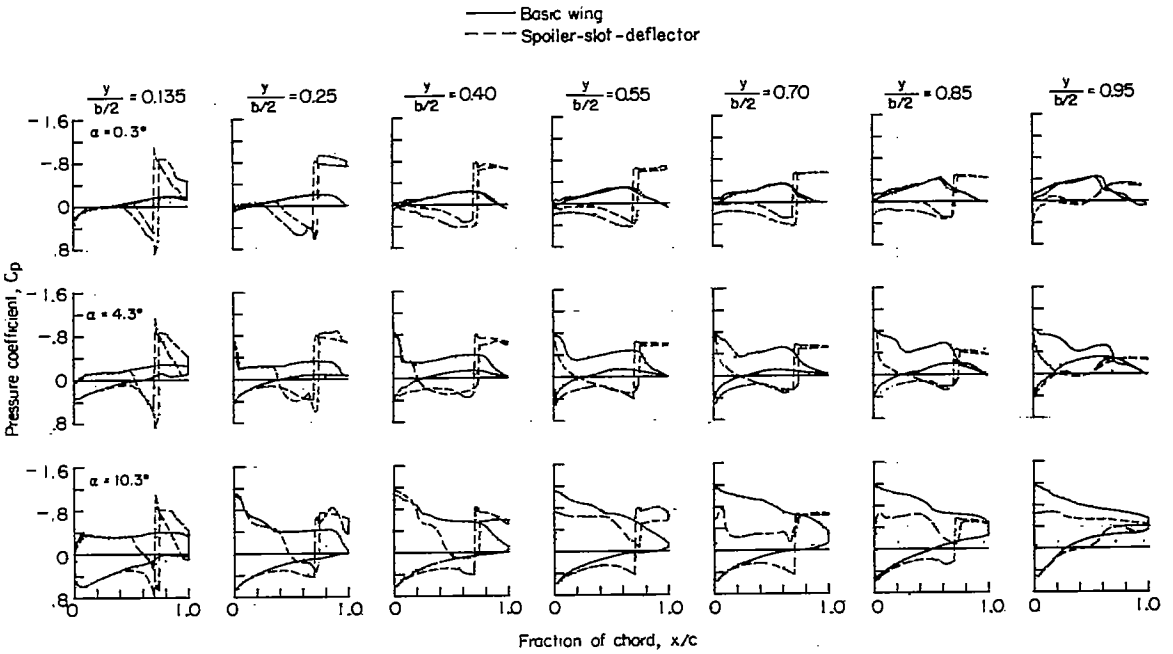
(e) M = 0.98.

Figure 7.- Continued.



(f) M = 1.00.

Figure 7.- Continued.



(g) M = 1.03.

Figure 7.- Concluded.

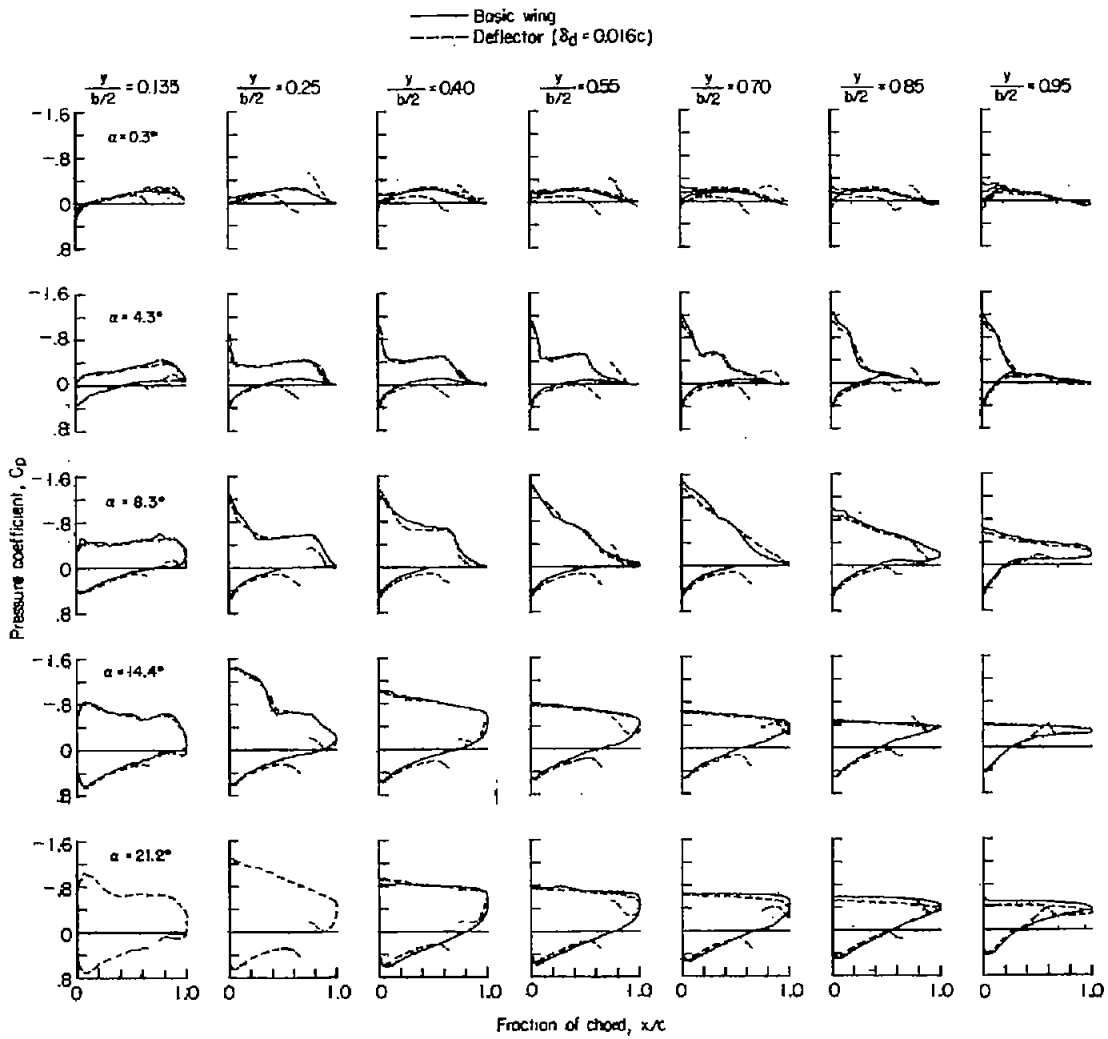


Figure 8.- Wing chordwise pressure distributions for the basic model and a deflector (δ_d = 0.016c) aileron configuration at a Mach number of 0.90.

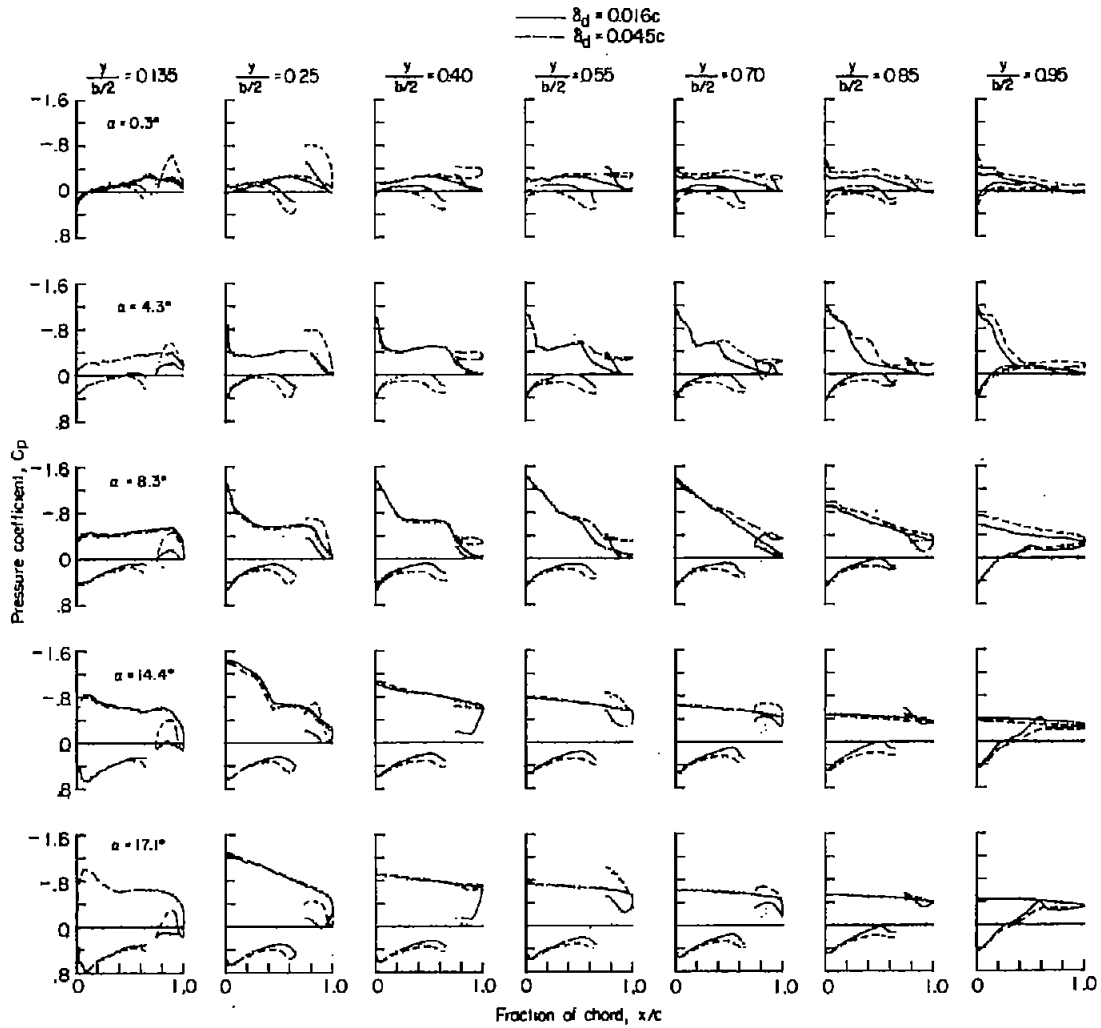
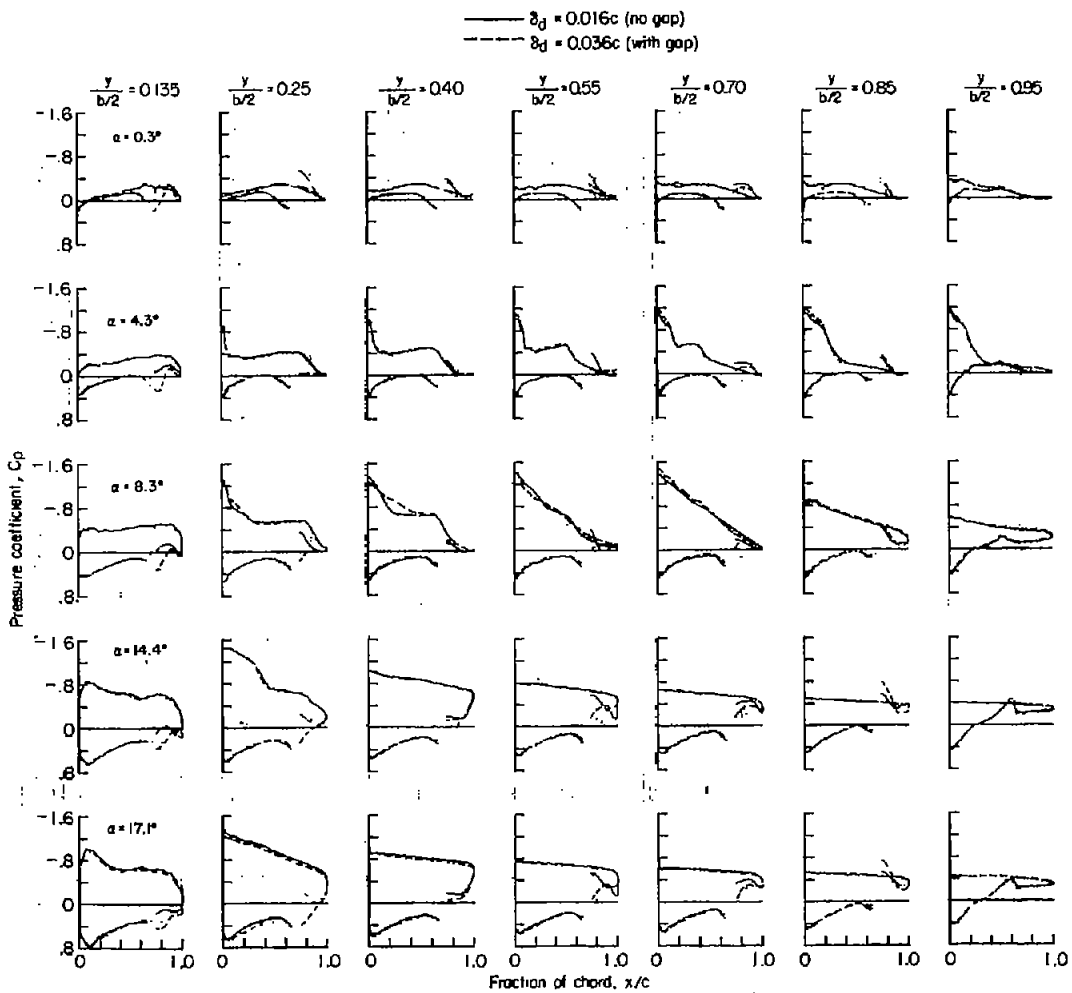
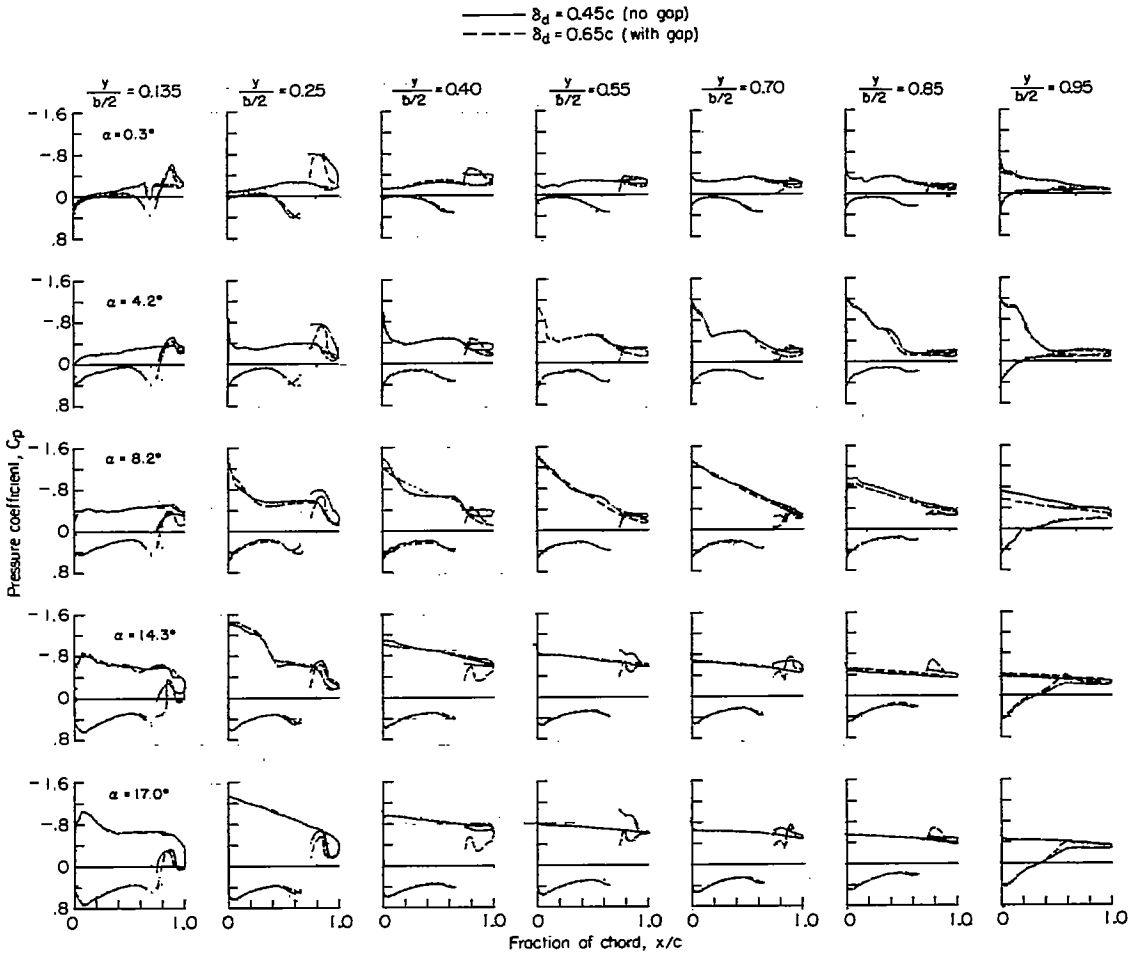


Figure 9.- Wing chordwise pressure distributions showing the effect of changing projection of a deflector aileron from 0.016c to 0.045c at a Mach number of 0.90.



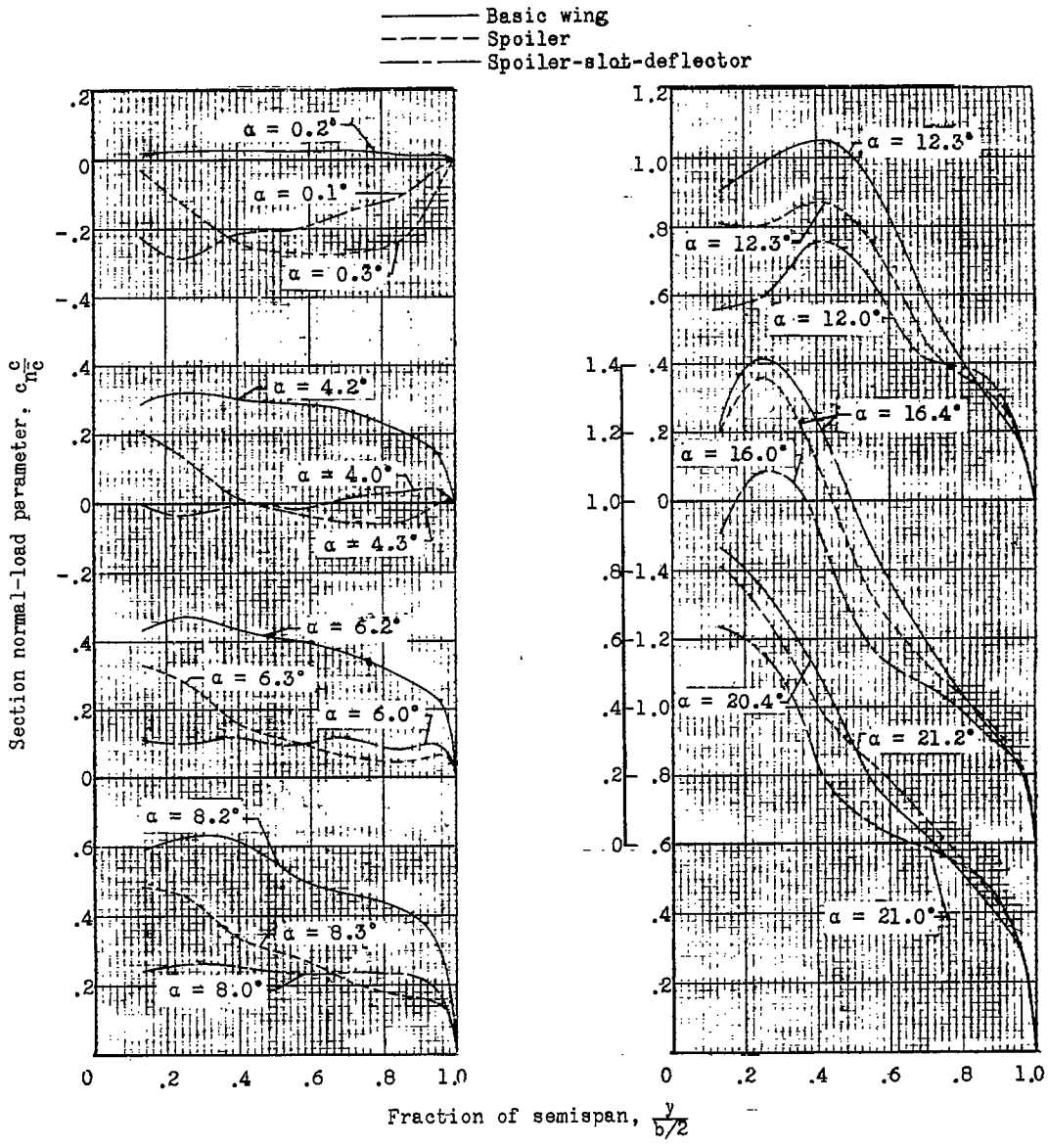
(a) $\delta_d = 0.016c$ (no gap); $\delta_d = 0.036c$ (with gap).

Figure 10.- Wing chordwise pressure distributions showing the effect of a 0.02c gap between a deflector aileron and the wing at a Mach number of 0.90.



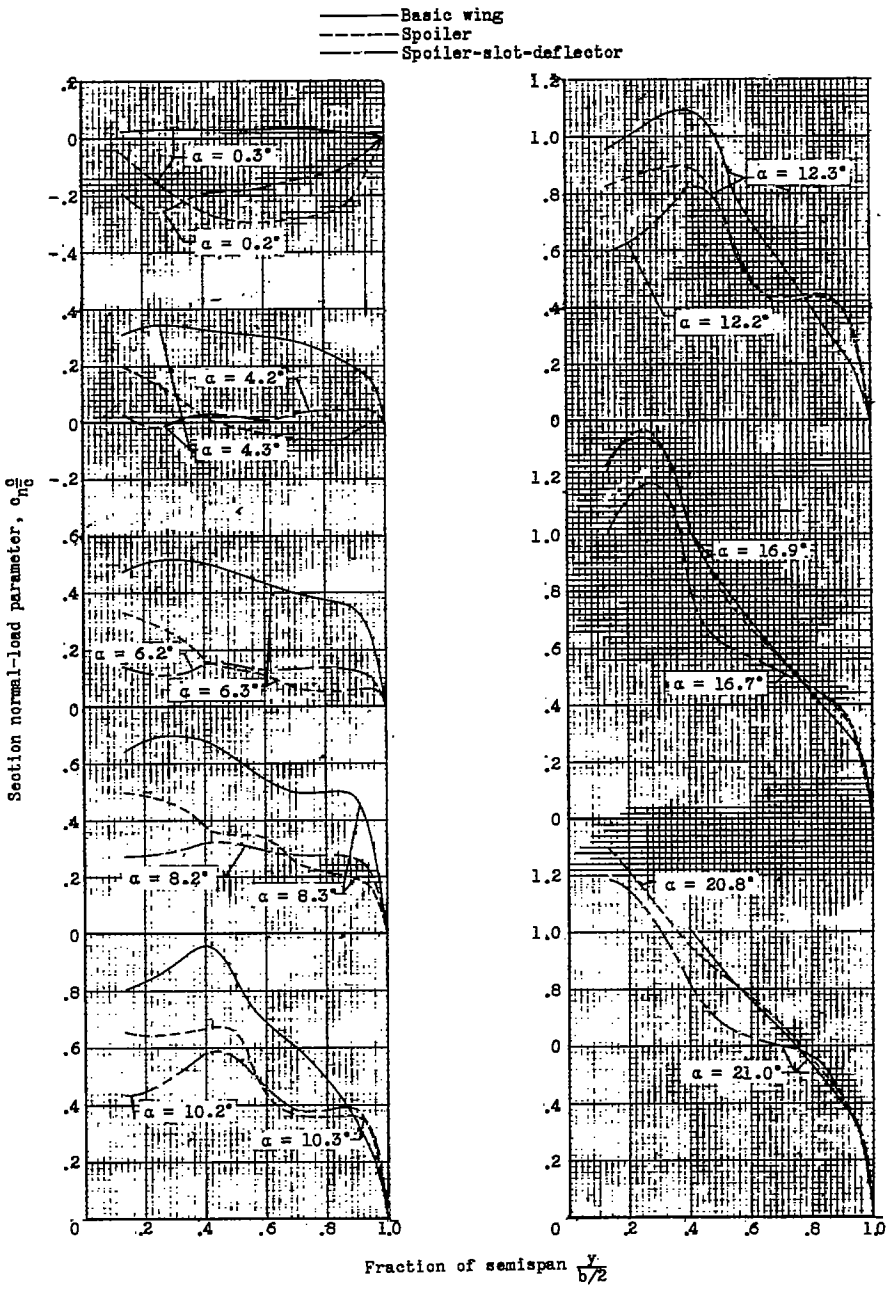
(b) $\delta_d = 0.45c$ (no gap); $\delta_d = 0.65c$ (with gap).

Figure 10.- Concluded.



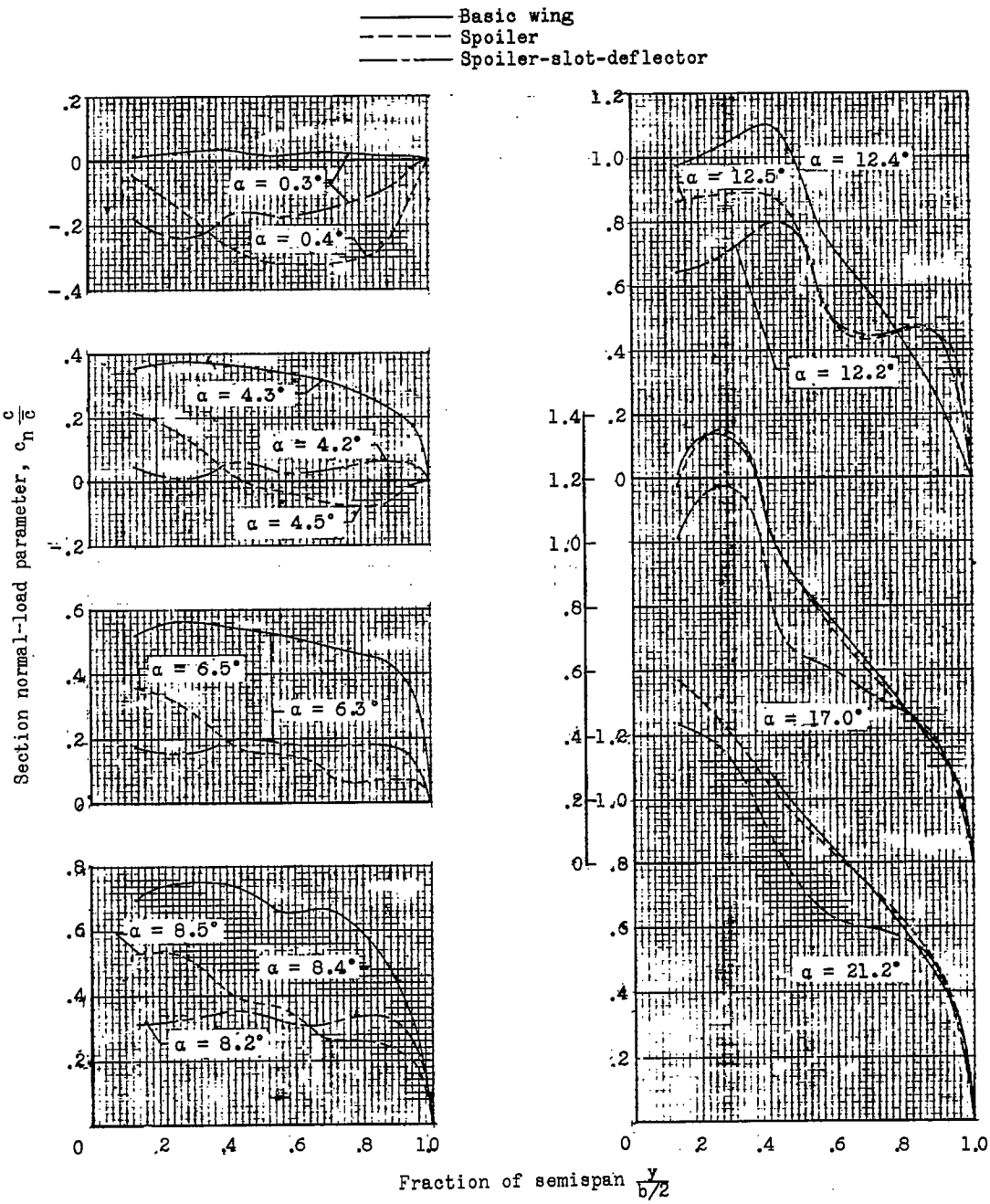
(a) M = 0.60.

Figure 11.- Wing semispan load distributions for the basic model, a spoiler aileron configuration, and a spoiler-slot-deflector aileron configuration.



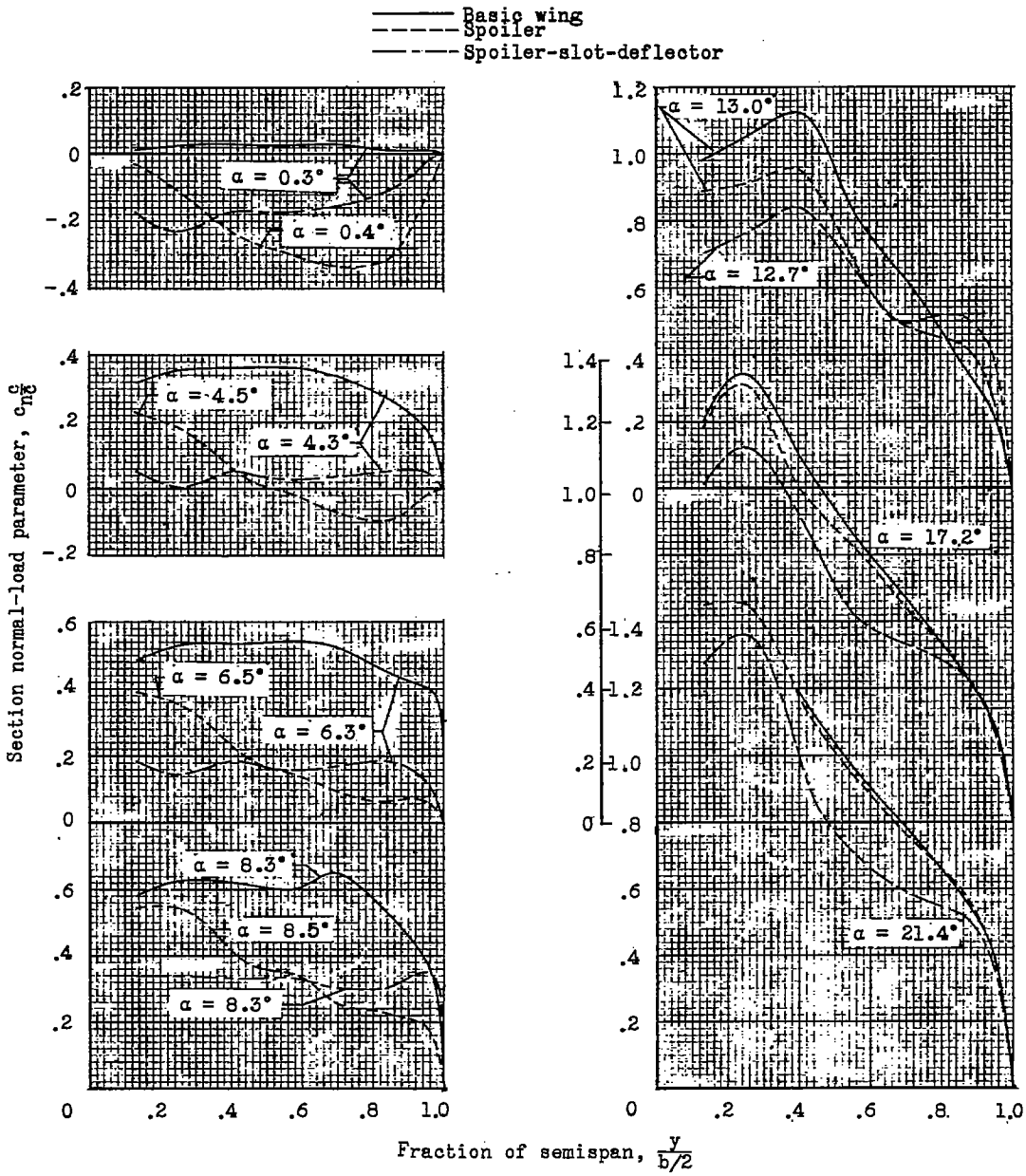
(b) M = 0.80.

Figure 11.- Continued.



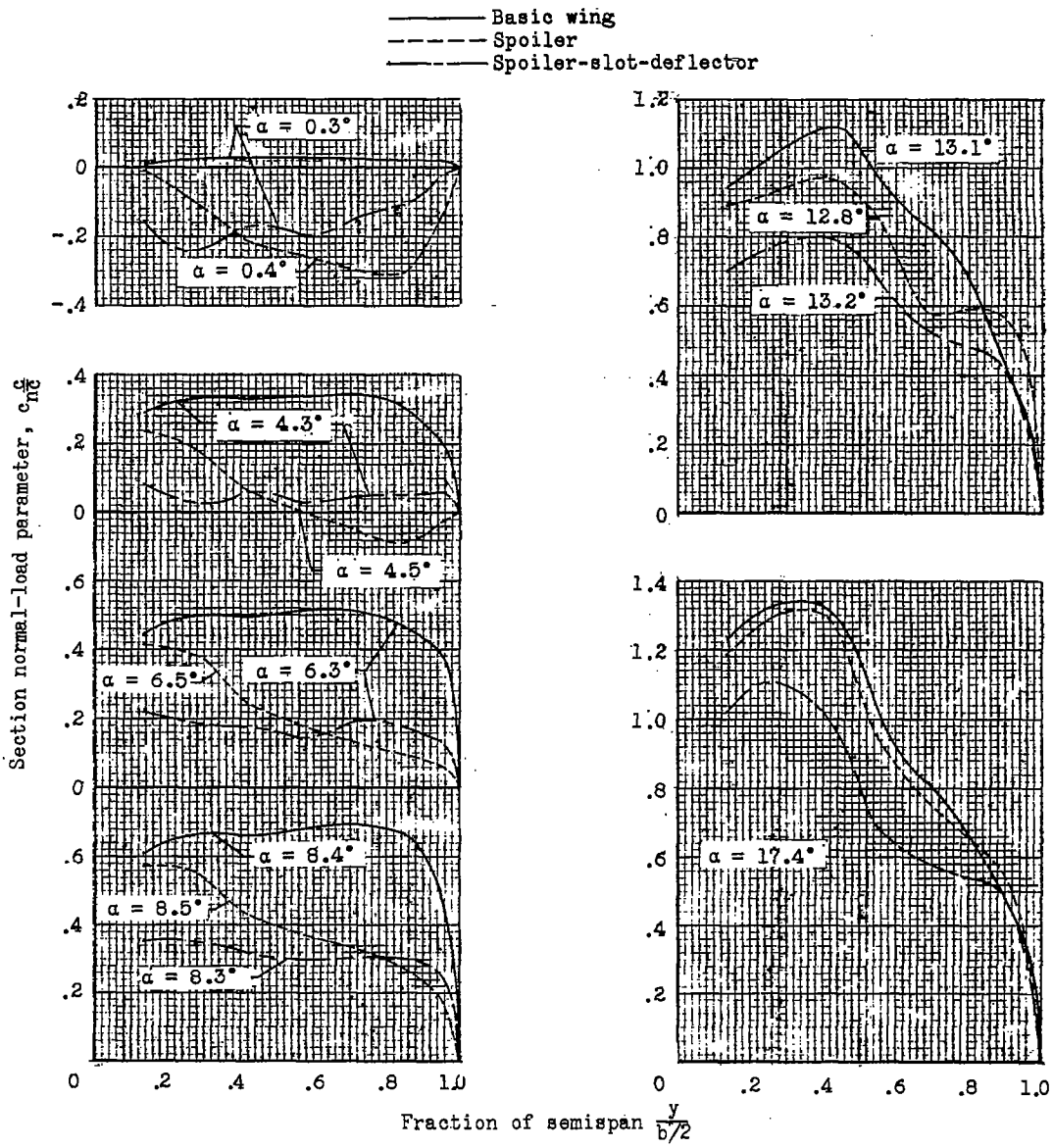
(c) M = 0.90.

Figure 11.- Continued.



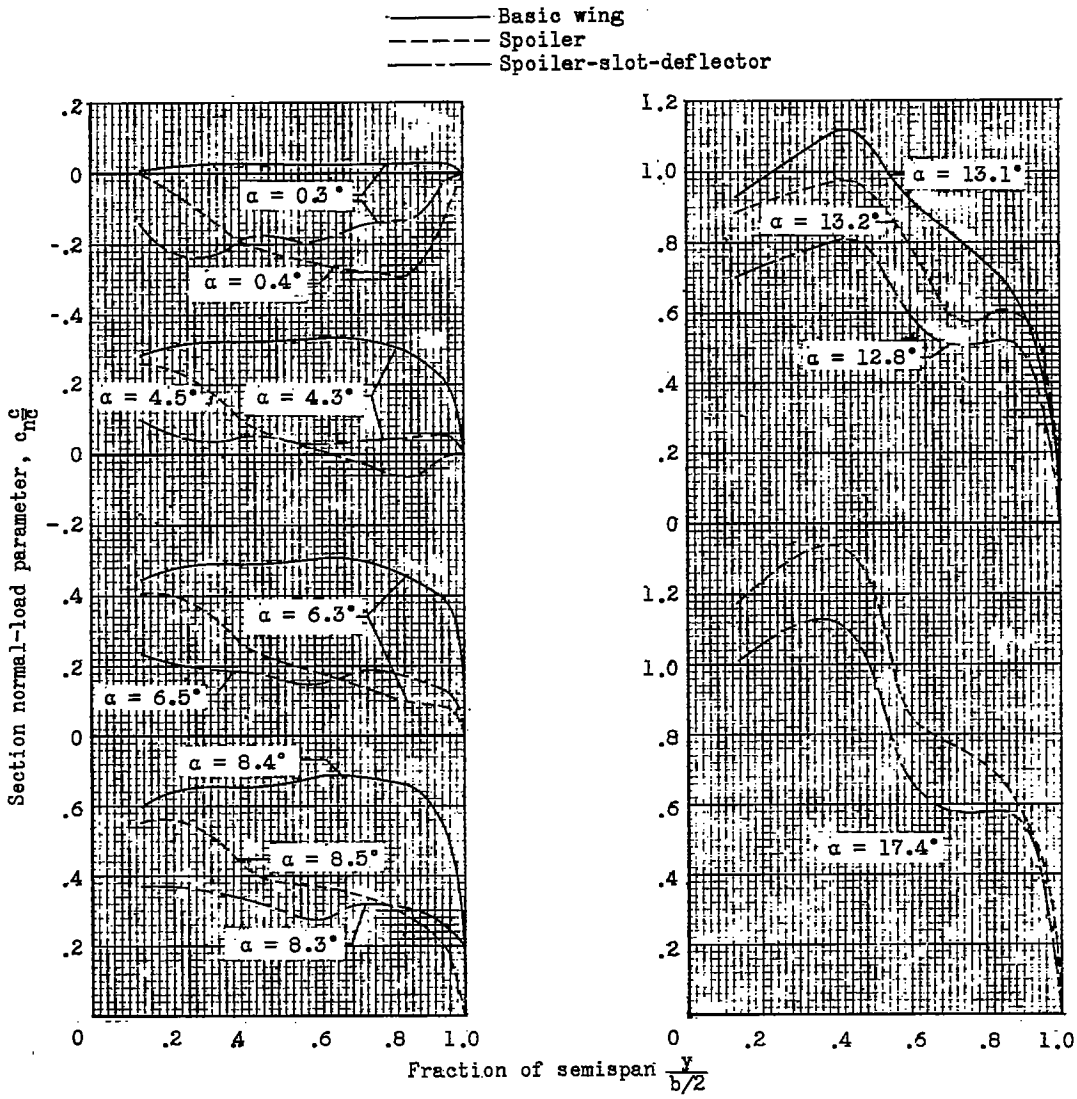
(d) M = 0.94.

Figure 11.- Continued.



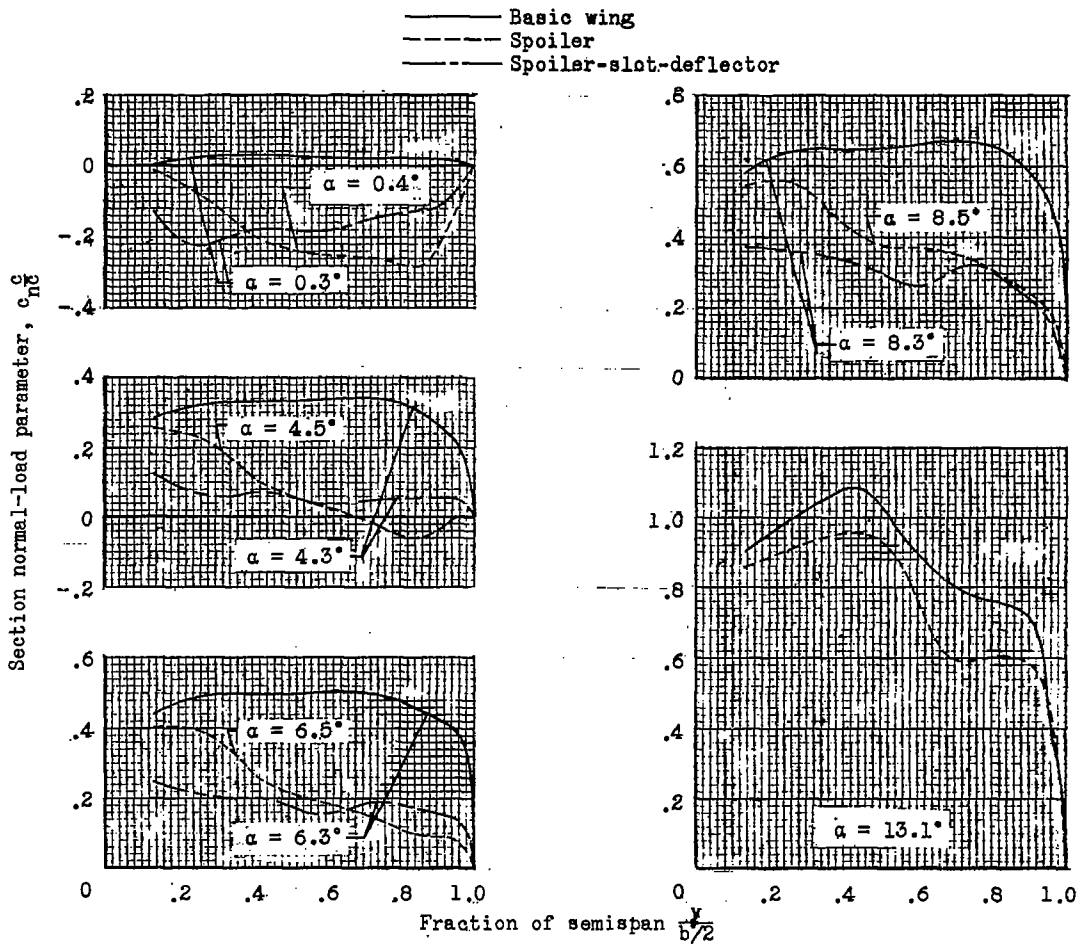
(e) M = 0.98.

Figure 11.- Continued.



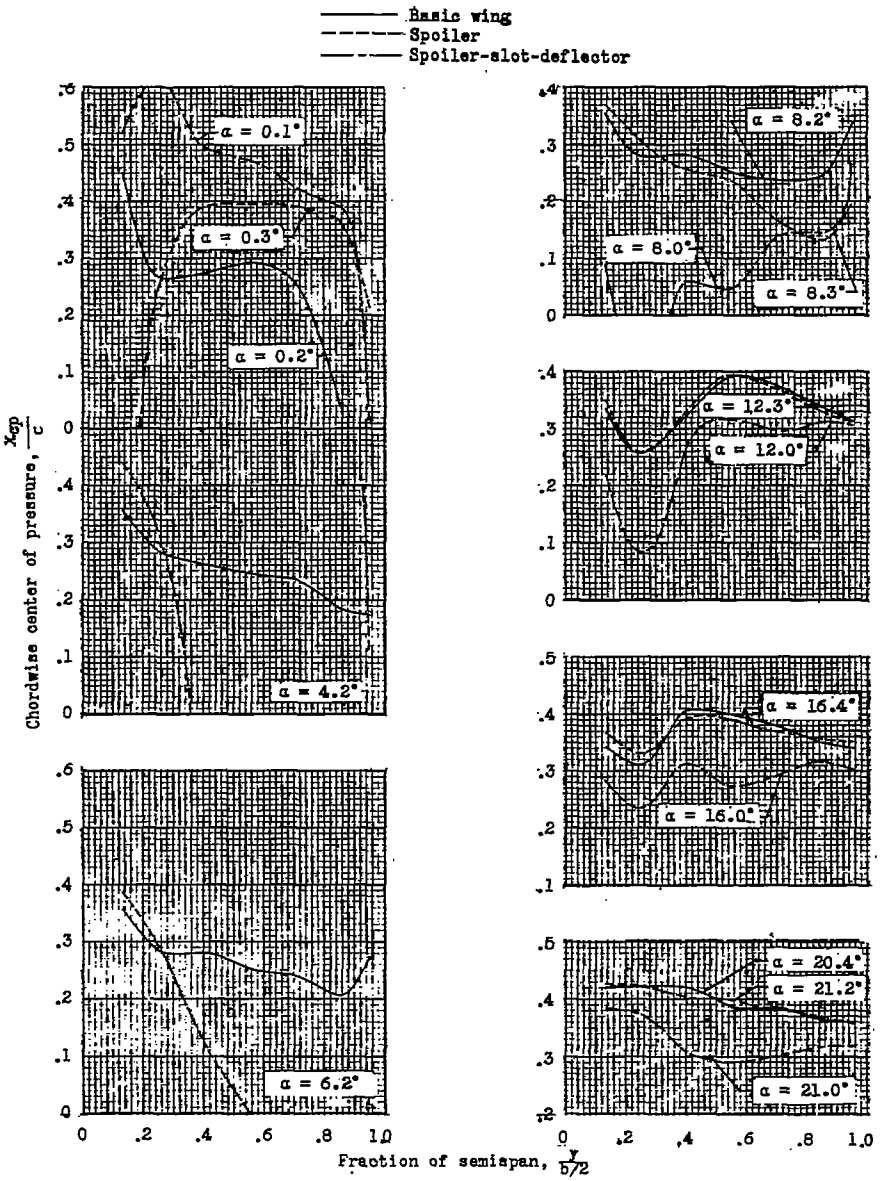
(f) M = 1.00

Figure 11.- Continued.



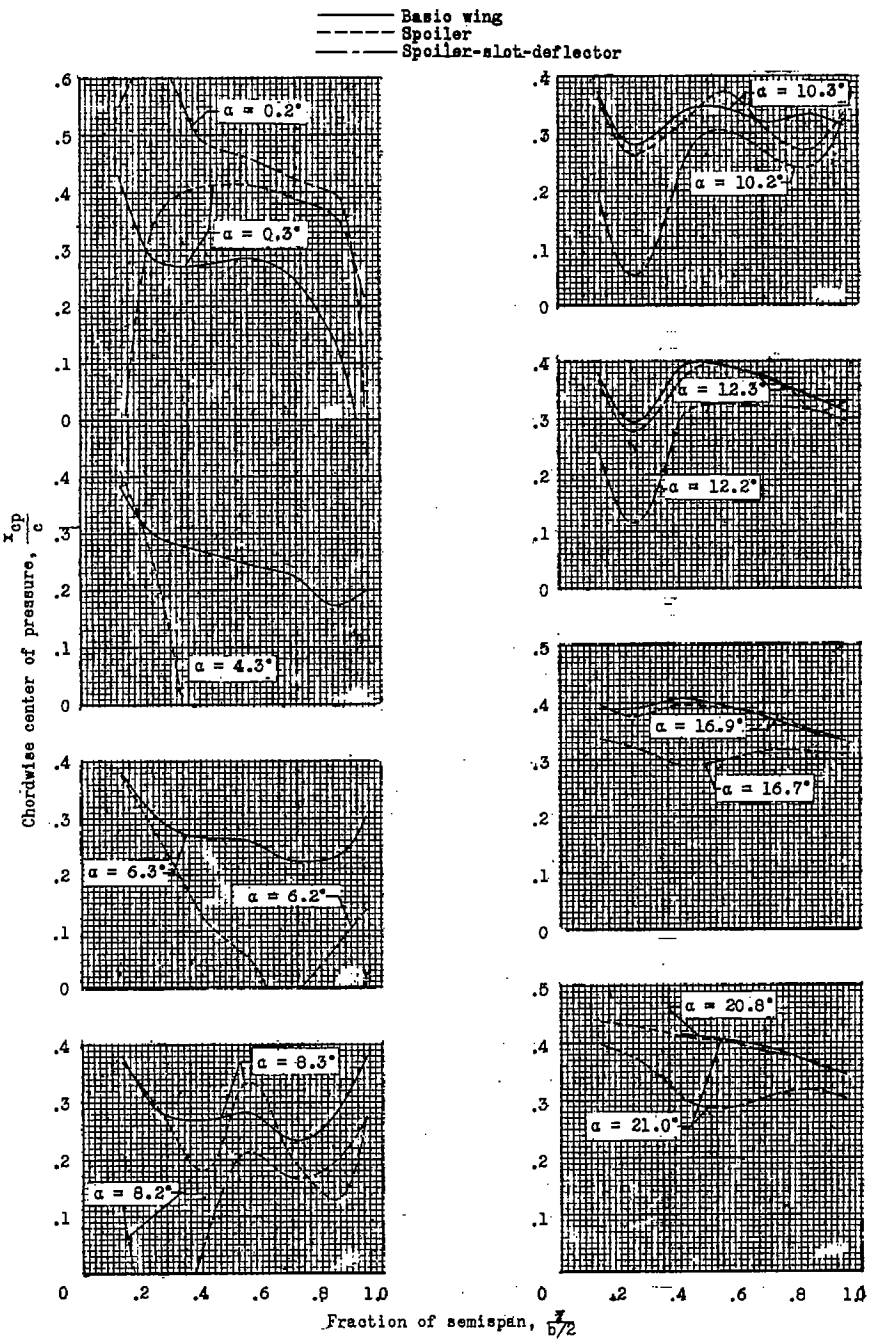
(g) M = 1.03.

Figure 11.- Concluded.



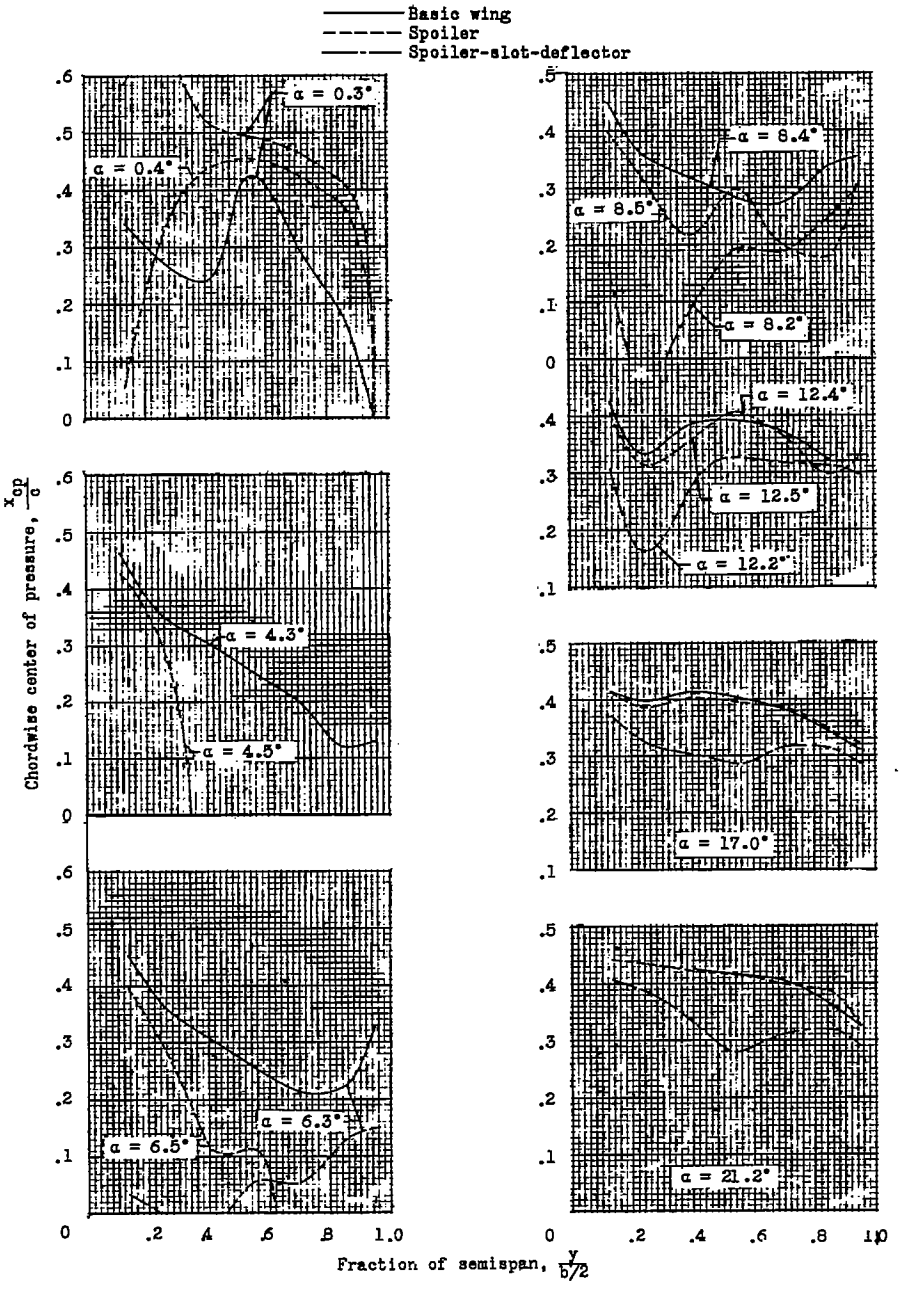
(a) M = 0.60.

Figure 12.- Wing section center of pressure for the basic model, a spoiler aileron configuration, and a spoiler-slot-deflector aileron configuration.



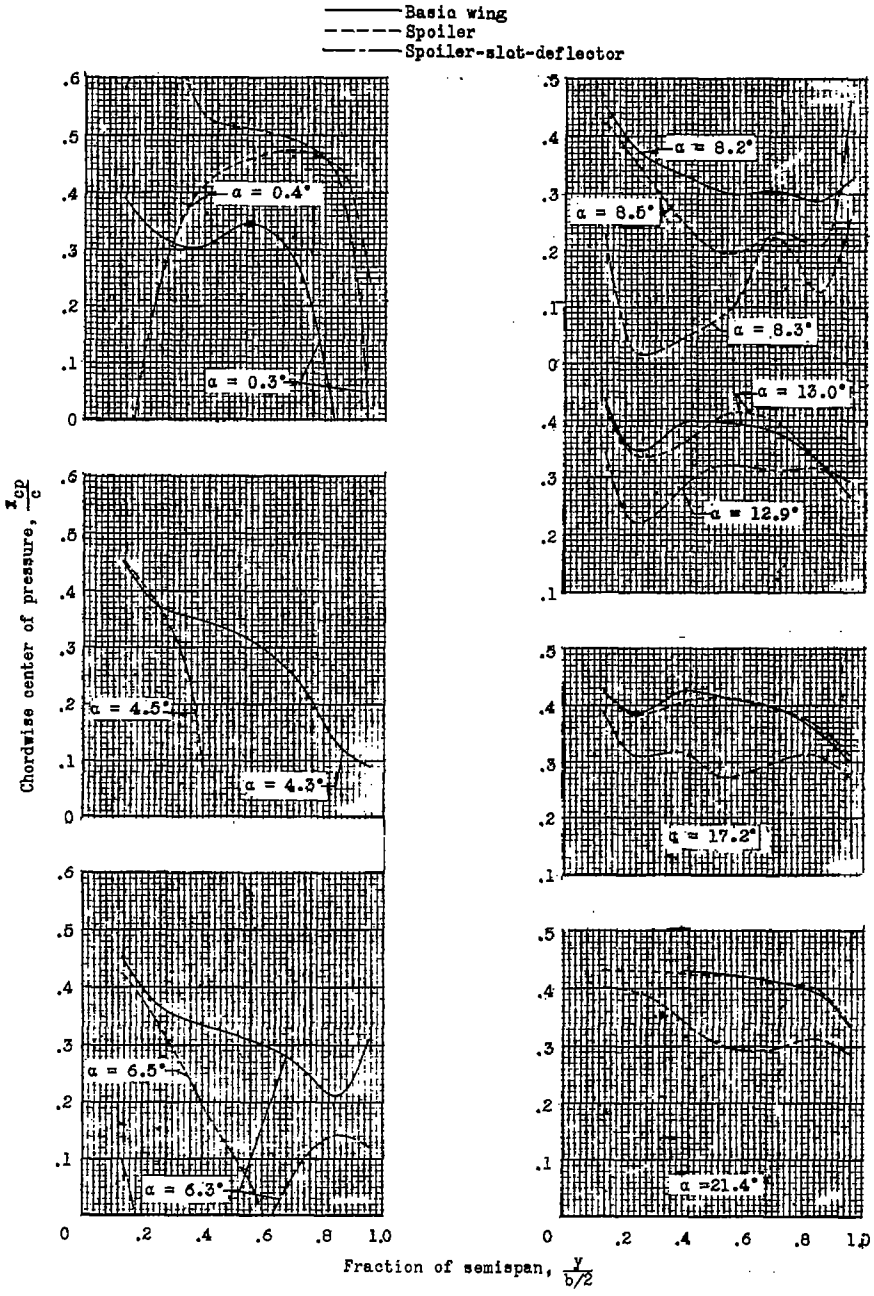
(b) M = 0.80.

Figure 12.- Continued.



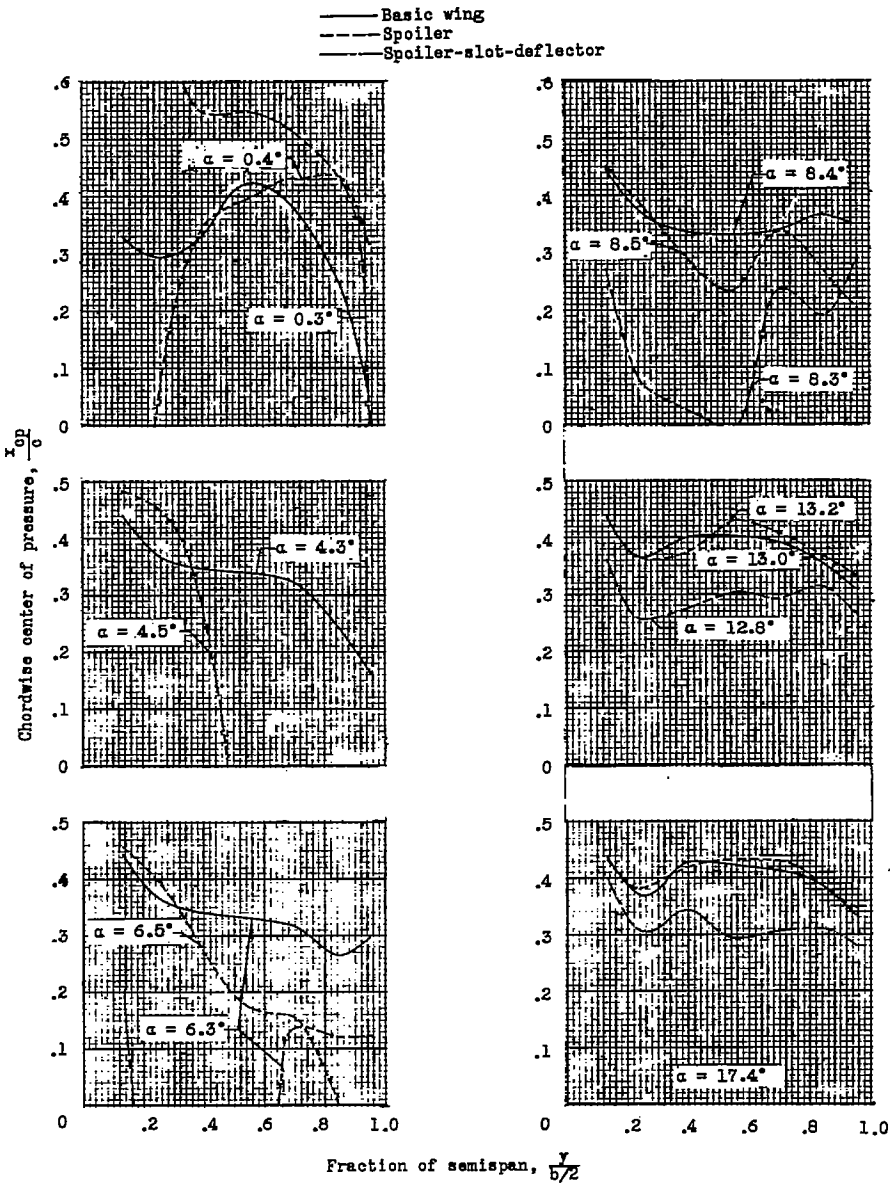
(c) M = 0.90.

Figure 12.- Continued.



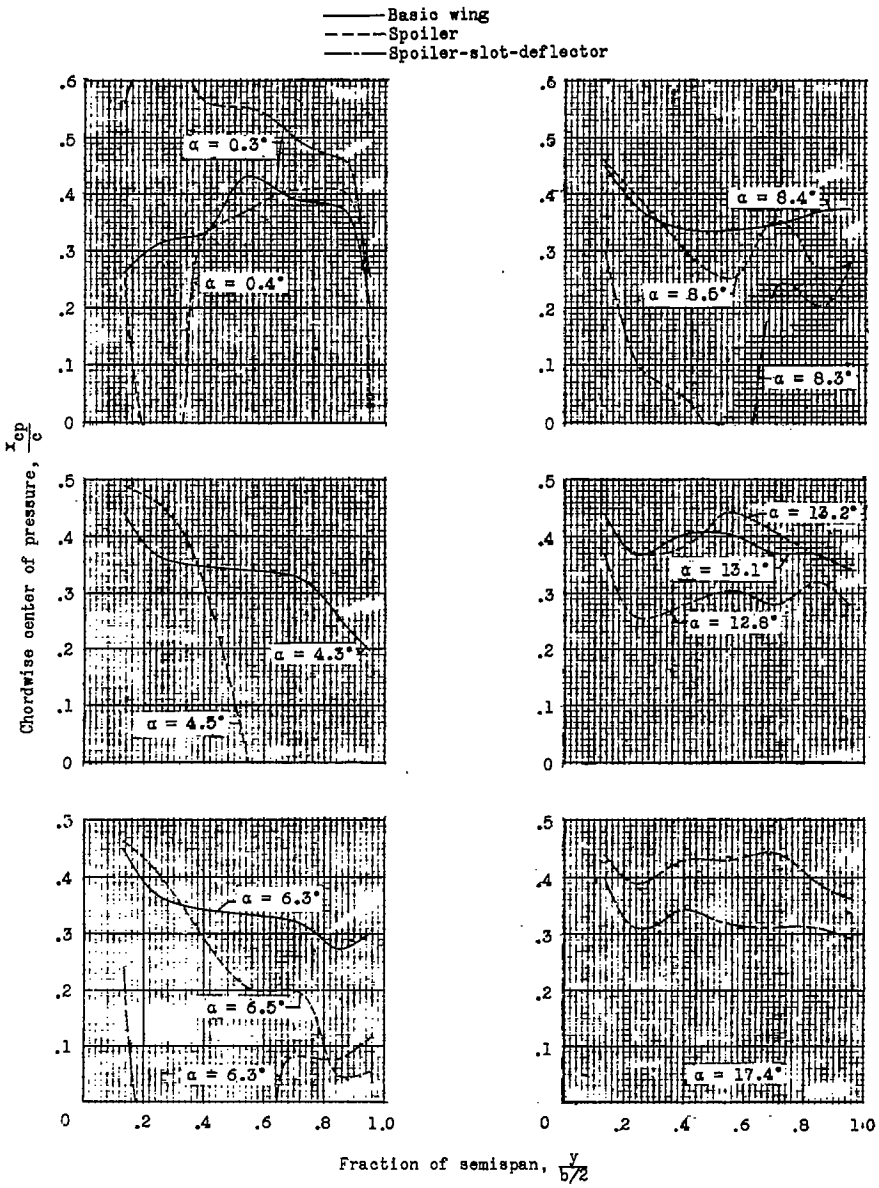
(d) M = 0.94.

Figure 12.- Continued.



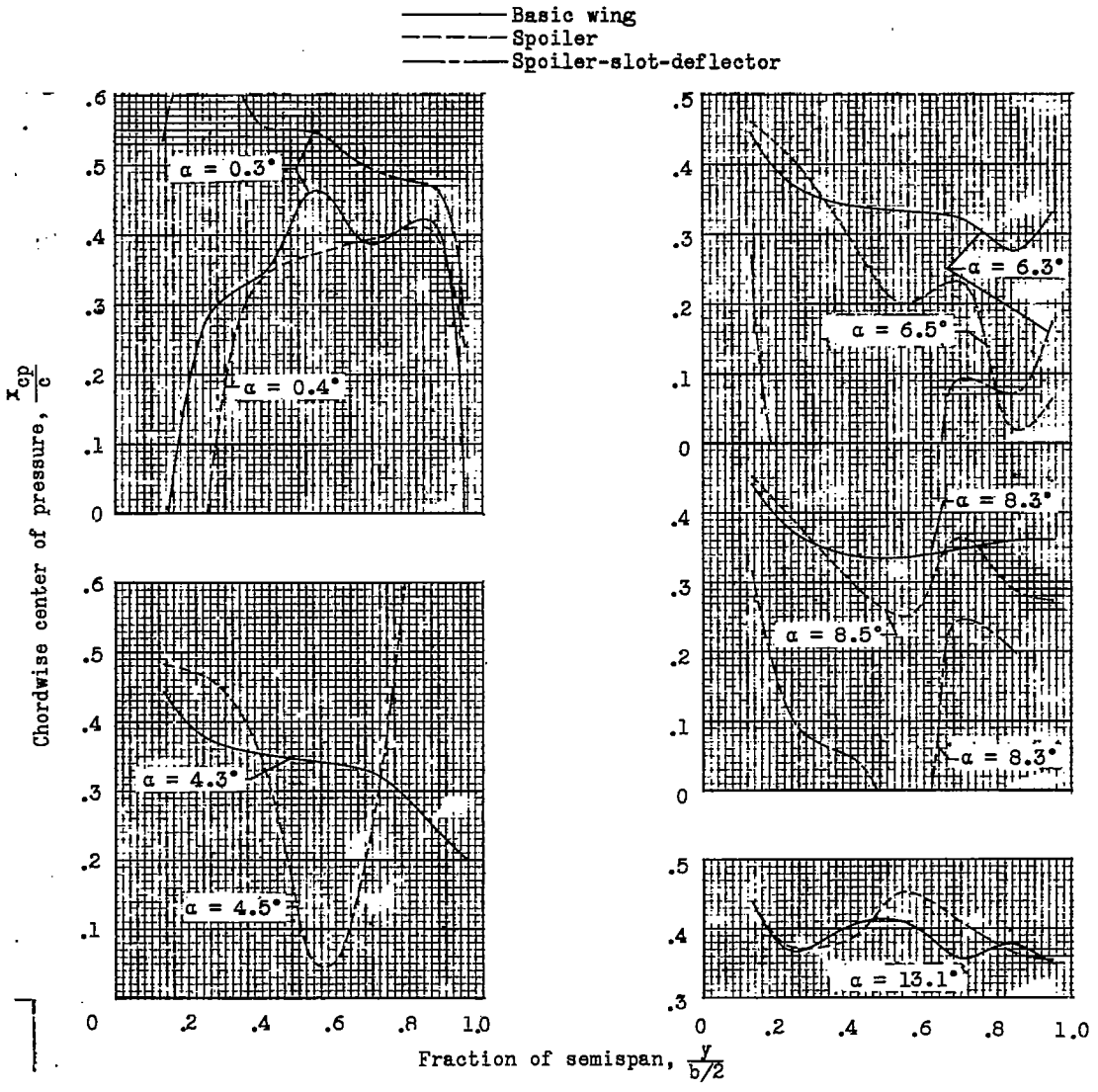
(e) M = 0.98.

Figure 12.- Continued.



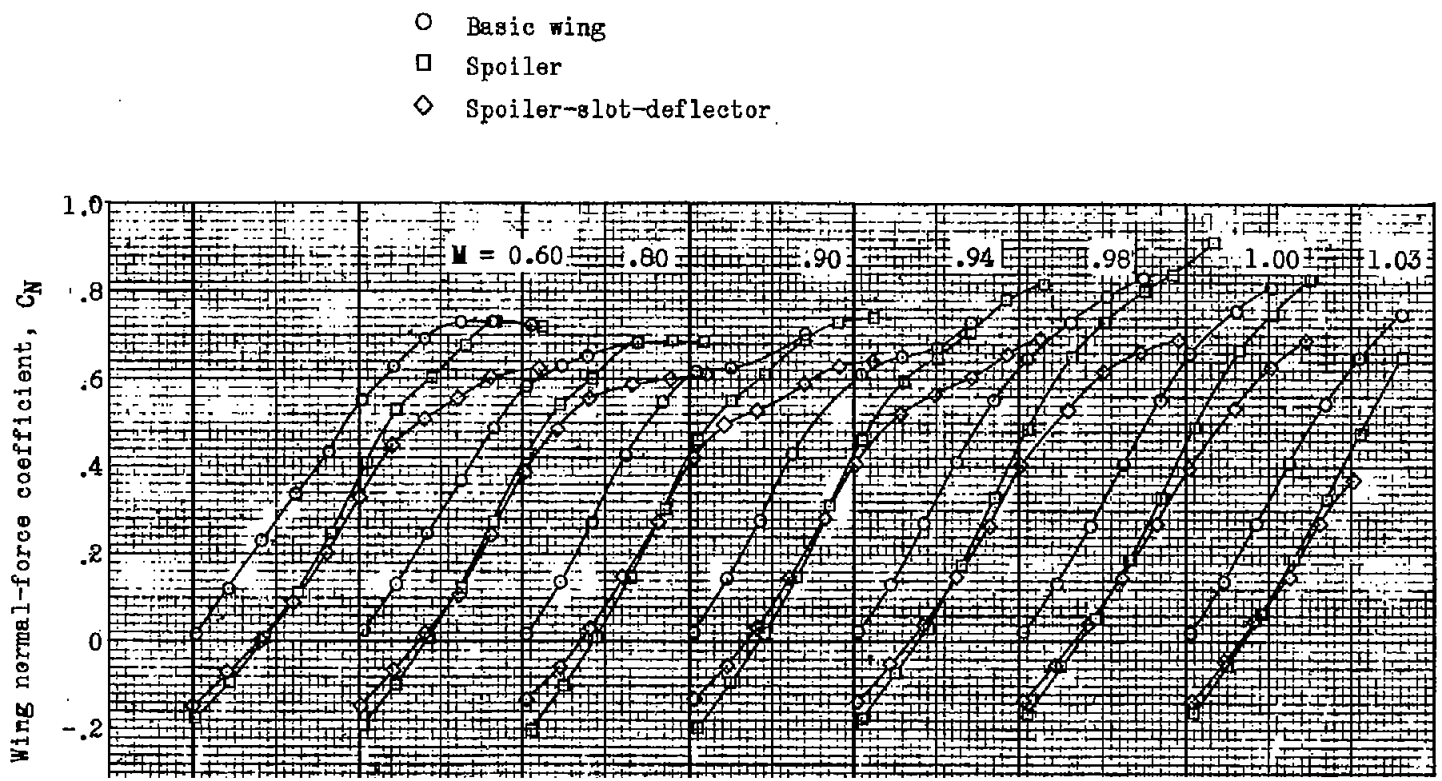
(f) M = 1.00.

Figure 12.- Continued.



(g) M = 1.03.

Figure 12.- Concluded.


Basic wing
Spoiler
Spoiler-slot-deflector
M = 0.60
.80
.90
.94
.98
1.00
1.03
Wing normal-force coefficient, C_N
1.0
.8
.6
.4
.2
0
-.2

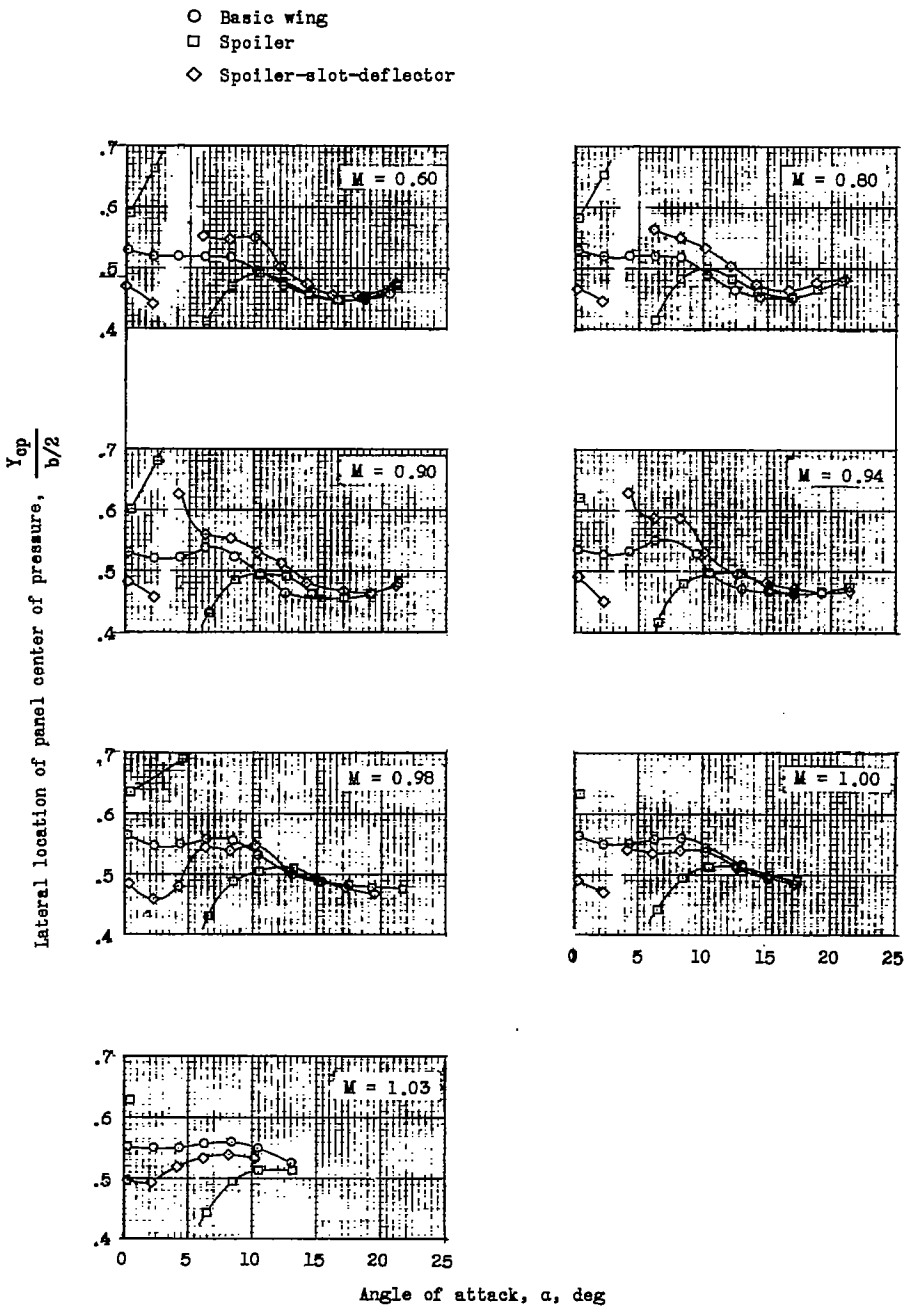


Figure 14.- Lateral position of wing center of pressure for the basic model, a spoiler aileron configuration, and a spoiler-slot-deflector aileron configuration.

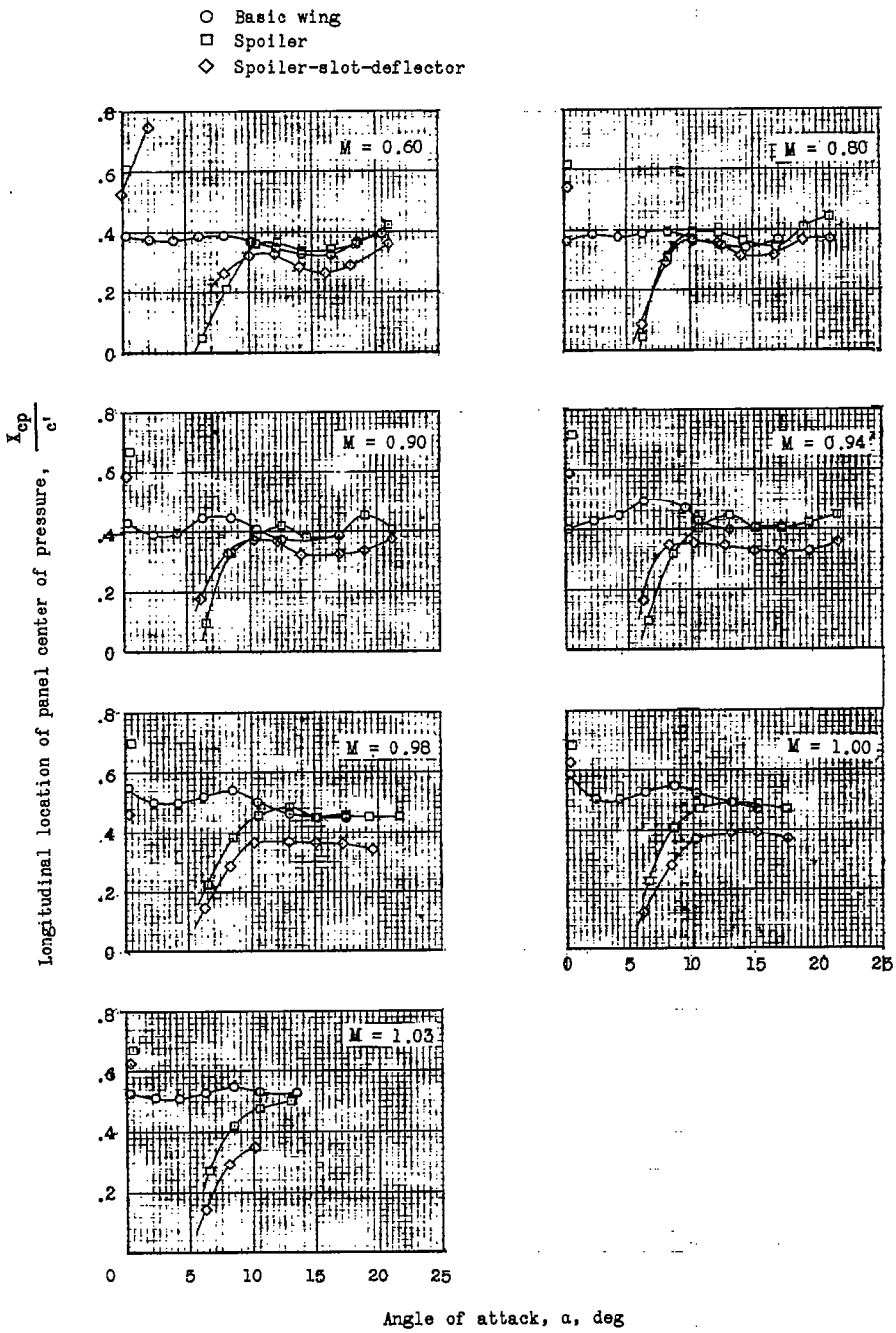
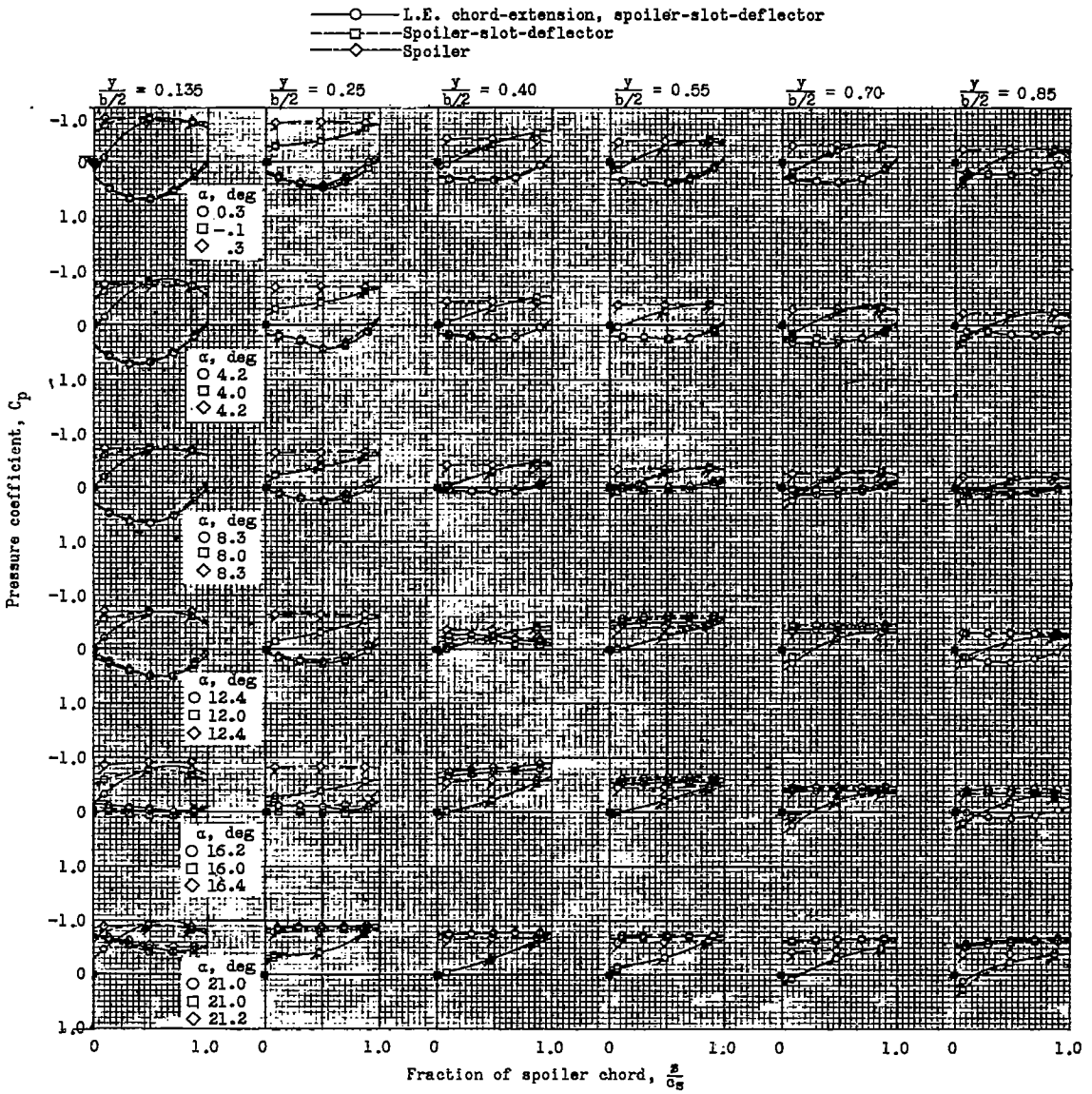
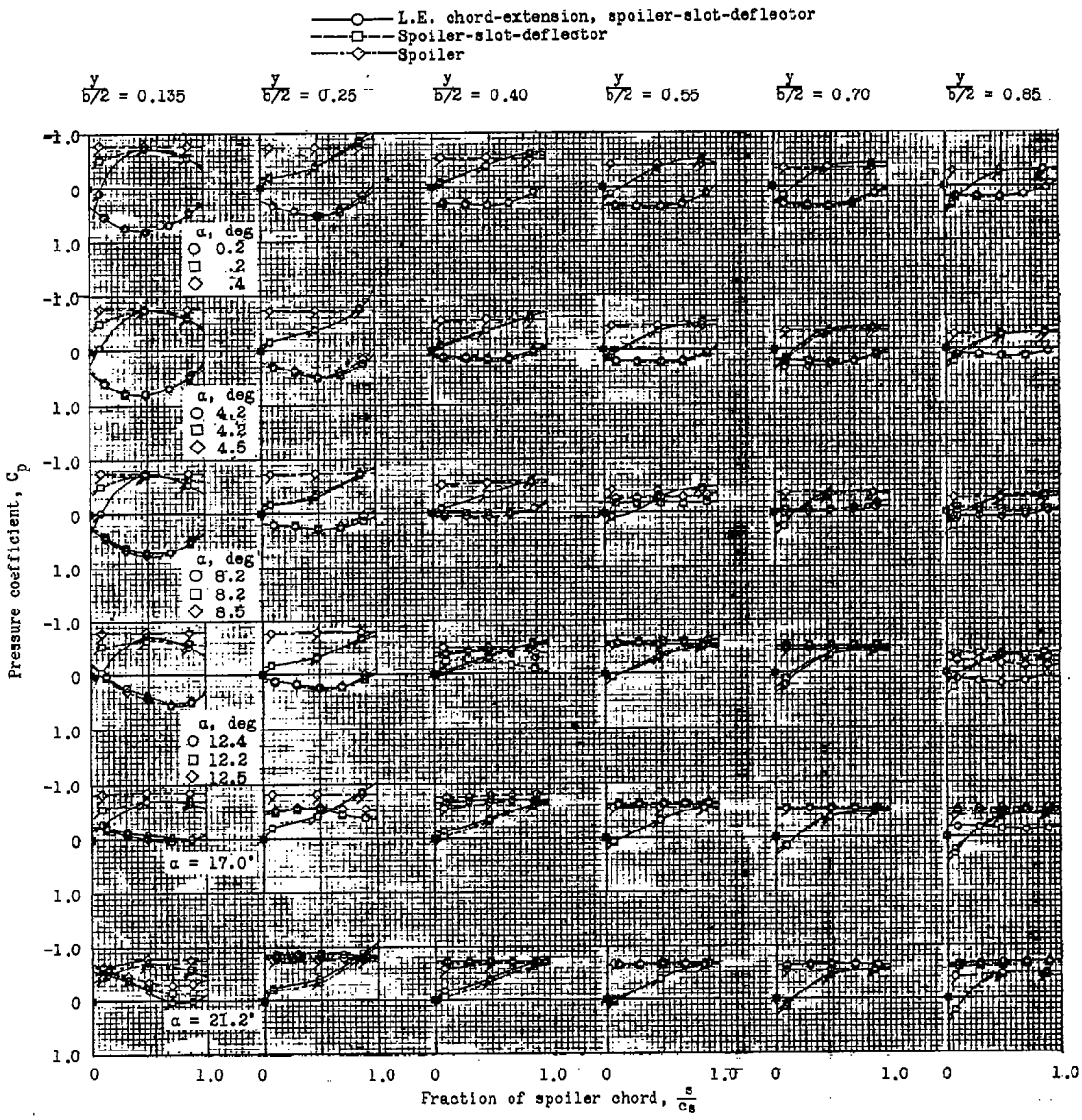


Figure 15.- Longitudinal position of wing center of pressure for the basic model, a spoiler aileron configuration, and a spoiler-slot-deflector aileron configuration.



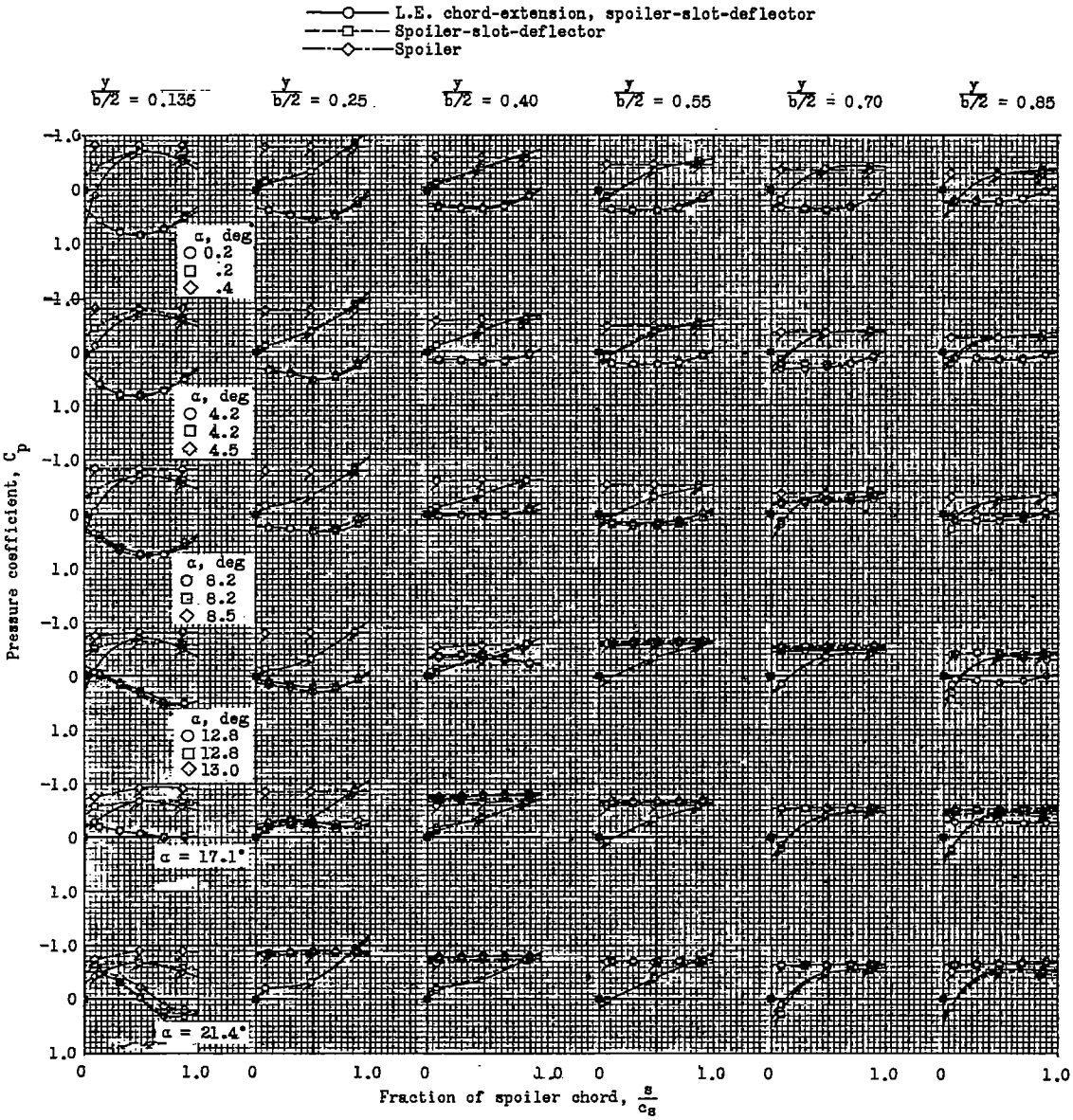
(a) M = 0.60.

Figure 16.- Section pressure distributions for a spoiler aileron and spoilers of basic and leading-edge chord-extension spoiler-slot-deflector aileron configurations. (Flagged symbols indicate rear surface.)



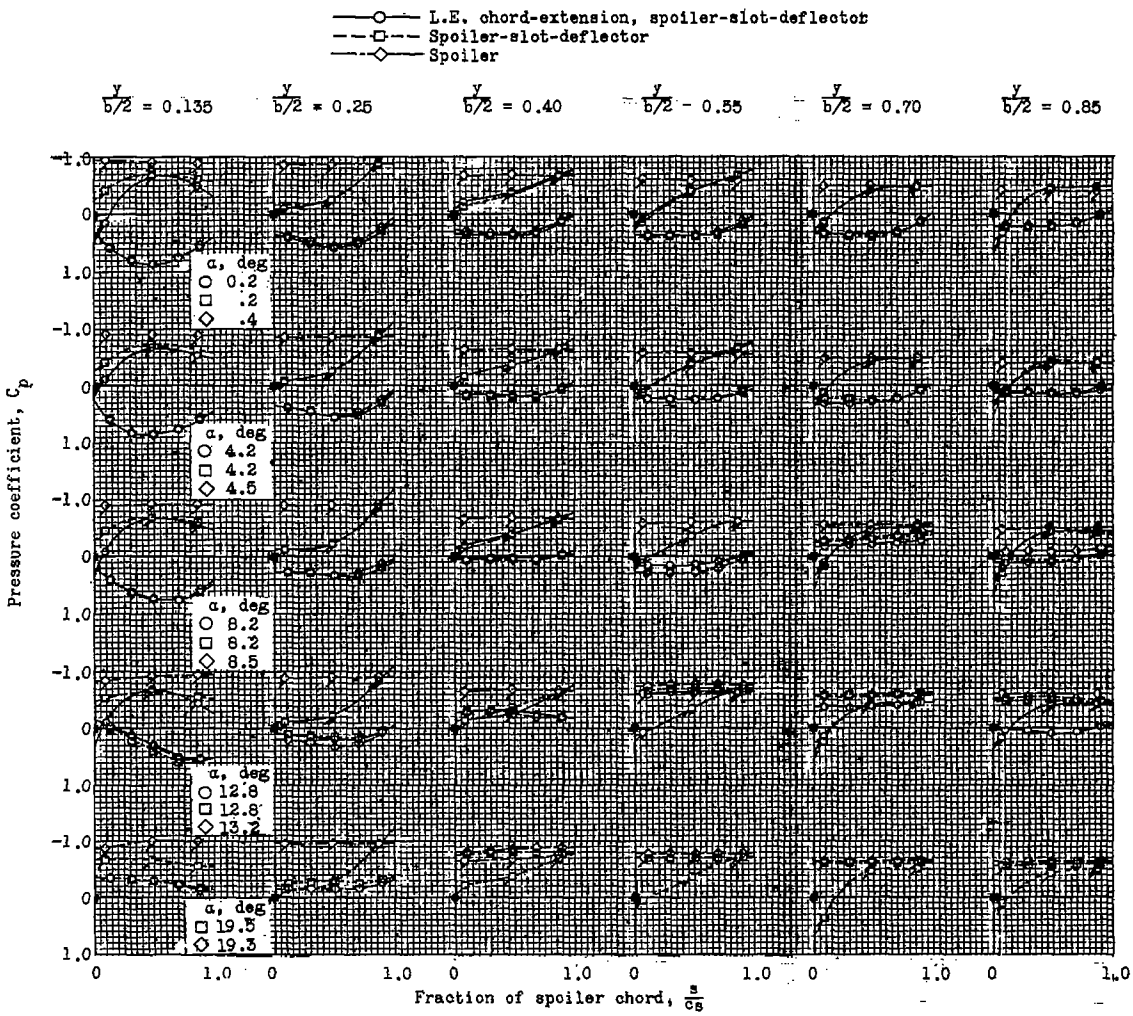
(b) M = 0.90.

Figure 16.- Continued.



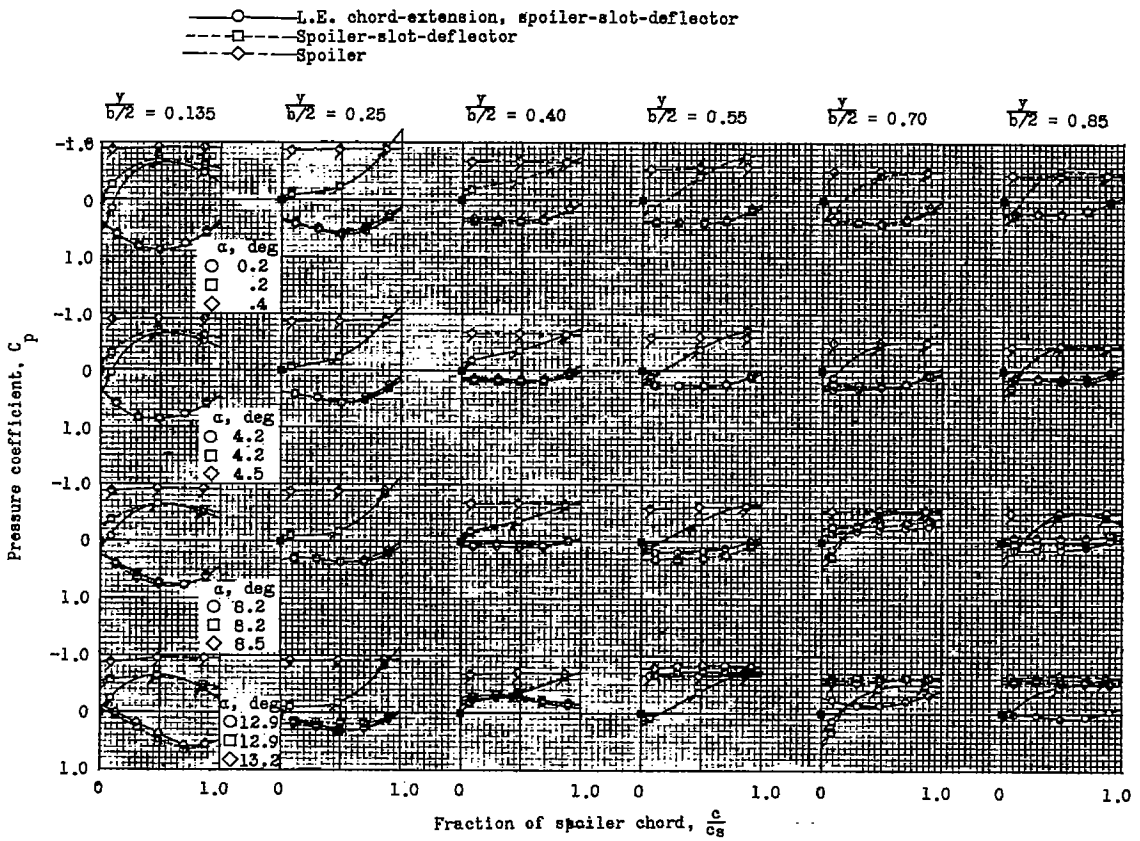
(c) M = 0.94.

Figure 16.- Continued.



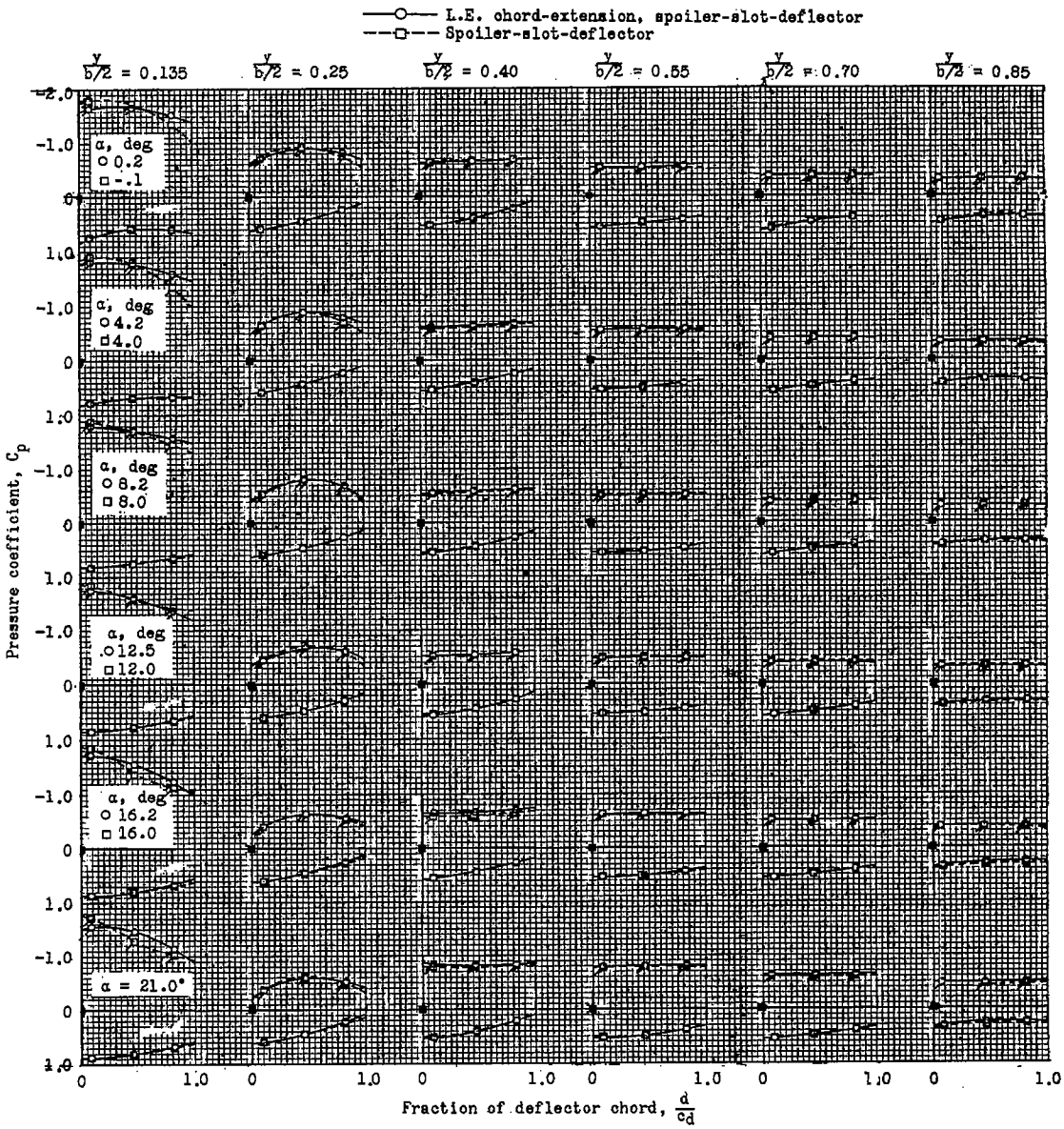
(d) M = 0.98.

Figure 16.- Continued.



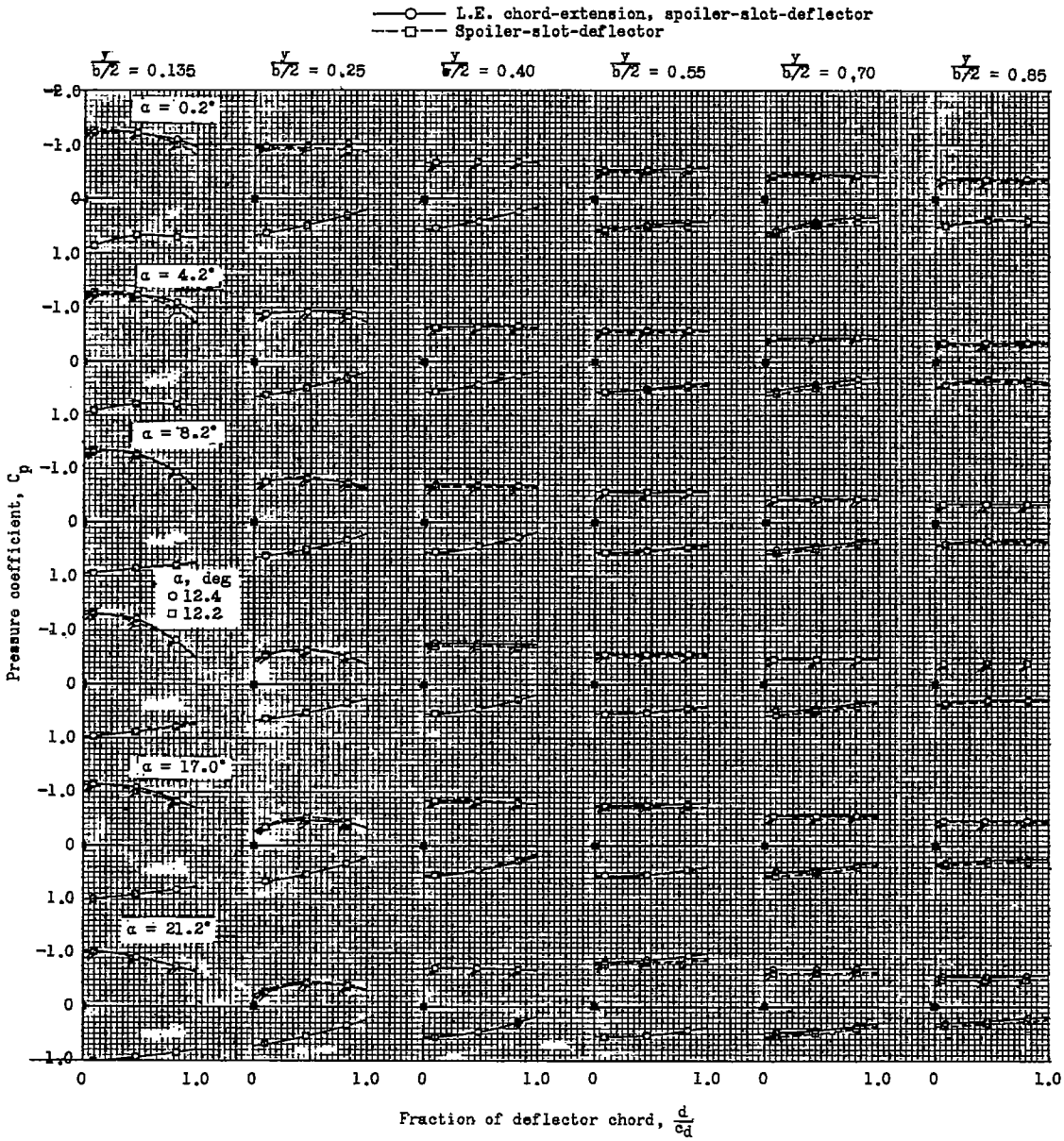
(e) M = 1.00.

Figure 16.- Concluded.



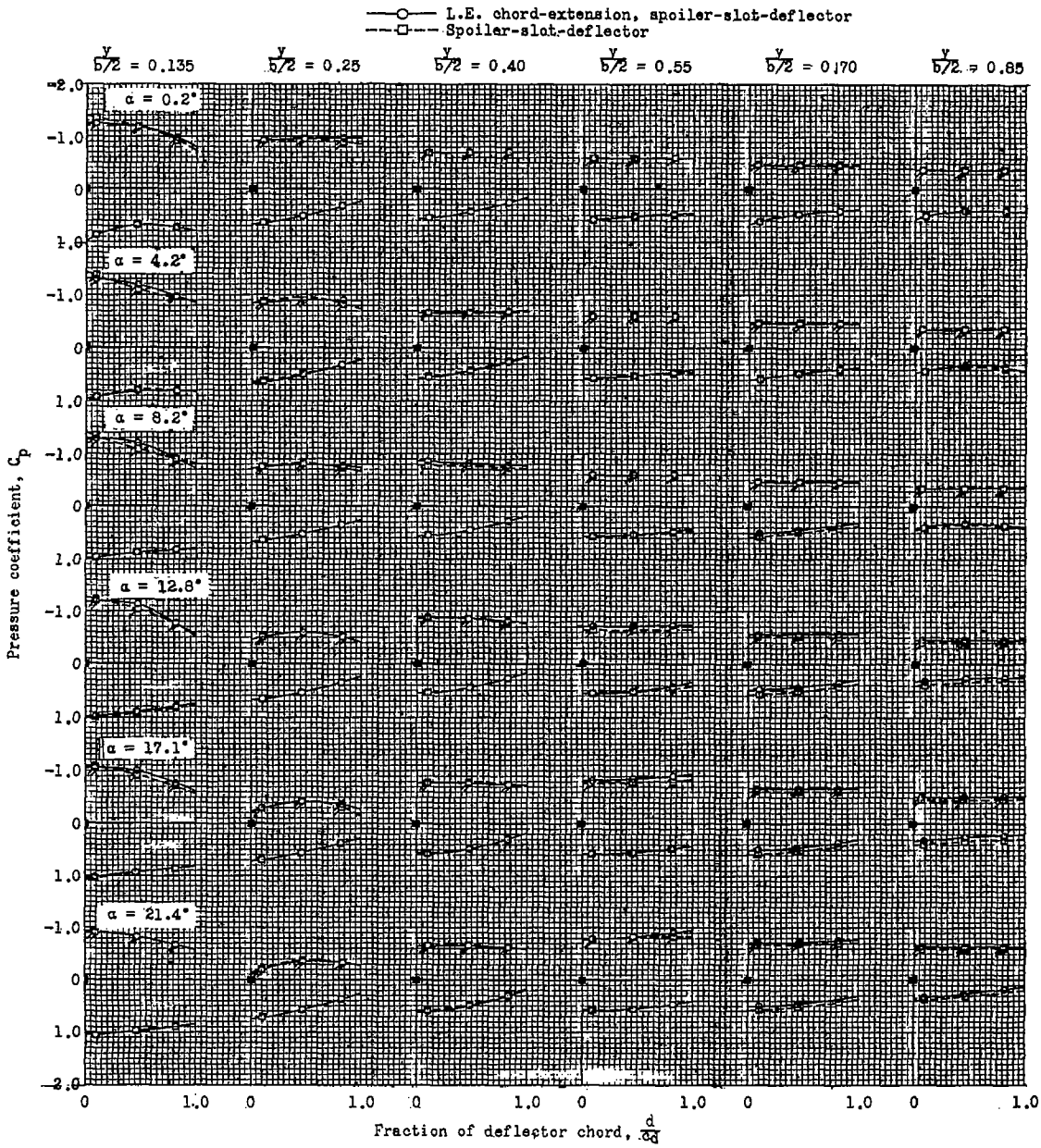
(a) M = 0.60.

Figure 17.- Section pressure distribution for deflectors of the basic and leading-edge chord-extension spoiler-slot-deflector aileron configurations. (Flagged symbols indicate rear surface.)



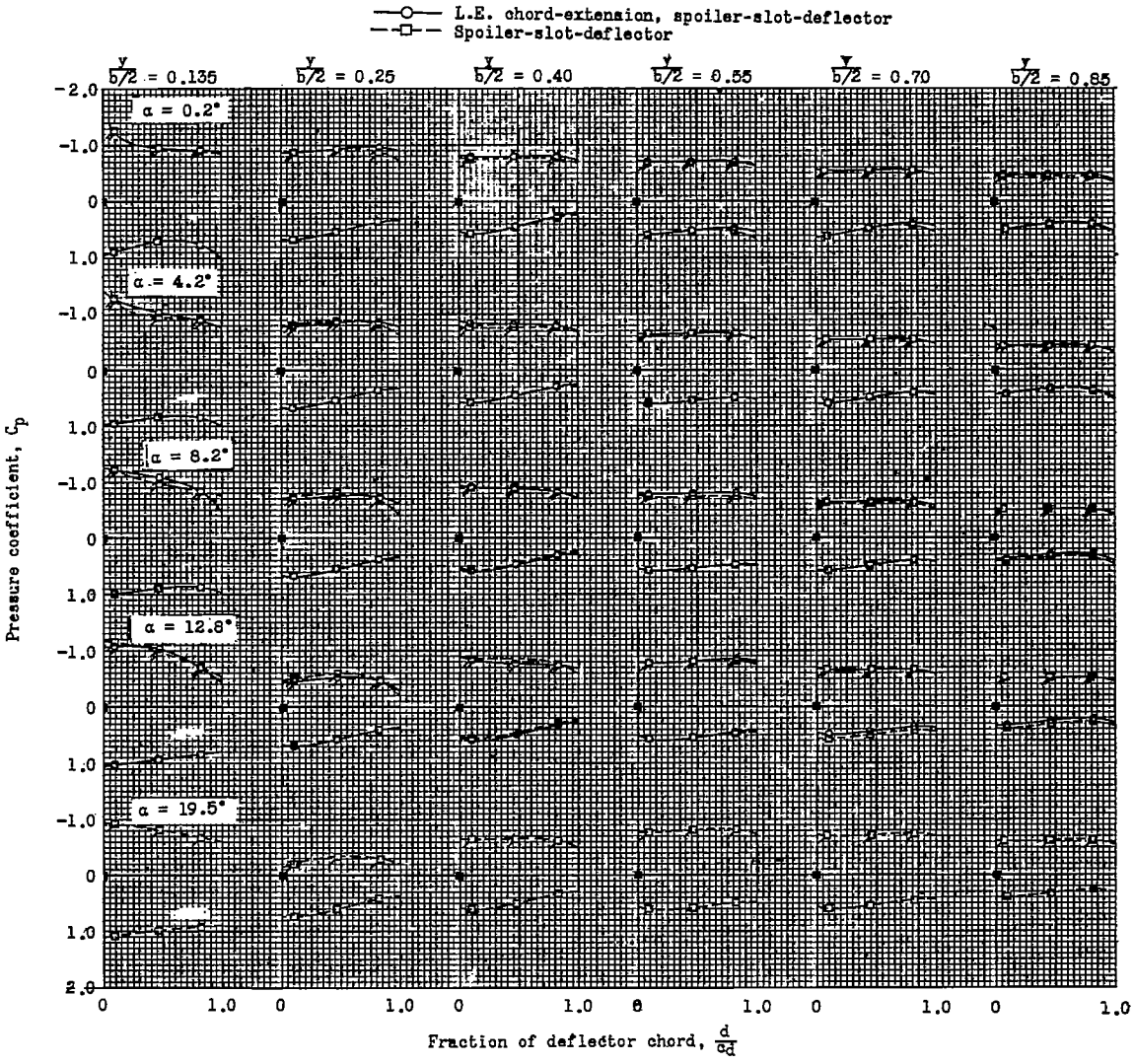
(b) M = 0.90.

Figure 17.- Continued.



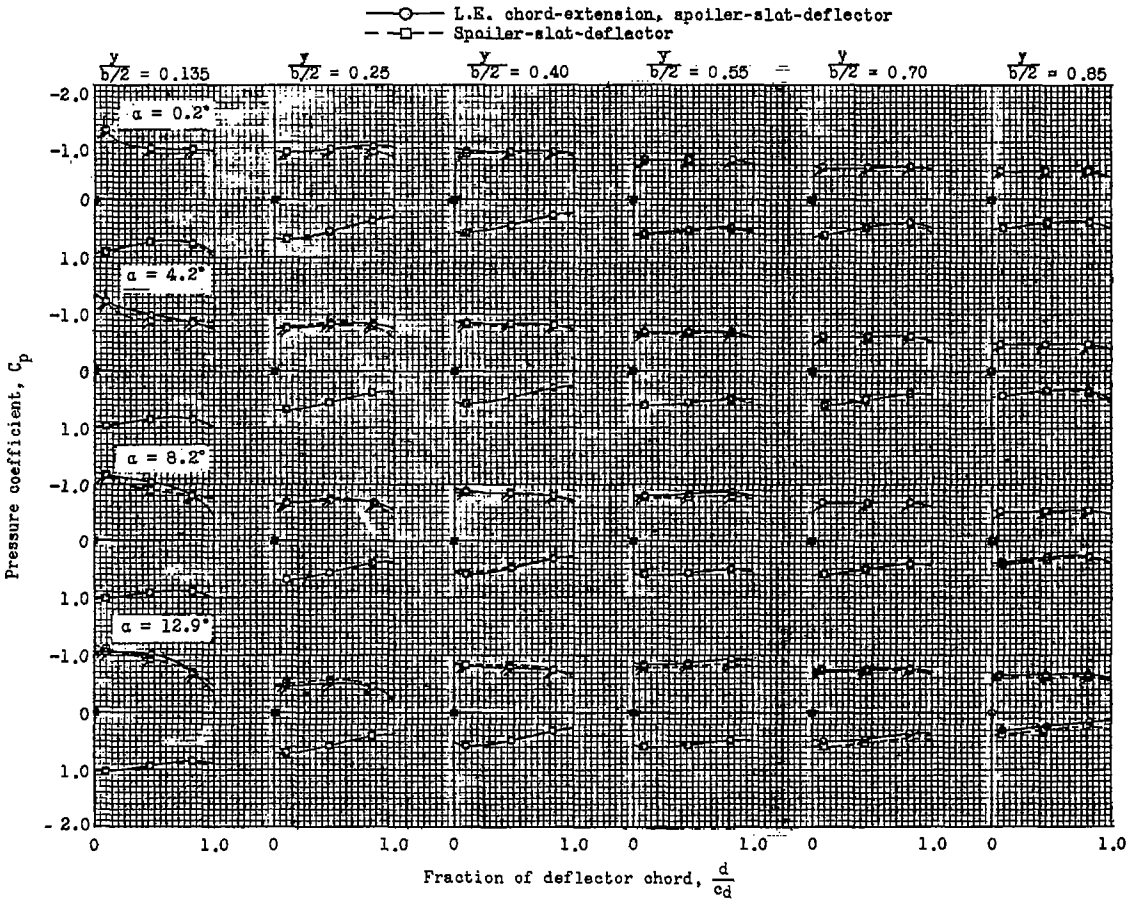
(c) M = 0.94.

Figure 17.- Continued.



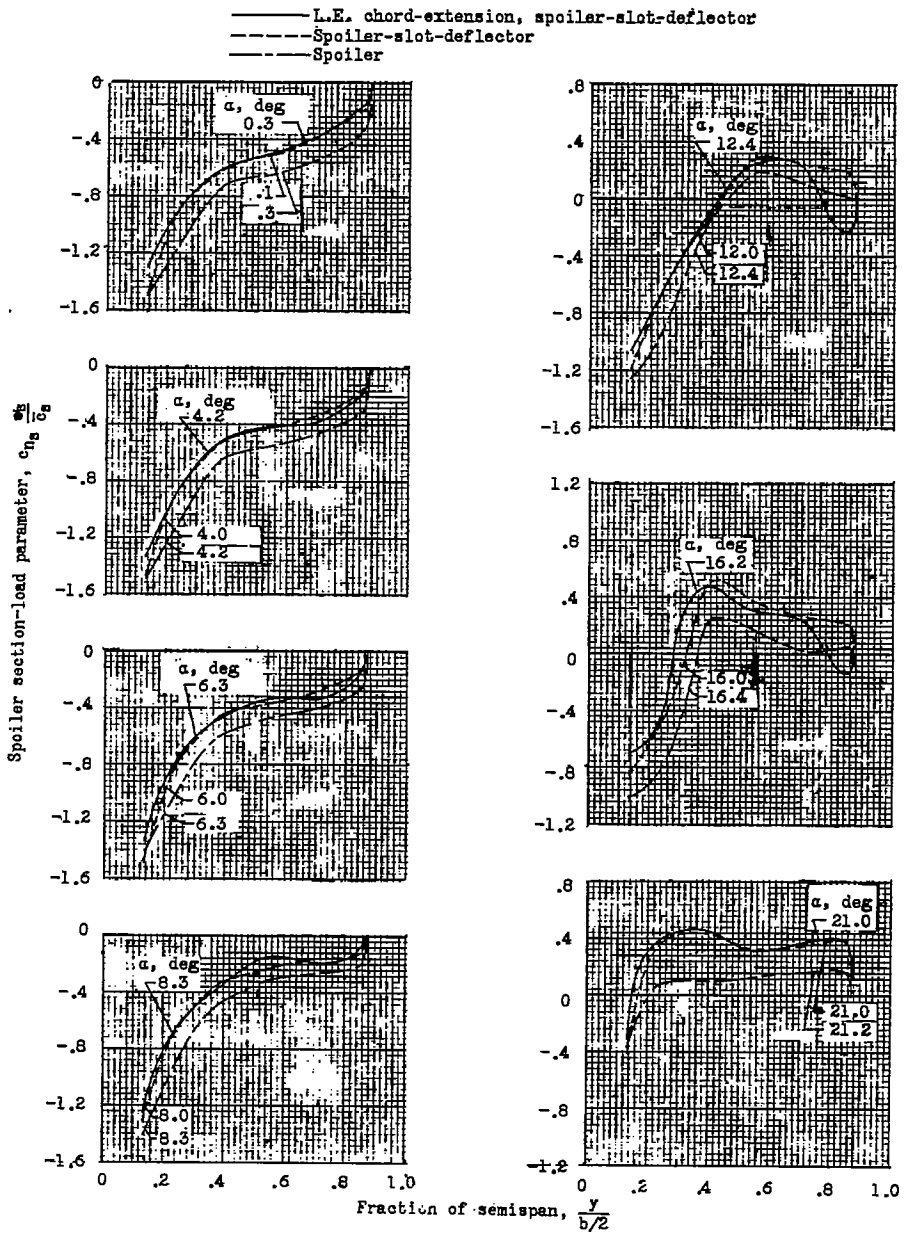
(d) M = 0.98.

Figure 17.- Continued.



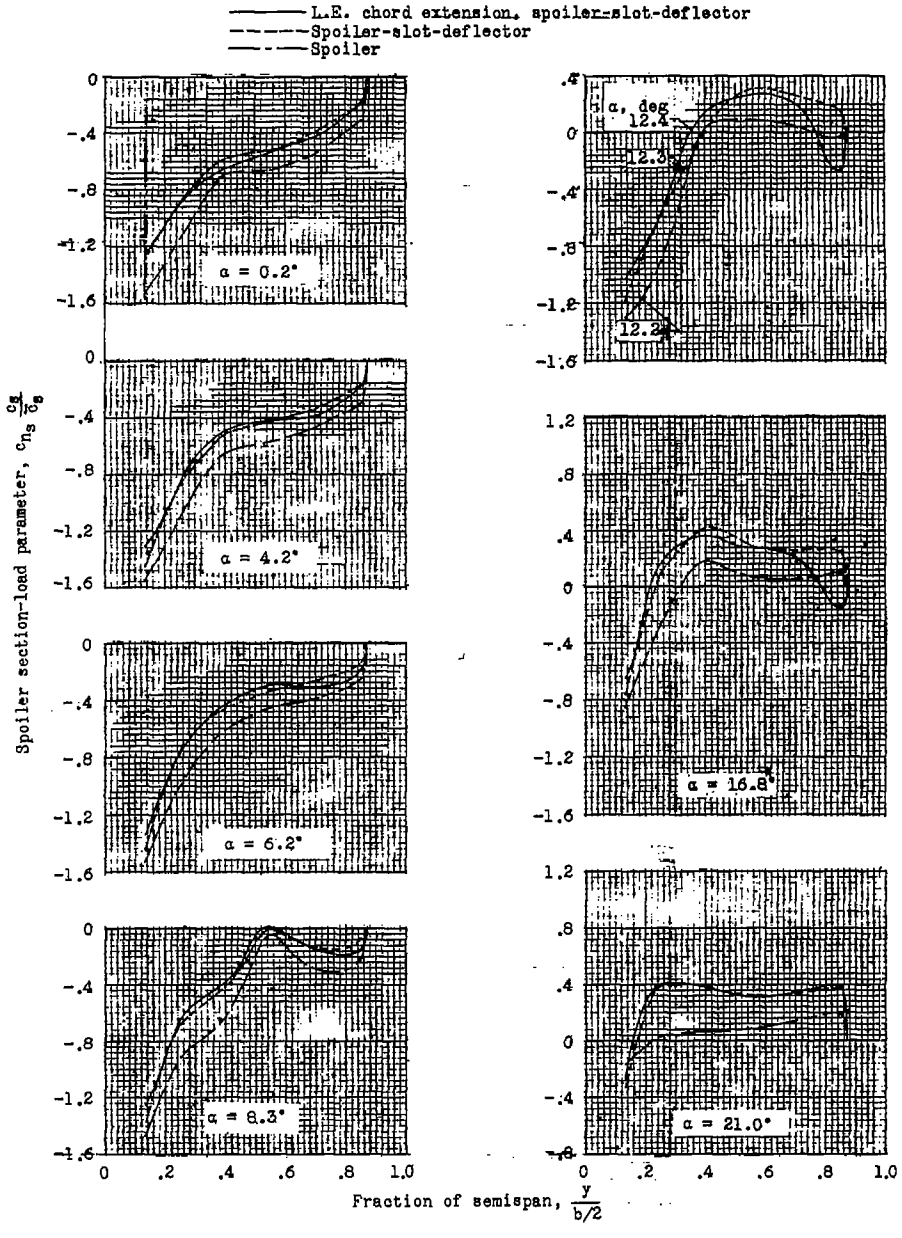
(e) M = 1.00.

Figure 17.- Concluded.



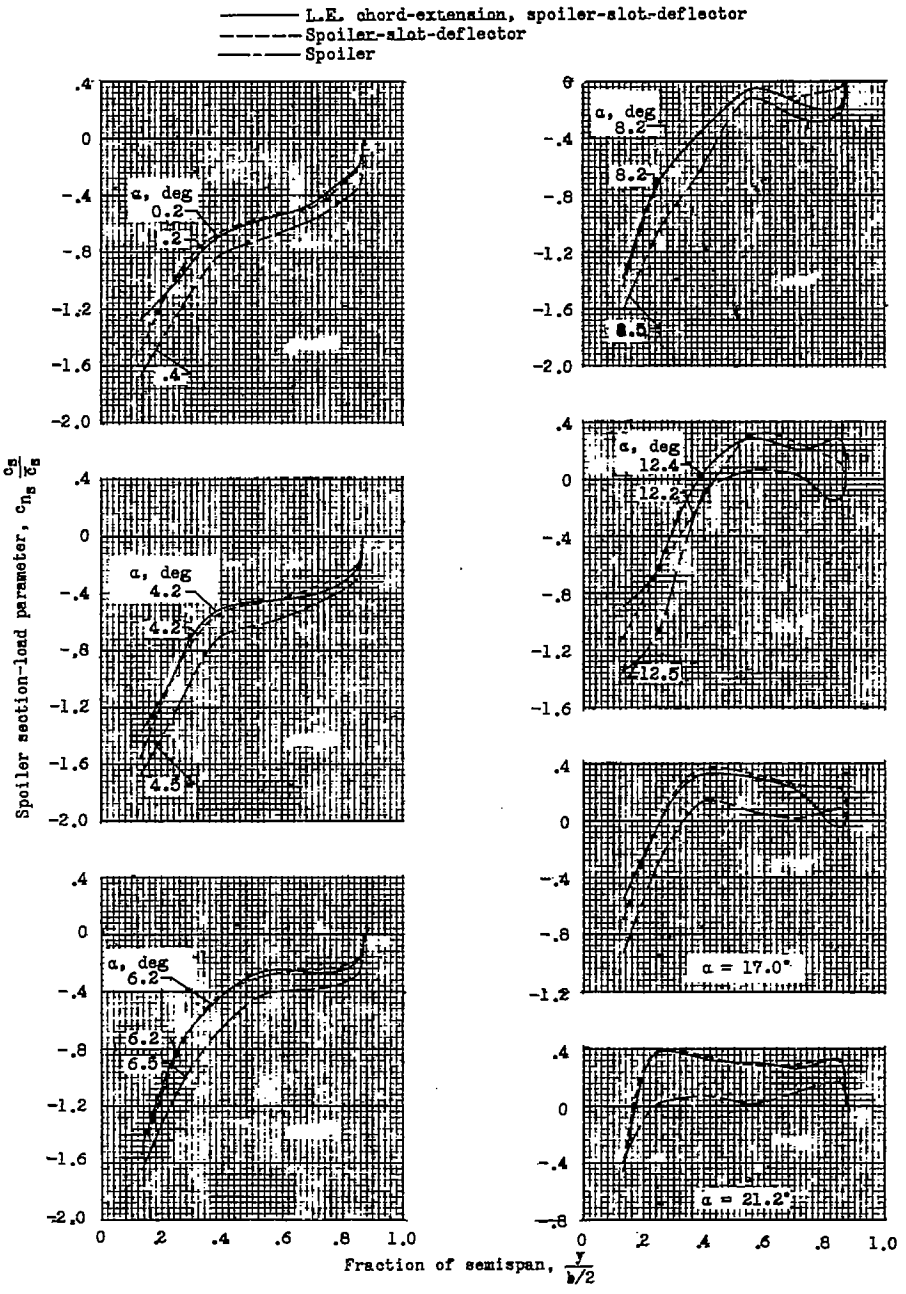
(a) M = 0.60.

Figure 18.- Span-load distributions for a spoiler aileron and spoilers of the basic and leading-edge chord-extension spoiler-slot-deflector aileron configurations.



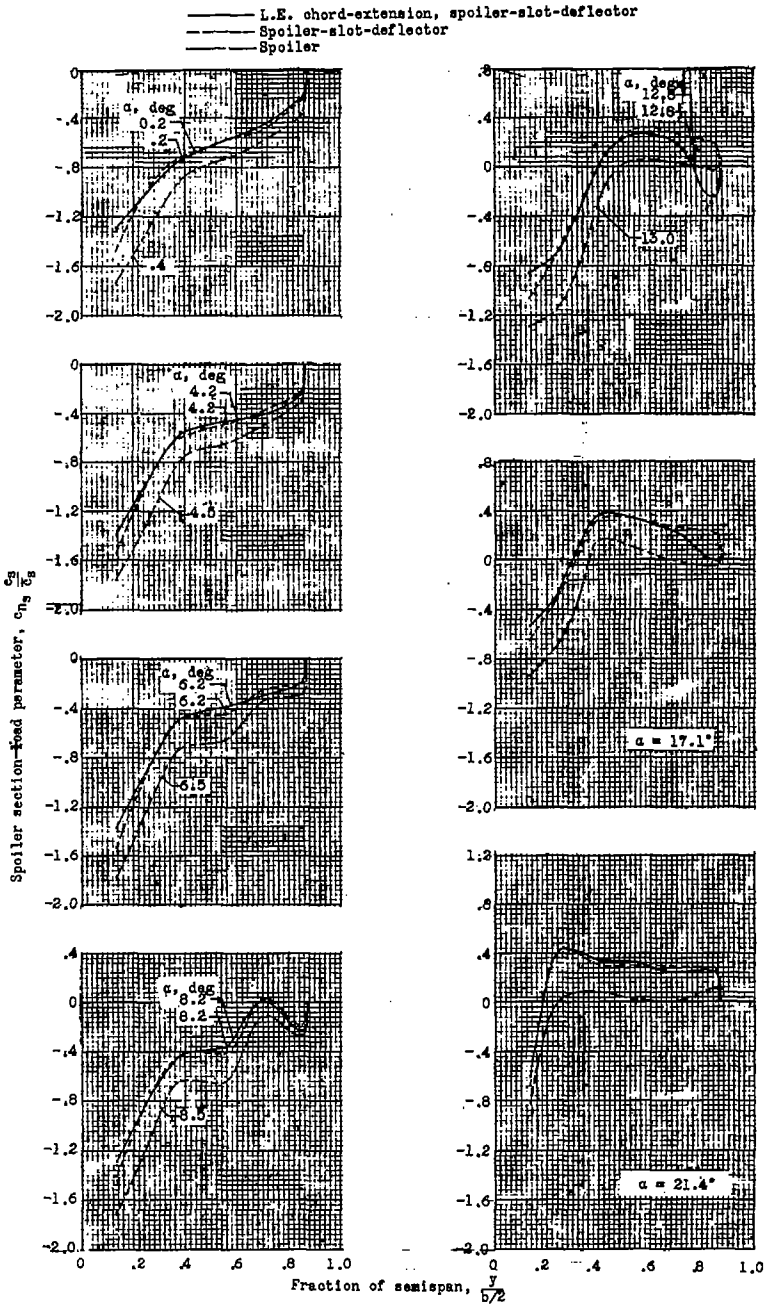
(b) M = 0.80.

Figure 18.- Continued.



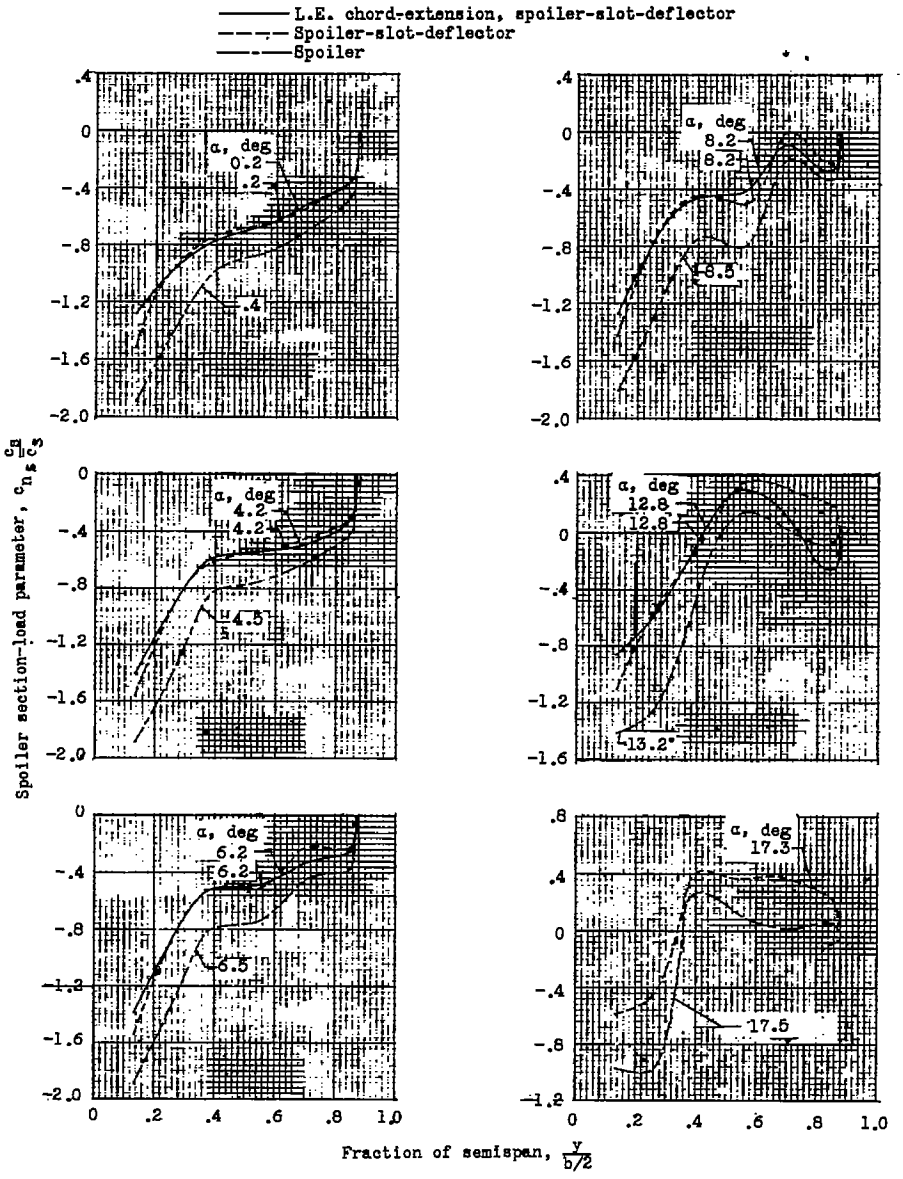
(c) M = 0.90.

Figure 18.- Continued.



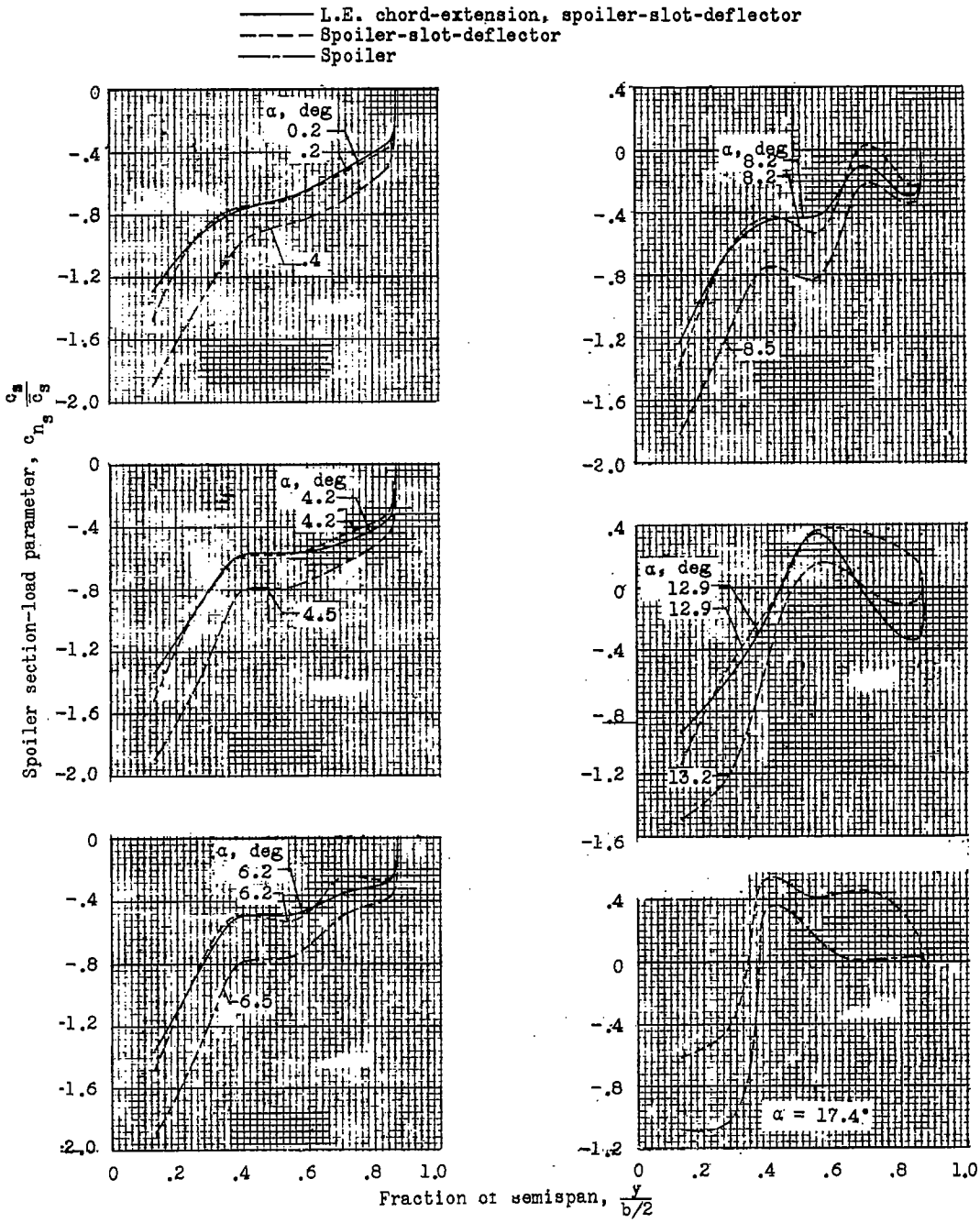
(d) M = 0.94.

Figure 18.- Continued.



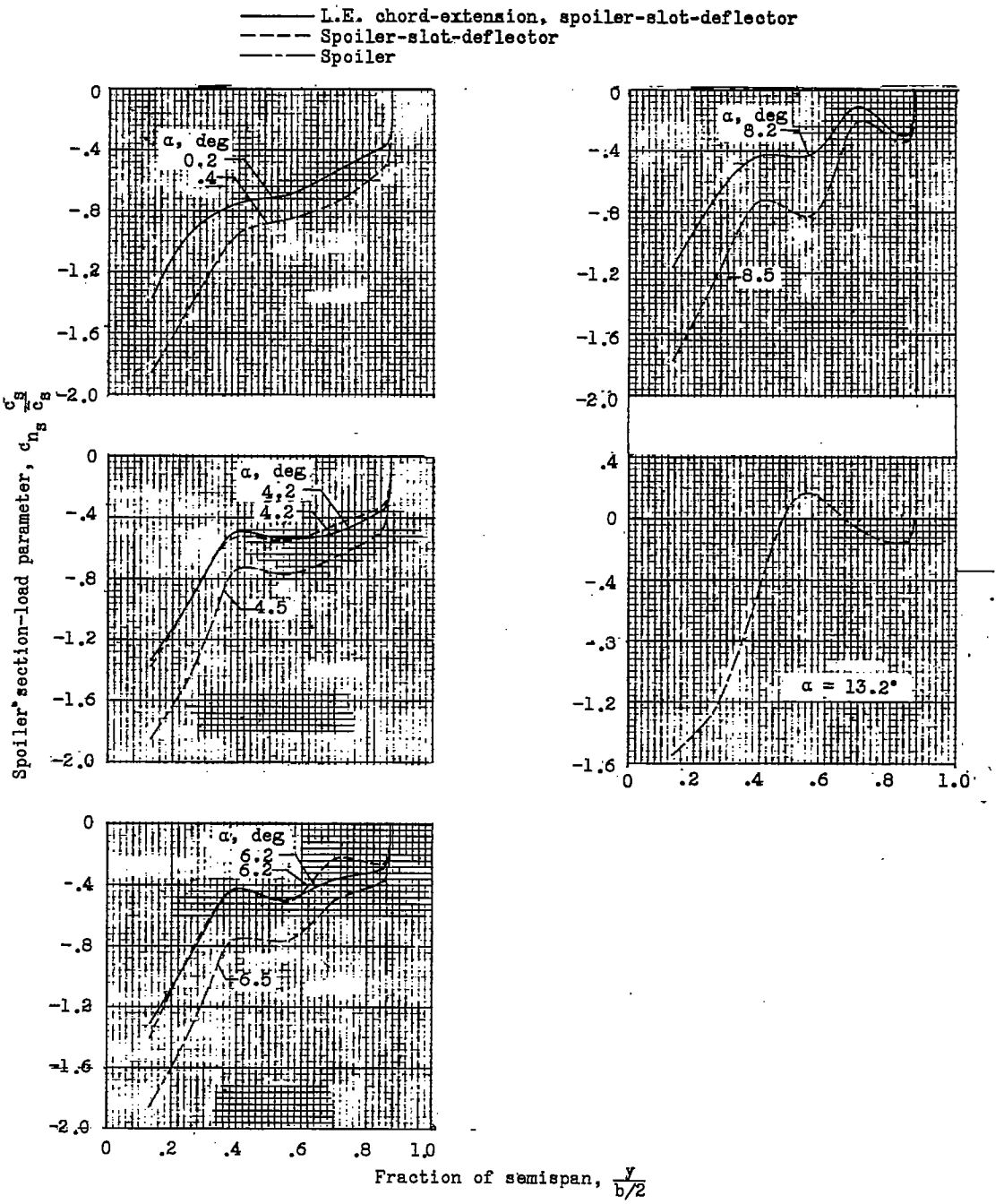
(e) M = 0.98.

Figure 18.- Continued.



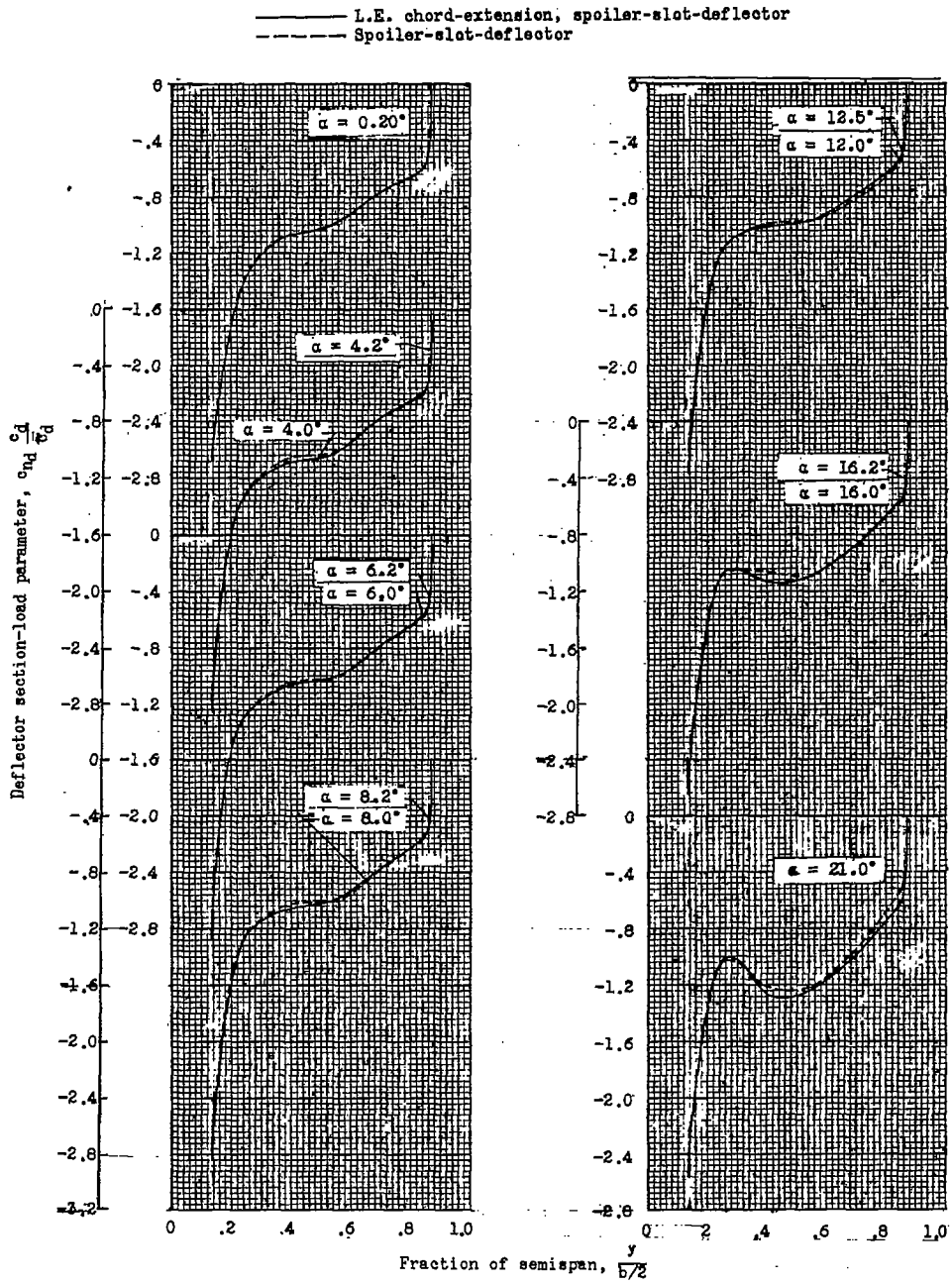
(f) M = 1.00.

Figure 18.- Continued.



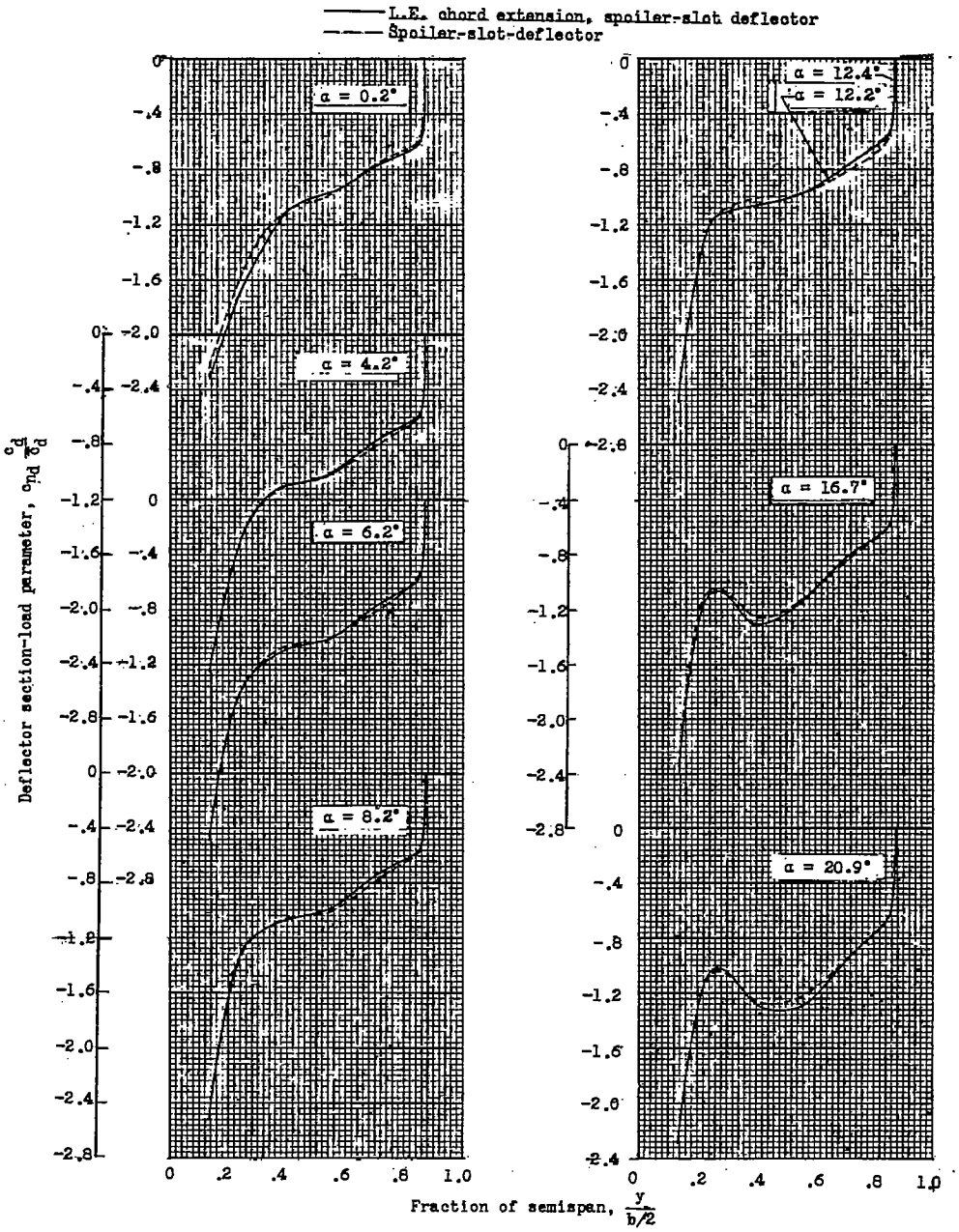
(g) M = 1.03.

Figure 18.- Concluded.



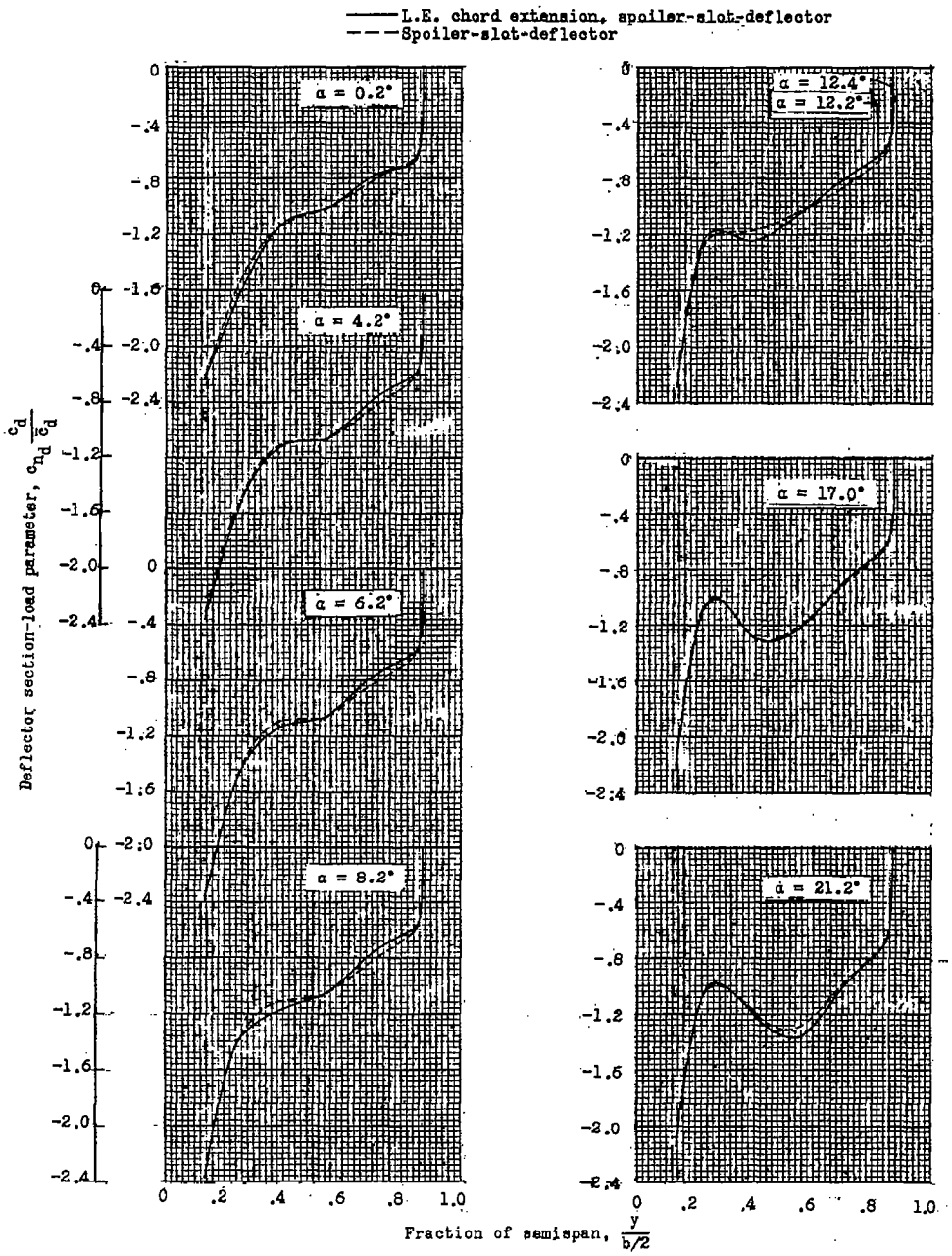
(a) M = 0.60.

Figure 19.- Span-load distributions for deflectors of basic and leading-edge chord-extension spoiler-slot-deflector aileron configurations.



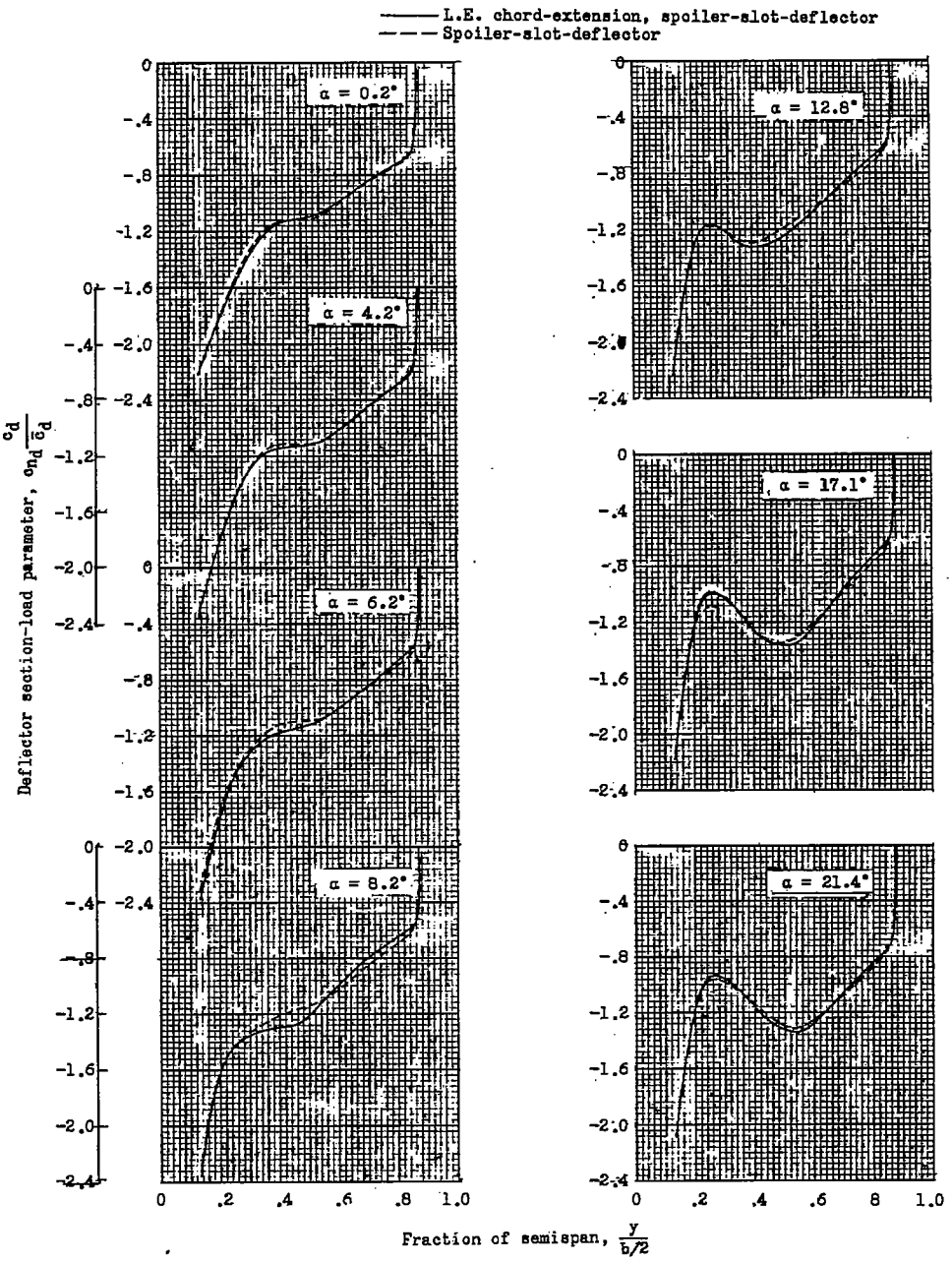
(b) M = 0.80.

Figure 19.- Continued.



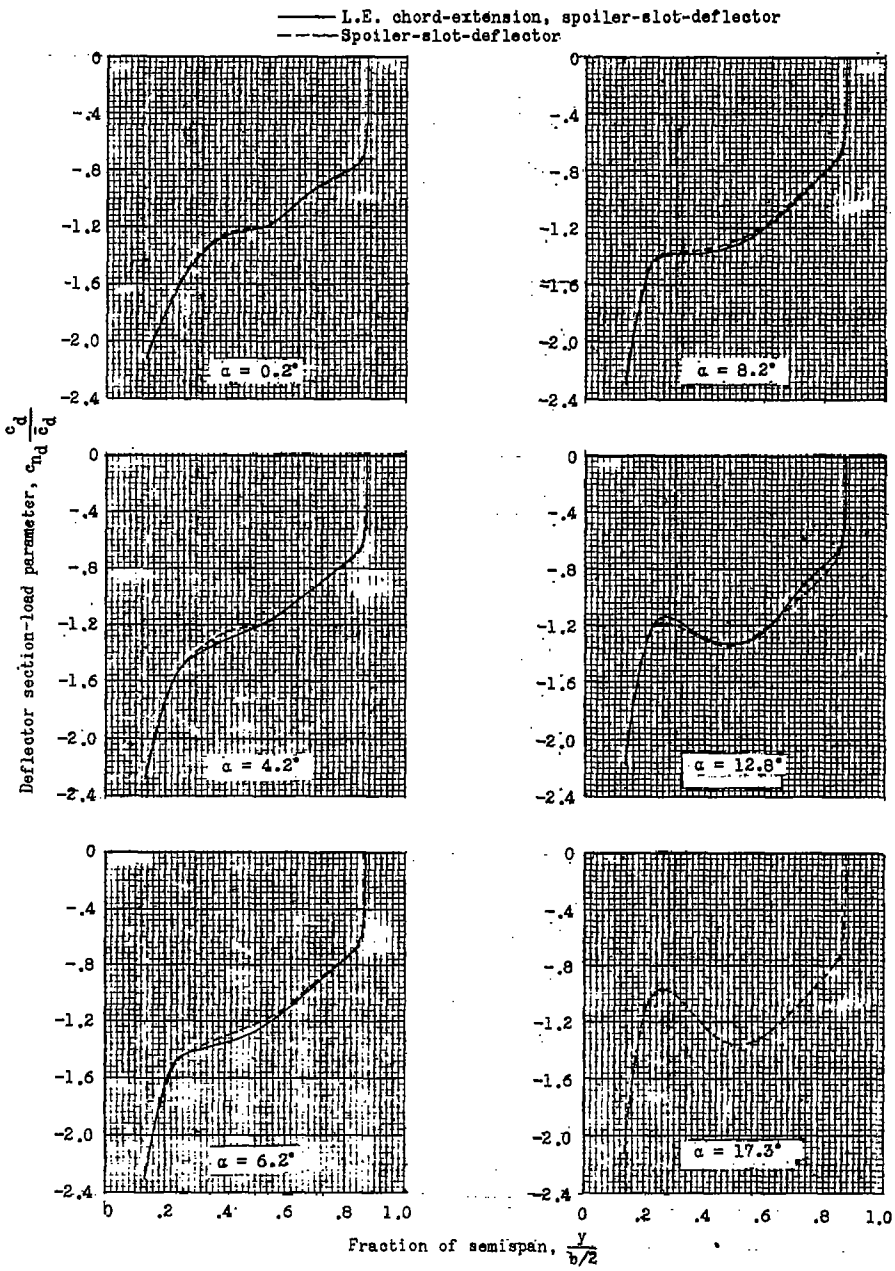
(c) M = 0.90.

Figure 19.- Continued.



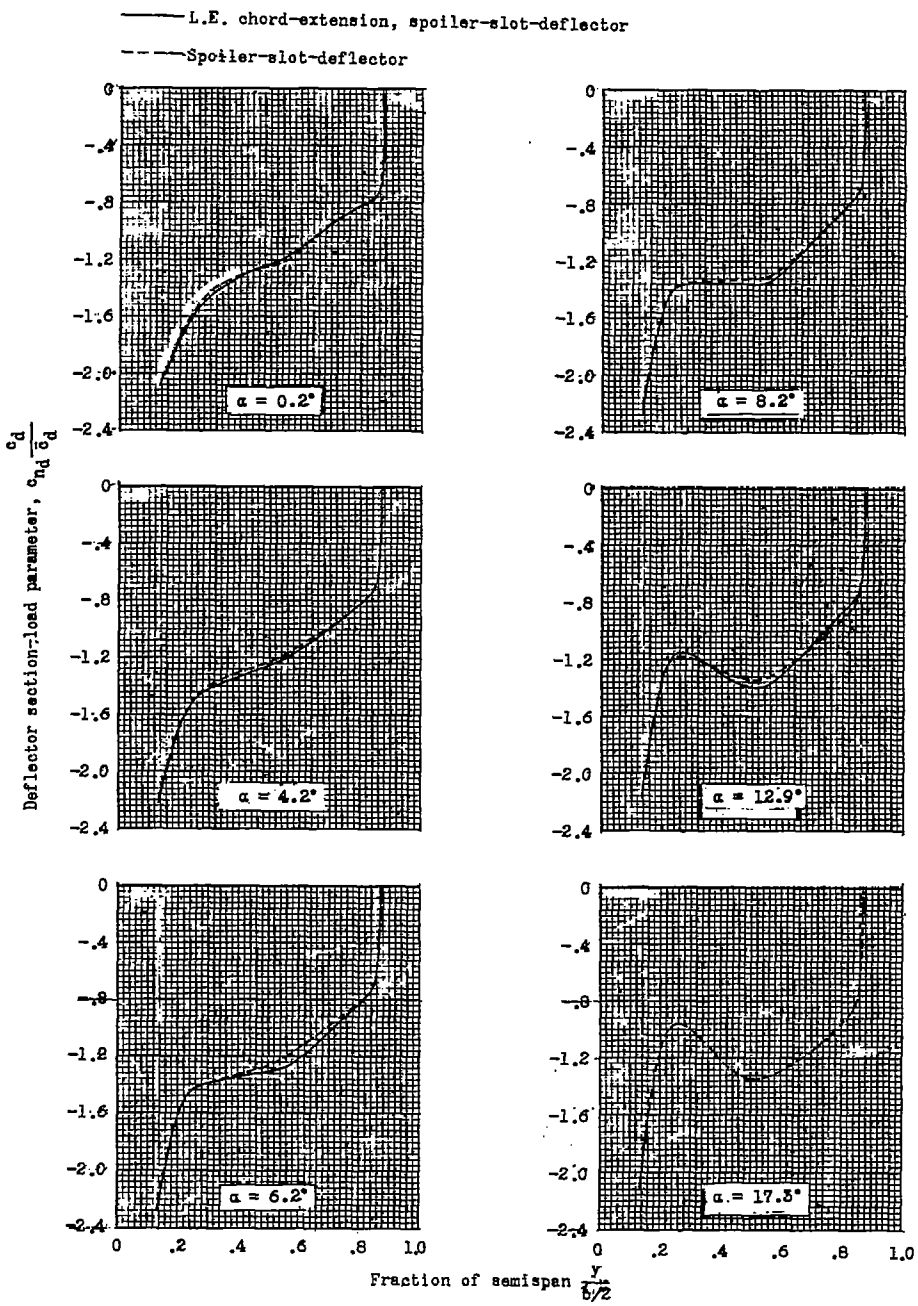
(d) M = 0.94.

Figure 19.- Continued.



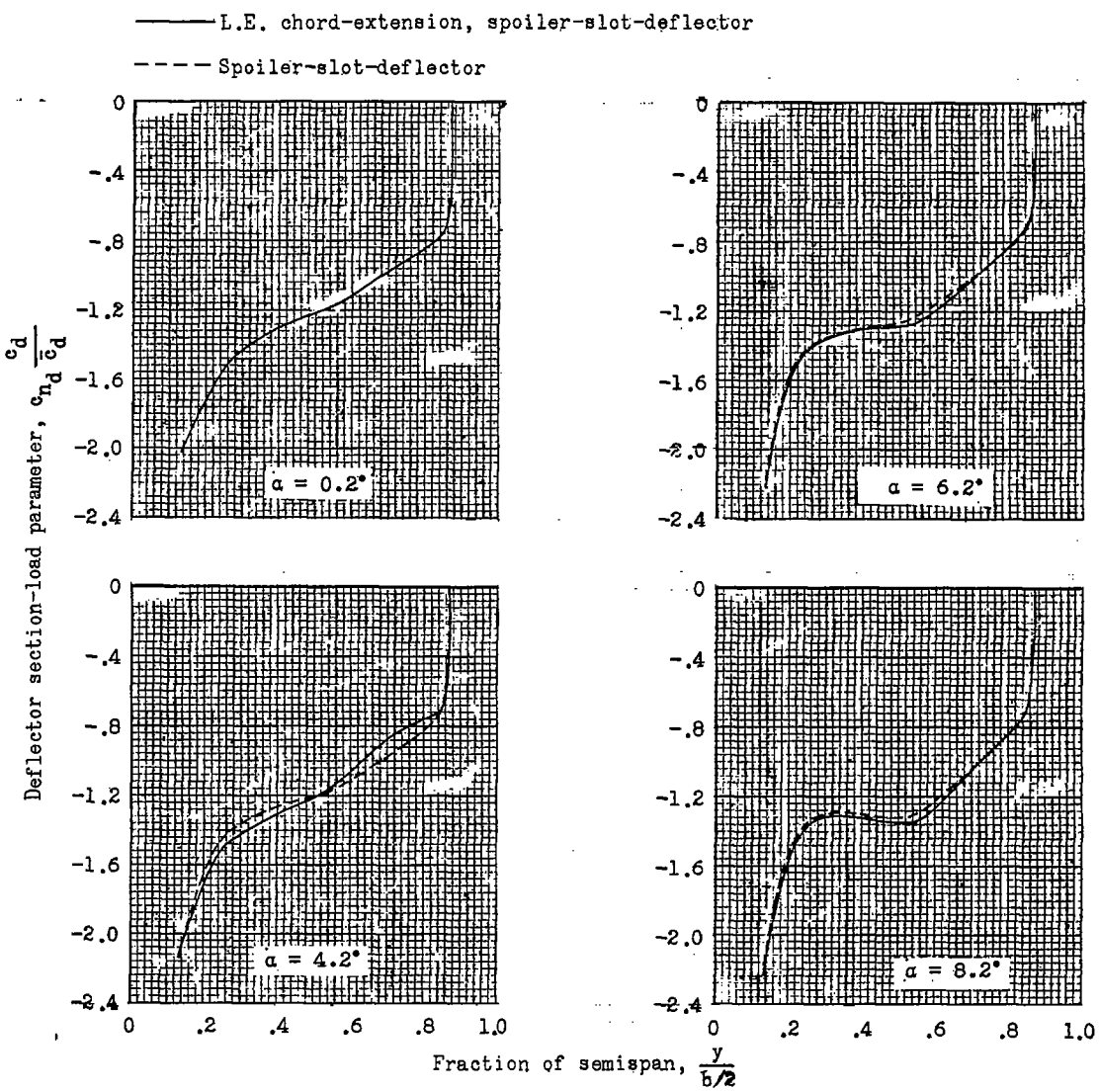
(e) M = 0.98.

Figure 19.- Continued.



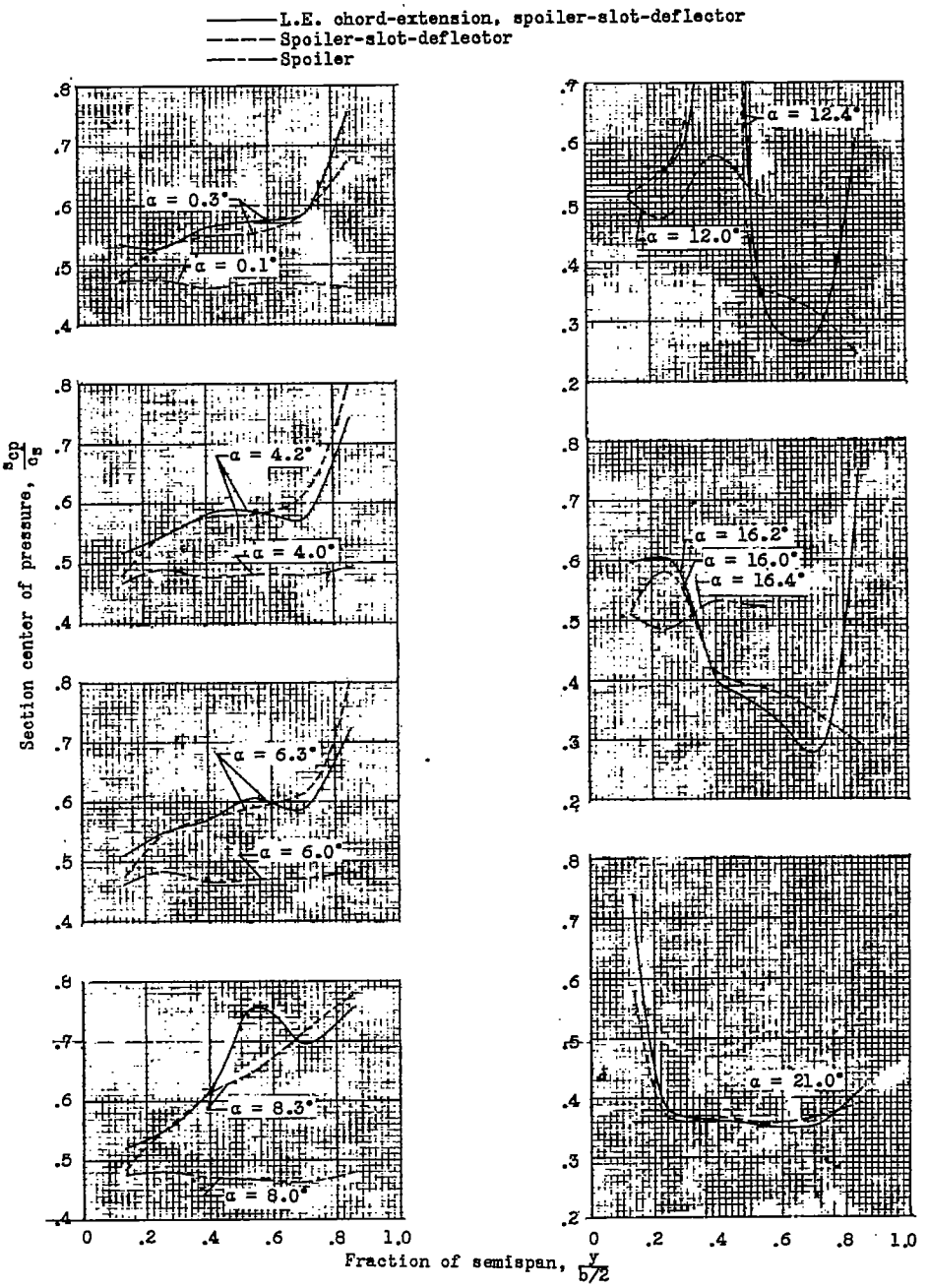
(f) M = 1.00.

Figure 19.- Continued.



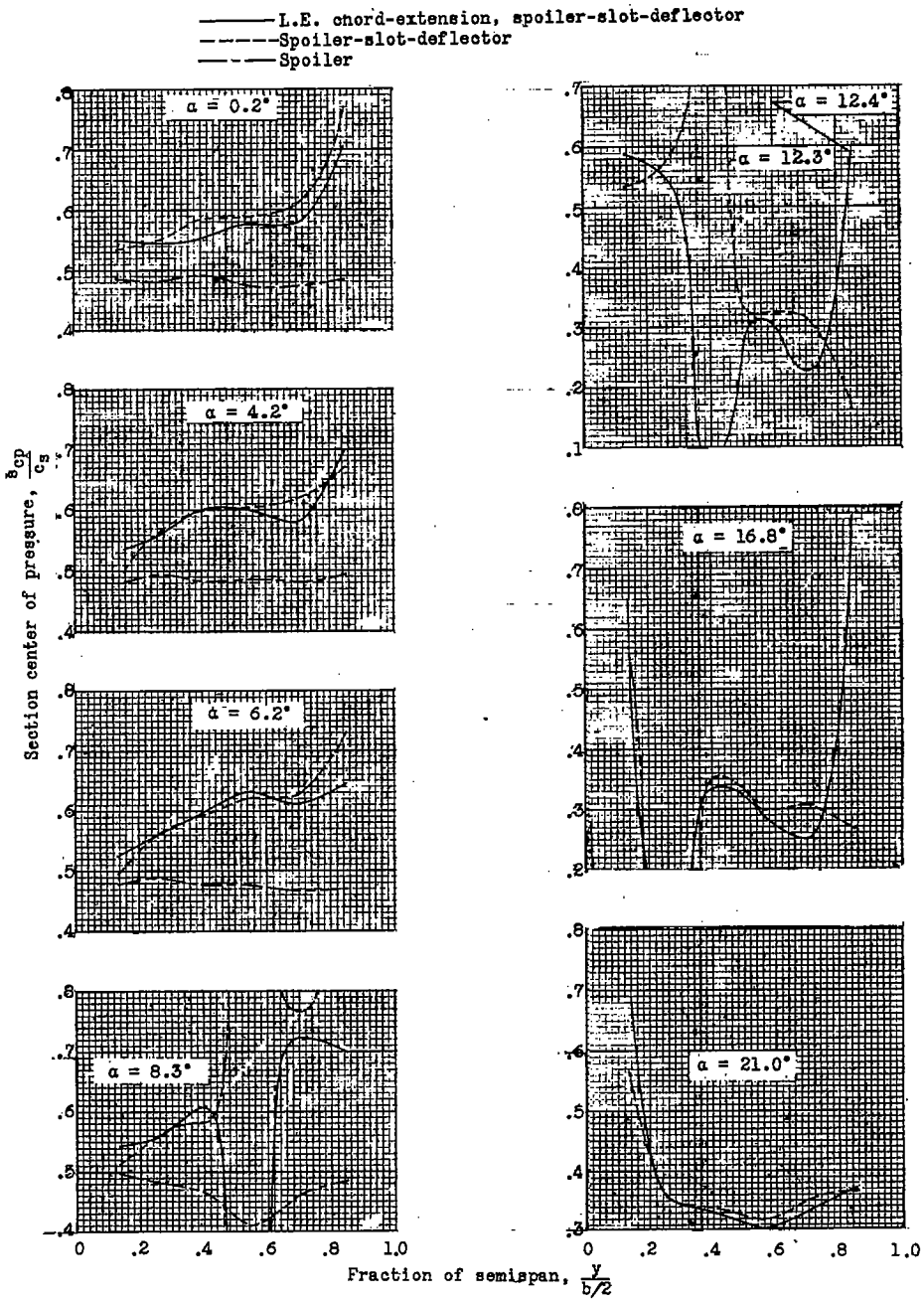
(g) M = 1.03.

Figure 19.- Concluded.



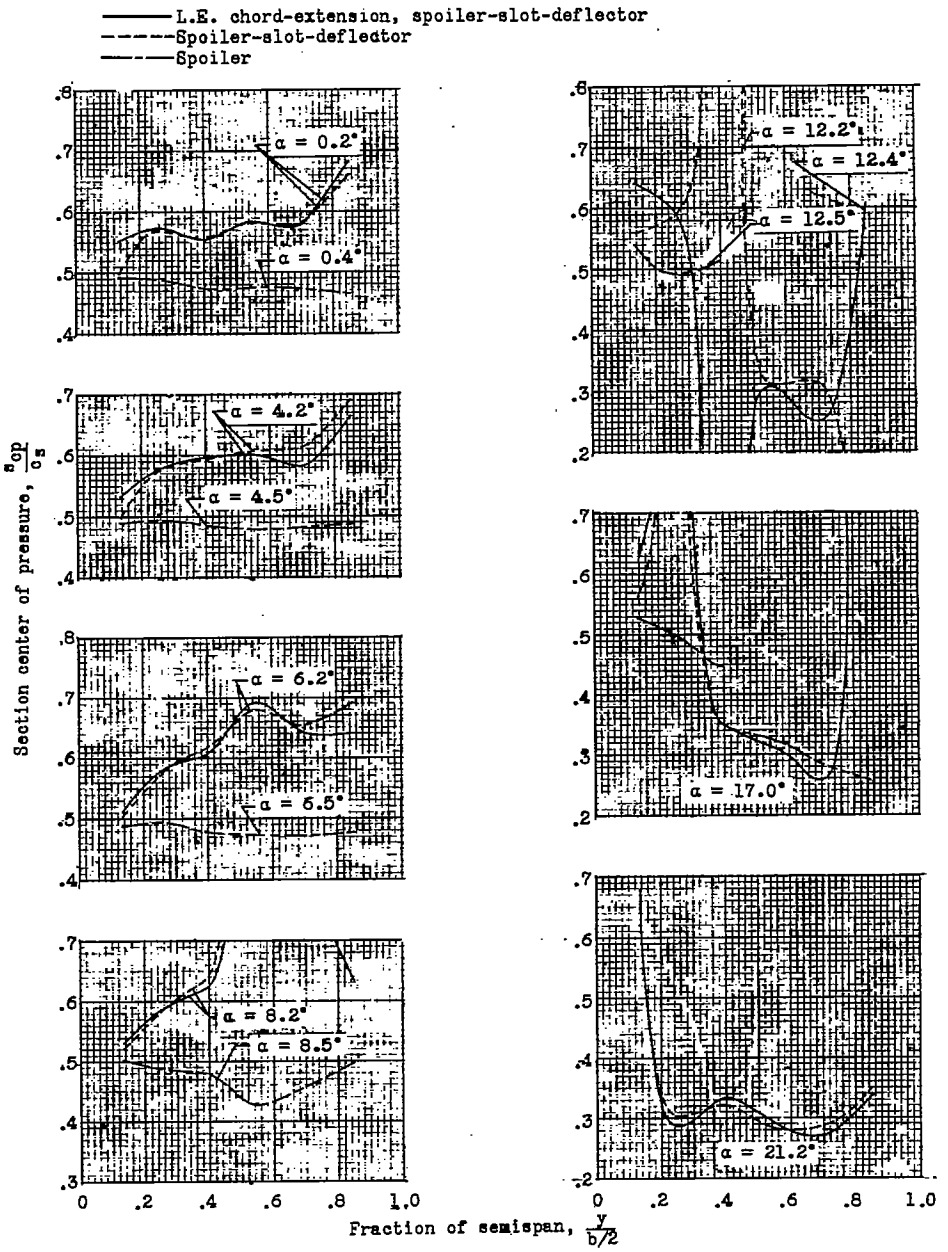
(a) M = 0.60.

Figure 20.- Section centers of pressure for a spoiler aileron and spoilers of basic and leading-edge chord-extension spoiler-slot-deflector aileron configurations.



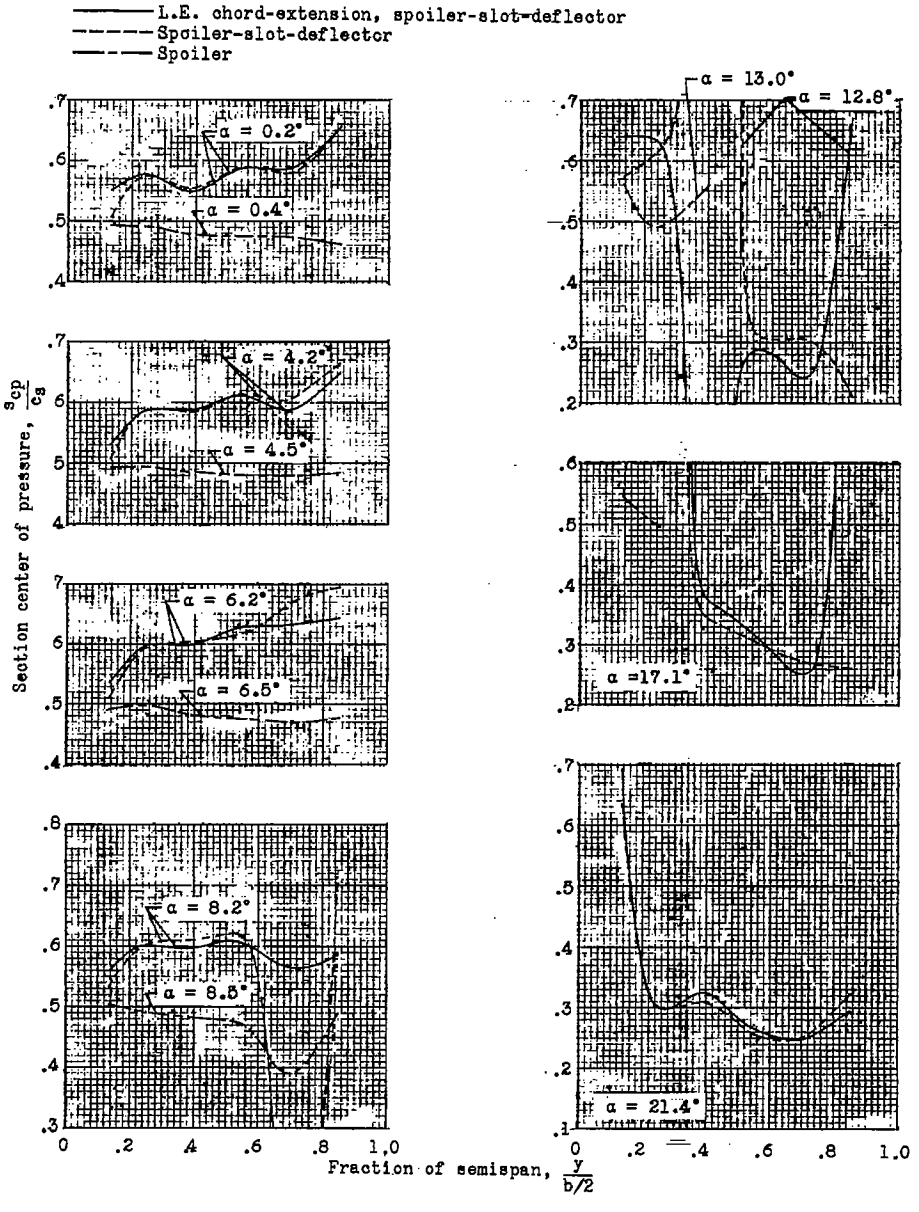
(b) M = 0.80.

Figure 20.- Continued.



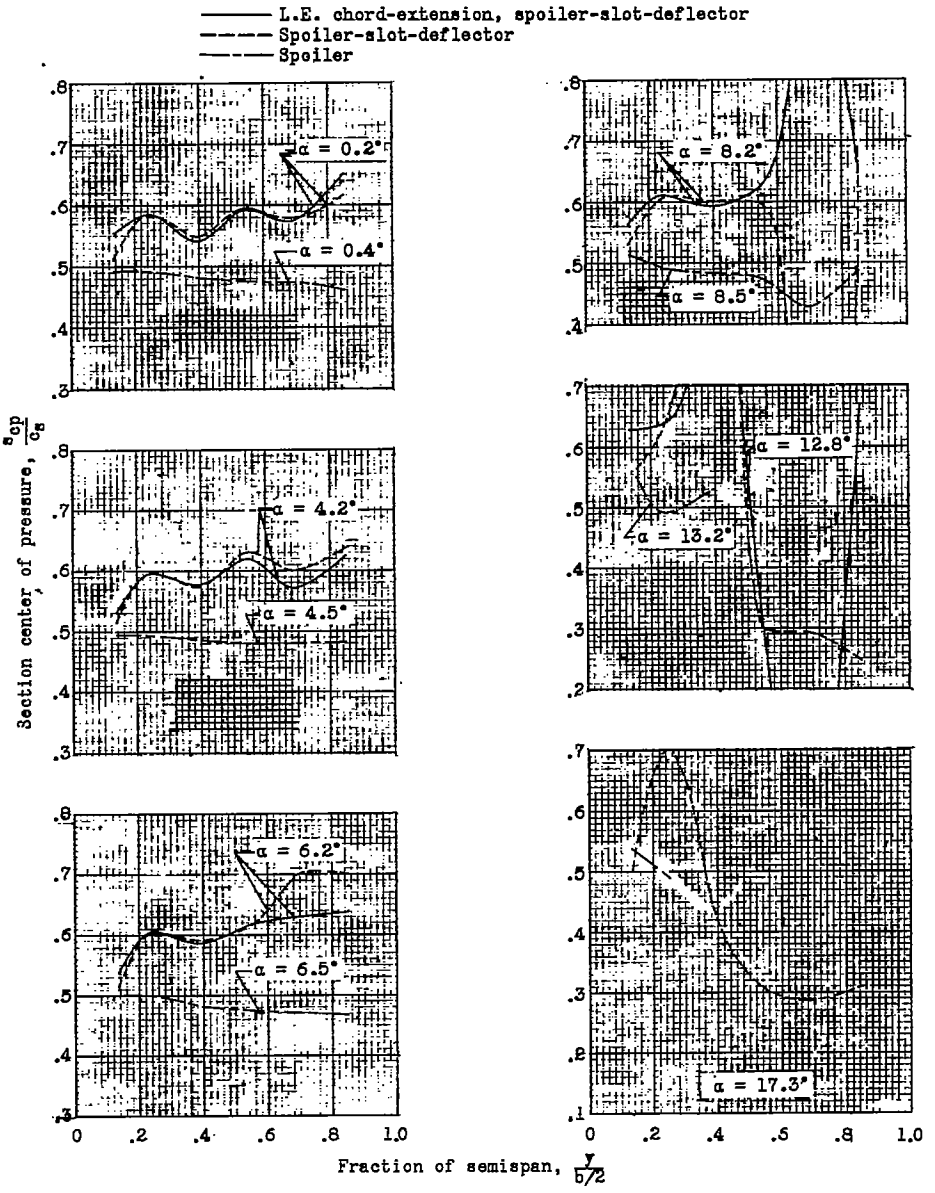
(c) M = 0.90.

Figure 20.- Continued.



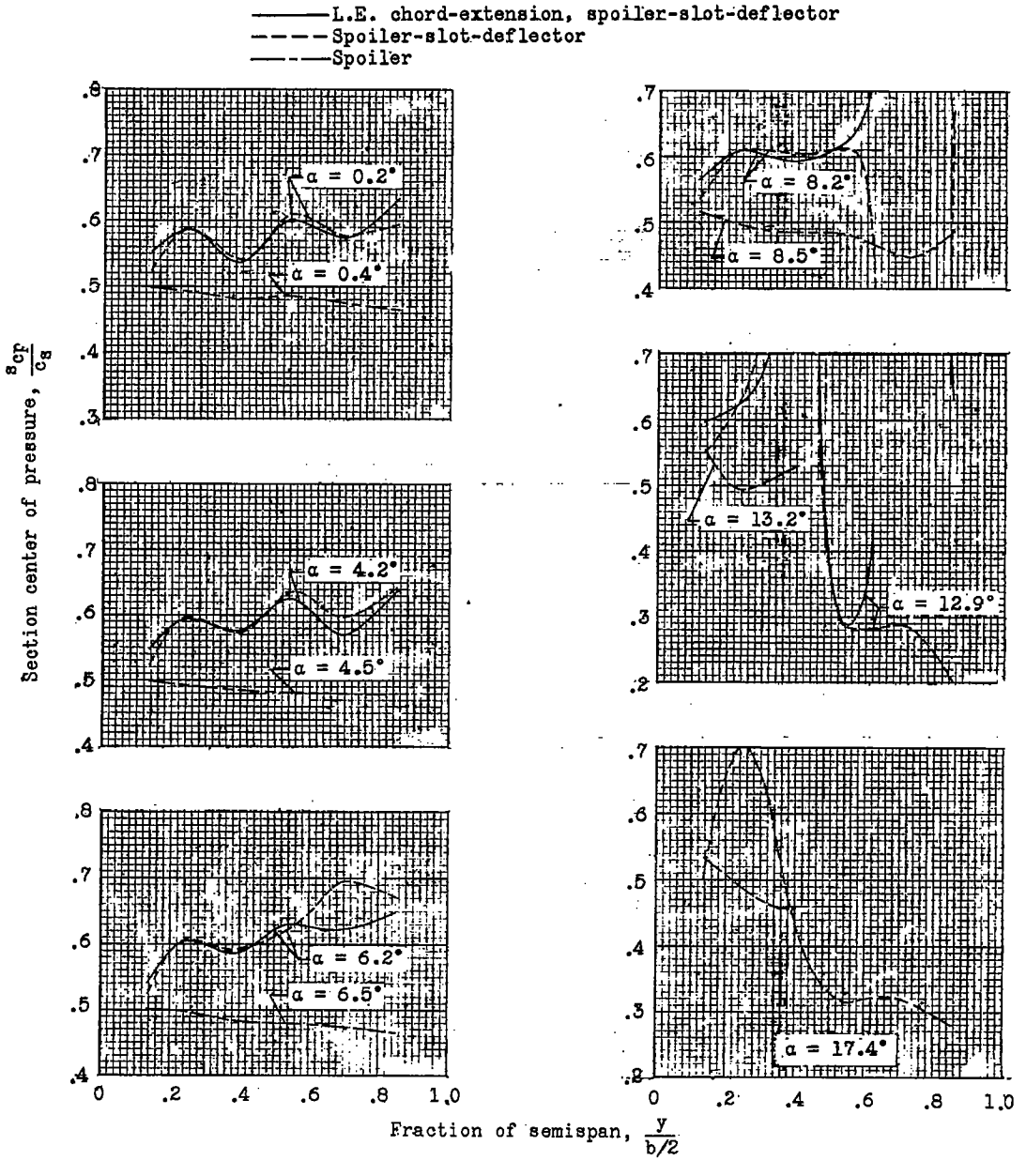
(d) M = 0.94.

Figure 20.- Continued.



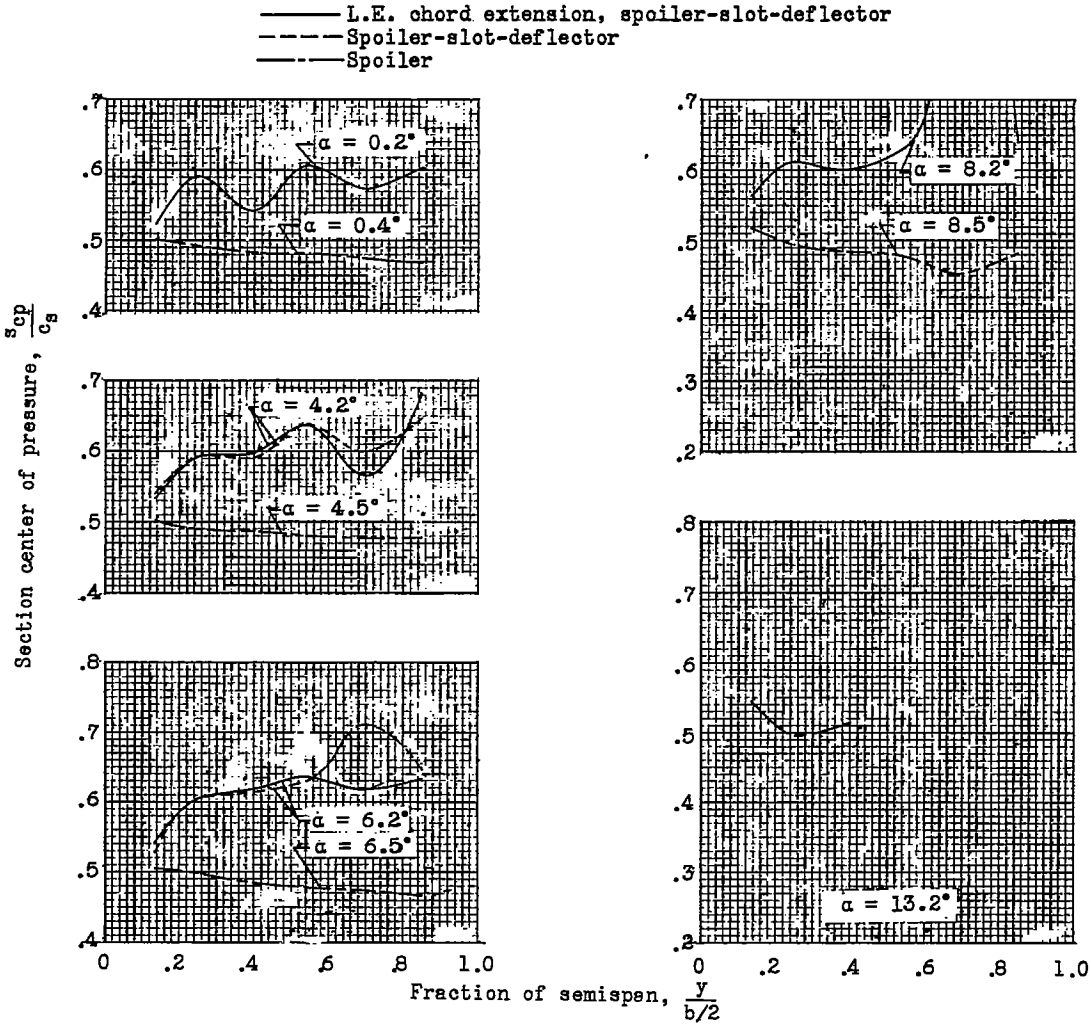
(e) M = 0.98.

Figure 20.- Continued.



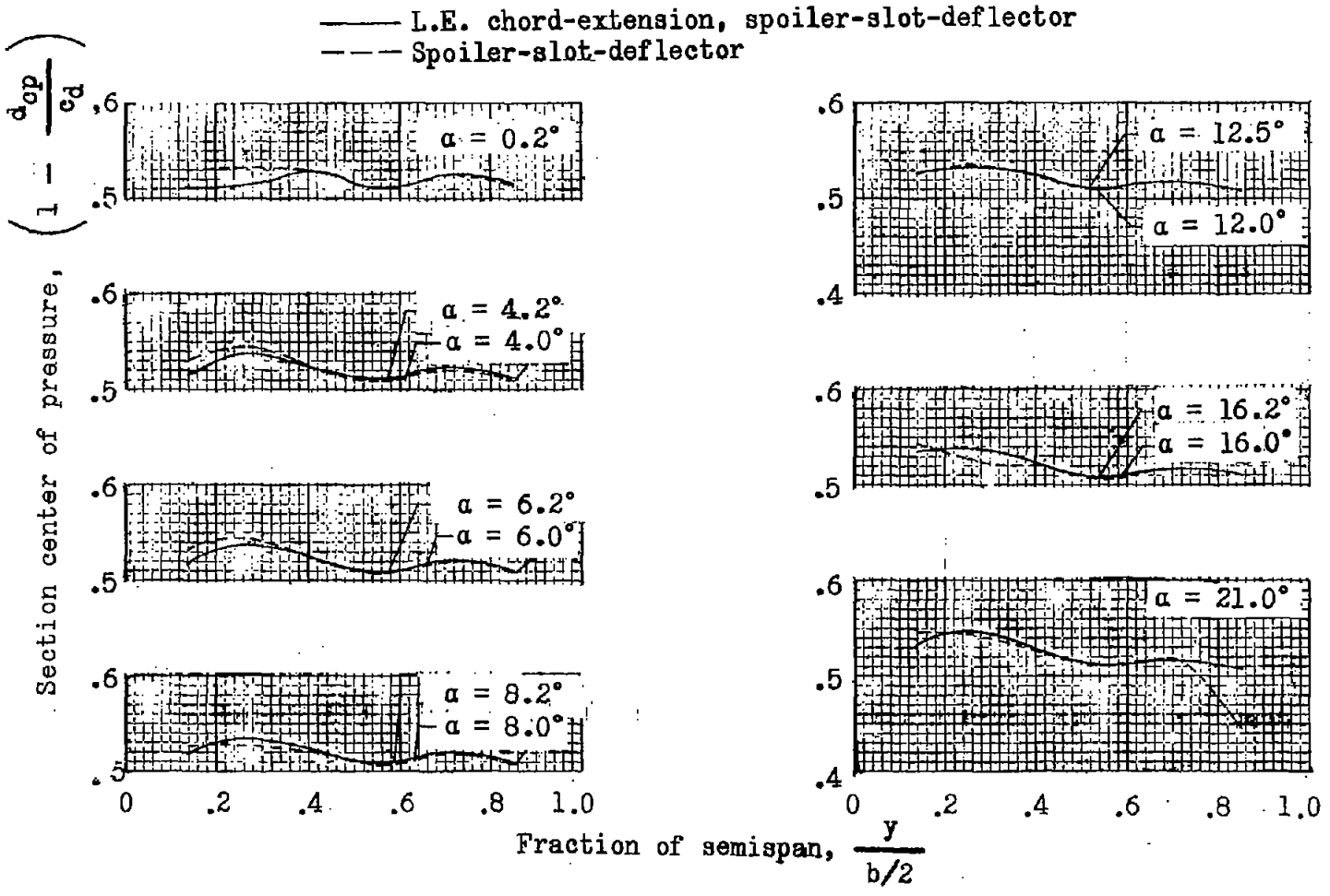
(f) M = 1.00.

Figure 20.- Continued.



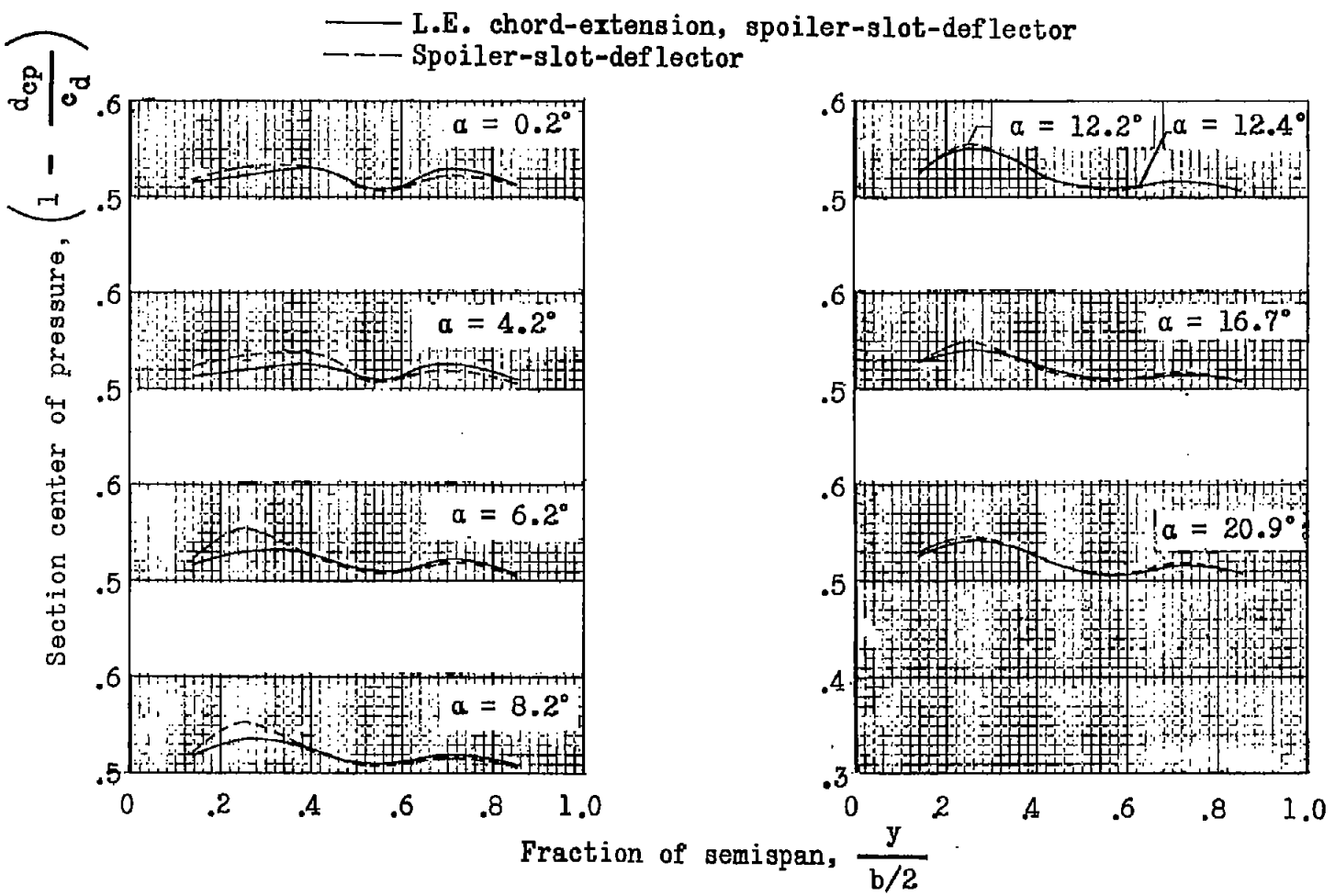
(g) M = 1.03.

Figure 20.- Concluded.



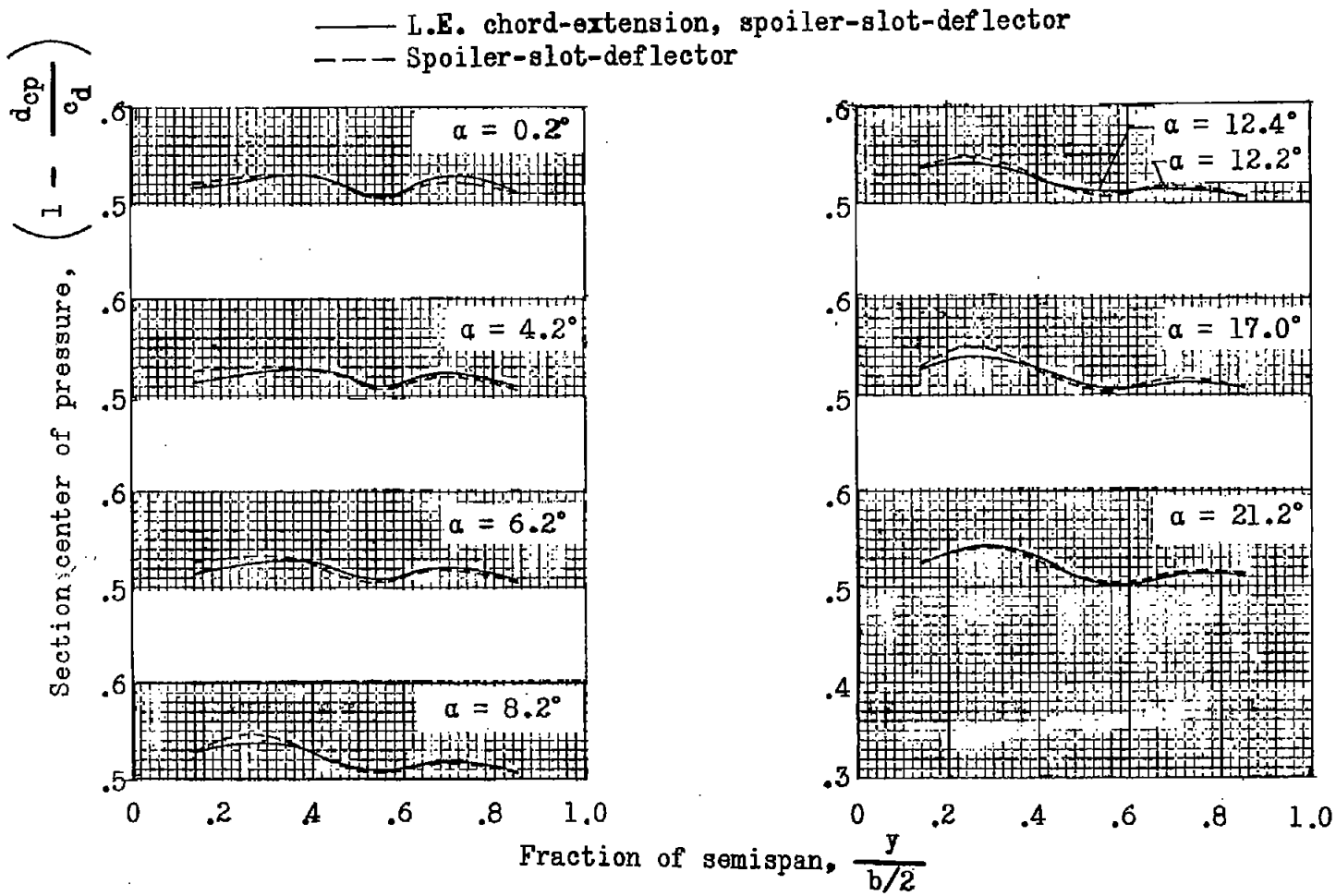
(a) M = 0.60.

Figure 21.- Section centers of pressure (measured from hinge line) for deflectors of the basic and leading-edge chord-extension spoiler-slot-deflector aileron configurations.



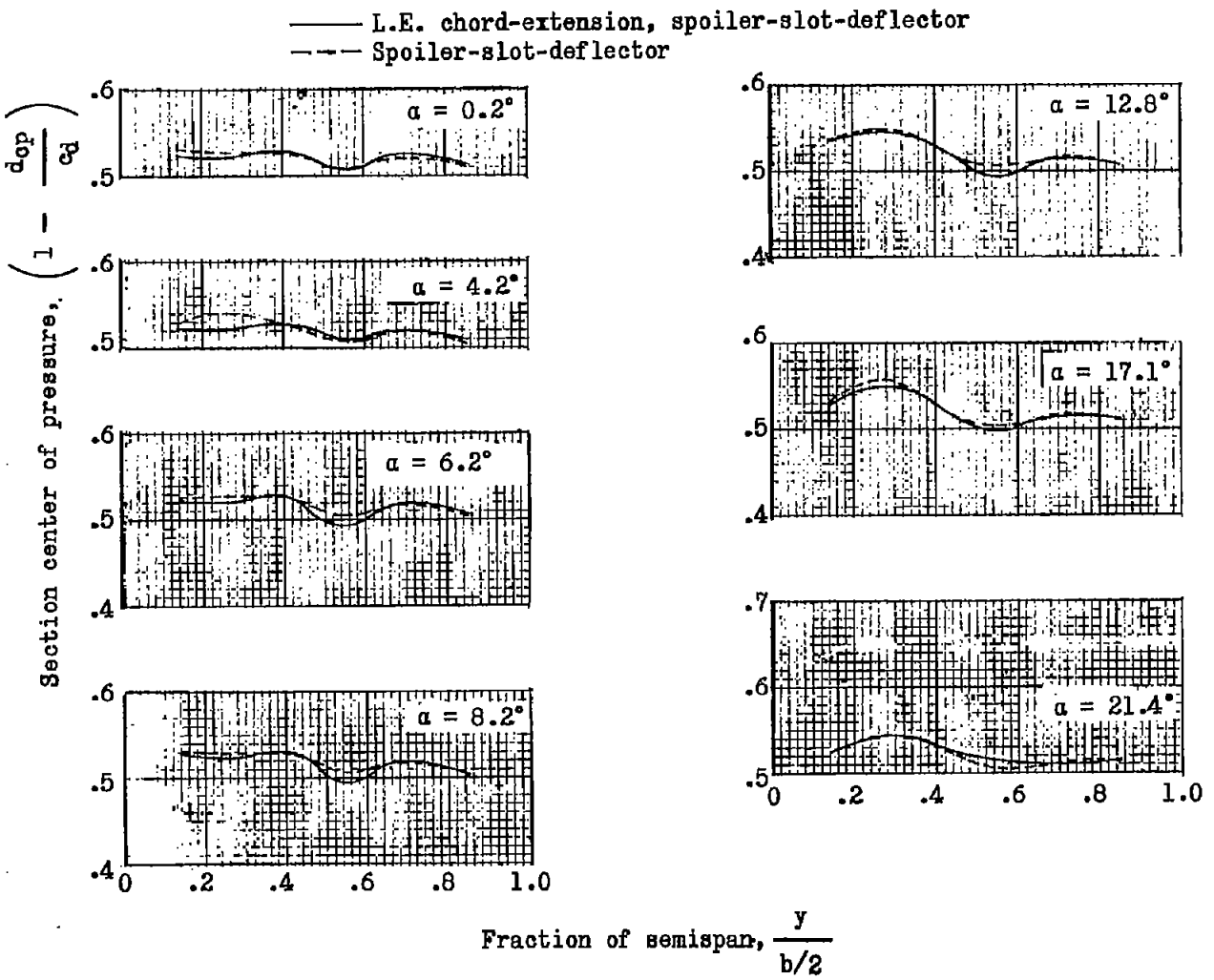
(b) M = 0.80.

Figure 21.- Continued.



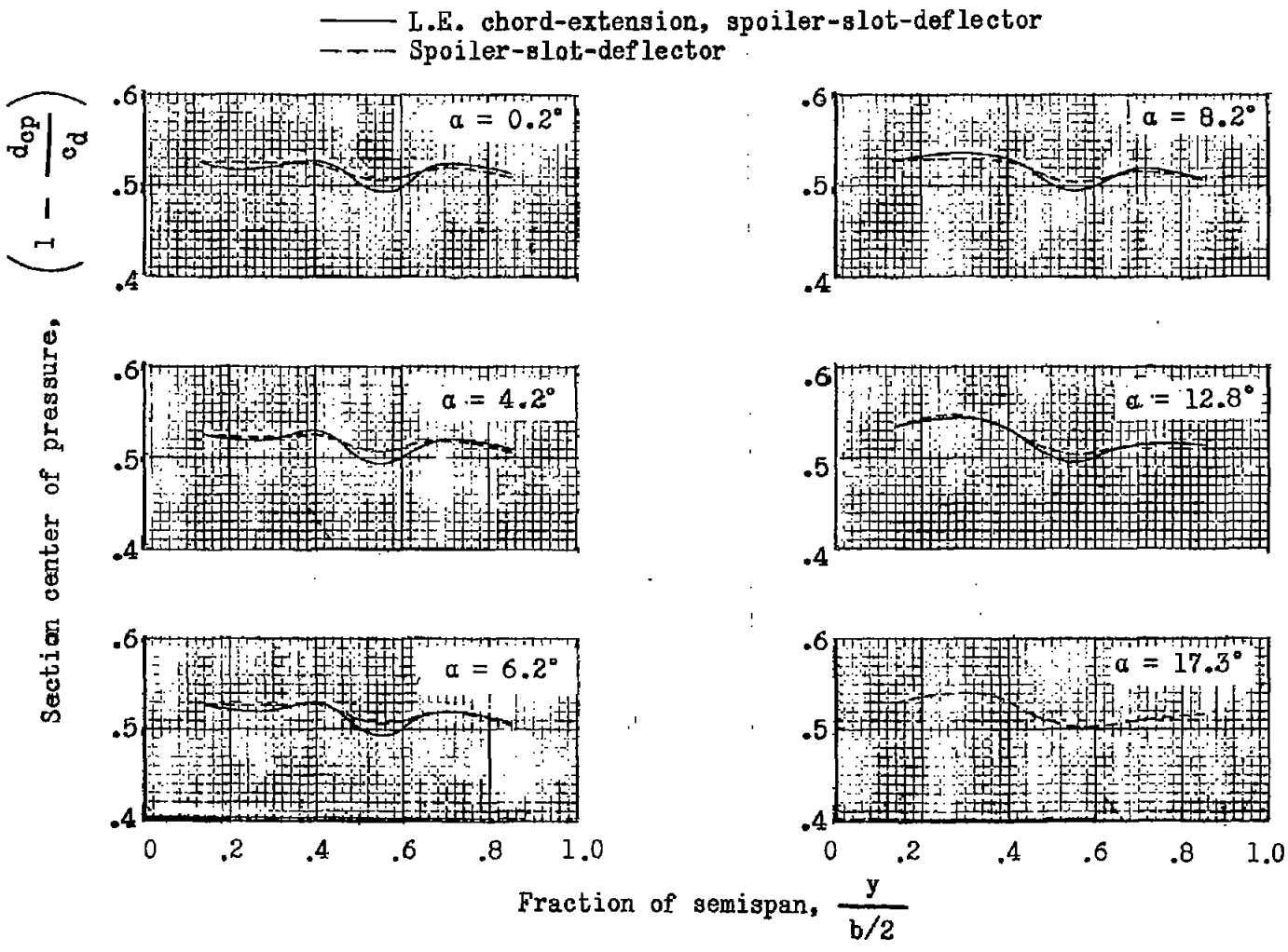
(c) M = 0.90.

Figure 21.- Continued.



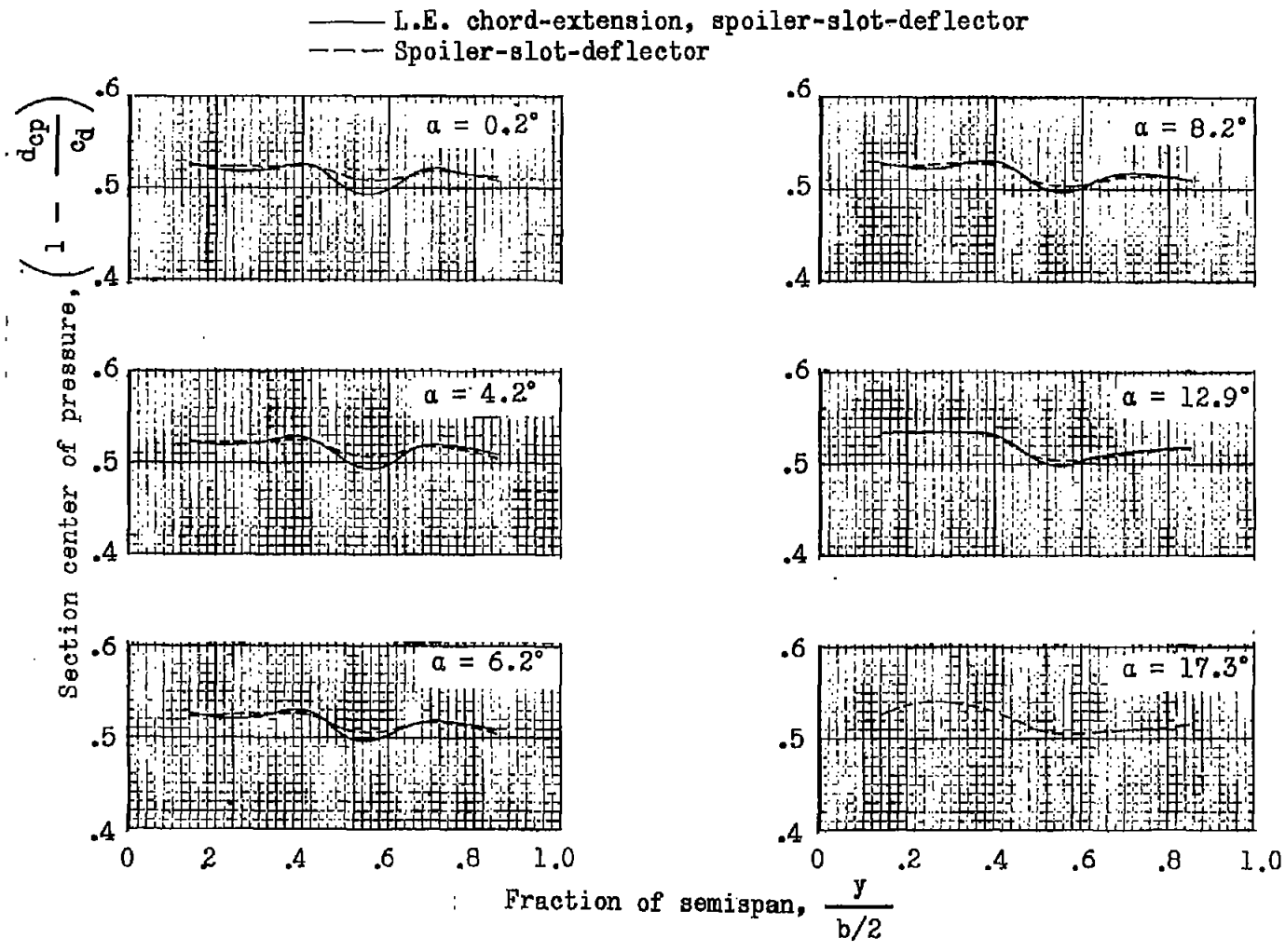
(d) M = 0.94.

Figure 21.- Continued.



(e) M = 0.98.

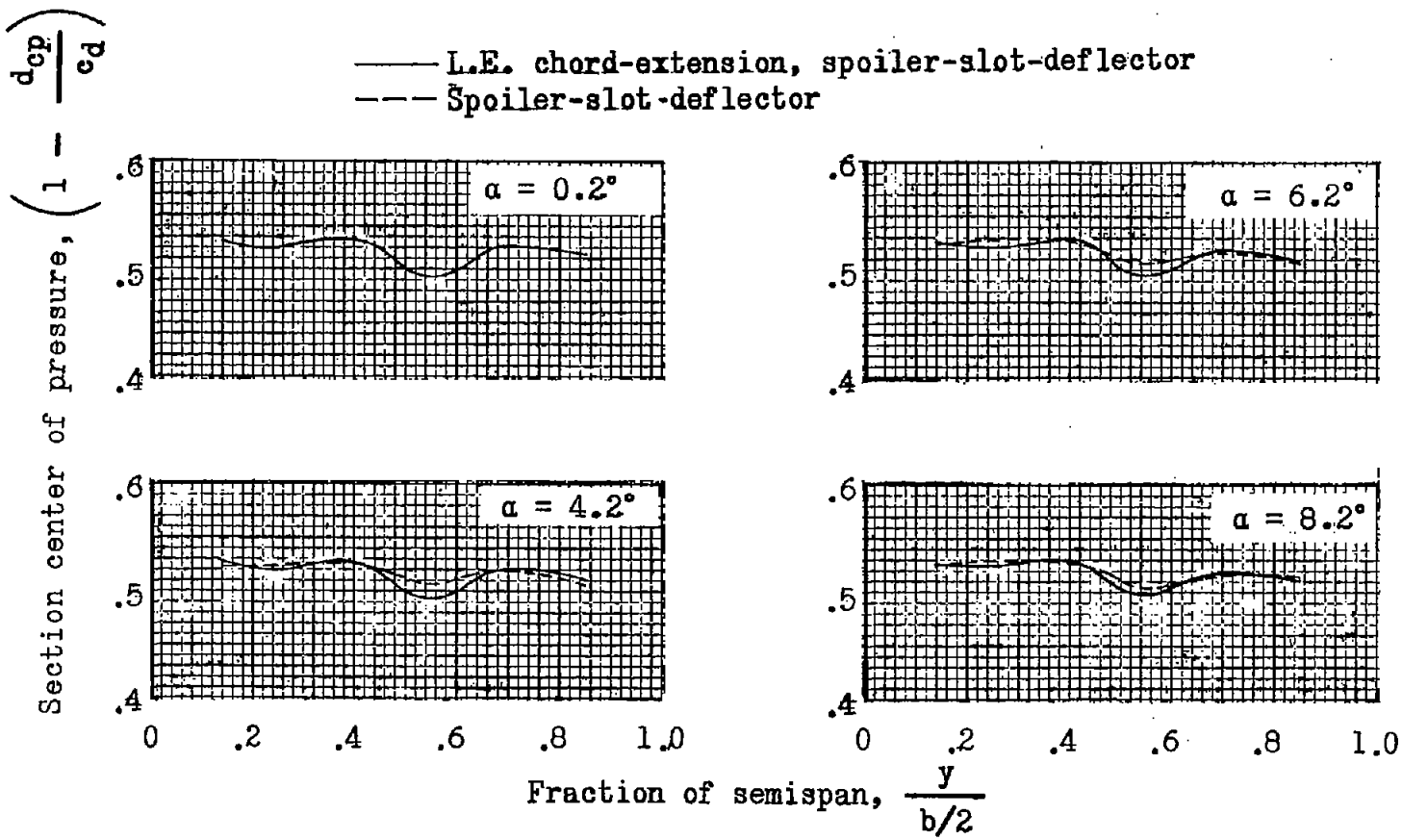
Figure 21.- Continued.



(f) M = 1.00.

Figure 21.- Continued.

UNCLASSIFIED



(g) M = 1.03.

Figure 21.- Concluded.

UNCLASSIFIED