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# RESEARCH MEMORANDUM

## A COMPARISON OF THE EXPERIMENTAL AND THEORETICAL LOADING OVER TRIANGULAR WINGS IN SIDESLIP AT SUPERSONIC SPEEDS

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[redacted]

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NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

RESEARCH MEMORANDUM

# A COMPARISON OF THE EXPERIMENTAL AND THEORETICAL LOADING OVER TRIANGULAR WINGS IN SIDESLIP AT SUPERSONIC SPEEDS

By John W. Boyd

## SUMMARY

The results of an experimental investigation of the pressure distribution over two triangular wings in sideslip at supersonic speeds are presented. The two wings had identical plan forms, 45° sweepback of the leading edge, and an aspect ratio of 4.0. One model was composed of round leading-edge sections (NACA 0006-63) and the other of sharp-nose, symmetrical, circular-arc sections. For both wings the maximum thickness of streamwise sections was 6 percent and was located at the 30-percent chord. The experimental data were obtained through a sideslip range from 0° to 9°, for angles of attack from 0° to 10°, at Mach numbers from 1.20 to 1.70 and at a constant Reynolds number of 1.8 million.

At the high angles of attack, the results showed a significant departure of the variation in the experimental loading with sideslip from that predicted by the linearized theory. In the lower speed range (Mach lines swept ahead of the leading edge) the positive dihedral effect predicted by theoretical calculations was in evidence at the low angles of attack but was not realized at the high angles of attack. The airfoils exhibited a variation of dihedral effect with lift coefficient similar to the variation with Mach number predicted by theory, in this case a loss of positive dihedral effect.

In the higher speed range (Mach line swept behind the leading wing), because of a detached bow wave ahead of the leading edge and resulting subsonic velocities at the leading edge, the load distribution revealed characteristics similar to those experienced in the lower speed range wherein the Mach lines were swept ahead of the leading edge.

## INTRODUCTION

Reference 1 has shown that transonic flow effects have a significant influence on the experimental load distribution over triangular wings at high lift coefficients at supersonic speeds. These transonic effects have been shown to be primarily a function of the Mach number component perpendicular to the swept leading edge (reference 1). It is expected, therefore, that these effects may significantly influence the load distribution over triangular wings in sideslip. The present investigation was undertaken to determine whether or not these expectations would be realized and to provide data for a comparison of the theoretical and experimental load distributions. It is suggested that the reader refer to reference 1 for a more detailed explanation of transonic effects since, in the interest of brevity, some of the explanations concerning transonic flow characteristics are omitted in the present report.

## SYMBOLS

$\frac{b}{2}$ semispan, feet

$c$ local wing chord, feet

$c_r$ root chord, feet

$\bar{c}$ mean aerodynamic chord measured parallel to the plane of symmetry $\left(\frac{\int_0^{b/2} c^2\,dy}{\int_0^{b/2} c\,dy}\right)$, feet

$M$ free-stream Mach number

$P$ pressure coefficient $\left(\frac{p-p_o}{q_o}\right)$

$\frac{\Delta p}{q_o\alpha}$ loading coefficient per unit angle of attack $\left(\frac{p_l-p_u}{q_o\alpha}\right)$, per degree

$p$ local pressure on airfoil, pounds per square foot

$p_o$ free-stream static pressure, pounds per square foot

$q_o$ free-stream dynamic pressure $\left(\frac{1}{2}\rho V^2\right)$, pounds per square foot

R Reynolds number based on mean aerodynamic chord

V velocity of free stream, feet per second

$\frac{w}{2}$ half-width of plan form at any root-chord position, feet

x,y rectangular coordinates in the plane of the wing with the origin at the apex of the wing and x measured parallel to plane of symmetry of the wing

$\alpha$ angle of attack of wing at plane of symmetry, degrees

$\beta$ sideslip angle (positive when sideslipping to right), degrees

$\epsilon$ vertex half-angle of wing plan form, degrees

$\mu$ Mach angle $\left(\sin^{-1}\frac{1}{M}\right)$, degrees

$\rho$ mass density of free stream, slugs per cubic foot

Subscripts

$l$ conditions on lower surface of airfoil

u conditions on upper surface of airfoil

## APPARATUS AND MODELS

The experimental investigation was conducted in the Ames 6- by 6-foot supersonic wind tunnel which is of the closed-return variable-pressure type with a Mach number range from 1.15 to 2.0. This wind tunnel is described fully in reference 2.

A sketch of the 45° swept-back triangular wing models which gives all plan-form dimensions is shown in figure 1. In order to obtain as high a test Reynolds number as possible, the maximum size model which was free from wind-tunnel-wall interference at the lowest test Mach number was used.

Since in reference 3 there was shown a pronounced effect of chordwise-airfoil-thickness distribution on the flow characteristics of airfoil sections at transonic speeds and, since in the present experiment it was expected that similar transonic effects would be manifest, two different airfoil sections were selected for the wings. One wing was composed of round-nose airfoil sections 6 percent thick in streamwise planes. The section used for this wing was the NACA 0006-63 profile. The other wing was composed of sharp-nose, symmetrical, circular-arc sections. For both wings the maximum thickness of streamwise sections was 6 percent and was located at the 30-percent chord. See table I for airfoil ordinates.

The models were cast of bismuth-tin alloy and coated with zinc chromate to give a smooth surface. The cone which joined the wing to the support sting (fig. 2) was designed to minimize the pressure disturbance and at the same time fulfill the strength requirements. The support sting itself served as a conduit for the pressure tubes.

The right wing panel was fitted with 86 pressure orifices, each 0.013 inch in diameter, arranged to measure the local pressures on the surface in such a manner as to permit the calculation of the pressure difference between the upper and lower surfaces. These orifices were located in planes perpendicular to the plane of symmetry at three chordwise stations (fig. 1). These stations hereafter designated as stations 1, 2, and 3 were located at 25, 50, and 75 percent of the root chord, respectively.

The models were mounted with the plane of the wing in the vertical plane in the test section. A cantilever sting support was used as shown in figure 2. The sting angle of attack could be adjusted to any angle between ±5° while the tunnel was operating. Through the use of bent stings, various angles of attack and angles of sideslip could be obtained. For the present test both a 5° and a 10° bent sting were employed to give an angle-of-attack range of approximately 0° to 10° and angles of sideslip from −9° to +9°. Since the model angle of attack during the test was influenced by the deflection of the model support under load, an arrangement of mirrors and lenses was used to determine optically the true angle of attack. The angle of sideslip was determined by means of a cathetometer.

## METHODS

### Theoretical

The theoretical loading per unit angle of attack was calculated using the formulas of reference 4 as derived from the linearized theory. The flow field of a flat lifting triangular wing in sideslip is of conical form; that is, quantities such as pressure and velocity are constant along rays emanating from the apex of the wing. The flow, therefore, when shown in transverse planes (planes normal to the axis of symmetry) has a characteristic of two-dimensional flow in that the pressure plots at all fore and aft locations will be similar.

Since the theory is based on linear differential equations, the principle of superposition applies so that the pressure distribution due to airfoil thickness has no influence on the pressure distribution due to angle of attack or vice versa.

### Experimental

Tests.– In the present investigation, data were obtained over a Mach number range from 1.20 to 1.70 at a constant Reynolds number of 1.8 million. Measurements were made through a sideslip range from $0^{\circ}$ to $9^{\circ}$ and at angles of attack from $0^{\circ}$ to $10^{\circ}$. It should be noted here that the load distributions presented in figures 3 through 8 over the trailing wing panel were actually measured over the leading wing panel at equal negative sideslip angles.

Recording and reduction of data.– The pressures were indicated on multiple-tube manometers which were photographed to record the pressures. The data were reduced directly to spanwise plots of the pressure coefficient through use of a plotting machine.

Precision.– Surveys of the tunnel air stream (reference 2) have shown that at Mach numbers other than 1.40 there exist pressure and stream angle disturbances in the air stream. These surveys indicate, however, that the flow in the air stream is two-dimensional; that is, there are no appreciable transverse pressure gradients in horizontal planes. In the present test, therefore, since there is no cross flow in horizontal planes in the test section, the model was mounted with the wing in the vertical plane to minimize the effects of stream irregularities on the load distribution. Hence, since the flow was similar in all vertical planes, the static-pressure corrections applied were those measured in the vertical plane at the center line of the tunnel.

In applying these corrections it was assumed that the static pressures on the upper and lower surfaces were equally affected by the stream static-pressure variation and that the lifting pressures were not affected. These assumptions have been shown to be valid by the results of the investigation of reference 2.

The major items which may cause inaccuracies in the experimental pressure distributions have been noted in reference 5. Since the techniques employed in this investigation parallel those used in reference 5, the over-all precision should be approximately of the same magnitude; that is, the wing static pressures should be accurate to within ±1 percent of the dynamic pressure.

As noted previously, the size of the wing was chosen so that at the lowest Mach number there was no interference between the wing and the compression or expansion waves originating on the model and reflecting from the tunnel walls.

Errors made in measuring the angle of attack were confined to purely mechanical inaccuracies since the variation of the stream angle in transverse planes was negligible. A possible error of $\pm 0.05^{\circ}$ in the angle of attack was incurred in the initial referencing of the model with respect to the stream direction. The angle of attack under load, determined by means of the optical measuring system, could be read to within $\pm 0.03^{\circ}$, resulting in a total possible error of $\pm 0.08^{\circ}$ in the angle-of-attack reading.

Errors made in measuring the angle of sideslip were a combination of stream-angle variation and mechanical inaccuracies. Because of the axial variations in the stream angle at Mach numbers other than 1.40 it was difficult to determine the effective model angle of sideslip. At a Mach number of 1.20 the angle of sideslip may be in error as much as $1.1^{\circ}$ due to stream inclination, whereas at a Mach number of 1.70 the stream angle may be as great as $1.1^{\circ}$ in the opposite direction. All of the data presented herein are for angles of sideslip which have not been corrected for stream inclination. Mechanically the inaccuracy of the sideslip angle was limited to the accuracy of the cathetometer which could be read to within $\pm 0.05^{\circ}$.

The absolute humidity of the air in the wind tunnel was kept below 0.0003 pound of water per pound of air at all times so that it had negligible effect on the experimental results.

## RESULTS AND DISCUSSION

The experimental results in the form of pressure coefficients on the upper and lower surfaces for the complete range of test variables

are presented in tabular form for any analysis which the reader may wish to make (tables II-VII). A portion of the data of station 3 was omitted because of noticeable interference effects from the support cone. For the purpose of discussion in this report, figures showing the experimental load distributions are presented for Mach numbers of 1.20 and 1.70 and compared with the theoretical results. These data are considered representative of the results obtained throughout the test range.

## Experimental Load Distributions

In the analysis of the experimental lifting pressures the data show, as in reference 1, that, while theory and experiment did not always agree on the magnitude of the pressures on the wing, the experimental lifting pressures were essentially constant along rays from the apex of the wing so that conical flow fields existed for both theory and experiment. It is possible, therefore, and convenient in considering the loading over triangular wings to resort to transverse pressure plots since they are essentially similar at all fore-and-aft locations. Components of the velocity perpendicular to rays are considered in analyzing these transverse pressure plots. It may be seen that on the surface of wings moving at supersonic speeds the components may be either subsonic or supersonic, depending on the stream Mach number and the sweep of the ray considered, so that no inconsistency exists in referring to subsonic velocity components on the surface of an airfoil moving at supersonic speeds.

The variable $\tan \epsilon / \tan \mu$, where $\epsilon$ is the semivertex angle of the wing and $\mu$ is the Mach angle, is sometimes used to indicate the relative position of the Mach line from the apex with respect to the wing leading edges. Values of $\tan \epsilon / \tan \mu$ greater than one correspond to the condition wherein the Mach line is swept behind the leading edge and values less than one correspond to the condition wherein the Mach line is swept ahead of the leading edge.

Mach lines swept ahead of the leading edge.- The variation of the experimental load distribution with angle of sideslip for both the round-nose and the sharp-nose airfoil is presented in figure 3 for low angles of attack (approximately 2.5°) and for a Mach number of 1.20. The data presented here are typical of the results obtained at low angles of attack in this speed range (Mach lines swept ahead of the leading edge). Examination of the data revealed that, as the angle of sideslip was increased from 0° to 9°, the experimental data showed the increase in loading over the leading wing panel and decrease in loading over the trailing wing panel expected from theoretical considerations, that is, a positive dihedral effect. Positive dihedral effect is

considered to exist when the loading is such as to cause the leading wing panel to rise and the trailing wing panel to lower.

For higher angles of attack (approx. 8.6°), very little variation in the loading with angle of sideslip was noted. As shown in figure 4, the data obtained for both the round-nose airfoil and the sharp-nose airfoil indicated little change in the magnitude or the distribution of the experimental loading coefficients as the angle of sideslip was increased from 0° to 9°, very little dihedral effect being present in this case. Theoretical studies, while strictly applicable to only small angles of attack, lead one to expect that positive dihedral effect also would be present here. The reasons for the departure of the variation in experimental loadings with sideslip at high lift coefficients from the theoretically predicted trends are not known. However, at high angles of attack such as those under consideration, because of the transonic character of the flow (see reference 1), the Mach number of the flow over the upper surface of the airfoil is much higher than that of the free stream. It is possible, therefore, that the airfoil exhibits characteristics which the theory predicts for higher Mach numbers (bow wave attached), in this case a loss of positive dihedral effect.[1] (See reference 6.)

Mach lines swept behind the leading wing.- The variation of the experimental loading with angle of sideslip for both wings is presented in figure 5 for a Mach number of 1.70 and an angle of attack of 2.5°. It is evident from a study of these data and similar data at 8.6° angle of attack (see fig. 6) that, even though the theoretical flow velocity component perpendicular to the edge of the leading wing was supersonic, the resulting load distributions differed little from those in the lower speed range where the flow component perpendicular to the leading wing was subsonic. At these higher supersonic speeds ($M = 1.70$) the value of $\tan \epsilon / \tan \mu$ for the leading wing panel was greater than 1.0 but less than the value for which the shock wave became attached to the sharp leading edge. Therefore, for both airfoils, transonic flow characteristics were evident in the form of a detached bow wave ahead of the swept leading edge. Since in the region between the detached bow wave and the leading edge the flow components perpendicular to the leading wing were subsonic, the flow around the leading edge of the airfoil was similar to the flow experienced when the Mach lines were swept ahead of the leading edge. It is not surprising, therefore, that the airfoils did not exhibit characteristics with regard to dihedral effect which are in agreement with the theory which assumes the bow wave to be

[1]Verification of this hypothesis can be obtained by a separate examination of the pressure data on the upper and lower surfaces of the airfoil (tables II-VII). These data show that the distribution of loading on the upper surface of the wing is such as to result in the loss in positive dihedral effect.

attached, but rather, because of these transonic effects, showed characteristics similar to those noted in the lower speed range (Mach lines swept ahead of the leading edge), that is, a positive dihedral effect at 2.5° angle of attack which was reduced to almost zero dihedral effect at 8.6° angle of attack.

## Comparison of Experimental and Theoretical Loading

A comparison of the theoretical load distribution with the experimental values at 9° of sideslip is presented in figure 7 for both the round-nose and the sharp-nose airfoil at a Mach number of 1.20. At the low angles of attack the data for the sharp-nose airfoil are in somewhat better agreement with the theory than the data for the round-nose airfoil. For the high angles of attack, the experimental loading for both airfoils revealed certain pressure discontinuities over the airfoil surface (as indicated on the trailing panel at about 70-percent semispan and on the leading panel at about 60-percent semispan), resulting in a reduction in the loading, which were quite similar to those noted in the data for triangular wings at zero sideslip (reference 1). The discontinuities over the triangular wing at zero sideslip have been shown to be associated with certain transonic effects (formation of shock waves) similar to those experienced over two-dimensional airfoils at transonic speeds (reference 3). It was concluded that the pressure discontinuities noted in the data of the present investigation also denoted the existence of shock waves on the airfoil surface and that the shock patterns in transverse planes resemble closely the patterns existing on triangular wings at zero sideslip (reference 1).

The theoretical and experimental load distributions at 9° of sideslip are compared for both airfoils in figure 8 for a Mach number of 1.70. Since $\tan \epsilon / \tan \mu$ of the leading wing is greater than unity, it is assumed in the theory that the bow wave is attached to the wing leading edge with the result that the lifting pressures are constant between the Mach line and the leading edge. In the actual case, however, since the bow wave was detached, interaction between the upper and lower surface occurred, resulting in a pressure peak near the leading edge. Over the remaining portion of the span the experimental loading for both airfoils was in fairly good agreement with the theoretical.

## CONCLUDING REMARKS

The present investigation of the characteristics of the pressure distribution over two triangular wings in sideslip for a Mach number

range of 1.20 to 1.70 was made to study the transonic effects on the load distribution over triangular wings in sideslip and to provide data for a comparison of the experimental and theoretical load distributions.

In the lower speed range (Mach lines swept ahead of the leading edge) the results of the investigation indicated at the high angles of attack a significant departure of the variation of the experimental loading with sideslip from that indicated by the linearized theory. The positive dihedral effect expected from theoretical considerations was in evidence at the low angles of attack but was not realized at the high angles of attack. The airfoils exhibited a variation of dihedral effect with lift coefficient similar to the variation with Mach number predicted by theory, that is, a loss of dihedral effect with increasing Mach number.

In the higher speed range where the Mach line was swept behind the edge of the leading wing panel, because of a detached bow wave ahead of the leading edge and resulting subsonic velocities at the leading edge, the load distributions exhibited characteristics similar to those experienced in the lower speed range wherein the Mach lines were swept ahead of the leading edge.

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TABLE I.— AIRFOIL ORDINATES

[Stations and Ordinates Given in Percent of Airfoil Chord]

| NACA 0006-63 | | | | Sharp-Nose Symmetrical Circular-Arc Profile | | | |
|---|---|---|---|---|---|---|---|
| Upper surface | | Lower surface | | Upper surface | | Lower surface | |
| Station | Ordinate | Station | Ordinate | Station | Ordinate | Station | Ordinate |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.25 | .95 | 1.25 | -.95 | 5 | .92 | 5 | -.92 |
| 2.50 | 1.31 | 2.50 | -1.31 | 10 | 1.67 | 10 | -1.67 |
| 5.0 | 1.78 | 5.0 | -1.78 | 15 | 2.25 | 15 | -2.25 |
| 7.5 | 2.10 | 7.5 | -2.10 | 20 | 2.67 | 20 | -2.67 |
| 10 | 2.34 | 10 | -2.34 | 25 | 2.92 | 25 | -2.92 |
| 15 | 2.67 | 15 | -2.67 | 30 | 3.00 | 30 | -3.00 |
| 20 | 2.87 | 20 | -2.87 | 40 | 2.94 | 40 | -2.94 |
| 25 | 2.97 | 25 | -2.97 | 50 | 2.75 | 50 | -2.75 |
| 30 | 3.00 | 30 | -3.00 | 60 | 2.45 | 60 | -2.45 |
| 40 | 2.90 | 40 | -2.90 | 70 | 2.02 | 70 | -2.02 |
| 50 | 2.65 | 50 | -2.65 | 80 | 1.47 | 80 | -1.47 |
| 60 | 2.28 | 60 | -2.28 | 85 | 1.15 | 85 | -1.15 |
| 70 | 1.83 | 70 | -1.83 | 90 | .79 | 90 | -.79 |
| 80 | 1.31 | 80 | -1.31 | 95 | .40 | 95 | -.40 |
| 90 | .72 | 90 | -.72 | 100 | 0 | 100 | 0 |
| 95 | .40 | 95 | -.40 | | | | |
| 100 | (.06) | 100 | (-.06) | | | | |
| 100 | 0 | 100 | 0 | | | | |
| L.E. radius: 0.40 | | | | | | | |

[redacted]

## TABLE II.– EXPERIMENTAL PRESSURE COEFFICIENTS
[M = 1.20]

β = 0°

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.544 | --- | 0.654 | --- | 0.717 | --- | 0.747 | --- | 0.770 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.099 | .255 | -0.080 | .399 | -0.239 | .520 | -0.454 | .652 | -0.555 | .710 | 0.330 | 0.373 | 0.184 | 0.498 | -0.221 | 0.589 | -0.665 | 0.686 | -0.782 | 0.739 |
| | .867 | .032 | .085 | -.139 | .228 | -.302 | .356 | -.511 | .512 | -.548 | .578 | .251 | .309 | .141 | .423 | -.006 | .507 | -.436 | .622 | -.553 | .669 |
| | .800 | .027 | .059 | -.114 | .189 | -.269 | .308 | -.461 | .459 | -.516 | .524 | .195 | .255 | .101 | .359 | -.011 | .443 | -.311 | .560 | -.417 | .610 |
| | .733 | .029 | .043 | -.096 | .158 | -.230 | .267 | -.433 | .412 | -.492 | .475 | .157 | .208 | .070 | .308 | -.026 | .391 | -.256 | .509 | -.379 | .559 |
| | .667 | --- | .039 | --- | .138 | --- | .236 | --- | .377 | --- | .437 | .134 | .178 | .052 | .272 | -.038 | .352 | -.176 | .471 | -.324 | .533 |
| | .533 | .011 | .034 | -.079 | .121 | -.154 | .206 | -.269 | .336 | -.309 | .395 | .099 | .134 | .028 | .217 | -.047 | .294 | -.140 | .410 | -.165 | .462 |
| | .400 | .012 | .023 | -.079 | .097 | -.143 | .180 | -.235 | .302 | -.254 | .360 | .067 | .094 | 0 | .173 | -.064 | .246 | -.151 | .360 | -.174 | .411 |
| | .267 | .003 | .015 | -.067 | .088 | -.124 | .167 | -.209 | .286 | -.230 | .341 | .052 | .072 | -.009 | .148 | -.064 | .219 | -.149 | .329 | -.177 | .379 |
| | 0 | .002 | .013 | -.064 | .083 | -.115 | .160 | -.191 | .272 | -.210 | .326 | .036 | .054 | -.020 | .125 | -.076 | .194 | -.148 | .300 | -.176 | .349 |
| 0.50 | 1 | --- | .555 | --- | .624 | --- | .634 | --- | .581 | --- | .588 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | 0 | .069 | -.229 | .257 | -.395 | .404 | -.658 | .558 | -.696 | .647 | .167 | .263 | -.002 | .402 | -.565 | .498 | -.760 | .604 | -.841 | .668 |
| | .933 | -.084 | -.026 | -.307 | .140 | -.461 | .285 | -.659 | .443 | -.688 | .545 | .094 | .184 | -.049 | .307 | -.359 | .397 | -.656 | .499 | -.777 | .554 |
| | .900 | --- | -.058 | --- | .091 | -.466 | .227 | --- | .380 | -.692 | .481 | --- | .113 | --- | .232 | -.185 | .320 | -.621 | .457 | -.724 | .537 |
| | .867 | -.101 | -.058 | -.257 | .075 | -.453 | .199 | -.642 | .347 | -.677 | .448 | .025 | .066 | -.091 | .180 | -.202 | .265 | -.593 | .402 | -.684 | .488 |
| | .800 | -.114 | -.076 | -.241 | .034 | -.405 | .147 | -.597 | .286 | -.648 | .391 | -.047 | .001 | -.151 | .104 | -.254 | .189 | -.567 | .325 | -.659 | .419 |
| | .733 | -.117 | -.096 | -.231 | .003 | -.362 | .112 | -.575 | .245 | -.627 | .353 | -.091 | -.055 | -.183 | .044 | -.276 | .130 | -.384 | .266 | -.575 | .366 |
| | .667 | -.128 | -.106 | -.227 | -.013 | -.320 | .090 | -.570 | .220 | -.606 | .331 | -.111 | -.093 | -.192 | 0 | -.280 | .088 | -.366 | .225 | -.422 | .320 |
| | .600 | --- | -.102 | --- | -.018 | --- | .080 | --- | .209 | --- | .327 | -.129 | -.116 | -.205 | -.026 | -.285 | .065 | -.373 | .201 | -.413 | .312 |
| | .533 | -.121 | -.101 | -.203 | -.021 | -.275 | .074 | -.343 | .193 | -.400 | .314 | -.131 | -.120 | -.207 | -.032 | -.280 | .058 | -.371 | .193 | -.409 | .305 |
| | .467 | -.114 | -.093 | -.192 | -.017 | -.254 | .073 | -.335 | .193 | -.359 | .310 | -.123 | -.106 | -.197 | -.023 | -.268 | .062 | -.362 | .199 | -.401 | .311 |
| | .400 | -.113 | -.087 | -.188 | -.015 | -.247 | .069 | -.335 | .191 | -.356 | .309 | -.111 | -.093 | -.180 | -.014 | -.247 | .068 | -.341 | .199 | -.373 | .313 |
| | .267 | -.099 | --- | -.170 | --- | -.224 | --- | -.295 | --- | -.318 | --- | -.090 | -.074 | -.155 | .002 | -.215 | .085 | -.301 | .215 | -.323 | .316 |
| | .133 | -.088 | -.073 | -.156 | -.004 | -.207 | .081 | -.261 | .236 | -.284 | .330 | -.079 | -.068 | -.137 | .005 | -.194 | .080 | -.276 | .233 | -.298 | .324 |
| | 0 | --- | -.074 | --- | -.005 | --- | .084 | --- | .252 | --- | .339 | -.075 | -.060 | -.129 | .005 | -.187 | .083 | -.262 | .246 | -.284 | .334 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .036 | --- | -.156 | --- | -.566 | --- | -.744 | --- | -.864 | --- |
| | .955 | -.153 | -.094 | -.359 | .065 | -.520 | .215 | -.717 | .438 | -.747 | .561 | -.006 | .035 | -.135 | .172 | -.527 | .282 | -.695 | .476 | -.840 | .525 |
| | .933 | -.172 | -.151 | -.379 | .010 | -.525 | .160 | -.721 | .374 | -.745 | .512 | -.090 | -.023 | -.206 | .104 | -.515 | .209 | -.679 | .412 | -.807 | .472 |
| | .912 | -.193 | -.167 | -.380 | -.028 | -.518 | .114 | -.708 | .341 | -.733 | .453 | -.131 | -.080 | -.242 | .043 | -.494 | .151 | --- | .377 | --- | .428 |
| | .889 | -.208 | -.184 | -.382 | -.048 | -.516 | .089 | -.700 | .319 | -.726 | .390 | -.161 | -.127 | -.271 | -.011 | -.476 | .105 | -.662 | .330 | -.774 | .393 |
| | .867 | --- | -.201 | --- | -.067 | --- | .067 | --- | .301 | --- | .369 | --- | -.161 | --- | -.046 | --- | .076 | --- | .309 | --- | .372 |
| | .845 | -.221 | -.202 | -.359 | -.070 | -.522 | .057 | -.691 | .293 | -.720 | .357 | -.205 | -.182 | -.309 | -.067 | -.379 | .064 | -.659 | .296 | -.758 | .367 |
| | .800 | -.224 | -.196 | -.349 | -.076 | -.500 | .043 | -.679 | .285 | -.713 | .343 | -.223 | -.199 | -.320 | -.076 | -.406 | .059 | -.650 | .292 | -.722 | .351 |
| | .756 | -.216 | -.181 | -.332 | -.072 | -.478 | .045 | -.657 | .287 | -.699 | .343 | --- | -.204 | --- | -.079 | --- | .048 | --- | .278 | --- | .334 |
| | .711 | -.205 | --- | -.310 | --- | -.448 | --- | -.635 | --- | -.682 | --- | -.212 | -.180 | -.310 | -.061 | -.399 | .058 | -.573 | .281 | -.686 | .338 |
| | .667 | -.189 | --- | -.289 | --- | -.403 | --- | -.621 | --- | -.667 | --- | -.193 | -.156 | -.290 | -.043 | -.379 | .075 | -.465 | .287 | -.594 | .335 |
| | .622 | -.178 | -.148 | -.271 | -.057 | -.344 | .077 | -.561 | .299 | -.649 | .343 | -.181 | --- | -.272 | --- | .359 | --- | -.442 | --- | -.499 | --- |
| | .578 | -.159 | -.137 | -.252 | -.039 | -.305 | .095 | -.402 | .311 | -.531 | .355 | -.169 | -.137 | -.254 | -.046 | -.337 | .089 | -.428 | .288 | -.456 | .334 |
| | .533 | -.149 | -.122 | -.242 | -.024 | -.302 | .113 | -.386 | .316 | -.467 | .359 | -.154 | -.129 | -.242 | -.041 | -.308 | .147 | -.407 | .294 | -.431 | .339 |
| | .446 | --- | -.095 | --- | .010 | --- | .209 | --- | .327 | --- | .370 | -.129 | -.111 | -.218 | -.024 | -.284 | .187 | -.365 | .305 | -.391 | .345 |

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## TABLE II.— CONTINUED

$\beta = 5^\circ$

Right wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^\circ$ | | $\alpha=2.5^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.6^\circ$ | | $\alpha=10.1^\circ$ | | $\alpha=0.0^\circ$ | | $\alpha=2.7^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.8^\circ$ | | $\alpha=10.1^\circ$ | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.698 | --- | 0.767 | --- | 0.842 | --- | 0.870 | --- | 0.941 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.126 | .316 | -0.042 | .463 | -0.185 | .603 | -0.395 | .720 | -0.458 | .825 | 0.385 | 0.446 | 0.243 | 0.579 | -0.226 | 0.685 | -0.643 | 0.808 | -0.715 | 0.849 |
| | .867 | .039 | .118 | -.132 | .265 | -.275 | .404 | -.467 | .546 | -.529 | .655 | .300 | .375 | .179 | .485 | .047 | .585 | -.474 | .701 | -.587 | .749 |
| | .800 | .027 | .078 | -.126 | .216 | -.286 | .347 | -.460 | .484 | -.544 | .588 | .231 | .310 | .123 | .411 | .015 | .507 | -.296 | .622 | -.499 | .679 |
| | .733 | .028 | .053 | -.110 | .179 | -.256 | .301 | -.437 | .433 | -.514 | .532 | .184 | .250 | .089 | .348 | -.019 | .441 | -.131 | .560 | -.236 | .617 |
| | .667 | --- | .044 | --- | .155 | --- | .267 | --- | .391 | --- | .489 | .154 | .212 | .066 | .305 | -.032 | .398 | -.129 | .514 | -.168 | .573 |
| | .533 | .003 | .039 | -.087 | .131 | -.163 | .232 | -.322 | .344 | -.417 | .439 | .113 | .157 | .038 | .239 | -.042 | .325 | -.144 | .439 | -.174 | .500 |
| | .400 | -.009 | .035 | -.087 | .106 | -.149 | .197 | -.248 | .302 | -.275 | .393 | .073 | .108 | .004 | .184 | -.067 | .267 | -.154 | .378 | -.180 | .437 |
| | .267 | -.006 | .016 | -.074 | .093 | -.128 | .180 | -.216 | .284 | -.245 | .371 | .054 | .078 | -.009 | .153 | -.072 | .231 | -.151 | .339 | -.172 | .398 |
| | 0 | -.002 | .016 | -.066 | .088 | -.110 | .174 | -.174 | .267 | -.213 | .354 | .055 | .082 | -.020 | .132 | -.069 | .202 | -.143 | .302 | -.162 | .363 |
| 0.50 | 1 | --- | .678 | --- | .761 | --- | .784 | --- | .739 | --- | .784 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | -.010 | .136 | -.161 | .325 | -.315 | .485 | -.585 | .623 | -.702 | .756 | .228 | .349 | .058 | .496 | -.472 | .545 | -.695 | .708 | -.803 | .771 |
| | .933 | -.071 | .014 | -.267 | .185 | -.400 | .345 | -.611 | .486 | -.702 | .624 | .139 | .257 | 0 | .386 | -.340 | .482 | -.584 | .604 | -.677 | .685 |
| | .900 | --- | -.024 | --- | .128 | -.436 | .268 | --- | .417 | -.682 | .545 | --- | .176 | --- | .293 | -.162 | .391 | -.540 | .527 | -.643 | .606 |
| | .867 | -.088 | -.029 | -.272 | .108 | -.429 | .237 | -.601 | .378 | -.669 | .506 | .059 | .118 | -.067 | .229 | -.162 | .323 | -.515 | .463 | -.621 | .547 |
| | .800 | -.114 | -.054 | -.246 | .059 | -.418 | .177 | -.582 | .309 | -.654 | .439 | -.015 | .040 | -.128 | .141 | -.236 | .232 | -.516 | .371 | -.598 | .463 |
| | .733 | -.123 | -.082 | -.240 | .021 | -.391 | .134 | -.563 | .260 | -.644 | .392 | -.080 | -.028 | -.171 | .070 | -.271 | .158 | -.506 | .300 | -.593 | .399 |
| | .667 | -.139 | -.099 | -.246 | -.001 | -.342 | .111 | -.529 | .229 | -.607 | .367 | -.107 | -.076 | -.188 | .019 | -.280 | .108 | -.351 | .251 | -.494 | .356 |
| | .600 | --- | -.099 | --- | -.008 | --- | .100 | --- | .218 | --- | .357 | -.131 | -.109 | -.208 | -.017 | -.294 | .078 | -.374 | .223 | -.393 | .333 |
| | .533 | -.129 | -.099 | -.219 | -.014 | -.295 | .089 | -.462 | .303 | -.565 | .339 | -.140 | -.122 | -.213 | -.028 | -.291 | .070 | -.377 | .214 | -.395 | .324 |
| | .467 | -.123 | -.093 | -.205 | -.010 | -.272 | .090 | -.330 | .199 | -.375 | .343 | -.135 | -.114 | -.209 | -.022 | -.283 | .074 | -.373 | .216 | -.390 | .330 |
| | .400 | -.122 | -.088 | -.201 | -.010 | -.260 | .089 | -.341 | .197 | -.373 | .340 | -.120 | -.100 | -.189 | -.012 | -.263 | .081 | -.351 | .224 | -.365 | .336 |
| | .267 | -.105 | --- | -.177 | --- | -.221 | --- | -.309 | --- | -.327 | --- | -.095 | -.070 | -.160 | .010 | -.224 | .092 | -.306 | .238 | -.316 | .342 |
| | .133 | -.089 | .064 | -.158 | .008 | -.206 | .104 | -.272 | .241 | -.287 | .359 | -.079 | -.059 | -.136 | .017 | -.196 | .095 | -.271 | .253 | -.282 | .347 |
| | 0 | --- | .059 | --- | .012 | --- | .119 | --- | .262 | --- | .378 | -.070 | -.053 | -.125 | .019 | -.183 | .103 | -.253 | .271 | -.265 | .360 |
| 0.75 | 1 | --- | -- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | -- | --- | --- | --- | --- | --- | --- | --- | --- | .096 | --- | -.105 | --- | -.490 | --- | -.676 | --- | -.783 | --- |
| | .955 | -.125 | -.030 | -.310 | .118 | -.478 | .266 | -.697 | .474 | -.750 | .583 | .046 | .124 | -.094 | .254 | -.449 | .353 | -.633 | .538 | -.733 | .613 |
| | .933 | -.154 | -.091 | -.335 | .054 | -.476 | .182 | -.680 | .418 | -.739 | .495 | -.048 | .044 | -.169 | .162 | -.448 | .264 | -.614 | .459 | -.723 | .531 |
| | .912 | -.179 | -.120 | -.357 | .007 | -.482 | .149 | -.675 | .363 | -.734 | .468 | -.098 | -.023 | -.210 | .094 | -.446 | .196 | --- | .404 | --- | .478 |
| | .889 | -.196 | -.145 | -.368 | -.023 | -.485 | .120 | -.667 | .337 | -.727 | .439 | -.135 | -.075 | -.242 | .032 | -.448 | .139 | -.605 | .361 | -.704 | .436 |
| | .867 | --- | -.170 | --- | -.047 | --- | .094 | --- | .315 | --- | .416 | --- | -.118 | --- | -.011 | --- | .105 | --- | .333 | --- | .410 |
| | .845 | -.222 | -.180 | -.377 | -.057 | -.498 | .083 | -.658 | .306 | -.722 | .403 | -.189 | -.145 | -.289 | -.039 | -.402 | .082 | -.611 | .318 | -.698 | .392 |
| | .800 | -.234 | -.184 | -.366 | -.066 | -.505 | .067 | -.648 | .295 | -.716 | .390 | -.214 | -.172 | -.308 | -.065 | -.384 | .073 | -.608 | .310 | -.691 | .383 |
| | .756 | -.234 | -.176 | -.353 | -.063 | -.490 | .064 | -.636 | .298 | -.708 | .388 | --- | -.191 | --- | -.075 | --- | .063 | --- | .299 | --- | .367 |
| | .711 | -.222 | --- | -.340 | --- | -.454 | --- | -.617 | --- | -.685 | --- | -.223 | -.184 | -.313 | -.059 | -.408 | .068 | -.590 | .298 | -.667 | .363 |
| | .667 | -.209 | --- | -.319 | --- | -.433 | --- | -.595 | --- | .668 | --- | -.213 | -.167 | -.301 | -.042 | -.394 | .076 | -.555 | .308 | -.645 | .370 |
| | .622 | -.196 | -.150 | -.298 | -.056 | -.403 | .083 | -.571 | .305 | -.663 | .383 | -.203 | --- | -.292 | --- | -.385 | --- | -.456 | --- | -.609 | --- |
| | .578 | -.179 | -.139 | -.277 | -.037 | -.366 | .105 | -.527 | .317 | -.645 | .391 | -.189 | -.143 | -.271 | -.036 | -.368 | .078 | -.452 | .312 | -.479 | .367 |
| | .533 | -.169 | -.125 | -.265 | -.018 | -.334 | .124 | -.507 | .333 | -.628 | .404 | -.172 | -.130 | -.263 | -.036 | -.341 | .104 | -.432 | .318 | -.455 | .371 |
| | .446 | --- | -.088 | --- | .020 | --- | .156 | --- | .353 | --- | .412 | -.140 | -.107 | -.229 | -.029 | -.299 | .214 | -.389 | .329 | -.407 | .379 |

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TABLE II.— CONTINUED

$\beta = 5^{\circ}$

Left wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^{\circ}$ | | $\alpha=2.5^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.6^{\circ}$ | | $\alpha=10.1^{\circ}$ | | $\alpha=0.0^{\circ}$ | | $\alpha=2.7^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.8^{\circ}$ | | $\alpha=10.1^{\circ}$ | |
| $x/c_r$ | $\frac{y}{b/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.427 | --- | 0.545 | --- | 0.592 | --- | 0.616 | --- | 0.622 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.097 | .194 | -0.080 | .377 | -0.280 | .447 | -0.510 | .579 | -0.572 | .622 | 0.286 | 0.286 | 0.151 | 0.417 | -0.254 | 0.525 | -0.527 | 0.594 | -0.571 | 0.644 |
| | .867 | .038 | .060 | -.120 | .195 | -.306 | .309 | -.501 | .463 | -.560 | .578 | .224 | .249 | .112 | .345 | -.049 | .447 | -.491 | .551 | -.573 | .589 |
| | .800 | .037 | .044 | -.093 | .166 | -.243 | .270 | -.454 | .420 | -.529 | .475 | .178 | .209 | .077 | .297 | -.021 | .402 | -.419 | .503 | -.511 | .544 |
| | .733 | .036 | .031 | -.077 | .139 | -.208 | .234 | -.442 | .380 | -.512 | .434 | .146 | .169 | .057 | .253 | -.030 | .346 | -.335 | .460 | -.452 | .503 |
| | .667 | --- | .028 | --- | .123 | --- | .210 | --- | .350 | --- | .402 | .125 | .149 | .043 | .229 | -.038 | .318 | -.213 | .432 | -.366 | .476 |
| | .533 | .016 | .025 | -.064 | .106 | -.147 | .188 | -.227 | .317 | -.267 | .367 | .096 | .113 | .023 | .188 | -.048 | .271 | -.117 | .365 | -.129 | .428 |
| | .400 | .006 | .014 | -.065 | .091 | -.138 | .166 | -.223 | .290 | -.248 | .339 | .069 | .080 | 0 | .152 | -.062 | .231 | -.144 | .344 | -.171 | .389 |
| | .267 | .011 | .011 | -.055 | .083 | -.123 | .156 | -.195 | .277 | -.225 | .325 | .062 | .063 | -.005 | .131 | -.062 | .209 | -.143 | .320 | -.172 | .365 |
| | 0 | .002 | 0 | -.063 | .073 | -.126 | .146 | -.194 | .264 | -.220 | .311 | .034 | .045 | -.021 | .104 | -.073 | .182 | -.156 | .292 | -.186 | .337 |
| 0.50 | 1 | --- | .436 | --- | .500 | --- | .495 | --- | .433 | --- | .427 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | -.014 | .006 | -.265 | .200 | -.476 | .339 | -.720 | .493 | -.744 | .565 | .127 | .170 | -.047 | .312 | -.634 | .430 | -.779 | .525 | -.792 | .574 |
| | .933 | -.079 | -.057 | -.298 | .106 | -.508 | .238 | -.699 | .403 | -.719 | .485 | .062 | .109 | -.079 | .228 | -.236 | .344 | -.761 | .457 | -.785 | .517 |
| | .900 | --- | -.078 | -.260 | .066 | -.477 | .185 | -.682 | .347 | -.716 | .432 | .025 | .049 | -.105 | .160 | -.224 | .268 | -.609 | .405 | -.706 | .469 |
| | .867 | -.089 | -.075 | -.238 | .050 | -.451 | .161 | -.667 | .317 | -.703 | .403 | .005 | .014 | -.110 | .110 | -.227 | .223 | -.516 | .362 | -.621 | .432 |
| | .800 | -.100 | -.088 | -.220 | .018 | -.400 | .118 | -.687 | .266 | -.685 | .355 | -.055 | -.036 | -.163 | .061 | -.257 | .160 | -.536 | .299 | -.617 | .378 |
| | .733 | -.102 | -.102 | -.208 | -.006 | -.304 | .088 | -.590 | .232 | -.664 | .325 | -.087 | -.080 | -.180 | .011 | -.270 | .109 | -.490 | .251 | -.579 | .335 |
| | .667 | -.113 | -.108 | -.202 | -.020 | -.294 | .070 | -.592 | .211 | -.592 | .311 | -.102 | -.108 | -.186 | -.020 | -.268 | .074 | -.424 | .219 | -.542 | .307 |
| | .600 | --- | -.104 | --- | -.021 | --- | .062 | --- | .203 | --- | .304 | -.111 | -.121 | -.191 | -.036 | -.272 | .056 | -.386 | .201 | -.469 | .294 |
| | .533 | -.106 | -.101 | -.185 | -.023 | -.255 | .057 | -.338 | .194 | -.370 | .293 | -.110 | -.117 | -.185 | -.037 | -.264 | .050 | -.345 | .199 | -.389 | .287 |
| | .467 | -.100 | -.094 | -.176 | -.020 | -.234 | .057 | -.320 | .200 | -.354 | .293 | -.102 | -.105 | -.177 | -.028 | -.249 | .055 | -.330 | .197 | -.349 | .291 |
| | .400 | -.101 | -.089 | -.171 | -.019 | -.241 | .055 | -.319 | .193 | -.349 | .288 | -.093 | -.095 | -.162 | -.021 | -.231 | .060 | -.314 | .203 | -.339 | .291 |
| | .267 | -.088 | --- | -.156 | --- | -.222 | --- | -.291 | --- | -.317 | --- | -.077 | -.078 | -.143 | -.011 | -.206 | .069 | -.290 | .215 | -.317 | .296 |
| | .133 | -.080 | -.076 | -.145 | -.009 | -.210 | .065 | -.265 | .238 | -.289 | .310 | -.070 | -.072 | -.134 | -.009 | -.191 | .069 | -.274 | .232 | -.299 | .306 |
| | 0 | --- | -.083 | --- | -.014 | --- | .063 | --- | .241 | --- | .307 | -.068 | -.070 | -.129 | -.011 | -.185 | .069 | -.271 | .222 | -.295 | .299 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .007 | --- | -.202 | --- | -.604 | --- | -.827 | --- | -.856 | --- |
| | .955 | -.150 | -.144 | -.381 | .028 | -.580 | .165 | -.764 | .401 | -.773 | .446 | -.030 | -.039 | -.185 | .100 | -.561 | .239 | -.812 | .421 | -.841 | .453 |
| | .933 | -.171 | -.175 | -.380 | .016 | -.585 | .121 | -.761 | .356 | -.776 | .411 | -.112 | -.092 | -.245 | .034 | -.549 | .166 | -.797 | .371 | -.828 | .412 |
| | .912 | -.188 | -.196 | -.357 | -.047 | -.568 | .075 | -.745 | .328 | -.761 | .365 | -.146 | -.139 | -.271 | -.014 | -.507 | .116 | --- | .335 | --- | .377 |
| | .889 | -.199 | -.204 | -.348 | -.062 | -.548 | .057 | -.732 | .301 | -.753 | .347 | -.169 | -.192 | -.294 | -.055 | -.437 | .078 | -.753 | .305 | -.795 | .351 |
| | .867 | --- | -.212 | --- | -.076 | --- | .039 | --- | .285 | --- | .329 | --- | -.200 | --- | -.077 | --- | .056 | -.287 | --- | --- | .332 |
| | .845 | -.203 | -.205 | -.331 | -.078 | -.524 | .032 | -.713 | .279 | -.742 | .321 | -.199 | -.211 | -.315 | -.083 | -.394 | .048 | -.731 | .279 | -.776 | .323 |
| | .800 | -.202 | -.192 | -.315 | -.082 | -.501 | .025 | -.696 | .272 | -.732 | .309 | -.201 | -.206 | -.315 | -.079 | -.407 | .048 | -.684 | .278 | -.646 | .321 |
| | .756 | -.194 | -.178 | -.298 | -.074 | -.426 | .033 | -.678 | .274 | -.718 | .314 | --- | -.194 | --- | -.073 | --- | .037 | --- | .259 | --- | .302 |
| | .711 | -.182 | --- | -.276 | --- | -.345 | --- | -.644 | --- | -.698 | --- | -.172 | -.166 | -.275 | -.060 | -.381 | .052 | -.482 | .264 | -.614 | .302 |
| | .667 | -.166 | --- | -.257 | --- | -.334 | --- | -.425 | --- | -.608 | --- | -.158 | -.149 | -.249 | -.057 | -.347 | .071 | -.462 | .272 | -.568 | .306 |
| | .622 | -.153 | -.148 | -.243 | -.047 | -.318 | .076 | -.414 | .283 | -.536 | .413 | -.149 | --- | -.233 | --- | -.323 | --- | --- | --- | -.538 | --- |
| | .578 | -.137 | -.133 | -.225 | -.031 | -.297 | .104 | -.374 | .291 | -.450 | .321 | -.141 | -.137 | -.224 | -.050 | -.307 | .116 | -.453 | .272 | -.535 | .303 |
| | .533 | -.125 | -.119 | -.217 | -.019 | -.286 | .152 | -.367 | .295 | -.419 | .323 | -.126 | -.132 | -.213 | -.031 | -.290 | .143 | -.388 | .277 | -.456 | .310 |
| | .446 | --- | -.090 | --- | .002 | --- | .198 | --- | .308 | --- | .336 | -.102 | -.108 | -.202 | -.013 | -.271 | .168 | -.350 | .286 | -.361 | .315 |

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TABLE II.– CONTINUED

$\beta = 9^{\circ}$

Right wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^{\circ}$ | | $\alpha=2.5^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.6^{\circ}$ | | $\alpha=10.1^{\circ}$ | | $\alpha=0.0^{\circ}$ | | $\alpha=2.7^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.8^{\circ}$ | | $\alpha=10.1^{\circ}$ | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.736 | --- | 0.847 | --- | --- | --- | 0.976 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.163 | .460 | -0.007 | .508 | --- | --- | -0.325 | .774 | --- | --- | 0.425 | 0.506 | 0.296 | 0.661 | --- | --- | -0.569 | 0.863 | --- | --- |
| | .867 | .049 | .146 | -.112 | .293 | --- | --- | -.407 | .582 | --- | --- | .337 | .424 | .219 | .550 | --- | --- | -.413 | .761 | --- | --- |
| | .800 | .028 | .094 | -.129 | .237 | --- | --- | -.428 | .511 | --- | --- | .258 | .350 | .151 | .467 | --- | --- | -.307 | .672 | --- | --- |
| | .733 | .027 | .062 | -.121 | .194 | --- | --- | -.424 | .453 | --- | --- | .204 | .282 | .110 | .393 | --- | --- | -.099 | .602 | --- | --- |
| | .667 | --- | .048 | --- | .166 | --- | --- | --- | .407 | --- | --- | .167 | .235 | .081 | .346 | --- | --- | -.108 | .550 | --- | --- |
| | .533 | 0 | .041 | -.097 | .138 | --- | --- | -.329 | .355 | --- | --- | .118 | .169 | .051 | .270 | --- | --- | -.134 | .466 | --- | --- |
| | .400 | -.015 | .027 | -.094 | .108 | --- | --- | -.272 | .309 | --- | --- | .074 | .112 | .012 | .203 | --- | --- | -.147 | .394 | --- | --- |
| | .267 | -.011 | .016 | -.080 | .093 | --- | --- | -.219 | .285 | --- | --- | .053 | .079 | -.004 | .165 | --- | --- | -.150 | .348 | --- | --- |
| | 0 | -.003 | .020 | -.046 | .090 | --- | --- | -.186 | .264 | --- | --- | .034 | .063 | -.012 | .142 | --- | --- | -.137 | .305 | --- | --- |
| 0.50 | 1 | --- | .778 | --- | .862 | --- | --- | --- | .861 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .075 | .188 | -.104 | .370 | --- | --- | -.494 | .676 | --- | --- | .274 | .414 | .105 | .579 | --- | --- | -.627 | .787 | --- | --- |
| | .933 | -.056 | .051 | -.226 | .217 | --- | --- | -.525 | .533 | --- | --- | .176 | .314 | .047 | .458 | --- | --- | -.526 | .675 | --- | --- |
| | .900 | --- | 0 | --- | .156 | --- | --- | --- | .451 | --- | --- | --- | .224 | --- | .350 | --- | --- | -.490 | .579 | --- | --- |
| | .867 | -.075 | -.009 | -.255 | .133 | --- | --- | -.540 | .410 | --- | --- | .085 | .159 | -.039 | .279 | --- | --- | -.477 | .507 | --- | --- |
| | .800 | -.107 | -.039 | -.260 | .077 | --- | --- | -.539 | .335 | --- | --- | .011 | .071 | -.099 | .180 | --- | --- | -.474 | .401 | --- | --- |
| | .733 | -.125 | -.072 | -.242 | .033 | --- | --- | -.534 | .281 | --- | --- | -.061 | -.005 | -.158 | .098 | --- | --- | -.480 | .327 | --- | --- |
| | .667 | -.149 | -.096 | -.254 | .006 | --- | --- | -.531 | .249 | --- | --- | -.102 | -.059 | -.175 | .042 | --- | --- | -.348 | .273 | --- | --- |
| | .600 | --- | -.099 | --- | -.002 | --- | --- | --- | .237 | --- | --- | -.131 | -.099 | -.209 | -.002 | --- | --- | -.367 | .243 | --- | --- |
| | .533 | -.140 | -.101 | -.231 | -.008 | --- | --- | -.469 | .223 | --- | --- | -.146 | -.120 | -.214 | -.021 | --- | --- | -.378 | .233 | --- | --- |
| | .467 | -.132 | -.095 | -.215 | -.007 | --- | --- | -.435 | .223 | --- | --- | -.146 | -.117 | -.213 | -.017 | --- | --- | -.377 | .237 | --- | --- |
| | .400 | -.132 | -.091 | -.208 | -.006 | --- | --- | -.354 | .224 | --- | --- | -.131 | -.105 | -.195 | -.007 | --- | --- | -.357 | .243 | --- | --- |
| | .267 | -.113 | --- | -.182 | --- | --- | --- | -.299 | --- | --- | --- | -.102 | -.072 | -.160 | .016 | --- | --- | -.304 | .270 | --- | --- |
| | .133 | -.094 | -.063 | -.160 | .010 | --- | --- | -.257 | .266 | --- | --- | -.082 | -.055 | -.134 | .027 | --- | --- | -.259 | .293 | --- | --- |
| | 0 | --- | -.044 | --- | .019 | --- | --- | --- | .283 | --- | --- | -.072 | -.048 | -.119 | .031 | --- | --- | -.239 | .315 | --- | --- |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .140 | --- | .057 | --- | --- | --- | -.624 | --- | --- | --- |
| | .955 | -.096 | .017 | -.264 | .163 | --- | --- | -.634 | .504 | --- | --- | .079 | .183 | -.064 | .316 | --- | --- | -.583 | .584 | --- | --- |
| | .933 | -.133 | -.049 | -.293 | .093 | --- | --- | -.611 | .429 | --- | --- | -.011 | .095 | -.130 | .219 | --- | --- | -.571 | .495 | --- | --- |
| | .912 | -.160 | -.083 | -.321 | .042 | --- | --- | -.614 | .380 | --- | --- | -.066 | .022 | -.179 | .143 | --- | --- | --- | .433 | --- | --- |
| | .889 | -.180 | -.113 | -.334 | .007 | --- | --- | -.607 | .350 | --- | --- | -.106 | -.035 | -.215 | .074 | --- | --- | -.573 | .382 | --- | --- |
| | .867 | --- | -.142 | --- | -.025 | --- | --- | --- | .326 | --- | --- | --- | -.083 | --- | .027 | --- | --- | --- | .352 | --- | --- |
| | .845 | -.211 | -.157 | -.356 | -.038 | --- | --- | -.604 | .314 | --- | --- | -.168 | -.116 | -.268 | -.006 | --- | --- | -.581 | .333 | --- | --- |
| | .800 | -.233 | -.169 | -.367 | -.051 | --- | --- | -.603 | .304 | --- | --- | -.198 | -.148 | -.292 | -.040 | --- | --- | -.582 | .324 | --- | --- |
| | .756 | -.242 | -.169 | -.362 | -.051 | --- | --- | -.600 | .306 | --- | --- | --- | -.170 | --- | -.060 | --- | --- | --- | .316 | --- | --- |
| | .711 | -.238 | --- | -.348 | --- | --- | --- | -.593 | --- | --- | --- | -.218 | -.173 | -.306 | -.054 | --- | --- | -.571 | .315 | --- | --- |
| | .667 | -.223 | --- | -.333 | --- | --- | --- | -.579 | --- | --- | --- | -.216 | -.164 | -.297 | -.041 | --- | --- | -.559 | .317 | --- | --- |
| | .622 | -.209 | -.155 | -.314 | -.049 | --- | --- | -.556 | .313 | --- | --- | -.214 | --- | -.296 | --- | --- | --- | -.509 | --- | --- | --- |
| | .578 | -.193 | -.133 | -.291 | -.035 | --- | --- | -.516 | .323 | --- | --- | -.205 | -.150 | -.286 | -.026 | --- | --- | -.437 | .323 | --- | --- |
| | .533 | -.182 | -.128 | -.277 | -.017 | --- | --- | -.519 | .333 | --- | --- | -.186 | -.135 | -.282 | -.025 | --- | --- | -.441 | .331 | --- | --- |
| | .446 | --- | -.083 | --- | .027 | --- | --- | --- | .391 | --- | --- | -.149 | -.105 | -.238 | -.006 | --- | --- | -.408 | .352 | --- | --- |

## TABLE II.— CONCLUDED

$\beta = 9^{\circ}$

Left wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^{\circ}$ | | $\alpha=2.5^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.6^{\circ}$ | | $\alpha=10.1^{\circ}$ | | $\alpha=0.0^{\circ}$ | | $\alpha=2.7^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.8^{\circ}$ | | $\alpha=10.1^{\circ}$ | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.343 | --- | 0.447 | --- | --- | --- | 0.492 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.081 | .153 | -0.090 | .277 | --- | --- | -0.546 | .505 | --- | --- | 0.240 | 0.255 | 0.104 | 0.333 | --- | --- | -0.479 | 0.525 | --- | --- |
| | .867 | .031 | .037 | -.112 | .161 | --- | --- | -.534 | .416 | --- | --- | .195 | .194 | .084 | .283 | --- | --- | -.496 | .484 | --- | --- |
| | .800 | .031 | .028 | -.084 | .138 | --- | --- | -.490 | .383 | --- | --- | .154 | .171 | .058 | .244 | --- | --- | -.444 | .446 | --- | --- |
| | .733 | .031 | .018 | -.072 | .114 | --- | --- | -.444 | .347 | --- | --- | .128 | .138 | .042 | .211 | --- | --- | -.373 | .413 | --- | --- |
| | .667 | -- | .015 | --- | .102 | --- | --- | --- | .323 | --- | --- | .112 | .124 | .030 | .191 | --- | --- | -.227 | .393 | --- | --- |
| | .533 | .012 | .010 | -.065 | .088 | --- | --- | -.223 | .294 | --- | --- | .085 | .093 | .011 | .154 | --- | --- | -.111 | .354 | --- | --- |
| | .400 | .002 | .005 | -.067 | .073 | --- | --- | -.214 | .272 | --- | --- | .063 | .065 | -.009 | .124 | --- | --- | -.142 | .321 | --- | --- |
| | .267 | .007 | -.004 | -.059 | .066 | --- | --- | -.197 | .264 | --- | --- | .050 | .058 | -.011 | .109 | --- | --- | -.141 | .303 | --- | --- |
| | 0 | -.010 | -.018 | -.076 | .052 | --- | --- | -.187 | .251 | --- | --- | .025 | .020 | -.039 | .076 | --- | --- | -.168 | .273 | --- | --- |
| 0.50 | 1 | --- | .322 | --- | .392 | --- | --- | --- | .300 | --- | --- | -- | -- | -- | -- | --- | --- | --- | -- | --- | --- |
| | .967 | -.020 | -.040 | -.285 | .144 | --- | --- | -.755 | .424 | --- | --- | .102 | .102 | -.068 | .229 | --- | --- | -.655 | .450 | --- | --- |
| | .933 | -.074 | -.086 | -.282 | .067 | --- | --- | -.728 | .354 | --- | --- | .046 | .058 | -.100 | .160 | --- | --- | -.659 | .392 | --- | --- |
| | .900 | --- | -.098 | -.244 | .036 | --- | --- | -.723 | .305 | --- | --- | .008 | .003 | --- | .109 | --- | --- | -.627 | .347 | --- | --- |
| | .867 | -.089 | -.095 | -.224 | .023 | --- | --- | -.710 | .279 | --- | --- | -.007 | -.022 | -.123 | .077 | --- | --- | -.590 | .313 | --- | --- |
| | .800 | -.100 | -.102 | -.206 | -.003 | --- | --- | -.677 | .237 | --- | --- | -.058 | -.063 | -.165 | .028 | --- | --- | -.577 | .264 | --- | --- |
| | .733 | -.100 | -.111 | -.195 | -.022 | --- | --- | -.456 | .208 | --- | --- | -.085 | -.096 | -.177 | -.011 | --- | --- | -.532 | .225 | --- | --- |
| | .667 | -.110 | -.115 | -.193 | -.031 | --- | --- | -.364 | .191 | --- | --- | -.095 | -.115 | -.183 | -.035 | --- | --- | -.444 | .200 | --- | --- |
| | .600 | --- | -.109 | --- | -.032 | --- | --- | --- | .194 | --- | --- | -.103 | -.121 | -.182 | -.045 | --- | --- | -.325 | .190 | --- | --- |
| | .533 | -.104 | -.106 | -.178 | -.033 | --- | --- | -.332 | .176 | --- | --- | -.100 | -.115 | -.175 | -.045 | --- | --- | -.306 | .183 | --- | --- |
| | .467 | -.100 | -.100 | -.170 | -.030 | --- | --- | -.315 | .180 | --- | --- | -.094 | -.105 | -.168 | -.037 | --- | --- | -.315 | .185 | --- | --- |
| | .400 | -.100 | -.097 | -.169 | -.029 | --- | --- | -.313 | .184 | --- | --- | -.086 | -.097 | -.156 | -.034 | --- | --- | -.303 | .187 | --- | --- |
| | .267 | -.091 | --- | -.157 | --- | --- | --- | -.289 | -- | --- | --- | -.075 | -.084 | -.137 | -.019 | --- | --- | -.284 | .203 | --- | --- |
| | .133 | -.088 | -.086 | -.150 | -.021 | --- | --- | -.268 | .214 | --- | --- | -.071 | -.074 | -.125 | -.007 | --- | --- | -.272 | .208 | --- | --- |
| | 0 | --- | -.097 | --- | -.028 | --- | --- | --- | .205 | --- | --- | -.072 | -.079 | -.122 | -.006 | --- | --- | -.278 | .191 | --- | --- |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | -- | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | -- | --- | --- | -.015 | --- | -.222 | --- | --- | --- | -.743 | -- | --- | --- |
| | .955 | -.150 | -.181 | -.368 | -.007 | --- | --- | -.798 | .351 | --- | --- | -.055 | -.088 | -.199 | .046 | --- | --- | -.756 | .371 | --- | --- |
| | .933 | -.166 | -.198 | -.345 | -.040 | --- | --- | -.801 | .316 | --- | --- | -.121 | -.137 | -.256 | -.003 | --- | --- | -.769 | .325 | --- | --- |
| | .912 | -.180 | -.215 | -.334 | -.069 | --- | --- | -.782 | .280 | --- | --- | -.146 | -.174 | -.274 | -.042 | --- | --- | --- | .296 | --- | --- |
| | .889 | -.186 | -.215 | -.322 | -.081 | --- | --- | -.771 | .267 | --- | --- | -.163 | -.216 | -.290 | -.074 | --- | --- | -.718 | .274 | --- | --- |
| | .867 | --- | -.216 | --- | -.092 | --- | --- | --- | .254 | --- | --- | --- | -.219 | --- | -.080 | --- | --- | --- | .259 | --- | --- |
| | .845 | -.188 | -.208 | -.308 | -.092 | --- | --- | -.753 | .248 | --- | --- | -.182 | -.216 | -.303 | -.092 | --- | --- | -.672 | .244 | --- | --- |
| | .800 | -.186 | -.195 | -.290 | -.092 | --- | --- | -.728 | .242 | --- | --- | -.175 | -.200 | -.288 | -.095 | --- | --- | -.629 | .255 | --- | --- |
| | .756 | -.177 | -.181 | -.272 | -.082 | --- | --- | -.633 | .246 | --- | --- | --- | -.188 | --- | -.092 | --- | --- | --- | .226 | --- | --- |
| | .711 | -.163 | --- | -.254 | --- | --- | --- | -.462 | -- | --- | --- | -.152 | -.164 | -.243 | -.067 | --- | --- | -.560 | .240 | --- | --- |
| | .667 | -.149 | --- | -.238 | --- | --- | --- | -.434 | -- | --- | --- | -.140 | -.152 | -.223 | -.066 | --- | --- | -.513 | .250 | --- | --- |
| | .622 | -.136 | -.146 | -.224 | -.049 | --- | --- | -.394 | .254 | --- | --- | -.132 | --- | -.215 | --- | --- | --- | -.475 | -- | --- | --- |
| | .578 | -.120 | -.131 | -.209 | -.037 | --- | --- | -.360 | .263 | --- | --- | -.124 | -.141 | -.209 | -.047 | --- | --- | -.372 | .245 | --- | --- |
| | .533 | -.110 | -.118 | -.201 | -.030 | --- | --- | -.356 | .267 | --- | --- | -.111 | -.135 | -.198 | -.038 | --- | --- | -.327 | .251 | --- | --- |
| | .446 | --- | -.089 | --- | -.009 | --- | --- | --- | .278 | --- | --- | -.090 | -.110 | -.183 | -.010 | --- | --- | -.326 | .258 | --- | --- |

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TABLE III.– EXPERIMENTAL PRESSURE COEFFICIENTS

[M = 1.30]

| | | β = 0° | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| | 1 | --- | 0.551 | --- | 0.654 | --- | 0.721 | --- | 0.749 | --- | 0.747 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.113 | .216 | -0.022 | .353 | -0.164 | .474 | -0.358 | .608 | -0.421 | .641 | 0.352 | 0.374 | 0.193 | 0.488 | -0.161 | 0.583 | -0.572 | 0.684 | -0.638 | 0.716 |
| | .867 | .036 | .088 | -.111 | .205 | -.250 | .337 | -.412 | .484 | -.481 | .529 | .261 | .315 | .153 | .411 | .041 | .495 | -.405 | .618 | -.513 | .647 |
| | .800 | .013 | .055 | -.115 | .170 | -.252 | .292 | -.420 | .437 | -.472 | .480 | .201 | .261 | .105 | .351 | .003 | .431 | -.266 | .555 | -.426 | .588 |
| | .733 | .022 | .026 | -.093 | .117 | -.221 | .237 | -.387 | .376 | -.440 | .426 | .162 | .213 | .073 | .301 | -.019 | .380 | -.114 | .503 | -.223 | .538 |
| 0.25 | .667 | --- | .032 | --- | .115 | --- | .228 | --- | .355 | --- | .398 | .136 | .181 | .052 | .268 | -.031 | .347 | -.121 | .469 | -.163 | .501 |
| | .533 | .007 | .028 | -.071 | .107 | -.146 | .201 | -.274 | .317 | -.330 | .355 | .101 | .137 | .030 | .218 | -.039 | .293 | -.118 | .413 | -.158 | .443 |
| | .400 | .003 | .024 | -.067 | .094 | -.129 | .181 | -.216 | .292 | -.229 | .328 | .072 | .098 | .009 | .175 | -.054 | .248 | -.127 | .365 | -.164 | .396 |
| | .267 | .004 | .020 | -.059 | .086 | -.115 | .167 | -.193 | .277 | -.211 | .312 | .064 | .077 | .005 | .153 | -.044 | .222 | -.114 | .338 | -.151 | .365 |
| | 0 | .013 | .021 | -.044 | .083 | -.095 | .161 | -.164 | .268 | -.189 | .303 | .059 | .076 | .007 | .141 | -.049 | .202 | -.105 | .316 | -.143 | .341 |
| | 1 | --- | .549 | --- | .614 | --- | .624 | --- | .608 | --- | .588 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .059 | .117 | -.116 | .284 | -.274 | .422 | -.496 | .566 | -.586 | .604 | .235 | .306 | .036 | .436 | -.403 | .526 | -.606 | .627 | -.661 | .657 |
| | .933 | -.031 | .017 | -.203 | .176 | -.346 | .309 | -.506 | .454 | -.576 | .503 | .162 | .233 | .012 | .343 | -.272 | .427 | -.504 | .537 | -.574 | .570 |
| | .900 | --- | -.016 | --- | .120 | --- | .243 | --- | .393 | --- | .437 | .104 | .160 | -.018 | .267 | -.128 | .351 | -.464 | .472 | -.540 | .506 |
| | .867 | -.055 | -.024 | -.202 | .100 | -.356 | .219 | -.498 | .357 | -.573 | .401 | .076 | .115 | -.035 | .216 | -.137 | .299 | -.447 | .419 | -.522 | .453 |
| | .800 | -.077 | -.040 | -.183 | .063 | -.343 | .168 | -.492 | .298 | -.548 | .343 | .002 | .049 | -.094 | .145 | -.193 | .223 | -.436 | .344 | -.510 | .377 |
| | .733 | -.083 | -.065 | -.177 | .029 | -.307 | .126 | -.461 | .253 | -.530 | .297 | -.041 | -.009 | -.123 | .081 | -.212 | .159 | -.363 | .282 | -.501 | .317 |
| 0.50 | .667 | -.099 | -.078 | -.183 | .010 | -.275 | .105 | -.442 | .229 | -.497 | .273 | -.060 | -.044 | -.137 | .038 | -.218 | .112 | -.279 | .238 | -.410 | .274 |
| | .600 | -.091 | -.079 | -.173 | .006 | -.252 | .094 | -.438 | .213 | -.451 | .258 | -.079 | -.071 | -.150 | .007 | -.222 | .081 | -.301 | .211 | -.325 | .248 |
| | .533 | -.093 | -.077 | -.162 | .004 | -.234 | .088 | -.352 | .209 | -.404 | .249 | -.088 | -.082 | -.150 | -.003 | -.223 | .070 | -.298 | .199 | -.326 | .234 |
| | .467 | -.089 | -.073 | -.153 | .012 | -.218 | .089 | -.286 | .196 | -.293 | .237 | -.087 | -.076 | -.147 | .003 | -.218 | .074 | -.286 | .199 | -.320 | .237 |
| | .400 | -.088 | -.070 | -.148 | .002 | -.209 | .081 | -.280 | .197 | -.288 | .234 | -.078 | -.065 | -.134 | .009 | -.202 | .082 | -.267 | .200 | -.302 | .233 |
| | .267 | -.077 | -.062 | -.133 | .007 | -.188 | .078 | -.252 | .183 | -.273 | .222 | -.059 | -.044 | -.112 | .022 | -.173 | .093 | -.233 | .200 | -.268 | .240 |
| | .133 | -.067 | -.053 | -.118 | .011 | -.173 | .082 | -.223 | .187 | -.245 | .231 | -.048 | -.034 | -.098 | .029 | -.154 | .087 | -.211 | .197 | -.244 | .230 |
| | 0 | -.065 | -.054 | -.106 | .008 | -.168 | .081 | -.230 | .187 | -.250 | .240 | -.042 | -.027 | -.086 | .033 | -.145 | .086 | -.199 | .197 | -.232 | .236 |
| | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .112 | --- | -.073 | --- | -.418 | --- | -.590 | --- | -.639 | --- |
| | .955 | -.088 | -.043 | -.240 | .097 | -.428 | .225 | -.580 | .370 | -.665 | .417 | .062 | .098 | -.068 | .220 | -.383 | .305 | -.552 | .435 | -.610 | .471 |
| | .933 | -.117 | -.074 | -.266 | .046 | -.421 | .170 | -.581 | .314 | -.652 | .357 | -.023 | .031 | -.133 | .142 | -.380 | .229 | -.515 | .367 | -.587 | .406 |
| | .912 | -.138 | --- | -.281 | --- | -.417 | --- | -.580 | --- | -.644 | -- | -.063 | -.023 | -.167 | .086 | -.369 | .171 | --- | .315 | --- | .357 |
| | .889 | -.152 | -.128 | -.287 | -.014 | -.416 | .106 | -.576 | .243 | -.634 | .293 | -.097 | -.068 | -.197 | .031 | -.377 | .119 | -.514 | .270 | -.578 | .314 |
| | .867 | --- | -.149 | --- | -.035 | --- | .080 | --- | .220 | --- | .272 | --- | -.101 | --- | -.002 | --- | .087 | --- | .243 | --- | .290 |
| 0.75 | .845 | -.174 | -.155 | -.288 | -.040 | -.427 | .071 | -.575 | .207 | -.626 | .261 | -.141 | -.124 | -.233 | -.027 | -.303 | .068 | -.521 | .225 | -.581 | .273 |
| | .800 | -.183 | -.160 | -.276 | -.044 | -.423 | .054 | -.569 | .187 | -.614 | .247 | -.159 | -.144 | -.246 | -.048 | -.324 | .058 | -.518 | .213 | -.578 | .266 |
| | .756 | -.182 | -.149 | -.269 | -.043 | -.400 | .055 | -.562 | .174 | -.597 | .247 | --- | -.159 | --- | -.061 | --- | .044 | --- | .193 | --- | .251 |
| | .711 | -.169 | -.151 | -.255 | -.054 | -.372 | --- | -.541 | .171 | -.576 | .255 | -.164 | -.147 | -.244 | -.041 | -.326 | .057 | -.500 | .200 | -.560 | .261 |
| | .667 | -.158 | --- | -.229 | --- | -.351 | --- | -.526 | --- | -.558 | -- | -.155 | -.136 | -.227 | -.029 | -.314 | .071 | -.398 | .204 | -.550 | .303 |
| | .622 | -.152 | -.130 | -.223 | -.046 | -.320 | .040 | -.517 | .168 | -.511 | .315 | -.147 | --- | -.220 | --- | -.304 | --- | -.364 | --- | -.438 | --- |
| | .578 | -.137 | -.124 | -.198 | -.043 | -.287 | .042 | --- | .179 | --- | .344 | -.136 | -.115 | -.205 | -.026 | -.289 | .064 | -.357 | .184 | -.394 | .328 |
| | .533 | -.135 | -.115 | -.196 | -.048 | -.272 | .049 | -.371 | .213 | -.450 | .363 | -.127 | -.107 | -.196 | -.022 | -.268 | .061 | -.356 | .193 | -.376 | .336 |
| | .446 | --- | -.086 | --- | -.022 | --- | .069 | --- | .304 | --- | .374 | -.108 | -.100 | -.172 | -.029 | -.239 | .046 | -.312 | .273 | -.347 | .350 |

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TABLE III.– CONTINUED

| β = 5° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{b/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| | 1 | --- | 0.667 | --- | 0.769 | --- | 0.830 | --- | 0.879 | --- | 0.870 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.167 | .288 | 0.023 | .418 | -0.102 | .533 | -0.275 | .680 | -0.347 | .708 | 0.387 | 0.450 | 0.246 | 0.572 | -0.148 | 0.683 | -0.500 | 0.768 | -0.566 | 0.806 |
| | .867 | .058 | .128 | -.084 | .256 | -.210 | .380 | -.350 | .528 | -.427 | .572 | .305 | .374 | .187 | .469 | .115 | .573 | -.363 | .619 | -.428 | .719 |
| | .800 | .017 | .080 | -.118 | .206 | -.243 | .277 | -.378 | .470 | -.444 | .513 | .234 | .311 | .129 | .398 | .036 | .496 | -.275 | .601 | -.372 | .646 |
| | .733 | .025 | .035 | -.102 | .140 | -.231 | .261 | -.372 | .397 | -.426 | .449 | .189 | .250 | .092 | .336 | .001 | .432 | -.098 | .539 | -.300 | .586 |
| 0.25 | .667 | -- | .037 | --- | .138 | --- | .247 | --- | .374 | --- | .418 | .157 | .215 | .065 | .297 | -.018 | .387 | -.107 | .495 | -.153 | .539 |
| | .533 | .008 | .033 | -.077 | .126 | -.165 | .213 | -.293 | .327 | -.339 | .368 | .115 | .161 | .035 | .237 | -.034 | .319 | -.126 | .423 | -.158 | .466 |
| | .400 | .001 | .028 | -.073 | .109 | -.144 | .189 | -.240 | .294 | -.271 | .334 | .076 | .109 | .007 | .184 | -.054 | .261 | -.135 | .363 | -.166 | .404 |
| | .267 | .001 | .020 | -.066 | .097 | -.127 | .172 | -.202 | .272 | -.219 | .312 | .057 | .078 | -.003 | .151 | -.059 | .227 | -.131 | .325 | -.161 | .365 |
| | 0 | .012 | .025 | -.046 | .095 | -.099 | .165 | -.167 | .260 | -.184 | .298 | .046 | .067 | -.009 | .134 | -.060 | .203 | -.120 | .295 | -.146 | .333 |
| | 1 | --- | .661 | --- | .749 | --- | .765 | --- | .772 | --- | .743 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .114 | .189 | -.061 | .349 | -.205 | .484 | -.401 | .639 | -.506 | .672 | .288 | .396 | .112 | .526 | -.300 | .627 | -.536 | .714 | -.588 | .761 |
| | .933 | -.001 | .071 | -.171 | .213 | -.294 | .346 | -.436 | .508 | -.511 | .548 | .201 | .307 | .062 | .417 | -.198 | .517 | -.436 | .613 | -.488 | .659 |
| | .900 | --- | .016 | --- | .163 | --- | .286 | --- | .434 | --- | .477 | .141 | .217 | .005 | .315 | -.085 | .423 | -.428 | .525 | -.471 | .573 |
| | .867 | -.034 | .001 | -.190 | .138 | -.315 | .253 | -.448 | .393 | -.525 | .437 | .109 | .161 | -.014 | .255 | -.085 | .357 | -.406 | .459 | -.454 | .510 |
| | .800 | -.063 | -.019 | -.200 | .092 | -.321 | .193 | -.454 | .323 | -.511 | .368 | .026 | .085 | -.082 | .173 | -.162 | .267 | -.404 | .368 | -.455 | .416 |
| | .733 | -.079 | -.050 | -.190 | .047 | -.321 | .143 | -.447 | .268 | -.505 | .314 | -.032 | .014 | -.119 | .099 | -.202 | .192 | -.390 | .273 | -.453 | .340 |
| 0.50 | .667 | -.103 | -.069 | -.199 | .022 | -.311 | .116 | -.449 | .238 | -.490 | .283 | -.061 | -.035 | -.137 | .048 | -.213 | .137 | -.287 | .238 | -.448 | .287 |
| | .600 | -.100 | -.075 | -.192 | .012 | -.278 | .102 | -.422 | .219 | -.458 | .265 | -.088 | -.070 | -.162 | .010 | -.233 | .095 | -.307 | .201 | -.335 | .253 |
| | .533 | -.094 | -.071 | -.182 | .006 | -.256 | .093 | -.389 | .206 | -.434 | .251 | -.101 | -.088 | -.167 | -.011 | -.236 | .074 | -.311 | .184 | -.337 | .236 |
| | .467 | -.092 | -.066 | -.171 | .007 | -.238 | .097 | -.365 | .201 | -.383 | .243 | -.105 | -.087 | -.168 | -.011 | -.236 | .074 | -.309 | .181 | -.338 | .235 |
| | .400 | -.071 | -.056 | -.164 | .007 | -.226 | .086 | -.289 | .189 | -.314 | .231 | -.099 | -.079 | -.159 | -.004 | -.223 | .079 | -.295 | .185 | -.322 | .234 |
| | .267 | -.063 | -.045 | -.144 | .016 | -.191 | .082 | -.256 | .188 | -.275 | .221 | -.079 | -.055 | -.135 | .014 | -.188 | .088 | -.255 | .187 | -.280 | .238 |
| | .133 | -.057 | -.041 | -.126 | .016 | -.176 | .087 | -.220 | .181 | -.243 | .226 | -.061 | -.042 | -.115 | .020 | -.159 | .092 | -.222 | .186 | -.242 | .234 |
| | 0 | --- | --- | -.118 | .018 | -.165 | .088 | -.216 | .185 | -.241 | .236 | -.055 | -.030 | -.104 | .025 | -.143 | .098 | -.207 | .188 | -.221 | .238 |
| | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .151 | --- | -.033 | --- | -.330 | --- | -.531 | --- | -.570 | --- |
| | .955 | -.052 | .020 | -.205 | .158 | -.358 | .276 | -.526 | .425 | -.622 | .457 | .104 | .170 | -.046 | .285 | -.298 | .394 | -.492 | .489 | -.532 | .552 |
| | .933 | -.083 | -.049 | -.233 | .090 | -.358 | .218 | -.518 | .359 | -.603 | .394 | .016 | .092 | -.107 | .194 | -.311 | .299 | -.485 | .407 | -.528 | .463 |
| | .912 | -.108 | --- | -.255 | --- | -.363 | --- | -.520 | --- | -.599 | --- | -.033 | .030 | -.145 | .120 | -.312 | .233 | --- | .337 | --- | .403 |
| | .889 | -.125 | -.090 | -.268 | .020 | -.371 | .139 | -.518 | .273 | -.591 | .319 | -.071 | -.022 | -.178 | .069 | -.330 | .171 | -.490 | .290 | -.529 | .350 |
| | .867 | --- | -.113 | --- | -.008 | --- | .107 | --- | .246 | --- | .293 | --- | -.063 | --- | .008 | --- | .130 | --- | .255 | --- | .318 |
| | .845 | -.155 | -.124 | -.286 | -.020 | -.390 | .095 | -.517 | .231 | -.586 | .279 | -.123 | -.092 | -.220 | 0 | -.298 | .099 | -.497 | .233 | -.536 | .297 |
| 0.75 | .800 | -.173 | -.136 | -.294 | -.030 | -.399 | .074 | -.514 | .207 | -.576 | .256 | -.151 | -.119 | -.238 | -.030 | -.300 | .074 | -.497 | .217 | -.537 | .280 |
| | .756 | -.182 | -.135 | -.294 | -.035 | -.401 | .071 | -.514 | .196 | -.566 | .246 | --- | -.142 | --- | -.052 | --- | .055 | --- | .196 | --- | .257 |
| | .711 | -.178 | -.145 | -.280 | -.049 | -.392 | --- | -.508 | .180 | -.550 | .237 | -.169 | -.138 | -.246 | -.044 | -.329 | .062 | -.486 | .196 | -.528 | .256 |
| | .667 | -.165 | --- | -.252 | --- | -.372 | --- | -.493 | --- | -.537 | --- | -.166 | -.136 | -.241 | -.039 | -.319 | .067 | -.462 | .198 | -.520 | .258 |
| | .622 | -.161 | -.127 | -.255 | -.041 | -.337 | .049 | -.471 | .165 | -.512 | .246 | -.166 | --- | -.238 | --- | -.315 | --- | -.390 | --- | -.513 | --- |
| | .578 | -.146 | -.125 | -.226 | -.041 | -.320 | .050 | --- | .163 | --- | .278 | -.161 | -.129 | -.230 | -.035 | -.310 | .061 | -.370 | .185 | -.454 | .275 |
| | .533 | -.144 | -.115 | -.213 | -.036 | -.304 | .054 | -.446 | .173 | -.481 | .308 | -.148 | -.121 | -.216 | -.031 | -.299 | .063 | -.366 | .182 | -.394 | .331 |
| | .446 | --- | -.086 | --- | -.016 | --- | .068 | --- | .260 | --- | .401 | -.129 | -.108 | -.194 | -.031 | -.264 | .064 | -.345 | .228 | -.374 | .364 |

CONFIDENTIAL

TABLE III.– CONTINUED

$\beta = 5^{\circ}$

Left wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^{\circ}$ | | $\alpha=2.5^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.6^{\circ}$ | | $\alpha=10.1^{\circ}$ | | $\alpha=0.0^{\circ}$ | | $\alpha=2.7^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.8^{\circ}$ | | $\alpha=10.1^{\circ}$ | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.450 | --- | 0.599 | --- | 0.589 | --- | 0.609 | --- | 0.616 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.107 | .157 | -0.050 | .288 | -0.219 | .400 | -0.422 | .530 | -0.486 | .581 | 0.279 | 0.279 | 0.151 | 0.402 | -0.123 | 0.486 | -0.566 | 0.581 | -0.610 | 0.616 |
| | .867 | .036 | .052 | -.108 | .173 | -.268 | .293 | -.442 | .429 | -.521 | .484 | .224 | .248 | .111 | .335 | -.005 | .425 | -.408 | .530 | -.506 | .567 |
| | .800 | .021 | .036 | -.097 | .150 | -.230 | .257 | -.396 | .392 | -.481 | .444 | .174 | .205 | .076 | .286 | -.017 | .372 | -.277 | .482 | -.385 | .521 |
| | .733 | .031 | .030 | -.075 | .108 | -.191 | .213 | -.372 | .343 | -.454 | .397 | .142 | .168 | .053 | .245 | -.029 | .330 | -.231 | .443 | -.354 | .482 |
| | .667 | --- | .019 | --- | .108 | --- | .206 | --- | .322 | --- | .375 | .122 | .145 | .039 | .222 | -.039 | .301 | -.153 | .417 | -.273 | .456 |
| | .533 | .018 | .023 | -.058 | .100 | -.129 | .185 | -.224 | .297 | -.258 | .344 | .092 | .108 | .019 | .180 | -.047 | .256 | -.126 | .372 | -.190 | .415 |
| | .400 | .014 | .019 | -.054 | .090 | -.116 | .169 | -.199 | .276 | -.219 | .323 | .071 | .079 | .004 | .145 | -.058 | .221 | -.133 | .337 | -.160 | .374 |
| | .267 | .015 | .017 | -.048 | .083 | -.105 | .160 | -.180 | .266 | -.207 | .311 | .067 | .063 | .002 | .127 | -.053 | .199 | -.124 | .315 | -.153 | .355 |
| | 0 | .018 | .015 | -.043 | .078 | -.097 | .153 | -.164 | .258 | -.192 | .304 | .047 | .057 | -.010 | .114 | -.060 | .181 | -.127 | .295 | -.159 | .334 |
| 0.50 | 1 | --- | .394 | --- | .464 | --- | .465 | --- | .544 | --- | .416 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .027 | .041 | -.175 | .219 | -.358 | .346 | -.568 | .490 | -.657 | .528 | .173 | .210 | .014 | .340 | -.472 | .432 | -.663 | .521 | -.704 | .552 |
| | .933 | -.040 | -.028 | -.228 | .128 | -.408 | .248 | -.565 | .396 | -.644 | .443 | .111 | .152 | -.026 | .258 | -.259 | .354 | -.588 | .451 | -.649 | .484 |
| | .900 | --- | -.047 | --- | .088 | --- | .203 | --- | .344 | --- | .395 | .073 | .096 | -.054 | .189 | -.137 | .287 | -.544 | .397 | -.599 | .431 |
| | .867 | -.055 | -.049 | -.185 | .071 | -.372 | .179 | -.518 | .314 | -.599 | .365 | .049 | .059 | -.064 | .150 | -.160 | .245 | -.524 | .358 | -.582 | .393 |
| | .800 | -.068 | -.058 | -.174 | .041 | -.322 | .138 | -.493 | .267 | -.568 | .315 | -.015 | .004 | -.114 | .089 | -.203 | .180 | -.430 | .297 | -.554 | .335 |
| | .733 | -.069 | -.075 | -.164 | .014 | -.280 | .104 | -.475 | .231 | -.553 | .278 | -.045 | -.040 | -.131 | .039 | -.213 | .126 | -.308 | .247 | -.401 | .287 |
| | .667 | -.080 | -.082 | -.163 | .002 | -.248 | .088 | -.467 | .212 | -.525 | .258 | -.064 | -.070 | -.141 | .008 | -.219 | .090 | -.306 | .212 | -.361 | .254 |
| | .600 | -.080 | -.079 | -.155 | -.001 | -.242 | .081 | -.317 | .205 | -.419 | .246 | -.077 | -.089 | -.148 | -.011 | -.219 | .067 | -.307 | .193 | -.362 | .238 |
| | .533 | -.077 | -.076 | -.146 | .004 | -.214 | .084 | -.282 | .190 | -.308 | .234 | -.077 | -.088 | -.148 | -.014 | -.217 | .062 | -.295 | .186 | -.340 | .226 |
| | .467 | -.073 | -.071 | -.138 | 0 | -.190 | .075 | -.265 | .190 | -.292 | .238 | -.071 | -.077 | -.140 | -.007 | -.209 | .068 | -.278 | .188 | -.316 | .227 |
| | .400 | -.072 | -.065 | -.135 | .007 | -.187 | .071 | -.261 | .186 | -.289 | .225 | -.062 | -.067 | -.122 | -.001 | -.190 | .070 | -.256 | .188 | -.288 | .227 |
| | .267 | -.063 | -.062 | -.123 | .001 | -.179 | .069 | -.237 | .174 | -.264 | .219 | -.048 | -.050 | -.105 | .011 | -.161 | .078 | -.233 | .185 | -.261 | .229 |
| | .133 | -.055 | -.056 | -.112 | .006 | -.167 | .073 | -.227 | .180 | -.244 | .227 | -.042 | -.040 | -.096 | .016 | -.147 | .079 | -.215 | .181 | -.242 | .222 |
| | 0 | -.059 | -.063 | -.115 | -.001 | -.171 | .067 | -.228 | .176 | -.254 | .221 | -.040 | -.040 | -.095 | .014 | -.145 | .077 | -.214 | .182 | -.241 | .221 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .064 | --- | -.112 | --- | -.467 | --- | -.650 | --- | -.685 | --- |
| | .955 | -.100 | -.101 | -.283 | .128 | -.459 | .173 | -.600 | .318 | -.684 | .389 | .021 | .021 | -.109 | .138 | -.432 | .251 | -.612 | .368 | -.656 | .436 |
| | .933 | -.129 | -.129 | -.301 | .007 | -.456 | .125 | -.597 | .275 | -.680 | .326 | -.052 | -.037 | -.176 | .064 | -.417 | .173 | -.595 | .309 | -.642 | .387 |
| | .912 | -.139 | --- | -.297 | --- | -.450 | --- | -.592 | --- | -.673 | --- | -.087 | -.081 | -.201 | .015 | -.390 | .125 | --- | .266 | --- | .351 |
| | .889 | -.149 | -.159 | -.282 | -.041 | -.446 | .074 | -.587 | .212 | -.662 | .291 | -.114 | -.134 | -.227 | -.026 | -.371 | .082 | -.581 | .230 | -.625 | .319 |
| | .867 | --- | -.173 | --- | -.055 | --- | .054 | --- | .194 | --- | .286 | --- | -.146 | --- | -.052 | --- | .059 | --- | .209 | --- | .301 |
| | .845 | -.172 | -.172 | -.275 | -.058 | -.439 | .045 | -.581 | .183 | -.655 | .281 | -.151 | -.160 | -.251 | -.064 | -.312 | .048 | -.579 | .197 | -.624 | .295 |
| | .800 | -.162 | -.164 | -.264 | -.058 | -.409 | .034 | -.568 | .172 | -.639 | .284 | -.159 | -.172 | -.255 | -.069 | -.332 | .043 | -.573 | .190 | -.617 | .298 |
| | .756 | -.159 | -.150 | -.249 | -.054 | -.386 | .036 | -.551 | .173 | -.626 | .288 | --- | -.175 | --- | -.072 | --- | .032 | --- | .167 | --- | .293 |
| | .711 | -.148 | -.152 | -.233 | -.066 | -.340 | --- | -.534 | .171 | -.613 | .295 | -.143 | -.148 | -.234 | -.047 | -.320 | .046 | -.416 | .187 | -.563 | .315 |
| | .667 | -.126 | --- | -.208 | --- | --- | --- | -.488 | --- | -.577 | --- | -.132 | -.134 | -.213 | -.043 | -.302 | .055 | -.379 | .186 | -.447 | .316 |
| | .622 | -.129 | -.133 | -.203 | -.052 | -.264 | .036 | -.375 | .195 | -.452 | .332 | -.122 | --- | -.191 | --- | -.286 | --- | -.358 | --- | -.401 | --- |
| | .578 | -.113 | -.124 | -.183 | -.047 | -.242 | .039 | --- | .236 | --- | .335 | -.115 | -.115 | -.181 | -.039 | -.260 | .044 | -.341 | .217 | -.375 | .308 |
| | .533 | -.108 | -.114 | -.178 | -.041 | -.233 | .050 | -.316 | .270 | -.351 | .344 | -.107 | -.111 | -.167 | -.028 | -.237 | .045 | -.322 | .248 | -.355 | .315 |
| | .446 | --- | -.096 | --- | -.022 | --- | .074 | --- | .290 | --- | .352 | -.095 | -.099 | -.160 | -.035 | -.223 | .047 | -.303 | .273 | -.349 | .324 |

CONFIDENTIAL

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NACA

TABLE III.– CONTINUED

| β = 9° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | |
| | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{x/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.759 | --- | 0.871 | --- | --- | --- | 0.980 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.203 | .347 | 0.088 | .486 | --- | --- | -0.211 | .737 | --- | --- | 0.436 | 0.505 | 0.288 | 0.630 | --- | --- | -0.407 | 0.830 | --- | --- |
| | .867 | .085 | .163 | -.051 | .290 | --- | --- | -.297 | .562 | --- | --- | .344 | .425 | .228 | .529 | --- | --- | -.301 | .732 | --- | --- |
| | .800 | .029 | .105 | -.104 | .230 | --- | --- | -.338 | .495 | --- | --- | .263 | .352 | .160 | .446 | --- | --- | -.228 | .641 | --- | --- |
| | .733 | .031 | .049 | -.099 | .154 | --- | --- | -.339 | .415 | --- | --- | .209 | .284 | .113 | .372 | --- | --- | -.112 | .571 | --- | --- |
| | .667 | --- | .041 | --- | .149 | --- | --- | --- | .391 | --- | --- | .170 | .239 | .077 | .325 | --- | --- | -.092 | .517 | --- | --- |
| | .533 | .009 | .033 | -.086 | .134 | --- | --- | -.312 | .336 | --- | --- | .121 | .174 | .036 | .251 | --- | --- | -.132 | .434 | --- | --- |
| | .400 | -.002 | .029 | -.082 | .114 | --- | --- | -.257 | .296 | --- | --- | .076 | .116 | .002 | .188 | --- | --- | -.141 | .363 | --- | --- |
| | .267 | -.003 | .020 | -.074 | .098 | --- | --- | -.210 | .269 | --- | --- | .049 | .077 | -.016 | .148 | --- | --- | -.143 | .319 | --- | --- |
| | 0 | .011 | .024 | -.049 | .094 | --- | --- | -.166 | .252 | --- | --- | .033 | .059 | -.021 | .125 | --- | --- | -.127 | .285 | --- | --- |
| 0.50 | 1 | --- | .813 | --- | .859 | --- | --- | --- | .890 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .164 | .250 | .004 | .379 | --- | --- | -.321 | .692 | --- | --- | .339 | .468 | .161 | .591 | --- | --- | -.456 | .788 | --- | --- |
| | .933 | .026 | .113 | -.116 | .231 | --- | --- | -.371 | .542 | --- | --- | .244 | .371 | .104 | .474 | --- | --- | -.370 | .672 | --- | --- |
| | .900 | --- | .053 | --- | .198 | --- | --- | --- | .465 | --- | --- | .179 | .273 | .052 | .374 | --- | --- | -.355 | .575 | --- | --- |
| | .867 | -.014 | .026 | -.157 | .170 | --- | --- | -.400 | .420 | --- | --- | .143 | .209 | .019 | .306 | --- | --- | -.345 | .502 | --- | --- |
| | .800 | -.047 | -.002 | -.180 | .119 | --- | --- | -.411 | .343 | --- | --- | .059 | .124 | -.055 | .209 | --- | --- | -.354 | .399 | --- | --- |
| | .733 | -.066 | -.036 | -.190 | .067 | --- | --- | -.412 | .280 | --- | --- | -.014 | .043 | -.106 | .126 | --- | --- | -.360 | .313 | --- | --- |
| | .667 | -.101 | -.060 | -.205 | .035 | --- | --- | -.424 | .246 | --- | --- | -.050 | -.014 | -.129 | .068 | --- | --- | -.333 | .251 | --- | --- |
| | .600 | -.105 | -.070 | -.200 | .019 | --- | --- | -.422 | .224 | --- | --- | -.089 | -.059 | -.163 | .019 | --- | --- | -.298 | .206 | --- | --- |
| | .533 | -.106 | -.075 | -.193 | .009 | --- | --- | -.398 | .207 | --- | --- | -.106 | -.086 | -.173 | -.008 | --- | --- | -.315 | .184 | --- | --- |
| | .467 | -.101 | -.074 | -.183 | .007 | --- | --- | -.371 | .198 | --- | --- | -.115 | -.091 | -.182 | -.015 | --- | --- | -.318 | .181 | --- | --- |
| | .400 | -.100 | -.070 | -.174 | .007 | --- | --- | -.352 | .192 | --- | --- | -.112 | -.087 | -.176 | -.014 | --- | --- | -.307 | .181 | --- | --- |
| | .267 | -.079 | -.059 | -.152 | .014 | --- | --- | -.258 | .188 | --- | --- | -.090 | -.060 | -.151 | .011 | --- | --- | -.266 | .190 | --- | --- |
| | .133 | -.068 | -.048 | -.129 | .021 | --- | --- | -.215 | .180 | --- | --- | -.063 | -.038 | -.116 | .027 | --- | --- | -.218 | .192 | --- | --- |
| | 0 | -.058 | -.039 | -.117 | .025 | --- | --- | -.209 | .182 | --- | --- | -.045 | -.026 | -.098 | .035 | --- | --- | -.196 | .191 | --- | --- |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .212 | --- | .021 | --- | --- | --- | -.455 | --- | --- | --- |
| | .955 | -.011 | .074 | -.155 | .209 | --- | --- | -.463 | .468 | --- | --- | .151 | .242 | .006 | .353 | --- | --- | -.421 | .547 | --- | --- |
| | .933 | -.049 | -.007 | -.187 | .135 | --- | --- | -.456 | .393 | --- | --- | .061 | .154 | -.062 | .257 | --- | --- | -.430 | .450 | --- | --- |
| | .912 | -.076 | --- | -.213 | --- | --- | --- | -.461 | --- | --- | --- | .008 | .085 | -.105 | .185 | --- | --- | --- | .379 | --- | --- |
| | .889 | -.098 | -.054 | -.229 | .058 | --- | --- | -.460 | .298 | --- | --- | -.034 | .029 | -.142 | .119 | --- | --- | -.445 | .316 | --- | --- |
| | .867 | --- | -.082 | --- | .026 | --- | --- | --- | .268 | --- | --- | --- | -.018 | --- | .071 | --- | --- | --- | .270 | --- | --- |
| | .845 | -.133 | -.096 | -.255 | .010 | --- | --- | -.464 | .251 | --- | --- | -.095 | -.052 | -.193 | .038 | --- | --- | -.458 | .247 | --- | --- |
| | .800 | -.156 | -.113 | -.271 | -.006 | --- | --- | -.467 | .226 | --- | --- | -.129 | -.085 | -.218 | .001 | --- | --- | -.463 | .227 | --- | --- |
| | .756 | -.171 | -.117 | -.282 | -.017 | --- | --- | -.472 | .211 | --- | --- | --- | -.114 | --- | -.027 | --- | --- | --- | .206 | --- | --- |
| | .711 | -.176 | -.132 | -.282 | -.039 | --- | --- | -.472 | .192 | --- | --- | -.158 | -.119 | -.240 | -.042 | --- | --- | -.458 | .201 | --- | --- |
| | .667 | -.169 | --- | -.257 | --- | --- | --- | -.470 | --- | --- | --- | -.162 | -.123 | -.236 | -.035 | --- | --- | -.450 | .201 | --- | --- |
| | .622 | -.169 | -.131 | -.265 | -.039 | --- | --- | -.462 | .171 | --- | --- | -.167 | --- | -.241 | --- | --- | --- | -.433 | --- | --- | --- |
| | .578 | -.155 | -.121 | -.240 | -.037 | --- | --- | --- | .167 | --- | --- | -.167 | -.129 | -.242 | -.040 | --- | --- | -.374 | .191 | --- | --- |
| | .533 | -.152 | -.117 | -.239 | -.032 | --- | --- | -.429 | .169 | --- | --- | -.164 | -.127 | -.233 | -.039 | --- | --- | -.371 | .186 | --- | --- |
| | .446 | --- | -.083 | --- | -.006 | --- | --- | --- | .208 | --- | --- | -.145 | -.114 | -.221 | -.031 | --- | --- | -.367 | .174 | --- | --- |

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## TABLE III.— CONCLUDED

| $\beta = 9^\circ$ | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Left wing panel | | | | | | | | | | | | | | | | | | | | | | | |
| | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | | | |
| Station | | $\alpha=-0.1^\circ$ | | $\alpha=2.5^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.6^\circ$ | | $\alpha=10.1^\circ$ | | $\alpha=0.0^\circ$ | | $\alpha=2.7^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.8^\circ$ | | $\alpha=10.1^\circ$ | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.359 | --- | 0.454 | --- | --- | --- | 0.484 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.088 | .113 | -0.061 | .236 | --- | --- | -0.456 | .457 | --- | --- | 0.230 | 0.214 | 0.128 | 0.342 | --- | --- | -0.488 | 0.502 | --- | --- |
| | .867 | .030 | .028 | -.101 | .146 | --- | --- | -.451 | .390 | --- | --- | .187 | .194 | .091 | .284 | --- | --- | -.452 | .462 | --- | --- |
| | .800 | .018 | .021 | -.087 | .126 | --- | --- | -.402 | .360 | --- | --- | .146 | .160 | .064 | .244 | --- | --- | -.367 | .426 | --- | --- |
| | .733 | .028 | .001 | -.067 | .090 | --- | --- | -.385 | .316 | --- | --- | .120 | .131 | .046 | .212 | --- | --- | -.289 | .394 | --- | --- |
| | .667 | --- | .010 | --- | .092 | --- | --- | --- | .300 | --- | --- | .102 | .113 | .036 | .193 | --- | --- | -.171 | .376 | --- | --- |
| | .533 | .014 | .012 | -.055 | .086 | --- | --- | -.208 | .279 | --- | --- | .075 | .084 | .018 | .159 | --- | --- | -.120 | .342 | --- | --- |
| | .400 | .010 | .010 | -.054 | .078 | --- | --- | -.193 | .264 | --- | --- | .060 | .060 | .004 | .131 | --- | --- | -.133 | .313 | --- | --- |
| | .267 | .011 | .007 | -.049 | .072 | --- | --- | -.179 | .255 | --- | --- | .059 | .049 | .005 | .118 | --- | --- | -.126 | .297 | --- | --- |
| | 0 | .007 | -.001 | -.053 | .065 | --- | --- | -.177 | .246 | --- | --- | .031 | .029 | -.012 | .097 | --- | --- | -.146 | .275 | --- | --- |
| 0.50 | 1 | --- | .256 | --- | .357 | --- | --- | --- | .294 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .019 | -.006 | -.205 | .163 | --- | --- | -.604 | .407 | --- | --- | .133 | .133 | -.004 | .271 | --- | --- | -.624 | .432 | --- | --- |
| | .933 | -.041 | -.058 | -.220 | .086 | --- | --- | -.585 | .336 | --- | --- | .074 | .084 | -.036 | .202 | --- | --- | -.613 | .378 | --- | --- |
| | .900 | --- | -.072 | --- | .058 | --- | --- | --- | .305 | --- | --- | .042 | .038 | -.064 | .139 | --- | --- | -.584 | .336 | --- | --- |
| | .867 | -.056 | -.071 | -.181 | .043 | --- | --- | -.559 | .280 | --- | --- | .023 | .011 | -.072 | .109 | --- | --- | -.471 | .308 | --- | --- |
| | .800 | -.068 | -.076 | -.168 | .018 | --- | --- | -.550 | .239 | --- | --- | -.030 | -.034 | -.116 | .056 | --- | --- | -.456 | .258 | --- | --- |
| | .733 | -.067 | -.087 | -.156 | -.001 | --- | --- | -.509 | .208 | --- | --- | -.054 | -.066 | -.129 | .017 | --- | --- | -.412 | .219 | --- | --- |
| | .667 | -.079 | -.090 | -.156 | -.010 | --- | --- | -.285 | .191 | --- | --- | -.071 | -.090 | -.135 | -.006 | --- | --- | -.340 | .193 | --- | --- |
| | .600 | -.078 | -.086 | -.149 | -.008 | --- | --- | -.294 | .181 | --- | --- | -.078 | -.100 | -.140 | -.020 | --- | --- | -.286 | .180 | --- | --- |
| | .533 | -.076 | -.083 | -.192 | -.006 | --- | --- | -.279 | .177 | --- | --- | -.079 | -.098 | -.136 | -.019 | --- | --- | -.268 | .171 | --- | --- |
| | .467 | -.072 | -.077 | -.133 | -.009 | --- | --- | -.261 | .179 | --- | --- | -.075 | -.088 | -.129 | -.013 | --- | --- | -.268 | .175 | --- | --- |
| | .400 | -.072 | -.067 | -.131 | -.002 | --- | --- | -.257 | .177 | --- | --- | -.066 | -.079 | -.116 | -.007 | --- | --- | -.254 | .173 | --- | --- |
| | .267 | -.064 | -.069 | -.120 | -.007 | --- | --- | -.238 | .166 | --- | --- | -.052 | -.060 | -.102 | .007 | --- | --- | -.231 | .172 | --- | --- |
| | .133 | -.058 | -.065 | -.110 | -.004 | --- | --- | -.225 | .171 | --- | --- | -.043 | -.048 | -.092 | .014 | --- | --- | -.217 | .175 | --- | --- |
| | 0 | -.063 | -.074 | -.121 | -.012 | --- | --- | -.236 | .163 | --- | --- | -.045 | -.054 | -.093 | .006 | --- | --- | -.222 | .174 | --- | --- |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .027 | --- | -.127 | --- | --- | --- | -.710 | --- | --- | --- |
| | .955 | -.103 | -.137 | -.298 | .016 | --- | --- | -.637 | .288 | --- | --- | -.008 | -.039 | -.136 | .088 | --- | --- | -.687 | .321 | --- | --- |
| | .933 | -.121 | -.157 | -.286 | -.021 | --- | --- | -.634 | .255 | --- | --- | -.073 | -.087 | -.184 | .030 | --- | --- | -.656 | .273 | --- | --- |
| | .912 | -.136 | --- | -.275 | --- | --- | --- | -.624 | --- | --- | --- | -.100 | -.123 | -.203 | -.011 | --- | --- | --- | .239 | --- | --- |
| | .889 | -.142 | -.175 | -.266 | -.056 | --- | --- | -.614 | .201 | --- | --- | -.120 | -.168 | -.226 | -.046 | --- | --- | -.629 | .212 | --- | --- |
| | .867 | --- | -.183 | --- | -.067 | --- | --- | --- | .185 | --- | --- | --- | -.176 | --- | -.066 | --- | --- | --- | .196 | --- | --- |
| | .845 | -.150 | -.177 | -.258 | -.069 | --- | --- | -.602 | .180 | --- | --- | -.149 | -.185 | -.243 | -.071 | --- | --- | -.563 | .189 | --- | --- |
| | .800 | -.150 | -.168 | -.246 | -.071 | --- | --- | -.591 | .175 | --- | --- | -.152 | -.184 | -.241 | -.068 | --- | --- | -.458 | .188 | --- | --- |
| | .756 | -.147 | -.154 | -.232 | -.066 | --- | --- | -.572 | .182 | --- | --- | --- | -.175 | --- | -.071 | --- | --- | --- | .171 | --- | --- |
| | .711 | -.138 | -.156 | -.218 | -.076 | --- | --- | -.483 | .188 | --- | --- | -.131 | -.152 | -.208 | -.045 | --- | --- | -.452 | .207 | --- | --- |
| | .667 | -.119 | --- | -.196 | --- | --- | --- | -.381 | --- | --- | --- | -.121 | -.138 | -.186 | -.048 | --- | --- | -.398 | .228 | --- | --- |
| | .622 | -.122 | -.138 | -.193 | -.064 | --- | --- | -.350 | .238 | --- | --- | -.114 | --- | -.177 | --- | --- | --- | -.405 | --- | --- | --- |
| | .578 | -.106 | -.130 | -.175 | -.055 | --- | --- | --- | .251 | --- | --- | -.107 | -.123 | -.166 | -.038 | --- | --- | -.405 | .237 | --- | --- |
| | .533 | -.101 | -.121 | -.173 | -.049 | --- | --- | -.308 | .264 | --- | --- | -.097 | -.118 | -.157 | -.036 | --- | --- | -.297 | .244 | --- | --- |
| | .446 | --- | -.103 | --- | -.020 | --- | --- | --- | .279 | --- | --- | -.086 | -.109 | -.144 | -.033 | --- | --- | -.286 | .255 | --- | --- |

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# TABLE IV.– EXPERIMENTAL PRESSURE COEFFICIENTS
## [M = 1.40]

$\beta = 0^\circ$

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^\circ$ | | $\alpha=2.5^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.6^\circ$ | | $\alpha=10.1^\circ$ | | $\alpha=0.0^\circ$ | | $\alpha=2.7^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.8^\circ$ | | $\alpha=10.1^\circ$ | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.553 | --- | 0.653 | --- | 0.698 | --- | 0.763 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.133 | .271 | 0.003 | .388 | -0.124 | .483 | -0.259 | .615 | -0.320 | .653 | 0.340 | 0.367 | 0.201 | 0.480 | -0.065 | 0.578 | -0.440 | 0.685 | -0.507 | 0.707 |
| | .867 | .055 | .107 | -.071 | .214 | -.187 | .318 | -.304 | .472 | -.376 | .517 | .264 | .326 | .134 | .394 | .079 | .510 | -.310 | .621 | -.394 | .649 |
| | .800 | .033 | .065 | -.086 | .169 | -.198 | .271 | -.317 | .419 | -.383 | .463 | .205 | .259 | .089 | .322 | .042 | .436 | -.239 | .546 | -.325 | .578 |
| | .733 | .031 | .039 | -.079 | .138 | -.185 | .236 | -.321 | .372 | -.373 | .416 | .163 | .197 | .053 | .256 | .016 | .371 | -.073 | .484 | -.249 | .517 |
| | .667 | --- | .029 | --- | .121 | --- | .211 | --- | .338 | --- | .391 | .126 | .169 | .023 | .224 | -.016 | .339 | -.110 | .455 | -.135 | .490 |
| | .533 | .013 | .030 | -.059 | .110 | -.129 | .187 | -.247 | .302 | -.292 | .343 | .084 | .118 | -.009 | .168 | -.043 | .280 | -.133 | .396 | -.155 | .431 |
| | .400 | .004 | .025 | -.058 | .092 | -.116 | .165 | -.203 | .270 | -.232 | .319 | .054 | .080 | -.030 | .125 | -.056 | .230 | -.137 | .344 | -.158 | .380 |
| | .267 | .011 | .020 | -.045 | .083 | -.096 | .151 | -.168 | .255 | -.186 | .295 | .042 | .055 | -.035 | .095 | -.056 | .196 | -.132 | .309 | -.151 | .347 |
| | 0 | .016 | .025 | -.039 | .084 | -.088 | .147 | -.149 | .246 | -.172 | .283 | .035 | .044 | -.042 | .078 | -.057 | .174 | -.122 | .276 | -.143 | .312 |
| 0.50 | 1 | --- | .602 | --- | .668 | --- | .678 | --- | .662 | --- | .653 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .093 | .139 | -.057 | .283 | -.202 | .402 | -.367 | .555 | -.457 | .593 | .243 | .317 | .077 | .431 | -.268 | .519 | -.483 | .632 | -.553 | .647 |
| | .933 | -.009 | .032 | -.148 | .172 | -.275 | .284 | -.388 | .437 | -.468 | .482 | .162 | .254 | .030 | .339 | -.170 | .439 | -.396 | .547 | -.458 | .567 |
| | .900 | --- | -.003 | --- | .124 | -.298 | .230 | --- | .381 | -.471 | .423 | --- | .185 | --- | .253 | -.087 | .372 | -.381 | .489 | -.448 | .519 |
| | .867 | -.029 | -.013 | -.168 | .108 | -.294 | .207 | -.386 | .348 | .461 | .391 | .083 | .130 | -.049 | .195 | -.091 | .316 | -.371 | .433 | -.432 | .463 |
| | .800 | -.055 | -.030 | -.171 | .068 | -.286 | .156 | -.393 | .288 | -.450 | .329 | 0. | .058 | -.110 | .115 | -.169 | .234 | -.377 | .347 | -.430 | .382 |
| | .733 | -.059 | -.031 | -.160 | .054 | -.269 | .117 | -.390 | .241 | -.440 | .285 | -.033 | .011 | -.134 | .046 | -.183 | .158 | -.363 | .271 | -.420 | .309 |
| | .667 | -.086 | -.066 | -.166 | .014 | -.247 | .095 | -.379 | .211 | -.427 | .255 | -.061 | -.047 | -.158 | .004 | -.190 | .114 | -.265 | .220 | -.381 | .261 |
| | .600 | --- | -.069 | --- | .007 | --- | .084 | --- | .200 | --- | .246 | -.080 | -.072 | -.168 | -.027 | -.200 | .077 | -.283 | .190 | -.296 | .230 |
| | .533 | -.085 | -.071 | -.153 | .001 | -.212 | .075 | -.343 | .182 | -.367 | .227 | -.093 | -.089 | -.177 | -.042 | -.211 | .067 | -.295 | .178 | -.310 | .221 |
| | .467 | -.079 | -.065 | -.143 | .004 | -.198 | .075 | -.286 | .179 | -.310 | .223 | -.097 | -.083 | -.174 | -.028 | -.201 | .082 | -.282 | .185 | -.301 | .219 |
| | .400 | -.080 | -.062 | -.140 | .005 | -.191 | .072 | -.261 | .173 | -.271 | .217 | -.092 | -.077 | -.170 | -.029 | -.193 | .071 | -.271 | .188 | -.290 | .228 |
| | .267 | -.067 | --- | -.124 | --- | -.172 | --- | -.229 | --- | -.251 | --- | -.070 | -.056 | -.145 | -.017 | -.162 | .079 | -.235 | .183 | -.254 | .221 |
| | .133 | -.057 | -.044 | -.111 | .014 | -.157 | .076 | -.203 | .168 | -.222 | .220 | -.052 | -.043 | -.127 | -.009 | -.136 | .085 | -.206 | .179 | -.225 | .219 |
| | 0 | --- | -.045 | --- | .013 | --- | .072 | --- | .166 | --- | .205 | -.050 | -.051 | -.119 | -.016 | -.134 | .083 | -.203 | .171 | -.222 | .212 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .143 | --- | -.043 | --- | -.302 | --- | -.473 | --- | -.541 | --- |
| | .955 | -.028 | .006 | -.175 | .129 | -.336 | .232 | -.423 | .388 | -.517 | .434 | .097 | .131 | -.051 | .232 | -.277 | .340 | -.443 | .458 | -.505 | .489 |
| | .933 | -.062 | -.026 | -.202 | .077 | -.333 | .167 | -.436 | .337 | -.515 | .370 | .013 | .067 | -.122 | .143 | -.280 | .262 | -.445 | .381 | -.515 | .425 |
| | .912 | -.083 | -.068 | -.221 | .037 | -.339 | .135 | -.431 | .281 | -.511 | .325 | -.036 | .022 | -.162 | .092 | -.294 | .207 | --- | .329 | --- | .377 |
| | .889 | -.102 | -.086 | -.232 | .009 | -.344 | .107 | -.433 | .253 | -.506 | .298 | -.062 | -.029 | -.178 | .035 | -.283 | .149 | -.447 | .273 | -.497 | .323 |
| | .867 | --- | -.107 | --- | -.014 | --- | .083 | --- | .227 | --- | .271 | --- | -.065 | --- | .001 | --- | .113 | --- | .235 | --- | .287 |
| | .845 | -.129 | -.115 | -.247 | -.025 | -.351 | .073 | -.436 | .213 | -.503 | .258 | -.108 | -.096 | -.215 | -.031 | -.250 | .079 | -.454 | .212 | -.497 | .267 |
| | .800 | -.147 | -.124 | -.252 | -.035 | -.351 | .056 | -.441 | .188 | -.497 | .233 | -.133 | -.115 | -.235 | -.050 | -.273 | .064 | -.454 | .206 | -.495 | .262 |
| | .756 | -.152 | -.124 | -.242 | -.035 | -.343 | .054 | -.441 | .180 | -.491 | .226 | --- | -.137 | --- | -.075 | --- | .041 | --- | .184 | --- | .217 |
| | .711 | -.149 | --- | -.234 | --- | -.326 | --- | -.431 | --- | -.478 | --- | -.144 | -.131 | -.234 | -.068 | -.285 | .053 | -.443 | .206 | -.481 | .260 |
| | .667 | -.141 | --- | -.222 | --- | -.304 | --- | -.416 | --- | -.467 | --- | -.147 | -.129 | -.240 | -.063 | -.281 | .075 | -.425 | .215 | -.469 | .261 |
| | .622 | -.135 | -.115 | -.208 | -.040 | -.281 | .040 | -.406 | .163 | -.452 | .205 | -.146 | --- | -.237 | --- | -.278 | --- | -.353 | --- | -.439 | --- |
| | .578 | -.125 | -.110 | -.193 | -.037 | -.256 | .041 | -.394 | .168 | -.421 | .207 | -.142 | -.120 | -.229 | -.058 | -.271 | .068 | -.351 | .177 | -.367 | .218 |
| | .533 | -.118 | -.103 | -.185 | -.038 | -.246 | .042 | -.396 | .164 | -.412 | .206 | -.124 | -.113 | -.189 | -.040 | -.250 | .064 | -.334 | .171 | -.342 | .212 |
| | .446 | --- | -.081 | --- | -.023 | --- | .044 | --- | .163 | --- | .231 | -.116 | -.102 | -.194 | -.037 | -.227 | .055 | -.308 | .158 | -.384 | .205 |

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TABLE IV.— CONTINUED

| β = 5° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.664 | --- | 0.764 | --- | 0.818 | --- | 0.891 | --- | 0.888 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.176 | .344 | 0.062 | .462 | -0.056 | .566 | -0.176 | .693 | -0.259 | .725 | 0.415 | 0.453 | 0.282 | 0.579 | 0.002 | 0.632 | -0.331 | 0.783 | -0.417 | 0.808 |
| | .867 | .083 | .156 | -.030 | .262 | -.143 | .359 | -.246 | .512 | -.329 | .561 | .323 | .398 | .209 | .496 | .124 | .573 | -.225 | .699 | -.302 | .724 |
| | .800 | .044 | .099 | -.069 | .200 | -.177 | .299 | -.275 | .447 | -.355 | .497 | .253 | .320 | .151 | .406 | .074 | .486 | -.183 | .609 | -.257 | .636 |
| | .733 | .031 | .060 | -.079 | .159 | -.178 | .255 | -.283 | .394 | -.349 | .443 | .199 | .245 | .105 | .329 | .039 | .411 | -.118 | .533 | -.226 | .562 |
| | .667 | --- | .035 | --- | .133 | --- | .225 | --- | .354 | --- | .399 | .153 | .209 | .066 | .293 | -.002 | .373 | -.082 | .496 | -.170 | .524 |
| | .533 | .005 | .028 | -.074 | .155 | -.149 | .196 | -.263 | .312 | -.303 | .355 | .098 | .135 | .020 | .223 | -.045 | .302 | -.132 | .421 | -.153 | .451 |
| | .400 | -.009 | .023 | -.072 | .096 | -.133 | .167 | -.221 | .272 | -.258 | .313 | .060 | .096 | -.006 | .167 | -.064 | .242 | -.139 | .357 | -.164 | .388 |
| | .267 | .004 | .015 | -.058 | .082 | -.109 | .150 | -.177 | .252 | -.200 | .291 | .040 | .059 | -.018 | .125 | -.068 | .198 | -.138 | .314 | -.159 | .346 |
| | 0 | .002 | .021 | -.047 | .082 | -.096 | .144 | -.153 | .238 | -.178 | .277 | .031 | .047 | -.021 | .105 | -.067 | .169 | -.127 | .276 | -.146 | .305 |
| 0.50 | 1 | --- | .735 | --- | .813 | --- | .831 | --- | .820 | --- | .801 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .151 | .218 | -.014 | .354 | -.123 | .474 | -.271 | .625 | -.391 | .663 | .315 | .408 | .154 | .534 | -.182 | .610 | -.397 | .732 | -.471 | .803 |
| | .933 | .028 | .095 | -.094 | .222 | -.225 | .339 | -.311 | .494 | -.412 | .535 | .224 | .331 | .102 | .440 | -.088 | .512 | -.318 | .627 | -.381 | .657 |
| | .900 | --- | .093 | --- | .167 | -.247 | .273 | --- | .421 | -.427 | .469 | --- | .257 | --- | .350 | -.033 | .437 | -.307 | .561 | -.372 | .588 |
| | .867 | .008 | .026 | -.130 | .146 | -.250 | .257 | -.337 | .385 | -.421 | .431 | .131 | .192 | .016 | .283 | -.051 | .371 | -.301 | .493 | -.362 | .521 |
| | .800 | -.040 | -.006 | -.154 | .101 | -.259 | .188 | -.352 | .315 | -.420 | .359 | .034 | .111 | -.059 | .193 | -.140 | .278 | -.324 | .395 | -.373 | .426 |
| | .733 | -.058 | -.033 | -.166 | .059 | -.264 | .141 | -.355 | .261 | -.419 | .306 | -.009 | .029 | -.097 | .108 | -.167 | .191 | -.323 | .309 | -.375 | .342 |
| | .667 | -.088 | -.054 | -.178 | .029 | -.270 | .110 | -.370 | .226 | -.419 | .272 | -.041 | -.019 | -.121 | .058 | -.187 | .137 | -.296 | .248 | -.371 | .282 |
| | .600 | --- | -.062 | --- | .014 | --- | .095 | --- | .210 | --- | .253 | -.072 | -.055 | -.146 | .016 | -.200 | .092 | -.280 | .205 | -.316 | .239 |
| | .533 | -.095 | -.069 | -.170 | .006 | -.232 | .081 | -.345 | .188 | -.382 | .233 | -.090 | -.079 | -.158 | -.008 | -.217 | .070 | -.303 | .180 | -.320 | .220 |
| | .467 | -.090 | -.067 | -.159 | .004 | -.216 | .079 | -.325 | .186 | -.357 | .228 | -.097 | -.077 | -.161 | -.002 | -.213 | .071 | -.294 | .182 | -.313 | .213 |
| | .400 | -.090 | -.065 | -.155 | .005 | -.206 | .076 | -.306 | .173 | -.332 | .216 | -.096 | -.077 | -.159 | -.007 | -.211 | .073 | -.290 | .184 | -.306 | .220 |
| | .267 | -.079 | --- | -.135 | --- | -.182 | --- | -.239 | --- | -.258 | --- | -.075 | -.058 | -.132 | -.006 | -.178 | .076 | -.251 | .186 | -.266 | .223 |
| | .133 | -.062 | -.045 | -.118 | .013 | -.163 | .079 | -.203 | .169 | -.223 | .208 | -.057 | -.041 | -.110 | .020 | -.149 | .085 | -.211 | .188 | -.226 | .221 |
| | 0 | --- | -.043 | --- | .016 | --- | .079 | --- | .165 | --- | .202 | -.050 | -.036 | -.099 | .018 | -.137 | .087 | -.198 | .178 | -.214 | .208 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .201 | --- | .025 | --- | -.235 | --- | -.401 | --- | -.471 | --- |
| | .955 | .010 | .075 | -.119 | .191 | -.284 | .287 | -.375 | .436 | -.489 | .486 | .146 | .211 | .014 | .326 | -.209 | .410 | -.370 | .527 | -.435 | .558 |
| | .933 | -.034 | .032 | -.154 | .133 | -.279 | .211 | -.384 | .369 | -.476 | .410 | .060 | .137 | -.058 | .234 | -.229 | .324 | -.382 | .442 | -.439 | .474 |
| | .912 | -.058 | -.020 | -.177 | .085 | -.294 | .171 | -.386 | .314 | -.478 | .361 | .006 | .083 | -.101 | .175 | -.249 | .262 | --- | .383 | --- | .419 |
| | .889 | -.078 | -.045 | -.193 | .053 | -.305 | .137 | -.388 | .279 | -.475 | .326 | -.025 | .026 | -.125 | .111 | -.250 | .196 | -.396 | .317 | -.447 | .355 |
| | .867 | --- | -.069 | --- | .023 | --- | .109 | --- | .249 | --- | .298 | --- | -.018 | --- | .066 | --- | .153 | --- | .267 | --- | .310 |
| | .845 | -.111 | -.085 | -.219 | .005 | -.331 | .093 | -.395 | .231 | -.474 | .280 | -.082 | -.055 | -.171 | .027 | -.228 | .111 | -.408 | .233 | -.452 | .278 |
| | .800 | -.137 | -.103 | -.238 | -.015 | -.334 | .072 | -.406 | .203 | -.472 | .249 | -.112 | -.080 | -.198 | .001 | -.254 | .086 | -.414 | .217 | -.455 | .270 |
| | .756 | -.149 | -.107 | -.247 | -.022 | -.329 | .065 | -.411 | .191 | -.469 | .239 | --- | -.110 | --- | -.050 | --- | .055 | --- | .188 | --- | .238 |
| | .711 | -.156 | --- | -.251 | --- | -.231 | --- | -.413 | --- | -.462 | --- | -.135 | -.110 | -.215 | -.030 | -.279 | .059 | -.411 | .193 | -.448 | .241 |
| | .667 | -.155 | --- | -.243 | --- | -.323 | --- | -.412 | --- | -.456 | --- | -.141 | -.116 | -.219 | -.035 | -.283 | .054 | -.410 | .201 | -.441 | .267 |
| | .622 | -.150 | -.116 | -.233 | -.039 | -.308 | .043 | -.405 | .157 | -.446 | .205 | -.146 | --- | -.223 | --- | -.283 | --- | -.400 | --- | -.436 | --- |
| | .578 | -.142 | -.114 | -.221 | -.038 | -.285 | .041 | -.387 | .152 | -.421 | .208 | -.146 | -.121 | -.226 | -.042 | -.283 | .052 | -.359 | .189 | -.424 | .226 |
| | .533 | -.138 | -.111 | -.211 | -.035 | -.274 | .041 | -.381 | .156 | -.414 | .205 | -.136 | -.117 | -.203 | -.037 | -.262 | .065 | -.351 | .182 | -.360 | .218 |
| | .446 | --- | -.087 | --- | -.027 | --- | .044 | --- | .153 | --- | .203 | -.128 | -.107 | -.192 | -.022 | -.254 | .060 | -.342 | .163 | -.353 | .199 |

NACA

TABLE IV.— CONTINUED

$\beta = 5^{\circ}$

Left wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=0.1^{\circ}$ | | $\alpha=2.5^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.6^{\circ}$ | | $\alpha=10.1^{\circ}$ | | $\alpha=0.0^{\circ}$ | | $\alpha=2.7^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.8^{\circ}$ | | $\alpha=10.1^{\circ}$ | |
| x/cr | y/(x/2) | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.425 | --- | 0.522 | --- | 0.584 | --- | 0.618 | --- | 0.647 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.107 | .204 | -0.033 | .317 | -0.169 | .423 | -0.331 | .541 | -0.365 | .590 | 0.331 | 0.331 | 0.170 | 0.413 | -0.012 | 0.517 | -0.496 | 0.577 | -0.549 | 0.627 |
| | .867 | .048 | .062 | -.083 | .176 | -.214 | .284 | -.372 | .420 | -.396 | .486 | .250 | .289 | .128 | .360 | .070 | .453 | -.419 | .534 | -.486 | .577 |
| | .800 | .039 | .040 | -.072 | .145 | -.203 | .247 | -.341 | .379 | -.375 | .440 | .197 | .233 | .092 | .298 | .022 | .389 | -.154 | .479 | -.368 | .519 |
| | .733 | .041 | .027 | -.061 | .124 | -.172 | .218 | -.316 | .341 | -.353 | .398 | .165 | .180 | .069 | .244 | .004 | .332 | -.127 | .427 | -.156 | .473 |
| | .667 | --- | .026 | --- | .112 | --- | .197 | --- | .315 | --- | .367 | .134 | .158 | .046 | .225 | -.021 | .307 | -.119 | .406 | -.161 | .454 |
| | .533 | .025 | .029 | -.045 | .101 | -.112 | .178 | -.211 | .286 | -.256 | .332 | .095 | .117 | .022 | .180 | -.039 | .259 | -.124 | .359 | -.150 | .406 |
| | .400 | .017 | .025 | -.046 | .088 | -.103 | .158 | -.181 | .261 | -.202 | .301 | .070 | .070 | .006 | .143 | -.050 | .218 | -.127 | .318 | -.157 | .366 |
| | .267 | .023 | .018 | -.035 | .079 | -.086 | .149 | -.156 | .250 | -.180 | .287 | .061 | .066 | .004 | .121 | -.051 | .194 | -.122 | .293 | -.138 | .340 |
| | 0 | .019 | .016 | -.037 | .075 | -.089 | .145 | -.153 | .241 | -.186 | .271 | .046 | .046 | -.007 | .095 | -.058 | .170 | -.127 | .264 | -.145 | .311 |
| 0.50 | 1 | --- | .468 | --- | .534 | --- | .553 | --- | .518 | --- | .497 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .054 | .069 | -.117 | .229 | -.257 | .350 | -.473 | .484 | -.510 | .516 | .215 | .268 | .042 | .361 | -.336 | .462 | -.574 | .528 | -.585 | .575 |
| | .933 | -.014 | -.014 | -.188 | .129 | -.312 | .251 | -.467 | .391 | -.506 | .434 | .145 | .197 | .008 | .285 | -.214 | .386 | -.488 | .463 | -.518 | .512 |
| | .900 | --- | -.400 | -.175 | .091 | -.320 | .206 | -.468 | .335 | -.499 | .388 | --- | .141 | --- | .224 | -.116 | .325 | -.460 | .415 | -.497 | .464 |
| | .867 | -.036 | -.039 | -.157 | .077 | -.308 | .184 | -.454 | .309 | -.490 | .358 | .066 | .094 | -.041 | .175 | -.111 | .275 | -.431 | .369 | -.481 | .419 |
| | .800 | -.048 | -.480 | -.148 | .044 | -.279 | .140 | -.428 | .258 | -.472 | .304 | -.007 | .028 | -.098 | .107 | -.176 | .201 | -.414 | .299 | -.472 | .350 |
| | .733 | -.060 | -.065 | -.145 | .017 | -.245 | .108 | -.409 | .222 | -.448 | .268 | -.036 | -.029 | -.110 | .048 | -.182 | .136 | -.274 | .237 | -.429 | .289 |
| | .667 | -.071 | -.072 | -.148 | .003 | -.221 | .087 | -.375 | .199 | -.432 | .245 | -.056 | -.059 | -.122 | .015 | -.187 | .098 | -.263 | .199 | -.294 | .253 |
| | .600 | --- | -.072 | --- | .002 | --- | .078 | --- | .195 | --- | .240 | -.074 | -.081 | -.129 | -.007 | -.193 | .073 | -.268 | .184 | -.285 | .237 |
| | .533 | -.068 | -.071 | -.139 | -.005 | -.197 | .070 | -.344 | .173 | -.277 | .218 | -.083 | -.088 | -.139 | -.011 | -.202 | .067 | -.272 | .176 | -.294 | .229 |
| | .467 | -.063 | -.065 | -.127 | 0 | -.185 | .072 | -.239 | .182 | -.269 | .218 | -.079 | -.073 | -.129 | -.001 | -.190 | .075 | -.259 | .176 | -.279 | .226 |
| | .400 | -.060 | -.060 | -.124 | .001 | -.181 | .068 | -.241 | .172 | -.274 | .206 | -.072 | -.069 | -.124 | .005 | -.180 | .076 | -.248 | .182 | -.269 | .231 |
| | .267 | -.056 | --- | -.112 | --- | -.163 | --- | -.217 | --- | -.252 | --- | -.055 | -.054 | -.103 | .011 | -.154 | .084 | -.220 | .173 | -.242 | .220 |
| | .133 | -.050 | -.048 | -.103 | .009 | -.149 | .073 | -.208 | .166 | -.234 | .191 | -.043 | -.037 | -.090 | .017 | -.128 | .081 | -.197 | .168 | -.220 | .212 |
| | 0 | --- | -.053 | --- | .004 | --- | .068 | --- | .160 | --- | .204 | -.043 | -.052 | -.089 | .010 | -.133 | .078 | -.204 | .162 | -.224 | .209 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .117 | --- | -.069 | --- | -.360 | --- | -.581 | --- | -.563 | --- |
| | .955 | -.061 | -.064 | -.226 | .075 | -.358 | .192 | -.528 | .334 | -.513 | .403 | .064 | .071 | -.071 | .176 | -.328 | .277 | -.558 | .351 | -.549 | .439 |
| | .933 | -.081 | -.106 | -.239 | .025 | -.363 | .141 | -.529 | .276 | -.522 | .356 | -.016 | .010 | -.126 | .110 | -.332 | .210 | -.523 | .325 | -.543 | .381 |
| | .912 | -.099 | -.114 | -.244 | -.001 | -.360 | .108 | -.520 | .244 | -.514 | .310 | -.063 | -.031 | -.159 | .066 | -.334 | .163 | --- | .285 | --- | .342 |
| | .889 | -.113 | -.129 | -.242 | -.021 | -.364 | .087 | -.520 | .221 | -.511 | .288 | -.086 | -.079 | -.173 | .015 | -.307 | .113 | -.511 | .239 | -.529 | .298 |
| | .867 | --- | -.140 | --- | -.037 | --- | .067 | --- | .200 | --- | .264 | --- | -.110 | --- | -.014 | --- | .084 | --- | .212 | --- | .271 |
| | .845 | -.127 | -.143 | -.231 | -.043 | -.368 | .059 | -.505 | .188 | -.509 | .250 | -.126 | -.110 | --- | -.040 | -.253 | .060 | -.503 | .197 | -.528 | .255 |
| | .800 | -.134 | -.140 | -.229 | -.047 | -.349 | .048 | -.491 | .170 | -.506 | .229 | -.145 | -.148 | -.214 | -.048 | -.283 | .053 | -.495 | .194 | -.523 | .250 |
| | .756 | -.131 | -.128 | -.220 | -.041 | -.327 | .048 | -.473 | .166 | -.495 | .222 | --- | -.161 | --- | -.058 | --- | .041 | --- | .192 | --- | .225 |
| | .711 | -.125 | --- | -.207 | --- | -.305 | --- | -.459 | --- | -.492 | --- | -.141 | -.144 | -.201 | -.041 | -.279 | .070 | -.397 | .202 | -.505 | .256 |
| | .667 | -.116 | --- | -.193 | --- | -.279 | --- | -.423 | --- | -.501 | --- | -.133 | -.131 | -.194 | -.013 | -.273 | .085 | -.337 | .192 | -.417 | .241 |
| | .622 | -.108 | -.111 | -.180 | -.039 | -.255 | .039 | -.389 | .160 | -.473 | .212 | -.127 | --- | -.186 | --- | -.261 | --- | -.332 | --- | -.351 | --- |
| | .578 | -.097 | -.105 | -.165 | -.036 | -.230 | .048 | -.295 | .164 | -.387 | .217 | -.118 | -.112 | -.173 | -.012 | -.249 | .062 | -.322 | .162 | -.344 | .212 |
| | .533 | -.092 | -.097 | -.159 | -.030 | -.217 | .050 | -.275 | .166 | -.306 | .222 | -.106 | -.104 | -.153 | -.006 | -.226 | .060 | -.296 | .157 | -.326 | .211 |
| | .446 | --- | -.083 | --- | -.017 | --- | .055 | --- | .187 | --- | .273 | -.094 | -.099 | -.145 | -.012 | -.203 | .054 | -.274 | .164 | -.296 | .249 |

NACA

TABLE IV.– CONTINUED

| β = 9° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | -- | 0.737 | -- | 0.870 | -- | -- | -- | 0.967 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | .933 | 0.193 | .382 | 0.117 | .536 | -- | -- | -.119 | .745 | -- | -- | .456 | .513 | .317 | .628 | -- | -- | -.252 | .852 | -- | -- |
| | .867 | .094 | .179 | .010 | .306 | -- | -- | -.205 | .548 | -- | -- | .368 | .454 | .254 | .543 | -- | -- | -.151 | .755 | -- | -- |
| | .800 | .049 | .112 | -.047 | .235 | -- | -- | -.249 | .473 | -- | -- | .291 | .370 | .187 | .451 | -- | -- | -.119 | .684 | -- | -- |
| | .733 | .026 | .067 | -.056 | .186 | -- | -- | -.255 | .415 | -- | -- | .230 | .291 | .133 | .366 | -- | -- | -.091 | .569 | -- | -- |
| | .667 | -- | .032 | -- | .150 | -- | -- | -- | .370 | -- | -- | .176 | .242 | .085 | .324 | -- | -- | -.080 | .523 | -- | -- |
| | .533 | -.016 | .012 | -.079 | .127 | -- | -- | -.272 | .321 | -- | -- | .108 | .166 | .027 | .244 | -- | -- | -.122 | .436 | -- | -- |
| | .400 | -.031 | .007 | -.082 | .101 | -- | -- | -.240 | .275 | -- | -- | .063 | .106 | -.008 | .181 | -- | -- | -.140 | .364 | -- | -- |
| | .267 | -.026 | -.004 | -.069 | .115 | -- | -- | -.193 | .250 | -- | -- | .035 | .059 | -.027 | .130 | -- | -- | -.143 | .312 | -- | -- |
| | 0 | -.020 | -.001 | -.049 | .116 | -- | -- | -.156 | .234 | -- | -- | .023 | .042 | -.031 | .101 | -- | -- | -.128 | .268 | -- | -- |
| 0.50 | 1 | | .822 | -- | .930 | -- | -- | -- | .943 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | .967 | .176 | .265 | .082 | .425 | -- | -- | -.197 | .691 | -- | -- | .385 | .482 | .207 | .596 | -- | -- | -.325 | .811 | -- | -- |
| | .933 | .041 | .124 | -.039 | .280 | -- | -- | -.262 | .539 | -- | -- | .277 | .397 | .143 | .494 | -- | -- | -.236 | .694 | -- | -- |
| | .900 | -- | .074 | -- | .209 | -- | -- | -- | .458 | -- | -- | -- | .316 | -- | .407 | -- | -- | -.242 | .615 | -- | -- |
| | .867 | .021 | .048 | -.091 | .184 | -- | -- | -.305 | .419 | -- | -- | .173 | .242 | .057 | .333 | -- | -- | -.243 | .537 | -- | -- |
| | .800 | -.039 | .008 | -.120 | .132 | -- | -- | -.317 | .340 | -- | -- | .068 | .154 | -.027 | .237 | -- | -- | -.272 | .430 | -- | -- |
| | .733 | -.060 | -.029 | -.143 | .085 | -- | -- | -.329 | .279 | -- | -- | .011 | .063 | -.077 | .141 | -- | -- | -.293 | .335 | -- | -- |
| | .667 | -.099 | -.059 | -.167 | .051 | -- | -- | -.343 | .239 | -- | -- | -.024 | .006 | -.104 | .063 | -- | -- | -.287 | .270 | -- | -- |
| | .600 | --- | -.069 | -- | .031 | -- | -- | -- | .220 | -- | -- | -.063 | -.038 | -.136 | .034 | -- | -- | -.276 | .218 | -- | -- |
| | .533 | -.112 | -.073 | -.180 | .011 | | | -.355 | .191 | -- | -- | -.086 | -.069 | -.156 | .003 | -- | -- | -.295 | .187 | -- | -- |
| | .467 | -.111 | -.081 | -.167 | .011 | -- | -- | -.335 | .185 | -- | -- | -.098 | -.075 | -.164 | -.001 | -- | -- | -.297 | .176 | -- | -- |
| | .400 | -.113 | -.082 | -.162 | .018 | -- | -- | -.315 | .177 | -- | -- | -.104 | -.078 | -.168 | -.007 | -- | -- | -.296 | .173 | -- | -- |
| | .267 | -.100 | -- | -.137 | -- | -- | -- | -.269 | -- | -- | -- | -.084 | -.061 | -.141 | .007 | -- | -- | -.263 | .183 | -- | -- |
| | .133 | -.080 | -.057 | -.119 | .024 | -- | -- | -.208 | .168 | -- | -- | -.059 | -.039 | -.112 | .021 | -- | -- | -.210 | .185 | -- | -- |
| | 0 | -- | -.051 | -- | .030 | -- | -- | -- | .167 | -- | -- | -.047 | -.031 | -.098 | .026 | -- | -- | -.192 | .175 | -- | -- |
| 0.75 | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | .978 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | .251 | -- | .060 | -- | -- | -- | -.341 | -- | -- | -- |
| | .955 | .026 | .107 | -.075 | .245 | -- | -- | -.338 | .483 | -- | -- | .193 | .271 | .046 | .376 | -- | -- | -.311 | .587 | -- | -- |
| | .933 | -.022 | .059 | -.107 | .167 | -- | -- | -.341 | .400 | -- | -- | .099 | .188 | -.020 | .287 | -- | -- | -.327 | .491 | -- | -- |
| | .912 | -.048 | -.003 | -.138 | .129 | -- | -- | -.350 | .345 | -- | -- | .039 | .131 | -.067 | .224 | -- | -- | -- | .426 | -- | -- |
| | .889 | -.071 | -.026 | -.156 | .092 | -- | -- | -.354 | .306 | -- | -- | .005 | .070 | -.095 | .145 | -- | -- | -.351 | .353 | -- | -- |
| | .867 | --- | -.054 | -- | .058 | -- | -- | -- | .271 | -- | -- | -- | .029 | -- | .105 | -- | -- | -- | .297 | -- | -- |
| | .845 | -.106 | -.070 | -.185 | .037 | -- | -- | -.367 | .250 | -- | -- | -.055 | -.021 | -.146 | .060 | -- | -- | -.367 | .257 | -- | -- |
| | .800 | -.135 | -.092 | -.207 | .016 | -- | -- | -.378 | .220 | -- | -- | -.092 | -.050 | -.176 | .031 | -- | -- | -.378 | .234 | -- | -- |
| | .756 | -.150 | -.100 | -.218 | .005 | -- | -- | -.388 | .203 | -- | -- | -- | -.082 | -- | -.002 | -- | -- | -- | .201 | -- | -- |
| | .711 | -.162 | -- | -.227 | -- | -- | -- | -.390 | -- | -- | -- | -.121 | -.087 | -.200 | -.008 | -- | -- | -.380 | .198 | -- | -- |
| | .667 | -.164 | -- | -.230 | -- | -- | -- | -.393 | -- | -- | -- | -.128 | -.096 | -.206 | -.017 | -- | -- | -.380 | .190 | -- | -- |
| | .622 | -.160 | -.118 | -.233 | -.025 | -- | -- | -.391 | .163 | -- | -- | -.139 | -- | -.211 | -- | -- | -- | -.379 | -- | -- | -- |
| | .578 | -.156 | -.113 | -.229 | -.025 | -- | -- | -.386 | .158 | -- | -- | -.147 | -.113 | -.222 | -.032 | -- | -- | -.364 | .178 | -- | -- |
| | .533 | -.157 | -.121 | -.222 | -.024 | -- | -- | -.387 | .164 | -- | -- | -.142 | -.114 | -.208 | -.033 | -- | -- | -.350 | .183 | -- | -- |
| | .446 | -- | -.090 | -- | -.028 | -- | -- | -- | .144 | -- | -- | -.141 | -.110 | -.206 | -.030 | -- | -- | -.349 | .176 | -- | -- |

CONFIDENTIAL

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NACA

TABLE IV.– CONCLUDED

| $\beta = 9^\circ$ | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Left wing panel | | | | | | | | | | | | | | | | | | | | | |
| | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | $\alpha=-0.1^\circ$ | | $\alpha=2.5^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.6^\circ$ | | $\alpha=10.1^\circ$ | | $\alpha=0.0^\circ$ | | $\alpha=2.7^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.8^\circ$ | | $\alpha=10.1^\circ$ | |
| $x/c_r$ | $\frac{y}{b/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| | 1 | --- | 0.347 | --- | 0.438 | --- | --- | --- | 0.516 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.103 | .164 | -0.039 | .272 | --- | --- | -0.367 | .472 | --- | --- | 0.273 | 0.263 | 0.149 | 0.353 | --- | --- | -0.441 | 0.523 | --- | --- |
| | .867 | .049 | .048 | -.076 | .153 | --- | --- | -.384 | .384 | --- | --- | .211 | .238 | .105 | .307 | --- | --- | -.409 | .486 | --- | --- |
| | .800 | .039 | .034 | -.063 | .132 | --- | --- | -.339 | .350 | --- | --- | .171 | .191 | .076 | .256 | --- | --- | -.261 | .437 | --- | --- |
| | .733 | .046 | .029 | -.046 | .115 | --- | --- | -.323 | .318 | --- | --- | .144 | .149 | .059 | .215 | --- | --- | -.178 | .397 | --- | --- |
| 0.25 | .667 | --- | .029 | --- | .107 | --- | --- | --- | .295 | --- | --- | .120 | .133 | .041 | .198 | --- | --- | -.123 | .382 | --- | --- |
| | .533 | .037 | .031 | -.033 | .100 | --- | --- | -.191 | .273 | --- | --- | .089 | .100 | .022 | .162 | --- | --- | -.112 | .342 | --- | --- |
| | .400 | .027 | .025 | -.036 | .084 | --- | --- | -.173 | .252 | --- | --- | .070 | .074 | .008 | .134 | --- | --- | -.121 | .310 | --- | --- |
| | .267 | .033 | .019 | -.026 | .078 | --- | --- | -.150 | .244 | --- | --- | .063 | .058 | .008 | .117 | --- | --- | -.116 | .290 | --- | --- |
| | 0 | .021 | .013 | -.037 | .071 | --- | --- | -.160 | .236 | --- | --- | .040 | .027 | -.016 | .085 | --- | --- | -.133 | .261 | --- | --- |
| | 1 | --- | .362 | --- | .434 | --- | --- | --- | .391 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .054 | .033 | -.137 | .186 | --- | --- | -.506 | .431 | --- | --- | .173 | .187 | .018 | .297 | --- | --- | -.595 | .467 | --- | --- |
| | .933 | -.007 | -.028 | -.170 | .112 | --- | --- | -.479 | .353 | --- | --- | .112 | .137 | -.014 | .230 | --- | --- | -.518 | .412 | --- | --- |
| | .900 | --- | -.043 | -.155 | .074 | --- | --- | -.471 | .309 | --- | --- | --- | .096 | --- | .181 | --- | --- | -.490 | .377 | --- | --- |
| | .867 | -.028 | -.041 | -.142 | .064 | --- | --- | -.459 | .287 | --- | --- | .047 | .058 | -.044 | .142 | --- | --- | -.419 | .340 | --- | --- |
| | .800 | -.042 | -.047 | -.134 | .038 | --- | --- | -.446 | .244 | --- | --- | -.016 | .003 | -.098 | .084 | --- | --- | -.336 | .279 | --- | --- |
| | .733 | -.047 | -.058 | -.129 | .017 | --- | --- | -.437 | .213 | --- | --- | -.038 | -.042 | -.104 | .036 | --- | --- | -.316 | .230 | --- | --- |
| 0.50 | .667 | -.053 | -.063 | -.125 | .014 | --- | --- | -.339 | .197 | --- | --- | -.057 | -.065 | -.110 | .011 | --- | --- | -.279 | .206 | --- | --- |
| | .600 | --- | -.061 | --- | .015 | --- | --- | --- | .198 | --- | --- | -.069 | -.080 | -.112 | -.002 | --- | --- | -.253 | .193 | --- | --- |
| | .533 | -.055 | -.064 | -.117 | -.002 | --- | --- | -.247 | .177 | --- | --- | -.073 | -.083 | -.122 | -.009 | --- | --- | -.246 | .188 | --- | --- |
| | .467 | -.050 | -.055 | -.109 | .004 | --- | --- | -.228 | .183 | --- | --- | -.069 | -.073 | -.111 | -.001 | --- | --- | -.239 | .185 | --- | --- |
| | .400 | -.052 | -.051 | -.109 | .004 | --- | --- | -.228 | .177 | --- | --- | -.062 | -.067 | -.106 | -.001 | --- | --- | -.227 | .189 | --- | --- |
| | .267 | -.044 | --- | -.101 | --- | --- | --- | -.209 | --- | --- | --- | -.051 | -.051 | -.094 | -.009 | --- | --- | -.206 | .174 | --- | --- |
| | .133 | -.043 | -.047 | -.103 | .006 | --- | --- | -.205 | .165 | --- | --- | -.045 | -.047 | -.081 | -.014 | --- | --- | -.191 | .174 | --- | --- |
| | 0 | --- | -.055 | --- | -.001 | --- | --- | --- | .157 | --- | --- | -.050 | -.060 | -.094 | -.002 | --- | --- | -.203 | .168 | --- | --- |
| | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .081 | --- | -.080 | --- | --- | --- | -.589 | --- | --- | --- |
| | .955 | -.062 | -.087 | -.236 | .049 | --- | --- | -.526 | .312 | --- | --- | .041 | .014 | -.083 | .132 | --- | --- | -.560 | .353 | --- | --- |
| | .933 | -.074 | -.119 | -.234 | .002 | --- | --- | -.537 | .255 | --- | --- | -.037 | -.033 | -.137 | .073 | --- | --- | -.551 | .284 | --- | --- |
| | .912 | -.093 | -.126 | -.225 | -.013 | --- | --- | -.524 | .230 | --- | --- | -.075 | -.067 | -.165 | .034 | --- | --- | --- | .270 | --- | --- |
| | .889 | -.103 | -.136 | -.220 | -.030 | --- | --- | -.521 | .209 | --- | --- | -.092 | -.109 | -.177 | -.009 | --- | --- | -.533 | .232 | --- | --- |
| | .867 | --- | -.144 | --- | -.041 | --- | --- | --- | .191 | --- | --- | --- | -.133 | --- | -.033 | --- | --- | --- | .208 | --- | --- |
| 0.75 | .845 | -.113 | -.143 | -.215 | -.043 | --- | --- | -.508 | .180 | --- | --- | -.125 | -.151 | -.196 | -.051 | --- | --- | -.526 | .198 | --- | --- |
| | .800 | -.115 | -.134 | -.206 | -.046 | --- | --- | -.496 | .165 | --- | --- | -.137 | -.157 | -.205 | -.050 | --- | --- | -.511 | .196 | --- | --- |
| | .756 | -.112 | -.123 | -.194 | -.040 | --- | --- | -.482 | .170 | --- | --- | --- | -.159 | --- | -.053 | --- | --- | --- | .173 | --- | --- |
| | .711 | -.105 | --- | -.181 | --- | --- | --- | -.465 | --- | --- | --- | -.124 | -.137 | -.186 | -.027 | --- | --- | -.346 | .205 | --- | --- |
| | .667 | -.097 | --- | -.169 | --- | --- | --- | -.328 | --- | --- | --- | -.114 | -.122 | -.170 | -.018 | --- | --- | -.318 | .188 | --- | --- |
| | .622 | -.091 | -.105 | -.161 | -.036 | --- | --- | -.301 | .163 | --- | --- | -.108 | --- | -.162 | --- | --- | --- | -.322 | --- | --- | --- |
| | .578 | -.083 | -.098 | -.149 | -.031 | --- | --- | -.275 | .170 | --- | --- | -.103 | -.108 | -.153 | -.012 | --- | --- | -.309 | .164 | --- | --- |
| | .533 | -.078 | -.090 | -.142 | -.025 | --- | --- | -.266 | .176 | --- | --- | -.093 | -.105 | -.141 | -.013 | --- | --- | -.287 | .167 | --- | --- |
| | .446 | --- | -.082 | --- | -.007 | --- | --- | --- | .209 | --- | --- | -.086 | -.095 | -.134 | -.019 | --- | --- | -.257 | .212 | --- | --- |

CONFIDENTIAL

# TABLE V.– EXPERIMENTAL PRESSURE COEFFICIENTS

[M = 1.53]

| β = 0° | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | | 0.593 | - - - | 0.671 | - - - | 0.722 | - - - | 0.767 | - - - | 0.757 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .933 | 0.177 | .257 | 0.076 | .360 | -0.032 | .458 | -0.162 | .565 | -0.211 | .605 | 0.364 | 0.380 | 0.242 | 0.486 | 0.064 | 0.563 | -0.286 | 0.687 | -0.377 | 0.689 |
| | .867 | .081 | .125 | -.022 | .222 | -.117 | .317 | -.216 | .453 | -.259 | .483 | .291 | .327 | .201 | .415 | .095 | .486 | -.191 | .596 | -.279 | .621 |
| | .800 | .034 | .080 | -.061 | .173 | -.155 | .266 | -.241 | .405 | -.272 | .434 | .225 | .272 | .148 | .351 | .052 | .421 | -.152 | .530 | -.242 | .559 |
| | .733 | .036 | .041 | -.060 | .114 | -.152 | .215 | -.252 | .344 | -.286 | .376 | .177 | .222 | .105 | .297 | .023 | .368 | -.090 | .477 | -.204 | .508 |
| | .667 | - - - | .035 | - - - | .110 | - - - | .206 | - - - | .325 | - - - | .354 | .146 | .185 | .077 | .258 | .006 | .334 | -.088 | .440 | -.153 | .474 |
| | .533 | .021 | .031 | -.052 | .100 | -.118 | .179 | -.220 | .286 | -.247 | .314 | .106 | .134 | .041 | .201 | -.011 | .276 | -.111 | .376 | -.139 | .411 |
| | .400 | .014 | .028 | -.049 | .089 | -.103 | .159 | -.184 | .258 | -.211 | .284 | .077 | .094 | .019 | .156 | -.020 | .222 | -.115 | .322 | -.137 | .357 |
| | .267 | .012 | .024 | -.046 | .079 | -.093 | .146 | -.159 | .238 | -.173 | .264 | .064 | .071 | .011 | .129 | -.023 | .193 | -.105 | .291 | -.125 | .325 |
| | 0 | .023 | .028 | -.031 | .079 | -.076 | .140 | -.133 | .229 | -.151 | .253 | .053 | .066 | .004 | .121 | -.039 | .179 | -.104 | .273 | -.125 | .307 |
| 0.50 | 1 | - - - | .589 | - - - | .620 | - - - | .649 | - - - | .650 | - - - | .630 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .967 | .151 | .192 | .016 | .293 | -.104 | .418 | -.260 | .552 | -.328 | .580 | .286 | .341 | .128 | .458 | -.181 | .545 | -.352 | .641 | -.432 | .674 |
| | .933 | .050 | .090 | -.081 | .190 | -.175 | .303 | -.289 | .440 | -.339 | .470 | .204 | .271 | .085 | .367 | -.092 | .454 | -.282 | .552 | -.351 | .588 |
| | .900 | - - - | .032 | - - - | .140 | - - - | .246 | - - - | .385 | - - - | .407 | .162 | .213 | .053 | .299 | -.026 | .380 | -.257 | .486 | -.337 | .521 |
| | .867 | 0 | .012 | -.110 | .118 | -.207 | .219 | -.297 | .349 | -.329 | .377 | .129 | .165 | .026 | .250 | -.036 | .329 | -.253 | .437 | -.324 | .468 |
| | .800 | -.025 | -.011 | -.130 | .084 | -.218 | .171 | -.308 | .288 | -.338 | .317 | .056 | .098 | -.032 | .172 | -.113 | .251 | -.259 | .358 | -.325 | .386 |
| | .733 | -.039 | -.032 | -.133 | .048 | -.225 | .127 | -.310 | .240 | -.334 | .268 | .015 | .038 | -.064 | .108 | -.144 | .184 | -.259 | .292 | -.325 | .318 |
| | .667 | -.061 | -.046 | -.142 | .025 | -.229 | .100 | -.324 | .210 | -.351 | .238 | -.017 | -.005 | -.088 | .065 | -.158 | .134 | -.220 | .245 | -.314 | .266 |
| | .600 | -.074 | -.051 | -.142 | .015 | -.213 | .087 | -.307 | .193 | -.292 | .224 | -.042 | -.035 | -.108 | .031 | -.173 | .096 | -.231 | .208 | -.257 | .233 |
| | .533 | -.065 | -.056 | -.133 | .009 | -.193 | .083 | -.292 | .187 | -.309 | .216 | -.051 | -.051 | -.118 | .015 | -.176 | .072 | -.238 | .185 | -.258 | .212 |
| | .467 | -.062 | -.046 | -.125 | .015 | -.180 | .083 | -.275 | .177 | -.302 | .206 | -.062 | -.053 | -.124 | .013 | -.177 | .074 | -.238 | .178 | -.255 | .214 |
| | .400 | -.061 | -.049 | -.123 | .005 | -.173 | .070 | -.243 | .174 | -.270 | .199 | -.059 | -.051 | -.118 | .017 | -.169 | .073 | -.224 | .177 | -.243 | .212 |
| | .267 | -.053 | -.044 | -.109 | .007 | -.155 | .067 | -.205 | .160 | -.215 | .185 | -.042 | -.031 | -.098 | .032 | -.147 | .087 | -.194 | .186 | -.214 | .219 |
| | .133 | -.046 | -.037 | -.100 | .012 | -.143 | .070 | -.192 | .159 | -.200 | .181 | -.027 | -.016 | -.082 | .046 | -.126 | .087 | -.168 | .184 | -.190 | .214 |
| | 0 | -.046 | -.040 | -.096 | .008 | -.138 | .066 | -.186 | .153 | -.202 | .176 | -.019 | -.010 | -.069 | .041 | -.115 | .086 | -.155 | .176 | -.178 | .204 |
| 0.75 | 1 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .978 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | .204 | - - - | .045 | - - - | -.212 | - - - | -.355 | - - - | -.427 | - - - |
| | .955 | .008 | .047 | -.099 | .163 | -.228 | .264 | -.334 | .395 | -.350 | .424 | .162 | .191 | .030 | .285 | -.193 | .361 | -.332 | .461 | -.396 | .496 |
| | .933 | -.021 | -.008 | -.130 | .118 | -.231 | .208 | -.342 | .348 | -.369 | .371 | .087 | .131 | -.018 | .218 | -.202 | .288 | -.319 | .395 | -.396 | .426 |
| | .912 | -.046 | - - - | -.152 | - - - | -.244 | - - - | -.345 | - - - | -.366 | - - - | .046 | .080 | -.048 | .166 | -.199 | .230 | - - - | .337 | - - - | .369 |
| | .889 | -.063 | -.050 | -.164 | .048 | -.254 | .138 | -.347 | .262 | -.369 | .293 | .010 | .036 | -.080 | .112 | -.215 | .176 | -.326 | .285 | -.398 | .316 |
| | .867 | - - - | -.077 | - - - | .022 | - - - | .107 | - - - | .235 | - - - | .266 | - - - | .002 | - - - | .076 | - - - | .139 | - - - | .251 | - - - | .282 |
| | .845 | -.091 | -.082 | -.186 | .009 | -.272 | .092 | -.351 | .220 | -.375 | .250 | -.041 | -.025 | -.124 | .047 | -.195 | .109 | -.338 | .227 | -.403 | .258 |
| | .800 | -.107 | -.093 | -.199 | -.006 | -.281 | .072 | -.358 | .197 | -.383 | .227 | -.069 | -.054 | -.147 | .016 | -.217 | .075 | -.341 | .204 | -.401 | .239 |
| | .756 | -.120 | -.093 | -.209 | -.011 | -.286 | .066 | -.361 | .200 | -.384 | .214 | - - - | -.080 | - - - | -.011 | - - - | .047 | - - - | .179 | - - - | .212 |
| | .711 | -.119 | -.106 | -.204 | -.028 | -.285 | .046 | -.363 | .178 | -.387 | .199 | -.097 | -.081 | -.164 | -.008 | -.235 | .048 | -.336 | .184 | -.394 | .228 |
| | .667 | -.115 | - - - | -.186 | - - - | -.278 | - - - | -.359 | - - - | -.382 | - - - | -.104 | -.090 | -.166 | -.012 | -.234 | .052 | -.332 | .182 | -.384 | .218 |
| | .622 | -.116 | -.100 | -.191 | -.031 | -.263 | .044 | -.342 | .156 | -.364 | .188 | -.107 | - - - | -.169 | - - - | -.231 | - - - | -.295 | - - - | -.370 | - - - |
| | .578 | -.103 | -.096 | -.166 | -.024 | -.238 | .044 | - - - | .155 | - - - | .179 | -.108 | -.092 | -.166 | -.014 | -.226 | .054 | -.289 | .163 | -.330 | .200 |
| | .533 | -.104 | -.089 | -.171 | -.025 | -.230 | .049 | -.332 | .160 | -.349 | .182 | -.104 | -.087 | -.160 | -.010 | -.212 | .055 | -.280 | .158 | -.298 | .195 |
| | .446 | - - - | -.088 | - - - | -.024 | - - - | .051 | - - - | .149 | - - - | .173 | -.094 | -.080 | -.146 | -.016 | -.197 | .046 | -.264 | .142 | -.284 | .177 |

NACA

TABLE V.– CONTINUED

| β = 5° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.715 | --- | 0.777 | --- | 0.832 | --- | 0.897 | --- | 0.877 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.230 | .329 | 0.131 | .489 | 0.019 | .519 | -0.097 | .657 | -0.164 | .677 | 0.418 | 0.450 | 0.287 | 0.561 | 0.083 | 0.646 | -0.193 | 0.746 | -0.277 | 0.786 |
| | .867 | .111 | .165 | .021 | .268 | -.075 | .360 | -.165 | .494 | -.234 | .518 | .339 | .388 | .238 | .481 | .131 | .555 | -.119 | .660 | -.198 | .693 |
| | .800 | .049 | .108 | -.035 | .207 | -.124 | .297 | -.205 | .434 | -.263 | .458 | .262 | .323 | .173 | .407 | .078 | .478 | -.089 | .579 | -.169 | .619 |
| | .733 | .042 | .055 | -.043 | .133 | -.130 | .231 | -.217 | .363 | -.270 | .395 | .204 | .261 | .121 | .343 | .036 | .412 | -.074 | .515 | -.158 | .553 |
| | .667 | --- | .041 | --- | .120 | --- | .215 | --- | .339 | --- | .368 | .166 | .216 | .088 | .296 | .010 | .366 | -.074 | .470 | -.144 | .510 |
| | .533 | .011 | .023 | -.068 | .101 | -.145 | .181 | -.236 | .293 | -.261 | .320 | .112 | .152 | .041 | .226 | -.031 | .295 | -.103 | .397 | -.134 | .436 |
| | .400 | 0. | .020 | -.068 | .087 | -.128 | .157 | -.206 | .259 | -.225 | .285 | .076 | .101 | .009 | .166 | -.050 | .230 | -.111 | .333 | -.142 | .370 |
| | .267 | -.003 | .012 | -.063 | .073 | -.113 | .137 | -.175 | .234 | -.188 | .259 | .056 | .067 | -.004 | .127 | -.055 | .189 | -.104 | .288 | -.131 | .325 |
| | 0 | .006 | .014 | -.047 | .069 | -.094 | .127 | -.142 | .219 | -.158 | .241 | .039 | .058 | -.012 | .112 | -.060 | .169 | -.099 | .263 | -.125 | .296 |
| 0.50 | 1 | --- | .710 | --- | .755 | --- | .773 | --- | .805 | --- | .775 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .196 | .251 | .081 | .363 | -.050 | .469 | -.160 | .631 | -.269 | .650 | .354 | .433 | .204 | .563 | -.108 | .619 | -.278 | .718 | -.354 | .765 |
| | .933 | .071 | .129 | -.037 | .237 | -.141 | .334 | -.229 | .496 | -.299 | .523 | .262 | .349 | .151 | .462 | -.036 | .512 | -.212 | .619 | -.278 | .661 |
| | .900 | --- | .068 | --- | .178 | --- | .281 | --- | .426 | --- | .447 | .213 | .279 | .109 | .379 | .006 | .433 | -.202 | .538 | -.271 | .576 |
| | .867 | .019 | .042 | -.075 | .147 | -.172 | .247 | -.257 | .386 | -.313 | .405 | .175 | .222 | .075 | .312 | -.017 | .371 | -.200 | .477 | -.265 | .514 |
| | .800 | -.018 | .007 | -.105 | .104 | -.192 | .191 | -.274 | .317 | -.323 | .338 | .088 | .149 | .002 | .228 | -.093 | .282 | -.220 | .386 | -.276 | .423 |
| | .733 | -.039 | -.028 | -.123 | .061 | -.205 | .139 | -.280 | .258 | -.326 | .280 | .037 | .076 | -.042 | .145 | -.128 | .203 | -.227 | .306 | -.286 | .344 |
| | .667 | -.070 | -.051 | -.152 | .031 | -.228 | .106 | -.300 | .219 | -.341 | .242 | .003 | .025 | -.075 | .688 | -.152 | .147 | -.235 | .246 | -.289 | .282 |
| | .600 | -.078 | -.060 | -.156 | .016 | -.228 | .087 | -.303 | .197 | -.312 | .220 | -.031 | -.013 | -.103 | .045 | -.173 | .101 | -.226 | .199 | -.279 | .237 |
| | .533 | -.082 | -.064 | -.155 | .004 | -.224 | .074 | -.305 | .178 | -.322 | .205 | -.050 | -.037 | -.117 | .028 | -.183 | .075 | -.248 | .166 | -.265 | .204 |
| | .467 | -.081 | -.066 | -.147 | -.001 | -.207 | .053 | -.288 | .176 | -.308 | .195 | -.061 | -.047 | -.128 | .008 | -.189 | .068 | -.256 | .160 | -.278 | .195 |
| | .400 | -.081 | -.065 | -.143 | -.003 | -.196 | .042 | -.275 | .160 | -.290 | .184 | -.065 | -.051 | -.128 | .002 | -.185 | .066 | -.251 | .157 | -.274 | .193 |
| | .267 | -.071 | -.058 | -.125 | .003 | -.166 | .038 | -.229 | .153 | -.231 | .174 | -.057 | -.043 | -.106 | .013 | -.160 | .076 | -.223 | .164 | -.245 | .201 |
| | .133 | -.060 | -.048 | -.110 | .006 | -.154 | .042 | -.206 | .149 | -.206 | .175 | -.043 | -.015 | -.082 | .025 | -.132 | .085 | -.191 | .166 | -.210 | .200 |
| | 0 | -.055 | -.046 | -.102 | .006 | -.144 | .043 | -.191 | .144 | -.203 | .167 | -.033 | -.019 | -.068 | .033 | -.114 | .083 | -.175 | .161 | -.196 | .196 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .255 | --- | .095 | --- | -.166 | --- | -.292 | --- | -.369 | --- |
| | .955 | .037 | .096 | -.054 | .210 | -.181 | .305 | -.292 | .440 | -.354 | .458 | .206 | .253 | .080 | .346 | -.150 | .409 | -.273 | .522 | -.344 | .559 |
| | .933 | .003 | .023 | -.090 | .158 | -.189 | .247 | -.299 | .384 | -.363 | .396 | .121 | .182 | .020 | .270 | -.158 | .326 | -.273 | .438 | -.342 | .475 |
| | .912 | -.026 | --- | -.114 | --- | -.208 | --- | -.306 | --- | -.366 | --- | .073 | .123 | -.014 | .208 | -.166 | .273 | --- | .372 | --- | .409 |
| | .889 | -.044 | -.021 | -.130 | .079 | -.221 | .164 | -.308 | .284 | -.366 | .311 | .032 | .072 | -.049 | .150 | -.185 | .213 | -.291 | .314 | -.355 | .351 |
| | .867 | --- | -.046 | --- | .049 | --- | .127 | --- | .252 | --- | .280 | --- | .034 | --- | .107 | --- | .170 | --- | .273 | --- | .311 |
| | .845 | -.078 | -.060 | -.158 | .032 | -.224 | .110 | -.319 | .233 | -.371 | .262 | -.025 | .002 | -.101 | .075 | -.175 | .139 | -.307 | .241 | -.365 | .280 |
| | .800 | -.102 | -.080 | -.177 | .012 | -.258 | .084 | -.330 | .206 | -.375 | .234 | -.056 | -.033 | -.130 | .039 | -.198 | .103 | -.311 | .210 | -.367 | .250 |
| | .756 | -.118 | -.087 | -.191 | .001 | -.268 | .076 | -.338 | .192 | -.378 | .220 | --- | -.066 | --- | .005 | --- | .070 | --- | .177 | --- | .217 |
| | .711 | -.124 | -.104 | -.198 | -.022 | -.271 | .060 | -.342 | .172 | -.378 | .201 | -.077 | -.077 | -.159 | 0. | -.226 | .066 | -.315 | .174 | -.364 | .220 |
| | .667 | -.123 | --- | -.184 | --- | -.270 | --- | -.343 | --- | -.378 | --- | -.108 | -.087 | -.160 | -.010 | -.232 | .056 | -.317 | .168 | -.360 | .222 |
| | .622 | -.129 | -.105 | -.203 | -.027 | -.273 | .043 | -.341 | .147 | -.368 | .178 | -.117 | --- | -.166 | --- | -.234 | --- | -.311 | --- | -.356 | --- |
| | .578 | -.120 | -.107 | -.186 | -.037 | -.262 | .035 | --- | .141 | --- | .176 | -.123 | -.101 | -.168 | -.026 | -.234 | .052 | -.294 | .162 | -.348 | .202 |
| | .533 | -.123 | -.103 | -.194 | -.035 | -.260 | .050 | -.335 | .148 | -.353 | .181 | -.121 | -.103 | -.174 | -.024 | -.224 | .051 | -.280 | .158 | -.321 | .198 |
| | .446 | --- | -.095 | --- | -.034 | --- | .044 | --- | .140 | --- | .173 | -.121 | -.101 | -.178 | -.019 | -.220 | .027 | -.283 | .142 | -.308 | .193 |

CONFIDENTIAL

## TABLE V.— CONTINUED

$\beta = 5^{\circ}$

Left wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^{\circ}$ | | $\alpha=2.5^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.6^{\circ}$ | | $\alpha=10.1^{\circ}$ | | $\alpha=0.0^{\circ}$ | | $\alpha=2.7^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.8^{\circ}$ | | $\alpha=10.1^{\circ}$ | |
| $x/c_r$ | $y/w/2$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | - - - | 0.407 | - - - | 0.546 | - - - | 0.595 | - - - | 0.632 | - - - | 0.667 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .933 | 0.145 | .187 | 0.026 | .286 | -0.088 | .387 | -0.243 | .507 | -0.262 | .555 | 0.306 | 0.288 | 0.195 | 0.406 | -0.025 | 0.506 | -0.397 | 0.577 | -0.436 | 0.522 |
| | .867 | .064 | .074 | -.043 | .181 | -.147 | .282 | -.290 | .412 | -.281 | .469 | .245 | .258 | .157 | .348 | .075 | .438 | -.274 | .523 | -.330 | .571 |
| | .800 | .039 | .049 | -.059 | .146 | -.159 | .244 | -.285 | .373 | -.293 | .429 | .192 | .215 | .115 | .297 | .034 | .383 | -.190 | .473 | -.279 | .521 |
| | .733 | .043 | .019 | -.053 | .101 | -.145 | .202 | -.269 | .327 | -.293 | .375 | .156 | .177 | .086 | .257 | .011 | .339 | -.092 | .431 | -.179 | .480 |
| | .667 | - - - | .025 | - - - | .100 | - - - | .196 | - - - | .308 | - - - | .356 | .133 | .151 | .070 | .229 | -.002 | .310 | -.097 | .404 | -.115 | .453 |
| | .533 | .049 | .025 | -.043 | .091 | -.097 | .173 | -.189 | .278 | -.242 | .321 | .103 | .111 | .052 | .181 | -.014 | .259 | -.101 | .351 | -.115 | .401 |
| | .400 | .022 | .024 | -.042 | .081 | -.087 | .157 | -.156 | .254 | -.187 | .294 | .079 | .082 | .037 | .144 | -.026 | .218 | -.104 | .310 | -.112 | .357 |
| | .267 | .022 | .019 | -.039 | .073 | -.081 | .146 | -.141 | .239 | -.166 | .279 | .076 | .076 | .034 | .126 | -.027 | .196 | -.094 | .287 | -.098 | .332 |
| | 0 | .024 | .017 | -.033 | .067 | -.076 | .138 | -.135 | .229 | -.150 | .269 | .051 | .057 | .010 | .113 | -.034 | .179 | -.106 | .269 | -.117 | .312 |
| 0.50 | 1 | - - - | .438 | - - - | .489 | - - - | .523 | - - - | .514 | - - - | .509 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .967 | .095 | .101 | -.049 | .223 | .169 | .356 | -.368 | .481 | -.355 | .531 | .216 | .238 | .086 | .368 | -.238 | .472 | -.455 | .548 | -.475 | .586 |
| | .933 | .012 | .012 | -.121 | .135 | .229 | .263 | -.376 | .389 | -.369 | .442 | .151 | .181 | .052 | .295 | -.129 | .393 | -.372 | .478 | -.410 | .514 |
| | .900 | - - - | -.015 | - - - | .106 | - - - | .215 | - - - | .343 | - - - | .399 | .115 | .136 | .025 | .233 | -.044 | .327 | -.352 | .417 | -.382 | .464 |
| | .867 | -.009 | -.022 | -.125 | .088 | -.232 | .192 | -.368 | .313 | -.354 | .366 | .090 | .099 | .008 | .191 | -.062 | .284 | -.335 | .377 | -.369 | .424 |
| | .800 | -.029 | -.029 | -.127 | .058 | -.234 | .150 | -.356 | .262 | -.359 | .312 | .029 | .045 | -.038 | .123 | -.116 | .215 | -.320 | .310 | -.363 | .355 |
| | .733 | -.037 | -.045 | -.123 | .028 | -.215 | .115 | -.342 | .222 | -.351 | .269 | -.004 | -.004 | -.066 | .074 | -.134 | .161 | -.242 | .255 | -.348 | .301 |
| | .667 | -.052 | -.055 | -.132 | .011 | -.196 | .095 | -.319 | .198 | -.348 | .249 | -.024 | -.033 | -.088 | .040 | -.141 | .120 | -.214 | .219 | -.256 | .262 |
| | .600 | -.051 | -.056 | -.116 | .006 | -.187 | .086 | -.282 | .191 | -.327 | .237 | -.042 | -.053 | -.102 | .018 | -.152 | .091 | -.223 | .197 | -.242 | .239 |
| | .533 | -.050 | -.055 | -.119 | .008 | -.170 | .086 | -.243 | .177 | -.320 | .222 | -.050 | -.062 | -.109 | .004 | -.153 | .081 | -.221 | .188 | -.240 | .232 |
| | .467 | -.048 | -.052 | -.113 | .004 | -.157 | .077 | -.208 | .174 | -.244 | .220 | -.051 | -.060 | -.110 | .005 | -.149 | .085 | -.217 | .192 | -.237 | .233 |
| | .400 | -.049 | -.047 | -.110 | .007 | -.151 | .075 | -.208 | .172 | -.243 | .209 | -.045 | -.053 | -.102 | .011 | -.135 | .089 | -.205 | .186 | -.224 | .235 |
| | .267 | -.042 | -.044 | -.099 | .004 | -.136 | .072 | -.186 | .166 | -.212 | .197 | -.031 | -.032 | -.084 | .028 | -.126 | .108 | -.177 | .189 | -.199 | .234 |
| | .133 | -.038 | -.040 | -.091 | .006 | -.128 | .074 | -.183 | .160 | -.200 | .197 | -.018 | -.023 | -.071 | .037 | -.115 | .101 | -.161 | .177 | -.182 | .219 |
| | 0 | -.041 | -.046 | -.093 | .001 | -.130 | .069 | -.182 | .154 | -.201 | .191 | -.015 | -.020 | -.066 | .043 | -.110 | .094 | -.159 | .175 | -.178 | .217 |
| 0.75 | 1 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .978 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | .147 | - - - | .008 | - - - | -.260 | - - - | -.456 | - - - | -.473 | - - - |
| | .955 | -.023 | -.025 | -.139 | .110 | -.257 | .208 | -.441 | .338 | -.393 | .386 | .106 | .106 | -.006 | .215 | -.238 | .306 | -.427 | .393 | -.452 | .435 |
| | .933 | -.046 | -.064 | -.164 | .078 | -.265 | .175 | -.437 | .289 | -.401 | .362 | .042 | .054 | -.055 | .151 | -.236 | .241 | -.407 | .334 | -.430 | .381 |
| | .912 | -.068 | - - - | -.179 | - - - | -.271 | - - - | -.435 | - - - | -.401 | - - - | .006 | .011 | -.076 | .105 | -.222 | .191 | - - - | .288 | - - - | .336 |
| | .889 | -.080 | -.088 | -.187 | .011 | -.278 | .108 | -.431 | .227 | -.401 | .282 | -.025 | -.039 | -.107 | .059 | -.225 | .144 | -.404 | .247 | -.424 | .298 |
| | .867 | - - - | -.104 | - - - | -.010 | - - - | .083 | - - - | .206 | - - - | .258 | - - - | -.053 | - - - | .030 | - - - | .114 | - - - | .222 | - - - | .275 |
| | .845 | -.099 | -.108 | -.197 | -.019 | -.291 | .075 | -.426 | .195 | -.404 | .245 | -.066 | -.071 | -.142 | .010 | -.199 | .092 | -.405 | .205 | -.426 | .260 |
| | .800 | -.108 | -.110 | -.199 | -.026 | -.295 | .060 | -.415 | .178 | -.405 | .226 | -.083 | -.092 | -.158 | -.014 | -.220 | .070 | -.397 | .194 | -.423 | .250 |
| | .756 | -.111 | -.104 | -.199 | -.027 | -.284 | .061 | -.400 | .186 | -.400 | .220 | - - - | -.107 | - - - | -.034 | - - - | .053 | - - - | .175 | - - - | .228 |
| | .711 | -.105 | -.109 | -.191 | -.038 | -.264 | .073 | -.383 | .166 | -.393 | .213 | -.094 | -.100 | -.162 | -.020 | -.228 | .070 | -.353 | .199 | -.413 | .245 |
| | .667 | -.087 | - - - | -.170 | - - - | -.246 | - - - | -.363 | - - - | -.388 | - - - | -.094 | -.097 | -.158 | -.016 | -.220 | .077 | -.288 | .185 | -.393 | .230 |
| | .622 | -.095 | -.097 | -.171 | -.033 | -.229 | .052 | -.339 | .155 | -.379 | .198 | -.092 | - - - | -.153 | - - - | -.214 | - - - | -.277 | - - - | -.315 | - - - |
| | .578 | -.081 | -.091 | -.150 | -.032 | -.206 | .050 | - - - | .152 | - - - | .183 | -.084 | -.088 | -.147 | -.006 | -.204 | .075 | -.271 | .164 | -.294 | .213 |
| | .533 | -.083 | -.085 | -.153 | -.029 | -.200 | .062 | -.296 | .158 | -.357 | .200 | -.077 | -.079 | -.137 | -.003 | -.194 | .072 | -.254 | .153 | -.280 | .204 |
| | .446 | - - - | -.078 | - - - | -.023 | - - - | .062 | - - - | .154 | - - - | .195 | -.067 | -.067 | -.123 | -.008 | -.173 | .050 | -.235 | .136 | -.255 | .182 |

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## TABLE V.– CONTINUED

| β = 9° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{b/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | - - - | 0.776 | - - - | 0.895 | - - - | - - - | - - - | 0.997 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .933 | 0.267 | .376 | 0.196 | .510 | - - - | - - - | -0.043 | .707 | - - - | - - - | 0.485 | 0.526 | 0.321 | 0.621 | - - - | - - - | -0.104 | 0.841 | - - - | - - - |
| | .867 | .144 | .207 | .052 | .309 | - - - | - - - | -.129 | .526 | - - - | - - - | .387 | .447 | .270 | .529 | - - - | - - - | -.046 | .734 | - - - | - - - |
| | .800 | .070 | .134 | -.017 | .237 | - - - | - - - | -.181 | .452 | - - - | - - - | .299 | .371 | .199 | .447 | - - - | - - - | -.036 | .638 | - - - | - - - |
| | .733 | .056 | .072 | -.026 | .153 | - - - | - - - | -.192 | .373 | - - - | - - - | .233 | .297 | .139 | .371 | - - - | - - - | -.035 | .562 | - - - | - - - |
| | .667 | - - - | .047 | - - - | .124 | - - - | - - - | - - - | .344 | - - - | - - - | .188 | .246 | .098 | .316 | - - - | - - - | -.046 | .510 | - - - | - - - |
| | .533 | -.005 | .013 | -.081 | .100 | - - - | - - - | -.229 | .290 | - - - | - - - | .121 | .170 | -.037 | .234 | - - - | - - - | -.081 | .424 | - - - | - - - |
| | .400 | -.024 | 0 | -.087 | .079 | - - - | - - - | -.230 | .251 | - - - | - - - | .074 | .105 | 0 | .165 | - - - | - - - | -.109 | .346 | - - - | - - - |
| | .267 | -.028 | -.008 | -.083 | .062 | - - - | - - - | -.197 | .218 | - - - | - - - | .047 | .062 | -.019 | .118 | - - - | - - - | -.115 | .290 | - - - | - - - |
| | 0 | -.018 | -.005 | -.062 | .056 | - - - | - - - | -.154 | .196 | - - - | - - - | .025 | .050 | -.030 | .095 | - - - | - - - | -.113 | .254 | - - - | - - - |
| 0.50 | 1 | - - - | .818 | - - - | .887 | - - - | - - - | - - - | .928 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .967 | .245 | .306 | .137 | .436 | - - - | - - - | -.099 | .681 | - - - | - - - | .437 | .528 | .251 | .611 | - - - | - - - | -.202 | .827 | - - - | - - - |
| | .933 | .103 | .170 | .013 | .290 | - - - | - - - | -.188 | .529 | - - - | - - - | .335 | .434 | .190 | .500 | - - - | - - - | -.147 | .709 | - - - | - - - |
| | .900 | - - - | .110 | - - - | .215 | - - - | - - - | - - - | .451 | - - - | - - - | .269 | .337 | .144 | .416 | - - - | - - - | -.157 | .594 | - - - | - - - |
| | .867 | .046 | .076 | -.050 | .181 | - - - | - - - | -.231 | .408 | - - - | - - - | .226 | .287 | .107 | .347 | - - - | - - - | -.160 | .524 | - - - | - - - |
| | .800 | .001 | .032 | -.083 | .131 | - - - | - - - | -.249 | .332 | - - - | - - - | .125 | .186 | .027 | .257 | - - - | - - - | -.181 | .426 | - - - | - - - |
| | .733 | -.026 | -.012 | -.107 | .080 | - - - | - - - | -.262 | .267 | - - - | - - - | .055 | .103 | -.021 | .170 | - - - | - - - | -.207 | .331 | - - - | - - - |
| | .667 | -.067 | -.043 | -.138 | .044 | - - - | - - - | -.282 | .223 | - - - | - - - | .018 | .044 | -.057 | .107 | - - - | - - - | -.221 | .273 | - - - | - - - |
| | .600 | -.072 | -.060 | -.161 | .025 | - - - | - - - | -.297 | .196 | - - - | - - - | -.028 | -.003 | -.087 | .058 | - - - | - - - | -.230 | .220 | - - - | - - - |
| | .533 | -.093 | -.069 | -.167 | .008 | - - - | - - - | -.301 | .173 | - - - | - - - | -.053 | -.034 | -.107 | .022 | - - - | - - - | -.246 | .183 | - - - | - - - |
| | .467 | -.097 | -.074 | -.163 | 0 | - - - | - - - | -.303 | .164 | - - - | - - - | -.071 | -.051 | -.123 | .006 | - - - | - - - | -.254 | .169 | - - - | - - - |
| | .400 | -.100 | -.072 | -.159 | -.005 | - - - | - - - | -.291 | .155 | - - - | - - - | -.081 | -.060 | -.135 | -.002 | - - - | - - - | -.254 | .163 | - - - | - - - |
| | .267 | -.090 | -.072 | -.139 | -.001 | - - - | - - - | -.249 | .146 | - - - | - - - | -.073 | -.053 | -.127 | .002 | - - - | - - - | -.232 | .168 | - - - | - - - |
| | .133 | -.076 | -.061 | -.123 | .002 | - - - | - - - | -.271 | .151 | - - - | - - - | -.054 | -.032 | -.103 | .016 | - - - | - - - | -.195 | .176 | - - - | - - - |
| | 0 | -.068 | -.054 | -.109 | .005 | - - - | - - - | -.192 | .138 | - - - | - - - | -.028 | -.019 | -.087 | .023 | - - - | - - - | -.172 | .170 | - - - | - - - |
| 0.75 | 1 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .978 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | .297 | - - - | .121 | - - - | - - - | - - - | -.229 | - - - | - - - | - - - |
| | .955 | .079 | .146 | -.023 | .257 | - - - | - - - | -.260 | .478 | - - - | - - - | .248 | .312 | .102 | .396 | - - - | - - - | -.217 | .607 | - - - | - - - |
| | .933 | .037 | .103 | -.060 | .180 | - - - | - - - | -.269 | .411 | - - - | - - - | .151 | .226 | .050 | .318 | - - - | - - - | -.229 | .502 | - - - | - - - |
| | .912 | .003 | - - - | -.089 | - - - | - - - | - - - | -.275 | - - - | - - - | - - - | .099 | .161 | .013 | .251 | - - - | - - - | - - - | .430 | - - - | - - - |
| | .889 | -.019 | .017 | -.107 | .109 | - - - | - - - | -.279 | .307 | - - - | - - - | .056 | .108 | -.023 | .187 | - - - | - - - | -.254 | .365 | - - - | - - - |
| | .867 | - - - | .016 | - - - | .077 | - - - | - - - | - - - | .272 | - - - | - - - | - - - | .064 | - - - | .139 | - - - | - - - | - - - | .331 | - - - | - - - |
| | .845 | -.038 | -.033 | -.139 | .057 | - - - | - - - | -.294 | .250 | - - - | - - - | -.007 | .029 | -.083 | .103 | - - - | - - - | -.273 | .282 | - - - | - - - |
| | .800 | -.085 | -.056 | -.161 | .035 | - - - | - - - | -.307 | .219 | - - - | - - - | -.042 | -.008 | -.120 | .063 | - - - | - - - | -.282 | .243 | - - - | - - - |
| | .756 | -.107 | -.068 | -.178 | .017 | - - - | - - - | -.319 | .200 | - - - | - - - | - - - | -.039 | - - - | .026 | - - - | - - - | - - - | .208 | - - - | - - - |
| | .711 | -.119 | -.089 | -.186 | -.011 | - - - | - - - | -.323 | .179 | - - - | - - - | -.082 | -.082 | -.153 | .017 | - - - | - - - | -.294 | .200 | - - - | - - - |
| | .667 | -.113 | - - - | -.173 | - - - | - - - | - - - | -.325 | - - - | - - - | - - - | -.091 | -.063 | -.163 | .003 | - - - | - - - | -.291 | .189 | - - - | - - - |
| | .622 | -.134 | -.106 | -.201 | -.024 | - - - | - - - | -.327 | .147 | - - - | - - - | -.102 | - - - | -.172 | - - - | - - - | - - - | -.292 | - - - | - - - | - - - |
| | .578 | -.131 | -.112 | -.192 | -.035 | - - - | - - - | - - - | .136 | - - - | - - - | -.110 | -.082 | -.176 | -.019 | - - - | - - - | -.290 | .175 | - - - | - - - |
| | .533 | -.142 | -.115 | -.209 | -.038 | - - - | - - - | -.331 | .132 | - - - | - - - | -.120 | -.091 | -.182 | -.027 | - - - | - - - | -.282 | .175 | - - - | - - - |
| | .446 | - - - | -.111 | - - - | -.046 | - - - | - - - | - - - | .133 | - - - | - - - | -.126 | -.100 | -.194 | -.030 | - - - | - - - | -.290 | .164 | - - - | - - - |

CONFIDENTIAL

TABLE V.— CONCLUDED

| $\beta = 9^\circ$ | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Left wing panel | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | $\alpha=-0.1^\circ$ | | $\alpha=2.5^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.6^\circ$ | | $\alpha=10.1^\circ$ | | $\alpha=0.0^\circ$ | | $\alpha=2.7^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.8^\circ$ | | $\alpha=10.1^\circ$ | |
| $r/c_r$ | $\frac{y}{b/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| | 1 | --- | 0.367 | --- | 0.479 | --- | --- | --- | 0.536 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.119 | .146 | 0.017 | .262 | --- | --- | -0.275 | .470 | --- | --- | 0.252 | 0.285 | 0.159 | 0.353 | --- | --- | -0.430 | 0.522 | --- | --- |
| | .867 | .066 | .060 | -.046 | .165 | --- | --- | -.310 | .382 | --- | --- | .225 | .222 | .130 | .307 | --- | --- | -.281 | .477 | --- | --- |
| | .800 | .044 | .043 | -.054 | .136 | --- | --- | -.279 | .352 | --- | --- | .181 | .190 | .099 | .268 | --- | --- | -.176 | .438 | --- | --- |
| | .733 | .052 | .024 | -.040 | .099 | --- | --- | -.256 | .311 | --- | --- | .153 | .161 | .076 | .237 | --- | --- | -.106 | .405 | --- | --- |
| 0.25 | .667 | --- | .033 | --- | .101 | --- | --- | --- | .298 | --- | --- | .138 | .143 | .064 | .214 | --- | --- | -.080 | .383 | --- | --- |
| | .533 | .041 | .034 | -.029 | .093 | --- | --- | -.162 | .271 | --- | --- | .117 | .114 | .048 | .177 | --- | --- | -.078 | .340 | --- | --- |
| | .400 | .035 | .031 | -.030 | .083 | --- | --- | -.139 | .253 | --- | --- | .102 | .091 | .034 | .147 | --- | --- | -.081 | .309 | --- | --- |
| | .267 | .033 | .027 | -.028 | .077 | --- | --- | -.129 | .242 | --- | --- | .102 | .081 | .033 | .131 | --- | --- | -.071 | .292 | --- | --- |
| | 0 | .027 | .018 | -.030 | .070 | --- | --- | -.133 | .232 | --- | --- | .066 | .063 | .010 | .110 | --- | --- | -.095 | .268 | --- | --- |
| | 1 | --- | .340 | --- | .430 | --- | --- | --- | .419 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .072 | .063 | -.068 | .201 | --- | --- | -.414 | .444 | --- | --- | .210 | .202 | .066 | .315 | --- | --- | -.483 | .473 | --- | --- |
| | .933 | .016 | 0 | -.137 | .123 | --- | --- | -.409 | .366 | --- | --- | .150 | .160 | .037 | .252 | --- | --- | -.422 | .414 | --- | --- |
| | .900 | --- | -.019 | --- | .097 | --- | --- | --- | .326 | --- | --- | .113 | .116 | .015 | .202 | --- | --- | -.377 | .375 | --- | --- |
| | .867 | -.004 | -.020 | -.119 | .083 | --- | --- | -.381 | .300 | --- | --- | .090 | .083 | .001 | .165 | --- | --- | -.363 | .341 | --- | --- |
| | .800 | -.019 | -.026 | -.115 | .056 | --- | --- | -.351 | .256 | --- | --- | .036 | .036 | -.044 | .106 | --- | --- | -.317 | .285 | --- | --- |
| | .733 | -.024 | -.039 | -.111 | .030 | --- | --- | -.337 | .233 | --- | --- | .008 | -.005 | -.061 | .062 | --- | --- | -.205 | .243 | --- | --- |
| | .667 | -.036 | -.047 | -.115 | .016 | --- | --- | -.322 | .208 | --- | --- | -.012 | -.029 | -.073 | .034 | --- | --- | -.200 | .211 | --- | --- |
| 0.50 | .600 | -.041 | -.046 | -.110 | .012 | --- | --- | -.253 | .195 | --- | --- | -.033 | -.047 | -.082 | .009 | --- | --- | -.206 | .193 | --- | --- |
| | .533 | -.037 | -.045 | -.105 | .015 | --- | --- | -.209 | .181 | --- | --- | -.053 | -.055 | -.086 | 0 | --- | --- | -.201 | .186 | --- | --- |
| | .467 | -.033 | -.041 | -.098 | .011 | --- | --- | -.194 | .184 | --- | --- | -.053 | -.054 | -.083 | .003 | --- | --- | -.196 | .185 | --- | --- |
| | .400 | -.035 | -.033 | -.097 | .016 | --- | --- | -.195 | .179 | --- | --- | -.036 | -.048 | -.077 | .007 | --- | --- | -.183 | .184 | --- | --- |
| | .267 | -.028 | -.037 | -.087 | .010 | --- | --- | -.178 | .164 | --- | --- | -.023 | -.032 | -.064 | .023 | --- | --- | -.167 | .185 | --- | --- |
| | .133 | -.026 | -.034 | -.082 | .012 | --- | --- | -.175 | .163 | --- | --- | -.017 | -.024 | -.067 | .028 | --- | --- | -.156 | .185 | --- | --- |
| | 0 | -.031 | -.042 | -.086 | .006 | --- | --- | -.179 | .158 | --- | --- | -.018 | -.027 | -.072 | .024 | --- | --- | -.158 | .195 | --- | --- |
| | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .116 | --- | -.036 | --- | --- | --- | -.486 | --- | --- | --- |
| | .955 | -.035 | -.063 | -.158 | .081 | --- | --- | -.451 | .297 | --- | --- | .085 | .054 | -.042 | .153 | --- | --- | -.461 | .344 | --- | --- |
| | .933 | -.052 | -.091 | -.180 | .056 | --- | --- | -.453 | .258 | --- | --- | .021 | .009 | -.080 | .102 | --- | --- | -.429 | .298 | --- | --- |
| | .912 | -.070 | --- | -.188 | --- | --- | --- | -.449 | --- | --- | --- | -.009 | -.026 | -.086 | .061 | --- | --- | --- | .260 | --- | --- |
| | .889 | -.079 | -.105 | -.189 | -.003 | --- | --- | -.445 | .201 | --- | --- | -.034 | -.069 | -.122 | .022 | --- | --- | -.409 | .227 | --- | --- |
| | .867 | --- | -.116 | --- | -.020 | --- | --- | --- | .184 | --- | --- | --- | -.079 | --- | 0 | --- | --- | --- | .209 | --- | --- |
| 0.75 | .845 | -.091 | -.117 | -.192 | -.025 | --- | --- | -.439 | .174 | --- | --- | -.068 | -.092 | -.149 | -.016 | --- | --- | -.418 | .199 | --- | --- |
| | .800 | -.094 | -.115 | -.189 | -.030 | --- | --- | -.426 | .163 | --- | --- | -.079 | -.107 | -.156 | -.031 | --- | --- | -.408 | .190 | --- | --- |
| | .756 | -.093 | -.103 | -.184 | -.026 | --- | --- | -.418 | .161 | --- | --- | --- | -.115 | --- | -.039 | --- | --- | --- | .172 | --- | --- |
| | .711 | -.088 | -.105 | -.172 | -.036 | --- | --- | -.412 | .153 | --- | --- | -.081 | -.100 | -.148 | -.018 | --- | --- | -.294 | .192 | --- | --- |
| | .667 | -.070 | --- | -.152 | --- | --- | --- | -.362 | --- | --- | --- | -.075 | -.090 | -.137 | -.011 | --- | --- | -.264 | .178 | --- | --- |
| | .622 | -.077 | -.087 | -.153 | -.028 | --- | --- | -.295 | .150 | --- | --- | -.069 | --- | -.128 | --- | --- | --- | -.256 | --- | --- | --- |
| | .578 | -.065 | -.082 | -.134 | -.025 | --- | --- | --- | .148 | --- | --- | -.057 | -.074 | -.119 | -.002 | --- | --- | -.244 | .167 | --- | --- |
| | .533 | -.065 | -.075 | -.135 | -.020 | --- | --- | -.234 | .155 | --- | --- | -.051 | -.064 | -.110 | .001 | --- | --- | -.230 | .166 | --- | --- |
| | .446 | --- | -.071 | --- | -.012 | --- | --- | --- | .161 | --- | --- | -.046 | -.053 | -.104 | -.001 | --- | --- | -.213 | .156 | --- | --- |

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TABLE VI.– EXPERIMENTAL PRESSURE COEFFICIENTS

[M = 1.60]

| β = 0° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.525 | --- | 0.626 | --- | 0.646 | --- | 0.744 | --- | 0.747 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | .158 | .269 | .070 | .384 | -.057 | .428 | -.152 | .577 | -.192 | .608 | .345 | .352 | .219 | .461 | .026 | .522 | -.267 | .641 | -.309 | .676 |
| | .867 | .077 | .112 | -.014 | .207 | -.111 | .273 | -.205 | .420 | -.237 | .469 | .261 | .305 | .174 | .400 | .060 | .458 | -.186 | .556 | -.226 | .619 |
| | .800 | .042 | .067 | -.049 | .158 | -.125 | .224 | -.212 | .367 | -.246 | .416 | .203 | .243 | .126 | .328 | .036 | .384 | -.159 | .478 | -.203 | .545 |
| | .733 | .030 | .038 | -.056 | .124 | -.146 | .183 | -.234 | .325 | -.265 | .371 | .159 | .185 | .087 | .266 | .001 | .321 | -.128 | .412 | -.183 | .481 |
| | .667 | --- | .019 | --- | .102 | --- | .154 | --- | .294 | --- | .338 | .122 | .135 | .054 | .232 | -.024 | .287 | -.119 | .380 | -.158 | .449 |
| | .533 | .009 | .014 | -.052 | .087 | -.137 | .130 | -.212 | .262 | -.239 | .300 | .077 | .105 | .016 | .175 | -.043 | .227 | -.135 | .315 | -.140 | .369 |
| | .400 | 0 | .013 | -.053 | .074 | -.120 | .115 | -.182 | .229 | -.207 | .265 | .053 | .071 | -.004 | .133 | -.064 | .181 | -.136 | .263 | -.138 | .331 |
| | .267 | .009 | .007 | -.039 | .066 | -.097 | .100 | -.143 | .213 | -.158 | .249 | .040 | .046 | -.010 | .102 | -.062 | .149 | -.127 | .228 | -.128 | .296 |
| | 0 | .011 | .011 | -.038 | .066 | -.101 | .093 | -.137 | .209 | -.152 | .240 | .030 | .036 | -.017 | .087 | -.071 | .129 | -.131 | .206 | -.129 | .271 |
| 0.50 | 1 | --- | .646 | --- | .717 | --- | .599 | --- | .731 | --- | .710 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .161 | .198 | .047 | .325 | -.099 | .381 | -.218 | .569 | -.281 | .601 | .308 | .368 | .160 | .477 | -.127 | .529 | -.333 | .646 | -.361 | .679 |
| | .933 | .052 | .091 | -.053 | .200 | -.173 | .266 | -.251 | .454 | -.298 | .492 | .222 | .296 | .110 | .392 | -.063 | .440 | -.263 | .561 | -.290 | .600 |
| | .900 | --- | .045 | --- | .147 | -.189 | .214 | --- | .385 | -.296 | .432 | --- | .229 | --- | .325 | -.036 | .371 | -.247 | .502 | -.279 | .545 |
| | .867 | .013 | .024 | -.088 | .126 | -.195 | .184 | -.264 | .355 | -.296 | .398 | .132 | .173 | .042 | .262 | -.047 | .307 | -.242 | .441 | -.272 | .486 |
| | .800 | -.017 | -.005 | -.111 | .086 | -.213 | .131 | -.276 | .296 | -.308 | .330 | .050 | .105 | -.028 | .179 | -.113 | .220 | -.260 | .354 | -.283 | .396 |
| | .733 | -.036 | -.033 | -.126 | .048 | -.214 | .087 | -.272 | .244 | -.306 | .273 | -.013 | .035 | -.064 | .103 | -.143 | .140 | -.255 | .276 | -.288 | .315 |
| | .667 | -.064 | -.054 | -.139 | .019 | -.236 | .057 | -.296 | .208 | -.326 | .234 | -.021 | -.011 | -.091 | .053 | -.163 | .096 | -.244 | .224 | -.291 | .255 |
| | .600 | --- | -.062 | --- | .004 | --- | .042 | --- | .201 | --- | .222 | -.052 | -.044 | -.116 | .016 | -.173 | .067 | -.233 | .186 | -.260 | .215 |
| | .533 | -.077 | -.069 | -.137 | -.008 | -.199 | .039 | -.255 | .165 | -.292 | .195 | -.071 | -.068 | -.129 | -.007 | -.185 | .042 | -.245 | .159 | -.253 | .194 |
| | .467 | -.077 | -.069 | -.131 | -.008 | -.195 | .088 | -.252 | .159 | -.289 | .188 | -.078 | -.067 | -.134 | -.013 | -.184 | .047 | -.241 | .149 | -.249 | .192 |
| | .400 | -.077 | -.068 | -.127 | -.009 | -.189 | .083 | -.239 | .155 | -.279 | .184 | -.079 | -.071 | -.131 | -.011 | -.180 | .040 | -.241 | .146 | -.245 | .189 |
| | .267 | -.069 | --- | -.113 | --- | -.172 | --- | -.206 | --- | -.218 | --- | -.064 | -.057 | -.113 | -.002 | -.157 | .049 | -.220 | .138 | -.219 | .181 |
| | .133 | -.058 | -.052 | -.101 | 0 | -.151 | .031 | -.191 | .149 | -.193 | .182 | -.047 | -.041 | -.095 | .007 | -.136 | .059 | -.192 | .144 | -.191 | .187 |
| | 0 | --- | -.050 | --- | .001 | --- | .029 | --- | .135 | --- | .168 | -.040 | -.043 | -.086 | .002 | -.129 | .052 | -.189 | .134 | -.184 | .180 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .216 | --- | .056 | --- | -.188 | --- | -.354 | --- | -.383 | --- |
| | .955 | .033 | .067 | -.082 | .180 | -.190 | .245 | -.270 | .394 | -.313 | .449 | .166 | .203 | .042 | .304 | -.168 | .353 | -.334 | .460 | -.353 | .512 |
| | .933 | 0 | .030 | -.106 | .119 | -.219 | .207 | -.314 | .317 | -.352 | .385 | .090 | .138 | -.004 | .237 | -.177 | .286 | -.324 | .390 | -.348 | .442 |
| | .912 | -.024 | -.010 | -.127 | .086 | -.223 | .146 | -.299 | .283 | -.336 | .338 | .042 | .094 | -.047 | .186 | -.191 | .234 | --- | .335 | --- | .388 |
| | .889 | -.043 | -.032 | -.141 | .059 | -.234 | .119 | -.304 | .251 | -.341 | .307 | .018 | .047 | -.064 | .129 | -.185 | .177 | -.324 | .275 | -.347 | .330 |
| | .867 | --- | -.053 | --- | .031 | --- | .091 | --- | .224 | --- | .275 | --- | .012 | --- | .089 | --- | .139 | --- | .231 | --- | .288 |
| | .845 | -.071 | -.063 | -.163 | .016 | -.247 | .078 | -.309 | .208 | -.345 | .258 | -.032 | -.019 | -.110 | .053 | -.180 | .106 | -.335 | .203 | -.357 | .258 |
| | .800 | -.090 | -.075 | -.176 | .001 | -.265 | .056 | -.325 | .187 | -.361 | .233 | -.058 | -.039 | -.133 | .027 | -.202 | .083 | -.336 | .186 | -.359 | .242 |
| | .756 | -.097 | -.077 | -.185 | -.004 | -.268 | .049 | -.332 | .177 | -.364 | .222 | --- | -.064 | --- | -.002 | --- | .053 | --- | .154 | --- | .212 |
| | .711 | -.099 | --- | -.185 | --- | -.271 | --- | -.337 | --- | -.367 | --- | -.077 | -.063 | -.152 | -.002 | -.207 | .056 | -.338 | .181 | -.358 | .247 |
| | .667 | -.097 | --- | -.176 | --- | -.267 | --- | -.334 | --- | -.364 | --- | -.082 | -.073 | -.157 | -.008 | -.224 | .070 | -.348 | .180 | -.357 | .236 |
| | .622 | -.098 | -.089 | -.165 | -.019 | -.246 | .036 | -.318 | .153 | -.349 | .197 | -.091 | --- | -.160 | --- | -.222 | --- | -.330 | --- | -.353 | --- |
| | .578 | -.093 | -.088 | -.148 | -.020 | -.246 | .040 | -.296 | .157 | -.324 | .196 | -.096 | -.084 | -.157 | -.014 | -.218 | .059 | -.311 | .159 | -.340 | .209 |
| | .533 | -.091 | -.084 | -.140 | -.010 | -.222 | .040 | -.299 | .154 | -.329 | .193 | -.091 | -.083 | -.151 | -.005 | -.191 | .058 | -.269 | .151 | -.293 | .204 |
| | .446 | --- | -.070 | --- | -.002 | --- | .052 | --- | .139 | --- | .183 | -.085 | -.064 | -.135 | -.001 | -.184 | .054 | -.283 | .141 | -.279 | .190 |

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TABLE VI.– CONTINUED

| $\beta = 5^\circ$ | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | |
| | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | $\alpha=-0.1^\circ$ | | $\alpha=2.5^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.6^\circ$ | | $\alpha=10.1^\circ$ | | $\alpha=0.0^\circ$ | | $\alpha=2.7^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.8^\circ$ | | $\alpha=10.1^\circ$ | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| | 1 | - - - | 0.641 | - - - | 0.732 | - - - | 0.767 | - - - | 0.866 | - - - | 0.860 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .933 | 0.202 | .347 | 0.110 | .445 | -0.002 | .513 | -0.088 | .653 | -0.150 | .684 | 0.391 | 0.410 | 0.265 | 0.527 | 0.105 | 0.595 | -0.172 | 0.723 | -0.228 | 0.751 |
| | .867 | .107 | .157 | -.004 | .249 | -.077 | .327 | -.165 | .464 | -.209 | .507 | .304 | .359 | .211 | .456 | .097 | .517 | -.111 | .650 | -.165 | .682 |
| | .800 | .056 | .096 | -.028 | .184 | -.113 | .260 | -.198 | .397 | -.236 | .439 | .236 | .286 | .152 | .373 | .063 | .431 | -.098 | .561 | -.149 | .595 |
| | .733 | .036 | .057 | -.045 | .141 | -.129 | .212 | -.209 | .345 | -.246 | .387 | .181 | .218 | .103 | .298 | .024 | .357 | -.094 | .483 | -.147 | .519 |
| 0.25 | .667 | - - - | .025 | - - - | .105 | - - - | .177 | - - - | .305 | - - - | .344 | .134 | .177 | .062 | .256 | -.008 | .315 | -.103 | .440 | -.148 | .478 |
| | .533 | -.003 | .005 | -.076 | .079 | -.149 | .147 | -.226 | .261 | -.253 | .300 | .076 | .112 | .010 | .184 | -.050 | .243 | -.128 | .360 | -.154 | .398 |
| | .400 | -.016 | .003 | -.077 | .064 | -.133 | .126 | -.200 | .226 | -.222 | .263 | .044 | .068 | -.017 | .132 | -.068 | .190 | -.139 | .295 | -.161 | .333 |
| | .267 | -.007 | -.004 | -.060 | .052 | -.105 | .109 | -.159 | .204 | -.176 | .239 | .025 | .034 | -.029 | .093 | -.066 | .149 | -.131 | .249 | -.149 | .286 |
| | 0 | -.006 | .005 | -.053 | .054 | -.100 | .105 | -.143 | .194 | -.160 | .226 | .023 | .025 | -.033 | .078 | -.069 | .129 | -.129 | .221 | -.143 | .255 |
| | 1 | - - - | .726 | - - - | .788 | - - - | .689 | - - - | .829 | - - - | .805 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .967 | .185 | .233 | .075 | .339 | -.044 | .431 | -.158 | .596 | -.234 | .631 | .333 | .398 | .180 | .514 | -.050 | .566 | -.259 | .699 | -.311 | .721 |
| | .933 | .063 | .112 | -.022 | .214 | -.133 | .302 | -.213 | .462 | -.265 | .505 | .241 | .322 | .124 | .417 | -.008 | .476 | -.203 | .605 | -.248 | .634 |
| | .900 | - - - | .059 | - - - | .155 | -.161 | .245 | - - - | .392 | -.283 | .433 | - - - | .251 | - - - | .343 | -.009 | .402 | -.200 | .527 | -.246 | .565 |
| | .867 | -.013 | .034 | -.079 | .127 | -.170 | .215 | -.251 | .358 | -.286 | .396 | .140 | .187 | .049 | .274 | -.030 | .339 | -.202 | .464 | -.243 | .496 |
| | .800 | -.025 | -.004 | -.109 | .082 | -.191 | .160 | -.265 | .289 | -.300 | .324 | .050 | .112 | -.028 | .187 | -.094 | .252 | -.224 | .366 | -.263 | .399 |
| | .733 | -.048 | -.037 | -.128 | .041 | -.203 | .114 | -.273 | .232 | -.304 | .268 | .008 | .038 | -.065 | .106 | -.125 | .168 | -.236 | .276 | -.272 | .312 |
| | .667 | -.079 | -.062 | -.154 | .013 | -.224 | .081 | -.290 | .192 | -.321 | .230 | -.027 | -.009 | -.097 | .057 | -.149 | .118 | -.247 | .220 | -.281 | .252 |
| 0.50 | .600 | - - - | -.070 | - - - | -.002 | - - - | .064 | - - - | .176 | - - - | .212 | -.057 | -.044 | -.120 | .014 | -.169 | .077 | -.248 | .174 | -.283 | .210 |
| | .533 | -.092 | -.075 | -.159 | -.014 | -.219 | .051 | -.287 | .152 | -.310 | .189 | -.079 | -.071 | -.139 | -.016 | -.188 | .050 | -.258 | .145 | -.279 | .183 |
| | .467 | -.091 | -.075 | -.152 | -.017 | -.207 | .044 | -.275 | .146 | -.298 | .185 | -.095 | -.076 | -.148 | -.020 | -.187 | .053 | -.261 | .142 | -.279 | .175 |
| | .400 | -.092 | -.075 | -.148 | -.019 | -.197 | .039 | -.260 | .140 | -.285 | .177 | -.103 | -.081 | -.151 | -.024 | -.187 | .042 | -.253 | .137 | -.270 | .175 |
| | .267 | -.082 | - - - | -.130 | - - - | -.176 | - - - | -.223 | - - - | -.240 | - - - | -.097 | -.069 | -.132 | -.010 | -.165 | .045 | -.225 | .133 | -.240 | .166 |
| | .133 | -.069 | -.056 | -.126 | -.017 | -.159 | .042 | -.199 | .144 | -.203 | .175 | -.083 | -.051 | -.111 | .006 | -.146 | .058 | -.198 | .143 | -.213 | .173 |
| | 0 | .008 | -.053 | - - - | -.008 | - - - | .039 | - - - | .129 | - - - | .159 | -.082 | -.045 | -.101 | .001 | -.136 | .049 | -.185 | .137 | -.198 | .170 |
| | 1 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .978 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | .268 | - - - | .119 | - - - | -.098 | - - - | -.289 | - - - | -.324 | - - - |
| | .955 | .072 | .128 | -.024 | .236 | -.149 | .307 | -.273 | .454 | -.314 | .496 | .218 | .266 | .104 | .375 | -.084 | .438 | -.264 | .544 | -.243 | .584 |
| | .933 | .038 | .069 | -.048 | .171 | -.162 | .253 | -.283 | .379 | -.332 | .420 | .133 | .196 | .043 | .293 | -.103 | .358 | -.273 | .464 | -.305 | .504 |
| | .912 | .007 | .036 | -.078 | .131 | -.181 | .208 | -.286 | .330 | -.328 | .372 | .078 | .144 | -.002 | .234 | -.127 | .300 | - - - | .403 | - - - | .443 |
| | .889 | -.016 | .008 | -.098 | .100 | -.195 | .173 | -.288 | .294 | -.332 | .335 | .050 | .092 | -.026 | .172 | -.131 | .236 | -.287 | .336 | -.316 | .376 |
| | .867 | - - - | -.018 | - - - | .067 | - - - | .141 | - - - | .261 | - - - | .304 | - - - | .049 | - - - | .128 | - - - | .192 | - - - | .286 | - - - | .326 |
| 0.75 | .845 | -.050 | -.035 | -.130 | .048 | -.216 | .121 | -.295 | .241 | -.335 | .284 | -.010 | .012 | -.085 | .086 | -.138 | .151 | -.300 | .251 | -.326 | .289 |
| | .800 | -.076 | -.054 | -.154 | .024 | -.230 | .095 | -.307 | .215 | -.346 | .253 | -.044 | -.017 | -.117 | .056 | -.162 | .121 | -.306 | .224 | -.331 | .271 |
| | .756 | -.094 | -.065 | -.168 | .010 | -.238 | .082 | -.314 | .203 | -.350 | .240 | - - - | -.048 | - - - | .018 | - - - | .080 | - - - | .188 | - - - | .226 |
| | .711 | -.105 | - - - | -.179 | - - - | -.249 | - - - | -.317 | - - - | -.351 | - - - | -.077 | -.055 | -.146 | .013 | -.195 | .076 | -.311 | .193 | -.332 | .250 |
| | .667 | -.111 | - - - | -.184 | - - - | -.256 | - - - | -.317 | - - - | -.352 | - - - | -.090 | -.067 | -.160 | 0 | -.211 | .069 | -.312 | .198 | -.332 | .237 |
| | .622 | -.115 | -.091 | -.187 | -.022 | -.253 | .037 | -.313 | .163 | -.346 | .203 | -.104 | - - - | -.169 | - - - | -.221 | - - - | -.307 | - - - | -.333 | - - - |
| | .578 | -.117 | -.096 | -.184 | -.034 | -.244 | .028 | -.304 | .163 | -.333 | .194 | -.116 | -.089 | -.179 | -.030 | -.227 | .044 | -.302 | .166 | -.330 | .205 |
| | .533 | -.121 | -.100 | -.187 | -.039 | -.244 | .021 | -.307 | .159 | -.331 | .185 | -.116 | -.100 | -.174 | -.029 | -.216 | .033 | -.277 | .161 | -.309 | .193 |
| | .446 | - - - | -.095 | - - - | -.031 | - - - | .031 | - - - | .144 | - - - | .165 | -.127 | -.109 | -.185 | -.029 | -.222 | .026 | -.287 | .146 | -.304 | .167 |

TABLE VI.– CONTINUED

| β = 5° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Left wing panel | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | 0 | 0.412 | 0 | 0.494 | 0 | 0.576 | 0 | 0.618 | 0 | 0.653 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | .933 | .125 | .202 | .018 | .298 | -.066 | .398 | -.193 | .508 | -.217 | .566 | .305 | .286 | .177 | .391 | -.015 | .486 | -.322 | .577 | -.362 | .617 |
| | .867 | .059 | .077 | -.041 | .163 | -.116 | .267 | -.227 | .388 | -.247 | .449 | .230 | .253 | .134 | .335 | .058 | .421 | -.231 | .522 | -.277 | .579 |
| | .800 | .038 | .043 | -.055 | .127 | -.133 | .226 | -.233 | .346 | -.260 | .402 | .180 | .202 | .095 | .273 | .035 | .354 | -.174 | .459 | -.236 | .514 |
| | .733 | .032 | .023 | -.057 | .101 | -.134 | .195 | -.243 | .308 | -.268 | .361 | .145 | .156 | .066 | .223 | .012 | .301 | -.080 | .407 | -.184 | .459 |
| | .667 | --- | .012 | --- | .086 | --- | .174 | --- | .280 | --- | .332 | .115 | .133 | .043 | .198 | -.016 | .273 | -.094 | .379 | -.118 | .432 |
| | .533 | .018 | .013 | -.045 | .078 | -.103 | .155 | -.193 | .251 | -.228 | .299 | .079 | .092 | .017 | .154 | -.039 | .224 | -.112 | .324 | -.127 | .376 |
| | .400 | .009 | .013 | -.046 | .067 | -.095 | .137 | -.162 | .227 | -.185 | .271 | .060 | .067 | .005 | .123 | -.046 | .188 | -.113 | .285 | -.126 | .333 |
| | .267 | .018 | .006 | -.031 | .062 | -.076 | .126 | -.130 | .214 | -.150 | .254 | .053 | .047 | .002 | .102 | -.043 | .163 | -.104 | .260 | -.118 | .305 |
| | 0 | .011 | .006 | -.037 | .058 | -.079 | .122 | -.132 | .206 | -.149 | .245 | .035 | .017 | -.011 | .072 | -.053 | .143 | -.117 | .235 | -.134 | .278 |
| 0.50 | 1 | --- | .520 | --- | .561 | --- | .595 | --- | .570 | --- | .558 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .116 | .129 | -.014 | .245 | -.114 | .361 | -.277 | .490 | -.311 | .531 | .259 | .291 | .103 | .399 | -.169 | .490 | -.378 | .563 | -.391 | .599 |
| | .933 | .029 | .037 | -.094 | .152 | -.179 | .266 | -.290 | .392 | -.325 | .442 | .186 | .230 | .063 | .318 | -.090 | .412 | -.314 | .494 | -.341 | .532 |
| | .900 | --- | .005 | -.104 | .113 | -.190 | .224 | -.289 | .349 | -.321 | .395 | .215 | .174 | --- | .277 | -.016 | .351 | -.289 | .447 | -.335 | .484 |
| | .867 | .004 | -.008 | -.109 | .098 | -.192 | .202 | -.290 | .322 | -.318 | .369 | .107 | .129 | .014 | .215 | -.034 | .302 | -.280 | .398 | -.326 | .435 |
| | .800 | -.019 | -.019 | -.113 | .069 | -.199 | .161 | -.299 | .270 | -.326 | .313 | .039 | .068 | -.038 | .146 | -.098 | .228 | -.287 | .324 | -.328 | .362 |
| | .733 | -.033 | -.040 | -.111 | .040 | -.191 | .125 | -.295 | .230 | -.321 | .274 | .009 | .012 | -.060 | .085 | -.117 | .164 | -.258 | .262 | -.319 | .302 |
| | .667 | -.049 | -.052 | -.117 | .021 | -.179 | .105 | -.289 | .207 | -.324 | .251 | -.015 | -.021 | -.078 | .052 | -.128 | .127 | -.209 | .221 | -.276 | .264 |
| | .600 | --- | -.055 | --- | .012 | --- | .094 | --- | .204 | --- | .250 | -.035 | -.044 | -.095 | .020 | -.139 | .104 | -.215 | .202 | -.238 | .245 |
| | .533 | -.057 | -.062 | -.115 | .001 | -.166 | .083 | -.253 | .178 | -.297 | .221 | -.049 | -.058 | -.105 | .009 | -.151 | .086 | -.221 | .187 | -.243 | .233 |
| | .467 | -.057 | -.061 | -.111 | .001 | -.153 | .087 | -.209 | .179 | -.249 | .219 | -.054 | -.057 | -.109 | .012 | -.145 | .089 | -.207 | .178 | -.232 | .229 |
| | .400 | -.061 | -.061 | -.102 | -.003 | -.147 | .082 | -.201 | .168 | -.229 | .219 | -.055 | -.057 | -.105 | .004 | -.141 | .080 | -.197 | .169 | -.219 | .230 |
| | .267 | -.056 | --- | -.103 | --- | -.138 | --- | -.180 | --- | -.198 | --- | -.046 | -.045 | -.094 | .006 | -.130 | .075 | -.176 | .149 | -.194 | .224 |
| | .133 | -.049 | -.054 | -.096 | -.004 | -.133 | .061 | -.177 | .145 | -.187 | .197 | -.037 | -.042 | -.083 | .007 | -.117 | .067 | -.169 | .136 | -.173 | .217 |
| | 0 | --- | -.056 | --- | -.007 | --- | .055 | --- | .138 | --- | .184 | -.040 | -.055 | -.083 | -.003 | -.117 | .058 | -.177 | .118 | -.178 | .193 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .153 | --- | -.013 | --- | -.226 | --- | -.386 | --- | -.384 | --- |
| | .955 | .011 | .010 | -.121 | .118 | -.203 | .227 | -.315 | .355 | -.348 | .405 | .114 | .115 | -.024 | .213 | -.202 | .317 | -.362 | .416 | -.359 | .458 |
| | .933 | -.023 | -.010 | -.146 | .086 | -.223 | .193 | -.344 | .311 | -.365 | .367 | .034 | .054 | -.063 | .159 | -.202 | .249 | -.358 | .349 | -.385 | .391 |
| | .912 | -.040 | -.052 | -.157 | .044 | -.227 | .139 | -.334 | .257 | -.357 | .311 | -.008 | .016 | -.096 | .116 | -.214 | .204 | --- | .303 | --- | .349 |
| | .889 | -.056 | -.067 | -.167 | .022 | -.238 | .117 | -.336 | .231 | -.359 | .285 | -.031 | .027 | -.111 | .068 | -.199 | .155 | -.357 | .250 | -.381 | .302 |
| | .867 | --- | -.084 | --- | .001 | --- | .094 | --- | .207 | --- | .257 | --- | -.056 | --- | .037 | --- | .124 | --- | .214 | --- | .257 |
| | .845 | -.081 | -.093 | -.171 | -.007 | -.252 | .084 | -.337 | .193 | -.362 | .243 | -.070 | -.080 | -.144 | .011 | -.187 | .095 | -.362 | .192 | -.386 | .246 |
| | .800 | -.096 | -.100 | -.186 | -.015 | -.267 | .069 | -.348 | .173 | -.369 | .221 | -.090 | -.095 | -.160 | -.004 | -.211 | .074 | -.360 | .184 | -.385 | .237 |
| | .756 | -.101 | -.095 | -.184 | -.013 | -.266 | .063 | -.348 | .168 | -.367 | .216 | --- | -.110 | --- | -.023 | --- | .049 | --- | .174 | --- | .216 |
| | .711 | -.097 | --- | -.176 | --- | -.256 | --- | -.338 | --- | -.361 | --- | -.095 | -.100 | -.161 | -.016 | -.218 | .065 | -.349 | .201 | -.377 | .250 |
| | .667 | -.091 | --- | -.165 | --- | -.243 | --- | -.332 | --- | -.356 | --- | -.091 | -.096 | -.162 | -.162 | -.216 | .079 | -.300 | .186 | -.374 | .235 |
| | .622 | -.083 | -.087 | -.156 | -.023 | -.228 | .049 | -.319 | .154 | -.346 | .194 | -.088 | --- | -.155 | --- | -.214 | --- | -.289 | --- | -.326 | --- |
| | .578 | -.073 | -.080 | -.141 | -.020 | -.211 | .058 | -.304 | .152 | -.334 | .194 | -.080 | -.082 | -.148 | 0 | -.207 | .069 | -.287 | .165 | -.297 | .208 |
| | .533 | -.073 | -.075 | -.134 | -.017 | -.204 | .062 | -.305 | .150 | -.339 | .192 | -.066 | -.075 | -.132 | .003 | -.192 | .070 | -.266 | .160 | -.281 | .203 |
| | .446 | --- | -.082 | --- | -.009 | --- | .055 | --- | .148 | --- | .184 | -.064 | -.050 | -.115 | .001 | -.172 | .066 | -.248 | .150 | -.259 | .192 |

TABLE VI.— CONTINUED

$\beta = 9^\circ$

Right wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^\circ$ | | $\alpha=2.5^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.6^\circ$ | | $\alpha=10.1^\circ$ | | $\alpha=0.0^\circ$ | | $\alpha=2.7^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.8^\circ$ | | $\alpha=10.1^\circ$ | |
| $x/c_r$ | $y/(w/2)$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.776 | --- | 0.817 | --- | --- | --- | 0.950 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.253 | .422 | 0.145 | .496 | --- | --- | -0.047 | .708 | --- | --- | 0.418 | 0.448 | 0.291 | 0.577 | --- | --- | -0.109 | 0.780 | --- | --- |
| | .867 | .141 | .205 | .051 | .287 | --- | --- | -.131 | .408 | --- | --- | .330 | .392 | .230 | .493 | --- | --- | -.055 | .701 | --- | --- |
| | .800 | .079 | .133 | -.004 | .214 | --- | --- | -.174 | .414 | --- | --- | .255 | .315 | .168 | .402 | --- | --- | -.054 | .605 | --- | --- |
| | .733 | .055 | .087 | -.024 | .163 | --- | --- | -.185 | .356 | --- | --- | .193 | .239 | .112 | .319 | --- | --- | -.063 | .511 | --- | --- |
| | .667 | --- | .045 | --- | .119 | --- | --- | --- | .308 | --- | --- | .143 | .193 | .066 | .269 | --- | --- | -.082 | .472 | --- | --- |
| | .533 | -.009 | .012 | -.081 | .084 | --- | --- | -.229 | .263 | --- | --- | .073 | .118 | 0 | .188 | --- | --- | -.124 | .380 | --- | --- |
| | .400 | -.025 | .001 | -.087 | .066 | --- | --- | -.216 | .223 | --- | --- | .034 | .067 | -.031 | .132 | --- | --- | -.144 | .306 | --- | --- |
| | .267 | -.018 | -.006 | -.068 | .050 | --- | --- | -.172 | .196 | --- | --- | .011 | .026 | -.048 | .084 | --- | --- | -.141 | .250 | --- | --- |
| | 0 | -.017 | 0 | -.062 | .047 | --- | --- | -.150 | .181 | --- | --- | -.005 | .011 | -.057 | .057 | --- | --- | -.136 | .211 | --- | --- |
| 0.50 | 1 | --- | .867 | --- | .905 | --- | --- | --- | .919 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .238 | .308 | .120 | .398 | --- | --- | -.100 | .639 | --- | --- | .360 | .441 | .212 | .571 | --- | --- | -.199 | .761 | --- | --- |
| | .933 | .104 | .169 | 0 | .262 | --- | --- | -.178 | .492 | --- | --- | .262 | .344 | .152 | .469 | --- | --- | -.153 | .658 | --- | --- |
| | .900 | --- | .103 | --- | .190 | --- | --- | --- | .416 | --- | --- | --- | .283 | --- | .378 | --- | --- | -.153 | .574 | --- | --- |
| | .867 | .038 | .073 | -.052 | .159 | --- | --- | -.226 | .379 | --- | --- | .161 | .215 | .064 | .304 | --- | --- | -.160 | .507 | --- | --- |
| | .800 | .006 | .028 | -.086 | .107 | --- | --- | -.242 | .306 | --- | --- | .064 | .136 | -.018 | .211 | --- | --- | -.191 | .403 | --- | --- |
| | .733 | -.036 | -.014 | -.111 | .060 | --- | --- | -.255 | .244 | --- | --- | .017 | .055 | -.061 | .121 | --- | --- | -.211 | .305 | --- | --- |
| | .667 | -.073 | -.047 | -.141 | .023 | --- | --- | -.274 | .200 | --- | --- | -.021 | .003 | -.100 | .063 | --- | --- | -.228 | .239 | --- | --- |
| | .600 | --- | -.066 | --- | .003 | --- | --- | --- | .177 | --- | --- | -.057 | -.038 | -.125 | .012 | --- | --- | -.241 | .186 | --- | --- |
| | .533 | -.106 | -.079 | -.168 | -.013 | --- | --- | -.286 | .150 | --- | --- | -.083 | -.071 | -.149 | -.020 | --- | --- | -.259 | .149 | --- | --- |
| | .467 | -.109 | -.083 | -.169 | -.022 | --- | --- | -.287 | .139 | --- | --- | -.101 | -.081 | -.164 | -.033 | --- | --- | -.265 | .141 | --- | --- |
| | .400 | -.112 | -.080 | -.165 | -.029 | --- | --- | -.277 | .131 | --- | --- | -.112 | -.095 | -.174 | -.045 | --- | --- | -.271 | .131 | --- | --- |
| | .267 | -.102 | --- | -.149 | --- | --- | --- | -.243 | --- | --- | --- | -.106 | -.088 | -.162 | -.041 | --- | --- | -.249 | .121 | --- | --- |
| | .133 | -.087 | -.066 | -.130 | -.016 | --- | --- | -.210 | .127 | --- | --- | -.085 | -.068 | -.136 | -.019 | --- | --- | -.217 | .133 | --- | --- |
| | 0 | .017 | -.060 | --- | -.012 | --- | --- | --- | .118 | --- | --- | -.072 | -.057 | -.123 | -.019 | --- | --- | -.197 | .121 | --- | --- |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .288 | --- | .122 | --- | --- | --- | -.222 | --- | --- | --- |
| | .955 | .103 | .177 | -.003 | .272 | --- | --- | -.239 | .500 | --- | --- | .235 | .298 | .104 | .407 | --- | --- | -.196 | .609 | --- | --- |
| | .933 | .062 | .108 | -.032 | .199 | --- | --- | -.236 | .416 | --- | --- | .145 | .221 | -.018 | .312 | --- | --- | -.209 | .526 | --- | --- |
| | .912 | .024 | .070 | -.066 | .152 | --- | --- | -.249 | .364 | --- | --- | .086 | .164 | -.043 | .247 | --- | --- | --- | .459 | --- | --- |
| | .889 | -.003 | .034 | -.088 | .116 | --- | --- | -.253 | .321 | --- | --- | .053 | .107 | -.037 | .180 | --- | --- | -.240 | .385 | --- | --- |
| | .867 | --- | .002 | --- | .080 | --- | --- | --- | .275 | --- | --- | --- | .060 | --- | .127 | --- | --- | --- | .325 | --- | --- |
| | .845 | -.046 | -.022 | -.124 | .054 | --- | --- | -.269 | .259 | --- | --- | -.012 | .015 | -.100 | .080 | --- | --- | -.264 | .284 | --- | --- |
| | .800 | -.079 | -.046 | -.151 | .024 | --- | --- | -.281 | .225 | --- | --- | -.050 | -.017 | -.132 | .044 | --- | --- | -.277 | .247 | --- | --- |
| | .756 | -.101 | -.064 | -.162 | .011 | --- | --- | -.294 | .201 | --- | --- | --- | -.055 | --- | .003 | --- | --- | --- | .201 | --- | --- |
| | .711 | -.115 | --- | -.179 | --- | --- | --- | -.298 | --- | --- | --- | -.089 | -.065 | -.161 | -.010 | --- | --- | -.290 | .187 | --- | --- |
| | .667 | -.124 | --- | -.186 | --- | --- | --- | -.300 | --- | --- | --- | -.106 | -.077 | -.177 | -.024 | --- | --- | -.291 | .166 | --- | --- |
| | .622 | -.132 | -.103 | -.193 | -.036 | --- | --- | -.302 | .138 | --- | --- | -.119 | --- | -.190 | --- | --- | --- | -.295 | --- | --- | --- |
| | .578 | -.137 | -.110 | -.193 | -.045 | --- | --- | -.298 | .125 | --- | --- | -.128 | -.102 | -.199 | -.050 | --- | --- | -.296 | .143 | --- | --- |
| | .533 | -.144 | -.117 | -.201 | -.049 | --- | --- | -.304 | .126 | --- | --- | -.123 | -.111 | -.182 | -.063 | --- | --- | -.282 | .131 | --- | --- |
| | .446 | --- | -.112 | --- | -.050 | --- | --- | --- | .119 | --- | --- | -.144 | -.201 | -.207 | -.065 | --- | --- | -.300 | .117 | --- | --- |

NACA

[redacted]

## TABLE VI.– CONCLUDED

| β = 9° | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Left wing panel | | | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| | 1 | --- | 0.375 | --- | 0.459 | --- | --- | --- | 0.581 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.130 | .193 | 0.017 | .283 | --- | --- | -0.211 | .517 | --- | --- | 0.335 | 0.336 | 0.179 | 0.375 | --- | --- | -0.354 | 0.556 | --- | --- |
| | .867 | .077 | .080 | -.030 | .170 | --- | --- | -.247 | .400 | --- | --- | .243 | .263 | .140 | .331 | --- | --- | -.286 | .511 | --- | --- |
| | .800 | .062 | .056 | -.031 | .141 | --- | --- | -.234 | .363 | --- | --- | .196 | .214 | .107 | .273 | --- | --- | -.100 | .452 | --- | --- |
| | .733 | .062 | .043 | -.022 | .119 | --- | --- | -.221 | .329 | --- | --- | .165 | .165 | .085 | .227 | --- | --- | -.048 | .408 | --- | --- |
| 0.25 | .667 | --- | .036 | --- | .106 | --- | --- | --- | .302 | --- | --- | .135 | .150 | .063 | .205 | --- | --- | -.068 | .386 | --- | --- |
| | .533 | .040 | .033 | -.020 | .093 | --- | --- | -.150 | .274 | --- | --- | .098 | .108 | .037 | .160 | --- | --- | -.076 | .335 | --- | --- |
| | .400 | .029 | .027 | -.024 | .080 | --- | --- | -.132 | .255 | --- | --- | .071 | .073 | .021 | .129 | --- | --- | -.085 | .295 | --- | --- |
| | .267 | .034 | .019 | -.014 | .071 | --- | --- | -.111 | .230 | --- | --- | .062 | .052 | .017 | .109 | --- | --- | -.083 | .271 | --- | --- |
| | 0 | .018 | .009 | -.032 | .060 | --- | --- | -.130 | .215 | --- | --- | .034 | .020 | -.010 | .077 | --- | --- | -.113 | .235 | --- | --- |
| | 1 | --- | .390 | --- | .458 | --- | --- | --- | .443 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .090 | .073 | -.058 | .199 | --- | --- | -.345 | .440 | --- | --- | .244 | .259 | .070 | .329 | --- | --- | -.429 | .481 | --- | --- |
| | .933 | .024 | .005 | -.115 | .126 | --- | --- | -.348 | .361 | --- | --- | .171 | .203 | .042 | .263 | --- | --- | -.370 | .426 | --- | --- |
| | .900 | --- | -.011 | -.108 | .098 | --- | --- | -.335 | .318 | --- | --- | .191 | .133 | --- | .242 | --- | --- | -.342 | .389 | --- | --- |
| | .867 | .006 | -.013 | -.098 | .087 | --- | --- | -.329 | .295 | --- | --- | .084 | .093 | .003 | .200 | --- | --- | -.329 | .348 | --- | --- |
| | .800 | -.012 | -.023 | -.089 | .062 | --- | --- | -.319 | .252 | --- | --- | .025 | .040 | -.036 | .141 | --- | --- | -.315 | .286 | --- | --- |
| | .733 | -.019 | -.032 | -.086 | .039 | --- | --- | -.302 | .220 | --- | --- | -.003 | -.010 | -.050 | .072 | --- | --- | -.214 | .237 | --- | --- |
| | .667 | -.027 | -.038 | -.093 | .026 | --- | --- | -.291 | .202 | --- | --- | -.015 | -.032 | -.063 | .045 | --- | --- | -.201 | .209 | --- | --- |
| 0.50 | .600 | --- | -.039 | --- | .023 | --- | --- | --- | .205 | --- | --- | -.035 | -.049 | -.080 | .030 | --- | --- | -.204 | .194 | --- | --- |
| | .533 | -.029 | -.039 | -.086 | .019 | --- | --- | -.205 | .186 | --- | --- | -.043 | -.054 | -.085 | .016 | --- | --- | -.209 | .187 | --- | --- |
| | .467 | -.024 | -.033 | -.078 | .019 | --- | --- | -.185 | .189 | --- | --- | -.040 | -.049 | -.081 | .029 | --- | --- | -.195 | .185 | --- | --- |
| | .400 | -.025 | -.029 | -.076 | .017 | --- | --- | -.182 | .187 | --- | --- | -.034 | -.039 | -.073 | .034 | --- | --- | -.184 | .189 | --- | --- |
| | .267 | -.021 | --- | -.069 | --- | --- | --- | -.162 | --- | --- | --- | -.023 | -.025 | -.058 | .041 | --- | --- | -.161 | .191 | --- | --- |
| | .133 | -.023 | -.027 | -.070 | .003 | --- | --- | -.152 | .177 | --- | --- | -.021 | -.019 | -.049 | .039 | --- | --- | -.140 | .190 | --- | --- |
| | 0 | --- | -.040 | --- | .011 | --- | --- | --- | .170 | --- | --- | -.034 | -.042 | -.069 | .016 | --- | --- | -.153 | .172 | --- | --- |
| | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .123 | --- | -.041 | --- | --- | --- | -.434 | --- | --- | --- |
| | .955 | -.023 | -.048 | -.151 | .070 | --- | --- | -.363 | .301 | --- | --- | .068 | .054 | -.043 | .149 | --- | --- | -.412 | .338 | --- | --- |
| | .933 | -.050 | -.058 | -.175 | .045 | --- | --- | -.385 | .269 | --- | --- | -.012 | -.008 | -.083 | .103 | --- | --- | -.395 | .286 | --- | --- |
| | .912 | -.066 | -.090 | -.182 | .005 | --- | --- | -.372 | .224 | --- | --- | -.048 | -.044 | -.112 | .065 | --- | --- | --- | .253 | --- | --- |
| | .889 | -.078 | -.098 | -.181 | -.031 | --- | --- | -.371 | .205 | --- | --- | -.071 | -.083 | -.125 | .023 | --- | --- | -.386 | .214 | --- | --- |
| | .867 | --- | -.111 | --- | -.027 | --- | --- | --- | .187 | --- | --- | --- | -.109 | --- | -.002 | --- | --- | --- | .191 | --- | --- |
| 0.75 | .845 | -.094 | -.114 | -.183 | -.032 | --- | --- | -.369 | .179 | --- | --- | -.104 | -.127 | -.153 | -.024 | --- | --- | -.387 | .179 | --- | --- |
| | .800 | -.101 | -.113 | -.184 | -.036 | --- | --- | -.367 | .163 | --- | --- | -.119 | -.135 | -.167 | -.034 | --- | --- | -.382 | .179 | --- | --- |
| | .756 | -.098 | -.105 | -.177 | -.029 | --- | --- | -.360 | .170 | --- | --- | --- | -.144 | --- | -.046 | --- | --- | --- | .165 | --- | --- |
| | .711 | -.093 | --- | -.169 | --- | --- | --- | -.354 | --- | --- | --- | -.115 | -.125 | -.161 | -.027 | --- | --- | -.311 | .198 | --- | --- |
| | .667 | -.085 | --- | -.156 | --- | --- | --- | -.344 | --- | --- | --- | -.106 | -.117 | -.156 | -.014 | --- | --- | -.272 | .190 | --- | --- |
| | .622 | -.077 | -.086 | -.144 | -.023 | --- | --- | -.326 | .157 | --- | --- | -.098 | --- | -.148 | --- | --- | --- | -.265 | --- | --- | --- |
| | .578 | -.066 | -.078 | -.132 | -.016 | --- | --- | -.248 | .150 | --- | --- | -.089 | -.095 | -.137 | .003 | --- | --- | -.256 | .160 | --- | --- |
| | .533 | -.063 | -.071 | -.128 | -.010 | --- | --- | -.233 | .149 | --- | --- | -.074 | -.085 | -.122 | .009 | --- | --- | -.238 | .154 | --- | --- |
| | .446 | --- | -.062 | --- | .004 | --- | --- | --- | .151 | --- | --- | -.065 | -.057 | -.112 | .011 | --- | --- | -.218 | .147 | --- | --- |

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[redacted]

CONFIDENTIAL

# TABLE VII.– EXPERIMENTAL PRESSURE COEFFICIENTS

[M = 1.70]

$\beta = 0^\circ$

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^\circ$ | | $\alpha=2.5^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.6^\circ$ | | $\alpha=10.1^\circ$ | | $\alpha=0.0^\circ$ | | $\alpha=2.7^\circ$ | | $\alpha=5.2^\circ$ | | $\alpha=8.8^\circ$ | | $\alpha=10.1^\circ$ | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.571 | --- | 0.623 | --- | 0.689 | --- | 0.759 | --- | 0.767 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.210 | .277 | 0.089 | .329 | 0.015 | .425 | -0.100 | .559 | -0.121 | .590 | 0.342 | 0.342 | 0.230 | 0.450 | 0.078 | 0.527 | -0.188 | 0.630 | -0.232 | 0.660 |
| | .867 | .112 | .144 | .014 | .207 | -.062 | .291 | -.156 | .432 | -.165 | .471 | .270 | .294 | .180 | .375 | .090 | .451 | -.114 | .570 | -.166 | .596 |
| | .800 | .061 | .045 | -.021 | .159 | -.091 | .239 | -.170 | .378 | -.187 | .418 | .207 | .207 | .128 | .317 | .049 | .387 | -.095 | .503 | -.148 | .534 |
| | .733 | .050 | .053 | -.038 | .103 | -.104 | .188 | -.184 | .321 | -.204 | .362 | .160 | .194 | .090 | .266 | .018 | .334 | -.084 | .450 | -.143 | .481 |
| | .667 | --- | .040 | --- | .091 | --- | .171 | --- | .300 | --- | .338 | .129 | .158 | .063 | .230 | -.003 | .297 | -.081 | .409 | -.133 | .442 |
| | .533 | .024 | .026 | -.052 | .076 | -.108 | .148 | -.185 | .263 | -.212 | .297 | .090 | .110 | .031 | .177 | -.026 | .238 | -.093 | .344 | -.121 | .377 |
| | .400 | .015 | .025 | -.049 | .067 | -.093 | .132 | -.156 | .235 | -.188 | .267 | .064 | .073 | .011 | .134 | -.041 | .195 | -.101 | .290 | -.126 | .323 |
| | .267 | .014 | .022 | -.041 | .056 | -.080 | .119 | -.132 | .217 | -.159 | .246 | .056 | .056 | .007 | .107 | -.037 | .168 | -.088 | .259 | -.108 | .293 |
| | 0 | .020 | .023 | -.037 | .052 | -.079 | .114 | -.117 | .208 | -.134 | .236 | .038 | .048 | -.005 | .098 | -.045 | .152 | -.097 | .244 | -.115 | .276 |
| 0.50 | 1 | --- | .676 | --- | .599 | --- | .651 | --- | .682 | --- | .671 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .279 | .313 | .050 | .287 | -.041 | .400 | -.185 | .547 | -.210 | .579 | .306 | .344 | .170 | .454 | -.071 | .533 | -.258 | .650 | -.400 | .653 |
| | .933 | .179 | .214 | -.051 | .178 | -.115 | .288 | -.225 | .425 | -.244 | .467 | .220 | .276 | .126 | .370 | -.011 | .444 | -.196 | .558 | -.251 | .568 |
| | .900 | --- | .065 | --- | .136 | --- | .226 | --- | .377 | --- | .418 | .172 | .212 | .079 | .296 | -.001 | .367 | -.184 | .490 | -.230 | .508 |
| | .867 | .030 | .040 | -.068 | .108 | -.145 | .198 | -.227 | .343 | -.238 | .383 | .136 | .164 | .052 | .244 | -.019 | .314 | -.182 | .439 | -.225 | .457 |
| | .800 | -.004 | .008 | -.096 | .073 | -.162 | .153 | -.240 | .284 | -.253 | .321 | .063 | .100 | -.009 | .171 | -.080 | .234 | -.196 | .357 | -.239 | .374 |
| | .733 | -.021 | -.021 | -.104 | .039 | -.167 | .111 | -.242 | .234 | -.257 | .267 | .020 | .042 | -.046 | .105 | -.110 | .167 | -.202 | .286 | -.244 | .305 |
| | .667 | -.047 | -.039 | -.131 | .014 | -.191 | .085 | -.266 | .200 | -.277 | .236 | -.009 | -.001 | -.069 | .061 | -.128 | .122 | -.205 | .233 | -.255 | .253 |
| | .600 | -.050 | -.043 | -.088 | .004 | -.149 | .070 | -.222 | .183 | -.257 | .214 | -.036 | -.031 | -.091 | .028 | -.144 | .089 | -.199 | .194 | -.244 | .219 |
| | .533 | -.054 | -.045 | -.116 | .007 | -.164 | .069 | -.237 | .174 | -.266 | .205 | -.051 | -.050 | -.101 | .009 | -.149 | .066 | -.204 | .167 | -.234 | .195 |
| | .467 | -.053 | -.042 | -.115 | -.001 | -.158 | .058 | -.227 | .163 | -.257 | .198 | -.061 | -.053 | -.107 | .002 | -.152 | .061 | -.204 | .162 | -.232 | .189 |
| | .400 | -.052 | -.041 | -.111 | -.007 | -.152 | .054 | -.213 | .162 | -.247 | .191 | -.057 | -.050 | -.102 | .004 | -.144 | .062 | -.194 | .161 | -.221 | .187 |
| | .267 | -.043 | -.035 | -.100 | .001 | -.137 | .053 | -.177 | .154 | -.200 | .181 | -.044 | -.035 | -.086 | .023 | -.128 | .074 | -.171 | .168 | -.196 | .195 |
| | .133 | -.037 | -.029 | -.087 | .001 | -.122 | .062 | -.163 | .146 | -.180 | .177 | -.033 | -.027 | -.071 | .025 | -.112 | .074 | -.152 | .168 | -.176 | .196 |
| | 0 | -.035 | -.030 | -.086 | -.002 | -.119 | .049 | -.162 | .142 | -.177 | .168 | -.029 | -.023 | -.067 | .028 | -.105 | .076 | -.148 | .161 | -.168 | .188 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .221 | --- | .076 | --- | -.130 | --- | -.286 | --- | -.320 | --- |
| | .955 | .063 | .089 | -.047 | .164 | -.148 | .260 | -.242 | .395 | -.260 | .443 | .175 | .203 | .055 | .292 | -.114 | .377 | -.266 | .474 | -.295 | .504 |
| | .933 | .026 | .055 | -.081 | .138 | -.165 | .209 | -.263 | .344 | -.274 | .391 | .115 | .138 | .010 | .223 | -.130 | .297 | -.256 | .403 | -.288 | .435 |
| | .912 | -.001 | --- | -.102 | --- | -.179 | --- | -.266 | --- | -.278 | --- | .068 | .090 | -.017 | .170 | -.129 | .244 | --- | .346 | --- | .380 |
| | .889 | -.018 | -.009 | -.115 | .052 | -.188 | .136 | -.267 | .256 | -.281 | .302 | .029 | .049 | -.053 | .120 | -.148 | .190 | -.265 | .293 | -.293 | .326 |
| | .867 | --- | -.034 | --- | .027 | --- | .106 | --- | .227 | --- | .273 | --- | .015 | --- | .083 | --- | .154 | --- | .258 | --- | .291 |
| | .845 | -.051 | -.046 | -.139 | .013 | -.208 | .091 | -.275 | .212 | -.290 | .255 | -.024 | -.012 | -.097 | .056 | -.152 | .126 | -.276 | .229 | -.305 | .261 |
| | .800 | -.074 | -.064 | -.158 | -.007 | -.222 | .065 | -.287 | .189 | -.299 | .230 | -.051 | -.041 | -.117 | .023 | -.173 | .092 | -.279 | .199 | -.309 | .233 |
| | .756 | -.088 | -.070 | -.169 | -.015 | -.227 | .061 | -.293 | .189 | -.305 | .217 | --- | -.066 | --- | -.004 | --- | .063 | --- | .169 | --- | .204 |
| | .711 | -.093 | -.081 | -.176 | -.028 | -.233 | .040 | -.298 | .169 | -.309 | .205 | -.081 | -.070 | -.142 | -.006 | -.197 | .060 | -.280 | .177 | -.311 | .218 |
| | .667 | -.091 | --- | -.162 | --- | -.229 | --- | -.296 | --- | -.310 | --- | -.086 | -.077 | -.142 | -.008 | -.199 | .059 | -.280 | .174 | -.314 | .209 |
| | .622 | -.096 | -.082 | -.166 | -.032 | -.223 | .037 | -.288 | .153 | -.304 | .185 | -.092 | --- | -.144 | --- | -.199 | --- | -.271 | --- | -.311 | --- |
| | .578 | -.084 | -.082 | -.141 | -.030 | -.203 | .037 | --- | .148 | --- | .176 | -.092 | -.076 | -.148 | -.010 | -.200 | .052 | -.252 | .163 | -.304 | .191 |
| | .533 | -.090 | -.077 | -.151 | -.034 | -.203 | .038 | -.265 | .152 | -.289 | .181 | -.089 | -.076 | -.142 | -.011 | -.186 | .051 | -.235 | .160 | -.271 | .186 |
| | .446 | --- | -.071 | --- | -.016 | --- | .044 | --- | .149 | --- | .166 | -.088 | -.067 | -.138 | -.009 | -.182 | .045 | -.231 | .149 | -.264 | .170 |

CONFIDENTIAL

NACA

TABLE VII.– CONTINUED

| β = 5° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.697 | --- | 0.765 | --- | --- | --- | 0.869 | --- | 0.879 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.253 | .340 | 0.164 | .421 | 0.074 | 0.305 | -0.058 | .614 | -0.079 | .649 | 0.398 | 0.413 | 0.271 | 0.518 | 0.142 | 0.608 | -0.102 | 0.709 | -0.174 | 0.705 |
| | .867 | .144 | .186 | .056 | .262 | -.023 | .350 | -.117 | .463 | -.138 | .501 | .313 | .350 | .224 | .442 | .121 | .512 | -.062 | .619 | -.117 | .634 |
| | .800 | .081 | .127 | -.001 | .201 | -.073 | .286 | -.154 | .401 | -.164 | .440 | .241 | .291 | .164 | .373 | .079 | .439 | -.058 | .543 | -.110 | .573 |
| | .733 | .065 | .074 | -.010 | .133 | -.082 | .224 | -.166 | .333 | -.184 | .374 | .187 | .233 | .116 | .312 | .042 | .378 | -.061 | .479 | -.115 | .502 |
| | .667 | --- | .053 | --- | .128 | --- | .200 | --- | .307 | --- | .344 | .150 | .193 | .084 | .266 | .015 | .333 | -.073 | .436 | -.118 | .455 |
| | .533 | .018 | .026 | -.051 | .092 | -.115 | .166 | -.190 | .263 | -.214 | .298 | .099 | .131 | .037 | .201 | -.023 | .264 | -.096 | .360 | -.132 | .382 |
| | .400 | .004 | .021 | -.053 | .079 | -.105 | .145 | -.171 | .235 | -.197 | .264 | .065 | .084 | .010 | .148 | -.045 | .205 | -.109 | .296 | -.138 | .318 |
| | .267 | .004 | .017 | -.045 | .070 | -.089 | .129 | -.144 | .212 | -.167 | .241 | .053 | .055 | .004 | .114 | -.043 | .168 | -.099 | .256 | -.122 | .278 |
| | 0 | .012 | .019 | -.034 | .068 | -.073 | .121 | -.120 | .201 | -.138 | .225 | .033 | .045 | -.009 | .101 | -.053 | .152 | -.101 | .235 | -.123 | .254 |
| 0.50 | 1 | --- | .697 | --- | .732 | --- | --- | --- | .796 | --- | .777 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .228 | .269 | .108 | .364 | .027 | .459 | -.105 | .598 | -.162 | .634 | .350 | .410 | .215 | .522 | -.013 | .598 | -.190 | .718 | -.260 | .702 |
| | .933 | .107 | .149 | .001 | .238 | -.073 | .331 | -.175 | .469 | -.205 | .509 | .258 | .330 | .162 | .418 | .023 | .497 | -.140 | .619 | -.206 | .601 |
| | .900 | --- | .100 | --- | .182 | --- | .264 | --- | .398 | --- | .439 | .204 | .258 | .115 | .349 | .018 | .409 | -.143 | .529 | -.194 | .514 |
| | .867 | .050 | .069 | -.035 | .150 | -.120 | .232 | -.206 | .361 | -.220 | .399 | .164 | .203 | .082 | .288 | --- | .351 | -.144 | .470 | -.192 | .477 |
| | .800 | .007 | .028 | -.068 | .104 | -.142 | .180 | -.221 | .297 | -.238 | .330 | .083 | .130 | .014 | .207 | -.060 | .266 | -.166 | .379 | -.213 | .385 |
| | .733 | -.017 | -.010 | -.088 | .061 | -.157 | .130 | -.230 | .238 | -.242 | .270 | .031 | .062 | -.030 | .133 | -.096 | .189 | -.183 | .398 | -.224 | .307 |
| | .667 | -.053 | -.037 | -.117 | .032 | -.182 | .096 | -.249 | .201 | -.269 | .229 | -.002 | .012 | -.062 | .080 | -.122 | .138 | -.196 | .241 | -.242 | .251 |
| | .600 | -.058 | -.050 | -.108 | .017 | -.171 | .083 | -.236 | .178 | -.236 | .204 | -.034 | -.023 | -.089 | .040 | -.141 | .093 | -.203 | .193 | -.241 | .205 |
| | .533 | -.072 | -.057 | -.126 | .009 | -.186 | .067 | -.249 | .164 | -.266 | .194 | -.053 | -.049 | -.106 | .010 | -.156 | .063 | -.213 | .166 | -.243 | .178 |
| | .467 | -.073 | -.060 | -.125 | .005 | -.181 | .062 | -.245 | .155 | -.267 | .186 | -.067 | -.060 | -.118 | -.003 | -.164 | .054 | -.219 | .152 | -.247 | .167 |
| | .400 | -.072 | -.060 | -.119 | .002 | -.170 | .053 | -.230 | .146 | -.252 | .174 | -.070 | -.062 | -.121 | -.008 | -.162 | .049 | -.215 | .145 | -.243 | .158 |
| | .267 | -.064 | -.053 | -.106 | .005 | -.145 | .051 | -.200 | .140 | -.228 | .166 | -.062 | -.049 | -.106 | -.002 | -.146 | .058 | -.193 | .152 | -.218 | .165 |
| | .133 | -.053 | -.043 | -.091 | .005 | -.133 | .056 | -.176 | .133 | -.180 | .162 | -.045 | -.035 | -.087 | .017 | -.125 | .068 | -.169 | .152 | -.193 | .164 |
| | 0 | -.046 | -.039 | -.084 | .007 | -.123 | .057 | -.167 | .128 | -.180 | .151 | -.037 | -.023 | -.076 | .020 | -.113 | .067 | -.157 | .144 | -.178 | .158 |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .270 | --- | .119 | --- | -.076 | --- | -.214 | --- | -.286 | --- |
| | .955 | .094 | .139 | -.009 | .227 | -.113 | .318 | -.228 | .449 | -.231 | .481 | .215 | .256 | .097 | .357 | -.067 | .433 | -.196 | .571 | -.264 | .542 |
| | .933 | .052 | .086 | -.044 | .166 | -.129 | .250 | -.239 | .383 | -.250 | .412 | .138 | .188 | .046 | .284 | -.092 | .346 | -.209 | .472 | -.254 | .470 |
| | .912 | .021 | --- | -.071 | --- | -.150 | --- | -.246 | --- | -.253 | --- | .095 | .131 | .014 | .223 | -.101 | .285 | --- | .407 | --- | .407 |
| | .889 | .001 | .020 | -.086 | .094 | -.163 | .175 | -.247 | .290 | -.260 | .320 | .053 | .085 | -.022 | .167 | -.124 | .225 | -.231 | .347 | -.249 | .348 |
| | .867 | --- | -.007 | --- | .064 | --- | .139 | --- | .257 | --- | .286 | --- | .048 | --- | .126 | --- | .191 | --- | .303 | --- | .306 |
| | .845 | -.036 | -.024 | -.116 | .046 | -.187 | .117 | -.258 | .235 | -.269 | .264 | -.005 | .016 | -.072 | .092 | -.142 | .151 | -.248 | .269 | -.286 | .271 |
| | .800 | -.084 | -.046 | -.136 | .025 | -.203 | .090 | -.270 | .207 | -.284 | .234 | -.037 | -.018 | -.101 | .054 | -.161 | .111 | -.254 | .233 | -.292 | .233 |
| | .756 | -.085 | -.058 | -.151 | -.011 | -.214 | .078 | .279 | .193 | -.289 | .217 | --- | .047 | --- | .019 | --- | .076 | --- | .193 | --- | .192 |
| | .711 | -.095 | -.077 | -.161 | .014 | -.220 | .050 | -.284 | .168 | -.296 | .199 | -.074 | -.055 | -.132 | .010 | -.188 | .067 | -.262 | .192 | -.298 | .197 |
| | .667 | -.196 | --- | -.149 | --- | -.221 | --- | -.284 | --- | -.299 | --- | -.083 | -.068 | -.141 | -.001 | -.195 | .055 | -.263 | .184 | -.302 | .186 |
| | .622 | -.109 | -.090 | -.167 | -.025 | -.224 | .041 | -.282 | .144 | -.293 | .174 | -.094 | --- | -.146 | --- | -.200 | --- | -.262 | --- | -.302 | --- |
| | .578 | -.103 | -.098 | -.152 | -.033 | -.216 | .034 | --- | .134 | --- | .163 | -.098 | -.081 | -.154 | -.015 | -.201 | .043 | -.256 | .164 | -.300 | .161 |
| | .533 | -.114 | -.093 | -.168 | -.028 | -.222 | .039 | -.275 | .141 | -.282 | .165 | -.096 | -.088 | -.150 | -.023 | -.194 | .038 | -.243 | .155 | -.225 | .155 |
| | .446 | --- | -.089 | --- | -.028 | --- | --- | --- | .132 | --- | .154 | -.106 | -.087 | -.159 | -.030 | -.202 | .026 | -.253 | .137 | -.283 | .138 |

TABLE VII.– CONTINUED

| β = 5° | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Left wing panel | | | | | | | | | | | | | | | | | | | | | |
| | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| $x/c_r$ | $\frac{y}{w/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | - - - | 0.449 | - - - | 0.535 | - - - | 0.600 | - - - | 0.645 | - - - | 0.652 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .933 | 0.161 | .209 | 0.072 | .294 | -.011 | .392 | -0.133 | .505 | -0.169 | .548 | 0.300 | 0.270 | 0.175 | 0.365 | 0.045 | 0.475 | -0.242 | 0.542 | -0.300 | 0.604 |
| | .867 | .084 | .093 | -.001 | .185 | -.079 | .277 | -.175 | .394 | -.197 | .446 | .237 | .237 | .142 | .307 | .083 | .414 | -.163 | .495 | -.218 | .550 |
| | .800 | .050 | .061 | -.033 | .156 | -.105 | .236 | -.191 | .352 | -.213 | .405 | .185 | .197 | .101 | .260 | .046 | .361 | -.128 | .455 | -.191 | .498 |
| | .733 | .051 | .031 | -.029 | .102 | -.107 | .195 | -.202 | .308 | -.226 | .356 | .147 | .163 | .071 | .222 | .019 | .318 | -.084 | .403 | -.161 | .458 |
| | .667 | - - - | .028 | - - - | .097 | - - - | .186 | - - - | .288 | - - - | .335 | .125 | .136 | .053 | .194 | .003 | .283 | -.080 | .370 | -.103 | .426 |
| | .533 | .036 | .028 | -.026 | .088 | -.078 | .165 | -.163 | .257 | -.198 | .301 | .096 | .100 | .031 | .148 | -.016 | .231 | -.090 | .319 | -.101 | .374 |
| | .400 | .027 | .025 | -.026 | .079 | -.070 | .148 | -.137 | .234 | -.164 | .275 | .074 | .070 | .014 | .117 | -.027 | .191 | -.093 | .277 | -.103 | .331 |
| | .267 | .026 | .021 | -.024 | .072 | -.062 | .138 | -.119 | .219 | -.140 | .259 | .073 | .055 | .015 | .099 | -.023 | .169 | -.081 | .255 | -.088 | .309 |
| | 0 | .024 | .015 | -.023 | .067 | -.062 | .127 | -.114 | .208 | -.129 | .247 | .045 | .044 | -.007 | .088 | -.039 | .154 | -.098 | .238 | -.109 | .288 |
| 0.50 | 1 | - - - | .442 | - - - | .517 | - - - | .555 | - - - | .564 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .967 | .131 | .131 | .026 | .249 | -.084 | .356 | -.228 | .481 | -.255 | .537 | .246 | .267 | .110 | .362 | -.119 | .467 | -.304 | .540 | -.354 | .592 |
| | .933 | .040 | .050 | -.056 | .158 | -.045 | .260 | -.252 | .384 | -.275 | .441 | .187 | .208 | .071 | .289 | -.044 | .387 | -.243 | .469 | -.296 | .519 |
| | .900 | - - - | .014 | - - - | .115 | - - - | .219 | - - - | .349 | - - - | .393 | .144 | .160 | .040 | .230 | -.010 | .333 | -.227 | .415 | -.275 | .465 |
| | .867 | .012 | -.003 | -.080 | .095 | -.158 | .196 | -.241 | .319 | -.267 | .362 | .115 | .120 | .020 | .187 | -.028 | .288 | -.222 | .372 | -.268 | .424 |
| | .800 | -.009 | -.019 | -.095 | .070 | -.170 | .157 | -.252 | .266 | -.277 | .308 | .053 | .066 | -.029 | .125 | -.080 | .216 | -.231 | .304 | -.273 | .352 |
| | .733 | -.021 | -.034 | -.097 | .041 | -.172 | .119 | -.252 | .223 | -.278 | .265 | .018 | .017 | -.053 | .073 | -.106 | .158 | -.221 | .247 | -.269 | .296 |
| | .667 | -.039 | -.045 | -.106 | .023 | -.167 | .099 | -.256 | .196 | -.285 | .240 | -.007 | -.016 | -.074 | .041 | -.118 | .118 | -.197 | .204 | -.252 | .357 |
| | .600 | -.036 | -.046 | -.100 | .017 | -.154 | .088 | -.220 | .188 | -.267 | .224 | -.027 | -.039 | -.086 | .014 | -.131 | .089 | -.200 | .180 | -.215 | .234 |
| | .533 | -.039 | -.046 | -.098 | .014 | -.142 | .085 | -.224 | .177 | -.264 | .218 | -.037 | -.050 | -.092 | -.003 | -.135 | .073 | -.199 | .161 | -.212 | .215 |
| | .467 | -.038 | -.044 | -.092 | .011 | -.132 | .077 | -.192 | .177 | -.240 | .212 | -.043 | -.050 | -.095 | -.005 | -.137 | .071 | -.197 | .158 | -.208 | .209 |
| | .400 | -.036 | -.036 | -.088 | .015 | -.123 | .076 | -.175 | .167 | -.209 | .206 | -.036 | -.044 | -.088 | .002 | -.127 | .076 | -.187 | .156 | -.195 | .193 |
| | .267 | -.031 | -.033 | -.078 | .012 | -.111 | .074 | -.159 | .162 | -.180 | .195 | -.025 | -.026 | -.074 | .020 | -.111 | .085 | -.166 | .166 | -.174 | .197 |
| | .133 | -.028 | -.032 | -.078 | .017 | -.104 | .074 | -.148 | .154 | -.171 | .187 | -.018 | -.018 | -.064 | .024 | -.099 | .079 | -.150 | .158 | -.158 | .177 |
| | 0 | -.033 | .016 | -.074 | .012 | -.106 | .070 | -.149 | .150 | -.171 | .179 | -.017 | -.019 | -.064 | .021 | -.094 | .086 | -.147 | .160 | -.161 | .171 |
| 0.75 | 1 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| | .978 | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | .174 | - - - | .019 | - - - | -.165 | - - - | -.324 | - - - | -.366 | - - - |
| | .955 | .019 | .017 | -.074 | .127 | -.169 | .222 | -.284 | .337 | -.297 | .388 | .138 | .125 | .000 | .209 | -.143 | .312 | -.304 | .393 | -.346 | .433 |
| | .933 | -.009 | -.004 | -.102 | .090 | -.183 | .185 | -.298 | .298 | -.309 | .357 | .071 | .078 | -.038 | .148 | -.150 | .254 | -.286 | .336 | -.329 | .376 |
| | .912 | -.030 | - - - | -.119 | - - - | -.194 | - - - | -.299 | - - - | -.310 | - - - | .038 | .037 | -.057 | .105 | -.141 | .206 | - - - | .288 | - - - | .330 |
| | .889 | -.045 | -.059 | -.130 | .032 | -.204 | .118 | -.299 | .221 | -.312 | .275 | -.005 | -.009 | -.089 | .061 | -.156 | .159 | -.287 | .243 | -.328 | .288 |
| | .867 | - - - | -.077 | - - - | .010 | - - - | .092 | - - - | .197 | - - - | .251 | - - - | -.026 | - - - | .032 | - - - | .129 | - - - | .215 | - - - | .268 |
| | .845 | -.069 | -.085 | -.149 | -.001 | -.221 | .081 | -.306 | .183 | -.317 | .236 | -.006 | -.048 | -.124 | .011 | -.158 | .105 | -.297 | .193 | -.335 | .242 |
| | .800 | -.085 | -.092 | -.161 | -.015 | -.232 | .063 | -.314 | .162 | -.325 | .217 | -.060 | -.072 | -.137 | -.015 | -.179 | .076 | -.297 | .171 | -.335 | .224 |
| | .756 | -.092 | -.089 | -.165 | -.018 | -.235 | .062 | -.317 | .176 | -.326 | .211 | - - - | -.088 | - - - | -.037 | - - - | .049 | - - - | .150 | - - - | .205 |
| | .711 | -.093 | -.095 | -.161 | -.031 | -.231 | .039 | -.314 | .152 | -.325 | .205 | -.081 | -.088 | -.145 | -.030 | -.196 | .056 | -.295 | .166 | -.330 | .221 |
| | .667 | -.076 | - - - | -.146 | - - - | -.216 | - - - | -.303 | - - - | -.319 | - - - | -.081 | -.090 | -.144 | -.025 | -.192 | .060 | -.285 | .158 | -.332 | .209 |
| | .622 | -.082 | -.085 | -.147 | -.027 | -.204 | .053 | -.294 | .139 | -.310 | .186 | -.077 | - - - | -.142 | - - - | -.190 | - - - | -.260 | - - - | -.308 | - - - |
| | .578 | - - - | -.080 | -.129 | -.025 | -.183 | .052 | - - - | .133 | - - - | .181 | -.074 | -.075 | -.136 | -.015 | -.185 | .056 | -.250 | .148 | -.269 | .194 |
| | .533 | -.071 | -.074 | -.131 | -.021 | -.179 | .061 | -.280 | .137 | -.297 | .185 | -.064 | -.064 | -.116 | -.012 | -.177 | .060 | -.230 | .145 | -.250 | .193 |
| | .446 | -.083 | -.064 | - - - | -.008 | - - - | .059 | - - - | .133 | - - - | .176 | -.054 | -.054 | -.116 | -.010 | -.163 | .054 | -.222 | .136 | -.232 | .181 |

NACA

TABLE VII.– CONTINUED

| β = 9° | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right wing panel | | | | | | | | | | | | | | | | | | | | | | | |
| Round-nose airfoil | | | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | | | |
| Station | | α=-0.1° | | α=2.5° | | α=5.2° | | α=8.6° | | α=10.1° | | α=0.0° | | α=2.7° | | α=5.2° | | α=8.8° | | α=10.1° | |
| x/c_r | y/(b/2) | P_u | P_l | P_u | P_l | P_u | P_l | P_u | P_l | P_u | P_l | P_u | P_l | P_u | P_l | P_u | P_l | P_u | P_l | P_u | P_l |
| 0.25 | 1 | --- | 0.770 | --- | 0.879 | --- | --- | --- | 0.976 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.273 | .373 | 0.215 | .492 | --- | --- | -0.010 | .687 | --- | --- | 0.450 | 0.471 | 0.318 | 0.595 | --- | --- | -0.052 | 0.768 | --- | --- |
| | .867 | .162 | .214 | .094 | .317 | --- | --- | -.076 | .507 | --- | --- | .355 | .402 | .258 | .497 | --- | --- | -.015 | .676 | --- | --- |
| | .800 | .100 | .147 | .025 | .244 | --- | --- | -.127 | .433 | --- | --- | .278 | .336 | .194 | .419 | --- | --- | -.024 | .583 | --- | --- |
| | .733 | .072 | .085 | .015 | .166 | --- | --- | -.138 | .355 | --- | --- | .213 | .271 | .142 | .348 | --- | --- | -.027 | .510 | --- | --- |
| | .667 | --- | .055 | --- | .144 | --- | --- | --- | .323 | --- | --- | .170 | .220 | .103 | .297 | --- | --- | -.056 | .455 | --- | --- |
| | .533 | -.001 | .014 | -.050 | .104 | --- | --- | -.178 | .270 | --- | --- | .106 | .146 | .046 | .218 | --- | --- | -.091 | .371 | --- | --- |
| | .400 | -.018 | .004 | -.065 | .082 | --- | --- | -.190 | .234 | --- | --- | .062 | .090 | .009 | .154 | --- | --- | -.118 | .295 | --- | --- |
| | .267 | -.017 | -.003 | -.058 | .069 | --- | --- | -.162 | .207 | --- | --- | .043 | .054 | -.005 | .112 | --- | --- | -.111 | .243 | --- | --- |
| | 0 | -.013 | -.003 | -.042 | .064 | --- | --- | -.129 | .188 | --- | --- | .021 | .041 | -.020 | .094 | --- | --- | -.119 | .211 | --- | --- |
| 0.50 | 1 | | .762 | --- | .846 | --- | --- | --- | .896 | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | --- |
| | .967 | .238 | .290 | .158 | .417 | --- | --- | -.047 | .646 | --- | --- | .391 | .464 | .245 | .588 | --- | --- | -.125 | .784 | --- | --- |
| | .933 | .102 | .159 | .038 | .279 | --- | --- | -.136 | .499 | --- | --- | .250 | .378 | .189 | .477 | --- | --- | -.066 | .671 | --- | --- |
| | .900 | --- | .113 | --- | .215 | --- | --- | --- | .423 | --- | --- | .227 | .292 | .133 | .382 | --- | --- | -.095 | .569 | --- | --- |
| | .867 | .054 | .078 | -.018 | .177 | --- | --- | -.179 | .383 | --- | --- | .185 | .232 | .099 | .317 | --- | --- | -.106 | .502 | --- | --- |
| | .800 | .008 | .033 | -.053 | .126 | --- | --- | -.199 | .313 | --- | --- | .099 | .155 | .027 | .231 | --- | --- | -.142 | .400 | --- | --- |
| | .733 | -.016 | -.007 | -.078 | .078 | --- | --- | -.211 | .249 | --- | --- | .044 | .083 | -.019 | .150 | --- | --- | -.168 | .309 | --- | --- |
| | .667 | -.062 | -.040 | -.110 | .042 | --- | --- | -.233 | .206 | --- | --- | .006 | .029 | -.053 | .093 | --- | --- | -.191 | .241 | --- | --- |
| | .600 | -.039 | -.056 | -.117 | .023 | --- | --- | -.236 | .180 | --- | --- | -.029 | -.011 | -.083 | .051 | --- | --- | -.206 | .183 | --- | --- |
| | .533 | -.084 | -.062 | -.135 | .007 | --- | --- | -.247 | .157 | --- | --- | -.052 | -.041 | -.105 | .021 | --- | --- | -.223 | .143 | --- | --- |
| | .467 | -.095 | -.076 | -.141 | -.002 | --- | --- | -.252 | .148 | --- | --- | -.070 | -.056 | -.122 | .003 | --- | --- | -.237 | .123 | --- | --- |
| | .400 | -.095 | -.080 | -.139 | -.003 | --- | --- | -.252 | .139 | --- | --- | -.080 | -.066 | -.129 | -.008 | --- | --- | -.245 | .111 | --- | --- |
| | .267 | -.087 | -.067 | -.120 | -.002 | --- | --- | -.220 | .126 | --- | --- | -.078 | -.059 | -.122 | -.007 | --- | --- | -.230 | .108 | --- | --- |
| | .133 | -.071 | -.060 | -.104 | .002 | --- | --- | -.190 | .126 | --- | --- | -.059 | -.039 | -.100 | .016 | --- | --- | -.208 | .112 | --- | --- |
| | 0 | -.082 | -.055 | -.092 | .006 | --- | --- | -.172 | .120 | --- | --- | -.047 | -.029 | -.085 | .020 | --- | --- | -.195 | .104 | --- | --- |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .291 | --- | .144 | --- | --- | --- | -.127 | --- | --- | --- |
| | .955 | .103 | .152 | .017 | .267 | --- | --- | -.198 | .473 | --- | --- | .236 | .302 | .118 | .398 | --- | --- | -.121 | .643 | --- | --- |
| | .933 | .054 | .113 | -.020 | .194 | --- | --- | -.206 | .408 | --- | --- | .155 | .217 | .057 | .312 | --- | --- | -.146 | .536 | --- | --- |
| | .912 | .021 | --- | -.051 | --- | --- | --- | -.217 | --- | --- | --- | .111 | .156 | .023 | .249 | --- | --- | --- | .460 | --- | --- |
| | .889 | -.001 | .027 | -.069 | .119 | --- | --- | -.222 | .305 | --- | --- | .067 | .108 | -.014 | .189 | --- | --- | -.188 | .390 | --- | --- |
| | .867 | --- | -.003 | --- | .088 | --- | --- | --- | .266 | --- | --- | --- | .067 | --- | .142 | --- | --- | --- | .337 | --- | --- |
| | .845 | -.040 | -.020 | -.103 | .066 | --- | --- | -.240 | .243 | --- | --- | .006 | .033 | -.066 | .107 | --- | --- | -.218 | .294 | --- | --- |
| | .800 | -.070 | -.046 | -.125 | .044 | --- | --- | -.255 | .210 | --- | --- | -.029 | -.001 | -.095 | .068 | --- | --- | -.234 | .248 | --- | --- |
| | .756 | -.089 | -.057 | -.142 | .025 | --- | --- | -.256 | .194 | --- | --- | --- | -.032 | --- | .032 | --- | --- | --- | .203 | --- | --- |
| | .711 | -.103 | -.070 | -.151 | -.003 | --- | --- | -.272 | .167 | --- | --- | -.068 | -.042 | -.126 | .022 | --- | --- | -.255 | .185 | --- | --- |
| | .667 | -.106 | --- | -.140 | --- | --- | --- | -.274 | --- | --- | --- | -.079 | -.056 | -.135 | .007 | --- | --- | -.260 | .170 | --- | --- |
| | .622 | -.115 | -.090 | -.166 | -.017 | --- | --- | -.276 | .139 | --- | --- | -.092 | --- | -.143 | --- | --- | --- | -.266 | --- | --- | --- |
| | .578 | -.111 | -.102 | -.152 | -.031 | --- | --- | --- | .124 | --- | --- | -.099 | -.076 | -.152 | -.014 | --- | --- | -.270 | .138 | --- | --- |
| | .533 | -.128 | -.111 | -.176 | -.032 | --- | --- | -.270 | .123 | --- | --- | -.102 | -.090 | -.154 | -.024 | --- | --- | -.260 | .126 | --- | --- |
| | .446 | --- | -.093 | --- | -.040 | --- | --- | --- | .115 | --- | --- | -.122 | -.099 | -.171 | -.036 | --- | --- | -.279 | .099 | --- | --- |

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TABLE VII.– CONCLUDED

$\beta = 9^{\circ}$

Left wing panel

| Station | | Round-nose airfoil | | | | | | | | | | Sharp-nose airfoil | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $\alpha=-0.1^{\circ}$ | | $\alpha=2.5^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.6^{\circ}$ | | $\alpha=10.1^{\circ}$ | | $\alpha=0.0^{\circ}$ | | $\alpha=2.7^{\circ}$ | | $\alpha=5.2^{\circ}$ | | $\alpha=8.8^{\circ}$ | | $\alpha=10.1^{\circ}$ | |
| $x/c_r$ | $\frac{y}{b/2}$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ | $P_u$ | $P_l$ |
| 0.25 | 1 | --- | 0.375 | --- | 0.465 | --- | --- | --- | 0.550 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .933 | 0.140 | .168 | 0.051 | .260 | --- | --- | -0.173 | .460 | --- | --- | 0.269 | 0.228 | 0.128 | 0.294 | --- | --- | -0.310 | 0.509 | --- | --- |
| | .867 | .080 | .077 | -.009 | .120 | --- | --- | -.201 | .380 | --- | --- | .219 | .210 | .107 | .256 | --- | --- | -.210 | .465 | --- | --- |
| | .800 | .058 | .056 | -.027 | .140 | --- | --- | -.207 | .345 | --- | --- | .174 | .178 | .076 | .216 | --- | --- | -.147 | .422 | --- | --- |
| | .733 | .062 | .033 | -.017 | .104 | --- | --- | -.201 | .305 | --- | --- | .146 | .151 | .051 | .188 | --- | --- | -.058 | .388 | --- | --- |
| | .667 | --- | .012 | --- | .102 | --- | --- | --- | .289 | --- | --- | .126 | .128 | .038 | .160 | --- | --- | -.071 | .362 | --- | --- |
| | .533 | .049 | .037 | -.011 | .095 | --- | --- | -.140 | .262 | --- | --- | .102 | .096 | .019 | .124 | --- | --- | -.072 | .318 | --- | --- |
| | .400 | .041 | .033 | -.013 | .086 | --- | --- | -.117 | .243 | --- | --- | .083 | .072 | .007 | .099 | --- | --- | -.074 | .286 | --- | --- |
| | .267 | .040 | .032 | -.011 | .079 | --- | --- | -.104 | .232 | --- | --- | .085 | .061 | .009 | .085 | --- | --- | -.062 | .268 | --- | --- |
| | 0 | .032 | .022 | -.017 | .069 | --- | --- | -.107 | .219 | --- | --- | .051 | .039 | -.022 | .059 | --- | --- | -.092 | .246 | --- | --- |
| 0.50 | 1 | --- | .355 | --- | .437 | --- | --- | --- | .464 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .967 | .103 | .036 | -.011 | .207 | --- | --- | -.279 | .444 | --- | --- | .216 | .199 | .042 | .270 | --- | --- | -.362 | .476 | --- | --- |
| | .933 | .037 | .016 | -.080 | .132 | --- | --- | -.289 | .361 | --- | --- | .154 | .172 | .014 | .206 | --- | --- | -.309 | .415 | --- | --- |
| | .900 | --- | -.005 | --- | .101 | --- | --- | --- | .323 | --- | --- | .126 | .126 | .004 | .172 | --- | --- | -.270 | .377 | --- | --- |
| | .867 | .016 | -.011 | -.085 | .086 | --- | --- | -.272 | .295 | --- | --- | .104 | .094 | -.011 | .135 | --- | --- | -.261 | .342 | --- | --- |
| | .800 | -.001 | -.015 | -.086 | .074 | --- | --- | -.273 | .252 | --- | --- | .050 | .049 | -.049 | .082 | --- | --- | -.258 | .284 | --- | --- |
| | .733 | -.007 | -.025 | -.084 | .041 | --- | --- | -.263 | .219 | --- | --- | .022 | .010 | -.064 | .043 | --- | --- | -.193 | .238 | --- | --- |
| | .667 | -.020 | -.031 | -.089 | .028 | --- | --- | -.255 | .202 | --- | --- | 0 | -.015 | -.085 | .018 | --- | --- | -.176 | .208 | --- | --- |
| | .600 | -.019 | -.030 | -.088 | .025 | --- | --- | -.232 | .193 | --- | --- | -.011 | -.029 | -.088 | -.002 | --- | --- | -.180 | .188 | --- | --- |
| | .533 | -.017 | -.027 | -.079 | .025 | --- | --- | -.189 | .183 | --- | --- | -.019 | -.035 | -.092 | -.014 | --- | --- | -.176 | .177 | --- | --- |
| | .467 | -.016 | -.025 | -.074 | .020 | --- | --- | -.167 | .183 | --- | --- | -.021 | -.033 | -.095 | -.011 | --- | --- | -.171 | .174 | --- | --- |
| | .400 | -.017 | -.018 | -.072 | .023 | --- | --- | -.161 | .180 | --- | --- | -.014 | -.027 | -.090 | -.004 | --- | --- | -.158 | .176 | --- | --- |
| | .267 | -.013 | -.022 | -.064 | .021 | --- | --- | -.151 | .164 | --- | --- | -.008 | -.015 | -.078 | .012 | --- | --- | -.141 | .189 | --- | --- |
| | .133 | -.012 | -.021 | -.062 | .018 | --- | --- | -.143 | .162 | --- | --- | -.004 | -.010 | -.071 | .007 | --- | --- | -.132 | .181 | --- | --- |
| | 0 | -.018 | -.028 | -.068 | .014 | --- | --- | -.148 | .158 | --- | --- | -.008 | -.015 | -.079 | -.005 | --- | --- | -.177 | .178 | --- | --- |
| 0.75 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | .978 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .140 | --- | -.045 | --- | --- | --- | -.369 | --- | --- | --- |
| | .955 | -.004 | -.032 | -.101 | .091 | --- | --- | -.311 | .304 | --- | --- | .105 | .078 | -.054 | .119 | --- | --- | -.347 | .337 | --- | --- |
| | .933 | -.027 | -.046 | -.126 | .067 | --- | --- | -.322 | .274 | --- | --- | .046 | .033 | -.083 | .078 | --- | --- | -.325 | .288 | --- | --- |
| | .912 | -.044 | --- | -.139 | --- | --- | --- | -.322 | --- | --- | --- | .018 | 0 | -.094 | .042 | --- | --- | --- | .251 | --- | --- |
| | .889 | -.056 | -.081 | -.146 | .008 | --- | --- | -.320 | .206 | --- | --- | -.011 | -.041 | -.121 | .005 | --- | --- | -.319 | .215 | --- | --- |
| | .867 | --- | -.093 | --- | -.008 | --- | --- | --- | .186 | --- | --- | --- | -.053 | --- | -.018 | --- | --- | --- | .195 | --- | --- |
| | .845 | -.072 | -.095 | -.156 | -.015 | --- | --- | -.323 | .176 | --- | --- | -.050 | -.069 | -.150 | -.033 | --- | --- | -.326 | .181 | --- | --- |
| | .800 | -.081 | -.096 | -.160 | -.024 | --- | --- | -.323 | .162 | --- | --- | -.064 | -.087 | -.157 | -.053 | --- | --- | -.321 | .168 | --- | --- |
| | .756 | -.082 | -.088 | -.158 | -.023 | --- | --- | -.317 | .167 | --- | --- | --- | -.097 | --- | -.066 | --- | --- | --- | .153 | --- | --- |
| | .711 | -.078 | -.087 | -.151 | -.031 | --- | --- | -.310 | .157 | --- | --- | -.075 | -.091 | -.153 | -.051 | --- | --- | -.287 | .169 | --- | --- |
| | .667 | -.061 | --- | -.133 | --- | --- | --- | -.300 | --- | --- | --- | -.070 | -.086 | -.155 | -.038 | --- | --- | -.241 | .162 | --- | --- |
| | .622 | -.067 | -.079 | -.134 | -.023 | --- | --- | -.292 | .149 | --- | --- | -.067 | --- | -.149 | --- | --- | --- | -.232 | --- | --- | --- |
| | .578 | -.052 | -.073 | -.112 | -.020 | --- | --- | --- | .144 | --- | --- | -.055 | -.074 | -.141 | -.030 | --- | --- | -.225 | .153 | --- | --- |
| | .533 | -.057 | -.066 | -.116 | -.015 | --- | --- | -.216 | .149 | --- | --- | -.043 | -.059 | -.111 | -.031 | --- | --- | -.210 | .150 | --- | --- |
| | .446 | --- | -.057 | --- | -.003 | --- | --- | --- | .146 | --- | --- | -.041 | -.048 | -.119 | -.034 | --- | --- | -.194 | .140 | --- | --- |

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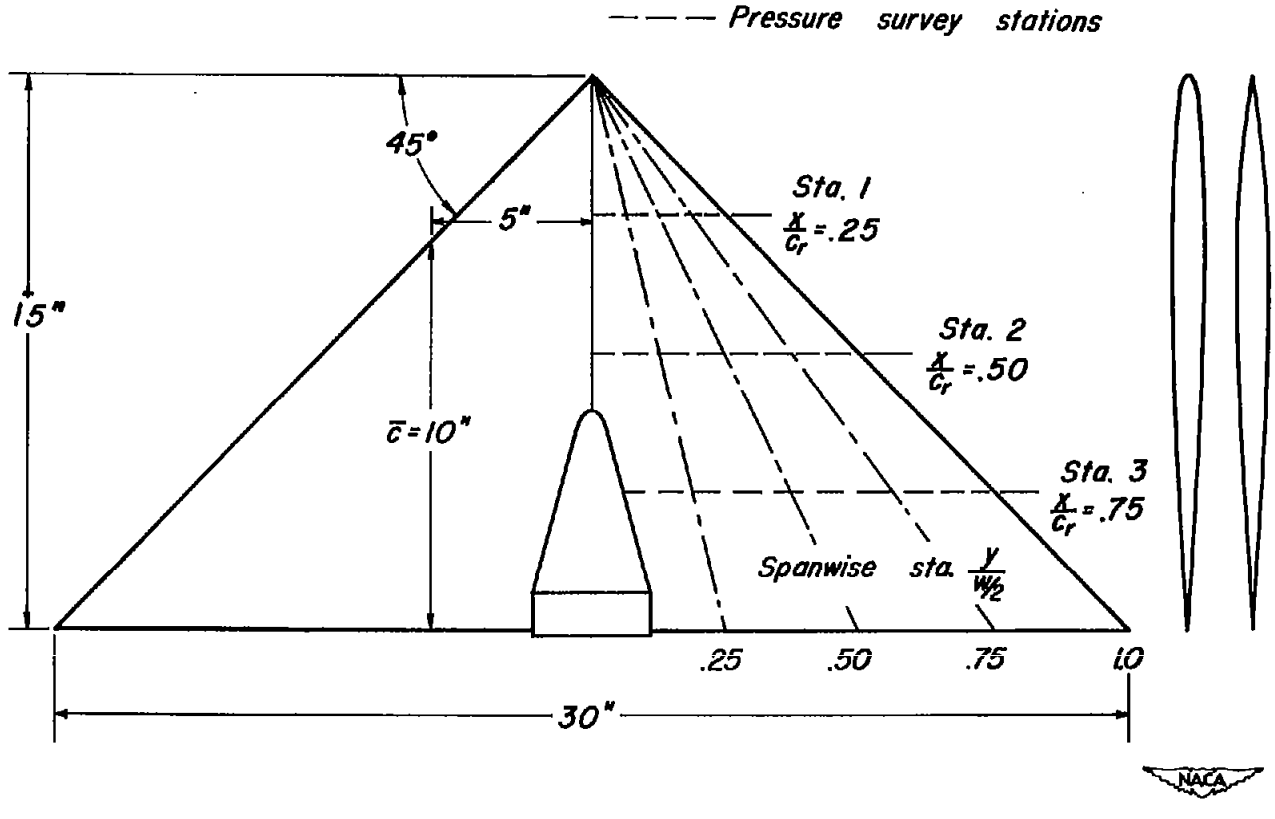


Figure 1.- Dimensional sketch of triangular wing showing both the round-nose airfoil section (NACA 0006-63) and the sharp-nose airfoil section.

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Figure 2.– Model mounted in the Ames 6– by 6–foot supersonic wind tunnel.

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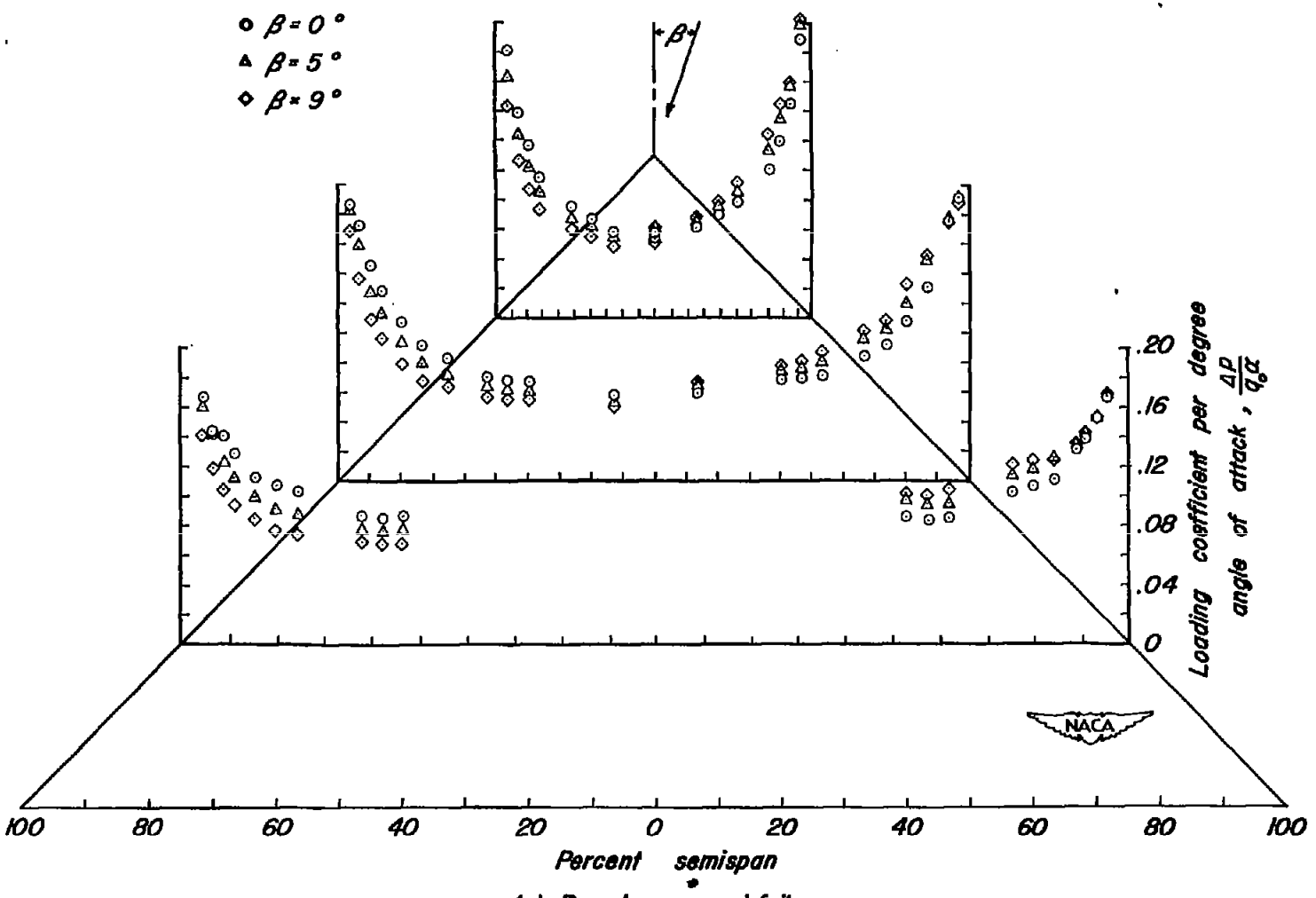
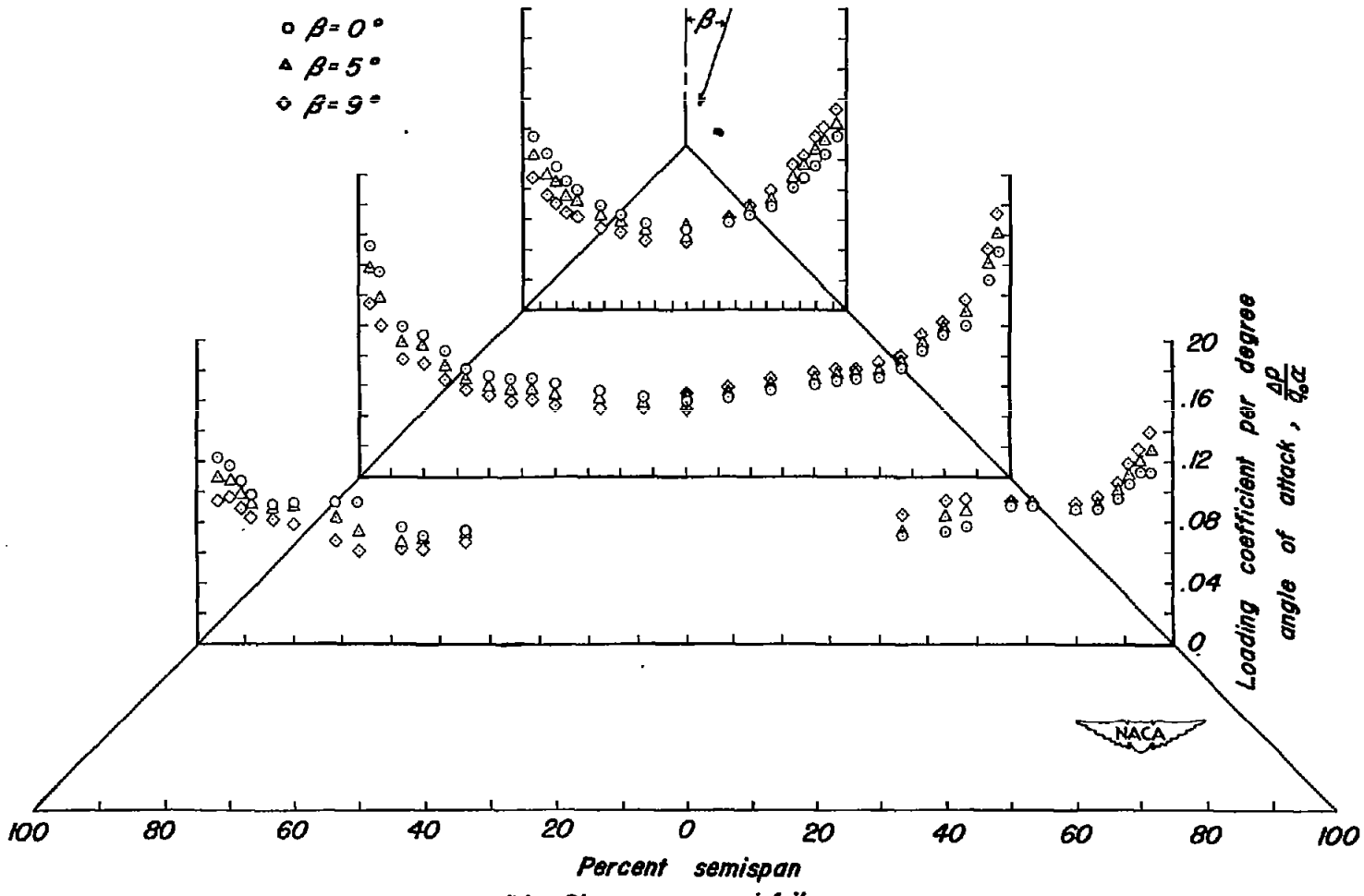
[redacted]




(a) Round-nose airfoil.

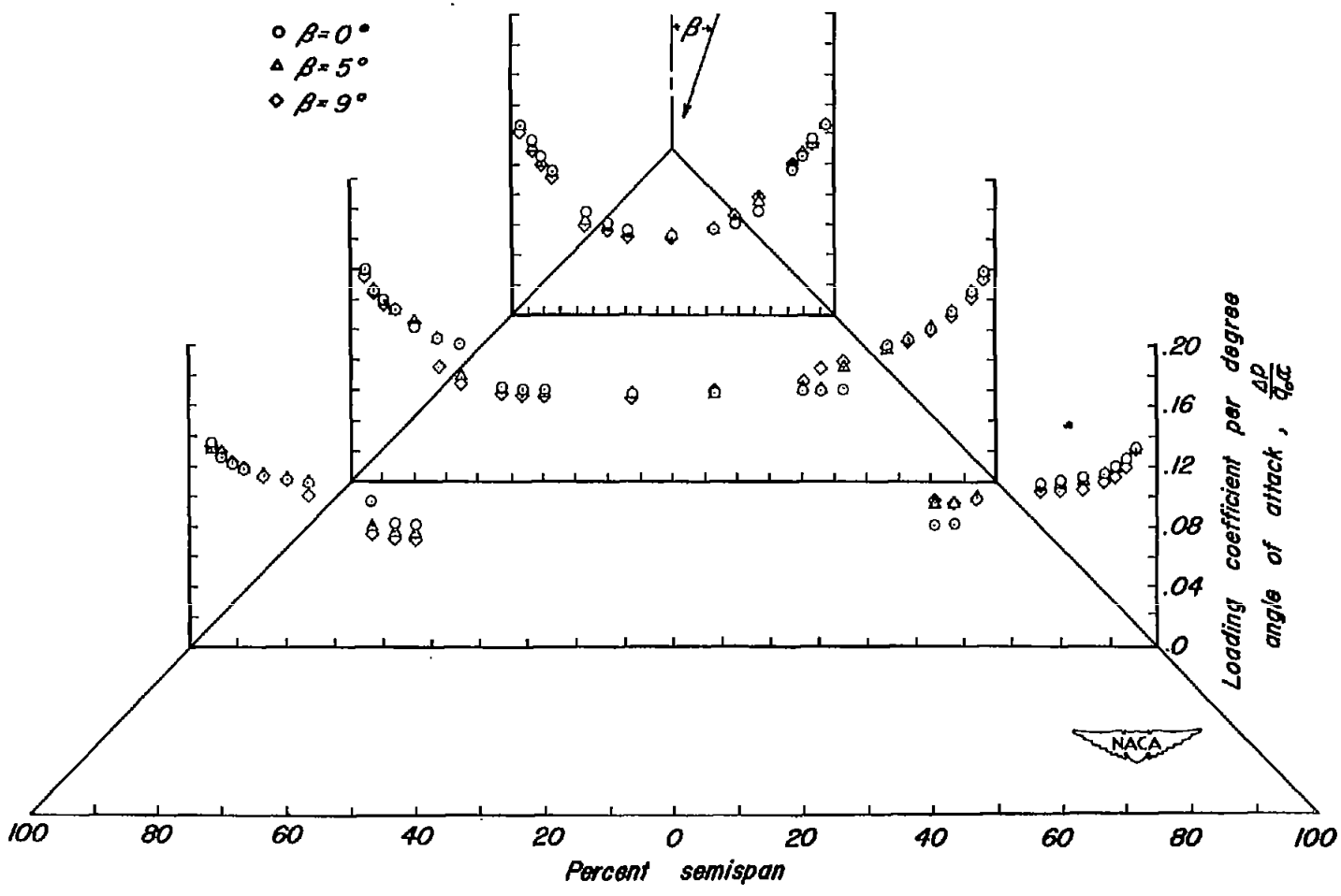
Figure 3.— Variation with angle of sideslip of experimental load distribution over a triangular wing at 2.5° angle of attack. M = 1.20.

[redacted]




(b) Sharp-nose airfoil.

Figure 3.– Concluded.




(a) Round-nose airfoil

Figure 4.— Variation with angle of sideslip of experimental load distribution over a triangular wing at 8.6° angle of attack. M=1.20.

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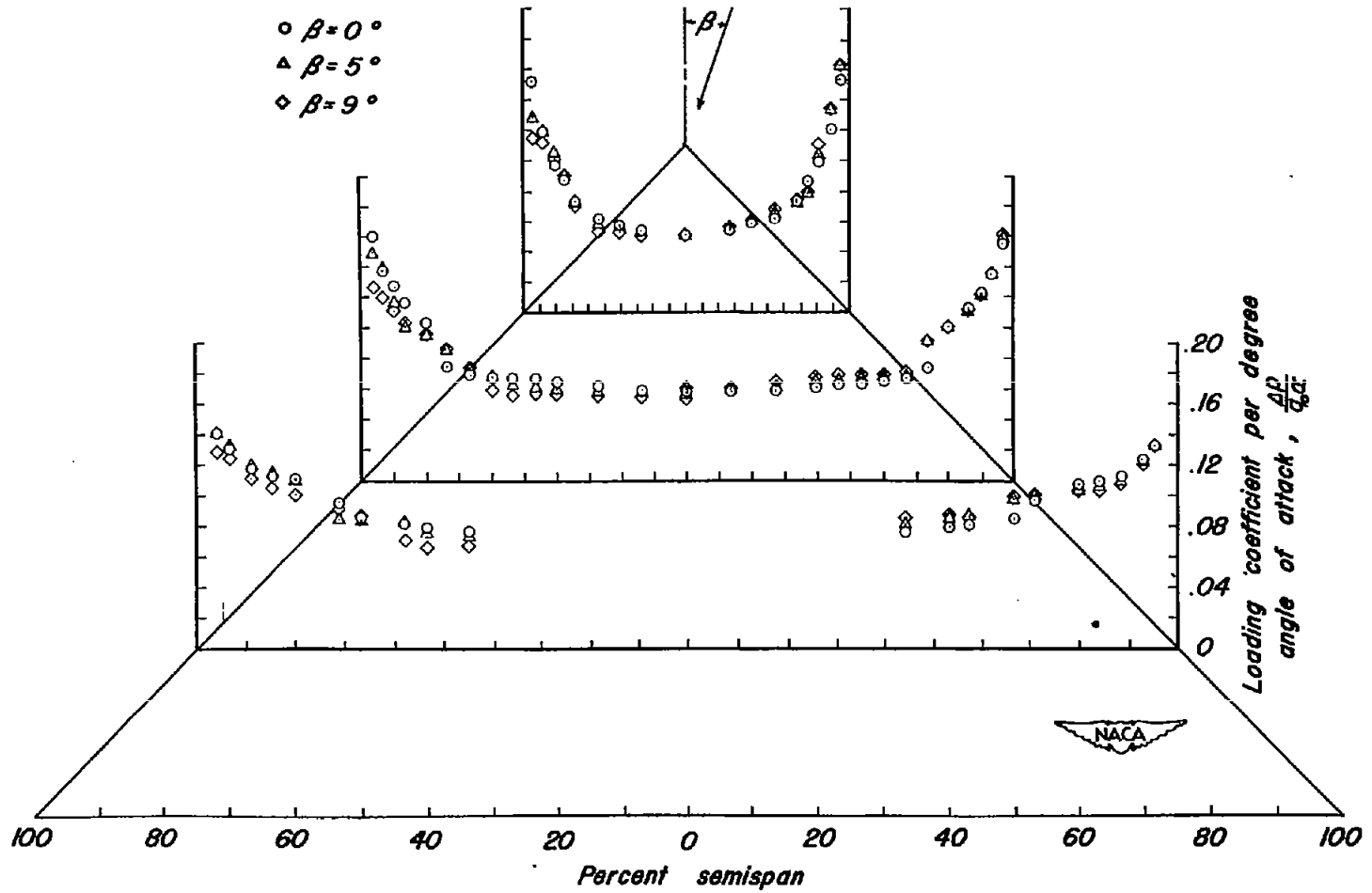


(b) Sharp-nose airfoil.

Figure 4.- Concluded.

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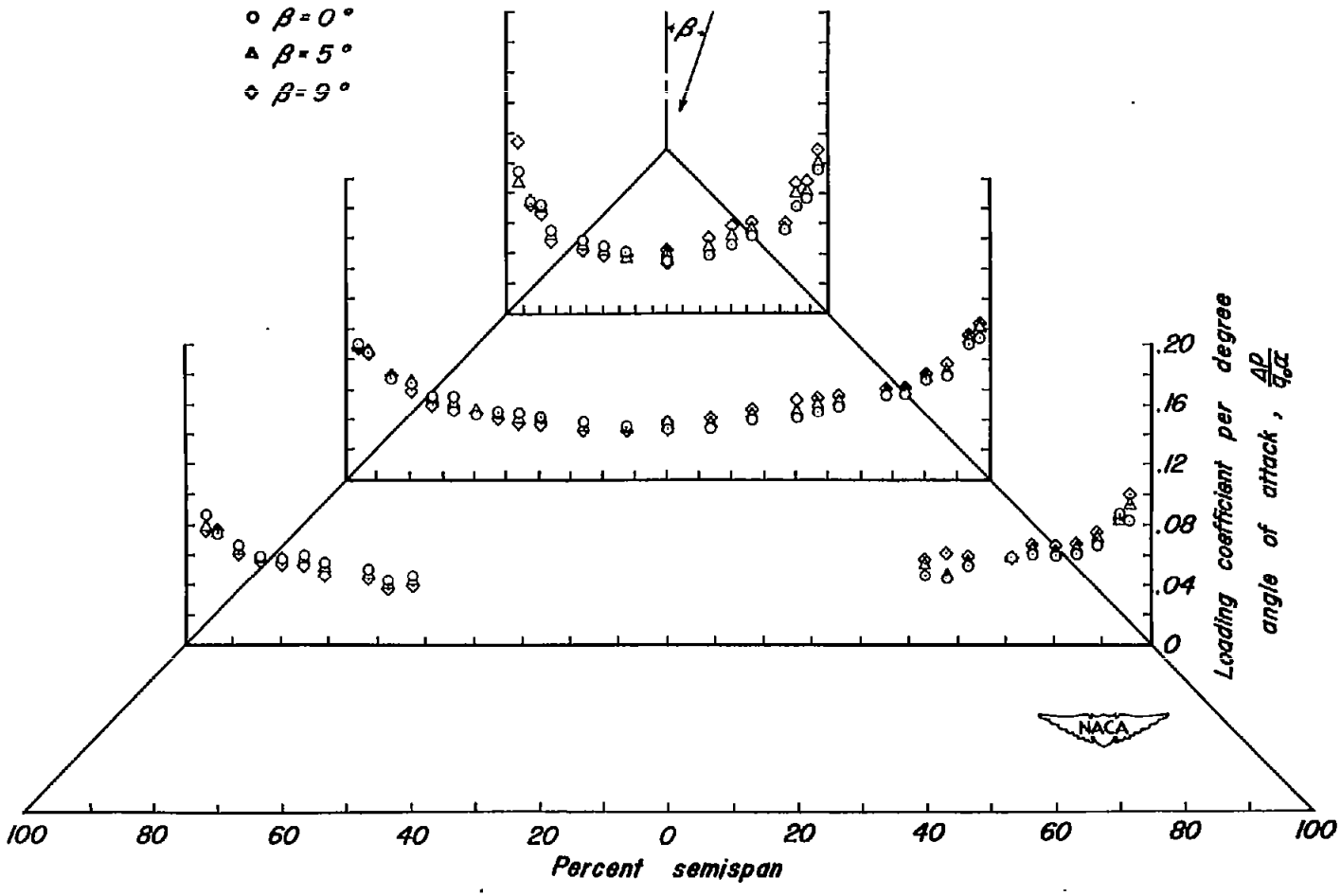


(a) Round-nose airfoil.

Figure 5. — Variation with angle of sideslip of experimental load distribution over a triangular wing at 2.5° angle of attack. M = 1.70.

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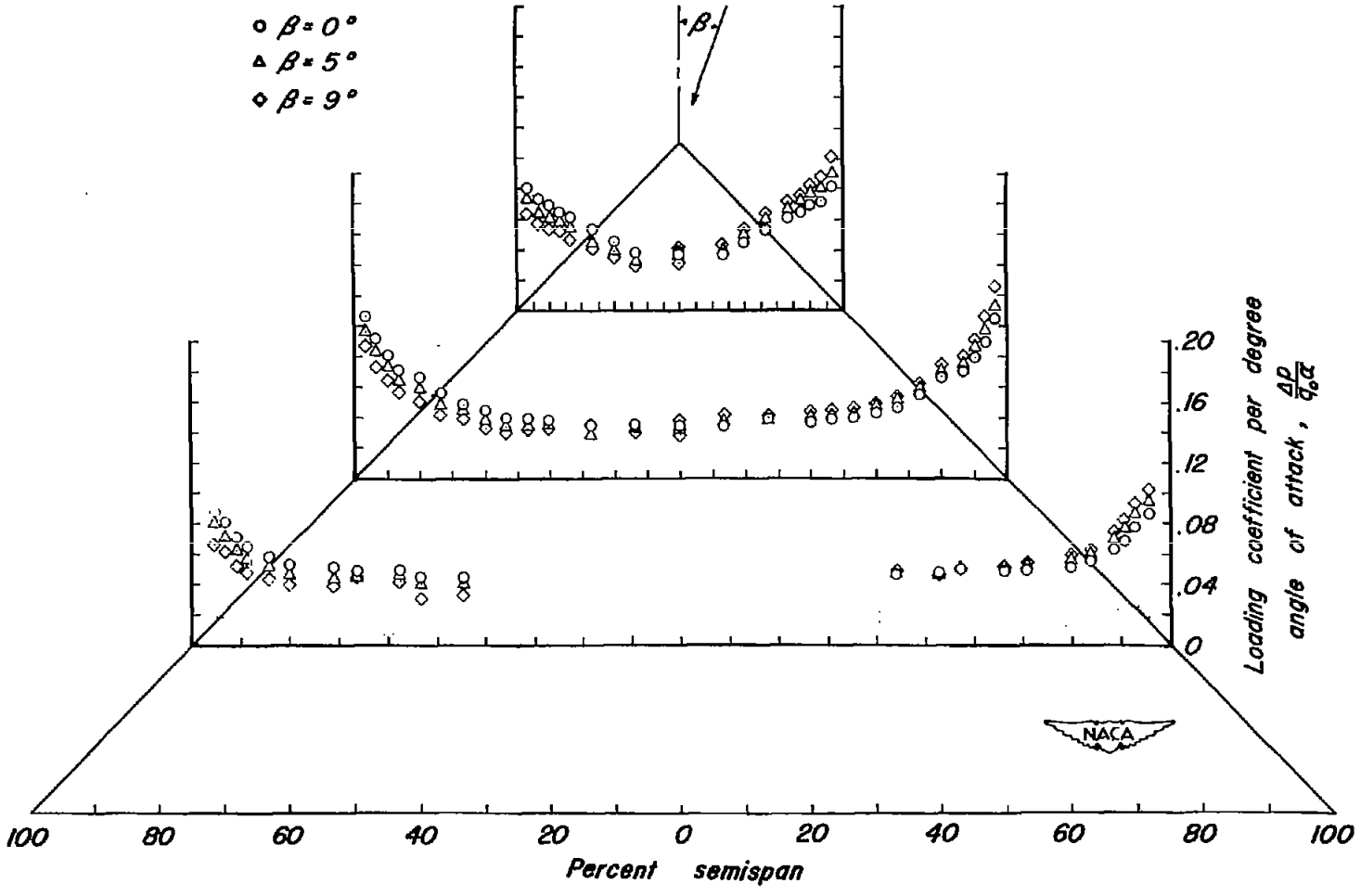
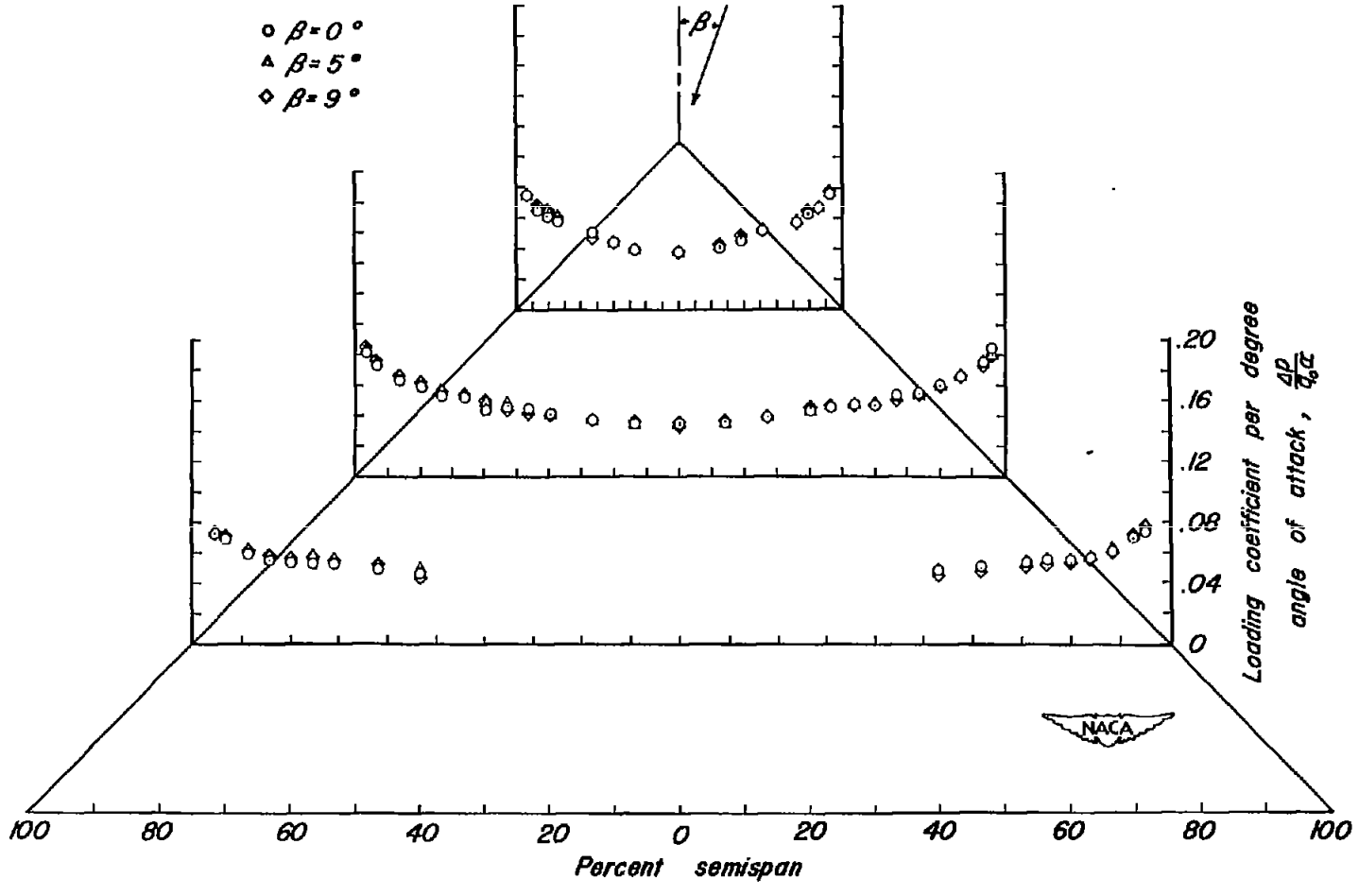



(b) Sharp - nose airfoil.

Figure 5.- Concluded.




(a) Round-nose airfoil.

Figure 6. — Variation with angle of sideslip of experimental load distribution over a triangular wing at 8.6° angle of attack. M = 1.70.

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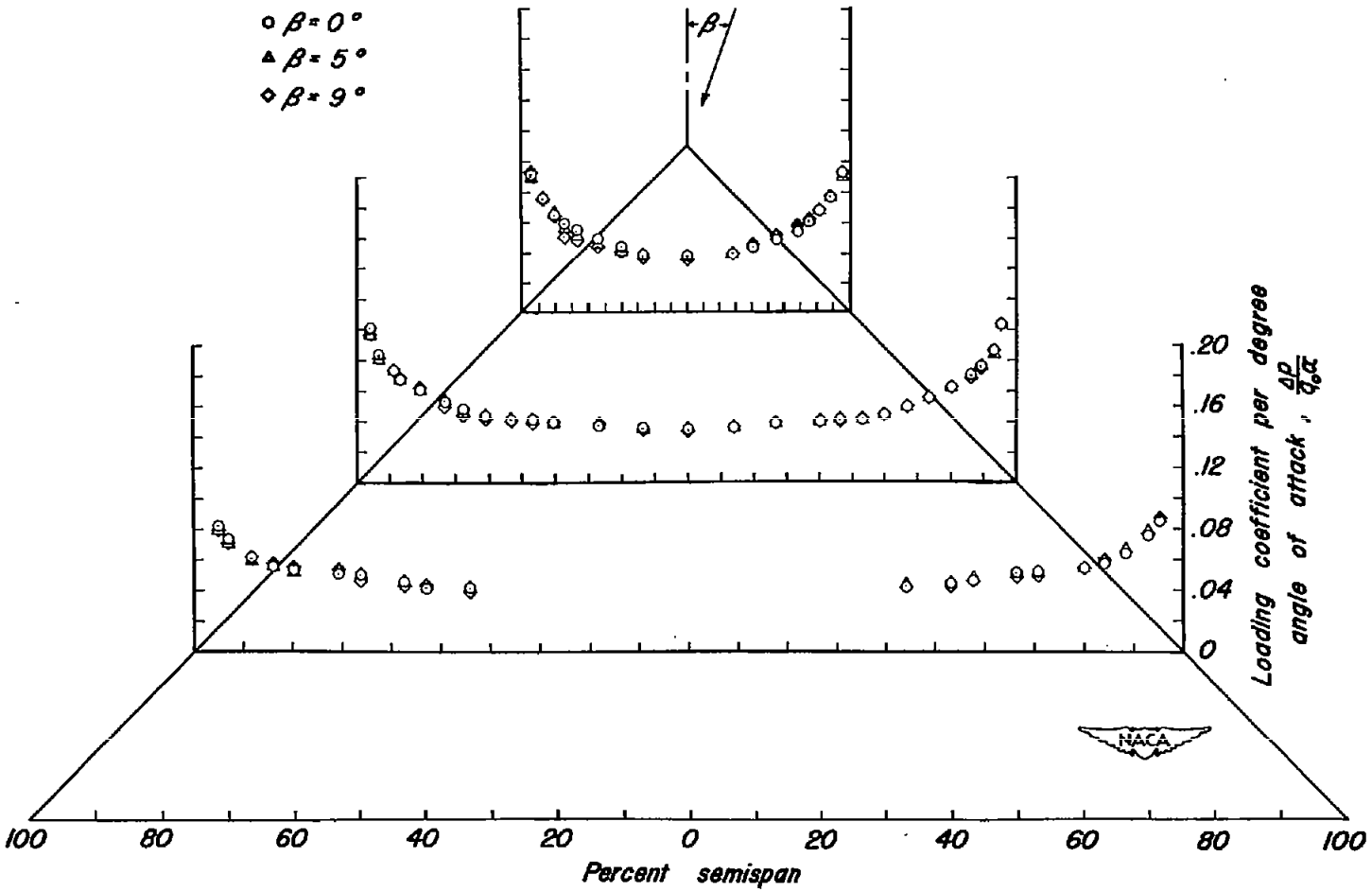
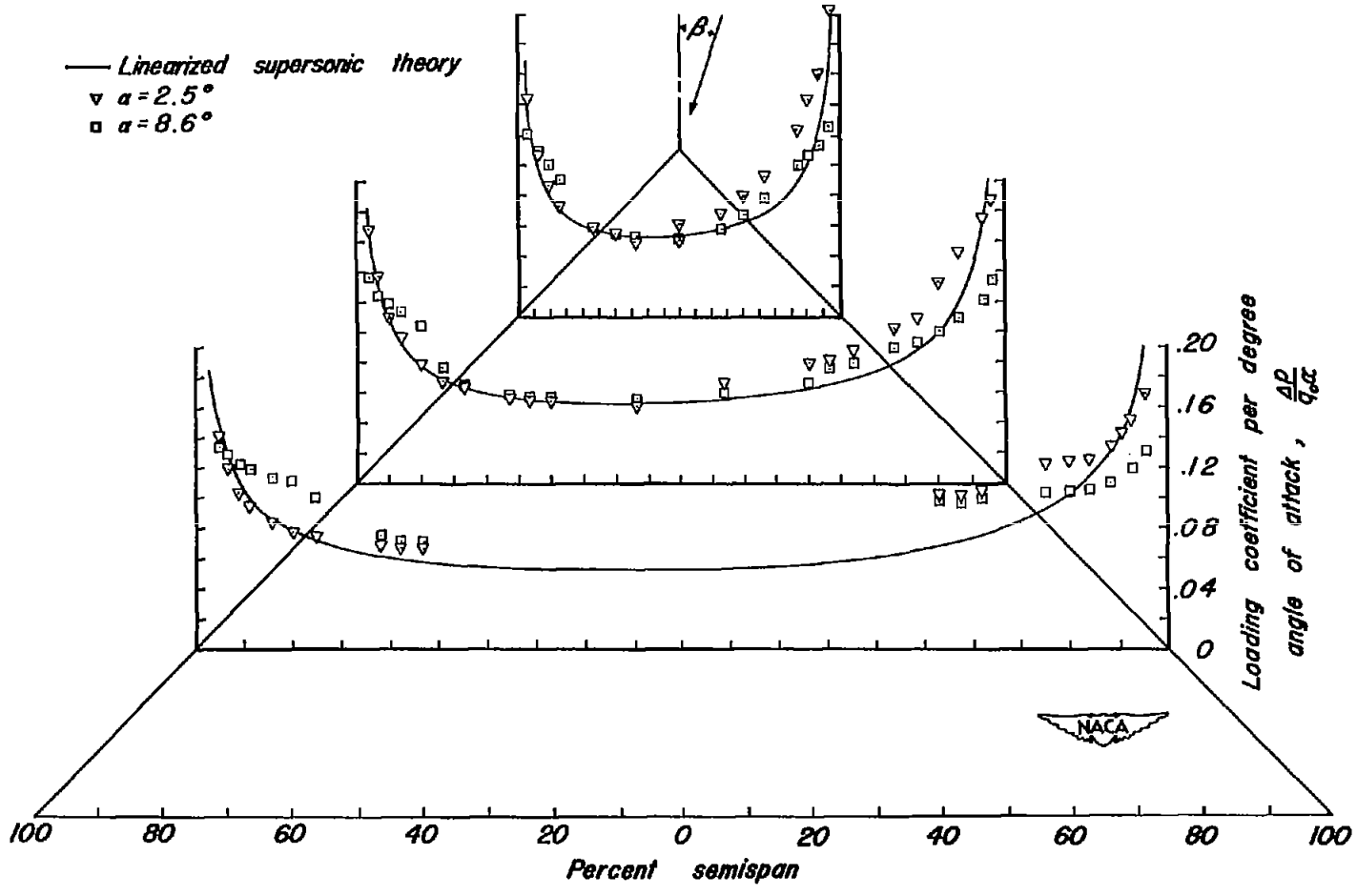



(b) Sharp-nose airfoil.

Figure 6.– Concluded.

CONFIDENTIAL

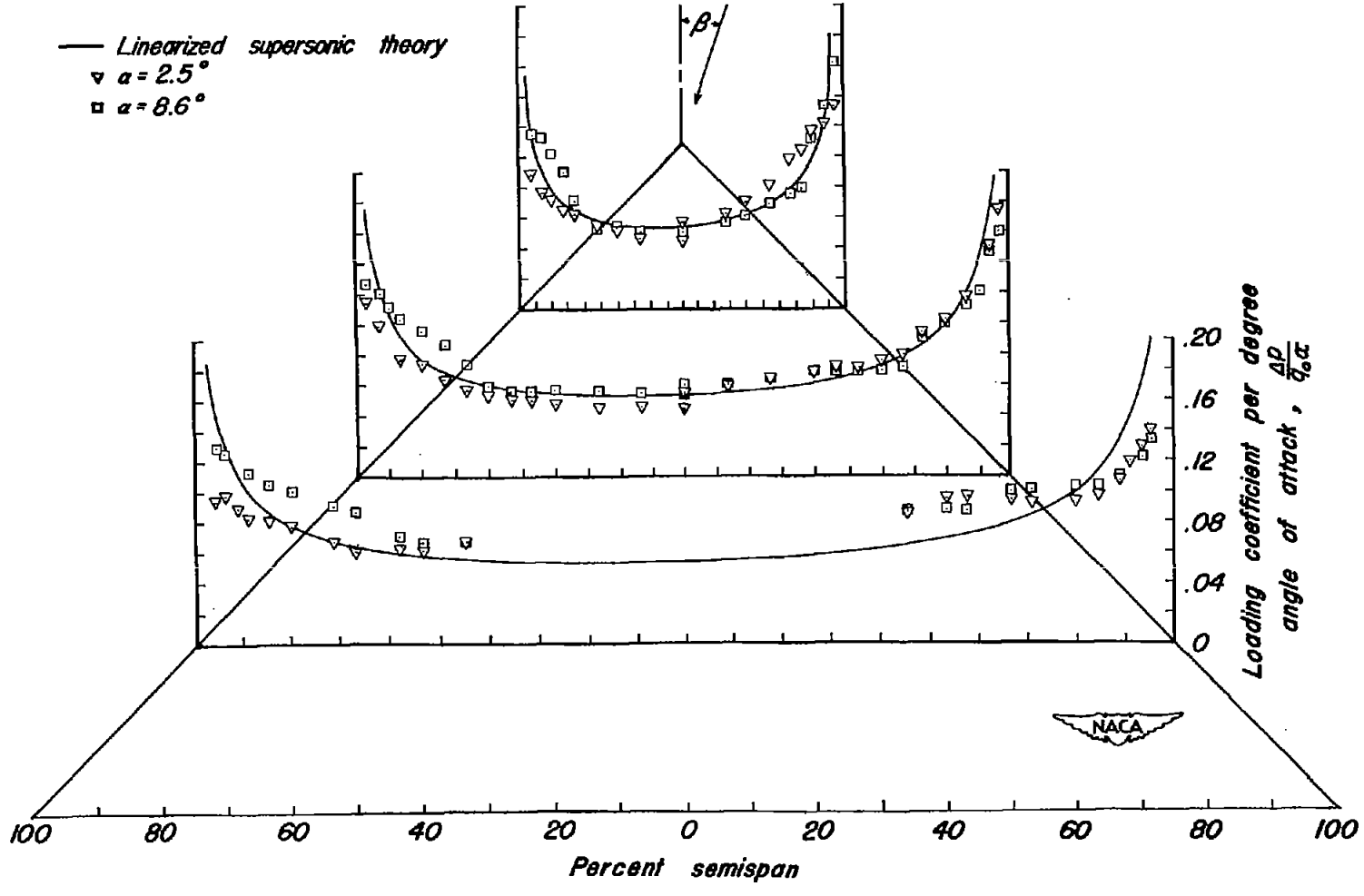
[redacted]




(a) Round-nose airfoil.

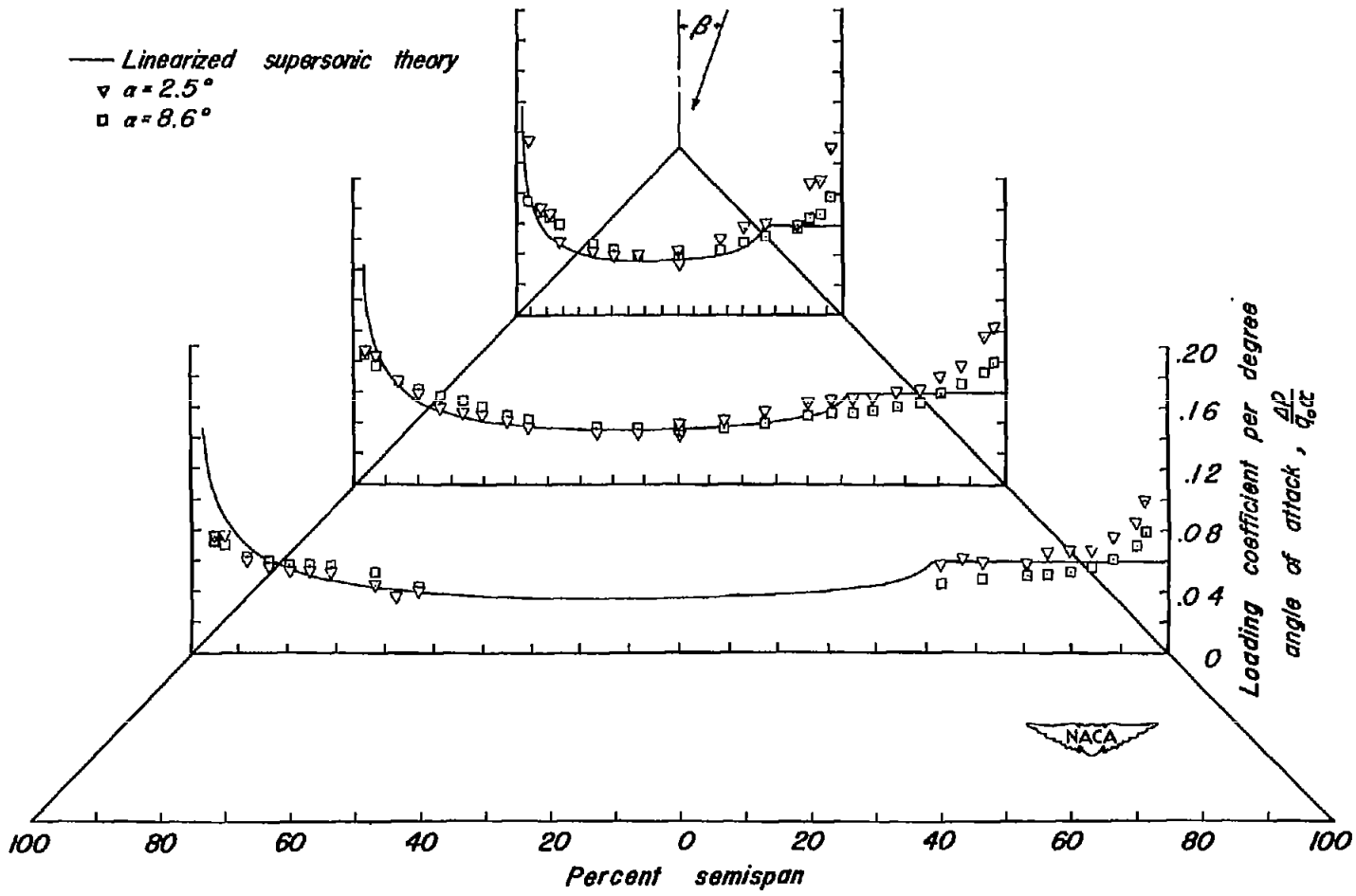
Figure 7. — A comparison of the experimental and theoretical load distributions at $\beta = 9°$, $M = 1.20$.

[redacted]



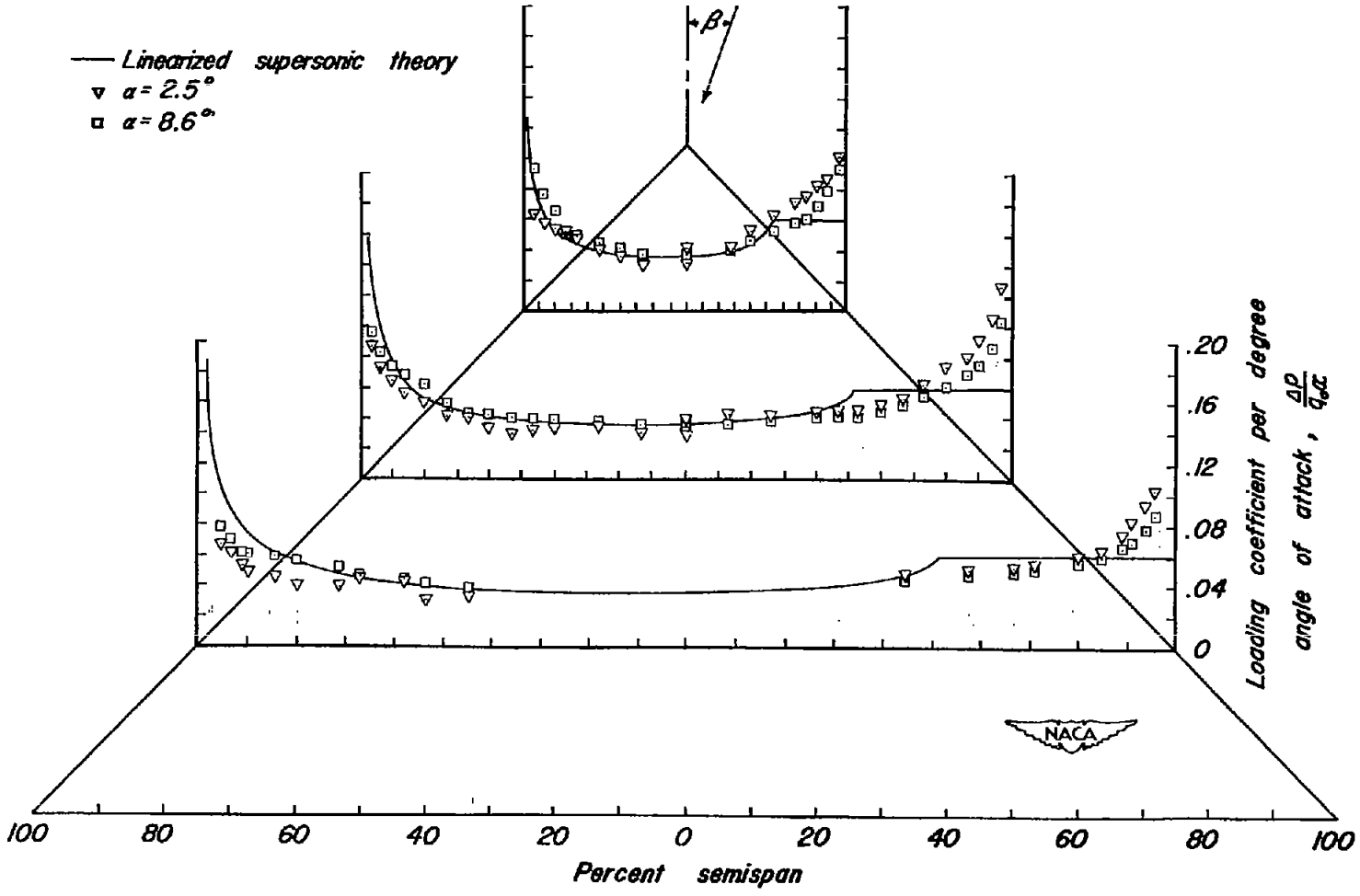

(b) Sharp-nose airfoil.

Figure 7.– Concluded




(a) Round - nose airfoil

Figure 8. — A comparison of the experimental and theoretical load distributions at $\beta = 9°$, $M = 1.70$.




(b) Sharp-nose airfoil.

Figure 8.— Concluded.