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RESEARCH MEMORANDUM

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EFFECT OF A WING LEADING-EDGE FLAP AND CHORD-EXTENSION
ON THE HIGH SUBSONIC CONTROL CHARACTERISTICS OF AN
AILERON LOCATED AT TWO SPANWISE POSITIONS

By Robert F. Thompson and Robert T. Taylor

Langley Aeronautical Laboratory
Langley Field, Va.

NATIONAL ADVISORY COMMITTEE
FOR AERONAUTICS

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RESEARCH MEMORANDUM

EFFECT OF A WING LEADING-EDGE FLAP AND CHORD-EXTENSION

ON THE HIGH SUBSONIC CONTROL CHARACTERISTICS OF AN
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SUMMARY

An investigation was made in the Langley high-speed 7- by 10-foot tunnel to determine the effects of a wing leading-edge modification on the effectiveness of a trailing-edge flap-type aileron. The control was tested on the left half of the wing of a sting-mounted wing-fuselage model having a wing of aspect ratio 4, taper ratio 0.3, 45° sweepback, and NACA 65A006 airfoil sections. The wing leading-edge modification was the optimum configuration from a previous investigation and consisted of a chord-extension over the outboard 35 percent of the semispan in combination with a full-span leading-edge flap deflected 6°. The aileron spanned 50 percent of the left half of the wing and was tested at two spanwise locations. Aileron deflections up to approximately $\pm 30^\circ$ were tested through an angle-of-attack range which varied with Mach number and a Mach number range from 0.40 to 0.94. Complete results are presented in tabular form as increments in aerodynamic coefficients due to aileron deflection. A representative part of the data is presented graphically, and results are discussed on the basis of these data.

Modifying the wing leading edge generally had only a small effect on the static control characteristics of either the inboard or outboard aileron. The effect of aileron spanwise position was small and did not favor either location over the entire test range.

INTRODUCTION

Detailed wind-tunnel investigations have shown that, for certain thin sweptback wings, leading-edge separation combines with a spanwise pressure gradient to create a vortex-type flow over most of the lift range. This flow can result in undesirable static longitudinal stability characteristics for certain aspect ratios and can lead to the objectionable

characteristic termed "pitch-up" which is found in many current airplane designs having thin sweptback wings. A detailed discussion of this flow phenomenon is given in reference 1. Outboard leading-edge chord-extensions have been effective in improving the longitudinal stability characteristics of wings of this type (ref. 2). In addition, appreciable improvement in the lift-drag ratio for thin sweptback wings up to a Mach number of 0.90 was obtained with a deflected leading-edge flap (refs. 3 and 4). The investigation of reference 5, therefore, was made to determine the extent to which these gains in longitudinal stability and lift-drag ratio could be combined at high subsonic speeds. For the model investigated, a leading-edge chord-extension over the outboard 35 percent of the semispan in combination with a full-span leading-edge flap deflected 6° gave best results from overall considerations of stability and performance.

The present investigation was made on the wing-fuselage model used in reference 5 to determine the effects of the optimum wing leading-edge modification obtained in reference 5 on the control characteristics of a trailing-edge flap-type aileron located at two spanwise positions. The same wing-fuselage model was used in reference 6 to determine the effects of the leading-edge modification on a spoiler-type aileron located at two spanwise positions. The wing had an aspect ratio of 4, a taper ratio of 0.3, 45° of sweepback of the quarter-chord line, and streamwise NACA 65A006 airfoil sections. Tests were made in the Langley high-speed 7- by 10-foot tunnel through a Mach number range from 0.40 to 0.94 and an approximate angle-of-attack range from -2° to 24° at the lower speeds and -2° to 10° at a Mach number of 0.94. Complete incremental force and moment coefficients due to aileron deflection are listed in tabular form and a representative part of the data is presented graphically.

SYMBOLS

The forces and moments measured on the model are presented about the wind axes which, for the conditions of these tests (zero yaw), correspond to the stability axes. The origin of the axes was in the plane of symmetry at a longitudinal position corresponding to the projection of the quarter-chord point of the wing mean aerodynamic chord (fig. 1).

All force and moment coefficients presented are based on the plan form of the basic wing without chord-extensions. The area of the chord-extensions was 3.8 percent of the basic-wing area. Incremental effects due to control deflection were produced by an aileron on only the left half of the complete wing.

C_L	lift coefficient, Lift/qS
C_D	drag coefficient, Drag/qS
C_m	pitching-moment coefficient, Pitching moment/qS \bar{c}
C_l	rolling-moment coefficient, Rolling moment/qS b
C_n	yawing-moment coefficient, Yawing moment/qS b
C_Y	lateral-force coefficient, Lateral force/qS
Δ	prefix signifying increment of coefficient due to control deflection
q	free-stream dynamic pressure, $\frac{\rho V^2}{2}$, lb/sq ft
S	wing area before leading-edge modification, 2.25 sq ft
b	wing span, 3 ft
\bar{c}	mean aerodynamic chord of basic wing, 0.823 ft
c	local wing chord of basic wing, ft
R	Reynolds number based on \bar{c}
M	free-stream Mach number
V	free-stream velocity, ft/sec
ρ	mass density of air, slugs/cu ft
y_i	spanwise distance from plane of symmetry to inboard end of control, measured perpendicular to plane of symmetry, ft
δ	control deflection, positive when trailing edge is below wing-chord plane, deg
α	angle of attack of fuselage center line and wing chord line, deg

Subscript:

nom nominal, used to identify the approximate angles presented graphically. (Actual angles are listed in the appropriate tables.)

MODEL AND APPARATUS

A drawing of the wing-fuselage model is given in figure 1 and a photograph of the model mounted in the tunnel is shown as figure 2. Ordinates of the fuselage are given in table 1.

The wing had 45° sweepback referred to the quarter-chord line, an aspect ratio of 4.0, a taper ratio of 0.3, and NACA 65A006 airfoil sections parallel to the plane of symmetry. The wing was made of solid aluminum alloy and the stiffness was reduced in order to provide for the leading-edge modification and the controls.

Provision for the wing leading-edge modification was made by cutting the wing along the 20-percent chord line, and leading-edge flap angles of 0° and 6° were obtained with preset steel inserts. After setting a desired flap angle, the groove in the wing was filled and finished flush to the wing surface. The chord-extension was made by using a larger insert to extend the nose section forward $0.10c$. The two segments of the airfoil (nose and trailing-edge sections) were joined by a smooth fairing. Angular distortion of the leading-edge flap and chord-extension under load was checked analytically and found to be negligible.

Provision for the trailing-edge flap-type ailerons was made by cutting the wing along the 70-percent chord line and preset steel inserts were used to attach the ailerons to the wing at the desired control deflections. The groove in the wing was then filled and finished flush to the wing surface to simulate the control configuration that would be obtained with a sealed, radius-nose aileron. The controls spanned 50 percent of the wing semispan and were tested on the left wing at spanwise stations of $\frac{y_i}{b/2} = 0.25$ and 0.50 . Forces and moments were measured by a six-component strain-gage balance located within the model fuselage.

CORRECTIONS

Blockage corrections were determined by the method of reference 7 and were applied to the Mach numbers and dynamic pressures. Jet-boundary

corrections, applied to the angle of attack and drag, were calculated by the method of reference 8. The angle of attack has been corrected for deflection of the sting-support system under load. The basic-model data (fig. 4) were obtained from reference 5 and therefore have the corrections of reference 5 applied.

Aileron deflections were measured in the wind-off condition and were believed to be little affected by aerodynamic load.

TESTS

The sting-supported wing-fuselage model was tested in the Langley high-speed 7- by 10-foot tunnel. Data were obtained for each model configuration by setting the tunnel Mach number and then rotating the model through an angle-of-attack range. Tests were made through a Mach number range from 0.40 to 0.94. The approximate angle-of-attack range varied from -2° to 24° at the lower test speeds and from -2° to 10° at $M = 0.94$. The angle of attack at the higher Mach numbers was limited by tunnel choking conditions. The ailerons were tested through a deflection range of about $\pm 30^{\circ}$.

The variation of average test Reynolds number based on the wing mean aerodynamic chord with Mach number is given in figure 3.

PRESENTATION OF DATA

Incremental aerodynamic coefficients due to aileron deflection for the complete investigation are presented in tabular form as follows:

Table*	Spanwise location of control, $\frac{y_1}{b/2}$	M	δ	α
2	0.25	0.40	Range	Range
3		.60		
4		.70		
5		.81		
6		.85		
7		.90		
8		.94	↓	
9	0.50	.40	Range	Range
10		.60		
11		.70		
12		.81		
13		.85		
14		.90		
15		.94	↓	↓

*Parts (a) of the tables present data for the plain wing and parts (b) for the wing with the modified leading edge.

Lift, drag, and pitching-moment characteristics of the model with the aileron undeflected are presented in figure 4. These data were obtained from reference 5 and are presented without discussion to show the model characteristics with and without leading-edge modification.

A representative part of the test data is plotted in figures 5 to 10 to present graphically the general results of the investigation. The effect of modifying the wing leading edge on the aileron characteristics is presented in figures 5 to 8. Figures 9 and 10 present the effect of spanwise location on the aerodynamic effectiveness of the ailerons on the wing with the modified leading edge.

The values given for angle of attack α_{nom} in figures 5, 6, and 9 are nominal values of the angles of attack at which the test points were obtained. The absolute magnitude in angle-of-attack difference between any two corresponding test points is small, as shown in the tables, and results from the jet-boundary and sting-deflection corrections.

RESULTS AND DISCUSSION

Results of this investigation are discussed on the basis of data presented graphically in figures 5 to 10. These data were arbitrarily chosen as being representative. It should be emphasized, however, that complete results are presented in tables 2 to 15.

Effect of Wing Leading-Edge Modification on the Variation
of Aileron Characteristics With Aileron Deflection

The effect of modifying the wing leading edge on the variation of incremental aerodynamic coefficients with aileron deflection is given for the two spanwise control positions in figures 5 and 6. In general, throughout the test range, modifying the wing leading edge had only a small effect on the incremental aerodynamic coefficient produced by control deflection of either the inboard or outboard aileron and the largest effect was on the incremental pitching-moment coefficient due to deflection of the outboard control at the lower test speeds (fig. 6(e)). These results at high subsonic speeds are in general agreement with results obtained in similar investigations at low speed in reference 9 and at supersonic speeds in reference 10 wherein the leading-edge modification included only a chord-extension.

Effect of Wing Leading-Edge Modification on the Variation
of the Aileron Characteristics With Angle of Attack

The effect of modifying the wing leading edge on the variation of incremental rolling- and yawing-moment coefficients produced by maximum test aileron deflections with angle of attack is presented for the two spanwise control positions at $M = 0.85$ in figures 7 and 8. Modifying the wing leading edge did not change the general variation of ΔC_l and ΔC_n with angle of attack and had only a small effect on the absolute magnitudes although there was a tendency to decrease the static roll effectiveness of the down-going aileron at the higher test angle of attack, especially for the inboard control.

Effect of Spanwise Position on the Variation of Aileron
Characteristics With Aileron Deflection

The effect of aileron spanwise position on the variation of ΔC_l , ΔC_n , and ΔC_m with aileron deflection on the wing with the modified leading edge is shown in figure 9. In general, the effect of spanwise position was small and did not favor either the inboard or outboard location over the whole test range.

Effect of Spanwise Position on the Variation of
Control Characteristics With Angle of Attack

The effect of aileron spanwise position on the variation of ΔC_l and ΔC_n produced by maximum test control deflections with angle of attack is presented in figure 10 at $M = 0.85$ for the wing with the modified leading edge. The general variation of ΔC_l and ΔC_n with angle of attack was unaffected by aileron spanwise location. Based on total maximum positive and negative control deflection, the inboard aileron gave slightly higher values of static roll effectiveness up to an angle of attack of about 12° with the outboard control becoming slightly more effective at the higher angles primarily because of the increase in effectiveness of the outboard aileron for positive deflections.

CONCLUSIONS

A wind-tunnel investigation of a wing-fuselage model was made through an angle-of-attack range to a Mach number of 0.94. The purpose was to determine the effects of a wing leading-edge modification on the incremental aerodynamic coefficients due to deflection of a trailing-edge flap-type aileron located at two spanwise positions. Results indicate the following conclusions:

1. Modifying the wing leading edge generally had only a small effect on the static control characteristics of either the inboard or outboard aileron.
2. In general, the effect of aileron spanwise position was small and did not favor either the inboard or outboard location over the entire test range.

Langley Aeronautical Laboratory,
National Advisory Committee for Aeronautics,
Langley Field, Va., February 2, 1955.

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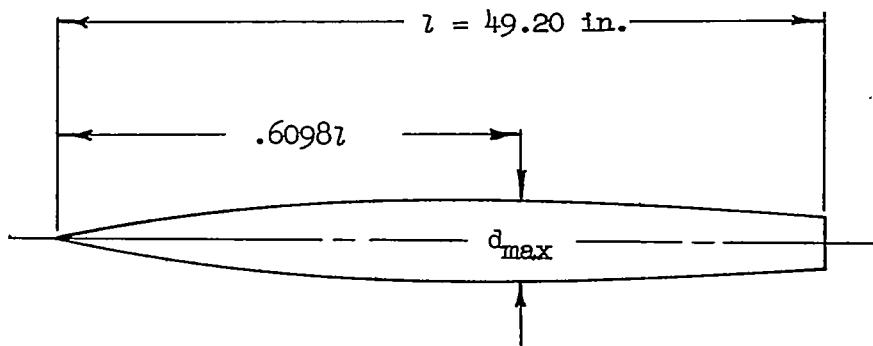
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TABLE 1.- FUSELAGE ORDINATES

Basic fineness ratio 12, actual fineness ratio 9.8
achieved by cutting off rear portion of body

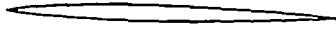
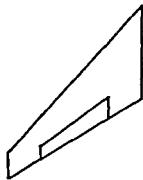


Ordinates, percent length	
Station	Radius
0	0
.61	.28
.91	.36
1.52	.52
3.05	.88
6.10	1.47
9.15	1.97
12.20	2.40
18.29	3.16
24.39	3.77
30.49	4.23
36.59	4.56
42.68	4.80
48.78	4.95
54.88	5.05
60.98	5.08
67.07	5.04
73.17	4.91
79.27	4.69
85.37	4.34
91.46	3.81
100.00	3.35

Leading-edge radius = 0.0006 l

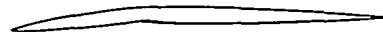
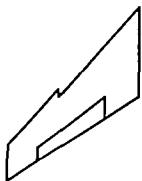
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TABLE 2.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.25$; $H = 0.40$

(a) Plain leading edge

α deg	ΔC_L	ΔC_D	ΔC_m	ΔC_I	ΔC_n	ΔC_x	α deg	ΔC_L	ΔC_D	ΔC_m	ΔC_I	ΔC_n	ΔC_x					
$b = 6.7$												$b = -5.1$						
-2.05	.0020	.0021	-.0170	.0107	-.0002	.0023	-2.05	-.0253	.0018	.0246	-.0091	-.0003	-.0001					
.01	.0017	.0017	-.0220	.0106	-.0005	.0048	-.01	-.0474	.0008	.0199	-.0092	-.0003	.0010					
2.07	.0393	.0029	-.0191	.0107	-.0009	.0050	2.04	-.0318	.0004	.0195	-.0091	-.0002	.0023					
4.12	.0348	.0032	-.0216	.0104	-.0014	.0047	4.10	-.0206	.0015	.0194	-.0094	-.0002	.0024					
6.18	.0165	.0024	-.0194	.0102	-.0019	.0046	6.16	-.0330	.0041	.0203	-.0088	-.0009	.0015					
8.24	.0165	.0035	-.0145	.0098	-.0018	.0048	8.23	-.0268	.0041	.0170	-.0057	-.0020	.0024					
10.30	.0254	.0076	-.0088	.0068	-.0020	.0054	10.29	-.0110	.0023	.0175	-.0060	-.0016	-.0003					
12.34	.0254	.0081	-.0103	.0061	-.0025	.0055	12.34	.0043	-.0009	.0181	-.0066	-.0020	.0024					
14.39	-.0064	.0018	-.0078	.0050	-.0025	.0073	14.39	-.0121	-.0051	.0161	-.0050	-.0018	.0023					
16.42	.0025	.0043	-.0056	.0047	-.0026	.0086	16.43	-.0018	-.0029	.0163	-.0040	-.0019	.0025					
18.46	-.0197	-.0034	-.0060	.0037	-.0025	.0071	18.46	-.0323	.0132	.0131	-.0040	-.0022	-.0001					
20.47	-.0247	-.0037	-.0071	.0031	-.0026	.0070	20.47	-.0563	-.0266	.0071	-.0022	-.0014	-.0002					
23.48	.0246	-.0045	-.0022	.0028	-.0024	.0033	23.48	-.0189	-.0120	.0154	-.0007	-.0003	-.0040					
$b = 12.0$																		
-2.01	.0970	.0010	-.0339	.0191	-.0007	.0046	-2.06	-.0596	.0047	.0372	-.0187	-.0011	.0035					
.04	.0974	.0032	-.0339	.0192	-.0014	.0058	-.03	-.0911	.0032	.0339	-.0188	-.0006	.0071					
2.10	.1114	.0058	-.0328	.0188	-.0020	.0045	2.03	-.0751	.0008	.0342	-.0184	-.0002	.0085					
4.16	.1210	.0095	-.0335	.0181	-.0029	.0042	4.09	-.0685	-.0011	.0329	-.0188	-.0004	.0086					
6.21	.1077	.0130	-.0282	.0179	-.0038	.0039	6.16	-.0665	-.0042	.0314	-.0175	-.0013	.0091					
8.27	.1118	.0193	-.0215	.0162	-.0037	.0050	8.22	-.0646	-.0075	.0277	-.0136	-.0029	.0090					
10.33	.1019	.0228	-.0102	.0095	-.0040	.0040	10.28	-.0488	-.0071	.0232	-.0131	-.0029	.0053					
12.37	.0969	.0259	-.0112	.0093	-.0047	.0050	12.33	-.0241	-.0054	.0224	-.0123	-.0036	.0084					
14.42	.0738	.0245	-.0087	.0084	-.0051	.0059	14.38	-.0354	-.0106	.0213	-.0109	-.0039	.0085					
16.45	.0728	.0281	-.0072	.0078	-.0054	.0070	18.45	-.0461	-.0187	.0156	-.0092	-.0051	.0084					
18.50	.0492	.0233	-.0070	.0054	-.0048	.0055	20.46	-.0447	-.0203	.0075	-.0060	-.0047	.0056					
20.48	.0124	.0148	-.0113	.0053	-.0053	.0052	23.49	-.0012	-.0286	.0183	-.0030	-.0026	.0016					
23.51	.0329	.0236	-.0018	.0034	-.0038	.0031	$b = -10.5$											
$b = 16.0$																		
-2.02	.1080	.0035	-.0467	.0259	-.0013	.0051	-2.05	-.0924	.0083	.0555	-.0246	-.0020	.0048					
.04	.1081	.0042	-.0495	.0258	-.0021	.0088	-.02	-.1192	.0068	.0554	-.0257	-.0013	.0071					
2.09	.1361	.0073	-.0474	.0249	-.0026	.0077	2.04	-.0887	.0040	.0560	-.0256	-.0009	.0084					
4.15	.1228	.0109	-.0492	.0247	-.0040	.0071	4.10	-.0912	.0008	.0563	-.0260	-.0001	.0110					
6.23	.1235	.0161	-.0436	.0235	-.0052	.0092	6.15	-.0991	-.0049	.0554	-.0256	-.0018	.0118					
8.27	.1224	.0218	-.0351	.0203	-.0046	.0118	8.21	-.0874	-.0077	.0483	-.0211	-.0033	.0104					
10.32	.0890	.0228	-.0220	.0118	-.0049	.0091	10.27	-.0575	-.0062	.0419	-.0186	-.0037	.0073					
12.37	.0889	.0264	-.0219	.0108	-.0057	.0112	12.33	-.0323	-.0058	.0396	-.0177	-.0045	.0090					
14.40	.0523	.0214	-.0191	.0097	-.0061	.0119	14.38	-.0529	-.0136	.0380	-.0154	-.0052	.0081					
16.43	.0381	.0204	-.0172	.0090	-.0063	.0129	16.42	-.0331	-.0112	.0354	-.0135	-.0058	.0073					
18.49	.0505	.0270	-.0140	.0068	-.0061	.0116	18.45	-.0405	-.0161	.0318	-.0129	-.0066	.0038					
20.48	.0135	.0193	-.0234	.0067	-.0071	.0124	20.46	-.0442	-.0188	.0211	-.0091	-.0068	.0046					
23.49	-.0011	.0118	-.0147	.0038	-.0044	.0117	23.49	-.0382	-.0229	.0330	-.0049	-.0044	.0005					
$b = 30.6$																		
.06	.2041	.0242	-.0889	.0437	-.0075	.0213	-2.10	-.1895	.0262	.0844	-.0426	-.0073	.0135					
2.12	.2275	.0281	-.0858	.0450	-.0090	.0224	-.04	-.2119	.0227	.0853	-.0450	-.0064	.0143					
4.17	.2322	.0369	-.0854	.0419	-.0109	.0230	2.00	-.2057	.0178	.0921	-.0480	-.0056	.0137					
6.23	.2131	.0438	-.0777	.0377	-.0125	.0247	4.05	-.2085	.0109	.0924	-.0480	-.0041	.0165					
8.30	.1779	.0457	-.0611	.0304	-.0111	.0257	6.11	-.2076	.0015	.0922	-.0480	-.0010	.0177					
10.33	.1303	.0478	-.0426	.0213	-.0121	.0213	8.18	-.1920	.0066	.0831	-.0434	-.0020	.0157					
12.34	.0458	.0336	-.0398	.0152	-.0118	.0254	10.24	-.1625	.0116	.0704	-.0376	-.0041	.0124					
14.42	.0913	.0513	-.0326	.0143	-.0133	.0274	12.28	-.1420	.0176	.0621	-.0351	-.0058	.0108					
16.44	.0759	.0509	-.0307	.0125	-.0103	.0284	14.35	-.1527	-.0284	.0612	-.0318	-.0073	.0078					
18.4.	.0378	.0429	-.0315	.0099	-.0128	.0269	16.38	-.1414	-.0341	.0535	-.0286	-.0086	.0074					
20.50	.0170	.0395	-.0201	.0097	-.0143	.0275	18.42	-.1248	-.0379	.0461	-.0249	-.0097	.0034					
23.50	.0432	.0530	-.0246	.0074	-.0141	.0276	20.43	-.1354	-.0505	.0353	-.0184	-.0102	-.0008					
							23.44	-.1430	-.0654	.0418	-.0133	-.0104	-.0053					

TABLE 2.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.25$; $K = 0.40$ - Continued

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$b = 6.7$							$b = -5.1$						
- 2.03	.0580	-.0013	+.0149	.0100	+.0003	.0028	- 2.05	-.0391	.0035	.0221	-.0099	-.0003	+.0040
.03	.0532	+.0004	-.0182	.0097	-.0002	.0013	- .02	-.0459	.0009	.0239	-.0118	-.0000	-.0081
2.08	.0630	+.0023	-.0175	.0101	-.0005	.0014	2.04	-.0476	-.0002	.0256	-.0112	.0003	-.0080
4.14	.0584	+.0038	-.0171	.0103	-.0009	.0001	4.10	-.0471	-.0007	.0249	-.0113	.0007	-.0079
6.20	.0587	+.0048	-.0171	.0102	-.0012	-.0000	6.17	-.0463	-.0016	.0262	-.0116	.0011	-.0066
8.25	.0654	+.0088	-.0146	.0094	-.0018	.0009	8.23	-.0316	-.0025	.0245	-.0112	.0015	-.0064
10.31	.0448	+.0089	-.0111	.0085	-.0022	.0007	10.29	-.0212	-.0024	.0287	-.0107	.0022	-.0060
12.35	.0541	+.0111	-.0104	.0073	-.0024	.0017	12.34	-.0068	-.0010	.0240	-.0098	.0025	-.0058
14.39	.0302	+.0099	-.0065	.0052	-.0023	-.0000	14.38	-.0290	-.0066	.0258	-.0077	.0028	-.0069
16.43	.0298	+.0114	-.0080	.0049	-.0025	.0025	16.41	-.0373	-.0103	.0228	-.0073	.0028	-.0069
18.48	.0469	+.0195	-.0058	.0034	-.0023	.0024	18.45	-.0180	-.0069	.0215	-.0059	.0027	-.0079
20.48	.0097	+.0106	-.0015	.0003	-.0017	.0019	20.49	-.0051	-.0010	.0133	-.0046	.0025	-.0076
23.51	.0088	+.0103	-.0058	.0012	-.0011	.0165	23.51	-.0035	-.0039	.0149	-.0026	.0025	-.0098
$b = 12.0$							$b = -10.5$						
- 2.00	.1159	-.0006	+.0355	.0191	-.0002	.0065	- 2.06	-.0864	.0070	.0400	-.0192	-.0019	-.0024
.04	.1015	+.0023	-.0402	.0188	-.0009	.0041	- .03	-.0916	.0043	.0418	-.0218	-.0009	-.0002
2.09	.1016	+.0051	-.0403	.0191	-.0015	.0041	2.05	-.0813	.0016	.0417	-.0217	-.0002	-.0005
4.15	.0967	+.0078	-.0392	.0185	-.0020	.0055	4.09	-.0944	-.0000	.0413	-.0213	.0002	-.0005
6.21	.0976	+.0090	-.0385	.0180	-.0027	.0058	6.14	-.0935	-.0034	.0405	-.0214	.0010	-.0006
8.26	.1062	+.0157	-.0349	.0166	-.0036	.0050	8.22	-.0692	-.0053	.0395	-.0216	.0021	-.0022
10.32	.0735	+.0146	-.0275	.0148	-.0041	.0041	10.27	-.0816	-.0114	.0397	-.0192	.0029	-.0015
12.34	.0655	+.0173	-.0247	.0110	-.0046	.0024	12.31	-.0622	-.0116	.0339	-.0179	.0036	-.0019
14.38	.0210	+.0119	-.0187	.0082	-.0044	.0030	14.37	-.0747	-.0181	.0328	-.0144	.0045	-.0001
16.43	.0295	+.0161	-.0187	.0068	-.0046	.0007	16.41	-.0457	-.0134	.0300	-.0123	.0046	-.0007
18.45	.0101	+.0132	-.0173	.0048	-.0044	.0023	18.45	-.0262	-.0111	.0257	-.0109	.0048	-.0017
20.49	.0138	+.0169	-.0069	.0003	-.0037	.0029	20.49	-.0172	-.0093	.0128	-.0074	.0048	-.0022
23.50	-.0160	+.0060	-.0162	.0015	-.0015	.0042	23.50	-.0193	-.0050	.0184	-.0050	.0051	-.0067
$b = 16.0$							$b = -14.5$						
- 2.00	.1078	+.0025	-.0456	.0247	-.0002	.0043	- 2.06	-.1107	.0105	.0514	-.0238	-.0028	-.0021
.05	.1500	+.0050	-.0473	.0245	-.0012	.0043	- .04	-.1346	.0060	.0473	-.0255	-.0017	-.0030
2.11	.1312	+.0081	-.0452	.0245	-.0018	.0068	2.01	-.1278	.0037	.0511	-.0245	-.0009	-.0034
4.16	.1261	+.0114	-.0477	.0242	-.0024	.0053	4.07	-.1359	.0008	.0511	-.0250	-.0003	-.0033
6.20	.1076	+.0126	-.0414	.0227	-.0034	.0049	6.14	-.1296	-.0025	.0520	-.0256	-.0006	-.0047
8.26	.1212	+.0205	-.0388	.0212	-.0044	.0070	8.19	-.1283	-.0092	.0491	-.0253	.0019	-.0050
10.34	.1209	+.0255	-.0289	.0184	-.0051	.0064	10.25	-.1353	-.0164	.0474	-.0226	.0029	-.0031
12.36	.0776	+.0237	-.0300	.0139	-.0057	.0066	12.30	-.0962	-.0175	.0424	-.0206	.0042	-.0027
14.39	.0435	+.0208	-.0218	.0102	-.0048	.0063	14.35	-.1031	-.0238	.0395	-.0162	.0046	-.0009
16.44	.0515	+.0297	-.0190	.0082	-.0058	.0094	16.39	-.0870	-.0249	.0341	-.0138	.0050	-.0012
18.47	.0467	+.0275	-.0179	.0057	-.0058	.0103	18.42	-.0759	-.0265	.0283	-.0110	.0050	-.0019
20.49	.0088	+.0198	-.0058	.0016	-.0044	.0091	20.46	-.0649	-.0280	.0233	-.0074	.0053	-.0023
23.50	-.0113	+.0122	-.0158	.0025	-.0035	.0105	23.49	-.0491	-.0302	.0154	-.0030	.0057	-.0074
$b = 30.6$							$b = -29.3$						
- 2.00	.1765	+.0168	-.0889	.0445	-.0050	.0107	- 2.12	-.2511	.0326	.0850	-.0445	-.0084	-.0059
.05	.2043	+.0222	-.0889	.0443	-.0064	.0145	- .08	-.2557	.0244	.0846	-.0445	-.0068	-.0114
2.11	.2132	+.0256	-.0824	.0429	-.0074	.0143	4.03	-.2821	.0116	.0924	-.0482	-.0045	-.0083
4.17	.1746	+.0276	-.0803	.0406	-.0086	.0125	6.08	-.2806	.0034	.0929	-.0480	-.0029	-.0112
6.23	.1695	+.0334	-.0758	.0385	-.0101	.0119	8.15	-.2566	-.0058	.0897	-.0479	-.0000	-.0135
8.27	.1641	+.0387	-.0704	.0369	-.0113	.0140	10.19	-.2736	-.0221	.0863	-.0457	-.0027	-.0095
10.33	.1356	+.0409	-.0584	.0326	-.0126	.0129	12.26	-.2246	-.0288	.0751	-.0408	-.0047	-.0073
12.35	.1047	+.0443	-.0548	.0230	-.0130	.0177	14.30	-.2216	-.0411	.0707	-.0345	.0065	-.0038
14.38	.0377	+.1170	-.0441	.0182	-.0133	.0167	16.36	-.1950	-.0467	.0573	-.0281	.0069	-.0012
16.43	.0555	+.0426	-.0421	.0145	-.0135	.0186	18.39	-.1650	-.0471	.0480	-.0231	.0078	-.0014
18.47	.0399	+.0432	-.0295	.0087	-.0130	.0191	20.44	-.1258	-.0471	.0364	-.0172	.0089	-.0033
20.49	.0230	+.0465	-.0170	.0025	-.0119	.0222	23.47	-.1185	-.0586	.0236	-.0094	.0108	-.0098
23.49	-.0121	+.0307	-.0338	.0042	-.0099	.0223							

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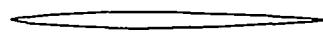
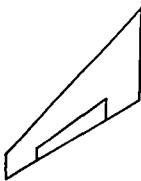


TABLE 3.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{V_1}{b/2} = 0.25$; $M = 0.60$

(a) Plain leading edge

α_g deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α_g deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$b = 6.7$													
-2.07	.0368	.0010	-.0216	.0107	-.0000	.0047	-2.08	.2233	.0005	.0022	-.0101	.0001	.0026
.01	.0371	.0020	-.0235	.0110	-.0003	.0039	-2.00	-.0367	.0011	.0198	-.0099	-.0001	.0004
2.09	.0397	.0026	-.0233	.0109	-.0007	.0038	4.17	-.0324	-.0017	.0184	-.0098	.0006	.0021
4.18	.0376	.0039	-.0242	.0105	-.0011	.0042	6.26	-.0300	-.0030	.0167	-.0089	.0011	.0011
6.27	.0356	.0049	-.0219	.0098	-.0014	.0047	8.35	-.0230	-.0032	.0167	-.0068	.0019	.0012
8.36	.0266	.0052	-.0183	.0087	-.0017	.0043	10.45	-.0298	-.0059	.0148	-.0063	.0015	-.0009
10.45	-.0037	.0018	-.0124	.0060	-.0020	.0031	12.52	-.0398	-.0095	.0134	-.0055	.0019	.0006
12.54	.0221	.0081	-.0114	.0055	-.0023	.0049	14.59	-.0380	-.0112	.0124	-.0044	.0021	.0001
14.60	.0038	.0042	-.0108	.0052	-.0025	.0047	16.65	-.0250	-.0088	.0109	-.0047	.0022	-.0005
16.64	-.0123	-.0000	-.0106	.0043	-.0026	.0045	18.63	-.0322	-.0108	.0004	-.0035	.0021	-.0004
18.65	.0029	.0057	-.0093	.0034	-.0022	.0047	20.63	-.0269	-.0125	.0086	-.0018	.0009	-.0001
20.66	.0104	.0086	-.0092	.0045	-.0035	.0050	22.70	-.0147	-.0091	.0074	-.0007	-.0003	.0029
23.61	-.0171	-.0463	-.0170	.0026	-.0027	.0070							
$b = 12.0$													
-2.03	.1145	.0007	-.0377	.0192	-.0006	.0069	-2.10	-.0756	.0055	.0354	-.0189	-.0010	.0027
.06	.1101	.0033	-.0385	.0193	-.0012	.0041	-2.02	-.0806	.0033	.0365	-.0195	-.0006	.0040
2.14	.1152	.0051	-.0385	.0191	-.0018	.0039	2.06	-.0783	.0007	.0352	-.0187	-.0002	.0042
4.22	.1156	.0096	-.0382	.0184	-.0026	.0041	4.15	-.0764	-.0021	.0354	-.0193	-.0008	.0052
6.31	.1164	.0145	-.0329	.0171	-.0035	.0055	6.24	-.0737	-.0048	.0338	-.0177	.0015	.0044
8.41	.1046	.0180	-.0230	.0153	-.0035	.0052	8.34	-.0599	-.0066	.0274	-.0148	.0029	.0043
10.47	.0431	.0131	-.0140	.0084	-.0038	.0034	10.43	-.0618	-.0101	.0241	-.0129	.0028	.0025
12.19	-.0425	-.0891	-.0527	.0087	-.0045	.0029	12.52	-.0574	-.0182	.0230	-.0117	.0035	.0030
14.63	.0524	.0204	-.0129	.0087	-.0049	.0056	14.51	-.1373	-.0370	.0144	-.0100	.0039	.0015
16.67	.0356	.0182	-.0123	.0073	-.0049	.0053	16.63	-.0677	-.0222	.0177	-.0095	.0044	.0015
18.65	.0154	.0158	-.0210	.0062	-.0049	.0059	18.63	-.0449	-.0162	.0075	-.0076	.0049	.0014
20.68	.0548	.0287	-.0136	.0064	-.0059	.0071	20.63	-.0233	-.0128	.0119	-.0049	.0032	.0004
23.73	.0369	.0255	-.0114	.0038	-.0044	.0080	23.69	-.0264	-.0159	.0137	-.0052	.0021	.0034
$b = 16.0$													
-2.03	.1348	.0028	-.0550	.0261	-.0011	.0101	-2.10	-.0945	.0089	.0529	-.0242	-.0019	.0047
.05	.1350	.0056	-.0565	.0259	-.0018	.0092	-2.01	-.1091	.0063	.0551	-.0257	-.0014	.0053
2.14	.1398	.0285	-.0530	.0247	-.0027	.0081	2.07	-.1018	.0033	.0545	-.0254	-.0009	.0055
4.22	.1388	.0133	-.0543	.0246	-.0038	.0076	4.15	-.0996	.0002	.0551	-.0258	.0003	.0073
6.31	.1249	.0174	-.0465	.0213	-.0047	.0101	6.24	-.0973	-.0044	.0545	-.0249	.0019	.0068
8.41	.1178	.0217	-.0355	.0189	-.0046	.0085	8.34	-.0879	-.0076	.0463	-.0212	.0034	.0047
10.48	.0537	.0171	-.0230	.0104	-.0047	.0071	10.43	-.0920	-.0129	.0384	-.0174	.0034	.0020
12.57	.0702	.0243	-.0228	.0107	-.0056	.0100	12.53	-.0521	-.0097	.0391	-.0167	.0046	.0015
14.61	.0421	.0201	-.0246	.0103	-.0061	.0104	14.59	-.0571	-.0146	.0350	-.0143	.0051	.0013
16.65	.0164	.0147	-.0226	.0085	-.0061	.0101	16.62	-.0786	-.0238	.0308	-.0136	.0057	-.0012
20.68	.0589	.0336	-.0200	.0081	-.0081	.0128	18.65	-.0329	-.0112	.0208	-.0107	.0066	-.0008
23.72	.0174	.0200	-.0176	.0054	-.0070	.0147	20.64	-.0248	-.0123	.0237	-.0075	.0046	-.0026
$b = 30.6$													
.08	.2225	.0236	-.0883	.0405	-.0071	.0213	-2.05	-.2019	.0247	.0880	-.0422	-.0066	.0127
2.16	.2254	.0287	-.0882	.0404	-.0088	.0207	2.03	-.2071	.0202	.0963	-.0459	-.0062	.0129
4.26	.2255	.0370	-.0864	.0388	-.0105	.0231	4.11	-.2130	.0127	.0938	-.0453	-.0041	.0158
6.36	.2257	.0460	-.0739	.0330	-.0124	.0248	6.20	-.2146	.0025	.0952	-.0465	-.0009	.0145
8.43	.1693	.0479	-.0539	.0254	-.0113	.0242	8.30	-.1965	-.0054	.0852	-.0420	.0019	.0106
10.49	.0997	.0421	-.0393	.0167	-.0111	.0217	10.38	-.1895	-.0158	.0706	-.0363	.0034	.0051
12.57	.0732	.0415	-.0365	.0151	-.0117	.0225	12.46	-.1801	-.0258	.0638	-.0328	.0054	.0045
14.61	.0606	.0429	-.0371	.0142	-.0125	.0228	14.55	-.1428	-.0258	.0586	-.0301	.0069	.0025
16.65	.0360	.0384	-.0370	.0114	-.0122	.0239	16.60	-.1403	-.0345	.0486	-.0260	.0080	-.0005
18.66	.0506	.0490	-.0444	.0124	-.0144	.0259	18.61	-.1126	-.0344	.0379	-.0199	.0083	-.0035
20.67	.0810	.0613	-.0325	.0117	-.0166	.0289	20.63	-.0713	-.0240	.0427	-.0170	.0072	-.0062
23.72	.0484	.0536	-.0274	.0068	-.0146	.0316	23.68	-.0778	-.0435	.0418	-.0161	.0087	-.0063

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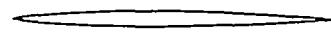
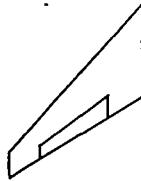
TABLE 3.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.25$; $H = 0.60$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 6.7$													
$\delta = -5.1$													
- 2.05 + 02 + 11 + 20 + 30 + 38 + 46 + 53 + 57 + 63 + 67 + 69 + 69 + 71	+ 0370 + 0494 + 0684 + 0590 + 0545 + 0497 + 0428 + 0053 + 0381 + 0258 + 0254 + 0108 + 0018 + 0173 + 0226	- +0010 - +0008 - +0020 - +0038 - +0188 - +0057 - +0072 - +0085 - +0095 - +0114 - +0094 - +0073 - +0105 - +0051 - +0111 - +0006	- -0.0212 - -0.0188 - -0.0195 - -0.0188 - -0.0184 - -0.0101 - -0.0159 - -0.0140 - -0.0114 - -0.0024 - -0.0025 - -0.0040 - -0.0023 - -0.0019 - -0.0015 - -0.0012	+ 0110 + 0105 + 0102 + 0103 + 0101 + 0101 + 0093 + 0083 + 0073 + 0024 + 0020 + 0023 + 0023 + 0019 + 0015 + 0012	+ 0004 - -0.0003 - -0.0005 - -0.0008 + 0005 + 0013 - -0.0016 + 0016 - -0.0021 + 0020 + 0026 - -0.0023 + 0014 + 0018 + 0021 + 0026 + 0023 + 0019 + 0021 + 0016 + 0014	+ 0016 - -0.0016 + 0001 + 0005 + 0005 + 0010 + 0014 + 0017 + 0017 + 0020 + 0024 + 0025 + 0025 + 0023 + 0021 + 0021 + 0021 + 0021	- 2.07 - .00 - 2.09 + 4.17 + 6.26 + 8.35 + 10.45 + 12.52 + 14.56 + 16.62 + 18.69 + 20.69 + 23.71	- -0.0563 - -0.0438 - -0.0238 - -0.0399 - -0.0536 - -0.0388 - -0.0278 - -0.0079 - -0.0088 - -0.0081 - -0.0081 + 0043 + 0010 + 0015 + 0021 + 0023 + 0019 + 0023 + 0023 + 0023 + 0023 + 0023 + 0023	+ 0.033 + 0.016 + 0.005 + 0.002 + 0.026 + 0.023 + 0.027 + 0.021 + 0.020 + 0.019 + 0.018 + 0.015 + 0.010 + 0.015 + 0.014 + 0.013	+ 0.0229 + 0.0249 + 0.0256 + 0.0254 + 0.0253 + 0.0257 + 0.0251 + 0.0231 + 0.0229 + 0.0226 + 0.0218 + 0.0210 + 0.0209 + 0.0208 + 0.0207 + 0.0206 + 0.0205	- -0.0103 - -0.0105 - -0.0100 - -0.0104 - -0.0105 - -0.0103 - -0.0103 - -0.0090 - -0.0089 - -0.0089	+ 0.0006 + 0.0001 + 0.0001 + 0.0004 + 0.0004 + 0.0015 + 0.0041 + 0.0021 + 0.0023 + 0.0023 + 0.0019 + 0.0052 + 0.0023 + 0.0023 + 0.0023 + 0.0023 + 0.0023 + 0.0023	- -0.0031 + 0.0042 + 0.0045 + 0.0040 + 0.0038 + 0.0041 + 0.0036 + 0.0036 + 0.0048 + 0.0052 + 0.0052 + 0.0065 + 0.0063 + 0.0062 + 0.0062 + 0.0062 + 0.0062
$\delta = 12.0$													
- 2.04 + 04 + 12 + 21 + 31 + 39 + 49 + 53 + 57 + 63 + 67 + 69 + 71	+ 0812 + 0984 + 1153 + 1011 + 0105 + 0872 + 0144 + 0146 + 0232 + 0115 + 0194 + 0210 + 0205 + 0278	- -0.0002 - -0.0027 - -0.0053 - -0.0079 - -0.0390 - -0.0339 - -0.0388 - -0.0144 - -0.0280 - -0.0115 - -0.0168 + 0.0129 + 0.0007 + 0.0254	- -0.0429 - -0.0402 - -0.0404 - -0.0190 - -0.0194 - -0.0199 - -0.0027 - -0.0175 - -0.0132 - -0.0115 - -0.0168 - -0.0129 - -0.0007 - -0.0151	+ 0195 + 0188 + 0190 + 0182 + 0182 + 0158 + 0158 + 0132 + 0115 + 0186 + 0168 + 0129 + 0008	- -0.0000 - -0.0010 - -0.0010 - -0.0019 - -0.0009 - -0.0034 + 0009 + 0002 + 0018 + 0012 + 0003 + 0006	+ 0025 + 0010 + 0009 + 0006 + 0009 + 0009 + 0009 + 0002 + 0022 + 0017 + 0017 + 0017 + 0017 + 0017	- 2.11 - .03 + 4.15 + 6.24 + 8.32 + 10.41 + 12.49 + 14.55 + 16.60 + 18.69 + 20.69 + 23.72	- -0.1165 - -0.0922 - -0.0902 - -0.0902 - -0.0939 - -0.0939 - -0.0946 - -0.0956 - -0.0919 - -0.0919 - -0.0919 - -0.0919	+ 0.082 + 0.041 + 0.042 + 0.0422 + 0.0422 + 0.0414 + 0.0414 + 0.0360 + 0.0313 + 0.0313 + 0.0313 + 0.0313	+ 0.0181 + 0.0101 + 0.0091 + 0.0202 + 0.0202 + 0.0205 + 0.0174 + 0.0333 + 0.038 + 0.038 + 0.041 + 0.032	+ 0.0013 + 0.0018 + 0.0008 + 0.0012 + 0.0011 + 0.0011 + 0.0001 + 0.0001 + 0.0008 + 0.0016 + 0.0032 + 0.0045 + 0.0036	+ 0.0013 + 0.0018 + 0.0008 + 0.0012 + 0.0011 + 0.0011 + 0.0011 + 0.0001 + 0.0008 + 0.0016 + 0.0032 + 0.0045 + 0.0036	
$\delta = -30.5$													
- 2.04 + 04 + 12 + 21 + 31 + 39 + 49 + 53 + 57 + 63 + 67 + 69 + 71	+ 0812 + 0984 + 1153 + 1011 + 0105 + 0872 + 0144 + 0146 + 0232 + 0115 + 0194 + 0210 + 0205 + 0278	- -0.0002 - -0.0027 - -0.0053 - -0.0079 - -0.0390 - -0.0339 - -0.0388 - -0.0144 - -0.0280 - -0.0115 - -0.0168 + 0.0129 + 0.0007 + 0.0254	- -0.0429 - -0.0402 - -0.0404 - -0.0190 - -0.0194 - -0.0199 - -0.0027 - -0.0175 - -0.0132 - -0.0115 - -0.0168 - -0.0129 - -0.0007 - -0.0151	+ 0195 + 0188 + 0190 + 0182 + 0182 + 0158 + 0158 + 0132 + 0115 + 0186 + 0168 + 0129 + 0008	- -0.0000 - -0.0010 - -0.0010 - -0.0019 - -0.0009 - -0.0034 + 0009 + 0002 + 0018 + 0012 + 0006	+ 0025 + 0010 + 0009 + 0006 + 0009 + 0009 + 0009 + 0002 + 0022 + 0017 + 0017 + 0017 + 0017	- 2.11 - .03 + 4.15 + 6.24 + 8.32 + 10.41 + 12.49 + 14.55 + 16.60 + 18.69 + 20.69 + 23.72	- -0.1165 - -0.0922 - -0.0902 - -0.0902 - -0.0939 - -0.0939 - -0.0946 - -0.0956 - -0.0919 - -0.0919 - -0.0919 - -0.0919	+ 0.082 + 0.041 + 0.0422 + 0.0422 + 0.0414 + 0.0414 + 0.0360 + 0.0313 + 0.0313 + 0.0313 + 0.0313	+ 0.0181 + 0.0101 + 0.0091 + 0.0202 + 0.0202 + 0.0205 + 0.0174 + 0.0333 + 0.038 + 0.038 + 0.041 + 0.032	+ 0.0013 + 0.0018 + 0.0008 + 0.0012 + 0.0011 + 0.0011 + 0.0011 + 0.0001 + 0.0008 + 0.0016 + 0.0032 + 0.0045 + 0.0036	+ 0.0013 + 0.0018 + 0.0008 + 0.0012 + 0.0011 + 0.0011 + 0.0011 + 0.0001 + 0.0008 + 0.0016 + 0.0032 + 0.0045 + 0.0036	
$\delta = 16.0$													
- 2.03 + 05 + 14 + 22 + 31 + 39 + 41 + 54 + 55 + 65 + 66 + 67 + 69 + 71	+ 1088 + 1358 + 1452 + 1239 + 1169 + 1358 + 0224 + 0935 + 0293 + 0307 + 0316 + 0478 + 0230 + 0498	- -0.0013 - -0.0050 - -0.0078 - -0.0112 - -0.0146 - -0.0224 - -0.0207 - -0.0208 - -0.0293 - -0.0152 - -0.0195 - -0.0147 - -0.0288 - -0.0394	- -0.0536 - -0.0497 - -0.0494 - -0.0467 - -0.0466 - -0.0444 - -0.0207 - -0.0208 - -0.0312 - -0.0152 - -0.0195 - -0.0147 - -0.0338 - -0.0158	+ 0252 + 0249 + 0244 + 0233 + 0223 + 0207 + 0050 + 0173 + 0152 + 0051 + 0050 + 0040 + 0038 + 0016	- -0.0003 - -0.0015 - -0.0020 - -0.0029 - -0.0038 - -0.0050 + 0058 + 0038 + 0061 + 0061 + 0055 + 0040 + 0041	+ 0090 + 0048 + 0053 + 0046 + 0061 + 0044 + 0058 + 0057 + 0057 + 0056 + 0055 + 0049 + 0041	- 2.13 - .04 + 4.13 + 6.22 + 8.30 + 10.40 + 12.48 + 14.54 + 16.57 + 18.63 + 20.65 + 23.69	- -0.1556 - -0.1380 - -0.1346 - -0.1474 - -0.1474 - -0.1388 - -0.1270 - -0.1230 - -0.1212 - -0.1238 - -0.1285 - -0.1250	+ 0.121 + 0.068 + 0.009 + 0.040 + 0.083 + 0.037 + 0.055 + 0.074 + 0.057 + 0.043 + 0.026 + 0.050	+ 0.0245 + 0.0250 + 0.0248 + 0.0242 + 0.0243 + 0.0238 + 0.0210 + 0.0182 + 0.0162 + 0.0139 + 0.0106 + 0.0067	+ 0.0025 + 0.0018 + 0.0004 + 0.0020 + 0.0038 + 0.0019 + 0.0009 + 0.0038 + 0.0020 + 0.0016 + 0.0050 + 0.0058	+ 0.0025 + 0.0018 + 0.0008 + 0.0020 + 0.0038 + 0.0019 + 0.0007 + 0.0009 + 0.0020 + 0.0016 + 0.0050 + 0.0058	
$\delta = -14.5$													
- 2.03 + 05 + 14 + 21 + 31 + 39 + 41 + 54 + 55 + 65 + 66 + 67 + 69 + 71	+ 1088 + 1358 + 1452 + 1239 + 1169 + 1358 + 0224 + 0935 + 0293 + 0307 + 0316 + 0478 + 0230 + 0498	- -0.0013 - -0.0050 - -0.0078 - -0.0112 - -0.0146 - -0.0224 - -0.0207 - -0.0208 - -0.0293 - -0.0152 - -0.0195 - -0.0147 - -0.0288 - -0.0394	- -0.0536 - -0.0497 - -0.0494 - -0.0467 - -0.0466 - -0.0444 - -0.0207 - -0.0208 - -0.0312 - -0.0152 - -0.0195 - -0.0147 - -0.0338 - -0.0158	+ 0252 + 0249 + 0244 + 0233 + 0223 + 0207 + 0050 + 0173 + 0152 + 0051 + 0050 + 0040 + 0038 + 0016	- -0.0003 - -0.0010 - -0.0010 - -0.0019 - -0.0009 - -0.0034 + 0058 + 0057 + 0057 + 0056 + 0055 + 0040 + 0041	+ 0090 + 0048 + 0053 + 0046 + 0061 + 0044 + 0058 + 0057 + 0057 + 0056 + 0055 + 0049 + 0041	- 2.13 - .04 + 4.13 + 6.22 + 8.30 + 10.40 + 12.48 + 14.54 + 16.57 + 18.63 + 20.65 + 23.69	- -0.1556 - -0.1380 - -0.1346 - -0.1474 - -0.1474 - -0.1388 - -0.1270 - -0.1230 - -0.1212 - -0.1238 - -0.1285 - -0.1250	+ 0.121 + 0.068 + 0.009 + 0.040 + 0.083 + 0.037 + 0.055 + 0.074 + 0.057 + 0.043 + 0.026 + 0.050	+ 0.0245 + 0.0250 + 0.0248 + 0.0242 + 0.0243 + 0.0238 + 0.0210 + 0.0182 + 0.0162 + 0.0139 + 0.0106 + 0.0067	+ 0.0025 + 0.0018 + 0.0008 + 0.0020 + 0.0038 + 0.0019 + 0.0007 + 0.0009 + 0.0020 + 0.0016 + 0.0050 + 0.0058	+ 0.0025 + 0.0018 + 0.0008 + 0.0020 + 0.0038 + 0.0019 + 0.0007 + 0.0009 + 0.0020 + 0.0016 + 0.0050 + 0.0058	
$\delta = 30.6$													
- 2.01 + 08 + 16 + 24 + 32 + 33 + 42 + 49 + 57 + 64 + 65 + 66 + 67 + 69 + 72	+ 1855 + 2142 + 2158 + 2014 + 1869 + 1882 + 0460 + 0470 + 0507 + 0489 + 0448 + 0430 + 0430 + 0402	- -0.0901 - -0.0860 - -0.0838 - -0.0802 - -0.0791 - -0.0739 - -0.0739 - -0.0629 - -0.0507 - -0.0489 - -0.0438 - -0.0430 - -0.0430 - -0.0430	- -0.0429 - -0.0419 - -0.0404 - -0.0386 - -0.0374 - -0.0326 - -0.0326 - -0.0286 - -0.0225 - -0.0155 - -0.0155 - -0.0113 - -0.0113 - -0.0116	+ 0429 + 0419 + 0404 + 0386 + 0374 + 0326 + 0326 + 0286 + 0225 + 0155 + 0155 + 0113 + 0113 + 0116	+ 0.049 + 0.0465 + 0.0449 + 0.0415 + 0.0374 + 0.0326 + 0.0326 + 0.0286 + 0.0225 + 0.0155 + 0.0155 + 0.0116 + 0.0116 + 0.0116	- 2.17 - .08 + 4.08 + 6.07 + 8.26 + 10.34 + 12.42 + 14.48 + 16.56 + 18.63 + 20.64 + 23.67	- -0.2632 - -0.2409 - -0.2388 - -0.2356 - -0.2328 - -0.2293 - -0.2259 - -0.2244 - -0.2200 - -0.2160 - -0.2120 - -0.2082 - -0.2044 - -0.2006 - -0.1968 - -0.1931 - -0.1898 - -0.1864 - -0.1826 - -0.1786 - -0.1744 - -0.1707 - -0.1670 - -0.1638 - -0.1604 - -0.1571 - -0.1534 -						

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NACA RM L55B18a

TABLE 4.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.25$; $R = 0.70$

(a) Plain leading edge

α_{deg}	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y	α_{deg}	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
$\delta = 6.7$													
$\delta = -5.1$													
- 2.08 + .00 + .10 + .22 + .32 + .43 10.53 12.62 14.59 16.72 18.71 20.73 23.80	.0334 .0336 .0376 .0362 .0340 .0250 .0106 .0287 .0095 .0068 .0217 .0090 .0174 .0150 .0224 .0101 .0117 .0042 .0132 .0056 .0115 .0022	.0009 .0018 .0025 .0023 .0010 .0006 .0003 .0014 .0014 .0019 .0034 .0023 .0012 .0017 .0025 .0012 .0023 .0036 .0030 .0028	-.0233 -.0251 -.0237 -.0250 -.0102 -.0012 -.0014 -.0014 -.0158 -.0144 -.0174 -.0154 -.0025 -.0047 -.0025 -.0023 -.0062 -.0042 -.0021 -.0011	.0106 .0111 .0102 .0106 .0006 .0012 .0014 .0014 .0017 .0019 .0023 .0023 .0017 .0017 .0017 .0017 .0017 .0017 .0017 .0017	-.0000 -.0003 -.0006 -.0012 -.0012 -.0034 -.0014 -.0014 .0029 .0034 .0023 .0019 .0019 .0019 .0019 .0019 .0019 .0019 .0019	.0029 .0034 .0057 .0034 .0038 .0038 .0038 .0038 .0038 .0038 .0038 .0038 .0038 .0038 .0038 .0038 .0038 .0038 .0038	~ 2.10 ~ .01 2.10 4.21 6.30 8.41 10.52 12.60 14.66 16.72 18.71 20.74 23.79	-.0320 -.0392 -.0260 -.0284 -.0160 -.0142 -.0170 -.0153 -.0268 -.0058 -.0124 -.0040 -.0159	.0021 .0010 .0004 .0012 .0123 .0108 .0027 -.0044 -.0084 -.0097 -.0047 -.0042 -.0068 -.0077	.00202 .0198 .0098 .0098 .0098 .0098 .0070 .0017 .0017 .0017 .0017 .0017 .0017 .0017	-.0097 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098 -.0098	+.0003 -.0002 -.0002 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001 -.0001	-.0011 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001 .0001
$\delta = 12.0$													
- 2.03 .06 + .16 + .25 + .37 + .46 10.56 12.64 14.71 16.75 18.74 20.76 23.82	.1167 .1152 .0953 .1162 .0223 .0944 .0613 .0578 .0631 .0599 .0491 .0604 .0299	.0006 .0033 -.0401 -.0404 -.0424 -.0224 -.0175 -.0204 -.0167 -.0231 -.0255 -.0311 -.0299	-.0412 -.0420 -.0197 -.0117 -.0227 -.0224 -.0173 -.0096 -.0167 -.0087 -.0171 -.0177 -.0143	.0194 .0012 -.0012 -.0027 -.0035 	-.0006 -.0023 -.0034 -.0039 -.0054 -.0050 -.0050 -.0045 -.0046 -.0083 -.0083 -.0057	.0076 .0038 .0034 .0039 .0054 .0050 .0050 .0050 .0064 .0064 .0083 .0083 .0071	~ 2.11 ~ .02 2.09 4.19 6.29 8.41 10.52 12.60 14.67 16.71 18.68 20.72 23.80	-.0708 -.0840 -.0778 -.0737 -.1618 -.0558 -.0383 -.0380 -.0259 -.0253 -.0382 -.0272	.0052 -.0031 -.0007 -.0018 -.0180 -.0050 -.0061 -.0211 -.0078 -.0083 -.0158 -.0162	.0352 .0376 -.0192 -.0194 -.0194 	-.0184 -.0194 -.0002 -.0002 -.0008 -.0015 -.0030 -.0123 -.0028 -.0039 -.0044 -.0017 -.0025	+.0011 -.0007 -.0007 -.0002 -.0002 -.0008 -.0019 -.0019 -.0019 -.0019 -.0019 -.0019 -.0019	+.0009 -.0036 -.0039 -.0048 -.0028 -.0018
$\delta = 16.0$													
- 2.04 .04 + .16 + .26 + .36 + .48 10.56 12.64 14.69 16.74 18.73 20.75 23.82	.1370 .1373 .1358 .1387 .0294 .1014 .0682 .0686 .0532 .0233 .0265 .0614 .0394 .0375 .0327	.0026 .0058 -.0549 -.0545 -.0527 	-.0580 -.0610 -.0621 -.0543 -.0204 -.0295 -.0091 -.0047 -.0047 -.0060 -.0043 -.0083 -.0059 -.0075 -.0181	.0261 -.0020 -.0026 -.0039 -.0204 -.0295 -.0091 -.0047 -.0047 -.0062 -.0043 -.0083 -.0077 -.0076	-.0012 -.0020 -.0026 -.0039 -.0043 -.0046 -.0047 -.0047 -.0062 -.0110 -.0110 -.0120 -.0113 -.0137	.0086 .0073 .0073 .0076 .0080 .0083 .0089 .0089 .0083 .0110 .0121 .0120 .0113 .0134	~ 2.10 ~ .01 2.08 4.18 6.29 8.40 10.52 12.60 14.66 16.71 18.72 20.73 23.81	-.0900 -.1066 -.1060 -.1018 -.1899 -.0875 -.0625 -.0585 -.0530 -.0338 -.0279 -.0272	.0089 -.0064 -.0033 -.0004 -.0146 -.0070 -.0079 -.0117 -.0134 -.0097 -.0059 -.0108	.0490 -.0575 -.0580 -.0580 -.0472 -.0517 -.0394 -.0162 -.0144 -.0271 -.0189 -.0227	-.0240 -.0260 -.0261 -.0262 -.0247 -.0214 -.0182 -.0036 -.0050 -.0131 -.0097 -.0076	+.0020 -.0015 -.0008 -.0004 -.0015 -.0033 -.0036 -.0036 -.0050 -.0056 -.0020 -.0039	+.0028 -.0045 -.0051 -.0057 -.0039 -.0022
$\delta = 30.6$													
- 2.00 .10 + .19 + .30 + .40 + .49 10.57 12.65 14.70 16.75 18.73 20.77 23.83	.2355 .2292 .2239 .2261 .2288 .0456 .0470 .0478 .0810 .0809 .0603 .0648 .0478	.0191 .0241 .0288 .0378 .0884 .0418 .0435 .0159 .0119 .0234 .0113 .0113 .0163 .0113 .0523	-.0906 -.0891 -.0876 -.0884 .0365 -.0105 -.0105 -.0117 	.0408 -.0070 -.0086 -.0086 -.0231 -.0231 -.0232 -.0234 -.0234 -.0230 -.0113 -.0163	-.0061 -.0209 -.0211 -.0230 -.0212 -.0246 -.0250 -.0250 -.0250 -.0250 -.0112 -.0163	.0235 .0209 .0211 .0230 .0246 .0250 .0250 .0250 .0250 .0250 .0112 .0163	~ 2.14 ~ .04 2.05 4.15 6.26 8.36 10.47 12.65 14.64 16.69 18.69 20.72 23.78	-.1783 -.1895 -.1897 -.1997 -.2816 -.1702 -.1527 -.0467 -.0911 -.0914 -.0914	.0288 -.0242 -.0206 -.0190 -.0089 -.0061 -.0028 -.0049 -.0176 -.0438 -.0461	.0821 -.0873 -.0901 -.0908 -.0809 -.0668 -.0620 -.0706 -.0448 -.0438 -.0461	-.0384 -.0399 -.0416 -.0423 -.0420 -.0323 -.0356 -.0317 -.0282 -.0192 -.0167	+.0099 -.0131 -.0139 -.0136 -.0107 -.0074 -.0026 -.0044 -.0064 -.0048 -.0037 -.0056	+.0099 -.0131 -.0139 -.0136 -.0107 -.0074 -.0026 -.0035 -.0064 -.0048 -.0037 -.0056

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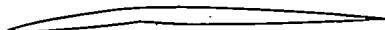
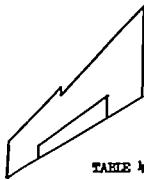


TABLE 4--INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{r_1}{b/2} = 0.25$; $N = 0.70$ - Concluded

(b) Modified leading edge

α_{deg}	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α_{deg}	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 6.7$							$\delta = -5.1$						
- 2.06	.0547	-.0015	-.0208	.0108	.0004	.0028	- 2.10	-.0489	.0034	.0266	-.0107	-.0006	-.0039
.02	.0552	.0006	-.0198	.0103	-.0003	-.0002	.01	-.0447	.0016	.0256	-.0103	-.0002	-.0037
2.13	.0591	.0026	-.0200	.0103	.0006	.0002	2.10	-.0382	.0009	.0263	-.0101	-.0000	-.0041
4.23	.0687	.0051	-.0193	.0106	.0009	.0007	4.21	-.0188	.0020	.0275	-.0102	.0004	-.0037
6.34	.0462	.0051	-.0184	.0103	.0014	.0007	6.32	-.0471	-.0013	.0273	-.0104	.0010	-.0032
8.44	.0610	.0091	-.0187	.0085	-.0017	.0009	8.41	-.0332	-.0039	.0248	-.0096	.0015	-.0032
10.53	.0497	.0112	-.0124	.0078	-.0020	.0013	10.51	-.0187	.0011	.0216	-.0093	.0022	-.0048
12.61	.0512	.0132	-.0125	.0057	-.0023	.0019	12.58	-.0231	-.0042	.0194	-.0074	.0023	-.0041
14.65	.0136	.0065	-.0085	.0046	-.0023	.0021	14.64	-.0320	-.0037	.0181	-.0052	.0017	-.0053
16.71	.0146	.0097	-.0051	.0037	-.0022	.0026	16.71	-.0215	-.0063	.0183	-.0053	.0020	-.0051
18.76	.0195	.0104	-.0091	.0022	-.0017	.0028	18.75	-.0060	-.0035	.0159	-.0046	.0019	-.0050
20.77	-.0055	.0065	-.0041	-.0036	-.0005	.0023	20.78	-.0041	-.0037	.0211	-.0021	.0009	-.0057
23.83	.0189	.0125	-.0079	.0019	-.0022	.0036	23.82	-.0091	-.0071	.0130	-.0046	.0030	-.0082
$\delta = 12.0$							$\delta = -10.5$						
- 2.06	.0962	-.0009	-.0415	.0196	.0001	.0034	- 2.12	-.0937	.0076	.0428	-.0190	-.0017	.0010
.04	.1003	.0028	-.0418	.0190	-.0009	-.0004	.03	-.0988	.0043	.0425	-.0192	-.0010	.0017
2.14	.0985	.0052	-.0403	.0187	.0015	.0004	2.06	-.0997	.0022	.0440	-.0196	-.0006	.0009
4.25	.1157	.0094	-.0381	.0185	-.0021	.0007	4.18	-.0759	.0016	.0449	-.0194	.0001	.0009
6.36	.0871	.0107	-.0374	.0175	-.0028	.0010	6.28	-.1133	-.0044	.0448	-.0195	.0010	.0005
8.44	.0846	.0148	-.0378	.0148	-.0036	.0009	8.39	-.0862	-.0042	.0416	-.0186	.0022	.0004
10.54	.0826	.0179	-.0331	.0127	-.0041	.0015	10.49	-.0679	-.0088	.0364	-.0170	.0032	-.0009
12.61	.0590	.0181	-.0247	.0089	-.0041	.0035	12.56	-.0629	-.0112	.0312	-.0147	.0034	-.0016
14.65	.0286	.0136	-.0212	.0075	-.0042	.0038	14.63	-.0518	-.0127	.0258	-.0108	.0034	-.0022
16.72	.0387	.0187	-.0189	.0053	-.0041	.0026	16.70	-.0381	-.0115	.0225	-.0097	.0038	-.0029
18.75	.0197	.0150	-.0143	.0031	-.0039	.0024	18.73	-.0404	-.0151	.0203	-.0082	.0038	-.0038
20.76	.0033	.0136	-.0022	-.0016	-.0024	.0022	20.77	-.0285	-.0148	.0252	-.0044	.0027	-.0059
23.82	.0274	.0217	-.0169	.0011	-.0028	.0027	23.81	-.0267	-.0168	.0199	-.0060	.0042	-.0070
$\delta = 16.0$							$\delta = -14.5$						
- 2.05	.1264	.0007	-.0533	.0259	-.0003	.0061	- 2.14	-.1346	.0119	.0560	-.0238	-.0020	.0032
.06	.1383	.0051	-.0528	.0249	-.0016	.0038	- 2.05	-.1374	.0068	.0552	-.0244	-.0020	.0029
2.16	.1346	.0090	-.0508	.0242	-.0023	.0049	2.05	-.1435	.0043	.0580	-.0249	-.0013	.0021
4.26	.1405	.0137	-.0478	.0234	-.0031	.0055	4.16	-.1323	.0016	.0589	-.0249	-.0005	.0026
6.38	.1216	.0166	-.0478	.0224	-.0042	.0062	6.26	-.1498	-.0041	.0594	-.0248	-.0006	.0014
8.46	.1169	.0242	-.0461	.0194	-.0051	.0065	8.37	-.1410	-.0081	.0549	-.0235	-.0020	.0003
10.57	.1171	.0274	-.0380	.0167	-.0058	.0080	10.46	-.1185	-.0114	.0502	-.0210	.0034	-.0022
12.62	.0837	.0269	-.0283	.0117	-.0056	.0094	12.55	-.0935	-.0161	.0401	-.0176	.0038	-.0031
14.67	.0565	.0249	-.0251	.0094	-.0058	.0096	14.62	-.0852	-.0202	.0332	-.0127	.0037	-.0026
16.71	.0352	.0213	-.0195	.0070	-.0055	.0094	16.66	-.0803	-.0229	.0299	-.0115	.0043	-.0043
18.77	.0433	.0279	-.0144	.0036	-.0055	.0096	18.73	-.0602	-.0211	.0258	-.0103	.0048	-.0048
20.77	-.0065	.0181	-.0066	.0075	-.0063	.0085	20.75	-.0512	-.0237	.0307	-.0059	.0037	-.0090
23.83	.0391	.0302	-.0174	.0032	-.0057	.0101	23.79	-.0509	-.0267	.0262	-.0078	.0054	-.0103
$\delta = 30.6$							$\delta = -29.3$						
- 2.03	.2018	.0148	-.0887	.0405	-.0049	.0170	- 2.18	-.2292	.0341	.0888	-.0393	-.0086	.0146
.07	.1996	.0220	-.0877	.0391	-.0065	.0145	- 2.10	-.2406	.0287	.0881	-.0411	-.0075	.0138
2.17	.2010	.0268	-.0836	.0375	-.0077	.0153	2.01	-.2379	.0206	.0898	-.0409	-.0057	.0127
4.28	.2140	.0330	-.0820	.0372	-.0089	.0163	4.12	-.2330	.0160	.0944	-.0429	-.0047	.0108
6.38	.1755	.0372	-.0817	.0359	-.0107	.0177	6.22	-.2587	.0056	.0952	-.0441	-.0029	.0109
8.48	.1836	.0492	-.0761	.0314	-.0124	.0195	8.32	-.2412	-.0026	.0940	-.0443	-.0001	.0072
10.57	.1462	.0576	-.0534	.0181	-.0143	.0227	10.43	-.2155	-.0111	.0847	-.0403	-.0026	.0030
12.61	.0938	.0489	-.0467	.0163	-.0119	.0226	12.51	-.1911	-.0169	.0751	-.0383	-.0039	.0013
14.66	.0605	.0441	-.0405	.0132	-.0118	.0212	14.57	-.1743	-.0266	.0627	-.0279	.0043	-.0004
16.71	.0535	.0458	-.0325	.0102	-.0120	.0203	16.63	-.1574	-.0326	.0498	-.0221	.0051	-.0045
18.75	.0102	.0396	-.0111	-.0021	-.0101	.0214	18.69	-.1222	-.0291	.0471	-.0218	.0063	-.0053
20.77	.0191	.0427	-.0174	.0044	-.0119	.0211	20.74	-.0972	-.0279	.0495	-.0171	.0060	-.0095
23.83	.0516	.0568	-.0314	.0052	-.0159	.0243	23.77	-.1057	-.0407	.0480	-.0179	.0079	-.0142

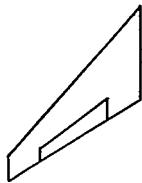


TABLE 5.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.25$; $M = 0.81$

(a) Plain leading edge

α_2 deg	$\Delta\alpha_L$	$\Delta\alpha_D$	$\Delta\alpha_m$	$\Delta\alpha_t$	$\Delta\alpha_n$	$\Delta\alpha_Y$	α_2 deg	$\Delta\alpha_L$	$\Delta\alpha_D$	$\Delta\alpha_m$	$\Delta\alpha_t$	$\Delta\alpha_n$	$\Delta\alpha_Y$	
$\delta = 6.7$							$\delta = -5.1$							
- 2.10 .01	.0024 .0035	.0009 .0019	-.0252 .0273	.0108 .0113	-.0000 .0004	.0027 .0035	- 2.10 .00	-.0369 .0357	.0023 .0009	.0199 .0210	-.0100 .0100	-.0004 .0003	-.0013 .0006	
2.12 4.25	.0361 .0337	.0024 .0035	-.0276 .0258	.0109 .0108	-.0007 .0012	.0033 .0038	2.12 4.24	-.0346 .0319	-.0008 .0021	.0202 .0216	-.0097 .0099	-.0000 .0007	.0012 .0016	
6.38 8.49	.0415 .0249	.0050 .0042	-.0245 .0186	.0098 .0075	-.0013 .0018	.0045 .0043	6.36 8.49	-.0243 .0186	-.0018 .0021	.0177 .0175	-.0090 .0059	-.0007 .0016	.0006 .0012	
10.59 12.67	-.0049 .0061	.0221 .0048	-.0142 .0167	.0045 .0056	-.0019 .0024	.0041 .0045	10.60 12.68	-.0242 .0308	-.0046 .0077	.0151 .0129	-.0044 .0053	-.0012 .0017	-.0005 .0000	
14.74 16.77	.0183 .0223	.0091 .0038	-.0171 .0092	.0053 .0033	-.0027 .0021	.0053 .0048	14.74 16.81	-.0203 .0157	-.0059 .0049	.0108 .0086	-.0050 .0042	-.0018 .0015	.0002 .0003	
18.79 20.82	.0026 .0287	.0050 .0164	-.0115 .0167	.0034 .0035	-.0021 .0027	.0045 .0045	18.78 20.83	-.0147 .0129	-.0061 .0041	.0069 .0027	-.0028 .0027	-.0011 .0010	-.0000 .0014	
23.90 	.0052 	.0052	.0077	-.0109	.0024	-.0023	.0070	23.91	.0037	-.0001	.0104	-.0024	.0012	.0020
$\delta = 12.0$							$\delta = -10.5$							
- 2.05 .06	.1157 .1227	.0009 .0039	-.0463 .0483	.0203 .0201	-.0006 .0013	.0060 .0044	- 2.13 .01	-.0655 .0778	.0053 .0036	.0258 .0246	-.0189 .0196	-.0011 .0007	.0010 .0037	
2.17 4.31	.1124 .1281	.0057 .0109	-.0452 .0445	.0190 .0187	-.0018 .0028	.0047 .0055	2.11 4.23	-.0830 .0758	-.0002 .0023	.0388 .0400	-.0191 .0198	-.0003 .0009	.0044 .0046	
6.42 8.55	.1144 .1020	.0144 .0200	-.0381 .0257	.0162 .0123	-.0032 .0036	.0067 .0068	6.35 8.47	-.0681 .0563	-.0038 .0055	.0359 .0325	-.0184 .0145	-.0013 .0027	.0035 .0038	
10.63 12.72	.0566 .0764	.0182 .0245	-.0221 .0248	.0088 .0099	-.0039 .0046	.0069 .0072	10.58 12.69	-.0536 .0324	-.0089 .0067	.0250 .0211	-.0107 .0116	-.0024 .0034	.0015 .0011	
14.79 16.81	.0783 .0323	.0284 .0168	-.0244 .0151	.0088 .0062	-.0051 .0041	.0074 .0079	14.74 16.78	-.0448 .0583	-.0125 .0184	.0203 .0186	-.0109 .0093	-.0040 .0040	.0005 .0004	
18.82 20.87	.0640 .0874	.0311 .0435	-.0225 .0253	.0058 .0052	-.0043 .0049	.0076 .0083	18.78 20.82	-.0335 .0026	-.0133 .0022	.0148 .0087	-.0063 .0057	-.0028 .0025	-.0002 .0003	
23.93 	.0634 	.0380	.0176	.0029	-.0039	.0077	23.91	-.0041	-.0046	.0148	-.0055	-.0029	.0019	
$\delta = 16.0$							$\delta = -14.5$							
- 2.05 .07	.1409 .1463	.0032 .0070	-.0621 .0633	.0263 .0258	-.0014 .0023	.0090 .0076	- 2.14 .01	-.0845 .1120	.0106 .0075	.0282 .0264	-.0232 .0264	-.0023 .0020	.0036 .0050	
2.18 4.30	.1407 .1400	.0096 .0143	-.0583 .0572	.0237 .0224	-.0030 .0039	.0082 .0096	2.11 4.22	-.1126 .1119	-.0035 .0012	.0589 .0607	-.0256 .0260	-.0011 .0005	.0061 .0056	
6.41 8.53	.1248 .0907	.0183 .0205	-.0505 .0345	.0195 .0153	-.0046 .0048	.0106 .0103	6.35 8.46	-.1044 .0929	-.0045 .0080	.0558 .0481	-.0241 .0199	-.0013 .0031	.0038 .0032	
10.62 12.72	.0494 .0728	.0192 .0261	-.0294 .0320	.0105 .0117	-.0051 .0059	.0094 .0102	10.58 12.68	-.0806 .0591	-.0118 .0113	.0388 .0360	-.0160 .0161	-.0029 .0042	.0005 .0004	
14.77 16.81	.0586 .0275	.0253 .0181	-.0293 .0224	.0101 .0075	-.0061 .0054	.0108 .0108	14.73 16.77	-.0531 .0705	-.0126 .0219	.0318 .0306	-.0145 .0123	-.0048 .0049	-.0009 .0026	
18.81 20.85	.0517 .0703	.0292 .0588	-.0264 .0301	.0069 .0063	-.0057 .0064	.0108 .0123	18.79 20.83	-.0398 .0190	-.0133 .0074	.0261 .0224	-.0095 .0080	-.0042 .0033	-.0026 .0028	
23.93 	.0511 	.0357	-.0216	.0048	-.0073	.0143	23.93	-.0177	-.0099	.0400	-.0068	-.0036	-.0007	
$\delta = 30.6$							$\delta = -29.3$							
- 2.03 .09	.2199 .2204	.0198 .0248	-.0958 .0943	.0381 .0360	-.0061 .0069	.0189 .0208	- 2.16 .03	-.4324 .1749	.0275 .0264	.0862 .0861	-.0342 .0369	-.0079 .0072	.0126 .0143	
2.20 4.32	.2120 .2026	.0283 .0363	-.0940 .0891	.0351 .0329	-.0082 .0100	.0226 .0239	2.07 4.20	-.1877 .1844	-.0199 .0131	.0870 .0917	-.0378 .0398	-.0058 .0038	.0140 .0137	
6.44 8.55	.1781 .1421	.0448 .0484	-.0745 .0576	.0252 .0224	-.0116 .0116	.0260 .0251	6.32 8.44	-.1831 .1547	-.0054 .0019	.0867 .0709	-.0385 .0303	-.0013 .0015	.0110 .0063	
10.63 12.70	.0796 .0916	.0421 .0480	-.0528 .0528	.0160 .0166	-.0120 .0116	.0229 .0215	10.55 12.65	-.1367 .1121	-.0103 .0115	.0577 .0549	-.0260 .0268	-.0024 .0040	.0013 .0009	
14.75 16.80	.0638 .0538	.0434 .0443	-.0454 .0430	.0125 .0109	-.0110 .0113	.0216 .0223	14.73 16.78	-.0854 .0905	-.0119 .0180	.0439 .0420	-.0218 .0182	-.0046 .0044	-.0020 .0014	
18.81 20.84	.0726 .0844	.0542 .0625	-.0429 .0405	.0104 .0093	-.0127 .0144	.0257 .0284	18.78 20.81	-.0627 .0593	-.0124 .0118	.0417 .0429	-.0160 .0159	-.0039 .0030	-.0042 .0040	
23.93 	.0831 	.0703	-.0323	.0059	-.0156	.0288	23.89	-.0651 .0651	-.0179 .0179	.0515 .0515	-.0164 .0164	-.0043 .0043	-.0040 .0040	

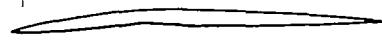
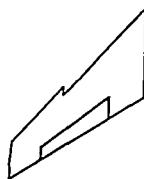


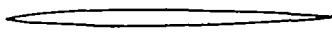
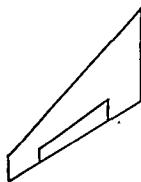
TABLE 5.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.25$; $H = 0.81$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
$\delta = 6.7$													
- 2.10	.0488	-.0006	-.0206	.0108	.0004	.0026	- 2.12	-.0566	.0039	.0283	-.0100	-.0005	-.0041
.03	.0569	.0010	-.0227	.0108	-.0003	-.0003	- .01	-.0451	.0017	.0247	-.0099	-.0003	-.0038
2.16	.0620	.0028	-.0206	.0109	-.0006	.0008	2.10	-.0773	.0009	.0311	-.0102	-.0001	-.0042
4.28	.0511	.0058	-.0203	.0107	-.0010	.0009	4.25	-.0466	-.0003	.0275	-.0102	-.0004	-.0034
6.40	.0462	.0050	-.0188	.0095	-.0011	.0011	6.37	-.0454	-.0021	.0316	-.0101	-.0008	-.0031
8.51	.0291	.0060	-.0148	.0076	-.0018	.0004	8.49	-.0402	-.0042	.0261	-.0090	.0014	-.0039
10.59	.0338	.0079	-.0126	.0069	-.0020	.0028	10.59	-.0213	-.0020	.0214	-.0082	.0019	-.0039
12.66	.0287	.0085	-.0101	.0047	-.0020	.0023	12.66	-.0093	-.0019	.0192	-.0059	.0019	-.0054
14.73	.0164	.0063	-.0077	.0045	-.0021	.0025	14.73	-.0179	-.0052	.0199	-.0055	.0021	-.0054
16.79	.0173	.0086	-.0056	.0032	-.0019	.0030	16.78	-.0117	-.0033	.0149	-.0051	.0022	-.0052
18.84	-.0058	.0021	-.0021	.0020	-.0016	.0024	18.86	-.0126	-.0058	.0190	-.0041	.0014	-.0047
20.87	.0283	.0146	-.0099	.0034	-.0024	.0025	20.85	-.0126	-.0016	.0028	-.0035	.0009	-.0060
23.95	.0300	.0178	-.0140	.0022	-.0023	.0050	23.94	-.0021	-.0033	.0131	-.0035	.0023	-.0072
$\delta = 12.0$													
- 2.09	.0944	-.0003	-.0445	.0203	.0001	.0008	- 2.14	-.1047	.0068	.0464	-.0189	-.0018	-.0016
.04	.1043	.0034	-.0469	.0199	-.0010	-.0011	- .03	-.0931	.0026	.0431	-.0192	-.0011	-.0017
2.17	.1047	.0061	-.0443	.0191	-.0016	.0006	2.10	-.1013	.0005	.0486	-.0198	-.0006	-.0006
4.29	.0987	.0087	-.0422	.0186	-.0022	.0009	4.21	-.1100	-.0030	.0468	-.0198	-.0001	-.0009
6.41	.0907	.0109	-.0435	.0173	-.0029	.0017	6.35	-.1010	-.0069	.0454	-.0194	-.0011	-.0004
8.51	.0640	.0139	-.0327	.0127	-.0037	.0019	8.46	-.1088	-.0112	.0568	-.0179	.0019	-.0011
10.60	.0546	.0148	-.0258	.0103	-.0041	.0040	10.64	-.0028	-.0017	.0469	-.0159	.0030	-.0014
12.68	.0617	.0187	-.0222	.0087	-.0039	.0045	12.63	-.0524	-.0107	.0309	-.0119	.0031	-.0031
14.74	.0488	.0186	-.0189	.0074	-.0040	.0038	14.71	-.0560	-.0141	.0301	-.0108	.0036	-.0029
16.79	.0415	.0199	-.0145	.0050	-.0036	.0042	16.77	-.0459	-.0132	.0294	-.0098	.0039	-.0039
18.85	-.0035	.0112	-.0038	.0052	-.0011	.0035	18.83	-.0472	-.0172	.0276	-.0083	.0036	-.0048
20.87	.0426	.0239	-.0176	.0040	-.0036	.0025	20.86	-.0077	-.0077	.0079	-.0079	.0033	-.0072
23.92	.0158	.0164	-.0149	.0019	-.0028	.0016	23.91	-.0376	-.0202	.0196	-.0068	.0044	-.0060
$\delta = 16.0$													
- 2.07	.1244	.0020	-.0550	.0258	-.0003	.0056	- 2.16	-.1370	.0123	.0588	-.0233	-.0030	-.0033
.06	.1356	.0065	-.0586	.0243	-.0019	.0039	- .05	-.1327	.0076	.0574	-.0239	-.0022	-.0033
2.18	.1250	.0098	-.0513	.0232	-.0025	.0054	2.08	-.1500	.0045	.0651	-.0246	-.0014	-.0027
4.30	.1298	.0140	-.0555	.0232	-.0035	.0060	4.20	-.1436	.0012	.0631	-.0250	-.0005	-.0024
6.44	.1527	.0184	-.0572	.0224	-.0045	.0076	6.32	-.1484	-.0047	.0617	-.0248	-.0007	-.0006
8.52	.0916	.0215	-.0417	.0163	-.0054	.0072	8.45	-.1446	-.0110	.0611	-.0227	-.0017	-.0013
10.61	.0769	.0234	-.0313	.0118	-.0057	.0091	10.55	-.1055	-.0141	.0528	-.0207	.0032	-.0040
12.69	.0777	.0261	-.0282	.0111	-.0035	.0100	12.62	-.0865	-.0161	.0404	-.0150	.0034	-.0032
14.75	.0599	.0251	-.0233	.0090	-.0054	.0094	14.69	-.0804	-.0184	.0357	-.0135	.0039	-.0037
16.81	.0486	.0282	-.0172	.0062	-.0050	.0097	16.75	-.0757	-.0206	.0357	-.0117	.0042	-.0042
18.84	-.0202	.0168	-.0163	.0068	-.0055	.0117	18.80	-.0888	-.0300	.0364	-.0105	.0045	-.0055
20.86	.0331	.0259	-.0173	.0049	-.0050	.0071	20.85	-.0182	-.0163	.0157	-.0101	.0043	-.0094
23.94	.0300	.0296	-.0189	.0030	-.0057	.0100	23.89	-.0694	-.0330	.0329	-.0082	.0054	-.0103
$\delta = 30.6$													
- 2.05	.1874	.0158	-.0885	.0386	-.0047	.0176	- .07	-.2094	.0259	.0865	-.0377	-.0075	-.0133
.07	.1950	.0222	-.0884	.0368	-.0065	.0151	2.04	-.2372	.0204	.0926	-.0386	-.0059	-.0122
2.19	.1883	.0272	-.0853	.0357	-.0075	.0160	4.15	-.2457	.0144	.0944	-.0404	-.0048	-.0117
4.31	.1769	.0312	-.0811	.0345	-.0087	.0172	6.29	-.2467	.0052	.0939	-.0415	-.0027	-.0090
6.44	.1750	.0373	-.0847	.0335	-.0107	.0199	8.39	-.2402	-.0065	.0936	-.0392	-.0004	-.0049
8.54	.1504	.0515	-.0735	.0259	-.0136	.0227	10.52	-.1845	-.0119	.0786	-.0349	-.0025	-.0009
10.63	.1095	.0523	-.0473	.0159	-.0137	.0232	12.60	-.1449	-.0131	.0639	-.0273	.0031	-.0009
12.67	.0795	.0434	-.0427	.0172	-.0117	.0236	14.66	-.1118	-.0201	.0511	-.0215	-.0037	-.0022
14.73	.0452	.0582	-.0342	.0126	-.0112	.0210	16.74	-.1160	-.0219	.0501	-.0193	.0042	-.0037
16.81	.0530	.0454	-.0394	.0079	-.0112	.0198	18.79	-.1288	-.0327	.0528	-.0190	.0049	-.0058
18.87	.0460	.0511	-.0143	.0017	-.0098	.0215	20.82	-.0877	-.0268	.0444	-.0117	.0031	-.0100
20.87	.0683	.0569	-.0395	.0092	-.0127	.0226	23.90	-.1025	-.0343	.0547	-.0189	.0067	-.0098
23.93	.0397	.0524	-.0311	.0054	-.0140	.0258							

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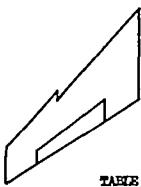
NACA RM L55B18a

TABLE 6.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.25$; $H = 0.85$

(a) Plain leading edge

α deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 6.7$												$\delta = -5.1$	
- 2.10 .01 2.14 4.27 6.41 8.53 10.65 12.70 14.77 16.83 18.86	.0421 .0425 .0358 .0367 .0371 .0372 .0169 .0116 .0091 .0056 .0385	-.0005 .0009 -.0294 -.0248 -.0242 .0056 -.0254 -.0188 -.0157 	-.0265 -.0294 -.0279 -.0110 -.0005 -.0242 -.0074 -.0188 -.0023 -.0025 -.0033 -.0184	.0109 .0112 .0110 .0106 .0100 .0074 -.0191 .0062 -.0022 	-.0002 -.0001 -.0005 -.0008 -.0008 -.0008 -.0019 -.0019 -.0019 -.0019 -.0019 -.0018	.0029 .0019 .0020 .0026 .0028 .0044 .0044 .0041 .0041 	- 2.10 .01 2.14 4.27 6.40 8.54 10.64 12.71 14.79 16.83 18.83	-.0294 -.0387 -.0357 -.0415 -.0250 -.0296 -.0320 -.0257 -.0154 -.0275 -.0050	.0009 -.0003 -.0012 -.0034 -.0025 -.0047 -.0068 -.0067 -.0035 -.0099 -.0036	.0235 .0233 .0232 .0242 .0191 .0206 .0183 .0147 .0123 .0134 .0079	-.0108 -.0110 -.0104 -.0102 -.0089 -.0072 -.0053 -.0052 -.0048 -.0040 -.0010	-.0002 -.0001 -.0004 -.0005 -.0008 -.0009 -.0016 -.0018 -.0014 -.0017 -.0003	-.0020 -.0008 -.0004 -.0005 -.0006 -.0007 -.0008 -.0002 -.0001 -.0006
$\delta = 12.0$													
- 2.05 .06 2.19 4.31 6.44 8.57 10.66 12.73 14.80 16.85 18.87	.1211 .1291 .1225 .1056 .1030 .0728 .0429 .0572 .0428 .0349 .0612	-.0000 -.0033 -.0066 -.0094 .0133 .0152 .0138 .0197 .0176 .0176	-.0483 -.0511 -.0482 -.0461 -.0415 -.0308 -.0217 -.0263 -.0227 -.0172 -.0236	.0202 .0190 -.0018 -.0023 -.0023 	-.0005 -.0012 -.0018 -.0046 -.0029 -.0028 -.0037 -.0044 -.0046 -.0040	.0051 .0038 .0046 .0078 .0062 .0068 .0068 .0067 .0080 	- 2.15 .00 2.13 4.28 6.39 8.52 10.64 12.69 14.77 16.82 18.83	-.0629 -.0812 -.0751 -.0797 -.0633 -.0724 -.0479 -.0479 -.0110 -.0133 -.0003	.0055 .0030 .0005 -.0030 -.0038 -.0090 -.0083 -.0308 -.0118 	.0176 .0454 .0446 -.0202 -.0177 -.0177 -.0148 -.0118 -.0108 	-.0191 -.0211 -.0202 -.0001 -.0013 -.0177 -.0026 -.0032 -.0032 -.0035	-.0012 -.0007 -.0001 -.0031 -.0021 -.0027 -.0027 -.0004 -.0001 -.0007	.0024 .0027 .0033 .0031 .0021 .0026 .0004 .0002 .0001 .0007
$\delta = 16.0$													
- 2.06 .07 2.19 4.32 6.45 8.59 10.68 12.73 14.80 16.85 18.87	.1444 .1531 .1387 .1351 .1225 .0939 .0590 .0662 .0532 .0503 .0766	-.0028 -.0070 -.0105 .0147 -.0594 -.0187 -.0202 	-.0614 -.0642 -.0599 -.0594 -.0520 -.0371 -.0274 -.0227 -.0326 -.0249 -.0302	.0249 .0251 -.0228 -.0217 -.0036 	-.0010 -.0023 -.0028 -.0036 -.0043 -.0053 -.0053 -.0047 -.0058 -.0052 -.0049	.0068 .0068 .0074 .0084 .0099 	- 2.15 .00 2.12 4.25 6.39 8.51 10.64 12.70 14.77 16.82 18.85	-.0764 -.0105 -.1056 -.1149 -.1000 -.0739 -.0739 -.0104 -.0113 -.0113 -.0003	.0110 -.0076 -.0038 -.0011 -.0042 -.0057 -.0061 -.0121 -.0131 -.0130	.0230 -.0262 -.0250 -.0266 -.0245 -.0245 -.0266 -.0211 -.0211 -.0211	-.0234 -.0262 -.0011 -.0004 -.0015 -.0181 -.0032 -.0032 -.0140 -.0108	-.0024 -.0020 -.0011 -.0043 -.0036 -.0024 -.0009 -.0009 -.0007 -.0034	.0035 .0049 .0061 .0043 .0036 .0024 .0009 .0009 .0007 .0039
$\delta = 20.6$													
- 2.03 .08 2.21 4.34 6.46 8.59 10.66 12.73 14.80 16.85 18.88	.2259 .2166 .2052 .1945 .1869 .1450 .0892 .0918 .0830 .0876 .0849	-.0184 -.0241 -.0281 .0358 .0491 .0507 -.0439 .0472 -.0497 	-.0947 -.0948 -.0914 -.0851 -.0796 -.0637 -.0461 -.0503 -.0484 -.0432 -.0425	.0369 -.0347 -.0337 -.0310 -.0233 -.0211 -.0160 -.0162 -.0129 -.0102 -.0088	-.0058 -.0067 -.0076 -.0096 -.0120 -.0122 -.0112 -.0119 -.0114 -.0110 -.0118	.0169 .0177 .0186 .0209 .0257 .0247 .0200 .0219 .0222 .0221 .0248	- 2.16 .03 2.10 4.22 6.35 8.48 10.60 12.68 14.76 16.81 18.83	-.1388 -.1665 -.1825 -.1941 -.1819 -.1696 -.1450 -.0996 -.0902 -.0949 -.0649	.0263 -.0258 -.0199 -.0121 -.0057 -.0060 -.0126 -.0108 -.0152 -.0211 -.0138	.0595 -.0587 -.0573 -.0563 -.0577 -.0749 -.0660 -.0541 -.0462 -.0447 -.0428	-.0340 -.0367 -.0373 -.0396 -.0377 -.0294 -.0248 -.0226 -.0186 -.0162 -.0153	.0127 .0135 .0138 .0118 .0101 .0047 .0002 .0001 .0018 .0041 -.0050	
$\delta = -29.3$													
$\delta = -5.1$													

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TABLE 6.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.25$; $N = 0.85$ - Concluded

(b) Modified leading edge

α_{deg}	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α_{deg}	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 6.7$							$\delta = -5.1$						
- 2.11 + 0.32.16 4.31 6.44 8.53 10.63 12.71 14.77 16.82 18.89	.0549 .0660 .0025 .0532 .0669 .0321 .0559 .0375 .0365 .0179 .0087 .0179 .0186	-.0009 .0009 -.0244 -.0248 .0288 -.0321 .0101 .0126 	.0231 .0110 -.0006 -.0003 .0012 -.0016 .0014 .0020 	.0113 .0110 -.0006 -.0003 -.0012 -.0016 -.0014 -.0020 -.0014 -.0021 -.0021 -.0030 -.0028 -.0016 -.0025	.0004 .0008 -.0008 -.0008 -.0008 	.0031 .0003 -.0008 -.0008 -.0008 	- 2.13 + 0.1 2.13 4.28 6.41 8.51 10.62 12.70 14.77 16.82 18.89	-.0566 -.0454 -.0564 -.0529 -.0337 -.0244 -.0241 -.0286 -.0286 -.0361 -.0048 -.0226 -.0085 -.0171 -.0073 -.0017 -.0019 -.0043 -.0015 -.0049 -.0043	.0025 -.0000 -.0018 -.0029 -.0010 -.0011 -.0003 -.0009 -.0010 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011 -.0011	.0286 .0280 .0292 -.0102 -.0102 -.0001 -.0003 -.0009 -.0011 	-.0102 -.0104 -.0102 -.0003 -.0003 -.0035 -.0038 -.0041 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043	-.0006 -.0003 -.0003 -.0003 -.0003 -.0035 -.0038 -.0041 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043	-.0032 -.0029 -.0029 -.0029 -.0029 -.0035 -.0038 -.0041 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043 -.0043
$\delta = 12.0$							$\delta = -10.5$						
- 2.09 .04 2.17 4.35 6.45 8.54 10.63 12.70 14.78 16.83 18.87	.0982 .1122 .0036 .0685 .0102 .0352 .0222 .0729 .0503 .0499 .0502 .0518 .0505 .0528 .0525 .0463 .0297	-.0468 -.0467 -.0462 .0189 -.0017 -.0012 -.0026 	.0205 .0192 -.0010 -.0017 -.0012 	-.0000 -.0000 -.0002 -.0017 -.0012 -.0013 -.0013 -.0045 -.0091 -.0039 -.0039 -.0045 -.0045 -.0040 -.0052 -.0048 -.0037	.0030 .0002 -.0014 -.0017 -.0012 	.0031 .0003 -.0019 -.0019 -.0006 	- 2.17 + 0.3 2.11 4.24 6.36 8.49 10.57 12.66 14.73 16.79 18.86	-.1120 -.1062 -.1162 -.1235 -.1155 -.0954 -.0964 -.1060 -.0143 -.0152	.0087 -.0048 -.0016 -.0021 -.0053 -.0125 -.0160 -.0120 -.0309 -.0113	.0489 -.0464 -.0464 -.0457 -.0476 -.0479 -.0412 -.0412 -.0109 -.0276	-.0192 -.0196 -.0197 -.0202 -.0193 -.0193 -.0135 -.0135 -.0028 -.0101	-.0019 -.0013 -.0006 -.0005 -.0009 -.0019 -.0023 -.0023 -.0059 -.0032	-.0019 -.0003 -.0005 -.0014 -.0027 -.0045 -.0057 -.0056 -.0067 -.0076
$\delta = 16.0$							$\delta = -14.5$						
- 2.08 .06 2.19 4.31 6.45 8.56 10.63 12.71 14.78 16.79 18.91	.1279 .1434 .1286 .1162 .1308 .1168 .0703 .0259 .0603 .0284 .0116 .0582	.0025 -.0074 .0112 -.0561 -.0627 -.0673 	-.0575 -.0580 -.0228 -.0218 -.0208 -.0174 -.0053 -.0104 -.0111 -.0111 -.0086 -.0051	.0250 -.0233 -.0027 -.0036 -.0047 -.0065 -.0053 -.0102 -.0111 -.0111 -.0039 -.0045	-.0005 -.0020 -.0027 -.0036 -.0047 -.0100 -.0053 -.0102 -.0111 -.0111 -.0034 -.0045	.0058 .0052 -.0057 -.0056 -.0053 	- 2.16 + 0.4 2.09 4.23 6.37 8.48 10.57 12.66 14.71 16.79 18.84	-.1320 -.1308 -.1486 -.1593 -.1455 -.1256 -.1118 -.0100 -.0162 -.0194	.0131 -.0084 -.0049 -.0002 -.0046 -.0100 -.0118 -.0162 -.0540 -.0194	.0461 -.0611 -.0611 -.0636 -.0648 -.0656 -.0656 -.0231 -.0220 -.0193 -.0390 -.0113	-.0235 -.0237 -.0247 -.0264 -.0261 -.0231 -.0231 -.0020 -.0020 -.0028 -.0137 -.0013	-.0032 -.0025 -.0016 -.0008 -.0005 -.0003 -.0030 -.0030 -.0041 -.0036 -.0044	-.0043 -.0043 -.0031 -.0022 -.0003 -.0003 -.0030 -.0030 -.0041 -.0036 -.0044
$\delta = 30.6$							$\delta = -29.3$						
- 2.07 .06 2.20 4.31 6.44 8.55 10.65 12.72 14.77 16.85 18.90	.1861 .1934 .1734 .1384 .1643 .1407 .0968 .0494 .0784 .0486 .0722	.0154 -.0226 -.0271 -.0288 -.0395 -.0508 -.0494 -.0430 -.0329 -.0360 -.0558	-.0902 -.0887 -.0849 -.0839 -.0933 -.0697 -.0430 -.0152 -.0092 -.0051 -.0408	.0379 -.0353 -.0359 -.0322 -.0297 -.0237 -.0152 -.0135 -.0125 -.0113 -.0112	-.0046 -.0065 -.0074 -.0052 -.0107 -.0133 -.0135 -.0233 -.0244 -.0230 -.0215	.0185 .0159 .0157 .0185 .0199 .0223 .0233 .0233 .0244 .0230 -.0215	- 2.06 + 0.6 2.05 4.20 6.32 8.44 10.55 12.63 14.70 16.77 18.85	-.2029 -.2336 -.2027 -.2446 -.2437 -.2097 -.1751 -.1459 -.1235 -.0567	.0266 -.0942 -.0942 -.0135 -.0937 -.0054 -.0117 -.0169 -.0668 -.0176	.0909 -.0370 -.0370 -.0559 -.0382 -.0054 -.0117 -.0169 -.0256 -.0176	-.0077 -.0127 -.0061 -.00405 -.0029 -.0002 -.0023 -.0010 -.0029 -.0050	-.0145 -.0127 -.0051 -.0115 -.0079 -.0030 -.0012 -.0010 -.0051 -.0070	



TABLE 7.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{V_1}{b/2} = 0.25$; $H = 0.90$

(a) Plain leading edge

α deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 6.7$							$\delta = -5.1$						
-2.11 .01 2.14 4.29 6.41 8.55 10.65 12.71 14.80	.0455 .0474 .0476 .0370 .0052 .0273 .0368 .0102 .0047 .0361 .0189	.0004 .0024 .0037 .0052 .0076 .0068 .0012 .0021 .0112 .0121 .0087	-.0290 -.0310 -.0317 -.0292 -.0258 -.0068 -.0231 -.0086 -.0053 -.0055 -.0196	.0114 .0119 .0112 .0101 .0015 .0020 .0015 .0013 .0019 .0020 .0021	-.0000 -.0004 -.0008 -.0015 .0043 .0048 -.0015 .0042 -.0019 	.0025 .0034 .0034 .0035 .0043 .0048 .0041 .0010 .0012 .0018 .0019	-2.12 .02 2.17 4.30 6.43 8.55 10.66 12.73 14.83	-.0293 -.0360 -.0221 -.0230 -.0233 -.0230 -.0092 -.0001 -.0126	.0027 .0014 .0010 .0014 .0016 .0028 .0199 .0003 .0025	.0222 .0289 .0249 .0267 .0228 .0090 .0012 .0058 .0019	-.0114 -.0114 .0112 -.0109 .0012 -.0013 	-.0003 .0001 .0002 .0005 .0012 .0013 .0014 .0015 .0011 .0009	.0002 .0007 .0010 .0001 .0013 .0014 .0015 .0011 .0011 .0009
$\delta = 12.0$							$\delta = -10.5$						
-2.09 .05 2.19 4.32 6.44 8.57 10.68 12.75 14.81	.1171 .1220 .1150 .0975 .0784 .0799 .0476 .0475 .0862 .0460	.0019 .0061 .0094 .0130 .0184 .0230 .0144 .0144 .0271 .0189	-.0505 -.0534 -.0505 -.0478 -.0370 -.0398 -.0183 -.0183 -.0344 -.0241	.0200 .0201 .0172 .0153 .0110 .0131 .0114 .0114 .0090 .0082	-.0007 -.0017 -.0023 -.0034 -.0043 -.0035 -.0040 -.0040 -.0044 -.0046	.0053 .0059 .0065 .0075 .0075 .0078 .0068 .0068 .0071 .0082	-2.15 .00 2.19 4.29 6.41 8.55 10.67 12.74 14.81	-.0448 -.0782 -.0685 -.0727 -.0684 -.0373 -.0379 -.0134 -.0291	.0074 .0053 .0015 -.0014 -.0040 -.0009 -.0053 -.0018 -.0074	.0153 .0495 .0480 .0498 .0461 .0278 .0358 .0107 .0249	-.0183 -.0204 -.0198 -.0206 .0180 -.0134 -.0107 -.0116 	-.0015 -.0012 -.0004 -.0004 .0012 -.0028 -.0025 -.0031 	.0024 .0053 .0056 .0041 .0030 .0000 .0003 .0003 .0006
$\delta = 16.0$							$\delta = -14.5$						
-2.07 .06 2.18 4.32 6.45 8.58 10.59 12.74	.1502 .1483 .1369 .1172 .0939 	.0048 .0100 .0134 .0174 .0234 .0102 .0090 -.0080 .0300	-.0645 -.0671 -.0656 -.0576 -.0446 -.0494 -.0358 -.0358 -.0375	.0239 .0235 -.0204 -.0185 -.0135 	-.0016 -.0028 -.0033 -.0045 -.0054 -.0051 -.0058 -.0058 -.0056	.0085 .0092 .0096 .0108 .0111 .0112 .0106 .0106 .0109	-2.15 .00 2.19 4.29 6.43 8.55 10.66 12.73 14.81	-.0574 -.0916 -.0995 -.0927 -.0925 -.0926 -.0733 -.0439 -.0417	.0132 .0102 .0057 .0018 -.0026 -.0052 -.0101 -.0051 -.0073	.0182 .0608 .0662 .0690 .0652 .0538 .0592 .0438 .0411	-.0221 -.0247 -.0246 -.0258 -.0235 -.0191 -.0147 -.0166 -.0150	-.0029 -.0024 -.0014 -.0003 -.0007 -.0027 -.0026 -.0033 -.0040	.0045 .0079 .0070 .0054 .0028 .0015 .0005 .0013 .0028
$\delta = 30.6$							$\delta = -29.3$						
-2.05 .16 2.20 4.33 6.46 8.60 10.69 12.75	.2195 .2778 .1938 .1679 .1415 .1409 .0530 .1172 .1320	.0199 .0263 .0293 .0359 .0502 	-.0985 -.0904 -.0914 -.0824 -.0664 -.0685 -.0531 -.0629 -.0500	.0359 .0332 .0306 .0267 .0199 .0224 .0226 .0155 .0113	-.0060 -.0070 -.0079 -.0097 -.0121 -.0120 -.0126 -.0125 -.0116	.0174 .0195 .0193 .0215 .0248 .0240 .0230 .0235 .0242	- .00 2.11 4.26 6.40 8.52 10.65 12.71 14.81	-.1537 -.1706 -.1893 -.1798 -.1384 -.0872 -.0729 -.0905	.0274 .0209 .0124 .0071 -.0022 -.0002 -.0022 -.0137	.0923 .0959 .1075 .1052 -.0755 -.0594 -.0551 -.0647	-.0344 -.0370 -.0389 -.0388 -.0284 -.0206 -.0213 -.0182	-.0073 -.0059 -.0042 -.0031 -.0012 -.0013 -.0020 -.0036	.0159 .0149 .0127 .0105 .0047 .0009 .0008 .0029

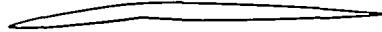
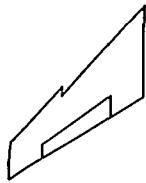


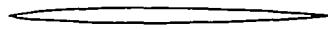
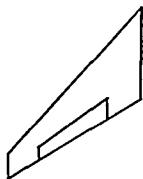
TABLE 7.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.25; H = 0.90$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 6.7$							$\delta = -5.1$						
- 2.12 .03	.0557	-.0011	-.0261	.0106	.0002	.0025	- 2.15 .02	-.0546	.0020	.0324	-.0111	-.0007	-.0029
2.17 .0467	.0677	.0012	-.0274	.0113	-.0003	-.0000	2.15 .0667	-.0667	-.0004	-.0297	-.0108	-.0003	-.0033
4.30 .0430	.0460	.0056	-.0268	.0094	-.0015	.0012	4.30 .0642	-.0462	-.0037	.0346	-.0127	.0005	-.0035
6.44 .0452	.0070	-.0211	.0086	-.0016	.0025		6.42 .0470	-.0470	-.0055	.0335	-.0110	.0014	-.0045
8.54 .0315	.0089	-.0161	.0076	-.0021	.0028		8.53 .0589	-.0589	-.0106	.0366	-.0067	.0019	-.0045
10.63 .0245	.0045	.0068	-.0102	.0049	-.0019	.0034	10.63 .0171	-.0171	-.0005	.0143	-.0054	.0015	-.0052
12.74 .0508	.0050	.0178	-.0110	-.0018	-.0023	.0040	12.70 .0115	-.0115	-.0017	.0097	-.0062	.0018	-.0047
14.84 .0450	.0045	.0145	-.0119	.0060	-.0025	.0030	14.83 .0020	-.0020	-.0033	.0120	-.0035	.0014	-.0067
$\delta = 12.0$							$\delta = -10.5$						
- 2.11 .04	.0994	.0008	-.0488	.0196	-.0002	.0040	- 2.16 .02	-.1035	.0094	.0558	-.0179	-.0021	.0009
2.18 .0847	.0081	-.0463	.0171	-.0020	.0016		2.12 .1263	-.1263	.0016	.0594	-.0195	-.0008	-.0027
4.30 .0735	.0112	-.0440	.0146	-.0029	.0027		4.26 .1255	-.1255	-.0030	.0626	-.0209	.0001	-.0042
6.42 .0664	.0141	-.0434	.0136	-.0033	.0038		6.40 .1031	-.1031	-.0047	.0564	-.0202	.0017	-.0065
8.55 .0574	.0178	-.0249	.0095	-.0041	.0044		8.50 .0963	-.0963	-.0120	.0484	-.0146	.0026	-.0085
10.65 .0607	.0250	-.0258	.0081	-.0046	.0056		10.60 .0712	-.0712	-.0114	.0306	-.0106	.0024	-.0084
12.74 .0533	.0238	-.0110	.0075	-.0056	.0019		12.68 .0472	-.0472	-.0083	.0248	-.0120	.0029	-.0086
14.83 .0457	.0198	-.0184	.0091	-.0050	.0039		14.79 .0543	-.0543	-.0159	.0262	-.0012	.0023	-.0106
$\delta = 16.0$							$\delta = -14.5$						
- 2.10 .05	.1246	.0038	-.0593	.0235	-.0009	.0081	- 2.18 .02	-.1369	.0142	.0653	-.0224	-.0035	.0047
2.18 .0997	.0123	-.0550	.0201	-.0030	.0065		2.10 .1611	-.1611	.0048	.0726	-.0243	-.0019	.0033
4.31 .0913	.0162	-.0513	.0171	-.0040	.0070		4.26 .1559	-.1559	-.0018	.0794	-.0263	-.0008	.0015
6.43 .0878	.0217	-.0534	.0152	-.0046	.0083		6.40 .1455	-.1455	-.0079	.0824	-.0262	.0010	-.0112
8.56 .0681	.0230	-.0297	.0131	-.0054	.0094		8.51 .1327	-.1327	-.0150	.0724	-.0225	.0028	-.0044
10.67 .0735	.0241	-.0292	.0100	-.0062	.0100		10.61 .0855	-.0855	-.0096	.0452	-.0158	.0026	-.0054
12.74 .0815	.0337	-.0522	.0044	-.0059	.0114		12.68 .0751	-.0751	-.0096	.0421	-.0175	.0029	-.0043
14.84 .0657	.0275	-.0253	.0066	-.0057	.0096		14.77 .0794	-.0794	-.0206	.0345	-.0150	.0038	-.0063
$\delta = 30.6$							$\delta = -29.3$						
- 2.10 .05	.1763	.0161	-.0911	.0354	-.0047	.0173	- .05 .02	-.1986	.0262	.0911	-.0348	-.0075	.0139
2.17 .1734	.0235	-.0905	.0331	-.0067	.0158		2.08 .2352	-.2352	.0208	.1029	-.0373	-.0063	.0122
4.31 .1289	.0266	-.0786	.0310	-.0076	.0157		4.23 .2297	-.2297	.0130	.1105	-.0411	-.0050	.0106
6.43 .1059	.0318	-.0765	.0272	-.0089	.0179		6.36 .2318	-.2318	.0017	.1146	-.0416	-.0020	.0057
8.55 .1001	.0481	-.0624	.0161	-.0120	.0220		8.47 .2044	-.2044	-.0093	.0998	-.0358	.0010	.0005
10.66 .0919	.0509	-.0451	.0152	-.0130	.0236		10.59 .1398	-.1398	-.0082	.0657	-.0247	.0026	-.0036
12.76 .1101	.0502	-.0366	.0164	-.0132	.0252		12.66 .1034	-.1034	-.0072	.0523	-.0203	.0023	-.0032
							14.75 .1065	-.1065	-.0201	.0386	-.0182	.0029	-.0053

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NACA RM L55B18a

TABLE 8.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{V_1}{b/2} = 0.25$; $M = 0.94$

(a) Plain leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 6.7$												$\delta = -5.1$	
- 2.12 .00	.0476 .0544	-.0001 .0022	-.0312 .0363	.0116 .0116	-.0001 .0006	.0042 .0033	- 2.13 .03 2.16 4.30 6.42 8.53 10.66	-.0216 .0209 .0206 .0036 .0191 .0192 .0347	.0029 .0012 .0002 .0253 .0023 .0189 .0068	.0127 .0278 .0253 .0298 .0223 .0189 .0237	-.0102 .0115 .0109 .0110 .0075 .0057 .0070	-.0009 .0004 .0001 .0008 .0012 .0012 .0018	-.0004 .0009 .0012 .0000 .0020 .0019 .0018
2.13 4.26 6.39 8.52 10.63	.0390 .0222 .0157 .0139 .0101	.0045 .0242 .0208 .0050 .0048	-.0311 .0242 .0208 .0158 .0221	.0095 .0074 .0057 .0061 .0075	-.0011 .0016 .0019 .0020 .0026	.0040 .0042 .0041 .0044 .0052							
$\delta = 12.0$												$\delta = -10.5$	
- 2.09 .05 2.16 4.29 6.44 8.55 10.66	.1122 .1233 .0944 .0780 .0635 .0593 .0715	.0017 .0061 .0105 .0118 .0146 .0159 .0208	-.0569 .0568 .0475 .0390 .0242 .0248 .0433	.0197 .0185 .0149 .0127 .0096 .0110 .0117	-.0014 .0022 .0028 .0036 .0042 .0046 .0054	.0070 .0061 .0068 .0072 .0072 .0077 .0096	- 2.15 .02 2.15 4.29 6.41 8.54 10.65	-.0387 .0610 .0543 .0518 .0519 .0539 .0618	.0085 .0059 .0031 .0014 .0040 .0069 .0089	.0078 .0167 .0191 .0189 .0159 .0456 .0474	-.0023 .0053 .0008 .0029 .0016 .0019 .0028	-.0053 .0057 .0056 .0029 .0012 .0005 .0006	
$\delta = 16.0$												$\delta = -14.5$	
- 2.09 .04 2.18 4.30 6.43 8.56 10.64	.1373 .1487 .1223 .0994 .0864 .0975 .1110	.0053 .0106 .0140 .0171 .0222 .0262 .0330	-.0714 .0705 .0606 .0502 .0412 .0466 .0820	.0234 .0218 .0181 .0154 .0123 .0137 .0142	-.0023 .0034 .0038 .0049 .0055 .0064 .0075	.0100 .0092 .0097 .0106 .0109 .0120 .0138	- 2.14 .02 2.15 4.28 6.43 8.55 10.67	-.0508 .0773 .0963 .0775 .0693 .0687 .0743	.0146 .0113 .0048 .0003 .0030 .0062 .0060	.0202 .0235 .0243 .0241 .0211 .0165 .0225	-.0041 .0031 .0018 .0002 .0011 .0018 .0017	-.0079 .0088 .0067 .0036 .0008 .0003 .0017	
$\delta = 30.6$												$\delta = -29.5$	
- 2.07 .06 2.18 4.31 6.75 8.54 10.66	.2142 .2087 .1772 .1484 .1416 .1471 .1560	.0201 .0277 .0334 .0557 .0808 .0567 .0671	-.1062 .1030 .0933 .0754 .0443 .0901 .1034	.0348 .0312 .0292 .0243 .0213 .0188 .0177	-.0066 .0079 .0089 .0101 .0123 .0147 .0166	.0190 .0205 .0215 .0220 .0254 .0290 .0320	- 2.14 .01 2.14 4.28 6.42 8.54 10.66	-.1116 .1364 .1579 .1540 .1453 .1257 .1087	.0304 .0301 .0191 .0111 .0055 .0024 .0024	.0613 .0950 .1027 .1073 .0999 .0912 .0777	-.0297 .0346 .0362 .0399 .0369 .0292 .0237	-.0091 .0087 .0063 .0040 .0023 .0001 .0016	-.0160 .0166 .0151 .0105 .0068 .0017 .0027

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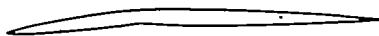
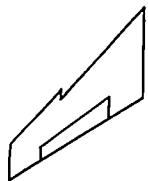


TABLE 8.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.25$; $M = 0.94$ - Commaled

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 6.7$													
- 2.12	.0558	-.0011	-.0304	.0114	+.0003	.0026	- 2.13	-.0468	.0020	.0325	-.0105	-.0008	-.0028
.02	.0621	.0021	-.0290	.0109	-.0005	.0002	-.00	-.0407	.0014	.0301	-.0104	-.0004	-.0028
2.15	.0423	.0053	-.0252	.0084	-.0012	.0013	2.15	-.0460	-.0036	.0374	-.0108	-.0000	-.0033
4.28	.0358	.0071	-.0394	.0067	-.0015	.0017	4.28	-.0471	-.0052	.0178	-.0110	.0010	-.0038
6.41	.0371	.0048	-.0151	.0070	-.0016	.0037	6.41	-.0377	-.0064	.0341	-.0092	.0014	-.0041
8.54	.0258	.0041	-.0045	.0051	-.0018	.0030	8.49	-.0368	-.0001	.0116	-.0078	.0019	-.0055
10.61	.0300	.0081	-.0267	.0068	-.0026	.0035	10.62	-.0308	-.0063	.0172	-.0084	.0020	-.0050
$\delta = 12.0$													
- 2.12	.0908	.0014	-.0528	.0185	-.0006	.0029	- 2.15	-.0852	.0100	.0517	-.0160	-.0025	-.0002
.03	.1037	.0058	-.0501	.0170	-.0016	.0013	-.00	-.0833	.0081	.0517	-.0166	-.0018	-.0020
2.16	.0773	.0077	-.0415	.0144	-.0024	.0022	2.13	-.1001	.0013	.0591	-.0186	-.0010	-.0036
4.29	.0641	.0119	-.0538	.0121	-.0030	.0034	4.26	-.1022	-.0022	.0447	-.0182	.0006	-.0060
6.41	.0651	.0105	-.0290	.0121	-.0033	.0045	6.38	-.0936	-.0070	.0578	-.0172	.0016	-.0071
8.51	.0532	.0168	-.0327	.0096	-.0040	.0047	8.49	-.0900	-.0121	.0482	-.0136	.0022	-.0090
10.62	.0810	.0292	-.0620	.0098	-.0049	.0059	10.58	-.0986	-.0152	.0416	-.0148	.0029	-.0091
$\delta = 16.0$													
- 2.12	.1124	.0050	-.0644	.0223	-.0015	.0052	- 2.15	-.1073	.0150	.0624	-.0200	-.0039	.0054
.03	.1208	.0107	-.0637	.0200	-.0028	.0067	-.01	-.1056	.0120	.0636	-.0212	-.0030	.0051
2.16	.0983	.0132	-.0543	.0176	-.0036	.0072	2.12	-.1161	.0076	.0667	-.0222	-.0019	.0028
4.29	.0771	.0150	-.0602	.0150	-.0039	.0077	4.25	-.1214	.0049	.0516	-.0220	-.0001	.0002
6.39	.0755	.0222	-.0450	.0138	-.0050	.0102	6.38	-.1148	-.0073	.0717	-.0223	.0012	-.0021
8.52	.0616	.0202	-.0322	.0132	-.0054	.0105	8.50	-.1047	-.0092	.0578	-.0154	.0019	-.0042
10.62	.1085	.0340	-.0804	.0116	-.0069	.0122	10.62	-.1170	-.0153	.0711	-.0181	.0024	-.0053
$\delta = 30.6$													
- 2.12	.1672	.0169	-.0975	.0341	-.0050	.0173	- 2.15	-.1811	.0275	.0930	-.0331	-.0077	.0142
.02	.1677	.0253	-.0949	.0321	-.0072	.0174	2.10	-.2040	.0204	.1081	-.0370	-.0046	.0127
2.16	.1433	.0287	-.0840	.0290	-.0083	.0184	4.25	-.1989	.0154	.0933	-.0403	-.0039	.0086
4.29	.1139	.0326	-.0832	.0254	-.0093	.0194	6.37	-.1770	.0047	.1024	-.0373	-.0008	.0051
6.39	.1095	.0407	-.0698	.0251	-.0113	.0237	8.48	-.1667	-.0042	.0935	-.0324	.0019	-.0018
8.54	.0759	.0375	-.0355	.0146	-.0115	.0223	10.58	-.1414	-.0063	.0705	-.0265	.0022	-.0045
10.64	.1331	.0576	-.0830	.0168	-.0149	.0282							



TABLE 9.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.50$; $M = 0.40$

(a) Plain leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y					
$S = 3.5$												$S = -6.6$						
- 2.04	.0173	.0003	-.0105	.0052	-.0002	-.0029	- 2.05	-.0315	.0016	-.0081	-.0090	-.0008	-.0077					
.01	.0281	.0007	-.0129	.0050	-.0005	-.0038	- 2.06	-.0311	.0008	-.0081	-.0098	-.0007	-.0086					
2.05	.0154	.0003	-.0141	.0049	-.0005	-.0012	2.07	-.0350	-.0014	-.0085	-.0094	-.0005	-.0077					
4.11	.0127	.0010	-.0085	.0050	-.0004	-.0012	4.10	-.0441	-.0029	-.0062	-.0098	-.0001	-.0078					
6.17	.0082	.0009	-.0115	.0052	-.0008	.0006	6.15	-.0401	-.0045	-.0269	-.0085	.0002	-.0066					
8.24	.0066	.0002	-.0095	.0049	-.0006	.0014	8.23	-.0197	-.0036	-.0135	-.0078	.0002	-.0045					
10.29	.0177	.0027	-.0116	.0068	-.0011	.0034	10.29	-.0103	-.0025	-.0157	-.0075	.0012	-.0042					
12.36	.0219	.0031	-.0065	.0038	-.0011	.0040	12.34	-.0204	-.0063	-.0149	-.0063	.0012	-.0031					
14.40	.0145	.0032	-.0048	.0022	-.0012	.0001	14.38	-.0189	-.0063	-.0156	-.0057	.0013	-.0039					
16.45	.0224	.0025	-.0047	.0030	-.0013	.0002	16.42	-.0357	-.0166	-.0178	-.0050	.0014	-.0049					
18.48	-.0009	.0000	-.0058	.0027	-.0013	.0026	18.46	-.0305	-.0112	-.0144	-.0053	.0019	-.0039					
20.48	.0134	.0199	.0035	.0023	-.0017	.0044	20.47	-.0254	-.0044	-.0167	-.0049	.0012	-.0031					
23.50	.0170	.0234	.0032	.0014	-.0007	.0012	23.48	.0411	.0013	-.0146	-.0046	.0015	-.0074					
$S = 7.7$																		
- 2.06	.0215	.0011	-.0435	.0117	-.0006	-.0032	- 2.29	-.5167	.0201	-.0189	-.0167	-.0012	-.0113					
.01	.0383	.0016	-.0334	.0119	-.0008	.0014	- 2.01	-.0410	.0015	.0147	-.0170	-.0009	-.0123					
2.06	.0341	.0020	-.0489	.0119	-.0010	.0041	2.05	-.0479	-.0013	.0146	-.0162	-.0010	-.0163					
4.11	.0409	.0037	-.0457	.0119	-.0014	.0040	4.11	-.0369	-.0027	.0146	-.0166	.0001	-.0059					
6.17	.0317	.0041	-.0149	.0107	-.0014	.0057	6.16	-.0405	-.0042	-.0109	-.0134	.0002	-.0047					
8.23	.0344	.0045	-.0447	.0101	-.0014	.0083	8.24	-.0234	-.0041	-.0229	-.0123	.0012	-.0033					
10.29	.0503	.0088	-.0484	.0115	-.0021	.0076	10.28	-.0267	-.0055	-.0048	-.0120	.0021	-.0020					
12.34	.0365	.0082	-.0357	.0085	-.0028	.0059	12.33	-.0361	-.0093	-.0018	-.0096	.0024	-.0032					
14.39	.0149	.0046	-.0351	.0060	-.0028	.0045	14.37	-.0578	-.0154	-.0067	-.0099	.0031	-.0019					
16.43	.0261	.0040	-.0350	.0066	-.0031	.0046	16.43	-.0356	-.0161	-.0036	-.0084	.0031	-.0004					
18.47	-.0043	.0001	-.0284	.0060	-.0032	.0052	18.45	-.0266	-.0199	-.0044	-.0094	.0039	-.0003					
20.48	.0433	.0335	-.0272	.0054	-.0038	.0062	20.46	-.0308	-.0045	-.0162	-.0074	.0025	-.0039					
23.48	.0182	.0252	-.0332	.0032	-.0042	.0016	23.47	-.0363	-.0007	-.0064	-.0061	.0027	-.0084					
$S = 13.2$																		
- 2.04	.0570	.0023	-.0621	.0207	-.0014	-.0025	- 2.06	-.0420	.0060	.0322	-.0219	-.0023	-.0095					
.01	.0628	.0041	-.0679	.0209	-.0021	-.0051	- 2.00	-.0495	.0043	.0357	-.0233	-.0023	-.0125					
2.05	.0598	.0046	-.0623	.0200	-.0023	-.0015	2.06	-.0565	.0012	.0324	-.0230	-.0020	-.0084					
4.11	.0569	.0069	-.0597	.0198	-.0030	-.0026	8.23	-.0412	-.0060	.0152	-.0181	.0010	-.0032					
6.17	.0520	.0084	-.0812	.0184	-.0036	-.0011	10.29	-.0351	-.0053	.0186	-.0167	.0024	-.0027					
8.22	.0405	.0074	-.0645	.0165	-.0037	-.0012	12.33	-.0397	-.0091	.0130	-.0139	.0029	-.0038					
10.29	.0471	.0107	-.0579	.0176	-.0045	-.0003	14.38	-.0332	-.0085	.0068	-.0139	.0037	-.0036					
12.34	.0360	.0110	-.0418	.0133	-.0054	-.0024	16.42	-.0393	-.0161	.0083	-.0123	.0037	-.0025					
14.39	.0848	.0126	-.0397	.0104	-.0055	-.0047	18.44	-.0888	-.0264	.0065	-.0131	.0047	-.0029					
16.43	.0273	.0072	-.0410	.0109	-.0060	-.0048	20.44	-.0718	-.0030	.0093	-.0107	.0038	-.0009					
18.47	.0150	.0090	-.0360	.0105	-.0063	-.0041	23.45	-.0927	-.00240	.0026	-.0092	.0043	-.0081					
20.46	.0151	.0247	-.0328	.0084	-.0070	-.0036	$S = 15.2$											
23.49	.0037	.0215	-.0044	.0074	-.0069	-.0064	- 2.06	-.1022	.0193	.0732	-.0392	-.0088	.0042					
$S = 28.2$																		
- 2.04	.1281	.0124	-.0898	.0397	-.0079	-.0183	- 2.06	-.1111	.0172	.0803	-.0434	-.0086	.0020					
.02	.1318	.0245	-.0894	.0377	-.0085	-.0184	2.04	-.1244	.0135	.0820	-.0459	-.0081	.0066					
2.08	.1221	.0180	-.0842	.0359	-.0092	-.0159	4.10	-.1149	.0096	.0807	-.0455	-.0062	.0084					
4.18	.1338	.0225	-.0768	.0293	-.0114	-.0143	6.17	-.1166	.0023	.0513	-.0418	-.0035	.0130					
6.19	.1152	.0244	-.1056	.0352	-.0106	-.0167	8.22	-.0920	-.0041	.0524	-.0364	-.0007	.0107					
8.25	.1018	.0250	-.0768	.0285	-.0122	-.0163	10.28	-.0788	-.0061	.0449	-.0308	.0024	.0099					
12.35	.0722	.0271	-.0534	.0236	-.0132	-.0156	12.34	-.0612	-.0077	.0382	-.0269	.0036	.0081					
14.38	.0511	.0258	-.0735	.0169	-.0128	-.0181	14.38	-.0607	-.0101	.0279	-.0266	.0051	.0073					
16.44	.0357	.0195	-.0427	.0170	-.0137	-.0185	16.42	-.0768	-.0217	.0294	-.0244	.0058	.0076					
18.46	-.0091	.0207	-.0373	.0159	-.0143	-.0190	18.44	-.1224	.0319	.0257	-.0250	.0075	.0072					
20.48	.0358	.0406	-.0422	.0144	-.0161	-.0212	20.47	-.0563	.0049	.0148	-.0233	.0082	.0104					
23.50	.0256	.0547	-.0381	.0116	-.0166	-.0259	23.48	-.0740	-.0111	.0258	-.0196	.0086	.0137					



TABLE 9.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.30$; $H = 0.40$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_I	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_I	ΔC_n	ΔC_T
$\delta = 3.3$							$\delta = -6.6$						
- 2.05	.0487	-.0020	.0066	.0057	.0002	.0055	- 2.08	-.0070	.0004	.0237	-.0094	-.0004	.0058
- .01	.0299	-.0001	-.0011	.0055	-.0000	.0052	- .02	-.0143	.0002	.0351	-.0092	-.0000	.0076
2.04	.0413	.0010	.0057	.0059	-.0003	.0053	2.04	-.0125	-.0000	.0319	-.0090	-.0002	.0048
4.11	.0327	.0017	.0079	.0054	-.0002	.0044	4.10	-.0210	-.0004	.0311	-.0094	-.0005	.0041
6.16	.0346	.0039	.0169	.0052	-.0007	.0076	6.15	-.0133	-.0001	.0435	-.0095	-.0003	.0074
8.23	.0385	.0049	-.0039	.0053	-.0006	.0061	8.20	-.0235	-.0022	.0154	-.0093	-.0009	.0068
10.28	.0221	.0033	.0156	.0043	-.0009	.0039	10.26	-.0247	-.0043	.0360	-.0085	-.0012	.0051
12.33	.0497	.0097	.0027	.0023	-.0010	-.0016	12.33	-.0236	.0040	.0306	-.0090	.0011	.0007
14.37	.0326	.0088	.0163	.0033	-.0013	.0037	14.36	-.0035	-.0006	.0284	-.0058	.0014	.0065
16.43	.0426	.0118	.0140	.0031	-.0016	.0044	16.41	-.0061	.0014	.0199	-.0052	.0019	.0104
18.46	.0288	.0103	.0159	.0031	-.0017	.0044	18.45	-.0018	.0006	.0283	-.0054	.0020	.0076
20.49	.0159	.0068	.0209	.0022	-.0014	.0042	20.47	-.0190	-.0066	.0269	-.0042	.0026	.0097
23.51	.0326	.0149	.0106	.0032	-.0018	.0025	23.50	-.0084	.0019	.0204	-.0038	.0025	.0070
$\delta = 7.7$							$\delta = -10.3$						
- 2.05	.0439	-.0008	-.0092	.0117	-.0000	.0086	- 2.05	.0072	.0013	.0508	-.0158	-.0021	-.0042
- .00	.0644	.0005	.0017	.0114	-.0005	.0086	- .01	-.0087	.0017	.0461	-.0158	-.0012	-.0039
2.06	.0629	.0031	-.0084	.0120	-.0012	.0087	2.05	-.0090	.0004	.0598	-.0157	-.0011	-.0080
4.12	.0498	.0038	-.0127	.0114	-.0012	.0067	4.10	-.0108	-.0021	.0464	-.0159	-.0005	-.0030
6.17	.0625	.0073	-.0000	.0108	-.0018	.0091	6.16	-.0200	-.0042	.0594	-.0159	-.0000	-.0008
8.22	.0435	.0078	-.0197	.0102	-.0018	.0090	8.21	-.0140	-.0035	.0357	-.0147	.0010	-.0001
10.28	.0278	.0065	.0028	.0087	-.0019	.0069	10.29	-.0186	-.0048	.0494	-.0123	.0016	-.0019
12.33	.0385	.0083	.0006	.0051	-.0024	-.0001	12.32	-.0158	-.0036	.0429	-.0120	.0024	-.0077
14.37	.0451	.0129	.0039	.0070	-.0029	.0055	14.37	-.0067	-.0028	.0465	-.0087	.0026	-.0030
16.42	.0650	.0194	.0023	.0068	-.0033	.0071	16.41	-.0036	-.0024	.0385	-.0081	.0031	-.0005
18.46	.0467	.0181	-.0023	.0066	-.0038	.0052	18.45	-.0195	-.0036	.0393	-.0074	.0041	-.0009
20.49	.0209	.0110	.0169	.0043	-.0032	.0048	20.47	-.0399	-.0074	.0347	-.0054	.0046	.0031
23.51	.0419	.0208	.0011	.0064	-.0040	.0023	23.49	-.0325	-.0118	.0337	-.0037	.0040	.0150
$\delta = 13.2$							$\delta = -15.2$						
- 2.06	.0798	-.0016	-.0249	.0205	-.0006	.0112	- 2.06	-.0317	.0043	.0553	-.0220	-.0034	.0058
- .00	.0670	.0022	-.0261	.0203	-.0014	.0110	- .03	-.0371	.0032	.0570	-.0223	-.0022	.0074
2.05	.0791	.0042	-.0225	.0209	-.0023	.0109	2.03	-.0557	.0007	.0617	-.0225	-.0019	.0059
4.11	.0510	.0052	-.0278	.0193	-.0025	.0098	4.09	-.0612	-.0019	.0568	-.0229	-.0011	.0069
6.17	.0683	.0068	-.0147	.0190	-.0034	.0122	6.14	-.0509	-.0030	.0683	-.0227	-.0005	.0118
8.22	.0491	.0083	-.0345	.0180	-.0038	.0102	8.21	-.0531	-.0051	.0466	-.0209	-.0009	.0114
10.28	.0525	.0096	-.0135	.0167	-.0044	.0090	10.27	-.0519	-.0068	.0642	-.0178	.0018	.0098
12.34	.0722	.0156	.0120	.0118	-.0052	-.0000	12.31	-.0337	-.0066	.0552	-.0160	-.0027	.0058
14.36	.0402	.0133	-.0055	.0120	-.0054	.0053	14.36	-.0433	-.0084	.0559	-.0126	.0033	.0079
16.42	.0659	.0167	-.0068	.0115	-.0061	.0068	16.58	-.0578	-.0133	.0478	-.0114	.0040	.0117
18.47	.0840	.0310	.0009	.0099	-.0067	.0047	18.43	-.0498	-.0102	.0490	-.0109	.0051	.0132
20.49	.0250	.0134	.0083	.0070	-.0061	.0041	20.46	-.0697	-.0157	.0422	-.0083	.0059	.0156
23.50	.0288	.0173	.0004	.0113	-.0025	.0051	23.49	-.0398	-.0144	.0390	-.0071	.0060	.0253
$\delta = 28.2$							$\delta = -31.3$						
- 2.05	.1341	.0095	-.0943	.0417	-.0066	-.0007	- 2.06	-.0794	.0180	.1044	-.0417	-.0104	.0100
- .01	.1546	.0147	-.0890	.0390	-.0084	-.0013	- .03	-.0805	.0160	.1015	-.0416	-.0086	.0131
2.07	.1462	.0184	-.0785	.0378	-.0092	-.0016	2.03	-.0802	.0130	.1098	-.0425	-.0076	.0118
4.13	.1365	.0211	-.0824	.0359	-.0096	-.0007	4.09	-.0952	.0102	.1063	-.0445	-.0066	.0124
6.18	.1394	.0254	-.0582	.0348	-.0109	-.0006	6.16	-.0805	.0082	.1196	-.0457	-.0050	.0200
8.23	.1220	.0272	-.0897	.0329	-.0114	-.0004	8.22	-.0786	.0042	.0947	-.0437	-.0028	.0199
10.28	.1059	.0272	.0611	.0289	-.0116	-.0028	10.27	-.0854	.0392	.1001	-.0376	-.0000	.0169
12.34	.1151	.0339	-.0572	.0223	-.0125	-.00102	12.32	-.0521	.0003	.0846	-.0317	.0026	.0104
14.38	.0874	.0341	-.0443	.0205	-.0132	-.0071	14.36	-.0610	-.0068	.0809	-.0277	.0038	.0115
16.43	.1019	.0409	-.0402	.0183	-.0139	-.0068	16.42	-.0385	-.0047	.0780	-.0274	.0058	.0132
18.47	.0970	.0451	-.0314	.0151	-.0143	-.0083	18.45	-.0588	-.0082	.0747	-.0273	.0076	.0146
20.49	.0420	.0303	-.0145	.0092	-.0133	-.0119	20.46	-.0924	-.0190	.0683	-.0241	.0096	.0174
23.50	.0620	.0413	-.0335	.0137	-.0151	-.0113	23.49	-.0402	-.0133	.0497	-.0131	.0095	.0228

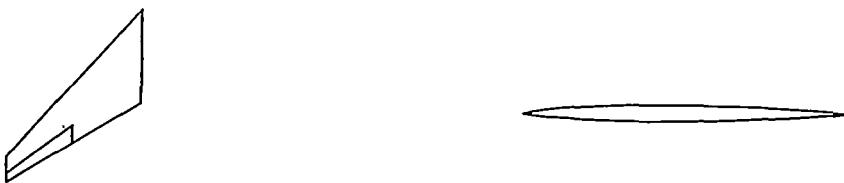


TABLE 10.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.90$; $M = 0.60$

(a) Plain leading edge

α deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α_0 deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 3.3$							$\delta = -6.6$						
- 2.08	.0165	-.0025	-.0032	.0047	-.0002	-.0008	- 2.09	-.0295	-.0009	.0235	-.0095	-.0006	-.0047
- .01	.0159	.0004	-.0019	.0049	-.0004	-.0008	- .00	-.0269	.0006	.0207	-.0098	-.0006	-.0034
2.09	.0152	.0002	-.0038	.0048	-.0005	-.0001	2.08	-.0314	-.0008	.0158	-.0097	-.0005	-.0048
4.18	.0055	.0012	.0104	.0048	-.0008	-.0008	4.17	-.0426	-.0013	.0108	-.0097	-.0003	-.0058
6.26	.0072	.0001	-.0020	.0046	-.0009	-.0012	6.26	-.0351	-.0033	.0183	-.0083	.0001	-.0053
8.35	.0091	.0015	-.0035	.0074	-.0010	-.0008	8.36	-.0179	-.0021	.0136	-.0060	-.0000	-.0063
10.45	.0123	.0053	.0013	.0048	-.0018	-.0022	10.44	-.0260	-.0038	.0145	-.0056	.0006	-.0058
12.52	.0081	.0037	.0021	-.0019	-.0000	-.0008	12.51	-.0282	-.0050	.0151	-.0053	.0009	-.0052
14.60	.0106	.0058	.0017	.0051	-.0015	-.0021	14.59	-.0314	-.0056	.0098	-.0056	.0011	-.0058
16.66	.0236	.0062	-.0004	.0030	-.0013	-.0020	16.63	-.0207	-.0073	.0076	-.0052	.0012	-.0067
18.67	.0029	.0003	.0022	.0039	-.0022	-.0035	18.65	-.0274	-.0107	.0113	-.0042	.0007	-.0085
20.67	.0281	.0062	.0055	.0032	-.0023	-.0045	20.64	-.0156	-.0114	.0121	-.0045	.0007	-.0100
23.71	.0228	.0038	.0033	.0036	-.0037	-.0077	23.71	-.0105	-.0122	.0140	-.0050	.0010	-.0095
$\delta = 7.7$							$\delta = -10.3$						
- 2.08	.0309	-.0021	-.0298	.0113	-.0005	.0022	- 2.08	-.0271	.0003	.0372	-.0163	-.0010	-.0045
- .01	.0325	.0012	-.0359	.0117	-.0009	.0021	.01	-.0303	.0015	.0326	-.0169	-.0010	-.0046
2.09	.0398	.0017	-.0280	.0113	-.0010	.0033	2.10	-.0158	-.0004	.0309	-.0162	-.0007	-.0039
4.17	-.0327	.0036	-.0367	.0110	-.0015	.0025	4.19	-.0209	-.0003	.0212	-.0159	-.0001	-.0028
6.25	.0270	.0030	-.0267	.0104	-.0018	.0020	6.27	-.0111	-.0003	.0272	-.0134	-.0002	-.0028
8.35	.0315	.0053	-.0265	.0116	-.0023	.0011	8.37	-.0137	-.0019	.0260	-.0109	.0005	-.0025
10.44	.0205	.0063	-.0212	.0096	-.0033	-.0022	10.45	-.0330	-.0044	.0324	-.0120	.0021	-.0031
12.52	.0299	.0094	-.0164	.0069	-.0029	-.0014	12.52	-.0203	-.0027	.0278	-.0093	.0022	-.0024
14.60	.0239	.0102	-.0173	.0073	-.0033	-.0014	14.58	-.0408	-.0069	.0211	-.0088	.0022	-.0022
16.63	.0231	.0073	-.0190	.0069	-.0034	-.0024	16.64	-.0315	-.0088	.0210	-.0084	.0028	-.0021
18.66	.0208	.0073	-.0149	.0073	-.0044	-.0036	18.62	-.0589	-.0164	.0061	-.0084	.0028	-.0013
20.64	.0246	.0063	-.0164	.0057	-.0042	-.0044	20.64	-.0215	-.0116	.0161	-.0069	.0020	-.0007
23.71	.0313	.0091	-.0116	.0061	-.0061	-.0078	23.69	-.0225	-.0167	.0207	-.0053	.0009	.0132
$\delta = 13.2$							$\delta = -15.2$						
- 2.08	.0645	-.0003	-.0473	.0199	-.0017	-.0018	- 2.07	-.0427	.0038	.0598	-.0210	-.0024	-.0065
- .00	.0640	.0038	-.0491	.0203	-.0022	-.0010	.02	-.0481	.0051	.0587	-.0228	-.0023	-.0075
2.08	.0607	.0045	-.0496	.0191	-.0025	-.0012	2.10	-.0409	.0023	.0572	-.0224	-.0018	-.0060
4.17	-.0663	.0075	-.0574	.0196	-.0035	-.0031	4.18	-.0506	.0010	.0474	-.0221	-.0009	-.0055
6.26	.0560	.0082	-.0416	.0180	-.0059	-.0037	6.28	-.0479	-.0017	.0528	-.0184	-.0004	-.0065
8.35	.0554	.0109	-.0433	.0169	-.0049	-.0075	8.37	-.0315	-.0012	.0483	-.0142	-.0008	-.0074
10.46	.0688	.0171	-.0331	.0161	-.0062	-.0088	10.46	-.0433	-.0043	.0517	-.0159	.0022	-.0089
12.53	.0444	.0133	-.0247	.0110	-.0054	-.0083	12.53	-.0427	-.0052	.0443	-.0130	.0022	-.0081
14.60	.0316	.0144	-.0247	.0117	-.0062	-.0097	14.62	-.0132	.0018	.0416	-.0124	.0031	-.0075
16.64	.0378	.0141	-.0273	.0117	-.0066	-.0103	16.64	-.0417	-.0105	.0384	-.0122	.0037	-.0083
18.66	.0354	.0147	-.0232	.0112	-.0080	-.0138	18.63	-.0628	-.0157	.0241	-.0126	.0042	-.0065
20.66	.0523	.0195	-.0221	.0088	-.0075	-.0143	20.64	-.0320	-.0136	.0343	-.0109	.0036	-.0066
23.70	.0375	.0146	-.0236	.0083	-.0088	-.0149	23.70	-.0248	-.0148	.0378	-.0102	.0038	-.0030
$\delta = 26.2$							$\delta = -51.3$						
- 2.08	.1141	.0105	-.0801	.0365	-.0081	-.0140	- 2.07	-.0919	.0174	.0913	-.0380	-.0093	.0052
.01	.1254	.0159	-.0853	.0362	-.0089	-.0137	.02	-.0919	.0166	.0871	-.0394	-.0084	.0092
2.09	.1178	.0177	-.0828	.0344	-.0095	-.0138	2.10	-.0978	.0139	.0902	-.0411	-.0083	.0095
4.18	.1060	.0216	-.0909	.0337	-.0108	-.0167	4.18	-.1097	.0101	.0813	-.0412	-.0062	.0117
6.27	.1156	.0241	-.0771	.0330	-.0117	-.0178	6.27	-.0906	.0051	.0840	-.0377	-.0040	.0098
8.38	.1081	.0267	-.0655	.0299	-.0121	-.0193	8.37	-.0672	.0012	.0647	-.0292	-.0011	.0050
10.47	.0940	.0309	-.0530	.0285	-.0144	-.0235	10.45	-.0804	-.0070	.0654	-.0277	-.0015	.0026
12.54	.0651	.0288	-.0374	.0193	-.0129	-.0227	12.51	-.0809	-.0085	.0586	-.0249	-.0027	.0017
14.63	.0790	.0366	-.0384	.0200	-.0145	-.0248	14.59	-.0877	-.0123	.0597	-.0241	-.0035	.0015
16.66	.0827	.0340	-.0374	.0195	-.0155	-.0261	16.64	-.0746	-.0106	.0543	-.0247	-.0046	.0012
18.68	.0627	.0332	-.0384	.0193	-.0178	-.0317	18.64	-.0851	-.0153	.0421	-.0255	-.0064	-.0001
20.67	.0770	.0409	-.0401	.0143	-.0167	-.0307	20.65	-.0614	-.0160	.0533	-.0242	-.0060	.0030
23.71	.0583	.0342	-.0341	.0116	-.0171	-.0298	23.69	-.0748	-.0278	.0590	-.0209	-.0044	.0150



TABLE 10.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{V_1}{b/2} = 0.50$; $H = 0.60$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 3.3$							$\delta = -6.6$						
- 2.09	.0351	-.0015	.0026	.0050	-.0000	.0021	- 2.11	-.0260	.0015	.0212	-.0096	-.0006	.0010
- .00	.0257	-.0000	-.0012	.0052	-.0002	.0052	- .02	-.0270	.0003	.0256	-.0094	-.0003	.0044
2.08	.0262	.0007	.0018	.0053	-.0002	.0030	2.08	-.0232	-.0006	.0319	-.0096	-.0001	.0009
4.17	.0319	.0014	.0067	.0055	-.0004	.0029	4.17	-.0172	-.0008	.0337	-.0096	.0002	.0009
6.26	.0369	.0034	.0025	.0055	-.0006	.0028	6.25	-.0191	-.0011	.0289	-.0094	.0007	.0025
8.34	.0202	.0024	.0012	.0052	-.0007	.0026	8.34	-.0251	-.0026	.0282	-.0087	.0009	.0026
10.44	.0050	.0022	-.0077	.0040	-.0008	.0024	10.44	-.0424	-.0052	.0115	-.0081	.0013	.0033
12.50	.0328	.0072	.0066	.0036	-.0010	.0015	12.49	-.0180	-.0037	.0254	-.0056	.0012	.0041
14.56	-.0026	.0006	.0053	.0033	-.0013	.0011	14.56	-.0249	-.0052	.0233	-.0061	.0017	.0032
16.62	.0233	.0082	.0059	.0034	-.0015	.0012	16.61	-.0104	-.0009	.0229	-.0058	.0021	.0044
18.66	-.0002	.0016	.0024	.0027	-.0016	.0006	18.65	-.0170	-.0040	.0222	-.0059	.0024	.0054
20.69	.0186	.0087	.0116	.0016	-.0015	.0005	20.68	-.0055	-.0004	.0248	-.0048	.0031	.0058
23.71	.0094	.0049	.0048	.0027	-.0019	.0003	23.70	-.0157	-.0089	.0194	-.0049	.0027	.0046
$\delta = 7.7$							$\delta = -10.3$						
- 2.10	.0421	-.0008	-.0124	.0107	-.0000	.0082	- 2.08	-.0023	.0001	.0436	-.0159	-.0021	.0005
- .01	.0383	.0012	-.0237	.0111	-.0006	.0072	- .01	-.0194	.0011	.0354	-.0158	-.0012	.0010
2.08	.0498	.0021	-.0215	.0117	-.0009	.0054	2.09	-.0062	-.0002	.0413	-.0156	-.0008	.0021
4.16	.0464	.0035	-.0190	.0114	-.0012	.0047	4.17	-.0079	-.0021	.0417	-.0157	-.0001	.0012
6.24	.0503	.0055	-.0203	.0114	-.0015	.0046	6.26	-.0073	-.0028	.0388	-.0152	.0007	.0001
8.34	.0444	.0066	-.0210	.0105	-.0019	.0039	8.36	-.0120	-.0026	.0344	-.0133	.0014	.0006
10.43	.0154	.0046	-.0311	.0087	-.0018	.0044	10.44	-.0321	-.0040	.0181	-.0114	.0020	.0003
12.49	.0257	.0066	-.0059	.0081	-.0024	.0023	12.50	-.0224	-.0001	.0380	-.0066	.0027	.0027
14.55	.0120	.0055	-.0102	.0069	-.0027	.0019	14.56	-.0517	-.0111	.0320	-.0087	.0031	.0010
16.61	.0295	.0115	-.0042	.0068	-.0032	.0014	16.60	-.0384	-.0084	.0347	-.0084	.0037	.0007
18.65	.0068	.0050	-.0061	.0056	-.0036	.0001	18.65	-.0451	-.0112	.0299	-.0082	.0047	.0021
20.69	.0353	.0157	.0085	.0031	-.0032	-.0005	20.68	-.0261	-.0043	.0315	-.0072	.0060	.0070
23.71	.0321	.0160	-.0037	.0054	-.0042	-.0000	23.71	-.0315	-.0119	.0343	-.0051	.0045	.0229
$\delta = 13.2$							$\delta = -15.2$						
- 2.10	.0613	-.0003	-.0296	.0193	-.0008	.0048	- 2.08	-.0241	.0031	.0569	-.0216	-.0033	.0049
- .01	.0576	.0027	-.0362	.0197	-.0017	.0064	- .01	-.0451	.0031	.0524	-.0215	-.0021	.0081
2.07	.0664	.0042	-.0327	.0200	-.0024	.0040	2.07	-.0436	.0010	.0541	-.0217	-.0016	.0049
4.15	.0597	.0054	-.0334	.0186	-.0027	.0036	4.17	-.0373	-.0017	.0560	-.0218	-.0007	.0066
6.25	.0659	.0080	-.0346	.0190	-.0034	.0033	6.27	-.0316	-.0031	.0524	-.0215	.0005	.0083
8.34	.0575	.0093	-.0308	.0179	-.0040	.0025	8.34	-.0400	-.0044	.0467	-.0189	.0012	.0074
10.42	.0331	.0082	-.0405	.0155	-.0043	.0020	10.43	-.0524	-.0042	.0306	-.0158	.0022	.0081
12.50	.0525	.0130	-.0161	.0143	-.0050	-.0002	12.49	-.0469	-.0035	.0476	-.0104	.0031	.0099
14.55	.0171	.0083	-.0158	.0119	-.0056	-.0019	14.55	-.0619	-.0122	.0391	-.0128	.0037	.0084
16.61	.0506	.0190	-.0147	.0115	-.0064	-.0029	16.60	-.0544	-.0118	.0423	-.0123	.0047	.0082
18.65	.0160	.0094	-.0130	.0093	-.0067	-.0039	18.64	-.0800	-.0203	.0388	-.0123	.0060	.0082
20.69	.0330	.0163	.0069	.0057	-.0063	-.0052	20.66	-.0517	-.0120	.0361	-.0113	.0077	.0128
23.71	.0274	.0164	-.0087	.0087	-.0080	-.0057	23.70	-.0448	-.0161	.0407	-.0068	.0057	.0285
$\delta = 28.2$							$\delta = -3L3$						
- 2.10	.1220	.0085	-.0687	.0365	-.0063	.0029	- 2.09	-.0891	.0185	.0971	-.0396	-.0106	.0136
- .00	.1204	.0144	-.0797	.0364	-.0086	.0066	- .01	-.0934	.0165	.0984	-.0375	-.0088	.0154
2.08	.1328	.0177	-.0743	.0351	-.0094	.0100	2.08	-.0922	.0132	.0948	-.0398	-.0077	.0122
4.17	.1281	.0204	-.0716	.0339	-.0101	.0100	4.17	-.0882	.0100	.0991	-.0412	-.0066	.0145
6.25	.1234	.0240	-.0751	.0334	-.0112	.0109	6.25	-.0850	.0065	.0960	-.0411	-.0046	.0167
8.34	.1087	.0248	-.0748	.0314	-.0116	.0122	8.35	-.0871	.0031	.0872	-.0383	-.0024	.0164
10.41	.0759	.0235	-.0804	.0272	-.0117	.0114	10.45	-.0716	.0022	.0635	-.0319	-.0003	.0146
12.50	.0998	.0302	-.0479	.0241	-.0125	.0135	12.50	-.0690	-.0004	.0760	-.0245	-.0025	.0153
14.58	.0825	.0326	-.0461	.0204	-.0136	.0159	14.55	-.1049	-.0161	.0579	-.0266	-.0039	.0119
16.76	.0846	.0366	-.0178	.0141	-.0181		16.61	-.0844	-.0134	.0708	-.0264	-.0054	.0106
18.81	.0723	.0359	-.0134	.0142	-.0205		18.65	-.0957	-.0185	.0670	-.0279	-.0079	.0109
20.70	.0568	.0388	-.0079	.0040	-.0135	-.0254	20.66	-.0792	-.0142	.0662	-.0263	-.0105	.0137
23.70	.0621	.0417	-.0380	.0126	-.0165	-.0230	23.71	-.0803	-.0235	.0694	-.0227	-.0085	.0287

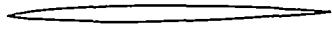
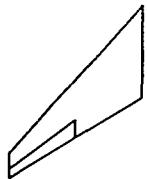


TABLE II.—INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; $M = 0.70$

(a) Plain leading edge

$\Delta\zeta$	$\Delta\zeta_L$	$\Delta\zeta_D$	$\Delta\zeta_m$	$\Delta\zeta_I$	$\Delta\zeta_n$	$\Delta\zeta_T$	α_2	$\Delta\zeta_L$	$\Delta\zeta_D$	$\Delta\zeta_m$	$\Delta\zeta_I$	$\Delta\zeta_n$	$\Delta\zeta_T$
$\delta = 3.3$													
- 2.10	.0148	-.0005	-.0036	.0045	-.0001	+.0013	- 2.10	-.0324	.0013	.0196	-.0101	-.0006	-.0064
- .00	.0206	-.0001	-.0047	.0052	-.0004	-.0005	- .01	-.0314	.0004	.0195	-.0098	-.0006	-.0045
2.12	.0166	-.0001	-.0027	.0047	-.0004	+.0003	2.09	-.0284	-.0008	.0184	-.0095	-.0004	-.0051
4.20	.0052	-.0002	-.0052	.0051	-.0008	-.0005	4.20	-.0373	-.0029	.0188	-.0094	-.0001	-.0050
6.30	.0108	.0004	-.0075	.0047	-.0010	+.0017	6.30	-.0324	-.0029	.0178	-.0080	-.0000	-.0054
8.43	.0241	.0027	-.0050	.0031	-.0010	+.0021	8.42	-.0187	-.0030	.0140	-.0087	-.0005	-.0065
10.53	.0122	.0022	-.0013	.0031	-.0011	-.0022	10.52	-.0184	-.0036	.0080	-.0089	.0011	-.0049
12.62	.0185	.0032	-.0112	.0030	-.0012	+.0021	12.59	-.0270	-.0072	-.0007	-.0049	.0009	-.0055
14.69	.0174	.0113	-.0238	.0032	-.0014	+.0019	14.67	-.0252	-.0066	.0143	-.0058	.0013	-.0056
16.74	.0207	.0046	.0018	.0031	-.0015	+.0020	16.71	-.0235	-.0087	.0087	-.0051	.0012	-.0063
18.74	.0113	.0027	-.0041	.0028	-.0021	-.0034	18.72	-.0143	-.0055	.0043	-.0055	.0006	-.0069
20.75	.0052	.0014	.0014	.0023	-.0023	-.0043	20.74	-.0236	-.0097	.0121	-.0057	.0008	-.0086
23.80	.0083	.0033	-.0010	.0030	-.0033	+.0072	23.79	-.0174	-.0089	.0101	-.0054	.0010	-.0095
$\delta = 7.7$													
$\delta = -10.5$													
- 2.11	.0283	-.0003	-.0284	.0106	-.0005	+.0006	- 2.08	-.0202	.0026	.0368	-.0164	-.0012	-.0023
- .00	.0325	.0008	-.0284	.0113	-.0008	+.0023	- .03	-.0185	.0019	.0338	-.0168	-.0011	-.0043
2.09	.0325	.0012	-.0287	.0106	-.0010	+.0021	2.12	-.0162	-.0006	.0320	-.0161	-.0007	-.0031
4.19	.0253	.0017	-.0309	.0110	-.0014	+.0019	4.22	-.0258	-.0016	.0277	-.0148	-.0002	-.0022
6.30	.0280	.0029	-.0249	.0101	-.0019	+.0008	6.33	-.0169	-.0012	.0257	-.0122	-.0005	-.0027
8.41	.0321	.0048	-.0224	.0081	-.0023	+.0017	8.43	-.0274	-.0038	.0301	-.0141	.0015	-.0018
10.52	.0245	.0057	-.0191	.0083	-.0027	+.0022	10.52	-.0315	-.0041	.0237	-.0104	.0019	-.0027
12.61	.0422	.0096	-.0268	.0072	-.0028	+.0022	12.61	-.0228	-.0052	.0119	-.0082	.0020	-.0034
14.68	.0299	.0082	-.0415	.0072	-.0032	+.0030	14.66	-.0371	-.0089	-.0021	-.0088	.0024	-.0032
16.72	.0312	.0087	-.0160	.0064	-.0034	+.0031	16.71	-.0297	-.0080	.0200	-.0077	.0023	-.0026
18.73	.0296	.0095	-.0190	.0061	-.0043	-.0053	18.71	-.0342	-.0095	.0054	-.0086	.0025	-.0003
20.74	.0120	.0050	-.0156	.0052	-.0045	-.0055	20.73	-.0309	-.0107	.0190	-.0082	.0019	.0012
23.79	.0191	.0094	-.0165	.0058	-.0061	-.0097	23.79	-.0275	-.0110	.0161	-.0055	-.0001	.0142
$\delta = 13.2$													
$\delta = -15.2$													
- 2.11	.0557	.0016	-.0474	.0195	-.0017	+.0030	- 2.06	-.0366	.0053	.0368	-.0204	-.0025	-.0057
- .01	.0597	.0036	-.0474	.0198	-.0023	+.0019	- .03	-.0404	.0047	.0571	-.0223	-.0023	-.0043
2.09	.0555	.0042	-.0455	.0182	-.0024	+.0023	2.12	-.0379	-.0023	.0553	-.0218	-.0017	-.0060
4.19	.0522	.0058	-.0486	.0189	-.0034	+.0030	4.23	-.0357	-.0008	.0496	-.0210	-.0006	-.0044
6.29	.0428	.0064	-.0448	.0172	-.0040	+.0057	6.33	-.0307	-.0002	.0469	-.0177	-.0003	-.0050
8.42	.0506	.0094	-.0420	.0138	-.0047	+.0086	8.45	-.0329	-.0021	.0477	-.0191	.0013	-.0062
10.53	.0508	.0123	-.0331	.0140	-.0053	+.0092	10.53	-.0521	-.0041	.0430	-.0143	.0020	-.0074
12.60	.0396	.0109	-.0382	.0116	-.0053	+.0101	12.61	-.0392	-.0072	.0272	-.0122	.0024	-.0080
14.69	.0541	.0165	-.0507	.0124	-.0064	+.0110	14.68	-.0404	-.0070	.0128	-.0130	.0030	-.0082
16.72	.0417	.0138	-.0276	.0108	-.0065	+.0119	16.71	-.0422	-.0095	.0356	-.0121	.0032	-.0076
18.73	.0561	.0216	-.0328	.0097	-.0076	-.0137	18.70	-.0415	-.0093	.0209	-.0129	.0038	-.0061
20.73	.0202	.0106	-.0237	.0079	-.0074	-.0133	20.73	-.0469	-.0147	.0351	-.0126	.0036	-.0035
23.68	-.0894	.0140	-.0371	.0072	-.0082	-.0156	23.80	-.0402	-.0150	.0334	-.0110	.0031	-.0046
$\delta = 28.2$													
$\delta = -51.3$													
- 2.09	.1108	.0129	-.0762	.0346	-.0082	+.0145	- 2.07	-.0782	.0189	.0853	-.0355	-.0093	-.0069
.01	.1155	.0157	-.0819	.0337	-.0089	+.0151	- .02	-.0797	.0175	.0830	-.0364	-.0088	-.0048
2.10	.1153	.0180	-.0807	.0329	-.0097	+.0160	2.11	-.0923	.0140	.0844	-.0373	-.0081	-.0098
4.20	.1094	.0207	-.0824	.0322	-.0108	+.0181	4.22	-.0915	.0173	.0814	-.0373	-.0058	-.0106
6.31	.1098	.0237	-.0776	.0314	-.0120	-.0202	6.32	-.0811	.0053	.0742	-.0328	-.0039	-.0078
8.44	.1039	.0259	-.0635	.0262	-.0124	-.0225	8.45	-.0601	-.0019	.0585	-.0273	.0005	-.0022
10.55	.0969	.0300	-.0591	.0277	-.0140	-.0249	10.53	-.0634	-.0053	.0478	-.0202	.0019	-.0006
12.62	.0742	.0278	-.0517	.0200	-.0130	-.0238	12.61	-.0499	-.0058	.0349	-.0185	.0024	-.0009
14.69	.0762	.0314	-.0640	.0210	-.0147	-.0264	14.68	-.0704	-.0115	.0189	-.0193	.0030	-.0013
16.74	.0762	.0331	-.0386	.0196	-.0155	-.0281	16.72	-.0548	-.0080	.0432	-.0195	.0036	-.0011
18.75	.0881	.0410	-.0476	.0174	-.0176	-.0332	18.71	-.0668	-.0119	.0334	-.0211	.0044	-.0004
20.73	.0300	.0234	-.0374	.0126	-.0157	-.0302	20.74	-.0749	-.0165	.0482	-.0221	.0041	-.0049
23.81	.0522	.0365	-.0392	.0110	-.0171	-.0327	23.80	-.0657	-.0155	.0540	-.0213	.0024	-.0184

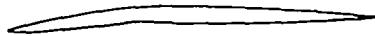
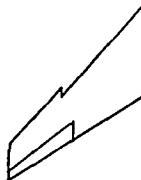
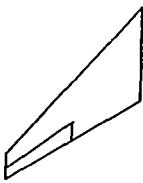


TABLE 11.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; $M = 0.70$ - Concluded

(b) Modified leading edge

CONFIDENTIAL

NACA RM L55B18a

TABLE 12.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{Y_1}{b/2} = 0.50$; $N = 0.81$

(a) Plain leading edge

α_g deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α_g deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 3.3$												$\delta = -6.6$	
- 2.12	.0103	-.0002	-.0052	.0050	-.0001	-.0003	- 2.12	-.0317	.0012	.0229	-.0092	-.0006	-.0049
- .00	.0159	.0001	-.0040	.0055	-.0003	.0003	- .00	-.0322	.0006	.0218	-.0095	-.0006	-.0040
2.13	.0117	.0001	-.0026	.0050	-.0004	.0001	2.12	-.0389	-.0008	.0221	-.0089	-.0003	-.0050
4.24	.0104	.0004	-.0051	.0044	-.0005	-.0003	4.24	-.0317	-.0016	.0175	-.0087	-.0002	-.0050
6.37	.0115	.0009	-.0004	.0045	-.0008	-.0010	6.36	-.0302	-.0030	.0173	-.0070	-.0000	-.0053
8.50	.0257	.0035	-.0044	.0039	-.0008	-.0011	8.49	-.0090	-.0017	.0119	-.0075	-.0002	-.0071
10.60	.0130	.0020	-.0032	.0035	-.0012	-.0023	10.59	-.0245	-.0050	.0118	-.0074	-.0009	-.0055
12.69	.0125	.0027	-.0022	.0030	-.0013	-.0024	12.68	-.0263	-.0070	.0106	-.0056	-.0008	-.0053
14.76	.0240	.0067	-.0113	.0026	-.0013	-.0023	14.76	-.0011	-.0000	.0114	-.0054	-.0009	-.0058
16.81	.0169	.0049	-.0029	.0026	-.0014	-.0009	16.80	-.0146	-.0048	.0085	-.0055	-.0011	-.0043
18.81	.0069	.0026	-.0001	.0026	-.0019	-.0012	18.81	-.0144	-.0041	.0094	-.0060	-.0011	-.0048
20.83	.0156	.0065	-.0033	.0022	-.0014	-.0013	20.82	-.0182	-.0084	.0065	-.0060	-.0016	-.0047
23.69	.0098	.0052	-.0052	.0024	-.0025	-.0047	23.90	.0020	.0013	.0105	-.0056	.0012	-.0086
$\delta = 7.7$												$\delta = -10.3$	
- 2.14	.0282	-.0004	-.0262	.0109	-.0005	.0004	- 2.08	-.0125	.0025	.0363	-.0155	-.0013	-.0024
- .01	.0290	.0009	-.0285	.0115	-.0009	.0021	.03	-.0167	.0019	.0341	-.0160	-.0012	-.0046
2.11	.0283	.0014	-.0259	.0112	-.0010	.0019	2.15	-.0188	-.0006	.0335	-.0151	-.0007	-.0034
4.24	.0352	.0023	-.0288	.0108	-.0014	.0005	4.27	-.0072	-.0003	.0266	-.0141	-.0002	-.0027
6.35	.0203	.0019	-.0233	.0097	-.0017	-.0008	6.39	-.0072	-.0008	.0235	-.0109	-.0001	-.0028
8.48	.0380	.0055	-.0240	.0082	-.0021	-.0012	8.50	-.0113	-.0005	.0266	-.0175	-.0008	-.0045
10.59	.0209	.0038	-.0197	.0078	-.0027	-.0034	10.58	-.0444	-.0063	.0231	-.0108	.0016	-.0041
12.68	.0249	.0063	-.0187	.0069	-.0028	-.0035	12.69	-.0158	-.0020	.0210	-.0088	.0017	-.0046
14.75	.0319	.0091	-.0171	.0062	-.0029	-.0041	14.74	-.0319	-.0062	.0203	-.0085	.0018	-.0047
16.78	.0247	.0080	-.0198	.0057	-.0032	-.0028	16.78	-.0444	-.0115	.0194	-.0080	.0018	-.0021
18.80	.0268	.0104	-.0178	.0058	-.0040	-.0041	18.79	-.0305	-.0075	.0165	-.0089	.0023	-.0001
20.83	.0356	.0152	-.0192	.0051	-.0038	-.0040	20.81	-.0232	-.0064	.0153	-.0083	-.0023	-.0046
23.68	.0249	.0131	-.0174	.0047	-.0048	-.0116	23.89	-.0201	-.0068	.0198	-.0076	.0019	-.0157
$\delta = 13.2$												$\delta = -15.2$	
- 2.13	.0479	.0017	-.0453	.0191	-.0017	-.0027	- 2.07	-.0290	.0054	.0528	-.0192	-.0027	-.0045
- .01	.0353	.0040	-.0470	.0199	-.0025	-.0021	.03	-.0393	.0047	.0560	-.0219	-.0027	-.0045
2.11	.0475	.0043	-.0429	.0178	-.0027	-.0034	2.16	-.0352	.0023	.0541	-.0210	-.0018	-.0034
4.22	.0494	.0057	-.0482	.0177	-.0034	-.0047	4.27	-.0315	.0010	.0465	-.0198	-.0009	-.0034
6.35	.0408	.0064	-.0402	.0160	-.0038	-.0058	6.39	-.0316	-.0001	.0430	-.0170	-.0005	-.0051
8.47	.0444	.0074	-.0410	.0127	-.0052	-.0099	8.51	-.0228	-.0001	.0434	-.0226	-.0007	-.0078
10.60	.0458	.0107	-.0335	.0130	-.0052	-.0103	10.60	-.0431	-.0036	.0373	-.0151	.0015	-.0072
12.67	.0419	.0121	-.0328	.0120	-.0056	-.0108	12.69	-.0356	-.0063	.0387	-.0123	.0017	-.0077
14.75	.0535	.0173	-.0277	.0110	-.0059	-.0119	14.75	-.0413	-.0069	.0361	-.0129	.0022	-.0077
16.79	.0384	.0142	-.0290	.0097	-.0063	-.0110	16.79	-.0454	-.0078	.0315	-.0129	.0024	-.0054
18.80	.0404	.0172	-.0281	.0094	-.0075	-.0130	18.80	-.0372	-.0065	.0305	-.0133	.0030	-.0028
20.82	.0483	.0226	-.0295	.0081	-.0069	-.0119	20.83	-.0368	-.0098	.0336	-.0124	.0032	-.0004
23.68	.0423	.0239	-.0323	.0064	-.0072	-.0133	23.91	-.0152	-.0016	.0311	-.0124	.0033	-.0109
$\delta = 28.2$												$\delta = -3L_3$	
- 2.13	.1025	.0126	-.0735	.0324	-.0079	-.0111	- 2.07	-.0670	.0189	.0809	-.0322	-.0094	-.0088
-.02	.1042	.0164	-.0785	.0322	-.0094	-.0162	.04	-.0738	.0183	.0803	-.0337	-.0095	-.0081
2.11	.0972	.0177	-.0770	.0306	-.0098	-.0176	2.16	-.0812	.0144	.0825	-.0348	-.0081	-.0101
4.22	.0936	.0197	-.0793	.0294	-.0107	-.0201	4.27	-.0740	.0103	.0756	-.0338	-.0098	-.0088
6.36	.0926	.0221	-.0725	.0285	-.0118	-.0227	6.38	-.0599	.0058	.0592	-.0262	-.0031	-.0050
8.49	.0851	.0236	-.0636	.0280	-.0121	-.0234	8.52	-.0364	.0008	.0456	-.0252	-.0004	-.0009
10.61	.0812	.0256	-.0530	.0232	-.0126	-.0249	10.61	-.0390	-.0008	.0343	-.0159	.0015	-.0023
12.68	.0622	.0243	-.0464	.0206	-.0131	-.0260	12.70	-.0342	-.0031	.0354	-.0136	.0016	-.0039
14.77	.0774	.0315	-.0452	.0202	-.0143	-.0289	14.75	-.0373	-.0025	.0332	-.0142	.0019	-.0040
16.82	.0740	.0339	-.0483	.0168	-.0145	-.0288	16.80	-.0461	-.0055	.0306	-.0144	.0020	-.0014
18.83	.0755	.0379	-.0443	.0156	-.0162	-.0322	18.80	-.0446	-.0058	.0305	-.0134	.0027	.0016
20.85	.0820	.0449	-.0475	.0130	-.0159	-.0309	20.84	-.0279	-.0068	.0338	-.0154	.0020	.0065
							23.91	-.0428	-.0074	.0455	-.0167	.0013	.0168

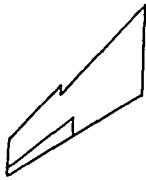


TABLE 12.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; $K = 0.81$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 5.3$							$\delta = -6.6$						
- 2.16	.0168	.0004	-.0039	.0048	-.0001	-.0014	- 2.16	-.0255	.0020	+.0237	-.0089	-.0008	-.0057
- .02	.0140	.0008	-.0042	.0049	-.0003	+.0011	- .02	-.0327	.0013	+.0230	-.0093	-.0006	-.0025
2.10	.0193	.0014	-.0059	.0051	-.0004	+.0010	2.09	-.0280	.0006	+.0263	-.0088	-.0003	-.0014
4.22	.0198	.0021	-.0039	.0050	-.0005	+.0011	4.22	-.0228	-.0001	+.0235	-.0092	+.0004	-.0004
6.36	.0185	.0030	-.0040	.0042	-.0008	+.0001	6.35	-.0215	-.0002	+.0235	-.0095	+.0004	+.0002
8.47	.0236	.0036	-.0047	.0049	-.0006	+.0040	8.46	-.0096	.0011	+.0181	-.0085	+.0006	+.0003
10.58	.0200	.0040	.0046	.0040	-.0010	-.0001	10.56	-.0146	-.0011	+.0621	-.0070	+.0010	+.0007
12.66	.0193	.0054	-.0021	.0037	-.0011	-.0004	12.66	-.0039	.0010	+.0168	-.0062	+.0014	+.0026
14.71	.0098	.0035	-.0049	.0033	-.0013	-.0012	14.72	-.0127	-.0016	+.0135	-.0068	+.0018	+.0024
16.79	.0182	.0059	-.0022	.0034	-.0016	-.0022	16.78	-.0274	-.0070	+.0174	-.0057	+.0023	+.0034
18.83	.0167	.0065	-.0023	.0036	-.0021	-.0032	18.82	-.0169	-.0037	+.0131	-.0057	+.0027	+.0047
20.85	.0276	.0103	-.0017	.0032	-.0022	-.0017	20.84	-.0053	-.0009	+.0162	-.0055	+.0024	+.0041
23.92	.0220	.0097	-.0007	.0021	-.0014	-.0003	23.90	-.0212	-.0088	+.0127	-.0055	+.0030	+.0036
$\delta = 7.7$							$\delta = -10.5$						
- 2.16	.0326	.0006	+.0181	.0101	-.0002	.0017	- 2.11	+.0046	.0009	+.0389	-.0149	-.0017	+.0157
- .04	.0357	.0017	-.0265	.0106	-.0007	.0018	-.00	-.0063	.0023	-.0149	-.0014	-.0062	
2.09	.0416	.0028	-.0302	.0114	-.0012	.0013	2.13	-.0037	.0011	+.0341	-.0148	-.0008	-.0048
4.22	.0368	.0040	-.0236	.0108	-.0014	.0014	4.26	-.0058	-.0006	+.0369	-.0144	-.0001	-.0049
6.34	.0380	.0056	-.0237	.0098	-.0018	.0004	6.39	-.0036	-.0006	+.0348	-.0145	+.0005	-.0032
8.46	.0338	.0055	-.0252	.0097	-.0014	.0012	8.49	-.0047	-.0005	+.0239	-.0124	+.0012	-.0022
10.56	.0301	.0061	-.0310	.0083	-.0023	-.0009	10.58	-.0261	-.0044	+.0764	-.0096	+.0020	-.0053
12.64	.0251	.0072	-.0150	.0066	-.0023	-.0007	12.66	-.0400	-.0082	+.0341	-.0103	+.0026	-.0045
14.71	.0333	.0102	-.0194	.0067	-.0030	-.0027	14.72	-.0394	-.0103	+.0281	-.0095	+.0030	-.0034
16.76	.0183	.0065	-.0153	-.0049	-.0005	-.0027	16.78	-.0511	-.0139	+.0352	-.0104	+.0040	-.0028
18.83	.0182	.0131	-.0028	.0045	-.0050	-.0061	18.82	-.0450	-.0121	+.0319	-.0102	+.0051	-.0007
20.85	.0426	.0171	-.0082	.0027	-.0028	-.0027	20.83	-.0278	-.0111	+.0190	-.0027	+.0036	+.0103
23.90							23.90	-.0540	-.0215	.0290	-.0064	+.0051	+.0283
$\delta = 13.2$							$\delta = -15.2$						
- 2.16	.0542	.0014	-.0320	.0174	-.0012	-.0005	- 2.13	-.0214	.0040	+.0521	-.0207	-.0034	-.0012
- .03	.0455	.0034	-.0380	.0177	-.0020	-.0006	-.01	-.0513	.0046	+.0476	-.0205	-.0024	-.0019
2.08	.0565	.0058	-.0445	.0192	-.0031	-.0013	2.12	-.0277	.0024	+.0476	-.0208	-.0019	-.0020
4.22	.0673	.0072	-.0367	.0175	-.0034	-.0023	4.26	-.0257	-.0003	+.0566	-.0207	-.0008	-.0038
6.34	.0552	.0089	-.0377	.0170	-.0039	-.0028	6.38	-.0274	-.0009	+.0459	-.0201	+.0001	-.0044
8.47	.0748	.0118	-.0425	.0179	-.0039	-.0024	8.38	-.0384	-.0026	+.0382	-.0168	+.0011	-.0048
10.57	.0559	.0116	.0178	.0144	-.0046	-.0046	10.44	-.0556	.0000	+.0600	-.0128	+.0020	-.0024
12.64	.0211	.0071	-.0203	.0122	-.0050	-.0054	12.52	-.0764	-.0100	+.0476	-.0141	+.0028	-.0009
14.71	.0493	.0153	-.0283	.0114	-.0058	-.0068	14.57	-.0709	-.0106	+.0615	-.0138	+.0036	-.0023
16.78	.0438	.0158	-.0237	.0107	-.0067	-.0092	16.77	-.0607	-.0113	+.0435	-.0156	+.0050	-.0030
18.83	.0277	.0176	-.0043	-.0005	-.0047	-.0113	18.81	-.0743	-.0163	+.0376	-.0148	+.0062	-.0041
20.85	.0494	.0215	-.0179	.0086	-.0074	-.0083	20.82	-.0507	-.0146	+.0255	-.0074	+.0048	+.0135
23.93	.0424	.0225	-.0205	.0086	-.0078	-.0100	23.92	-.0506	-.0153	+.0347	-.0107	+.0060	+.0329
$\delta = 28.2$							$\delta = -5L3$						
- 2.17	.1004	.0106	-.0699	.0304	-.0067	-.0118	- 2.12	-.0643	.0181	+.0860	-.0339	-.0102	+.0073
- .04	.0951	.0150	-.0757	.0306	-.0084	-.0131	-.01	-.0743	.0175	+.0802	-.0338	-.0090	+.0101
2.08	.1024	.0164	-.0773	.0304	-.0099	-.0161	2.13	-.0724	.0154	+.0821	-.0349	-.0080	+.0099
4.21	.1044	.0206	-.0753	.0290	-.0105	-.0175	4.26	-.0690	.0115	+.0849	-.0354	-.0065	+.0120
6.34	.1032	.0236	-.0734	.0282	-.0113	-.0188	6.38	-.0777	.0082	+.0804	-.0351	-.0045	+.0123
8.47	.1305	.0292	-.0826	.0302	-.0121	-.0196	8.50	-.0397	.0085	+.0561	-.0284	-.0018	+.0100
10.57	.0991	.0263	-.0510	.0234	-.0121	-.0207	10.60	-.0414	.0058	+.0974	-.0221	+.0009	+.0053
12.67	.0960	.0312	-.0505	.0221	-.0129	-.0208	12.66	-.0673	-.0027	+.0561	-.0214	+.0021	+.0033
14.72	.0917	.0345	-.0529	.0192	-.0134	-.0225	14.72	-.0659	-.0081	+.0477	-.0200	+.0030	+.0038
16.77	.0656	.0301	-.0449	.0161	-.0143	-.0251	16.79	-.0742	-.0103	+.0572	-.0205	+.0043	+.0046
18.83	.0499	.0355	-.0283	.0057	-.0126	-.0260	18.82	-.0662	-.0077	+.0460	-.0196	+.0063	+.0058
20.85	.0810	.0428	-.0411	.0136	-.0151	-.0241	20.85	-.0468	-.0078	+.0415	-.0127	+.0055	+.0139
23.91	.0696	.0452	-.0449	.0112	-.0156	-.0255	23.91	-.0584	-.0130	+.0461	-.0157	+.0057	+.0320



TABLE 15.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{T_1}{b/2} = 0.50$; $M = 0.85$

(a) Plain leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 3.3$												$\delta = -6.6$	
- 2.11	.0095	.0006	-.0118	.0046	-.0003	-.0003	- 2.12	-.0406	.0025	.0168	-.0095	-.0009	-.0054
- .00	.0163	.0008	-.0060	.0051	-.0003	.0014	- .00	-.0368	.0015	.0191	-.0100	-.0006	-.0034
2.13	.0075	.0008	-.0063	.0048	-.0005	.0011	2.13	-.0316	.0006	.0178	-.0093	-.0005	-.0035
4.25	-.0061	.0003	-.0054	.0043	-.0005	.0007	4.26	-.0311	-.0005	.0171	-.0087	-.0003	-.0041
6.39	-.0098	-.0000	-.0010	.0047	-.0010	-.0006	6.40	-.0230	-.0007	.0191	-.0069	-.0002	-.0043
8.54	.0020	.0039	-.0113	.0018	-.0012	-.0022	8.53	-.0247	-.0002	.0059	-.0089	-.0001	-.0053
10.65	.0092	.0043	-.0136	.0040	-.0013	-.0008	10.63	-.0403	-.0057	.0065	-.0068	.0008	-.0034
12.71	.0067	.0016	-.0118	.0027	-.0011	-.0005	12.71	-.0203	-.0030	.0040	-.0068	.0010	-.0031
14.78	.0063	.0028	-.0161	.0020	-.0010	-.0004	14.78	-.0252	-.0055	-.0035	-.0062	.0010	-.0031
16.85	.0089	.0063	-.0208	.0026	-.0016	-.0016	16.84	-.0173	-.0009	.0076	-.0059	.0009	-.0040
18.88	.0164	.0047	-.0196	.0031	-.0023	-.0028	18.88	-.0157	-.0090	-.0010	-.0059	.0009	-.0039
$\delta = 7.7$												$\delta = -10.3$	
- 2.14	.0205	.0009	-.0312	.0106	-.0006	.0001	- 2.08	-.0178	.0035	.0328	-.0160	-.0016	-.0038
- .01	.0243	.0019	-.0291	.0111	-.0008	.0025	.04	-.0219	.0026	.0344	-.0170	-.0013	-.0043
2.12	.0263	.0024	-.0271	.0105	-.0011	.0021	2.16	-.0155	.0003	.0305	-.0158	-.0008	-.0034
4.25	.0204	.0028	-.0285	.0103	-.0015	.0008	4.29	-.0047	.0002	.0238	-.0142	-.0003	-.0028
6.39	.0242	.0038	-.0226	.0095	-.0020	-.0004	6.42	-.0005	.0018	.0230	-.0122	-.0007	-.0043
8.52	.0288	.0072	-.0295	.0071	-.0026	-.0031	8.53	-.0416	-.0009	.0270	-.0162	-.0003	-.0057
10.63	.0250	.0062	-.0325	.0081	-.0028	-.0022	10.61	-.0618	-.0075	.0197	-.0122	.0015	-.0037
12.70	.0189	.0053	-.0265	.0072	-.0027	-.0020	12.71	-.0211	-.0022	.0132	-.0095	.0013	-.0045
14.76	.0053	.0024	-.0308	.0056	-.0028	-.0022	14.77	-.0360	-.0063	.0044	-.0093	.0014	-.0032
16.83	.0177	.0100	-.0376	.0057	-.0034	-.0032	16.83	-.0289	-.0017	.0007	-.0087	.0013	-.0028
18.86	.0184	.0062	-.0341	.0062	-.0046	-.0061	18.86	-.0403	-.0111	.0038	-.0090	.0017	-.0040
$\delta = 13.2$												$\delta = -15.2$	
- 2.14	.0453	.0027	-.0506	.0184	-.0020	-.0034	- 2.06	-.0199	.0066	.0453	-.0202	-.0031	-.0026
- .02	.0431	.0049	-.0490	.0190	-.0027	-.0021	.06	-.0238	.0057	.0504	-.0227	-.0030	-.0033
2.12	.0444	.0055	-.0470	.0174	-.0029	-.0032	2.18	-.0175	.0029	.0446	-.0208	-.0019	-.0020
4.25	.0475	.0067	-.0497	.0173	-.0035	-.0049	4.31	-.0083	.0027	.0373	-.0195	-.0010	-.0045
6.38	.0529	.0077	-.0446	.0164	-.0045	-.0070	6.43	-.0162	.0035	.0385	-.0160	-.0005	-.0043
8.51	.0445	.0117	-.0476	.0120	-.0049	-.0102	8.55	-.0451	-.0017	.0398	-.0210	-.0000	-.0071
10.63	.0431	.0115	-.0428	.0137	-.0054	-.0097	10.64	-.0522	-.0020	.0308	-.0189	.0014	-.0046
12.69	.0397	.0119	-.0375	.0126	-.0055	-.0096	12.70	-.0461	-.0064	.0277	-.0132	.0012	-.0059
14.77	.0212	.0090	-.0431	.0101	-.0058	-.0102	14.78	-.0607	-.0103	.0219	-.0186	.0014	-.0054
16.85	.0551	.0244	-.0491	.0096	-.0065	-.0121	16.82	-.0564	-.0076	.0191	-.0134	.0017	-.0054
18.86	.0114	.0063	-.0397	.0095	-.0080	-.0147	18.86	-.0608	-.0145	.0193	-.0135	.0023	-.0024
$\delta = 26.2$												$\delta = -31.3$	
- 2.14	.0883	.0141	-.0800	.0315	-.0083	-.0154	- 2.07	-.0714	.0210	.0756	-.0317	-.0100	.0088
- .02	.0925	.0174	-.0804	.0305	-.0096	-.0168	.05	-.0736	.0201	.0793	-.0337	-.0099	.0090
2.11	.0931	.0190	-.0800	.0293	-.0103	-.0192	2.17	-.0725	.0160	.0774	-.0340	-.0084	.0107
4.24	.0909	.0212	-.0817	.0289	-.0112	-.0221	4.30	-.0708	.0118	.0700	-.0325	-.0060	.0087
6.38	.0982	.0243	-.0752	.0272	-.0124	-.0245	6.42	-.0536	.0075	.0550	-.0247	-.0034	.0042
8.52	.0884	.0272	-.0717	.0229	-.0126	-.0262	8.55	-.0434	.0041	.0417	-.0224	-.0003	-.0020
10.63	.0746	.0256	-.0660	.0245	-.0131	-.0258	10.64	-.0441	.0001	.0238	-.0159	.0013	-.0044
12.70	.0670	.0230	-.0571	.0214	-.0134	-.0259	12.72	-.0228	.0011	.0208	-.0117	.0009	-.0036
14.79	.0672	.0305	-.0670	.0183	-.0142	-.0267	14.79	-.0489	-.0025	.0166	-.0122	.0012	-.0032
16.85	.0623	.0347	-.0645	.0161	-.0146	-.0298	16.84	-.0461	-.0030	.0140	-.0122	.0013	-.0033
18.89	.0717	.0366	-.0630	.0151	-.0168	-.0343	18.87	-.0406	-.0059	.0154	-.0127	.0012	-.0002
							20.90	-.0462	-.0082	.0331	-.0137	.0015	-.0057

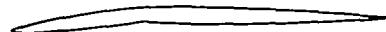
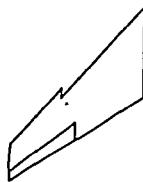


TABLE 13.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; $M = 0.85$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
$\delta = 3.3$													
- 2.16	.0202	.0001	-.0042	.0042	-.0001	.0020	- 2.19	-.0281	.0020	.0145	-.0091	-.0009	-.0024
- .03	.0163	.0007	-.0037	.0044	-.0002	.0014	- .04	-.0285	.0014	.0220	-.0099	-.0003	-.0018
2.12	.0231	.0015	-.0032	.0052	-.0004	.0014	2.11	-.0251	.0006	.0250	-.0098	-.0003	-.0009
4.25	.0223	.0021	-.0085	.0067	-.0008	.0010	4.26	-.0120	.0003	.0209	-.0098	-.0000	-.0005
6.40	.0256	.0053	-.0082	.0046	-.0007	.0001	6.39	-.0098	.0009	.0161	-.0094	.0004	.0006
8.52	.0384	.0078	-.0138	.0053	-.0008	.0002	8.50	-.0259	.0005	.0195	-.0111	.0011	.0018
10.61	.0140	.0034	-.0034	.0045	-.0011	-.0004	10.59	-.0073	.0011	.0073	-.0074	.0012	.0021
12.67	.0060	.0005	-.0027	.0042	-.0011	.0001	12.67	-.0170	-.0028	.0170	-.0050	.0010	.0030
14.76	.0191	.0056	-.0009	.0038	-.0015	-.0009	14.75	-.0114	-.0006	.0195	-.0076	.0019	.0032
16.84	.0232	.0087	.0013	.0032	-.0016	-.0012	16.82	-.0169	-.0027	.0219	-.0076	.0025	.0045
18.89	.0259	.0095	-.0042	.0030	-.0019	-.0019							
20.93	.0334	.0124	-.0017	.0027	-.0021	-.0023							
$\delta = 7.7$													
- 2.18	.0287	.0008	-.0220	.0095	-.0003	.0041	- 2.12	.0055	.0008	.0356	-.0153	-.0022	-.0045
-.04	.0348	.0017	-.0267	.0103	-.0007	.0021	- .00	.0017	.0022	.0354	-.0151	-.0014	-.0058
2.09	.0396	.0051	-.0285	.0111	-.0011	.0019	2.15	.0055	.0012	.0356	-.0153	-.0008	-.0043
4.11	.0433	.0046	-.0112	.0015	.0012		4.29	.0032	-.0003	.0351	-.0153	-.0001	-.0038
6.37	.0349	.0055	-.0285	.0102	-.0018	-.0002	8.52	-.0171	.0011	.0273	-.0120	.0016	-.0030
8.50	.0579	.0121	-.0376	.0097	-.0021	-.0007	10.61	-.0281	-.0034	.0318	-.0106	.0021	-.0046
10.59	.0313	.0070	-.0195	.0081	-.0023	-.0014	12.68	-.0293	-.0046	.0340	-.0116	.0030	-.0039
12.67	.0253	.0059	-.0143	.0086	-.0028	-.0016	14.77	-.0312	-.0063	.0349	-.0105	.0032	-.0037
14.74	.0199	.0064	-.0099	.0072	-.0032	-.0025	16.84	-.0365	-.0082	.0370	-.0106	.0039	-.0022
16.79	.0058	.0027	-.0110	.0069	-.0035	-.0025	18.88	-.0043	-.0047	.0014	-.0109	.0051	.0009
18.88	.0346	.0133	-.0141	.0062	-.0041	-.0043	20.88	-.0514	-.0148	.0233	-.0095	.0058	.0113
20.91	.0403	.0167	-.0148	.0055	-.0043	-.0050							
$\delta = 13.2$													
- 2.18	.0461	.0022	-.0354	.0167	-.0014	.0024	- 2.13	-.0141	.0037	.0485	-.0206	-.0037	.0009
-.04	.0555	.0037	-.0369	.0173	-.0021	.0011	.01	-.0203	.0045	.0473	-.0203	-.0026	.0018
2.09	.0605	.0063	-.0417	.0187	-.0033	.0014	2.15	-.0215	.0027	.0487	-.0208	-.0020	.0021
4.25	.0678	.0077	-.0395	.0171	-.0036	-.0033	4.28	-.0320	-.0002	.0498	-.0205	-.0009	.0026
6.38	.0596	.0092	-.0423	.0167	-.0039	-.0040	6.42	-.0193	.0001	.0400	-.0203	-.0000	.0039
8.49	.0653	.0126	-.0422	.0161	-.0042	-.0043	8.52	-.0413	-.0019	.0422	-.0162	.0012	.0031
10.61	.0551	.0144	-.0304	.0111	-.0049	-.0074	10.61	-.0410	-.0024	.0398	-.0145	.0020	.0010
12.67	.0480	.0120	-.0243	.0136	-.0056	-.0070	12.69	-.0482	-.0083	.0467	-.0155	.0029	.0008
14.77	.0546	.0165	-.0189	.0123	-.0063	-.0077	14.77	-.0503	-.0082	.0462	-.0147	.0032	.0010
16.82	.0168	.0132	-.0052	-.0007	-.0048	-.0101	16.82	-.0682	-.0146	.0505	-.0155	.0044	.0029
18.89	.0560	.0228	-.0221	.0098	-.0073	-.0100	18.87	-.0250	-.0056	.0268	-.0055	.0024	.0043
20.91	.0532	.0236	-.0235	.0087	-.0076	-.0113							
$\delta = 28.2$													
$\delta = -15.2$													
- 2.18	.0461	.0022	-.0354	.0167	-.0014	.0024	- 2.13	-.0141	.0037	.0485	-.0206	-.0037	.0009
-.04	.0555	.0037	-.0369	.0173	-.0021	.0011	.01	-.0203	.0045	.0473	-.0203	-.0026	.0018
2.09	.0605	.0063	-.0417	.0187	-.0033	.0014	2.15	-.0215	.0027	.0487	-.0208	-.0020	.0021
4.25	.0678	.0077	-.0395	.0171	-.0036	-.0033	4.28	-.0320	-.0002	.0498	-.0205	-.0009	.0026
6.38	.0596	.0092	-.0423	.0167	-.0039	-.0040	6.42	-.0193	.0001	.0400	-.0203	-.0000	.0039
8.49	.0653	.0126	-.0422	.0161	-.0042	-.0043	8.52	-.0413	-.0019	.0422	-.0162	.0012	.0031
10.61	.0551	.0144	-.0304	.0111	-.0049	-.0074	10.61	-.0410	-.0024	.0398	-.0145	.0020	.0010
12.67	.0480	.0120	-.0243	.0136	-.0056	-.0070	12.69	-.0482	-.0083	.0467	-.0155	.0029	.0008
14.77	.0546	.0165	-.0189	.0123	-.0063	-.0077	14.77	-.0503	-.0082	.0462	-.0147	.0032	.0010
16.82	.0168	.0132	-.0052	-.0007	-.0048	-.0101	16.82	-.0682	-.0146	.0505	-.0155	.0044	.0029
18.89	.0560	.0228	-.0221	.0098	-.0073	-.0100	18.87	-.0250	-.0056	.0268	-.0055	.0024	.0043
20.91	.0532	.0236	-.0235	.0087	-.0076	-.0113							
$\delta = -51.3$													
- 2.18	.0937	.0116	-.0710	.0293	-.0071	-.0091	- 2.12	-.0557	.0180	.0820	-.0333	-.0105	.0094
-.05	.0980	.0152	-.0748	.0297	-.0086	-.0136	.02	-.0603	.0179	.0809	-.0331	-.0092	.0105
2.09	.1009	.0193	-.0757	.0298	-.0104	-.0170	2.16	-.0647	.0155	.0839	-.0341	-.0082	.0106
4.23	.1042	.0213	-.0757	.0284	-.0110	-.0197	4.30	-.0681	.0116	.0841	-.0350	-.0067	.0115
6.38	.1103	.0247	-.0802	.0284	-.0115	-.0202	6.42	-.0707	.0081	.0734	-.0334	-.0046	.0105
8.48	.0968	.0283	-.0804	.0262	-.0128	-.0232	8.52	-.0777	.0035	.0643	-.0262	-.0015	.0079
10.60	.1041	.0327	-.0626	.0251	-.0138	-.0241	10.62	-.0571	.0005	.0543	-.0194	-.0010	.0036
12.69	.0921	.0327	-.0461	.0187	-.0140	-.0246	12.70	-.0455	-.0028	.0525	-.0175	-.0022	.0023
14.77	.0888	.0376	-.0432	.0146	-.0139	-.0258	14.76	-.0565	-.0056	.0501	-.0163	-.0027	.0026
16.81	.0517	.0324	-.0315	.0065	-.0129	-.0269	16.83	-.0629	-.0075	.0556	-.0181	-.0036	.0036
18.88	.0897	.0426	-.0533	.0154	-.0152	-.0263	18.90	-.0143	-.0082	.0310	-.0084	-.0020	.0063
20.91	.0901	.0426	-.0533	.0154	-.0152	-.0263	20.90	-.0544	-.0092	.0310	-.0133	-.0056	.0063

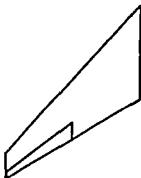


TABLE 14.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; $H = 0.90$

(a) Plain leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 3.5$												$\delta = -6.6$	
- 2.12	.0080	.0023	-.0085	.0049	-.0002	-.0003	- 2.13	-.0346	.0026	.0223	-.0089	-.0007	-.0054
- .00	.0123	.0029	-.0099	.0049	-.0004	.0005	.01	-.0316	.0017	.0209	-.0099	-.0007	-.0044
2.14	.0082	.0028	-.0086	.0047	-.0006	.0002	2.14	-.0367	-.0000	.0198	-.0088	-.0006	-.0042
4.29	.0153	.0037	-.0107	.0043	-.0007	-.0002	4.30	-.0244	.0003	.0121	-.0090	-.0004	-.0044
6.42	.0093	.0027	-.0023	.0038	-.0012	-.0007	6.42	-.0059	.0012	.0071	-.0072	-.0003	-.0037
8.54	.0142	.0063	-.0082	.0042	-.0012	.0010	8.55	-.0253	-.0030	.0212	-.0074	-.0004	-.0032
10.65	.0135	.0056	-.0154	.0029	-.0013	.0023	10.66	-.0276	-.0030	.0210	-.0101	-.0006	-.0041
12.74	.0114	.0054	-.0083	.0038	-.0016	.0022	12.73	-.0309	-.0054	.0117	-.0068	-.0009	-.0037
14.82	-.0084	.0023	-.0033	.0023	-.0014	-.0024	14.82	-.0203	-.0069	.0200	-.0068	-.0011	-.0029
$\delta = 7.7$												$\delta = -10.3$	
- 2.14	.0241	.0011	-.0281	.0107	-.0005	.0005	- 2.09	-.0160	.0048	.0368	-.0153	-.0019	-.0044
- .01	.0273	.0023	-.0306	.0112	-.0010	.0023	.05	-.0091	.0034	.0315	-.0164	-.0017	-.0046
2.14	.0302	.0027	-.0284	.0107	-.0013	.0012	2.18	-.0058	.0008	.0285	-.0150	-.0011	-.0040
4.27	.0388	.0055	-.0423	.0097	-.0015	.0005	4.32	-.0030	.0012	.0200	-.0140	-.0006	-.0042
6.40	.0316	.0055	-.0313	.0086	-.0025	-.0015	6.45	-.0117	.0010	.0256	-.0120	-.0004	-.0040
8.52	.0046	-.0003	-.0181	.0092	-.0023	-.0017	8.52	-.0242	-.0008	.0313	-.0110	-.0007	-.0038
10.65	.0275	.0067	-.0280	.0071	-.0031	-.0033	10.68	-.0344	-.0026	.0355	-.0173	-.0012	-.0057
12.74	.0267	.0071	-.0208	.0084	-.0034	-.0042	12.74	-.0506	-.0161	.0302	-.0111	-.0014	-.0056
14.80	.0160	.0630	-.0142	.0059	-.0032	-.0042	14.81	-.0201	-.0045	.0234	-.0090	-.0011	-.0048
$\delta = 13.2$												$\delta = -15.2$	
- 2.14	.0499	.0031	-.0489	.0160	-.0019	-.0034	- 2.08	-.0118	.0070	.0434	-.0256	-.0033	-.0024
- .01	.0466	.0055	-.0474	.0182	-.0030	-.0032	.06	-.0166	.0063	.0437	-.0213	-.0033	-.0018
2.14	.0395	.0059	-.0445	.0170	-.0033	-.0051	2.20	-.0092	.0032	.0368	-.0196	-.0022	-.0016
4.26	.0459	.0074	-.0530	.0162	-.0036	-.0062	4.33	-.0009	.0035	.0257	-.0184	-.0014	-.0020
6.40	.0404	.0076	-.0401	.0144	-.0048	-.0093	6.46	-.0135	.0040	.0370	-.0171	-.0009	-.0027
8.53	.0403	.0102	-.0383	.0145	-.0050	-.0100	8.58	-.0258	-.0022	.0419	-.0161	-.0002	-.0033
10.64	.0322	.0088	-.0343	.0127	-.0056	-.0112	10.68	-.0416	-.0014	.0424	-.0202	-.0009	-.0054
12.74	.0639	.0176	-.0471	.0144	-.0069	-.0132	12.74	-.0535	-.0054	.0321	-.0140	-.0008	-.0050
14.82	.0464	.0132	-.0273	.0102	-.0063	-.0132	14.83	-.0187	-.0014	.0277	-.0125	-.0006	-.0046
$\delta = 26.2$												$\delta = -31.3$	
- 2.17	.0837	.0144	-.0798	.0310	-.0085	-.0150	- 2.07	-.0546	.0214	.0744	-.0298	-.0102	.0076
- .03	.0893	.0182	-.0809	.0296	-.0100	-.0181	.07	-.0601	.0206	.0750	-.0320	-.0101	.0088
2.11	.0829	.0197	-.0767	.0280	-.0108	-.0210	2.20	-.0594	.0165	.0754	-.0328	-.0085	.0099
4.26	.0923	.0223	-.0890	.0275	-.0113	-.0234	4.33	-.0558	.0195	.0611	-.0312	-.0067	.0071
6.40	.0850	.0258	-.0741	.0243	-.0136	-.0289	6.46	-.0358	.0098	.0511	-.0241	-.0030	.0023
8.53	.0731	.0247	-.0623	.0238	-.0127	-.0281	8.59	-.0572	-.0002	.0616	-.0195	-.0006	-.0008
10.65	.0831	.0302	-.0713	.0198	-.0137	-.0303	10.68	-.0224	.0008	.0398	-.0172	.0013	-.0048
12.73	.0811	.0297	-.0653	.0251	-.0152	-.0310	12.74	-.0447	-.0039	.0249	-.0107	.0011	-.0048
14.84	.1072	.0388	-.0538	.0188	-.0157	-.0358	14.83	-.0308	-.0046	.0329	-.0102	-.0007	-.0052

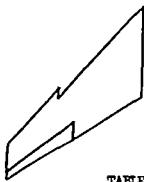


TABLE 14.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; $M = 0.90$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_n	ΔC_l	ΔC_b	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_n	ΔC_l	ΔC_b	ΔC_T
$\delta = 3.3$													
- 2.17	.0191	-0.000	+0.077	+0.047	-0.001	.0015	- 2.18	-0.0338	+0.027	+0.266	-0.0086	-0.0008	+0.024
- .03	.0164	.0008	-0.032	.0048	-0.002	.0014	- .03	-0.0246	.0017	.0254	-0.0096	-0.0006	-0.019
2.12	.0160	.0012	-0.017	.0051	-0.003	.0010	2.12	-0.0207	.0007	.0254	-0.0095	-0.0003	-0.014
4.26	.0226	.0023	-0.093	.0046	-0.005	.0008	4.26	-0.0146	.0017	.0194	-0.0093	-0.0000	-0.003
6.39	.0160	.0026	-0.045	.0041	-0.007	.0009	6.40	-0.0191	-0.0009	.0206	-0.0085	.0004	+0.008
8.50	.0238	.0063	-0.139	.0044	-0.010	-0.000	8.50	-0.0187	-0.012	.0187	-0.0068	.0013	+0.030
10.61	.0253	.0093	-0.046	.0036	-0.010	.0005	10.60	-0.0066	.0052	.0153	-0.0072	.0012	+0.026
12.78	.0274	.0076	-0.010	.0017	-0.022	.0022	12.72	.0045	.0052	.0223	-0.0099	.0006	+0.008
14.82	.0189	.0094	.0057	.0029	-0.0014	.0012	14.80	-0.0081	-0.0000	.0151	-0.0065	.0023	+0.047
$\delta = 7.7$													
$\delta = -10.3$													
- 2.20	.0240	.0013	-0.0255	.0098	-0.003	.0041	- 2.13	.0154	-0.0000	.0304	-0.0147	-0.0023	-0.005
- .05	.0285	.0021	-0.0254	.0100	-0.007	.0017	- .02	.0087	.0084	.0344	-0.0148	-0.0014	-0.001
2.10	.0386	.0034	-0.0296	.0109	-0.011	.0004	4.30	.0068	.0013	.0304	-0.0147	-0.0001	-0.048
4.24	.0385	.0051	-0.0298	.0102	-0.017	-0.003	6.43	.0001	-0.0002	.0279	-0.0131	.0007	-0.038
6.38	.0354	.0069	-0.0259	.0087	-0.020	-0.011	8.52	-0.0536	-0.0090	.0530	-0.0125	.0019	-0.043
8.49	.0386	.0104	-0.0323	.0080	-0.024	-0.024	10.64	-0.0205	-0.0017	.0418	-0.0109	.0020	-0.050
10.61	.0458	.0152	-0.0162	.0061	-0.030	-0.039	12.70	-0.0419	-0.0079	.0420	-0.0105	.0023	-0.049
12.71	.0555	.0153	-0.0110	.0041	-0.033	-0.050	14.79	-0.0592	-0.0148	.0358	-0.0106	.0036	-0.032
14.80	.0185	.0095	-0.0046	.0040	-0.0026	-0.0042							
$\delta = 13.2$													
$\delta = -15.2$													
- 2.20	.0420	.0028	-0.0352	.0157	-0.0015	.0019	- 2.12	-0.0068	.0034	.0466	-0.0196	-0.0037	.0002
- .04	.0494	.0044	-0.0376	.0166	-0.023	-0.0001	- .01	-0.0158	.0049	.0454	-0.0193	-0.0028	.0011
2.10	.0499	.0061	-0.0380	.0172	-0.033	-0.029	2.16	-0.0150	.0030	.0475	-0.0204	-0.0021	.0010
4.24	.0549	.0089	-0.0443	.0167	-0.039	-0.042	4.31	-0.0223	.0004	.0519	-0.0202	-0.0010	.0021
6.37	.0447	.0076	-0.0372	.0146	-0.042	-0.050	6.43	-0.0126	.0004	.0371	-0.0185	.0003	-0.029
8.49	.0508	.0135	-0.0407	.0131	-0.051	-0.078	8.53	-0.0509	-0.025	.0599	-0.0355	.0018	-0.027
10.61	.0715	.0215	-0.0325	.0153	-0.060	-0.090	10.62	-0.0289	.0020	.0436	-0.0147	.0018	-0.002
12.72	.0670	.0199	-0.0192	.0102	-0.064	-0.099	12.70	-0.0534	-0.0048	.0517	-0.0145	.0017	-0.001
14.81	.0501	.0194	-0.0186	.0074	-0.0052	-0.0093	14.81	-0.0608	-0.0093	.0471	-0.0152	.0033	-0.019
$\delta = 28.2$													
$\delta = -51.3$													
- 2.21	.0773	.0127	-0.0676	.0279	-0.0073	-0.0096	- 2.11	-0.0437	.0183	.0798	-0.0309	-0.0107	.0098
-.06	.0872	.0164	-0.0725	.0287	-0.0091	-0.0146	- .02	-0.0530	.0183	.0787	-0.0313	-0.0094	.0103
2.09	.0899	.0192	-0.0718	.0284	-0.0107	-0.0190	2.17	-0.0567	.0185	.0827	-0.0335	-0.0093	.0100
4.23	.0981	.0224	-0.0776	.0275	-0.0112	-0.0203	4.32	-0.0606	.0168	.0850	-0.0340	-0.0064	.0104
6.36	.0866	.0240	-0.0742	.0259	-0.0117	-0.0212	6.44	-0.0579	.0065	.0740	-0.0316	-0.0037	.0083
8.48	.0869	.0278	-0.0698	.0250	-0.0128	-0.0244	8.54	-0.0737	-0.0016	.0742	-0.0215	-0.0002	.0045
10.59	.0985	.0323	-0.0623	.0242	-0.0137	-0.0251	10.63	-0.0515	.0038	.0466	-0.0162	.0009	.0023
12.70	.1106	.0374	-0.0613	.0209	-0.0145	-0.0266	12.71	-0.0316	.0010	.0446	-0.0128	.0014	.0014
14.80	.0984	.0365	-0.0450	.0155	-0.0135	-0.0264	14.80	-0.0659	-0.0062	.0466	-0.0144	.0032	.0019



TABLE 15.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; $M = 0.94$

(a) Plain leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 3.3$												$\delta = -6.6$	
-2.14	.0051	.0027	-.0085	.0046	-.0003	-.0006	-2.13	-.0301	.0033	.0206	-.0090	-.0008	-.0043
-.00	.0093	.0031	-.0073	.0049	-.0004	.0004	.01	-.0302	.0026	.0218	-.0098	-.0007	-.0037
2.13	.0089	.0038	-.0098	.0048	-.0006	.0003	2.15	-.0250	.0023	.0174	-.0086	-.0005	-.0039
4.27	.0119	.0052	-.0044	.0040	-.0007	-.0004	4.27	-.0264	.0007	.0150	-.0078	-.0001	-.0030
6.39	.0097	.0046	-.0123	.0037	-.0011	-.0012	6.41	-.0170	-.0011	.0126	-.0067	-.0002	-.0027
8.54	.0167	.0062	-.0048	.0033	-.0010	-.0009	8.52	-.0088	.0022	-.0012	-.0078	-.0005	-.0025
10.62	.0171	.0059	-.0203	.0036	-.0014	-.0020	10.64	-.0394	-.0058	.0284	-.0079	-.0007	-.0026
$\delta = 7.7$												$\delta = -10.3$	
-2.15	.0205	.0021	-.0271	.0105	-.0006	.0012	-2.08	-.0057	.0038	.0347	-.0154	-.0020	-.0055
-.01	.0266	.0030	-.0259	.0108	-.0011	.0017	.05	-.0045	.0035	.0302	-.0158	-.0017	-.0045
2.12	.0208	.0045	-.0290	.0099	-.0015	.0005	2.18	-.0030	.0015	.0266	-.0137	-.0011	-.0038
4.26	.0277	.0023	-.0251	.0085	-.0016	-.0000	4.31	-.0028	-.0012	.0264	-.0129	-.0005	-.0040
6.39	.0197	.0050	-.0248	.0078	-.0023	-.0021	6.44	-.0108	-.0001	.0273	-.0119	-.0000	-.0041
8.48	.0451	.0106		.0071	-.0028	-.0031	8.55	-.0091	.0041	.0178	-.0117	-.0003	-.0040
10.62	-.0027	.0009	-.0050	.0073	-.0030	-.0042	10.67	-.0451	-.0050	.0514	-.0111	-.0007	-.0049
$\delta = 13.2$												$\delta = -15.2$	
-2.16	.0397	.0036	-.0458	.0170	-.0020	-.0032	-2.07	-.0058	.0085	.0440	-.0199	-.0039	-.0022
-.02	.0420	.0056	-.0466	.0172	-.0031	-.0043	.06	-.0024	.0082	.0359	-.0203	-.0033	-.0010
2.11	.0420	.0064	-.0476	.0164	-.0035	-.0055	2.18	-.0040	.0063	.0296	-.0167	-.0021	-.0002
4.25	.0455	.0070	-.0424	.0144	-.0038	-.0067	4.31	-.0039	.0024	.0269	-.0163	-.0011	-.0028
6.38	.0343	.0102	-.0397	.0128	-.0049	-.0099	6.44	-.0047	.0053	.0216	-.0126	-.0003	-.0020
8.50	.0496	.0126	-.0550	.0125	-.0053	-.0110	8.54	-.0032	.0071	.0100	-.0146	-.0002	-.0030
10.60	.0695	.0187	-.0735	.0130	-.0070	-.0145	10.66	-.0148	.0043	.0229	-.0164	-.0005	-.0033
$\delta = 28.2$												$\delta = -31.3$	
-2.17	.0823	.0147	-.0774	.0298	-.0085	-.0151	-2.06	-.0486	.0212	.0726	-.0293	-.0106	.0083
-.03	.0834	.0182	-.0778	.0286	-.0101	-.0188	.07	-.0504	.0207	.0721	-.0310	-.0101	.0057
2.10	.0833	.0205	-.0799	.0273	-.0110	-.0221	2.20	-.0505	.0182	.0689	-.0303	-.0083	.0089
4.24	.0766	.0208	-.0714	.0243	-.0111	-.0235	4.33	-.0395	.0121	.0655	-.0294	-.0063	.0052
6.38	.0685	.0226	-.0657	.0221	-.0129	-.0289	6.45	-.0300	.0083	.0481	-.0212	-.0023	-.0007
8.51	.0996	.0330	-.0880	.0194	-.0142	-.0327	8.57	-.0135	.0096	.0327	-.0166	-.0010	-.0029
10.60	.0633	.0272	-.0673	.0188	-.0150	-.0339	10.69	-.0468	.0006	.0623	-.0142	-.0003	-.0049

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TABLE 15.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; $N = 0.94$ - Concluded

(b) Modified leading edge

α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T	α , deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_T
$\delta = 3.3$							$\delta = -6.6$						
- 2.19 - .03 2.10 4.24 6.37 8.47 10.58	.0178 .0184 .0164 .0151 .0196 .0186 .0530	.0020 .0015 .0019 .0030 .0030 .0068 .0128	-.0013 -.0034 -.0050 -.0078 -.0049 -.0145 -.0430	.0055 .0042 .0047 .0048 .0041 .0039 .0031	.0001 -.0002 -.0003 -.0006 -.0009 -.0011 -.0014	+.0027 +.0017 +.0012 +.0008 -.0007 -.0009 -.0015	- 2.18 -.03 2.11 4.25 6.36 8.49 10.59	-.0174 -.0237 -.0254 -.0207 -.0151 -.0103 -.0245	.0027 .0014 .0019 .0014 .0012 .0016 .0076	.0250 .0226 .0240 .0197 .0113 .0132 -.0162	-.0083 -.0091 -.0084 -.0083 -.0074 -.0071 -.0078	-.0007 -.0005 -.0002 -.0002 -.0007 -.0011 -.0012	-.0011 -.0016 -.0010 -.0006 -.0021 -.0028 -.0040
$\delta = 7.7$							$\delta = -10.3$						
- 2.19 - .05 2.07 4.22 6.34 8.46 10.57	.0272 .0235 .0223 .0254 .0245 .0252 .0608	.0027 .0035 .0055 .0047 .0112 .0086 .0157	-.0179 -.0230 -.0252 -.0255 -.0285 -.0245 -.0541	.0089 .0097 .0096 .0090 .0073 .0072 .0066	-.0003 -.0008 -.0013 -.0017 -.0021 -.0026 -.0032	+.0036 +.0017 +.0001 -.0007 -.0022 -.0031 -.0044	- 2.11 .02 2.15 4.29 6.40 8.55 10.63	.0238 -.0150 .0159 .0036 .0042 .0046 -.0186	.0025 .0026 .0026 .0023 .0029 .0030 -.0001	.0351 .0283 .0261 .0246 .0320 .0307 -.0342	-.0136 -.0142 -.0133 -.0131 -.0123 -.0123 -.0128	-.0020 -.0016 -.0008 -.0001 -.0017 -.0017 -.0016	-.0050 -.0054 -.0049 -.0043 -.0046 -.0046 -.0043
$\delta = 13.2$							$\delta = -15.2$						
- 2.20 - .06 2.08 4.22 6.34 8.44 10.57	.0377 .0407 .0409 .0405 .0341 .0374 .0726	.0046 .0042 .0072 .0093 .0133 .0153 .0201	-.0304 -.0367 -.0396 -.0375 -.0382 -.0426 -.0661	.0143 .0157 .0164 .0144 .0131 .0120 .0120	-.0016 -.0026 -.0035 -.0040 -.0045 -.0054 -.0067	+.0019 -.0004 -.0032 -.0048 -.0066 -.0093 -.0112	- 2.12 .01 2.16 4.29 6.40 8.52 10.64	.0022 -.0039 .0034 -.0009 .0026 -.0107 -.0186	.0036 -.0043 .0048 .0048 .0054 -.0000 -.0025	.0464 -.0412 .0390 .0320 .0221 .0372 -.0394	-.0094 -.0092 -.0085 -.0079 -.0064 -.0062 -.0069	-.0036 -.0035 -.0030 -.0020 -.0005 -.0004 -.0008	-.0011 -.0014 -.0017 -.0020 -.0009 -.0006 -.0003
$\delta = 26.2$							$\delta = -31.3$						
- 2.21 - .07 2.07 4.20 6.33 8.44 10.55	.0731 .0775 .0913 .0717 .0718 .0693 .1068	.0146 .0175 .0189 .0218 .0244 .0285 .0389	-.0588 -.0692 -.0788 -.0701 .0218 -.0659 -.0982	.0256 .0279 .0279 .0237 .0218 .0191 .0170	-.0072 -.0092 -.0105 -.0106 -.0112 -.0129 -.0150	+.0094 -.0142 -.0186 -.0192 -.0216 -.0270 -.0308	- 2.11 .02 2.18 4.30 6.42 8.55 10.64	-.0374 -.0423 -.0382 -.0417 .0322 -.0279 -.0201	.0176 -.0170 -.0171 .0143 .0085 .0020 -.0033	.0789 -.0760 -.0734 .0678 .0604 .0604 -.0392	-.0305 -.0306 -.0313 -.0307 -.0270 -.0204 -.0150	-.0105 -.0095 -.0081 -.0056 -.0029 -.0004 -.0010	.0100 -.0103 -.0097 -.0080 -.0050 -.0030 -.0010

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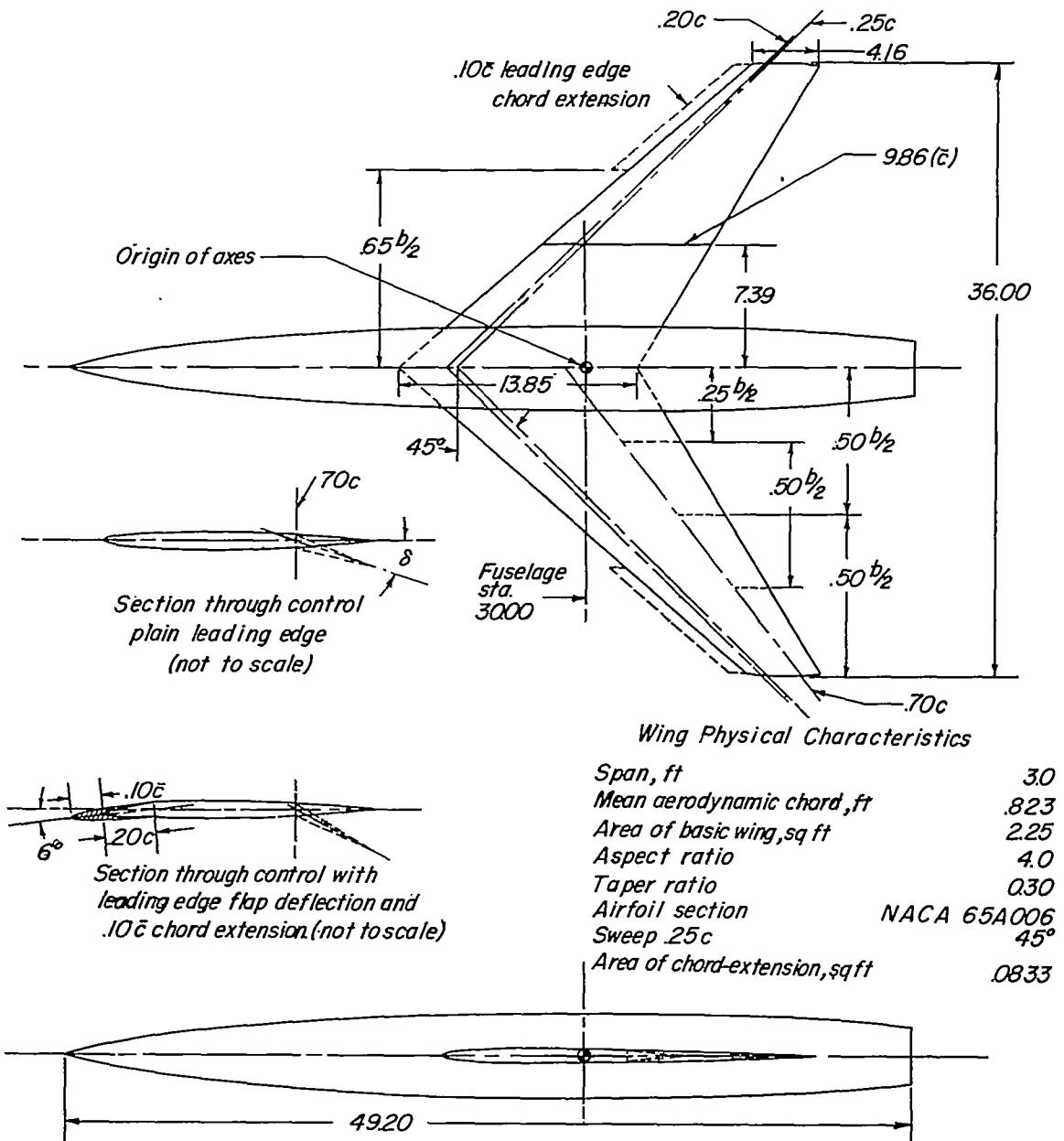


Figure 1.- General arrangement of model and controls. All dimensions are in inches unless otherwise noted.

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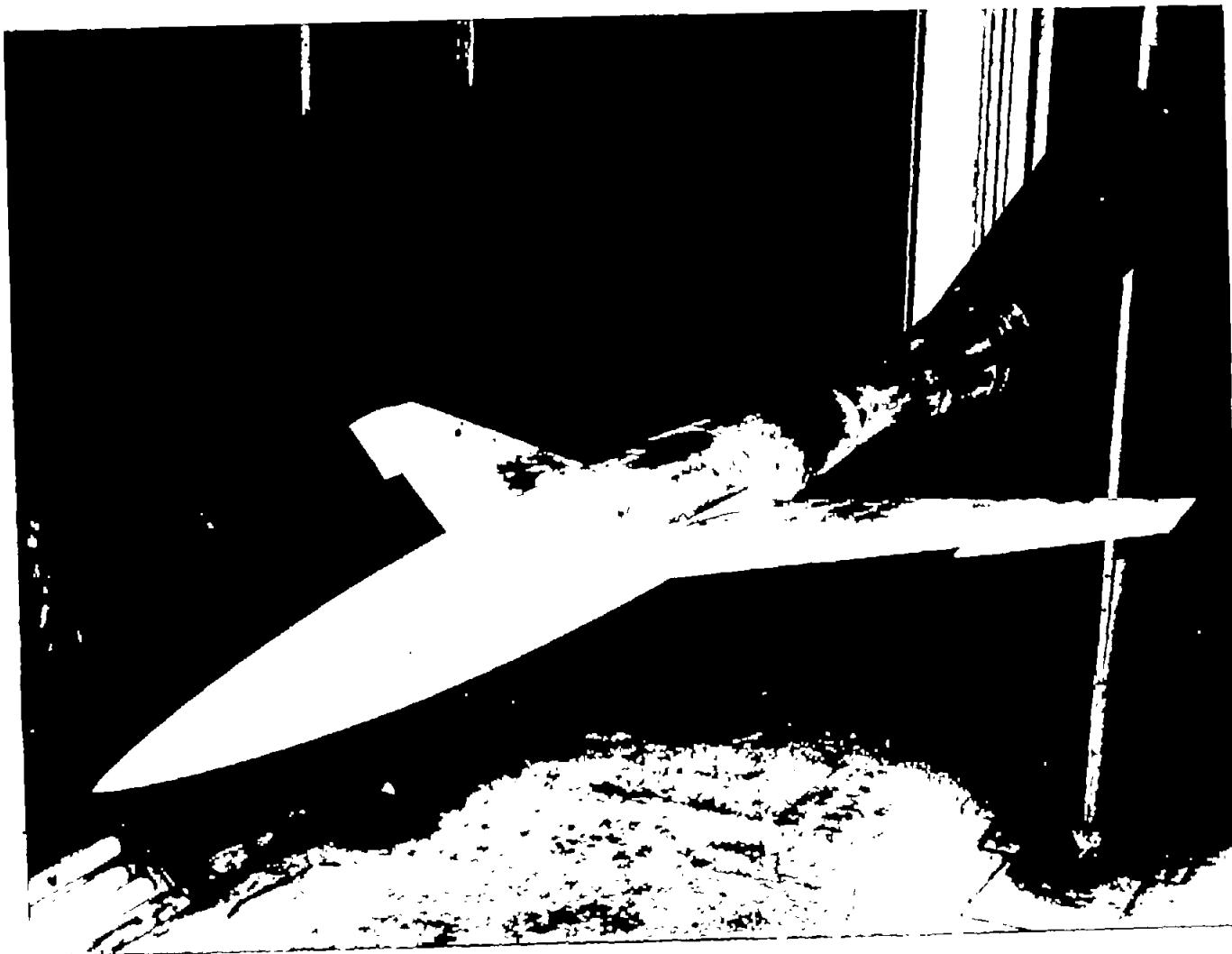


Figure 2.- Photograph of the model mounted in the Langley high-speed 7- by 10-foot tunnel. L-74562

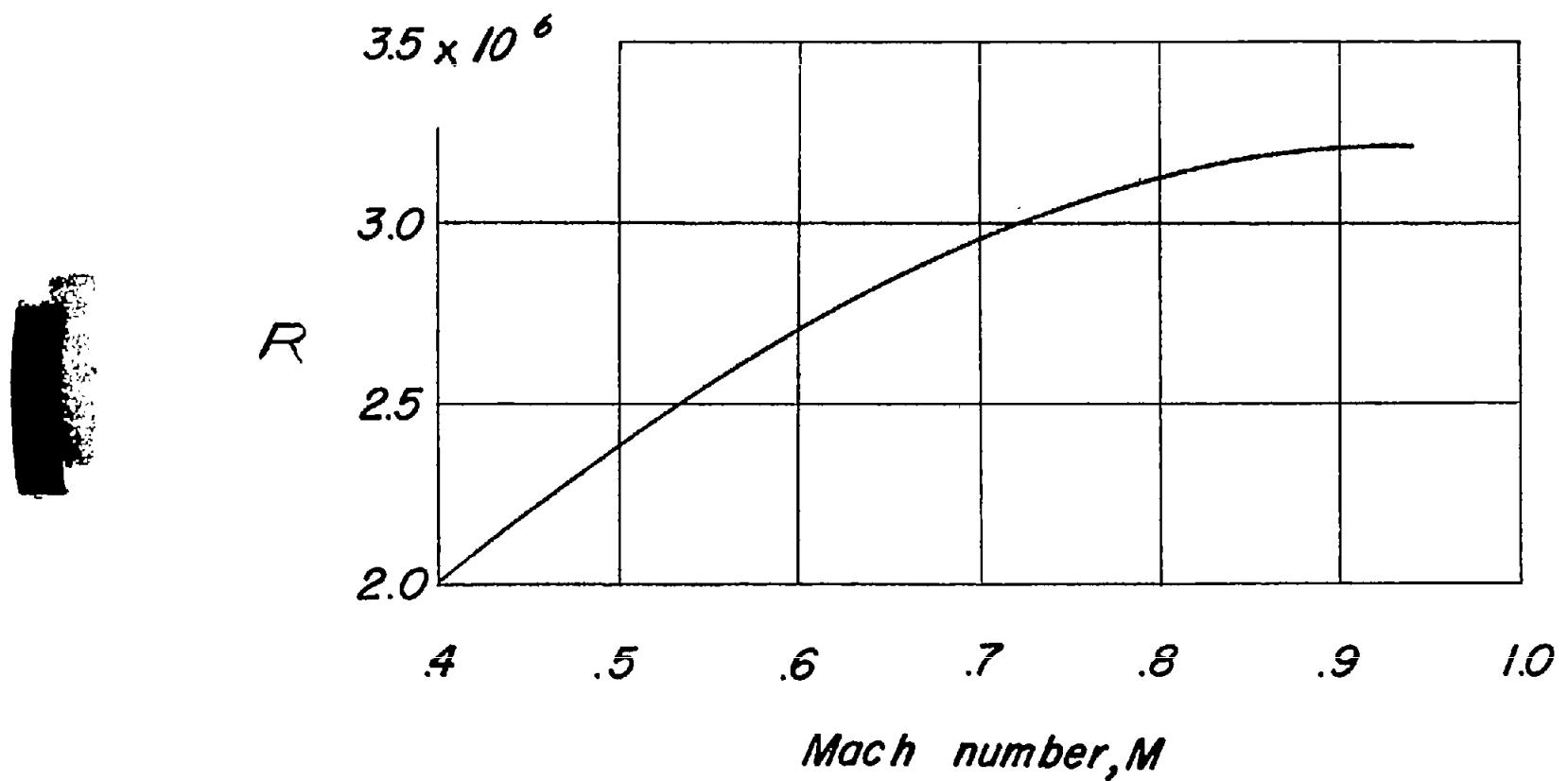


Figure 3.- Variation of average test Reynolds number with Mach number.

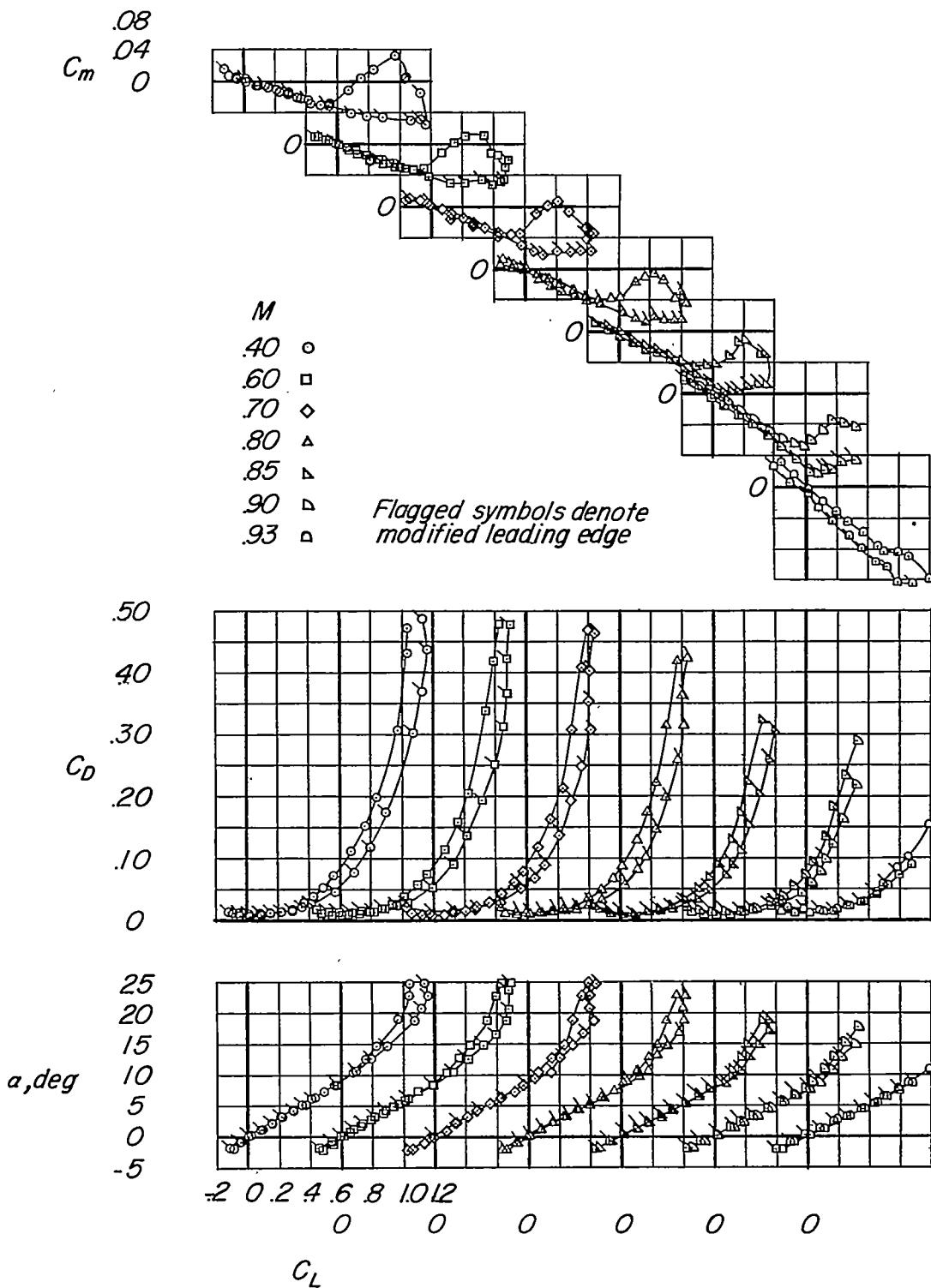
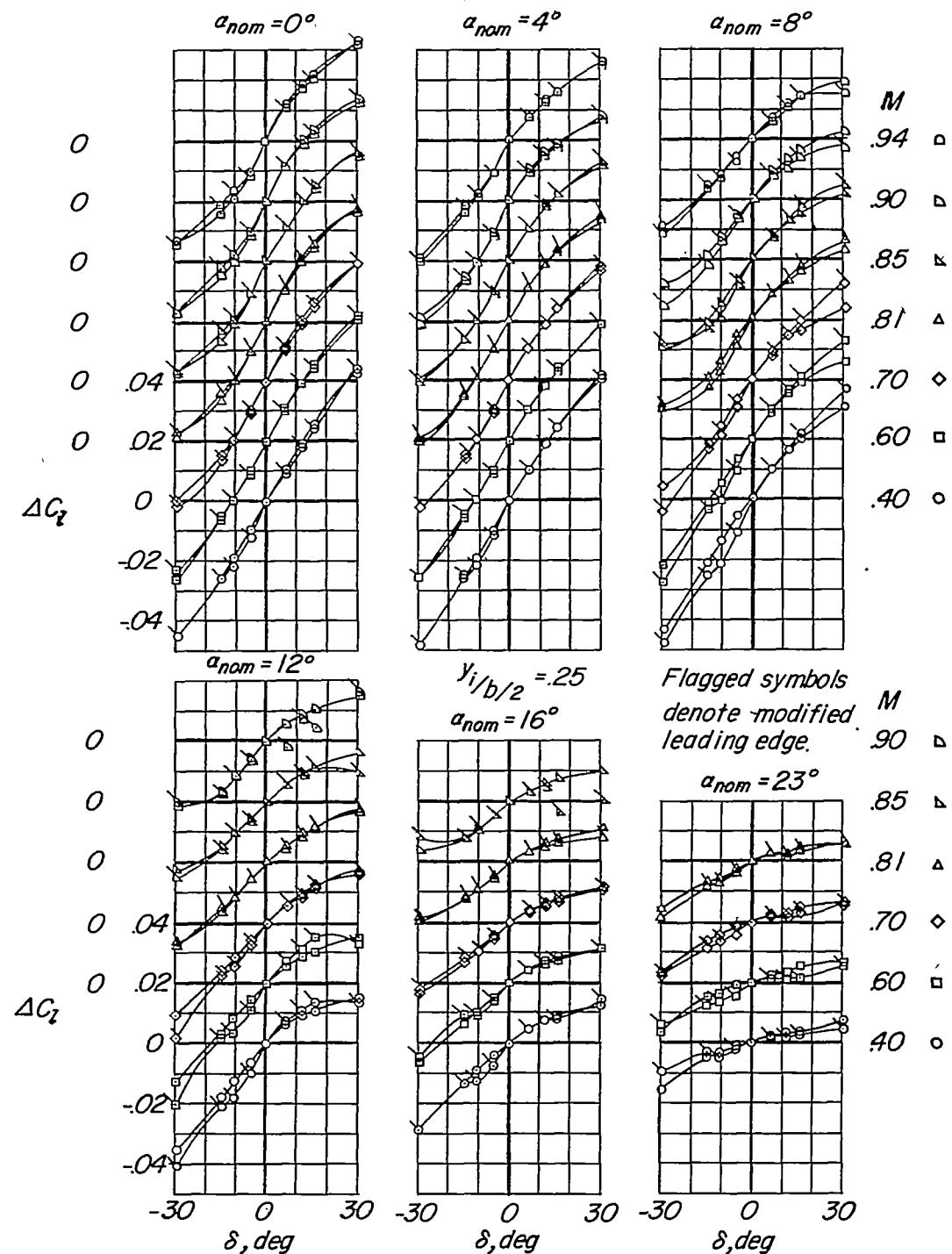
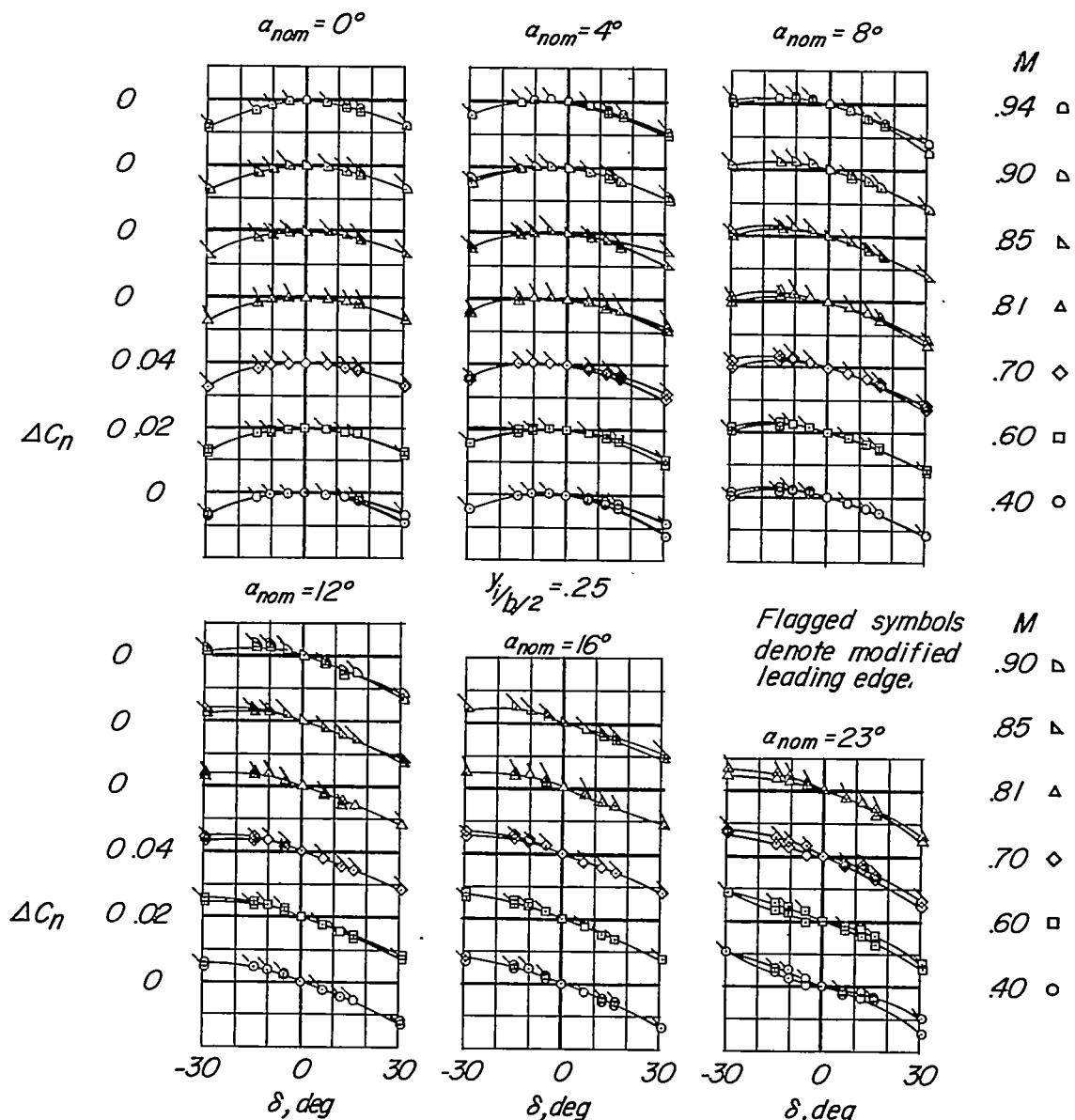


Figure 4.- Effect of wing leading-edge modification on the lift, drag, and pitching-moment characteristics of the model without controls.
(Data taken from ref. 5.)



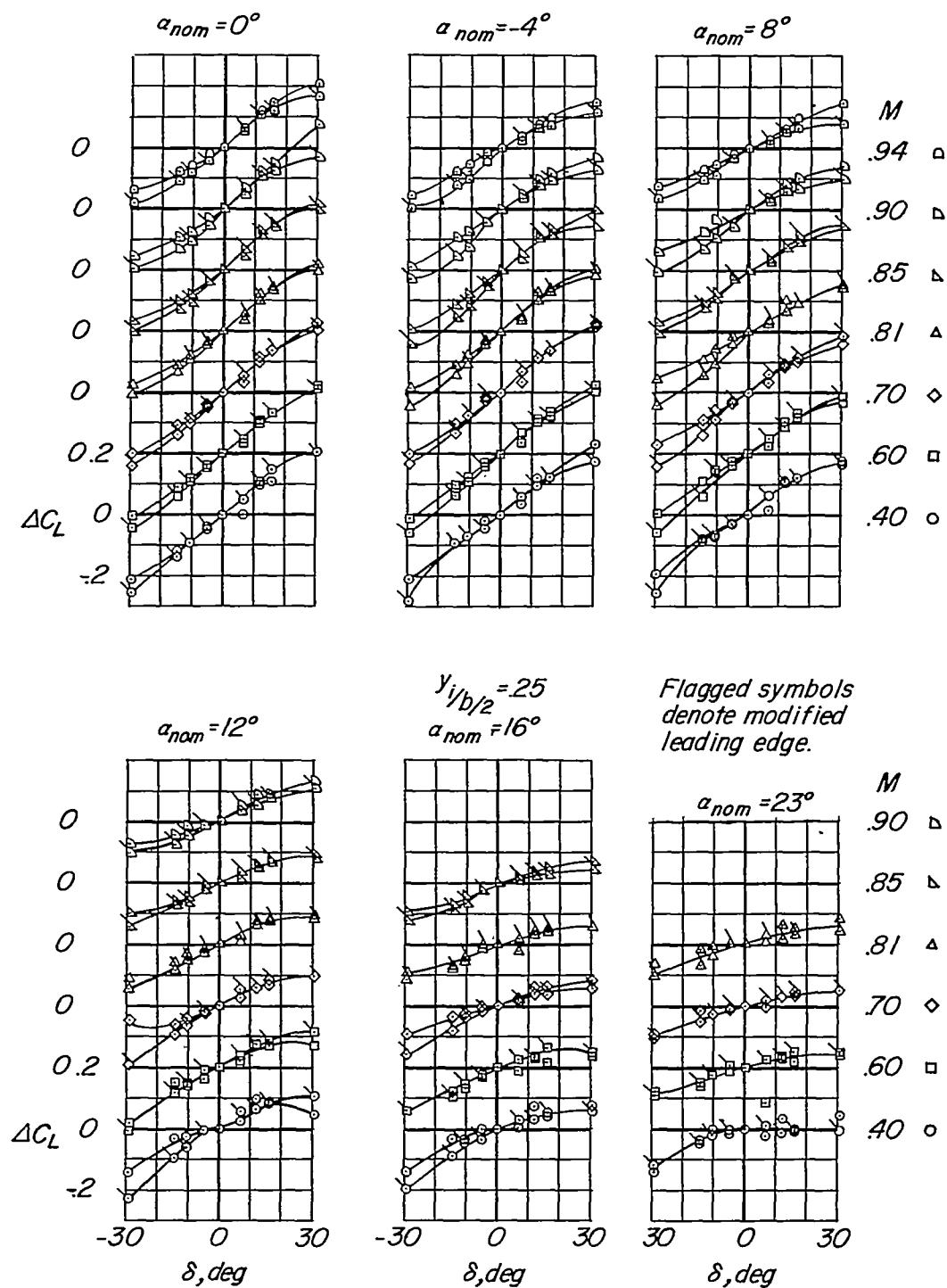
(a) Rolling-moment coefficient.

Figure 5.- Effect of wing leading-edge modification on the variation of incremental aerodynamic coefficients with inboard aileron deflection.



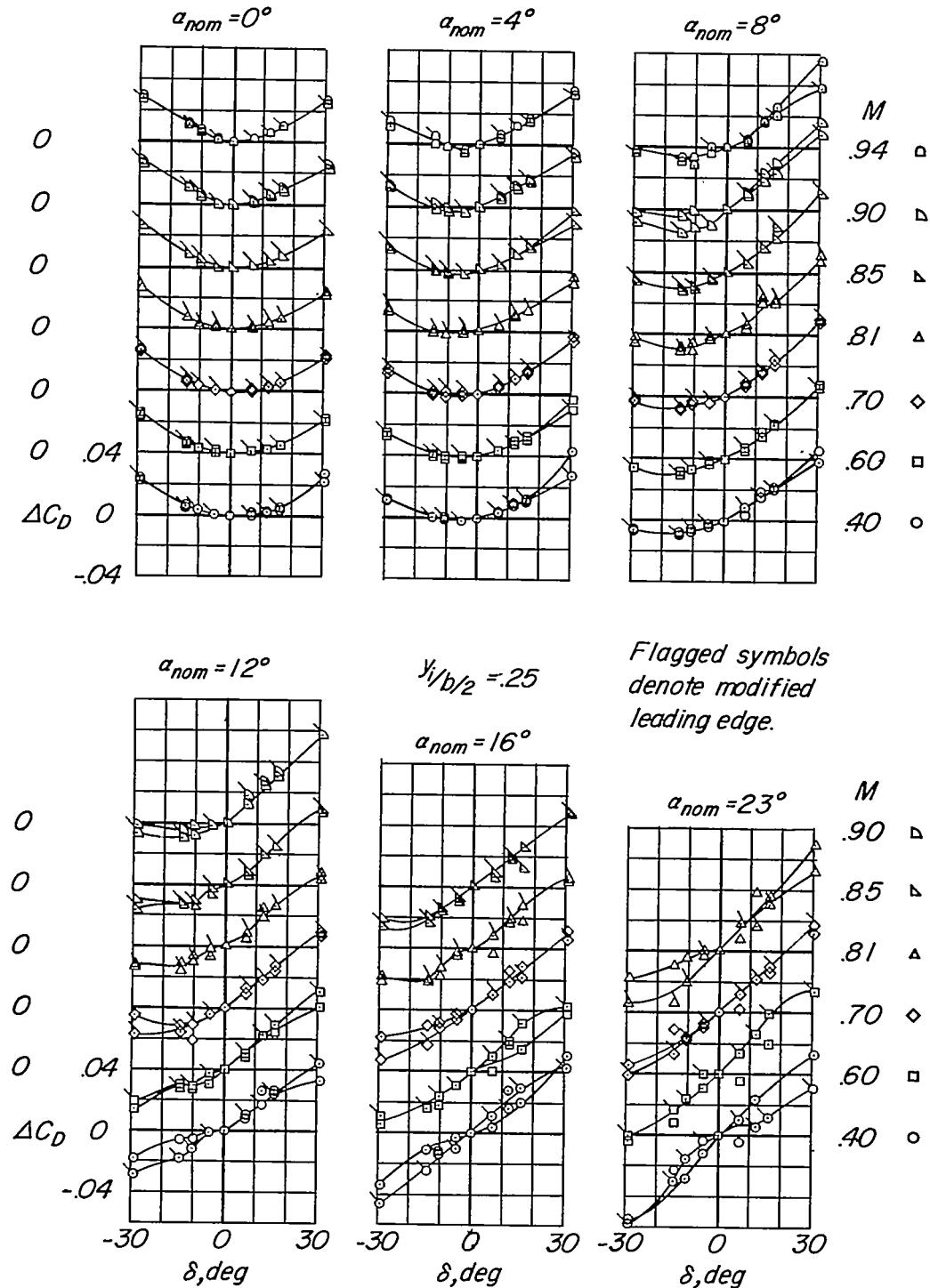
(b) Yawing-moment coefficient.

Figure 5.- Continued.



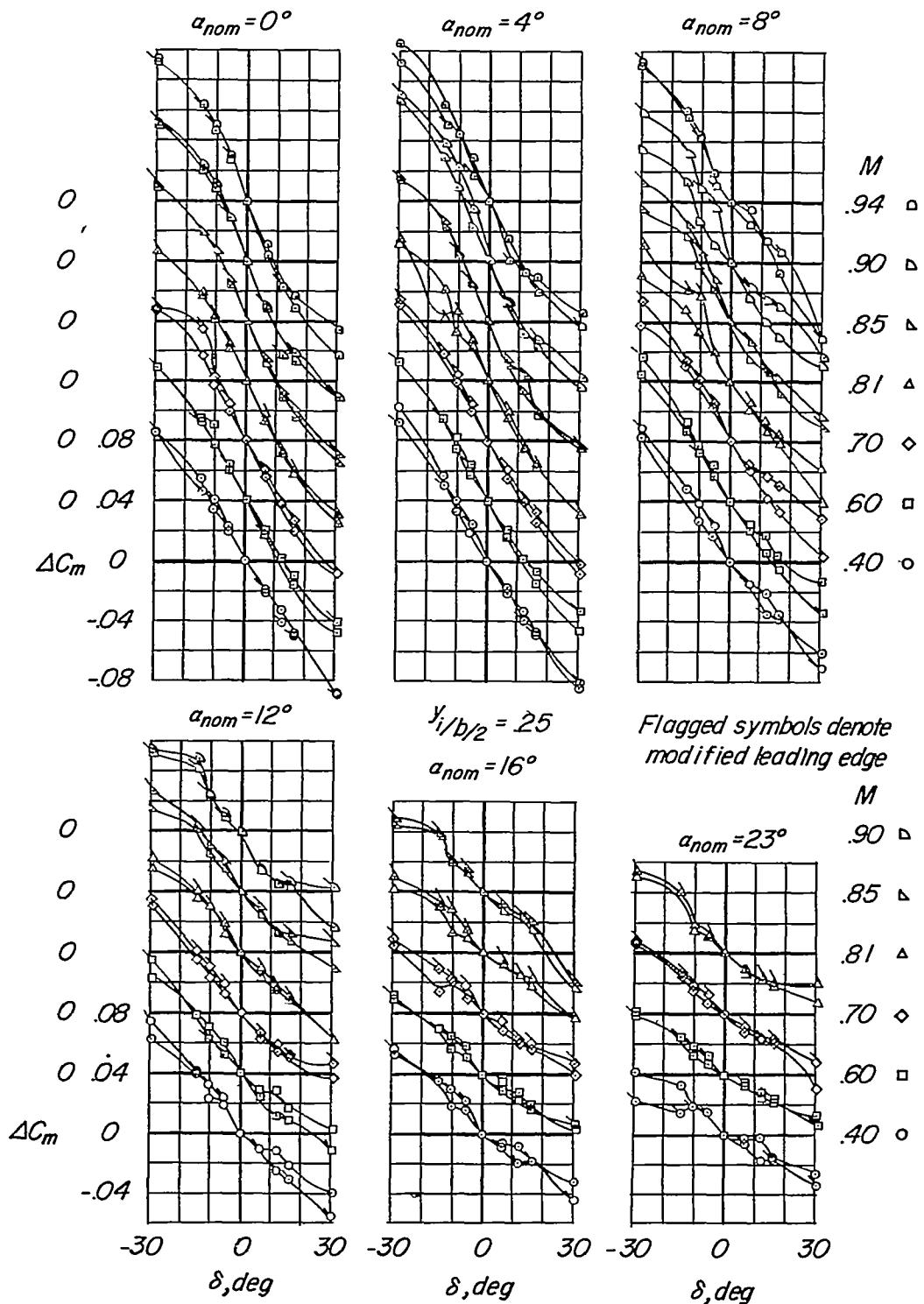
(c) Lift coefficient.

Figure 5.- Continued.



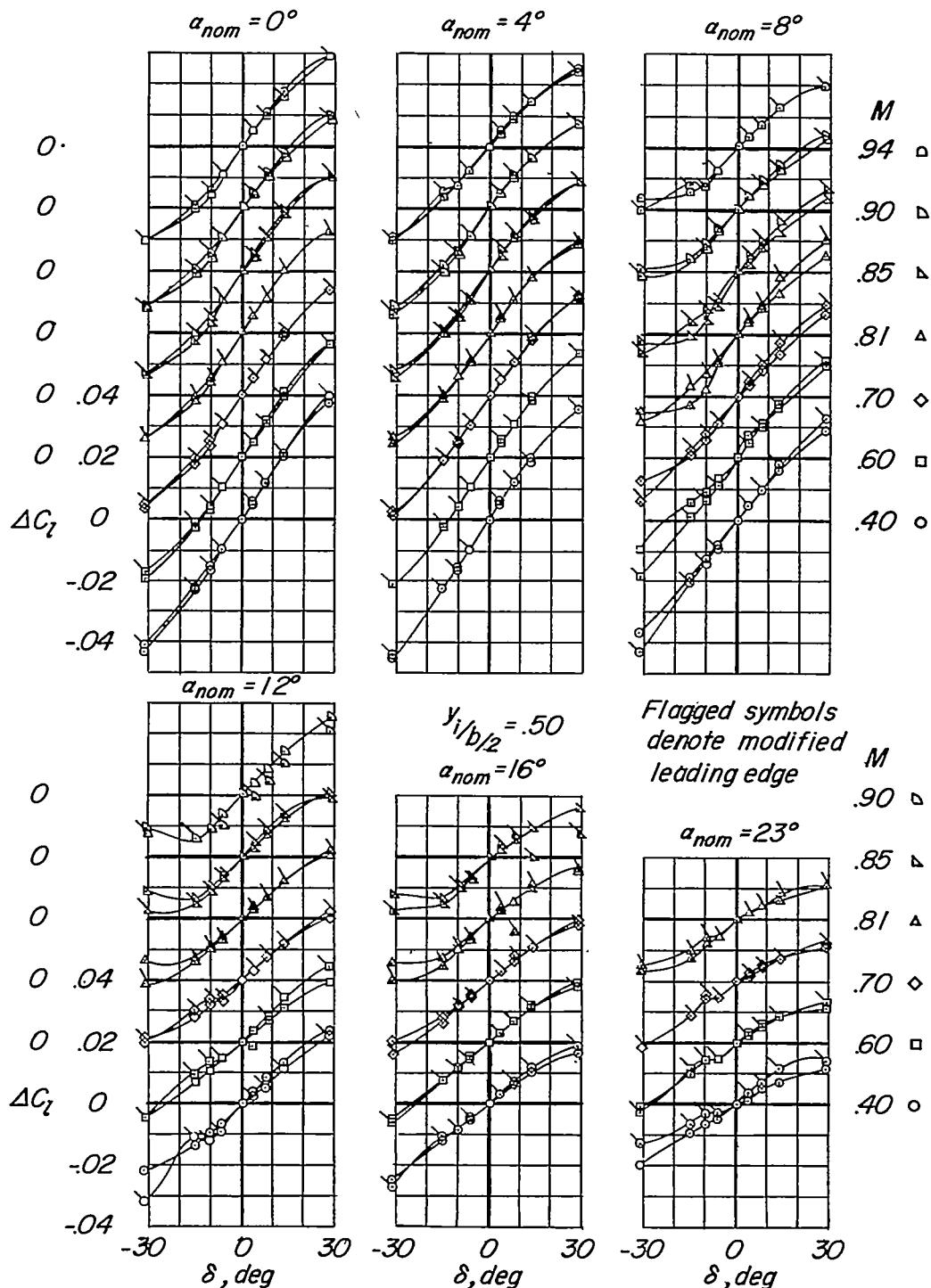
(d) Drag coefficient.

Figure 5.- Continued.



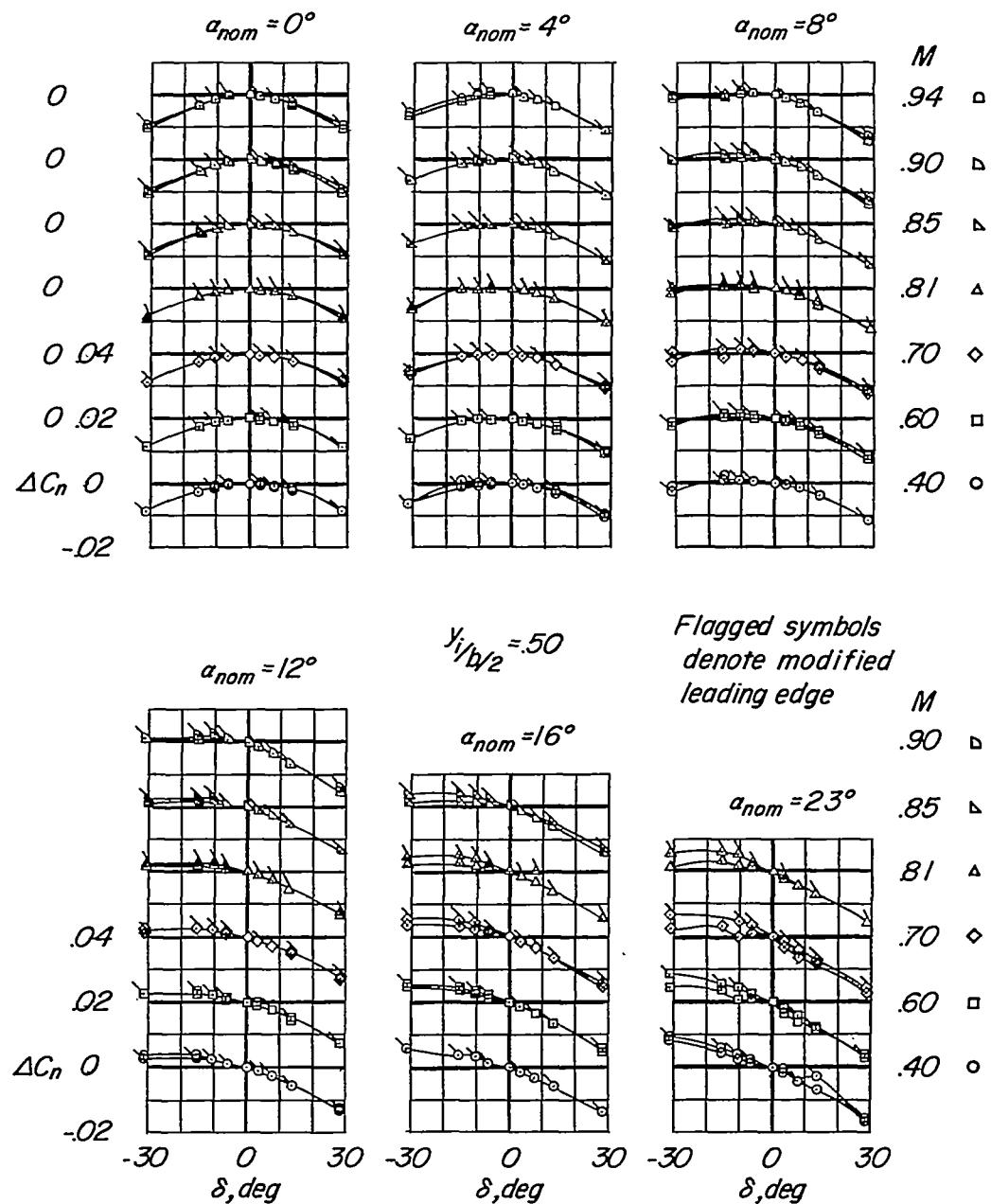
(e) Pitching-moment coefficient.

Figure 5.- Concluded.



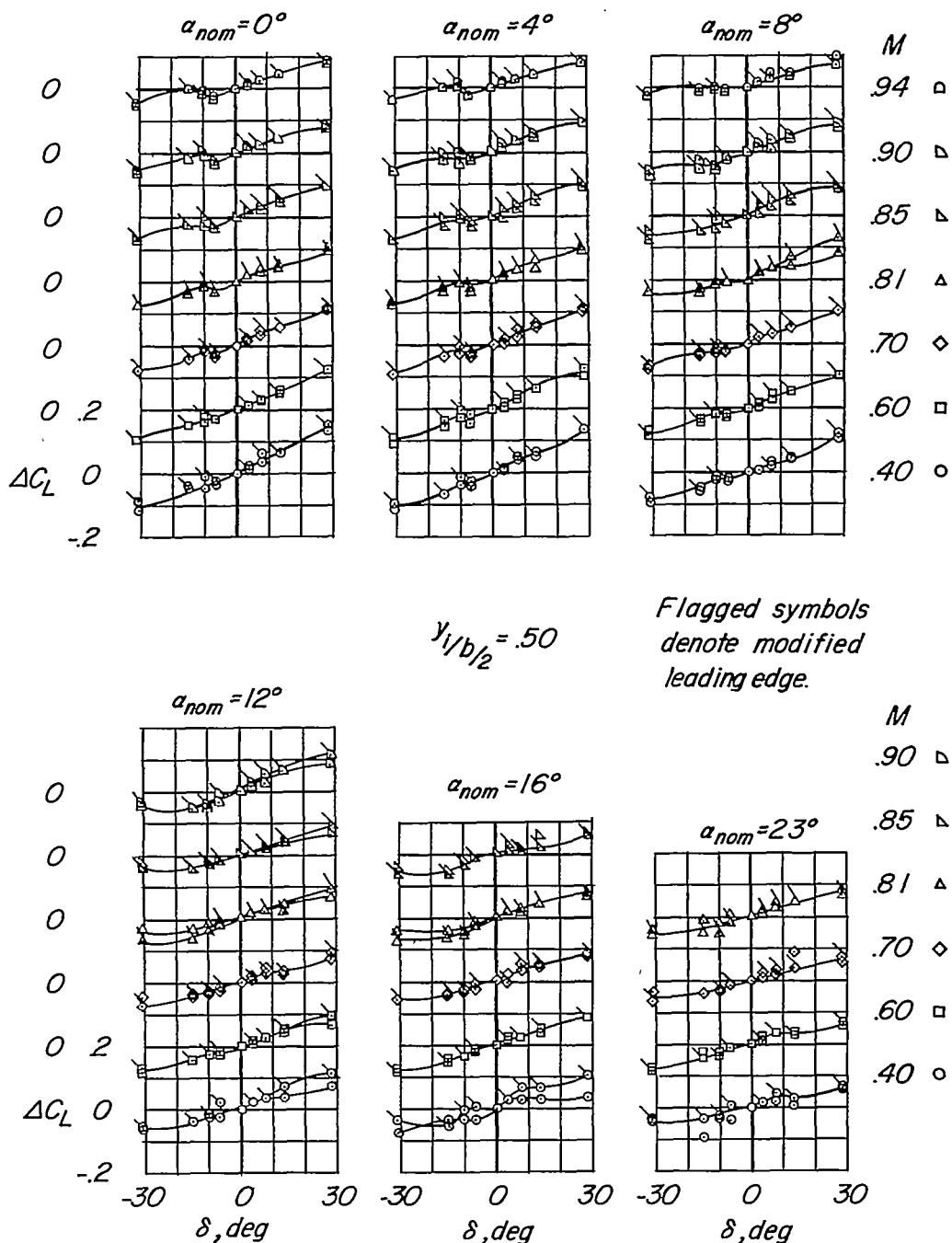
(a) Rolling-moment coefficient.

Figure 6.- Effect of wing leading-edge modification on the variation of incremental aerodynamic coefficients with outboard aileron deflection.



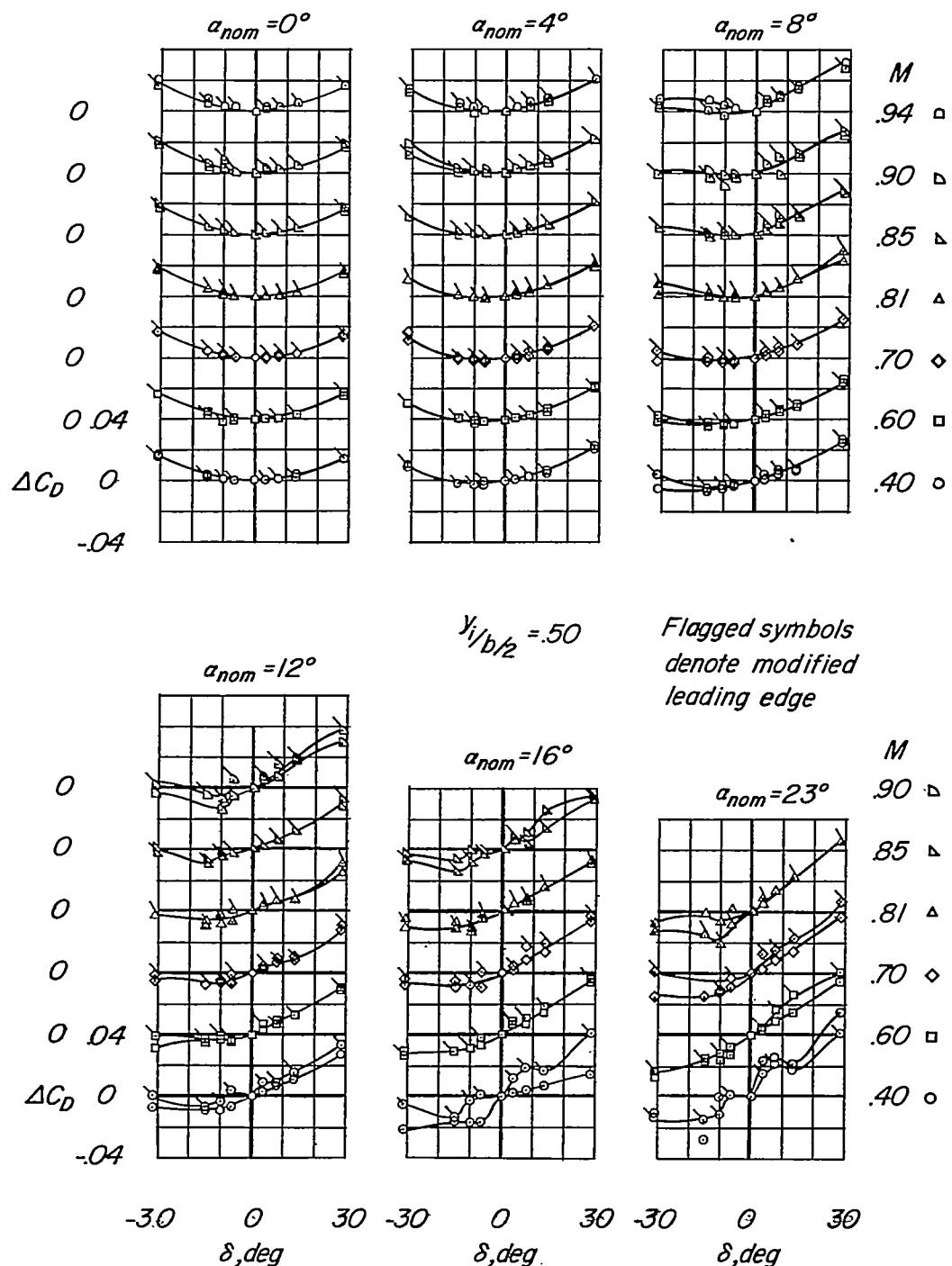
(b) Yawing-moment coefficient.

Figure 6.- Continued.



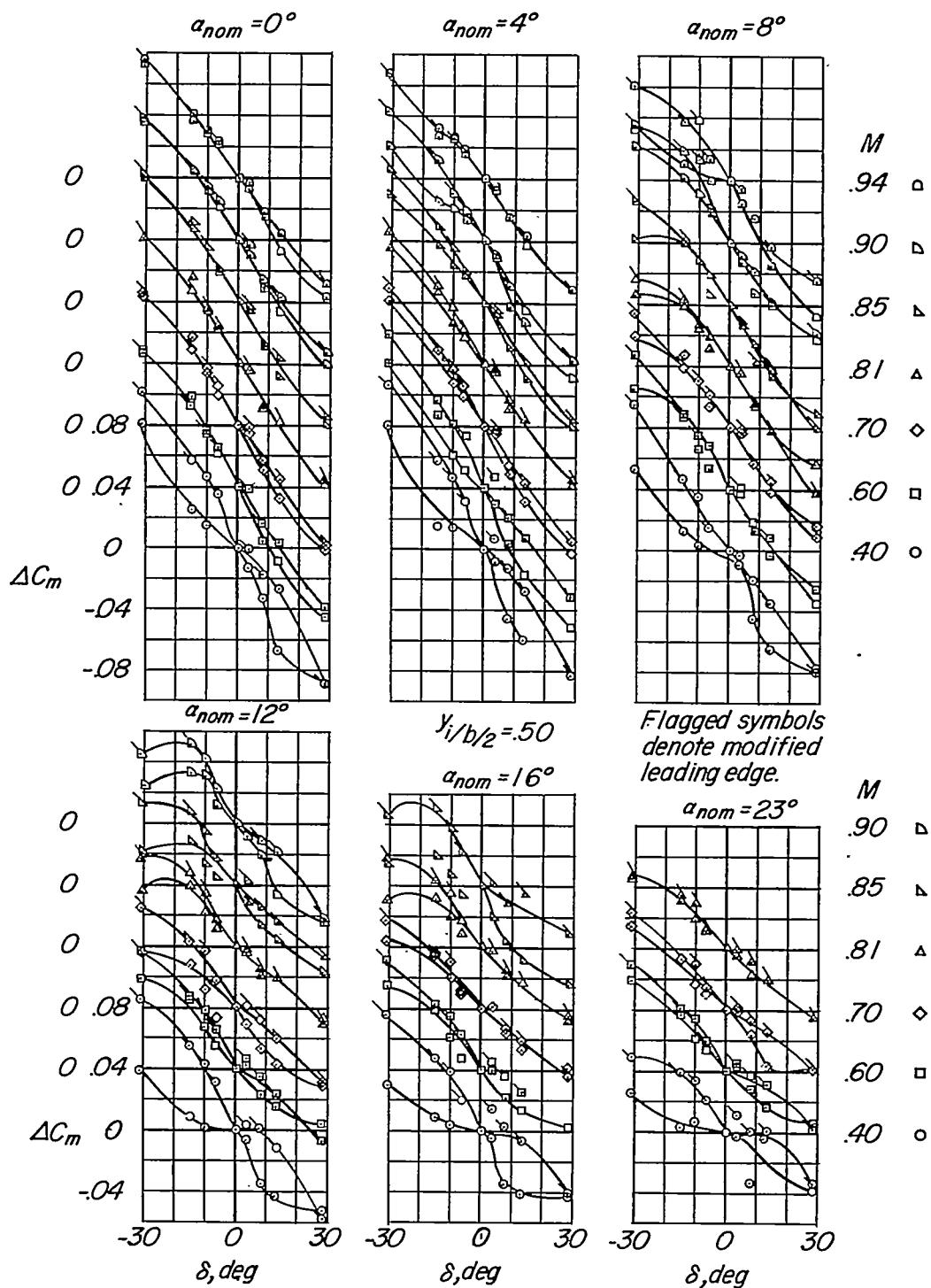
(c) Lift coefficient.

Figure 6.- Continued.



(d) Drag coefficient.

Figure 6.- Continued.



(e) Pitching-moment coefficient.

Figure 6.- Concluded.

$M = .85$

$\delta = 30.6$ ▲

$\delta = -29.3$ ▽

Flagged symbols denote
modified leading edge.

$$y_i/b_{1/2} = 2.5$$

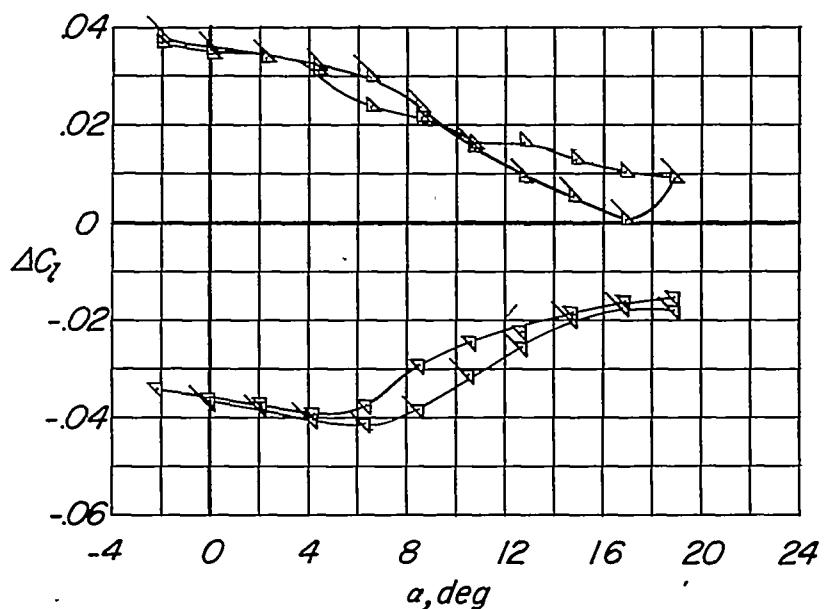
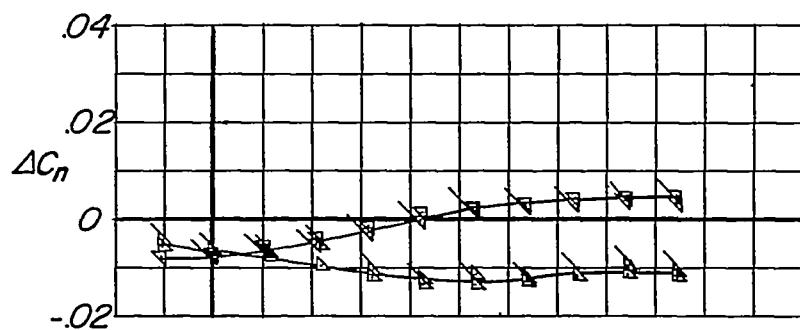


Figure 7.- Effect of wing leading-edge modification on the variation of incremental rolling-moment and yawing-moment coefficient with angle of attack for the inboard aileron.

$M=85$

$\delta = 28.2 \quad \Delta$ Flagged symbols denote
 $\delta = -31.3 \quad \nabla$ modified leading edge.

$$y_i/b_{1/2} = .50$$

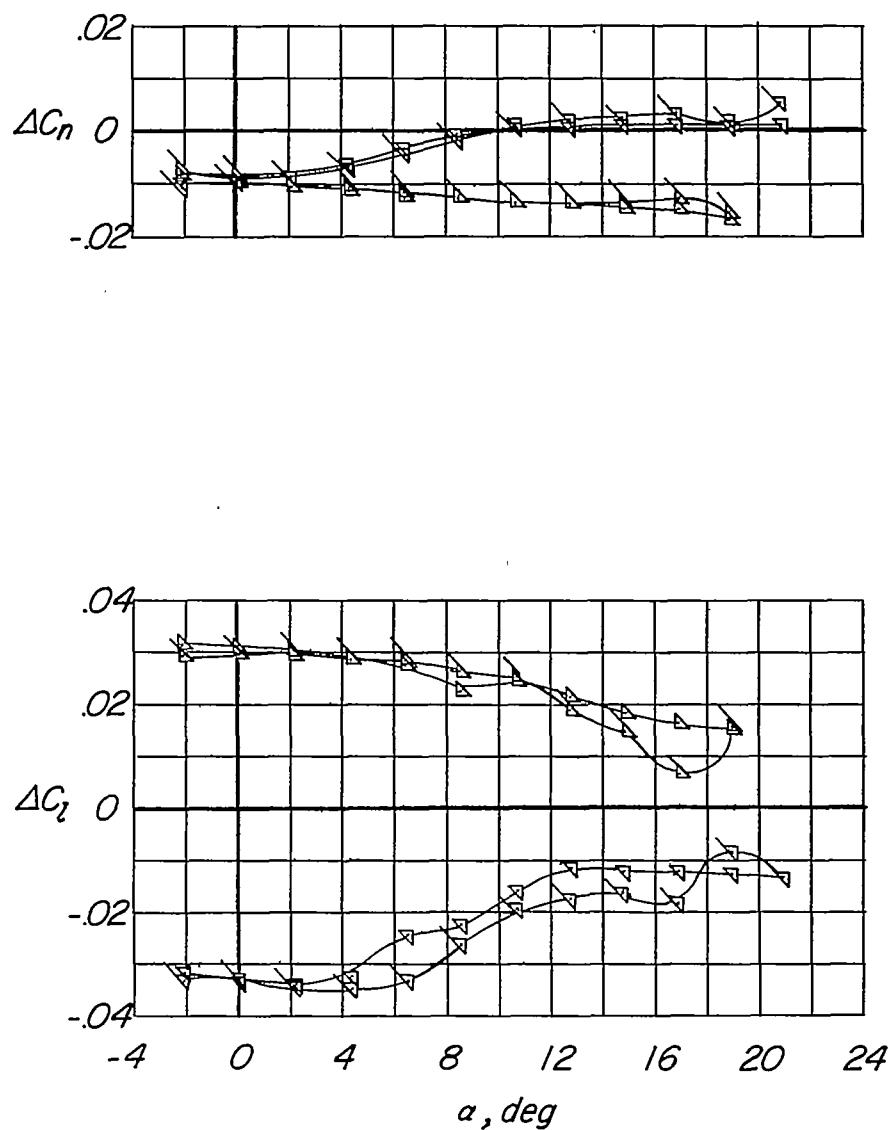
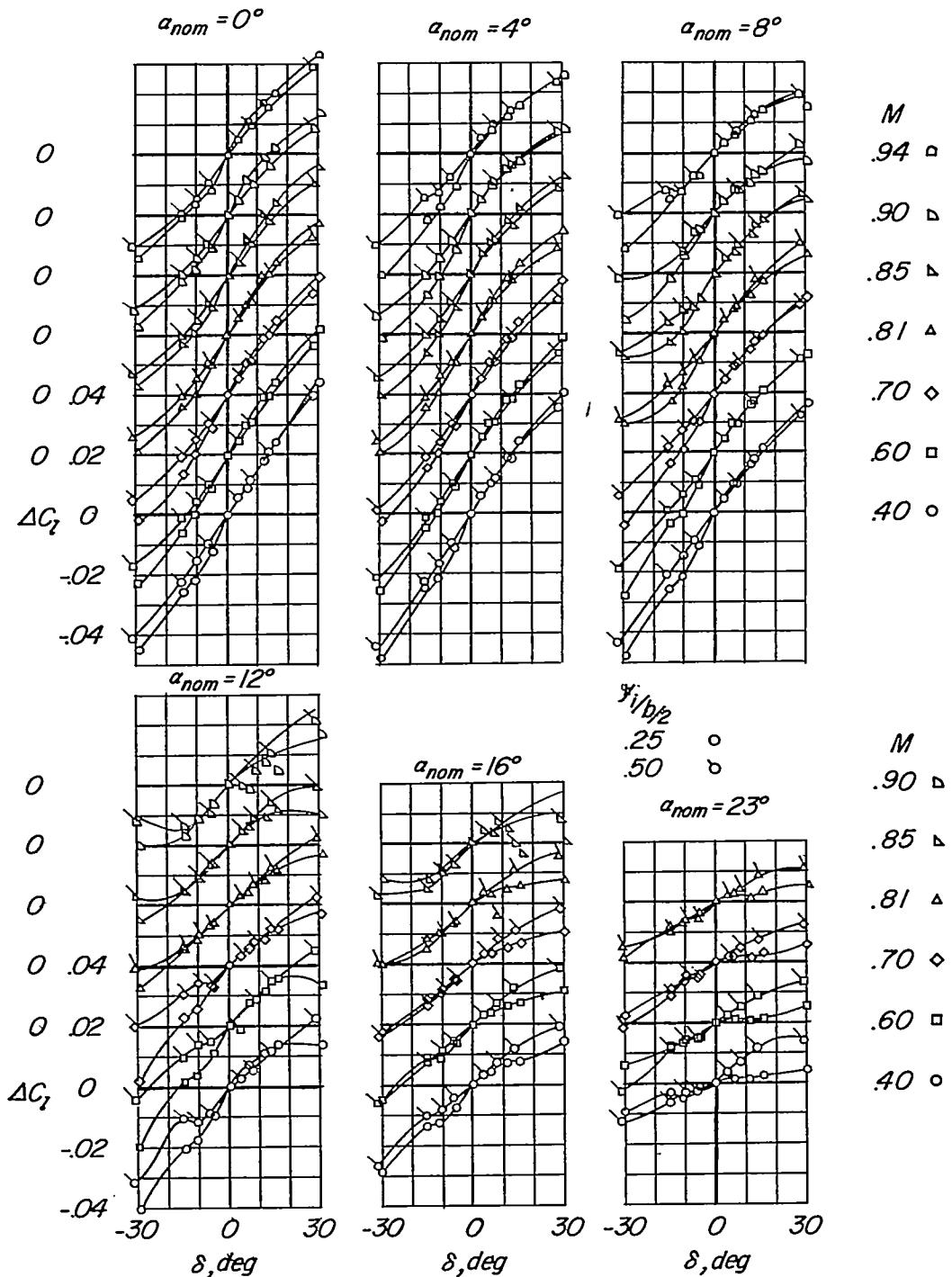
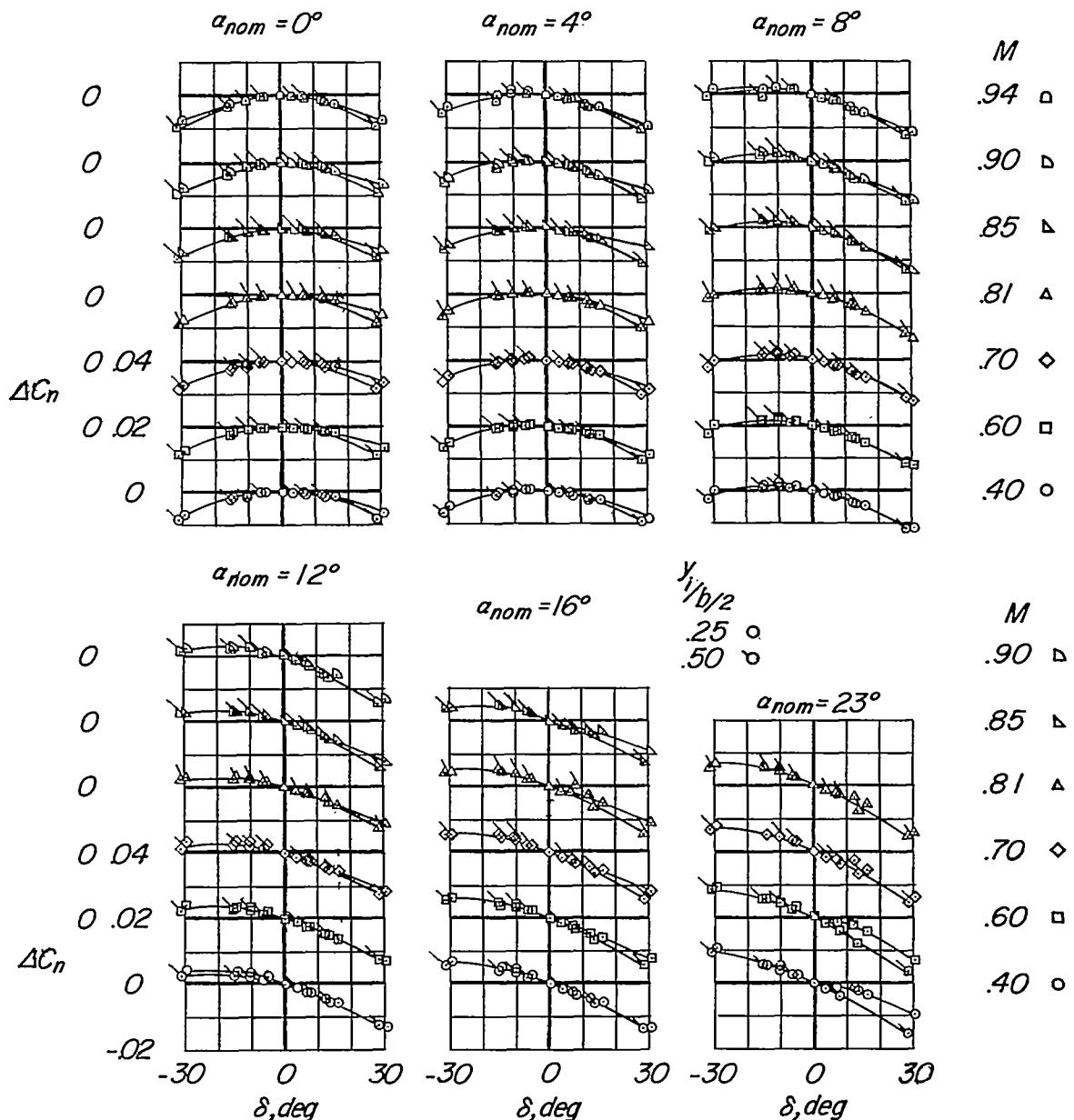


Figure 8.- Effect of wing leading-edge modification on the variation of incremental rolling-moment and yawing-moment coefficient with angle of attack for the outboard aileron.



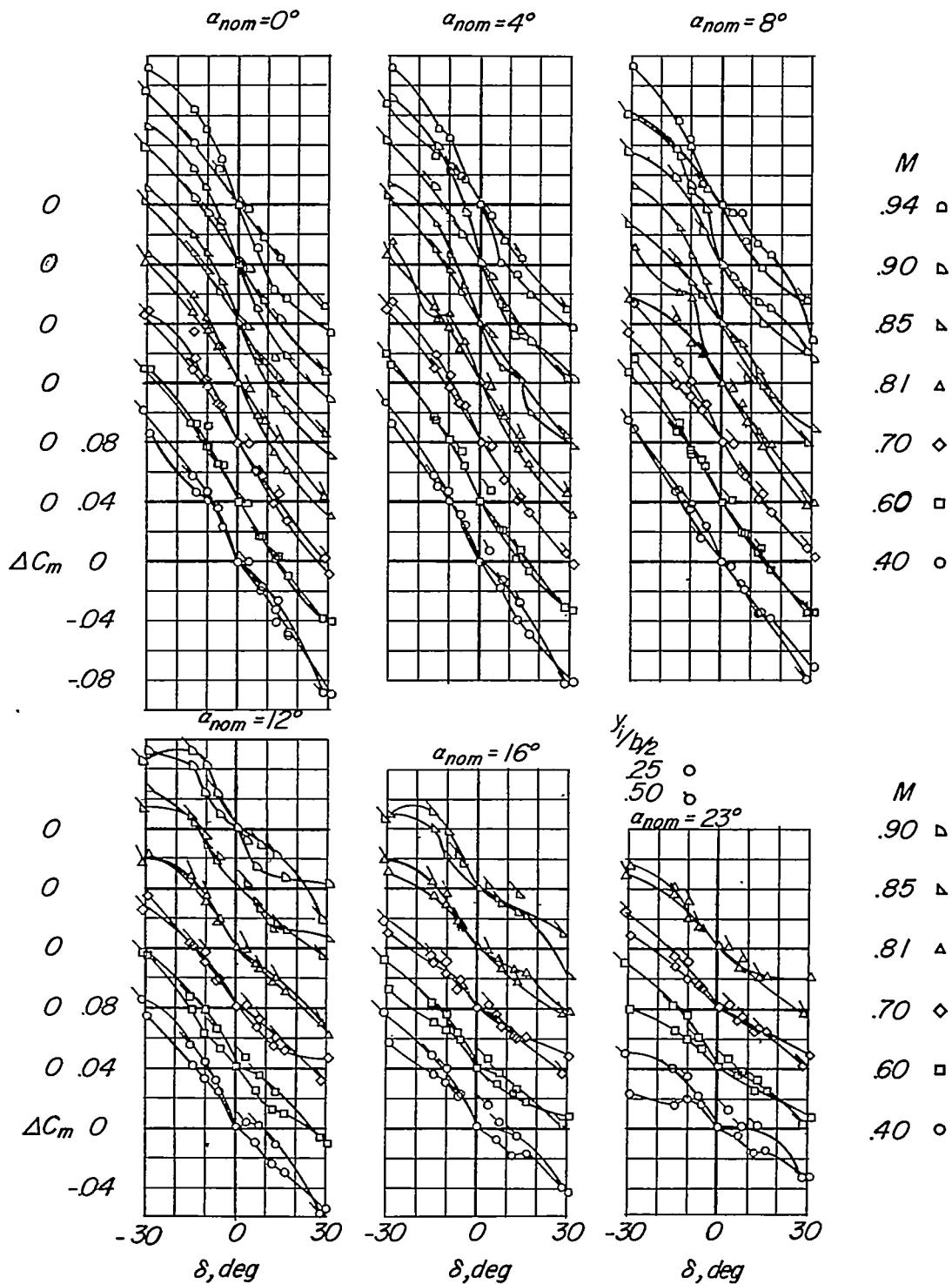
(a) Rolling-moment coefficient.

Figure 9.- Effect of aileron spanwise location on the variation of incremental aerodynamic moment coefficients with aileron deflection on the wing with the modified leading edge.



(b) Yawing-moment coefficient.

Figure 9.- Continued.



(c) Pitching-moment coefficient.

Figure 9.- Concluded.

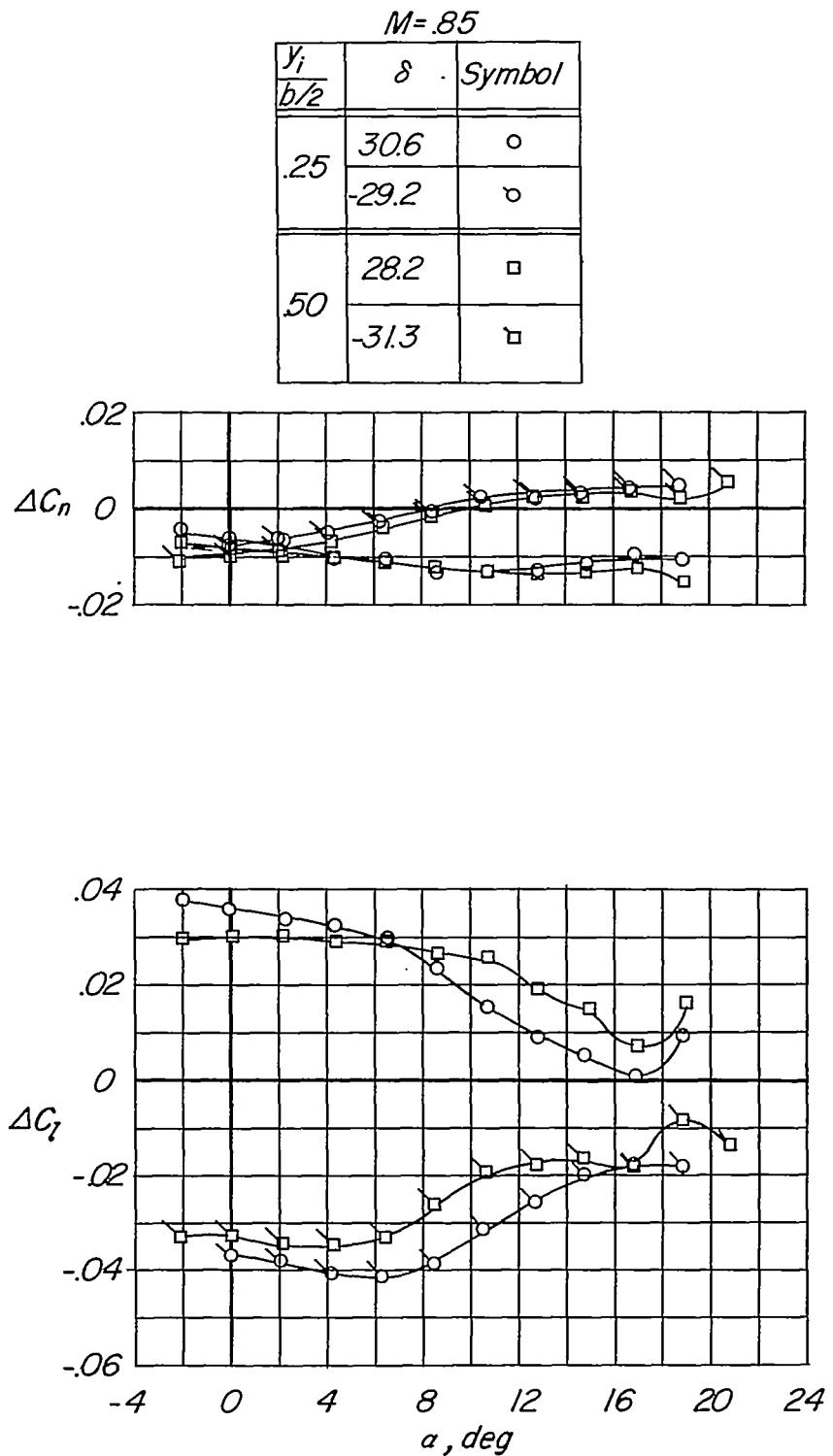


Figure 10.- Effect of aileron spanwise location on the variation of incremental rolling-moment and yawing-moment coefficients with angle of attack on the wing with the modified leading edge.