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RESEARCH MEMORANDUM

STATIC STABILITY AND CONTROL OF CANARD CONFIGURATIONS AT MACH NUMBERS FROM 0.70 TO 2.22 - LATERAL-DIRECTIONAL CHARACTERISTICS OF A TRIANGULAR WING AND CANARD

By Victor L. Peterson and Gene P. Menees

Ames Aeronautical Laboratory
Moffett Field, Calif.

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RESEARCH MEMORANDUM

STATIC STABILITY AND CONTROL OF CANARD CONFIGURATIONS AT MACH NUMBERS FROM 0.70 TO 2.22 - LATERAL-DIRECTIONAL CHARACTERISTICS OF A TRIANGULAR WING AND CANARD

By Victor L. Peterson and Gene P. Menees

SUMMARY

Results of an investigation of the static lateral-directional stability characteristics of a canard airplane configuration are presented without analysis for the Mach number range of 0.70 to 2.22. The configuration consisted of a triangular wing and triangular canard both having an aspect ratio of 2.0, a low aspect ratio vertical tail, and a fineness ratio 12.5 Sears-Haack body. The hinge line of the canard was in the extended wing chord plane, 1.21 wing mean aerodynamic chords ahead of the reference center of moments. The ratio of the area of the exposed canard panels to the total area of the wing was 6.9 percent. Data are presented for various combinations of the canard, body, wing, and vertical tail. These data were obtained at angles of attack from -6° to $+18^{\circ}$ at 0° and $+5^{\circ}$ sideslip angles and at angles of attack of approximately 0° and $+10^{\circ}$ at sideslip angles from -8° to $+10^{\circ}$. The canard was set at angles from 0° to $+20^{\circ}$.

INTRODUCTION

The possible gains that can be realized at supersonic speeds by the use of canards rather than tail aft controls include reduced trim drag and increased maneuverability. Because of the increased interest in these arrangements, an extensive research program aimed at determining the static longitudinal, lateral, and directional characteristics of a number of canard configurations has been undertaken at the NACA Laboratories. This report is one of a series pertaining to the program and presents without analysis the static lateral-directional stability characteristics from the Ames Laboratory for one complete configuration and its component parts. The configuration consisted of a triangular wing and triangular canard

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both having an aspect ratio of 2.0, a Sears-Haack body of fineness ratio 12.5, and a low aspect ratio vertical tail. The results for this same configuration showing the longitudinal stability and control characteristics have been presented in reference 1. Other phases of the Ames investigation are reported in references 2 through 4.

NOTATION

b wing span, ft

$\bar{c}$ mean aerodynamic chord of wing, ft

C_D drag coefficient, $\frac{\text{drag}}{qS}$

C_L lift coefficient, $\frac{\text{lift}}{qS}$

C_m pitching-moment coefficient, $\frac{\text{pitching moment}}{qS\bar{c}}$, referred to the projection of the $0.21\bar{c}$ point on the fuselage reference line

C_l rolling-moment coefficient, $\frac{\text{rolling moment}}{qSb}$

C_n yawing-moment coefficient, $\frac{\text{yawing moment}}{qSb}$

C_Y side-force coefficient, $\frac{\text{side force}}{qS}$

$\frac{\Delta C_l}{\beta}$ difference between rolling moment at 5° sideslip and 0° sideslip divided by 5°, per deg

$\frac{\Delta C_n}{\beta}$ difference between yawing moment at 5° sideslip and 0° sideslip divided by 5°, per deg

$\frac{\Delta C_Y}{\beta}$ difference between side force at 5° sideslip and 0° sideslip divided by 5°, per deg

M free-stream Mach number

q free-stream dynamic pressure, lb/sq ft

S wing area formed by extending the leading and trailing edges to the plane of symmetry, sq ft

α angle of attack of wing root chord, deg

β sideslip angle measured between relative wind and vertical plane of symmetry, deg

δ angle of deflection of the canard with respect to the extended wing chord plane, positive when trailing edge is down, deg

Configurations are denoted by the following letters used in combination:

B body

C canard

V vertical tail

W wing

APPARATUS AND MODEL

Test Facility

The experimental data were obtained in the Ames 6- by 6-foot supersonic wind tunnel which is a closed-circuit variable-pressure type with a Mach number range continuous from 0.70 to 2.22. A recent modification involved perforating the test-section floor and ceiling and adding a boundary-layer removal system to enable uniform flow to be maintained at transonic and low supersonic speeds. At the same time injector flaps were installed downstream of the test section to extend the upper Mach number limit by reducing the required compression ratio across the nozzle and by better matching the weight flow characteristics of the nozzle with those of the compressor.

Analysis of the results of an extensive survey of the modified wind-tunnel characteristics, although incomplete, is sufficiently complete to establish the validity of the results of the present investigation.

Description of Model and Balance

The sting-mounted model (fig. 1(a)) consisted of an aspect ratio 2.0 triangular wing, an aspect ratio 2.0 movable triangular canard, and a low

aspect ratio vertical tail all mounted on a fineness ratio 12.5 Sears-Haack body. A dimensional sketch of the model is shown in figure 1(b). The wing and vertical tail had NACA 0003-63 sections streamwise and the constant thickness canard, detailed in figure 1(c), had beveled leading and trailing edges. The canard, which was pivoted about the 0.35 canard mean aerodynamic chord, was mounted in the extended wing chord plane 1.21 wing mean aerodynamic chords ahead of the reference center of moments ($0.21\bar{c}$). The ratio of the area of the exposed canard panels to the total area of the wing was 6.9 percent and the ratio of the total areas was 12.9 percent. The wing, canard, and vertical tail were of solid steel construction to minimize aeroelastic effects. The surfaces were polished to give a smooth surface and further treated to prevent corrosion.

The fuselage was cut off as shown in figure 1(b) to accommodate the sting and the six-component strain-gage balance which measured forces and moments on the entire configuration. The canard, wing, and vertical tail were removable, enabling data to be taken which would permit an evaluation of the contribution of each of the component parts of the model and the interference between parts.

TEST AND PROCEDURES

Range of Test Variables

For convenience, table I is presented showing the complete range of variables for each of the configurations tested. Data were taken at Mach numbers of 0.70, 0.90, 1.00, 1.10, 1.30, 1.70, and 2.22 both through an angle-of-attack range with sideslip angle constant and through an angle-of-sideslip range with angle of attack constant. The test Reynolds number based on the wing mean aerodynamic chord was 1.84 million at Mach numbers of 1.00 and 1.10 and 3.68 million at all other Mach numbers. The smaller Reynolds number at transonic speeds was necessary because of model structural limitations.

At the relatively low Reynolds numbers at which most wind tunnels operate, extensive regions of laminar flow can exist on models at zero lift. At lifting conditions the transition points on the wing, canard, and vertical tail usually move forward, thus causing a change in friction drag with changing lift coefficient which is difficult to evaluate and, moreover, not necessarily representative of full scale. In order to induce transition at fixed locations on the component parts, a 0.010-inch-diameter wire was placed on the wing and 0.005-inch-diameter wires were affixed to the canard and vertical tail in the locations shown in figure 1(b). When the model was tested with the canard off, a 0.010-inch-diameter wire was located on the body 4 inches from the nose. The wire sizes were selected on the basis of the results of reference 5. Although there is no conclusive evidence as to the magnitude of the form

drag-coefficient increment contributed by the transition wires, previous studies have indicated this increment to be not more than 0.0010. All of the data presented herein are with transition fixed.

Reduction of Data

The data presented herein have been reduced to standard NACA coefficient form. The rolling-moment, side-force, yawing-moment, and pitching-moment coefficients were computed about the body axes and the lift and drag coefficients were referred to the wind axes. The yawing-moment and pitching-moment coefficients were referred to the 0.21 point of the wing mean aerodynamic chord. This location was chosen so that the minimum longitudinal static margin in the range of trim lift coefficients between 0 and 0.6 throughout the Mach number range investigated was $0.03\bar{c}$. Factors which affect the accuracy of the results are discussed in the following paragraphs.

Stream variations.- Surveys of the stream characteristics of the Ames 6- by 6-foot supersonic wind tunnel showed that, in the region of the test section, essentially no stream curvature existed along the tunnel center line in the vertical plane (pitch plane of the model) and that the axial static-pressure variations were usually less than ±1 percent of the dynamic pressure. This static-pressure variation resulted in negligible longitudinal-buoyancy corrections to the drag of this model. On the basis of these findings no corrections for stream curvature or static-pressure variation were made in the present investigation.

The results of these surveys also showed that a stream angle existed along the tunnel center line in the vertical plane. Similar results showing a stream angle of less than $\pm 0.3^{\circ}$ throughout the Mach number range were obtained from tests of the model mounted in a horizontal position on the tunnel center line ($\beta = 0^{\circ}$) and pitched in the vertical plane. No data were available either from stream surveys or model tests to determine the lateral deviations of the stream; however, in view of the small deviations from a uniform stream measured in the vertical plane, they also are believed to be small. Therefore, the data at 0° sideslip which were obtained with the model mounted in the horizontal position were corrected only for the stream angles in the pitch plane. Since the data of primary interest at these conditions, and particularly the drag, are sensitive to stream angle changes in the pitch plane, it was considered necessary to make these corrections. On the other hand, the lift, drag, and pitching-moment characteristics do not vary appreciably with small sideslip angles so that these coefficients would be only slightly affected if small sideslip angles did exist.

The data at a constant sideslip angle of 5° were obtained by mounting the model in a horizontal position on a sting bent off the tunnel center

line and again pitching in the vertical plane. The testing at variable sideslip angles where angle of attack was held constant was achieved by mounting the model in a wing vertical position on 0° and 10° bent stings, respectively. With the model mounted in these attitudes to obtain lateral-directional data, results were not available which would permit stream angle corrections in either the pitch or yaw planes to be applied to these data. However, the lateral-directional characteristics, which are of primary interest at these test conditions, would not be appreciably affected by the existence of small stream angles in either the pitch or yaw planes.

Support interference.- The effects of model support interference on the aerodynamic characteristics were considered to consist primarily of a change in the pressure at the base of the model. The drag data presented herein contain no base drag component since the base pressure was measured and the drag was adjusted to correspond to that in which the base pressure is equal to the free-stream static pressure; therefore, no corrections were made to take into account support interference.

Tunnel-wall interference.- The effectiveness of the perforations in the wind-tunnel test section in preventing choking and absorbing reflected disturbances at transonic and low supersonic speeds has been established experimentally. Unpublished data from the wind-tunnel calibration indicate that reliable data can be obtained throughout the Mach number range if certain restrictions are imposed on the model size and attitude. The configuration and methods of testing used in the present investigation conform to these restrictions so that the data at transonic and low supersonic speeds are reasonably free of interference effects. Thus, no corrections for wall interference have been made.

RESULTS

The results are presented in this report without analysis in order to expedite publication. All of the experimental results are tabulated in tables II through V. An index for these tabulated results is presented in table I. Certain of the data are plotted in figures 2 through 8 both at constant angles of sideslip and constant angles of attack.

The effect of configuration changes on the rolling-moment, side-force, and yawing-moment coefficients is shown in figure 2 at constant sideslip angles and in figures 3 and 4 at constant angles of attack. The effect of canard deflections on the lateral-directional characteristics is shown in figure 5 at constant sideslip angles and in figures 6 and 7 at constant angles of attack. A comparison of the lateral-directional data taken at constant sideslip angles and at constant angles of attack shows reasonably good agreement with a few exceptions. These exceptions can,

in general, be broken into several groups; one wherein separated flow might exist on the model and, therefore, the results could critically depend on the manner in which the attitude of the model was approached (e.g., see the rolling-moment results of figures 2(a) and 2(b) at $\alpha = 10.5^{\circ}$). Second, in certain model attitudes off the tunnel center line, for example $\beta = 5^{\circ}$, reflected waves from the tunnel side walls could strike the vertical tail at Mach numbers of 1.3 and below and cause discrepancies between the two sets of data. (See the results of figure 5(d).)

As noted previously the manner in which the two sets of data were taken positioned the model in different parts of the wind tunnel. Some of the small differences in the data might be attributable to the differences in the type of flow that exists in the various parts of the tunnel. No corrections were applied to the data off the tunnel center line to take into account stream irregularities.

The basic stability parameters, $\Delta C_l/\beta$, $\Delta C_Y/\beta$, and $\Delta C_n/\beta$ are summarized in figure 8 as a function of Mach number at several angles of attack. These results were obtained from the results taken at constant sideslip angles in order to obtain values for an angle of attack of 18°.

Ames Aeronautical Laboratory
National Advisory Committee for Aeronautics
Moffett Field, Calif., Dec. 18, 1957

REFERENCES

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2. Boyd, John W., and Peterson, Victor L.: Static Stability and Control of Canard Configurations at Mach Numbers From 0.70 to 2.22 - Triangular Wing and Canard on an Extended Body. NACA RM A57K14, 1958.

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5. Winter, K. G., Scott-Wilson, J. B., and Davies, F. V.: Methods of Determination and of Fixing Boundary-Layer Transition on Wind Tunnel Models at Supersonic Speeds. R.A.E. TN Aero. 2341, British, Sept. 1954.

TABLE I.- RANGE OF TEST VARIABLES FOR CONFIGURATIONS TESTED

Configuration	α, deg	δ, deg	β, deg	Tabulated data, table no.
BVWC	-6 to +18	0, 9.7, 19.5	0	II(a)
BVW				II(b)
BVC		0, 9.7, 19.5		II(c)
BV				II(d)
BVWC	-6 to +18	0, 9.5, 19.7	5	III(a)
BVW				III(b)
BWC		0, 9.7, 19.7		III(c)
BW				III(d)
BVC		0, 9.7, 19.7		III(e)
BC		0, 10.0, 19.7		III(f)
BV				III(g)
B	-8 to +10			III(h)
BVWC	0	0, 9.7, 19.7	-8 to +10	IV(a)
BVW				IV(b)
BWC		0, 9.7, 19.7		IV(c)
BW				IV(d)
BVC		0, 9.7, 19.7		IV(e)
BC		0, 9.7, 19.7		IV(f)
BV				IV(g)
BVWC	10.5	0, 9.7, 19.7	-8 to +10	V(a)
BVW				V(b)
BWC		0, 9.7, 19.7		V(c)
BW				V(d)
BVC	10.2	0, 9.7, 19.7		V(e)
BC		0, 9.7		V(f)
BV				V(g)

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° SIDESLIP

(a) BVWC

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
			δ = 0°				
0.70	-0.63	-0.314	.0420	.0275	.0003	-0.0004	.0015
	-0.42	-0.199	.0233	.0185	.0005	-0.0003	.0012
	-0.22	-0.101	.0139	.0111	.0006	-0.0002	.0010
	-0.08	-0.039	.0112	.0076	.0003	-0.0001	.0007
	-0.02	-0.013	.0108	.0053	.0002	-0.0001	.0005
	0.03	0.008	.0108	.0024	.0002	-0.0001	.0005
	0.18	0.074	.0119	-.0030	.0003	-0.0001	.0003
	0.37	0.166	.0191	-.0102	.0004	-0.0001	.0001
	0.58	0.279	.0348	-.0185	.0003	-0.0001	-.0001
	0.77	0.383	.0569	-.0248	.0004	0.0002	-.0004
	0.98	0.501	.0893	-.0310	.0004	0.0002	-.0006
	1.17	0.616	.1292	-.0370	.0004	0.0002	-.0012
	1.38	0.734	.1794	-.0417	.0004	0.0002	-.0011
	1.58	0.863	.2411	-.0461	.0004	0.0003	-.0011
	1.78	0.976	.3082	-.0482	.0006	0.0002	-.0017
0.90	-0.60	-0.331	.0433	.0422	.0004	-0.0003	.0015
	-0.39	-0.206	.0238	.0262	.0005	-0.0002	.0011
	-0.20	-0.099	.0139	.0140	.0007	-0.0002	.0009
	-0.05	-0.035	.0115	.0088	.0003	-0.0001	.0005
	0.00	-0.010	.0110	.0058	.0002	-0.0001	.0005
	0.05	0.012	.0106	.0021	.0002	-0.0001	.0005
	0.20	0.084	.0128	-.0058	.0003	-0.0001	.0003
	0.40	0.192	.0217	-.0184	.0003	-0.0001	.0001
	0.60	0.313	.0398	-.0332	.0003	-0.0001	-.0001
	0.80	0.431	.0665	-.0473	.0003	-0.0001	-.0003
	0.99	0.565	.1041	-.0666	.0003	0.0001	-.0006
	1.20	0.691	.1513	-.0854	.0004	0.0000	-.0010
	1.39	0.818	.2052	-.1025	.0002	0.0001	-.0008
	1.61	0.947	.2762	-.1257	.0005	0.0000	-.0013
	1.81	1.060	.3482	-.1380	.0006	0.0000	-.0015
1.00	-0.59	-0.359	.0527	.0696	.0002	-0.0004	.0014
	-0.38	-0.231	.0314	.0469	.0003	-0.0003	.0014
	-0.18	-0.113	.0210	.0250	.0003	-0.0002	.0012
	-0.03	-0.034	.0170	.0105	.0000	-0.0002	.0009
	0.02	-0.006	.0166	.0053	-.0002	-0.0001	.0007
	0.07	0.020	.0168	.0000	-.0001	-0.0002	.0007
	0.22	0.099	.0188	-.0149	.0001	-0.0002	.0005
	0.43	0.220	.0303	-.0388	.0000	-0.0002	.0004
	0.62	0.342	.0509	-.0615	.0001	-0.0002	.0003
	0.82	0.464	.0793	-.0820	.0001	-0.0003	.0003
	1.02	0.577	.1151	-.0987	.0002	-0.0003	-.0000
	1.22	0.694	.1616	-.1153	.0002	-0.0000	.0001
	1.42	0.808	.2150	-.1298	.0002	-0.0000	.0002
	1.63	0.917	.2763	-.1421	.0002	-0.0001	-.0000
	1.83	1.017	.3438	-.1533	.0004	0.0000	-.0009
1.10	-0.60	-0.342	.0518	.0715	.0006	-0.0001	.0004
	-0.40	-0.220	.0317	.0495	.0006	0.0000	.0002
	-0.20	-0.109	.0211	.0272	.0005	0.0000	.0000
	-0.05	-0.035	.0179	.0128	.0002	0.0001	-.0001
	0.01	-0.010	.0179	.0080	.0000	0.0001	-.0001
	0.05	0.013	.0177	.0027	.0000	0.0001	.0000
	0.21	0.094	.0204	-.0133	-.0001	0.0000	.0000
	0.41	0.204	.0295	-.0361	.0000	0.0001	.0001
	0.61	0.321	.0479	-.0607	.0001	-0.0001	.0001
	0.80	0.443	.0743	-.0829	.0000	-0.0001	-.0000
	1.00	0.558	.1089	-.0930	.0000	-0.0002	.0002
	1.22	0.658	.1518	-.1040	.0002	-0.0002	-.0003
	1.41	0.747	.1963	-.1134	.0002	-0.0003	-.0001
	1.62	0.846	.2566	-.1354	.0002	-0.0003	-.0001
	1.81	0.944	.3193	-.1474	.0005	0.0000	-.0010
1.30	-0.61	-0.292	.0448	.0528	.0003	-0.0001	.0008
	-0.40	-0.189	.0277	.0354	.0004	-0.0001	.0001
	-0.20	-0.091	.0184	.0178	.0004	0.0000	-.0001
	-0.04	-0.022	.0158	.0049	.0003	0.0000	-.0003
	0.01	-0.001	.0154	.0008	.0003	0.0002	-.0003
	0.20	0.085	.0177	-.0159	.0002	0.0001	-.0004
	0.40	0.182	.0261	-.0340	.0003	0.0001	-.0005
	0.60	0.277	.0410	-.0509	.0004	0.0001	-.0005
	0.79	0.374	.0632	-.0659	.0003	0.0001	-.0006
	1.00	0.472	.0934	-.0808	.0003	0.0000	-.0007
	1.20	0.569	.1303	-.0940	.0002	0.0000	-.0008
	1.41	0.661	.1729	-.1070	.0004	-0.0001	-.0011
	1.60	0.758	.2219	-.1202	.0000	-0.0001	-.0001
	1.81	0.843	.2803	-.1305	.0002	-0.0002	-.0005
1.70	-0.63	-0.241	.0399	.0388	.0001	0.0000	.0003
	-0.42	-0.159	.0253	.0273	.0001	0.0000	.0001
	-0.22	-0.088	.0175	.0149	.0002	0.0001	-.0001
	-0.06	-0.023	.0147	.0051	.0001	0.0001	-.0001
	-0.03	-0.010	.0146	.0028	.0000	0.0001	-.0002
	0.03	0.009	.0145	-.0006	.0000	0.0001	-.0001
	0.17	0.063	.0159	-.0099	.0000	0.0000	-.0001
	0.38	0.142	.0225	-.0219	.0000	0.0000	-.0002
	0.58	0.218	.0343	-.0330	-.0001	-0.0001	-.0001
	0.78	0.293	.0514	-.0427	.0000	-0.0001	-.0003
	0.98	0.368	.0741	-.0530	.0000	-0.0001	-.0003
	1.19	0.445	.1039	-.0625	.0000	-0.0001	-.0005
	1.39	0.513	.1360	-.0716	.0001	-0.0002	-.0008
	1.59	0.585	.1745	-.0811	-.0001	-0.0002	-.0004
	1.78	0.651	.2163	-.0892	.0001	-0.0003	-.0007

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
			δ = 0° - Concluded				
2.22	-0.57	-0.182	.0309	.0238	.0001	-0.0001	.0002
	-0.38	-0.117	.0205	.0158	.0000	-0.0001	-.0000
	-0.17	-0.050	.0141	.0071	.0000	0.0000	-.0002
	-0.02	-0.005	.0128	.0009	.0000	0.0000	-.0002
	0.07	0.026	.0129	-.0042	.0000	0.0000	-.0003
	0.23	0.075	.0152	-.0113	.0000	0.0001	-.0002
	0.43	0.137	.0218	-.0188	.0000	0.0001	-.0004
	0.62	0.196	.0328	-.0254	.0000	0.0001	-.0004
	0.83	0.257	.0481	-.0324	.0000	0.0000	-.0005
	1.03	0.316	.0685	-.0389	.0000	0.0000	-.0007
	1.22	0.372	.0907	-.0446	.0000	0.0000	-.0007
	1.42	0.429	.1186	-.0505	.0001	-0.0001	-.0008
	1.63	0.489	.1518	-.0566	.0001	-0.0001	-.0009
	1.83	0.544	.0188	-.0607	.0000	0.0000	.0000
			δ = 9.7°				
0.70	-0.63	-0.316	.0417	.0626	.0004	-0.0002	.0011
	-0.42	-0.199	.0236	.0508	.0005	-0.0001	.0007
	-0.22	-0.098	.0160	.0423	.0007	-0.0001	.0006
	-0.08	-0.037	.0148	.0395	.0001	0.0000	.0001
	-0.03	-0.016	.0143	.0382	.0001	0.0000	.0001
	0.02	0.007	.0153	.0363	.0001	0.0000	.0000
	0.18	0.070	.0175	.0316	.0004	0.0000	-.0001
	0.37	0.160	.0253	.0240	.0004	0.0001	-.0005
	0.57	0.273	.0442	.0199	.0004	0.0004	-.0008
	0.78	0.387	.0714	.0171	.0003	0.0003	-.0008
	0.98	0.499	.1046	.0095	.0004	0.0003	-.0010
	1.17	0.610	.1455	.0047	.0003	0.0003	-.0012
	1.58	0.842	.2538	-.0100	.0008	0.0000	-.0024
	1.78	0.961	.3281	-.0279	.0005	0.0002	-.0017
0.90	-0.40	-0.204	.0259	.0597	.0005	-0.0002	.0008
	-0.21	-0.104	.0165	.0471	.0006	-0.0001	.0006
	-0.05	-0.032	.0152	.0414	.0001	-0.0001	.0002
	0.00	-0.008	.0152	.0395	.0000	0.0000	.0001
	0.05	0.014	.0159	.0365	.0001	0.0000	.0001
	0.21	0.085	.0189	.0283	.0004	0.0000	-.0002
	0.40	0.188	.0261	.0130	.0004	0.0001	-.0004
	0.60	0.311	.0508	.0033	.0002	0.0003	-.0006
	0.79	0.427	.0793	-.0062	.0004	0.0002	-.0006
	1.00	0.536	.1186	-.0253	.0001	0.0002	-.0009
	1.21	0.650	.1665	-.0418	.0002	0.0002	-.0012
	1.41	0.810	.2227	-.0813	.0003	0.0001	-.0010
	1.60	0.924	.2834	-.1064	.0002	0.0001	-.0009
	1.81	1.044	.3582	-.1391	.0004	0.0001	-.0013
1.00	-0.59	-0.349	.0518	.1045	.0003	0.0001	.0007
	-0.38	-0.219	.0335	.0783	.0003	-0.0001	.0007
	-0.18	-0.101	.0232	.0530	.0003	-0.0001	.0007
	-0.04	-0.027	.0212	.0397	.0000	-0.0000	.0005
	0.02	-0.001	.0216	.0350	.0002	0.0000	.0002
	0.07	0.026	.0215	.0284	-.0002	0.0000	.0004
	0.22	0.105	.0260	.0115	-.0001	-0.0000	.0002
	0.41	0.209	.0353	-.0119	.0000	-0.0001	.0003
	0.61	0.330	.0582	-.0257	.0001	-0.0001	-.0000
	0.82	0.451	.0898	-.0422	.0002	0.0002	-.0002
	1.02	0.562	.1264	-.0595	.0002	0.0002	.0001
	1.22	0.680	.1736	-.0777	.0002	0.0001	-.0001
	1.42	0.785	.2261	-.0924	.0002	0.0001	-.0002
	1.62	0.886	.2853	-.1048	.0003	0.0000	-.0005
	1.82	0.981	.3493	-.1235	.0005	0.0000	-.0006
1.10	-0.61	-0.343	.0514	.1087	.0004	0.0000	.0005
	-0.40	-0.219	.0323	.0851	.0006	0.0002	-.0004
	-0.21	-0.111	.0238	.0623	.0006	0.0002	-.0004
	-0.06	-0.039	.0221	.0475	.0002	0.0002	-.0004
	-0.01	-0.002	.0217	.0390	.0004	0.0003	-.0007
	0.05	0.011	.0226	.0379	.0003	0.0003	-.0007
	0.20	0.081	.0255	.0234	.0003	0.0002	-.0006
	0.40	0.188	.0355	-.0009	.0003	0.0003	-.0007
	0.60	0.305	.0558	-.0197	.0002	0.0001	-.0006
	0.80	0.415	.0832	-.0353	.0004	0.0002	-.0010
	1.00	0.546	.1205	-.0642	.0003	-0.0001	-.0007
	1.20	0.659	.1656	-.0763	.0002	-0.0001	-.0005
	1.41	0.755	.2138	-.0844	.0004	0.0001	-.0003
	1.60	0.831	.2640	-.0887	.0005	0.0000	-.0003
	1.80	0.908	.3222	-.1060	.0006	-0.0001	-.0006
1.30	-0.60	-0.288	.0430	.0886	.0005	0.0001	-.0003
	-0.40	-0.187	.0279	.0695	.0005	0.0002	-.0004
	-0.20	-0.092	.0204	.0507	.0005	0.0002	-.0007
	-0.05	-0.028	.0191	.0386	.0003	0.0002	-.0008
	0.00	-0.007	.0193	.0352	.0002	0.0004	-.0008
	0.05	0.013	.0197	.0311	.0003	0.0004	-.0008
	0.20	0.077	.0227	.0171	.0001	0.0004	-.0010
	0.40	0.170	.0313	-.0038	.0003	0.0004	-.0010
	0.60	0.275	.0497	-.0185	.0003	0.0003	-.0010
	0.80	0.377	.0753	-.0331	.0004	0.0002	-.0011
	1.00	0.473	.1057	-.0482	.0003	0.0002	-.0012
	1.20	0.564	.1417	-.0623	.0005	0.0001	-.0013
	1.40	0.652	.1838	-.0770	.0003	0.0001	-.0012
	1.61	0.748	.2358	-.0926	.0002	-0.0001	-.0007
	1.81	0.834	.2917	-.1043	.0001	-0.0002	-.0001

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° SIDESLIP - Continued

(a) BVWC - Concluded

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				δ = 9.7° - Concluded			
1.70	-0.63	-0.238	.0387	.0724	.0002	0.001	-.0002
	-0.42	-0.154	.0256	.0588	.0003	0.002	-.0003
	-0.22	-0.078	.0193	.0452	.0003	0.001	-.0004
	-0.08	-0.031	.0180	.0368	.0003	0.002	-.0005
	-0.02	-0.009	.0178	.0334	.0002	0.002	-.0006
	0.03	0.008	.0183	.0300	.0001	0.002	-.0006
	0.18	0.061	.0207	.0200	.0001	0.003	-.0007
	0.38	0.136	.0278	.0059	.0001	0.003	-.0007
	0.58	0.220	.0420	-.0051	-.0001	0.002	-.0007
	0.78	0.294	.0604	-.0154	.0000	0.001	-.0008
	0.98	0.371	.0844	-.0266	.0000	0.001	-.0009
	1.19	0.444	.1139	-.0371	-.0001	0.000	-.0008
	1.38	0.513	.1470	-.0481	-.0002	0.000	-.0009
	1.58	0.581	.1859	-.0571	.0000	0.000	-.0011
	1.77	0.640	.2250	-.0657	.0002	-0.001	-.0013
2.22	-0.58	-0.173	.0303	.0523	.0000	0.001	-.0003
	-0.37	-0.113	.0213	.0442	.0000	0.001	-.0003
	-0.18	-0.049	.0168	.0348	-.0001	0.001	-.0006
	-0.03	-0.004	.0158	.0277	.0000	0.002	-.0006
	0.03	0.007	.0164	.0258	.0000	0.002	-.0006
	0.07	0.025	.0166	.0232	-.0001	0.002	-.0007
	0.42	0.132	.0264	.0052	-.0001	0.002	-.0007
	0.62	0.198	.0389	-.0017	-.0001	0.001	-.0008
	0.82	0.255	.0548	-.0088	-.0001	0.001	-.0008
	1.02	0.313	.0748	-.0154	-.0002	0.000	-.0008
	1.22	0.378	.0993	-.0224	-.0001	0.000	-.0009
	1.42	0.421	.1249	-.0280	-.0001	0.000	-.0009
	1.63	0.477	.1578	-.0343	-.0001	-0.001	-.0009
	1.83	0.532	.1947	-.0386	.0000	-0.001	-.0009
				δ = 19.5°			
1.00	-0.58	-0.343	.0600	.1413	.0002	-0.003	.0012
	-0.19	-0.101	.0351	.0899	.0002	-0.003	.0010
	0.02	0.003	.0354	.0678	-.0002	-0.001	.0004
	0.23	0.104	.0408	.0434	.0000	-0.001	.0000
	0.62	0.325	.0732	-.0069	.0003	-0.002	-.0003
	1.02	0.566	.1456	-.0387	.0001	0.001	-.0004
	1.43	0.783	.2440	-.0888	.0003	-0.002	-.0003
	1.85	0.997	.3762	-.1295	.0005	-0.003	-.0011
1.10	-0.61	-0.331	.0600	.1374	.0005	-0.001	.0006
	-0.20	-0.111	.0356	.0930	.0004	-0.002	.0003
	-0.00	-0.008	.0360	.0697	.0000	-0.001	-.0002
	0.20	0.084	.0408	.0465	.0001	-0.001	-.0003
	0.60	0.293	.0701	.0000	.0002	0.002	-.0005
	1.01	0.539	.1386	-.0412	.0005	0.002	-.0008
	1.42	0.774	.2367	-.0883	.0004	0.000	-.0013
	1.80	0.915	.3385	-.1051	.0007	-0.001	-.0011
1.30	-0.60	-0.286	.0515	.1229	.0006	0.001	-.0001
	-0.19	-0.087	.0311	.0800	.0006	0.002	-.0006
	-0.01	-0.011	.0313	.0631	.0002	0.002	-.0007
	0.21	0.073	.0360	.0423	.0001	0.002	-.0011
	0.60	0.263	.0625	.0017	.0003	0.002	-.0010
	1.01	0.469	.1218	-.0314	.0005	0.000	-.0016
	1.41	0.651	.2015	-.0658	.0000	0.000	-.0018
1.70	-0.63	-0.232	.0458	.1020	.0002	0.000	-.0001
	-0.22	-0.080	.0285	.0719	.0004	0.001	-.0003
	-0.02	-0.009	.0283	.0569	.0002	0.000	-.0004
	0.18	0.056	.0316	.0411	.0001	0.001	-.0007
	0.58	0.217	.0544	.0136	-.0001	0.000	-.0009
	0.98	0.368	.0982	-.0127	.0001	0.000	-.0010
	1.39	0.512	.1629	-.0375	.0001	-0.001	-.0013
	1.78	0.644	.2439	-.0578	.0004	-0.002	-.0016
2.22	-0.58	-0.161	.0357	.0765	.0000	-0.001	.0001
	-0.18	-0.043	.0250	.0566	.0000	-0.001	-.0002
	0.03	0.016	.0254	.0454	-.0001	0.000	-.0004
	0.23	0.069	.0288	.0335	-.0001	0.000	-.0006
	0.63	0.197	.0499	.0144	.0000	0.000	-.0007
	1.05	0.319	.0896	-.0035	-.0001	-0.001	-.0007
	1.42	0.422	.1397	-.0160	-.0001	-0.002	-.0008
	1.84	0.532	.2120	-.0255	.0000	-0.003	-.0009

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° SIDESLIP - Continued

(b) BVW

M	α_r, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-0.64	-0.311	.0404	.0602	.0007	-0.002	.0010
	-0.42	-0.196	.0214	.0386	.0008	-0.001	.0008
	-0.22	-0.101	.0130	.0204	.0008	-0.001	.0006
	-0.07	-0.039	.0107	.0106	.0003	0.000	.0002
	-0.02	-0.018	.0104	.0070	.0002	0.000	.0001
	0.04	0.004	.0103	.0037	.0002	0.000	.0002
	0.19	0.066	.0113	-.0078	.0002	0.000	.0001
	0.39	0.164	.0183	-.0260	.0002	0.001	-.0001
	0.58	0.260	.0317	-.0439	.0002	0.000	.0000
	0.78	0.368	.0538	-.0637	.0002	0.000	.0001
	0.98	0.478	.0844	-.0824	.0002	0.000	-.0001
	1.17	0.588	.1210	-.1019	.0003	0.000	-.0001
	1.38	0.702	.1681	-.1229	.0002	0.000	-.0003
	1.58	0.808	.2225	-.1396	.0002	0.000	-.0002
	1.78	0.919	.2862	-.1572	.0003	-0.001	-.0001
0.90	-0.60	-0.324	.0411	.0729	.0008	-0.002	.0010
	-0.39	-0.202	.0221	.0447	.0009	-0.001	.0006
	-0.19	-0.098	.0125	.0225	.0006	0.000	.0003
	-0.06	-0.037	.0110	.0113	.0003	0.001	.0000
	0.00	-0.012	.0107	.0070	.0001	0.001	-.0002
	0.06	0.010	.0107	.0023	.0001	0.001	-.0001
	0.20	0.077	.0120	-.0114	.0002	0.001	-.0002
	0.40	0.180	.0200	-.0339	.0002	0.000	-.0001
	0.60	0.291	.0370	-.0584	.0001	-0.001	.0001
	0.79	0.410	.0620	-.0864	.0001	0.000	-.0001
	1.00	0.540	.0992	-.1187	.0000	0.000	-.0001
	1.20	0.661	.1434	-.1490	.0003	0.002	-.0001
	1.40	0.789	.1983	-.1867	.0004	0.000	.0001
	1.60	0.913	.2627	-.2243	.0003	0.000	.0002
1.00	-0.58	-0.347	.0483	.1020	.0005	-0.002	.0008
	-0.38	-0.222	.0295	.0670	.0004	-0.001	.0006
	-0.18	-0.109	.0174	.0348	.0005	-0.000	.0005
	-0.03	-0.031	.0149	.0134	.0000	-0.000	.0002
	0.02	-0.007	.0154	.0054	-.0001	0.001	.0000
	0.07	0.024	.0155	-.0022	-.0001	0.000	.0000
	0.22	0.104	.0178	-.0242	.0001	0.000	-.0000
	0.42	0.222	.0288	-.0563	.0001	0.000	.0001
	0.63	0.345	.0490	-.0935	.0001	0.000	.0002
	0.82	0.459	.0768	-.1268	.0002	-0.001	.0003
	1.03	0.580	.1153	-.1610	.0002	-0.002	.0004
	1.22	0.686	.1585	-.1908	.0001	-0.003	.0007
	1.42	0.792	.2089	-.2211	.0001	-0.002	.0007
	1.63	0.897	.2704	-.2517	.0000	-0.003	.0011
	1.82	0.990	.3326	-.2781	.0001	-0.004	.0012
1.10	-0.60	-0.334	.0484	.1030	.0006	0.000	-.0001
	-0.40	-0.215	.0294	.0694	.0007	0.001	-.0004
	-0.20	-0.106	.0194	.0363	.0008	0.002	-.0003
	-0.04	-0.027	.0162	.0145	.0003	0.002	-.0006
	0.01	-0.004	.0160	.0078	.0002	0.002	-.0007
	0.06	0.024	.0163	-.0011	.0000	0.002	-.0007
	0.21	0.102	.0186	-.0236	-.0001	0.001	-.0004
	0.41	0.214	.0279	-.0588	-.0001	0.001	-.0002
	0.61	0.330	.0469	-.0932	.0001	0.001	-.0003
	0.81	0.446	.0723	-.1259	.0000	0.000	.0002
	1.01	0.544	.1043	-.1484	.0000	-0.000	.0003
	1.21	0.636	.1449	-.1774	.0002	-0.001	.0005
	1.41	0.739	.1934	-.2111	.0002	-0.002	.0005
	1.61	0.838	.2506	-.2401	.0003	-0.001	.0006
	1.81	0.924	.3105	-.2641	.0006	-0.001	-.0001

M	α_r, deg	C_L	C_D	C_m	C_l	C_Y	C_n
1.30	-0.60	-0.291	.0418	.0873	.0006	0.001	-.0003
	-0.40	-0.189	.0254	.0569	.0007	0.001	-.0006
	-0.20	-0.093	.0169	.0280	.0006	0.003	-.0007
	-0.05	-0.026	.0145	.0087	.0004	0.004	-.0008
	-0.00	-0.005	.0139	.0036	.0003	0.003	-.0008
	0.06	0.019	.0145	-.0038	.0002	0.004	-.0008
	0.21	0.087	.0167	-.0233	.0002	0.003	-.0007
	0.40	0.181	.0246	-.0507	.0003	0.003	-.0006
	0.60	0.278	.0399	-.0793	.0002	0.003	-.0005
	0.80	0.374	.0620	-.1067	.0002	0.003	-.0003
	1.00	0.470	.0910	-.1347	.0001	0.002	-.0004
	1.20	0.562	.1264	-.1613	.0001	0.001	-.0002
	1.41	0.650	.1677	-.1869	.0001	0.000	.0001
	1.61	0.735	.2146	-.2112	.0002	0.000	.0003
	1.81	0.809	.2660	-.2280	.0004	-0.001	.0003
1.70	-0.63	-0.239	.0376	.0695	.0003	0.001	-.0003
	-0.41	-0.160	.0238	.0470	.0004	0.002	-.0003
	-0.22	-0.084	.0163	.0251	.0004	0.002	-.0004
	-0.07	-0.031	.0140	.0098	.0002	0.002	-.0005
	-0.01	-0.010	.0136	.0044	.0001	0.002	-.0005
	0.04	0.012	.0137	-.0019	.0001	0.002	-.0004
	0.18	0.068	.0152	-.0169	.0000	0.002	-.0004
	0.38	0.143	.0215	-.0386	.0000	0.001	-.0002
	0.58	0.216	.0327	-.0598	.0001	0.001	-.0001
	0.78	0.290	.0493	-.0796	.0000	0.001	-.0001
	0.98	0.362	.0721	-.1000	.0001	0.000	-.0000
	1.18	0.430	.0988	-.1188	.0001	0.000	.0000
	1.39	0.499	.1299	-.1372	.0001	0.000	.0000
	1.59	0.565	.1666	-.1542	.0001	-0.001	.0002
	1.79	0.627	.2063	-.1678	.0001	-0.001	.0003
2.22	-0.59	-0.185	.0308	.0495	.0000	0.000	-.0001
	-0.36	-0.114	.0191	.0313	.0000	0.000	-.0002
	-0.17	-0.057	.0139	.0165	.0001	0.001	-.0002
	-0.03	-0.013	.0124	.0047	.0000	0.001	-.0003
	0.02	0.003	.0123	.0003	-.0001	0.001	-.0003
	0.08	0.022	.0126	-.0040	-.0001	0.001	-.0002
	0.22	0.068	.0145	-.0167	-.0001	0.001	-.0002
	0.42	0.129	.0207	-.0329	-.0001	0.000	-.0002
	0.62	0.187	.0309	-.0480	-.0001	0.000	-.0001
	0.83	0.244	.0453	-.0625	.0000	-0.001	-.0001
	1.02	0.300	.0629	-.0761	.0000	-0.001	.0001
	1.23	0.357	.0862	-.0899	.0000	-0.001	.0000
	1.42	0.409	.1115	-.1009	.0000	-0.001	-.0000
	1.62	0.465	.1486	-.1116	.0000	-0.002	.0000
	1.83	0.519	.1777	-.1223	.0001	-0.002	-.0000

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° SIDESLIP - Continued

(c) BVC

M	α_w, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 0^\circ$			
0.70	-0.04	-0.038	.0105	-.0487	-.0000	0.001	.0007
	-.043	-.0084	.0084	-.0333	.0000	0.002	.0005
	-.082	-.0013	.0069	-.0167	.0001	0.002	.0001
	-.007	-.0002	.0065	-.0058	.0001	0.002	-.0000
	-.002	0.001	.0059	-.0019	.0001	0.002	-.0001
	.004	0.002	.0059	.0006	-.0001	0.002	-.0001
	.017	0.010	.0063	.0102	.0000	0.002	-.0003
	.039	0.022	.0076	.0264	.0000	0.002	-.0004
	.058	0.035	.0102	.0483	.0001	0.002	-.0006
	.078	0.048	.0181	.0591	.0001	0.002	-.0008
	.098	0.064	.0164	.0776	.0002	0.004	-.0009
	.118	0.078	.0281	.0963	.0003	0.004	-.0011
	.138	0.093	.0278	.1142	.0003	0.004	-.0018
	.158	0.107	.0389	.1387	.0004	0.006	-.0018
	.178	0.185	.0446	.1531	.0005	0.005	-.0019
0.90	-.060	-.0039	.0107	-.0501	.0000	0.000	.0005
	-.040	-.0028	.0082	-.0326	.0001	0.001	.0002
	-.019	-.0010	.0068	-.0158	-.0000	0.002	-.0000
	-.005	-.0002	.0063	-.0045	-.0000	0.002	-.0002
	.002	0.001	.0062	-.0006	.0000	0.002	-.0002
	.005	0.002	.0063	.0012	.0000	0.002	-.0002
	.020	0.011	.0066	.0117	.0001	0.002	-.0004
	.041	0.024	.0074	.0283	.0001	0.001	-.0005
	.060	0.038	.0108	.0457	.0001	0.003	-.0006
	.080	0.053	.0138	.0633	.0002	0.003	-.0008
	.101	0.071	.0180	.0830	.0002	0.004	-.0009
	.181	0.066	.0240	.1017	.0003	0.004	-.0012
	.141	0.100	.0308	.1191	.0004	0.004	-.0015
	.161	0.116	.0386	.1383	.0004	0.004	-.0016
	.181	0.132	.0480	.1554	.0006	0.005	-.0020
1.00	-.058	-.0040	.0137	-.0494	.0002	0.002	.0001
	-.038	-.0025	.0108	-.0323	.0001	0.003	-.0002
	-.018	-.0008	.0079	-.0169	.0001	0.002	-.0001
	-.003	0.000	.0076	-.0059	.0001	0.003	-.0001
	.002	0.003	.0080	-.0017	.0000	0.003	-.0002
	.007	-.0000	.0093	.0006	.0000	0.003	-.0003
	.022	0.006	.0091	.0123	.0000	0.003	-.0003
	.042	0.020	.0110	.0286	.0001	0.003	-.0004
	.063	0.032	.0181	.0464	.0001	0.003	-.0004
	.082	0.046	.0159	.0689	.0000	0.003	-.0008
	.102	0.062	.0177	.0825	.0001	0.002	-.0011
	.123	0.076	.0233	.1006	.0002	0.006	-.0013
	.142	0.090	.0303	.1163	.0003	0.008	-.0015
	.163	0.104	.0383	.1362	.0005	0.005	-.0019
	.183	0.118	.0455	.1537	.0007	0.006	-.0024
1.10	-.060	-.0041	.0158	-.0466	.0000	0.001	-.0001
	-.039	-.0025	.0142	-.0310	-.0001	0.001	-.0001
	-.020	-.0014	.0128	-.0143	.0001	0.002	-.0003
	-.005	-.0004	.0118	-.0035	.0000	0.002	-.0004
	.001	-.0001	.0120	-.0001	.0000	0.001	-.0005
	.005	-.0003	.0117	.0017	.0000	0.002	-.0004
	.020	0.004	.0118	.0130	.0000	0.002	-.0006
	.041	0.016	.0123	.0284	.0001	0.002	-.0008
	.061	0.032	.0142	.0443	.0001	0.002	-.0008
	.081	0.046	.0174	.0602	.0002	0.001	-.0010
	.101	0.059	.0227	.0778	.0002	0.005	-.0012
	.122	0.074	.0282	.0949	.0003	0.006	-.0015
	.140	0.086	.0333	.1104	.0003	0.005	-.0017
	.161	0.099	.0417	.1279	.0005	0.005	-.0018
	.181	0.110	.0506	.1462	.0007	0.005	-.0025

M	α_w, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 0^\circ$ - Concluded			
1.30	-.060	-.0038	.0138	-.0473	.0008	0.002	-.0004
	-.040	-.0028	.0114	-.0319	.0008	0.002	-.0006
	-.019	-.0011	.0099	-.0158	.0008	0.002	-.0007
	-.005	-.0002	.0094	-.0053	.0002	0.003	-.0008
	0.00	-.0000	.0094	-.0024	.0008	0.003	-.0008
	0.05	0.001	.0093	.0009	.0008	0.005	-.0009
	0.20	0.010	.0095	.0104	.0008	0.004	-.0009
	0.41	0.022	.0108	.0285	.0008	0.004	-.0010
	0.60	0.035	.0125	.0405	.0003	0.004	-.0011
	0.81	0.049	.0157	.0568	.0003	0.003	-.0011
	1.01	0.063	.0200	.0730	.0004	0.003	-.0013
	1.21	0.076	.0257	.0881	.0004	0.003	-.0014
	1.41	0.089	.0320	.1028	.0004	0.004	-.0014
	1.61	0.103	.0395	.1157	.0004	0.003	-.0013
	1.81	0.122	.0497	.1313	.0005	0.003	-.0016
1.70	-.062	-.0037	.0140	-.0418	.0000	0.000	-.0001
	-.041	-.0025	.0114	-.0275	.0000	0.000	-.0002
	-.021	-.0013	.0098	-.0141	.0000	0.001	-.0003
	-.007	-.0005	.0094	-.0040	.0000	0.001	-.0003
	-.002	-.0002	.0093	-.0012	.0000	0.001	-.0003
	0.04	-.0001	.0093	.0016	.0000	0.001	-.0004
	0.17	0.007	.0093	.0104	.0000	0.001	-.0004
	0.38	0.019	.0105	.0241	.0001	0.002	-.0005
	0.58	0.030	.0121	.0383	.0001	0.002	-.0006
	0.79	0.043	.0150	.0524	.0001	0.002	-.0007
	0.99	0.056	.0191	.0661	.0002	0.002	-.0009
	1.18	0.067	.0240	.0783	.0002	0.002	-.0011
	1.38	0.083	.0306	.0901	.0003	0.003	-.0011
	1.59	0.100	.0391	.1006	.0005	0.002	-.0017
	1.79	0.120	.0495	.1098	.0005	0.002	-.0018
2.22	-.058	-.0035	.0120	-.0340	-.0000	0.000	.0002
	-.037	-.0023	.0099	-.0217	-.0000	-.0000	.0002
	-.017	-.0012	.0083	-.0100	.0000	0.000	-.0000
	-.002	-.0004	.0080	-.0021	-.0000	0.001	-.0001
	0.03	-.0003	.0078	.0012	-.0000	0.001	-.0001
	0.07	-.0002	.0078	.0033	-.0000	0.001	-.0002
	0.22	0.005	.0082	.0120	.0000	0.002	-.0003
	0.43	0.017	.0098	.0247	.0000	0.002	-.0004
	0.63	0.028	.0111	.0361	.0001	0.002	-.0005
	0.83	0.040	.0137	.0471	-.0000	0.002	-.0006
	1.02	0.051	.0160	.0581	.0000	0.002	-.0007
	1.22	0.068	.0239	.0668	.0001	0.002	-.0007
	1.43	0.085	.0316	.0762	.0002	0.001	-.0009
	1.63	0.106	.0413	.0862	.0002	0.002	-.0009
	1.83	0.127	.0533	.0962	.0003	0.002	-.0013

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° SIDESLIP - Continued

(c) BVC - Concluded

M	α_w deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 9.7°$			
0.70	-0.64	-0.005	.0070	-.0104	-.0000	-0.001	.0005
	-0.21	0.018	.0085	.0210	.0000	-0.001	.0001
	-0.02	0.031	.0108	.0367	.0001	-0.002	-.0001
	0.19	0.044	.0138	.0534	.0001	0.001	-.0003
	0.57	0.074	.0830	.0847	.0002	0.001	-.0010
	0.98	0.107	.0368	.1201	.0004	0.001	-.0017
	1.39	0.135	.0548	.1563	.0005	0.002	-.0025
	1.79	0.150	.0697	.1703	.0008	-0.002	-.0028
0.90	-0.60	-0.005	.0071	-.0085	-.0000	-0.000	.0002
	-0.19	0.022	.0091	.0228	.0001	-0.001	-.0002
	0.00	0.033	.0113	.0379	.0001	0.001	-.0004
	0.21	0.046	.0147	.0552	.0001	0.000	-.0006
	0.61	0.078	.0847	.0885	.0002	0.000	-.0012
	1.01	0.108	.0382	.1226	.0004	0.001	-.0017
	1.41	0.128	.0528	.1477	.0000	-0.001	-.0028
	1.81	0.142	.0662	.1588	.0002	-0.001	-.0030
1.00	-0.58	-0.005	.0087	-.0080	.0002	0.002	-.0006
	-0.18	0.020	.0109	.0289	.0002	0.002	-.0008
	0.03	0.035	.0123	.0392	.0002	0.000	-.0009
	0.22	0.045	.0156	.0544	.0002	-0.000	-.0011
	0.63	0.075	.0253	.0869	.0003	0.003	-.0016
	1.02	0.106	.0403	.1214	.0005	0.003	-.0023
	1.43	0.133	.0583	.1528	.0005	0.002	-.0025
	1.83	0.165	.0771	.1816	.0004	0.002	-.0028
1.10	-0.60	-0.008	.0135	-.0065	.0001	0.003	-.0002
	-0.19	0.018	.0138	.0220	.0002	0.004	-.0005
	0.01	0.031	.0164	.0385	.0008	0.008	-.0006
	0.20	0.042	.0196	.0526	.0003	0.002	-.0009
	0.61	0.072	.0293	.0818	.0003	0.003	-.0015
	1.00	0.101	.0429	.1130	.0004	0.002	-.0020
	1.41	0.123	.0585	.1449	.0005	0.002	-.0026
	1.81	0.148	.0795	.1783	.0004	0.001	-.0022
1.30	-0.61	-0.008	.0110	-.0085	.0002	0.002	-.0005
	-0.19	0.017	.0119	.0201	.0003	0.002	-.0009
	0.00	0.028	.0139	.0344	.0003	0.001	-.0010
	0.20	0.041	.0166	.0480	.0003	0.001	-.0011
	0.60	0.067	.0253	.0748	.0003	0.001	-.0014
	1.00	0.091	.0367	.1044	.0005	0.001	-.0018
	1.41	0.115	.0580	.1310	.0005	0.001	-.0019
	1.81	0.145	.0731	.1554	.0005	0.000	-.0021
1.70	-0.62	-0.010	.0111	-.0072	.0000	0.001	-.0002
	-0.21	0.012	.0116	.0184	.0000	0.001	-.0004
	-0.02	0.022	.0131	.0308	.0001	-0.000	-.0004
	0.19	0.033	.0156	.0430	.0001	-0.000	-.0004
	0.59	0.055	.0225	.0656	.0001	-0.000	-.0008
	0.99	0.078	.0329	.0906	.0002	-0.000	-.0013
	1.38	0.099	.0461	.1118	.0004	-0.000	-.0017
	1.79	0.134	.0674	.1303	.0008	-0.001	-.0025
2.22	-0.57	-0.010	.0102	-.0032	-.0001	0.000	.0000
	-0.17	0.012	.0100	.0187	-.0001	-0.000	-.0001
	0.03	0.021	.0117	.0298	-.0001	0.000	-.0003
	0.22	0.029	.0136	.0397	-.0000	0.000	-.0004
	0.63	0.049	.0200	.0594	.0001	-0.000	-.0008
	1.03	0.070	.0296	.0787	.0001	-0.000	-.0009
	1.43	0.100	.0438	.0945	.0002	-0.000	-.0012
	1.82	0.140	.0674	.1145	.0002	-0.000	-.0013

M	α_w deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 19.5°$			
1.00	-0.58	0.038	.0146	.0284	.0003	0.003	-.0011
	-0.18	0.058	.0221	.0541	.0003	0.002	-.0014
	0.03	0.070	.0277	.0683	.0003	0.005	-.0016
	0.21	0.078	.0318	.0833	.0003	0.003	-.0014
	0.62	0.105	.0456	.1119	.0004	0.001	-.0018
	1.02	0.128	.0611	.1377	.0005	0.002	-.0024
	1.41	0.140	.0759	.1604	.0003	0.000	-.0018
	1.83	0.155	.0902	.1809	.0003	-0.003	-.0022
1.10	-0.60	0.029	.0194	.0258	.0002	0.003	-.0006
	-0.19	0.053	.0258	.0505	.0001	0.003	-.0011
	-0.01	0.063	.0314	.0648	.0002	0.003	-.0014
	0.19	0.077	.0367	.0774	.0003	0.002	-.0012
	0.60	0.099	.0501	.1045	.0002	0.002	-.0013
	1.00	0.115	.0636	.1303	.0004	0.001	-.0021
	1.41	0.138	.0799	.1536	-.0002	-0.001	-.0004
	1.81	0.148	.0937	.1703	.0001	-0.003	-.0017
1.30	-0.60	0.023	.0166	.0220	.0002	0.002	-.0009
	-0.20	0.045	.0222	.0465	.0002	0.001	-.0011
	0.01	0.056	.0265	.0596	.0003	0.001	-.0012
	0.20	0.066	.0312	.0723	.0003	0.002	-.0014
	0.60	0.087	.0426	.0967	.0003	0.001	-.0014
	0.99	0.105	.0554	.1199	.0004	0.001	-.0016
	1.40	0.125	.0718	.1432	.0005	-0.000	-.0020
	1.82	0.140	.0883	.1610	.0004	-0.002	-.0018
1.70	-0.62	0.015	.0162	.0182	-.0000	0.001	-.0004
	-0.22	0.036	.0208	.0392	.0001	0.001	-.0007
	-0.02	0.045	.0235	.0496	.0001	-0.000	-.0006
	0.18	0.055	.0276	.0619	.0001	-0.000	-.0007
	0.58	0.074	.0368	.0819	.0002	-0.000	-.0009
	0.98	0.088	.0484	.1017	.0001	-0.001	-.0008
	1.38	0.108	.0630	.1214	.0004	-0.001	-.0017
	1.79	0.134	.0848	.1434	.0004	-0.001	-.0016
2.22	-0.57	0.011	.0150	.0177	-.0001	0.000	-.0008
	-0.17	0.031	.0177	.0356	-.0001	-0.001	-.0003
	0.03	0.040	.0208	.0454	-.0000	-0.000	-.0003
	0.22	0.045	.0240	.0539	-.0000	-0.000	-.0004
	0.63	0.061	.0328	.0721	.0001	-0.001	-.0007
	1.03	0.079	.0433	.0895	.0001	-0.000	-.0008
	1.43	0.103	.0589	.1084	.0002	-0.001	-.0012
	1.84	0.142	.0840	.1299	.0003	-0.003	-.0016

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT
0° SIDESLIP - Concluded
(d) BV

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-.063	-.0007	.0068	-.0127	.0000	.0000	.0005
	-.043	-.0003	.0064	-.0028	.0001	.0000	.0003
	-.022	-.0002	.0060	-.0051	.0001	.0001	.0002
	-.007	.0000	.0057	-.0018	.0001	.0000	.0000
	-.002	.0001	.0057	-.0008	.0001	.0001	.0000
	.003	.0002	.0055	.0009	.0001	.0001	.0000
	.017	.0003	.0055	.0039	.0001	.0001	-.0000
	.038	.0004	.0057	.0082	.0001	.0001	-.0003
	.057	.0007	.0056	.0128	.0001	.0002	-.0004
	.078	.0011	.0072	.0158	.0001	.0002	-.0005
	.098	.0015	.0076	.0192	.0001	.0002	-.0007
	.118	.0021	.0083	.0231	.0002	.0002	-.0008
	.138	.0029	.0102	.0269	.0002	.0003	-.0009
	.158	.0036	.0126	.0310	.0001	.0004	-.0011
	.179	.0043	.0159	.0363	.0000	.0004	-.0008
0.90	-.060	-.0008	.0069	-.0129	-.0000	.0000	.0003
	-.039	-.0004	.0062	-.0069	.0000	.0001	.0001
	-.019	-.0000	.0060	-.0050	.0001	.0001	-.0000
	-.005	.0001	.0057	-.0019	.0000	.0001	-.0001
	.001	.0001	.0053	-.0003	.0000	.0001	-.0001
	.005	.0002	.0054	.0005	.0001	.0001	-.0002
	.020	.0003	.0053	.0039	.0000	.0001	-.0002
	.041	.0008	.0054	.0086	.0001	.0001	-.0003
	.060	.0009	.0058	.0120	.0001	.0002	-.0005
	.080	.0012	.0065	.0160	.0001	.0002	-.0006
	.101	.0019	.0078	.0194	.0001	.0003	-.0007
	.121	.0024	.0091	.0235	.0001	.0002	-.0008
	.141	.0031	.0117	.0276	.0002	.0003	-.0008
	.161	.0038	.0140	.0321	.0001	.0003	-.0010
	.181	.0048	.0176	.0373	-.0000	.0003	-.0007
1.00	-.058	-.0008	.0095	-.0134	.0001	.0000	.0001
	-.038	-.0007	.0089	-.0089	.0001	.0001	-.0001
	-.018	-.0007	.0086	-.0044	.0001	.0001	-.0001
	-.003	-.0003	.0073	-.0015	.0000	-.0000	-.0002
	.002	-.0001	.0075	-.0008	.0000	.0001	-.0001
	.008	-.0001	.0069	.0018	.0001	.0000	-.0002
	.022	-.0000	.0070	.0033	.0000	.0001	-.0002
	.043	.0003	.0073	.0095	.0001	.0001	-.0004
	.062	.0005	.0074	.0137	.0001	.0002	-.0006
	.082	.0010	.0089	.0176	.0001	.0002	-.0006
	.102	.0015	.0097	.0213	.0001	.0003	-.0008
	.123	.0021	.0092	.0255	.0001	.0005	-.0007
	.142	.0028	.0120	.0292	.0002	.0004	-.0008
	.163	.0036	.0154	.0354	.0001	.0001	-.0009
	.183	.0047	.0191	.0400	.0002	.0006	-.0011
1.10	-.061	-.0013	.0138	-.0116	.0000	-.0001	.0003
	-.039	-.0010	.0122	-.0077	.0001	.0000	-.0001
	-.019	-.0006	.0109	-.0036	.0001	.0000	-.0003
	-.005	-.0007	.0111	.0001	.0000	-.0001	-.0000
	.001	-.0004	.0106	.0003	.0000	-.0000	-.0002
	.005	-.0004	.0103	.0015	.0000	.0000	-.0002
	.020	-.0000	.0101	.0038	.0000	.0000	-.0002
	.041	.0000	.0100	.0096	-.0000	.0001	-.0002
	.060	.0003	.0101	.0137	.0000	.0000	-.0003
	.081	.0008	.0107	.0169	-.0000	.0001	-.0004
	.101	.0018	.0117	.0206	.0001	.0001	-.0005
	.120	.0021	.0130	.0241	.0001	.0001	-.0007
	.140	.0029	.0147	.0283	.0001	.0002	-.0007
	.162	.0037	.0183	.0334	.0001	.0001	-.0009
	.181	.0047	.0219	.0379	.0002	.0002	-.0012

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
1.30	-.060	-.0010	.0099	-.0185	.0003	.0003	-.0007
	-.040	-.0005	.0088	-.0090	.0003	.0003	-.0007
	-.019	-.0001	.0084	-.0045	.0003	.0003	-.0007
	-.003	.0000	.0082	-.0017	.0003	.0003	-.0007
	.000	.0001	.0082	-.0005	.0003	.0003	-.0007
	.006	.0001	.0081	.0004	.0003	.0003	-.0007
	.020	.0004	.0073	.0037	.0003	.0003	-.0008
	.041	.0007	.0081	.0082	.0003	.0003	-.0008
	.060	.0008	.0084	.0120	.0003	.0003	-.0009
	.080	.0013	.0093	.0157	.0003	.0004	-.0011
	.101	.0019	.0107	.0197	.0003	.0004	-.0018
	.120	.0027	.0130	.0239	.0003	.0003	-.0011
	.141	.0035	.0168	.0285	.0002	.0004	-.0011
	.161	.0047	.0199	.0333	.0002	.0003	-.0010
	.181	.0059	.0247	.0385	.0002	.0003	-.0010
1.70	-.062	-.0012	.0106	-.0119	.0001	.0001	-.0008
	-.041	-.0009	.0092	-.0077	.0001	.0001	-.0003
	-.021	-.0005	.0087	-.0036	.0001	.0001	-.0003
	-.007	-.0003	.0084	-.0008	.0001	.0001	-.0003
	-.002	-.0001	.0084	.0002	.0001	.0001	-.0003
	.004	-.0002	.0082	.0019	.0001	.0001	-.0003
	.018	.0001	.0081	.0048	.0001	.0001	-.0003
	.039	.0005	.0083	.0091	.0001	.0002	-.0004
	.058	.0009	.0088	.0138	.0001	.0002	-.0006
	.078	.0010	.0084	.0167	.0001	.0002	-.0007
	.098	.0022	.0110	.0210	.0001	.0002	-.0008
	.118	.0032	.0140	.0246	.0002	.0002	-.0009
	.139	.0042	.0177	.0292	.0002	.0002	-.0010
	.159	.0058	.0236	.0342	.0002	.0002	-.0011
	.179	.0076	.0314	.0405	.0001	.0002	-.0010
2.22	-.057	-.0016	.0092	-.0100	-.0000	-.0001	.0002
	-.032	-.0010	.0081	-.0061	-.0000	-.0001	.0002
	-.017	-.0007	.0073	-.0021	-.0000	-.0001	.0001
	-.002	-.0002	.0070	.0004	-.0000	-.0001	-.0000
	.003	-.0003	.0070	.0016	-.0000	-.0000	-.0000
	.008	-.0001	.0070	.0031	-.0000	-.0001	-.0000
	.022	.0001	.0069	.0057	-.0000	.0000	-.0001
	.043	.0005	.0069	.0108	.0000	.0000	-.0002
	.063	.0011	.0080	.0140	.0000	.0001	-.0002
	.083	.0017	.0093	.0176	.0000	.0002	-.0004
	.103	.0028	.0119	.0214	.0000	.0001	-.0004
	.123	.0041	.0157	.0247	.0000	.0001	-.0004
	.143	.0058	.0213	.0294	.0000	.0001	-.0006

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP
(a) BVWC

K	α_T deg	C_L	C_D	C_m	C_l	C_Y	C_n
			$\delta = 0^\circ$				
0.70	-06.0	-0.302	.0430	.0241	.0022	-0.060	.0224
	-01.8	-0.093	.0174	.0134	-.0046	-.0059	.0209
	00.1	-0.017	.0150	.0081	-.0073	-.0058	.0201
	02.0	0.064	.0163	.0042	-.0093	-.0057	.0198
	06.0	0.270	.0386	-.0099	-.0148	-.0056	.0194
	10.0	0.496	.0936	-.0209	-.0202	-.0053	.0186
	14.1	0.731	.1843	-.0302	-.0244	-.0047	.0162
	17.8	0.943	.2988	-.0327	-.0271	-.0039	.0143
0.90	-06.0	-0.320	.0469	.0389	.0027	-0.065	.0250
	-01.8	-0.091	.0179	.0163	-.0051	-.0061	.0227
	00.1	-0.004	.0154	.0076	-.0081	-.0060	.0218
	02.0	0.079	.0171	.0017	-.0103	-.0060	.0213
	06.0	0.311	.0440	-.0249	-.0166	-.0058	.0207
	09.9	0.566	.1084	-.0584	-.0225	-.0055	.0194
	14.0	0.818	.2111	-.0967	-.0248	-.0048	.0163
	17.8	1.011	.3302	-.1075	-.0185	-.0041	.0150
1.00	-06.0	-0.335	.0566	.0678	-.0006	-0.075	.0303
	-01.7	-0.085	.0248	.0220	-.0073	-.0069	.0269
	00.1	-0.001	.0217	.0055	-.0104	-.0066	.0256
	02.0	0.107	.0244	-.0139	-.0128	-.0065	.0244
	06.1	0.354	.0567	-.0594	-.0192	-.0068	.0270
	10.0	0.584	.1197	-.0930	-.0242	-.0065	.0267
	14.1	0.808	.2159	-.1221	-.0258	-.0055	.0221
	17.8	0.991	.3292	-.1482	-.0260	-.0039	.0166
1.10	-06.0	-0.327	.0546	.0711	.0005	-0.070	.0290
	-01.7	-0.085	.0253	.0243	-.0068	-.0067	.0264
	00.1	0.002	.0227	.0079	-.0104	-.0063	.0248
	01.9	0.096	.0248	-.0085	-.0129	-.0063	.0247
	06.0	0.319	.0514	-.0509	-.0181	-.0062	.0249
	09.9	0.557	.1123	-.0892	-.0245	-.0064	.0271
	14.0	0.746	.1995	-.1051	-.0243	-.0052	.0215
	17.8	0.916	.3058	-.1348	-.0237	-.0035	.0147
1.30	-06.1	-0.283	.0472	.0516	-.0015	-0.061	.0240
	-01.7	-0.074	.0215	.0158	-.0065	-.0058	.0219
	00.1	0.001	.0195	.0022	-.0090	-.0055	.0206
	02.0	0.089	.0212	-.0124	-.0112	-.0054	.0199
	06.1	0.286	.0460	-.0466	-.0152	-.0051	.0178
	10.0	0.481	.0974	-.0760	-.0170	-.0042	.0126
	14.0	0.668	.1750	-.1037	-.0163	-.0029	.0053
	17.8	0.829	.2701	-.1270	-.0152	-.0018	.0007
1.70	-06.1	-0.236	.0423	.0393	-.0022	-0.055	.0188
	-01.8	-0.067	.0205	.0141	-.0055	-.0050	.0163
	00.1	-0.004	.0184	.0045	-.0075	-.0048	.0149
	02.0	0.068	.0205	-.0069	-.0093	-.0046	.0138
	06.1	0.226	.0398	-.0299	-.0121	-.0043	.0114
	10.0	0.375	.0796	-.0488	-.0126	-.0036	.0070
	14.1	0.520	.1418	-.0685	-.0117	-.0031	.0023
	17.8	0.639	.2136	-.0832	-.0109	-.0027	.0012
2.22	-06.0	-0.177	.0352	.0236	-.0026	-0.048	.0139
	-01.8	-0.046	.0185	.0076	-.0046	-.0042	.0112
	-00.0	0.007	.0168	.0012	-.0055	-.0040	.0100
	02.0	0.071	.0189	-.0075	-.0065	-.0039	.0089
	06.0	0.196	.0355	-.0216	-.0084	-.0036	.0070
	09.5	0.314	.0651	-.0341	-.0095	-.0033	.0042
	14.1	0.429	.1198	-.0463	-.0098	-.0031	.0017
	17.8	0.530	.1806	-.0560	-.0098	-.0030	.0005
			$\delta = 9.5^\circ$				
0.70	-06.0	-0.292	.0410	.0571	.0001	-0.064	.0224
	-01.8	-0.081	.0181	.0428	-.0063	-.0061	.0203
	-00.0	-0.011	.0177	.0402	-.0087	-.0060	.0194
	02.0	0.068	.0203	.0380	-.0107	-.0057	.0186
	06.0	0.275	.0478	.0277	-.0162	-.0053	.0182
	10.1	0.508	.1099	.0183	-.0235	-.0046	.0199
	14.1	0.733	.1986	-.0009	-.0283	-.0037	.0216
	17.8	0.950	.3144	-.0223	-.0317	-.0028	.0275
0.90	-06.0	-0.307	.0442	.0706	.0003	-0.068	.0246
	-01.7	-0.080	.0192	.0479	-.0071	-.0064	.0222
	00.1	0.001	.0189	.0412	-.0099	-.0062	.0210
	02.0	0.083	.0214	.0356	-.0118	-.0060	.0202
	06.0	0.309	.0518	.0119	-.0180	-.0056	.0200
	10.0	0.561	.1210	-.0136	-.0252	-.0050	.0217
	14.0	0.819	.2221	-.0690	-.0297	-.0038	.0248
	17.8	1.019	.3428	-.1073	-.0300	-.0031	.0233
1.00	-06.0	-0.335	.0552	.1033	-.0027	-0.078	.0305
	-01.7	-0.082	.0255	.0545	-.0089	-.0071	.0259
	00.1	0.008	.0246	.0379	-.0118	-.0066	.0241
	02.0	0.106	.0291	.0196	-.0142	-.0065	.0235
	06.1	0.360		-.0222	-.0202	-.0064	.0257
	10.0	0.588	.1315	-.0542	-.0271	-.0060	.0291
	14.1	0.815	.2310	-.0867	-.0311	-.0050	.0293
	17.8	1.003	.3452	-.1311	-.0302	-.0038	.0263

K	α_T deg	C_L	C_D	C_m	C_l	C_Y	C_n
			$\delta = 9.5$ - Concluded				
1.10	-06.1	-0.328	.0554	.1038	-.0018	-0.077	.0301
	-01.8	-0.093	.0265	.0566	-.0080	-.0070	.0267
	00.1	-0.007	.0259	.0441	-.0116	-.0067	.0249
	02.1	0.090	.0304	.0224	-.0133	-.0064	.0247
	06.1	0.316	.0607	-.0155	-.0194	-.0061	.0245
	10.0	0.564	.1270	-.0569	-.0267	-.0057	.0275
	14.1	0.768	.2181	-.0769	-.0300	-.0052	.0280
	17.8	0.924	.3223	-.1050	-.0278	-.0031	.0207
1.30	-05.9	-0.276	.0455	.0862	-.0039	-0.065	.0237
	-01.8	-0.077	.0237	.0484	-.0084	-.0061	.0216
	00.1	0.000	.0231	.0354	-.0107	-.0058	.0202
	02.0	0.080	.0268	.0205	-.0128	-.0056	.0190
	06.0	0.279	.0527	-.0133	-.0164	-.0048	.0154
	10.0	0.485	.1083	-.0453	-.0194	-.0038	.0135
	14.0	0.672	.1881	-.0742	-.0201	-.0027	.0102
	17.8	0.838	.2860	-.1031	-.0182	-.0015	.0069
1.70	-06.0	-0.225	.0409	.0701	-.0047	-0.057	.0181
	-01.8	-0.068	.0229	.0440	-.0077	-.0051	.0151
	00.1	-0.004	.0219	.0343	-.0098	-.0048	.0137
	02.0	0.064	.0244	.0223	-.0119	-.0046	.0122
	06.0	0.223	.0459	-.0018	-.0142	-.0042	.0104
	10.1	0.381	.0903	-.0249	-.0149	-.0035	.0086
	14.0	0.524	.1521	-.0453	-.0142	-.0025	.0043
	17.8	0.649	.2287	-.0667	-.0122	-.0020	.0020
2.22	-06.0	-0.165	.0347	.0519	-.0045	-0.050	.0133
	-01.7	-0.038	.0210	.0348	-.0063	-.0043	.0100
	00.1	0.012	.0204	.0278	-.0072	-.0039	.0086
	02.0	0.070	.0232	.0191	-.0081	-.0037	.0071
	06.1	0.200	.0423	.0017	-.0103	-.0034	.0059
	10.0	0.321	.0780	-.0131	-.0114	-.0032	.0043
	14.1	0.437	.1306	-.0274	-.0112	-.0029	.0019
	17.8	0.535	.1919	-.0397	-.0108	-.0024	.0006
			$\delta = 19.7^\circ$				
1.00	-06.0	-0.320	.0632	.1375	-.0045	-0.081	.0291
	-01.7	-0.067	.0388	.0871	-.0114	-.0076	.0256
	00.1	0.018	.0391	.0719	-.0143	-.0072	.0238
	02.0	0.109	.0442	.0516	-.0154	-.0067	.0226
	06.0	0.338	.0766	.0046	-.0210	-.0069	.0250
	10.1	0.581	.1488	-.0289	-.0264	-.0065	.0306
	14.1	0.802	.2460	-.0781	-.0314	-.0053	.0334
	17.8	0.983	.3587	-.1218	-.0333	-.0042	.0287
1.10	-05.9	-0.302	.0613	.1303	-.0041	-0.080	.0290
	-01.7	-0.075	.0407	.0875	-.0105	-.0074	.0255
	00.1	0.005	.0417	.0718	-.0133	-.0070	.0244
	01.9	0.082	.0461	.0560	-.0150	-.0068	.0237
	06.0	0.299	.0762	.0111	-.0211	-.0066	.0246
	10.1	0.546	.1432	-.0306	-.0239	-.0058	.0247
	14.0	0.765	.2370	-.0707	-.0307	-.0052	.0270
	17.8	0.910	.3366	-.0909	-.0310	-.0038	.0271
1.30	-06.0	-0.266	.0534	.1186	-.0054	-0.066	.0224
	-01.8	-0.067	.0349	.0774	-.0100	-.0062	.0194
	00.1	0.007	.0351	.0637	-.0125	-.0057	.0169
	02.0	0.081	.0392	.0473	-.0145	-.0052	.0151
	06.0	0.278	.0667	.0078	-.0177	-.0049	.0150
	10.0	0.483	.1245	-.0253	-.0212	-.0036	.0145
	14.1	0.666	.2049	-.0606	-.0210	-.0027	.0107
	17.8	0.835	.3032	-.0972	-.0202	-.0016	.0105
1.70	-06.1	-0.215	.0478	.0988	-.0062	-0.058	.0172
	-01.7	-0.058	.0321	.0679	-.0096	-.0052	.0133
	00.1	0.006	.0325	.0571	-.0118	-.0049	.0116
	02.0	0.065	.0359	.0461	-.0129	-.0044	.0100
	06.0	0.227	.0595	.0164	-.0156	-.0043	.0106
	10.0	0.378	.1035	-.0073	-.0165	-.0036	.0098
	14.0	0.521	.1676	-.0323	-.0157	-.0027	.0077
	17.8	0.640	.2427	-.0510	-.0143	-.0020	.0044
2.22	-06.0	-0.151	.0400	.0735	-.0054	-0.051	.0123
	-01.7	-0.024	.0287	.0536	-.0075	-.0042	.0087
	00.1	0.024	.0298	.0467	-.0084	-.0040	.0075
	02.0	0.074	.0328	.0375	-.0091	-.0037	.0060
	06.1	0.203	.0535	.0173	-.0108	-.0034	.0057
	09.9	0.319	.0895	.0021	-.0119	-.0032	.0048
	14.1	0.431	.1436	-.0184	-.0118	-.0028	.0027
	17.8	0.527	.2064	-.0287	-.0117	-.0024	.0009

[redacted]

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Continued

(b) BVW

M	α_T deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-0.63	-0.297	.0425	.0605	-.0010	-0.063	.0230
	-0.22	-0.100	.0170	.0225	-.0044	-0.059	.0218
	-0.03	-0.009	.0139	.0055	-.0064	-0.058	.0211
	0.18	0.082	.0149	-.0115	-.0083	-0.058	.0204
	0.57	0.282	.0367	-.0495	-.0114	-0.057	.0193
	0.98	0.506	.0914	-.0881	-.0143	-0.058	.0188
	1.39	0.713	.1760	-.1171	-.0115	-0.064	.0187
	1.78	0.925	.2620	-.1582	-.0113	-0.058	.0152
0.90	-0.60	-0.314	.0443	.0739	-.0005	-0.066	.0251
	-0.20	-0.098	.0174	.0251	-.0045	-0.063	.0239
	0.01	0.003	.0140	.0037	-.0069	-0.060	.0227
	0.20	0.098	.0157	-.0168	-.0088	-0.060	.0218
	0.60	0.324	.0438	-.0679	-.0126	-0.060	.0207
	1.00	0.575	.1087	-.1289	-.0163	-0.062	.0203
	1.41	0.842	.2181	-.2088	-.0170	-0.068	.0214
	1.80	0.992	.3056	-.2403	-.0046	-0.072	.0213
1.00	-0.58	-0.331	.0529	.1035	-.0030	-0.077	.0308
	-0.17	-0.097	.0238	.0338	-.0069	-0.070	.0277
	0.02	0.013	.0227	.0004	-.0100	-0.069	.0272
	0.22	0.122	.0238	-.0325	-.0118	-0.067	.0255
	0.62	0.373	.0570	-.1060	-.0155	-0.070	.0267
	1.03	0.606	.1260	-.1717	-.0189	-0.074	.0274
	1.42	0.815	.2207	-.2279	-.0199	-0.076	.0273
	1.82	1.001	.2927	-.2804	-.0198	-0.065	.0223
1.10	-0.60	-0.331	.0549	.1047	-.0022	-0.076	.0307
	-0.19	-0.096	.0247	.0342	-.0075	-0.068	.0274
	0.01	0.005	.0232	.0042	-.0100	-0.068	.0268
	0.25	0.134	.0272	-.0359	-.0128	-0.067	.0261
	0.63	0.359	.0569	-.1036	-.0157	-0.067	.0256
	1.01	0.559	.1139	-.1549	-.0185	-0.071	.0269
	1.40	0.763	.2057	-.2181	-.0182	-0.069	.0246
	1.80	0.935	.2724	-.2649	-.0180	-0.059	.0197
1.30	-0.60	-0.278	.0454	.0843	-.0043	-0.065	.0255
	-0.20	-0.085	.0212	.0267	-.0072	-0.059	.0233
	0.01	0.006	.0184	.0000	-.0089	-0.056	.0218
	0.21	0.102	.0208	-.0283	-.0106	-0.055	.0206
	0.60	0.292	.0451	-.0847	-.0124	-0.052	.0182
	1.00	0.484	.0973	-.1388	-.0130	-0.051	.0156
	1.40	0.658	.1725	-.1879	-.0126	-0.049	.0119
	1.80	0.819	.2502	-.2326	-.0114	-0.042	.0063
1.70	-0.21	-0.075	.0203	.0224	-.0063	-0.050	.0167
	-0.01	-0.000	.0176	.0013	-.0075	-0.048	.0156
	0.18	0.073	.0193	-.0199	-.0085	-0.047	.0146
	0.58	0.224	.0380	-.0619	-.0095	-0.046	.0126
	0.98	0.365	.0764	-.1006	-.0095	-0.044	.0097
	1.39	0.499	.1344	-.1352	-.0089	-0.043	.0060
	1.79	0.624	.1897	-.1645	-.0077	-0.037	-.0009
2.22	-0.58	-0.163	.0318	.0448	-.0044	-0.047	.0135
	-0.17	-0.046	.0169	.0137	-.0050	-0.040	.0112
	0.04	0.018	.0155	-.0031	-.0054	-0.038	.0101
	0.23	0.074	.0179	-.0180	-.0058	-0.038	.0092
	0.63	0.193	.0348	-.0485	-.0063	-0.038	.0071
	1.02	0.301	.0666	-.0745	-.0070	-0.038	.0041
	1.43	0.407	.1148	-.0976	-.0073	-0.038	-.0004
	1.83	0.509	.1563	-.1179	-.0072	-0.036	-.0034

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Continued

(c) BWC

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
			δ = 0°				
0.70	-05.9	-0.289	.0357	.0227	.0091	-.0005	-.0054
	-01.7	-0.079	.0120	.0101	.0026	-.0005	-.0058
	00.1	-0.011	.0099	.0085	-.0007	-.0005	-.0059
	02.1	0.070	.0117	.0049	-.0033	-.0005	-.0061
	06.1	0.274	.0348	-.0085	-.0087	-.0004	-.0061
	10.1	0.506	.0923	-.0209	-.0135	-.0006	-.0056
	14.0	0.740	.1828	-.0305	-.0169	-.0009	-.0053
	17.8	0.958	.3019	-.0360	-.0187	-.0008	-.0049
0.90	-06.0	-0.313	.0405	.0365	.0104	-.0006	-.0056
	-01.6	-0.076	.0181	.0126	.0024	-.0006	-.0059
	00.1	-0.002	.0103	.0073	-.0009	-.0006	-.0061
	02.0	0.082	.0119	.0018	-.0039	-.0006	-.0063
	06.0	0.313	.0394	-.0241	-.0102	-.0006	-.0062
	10.0	0.571	.1057	-.0565	-.0153	-.0010	-.0055
	14.0	0.826	.2105	-.0954	-.0173	-.0013	-.0054
	17.9	1.019	.3380	-.1092	-.0105	-.0012	-.0047
1.00	-06.0	-0.322	.0470	.0611	.0093	-.0006	-.0051
	-01.8	-0.079	.0181	.0171	.0023	-.0004	-.0061
	00.1	0.016	.0168	.0020	-.0012	-.0005	-.0061
	02.0	0.116	.0193	-.0152	-.0043	-.0005	-.0062
	06.1	0.361	.0513	-.0607	-.0099	-.0008	-.0055
	10.0	0.600	.1176	-.0967	-.0139	-.0010	-.0045
	14.1	0.828	.2158	-.1256	-.0157	-.0014	-.0035
	17.7	1.007	.3312	-.1485	-.0165	-.0014	-.0024
1.10	-06.1	-0.323	.0493	.0670	.0101	-.0008	-.0043
	-01.8	-0.084	.0209	.0199	.0030	-.0006	-.0051
	00.1	0.001	.0177	.0061	-.0007	-.0006	-.0053
	02.1	0.099	.0218	-.0116	-.0035	-.0007	-.0053
	06.0	0.319	.0466	-.0510	-.0088	-.0007	-.0051
	10.0	0.569	.1113	-.0922	-.0142	-.0011	-.0037
	14.1	0.760	.2013	-.1093	-.0141	-.0013	-.0033
	17.8	0.937	.3125	-.1420	-.0150	-.0013	-.0029
1.30	-06.0	-0.277	.0410	.0484	.0081	-.0008	-.0057
	-01.7	-0.073	.0169	.0136	.0026	-.0008	-.0060
	00.1	0.005	.0149	.0115	-.0003	-.0007	-.0061
	02.0	0.084	.0174	-.0121	-.0029	-.0008	-.0061
	06.2	0.294	.0435	-.0480	-.0076	-.0010	-.0059
	10.0	0.484	.0947	-.0774	-.0104	-.0013	-.0056
	14.0	0.670	.1741	-.1048	-.0113	-.0015	-.0053
	17.8	0.841	.2740	-.1297	-.0107	-.0016	-.0053
1.70	-06.0	-0.232	.0373	.0364	.0059	-.0011	-.0059
	-01.8	-0.068	.0163	.0125	.0019	-.0010	-.0063
	00.1	-0.004	.0145	.0029	-.0006	-.0009	-.0065
	02.0	0.068	.0168	-.0077	-.0029	-.0010	-.0064
	06.0	0.224	.0363	-.0300	-.0063	-.0012	-.0065
	10.0	0.379	.0785	-.0503	-.0076	-.0016	-.0063
	14.0	0.523	.1404	-.0686	-.0080	-.0020	-.0059
	17.9	0.651	.2179	-.0857	-.0080	-.0018	-.0051
2.22	-06.1	-0.176	.0314	.0211	.0037	-.0013	-.0054
	-01.8	-0.042	.0147	.0053	.0009	-.0011	-.0057
	00.1	0.011	.0135	-.0007	-.0006	-.0011	-.0058
	02.0	0.073	.0158	-.0086	-.0019	-.0012	-.0058
	06.1	0.197	.0335	-.0225	-.0043	-.0014	-.0056
	10.0	0.318	.0676	-.0357	-.0060	-.0018	-.0053
	14.0	0.432	.1190	-.0483	-.0071	-.0020	-.0051
	17.8	0.534	.1811	-.0585	-.0073	-.0020	-.0057
			δ = 9.7°				
0.70	-06.1	-0.288	.0363	.0563	.0069	-.0010	-.0055
	-01.8	-0.075	.0144	.0404	.0009	-.0009	-.0062
	-00.0	-0.005	.0142	.0399	-.0023	-.0008	-.0067
	02.0	0.066	.0166	.0391	-.0050	-.0007	-.0071
	06.0	0.275	.0443	.0295	-.0108	-.0004	-.0070
	10.0	0.501	.1052	.0225	-.0179	.0006	-.0074
	14.0	0.731	.1958	.0016	-.0218	.0007	-.0034
	17.8	0.937	.3083	-.0202	-.0235	.0013	.0001
0.90	-06.0	-0.303	.0395	.0712	.0077	-.0011	-.0057
	-01.8	-0.074	.0150	.0447	.0007	-.0009	-.0066
	-00.0	0.001	.0148	.0404	-.0025	-.0009	-.0070
	02.0	0.086	.0181	.0360	-.0058	-.0008	-.0074
	06.1	0.317	.0498	.0138	-.0128	-.0005	-.0067
	10.0	0.559	.1166	-.0115	-.0194	.0002	-.0074
	14.0	0.814	.2800	-.0696	-.0223	.0003	-.0018
	17.9	1.023	.3459	-.1105	-.0216	.0004	-.0016
1.00	-06.1	-0.318	.0483	.0970	.0068	-.0012	-.0049
	-01.7	-0.066	.0219	.0475	.0002	-.0009	-.0064
	-00.0	0.018	.0220	.0348	-.0027	-.0008	-.0068
	02.0	0.114	.0242	.0170	-.0056	-.0007	-.0071
	06.0	0.356	.0588	-.0232	-.0116	-.0007	-.0058
	10.0	0.596	.1301	-.0564	-.0171	.0000	-.0060
	14.1	0.815	.2891	-.0864	-.0194	-.0002	-.0038
	17.8	1.002	.3446	-.1266	-.0199	.0002	-.0001

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
			δ = 9.7° - Concluded				
1.10	-06.0	-0.313	.0484	.0992	.0078	-.0013	-.0043
	-01.8	-0.064	.0239	.0538	.0017	-.0011	-.0056
	00.1	0.006	.0222	.0393	-.0020	-.0009	-.0059
	02.1	0.095	.0271	.0215	-.0043	-.0009	-.0063
	06.1	0.320	.0576	-.0159	-.0106	-.0008	-.0058
	10.0	0.567	.1239	-.0575	-.0170	-.0001	-.0059
	14.1	0.768	.2158	-.0770	-.0187	-.0004	-.0041
	17.8	0.920	.3204	-.1046	-.0178	-.0004	-.0016
1.30	-06.0	-0.272	.0406	.0839	.0056	-.0018	-.0059
	-01.7	-0.067	.0193	.0453	.0005	-.0010	-.0065
	00.1	0.007	.0192	.0340	-.0021	-.0010	-.0070
	02.0	0.082	.0286	.0201	-.0045	-.0010	-.0074
	06.0	0.281	.0496	-.0131	-.0091	-.0009	-.0076
	09.9	0.481	.1040	-.0446	-.0127	-.0004	-.0069
	14.0	0.673	.1874	-.0750	-.0139	-.0007	-.0048
	17.8	0.842	.2881	-.1041	-.0128	-.0005	-.0033
1.70	-06.0	-0.223	.0368	.0688	.0032	-.0014	-.0062
	-02.8	-0.099	.0210	.0482	.0001	-.0013	-.0066
	00.1	-0.008	.0182	.0331	-.0031	-.0012	-.0072
	02.1	0.069	.0217	.0211	-.0058	-.0013	-.0074
	06.1	0.225	.0441	-.0013	-.0085	-.0011	-.0077
	10.0	0.376	.0863	-.0239	-.0098	-.0011	-.0063
	14.1	0.521	.1509	-.0442	-.0101	-.0015	-.0048
	17.8	0.644	.2264	-.0645	-.0089	-.0014	-.0040
2.22	-06.0	-0.161	.0299	.0493	.0016	-.0015	-.0055
	-01.8	-0.032	.0171	.0316	-.0011	-.0013	-.0062
	00.1	0.021	.0172	.0250	-.0025	-.0013	-.0064
	02.0	0.074	.0203	.0172	-.0037	-.0014	-.0065
	06.2	0.203	.0401	.0007	-.0061	-.0013	-.0066
	10.0	0.319	.0756	-.0128	-.0076	-.0017	-.0057
	14.0	0.431	.1274	-.0259	-.0082	-.0020	-.0048
	17.9	0.533	.1915	-.0378	-.0083	-.0019	-.0045
			δ = 19.7°				
1.00	-06.0	-0.308	.0581	.1314	.0050	-.0012	-.0066
	-01.7	-0.061	.0334	.0825	-.0018	-.0009	-.0080
	00.1	0.017	.0358	.0709	-.0047	-.0007	-.0083
	02.0	0.110	.0407	.0497	-.0065	-.0005	-.0084
	06.0	0.348	.0744	.0014	-.0129	-.0007	-.0064
	10.0	0.583	.1441	-.0328	-.0171	0.001	-.0044
	14.0	0.811	.2441	-.0838	-.0207	0.004	-.0012
	17.7	0.991	.3563	-.1259	-.0221	0.003	-.0007
1.10	-06.0	-0.307	.0578	.1290	.0059	-.0013	-.0057
	-01.7	-0.069	.0353	.0823	-.0006	-.0011	-.0070
	00.1	0.005	.0360	.0727	-.0037	-.0009	-.0074
	02.1	0.092	.0417	.0528	-.0057	-.0006	-.0077
	06.1	0.309	.0731	.0065	-.0118	-.0009	-.0064
	10.0	0.550	.1391	-.0336	-.0155	0.001	-.0059
	14.1	0.768	.2367	-.0778	-.0208	0.001	-.0034
	17.7	0.918	.3345	-.0963	-.0199	0.003	-.0010
1.30	-06.1	-0.269	.0491	.1184	.0041	-.0012	-.0070
	-01.8	-0.066	.0305	.0763	-.0010	-.0011	-.0083
	00.1	0.008	.0310	.0632	-.0041	-.0009	-.0091
	02.0	0.078	.0348	.0477	-.0065	-.0007	-.0097
	06.0	0.280	.0636	.0072	-.0105	-.0008	-.0076
	10.1	0.487	.1222	-.0273	-.0145	0.003	-.0075
	14.1	0.674	.2057	-.0635	-.0151	-.0005	-.0038
	17.8	0.838	.3038	-.1004	-.0143	0.001	-.0021
1.70	-05.9	-0.207	.0427	.0963	.0015	-.0014	-.0069
	-01.7	-0.055	.0284	.0675	-.0024	-.0013	-.0084
	-00.0	0.002	.0286	.0572	-.0044	-.0012	-.0090
	01.9	0.065	.0323	.0454	-.0069	-.0012	-.0089
	06.0	0.230	.0564	.0147	-.0098	-.0011	-.0074
	10.0	0.382	.1011	-.0092	-.0114	-.0007	-.0068
	14.1	0.524	.1662	-.0340	-.0116	-.0008	-.0036
	17.8	0.647	.2432	-.0540	-.0108	-.0008	-.0033
2.22	-06.0	-0.150	.0365	.0718	.0006	-.0017	-.0065
	-01.8	-0.026	.0257	.0533	-.0023	-.0014	-.0074
	-00.0	0.021	.0263	.0463	-.0036	-.0014	-.0076
	02.1	0.077	.0303	.0364	-.0050	-.0014	-.0073
	06.0	0.200	.0504	.0171	-.0068	-.0013	-.0068
	10.0	0.324	.0887	.0000	-.0083	-.0014	-.0061
	14.1	0.433	.1428	-.0141	-.0089	-.0017	-.0048
	17.8	0.533	.2068	-.0250	-.0095	-.0016	-.0045

[redacted]

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Continued

(d) BW

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-0.60	-0.289	.0353	.0549	.0072	-0.009	-.0052
	-0.17	-0.082	.0111	.0179	.0023	-0.006	-.0057
	0.01	-0.010	.0095	.0078	-.0007	-0.006	-.0057
	0.20	0.061	.0110	-.0019	-.0033	-0.007	-.0058
	0.61	0.253	.0316	-.0320	-.0093	-0.010	-.0055
	1.00	0.467	.0826	-.0695	-.0123	-0.014	-.0048
	1.40	0.668	.1626	-.0982	-.0090	-0.018	-.0055
	1.79	0.883	.2772	-.1397	-.0090	-0.019	-.0073
0.90	-0.60	-0.305	.0377	.0667	.0079	-0.009	-.0054
	-0.18	-0.081	.0117	.0196	.0023	-0.006	-.0059
	0.01	-0.003	.0097	.0063	-.0009	-0.006	-.0060
	0.20	0.082	.0113	-.0072	-.0039	-0.008	-.0060
	0.60	0.287	.0359	-.0470	-.0108	-0.011	-.0055
	0.99	0.542	.0990	-.1111	-.0142	-0.016	-.0048
	1.40	0.786	.1979	-.1767	-.0143	-0.021	-.0050
	1.78	0.937	.3023	-.2111	-.0014	-0.022	-.0078
1.00	-0.60	-0.315	.0457	.0916	.0072	-0.008	-.0047
	-0.18	-0.076	.0189	.0229	.0019	-0.005	-.0060
	0.01	0.013	.0157	-.0001	-.0010	-0.005	-.0058
	0.20	0.113	.0181	-.0262	-.0039	-0.007	-.0060
	0.61	0.360	.0512	-.0971	-.0076	-0.010	-.0050
	0.99	0.587	.1148	-.1603	-.0104	-0.014	-.0045
	1.40	0.811	.2113	-.2231	-.0109	-0.020	-.0043
	1.78	0.986	.3244	-.2729	-.0109	-0.022	-.0046
1.10	-0.61	-0.318	.0462	.0966	.0072	-0.010	-.0041
	-0.16	-0.072	.0194	.0234	.0020	-0.007	-.0052
	0.01	0.007	.0170	.0013	-.0005	-0.007	-.0052
	0.21	0.109	.0188	-.0254	-.0038	-0.008	-.0051
	0.60	0.327	.0475	-.0902	-.0067	-0.010	-.0047
	0.99	0.551	.1049	-.1483	-.0105	-0.014	-.0040
	1.40	0.751	.1976	-.2110	-.0097	-0.020	-.0035
	1.79	0.914	.3051	-.2574	-.0099	-0.022	-.0041
1.30	-0.60	-0.274	.0393	.0803	.0061	-0.011	-.0056
	-0.17	-0.072	.0157	.0207	.0022	-0.008	-.0059
	0.01	0.001	.0136	.0012	-.0003	-0.008	-.0059
	0.20	0.086	.0161	-.0217	-.0026	-0.009	-.0058
	0.60	0.285	.0397	-.0804	-.0057	-0.011	-.0057
	1.00	0.479	.0924	-.1358	-.0069	-0.016	-.0054
	1.40	0.654	.1675	-.1863	-.0073	-0.021	-.0057
	1.77	0.806	.2593	-.2293	-.0071	-0.024	-.0069
1.70	-0.61	-0.226	.0354	.0642	.0036	-0.013	-.0059
	-0.18	-0.066	.0155	.0185	.0013	-0.010	-.0063
	-0.00	-0.005	.0137	.0023	-.0004	-0.010	-.0063
	0.20	0.070	.0159	-.0177	-.0021	-0.011	-.0061
	0.60	0.222	.0349	-.0608	-.0039	-0.014	-.0060
	1.01	0.369	.0753	-.1016	-.0047	-0.018	-.0062
	1.41	0.502	.1333	-.1361	-.0048	-0.023	-.0069
	1.79	0.623	.2059	-.1648	-.0048	-0.028	-.0082
2.22	-0.60	-0.168	.0293	.0434	.0019	-0.015	-.0056
	-0.18	-0.044	.0138	.0109	.0005	-0.012	-.0057
	0.01	0.012	.0125	-.0023	-.0005	-0.011	-.0057
	0.20	0.068	.0148	-.0170	-.0012	-0.012	-.0055
	0.61	0.191	.0314	-.0486	-.0024	-0.016	-.0053
	1.00	0.300	.0631	-.0747	-.0038	-0.021	-.0060
	1.41	0.410	.1183	-.0991	-.0049	-0.027	-.0070
	1.77	0.506	.1698	-.1181	-.0054	-0.033	-.0069

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Continued

(e) BVC

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
			δ = 0°				
0.70	-06.0	-0.042	.0134	-.0469	-.0080	-.0049	.0178
	-04.0	-.0028	.0112	-.0299	-.0080	-.0049	.0171
	-02.0	-.0015	.0098	-.0144	-.0081	-.0051	.0174
	-00.4	-.0004	.0096	-.0037	-.0081	-.0052	.0177
	00.6	-.0000	.0097	.0033	-.0081	-.0053	.0178
	02.1	.0008	.0096	.0139	-.0081	-.0053	.0178
	04.0	.0023	.0102	.0281	-.0081	-.0053	.0179
	06.0	.0038	.0133	.0441	-.0081	-.0052	.0173
	08.0	.0055	.0163	.0606	-.0079	-.0046	.0152
	10.1	.0072	.0204	.0801	-.0071	-.0038	.0115
	12.1	.0087	.0254	.0978	-.0056	-.0029	.0065
	13.9	.0105	.0317	.1146	-.0034	-.0017	.0003
	16.0	.0125	.0404	.1356	.0001	-.0004	-.0079
	18.1	.0143	.0506	.1553	.0017	-.0000	-.0102
0.90	-06.0	-0.043	.0138	-.0477	-.0083	-.0050	.0181
	-03.9	-.0027	.0114	-.0304	-.0082	-.0051	.0180
	-01.9	-.0013	.0104	-.0132	-.0084	-.0053	.0186
	-00.3	-.0004	.0097	-.0020	-.0085	-.0054	.0191
	00.5	.0001	.0100	.0035	-.0084	-.0054	.0189
	02.1	.0012	.0100	.0153	-.0085	-.0055	.0191
	04.1	.0027	.0118	.0308	-.0085	-.0055	.0192
	06.0	.0043	.0140	.0476	-.0085	-.0053	.0183
	08.0	.0059	.0174	.0653	-.0081	-.0046	.0158
	10.0	.0077	.0216	.0848	-.0073	-.0037	.0116
	12.0	.0093	.0267	.1024	-.0057	-.0027	.0063
	14.0	.0109	.0325	.1186	-.0030	-.0013	-.0012
	16.0	.0131	.0420	.1397	.0003	-.0000	-.0089
	18.0	.0149	.0522	.1576	.0017	.0005	-.0116
1.00	-06.0	-0.040	.0167	-.0461	-.0098	-.0058	.0223
	-04.0	-.0028	.0135	-.0292	-.0093	-.0056	.0211
	-02.0	-.0016	.0136	-.0132	-.0093	-.0058	.0213
	-00.5	-.0004	.0115	-.0022	-.0093	-.0059	.0215
	00.1	-.0001	.0116	.0011	-.0093	-.0060	.0216
	00.5	.0001	.0115	.0052	-.0093	-.0060	.0216
	02.1	.0011	.0120	.0161	-.0094	-.0061	.0220
	04.0	.0025	.0133	.0317	-.0095	-.0061	.0223
	06.1	.0042	.0156	.0490	-.0094	-.0057	.0209
	08.0	.0058	.0186	.0665	-.0087	-.0050	.0177
	10.1	.0075	.0227	.0840	-.0077	-.0039	.0124
	12.0	.0092	.0265	.1016	-.0059	-.0028	.0064
	14.0	.0110	.0339	.1200	-.0031	-.0013	-.0015
	16.0	.0128	.0418	.1383	.0004	-.0000	-.0095
	18.0	.0145	.0506	.1563	.0018	-.0005	-.0112
1.10	-06.0	-0.044	.0206	-.0450	-.0098	-.0056	.0226
	-04.0	-.0027	.0181	-.0290	-.0096	-.0057	.0220
	-01.9	-.0016	.0169	-.0130	-.0096	-.0059	.0224
	-00.5	-.0007	.0157	-.0024	-.0096	-.0060	.0228
	00.1	-.0006	.0161	.0018	-.0095	-.0060	.0227
	00.5	-.0003	.0158	.0050	-.0095	-.0060	.0226
	02.0	.0008	.0160	.0159	-.0095	-.0061	.0227
	04.0	.0023	.0167	.0313	-.0096	-.0061	.0229
	06.1	.0039	.0181	.0473	-.0094	-.0057	.0212
	08.1	.0054	.0229	.0637	-.0086	-.0049	.0176
	10.0	.0069	.0257	.0786	-.0074	-.0039	.0121
	12.2	.0086	.0324	.0976	-.0054	-.0028	.0054
	13.9	.0100	.0357	.1186	-.0030	-.0014	-.0013
	16.0	.0117	.0451	.1308	.0002	-.0003	-.0083
	18.0	.0134	.0557	.1476	.0011	-.0002	-.0097
1.30	-06.0	-0.042	.0176	-.0447	-.0091	-.0052	.0201
	-03.9	-.0028	.0150	-.0284	-.0089	-.0052	.0197
	-02.0	-.0016	.0130	-.0138	-.0087	-.0053	.0194
	-00.5	-.0006	.0130	-.0030	-.0087	-.0054	.0193
	00.5	.0000	.0127	.0034	-.0086	-.0054	.0191
	02.1	.0010	.0129	.0134	-.0084	-.0054	.0188
	04.0	.0023	.0141	.0279	-.0083	-.0052	.0180
	06.1	.0039	.0162	.0438	-.0080	-.0049	.0163
	08.0	.0054	.0192	.0585	-.0073	-.0042	.0130
	10.1	.0068	.0234	.0742	-.0062	-.0032	.0078
	12.0	.0082	.0279	.0895	-.0043	-.0021	.0022
	13.9	.0096	.0345	.1040	-.0019	-.0013	-.0035
	15.9	.0114	.0422	.1179	-.0002	-.0007	-.0073
	17.9	.0134	.0529	.1326	.0008	-.0004	-.0095
1.70	-06.0	-0.042	.0174	-.0377	-.0070	-.0046	.0151
	-04.0	-.0029	.0149	-.0244	-.0071	-.0047	.0151
	-01.9	-.0016	.0133	-.0109	-.0072	-.0048	.0152
	-00.5	-.0008	.0129	-.0020	-.0073	-.0049	.0151
	00.6	-.0002	.0126	.0046	-.0073	-.0049	.0152
	02.2	.0007	.0129	.0147	-.0074	-.0049	.0151
	04.1	.0020	.0140	.0273	-.0073	-.0048	.0145
	06.1	.0034	.0159	.0407	-.0071	-.0045	.0127
	08.1	.0048	.0186	.0539	-.0065	-.0039	.0095
	10.1	.0062	.0224	.0672	-.0054	-.0030	.0054
	12.1	.0077	.0279	.0792	-.0040	-.0025	.0016
	14.0	.0093	.0350	.0905	-.0027	-.0022	-.0010
	16.0	.0113	.0441	.1015	-.0019	-.0019	-.0022
	18.0	.0135	.0558	.1119	-.0011	-.0015	-.0042

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
			δ = 0° - Concluded				
2.22	-05.9	-0.038	.0159	-.0311	-.0053	-.0040	.0106
	-04.5	-.0026	.0128	-.0193	-.0053	-.0040	.0104
	-01.9	-.0014	.0119	-.0082	-.0053	-.0041	.0105
	-00.4	-.0006	.0113	.0004	-.0054	-.0041	.0104
	00.6	-.0001	.0113	.0066	-.0054	-.0041	.0103
	02.0	.0007	.0115	.0146	-.0054	-.0041	.0102
	04.1	.0020	.0125	.0268	-.0055	-.0040	.0097
	06.0	.0033	.0146	.0381	-.0054	-.0038	.0086
	08.1	.0047	.0173	.0494	-.0050	-.0033	.0067
	10.1	.0062	.0223	.0593	-.0043	-.0031	.0045
	12.1	.0080	.0278	.0685	-.0035	-.0029	.0030
	13.9	.0100	.0362	.0760	-.0030	-.0027	.0016
	16.0	.0123	.0464	.0851	-.0027	-.0023	.0001
	18.0	.0146	.0590	.0953	-.0020	-.0019	-.0023
			δ = 9.7°				
0.70	-05.9	-0.008	.0104	-.0076	-.0089	-.0057	.0183
	-01.9	.0018	.0124	.0210	-.0090	-.0060	.0192
	00.1	.0031	.0148	.0359	-.0092	-.0061	.0201
	02.0	.0046	.0176	.0519	-.0094	-.0062	.0209
	06.1	.0080	.0262	.0840	-.0095	-.0058	.0209
	10.0	.0111	.0388	.1195	-.0085	-.0040	.0153
	14.0	.0133	.0515	.1471	-.0042	-.0007	.0045
	17.9	.0148	.0637	.1661	-.0003	.0019	-.0004
0.90	-05.9	-.0007	.0110	-.0073	-.0093	-.0058	.0196
	-01.9	.0018	.0131	.0289	-.0097	-.0064	.0214
	-00.1	.0033	.0145	.0377	-.0097	-.0064	.0219
	02.0	.0049	.0177	.0543	-.0100	-.0066	.0230
	06.0	.0083	.0261	.0868	-.0101	-.0061	.0231
	10.1	.0111	.0389	.1202	-.0084	-.0038	.0159
	14.0	.0137	.0527	.1479	-.0050	-.0004	.0081
	18.0	.0152	.0940	.1658	-.0004	-.0332	.0775
1.00	-06.0	-.0009	.0144	-.0066	-.0109	-.0067	.0243
	-02.0	.0018	.0145	.0242	-.0107	-.0069	.0249
	00.1	.0032	.0174	.0391	-.0109	-.0072	.0259
	02.0	.0046	.0208	.0548	-.0111	-.0073	.0269
	06.0	.0080	.0301	.0860	-.0113	-.0067	.0266
	10.0	.0108	.0411	.1225	-.0096	-.0043	.0186
	14.0	.0133	.0536	.1549	-.0049	-.0007	.0031
	17.9	.0155	.0692	.1821	.0008	.0022	-.0091
1.10	-06.0	-.0011	.0176	-.0065	-.0114	-.0067	.0260
	-01.9	.0016	.0192	.0235	-.0110	-.0070	.0259
	00.1	.0030	.0205	.0377	-.0109	-.0071	.0261
	02.1	.0045	.0243	.0532	-.0110	-.0071	.0263
	06.1	.0075	.0327	.0819	-.0107	-.0064	.0249
	10.1	.0101	.0440	.1155	-.0090	-.0040	.0168
	14.0	.0125	.0573	.1446	-.0041	-.0006	.0005
	17.9	.0143	.0727	.1728	.0010	.0019	-.0104
1.30	-06.0	-.0011	.0151	-.0072	-.0100	-.0059	.0216
	-02.0	.0016	.0157	.0207	-.0099	-.0061	.0216
	00.1	.0029	.0175	.0351	-.0099	-.0062	.0218
	02.0	.0043	.0198	.0481	-.0098	-.0062	.0214
	06.0	.0073	.0278	.0749	-.0087	-.0052	.0170
	10.1	.0097	.0379	.1048	-.0066	-.0026	.0073
	14.1	.0123	.0513	.1323	-.0027	.0005	-.0055
	18.0	.0148	.0692	.1565	.0012	.0022	-.0126
1.70	-06.1	-.0015	.0151	-.0055	-.0076	-.0050	.0153
	-02.0	.0010	.0153	.0200	-.0078	-.0053	.0160
	00.1	.0023	.0167	.0324	-.0080	-.0054	.0163
	02.0	.0036	.0189	.0435	-.0081	-.0054	.0164
	06.1	.0061	.0258	.0663	-.0078	-.0048	.0138
	10.0	.0086	.0347	.0904	-.0062	-.0027	.0065
	14.0	.0110	.0479	.1125	-.0038	-.0009	-.0001
	17.9	.0141	.0675	.1299	-.0017	-.0003	-.0036
2.22	-05.9	-.0015	.0140	-.0016	-.0058	-.0042	.0105
	-01.9	.0009	.0138	.0199	-.0058	-.0044	.0108
	-00.0	.0020	.0141	.0301	-.0059	-.0043	.0107
	02.1	.0031	.0166	.0403	-.0059	-.0044	.0104
	06.0	.0054	.0227	.0594	-.0057	-.0038	.0084
	10.1	.0081	.0318	.0786	-.0048	-.0024	.0038
	14.0	.0110	.0463	.0958	-.0034	-.0028	.0011
	17.9	.0150	.0683	.1133	-.0032	-.0013	-.0003

[redacted]

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Continued

(e) BVC - Concluded

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				δ = 19.7°			
1.00	-0.61	0.021	.0227	.0255	-.0121	-0.076	.0268
	-0.19	0.053	.0284	.0550	-.0117	-0.080	.0272
	0.01	0.065	.0318	.0699	-.0119	-0.081	.0288
	0.21	0.079	.0382	.0856	-.0123	-0.081	.0300
	0.61	0.107	.0507	.1142	-.0121	-0.075	.0294
	1.01	0.129	.0628	.1408	-.0101	-0.048	.0217
	1.40	0.137	.0710	.1598	-.0064	-0.010	.0105
	1.80	0.152	.0865	.1841	-.0012	0.022	-.0032
1.10	-0.61	0.018	.0255	.0257	-.0121	-0.076	.0276
	-0.19	0.050	.0319	.0518	-.0117	-0.078	.0272
	0.01	0.059	.0365	.0667	-.0118	-0.079	.0282
	0.20	0.070	.0414	.0806	-.0119	-0.078	.0287
	0.60	0.095	.0539	.1053	-.0117	-0.072	.0281
	1.00	0.119	.0662	.1333	-.0095	-0.045	.0184
	1.40	0.129	.0751	.1514	-.0057	-0.005	.0061
	1.79	0.143	.0908	.1757	-.0005	0.021	-.0048
1.30	-0.61	0.015	.0216	.0226	-.0106	-0.067	.0235
	-0.19	0.044	.0260	.0476	-.0105	-0.070	.0230
	-0.00	0.054	.0301	.0598	-.0103	-0.068	.0225
	0.20	0.066	.0347	.0728	-.0103	-0.066	.0218
	0.60	0.094	.0457	.0960	-.0092	-0.056	.0187
	1.00	0.112	.0570	.1225	-.0071	-0.025	.0095
	1.40	0.130	.0701	.1417	-.0038	0.006	-.0017
	1.80	0.150	.0868	.1611	-.0012	0.030	-.0084
1.70	-0.60	0.007	.0210	.0205	-.0080	-0.055	.0165
	-0.20	0.033	.0246	.0410	-.0083	-0.061	.0170
	-0.00	0.043	.0276	.0522	-.0084	-0.061	.0171
	0.20	0.055	.0314	.0627	-.0086	-0.060	.0175
	0.60	0.079	.0404	.0830	-.0084	-0.052	.0165
	1.01	0.098	.0510	.1043	-.0067	-0.027	.0079
	1.40	0.119	.0657	.1221	-.0052	-0.008	.0042
	1.80	0.147	.0863	.1409	-.0037	0.004	-.0008
2.22	-0.60	0.003	.0194	.0187	-.0060	-0.046	.0105
	-0.45	0.028	.0172	.0376	-.0061	-0.049	.0112
	0.01	0.039	.0243	.0470	-.0062	-0.049	.0115
	0.20	0.047	.0275	.0558	-.0062	-0.047	.0114
	0.61	0.069	.0359	.0741	-.0061	-0.040	.0096
	1.00	0.086	.0452	.0909	-.0050	-0.023	.0045
	1.40	0.114	.0620	.1073	-.0044	-0.017	.0020
	1.79	0.149	.0837	.1258	-.0036	-0.009	.0001

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Continued

(f) BC

M	α_v deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 0^\circ$			
0.70	-0.61	-0.041	.0108	-.0462	.0003	-.0006	-.0061
	-0.40	-.0024	.0060	-.0288	.0002	-.0005	-.0064
	-0.19	-.0012	.0056	-.0132	.0001	-.0005	-.0065
	-0.05	-.0003	.0051	-.0031	.0001	-.0005	-.0066
	0.01	-.0000	.0045	.0008	.0000	-.0005	-.0066
	0.06	.0002	.0046	.0039	.0000	-.0005	-.0066
	0.20	.0010	.0054	.0132	-.0001	-.0004	-.0067
	0.40	.0025	.0066	.0293	-.0001	-.0004	-.0069
	0.60	.0040	.0087	.0457	-.0002	-.0003	-.0068
	0.80	.0055	.0122	.0635	-.0003	-.0003	-.0068
	1.01	.0072	.0169	.0826	-.0003	-.0004	-.0065
	1.21	.0087	.0228	.1008	-.0004	-.0007	-.0056
	1.40	.0101	.0293	.1170	-.0005	-.0008	-.0049
	1.60	.0123	.0385	.1383	-.0005	-.0006	-.0049
	1.80	.0142	.0494	.1581	-.0004	-.0006	-.0038
0.90	-0.60	-.0042	.0098	-.0477	.0002	-.0006	-.0063
	-0.40	-.0026	.0069	-.0297	.0001	-.0005	-.0065
	-0.19	-.0012	.0056	-.0126	.0000	-.0006	-.0066
	-0.04	-.0002	.0054	-.0015	-.0000	-.0005	-.0068
	0.01	.0001	.0053	.0015	.0000	-.0005	-.0068
	0.06	.0003	.0054	.0046	-.0000	-.0005	-.0068
	0.21	.0014	.0056	.0163	-.0001	-.0005	-.0069
	0.40	.0028	.0069	.0318	-.0001	-.0004	-.0071
	0.61	.0044	.0097	.0494	-.0002	-.0004	-.0071
	0.81	.0061	.0135	.0679	-.0003	-.0000	-.0069
	1.01	.0076	.0181	.0874	-.0004	-.0005	-.0066
	1.21	.0094	.0243	.1056	-.0004	-.0005	-.0061
	1.40	.0108	.0312	.1220	-.0005	-.0006	-.0056
	1.61	.0130	.0412	.1428	-.0004	-.0004	-.0053
	1.80	.0149	.0519	.1606	-.0005	-.0004	-.0041
1.00	-0.60	-.0040	.0100	-.0454	.0002	-.0004	-.0067
	-0.40	-.0024	.0102	-.0277	-.0000	-.0004	-.0068
	-0.20	-.0011	.0066	-.0115	-.0001	-.0003	-.0070
	-0.05	-.0001	.0071	-.0001	.0000	-.0004	-.0073
	0.01	.0003	.0059	.0029	.0000	-.0004	-.0072
	0.05	.0003	.0058	.0062	.0000	-.0004	-.0072
	0.20	.0015	.0071	.0165	-.0001	-.0003	-.0073
	0.41	.0031	.0095	.0327	-.0001	-.0001	-.0074
	0.60	.0043	.0109	.0501	-.0002	-.0002	-.0074
	0.80	.0060	.0139	.0679	-.0003	-.0002	-.0073
	1.01	.0075	.0193	.0866	-.0004	-.0003	-.0068
	1.21	.0092	.0265	.1043	-.0005	-.0006	-.0057
	1.40	.0108	.0292	.1228	-.0004	-.0006	-.0056
	1.60	.0123	.0398	.1405	-.0005	-.0007	-.0043
	1.80	.0139	.0483	.1590	-.0005	-.0008	-.0025
1.10	-0.59	-.0043	.0159	-.0427	.0001	-.0006	-.0061
	-0.41	-.0029	.0128	-.0281	-.0000	-.0006	-.0064
	-0.19	-.0015	.0108	-.0111	.0000	-.0006	-.0063
	-0.04	-.0004	.0106	-.0010	-.0001	-.0006	-.0064
	0.01	-.0003	.0101	.0029	-.0001	-.0005	-.0065
	0.05	.0001	.0103	.0056	-.0001	-.0005	-.0065
	0.21	.0011	.0107	.0169	-.0002	-.0005	-.0065
	0.41	.0026	.0117	.0324	-.0003	-.0005	-.0067
	0.61	.0048	.0144	.0481	-.0003	-.0003	-.0068
	0.80	.0056	.0180	.0642	-.0003	-.0004	-.0067
	1.00	.0071	.0221	.0815	-.0004	-.0005	-.0064
	1.21	.0086	.0281	.0996	-.0004	-.0006	-.0058
	1.40	.0102	.0355	.1156	-.0005	-.0008	-.0056
	1.60	.0117	.0439	.1336	-.0005	-.0007	-.0045
	1.80	.0129	.0528	.1506	-.0005	-.0010	-.0030
1.30	-0.60	-.0040	.0129	-.0447	.0002	-.0007	-.0068
	-0.40	-.0026	.0104	-.0285	.0001	-.0007	-.0069
	-0.19	-.0012	.0090	-.0133	.0001	-.0007	-.0070
	-0.04	-.0003	.0080	-.0027	-.0000	-.0007	-.0071
	0.01	.0001	.0084	.0009	.0000	-.0007	-.0071
	0.06	.0003	.0083	.0041	-.0000	-.0007	-.0072
	0.20	.0012	.0087	.0134	-.0001	-.0006	-.0072
	0.41	.0024	.0098	.0291	-.0001	-.0007	-.0073
	0.60	.0040	.0121	.0446	-.0002	-.0006	-.0074
	0.80	.0054	.0156	.0602	-.0003	-.0006	-.0073
	1.01	.0069	.0205	.0761	-.0003	-.0007	-.0069
	1.19	.0081	.0257	.0907	-.0003	-.0009	-.0068
	1.39	.0097	.0330	.1055	-.0003	-.0010	-.0053
	1.61	.0115	.0421	.1214	-.0003	-.0010	-.0049
	1.80	.0130	.0519	.1342	-.0004	-.0015	-.0028
1.70	-0.60	-.0038	.0184	-.0395	.0002	-.0010	-.0069
	-0.40	-.0026	.0106	-.0255	.0001	-.0010	-.0070
	-0.21	-.0014	.0093	-.0128	.0000	-.0009	-.0072
	-0.05	-.0004	.0088	-.0030	.0000	-.0009	-.0074
	0.01	-.0002	.0082	.0009	-.0000	-.0008	-.0074
	0.05	.0001	.0085	.0035	-.0000	-.0009	-.0074
	0.20	.0010	.0088	.0131	-.0001	-.0009	-.0075
	0.40	.0023	.0100	.0263	-.0002	-.0009	-.0076
	0.60	.0036	.0128	.0404	-.0002	-.0008	-.0077
	0.80	.0049	.0154	.0538	-.0003	-.0009	-.0077
	1.00	.0063	.0201	.0676	-.0003	-.0010	-.0073
	1.20	.0078	.0261	.0799	-.0003	-.0012	-.0066
	1.40	.0094	.0337	.0913	-.0003	-.0015	-.0055
	1.61	.0115	.0435	.1016	-.0003	-.0015	-.0042
	1.80	.0137	.0553	.1116	-.0003	-.0021	-.0013

M	α_v deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 0^\circ$ - Concluded			
2.22	-0.60	-.0036	.0127	-.0331	.0000	-.0012	-.0062
	-0.40	-.0023	.0096	-.0215	-.0000	-.0011	-.0063
	-0.19	-.0012	.0082	-.0092	-.0001	-.0010	-.0065
	-0.04	-.0003	.0078	-.0006	-.0001	-.0010	-.0066
	0.01	.0001	.0072	.0024	-.0001	-.0009	-.0067
	0.05	.0002	.0076	.0045	-.0001	-.0010	-.0067
	0.20	.0010	.0080	.0138	-.0001	-.0010	-.0067
	0.41	.0022	.0093	.0260	-.0002	-.0010	-.0067
	0.60	.0034	.0115	.0377	-.0002	-.0011	-.0067
	0.80	.0048	.0150	.0484	-.0002	-.0012	-.0064
	1.01	.0064	.0200	.0592	-.0002	-.0014	-.0056
	1.20	.0082	.0267	.0675	-.0002	-.0017	-.0044
	1.40	.0101	.0356	.0759	-.0002	-.0019	-.0037
	1.60	.0122	.0448	.0851	-.0003	-.0018	-.0035
	1.80	.0145	.0571	.0955	-.0003	-.0018	-.0037
				$\delta = 10^\circ$			
0.70	-0.59	-.0009	.0069	-.0075	.0001	-.0008	-.0069
	-0.19	.0018	.0077	.0220	.0000	-.0008	-.0073
	0.01	.0033	.0106	.0370	.0000	-.0009	-.0073
	0.21	.0048	.0136	.0521	-.0001	-.0006	-.0077
	0.61	.0080	.0226	.0860	-.0002	-.0002	-.0081
	0.99	.0111	.0364	.1226	-.0004	.0001	-.0069
	1.40	.0134	.0513	.1514	.0002	.0010	-.0046
0.90	-0.60	-.0007	.0070	-.0079	.0001	-.0008	-.0071
	-0.19	.0021	.0085	.0236	.0001	-.0009	-.0074
	0.01	.0035	.0109	.0392	.0000	-.0009	-.0075
	0.21	.0051	.0140	.0551	-.0001	-.0007	-.0079
	0.61	.0084	.0239	.0900	-.0001	-.0002	-.0079
	1.00	.0116	.0381	.1255	-.0003	.0001	-.0069
	1.39	.0137	.0509	.1492	.0005	.0012	-.0032
	1.80	.0155	.0685	.1711	.0001	.0007	.0028
1.00	-0.60	-.0006	.0080	-.0070	.0001	-.0008	-.0073
	-0.19	.0020	.0087	.0239	-.0001	-.0008	-.0075
	0.01	.0034	.0121	.0396	-.0001	-.0007	-.0078
	0.22	.0050	.0163	.0558	-.0001	-.0006	-.0082
	0.60	.0073	---	.0882	-.0001	-.0001	-.0088
	1.01	.0112	.0390	.1254	-.0002	.0002	-.0072
	1.40	.0138	.0550	.1581	-.0002	.0005	-.0048
	1.81	.0160	.0736	.1895	-.0001	.0004	.0001
1.10	-0.59	-.0010	.0116	-.0061	.0001	-.0008	-.0067
	-0.19	.0017	.0139	.0233	.0000	-.0009	-.0068
	0.01	.0030	.0151	.0390	-.0000	-.0010	-.0070
	0.20	.0045	.0182	.0531	-.0001	-.0007	-.0076
	0.60	.0083	.0284	.0834	-.0002	-.0002	-.0078
	1.00	.0102	.0411	.1178	-.0003	.0000	-.0068
	1.40	.0126	.0580	.1479	-.0003	.0003	-.0051
	1.80	.0147	.0765	.1767	-.0003	.0001	-.0013
1.30	-0.59	-.0008	.0100	-.0078	.0001	-.0010	-.0074
	-0.19	.0017	.0113	.0208	-.0000	-.0010	-.0077
	0.02	.0031	.0134	.0353	-.0001	-.0010	-.0079
	0.20	.0043	.0159	.0476	-.0001	-.0009	-.0083
	0.61	.0074	.0247	.0762	-.0001	-.0005	-.0090
	1.00	.0096	.0358	.1056	-.0002	.0001	-.0086
	1.40	.0123	.0512	.1348	-.0002	.0005	-.0072
	1.81	.0149	.0722	.1605	-.0002	.0003	-.0021
1.70	-0.60	-.0018	.0108	-.0064	-.0000	-.0011	-.0076
	-0.19	.0013	.0112	.0187	-.0001	-.0011	-.0078
	0.01	.0025	.0129	.0307	-.0001	-.0012	-.0081
	0.19	.0036	.0151	.0410	-.0001	-.0011	-.0083
	0.60	.0061	.0218	.0656	-.0002	-.0008	-.0090
	0.99	.0085	.0328	.0901	-.0002	-.0003	-.0083
	1.39	.0111	.0480	.1132	-.0002	-.0002	-.0061
	1.79	.0143	.0683	.1302	-.0001	-.0009	-.0012
2.22	-0.59	-.0018	.0100	-.0045	-.0002	-.0011	-.0067
	-0.18	.0011	.0103	.0185	-.0002	-.0012	-.0070
	0.01	.0022	.0115	.0288	-.0002	-.0012	-.0073
	0.20	.0033	.0136	.0385	-.0002	-.0011	-.0076
	0.60	.0055	.0201	.0585	-.0002	-.0009	-.0080
	1.00	.0079	.0304	.0784	-.0002	-.0007	-.0077
	1.41	.0110	.0468	.0967	-.0003	-.0014	-.0045
	1.80	.0150	.0691	.1145	-.0002	-.0008	-.0041

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Continued

(f) BC - Concluded

M	α_r, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 19.7°$			
1.00	-0.59	0.028	.0161	.0281	-.0000	-0.011	-.0079
	-0.18	0.057	.0217	.0564	-.0001	-0.012	-.0081
	0.01	0.070	.0276	.0712	-.0001	-0.011	-.0080
	0.21	0.084	.0328	.0858	-.0001	-0.009	-.0083
	0.60	0.108	.0445	.1158	-.0001	-0.003	-.0088
	1.00	0.128	.0573	.1414	.0001	0.007	-.0076
	1.40	0.146	.0722	.1652	.0002	0.015	-.0039
1.10	-0.59	0.024	.0196	.0271	-.0001	-0.012	-.0071
	-0.19	0.053	.0270	.0528	-.0002	-0.013	-.0074
	0.01	0.065	.0315	.0678	-.0003	-0.011	-.0075
	0.20	0.076	.0362	.0813	-.0000	-0.009	-.0083
	0.60	0.099	.0492	.1077	-.0002	-0.006	-.0082
	1.01	0.119	.0612	.1329	.0000	0.005	-.0082
	1.40	0.138	.0777	.1571	.0001	0.011	-.0055
	1.79	0.151	.0943	.1777	.0000	0.006	.0014
1.30	-0.59	0.022	.0171	.0232	-.0000	-0.014	-.0070
	-0.20	0.048	.0223	.0466	.0000	-0.015	-.0083
	0.01	0.059	.0264	.0598	-.0000	-0.012	-.0088
	0.20	0.069	.0309	.0722	-.0000	-0.010	-.0096
	0.60	0.096	.0424	.0973	-.0001	-0.005	-.0094
	1.00	0.114	.0554	.1228	-.0002	0.006	-.0082
	1.40	0.136	.0714	.1438	-.0001	0.013	-.0073
	1.79	0.152	.0890	.1617	.0000	0.011	-.0001
1.70	-0.60	0.012	.0167	.0190	-.0001	-0.014	-.0071
	-0.19	0.038	.0208	.0393	-.0001	-0.016	-.0083
	0.01	0.050	.0241	.0502	-.0001	-0.015	-.0089
	0.20	0.060	.0278	.0604	-.0001	-0.013	-.0090
	0.60	0.082	.0375	.0820	-.0001	-0.007	-.0091
	1.00	0.099	.0492	.1033	-.0001	0.000	-.0088
	1.39	0.122	.0646	.1216	-.0000	0.009	-.0060
	1.80	0.155	.0891	.1406	-.0001	0.005	-.0025
2.22	-0.59	0.007	.0159	.0174	-.0002	-0.014	-.0070
	-0.19	0.032	.0186	.0352	-.0002	-0.016	-.0073
	0.01	0.042	.0208	.0448	-.0002	-0.015	-.0075
	0.22	0.051	.0247	.0548	-.0002	-0.013	-.0078
	0.60	0.072	.0334	.0735	-.0002	-0.009	-.0086
	1.00	0.089	.0442	.0904	-.0002	-0.005	-.0079
	1.39	0.120	.0615	.1061	-.0002	-0.001	-.0063
	1.79	0.155	.0860	.1259	-.0002	-0.003	-.0044

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Continued

(g) BV

M	α_r deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-0.61	-0.0009	.0106	-.0121	-.0092	-.0057	.0196
	-0.41	-0.0008	.0100	-.0077	-.0089	-.0056	.0190
	-0.19	-0.0003	.0092	-.0040	-.0085	-.0054	.0183
	-0.05	-0.0001	.0088	-.0009	-.0082	-.0053	.0177
	0.01	-0.0000	.0087	.0004	-.0081	-.0053	.0177
	0.05	0.0001	.0075	.0009	-.0080	-.0052	.0175
	0.20	0.0001	.0085	.0042	-.0076	-.0050	.0167
	0.41	0.0005	.0085	.0084	-.0072	-.0049	.0161
	0.60	0.0009	.0087	.0116	-.0069	-.0048	.0156
	0.81	0.0012	.0091	.0157	-.0066	-.0046	.0148
	1.00	0.0018	.0099	.0188	-.0064	-.0045	.0141
	1.21	0.0026	.0115	.0212	-.0062	-.0043	.0131
	1.40	0.0034	.0134	.0239	-.0060	-.0040	.0119
	1.60	0.0043	.0166	.0267	-.0060	-.0037	.0106
	1.80	0.0052	.0202	.0299	-.0060	-.0035	.0095
0.90	-0.61	-0.0010	.0108	-.0120	-.0097	-.0059	.0211
	-0.40	-0.0007	.0099	-.0076	-.0093	-.0057	.0203
	-0.19	-0.0002	.0091	-.0035	-.0089	-.0056	.0198
	-0.05	-0.0002	.0090	-.0005	-.0086	-.0054	.0190
	0.01	0.0001	.0086	.0004	-.0084	-.0053	.0188
	0.05	0.0001	.0083	.0017	-.0083	-.0053	.0187
	0.21	0.0002	.0086	.0051	-.0080	-.0052	.0178
	0.40	0.0005	.0083	.0090	-.0075	-.0050	.0169
	0.60	0.0009	.0091	.0125	-.0072	-.0049	.0164
	0.80	0.0013	.0097	.0157	-.0069	-.0048	.0156
	1.00	0.0019	.0106	.0191	-.0066	-.0046	.0147
	1.21	0.0027	.0123	.0222	-.0064	-.0044	.0135
	1.40	0.0035	.0140	.0252	-.0063	-.0041	.0123
	1.61	0.0045	.0174	.0288	-.0062	-.0038	.0107
	1.80	0.0056	.0214	.0323	-.0062	-.0035	.0094
1.00	-0.61	-0.0010	.0128	-.0127	-.0109	-.0066	.0248
	-0.40	-0.0006	.0118	-.0083	-.0102	-.0063	.0234
	-0.22	-0.0004	.0108	-.0042	-.0098	-.0060	.0228
	-0.05	0.0000	.0103	-.0000	-.0093	-.0059	.0213
	0.01	0.0001	.0107	.0007	-.0091	-.0058	.0209
	0.04	-0.0001	.0107	.0024	-.0091	-.0058	.0210
	0.20	0.0001	.0096	.0057	-.0087	-.0056	.0202
	0.41	0.0005	.0096	.0091	-.0082	-.0053	.0192
	0.61	0.0009	.0107	.0130	-.0079	-.0052	.0186
	0.81	0.0015	.0108	.0163	-.0075	-.0050	.0176
	1.01	0.0021	.0119	.0201	-.0071	-.0048	.0165
	1.20	0.0025	.0130	.0231	-.0070	-.0045	.0153
	1.40	0.0038	.0159	.0263	-.0068	-.0041	.0138
	1.60	0.0049	.0204	.0283	-.0067	-.0038	.0119
	1.80	0.0057	.0228	.0328	-.0064	-.0034	.0097
1.10	-0.61	-0.0012	.0170	-.0118	-.0113	-.0068	.0262
	-0.41	-0.0009	.0164	-.0077	-.0106	-.0064	.0244
	-0.19	-0.0006	.0147	-.0030	-.0098	-.0062	.0230
	-0.05	-0.0004	.0144	.0003	-.0093	-.0059	.0217
	0.01	-0.0001	.0142	.0017	-.0093	-.0059	.0221
	0.05	-0.0003	.0135	.0022	-.0093	-.0059	.0220
	0.20	-0.0000	.0141	.0054	-.0088	-.0057	.0212
	0.41	0.0002	.0131	.0091	-.0084	-.0055	.0205
	0.61	0.0007	.0142	.0124	-.0080	-.0053	.0192
	0.81	0.0013	.0140	.0162	-.0078	-.0052	.0187
	1.00	0.0021	.0156	.0182	-.0075	-.0049	.0176
	1.21	0.0026	.0168	.0213	-.0071	-.0046	.0158
	1.40	0.0035	.0187	.0239	-.0070	-.0042	.0140
	1.61	0.0047	.0228	.0273	-.0068	-.0038	.0117
	1.80	0.0056	.0258	.0310	-.0065	-.0032	.0086
1.30	-0.60	-0.0013	.0139	-.0111	-.0101	-.0060	.0227
	-0.40	-0.0009	.0128	-.0071	-.0097	-.0058	.0217
	-0.19	-0.0004	.0120	-.0031	-.0092	-.0055	.0204
	-0.05	-0.0001	.0116	-.0006	-.0088	-.0053	.0194
	0.01	-0.0001	.0114	.0008	-.0086	-.0053	.0190
	0.05	0.0000	.0112	.0017	-.0085	-.0052	.0187
	0.21	0.0003	.0112	.0049	-.0079	-.0051	.0177
	0.40	0.0006	.0105	.0084	-.0074	-.0049	.0165
	0.60	0.0010	.0114	.0130	-.0070	-.0047	.0156
	0.80	0.0015	.0123	.0164	-.0067	-.0046	.0146
	1.00	0.0022	.0137	.0201	-.0065	-.0044	.0133
	1.20	0.0032	.0165	.0229	-.0063	-.0041	.0115
	1.41	0.0042	.0194	.0263	-.0062	-.0038	.0094
	1.61	0.0055	.0235	.0293	-.0060	-.0032	.0070
	1.80	0.0067	.0286	.0331	-.0058	-.0028	.0042
1.70	-0.60	-0.0017	.0142	-.0095	-.0077	-.0052	.0165
	-0.41	-0.0013	.0134	-.0059	-.0076	-.0050	.0161
	-0.19	-0.0008	.0123	-.0020	-.0075	-.0049	.0156
	-0.05	-0.0004	.0118	.0007	-.0073	-.0048	.0153
	0.01	-0.0004	.0116	.0020	-.0073	-.0048	.0151
	0.06	-0.0003	.0116	.0029	-.0072	-.0048	.0150
	0.20	0.0000	.0115	.0057	-.0071	-.0047	.0146
	0.40	0.0004	.0116	.0097	-.0068	-.0046	.0138
	0.61	0.0011	.0121	.0132	-.0065	-.0044	.0126
	0.80	0.0016	.0127	.0170	-.0062	-.0042	.0111
	1.00	0.0026	.0142	.0202	-.0059	-.0040	.0093
	1.20	0.0037	.0172	.0234	-.0057	-.0036	.0073
	1.40	0.0051	.0217	.0267	-.0054	-.0033	.0050
	1.61	0.0070	.0284	.0305	-.0049	-.0029	.0017
	1.80	0.0088	.0365	.0360	-.0044	-.0027	-.0009
2.22	-0.61	-0.0019	.0132	-.0089	-.0057	-.0045	.0113
	-0.41	-0.0013	.0116	-.0047	-.0056	-.0042	.0111
	-0.20	-0.0008	.0108	-.0013	-.0055	-.0041	.0108
	-0.05	-0.0005	.0105	.0019	-.0054	-.0040	.0105
	0.01	-0.0004	.0100	.0032	-.0054	-.0040	.0103
	0.05	-0.0003	.0098	.0042	-.0054	-.0040	.0103
	0.21	0.0001	.0103	.0069	-.0053	-.0039	.0099
	0.40	0.0007	.0102	.0103	-.0052	-.0038	.0095
	0.61	0.0013	.0110	.0145	-.0051	-.0038	.0088
	0.80	0.0021	.0121	.0179	-.0050	-.0036	.0078
	1.00	0.0034	.0155	.0204	-.0047	-.0036	.0063
	1.21	0.0050	.0194	.0231	-.0044	-.0034	.0041
	1.40	0.0068	.0255	.0268	-.0039	-.0033	.0017
	1.60	0.0085	.0322	.0313	-.0035	-.0033	.0000
	1.81	0.0102	.0419	.0355	-.0030	-.0032	-.0016

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 5° SIDESLIP - Concluded

(h) B

M	α, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-08.2	-0.021	.0085	-.0143	-.0001	-0.009	-.0059
	-06.2	-0.015	.0072	-.0110	-.0001	-0.008	-.0062
	-04.3	-0.011	.0062	-.0074	-.0001	-0.007	-.0064
	-02.3	-0.008	.0057	-.0035	-.0001	-0.006	-.0065
	-00.1	-0.005	.0055	.0012	-.0001	-0.007	-.0065
	01.8	-0.003	.0053	.0051	-.0001	-0.007	-.0064
	03.7	0.001	.0052	.0088	-.0001	-0.007	-.0064
	05.7	0.004	.0054	.0128	-.0001	-0.007	-.0063
	07.7	0.008	.0062	.0162	-.0001	-0.008	-.0060
	09.7	0.012	.0072	.0201	-.0001	-0.009	-.0059
0.90	-07.9	-0.019	.0083	-.0145	-.0001	-0.009	-.0062
	-05.9	-0.014	.0070	-.0111	-.0001	-0.009	-.0063
	-03.9	-0.010	.0064	-.0073	-.0001	-0.008	-.0065
	-02.0	-0.006	.0059	-.0033	-.0001	-0.007	-.0067
	00.1	-0.004	.0054	.0013	-.0001	-0.007	-.0067
	02.0	-0.001	.0053	.0055	-.0001	-0.006	-.0067
	04.0	0.002	.0055	.0092	-.0001	-0.007	-.0066
	06.0	0.005	.0058	.0131	-.0000	-0.007	-.0063
	08.0	0.008	.0065	.0169	-.0000	-0.008	-.0061
	10.0	0.014	.0075	.0203	-.0000	-0.009	-.0059
1.00	-07.8	-0.023	.0116	-.0144	-.0002	-0.009	-.0064
	-05.7	-0.017	.0093	-.0109	-.0002	-0.008	-.0067
	-03.7	-0.013	.0088	-.0068	-.0002	-0.007	-.0068
	-01.9	-0.009	.0072	-.0034	-.0001	-0.006	-.0069
	00.2	-0.008	.0074	.0019	-.0001	-0.006	-.0070
	02.2	-0.003	.0072	.0062	-.0001	-0.006	-.0067
	04.2			.0104	-.0001	-0.006	-.0067
	06.2	0.002	.0080	.0140	-.0001	-0.007	-.0064
	08.2	0.006	.0081	.0184	-.0001	-0.009	-.0062
	10.2	0.011	.0102	.0223	-.0001	-0.010	-.0060
1.10	-08.0	-0.019	.0122	-.0145	-.0001	-0.009	-.0061
	-05.9	-0.013	.0113	-.0110	-.0001	-0.008	-.0063
	-04.0	-0.009	.0107	-.0072	-.0001	-0.008	-.0063
	-02.0	-0.006	.0093	-.0036	-.0001	-0.006	-.0065
	-00.1	-0.004	.0099	.0009	-.0001	-0.006	-.0063
	01.9	0.001	.0094	.0050	-.0001	-0.007	-.0064
	03.9	0.004	.0097	.0090	-.0000	-0.008	-.0062
	06.0	0.007	.0100	.0131	-.0001	-0.008	-.0060
	08.0	0.010	.0110	.0166	-.0000	-0.009	-.0058
	10.1	0.014	.0121	.0203	-.0000	-0.010	-.0056
1.30	-08.0	-0.018	.0102	-.0160	.0000	-0.010	-.0066
	-05.9	-0.012	.0089	-.0123	-.0000	-0.009	-.0068
	-04.0	-0.008	.0080	-.0084	-.0000	-0.008	-.0070
	-02.0	-0.004	.0076	-.0042	-.0000	-0.007	-.0071
	-00.1	-0.001	.0075	-.0001	-.0000	-0.007	-.0071
	02.0	0.003	.0075	.0041	-.0000	-0.007	-.0071
	04.0	0.006	.0077	.0086	-.0000	-0.008	-.0069
	05.9	0.009	.0083	.0123	-.0000	-0.008	-.0068
	08.0	0.014	.0095	.0159	-.0000	-0.009	-.0066
	09.9	0.019	.0110	.0195	.0000	-0.011	-.0064
1.70	-08.1	-0.019	.0105	-.0158	.0000	-0.012	-.0070
	-06.0	-0.012	.0090	-.0119	.0000	-0.011	-.0071
	-04.3	-0.008	.0080	-.0085	.0000	-0.009	-.0073
	-02.3	-0.004	.0075	-.0044	.0000	-0.008	-.0075
	-00.3	0.001	.0073	-.0005	.0000	-0.008	-.0076
	01.8	0.002	.0074	.0041	.0000	-0.008	-.0076
	03.8	0.007	.0079	.0083	.0000	-0.009	-.0075
	05.7	0.010	.0086	.0120	.0000	-0.009	-.0074
	07.8	0.016	.0099	.0159	.0000	-0.011	-.0074
	09.9	0.023	.0119	.0197	.0000	-0.012	-.0073
2.22	-08.0	-0.023	.0107	-.0158	-.0000	-0.015	-.0065
	-05.8	-0.014	.0086	-.0117	-.0000	-0.012	-.0067
	-01.7	-0.003	.0070	-.0036	-.0000	-0.010	-.0069
	00.3	0.001	.0069	.0006	-.0000	-0.009	-.0069
	02.3	0.004	.0070	.0054	-.0000	-0.010	-.0069
	04.3	0.009	.0075	.0098	-.0000	-0.011	-.0068
	06.2	0.014	.0087	.0134	-.0000	-0.012	-.0066
	08.2	0.022	.0106	.0171	-.0000	-0.014	-.0064
	10.3	0.033	.0130	.0204	.0000	-0.018	-.0061

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK

(a) BVWC

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
$\delta = 0°$							
0.70	-0.8	-0.006	.0235	.0034	.0107	0.100	-.0362
	-0.4	-0.006	.0139	.0036	.0049	0.050	-.0177
	-0.0	-0.003	.0110	.0030	-.0010	0.006	-.0017
	0.2	-0.003	.0108	.0030	-.0033	-0.016	.0047
	0.4	-0.003	.0125	.0024	-.0060	-0.039	.0127
	0.6	-0.002	.0160	.0025	-.0090	-0.065	.0224
	0.9	-0.002	.0213	.0030	-.0116	-0.091	.0317
	1.0	-0.002	.0292	.0035	-.0140	-0.120	.0415
0.90	-0.8	-0.010	.0236	.0051	.0104	0.098	-.0362
	-0.4	-0.010	.0133	.0053	.0045	0.045	-.0162
	-0.0	-0.010	.0110	.0058	-.0011	0.003	-.0006
	0.2	-0.008	.0111	.0053	-.0035	-0.020	.0064
	0.4	-0.008	.0129	.0050	-.0065	-0.044	.0154
	0.6	-0.008	.0166	.0054	-.0095	-0.071	.0255
	0.8	-0.009	.0224	.0061	-.0123	-0.100	.0363
	1.01	-0.010	.0293	.0067	-.0127	-0.121	.0410
1.00	-0.9	-0.014	.0299	.0086	.0135	0.103	-.0403
	-0.4	-0.012	.0218	.0064	.0062	0.051	-.0191
	0.1	-0.010	.0158	.0069	-.0015	-0.004	.0013
	0.2	-0.010	.0187	.0070	-.0048	-0.027	.0096
	0.4	-0.009	.0207	.0072	-.0089	-0.054	.0208
	0.6	-0.012	.0252	.0084	-.0126	-0.084	.0322
	0.8	-0.012	.0316	.0098	-.0154	-0.109	.0412
	1.0	-0.017	.0377	.0128	-.0176	-0.134	.0489
1.10	-0.8	-0.009	.0321	.0064	.0142	0.103	-.0406
	-0.3	-0.006	.0212	.0039	.0059	0.047	-.0174
	0.1	-0.007	.0193	.0047	-.0014	0.001	.0010
	0.2	-0.007	.0191	.0048	-.0047	-0.024	.0090
	0.4	-0.005	.0207	.0045	-.0089	-0.051	.0200
	0.6	-0.006	.0259	.0051	-.0130	-0.080	.0315
	0.8	-0.009	.0310	.0068	-.0163	-0.106	.0416
	1.0	-0.011	.0402	.0080	-.0194	-0.136	.0527
1.30	-0.4	-0.003	.0182	.0018	.0061	0.045	-.0168
	-0.1	-0.001	.0158	.0012	-.0009	-0.001	-.0007
	0.2	0.000	.0161	.0008	-.0043	-0.021	.0076
	0.4	0.001	.0179	.0004	-.0079	-0.044	.0164
	0.6	0.001	.0214	.0007	-.0118	-0.069	.0260
	0.9	0.001	.0260	.0013	-.0150	-0.091	.0341
	1.0	-0.001	.0386	.0026	-.0180	-0.116	.0418
1.70	-0.8	-0.007	.0253	.0038	.0103	0.078	-.0249
	-0.4	-0.005	.0176	.0025	.0051	0.039	-.0129
	0.1	-0.003	.0150	.0017	-.0005	0.003	-.0006
	0.2	-0.004	.0154	.0020	-.0032	-0.017	.0056
	0.4	-0.004	.0170	.0023	-.0059	-0.036	.0117
	0.6	-0.005	.0198	.0021	-.0087	-0.056	.0178
	0.8	-0.005	.0242	.0034	-.0110	-0.074	.0231
	1.0	-0.005	.0298	.0042	-.0131	-0.094	.0278
2.22	-0.8	-0.008	.0217	.0035	.0073	0.063	-.0150
	-0.4	-0.006	.0151	.0021	.0035	0.030	-.0077
	-0.0	-0.006	.0130	.0017	-.0006	-0.001	.0005
	0.2	-0.005	.0137	.0018	-.0027	-0.018	.0048
	0.4	-0.006	.0158	.0023	-.0047	-0.034	.0087
	0.6	-0.006	.0183	.0030	-.0067	-0.051	.0126
	0.9	-0.007	.0220	.0037	-.0085	-0.068	.0159
	1.0	-0.008	.0274	.0043	-.0101	-0.086	.0187
$\delta = 9.7°$							
0.70	-0.8	0.003	.0274	.0409	.0144	0.104	-.0358
	-0.4	0.001	.0179	.0370	.0066	0.052	-.0168
	-0.0	0.003	.0149	.0350	-.0011	0.005	-.0015
	0.2	0.003	.0153	.0349	-.0042	-0.018	.0045
	0.4	0.005	.0163	.0351	-.0077	-0.042	.0124
	0.6	0.005	.0202	.0366	-.0117	-0.069	.0217
	0.9	0.005	.0259	.0390	-.0155	-0.096	.0316
	1.0	0.006	.0329	.0417	-.0186	-0.122	.0403
0.90	-0.8	-0.003	.0284	.0439	.0142	0.103	-.0361
	-0.4	-0.002	.0177	.0389	.0065	0.049	-.0162
	0.1	-0.002	.0153	.0375	-.0013	0.001	-.0002
	0.1	-0.001	.0155	.0377	-.0044	-0.022	.0062
	0.4	-0.001	.0170	.0385	-.0085	-0.049	.0154
	0.6	-0.001	.0216	.0402	-.0126	-0.077	.0258
	0.8	-0.001	.0274	.0430	-.0160	-0.104	.0354
	1.0	0.000	.0338	.0458	-.0175	-0.124	.0399
1.00	-0.8	-0.009	.0358	.0486	.0177	0.111	-.0413
	-0.4	-0.005	.0256	.0410	.0081	0.053	-.0187
	-0.1	-0.004	.0183	.0384	-.0013	-0.002	.0001
	0.2	-0.003	.0232	.0384	-.0057	-0.029	.0094
	0.4	-0.004	.0240	.0404	-.0108	-0.060	.0208
	0.6	-0.006	.0277	.0431	-.0153	-0.086	.0311
	0.8	-0.007	.0364	.0474	-.0192	-0.114	.0407
	1.0	-0.009	.0431	.0589	-.0237	-0.143	.0509

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
$\delta = 9.7°$ - Concluded							
1.10	-0.8	-0.015	.0355	.0505	.0175	0.104	-.0390
	-0.4	-0.013	.0251	.0423	.0083	0.049	-.0172
	-0.0	-0.016	.0219	.0485	-.0009	-0.002	.0006
	0.1	-0.013	.0230	.0485	-.0049	-0.027	.0093
	0.4	-0.013	.0242	.0430	-.0100	-0.054	.0193
	0.6	-0.012	.0289	.0454	-.0149	-0.085	.0315
	0.8	-0.011	.0353	.0483	-.0195	-0.110	.0402
	1.01	-0.010	.0434	.0514	-.0240	-0.139	.0511
1.30	-0.8	0.002	.0306	.0392	.0174	0.092	-.0335
	-0.4	-0.003	.0220	.0359	.0079	0.047	-.0168
	-0.0	-0.003	.0194	.0341	-.0007	0.001	-.0005
	0.2	-0.001	.0198	.0336	-.0047	-0.022	.0069
	0.4	0.000	.0218	.0345	-.0093	-0.048	.0159
	0.6	0.002	.0247	.0357	-.0143	-0.078	.0250
	0.8	0.004	.0294	.0383	-.0189	-0.095	.0333
	1.0	0.008	.0362	.0410	-.0231	-0.117	.0400
1.70	-0.8	0.000	.0284	.0368	.0144	0.077	-.0231
	-0.4	-0.003	.0208	.0342	.0075	0.039	-.0121
	-0.0	-0.003	.0182	.0323	-.0002	0.003	-.0009
	0.2	-0.002	.0189	.0320	-.0040	-0.017	.0045
	0.4	-0.002	.0209	.0331	-.0081	-0.038	.0106
	0.6	0.001	.0235	.0335	-.0115	-0.055	.0157
	0.8	0.003	.0274	.0346	-.0146	-0.074	.0207
	1.0	0.005	.0330	.0365	-.0173	-0.093	.0252
2.22	-0.9	-0.002	.0245	.0322	.0097	0.059	-.0135
	-0.4	-0.001	.0183	.0298	.0047	0.029	-.0066
	-0.0	0.002	.0161	.0275	-.0007	-0.003	.0006
	0.2	0.001	.0169	.0278	-.0034	-0.018	.0040
	0.4	-0.001	.0186	.0293	-.0062	-0.034	.0075
	0.6	-0.001	.0215	.0306	-.0088	-0.052	.0113
	0.8	-0.001	.0254	.0314	-.0111	-0.068	.0145
	1.0	0.001	.0307	.0313	-.0130	-0.088	.0172
$\delta = 19.7°$							
1.00	-0.9	-0.001	.0472	.0829	.0210	0.108	-.0393
	-0.4	-0.002	.0372	.0739	.0092	0.052	-.0178
	-0.1	-0.001	.0345	.0705	-.0014	0.000	.0000
	0.1	0.002	.0368	.0708	-.0066	-0.030	.0088
	0.4	0.001	.0362	.0736	-.0130	-0.060	.0202
	0.6	0.002	.0426	.0775	-.0188	-0.090	.0308
	0.8	0.006	.0467	.0820	-.0235	-0.118	.0393
	1.0	0.006	.0572	.0877	-.0290	-0.149	.0498
1.10	-0.8	-0.009	.0483	.0831	.0210	0.103	-.0373
	-0.4	-0.007	.0388	.0740	.0095	0.051	-.0173
	-0.0	-0.009	.0358	.0715	-.0011	-0.005	.0013
	0.2	-0.010	.0368	.0732	-.0061	-0.028	.0094
	0.4	-0.008	.0389	.0750	-.0120	-0.056	.0192
	0.6	-0.005	.0432	.0774	-.0183	-0.086	.0301
	0.9	0.003	.0493	.0787	-.0233	-0.115	.0404
	1.0	0.011	.0569	.0813	-.0287	-0.141	.0496
1.30	-0.8	0.009	.0484	.0689	.0209	0.095	-.0325
	-0.4	0.000	.0332	.0641	.0095	0.045	-.0152
	-0.0	-0.003	.0310	.0618	-.0008	0.001	-.0006
	0.2	0.000	.0319	.0610	-.0055	-0.022	.0060
	0.4	0.003	.0337	.0628	-.0102	-0.047	.0139
	0.6	0.007	.0372	.0653	-.0142	-0.075	.0231
	0.8	0.014	.0423	.0669	-.0222	-0.098	.0313
	1.0	0.023	.0488	.0704	-.0271	-0.122	.0379
1.70	-0.8	0.009	.0380	.0606	.0166	0.077	-.0219
	-0.4	0.002	.0308	.0568	.0084	0.039	-.0107
	-0.0	0.000	.0287	.0542	-.0003	0.002	-.0009
	0.2	0.001	.0291	.0543	-.0048	-0.017	.0039
	0.4	0.004	.0308	.0555	-.0091	-0.039	.0088
	0.6	0.008	.0340	.0576	-.0134	-0.058	.0143
	0.8	0.012	.0382	.0585	-.0172	-0.078	.0196
	1.0	0.018	.0442	.0605	-.0209	-0.099	.0241
2.22	-0.8	0.008	.0336	.0520	.0119	0.062	-.0128
	-0.4	0.007	.0269	.0493	.0059	0.027	-.0089
	0.1	0.008	.0253	.0474	-.0008	-0.003	.0008
	0.2	0.009	.0259	.0476	-.0041	-0.018	.0036
	0.4	0.010	.0275	.0485	-.0075	-0.035	.0066
	0.6	0.010	.0304	.0501	-.0105	-0.052	.0100
	0.9	0.011	.0345	.0510	-.0132	-0.071	.0138
	1.0	0.014	.0406	.0513	-.0151	-0.093	.0160

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Continued

(b) BVW

K	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-08.0	-0.006	.0283	.0031	.0109	.0101	-.0364
	-04.0	-0.005	.0126	.0031	.0047	.0048	-.0167
	-00.0	-0.003	.0104	.0030	-.0009	.0006	-.0016
	01.9	-0.001	.0104	.0025	-.0032	-.0016	.0048
	04.0	-0.002	.0118	.0026	-.0061	-.0040	.0129
	06.0	-0.002	.0160	.0032	-.0091	-.0067	.0227
	08.0	-0.002	.0213	.0037	-.0120	-.0094	.0328
	10.0	-0.001	.0287	.0040	-.0142	-.0121	.0417
0.90	-02.1	-0.009	.0112	.0057	.0018	.0024	-.0082
	-00.1	-0.008	.0108	.0059	-.0010	.0004	-.0007
	02.0	-0.008	.0110	.0054	-.0036	-.0020	.0066
	04.0	-0.007	.0127	.0053	-.0066	-.0046	.0157
	06.1	-0.009	.0168	.0063	-.0099	-.0073	.0266
	08.0	-0.010	.0225	.0071	-.0125	-.0101	.0367
	10.0	-0.010	.0295	.0075	-.0129	-.0121	.0414
1.00	-08.1	-0.009	.0296	.0071	.0143	.0108	-.0420
	-04.0	-0.006	.0191	.0059	.0061	.0051	-.0165
	-00.0	-0.005	.0154	.0059	-.0014	-.0002	.0005
	01.9	-0.006	.0177	.0061	-.0047	-.0026	.0093
	04.0	-0.006	.0190	.0063	-.0091	-.0056	.0217
	06.1	-0.006	.0249	.0079	-.0130	-.0086	.0335
	08.0	-0.009	.0297	.0098	-.0156	-.0111	.0423
	10.1	-0.014	.0369	.0128	-.0177	-.0135	.0494
1.10	-08.1	-0.007	.0296	.0055	.0146	.0104	-.0411
	-04.0	-0.004	.0199	.0039	.0067	.0051	-.0192
	00.1	-0.003	.0167	.0040	-.0012	-.0002	.0004
	01.9	-0.002	.0179	.0031	-.0046	-.0025	.0100
	04.0	-0.003	.0199	.0045	-.0089	-.0053	.0207
	06.1	-0.002	.0245	.0048	-.0130	-.0082	.0325
	08.0	-0.005	.0297	.0070	-.0164	-.0108	.0422
	10.1	-0.008	.0387	.0088	-.0195	-.0137	.0523
1.30	-08.1	-0.002	.0258	.0019	.0137	.0093	-.0350
	-04.0	-0.001	.0168	.0010	.0063	.0044	-.0168
	-00.0	0.001	.0144	.0011	-.0008	.0002	-.0003
	02.1	0.001	.0149	.0007	-.0043	-.0022	.0077
	04.1	0.001	.0167	.0008	-.0080	-.0045	.0167
	06.1	0.001	.0205	.0015	-.0118	-.0069	.0263
	08.0	0.000	.0249	.0023	-.0150	-.0092	.0343
	10.1	0.000	.0318	.0035	-.0178	-.0117	.0422
1.70	-08.1	-0.006	.0240	.0040	.0105	.0078	-.0249
	-04.0	-0.004	.0164	.0025	.0052	.0040	-.0129
	00.1	-0.002	.0138	.0021	-.0004	.0002	-.0004
	01.9	-0.003	.0143	.0021	-.0031	-.0017	.0053
	04.0	-0.003	.0159	.0024	-.0059	-.0036	.0117
	06.0	-0.004	.0189	.0033	-.0087	-.0055	.0177
	08.0	-0.004	.0232	.0039	-.0110	-.0074	.0232
	10.0	-0.005	.0288	.0047	-.0132	-.0094	.0279
2.22	-08.1	-0.007	.0212	.0037	.0076	.0063	-.0151
	-04.0	-0.006	.0140	.0029	.0035	.0029	-.0077
	-00.0	-0.005	.0122	.0026	-.0006	-.0001	.0005
	02.0	-0.005	.0128	.0030	-.0028	-.0019	.0049
	04.0	-0.005	.0143	.0031	-.0049	-.0035	.0091
	06.1	-0.006	.0176	.0040	-.0069	-.0052	.0131
	08.0	-0.007	.0214	.0046	-.0087	-.0069	.0162
	10.1	-0.007	.0265	.0052	-.0102	-.0087	.0189

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Continued

(c) BWC

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
δ = 0°							
0.70	-08.0	-0.006	.0118	.0061	-.0012	0.013	.0096
	-04.0	-0.005	.0095	.0048	-.0013	0.005	.0048
	00.1	-0.002	.0097	.0039	-.0013	0.000	-.0001
	02.0	-0.001	.0095	.0035	-.0014	-0.001	-.0025
	04.1	0.000	.0095	.0031	-.0014	-0.004	-.0050
	06.2	0.000	.0099	.0026	-.0014	-0.008	-.0073
	08.1	0.002	.0107	.0023	-.0015	-0.013	-.0094
	10.1	0.003	.0127	.0023	-.0015	-0.018	-.0116
0.90	-08.0	-0.009	.0117	.0071	-.0012	0.012	.0096
	-04.0	-0.006	.0108	.0062	-.0012	0.005	.0049
	00.1	-0.004	.0099	.0046	-.0013	0.000	-.0002
	02.1	-0.003	.0096	.0040	-.0013	-0.002	-.0027
	04.1	-0.002	.0097	.0036	-.0014	-0.005	-.0053
	06.1	-0.001	.0101	.0033	-.0014	-0.009	-.0076
	08.0	-0.001	.0110	.0033	-.0014	-0.013	-.0097
	10.1	0.000	.0121	.0029	-.0015	-0.019	-.0119
1.00	-07.9	-0.008	.0193	.0067	-.0011	0.012	.0098
	-04.0	-0.006	.0178	.0054	-.0011	0.004	.0053
	00.1	-0.004	.0154	.0047	-.0012	-0.001	-.0002
	02.0	0.000	.0163	.0031	-.0013	-0.002	-.0029
	04.1	-0.001	.0159	.0029	-.0013	-0.004	-.0055
	06.1	-0.002	.0164	.0027	-.0014	-0.009	-.0081
	08.1	0.001	.0162	.0022	-.0014	-0.013	-.0100
	10.1	0.001	.0184	.0021	-.0015	-0.020	-.0124
1.10	-08.0	-0.008	.0198	.0056	-.0009	0.013	.0096
	-03.9	-0.006	.0178	.0043	-.0010	0.004	.0049
	00.1	-0.005	.0171	.0042	-.0011	-0.002	.0001
	02.1	-0.004	.0170	.0036	-.0010	-0.002	-.0023
	04.1	-0.004	.0176	.0035	-.0011	-0.006	-.0046
	06.1	-0.002	.0181	.0025	-.0012	-0.010	-.0068
	08.1	-0.003	.0199	.0023	-.0011	-0.015	-.0089
	10.1	-0.003	.0198	.0022	-.0011	-0.021	-.0111
1.30	-07.9	-0.005	.0169	.0034	-.0010	0.015	.0096
	-04.0	-0.004	.0148	.0025	-.0010	0.005	.0050
	00.1	-0.003	.0145	.0019	-.0009	-0.001	.0000
	02.0	-0.001	.0148	.0008	-.0010	-0.003	-.0022
	04.1	0.001	.0146	.0001	-.0010	-0.007	-.0049
	06.1	0.003	.0153	-.0006	-.0011	-0.011	-.0072
	08.0	0.004	.0159	-.0008	-.0011	-0.017	-.0093
	10.1	0.005	.0178	-.0008	-.0012	-0.024	-.0115
1.70	-07.9	-0.008	.0170	.0034	-.0006	0.019	.0098
	-03.9	-0.006	.0145	.0029	-.0006	0.007	.0053
	00.1	-0.005	.0139	.0023	-.0006	0.000	.0003
	02.0	-0.005	.0141	.0021	-.0007	-0.003	-.0022
	04.0	-0.004	.0144	.0021	-.0007	-0.008	-.0048
	06.1	-0.004	.0152	.0018	-.0007	-0.013	-.0072
	08.0	-0.003	.0164	.0015	-.0007	-0.019	-.0094
	10.0	-0.003	.0185	.0015	-.0007	-0.027	-.0116
2.22	-08.0	-0.008	.0154	.0026	-.0004	0.019	.0096
	-03.9	-0.007	.0127	.0023	-.0004	0.007	.0045
	00.1	-0.006	.0121	.0019	-.0003	-0.001	-.0004
	02.0	-0.007	.0122	.0018	-.0003	-0.005	-.0028
	04.0	-0.007	.0129	.0017	-.0003	-0.010	-.0053
	06.1	-0.006	.0136	.0015	-.0003	-0.016	-.0077
	08.0	-0.007	.0157	.0017	-.0003	-0.024	-.0099
δ = 9.7°							
0.70	-07.9	0.004	.0145	.0392	.0019	0.013	.0145
	-04.0	0.005	.0135	.0353	.0001	0.006	.0058
	00.1	0.006	.0130	.0329	-.0015	0.001	.0000
	02.1	0.006	.0131	.0330	-.0023	-0.002	-.0029
	04.0	0.007	.0135	.0341	-.0030	-0.006	-.0058
	06.1	0.009	.0138	.0350	-.0039	-0.009	-.0085
	08.0	0.010	.0154	.0368	-.0047	-0.013	-.0109
	10.1	0.011	.0159	.0388	-.0058	-0.019	-.0131
0.90	-08.0	0.002	.0153	.0412	.0020	0.013	.0107
	-03.9	0.002	.0141	.0373	.0000	0.005	.0056
	00.1	0.004	.0138	.0349	-.0015	0.000	-.0002
	02.0	0.004	.0135	.0349	-.0022	-0.004	-.0030
	04.1	0.005	.0142	.0357	-.0030	-0.007	-.0061
	06.1	0.007	.0145	.0368	-.0040	-0.010	-.0088
	08.1	0.008	.0154	.0386	-.0050	-0.015	-.0112
	10.1	0.010	.0166	.0413	-.0061	-0.021	-.0137
1.00	-08.0	-0.002	.0219	.0414	.0019	0.014	.0109
	-04.0	-0.001	.0198	.0363	.0001	0.005	.0058
	00.1	0.000	.0209	.0338	-.0014	-0.002	-.0001
	02.0	0.001	.0207	.0337	-.0021	-0.003	-.0028
	04.1	0.001	.0188	.0352	-.0029	-0.007	-.0062
	06.1	0.003	.0201	.0367	-.0038	-0.011	-.0088
	08.0	0.004	.0238	.0398	-.0050	-0.017	-.0108
	10.1	0.006	.0229	.0413	-.0062	-0.023	-.0136

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
δ = 9.7° - Concluded							
1.10	-07.9	-0.010	.0225	.0441	.0024	0.013	.0103
	-04.0	-0.012	.0212	.0394	.0006	0.004	.0055
	00.1	-0.012	.0214	.0373	-.0006	-0.003	.0002
	02.1	-0.011	.0216	.0375	-.0012	-0.004	-.0023
	04.1	-0.011	.0222	.0397	-.0020	-0.008	-.0053
	06.1	-0.009	.0223	.0399	-.0030	-0.013	-.0074
	08.1	-0.005	.0243	.0419	-.0044	-0.017	-.0103
	10.1	0.000	.0255	.0426	-.0059	-0.024	-.0123
1.30	-07.9	0.003	.0201	.0363	.0029	0.016	.0103
	-03.9	-0.001	.0183	.0332	.0002	0.006	.0055
	00.1	-0.001	.0174	.0313	-.0011	-0.000	.0001
	02.1	0.000	.0184	.0313	-.0016	-0.006	-.0025
	04.1	0.002	.0181	.0321	-.0025	-0.009	-.0055
	06.1	0.006	.0194	.0329	-.0037	-0.013	-.0081
	08.0	0.009	.0206	.0343	-.0051	-0.018	-.0104
	10.1	0.011	.0219	.0365	-.0067	-0.025	-.0129
1.70	-08.0	0.002	.0200	.0336	.0035	0.020	.0103
	-04.0	-0.002	.0175	.0319	.0015	0.007	.0058
	00.1	-0.002	.0173	.0304	-.0006	-0.001	.0002
	02.0	-0.002	.0171	.0302	-.0017	-0.004	-.0024
	04.1	0.001	.0181	.0301	-.0029	-0.009	-.0056
	06.1	0.002	.0188	.0310	-.0038	-0.014	-.0080
	08.0	0.004	.0204	.0317	-.0046	-0.020	-.0103
	10.0	0.008	.0225	.0328	-.0054	-0.028	-.0127
2.22	-07.9	-0.002	.0180	.0295	.0021	0.020	.0097
	-04.0	-0.001	.0155	.0273	.0009	0.007	.0049
	00.1	0.001	.0149	.0256	-.0005	-0.001	-.0004
	02.0	0.001	.0155	.0259	-.0012	-0.006	-.0030
	04.0	0.001	.0157	.0264	-.0019	-0.011	-.0057
	06.1	0.001	.0174	.0276	-.0025	-0.017	-.0082
	08.0	0.001	.0192	.0278	-.0030	-0.025	-.0104
	10.1	0.002	.0220	.0280	-.0033	-0.037	-.0127
δ = 19.7°							
1.00	-07.9	0.007	.0360	.0775	.0060	0.016	.0124
	-04.0	0.004	.0340	.0705	.0016	0.005	.0070
	00.1	0.007	.0334	.0671	-.0017	0.000	.0000
	02.0	0.008	.0342	.0667	-.0031	-0.005	-.0034
	04.1	0.006	.0341	.0704	-.0051	-0.009	-.0070
	06.0	0.011	.0353	.0730	-.0071	-0.015	-.0094
	08.1	0.014	.0365	.0754	-.0092	-0.021	-.0123
	10.1	0.018	.0363	.0798	-.0114	-0.027	-.0153
1.10	-08.0	0.001	.0372	.0760	.0061	0.015	.0121
	-04.0	-0.005	.0360	.0711	.0019	0.004	.0070
	00.1	-0.005	.0358	.0683	-.0007	-0.008	.0003
	02.0	-0.009	.0362	.0701	-.0022	-0.005	-.0030
	04.1	-0.002	.0362	.0702	-.0039	-0.010	-.0064
	06.1	0.002	.0367	.0717	-.0059	-0.015	-.0086
	08.0	0.009	.0381	.0738	-.0082	-0.021	-.0109
	10.1	0.013	.0389	.0767	-.0107	-0.027	-.0136
1.30	-07.9	0.011	.0325	.0668	.0061	0.017	.0117
	-04.0	0.001	.0307	.0627	.0019	0.005	.0068
	00.1	-0.001	.0306	.0596	-.0012	-0.001	-.0003
	02.0	0.002	.0307	.0598	-.0027	-0.005	-.0037
	04.1	0.005	.0311	.0621	-.0043	-0.009	-.0072
	06.1	0.010	.0317	.0634	-.0062	-0.015	-.0096
	08.1	0.018	.0330	.0647	-.0084	-0.022	-.0121
	10.1	0.025	.0345	.0671	-.0106	-0.029	-.0149
1.70	-08.0	0.011	.0306	.0582	.0060	0.021	.0115
	-04.0	0.003	.0283	.0553	.0026	0.007	.0069
	00.1	0.000	.0281	.0534	-.0007	-0.002	.0002
	02.1	0.001	.0284	.0535	-.0023	-0.005	-.0032
	04.0	0.005	.0290	.0545	-.0039	-0.010	-.0069
	06.1	0.008	.0296	.0564	-.0055	-0.015	-.0097
	08.1	0.014	.0313	.0569	-.0070	-0.023	-.0118
	10.0	0.021	.0330	.0575	-.0084	-0.032	-.0142
2.22	-08.0	0.010	.0274	.0497	.0044	0.022	.0108
	-04.0	0.009	.0250	.0478	.0023	0.007	.0057
	00.1	0.008	.0244	.0462	-.0006	-0.002	-.0005
	02.0	0.009	.0249	.0463	-.0019	-0.007	-.0035
	04.1	0.010	.0254	.0473	-.0032	-0.012	-.0068
	06.1	0.012	.0266	.0484	-.0043	-0.019	-.0095
	08.1	0.012	.0287	.0491	-.0051	-0.028	-.0117
	10.0	0.015	.0315	.0492	-.0054	-0.041	-.0139

[redacted]

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Continued

(d) BW

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-08.0	-0.005	.0114	.0058	-.0016	0.014	.0094
	-03.9	-0.002	.0101	.0041	-.0016	0.007	.0047
	-00.0	-0.001	.0096	.0036	-.0015	0.001	-.0001
	01.9	0.000	.0095	.0033	-.0016	0.001	-.0027
	04.0	-0.001	.0092	.0033	-.0016	-0.002	-.0053
	06.0	-0.002	.0099	.0034	-.0017	-0.006	-.0076
	08.0	0.000	.0103	.0027	-.0016	-0.010	-.0097
	10.0	-0.001	.0115	.0027	-.0017	-0.016	-.0117
0.90	-08.0	-0.007	.0116	.0064	-.0015	0.013	.0096
	-04.0	-0.006	.0099	.0060	-.0014	0.006	.0048
	00.1	-0.004	.0098	.0046	-.0014	0.001	-.0004
	01.9	-0.004	.0095	.0043	-.0014	0.000	-.0028
	04.0	-0.002	.0095	.0039	-.0015	-0.003	-.0055
	06.0	-0.002	.0098	.0039	-.0016	-0.007	-.0078
	08.0	-0.003	.0109	.0036	-.0016	-0.012	-.0099
	10.0	-0.001	.0119	.0035	-.0017	-0.017	-.0121
1.00	-08.0	-0.005	.0181	.0056	-.0014	0.014	.0097
	-04.0	-0.004	.0150	.0048	-.0014	0.006	.0050
	-00.1	-0.003	.0151	.0036	-.0014	0.001	-.0005
	02.0	-0.002	.0146	.0031	-.0015	-0.001	-.0033
	04.0	-0.002	.0152	.0029	-.0015	-0.004	-.0060
	06.0	-0.001	.0153	.0027	-.0016	-0.008	-.0082
	08.0	0.000	.0181	.0023	-.0016	-0.013	-.0103
	10.0	0.003	.0790	.0007	-.0017	-0.019	-.0127
1.10	-08.1	-0.004	.0177	.0040	-.0013	0.014	.0093
	-04.0	-0.002	.0161	.0030	-.0012	0.006	.0047
	-00.0	-0.001	.0156	.0026	-.0011	0.000	-.0002
	02.0	0.000	.0157	.0019	-.0014	-0.002	-.0023
	04.0	0.000	.0152	.0020	-.0014	-0.005	-.0053
	06.0	0.002	.0164	.0010	-.0015	-0.009	-.0073
	08.0	0.002	.0172	.0008	-.0014	-0.015	-.0092
	10.0	0.002	.0185	.0006	-.0014	-0.021	-.0113
1.30	-08.0	0.001	.0157	.0014	-.0012	0.015	.0095
	-04.0	0.002	.0138	.0005	-.0011	0.007	.0048
	-00.0	0.003	.0134	-.0001	-.0010	0.001	-.0001
	01.9	0.004	.0134	-.0003	-.0011	-0.001	-.0024
	04.0	0.003	.0134	-.0005	-.0011	-0.005	-.0050
	06.0	0.004	.0142	-.0007	-.0012	-0.010	-.0073
	07.9	0.004	.0151	-.0009	-.0012	-0.015	-.0094
	10.0	0.005	.0169	-.0010	-.0013	-0.022	-.0115
1.70	-08.0	-0.003	.0157	.0026	-.0007	0.019	.0094
	-04.0	-0.003	.0137	.0022	-.0007	0.008	.0050
	-00.0	-0.003	.0129	.0018	-.0007	0.001	.0000
	01.9	-0.002	.0130	.0016	-.0007	-0.001	-.0024
	04.0	-0.002	.0131	.0014	-.0007	-0.006	-.0050
	06.0	-0.002	.0140	.0012	-.0007	-0.011	-.0073
	07.9	-0.002	.0153	.0013	-.0007	-0.017	-.0095
	10.0	0.000	.0174	.0002	-.0007	-0.026	-.0118
2.22	-08.0	-0.003	.0144	.0020	-.0003	0.020	.0093
	-04.0	-0.004	.0118	.0021	-.0003	0.008	.0044
	-00.0	-0.005	.0113	.0021	-.0004	0.001	-.0005
	02.0	-0.004	.0115	.0019	-.0004	-0.003	-.0029
	04.0	-0.004	.0120	.0017	-.0003	-0.009	-.0053
	06.0	-0.004	.0131	.0017	-.0003	-0.015	-.0077
	08.0	-0.004	.0150	.0015	-.0003	-0.023	-.0099
	10.0	-0.005	.0176	.0015	-.0004	-0.035	-.0123

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Continued

(e) BVC

K	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				δ = 0°			
0.70	-07.9	0.006	.0191	.0083	.0141	0.096	-0.326
	-03.9	0.006	.0090	.0007	.0066	0.044	-0.143
	00.1	0.005	.0058	.0001	.0003	0.004	-0.018
	02.0	0.004	.0069	.0001	-.0024	-0.016	.0046
	06.0	0.001	.0112	.0006	-.0093	-0.061	.0199
	08.0	-0.002	.0162	.0021	-.0128	-0.086	.0287
	10.1	-0.005	.0231	.0045	-.0160	-0.111	.0372
0.90	-07.9	0.004	.0187	.0082	.0141	0.094	-0.338
	-04.4	0.006	.0091	-.0001	.0065	0.043	-0.143
	-00.2	0.004	.0067	.0000	.0001	0.003	-0.006
	02.1	0.003	.0070	.0001	-.0030	-0.020	.0061
	04.1	0.003	.0085	.0002	-.0064	-0.042	.0135
	06.0	-0.001	.0120	.0013	-.0103	-0.067	.0231
	08.0	-0.004	.0173	.0085	-.0139	-0.092	.0325
	10.0	-0.008	.0244	.0047	-.0167	-0.116	.0403
1.00	-07.9	0.010	.0218	.0019	.0156	0.104	-0.386
	-03.9	0.013	.0108	-.0000	.0070	0.048	-0.163
	00.1	0.009	.0077	.0002	-.0002	0.002	-0.001
	02.1	0.009	.0096	-.0002	-.0036	-0.022	.0076
	04.1	0.005	.0102	.0009	-.0075	-0.047	.0167
	06.0	0.003	.0153	.0010	-.0117	-0.074	.0275
	08.1	-0.002	.0202	.0027	-.0158	-0.103	.0387
	10.1	-0.007	.0284	.0045	-.0189	-0.130	.0480
1.10	-08.0	0.009	.0253	.0010	.0153	0.102	-0.379
	-03.9	0.012	.0150	-.0000	.0068	0.045	-0.156
	00.1	0.009	.0125	.0002	.0025	-0.000	.0013
	02.0	0.007	.0120	.0003	-.0037	-0.024	.0083
	04.1	0.007	.0131	-.0001	-.0077	-0.049	.0177
	06.0	0.003	.0172	.0010	-.0118	-0.074	.0279
	08.0	-0.001	.0227	.0027	-.0153	-0.100	.0378
	10.1	-0.004	.0315	.0039	-.0186	-0.126	.0471
1.30	-08.0	0.003	.0210	.0018	.0144	0.092	-0.330
	-04.4	0.006	.0118	-.0000	.0070	0.043	-0.156
	00.1	0.003	.0094	.0003	-.0000	0.001	-0.003
	02.1	0.002	.0097	.0003	-.0033	-0.021	.0071
	04.1	0.002	.0114	.0001	-.0070	-0.044	.0155
	06.0	0.000	.0143	.0009	-.0106	-0.066	.0241
	08.0	-0.003	.0193	.0026	-.0139	-0.089	.0321
	10.1	-0.006	.0257	.0044	-.0162	-0.111	.0386
1.70	-08.0	0.001	.0199	.0023	.0116	0.081	-0.254
	-03.9	0.003	.0117	.0011	.0061	0.040	-0.131
	00.1	0.003	.0094	.0005	.0002	0.003	-0.009
	02.1	0.002	.0096	.0005	-.0026	-0.016	.0053
	04.1	0.000	.0111	.0010	-.0055	-0.036	.0115
	06.0	-0.001	.0139	.0020	-.0081	-0.054	.0178
	08.0	-0.004	.0181	.0032	-.0107	-0.074	.0239
	10.1	-0.006	.0235	.0042	-.0128	-0.093	.0276
2.22	-08.0	0.003	.0178	.0019	.0081	0.065	-0.153
	-03.9	0.002	.0102	.0008	.0039	0.030	-0.078
	00.1	0.002	.0075	.0002	-.0005	-0.003	.0008
	02.0	0.002	.0083	.0003	-.0025	-0.018	.0046
	04.1	-0.001	.0099	.0010	-.0048	-0.036	.0091
	06.0	-0.003	.0126	.0022	-.0068	-0.051	.0127
	08.0	-0.004	.0158	.0028	-.0085	-0.068	.0161
	10.1	-0.006	.0218	.0038	-.0101	-0.087	.0191
				δ = 9.7°			
0.70	-07.9	0.038	.0249	.0415	.0153	0.108	-0.364
	-03.9	0.036	.0142	.0381	.0079	0.054	-0.177
	00.1	0.035	.0114	.0378	.0003	0.005	-0.013
	02.1	0.034	.0110	.0375	-.0089	-0.021	.0054
	04.1	0.034	.0134	.0379	-.0069	-0.047	.0141
	06.0	0.034	.0166	.0386	-.0105	-0.072	.0230
	08.1	0.033	.0233	.0396	-.0140	-0.099	.0321
	10.1	0.031	.0293	.0428	-.0165	-0.121	.0386
0.90	-08.0	0.039	.0252	.0421	.0153	0.107	-0.373
	-04.0	0.037	.0143	.0393	.0077	0.052	-0.176
	00.2	0.035	.0114	.0385	-.0002	0.000	-0.001
	02.1	0.036	.0121	.0384	-.0036	-0.025	.0073
	04.0	0.034	.0133	.0394	-.0076	-0.052	.0165
	06.0	0.034	.0178	.0401	-.0118	-0.080	.0271
	08.0	0.033	.0236	.0418	-.0150	-0.104	.0355
	10.1	0.030	.0304	.0452	-.0160	-0.122	.0384
1.00	-08.0	0.036	.0281	.0410	.0171	0.118	-0.433
	-03.9	0.037	.0176	.0385	.0086	0.057	-0.206
	00.2	0.036	.0124	.0376	-.0004	-0.000	.0004
	02.1	0.037	.0150	.0378	-.0046	-0.030	.0100
	04.0	0.034	.0148	.0384	-.0089	-0.058	.0203
	05.9	0.033	.0211	.0404	-.0133	-0.088	.0322
	08.1	0.030	.0282	.0417	-.0173	-0.119	.0432
	10.1	0.027	.0347	.0460	-.0194	-0.139	.0490
				δ = 9.7° - Concluded			
1.10	-08.0	0.037	.0315	.0393	.0164	0.113	-0.414
	-03.9	0.035	.0204	.0376	.0080	0.053	-0.186
	00.1	0.033	.0169	.0373	-.0006	-0.004	.0016
	02.1	0.034	.0172	.0370	-.0047	-0.031	.0106
	04.1	0.031	.0204	.0383	-.0095	-0.062	.0225
	06.1	0.032	.0230	.0387	-.0135	-0.089	.0331
	08.1	0.030	.0288	.0405	-.0169	-0.115	.0422
	10.1	0.029	.0375	.0437	-.0194	-0.137	.0490
1.30	-07.9	0.038	.0262	.0382	.0154	0.100	-0.363
	-03.9	0.031	.0169	.0361	.0081	0.051	-0.184
	00.1	0.030	.0139	.0358	-.0000	0.001	-0.003
	02.1	0.031	.0144	.0357	-.0039	-0.026	.0085
	04.1	0.029	.0159	.0364	-.0082	-0.053	.0182
	06.0	0.029	.0203	.0370	-.0120	-0.078	.0277
	08.0	0.029	.0251	.0382	-.0152	-0.100	.0354
	10.0	0.027	.0317	.0416	-.0168	-0.119	.0400
1.70	-08.0	0.025	.0239	.0350	.0120	0.084	-0.260
	-03.9	0.025	.0159	.0329	.0065	0.043	-0.143
	00.1	0.026	.0133	.0317	.0000	0.002	-0.006
	02.0	0.025	.0135	.0319	-.0031	-0.021	.0061
	04.1	0.024	.0159	.0329	-.0064	-0.044	.0132
	06.0	0.024	.0191	.0339	-.0092	-0.063	.0193
	08.1	0.023	.0235	.0350	-.0116	-0.083	.0246
	10.1	0.020	.0291	.0375	-.0134	-0.101	.0281
2.22	-07.9	0.018	.0209	.0303	.0085	0.068	-0.159
	-03.9	0.020	.0139	.0283	.0044	0.032	-0.085
	00.1	0.021	.0115	.0276	-.0005	-0.003	.0006
	02.1	0.019	.0121	.0278	-.0030	-0.022	.0053
	04.1	0.020	.0136	.0288	-.0053	-0.039	.0097
	06.1	0.017	.0171	.0302	-.0074	-0.056	.0136
	08.0	0.015	.0208	.0316	-.0090	-0.072	.0162
	10.1	0.011	.0263	.0327	-.0104	-0.091	.0186
				δ = 19.7°			
1.00	-07.8	0.074	.0443	.0710	.0182	0.129	-0.469
	-03.9	0.067	.0296	.0709	.0093	0.063	-0.226
	-00.1	0.065	.0279	.0713	-.0004	-0.005	.0012
	02.1	0.065	.0285	.0705	-.0051	-0.035	.0118
	04.1	0.067	.0313	.0705	-.0103	-0.070	.0246
	06.0	0.069	.0368	.0709	-.0146	-0.103	.0368
	08.0	0.070	.0429	.0722	-.0187	-0.134	.0478
	10.1	0.078	.0521	.0731	-.0216	-0.165	.0566
1.10	-08.0	0.070	.0473	.0672	.0175	0.124	-0.449
	-04.0	0.064	.0349	.0667	.0092	0.061	-0.224
	00.1	0.063	.0324	.0674	-.0007	-0.005	.0019
	02.1	0.063	.0320	.0674	-.0052	-0.035	.0128
	04.1	0.063	.0356	.0675	-.0103	-0.069	.0251
	06.0	0.065	.0390	.0677	-.0145	-0.100	.0365
	08.0	0.068	.0477	.0676	-.0181	-0.131	.0470
	09.9	0.074	.0534	.0687	-.0209	-0.155	.0538
1.30	-08.0	0.068	.0402	.0613	.0167	0.114	-0.403
	-03.8	0.060	.0299	.0616	.0084	0.054	-0.198
	00.2	0.059	.0271	.0617	-.0002	-0.002	.0004
	02.0	0.058	.0275	.0616	-.0041	-0.030	.0091
	04.1	0.058	.0297	.0618	-.0090	-0.060	.0203
	06.0	0.060	.0340	.0622	-.0130	-0.089	.0305
	08.0	0.064	.0400	.0624	-.0164	-0.116	.0394
	10.2	0.070	.0475	.0627	-.0186	-0.141	.0459
1.70	-07.9	0.056	.0355	.0529	.0185	0.093	-0.280
	-03.9	0.049	.0267	.0526	.0068	0.047	-0.148
	00.1	0.048	.0244	.0526	-.0001	0.000	-0.003
	02.1	0.048	.0248	.0521	-.0034	-0.025	.0068
	04.0	0.048	.0268	.0527	-.0066	-0.047	.0133
	06.0	0.050	.0302	.0534	-.0095	-0.069	.0198
	08.0	0.053	.0353	.0533	-.0122	-0.093	.0267
	10.1	0.060	.0419	.0531	-.0144	-0.115	.0315
2.22	-07.9	0.043	.0309	.0447	.0090	0.073	-0.170
	-03.9	0.040	.0233	.0447	.0046	0.035	-0.089
	00.2	0.039	.0209	.0449	-.0007	-0.005	.0009
	02.1	0.039	.0215	.0449	-.0030	-0.024	.0056
	04.1	0.040	.0232	.0450	-.0056	-0.043	.0103
	06.0	0.040	.0263	.0454	-.0076	-0.060	.0140
	08.0	0.044	.0308	.0452	-.0096	-0.079	.0178
	10.2	0.046	.0373	.0450	-.0112	-0.101	.0202

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Continued

(f) BC

M	β_r, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 0°$			
0.70	-08.0	0.002	.0067	.0002	.0001	0.014	.0104
	-04.0	0.001	.0054	.0001	.0000	0.006	.0056
	00.1	0.001	.0051	.0001	.0001	0.000	.0000
	02.0	0.000	.0049	-.0004	.0001	-0.001	-.0028
	04.1	0.000	.0054	-.0004	.0001	-0.004	-.0054
	06.1	0.001	.0056	-.0007	.0001	-0.008	-.0080
	08.1	0.000	.0061	-.0004	.0001	-0.011	-.0103
	10.0	0.001	.0081	-.0007	.0001	-0.017	-.0124
0.90	-07.9	-0.000	.0067	-.0000	.0000	0.012	.0104
	-04.0	-0.000	.0055	-.0000	.0000	0.005	.0056
	00.1	0.000	.0051	-.0003	.0001	-0.000	-.0002
	02.0	0.000	.0051	-.0003	.0001	-0.002	-.0028
	04.1	0.000	.0053	-.0003	.0001	-0.005	-.0057
	06.0	-0.001	.0058	-.0004	.0001	-0.008	-.0083
	08.1	-0.001	.0065	-.0004	.0000	-0.012	-.0106
	10.0	-0.001	.0077	-.0004	.0001	-0.018	-.0127
1.00	-08.6	0.003	.0068	-.0004	-.0001	0.012	.0110
	-03.9	-0.000	.0064	-.0000	-.0001	0.005	.0057
	00.1	0.000	.0065	.0000	.0000	0.001	-.0003
	02.0	0.000	.0068	.0000	-.0001	-0.000	-.0031
	04.1	0.000	.0081	.0000	-.0001	-0.004	-.0061
	06.2	0.000	.0087	.0000	-.0001	-0.007	-.0089
	08.1	0.000	.0072	-.0006	-.0000	-0.012	-.0112
	10.0	-0.001	.0096	-.0001	-.0001	-0.017	-.0135
1.10	-08.0	-0.001	.0111	-.0001	-.0002	0.014	.0107
	-03.9	-0.001	.0106	-.0001	.0000	0.005	.0055
	00.1	-0.001	.0103	-.0001	.0000	-0.001	-.0000
	02.1	-0.001	.0099	-.0001	.0001	-0.001	-.0028
	04.1	-0.004	.0103	.0003	.0001	-0.006	-.0055
	06.2	-0.004	.0111	.0003	.0001	-0.009	-.0081
	08.1	-0.003	.0119	.0002	.0000	-0.014	-.0102
	10.0	-0.001	.0135	.0001	.0001	-0.021	-.0123
1.30	-06.0	-0.001	.0098	-.0003	.0000	0.015	.0109
	-04.0	-0.001	.0082	-.0001	.0000	0.006	.0058
	00.1	-0.001	.0078	-.0003	.0000	-0.001	.0001
	02.0	-0.001	.0078	-.0003	.0000	-0.003	-.0027
	04.1	0.000	.0080	-.0005	.0000	-0.007	-.0055
	06.0	0.000	.0088	-.0005	.0000	-0.011	-.0081
	08.1	0.000	.0095	-.0005	.0000	-0.015	-.0105
	10.1	0.000	.0108	-.0005	.0000	-0.022	-.0129
1.70	-07.9	-0.002	.0101	-.0004	-.0000	0.018	.0107
	-04.0	-0.002	.0083	-.0002	.0000	0.007	.0058
	00.1	-0.001	.0076	-.0004	.0000	-0.000	.0003
	02.0	-0.002	.0078	-.0001	.0000	-0.003	-.0026
	04.1	-0.002	.0082	-.0001	.0000	-0.007	-.0055
	06.1	-0.001	.0089	-.0004	.0000	-0.012	-.0082
	08.1	-0.001	.0101	-.0006	.0000	-0.017	-.0106
	10.1	-0.001	.0119	-.0004	.0000	-0.026	-.0130
2.22	-08.0	-0.002	.0092	-.0010	-.0001	0.019	.0104
	-03.9	-0.002	.0070	-.0010	-.0000	0.007	.0053
	00.1	-0.003	.0064	-.0008	.0000	-0.001	-.0004
	02.0	-0.002	.0067	-.0008	.0000	-0.004	-.0031
	04.1	-0.003	.0070	-.0008	.0000	-0.009	-.0059
	06.0	-0.002	.0077	-.0008	.0001	-0.015	-.0084
	08.1	-0.002	.0100	-.0008	.0001	-0.023	-.0108
	10.1	-0.002	.0125	-.0008	.0001	-0.034	-.0129
				$\delta = 9.7°$			
0.70	-08.1	0.043	.0118	.0374	-.0000	0.016	.0115
	-03.9	0.037	.0106	.0378	-.0000	0.006	.0062
	00.1	0.034	.0105	.0374	-.0000	0.001	.0002
	02.1	0.034	.0103	.0375	-.0000	-0.001	-.0038
	04.0	0.034	.0101	.0375	-.0000	-0.004	-.0060
	06.1	0.036	.0104	.0364	.0000	-0.008	-.0089
	08.1	0.037	.0113	.0363	.0000	-0.012	-.0113
	10.0	0.037	.0129	.0383	.0000	-0.018	-.0137
0.90	-08.1	0.043	.0124	.0386	-.0001	0.015	.0118
	-04.0	0.038	.0108	.0389	-.0001	0.006	.0063
	00.1	0.035	.0107	.0387	-.0001	-0.000	-.0008
	02.0	0.035	.0105	.0389	-.0000	-0.002	-.0033
	04.1	0.035	.0107	.0383	-.0000	-0.006	-.0064
	06.0	0.037	.0109	.0378	-.0000	-0.009	-.0091
	08.1	0.039	.0116	.0375	.0000	-0.014	-.0117
	10.1	0.039	.0135	.0397	.0000	-0.020	-.0142
1.00	-08.0	0.043	.0148	.0374	-.0001	0.015	.0119
	-04.0	0.038	.0129	.0387	-.0000	0.007	.0064
	00.1	0.036	.0117	.0382	-.0000	-0.000	-.0002
	02.2	0.033	.0120	.0385	-.0001	0.000	-.0035
	04.1	0.034	.0115	.0361	-.0001	-0.003	-.0066
	06.0	0.038	.0132	.0371	-.0002	-0.008	-.0092
	08.1	0.037	.0129	.0379	-.0002	-0.013	-.0120
	10.0	0.032	.0144	.0403	-.0001	-0.019	-.0145

M	β_r, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 9.7°$ - Concluded			
1.10	-07.9	0.041	.0184	.0366	-.0001	0.017	.0113
	-04.0	0.035	.0161	.0374	-.0002	0.007	.0060
	00.1	0.032	.0153	.0379	-.0001	-0.001	-.0000
	02.0	0.031	.0153	.0380	-.0001	-0.001	-.0028
	04.1	0.032	.0161	.0378	-.0001	-0.006	-.0060
	06.1	0.034	.0150	.0366	-.0001	-0.009	-.0085
	08.1	0.035	.0170	.0369	-.0001	-0.014	-.0112
	10.0	0.033	.0181	.0390	-.0001	-0.020	-.0136
1.30	-08.1	0.037	.0148	.0345	-.0000	0.016	.0117
	-04.0	0.033	.0130	.0349	-.0000	0.006	.0063
	00.1	0.031	.0125	.0354	-.0001	-0.001	-.0000
	02.0	0.031	.0126	.0354	-.0000	-0.003	-.0028
	04.0	0.032	.0130	.0352	-.0001	-0.007	-.0061
	06.0	0.034	.0135	.0346	-.0000	-0.011	-.0088
	08.1	0.035	.0144	.0344	-.0001	-0.016	-.0116
	10.1	0.034	.0160	.0369	-.0001	-0.024	-.0140
1.70	-08.1	0.029	.0146	.0313	.0000	0.020	.0115
	-04.0	0.028	.0125	.0312	-.0000	0.007	.0064
	00.1	0.027	.0120	.0309	-.0000	0.000	.0002
	02.0	0.026	.0115	.0312	-.0001	-0.003	-.0029
	04.1	0.027	.0124	.0308	-.0001	-0.007	-.0060
	06.0	0.028	.0128	.0309	-.0001	-0.012	-.0087
	08.1	0.028	.0143	.0307	-.0001	-0.018	-.0113
	10.0	0.026	.0163	.0330	-.0002	-0.027	-.0138
2.22	-08.1	0.022	.0129	.0268	.0001	0.021	.0110
	-04.0	0.023	.0107	.0261	.0000	0.008	.0057
	00.1	0.022	.0099	.0260	-.0001	-0.001	-.0003
	02.0	0.022	.0102	.0261	-.0001	-0.005	-.0033
	04.1	0.022	.0106	.0262	-.0001	-0.009	-.0064
	06.1	0.021	.0116	.0265	-.0002	-0.015	-.0091
	08.1	0.019	.0134	.0276	-.0002	-0.024	-.0113
	10.0	0.017	.0161	.0285	-.0003	-0.035	-.0133
				$\delta = 19.7°$			
1.00	00.1	0.059	.0270	.0726	-.0002	-0.003	.0001
	02.0	0.060	.0278	.0723	-.0001	-0.004	-.0031
	04.1	0.064	.0263	.0707	-.0001	-0.008	-.0062
	06.1	0.070	.0285	.0683	-.0002	-0.014	-.0097
	08.1	0.077	.0280	.0671	-.0001	-0.020	-.0126
	10.1	0.085	.0318	.0664	-.0000	-0.026	-.0157
1.10	-08.0	0.068	.0334	.0648	-.0001	0.020	.0118
	-04.0	0.054	.0316	.0683	-.0002	0.007	.0062
	00.1	0.054	.0313	.0706	-.0002	-0.003	.0001
	02.1	0.055	.0310	.0699	-.0002	-0.005	-.0027
	04.1	0.057	.0316	.0684	-.0002	-0.010	-.0057
	06.1	0.063	.0323	.0666	-.0001	-0.016	-.0086
	08.1	0.074	.0324	.0640	-.0001	-0.022	-.0118
	10.0	0.079	.0344	.0636	-.0001	-0.028	-.0141
1.30	-08.0	0.067	.0282	.0586	-.0001	0.021	.0119
	-04.0	0.056	.0263	.0626	-.0001	0.008	.0068
	-00.0	0.053	.0259	.0634	-.0001	-0.002	.0001
	02.0	0.054	.0259	.0632	-.0001	-0.006	-.0033
	04.1	0.056	.0264	.0623	-.0000	-0.010	-.0066
	06.1	0.061	.0271	.0602	-.0000	-0.017	-.0094
	08.1	0.070	.0285	.0582	-.0001	-0.024	-.0121
	10.1	0.079	.0304	.0562	-.0001	-0.032	-.0148
1.70	-08.0	0.055	.0260	.0503	-.0000	0.023	.0117
	-04.0	0.046	.0235	.0524	-.0000	0.009	.0068
	00.2	0.043	.0232	.0538	-.0001	-0.001	.0000
	02.1	0.044	.0234	.0533	-.0001	-0.006	-.0031
	04.1	0.047	.0235	.0525	-.0001	-0.010	-.0068
	06.1	0.051	.0244	.0518	-.0001	-0.016	-.0098
	08.1	0.057	.0261	.0497	-.0002	-0.024	-.0117
	10.1	0.067	.0284	.0476	-.0002	-0.033	-.0143
2.22	-08.0	0.042	.0218	.0428	.0001	0.023	.0110
	-04.0	0.037	.0198	.0447	.0000	0.008	.0058
	00.1	0.035	.0187	.0459	-.0000	-0.001	-.0003
	02.0	0.036	.0196	.0453	-.0001	-0.006	-.0033
	04.1	0.038	.0202	.0446	-.0002	-0.012	-.0066
	06.0	0.041	.0214	.0439	-.0003	-0.019	-.0094
	08.1	0.045	.0234	.0420	-.0004	-0.028	-.0116
	10.0	0.049	.0265	.0409	-.0004	-0.040	-.0137

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Concluded

(g) BV

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-08.0	-0.003	.0168	.0022	.0140	0.093	-.0321
	-04.0	0.001	.0076	-.0003	.0068	0.044	-.0146
	-00.3	0.002	.0052	-.0003	.0005	0.005	-.0015
	02.0	0.000	.0060	.0000	-.0023	-0.015	.0040
	04.1	0.000	.0072	.0000	-.0054	-0.036	.0106
	06.1	-0.002	.0106	.0011	-.0093	-0.061	.0198
	08.1	-0.004	.0158	.0025	-.0128	-0.085	.0286
	10.0	-0.006	.0234	.0040	-.0158	-0.110	.0366
0.90	-08.0	-0.004	.0168	.0027	.0139	0.091	-.0326
	-04.0	0.001	.0079	-.0003	.0064	0.041	-.0138
	00.1	0.001	.0058	-.0003	.0000	0.001	-.0002
	02.0	0.001	.0060	-.0003	-.0028	-0.019	.0056
	04.1	-0.001	.0077	-.0001	-.0064	-0.041	.0134
	06.1	-0.002	.0114	.0015	-.0104	-0.067	.0232
	08.1	-0.004	.0166	.0030	-.0139	-0.092	.0324
	10.1	-0.007	.0242	.0048	-.0169	-0.118	.0409
1.00	-08.0	-0.003	.0191	.0024	.0152	0.099	-.0373
	-03.9	-0.000	.0093	-.0000	.0071	0.045	-.0162
	00.1	0.000	.0068	-.0006	-.0003	0.000	.0004
	02.0	0.003	.0077	-.0011	-.0034	-0.022	.0069
	04.1	0.000	.0089	.0000	-.0074	-0.046	.0161
	06.1	-0.003	.0138	.0017	-.0118	-0.075	.0277
	08.1	-0.004	.0192	.0029	-.0158	-0.103	.0386
	10.0	-0.008	.0270	.0051	-.0187	-0.128	.0473
1.10	-07.9	-0.005	.0214	.0026	.0148	0.095	-.0366
	-03.9	-0.001	.0120	-.0001	.0068	0.043	-.0156
	00.1	-0.001	.0110	-.0001	-.0003	-0.003	.0006
	02.1	-0.001	.0112	-.0001	-.0038	-0.024	.0083
	04.1	-0.003	.0123	.0004	-.0076	-0.048	.0175
	06.0	-0.004	.0170	.0015	-.0116	-0.072	.0276
	08.0	-0.008	.0234	.0037	-.0156	-0.102	.0386
	10.1	-0.011	.0308	.0053	-.0188	-0.127	.0476
1.30	-08.0	-0.004	.0186	.0024	.0141	0.088	-.0322
	-04.0	-0.001	.0105	.0004	.0070	0.042	-.0155
	00.1	-0.001	.0084	.0004	.0001	0.001	-.0002
	02.0	-0.001	.0083	.0002	-.0031	-0.020	.0067
	04.0	-0.001	.0104	.0007	-.0068	-0.042	.0150
	06.0	-0.004	.0136	.0019	-.0106	-0.066	.0240
	08.1	-0.005	.0185	.0031	-.0140	-0.089	.0323
	10.0	-0.008	.0248	.0048	-.0163	-0.111	.0387
1.70	-08.0	-0.006	.0180	.0034	.0113	0.077	-.0243
	-04.1	-0.003	.0108	.0013	.0061	0.039	-.0131
	00.1	-0.002	.0085	.0009	.0001	0.001	-.0005
	02.0	-0.002	.0089	.0009	-.0026	-0.016	.0051
	04.0	-0.003	.0104	.0015	-.0055	-0.035	.0113
	06.1	-0.004	.0134	.0025	-.0084	-0.055	.0176
	08.1	-0.006	.0175	.0036	-.0107	-0.073	.0228
	10.0	-0.007	.0230	.0046	-.0129	-0.094	.0275
2.22	-08.0	-0.006	.0154	.0033	.0081	0.063	-.0151
	-03.9	-0.003	.0091	.0018	.0040	0.029	-.0078
	00.1	-0.003	.0070	.0012	-.0003	-0.002	.0004
	02.1	-0.003	.0077	.0015	-.0026	-0.019	.0047
	04.0	-0.004	.0092	.0023	-.0047	-0.035	.0088
	06.0	-0.005	.0119	.0031	-.0068	-0.051	.0128
	08.1	-0.007	.0160	.0041	-.0086	-0.069	.0161
	10.0	-0.008	.0211	.0046	-.0101	-0.086	.0187

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY 10° ANGLE OF ATTACK

(a) BVWC; $\alpha = 10.5^{\circ}$

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
		$\delta = 0^{\circ}$					
0.70	-08.0	0.522	.1086	-0.180	.0318	0.092	-0.367
	-03.9	0.540	.1049	-0.271	.0169	0.048	-0.189
	00.1	0.542	.1038	-0.285	-0.005	0.007	-0.029
	02.0	0.542	.1038	-0.290	-0.086	-0.016	.0039
	04.1	0.541	.1049	-0.283	-0.175	-0.039	.0124
	06.1	0.535	.1063	-0.247	-0.257	-0.064	.0216
	08.1	0.517	.1070	-0.172	-0.307	-0.086	.0302
	10.0	0.507	.1118	-0.119	-0.346	-0.113	.0379
0.90	-08.0	0.585	.1231	-0.563	.0344	0.084	-0.346
	-03.9	0.606	.1212	-0.697	.0172	0.043	-0.188
	00.1	0.605	.1198	-0.704	-0.014	0.004	-0.022
	02.0	0.605	.1199	-0.698	-0.101	-0.019	.0050
	04.2	0.605	.1211	-0.694	-0.204	-0.046	.0147
	06.1	0.601	.1230	-0.655	-0.294	-0.070	.0244
	08.1	0.593	.1249	-0.595	-0.369	-0.092	.0323
	10.0	0.537	.1215	-0.297	-0.343	-0.118	.0396
1.00	-08.0	0.590	.1294	-0.899	.0357	0.089	-0.379
	-03.9	0.595	.1241	-0.969	.0180	0.047	-0.209
	00.1	0.595	.1215	-0.981	-0.018	-0.007	.0018
	02.0	0.595	.1228	-0.977	-0.116	-0.029	.0123
	04.1	0.595	.1242	-0.969	-0.223	-0.060	.0244
	06.0	0.593	.1273	-0.940	-0.314	-0.084	.0335
	08.0	0.592	.1308	-0.897	-0.386	-0.104	.0400
	10.0	0.588	.1378	-0.863	-0.445	-0.130	.0485
1.10	-08.0	0.553	.1204	-0.830	.0357	0.083	-0.361
	-03.9	0.562	.1167	-0.893	.0184	0.042	-0.183
	00.1	0.564	.1150	-0.905	-0.015	-0.008	.0031
	02.0	0.566	.1156	-0.911	-0.104	-0.028	.0125
	04.1	0.566	.1176	-0.904	-0.214	-0.058	.0243
	06.0	0.565	.1216	-0.877	-0.298	-0.081	.0331
	08.0	0.560	.1240	-0.841	-0.373	-0.101	.0403
	10.1	0.556	.1314	-0.797	-0.440	-0.130	.0496
1.30	-08.0	0.498	.1096	-0.735	.0285	0.069	-0.257
	-03.9	0.498	.1041	-0.773	.0146	0.033	-0.130
	00.1	0.499	.1040	-0.786	-0.002	0.002	-0.015
	02.0	0.499	.1044	-0.788	-0.073	-0.016	.0042
	04.1	0.500	.1054	-0.780	-0.152	-0.036	.0104
	06.1	0.498	.1068	-0.765	-0.224	-0.055	.0172
	08.0	0.499	.1099	-0.743	-0.285	-0.074	.0233
	10.0	0.497	.1155	-0.710	-0.348	-0.102	.0322
1.70	-08.0	0.402	.0921	-0.519	.0200	0.060	-0.141
	-04.0	0.402	.0878	-0.544	.0098	0.031	-0.075
	00.2	0.404	.0863	-0.564	-0.007	0.001	-0.010
	02.0	0.406	.0872	-0.569	-0.055	-0.014	.0023
	04.2	0.404	.0880	-0.555	-0.107	-0.030	.0051
	06.0	0.404	.0896	-0.547	-0.155	-0.044	.0075
	08.0	0.403	.0925	-0.535	-0.197	-0.061	.0111
	10.0	0.401	.0968	-0.504	-0.242	-0.084	.0159
		$\delta = 9.7^{\circ}$					
0.70	-08.1	0.533	.1241	.0186	.0375	.0088	-0.385
	-04.0	0.543	.1217	.0145	.0206	.0047	-0.209
	00.1	0.547	.1213	.0109	-0.003	.0008	-0.030
	01.9	0.550	.1216	.0104	-0.099	-0.011	.0042
	04.1	0.545	.1209	.0119	-0.209	-0.036	.0138
	06.1	0.543	.1222	.0151	-0.302	-0.058	.0232
	08.0	0.537	.1230	.0162	-0.374	-0.078	.0312
	10.0	0.529	.1261	.0229	-0.433	-0.100	.0393
0.90	-08.0	0.589	.1372	-0.163	.0392	0.083	-0.388
	-04.0	0.599	.1353	-0.251	.0202	0.043	-0.206
	00.1	0.601	.1345	-0.278	-0.017	0.005	-0.019
	02.0	0.602	.1349	-0.292	-0.119	-0.015	.0063
	04.1	0.600	.1354	-0.260	-0.232	-0.042	.0168
	06.0	0.603	.1381	-0.228	-0.333	-0.064	.0267
	08.1	0.598	.1386	-0.219	-0.419	-0.086	.0360
	10.1	0.597	.1441	-0.084	-0.500	-0.109	.0443
1.00	-07.9	0.598	.1424	-0.452	.0400	0.088	-0.410
	-03.9	0.591	.1360	-0.569	.0208	0.046	-0.229
	00.1	0.596	.1355	-0.602	-0.025	-0.003	.0015
	01.9	0.593	.1357	-0.593	-0.130	-0.026	.0132
	04.1	0.593	.1378	-0.565	-0.259	-0.058	.0275
	06.0	0.595	.1408	-0.514	-0.353	-0.080	.0366
	08.1	0.591	.1444	-0.452	-0.439	-0.102	.0440
	10.1	0.592	.1491	-0.364	-0.518	-0.122	.0509

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
		$\delta = 9.7^{\circ}$ - Concluded					
1.10	-07.9	0.561	.1353	-0.448	.0387	0.087	-0.393
	-04.0	0.565	.1309	-0.563	.0198	0.045	-0.210
	00.1	0.561	.1277	-0.571	-0.023	-0.004	.0027
	02.0	0.566	.1296	-0.599	-0.128	-0.027	.0141
	04.1	0.564	.1302	-0.554	-0.239	-0.054	.0262
	06.1	0.568	.1345	-0.535	-0.335	-0.078	.0355
	08.1	0.569	.1385	-0.476	-0.413	-0.099	.0426
	10.0	0.567	.1421	-0.404	-0.479	-0.117	.0482
1.30	-08.0	0.499	.1220	-0.354	.0346	0.073	-0.317
	-04.0	0.498	.1171	-0.445	.0182	0.037	-0.168
	00.1	0.496	.1158	-0.464	.0000	0.003	-0.017
	01.9	0.497	.1161	-0.461	-0.085	-0.014	.0049
	04.1	0.499	.1173	-0.449	-0.180	-0.035	.0128
	06.1	0.499	.1194	-0.419	-0.266	-0.056	.0211
	08.0	0.502	.1222	-0.370	-0.343	-0.074	.0283
	10.0	0.506	.1275	-0.337	-0.394	-0.093	.0319
1.70	-08.0	0.407	.1021	-0.241	.0231	0.057	-0.146
	-03.9	0.403	.0978	-0.286	.0120	0.029	-0.092
	00.1	0.404	.0964	-0.313	-0.002	0.002	-0.013
	02.0	0.404	.0968	-0.308	-0.066	-0.013	.0030
	04.2	0.404	.0980	-0.294	-0.128	-0.029	.0067
	06.1	0.406	.0996	-0.285	-0.180	-0.042	.0092
	08.0	0.408	.1023	-0.263	-0.231	-0.057	.0115
	10.0	0.410	.1074	-0.228	-0.275	-0.079	.0155
		$\delta = 19.7^{\circ}$					
0.90	-08.0	0.580	.1500	-0.014	.0409	0.082	-0.391
	-04.0	0.578	.1454	-0.154	.0197	0.044	-0.236
	-00.1	0.583	.1463	-0.235	-0.013	0.006	-0.018
	02.0	0.586	.1468	-0.253	-0.114	-0.017	.0091
	04.1	0.581	.1453	-0.190	-0.232	-0.042	.0207
	06.0	0.585	.1476	-0.136	-0.338	-0.062	.0283
	08.0	0.589	.1519	-0.046	-0.443	-0.084	.0355
	10.1	0.575	.1527	.0047	-0.518	-0.111	.0463
1.00	-08.0	0.582	.1568	-0.217	.0395	0.091	-0.430
	-04.0	0.579	.1510	-0.352	.0198	0.048	-0.233
	00.1	0.580	.1508	-0.390	-0.024	-0.004	.0014
	02.0	0.585	.1520	-0.388	-0.133	-0.028	.0141
	04.1	0.578	.1597	-0.326	-0.244	-0.058	.0277
	06.1	0.574	.1530	-0.235	-0.342	-0.082	.0378
	08.0	0.578	.1572	-0.205	-0.435	-0.101	.0441
	10.1	0.585	.1634	-0.135	-0.526	-0.123	.0509
1.10	-08.0	0.547	.1512	-0.184	.0379	0.091	-0.413
	-04.0	0.545	.1463	-0.312	.0196	0.051	-0.236
	-00.0	0.546	.1445	-0.381	-0.015	0.003	-0.006
	01.9	0.553	.1451	-0.376	-0.129	-0.023	.0112
	04.1	0.545	.1459	-0.310	-0.236	-0.053	.0236
	06.1	0.538	.1464	-0.203	-0.318	-0.077	.0332
	08.0	0.538	.1504	-0.154	-0.401	-0.096	.0408
	10.1	0.550	.1568	-0.126	-0.484	-0.116	.0456
1.30	-08.0	0.492	.1370	-0.136	.0370	0.078	-0.335
	-04.0	0.487	.1309	-0.223	.0207	0.040	-0.223
	-00.0	0.482	.1294	-0.268	.0001	0.006	-0.027
	02.0	0.484	.1299	-0.258	-0.098	-0.012	.0062
	04.1	0.487	.1310	-0.229	-0.202	-0.035	.0161
	06.1	0.489	.1338	-0.171	-0.296	-0.057	.0237
	08.0	0.491	.1366	-0.134	-0.374	-0.076	.0293
	10.0	0.496	.1416	-0.074	-0.432	-0.093	.0316
1.70	-04.0	0.402	.1116	-0.136	.0137	0.029	-0.111
	-00.0	0.401	.1102	-0.186	.0001	0.004	-0.018
	02.0	0.400	.1104	-0.168	-0.078	-0.013	.0030
	04.0	0.403	.1116	-0.148	-0.138	-0.029	.0079
	06.1	0.404	.1138	-0.108	-0.199	-0.044	.0106
	08.1	0.410	.1171	-0.084	-0.254	-0.057	.0126
	10.0	0.410	.1209	-0.041	-0.294	-0.076	.0146
2.22	-08.1	0.317	.0958	.0055	.0170	0.051	-0.068
	-06.0	0.314	.0926	.0029	.0134	0.037	-0.061
	-04.0	0.312	.0905	.0008	.0092	0.024	-0.052
	-02.0	0.311	.0897	-0.003	.0042	0.012	-0.031
	00.1	0.310	.0891	-0.007	-0.011	-0.002	-0.003
	01.9	0.313	.0896	-0.013	-0.059	-0.018	.0020
	04.0	0.313	.0918	.0007	-0.110	-0.029	.0039
	06.0	0.315	.0936	.0033	-0.156	-0.042	.0055
	08.0	0.315	.0969	.0062	-0.189	-0.057	.0060
	10.0	0.316	.1017	.0096	-0.220	-0.077	.0071

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY 10° ANGLE OF ATTACK - Continued

(b) BVW; $\alpha = 10.5^{\circ}$

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-08.0	0.504	.1049	-.0838	.0235	0.108	-.0375
	-04.0	0.522	.0990	-.0894	.0119	0.053	-.0177
	-00.0	0.527	.0977	-.0904	-.0008	0.007	-.0022
	02.0	0.526	.0976	-.0905	-.0066	-0.017	.0045
	04.0	0.527	.0990	-.0906	-.0130	-0.044	.0129
	06.0	0.517	.1005	-.0871	-.0184	-0.070	.0221
	08.1	0.503	.1035	-.0814	-.0228	-0.101	.0327
	10.0	0.493	.1084	-.0792	-.0270	-0.128	.0412
0.90	-08.0	0.572	.1214	-.1267	.0258	0.103	-.0363
	-04.0	0.592	.1162	-.1348	.0124	0.050	-.0170
	-00.0	0.597	.1148	-.1380	-.0015	0.003	-.0011
	02.0	0.593	.1143	-.1360	-.0083	-0.021	.0060
	04.1	0.593	.1158	-.1354	-.0158	-0.050	.0154
	06.0	0.588	.1181	-.1325	-.0222	-0.078	.0252
	08.1	0.575	.1210	-.1256	-.0282	-0.107	.0354
	10.0	0.525	.1185	-.1016	-.0259	-0.128	.0398
1.00	-08.0	0.579	.1277	-.1585	.0278	0.106	-.0394
	-04.0	0.589	.1201	-.1624	.0143	0.053	-.0202
	00.1	0.589	.1176	-.1625	-.0022	-0.004	.0018
	02.0	0.592	.1185	-.1631	-.0103	-0.033	.0126
	04.1	0.588	.1204	-.1626	-.0183	-0.064	.0243
	06.0	0.582	.1248	-.1600	-.0253	-0.092	.0345
	08.0	0.579	.1287	-.1583	-.0316	-0.118	.0442
	10.0	0.571	.1341	-.1539	-.0365	-0.144	.0514
1.10	-08.0	0.536	.1187	-.1451	.0289	0.102	-.0397
	-03.9	0.547	.1117	-.1481	.0144	0.046	-.0169
	00.1	0.549	.1095	-.1480	-.0018	-0.008	.0036
	02.0	0.551	.1111	-.1483	-.0092	-0.033	.0128
	04.0	0.549	.1130	-.1478	-.0172	-0.061	.0239
	06.1	0.543	.1160	-.1453	-.0248	-0.089	.0350
	08.1	0.541	.1205	-.1440	-.0315	-0.115	.0440
	10.0	0.531	.1258	-.1393	-.0374	-0.141	.0529
1.30	-08.0	0.478	.1055	-.1345	.0229	0.085	-.0284
	-03.9	0.486	.1004	-.1381	.0110	0.041	-.0136
	00.1	0.488	.0988	-.1381	-.0009	0.000	.0000
	02.0	0.488	.0992	-.1384	-.0061	-0.020	.0058
	04.1	0.487	.1003	-.1384	-.0121	-0.044	.0131
	06.0	0.486	.1017	-.1378	-.0178	-0.065	.0202
	08.1	0.482	.1057	-.1358	-.0234	-0.090	.0282
	10.0	0.476	.1101	-.1332	-.0285	-0.113	.0353
1.70	-08.0	0.378	.0874	-.1007	.0156	0.073	-.0161
	-04.0	0.384	.0824	-.1043	.0074	0.036	-.0088
	00.1	0.386	.0809	-.1058	-.0006	0.002	-.0007
	01.9	0.387	.0811	-.1061	-.0039	-0.015	.0030
	04.0	0.385	.0823	-.1054	-.0082	-0.035	.0072
	06.0	0.384	.0836	-.1045	-.0124	-0.052	.0110
	08.1	0.382	.0874	-.1024	-.0162	-0.071	.0146
	10.1	0.376	.0914	-.0994	-.0196	-0.092	.0175
2.22	-08.0	0.288	.0699	-.0712	.0107	0.058	-.0061
	-03.9	0.291	.0646	-.0741	.0050	0.026	-.0032
	00.1	0.293	.0637	-.0749	-.0009	-0.003	.0005
	02.0	0.293	.0642	-.0746	-.0038	-0.017	.0020
	04.1	0.292	.0654	-.0742	-.0070	-0.034	.0040
	06.1	0.292	.0675	-.0730	-.0098	-0.050	.0057
	08.1	0.288	.0704	-.0707	-.0123	-0.067	.0068
	10.1	0.285	.0756	-.0680	-.0148	-0.088	.0076

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY 10° ANGLE OF ATTACK - Continued

(c) BWC; $\alpha = 10.5°$

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
			$\delta = 0°$				
0.70	-08.0	0.525	.0996	-.0172	.0198	0.015	.0074
	-03.9	0.541	.1024	-.0858	.0104	0.004	.0042
	-00.0	0.545	.1036	-.0285	-.0006	0.000	-.0004
	02.0	0.548	.1038	-.0289	-.0064	-0.001	-.0028
	04.0	0.547	.1033	-.0284	-.0120	-0.005	-.0048
	06.0	0.542	.1021	-.0254	-.0171	-0.011	-.0066
	08.0	0.530	.1000	-.0197	-.0210	-0.016	-.0084
	10.1	0.509	.0966	-.0100	-.0231	-0.022	-.0104
0.90	-08.0	0.597	.1164	-.0597	.0224	0.014	.0075
	-03.9	0.614	.1203	-.0721	.0112	0.004	.0041
	00.1	0.615	.1211	-.0722	-.0015	0.000	-.0006
	02.0	0.619	.1220	-.0741	-.0080	-0.003	-.0031
	04.2	0.607	.1185	-.0678	-.0147	-0.008	-.0053
	06.1	0.614	.1204	-.0709	-.0201	-0.014	-.0068
	08.0	0.603	.1179	-.0622	-.0251	-0.021	-.0084
	10.0	0.594	.1168	-.0566	-.0294	-0.027	-.0102
1.00	-08.1	0.595	.1208	-.0938	.0206	0.015	.0070
	-04.0	0.595	.1212	-.0983	.0098	0.005	.0038
	00.1	0.598	.1216	-.0990	-.0017	0.001	-.0005
	02.1	0.598	.1211	-.0991	-.0072	-0.004	-.0025
	04.1	0.597	.1216	-.0985	-.0132	-0.009	-.0043
	06.0	0.598	.1216	-.0968	-.0182	-0.015	-.0055
	08.0	0.593	.1208	-.0935	-.0231	-0.022	-.0069
	10.0	0.591	.1211	-.0898	-.0278	-0.030	-.0085
1.10	-08.0	0.556	.1129	-.0858	.0204	0.015	.0070
	-04.0	0.559	.1136	-.0899	.0106	0.004	.0041
	00.1	0.562	.1153	-.0918	-.0005	-0.003	.0001
	02.0	0.563	.1148	-.0921	-.0060	-0.004	-.0018
	04.0	0.563	.1154	-.0910	-.0115	-0.009	-.0037
	06.0	0.563	.1148	-.0899	-.0167	-0.015	-.0052
	08.0	0.561	.1148	-.0870	-.0215	-0.022	-.0065
	10.1	0.558	.1159	-.0830	-.0264	-0.030	-.0082
1.30	-08.0	0.498	.1030	-.0739	.0165	0.018	.0075
	-03.9	0.500	.1031	-.0775	.0085	0.006	.0040
	00.1	0.500	.1029	-.0790	-.0004	0.000	-.0004
	01.9	0.502	.1033	-.0791	-.0049	-0.005	-.0024
	04.1	0.502	.1035	-.0783	-.0097	-0.011	-.0046
	06.1	0.502	.1036	-.0769	-.0138	-0.018	-.0064
	08.1	0.501	.1045	-.0748	-.0178	-0.025	-.0080
	10.0	0.498	.1053	-.0719	-.0210	-0.033	-.0098
1.70	-08.0	0.401	.0869	-.0519	.0117	0.024	.0087
	-03.9	0.403	.0858	-.0551	.0055	0.009	.0044
	00.1	0.406	.0860	-.0573	-.0006	-0.001	-.0002
	02.0	0.406	.0860	-.0570	-.0035	-0.006	-.0024
	04.1	0.404	.0859	-.0553	-.0066	-0.013	-.0049
	06.1	0.404	.0869	-.0547	-.0098	-0.021	-.0073
	08.0	0.403	.0874	-.0529	-.0125	-0.029	-.0094
	10.0	0.402	.0896	-.0509	-.0151	-0.038	-.0119
2.22	-08.0	0.310	.0705	-.0338	.0079	0.026	.0088
	-03.9	0.312	.0689	-.0355	.0040	0.010	.0043
	00.1	0.314	.0684	-.0362	-.0009	-0.002	-.0004
	02.0	0.314	.0690	-.0364	-.0034	-0.008	-.0028
	04.1	0.312	.0693	-.0360	-.0057	-0.016	-.0052
			$\delta = 9.7°$				
0.70	-08.0	0.540	.1088	.0156	.0260	0.004	.0064
	-04.0	0.552	.1135	.0124	.0149	-0.006	.0053
	00.1	0.558	.1156	.0072	-.0006	0.003	-.0008
	01.9	0.557	.1158	.0070	-.0081	0.005	-.0038
	04.0	0.556	.1143	.0087	-.0157	0.006	-.0068
	06.0	0.554	.1128	.0126	-.0227	0.004	-.0090
	08.1	0.547	.1109	.0132	-.0276	-0.006	-.0083
	10.0	0.539	.1084	.0203	-.0321	-0.012	-.0087
0.90	-08.0	0.610	.1274	-.0204	.0299	-0.002	.0078
	-04.0	0.605	.1284	-.0261	.0146	-0.005	.0047
	00.1	0.611	.1307	-.0326	-.0018	0.002	-.0012
	01.9	0.610	.1305	-.0316	-.0093	0.003	-.0035
	04.0	0.615	.1306	-.0331	-.0179	0.002	-.0063
	06.0	0.614	.1297	-.0289	-.0252	0.000	-.0086
	08.1	0.614	.1289	-.0233	-.0325	-0.004	-.0086
	10.0	0.610	.1279	-.0149	-.0379	-0.014	-.0083
1.00	-08.0	0.607	.1320	-.0547	.0256	0.002	.0083
	-03.8	0.601	.1337	-.0620	.0119	-0.004	.0045
	00.1	0.596	.1340	-.0642	-.0017	0.003	-.0008
	02.0	0.595	.1334	-.0635	-.0084	0.003	-.0034
	04.1	0.602	.1338	-.0619	-.0157	0.008	-.0059
	06.1	0.600	.1333	-.0582	-.0225	-0.002	-.0076
	08.0	0.603	.1336	-.0536	-.0286	-0.010	-.0084
	10.0	0.601	.1328	-.0471	-.0343	-0.018	-.0085
			$\delta = 9.7°$ - Concluded				
1.10	-08.1	0.561	.1241	-.0487	.0248	0.004	.0085
	-03.9	0.559	.1258	-.0572	.0120	-0.003	.0049
	00.1	0.562	.1270	-.0614	-.0010	0.002	-.0004
	02.0	0.567	.1262	-.0622	-.0075	0.002	-.0031
	04.0	0.567	.1273	-.0614	-.0140	0.001	-.0057
	06.0	0.570	.1271	-.0594	-.0201	-0.004	-.0076
	08.1	0.572	.1275	-.0545	-.0259	-0.011	-.0087
	10.0	0.573	.1279	-.0497	-.0311	-0.021	-.0087
1.30	-08.1	0.503	.1133	-.0395	.0215	0.013	.0068
	-03.9	0.500	.1126	-.0470	.0106	0.002	.0040
	00.1	0.499	.1129	-.0489	-.0004	0.000	-.0006
	02.0	0.500	.1131	-.0491	-.0062	-0.001	-.0031
	04.0	0.502	.1134	-.0480	-.0117	-0.004	-.0052
	06.1	0.502	.1135	-.0456	-.0171	-0.011	-.0069
	08.1	0.504	.1145	-.0412	-.0219	-0.018	-.0078
	10.0	0.507	.1164	-.0375	-.0261	-0.028	-.0088
1.70	-08.0	0.407	.0963	-.0263	.0149	0.022	.0078
	-04.0	0.403	.0942	-.0306	.0075	0.006	.0040
	00.1	0.403	.0939	-.0329	-.0005	0.000	-.0003
	01.9	0.403	.0941	-.0323	-.0044	-0.005	-.0024
	04.1	0.406	.0949	-.0320	-.0086	-0.008	-.0049
	06.0	0.407	.0955	-.0307	-.0119	-0.015	-.0069
	08.0	0.407	.0968	-.0279	-.0154	-0.024	-.0090
	10.1	0.409	.0995	-.0245	-.0184	-0.034	-.0115
2.22	-08.1	0.316	.0786	-.0118	.0101	0.026	.0087
	-03.9	0.315	.0763	-.0148	.0052	0.009	.0041
	00.1	0.315	.0763	-.0161	-.0011	-0.001	-.0006
	02.0	0.315	.0764	-.0158	-.0043	-0.006	-.0029
	04.1	0.315	.0768	-.0149	-.0073	-0.014	-.0053
	06.0	0.313	.0774	-.0132	-.0097	-0.022	-.0076
	08.1	0.315	.0799	-.0114	-.0118	-0.032	-.0098
	10.0	0.314	.0823	-.0090	-.0138	-0.045	-.0122
			$\delta = 19.7°$				
1.00	-08.0	0.593	.1407	-.0288	.0256	0.004	.0069
	-04.0	0.589	.1423	-.0368	.0123	-0.001	.0027
	00.1	0.589	.1446	-.0441	-.0014	0.003	-.0010
	02.0	0.591	.1450	-.0413	-.0085	0.005	-.0026
	04.0	0.587	.1425	-.0352	-.0158	0.003	-.0043
	06.0	0.590	.1427	-.0304	-.0218	-0.003	-.0063
	08.1	0.592	.1419	-.0281	-.0298	-0.011	-.0078
	10.0	0.603	.1442	-.0222	-.0367	-0.019	-.0074
1.10	-08.0	0.557	.1339	-.0250	.0239	0.005	.0074
	-04.1	0.553	.1363	-.0323	.0119	0.001	.0039
	00.1	0.552	.1370	-.0403	-.0013	0.003	-.0017
	02.0	0.552	.1368	-.0377	-.0081	0.005	-.0037
	04.0	0.550	.1352	-.0330	-.0148	0.003	-.0059
	06.0	0.551	.1344	-.0268	-.0208	-0.003	-.0079
	08.1	0.562	.1359	-.0261	-.0281	-0.012	-.0093
	10.1	0.565	.1366	-.0226	-.0338	-0.021	-.0091
1.30	-08.0	0.497	.1301	-.0166	.0234	0.013	.0065
	-04.0	0.490	.1291	-.0242	.0127	-0.002	.0033
	00.1	0.487	.1298	-.0292	-.0002	0.000	-.0021
	02.0	0.487	.1295	-.0278	-.0066	0.002	-.0040
	04.0	0.492	.1293	-.0251	-.0135	0.002	-.0054
	06.0	0.494	.1301	-.0200	-.0192	-0.005	-.0075
	08.1	0.497	.1311	-.0175	-.0242	-0.018	-.0088
	10.0	0.502	.1319	-.0118	-.0298	-0.027	-.0089
1.70	-08.0	0.410	.1116	-.0088	.0167	0.020	.0082
	-04.0	0.404	.1093	-.0149	.0085	0.003	.0039
	00.1	0.402	.1094	-.0190	-.0007	0.000	-.0005
	01.9	0.403	.1094	-.0184	-.0051	-0.001	-.0025
	04.1	0.406	.1101	-.0164	-.0101	-0.007	-.0051
	06.0	0.409	.1107	-.0137	-.0141	-0.014	-.0071
	08.1	0.410	.1124	-.0107	-.0180	-0.023	-.0093
	10.0	0.415	.1152	-.0060	-.0209	-0.034	-.0119
2.22	-08.0	0.318	.0928	.0046	.0115	0.025	.0090
	-04.0	0.314	.0891	.0001	.0061	0.008	.0048
	00.1	0.313	.0888	-.0021	-.0011	0.000	-.0008
	02.0	0.314	.0888	-.0017	-.0040	-0.005	-.0034
	04.0	0.315	.0896	-.0005	-.0077	-0.012	-.0057
	06.2	0.317	.0914	.0023	-.0109	-0.020	-.0080
	08.1	0.319	.0938	.0046	-.0134	-0.031	-.0100
	10.0	0.319	.0971	.0078	-.0153	-0.045	-.0123

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY 10° ANGLE OF ATTACK - Continued

(d) BW; $\alpha = 10.5^{\circ}$

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-08.0	0.509	.0935	-.0833	.0133	0.020	.0096
	-03.9	0.525	.0964	-.0894	.0065	0.010	.0049
	00.1	0.530	.0973	-.0911	-.0012	0.001	-.0008
	02.0	0.531	.0972	-.0909	-.0049	-0.002	-.0025
	04.1	0.527	.0966	-.0903	-.0086	-0.007	-.0049
	06.0	0.523	.0958	-.0881	-.0117	-0.013	-.0069
	08.1	0.508	.0938	-.0822	-.0134	-0.020	-.0093
	10.0	0.495	.0924	-.0777	-.0155	-0.027	-.0116
0.90	-08.0	0.584	.1118	-.1314	.0154	0.018	.0101
	-04.0	0.600	.1143	-.1393	.0072	0.008	.0051
	-00.0	0.603	.1154	-.1423	-.0016	-0.001	-.0001
	02.0	0.598	.1143	-.1381	-.0062	-0.004	-.0025
	04.1	0.604	.1154	-.1412	-.0106	-0.011	-.0051
	06.0	0.596	.1139	-.1374	-.0147	-0.017	-.0072
	08.0	0.593	.1144	-.1365	-.0186	-0.025	-.0096
	10.0	0.577	.1119	-.1281	-.0219	-0.032	-.0120
1.00	-08.0	0.582	.1165	-.1604	.0139	0.023	.0085
	-03.9	0.588	.1171	-.1630	.0066	0.010	.0040
	00.1	0.589	.1172	-.1633	-.0015	0.002	-.0003
	02.0	0.592	.1177	-.1645	-.0055	-0.003	-.0024
	04.1	0.592	.1181	-.1644	-.0093	-0.008	-.0047
	06.0	0.590	.1180	-.1640	-.0131	-0.014	-.0068
	08.1	0.586	.1184	-.1623	-.0163	-0.023	-.0088
	10.0	0.578	.1167	-.1599	-.0197	-0.031	-.0110
1.10	-08.1	0.542	.1083	-.1468	.0144	0.019	.0092
	-03.9	0.552	.1093	-.1492	.0072	0.007	.0050
	00.1	0.554	.1094	-.1503	-.0011	-0.003	.0007
	02.0	0.558	.1102	-.1517	-.0050	-0.004	-.0011
	04.1	0.558	.1103	-.1521	-.0093	-0.010	-.0036
	06.0	0.551	.1099	-.1490	-.0128	-0.016	-.0058
	08.1	0.545	.1098	-.1471	-.0157	-0.023	-.0078
	10.1	0.539	.1095	-.1449	-.0191	-0.031	-.0101
1.30	-08.0	0.480	.0970	-.1352		0.021	.0101
	-04.0	0.487	.0975	-.1366	.0050	0.009	.0055
	00.1	0.490	.0977	-.1391	-.0006	-0.002	.0002
	02.0	0.491	.0979	-.1396	-.0033	-0.005	-.0019
	04.1	0.491	.0981	-.1398	-.0062	-0.011	-.0047
	06.1	0.489	.0982	-.1392	-.0088	-0.018	-.0070
	08.1	0.484	.0988	-.1376	-.0114	-0.026	-.0092
	10.0	0.478	.0982	-.1352	-.0138	-0.035	-.0116
1.70	-08.0	0.378	.0798	-.1015	.0065	0.026	.0109
	-03.9	0.385	.0792	-.1052	.0025	0.012	.0056
	00.1	0.387	.0799	-.1066	-.0007	-0.001	.0004
	02.0	0.388	.0802	-.1070	-.0022	-0.006	-.0028
	04.0	0.387	.0801	-.1065	-.0040	-0.013	-.0050
	06.0	0.386	.0808	-.1060	-.0060	-0.021	-.0076
	08.0	0.383	.0816	-.1042	-.0078	-0.030	-.0102
	10.1	0.379	.0830	-.1018	-.0095	-0.041	-.0131
2.22	-08.0	0.290	.0652	-.0722	.0049	0.031	.0111
	-03.9	0.293	.0629	-.0749	.0021	0.012	.0053
	00.1	0.292	.0624	-.0756	-.0006	-0.001	-.0001
	02.0	0.294	.0630	-.0760	-.0021	-0.008	-.0086
	04.0	0.293	.0635	-.0754	-.0035	-0.016	-.0055
	06.1	0.292	.0647	-.0744	-.0049	-0.026	-.0083
	08.0	0.290	.0662	-.0724	-.0061	-0.036	-.0111
	10.0	0.285	.0686	-.0695	-.0073	-0.051	-.0139

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY 10° ANGLE OF ATTACK - Continued

(e) BVC; $\alpha = 10.2^{\circ}$

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
				$\delta = 0^{\circ}$			
0.70	-0.81	0.075	0.281	0.809	0.122	0.074	-0.267
	-0.40	0.075	0.208	0.816	0.068	0.035	-0.122
	-0.00	0.073	0.189	0.828	0.007	0.005	-0.083
	0.21	0.073	0.190	0.822	-0.017	-0.009	0.019
	0.40	0.075	0.204	0.811	-0.048	-0.026	0.068
	0.60	0.075	0.222	0.800	-0.082	-0.042	0.132
	0.80	0.075	0.265	0.807	-0.102	-0.066	0.204
	0.99	0.073	0.316	0.815	-0.125	-0.090	0.279
0.90	-0.77	0.078	0.272	0.846	0.125	0.068	-0.264
	-0.39	0.077	0.208	0.855	0.063	0.030	-0.113
	0.01	0.077	0.197	0.870	0.003	0.002	-0.013
	0.20	0.077	0.199	0.864	-0.021	-0.011	0.026
	0.41	0.079	0.207	0.852	-0.055	-0.029	0.084
	0.60	0.078	0.230	0.839	-0.089	-0.045	0.150
	0.81	0.078	0.278	0.842	-0.109	-0.069	0.225
	0.99	0.078	0.331	0.859	-0.131	-0.093	0.297
1.00	-0.79	0.077	0.289	0.827	0.133	0.075	-0.293
	-0.41	0.073	0.224	0.822	0.070	0.036	-0.132
	0.01	0.072	0.189	0.840	0.003	0.003	-0.013
	0.21	0.072	0.184	0.836	-0.026	-0.014	0.038
	0.40	0.071	0.188	0.823	-0.059	-0.029	0.099
	0.61	0.074	0.233	0.822	-0.098	-0.050	0.183
	0.80	0.077	0.289	0.822	-0.120	-0.074	0.261
	1.01	0.080	0.361	0.813	-0.155	-0.102	0.370
1.10	-0.79	0.072	0.335	0.796	0.125	0.069	-0.262
	-0.42	0.073	0.261	0.786	0.063	0.031	-0.113
	0.01	0.073	0.246	0.799	-0.002	-0.002	0.005
	0.21	0.073	0.249	0.789	-0.031	-0.017	0.056
	0.41	0.073	0.266	0.787	-0.064	-0.033	0.113
	0.61	0.074	0.293	0.767	-0.100	-0.050	0.185
	0.81	0.076	0.349	0.782	-0.124	-0.076	0.275
	1.00	0.085	0.410	0.769	-0.160	-0.103	0.376
1.30	-0.80	0.072	0.294	0.763	0.112	0.062	-0.211
	-0.40	0.069	0.234	0.766	0.068	0.028	-0.094
	0.01	0.068	0.219	0.773	0.003	0.000	-0.008
	0.20	0.068	0.221	0.770	-0.021	-0.012	0.029
	0.41	0.070	0.234	0.766	-0.052	-0.027	0.075
	0.60	0.072	0.254	0.759	-0.082	-0.042	0.118
	0.80	0.072	0.295	0.772	-0.105	-0.064	0.195
	1.01	0.074	0.363	0.776	-0.136	-0.091	0.284
1.70	-0.80	0.067	0.291	0.672	0.094	0.061	-0.154
	-0.40	0.068	0.224	0.682	0.050	0.026	-0.068
	-0.00	0.060	0.207	0.690	0.004	0.001	-0.012
	0.20	0.061	0.209	0.688	-0.016	-0.010	0.014
	0.41	0.063	0.220	0.684	-0.040	-0.023	0.042
	0.60	0.064	0.241	0.682	-0.061	-0.038	0.073
	0.80	0.067	0.281	0.681	-0.083	-0.057	0.122
	1.01	0.073	0.340	0.673	-0.108	-0.079	0.172
2.22	-0.79	0.065	0.276	0.552	0.070	0.054	-0.093
	-0.41	0.057	0.202	0.577	0.036	0.023	-0.041
	0.01	0.056	0.194	0.585	-0.004	-0.003	0.004
	0.20	0.056	0.197	0.580	-0.021	-0.015	0.022
	0.41	0.058	0.211	0.573	-0.039	-0.027	0.041
	0.61	0.062	0.242	0.560	-0.057	-0.044	0.069
	0.80	0.068	0.282	0.549	-0.075	-0.062	0.101
	1.00	0.073	0.343	0.532	-0.089	-0.080	0.122
				$\delta = 9.7^{\circ}$			
0.70	-0.79	0.117	0.445	1.176	0.126	0.063	-0.280
	-0.46	0.114	0.389	1.226	0.081	0.036	-0.163
	-0.00	0.111	0.382	1.237	0.006	0.004	-0.020
	0.19	0.110	0.384	1.234	-0.024	-0.011	0.031
	0.40	0.104	0.381	1.223	-0.056	-0.027	0.098
	0.61	0.113	0.411	1.285	-0.089	-0.041	0.156
	0.80	0.115	0.434	1.175	-0.110	-0.059	0.227
	1.01	0.119	0.496	1.171	-0.134	-0.087	0.325
0.90	-0.79	0.124	0.456	1.247	0.125	0.057	-0.267
	-0.40	0.115	0.406	1.245	0.081	0.034	-0.171
	0.01	0.110	0.382	1.262	0.004	0.002	-0.014
	0.21	0.112	0.391	1.250	-0.032	-0.015	0.055
	0.40	0.113	0.401	1.247	-0.067	-0.031	0.125
	0.61	0.116	0.417	1.247	-0.098	-0.045	0.188
	0.80	0.122	0.459	1.249	-0.118	-0.060	0.246
	0.99	0.126	0.527	1.259	-0.146	-0.089	0.371
1.00	-0.80	0.119	0.447	1.208	0.130	0.061	-0.278
	-0.41	0.108	0.389	1.222	0.084	0.037	-0.179
	-0.01	0.104	0.369	1.235	0.000	-0.000	-0.005
	0.19	0.107	0.368	1.225	-0.037	-0.018	0.073
	0.40	0.106	0.406	1.220	-0.082	-0.037	0.160
	0.61	0.110	0.426	1.219	-0.112	-0.051	0.225
	0.80	0.113	0.455	1.230	-0.130	-0.068	0.283
	1.00	0.117	0.543	1.238	-0.159	-0.100	0.408
				$\delta = 9.7^{\circ}$ - Concluded			
1.10	-0.81	0.108	0.488	1.137	0.124	0.056	-0.245
	-0.40	0.100	0.442	1.145	0.074	0.031	-0.143
	0.01	0.095	0.420	1.152	-0.003	-0.004	0.008
	0.21	0.095	0.428	1.154	-0.040	-0.021	0.082
	0.40	0.099	0.446	1.143	-0.080	-0.037	0.159
	0.61	0.101	0.465	1.140	-0.110	-0.050	0.217
	0.80	0.105	0.509	1.145	-0.129	-0.069	0.279
	1.02	0.109	0.574	1.155	-0.162	-0.102	0.413
1.30	-0.79	0.106	0.446	1.062	0.119	0.055	-0.227
	-0.40	0.096	0.388	1.067	0.072	0.027	-0.128
	0.01	0.093	0.375	1.087	0.005	0.002	-0.015
	0.20	0.094	0.378	1.081	-0.026	-0.013	0.038
	0.41	0.097	0.390	1.073	-0.061	-0.026	0.095
	0.60	0.101	0.409	1.064	-0.088	-0.036	0.132
	0.80	0.105	0.450	1.073	-0.111	-0.057	0.208
	1.01	0.110	0.518	1.075	-0.144	-0.086	0.313
1.70	-0.79	0.096	0.414	0.903	0.102	0.054	-0.165
	-0.40	0.084	0.345	0.922	0.057	0.022	-0.081
	0.01	0.079	0.330	0.933	0.005	0.002	-0.013
	0.21	0.080	0.337	0.933	-0.020	-0.008	0.019
	0.40	0.083	0.348	0.929	-0.046	-0.019	0.050
	0.60	0.089	0.367	0.910	-0.069	-0.030	0.077
	0.80	0.094	0.412	0.915	-0.092	-0.052	0.135
	1.00	0.101	0.472	0.903	-0.114	-0.073	0.181
2.22	-0.80	0.087	0.378	0.751	0.077	0.048	-0.090
	-0.41	0.075	0.313	0.787	0.041	0.019	-0.042
	0.01	0.069	0.290	0.793	-0.003	-0.003	0.005
	0.21	0.071	0.299	0.789	-0.026	-0.013	0.024
	0.40	0.075	0.315	0.782	-0.044	-0.023	0.038
	0.60	0.080	0.342	0.768	-0.062	-0.038	0.061
	0.80	0.087	0.391	0.755	-0.080	-0.057	0.095
	1.00	0.090	0.447	0.762	-0.091	-0.078	0.118
				$\delta = 19.7^{\circ}$			
1.00	-0.79	0.134	0.647	1.404	0.131	0.062	-0.302
	-0.38	0.129	0.612	1.418	0.069	0.040	-0.203
	-0.00	0.120	0.588	1.426	-0.004	-0.003	0.016
	0.21	0.120	0.583	1.397	-0.045	-0.022	0.113
	0.40	0.127	0.591	1.389	-0.088	-0.042	0.207
	0.61	0.133	0.631	1.408	-0.116	-0.057	0.266
	0.80	0.142	0.676	1.391	-0.131	-0.072	0.319
	1.00	0.148	0.738	1.391	-0.155	-0.103	0.439
1.10	-0.80	0.124	0.687	1.330	0.128	0.060	-0.285
	-0.40	0.118	0.651	1.339	0.083	0.035	-0.180
	0.01	0.110	0.622	1.340	-0.004	-0.004	0.015
	0.20	0.112	0.630	1.319	-0.045	-0.022	0.104
	0.40	0.116	0.637	1.319	-0.087	-0.040	0.189
	0.61	0.123	0.677	1.326	-0.114	-0.052	0.237
	0.81	0.130	0.716	1.308	-0.134	-0.073	0.315
	1.01	0.138	0.792	1.310	-0.158	-0.101	0.412
1.30	-0.81	0.124	0.633	1.233	0.122	0.055	-0.234
	-0.40	0.111	0.575	1.250	0.084	0.030	-0.181
	0.01	0.103	0.557	1.249	0.007	0.003	-0.019
	0.21	0.104	0.559	1.238	-0.031	-0.014	0.058
	0.40	0.110	0.574	1.238	-0.065	-0.027	0.111
	0.60	0.119	0.601	1.240	-0.091	-0.039	0.151
	0.81	0.125	0.638	1.221	-0.114	-0.058	0.214
	1.00	0.132	0.704	1.243	-0.141	-0.084	0.313
1.70	-0.80	0.114	0.578	1.043	0.106	0.052	-0.176
	-0.40	0.096	0.504	1.058	0.062	0.062	-0.091
	0.01	0.088	0.480	1.050	0.005	0.002	-0.011
	0.20	0.090	0.490	1.055	-0.020	-0.009	0.022
	0.41	0.095	0.502	1.062	-0.050	-0.019	0.061
	0.60	0.107	0.543	1.049	-0.074	-0.031	0.090
	0.81	0.112	0.575	1.037	-0.094	-0.050	0.132
	1.00	0.116	0.632	1.057	-0.113	-0.073	0.179
2.22	-0.80	0.102	0.522	0.887	0.077	0.045	-0.086
	-0.41	0.083	0.442	0.909	0.042	0.017	-0.042
	0.01	0.075	0.421	0.903	-0.004	-0.004	0.003
	0.21	0.078	0.429	0.897	-0.026	-0.014	0.023
	0.40	0.082	0.451	0.907	-0.046	-0.024	0.036
	0.60	0.094	0.485	0.893	-0.064	-0.035	0.059
	0.80	0.103	0.534	0.881	-0.080	-0.054	0.087
	1.00	0.108	0.597	0.892	-0.092	-0.076	0.108

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY 10° ANGLE OF ATTACK - Continued

(f) BC; $\alpha = 10.2^{\circ}$

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
		$\delta = 0^{\circ}$					
0.70	-08.0	0.075	.0188	.0802	.0005	0.011	.0090
	-04.0	0.074	.0176	.0817	.0002	0.002	.0050
	00.1	0.071	.0170	.0822	.0000	0.000	-.0002
	02.1	0.072	.0171	.0819	-.0001	-0.002	-.0029
	04.1	0.074	.0180	.0810	-.0003	-0.004	-.0055
	06.1	0.073	.0180	.0806	-.0004	-0.007	-.0078
	08.1	0.075	.0190	.0797	-.0005	-0.012	-.0099
	10.1	0.075	.0202	.0797	-.0007	-0.017	-.0113
0.90	-08.0	0.079	.0195	.0835	.0005	0.009	.0092
	-04.0	0.077	.0181	.0856	.0002	0.000	.0051
	00.1	0.074	.0177	.0859	-.0001	-0.001	-.0004
	02.0	0.075	.0180	.0859	-.0002	-0.003	-.0030
	04.0	0.077	.0189	.0853	-.0003	-0.005	-.0057
	06.0	0.077	.0189	.0840	-.0004	-0.007	-.0082
	08.1	0.078	.0201	.0836	-.0006	-0.012	-.0101
	09.9	0.079	.0211	.0829	-.0007	-0.017	-.0115
1.00	-07.9	0.078	.0204	.0825	.0005	0.010	.0097
	-04.0	0.076	.0198	.0829	.0002	0.002	.0054
	00.1	0.075	.0194	.0827	-.0000	0.001	-.0003
	02.0	0.073	.0190	.0835	-.0002	-0.002	-.0031
	04.0	0.076	.0207	.0826	-.0002	-0.004	-.0056
	06.0	0.077	.0193	.0814	-.0005	-0.007	-.0082
	08.0	0.079	.0215	.0813	-.0006	-0.010	-.0108
	10.0	0.088	.0223	.0791	-.0006	-0.011	-.0144
1.10	-08.0	0.072	.0250	.0773	.0003	0.010	.0095
	-04.0	0.069	.0219	.0794	.0001	0.002	.0051
	00.1	0.068	.0225	.0795	-.0001	-0.001	.0000
	02.0	0.069	.0228	.0791	-.0001	-0.002	-.0026
	04.1	0.072	.0228	.0782	-.0003	-0.005	-.0052
	06.0	0.073	.0244	.0777	-.0004	-0.008	-.0075
	08.0	0.075	.0253	.0767	-.0004	-0.012	-.0099
	10.0	0.085	.0275	.0742	-.0007	-0.013	-.0128
1.30	-08.0	0.072	.0225	.0750	.0004	0.013	.0097
	-04.1	0.068	.0205	.0761	.0002	0.002	.0055
	00.1	0.067	.0203	.0765	-.0000	-0.001	.0000
	02.1	0.067	.0203	.0765	-.0001	-0.003	-.0030
	04.0	0.068	.0207	.0763	-.0002	-0.006	-.0054
	06.1	0.070	.0217	.0754	-.0003	-0.010	-.0081
	08.0	0.072	.0227	.0750	-.0004	-0.015	-.0100
	10.0	0.075	.0248	.0743	-.0006	-0.022	-.0123
1.70	-08.0	0.069	.0229	.0655	.0003	0.020	.0096
	-03.9	0.064	.0202	.0669	.0001	0.006	.0054
	00.1	0.061	.0194	.0676	.0000	-0.000	.0000
	02.1	0.061	.0195	.0679	-.0001	-0.004	-.0028
	04.0	0.061	.0199	.0673	-.0002	-0.008	-.0053
	06.1	0.064	.0213	.0666	-.0003	-0.014	-.0077
	08.0	0.067	.0232	.0661	-.0003	-0.021	-.0099
	10.0	0.074	.0262	.0642	-.0004	-0.028	-.0126
2.22	-08.0	0.069	.0236	.0524	.0002	0.025	.0084
	-04.1	0.059	.0191	.0564	.0001	0.008	.0048
	00.1	0.056	.0180	.0566	.0000	-0.001	-.0003
	02.1	0.057	.0187	.0560	-.0001	-0.006	-.0032
	04.0	0.059	.0195	.0556	-.0002	-0.011	-.0054
	06.0	0.062	.0211	.0544	-.0003	-0.020	-.0073
	08.0	0.069	.0239	.0520	-.0004	-0.030	-.0091
	10.1	0.076	.0284	.0502	-.0004	-0.041	-.0114
		$\delta = 9.7^{\circ}$					
0.70	-08.0	0.181	.0366	1.161	.0001	-0.004	.0104
	-04.0	0.114	.0374	1.242	.0002	-0.004	.0053
	00.1	0.112	.0373	1.245	-.0001	-0.003	-.0003
	02.0	0.112	.0375	1.245	-.0001	-0.000	-.0030
	04.1	0.113	.0367	1.240	-.0003	0.000	-.0057
	05.9	0.115	.0374	1.235	-.0004	0.000	-.0088
	08.0	0.116	.0359	1.168	-.0002	0.001	-.0110
	10.0	0.124	.0368	1.147	-.0003	-0.001	-.0127
0.90	-08.0	0.126	.0388	1.241	.0003	-0.005	.0101
	-04.0	0.114	.0375	1.254	.0001	-0.006	.0051
	00.1	0.111	.0376	1.254	-.0001	-0.001	-.0003
	02.1	0.111	.0378	1.253	-.0002	0.000	-.0028
	04.1	0.115	.0377	1.249	-.0002	0.001	-.0056
	06.1	0.118	.0380	1.242	-.0003	0.001	-.0085
	08.1	0.122	.0376	1.231	-.0004	0.001	-.0108
	10.1	0.133	.0382	1.207	-.0005	0.004	-.0126
1.00	-08.0	0.122	.0379	1.190	.0008	-0.002	.0111
	-04.0	0.113	.0366	1.206	.0000	-0.005	.0060
	-00.0	0.109	.0368	1.209	-.0001	-0.002	.0000
	02.0	0.110	.0374	1.208	-.0002	0.004	-.0031
	04.1	0.113	.0369	1.204	-.0002	0.004	-.0063
	06.0	0.115	.0375	1.197	-.0003	0.003	-.0090
	08.0	0.122	.0388	1.186	-.0004	0.000	-.0116
	10.1	0.129	.0392	1.173	-.0006	-0.002	-.0135

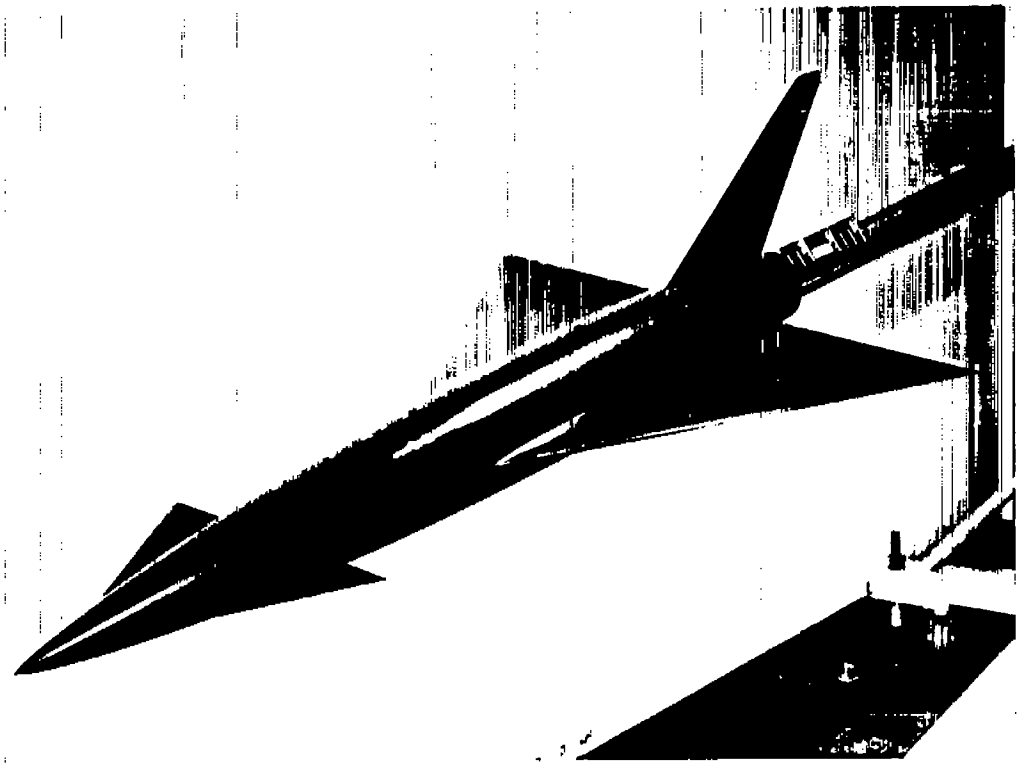
M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
		$\delta = 9.7^{\circ}$ - Concluded					
1.10	-08.0	0.115	.0434	1.107	.0003	-0.000	.0106
	-04.0	0.104	.0417	1.133	.0000	-0.005	.0057
	00.1	0.102	.0414	1.130	-.0002	-0.004	.0003
	02.0	0.100	.0416	1.188	-.0001	0.001	-.0026
	03.9	0.103	.0414	1.132	-.0002	0.001	-.0050
	06.1	0.107	.0414	1.117	-.0003	-0.002	-.0078
	08.1	0.111	.0420	1.116	-.0004	-0.004	-.0103
	10.0	0.119	.0451	1.103	-.0005	-0.007	-.0118
1.30	-07.9	0.108	.0378	1.043	.0002	0.000	.0108
	-03.9	0.097	.0364	1.064	.0001	-0.004	.0062
	00.1	0.093	.0357	1.073	-.0000	-0.002	-.0001
	02.1	0.094	.0362	1.070	-.0001	-0.001	-.0033
	04.1	0.097	.0364	1.063	-.0001	-0.000	-.0064
	06.1	0.102	.0369	1.045	-.0002	-0.001	-.0096
	08.1	0.108	.0381	1.044	-.0003	-0.004	-.0116
	10.0	0.115	.0397	1.033	-.0003	-0.009	-.0133
1.70	-08.1	0.100	.0358	.0876	.0002	0.007	.0117
	-04.1	0.083	.0383	.0905	.0000	-0.001	.0061
	00.1	0.080	.0380	.0911	-.0000	-0.000	-.0000
	01.9	0.081	.0383	.0916	-.0001	-0.000	-.0028
	04.1	0.084	.0387	.0909	-.0001	-0.001	-.0064
	06.0	0.089	.0395	.0894	-.0002	-0.004	-.0095
	08.0	0.095	.0353	.0889	-.0002	-0.010	-.0118
	10.1	0.105	.0386	.0873	-.0003	-0.019	-.0143
2.22	-08.0	0.090	.0340	.0720	.0002	0.016	.0107
	-04.1	0.077	.0295	.0760	.0001	0.002	.0060
	00.1	0.072	.0284	.0767	-.0000	-0.001	-.0005
	02.1	0.073	.0286	.0764	-.0001	-0.008	-.0041
	04.1	0.077	.0294	.0753	-.0002	-0.005	-.0072
	06.0	0.088	.0316	.0746	-.0003	-0.013	-.0093
	08.0	0.089	.0343	.0726	-.0004	-0.024	-.0110
	10.0	0.093	.0382	.0729	-.0005	-0.039	-.0116

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY 10° ANGLE OF ATTACK - Concluded

(g) BV; $\alpha = 10.2^{\circ}$

M	β, deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-0.79	0.016	.0182	.0212	.0122	0.092	-.0291
	-0.40	0.016	.0098	.0195	.0061	0.046	-.0138
	0.01	0.016	.0075	.0199	.0004	0.005	-.0012
	0.20	0.015	.0078	.0191	-.0020	-0.016	.0039
	0.41	0.017	.0098	.0196	-.0050	-0.038	.0106
	0.60	0.017	.0120	.0203	-.0080	-0.059	.0179
	0.81	0.015	.0174	.0211	-.0110	-0.085	.0258
	1.00	0.017	.0242	.0221	-.0136	-0.109	.0328
0.90	-0.79	0.018	.0183	.0209	.0118	0.089	-.0282
	-0.41	0.017	.0102	.0195	.0061	0.044	-.0136
	0.01	0.016	.0082	.0195	.0000	0.001	-.0001
	0.21	0.017	.0083	.0193	-.0025	-0.019	.0051
	0.41	0.017	.0100	.0196	-.0055	-0.041	.0121
	0.61	0.015	.0132	.0208	-.0088	-0.066	.0203
	0.81	0.016	.0183	.0216	-.0116	-0.089	.0276
	1.00	0.015	.0246	.0232	-.0141	-0.113	.0347
1.00	-0.80	0.020	.0215	.0214	.0132	0.098	-.0327
	-0.40	0.019	.0112	.0195	.0063	0.047	-.0150
	0.01	0.018	.0096	.0207	-.0002	-0.000	-.0002
	0.21	0.020	.0107	.0196	-.0029	-0.020	.0060
	0.41	0.017	.0118	.0206	-.0065	-0.046	.0148
	0.60	0.017	.0147	.0219	-.0099	-0.072	.0237
	0.81	0.018	.0197	.0225	-.0131	-0.097	.0325
	1.00	0.014	.0276	.0235	-.0159	-0.124	.0403
1.10	-0.78	0.021	.0242	.0205	.0126	0.091	-.0306
	-0.39	0.018	.0153	.0188	.0058	0.044	-.0133
	0.01	0.019	.0134	.0189	-.0003	0.001	.0007
	0.21	0.019	.0131	.0189	-.0032	-0.023	.0072
	0.41	0.016	.0135	.0198	-.0066	-0.047	.0156
	0.61	0.017	.0191	.0200	-.0102	-0.073	.0248
	0.81	0.016	.0257	.0223	-.0133	-0.097	.0331
	1.01	0.018	.0320	.0224	-.0160	-0.122	.0407
1.30	-0.78	0.022	.0206	.0217	.0117	0.082	-.0256
	-0.39	0.020	.0128	.0200	.0057	0.039	-.0116
	0.01	0.020	.0114	.0202	.0001	0.002	-.0002
	0.20	0.019	.0116	.0199	-.0025	-0.017	.0049
	0.41	0.019	.0132	.0204	-.0057	-0.040	.0119
	0.60	0.018	.0164	.0215	-.0089	-0.062	.0193
	0.80	0.019	.0209	.0224	-.0117	-0.084	.0261
	1.00	0.023	.0276	.0227	-.0141	-0.106	.0321
1.70	-0.79	0.028	.0217	.0228	.0098	0.075	-.0182
	-0.40	0.024	.0144	.0215	.0054	0.038	-.0096
	0.01	0.023	.0123	.0219	.0003	0.003	-.0008
	0.20	0.021	.0128	.0215	-.0020	-0.012	.0028
	0.41	0.023	.0140	.0217	-.0046	-0.032	.0076
	0.60	0.024	.0170	.0223	-.0070	-0.052	.0121
	0.80	0.026	.0214	.0233	-.0091	-0.071	.0161
	1.00	0.028	.0268	.0242	-.0109	-0.091	.0193
2.22	-0.79	0.036	.0212	.0194	.0071	0.062	-.0097
	-0.39	0.030	.0141	.0198	.0037	0.028	-.0048
	0.01	0.025	.0117	.0203	-.0004	-0.003	.0006
	0.21	0.027	.0127	.0198	-.0024	-0.018	.0033
	0.41	0.028	.0145	.0199	-.0046	-0.035	.0065
	0.61	0.032	.0176	.0196	-.0063	-0.053	.0092
	0.80	0.034	.0222	.0196	-.0076	-0.071	.0107
	1.01	0.040	.0292	.0209	-.0089	-0.092	.0117

[redacted]

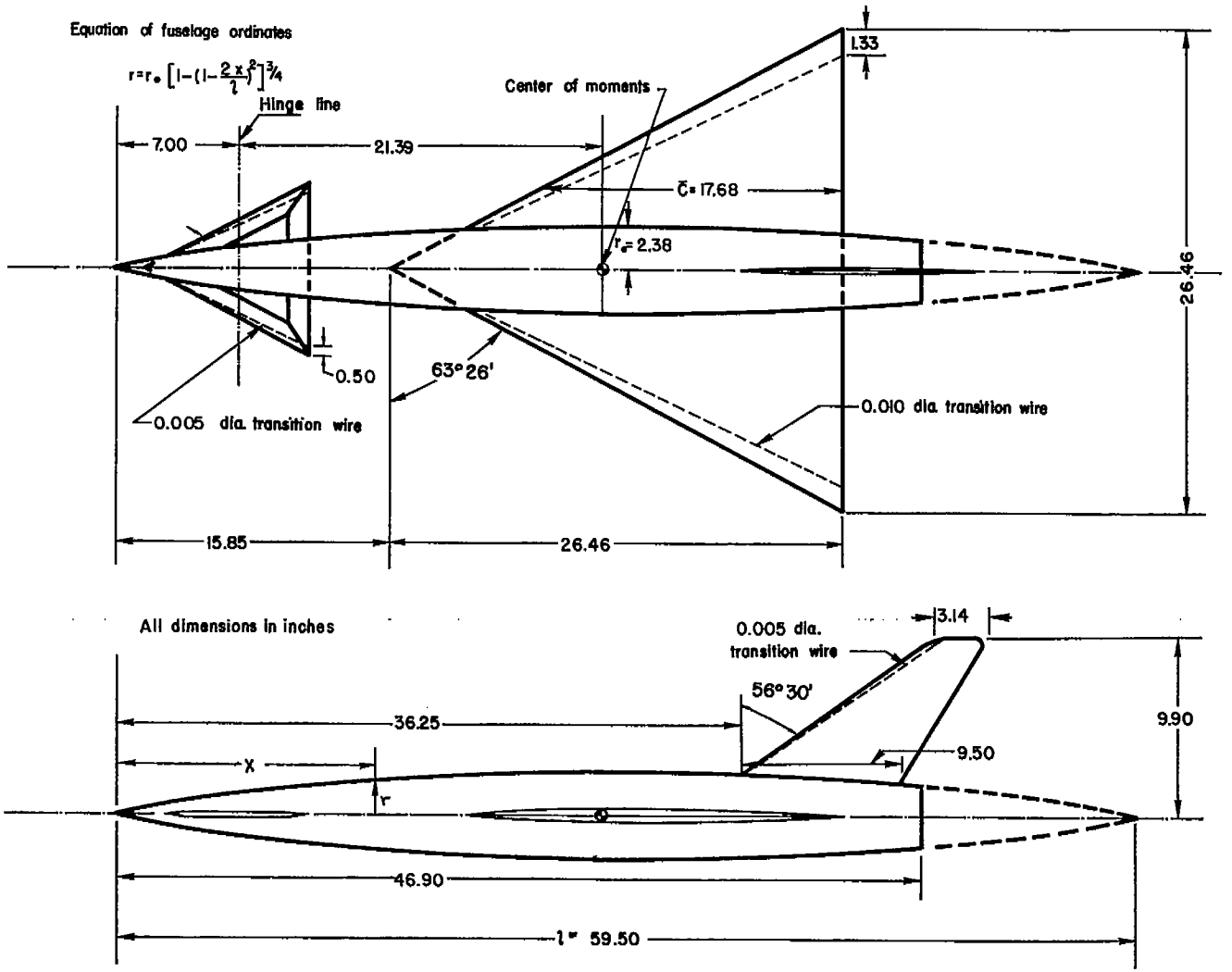


A-22831

(a) Photograph of model.

Figure 1.- Model details and dimensions.

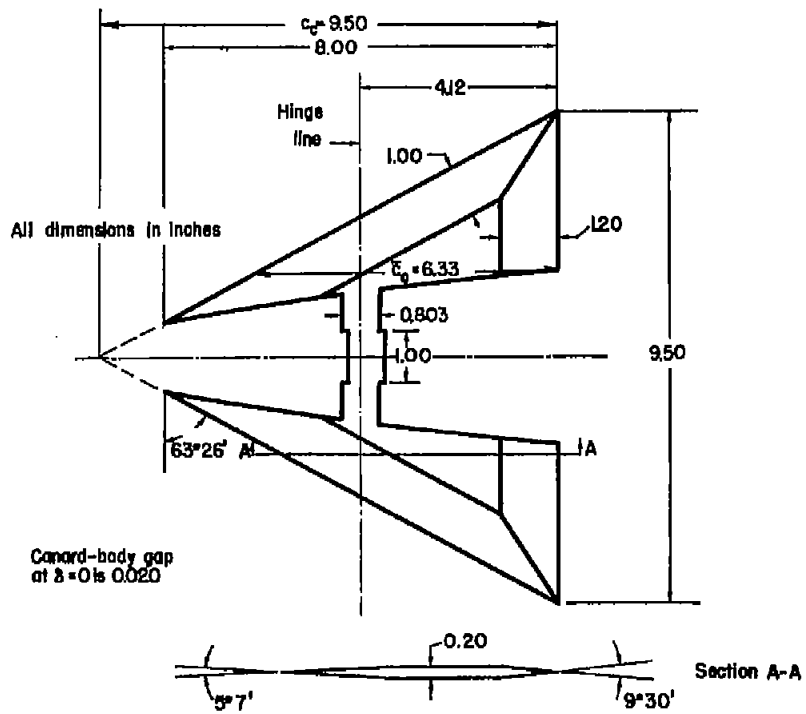
[redacted]



(b) Dimensional sketch of complete model.

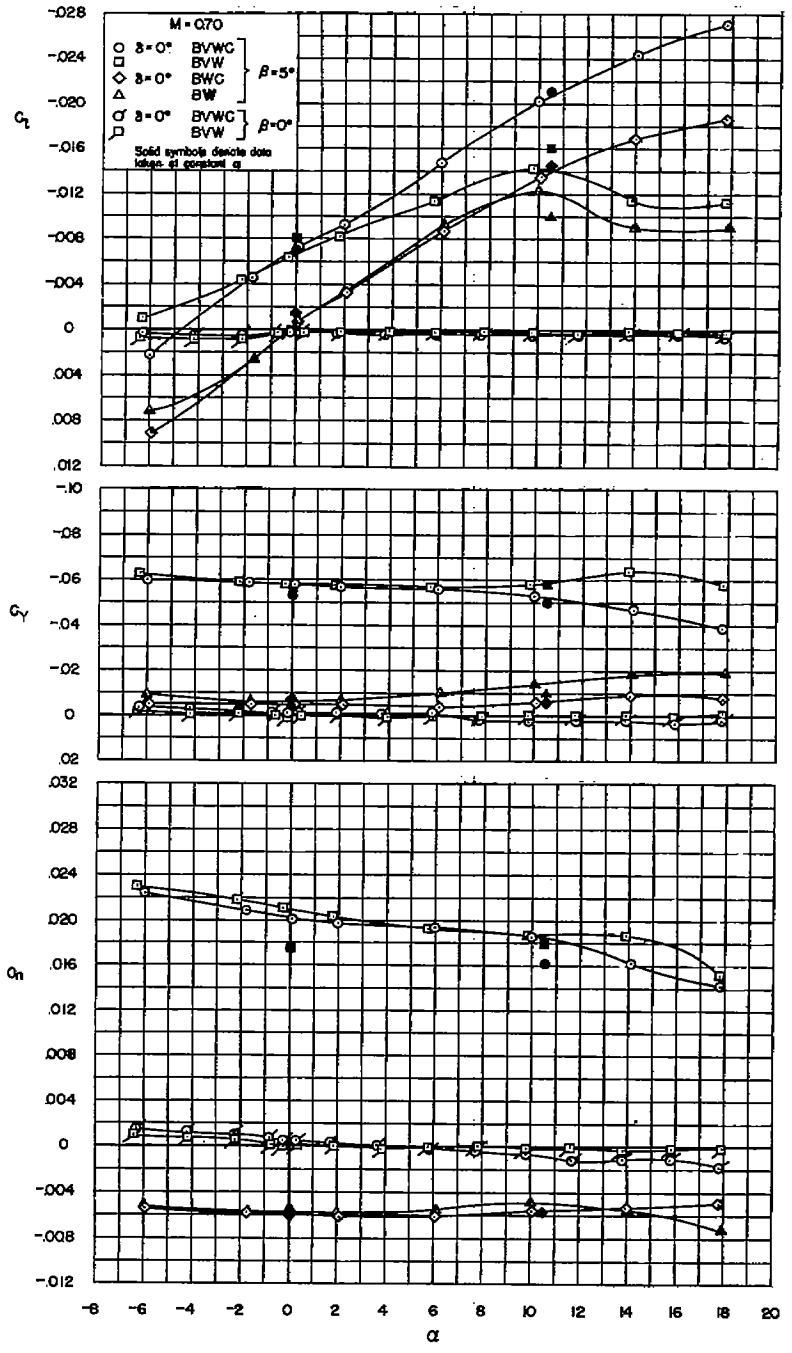
Figure 1.- Continued.

[redacted]



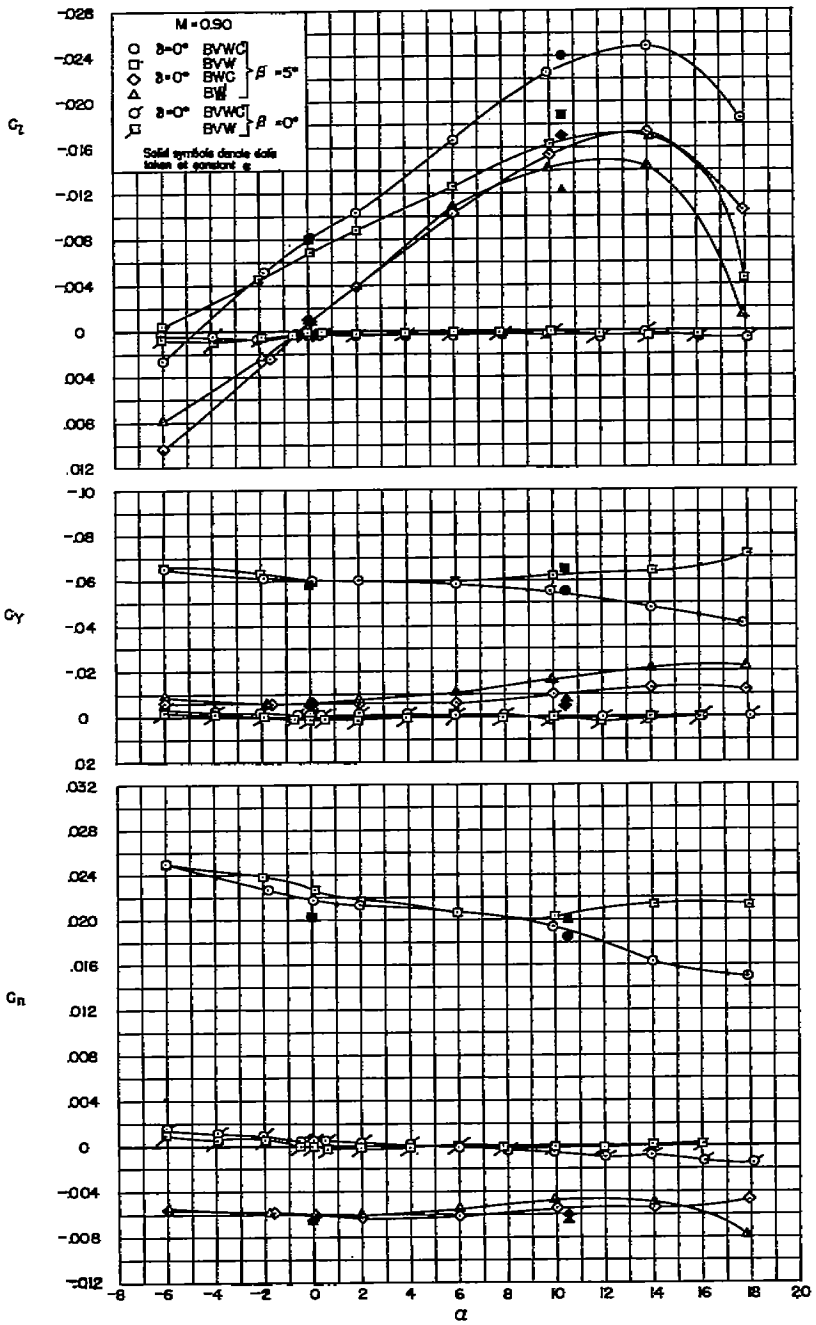
(c) Details of canard.

Figure 1.- Concluded.



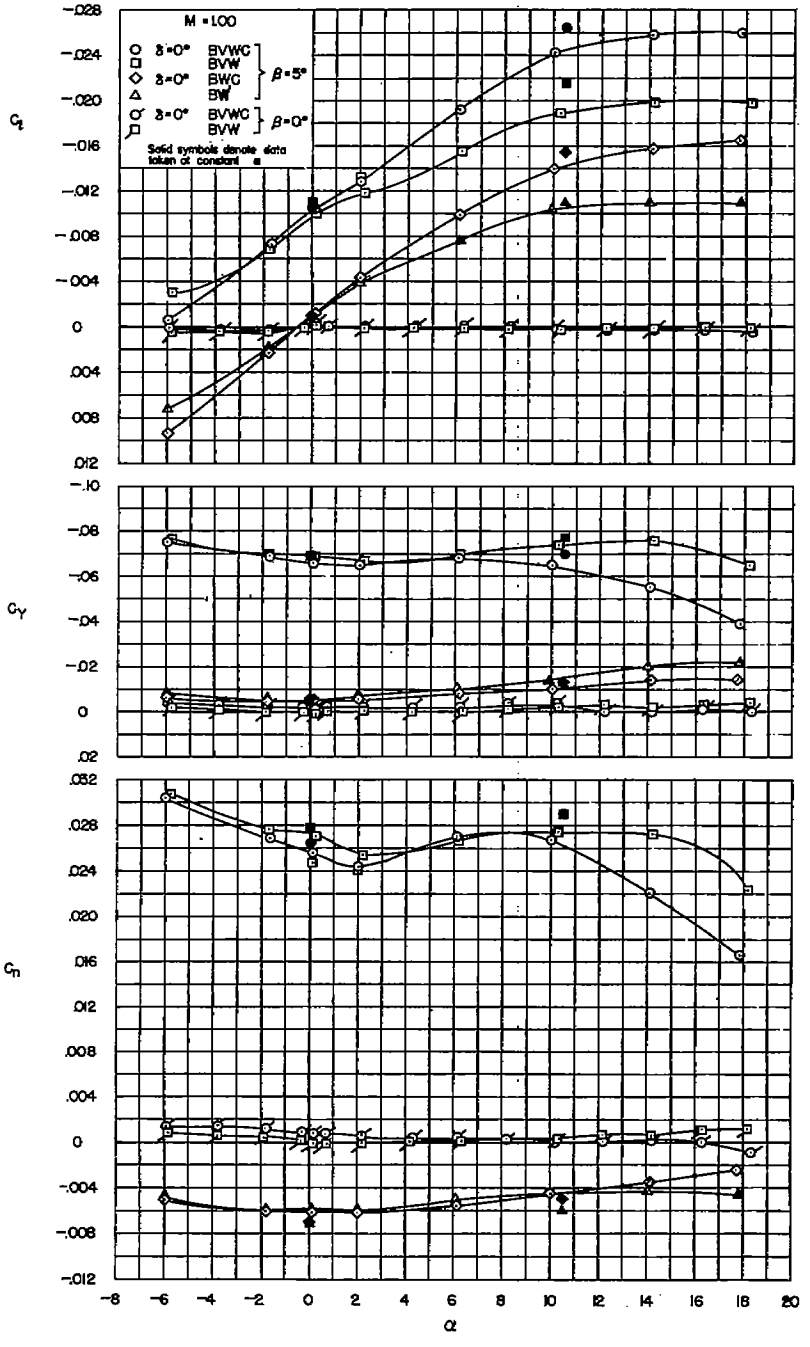
(a) M = 0.70

Figure 2.- The effect of configuration changes on the lateral-directional stability characteristics as a function of angle of attack at constant sideslip angles.



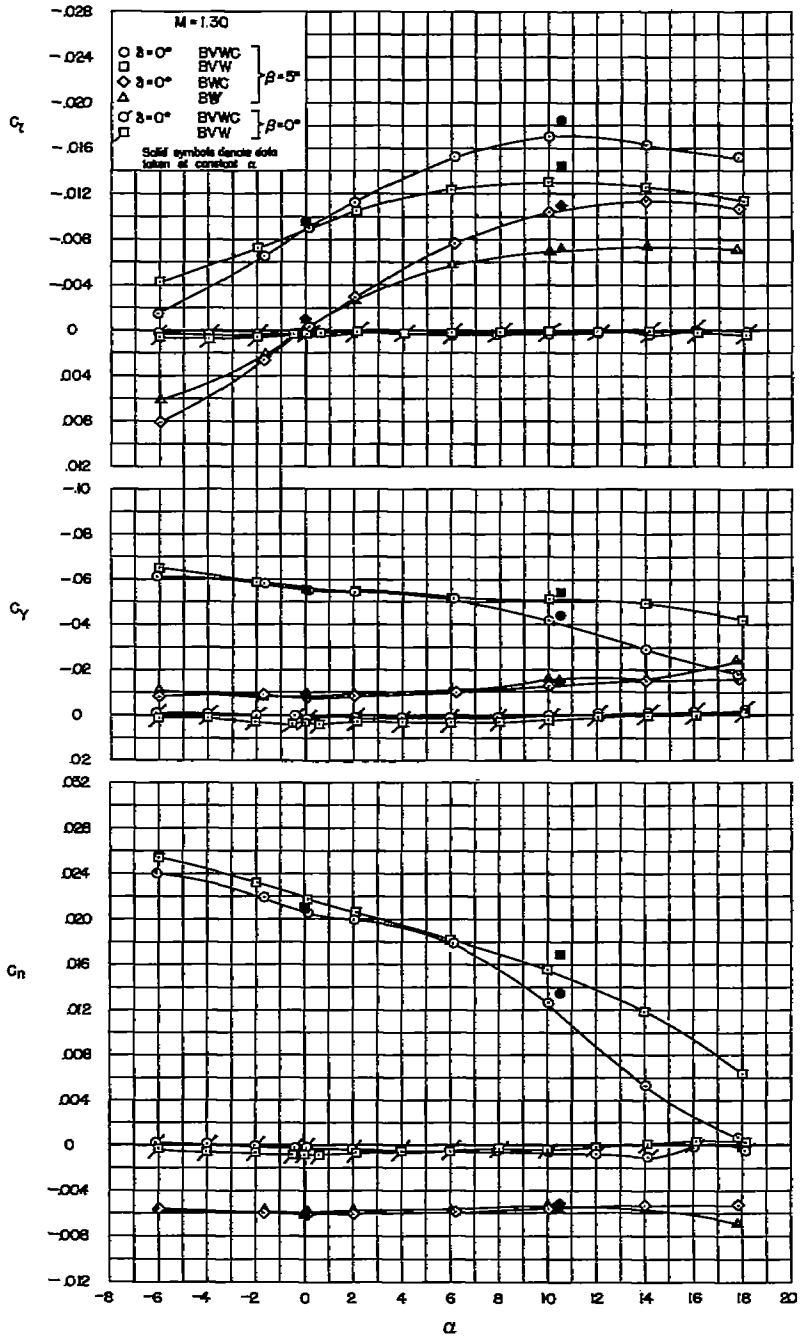
(b) M = 0.90

Figure 2.- Continued.



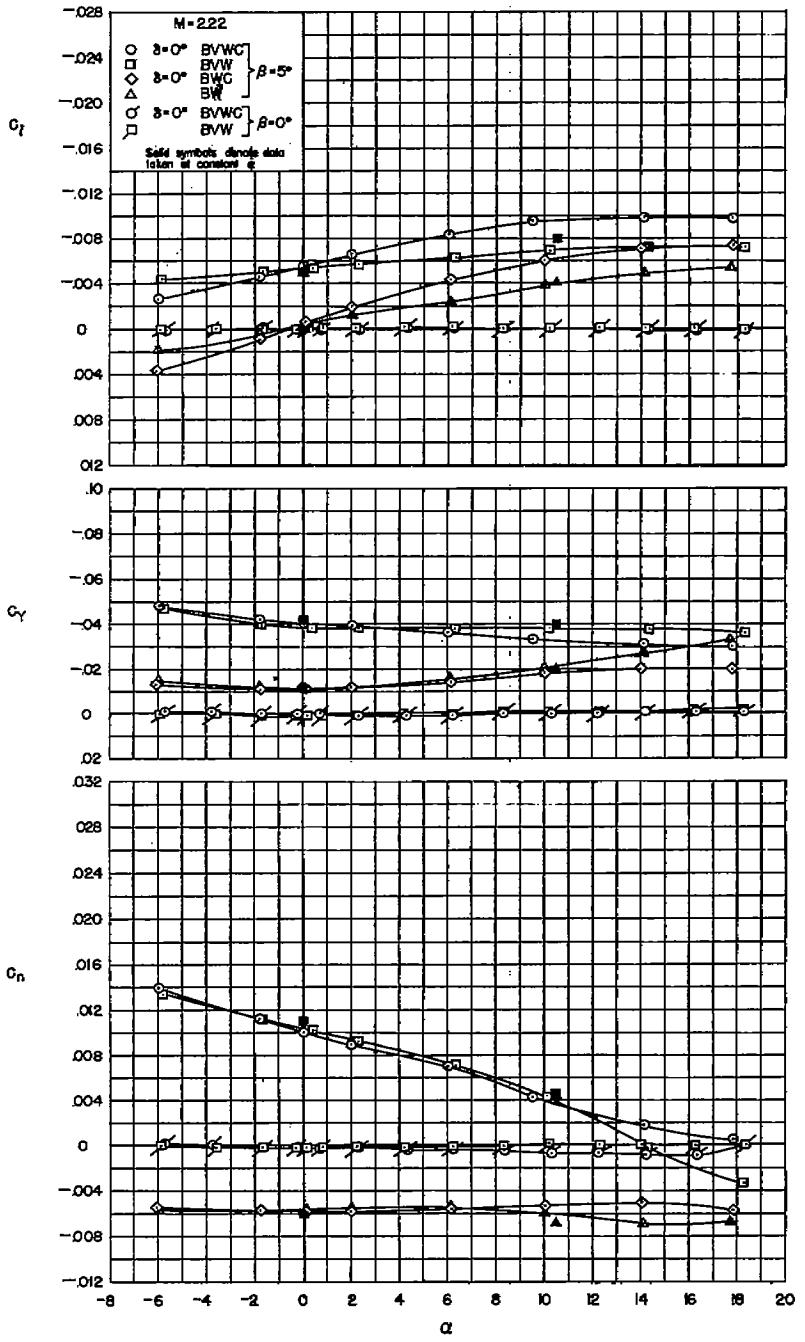
(c) M = 1.00

Figure 2.- Continued.



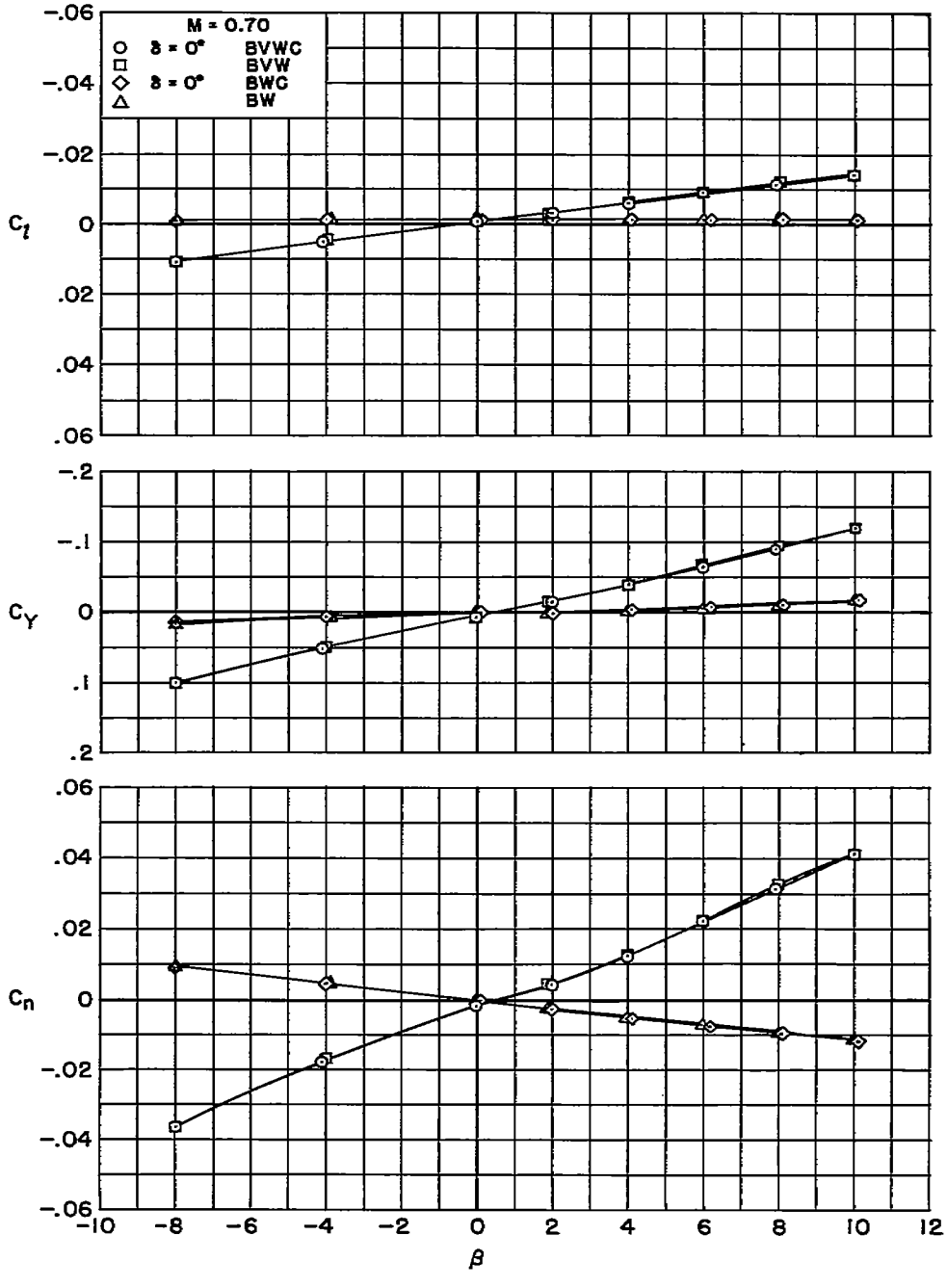
(d) M = 1.30

Figure 2.- Continued.



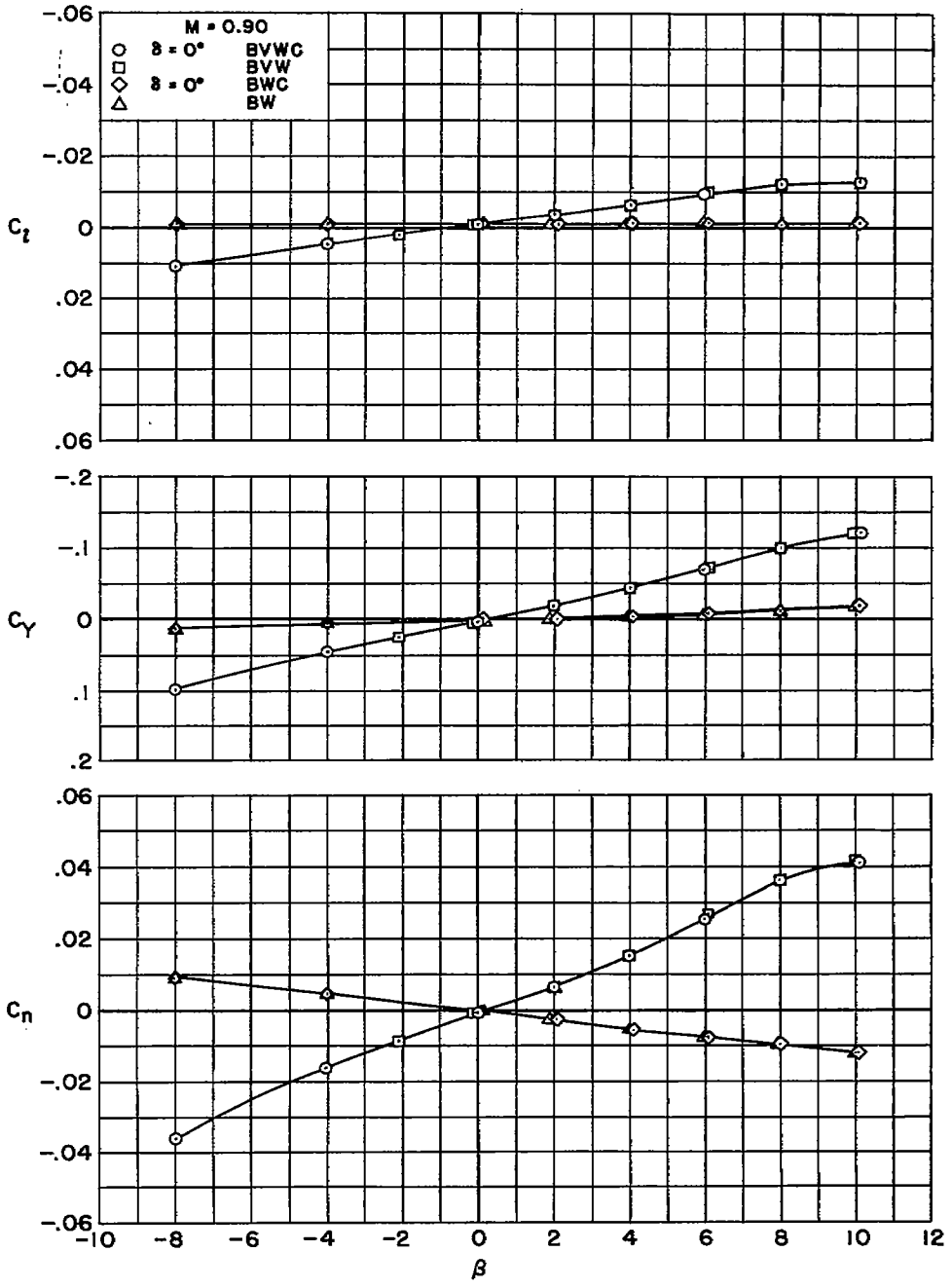
(e) M = 2.22

Figure 2.- Concluded.



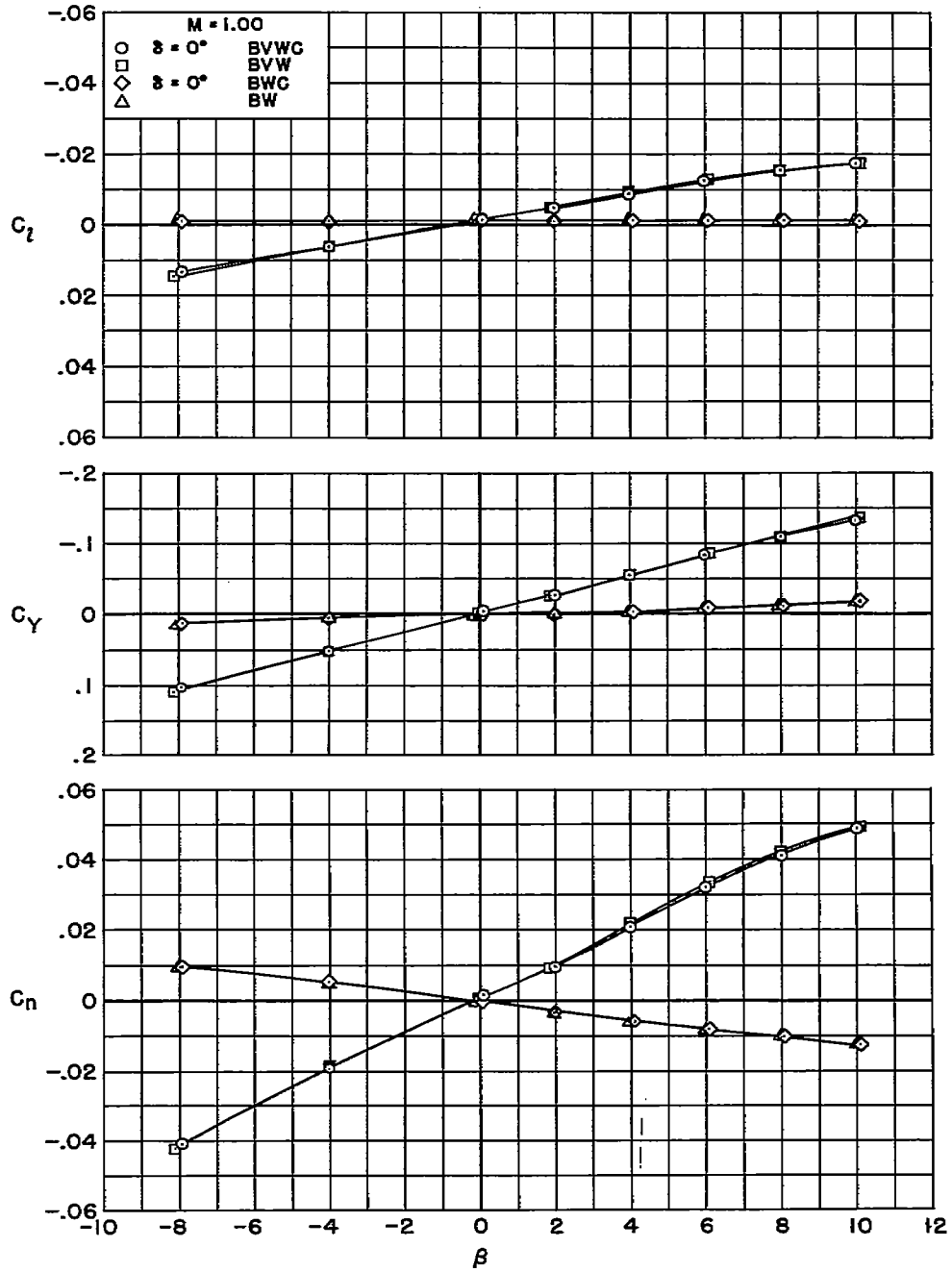
(a) M = 0.70

Figure 3.- The effect of configuration changes on the lateral-directional stability characteristics as a function of angle of sideslip at a constant angle of attack of 0°.



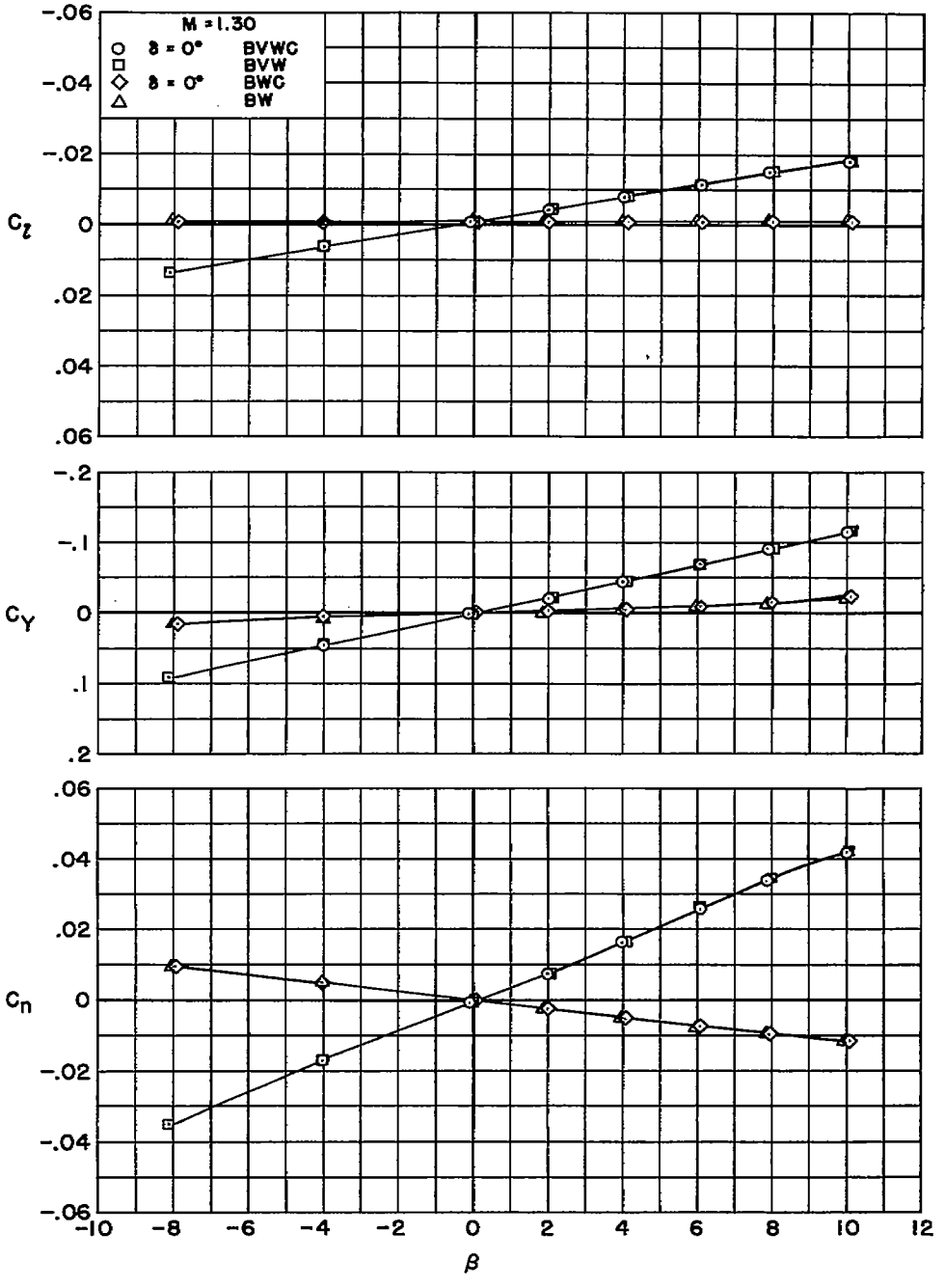
(b) M = 0.90

Figure 3.- Continued.



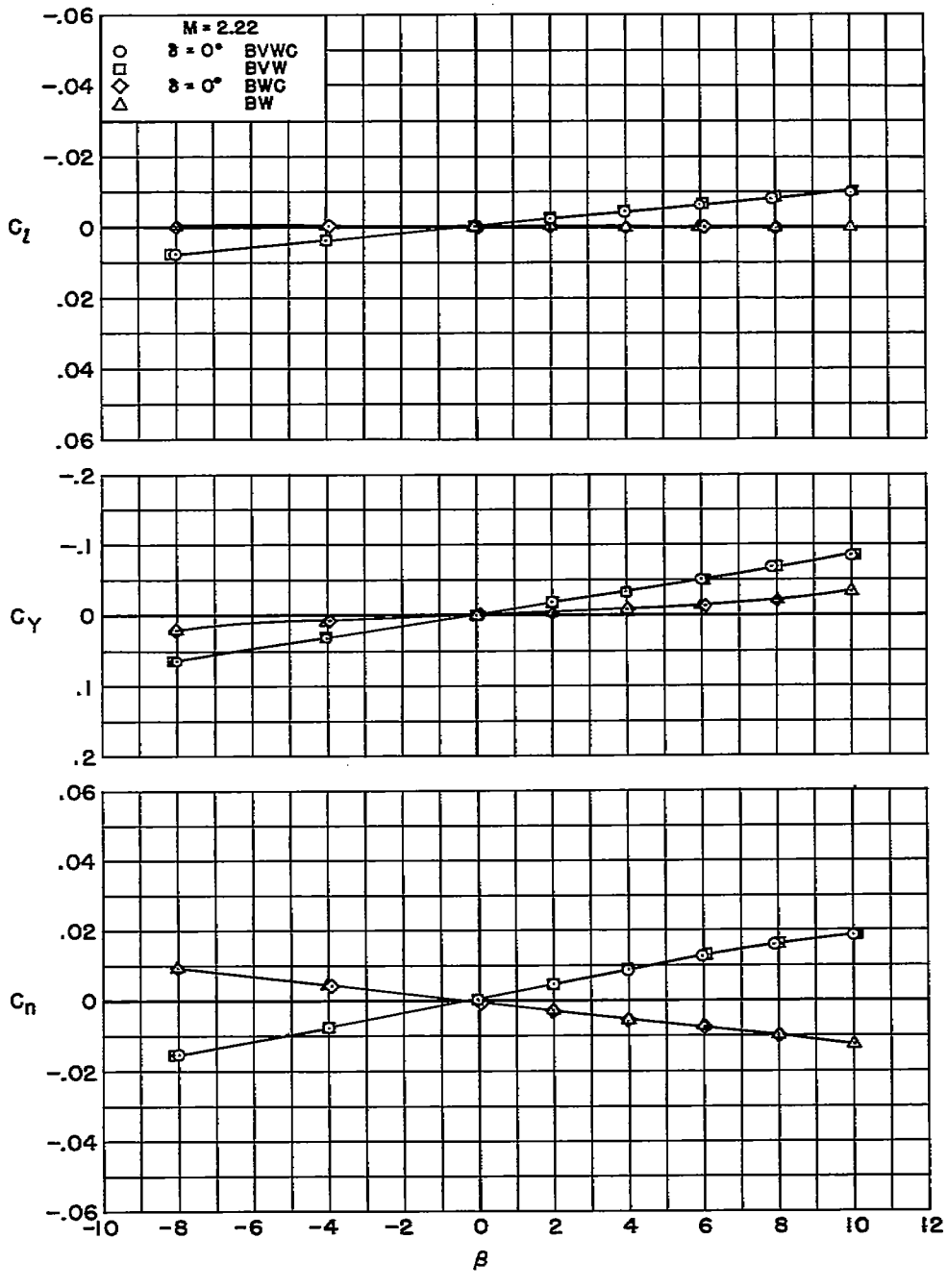
(c) M = 1.00

Figure 3.- Continued.



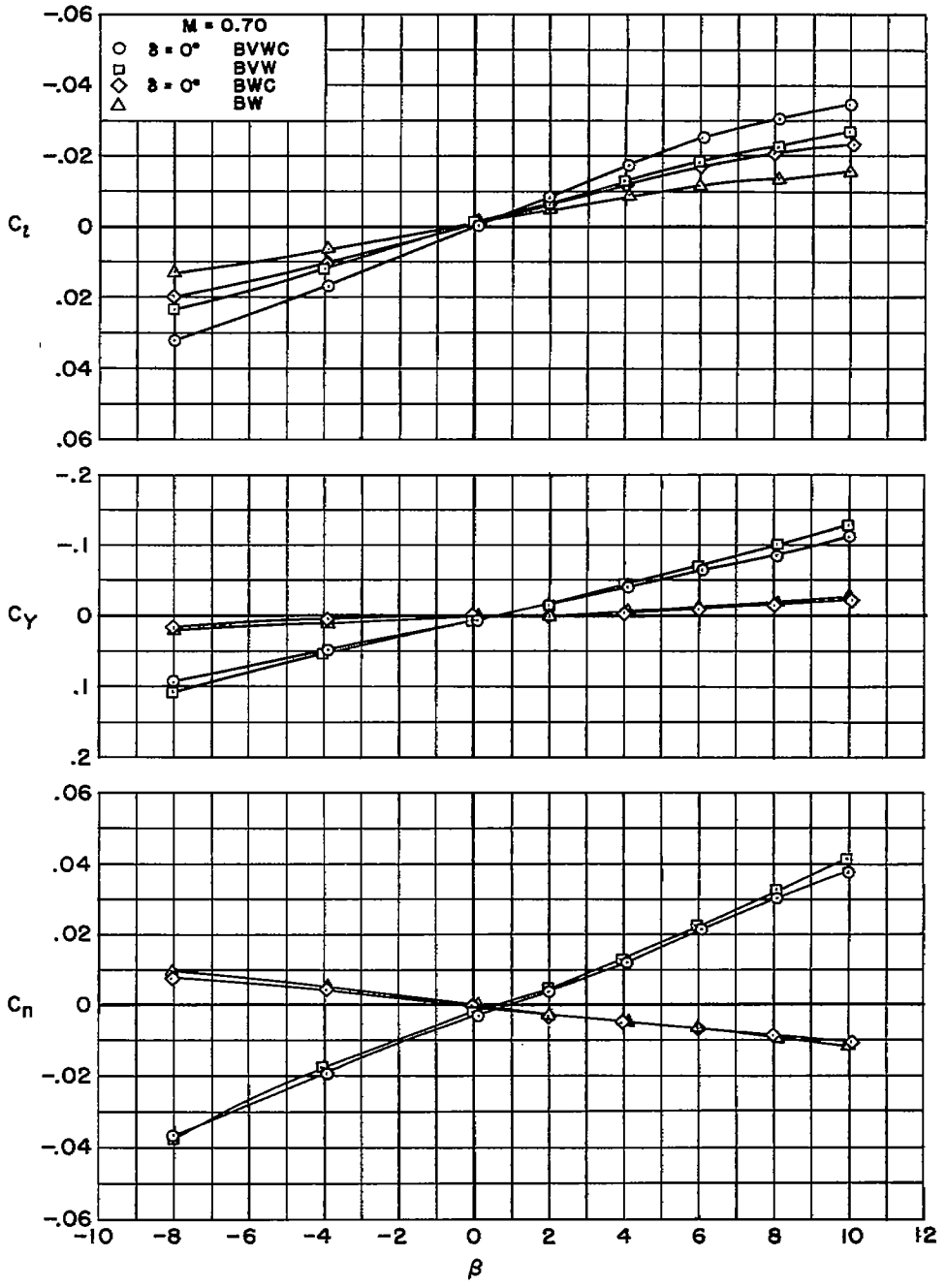
(d) M = 1.30

Figure 3.- Continued.



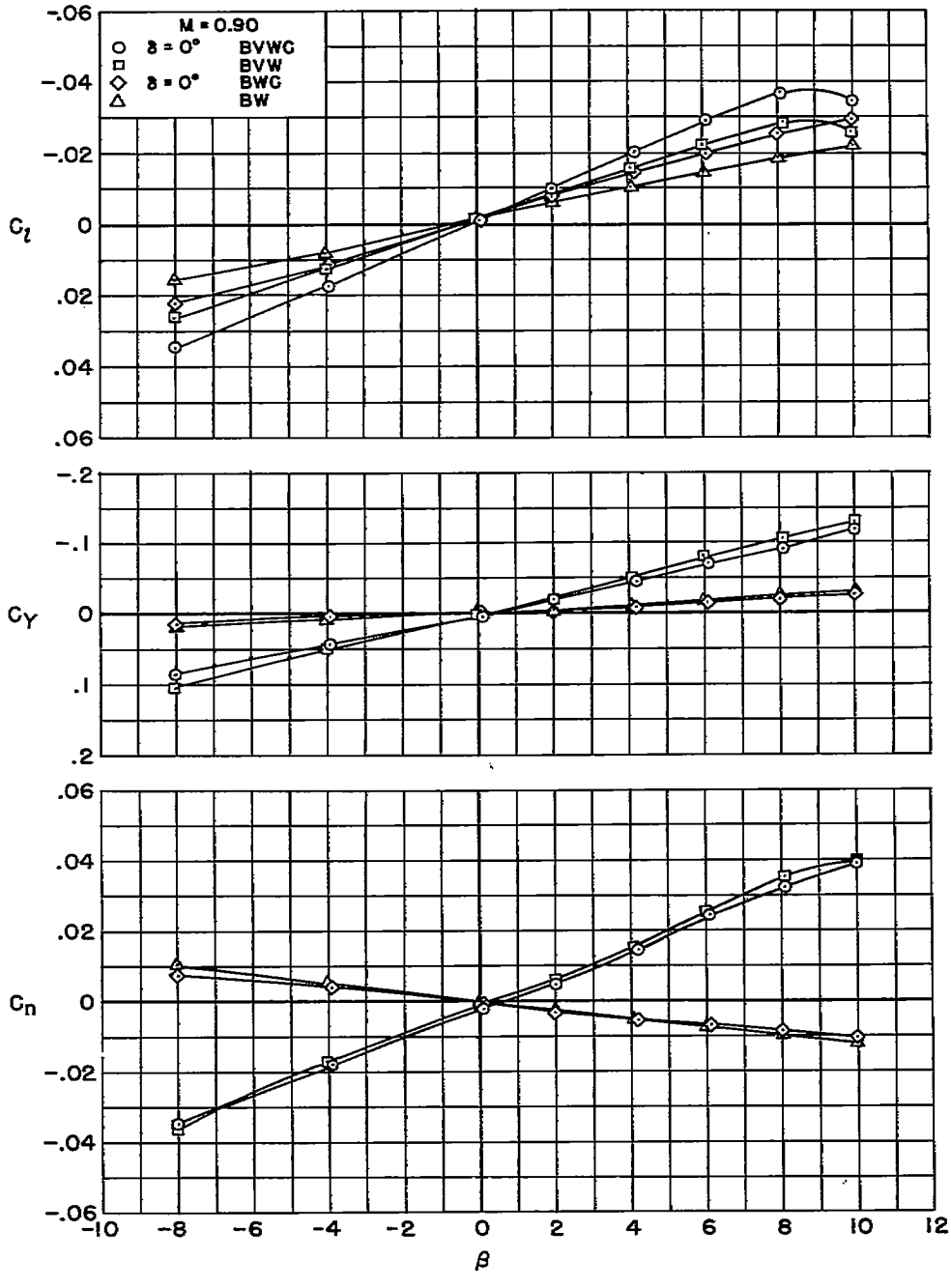
(e) M = 2.22

Figure 3.- Concluded.



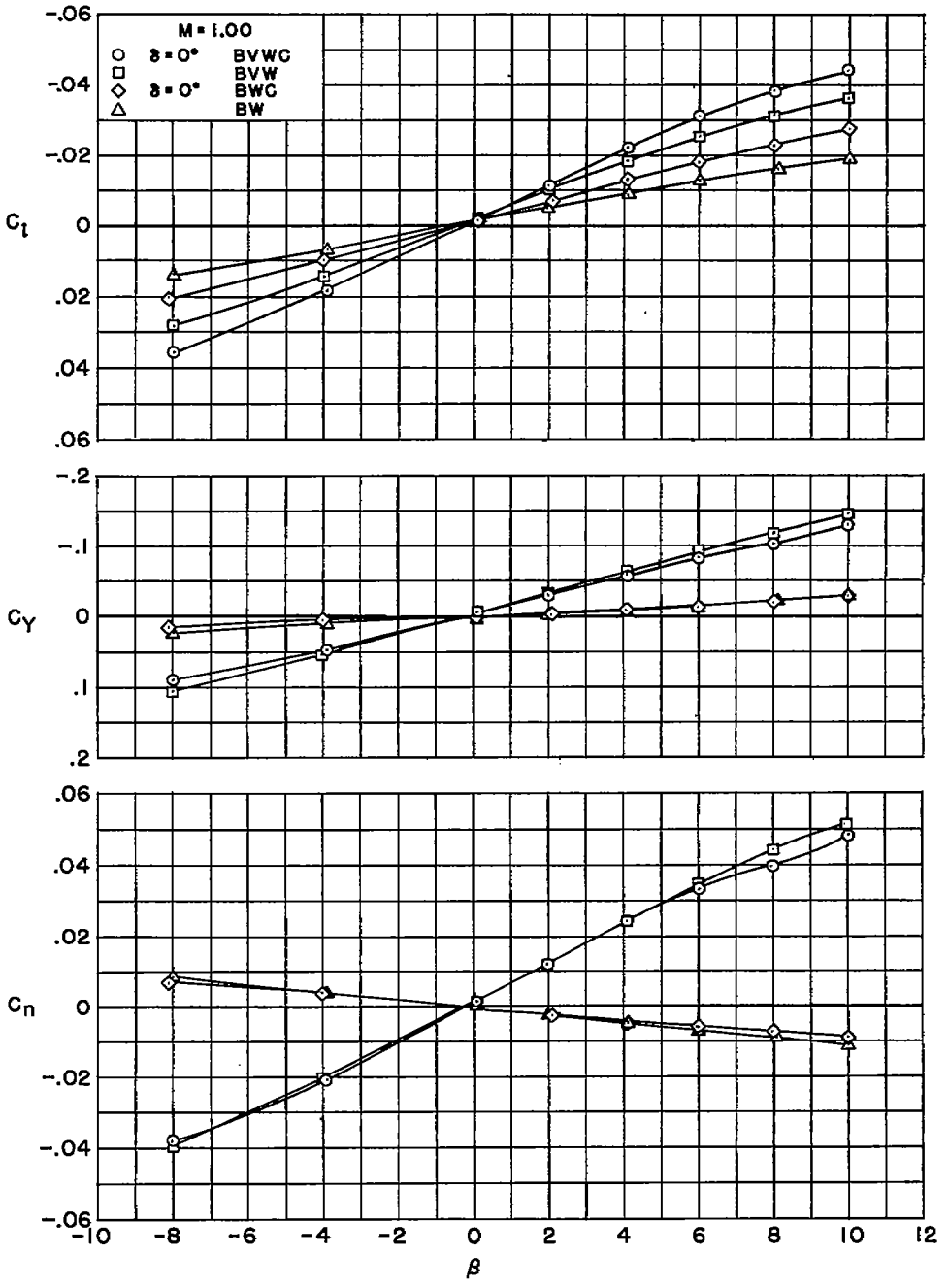
(a) M = 0.70

Figure 4.- The effect of configuration changes on the lateral-directional stability characteristics as a function of angle of sideslip at a constant angle of attack of 10.5°.



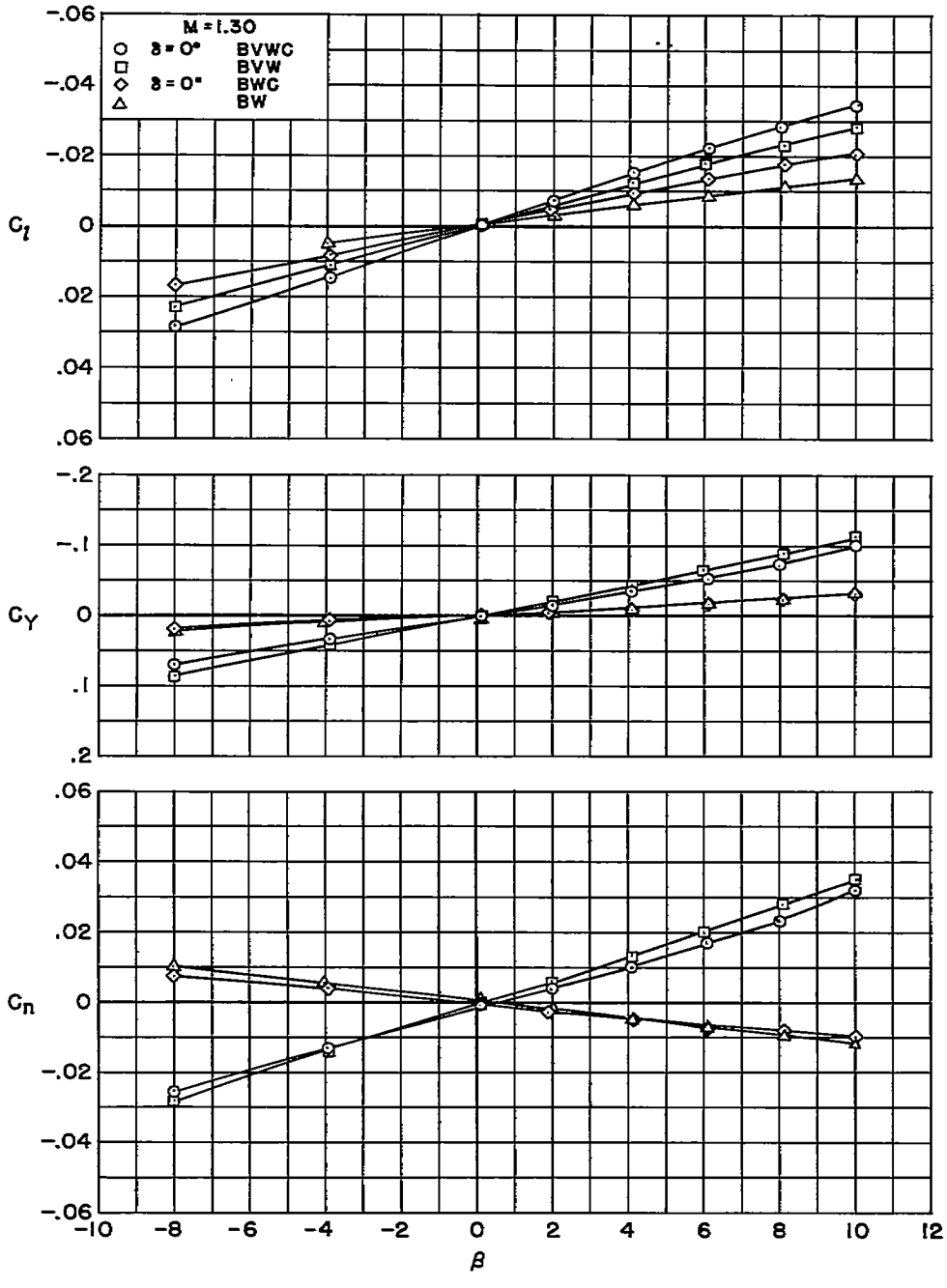
(b) M = 0.90

Figure 4.- Continued.



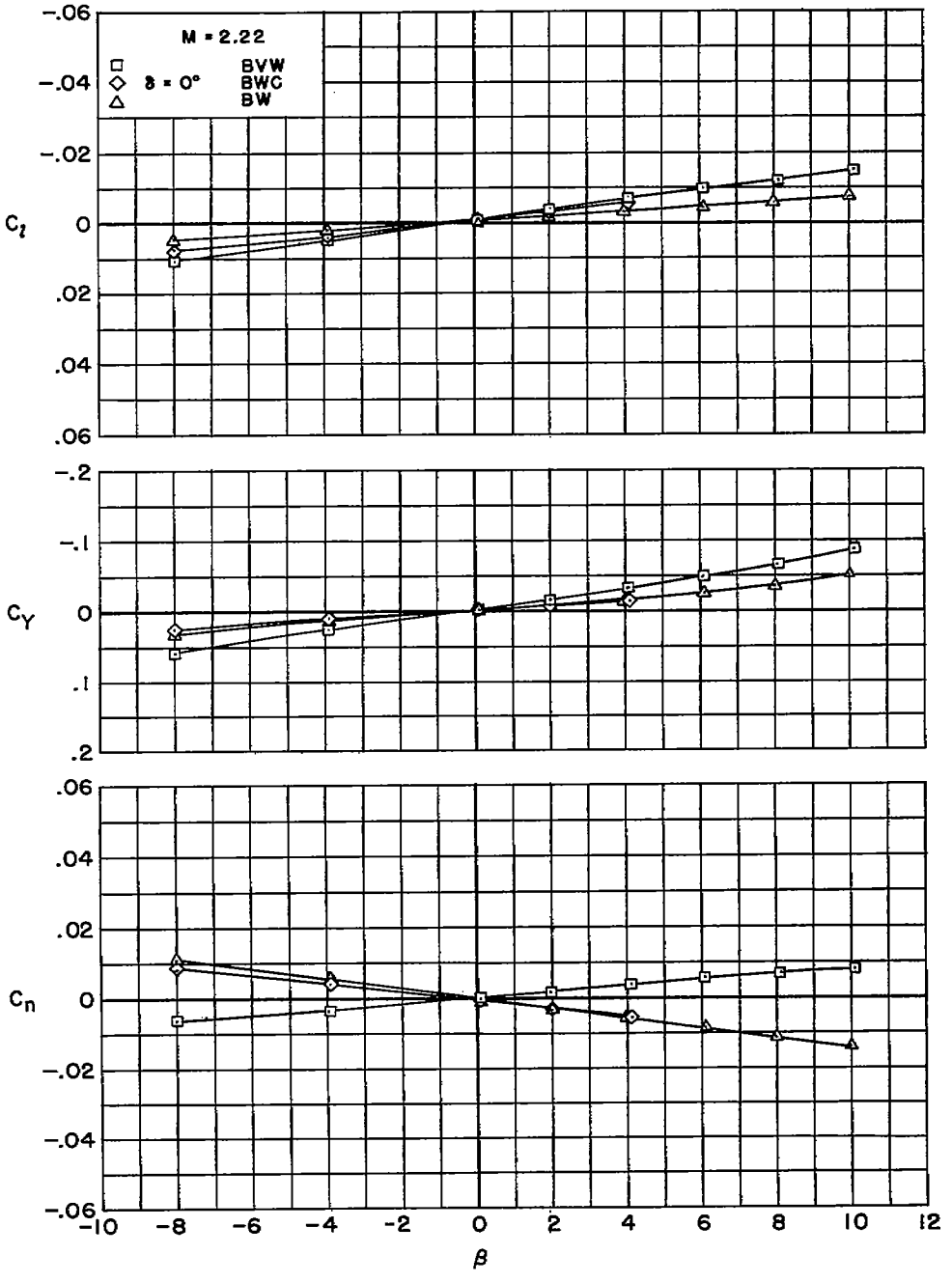
(c) M = 1.00

Figure 4.- Continued.



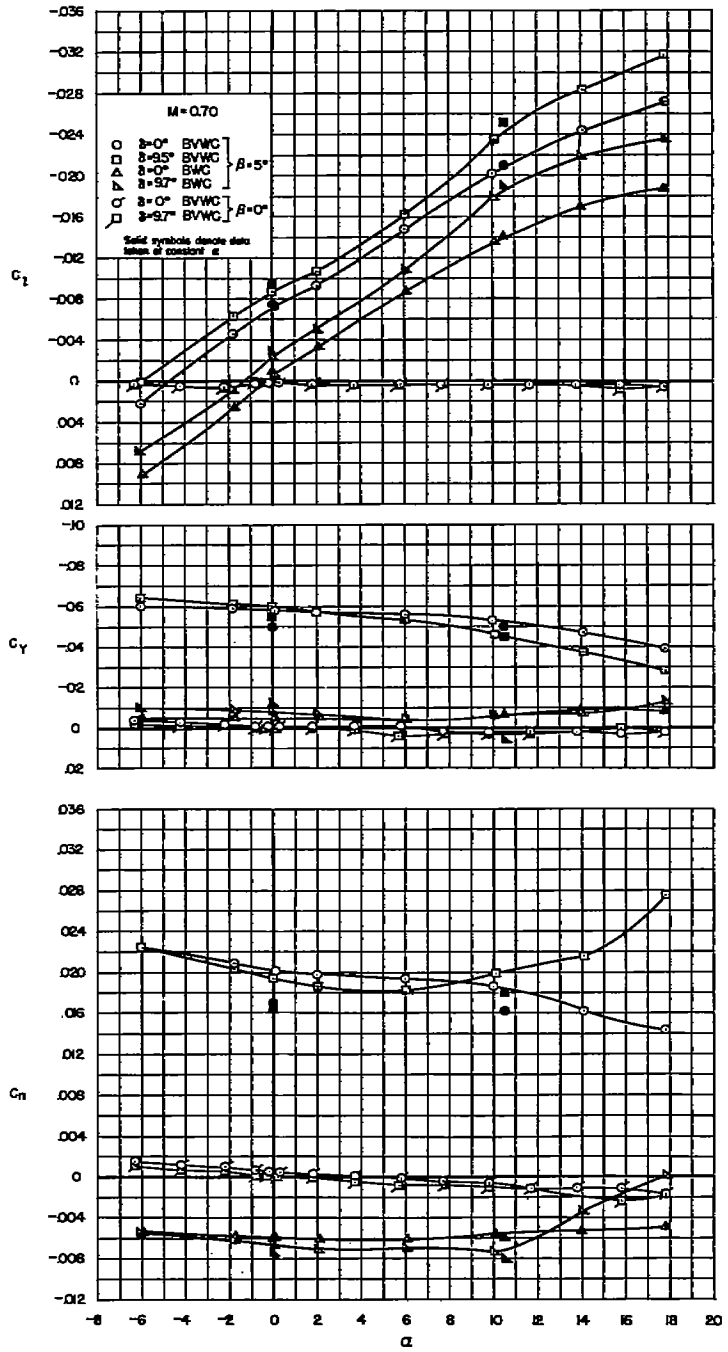
(d) M = 1.30

Figure 4.- Continued.



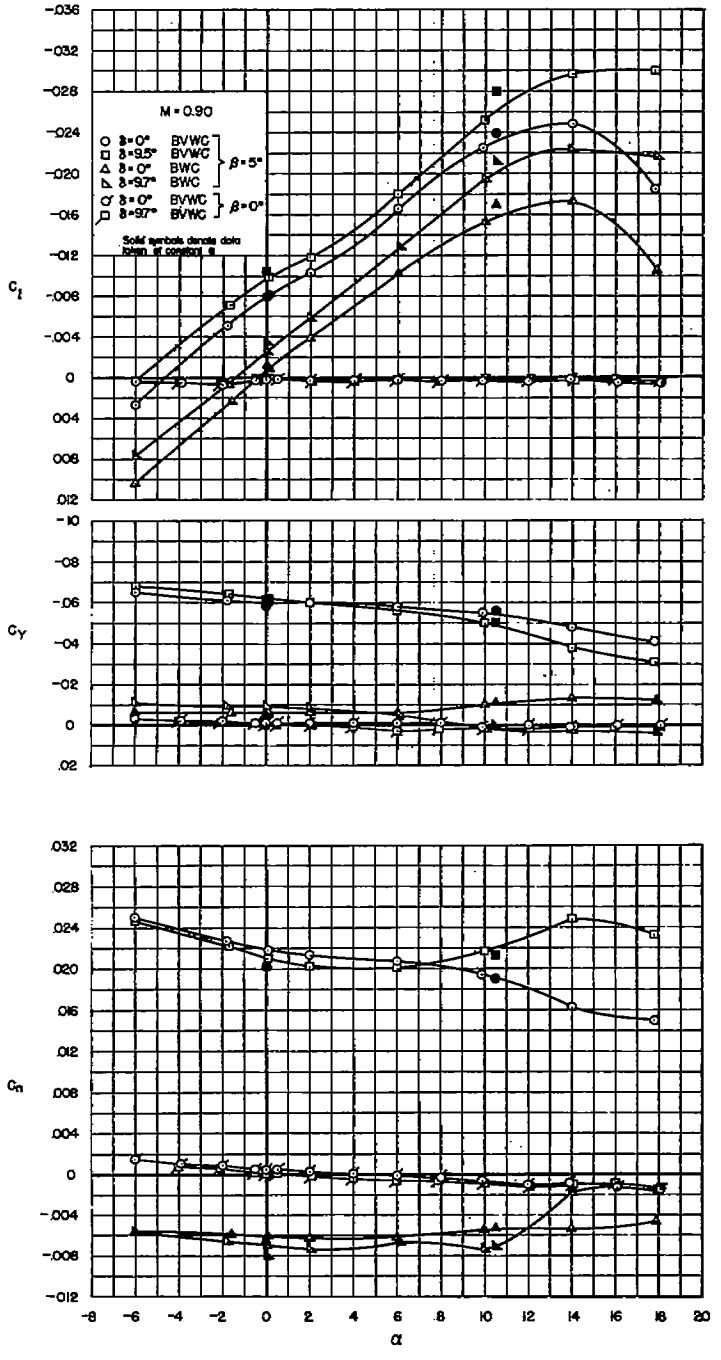
(e) M = 2.22

Figure 4.- Concluded.



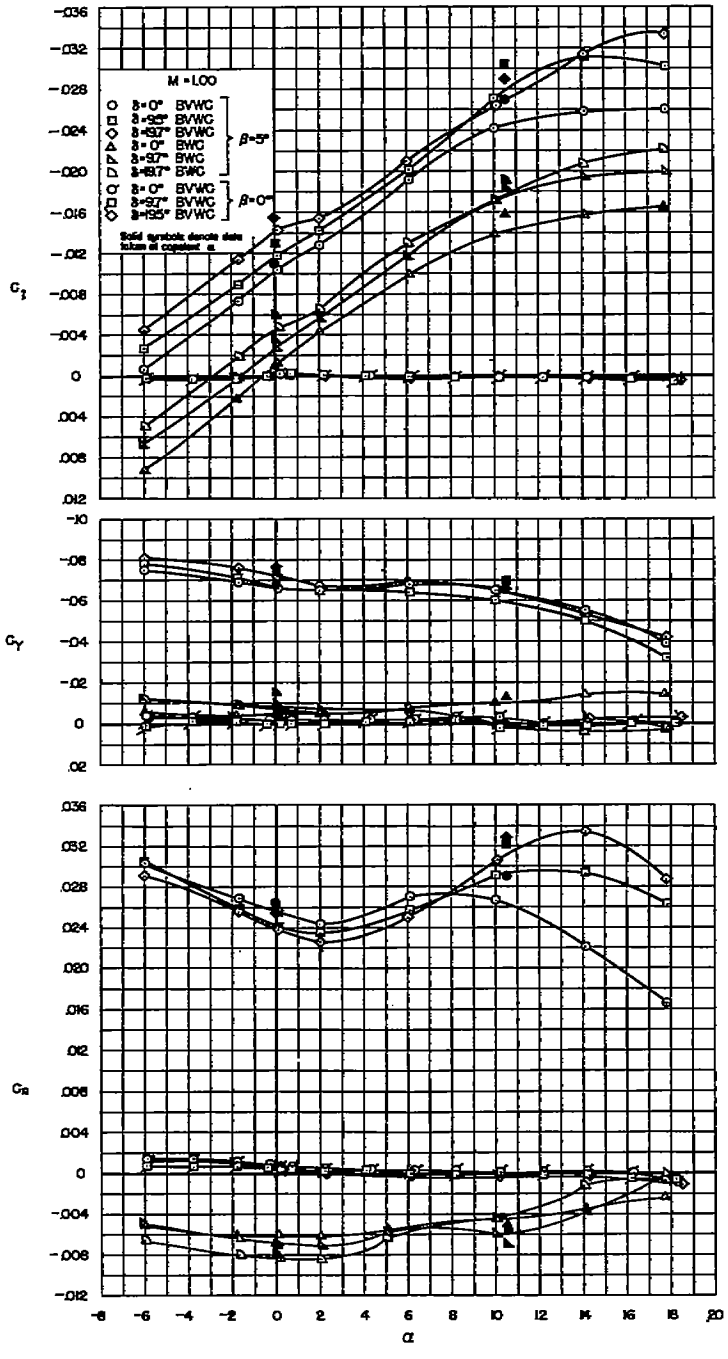
(a) M = 0.70

Figure 5.- The effect of canard deflection on the lateral-directional characteristics with the vertical tail on and off as a function of angle of attack at constant sideslip angles.



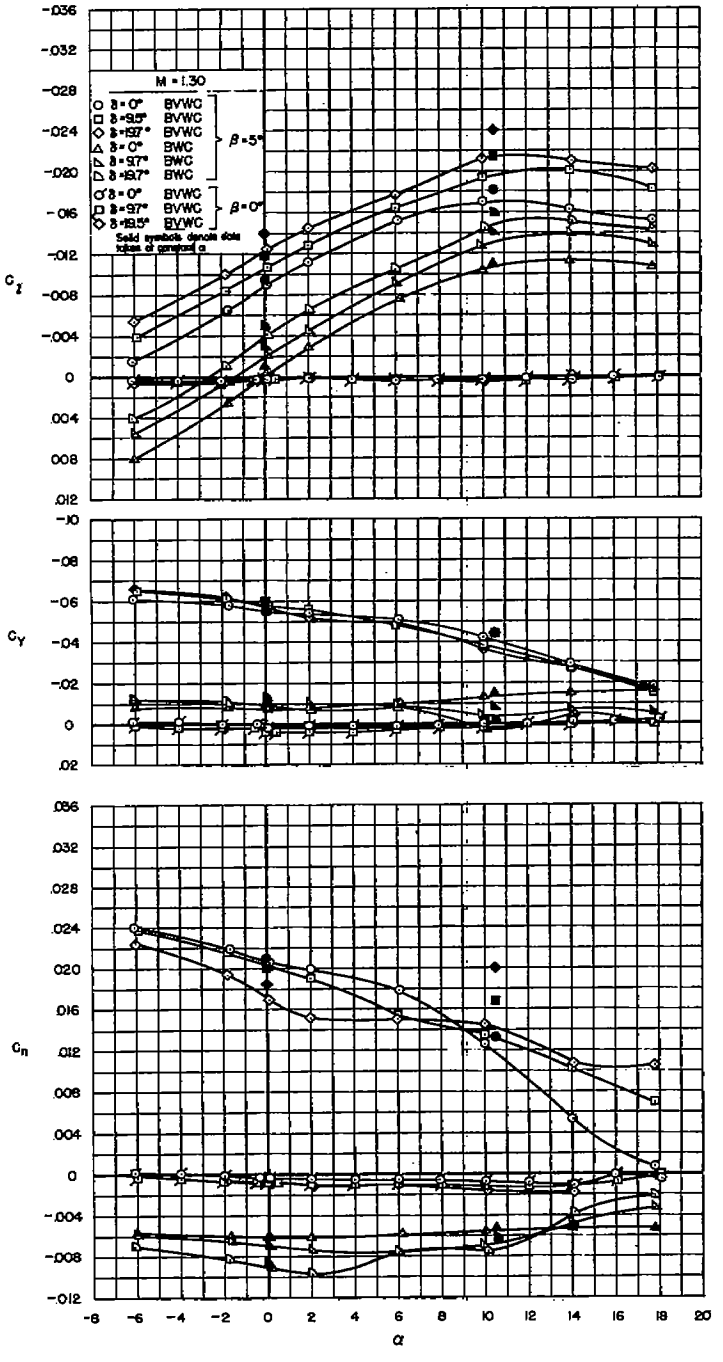
(b) M = 0.90

Figure 5.- Continued.



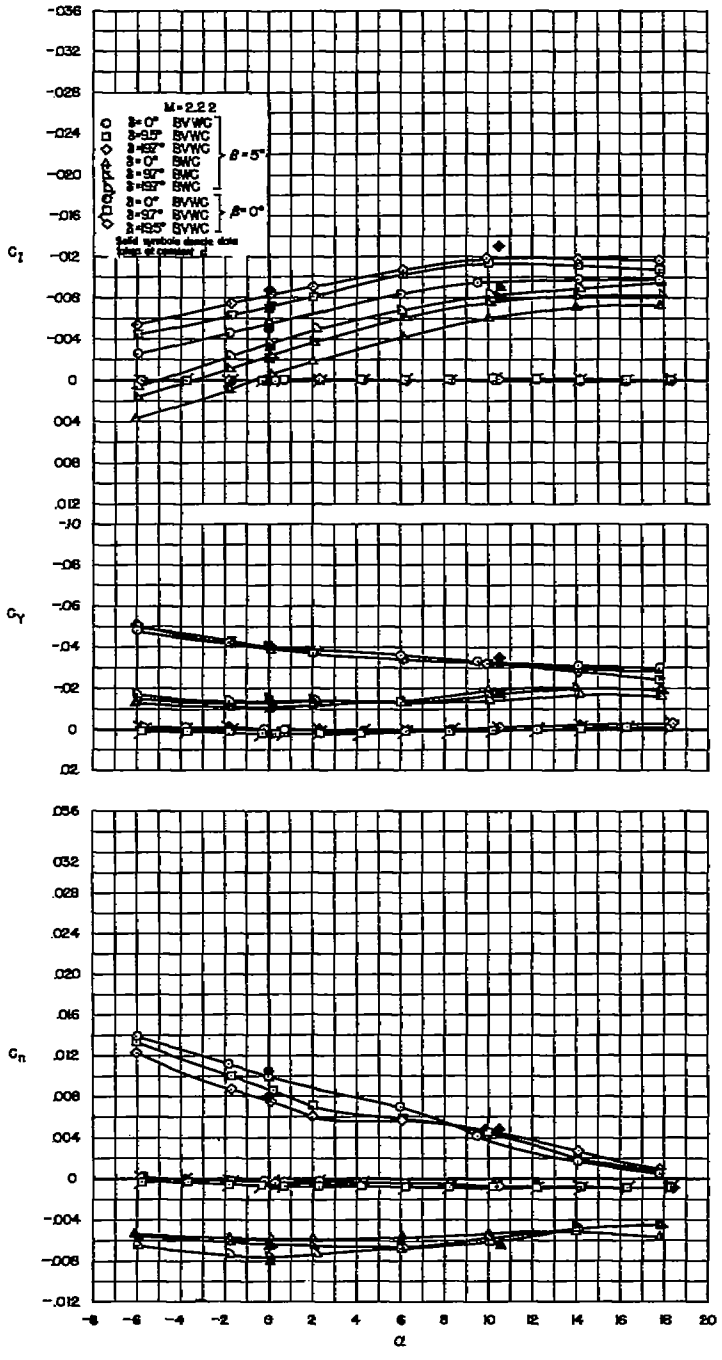
(c) M = 1.00

Figure 5.- Continued.



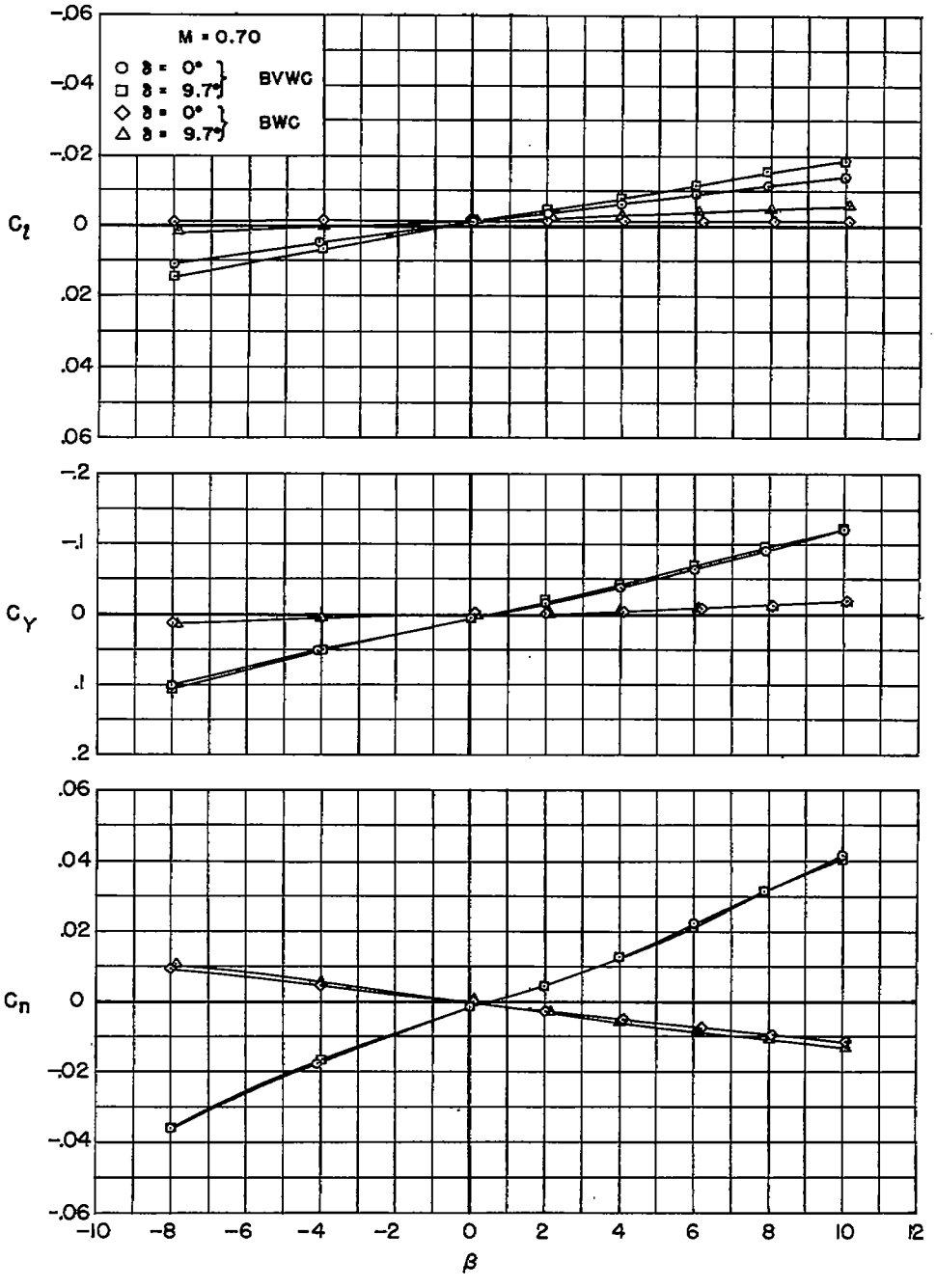
(d) M = 1.30

Figure 5.- Continued.



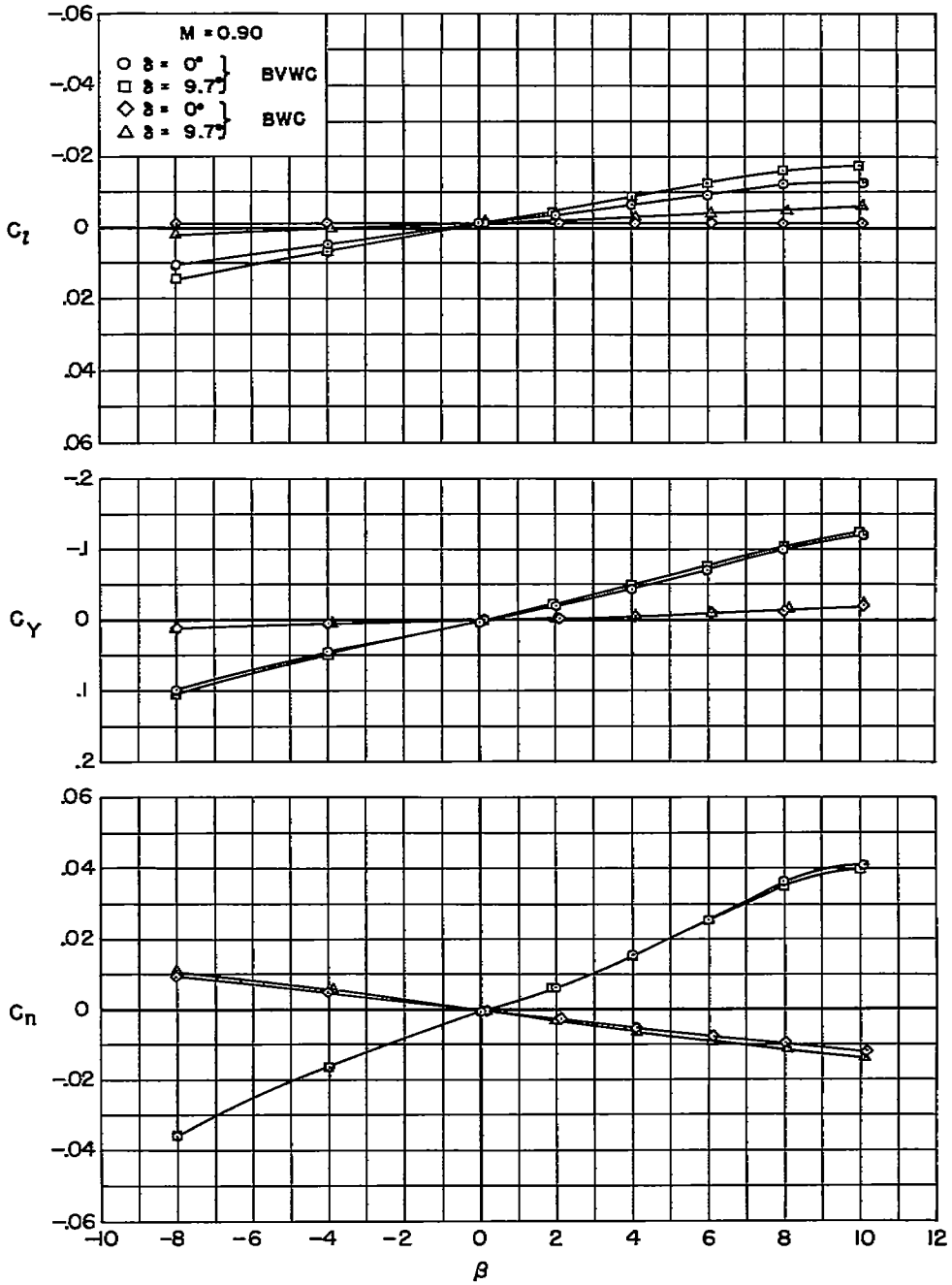
(e) M = 2.22

Figure 5.- Concluded.



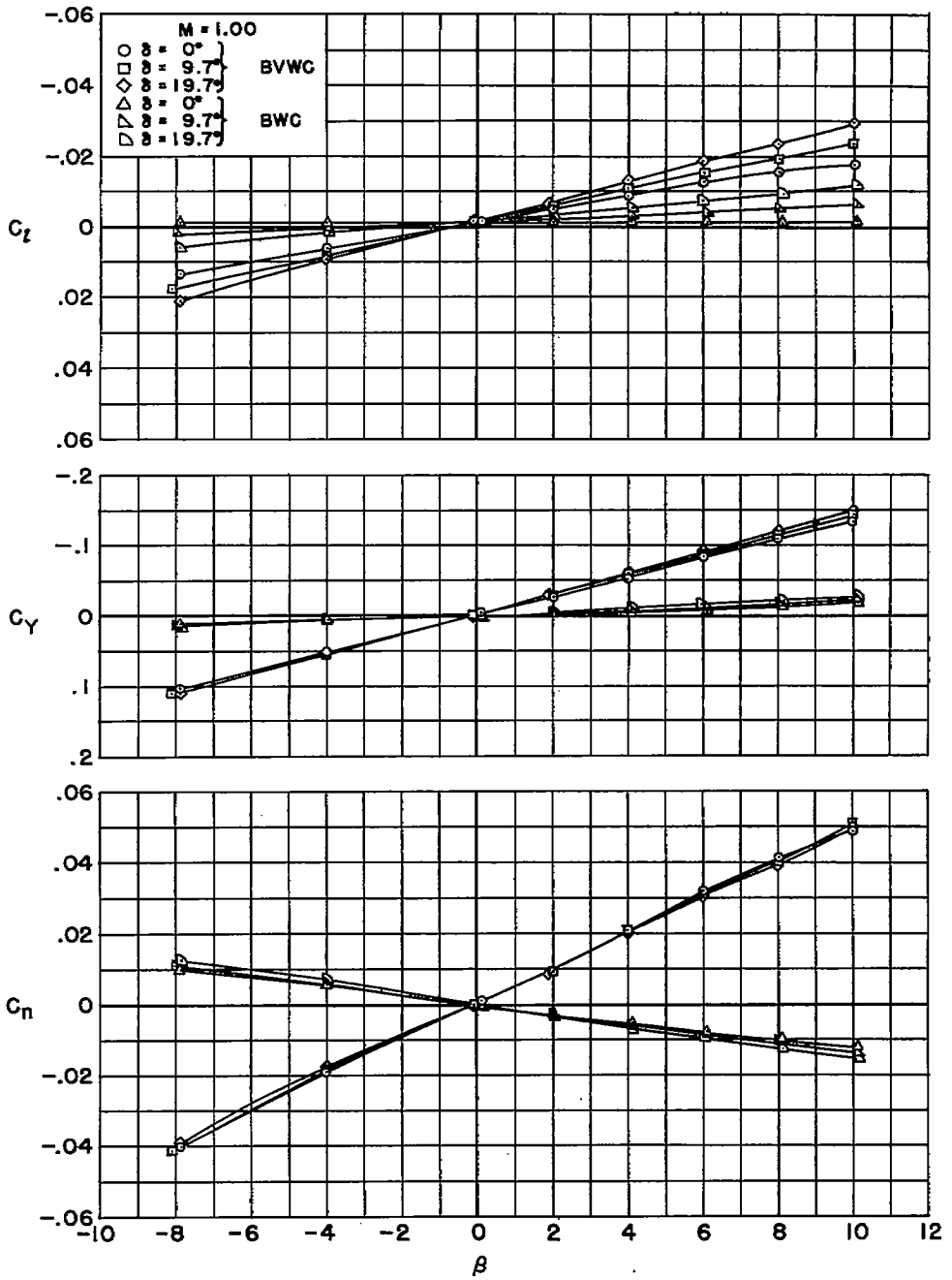
(a) M = 0.70

Figure 6.- The effect of canard deflection on the lateral-directional characteristics with the vertical tail on and off as a function of angle of sideslip at a constant angle of attack of 0°.



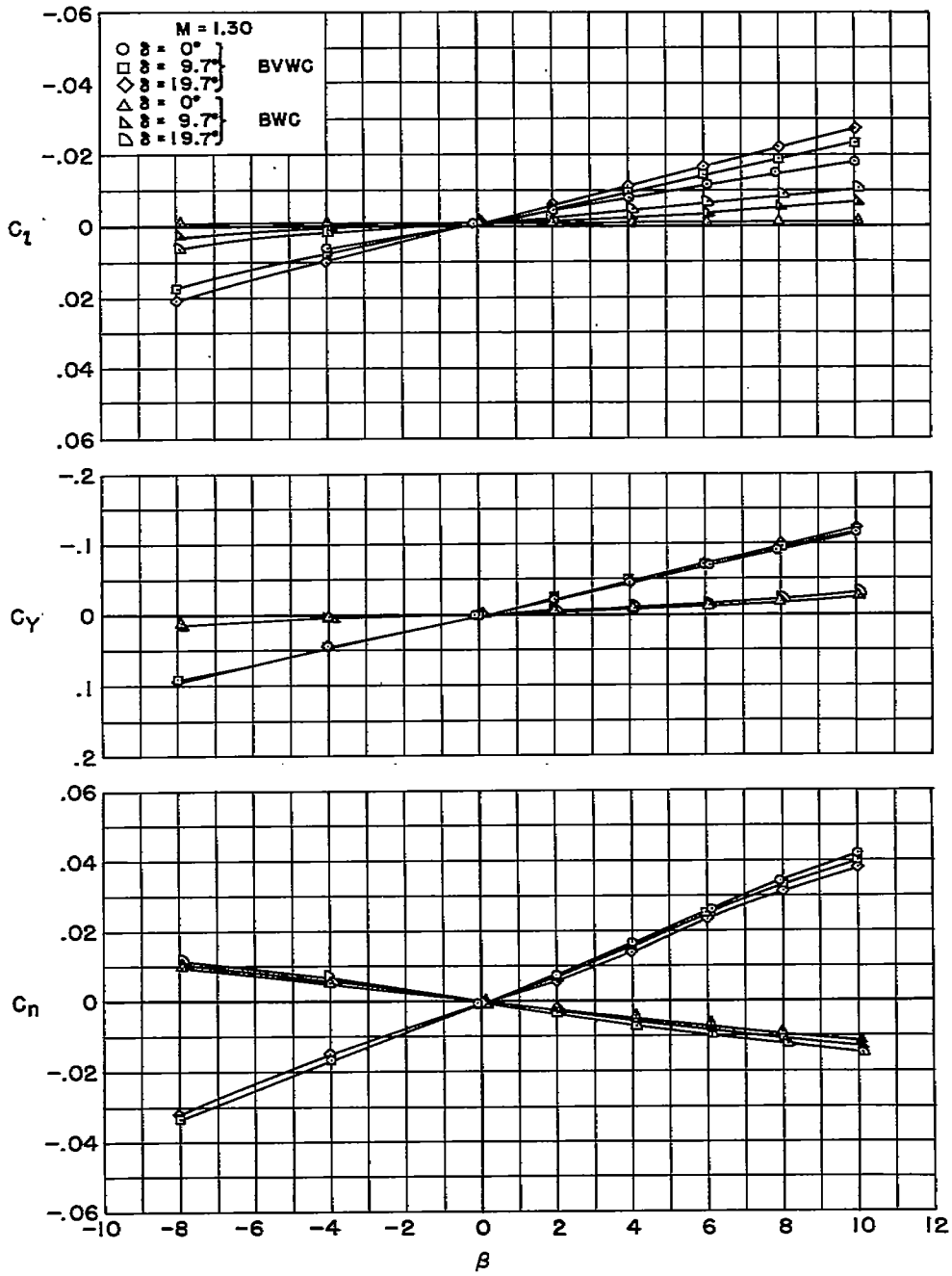
(b) M = 0.90

Figure 6.- Continued.



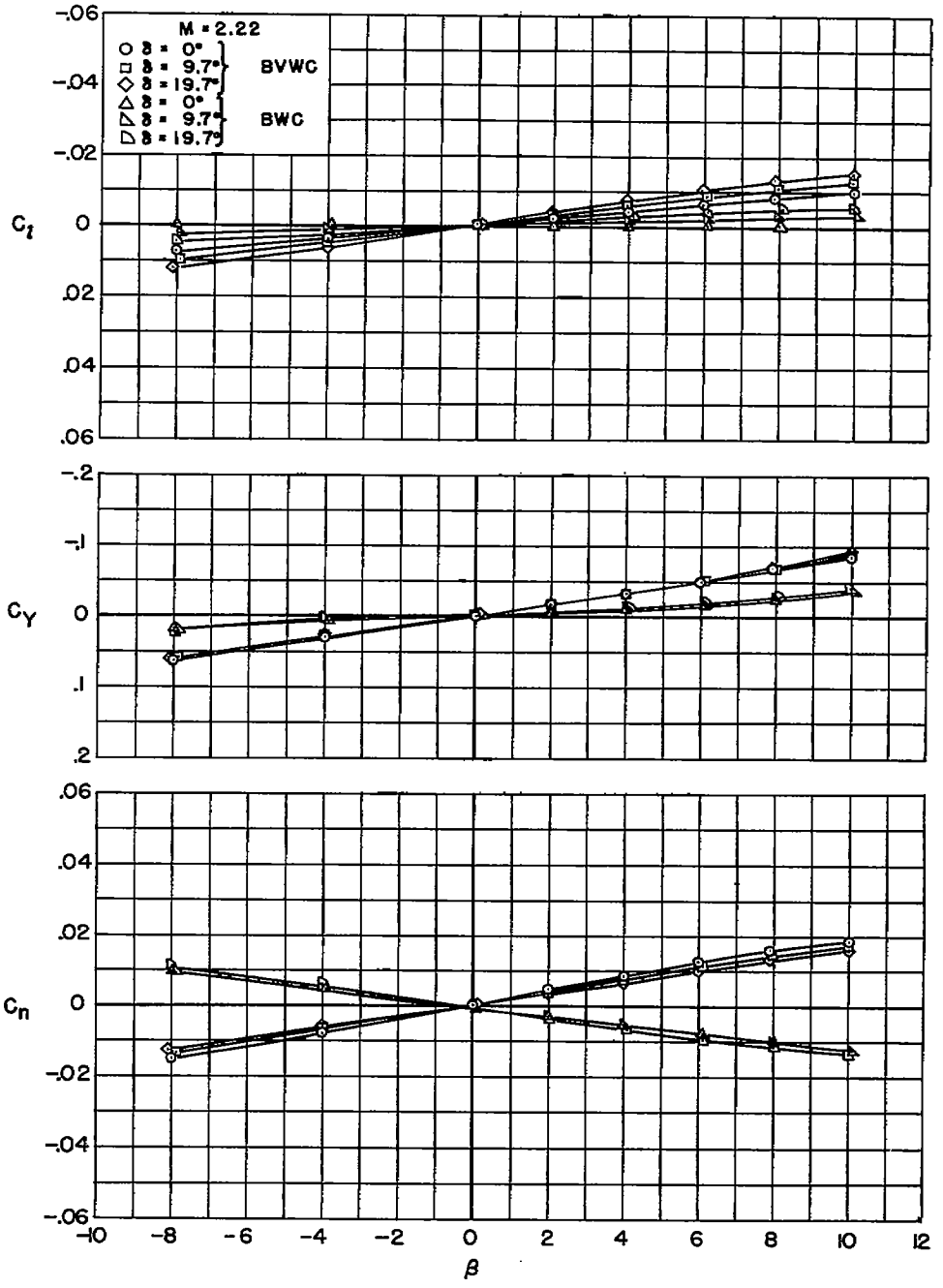
(c) M = 1.00

Figure 6.- Continued.



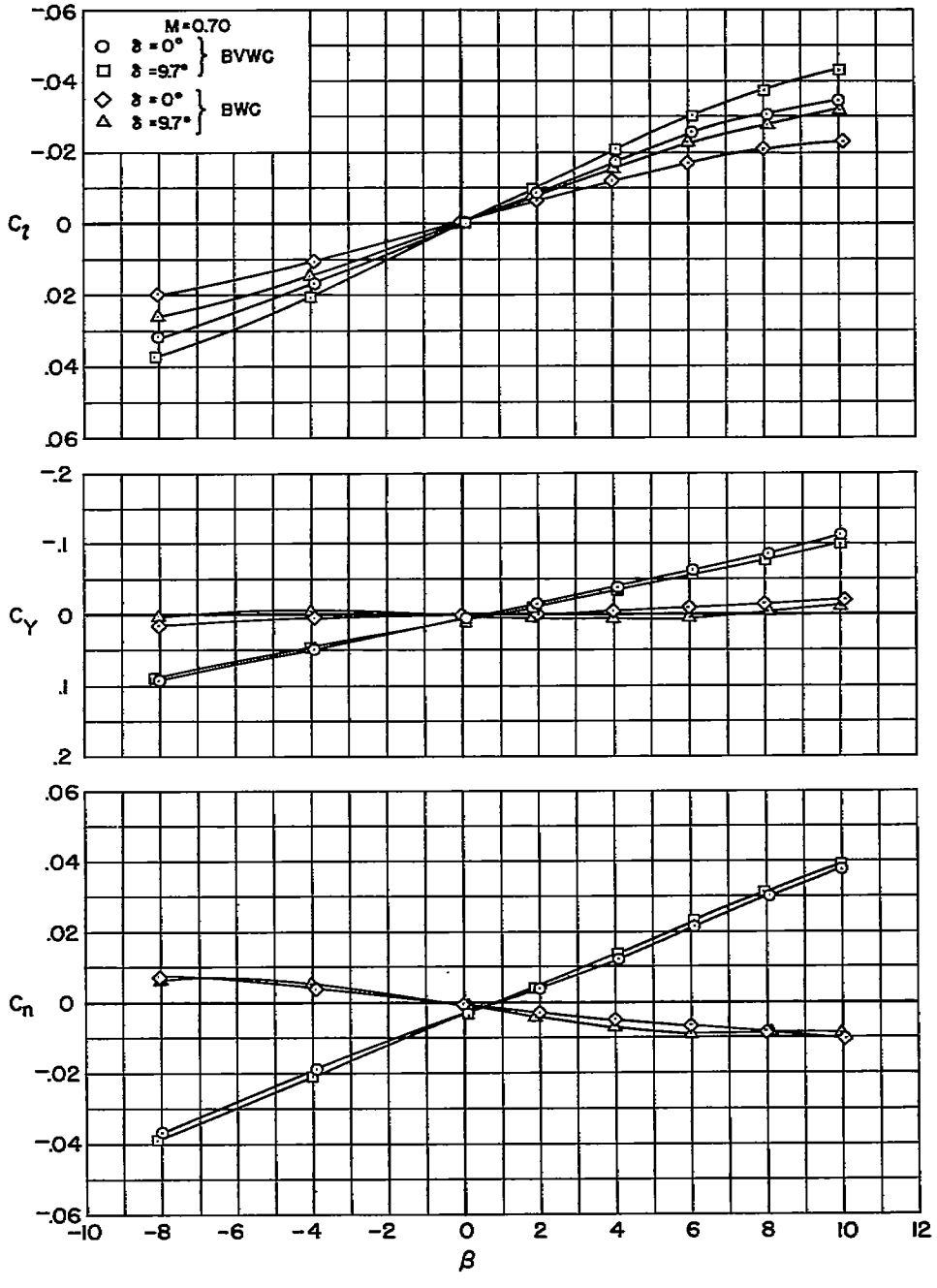
(d) M = 1.30

Figure 6.- Continued.



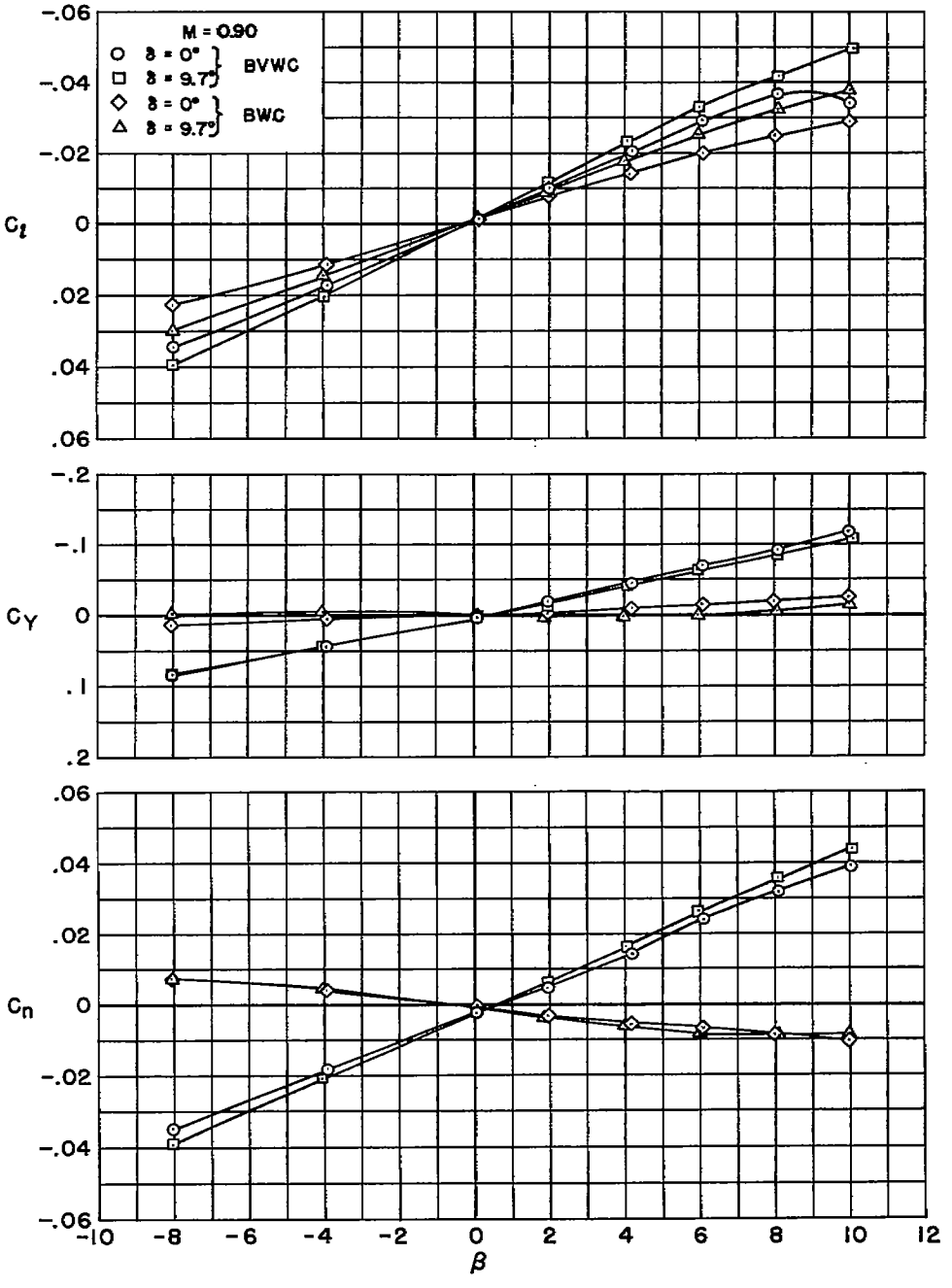
(e) M = 2.22

Figure 6.- Concluded.



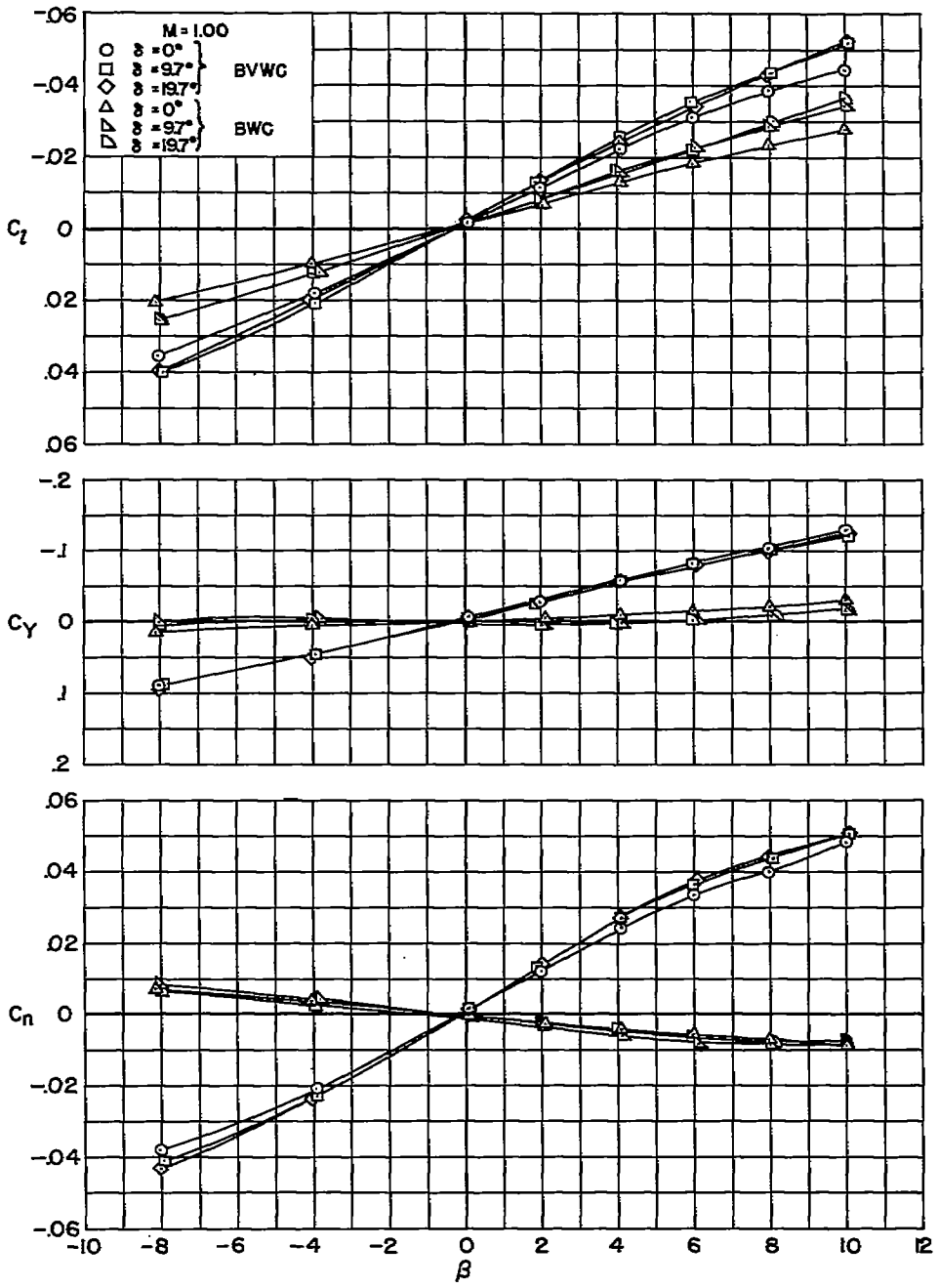
(a) M = 0.70

Figure 7.- The effect of canard deflection on the lateral-directional characteristics with the vertical tail on and off as a function of angle of sideslip at a constant angle of attack of 10.5°.



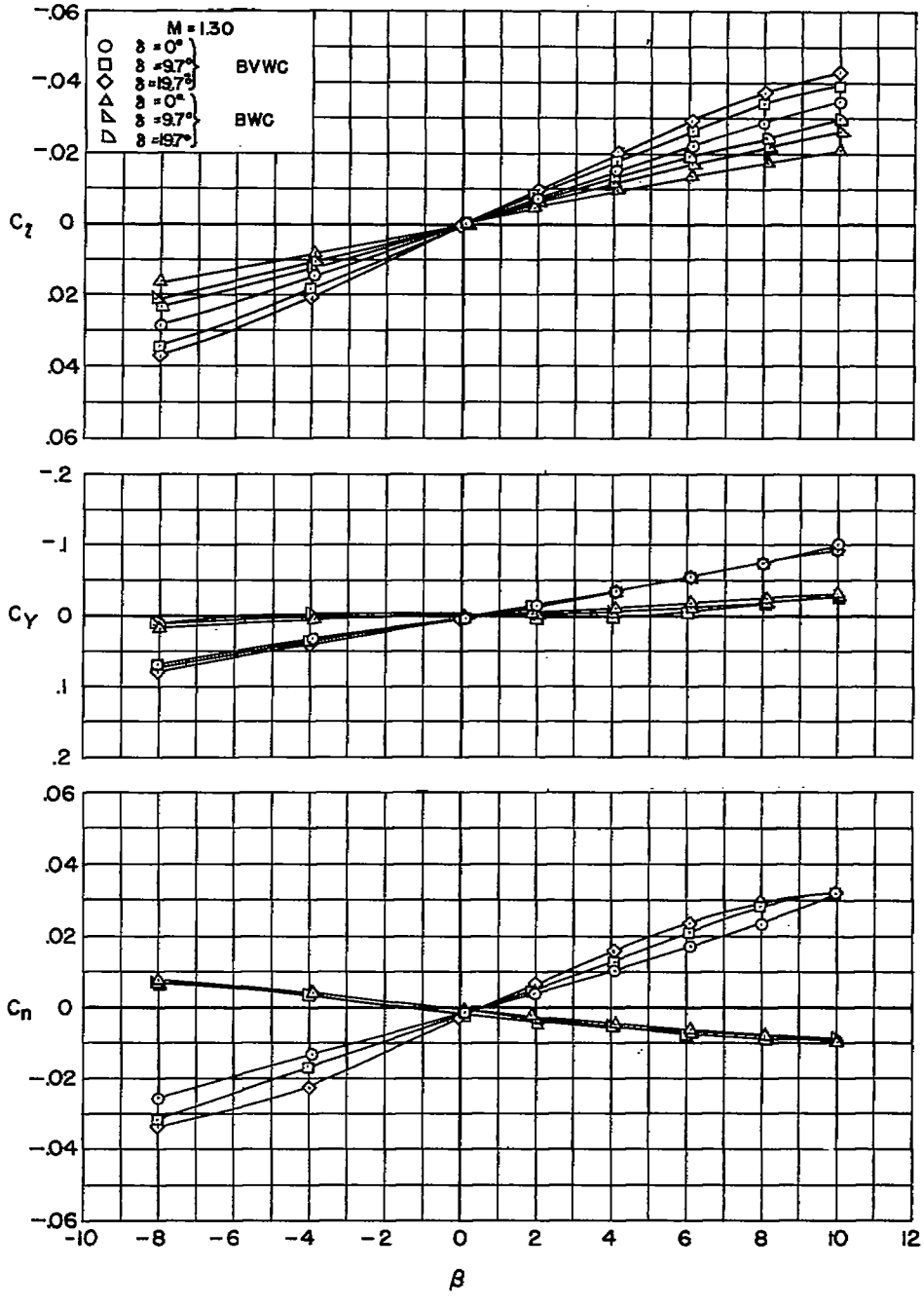
(b) M = 0.90

Figure 7.- Continued.



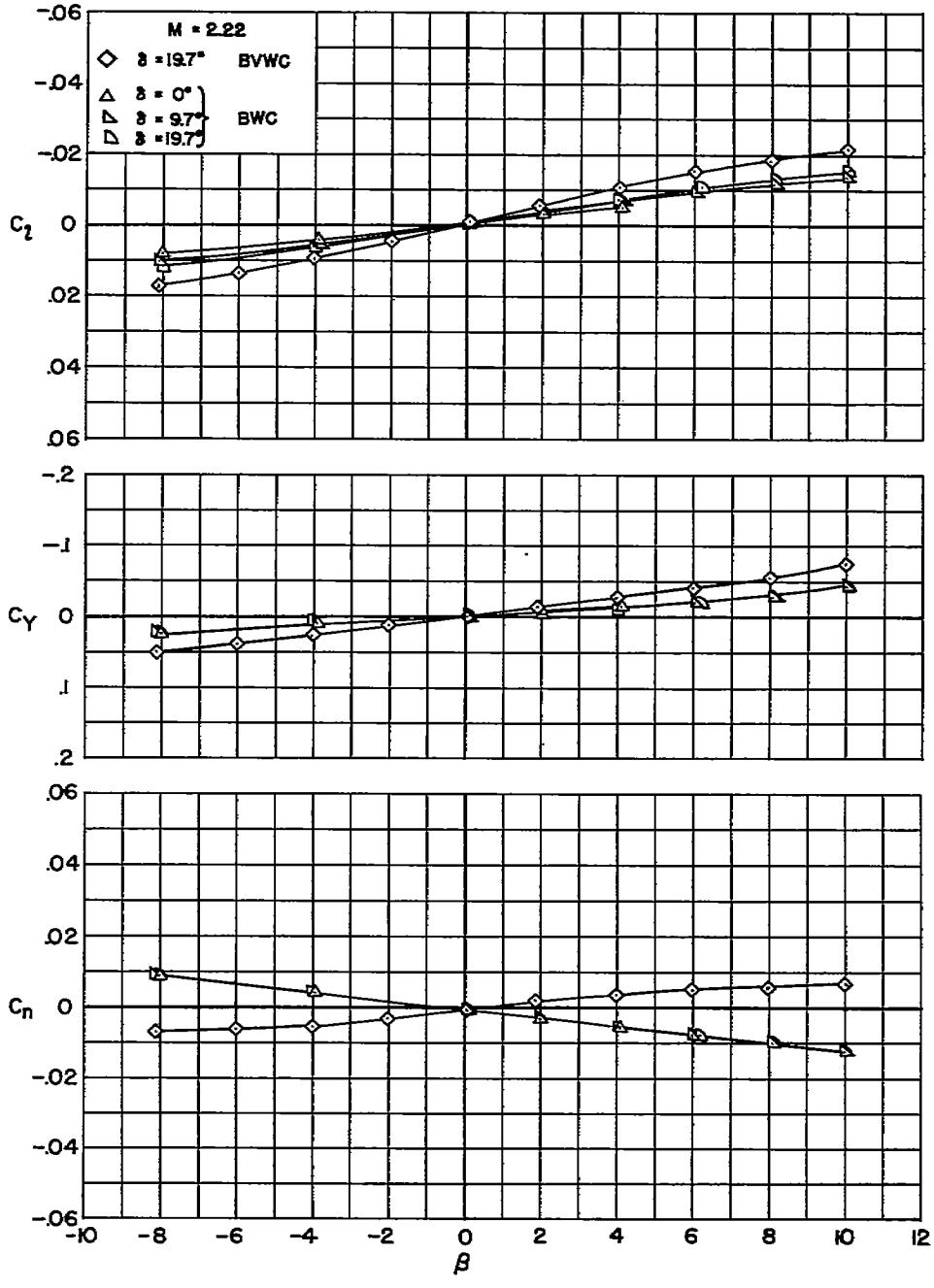
(c) M = 1.00

Figure 7.- Continued.



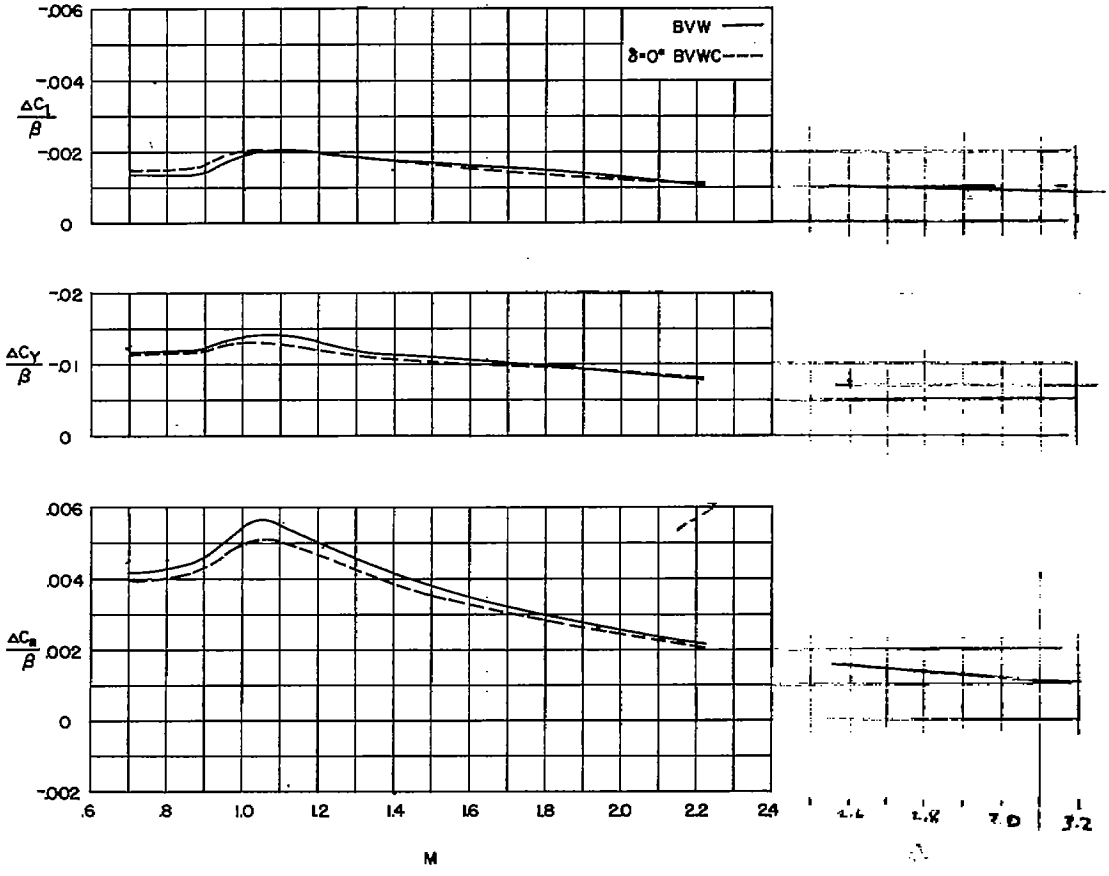
(d) M = 1.30

Figure 7.- Continued.



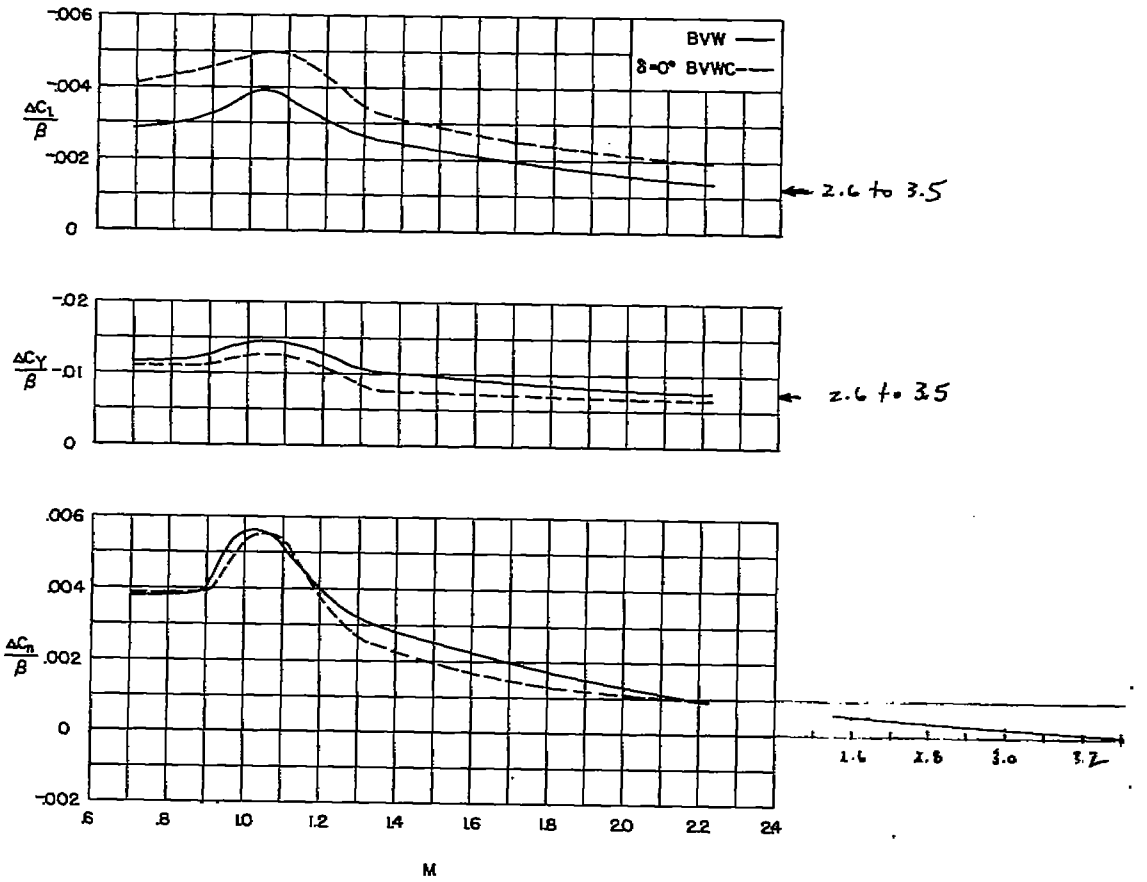
(e) M = 2.22

Figure 7.- Concluded.



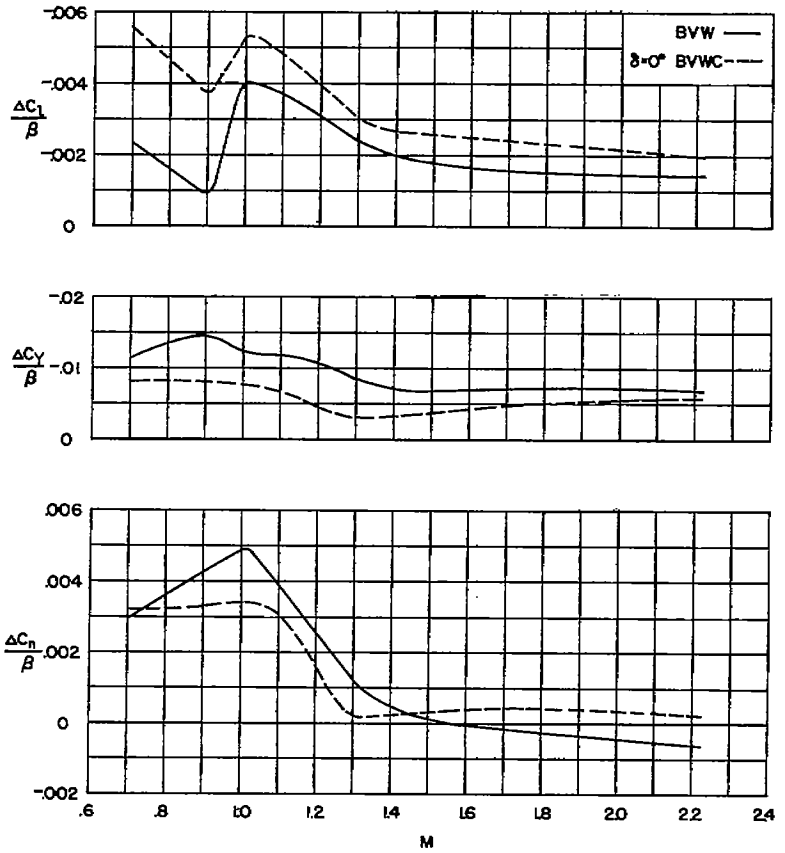
(a) $\alpha = 0^{\circ}$

Figure 8.- Variation of $\Delta C_l/\beta$, $\Delta C_Y/\beta$, and $\Delta C_n/\beta$ as a function of Mach number at constant angles of attack with the canard on and off with the vertical tail on.



(b) $\alpha = 10^{\circ}$

Figure 8.- Continued.



(c) $\alpha = 18^{\circ}$

Figure 8.- Concluded.

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