

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.

NATIONAL ADVISORY COMMITTEE
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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

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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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				II(c)			
BV				II(d)			
BVWC	-6 to +18	0, 9.5, 19.7	5	III(a)			
BVW				III(b)			
BWC				III(c)			
BW				III(d)			
BVC				III(e)			
BC				III(f)			
BV				III(g)			
B				III(h)			
BVWC				-8 to +10	0, 9.7, 19.7	-8 to +10	IV(a)
BVW							IV(b)
BWC	IV(c)						
BW	IV(d)						
BVC	IV(e)						
BC	IV(f)						
BV	IV(g)						
BVWC	10.5	0, 9.7, 19.7	-8 to +10				V(a)
BVW							V(b)
BWC							V(c)
BW				V(d)			
BVC				V(e)			
BC				V(f)			
BV				V(g)			
BVWC	10.2	0, 9.7, 19.7		V(a)			
BVW				V(b)			
BVC				V(c)			
BW		0, 9.7		V(d)			
BV				V(e)			

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	M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n
$\delta = 0^\circ$								$\delta = 0^\circ$ - Concluded							
0.70	0.63	-0.314	.0420	.0275	.0003	-0.004	.0015	2.22	0.7	-0.182	.0309	.0238	.0001	-0.001	-0.002
	0.42	-0.199	.0233	.0185	.0005	-0.003	.0012		0.2	-0.117	.0206	.0158	.0000	-0.001	-0.002
	0.22	-0.101	.0139	.0111	.0006	-0.002	.0010		0.1	-0.050	.0141	.0107	.0000	0.000	-0.002
	0.08	-0.039	.0112	.0076	.0003	-0.001	.0007		0.02	-0.005	.0128	.0009	.0000	0.000	-0.002
	0.02	-0.013	.0108	.0053	.0002	-0.001	.0005		0.007	0.026	.0129	-.0042	.0000	0.000	-0.003
	0.03	0.008	.0108	.0024	.0002	-0.001	.0005		0.23	0.075	.0152	-.0113	.0000	0.001	-0.002
	0.18	0.074	.0119	-.0030	.0003	-0.001	.0003		0.43	0.137	.0218	-.0198	.0000	0.001	-0.002
	0.37	0.166	.0191	-.0102	.0004	-0.001	.0001		0.62	0.196	.0328	-.0254	.0000	0.001	-0.004
	0.58	0.279	.0348	-.0185	.0003	-0.001	.0001		0.83	0.257	.0481	-.0324	.0000	0.000	-0.005
	0.77	0.383	.0569	-.0248	.0004	-0.001	.0002		1.03	0.318	.0685	-.0389	.0000	0.000	-0.007
	0.98	0.501	.0893	-.0310	.0004	-0.001	.0002		1.22	0.372	.0907	-.0446	.0000	0.000	-0.007
	1.17	0.616	.1292	-.0370	.0004	-0.001	.0002		1.42	0.429	.1186	-.0505	.0001	-0.001	-0.008
	1.38	0.734	.1794	-.0417	.0004	-0.001	.0002		1.63	0.489	.1518	-.0566	.0001	-0.001	-0.009
	1.58	0.863	.2411	-.0461	.0004	-0.001	.0002		1.83	0.544	.0188	-.0607	.0000	-0.001	-0.009
	1.78	0.976	.3082	-.0482	.0006	-0.002	.0002								
$\delta = 0^\circ$								$\delta = 9.7^\circ$							
0.90	0.60	-0.331	.0433	.0422	.0004	-0.003	.0015	0.70	0.63	-0.316	.0417	.0626	.0004	-0.002	.0011
	0.39	-0.206	.0238	.0262	.0005	-0.002	.0011		0.42	-0.199	.0236	.0508	.0005	-0.001	.0007
	0.20	-0.099	.0139	.0140	.0007	-0.002	.0009		0.22	-0.098	.0160	.0423	.0007	-0.001	.0006
	0.05	-0.035	.0110	.0088	.0003	-0.001	.0005		0.02	-0.037	.0148	.0395	.0001	0.000	.0001
	0.00	-0.010	.0110	.0058	.0002	-0.001	.0005		0.03	-0.016	.0143	.0382	.0001	0.000	.0001
	0.05	0.012	.0106	.0021	.0002	-0.001	.0005		0.02	0.007	.0153	.0363	.0001	0.000	.0000
	0.20	0.084	.0128	-.0058	.0003	-0.001	.0003		0.18	0.070	.0175	.0316	.0004	0.000	.0001
	0.40	0.192	.0217	-.0184	.0003	-0.001	.0001		0.37	0.160	.0253	.0240	.0004	0.001	-0.005
	0.60	0.313	.0398	-.0332	.0003	-0.001	.0001		0.57	0.273	.0442	.0199	.0004	0.004	-0.008
	0.80	0.431	.0665	-.0473	.0003	-0.001	.0001		0.78	0.387	.0714	.0171	.0003	0.003	-0.008
	0.99	0.565	.1041	-.0643	.0003	-0.001	.0001		0.98	0.499	.1046	.0095	.0004	0.003	-0.010
	1.20	0.691	.1513	-.0854	.0004	-0.001	.0000		1.17	0.610	.1455	-.0047	.0003	0.003	-0.012
	1.39	0.812	.2052	-.1025	.0002	-0.001	.0000		1.58	0.842	.2538	-.0100	.0008	0.000	-0.024
	1.61	0.947	.2762	-.1257	.0005	-0.001	.0000		1.78	0.961	.3221	-.0279	.0005	0.002	-0.017
	1.81	1.060	.3482	-.1380	.0006	-0.002	.0000								
1.00	0.59	-0.359	.0527	.0696	.0002	-0.004	.0014	0.90	0.40	-0.204	.0259	.0597	.0005	-0.002	.0008
	0.38	-0.231	.0314	.0469	.0003	-0.003	.0014		0.21	-0.104	.0165	.0471	.0006	-0.001	.0006
	0.18	-0.113	.0210	.0250	.0003	-0.002	.0012		0.05	-0.032	.0152	.0414	.0001	-0.001	.0002
	0.03	-0.034	.0170	.0105	.0000	-0.002	.0009		0.00	-0.008	.0152	.0395	.0000	0.000	.0000
	0.02	-0.006	.0166	.0055	.0000	-0.001	.0007		0.05	0.014	.0159	.0365	.0001	0.000	.0001
	0.07	0.020	.0168	.0000	.0001	-0.002	.0007		0.40	0.188	.0281	.0130	.0004	0.001	-0.004
	0.22	0.099	.0188	-.0149	.0000	-0.002	.0005		0.60	0.311	.0502	.0033	.0002	0.003	-0.006
	0.43	0.220	.0303	-.0388	.0000	-0.002	.0004		0.79	0.427	.0793	-.0062	.0004	0.002	-0.006
	0.62	0.342	.0509	-.0615	.0001	-0.002	.0003		1.00	0.556	.1186	-.0253	.0001	0.002	-0.009
	0.82	0.464	.0793	-.0820	.0001	-0.003	.0003		1.21	0.680	.1665	-.0418	.0002	0.002	-0.012
	1.02	0.574	.1151	-.0987	.0002	-0.003	.0000		1.41	0.810	.2227	-.0813	.0003	0.001	-0.010
	1.22	0.694	.1616	-.1153	.0002	-0.003	.0001		1.60	0.924	.2834	-.1064	.0002	0.001	-0.009
	1.42	0.808	.2150	-.1298	.0002	-0.000	.0002		1.81	1.044	.3582	-.1391	.0004	0.001	-0.013
	1.63	0.917	.2763	-.1421	.0002	-0.001	.0000								
	1.83	1.017	.3438	-.1533	.0004	-0.000	.0000								
1.10	0.60	-0.342	.0518	.0715	.0006	-0.001	.0004	1.00	0.59	-0.349	.0518	.1045	.0003	0.001	.0007
	0.40	-0.220	.0317	.0495	.0006	-0.000	.0002		0.38	-0.219	.0325	.0783	.0003	-0.001	.0007
	0.20	-0.109	.0211	.0272	.0005	-0.000	.0000		0.18	-0.101	.0232	.0530	.0003	-0.001	.0007
	0.05	-0.035	.0179	.0128	.0003	-0.001	.0001		0.04	-0.027	.0212	.0397	.0000	0.000	.0005
	0.01	-0.010	.0179	.0080	.0000	-0.001	.0001		0.02	-0.001	.0216	.0350	.0000	0.000	.0002
	0.05	0.013	.0177	.0027	.0000	-0.001	.0000		0.22	0.105	.0260	.0115	.0001	-0.000	.0004
	0.21	0.094	.0204	-.0133	.0001	-0.000	.0000		0.41	0.209	.0353	-.0119	.0000	-0.001	.0003
	0.41	0.204	.0295	-.0361	.0000	-0.000	.0001		0.61	0.330	.0582	-.0257	.0001	-0.001	.0000
	0.61	0.321	.0479	-.0607	.0001	-0.001	.0001		0.82	0.451	.0898	-.0422	.0002	0.002	-0.002
	0.80	0.443	.0743	-.0829	.0000	-0.001	.0000		1.02	0.562	.1264	-.0595	.0002	0.002	-0.001
	1.00	0.552	.1069	-.0930	.0000	-0.002	.0002		1.22	0.680	.1736	-.0777	.0002	0.000	-0.002
	1.22	0.658	.1518	-.1040	.0000	-0.002	.0002		1.42	0.785	.2261	-.0924	.0002	0.001	-0.002
	1.42	0.747	.2063	-.1134	.0002	-0.003	.0001		1.62	0.886	.2853	-.1048	.0003	0.000	-0.005
	1.62	0.848	.2566	-.1354	.0002	-0.003	.0001		1.82	0.981	.3493	-.1235	.0005	0.000	-0.006
	1.81	0.944	.3193	-.1474	.0005	-0.000	.0000								
1.30	0.61	-0.292	.0448	.0528	.0003	-0.001	.0002	1.10	0.61	-0.343	.0514	.1087	.0004	0.000	.0005
	0.40	-0.189	.0277	.0354	.0004	-0.001	.0001		0.40	-0.219	.0323	.0851	.0006	0.002	-0.004
	0.20	-0.091	.0184	.0178	.0004	-0.000	.0001		0.21	-0.111	.0238	.0623	.0006	0.002	-0.004
	0.04	-0.022	.0158	.0049	.0003	-0.000	.0003		0.06	-0.039	.0221	.0475	.0002	0.002	-0.004
	0.01	-0.001	.0154	.0008	.0003	-0.002	.0003		0.01	-0.002	.0217	.0390	.0004	0.003	-0.007
	0.20	0.085	.0177	-.0159	.0002	-0.001	.0004		0.20	0.081	.0255	.0234	.0003	0.002	-0.006
	0.40	0.182	.0261	-.0340	.0003	-0.001	.0005		0.40	0.188	.0355	-.0009	.0003	0.003	-0.007
	0.60	0.277	.0410	-.0509	.0004	-0.001	.0005		0.60	0.305	.0558	-.0197	.0002	0.001	-0.006
	0.79	0.374	.0632	-.0659	.0003	-0.001	.0006		0.80	0.415	.0832	-.0353	.0004	0.002	-0.010
	1.00	0.472	.0934	-.0808	.0003	-0.001	.0007		1.00	0.548	.1205	-.0642	.0003	-0.001	-0.007
	1.20	0.569	.1247	-.0948	.0003	-0.000	.0008		1.20	0.659	.1656	-.0753	.0002	-0.001	-0.005
	1.41	0.661	.1729	-.1070	.0004	-0.001	.0008		1.40	0.779	.2139	-.0924	.0004	0.001	-0.003
	1.60	0.752	.2219	-.1202	.0000	-0.001	.0001		1.60	0.831	.2640	-.0887	.0005	0.000	-0.003
	1.81	0.843	.2803	-.1305	.0002	-0.002	.0005		1.80	0.908	.3222	-.1060	.0006	-0.001	-0

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT
 0° SIDESLIP - Continued
 (a) BVWC - Concluded

M	α , deg	C_L	C_D	C_m	C_i	C_y	C_n
$\delta = 9.7^\circ$ - 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	-.0001	-.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	0.372	.0993	-.0224	-.0001	0.000	-.0009
	1.42	0.421	.1249	-.0280	-.0001	0.000	-.0009
	1.63	0.477	.1578	-.0343	-.0001	-.0001	-.0009
	1.83	0.532	.1947	-.0386	.0000	-.0001	-.0009
	$\delta = 19.5^\circ$						
1.00	-0.58	-0.343	.0600	.1413	.0002	-.0003	.0012
	-0.19	-0.101	.0351	.0899	.0002	-.0003	.0010
	0.02	0.003	.0354	.0678	-.0002	-.0001	.0004
	0.23	0.104	.0408	.0434	.0000	-.0001	.0000
	0.62	0.325	.0732	-.0069	.0003	-.0002	-.0003
	1.02	0.566	.1456	-.0387	.0001	0.001	-.0004
	1.43	0.783	.2440	-.0888	.0003	-.0002	-.0003
1.85	0.997	.3762	-.1295	.0005	-.0003	-.0011	
1.10	-0.61	-0.331	.0600	.1374	.0005	-.0001	.0006
	-0.20	-0.111	.0356	.0930	.0004	-.0002	.0003
	-0.00	-0.008	.0360	.0697	.0000	-.0001	-.0002
	0.20	0.084	.0408	.0465	.0001	-.0001	-.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	-.0001	-.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	-.0001	-.0013
	1.78	0.644	.2439	-.0578	.0004	-.0002	-.0016
2.22	-0.58	-0.161	.0357	.0765	.0000	-.0001	.0001
	-0.18	-0.043	.0250	.0566	.0000	-.0001	-.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	-.0001	-.0007
	1.42	0.422	.1397	-.0160	-.0001	-.0002	-.0008
	1.84	0.532	.2120	-.0255	.0000	-.0003	-.0009

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT
 0° SIDESLIP - Continued
 (c) BVC

M	α , deg	C_L	C_D	C_m	C_l	C_Y	C_n	M	α , deg	C_L	C_D	C_m	C_l	C_Y	C_n
$\delta = 0^\circ$								$\delta = 0^\circ$ - Concluded							
0.70	-0.62	-0.038	.0105	-.0487	-.0000	0.001	.0007	1.30	-0.60	-0.038	.0138	-.0473	-.0002	0.002	-.0004
	-0.43	-0.024	.0084	-.0333	-.0000	0.002	.0005		-0.40	-0.025	.0114	-.0319	-.0002	0.002	-.0006
	-0.22	-0.013	.0069	-.0167	-.0001	0.002	.0001		-0.19	-0.011	.0099	-.0158	-.0002	0.002	-.0007
	-0.07	-0.002	.0059	-.0055	-.0001	0.002	-.0000		-0.05	-0.002	.0094	-.0053	-.0002	0.003	-.0008
	-0.02	0.001	.0059	-.0019	-.0001	0.002	-.0001		0.00	-0.000	.0094	-.0024	-.0002	0.003	-.0008
	0.04	0.002	.0059	-.0006	-.0001	0.002	-.0001		0.05	0.001	.0093	.0009	-.0002	0.005	-.0009
	0.17	0.010	.0063	-.0102	-.0000	0.002	-.0003		0.20	0.010	.0095	.0104	-.0002	0.004	-.0009
	0.39	0.022	.0076	-.0264	-.0000	0.002	-.0004		0.41	0.022	.0105	.0255	-.0002	0.004	-.0010
	0.58	0.035	.0102	-.0423	-.0001	0.002	-.0006		0.60	0.035	.0125	.0405	-.0003	0.004	-.0011
	0.78	0.048	.0121	-.0591	-.0001	0.002	-.0008		0.81	0.049	.0157	.0568	-.0003	0.003	-.0011
	0.98	0.064	.0164	-.0776	-.0002	0.004	-.0009		1.01	0.063	.0200	.0730	-.0004	0.003	-.0013
	1.18	0.078	.0221	-.0963	-.0003	0.004	-.0011		1.21	0.076	.0257	.0881	-.0004	0.003	-.0014
	1.38	0.093	.0278	-.1142	-.0003	0.004	-.0015		1.41	0.089	.0320	.1025	-.0004	0.004	-.0014
	1.58	0.107	.0359	-.1327	-.0004	0.006	-.0012		1.61	0.103	.0395	.1157	-.0004	0.003	-.0013
	1.78	0.125	.0446	-.1531	-.0005	0.005	-.0019		1.81	0.122	.0497	.1313	-.0005	0.003	-.0018
0.90	-0.60	-0.039	.0107	-.0501	-.0000	0.000	.0005	1.70	-0.62	-0.037	.0140	-.0412	-.0000	0.000	-.0001
	-0.40	-0.025	.0082	-.0326	-.0001	0.001	-.0002		-0.41	-0.025	.0114	-.0275	-.0000	0.000	-.0002
	-0.19	-0.010	.0068	-.0158	-.0000	0.002	-.0000		-0.21	-0.013	.0098	-.0141	-.0000	0.001	-.0003
	-0.05	-0.002	.0063	-.0045	-.0000	0.002	-.0002		-0.07	-0.005	.0094	-.0040	-.0000	0.001	-.0003
	0.02	0.001	.0062	-.0006	-.0000	0.002	-.0002		-0.02	-0.002	.0093	-.0012	-.0000	0.001	-.0003
	0.05	0.002	.0063	-.0012	-.0000	0.002	-.0004		0.04	-0.001	.0093	-.0016	-.0000	0.001	-.0004
	0.20	0.011	.0066	-.0117	-.0001	0.001	-.0005		0.17	0.007	.0093	.0104	-.0000	0.001	-.0004
	0.41	0.024	.0074	-.0283	-.0001	0.003	-.0006		0.38	0.019	.0103	.0241	-.0001	0.002	-.0005
	0.60	0.038	.0102	-.0457	-.0002	0.003	-.0008		0.58	0.030	.0121	.0383	-.0001	0.002	-.0006
	0.80	0.053	.0132	-.0633	-.0002	0.004	-.0009		0.79	0.043	.0150	.0524	-.0001	0.002	-.0007
	1.01	0.071	.0180	-.0830	-.0003	0.004	-.0012		0.99	0.056	.0191	.0661	-.0002	0.002	-.0009
	1.21	0.086	.0240	-.1017	-.0004	0.004	-.0015		1.18	0.067	.0240	.0783	-.0002	0.002	-.0011
	1.41	0.100	.0308	-.1191	-.0004	0.004	-.0016		1.38	0.083	.0306	.0901	-.0003	0.003	-.0011
	1.61	0.116	.0386	-.1383	-.0004	0.004	-.0020		1.59	0.100	.0391	.1006	-.0005	0.002	-.0017
	1.81	0.132	.0480	-.1554	-.0006	0.005	-.0020		1.79	0.120	.0495	.1098	-.0005	0.002	-.0018
1.00	-0.58	-0.040	.0137	-.0494	-.0002	0.002	-.0001	2.22	-0.58	-0.035	.0120	-.0340	-.0000	0.000	-.0002
	-0.38	-0.025	.0108	-.0323	-.0001	0.003	-.0002		-0.37	-0.023	.0099	-.0217	-.0000	0.000	-.0002
	-0.18	-0.008	.0079	-.0169	-.0001	0.002	-.0001		-0.17	-0.012	.0083	-.0100	-.0000	0.000	-.0000
	-0.03	0.000	.0076	-.0059	-.0001	0.003	-.0001		-0.02	-0.004	.0080	-.0021	-.0000	0.001	-.0001
	0.07	0.003	.0080	-.0017	-.0000	0.003	-.0002		0.03	-0.003	.0078	-.0012	-.0000	0.001	-.0001
	0.22	0.006	.0093	-.0006	-.0000	0.003	-.0003		0.07	-0.002	.0078	-.0033	-.0000	0.001	-.0002
	0.42	0.020	.0110	-.0286	-.0001	0.003	-.0004		0.22	0.005	.0082	.0120	-.0000	0.002	-.0003
	0.63	0.032	.0121	-.0464	-.0001	0.003	-.0008		0.43	0.017	.0092	.0247	-.0000	0.002	-.0004
	0.82	0.046	.0159	-.0629	-.0001	0.003	-.0011		0.63	0.028	.0111	.0361	-.0001	0.002	-.0005
	1.02	0.062	.0177	-.0825	-.0001	0.006	-.0013		0.83	0.040	.0137	.0471	-.0000	0.002	-.0006
	1.23	0.076	.0233	-.1006	-.0002	0.005	-.0015		1.02	0.051	.0180	.0581	-.0000	0.002	-.0007
	1.42	0.090	.0303	-.1163	-.0003	0.005	-.0019		1.22	0.068	.0239	.0668	-.0001	0.002	-.0007
	1.63	0.104	.0383	-.1362	-.0005	0.005	-.0024		1.43	0.085	.0315	.0762	-.0002	0.001	-.0009
	1.83	0.118	.0455	-.1537	-.0007	0.005	-.0024		1.63	0.106	.0413	.0862	-.0002	0.002	-.0009
									1.83	0.127	.0533	.0962	-.0003	0.002	-.0013
1.10	-0.60	-0.041	.0158	-.0466	-.0000	0.001	-.0001								
	-0.39	-0.025	.0142	-.0310	-.0001	0.001	-.0003								
	-0.20	-0.014	.0125	-.0143	-.0001	0.001	-.0004								
	-0.05	-0.004	.0118	-.0035	-.0000	0.002	-.0005								
	0.01	0.001	.0120	-.0001	-.0000	0.001	-.0004								
	0.25	0.003	.0117	-.0017	-.0000	0.002	-.0004								
	0.40	0.004	.0118	-.0130	-.0000	0.002	-.0006								
	0.61	0.016	.0123	-.0284	-.0001	0.002	-.0008								
	0.81	0.032	.0142	-.0443	-.0001	0.002	-.0008								
	1.01	0.046	.0174	-.0602	-.0002	0.001	-.0010								
	1.22	0.059	.0227	-.0772	-.0002	0.005	-.0012								
	1.40	0.074	.0282	-.0949	-.0003	0.006	-.0015								
	1.61	0.085	.0333	-.1104	-.0003	0.005	-.0017								
	1.81	0.099	.0417	-.1279	-.0005	0.005	-.0018								
		0.110	.0506	-.1462	-.0007	0.005	-.0025								

TABLE II.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT
 0° SIDESLIP - Continued
 (c) BVC - Concluded

M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n	M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n
$\delta = 9.7^\circ$								$\delta = 19.5^\circ$							
0.70	-0.64	-0.005	.0070	-.0104	-.0000	-.0001	.0005	1.00	-0.58	0.032	.0146	.0254	.0003	0.003	-.0011
	-0.21	0.018	.0085	.0210	.0000	-.0001	.0001		-0.18	0.058	.0221	.0541	.0003	0.002	-.0014
	-0.02	0.031	.0108	.0367	.0001	-.0002	-.0001		0.03	0.070	.0277	.0683	.0003	0.005	-.0016
	0.19	0.044	.0138	.0534	.0001	0.001	-.0003		0.21	0.078	.0318	.0833	.0003	0.003	-.0014
	0.57	0.074	.0230	.0847	.0002	0.001	-.0010		0.62	0.105	.0456	.1119	.0004	0.001	-.0018
	0.98	0.107	.0368	.1201	.0004	0.001	-.0017		1.02	0.128	.0611	.1377	.0005	0.002	-.0024
	1.39	0.135	.0548	.1563	.0005	0.002	-.0025		1.44	0.140	.0759	.1604	.0003	0.000	-.0018
	1.79	0.150	.0697	.1703	.0002	-.0002	-.0028		1.83	0.155	.0902	.1809	.0003	-.0003	-.0022
0.90	-0.60	-0.005	.0071	-.0085	-.0000	-.0000	.0002	1.10	-0.60	0.029	.0194	.0252	.0002	0.003	-.0006
	-0.19	0.022	.0091	.0228	.0001	-.0001	-.0002		-0.19	0.053	.0258	.0505	.0001	0.003	-.0011
	0.00	0.033	.0113	.0379	.0001	0.001	-.0004		0.01	0.063	.0314	.0642	.0002	0.003	-.0014
	0.21	0.046	.0147	.0552	.0001	0.000	-.0006		0.19	0.077	.0367	.0774	.0003	0.002	-.0012
	0.61	0.078	.0247	.0885	.0002	0.000	-.0012		0.60	0.099	.0501	.1045	.0002	0.002	-.0013
	1.01	0.108	.0382	.1226	.0004	0.001	-.0017		1.00	0.115	.0636	.1303	.0004	0.001	-.0021
	1.41	0.128	.0528	.1477	.0000	-.0001	-.0022		1.41	0.132	.0799	.1536	-.0002	-.0001	-.0004
	1.81	0.142	.0652	.1588	.0002	-.0001	-.0020		1.81	0.142	.0937	.1703	.0001	-.0003	-.0017
1.00	-0.58	-0.005	.0087	-.0080	.0002	0.002	-.0006	1.30	-0.60	0.023	.0166	.0220	.0002	0.002	-.0009
	-0.18	0.020	.0109	.0229	.0002	0.002	-.0008		-0.20	0.045	.0222	.0465	.0002	0.001	-.0011
	0.03	0.035	.0123	.0392	.0002	0.000	-.0009		0.01	0.056	.0265	.0596	.0003	0.001	-.0012
	0.22	0.045	.0156	.0544	.0002	-.0003	-.0011		0.20	0.066	.0312	.0723	.0003	0.002	-.0014
	0.63	0.075	.0253	.0869	.0003	0.003	-.0023		0.60	0.087	.0426	.0967	.0003	0.001	-.0014
	1.02	0.106	.0403	.1214	.0003	0.003	-.0023		0.99	0.105	.0554	.1199	.0004	0.001	-.0016
	1.43	0.133	.0553	.1525	.0005	0.002	-.0025		1.40	0.125	.0715	.1432	.0005	-.0000	-.0020
	1.83	0.165	.0771	.1816	.0004	0.002	-.0022		1.82	0.140	.0883	.1610	.0004	-.0002	-.0018
1.10	-0.60	-0.008	.0135	-.0065	.0001	0.003	-.0002	1.70	-0.62	0.015	.0162	.0182	-.0000	0.001	-.0004
	-0.19	0.018	.0138	.0220	.0002	0.004	-.0005		-0.22	0.036	.0202	.0392	.0001	0.001	-.0007
	0.01	0.031	.0164	.0385	.0002	0.002	-.0006		-0.02	0.045	.0235	.0492	.0001	0.000	-.0006
	0.20	0.042	.0196	.0526	.0003	0.002	-.0009		0.18	0.055	.0276	.0619	.0001	-.0000	-.0007
	0.61	0.072	.0293	.0818	.0003	0.003	-.0015		0.58	0.074	.0368	.0819	.0002	-.0000	-.0009
	1.00	0.101	.0429	.1130	.0004	0.002	-.0020		0.98	0.088	.0484	.1117	.0001	-.0001	-.0008
	1.41	0.123	.0585	.1449	.0005	0.002	-.0026		1.38	0.108	.0630	.1214	.0004	-.0001	-.0017
	1.81	0.148	.0795	.1723	.0004	0.001	-.0022		1.79	0.134	.0842	.1434	.0004	-.0001	-.0016
1.30	-0.61	-0.008	.0110	-.0085	.0002	0.002	-.0005	2.22	-0.57	0.011	.0150	.0177	-.0001	0.000	-.0002
	-0.19	0.017	.0119	.0201	.0003	0.002	-.0009		-0.17	0.031	.0177	.0356	-.0001	0.001	-.0003
	0.00	0.028	.0139	.0344	.0003	0.001	-.0010		0.03	0.040	.0208	.0454	-.0000	0.000	-.0003
	0.20	0.041	.0166	.0480	.0003	0.001	-.0011		0.22	0.045	.0240	.0539	-.0000	0.000	-.0004
	0.60	0.067	.0253	.0748	.0003	0.001	-.0014		0.63	0.061	.0322	.0721	.0001	-.0001	-.0007
	1.00	0.091	.0367	.1044	.0005	0.001	-.0018		1.03	0.079	.0433	.0895	.0001	-.0000	-.0008
	1.41	0.115	.0520	.1310	.0005	0.001	-.0019		1.43	0.103	.0589	.1084	.0002	-.0001	-.0013
	1.81	0.145	.0731	.1554	.0005	0.000	-.0021		1.84	0.142	.0840	.1299	.0003	0.0003	-.0016
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	-.0000	-.0004								
	0.19	0.033	.0156	.0430	.0001	-.0000	-.0004								
	0.59	0.055	.0225	.0656	.0001	-.0000	-.0008								
	0.99	0.078	.0329	.0906	.0002	-.0000	-.0013								
	1.38	0.099	.0461	.1112	.0004	-.0000	-.0017								
	1.79	0.134	.0674	.1303	.0008	-.0001	-.0025								
2.22	-0.57	-0.010	.0102	-.0032	-.0001	-.0000	.0000								
	-0.17	0.012	.0100	.0187	-.0001	-.0000	-.0003								
	0.03	0.021	.0117	.0298	-.0001	0.000	-.0003								
	0.22	0.023	.0135	.0397	-.0000	0.000	-.0004								
	0.63	0.049	.0200	.0594	-.0001	-.0000	-.0008								
	1.03	0.070	.0296	.0787	-.0001	-.0000	-.0009								
	1.43	0.100	.0438	.0945	-.0002	-.0000	-.0012								
	1.83	0.140	.0674	.1145	-.0002	-.0000	-.0013								

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	M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n		
0.70	-0.63	-0.0077	.0068	-.0127	.0000	.0000	.00075	1.30	-0.60	-0.010	.0099	-.0125	.0003	0.003	-.0007		
	-0.43	-0.003	.0064	-.0092	.0001	0.000	.0003		-0.40	-0.005	.0088	-.0090	.0003	0.0003	-.0007		
	-0.22	-0.002	.0060	-.0051	.0001	0.001	.0002		-0.19	-0.001	.0082	-.0048	.0003	0.0003	-.0007		
	-0.07	0.000	.0057	-.0018	.0001	0.000	.0000		-0.05	0.000	.0082	-.0017	.0003	0.0003	-.0007		
	-0.02	0.001	.0057	-.0008	.0001	0.001	.0000		0.00	0.001	.0082	-.0005	.0003	0.0003	-.0007		
	0.03	0.002	.0055	.0002	.0001	0.001	.0000		0.06	0.001	.0081	.0004	.0003	0.0003	-.0008		
	0.17	0.003	.0055	.0039	.0001	0.001	-.0000		0.20	0.004	.0073	.0037	.0003	0.003	-.0008		
	0.38	0.004	.0057	.0082	.0001	0.001	-.0003		0.41	0.007	.0081	.0082	.0003	0.003	-.0009		
	0.57	0.007	.0056	.0122	.0001	0.002	-.0004		0.60	0.008	.0084	.0120	.0003	0.003	-.0011		
	0.78	0.011	.0072	.0158	.0001	0.002	-.0005		0.80	0.013	.0093	.0157	.0003	0.004	-.0012		
	0.98	0.015	.0076	.0192	.0001	0.002	-.0007		1.01	0.019	.0107	.0197	.0003	0.004	-.0011		
	1.18	0.021	.0083	.0231	.0002	0.002	-.0008		1.20	0.027	.0130	.0239	.0003	0.003	-.0011		
	1.38	0.029	.0102	.0269	.0002	0.003	-.0009		1.41	0.035	.0162	.0285	.0002	0.004	-.0011		
	1.58	0.036	.0126	.0310	.0001	0.004	-.0011		1.61	0.047	.0199	.0333	.0002	0.003	-.0010		
	1.79	0.043	.0159	.0363	.0000	0.004	-.0008		1.81	0.059	.0247	.0385	.0002	0.003	-.0010		
	0.90	-0.60	-0.008	.0069	-.0129	.0000	0.000		.0003	1.70	-0.62	-0.012	.0106	-.0119	.0001	0.001	-.0002
		-0.39	-0.004	.0062	-.0089	.0000	0.001		.0001		-0.41	-0.009	.0092	-.0077	.0001	0.001	-.0003
-0.19		-0.000	.0060	-.0050	.0001	0.001	-.0000	-0.21	-0.005		.0087	-.0036	.0001	0.001	-.0003		
-0.05		0.001	.0057	-.0019	.0000	0.001	-.0001	-0.07	-0.003		.0084	-.0008	.0001	0.001	-.0003		
0.01		0.001	.0053	-.0003	.0000	0.001	-.0001	-0.02	-0.001		.0084	-.0002	.0001	0.001	-.0003		
0.05		0.002	.0054	.0005	.0001	0.001	-.0002	0.04	-0.002		.0082	.0019	.0001	0.001	-.0003		
0.20		0.003	.0053	.0039	.0000	0.001	-.0002	0.18	0.001		.0081	.0048	.0001	0.001	-.0003		
0.41		0.005	.0054	.0086	.0001	0.001	-.0003	0.39	0.005		.0083	.0091	.0001	0.002	-.0004		
0.60		0.009	.0058	.0120	.0001	0.002	-.0005	0.58	0.009		.0088	.0132	.0001	0.002	-.0006		
0.80		0.012	.0065	.0160	.0001	0.002	-.0006	0.78	0.010		.0084	.0167	.0001	0.002	-.0007		
1.01		0.019	.0078	.0194	.0001	0.003	-.0007	0.98	0.010		.0110	.0210	.0001	0.002	-.0008		
1.21		0.024	.0091	.0235	.0001	0.002	-.0008	1.18	0.032		.0140	.0246	.0002	0.002	-.0009		
1.41		0.031	.0117	.0276	.0002	0.003	-.0008	1.39	0.042		.0177	.0292	.0002	0.002	-.0010		
1.61		0.038	.0140	.0321	.0001	0.003	-.0010	1.59	0.058		.0236	.0342	.0002	0.002	-.0011		
1.81		0.048	.0176	.0373	-.0000	0.003	-.0007	1.79	0.076		.0314	.0405	.0001	0.002	-.0010		
1.00		-0.58	-0.008	.0095	-.0134	.0001	0.000	.0001	2.22		-0.37	-0.016	.0092	-.0100	-.0000	-.0001	.0002
		-0.38	-0.007	.0089	-.0089	.0001	0.001	-.0001			-0.16	-0.010	.0081	-.0061	-.0000	-.0001	.0002
	-0.18	-0.007	.0086	-.0044	.0001	0.001	-.0001	-0.17		-0.007	.0073	-.0021	-.0000	-.0001	.0001		
	-0.03	-0.003	.0073	-.0015	.0000	0.000	-.0002	-0.02		-0.002	.0070	-.0004	-.0000	-.0001	-.0000		
	0.02	-0.001	.0075	-.0008	.0000	0.001	-.0001	0.03		-0.003	.0070	.0018	-.0000	-.0000	-.0000		
	0.08	-0.001	.0069	.0012	.0001	0.000	-.0002	0.08		-0.001	.0070	.0031	-.0000	-.0001	-.0000		
	0.22	-0.000	.0070	.0033	.0000	0.001	-.0002	0.22		0.001	.0069	.0057	-.0000	0.000	-.0001		
	0.43	0.003	.0073	.0095	.0001	0.001	-.0004	0.43		0.005	.0069	.0102	-.0000	0.000	-.0002		
	0.62	0.005	.0074	.0137	.0001	0.002	-.0006	0.63		0.011	.0080	.0140	-.0000	0.001	-.0002		
	0.82	0.010	.0089	.0176	.0001	0.002	-.0006	0.83		0.017	.0093	.0176	-.0000	0.002	-.0004		
	1.02	0.015	.0097	.0213	.0001	0.003	-.0008	1.03		0.024	.0119	.0214	-.0000	0.001	-.0004		
	1.23	0.021	.0092	.0255	.0001	0.005	-.0007	1.23		0.041	.0157	.0247	-.0000	0.001	-.0004		
	1.42	0.028	.0120	.0298	.0002	0.004	-.0008	1.43		0.058	.0213	.0294	-.0000	0.001	-.0005		
	1.63	0.036	.0154	.0354	.0001	0.001	-.0009										
	1.83	0.047	.0191	.0400	.0002	0.006	-.0011										
	1.10	-0.61	-0.013	.0132	-.0116	.0000	-.0001	.0003									
		-0.39	-0.010	.0122	-.0077	.0001	0.000	-.0001									
-0.19		-0.006	.0109	-.0036	.0001	0.000	-.0003										
-0.05		-0.007	.0111	.0001	.0000	-.0001	-.0000										
0.01		-0.004	.0106	.0003	.0000	-.0000	-.0002										
0.05		-0.004	.0103	.0015	.0000	0.000	-.0002										
0.20		-0.000	.0101	.0038	.0000	0.000	-.0002										
0.41		0.000	.0100	.0096	-.0000	0.001	-.0002										
0.60		0.003	.0101	.0137	.0000	0.000	-.0003										
0.81		0.008	.0107	.0169	-.0000	0.001	-.0004										
1.01		0.012	.0117	.0206	.0001	0.001	-.0005										
1.20		0.021	.0130	.0241	.0001	0.001	-.0007										
1.40		0.029	.0147	.0283	.0001	0.001	-.0007										
1.62		0.037	.0183	.0334	.0001	0.001	-.0009										
1.81		0.047	.0219	.0379	.0002	0.002	-.0012										

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

M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n	M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n	
$\delta = 0^\circ$								$\delta = 9.5^\circ$ - Concluded								
0.70	-0.60	-0.302	.0430	.0241	-.0022	-.0060	.0224	1.10	-0.61	-0.328	.0554	.1038	-.0018	-.0077	.0301	
	-0.18	-0.093	.0174	.0134	-.0046	-.0059	.0209		-0.18	-0.093	.0285	.0566	-.0080	-.0070	.0267	
	0.01	-0.017	.0150	.0081	-.0073	-.0058	.0201		0.01	-0.007	.0259	.0441	-.0116	-.0067	.0249	
	0.20	0.064	.0163	.0042	-.0093	-.0057	.0198		0.21	0.090	.0304	.0224	-.0133	-.0064	.0247	
	0.60	0.270	.0386	-.0099	-.0148	-.0056	.0194		0.61	0.316	.0670	-.0155	-.0194	-.0061	.0245	
	1.00	0.496	.0936	-.0209	-.0202	-.0053	.0186		1.00	0.564	.1270	-.0569	-.0267	-.0057	.0275	
	1.41	0.731	.1843	-.0302	-.0244	-.0047	.0162		1.41	0.768	.2181	-.0769	-.0300	-.0042	.0280	
	1.78	0.943	.2988	-.0327	-.0039	-.0043	.0143		1.78	0.924	.3223	-.1050	-.0278	-.0031	.0207	
0.90	-0.60	-0.320	.0469	.0389	-.0027	-.0065	.0250	1.30	-0.59	-.0276	.0455	.0862	-.0039	-.0065	.0237	
	-0.18	-0.091	.0179	.0163	-.0051	-.0061	.0227		-0.18	-0.077	.0237	.0484	-.0084	-.0061	.0216	
	0.01	-0.004	.0154	.0076	-.0081	-.0060	.0218		0.01	0.000	.0231	.0354	-.0107	-.0058	.0202	
	0.20	0.079	.0171	.0017	-.0103	-.0060	.0213		0.20	0.080	.0262	.0205	-.0128	-.0056	.0190	
	0.60	0.311	.0440	-.0249	-.0166	-.0058	.0207		0.60	0.279	.0527	-.0133	-.0164	-.0048	.0154	
	0.99	0.566	.1084	-.0584	-.0225	-.0055	.0194		1.00	0.485	.1083	-.0453	-.0194	-.0038	.0135	
	1.40	0.818	.2111	-.0967	-.0248	-.0048	.0163		1.40	0.672	.1831	-.0742	-.0201	-.0027	.0102	
	1.78	1.011	.3302	-.1075	-.0185	-.0041	.0150		1.78	0.838	.2860	-.1031	-.0182	-.0015	.0069	
1.00	-0.60	-0.335	.0566	.0678	-.0006	-.0075	.0303	1.70	-0.60	-.0225	.0409	.0701	-.0047	-.0057	.0181	
	-0.17	-0.085	.0248	.0220	-.0073	-.0069	.0269		-0.18	-0.068	.0229	.0440	-.0077	-.0051	.0151	
	0.01	-0.001	.0217	.0055	-.0104	-.0066	.0256		0.01	-0.004	.0219	.0343	-.0098	-.0048	.0137	
	0.20	0.107	.0244	-.0139	-.0128	-.0065	.0244		0.20	0.066	.0243	.0259	-.0119	-.0042	.0122	
	0.61	0.354	.0567	-.0594	-.0192	-.0068	.0270		0.60	0.223	.0459	-.0048	-.0142	-.0042	.0104	
	1.00	0.584	.1197	-.0930	-.0242	-.0065	.0267		1.01	0.381	.0903	-.0249	-.0149	-.0035	.0086	
	1.41	0.808	.2159	-.1251	-.0258	-.0055	.0221		1.40	0.524	.1521	-.0453	-.0142	-.0025	.0043	
	1.78	0.991	.3292	-.1422	-.0260	-.0039	.0166		1.78	0.649	.2287	-.0667	-.0122	-.0020	.0020	
1.10	-0.60	-0.327	.0546	.0711	-.0005	-.0070	.0290	2.22	-0.60	-.0165	.0347	.0519	-.0045	-.0050	.0133	
	-0.17	-0.085	.0253	.0243	-.0068	-.0067	.0264		-0.17	-0.038	.0230	.0342	-.0063	-.0043	.0100	
	0.01	0.002	.0227	.0079	-.0104	-.0063	.0248		0.01	0.012	.0204	.0278	-.0072	-.0039	.0086	
	0.19	0.096	.0248	-.0085	-.0129	-.0063	.0247		0.20	0.070	.0232	.0191	-.0081	-.0037	.0071	
	0.60	0.319	.0514	-.0509	-.0151	-.0062	.0249		0.61	0.200	.0423	-.0017	-.0103	-.0034	.0059	
	0.99	0.557	.1123	-.0829	-.0245	-.0064	.0271		1.00	0.321	.0780	-.0131	-.0114	-.0032	.0043	
	1.40	0.746	.1996	-.1051	-.0243	-.0052	.0215		1.41	0.437	.1306	-.0274	-.0112	-.0029	.0019	
	1.78	0.916	.3058	-.1348	-.0237	-.0035	.0147		1.78	0.535	.1919	-.0397	-.0108	-.0024	.0006	
1.30	-0.61	-0.283	.0472	.0516	-.0015	-.0061	.0240		$\delta = 19.7^\circ$							
	-0.17	-0.074	.0215	.0158	-.0065	-.0058	.0219	1.00	-0.60	-0.320	.0632	.1375	-.0045	-.0081	.0291	
	0.01	0.001	.0195	.0022	-.0090	-.0055	.0206		-0.17	-0.067	.0388	.0871	-.0114	-.0076	.0256	
	0.20	0.089	.0212	-.0124	-.0112	-.0054	.0199		0.01	0.018	.0391	.0719	-.0143	-.0072	.0238	
	0.61	0.286	.0460	-.0466	-.0152	-.0051	.0178		0.20	0.109	.0442	.0516	-.0154	-.0067	.0226	
	1.00	0.481	.0974	-.0750	-.0170	-.0042	.0126		0.60	0.338	.0766	-.0046	-.0210	-.0069	.0250	
	1.40	0.668	.1750	-.1037	-.0163	-.0029	.0053		1.01	0.581	.1488	-.0289	-.0264	-.0065	.0306	
	1.78	0.829	.2701	-.1270	-.0152	-.0018	.0007		1.41	0.802	.2460	-.0781	-.0314	-.0053	.0334	
									1.78	0.983	.3587	-.1218	-.0333	-.0042	.0287	
1.70	-0.61	-0.236	.0423	.0393	-.0022	-.0055	.0188	1.10	-0.59	-.0302	.0613	.1303	-.0041	-.0080	.0290	
	-0.18	-0.067	.0205	.0141	-.0055	-.0050	.0163		-0.17	-0.075	.0407	.0875	-.0105	-.0074	.0255	
	0.01	-0.004	.0184	.0045	-.0075	-.0048	.0149		0.01	0.005	.0417	.0718	-.0133	-.0070	.0244	
	0.20	0.068	.0205	-.0069	-.0093	-.0046	.0114		0.20	0.082	.0461	.0500	-.0150	-.0068	.0237	
	0.61	0.226	.0398	-.0488	-.0126	-.0036	.0070		0.60	0.299	.0762	-.0111	-.0211	-.0066	.0246	
	1.00	0.375	.0796	-.0685	-.0117	-.0031	.0023		1.01	0.546	.1432	-.0306	-.0239	-.0058	.0247	
	1.41	0.520	.1418	-.0882	-.0109	-.0027	.0012		1.40	0.765	.2370	-.0707	-.0307	-.0052	.0270	
	1.78	0.639	.2136	-.1035	-.0098	-.0022	.0005		1.78	0.910	.3366	-.0909	-.0310	-.0038	.0271	
2.22	-0.60	-0.177	.0352	.0236	-.0026	-.0048	.0139	1.30	-0.60	-.0266	.0534	.1186	-.0054	-.0066	.0224	
	-0.18	-0.046	.0185	.0076	-.0046	-.0042	.0112		-0.18	-0.067	.0349	.0774	-.0100	-.0062	.0194	
	0.00	0.007	.0168	.0012	-.0053	-.0040	.0100		0.01	0.007	.0351	.0637	-.0125	-.0057	.0169	
	0.20	0.071	.0189	-.0075	-.0065	-.0039	.0089		0.20	0.081	.0392	.0473	-.0145	-.0052	.0151	
	0.60	0.196	.0355	-.0216	-.0084	-.0036	.0070		0.60	0.278	.0667	.0078	-.0177	-.0049	.0150	
	0.95	0.314	.0651	-.0341	-.0095	-.0033	.0042		1.00	0.483	.1245	-.0253	-.0212	-.0036	.0145	
	1.41	0.429	.1198	-.0463	-.0098	-.0031	.0017		1.41	0.666	.2049	-.0606	-.0210	-.0027	.0107	
	1.78	0.530	.1806	-.0560	-.0098	-.0030	.0005		1.78	0.835	.3032	-.0972	-.0202	-.0016	.0105	
$\delta = 9.5^\circ$								$\delta = 9.5^\circ$								
0.70	-0.60	-0.292	.0410	.0571	-.0001	-.0064	.0224	1.70	-0.61	-0.215	.0478	.0988	-.0062	-.0058	.0172	
	-0.18	-0.081	.0181	.0428	-.0063	-.0061	.0203		-0.17	-0.052	.0321	.0679	-.0096	-.0052	.0133	
	-0.00	-0.011	.0177	.0402	-.0087	-.0060	.0194		0.01	0.006	.0325	.0571	-.0112	-.0049	.0116	
	0.20	0.068	.0203	.0380	-.0107	-.0057	.0186		0.20	0.065	.0359	.0461	-.0129	-.0044	.0100	
	0.60	0.275	.0478	.0277	-.0162	-.0053	.0182		0.60	0.227	.0595	.0164	-.0156	-.0043	.0106	
	1.01	0.508	.1099	.0183	-.0235	-.0046	.0199		1.00	0.378	.1035	-.0073	-.0165	-.0036	.0098	
	1.41	0.733	.1986	-.0009	-.0283	-.0037	.0216		1.40	0.521	.1676	-.0323	-.0157	-.0027	.0077	
	1.78	0.950	.3144	-.0223	-.0317	-.0028	.0275		1.78	0.640	.2427	-.0510	-.0143	-.0020	.0044	
0.90	-0.60	-0.307	.0442	.0706	-.0003	-.0068	.0246	2.22	-0.60	-.0151	.0400	.0735	-.0054	-.0051	.0123	
	-0.17	-0.080	.0192	.0479	-.0071	-.0064	.0222		-0.17	-0.024	.0287	.0536	-.0075	-.0042	.0087	
	0.01	0.001	.0189	.0412	-.0099	-.0062	.0209		0.01	0.024	.0292	.0467	-.0084	-.0040	.0075	
	0.20	0.083	.0214	.0356	-.0119	-.0060	.0202		0.20	0.074	.0328	.0375	-.0091	-.0037	.0060	
	0.60	0.309	.0518	-.0180	-.0056	-.0060	.0200		0.61	0.203	.0535	.0173	-.0108	-.0034	.0057	
	0.99	0.511	.1210	-.0136	-.0252	-.0050	.0217		0.99	0.319	.0895	.0021	-.0119	-.0032	.0048	
	1.40	0.819	.2221	-.0690	-.0297	-.0038	.0248		1.41	0.431	.1436	-.0124	-.0118	-.0028	.0027	
	1.78	1.019	.3422	-.1073	-.0300	-.0031										

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT
 5° SIDESLIP - Continued
 (b) BVW

M	α , deg	C_L	C_D	C_m	C_l	C_Y	C_n
0.70	-0.63	-0.297	.0425	.0605	-0.010	-0.063	.0230
	-0.22	-0.100	.0170	.0225	-0.044	-0.059	.0218
	-0.03	-0.009	.0139	.0055	-0.064	-0.058	.0211
	0.12	0.082	.0149	-0.115	-0.083	-0.058	.0204
	0.57	0.282	.0367	-0.495	-0.114	-0.057	.0193
	0.93	0.506	.0914	-0.881	-0.143	-0.058	.0188
	1.39	0.713	.1760	-1.171	-0.115	-0.064	.0187
	1.78	0.925	.2620	-1.582	-0.113	-0.058	.0152
0.90	-0.60	-0.314	.0443	.0739	-0.005	-0.066	.0251
	-0.20	-0.098	.0174	.0251	-0.045	-0.063	.0239
	0.01	0.003	.0140	.0037	-0.069	-0.060	.0227
	0.20	0.098	.0157	-0.168	-0.088	-0.060	.0218
	0.60	0.324	.0438	-0.679	-0.126	-0.060	.0207
	1.00	0.575	.1087	-1.289	-0.163	-0.062	.0203
	1.41	0.842	.2181	-2.088	-0.170	-0.068	.0214
	1.80	0.992	.3056	-2.403	-0.046	-0.072	.0213
1.00	-0.58	-0.331	.0529	.1035	-0.030	-0.077	.0308
	-0.17	-0.097	.0238	.0338	-0.069	-0.070	.0277
	0.02	0.013	.0227	.0004	-0.100	-0.069	.0272
	0.22	0.122	.0238	-0.325	-0.118	-0.067	.0255
	0.62	0.373	.0570	-1.060	-0.155	-0.070	.0267
	1.03	0.606	.1260	-1.717	-0.189	-0.074	.0274
	1.42	0.815	.2207	-2.279	-0.199	-0.076	.0273
	1.82	1.001	.2927	-2.804	-0.198	-0.065	.0223
1.10	-0.60	-0.331	.0549	.1047	-0.022	-0.076	.0307
	-0.19	-0.096	.0247	.0342	-0.075	-0.068	.0274
	0.01	0.005	.0232	.0042	-0.100	-0.068	.0268
	0.25	0.134	.0272	-0.359	-0.128	-0.067	.0261
	0.63	0.359	.0569	-1.036	-0.157	-0.067	.0256
	1.01	0.559	.1139	-1.549	-0.185	-0.071	.0269
	1.40	0.763	.2057	-2.181	-0.182	-0.069	.0246
	1.80	0.935	.2724	-2.649	-0.180	-0.059	.0197
1.30	-0.60	-0.278	.0454	.0843	-0.043	-0.065	.0255
	-0.20	-0.085	.0212	.0267	-0.072	-0.059	.0233
	0.01	0.006	.0184	.0000	-0.089	-0.056	.0218
	0.21	0.102	.0208	-0.283	-0.106	-0.055	.0206
	0.60	0.292	.0451	-0.847	-0.124	-0.052	.0182
	1.00	0.484	.0973	-1.388	-0.130	-0.051	.0156
	1.40	0.658	.1725	-1.879	-0.126	-0.049	.0119
	1.80	0.819	.2502	-2.326	-0.114	-0.042	.0063
1.70	-0.21	-0.075	.0203	.0224	-0.063	-0.050	.0167
	-0.01	-0.000	.0176	.0013	-0.075	-0.048	.0156
	0.13	0.073	.0193	-0.199	-0.085	-0.047	.0146
	0.58	0.224	.0380	-0.619	-0.095	-0.046	.0126
	0.98	0.365	.0764	-1.006	-0.095	-0.044	.0097
	1.39	0.499	.1344	-1.352	-0.089	-0.043	.0060
	1.79	0.624	.1897	-1.645	-0.077	-0.037	.0009
	2.22	-0.58	-0.163	.0318	.0448	-0.044	-0.047
-0.17		-0.046	.0169	.0137	-0.050	-0.040	.0112
0.04		0.018	.0155	-0.031	-0.054	-0.038	.0101
0.23		0.074	.0179	-0.180	-0.058	-0.038	.0092
0.63		0.193	.0348	-0.485	-0.063	-0.038	.0071
1.02		0.301	.0666	-0.745	-0.070	-0.038	.0041
1.43		0.407	.1148	-0.976	-0.073	-0.038	.0004
1.83		0.509	.1563	-1.179	-0.072	-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	M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n
$\delta = 0^\circ$								$\delta = 9.7^\circ$ - Concluded							
0.70	0.59	-0.289	.0357	.0227	.0091	-0.005	-0.0054	1.10	0.60	-0.313	.0484	.0992	.0078	-0.013	-0.0043
	0.17	-0.079	.0120	.0101	.0026	-0.005	-0.0058		0.18	-0.084	.0239	.0538	.0017	-0.011	-0.0056
	0.01	-0.011	.0099	.0085	-0.007	-0.005	-0.0059		0.01	0.006	.0222	.0393	-0.020	-0.009	-0.0059
	0.21	0.070	.0117	.0049	-0.0033	-0.005	-0.0061		0.21	0.095	.0271	.0215	-0.043	-0.009	-0.0063
	0.61	0.274	.0348	-0.085	-0.087	-0.004	-0.0061		0.61	0.320	.0576	-0.159	-0.106	-0.008	-0.0058
	1.01	0.506	.0923	-0.209	-0.135	-0.006	-0.0056		1.00	0.567	1.239	-0.575	-0.170	-0.001	-0.0059
	1.40	0.740	.1828	-0.305	-0.169	-0.009	-0.0053		1.41	0.768	2.158	-0.770	-0.187	-0.004	-0.0041
	1.78	0.958	.3019	-0.360	-0.187	-0.008	-0.0049		1.78	0.920	3.204	-1.046	-0.178	-0.004	-0.0016
0.90	0.60	-0.313	.0405	.0365	.0104	-0.006	-0.0056	1.30	0.60	-0.272	.0406	.0839	.0056	-0.012	-0.0059
	0.15	-0.076	.0121	.0126	.0024	-0.006	-0.0059		0.17	-0.067	.0193	.0453	.0005	-0.010	-0.0065
	0.01	-0.002	.0103	.0073	-0.009	-0.006	-0.0061		0.01	0.007	.0192	.0340	-0.021	-0.010	-0.0070
	0.20	0.082	.0119	.0018	-0.0039	-0.006	-0.0063		0.20	0.082	.0226	.0201	-0.045	-0.010	-0.0074
	0.60	0.313	.0394	-0.241	-0.102	-0.006	-0.0062		0.60	0.281	.0496	-0.131	-0.091	-0.009	-0.0076
	1.00	0.571	.1057	-0.265	-0.153	-0.010	-0.0055		0.99	0.481	1.940	-0.446	-0.127	-0.004	-0.0059
	1.40	0.826	.2105	-0.294	-0.173	-0.013	-0.0054		1.41	0.773	2.874	-0.750	-0.139	-0.007	-0.0048
	1.79	1.019	.3320	-0.292	-0.105	-0.012	-0.0047		1.78	0.842	2.881	-1.041	-0.128	-0.005	-0.0033
1.00	0.60	-0.322	.0470	.0611	.0093	-0.006	-0.0051	1.70	0.60	-0.223	.0368	.0688	.0032	-0.014	-0.0062
	0.18	-0.079	.0181	.0171	.0023	-0.004	-0.0061		0.28	-0.099	.0210	.0482	.0001	-0.013	-0.0066
	0.01	0.016	.0162	.0020	-0.0012	-0.005	-0.0061		0.01	-0.002	.0182	.0331	-0.031	-0.012	-0.0072
	0.20	0.116	.0193	-0.152	-0.043	-0.005	-0.0062		0.21	0.069	.0217	.0211	-0.058	-0.013	-0.0074
	0.61	0.361	.0513	-0.607	-0.039	-0.005	-0.0058		0.60	0.233	.0441	-0.103	-0.085	-0.011	-0.0077
	1.00	0.600	.1176	-0.267	-0.139	-0.010	-0.0045		1.00	0.376	.0863	-0.239	-0.098	-0.011	-0.0063
	1.41	0.822	.2168	-0.256	-0.157	-0.014	-0.0035		1.41	0.521	1.509	-0.442	-0.101	-0.015	-0.0048
	1.77	1.007	.3312	-0.185	-0.165	-0.014	-0.0024		1.78	0.644	2.264	-0.645	-0.089	-0.014	-0.0040
1.10	0.61	-0.323	.0493	.0670	.0101	-0.008	-0.0043	2.22	0.60	-0.161	.0299	.0493	.0016	-0.015	-0.0055
	0.18	-0.084	.0209	.0199	.0030	-0.006	-0.0051		0.18	-0.032	.0171	.0316	-0.011	-0.013	-0.0062
	0.01	0.001	.0177	.0061	-0.0007	-0.006	-0.0053		0.01	0.021	.0172	.0250	-0.025	-0.013	-0.0064
	0.21	0.099	.0212	-0.116	-0.035	-0.007	-0.0053		0.20	0.074	.0203	.0172	-0.037	-0.014	-0.0065
	0.60	0.319	.0466	-0.510	-0.088	-0.007	-0.0051		0.62	0.203	.0401	-0.007	-0.061	-0.013	-0.0066
	1.00	0.569	.1113	-0.222	-0.142	-0.011	-0.0037		1.00	0.319	.0756	-0.128	-0.076	-0.017	-0.0057
	1.41	0.760	.2013	-0.193	-0.141	-0.013	-0.0033		1.40	0.431	1.274	-0.259	-0.082	-0.020	-0.0048
	1.78	0.937	.3125	-0.1420	-0.150	-0.013	-0.0029		1.79	0.533	1.915	-0.378	-0.083	-0.019	-0.0045
1.30	0.60	-0.277	.0410	.0484	.0081	-0.008	-0.0057	$\delta = 19.7^\circ$							
	0.17	-0.073	.0169	.0136	.0026	-0.008	-0.0060	1.00	0.60	-0.308	.0581	.1314	-0.050	-0.012	-0.0066
	0.01	0.005	.0149	.0045	-0.003	-0.007	-0.0061		0.17	-0.061	.0334	.0825	-0.018	-0.009	-0.0080
	0.20	0.084	.0174	-0.121	-0.029	-0.008	-0.0061		0.01	0.017	.0358	.0709	-0.047	-0.007	-0.0083
	0.62	0.294	.0435	-0.480	-0.076	-0.010	-0.0059		0.20	0.110	.0407	.0497	-0.065	-0.005	-0.0084
	1.00	0.484	.0947	-0.774	-0.104	-0.013	-0.0056		0.60	0.346	.0744	-0.114	-0.129	-0.007	-0.0064
	1.40	0.670	.1741	-1.048	-0.113	-0.015	-0.0053		1.00	0.583	1.441	-0.328	-0.171	-0.001	-0.0044
	1.78	0.841	.2740	-1.297	-0.107	-0.016	-0.0053		1.40	0.811	2.441	-0.832	-0.207	-0.004	-0.0012
									1.77	0.991	3.563	-1.259	-0.221	-0.003	-0.0007
1.70	0.60	-0.232	.0373	.0364	.0059	-0.011	-0.0059	1.10	0.60	-0.307	.0578	.1290	.0059	-0.013	-0.0057
	0.18	-0.088	.0165	.0125	.0019	-0.010	-0.0063		0.17	-0.062	.0353	.0823	-0.006	-0.011	-0.0070
	0.01	-0.004	.0145	.0029	-0.006	-0.009	-0.0065		0.01	0.005	.0360	.0727	-0.037	-0.013	-0.0074
	0.20	0.068	.0168	-0.077	-0.029	-0.010	-0.0064		0.20	0.092	.0417	.0528	-0.057	-0.006	-0.0077
	0.60	0.224	.0363	-0.300	-0.063	-0.012	-0.0065		0.60	0.230	.0731	-0.066	-0.118	-0.009	-0.0064
	1.00	0.379	.0785	-0.503	-0.076	-0.016	-0.0063		1.00	0.550	1.391	-0.336	-0.155	-0.001	-0.0059
	1.40	0.523	.1404	-0.686	-0.080	-0.020	-0.0059		1.41	0.782	2.367	-0.778	-0.208	-0.001	-0.0034
	1.79	0.651	.2179	-0.857	-0.080	-0.018	-0.0051		1.77	0.918	3.345	-0.963	-0.199	-0.003	-0.0010
2.22	0.61	-0.176	.0314	.0211	.0037	-0.013	-0.0054	1.30	0.61	-0.269	.0491	.1184	.0041	-0.012	-0.0070
	0.18	-0.042	.0147	.0053	.0009	-0.011	-0.0057		0.18	-0.066	.0305	.0763	-0.010	-0.011	-0.0083
	0.01	0.011	.0135	-0.007	-0.006	-0.011	-0.0058		0.01	0.008	.0310	.0632	-0.041	-0.009	-0.0091
	0.20	0.073	.0158	-0.086	-0.019	-0.012	-0.0058		0.20	0.078	.0348	.0477	-0.065	-0.007	-0.0097
	0.61	0.197	.0335	-0.225	-0.043	-0.014	-0.0056		0.60	0.280	.0636	-0.072	-0.105	-0.008	-0.0076
	1.00	0.318	.0676	-0.357	-0.060	-0.018	-0.0053		1.01	0.487	1.222	-0.273	-0.145	-0.003	-0.0075
	1.40	0.432	.1190	-0.483	-0.071	-0.020	-0.0051		1.41	0.674	2.057	-0.635	-0.151	-0.005	-0.0038
	1.78	0.534	.1811	-0.585	-0.073	-0.020	-0.0057		1.78	0.838	3.038	-1.004	-0.143	-0.001	-0.0021
$\delta = 9.7^\circ$															
0.70	0.61	-0.288	.0363	.0563	.0069	-0.010	-0.0055	1.70	0.59	-0.207	.0427	.0963	.0015	-0.014	-0.0069
	0.18	-0.075	.0144	.0404	.0009	-0.009	-0.0062		0.17	-0.055	.0284	.0675	-0.024	-0.013	-0.0084
	0.00	-0.005	.0142	.0399	-0.023	-0.008	-0.0067		0.00	0.002	.0286	.0572	-0.044	-0.012	-0.0090
	0.20	0.066	.0166	.0391	-0.050	-0.007	-0.0071		0.19	0.065	.0323	.0454	-0.069	-0.012	-0.0089
	0.60	0.275	.0443	.0295	-0.108	-0.004	-0.0070		0.60	0.230	.0564	-0.147	-0.098	-0.011	-0.0074
	1.00	0.501	.1052	.0225	-0.179	0.006	-0.0074		1.00	0.382	1.011	-0.092	-0.114	-0.007	-0.0068
	1.40	0.731	.1952	.0016	-0.218	0.007	-0.0034		1.41	0.524	1.662	-0.340	-0.116	-0.008	-0.0036
	1.78	0.937	.3083	-0.202	-0.235	0.013	-0.0001		1.78	0.647	2.432	-0.540	-0.108	-0.008	-0.0033
0.90	0.60	-0.303	.0395	.0712	.0077	-0.011	-0.0057	2.22	0.60	-0.150	.0365	.0718	.0006	-0.017	-0.0065
	0.18	-0.074	.0150	.0477	.0007	-0.009	-0.0066		0.18	-0.026	.0257	.0533	-0.023	-0.014	-0.0074
	0.00	-0.001	.0148	.0404	-0.025	-0.009	-0.0070		0.00	0.021	.0263	.0463	-0.036	-0.014	-0.0076
	0.20	0.086	.0181	.0360	-0.058	-0.008	-0.0074		0.21	0.077	.0303	.0364	-0.050	-0.014	-0.0073
	0.61	0.317	.0498	.0138	-0.128	-0.005	-0.0067		0.60	0.200	.0504	-0.171	-0.068	-0.013	-0.0068
	1.00	0.559	.1166	-0.115	-0.194	0.002	-0.0074		1.00	0.324	.0887	-0.000	-0.083	-0.014</	

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	-.007	-0.006	-.0057
	0.20	0.051	.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	-.009	-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	-.0055
	1.00	0.300	.0631	-.0747	-.0038	-0.021	-.0060
	1.41	0.410	.1123	-.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_z	C_y	C_n	M	α , deg	C_L	C_D	C_m	C_z	C_y	C_n
$\delta = 0^\circ$								$\delta = 0^\circ$ - Concluded							
0.70	0.60	-0.042	.0134	-0.469	-0.080	-0.049	.0172	2.22	-0.59	-0.038	.0159	-0.311	-0.053	-0.040	.0106
	0.40	-0.028	.0112	-0.299	-0.080	-0.049	.0171		-0.45	-0.026	.0128	-0.193	-0.053	-0.040	.0104
	0.20	-0.015	.0098	-0.144	-0.081	-0.051	.0174		-0.19	-0.014	.0119	-0.082	-0.053	-0.041	.0105
	0.04	-0.004	.0096	-0.037	-0.081	-0.052	.0177		-0.04	-0.006	.0113	.0004	-0.054	-0.041	.0104
	0.06	-0.000	.0097	.0033	-0.081	-0.053	.0178		0.06	-0.001	.0113	.0066	-0.054	-0.041	.0103
	0.21	0.008	.0096	.0139	-0.081	-0.053	.0178		0.20	0.007	.0115	.0146	-0.054	-0.041	.0102
	0.40	0.023	.0102	.0281	-0.081	-0.053	.0179		0.41	0.020	.0125	.0268	-0.055	-0.040	.0097
	0.60	0.038	.0133	.0441	-0.081	-0.052	.0173		0.60	0.033	.0146	.0383	-0.054	-0.038	.0086
	0.80	0.055	.0163	.0606	-0.079	-0.046	.0152		0.81	0.047	.0173	.0494	-0.050	-0.033	.0067
	1.01	0.072	.0204	.0801	-0.071	-0.038	.0115		1.01	0.062	.0223	.0593	-0.043	-0.031	.0045
	1.21	0.087	.0254	.0978	-0.056	-0.029	.0053		1.21	0.080	.0278	.0685	-0.035	-0.029	.0030
	1.39	0.105	.0317	.1146	-0.030	-0.017	.0013		1.39	0.100	.0362	.0760	-0.030	-0.027	.0016
	1.59	0.125	.0404	.1356	.0001	-0.004	-.0079		1.60	0.123	.0464	.0851	-0.027	-0.023	.0001
	1.81	0.143	.0506	.1553	.0017	-0.000	-.0102		1.80	0.146	.0590	.0953	-0.020	-0.019	-.0023
$\delta = 9.7^\circ$								$\delta = 9.7^\circ$							
0.90	0.60	-0.043	.0138	-0.477	-0.083	-0.050	.0181	0.70	-0.59	-0.008	.0104	-0.076	-0.089	-0.057	.0183
	0.39	-0.027	.0114	-0.304	-0.082	-0.051	.0180		-0.19	0.018	.0124	.0210	-0.090	-0.060	.0192
	0.19	-0.013	.0104	-0.132	-0.084	-0.053	.0186		0.01	0.031	.0142	.0359	-0.092	-0.061	.0201
	0.03	-0.004	.0097	-0.020	-0.085	-0.054	.0191		0.20	0.046	.0175	.0519	-0.094	-0.062	.0209
	0.05	0.001	.0100	.0035	-0.084	-0.054	.0189		0.61	0.080	.0262	.0840	-0.095	-0.058	.0209
	0.21	0.027	.0118	.0308	-0.085	-0.055	.0192		1.00	0.111	.0388	.1195	-0.085	-0.040	.0153
	0.40	0.043	.0140	.0476	-0.085	-0.053	.0183		1.40	0.133	.0515	.1471	-0.042	-0.007	.0045
	0.60	0.059	.0174	.0653	-0.081	-0.046	.0158		1.79	0.148	.0637	.1661	-0.003	0.019	-.0004
	0.80	0.077	.0216	.0848	-0.073	-0.037	.0111								
	1.00	0.093	.0267	.1024	-0.057	-0.027	.0063		0.90	-0.59	-0.007	.0110	-0.073	-0.093	.0196
	1.20	0.109	.0325	.1186	-0.030	-0.013	-.0089		-0.19	0.018	.0131	.0229	-0.097	-0.064	.0214
	1.40	0.131	.0420	.1397	.0003	-0.000	-.0089		-0.01	0.033	.0145	.0377	-0.097	-0.064	.0219
	1.60	0.149	.0522	.1576	.0017	0.005	-.0116		0.20	0.049	.0177	.0543	-0.100	-0.061	.0230
									0.60	0.083	.0288	.0868	-0.084	-0.038	.0159
									1.00	0.111	.0389	.1202	-0.084	-0.038	.0159
									1.40	0.137	.0527	.1479	-0.050	-0.004	.0081
									1.80	0.152	.0640	.1658	-0.004	-0.332	.0775
1.00	0.60	-0.040	.0167	-0.461	-0.098	-0.058	.0223	1.00	-0.60	-0.009	.0144	-0.066	-0.109	-0.067	.0243
	0.40	-0.028	.0135	-0.292	-0.093	-0.056	.0211		-0.20	0.018	.0145	.0242	-0.107	-0.069	.0249
	0.20	-0.016	.0136	-0.132	-0.093	-0.058	.0213		0.01	0.032	.0174	.0391	-0.109	-0.072	.0259
	0.05	-0.004	.0115	-0.022	-0.093	-0.059	.0213		0.20	0.046	.0208	.0548	-0.111	-0.073	.0269
	0.05	0.001	.0115	.0052	-0.093	-0.060	.0216		0.60	0.080	.0301	.0860	-0.113	-0.067	.0266
	0.21	0.011	.0120	.0161	-0.094	-0.061	.0220		1.00	0.108	.0411	.1225	-0.096	-0.043	.0186
	0.40	0.025	.0133	.0317	-0.095	-0.061	.0223		1.40	0.133	.0536	.1549	-0.049	-0.007	.0031
	0.61	0.042	.0156	.0490	-0.094	-0.057	.0209		1.79	0.155	.0692	.1821	.008	0.022	-.0091
	0.80	0.058	.0186	.0665	-0.087	-0.050	.0177								
	1.01	0.075	.0227	.0840	-0.077	-0.039	.0124		1.10	-0.60	-0.011	.0176	-0.065	-0.114	.0260
	1.20	0.092	.0265	.1016	-0.059	-0.028	.0064		-0.19	0.016	.0192	.0235	-0.110	-0.070	.0259
	1.40	0.110	.0339	.1200	-0.031	-0.013	-.0015		0.21	0.030	.0205	.0377	-0.109	-0.071	.0261
	1.60	0.128	.0418	.1383	.0004	-0.000	-.0095		0.61	0.075	.0327	.0819	-0.107	-0.064	.0249
	1.80	0.145	.0506	.1563	.0018	-0.005	-.0112		1.01	0.101	.0440	.1155	-0.090	-0.040	.0168
									1.40	0.125	.0573	.1446	-0.041	-0.006	.0005
									1.79	0.143	.0727	.1728	.0010	0.019	-.0104
1.10	0.60	-0.044	.0206	-0.450	-0.098	-0.056	.0226	1.30	-0.60	-0.011	.0151	-0.072	-0.100	-0.059	.0216
	0.40	-0.027	.0181	-0.290	-0.096	-0.057	.0220		-0.20	0.016	.0157	.0207	-0.099	-0.061	.0216
	0.19	-0.016	.0169	-0.130	-0.096	-0.059	.0224		0.01	0.029	.0175	.0351	-0.099	-0.062	.0218
	0.05	-0.007	.0157	-0.024	-0.096	-0.060	.0228		0.20	0.043	.0198	.0481	-0.098	-0.062	.0214
	0.01	-0.006	.0161	.0018	-0.095	-0.060	.0227		0.60	0.073	.0278	.0749	-0.087	-0.052	.0170
	0.05	-0.003	.0158	.0050	-0.095	-0.060	.0226		1.01	0.097	.0379	.1048	-0.066	-0.026	.0073
	0.20	0.003	.0160	.0159	-0.095	-0.061	.0226		1.41	0.123	.0513	.1323	-0.027	.005	-.0055
	0.40	0.023	.0167	.0313	-0.096	-0.061	.0229		1.80	0.148	.0692	.1565	.0012	0.022	-.0126
	0.61	0.039	.0181	.0473	-0.094	-0.057	.0212								
	0.81	0.054	.0229	.0637	-0.086	-0.049	.0176		1.70	-0.61	-0.015	.0151	-0.055	-0.076	.0050
	1.00	0.069	.0257	.0786	-0.074	-0.039	.0121		-0.20	0.010	.0153	.0200	-0.078	-0.053	.0160
	1.22	0.085	.0324	.0976	-0.054	-0.028	.0054		0.01	0.023	.0167	.0324	-0.080	-0.054	.0163
	1.39	0.100	.0357	.1126	-0.030	-0.014	-.0013		0.20	0.036	.0189	.0435	-0.081	-0.054	.0164
	1.60	0.117	.0421	.1308	.0002	-0.003	-.0083		0.61	0.061	.0258	.0663	-0.078	-0.048	.0138
	1.80	0.134	.0557	.1476	.0011	-0.002	-.0097		1.00	0.086	.0347	.0904	-0.062	-0.027	.0065
									1.40	0.110	.0479	.1125	-0.038	-0.009	.0001
									1.79	0.141	.0675	.1299	-0.017	-0.003	-.0036
1.30	0.60	-0.042	.0176	-0.447	-0.091	-0.052	.0201	2.22	-0.59	-0.015	.0140	-0.016	-0.058	-0.042	.0105
	0.39	-0.028	.0150	-0.284	-0.089	-0.052	.0197		-0.19	0.009	.0138	.0199	-0.058	-0.044	.0108
	0.20	-0.016	.0130	-0.130	-0.087	-0.053	.0194		0.00	0.020	.0141	.0301	-0.059	-0.043	.0107
	0.05	-0.006	.0130	-0.030	-0.087	-0.054	.0193		0.21	0.031	.0166	.0403	-0.059	-0.044	.0104
	0.05	0.000	.0127	.0034	-0.086	-0.054	.0191		0.60	0.054	.0227	.0594	-0.057	-0.038	.0038
	0.21	0.010	.0129	.0134	-0.084	-0.054	.0188		1.01	0.081	.0318	.0786	-0.048	-0.024	.0034
	0.40	0.023	.0141	.0279	-0.083	-0.052	.0180		1.40	0.110	.0463	.0958	-0.034	-0.020	.0011
	0.61	0.039	.0162	.0438	-0.080	-0.049	.0163		1.79	0.150	.0683	.1133	-0.032	-0.013	-.0003
	0.80	0.054	.0192	.0585	-0.073	-0.042	.0130								
	1.01	0.068	.0234	.0742	-0.062	-0.032	.0078								
	1.20	0.082	.0274	.0895	-0.043	-0.021	.0022								
	1.39	0.098	.0345	.1040	-0.019	-0.013	-.0035								

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
$\delta = 19.7^\circ$							
1.00	-0.61	0.021	.0227	.0255	-.0121	-.0076	.0268
	-0.19	0.053	.0284	.0550	-.0117	-.0080	.0272
	0.01	0.065	.0318	.0699	-.0119	-.0081	.0288
	0.21	0.079	.0382	.0856	-.0123	-.0081	.0300
	0.61	0.107	.0507	1.142	-.0121	-.0075	.0294
	10.1	0.129	.0628	1.408	-.0101	-.0048	.0217
	14.0	0.137	.0710	1.598	-.0064	-.0010	.0105
	18.0	0.152	.0865	1.841	-.0012	0.022	-.0032
1.10	-0.61	0.018	.0255	.0257	-.0121	-.0076	.0276
	-0.19	0.050	.0319	.0518	-.0117	-.0078	.0272
	0.01	0.059	.0365	.0667	-.0118	-.0079	.0282
	0.20	0.070	.0414	.0806	-.0119	-.0078	.0287
	0.60	0.095	.0539	1.053	-.0117	-.0072	.0281
	10.0	0.119	.0662	1.333	-.0095	-.0045	.0184
	14.0	0.129	.0751	1.514	-.0057	-.0005	.0061
	17.9	0.143	.0908	1.757	-.0005	0.021	-.0048
1.30	-0.61	0.015	.0216	.0226	-.0106	-.0067	.0235
	-0.19	0.044	.0260	.0476	-.0105	-.0070	.0230
	-0.00	0.054	.0301	.0598	-.0103	-.0068	.0225
	0.20	0.066	.0347	.0728	-.0103	-.0066	.0218
	0.60	0.094	.0457	.0960	-.0092	-.0056	.0187
	10.0	0.112	.0570	1.225	-.0071	-.0025	.0095
	14.0	0.130	.0701	1.417	-.0038	0.006	-.0017
	18.0	0.150	.0868	1.611	-.0012	0.030	-.0084
1.70	-0.60	0.007	.0210	.0205	-.0080	-.0055	.0165
	-0.20	0.033	.0246	.0410	-.0083	-.0061	.0170
	-0.00	0.043	.0276	.0522	-.0084	-.0061	.0171
	0.20	0.055	.0314	.0627	-.0086	-.0060	.0175
	0.60	0.079	.0404	.0830	-.0084	-.0052	.0165
	10.1	0.098	.0510	1.043	-.0067	-.0027	.0079
	14.0	0.119	.0657	1.221	-.0052	-.0008	.0042
	18.0	0.147	.0863	1.409	-.0037	0.004	-.0008
2.22	-0.60	0.003	.0194	.0187	-.0060	-.0046	.0105
	-0.45	0.028	.0172	.0376	-.0061	-.0049	.0112
	0.01	0.039	.0243	.0470	-.0062	-.0049	.0115
	0.20	0.047	.0275	.0558	-.0062	-.0047	.0114
	0.61	0.069	.0359	.0741	-.0061	-.0040	.0096
	10.0	0.086	.0452	.0909	-.0050	-.0023	.0045
	14.0	0.114	.0620	1.073	-.0044	-.0017	.0020
	17.9	0.149	.0837	1.258	-.0036	-.0009	.0001

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT
5° SIDESLIP - Continued
(f) BC

M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n	M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n
$\delta = 0^\circ$								$\delta = 0^\circ$ - Concluded							
0.70	0.61	-0.0041	0.1088	-0.4499	0.0003	-0.0006	-0.0061	2.22	0.60	-0.0036	0.1233	-0.0331	-0.0000	-0.0012	-0.0062
	0.40	-0.0024	0.0680	-0.2888	0.0002	-0.0005	-0.0064		0.40	-0.0023	0.0996	-0.0215	-0.0000	-0.0011	-0.0063
	0.19	-0.0012	0.0566	-0.1332	0.0001	-0.0005	-0.0065		0.19	-0.0012	0.0882	-0.0092	-0.0001	-0.0010	-0.0065
	0.05	-0.0003	0.0551	-0.0031	0.0001	-0.0005	-0.0066		0.04	-0.0003	0.0778	-0.0006	-0.0001	-0.0010	-0.0066
	0.01	-0.0000	0.0445	0.0008	0.0000	-0.0005	-0.0066		0.01	0.0001	0.0772	0.0024	-0.0001	-0.0010	-0.0066
	0.06	0.0002	0.0446	0.0399	0.0000	-0.0005	-0.0066		0.05	0.0002	0.0776	0.0045	-0.0001	-0.0010	-0.0067
	0.20	0.0010	0.0584	0.1332	-0.0001	-0.0004	-0.0067		0.20	0.0010	0.0800	0.0138	-0.0001	-0.0010	-0.0067
	0.40	0.0025	0.0666	0.2993	-0.0001	-0.0004	-0.0069		0.41	0.0022	0.0933	0.0260	-0.0002	-0.0010	-0.0067
	0.60	0.0040	0.0877	0.4577	-0.0002	-0.0003	-0.0068		0.60	0.0034	0.1115	0.0377	-0.0002	-0.0011	-0.0067
	0.80	0.0055	0.1122	0.6355	-0.0003	-0.0003	-0.0068		0.80	0.0048	0.1500	0.0484	-0.0002	-0.0012	-0.0064
	1.01	0.0072	0.1699	0.8226	-0.0003	-0.0004	-0.0065		1.01	0.0064	0.2000	0.0592	-0.0002	-0.0014	-0.0056
	1.21	0.0087	0.2228	1.0088	-0.0004	-0.0007	-0.0056		1.20	0.0082	0.2667	0.0675	-0.0002	-0.0017	-0.0044
	1.40	0.0101	0.2933	1.1700	-0.0005	-0.0008	-0.0049		1.40	0.0101	0.3566	0.0759	-0.0002	-0.0019	-0.0037
	1.60	0.0123	0.3855	1.3833	-0.0005	-0.0006	-0.0049		1.60	0.0122	0.4448	0.0851	-0.0003	-0.0018	-0.0035
	1.80	0.0142	0.4994	1.5811	-0.0004	-0.0006	-0.0038		1.80	0.0145	0.5711	0.0955	-0.0003	-0.0018	-0.0037
$\delta = 10^\circ$								$\delta = 10^\circ$							
0.90	0.60	-0.0042	0.0998	-0.4777	0.0002	-0.0006	-0.0063	0.70	0.59	-0.0009	0.0699	-0.0075	0.0001	-0.0008	-0.0069
	0.40	-0.0026	0.0699	-0.2997	0.0001	-0.0005	-0.0065		0.19	0.0118	0.0777	0.0220	0.0000	-0.0008	-0.0073
	0.19	-0.0012	0.0566	-0.1266	0.0000	-0.0006	-0.0066		0.01	0.0333	0.1066	0.3700	0.0000	-0.0009	-0.0073
	0.04	-0.0002	0.0554	-0.0015	0.0000	-0.0005	-0.0068		0.21	0.0448	0.1336	0.5211	-0.0001	-0.0006	-0.0077
	0.01	0.0001	0.0553	0.0155	0.0000	-0.0005	-0.0068		0.61	0.0800	0.2226	0.8660	-0.0002	-0.0002	-0.0081
	0.06	0.0003	0.0584	0.0466	-0.0001	-0.0005	-0.0068		0.99	0.1111	0.3664	1.2226	-0.0004	0.0001	-0.0069
	0.21	0.0014	0.0713	0.1633	-0.0001	-0.0005	-0.0069		1.40	0.1334	0.5133	1.5114	0.0002	0.0010	-0.0046
	0.40	0.0028	0.0899	0.3188	-0.0001	-0.0004	-0.0071	0.90	0.60	-0.0007	0.0700	-0.0079	0.0001	-0.0008	-0.0071
	0.61	0.0044	0.0977	0.4942	-0.0002	-0.0004	-0.0069		0.19	0.0221	0.0885	0.2336	0.0001	-0.0009	-0.0074
	0.81	0.0061	0.1355	0.6799	-0.0003	-0.0000	-0.0069		0.01	0.0335	0.1099	0.3392	0.0000	-0.0009	-0.0075
	1.01	0.0076	0.1811	0.8774	-0.0004	-0.0005	-0.0066		0.21	0.0551	0.1400	0.5511	-0.0001	-0.0007	-0.0079
	1.21	0.0094	0.2433	1.0566	-0.0004	-0.0005	-0.0061		0.61	0.0884	0.2339	0.9000	-0.0001	-0.0002	-0.0079
	1.40	0.0108	0.3312	1.2200	-0.0005	-0.0006	-0.0056		1.00	0.1116	0.3381	1.2555	-0.0003	0.0001	-0.0069
	1.61	0.0130	0.4412	1.4228	-0.0004	-0.0004	-0.0053		1.39	0.1337	0.5099	1.4922	0.0005	0.0012	-0.0032
	1.80	0.0149	0.5199	1.6066	-0.0005	-0.0004	-0.0041	1.00	0.60	-0.0006	0.0800	-0.0070	0.0001	-0.0008	-0.0073
1.00	0.60	-0.0040	0.1000	-0.4544	0.0002	-0.0004	-0.0067	1.00	0.60	-0.0006	0.0800	-0.0070	0.0001	-0.0008	-0.0073
	0.40	-0.0024	0.0700	-0.2777	0.0000	-0.0004	-0.0068		0.19	0.0200	0.0887	0.2339	-0.0001	-0.0008	-0.0075
	0.20	-0.0011	0.0666	-0.1115	0.0001	-0.0003	-0.0070		0.01	0.0334	0.1121	0.3396	-0.0001	-0.0007	-0.0078
	0.05	-0.0001	0.0711	-0.0001	0.0000	-0.0004	-0.0073		0.22	0.0500	0.1663	0.5588	-0.0001	-0.0006	-0.0082
	0.01	0.0003	0.0599	0.0229	0.0000	-0.0004	-0.0072		0.60	0.0733	0.1333	0.8882	-0.0001	-0.0001	-0.0082
	0.06	0.0003	0.0588	0.0662	0.0001	-0.0004	-0.0072		1.01	0.1112	0.3390	1.2554	-0.0002	0.0002	-0.0072
	0.20	0.0015	0.0771	0.1655	-0.0001	-0.0003	-0.0073		1.40	0.1338	0.5550	1.5811	-0.0002	0.0005	-0.0048
	0.41	0.0031	0.0995	0.3227	-0.0001	-0.0001	-0.0074		1.81	0.1660	0.7336	1.8995	-0.0001	0.0004	-0.0001
	0.60	0.0043	0.1099	0.5011	-0.0002	-0.0002	-0.0074	1.10	0.59	-0.0010	0.1116	-0.0061	0.0001	-0.0008	-0.0067
	0.80	0.0060	0.1399	0.6799	-0.0003	-0.0002	-0.0073		0.19	0.0177	0.1322	0.2333	0.0000	-0.0009	-0.0068
	1.01	0.0075	0.1933	0.8666	-0.0004	-0.0003	-0.0068		0.01	0.0300	0.1511	0.3390	-0.0000	-0.0010	-0.0070
	1.21	0.0092	0.2655	1.0433	-0.0005	-0.0006	-0.0057		0.20	0.0445	0.1882	0.5531	-0.0001	-0.0007	-0.0076
	1.40	0.0108	0.2922	1.2228	-0.0004	-0.0006	-0.0056		0.60	0.0883	0.2884	0.8334	-0.0002	-0.0002	-0.0078
	1.60	0.0123	0.3988	1.4000	-0.0005	-0.0007	-0.0043		1.00	0.1022	0.4411	1.1778	-0.0003	0.0000	-0.0068
	1.80	0.0139	0.4833	1.5900	-0.0005	-0.0008	-0.0025	1.30	0.59	-0.0008	0.1000	-0.0078	0.0001	-0.0008	-0.0074
1.10	0.59	-0.0043	0.1159	-0.4427	0.0001	-0.0006	-0.0061		0.19	0.0177	0.1322	0.2333	0.0000	-0.0009	-0.0068
	0.41	-0.0029	0.1288	-0.2881	0.0000	-0.0006	-0.0064		0.01	0.0300	0.1511	0.3390	-0.0000	-0.0010	-0.0070
	0.19	-0.0015	0.1088	-0.1111	0.0000	-0.0006	-0.0063		0.20	0.0445	0.1882	0.5531	-0.0001	-0.0007	-0.0076
	0.04	-0.0004	0.1066	-0.0010	0.0001	-0.0006	-0.0064		0.60	0.0883	0.2884	0.8334	-0.0002	-0.0002	-0.0078
	0.01	0.0003	0.1011	0.0229	0.0001	-0.0005	-0.0065		1.00	0.1022	0.4411	1.1778	-0.0003	0.0000	-0.0068
	0.06	0.0001	0.1033	0.0566	-0.0001	-0.0005	-0.0065		1.40	0.1226	0.5880	1.4799	-0.0003	0.0003	-0.0051
	0.21	0.0011	0.1077	0.1699	-0.0002	-0.0005	-0.0065		1.80	0.1447	0.7665	1.7667	-0.0003	0.0001	-0.0013
	0.41	0.0026	0.1177	0.3244	-0.0003	-0.0005	-0.0065	1.30	0.59	-0.0008	0.1000	-0.0078	0.0001	-0.0008	-0.0074
	0.61	0.0042	0.1444	0.4811	-0.0003	-0.0003	-0.0068		0.19	0.0177	0.1322	0.2333	0.0000	-0.0009	-0.0068
	0.80	0.0056	0.1800	0.6442	-0.0003	-0.0004	-0.0067		0.01	0.0300	0.1511	0.3390	-0.0000	-0.0010	-0.0070
	1.00	0.0071	0.2221	0.8155	-0.0004	-0.0005	-0.0064		0.20	0.0445	0.1882	0.5531	-0.0001	-0.0007	-0.0076
	1.21	0.0086	0.2811	0.9966	-0.0004	-0.0006	-0.0058		0.60	0.0883	0.2884	0.8334	-0.0002	-0.0002	-0.0078
	1.40	0.0102	0.3555	1.1566	-0.0005	-0.0008	-0.0056		1.00	0.0966	0.3558	1.0566	-0.0002	0.0001	-0.0086
	1.60	0.0117	0.4399	1.3366	-0.0005	-0.0007	-0.0045		1.40	0.1223	0.5112	1.3488	-0.0002	0.0005	-0.0072
	1.80	0.0129	0.5228	1.5066	-0.0005	-0.0010	-0.0030	1.70	0.60	-0.0012	0.1008	-0.0064	-0.0000	-0.0011	-0.0076
1.30	0.60	-0.0040	0.1229	-0.4447	0.0002	-0.0007	-0.0068		0.19	0.0133	0.1112	0.1887	-0.0001	-0.0011	-0.0078
	0.40	-0.0026	0.1044	-0.2885	0.0001	-0.0007	-0.0069		0.01	0.0225	0.1229	0.3007	-0.0001	-0.0012	-0.0081
	0.19	-0.0012	0.0900	-0.1333	0.0001	-0.0007	-0.0070		0.20	0.0336	0.1511	0.4110	-0.0001	-0.0011	-0.0083
	0.04	-0.0003	0.0880	-0.0027	0.0000	-0.0007	-0.0071		0.60	0.0661	0.2118	0.6566	-0.0002	-0.0008	-0.0090
	0.01	0.0001	0.0884	0.0009	0.0000	-0.0007	-0.0071		0.99	0.0885	0.3288	0.9011	-0.0002	-0.0003	-0.0083
	0.06	0.0003	0.0883	0.044											

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT
 5° SIDESLIP - Continued
 (f) BC - Concluded

M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n
$\delta = 19.7^\circ$							
1.00	-05.9	0.028	.0161	.0281	-.0000	-0.011	-.0079
	-01.8	0.057	.0217	.0564	-.0001	-0.012	-.0081
	00.1	0.070	.0276	.0712	-.0001	-0.011	-.0080
	02.1	0.084	.0328	.0858	-.0001	-0.009	-.0083
	06.0	0.108	.0445	.1158	-.0001	-0.003	-.0088
	10.0	0.128	.0573	.1414	.0001	0.007	-.0076
14.0	0.146	.0722	.1652	.0002	0.015	-.0039	
1.10	-05.9	0.024	.0196	.0271	-.0001	-0.012	-.0071
	-01.9	0.053	.0270	.0528	-.0002	-0.013	-.0074
	00.1	0.065	.0315	.0678	-.0003	-0.011	-.0075
	02.0	0.076	.0362	.0813	-.0000	-0.009	-.0083
	06.0	0.099	.0492	.1077	-.0002	-0.006	-.0082
	10.1	0.119	.0612	.1329	.0000	0.005	-.0082
14.0	0.138	.0777	.1571	.0001	0.011	-.0055	
17.9	0.151	.0943	.1777	.0000	0.006	.0014	
1.30	-05.9	0.022	.0171	.0232	-.0000	-0.014	-.0070
	-02.0	0.048	.0223	.0466	.0000	-0.015	-.0083
	00.1	0.059	.0264	.0598	-.0000	-0.012	-.0088
	02.0	0.069	.0309	.0722	-.0000	-0.010	-.0096
	06.0	0.096	.0424	.0973	-.0001	-0.005	-.0094
	10.0	0.114	.0554	.1228	-.0002	0.006	-.0082
14.0	0.136	.0714	.1438	-.0001	0.013	-.0073	
17.9	0.152	.0890	.1617	.0000	0.011	-.0001	
1.70	-06.0	0.012	.0167	.0190	-.0001	-0.014	-.0071
	-01.9	0.038	.0208	.0393	-.0001	-0.016	-.0083
	00.1	0.050	.0241	.0502	-.0001	-0.015	-.0089
	02.0	0.060	.0278	.0604	-.0001	-0.013	-.0090
	06.0	0.082	.0375	.0820	-.0001	-0.007	-.0091
	10.0	0.099	.0492	.1033	-.0001	0.000	-.0088
13.9	0.122	.0646	.1216	-.0000	0.009	-.0060	
18.0	0.155	.0891	.1406	-.0001	0.005	-.0025	
2.22	-05.9	0.007	.0159	.0174	-.0002	-0.014	-.0070
	-01.9	0.032	.0186	.0352	-.0002	-0.016	-.0073
	00.1	0.042	.0208	.0448	-.0002	-0.015	-.0075
	02.2	0.051	.0247	.0548	-.0002	-0.013	-.0078
	06.0	0.072	.0334	.0735	-.0002	-0.009	-.0086
	10.0	0.089	.0442	.0904	-.0002	-0.005	-.0079
13.9	0.120	.0615	.1061	-.0002	-0.001	-.0063	
17.9	0.155	.0860	.1259	-.0002	-0.003	-.0044	

TABLE III.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT
5° SIDESLIP - Continued
(g) BV

M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n	M	α , deg	C_L	C_D	C_m	C_l	C_y	C_n
0.70	0.61	-0.0009	.0106	-.0121	-.0092	-.0057	.0196	1.30	0.60	-0.013	.0139	-.0111	-.0101	-0.060	.0227
	0.41	-0.0008	.0100	-.0077	-.0089	-.0056	.0190		0.40	-0.009	.0128	-.0071	-.0097	-0.058	.0217
	0.19	-0.0003	.0092	-.0040	-.0085	-.0054	.0183		0.19	-0.004	.0120	-.0031	-.0092	-0.055	.0204
	0.05	-0.0001	.0088	-.0009	-.0082	-.0053	.0177		0.05	-0.001	.0116	-.0006	-.0088	-0.053	.0194
	0.01	-0.0000	.0087	.0004	-.0081	-.0053	.0177		0.01	-0.001	.0114	.0008	-.0086	-0.053	.0190
	0.05	0.0001	.0075	.0009	-.0080	-.0052	.0175		0.05	0.000	.0112	.0017	-.0085	-0.052	.0187
	0.20	0.0001	.0085	.0042	-.0076	-.0050	.0167		0.21	0.003	.0112	.0049	-.0079	-0.051	.0177
	0.41	0.0005	.0085	.0084	-.0072	-.0049	.0161		0.40	0.006	.0105	.0084	-.0074	-0.049	.0165
	0.60	0.0009	.0087	.0116	-.0069	-.0048	.0156		0.60	0.010	.0114	.0130	-.0070	-0.047	.0156
	0.81	0.012	.0091	.0157	-.0066	-.0046	.0148		0.80	0.015	.0123	.0164	-.0067	-0.046	.0146
	1.00	0.018	.0099	.0188	-.0064	-.0045	.0141		1.00	0.022	.0137	.0201	-.0065	-0.044	.0133
	1.21	0.026	.0115	.0212	-.0062	-.0043	.0131		1.20	0.032	.0165	.0229	-.0063	-0.041	.0115
	1.40	0.034	.0134	.0239	-.0060	-.0040	.0119		1.41	0.042	.0194	.0263	-.0062	-0.038	.0094
	1.60	0.043	.0166	.0267	-.0060	-.0037	.0106		1.61	0.055	.0235	.0293	-.0060	-0.033	.0070
1.80	0.052	.0202	.0299	-.0060	-.0035	.0095	1.80	0.067	.0286	.0331	-.0058	-0.028	.0042		
0.90	0.61	-0.010	.0108	-.0120	-.0097	-.0059	.0211	1.70	0.60	-0.017	.0142	-.0095	-.0077	-0.052	.0165
	0.40	-0.007	.0099	-.0076	-.0093	-.0057	.0203		0.41	-0.013	.0134	-.0059	-.0076	-0.050	.0161
	0.19	-0.002	.0091	-.0035	-.0089	-.0056	.0198		0.19	-0.008	.0123	-.0020	-.0075	-0.049	.0156
	0.05	-0.0002	.0090	-.0005	-.0086	-.0054	.0190		0.05	-0.004	.0118	.0007	-.0073	-0.048	.0153
	0.01	0.0001	.0086	.0004	-.0084	-.0053	.0188		0.01	0.000	.0116	.0020	-.0073	-0.048	.0151
	0.05	0.0001	.0083	.0017	-.0083	-.0053	.0187		0.05	-0.003	.0116	.0029	-.0072	-0.048	.0150
	0.21	0.002	.0086	.0051	-.0080	-.0052	.0178		0.20	0.000	.0115	.0057	-.0071	-0.047	.0146
	0.40	0.005	.0083	.0090	-.0075	-.0050	.0169		0.40	0.004	.0116	.0097	-.0068	-0.046	.0138
	0.60	0.009	.0091	.0125	-.0072	-.0049	.0164		0.61	0.011	.0121	.0132	-.0065	-0.044	.0126
	0.80	0.013	.0097	.0157	-.0069	-.0048	.0156		0.80	0.016	.0127	.0170	-.0062	-0.042	.0111
	1.00	0.019	.0106	.0191	-.0066	-.0046	.0147		1.00	0.026	.0142	.0202	-.0059	-0.040	.0093
	1.21	0.027	.0123	.0222	-.0064	-.0044	.0135		1.20	0.037	.0172	.0234	-.0057	-0.036	.0073
	1.40	0.035	.0140	.0252	-.0063	-.0041	.0123		1.40	0.051	.0217	.0267	-.0054	-0.033	.0050
	1.61	0.045	.0174	.0288	-.0062	-.0038	.0107		1.61	0.070	.0284	.0305	-.0049	-0.029	.0017
1.80	0.056	.0214	.0323	-.0062	-.0035	.0094	1.80	0.088	.0365	.0360	-.0044	-0.027	-.0009		
1.00	0.61	-0.010	.0128	-.0127	-.0109	-.0066	.0248	2.22	0.61	-0.019	.0132	-.0089	-.0057	-0.045	.0113
	0.40	-0.006	.0118	-.0083	-.0102	-.0063	.0234		0.41	-0.013	.0116	-.0047	-.0056	-0.042	.0111
	0.22	-0.004	.0108	-.0042	-.0098	-.0060	.0222		0.20	-0.008	.0108	-.0013	-.0055	-0.041	.0108
	0.05	-0.000	.0103	-.0000	-.0093	-.0059	.0213		0.05	-0.005	.0105	.0019	-.0054	-0.040	.0105
	0.01	0.0001	.0107	.0007	-.0091	-.0058	.0210		0.01	-0.004	.0100	.0032	-.0054	-0.040	.0103
	0.04	-0.0001	.0107	.0024	-.0091	-.0058	.0210		0.05	-0.003	.0098	.0042	-.0054	-0.040	.0103
	0.20	0.001	.0096	.0057	-.0087	-.0056	.0202		0.21	0.001	.0103	.0069	-.0053	-0.039	.0099
	0.41	0.005	.0096	.0091	-.0082	-.0053	.0192		0.40	0.007	.0102	.0105	-.0052	-0.038	.0095
	0.61	0.009	.0107	.0130	-.0079	-.0052	.0186		0.61	0.013	.0110	.0145	-.0051	-0.038	.0088
	0.81	0.015	.0108	.0163	-.0075	-.0050	.0176		0.80	0.021	.0121	.0179	-.0050	-0.036	.0078
	1.01	0.021	.0119	.0201	-.0071	-.0048	.0165		1.00	0.034	.0155	.0204	-.0047	-0.036	.0063
	1.20	0.025	.0130	.0231	-.0070	-.0045	.0153		1.21	0.050	.0194	.0231	-.0044	-0.034	.0041
	1.40	0.038	.0159	.0263	-.0068	-.0041	.0138		1.40	0.068	.0255	.0268	-.0039	-0.033	.0017
	1.60	0.049	.0204	.0283	-.0067	-.0038	.0119		1.60	0.085	.0322	.0313	-.0035	-0.033	.0000
1.80	0.057	.0228	.0328	-.0064	-.0034	.0097	1.81	0.102	.0419	.0355	-.0030	-0.032	-.0016		
1.10	0.61	-0.012	.0170	-.0118	-.0113	-.0068	.0262	2.22	0.61	-0.019	.0132	-.0089	-.0057	-0.045	.0113
	0.41	-0.009	.0164	-.0077	-.0106	-.0064	.0244		0.41	-0.013	.0116	-.0047	-.0056	-0.042	.0111
	0.19	-0.006	.0147	-.0030	-.0098	-.0062	.0230		0.19	-0.008	.0108	-.0013	-.0055	-0.041	.0108
	0.05	-0.004	.0144	.0003	-.0093	-.0059	.0217		0.05	-0.005	.0105	.0019	-.0054	-0.040	.0105
	0.01	-0.001	.0142	.0017	-.0093	-.0059	.0217		0.01	-0.004	.0100	.0032	-.0054	-0.040	.0103
	0.05	-0.003	.0135	.0022	-.0093	-.0059	.0220		0.05	-0.003	.0098	.0042	-.0054	-0.040	.0103
	0.20	-0.000	.0141	.0054	-.0088	-.0057	.0212		0.21	0.001	.0103	.0069	-.0053	-0.039	.0099
	0.41	0.002	.0131	.0091	-.0084	-.0055	.0205		0.40	0.007	.0102	.0105	-.0052	-0.038	.0095
	0.61	0.007	.0142	.0124	-.0080	-.0053	.0192		0.61	0.013	.0110	.0145	-.0051	-0.038	.0088
	0.81	0.013	.0140	.0162	-.0078	-.0052	.0187		0.80	0.021	.0121	.0179	-.0050	-0.036	.0078
	1.00	0.021	.0156	.0182	-.0075	-.0049	.0176		1.00	0.034	.0155	.0204	-.0047	-0.036	.0063
	1.21	0.026	.0168	.0213	-.0071	-.0046	.0158		1.21	0.050	.0194	.0231	-.0044	-0.034	.0041
	1.40	0.035	.0187	.0239	-.0070	-.0042	.0140		1.40	0.068	.0255	.0268	-.0039	-0.033	.0017
	1.61	0.047	.0228	.0273	-.0068	-.0038	.0117		1.60	0.085	.0322	.0313	-.0035	-0.033	.0000
1.80	0.056	.0258	.0310	-.0065	-.0032	.0086	1.80	0.102	.0419	.0355	-.0030	-0.032	-.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	-.0009	-.0059
	-06.2	-0.015	.0072	-.0110	-.0001	-.0008	-.0062
	-04.3	-0.011	.0062	-.0074	-.0001	-.0007	-.0064
	-02.3	-0.008	.0057	-.0035	-.0001	-.0006	-.0065
	-00.1	-0.005	.0055	.0012	-.0001	-.0007	-.0065
	01.8	-0.003	.0053	.0051	-.0001	-.0007	-.0064
	03.7	0.001	.0052	.0088	-.0001	-.0007	-.0064
	05.7	0.004	.0054	.0128	-.0001	-.0007	-.0063
	07.7	0.008	.0062	.0162	-.0001	-.0008	-.0060
	09.7	0.012	.0072	.0201	-.0001	-.0009	-.0059
0.90	-07.9	-0.019	.0083	-.0145	-.0001	-.0009	-.0062
	-05.9	-0.014	.0070	-.0111	-.0001	-.0009	-.0063
	-03.9	-0.010	.0064	-.0073	-.0001	-.0008	-.0065
	-02.0	-0.006	.0059	-.0033	-.0001	-.0007	-.0067
	00.1	-0.004	.0054	.0013	-.0001	-.0007	-.0067
	02.0	-0.001	.0053	.0055	-.0001	-.0006	-.0067
	04.0	0.002	.0055	.0092	-.0001	-.0007	-.0066
	06.0	0.005	.0058	.0131	-.0000	-.0007	-.0063
	08.0	0.008	.0065	.0169	-.0000	-.0008	-.0061
	10.0	0.014	.0075	.0203	-.0000	-.0009	-.0059
1.00	-07.8	-0.023	.0116	-.0144	-.0002	-.0009	-.0064
	-05.7	-0.017	.0093	-.0109	-.0002	-.0008	-.0067
	-03.7	-0.013	.0088	-.0068	-.0002	-.0007	-.0068
	-01.9	-0.009	.0072	-.0034	-.0001	-.0006	-.0069
	00.2	-0.008	.0074	.0019	-.0001	-.0006	-.0070
	02.2	-0.003	.0072	.0062	-.0001	-.0006	-.0067
	04.2			.0104	-.0001	-.0006	-.0067
	06.2	0.002	.0080	.0140	-.0001	-.0007	-.0064
	08.2	0.006	.0081	.0184	-.0001	-.0009	-.0062
	10.2	0.011	.0102	.0223	-.0001	-.0010	-.0060
1.10	-08.0	-0.019	.0122	-.0145	-.0001	-.0009	-.0061
	-05.9	-0.013	.0113	-.0110	-.0001	-.0008	-.0063
	-04.0	-0.009	.0107	-.0072	-.0001	-.0008	-.0063
	-02.0	-0.006	.0093	-.0036	-.0001	-.0006	-.0065
	-00.1	-0.004	.0099	.0009	-.0001	-.0006	-.0063
	01.9	0.001	.0094	.0050	-.0001	-.0007	-.0064
	03.9	0.004	.0097	.0090	-.0000	-.0008	-.0062
	06.0	0.007	.0100	.0131	-.0001	-.0008	-.0060
	08.0	0.010	.0110	.0166	-.0000	-.0009	-.0058
	10.1	0.014	.0121	.0203	-.0000	-.0010	-.0056
1.30	-08.0	-0.018	.0102	-.0160	.0000	-.0010	-.0066
	-05.9	-0.012	.0089	-.0123	-.0000	-.0009	-.0068
	-04.0	-0.008	.0080	-.0084	-.0000	-.0008	-.0070
	-02.0	-0.004	.0076	-.0042	-.0000	-.0007	-.0071
	-00.1	-0.001	.0075	-.0001	-.0000	-.0007	-.0071
	02.0	0.003	.0075	.0041	-.0000	-.0007	-.0071
	04.0	0.006	.0077	.0086	-.0000	-.0008	-.0069
	05.9	0.009	.0083	.0123	-.0000	-.0008	-.0068
	08.0	0.014	.0095	.0159	-.0000	-.0009	-.0066
	09.9	0.019	.0110	.0195	.0000	-.0011	-.0064
1.70	-08.1	-0.019	.0105	-.0158	.0000	-.0012	-.0070
	-06.0	-0.012	.0090	-.0119	.0000	-.0011	-.0071
	-04.3	-0.008	.0080	-.0085	.0000	-.0009	-.0073
	-02.3	-0.004	.0075	-.0044	.0000	-.0008	-.0075
	-00.3	0.001	.0073	-.0005	.0000	-.0008	-.0076
	01.8	0.002	.0074	.0041	.0000	-.0008	-.0076
	03.8	0.007	.0079	.0083	.0000	-.0009	-.0075
	05.7	0.010	.0086	.0120	.0000	-.0009	-.0074
	07.8	0.016	.0099	.0159	.0000	-.0011	-.0074
	09.9	0.023	.0119	.0197	.0000	-.0012	-.0073
2.22	-08.0	-0.023	.0107	-.0158	-.0000	-.0015	-.0065
	-05.8	-0.014	.0086	-.0117	-.0000	-.0012	-.0067
	-01.7	-0.003	.0070	-.0036	-.0000	-.0010	-.0069
	00.3	0.001	.0069	.0006	-.0000	-.0009	-.0069
	02.3	0.004	.0070	.0054	-.0000	-.0010	-.0069
	04.3	0.009	.0075	.0098	-.0000	-.0011	-.0068
	06.2	0.014	.0087	.0134	-.0000	-.0012	-.0066
	08.2	0.022	.0106	.0171	-.0000	-.0014	-.0064
	10.3	0.033	.0130	.0204	.0000	-.0018	-.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	M	β , deg	C_L	C_D	C_m	C_l	C_Y	C_n
$\delta = 0^\circ$								$\delta = 9.7^\circ$ - Concluded							
0.70	-0.80	-0.006	.0235	.0034	.0107	0.100	-0.362	1.10	-0.80	-0.015	.0355	.0505	.0175	0.104	-0.390
	-0.41	-0.006	.0139	.0036	.0049	0.050	-0.177		-0.40	-0.013	.0251	.0423	.0083	0.049	-0.172
	-0.00	-0.003	.0110	.0030	.0010	0.006	-0.017		-0.00	-0.016	.0219	.0425	.0009	-0.002	.0006
	0.20	-0.003	.0108	.0030	.0033	-0.016	.0047		0.19	-0.013	.0230	.0425	.0049	-0.027	.0093
	0.40	-0.003	.0125	.0024	.0060	-0.039	.0127		0.40	-0.013	.0242	.0430	.0100	-0.054	.0193
	0.60	-0.002	.0160	.0025	.0090	-0.065	.0224		0.60	-0.012	.0289	.0454	.0149	-0.055	.0315
	0.79	-0.002	.0213	.0030	.0116	-0.091	.0317		0.80	-0.011	.0353	.0483	.0195	-0.110	.0402
	1.00	-0.002	.0292	.0035	.0140	-0.120	.0415		1.01	-0.010	.0434	.0514	.0240	-0.139	.0511
0.90	-0.80	-0.010	.0236	.0051	.0104	0.098	-0.362	1.30	-0.80	0.002	.0306	.0392	.0174	0.092	-0.335
	-0.40	-0.010	.0133	.0053	.0045	0.045	-0.162		-0.40	-0.003	.0220	.0359	.0079	0.047	-0.168
	-0.00	-0.010	.0110	.0058	.0011	0.003	-0.006		-0.00	-0.003	.0194	.0341	.0007	0.001	-0.005
	0.20	-0.008	.0111	.0053	.0035	-0.020	.0064		0.20	-0.001	.0198	.0336	.0047	-0.022	.0069
	0.40	-0.008	.0129	.0050	.0065	-0.044	.0154		0.40	0.000	.0218	.0345	.0143	-0.072	.0250
	0.60	-0.008	.0166	.0054	.0095	-0.071	.0255		0.60	0.002	.0247	.0357	.0143	-0.072	.0250
	0.80	-0.009	.0224	.0061	.0123	-0.100	.0363		0.80	0.004	.0294	.0383	.0189	-0.095	.0333
	1.01	-0.010	.0293	.0067	.0127	-0.121	.0410		1.00	0.008	.0362	.0410	.0231	-0.117	.0400
1.00	-0.79	-0.014	.0299	.0086	.0135	0.103	-0.403	1.70	-0.80	0.000	.0284	.0368	.0144	0.077	-0.231
	-0.40	-0.012	.0218	.0064	.0062	0.051	-0.191		-0.40	-0.003	.0208	.0342	.0075	0.039	-0.121
	0.01	-0.010	.0158	.0069	.0015	-0.004	.0013		-0.00	-0.003	.0182	.0323	.0002	0.003	-0.009
	0.20	-0.010	.0187	.0070	.0048	-0.027	.0096		0.20	-0.002	.0189	.0320	.0040	-0.017	.0045
	0.40	-0.009	.0207	.0072	.0089	-0.054	.0208		0.41	-0.002	.0209	.0331	.0081	-0.038	.0058
	0.60	-0.012	.0252	.0084	.0126	-0.084	.0292		0.60	0.001	.0235	.0335	.0115	-0.055	.0157
	0.80	-0.012	.0316	.0098	.0154	-0.109	.0412		0.80	0.003	.0274	.0346	.0146	-0.074	.0207
	1.00	-0.017	.0377	.0128	.0176	-0.134	.0489		1.00	0.005	.0330	.0365	.0173	-0.093	.0252
1.10	-0.81	-0.009	.0321	.0064	.0142	0.103	-0.406	2.22	-0.79	-0.002	.0245	.0322	.0097	0.059	-0.135
	-0.39	-0.006	.0212	.0039	.0059	0.047	-0.174		-0.40	-0.001	.0183	.0298	.0047	0.029	-0.066
	0.01	-0.007	.0193	.0047	.0014	-0.001	.0011		-0.00	0.002	.0161	.0275	.0037	-0.033	.0040
	0.20	-0.007	.0191	.0048	.0037	-0.024	.0090		0.20	0.001	.0169	.0278	.0034	-0.018	.0028
	0.40	-0.005	.0207	.0045	.0059	-0.051	.0200		0.40	-0.001	.0186	.0293	.0062	-0.034	.0075
	0.61	-0.005	.0259	.0051	.0130	-0.080	.0315		0.61	-0.001	.0215	.0306	.0089	-0.052	.0113
	0.80	-0.009	.0310	.0068	.0163	-0.106	.0416		0.80	-0.001	.0254	.0314	.0111	-0.068	.0145
	1.00	-0.011	.0402	.0080	.0194	-0.136	.0527		1.00	0.001	.0307	.0313	.0130	-0.088	.0172
1.30	-0.40	-0.003	.0182	.0018	.0061	0.045	-0.168	$\delta = 19.7^\circ$							
	-0.01	-0.001	.0158	.0012	.0009	-0.001	-0.007	1.00	-0.79	-0.001	.0472	.0829	.0210	0.108	-0.393
	0.20	0.000	.0161	.0008	.0043	-0.021	.0164		-0.40	-0.002	.0372	.0739	.0092	0.052	-0.178
	0.40	0.001	.0179	.0004	.0079	-0.044	.0164		-0.01	-0.001	.0345	.0705	.0014	0.000	.0000
	0.61	0.001	.0214	.0007	.0118	-0.069	.0260		0.19	0.002	.0365	.0708	.0066	-0.030	.0088
	0.79	-0.001	.0260	.0013	.0150	-0.091	.0341		0.40	0.001	.0382	.0736	.0130	-0.060	.0208
	1.00	-0.001	.0326	.0026	.0180	-0.116	.0418		0.60	0.002	.0426	.0775	.0183	-0.090	.0308
1.70	-0.81	-0.007	.0253	.0038	.0103	0.078	-0.249	1.10	-0.80	-0.009	.0483	.0831	.0210	0.103	-0.373
	-0.40	-0.005	.0176	.0025	.0051	0.039	-0.129		-0.40	-0.007	.0388	.0740	.0095	0.051	-0.173
	0.01	-0.003	.0150	.0017	.0005	0.003	-0.006		-0.00	-0.009	.0358	.0715	.0011	-0.005	.0013
	0.20	-0.004	.0154	.0020	.0032	-0.017	.0177		0.20	-0.010	.0368	.0732	.0061	-0.028	.0094
	0.40	-0.004	.0170	.0023	.0059	-0.036	.0178		0.40	-0.008	.0389	.0750	.0120	-0.056	.0192
	0.61	-0.005	.0198	.0028	.0087	-0.056	.0178		0.60	-0.005	.0432	.0774	.0183	-0.086	.0301
	0.80	-0.005	.0242	.0034	.0110	-0.074	.0231		0.80	0.000	.0467	.0820	.0225	-0.118	.0393
	1.00	-0.005	.0298	.0042	.0131	-0.094	.0278		1.00	0.006	.0572	.0877	.0290	-0.149	.0498
2.22	-0.80	-0.008	.0217	.0035	.0073	0.063	-0.150	1.30	-0.80	0.009	.0424	.0689	.0209	0.095	-0.325
	-0.40	-0.006	.0151	.0021	.0035	0.030	-0.077		-0.40	0.000	.0332	.0641	.0095	0.045	-0.152
	-0.00	-0.006	.0130	.0017	.0006	-0.001	.0005		-0.00	-0.003	.0310	.0618	.0008	0.001	-0.006
	0.20	-0.005	.0137	.0018	.0027	-0.018	.0048		0.20	0.000	.0319	.0610	.0055	-0.022	.0060
	0.40	-0.006	.0152	.0023	.0047	-0.034	.0087		0.40	0.001	.0337	.0653	.0109	-0.047	.0139
	0.60	-0.006	.0183	.0030	.0067	-0.051	.0126		0.60	0.007	.0372	.0653	.0166	-0.073	.0231
	0.79	-0.007	.0220	.0037	.0085	-0.068	.0159		0.80	0.014	.0423	.0669	.0222	-0.098	.0313
	1.00	-0.008	.0274	.0043	.0101	-0.086	.0187		1.00	0.023	.0488	.0704	.0271	-0.122	.0379
0.70	-0.80	0.003	.0274	.0409	.0144	0.104	-0.358	1.70	-0.80	0.009	.0380	.0606	.0166	0.077	-0.219
	-0.40	0.001	.0179	.0370	.0066	0.052	-0.158		-0.40	0.002	.0308	.0568	.0084	0.039	-0.107
	-0.00	0.003	.0149	.0350	.0011	0.005	-0.015		-0.00	0.000	.0287	.0542	.0003	0.002	-0.009
	0.20	0.003	.0153	.0349	.0042	-0.018	.0045		0.20	0.001	.0291	.0543	.0048	-0.017	.0039
	0.40	0.005	.0163	.0351	.0077	-0.042	.0124		0.40	0.004	.0308	.0555	.0091	-0.039	.0088
	0.60	0.005	.0202	.0366	.0117	-0.069	.0217		0.60	0.008	.0340	.0576	.0134	-0.058	.0143
	0.79	0.005	.0259	.0390	.0155	-0.096	.0316		0.80	0.012	.0382	.0585	.0172	-0.078	.0196
	1.00	0.006	.0329	.0417	.0186	-0.122	.0403		1.00	0.018	.0442	.0605	.0209	-0.099	.0241
0.90	-0.80	-0.003	.0284	.0439	.0142	0.103	-0.361	2.22	-0.81	0.008	.0336	.0520	.0119	0.062	-0.128
	-0.40	-0.002	.0177	.0389	.0065	0.049	-0.162		-0.40	0.007	.0269	.0493	.0059	0.027	-0.059
	0.01	-0.002	.0153	.0375	.0013	0.001	-0.002		0.01	0.008	.0253	.0474	.0008	-0.003	.0005
	0.19	-0.001	.0155	.0377	.0044	-0.022	.0062		0.20	0.009	.0259	.0476	.0041	-0.018	.0036
	0.40	-0.001	.0170	.0385	.0077	-0.044	.0154		0.40	0.010	.0275	.0485	.0075	-0.035	.0066
	0.60	-0.001	.0216	.0402	.0126	-0.077	.0258		0.60	0.010	.0304	.0501	.0105	-0.052	.0100
	0.80	-0.001	.0274	.0430	.0160	-0.104	.0354		0.79	0.011	.0345	.0510	.0132	-0.071	.0132
	1.00	0.000	.0338	.0458	.0175	-0.124	.0399		1.00	0.014	.0406	.0513	.0151	-0.093	.0160
1.00	-0.81	-0.009	.0358	.0486	.0177	0.111	-0.413								
	-0.40	-0.005	.0256	.0410	.0081	0.053	-0.187								
	-0.01	-0.004	.0183	.0384	.0013	-0.022	.0062								
	0.20	-0.003	.0232	.0385	.00										

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Continued
(b) BVW

M	β , deg	C_L	C_D	C_m	C_l	C_y	C_n
0.70	-0.80	-0.0006	.0223	.0031	.0109	0.101	-.0364
	-0.40	-0.0005	.0126	.0031	.0047	0.048	-.0167
	-0.00	-0.0003	.0104	.0030	-.0009	0.006	-.0016
	0.19	-0.0001	.0104	.0025	-.0032	-.0016	.0048
	0.40	-0.0002	.0118	.0026	-.0061	-.0040	.0129
	0.60	-0.0002	.0160	.0032	-.0091	-.0067	.0227
	0.80	-0.0002	.0213	.0037	-.0120	-.0094	.0328
	1.00	-0.0001	.0287	.0040	-.0142	-.0121	.0417
0.90	-0.21	-0.0009	.0112	.0057	.0018	0.024	-.0082
	-0.01	-0.0008	.0108	.0059	-.0010	0.004	-.0007
	0.20	-0.0008	.0110	.0054	-.0036	-.0020	.0066
	0.40	-0.0007	.0127	.0053	-.0066	-.0046	.0157
	0.61	-0.0009	.0168	.0063	-.0099	-.0073	.0266
	0.80	-0.0010	.0225	.0071	-.0125	-.0101	.0367
	1.00	-0.0010	.0295	.0075	-.0129	-.0121	.0414
1.00	-0.81	-0.0009	.0296	.0071	.0143	0.108	-.0420
	-0.40	-0.0006	.0191	.0059	.0061	0.051	-.0185
	-0.00	-0.0005	.0154	.0059	-.0014	-.0002	.0005
	0.19	-0.0006	.0177	.0061	-.0047	-.0026	.0093
	0.40	-0.0006	.0190	.0063	-.0091	-.0056	.0217
	0.61	-0.0006	.0249	.0079	-.0130	-.0086	.0335
	0.80	-0.0009	.0297	.0098	-.0156	-.0111	.0423
	1.01	-0.0014	.0369	.0128	-.0177	-.0135	.0494
1.10	-0.81	-0.0007	.0296	.0055	.0146	0.104	-.0411
	-0.40	-0.0004	.0199	.0039	.0067	0.051	-.0192
	0.01	-0.0003	.0167	.0040	-.0012	-.0002	.0004
	0.19	-0.0002	.0179	.0031	-.0046	-.0025	.0100
	0.40	-0.0003	.0199	.0045	-.0089	-.0053	.0207
	0.61	-0.0002	.0245	.0048	-.0130	-.0082	.0325
	0.80	-0.0005	.0297	.0070	-.0164	-.0108	.0422
1.01	-0.0008	.0387	.0088	-.0195	-.0137	.0523	
1.30	-0.81	-0.0002	.0258	.0019	.0137	0.093	-.0350
	-0.40	-0.0001	.0168	.0010	.0063	0.044	-.0168
	-0.00	0.0001	.0144	.0011	-.0003	0.002	-.0003
	0.21	0.0001	.0149	.0007	-.0043	-.0022	.0077
	0.41	0.0001	.0167	.0008	-.0080	-.0045	.0167
	0.61	0.0001	.0205	.0015	-.0118	-.0069	.0263
	0.80	0.0000	.0249	.0023	-.0150	-.0092	.0343
	1.01	0.0000	.0318	.0035	-.0178	-.0117	.0422
1.70	-0.81	-0.0006	.0240	.0040	.0105	0.078	-.0249
	-0.40	-0.0004	.0164	.0025	.0052	0.040	-.0129
	0.01	-0.0002	.0138	.0021	-.0004	0.002	-.0004
	0.19	-0.0003	.0143	.0021	-.0031	-.0017	.0053
	0.40	-0.0003	.0159	.0024	-.0059	-.0036	.0117
	0.60	-0.0004	.0189	.0033	-.0087	-.0055	.0177
	0.80	-0.0004	.0232	.0039	-.0110	-.0074	.0232
	1.00	-0.0005	.0288	.0047	-.0132	-.0094	.0279
2.22	-0.81	-0.0007	.0212	.0037	.0076	0.063	-.0151
	-0.40	-0.0006	.0140	.0029	.0035	0.029	-.0077
	-0.00	-0.0005	.0122	.0026	-.0006	-.0001	.0005
	0.20	-0.0005	.0128	.0030	-.0028	-.0019	.0049
	0.40	-0.0005	.0143	.0031	-.0049	-.0035	.0091
	0.61	-0.0006	.0176	.0040	-.0069	-.0052	.0131
	0.80	-0.0007	.0214	.0046	-.0087	-.0069	.0162
	1.01	-0.0007	.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	M	β , deg	C_L	C_D	C_m	C_l	C_Y	C_n	
$\delta = 0^\circ$								$\delta = 9.7^\circ$ - Concluded								
0.70	-0.80	-0.0005	.0118	.0061	-0.012	.0013	.0096	1.10	-0.79	-0.010	.0225	.0441	.0024	.0013	.0103	
	-0.40	-0.0005	.0095	.0048	-0.013	.0005	.0048		-0.40	-0.012	.0212	.0394	.0006	-0.004	.0055	
	0.01	-0.0002	.0097	.0039	-0.013	.0000	-0.001		0.01	-0.012	.0214	.0373	-0.0006	-0.003	.0023	
	0.20	-0.001	.0095	.0035	-0.014	-0.001	-0.0025		0.21	-0.011	.0216	.0375	-0.012	-0.004	.0053	
	0.41	0.000	.0095	.0031	-0.014	-0.004	-0.0050		0.41	-0.011	.0223	.0397	-0.020	-0.008	.0074	
	0.62	0.000	.0099	.0026	-0.014	-0.008	-0.0073		0.61	-0.009	.0223	.0399	-0.030	-0.013	.0103	
	0.81	0.002	.0107	.0023	-0.015	-0.013	-0.0094		1.01	-0.005	.0243	.0419	-0.044	-0.017	.0123	
	1.01	0.003	.0127	.0023	-0.015	-0.018	-0.0116				.0255	.0426	-0.059	-0.024	.0123	
0.90	-0.80	-0.0009	.0117	.0071	-0.012	.0012	.0096	1.30	-0.79	0.003	.0201	.0363	.0029	.0016	.0103	
	-0.40	-0.0006	.0102	.0062	-0.012	.0005	.0049		-0.39	-0.001	.0183	.0332	.0002	.0006	.0055	
	0.01	-0.0004	.0099	.0046	-0.013	.0000	-0.002		0.01	-0.001	.0174	.0313	-0.011	-0.000	.0011	
	0.21	-0.003	.0096	.0040	-0.013	-0.002	-0.0027		0.21	0.000	.0184	.0313	-0.016	-0.006	.0025	
	0.41	-0.002	.0097	.0036	-0.014	-0.005	-0.0053		0.61	0.006	.0194	.0329	-0.037	-0.013	.0081	
	0.61	-0.001	.0101	.0033	-0.014	-0.009	-0.0076		0.80	0.009	.0206	.0343	-0.051	-0.018	.0104	
	0.80	-0.001	.0110	.0033	-0.014	-0.013	-0.0097		1.01	0.011	.0219	.0365	-0.067	-0.025	.0129	
	1.01	0.000	.0121	.0029	-0.015	-0.019	-0.0119									
1.00	-0.79	-0.008	.0193	.0067	-0.011	.0012	.0098	1.70	-0.80	0.002	.0200	.0336	.0035	.0020	.0103	
	-0.40	-0.006	.0178	.0054	-0.011	.0004	.0053		-0.40	-0.002	.0175	.0319	.0015	.0007	.0058	
	0.01	-0.004	.0154	.0047	-0.012	-0.001	-0.002		0.01	-0.002	.0173	.0304	-0.006	-0.001	.0002	
	0.20	0.000	.0163	.0031	-0.013	-0.002	-0.0029		0.20	-0.002	.0171	.0302	-0.017	-0.004	.0024	
	0.41	-0.001	.0159	.0029	-0.013	-0.004	-0.0055		0.41	0.001	.0181	.0301	-0.029	-0.009	.0056	
	0.61	-0.002	.0164	.0027	-0.014	-0.009	-0.0081		0.61	0.002	.0188	.0310	-0.038	-0.014	.0080	
	0.81	0.001	.0162	.0022	-0.014	-0.013	-0.0100		0.80	0.004	.0204	.0317	-0.046	-0.020	.0103	
	1.01	0.001	.0184	.0021	-0.015	-0.020	-0.0124		1.00	0.008	.0225	.0328	-0.054	-0.028	.0127	
1.10	-0.80	-0.008	.0198	.0056	-0.009	.0013	.0096	2.22	-0.79	-0.002	.0180	.0295	.0021	.0020	.0097	
	-0.39	-0.006	.0178	.0043	-0.010	.0004	.0049		-0.40	-0.001	.0155	.0273	.0009	.0007	.0049	
	0.01	-0.005	.0171	.0042	-0.011	-0.002	.0001		0.01	0.001	.0149	.0256	-0.005	-0.001	.0004	
	0.21	-0.004	.0170	.0036	-0.010	-0.002	-0.0023		0.20	0.001	.0155	.0259	-0.012	-0.006	.0030	
	0.41	-0.004	.0176	.0035	-0.011	-0.006	-0.0046		0.40	0.001	.0157	.0264	-0.019	-0.011	.0057	
	0.61	-0.002	.0181	.0025	-0.012	-0.010	-0.0068		0.61	0.001	.0174	.0276	-0.025	-0.017	.0082	
	0.81	-0.003	.0199	.0023	-0.011	-0.015	-0.0089		0.80	0.001	.0192	.0278	-0.030	-0.025	.0104	
	1.01	-0.003	.0198	.0022	-0.011	-0.021	-0.0111		1.01	0.002	.0220	.0280	-0.033	-0.037	.0127	
1.30	-0.79	-0.005	.0169	.0034	-0.010	.0015	.0096		$\delta = 19.7^\circ$							
	-0.40	-0.004	.0148	.0025	-0.010	.0005	.0050	1.00	-0.79	0.007	.0360	.0775	.0060	.0016	.0124	
	0.01	-0.003	.0145	.0019	-0.009	-0.001	-0.000		-0.40	0.004	.0340	.0705	.0016	.0005	.0070	
	0.20	-0.001	.0145	.0008	-0.010	-0.003	-0.0022		0.01	0.007	.0344	.0671	-0.017	-0.000	.0000	
	0.41	0.001	.0146	.0001	-0.010	-0.007	-0.0049		0.20	0.008	.0342	.0667	-0.031	-0.005	.0034	
	0.61	0.003	.0153	-0.001	-0.011	-0.011	-0.0072		0.41	0.006	.0341	.0704	-0.051	-0.009	.0070	
	0.80	0.004	.0159	-0.008	-0.011	-0.017	-0.0093		0.60	0.011	.0353	.0730	-0.071	-0.015	.0094	
	1.01	0.005	.0178	-0.008	-0.012	-0.024	-0.0115		0.81	0.014	.0365	.0754	-0.092	-0.021	.0123	
1.70	-0.79	-0.008	.0170	.0034	-0.006	.0019	.0098	1.10	1.01	0.018	.0363	.0798	-0.114	-0.027	.0153	
	-0.39	-0.006	.0145	.0029	-0.006	.0007	.0033		-0.80	0.001	.0372	.0760	.0061	.0015	.0121	
	0.01	-0.005	.0139	.0023	-0.006	.0000	.0003		-0.40	-0.005	.0360	.0711	-0.019	.0004	.0070	
	0.20	-0.005	.0141	.0021	-0.007	-0.003	-0.0022		0.01	-0.005	.0352	.0683	-0.007	-0.002	.0003	
	0.40	-0.004	.0144	.0021	-0.007	-0.008	-0.0048		0.20	-0.009	.0362	.0701	-0.022	-0.005	.0030	
	0.61	-0.004	.0152	.0018	-0.007	-0.013	-0.0072		0.41	-0.002	.0362	.0702	-0.039	-0.010	.0064	
	0.80	-0.003	.0164	.0015	-0.007	-0.019	-0.0094		0.61	0.002	.0367	.0717	-0.059	-0.015	.0086	
	1.00	-0.003	.0185	.0015	-0.007	-0.027	-0.0116		0.80	0.009	.0381	.0732	-0.082	-0.021	.0109	
2.22	-0.80	-0.008	.0154	.0026	-0.004	.0019	.0096	1.30	1.01	0.013	.0389	.0767	-0.107	-0.027	.0136	
	-0.39	-0.007	.0127	.0023	-0.004	.0007	.0045		-0.79	0.011	.0325	.0668	.0061	.0017	.0117	
	0.01	-0.006	.0121	.0019	-0.003	-0.001	-0.0004		-0.40	0.001	.0307	.0627	-0.019	.0005	.0068	
	0.20	-0.007	.0122	.0018	-0.003	-0.005	-0.0028		0.01	-0.001	.0306	.0596	-0.012	-0.001	.0003	
	0.40	-0.007	.0129	.0017	-0.003	-0.010	-0.0053		0.20	0.002	.0307	.0598	-0.027	-0.005	.0037	
	0.61	-0.006	.0136	.0015	-0.003	-0.016	-0.0077		0.41	0.005	.0311	.0621	-0.043	-0.009	.0072	
	0.80	-0.007	.0157	.0017	-0.003	-0.024	-0.0099		0.61	0.010	.0317	.0634	-0.062	-0.015	.0096	
									0.81	0.018	.0330	.0647	-0.084	-0.022	.0121	
									1.01	0.025	.0345	.0671	-0.106	-0.029	.0149	
0.70	-0.79	0.004	.0145	.0392	.0019	.0013	.0105	1.70	-0.80	0.011	.0306	.0582	.0060	.0021	.0115	
	-0.40	0.005	.0135	.0353	-0.001	.0006	.0058		-0.40	0.003	.0283	.0553	.0026	.0007	.0069	
	0.01	0.006	.0130	.0329	-0.015	.0001	.0000		0.01	0.000	.0281	.0534	-0.007	-0.002	.0002	
	0.21	0.006	.0131	.0330	-0.023	-0.002	-0.0029		0.21	0.001	.0284	.0535	-0.023	-0.005	.0032	
	0.40	0.007	.0135	.0341	-0.030	-0.006	-0.0058		0.40	0.005	.0290	.0545	-0.039	-0.010	.0069	
	0.61	0.009	.0138	.0350	-0.039	-0.009	-0.0085		0.61	0.008	.0296	.0564	-0.055	-0.015	.0097	
	0.80	0.010	.0154	.0368	-0.047	-0.013	-0.0109		0.81	0.014	.0313	.0569	-0.070	-0.023	.0118	
	1.01	0.011	.0159	.0388	-0.058	-0.019	-0.0131		1.00	0.021	.0330	.0575	-0.084	-0.032	.0142	
0.90	-0.80	0.002	.0153	.0412	.0020	.0013	.0107	2.22	-0.80	0.010	.0274	.0497	.0044	.0022	.0108	
	-0.39	0.002	.0141	.0373	.0000	.0005	.0056		-0.40	0.009	.0250	.0478	.0023	.0007	.0057	
	0.01	0.004	.0138	.0349	-0.015	.0000	-0.0002		0.01	0.008	.0244	.0462	-0.006	-0.002	.0005	
	0.20	0.004	.0135	.0349	-0.022	-0.004	-0.0030		0.20	0.009	.0249	.0463	-0.019	-0.007	.0035	
	0.41	0.005	.0142	.0357	-0.030	-0.007	-0.0061		0.41	0.010	.0254	.0473	-0.032	-0.012	.0068	
	0.61	0.007	.0145	.0368	-0.040	-0.010	-0.0088		0.61	0.012	.0269	.0484	-0.043	-0.019	.0095	
	0.81	0.008	.0154	.0386	-0.050	-0.015	-0.0112		0.81	0.012	.0287	.0491	-0.051	-0.028	.0117	
	1.01	0.010	.0166	.0413	-0.061	-0.021	-0.0137		1.00	0.015	.0315	.0492	-0.054	-0.041	.0139	
1.00	-0.80	-0.002	.0219	.0414	.0019	.0014	.0									

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	-0.80	-0.0005	.0114	.0052	-0.0016	0.014	.0094
	-0.39	-0.0002	.0101	.0041	-0.0016	0.007	.0047
	-0.00	-0.0001	.0096	.0036	-0.0015	0.001	-.0001
	0.19	0.0000	.0095	.0033	-0.0016	0.001	-.0027
	0.40	-0.0001	.0092	.0033	-0.0016	-0.002	-.0053
	0.60	-0.0002	.0099	.0034	-0.0017	-0.006	-.0076
	0.80	0.0000	.0103	.0027	-0.0016	-0.010	-.0097
	1.00	-0.0001	.0115	.0027	-0.0017	-0.016	-.0117
0.90	-0.80	-0.0007	.0116	.0064	-0.0015	0.013	.0096
	-0.40	-0.0006	.0099	.0060	-0.0014	0.006	.0048
	0.01	-0.0004	.0098	.0046	-0.0014	0.001	-.0004
	0.19	-0.0004	.0095	.0043	-0.0014	0.000	-.0028
	0.40	-0.0002	.0095	.0039	-0.0015	-0.003	-.0055
	0.60	-0.0002	.0098	.0039	-0.0016	-0.007	-.0078
	0.80	-0.0003	.0109	.0036	-0.0016	-0.012	-.0099
	1.00	-0.0001	.0119	.0035	-0.0017	-0.017	-.0121
1.00	-0.80	-0.0005	.0181	.0056	-0.0014	0.014	.0097
	-0.40	-0.0004	.0150	.0048	-0.0014	0.006	.0050
	-0.01	-0.0003	.0151	.0036	-0.0014	0.001	-.0005
	0.20	-0.0002	.0146	.0031	-0.0015	-0.001	-.0033
	0.40	-0.0002	.0152	.0029	-0.0015	-0.004	-.0060
	0.60	-0.0001	.0153	.0027	-0.0016	-0.008	-.0082
	0.80	0.0000	.0181	.0023	-0.0016	-0.013	-.0103
	1.00	0.0003	.0790	.0007	-0.0017	-0.019	-.0127
1.10	-0.81	-0.0004	.0177	.0040	-0.0013	0.014	.0093
	-0.40	-0.0002	.0161	.0030	-0.0012	0.006	.0047
	-0.00	-0.0001	.0156	.0026	-0.0011	0.000	-.0002
	0.20	0.0000	.0157	.0019	-0.0014	-0.002	-.0023
	0.40	0.0000	.0152	.0020	-0.0014	-0.005	-.0053
	0.60	0.0002	.0164	.0010	-0.0013	-0.009	-.0073
	0.80	0.0002	.0172	.0008	-0.0014	-0.015	-.0092
	1.00	0.0002	.0185	.0006	-0.0014	-0.021	-.0113
1.30	-0.80	0.0001	.0157	.0014	-0.0012	0.015	.0095
	-0.40	0.0002	.0138	.0005	-0.0011	0.007	.0048
	-0.00	0.0003	.0134	-.0001	-0.0010	0.001	-.0001
	0.19	0.0004	.0134	-.0003	-0.0011	-0.001	-.0024
	0.40	0.0003	.0134	-.0005	-0.0011	-0.005	-.0050
	0.60	0.0004	.0142	-.0007	-0.0012	-0.010	-.0073
	0.79	0.0004	.0151	-.0009	-0.0012	-0.015	-.0094
	1.00	0.0005	.0169	-.0010	-0.0013	-0.022	-.0115
1.70	-0.80	-0.0003	.0157	.0026	-0.0007	0.019	.0094
	-0.40	-0.0003	.0137	.0022	-0.0007	0.008	.0050
	-0.00	-0.0003	.0129	.0018	-0.0007	0.001	-.0000
	0.19	-0.0002	.0130	.0016	-0.0007	-0.001	-.0024
	0.40	-0.0002	.0131	.0014	-0.0007	-0.006	-.0050
	0.60	-0.0002	.0140	.0012	-0.0007	-0.011	-.0073
	0.79	-0.0002	.0153	.0013	-0.0007	-0.017	-.0095
	1.00	0.0000	.0174	.0002	-0.0007	-0.026	-.0118
2.22	-0.80	-0.0003	.0144	.0020	-0.0003	0.020	.0093
	-0.40	-0.0004	.0118	.0021	-0.0003	0.008	.0044
	-0.00	-0.0005	.0113	.0021	-0.0004	0.001	-.0005
	0.20	-0.0004	.0115	.0019	-0.0004	-0.003	-.0029
	0.40	-0.0004	.0120	.0017	-0.0003	-0.009	-.0053
	0.60	-0.0004	.0131	.0017	-0.0003	-0.015	-.0077
	0.80	-0.0004	.0150	.0015	-0.0003	-0.023	-.0099
	1.00	-0.0005	.0176	.0015	-0.0004	-0.035	-.0123

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Continued
(e) BVC

M	β , deg	C_L	C_D	C_m	C_l	C_Y	C_n	M	β , deg	C_L	C_D	C_m	C_l	C_Y	C_n	
$\delta = 0^\circ$								$\delta = 9.7^\circ$ - Concluded								
0.70	-0.79	0.006	.0191	.0023	.0141	0.096	-0.326	1.10	-0.80	0.037	.0315	.0393	.0164	0.113	-0.414	
	-0.39	0.006	.0090	.0007	.0065	0.044	-0.143		-0.39	0.035	.0204	.0376	-.0080	0.053	-0.186	
	0.01	0.006	.0068	.0001	.0053	0.004	-0.012		0.01	0.033	.0169	.0373	-.0006	0.004	-0.016	
	0.20	0.004	.0069	.0001	-.0024	-0.016	0.046		0.21	0.034	.0172	.0370	-.0047	0.031	0.106	
	0.60	0.001	.0112	.0006	-.0093	-0.061	0.199		0.41	0.031	.0204	.0383	-.0095	0.062	0.225	
	0.80	-0.002	.0162	.0021	-.0128	-0.086	0.287		0.61	0.032	.0230	.0387	-.0135	0.089	0.331	
	1.01	-0.005	.0231	.0045	-.0160	-0.111	0.372		0.81	0.030	.0288	.0405	-.0169	0.115	0.422	
									1.01	0.029	.0375	.0437	-.0194	0.137	0.490	
0.90	-0.79	0.004	.0187	.0022	.0141	0.094	-0.332	1.30	-0.79	0.032	.0262	.0382	.0154	0.100	-0.363	
	-0.44	0.006	.0091	-.0001	.0065	0.043	-0.143		-0.39	0.031	.0169	.0361	-.0081	0.051	-0.184	
	0.02	0.004	.0067	.0000	.0001	0.003	-0.006		0.01	0.030	.0139	.0358	-.0000	0.001	-0.003	
	0.21	0.003	.0070	.0001	-.0030	-0.020	0.061		0.21	0.031	.0144	.0357	-.0039	0.026	0.083	
	0.41	0.003	.0085	.0002	-.0064	-0.042	0.135		0.41	0.029	.0159	.0364	-.0082	0.053	0.182	
	0.60	-0.001	.0120	.0013	-.0103	-0.067	0.231		0.60	0.029	.0203	.0370	-.0120	0.078	0.277	
	0.80	-0.004	.0173	.0025	-.0139	-0.092	0.325		0.80	0.029	.0251	.0382	-.0152	0.100	0.354	
	1.00	-0.008	.0244	.0047	-.0167	-0.116	0.403		1.00	0.027	.0317	.0416	-.0168	0.119	0.400	
1.00	-0.79	0.010	.0218	.0019	.0156	0.104	-0.386	1.70	-0.80	0.025	.0239	.0350	.0120	0.084	-0.260	
	-0.39	0.013	.0108	-.0000	.0070	0.048	-0.163		-0.39	0.025	.0159	.0329	.0065	0.043	-0.143	
	0.01	0.009	.0077	.0002	-.0002	0.002	-0.001		0.01	0.026	.0133	.0317	-.0000	0.002	-0.006	
	0.21	0.009	.0096	.0002	-.0036	-0.022	0.076		0.20	0.025	.0135	.0319	-.0031	0.021	0.061	
	0.41	0.005	.0102	.0009	-.0075	-0.047	0.167		0.41	0.024	.0159	.0329	-.0064	0.044	0.132	
	0.60	0.003	.0153	.0010	-.0117	-0.074	0.275		0.60	0.024	.0191	.0339	-.0092	0.063	0.193	
	0.81	-0.002	.0202	.0027	-.0158	-0.103	0.387		0.81	0.023	.0235	.0350	-.0116	0.083	0.246	
	1.01	-0.007	.0284	.0045	-.0189	-0.130	0.480		1.01	0.020	.0291	.0375	-.0134	0.101	0.281	
1.10	-0.80	0.009	.0253	.0010	.0153	0.102	-0.379	2.22	-0.79	0.018	.0209	.0303	.0085	0.068	-0.159	
	-0.39	0.012	.0150	-.0000	.0068	0.045	-0.156		-0.39	0.020	.0139	.0283	.0044	0.032	-0.085	
	0.01	0.009	.0125	.0002	-.0025	-0.000	0.013		0.01	0.021	.0115	.0276	-.0005	0.003	-0.006	
	0.20	0.007	.0120	.0003	-.0037	-0.024	0.083		0.21	0.019	.0121	.0278	-.0030	0.022	0.053	
	0.41	0.007	.0131	-.0001	-.0077	-0.049	0.177		0.41	0.020	.0136	.0288	-.0053	0.039	0.097	
	0.60	0.003	.0172	.0010	-.0118	-0.074	0.279		0.61	0.017	.0171	.0302	-.0074	0.056	0.136	
	0.80	-0.001	.0227	.0027	-.0153	-0.100	0.378		0.80	0.015	.0208	.0316	-.0090	0.072	0.162	
	1.01	-0.004	.0315	.0039	-.0186	-0.126	0.471		1.01	0.011	.0263	.0327	-.0104	0.091	0.186	
1.30	-0.80	0.003	.0210	.0018	.0144	0.092	-0.330		$\delta = 19.7^\circ$							
	-0.44	0.006	.0118	-.0000	.0070	0.043	-0.156		1.00	-0.78	0.074	.0443	.0710	.0182	0.129	-0.469
	0.01	0.003	.0094	.0003	-.0000	0.001	-0.003			-0.39	0.067	.0296	.0709	.0093	0.063	-0.226
	0.21	0.002	.0097	.0003	-.0033	-0.021	0.071			0.01	0.065	.0279	.0713	-.0004	0.005	-0.012
	0.41	0.002	.0114	.0001	-.0070	-0.044	0.155			0.21	0.065	.0285	.0705	-.0051	0.035	0.118
	0.60	0.000	.0143	.0009	-.0106	-0.066	0.241			0.41	0.067	.0313	.0705	-.0103	0.070	0.246
	0.80	-0.003	.0193	.0026	-.0139	-0.089	0.321			0.60	0.069	.0368	.0709	-.0146	0.103	0.368
	1.01	-0.006	.0257	.0044	-.0162	-0.111	0.386			0.80	0.070	.0429	.0722	-.0187	0.134	0.478
1.70	-0.80	0.001	.0199	.0023	.0116	0.081	-0.254			1.01	0.078	.0521	.0731	-.0216	0.165	0.566
	-0.39	0.003	.0117	.0011	.0061	0.040	-0.131		1.10	-0.80	0.070	.0473	.0672	.0175	0.124	-0.449
	0.01	0.003	.0094	.0005	-.0002	0.003	-0.009			-0.40	0.064	.0349	.0667	-.0092	0.061	-0.224
	0.21	0.002	.0096	.0005	-.0026	-0.016	0.053			0.01	0.063	.0324	.0674	-.0007	0.005	-0.019
	0.41	0.000	.0111	.0010	-.0055	-0.036	0.115			0.21	0.063	.0320	.0674	-.0052	0.035	0.122
	0.60	-0.001	.0139	.0020	-.0081	-0.054	0.172			0.41	0.063	.0356	.0675	-.0103	0.069	0.251
	0.80	-0.004	.0181	.0032	-.0107	-0.074	0.229			0.60	0.065	.0390	.0677	-.0145	0.100	0.365
	1.01	-0.006	.0235	.0042	-.0128	-0.093	0.276			0.80	0.068	.0477	.0676	-.0181	0.133	0.470
2.22	-0.80	0.003	.0172	.0019	.0081	0.065	-0.153			0.99	0.074	.0534	.0687	-.0209	0.155	0.538
	-0.39	0.002	.0102	.0008	.0039	0.030	-0.078		1.30	-0.80	0.068	.0402	.0613	.0167	0.114	-0.403
	0.01	0.002	.0075	.0002	-.0005	0.003	-0.008			-0.38	0.060	.0299	.0616	-.0084	0.054	-0.192
	0.20	0.002	.0083	.0003	-.0025	-0.018	0.046			0.02	0.059	.0271	.0617	-.0002	0.002	-0.004
	0.41	-0.001	.0099	.0010	-.0048	-0.036	0.091			0.20	0.058	.0275	.0616	-.0041	0.030	0.091
	0.60	-0.003	.0126	.0022	-.0068	-0.051	0.127			0.41	0.058	.0297	.0618	-.0090	0.060	0.203
	0.80	-0.004	.0158	.0028	-.0083	-0.068	0.161			0.60	0.060	.0340	.0622	-.0130	0.089	0.305
	1.01	-0.006	.0218	.0038	-.0101	-0.087	0.191			0.80	0.064	.0400	.0624	-.0164	0.116	0.394
										1.02	0.070	.0475	.0627	-.0186	0.141	0.459
$\delta = 9.7^\circ$								$\delta = 19.7^\circ$								
0.70	-0.79	0.038	.0249	.0415	.0153	0.108	-0.364	1.70	-0.79	0.056	.0355	.0529	.0125	0.093	-0.280	
	-0.39	0.036	.0142	.0381	.0079	0.054	-0.177		-0.39	0.049	.0267	.0526	.0068	0.047	-0.148	
	0.01	0.035	.0114	.0378	.0003	0.005	-0.013		0.01	0.048	.0244	.0526	-.0001	0.000	-0.003	
	0.21	0.034	.0110	.0375	-.0029	-0.021	0.054		0.21	0.048	.0248	.0521	-.0034	0.025	0.068	
	0.41	0.034	.0134	.0379	-.0069	-0.047	0.141		0.40	0.048	.0268	.0527	-.0066	0.047	0.133	
	0.60	0.034	.0166	.0386	-.0105	-0.072	0.230		0.60	0.050	.0302	.0534	-.0095	0.069	0.198	
	0.81	0.033	.0233	.0396	-.0140	-0.099	0.321		0.80	0.053	.0353	.0533	-.0122	0.093	0.267	
	1.01	0.031	.0293	.0428	-.0165	-0.121	0.386		1.01	0.060	.0419	.0531	-.0144	0.115	0.315	
0.90	-0.80	0.039	.0252	.0421	.0153	0.107	-0.373	2.22	-0.79	0.043	.0309	.0447	.0090	0.073	-0.170	
	-0.40	0.037	.0143	.0393	.0077	0.052	-0.176		-0.39	0.040	.0233	.0447	-.0046	0.035	-0.089	
	0.02	0.035	.0114	.0385	-.0002	0.000	-0.001		0.02	0.039	.0202	.0449	-.0000	0.000	-0.003	
	0.21	0.036	.0121	.0384	-.0036	-0.025	0.073		0.21	0.039	.0215	.0449	-.0030	0.024	0.056	
	0.40	0.034	.0133	.0394	-.0076	-0.052	0.165		0.41	0.040	.0232	.0450	-.0056	0.043	0.103	
	0.60	0.034	.0178	.0401	-.0118	-0.080	0.271		0.60	0.040	.0263	.0454	-.0076	0.060	0.140	
	0.80	0.033	.0236	.0418	-.0150	-0.104	0.355		0.80	0.044	.030					

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT 0° ANGLE OF ATTACK - Continued
(f) BC

M	β , deg	C_L	C_D	C_m	C_l	C_Y	C_n	M	β , deg	C_L	C_D	C_m	C_l	C_Y	C_n
$\delta = 0^\circ$								$\delta = 9.7^\circ$ - Concluded							
0.70	-0.80	0.002	.0067	.0002	.0001	0.014	.0104	1.10	-0.79	0.041	.0184	.0366	-0.0001	0.017	.0113
	-0.40	0.001	.0054	.0001	.0000	0.006	.0056		-0.40	0.035	.0161	.0374	-0.0002	0.007	.0060
	0.01	0.001	.0051	.0000	.0001	0.001	0.001		0.01	0.032	.0155	.0379	-0.0001	-0.001	-0.0000
	0.20	0.000	.0049	-0.0004	.0001	-0.001	-0.028		0.20	0.031	.0153	.0380	-0.0001	-0.001	-0.0028
	0.41	0.000	.0054	-0.0004	.0001	-0.004	-0.054		0.41	0.032	.0161	.0378	-0.0001	-0.006	-0.0060
	0.61	0.001	.0056	-0.0007	.0001	-0.008	-0.080		0.61	0.034	.0150	.0366	-0.0001	-0.009	-0.0085
	0.81	0.000	.0061	-0.0004	.0001	-0.011	-0.103		0.81	0.035	.0170	.0369	-0.0001	-0.014	-0.0112
	1.00	0.001	.0081	-0.0007	.0001	-0.017	-0.124		1.00	0.033	.0181	.0390	-0.0001	-0.020	-0.0136
0.90	-0.79	-0.000	.0067	-0.0000	.0000	0.012	.0104	1.30	-0.81	0.037	.0148	.0345	-0.0000	0.016	.0117
	-0.40	-0.000	.0055	-0.0000	.0000	0.005	.0056		-0.40	0.033	.0130	.0349	-0.0000	0.006	.0063
	0.01	0.000	.0051	-0.0003	.0001	-0.000	-0.002		0.01	0.031	.0125	.0354	-0.0001	-0.001	-0.0000
	0.20	0.000	.0051	-0.0003	.0001	-0.002	-0.028		0.20	0.031	.0126	.0354	-0.0000	-0.003	-0.0028
	0.41	0.000	.0053	-0.0003	.0001	-0.005	-0.057		0.41	0.032	.0130	.0352	-0.0001	-0.007	-0.0061
	0.60	-0.001	.0058	-0.0004	.0001	-0.008	-0.083		0.60	0.034	.0135	.0346	-0.0000	-0.011	-0.0086
	0.81	-0.001	.0065	-0.0004	.0000	-0.012	-0.126		0.81	0.035	.0144	.0344	-0.0001	-0.016	-0.0116
	1.00	-0.001	.0077	-0.0004	.0001	-0.018	-0.127		1.01	0.034	.0160	.0369	-0.0001	-0.024	-0.0140
1.00	-0.86	0.003	.0068	-0.0004	-0.001	0.012	.0110	1.70	-0.81	0.029	.0146	.0313	-0.0000	0.020	.0115
	-0.39	0.000	.0064	-0.0000	-0.001	0.005	.0057		-0.40	0.028	.0125	.0312	-0.0000	0.007	.0064
	0.01	0.000	.0065	-0.0000	-0.000	0.001	-0.003		0.01	0.027	.0120	.0309	-0.0000	0.000	.0002
	0.20	0.000	.0068	-0.0000	-0.001	-0.000	-0.031		0.20	0.026	.0115	.0312	-0.0001	-0.003	-0.0029
	0.41	0.000	.0081	-0.0000	-0.001	-0.004	-0.061		0.41	0.027	.0124	.0308	-0.0001	-0.007	-0.0060
	0.62	0.000	.0087	-0.0000	-0.001	-0.007	-0.089		0.60	0.028	.0128	.0309	-0.0001	-0.012	-0.0087
	0.81	0.000	.0072	-0.0006	-0.000	-0.012	-0.112		0.81	0.028	.0143	.0307	-0.0001	-0.018	-0.0113
	1.00	-0.001	.0096	-0.0001	-0.001	-0.017	-0.135		1.00	0.026	.0163	.0330	-0.0002	-0.027	-0.0138
1.10	-0.80	-0.001	.0111	-0.0001	-0.002	0.014	.0107	2.22	-0.81	0.022	.0129	.0268	-0.0001	0.021	.0110
	-0.39	-0.001	.0106	-0.0001	-0.000	0.005	.0055		-0.40	0.023	.0107	.0261	-0.0000	0.008	.0057
	0.01	-0.001	.0103	-0.0001	-0.000	-0.001	-0.000		0.01	0.022	.0099	.0260	-0.0001	-0.001	-0.0003
	0.21	-0.001	.0099	-0.0001	-0.001	-0.001	-0.028		0.20	0.022	.0102	.0261	-0.0001	-0.001	-0.0009
	0.41	-0.004	.0103	-0.0003	-0.001	-0.006	-0.055		0.41	0.022	.0106	.0262	-0.0001	-0.009	-0.0064
	0.62	-0.004	.0111	-0.0003	-0.001	-0.009	-0.081		0.61	0.021	.0116	.0265	-0.0002	-0.015	-0.0091
	0.81	-0.003	.0119	-0.0002	-0.000	-0.021	-0.123		0.81	0.019	.0134	.0276	-0.0002	-0.024	-0.0113
	1.00	-0.001	.0135	-0.0001	-0.001	-0.021	-0.123		1.00	0.017	.0161	.0285	-0.0003	-0.035	-0.0133
1.30	-0.80	-0.001	.0098	-0.0003	-0.000	0.015	.0109	1.00	0.01	0.059	.0270	.0726	-0.0002	-0.003	-0.0001
	-0.40	-0.001	.0082	-0.0001	-0.000	0.006	.0058		0.20	0.060	.0278	.0723	-0.0001	-0.004	-0.0031
	0.01	-0.001	.0078	-0.0003	-0.000	-0.001	-0.001		0.41	0.064	.0263	.0707	-0.0001	-0.008	-0.0062
	0.20	-0.001	.0078	-0.0003	-0.000	-0.003	-0.027		0.61	0.070	.0285	.0683	-0.0002	-0.014	-0.0097
	0.41	0.000	.0080	-0.0005	-0.000	-0.007	-0.055		0.81	0.077	.0280	.0671	-0.0001	-0.020	-0.0126
	0.60	0.000	.0088	-0.0005	-0.000	-0.011	-0.081		1.01	0.085	.0318	.0664	-0.0000	-0.026	-0.0157
	0.81	0.000	.0095	-0.0005	-0.000	-0.015	-0.105								
	1.01	0.000	.0108	-0.0005	-0.000	-0.022	-0.129								
1.70	-0.79	-0.002	.0101	-0.0004	-0.000	0.018	.0107	1.10	-0.80	0.068	.0334	.0648	-0.0001	0.020	.0118
	-0.40	-0.002	.0083	-0.0002	-0.000	0.007	.0058		-0.40	0.054	.0316	.0683	-0.0002	0.007	.0062
	0.01	-0.001	.0076	-0.0004	-0.000	-0.000	-0.003		0.01	0.054	.0313	.0706	-0.0002	-0.003	-0.0001
	0.20	-0.002	.0078	-0.0001	-0.000	-0.003	-0.026		0.21	0.055	.0310	.0699	-0.0002	-0.005	-0.0027
	0.41	-0.002	.0082	-0.0001	-0.000	-0.007	-0.055		0.41	0.057	.0316	.0684	-0.0002	-0.010	-0.0086
	0.61	-0.001	.0089	-0.0004	-0.000	-0.012	-0.082		0.61	0.063	.0323	.0666	-0.0001	-0.012	-0.0086
	0.81	-0.001	.0101	-0.0006	-0.000	-0.017	-0.106		0.81	0.074	.0343	.0649	-0.0001	-0.022	-0.0118
	1.01	-0.001	.0119	-0.0004	-0.000	-0.026	-0.130		1.00	0.079	.0344	.0636	-0.0001	-0.028	-0.0141
2.22	-0.80	-0.002	.0092	-0.0010	-0.001	0.019	.0104	1.30	-0.80	0.067	.0282	.0586	-0.0001	0.021	.0119
	-0.39	-0.002	.0070	-0.0010	-0.000	0.007	.0053		-0.40	0.056	.0263	.0626	-0.0001	0.008	.0068
	0.01	-0.003	.0064	-0.0008	-0.000	-0.001	-0.004		-0.00	0.053	.0259	.0634	-0.0001	-0.002	-0.0001
	0.20	-0.002	.0067	-0.0008	-0.000	-0.004	-0.031		0.20	0.054	.0259	.0632	-0.0001	-0.006	-0.0033
	0.41	-0.002	.0077	-0.0008	-0.000	-0.009	-0.059		0.41	0.056	.0264	.0623	-0.0000	-0.010	-0.0066
	0.60	-0.002	.0077	-0.0008	-0.001	-0.015	-0.084		0.61	0.061	.0271	.0602	-0.0000	-0.017	-0.0094
	0.81	-0.002	.0100	-0.0008	-0.001	-0.023	-0.108		0.81	0.070	.0285	.0582	-0.0001	-0.024	-0.0121
	1.01	-0.002	.0125	-0.0008	-0.001	-0.034	-0.129		1.01	0.079	.0304	.0562	-0.0001	-0.032	-0.0148
1.70	-0.80	0.055	.0260	.0503	-0.0000	0.023	.0117	1.00	-0.40	0.046	.0235	.0524	-0.0000	0.009	.0068
	-0.40	0.046	.0235	.0524	-0.0000	0.009	.0068		0.02	0.043	.0232	.0538	-0.0001	-0.001	-0.0000
	0.01	0.044	.0234	.0533	-0.0001	-0.006	-0.0031		0.21	0.044	.0234	.0533	-0.0001	-0.006	-0.0031
	0.21	0.047	.0235	.0525	-0.0001	-0.010	-0.0068		0.41	0.047	.0235	.0525	-0.0001	-0.010	-0.0068
	0.41	0.051	.0244	.0518	-0.0001	-0.016	-0.0098		0.61	0.051	.0244	.0518	-0.0001	-0.016	-0.0098
	0.61	0.057	.0261	.0497	-0.0002	-0.024	-0.0117		0.81	0.057	.0261	.0497	-0.0002	-0.024	-0.0117
	1.01	0.067	.0284	.0476	-0.0002	-0.033	-0.0143		1.01	0.067	.0284	.0476	-0.0002	-0.033	-0.0143
2.22	-0.80	0.042	.0218	.0428	-0.0001	0.023	.0110	1.10	-0.40	0.037	.0198	.0447	-0.0000	0.008	.0058
	-0.40	0.035	.0187	.0459	-0.0000	0.001	-0.0003		0.01	0.035	.0187	.0459	-0.0000	0.001	-0.0003
	0.01	0.036	.0196	.0453	-0.0001	-0.006	-0.0033		0.20	0.036	.0196	.0453	-0.0001	-0.006	-0.0033
	0.20	0.038	.0202	.0446	-0.0002	-0.012	-0.0066		0.41	0.038	.0202	.0446	-0.0002	-0.012	-0.0066
	0.41	0.041	.0214	.0439	-0.0003	-0.019	-0.0094		0.60	0.041	.0214	.0439	-0.0003	-0.019	-0.0094
	0.60	0.045	.0234	.0420	-0.0004	-0.028	-0.0116		0.81	0.045	.0234	.0420	-0.0004	-0.028	-0.0116
	1.00	0.049	.0265	.0409	-0.0004	-0.040	-0.0137		1.00	0.049	.0265	.0409	-0.0004	-0.040	-0.0137
0.70	-0.81	0.043	.0118	.0374	-0.0000	0.016	.0115	0.70	-0.81	0.043	.0118	.0374	-0.0000	0.016	.0115

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	M	β , deg	C_L	C_D	C_m	C_L	C_Y	C_n
$\delta = 0^\circ$								$\delta = 9.7^\circ$ - Concluded							
0.70	-0.80	0.522	1.086	-0.180	0.318	0.092	-0.367	1.10	-0.79	0.561	1.353	-0.448	0.387	0.087	-0.393
	-0.39	0.540	1.049	-0.271	0.169	0.048	-0.189		-0.40	0.565	1.309	-0.563	0.198	0.045	-0.210
	0.01	0.542	1.038	-0.285	-0.005	0.007	-0.029		0.01	0.561	1.277	-0.571	-0.023	-0.004	-0.027
	0.20	0.542	1.038	-0.290	-0.086	-0.016	-0.039		0.20	0.566	1.296	-0.599	-0.128	-0.027	-0.141
	0.41	0.541	1.049	-0.283	-0.175	-0.039	-0.124		0.41	0.564	1.302	-0.554	-0.239	-0.054	-0.262
	0.61	0.535	1.063	-0.247	-0.257	-0.064	-0.216		0.61	0.568	1.345	-0.535	-0.335	-0.078	-0.355
	0.81	0.517	1.070	-0.172	-0.307	-0.086	-0.302		0.81	0.569	1.385	-0.476	-0.413	-0.099	-0.426
	1.00	0.507	1.118	-0.119	-0.346	-0.113	-0.379		1.00	0.567	1.421	-0.404	-0.479	-0.117	-0.482
0.90	-0.80	0.585	1.231	-0.563	0.344	0.084	-0.346	1.30	-0.80	0.499	1.220	-0.354	0.346	0.073	-0.317
	-0.39	0.606	1.212	-0.697	0.172	0.043	-0.182		-0.40	0.498	1.171	-0.445	0.182	0.037	-0.168
	0.01	0.605	1.198	-0.704	-0.014	0.004	-0.022		0.01	0.496	1.158	-0.464	0.000	0.003	-0.017
	0.20	0.605	1.199	-0.698	-0.101	-0.019	-0.050		0.19	0.497	1.161	-0.461	-0.085	-0.014	-0.049
	0.42	0.605	1.211	-0.694	-0.204	-0.046	-0.147		0.41	0.499	1.173	-0.449	-0.180	-0.035	-0.128
	0.61	0.601	1.230	-0.655	-0.294	-0.070	-0.244		0.61	0.499	1.194	-0.419	-0.266	-0.056	-0.211
	0.81	0.593	1.249	-0.595	-0.369	-0.092	-0.323		0.80	0.502	1.222	-0.370	-0.343	-0.074	-0.283
	1.00	0.537	1.215	-0.297	-0.343	-0.118	-0.396		1.00	0.506	1.275	-0.337	-0.394	-0.093	-0.319
1.00	-0.80	0.590	1.294	-0.899	0.357	0.089	-0.379	1.70	-0.80	0.407	1.021	-0.241	0.231	0.057	-0.146
	-0.39	0.595	1.241	-0.969	0.180	0.047	-0.209		-0.39	0.403	0.978	-0.286	0.120	0.029	-0.092
	0.01	0.595	1.215	-0.981	-0.018	0.007	-0.018		0.01	0.404	0.964	-0.313	-0.002	0.002	-0.013
	0.20	0.595	1.228	-0.977	-0.116	-0.029	-0.123		0.20	0.404	0.968	-0.308	-0.066	-0.013	-0.030
	0.41	0.595	1.242	-0.969	-0.223	-0.060	-0.244		0.42	0.404	0.980	-0.294	-0.128	-0.029	-0.067
	0.60	0.593	1.273	-0.940	-0.314	-0.084	-0.335		0.61	0.406	0.996	-0.285	-0.180	-0.042	-0.092
	0.80	0.592	1.308	-0.897	-0.386	-0.104	-0.400		0.80	0.408	1.023	-0.263	-0.231	-0.057	-0.115
	1.00	0.588	1.378	-0.863	-0.445	-0.130	-0.485		1.00	0.410	1.074	-0.228	-0.275	-0.079	-0.155
1.10	-0.80	0.533	1.204	-0.830	0.357	0.083	-0.361	1.90	-0.80	0.580	1.500	-0.014	0.409	0.082	-0.391
	-0.39	0.562	1.167	-0.893	0.184	0.042	-0.183		-0.40	0.578	1.454	-0.134	0.197	0.044	-0.236
	0.01	0.564	1.150	-0.905	-0.015	0.008	-0.031		-0.01	0.583	1.463	-0.235	-0.013	0.006	-0.018
	0.20	0.566	1.156	-0.911	-0.104	-0.028	-0.125		0.20	0.586	1.468	-0.253	-0.114	-0.017	-0.091
	0.41	0.566	1.176	-0.904	-0.214	-0.058	-0.243		0.41	0.581	1.453	-0.190	-0.232	-0.042	-0.207
	0.60	0.565	1.216	-0.877	-0.298	-0.081	-0.331		0.60	0.585	1.476	-0.136	-0.338	-0.062	-0.283
	0.80	0.560	1.240	-0.841	-0.373	-0.101	-0.403		0.80	0.589	1.519	-0.046	-0.443	-0.084	-0.355
	1.01	0.556	1.314	-0.797	-0.440	-0.130	-0.496		1.01	0.575	1.527	0.047	-0.518	-0.111	-0.463
1.30	-0.80	0.498	1.096	-0.735	0.285	0.069	-0.257	1.00	-0.80	0.582	1.568	-0.217	0.395	0.091	-0.430
	-0.39	0.498	1.041	-0.773	0.146	0.033	-0.130		-0.40	0.579	1.510	-0.352	0.198	0.048	-0.233
	0.01	0.499	1.040	-0.786	-0.002	0.002	-0.015		0.01	0.580	1.508	-0.390	-0.024	-0.004	-0.014
	0.20	0.499	1.044	-0.788	-0.073	-0.016	-0.042		0.20	0.585	1.520	-0.388	-0.133	-0.028	-0.141
	0.41	0.500	1.054	-0.780	-0.152	-0.036	-0.104		0.41	0.578	1.507	-0.326	-0.244	-0.058	-0.277
	0.61	0.498	1.068	-0.765	-0.244	-0.055	-0.172		0.61	0.574	1.530	-0.235	-0.342	-0.082	-0.378
	0.80	0.499	1.099	-0.743	-0.285	-0.074	-0.233		0.80	0.578	1.572	-0.205	-0.435	-0.101	-0.441
	1.00	0.497	1.155	-0.710	-0.348	-0.102	-0.322		1.01	0.585	1.634	-0.135	-0.526	-0.123	-0.509
1.70	-0.80	0.402	0.921	-0.519	0.200	0.060	-0.141	1.10	-0.80	0.547	1.512	-0.184	0.379	0.091	-0.413
	-0.40	0.402	0.878	-0.544	0.098	0.031	-0.075		-0.40	0.545	1.463	-0.312	0.196	0.051	-0.236
	0.02	0.404	0.863	-0.564	-0.007	0.001	-0.010		-0.00	0.546	1.445	-0.381	-0.015	0.003	-0.006
	0.20	0.406	0.872	-0.569	-0.055	-0.014	-0.023		0.19	0.553	1.451	-0.376	-0.129	-0.023	-0.112
	0.42	0.404	0.880	-0.555	-0.107	-0.030	-0.051		0.41	0.545	1.459	-0.310	-0.236	-0.053	-0.236
	0.60	0.404	0.896	-0.547	-0.155	-0.044	-0.075		0.61	0.538	1.464	-0.203	-0.318	-0.077	-0.332
	0.80	0.403	0.925	-0.535	-0.197	-0.061	-0.111		0.80	0.538	1.504	-0.154	-0.401	-0.096	-0.402
	1.00	0.401	0.968	-0.504	-0.242	-0.084	-0.159		1.01	0.550	1.568	-0.126	-0.484	-0.116	-0.456
$\delta = 9.7^\circ$								$\delta = 19.7^\circ$							
0.70	-0.81	0.533	1.241	-0.186	0.375	0.088	-0.385	1.30	-0.80	0.492	1.370	-0.136	0.370	0.078	-0.335
	-0.40	0.543	1.217	-0.145	0.206	0.047	-0.209		-0.40	0.487	1.309	-0.223	0.207	0.040	-0.223
	0.01	0.547	1.213	-0.109	-0.003	0.008	-0.030		-0.00	0.482	1.294	-0.268	0.001	0.006	-0.027
	0.19	0.550	1.216	-0.104	-0.099	-0.011	-0.042		0.20	0.484	1.299	-0.258	-0.098	-0.012	-0.062
	0.41	0.545	1.209	-0.119	-0.209	-0.036	-0.138		0.41	0.487	1.310	-0.229	-0.202	-0.035	-0.161
	0.61	0.543	1.222	-0.151	-0.302	-0.058	-0.232		0.61	0.489	1.338	-0.171	-0.296	-0.057	-0.237
	0.80	0.537	1.230	-0.162	-0.374	-0.078	-0.312		0.80	0.491	1.366	-0.134	-0.374	-0.076	-0.293
	1.00	0.529	1.261	-0.229	-0.433	-0.100	-0.393		1.00	0.496	1.416	-0.074	-0.432	-0.093	-0.316
0.90	-0.80	0.589	1.372	-0.163	0.392	0.083	-0.388	1.70	-0.40	0.402	1.116	-0.136	0.137	0.029	-0.111
	-0.40	0.599	1.353	-0.251	0.202	0.043	-0.206		-0.00	0.401	1.102	-0.186	0.001	0.004	-0.018
	0.01	0.601	1.345	-0.278	-0.017	0.005	-0.019		0.20	0.400	1.104	-0.168	-0.072	-0.013	-0.030
	0.20	0.602	1.349	-0.292	-0.119	-0.015	-0.063		0.40	0.403	1.116	-0.148	-0.138	-0.029	-0.079
	0.41	0.600	1.354	-0.260	-0.232	-0.042	-0.168		0.61	0.404	1.138	-0.108	-0.199	-0.044	-0.106
	0.60	0.603	1.381	-0.228	-0.333	-0.064	-0.267		0.81	0.410	1.171	-0.084	-0.254	-0.057	-0.126
	0.81	0.598	1.386	-0.219	-0.419	-0.086	-0.360		1.00	0.410	1.209	-0.041	-0.294	-0.076	-0.146
	1.01	0.597	1.441	-0.084	-0.500	-0.109	-0.443	2.22	-0.81	0.317	0.958	0.055	0.170	0.051	-0.068
	-0.79	0.592	1.424	-0.452	0.400	0.088	-0.410		-0.60	0.314	0.926	0.029	0.134	0.037	-0.061
	-0.39	0.591	1.360	-0.569	0.208	0.046	-0.229		-0.40	0.312	0.905	0.008	0.092	0.024	-0.052
	0.01	0.596	1.355	-0.602	-0.025	-0.003	-0.015		-0.20	0.311	0.897	-0.003	0.042	0.012	-0.031
	0.19	0.593	1.357	-0.593	-0.130	-0.026	-0.132		0.01	0.310	0.891	-0.007	-0.011	-0.002	-0.003
	0.41	0.593	1.378	-0.565	-0.259	-0.058	-0.275		0.19	0.313	0.896	-0.013	-0.059	-0.015	-0.039
	0.60	0.595	1.408	-0.514	-0.353	-0.080	-0.366		0.40	0.313	0.912				

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	-0.8.0	0.504	.1049	-.0838	.0235	0.108	-.0375
	-0.4.0	0.522	.0990	-.0894	.0119	0.053	-.0177
	-0.0.0	0.527	.0977	-.0904	-.0008	0.007	-.0022
	0.2.0	0.526	.0976	-.0905	-.0066	-.0017	-.0045
	0.4.0	0.527	.0990	-.0906	-.0130	-.0044	-.0129
	0.6.0	0.517	.1005	-.0871	-.0184	-.0070	-.0221
	0.8.1	0.503	.1035	-.0814	-.0228	-.0101	-.0327
	1.0.0	0.493	.1084	-.0792	-.0270	-.0128	-.0412
0.90	-0.8.0	0.572	.1214	-.1267	.0258	0.103	-.0363
	-0.4.0	0.592	.1162	-.1348	.0124	0.050	-.0170
	-0.0.0	0.597	.1148	-.1380	-.0015	0.003	-.0011
	0.2.0	0.593	.1143	-.1360	-.0083	-.0021	-.0060
	0.4.1	0.593	.1158	-.1354	-.0158	-.0050	-.0154
	0.6.0	0.588	.1181	-.1325	-.0222	-.0078	-.0252
	0.8.1	0.575	.1210	-.1256	-.0282	-.0107	-.0354
	1.0.0	0.525	.1185	-.1016	-.0259	-.0128	-.0398
1.00	-0.8.0	0.579	.1277	-.1585	.0278	0.106	-.0394
	-0.4.0	0.589	.1201	-.1624	.0143	0.053	-.0202
	0.0.1	0.589	.1176	-.1625	-.0022	-.0004	-.0018
	0.2.0	0.592	.1185	-.1631	-.0103	-.0033	-.0126
	0.4.1	0.588	.1204	-.1626	-.0183	-.0064	-.0243
	0.6.0	0.582	.1248	-.1600	-.0253	-.0092	-.0345
	0.8.0	0.579	.1287	-.1583	-.0316	-.0118	-.0442
	1.0.0	0.571	.1341	-.1539	-.0365	-.0144	-.0514
1.10	-0.8.0	0.536	.1187	-.1451	.0289	0.102	-.0397
	-0.3.9	0.547	.1177	-.1481	.0144	0.046	-.0169
	0.0.1	0.549	.1095	-.1480	-.0018	-.0008	-.0036
	0.2.0	0.551	.1111	-.1483	-.0092	-.0033	-.0128
	0.4.0	0.549	.1130	-.1478	-.0172	-.0061	-.0239
	0.6.1	0.543	.1160	-.1453	-.0248	-.0089	-.0350
	0.8.1	0.541	.1205	-.1440	-.0315	-.0115	-.0440
	1.0.0	0.531	.1258	-.1393	-.0374	-.0141	-.0529
1.30	-0.8.0	0.478	.1055	-.1345	.0229	0.085	-.0284
	-0.3.9	0.486	.1004	-.1381	.0110	0.041	-.0136
	0.0.1	0.488	.0988	-.1381	-.0009	0.000	-.0000
	0.2.0	0.488	.0992	-.1384	-.0061	-.0020	-.0058
	0.4.1	0.487	.1003	-.1384	-.0121	-.0044	-.0131
	0.6.0	0.486	.1017	-.1378	-.0178	-.0065	-.0202
	0.8.1	0.482	.1057	-.1358	-.0234	-.0090	-.0282
	1.0.0	0.476	.1101	-.1332	-.0285	-.0113	-.0353
1.70	-0.8.0	0.378	.0874	-.1007	.0156	0.073	-.0161
	-0.4.0	0.384	.0824	-.1043	-.0074	0.036	-.0088
	0.0.1	0.386	.0809	-.1058	-.0006	0.002	-.0007
	0.1.9	0.387	.0811	-.1061	-.0039	-.0015	-.0030
	0.4.0	0.385	.0823	-.1054	-.0082	-.0035	-.0072
	0.6.0	0.384	.0836	-.1045	-.0124	-.0052	-.0110
	0.8.1	0.382	.0874	-.1024	-.0162	-.0071	-.0146
	1.0.1	0.376	.0914	-.0994	-.0196	-.0092	-.0175
2.22	-0.8.0	0.288	.0699	-.0712	.0107	0.058	-.0061
	-0.3.9	0.291	.0646	-.0741	.0050	0.026	-.0032
	0.0.1	0.293	.0637	-.0749	-.0009	-.0003	-.0005
	0.2.0	0.293	.0642	-.0746	-.0038	-.0017	-.0020
	0.4.1	0.292	.0654	-.0742	-.0070	-.0034	-.0040
	0.6.1	0.292	.0675	-.0730	-.0098	-.0050	-.0057
	0.8.1	0.288	.0704	-.0707	-.0123	-.0067	-.0068
	1.0.1	0.285	.0756	-.0680	-.0148	-.0088	-.0076

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY
 10° ANGLE OF ATTACK - Continued
 (d) BW; $\alpha = 10.5^\circ$

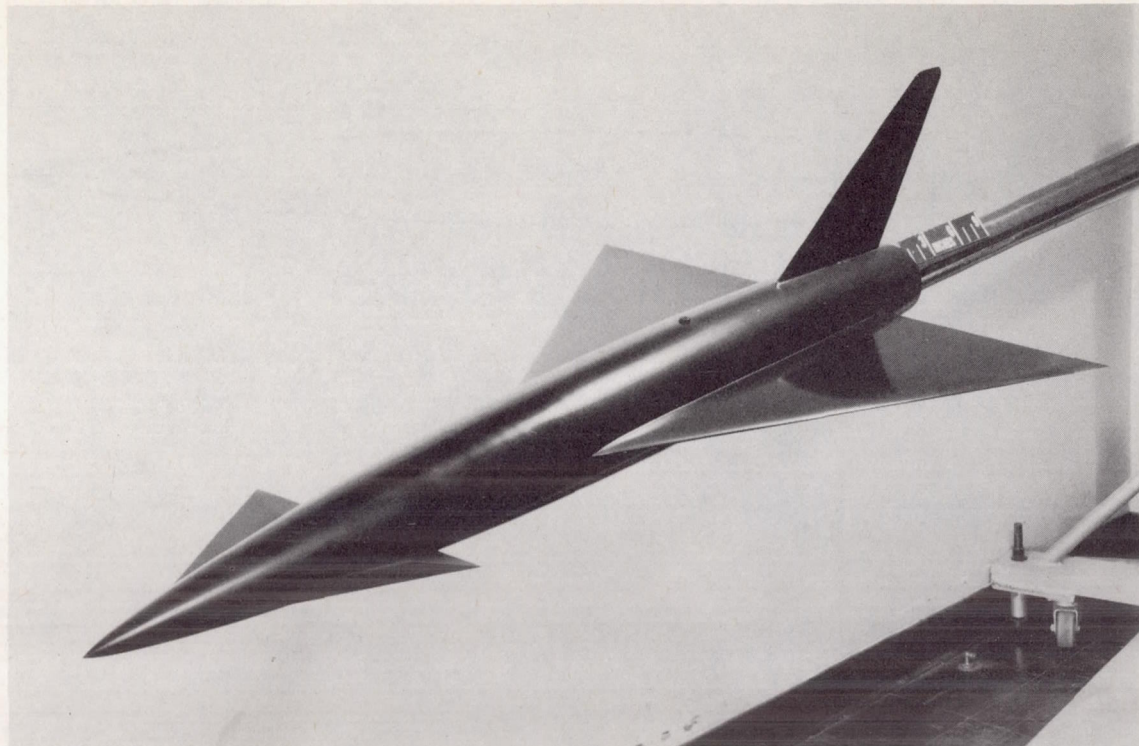
M	β , deg	C_L	C_D	C_m	C_L	C_Y	C_n
0.70	-08.0	0.509	.0935	-0833	.0133	0.020	.0096
	-03.9	0.525	.0964	-0894	.0065	0.010	.0049
	00.1	0.530	.0973	-0911	-.0012	0.001	-.0002
	02.0	0.531	.0972	-0909	-.0049	-.0002	-.0025
	04.1	0.527	.0966	-0903	-.0086	-.0007	-.0049
	06.0	0.523	.0958	-0881	-.0117	-.0013	-.0069
	08.1	0.508	.0938	-0822	-.0134	-.0020	-.0093
	10.0	0.495	.0924	-.0777	-.0155	-.0027	-.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	-.0001	-.0001
	02.0	0.598	.1143	-1381	-.0062	-.0004	-.0025
	04.1	0.604	.1154	-1412	-.0106	-.0011	-.0051
	06.0	0.596	.1139	-1374	-.0147	-.0017	-.0072
	08.0	0.593	.1144	-1365	-.0186	-.0025	-.0096
	10.0	0.577	.1119	-1281	-.0219	-.0032	-.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	-.0003	-.0024
	04.1	0.592	.1181	-1644	-.0093	-.0008	-.0047
	06.0	0.590	.1180	-1640	-.0131	-.0014	-.0068
	08.1	0.586	.1184	-1623	-.0163	-.0023	-.0088
	10.0	0.578	.1167	-1599	-.0197	-.0031	-.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	-.0003	-.0007
	02.0	0.558	.1102	-1517	-.0050	-.0004	-.0011
	04.1	0.558	.1103	-1521	-.0093	-.0010	-.0036
	06.0	0.551	.1099	-1490	-.0122	-.0016	-.0058
	08.1	0.545	.1098	-1471	-.0157	-.0023	-.0078
	10.1	0.539	.1095	-1449	-.0191	-.0031	-.0101
1.30	-08.0	0.480	.0970	-1352	.0050	0.021	.0101
	-04.0	0.487	.0975	-1386	.0009	0.009	.0055
	00.1	0.490	.0977	-1391	-.0006	-.0002	-.0002
	02.0	0.491	.0979	-1396	-.0033	-.0005	-.0019
	04.1	0.491	.0981	-1398	-.0062	-.0011	-.0047
	06.1	0.489	.0982	-1392	-.0088	-.0018	-.0070
	08.1	0.484	.0988	-1376	-.0114	-.0026	-.0092
	10.0	0.478	.0982	-1352	-.0138	-.0035	-.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	-.0001	-.0004
	02.0	0.388	.0802	-1070	-.0022	-.0006	-.0022
	04.0	0.387	.0801	-1065	-.0040	-.0013	-.0050
	06.0	0.386	.0808	-1060	-.0060	-.0021	-.0076
	08.0	0.383	.0816	-1042	-.0078	-.0030	-.0102
	10.1	0.379	.0830	-1018	-.0095	-.0041	-.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	-.0001	-.0001
	02.0	0.294	.0630	-0760	-.0021	-.0008	-.0026
	04.0	0.293	.0635	-0754	-.0035	-.0016	-.0055
	06.1	0.292	.0647	-0744	-.0049	-.0026	-.0083
	08.0	0.290	.0662	-0724	-.0061	-.0036	-.0111
	10.0	0.285	.0686	-0695	-.0073	-.0051	-.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	M	β , deg	C_L	C_D	C_m	C_l	C_y	C_n
$\delta = 0^\circ$															
0.70	0.81	0.075	.0281	.0809	.0122	0.074	-.0267	1.10	0.81	0.108	.0488	.1137	.0124	0.056	-.0245
	0.40	0.075	.0208	.0816	.0668	0.035	-.0122		0.40	0.100	.0442	.1145	.0074	0.031	-.0143
	0.00	0.073	.0189	.0828	.0007	0.005	-.0023		0.01	0.095	.0420	.1152	-.0003	-0.004	.0083
	0.21	0.073	.0190	.0822	-.0017	-.0009	.0019		0.21	0.095	.0428	.1154	-.0080	-0.037	.0159
	0.40	0.075	.0204	.0811	-.0048	-.0026	.0068		0.40	0.099	.0446	.1143	-.0080	-0.050	.0217
	0.60	0.075	.0222	.0800	-.0082	-.0042	.0132		0.61	0.101	.0465	.1140	-.0110	-0.069	.0279
	0.80	0.075	.0265	.0807	-.0102	-.0066	.0204		0.80	0.105	.0509	.1145	-.0129	-0.102	.0413
	0.99	0.073	.0316	.0815	-.0125	-.0090	.0279		1.02	0.109	.0574	.1155	-.0162	-0.102	.0413
0.90	0.77	0.078	.0272	.0846	.0125	0.068	-.0264	1.30	0.79	0.106	.0446	.1062	.0119	0.055	-.0227
	0.39	0.077	.0208	.0855	.0063	0.030	-.0113		0.40	0.096	.0388	.1067	.0072	0.027	-.0128
	0.01	0.077	.0197	.0870	.0003	0.002	-.0013		0.01	0.093	.0375	.1087	.0005	0.002	-.0015
	0.20	0.077	.0199	.0864	-.0021	-.0011	.0026		0.20	0.094	.0378	.1081	-.0026	-0.013	.0038
	0.41	0.079	.0207	.0852	-.0055	-.0029	.0084		0.41	0.097	.0390	.1073	-.0061	-0.026	.0095
	0.60	0.078	.0230	.0839	-.0089	-.0045	.0150		0.60	0.101	.0409	.1064	-.0088	-0.036	.0132
	0.81	0.078	.0278	.0842	-.0109	-.0069	.0225		0.80	0.105	.0450	.1073	-.0111	-0.057	.0208
	0.99	0.078	.0331	.0859	-.0131	-.0093	.0297		1.01	0.110	.0518	.1075	-.0144	-0.086	.0313
1.00	0.79	0.077	.0289	.0827	.0133	0.075	-.0293	1.70	0.79	0.096	.0414	.0903	.0102	0.054	-.0165
	0.41	0.073	.0224	.0822	.0070	0.036	-.0132		0.40	0.084	.0345	.0922	.0057	0.022	-.0081
	0.01	0.072	.0189	.0840	.0003	0.003	-.0013		0.01	0.079	.0330	.0933	.0005	0.002	-.0013
	0.21	0.072	.0184	.0836	-.0026	-.0014	.0038		0.21	0.080	.0337	.0933	-.0020	-0.008	.0019
	0.40	0.071	.0208	.0823	-.0059	-.0029	.0099		0.40	0.083	.0348	.0929	-.0046	-0.019	.0050
	0.61	0.074	.0235	.0822	-.0098	-.0050	.0183		0.60	0.089	.0367	.0910	-.0069	-0.030	.0077
	0.80	0.077	.0289	.0822	-.0120	-.0074	.0261		0.80	0.094	.0412	.0915	-.0092	-0.052	.0135
	1.01	0.080	.0361	.0813	-.0155	-.0102	.0370		1.00	0.101	.0472	.0903	-.0114	-0.073	.0181
1.10	0.79	0.072	.0335	.0796	.0125	0.069	-.0262	2.22	0.80	0.087	.0378	.0751	.0077	0.048	-.0090
	0.42	0.073	.0261	.0786	.0063	0.031	-.0113		0.41	0.075	.0313	.0787	.0041	0.019	-.0042
	0.01	0.073	.0246	.0799	-.0002	-.0002	.0005		0.01	0.069	.0290	.0793	-.0003	0.003	.0005
	0.21	0.073	.0249	.0789	-.0031	-.0017	.0056		0.21	0.071	.0299	.0789	-.0026	-0.013	.0024
	0.41	0.073	.0266	.0787	-.0064	-.0033	.0113		0.40	0.075	.0315	.0782	-.0044	-0.023	.0038
	0.61	0.074	.0293	.0767	-.0100	-.0050	.0185		0.60	0.080	.0342	.0768	-.0062	-0.038	.0061
	0.81	0.076	.0349	.0782	-.0124	-.0076	.0275		0.80	0.087	.0391	.0755	-.0080	-0.057	.0095
	1.00	0.085	.0410	.0769	-.0160	-.0103	.0376		1.00	0.090	.0447	.0762	-.0091	-0.078	.0118
$\delta = 9.7^\circ$															
1.30	0.80	0.072	.0294	.0763	.0112	0.062	-.0211	1.00	0.79	0.134	.0647	.1404	.0131	0.062	-.0302
	0.40	0.069	.0234	.0766	.0060	0.028	-.0094		0.55	0.129	.0612	.1418	-.0089	-0.040	-.0203
	0.01	0.068	.0219	.0773	.0003	0.000	-.0008		0.00	0.120	.0588	.1426	-.0004	-0.003	.0016
	0.20	0.068	.0221	.0770	-.0021	-.0012	.0029		0.21	0.120	.0583	.1397	-.0045	-0.022	.0113
	0.41	0.070	.0234	.0766	-.0052	-.0027	.0075		0.40	0.127	.0591	.1389	-.0088	-0.042	.0207
	0.60	0.072	.0254	.0759	-.0082	-.0042	.0118		0.61	0.133	.0631	.1408	-.0116	-0.057	.0266
	0.80	0.072	.0295	.0772	-.0105	-.0064	.0195		0.80	0.142	.0676	.1391	-.0131	-0.072	.0319
	1.01	0.074	.0363	.0776	-.0136	-.0091	.0284		1.00	0.148	.0738	.1391	-.0155	-0.103	.0439
1.70	0.80	0.067	.0291	.0672	.0094	0.061	-.0154	1.10	0.80	0.124	.0687	.1330	.0128	0.060	-.0285
	0.40	0.062	.0224	.0682	.0050	0.026	-.0068		0.40	0.118	.0651	.1339	-.0083	0.035	-.0180
	0.01	0.060	.0207	.0690	.0004	0.001	-.0012		0.01	0.110	.0622	.1340	-.0004	-0.004	.0015
	0.20	0.061	.0209	.0688	-.0016	-.0010	.0014		0.20	0.112	.0630	.1319	-.0045	-0.022	.0104
	0.41	0.063	.0220	.0684	-.0040	-.0023	.0042		0.40	0.116	.0637	.1319	-.0087	-0.040	.0189
	0.60	0.064	.0241	.0682	-.0061	-.0038	.0073		0.61	0.123	.0677	.1326	-.0114	-0.052	.0237
	0.80	0.067	.0281	.0681	-.0083	-.0057	.0122		0.81	0.130	.0716	.1308	-.0134	-0.073	.0315
	1.01	0.073	.0340	.0673	-.0108	-.0079	.0172		1.01	0.138	.0792	.1310	-.0158	-0.101	.0412
2.22	0.79	0.065	.0276	.0552	.0070	0.054	-.0093	1.30	0.81	0.124	.0633	.1233	.0122	0.055	-.0234
	0.41	0.057	.0202	.0577	.0036	0.023	-.0041		0.40	0.111	.0575	.1250	.0084	0.030	-.0181
	0.01	0.056	.0194	.0585	-.0004	-.0003	.0004		0.01	0.103	.0557	.1249	.0007	0.003	-.0019
	0.20	0.056	.0197	.0580	-.0021	-.0015	.0022		0.21	0.104	.0559	.1238	-.0031	-0.014	.0058
	0.41	0.058	.0211	.0573	-.0039	-.0027	.0041		0.40	0.110	.0574	.1238	-.0065	-0.027	.0111
	0.61	0.062	.0242	.0560	-.0057	-.0044	.0069		0.60	0.119	.0601	.1240	-.0091	-0.039	.0151
	0.80	0.068	.0282	.0549	-.0075	-.0062	.0101		0.81	0.125	.0638	.1221	-.0114	-0.058	.0214
	1.00	0.073	.0343	.0532	-.0089	-.0080	.0122		1.00	0.132	.0704	.1243	-.0141	-0.084	.0313
$\delta = 9.7^\circ$															
0.70	0.79	0.117	.0445	.1176	.0126	0.063	-.0280	1.70	0.80	0.114	.0578	.1043	.0106	0.052	-.0176
	0.45	0.114	.0389	.1226	.0081	0.036	-.0163		0.40	0.096	.0504	.1058	.0062	0.026	-.0091
	0.00	0.111	.0382	.1237	.0006	0.004	-.0020		0.01	0.088	.0480	.1050	.0005	0.002	-.0011
	0.19	0.110	.0384	.1234	-.0024	-.0011	.0031		0.20	0.090	.0490	.1055	-.0020	-0.009	.0022
	0.40	0.104	.0381	.1223	-.0058	-.0027	.0098		0.41	0.095	.0502	.1062	-.0050	-0.019	.0061
	0.61	0.113	.0411	.1225	-.0089	-.0041	.0156		0.60	0.107	.0543	.1049	-.0074	-0.031	.0090
	0.80	0.115	.0434	.1175	-.0110	-.0059	.0227		0.81	0.112	.0575	.1037	-.0094	-0.050	.0132
	1.01	0.119	.0496	.1171	-.0134	-.0087	.0325		1.00	0.116	.0632	.1057	-.0113	-0.073	.0179
0.90	0.79	0.124	.0456	.1247	.0125	0.057	-.0267	2.22	0.80	0.102	.0522	.0887	.0077	0.045	-.0086
	0.40	0.115	.0406	.1245	.0081	0.034	-.0171		0.41	0.083	.0442	.0909	-.0042	-0.027	.0043
	0.01	0.110	.0382	.1262	.0004	0.002	-.0014		0.01	0.075	.0421	.0905	-.0004	-0.004	.0003
	0.21	0.112	.0391	.1250	-.0032	-.0015	.0055		0.21	0.078	.0429	.0897	-.0026	-0.014	.0023
	0.40	0.113	.0401	.1247	-.0067	-.0031	.0125		0.41	0.082	.0445	.0907	-.0046	-0.024	.0036
	0.61	0.116	.0417	.1247	-.0098	-.0045	.0188		0.60	0.094	.0485	.0893	-.0064	-0.035	.0059
	0.80	0.122	.0459	.1249	-.0118	-.0060	.0246		0.80	0.103	.0534	.0881	-.0080	-0.054	.0087
	0.99	0.126	.0527	.1259	-.0146	-.0089	.0371		1.00	0.108	.0597	.0892	-.0092	-0.076	.0108
1.00	0.80	0.119	.0447	.1208											

TABLE V.- AERODYNAMIC CHARACTERISTICS OF CONFIGURATIONS AT APPROXIMATELY
 10° ANGLE OF ATTACK - Concluded
 (g) BV; $\alpha = 10.2^\circ$

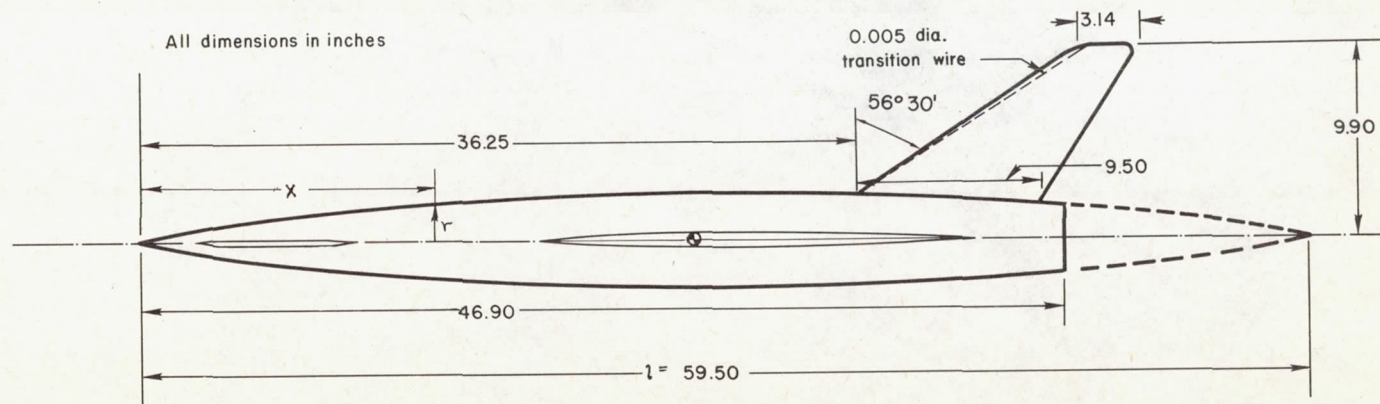
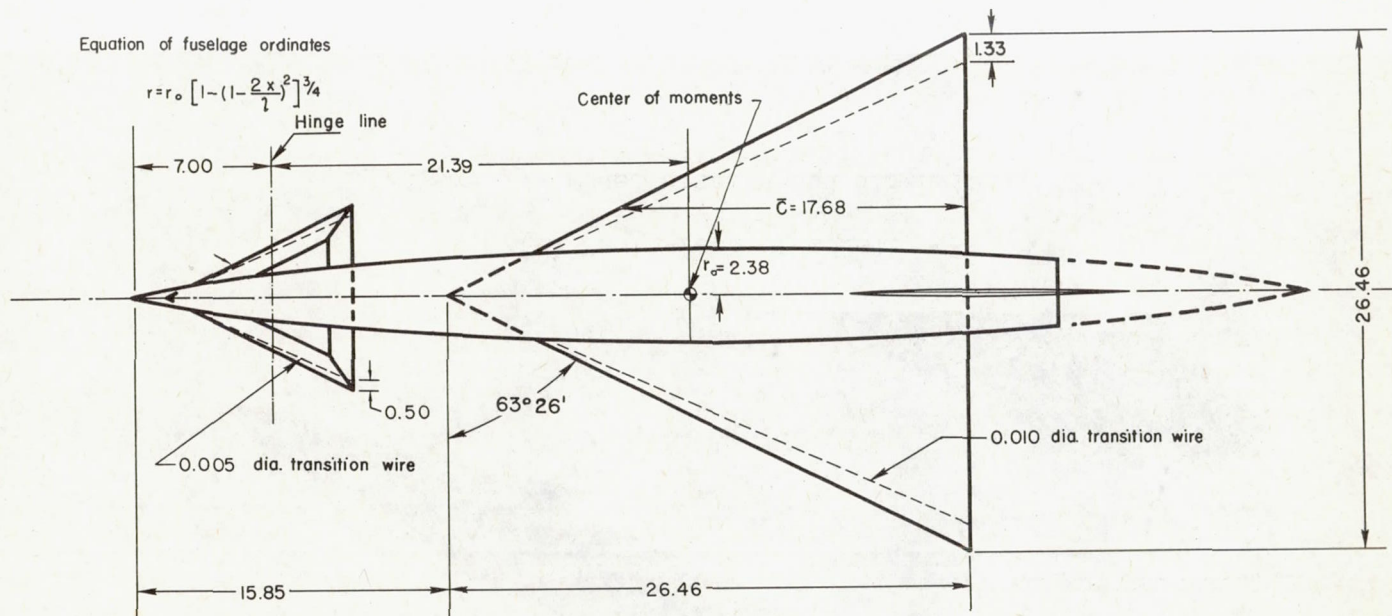
M	β , deg	C_L	C_D	C_m	C_l	C_y	C_n
0.70	-07.9	0.016	.0182	.0212	.0122	0.092	-.0291
	-04.0	0.016	.0098	.0195	.0061	0.046	-.0138
	00.1	0.016	.0075	.0199	.0004	0.005	-.0012
	02.0	0.015	.0078	.0191	-.0020	-.0016	.0039
	04.1	0.017	.0098	.0196	-.0050	-.0038	.0106
	06.0	0.017	.0120	.0203	-.0080	-.0059	.0179
	08.1	0.015	.0174	.0211	-.0110	-.0085	.0258
	10.0	0.017	.0242	.0221	-.0136	-.0109	.0328
0.90	-07.9	0.018	.0183	.0209	.0118	0.089	-.0282
	-04.1	0.017	.0102	.0195	.0061	0.044	-.0136
	00.1	0.016	.0082	.0195	.0000	0.001	-.0001
	02.1	0.017	.0083	.0193	-.0025	-.0019	.0051
	04.1	0.017	.0100	.0196	-.0055	-.0041	.0121
	06.1	0.015	.0132	.0208	-.0088	-.0066	.0203
	08.1	0.016	.0183	.0216	-.0116	-.0089	.0276
	10.0	0.015	.0246	.0232	-.0141	-.0113	.0347
1.00	-08.0	0.020	.0215	.0214	.0132	0.098	-.0327
	-04.0	0.019	.0112	.0195	.0063	0.047	-.0150
	00.1	0.018	.0096	.0207	-.0002	-.0000	-.0002
	02.1	0.020	.0107	.0196	-.0029	-.0020	.0060
	04.1	0.017	.0118	.0206	-.0065	-.0046	.0148
	06.0	0.017	.0147	.0219	-.0099	-.0072	.0237
	08.1	0.018	.0197	.0223	-.0131	-.0097	.0325
	10.0	0.014	.0276	.0235	-.0159	-.0124	.0403
1.10	-07.8	0.021	.0242	.0205	.0126	0.091	-.0306
	-03.9	0.018	.0153	.0188	.0058	0.044	-.0133
	00.1	0.019	.0134	.0189	-.0003	0.001	.0007
	02.1	0.019	.0131	.0189	-.0032	-.0023	.0072
	04.1	0.016	.0135	.0198	-.0066	-.0047	.0156
	06.1	0.017	.0191	.0200	-.0102	-.0073	.0248
	08.1	0.016	.0257	.0223	-.0133	-.0097	.0331
	10.1	0.018	.0320	.0224	-.0160	-.0122	.0407
1.30	-07.8	0.022	.0206	.0217	.0117	0.082	-.0256
	-03.9	0.020	.0128	.0200	.0057	0.039	-.0116
	00.1	0.020	.0114	.0202	.0001	0.002	-.0002
	02.0	0.019	.0116	.0199	-.0025	-.0017	.0049
	04.1	0.019	.0132	.0204	-.0057	-.0040	.0119
	06.0	0.018	.0164	.0215	-.0089	-.0062	.0193
	08.0	0.019	.0209	.0224	-.0117	-.0084	.0261
	10.0	0.023	.0276	.0227	-.0141	-.0106	.0321
1.70	-07.9	0.028	.0217	.0228	.0098	0.075	-.0182
	-04.0	0.024	.0144	.0215	.0054	0.038	-.0096
	00.1	0.023	.0123	.0219	.0003	0.003	-.0008
	02.0	0.021	.0122	.0215	-.0020	-.0012	.0028
	04.1	0.023	.0140	.0217	-.0046	-.0032	.0076
	06.0	0.024	.0170	.0223	-.0070	-.0052	.0121
	08.0	0.026	.0214	.0233	-.0091	-.0071	.0161
	10.0	0.028	.0268	.0242	-.0109	-.0091	.0193
2.22	-07.9	0.036	.0212	.0194	.0071	0.062	-.0097
	-03.9	0.030	.0141	.0198	.0037	0.028	-.0048
	00.1	0.025	.0117	.0203	-.0004	-.0003	.0006
	02.1	0.027	.0127	.0198	-.0024	-.0018	.0033
	04.1	0.028	.0145	.0199	-.0046	-.0035	.0065
	06.1	0.032	.0176	.0196	-.0063	-.0053	.0092
	08.0	0.034	.0222	.0196	-.0076	-.0071	.0107
	10.1	0.040	.0292	.0209	-.0089	-.0092	.0117



A-22831

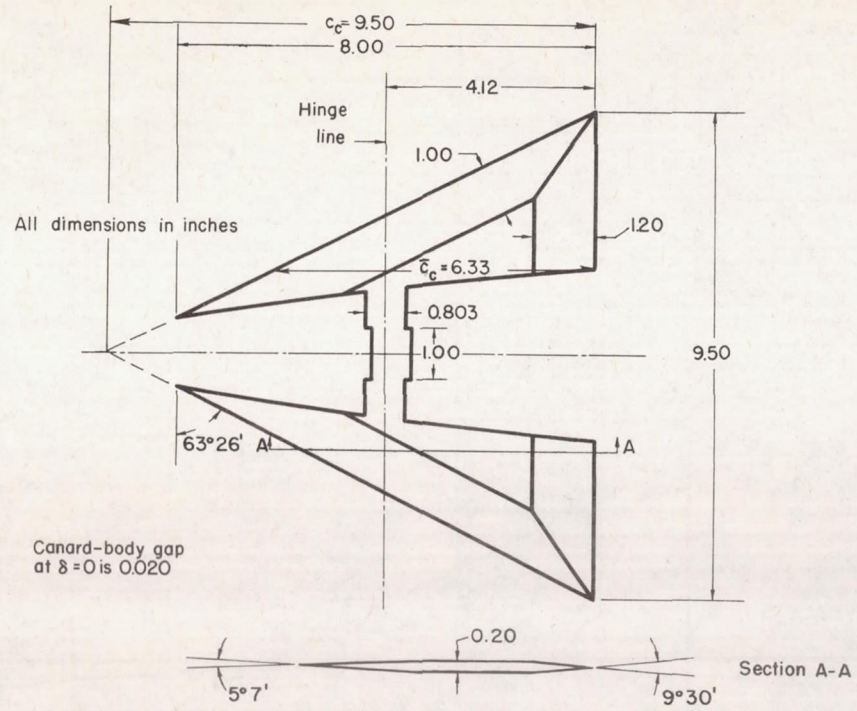
(a) Photograph of model.

Figure 1.- Model details and dimensions.



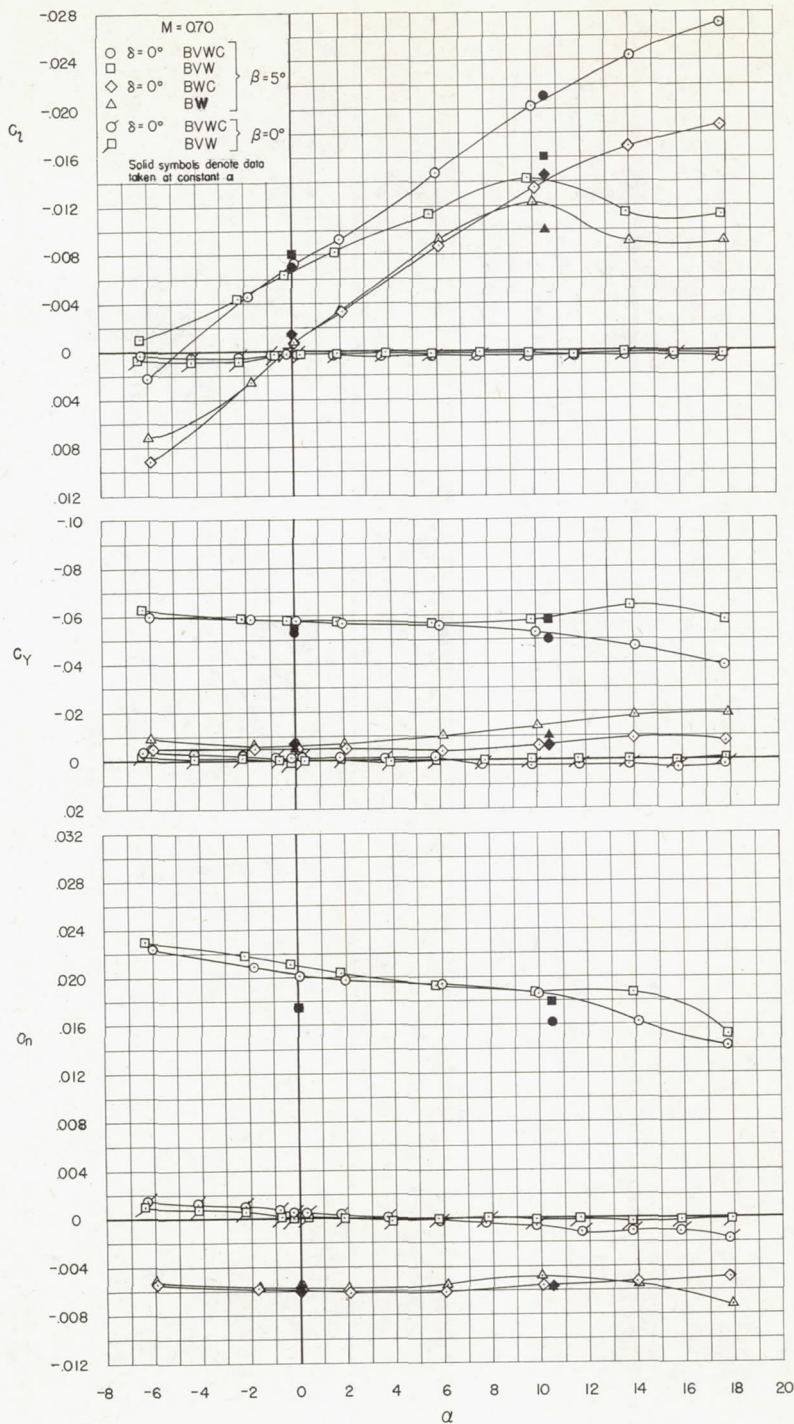
(b) Dimensional sketch of complete model.

Figure 1.- Continued.



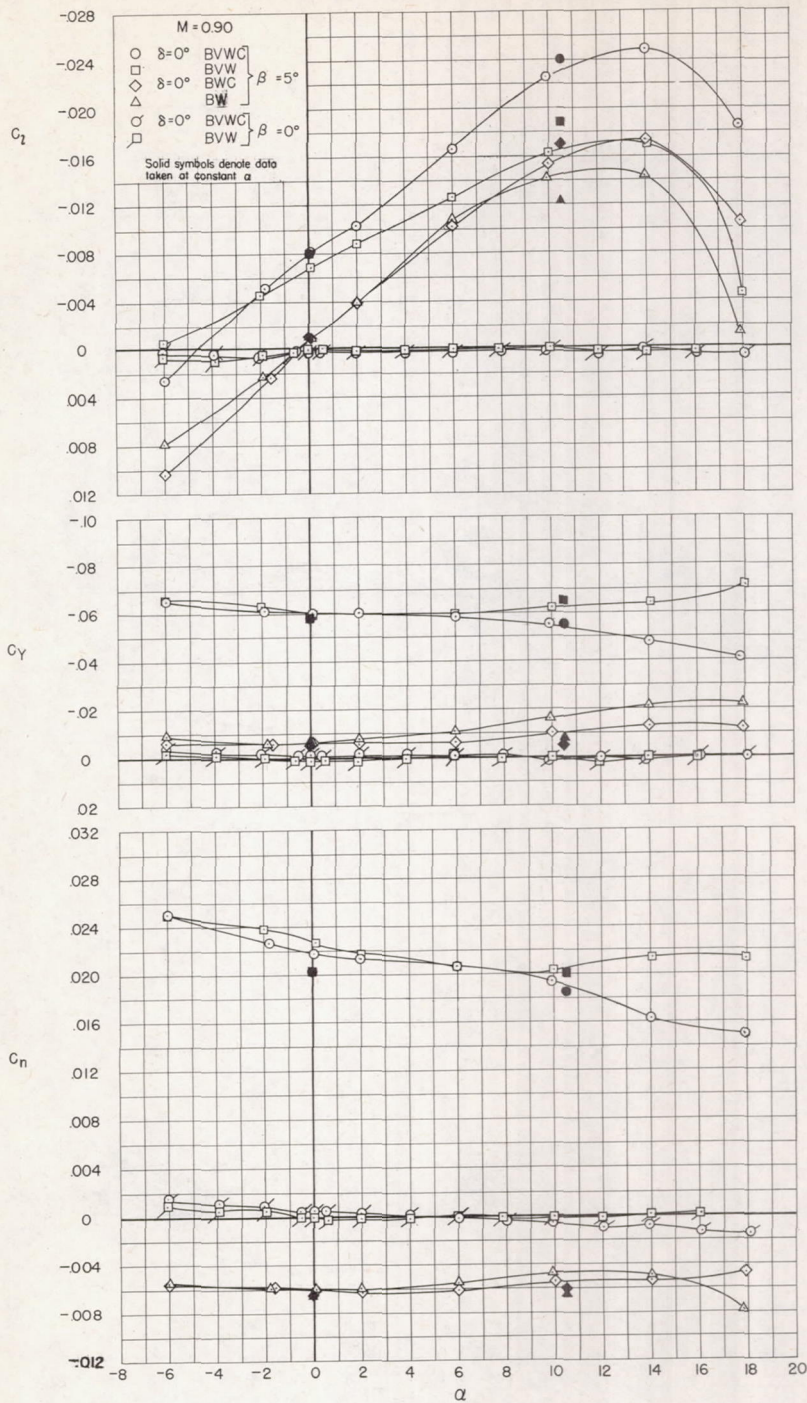
(c) Details of canard.

Figure 1.- Concluded.



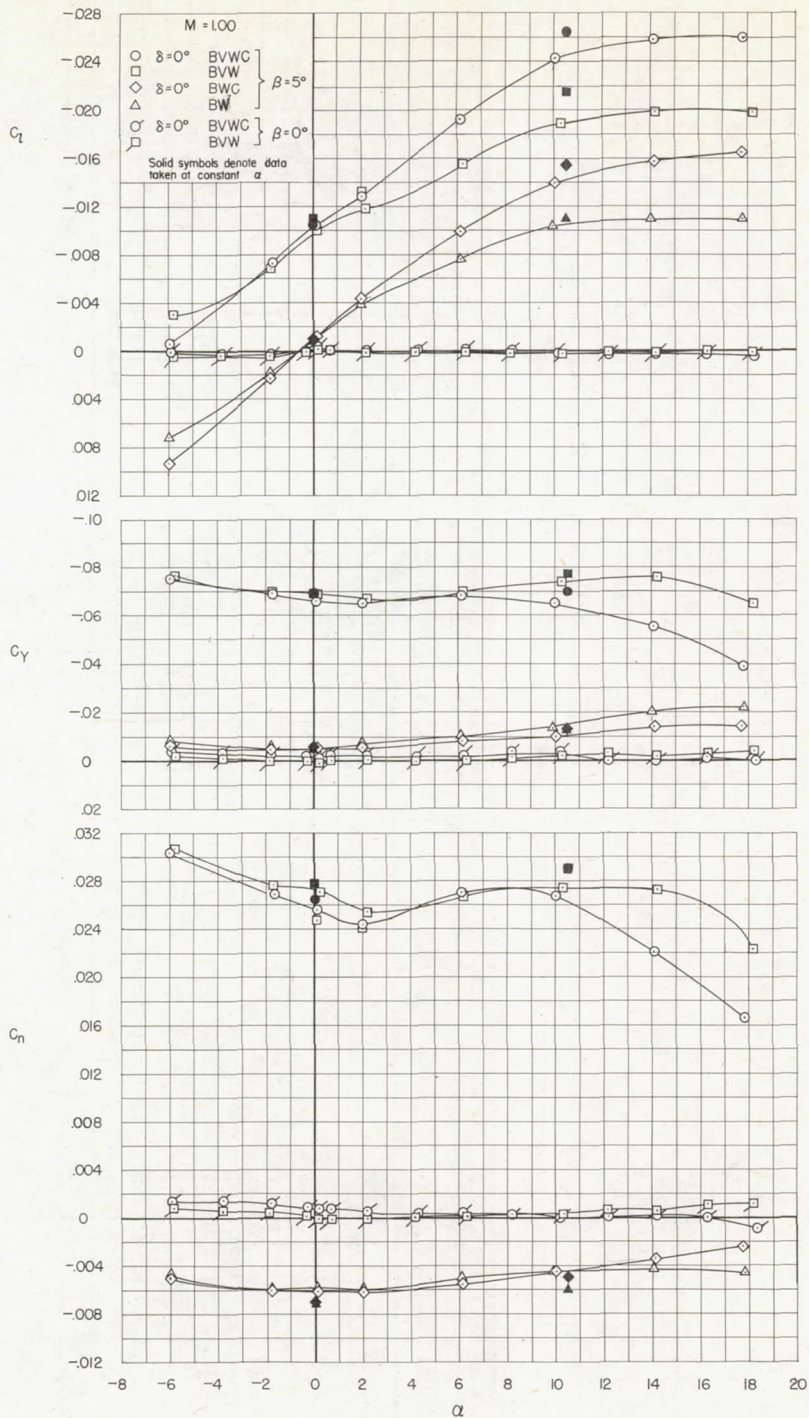
(a) M = 0.70

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



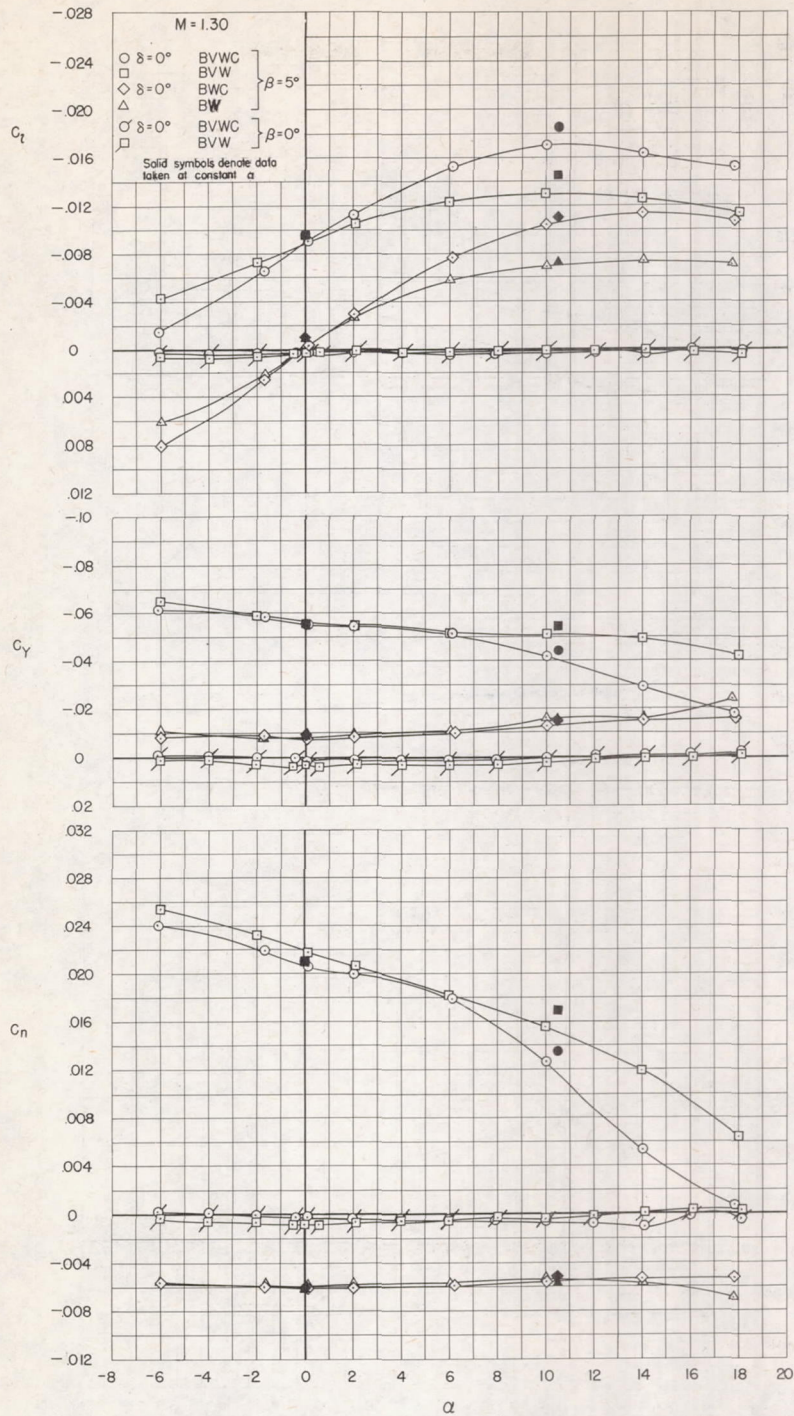
(b) M = 0.90

Figure 2.- Continued.



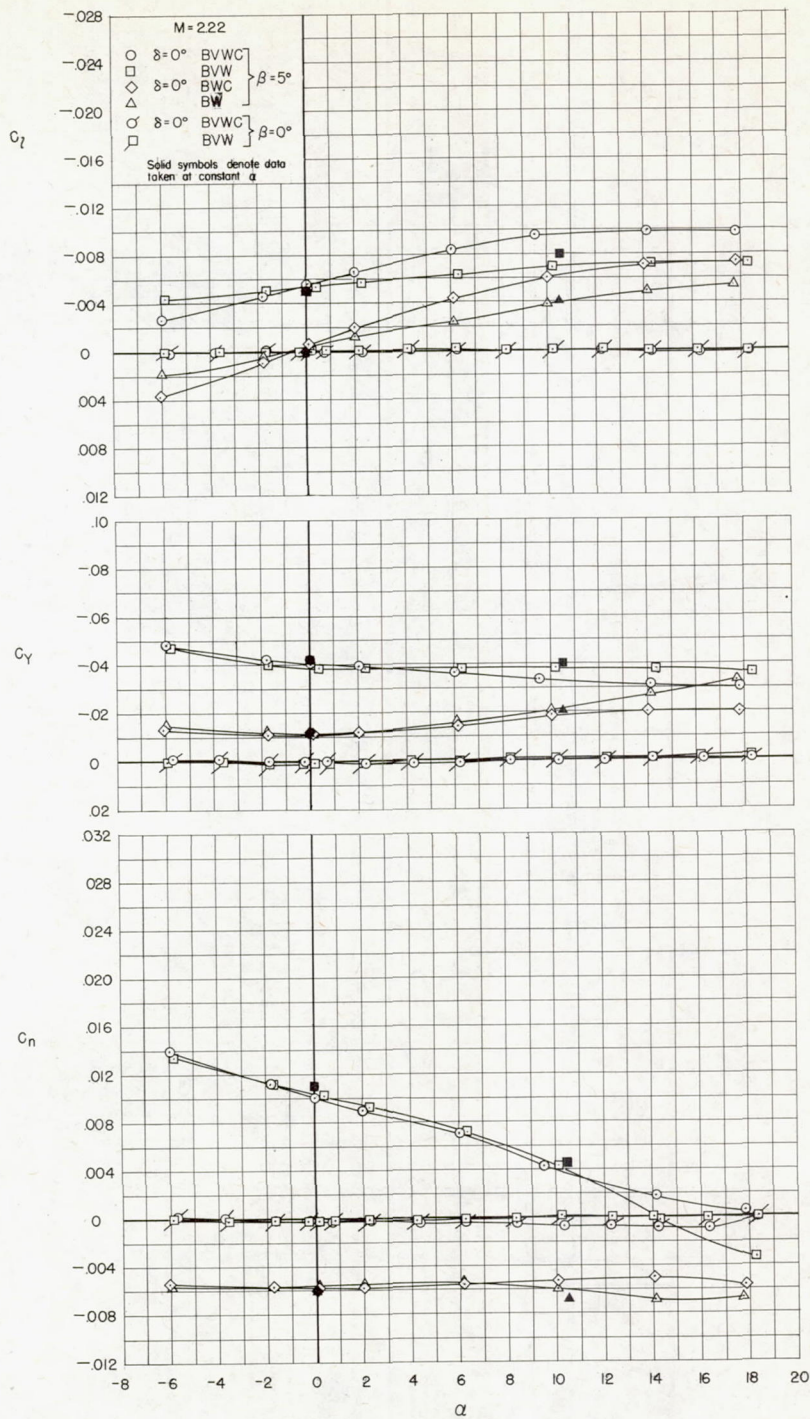
(c) M = 1.00

Figure 2.- Continued.



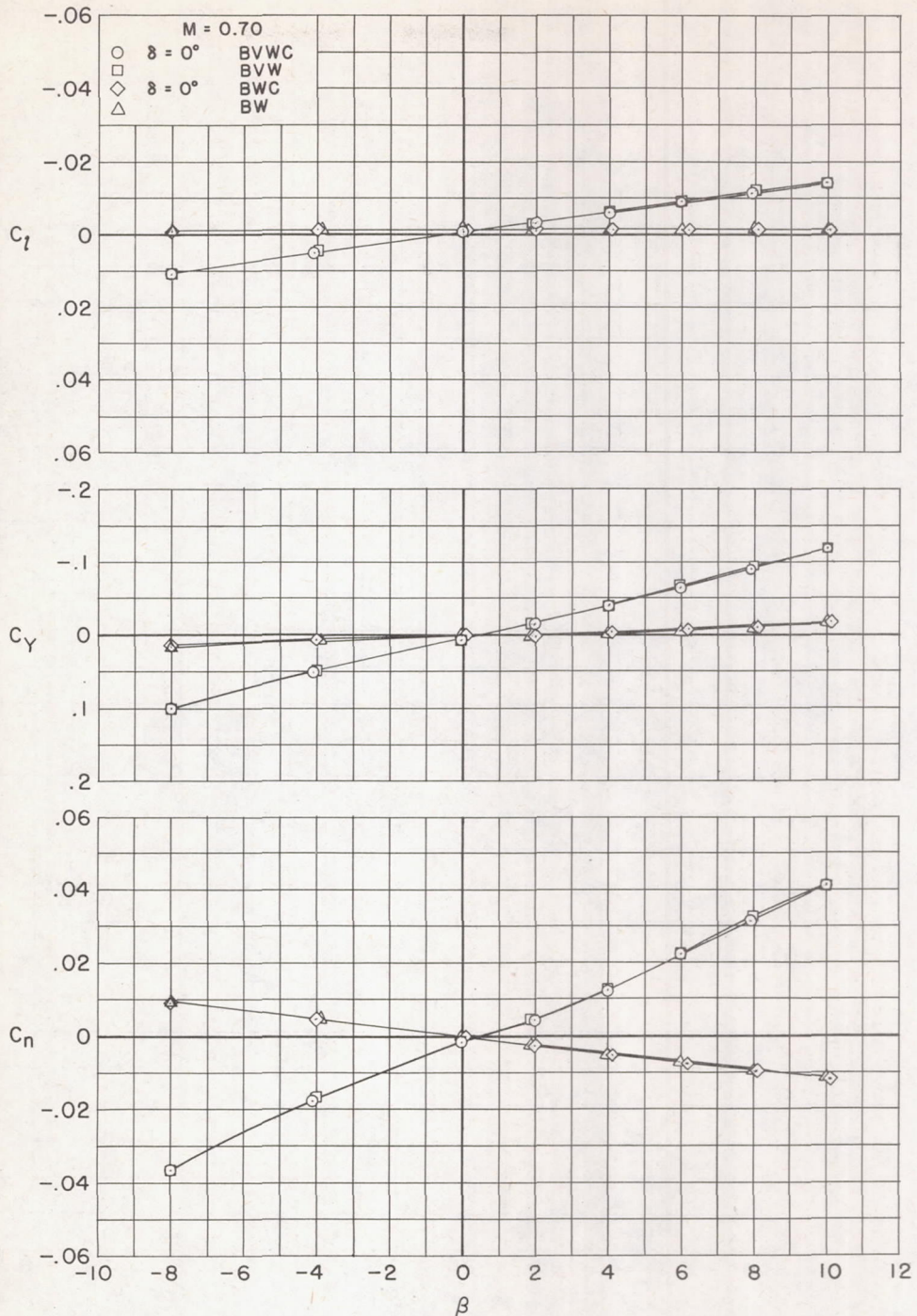
(d) M = 1.30

Figure 2.- Continued.



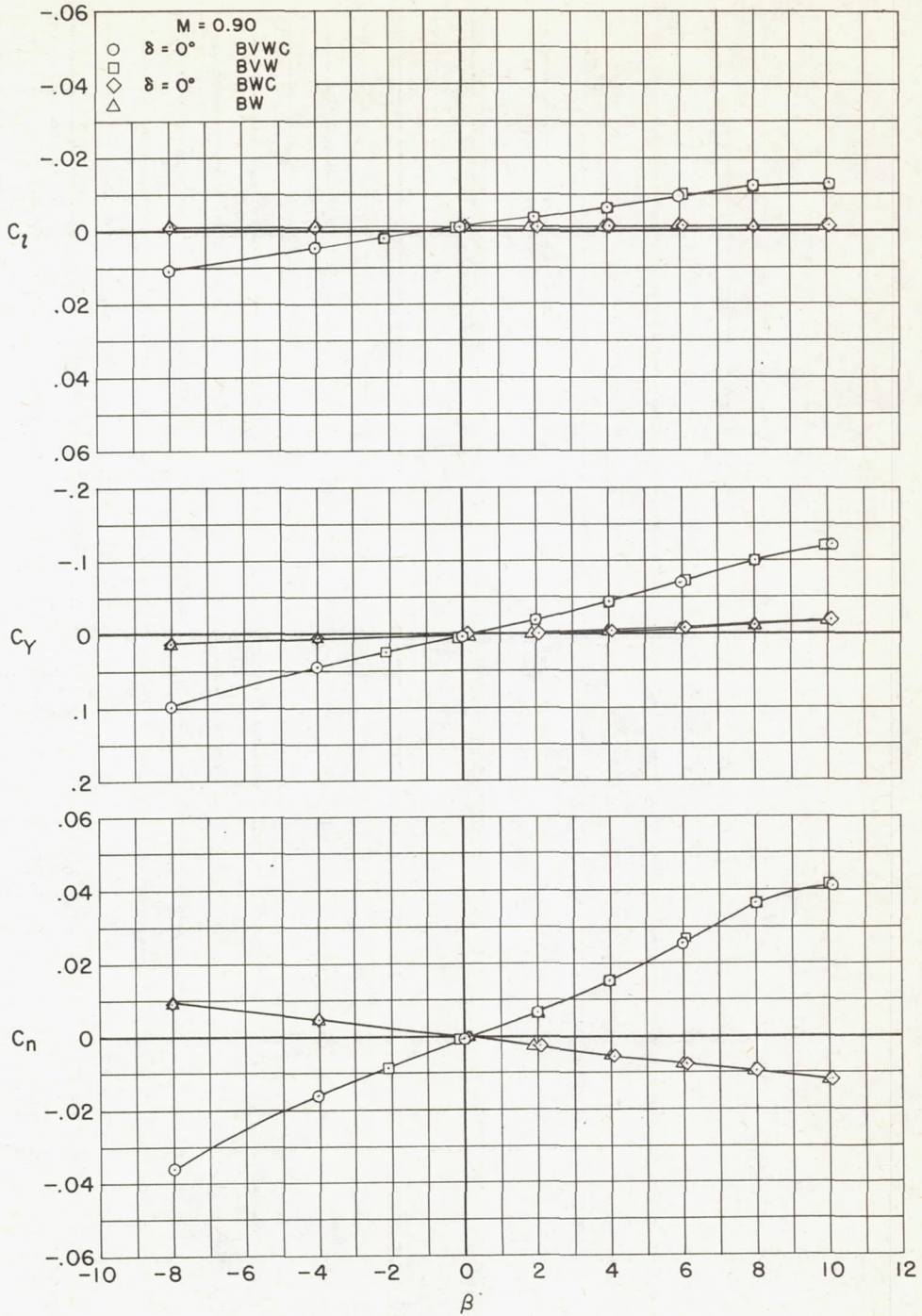
(e) M = 2.22

Figure 2.- Concluded.



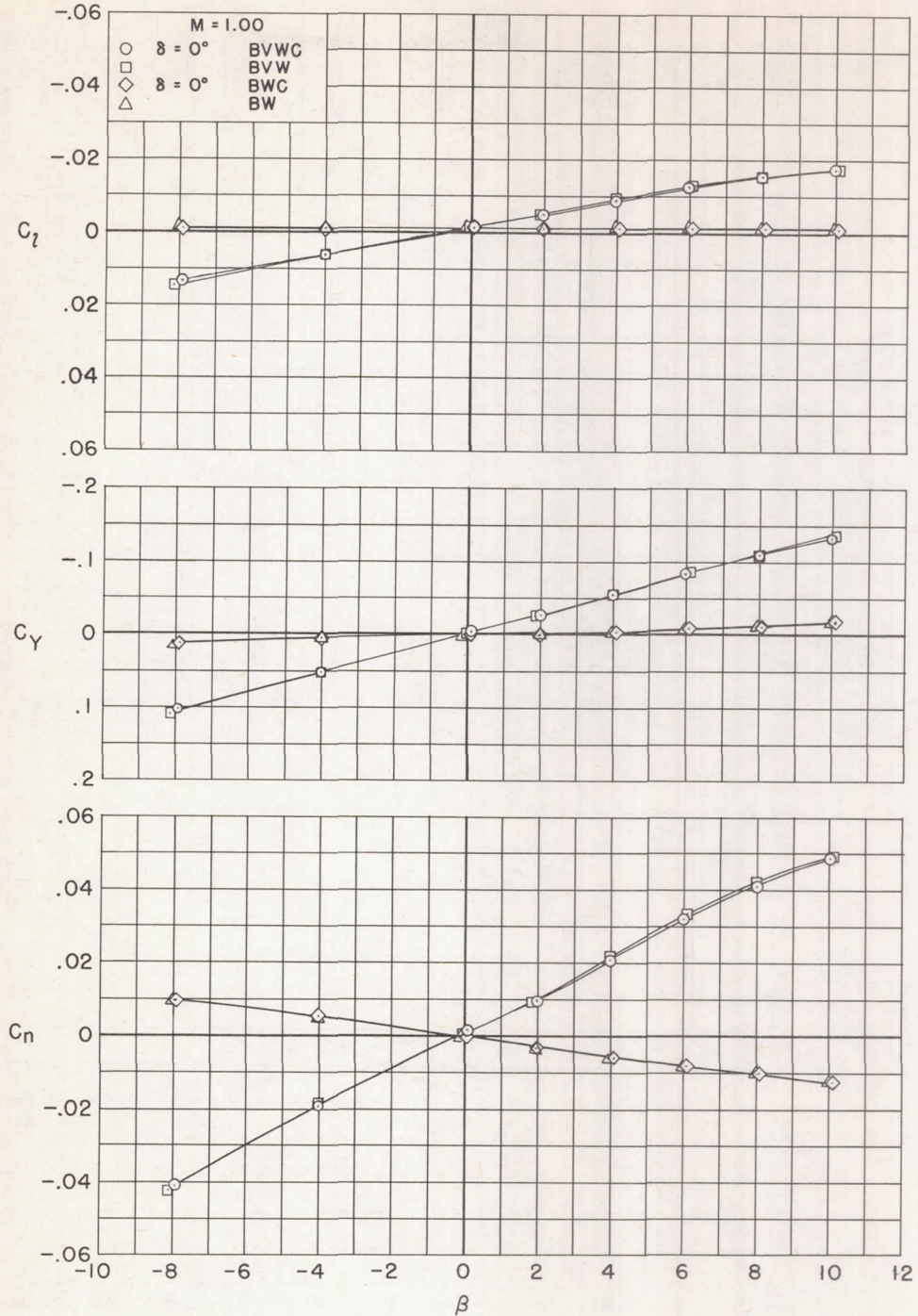
(a) M = 0.70

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° .



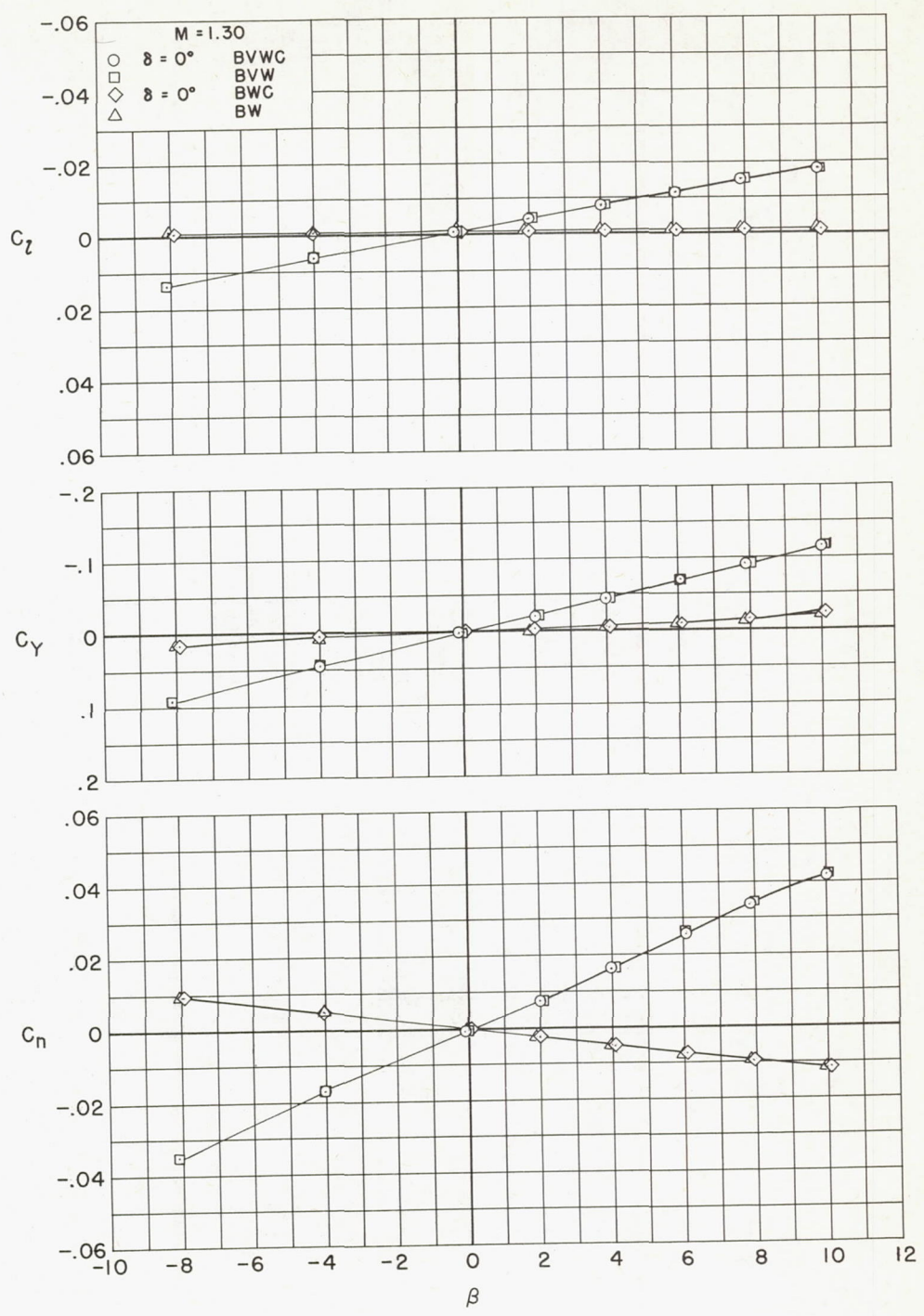
(b) M = 0.90

Figure 3.- Continued.



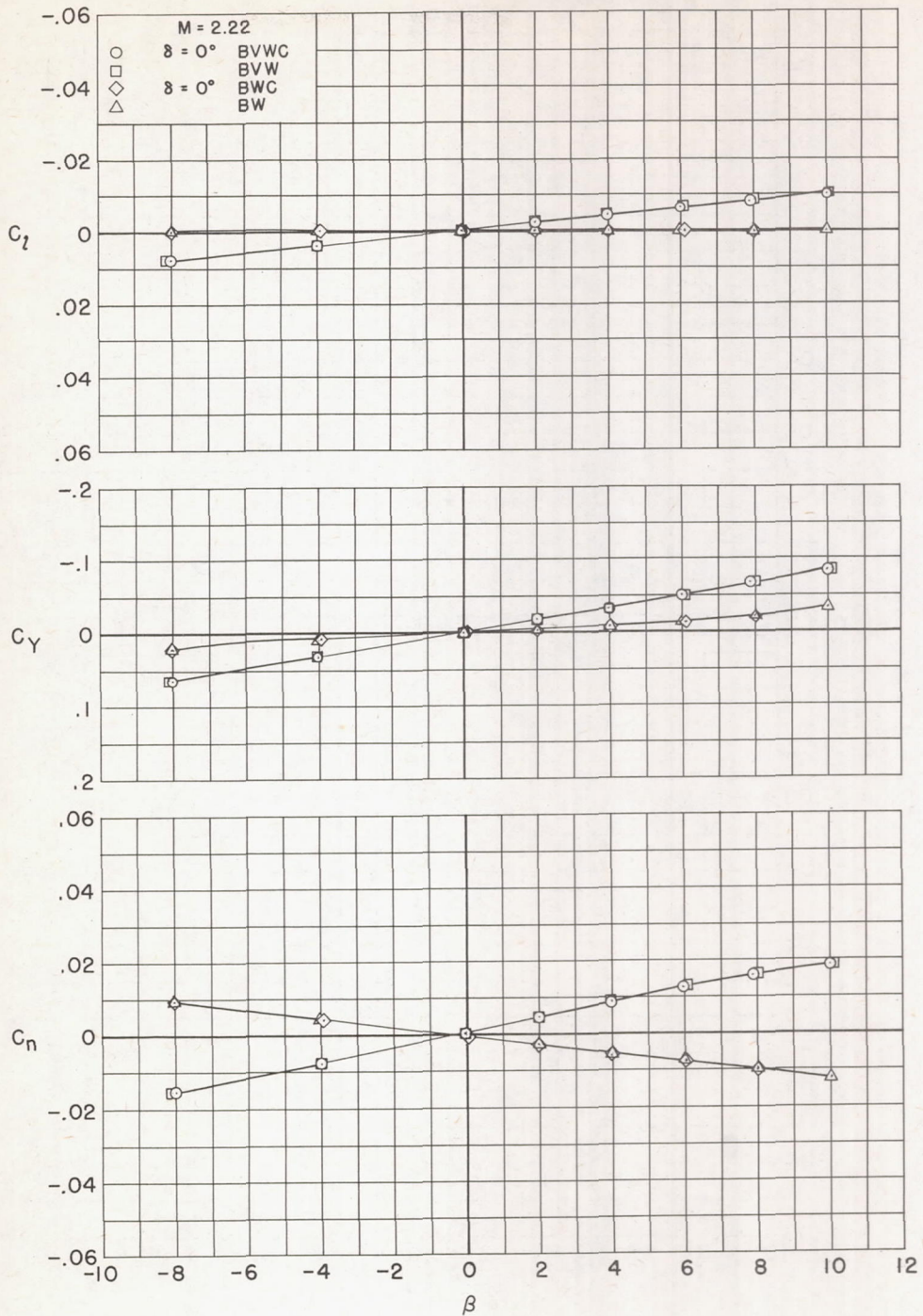
(c) M = 1.00

Figure 3.- Continued.



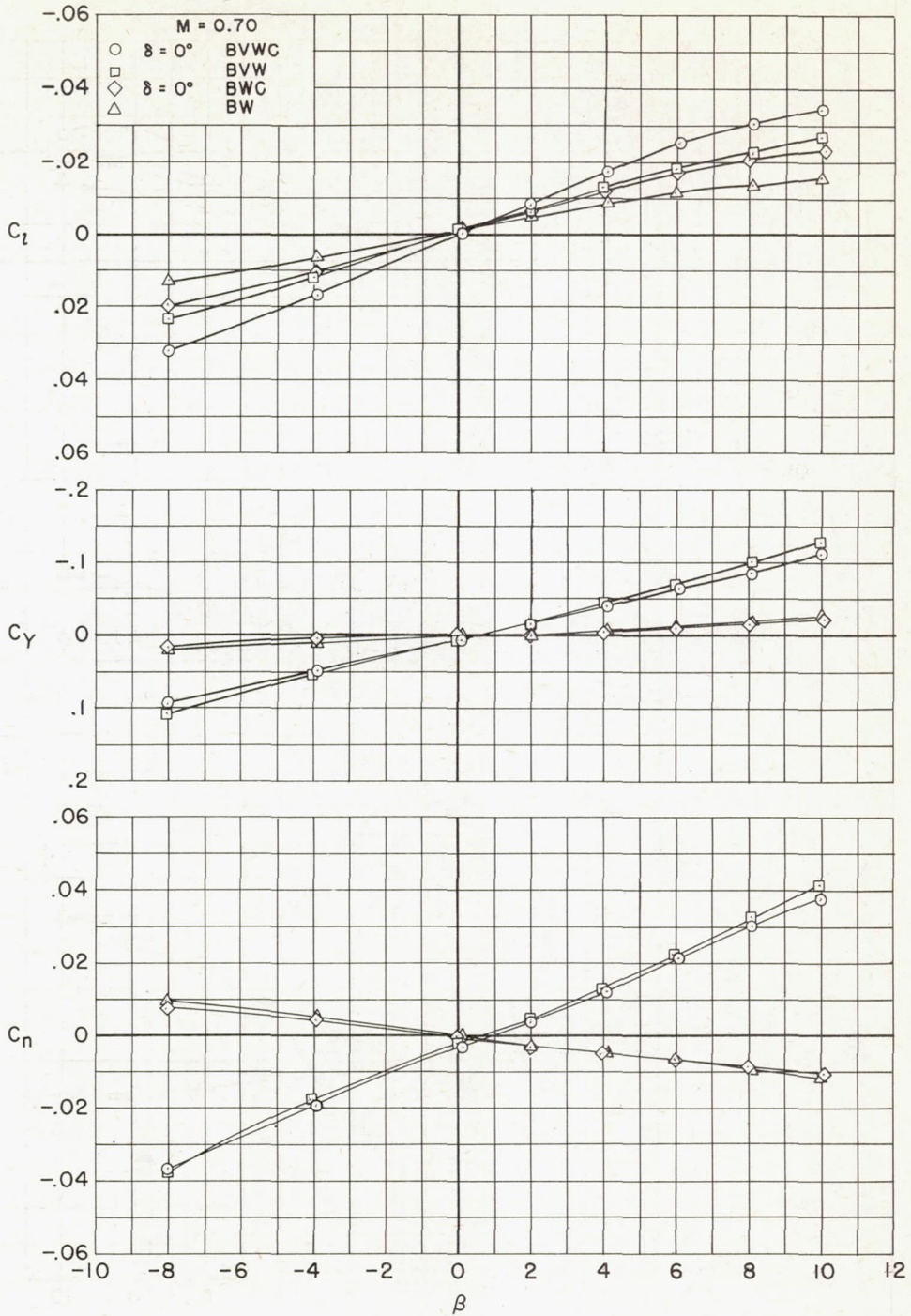
(d) M = 1.30

Figure 3.- Continued.



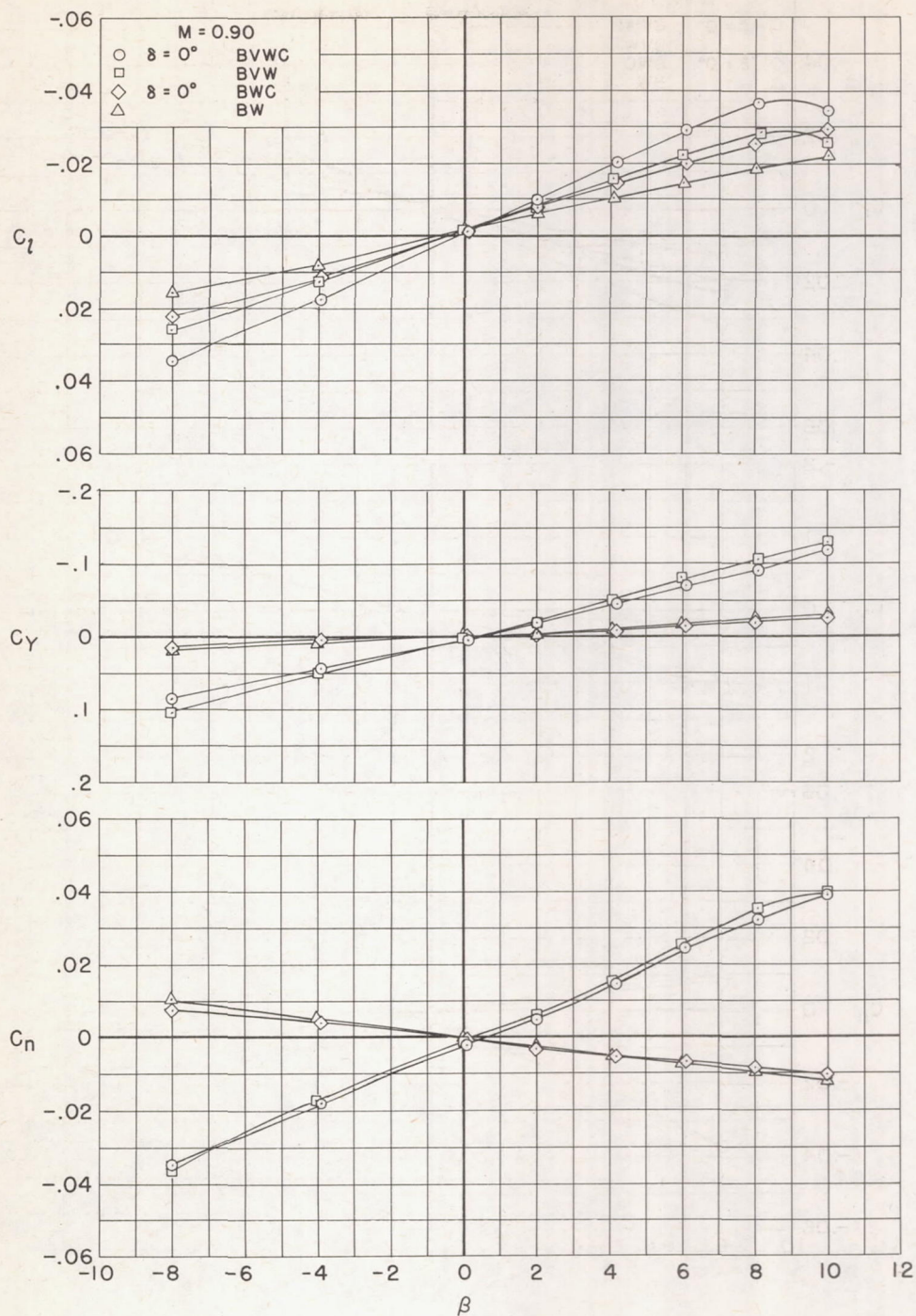
(e) $M = 2.22$

Figure 3.- Concluded.



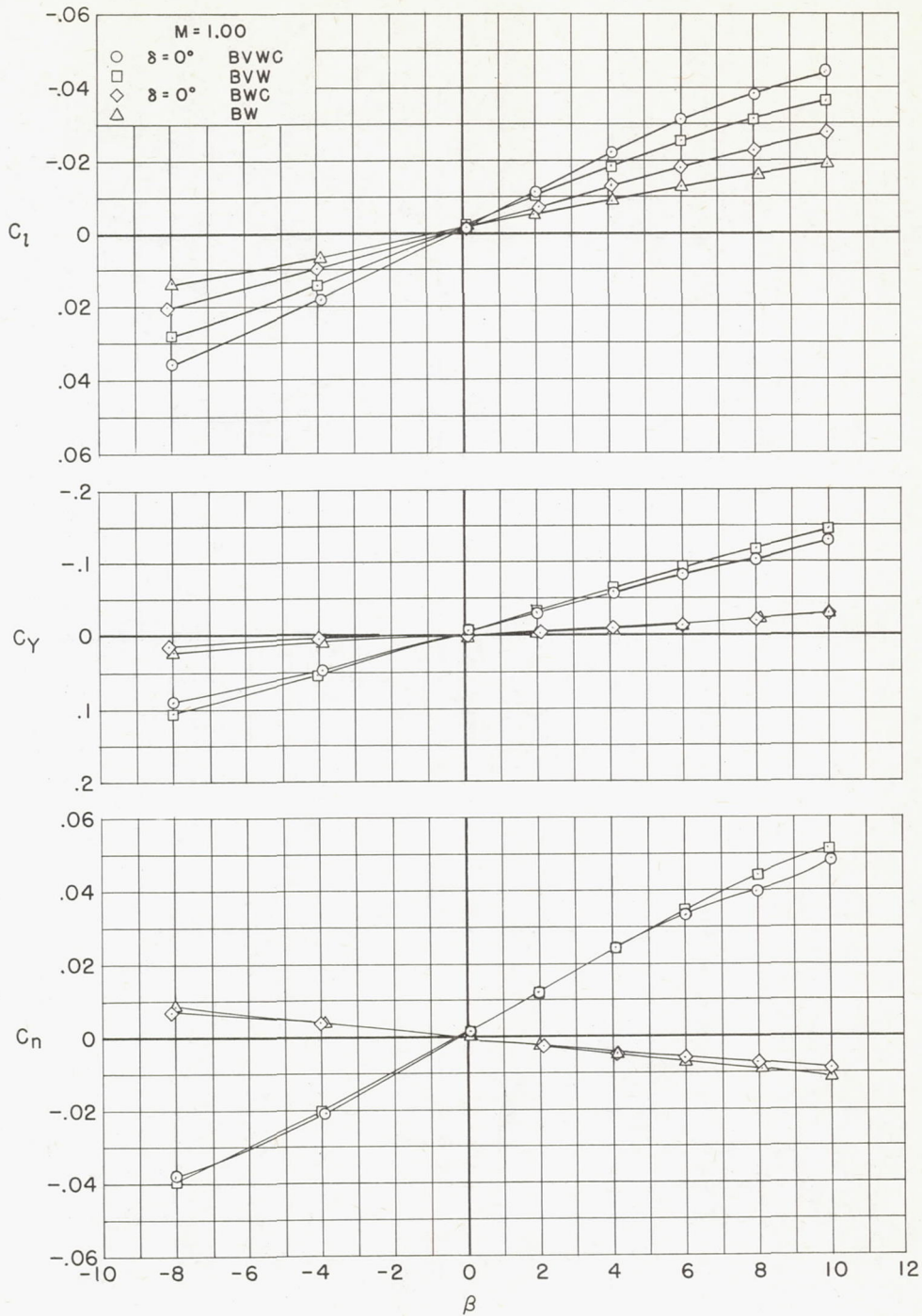
(a) $M = 0.70$

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° .



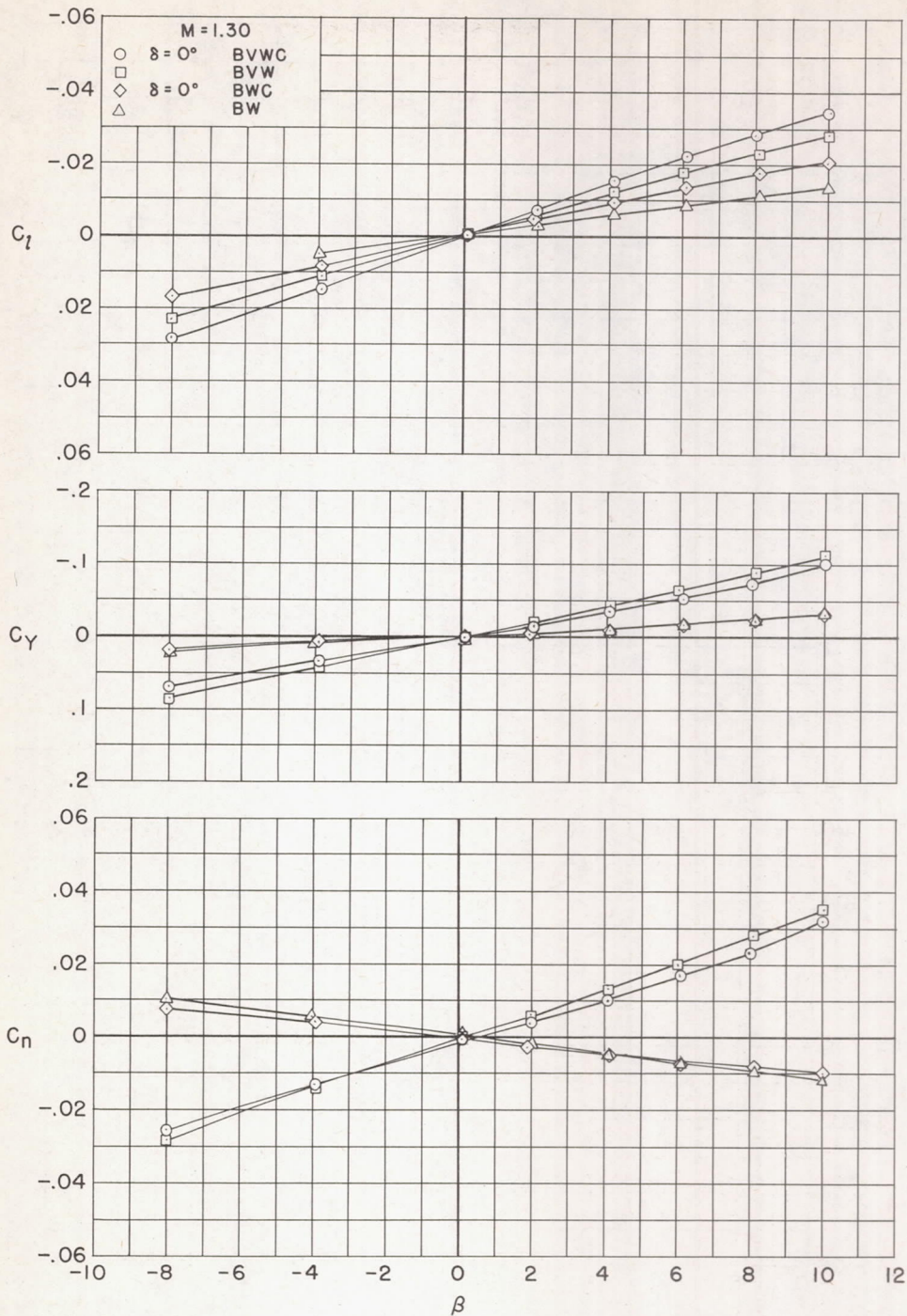
(b) M = 0.90

Figure 4.- Continued.



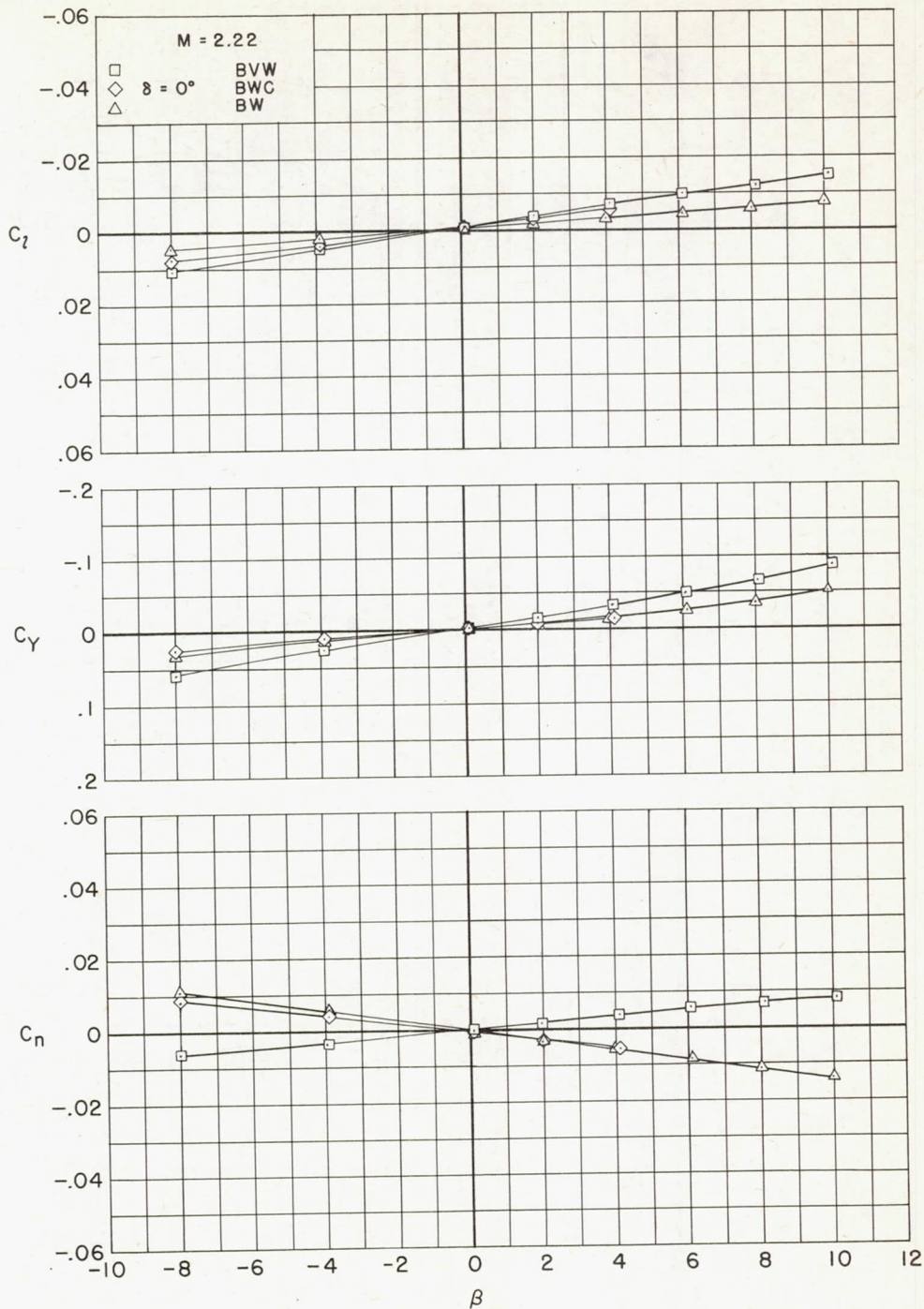
(c) M = 1.00

Figure 4.- Continued.



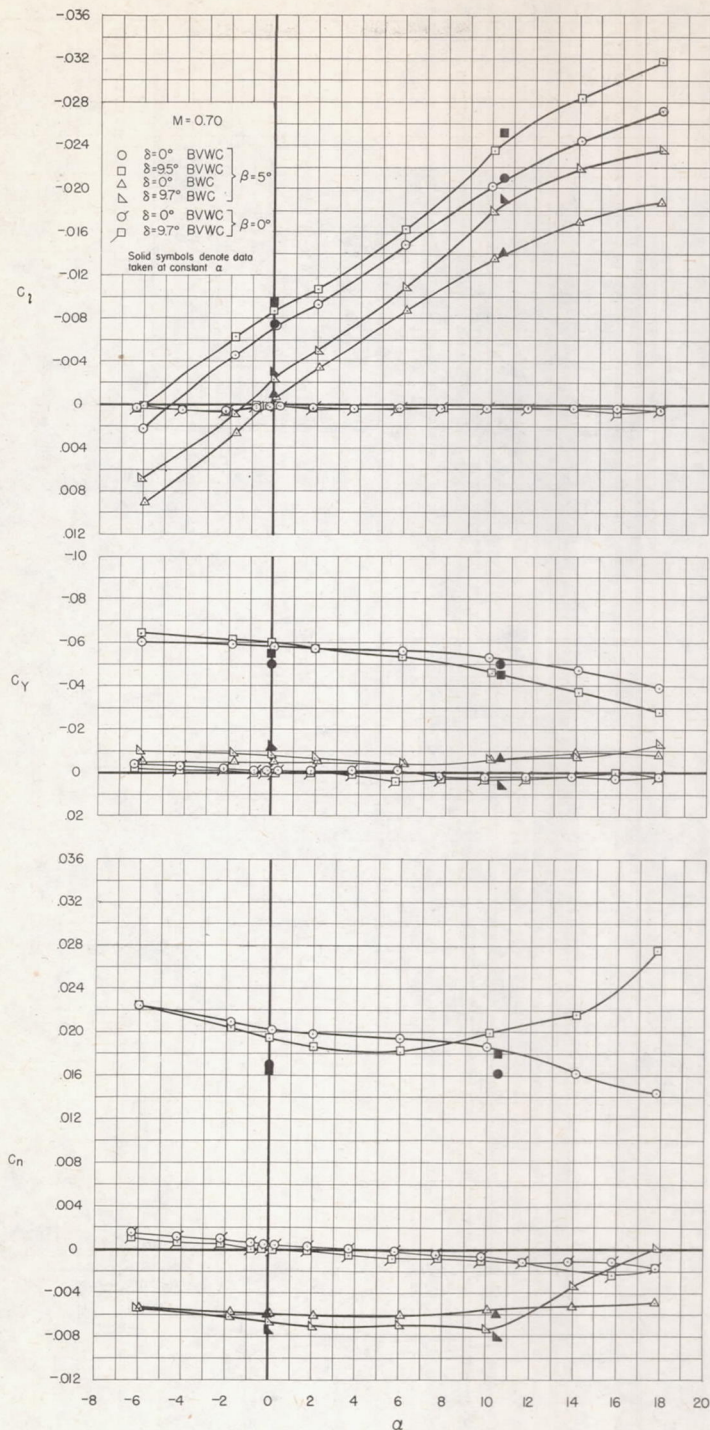
(d) M = 1.30

Figure 4.- Continued.



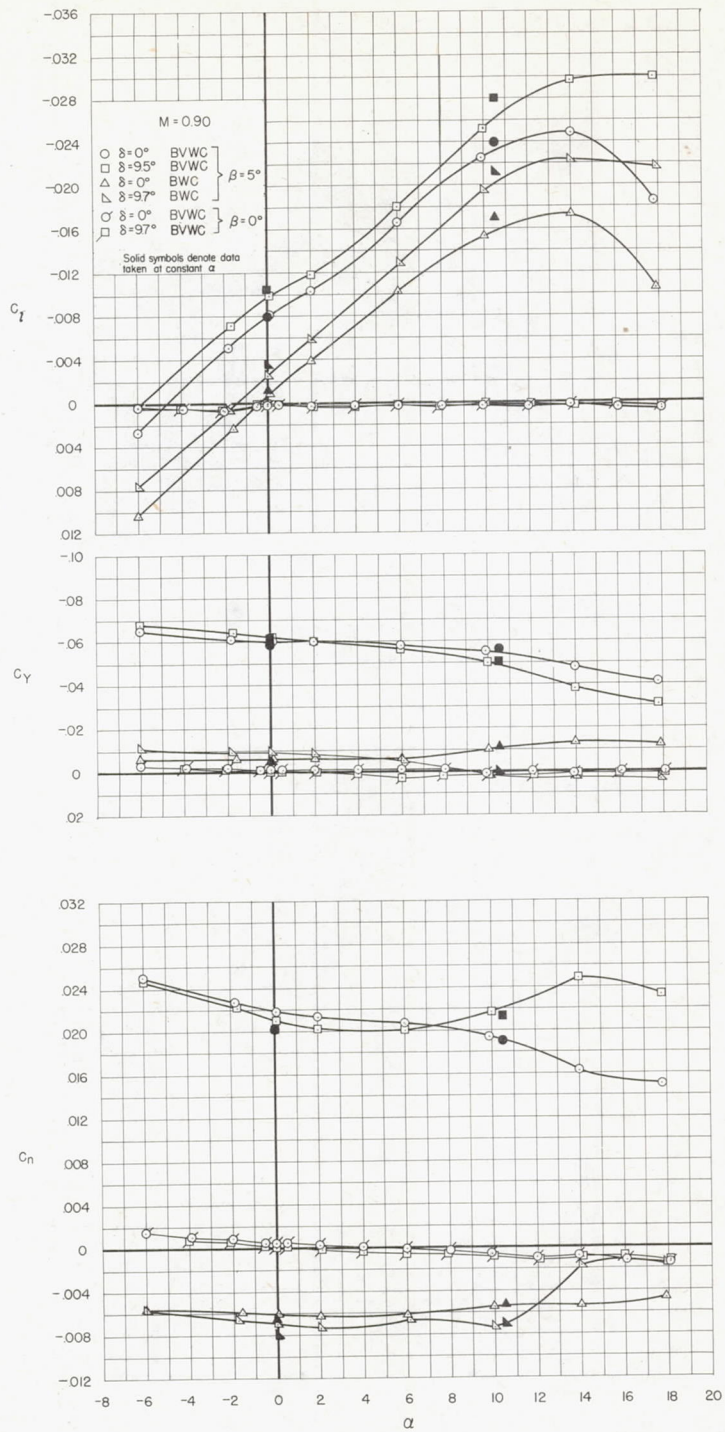
(e) M = 2.22

Figure 4.- Concluded.



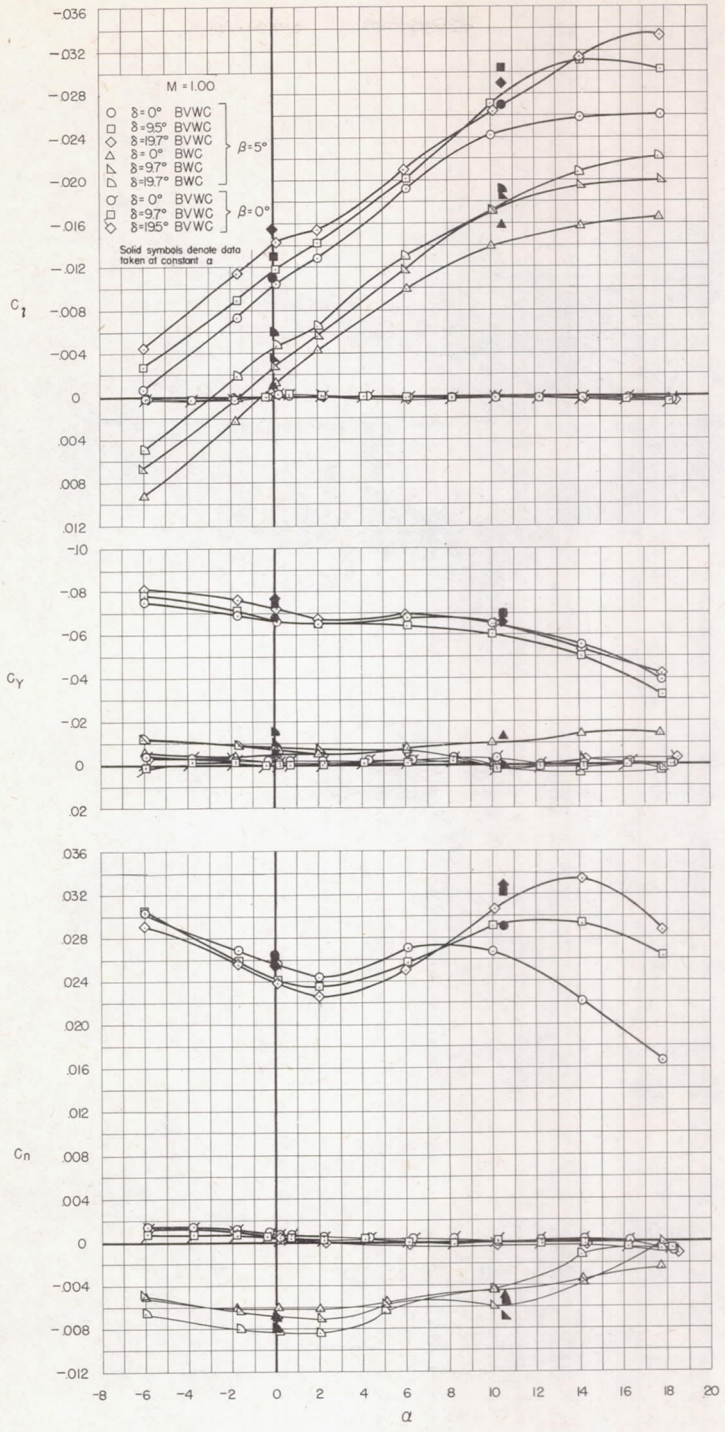
(a) $M = 0.70$

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.



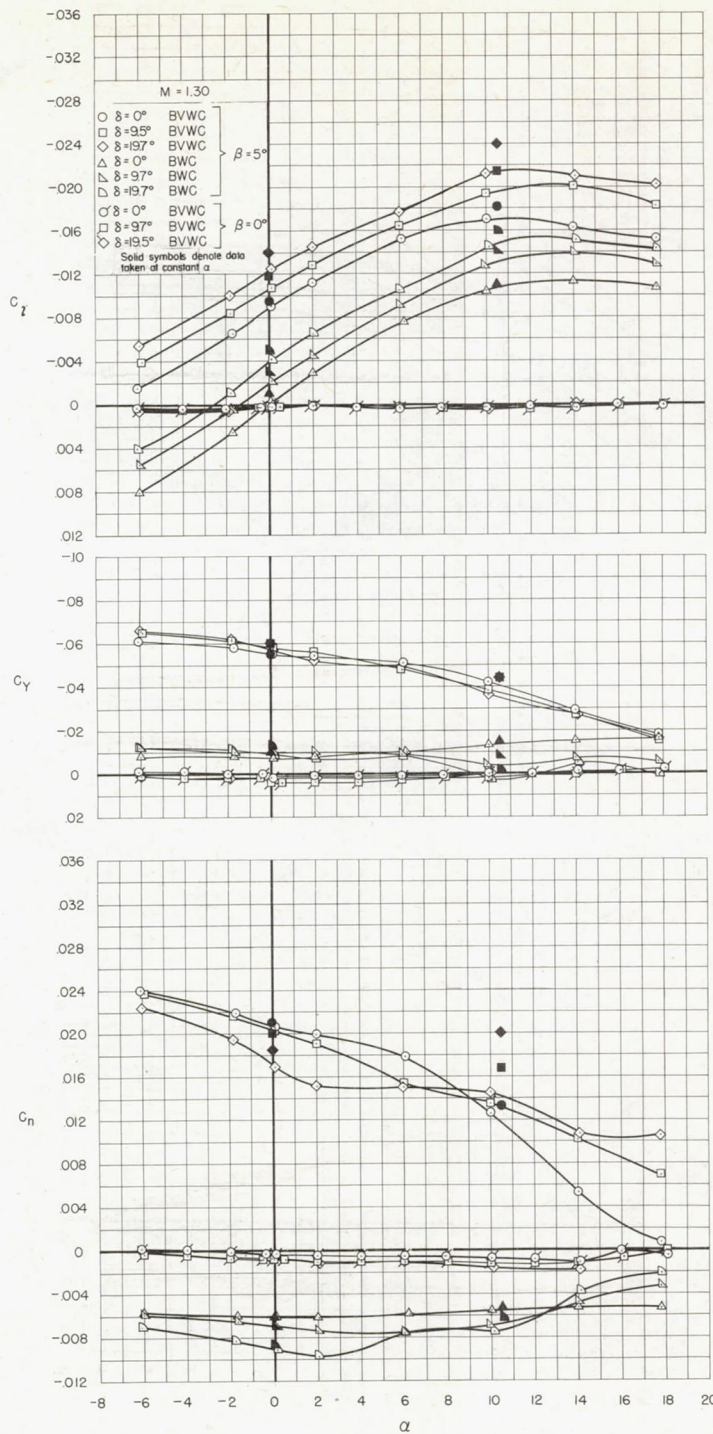
(b) M = 0.90

Figure 5.- Continued.



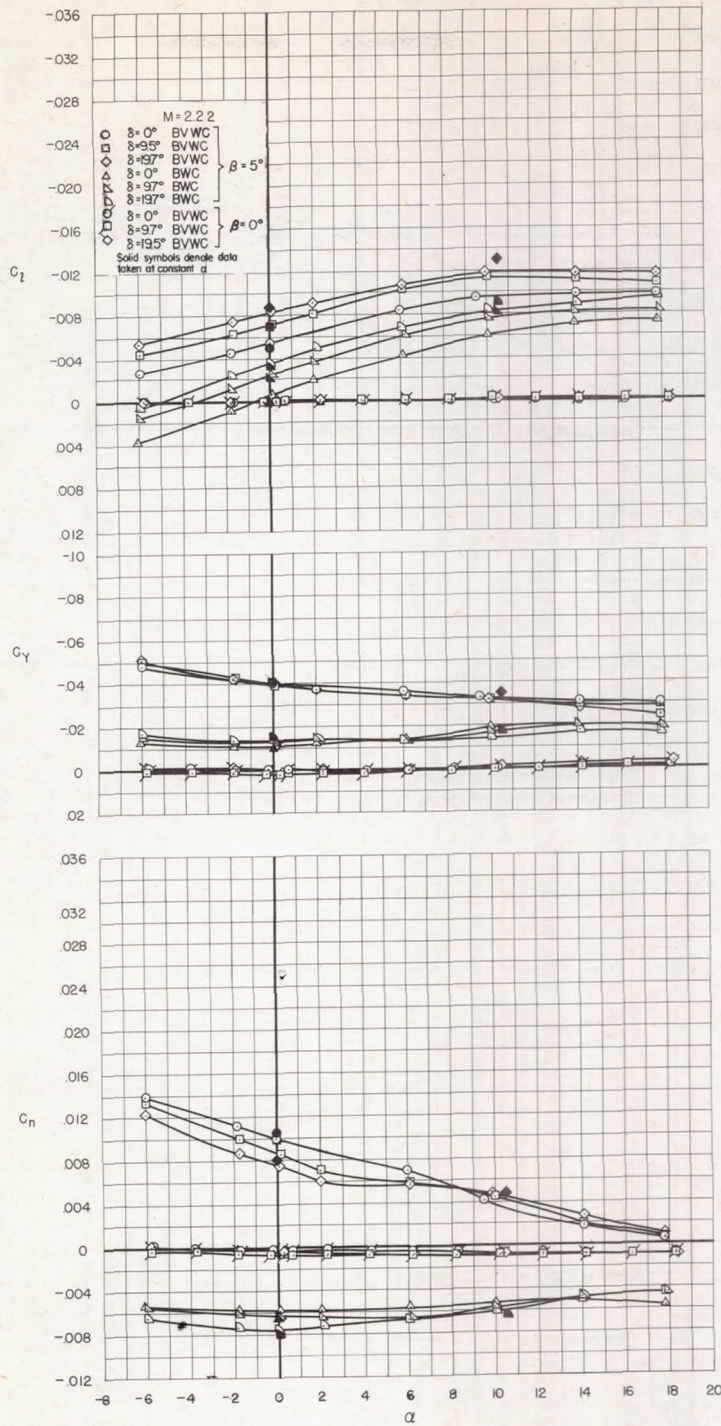
(c) M = 1.00

Figure 5.- Continued.



(a) $M = 1.30$

Figure 5.- Continued.



(e) M = 2.22

Figure 5.- Concluded.

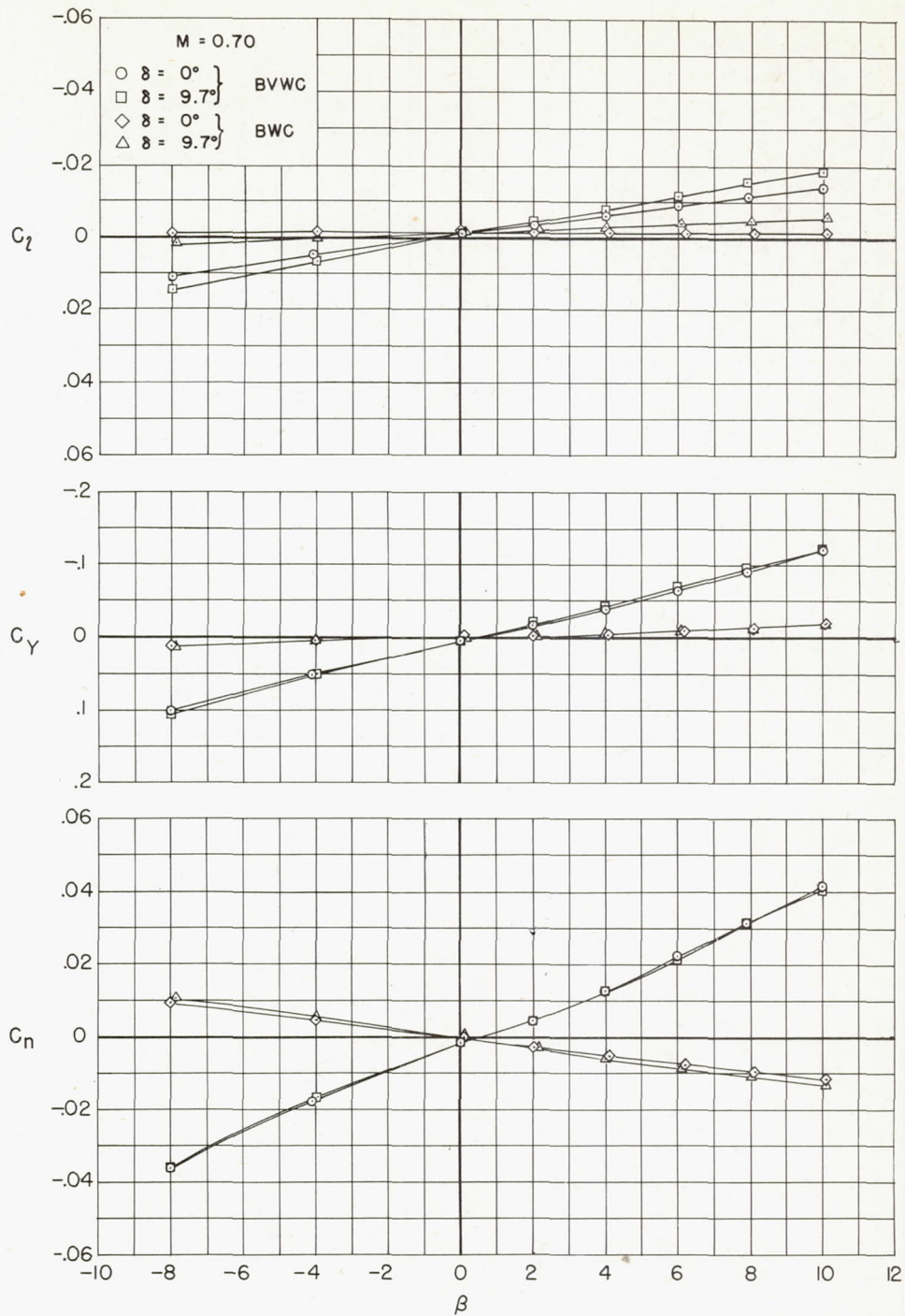
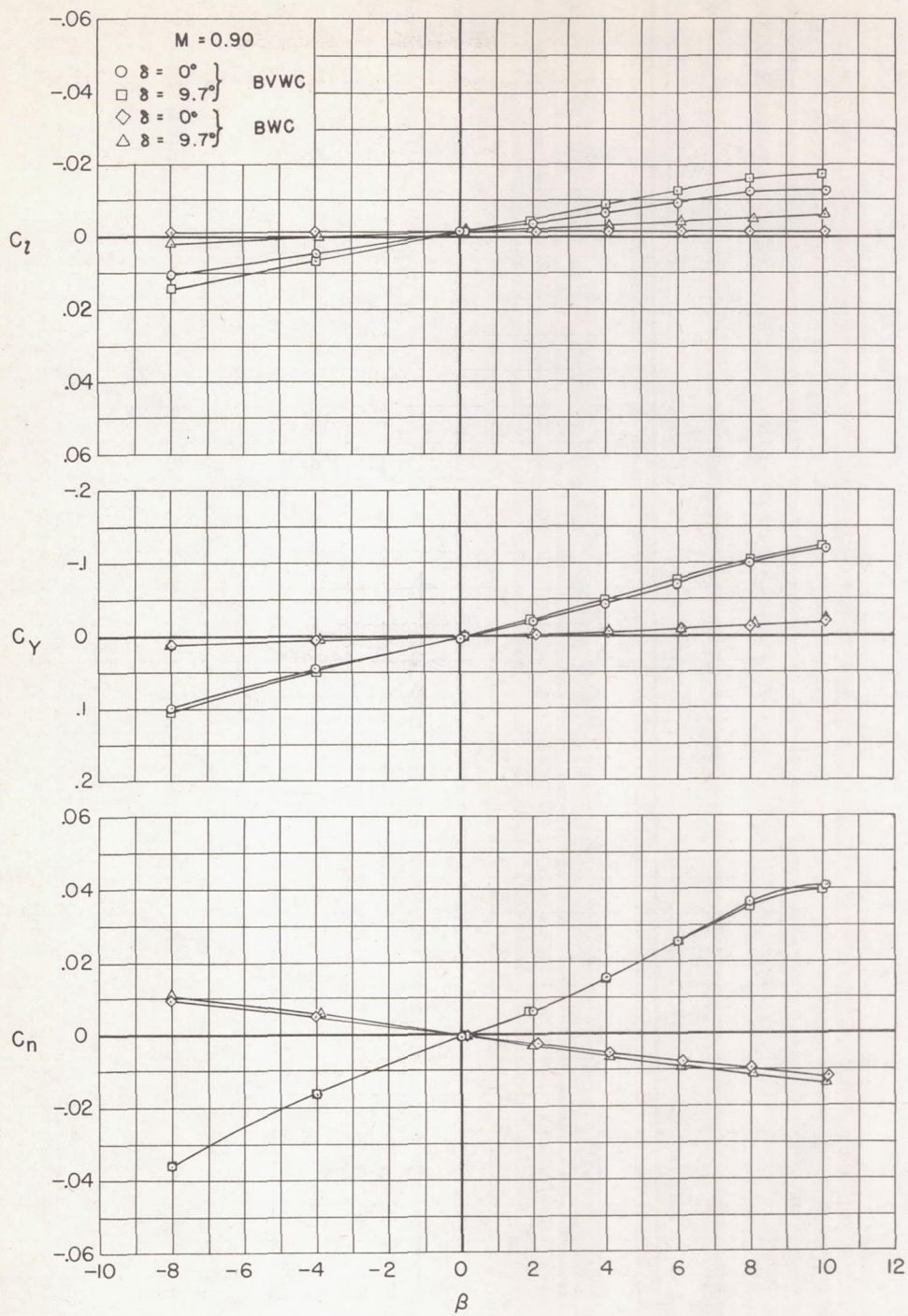
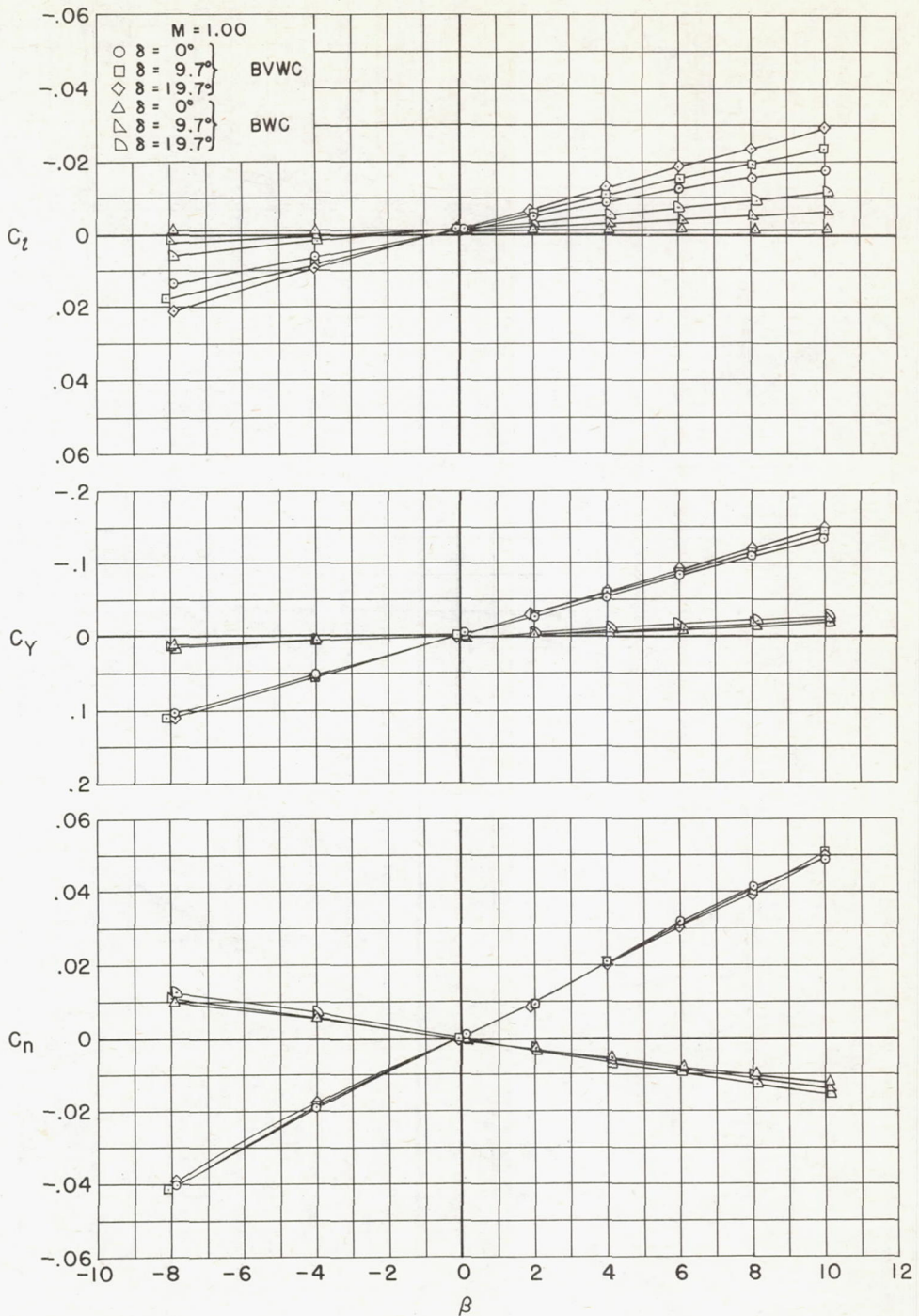
(a) $M = 0.70$

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° .



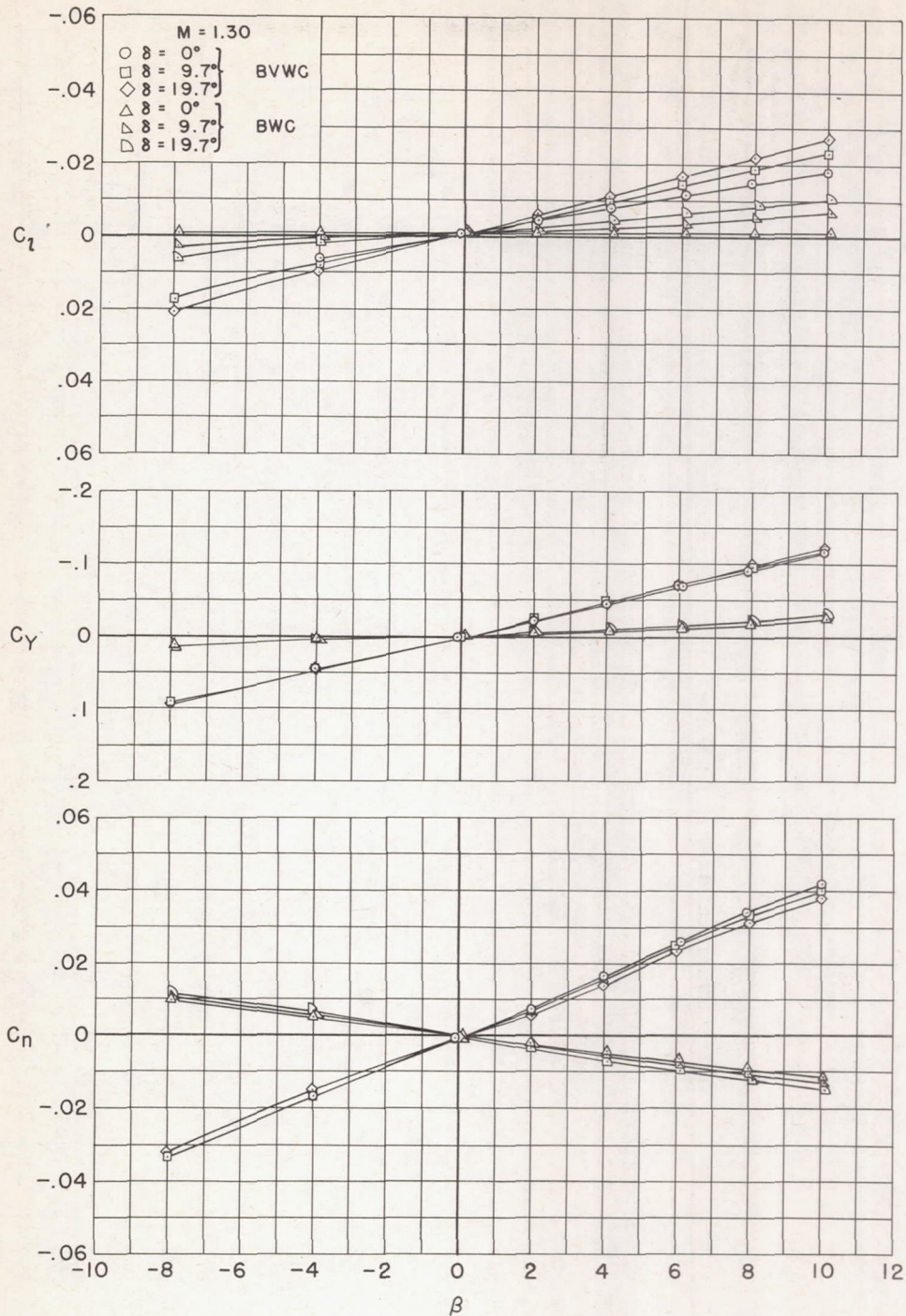
(b) M = 0.90

Figure 6.- Continued.



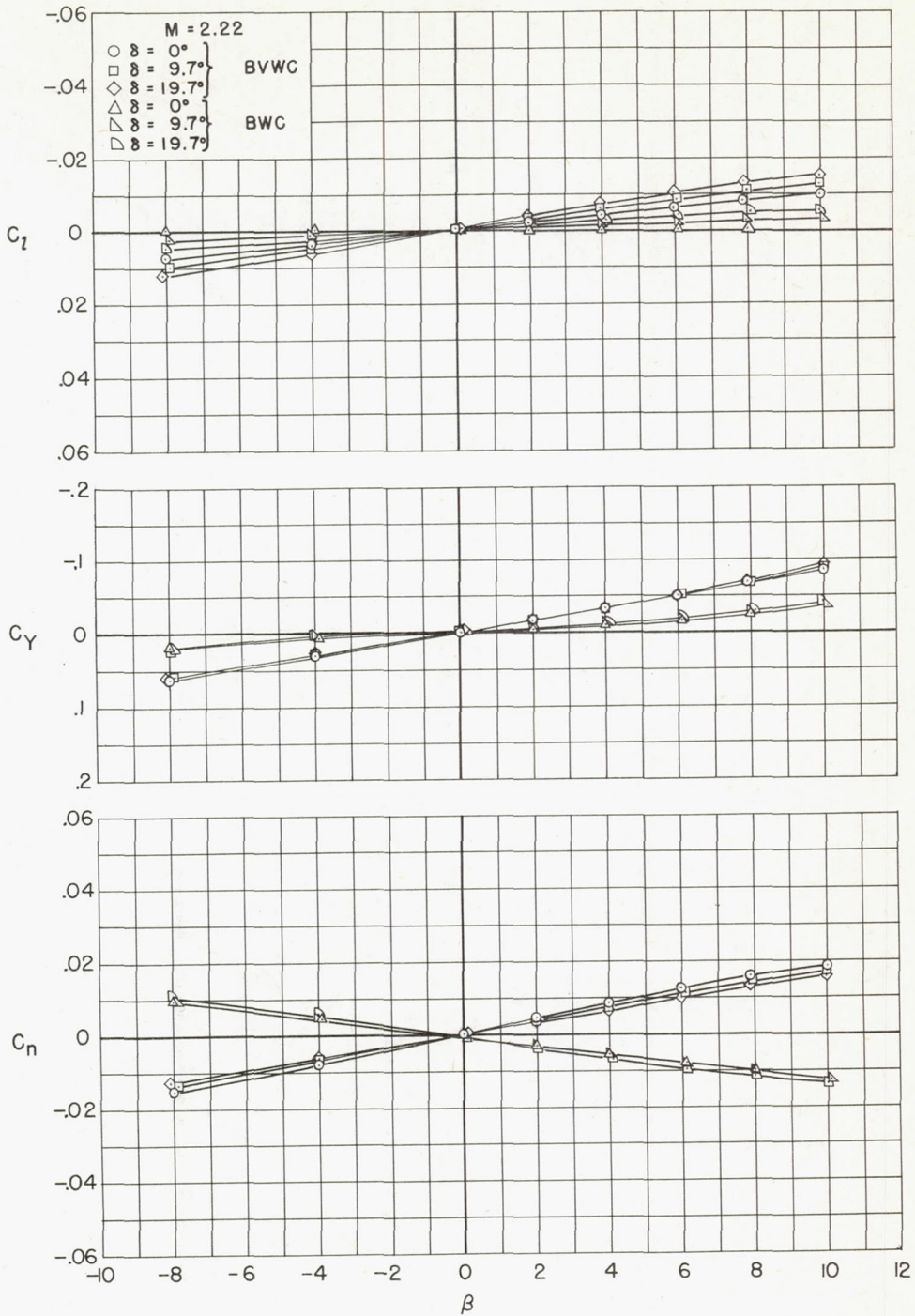
(c) M = 1.00

Figure 6.- Continued.



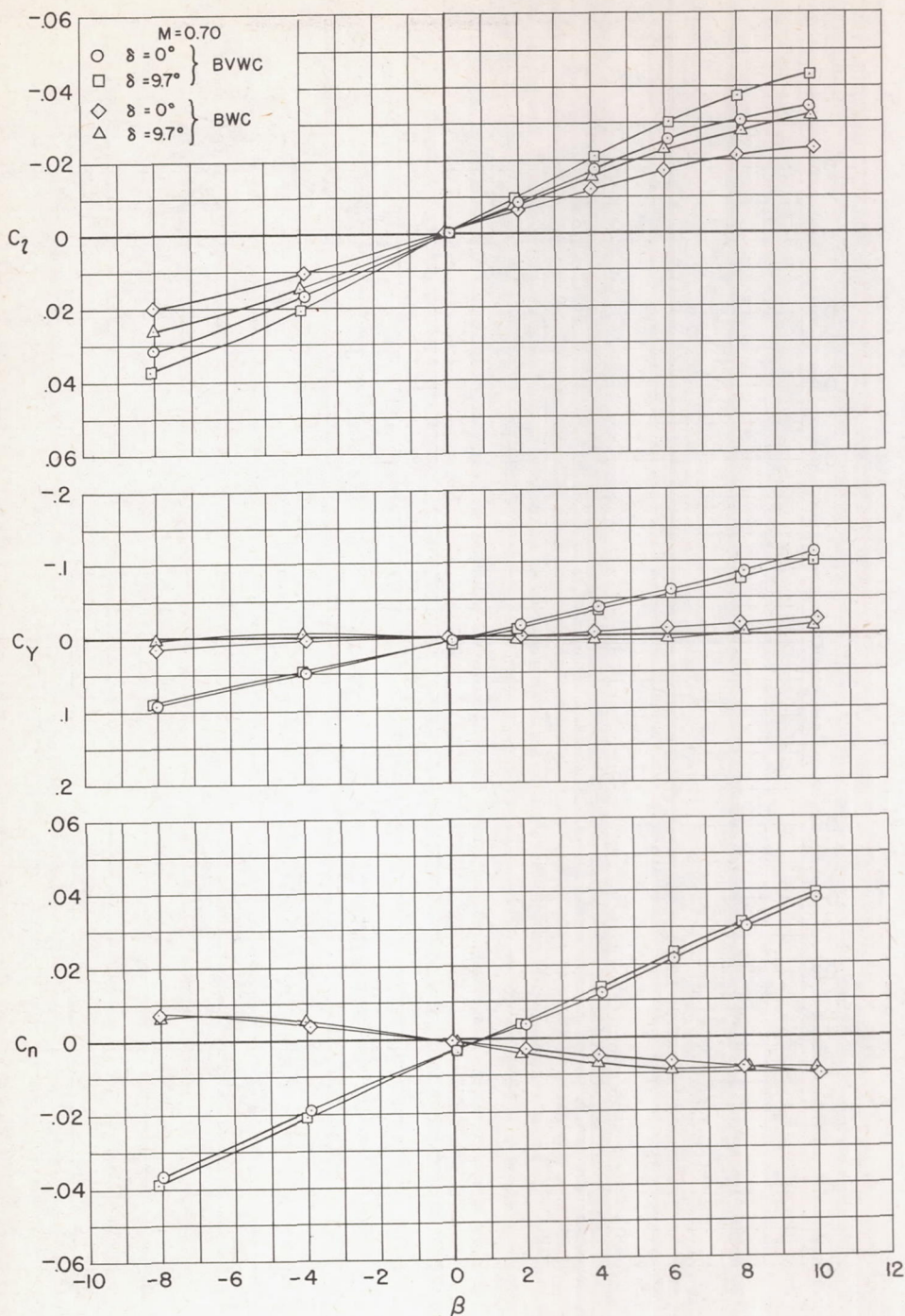
(d) $M = 1.30$

Figure 6.- Continued.



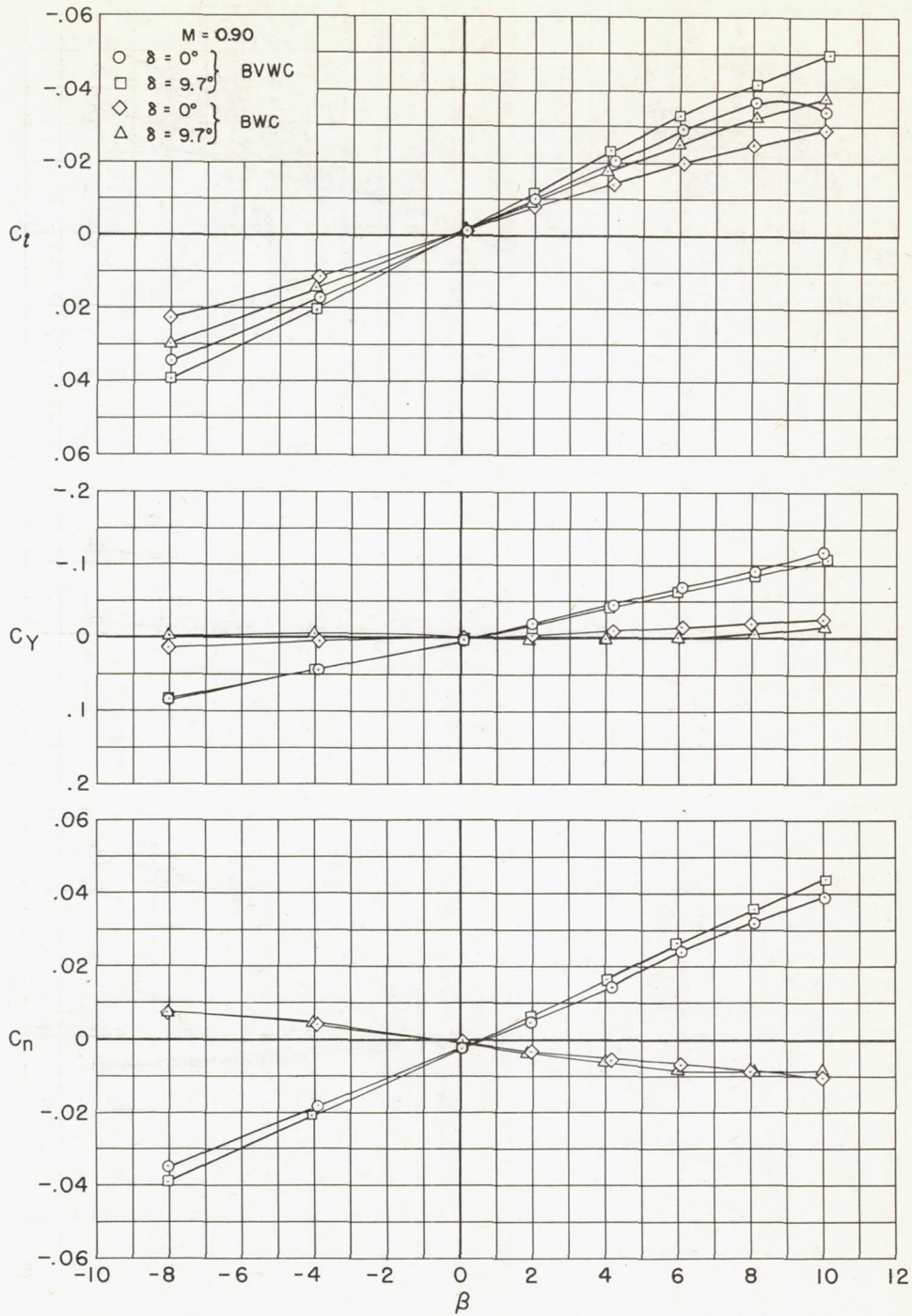
(e) $M = 2.22$

Figure 6.- Concluded.



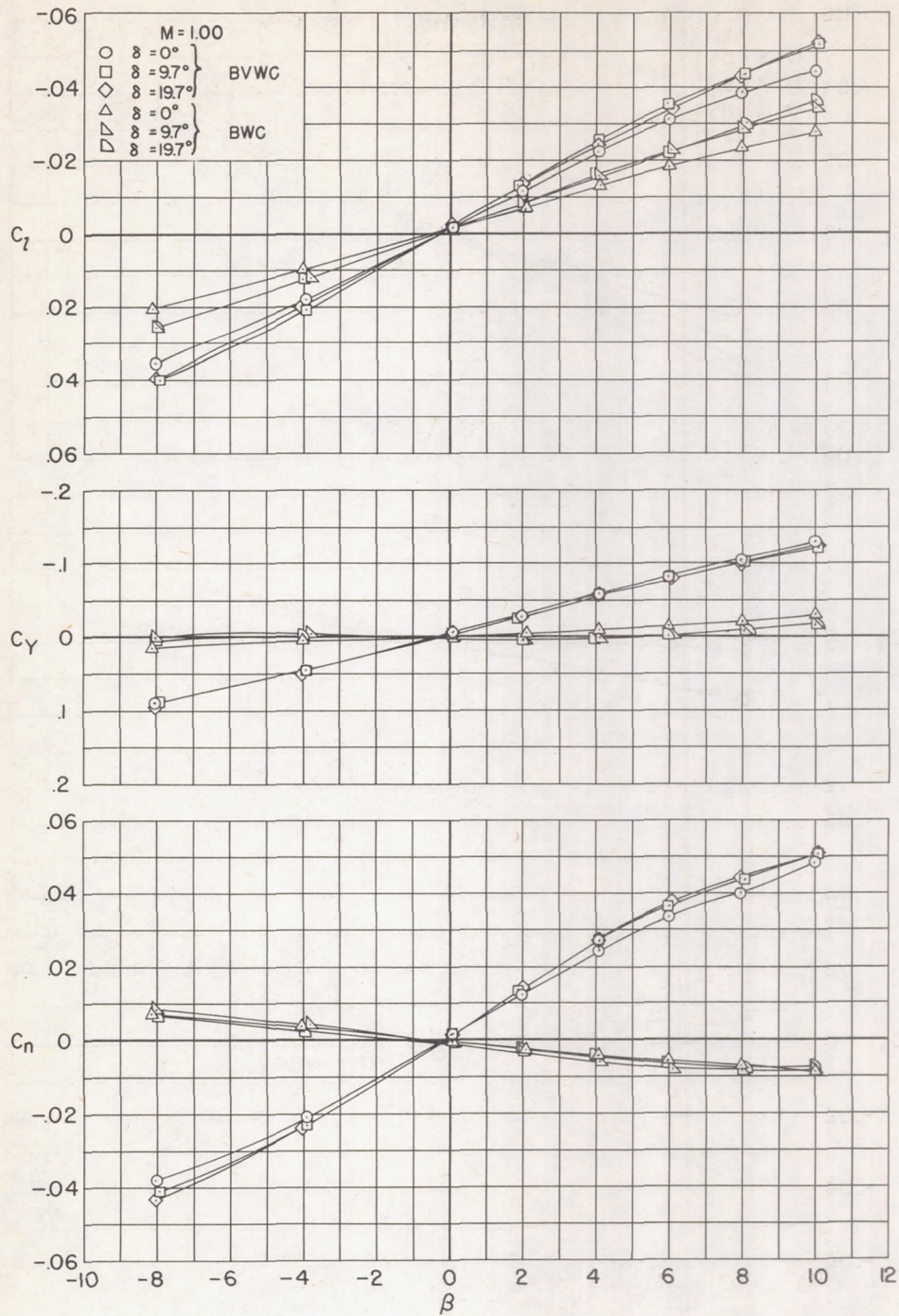
(a) M = 0.70

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° .



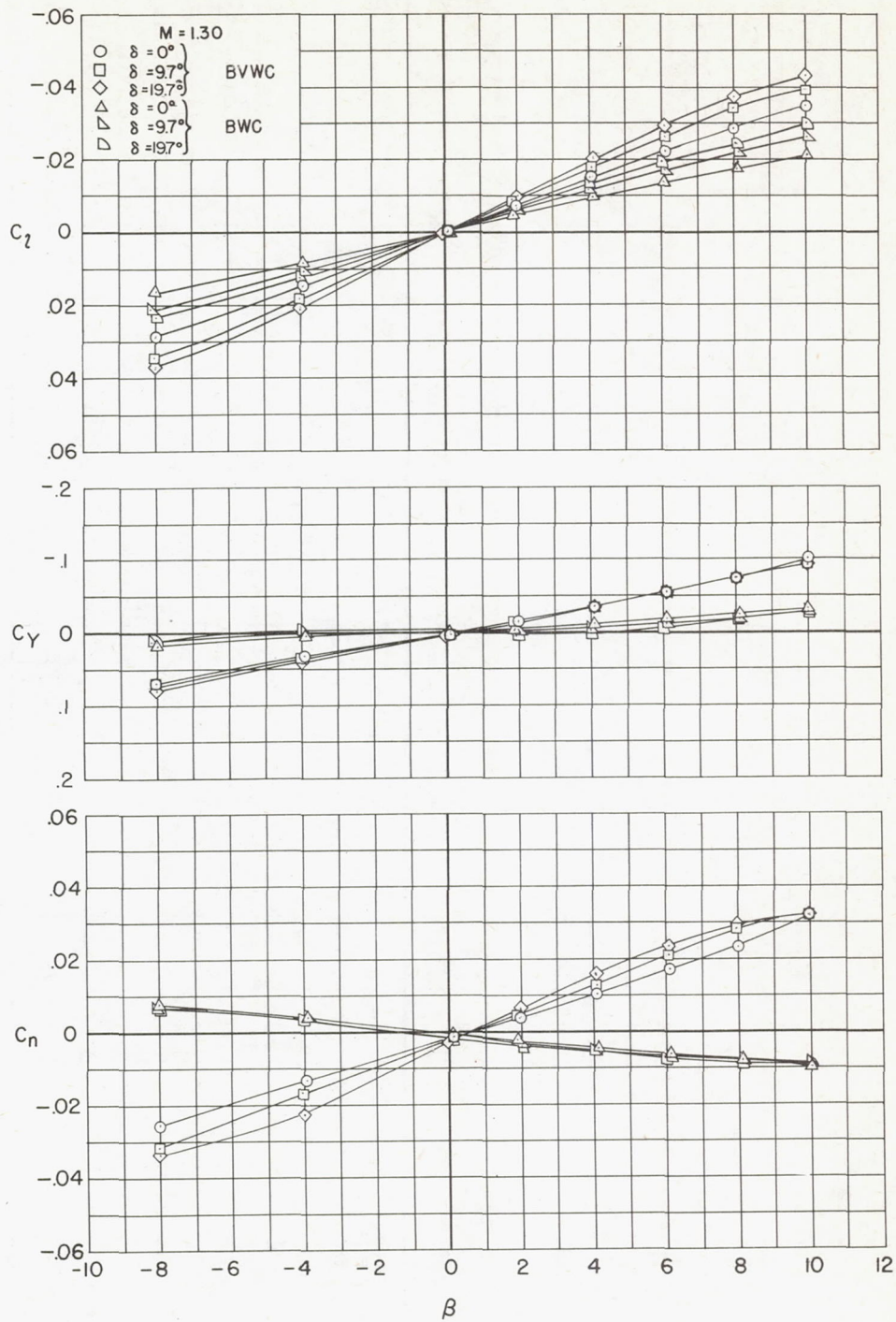
(b) $M = 0.90$

Figure 7.- Continued.



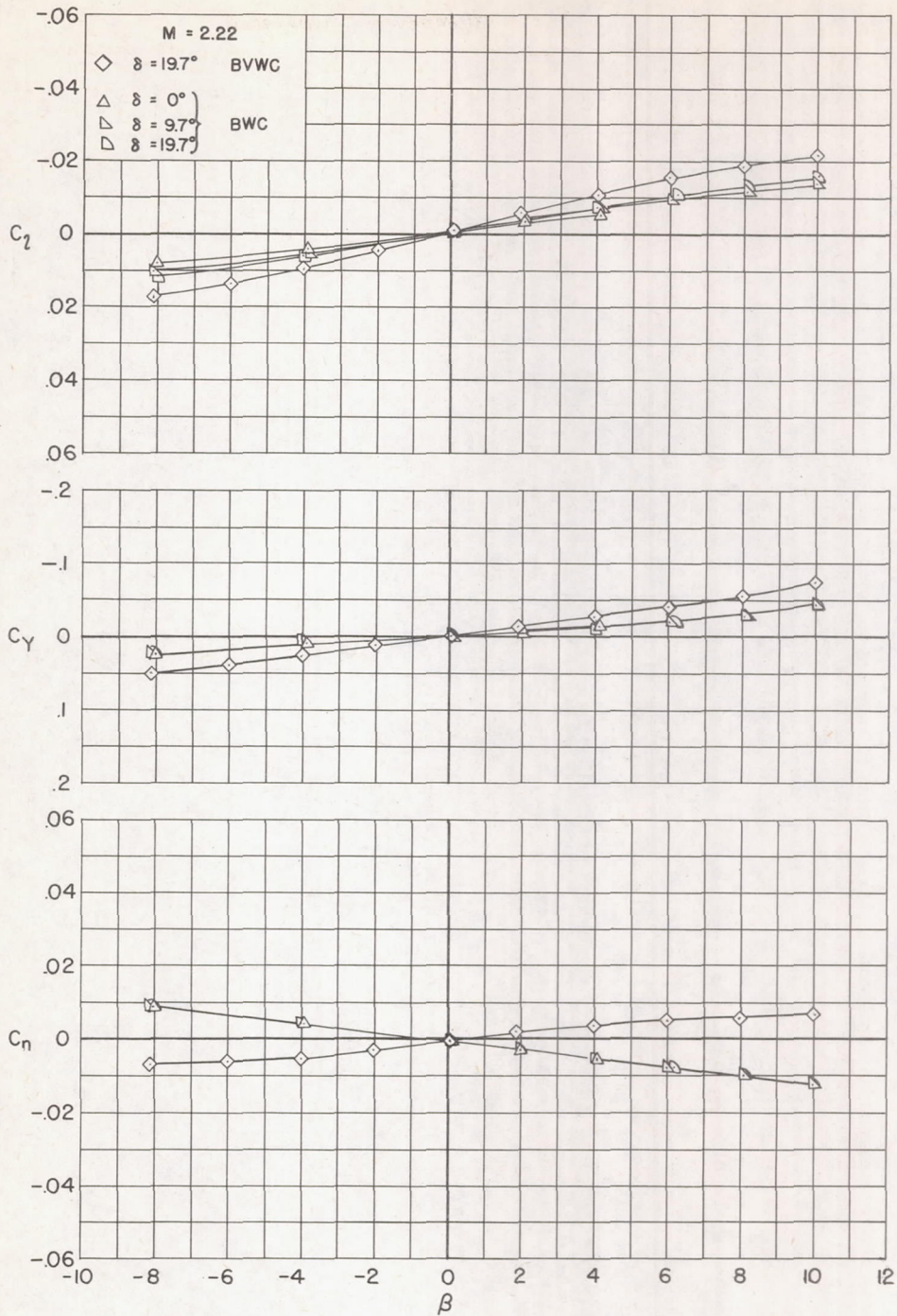
(c) M = 1.00

Figure 7.- Continued.



(d) M = 1.30

Figure 7.- Continued.



(e) M = 2.22

Figure 7.- Concluded.

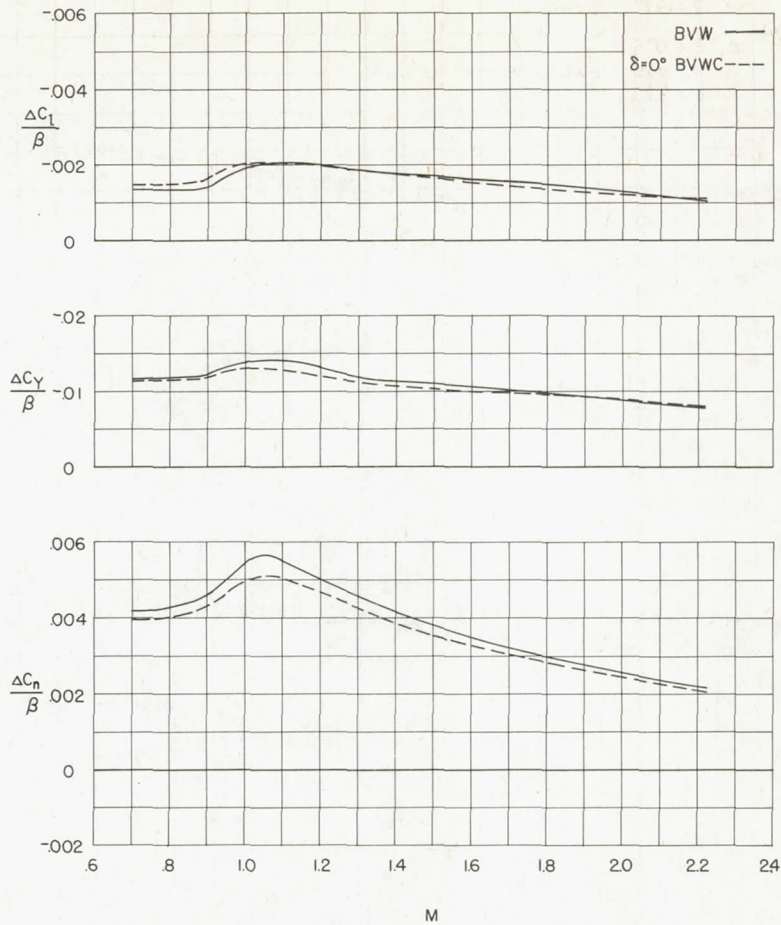
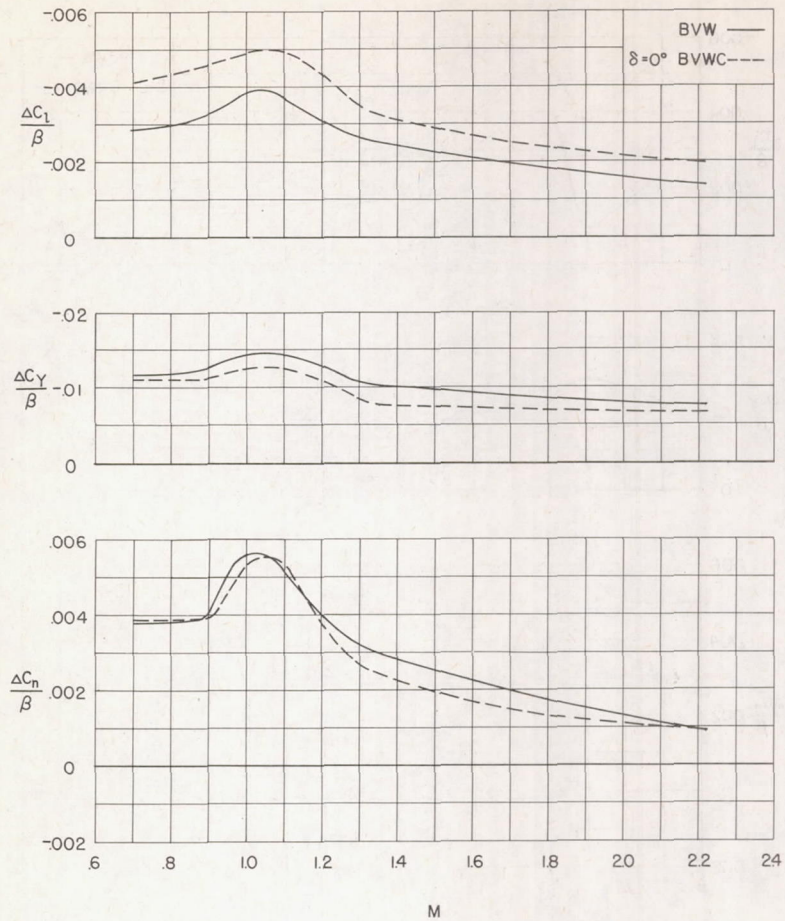
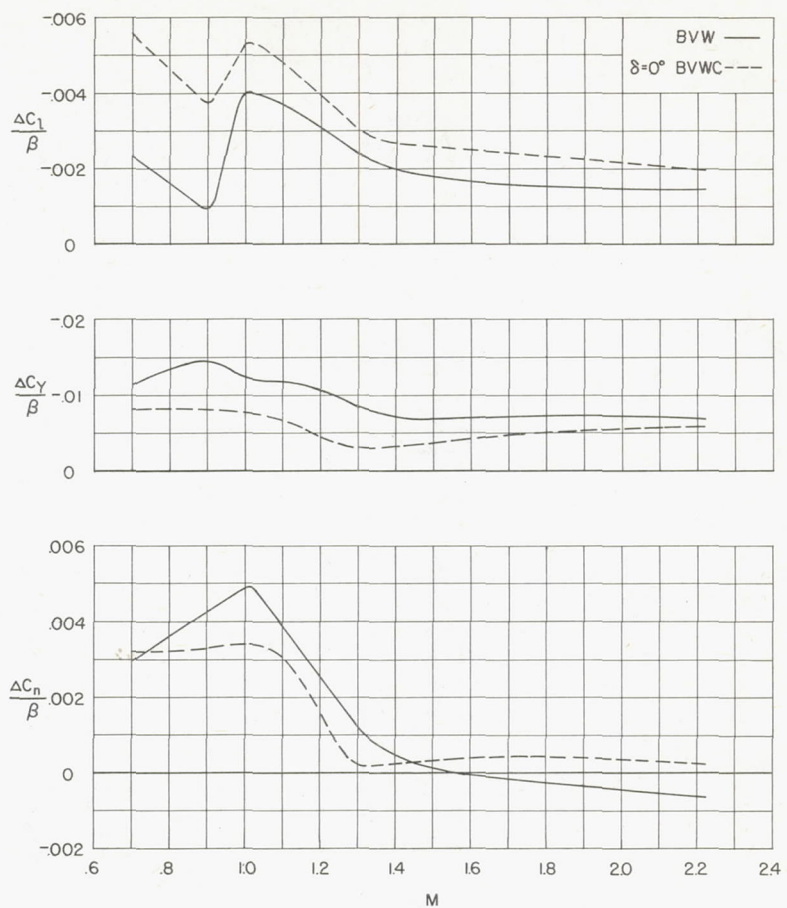
(a) $\alpha = 0^\circ$

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.