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AERODYNAMIC CHARACTERISTICS OF THREE SLENDER SHARP-EDGE 74° SWEPT WINGS AT SUBSONIC, TRANSONIC, AND SUPERSONIC MACH NUMBERS

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16. Abstract

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The results of the study indicated that the lift and drag characteristics as affected by planform and Mach number could be reasonably well predicted for the delta wing in the subsonic and transonic Mach number range. In the supersonic range, the delta and diamond wings were about equally good in the degree of agreement between experiment and theory. In making drag-due-to-lift predictions the vortex lift effects must be taken into account if reasonable results are to be obtained at moderate or high lift coefficients.

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SUMMARY

Slender sharp-edge wings having leading-edge sweep angles of 74° have been studied at Mach numbers from 0.60 to 2.80, at angles of attack from about -4° to 22°, and at angles of sideslip from 0° to 5°. The wings had delta, arrow, and diamond planforms. The experimental tests were made in the Langley 8-foot transonic pressure tunnel and the Langley Unitary Plan wind tunnel test section number 1. The theoretical predictions were made using the theories of NASA TN D-3767 and NASA TN D-6243.

The results of the study indicated that the lift and drag characteristics as affected by planform and Mach number could be reasonably well predicted for the delta wing in the subsonic and transonic Mach number range. In the supersonic range, the delta and diamond wings were about equally good in the degree of agreement between experiment and theory. In making drag-due-to-lift predictions the vortex lift effects must be taken into account if reasonable results are to be obtained at moderate or high lift coefficients.

INTRODUCTION

A continued interest in thin sharp-edge highly swept wings exists for application to supersonic aircraft. It has long been recognized that such wings develop an additional increment of lift which can be directly attributed to a vortex flow over the wing. A method has been developed at the Langley Research Center of the National Aeronautics and Space Administration for predicting this vortex lift. (See refs. 1 to 3.) This method, involving a leading-edge suction analogy, has been applied to wings of various planforms in both incompressible and supersonic flow. Application of this analogy to include the effects of subsonic compressibility has been made in reference 4 for wings with arrow, delta, and diamond planforms.

In reference 3 the suction analogy method was evaluated by comparison with experimental results for a variety of planforms in incompressible flow and for a delta wing at

supersonic speeds. In general, the analogy was found to provide excellent predictions of the vortex lift over the angle-of-attack range of usual interest, and boundries were established to identify the limits of applicability for delta wings at low speed associated with various types of vortex breakdown. It was also shown that the deviation from the theory at high angles of attack was quite dependent on the wing planform variation.

The experimental and analytical investigation of reference 5 studied the three previously mentioned planforms for subsonic flow conditions. The purpose of this investigation is to provide data for these same planforms at subsonic, transonic, and supersonic speeds over a large angle-of-attack range in order to define more completely the limits of the theory and to establish longitudinal and lateral stability characteristics.

The experimental data were obtained in the Langley 8-foot transonic pressure tunnel over a Mach number range of 0.60 to 1.20 and in the Langley Unitary Plan wind-tunnel test section number 1 over a Mach number range of 1.60 to 2.80.

SYMBOLS

The results are presented with the longitudinal aerodynamic parameters referred to the stability axes and the lateral aerodynamic parameters referred to the body axes. The coefficients were based on the individual reference areas and chords of each wing. The origin for these axes is the moment reference center which corresponded to the 50-percent point of the root chord of the 90^{o} trailing-edge wing, and this origin was held for all three wings referenced to the wing apex. (See fig. 1.) Values are given in both SI Units and U.S. Customary Units. Conversion factors between SI Units and U.S. Customary Units are presented in reference 6. The symbols used in the tabulated data given in tables II to XXV are defined in a separate list preceding table II. Symbols used in the text and in the figures are defined as follows:

A	aspect ratio
b	wing span
$\bar{c}$	mean aerodynamic chord of wing
C_D	drag coefficient, $\frac{\text{Drag force}}{qS}$

ΔC_D drag coefficient due to lift

C_{l_β} effective dihedral parameter

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

C_m pitching-moment coefficient, $\frac{\text{Pitching moment}}{qS\bar{c}}$

C_{n_β} directional-stability parameter

C_{Y_β} side-force parameter

K_p constant in potential-flow lift term

K_v constant in vortex lift term

L/D lift-drag ratio

M free-stream Mach number

q free-stream dynamic pressure

R Reynolds number

S reference wing area

α angle of attack, deg

β angle of sideslip, deg

Subscripts:

p potential-flow lift contribution

t total lift contribution

MODEL DESCRIPTION

The models were comprised of a 74° (approximate) swept leading-edge wing with three interchangeable aft sections to yield delta, arrow (37° recessed trailing edge), and diamond (35.15° extended trailing edge) shapes. The wings were thin flat-plate airfoils with sharp beveled edges. A cylindrical fuselage was provided to house the balance. Physical characteristics of the models are presented in figure 1 and table I, and a photograph of model components is shown as figure 2.

TESTS, APPARATUS, AND CORRECTIONS

The experimental investigation was made in the Langley 8-foot transonic pressure tunnel (8' TPT) and in the low Mach number test section of the Langley Unitary Plan wind tunnel (UPWT #1). Complete descriptions of these facilities are given in reference 7. A summary of the test conditions is presented in the following table:

Facility	Mach number	R/0.3048 m	Stagnation temperature, K	β, deg
8' TPT	0.60 to 1.20	1.68×10^6 to 1.86×10^6	322	0, 5, -5
UPWT #1	1.60 to 2.80	2.00×10^6 to 2.58×10^6	339	0, 4

Dewpoint temperatures were kept below the condensation point in both tunnels. The models were tested through an angle-of-attack range of about -4° to 22°. All axial-force data were corrected to a condition of free-stream static pressure acting at the base of the model and balance cavity. Angle of attack has been corrected for sting and balance deflections. Artificial transition was applied to all wings at approximately 1.016 centimeters (0.40 in.) streamwise from the leading edges. No. 60 grit was used as the transition material. Schlieren photographs were taken of the Langley Unitary Plan wind tunnel tests but not of the Langley 8-foot transonic pressure tunnel tests.

RESULTS AND DISCUSSION

In this discussion the 90° trailing-edge model, the 37° recessed trailing-edge model, and the 35.15° extended trailing-edge model will be referred to as the delta wing, the arrow wing, and the diamond wing, respectively.

Presentation of Data

The results of this investigation are presented, for the convenience of those wishing to make comparisons with other theories or data, in tabular form in tables II to XXV and in graphic form in figures 3 to 9. A summary of the graphic plots is presented as follows:

Longitudinal Aerodynamic Characteristics

The effects of Mach number on the basic longitudinal aerodynamic characteristics for the three wings at zero sideslip are presented in figure 3. There is no pronounced effect of Mach number on lift coefficient, C_L, or on drag coefficient, C_D, over the Mach number range of 0.60 to 1.20. In the Mach number range from 1.60 to 2.80, there is a decrease in C_L and C_D with increase of Mach number at a given angle of attack for all three wings. The slope of the pitching-moment curves for all three wings becomes more negative with increasing Mach number through the transonic range and shows the typical decrease in stability in the supersonic range.

Change in planform as shown in figure 4 had essentially no effect on C_L and C_D at a given Mach number over the Mach number range. The arrow-wing tests produced a decreased slope of C_m with increased α, and this effect may be accounted for by the reduction in planform area aft of the moment reference center (see fig. 1), whereas the data for the diamond wing, with additional area aft of the moment reference center, show an increased slope of C_m with increased α.

The effects of planform on lift-drag ratio, L/D, are presented in figure 5. There is no significant effect of planform on L/D except in the vicinity of an angle of attack of 5° to 7° at a Mach number of 0.98 and above. Typical schlieren photographs taken for the three planforms at supersonic Mach numbers above 2.00 are presented in figure 6.

Lateral Aerodynamic Characteristics

The variation of lateral-stability derivatives C_{l_β}, C_{n_β}, and C_{Y_β} with angle of attack is shown in figure 7 for a sideslip increment of 5° at Mach 0.60 to 1.20 and 4° at Mach 1.60 to 2.80.

In general, the wings exhibit positive effective dihedral parameter, C_{l_β}, throughout the angle-of-attack range at all Mach numbers, although the level decreases with Mach number.

The directional-stability parameter, C_{n_β}, takes a stable break near $\alpha = 8^\circ$ for all three planforms in the lower Mach number range (M = 0.60 to 1.20) but tends to remain fairly constant in the upper Mach number range (M = 1.60 to 2.80) for all three planforms.

Comparison of Theory With Experiment

The theoretical values of C_L for subsonic Mach numbers were obtained by the leading-edge suction analogy method of references 1 and 4. An extension of this theory as described in reference 3 was used to obtain corresponding values for the supersonic Mach number range. The required potential-flow theoretical results were obtained with the aid of reference 8.

Total theoretical lift coefficient is obtained from the following expression:

$$(C_L)_t = K_p \sin\alpha \cos^2\alpha + K_v \cos\alpha \sin^2\alpha$$

Values of K_p are to be found in the previously mentioned references. Values of K_v for subsonic speeds were obtained from reference 4. At supersonic speeds K_v for the delta wing was obtained by the method described in reference 3 and for the arrow and diamond wings by the following relationships:

$$K_{v_{Arrow}} = K_{v_{Delta}} \frac{S_{Delta}}{S_{Arrow}}$$

$$K_{v_{Diamond}} = K_{v_{Delta}} \frac{S_{Delta}}{S_{Diamond}}$$

The relationships assume that the leading-edge suction force is independent of trailing-edge sweep, and the empirical constant, K_v, need only be adjusted for differences in area. Comparisons between theoretical and experimental values are shown in figure 8.

In the subsonic and transonic Mach number range (M = 0.60 to 1.20) the results obtained with the delta wing showed the best agreement between experiment and theory. Theory tended to overpredict total lift for the arrow wing and underpredict for the diamond wing. The diamond wing exceeds theory at higher angles of attack, subsonically. Supersonically (M = 1.60 to 2.80), the delta and diamond wings were about on a par as to relative degree of agreement, with poorer agreement being obtained with the arrow wing. In general, the delta and arrow wings exhibited better agreement subsonically than supersonically. Mach number range had no appreciable effect on relative agreement for the diamond wings. The poorer agreement obtained for the arrow wing and the increased lift obtained at higher angles of attack for the diamond wing were noted in reference 5, and possible explanations were offered by Polhamus in reference 3.

Comparison of theoretical and experimental values of drag due to lift, $\Delta C_D/C_L{}^2$, is made in figure 9. The condition of zero leading-edge suction, as shown in reference 3, corresponds to $\frac{\Delta C_D}{C_L{}^2} = \frac{\tan \alpha}{(C_L)_t}$, and these values are shown as solid curves. The short-dashed curves represent $\Delta C_D/C_L{}^2$, and this parameter corresponds to the condition of potential lift only $\left(C_{L_p} = K_p \sin \alpha \cos^2 \alpha\right)$.

In general, the vortex lift effect must be accounted for in theory if reasonable drag-due-to-lift predictions are to be made for this type of wing at moderate or high lift coefficients.

The best agreement between theory and experiment was shown by the delta and diamond wings at M = 1.20 and 1.60. Agreement between theoretical and experimental data became progressively poorer with increase of Mach number for the arrow wing. The experimental data for this wing at M = 2.00 matched the predicted potential lift curve and at M = 2.80 exceeded it. Here again the cutout area at the trailing edge prevents a buildup of vortex lift resulting in higher values of $\Delta C_D/C_L{}^2$. Values of $1/\pi A$, the value representing full leading-edge suction, are shown to give a relative indication of the drag penalty associated with wings in separated flow. This penalty is greatest for the arrow wing, whereas the delta and diamond wings are about equal in drag decrement.

The linearized theory, as shown in reference 9, considers that the proper use of camber will almost entirely overcome the unfavorable effect of loss of suction forces on a thin airfoil. This investigation shows that at the higher lifts the vortex lift effects compensate for a large part of the loss of leading-edge thrust and, therefore, the possible benefits of camber and twist are not as great as predicted by linearized theory.

CONCLUDING REMARKS

On the basis of results of an experimental and analytical study of the subsonic, transonic, and supersonic aerodynamic characteristics of slender sharp-edge wings having a leading-edge sweep of 74° the following concluding remarks can be made:

1. The results of the study indicated that the lift and drag characteristics as affected by planform and Mach number could be reasonably well predicted for the delta wing in the subsonic and transonic Mach number range.

2. In the supersonic range, the delta and diamond wings were about equally good in the degree of agreement between experiment and theory.

3. Theory tended to overpredict total lift for the arrow wing in the subsonic Mach number range, and agreement with experimental values became poorer with increase in Mach number.

4. In making drag-due-to-lift predictions the vortex lift effects must be taken into account if reasonable results are to be obtained at moderate or high lift coefficients.

Langley Research Center,
National Aeronautics and Space Administration,
Hampton, Va., May 29, 1974.

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TABLE I.- GEOMETRIC CHARACTERISTICS OF MODELS

Wing configuration	Angle of sweep, deg		Wing span, b		Mean aerodynamic chord, $\bar{c}$		Wing area, S		Aspect ratio, A
	LE	TE	cm	in.	cm	in.	m^2	ft^2	
Delta	74	0	31.999	12.598	37.198	14.645	0.089	0.957	1.102
Arrow	74	-37	31.786	12.514	28.956	11.400	0.069	0.739	1.471
Diamond	74	35.15	31.984	12.592	45.202	17.796	0.107	1.152	0.956

LE, leading edge; TE, trailing edge

SYMBOLS USED IN TABLES II TO XXV

ALPHA	angle of attack, deg
BETA	angle of sideslip, deg
CA	axial-force coefficient
CAB	base axial-force coefficient (8' TPT)
CAC	base axial-force coefficient (UPWT #1)
CA UNC	axial-force coefficient uncorrected
CD	drag coefficient
CDB	base drag coefficient (8' TPT)
CDC	base drag coefficient (UPWT #1)
CD UNC	drag coefficient uncorrected
CL	lift coefficient
CLSQ	lift coefficient squared
CLB	rolling-moment coefficient, body axis (UPWT #1)
CLS	rolling-moment coefficient, stability axis (UPWT #1)
CM	pitching-moment coefficient
CN	normal-force coefficient
CNB	yawing-moment coefficient, body axis (UPWT #1)
CNS	yawing-moment coefficient, stability axis (UPWT #1)
CPI	base pressure coefficient

CROLL	rolling-moment coefficient (8' TPT)
CSIDE	side-force coefficient (8' TPT)
CY	side-force coefficient (UPWT #1)
CYAW	yawing-moment coefficient (8' TPT)
MINF	free-stream Mach number
Q	free-stream dynamic pressure

TABLE II.- DELTA WING; M = 0.60

(a) $\beta \approx 0^{o}$

					BODY AXIS					STABILITY AXIS			
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
91	.599	349.32	-.01	-4.00	-.1196	.00790	.0217	-.0007	-.0001	.0024	-.1188	.01622	-7.32
92	.599	349.16	-.01	-2.27	-.0630	.00835	.0118	-.0006	-.0002	.0028	-.0627	.01088	-5.76
93	.600	350.15	-.01	-.02	-.0011	.00924	.0002	-.0004	-.0004	.0031	-.0011	.00924	-.12
94	.600	350.07	-.01	2.21	.0570	.00858	-.0105	-.0004	-.0005	.0032	.0566	.01077	5.26
95	.601	351.07	-.01	4.52	.1319	.00765	-.0239	-.0004	-.0005	.0032	.1309	.01802	7.26
96	.599	349.15	-.02	6.87	.2170	.00666	-.0378	-.0003	-.0005	.0035	.2147	.03252	6.60
97	.600	350.24	-.02	9.27	.3140	.00555	-.0522	-.0000	-.0005	.0037	.3090	.05607	5.51
98	.600	349.99	-.02	11.76	.4237	.00425	-.0676	-.0001	-.0005	.0041	.4139	.09049	4.57
99	.600	349.66	-.02	14.26	.5394	.00240	-.0837	-.0001	-.0004	.0042	.5222	.13517	3.86
100	.600	349.57	-.02	16.80	.6654	.00024	-.1010	-.0005	-.0003	.0040	.6369	.19254	3.31
101	.599	349.33	-.02	19.40	.7986	-.00233	-.1203	-.0001	-.0003	.0042	.7540	.26308	2.87
102	.600	349.99	-.02	21.54	.9164	-.00486	-.1374	.0004	-.0003	.0043	.8542	.33185	2.57

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
91	.00231	.00231	-.098	2.65	119.6	-8.31
92	.00225	.00225	-.096	2.65	119.7	10.29
93	.00221	.00221	-.094	2.65	119.7	-11.77
94	.00222	.00222	-.094	2.65	119.7	-3.00
95	.00220	.00219	-.093	2.66	119.7	-6.92
96	.00231	.00229	-.098	2.65	119.9	-5.54
97	.00245	.00242	-.104	2.65	119.7	-1.38
98	.00267	.00261	-.113	2.65	119.9	-1.85
99	.00306	.00296	-.130	2.65	119.9	-9.92
100	.00331	.00317	-.140	2.65	119.9	-9.92
101	.00356	.00336	-.151	2.65	119.9	-2.54
102	.00366	.00340	-.155	2.65	119.9	-3.00

(b) $\beta \approx -5^{o}$

					BODY AXIS					STABILITY AXIS			
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
163	.598	348.23	-5.02	-4.26	-.1241	.00769	.0213	-.0054	.0001	.0066	-.1232	.01689	-7.29
164	.599	349.40	-5.03	-2.23	-.0598	.00838	.0107	-.0029	.0000	.0070	-.0594	.01070	-5.55
165	.600	349.31	-5.04	.04	.0033	.00897	-.0006	-.0004	-.0002	.0075	.0033	.00897	.37
166	.599	348.82	-5.04	2.29	.0626	.00827	-.0113	.0018	-.0003	.0077	.0623	.01077	5.78
167	.599	348.73	-5.03	4.59	.1350	.00738	-.0234	.0046	-.0003	.0080	.1340	.01815	7.38
168	.598	348.32	-5.01	6.98	.2266	.00644	-.0380	.0084	-.0009	.0097	.2242	.03392	6.61
169	.599	348.48	-4.99	9.39	.3224	.00536	-.0523	.0115	-.0015	.0115	.3172	.05791	5.48
170	.598	347.65	-4.95	11.86	.4296	.00398	-.0675	.0145	-.0020	.0129	.4196	.09219	4.55
171	.599	348.64	-4.90	14.40	.5497	.00204	-.0842	.0173	-.0022	.0130	.5319	.13867	3.84
172	.598	348.49	-4.83	16.97	.6808	-.00035	-.1024	.0203	-.0022	.0115	.6513	.19832	3.28
173	.598	348.06	-4.74	19.55	.8129	-.00310	-.1204	.0234	-.0021	.0088	.7671	.26906	2.85
174	.598	347.98	-4.69	21.05	.8991	-.00485	-.1326	.0259	-.0020	.0070	.8408	.31842	2.64
175	.599	348.90	-5.04	.03	.0024	.00908	-.0004	-.0005	-.0002	.0074	.0024	.00908	.26

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
163	.00268	.00268	-.114	2.64	120.4	13.07
164	.00266	.00266	-.113	2.65	120.4	12.86
165	.00264	.00264	-.112	2.65	120.4	12.64
166	.00275	.00275	-.117	2.65	120.4	12.64
167	.00266	.00266	-.113	2.64	120.5	12.43
168	.00271	.00269	-.115	2.64	120.5	12.43
169	.00279	.00275	-.118	2.64	120.5	12.21
170	.00298	.00292	-.127	2.64	120.5	12.43
171	.00320	.00310	-.136	2.64	120.5	11.79
172	.00347	.00332	-.147	2.64	120.5	11.57
173	.00375	.00353	-.159	2.64	120.5	11.57
174	.00382	.00357	-.162	2.64	120.5	11.36
175	.00265	.00265	-.113	2.64	120.5	10.93

TABLE III.- DELTA WING; M = 0.80

(a) $\beta \approx 0^{o}$

					BODY AXIS					STABILITY AXIS			
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
78	.798	348.86	-.01	-3.96	-.1214	.00880	.0235	-.0005	-.0001	.0024	-.1205	.01717	-7.01
79	.800	349.76	-.01	-2.28	-.0663	.00922	.0130	-.0004	-.0002	.0026	-.0659	.01185	-5.56
80	.799	349.31	-.01	-.03	-.0016	.01002	.0001	-.0003	-.0004	.0029	-.0015	.01003	-.15
81	.799	349.42	-.01	2.21	.0583	.00942	-.0113	-.0002	-.0005	.0033	.0579	.01166	4.97
82	.798	349.02	-.02	4.51	.1338	.00848	-.0261	-.0003	-.0005	.0034	.1327	.01897	6.99
83	.799	349.53	-.02	6.86	.2241	.00758	-.0423	-.0002	-.0004	.0035	.2216	.03427	6.47
84	.798	348.82	-.02	9.26	.3229	.00684	-.0584	-.0001	-.0005	.0039	.3176	.05872	5.41
85	.799	349.32	-.02	11.72	.4285	.00580	-.0750	-.0001	-.0005	.0041	.4183	.09270	4.51
86	.799	349.70	-.02	14.21	.5497	.00466	-.0952	-.0003	-.0004	.0041	.5317	.13948	3.81
87	.800	349.96	-.02	16.74	.6755	.00297	-.1167	-.0004	-.0003	.0041	.6460	.19740	3.27
88	.799	349.65	-.02	19.27	.8077	.00107	-.1401	-.0004	-.0004	.0047	.7621	.26758	2.85
89	.798	348.64	-.02	21.10	.8994	-.00058	-.1565	-.0004	-.0004	.0052	.8393	.32324	2.60
90	.799	349.62	-.01	-.02	-.0002	.01013	-.0001	-.0003	-.0004	.0029	-.0002	.01013	-.02

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
78	.00194	.00194	-.082	2.12	120.4	8.57
79	.00191	.00191	-.081	2.12	120.4	9.64
80	.00191	.00191	-.081	2.12	120.5	9.64
81	.00188	.00188	-.080	2.12	120.6	9.64
82	.00187	.00186	-.079	2.12	120.6	9.64
83	.00195	.00194	-.083	2.12	120.5	9.64
84	.00207	.00204	-.088	2.12	120.5	9.64
85	.00239	.00234	-.101	2.12	120.5	9.64
86	.00273	.00265	-.116	2.12	120.5	9.00
87	.00310	.00297	-.132	2.12	120.4	9.64
88	.00340	.00321	-.144	2.12	120.4	9.64
89	.00358	.00334	-.152	2.12	120.4	9.64
90	.00190	.00190	-.080	2.12	120.5	9.64

(b) $\beta \approx -5^{o}$

					BODY AXIS					STABILITY AXIS			
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
150	.799	349.11	-5.02	-4.27	-.1289	.00856	.0235	-.0057	.0000	.0067	-.1279	.01814	-7.05
151	.800	349.64	-5.03	-2.23	-.0611	.00908	.0113	-.0028	-.0000	.0071	-.0607	.01145	-5.30
152	.798	348.96	-5.04	.01	.0016	.00997	-.0009	-.0004	-.0003	.0079	.0016	.00997	.16
153	.799	349.11	-5.04	2.28	.0648	.00914	-.0124	.0019	-.0004	.0082	.0644	.01172	5.50
154	.800	350.02	-5.03	4.61	.1412	.00823	-.0262	.0049	-.0004	.0083	.1401	.01955	7.17
155	.798	348.87	-5.01	6.96	.2309	.00748	-.0416	.0086	-.0010	.0101	.2283	.03542	6.45
156	.800	349.88	-4.99	9.39	.3325	.00654	-.0586	.0119	-.0016	.0121	.3270	.06074	5.38
157	.798	348.58	-4.95	11.84	.4404	.00540	-.0758	.0149	-.0020	.0133	.4299	.09564	4.50
158	.799	349.41	-4.90	14.38	.5631	.00413	-.0961	.0177	-.0023	.0129	.5444	.14384	3.78
159	.798	348.81	-4.83	16.91	.6877	.00220	-.1167	.0203	-.0022	.0108	.6574	.20214	3.25
160	.799	349.33	-4.74	19.44	.8226	-.00006	-.1418	.0238	-.0019	.0066	.7758	.27368	2.83
161	.798	349.02	-4.69	20.76	.8907	-.00136	-.1532	.0251	-.0015	.0040	.8334	.31439	2.65
162	.800	349.82	-5.04	.02	.0009	.00995	-.0007	-.0003	-.0002	.0074	.0009	.00995	.09

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
150	.00231	.00230	-.098	2.12	120.5	24.43
151	.00231	.00231	-.098	2.12	120.5	22.93
152	.00224	.00224	-.095	2.12	120.5	21.64
153	.00232	.00232	-.098	2.12	120.6	21.43
154	.00225	.00225	-.096	2.12	120.7	21.00
155	.00232	.00230	-.098	2.12	120.6	20.79
156	.00243	.00240	-.103	2.12	120.6	20.57
157	.00270	.00264	-.114	2.12	120.5	20.36
158	.00295	.00286	-.125	2.12	120.5	20.36
159	.00328	.00314	-.139	2.12	120.5	20.57
160	.00366	.00345	-.155	2.12	120.5	20.57
161	.00383	.00358	-.163	2.12	120.5	20.57
162	.00226	.00226	-.096	2.12	120.7	20.14

TABLE IV.- DELTA WING; M = 0.98

(a) $\beta \approx 0^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
65	.980	349.91	-.01	-3.97	-.1276	.01806	.0272	-.0008	.0000	.0018	-.1261	.02685	-4.70
66	.980	349.91	-.01	-2.27	-.0674	.01863	.0143	-.0006	-.0002	.0023	-.0666	.02129	-3.13
67	.980	349.91	-.01	-.02	.0005	.01944	-.0005	-.0005	-.0003	.0027	.0005	.01944	.03
68	.980	349.91	-.01	2.22	.0628	.01873	-.0141	-.0005	-.0005	.0027	.0620	.02115	2.93
69	.980	349.91	-.01	4.52	.1432	.01778	-.0313	-.0006	-.0005	.0032	.1414	.02902	4.87
70	.979	349.71	-.02	6.88	.2425	.01662	-.0528	-.0005	-.0005	.0036	.2387	.04555	5.24
71	.979	349.59	-.02	9.28	.3540	.01610	-.0773	-.0004	-.0004	.0036	.3468	.07300	4.75
72	.979	349.59	-.02	11.73	.4697	.01484	-.1024	-.0006	-.0005	.0039	.4569	.11004	4.15
73	.979	349.69	-.02	14.16	.5936	.01342	-.1320	-.0008	-.0005	.0041	.5723	.15824	3.62
74	.979	349.66	-.02	16.60	.7134	.01222	-.1597	-.0010	-.0005	.0044	.6802	.21556	3.16
75	.979	349.51	-.02	19.02	.8319	.01032	-.1860	-.0010	-.0004	.0043	.7832	.28085	2.79
76	.979	349.74	-.02	20.40	.8970	.00946	-.1996	-.0008	-.0003	.0042	.8374	.32148	2.61
77	.980	349.94	-.01	-.01	.0005	.01937	-.0005	-.0005	-.0004	.0027	.0005	.01937	.03

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
65	.00424	.00423	-.180	1.86	119.9	1.50
66	.00407	.00407	-.173	1.86	120.1	1.93
67	.00388	.00388	-.165	1.86	120.6	2.79
68	.00398	.00397	-.169	1.86	120.7	2.79
69	.00415	.00414	-.176	1.86	120.6	1.07
70	.00435	.00432	-.185	1.86	120.5	8.14
71	.00501	.00494	-.213	1.86	120.6	8.57
72	.00570	.00558	-.242	1.86	120.6	8.14
73	.00681	.00660	-.289	1.86	120.7	3.21
74	.00752	.00721	-.319	1.85	121.0	11.57
75	.00990	.00936	-.420	1.85	121.6	13.07
76	.01058	.00992	-.449	1.85	121.5	9.64
77	.00397	.00397	-.169	1.86	119.9	9.64

(b) $\beta \approx -5^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
137	.980	349.80	-5.03	-4.28	-.1373	.01772	.0287	-.0068	.0007	.0063	-.1356	.02791	-4.86
138	.980	349.85	-5.04	-2.23	-.0636	.01851	.0132	-.0037	.0002	.0075	-.0628	.02097	-3.00
139	.981	350.26	-5.04	.03	.0044	.01915	-.0014	-.0007	-.0002	.0084	.0044	.01915	.23
140	.982	350.53	-5.04	2.30	.0732	.01831	-.0162	.0023	-.0001	.0082	.0724	.02124	3.41
141	.982	350.57	-5.03	4.64	.1547	.01720	-.0331	.0057	.0002	.0084	.1528	.02965	5.15
142	.981	350.10	-5.01	7.00	.2522	.01628	-.0534	.0090	.0002	.0091	.2484	.04688	5.30
143	.979	349.47	-4.99	9.41	.3646	.01555	-.0780	.0122	-.0012	.0124	.3572	.07496	4.76
144	.978	349.46	-4.95	11.86	.4823	.01437	-.1037	.0151	-.0020	.0136	.4690	.11314	4.15
145	.979	349.88	-4.90	14.31	.6124	.01321	-.1365	.0179	-.0022	.0129	.5901	.16420	3.59
146	.979	349.42	-4.83	16.77	.7317	.01166	-.1625	.0201	-.0021	.0102	.6972	.22228	3.14
147	.980	350.09	-4.74	19.26	.8571	.00954	-.1900	.0223	-.0011	.0058	.8059	.29209	2.76
148	.980	349.94	-4.72	19.82	.8815	.00920	-.1947	.0227	-.0009	.0047	.8262	.30759	2.69
149	.980	349.80	-5.04	.03	.0031	.01908	-.0012	-.0008	-.0002	.0079	.0031	.01909	.16

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
137	.00410	.00409	-.174	1.86	120.5	26.36
138	.00409	.00409	-.174	1.86	120.6	26.36
139	.00415	.00415	-.176	1.86	120.6	26.36
140	.00432	.00431	-.183	1.86	120.6	26.36
141	.00445	.00443	-.189	1.86	120.7	26.57
142	.00479	.00476	-.203	1.86	120.7	26.57
143	.00511	.00504	-.217	1.86	120.7	26.57
144	.00567	.00555	-.241	1.86	120.7	26.57
145	.00693	.00671	-.294	1.86	121.0	26.57
146	.00761	.00729	-.323	1.85	121.1	26.57
147	.00987	.00932	-.419	1.85	121.6	26.57
148	.01013	.00953	-.430	1.85	121.7	26.57
149	.00402	.00402	-.171	1.86	120.2	26.36

TABLE V.- DELTA WING; M = 1.20

(a) $\beta \approx 0^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
51	1.198	349.25	-.01	-3.92	-.1270	.01709	.0330	-.0005	.0001	.0020	-.1255	.02572	-4.88
52	1.199	349.48	-.01	-2.25	-.0682	.01778	.0181	-.0003	-.0001	.0023	-.0674	.02043	-3.30
53	1.198	349.43	-.01	-.01	.0005	.01845	.0003	-.0003	-.0002	.0027	.0006	.01845	.03
54	1.198	349.43	-.01	2.20	.0639	.01795	-.0162	-.0002	-.0004	.0031	.0632	.02039	3.10
55	1.198	349.43	-.01	4.48	.1431	.01680	-.0364	-.0004	-.0003	.0032	.1414	.02793	5.06
56	1.198	349.43	-.02	6.78	.2359	.01573	-.0604	-.0004	-.0003	.0032	.2324	.04348	5.34
57	1.198	349.43	-.02	9.13	.3354	.01490	-.0852	-.0003	-.0004	.0037	.3288	.06790	4.84
58	1.198	349.39	-.02	11.47	.4337	.01375	-.1088	-.0004	-.0005	.0040	.4223	.09974	4.23
59	1.199	349.53	-.02	13.85	.5360	.01276	-.1322	-.0005	-.0005	.0039	.5173	.14071	3.68
60	1.198	349.59	-.02	16.22	.6368	.01172	-.1545	-.0007	-.0005	.0039	.6081	.18916	3.21
61	1.198	349.43	-.02	18.60	.7412	.00988	-.1782	-.0008	-.0006	.0042	.6993	.24580	2.85
62	1.198	349.43	-.02	20.97	.8443	.00879	-.2010	-.0006	-.0005	.0042	.7852	.31040	2.53
63	1.199	349.53	-.02	22.34	.9000	.00776	-.2128	-.0005	-.0004	.0044	.8295	.34930	2.37
64	1.199	349.56	-.01	-.02	-.0008	.01845	.0005	-.0003	-.0002	.0022	-.0008	.01845	-.04

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
51	.00582	.00581	-.247	1.68	120.4	7.07
52	.00585	.00589	-.250	1.68	120.6	9.64
53	.00592	.00592	-.251	1.68	120.6	2.36
54	.00592	.00592	-.251	1.68	120.5	10.71
55	.00594	.00592	-.252	1.68	120.6	-16.85
56	.00602	.00597	-.255	1.68	120.4	-6.46
57	.00632	.00624	-.268	1.68	120.5	-2.31
58	.00693	.00660	-.294	1.68	120.5	-2.31
59	.00773	.00751	-.328	1.68	120.6	-2.08
60	.00854	.00820	-.362	1.68	120.7	-6.69
61	.00983	.00932	-.417	1.67	120.9	9.64
62	.01017	.00950	-.432	1.67	120.7	5.57
63	.01007	.00932	-.428	1.67	120.9	3.64
64	.00597	.00597	-.254	1.67	120.7	3.43

(b) $\beta \approx -5^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
123	1.201	349.87	-5.03	-4.19	-.1348	.01678	.0347	-.0059	.0009	.0059	-.1332	.02659	-5.01
124	1.201	349.97	-5.04	-2.20	-.0633	.01760	.0166	-.0032	.0005	.0070	-.0626	.02002	-3.13
125	1.201	349.97	-5.04	.04	.0044	.01813	-.0010	-.0005	.0001	.0079	.0044	.01813	.24
126	1.201	349.99	-5.04	2.28	.0731	.01754	-.0186	.0023	.0000	.0082	.0723	.02043	3.54
127	1.201	349.94	-5.03	4.56	.1524	.01643	-.0386	.0052	.0002	.0084	.1506	.02849	5.29
128	1.201	349.84	-5.02	6.88	.2448	.01546	-.0617	.0082	.0002	.0091	.2412	.04467	5.40
129	1.201	349.99	-4.99	9.23	.3441	.01459	-.0860	.0105	-.0011	.0121	.3373	.06962	4.85
130	1.200	349.75	-4.96	11.63	.4483	.01333	-.1105	.0126	-.0016	.0131	.4364	.10345	4.22
131	1.199	349.77	-4.91	14.00	.5496	.01240	-.1340	.0142	-.0020	.0129	.5303	.14497	3.66
132	1.199	349.72	-4.84	16.41	.6540	.01110	-.1572	.0162	-.0016	.0099	.6243	.19540	3.19
133	1.199	349.70	-4.76	18.79	.7611	.00934	-.1814	.0181	-.0007	.0063	.7175	.25393	2.83
134	1.199	349.57	-4.68	21.17	.8638	.00764	-.2030	.0191	.0012	.0013	.8028	.31906	2.52
135	1.199	349.73	-4.66	21.59	.8814	.00738	-.2066	.0193	.0015	.0006	.8169	.33117	2.47
136	1.201	349.99	-5.05	.03	.0037	.01827	-.0007	-.0005	.0000	.0082	.0037	.01827	.20

PCINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
123	.00617	.00616	-.262	1.68	120.9	26.36
124	.00620	.00620	-.263	1.68	121.0	26.57
125	.00614	.00614	-.261	1.67	121.1	26.57
126	.00623	.00623	-.265	1.67	121.2	26.57
127	.00621	.00619	-.264	1.67	121.2	26.79
128	.00640	.00636	-.272	1.67	121.2	26.79
129	.00659	.00650	-.280	1.67	121.2	26.79
130	.00728	.00714	-.305	1.67	121.1	26.79
131	.00776	.00753	-.329	1.67	121.1	26.79
132	.00856	.00821	-.363	1.67	121.0	26.79
133	.00961	.00910	-.408	1.67	121.0	26.79
134	.00954	.00889	-.405	1.67	121.0	27.00
135	.00953	.00886	-.404	1.67	121.0	27.21
136	.00618	.00618	-.262	1.68	120.7	27.64

TABLE VI.- DELTA WING; M = 1.60

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
245	-5.3727	.00	-4.29	-.1247	.0232	.0318	-.0003	.0001	-.0006	.0046	.0278	.01555	2.506
246	-3.1632	.00	-1.94	-.0517	.0163	.0132	-.0001	-.0001	-.0001	.0046	.0210	.00267	2.506
247	-1.4041	-.00	-.85	-.0214	.0152	.0051	-.0001	-.0002	.0003	.0046	.0198	.00046	2.507
248	.6441	-.00	.29	.0097	.0151	-.0031	.0001	-.0002	.0003	.0046	.0197	.00009	2.508
249	2.6213	-.00	1.45	.0418	.0159	-.0115	.0001	-.0003	.0008	.0046	.0205	.00175	2.509
250	4.2794	-.01	2.59	.0765	.0179	-.0206	.0002	-.0004	.0013	.0046	.0225	.00585	2.509
251	5.5804	-.01	4.92	.1512	.0271	-.0396	.0002	-.0007	.0023	.0045	.0316	.02287	2.504
252	5.3079	-.01	7.31	.2291	.0432	-.0591	-.0000	-.0010	.0033	.0044	.0476	.05251	2.497
253	4.6325	-.02	9.71	.3072	.0663	-.0781	-.0000	-.0011	.0039	.0045	.0708	.09440	2.497
254	4.0366	-.03	12.08	.3860	.0964	-.0978	-.0003	-.0015	.0054	.0048	.1011	.14902	2.501
255	3.4775	-.03	14.45	.4605	.1324	-.1173	-.0003	-.0016	.0060	.0051	.1375	.21206	2.501
256	3.0403	-.03	16.87	.5357	.1762	-.1375	-.0007	-.0017	.0072	.0053	.1816	.28700	2.501
257	.7040	-.00	.29	.0107	.0152	-.0034	.0000	-.0002	.0003	.0045	.0197	.00011	2.504
260	3.1276	-.03	16.32	.5198	.1662	-.1331	-.0007	-.0018	.0075	.0052	.1715	.27023	2.001
261	2.7787	-.03	18.59	.5865	.2111	-.1510	-.0009	-.0018	.0082	.0053	.2164	.34395	2.008
262	2.4806	-.04	20.90	.6488	.2616	-.1687	-.0011	-.0021	.0101	.0051	.2666	.42093	2.004
263	.8160	-.01	.29	.0124	.0152	-.0033	-.0001	-.0002	.0011	.0045	.0197	.00015	2.000

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
245	602.56	.00	-4.29	-.1261	.0138	.0318	-.0003	.0002	-.0006	.0046	.0184	-.2524	2.506
246	602.60	.00	-1.94	-.0522	.0146	.0132	-.0001	-.0001	-.0001	.0046	.0192	-.2529	2.506
247	602.85	-.00	-.85	-.0216	.0149	.0051	-.0001	-.0002	.0003	.0046	.0195	-.2378	2.507
248	603.11	-.00	.29	.0098	.0151	-.0031	.0001	-.0002	.0003	.0046	.0196	-.3118	2.508
249	603.23	-.00	1.45	.0422	.0149	-.0115	.0001	-.0003	.0008	.0046	.0194	-.2738	2.509
250	603.28	-.01	2.59	.0772	.0144	-.0206	.0002	-.0004	.0013	.0046	.0190	-.2671	2.509
251	602.14	-.01	4.92	.1530	.0140	-.0396	.0002	-.0007	.0023	.0045	.0185	-.2587	2.504
252	600.37	-.01	7.31	.2328	.0137	-.0591	.0001	-.0010	.0033	.0044	.0181	-.2538	2.497
253	600.24	-.02	9.71	.3140	.0135	-.0781	.0001	-.0011	.0039	.0046	.0181	-.2486	2.497
254	601.34	-.03	12.08	.3976	.0134	-.0978	.0000	-.0015	.0054	.0049	.0183	-.2459	2.501
255	601.34	-.03	14.45	.4790	.0133	-.1173	.0001	-.0016	.0060	.0052	.0185	-.2450	2.501
256	601.25	-.03	16.87	.5638	.0131	-.1375	-.0002	-.0018	.0072	.0056	.0187	-.2438	2.501
257	602.01	-.00	.29	.0107	.0151	-.0034	.0000	-.0002	.0003	.0045	.0196	-.3121	2.504
260	481.01	-.03	16.32	.5456	.0134	-.1331	-.0002	-.0019	.0075	.0055	.0189	-.2439	2.001
261	482.78	-.03	18.59	.6232	.0131	-.1510	-.0003	-.0020	.0082	.0056	.0188	-.2424	2.008
262	481.94	-.04	20.90	.6994	.0129	-.1687	-.0002	-.0024	.0101	.0054	.0184	-.2412	2.004
263	480.80	-.01	.29	.0125	.0151	-.0033	-.0001	-.0002	.0011	.0045	.0197	-.2659	2.000

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
264	481.14	4.02	.27	.0113	.0153	-.0030	-.0003	-.0007	-.0031	.0045	.0199	-.2685	2.001
265	481.60	3.97	10.32	.5453	.0133	-.1325	-.0108	-.0029	.0078	.0055	.0188	-.2429	2.003
266	481.73	3.95	18.53	.6229	.0129	-.1507	-.0115	-.0042	.0122	.0054	.0183	-.2420	2.004
267	481.93	3.94	20.91	.7018	.0128	-.1688	-.0126	-.0054	.0160	.0053	.0182	-.2406	2.004
268	481.43	4.01	.30	.0136	.0153	-.0036	-.0003	-.0006	-.0031	.0045	.0198	-.2646	2.002
276	601.63	4.03	-4.36	-.1287	.0139	.0326	.0039	-.0002	-.0050	.0048	.0187	-.2533	2.502
277	601.67	4.03	-1.95	-.0503	.0146	.0130	.0018	-.0005	-.0043	.0047	.0193	-.2577	2.502
278	601.72	4.03	-.85	-.0220	.0150	.0054	.0007	-.0005	-.0041	.0046	.0196	-.2468	2.503
279	601.72	4.02	.29	.0099	.0150	-.0030	-.0004	-.0007	-.0035	.0046	.0196	-.3008	2.503
280	601.72	4.02	1.44	.0436	.0148	-.0117	-.0013	-.0007	-.0033	.0046	.0194	-.2682	2.503
281	601.88	4.02	2.60	.0774	.0145	-.0204	-.0024	-.0008	-.0027	.0046	.0192	-.2639	2.503
282	601.97	4.02	4.96	.1536	.0139	-.0397	-.0043	-.0010	-.0019	.0045	.0184	-.2585	2.504
283	601.97	4.01	7.30	.2297	.0136	-.0582	-.0059	-.0013	-.0006	.0047	.0183	-.2536	2.504
284	601.46	4.01	9.71	.3141	.0134	-.0779	-.0072	-.0015	.0002	.0049	.0183	-.2479	2.502
285	601.21	4.00	12.09	.3970	.0133	-.0974	-.0085	-.0019	.0014	.0051	.0184	-.2453	2.501
286	601.34	3.98	14.50	.4806	.0131	-.1175	-.0098	-.0021	.0042	.0053	.0184	-.2444	2.501
287	601.29	3.98	14.51	.4825	.0131	-.1179	-.0100	-.0022	.0042	.0053	.0184	-.2444	2.501
288	601.53	3.96	16.90	.5638	.0128	-.1372	-.0112	-.0030	.0083	.0055	.0183	-.2433	2.502
289	601.59	4.03	.30	.0108	.0150	-.0033	-.0005	-.0006	-.0039	.0046	.0196	-.3028	2.502

TABLE VII.- DELTA WING; M = 2.00

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
305	-5.2116	-.00	-3.50	-.0907	.0174	.0222	.0001	.0000	.0003	.0040	.0214	.00822	2.498
306	-2.2591	-.01	-1.23	-.0298	.0132	.0071	.0001	-.0003	.0013	.0041	.0173	.00089	2.502
307	-.1420	-.01	-.09	-.0018	.0126	-.0002	.0001	-.0003	.0013	.0041	.0167	.00000	2.501
308	1.9259	-.01	1.02	.0254	.0132	-.0072	.0002	-.0003	.0018	.0041	.0172	.00064	2.500
309	3.7274	-.01	2.14	.0535	.0143	-.0143	.0002	-.0004	.0023	.0041	.0184	.00286	2.501
310	5.3463	-.01	3.34	.0869	.0172	-.0225	.0003	-.0006	.0028	.0041	.0213	.00756	2.500
311	5.5942	-.02	5.61	.1490	.0266	-.0372	.0001	-.0008	.0038	.0039	.0305	.02220	2.501
312	5.1436	-.03	7.94	.2156	.0419	-.0531	.0001	-.0010	.0048	.0038	.0457	.04650	2.499
313	4.4679	-.03	10.24	.2791	.0625	-.0685	-.0001	-.0011	.0054	.0038	.0662	.07788	2.501
314	3.8688	-.03	12.56	.3423	.0885	-.0843	-.0001	-.0013	.0064	.0039	.0923	.11715	2.502
315	3.3704	-.04	14.89	.4023	.1194	-.0997	-.0005	-.0015	.0075	.0040	.1234	.16185	2.502
316	2.9669	-.04	17.21	.4611	.1554	-.1151	-.0007	-.0018	.0086	.0038	.1592	.21262	2.500
317	2.6402	-.05	19.48	.5160	.1954	-.1306	-.0008	-.0020	.0096	.0039	.1993	.26621	2.506
318	2.0577	-.02	1.03	.0272	.0132	-.0075	.0003	-.0004	.0027	.0041	.0173	.00074	2.499
319	2.0739	-.02	1.02	.0272	.0131	-.0075	.0002	-.0004	.0028	.0041	.0172	.00074	2.498
338	2.7114	-.05	18.93	.5302	.1845	-.1262	-.0008	-.0018	.0082	.0037	.1882	.25022	2.000
339	2.4349	-.06	21.15	.5531	.2271	-.1412	-.0010	-.0019	.0095	.0038	.2310	.30587	2.001
340	2.1927	-.06	23.41	.6029	.2750	-.1558	-.0012	-.0020	.0102	.0039	.2789	.36348	2.001
341	1.8816	-.03	.99	.0249	.0133	-.0072	.0000	-.0004	.0023	.0041	.0173	.00062	2.001

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
305	593.32	-.00	-3.50	-.0915	.0118	.0222	.0001	.0000	.0003	.0040	.0159	-.2424	2.498
306	594.25	-.01	-1.23	-.0301	.0126	.0071	.0001	-.0003	.0013	.0041	.0166	-.2366	2.502
307	594.04	-.01	-.09	-.0018	.0126	-.0002	.0001	-.0003	.0013	.0041	.0167	.0889	2.501
308	593.78	-.01	1.02	.0256	.0127	-.0072	.0002	-.0003	.0018	.0041	.0168	-.2795	2.500
309	593.96	-.01	2.14	.0540	.0123	-.0143	.0002	-.0004	.0023	.0041	.0164	-.2651	2.501
310	593.89	-.01	3.34	.0878	.0121	-.0225	.0003	-.0006	.0028	.0041	.0162	-.2561	2.500
311	593.96	-.02	5.61	.1509	.0119	-.0372	.0002	-.0007	.0038	.0039	.0159	-.2467	2.501
312	593.64	-.03	7.94	.2194	.0117	-.0531	.0002	-.0009	.0048	.0038	.0156	-.2423	2.499
313	594.07	-.03	10.24	.2857	.0118	-.0685	.0001	-.0011	.0054	.0038	.0157	-.2399	2.501
314	594.39	-.03	12.56	.3533	.0119	-.0843	.0001	-.0013	.0064	.0040	.0159	-.2386	2.502
315	594.18	-.04	14.89	.4195	.0120	-.0997	-.0001	-.0015	.0075	.0042	.0161	-.2376	2.502
316	593.75	-.04	17.21	.4864	.0121	-.1151	-.0001	-.0019	.0086	.0040	.0161	-.2365	2.500
317	595.14	-.05	19.48	.5516	.0122	-.1306	-.0001	-.0021	.0096	.0041	.0163	-.2368	2.506
318	593.53	-.02	1.03	.0275	.0127	-.0075	.0003	-.0004	.0027	.0041	.0168	-.2720	2.499
319	593.39	-.02	1.02	.0275	.0126	-.0075	.0002	-.0004	.0028	.0041	.0167	-.2719	2.498
338	475.16	-.05	18.93	.5330	.0123	-.1262	-.0001	-.0019	.0082	.0039	.0162	-.2367	2.000
339	475.23	-.06	21.15	.5978	.0123	-.1412	-.0002	-.0022	.0095	.0041	.0164	-.2361	2.001
340	475.33	-.06	23.41	.6625	.0127	-.1558	-.0003	-.0023	.0102	.0043	.0170	-.2351	2.001
341	475.33	-.03	.99	.0252	.0128	-.0072	.0000	-.0004	.0023	.0041	.0169	-.2873	2.001

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
320	593.50	4.04	-3.50	-.0896	.0120	.0219	.0022	-.0003	-.0034	.0040	.0160	-.2447	2.499
321	593.86	4.04	-1.21	-.0277	.0127	.0067	.0009	-.0005	-.0032	.0040	.0167	-.2401	2.500
322	594.04	4.04	-.08	-.0009	.0127	-.0002	.0001	-.0007	-.0026	.0040	.0167	.2320	2.501
323	593.78	4.03	1.02	.0258	.0128	-.0071	-.0007	-.0006	-.0025	.0040	.0169	-.2752	2.500
324	594.07	4.03	2.14	.0544	.0125	-.0141	-.0014	-.0006	-.0023	.0041	.0166	-.2598	2.501
325	594.11	4.03	3.30	.0858	.0124	-.0218	-.0021	-.0008	-.0017	.0040	.0164	-.2537	2.501
326	593.96	4.03	5.64	.1521	.0120	-.0372	-.0035	-.0009	-.0015	.0040	.0160	-.2443	2.501
327	594.07	4.03	7.91	.2172	.0119	-.0524	-.0049	-.0012	-.0007	.0039	.0158	-.2410	2.501
328	593.57	4.02	10.24	.2834	.0118	-.0677	-.0058	-.0013	-.0000	.0040	.0158	-.2390	2.499
329	593.61	4.02	12.52	.3488	.0119	-.0830	-.0068	-.0017	.0016	.0041	.0160	-.2380	2.499
330	593.39	4.00	14.87	.4153	.0120	-.0986	-.0078	-.0022	.0043	.0041	.0161	-.2374	2.498
331	593.36	3.99	17.15	.4815	.0118	-.1138	-.0086	-.0028	.0074	.0041	.0160	-.2364	2.498
332	593.75	3.97	19.48	.5497	.0119	-.1297	-.0091	-.0033	.0100	.0043	.0162	-.2359	2.500
333	593.96	4.04	1.01	.0249	.0128	-.0069	-.0007	-.0006	-.0030	.0040	.0168	-.2792	2.501
334	475.23	3.98	18.91	.5316	.0119	-.1252	-.0091	-.0031	.0089	.0043	.0162	-.2356	2.001
335	474.33	3.98	21.15	.5977	.0122	-.1403	-.0094	-.0034	.0108	.0046	.0168	-.2348	1.997
336	474.91	3.97	23.45	.6642	.0127	-.1556	-.0098	-.0036	.0116	.0049	.0176	-.2342	1.999
337	475.34	4.03	1.00	.0265	.0131	-.0074	-.0008	-.0006	-.0031	.0040	.0171	-.2774	2.001

TABLE VIII.- DELTA WING; M = 2.36

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
343	-4.9861	-.01	-3.25	-.0792	.0158	.0175	.0003	.0002	-.0012	.0035	.0193	.00623	2.505
344	-2.0616	-.02	-.98	-.0251	.0122	.0052	.0000	-.0001	-.0001	.0036	.0158	.00063	2.502
345	.3967	-.02	.14	.0047	.0119	-.0015	.0002	-.0002	-.0001	.0036	.0155	.00002	2.503
346	2.1461	-.02	1.23	.0267	.0125	-.0069	.0001	-.0003	.0004	.0036	.0161	.00071	2.508
347	4.0871	-.02	2.38	.0574	.0141	-.0143	.0004	-.0003	.0009	.0036	.0177	.00330	2.503
348	4.9943	-.02	3.43	.0823	.0165	-.0221	.0003	-.0003	.0009	.0036	.0201	.00678	2.505
349	5.4694	-.03	5.72	.1357	.0248	-.0326	.0002	-.0006	.0020	.0034	.0282	.01840	2.503
350	5.5895	-.03	7.98	.1985	.0392	-.0475	.0004	-.0009	.0030	.0033	.0423	.03939	2.503
351	4.4067	-.03	10.26	.2507	.0569	-.0605	.0002	-.0009	.0031	.0032	.0601	.06285	2.503
352	3.8434	-.03	12.51	.3062	.0796	-.0742	.0001	-.0012	.0037	.0033	.0829	.09362	2.496
353	3.3646	-.04	14.76	.3549	.1052	-.0865	.0000	-.0013	.0047	.0033	.1085	.12535	2.504
354	2.9738	-.04	17.05	.4115	.1385	-.1013	.0000	-.0016	.0053	.0033	.1418	.16930	2.503
355	2.6441	-.04	19.32	.4645	.1757	-.1158	-.0002	-.0016	.0059	.0032	.1789	.21573	2.500
356	2.3695	-.05	21.59	.5085	.2146	-.1287	-.0004	-.0018	.0070	.0034	.2180	.25864	2.502
357	2.1346	-.05	23.89	.5597	.2622	-.1442	-.0007	-.0018	.0077	.0034	.2656	.31331	2.504
358	2.0716	-.02	1.21	.0258	.0125	-.0068	.0001	-.0002	-.0001	.0036	.0161	.00067	2.502

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
343	561.57	-.01	-3.25	-.0797	.0113	.0175	.0003	.0002	-.0012	.0035	.0148	-.2200	2.505
344	561.03	-.02	-.98	-.0253	.0117	.0052	.0000	-.0001	-.0001	.0036	.0153	-.2067	2.502
345	561.14	-.02	.14	.0047	.0119	-.0015	.0002	-.0002	-.0001	.0036	.0155	-.3265	2.503
346	562.28	-.02	1.23	.0270	.0119	-.0069	.0002	-.0003	.0004	.0036	.0155	-.2556	2.508
347	561.17	-.02	2.38	.0580	.0117	-.0143	.0004	-.0003	.0009	.0036	.0153	-.2469	2.503
348	561.61	-.02	3.43	.0832	.0115	-.0201	.0003	-.0003	.0009	.0036	.0150	-.2422	2.505
349	561.17	-.03	5.72	.1375	.0111	-.0326	.0002	-.0006	.0020	.0034	.0146	-.2372	2.503
350	561.23	-.03	7.98	.2020	.0111	-.0475	.0005	-.0009	.0030	.0033	.0144	-.2353	2.503
351	561.23	-.03	10.26	.2568	.0113	-.0605	.0003	-.0009	.0031	.0033	.0146	-.2357	2.503
352	559.53	-.03	12.51	.3154	.0115	-.0742	.0004	-.0012	.0037	.0034	.0148	-.2347	2.496
353	561.43	-.04	14.76	.3692	.0116	-.0865	.0004	-.0013	.0047	.0034	.0150	-.2344	2.504
354	561.29	-.04	17.05	.4340	.0118	-.1013	.0005	-.0015	.0053	.0035	.0152	-.2335	2.503
355	560.41	-.04	19.32	.4964	.0121	-.1158	.0004	-.0016	.0059	.0034	.0155	-.2333	2.500
356	560.95	-.05	21.59	.5518	.0125	-.1287	.0003	-.0018	.0070	.0037	.0161	-.2333	2.502
357	561.32	-.05	23.89	.6180	.0131	-.1442	.0001	-.0019	.0077	.0037	.0168	-.2333	2.504
358	560.97	-.02	1.21	.0261	.0119	-.0068	.0001	-.0002	-.0001	.0036	.0155	-.2590	2.502

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
359	560.89	4.05	-3.23	-.2766	.0114	.0171	.0018	-.0000	-.0060	.0035	.0149	-.2234	2.502
360	561.49	4.05	-.96	-.0168	.0120	.0036	.0005	-.0001	-.0053	.0035	.0155	-.2142	2.504
361	561.29	4.05	.15	.0037	.0121	-.0013	.0001	-.0002	-.0053	.0035	.0156	-.3545	2.503
362	561.23	4.05	1.24	.0301	.0119	-.0073	-.0006	-.0003	-.0046	.0035	.0154	-.2433	2.503
363	561.66	4.05	2.34	.0554	.0117	-.0133	-.0010	-.0004	-.0046	.0035	.0152	-.2406	2.505
364	561.29	4.04	3.51	.0848	.0115	-.0202	-.0018	-.0004	-.0044	.0035	.0151	-.2377	2.503
365	561.74	4.04	3.62	.0868	.0115	-.0203	-.0018	-.0005	-.0039	.0035	.0151	-.2342	2.506
366	561.37	4.04	5.76	.1452	.0112	-.0339	-.0030	-.0006	-.0037	.0035	.0147	-.2335	2.504
367	561.49	4.04	8.02	.2004	.0114	-.0470	-.0041	-.0008	-.0035	.0033	.0148	-.2344	2.504
368	561.57	4.04	10.28	.2573	.0113	-.0602	-.0045	-.0008	-.0023	.0034	.0147	-.2339	2.505
369	560.75	4.03	12.51	.3162	.0114	-.0737	-.0051	-.0011	-.0011	.0035	.0149	-.2332	2.501
370	560.07	4.02	14.78	.3723	.0116	-.0870	-.0060	-.0015	.0011	.0035	.0150	-.2336	2.498
371	561.37	4.01	17.10	.4373	.0117	-.1016	-.0065	-.0020	.0033	.0035	.0152	-.2323	2.504
372	560.89	4.00	19.33	.4958	.0120	-.1146	-.0072	-.0022	.0040	.0037	.0157	-.2311	2.502
373	561.23	4.00	21.58	.5514	.0124	-.1277	-.0074	-.0022	.0046	.0039	.0163	-.2316	2.503
374	560.78	4.00	23.85	.6116	.0130	-.1420	-.0074	-.0023	.0053	.0041	.0171	-.2321	2.501
375	560.63	4.05	1.29	.0370	.0119	-.0089	-.0008	-.0004	-.0046	.0035	.0154	-.2412	2.501
376	561.49	4.05	1.25	.0301	.0121	-.0075	-.0005	-.0002	-.0051	.0035	.0156	-.2490	2.504

TABLE IX.- DELTA WING; M = 2.80

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
377	-5.2831	.01	-4.74	-.0964	.0183	.0210	-.0003	.0001	-.0012	.0027	.0210	.00930	2.581
378	-3.6329	.00	-2.51	-.0458	.0126	.0094	-.0000	-.0001	-.0007	.0028	.0154	.00210	2.581
379	-1.8553	.00	-1.40	-.0208	.0112	.0039	-.0000	-.0001	-.0007	.0028	.0140	.00043	2.581
380	-.3033	.00	-.35	-.0033	.0108	-.0002	.0001	-.0001	-.0007	.0029	.0136	.00001	2.582
381	1.8619	.00	.77	.0206	.0111	-.0055	.0002	-.0000	-.0006	.0029	.0139	.00042	2.582
382	3.7495	.00	1.86	.0446	.0119	-.0109	.0001	-.0001	-.0001	.0028	.0147	.00199	2.581
383	5.5704	-.00	4.07	.0950	.0171	-.0225	.0004	-.0003	.0005	.0028	.0199	.00903	2.583
384	5.4913	-.00	6.28	.1419	.0258	-.0336	.0003	-.0007	.0016	.0027	.0286	.02013	2.581
385	4.8516	-.00	8.49	.1870	.0383	-.0443	.0002	-.0007	.0017	.0026	.0409	.03499	2.580
386	4.2446	-.01	10.67	.2326	.0548	-.0554	.0001	-.0009	.0023	.0025	.0573	.05409	2.581
387	3.7128	-.01	12.87	.2792	.0752	-.0671	.0001	-.0010	.0028	.0025	.0777	.07795	2.581
388	3.2735	-.01	15.12	.3264	.0997	-.0794	.0002	-.0012	.0034	.0025	.1022	.10655	2.581
389	2.9046	-.02	17.30	.3709	.1277	-.0911	.0002	-.0012	.0041	.0024	.1301	.13754	2.582
390	2.5904	-.02	19.52	.4143	.1599	-.1031	.0001	-.0014	.0047	.0025	.1624	.17162	2.582
391	2.3319	-.02	21.74	.4556	.1954	-.1152	.0001	-.0016	.0058	.0026	.1979	.20754	2.583
392	-.1031	.01	-.32	-.0011	.0110	-.0005	.0000	-.0002	-.0007	.0028	.0138	.00000	2.582

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CA	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
377	519.53	.01	-4.74	-.0976	.0192	.2210	-.0002	.0001	-.0012	.0027	.0129	-.2148	2.581
378	519.63	.00	-2.51	-.0463	.0136	.0094	-.0000	-.0001	-.0007	.0028	.0134	-.2027	2.581
379	519.61	.00	-1.40	-.0211	.0107	.0039	-.0000	-.0001	-.0007	.0028	.0135	-.1858	2.581
380	519.75	.00	-.35	-.0033	.0107	-.0002	.0001	-.0001	-.0007	.0029	.0136	.0499	2.582
381	519.80	.00	.77	.0208	.0108	-.0055	.0002	-.0000	-.0006	.0029	.0136	-.2625	2.582
382	519.61	.00	1.86	.0449	.0104	-.0109	.0001	-.0001	-.0001	.0029	.0133	-.2430	2.581
383	519.98	-.00	4.07	.0960	.0133	-.0225	.0005	-.0003	.0005	.0028	.0131	-.2339	2.583
384	519.63	-.00	6.28	.1438	.0132	-.0336	.0004	-.0006	.0016	.0028	.0129	-.2339	2.581
385	519.47	-.00	8.49	.1907	.0103	-.0443	.0003	-.0006	.0017	.0026	.0129	-.2325	2.580
386	519.69	-.01	10.67	.2387	.0138	-.0554	.0002	-.0008	.0023	.0026	.0133	-.2320	2.581
387	519.69	-.01	12.87	.2889	.0111	-.0671	.0004	-.0010	.0028	.0026	.0137	-.2323	2.581
388	519.61	-.01	15.12	.3411	.0111	-.0794	.0005	-.0011	.0034	.0026	.0137	-.2327	2.581
389	519.73	-.02	17.30	.3921	.0116	-.0911	.0002	-.0012	.0041	.0026	.0142	-.2322	2.582
390	519.73	-.02	19.52	.4439	.0123	-.1031	.0004	-.0013	.0047	.0026	.0149	-.2322	2.582
391	520.03	-.02	21.74	.4955	.0127	-.1152	.0005	-.0015	.0058	.0028	.0155	-.2325	2.583
392	519.84	.01	-.32	-.0012	.0110	-.0005	.0000	-.0002	-.0007	.0028	.0138	.4212	2.582

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
393	519.92	4.03	-4.73	-.0987	.0133	.0214	.0027	.0002	-.0071	.0028	.0131	-.2164	2.582
394	520.22	4.03	-2.49	-.0458	.0136	.0095	.0015	.0000	-.0064	.0028	.0134	-.2080	2.584
395	519.92	4.03	-1.39	-.0216	.0107	.0041	.0010	.0000	-.0063	.0028	.0135	-.1882	2.582
396	519.49	4.03	-.33	-.0014	.0110	-.0006	.0002	.0001	-.0062	.0028	.0138	.4162	2.580
397	519.86	4.03	.75	.0207	.0108	-.0055	-.0002	.0001	-.0061	.0028	.0136	-.2674	2.582
398	520.04	4.03	1.88	.0451	.0106	-.0110	-.0009	-.0001	-.0055	.0029	.0134	-.2445	2.583
399	519.86	4.03	4.05	.0894	.0104	-.0213	-.0021	-.0003	-.0053	.0028	.0132	-.2381	2.582
400	519.88	4.03	6.27	.1427	.0102	-.0335	-.0029	-.0004	-.0046	.0027	.0129	-.2349	2.582
401	520.13	4.02	8.50	.1927	.0105	-.0449	-.0035	-.0006	-.0039	.0027	.0131	-.2329	2.583
402	520.04	4.02	10.66	.2378	.0106	-.0553	-.0040	-.0005	-.0037	.0027	.0133	-.2325	2.583
403	519.35	4.01	12.89	.2886	.0109	-.0670	-.0044	-.0009	-.0020	.0027	.0135	-.2321	2.580
404	520.28	4.01	14.44	.3260	.0113	-.0754	-.0052	-.0010	-.0013	.0026	.0139	-.2313	2.584
405	520.08	4.00	17.31	.3948	.0116	-.0912	-.0056	-.0013	-.0000	.0027	.0144	-.2310	2.583
406	520.16	4.00	19.55	.4436	.0123	-.1025	-.0059	-.0014	.0006	.0028	.0151	-.2311	2.584
407	519.73	4.00	21.78	.4969	.0127	-.1150	-.0059	-.0015	.0007	.0029	.0156	-.2314	2.582
408	519.67	4.03	-.33	.0007	.0110	-.0008	.0002	.0001	-.0062	.0028	.0138	-1.0446	2.581

TABLE X.- ARROW WING; M = 0.60

(a) $\beta \approx 0^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
63	.600	349.57	-.01	-3.81	-.1285	.00860	.0180	-.0006	-.0000	.0017	-.1276	.01711	-7.46
64	.599	349.07	-.01	-2.19	-.0728	.00895	.0112	-.0003	-.0001	.0022	-.0724	.01173	-6.17
65	.599	348.99	-.01	.04	-.0059	.01003	.0020	-.0002	-.0004	.0029	-.0059	.01002	-.59
66	.598	348.40	-.01	2.29	.0597	.00918	-.0074	-.0002	-.0006	.0036	.0593	.01155	5.13
67	.599	348.98	-.02	4.59	.1464	.00868	-.0178	-.0001	-.0006	.0044	.1453	.02038	7.13
68	.599	348.57	-.02	6.94	.2316	.00846	-.0246	-.0000	-.0007	.0059	.2289	.03638	6.29
69	.598	348.15	-.03	9.29	.3265	.00810	-.0296	.0002	-.0006	.0071	.3209	.06072	5.28
70	.600	349.56	-.03	11.69	.4300	.00742	-.0344	.0005	-.0008	.0088	.4196	.09436	4.45
71	.600	350.15	-.04	14.16	.5417	.00597	-.0386	.0005	-.0006	.0097	.5238	.13832	3.79
72	.600	349.73	-.04	16.68	.6628	.00465	-.0441	.0003	-.0006	.0104	.6336	.19466	3.25
73	.599	349.07	-.04	19.14	.7828	.00314	-.0487	.0008	-.0007	.0115	.7385	.25959	2.84
74	.599	348.65	-.05	21.65	.9153	.00131	-.0548	.0016	-.0007	.0125	.8502	.33897	2.51
75	.598	348.40	-.05	24.20	1.0576	-.00130	-.0638	.0012	-.0007	.0149	.9652	.43234	2.23
76	.599	348.74	-.06	25.06	1.1072	-.00223	-.0668	.0009	-.0008	.0162	1.0040	.46694	2.15
77	.600	350.23	-.01	.07	-.0028	.00999	.0016	-.0001	-.0004	.0029	-.0029	.00999	-.29

POINT	CAB	CDB	CPl	R/FT	TEMP	DEWPT
63	.00370	.00369	-.121	2.65	119.6	11.36
64	.00366	.00366	-.120	2.65	119.6	10.64
65	.00360	.00360	-.118	2.65	119.6	4.71
66	.00351	.00351	-.115	2.65	119.6	16.07
67	.00355	.00354	-.116	2.65	119.6	4.07
68	.00354	.00351	-.116	2.65	119.6	12.00
69	.00372	.00367	-.122	2.65	119.6	16.50
70	.00433	.00424	-.142	2.65	119.7	4.93
71	.00536	.00520	-.176	2.65	119.7	10.29
72	.00596	.00571	-.195	2.65	119.7	16.71
73	.00635	.00600	-.208	2.65	119.9	15.64
74	.00671	.00624	-.220	2.65	120.0	3.86
75	.00728	.00664	-.239	2.64	120.1	13.29
76	.00738	.00669	-.242	2.65	120.1	7.50
77	.00359	.00359	-.118	2.65	120.1	9.00

(b) $\beta \approx 5^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
62	.599	349.41	5.01	-3.62	-.1245	.00818	.0164	.0038	-.0008	-.0033	-.1238	.01603	-7.72
63	.599	349.24	5.01	-2.27	-.0783	.00866	.0117	.0026	-.0009	-.0031	-.0779	.01175	-6.63
64	.600	349.57	5.02	-.02	-.0087	.00951	.0025	-.0001	-.0010	-.0027	-.0087	.00952	-.91
65	.599	348.91	5.01	2.21	.0547	.00863	-.0062	-.0026	-.0012	-.0018	.0543	.01073	5.06
66	.600	349.58	4.99	4.54	.1384	.00810	-.0150	-.0053	-.0011	-.0011	.1373	.01903	7.21
67	.599	349.07	4.97	6.90	.2303	.00785	-.0225	-.0084	-.0005	-.0009	.2277	.03547	6.42
68	.599	348.99	4.94	9.30	.3292	.00734	-.0281	-.0109	-.0001	-.0008	.3237	.06045	5.35
69	.599	348.91	4.89	11.74	.4378	.00679	-.0327	-.0137	.0004	.0004	.4272	.09570	4.46
70	.599	349.32	4.83	14.19	.5475	.00598	-.0369	-.0166	.0006	.0028	.5293	.14002	3.78
71	.599	348.83	4.76	16.69	.6690	.00518	-.0420	-.0200	.0008	.0072	.6393	.19704	3.24
72	.599	349.41	4.66	19.25	.8039	.00404	-.0484	-.0234	.0010	.0132	.7576	.26880	2.82
73	.599	348.91	4.56	21.72	.9246	.00228	-.0541	-.0262	.0010	.0199	.8581	.34432	2.49
74	.598	348.58	4.44	24.27	1.0627	-.00096	-.0610	-.0296	.0009	.0292	.9692	.43602	2.22
75	.599	348.83	4.38	25.48	1.1299	-.00203	-.0643	-.0318	.0009	.0341	1.0209	.48418	2.11
76	.599	349.33	5.02	-.01	-.0082	.00953	.0024	-.0002	-.0009	-.0031	-.0082	.00953	-.86

POINT	CAB	CDB	CPl	R/FT	TEMP	DEWPT
62	.00393	.00392	-.129	2.66	118.9	3.43
63	.00409	.00409	-.134	2.66	118.9	3.21
64	.00404	.00404	-.132	2.66	118.9	3.00
65	.00432	.00432	-.142	2.65	118.9	2.79
66	.00413	.00411	-.135	2.66	118.9	2.36
67	.00418	.00415	-.137	2.65	118.9	2.14
68	.00445	.00439	-.146	2.65	118.9	1.93
69	.00483	.00473	-.158	2.66	118.8	1.71
70	.00510	.00494	-.167	2.66	118.9	1.50
71	.00499	.00478	-.163	2.65	118.9	1.07
72	.00508	.00480	-.167	2.66	118.9	1.07
73	.00532	.00494	-.174	2.65	118.9	.86
74	.00671	.00612	-.220	2.65	118.9	.43
75	.00679	.00613	-.223	2.65	118.9	.43
76	.00403	.00403	-.132	2.66	118.9	0.00

TABLE XI.- ARROW WING; M = 0.80

(a) $\beta \approx 0^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
48	.799	349.28	-.01	-3.81	-.1329	.00949	.0205	-.0004	.0001	.0012	-.1319	.01831	-7.21
49	.799	349.48	-.01	-2.21	-.0762	.00973	.0126	-.0002	-.0001	.0019	-.0757	.01267	-5.98
50	.799	349.54	-.01	.06	-.0042	.01090	.0019	-.0000	-.0003	.0026	-.0042	.01089	-.39
51	.799	349.62	-.01	2.31	.0620	.01002	-.0083	-.0001	-.0006	.0036	.0616	.01252	4.92
52	.799	349.61	-.02	4.59	.1473	.00959	-.0200	-.0001	-.0005	.0044	.1460	.02134	6.84
53	.799	349.27	-.02	6.94	.2395	.00936	-.0296	.0000	-.0006	.0056	.2367	.03823	6.19
54	.799	349.34	-.03	9.31	.3385	.00937	-.0369	.0003	-.0008	.0075	.3325	.06402	5.19
55	.798	349.07	-.03	11.73	.4427	.00867	-.0442	.0004	-.0008	.0086	.4317	.09848	4.38
56	.799	349.21	-.04	14.13	.5517	.00786	-.0522	.0004	-.0009	.0097	.5331	.14233	3.75
57	.799	349.55	-.04	16.62	.6770	.00723	-.0633	.0003	-.0008	.0106	.6466	.20056	3.22
58	.798	349.08	-.04	19.08	.8032	.00612	-.0750	.0005	-.0009	.0115	.7570	.26839	2.82
59	.798	349.01	-.04	21.63	.9384	.00461	-.0887	.0015	-.0008	.0120	.8706	.35018	2.49
60	.798	349.15	-.05	24.13	1.0665	.00310	-.1004	.0017	-.0010	.0142	.9720	.43874	2.22
61	.799	349.14	-.05	24.85	1.1019	.00263	-.1047	.0013	-.0008	.0144	.9987	.46552	2.15
62	.798	348.94	-.01	.02	-.0055	.01073	.0017	-.0001	-.0002	.0022	-.0056	.01073	-.52

POINT	CAB	CDB	CP1	R/FT	TEMP	DEWPT
48	.00340	.00340	-.112	2.12	120.1	17.36
49	.00334	.00334	-.109	2.12	120.1	15.00
50	.00330	.00330	-.108	2.12	120.5	17.57
51	.00328	.00328	-.107	2.12	120.5	16.29
52	.00330	.00329	-.108	2.12	120.5	15.64
53	.00334	.00332	-.110	2.12	120.6	15.00
54	.00349	.00345	-.115	2.12	120.6	12.21
55	.00426	.00417	-.140	2.12	120.7	17.36
56	.00518	.00502	-.170	2.12	120.6	11.36
57	.00576	.00552	-.189	2.12	120.6	16.71
58	.00634	.00599	-.208	2.12	120.6	11.79
59	.00677	.00629	-.222	2.12	120.6	17.14
60	.00741	.00676	-.243	2.12	120.6	12.43
61	.00737	.00669	-.242	2.12	120.5	11.14
62	.00331	.00331	-.108	2.12	120.5	11.14

(b) $\beta \approx 5^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
47	.799	349.70	5.01	-3.63	-.1248	.00889	.0184	.0040	-.0007	-.0037	-.1240	.01678	-7.39
48	.800	349.80	5.02	-2.27	-.0785	.00918	.0127	.0026	-.0010	-.0033	-.0781	.01228	-6.36
49	.799	349.30	5.02	-.02	-.0088	.01017	.0026	.0001	-.0009	-.0029	-.0088	.01017	-.86
50	.799	349.41	5.01	2.23	.0598	.00921	-.0075	-.0026	-.0013	-.0021	.0594	.01153	5.15
51	.800	349.96	4.99	4.56	.1452	.00891	-.0180	-.0055	-.0011	-.0006	.1440	.02042	7.05
52	.799	349.36	4.97	6.91	.2391	.00872	-.0270	-.0084	-.0005	-.0016	.2363	.03741	6.32
53	.799	349.63	4.94	9.31	.3387	.00850	-.0352	-.0111	-.0001	-.0008	.3329	.06318	5.27
54	.799	349.36	4.89	11.73	.4461	.00809	-.0432	-.0139	.0002	.0004	.4351	.09863	4.41
55	.799	349.29	4.83	14.17	.5628	.00742	-.0517	-.0171	.0004	.0030	.5438	.14500	3.75
56	.799	349.36	4.75	16.68	.6890	.00686	-.0622	-.0206	.0004	.0085	.6580	.20439	3.22
57	.800	350.09	4.66	19.16	.8141	.00653	-.0741	-.0242	.0001	.0154	.7668	.27334	2.81
58	.799	349.64	4.55	21.67	.9493	.00513	-.0892	-.0274	-.0004	.0246	.8803	.35534	2.48
59	.798	348.95	4.44	24.11	1.0642	.00282	-.0965	-.0297	-.0013	.0334	.9702	.43730	2.22
60	.799	349.63	4.39	25.29	1.1271	.00295	-.1035	-.0312	-.0019	.0381	1.0178	.48420	2.10
61	.799	349.29	5.02	-.02	-.0087	.01025	.0027	-.0001	-.0011	-.0029	-.0087	.01025	-.85

POINT	CAB	CDB	CP1	R/FT	TEMP	DEWPT
47	.00365	.00364	-.120	2.12	119.5	4.29
48	.00389	.00388	-.127	2.12	119.6	4.29
49	.00372	.00372	-.122	2.12	119.7	4.71
50	.00404	.00404	-.132	2.12	119.9	4.71
51	.00377	.00376	-.124	2.12	119.9	4.93
52	.00390	.00387	-.128	2.12	119.9	4.93
53	.00420	.00414	-.137	2.12	120.1	4.71
54	.00458	.00449	-.150	2.12	120.1	4.71
55	.00522	.00506	-.171	2.12	120.1	3.43
56	.00543	.00520	-.178	2.12	120.1	4.07
57	.00526	.00496	-.172	2.12	120.1	3.00
58	.00559	.00520	-.183	2.12	120.1	3.43
59	.00680	.00621	-.223	2.12	120.1	3.21
60	.00620	.00561	-.203	2.12	120.1	2.14
61	.00372	.00372	-.122	2.12	120.1	1.71

TABLE XII.- ARROW WING; M = 0.98

(a) $\beta \approx 0^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
33	.979	349.62	-.00	-3.83	-.1379	.01467	.0227	-.0002	-.0000	.0012	-.1366	.02386	-5.73
34	.980	349.77	-.01	-2.22	-.0788	.01525	.0135	.0002	-.0002	.0018	-.0782	.01829	-4.28
35	.980	349.86	-.01	.06	-.0044	.01581	.0009	.0004	-.0004	.0025	-.0044	.01580	-.28
36	.980	350.00	-.01	2.28	.0656	.01534	-.0093	.0006	-.0004	.0032	.0650	.01794	3.62
37	.980	349.94	-.01	4.62	.1561	.01448	-.0239	-.0002	-.0005	.0041	.1545	.02700	5.72
38	.979	349.74	-.02	6.95	.2517	.01424	-.0354	-.0004	-.0007	.0054	.2481	.04461	5.56
39	.979	349.62	-.02	9.34	.3647	.01491	-.0537	.0002	-.0009	.0070	.3574	.07391	4.84
40	.979	349.68	-.03	11.76	.4778	.01534	-.0698	.0003	-.0011	.0083	.4646	.11243	4.13
41	.979	349.56	-.03	14.17	.5899	.01504	-.0854	.0005	-.0012	.0098	.5682	.15901	3.57
42	.980	349.91	-.04	16.58	.7033	.01473	-.1019	.0004	-.0012	.0107	.6699	.21475	3.12
43	.980	349.95	-.04	18.97	.8185	.01432	-.1179	.0005	-.0012	.0108	.7694	.27957	2.75
44	.980	349.83	-.04	21.33	.9249	.01309	-.1307	.0011	-.0010	.0109	.8568	.34866	2.46
45	.980	351.01	-.04	23.78	1.0371	.01216	-.1439	.0010	-.0011	.0129	.9441	.42925	2.20
46	.980	349.97	-.05	24.51	1.0685	.01155	-.1469	.0005	-.0011	.0138	.9674	.45386	2.13
47	.979	349.39	-.01	.05	-.0045	.01570	.0010	.0004	-.0003	.0023	-.0045	.01570	-.28

POINT	CAB	CDB	CP1	R/FT	TEMP	DEWPT
33	.00551	.00550	-.181	1.86	119.9	20.57
34	.00536	.00535	-.176	1.86	120.0	26.14
35	.00521	.00521	-.171	1.86	120.4	25.93
36	.00545	.00544	-.179	1.86	120.6	19.71
37	.00564	.00562	-.185	1.86	120.7	25.71
38	.00587	.00583	-.192	1.86	120.7	20.57
39	.00674	.00665	-.221	1.86	120.7	26.14
40	.00833	.00815	-.273	1.86	120.7	20.14
41	.01041	.01009	-.341	1.86	120.9	24.86
42	.01327	.01271	-.435	1.85	121.2	24.00
43	.01546	.01462	-.507	1.86	121.0	17.57
44	.01594	.01485	-.522	1.85	121.0	23.36
45	.01587	.01452	-.520	1.86	121.4	20.14
46	.01601	.01457	-.525	1.85	122.0	22.50
47	.00517	.00517	-.169	1.86	119.5	16.50

(b) $\beta \approx 5^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
32	.980	350.35	5.01	-3.60	-.1307	.01401	.0216	.0044	-.0003	-.0049	-.1295	.02219	-5.84
33	.981	350.67	5.02	-2.28	-.0817	.01478	.0142	.0025	-.0002	-.0051	-.0811	.01802	-4.50
34	.981	350.67	5.02	-.02	-.0058	.01551	.0016	.0002	-.0000	-.0049	-.0058	.01551	-.37
35	.980	350.38	5.02	2.24	.0651	.01458	-.0090	-.0023	-.0004	-.0039	.0645	.01712	3.77
36	.980	350.34	5.00	4.57	.1562	.01389	-.0230	-.0060	-.0009	-.0019	.1546	.02628	5.88
37	.980	350.40	4.97	6.94	.2585	.01382	-.0377	-.0091	-.0010	-.0011	.2549	.04495	5.67
38	.980	350.40	4.94	9.33	.3658	.01428	-.0520	-.0114	-.0003	-.0014	.3587	.07342	4.88
39	.980	350.26	4.90	11.73	.4781	.01407	-.0685	-.0151	-.0001	-.0002	.4652	.11095	4.19
40	.981	350.55	4.84	14.16	.5954	.01426	-.0857	-.0186	-.0001	.0033	.5738	.15950	3.60
41	.980	350.31	4.76	16.60	.7114	.01476	-.1011	-.0215	-.0006	.0091	.6776	.21733	3.12
42	.979	349.88	4.67	19.02	.8274	.01359	-.1151	-.0234	-.0012	.0167	.7778	.28252	2.75
43	.981	350.56	4.57	21.43	.9395	.01206	-.1294	-.0247	-.0028	.0242	.8701	.35447	2.45
44	.979	349.95	4.47	23.85	1.0456	.01241	-.1402	-.0248	-.0035	.0305	.9513	.43407	2.19
45	.979	349.82	4.43	24.94	1.0884	.01101	-.1424	-.0245	-.0037	.0328	.9822	.46889	2.09
46	.980	350.12	5.02	-.01	-.0062	.01498	.0019	.0001	-.0000	-.0049	-.0062	.01498	-.41

POINT	CAB	CDB	CP1	R/FT	TEMP	DEWPT
32	.00583	.00582	-.191	1.86	120.4	9.43
33	.00588	.00588	-.193	1.86	120.4	9.43
34	.00576	.00576	-.189	1.86	120.4	9.00
35	.00565	.00565	-.185	1.86	120.6	7.50
36	.00588	.00586	-.193	1.86	120.6	7.29
37	.00637	.00632	-.209	1.86	120.6	7.07
38	.00739	.00729	-.242	1.86	120.5	7.29
39	.00886	.00868	-.290	1.86	120.5	7.71
40	.01125	.01091	-.369	1.86	120.9	6.00
41	.01250	.01198	-.410	1.86	120.9	5.36
42	.01413	.01336	-.463	1.86	121.0	5.57
43	.01446	.01346	-.474	1.86	121.2	3.86
44	.01403	.01283	-.460	1.86	121.1	2.79
45	.01482	.01343	-.486	1.86	121.1	3.64
46	.00565	.00565	-.185	1.86	119.6	2.36

TABLE XIII.- ARROW WING; M = 1.20

(a) $\beta \approx 0^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
18	1.200	349.65	-.00	-3.79	-.1323	.01824	.0259	-.0003	.0002	.0005	-.1308	.02695	-4.85
19	1.200	349.60	-.00	-2.65	-.0912	.01875	.0183	-.0002	-.0000	.0009	-.0902	.02294	-3.93
20	1.200	349.48	-.01	.05	-.0043	.01984	.0014	.0001	-.0003	.0018	-.0043	.01984	-.22
21	1.200	349.60	-.01	2.27	.0639	.01902	-.0117	.0001	-.0005	.0028	.0631	.02154	2.93
22	1.199	349.56	-.01	4.54	.1458	.01806	-.0275	-.0002	-.0007	.0038	.1439	.02955	4.87
23	1.200	349.63	-.02	6.87	.2368	.01760	-.0425	-.0002	-.0007	.0049	.2330	.04579	5.09
24	1.200	349.60	-.02	9.18	.3318	.01681	-.0582	.0000	-.0009	.0063	.3249	.06954	4.67
25	1.199	349.52	-.03	11.54	.4288	.01656	-.0731	.0001	-.0011	.0075	.4169	.10201	4.09
26	1.199	349.52	-.03	13.86	.5245	.01606	-.0865	.0003	-.0012	.0083	.5054	.14124	3.58
27	1.198	349.43	-.03	16.22	.6222	.01567	-.0995	.0002	-.0011	.0087	.5931	.18885	3.14
28	1.199	349.53	-.03	18.59	.7226	.01479	-.1136	.0003	-.0011	.0095	.6802	.24433	2.78
29	1.199	349.45	-.03	20.96	.8172	.01376	-.1251	.0007	-.0009	.0094	.7582	.30516	2.48
30	1.199	349.50	-.04	23.29	.9090	.01345	-.1351	.0009	-.0010	.0109	.8296	.37178	2.23
31	1.199	349.54	-.04	23.98	.9349	.01329	-.1377	.0008	-.0012	.0117	.8488	.39210	2.16
32	1.199	349.42	-.01	.03	-.0043	.01982	.0013	.0000	-.0004	.0021	-.0043	.01981	-.22

POINT	CAB	CDB	CP1	R/FT	TEMP	DEWPT
18	.00763	.00761	-.250	1.67	120.9	20.79
19	.00757	.00756	-.248	1.67	120.9	19.29
20	.00749	.00749	-.245	1.67	121.0	19.29
21	.00747	.00746	-.245	1.67	120.7	17.57
22	.00756	.00754	-.248	1.67	120.7	18.43
23	.00775	.00770	-.254	1.67	120.7	20.14
24	.00852	.00841	-.279	1.67	120.7	18.00
25	.00909	.00890	-.298	1.67	120.9	18.86
26	.00987	.00958	-.323	1.67	120.9	20.36
27	.01047	.01005	-.343	1.67	120.9	17.57
28	.01146	.01086	-.376	1.67	121.0	19.07
29	.01247	.01165	-.409	1.67	121.0	17.57
30	.01144	.01051	-.375	1.67	121.0	20.79
31	.01125	.01028	-.369	1.67	121.0	18.00
32	.00749	.00749	-.245	1.68	120.5	20.57

(b) $\beta \approx 5^{o}$

BODY AXIS | STABILITY AXIS

POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
17	1.201	349.90	5.01	-3.55	-.1239	.01754	.0252	.0047	-.0002	-.0052	-.1226	.02517	-4.87
18	1.200	349.90	5.02	-2.26	-.0788	.01830	.0163	.0031	-.0001	-.0052	-.0781	.02140	-3.65
19	1.201	349.95	5.02	-.01	-.0049	.01924	.0012	.0001	-.0001	-.0048	-.0049	.01925	-.26
20	1.201	349.99	5.02	2.23	.0656	.01843	-.0124	-.0030	-.0005	-.0041	.0648	.02097	3.09
21	1.201	349.97	5.00	4.52	.1512	.01713	-.0288	-.0067	-.0010	-.0024	.1494	.02899	5.15
22	1.200	349.90	4.98	6.83	.2400	.01634	-.0438	-.0089	-.0011	-.0013	.2363	.04476	5.28
23	1.200	349.88	4.95	9.17	.3351	.01609	-.0576	-.0099	-.0006	-.0018	.3282	.06930	4.74
24	1.200	349.80	4.91	11.54	.4319	.01581	-.0713	-.0117	-.0007	-.0007	.4200	.10186	4.12
25	1.200	349.84	4.85	13.89	.5327	.01592	-.0866	-.0141	-.0010	.0028	.5133	.14330	3.58
26	1.200	349.82	4.77	16.25	.6344	.01539	-.1008	-.0170	-.0016	.0087	.6047	.19234	3.14
27	1.199	349.66	4.69	18.62	.7344	.01421	-.1142	-.0193	-.0024	.0152	.6914	.24795	2.79
28	1.199	349.80	4.61	20.98	.8295	.01326	-.1247	-.0200	-.0032	.0205	.7698	.30937	2.49
29	1.200	349.84	4.52	23.34	.9242	.01322	-.1350	-.0204	-.0034	.0240	.8434	.37825	2.23
30	1.200	349.74	4.47	24.43	.9673	.01317	-.1400	-.0207	-.0033	.0256	.8753	.41198	2.12
31	1.200	349.86	5.02	-.02	-.0036	.01916	.0009	-.0001	-.0002	-.0052	-.0036	.01916	-.19

POINT	CAB	CDB	CP1	R/FT	TEMP	DEWPT
17	.00826	.00824	-.271	1.68	120.5	4.29
18	.00815	.00814	-.267	1.68	120.5	5.57
19	.00793	.00793	-.260	1.68	120.5	4.93
20	.00794	.00793	-.260	1.68	120.5	5.14
21	.00814	.00811	-.267	1.68	120.6	5.14
22	.00857	.00851	-.281	1.68	120.6	6.00
23	.00891	.00880	-.292	1.68	120.6	6.21
24	.00945	.00926	-.310	1.68	120.6	6.21
25	.00997	.00968	-.327	1.68	120.5	6.21
26	.01059	.01017	-.347	1.68	120.6	5.36
27	.01085	.01029	-.356	1.68	120.6	5.57
28	.01127	.01053	-.369	1.68	120.6	5.36
29	.01158	.01063	-.379	1.68	120.6	5.36
30	.01205	.01097	-.395	1.68	120.6	6.43
31	.00794	.00794	-.260	1.68	120.6	5.79

TABLE XIV.- ARROW WING; M = 1.60

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
571	-5.1559	-.02	-4.34	-.1328	.0254	.0280	-.0002	.0002	-.0008	.0059	.0313	.01711	2.500
572	-2.9886	-.02	-1.97	-.0549	.0184	.0121	.0002	.0000	-.0002	.0059	.0242	.00302	2.503
573	-1.2678	-.02	-.85	-.0222	.0175	.0050	.0001	-.0000	-.0002	.0058	.0233	.00049	2.504
574	.5127	-.02	.29	.0089	.0173	-.0021	.0001	-.0000	-.0001	.0058	.0231	.00008	2.507
575	2.1895	-.02	1.41	.0387	.0177	-.0087	.0002	-.0001	.0005	.0059	.0236	.00150	2.507
576	3.9677	-.02	2.58	.0746	.0193	-.0165	.0001	-.0004	.0011	.0060	.0253	.00556	2.507
577	5.3081	-.02	4.91	.1502	.0283	-.0312	.0002	-.0004	.0012	.0060	.0343	.02257	2.507
578	5.1543	-.03	7.27	.2293	.0437	-.0427	.0001	-.0005	.0019	.0059	.0497	.05078	2.508
579	4.5649	-.03	9.65	.3024	.0663	-.0541	.0003	-.0006	.0026	.0061	.0723	.09147	2.508
580	3.9609	-.03	12.04	.3788	.0956	-.0655	.0001	-.0006	.0034	.0063	.1020	.14348	2.510
581	3.4483	-.04	14.43	.4505	.1306	-.0767	-.0000	-.0007	.0041	.0068	.1374	.20295	2.500
582	3.0284	-.04	16.82	.5251	.1734	-.0887	-.0001	-.0007	.0043	.0069	.1803	.27569	2.502
583	2.6858	-.04	19.17	.5909	.2200	-.0998	-.0004	-.0007	.0051	.0068	.2269	.34921	2.501
584	2.3932	-.05	21.59	.6573	.2747	-.1111	-.0006	-.0007	.0059	.0070	.2817	.43207	2.497
585	.4491	-.02	.27	.0077	.0172	-.0019	.0001	-.0001	-.0002	.0059	.0230	.00006	2.501

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
571	601.08	-.02	-4.34	-.1323	.0154	.0280	-.0002	.0002	-.0008	.0059	.0213	-.2116	2.500
572	601.80	-.02	-1.97	-.0555	.0165	.0121	.0002	.0000	-.0002	.0059	.0223	-.2186	2.503
573	602.10	-.02	-.85	-.0224	.0172	.0050	.0001	-.0000	-.0002	.0058	.0230	-.2208	2.504
574	602.64	-.02	.29	.0090	.0172	-.0021	.0001	-.0000	-.0001	.0058	.0231	-.2369	2.507
575	602.73	-.02	1.41	.0391	.0167	-.0087	.0002	-.0001	.0005	.0059	.0226	-.2223	2.507
576	602.77	-.02	2.58	.0754	.0159	-.0165	.0001	-.0004	.0011	.0060	.0219	-.2194	2.507
577	602.69	-.02	4.91	.1521	.0153	-.0312	.0002	-.0004	.0012	.0060	.0213	-.2049	2.507
578	602.90	-.03	7.27	.2291	.0149	-.0427	.0002	-.0005	.0019	.0060	.0209	-.1862	2.508
579	603.11	-.03	9.65	.3093	.0146	-.0541	.0003	-.0005	.0026	.0062	.0208	-.1750	2.508
580	603.44	-.03	12.04	.3904	.0145	-.0655	.0002	-.0006	.0034	.0065	.0210	-.1678	2.510
581	601.04	-.04	14.43	.4668	.0143	-.0767	.0002	-.0007	.0041	.0070	.0213	-.1637	2.500
582	601.59	-.04	16.82	.5528	.0140	-.0887	.0001	-.0006	.0043	.0072	.0212	-.1605	2.502
583	601.25	-.04	19.17	.6304	.0138	-.0998	-.0001	-.0008	.0051	.0072	.0210	-.1584	2.501
584	600.45	-.05	21.59	.7123	.0135	-.1111	-.0003	-.0009	.0059	.0076	.0211	-.1560	2.497
585	601.29	-.02	.27	.0078	.0171	-.0019	.0001	-.0001	-.0002	.0059	.0230	-.2397	2.501

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
586	601.97	4.05	-4.30	-.1316	.0154	.0277	.0044	-.0003	-.0070	.0063	.0217	-.2105	2.504
587	601.97	4.05	-1.99	-.0575	.0165	.0127	.0020	-.0003	-.0066	.0060	.0225	-.2204	2.504
588	602.21	4.05	-.84	-.0228	.0172	.0052	.0008	-.0004	-.0065	.0059	.0231	-.2265	2.504
589	602.10	4.05	.29	.0067	.0172	-.0012	-.0004	-.0005	-.0057	.0060	.0232	-.1869	2.504
590	602.18	4.05	1.42	.0385	.0168	-.0082	-.0016	-.0005	-.0055	.0060	.0228	-.2120	2.505
591	602.18	4.05	2.56	.0728	.0162	-.0153	-.0026	-.0006	-.0053	.0060	.0222	-.2108	2.505
592	602.18	4.04	4.90	.1482	.0152	-.0292	-.0051	-.0008	-.0043	.0061	.0213	-.1968	2.505
593	602.18	4.04	7.26	.2281	.0147	-.0423	-.0065	-.0008	-.0039	.0062	.0209	-.1841	2.505
594	602.22	4.04	9.66	.3077	.0145	-.0531	-.0075	-.0009	-.0030	.0064	.0209	-.1724	2.505
595	602.31	4.03	12.04	.3882	.0144	-.0646	-.0084	-.0009	-.0020	.0067	.0212	-.1663	2.505
596	602.31	4.02	14.45	.4701	.0144	-.0764	-.0096	-.0009	.0002	.0070	.0215	-.1625	2.505
597	602.19	4.00	16.82	.5514	.0139	-.0881	-.0108	-.0011	.0037	.0070	.0209	-.1597	2.505
598	601.34	3.98	19.18	.6311	.0130	-.0989	-.0118	-.0015	.0071	.0073	.0203	-.1567	2.501
599	601.25	3.97	21.59	.7122	.0128	-.1098	-.0123	-.0013	.0093	.0082	.0210	-.1541	2.501
600	602.26	4.05	.29	.0090	.0171	-.0017	-.0004	-.0005	-.0057	.0060	.0231	-.1929	2.505

TABLE XV.- ARROW WING; M = 2.00

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	COC	CD UNC	CLSQ	R/FT
601	-4.9538	.01	-3.79	-.1033	.0208	.0210	.0001	.0001	-.0015	.0052	.0260	.01066	2.497
602	-2.3137	.01	-1.49	-.0368	.0159	.0081	.0000	.0001	-.0014	.0052	.0211	.00135	2.498
603	-.6249	.00	-.38	-.0095	.0153	.0021	.0000	-.0000	-.0008	.0052	.0204	.00009	2.498
604	1.1195	.00	.74	.0173	.0154	-.0038	.0000	-.0000	-.0007	.0052	.0206	.00030	2.499
605	2.9037	.00	1.86	.0476	.0164	-.0100	.0002	-.0001	-.0001	.0052	.0216	.00227	2.499
606	4.3483	.00	3.01	.0805	.0185	-.0163	.0001	-.0001	-.0001	.0052	.0237	.00648	2.500
607	5.3030	-.00	5.31	.1444	.0272	-.0267	.0000	-.0003	.0006	.0051	.0323	.02085	2.500
608	5.0433	-.00	7.62	.2100	.0416	-.0366	.0001	-.0004	.0013	.0051	.0467	.04412	2.500
609	4.4451	-.01	9.96	.2743	.0617	-.0459	.0000	-.0004	.0021	.0052	.0669	.07526	2.500
610	3.8829	-.01	12.25	.3359	.0865	-.0553	.0001	-.0005	.0021	.0053	.0919	.11283	2.500
611	3.3856	-.01	14.59	.3956	.1169	-.0641	-.0001	-.0005	.0029	.0053	.1221	.15651	2.501
612	2.9918	-.02	16.91	.4551	.1521	-.0737	-.0003	-.0006	.0037	.0057	.1578	.20715	2.501
613	2.6623	-.02	19.18	.5103	.1917	-.0829	-.0004	-.0005	.0038	.0054	.1971	.26039	2.500
614	2.3753	-.02	21.54	.5644	.2376	-.0916	-.0005	-.0006	.0045	.0055	.2431	.31854	2.501
615	2.1393	-.02	23.85	.6148	.2874	-.1003	-.0005	-.0006	.0053	.0057	.2931	.37803	2.500
616	1.2737	.00	.74	.0197	.0154	-.0041	.0000	-.0001	-.0001	.0052	.0206	.00039	2.501

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
601	593.11	.01	-3.79	-.1044	.0140	.0210	.0001	.0001	-.0015	.0052	.0191	-.2009	2.497
602	593.28	.01	-1.49	-.0372	.0149	.0081	.0000	.0001	-.0014	.0052	.0201	-.2182	2.498
603	593.32	.00	-.38	-.0096	.0152	.0021	.0000	-.0000	-.0008	.0052	.0204	-.2164	2.498
604	593.46	.00	.74	.0174	.0152	-.0038	.0000	-.0000	-.0007	.0052	.0204	-.2203	2.499
605	593.64	.00	1.86	.0481	.0148	-.0100	.0002	-.0001	-.0001	.0052	.0200	-.2085	2.499
606	593.71	.00	3.01	.0814	.0143	-.0163	.0001	-.0001	-.0001	.0052	.0194	-.1998	2.500
607	593.82	-.00	5.31	.1463	.0138	-.0267	.0000	-.0003	.0006	.0051	.0188	-.1822	2.500
608	593.71	-.00	7.62	.2137	.0134	-.0366	.0001	-.0004	.0013	.0051	.0185	-.1711	2.500
609	593.78	-.01	9.96	.2809	.0134	-.0459	.0001	-.0004	.0021	.0053	.0186	-.1636	2.500
610	593.75	-.01	12.25	.3466	.0133	-.0553	.0002	-.0004	.0021	.0055	.0187	-.1594	2.500
611	594.00	-.01	14.59	.4123	.0134	-.0641	.0001	-.0005	.0029	.0054	.0188	-.1554	2.501
612	594.00	-.02	16.91	.4797	.0132	-.0737	-.0001	-.0006	.0037	.0060	.0191	-.1537	2.501
613	593.75	-.02	19.18	.5444	.0134	-.0829	-.0002	-.0006	.0038	.0057	.0191	-.1522	2.500
614	593.96	-.02	21.54	.6122	.0138	-.0916	-.0002	-.0007	.0045	.0060	.0198	-.1496	2.501
615	593.89	-.02	23.85	.6785	.0143	-.1003	-.0002	-.0007	.0053	.0062	.0205	-.1478	2.500
616	594.04	.00	.74	.0199	.0152	-.0041	.0000	-.0001	-.0001	.0052	.0204	-.2066	2.501

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
617	594.04	4.03	-3.78	-.1029	.0142	.0205	.0025	-.0000	-.0074	.0052	.0194	-.1992	2.501
618	594.11	4.03	-1.51	-.0376	.0150	.0081	.0009	-.0001	-.0072	.0052	.0202	-.2146	2.501
619	593.50	4.03	-.37	-.0086	.0152	.0020	.0002	-.0003	-.0071	.0052	.0204	-.2328	2.499
620	592.96	4.03	.74	.0198	.0151	-.0035	-.0007	-.0002	-.0069	.0052	.0204	-.1858	2.496
621	593.36	4.03	1.86	.0473	.0148	-.0095	-.0013	-.0004	-.0062	.0052	.0200	-.2001	2.498
622	593.75	4.03	3.02	.0797	.0144	-.0155	-.0021	-.0004	-.0060	.0052	.0196	-.1945	2.500
623	593.61	4.03	5.32	.1452	.0137	-.0260	-.0036	-.0006	-.0051	.0052	.0189	-.1790	2.499
624	593.32	4.03	7.63	.2143	.0136	-.0362	-.0050	-.0006	-.0055	.0052	.0188	-.1691	2.498
625	593.32	4.03	9.95	.2807	.0135	-.0457	-.0059	-.0006	-.0052	.0053	.0189	-.1628	2.498
626	593.64	4.02	12.25	.3467	.0135	-.0548	-.0068	-.0006	-.0036	.0056	.0191	-.1582	2.499
627	593.68	4.00	14.58	.4116	.0134	-.0635	-.0076	-.0006	-.0009	.0057	.0190	-.1543	2.499
628	593.61	3.99	16.90	.4782	.0130	-.0728	-.0086	-.0006	.0013	.0057	.0187	-.1522	2.499
629	593.64	3.98	19.19	.5447	.0133	-.0818	-.0091	-.0007	.0034	.0061	.0194	-.1501	2.499
630	593.68	3.97	21.54	.6123	.0136	-.0907	-.0094	-.0006	.0043	.0066	.0202	-.1482	2.499
631	593.68	3.97	23.87	.6811	.0141	-.1002	-.0099	-.0007	.0052	.0071	.0212	-.1471	2.499
632	593.82	4.03	.74	.0200	.0153	-.0040	-.0006	-.0003	-.0063	.0052	.0205	-.1998	2.500

TABLE XVI.- ARROW WING; M = 2.36

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
635	-4.3666	-.02	-3.11	-.0755	.0173	.0138	.0002	.0000	.0005	.0046	.0219	.00569	2.503
636	-1.3347	-.03	-.88	-.0189	.0142	.0036	.0002	-.0000	.0012	.0047	.0188	.00036	2.502
637	.3534	-.02	.22	.0049	.0139	-.0009	.0002	-.0001	.0012	.0047	.0186	.00002	2.504
638	2.0751	-.02	1.32	.0287	.0143	-.0054	.0000	-.0001	.0012	.0047	.0190	.00088	2.501
639	3.1526	-.03	2.41	.0491	.0156	-.0092	.0004	-.0003	.0019	.0047	.0202	.00241	2.504
640	4.9182	-.02	3.57	.0917	.0186	-.0164	.0003	-.0002	.0013	.0046	.0233	.00840	2.501
641	5.3643	-.03	5.84	.1491	.0278	-.0261	.0007	-.0005	.0026	.0045	.0323	.02223	2.500
642	4.9233	-.03	8.08	.2032	.0413	-.0346	.0004	-.0005	.0027	.0044	.0457	.04128	2.504
643	4.3113	-.03	10.34	.2564	.0595	-.0422	.0005	-.0005	.0034	.0045	.0640	.06575	2.502
644	3.7776	-.03	12.58	.3091	.0818	-.0503	.0004	-.0007	.0035	.0046	.0864	.09553	2.505
645	3.3146	-.03	14.85	.3608	.1089	-.0584	.0005	-.0006	.0036	.0046	.1135	.13021	2.502
646	2.9348	-.04	17.12	.4145	.1412	-.0675	.0004	-.0008	.0043	.0043	.1456	.17184	2.502
647	2.6151	-.04	19.37	.4624	.1768	-.0748	.0002	-.0009	.0051	.0044	.1812	.21380	2.503
648	2.3457	-.04	21.66	.5119	.2182	-.0834	.0001	-.0009	.0059	.0046	.2228	.26200	2.502
649	2.1162	-.05	23.94	.5605	.2649	-.0928	-.0000	-.0010	.0066	.0046	.2695	.31418	2.503
650	2.0313	-.02	1.31	.0296	.0146	-.0059	.0000	-.0001	.0012	.0047	.0192	.00087	2.505

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
635	561.09	-.02	-3.11	-.0763	.0132	.0138	.0002	.0000	.0005	.0046	.0178	-.1804	2.503
636	561.03	-.03	-.88	-.0191	.0139	.0036	.0002	-.0000	.0012	.0047	.0186	-.1882	2.502
637	561.37	-.02	.22	.0050	.0139	-.0009	.0002	-.0001	.0012	.0047	.0186	-.1847	2.504
638	560.72	-.02	1.32	.0350	.0136	-.0054	.0000	-.0001	.0012	.0047	.0183	-.1792	2.501
639	561.46	-.03	2.41	.0497	.0135	-.0092	.0004	-.0003	.0019	.0047	.0182	-.1861	2.504
640	560.78	-.02	3.57	.0926	.0129	-.0164	.0003	-.0001	.0013	.0046	.0175	-.1772	2.501
641	560.46	-.03	5.84	.1511	.0125	-.0261	.0007	-.0004	.0026	.0045	.0170	-.1724	2.500
642	561.43	-.03	8.08	.2069	.0123	-.0346	.0004	-.0004	.0027	.0045	.0168	-.1673	2.504
643	560.97	-.03	10.34	.2629	.0125	-.0422	.0006	-.0004	.0034	.0046	.0171	-.1603	2.502
644	561.54	-.03	12.58	.3195	.0125	-.0503	.0005	-.0006	.0035	.0047	.0172	-.1576	2.505
645	561.89	-.03	14.85	.3767	.0127	-.0584	.0006	-.0005	.0036	.0048	.0175	-.1550	2.502
646	560.89	-.04	17.12	.4377	.0130	-.0675	.0006	-.0006	.0043	.0045	.0175	-.1542	2.502
647	561.29	-.04	19.37	.4949	.0135	-.0748	.0005	-.0008	.0051	.0047	.0181	-.1511	2.503
648	561.06	-.04	21.66	.5563	.0139	-.0834	.0004	-.0008	.0059	.0049	.0188	-.1500	2.502
649	561.20	-.05	23.94	.6194	.0146	-.0928	.0004	-.0009	.0066	.0050	.0196	-.1498	2.503
650	561.57	-.02	1.31	.0299	.0139	-.0059	.0001	-.0001	.0012	.0047	.0186	-.1967	2.505

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
651	561.06	4.06	-3.11	-.9720	.0132	.0127	.0018	-.0031	-.0057	.0046	.0178	-.1764	2.502
652	561.09	4.06	-.88	-.0168	.0139	.0030	.0003	.0001	-.0061	.0046	.0185	-.1770	2.503
653	561.23	4.06	.22	.0088	.0139	-.0018	-.0003	-.0001	-.0060	.0046	.0186	-.2104	2.503
654	560.38	4.06	1.35	.0377	.0136	-.0069	-.0006	-.0001	-.0053	.0046	.0182	-.1822	2.499
655	560.97	4.06	2.44	.0591	.0133	-.0108	-.0015	-.0002	-.0058	.0046	.0179	-.1829	2.502
656	560.66	4.06	3.61	.0986	.0129	-.0175	-.0025	-.0004	-.0050	.0045	.0175	-.1775	2.501
657	561.43	4.06	5.84	.1510	.0126	-.0256	-.0035	-.0003	-.0054	.0045	.0171	-.1695	2.504
658	560.80	4.06	8.11	.2126	.0125	-.0346	-.0044	-.0004	-.0052	.0045	.0170	-.1625	2.501
659	561.03	4.06	10.35	.2672	.0126	-.0429	-.0050	-.0004	-.0044	.0045	.0171	-.1604	2.502
660	560.69	4.05	12.63	.3310	.0126	-.0515	-.0057	-.0004	-.0028	.0047	.0173	-.1556	2.501
661	560.92	4.04	14.87	.3816	.0126	-.0590	-.0064	-.0003	-.0013	.0047	.0174	-.1546	2.502
662	560.95	4.03	17.15	.4416	.0130	-.0671	-.0069	-.0004	.0003	.0048	.0178	-.1520	2.502
663	560.95	4.03	19.38	.4991	.0134	-.0750	-.0072	-.0004	.0011	.0050	.0184	-.1502	2.502
664	560.72	4.02	21.67	.5633	.0138	-.0837	-.0077	-.0005	.0020	.0055	.0192	-.1486	2.501
665	560.63	4.02	23.95	.6221	.0144	-.0926	-.0081	-.0007	.0022	.0057	.0201	-.1488	2.501
666	561.03	4.06	1.36	.0390	.0137	-.0071	-.0008	-.0000	-.0059	.0046	.0183	-.1830	2.502

TABLE XVII.- ARROW WING; M = 2.80

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
667	-5.1785	.00	-4.54	-.1017	.0196	.0172	-.0000	.0003	-.0009	.0039	.0235	.01034	2.584
668	-3.6907	.00	-2.32	-.0517	.0140	.0088	-.0001	.0003	-.0008	.0039	.0179	.00267	2.583
669	-2.0351	.00	-1.23	-.0259	.0127	.0039	-.0002	.0002	-.0008	.0039	.0166	.00067	2.582
670	-.3645	-.00	-.15	-.0045	.0123	.0011	-.0003	.0001	-.0001	.0039	.0163	.00002	2.582
671	1.6643	-.00	.96	.0206	.0124	-.0034	.0002	.0001	-.0001	.0039	.0163	.00043	2.582
672	3.1690	-.00	2.06	.0421	.0133	-.0071	-.0002	-.0000	.0007	.0039	.0172	.00178	2.579
673	4.9900	-.01	4.26	.0921	.0185	-.0154	.0001	-.0002	.0014	.0039	.0223	.00848	2.583
674	5.1400	-.01	6.47	.1433	.0279	-.0239	-.0001	-.0002	.0015	.0038	.0317	.02055	2.581
675	4.6833	-.01	8.67	.1896	.0405	-.0302	.0000	-.0002	.0015	.0037	.0441	.03594	2.581
676	4.1100	-.01	10.85	.2343	.0568	-.0365	.0001	-.0004	.0023	.0036	.0604	.05441	2.581
677	3.6144	-.01	13.08	.2799	.0774	-.0437	.0003	-.0004	.0023	.0035	.0810	.07833	2.580
678	3.1956	-.01	15.27	.3218	.1007	-.0501	.0002	-.0003	.0025	.0034	.1040	.10354	2.580
679	2.8397	-.01	17.49	.3712	.1307	-.0571	.0000	-.0004	.0032	.0034	.1341	.13777	2.581
680	2.5390	-.02	19.72	.4125	.1625	-.0641	-.0001	-.0005	.0040	.0035	.1659	.17013	2.579
681	2.2875	-.02	21.95	.4564	.1995	-.0716	-.0001	-.0006	.0041	.0035	.2030	.20826	2.581
682	-.0392	-.00	-.13	-.0005	.0122	-.0000	-.0002	.0001	-.0001	.0039	.0161	.00000	2.579

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
667	520.24	.00	-4.54	-.1029	.0115	.0172	-.0000	.0003	-.0009	.0039	.0154	-.1670	2.584
668	520.00	.00	-2.32	-.0522	.0119	.0088	-.0001	.0003	-.0008	.0039	.0158	-.1690	2.583
669	519.83	.00	-1.23	-.0262	.0122	.0039	-.0002	.0003	-.0008	.0039	.0161	-.1501	2.582
670	519.88	-.00	-.15	-.0045	.0123	.0011	-.0003	.0001	-.0001	.0039	.0163	-.2414	2.582
671	519.77	-.00	.96	.0209	.0121	-.0034	.0002	.0001	-.0001	.0039	.0160	-.1624	2.582
672	519.31	-.00	2.06	.0426	.0118	-.0071	-.0002	-.0000	.0007	.0039	.0157	-.1664	2.579
673	520.12	-.01	4.26	.0932	.0116	-.0154	.0001	-.0002	.0014	.0039	.0154	-.1657	2.583
674	519.63	-.01	6.47	.1456	.0116	-.0238	-.0000	-.0002	.0015	.0038	.0154	-.1581	2.581
675	519.53	-.01	8.67	.1935	.0115	-.0302	.0001	-.0002	.0015	.0037	.0152	-.1562	2.581
676	519.57	-.01	10.85	.2398	.0118	-.0365	.0002	-.0003	.0023	.0037	.0155	-.1523	2.581
677	519.51	-.01	13.08	.2901	.0121	-.0437	.0004	-.0003	.0023	.0036	.0157	-.1506	2.580
678	519.45	-.01	15.27	.3369	.0124	-.0501	-.0001	-.0004	.0025	.0035	.0159	-.1486	2.580
679	519.55	-.01	17.49	.3933	.0131	-.0571	.0002	-.0004	.0032	.0036	.0167	-.1452	2.581
680	519.29	-.02	19.72	.4431	.0137	-.0641	.0001	-.0005	.0040	.0037	.0174	-.1447	2.579
681	519.61	-.02	21.95	.4978	.0145	-.0716	.0001	-.0006	.0041	.0038	.0182	-.1439	2.581
682	519.23	-.00	-.13	-.0005	.0122	-.0000	-.0002	.0001	-.0001	.0039	.0161	.0744	2.579

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
683	519.47	4.05	-4.54	-.1043	.0115	.0181	.0030	.0002	-.0077	.0038	.0153	-.1738	2.580
684	518.93	4.04	-2.33	-.0531	.0120	.0094	.0019	.0000	-.0068	.0039	.0158	-.1769	2.577
685	519.47	4.05	-1.23	-.0266	.0122	.0047	.0007	.0002	-.0074	.0039	.0161	-.1765	2.580
686	519.37	4.04	-.12	-.0021	.0122	.0004	-.0001	.0002	-.0065	.0039	.0161	-.1925	2.580
687	519.39	4.04	.97	.0210	.0120	-.0030	-.0006	.0001	-.0057	.0039	.0160	-.1441	2.580
688	519.47	4.04	2.05	.0429	.0119	-.0067	-.0014	-.0000	-.0056	.0039	.0158	-.1572	2.580
689	519.25	4.04	4.26	.0928	.0115	-.0155	-.0028	-.0001	-.0061	.0039	.0154	-.1667	2.579
690	519.31	4.04	6.43	.1412	.0113	-.0228	-.0034	-.0002	-.0059	.0038	.0151	-.1613	2.579
691	519.27	4.04	8.65	.1894	.0115	-.0300	-.0041	-.0002	-.0058	.0038	.0153	-.1586	2.579
692	519.27	4.04	10.85	.2415	.0118	-.0364	-.0045	-.0001	-.0049	.0038	.0156	-.1509	2.578
693	519.17	4.03	13.09	.2921	.0122	-.0436	-.0050	-.0002	-.0040	.0037	.0159	-.1494	2.579
694	519.49	4.03	15.30	.3416	.0125	-.0503	-.0057	-.0001	-.0031	.0037	.0162	-.1474	2.580
695	519.03	4.02	17.47	.3902	.0130	-.0569	-.0060	-.0002	-.0022	.0037	.0167	-.1457	2.578
696	519.25	4.02	19.73	.4462	.0139	-.0639	-.0062	-.0002	-.0021	.0039	.0177	-.1434	2.579
697	519.23	4.02	21.95	.4991	.0146	-.0712	-.0064	-.0004	-.0012	.0040	.0187	-.1426	2.579
698	519.71	4.04	-.12	-.0021	.0123	.0007	.0001	.0002	-.0065	.0039	.0162	-.3300	2.581

TABLE XVIII.- DIAMOND WING; M = 0.60

(a) $\beta \approx 0^{o}$

					BODY AXIS						STABILITY AXIS		
PCINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
56	.595	349.32	-.02	-3.87	-.1086	.00726	.0209	-.0002	.0001	.0024	-.1079	.01456	-7.41
57	.598	347.81	-.02	-2.24	-.0577	.00768	.0113	-.0000	-.0002	.0030	-.0574	.00993	-5.78
58	.598	347.81	-.02	.01	-.0010	.00839	.0007	.0001	-.0004	.0036	-.0010	.00839	-.12
59	.595	348.64	-.02	2.24	.0526	.00789	-.0090	.0001	-.0006	.0043	.0523	.00994	5.26
60	.599	348.57	-.03	4.57	.1296	.00767	-.0236	-.0000	-.0009	.0052	.1286	.01798	7.15
61	.595	348.73	-.03	6.54	.2146	.00737	-.0398	.0000	-.0011	.0064	.2121	.03324	6.38
62	.599	348.98	-.04	9.38	.3147	.00704	-.0585	.0002	-.0015	.0079	.3093	.05823	5.31
63	.598	347.98	-.04	11.89	.4274	.00642	-.0795	.0001	-.0018	.0093	.4169	.09432	4.42
64	.598	347.56	-.05	14.38	.5431	.00553	-.1009	-.0003	-.0022	.0106	.5247	.14023	3.74
65	.595	348.40	-.06	16.93	.6713	.00431	-.1251	-.0006	-.0025	.0121	.6409	.19963	3.21
66	.601	351.07	-.06	18.20	.7395	.00384	-.1384	-.0007	-.0027	.0131	.7013	.23460	2.99
67	.598	348.15	-.02	.00	-.0007	.00844	.0006	.0001	-.0004	.0034	-.0007	.00844	-.08

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
56	.00180	.00180	-.092	2.65	120.4	1.29
57	.00176	.00176	-.090	2.64	120.4	1.07
58	.00175	.00175	-.090	2.64	120.4	1.07
59	.00178	.00177	-.091	2.64	120.5	1.07
60	.00176	.00176	-.090	2.64	120.4	1.07
61	.00184	.00182	-.094	2.64	120.4	.86
62	.00195	.00193	-.100	2.65	120.4	.86
63	.00219	.00214	-.112	2.64	120.4	.86
64	.00238	.00231	-.122	2.64	120.4	.64
65	.00252	.00241	-.129	2.64	120.4	.64
66	.00251	.00238	-.128	2.65	120.4	.64
67	.00176	.00176	-.090	2.64	120.6	0.00

(b) $\beta \approx -5^{o}$

					BODY AXIS						STABILITY AXIS		
PCINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
108	.598	347.90	-5.03	-4.03	-.1112	.00714	.0205	-.0044	-.0001	.0060	-.1105	.01495	-7.39
109	.600	349.38	-5.04	-2.27	-.0564	.00761	.0105	-.0022	-.0004	.0069	-.0560	.00983	-5.70
110	.598	348.31	-5.05	-.00	.0011	.00834	.0002	-.0001	-.0007	.0078	.0011	.00834	.13
111	.599	348.55	-5.04	2.25	.0562	.00787	-.0096	.0020	-.0009	.0084	.0559	.01008	5.54
112	.600	349.64	-5.03	4.60	.1291	.00744	-.0230	.0048	-.0013	.0093	.1281	.01776	7.21
113	.598	347.64	-5.02	6.98	.2172	.00720	-.0395	.0087	-.0019	.0112	.2147	.03355	6.40
114	.595	348.36	-5.00	9.43	.3194	.00693	-.0586	.0123	-.0027	.0136	.3140	.05920	5.30
115	.599	348.39	-4.96	11.93	.4285	.00631	-.0789	.0153	-.0034	.0155	.4180	.09474	4.41
116	.600	350.06	-4.91	14.48	.5499	.00547	-.1014	.0180	-.0037	.0155	.5311	.14280	3.72
117	.598	347.72	-4.84	17.06	.6845	.00434	-.1265	.0210	-.0036	.0142	.6531	.20496	3.19
119	.598	348.31	-4.81	17.96	.7336	.00387	-.1359	.0224	-.0035	.0137	.6966	.22987	3.03
120	.595	348.89	-5.04	.01	.0011	.00838	.0001	.0000	-.0007	.0075	.0011	.00838	.13

POINT	CAB	CDB	CPI	R/FT	TEMP	DEWPT
108	.00215	.00214	-.110	2.64	120.5	15.00
109	.00210	.00210	-.107	2.65	120.4	15.00
110	.00201	.00201	-.103	2.64	120.4	14.79
111	.00207	.00207	-.106	2.64	120.4	14.57
112	.00212	.00211	-.108	2.65	120.4	14.57
113	.00222	.00221	-.114	2.64	120.4	14.36
114	.00233	.00230	-.119	2.64	120.4	14.36
115	.00251	.00245	-.128	2.64	120.4	14.14
116	.00255	.00247	-.130	2.65	120.4	13.93
117	.00260	.00249	-.133	2.64	120.4	13.93
119	.00263	.00250	-.134	2.64	120.4	13.71
120	.00200	.00200	-.102	2.64	120.5	13.29

TABLE XIX.- DIAMOND WING; M = 0.80

(a) $\beta \approx 0^{o}$

					BODY AXIS					STABILITY AXIS			
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
44	.800	350.00	-.02	-3.87	-.1108	.00776	.0223	-.0001	.0001	.0025	-.1100	.01522	-7.23
45	.799	349.59	-.02	-2.24	-.0590	.00814	.0120	.0001	-.0001	.0031	-.0587	.01044	-5.62
46	.799	349.67	-.02	.01	-.0002	.00894	.0004	.0002	-.0004	.0035	-.0002	.00894	-.02
47	.800	350.14	-.02	2.26	.0573	.00837	-.0103	.0002	-.0006	.0043	.0569	.01062	5.36
48	.800	350.17	-.03	4.59	.1331	.00810	-.0254	-.0000	-.0009	.0054	.1320	.01872	7.05
49	.798	348.96	-.03	6.95	.2195	.00804	-.0425	-.0001	-.0011	.0063	.2169	.03455	6.28
50	.800	350.04	-.04	9.38	.3169	.00756	-.0608	.0000	-.0015	.0079	.3113	.05949	5.23
51	.800	350.40	-.04	11.85	.4269	.00775	-.0824	-.0002	-.0019	.0091	.4162	.09526	4.37
52	.800	350.27	-.05	14.31	.5394	.00731	-.1050	-.0006	-.0022	.0104	.5208	.14044	3.71
53	.800	350.32	-.05	16.85	.6658	.00672	-.1311	-.0008	-.0026	.0120	.6353	.19944	3.19
54	.800	350.34	-.06	18.17	.7347	.00634	-.1458	-.0009	-.0028	.0126	.6961	.23514	2.96
55	.800	349.90	-.02	.01	.0003	.00885	.0003	.0002	-.0004	.0032	.0003	.00885	.04

POINT	CAB	CDB	CPL	R/FT	TEMP	DEWPT
44	.00158	.00158	-.081	2.12	120.7	10.07
45	.00155	.00154	-.079	2.12	120.7	10.07
46	.00149	.00149	-.076	2.12	120.6	9.43
47	.00153	.00152	-.078	2.12	120.6	9.43
48	.00155	.00155	-.079	2.12	120.6	9.43
49	.00161	.00160	-.082	2.12	120.5	9.00
50	.00180	.00178	-.092	2.12	120.5	9.64
51	.00206	.00202	-.105	2.12	120.5	8.79
52	.00233	.00225	-.119	2.12	120.6	9.00
53	.00251	.00240	-.128	2.12	120.6	8.57
54	.00262	.00249	-.134	2.12	120.6	10.07
55	.00153	.00153	-.078	2.12	120.7	9.64

(b) $\beta \approx -5^{o}$

					BODY AXIS					STABILITY AXIS			
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
96	.799	349.13	-5.03	-4.03	-.1135	.00770	.0218	-.0045	-.0001	.0062	-.1127	.01567	-7.19
97	.798	348.78	-5.04	-2.26	-.0576	.00813	.0110	-.0022	-.0004	.0069	-.0572	.01039	-5.51
98	.799	349.62	-5.05	-.00	.0013	.00884	-.0000	.0001	-.0007	.0079	.0013	.00884	.15
99	.799	348.96	-5.04	2.27	.0578	.00822	-.0104	.0021	-.0010	.0085	.0574	.01050	5.47
100	.799	349.37	-5.04	4.59	.1332	.00794	-.0248	.0050	-.0014	.0096	.1321	.01858	7.11
101	.800	349.82	-5.02	6.98	.2219	.00794	-.0420	.0089	-.0020	.0117	.2193	.03487	6.29
102	.798	348.79	-5.00	9.43	.3231	.00796	-.0613	.0123	-.0029	.0140	.3175	.06077	5.22
103	.798	348.76	-4.96	11.89	.4299	.00757	-.0819	.0153	-.0034	.0153	.4191	.09600	4.37
104	.799	349.55	-4.91	14.44	.5544	.00738	-.1070	.0181	-.0038	.0153	.5351	.14540	3.68
105	.798	348.66	-4.84	16.96	.6811	.00669	-.1326	.0211	-.0035	.0133	.6495	.20508	3.17
106	.797	348.31	-4.80	18.08	.7363	.00616	-.1440	.0226	-.0034	.0116	.6980	.23435	2.98
107	.799	349.52	-5.04	.00	.0021	.00882	-.0001	.0001	-.0007	.0076	.0021	.00882	.24

POINT	CAB	CDB	CPL	R/FT	TEMP	DEWPT
96	.00188	.00188	-.096	2.12	120.6	9.64
97	.00184	.00184	-.094	2.12	120.6	9.64
98	.00175	.00175	-.089	2.12	120.6	9.64
99	.00186	.00186	-.095	2.12	120.6	9.64
100	.00188	.00187	-.096	2.12	120.6	9.64
101	.00198	.00196	-.101	2.12	120.7	9.64
102	.00213	.00210	-.109	2.12	120.7	9.64
103	.00238	.00233	-.122	2.11	120.7	9.64
104	.00243	.00235	-.124	2.12	120.6	9.64
105	.00255	.00244	-.130	2.12	120.6	9.64
106	.00261	.00248	-.133	2.11	120.6	9.64
107	.00177	.00177	-.090	2.12	120.7	9.64

TABLE XX.- DIAMOND WING; M = 0.98

(a) $\beta \approx 0^{o}$

					BODY AXIS						STABILITY AXIS		
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
30	.980	350.17	-.02	-3.87	-.1176	.01278	.0258	-.0002	.0001	.0030	-.1164	.02068	-5.63
31	.980	350.21	-.02	-2.25	-.0645	.01289	.0147	.0001	-.0001	.0035	-.0640	.01542	-4.15
32	.980	350.20	-.02	.01	.0011	.01346	-.0001	.0002	-.0004	.0041	.0011	.01346	.08
33	.980	350.31	-.03	2.26	.0663	.01316	-.0147	.0002	-.0007	.0050	.0658	.01577	4.17
34	.980	350.25	-.03	4.60	.1464	.01322	-.0318	-.0002	-.0011	.0061	.1449	.02492	5.81
35	.979	350.03	-.04	6.97	.2421	.01368	-.0536	-.0000	-.0014	.0074	.2386	.04295	5.55
36	.979	349.85	-.04	9.38	.3489	.01458	-.0781	-.0001	-.0017	.0085	.3418	.07126	4.80
38	.980	350.26	-.04	11.81	.4628	.01521	-.1058	-.0003	-.0023	.0099	.4499	.10959	4.11
39	.982	351.87	-.05	14.23	.5853	.01563	-.1386	-.0006	-.0027	.0111	.5635	.15920	3.54
40	.981	350.35	-.05	16.63	.7043	.01585	-.1704	-.0010	-.0034	.0129	.6703	.21680	3.09
41	.981	350.47	-.05	17.14	.7322	.01560	-.1785	-.0010	-.0036	.0134	.6950	.23094	3.01
42	.981	350.47	-.02	.02	.0014	.01334	-.0002	.0001	-.0004	.0035	.0014	.01334	.11

POINT	CAB	CDB	CP1	R/FT	TEMP	DEWPT
30	.00079	.00079	-.040	1.86	120.6	14.36
31	.00078	.00078	-.040	1.86	120.6	6.21
32	.00077	.00077	-.039	1.86	120.6	14.36
33	.00078	.00078	-.040	1.86	120.9	14.57
34	.00079	.00078	-.040	1.86	120.9	14.36
35	.00084	.00083	-.043	1.86	120.7	14.36
36	.00105	.00103	-.054	1.86	120.7	14.36
38	.00165	.00162	-.084	1.86	121.0	11.14
39	.00312	.00302	-.159	1.86	121.2	9.64
40	.00351	.00336	-.179	1.85	121.5	9.64
41	.00381	.00364	-.195	1.86	121.4	9.64
42	.00077	.00077	-.039	1.86	120.0	9.64

(b) $\beta \approx -5^{o}$

					BODY AXIS						STABILITY AXIS		
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
83	.978	349.13	-5.03	-4.05	-.1226	.01244	.0259	-.0053	-.0005	.0068	-.1214	.02106	-5.76
84	.981	350.09	-5.04	-2.27	-.0634	.01281	.0133	-.0027	-.0009	.0077	-.0628	.01531	-4.10
85	.981	350.32	-5.05	-.01	.0018	.01327	-.0007	-.0001	-.0013	.0090	.0019	.01327	.14
86	.981	350.32	-5.05	2.26	.0660	.01295	-.0146	.0023	-.0016	.0096	.0654	.01555	4.21
87	.980	349.85	-5.04	4.62	.1483	.01282	-.0319	.0057	-.0019	.0106	.1468	.02471	5.94
88	.979	349.73	-5.02	6.99	.2422	.01341	-.0524	.0088	-.0026	.0124	.2388	.04280	5.58
89	.979	349.73	-5.00	9.41	.3521	.01442	-.0790	.0119	-.0041	.0156	.3450	.07180	4.81
92	.981	350.26	-4.96	11.89	.4766	.01502	-.1093	.0151	-.0056	.0176	.4633	.11291	4.10
93	.978	349.33	-4.91	14.30	.5941	.01537	-.1398	.0173	-.0055	.0167	.5719	.16163	3.54
94	.979	349.85	-4.83	16.75	.7207	.01564	-.1749	.0198	-.0053	.0142	.6856	.22263	3.08
95	.980	350.05	-5.05	-.01	.0023	.01314	-.0009	.0000	-.0012	.0084	.0023	.01314	.18

POINT	CAB	CDB	CP1	R/FT	TEMP	DEWPT
83	.00130	.00130	-.066	1.86	120.4	9.64
84	.00126	.00125	-.064	1.86	120.4	9.64
85	.00119	.00119	-.061	1.86	120.5	9.64
86	.00120	.00120	-.062	1.86	120.6	9.64
87	.00124	.00124	-.063	1.86	120.7	9.64
88	.00148	.00147	-.075	1.86	120.7	9.64
89	.00162	.00160	-.083	1.86	120.7	9.64
92	.00232	.00227	-.119	1.86	121.1	9.64
93	.00236	.00228	-.120	1.85	120.9	11.79
94	.00384	.00367	-.196	1.86	121.1	9.64
95	.00113	.00113	-.058	1.86	120.4	9.64

TABLE XXI.- DIAMOND WING; M = 1.20

(a) $\beta \approx 0^{o}$

			BODY AXIS								STABILITY AXIS		
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
17	1.199	349.97	-.02	-3.78	-.1164	.01394	.0308	-.0001	-.0002	.0035	-.1152	.02158	-5.34
19	1.200	350.07	-.02	-2.20	-.0638	.01429	.0175	.0000	-.0005	.0044	-.0632	.01674	-3.78
20	1.200	350.02	-.03	.03	.0024	.01488	.0003	.0001	-.0008	.0051	.0024	.01488	.16
21	1.200	350.07	-.03	2.26	.0673	.01466	-.0167	.0001	-.0012	.0059	.0667	.01729	3.85
22	1.200	350.02	-.03	4.54	.1467	.01470	-.0370	-.0002	-.0015	.0070	.1451	.02626	5.52
23	1.200	350.03	-.04	6.84	.2391	.01495	-.0627	-.0002	-.0019	.0083	.2356	.04333	5.44
24	1.200	350.05	-.04	9.17	.3376	.01521	-.0895	-.0001	-.0024	.0095	.3309	.06883	4.81
25	1.200	350.05	-.05	11.50	.4373	.01514	-.1167	-.0003	-.0028	.0107	.4255	.10200	4.17
26	1.200	350.05	-.05	13.86	.5392	.01493	-.1440	-.0005	-.0034	.0121	.5199	.14362	3.62
27	1.200	350.03	-.05	16.19	.6428	.01461	-.1721	-.0007	-.0038	.0134	.6132	.19330	3.17
28	1.200	350.00	-.05	18.45	.7321	.01371	-.1959	-.0008	-.0041	.0141	.6910	.24229	2.85
29	1.200	350.05	-.02	.02	.0013	.01480	.0006	.0001	-.0007	.0045	.0013	.01480	.09

POINT	CAB	CDB	CPL	R/FT	TEMP	DEWPT
17	.00403	.00402	-.206	1.68	119.6	9.86
19	.00386	.00386	-.197	1.68	119.9	10.07
20	.00370	.00370	-.189	1.68	120.2	10.29
21	.00375	.00375	-.192	1.68	120.5	10.50
22	.00403	.00402	-.206	1.68	120.5	10.71
23	.00430	.00427	-.219	1.68	120.5	11.14
24	.00474	.00468	-.242	1.68	120.7	11.36
25	.00519	.00508	-.265	1.68	120.7	11.14
26	.00550	.00534	-.281	1.68	120.9	11.79
27	.00614	.00589	-.314	1.68	120.7	12.43
28	.00736	.00699	-.376	1.68	120.9	12.21
29	.00370	.00370	-.189	1.68	120.6	9.64

(b) $\beta \approx -5^{o}$

			BODY AXIS								STABILITY AXIS		
POINT	MINF	Q	BETA	ALPHA	CN	CA	CM	CROLL	CYAW	CSIDE	CL	CD	L/D
71	1.200	349.60	-5.03	-3.98	-.1277	.01341	.0334	-.0050	-.0004	.0072	-.1265	.02224	-5.69
72	1.200	349.62	-5.04	-2.23	-.0660	.01384	.0176	-.0027	-.0007	.0081	-.0654	.01640	-3.99
73	1.200	349.52	-5.05	.01	.0006	.01452	.0004	-.0001	-.0012	.0092	.0006	.01452	.04
74	1.200	349.52	-5.05	2.24	.0670	.01429	-.0168	.0022	-.0016	.0099	.0664	.01690	3.93
75	1.200	349.47	-5.04	4.55	.1471	.01418	-.0372	.0050	-.0019	.0108	.1455	.02579	5.64
76	1.200	349.60	-5.02	6.86	.2369	.01425	-.0611	.0077	-.0022	.0121	.2335	.04245	5.50
77	1.200	349.50	-5.00	9.19	.3367	.01477	-.0885	.0103	-.0033	.0146	.3300	.06836	4.83
78	1.199	349.35	-4.97	11.57	.4414	.01493	-.1170	.0125	-.0037	.0157	.4294	.10316	4.16
79	1.197	349.15	-4.92	13.91	.5442	.01470	-.1448	.0143	-.0038	.0149	.5247	.14504	3.62
80	1.194	348.82	-4.85	16.28	.6497	.01436	-.1730	.0162	-.0035	.0127	.6197	.19595	3.16
81	1.192	348.53	-4.80	17.98	.7277	.01354	-.1938	.0178	-.0027	.0105	.6880	.23753	2.90
82	1.199	349.44	-5.05	.01	.0025	.01458	-.0001	-.0001	-.0012	.0087	.0025	.01458	.17

POINT	CAB	CDB	CPL	R/FT	TEMP	DEWPT
71	.00434	.00433	-.222	1.67	120.9	17.57
72	.00409	.00409	-.209	1.67	120.9	17.57
73	.00363	.00363	-.185	1.67	120.9	17.36
74	.00376	.00376	-.192	1.67	121.0	17.14
75	.00420	.00419	-.215	1.67	121.0	16.50
76	.00475	.00472	-.243	1.67	120.9	17.14
77	.00495	.00488	-.253	1.67	120.7	17.36
78	.00527	.00516	-.269	1.67	120.7	17.57
79	.00572	.00555	-.292	1.67	120.6	18.00
80	.00642	.00616	-.328	1.67	120.6	14.36
81	.00723	.00687	-.369	1.67	120.6	16.93
82	.00362	.00362	-.185	1.67	120.7	9.64

TABLE XXII.- DIAMOND WING; M = 1.60

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
496	-5.6391	-.01	-4.16	-.1169	.0207	.0324	-.0002	.0027	-.0027	.0038	.0245	.01366	2.506
497	-3.2816	-.01	-1.80	-.0465	.0142	.0132	.0002	.0003	.0011	.0038	.0179	.00216	2.499
498	-1.3935	-.01	-.72	-.0184	.0132	.0053	.0001	-.0002	.0014	.0038	.0170	.00034	2.498
499	.8913	-.01	.44	.0117	.0132	-.0034	.0003	-.0004	.0022	.0037	.0169	.00014	2.501
500	2.8469	-.01	1.52	.0397	.0139	-.0110	.0003	-.0005	.0022	.0038	.0177	.00157	2.505
501	4.5987	-.01	2.70	.0741	.0161	-.0209	.0003	-.0007	.0026	.0038	.0199	.00549	2.506
502	5.7197	-.02	4.98	.1427	.0250	-.0398	.0002	-.0011	.0034	.0037	.0287	.02038	2.505
503	5.4313	-.02	7.30	.2200	.0405	-.0618	.0002	-.0014	.0043	.0038	.0443	.04840	2.498
504	4.7239	-.02	9.68	.2960	.0627	-.0833	.0001	-.0016	.0047	.0041	.0668	.08760	2.496
505	4.0757	-.03	12.04	.3734	.0916	-.1063	-.0001	-.0019	.0056	.0045	.0961	.13941	2.500
506	.9511	-.01	.47	.0125	.0131	-.0034	.0002	-.0004	.0018	.0037	.0169	.00016	2.504
507	4.1629	-.02	11.63	.3578	.0859	-.1015	.0001	-.0018	.0054	.0044	.0904	.12800	2.001
508	3.6178	-.02	13.91	.4308	.1191	-.1236	-.0002	-.0021	.0060	.0046	.1237	.18558	2.005
509	3.1746	-.02	16.20	.5039	.1587	-.1464	-.0004	-.0022	.0066	.0047	.1635	.25390	2.006
510	.7658	-.01	.41	.0101	.0132	-.0028	.0002	-.0005	.0018	.0037	.0169	.00010	1.999

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
496	602.43	-.01	-4.15	-.1181	.0122	.0324	.0000	.0027	-.0027	.0038	.0160	-.2740	2.506
497	600.96	-.01	-1.80	-.0469	.0127	.0132	.0002	.0003	.0011	.0038	.0165	-.2808	2.499
498	600.58	-.01	-.72	-.0186	.0130	.0053	.0001	-.0002	.0014	.0038	.0168	-.2861	2.498
499	601.21	-.01	.44	.0118	.0131	-.0034	.0003	-.0004	.0022	.0037	.0168	-.2880	2.501
500	602.31	-.01	1.52	.0400	.0129	-.0110	.0003	-.0005	.0022	.0038	.0166	-.2753	2.505
501	602.56	-.01	2.70	.0748	.0126	-.0209	.0004	-.0007	.0026	.0038	.0164	-.2797	2.506
502	602.22	-.02	4.98	.1444	.0125	-.0398	.0003	-.0011	.0034	.0038	.0162	-.2756	2.505
503	600.49	-.02	7.30	.2234	.0122	-.0618	.0003	-.0013	.0043	.0039	.0161	-.2769	2.498
504	600.20	-.02	9.68	.3023	.0120	-.0833	.0003	-.0015	.0047	.0042	.0162	-.2757	2.496
505	601.17	-.03	12.04	.3843	.0117	-.1063	.0003	-.0019	.0056	.0046	.0163	-.2765	2.500
506	601.97	-.01	.47	.0126	.0130	-.0034	.0002	-.0004	.0018	.0037	.0168	-.2704	2.504
507	481.18	-.02	11.63	.3677	.0120	-.1015	.0004	-.0018	.0054	.0045	.0165	-.2761	2.001
508	482.36	-.02	13.91	.4468	.0120	-.1236	.0002	-.0020	.0060	.0047	.0168	-.2766	2.005
509	482.19	-.02	16.20	.5282	.0118	-.1464	.0003	-.0022	.0066	.0049	.0168	-.2772	2.006
510	480.67	-.01	.41	.0102	.0132	-.0028	.0002	-.0005	.0018	.0037	.0169	-.2698	1.999

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
511	481.14	4.04	11.63	.3678	.0122	-.1012	-.0079	-.0015	.0006	.0043	.0165	-.2751	2.001
512	481.01	4.03	13.92	.4472	.0119	-.1239	-.0092	-.0020	.0028	.0046	.0165	-.2771	2.001
513	480.59	4.02	16.17	.5252	.0116	-.1459	-.0104	-.0031	.0060	.0047	.0164	-.2778	1.999
514	480.93	4.05	.40	.0103	.0132	-.0027	-.0002	-.0006	-.0021	.0037	.0169	-.2636	2.000
515	598.05	4.06	-4.15	-.1188	.0122	.0329	.0036	.0024	-.0068	.0038	.0160	-.2771	2.487
516	599.73	4.06	-1.83	-.0491	.0126	.0138	.0017	.0002	-.0035	.0038	.0164	-.2817	2.494
517	603.02	4.06	-.69	-.0173	.0129	.0050	.0007	-.0003	-.0030	.0038	.0167	-.2880	2.508
518	599.82	4.06	.42	.0112	.0130	-.0029	-.0002	-.0007	-.0021	.0037	.0167	-.2545	2.495
519	600.96	4.06	1.54	.0405	.0128	-.0112	-.0011	-.0008	-.0020	.0037	.0165	-.2771	2.499
520	602.69	4.06	2.67	.0719	.0126	-.0203	-.0020	-.0010	-.0019	.0037	.0163	-.2790	2.507
521	601.21	4.05	5.00	.1452	.0122	-.0404	-.0040	-.0013	-.0008	.0038	.0160	-.2779	2.501
522	600.28	4.05	7.31	.2202	.0121	-.0608	-.0056	-.0015	-.0005	.0039	.0160	-.2762	2.497
523	601.25	4.05	9.66	.2996	.0119	-.0827	-.0068	-.0015	-.0003	.0040	.0160	-.2760	2.501
524	601.25	4.04	11.99	.3804	.0118	-.1050	-.0083	-.0014	.0005	.0044	.0161	-.2761	2.501
525	601.42	4.06	.42	.0112	.0129	-.0030	-.0003	-.0006	-.0025	.0037	.0166	-.2634	2.501

TABLE XXIII.- DIAMOND WING; M = 2.00

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
526	-5.4766	.02	-3.56	-.0887	.0162	.0245	.0001	.0018	-.0024	.0033	.0195	.00787	2.503
527	-2.6013	.02	-1.29	-.0306	.0118	.0085	.0003	.0002	-.0001	.0033	.0151	.00094	2.498
528	-.4671	.02	-.19	-.0052	.0112	.0011	.0002	-.0001	.0003	.0033	.0145	.00003	2.499
529	1.8095	.02	.93	.0209	.0116	-.0060	.0002	-.0002	.0007	.0034	.0149	.00044	2.499
530	3.7456	.02	2.05	.0477	.0127	-.0136	.0003	-.0003	.0007	.0034	.0161	.00228	2.499
531	5.1013	.02	3.18	.0769	.0151	-.0214	.0002	-.0005	.0011	.0034	.0184	.00591	2.499
532	5.7645	.01	5.45	.1332	.0240	-.0382	.0002	-.0007	.0015	.0032	.0272	.01909	2.499
533	5.3001	.01	7.73	.2011	.0379	-.0558	.0001	-.0009	.0024	.0032	.0412	.04042	2.499
534	3.9833	.01	12.28	.3274	.0822	-.0929	-.0001	-.0013	.0033	.0034	.0856	.10720	2.499
535	4.6111	.01	10.01	.2651	.0575	-.0744	.0000	-.0011	.0028	.0033	.0608	.07029	2.500
536	3.4718	.00	14.57	.3879	.1117	-.1117	-.0004	-.0015	.0041	.0035	.1152	.15044	2.500
537	3.1223	.00	16.41	.4346	.1392	-.1259	-.0004	-.0016	.0046	.0035	.1427	.18887	2.001
538	2.7812	.00	18.59	.4891	.1758	-.1443	-.0007	-.0018	.0052	.0036	.1794	.23917	1.996
539	1.8411	.02	.92	.0215	.0117	-.0060	.0002	-.0003	.0009	.0033	.0150	.00046	1.999

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
526	594.46	.02	-3.56	-.0895	.0107	.0245	.0002	.0018	-.0024	.0033	.0140	-.2738	2.503
527	593.28	.02	-1.29	-.0309	.0111	.0085	.0003	.0002	-.0001	.0033	.0144	-.2747	2.498
528	593.53	.02	-.19	-.0053	.0112	.0011	.0002	-.0001	.0003	.0033	.0145	-.2161	2.499
529	593.64	.02	.93	.0211	.0112	-.0060	.0003	-.0002	.0007	.0034	.0146	-.2836	2.499
530	593.64	.02	2.05	.0482	.0110	-.0136	.0003	-.0003	.0007	.0034	.0144	-.2824	2.499
531	593.61	.02	3.18	.0776	.0108	-.0214	.0002	-.0004	.0011	.0034	.0141	-.2763	2.499
532	593.61	.01	5.45	.1398	.0107	-.0382	.0003	-.0007	.0015	.0032	.0140	-.2735	2.499
533	593.68	.01	7.73	.2043	.0106	-.0558	.0002	-.0009	.0024	.0033	.0138	-.2729	2.499
534	593.64	.01	12.28	.3374	.0107	-.0929	.0001	-.0013	.0033	.0035	.0141	-.2753	2.499
535	593.82	.01	10.01	.2711	.0106	-.0744	.0002	-.0011	.0028	.0034	.0139	-.2744	2.500
536	593.78	.00	14.57	.4035	.0106	-.1117	.0000	-.0016	.0041	.0036	.0141	-.2769	2.500
537	475.26	.00	16.41	.4562	.0108	-.1259	.0000	-.0017	.0046	.0037	.0144	-.2759	2.001
538	473.99	.00	18.59	.5196	.0108	-.1443	-.0001	-.0019	.0052	.0038	.0145	-.2776	1.996
539	474.80	.02	.92	.0217	.0113	-.0060	.0002	-.0003	.0009	.0033	.0147	-.2771	1.999

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
540	474.73	3.99	16.40	.4548	.0106	-.1254	-.0080	-.0029	.0046	.0038	.0143	-.2757	1.999
541	474.69	3.98	18.58	.5190	.0105	-.1439	-.0086	-.0039	.0067	.0036	.0140	-.2773	1.999
542	474.80	4.02	.93	.0210	.0115	-.0057	-.0005	-.0006	-.0026	.0033	.0147	-.2728	1.999
543	592.75	4.03	-3.55	-.0884	.0106	.0240	.0022	.0018	-.0063	.0034	.0139	-.2719	2.493
544	592.53	4.03	-1.29	-.0305	.0110	.0083	.0008	.0001	-.0042	.0033	.0143	-.2716	2.495
545	592.96	4.03	-.18	-.0038	.0113	.0011	.0002	-.0004	-.0034	.0033	.0145	-.2900	2.496
546	593.57	4.02	.92	.0213	.0111	-.0060	-.0006	-.0006	-.0029	.0032	.0144	-.2837	2.499
547	594.46	4.02	2.06	.0493	.0113	-.0137	-.0012	-.0007	-.0028	.0033	.0142	-.2773	2.503
548	594.14	4.03	3.18	.0781	.0108	-.0215	-.0018	-.0008	-.0027	.0032	.0141	-.2755	2.501
549	593.71	4.02	5.45	.1410	.0105	-.0382	-.0032	-.0009	-.0020	.0032	.0137	-.2710	2.500
550	593.71	4.02	7.74	.2060	.0106	-.0558	-.0046	-.0011	-.0018	.0033	.0139	-.2708	2.500
551	594.07	4.02	10.02	.2707	.0106	-.0737	-.0056	-.0011	-.0016	.0034	.0140	-.2723	2.501
552	594.11	4.01	12.29	.3379	.0105	-.0929	-.0065	-.0015	-.0003	.0035	.0140	-.2750	2.501
553	594.04	4.00	14.58	.4029	.0104	-.1109	-.0074	-.0021	.0019	.0037	.0141	-.2752	2.501
554	593.95	4.02	.94	.0213	.0112	-.0060	-.0005	-.0006	-.0029	.0032	.0145	-.2840	2.501

TABLE XXIV.- DIAMOND WING; M = 2.36

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CD UNC	CLSQ	R/FT
423	-4.9216	-.03	-2.86	-.0649	.0132	.0175	.0002	.0011	-.0000	.0029	.0160	.00422	2.503
424	-1.3328	-.04	-.65	-.0143	.0107	.0040	.0001	-.0002	.0016	.0029	.0136	.00020	2.499
425	1.0432	-.03	.51	.0110	.0106	-.0029	.0002	-.0004	.0020	.0029	.0135	.00012	2.499
426	3.0069	-.03	1.53	.0341	.0113	-.0090	.0002	-.0006	.0024	.0029	.0143	.00116	2.498
427	4.4998	-.03	2.67	.0577	.0128	-.0154	.0003	-.0007	.0028	.0029	.0158	.00332	2.502
428	5.5551	-.03	3.83	.0876	.0158	-.0231	.0003	-.0008	.0024	.0029	.0187	.00768	2.501
429	5.2820	-.03	3.67	.0804	.0152	-.0215	.0004	-.0007	.0028	.0029	.0181	.00646	2.503
430	5.7522	-.04	5.91	.1398	.0243	-.0374	.0005	-.0011	.0037	.0028	.0271	.01954	2.502
431	5.1687	-.04	8.11	.1960	.0379	-.0535	.0004	-.0012	.0037	.0027	.0406	.03841	2.503
432	4.4734	-.04	10.35	.2488	.0556	-.0693	.0002	-.0015	.0046	.0027	.0583	.06189	2.505
433	3.8644	-.04	12.62	.3031	.0780	-.0854	.0002	-.0016	.0046	.0028	.0808	.09185	2.504
434	3.3899	-.05	14.88	.3569	.1053	-.1021	.0001	-.0017	.0055	.0028	.1081	.12735	2.502
435	3.0183	-.04	17.00	.4051	.1342	-.1177	-.0000	-.0019	.0056	.0028	.1370	.16408	2.504
436	3.0590	-.04	16.69	.3954	.1293	-.1140	-.0001	-.0019	.0053	.0027	.1320	.15637	2.008
437	2.7235	-.04	18.89	.4484	.1647	-.1317	-.0002	-.0020	.0059	.0027	.1673	.20109	2.003
438	2.4449	-.04	21.04	.4943	.2018	-.1481	-.0004	-.0022	.0065	.0027	.2045	.24433	2.001
439	2.2968	-.04	22.42	.5219	.2272	-.1580	-.0006	-.0022	.0071	.0028	.2300	.27232	2.003
440	3.0026	-.03	1.53	.0340	.0113	-.0088	.0003	-.0006	.0029	.0029	.0143	.00116	2.499

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
423	561.29	-.03	-2.86	-.0655	.0099	.0175	.0003	.0011	-.0000	.0029	.0128	-.2664	2.503
424	560.26	-.03	-.65	-.0144	.0106	.0040	.0001	-.0002	.0016	.0029	.0134	-.2766	2.499
425	560.24	-.03	.51	.0111	.0105	-.0029	.0002	-.0004	.0020	.0029	.0134	-.2634	2.499
426	559.98	-.03	1.53	.0343	.0104	-.0090	.0002	-.0006	.0024	.0029	.0134	-.2613	2.498
427	560.86	-.03	2.67	.0582	.0101	-.0154	.0003	-.0007	.0028	.0030	.0131	-.2649	2.502
428	560.78	-.03	3.83	.0885	.0099	-.0231	.0003	-.0008	.0024	.0029	.0128	-.2616	2.501
429	561.14	-.03	3.67	.0812	.0100	-.0215	.0004	-.0007	.0028	.0029	.0130	-.2651	2.503
430	560.97	-.04	5.91	.1416	.0098	-.0374	.0006	-.0010	.0037	.0028	.0126	-.2641	2.502
431	561.29	-.04	8.11	.1994	.0099	-.0535	.0006	-.0012	.0037	.0027	.0126	-.2685	2.503
432	561.51	-.04	10.35	.2547	.0100	-.0693	.0005	-.0015	.0046	.0028	.0128	-.2722	2.505
433	561.46	-.04	12.62	.3128	.0099	-.0854	.0006	-.0015	.0046	.0029	.0128	-.2731	2.504
434	561.26	-.05	14.88	.3719	.0101	-.1021	.0005	-.0016	.0055	.0029	.0130	-.2746	2.502
435	561.32	-.04	17.00	.4266	.0099	-.1177	.0005	-.0018	.0056	.0029	.0128	-.2760	2.504
436	450.24	-.04	16.69	.4159	.0103	-.1140	.0004	-.0019	.0053	.0029	.0132	-.2742	2.008
437	449.37	-.04	18.89	.4776	.0106	-.1317	.0004	-.0020	.0059	.0028	.0134	-.2758	2.003
438	448.56	-.04	21.04	.5338	.0109	-.1481	.0004	-.0022	.0065	.0029	.0138	-.2775	2.001
439	449.15	-.04	22.42	.5690	.0110	-.1580	.0003	-.0023	.0071	.0030	.0139	-.2777	2.003
440	560.52	-.03	1.53	.0343	.0104	-.0088	.0003	-.0005	.0029	.0029	.0134	-.2582	2.499

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
441	560.63	4.04	-2.91	-.0719	.0102	.0183	.0009	.0013	-.0052	.0028	.0130	-.2588	2.501
442	560.86	4.04	-.72	-.0212	.0106	.0055	.0008	.0003	-.0044	.0028	.0134	-.2584	2.502
443	560.83	4.04	.36	.0038	.0106	-.0010	.0003	-.0002	-.0031	.0028	.0135	-.2729	2.501
444	560.89	4.04	1.53	.0295	.0105	-.0079	-.0002	-.0005	-.0031	.0029	.0133	-.2689	2.502
445	560.83	4.04	2.66	.0609	.0103	-.0154	-.0007	-.0006	-.0026	.0029	.0132	-.2526	2.501
446	561.03	4.04	3.71	.0825	.0102	-.0216	-.0013	-.0007	-.0025	.0028	.0130	-.2622	2.502
447	560.83	4.04	5.93	.1369	.0100	-.0360	-.0024	-.0007	-.0023	.0028	.0128	-.2632	2.501
448	560.83	4.04	8.19	.1983	.0101	-.0528	-.0033	-.0008	-.0026	.0028	.0129	-.2662	2.501
449	560.97	4.04	10.44	.2525	.0102	-.0677	-.0040	-.0010	-.0016	.0029	.0130	-.2681	2.502
450	560.78	4.03	12.62	.3134	.0101	-.0852	-.0050	-.0012	-.0010	.0029	.0130	-.2717	2.501
451	561.12	4.02	14.88	.3668	.0102	-.1004	-.0056	-.0017	.0008	.0030	.0132	-.2736	2.503
452	561.03	4.02	16.98	.4211	.0101	-.1161	-.0062	-.0025	.0026	.0030	.0131	-.2758	2.502
453	561.06	4.04	1.52	.0322	.0105	-.0082	-.0009	-.0005	-.0030	.0029	.0134	-.2540	2.502
454	561.14	4.04	1.51	.0313	.0105	-.0079	-.0006	-.0006	-.0026	.0029	.0133	-.2542	2.503
455	449.16	4.04	1.46	.0243	.0108	-.0060	-.0005	-.0005	-.0032	.0028	.0137	-.2484	2.003
456	448.48	4.01	16.68	.4157	.0105	-.1134	-.0056	-.0026	.0034	.0030	.0135	-.2729	2.000
457	449.73	4.01	18.89	.4753	.0107	-.1305	-.0063	-.0033	.0046	.0030	.0138	-.2746	2.006
458	449.27	4.01	21.02	.5286	.0110	-.1463	-.0070	-.0035	.0052	.0032	.0141	-.2769	2.004
459	449.27	4.01	22.47	.5733	.0113	-.1585	-.0071	-.0035	.0048	.0032	.0146	-.2765	2.004
460	448.37	4.03	1.49	.0291	.0109	-.0076	-.0007	-.0006	-.0027	.0029	.0137	-.2612	2.000

TABLE XXV.- DIAMOND WING; M = 2.80

(a) $\beta \approx 0^{o}$

STABILITY AXIS

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	COC	CD UNC	CLSQ	R/FT
461	-5.6354	.00	-4.41	-.0905	.0161	.0236	-.0002	.0018	-.0027	.0023	.0184	.00818	2.586
462	-4.1688	.00	-2.22	-.0455	.0109	.0114	.0000	.0004	-.0010	.0023	.0132	.00207	2.581
463	-2.3655	.00	-1.17	-.0232	.0098	.0061	.0000	-.0000	-.0001	.0023	.0122	.00054	2.582
464	-.3833	.00	-.10	-.0036	.0094	.0008	.0000	-.0003	.0003	.0023	.0118	.00001	2.582
465	2.0703	.00	1.00	.0195	.0098	-.0048	.0001	-.0003	.0004	.0024	.0122	.00038	2.583
466	3.6567	.00	2.06	.0391	.0107	-.0103	.0001	-.0004	.0003	.0024	.0131	.00153	2.582
467	5.6262	-.00	4.27	.0883	.0157	-.0228	.0001	-.0007	.0013	.0024	.0181	.00780	2.581
468	5.5376	-.00	6.44	.1351	.0244	-.0362	.0002	-.0009	.0017	.0023	.0267	.01824	2.582
469	4.8959	-.00	8.69	.1828	.0373	-.0495	.0002	-.0010	.0017	.0022	.0395	.03342	2.585
470	4.2768	-.01	10.79	.2236	.0523	-.0622	.0002	-.0011	.0022	.0021	.0544	.05002	2.582
471	3.7423	-.00	13.02	.2750	.0735	-.0770	.0001	-.0012	.0023	.0022	.0756	.07561	2.583
472	3.2916	-.01	15.24	.3219	.0978	-.0913	-.0000	-.0015	.0032	.0021	.0999	.10363	2.581
473	2.9144	-.01	17.45	.3643	.1250	-.1061	-.0001	-.0015	.0033	.0021	.1271	.13271	2.582
474	2.5965	-.01	19.69	.4122	.1588	-.1219	-.0002	-.0016	.0038	.0021	.1608	.16992	2.582
475	2.3499	-.02	21.76	.4537	.1931	-.1366	-.0004	-.0018	.0047	.0021	.1952	.20588	2.583
476	-.1073	.00	-.02	-.0010	.0095	.0005	.0001	-.0002	-.0001	.0023	.0119	.00000	2.582

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
461	520.56	.00	-4.41	-.0914	.0091	.0236	-.0000	.0018	-.0027	.0023	.0114	-.2578	2.586
462	519.69	.00	-2.22	-.0459	.0092	.0114	.0000	.0004	-.0010	.0023	.0115	-.2481	2.581
463	519.86	.00	-1.17	-.0234	.0093	.0061	.0000	-.0000	-.0001	.0023	.0117	-.2620	2.582
464	519.86	.00	-.10	-.0036	.0094	.0008	.0000	-.0003	.0003	.0023	.0118	-.2216	2.582
465	520.32	.00	1.00	.0197	.0094	-.0046	.0001	-.0003	.0004	.0024	.0118	-.2428	2.583
466	519.86	.00	2.06	.0394	.0093	-.0103	.0002	-.0004	.0003	.0024	.0117	-.2625	2.582
467	519.57	-.00	4.27	.0892	.0091	-.0228	.0002	-.0007	.0013	.0024	.0115	-.2560	2.581
468	519.88	-.00	6.44	.1369	.0091	-.0362	.0003	-.0008	.0017	.0023	.0114	-.2644	2.582
469	520.52	-.00	8.69	.1864	.0093	-.0495	.0004	-.0010	.0017	.0022	.0115	-.2658	2.585
470	519.86	-.01	10.79	.2295	.0095	-.0622	.0004	-.0011	.0022	.0022	.0117	-.2711	2.582
471	520.02	-.00	13.02	.2845	.0096	-.0770	.0004	-.0012	.0023	.0022	.0118	-.2707	2.583
472	519.59	-.01	15.24	.3363	.0098	-.0913	.0003	-.0014	.0032	.0022	.0120	-.2715	2.581
473	519.77	-.01	17.45	.3850	.0100	-.1061	.0003	-.0014	.0033	.0022	.0122	-.2756	2.582
474	519.90	-.01	19.69	.4416	.0106	-.1219	.0003	-.0016	.0038	.0022	.0128	-.2761	2.582
475	520.04	-.02	21.76	.4930	.0111	-.1366	.0003	-.0019	.0047	.0023	.0134	-.2771	2.583
476	519.88	.00	-.02	-.0010	.0095	.0005	.0001	-.0002	-.0001	.0023	.0119	-.4414	2.582

(b) $\beta \approx 4^{o}$

BODY AXIS

PT	DYN PRS	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CA UNC	CM/CN	R/FT
477	520.32	4.05	-4.47	-.0916	.0091	.0239	.0023	.0019	-.0076	.0022	.0114	-.2607	2.583
478	520.08	4.05	-2.25	-.0456	.0093	.0117	.0015	.0005	-.0053	.0022	.0116	-.2573	2.583
479	520.24	4.04	-1.18	-.0221	.0094	.0058	.0010	.0000	-.0044	.0023	.0117	-.2606	2.584
480	520.30	4.05	-.06	.0023	.0095	.0002	.0003	-.0001	-.0043	.0023	.0118	.0663	2.584
481	520.28	4.05	1.00	.0188	.0096	-.0046	-.0001	-.0002	-.0042	.0023	.0119	-.2456	2.583
482	520.06	4.04	2.09	.0414	.0094	-.0106	-.0007	-.0004	-.0037	.0023	.0117	-.2551	2.583
483	520.17	4.04	4.26	.0914	.0092	-.0234	-.0018	-.0006	-.0035	.0023	.0115	-.2560	2.583
484	520.28	4.04	6.43	.1369	.0091	-.0360	-.0026	-.0007	-.0034	.0023	.0114	-.2629	2.584
485	519.96	4.04	8.62	.1824	.0092	-.0490	-.0032	-.0007	-.0033	.0023	.0115	-.2671	2.583
486	520.48	4.04	10.80	.2346	.0094	-.0628	-.0036	-.0007	-.0027	.0022	.0117	-.2685	2.585
487	520.18	4.04	13.03	.2842	.0095	-.0768	-.0044	-.0008	-.0021	.0023	.0118	-.2702	2.584
488	520.52	4.03	15.23	.3357	.0099	-.0912	-.0048	-.0014	-.0007	.0022	.0122	-.2717	2.585
489	520.44	4.03	17.45	.3882	.0102	-.1066	-.0054	-.0016	-.0001	.0022	.0124	-.2746	2.585
490	520.24	4.03	19.82	.4486	.0108	-.1232	-.0058	-.0019	.0005	.0023	.0130	-.2746	2.584
491	520.36	4.03	21.79	.4968	.0112	-.1375	-.0060	-.0020	.0010	.0024	.0136	-.2758	2.583
492	520.00	4.05	-.37	-.0081	.0095	.0005	-.0001	-.0001	-.0047	.0023	.0118	-3.6444	2.583
493	519.84	4.04	-.07	-.0002	.0095	.0004	-.0000	-.0001	-.0042	.0023	.0118	-2.0503	2.582

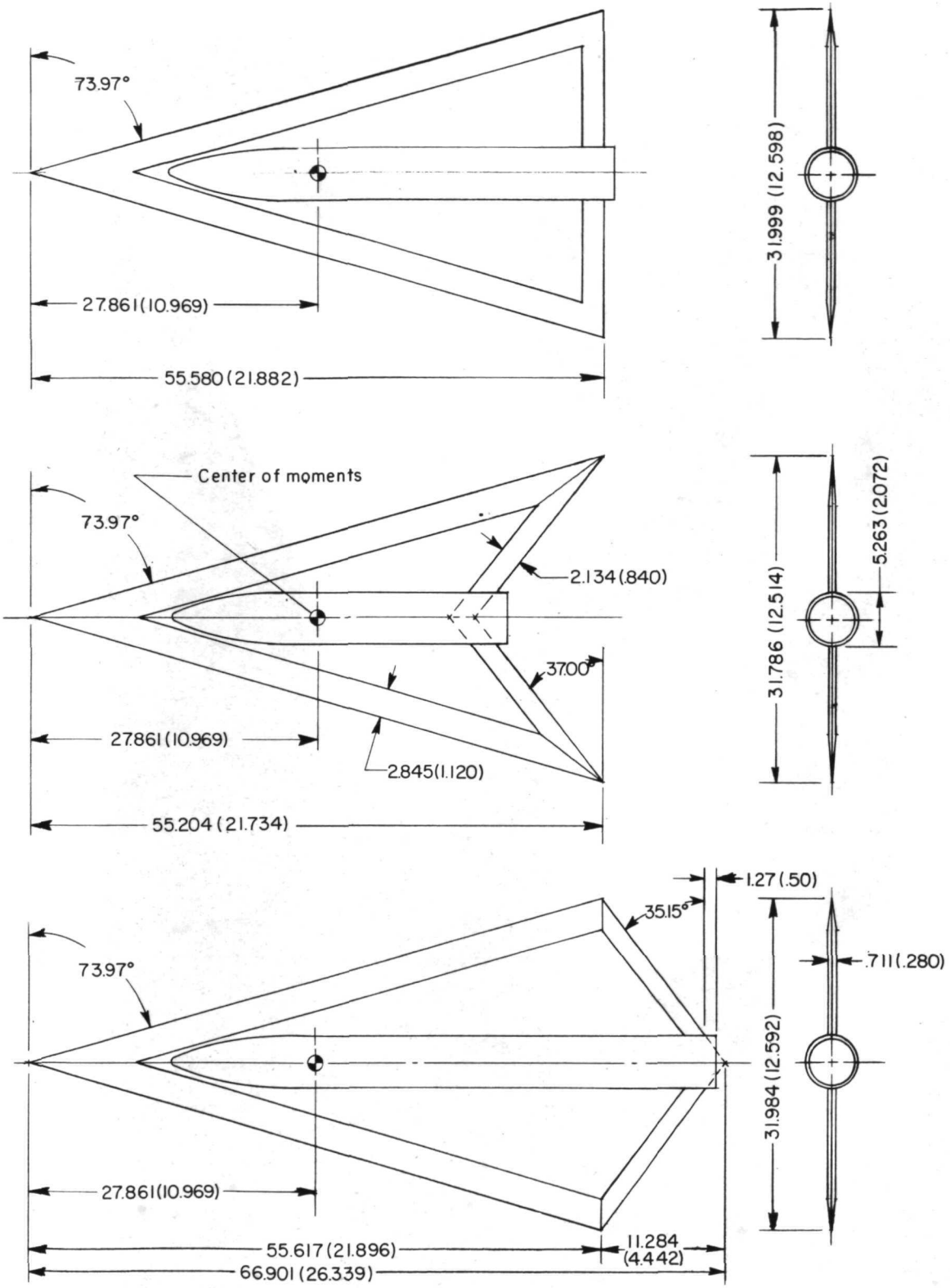

Figure 1.- Details of models. (Linear dimensions are in centimeters (in.).)

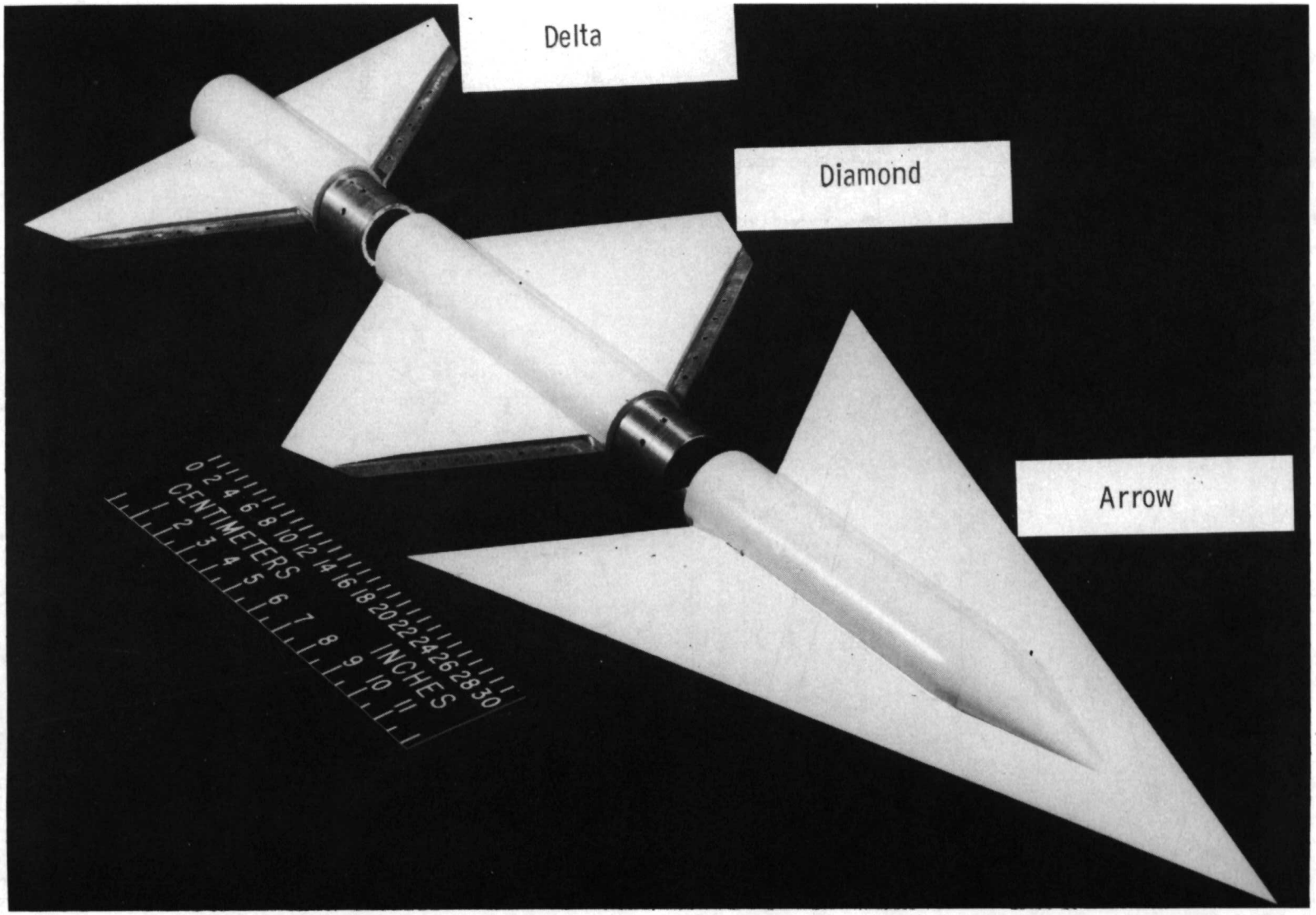

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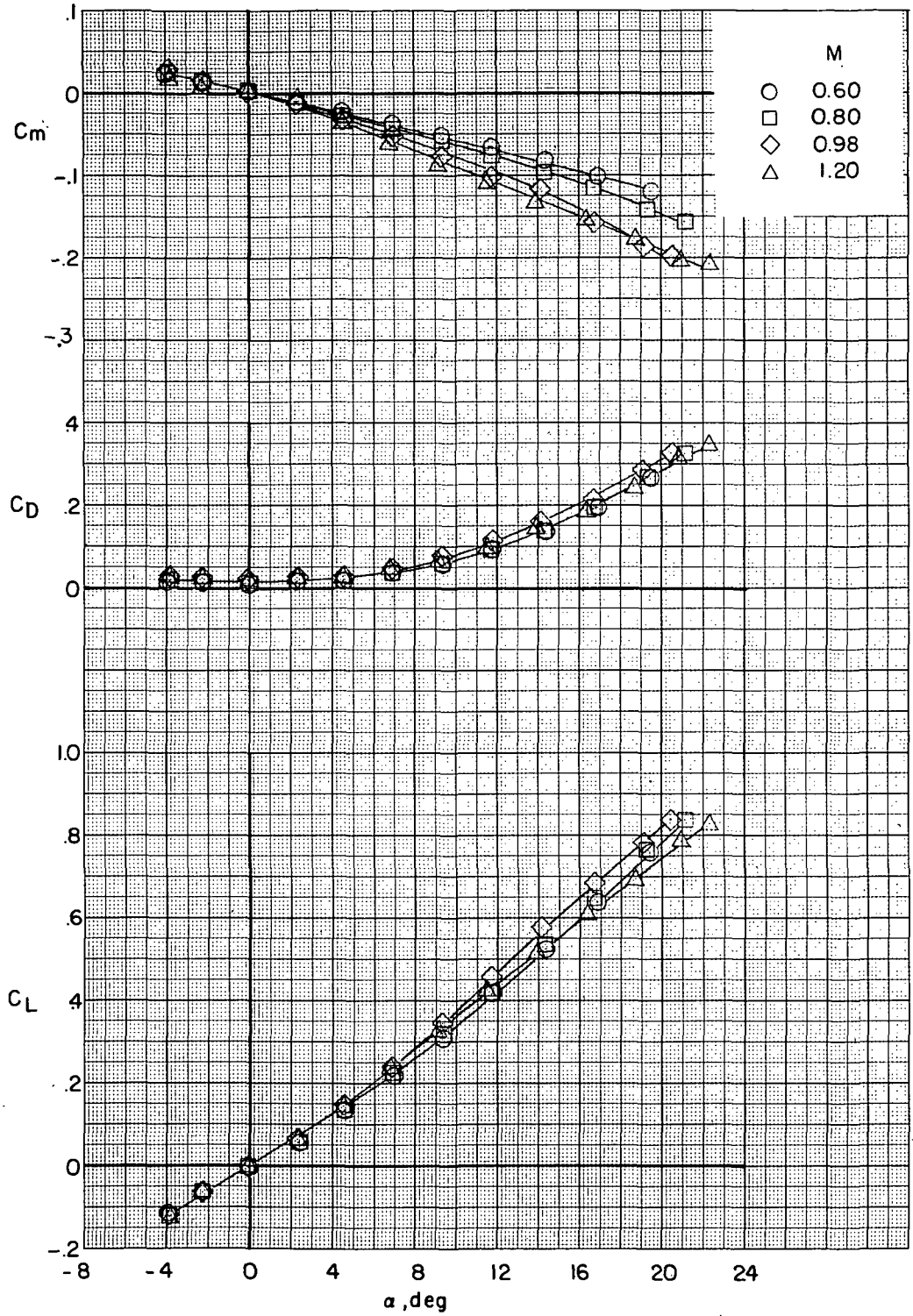
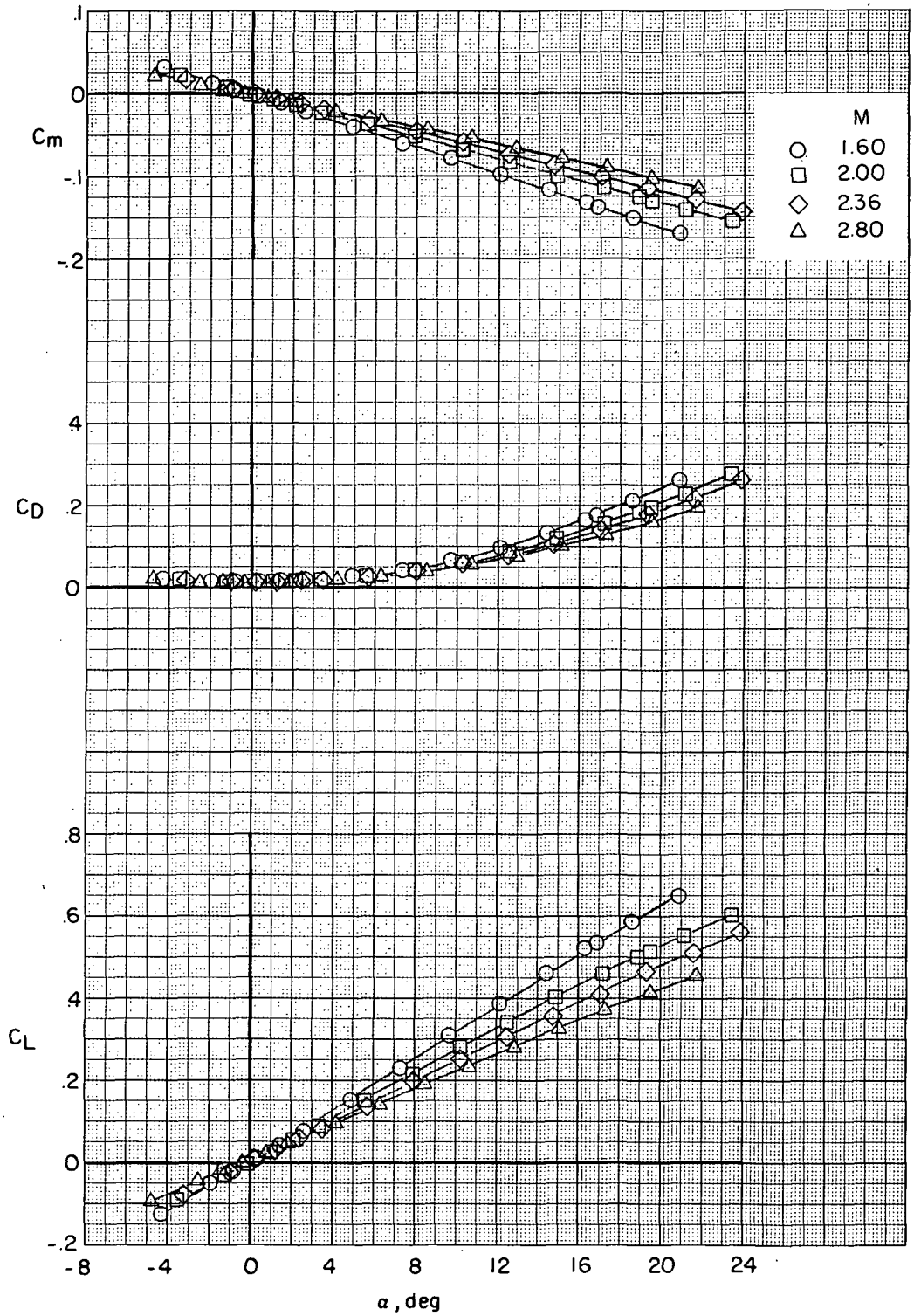
Figure 2.- Photograph of model and components.



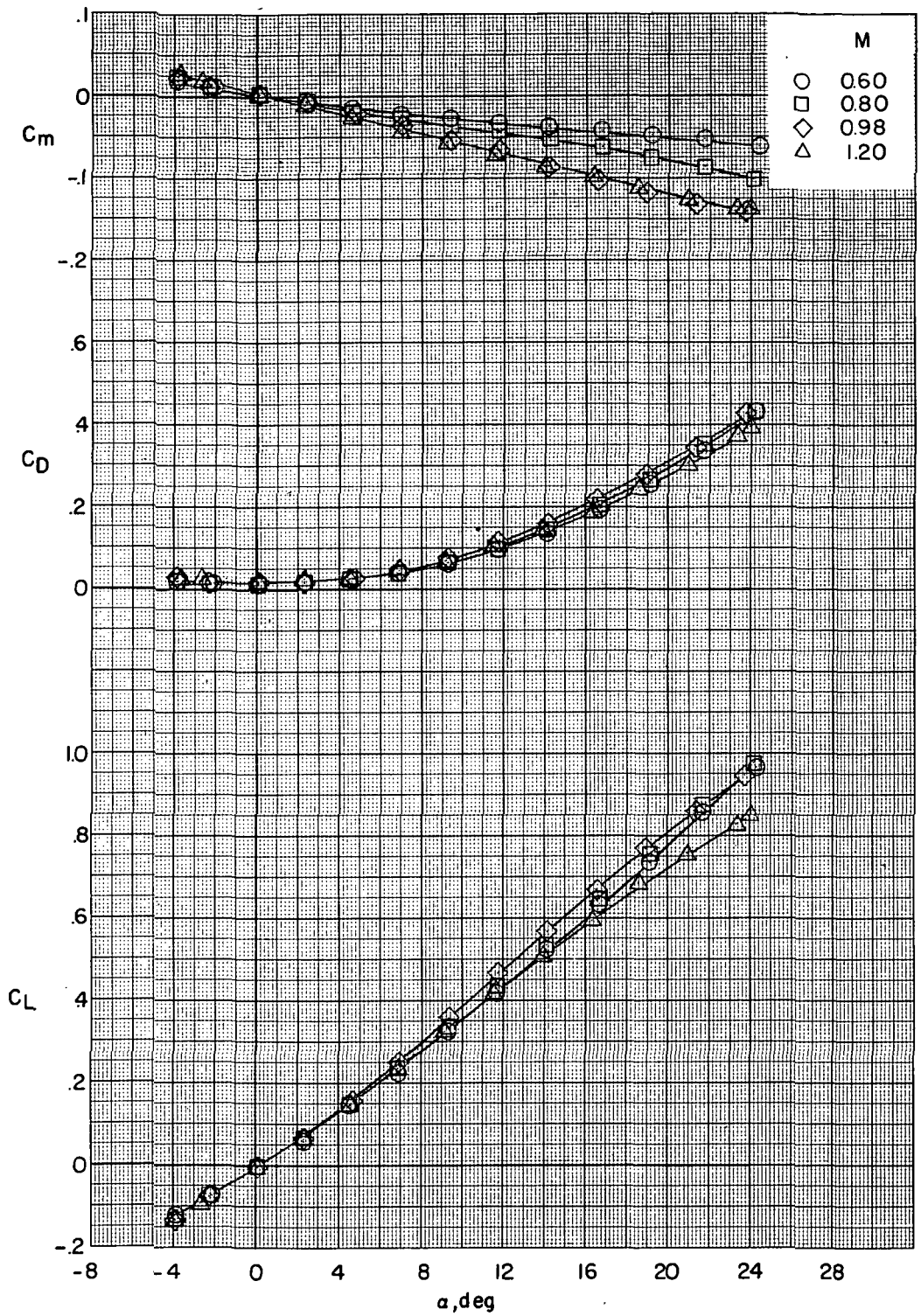
(a) Delta wing; M = 0.60, 0.80, 0.98, and 1.20.

Figure 3.- Effect of Mach number on aerodynamic characteristics at $\beta = 0^{\circ}$.



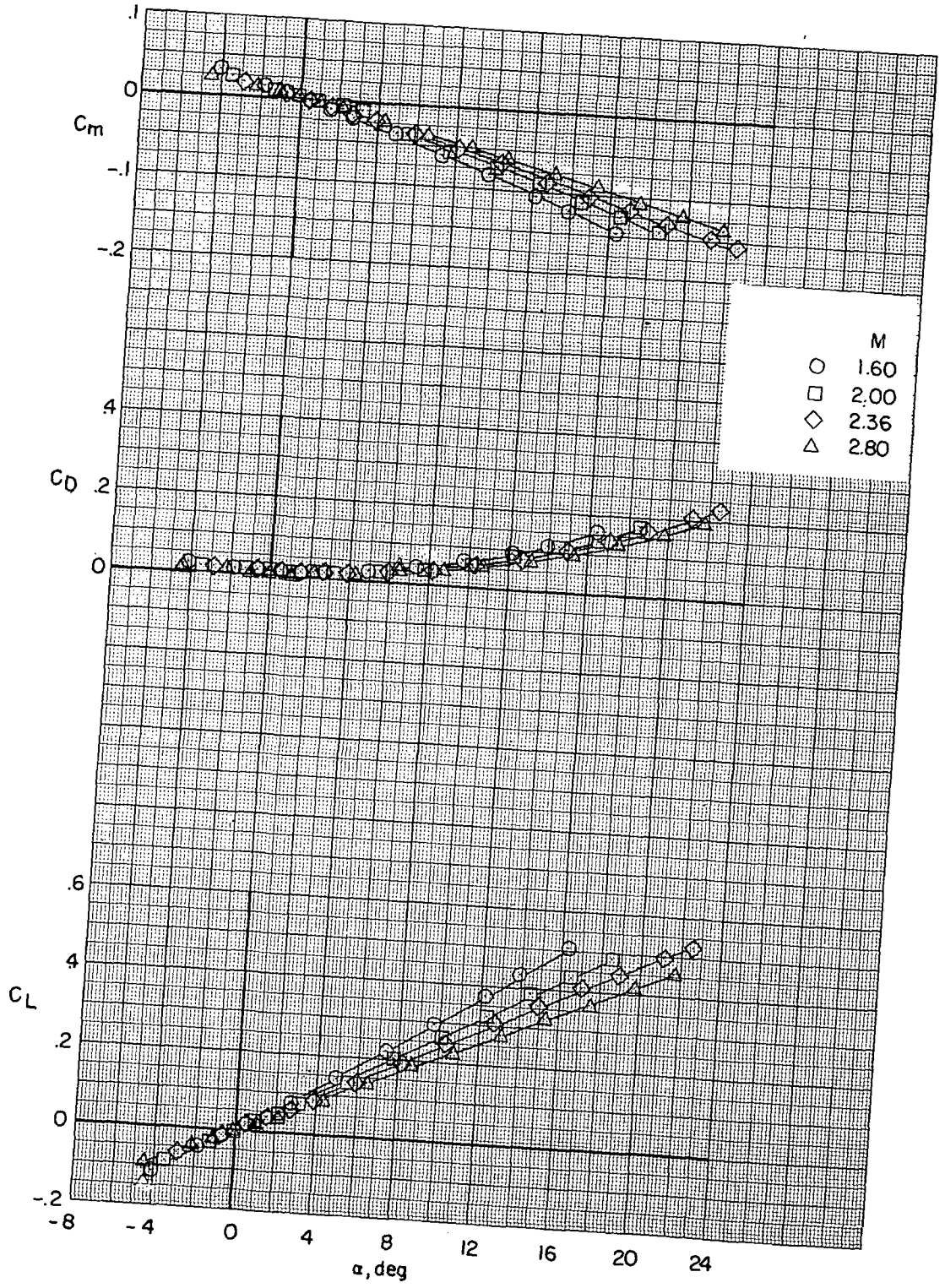
(b) Delta wing; M = 1.60, 2.00, 2.36, and 2.80.

Figure 3.- Continued.



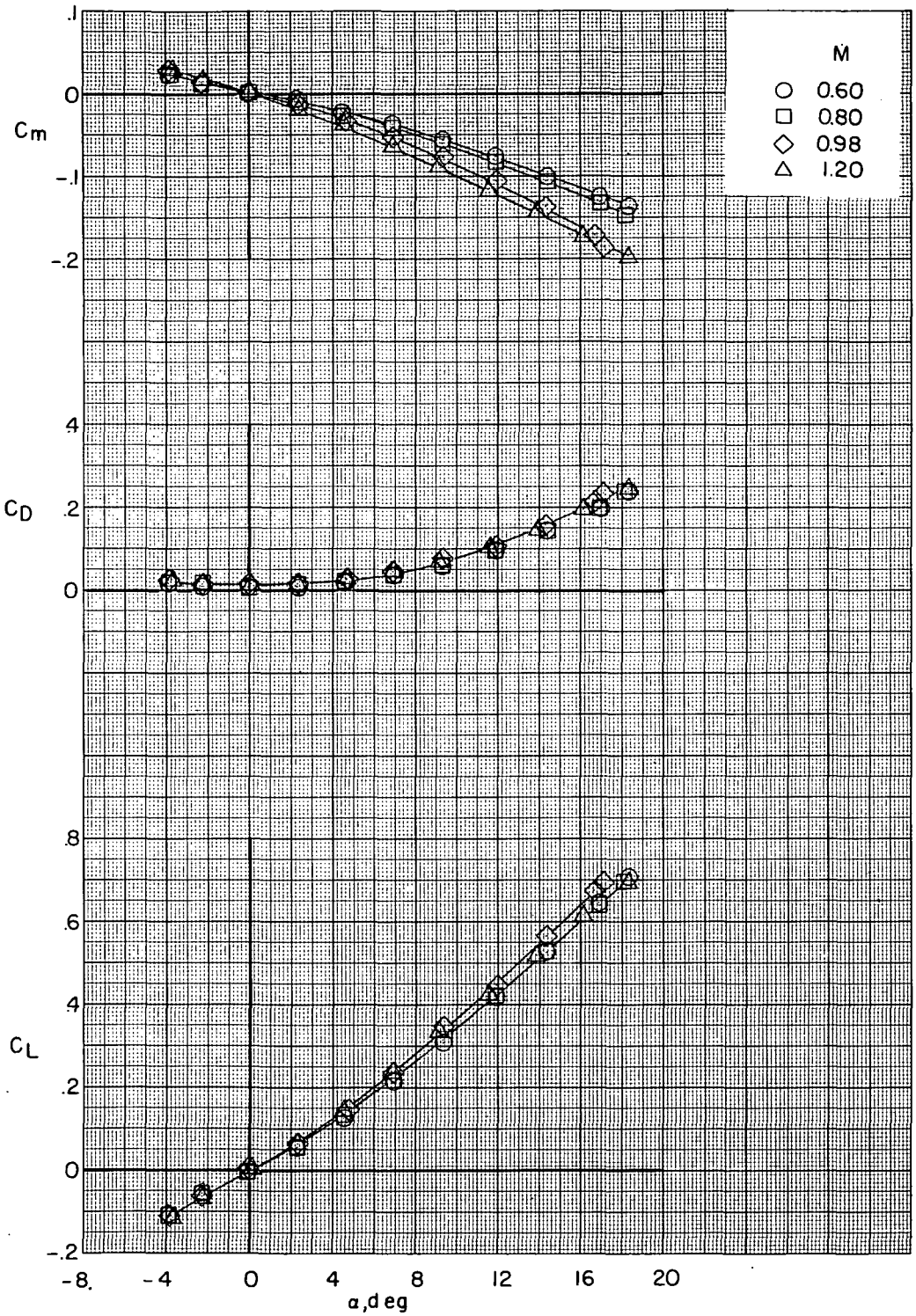
(c) Arrow wing; M = 0.60, 0.80, 0.98, and 1.20.

Figure 3.- Continued.



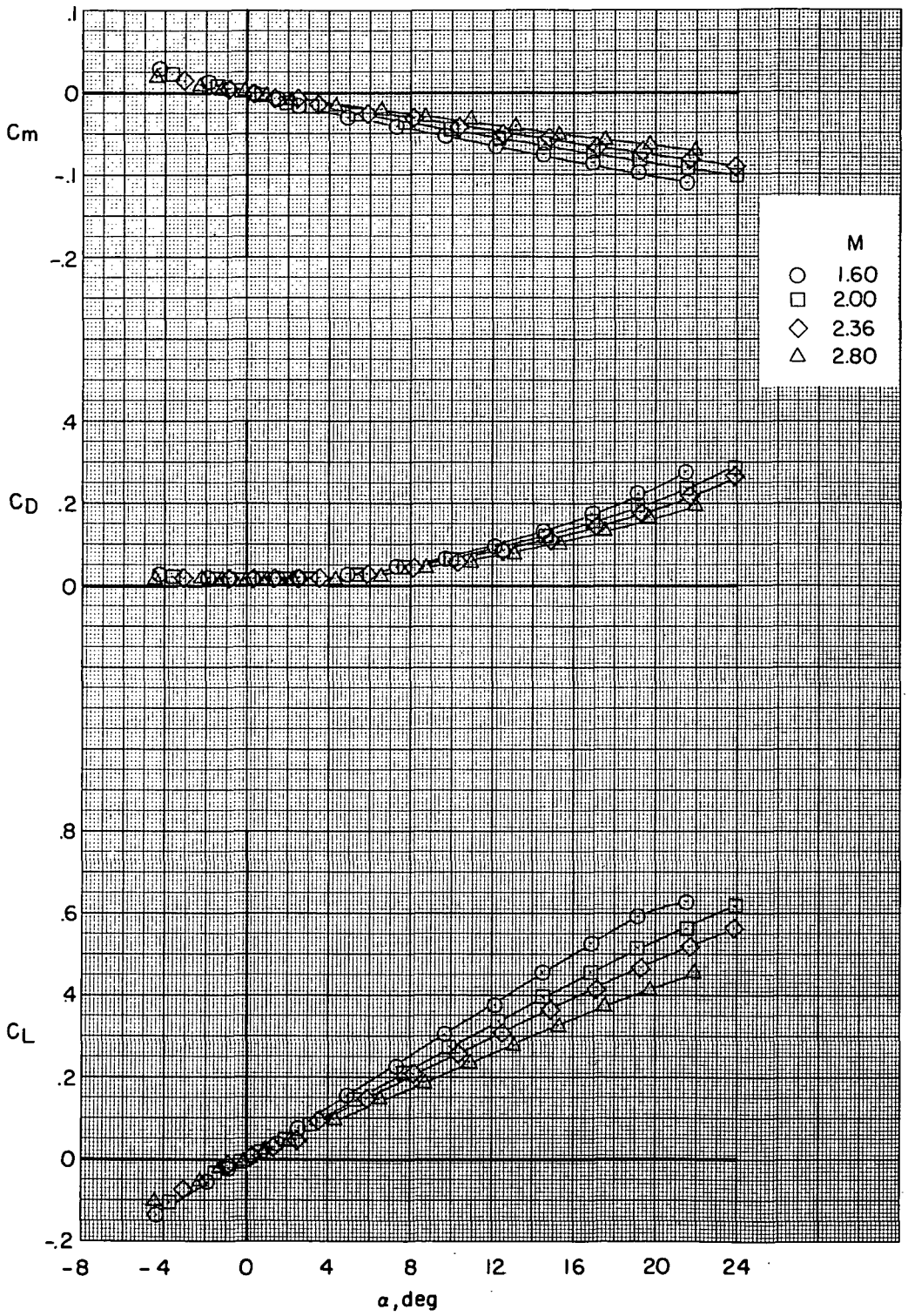
(d) Arrow wing; M = 1.60, 2.00, 2.36, and 2.80.

Figure 3.- Continued.



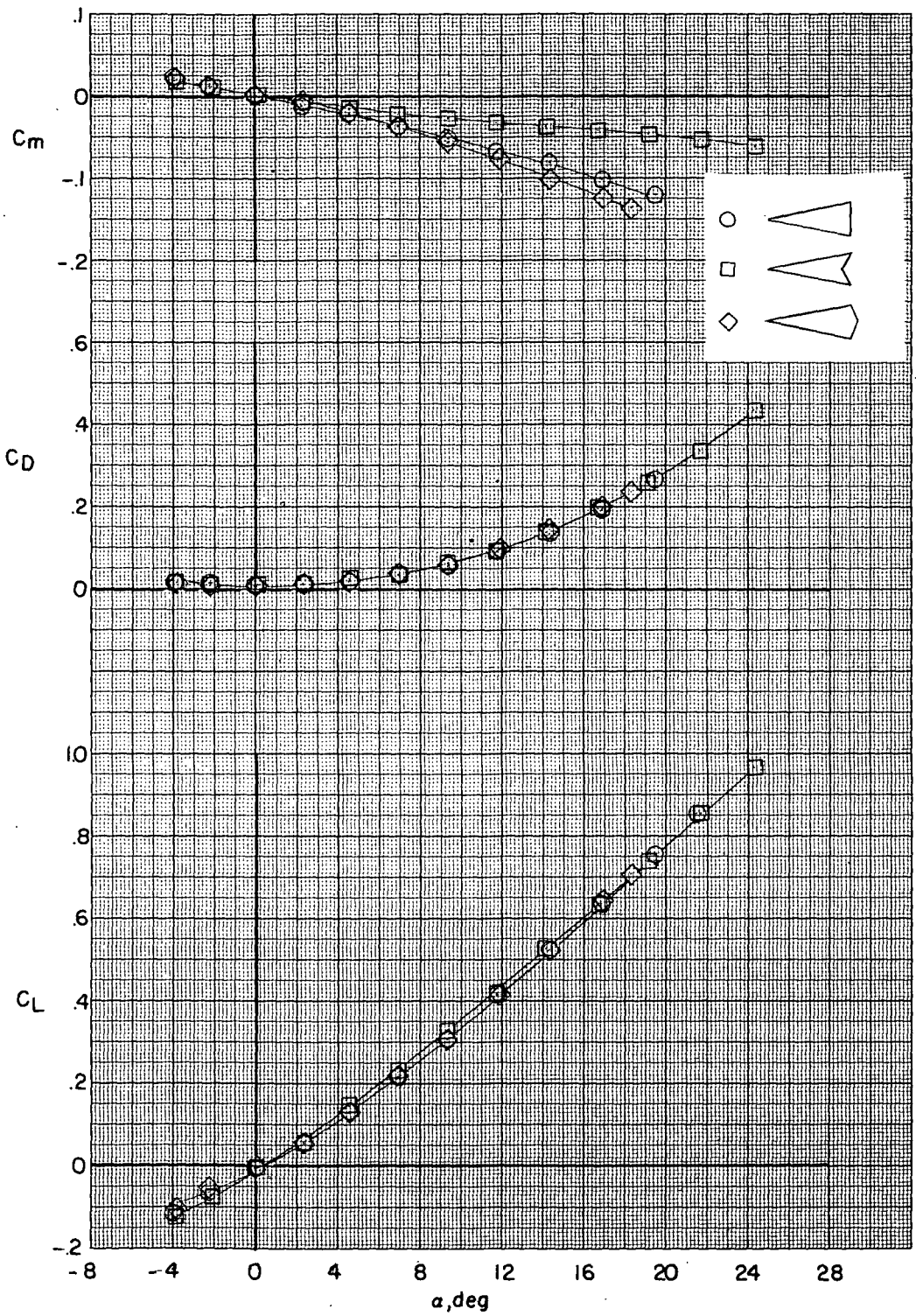
(e) Diamond wing; M = 0.60, 0.80, 0.98, and 1.20.

Figure 3.- Continued.



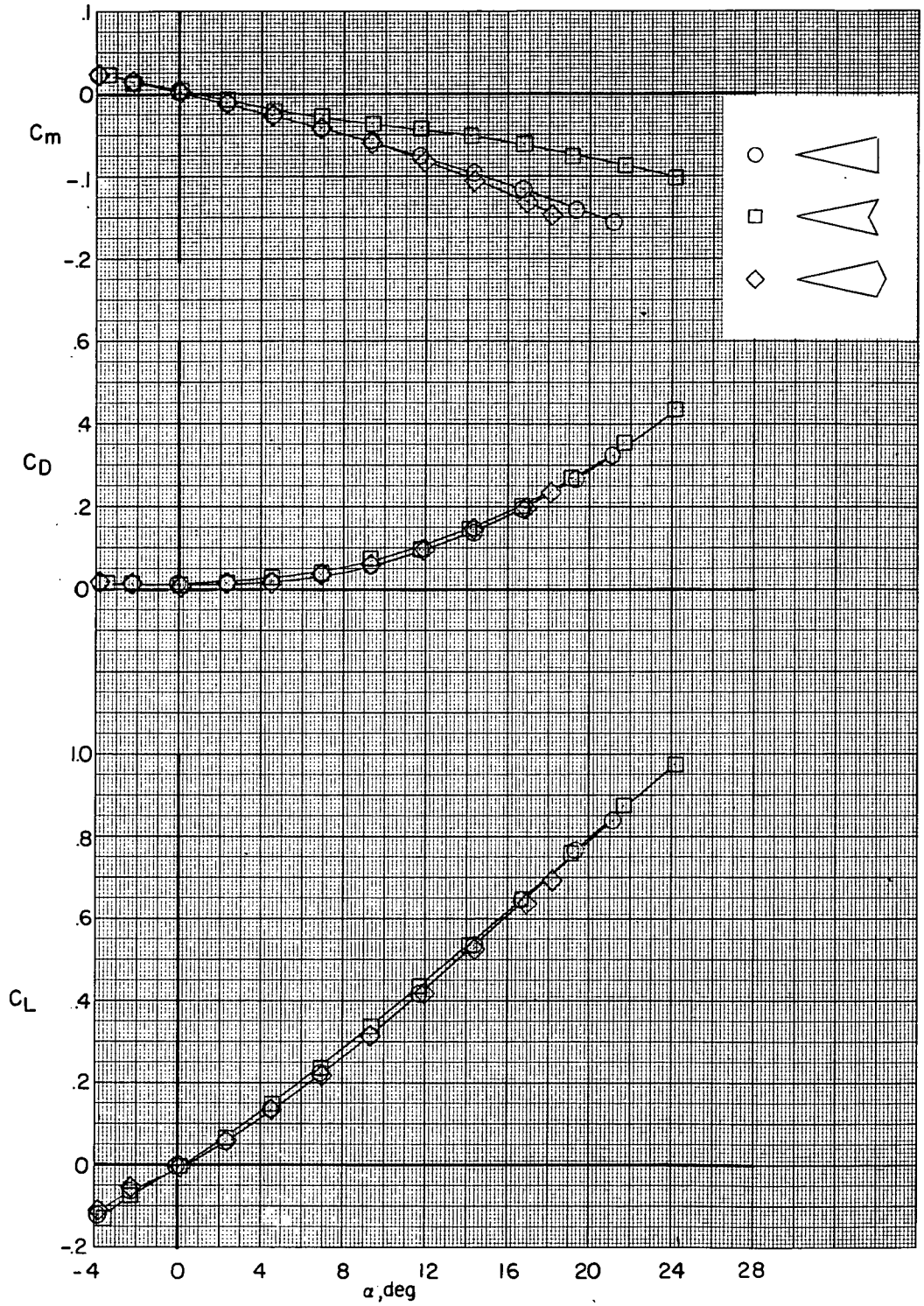
(f) Diamond wing; M = 1.60, 2.00, 2.36, and 2.80.

Figure 3.- Concluded.



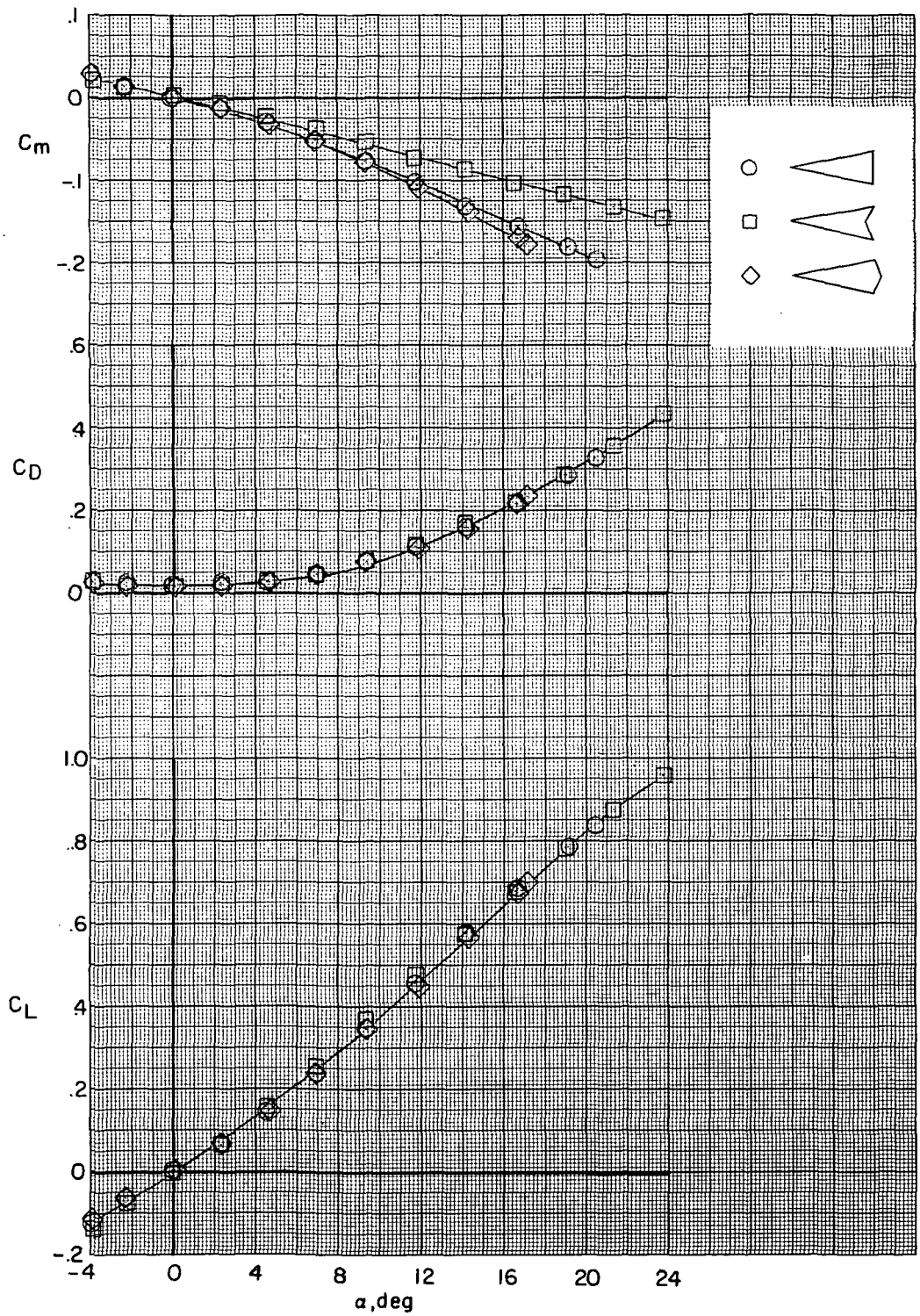
(a) M = 0.60.

Figure 4.- Effect of planform on aerodynamic characteristics at $\beta = 0^{o}$.



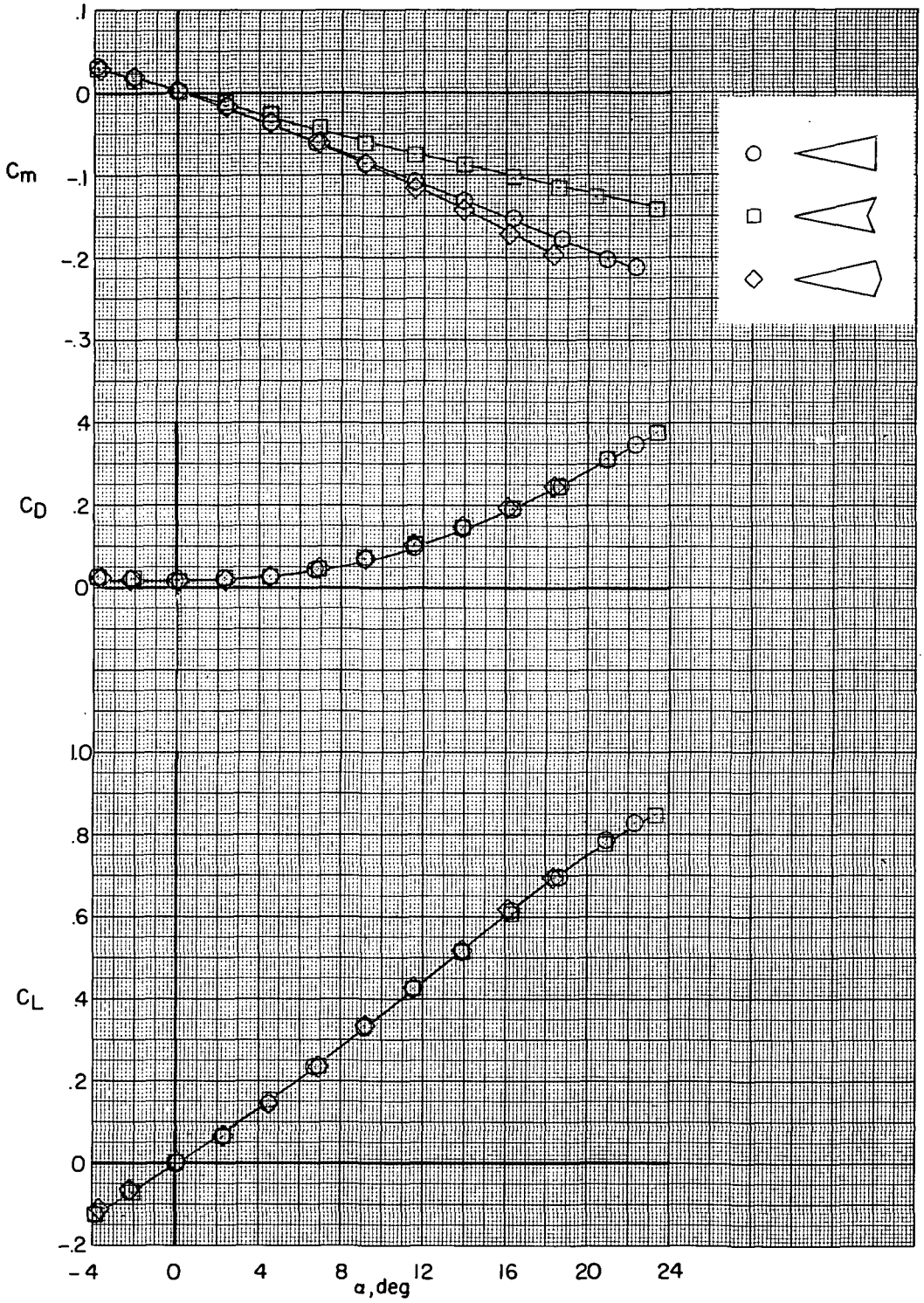
(b) M = 0.80.

Figure 4.- Continued.



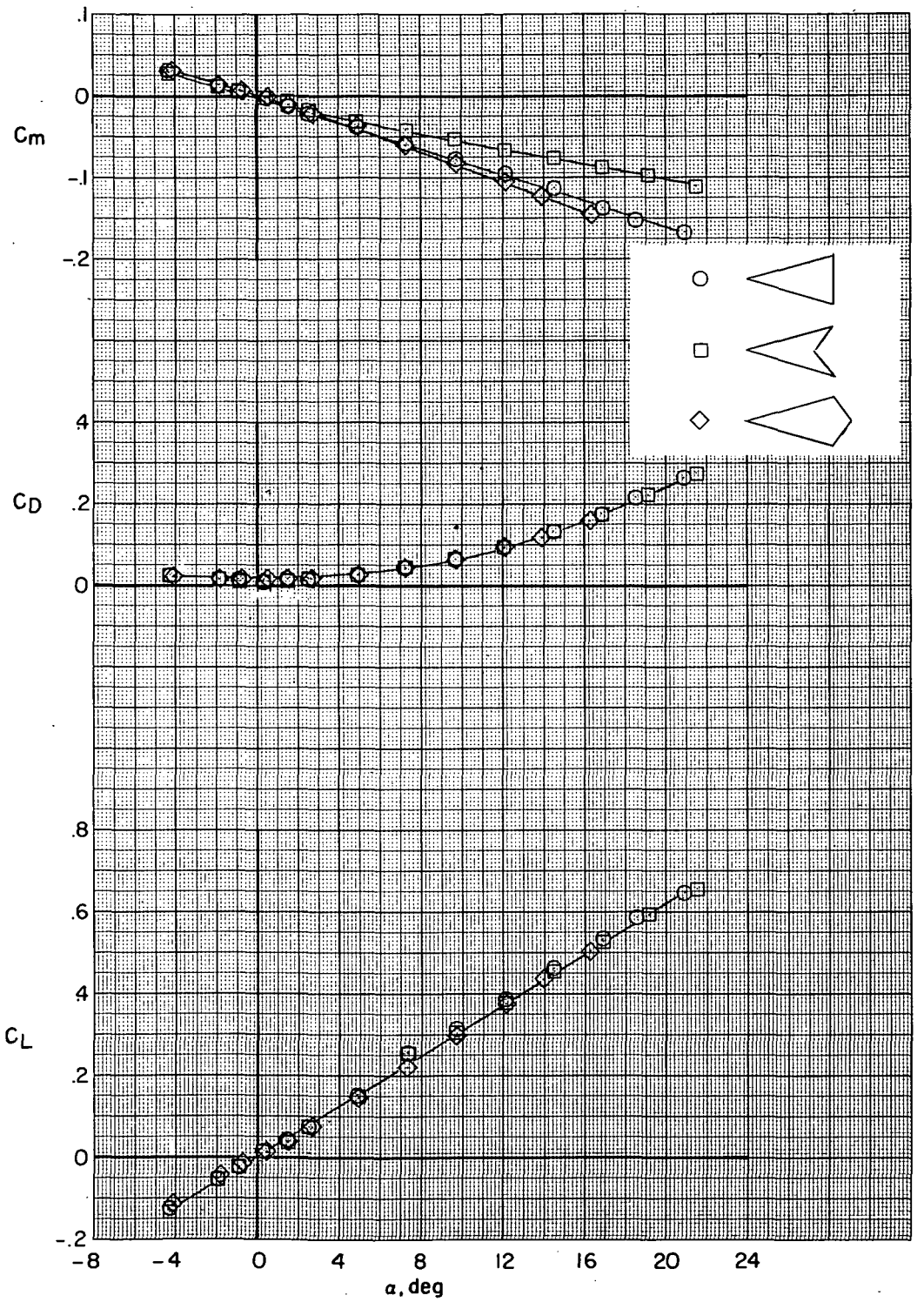
(c) M = 0.98.

Figure 4.- Continued.



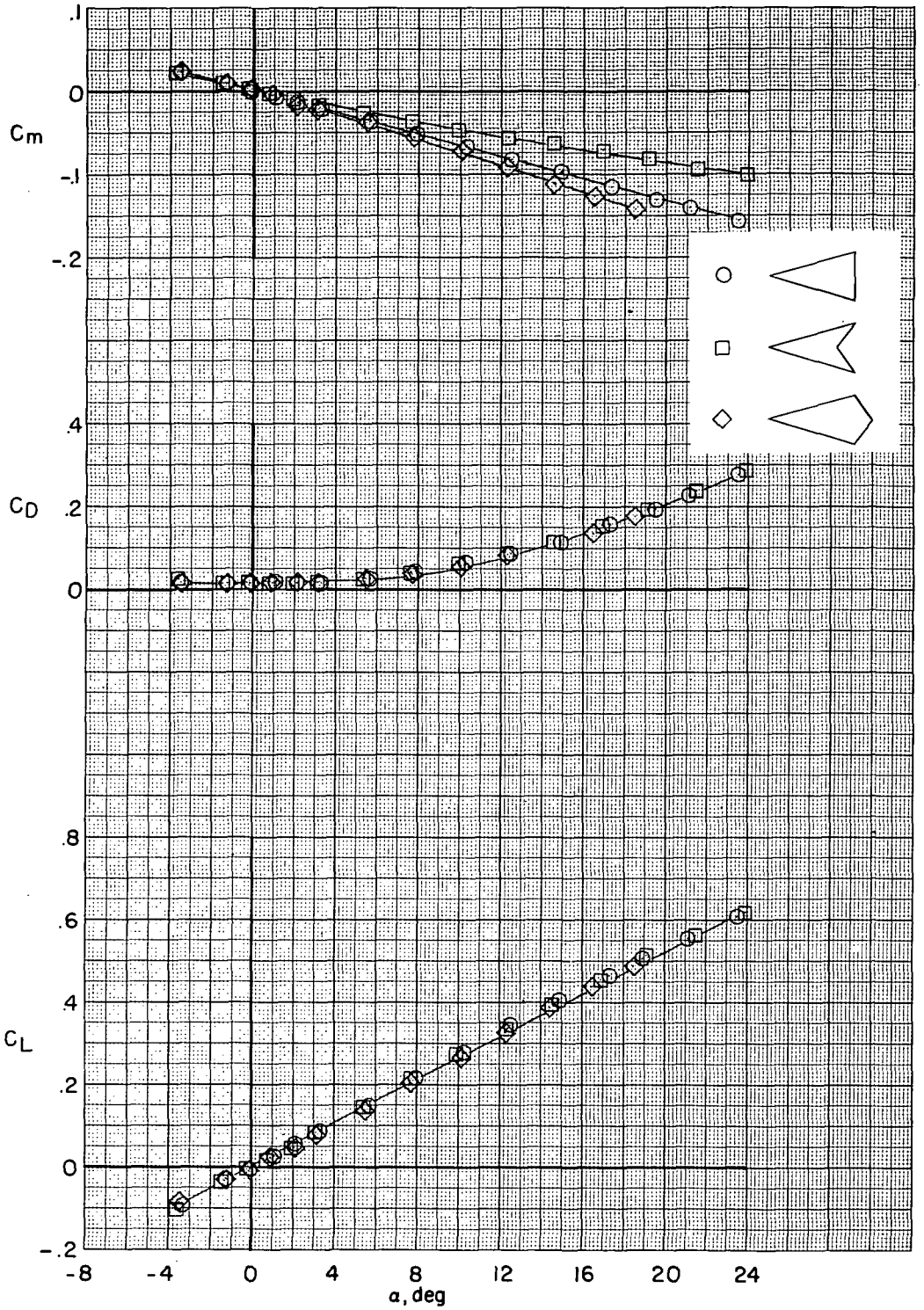
(d) M = 1.20.

Figure 4.- Continued.



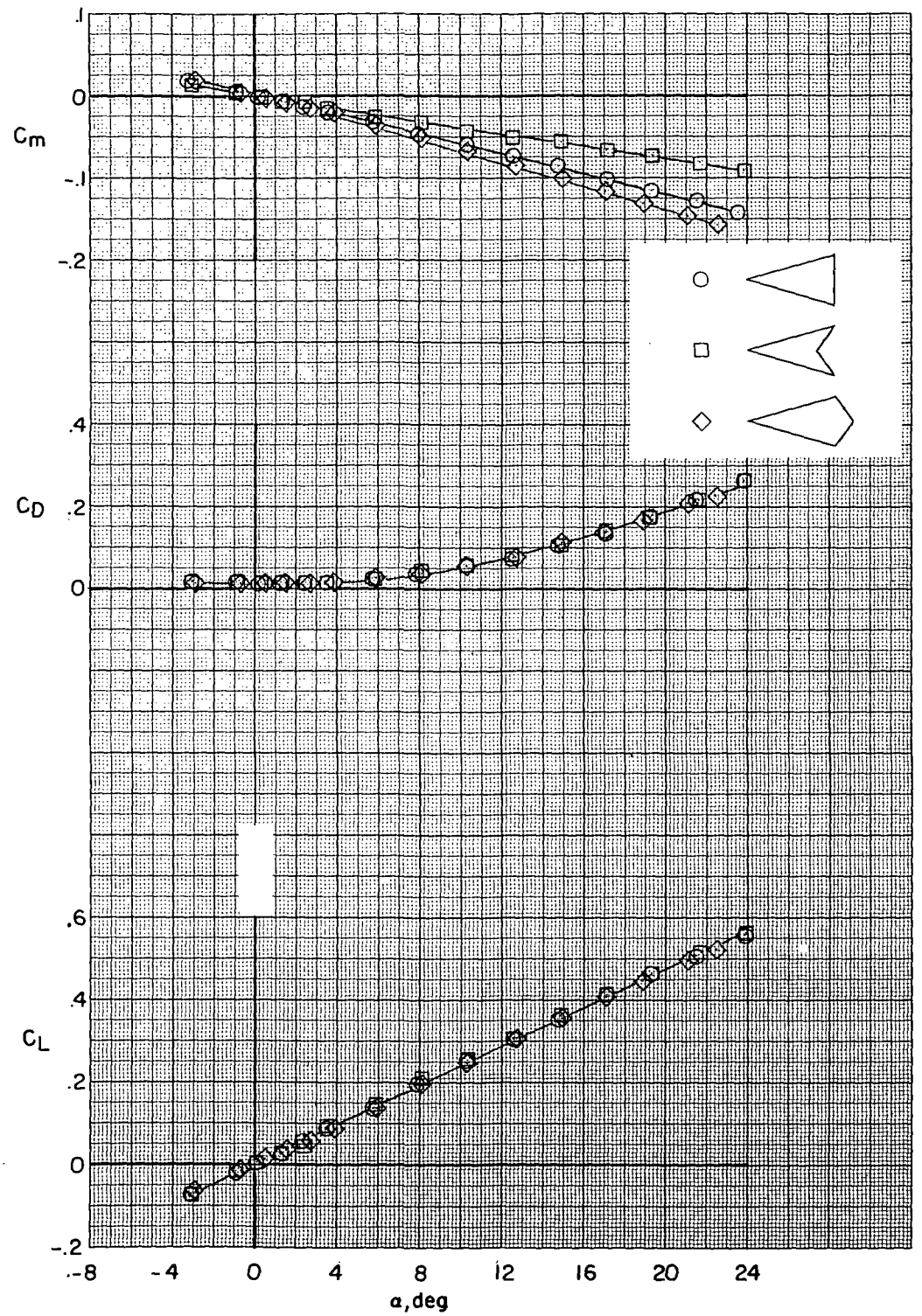
(e) M = 1.60.

Figure 4.- Continued.



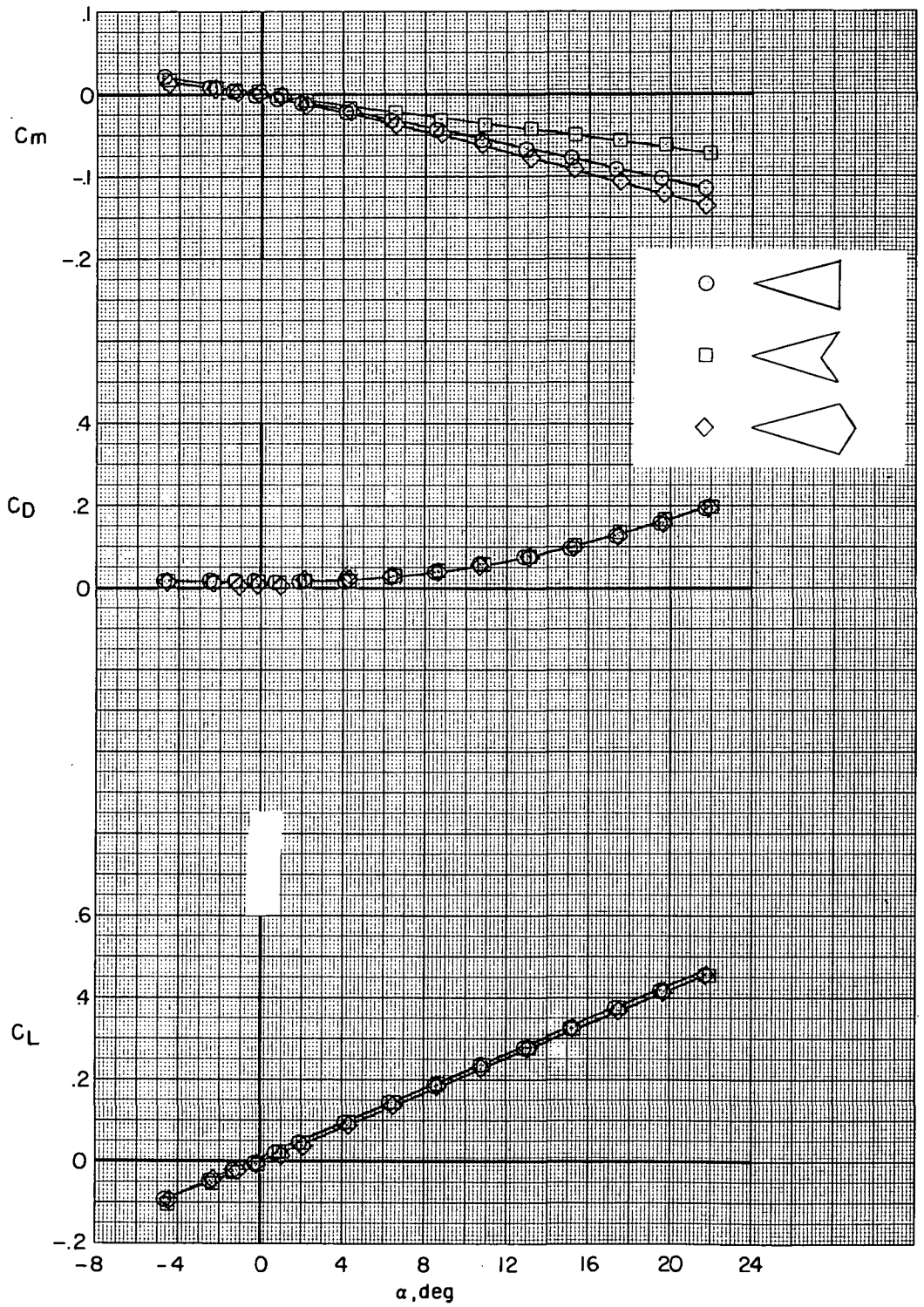
(f) M = 2.00.

Figure 4.- Continued.



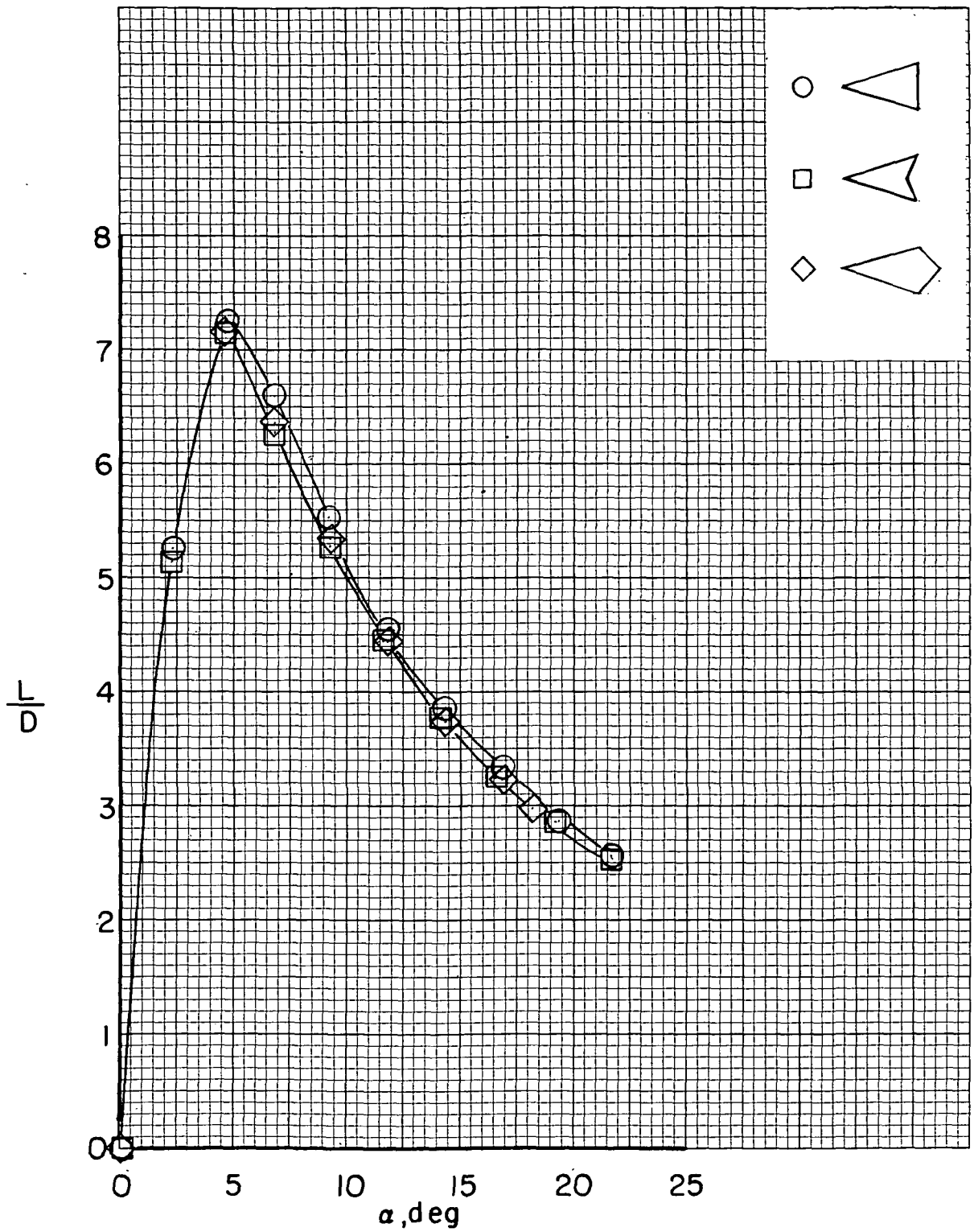
(g) M = 2.36.

Figure 4.- Continued.



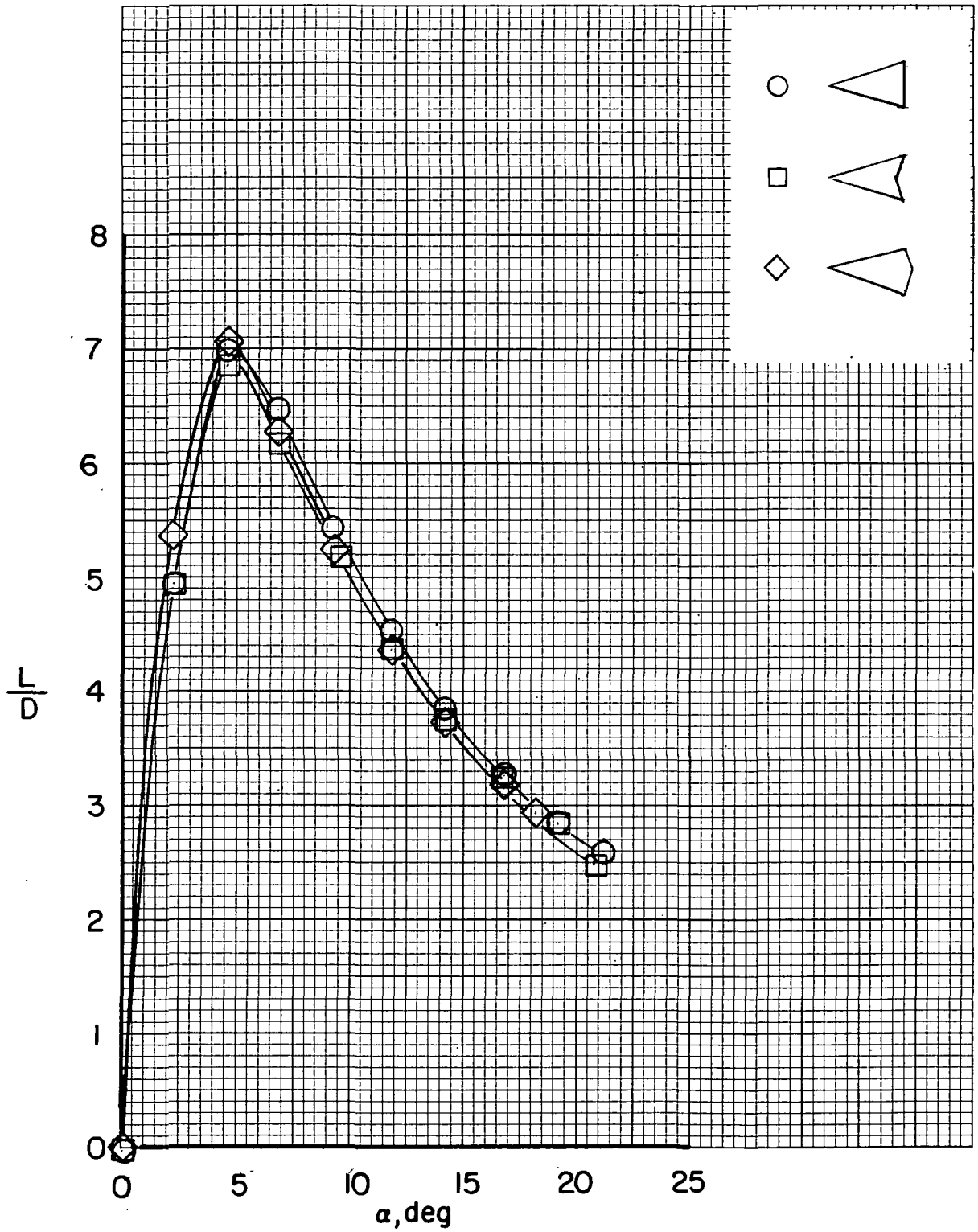
(h) M = 2.80.

Figure 4.- Concluded.



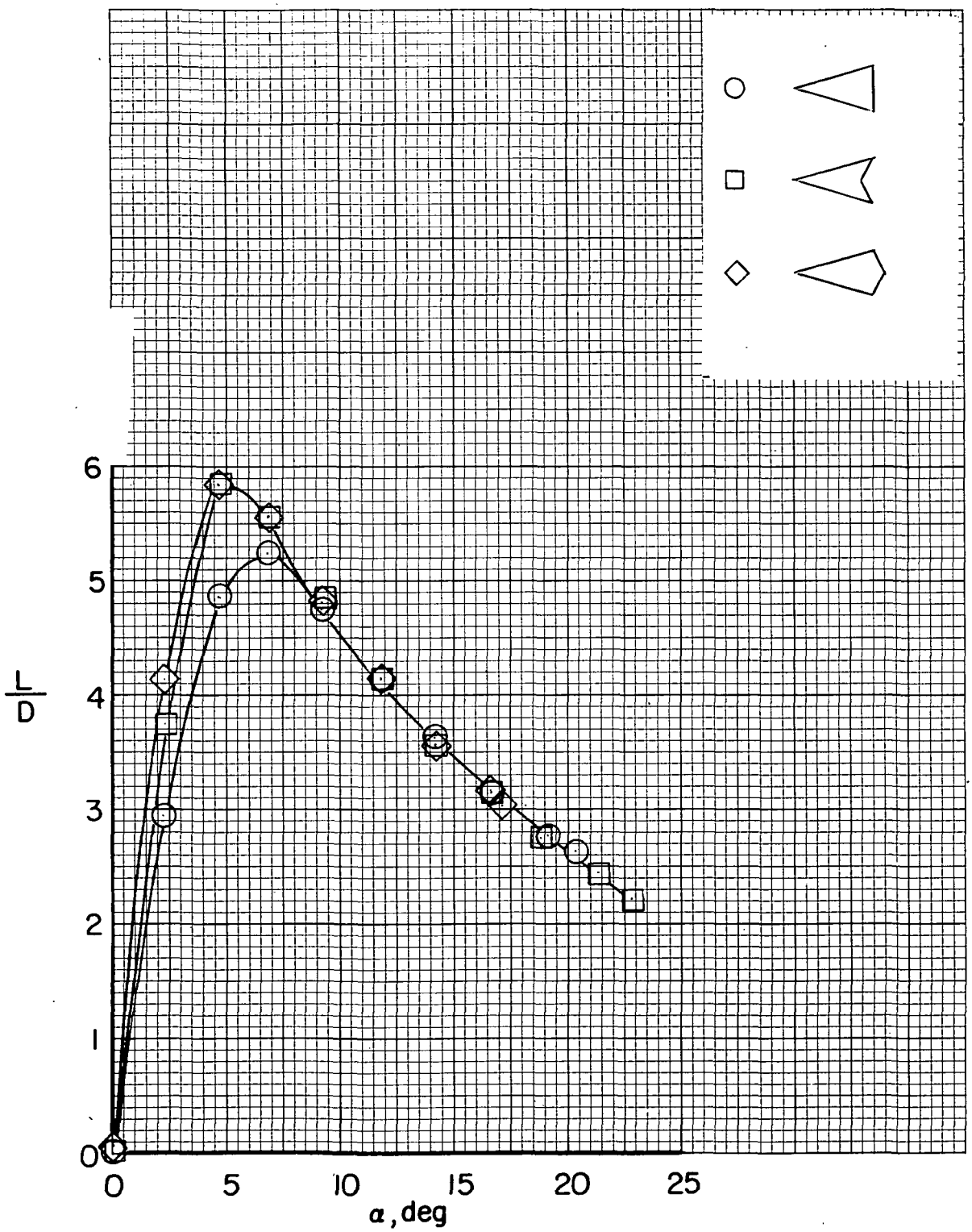
(a) M = 0.60.

Figure 5.- Effect of planform on L/D.



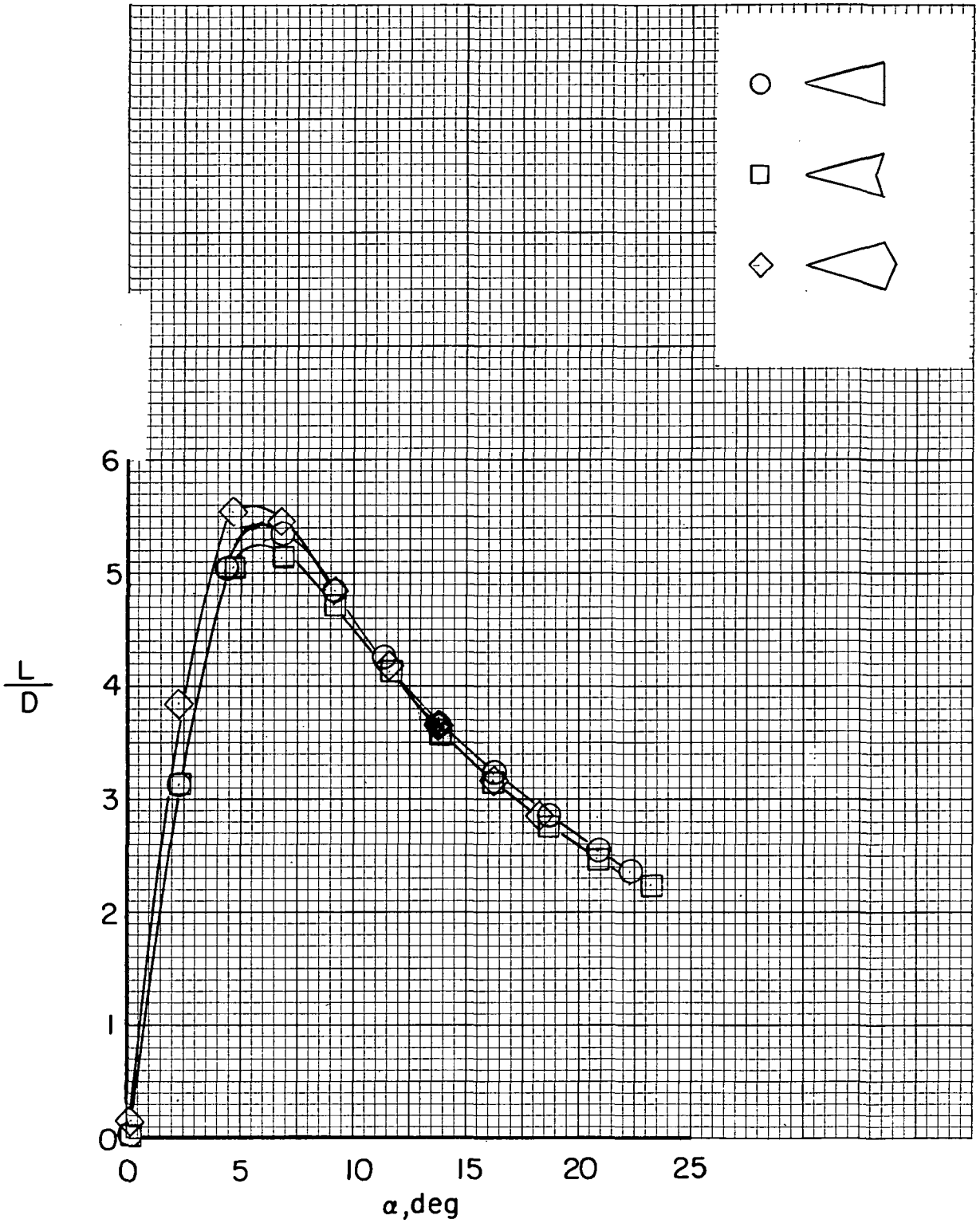
(b) M = 0.80.

Figure 5.- Continued.



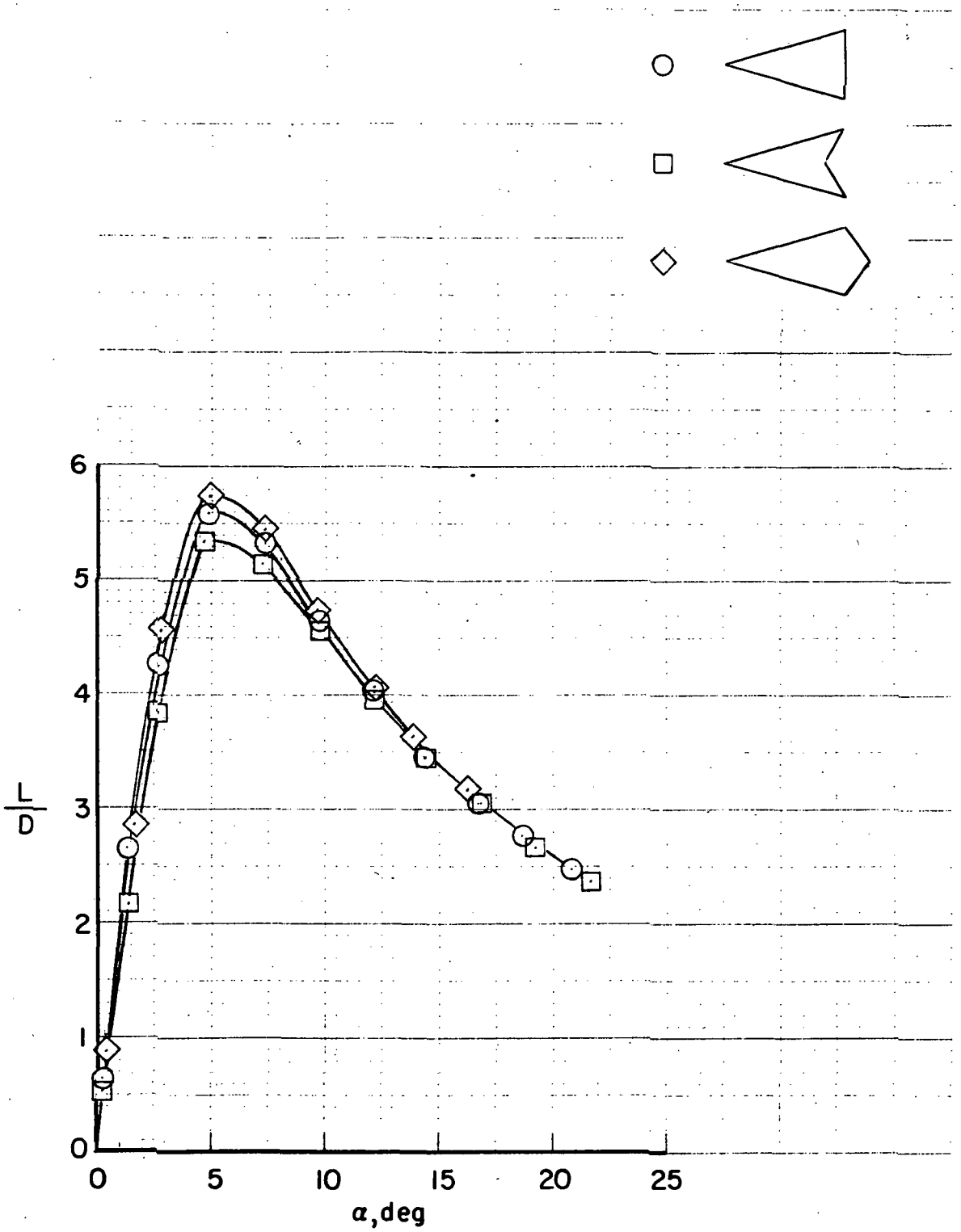
(c) M = 0.98.

Figure 5.- Continued.



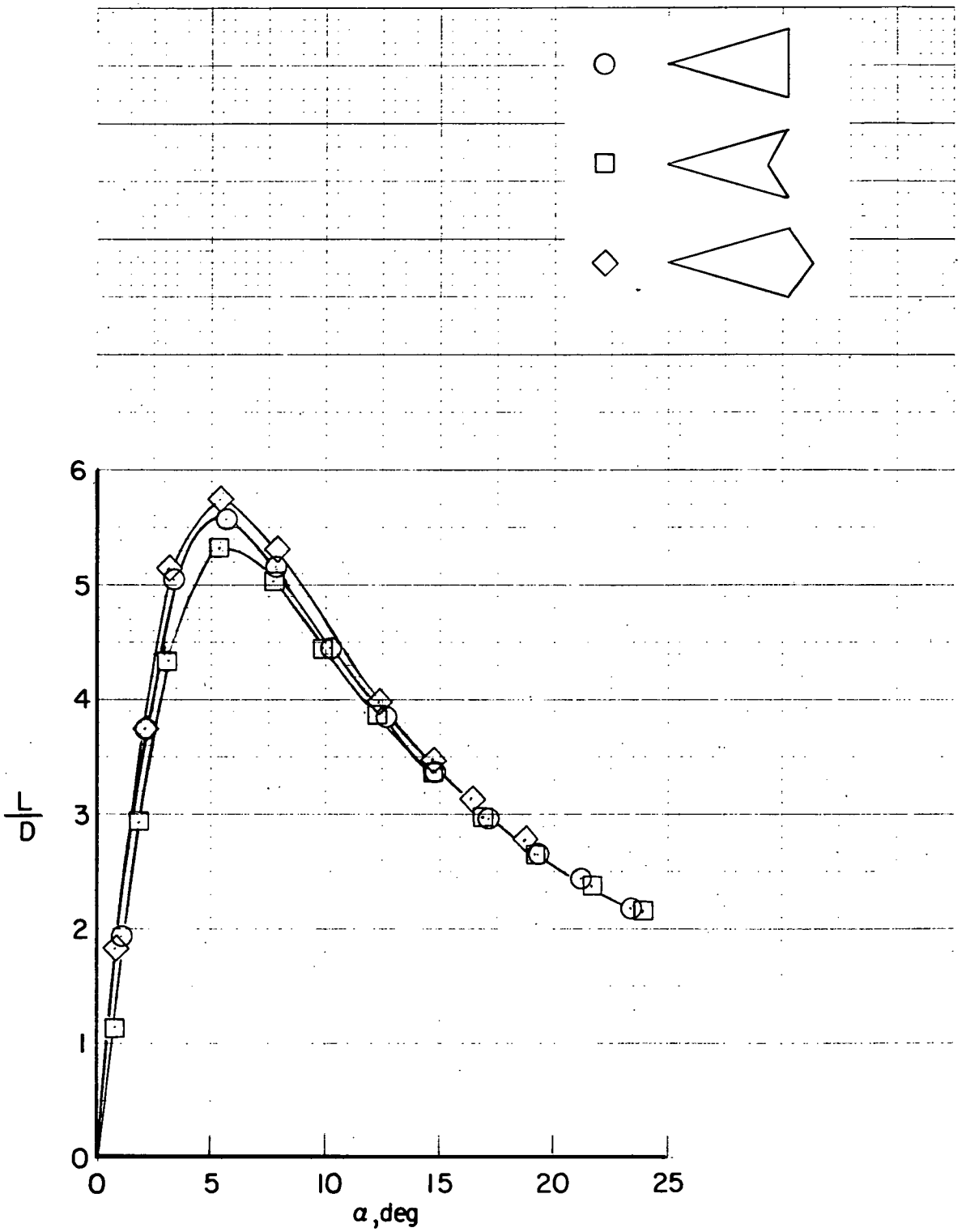
(d) M = 1.20.

Figure 5.- Continued.



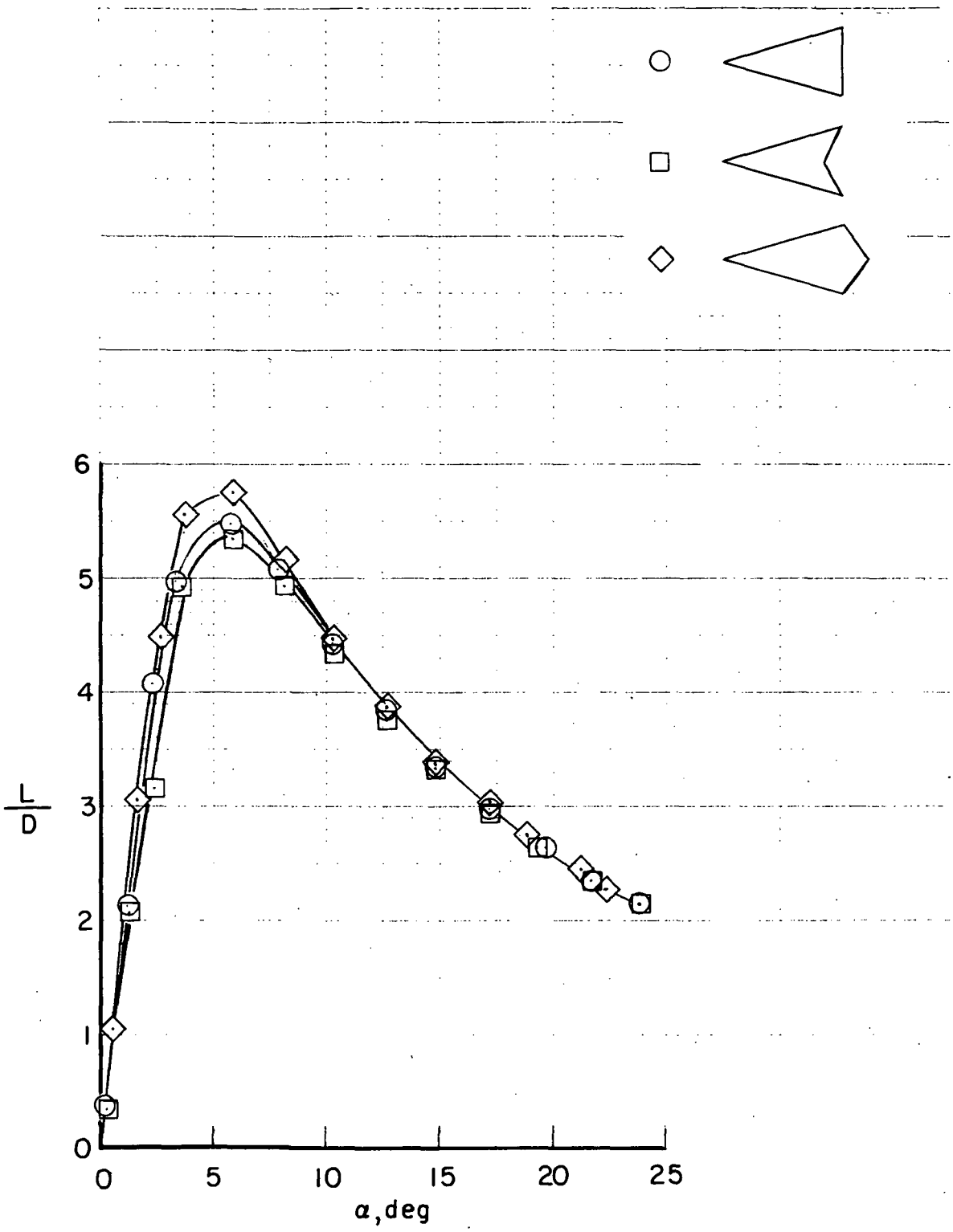
(e) M = 1.60.

Figure 5.- Continued.



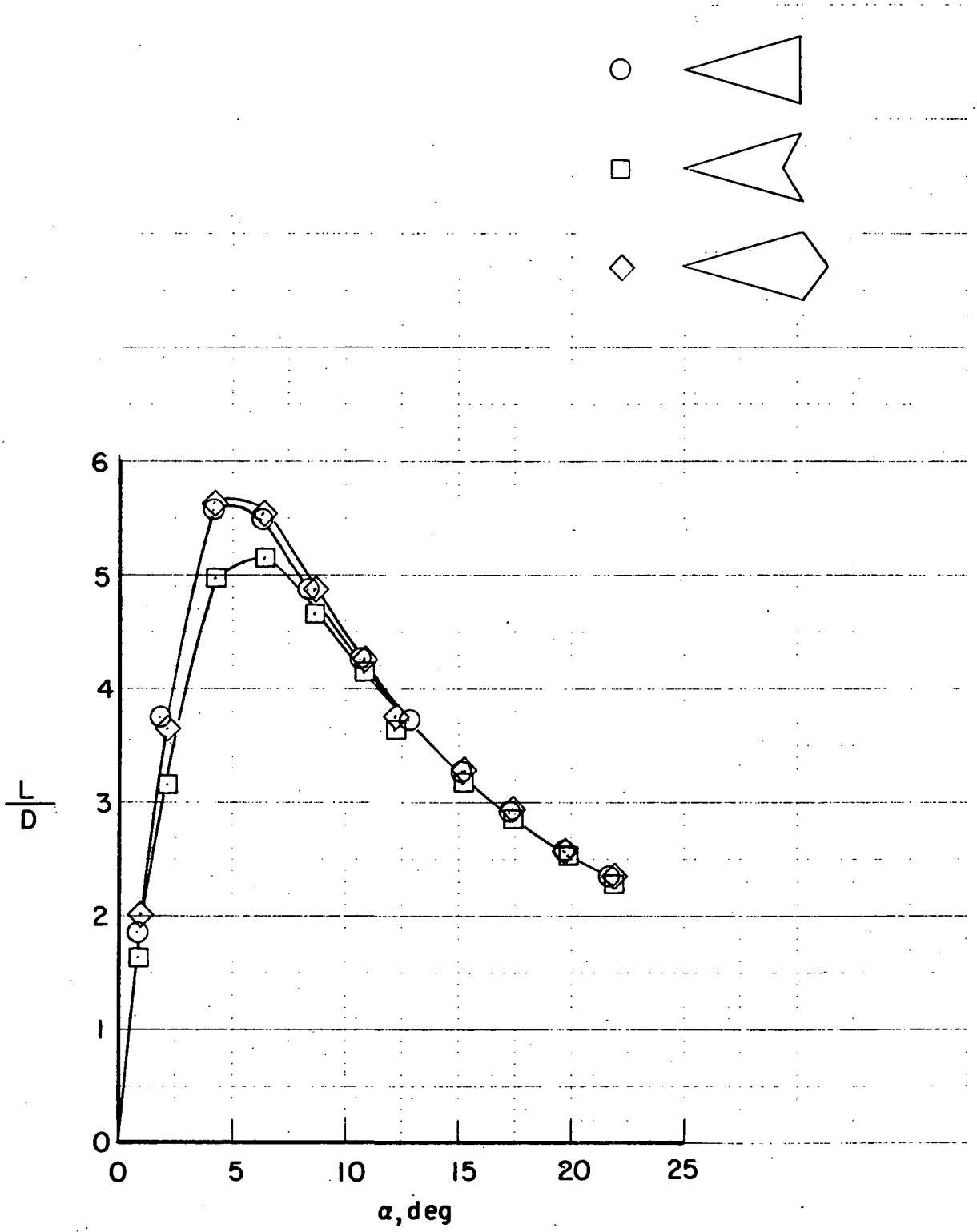
(f) M = 2.00.

Figure 5.- Continued.



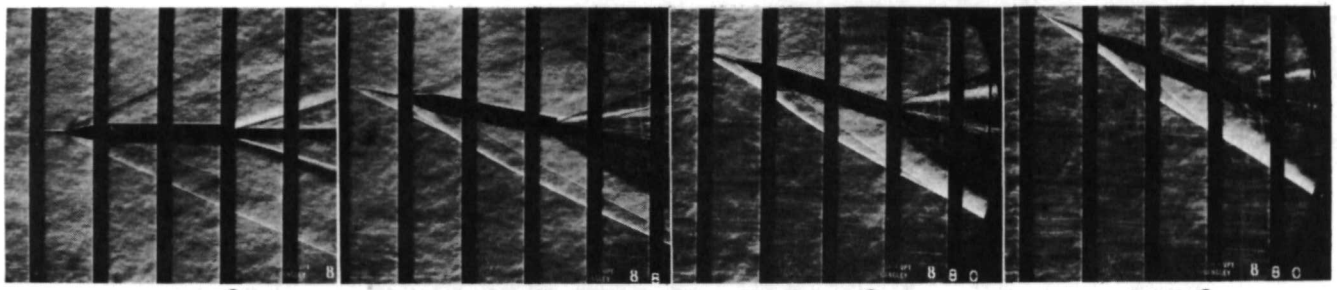
(g) M = 2.36.

Figure 5.- Continued.



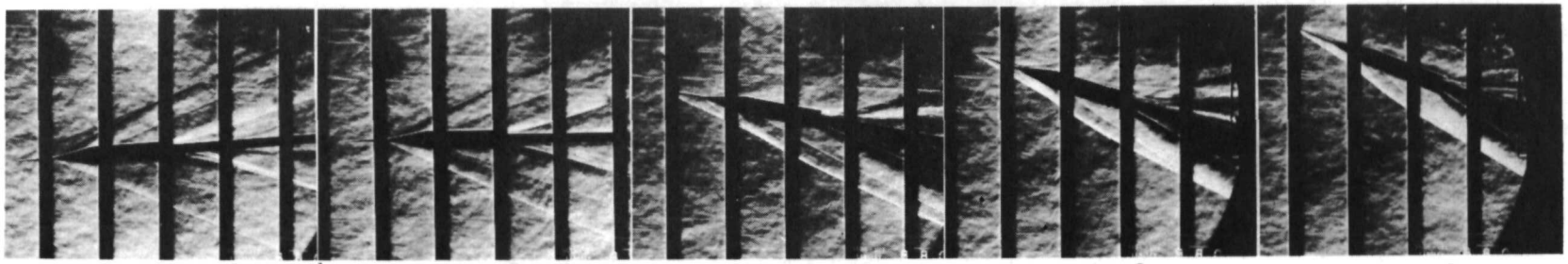
(h) M = 2.80.

Figure 5.- Concluded.



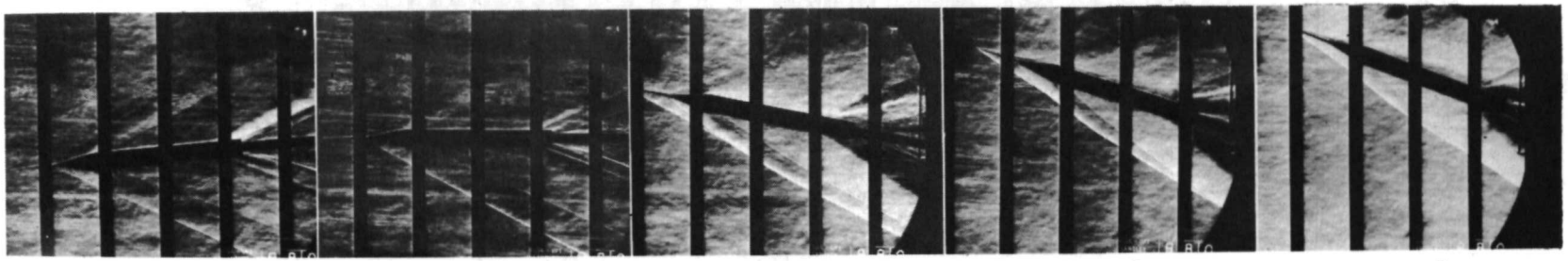
α = -0.35° 10.67° 17.30° 21.74°

(a) Delta wing; M = 2.80.



α = -4.54° -0.15° 10.85° 17.49° 21.95°

(b) Arrow wing; M = 2.80.



α = -2.86° 1.53° 12.62° 18.89° 22.42°

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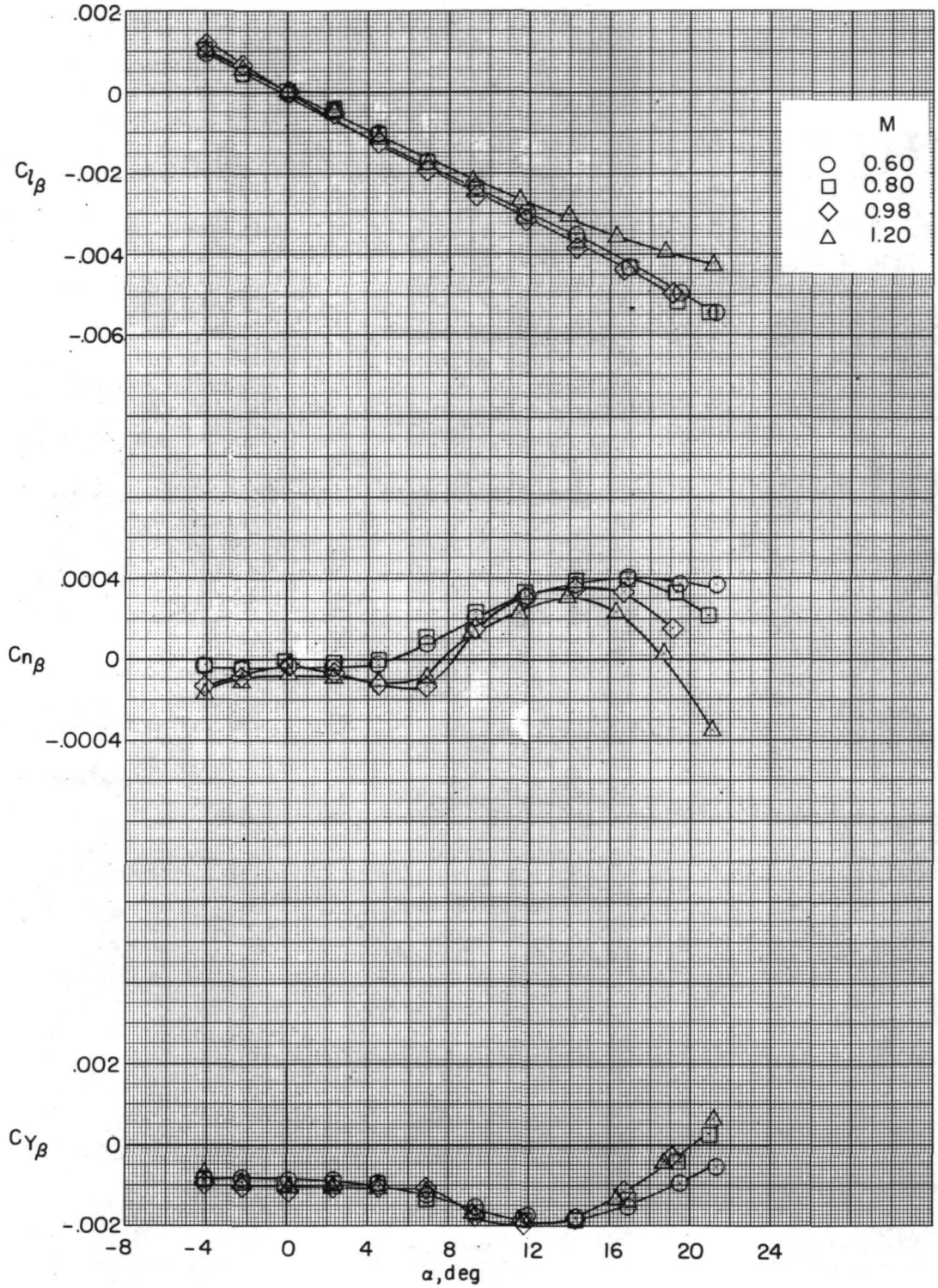
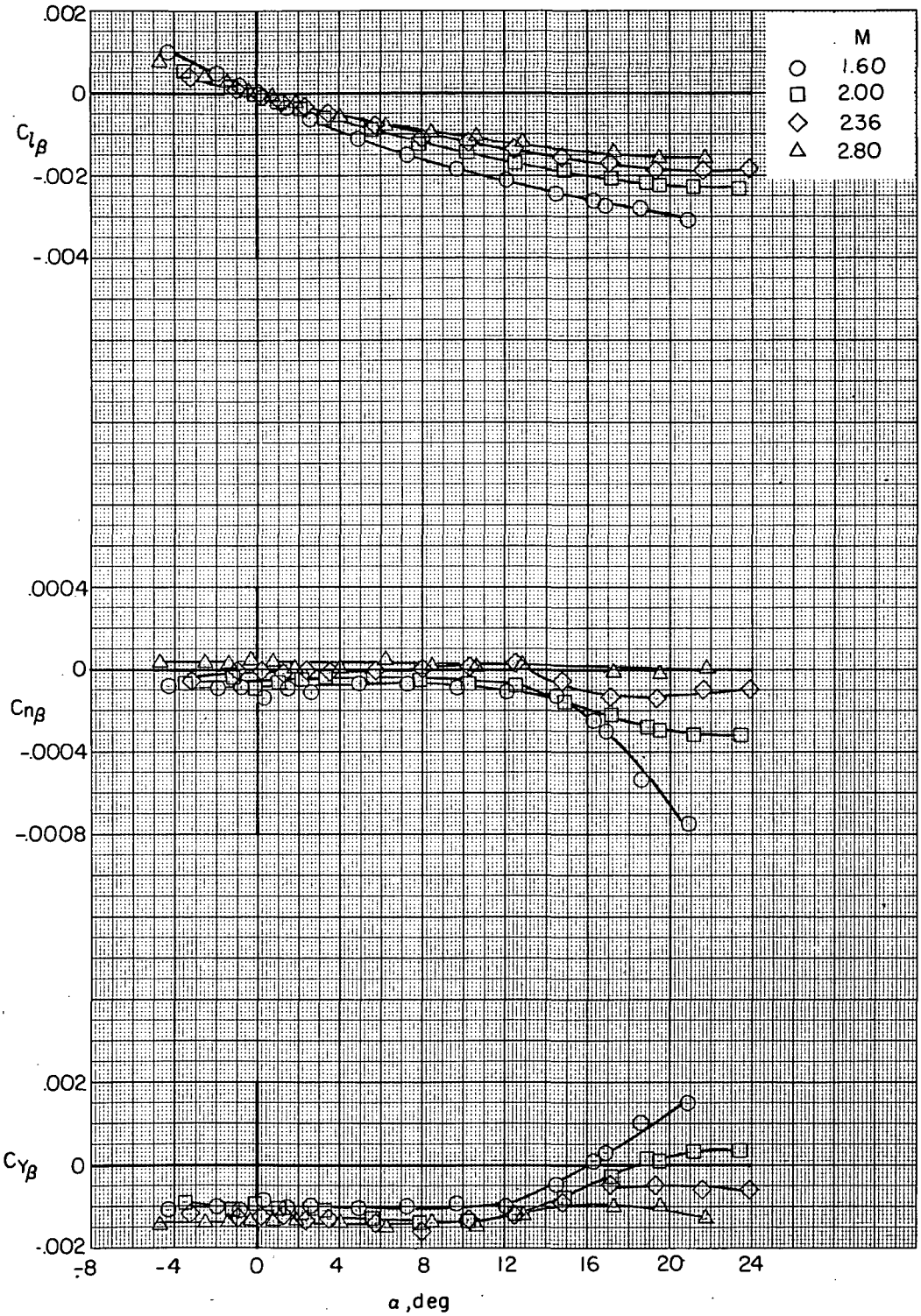
(c) Diamond wing; M = 2.36.

Figure 6.- Typical schlieren photographs for the three planforms.



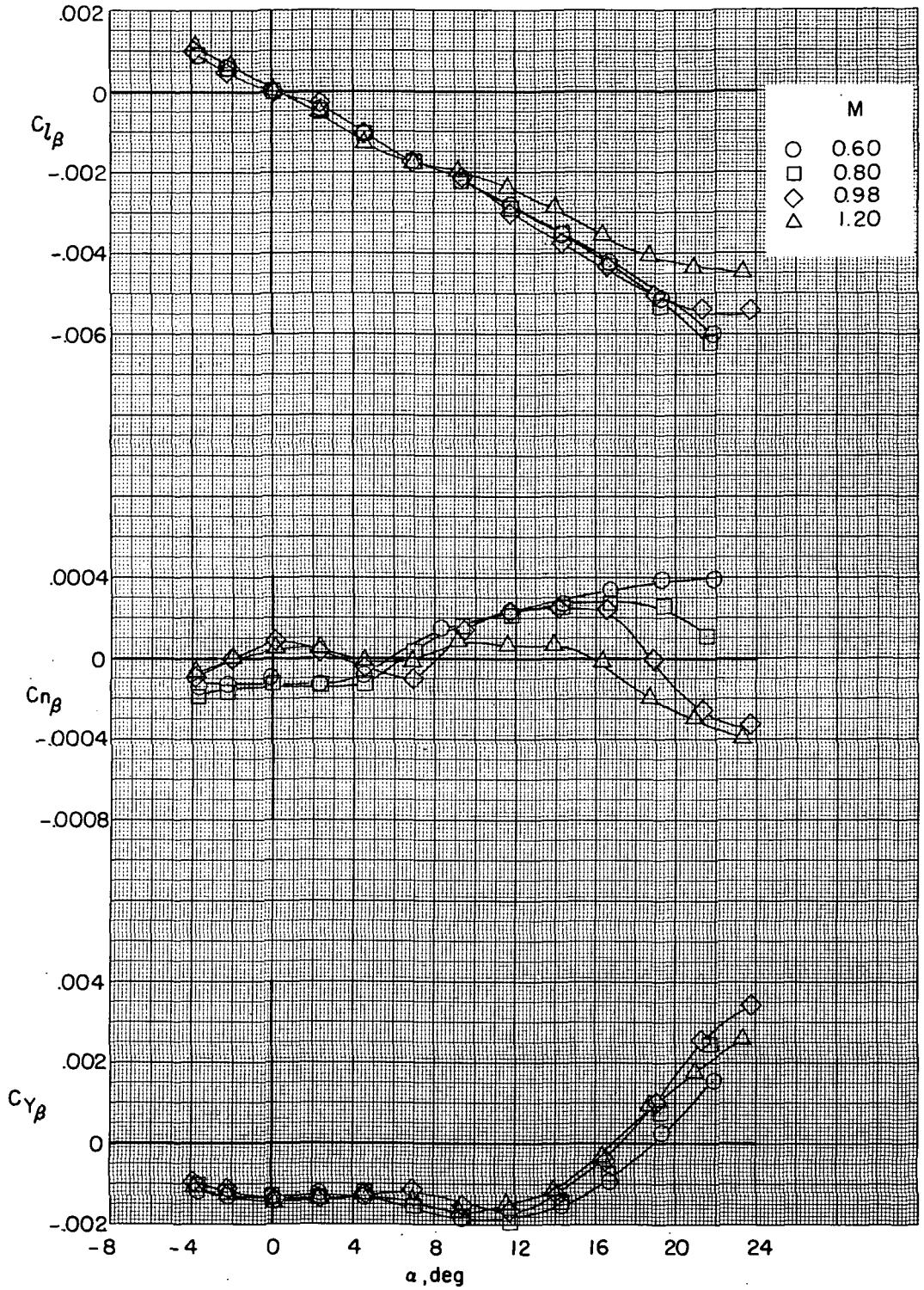
(a) Delta wing; M = 0.60, 0.80, 0.98, and 1.20; $\Delta\beta = 5^{o}$.

Figure 7.- Effect of Mach number on lateral stability derivatives.



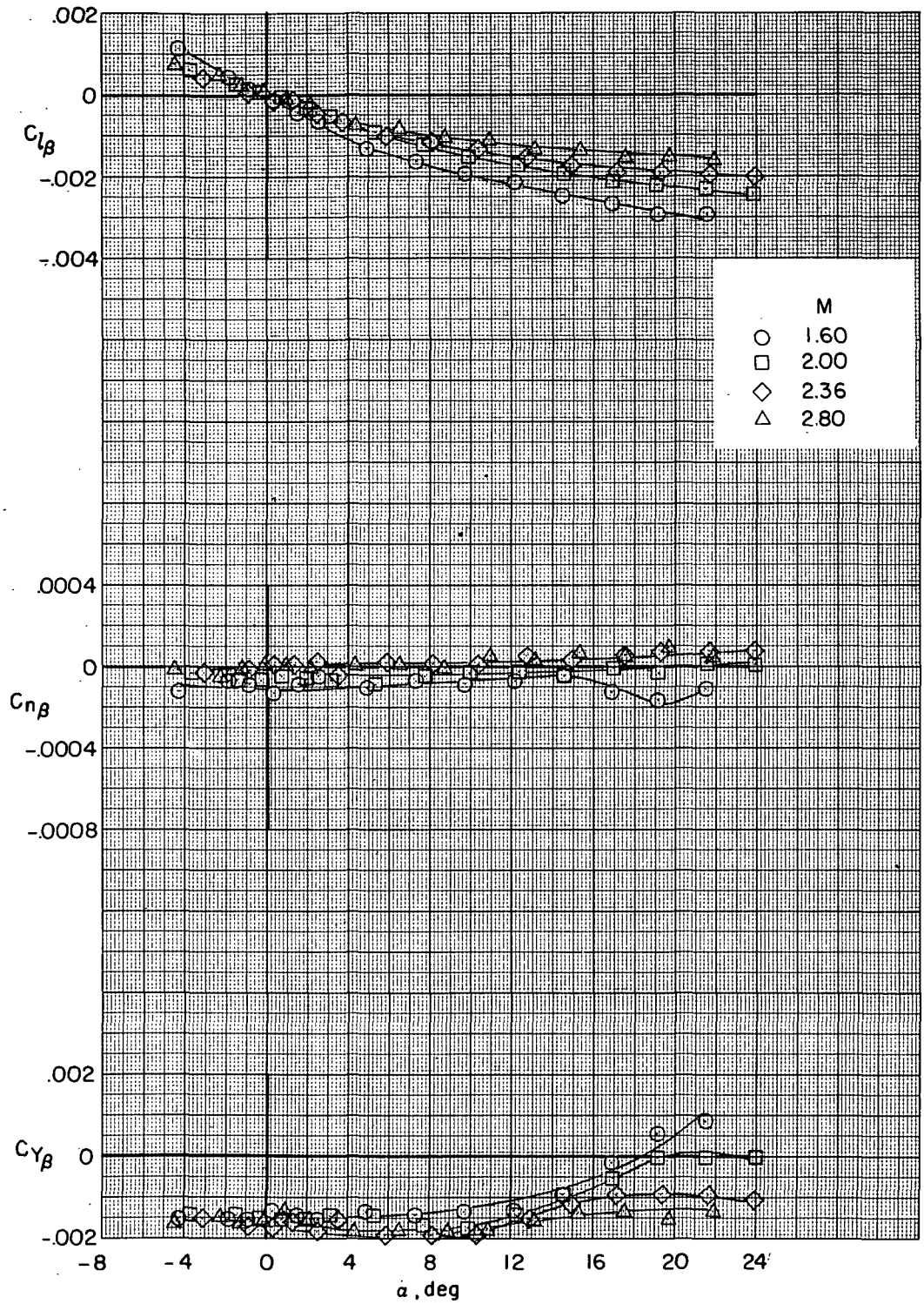
(b) Delta wing; M = 1.60, 2.00, 2.36, and 2.80; $\Delta\beta = 4^{o}$.

Figure 7.- Continued.



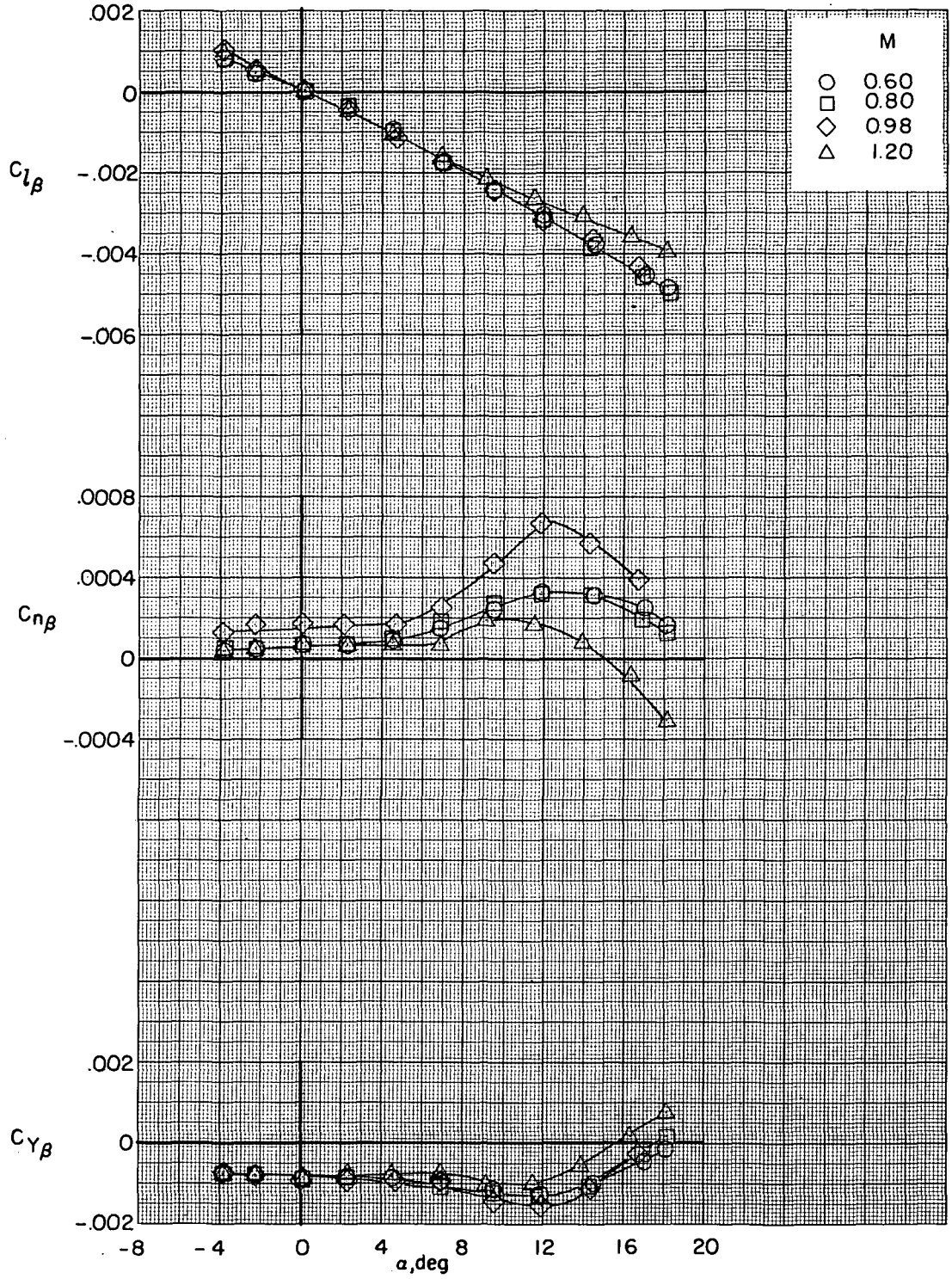
(c) Arrow wing; M = 0.60, 0.80, 0.98, and 1.20; $\Delta\beta = 5^{o}$.

Figure 7.- Continued.



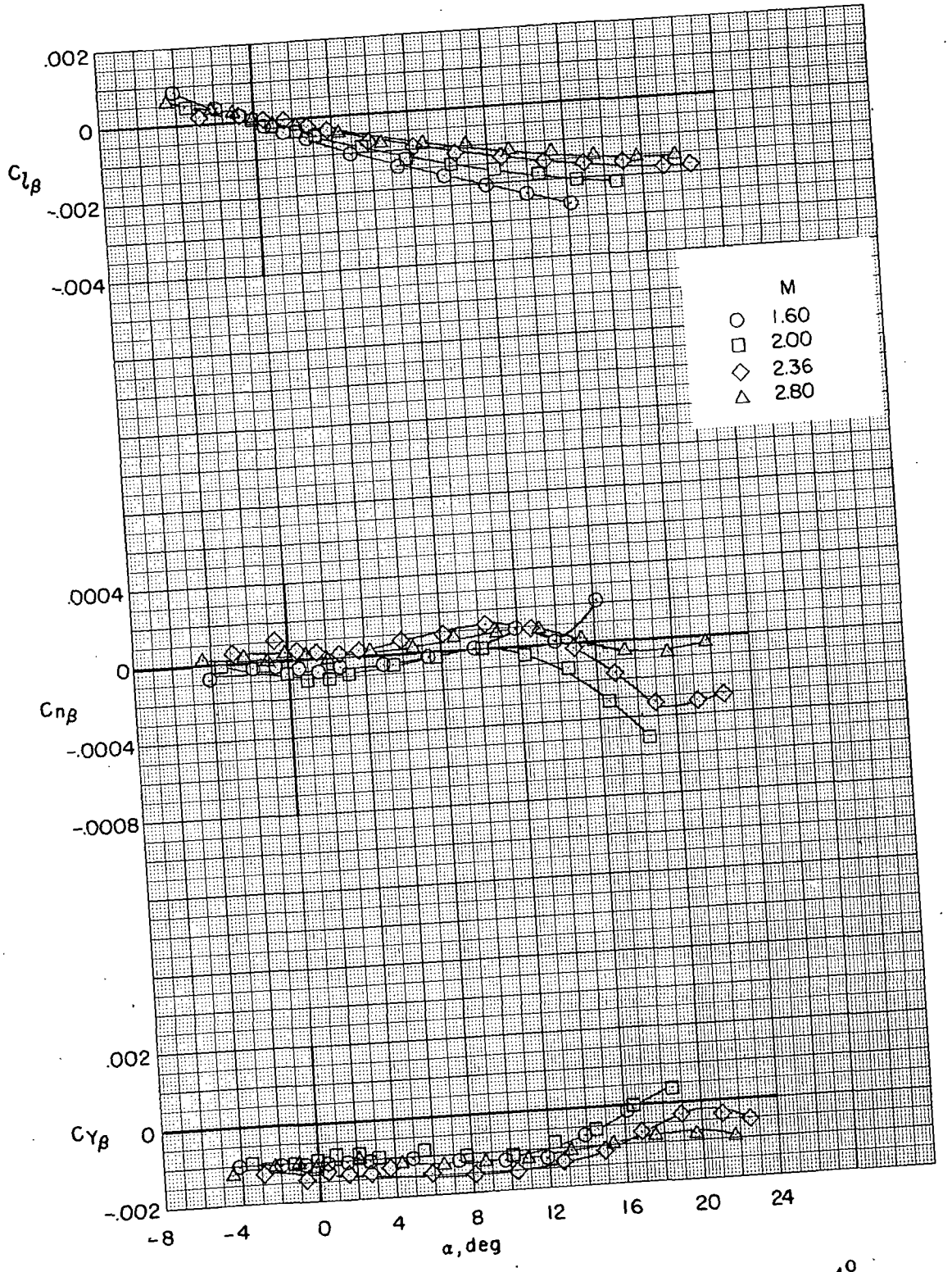
(d) Arrow wing; M = 1.60, 2.00, 2.36, and 2.80; $\Delta\beta = 4^{o}$.

Figure 7.- Continued.



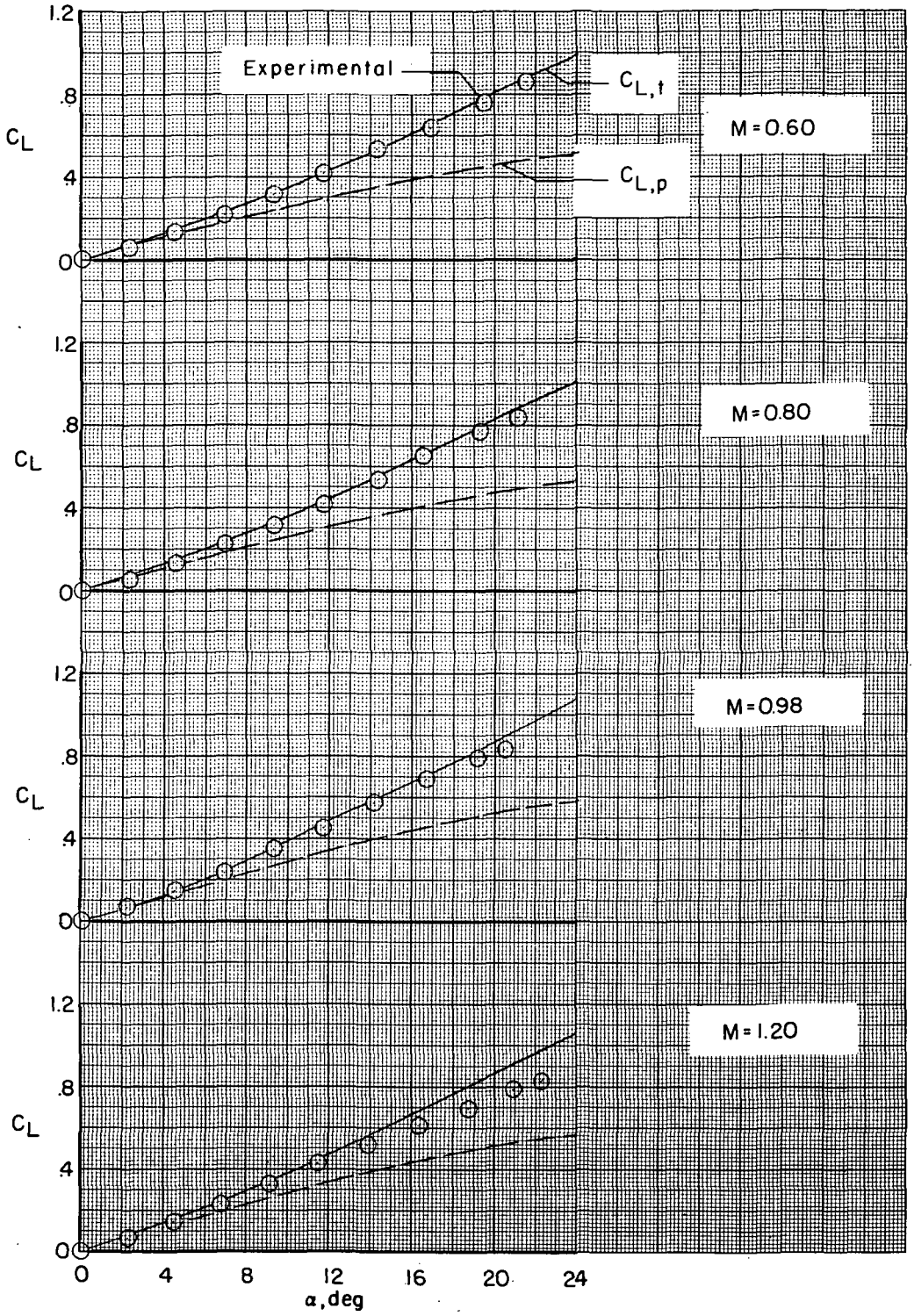
(e) Diamond wing; M = 0.60, 0.80, 0.98, and 1.20; $\Delta\beta = 5^{o}$.

Figure 7.- Continued.



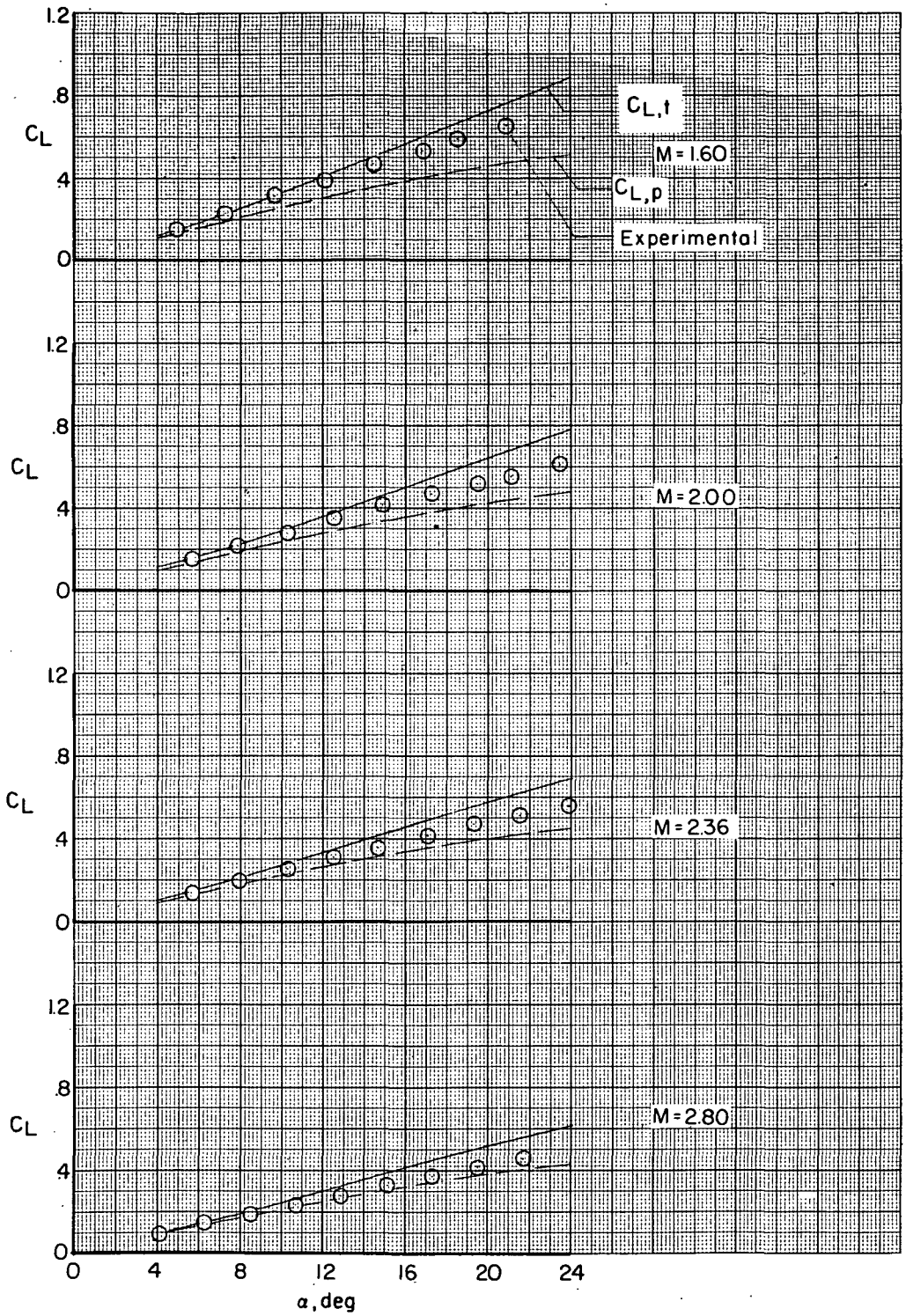
(f) Diamond wing; M = 1.60, 2.00, 2.36, and 2.80; $\Delta\beta = 4^{o}$.

Figure 7.- Concluded.



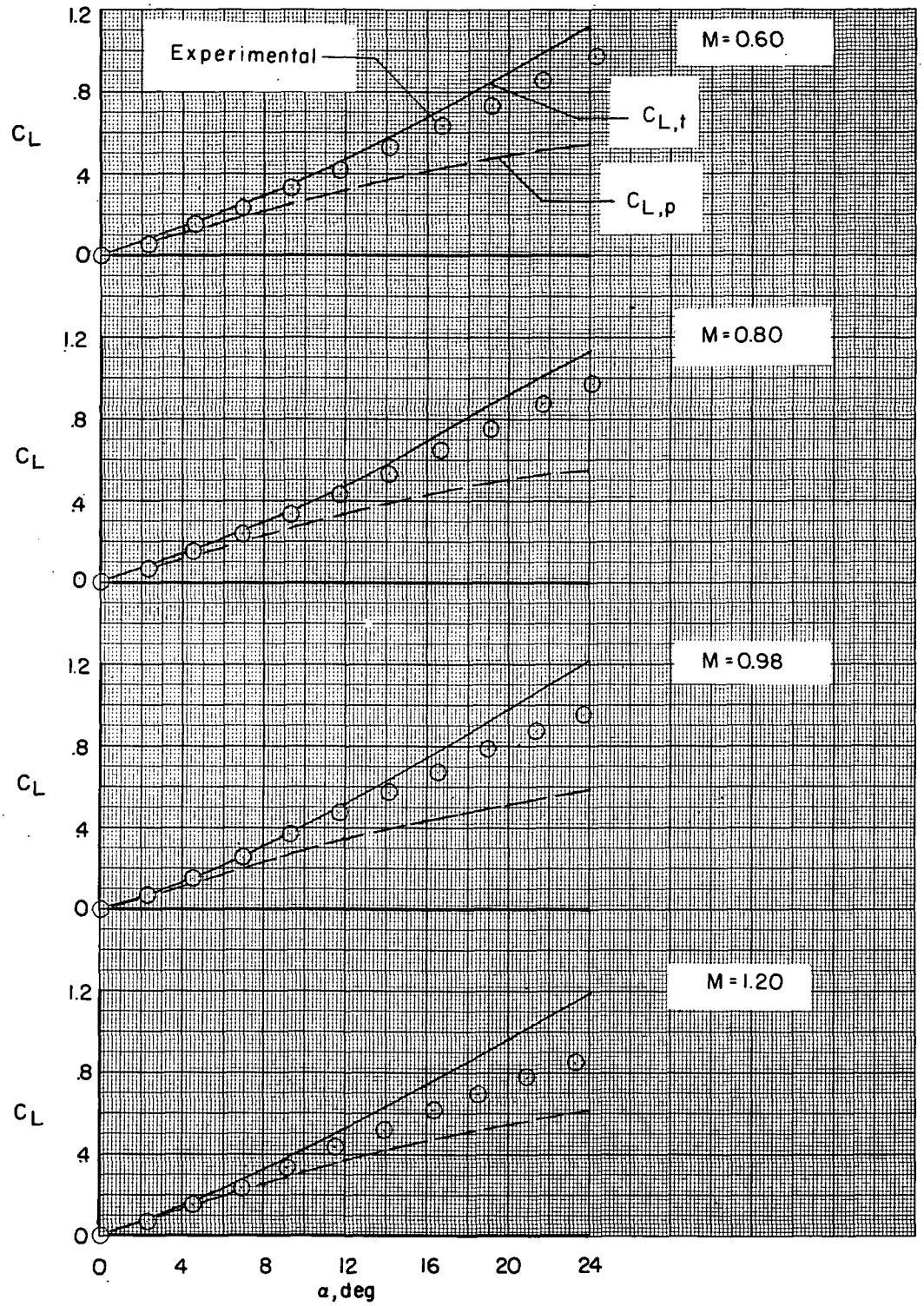
(a) Delta wing; M = 0.60, 0.80, 0.98, and 1.20.

Figure 8.- Comparison of experimental and theoretical lift coefficients.



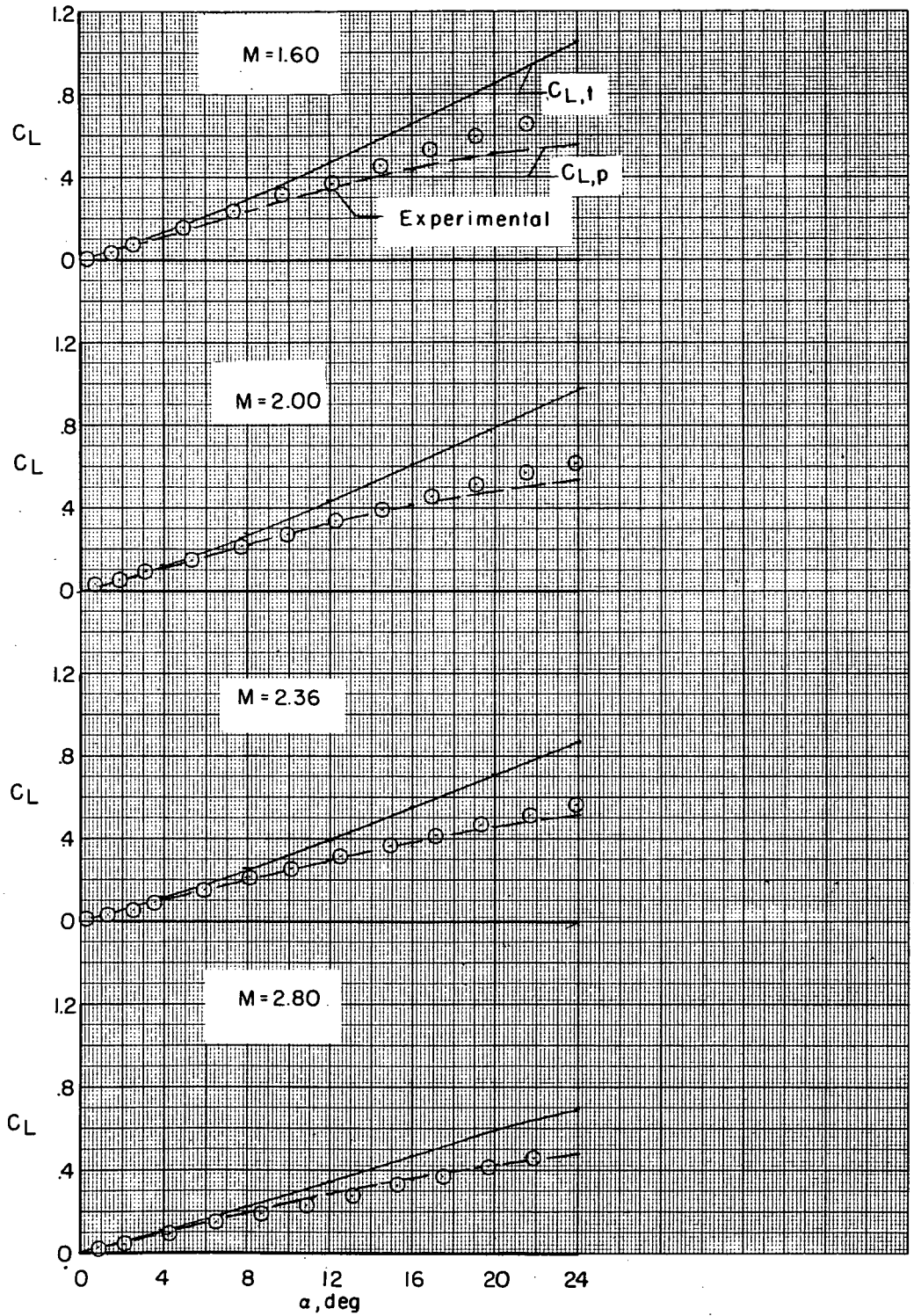
(b) Delta wing; M = 1.60, 2.00, 2.36, and 2.80.

Figure 8.- Continued.



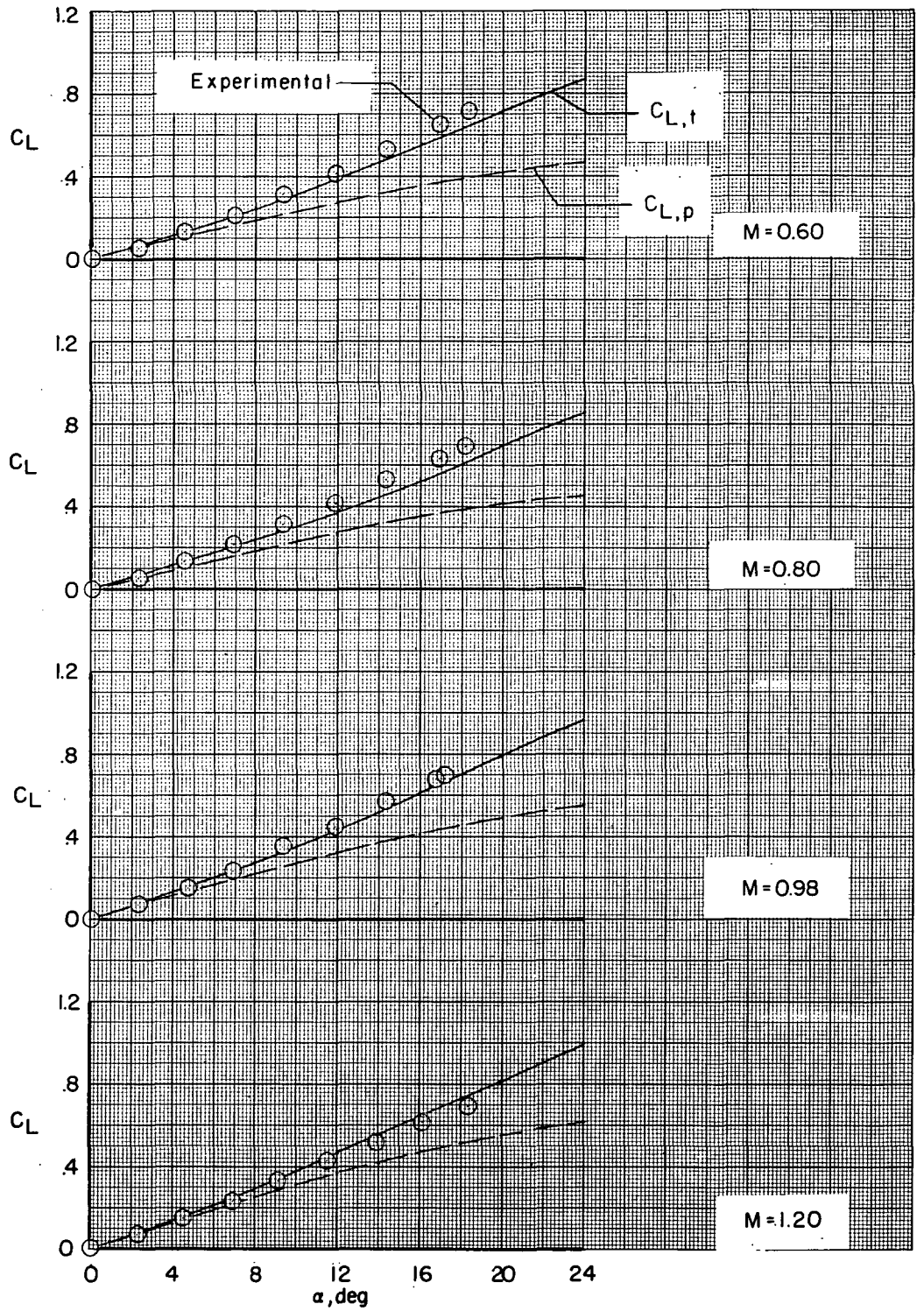
(c) Arrow wing; M = 0.60, 0.80, 0.98, and 1.20.

Figure 8.- Continued.



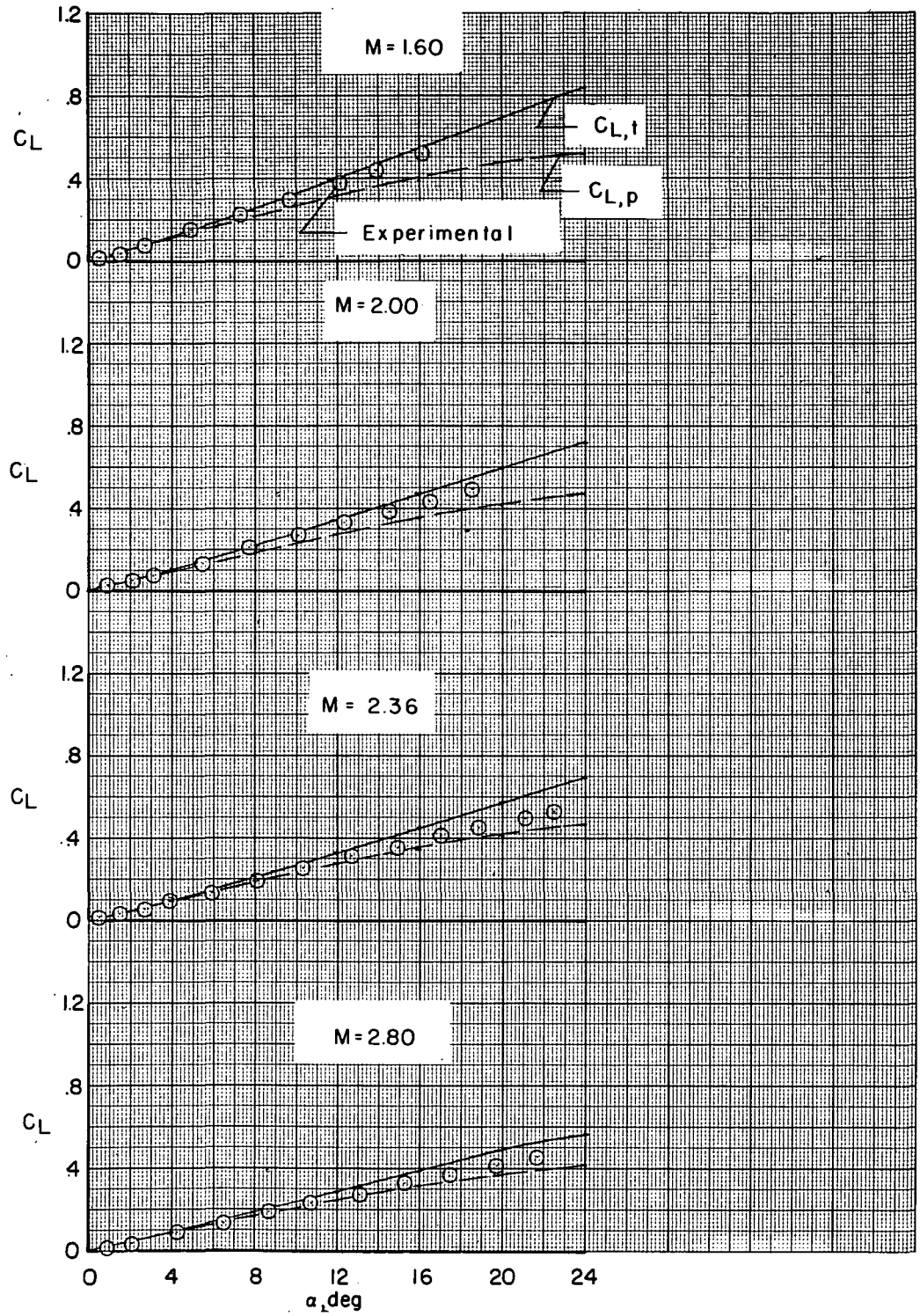
(d) Arrow wing; M = 1.60, 2.00, 2.36, and 2.80.

Figure 8.- Continued.



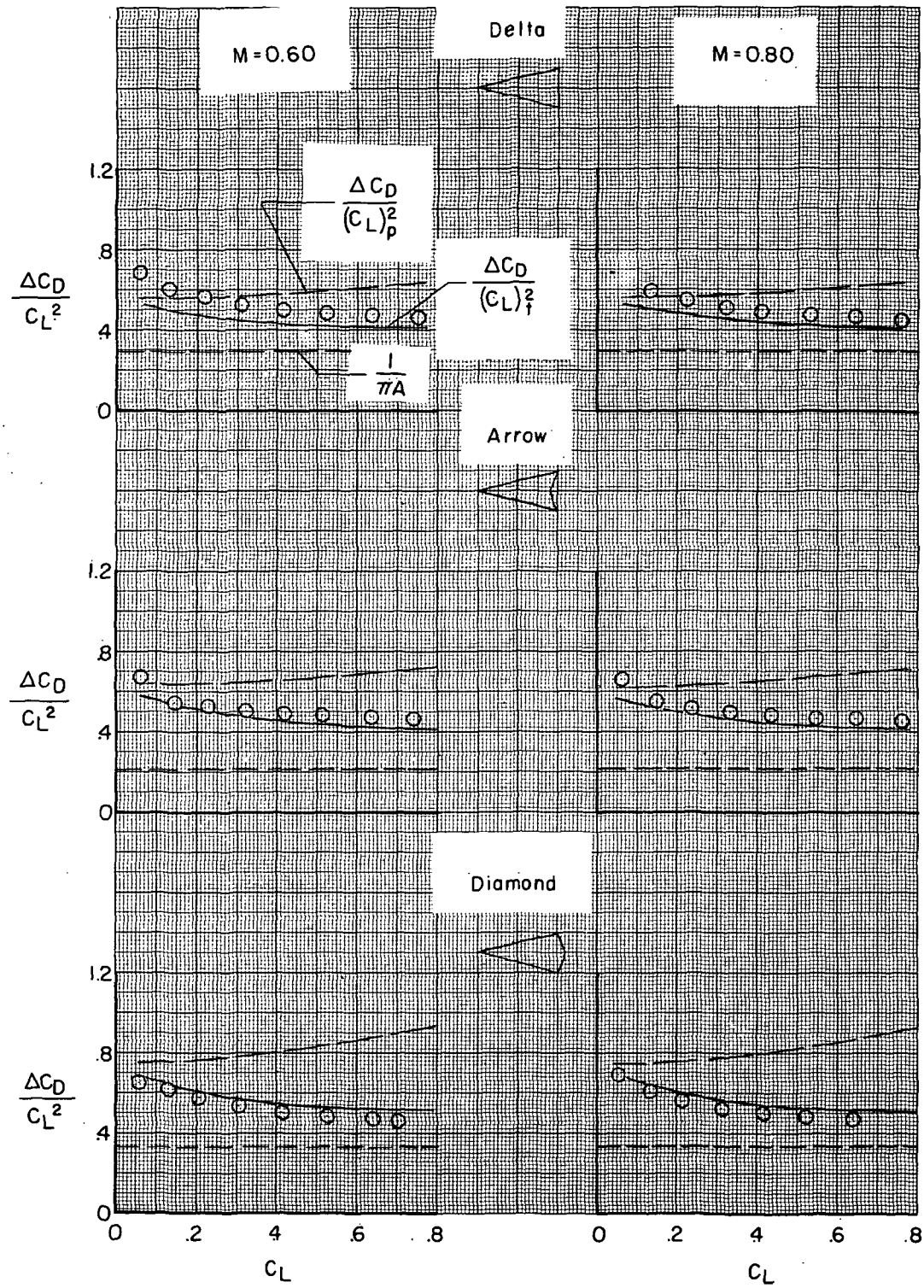
(e) Diamond wing; M = 0.60, 0.80, 0.98, and 1.20.

Figure 8.- Continued.



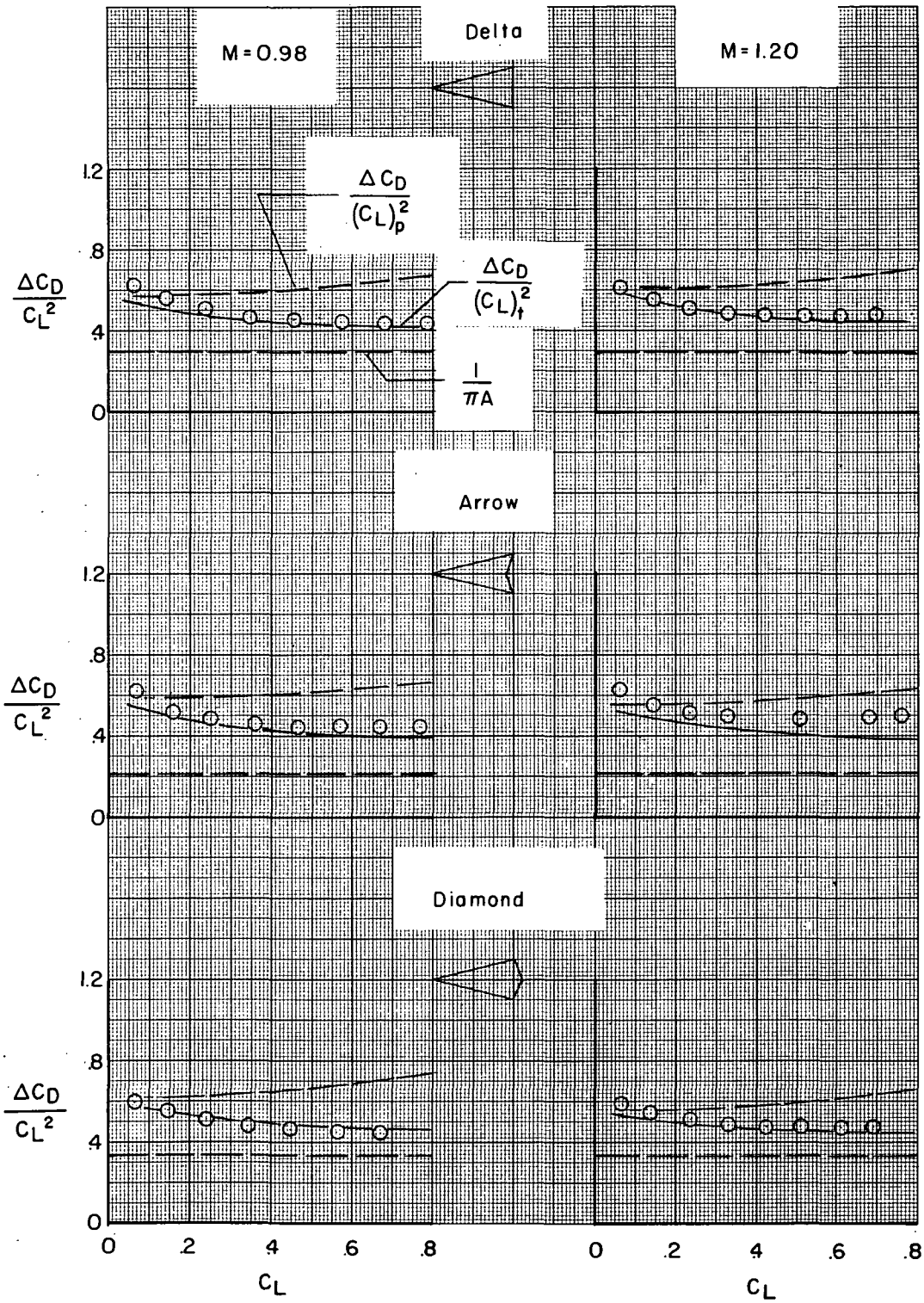
(f) Diamond wing; M = 1.60, 2.00, 2.36, and 2.80.

Figure 8.- Concluded.



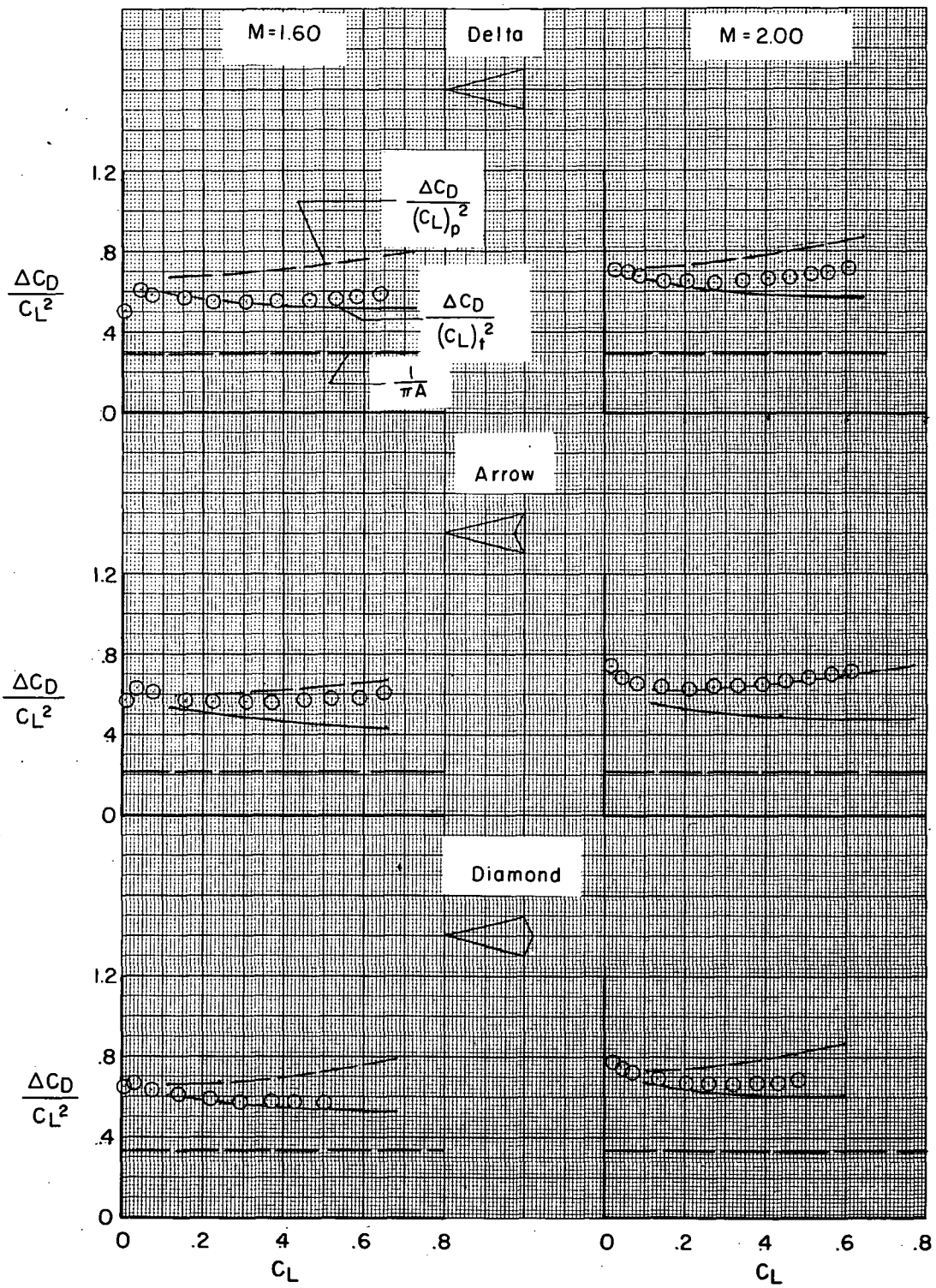
(a) M = 0.60 and 0.80.

Figure 9.- Comparison of theoretical and experimental drag-due-to-lift characteristics.



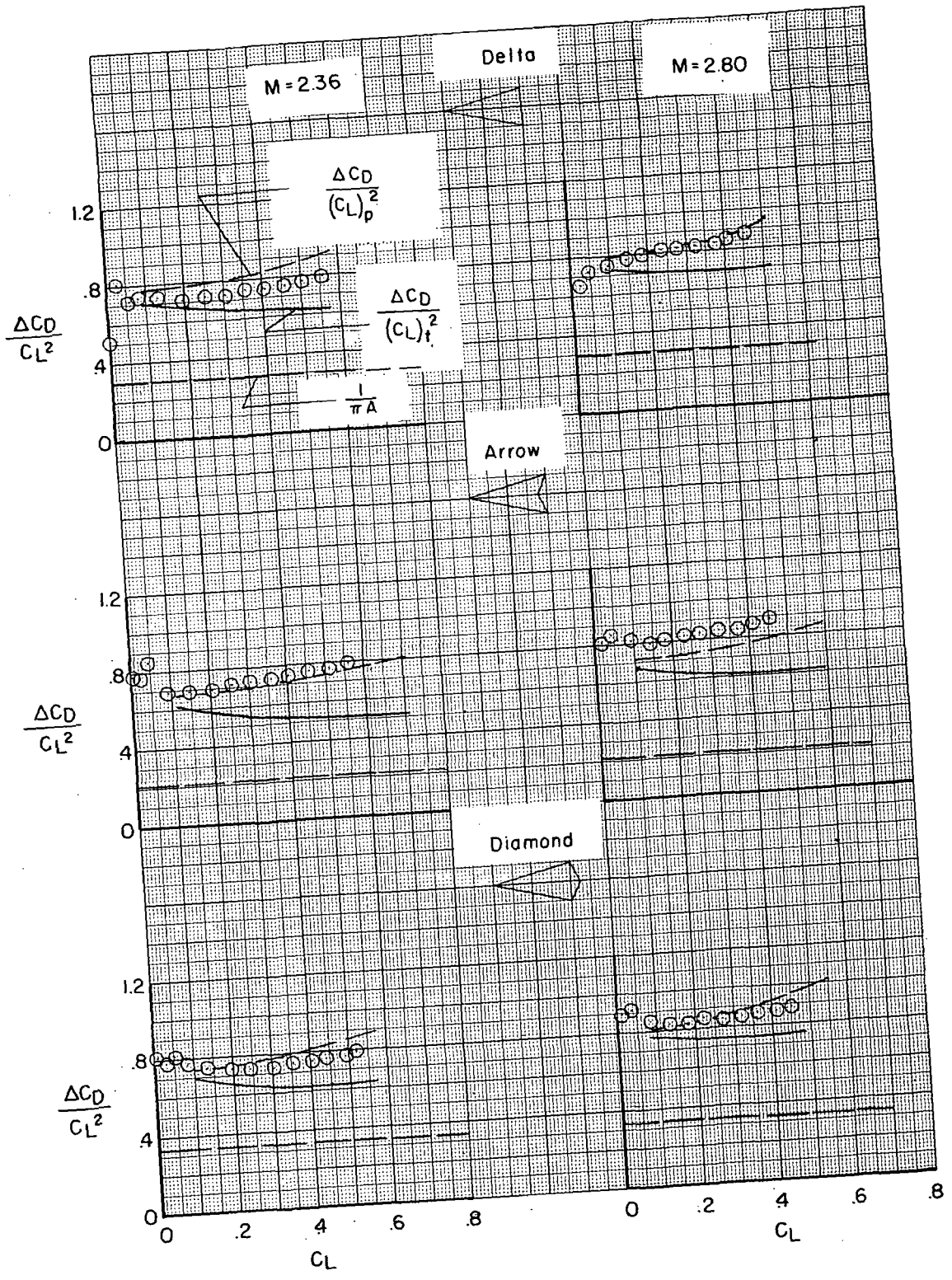
(b) M = 0.98 and 1.20.

Figure 9.- Continued.



(c) M = 1.60 and 2.00.

Figure 9.- Continued.



(d) M = 2.36 and 2.80.

Figure 9.- Concluded.

NASA-Langley, 1974 L-9433

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—NATIONAL AERONAUTICS AND SPACE ACT OF 1958

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