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SURFACE PRESSURE DISTRIBUTIONS ON 0.0628-SCALE MODELS OF PROPOSED PROJECT FIRE SPACE VEHICLES AT MACH NUMBERS FROM 0.25 TO 4.63

by Albin O. Pearson;
Langley Research Center,
Langley Station, Hampton, Va.

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By Albin O. Pearson

SUMMARY

Pressure distributions over the surface of 0.0628-scale models of a preliminary and a modified Project Fire space vehicle have been determined at Mach numbers from 0.25 to 4.63. Data are presented for the models at angles of attack from -8° to 8°.

INTRODUCTION

Project Fire is a flight reentry program being conducted by the National Aeronautics and Space Administration for the purpose of studying total heat transfer, ultrahigh-temperature air radiance, material response, and radio blackout effects at hyperbolic velocities. The Project Fire vehicle consists of an instrumented, blunt-shaped reentry package which is attached by an adapter to an Antares-IIA5 rocket motor. These components are enclosed by a heat shield and a guidance-unit shell. This assembly (designated velocity package) is mounted by means of an adapter to an Atlas D first-stage launch vehicle, which will launch the velocity package along a ballistic trajectory. Prior to reentry, the Antares motor will accelerate the reentry package to a velocity of about 37,000 feet per second. When this velocity is reached, the reentry package separates from the Antares motor and reenters the atmosphere.

Pressure distributions over the forward portion of a preliminary version of the Project Fire space vehicle have been obtained to aid in the structural design of the vehicle and in determining the size and location of vents. These results are presented in reference 1 for Mach numbers from about 0.25 to 0.60. Additional pressure distributions for this same preliminary version have been determined for Mach numbers from 0.80 to 4.63.

Since the publication of reference 1 and completion of the tests at the higher Mach numbers, however, the configuration shape has been modified. These modifications consist of an increase in the length of the velocity-package guidance-unit shell of 10.35 inches (full scale) and of a change in shape of the shell from a cylinder to a low-half-angle frustum-boattail. Additional wind-tunnel tests have

therefore been made by the National Aeronautics and Space Administration to determine the pressure distributions over the surface of a model having these modifications.

The present paper presents the pressure distributions over the surface of preliminary and modified versions of the Project Fire space vehicle. These data were obtained at Mach numbers from 0.80 to 4.63 for the preliminary version and from 0.25 to 1.90 for the modified version at angles of attack from -8° to 8°.

SYMBOLS

C_p	pressure coefficient, $\frac{p - p_\infty}{q_\infty}$
l	overall model length, 25.200 or 25.850 in.
M	free-stream Mach number
p	orifice pressure, lb/sq ft
p_∞	free-stream static pressure, lb/sq ft
p_t	free-stream stagnation pressure, lb/sq ft
q_∞	free-stream dynamic pressure, lb/sq ft
R	Reynolds number, per foot
T_t	free-stream stagnation temperature, $^{\circ}F$
x	orifice location measured from model nose, in.
α	angle of attack of model center line, deg
ϕ	angle of roll of model I or angular location of orifice rows on model II, measured from vertical, deg

MODELS, TESTS, AND ACCURACY

Models

Two 0.0628-scale wood models, designated as model I and model II, were tested. Details of model I are given in figure 1, and a photograph is presented in figure 2. This model is a preliminary version of the velocity package attached by an adapter to the forebody of an Atlas D first-stage launch vehicle. The model was instrumented with forty-two 0.043-inch-diameter pressure orifices located in a single longitudinal row along the surface. Locations of the pressure orifices

are given in figure 1. Complete pressure distributions were obtained by rotating the model about its center line.

Details of a modified configuration, referred to as model II, are given in figure 3, and a photograph is presented in figure 4. This model incorporates an increase in length of the velocity-package guidance-unit shell and a low-half-angle frustum-boattail on the guidance-unit shell. In all other respects it is the same as model I except that it was instrumented with a total of ninety-one 0.043-inch-diameter orifices, ninety of which were located longitudinally in five rows at meridian angles ϕ of 0°, 15°, 30°, 50°, and 90°. The orifice row along the upper surface ($\phi = 0^\circ$) was extended to provide data on the heat shield and Atlas forebody for comparison with data from model I. Orifices 1, 17, 33, 49, and 65 are rearward facing and are located at the rear of the heat shield. Orifice 89 is a total-pressure tube located against the model lower surface ($\phi = 180^\circ$) at $x = 8.348$ inches. The locations of all orifices are given in figure 3.

Tests and Accuracy

The tests were conducted in the Langley 8-foot transonic pressure tunnel at Mach numbers from 0.25 to 1.20 and in the Langley Unitary Plan wind tunnel at Mach numbers from 1.47 to 4.63. Both of these facilities are variable-pressure, continuous-, return-flow tunnels. The 8-foot transonic pressure tunnel has longitudinal slots in the upper and lower tunnel walls, which allow the Mach number to be varied continuously from 0 to 1.20. The Unitary Plan wind tunnel has two test sections 4 feet square and approximately 7 feet in length. An asymmetric sliding-block nozzle provides a means to vary the Mach number continuously from about 1.4 to 2.9 in the low Mach number test section and from about 2.3 to 4.7 in the high Mach number test section.

Model I was tested through a Mach number range from 0.80 to 4.63 whereas model II was tested through a Mach number range from 0.25 to 1.90. Both models were tested at angles of attack of $\pm 8^\circ$, $\pm 4^\circ$, and 0°; and at roll angles (or orifice angular locations) of 0°, 15°, 30°, 50°, and 90°. The test conditions for both models are summarized as follows:

Model I			
M	p_t, lb/sq ft abs	T_t, $^\circ$F	R
0.80	2,120	121	3.8×10^6
1.00	2,120	121	4.1
1.20	2,120	121	4.2
1.47	1,440	125	2.8
1.90	1,800	125	3.0
2.70	2,824	150	3.0
3.40	4,101	150	3.0
4.63	7,934	175	3.0

Model II			
M	p_t, lb/sq ft abs	T_t, $^\circ$F	R
0.25	4,223	121	3.0×10^6
.40	2,117	121	2.3
.60	2,115	121	3.1
.80	2,115	121	3.7
.85	2,106	120	3.8
.90	2,106	120	3.9
.95	2,106	120	4.0
1.00	2,112	121	4.1
1.05	2,106	120	4.1
1.10	2,106	120	4.2
1.15	2,106	120	4.2
1.20	2,120	121	4.2
1.47	1,565	125	3.0
1.60	1,613	125	3.0
1.90	1,800	125	3.0

Schlieren observations made during the tests show that a wall-reflected disturbance impinged on the models in the region of the conical afterbody for a test Mach number of 1.47 at angles of attack of $\pm 8^{\circ}$. For all other test conditions, however, the models are essentially free of wall-reflected disturbances.

The models were sting mounted. Pressures were measured in the 8-foot transonic pressure tunnel by means of liquid manometers and in the Unitary Plan wind tunnel by means of electrically actuated pressure scanning values.

Based upon the methods used to measure the model surface pressures, it is estimated that the pressure coefficients are accurate to within ± 0.02. The angles of attack are presented as nominal values; however, it is estimated that the maximum correction would be about $\pm 0.1^{\circ}$.

PRESENTATION OF RESULTS

The pressure coefficients are presented in tables I and II for models I and II, respectively. Representative plots of the pressure distributions over the surface of the models are presented as follows:

SUMMARY OF RESULTS

A detailed discussion of the results obtained from wind-tunnel pressure measurements on preliminary (model I) and modified (model II) Project Fire space-vehicle configurations has been omitted in order to expedite publication of the data. However, some of the results obtained in the investigations are mentioned herein. As would be expected, the results for both models (figs. 5 and 6) indicate, for Mach numbers greater than about 0.80, a general decrease in the magnitude of the negative pressure peaks associated with the junctures of conical and cylindrical model sections and a broadening of these peaks as the Mach number is increased. A comparison of figures 5(a) and 6(a) shows that the effect of the change in model shape is, in general, localized to the region in which the shape change was made and is negligible on the cylindrical afterbody section of the model.

Langley Research Center,
National Aeronautics and Space Administration,
Langley Station, Hampton, Va., June 19, 1963.

REFERENCE

1. Henderson, William P.: Pressure Distributions Over the Forward Portion of the Project Fire Space-Vehicle Configuration at Mach Numbers From 0.25 to 0.60. NASA TN D-1612, 1963.

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I

(a) M = 0.80

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.8116	.8064	.7743	.7055	
.010	.3960	.3853	.3397	.2544	
.020	.2540	.2410	.2040	.1246	
.040	.3187	.3150	.2868	.2305	
.060	.2758	.2796	.2701	.2042	
.079	.3038	.2978	.2731	.2178	
.099	.2897	.2841	.2604	.2074	
.139	.2477	.2464	.2216	.1753	
.179	.1007	.0954	.0894	.1947	
.198	.0207	.0196	-.0016	-.0289	
.208	-.1037	-.1015	-.1338	-.1604	
.227	-.9961	-1.0091	-.9938	-1.0536	
.237	-.2471	-.2604	-.3850	-.3491	
.257	-.1033	-.0980	-.1011	-.1313	
.276	-.1156	-.1129	-.1184	-.1358	
.302	-.1934	-.1850	-.1863	-.1679	
.311	-.1581	-.1551	-.1406	-.1477	
.331	.2169	.2183	.1967	.1408	
.351	.2631	.2659	.2405	.2106	
.371	.2681	.2686	.2500	.2214	
.391	.3232	.3237	.3031	.2693	
.412	.3878	.3890	.3668	.3287	
.422	.3237	.3217	.3012	.2594	
.442	.2992	.2990	.2813	.2417	
.461	.2766	.2756	.2564	.2164	
.481	.2517	.2501	.2288	.1880	
.505	.2368	.2355	.2144	.1730	
.525	.2209	.2193	.1995	.1576	
.564	.1951	.1929	.1727	.1300	
.604	.1598	.1575	.1351	.0920	
.644	.1481	.1467	.1265	.0851	
.683	.1210	.1203	.0998	.0579	
.723	.0848	.0845	.0632	.0213	
.763	.0463	.0455	.0247	-.0172	
.802	-.0449	-.0454	-.0655	-.1042	
.822	-.1432	-.1419	-.1568	-.1925	
.851	-1.0014	-.9982	-1.0065	-1.0260	
.861	-.4882	-.5186	-.5279	-.6008	
.881	-.1797	-.1797	-.1948	-.2228	
.921	-.1372	-.1374	-.1500	-.1748	
.960	-.1323	-.1334	-.1455	-.1693	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(a) M = 0.80 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.6755	.6723	.6623	.6321	
.010	.2128	.2086	.1842	.1502	
.020	.1268	.1200	.1041	.0722	
.040	.2364	.2335	.2250	.2033	
.060	.2016	.1945	.1916	.1584	
.079	.2314	.2268	.2178	.1961	
.099	.2183	.2159	.2070	.1879	
.139	.1794	.1778	.1725	.1544	
.179	.0335	.0313	.0236	.0682	
.198	-.0398	-.0415	-.0470	-.0399	
.208	-.1570	-.1596	-.1651	-.1792	
.227	-1.0938	-1.0857	-1.1048	-1.1070	
.237	-.3911	-.3812	-.4147	-.4332	
.257	-.1018	-.1022	-.1037	-.1070	
.276	-.1058	-.1058	-.1086	-.1087	
.302	-.1457	-.1438	-.1425	-.1374	
.311	-.1117	-.1094	-.1112	-.1034	
.331	.1658	.1679	.1653	.1539	
.351	.2314	.2308	.2269	.2155	
.371	.2476	.2471	.2421	.2319	
.391	.2958	.2946	.2898	.2778	
.412	.3468	.3453	.3396	.3244	
.422	.2876	.2859	.2802	.2659	
.442	.2600	.2611	.2535	.2405	
.461	.2327	.2317	.2259	.2133	
.481	.2066	.2037	.1983	.1851	
.505	.1879	.1855	.1797	.1670	
.525	.1698	.1693	.1621	.1480	
.564	.1427	.1416	.1350	.1194	
.604	.1069	.1041	.0969	.0817	
.644	.0947	.0929	.0852	.0717	
.683	.0666	.0648	.0589	.0441	
.723	.0313	.0295	.0231	.0092	
.763	-.0067	-.0090	-.0162	-.0317	
.802	-.0968	-.0981	-.1049	-.1197	
.822	-.1928	-.1958	-.1996	-.2114	
.851	-1.0304	-1.0291	-1.0315	-1.0367	
.861	-.6391	-.6020	-.6708	-.6661	
.881	-.1945	-.1958	-.2009	-.2091	
.921	-.1398	-.1411	-.1462	-.1528	
.960	-.1249	-.1265	-.1330	-.1396	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(a) M = 0.80 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.5232				
.010	.0181				
.020	-.0103				
.040	.1576				
.060	.1278				
.079	.1599				
.099	.1487				
.139	.1096				
.179	-.0307				
.198	-.1000				
.208	-.2122				
.227	-1.1329				
.237	-.4858				
.257	-.1249				
.276	-.0913				
.302	-.1130				
.311	-.0533				
.331	.1519				
.351	.2026				
.371	.2243				
.391	.2623				
.412	.2981				
.422	.2501				
.442	.2211				
.461	.1917				
.481	.1621				
.505	.1422				
.525	.1223				
.564	.0934				
.604	.0559				
.644	.0413				
.683	.0128				
.723	-.0234				
.763	-.0602				
.802	-.1530				
.822	-.2512				
.851	-1.0511				
.861	-.5198				
.881	-.2182				
.921	-.1530				
.960	-.1349				

ERRATA

NASA TECHNICAL NOTE D-1828

THEORETICAL INVESTIGATION OF THE SLIDEOUT DYNAMICS OF A VEHICLE EQUIPPED WITH A TRICYCLE SKID-TYPE LANDING-GEAR SYSTEM

By Richard B. Noll and Robert L. Halasey

August 1963

Replace page 25 with revised version on reverse side of this sheet.

Issued 9-30-63

APPENDIX A

DETERMINATION OF LANDING-GEAR DEFLECTION

The vertical distance z_o from the ground plane to the center of gravity is related to the main-gear geometry as shown in figure 1. Analysis of the geometry yields

$$z_o = h_2' + \left(d \cos \varphi + S_2 \sin \varphi\right)\cos \theta + L_{HM} \sin \theta \tag{A1}$$

where

$$h_2' = h_2 \cos \theta$$

In the absence of rigid-body rotation, the rate of change of vertical height of the point of attachment of the main gear with respect to the ground $\dot{h}_2'$ is equal to the rate of vertical deflection of the main gear $\dot{\delta}_{M_2}$. However, when body rotation is involved, the relationship becomes

$$\dot{h}_2' = \dot{\delta}_{M_2} - \dot{\bar{h}}_2 \tag{A2}$$

where

$\dot{\bar{h}}_2$ = rate of change of vertical height of point of attachment due to rigid-body rotation about the point of gear contact

Differentiation of equation (A1) and substitution of equation (A2) yields the following relation for rate of vertical deflection of a nonrigid right main gear

$$\dot{\delta}_{M_2} = \dot{\bar{h}}_2 + \dot{z}_o - \left[L_{HM} \cos \theta - \left(d \cos \varphi + S_2 \sin \varphi\right)\sin \theta\right]\dot{\theta}$$

$$- \left(S_2 \cos \varphi - d \sin \varphi\right)\dot{\varphi} \cos \theta \tag{A3}$$

The rate of vertical deflection for the left main gear is

$$\dot{\delta}_{M_1} = \dot{\bar{h}}_1 + \dot{z}_o - \left[L_{HM} \cos \theta - \left(d \cos \varphi - S_1 \sin \varphi\right)\sin \theta\right]\dot{\theta}$$

$$+ \left(S_1 \cos \varphi + d \sin \varphi\right)\dot{\varphi} \cos \theta \tag{A4}$$

ERRATA

NASA TECHNICAL NOTE D-1570

ORBIT-LAUNCHED NUCLEAR VEHICLE DESIGN AND PERFORMANCE EVALUATION PROCEDURE FOR ESCAPE AND PLANETARY MISSIONS

By

Ronald J. Harris and Robert E. Austin

June 1963

1. Page 5: The equation that follows equation number (7) is incorrectly written as

$$\frac{F}{m} = \left(\frac{F}{W_o}\right) g_n$$

It should include the subscript "o". The equation is then correctly written as

$$\frac{F}{m_o} = \left(\frac{F}{W_o}\right) g_n$$

2. Page 25: The equation at the bottom of the page is incorrectly written as

$$\Delta(\Delta V_{id})_I = -69.0 \text{ m/sec}$$

Hence for an I_{sp} of 885 sec,

$$\Delta(\Delta V_{id})_I = 0.85(-69.0)$$

$$= -58.7 \text{ m/sec}$$

It is correctly written as

$$\Delta(\Delta V_{id})_I = +69.0 \text{ m/sec}$$

Hence for an I_{sp} of 885 sec,

$$\Delta(\Delta V_{id})_I = 0.85(+69.0)$$

$$= +58.7 \text{ m/sec}$$

3. Page 26: The second equation near the top of this page is incorrectly written as

$$\Delta(\Delta V_{id})_{h_o} = \frac{300 - h_o}{100} \left[\Delta(\Delta V_{id})\right]_{100}$$

$$= 9400.0 - 58.7 + 69.0$$

$$= 9410.3 \text{ m/sec}$$

It is correctly written as

$$(\Delta V_{id})_{h_o} = \frac{300 - h_o}{100} \left[\Delta(\Delta V_{id})\right]_{100}$$

$$= \frac{300 - 375}{100} (92)$$

$$= 69.0 \text{ m/sec}$$

Finally, from equation 26,

$$\Delta V_{id} = (\Delta V_{id})_{ref} + \Delta(\Delta V_{id})_I + \Delta(\Delta V_{id})_{h_o}$$

$$= 9400.0 + 58.7 - 69.0$$

$$= 9389.7 \text{ m/sec}$$

4. Page 40: The units on the vertical scale are incorrectly written as (h_b) ref (km). They are correctly written as $(h_b)_{ref}$ (N.M.).

5. Page 41: The numeral 0.5 on the horizontal scale is incorrectly placed. It is correctly written with the numeral moved to the next heavy line to the right.

6. Page 62: The numeral 0.5 on the horizontal scale is incorrectly placed. It is correctly written with the numeral moved to the next heavy line to the left.

7. Page 65: Under example number 2, Predicted column, the third numeral is incorrectly written as 9410. 3. It is correctly written as 9389. 7.

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(a) M = 0.80 - Continued

$\alpha = 4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000					
.005	.3511	.3628	.3849	.4356	.5391
.010	-.1960	-.1781	-.1662	-.0943	.0480
.020	-.1737	-.1374	-.1527	-.0943	.0170
.040	.0788	.0851	.0886	.1083	.1524
.060	.0574	.0665	.0813	.0926	.1294
.079	.0914	.0978	.1020	.1170	.1560
.099	.0815	.0842	.0871	.1033	.1430
.139	.0435	.0467	.0483	.0649	.1023
.179	-.0914	-.0880	-.0862	.0254	.0391
.198	-.1580	-.1545	-.1523	-.0874	-.0703
.208	-.2652	-.2626	-.2641	-.2515	-.2224
.227	-1.0403	-1.0256	-1.0854	-1.1027	-1.1199
.237	-.5196	-.5119	-.5219	-.5049	-.4777
.257	-.2032	-.1935	-.1861	-.1608	-.1326
.276	-.0874	-.0850	-.0897	-.0924	-.1145
.302	-.0815	-.0830	-.0934	-.0996	-.1375
.311	.0063	.0059	-.0083	-.0262	-.0634
.331	.1412	.1440	.1420	.1419	.1403
.351	.1819	.1847	.1800	.1832	.1827
.371	.2028	.2051	.2026	.2049	.2080
.391	.2312	.2329	.2330	.2397	.2514
.412	.2530	.2575	.2591	.2693	.2924
.422	.2154	.2177	.2153	.2225	.2346
.442	.1869	.1892	.1863	.1909	.2048
.461	.1551	.1597	.1560	.1618	.1773
.481	.1262	.1276	.1266	.1329	.1488
.505	.1017	.1040	.1008	.1088	.1284
.525	.0810	.0834	.0809	.0893	.1113
.564	.0492	.0521	.0493	.0580	.0797
.604	.0117	.0136	.0116	.0204	.0426
.644	-.0055	-.0030	-.0061	.0032	.0269
.683	-.0353	-.0311	-.0332	-.0244	-.0016
.723	-.0715	-.0681	-.0690	-.0598	-.0323
.763	-.1131	-.1106	-.1110	-.0996	-.0743
.802	-.2082	-.2042	-.2030	-.1894	-.1601
.822	-.3086	-.3065	-.3029	-.2895	-.2591
.851	-.9968	-1.0012	-1.0501	-1.0737	-1.0752
.861	-.4240	-.4240	-.4749	-.5240	-.6882
.881	-.2490	-.2432	-.2440	-.2315	-.2239
.921	-.1757	-.1722	-.1739	-.1686	-.1661
.960	-.1603	-.1573	-.1622	-.1568	-.1539

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(a) M = 0.80 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.1780	.1892	.2185	.3054	.5086
.010	-.3948	-.3807	-.3407	-.2334	.0385
.020	-.2906	-.2218	-.2954	-.2063	.0067
.040	.0213	.0167	.0130	.0349	.1226
.060	.0087	.0104	.0139	.0294	.1035
.079	.0395	.0368	.0328	.0525	.1252
.099	.0300	.0241	.0179	.0344	.1063
.139	-.0058	-.0117	-.0178	-.0019	.0633
.179	-.1367	-.1422	-.1473	.0013	.0271
.198	-.2009	-.2056	-.2100	-.1610	-.0941
.208	-.3068	-.3110	-.3135	-.3006	-.2532
.227	-.6673	-.6646	-.7082	-.8357	-1.0254
.237	-.4875	-.4993	-.5225	-.5239	-.4331
.257	-.2576	-.2703	-.2792	-.2357	-.1609
.276	-.1032	-.1127	-.1220	-.1102	-.1415
.302	-.0416	-.0525	-.0728	-.0893	-.1333
.311	.0159	.0122	.0098	-.0178	-.0787
.331	.1114	.1091	.1047	.1105	.0819
.351	.1589	.1549	.1454	.1459	.1383
.371	.1862	.1810	.1697	.1666	.1664
.391	.2056	.2033	.1937	.1952	.2071
.412	.2192	.2191	.2113	.2156	.2513
.422	.1929	.1874	.1747	.1762	.1885
.442	.1675	.1621	.1484	.1464	.1592
.461	.1359	.1281	.1156	.1163	.1351
.481	.1046	.0974	.0826	.0864	.1103
.505	.0783	.0711	.0581	.0606	.0886
.525	.0567	.0497	.0365	.0403	.0715
.564	.0213	.0154	.0030	.0080	.0444
.604	-.0167	-.0236	-.0339	-.0296	.0067
.644	-.0353	-.0425	-.0543	-.0482	-.0087
.683	-.0656	-.0719	-.0813	-.0744	-.0340
.723	-.1040	-.1094	-.1175	-.1070	-.0646
.763	-.1470	-.1534	-.1609	-.1488	-.1031
.802	-.2435	-.2476	-.2512	-.2344	-.1858
.822	-.3444	-.3513	-.3519	-.3305	-.2871
.851	-.7193	-.8120	-1.0039	-1.1182	-1.1022
.861	-.3834	-.4010	-.4471	-.6119	-.5909
.881	-.2608	-.2635	-.2597	-.2461	-.2505
.921	-.1805	-.1855	-.1894	-.1873	-.1984
.960	-.1666	-.1733	-.1798	-.1796	-.1880

TABLE I.- PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(b) M = 1.00

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.9232	.9175	.8925	.8294	
.010	.5081	.4987	.4572	.3816	
.020	.3455	.3311	.2950	.2097	
.040	.4198	.4142	.3915	.3343	
.060	.3843	.3775	.3800	.3116	
.079	.4180	.4074	.3894	.3300	
.099	.4101	.4012	.3821	.3282	
.139	.3854	.3825	.3606	.3149	
.179	.2780	.2706	.2698	.0415	
.198	.2389	.2354	.2173	.0819	
.208	.1646	.1620	.1381	.1084	
.227	-.6441	-.6519	-.6623	-.6891	
.237	-.5820	-.5899	-.6014	-.6319	
.257	-.4477	-.4565	-.4815	-.5170	
.276	-.3521	-.3593	-.3871	-.4207	
.302	-.2020	-.1978	-.3142	-.1765	
.311	-.2089	-.2046	-.3135	-.1844	
.331	-.1783	-.1787	-.1519	-.1650	
.351	-.0706	-.0740	.0393	-.0900	
.371	.0906	.0828	.2055	.0332	
.391	.2877	.2793	.3369	.1968	
.412	.4669	.4595	.4342	.3632	
.422	.4896	.4858	.4274	.3999	
.442	.4852	.4829	.4263	.4176	
.461	.4468	.4429	.4026	.3844	
.481	.4101	.4063	.3742	.3434	
.505	.3847	.3803	.3541	.3181	
.525	.3616	.3584	.3358	.2962	
.564	.3301	.3257	.3050	.2631	
.604	.2920	.2876	.2687	.2230	
.644	.2827	.2785	.2609	.2172	
.683	.2604	.2574	.2392	.1942	
.723	.2356	.2307	.2134	.1697	
.763	.2166	.2116	.1933	.1492	
.802	.1646	.1602	.1424	.1013	
.822	.1107	.1088	.0943	.0602	
.851	-.5364	-.5371	-.5424	-.5619	
.861	-.4861	-.4889	-.4969	-.5237	
.881	-.4207	-.4255	-.4338	-.4683	
.921	-.3156	-.3197	-.3303	-.3739	
.960	-.2476	-.2550	-.2682	-.3123	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(b) M = 1.00 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.7955	.8015	.7878	.7595	
.010	.3344	.3352	.3063	.2813	
.020	.2096	.2052	.1871	.1536	
.040	.3394	.3401	.3279	.3097	
.060	.3100	.3074	.3034	.2689	
.079	.3445	.3455	.3347	.3119	
.099	.3373	.3391	.3283	.3101	
.139	.3167	.3200	.3121	.2957	
.179	.2146	.2160	.2079	.0408	
.198	.1840	.1846	.1770	.0786	
.208	.1168	.1170	.1113	.0968	
.227	-.6820	-.6819	-.6875	-.6949	
.237	-.6368	-.6345	-.6425	-.6515	
.257	-.5307	-.5279	-.5373	-.5535	
.276	-.4461	-.4448	-.4512	-.4652	
.302	-.1188	-.1119	-.1144	-.0948	
.311	-.1210	-.1155	-.1187	-.0991	
.331	-.1228	-.1206	-.1235	-.1048	
.351	-.0875	-.0870	-.0928	-.0790	
.371	-.0148	-.0212	-.0287	-.0162	
.391	.0931	.0820	.0696	.0846	
.412	.2491	.2368	.2195	.2315	
.422	.3286	.3190	.3004	.3083	
.442	.4308	.4279	.4140	.4077	
.461	.4372	.4395	.4306	.4171	
.481	.4042	.4064	.3999	.3833	
.505	.3661	.3682	.3625	.3452	
.525	.3344	.3380	.3311	.3148	
.564	.2898	.2919	.2846	.2681	
.604	.2456	.2445	.2393	.2232	
.644	.2304	.2322	.2245	.2092	
.683	.2063	.2091	.2007	.1863	
.723	.1812	.1818	.1744	.1601	
.763	.1621	.1624	.1535	.1386	
.802	.1128	.1134	.1074	.0915	
.822	.0625	.0630	.0581	.0463	
.851	-.5629	-.5610	-.5628	-.5683	
.861	-.5163	-.5146	-.5193	-.5265	
.881	-.4630	-.4624	-.4671	-.4774	
.921	-.3788	-.3793	-.3850	-.3974	
.960	-.3170	-.3188	-.3270	-.3410	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(b) M = 1.00 - Continued

$\alpha = 4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000					
.005	.5245	.5354	.5519	.5914	.6736
.010	.0068	.0175	.0220	.0784	.1858
.020	-.2518	-.2320	-.1473	-.1081	.0656
.040	.2002	.2028	.2073	.2191	.2543
.060	.1804	.1866	.2027	.2102	.2389
.079	.2153	.2193	.2261	.2375	.2715
.099	.2099	.2114	.2156	.2282	.2622
.139	.1912	.1931	.1972	.2087	.2400
.179	.0997	.1006	.1033	-.0488	.0574
.198	.0756	.0766	.0821	.0791	.0703
.208	.0169	.0164	.0237	.0309	.0552
.227	-.7339	-.7373	-.7378	-.7357	-.7192
.237	-.7098	-.7123	-.7093	-.7036	-.6794
.257	-.2781	-.3580	-.5877	-.6236	-.5930
.276	-.1016	-.1025	-.1236	-.1528	-.5191
.302	-.0530	-.0582	-.0840	-.0944	-.1270
.311	-.0739	-.0736	-.0908	-.0966	-.1342
.331	-.0898	-.0846	-.0945	-.0973	-.1324
.351	-.0753	-.0703	-.0822	-.0854	-.1005
.371	-.0508	-.0466	-.0595	-.0519	-.0524
.391	-.0170	-.0161	-.0271	.0003	.0144
.412	.0258	.0246	.0277	.0884	.1141
.422	.0471	.0459	.0579	.1317	.1682
.442	.1041	.1057	.1389	.2242	.2687
.461	.1559	.1612	.2063	.2761	.3178
.481	.1967	.2042	.2484	.2923	.3243
.505	.2250	.2347	.2674	.2836	.3042
.525	.2333	.2411	.2620	.2648	.2787
.564	.2196	.2207	.2292	.2227	.2356
.604	.1825	.1805	.1804	.1756	.1890
.644	.1530	.1522	.1529	.1503	.1693
.683	.1217	.1207	.1238	.1238	.1428
.723	.0889	.0884	.0918	.0960	.1180
.763	.0576	.0612	.0665	.0734	.0954
.802	-.0063	.0014	.0125	.0237	.0516
.822	-.0743	-.0617	-.0437	-.0304	-.0025
.851	-.6251	-.6377	-.6262	-.6182	-.6012
.861	-.5480	-.5896	-.5815	-.5729	-.5539
.881	-.4492	-.5086	-.5289	-.5235	-.5033
.921	-.3927	-.4029	-.4415	-.4656	-.4373
.960	-.3618	-.3627	-.3630	-.3958	-.3853

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(b) M = 1.00 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.3892	.4035	.4279	.4916	.6550
.010	-.1524	-.1340	-.1114	-.0167	.1766
.020	-.4096	-.4121	-.3824	-.2937	.0690
.040	.1734	.1702	.1547	.1512	.2176
.060	.1439	.1421	.1474	.1566	.2057
.079	.1665	.1648	.1658	.1753	.2359
.099	.1590	.1561	.1550	.1623	.2223
.139	.1381	.1381	.1367	.1421	.1982
.179	.0502	.0481	.0477	-.0995	.1085
.198	.0272	.0280	.0272	.0788	.0453
.208	-.0321	-.0268	-.0264	-.0225	.0154
.227	-.7417	-.7599	-.7626	-.7642	-.7441
.237	-.7248	-.7350	-.7385	-.7349	-.6984
.257	-.2597	-.2813	-.4119	-.5311	-.6105
.276	-.1290	-.1402	-.1593	-.1697	-.5242
.302	-.0895	-.1006	-.1217	-.1493	-.1875
.311	-.1104	-.1194	-.1381	-.1594	-.1839
.331	-.1153	-.1247	-.1362	-.1557	-.1335
.351	-.0873	-.0948	-.1096	-.1248	-.0770
.371	-.0439	-.0534	-.0667	-.0498	.0121
.391	.0103	-.0019	-.0066	.0359	.1144
.412	.0724	.0636	.0849	.1407	.2330
.422	.0994	.0917	.1197	.1684	.2539
.442	.1594	.1587	.2015	.2240	.2885
.461	.2042	.2062	.2396	.2376	.2770
.481	.1831	.2300	.2468	.2323	.2500
.505	.0786	.2376	.2357	.2161	.2259
.525	.0182	.2267	.2158	.1973	.2032
.564	-.0029	.1899	.1748	.1613	.1715
.604	-.0084	.1414	.1262	.1156	.1324
.644	-.0202	.1122	.1017	.0936	.1158
.683	-.0199	.0831	.0736	.0683	.0939
.723	-.0238	.0507	.0452	.0424	.0719
.763	-.0285	.0254	.0214	.0218	.0532
.802	-.0313	-.0318	-.0276	-.0231	.0093
.822	-.0938	-.0905	-.0822	-.0722	-.0443
.851	-.6490	-.6547	-.6477	-.6439	-.6311
.861	-.5923	-.6072	-.6052	-.6103	-.5925
.881	-.5096	-.5349	-.5584	-.5717	-.5390
.921	-.4206	-.4423	-.4955	-.5173	-.4685
.960	-.3912	-.3941	-.4087	-.4496	-.4109

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(c) M = 1.20

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	1.0228	1.0159	.9883	.9389	
.010	.5777	.5706	.5241	.4769	
.020	.3223	.3111	.2544	.1672	
.040	.4108	.4122	.3751	.3163	
.060	.3844	.3747	.3732	.2888	
.079	.4429	.4375	.3985	.3358	
.099	.4566	.4551	.4168	.3678	
.139	.4765	.4788	.4478	.4008	
.179	.4175	.4160	.3806	.1215	
.198	.4117	.4087	.3813	.3358	
.208	.3646	.3635	.3415	.3007	
.227	-.3371	-.3404	-.3563	-.3786	
.237	-.2992	-.3030	-.3191	-.3421	
.257	-.2201	-.2242	-.2467	-.2797	
.276	-.1663	-.1695	-.1916	-.2224	
.302	-.5201	-.5127	-.5203	-.4991	
.311	-.3557	-.3631	-.3762	-.4042	
.331	-.0803	-.0808	-.1099	-.1665	
.351	-.0390	-.0351	-.0619	-.1008	
.371	-.0198	-.0180	-.0440	-.0762	
.391	.0050	.0094	-.0250	-.0484	
.412	.3364	.3540	.3181	.2766	
.422	.3005	.3097	.2733	.2402	
.442	.3018	.3132	.2780	.2501	
.461	.3108	.3222	.2861	.2546	
.481	.3110	.3151	.2790	.2408	
.505	.3152	.3155	.2845	.2466	
.525	.3063	.3081	.2771	.2392	
.564	.3015	.3058	.2687	.2315	
.604	.2874	.2930	.2572	.2245	
.644	.2980	.3007	.2666	.2264	
.683	.2918	.2915	.2601	.2178	
.723	.2816	.2784	.2502	.2079	
.763	.2825	.2844	.2441	.1979	
.802	.2735	.2806	.2345	.2028	
.822	.2589	.2694	.2377	.2095	
.851	-.2455	-.2431	-.2518	-.2727	
.861	-.2140	-.2146	-.2275	-.2522	
.881	-.1791	-.1845	-.1993	-.2279	
.921	-.1323	-.1358	-.1545	-.1853	
.960	-.1082	-.1122	-.1314	-.1665	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(c) M = 1.20 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.9093	.9075	.8913	.8738	
.010	.4356	.4385	.4078	.3944	
.020	.0630	.0710	.0442	.0094	
.040	.3098	.3198	.2957	.2824	
.060	.2951	.3019	.2867	.2511	
.079	.3593	.3691	.3407	.3236	
.099	.3757	.3855	.3592	.3462	
.139	.4013	.4113	.3883	.3762	
.179	.3512	.3567	.3359	.1140	
.198	.3538	.3567	.3391	.3331	
.208	.3149	.3179	.3029	.2907	
.227	-.3690	-.3670	-.3749	-.3810	
.237	-.3410	-.3373	-.3473	-.3545	
.257	-.2800	-.2758	-.2870	-.2975	
.276	-.2332	-.2291	-.2419	-.2528	
.302	-.5310	-.5288	-.5320	-.5219	
.311	-.4141	-.4072	-.4174	-.4228	
.331	-.1580	-.1504	-.1604	-.1740	
.351	-.0974	-.0890	-.1025	-.1122	
.371	-.0695	-.0592	-.0753	-.0834	
.391	-.0066	.0214	-.0076	.0040	
.412	.2928	.3227	.2911	.2849	
.422	.2733	.2949	.2659	.2627	
.442	.2812	.2994	.2723	.2713	
.461	.2854	.2968	.2755	.2713	
.481	.2752	.2840	.2640	.2566	
.505	.2697	.2789	.2580	.2515	
.525	.2585	.2693	.2471	.2400	
.564	.2482	.2553	.2339	.2243	
.604	.2261	.2412	.2141	.2122	
.644	.2361	.2463	.2225	.2116	
.683	.2287	.2319	.2155	.2017	
.723	.2158	.2178	.2023	.1864	
.763	.2158	.2226	.1969	.1810	
.802	.2077	.2200	.1832	.1854	
.822	.1940	.2181	.1822	.1896	
.851	-.2787	-.2684	-.2719	-.2805	
.861	-.2489	-.2435	-.2466	-.2576	
.881	-.2168	-.2211	-.2227	-.2343	
.921	-.1812	-.1808	-.1885	-.1985	
.960	-.1619	-.1562	-.1703	-.1810	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(c) M = 1.20 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.8030				
.010	.3220				
.020	-.1220				
.040	.1789				
.060	.2432				
.079	.2970				
.099	.3088				
.139	.3380				
.179	.2923				
.198	.2983				
.208	.2647				
.227	-.3916				
.237	-.3712				
.257	-.3229				
.276	-.2826				
.302	-.5129				
.311	-.4480				
.331	-.2192				
.351	-.1357				
.371	-.0889				
.391	.0787				
.412	.2708				
.422	.2615				
.442	.2673				
.461	.2615				
.481	.2494				
.505	.2410				
.525	.2263				
.564	.2016				
.604	.1828				
.644	.1886				
.683	.1751				
.723	.1652				
.763	.1655				
.802	.1578				
.822	.1457				
.851	-.3062				
.861	-.2726				
.881	-.2468				
.921	-.2164				
.960	-.1916				

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(c) M = 1.20 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000					
.005	.6922	.6902	.7081	.7346	.8127
.010	.2013	.2123	.2085	.2493	.3405
.020	-.2484	-.2393	-.2222	-.1871	-.0728
.040	.0051	.0253	.0578	.1294	.2293
.060	.2179	.2161	.2232	.2183	.2666
.079	.2487	.2522	.2526	.2595	.2976
.099	.2554	.2571	.2568	.2637	.3046
.139	.2832	.2837	.2841	.2922	.3312
.179	.2308	.2308	.2312	-.0356	.1323
.198	.2384	.2397	.2408	.3343	.2312
.208	.2096	.2107	.2123	.2179	.2518
.227	-.4106	-.4134	-.4145	-.4131	-.3953
.237	-.3946	-.3958	-.3966	-.3939	-.3710
.257	-.3547	-.3548	-.3536	-.3485	-.3220
.276	-.3172	-.3186	-.3177	-.3107	-.2804
.302	-.4817	-.4913	-.4988	-.5061	-.5107
.311	-.4503	-.4540	-.4564	-.4540	-.4348
.331	-.2519	-.2514	-.2486	-.2446	-.2060
.351	-.1338	-.1326	-.1405	-.1541	-.1439
.371	-.0225	-.0193	-.0370	-.0688	-.1022
.391	.1056	.1143	.1043	.0981	.0394
.412	.2077	.2177	.2158	.2384	.2655
.422	.2141	.2193	.2174	.2256	.2412
.442	.2364	.2395	.2363	.2346	.2441
.461	.2384	.2397	.2363	.2318	.2409
.481	.2282	.2276	.2238	.2218	.2332
.505	.2128	.2128	.2091	.2077	.2271
.525	.1953	.1950	.1918	.1921	.2129
.564	.1725	.1738	.1699	.1726	.1932
.604	.1491	.1521	.1534	.1572	.1823
.644	.1450	.1456	.1440	.1482	.1749
.683	.1360	.1360	.1305	.1326	.1610
.723	.1257	.1252	.1229	.1233	.1450
.763	.1257	.1252	.1191	.1192	.1403
.802	.1155	.1168	.1175	.1355	.1617
.822	.0947	.1015	.1075	.1159	.1422
.851	-.3387	-.3324	-.3318	-.3283	-.3095
.861	-.3012	-.2965	-.2982	-.2990	-.2804
.881	-.2638	-.2642	-.2700	-.2779	-.2544
.921	-.2276	-.2344	-.2417	-.2459	-.2240
.960	-.2051	-.2091	-.2167	-.2222	-.2070

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(c) M = 1.20 - Concluded

$\alpha = 8^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000					
.005	.5721	.5849	.6025	.6511	.7906
.010	.0652	.0802	.0977	.1724	.3356
.020	-.3562	-.3441	-.3140	-.2415	.0070
.040	-.1269	-.0891	-.0073	.0377	.1688
.060	.1805	.1536	.1538	.1402	.1915
.079	.2201	.2115	.2066	.2140	.2546
.099	.2134	.2080	.2048	.2070	.2667
.139	.2275	.2215	.2173	.2207	.2818
.179	.1807	.1763	.1769	-.0003	.0980
.198	.1898	.1846	.1811	.3340	.1922
.208	.1619	.1587	.1567	.1609	.2036
.227	-.4280	-.4331	-.4380	-.4417	-.4277
.237	-.4164	-.4190	-.4216	-.4222	-.3996
.257	-.3770	-.3799	-.3848	-.3846	-.3503
.276	-.3376	-.3425	-.3460	-.3436	-.3042
.302	-.3949	-.4110	-.4255	-.4379	-.4799
.311	-.3918	-.4039	-.4139	-.4232	-.4389
.331	-.2486	-.2518	-.2602	-.2703	-.2574
.351	-.1199	-.1232	-.1312	-.1582	-.1822
.371	-.0194	-.0201	-.0287	-.0528	-.1437
.391	.0646	.0658	.0587	.0456	-.0109
.412	.1411	.1481	.1355	.1316	.2075
.422	.1626	.1650	.1510	.1463	.1787
.442	.2006	.1997	.1814	.1728	.1723
.461	.2125	.2051	.1888	.1772	.1723
.481	.2093	.1984	.1849	.1718	.1684
.505	.1997	.1875	.1756	.1647	.1662
.525	.1837	.1728	.1621	.1514	.1563
.564	.1548	.1465	.1397	.1377	.1531
.604	.1279	.1212	.1170	.1133	.1419
.644	.1239	.1151	.1065	.1000	.1319
.683	.1100	.1013	.0942	.0900	.1173
.723	.1014	.0923	.0843	.0776	.1069
.763	.0985	.0872	.0801	.0786	.1034
.802	.0824	.0763	.0773	.0877	.1271
.822	.0611	.0526	.0564	.0639	.1002
.851	-.3726	-.3562	-.3588	-.3574	-.3419
.861	-.3422	-.3069	-.3256	-.3354	-.3179
.881	-.2813	-.2719	-.2929	-.3171	-.2919
.921	-.2275	-.2469	-.2634	-.2929	-.2635
.960	-.2169	-.2242	-.2327	-.2529	-.2459

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(d) M = 1.47

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.4580	1.4680	1.4760	1.4899	
.005	1.1317	1.1217	1.0961	1.0386	
.010	.6424	.6350	.6055	.5506	
.020	.2882	.2811	.2556	.1975	
.040	.3703	.3574	.3260	.2657	
.060	.3781	.3613	.3318	.2736	
.079	.3821	.3632	.3357	.2794	
.099	.3742	.3593	.3338	.2794	
.139	.4193	.3906	.3651	.3107	
.179	.4036	.3906	.3670	.3204	
.198	.3821	.3789	.3573	.3048	
.208	.3762	.3711	.3455	.3068	
.227	-.1288	-.1352	-.1471	-.1753	
.237	-.1248	-.1293	-.1412	-.1693	
.257	-.1053	-.1118	-.1256	-.1558	
.276	-.0739	-.0824	-.1059	-.1245	
.302	-.4105	-.4148	-.4050	-.4113	
.311	-.1836	-.1997	-.2917	-.2591	
.331	-.0426	-.0374	-.0337	-.0855	
.351	-.0250	-.0277	-.0376	-.0737	
.371	-.0132	-.0179	-.0337	-.0621	
.391	-.0055	-.0061	-.0219	-.0522	
.412	.2372	.2363	.2166	.1682	
.422	.2236	.2166	.1949	.1506	
.442	.2176	.2050	.1853	.1390	
.461	.2294	.2245	.2028	.1662	
.481	.2313	.2245	.2028	.1662	
.505	.2294	.2226	.2009	.1624	
.525	.2352	.2284	.2086	.1741	
.564	.2313	.2226	.2028	.1662	
.604	.2372	.2284	.2086	.1701	
.644	.2393	.2322	.2127	.1780	
.683	.2412	.2322	.2146	.1780	
.723	.2470	.2382	.2146	.1780	
.763	.2549	.2401	.2262	.1877	
.802	.2549	.2460	.2283	.1877	
.822	.2372	.2322	.2166	.1761	
.851	-.1053	-.1060	-.1158	-.1440	
.861	-.0935	-.0942	-.1100	-.1363	
.881	-.0798	-.0844	-.1021	-.1264	
.921	-.0602	-.0687	-.0845	-.1069	
.960	-.0525	-.0610	-.0768	-.0932	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(d) M = 1.47 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.4875	1.4930	1.4992	1.5038	
.005	1.0300	1.0253	1.0160	.9868	
.010	.5301	.5276	.5181	.4908	
.020	.1571	.1548	.1433	.1082	
.040	.2547	.2445	.2311	.2057	
.060	.2802	.2738	.2624	.2390	
.079	.2899	.2817	.2701	.2469	
.099	.2860	.2796	.2662	.2469	
.139	.3270	.3188	.2994	.2780	
.179	.3154	.3128	.3033	.2820	
.198	.2957	.2914	.2898	.2741	
.208	.2918	.2895	.2838	.2644	
.227	-.1749	-.1809	-.1847	-.1906	
.237	-.1710	-.1751	-.1808	-.1867	
.257	-.1554	-.1575	-.1633	-.1730	
.276	-.1221	-.1244	-.1339	-.1475	
.302	-.4091	-.4113	-.4034	-.3975	
.311	-.2392	-.2473	-.2804	-.3115	
.331	-.0949	-.0970	-.0891	-.0948	
.351	-.0694	-.0698	-.0716	-.0793	
.371	-.0479	-.0501	-.0540	-.0637	
.391	-.0382	-.0385	-.0403	-.0481	
.412	.1904	.1938	.1960	.1862	
.422	.1825	.1822	.1803	.1667	
.442	.1805	.1782	.1707	.1590	
.461	.1904	.1880	.1861	.1766	
.481	.1904	.1880	.1861	.1785	
.505	.1884	.1861	.1823	.1706	
.525	.1923	.1899	.1861	.1785	
.564	.1865	.1841	.1784	.1667	
.604	.1865	.1861	.1823	.1706	
.644	.1884	.1880	.1842	.1706	
.683	.1884	.1880	.1823	.1648	
.723	.1884	.1880	.1803	.1629	
.763	.1904	.1861	.1842	.1785	
.802	.1904	.1880	.1861	.1785	
.822	.1805	.1822	.1784	.1629	
.851	-.1436	-.1400	-.1438	-.1535	
.861	-.1299	-.1302	-.1359	-.1475	
.881	-.1182	-.1205	-.1262	-.1379	
.921	-.1026	-.1049	-.1086	-.1203	
.960	-.0928	-.0970	-.1027	-.1105	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(d) M = 1.47 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.5135				
.005	.9261				
.010	.4180				
.020	.0329				
.040	.1423				
.060	.1970				
.079	.2186				
.099	.2225				
.139	.2576				
.179	.2538				
.198	.2321				
.208	.2283				
.227	-.2076				
.237	-.2057				
.257	-.1939				
.276	-.1607				
.302	-.4031				
.311	-.2780				
.331	-.1294				
.351	-.0942				
.371	-.0708				
.391	-.0492				
.412	.1678				
.422	.1657				
.442	.1657				
.461	.1775				
.481	.1755				
.505	.1697				
.525	.1697				
.564	.1541				
.604	.1502				
.644	.1502				
.683	.1442				
.723	.1423				
.763	.1423				
.802	.1442				
.822	.1305				
.851	-.1763				
.861	-.1645				
.881	-.1549				
.921	-.1373				
.960	-.1255				

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(d) M = 1.47 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.5244	1.5196	1.5155	1.5083	1.5013
.005	.8087	.8174	.8341	.8628	.9495
.010	.2973	.3063	.3153	.3451	.4368
.020	-.0731	-.0653	-.0520	-.0237	.0597
.040	.0385	.0448	.0541	.0822	.1637
.060	.1130	.1233	.1307	.1529	.2130
.079	.1640	.1686	.1798	.1861	.2287
.099	.1660	.1705	.1798	.1901	.2267
.139	.2012	.2040	.2093	.2175	.2522
.179	.1953	.1982	.2014	.2096	.2443
.198	.1895	.1922	.1956	.2019	.2385
.208	.1856	.1883	.1896	.1959	.2325
.227	-.2299	-.2324	-.2288	-.2277	-.2094
.237	-.2320	-.2324	-.2307	-.2296	-.2114
.257	-.2202	-.2168	-.2170	-.2140	-.1977
.276	-.1848	-.1833	-.1836	-.1806	-.1642
.302	-.3770	-.3760	-.3802	-.3846	-.3979
.311	-.2907	-.2895	-.2917	-.2904	-.2761
.331	-.1437	-.1440	-.1444	-.1472	-.1327
.351	-.0967	-.0968	-.1012	-.1061	-.1053
.371	-.0673	-.0693	-.0716	-.0806	-.0817
.391	.0092	.0074	-.0089	-.0393	-.0699
.412	.1561	.1628	.1622	.1646	.1678
.422	.1581	.1608	.1581	.1587	.1541
.442	.1621	.1608	.1602	.1548	.1520
.461	.1679	.1686	.1660	.1606	.1560
.481	.1660	.1647	.1641	.1606	.1618
.505	.1581	.1587	.1562	.1548	.1579
.525	.1542	.1548	.1543	.1548	.1599
.564	.1326	.1332	.1346	.1332	.1442
.604	.1190	.1194	.1228	.1214	.1382
.644	.1091	.1115	.1130	.1135	.1305
.683	.0993	.0978	.1012	.1077	.1264
.723	.0955	.0978	.0934	.0998	.1264
.763	.0934	.0959	.0973	.1038	.1305
.802	.0955	.1018	.1031	.1058	.1305
.822	.0876	.0900	.0934	.0940	.1147
.851	-.2025	-.2011	-.2014	-.2003	-.1859
.861	-.1888	-.1833	-.1856	-.1845	-.1741
.881	-.1751	-.1734	-.1738	-.1727	-.1583
.921	-.1555	-.1519	-.1502	-.1512	-.1426
.960	-.1457	-.1380	-.1365	-.1277	-.1209

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(d) M = 1.47 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.5175	1.5062	1.4955	1.4823	1.4609
.005	.6979	.7117	.7393	.7926	.9525
.010	.1993	.2104	.2332	.2755	.4382
.020	-.1606	-.1519	-.1257	-.0753	.0869
.040	-.0491	-.0422	-.0218	.0285	.1831
.060	.0644	.0556	.0704	.1049	.2105
.079	.1212	.1281	.1331	.1323	.2203
.099	.1425	.1439	.1410	.1422	.2203
.139	.1680	.1653	.1646	.1657	.2340
.179	.1583	.1595	.1607	.1638	.2302
.198	.1524	.1516	.1528	.1618	.2243
.208	.1445	.1418	.1430	.1520	.2126
.227	-.2465	-.2518	-.2532	-.2497	-.2213
.237	-.2505	-.2537	-.2532	-.2516	-.2193
.257	-.2347	-.2342	-.2395	-.2399	-.2095
.276	-.1997	-.1989	-.2042	-.2065	-.1802
.302	-.3541	-.3595	-.3670	-.3771	-.4039
.311	-.2935	-.2929	-.2983	-.3045	-.2842
.331	-.1448	-.1480	-.1591	-.1810	-.1643
.351	-.0843	-.0892	-.1080	-.1380	-.1331
.371	-.0314	-.0403	-.0609	-.1066	-.1153
.391	.0586	.0498	.0332	-.0184	-.1074
.412	.1485	.1418	.1214	.1148	.1045
.422	.1504	.1439	.1254	.1148	.0908
.442	.1583	.1497	.1352	.1167	.0947
.461	.1641	.1575	.1430	.1246	.1064
.481	.1602	.1516	.1430	.1246	.1163
.505	.1504	.1418	.1331	.1148	.1143
.525	.1406	.1340	.1235	.1128	.1163
.564	.1191	.1124	.1077	.0951	.1064
.604	.1054	.1026	.0999	.0874	.1045
.644	.1387	.1223	.1038	.0835	.0987
.683	.1308	.1281	.1254	.0874	.0927
.723	.1406	.1281	.1194	.1206	.1006
.763	.1660	.1614	.1587	.1186	.1045
.802	.1583	.1516	.1528	.1481	.1124
.822	.1368	.1300	.1312	.1422	.1105
.851	-.1899	-.1853	-.1766	-.1712	-.1802
.861	-.1800	-.1598	-.1531	-.1536	-.1643
.881	-.1762	-.1461	-.1413	-.1457	-.1487
.921	-.1409	-.1442	-.1276	-.1262	-.1213
.960	-.1234	-.1303	-.1238	-.1203	-.0977

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(e) M = 1.90

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.5728	1.5832	1.5930	1.6060	
.005	1.2403	1.2260	1.1998	1.1397	
.010	.7569	.7425	.7184	.6623	
.020	.3537	.3411	.3138	.2562	
.040	.3429	.3303	.3084	.2562	
.060	.3464	.3322	.3084	.2599	
.079	.3501	.3358	.3084	.2599	
.099	.3464	.3322	.3066	.2544	
.139	.3715	.3518	.3299	.2812	
.179	.3697	.3572	.3387	.2866	
.198	.3607	.3536	.3352	.2812	
.208	.3590	.3500	.3281	.2812	
.227	-.0228	-.0265	-.0373	-.0608	
.237	-.0265	-.0317	-.0410	-.0662	
.257	-.0265	-.0317	-.0410	-.0662	
.276	-.0121	-.0192	-.0338	-.0573	
.302	-.2619	-.2638	-.2567	-.2675	
.311	-.0638	-.0889	-.1444	-.1570	
.331	-.0068	-.0015	-.0107	-.0413	
.351	-.0032	-.0050	-.0125	-.0430	
.371	.0075	.0021	-.0071	-.0376	
.391	.0182	.0075	.0000	-.0306	
.412	.1895	.1841	.1676	.1209	
.422	.1823	.1752	.1568	.1119	
.442	.1823	.1734	.1568	.1102	
.461	.1985	.1912	.1765	.1316	
.481	.2055	.1966	.1801	.1351	
.505	.2037	.1949	.1783	.1351	
.525	.2110	.2019	.1836	.1404	
.564	.2055	.1949	.1765	.1334	
.604	.2073	.1984	.1801	.1369	
.644	.2073	.1984	.1836	.1422	
.683	.2090	.2001	.1836	.1440	
.723	.2110	.2001	.1836	.1404	
.763	.2110	.2019	.1836	.1422	
.802	.2145	.2056	.1873	.1459	
.822	.2020	.1966	.1783	.1404	
.851	-.0335	-.0389	-.0463	-.0680	
.861	-.0318	-.0372	-.0463	-.0698	
.881	-.0282	-.0354	-.0445	-.0680	
.921	-.0210	-.0282	-.0373	-.0608	
.960	-.0175	-.0229	-.0356	-.0608	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(e) M = 1.90 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.6083	1.6140	1.6190	1.6257	
.005	1.1337	1.1284	1.1143	1.0903	
.010	.6399	.6352	.6229	.5962	
.020	.2371	.2310	.2186	.1966	
.040	.2317	.2292	.2186	.2001	
.060	.2496	.2417	.2311	.2126	
.079	.2567	.2506	.2399	.2181	
.099	.2549	.2489	.2382	.2181	
.139	.2781	.2719	.2559	.2394	
.179	.2781	.2737	.2649	.2448	
.198	.2709	.2684	.2631	.2429	
.208	.2674	.2667	.2559	.2376	
.227	-.0695	-.0699	-.0717	-.0799	
.237	-.0731	-.0752	-.0787	-.0852	
.257	-.0731	-.0752	-.0787	-.0852	
.276	-.0588	-.0646	-.0699	-.0799	
.302	-.2692	-.2675	-.2640	-.2566	
.311	-.1248	-.1411	-.1766	-.2281	
.331	-.0500	-.0521	-.0485	-.0479	
.351	-.0445	-.0432	-.0449	-.0479	
.371	-.0338	-.0325	-.0342	-.0460	
.391	-.0232	-.0219	-.0254	-.0354	
.412	.1391	.1385	.1349	.1252	
.422	.1319	.1313	.1260	.1145	
.442	.1355	.1349	.1260	.1127	
.461	.1533	.1527	.1457	.1324	
.481	.1604	.1598	.1492	.1377	
.505	.1604	.1580	.1474	.1342	
.525	.1658	.1615	.1527	.1395	
.564	.1568	.1545	.1457	.1324	
.604	.1586	.1580	.1492	.1342	
.644	.1586	.1562	.1492	.1359	
.683	.1568	.1562	.1492	.1359	
.723	.1604	.1562	.1492	.1342	
.763	.1604	.1580	.1509	.1359	
.802	.1641	.1598	.1509	.1377	
.822	.1533	.1492	.1420	.1287	
.851	-.0623	-.0627	-.0681	-.0710	
.861	-.0623	-.0627	-.0681	-.0746	
.881	-.0623	-.0646	-.0681	-.0746	
.921	-.0553	-.0574	-.0609	-.0692	
.960	-.0517	-.0521	-.0574	-.0674	

TABLE I.- PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(e) M = 1.90 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.6284				
.005	1.0180				
.010	.5160				
.020	.1349				
.040	.1349				
.060	.1634				
.079	.1758				
.099	.1758				
.139	.1919				
.179	.1972				
.198	.1954				
.208	.1919				
.227	-.1073				
.237	-.1109				
.257	-.1109				
.276	-.0966				
.302	-.2266				
.311	-.2123				
.331	-.1001				
.351	-.0681				
.371	-.0504				
.391	-.0396				
.412	.1135				
.422	.1117				
.442	.1170				
.461	.1313				
.481	.1330				
.505	.1313				
.525	.1349				
.564	.1260				
.604	.1260				
.644	.1225				
.683	.1170				
.723	.1170				
.763	.1135				
.802	.1153				
.822	.1065				
.851	-.0877				
.861	-.0877				
.881	-.0894				
.921	-.0841				
.960	-.0824				

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(e) M = 1.90 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.6326	1.6272	1.6198	1.6137	1.6022
.005	.9041	.9111	.9286	.9547	1.0374
.010	.4101	.4179	.4293	.4527	.5300
.020	.0464	.0530	.0641	.0884	.1528
.040	.0501	.0565	.0661	.0902	.1548
.060	.0911	.0957	.1036	.1223	.1779
.079	.1088	.1135	.1233	.1383	.1851
.099	.1178	.1223	.1286	.1401	.1851
.139	.1356	.1473	.1483	.1579	.2012
.179	.1463	.1473	.1573	.1687	.2083
.198	.1391	.1455	.1501	.1634	.2029
.208	.1391	.1420	.1483	.1616	.2012
.227	-.1372	-.1341	-.1327	-.1242	-.1026
.237	-.1407	-.1393	-.1380	-.1314	-.1080
.257	-.1372	-.1376	-.1380	-.1314	-.1080
.276	-.1194	-.1198	-.1202	-.1154	-.0973
.302	-.2656	-.2622	-.2651	-.2636	-.2688
.311	-.1907	-.1874	-.1881	-.1867	-.1705
.331	-.0945	-.0949	-.0986	-.0956	-.0812
.351	-.0730	-.0752	-.0790	-.0796	-.0704
.371	-.0588	-.0574	-.0628	-.0653	-.0616
.391	-.0445	-.0449	-.0503	-.0563	-.0526
.412	.1018	.1045	.0964	.0902	.0976
.422	.1018	.1028	.0947	.0865	.0921
.442	.1053	.1028	.0964	.0919	.0957
.461	.1106	.1117	.1072	.1045	.1082
.481	.1124	.1135	.1107	.1080	.1136
.505	.1106	.1117	.1090	.1080	.1136
.525	.1106	.1117	.1090	.1098	.1154
.564	.0981	.1010	.1000	.1027	.1136
.604	.0946	.0957	.0964	.1008	.1136
.644	.0874	.0885	.0911	.0937	.1119
.683	.0821	.0850	.0857	.0919	.1099
.723	.0804	.0833	.0839	.0902	.1082
.763	.0821	.0850	.0839	.0902	.1082
.802	.0821	.0850	.0857	.0902	.1082
.822	.0732	.0761	.0749	.0776	.0976
.851	-.1087	-.1056	-.1059	-.1046	-.0955
.861	-.1069	-.1037	-.1059	-.1046	-.0955
.881	-.1052	-.1037	-.1059	-.1046	-.0955
.921	-.0997	-.0984	-.1004	-.0992	-.0902
.960	-.0945	-.0931	-.0969	-.0938	-.0830

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(e) M = 1.90 - Concluded

$\alpha = 8^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.6215	1.6123	1.6022	1.5876	1.5671
.005	.8037	.8123	.8408	.8894	1.0368
.010	.3131	.3213	.3458	.3915	.5242
.020	-.0234	-.0167	-.0009	.0362	.1616
.040	-.0144	-.0115	.0063	.0452	.1634
.060	.0321	.0348	.0438	.0718	.1741
.079	.0536	.0561	.0670	.0916	.1794
.099	.0571	.0668	.0725	.0933	.1794
.139	.0966	.0953	.1011	.1129	.1865
.179	.0983	.0936	.0992	.1129	.1937
.198	.0948	.0918	.0956	.1112	.1884
.208	.0913	.0900	.0938	.1076	.1830
.227	-.1577	-.1608	-.1581	-.1512	-.1134
.237	-.1630	-.1644	-.1634	-.1565	-.1189
.257	-.1594	-.1608	-.1599	-.1565	-.1189
.276	-.1432	-.1448	-.1473	-.1477	-.1134
.302	-.2597	-.2604	-.2636	-.2654	-.2724
.311	-.2007	-.2018	-.2045	-.2083	-.1849
.331	-.1057	-.1111	-.1187	-.1351	-.1099
.351	-.0771	-.0843	-.0974	-.1156	-.1011
.371	-.0592	-.0683	-.0812	-.1031	-.0921
.391	-.0197	-.0292	-.0473	-.0888	-.0885
.412	.0876	.0758	.0600	.0470	.0401
.422	.0913	.0776	.0653	.0470	.0348
.442	.0948	.0846	.0725	.0523	.0438
.461	.1038	.0936	.0849	.0630	.0508
.481	.1019	.0936	.0885	.0701	.0598
.505	.0983	.0918	.0868	.0718	.0616
.525	.0983	.0918	.0868	.0738	.0704
.564	.0858	.0793	.0760	.0665	.0687
.604	.0786	.0721	.0688	.0665	.0741
.644	.0715	.0668	.0617	.0595	.0741
.683	.0661	.0633	.0600	.0576	.0794
.723	.0626	.0580	.0545	.0540	.0812
.763	.0608	.0544	.0527	.0540	.0829
.802	.0608	.0544	.0527	.0540	.0847
.822	.0501	.0455	.0438	.0434	.0741
.851	-.1219	-.1146	-.1242	-.1279	-.1099
.861	-.1200	-.1093	-.1223	-.1298	-.1134
.881	-.1200	-.1111	-.1223	-.1298	-.1117
.921	-.1075	-.1111	-.1117	-.1226	-.1099
.960	-.1004	-.1040	-.1062	-.1173	-.1064

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(f) M = 2.70

$\alpha = -8^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.6646	1.6744	1.6864	1.6987	
.005	1.3076	1.2956	1.2575	1.1967	
.010	.8162	.7991	.7801	.7174	
.020	.3816	.3712	.3480	.3029	
.040	.3052	.2967	.2793	.2420	
.060	.2974	.2888	.2676	.2303	
.079	.3013	.2907	.2715	.2303	
.099	.3013	.2927	.2696	.2263	
.139	.3228	.3163	.2950	.2460	
.179	.3404	.3301	.3107	.2637	
.198	.3404	.3281	.3049	.2637	
.208	.3365	.3260	.3029	.2616	
.227	.0449	.0415	.0319	.0083	
.237	.0351	.0277	.0182	-.0034	
.257	.0213	.0180	.0063	-.0113	
.276	.0213	.0180	.0083	-.0113	
.302	-.1137	-.1155	-.1154	-.1174	
.311	-.0884	-.0920	-.1016	-.1135	
.331	.0174	.0121	.0005	-.0211	
.351	.0252	.0180	.0083	-.0152	
.371	.0292	.0277	.0143	-.0094	
.391	.0351	.0337	.0201	-.0034	
.412	.1564	.1514	.1360	.1007	
.422	.1583	.1553	.1379	.1026	
.442	.1643	.1592	.1418	.1084	
.461	.1800	.1730	.1556	.1203	
.481	.1858	.1809	.1634	.1280	
.505	.1877	.1809	.1655	.1280	
.525	.1956	.1887	.1713	.1379	
.564	.1916	.1867	.1655	.1321	
.604	.1956	.1906	.1694	.1360	
.644	.1956	.1926	.1752	.1399	
.683	.1956	.1945	.1752	.1438	
.723	.1995	.1945	.1752	.1418	
.763	.1995	.1966	.1772	.1438	
.802	.1935	.1906	.1713	.1379	
.822	.1897	.1848	.1655	.1321	
.851	.0271	.0258	.0143	-.0075	
.861	.0136	.0121	.0005	-.0172	
.881	.0076	.0062	-.0036	-.0232	
.921	.0095	.0062	-.0036	-.0232	
.960	.0095	.0062	-.0036	-.0232	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(f) M = 2.70 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.6887	1.6940	1.6992	1.7046	
.005	1.1923	1.1714	1.1664	1.1364	
.010	.6910	.6797	.6751	.6479	
.020	.2857	.2762	.2680	.2455	
.040	.2231	.2134	.2053	.1908	
.060	.2171	.2057	.2015	.1850	
.079	.2191	.2095	.2015	.1850	
.099	.2152	.2076	.2015	.1850	
.139	.2289	.2233	.2171	.1968	
.179	.2367	.2330	.2229	.2065	
.198	.2386	.2330	.2229	.2045	
.208	.2367	.2330	.2229	.2065	
.227	-.0002	-.0021	-.0061	-.0144	
.237	-.0079	-.0118	-.0158	-.0221	
.257	-.0158	-.0197	-.0237	-.0299	
.276	-.0158	-.0197	-.0237	-.0299	
.302	-.1098	-.1098	-.1099	-.1120	
.311	-.1098	-.1117	-.1118	-.1140	
.331	-.0315	-.0352	-.0375	-.0455	
.351	-.0158	-.0217	-.0237	-.0318	
.371	-.0100	-.0157	-.0178	-.0260	
.391	-.0040	-.0079	-.0120	-.0202	
.412	.0978	.0920	.0859	.0755	
.422	.1017	.0959	.0898	.0794	
.442	.1095	.1038	.0956	.0854	
.461	.1213	.1154	.1113	.1010	
.481	.1290	.1234	.1192	.1088	
.505	.1290	.1272	.1192	.1107	
.525	.1389	.1352	.1270	.1165	
.564	.1369	.1311	.1231	.1146	
.604	.1408	.1331	.1270	.1165	
.644	.1408	.1352	.1270	.1165	
.683	.1408	.1371	.1289	.1165	
.723	.1408	.1391	.1289	.1165	
.763	.1408	.1391	.1310	.1185	
.802	.1408	.1331	.1270	.1165	
.822	.1350	.1272	.1250	.1127	
.851	-.0040	-.0079	-.0100	-.0163	
.861	-.0139	-.0176	-.0197	-.0241	
.881	-.0217	-.0255	-.0257	-.0318	
.921	-.0217	-.0255	-.0276	-.0318	
.960	-.0197	-.0236	-.0257	-.0318	

TABLE I.- PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(f) M = 2.70 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.6997				
.005	1.0698				
.010	.5756				
.020	.1966				
.040	.1439				
.060	.1419				
.079	.1439				
.099	.1439				
.139	.1556				
.179	.1614				
.198	.1634				
.208	.1595				
.227	-.0339				
.237	-.0416				
.257	-.0476				
.276	-.0476				
.302	-.0944				
.311	-.0944				
.331	-.0924				
.351	-.0631				
.371	-.0435				
.391	-.0339				
.412	.0540				
.422	.0579				
.442	.0697				
.461	.0795				
.481	.0873				
.505	.0873				
.525	.0931				
.564	.0931				
.604	.0952				
.644	.0931				
.683	.0952				
.723	.0931				
.763	.0931				
.802	.0873				
.822	.0853				
.851	-.0279				
.861	-.0339				
.881	-.0416				
.921	-.0455				
.960	-.0455				

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(f) M = 2.70 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.7165	1.7113	1.7061	1.6976	1.6870
.005	.9593	.9646	.9814	1.0068	1.0885
.010	.4718	.4772	.4889	.5112	.5814
.020	.1290	.1347	.1416	.1586	.2074
.040	.0821	.0819	.0886	.1057	.1526
.060	.0821	.0838	.0905	.1057	.1466
.079	.0860	.0858	.0925	.1076	.1486
.099	.0860	.0858	.0944	.1076	.1486
.139	.0978	.0995	.1062	.1155	.1604
.179	.1056	.1055	.1101	.1194	.1643
.198	.1056	.1055	.1122	.1233	.1643
.208	.0978	.1015	.1101	.1194	.1623
.227	-.0589	-.0609	-.0606	-.0530	-.0354
.237	-.0668	-.0688	-.0645	-.0607	-.0432
.257	-.0687	-.0708	-.0684	-.0667	-.0492
.276	-.0687	-.0708	-.0684	-.0667	-.0492
.302	-.1156	-.1157	-.1154	-.1195	-.1177
.311	-.1177	-.1176	-.1175	-.1195	-.1156
.331	-.0883	-.0942	-.0901	-.0843	-.0726
.351	-.0608	-.0648	-.0645	-.0627	-.0492
.371	-.0472	-.0491	-.0527	-.0530	-.0432
.391	-.0412	-.0452	-.0469	-.0491	-.0393
.412	.0370	.0330	.0278	.0234	.0428
.422	.0430	.0370	.0336	.0273	.0449
.442	.0469	.0428	.0416	.0372	.0585
.461	.0566	.0525	.0513	.0470	.0684
.481	.0626	.0604	.0572	.0548	.0742
.505	.0626	.0604	.0611	.0606	.0781
.525	.0684	.0662	.0650	.0646	.0821
.564	.0665	.0643	.0650	.0646	.0802
.604	.0684	.0662	.0669	.0666	.0821
.644	.0665	.0643	.0650	.0666	.0821
.683	.0645	.0624	.0631	.0666	.0821
.723	.0626	.0604	.0631	.0666	.0821
.763	.0626	.0604	.0611	.0666	.0841
.802	.0585	.0565	.0572	.0627	.0821
.822	.0547	.0506	.0553	.0567	.0781
.851	-.0432	-.0452	-.0448	-.0451	-.0354
.861	-.0451	-.0491	-.0488	-.0491	-.0432
.881	-.0492	-.0512	-.0527	-.0569	-.0472
.921	-.0550	-.0570	-.0585	-.0607	-.0492
.960	-.0550	-.0590	-.0585	-.0607	-.0472

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(f) M = 2.70 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.7358	1.7286	1.7147	1.6992	1.6716
.005	.8743	.8742	.9025	.9564	1.1071
.010	.3851	.3921	.4110	.4547	.5965
.020	.0701	.0745	.0880	.1214	.2228
.040	.0310	.0373	.0488	.0784	.1680
.060	.0389	.0432	.0527	.0765	.1601
.079	.0467	.0490	.0566	.0784	.1601
.099	.0486	.0509	.0566	.0765	.1601
.139	.0604	.0608	.0645	.0823	.1620
.179	.0623	.0647	.0703	.0842	.1640
.198	.0604	.0666	.0742	.0881	.1700
.208	.0525	.0666	.0742	.0881	.1700
.227	-.0746	-.0804	-.0765	-.0724	-.0355
.237	-.0805	-.0862	-.0825	-.0765	-.0433
.257	-.0805	-.0862	-.0844	-.0823	-.0532
.276	-.0767	-.0823	-.0844	-.0804	-.0551
.302	-.1314	-.1313	-.1293	-.1313	-.1313
.311	-.1236	-.1293	-.1293	-.1293	-.1178
.331	-.0746	-.0804	-.0960	-.1019	-.0688
.351	-.0591	-.0627	-.0726	-.0842	-.0628
.371	-.0473	-.0509	-.0648	-.0784	-.0590
.391	-.0413	-.0451	-.0569	-.0765	-.0551
.412	.0329	.0275	.0076	-.0196	.0115
.422	.0368	.0333	.0155	-.0137	.0192
.442	.0408	.0354	.0233	-.0019	.0310
.461	.0447	.0393	.0312	.0078	.0388
.481	.0467	.0432	.0370	.0157	.0448
.505	.0467	.0451	.0370	.0215	.0467
.525	.0505	.0451	.0409	.0275	.0506
.564	.0467	.0451	.0409	.0275	.0506
.604	.0467	.0451	.0409	.0294	.0525
.644	.0447	.0432	.0390	.0294	.0506
.683	.0428	.0412	.0370	.0294	.0525
.723	.0408	.0373	.0370	.0294	.0525
.763	.0389	.0373	.0351	.0294	.0564
.802	.0349	.0333	.0312	.0275	.0525
.822	.0291	.0294	.0273	.0255	.0486
.851	-.0570	-.0529	-.0629	-.0647	-.0532
.861	-.0610	-.0548	-.0687	-.0724	-.0628
.881	-.0649	-.0608	-.0726	-.0765	-.0688
.921	-.0630	-.0666	-.0745	-.0804	-.0688
.960	-.0649	-.0666	-.0726	-.0784	-.0688

TABLE I.- PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(g) M = 3.40

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.6785	1.6893	1.6991	1.7142	
.005	1.3392	1.3285	1.2941	1.2298	
.010	.8276	.8192	.7894	.7325	
.020	.3893	.3811	.3582	.3124	
.040	.2894	.2862	.2665	.2287	
.060	.2769	.2703	.2476	.2129	
.079	.2800	.2719	.2491	.2129	
.099	.2800	.2751	.2507	.2097	
.139	.3086	.3020	.2744	.2271	
.179	.3275	.3225	.2949	.2446	
.198	.3496	.3400	.3170	.2651	
.208	.3339	.3257	.2981	.2476	
.227	.0743	.0694	.0581	.0360	
.237	.0568	.0504	.0406	.0217	
.257	.0395	.0363	.0265	.0076	
.276	.0331	.0315	.0233	.0044	
.302	-.0618	-.0650	-.0635	-.0651	
.311	-.0540	-.0381	-.0573	-.0651	
.331	.0157	.0142	.0012	-.0177	
.351	.0219	.0203	.0107	-.0068	
.371	.0251	.0235	.0153	-.0036	
.391	.0283	.0283	.0169	.0012	
.412	.1234	.1138	.0959	.0597	
.422	.1327	.1264	.1134	.0770	
.442	.1455	.1391	.1244	.0913	
.461	.1613	.1549	.1401	.1023	
.481	.1708	.1628	.1481	.1166	
.505	.1708	.1628	.1544	.1166	
.525	.1802	.1754	.1592	.1244	
.564	.1772	.1706	.1544	.1228	
.604	.1802	.1754	.1592	.1228	
.644	.1834	.1786	.1608	.1276	
.683	.1866	.1802	.1624	.1292	
.723	.1834	.1802	.1624	.1276	
.763	.1850	.1802	.1640	.1276	
.802	.1818	.1770	.1592	.1244	
.822	.1788	.1754	.1560	.1228	
.851	.0488	.0441	.0312	.0155	
.861	.0347	.0315	.0217	.0044	
.881	.0235	.0219	.0123	-.0052	
.921	.0235	.0203	.0107	-.0084	
.960	.0267	.0235	.0139	-.0068	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(g) M = 3.40 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.7128	1.7192	1.7257	1.7321	
.005	1.2149	1.2149	1.1999	1.1742	
.010	.7040	.6984	.6873	.6627	
.020	.2958	.2898	.2826	.2609	
.040	.2087	.2075	.2005	.1850	
.060	.1929	.1902	.1830	.1706	
.079	.1929	.1886	.1814	.1660	
.099	.1913	.1886	.1814	.1613	
.139	.2071	.2027	.1941	.1770	
.179	.2212	.2171	.2099	.1898	
.198	.2452	.2408	.2304	.2135	
.208	.2228	.2201	.2115	.1898	
.227	.0283	.0269	.0233	.0142	
.237	.0157	.0142	.0108	.0030	
.257	.0030	.0016	-.0002	-.0082	
.276	-.0002	-.0032	-.0050	-.0096	
.302	-.0540	-.0554	-.0540	-.0540	
.311	-.0556	-.0570	-.0556	-.0556	
.331	-.0397	-.0413	-.0431	-.0508	
.351	-.0159	-.0189	-.0209	-.0303	
.371	-.0066	-.0096	-.0114	-.0175	
.391	-.0018	-.0016	.0060	-.0034	
.412	.0504	.0458	.0297	.0157	
.422	.0694	.0666	.0534	.0395	
.442	.0869	.0823	.0755	.0616	
.461	.1027	.0999	.0945	.0773	
.481	.1138	.1092	.1040	.0885	
.505	.1138	.1140	.1025	.0933	
.525	.1248	.1220	.1182	.0995	
.564	.1216	.1188	.1166	.0995	
.604	.1264	.1220	.1166	.1011	
.644	.1296	.1252	.1198	.1027	
.683	.1296	.1268	.1214	.1042	
.723	.1296	.1252	.1198	.1027	
.763	.1296	.1252	.1198	.1027	
.802	.1248	.1220	.1150	.0995	
.822	.1216	.1188	.1136	.0979	
.851	.0171	.0142	.0124	.0030	
.861	.0062	.0016	-.0002	-.0066	
.881	-.0034	-.0064	-.0082	-.0159	
.921	-.0082	-.0096	-.0130	-.0191	
.960	-.0066	-.0096	-.0098	-.0175	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(g) M = 3.40 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.7620				
.005	1.1250				
.010	.6051				
.020	.2242				
.040	.1531				
.060	.1371				
.079	.1325				
.099	.1310				
.139	.1403				
.179	.1483				
.198	.1752				
.208	.1499				
.227	-.0034				
.237	-.0146				
.257	-.0209				
.276	-.0223				
.302	-.0399				
.311	-.0415				
.331	-.0415				
.351	-.0415				
.371	-.0383				
.391	-.0303				
.412	-.0098				
.422	.0076				
.442	.0345				
.461	.0534				
.481	.0646				
.505	.0692				
.525	.0771				
.564	.0803				
.604	.0835				
.644	.0835				
.683	.0835				
.723	.0835				
.763	.0835				
.802	.0803				
.822	.0797				
.851	-.0018				
.861	-.0114				
.881	-.0177				
.921	-.0239				
.960	-.0239				

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(g) M = 3.40 - Continued

$\alpha = 4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.7825	1.7783	1.7770	1.7684	1.7556
.005	1.0225	1.0268	1.0437	1.0694	1.1314
.010	.5124	.5194	.5278	.5517	.6195
.020	.1636	.1656	.1752	.1896	.2322
.040	.1005	.1007	.1104	.1216	.1595
.060	.0880	.0913	.0977	.1072	.1467
.079	.0864	.0882	.0947	.1040	.1421
.099	.0832	.0834	.0899	.1011	.1389
.139	.0864	.0882	.0947	.1040	.1467
.179	.0925	.0943	.0993	.1088	.1515
.198	.1242	.1244	.1294	.1405	.1800
.208	.0880	.0897	.0993	.1072	.1547
.227	-.0273	-.0257	-.0255	-.0207	-.0018
.237	-.0320	-.0336	-.0319	-.0271	-.0130
.257	-.0368	-.0382	-.0351	-.0319	-.0239
.276	-.0384	-.0382	-.0383	-.0351	-.0239
.302	-.0462	-.0462	-.0492	-.0524	-.0540
.311	-.0462	-.0494	-.0508	-.0524	-.0556
.331	-.0478	-.0494	-.0508	-.0540	-.0540
.351	-.0478	-.0478	-.0524	-.0540	-.0460
.371	-.0462	-.0462	-.0476	-.0460	-.0383
.391	-.0384	-.0414	-.0399	-.0383	-.0255
.412	-.0257	-.0257	-.0177	-.0098	.0076
.422	-.0131	-.0113	-.0066	-.0018	.0155
.442	.0090	.0107	.0108	.0124	.0329
.461	.0247	.0265	.0235	.0219	.0472
.481	.0326	.0328	.0329	.0329	.0582
.505	.0310	.0392	.0281	.0409	.0566
.525	.0454	.0454	.0441	.0472	.0726
.564	.0468	.0470	.0488	.0504	.0726
.604	.0484	.0517	.0518	.0552	.0741
.644	.0515	.0533	.0518	.0552	.0741
.683	.0515	.0517	.0518	.0552	.0755
.723	.0515	.0501	.0518	.0552	.0755
.763	.0515	.0517	.0518	.0552	.0755
.802	.0468	.0470	.0472	.0520	.0726
.822	.0454	.0438	.0441	.0488	.0710
.851	-.0179	-.0193	-.0191	-.0191	-.0114
.861	-.0241	-.0241	-.0255	-.0271	-.0207
.881	-.0273	-.0273	-.0271	-.0319	-.0271
.921	-.0273	-.0304	-.0319	-.0367	-.0303
.960	-.0273	-.0304	-.0319	-.0351	-.0303

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(g) M = 3.40 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.7855	1.7750	1.7620	1.7471	1.7162
.005	.8979	.9129	.9430	.9986	1.1464
.010	.4108	.4180	.4383	.4778	.6143
.020	.1040	.1124	.1250	.1519	.2382
.040	.0550	.0570	.0680	.0901	.1656
.060	.0472	.0522	.0632	.0773	.1483
.079	.0472	.0506	.0584	.0743	.1467
.099	.0441	.0474	.0536	.0696	.1435
.139	.0504	.0490	.0552	.0680	.1467
.179	.0504	.0522	.0568	.0696	.1498
.198	.0851	.0871	.0933	.1074	.1797
.208	.0425	.0522	.0616	.0773	.1560
.227	-.0399	-.0460	-.0413	-.0349	-.0036
.237	-.0476	-.0524	-.0492	-.0413	-.0145
.257	-.0476	-.0538	-.0524	-.0492	-.0241
.276	-.0508	-.0524	-.0524	-.0524	-.0273
.302	-.0730	-.0714	-.0714	-.0682	-.0730
.311	-.0730	-.0745	-.0730	-.0745	-.0730
.331	-.0588	-.0650	-.0682	-.0714	-.0525
.351	-.0415	-.0524	-.0572	-.0650	-.0430
.371	-.0303	-.0413	-.0540	-.0618	-.0398
.391	-.0255	-.0349	-.0460	-.0540	-.0334
.412	.0187	.0110	-.0080	-.0303	.0012
.422	.0235	.0157	-.0002	-.0255	.0107
.442	.0267	.0189	.0062	-.0144	.0265
.461	.0297	.0221	.0142	-.0048	.0344
.481	.0313	.0253	.0205	.0046	.0424
.505	.0281	.0269	.0189	.0094	.0501
.525	.0345	.0301	.0299	.0173	.0533
.564	.0345	.0317	.0331	.0205	.0517
.604	.0361	.0347	.0347	.0251	.0533
.644	.0393	.0347	.0347	.0267	.0533
.683	.0393	.0347	.0331	.0283	.0549
.723	.0361	.0347	.0331	.0299	.0533
.763	.0361	.0347	.0347	.0315	.0549
.802	.0345	.0317	.0315	.0283	.0533
.822	.0345	.0317	.0283	.0283	.0501
.851	-.0223	-.0223	-.0287	-.0303	-.0225
.861	-.0255	-.0269	-.0365	-.0397	-.0304
.881	-.0287	-.0301	-.0444	-.0460	-.0382
.921	-.0287	-.0349	-.0460	-.0492	-.0430
.960	-.0287	-.0349	-.0413	-.0492	-.0414

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(h) M = 4.63

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.6897	1.6989	1.7112	1.7326	
.005	1.3162	1.3162	1.2948	1.2547	
.010	.8557	.8371	.8094	.7553	
.020	.4024	.3853	.3669	.3238	
.040	.2937	.2786	.2648	.2308	
.060	.2711	.2580	.2443	.2059	
.079	.2711	.2580	.2420	.1991	
.099	.2754	.2626	.2443	.1991	
.139	.3049	.2966	.2737	.2194	
.179	.3301	.3195	.2966	.2400	
.198	.3707	.3581	.3372	.2874	
.208	.3412	.3263	.3032	.2488	
.227	.0987	.0947	.0878	.0672	
.237	.0715	.0672	.0649	.0446	
.257	.0581	.0515	.0469	.0286	
.276	.0535	.0446	.0400	.0243	
.302	-.0123	-.0235	-.0212	-.0257	
.311	-.0123	-.0189	-.0189	-.0235	
.331	.0194	.0174	.0152	-.0031	
.351	.0286	.0243	.0197	.0037	
.371	.0355	.0286	.0240	.0060	
.391	.0443	.0446	.0378	.0197	
.412	.0761	.0741	.0649	.0378	
.422	.1032	.1015	.0878	.0538	
.442	.1350	.1287	.1173	.0809	
.461	.1553	.1490	.1353	.0990	
.481	.1690	.1582	.1444	.1081	
.505	.1782	.1559	.1559	.1035	
.525	.1870	.1765	.1582	.1218	
.564	.1848	.1719	.1559	.1241	
.604	.1848	.1742	.1582	.1218	
.644	.1848	.1742	.1582	.1264	
.683	.1848	.1742	.1605	.1287	
.723	.1828	.1719	.1582	.1264	
.763	.1870	.1765	.1625	.1287	
.802	.1870	.1742	.1582	.1241	
.822	.1848	.1742	.1582	.1241	
.851	.0761	.0672	.0649	.0378	
.861	.0649	.0538	.0469	.0263	
.881	.0512	.0469	.0355	.0197	
.921	.0512	.0355	.0309	.0152	
.960	.0489	.0400	.0355	.0174	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(h) M = 4.63 - Continued

$\alpha = -4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.7881	1.7941	1.8004	1.8096	
.005	1.2825	1.2885	1.2670	1.2333	
.010	.7611	.7505	.7396	.7093	
.020	.3323	.3238	.3172	.2963	
.040	.2237	.2217	.2105	.1988	
.060	.2011	.1945	.1853	.1693	
.079	.1919	.1899	.1808	.1625	
.099	.1919	.1876	.1742	.1579	
.139	.2076	.2013	.1899	.1693	
.179	.2214	.2171	.2036	.1850	
.198	.2711	.2694	.2580	.2420	
.208	.2325	.2239	.2128	.1896	
.227	.0626	.0583	.0515	.0469	
.237	.0443	.0400	.0355	.0309	
.257	.0309	.0263	.0220	.0194	
.276	.0263	.0197	.0174	.0152	
.302	-.0169	-.0189	-.0212	-.0189	
.311	-.0169	-.0189	-.0212	-.0189	
.331	-.0077	-.0100	-.0166	-.0166	
.351	.0014	-.0031	-.0077	-.0100	
.371	.0106	.0037	-.0009	-.0031	
.391	.0194	.0197	.0106	.0037	
.412	.0286	.0286	.0220	.0152	
.422	.0423	.0492	.0355	.0286	
.442	.0695	.0672	.0606	.0469	
.461	.0829	.0809	.0718	.0626	
.481	.0944	.0947	.0855	.0741	
.505	.0898	.1012	.0787	.0809	
.525	.1124	.1058	.0992	.0852	
.564	.1170	.1081	.0992	.0921	
.604	.1193	.1150	.1038	.0944	
.644	.1238	.1173	.1058	.0967	
.683	.1261	.1218	.1081	.0990	
.723	.1238	.1196	.1104	.0990	
.763	.1238	.1196	.1127	.1012	
.802	.1170	.1150	.1081	.0990	
.822	.1147	.1127	.1058	.0944	
.851	.0355	.0355	.0286	.0263	
.861	.0263	.0240	.0197	.0152	
.881	.0194	.0174	.0106	.0060	
.921	.0126	.0083	.0014	.0014	
.960	.0149	.0106	.0060	.0037	

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(h) M = 4.63 - Continued

$\alpha = 0^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.7973				
.005	1.1532				
.010	.6387				
.020	.2485				
.040	.1579				
.060	.1353				
.079	.1307				
.099	.1238				
.139	.1261				
.179	.1353				
.198	.1965				
.208	.1376				
.227	.0263				
.237	.0172				
.257	.0106				
.276	.0037				
.302	-.0054				
.311	-.0054				
.331	-.0077				
.351	-.0077				
.371	-.0054				
.391	-.0054				
.412	-.0054				
.422	-.0031				
.442	.0060				
.461	.0194				
.481	.0309				
.505	.0423				
.525	.0489				
.564	.0581				
.604	.0718				
.644	.0718				
.683	.0741				
.723	.0741				
.763	.0764				
.802	.0741				
.822	.0718				
.851	.0217				
.861	.0129				
.881	.0037				
.921	-.0031				
.960	-.0009				

TABLE I. - PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Continued

(h) M = 4.63 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.000	1.7572	1.7544	1.7481	1.7421	1.7326
.005	1.0182	1.0211	1.0365	1.0579	1.1166
.010	.5260	.5260	.5351	.5583	.6118
.020	.1808	.1853	.1899	.2036	.2351
.040	.1104	.1081	.1173	.1218	.1490
.060	.0924	.0924	.0992	.1038	.1261
.079	.0832	.0832	.0855	.0992	.1196
.099	.0787	.0764	.0787	.0878	.1173
.139	.0764	.0764	.0809	.0878	.1196
.179	.0787	.0787	.0832	.0901	.1261
.198	.1490	.1467	.1513	.1584	.1899
.208	.0787	.0764	.0855	.0970	.1353
.227	.0037	.0014	.0037	.0083	.0217
.237	-.0054	-.0077	-.0054	-.0009	.0129
.257	-.0100	-.0120	-.0077	-.0074	.0060
.276	-.0120	-.0120	-.0120	-.0120	-.0009
.302	-.0120	-.0120	-.0143	-.0120	-.0146
.311	-.0120	-.0143	-.0143	-.0143	-.0146
.331	-.0100	-.0143	-.0120	-.0166	-.0166
.351	-.0120	-.0143	-.0143	-.0143	-.0166
.371	-.0100	-.0143	-.0120	-.0143	-.0123
.391	-.0100	-.0143	-.0120	-.0120	-.0123
.412	-.0100	-.0120	-.0120	-.0120	-.0054
.422	-.0100	-.0120	-.0097	-.0097	-.0009
.442	-.0077	-.0120	-.0077	-.0097	.0129
.461	-.0031	-.0054	-.0009	-.0009	.0240
.481	-.0009	.0014	-.0009	.0106	.0355
.505	-.0009	.0037	-.0009	.0220	.0332
.525	.0129	.0106	.0174	.0266	.0492
.564	.0220	.0197	.0243	.0289	.0558
.604	.0263	.0266	.0309	.0378	.0649
.644	.0332	.0286	.0332	.0400	.0672
.683	.0355	.0332	.0378	.0423	.0672
.723	.0355	.0332	.0355	.0446	.0695
.763	.0400	.0400	.0400	.0492	.0718
.802	.0400	.0355	.0400	.0446	.0672
.822	.0378	.0355	.0400	.0400	.0649
.851	.0037	.0014	.0014	.0037	.0152
.861	-.0009	-.0054	-.0031	-.0051	.0037
.881	-.0031	-.0077	-.0077	-.0120	-.0054
.921	-.0054	-.0120	-.0120	-.0143	-.0100
.960	-.0009	-.0077	-.0097	-.0097	-.0054

TABLE I.- PRESSURE COEFFICIENTS FOR A PRELIMINARY PROJECT FIRE VELOCITY PACKAGE - MODEL I - Concluded

(h) M = 4.63 - Concluded

$\alpha = 8^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.000	1.7572	1.7449	1.7358	1.7206	1.6989
.005	.8952	.9075	.9352	.9873	1.1194
.010	.4310	.4356	.4530	.4899	.6101
.020	.1333	.1356	.1444	.1673	.2445
.040	.0721	.0744	.0809	.1015	.1536
.060	.0606	.0629	.0672	.0809	.1310
.079	.0538	.0561	.0603	.0741	.1241
.099	.0446	.0492	.0515	.0675	.1173
.139	.0446	.0446	.0492	.0652	.1218
.179	.0446	.0446	.0492	.0675	.1241
.198	.1173	.1218	.1238	.1356	.1853
.208	.0378	.0400	.0492	.0629	.1333
.227	-.0120	-.0143	-.0123	-.0054	.0220
.237	-.0189	-.0189	-.0189	-.0120	.0106
.257	-.0235	-.0235	-.0235	-.0189	-.0009
.276	-.0235	-.0235	-.0235	-.0189	-.0054
.302	-.0235	-.0235	-.0235	-.0235	-.0235
.311	-.0257	-.0235	-.0235	-.0235	-.0235
.331	-.0235	-.0235	-.0235	-.0235	-.0235
.351	-.0235	-.0235	-.0235	-.0235	-.0235
.371	-.0235	-.0235	-.0235	-.0235	-.0235
.391	-.0212	-.0235	-.0212	-.0235	-.0166
.412	-.0097	-.0235	-.0189	-.0212	-.0097
.422	-.0074	-.0189	-.0212	-.0212	-.0009
.442	-.0031	-.0189	-.0166	-.0212	.0129
.461	-.0009	-.0166	-.0146	-.0166	.0220
.481	.0060	-.0120	-.0123	-.0143	.0309
.505	.0014	-.0143	-.0123	-.0189	.0400
.525	.0060	-.0009	-.0077	-.0009	.0515
.564	.0083	.0060	-.0009	.0037	.0492
.604	.0106	.0106	.0037	.0060	.0492
.644	.0106	.0129	.0083	.0060	.0515
.683	.0129	.0129	.0083	.0106	.0515
.723	.0174	.0152	.0083	.0129	.0515
.763	.0220	.0220	.0174	.0197	.0583
.802	.0174	.0174	.0129	.0174	.0561
.822	.0174	.0174	.0129	.0174	.0538
.851	-.0120	-.0097	-.0166	-.0143	.0037
.861	-.0166	-.0166	-.0235	-.0235	-.0054
.881	-.0189	-.0189	-.0235	-.0257	-.0120
.921	-.0166	-.0166	-.0280	-.0280	-.0166
.960	-.0097	-.0120	-.0212	-.0212	-.0120

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II

(a) M = 0.25

$\alpha = -8^{o}$

x/l	C_p at ø of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0486				
.284	-.0662	-.0565	-.0837	-.0820	-.0780
.289	-.0780	-.0848	-.0944	-.0967	-.0780
.294	-.1159	-.1091	-.1295	-.1142	-.0859
.304	.1792	.1131	————	.0192	-.0537
.323	.1821	.1996	.1674	.1402	.0622
.345	-.2183	-.2369	-.2533	-.2624	-.2409
.355	-.0204	-.0215	-.0418	-.0554	-.0848
.365	.0515	.0498	.0271	.0136	————
.384	.1431	————	.1295	.1091	.0662
.403	.2872	.2680	.2550	.2222	.1657
.417	.4343	.4394	.4139	.3653	.2844
.427	.3466	.3421	.3223	.2765	————
.436	.2952	.2816	.2601	.2222	.1510
.456	.2386	.2267	.2171	.1725	.0944
.475	.2318	————	.2154	.1645	.0837
.498	.2522	.2290	.2267	.1860	.1227
.517	.1928				
.537	.1753				
.575	.1470				
.691	.0905				
.769	.0215				
.865	-.2047				
.923	-.1080				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(a) M = 0.25 - Continued

$\alpha = -4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.269	-.0544				
.284	-.0476	-.0436	-.0521	-.0544	-.0396
.289	-.0572	-.0651	-.0600	-.0544	-.0532
.294	-.0759	-.0776	-.0736	-.0668	-.0544
.304	.0646	.0294	———	.0130	-.0074
.323	.1654	.1722	.1546	.1467	.1087
.345	-.2135	-.2152	-.2203	-.2056	-.1869
.355	-.0261	-.0221	-.0357	-.0396	-.0261
.365	.0425	.0413	.0306	.0317	———
.384	.1359	———	.1359	.1370	.1291
.403	.2696	.2560	.2452	.2424	.2305
.417	.4004	.4043	.3896	.3664	.3262
.427	.3166	.3177	.3086	.2871	———
.436	.2679	.2611	.2531	.2384	.2101
.456	.2033	.2044	.2044	.1897	.1518
.475	.2061	———	.2005	.1739	.1438
.498	.2101	.1993	.2033	.1925	.1710
.517	.1506				
.537	.1331				
.575	.1144				
.691	.0532				
.769	-.0261				
.865	-.2288				
.923	-.1195				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(a) M = 0.25 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0771				
.284	-.0334	-.0402	-.0442	-.0431	-.0419
.289	-.0482	-.0606	-.0550	-.0499	-.0459
.294	-.0635	-.0606	-.0595	-.0635	-.0550
.304	.0000	-.0068	————	-.0011	.0068
.323	.1230	.1269	.1247	.1269	.1286
.345	-.1904	-.1944	-.1927	-.1796	-.1904
.355	-.0266	-.0306	-.0306	-.0323	-.0244
.365	.0368	.0340	.0329	.0397	————
.384	.1298	————	.1269	.1383	.1298
.403	.2408	.2340	.2363	.2323	.2312
.417	.3456	.3524	.3445	.3456	.3298
.427	.2839	.2822	.2822	.2771	————
.436	.2380	.2340	.2323	.2125	.2255
.456	.1638	.1689	.1796	.1785	.1689
.475	.1666	————	.1609	.1609	.1473
.498	.1677	.1553	.1706	.1745	.1842
.517	.1162				
.537	.0867				
.575	.0635				
.691	.0028				
.769	-.0703				
.865	-.2561				
.923	-.1388				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(a) M = 0.25 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0736				
.284	-.0181	-.0232	-.0261	-.0261	-.0385
.289	-.0317	-.0340	-.0357	-.0357	-.0340
.294	-.0317	-.0357	-.0397	-.0408	-.0515
.304	.0142	.0051	————	.0079	.0130
.323	.1156	.1173	.1144	.1144	.1173
.345	-.1325	-.1450	-.1569	-.1518	-.1824
.355	-.0142	-.0034	-.0142	-.0142	-.0193
.365	.0430	.0493	.0521	.0453	————
.384	.1439	————	.1399	.1399	.1291
.403	.2356	.2288	.2305	.2317	.2396
.417	.3030	.3127	.3019	.3234	.3331
.427	.2696	.2617	.2640	.2600	————
.436	.2198	.2158	.2181	.2198	.2220
.456	.1614	.1654	.1699	.1699	.1643
.475	.1478	————	.1524	.1507	.1507
.498	.1427	.1331	.1535	.1563	.1790
.517	.0872				
.537	.0725				
.575	.0453				
.691	-.0210				
.769	-.0844				
.865	-.2407				
.923	-.1303				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(a) M = 0.25 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0814				
.284	-.0209	-.0209	-.0277	-.0520	-.0656
.289	-.0334	-.0384	-.0356	-.0531	-.0695
.294	-.0356	-.0384	-.0413	-.0520	-.0803
.304	.0260	.0102	————	-.0074	-.0413
.323	.1097	.1006	.0893	.0678	.0678
.345	-.1153	-.1153	-.1300	-.1487	-.2459
.355	.0102	-.0006	-.0141	-.0266	-.0842
.365	.0571	.0560	.0481	.0317	————
.384	.1329	————	.1340	.1125	.0735
.403	.2120	.2120	.1973	.1962	.1719
.417	.2793	.2770	.2646	.2646	.2946
.427	.2312	.2363	.2245	.2188	————
.436	.1945	.1985	.1894	.1758	.1662
.456	.1408	.1436	.1408	.1261	.1086
.475	.1233	————	.1221	.1097	.0989
.498	.1086	.1097	.1069	.1086	.1312
.517	.0667				
.537	.0396				
.575	.0237				
.691	-.0481				
.769	-.1046				
.865	-.2595				
.923	-.1408				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(b) M = 0.40

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0655				
.284	-.0721	-.0664	-.0909	-.0909	-.0867
.289	-.0909	-.0933	-.1046	-.1036	-.0909
.294	-.1347	-.1291	-.1258	-.1225	-.0923
.304	.1404	.0876	.0805	.0000	-.0664
.323	.1804	.1893	.1729	.1389	.0480
.345	-.2369	-.2524	-.2661	-.2798	-.2539
.355	-.0292	-.0396	-.0598	-.0730	-.0834
.365	.0391	.0447	.0165	.0000	-.0193
.384	.1446	.1446	.1276	.1097	.0603
.403	.2882	.2694	.2548	.2289	.1738
.417	.4343	.4333	.4116	.3645	.2840
.427	.3547	.3466	.3287	.2826	.2077
.436	.2972	.2859	.2647	.2256	.1559
.456	.2402	.2331	.2185	.1747	.0909
.475	.2364	.2200	.2129	.1729	.0805
.498	.2510	.2364	.2242	.1940	.1097
.517	.1917				
.537	.1761				
.575	.1550				
.691	.0805				
.769	.0188				
.865	-.2214				
.923	-.1201				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(b) M = 0.40 - Continued

$\alpha = -4^{o}$

x/l	C_p at ∅ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0829				
.284	-.0787	-.0617	-.0721	-.0683	-.0650
.289	-.0810	-.0773	-.0810	-.0787	-.0627
.294	-.1008	-.0853	-.0933	-.0876	-.0730
.304	.0551	.0104	.0155	-.0113	-.0283
.323	.1592	.1649	.1484	.1338	.0989
.345	-.2337	-.2483	-.2445	-.2299	-.2030
.355	-.0462	-.0471	-.0537	-.0537	-.0405
.365	.0269	.0302	.0250	.0170	.0236
.384	.1291	.1225	.1248	.1258	.1159
.403	.2605	.2469	.2450	.2412	.2134
.417	.3929	.4000	.3854	.3571	.3123
.427	.3156	.3133	.3020	.2897	.2572
.436	.2615	.2516	.2412	.2355	.2068
.456	.1964	.1932	.1955	.1795	.1550
.475	.1932	.1818	.1818	.1663	.1380
.498	.2021	.1884	.1988	.1842	.1616
.517	.1451				
.537	.1248				
.575	.0989				
.691	.0471				
.769	-.0382				
.865	-.2549				
.923	-.1291				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(b) M = 0.40 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0909				
.284	-.0561	-.0561	-.0584	-.0485	-.0528
.289	-.0697	-.0650	-.0641	-.0575	-.0575
.294	-.0763	-.0754	-.0721	-.0707	-.0664
.304	-.0113	-.0170	-.0057	-.0226	-.0113
.323	.1201	.1168	.1168	.1178	.1211
.345	-.2030	-.2030	-.2030	-.1898	-.1865
.355	-.0495	-.0396	-.0429	-.0382	-.0316
.365	.0236	.0278	.0278	.0301	.0382
.384	.1267	.1244	.1300	.1357	.1291
.403	.2322	.2289	.2412	.2402	.2332
.417	.3335	.3368	.3401	.3368	.3222
.427	.2784	.2817	.2817	.2841	.2728
.436	.2313	.2322	.2322	.2346	.2313
.456	.1672	.1715	.1795	.1785	.1729
.475	.1569	.1550	.1625	.1569	.1526
.498	.1592	.1559	.1705	.1715	.1762
.517	.0989				
.537	.0829				
.575	.0594				
.691	-.0193				
.769	-.0754				
.865	-.2784				
.923	-.1493				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(b) M = 0.40 - Continued

$\alpha = 4^{o}$

x/l	C_p at ø of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0890				
.284	-.0466	-.0452	-.0523	-.0542	-.0669
.289	-.0509	-.0565	-.0532	-.0589	-.0711
.294	-.0598	-.0622	-.0655	-.0645	-.0791
.304	-.0104	-.0160	-.0127	-.0184	-.0250
.323	.0928	.0928	.0895	.0937	.0881
.345	-.1564	-.1597	-.1668	-.1814	-.2059
.355	-.0306	-.0306	-.0353	-.0363	-.0466
.365	.0344	.0367	.0278	.0254	.0165
.384	.1173	.1206	.1230	.1230	.1074
.403	.2115	.2063	.2115	.2172	.2096
.417	.2826	.2892	.2859	.2883	.3081
.427	.2445	.2454	.2464	.2454	.2577
.436	.2082	.2082	.2016	.2049	.2007
.456	.1498	.1498	.1545	.1512	.1498
.475	.1333	.1300	.1343	.1319	.1366
.498	.1244	.1197	.1352	.1376	.1569
.517	.0612				
.537	.0457				
.575	.0165				
.691	-.0386				
.769	-.1149				
.865	-.2968				
.923	-.1630				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(b) M = 0.40 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0791				
.284	-.0410	-.0433	-.0523	-.0669	-.0905
.289	-.0481	-.0546	-.0537	-.0693	-.0928
.294	-.0570	-.0594	-.0627	-.0726	-.1008
.304	-.0042	-.0085	-.0165	-.0353	-.0579
.323	.0947	.0834	.0702	.0532	.0466
.345	-.1263	-.1357	-.1498	-.1715	-.2634
.355	-.0141	-.0174	-.0278	-.0499	-.0938
.365	.0452	.0410	.0339	.0104	-.0311
.384	.1296	.1183	.1159	.1036	.0612
.403	.2035	.1856	.1903	.1800	.1654
.417	.2577	.2553	.2483	.2473	.2742
.427	.2214	.2195	.2139	.2059	.2049
.436	.1903	.1866	.1757	.1677	.1484
.456	.1385	.1319	.1305	.1117	.0914
.475	.1150	.1060	.1013	.0914	.0848
.498	.1013	.0947	.0947	.0938	.1102
.517	.0410				
.537	.0231				
.575	-.0061				
.691	-.0702				
.769	-.1432				
.865	-.2949				
.923	-.1658				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(c) M = 0.60

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0782				
.284	-.0885	-.0811	-.1031	-.1060	-.0969
.289	-.1031	-.1055	-.1163	-.1170	-.1010
.294	-.1335	-.1306	-.1328	-.1306	-.1010
.304	.0713	.0313	.0273	-.0428	-.0804
.323	.2041	.2120	.1806	.1402	.0364
.345	-.2874	-.3063	-.3194	-.3252	-.2795
.355	-.0531	-.0589	-.0782	-.0936	-.1014
.365	.0273	.0297	.0041	-.0160	-.0292
.384	.1407	.1402	.1232	.1038	.0644
.403	.3034	.2816	.2646	.2285	.1797
.417	.4556	.4556	.4300	.3747	.2919
.427	.3752	.3682	.3434	.3027	.2189
.436	.3154	.3027	.2804	.2378	.1574
.456	.2469	.2395	.2275	.1785	.0957
.475	.2462	.2297	.2189	.1670	.0871
.498	.2618	.2445	.2326	.1950	.1282
.517	.1893				
.537	.1756				
.575	.1555				
.691	.0907				
.769	.0103				
.865	-.2630				
.923	-.1397				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(c) M = 0.60 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1010				
.284	-.0840	-.0766	-.0902	-.0857	-.0758
.289	-.0948	-.0919	-.0959	-.0914	-.0811
.294	-.1113	-.1067	-.1055	-.1000	-.0885
.304	-.0069	-.0258	-.0201	-.0407	-.0493
.323	.1596	.1584	.1440	.1275	.0871
.345	-.2720	-.2811	-.2881	-.2682	-.2333
.355	-.0703	-.0684	-.0770	-.0737	-.0639
.365	.0096	.0165	.0045	.0038	.0112
.384	.1230	.1247	.1208	.1196	.1122
.403	.2713	.2582	.2512	.2405	.2189
.417	.3984	.4020	.3888	.3632	.3175
.427	.3261	.3237	.3170	.3022	.2639
.436	.2689	.2685	.2520	.2450	.2125
.456	.2024	.2017	.2017	.1795	.1515
.475	.1943	.1852	.1876	.1670	.1361
.498	.2046	.1926	.1984	.1881	.1646
.517	.1373				
.537	.1184				
.575	.0933				
.691	.0301				
.769	-.0464				
.865	-.2984				
.923	-.1570				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(c) M = 0.60 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1082				
.284	-.0627	-.0632	-.0649	-.0615	-.0656
.289	-.0735	-.0706	-.0730	-.0718	-.0711
.294	-.0809	-.0792	-.0804	-.0821	-.0785
.304	-.0215	-.0306	-.0278	-.0323	-.0302
.323	.1182	.1194	.1125	.1125	.1113
.345	-.2240	-.2293	-.2286	-.2178	-.2190
.355	-.0570	-.0507	-.0562	-.0536	-.0455
.365	.0201	.0280	.0196	.0242	.0270
.384	.1285	.1307	.1295	.1352	.1269
.403	.2544	.2470	.2425	.2403	.2420
.417	.3492	.3550	.3447	.3384	.3282
.427	.2956	.2944	.2939	.2906	.2824
.436	.2449	.2461	.2396	.2396	.2322
.456	.1776	.1781	.1855	.1821	.1735
.475	.1649	.1599	.1656	.1628	.1558
.498	.1656	.1582	.1723	.1759	.1805
.517	.0981				
.537	.0771				
.575	.0503				
.691	-.0124				
.769	-.0895				
.865	-.3193				
.923	-.1692				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(c) M = 0.60 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1007				
.284	-.0574	-.0562	-.0615	-.0644	-.0751
.289	-.0632	-.0632	-.0672	-.0689	-.0797
.294	-.0689	-.0701	-.0718	-.0747	-.0854
.304	-.0249	-.0294	-.0294	-.0359	-.0376
.323	.0852	.0897	.0840	.0862	.0878
.345	-.1761	-.1795	-.1881	-.1967	-.2319
.355	-.0392	-.0359	-.0443	-.0495	-.0598
.365	.0280	.0354	.0263	.0218	.0098
.384	.1285	.1302	.1278	.1273	.1130
.403	.2276	.2226	.2221	.2230	.2271
.417	.2869	.2939	.2939	.2984	.3190
.427	.2534	.2534	.2568	.2601	.2671
.436	.2156	.2135	.2151	.2180	.2168
.456	.1496	.1553	.1649	.1575	.1558
.475	.1319	.1307	.1398	.1359	.1388
.498	.1240	.1220	.1359	.1426	.1661
.517	.0658				
.537	.0407				
.575	.0144				
.691	-.0558				
.769	-.1316				
.865	-.3312				
.923	-.1831				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(c) M = 0.60 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0941				
.284	-.0546	-.0536	-.0620	-.0735	-.1025
.289	-.0582	-.0627	-.0673	-.0776	-.1044
.294	-.0666	-.0690	-.0730	-.0838	-.1094
.304	-.0165	-.0215	-.0268	-.0438	-.0785
.323	.0828	.0759	.0623	.0390	.0345
.345	-.1350	-.1425	-.1552	-.1853	-.2885
.355	-.0187	-.0211	-.0323	-.0563	-.1066
.365	.0390	.0412	.0292	.0093	-.0369
.384	.1286	.1279	.1212	.1056	.0601
.403	.2050	.2009	.1930	.1872	.1741
.417	.2586	.2581	.2471	.2461	.2813
.427	.2268	.2268	.2198	.2119	.2210
.436	.1954	.1925	.1815	.1707	.1604
.456	.1360	.1382	.1348	.1176	.0994
.475	.1113	.1085	.1080	.0972	.0891
.498	.1001	.0931	.0977	.0982	.1154
.517	.0407				
.537	.0177				
.575	-.0129				
.691	-.0831				
.769	-.1573				
.865	-.3314				
.923	-.1853				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(d) M = 0.80

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0854				
.284	-.0968	-.0912	-.1123	-.1131	-.1004
.289	-.1157	-.1123	-.1234	-.1242	-.1054
.294	-.1437	-.1417	-.1433	-.1411	-.1142
.304	.0664	.0349	.0338	-.0122	-.0322
.323	.2178	.2189	.1879	.1449	.0587
.345	-.3407	-.3592	-.3718	-.3615	-.3069
.355	-.0689	-.0697	-.0899	-.0999	-.0912
.365	.0249	.0296	.0058	-.0080	-.0106
.384	.1588	.1576	.1419	.1258	.0959
.403	.3306	.3114	.2945	.2624	.2078
.417	.4717	.4712	.4429	.3927	.3068
.427	.4091	.4015	.3792	.3340	.2485
.436	.3536	.3406	.3159	.2757	.1964
.456	.2815	.2749	.2627	.2152	.1316
.475	.2760	.2641	.2524	.2037	.1197
.498	.2929	.2754	.2688	.2297	.1496
.517	.2228				
.537	.2014				
.575	.1765				
.691	.1067				
.769	.0346				
.865	-.4643				
.923	-.1517				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(d) M = 0.80 - Continued

$\alpha = -4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.269	-.0848				
.284	-.0775	-.0721	-.0795	-.0767	-.0626
.289	-.0898	-.0875	-.0886	-.0851	-.0737
.294	-.1100	-.1075	-.1039	-.1020	-.0870
.304	.0613	.0436	.0463	.0378	.0428
.323	.1667	.1675	.1528	.1387	.1031
.345	-.2957	-.3057	-.3110	-.2888	-.2389
.355	-.0653	-.0626	-.0714	-.0679	-.0442
.365	.0256	.0333	.0206	.0211	.0317
.384	.1528	.1548	.1514	.1495	.1442
.403	.3028	.2906	.2840	.2740	.2503
.417	.4189	.4206	.4070	.3829	.3382
.427	.3638	.3588	.3504	.3335	.2917
.436	.3105	.3028	.2944	.2820	.2476
.456	.2415	.2392	.2388	.2177	.1866
.475	.2315	.2238	.2235	.2027	.1686
.498	.2399	.2296	.2346	.2212	.1927
.517	.1694				
.537	.1453				
.575	.1211				
.691	.0533				
.769	-.0232				
.865	-.5871				
.923	-.1593				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(d) M = 0.80 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0699				
.284	-.0534	-.0518	-.0507	-.0488	-.0484
.289	-.0637	-.0623	-.0615	-.0607	-.0584
.294	-.0795	-.0784	-.0776	-.0753	-.0729
.304	.0769	.0697	.0752	.0728	.0713
.323	.1231	.1304	.1238	.1246	.1215
.345	-.2302	-.2379	-.2379	-.2215	-.2176
.355	-.0443	-.0385	-.0435	-.0369	-.0282
.365	.0378	.0459	.0391	.0414	.0497
.384	.1548	.1584	.1579	.1626	.1584
.403	.2768	.2704	.2696	.2696	.2649
.417	.3686	.3720	.3681	.3578	.3498
.427	.3179	.3176	.3176	.3156	.3026
.436	.2696	.2727	.2696	.2715	.2641
.456	.2102	.2128	.2178	.2152	.2113
.475	.1948	.1925	.2002	.1956	.1906
.498	.1944	.1886	.2033	.2052	.2117
.517	.1268				
.537	.1054				
.575	.0739				
.691	.0034				
.769	-.0795				
.865	-.5374				
.923	-.1642				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(d) M = 0.80 - Continued

$\alpha = 4^{o}$

x/l	C_p at ø of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0890				
.284	-.0332	-.0312	-.0393	-.0419	-.0568
.289	-.0438	-.0443	-.0493	-.0515	-.0676
.294	-.0407	-.0438	-.0468	-.0579	-.0787
.304	.0658	.0636	.0724	.0671	.0467
.323	.0932	.0977	.0988	.1032	.1062
.345	-.1233	-.1325	-.1447	-.1772	-.2421
.355	.0006	.0014	-.0082	-.0212	-.0430
.365	.0625	.0671	.0575	.0513	.0353
.384	.1557	.1598	.1565	.1587	.1437
.403	.2450	.2413	.2439	.2474	.2543
.417	.3099	.3160	.3176	.3240	.3429
.427	.2704	.2724	.2780	.2830	.2988
.436	.2386	.2394	.2389	.2447	.2519
.456	.1833	.1856	.1940	.1914	.1895
.475	.1645	.1626	.1690	.1668	.1756
.498	.1542	.1492	.1640	.1714	.1970
.517	.0935				
.537	.0686				
.575	.0348				
.691	-.0388				
.769	-.1259				
.865	-.4098				
.923	-.1816				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(d) M = 0.80 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ø of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1479				
.284	-.0578	-.0582	-.0674	-.0739	-.1031
.289	-.0636	-.0677	-.0755	-.0816	-.1104
.294	-.0597	-.0613	-.0639	-.0824	-.1192
.304	-.0103	-.0098	-.0006	.0196	-.0314
.323	.0507	.0510	.0492	.0542	.0534
.345	-.0145	-.0241	-.0652	-.1683	-.3051
.355	.0446	.0418	.0219	-.0245	-.0973
.365	.0803	.0806	.0679	.0407	-.0191
.384	.1385	.1405	.1389	.1355	.0920
.403	.1976	.1960	.2034	.2121	.2071
.417	.2401	.2444	.2620	.2769	.2980
.427	.2175	.2198	.2275	.2386	.2497
.436	.1990	.1976	.1971	.1957	.1968
.456	.1566	.1561	.1574	.1397	.1324
.475	.1350	.1316	.1347	.1239	.1205
.498	.1175	.1147	.1239	.1205	.1463
.517	.0640				
.537	.0393				
.575	.0005				
.691	-.0793				
.769	-.1675				
.865	-.3937				
.923	-.1958				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(e) M = 0.85

$\alpha = -8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.0708					
.284	----	-.0713	-.0971	-.0898	-.0856	
.289	-.0912	-.0919	-.1067	-.0999	-.0940	
.294	-.1153	-.1161	-.1207	-.1195	-.1072	
.304	.0473	.0380	.0427	-.0077	-.0184	
.313	.2742					
.323	.2538	.2552	.2267	.1658	.0930	.0244
.334	.0904					
.345	-.3836	-.4369	-.4809	-.4568	-.3971	
.355	-.0826	-.0865	-.0891	-.1249	-.0940	
.365	.0329	.0338	.0211	-.0086	-.0069	
.384	.1777	.1691	.1527	.1298	.1159	
.403	.3432	.3334	.3105	.2856	.2356	
.417	.4930	.4900	.4607	.4109	.3334	
.427	.4375	.4282	.4074	.3486	.2859	
.436	.3765	.3659	.3414	.3004	.2234	
.456	.3100	.3016	.3004	.2026	.1344	
.475	.2992	.2859	.2852	.2154	.1403	
.498	.3063	.3088	.3020	.2093	.1501	
.517	.2255					
.537	.2131					
.575	.1911					
.691	.1298					
.769	.0537					
.865	-.8077					
.923	-.1322					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(e) M = 0.85 - Continued

$\alpha = -4^{\circ}$

x/l	C_p at ø of:					
	0°	15°	30°	50°	90°	180°
.269	-.0442					
.284	-----	-.0332	-.0442	-.0353	-.0247	
.289	-.0513	-.0491	-.0526	-.0442	-.0336	
.294	-.0687	-.0662	-.0641	-.0585	-.0491	
.304	.0642	.0600	.0677	.0546	.0668	
.313	.2086					
.323	.2014	.2010	.1887	.1586	.1370	.2377
.334	.0727					
.345	-.3223	-.3561	-.3811	-.3443	-.2961	
.355	-.0690	-.0730	-.0657	-.0605	-.0390	
.365	.0392	.0422	.0389	.0295	.0460	
.384	.1752	.1717	.1651	.1642	.1642	
.403	.3229	.3124	.3068	.2983	.2805	
.417	.4498	.4474	.4376	.4105	.3733	
.427	.3962	.3920	.3826	.3526	.3301	
.436	.3395	.3314	.3229	.3089	.2738	
.456	.2695	.2658	.2742	.2159	.1934	
.475	.2539	.2471	.2569	.2218	.1913	
.498	.2539	.2599	.2658	.2082	.2010	
.517	.1768					
.537	.1607					
.575	.1345					
.691	.0761					
.769	.0059					
.865	-.8451					
.923	-.1351					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(e) M = 0.85 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.0662					
.284	———	-.0116	-.0116	-.0112	-.0062	
.289	-.0231	-.0214	-.0222	-.0214	-.0172	
.294	-.0332	-.0332	-.0329	-.0282	-.0299	
.304	.0798	.0832	.0811	.0777	.0798	
.313	.1624					
.323	.1505	.1570	.1502	.1446	.1421	.4165
.334	.0549					
.345	-.2374	-.2615	-.2763	-.2580	-.2645	
.355	-.0442	-.0439	-.0392	-.0472	-.0252	
.365	.0510	.0553	.0519	.0472	.0528	
.384	.1730	.1718	.1671	.1730	.1760	
.403	.2929	.2886	.2852	.2877	.2835	
.417	.3889	.3929	.3844	.3776	.3742	
.427	.3437	.3454	.3420	.3259	.3336	
.436	.3009	.2954	.2920	.2894	.2844	
.456	.2327	.2327	.2454	.2048	.2060	
.475	.2123	.2090	.2200	.2018	.2010	
.498	.2018	.2095	.2243	.1823	.2086	
.517	.1235					
.537	.1048					
.575	.0790					
.691	.0181					
.769	-.0535					
.865	-.8789					
.923	-.1564					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(e) M = 0.85 - Continued

$\alpha = 4^{\circ}$

x/l	C_p at ϕ of:					
	0°	15°	30°	50°	90°	180°
.269	-.1049					
.284	————	-.0068	-.0072	-.0118	-.0262	
.289	-.0157	-.0127	-.0182	-.0194	-.0339	
.294	-.0101	-.0110	-.0140	-.0241	-.0431	
.304	.0576	.0627	.0728	.0702	.0653	
.313	.1046					
.323	.1072	.1118	.1182	.1147	.1325	.5859
.334	.0588					
.345	-.0974	-.1185	-.1571	-.2002	-.3022	
.355	.0145	.0119	.0030	-.0241	-.0402	
.365	.0775	.0796	.0745	.0592	.0411	
.384	.1718	.1748	.1711	.1690	.1629	
.403	.2556	.2565	.2617	.2659	.2772	
.417	.3226	.3298	.3369	.3450	.3703	
.427	.2896	.2938	.3015	.2963	.3289	
.436	.2582	.2608	.2612	.2659	.2709	
.456	.2074	.2065	.2201	.1842	.1913	
.475	.1824	.1779	.1913	.1791	.1931	
.498	.1617	.1702	.1849	.1559	.2011	
.517	.1011					
.537	.0791					
.575	.0475					
.691	-.0220					
.769	-.0995					
.865	-.8842					
.923	-.1709					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(e) M = 0.85 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.2104					
.284	————	-.1017	-.1191	-.1343	-.1085	
.289	-.1081	-.1127	-.1284	-.1411	-.1228	
.294	-.1144	-.1139	-.1249	-.1448	-.1415	
.304	-.0894	-.0868	-.0919	-.0479	-.0268	
.313	-.0505					
.323	-.0124	-.0116	-.0065	.0282	.0850	.7629
.334	.0206					
.345	.0249	.0181	-.0158	-.1703	-.4044	
.355	.0595	.0570	.0452	-.0184	-.0987	
.365	.0858	.0867	.0808	.0490	-.0175	
.384	.1286	.1302	.1337	.1421	.1073	
.403	.1688	.1709	.1911	.2234	.2297	
.417	.2068	.2196	.2559	.2962	.3322	
.427	.2060	.2068	.2271	.2398	.2847	
.436	.1988	.1955	.2021	.2093	.2128	
.456	.1726	.1712	.1806	.1323	.1265	
.475	.1552	.1492	.1569	.1293	.1433	
.498	.1298	.1337	.1459	.1078	.1527	
.517	.0799					
.537	.0549					
.575	.0143					
.691	-.0606					
.769	-.1394					
.865	-.8784					
.923	-.1867					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(f) M = 0.90

$\alpha = -8^{\circ}$

x/l	C_p at ϕ of:					
	0°	15°	30°	50°	90°	180°
.269	-.3348					
.284	————	-.0359	-.0451	-.0554	-.1199	
.289	-.0459	-.0466	-.0566	-.0702	-.1373	
.294	-.0625	-.0605	-.0682	-.0825	-.1536	
.304	.0011	-.0045	-.0101	-.0455	-.1047	
.313	.2156					
.323	.3291	.3234	.3028	.2506	.1651	-.0996
.334	.1843					
.345	-.3460	-.4028	-.4750	-.4343	-.4156	
.355	-.0558	-.0594	-.0574	-.0944	-.0658	
.365	.0643	.0652	.0489	.0234	.0203	
.384	.2065	.1993	.1850	.1647	.1436	
.403	.3816	.3729	.3485	.3227	.2693	
.417	.5365	.5321	.5054	.4500	.3756	
.427	.4788	.4700	.4478	.3872	.3215	
.436	.4130	.4031	.3776	.3386	.2563	
.456	.3386	.3303	.3259	.2303	.1595	
.475	.3254	.3152	.3108	.2439	.1667	
.498	.3338	.3371	.3331	.2371	.1830	
.517	.2523					
.537	.2351					
.575	.2113					
.691	.1636					
.769	.0831					
.865	-.7090					
.923	-.4673					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(f) M = 0.90 - Continued

$\alpha = -4^{\circ}$

x/l	C_p at ϕ of:					
	0°	15°	30°	50°	90°	180°
.269	-.3387					
.284	-----	-.0429	-.0478	-.0612	-.0971	
.289	-.0465	-.0489	-.0561	-.0720	-.1074	
.294	-.0541	-.0573	-.0649	-.0784	-.1149	
.304	-.0354	-.0374	-.0465	-.0641	-.1039	
.313	.0896					
.323	.2280	.2297	.2165	.1923	.0940	-.0315
.334	.1835					
.345	-.2272	-.2833	-.2877	-.2494	-.1504	
.355	-.0254	-.0258	-.0187	-.0326	.0171	
.365	.0768	.0812	.0788	.0700	.0887	
.384	.2082	.2066	.2002	.1974	.1970	
.403	.3634	.3559	.3471	.3411	.3180	
.417	.4935	.4952	.4844	.4569	.4191	
.427	.4358	.4327	.4259	.3920	.3717	
.436	.3746	.3682	.3598	.3462	.3077	
.456	.2977	.2934	.3068	.2368	.2170	
.475	.2775	.2714	.2817	.2428	.2161	
.498	.2795	.2870	.2941	.2317	.2273	
.517	.1950					
.537	.1767					
.575	.1525					
.691	.0988					
.769	.0354					
.865	-.7505					
.923	-.5520					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(f) M = 0.90 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.2115					
.284	———	-.1128	-.1077	-.1097	-.1113	
.289	-.1128	-.1120	-.1141	-.1157	-.1168	
.294	-.1164	-.1160	-.1192	-.1157	-.1204	
.304	-.1168	-.1137	-.1141	-.1192	-.1248	
.313	-.0858					
.323	-.0078	.0404	.0496	.0050	.0173	.0886
.334	.0655					
.345	.0265	-.0301	-.0428	.0065	-.0162	
.355	.0719	.0600	.0595	.0655	.0767	
.365	.1236	.1221	.1221	.1225	.1228	
.384	.2128	.2168	.2139	.2128	.2176	
.403	.3024	.3158	.3163	.3092	.3139	
.417	.3784	.4098	.4130	.3863	.3962	
.427	.3601	.3709	.3724	.3517	.3649	
.436	.3270	.3295	.3258	.3242	.3215	
.456	.2713	.2720	.2852	.2487	.2462	
.475	.2467	.2438	.2566	.2375	.2383	
.498	.2287	.2438	.2594	.2163	.2447	
.517	.1575					
.537	.1384					
.575	.1029					
.691	.0503					
.769	-.0173					
.865	-.7566					
.923	-.6009					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(f) M = 0.90 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.2129					
.284	------	-.1002	-.1042	-.1063	-.0942	
.289	-.1122	-.1090	-.1114	-.1134	-.1083	
.294	-.1142	-.1138	-.1154	-.1178	-.1237	
.304	-.1063	-.1050	-.1059	-.1098	-.0852	
.313	-.0744					
.323	-.0286	-.0278	-.0218	-.0231	.1712	.5115
.334	.0187					
.345	.0422	.0429	.0310	.0044	-.2474	
.355	.0788	.0772	.0781	.0645	.0024	
.365	.1094	.1091	.1122	.1083	.0761	
.384	.1640	.1660	.1703	.1791	.1926	
.403	.2146	.2174	.2245	.2544	.3152	
.417	.2515	.2491	.2707	.3291	.4226	
.427	.2531	.2547	.2683	.2921	.3746	
.436	.2484	.2487	.2564	.2754	.3009	
.456	.2265	.2256	.2361	.2078	.2093	
.475	.2062	.2069	.2170	.2078	.2165	
.498	.1807	.1871	.2038	.1847	.2276	
.517	.1314					
.537	.1078					
.575	.0684					
.691	-.0011					
.769	-.0680					
.865	-.7648					
.923	-.6136					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(f) M = 0.90 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.2459					
.284	————	-.1459	-.1582	-.1957	-.1208	
.289	-.1598	-.1602	-.1702	-.2049	-.1407	
.294	-.1666	-.1675	-.1746	-.2204	-.1631	
.304	-.1563	-.1571	-.1618	-.1842	-.0783	
.313	-.1316					
.323	-.0990	-.0957	-.1041	-.0622	.1503	.7870
.334	-.0559					
.345	-.0265	-.0237	-.0305	-.0966	-.4604	
.355	.0069	.0069	.0069	-.0041	-.0845	
.365	.0320	.0357	.0333	.0457	.0006	
.384	.0827	.0818	.0890	.1229	.1210	
.403	.1285	.1276	.1448	.2097	.2531	
.417	.1607	.1624	.2080	.3025	.3595	
.427	.1794	.1778	.1981	.2391	.3144	
.436	.1890	.1870	.1921	.2137	.2375	
.456	.1926	.1882	.1977	.1404	.1456	
.475	.1818	.1782	.1838	.1512	.1599	
.498	.1639	.1651	.1818	.1353	.1763	
.517	.1185					
.537	.0937					
.575	.0508					
.691	-.0376					
.769	-.0997					
.865	-.8029					
.923	-.6396					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(g) M = 0.95

$\alpha = -8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.4692					
.284	————	-.2517	-.2505	-.2399	-.2019	
.289	-.2655	-.2618	-.2565	-.2463	-.2102	
.294	-.2697	-.2682	-.2588	-.2476	-.2151	
.304	-.2634	-.2641	-.2599	-.2505	-.2061	
.313	-.1559					
.323	.0397	.0066	-.0213	-.0771	-.0948	-.2000
.334	.1694					
.345	-.1291	-.1496	-.1536	-.1208	-.0827	
.355	.0107	.0145	.0187	-.0003	.0028	
.365	.1137	.1171	.1054	.0835	.0601	
.384	.2501	.2463	.2301	.2063	.1581	
.403	.4123	.4017	.3752	.3454	.2607	
.417	.5528	.5464	.5170	.4593	.3429	
.427	.5084	.4940	.4713	.4054	.3157	
.436	.4507	.4423	.4152	.3745	.2765	
.456	.3809	.3745	.3692	.2747	.2049	
.475	.3662	.3568	.3504	.2641	.2071	
.498	.3729	.3764	.3681	.2728	.2155	
.517	.2893					
.537	.2735					
.575	.2512					
.691	.2007					
.769	.1430					
.865	-.6101					
.923	-.4115					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(g) M = 0.95 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.5589					
.284	————	-.2706	-.2664	-.2555	-.2265	
.289	-.2785	-.2741	-.2699	-.2593	-.2330	
.294	-.2781	-.2760	-.2733	-.2616	-.2359	
.304	-.2841	-.2820	-.2774	-.2668	-.2326	
.313	-.2424					
.323	-.1446	-.1485	-.1510	-.1529	-.1299	-.2133
.334	-.0375					
.345	-.0043	-.0095	-.0129	-.0054	.0055	
.355	.0678	.0712	.0723	.0640	.0644	
.365	.1428	.1428	.1413	.1342	.1172	
.384	.2613	.2636	.2515	.2421	.2115	
.403	.3779	.3700	.3579	.3416	.2972	
.417	.4650	.4591	.4391	.4130	.3594	
.427	.4568	.4477	.4356	.4069	.3669	
.436	.4288	.4228	.4069	.3896	.3504	
.456	.3723	.3704	.3723	.3251	.3013	
.475	.3489	.3435	.3481	.3156	.2915	
.498	.3406	.3473	.3511	.2976	.2878	
.517	.2640					
.537	.2409					
.575	.2100					
.691	.1583					
.769	.1051					
.865	-.6245					
.923	-.4706					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(g) M = 0.95 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.6545					
.284	————	-.2021	-.1984	-.1969	-.1953	
.289	-.2067	-.2067	-.2009	-.2028	-.2017	
.294	-.2074	-.2119	-.2067	-.2051	-.2059	
.304	-.2165	-.2142	-.2115	-.2105	-.2119	
.313	-.2036					
.323	-.1542	-.1501	-.1523	-.1505	-.1467	-.1146
.334	-.0698					
.345	.0274	.0270	.0259	.0278	.0270	
.355	.0897	.0893	.0881	.0897	.0907	
.365	.1447	.1431	.1424	.1424	.1462	
.384	.2377	.2400	.2329	.2321	.2373	
.403	.3217	.3135	.3109	.3157	.3101	
.417	.3799	.3730	.3746	.3651	.3697	
.427	.3859	.3832	.3799	.3730	.3799	
.436	.3701	.3705	.3674	.3651	.3632	
.456	.3301	.3323	.3395	.3113	.3142	
.475	.3044	.3021	.3127	.2973	.2992	
.498	.2815	.2886	.3011	.2675	.2879	
.517	.2095					
.537	.1820					
.575	.1450					
.691	.0851					
.769	.0305					
.865	-.6691					
.923	-.5376					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(g) M = 0.95 - Continued

$\alpha = 4^{\circ}$

x/l	C_p at ϕ of:					
	0°	15°	30°	50°	90°	180°
.269	-.2254					
.284	———	-.1681	-.1637	-.1689	-.1946	
.289	-.1746	-.1746	-.1731	-.1769	-.1987	
.294	-.1814	-.1814	-.1777	-.1810	-.2013	
.304	-.1931	-.1896	-.1863	-.1889	-.1979	
.313	-.1885					
.323	-.1704	-.1554	-.1494	-.1527	-.1112	.0040
.334	-.1237					
.345	-.0721	-.0525	-.0431	-.0389	-.0020	
.355	-.0187	-.0058	.0025	.0078	.0586	
.365	.0199	.0301	.0357	.0478	.1103	
.384	.0907	.0990	.1043	.1314	.2045	
.403	.1585	.1620	.1728	.2181	.2972	
.417	.2007	.2030	.2203	.2787	.3673	
.427	.2268	.2279	.2516	.3017	.3669	
.436	.2460	.2512	.2723	.3137	.3390	
.456	.2652	.2689	.2950	.2852	.2798	
.475	.2625	.2648	.2858	.2795	.2754	
.498	.2429	.2543	.2760	.2504	.2735	
.517	.2026					
.537	.1736					
.575	.1231					
.691	.0455					
.769	-.0152					
.865	-.6599					
.923	-.5330					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(g) M = 0.95 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.2218					
.284	————	-.1645	-.1577	-.1638	-.1970	
.289	-.1755	-.1780	-.1736	-.1759	-.2053	
.294	-.1849	-.1856	-.1784	-.1838	-.2045	
.304	-.1947	-.1947	-.1897	-.1947	-.1920	
.313	-.1822					
.323	-.1603	-.1559	-.1555	-.1607	-.0841	.2765
.334	-.1177					
.345	-.0853	-.0860	-.0860	-.0891	-.1463	
.355	-.0442	-.0438	-.0461	-.0626	-.0294	
.365	-.0163	-.0167	-.0211	-.0309	.0265	
.384	.0386	.0378	.0325	.0369	.1279	
.403	.0958	.0920	.0955	.1091	.2320	
.417	.1348	.1340	.1290	.1690	.3199	
.427	.1604	.1565	.1596	.1834	.3026	
.436	.1849	.1849	.1868	.2079	.2592	
.456	.2181	.2162	.2237	.2007	.1955	
.475	.2320	.2306	.2339	.2139	.2097	
.498	.2237	.2264	.2347	.1932	.2241	
.517	.1955					
.537	.1686					
.575	.1204					
.691	.0242					
.769	-.0374					
.865	-.6753					
.923	-.5338					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(h) M = 1.00

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.3587				
.284	-.3684	-.3618	-.3620	-.3526	-.3321
.289	-.3746	-.3697	-.3669	-.3587	-.3400
.294	-.3806	-.3770	-.3706	-.3618	-.3450
.304	-.3455	-.3504	-.3495	-.3459	-.3124
.323	-.0046	-.0419	-.0849	-.1551	-.1961
.345	-.2954	-.3227	-.3642	-.3834	-.1103
.355	-.4615	-.4499	-.4368	-.2341	-.0330
.365	-.0421	-.0196	-.0004	.0271	.0207
.384	.2677	.2627	.2426	.2026	.0982
.403	.4233	.4098	.3833	.3225	.1702
.417	.5237	.5173	.4842	.4071	.2194
.427	.5261	.5148	.4849	.4202	.2463
.436	.4941	.4831	.4553	.4037	.2661
.456	.4309	.4239	.4071	.3591	.2661
.475	.4204	.4085	.3970	.3463	.2679
.498	.4336	.4202	.4089	.3723	.2969
.517	.3606				
.537	.3368				
.575	.3057				
.691	.2538				
.769	.2105				
.865	-.4887				
.923	-.3287				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(h) M = 1.00 - Continued

$\alpha = -4^{o}$

x/l	C_p at ø of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.4515				
.284	-.4400	-.4336	-.4308	-.4237	-.3978
.289	-.4442	-.4406	-.4378	-.4314	-.4034
.294	-.4491	-.4460	-.4431	-.4367	-.4060
.304	-.4226	-.4241	-.4210	-.4232	-.3939
.323	-.1253	-.1494	-.1710	-.1990	-.2195
.345	-.3526	-.3731	-.3902	-.3118	-.0648
.355	-.2455	-.1823	-.1189	-.0489	.0216
.365	.0674	.0738	.0781	.0815	.0854
.384	.2536	.2496	.2380	.2161	.1739
.403	.3739	.3626	.3455	.3095	.2417
.417	.4432	.4361	.4108	.3677	.2810
.427	.4646	.4556	.4335	.3982	.3122
.436	.4578	.4492	.4335	.4068	.3366
.456	.4139	.4114	.4068	.3898	.3467
.475	.3977	.3913	.3931	.3757	.3446
.498	.3995	.3900	.3943	.3839	.3538
.517	.3260				
.537	.2993				
.575	.2637				
.691	.2002				
.769	.1578				
.865	-.5190				
.923	-.3948				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(h) M = 1.00 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.5266				
.284	-.4738	-.4674	-.4650	-.4585	-.4650
.289	-.4780	-.4747	-.4738	-.4725	-.4707
.294	-.4835	-.4814	-.4811	-.4784	-.4744
.304	-.4619	-.4630	-.4597	-.4641	-.4582
.323	-.2055	-.2154	-.2184	-.2196	-.2119
.345	-.1417	-.1176	-.0931	-.0772	-.0738
.355	.0401	.0426	.0455	.0459	.0532
.365	.1263	.1254	.1226	.1232	.1296
.384	.2307	.2297	.2252	.2240	.2243
.403	.3030	.2986	.2933	.2921	.2921
.417	.3432	.3403	.3337	.3319	.3312
.427	.3688	.3666	.3606	.3591	.3584
.436	.3828	.3779	.3759	.3743	.3730
.456	.3770	.3752	.3774	.3752	.3739
.475	.3673	.3633	.3688	.3666	.3621
.498	.3551	.3514	.3596	.3615	.3657
.517	.2970				
.537	.2655				
.575	.2240				
.691	.1513				
.769	.1058				
.865	-.5443				
.923	-.4423				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(h) M = 1.00 - Continued

$\alpha = 4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.269	-.5795				
.284	-.3003	-.2954	-.3049	-.3323	-.3889
.289	-.3098	-.3082	-.3184	-.3394	-.3944
.294	-.3180	-.3164	-.3257	-.3464	-.4005
.304	-.3208	-.3204	-.3305	-.3486	-.3919
.323	-.1791	-.1837	-.1879	-.1962	-.2126
.345	-.0022	-.0050	-.0065	-.0145	-.0889
.355	.0458	.0442	.0427	.0356	.0067
.365	.0809	.0778	.0769	.0760	.0668
.384	.1394	.1410	.1410	.1432	.1524
.403	.1908	.1893	.1917	.1975	.2187
.417	.2217	.2231	.2253	.2299	.2574
.427	.2458	.2489	.2510	.2589	.2968
.436	.2730	.2717	.2772	.2858	.3240
.456	.2999	.3004	.3072	.3163	.3426
.475	.3106	.3103	.3185	.3234	.3432
.498	.3081	.3079	.3182	.3243	.3500
.517	.2776				
.537	.2494				
.575	.2019				
.691	.1162				
.769	.0634				
.865	-.5575				
.923	-.4359				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(h) M = 1.00 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ∅ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.2322				
.284	-.1769	-.1764	-.1797	-.2157	-.3382
.289	-.1967	-.1928	-.1962	-.2303	-.3486
.294	-.2075	-.2014	-.2031	-.2371	-.3581
.304	-.2237	-.2188	-.2179	-.2407	-.3036
.323	-.1861	-.1806	-.1724	-.1696	-.1757
.345	-.1077	-.1022	-.0938	-.0816	-.1503
.355	-.0669	-.0584	-.0501	-.0419	-.0368
.365	-.0368	-.0294	-.0227	-.0145	.0283
.384	.0256	.0332	.0372	.0519	.1151
.403	.0977	.1010	.1019	.1187	.1890
.417	.1453	.1518	.1500	.1701	.2299
.427	.1752	.1805	.1820	.2006	.2529
.436	.2083	.2134	.2138	.2260	.2635
.456	.2549	.2586	.2577	.2522	.2580
.475	.2772	.2797	.2712	.2633	.2611
.498	.2827	.2821	.2779	.2651	.2843
.517	.2538				
.537	.2251				
.575	.1767				
.691	.0782				
.769	.0201				
.865	-.6064				
.923	-.4436				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(i) M = 1.05

$\alpha = -8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.3037					
.284	————	-.3672	-.3843	-.3732	-.3486	
.289	-.3856	-.3849	-.3884	-.3766	-.3557	
.294	-.4037	-.3985	-.3960	-.3828	-.3561	
.304	-.2924	-.3020	-.3114	-.3509	-.3394	
.313	-.0530					
.323	.1218	.1083	.0681	-.0252	-.1990	-.1259
.334	.1360					
.345	-.2184	-.2538	-.3235	-.3225	-.3787	
.355	-.3954	-.4033	-.3877	-.4355	-.2420	
.365	-.3669	-.3565	-.3645	-.4190	-.0918	
.384	-.0259	-.0166	.0056	.0508	.0736	
.403	.3247	.3184	.2969	.2800	.1749	
.417	.4371	.4247	.4028	.3587	.2238	
.427	.5047	.4912	.4677	.4107	.2578	
.436	.5085	.4968	.4721	.4212	.2800	
.456	.4544	.4502	.4431	.3618	.2658	
.475	.4448	.4323	.4291	.3646	.2804	
.498	.4541	.4573	.4462	.3618	.3011	
.517	.3775					
.537	.3653					
.575	.3476					
.691	.3150					
.769	.2724					
.865	-.4037					
.923	-.2410					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(i) M = 1.05 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.3856					
.284	----	-.4000	-.4094	-.4056	-.3925	
.289	-.4119	-.4126	-.4161	-.4098	-.3991	
.294	-.4265	-.4237	-.4223	-.4161	-.4015	
.304	-.3565	-.3627	-.3609	-.3852	-.3856	
.313	-.1700					
.323	-.0155	-.0248	-.0453	-.0890	-.1662	-.0495
.334	.0313					
.345	-.2546	-.2986	-.3460	-.3295	-.3640	
.355	-.4098	-.4136	-.3963	-.4274	-.3335	
.365	-.3880	-.3730	-.3741	-.3991	-.0990	
.384	.0829	.0881	.0999	.1193	.1322	
.403	.2981	.2895	.2849	.2790	.2312	
.417	.3771	.3691	.3591	.3435	.2755	
.427	.4302	.4235	.4066	.3882	.3168	
.436	.4499	.4426	.4284	.4072	.3441	
.456	.4263	.4221	.4221	.3823	.3441	
.475	.4107	.4058	.4110	.3802	.3491	
.498	.4089	.4169	.4198	.3685	.3573	
.517	.3369					
.537	.3179					
.575	.2936					
.691	.2558					
.769	.2215					
.865	-.4345					
.923	-.3021					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(i) M = 1.05 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.4535					
.284	————	-.3973	-.4000	-.3931	-.3931	
.289	-.4088	-.4074	-.4094	-.4036	-.3987	
.294	-.4150	-.4150	-.4150	-.4123	-.4063	
.304	-.3887	-.3876	-.3845	-.3935	-.3891	
.313	-.2601					
.323	-.1402	-.1547	-.1517	-.1568	-.1562	.1512
.334	-.0900					
.345	-.3142	-.3571	-.3852	-.3620	-.3630	
.355	-.3918	-.3659	-.3346	-.3274	-.2781	
.365	-.0903	-.0779	-.0570	-.0564	-.0405	
.384	.1519	.1529	.1498	.1529	.1533	
.403	.2430	.2382	.2361	.2354	.2347	
.417	.2836	.2822	.2773	.2738	.2715	
.427	.3206	.3186	.3127	.3068	.3054	
.436	.3487	.3441	.3407	.3380	.3345	
.456	.3694	.3656	.3664	.3553	.3539	
.475	.3719	.3694	.3750	.3650	.3633	
.498	.3639	.3706	.3771	.2707	.3660	
.517	.3110					
.537	.2853					
.575	.2565					
.691	.2140					
.769	.1758					
.865	-.4455					
.923	-.3391					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(i) M = 1.05 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.5077					
.284	————	-.3559	-.3573	-.3659	-.3809	
.289	-.3649	-.3653	-.3673	-.3726	-.3868	
.294	-.3705	-.3709	-.3715	-.3767	-.3906	
.304	-.3611	-.3601	-.3638	-.3677	-.3782	
.313	-.2827					
.323	-.1813	-.1869	-.1917	-.1978	-.1729	.3740
.334	-.0984					
.345	-.0399	-.0441	-.0565	-.1161	-.3684	
.355	.0295	.0257	.0197	-.0104	-.2860	
.365	.0711	.0717	.0621	.0426	-.0828	
.384	.1196	.1217	.1154	.0981	.1202	
.403	.1549	.1543	.1480	.1382	.2152	
.417	.1715	.1723	.1688	.1664	.2679	
.427	.1896	.1875	.1886	.1989	.3071	
.436	.2118	.2149	.2118	.2325	.3289	
.456	.2526	.2523	.2582	.2790	.3345	
.475	.2776	.2790	.2887	.3078	.3456	
.498	.2942	.2942	.3053	.3088	.3577	
.517	.2797					
.537	.2630					
.575	.2304					
.691	.1685					
.769	.1244					
.865	-.4336					
.923	-.3368					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(i) M = 1.05 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.5519					
.284	————	-.2367	-.2516	-.2755	-.3252	
.289	-.2489	-.2481	-.2600	-.2818	-.3292	
.294	-.2550	-.2544	-.2644	-.2870	-.3327	
.304	-.2554	-.2585	-.2679	-.2836	-.3164	
.313	-.2149					
.323	-.1514	-.1545	-.1614	-.1752	-.1971	.5970
.334	-.0795					
.345	-.0172	-.0193	-.0241	-.0438	-.3557	
.355	.0189	.0189	.0109	-.0130	-.1933	
.365	.0432	.0408	.0314	.0064	-.0734	
.384	.0799	.0776	.0674	.0404	.0480	
.403	.1091	.1070	.1021	.0730	.1445	
.417	.1334	.1317	.1271	.1021	.2038	
.427	.1507	.1510	.1424	.1305	.2416	
.436	.1773	.1752	.1694	.1643	.2527	
.456	.2183	.2166	.2145	.2134	.2475	
.475	.2531	.2477	.2489	.2506	.2748	
.498	.2696	.2682	.2690	.2568	.2970	
.517	.2623					
.537	.2485					
.575	.2159					
.691	.1438					
.769	.0889					
.865	-.4541					
.923	-.3559					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(j) M = 1.10

$\alpha = -8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.2773					
.284	————	-.3938	-.4150	-.4122	-.3959	
.289	-.4122	-.4159	-.4220	-.4193	-.4031	
.294	-.4330	-.4324	-.4321	-.4300	-.4039	
.304	-.2734	-.2777	-.2888	-.3502	-.3911	
.313	-.0207					
.323	.1296	.1209	.0887	.0088	-.1750	-.1066
.334	.1302					
.345	-.1868	-.2187	-.2878	-.2801	-.3441	
.355	-.3623	-.3683	-.3629	-.4072	-.4300	
.365	-.3408	-.3321	-.3385	-.3975	-.4096	
.384	-.3083	-.3194	-.3387	-.3677	-.2009	
.403	.0937	.0870	.0723	.0762	.1098	
.417	.2685	.2571	.2377	.2041	.1779	
.427	.3792	.3685	.3440	.2950	.2289	
.436	.3957	.3900	.3679	.3282	.2473	
.456	.3705	.3625	.3601	.2883	.2206	
.475	.3779	.3698	.3672	.3091	.2330	
.498	.4061	.4132	.4010	.3215	.2605	
.517	.3316					
.537	.3249					
.575	.3195					
.691	.3269					
.769	.3041					
.865	-.3321					
.923	-.1797					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(j) M = 1.10 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.3519					
.284	-----	-.3968	-.4063	-.4022	-.3892	
.289	-.4059	-.4066	-.4096	-.4066	-.3972	
.294	-.4204	-.4176	-.4166	-.4129	-.4012	
.304	-.3402	-.3478	-.3415	-.3730	-.3753	
.313	-.1552					
.323	-.0114	-.0197	-.0405	-.0780	-.1522	.0018
.334	.0229					
.345	-.2324	-.2690	-.3200	-.3022	-.3337	
.355	-.3821	-.3855	-.3784	-.4016	-.3955	
.365	-.3673	-.3552	-.3565	-.3881	-.3720	
.384	-.3361	-.3432	-.3469	-.3421	-.1398	
.403	.1152	.1085	.1072	.1192	.1209	
.417	.2400	.2340	.2273	.2236	.1991	
.427	.3219	.3162	.3037	.2896	.2443	
.436	.3501	.3434	.3330	.3199	.2716	
.456	.3390	.3383	.3407	.3004	.2779	
.475	.3447	.3414	.3470	.3152	.2893	
.498	.3607	.3668	.3702	.3223	.3084	
.517	.2853					
.537	.2739					
.575	.2622					
.691	.2681					
.769	.2581					
.865	-.3582					
.923	-.2354					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(j) M = 1.10 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.4077					
.284	————	-.3849	-.3859	-.3801	-.3795	
.289	-.3936	-.3929	-.3929	-.3903	-.3855	
.294	-.4016	-.4024	-.3979	-.3963	-.3916	
.304	-.3701	-.3691	-.3701	-.3741	-.3714	
.313	-.2391					
.323	-.1257	-.1320	-.1357	-.1415	-.1404	.1800
.334	-.0806					
.345	-.2908	-.3271	-.3560	-.3355	-.3298	
.355	-.4044	-.4026	-.3957	-.4024	-.3849	
.365	-.3829	-.3708	-.3677	-.3849	-.3600	
.384	-.1324	-.1153	-.0984	-.0954	-.0809	
.403	.1336	.1322	.1282	.1328	.1302	
.417	.2027	.2034	.1974	.1987	.1950	
.427	.2531	.2483	.2420	.2461	.2396	
.436	.2806	.2793	.2753	.2726	.2719	
.456	.3025	.2998	.3035	.2914	.2907	
.475	.3105	.3111	.3163	.3065	.3059	
.498	.3209	.3246	.3300	.3068	.3185	
.517	.2615					
.537	.2424					
.575	.2222					
.691	.2292					
.769	.2188					
.865	-.3660					
.923	-.2646					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(j) M = 1.10 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.4558					
.284	————	-.3824	-.3797	-.3855	-.3888	
.289	-.3834	-.3847	-.3840	-.3881	-.3959	
.294	-.3888	-.3881	-.3894	-.3911	-.4022	
.304	-.3751	-.3764	-.3757	-.3804	-.3824	
.313	-.2918					
.323	-.2016	-.2107	-.2056	-.1958	-.1496	.4182
.334	-.1721					
.345	-.3445	-.3734	-.3972	-.3807	-.3385	
.355	-.2888	-.2908	-.3337	-.4102	-.3855	
.365	-.1056	-.1147	-.1405	-.2680	-.3760	
.384	.0326	.0347	.0246	.0075	-.1398	
.403	.0860	.0903	.0873	.0937	.1198	
.417	.1122	.1139	.1139	.1313	.1981	
.427	.1339	.1373	.1414	.1675	.2443	
.436	.1612	.1642	.1696	.1977	.2702	
.456	.2054	.2065	.2178	.2316	.2692	
.475	.2302	.2369	.2473	.2598	.2863	
.498	.2514	.2558	.2668	.2662	.3104	
.517	.2347					
.537	.2209					
.575	.2024					
.691	.1930					
.769	.1716					
.865	-.3432					
.923	-.2747					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(j) M = 1.10 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.4882					
.284	————	-.3432	-.3506	-.3612	-.3902	
.289	-.3478	-.3488	-.3532	-.3666	-.3894	
.294	-.3506	-.3545	-.3586	-.3679	-.3939	
.304	-.3482	-.3506	-.3502	-.3582	-.3865	
.313	-.2894					
.323	-.2092	-.2183	-.2210	-.2357	-.1807	.6974
.334	-.1522					
.345	-.1102	-.1152	-.1421	-.2465	-.3519	
.355	-.0534	-.0571	-.0716	-.1317	-.4102	
.365	-.0172	-.0235	-.0343	-.0740	-.4197	
.384	.0221	.0207	.0032	-.0192	-.1793	
.403	.0448	.0415	.0281	.0090	.1046	
.417	.0589	.0589	.0489	.0381	.1788	
.427	.0754	.0734	.0647	.0677	.2275	
.436	.0999	.0990	.0953	.1012	.2356	
.456	.1469	.1406	.1443	.1476	.2057	
.475	.1849	.1818	.1852	.1916	.2258	
.498	.2147	.2121	.2154	.2054	.2564	
.517	.2195					
.537	.2158					
.575	.2030					
.691	.1701					
.769	.1304					
.865	-.3330					
.923	-.2914					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(k) M = 1.15

$\alpha = -8^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.2306					
.284	-----	-.3720	-.3903	-.3845	-.3674	
.289	-.3901	-.3906	-.3975	-.3923	-.3749	
.294	-.4073	-.4073	-.4073	-.4002	-.3782	
.304	-.2306	-.2391	-.2516	-.3101	-.3589	
.313	.0108					
.323	.1418	.1366	.1045	.0266	-.1390	-.0441
.334	.1496					
.345	-.1439	-.1718	-.2384	-.2359	-.2947	
.355	-.3124	-.3220	-.3164	-.3577	-.3805	
.365	-.3007	-.2915	-.2954	-.3472	-.3560	
.384	-.2708	-.2777	-.2922	-.3186	-.3651	
.403	.0030	.0030	-.0114	-.0127	.0633	
.417	.2511	.2412	.2256	.1849	.1621	
.427	.3663	.3522	.3270	.2756	.2242	
.436	.3748	.3683	.3427	.3015	.2439	
.456	.3460	.3335	.3368	.2563	.2059	
.475	.3637	.3538	.3489	.2890	.2229	
.498	.4016	.4134	.4012	.3152	.2563	
.517	.3189					
.537	.3113					
.575	.2975					
.691	.2962					
.769	.2799					
.865	-.2909					
.923	-.1776					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(k) M = 1.15 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.2964					
.284	————	-.3608	-.3686	-.3641	-.3503	
.289	-.3716	-.3706	-.3735	-.3683	-.3556	
.294	-.3836	-.3811	-.3798	-.3732	-.3601	
.304	-.3002	-.3038	-.2993	-.3288	-.3379	
.313	-.1131					
.323	.0161	.0092	-.0100	-.0500	-.1122	.0675
.334	.0524					
.345	-.1855	-.2211	-.2673	-.2548	-.2875	
.355	-.3320	-.3379	-.3293	-.3516	-.3490	
.365	-.3208	-.3091	-.3111	-.3391	-.3281	
.384	-.2953	-.3013	-.3084	-.3134	-.2826	
.403	.0452	.0456	.0492	.0668	.0986	
.417	.2176	.2144	.2104	.2084	.1934	
.427	.3088	.3030	.2942	.2811	.2438	
.436	.3338	.3259	.3177	.3072	.2694	
.456	.3197	.3210	.3275	.2811	.2614	
.475	.3360	.3327	.3370	.3066	.2824	
.498	.3615	.3727	.3711	.3213	.3052	
.517	.2827					
.537	.2660					
.575	.2451					
.691	.2356					
.769	.2238					
.865	-.3163					
.923	-.2264					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(k) M = 1.15 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.3479					
.284	————	-.3459	-.3483	-.3405	-.3398	
.289	-.3542	-.3532	-.3555	-.3506	-.3477	
.294	-.3617	-.3611	-.3617	-.3568	-.3539	
.304	-.3264	-.3257	-.3237	-.3338	-.3289	
.313	-.1935					
.323	-.0879	-.0904	-.0934	-.1020	-.1020	.2373
.334	-.0477					
.345	-.2446	-.2793	-.3070	-.2897	-.2825	
.355	-.3636	-.3617	-.3551	-.3633	-.3408	
.365	-.3447	-.3313	-.3309	-.3477	-.3211	
.384	-.2825	-.2701	-.2540	-.2458	-.2190	
.403	.1039	.1043	.1023	.1101	.1105	
.417	.1916	.1939	.1877	.1926	.1946	
.427	.2465	.2456	.2397	.2422	.2442	
.436	.2757	.2730	.2714	.2724	.2701	
.456	.2934	.2894	.2979	.2813	.2802	
.475	.3048	.3052	.3104	.3021	.3012	
.498	.3175	.3267	.3313	.3074	.3173	
.517	.2554					
.537	.2335					
.575	.2066					
.691	.1906					
.769	.1736					
.865	-.3349					
.923	-.2632					

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(k) M = 1.15 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:					
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}	180^{o}
.269	-.3924					
.284	————	-.3414	-.3407	-.3459	-.3504	
.289	-.3468	-.3465	-.3459	-.3479	-.3570	
.294	-.3534	-.3524	-.3504	-.3531	-.3622	
.304	-.3361	-.3361	-.3318	-.3414	-.3371	
.313	-.2439					
.323	-.1586	-.1628	-.1602	-.1543	-.1147	.4813
.334	-.1271					
.345	-.2975	-.3276	-.3479	-.3325	-.2949	
.355	-.3740	-.3723	-.3681	-.3770	-.3443	
.365	-.3027	-.2857	-.3027	-.3534	-.3361	
.384	.0000	-.0026	-.0105	-.0517	-.2903	
.403	.0974	.0981	.0935	.0981	.0938	
.417	.1311	.1351	.1344	.1491	.1890	
.427	.1629	.1629	.1661	.1851	.2446	
.436	.1902	.1913	.1939	.2145	.2642	
.456	.2262	.2262	.2325	.2367	.2557	
.475	.2504	.2504	.2570	.2625	.2799	
.498	.2602	.2629	.2737	.2662	.3119	
.517	.2282					
.537	.2092					
.575	.1776					
.691	.1406					
.769	.1269					
.865	-.3452					
.923	-.2648					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(k) M = 1.15 - Concluded

$\alpha = 8^{\circ}$

x/l	C_p at ϕ of:					
	0°	15°	30°	50°	90°	180°
.269	-.4203					
.284	———	-.3342	-.3398	-.3457	-.3653	
.289	-.3362	-.3395	-.3425	-.3494	-.3693	
.294	-.3405	-.3425	-.3450	-.3530	-.3749	
.304	-.3342	-.3346	-.3353	-.3418	-.3559	
.313	-.2680					
.323	-.1985	-.2074	-.2038	-.2065	-.1403	.7625
.334	-.1658					
.345	-.2365	-.2447	-.3061	-.3669	-.3025	
.355	-.1168	-.1227	-.1488	-.3016	-.3640	
.365	-.0443	-.0475	-.0635	-.1535	-.3689	
.384	.0199	.0185	.0055	-.0175	-.3761	
.403	.0523	.0493	.0369	.0362	.0578	
.417	.0666	.0666	.0592	.0709	.1569	
.427	.0869	.0852	.0830	.1042	.2246	
.436	.1102	.1095	.1102	.1330	.2344	
.456	.1520	.1500	.1559	.1559	.1887	
.475	.1831	.1814	.1847	.1919	.2174	
.498	.2057	.2030	.2135	.2010	.2569	
.517	.1991					
.537	.1909					
.575	.1592					
.691	.1151					
.769	.0921					
.865	-.3199					
.923	-.2731					

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(l) M = 1.20

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1669				
.284	-.3474	-.3426	-.3558	-.3550	-.3386
.289	-.3591	-.3564	-.3613	-.3618	-.3429
.294	-.3775	-.3756	-.3721	-.3707	-.3453
.304	-.1874	-.2075	-.2229	-.2745	-.3232
.323	.1505	.1439	.1150	.0513	-.1069
.345	-.0923	-.1299	-.1666	-.1799	-.2253
.355	-.2677	-.2618	-.2888	-.2991	-.3531
.365	-.2618	-.2339	-.2734	-.2958	-.3161
.384	-.2440	-.2401	-.2585	-.2864	-.3451
.403	-.1633	-.1788	-.1928	-.2118	-.0484
.417	.2326	.2197	.2059	.1537	.1202
.427	.3364	.3265	.2970	.2446	.1897
.436	.3319	.3208	.2905	.2491	.2039
.456	.2672	.2653	.2526	.2127	.1694
.475	.2970	.2899	.2848	.2473	.1883
.498	.3924	.3800	.3697	.3354	.2743
.517	.3040				
.537	.2911				
.575	.2858				
.691	.2883				
.769	.2792				
.865	-.2239				
.923	-.1480				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(l) M = 1.20 - Continued

$\alpha = -4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.2295				
.284	-.3331	-.3263	-.3350	-.3326	-.3207
.289	-.3402	-.3358	-.3396	-.3375	-.3247
.294	-.3494	-.3482	-.3455	-.3434	-.3277
.304	-.2557	-.2663	-.2652	-.2888	-.3011
.323	.0431	.0302	.0159	-.0131	-.0821
.345	-.1476	-.1751	-.1994	-.1989	-.2129
.355	-.2952	-.2860	-.3033	-.2993	-.3163
.365	-.2882	-.2620	-.2911	-.2941	-.2833
.384	-.2714	-.2671	-.2753	-.2806	-.3009
.403	-.0869	-.0829	-.0840	-.0580	.0283
.417	.1984	.1888	.1931	.1822	.1687
.427	.2842	.2799	.2712	.2590	.2255
.436	.2961	.2888	.2799	.2709	.2404
.456	.2585	.2612	.2598	.2496	.2301
.475	.2869	.2839	.2874	.2742	.2523
.498	.3605	.3535	.3545	.3423	.3148
.517	.2758				
.537	.2510				
.575	.2322				
.691	.2344				
.769	.2238				
.865	-.2541				
.923	-.1932				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(l) M = 1.20 - Continued

$\alpha = 0^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.269	-.2755				
.284	-.3162	-.3139	-.3131	-.3093	-.3134
.289	-.3221	-.3193	-.3205	-.3191	-.3166
.294	-.3277	-.3272	-.3258	-.3250	-.3207
.304	-.2869	-.2898	-.2882	-.2966	-.2918
.323	-.0504	-.0588	-.0629	-.0658	-.0631
.345	-.2106	-.2292	-.2362	-.2270	-.2087
.355	-.3236	-.3113	-.3231	-.3039	-.3031
.365	-.3109	-.2849	-.3099	-.3017	-.2761
.384	-.2857	-.2798	-.2782	-.2777	-.2890
.403	.0510	.0492	.0488	.0521	.0499
.417	.1790	.1757	.1796	.1790	.1800
.427	.2393	.2366	.2348	.2350	.2344
.436	.2618	.2577	.2561	.2545	.2520
.456	.2591	.2606	.2626	.2604	.2539
.475	.2774	.2764	.2829	.2794	.2723
.498	.3154	.3105	.3210	.3199	.3173
.517	.2469				
.537	.2220				
.575	.1968				
.691	.1806				
.769	.1716				
.865	-.2736				
.923	-.2239				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(l) M = 1.20 - Continued

$\alpha = 4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.269	-.3133				
.284	-.3067	-.3052	-.3071	-.3106	-.3192
.289	-.3114	-.3090	-.3116	-.3136	-.3247
.294	-.3147	-.3138	-.3149	-.3173	-.3282
.304	-.2960	-.2993	-.2971	-.3016	-.3008
.323	-.1153	-.1229	-.1194	-.1143	-.0785
.345	-.2581	-.2703	-.2762	-.2684	-.2205
.355	-.3339	-.3241	-.3333	-.3206	-.3141
.365	-.3143	-.2938	-.3052	-.3106	-.2895
.384	-.1188	-.1112	-.1310	-.2054	-.3055
.403	.0935	.0889	.0861	.0797	.0337
.417	.1462	.1444	.1451	.1510	.1684
.427	.1825	.1806	.1811	.1933	.2257
.436	.2040	.2032	.2057	.2149	.2425
.456	.2287	.2284	.2322	.2328	.2349
.475	.2490	.2478	.2533	.2525	.2549
.498	.2679	.2654	.2750	.2814	.3150
.517	.2276				
.537	.2017				
.575	.1706				
.691	.1362				
.769	.1311				
.865	-.3038				
.923	-.2291				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(l) M = 1.20 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.3350				
.284	-.2995	-.3004	-.3057	-.3114	-.3325
.289	-.3057	-.3049	-.3096	-.3176	-.3395
.294	-.3077	-.3088	-.3120	-.3201	-.3444
.304	-.2977	-.2979	-.2965	-.3044	-.3136
.323	-.1484	-.1601	-.1573	-.1603	-.1120
.345	-.2844	-.2922	-.3069	-.3047	-.2417
.355	-.3217	-.3100	-.3341	-.3423	-.3446
.365	-.1851	-.1749	-.2206	-.3182	-.3233
.384	.0084	.0068	-.0045	-.0589	-.3514
.403	.0754	.0686	.0635	.0549	-.0319
.417	.1032	.0963	.0919	.0968	.1206
.427	.1298	.1222	.1182	.1296	.1912
.436	.1530	.1460	.1427	.1519	.2060
.456	.1876	.1792	.1771	.1769	.1730
.475	.2109	.2031	.1998	.1992	.1933
.498	.2298	.2174	.2176	.2285	.2674
.517	.2052				
.537	.1836				
.575	.1479				
.691	.1090				
.769	.0971				
.865	-.3395				
.923	-.2417				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(m) M = 1.47

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0835				
.284		-.2978	-.3088	-.2981	-.2833
.289	-.3014	-.2990	-.3088	-.3031	-.2870
.294	-.3014	-.3148	-.3137	-.3154	-.2895
.304	-.0620	-.0915	-.1012	-.1681	-.2472
.323	.1528	.1381	.0903	.0265	-.0925
.345	-.0178	-.0596	-.0891	-.1210	-.1779
.355	-.1712	-.1774	-.1897	-.2188	-.2833
.365	-.1749	-.1651	-.1872	-.2225	-.2646
.384	-.1774	-.1749	-.1804	-.2250	-.2807
.403	-.1628	-.1786	-.1816	-.2213	-.2684
.417	.1405	.1405	.1232	.0462	-.0095
.427	.2302	.2265	.2025	.1232	.0525
.436	.2339	.2191	.1925	.1195	.0587
.456	.1946	.1872	.1801	.0959	.0365
.475	.1995	.1688	.1739	.0996	.0425
.498	.2853	.2818	.2545	.2062	.1739
.517	.2533				
.537	.2191				
.575	.2155				
.691	.2191				
.769	.2438				
.865	-.0894				
.923	-.0740				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(m) M = 1.47 - Continued

$\alpha = -4^{o}$

x/l	C_p at ø of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1343				
.284		-.2710	-.2686	-.2625	-.2465
.289	-.2796	-.2723	-.2770	-.2674	-.2526
.294	-.2807	-.2796	-.2819	-.2760	-.2551
.304	-.1674	-.1540	-.1576	-.1850	-.2059
.323	.0740	.0569	.0434	.0144	-.0348
.345	-.0674	-.0918	-.1137	-.1247	-.1370
.355	-.2051	-.1954	-.2089	-.2133	-.2330
.365	-.2051	-.1844	-.2063	-.2145	-.2157
.384	-.2051	-.1906	-.1936	-.2120	-.2280
.403	-.1844	-.1918	-.1936	-.2010	-.1973
.417	.1178	.1155	.1079	.0931	.0783
.427	.2044	.1958	.1780	.1632	.1325
.436	.2068	.1958	.1767	.1620	.1411
.456	.1739	.1776	.1681	.1435	.1202
.475	.1776	.1556	.1632	.1423	.1226
.498	.2581	.2604	.2518	.2419	.2333
.517	.2139				
.537	.1810				
.575	.1762				
.691	.1669				
.769	.1810				
.865	-.1307				
.923	-.1131				

TABLE I. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(m) M = 1.47 - Continued

$\alpha = 0^{o}$

x/l	C_p at ∅ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1706				
.284		-.2526	-.2538	-.2469	-.2469
.289	-.2612	-.2538	-.2550	-.2531	-.2543
.294	-.2624	-.2624	-.2636	-.2531	-.2603
.304	-.1770	-.1868	-.1917	-.2002	-.2027
.323	.0059	.0010	-.0064	-.0145	-.0171
.345	-.1185	-.1308	-.1441	-.1351	-.1253
.355	-.2270	-.2185	-.2246	-.2113	-.2248
.365	-.2246	-.2062	-.2234	-.2162	-.2088
.384	-.2185	-.2125	-.2027	-.2101	-.2187
.403	-.1795	-.1782	-.1769	-.1769	-.1830
.417	.1096	.0986	.1033	.1010	.1033
.427	.1717	.1656	.1623	.1612	.1623
.436	.1790	.1717	.1672	.1672	.1686
.456	.1558	.1595	.1623	.1526	.1514
.475	.1583	.1474	.1612	.1537	.1477
.498	.2277	.2326	.2399	.2399	.2434
.517	.1893				
.537	.1588				
.575	.1435				
.691	.1235				
.769	.1352				
.865	-.1635				
.923	-.1447				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(m) M = 1.47 - Continued

$\alpha = 4^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.2007				
.284		-.2385	-.2457	-.2348	-.2558
.289	-.2457	-.2409	-.2471	-.2459	-.2583
.294	-.2457	-.2434	-.2543	-.2472	-.2720
.304	-.1943	-.2041	-.2127	-.2149	-.2212
.323	-.0425	-.0400	-.0572	-.0526	-.0526
.345	-.1588	-.1699	-.1797	-.1741	-.1618
.355	-.2385	-.2323	-.2434	-.2311	-.2484
.365	-.2336	-.2213	-.2422	-.2311	-.2323
.384	-.2189	-.2189	-.2087	-.2186	-.2435
.403	-.0216	-.0314	-.0415	-.0712	-.2100
.417	.0899	.0813	.0862	.0775	.0638
.427	.1315	.1192	.1246	.1234	.1197
.436	.1437	.1302	.1382	.1333	.1258
.456	.1437	.1315	.1456	.1333	.1135
.475	.1560	.1376	.1518	.1432	.1098
.498	.1976	.1903	.2038	.2026	.2089
.517	.1628				
.537	.1391				
.575	.1144				
.691	.0908				
.769	.0944				
.865	-.1890				
.923	-.1653				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(m) M = 1.47 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.2222				
.284		-.2372	-.2409	-.2422	-.2731
.289	-.2422	-.2397	-.2422	-.2496	-.2819
.294	-.2422	-.2397	-.2471	-.2496	-.2831
.304	-.2005	-.2140	-.2151	-.2236	-.2249
.323	-.0633	-.0707	-.0768	-.0972	-.0823
.345	-.1773	-.1833	-.1981	-.2063	-.1740
.355	-.2422	-.2348	-.2422	-.2509	-.2620
.365	-.2323	-.2262	-.2385	-.2484	-.2496
.384	-.2005	-.2005	-.1952	-.2298	-.2646
.403	.0225	.0200	.0033	-.0253	-.2546
.417	.0861	.0812	.0614	.0429	.0118
.427	.1156	.1093	.0886	.0775	.0763
.436	.1265	.1230	.1061	.0948	.0849
.456	.1315	.1351	.1209	.1024	.0676
.475	.1437	.1413	.1358	.1147	.0664
.498	.1768	.1719	.1594	.1605	.1681
.517	.1491				
.537	.1219				
.575	.0971				
.691	.0722				
.769	.0675				
.865	-.2163				
.923	-.1702				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(n) M = 1.60

$\alpha = -8^{o}$

x/l	C_p at ø of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0592				
.284		-.2612	-.2662	-.2642	-.2391
.289	-.2687	-.2612	-.2649	-.2692	-.2440
.294	-.2687	-.2649	-.2774	-.2830	-.2454
.304	-.0400	-.0486	-.0635	-.1236	-.1939
.323	.1481	.1566	.1084	.0435	-.0507
.345	.0084	-.0165	-.0448	-.0746	-.1186
.355	-.1364	-.1352	-.1475	-.1688	-.2227
.365	-.1388	-.1265	-.1487	-.1713	-.2089
.384	-.1413	-.1352	-.1474	-.1738	-.2241
.403	-.1339	-.1352	-.1500	-.1713	-.2164
.417	.1269	.1443	.1062	.0585	-.0056
.427	.2160	.2235	.1841	.1388	.0522
.436	.2210	.2198	.1778	.1375	.0585
.456	.1963	.1963	.1703	.1162	.0397
.475	.2050	.1765	.1615	.1187	.0472
.498	.2792	.2753	.2380	.2104	.1577
.517	.2355				
.537	.2069				
.575	.1997				
.691	.2105				
.769	.2213				
.865	-.0735				
.923	-.0569				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(n) M = 1.60 - Continued

$\alpha = -4^{\circ}$

x/l	C_p at ϕ of:				
	0°	15°	30°	50°	90°
.269	-.1111				
.284		-.2495	-.2470	-.2410	-.2261
.289	-.2543	-.2507	-.2483	-.2446	-.2323
.294	-.2532	-.2557	-.2592	-.2508	-.2336
.304	-.1581	-.1312	-.1312	-.1497	-.1744
.323	.0761	.0591	.0395	.0192	-.0226
.345	-.0410	-.0702	-.0909	-.0954	-.1065
.355	-.1715	-.1653	-.1775	-.1793	-.2016
.365	-.1715	-.1616	-.1763	-.1831	-.1879
.384	-.1726	-.1678	-.1657	-.1831	-.1991
.403	-.1629	-.1690	-.1657	-.1793	-.1879
.417	.0908	.0932	.0860	.0638	.0551
.427	.1748	.1676	.1562	.1377	.1106
.436	.1785	.1676	.1537	.1377	.1192
.456	.1493	.1493	.1500	.1205	.1006
.475	.1566	.1346	.1452	.1205	.1020
.498	.2236	.2249	.2204	.2130	.2044
.517	.1888				
.537	.1651				
.575	.1581				
.691	.1569				
.769	.1675				
.865	-.1146				
.923	-.1005				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(n) M = 1.60 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1475				
.284		-.2450	-.2450	-.2477	-.2427
.289	-.2524	-.2475	-.2450	-.2513	-.2463
.294	-.2524	-.2524	-.2585	-.2538	-.2463
.304	-.1610	-.1598	-.1610	-.1921	-.2365
.323	.0106	.0057	-.0015	-.0013	.0270
.345	-.0855	-.1062	-.1209	-.1072	-.0629
.355	-.1927	-.1867	-.1952	-.1860	-.1921
.365	-.1927	-.1817	-.1952	-.1921	-.1786
.384	-.1927	-.1830	-.1798	-.1910	-.1921
.403	-.1757	-.1769	-.1700	-.1786	-.1823
.417	.0812	.0776	.0789	.0739	.0789
.427	.1494	.1409	.1379	.1404	.1514
.436	.1544	.1470	.1379	.1441	.1514
.456	.1323	.1397	.1354	.1269	.1256
.475	.1360	.1263	.1331	.1244	.1219
.498	.2007	.2055	.2070	.2093	.2242
.517	.1658				
.537	.1400				
.575	.1259				
.691	.1166				
.769	.1166				
.865	-.1428				
.923	-.1299				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(n) M = 1.60 - Continued

$\alpha = 4^{\circ}$

x/l	C_p at ø of:				
	0°	15°	30°	50°	90°
.269	-.1781				
.284		-.2188	-.2213	-.2182	-.2342
.289	-.2225	-.2188	-.2213	-.2281	-.2416
.294	-.2237	-.2200	-.2237	-.2317	-.2466
.304	-.1677	-.1787	-.1799	-.1899	-.1800
.323	-.0341	-.0341	-.0401	-.0483	-.0273
.345	-.1361	-.1435	-.1508	-.1419	-.1147
.355	-.2079	-.2018	-.2043	-.2022	-.2059
.365	-.2054	-.1946	-.2031	-.2022	-.1911
.384	-.1969	-.1946	-.1849	-.1972	-.2034
.403	-.0596	-.0620	-.0815	-.1209	-.1924
.417	.0705	.0705	.0614	.0552	.0515
.427	.1106	.1094	.1019	.1019	.1081
.436	.1204	.1204	.1118	.1106	.1167
.456	.1191	.1216	.1179	.1069	.1007
.475	.1253	.1228	.1217	.1094	.0996
.498	.1714	.1750	.1746	.1783	.2018
.517	.1433				
.537	.1198				
.575	.1010				
.691	.0869				
.769	.0811				
.865	-.1617				
.923	-.1476				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(n) M = 1.60 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.2004				
.284		-.2143	-.2178	-.2217	-.2524
.289	-.2192	-.2143	-.2178	-.2303	-.2537
.294	-.2215	-.2167	-.2192	-.2340	-.2537
.304	-.1744	-.1876	-.1888	-.1996	-.1984
.323	-.0568	-.0642	-.0665	-.0867	-.0695
.345	-.1525	-.1573	-.1719	-.1788	-.1407
.355	-.2081	-.2046	-.2143	-.2205	-.2278
.365	-.2046	-.1961	-.2118	-.2217	-.2255
.384	-.1864	-.1876	-.1861	-.2106	-.2352
.403	.0000	-.0048	-.0204	-.0585	-.2315
.417	.0630	.0593	.0410	.0250	-.0253
.427	.0920	.0884	.0667	.0557	.0397
.436	.1041	.1016	.0839	.0704	.0483
.456	.1078	.1078	.0937	.0704	.0373
.475	.1199	.1138	.1047	.0814	.0360
.498	.1525	.1513	.1354	.1379	.1329
.517	.1282				
.537	.1072				
.575	.0884				
.691	.0615				
.769	.0546				
.865	-.1839				
.923	-.1617				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(o) M = 1.90

$\alpha = -8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0206				
.284		-.2032	-.2153	-.2107	-.2107
.289	-.2055	-.2043	-.2166	-.2144	-.2157
.294	-.2055	-.2055	-.2166	-.2231	-.2182
.304	-.0069	-.0484	-.0324	-.0702	-.1688
.323	.1358	.1346	.0882	.0470	-.0566
.345	.0370	.0102	-.0178	-.0479	-.0998
.355	-.0824	-.0958	-.1056	-.1343	-.1849
.365	-.0861	-.0921	-.1081	-.1392	-.1849
.384	-.0935	-.0970	-.1035	-.1442	-.1948
.403	-.0898	-.1056	-.1084	-.1442	-.1934
.417	.0870	.0944	.0691	.0027	-.0652
.427	.1858	.1760	.1519	.0852	-.0109
.436	.1943	.1760	.1482	.0864	.0050
.456	.1698	.1663	.1519	.0790	-.0060
.475	.1809	.1541	.1468	.0840	.0013
.498	.2358	.2272	.2011	.1443	.0815
.517	.2240				
.537	.2027				
.575	.2004				
.691	.2063				
.769	.2098				
.865	-.0301				
.923	-.0265				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(o) M = 1.90 - Continued

$\alpha = -4^{o}$

x/l	C_p at ø of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.0712				
.284		-.2005	-.2017	-.1995	-.1945
.289	-.1992	-.2005	-.2005	-.2032	-.1995
.294	-.2005	-.2017	-.2017	-.2080	-.2018
.304	-.1309	-.0979	-.0845	-.1093	-.1303
.323	.0815	.0705	.0448	.0352	-.0105
.345	-.0100	-.0246	-.0466	-.0476	-.0599
.355	-.1187	-.1187	-.1236	-.1327	-.1538
.365	-.1210	-.1187	-.1261	-.1377	-.1488
.384	-.1210	-.1224	-.1216	-.1389	-.1561
.403	-.1187	-.1224	-.1278	-.1377	-.1525
.417	.0534	.0644	.0512	.0229	.0155
.427	.1474	.1449	.1265	.1006	.0697
.436	.1523	.1461	.1253	.1006	.0759
.456	.1340	.1376	.1253	.0994	.0661
.475	.1401	.1230	.1216	.0994	.0661
.498	.1926	.1889	.1759	.1697	.1561
.517	.1781				
.537	.1547				
.575	.1464				
.691	.1499				
.769	.1511				
.865	-.0665				
.923	-.0665				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(o) M = 1.90 - Continued

$\alpha = 0^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1073				
.284		-.1434	-.1422	-.1390	-.1402
.289	-.1446	-.1434	-.1422	-.1438	-.1438
.294	-.1446	-.1422	-.1410	-.1452	-.1438
.304	-.1312	-.1434	-.1397	-.1438	-.1438
.323	-.0118	-.0227	-.0326	-.0464	-.0513
.345	-.0349	-.0472	-.0532	-.0476	-.0267
.355	-.1374	-.1360	-.1397	-.1402	-.1438
.365	-.1397	-.1349	-.1410	-.1402	-.1353
.384	-.1410	-.1349	-.1340	-.1415	-.1452
.403	-.1349	-.1349	-.1340	-.1390	-.1402
.417	.0407	.0492	.0475	.0339	.0326
.427	.1235	.1235	.1166	.1117	.1067
.436	.1309	.1260	.1166	.1117	.1079
.456	.1186	.1223	.1178	.1055	.0980
.475	.1223	.1089	.1154	.1055	.0943
.498	.1698	.1711	.1671	.1733	.1857
.517	.1481				
.537	.1257				
.575	.1163				
.691	.1104				
.769	.1069				
.865	-.0992				
.923	-.0980				

TABLE II. - PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Continued

(o) M = 1.90 - Continued

$\alpha = 4^{o}$

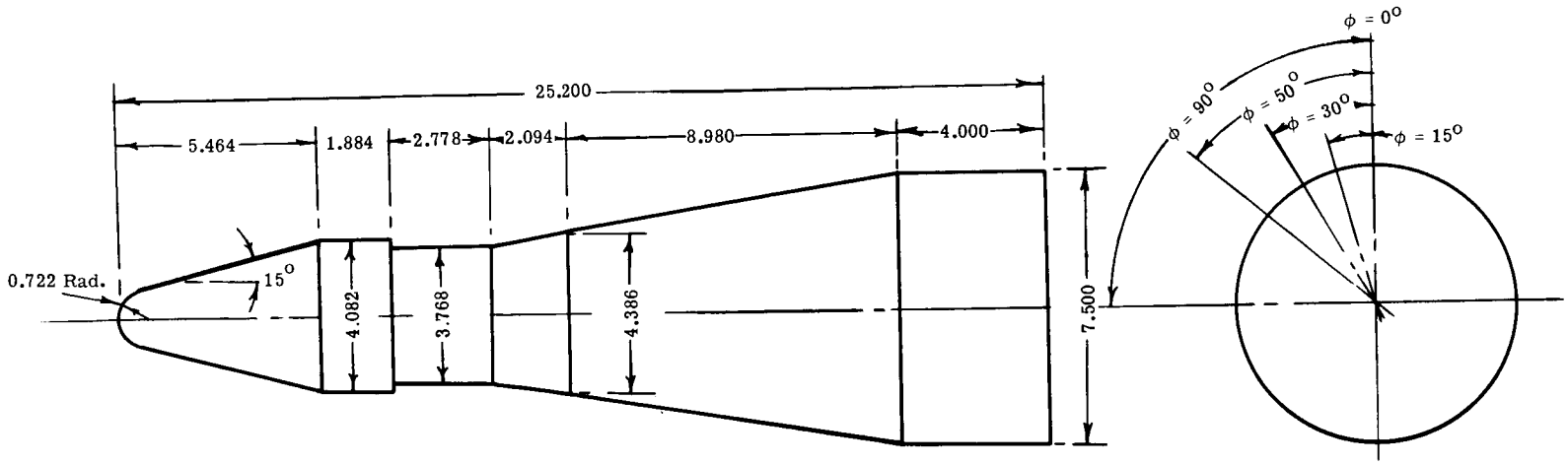
x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1304				
.284		-.1780	-.1817	-.1805	-.1916
.289	-.1842	-.1805	-.1817	-.1879	-.2003
.294	-.1879	-.1817	-.1842	-.1929	-.2015
.304	-.1256	-.1402	-.1378	-.1434	-.1285
.323	-.0155	-.0155	-.0215	-.0271	-.0184
.345	-.0778	-.0889	-.0974	-.0939	-.0643
.355	-.1536	-.1475	-.1500	-.1496	-.1508
.365	-.1549	-.1475	-.1500	-.1496	-.1496
.384	-.1524	-.1464	-.1409	-.1496	-.1570
.403	-.1316	-.1353	-.1335	-.1421	-.1533
.417	.0469	.0457	.0410	.0298	.0125
.427	.0909	.0898	.0805	.0719	.0706
.436	.0995	.0970	.0867	.0842	.0793
.456	.0921	.0958	.0880	.0805	.0706
.475	.0921	.0909	.0880	.0805	.0681
.498	.1436	.1484	.1436	.1412	.1559
.517	.1231				
.537	.1007				
.575	.0901				
.691	.0747				
.769	.0724				
.865	-.1127				
.923	-.1127				

TABLE II.- PRESSURE COEFFICIENTS FOR A MODIFIED PROJECT FIRE VELOCITY PACKAGE - MODEL II - Concluded

(o) M = 1.90 - Concluded

$\alpha = 8^{o}$

x/l	C_p at ϕ of:				
	0^{o}	15^{o}	30^{o}	50^{o}	90^{o}
.269	-.1474				
.284		-.1749	-.1785	-.1846	-.2032
.289	-.1797	-.1749	-.1797	-.1908	-.2069
.294	-.1797	-.1760	-.1834	-.1933	-.2080
.304	-.1261	-.1420	-.1432	-.1538	-.1501
.323	-.0370	-.0394	-.0456	-.0563	-.0414
.345	-.1016	-.1041	-.1200	-.1255	-.0908
.355	-.1554	-.1505	-.1578	-.1673	-.1698
.365	-.1566	-.1505	-.1589	-.1710	-.1673
.384	-.1480	-.1505	-.1464	-.1687	-.1797
.403	-.0456	-.0492	-.0600	-.1292	-.1785
.417	.0411	.0374	.0239	.0080	-.0488
.427	.0703	.0668	.0512	.0413	.0215
.436	.0802	.0789	.0622	.0535	.0326
.456	.0814	.0814	.0672	.0523	.0239
.475	.0874	.0837	.0770	.0560	.0264
.498	.1302	.1265	.1091	.1104	.0992
.517	.1056				
.537	.0904				
.575	.0750				
.691	.0585				
.769	.0503				
.865	-.1274				
.923	-.1227				



Orifice Locations											
No.	x	x/l	No.	x	x/l	No.	x	x/l	No.	x	x/l
1	0.000	0.000	12	5.250	0.208	23	10.376	0.412	34	18.220	0.723
2	.125	.005	13	5.714	.227	24	10.626	.422	35	19.220	.763
3	.250	.010	14	5.964	.237	25	11.126	.442	36	20.220	.802
4	.500	.020	15	6.464	.257	26	11.626	.461	37	20.720	.822
5	1.000	.040	16	6.964	.276	27	12.126	.481	38	21.450	.851
6	1.500	.060	17	7.598	.302	28	12.720	.505	39	21.700	.861
7	2.000	.079	18	7.848	.311	29	13.220	.525	40	22.200	.881
8	2.500	.099	19	8.348	.331	30	14.220	.564	41	23.200	.921
9	3.500	.139	20	8.848	.351	31	15.220	.604	42	24.200	.960
10	4.500	.179	21	9.348	.371	32	16.220	.644			
11	5.000	.198	22	9.848	.391	33	17.220	.683			

Figure 1.- Details of model I and locations of orifices. All linear dimensions are in inches.

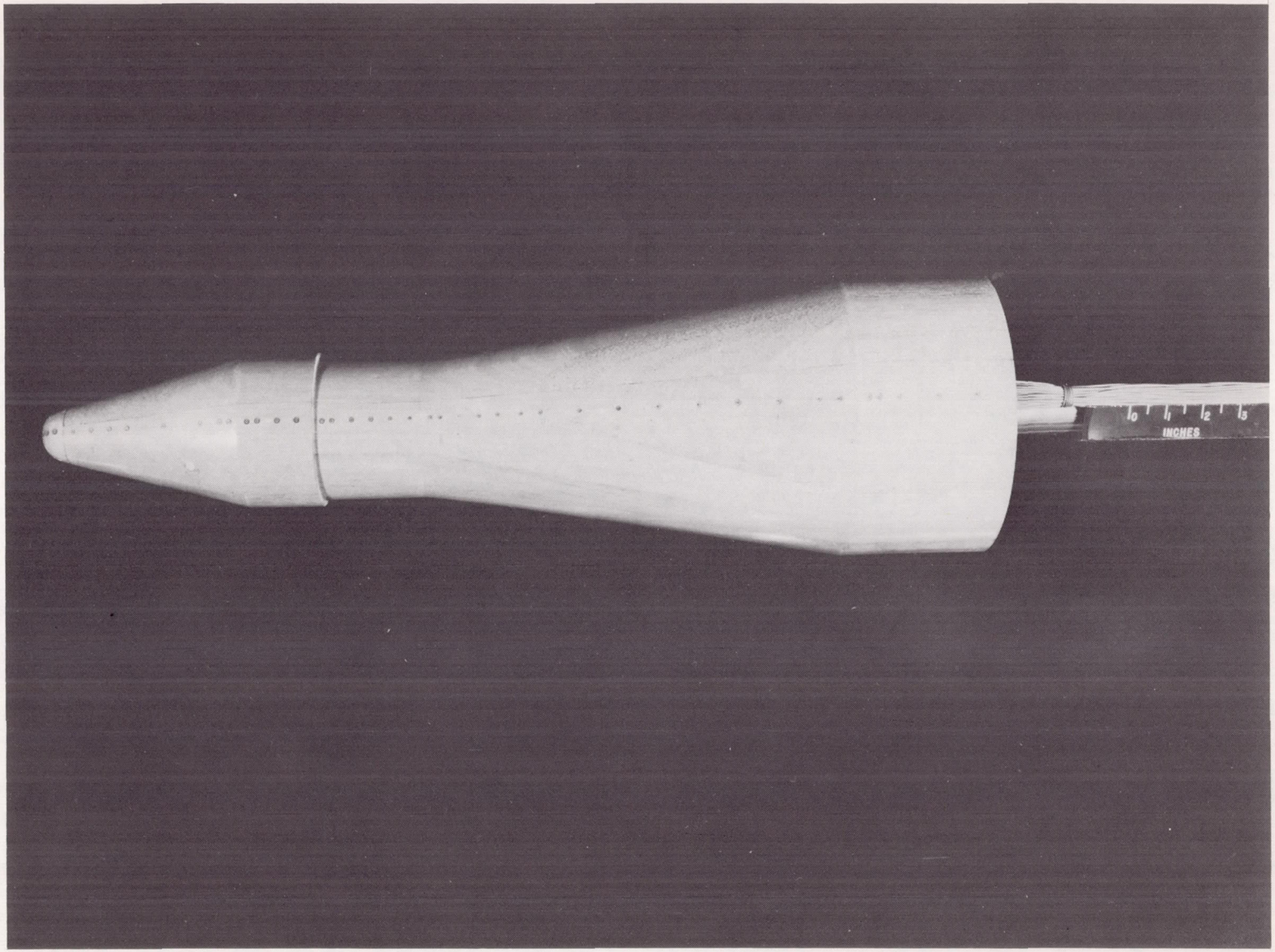
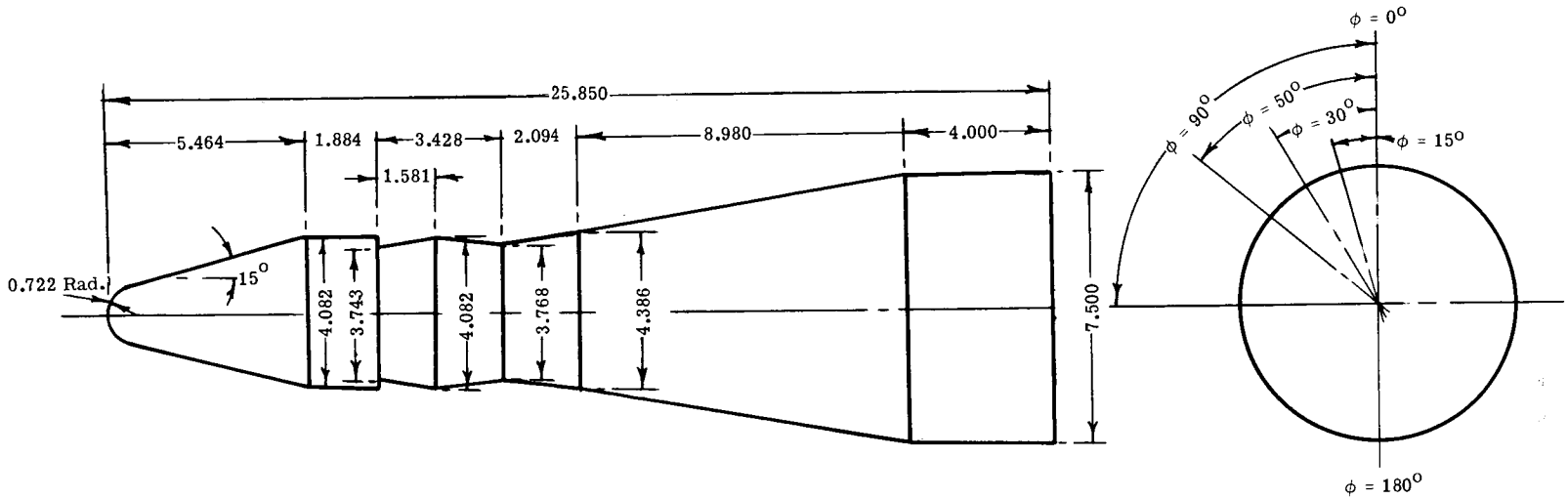


Figure 2.- Photograph of model I. L-62-4498



Orifice Locations																							
No.	ø	x	x/l	No.	ø	x	x/l	No.	ø	x	x/l	No.	ø	x	x/l	No.	ø	x	x/l	No.	ø	x	x/l
1	0°	7.348	0.284	17	15°	7.348	0.284	33	30°	7.348	0.284	49	50°	7.348	0.284	65	90°	7.348	0.284	81	0°	6.964	0.269
2		7.473	.289	18		7.473	.289	34		7.473	.289	50		7.473	.289	66		7.473	.289	82		13.370	.517
3		7.598	.294	19		7.598	.294	35		7.598	.294	51		7.598	.294	67		7.598	.294	83		13.870	.537
4		7.848	.304	20		7.848	.304	36		7.848	.304	52		7.848	.304	68		7.848	.304	84		14.870	.575
5		8.348	.323	21		8.348	.323	37		8.348	.323	53		8.348	.323	69		8.348	.323	85		17.870	.691
6		8.929	.345	22		8.929	.345	38		8.929	.345	54		8.929	.345	70		8.929	.345	86		19.870	.769
7		9.179	.355	23		9.179	.355	39		9.179	.355	55		9.179	.355	71		9.179	.355	87		22.350	.865
8		9.429	.365	24		9.429	.365	40		9.429	.365	56		9.429	.365	72		9.429	.365	88		23.850	.923
9		9.929	.384	25		9.929	.384	41		9.929	.384	57		9.929	.384	73		9.929	.384	89	180°	8.348	.323
10		10.429	.403	26		10.429	.403	42		10.429	.403	58		10.429	.403	74		10.429	.403	90	0°	8.098	.313
11		10.776	.417	27		10.776	.417	43		10.776	.417	59		10.776	.417	75		10.776	.417	91	0°	8.638	.334
12		11.026	.427	28		11.026	.427	44		11.026	.427	60		11.026	.427	76		11.026	.427				
13		11.276	.436	29		11.276	.436	45		11.276	.436	61		11.276	.436	77		11.276	.436				
14		11.776	.456	30		11.776	.456	46		11.776	.456	62		11.776	.456	78		11.776	.456				
15		12.276	.475	31		12.276	.475	47		12.276	.475	63		12.276	.475	79		12.276	.475				
16		12.870	.498	32		12.870	.498	48		12.870	.498	64		12.870	.498	80		12.870	.498				

Figure 3.- Details of model II and locations of orifices. All linear dimensions are in inches.

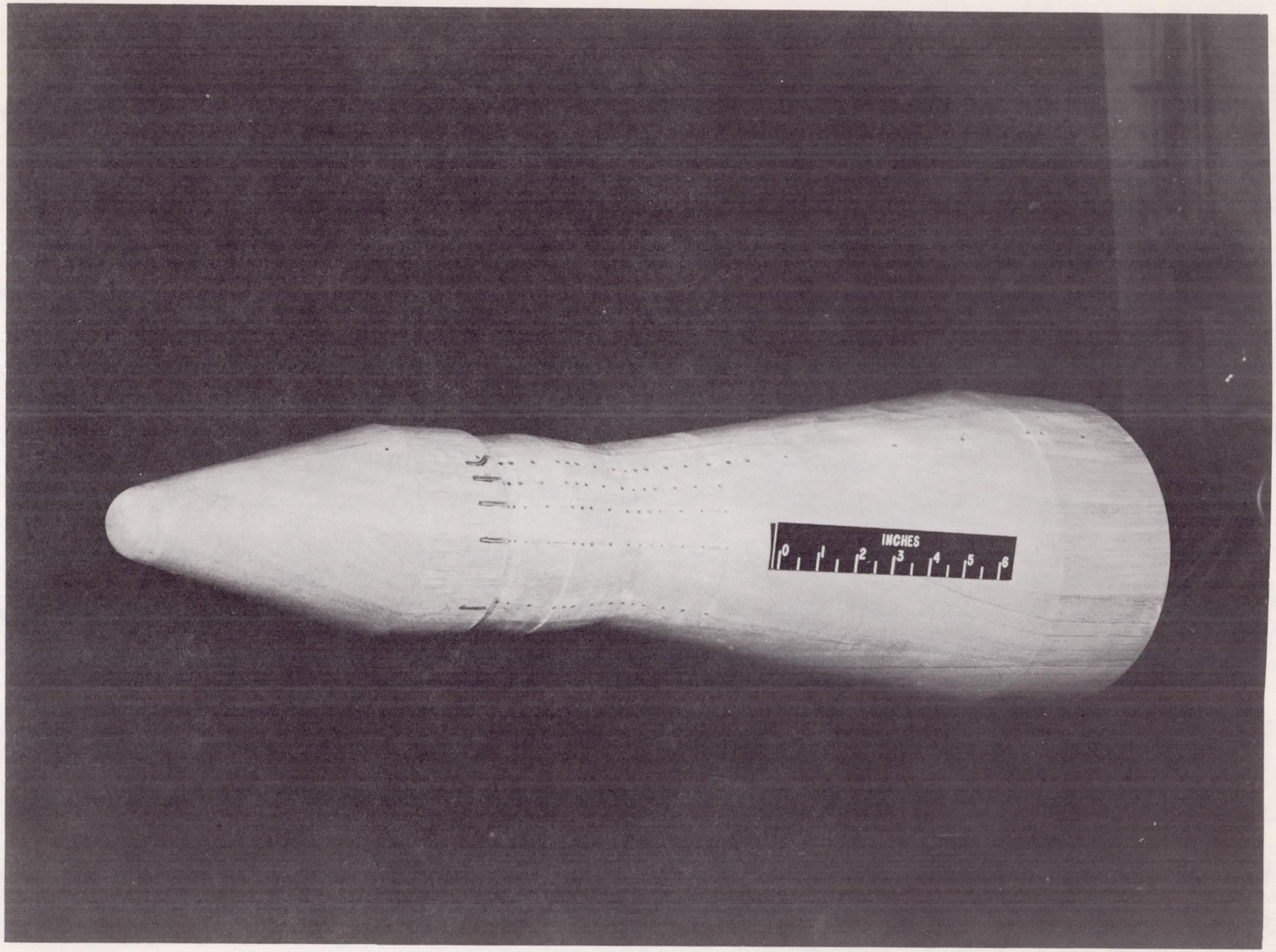
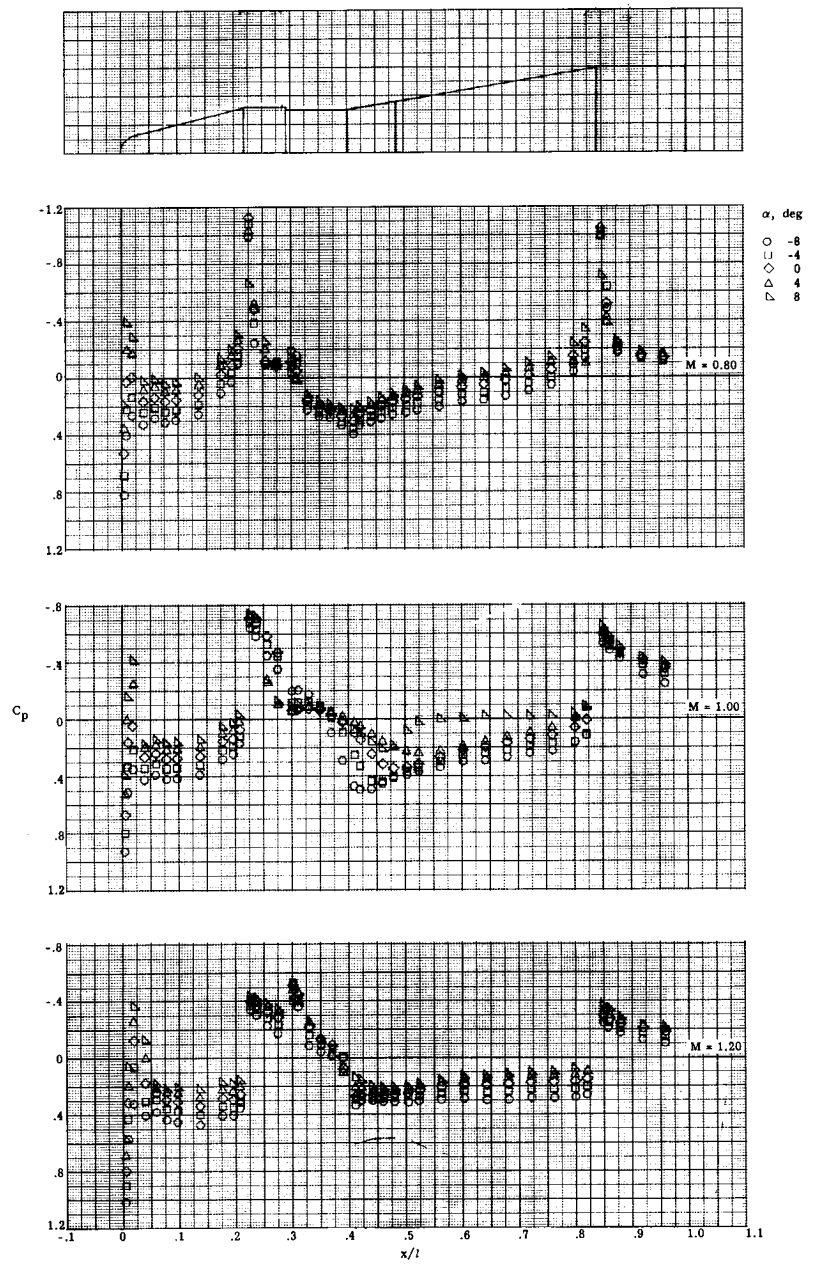


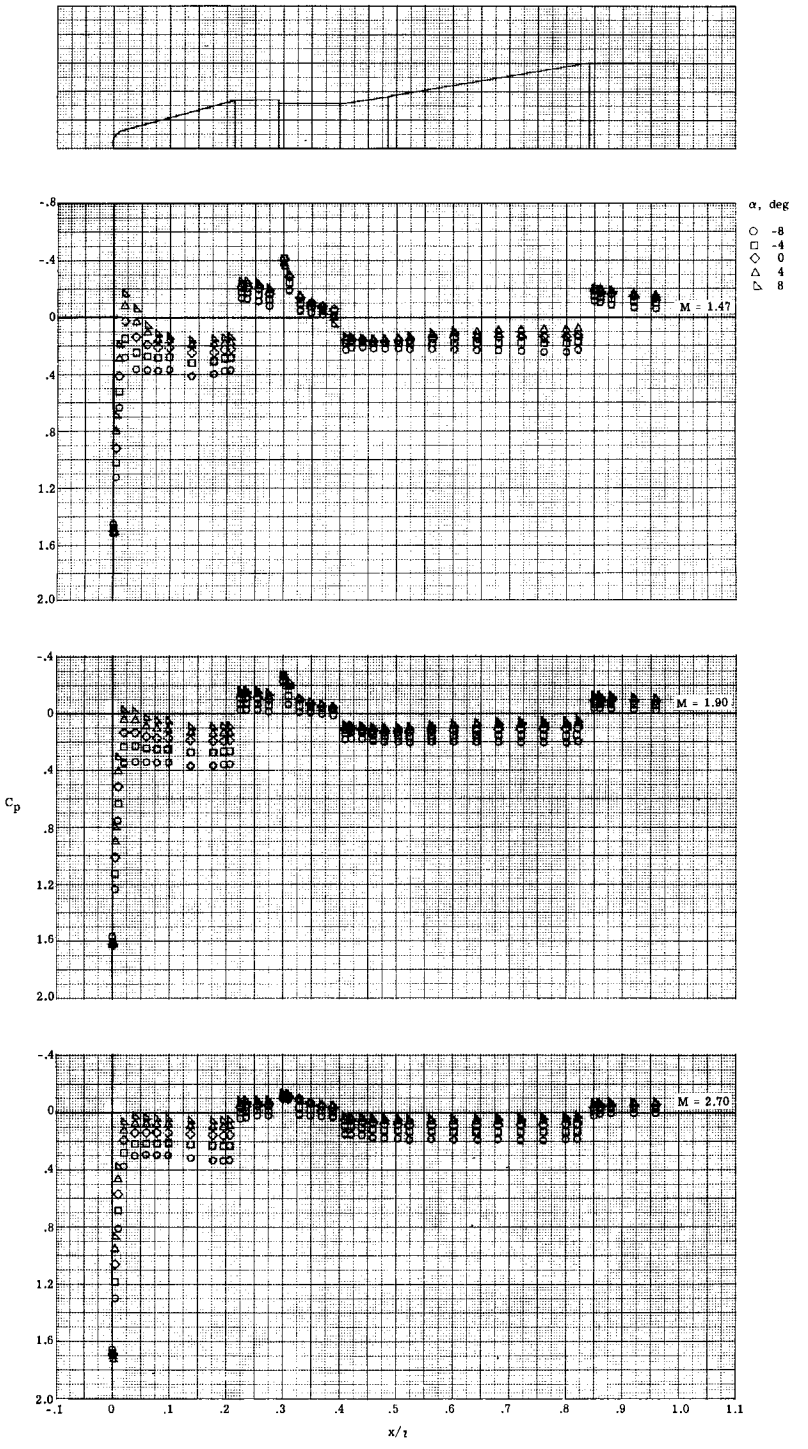
Figure 4.- Photograph of model II.

L-62-6759



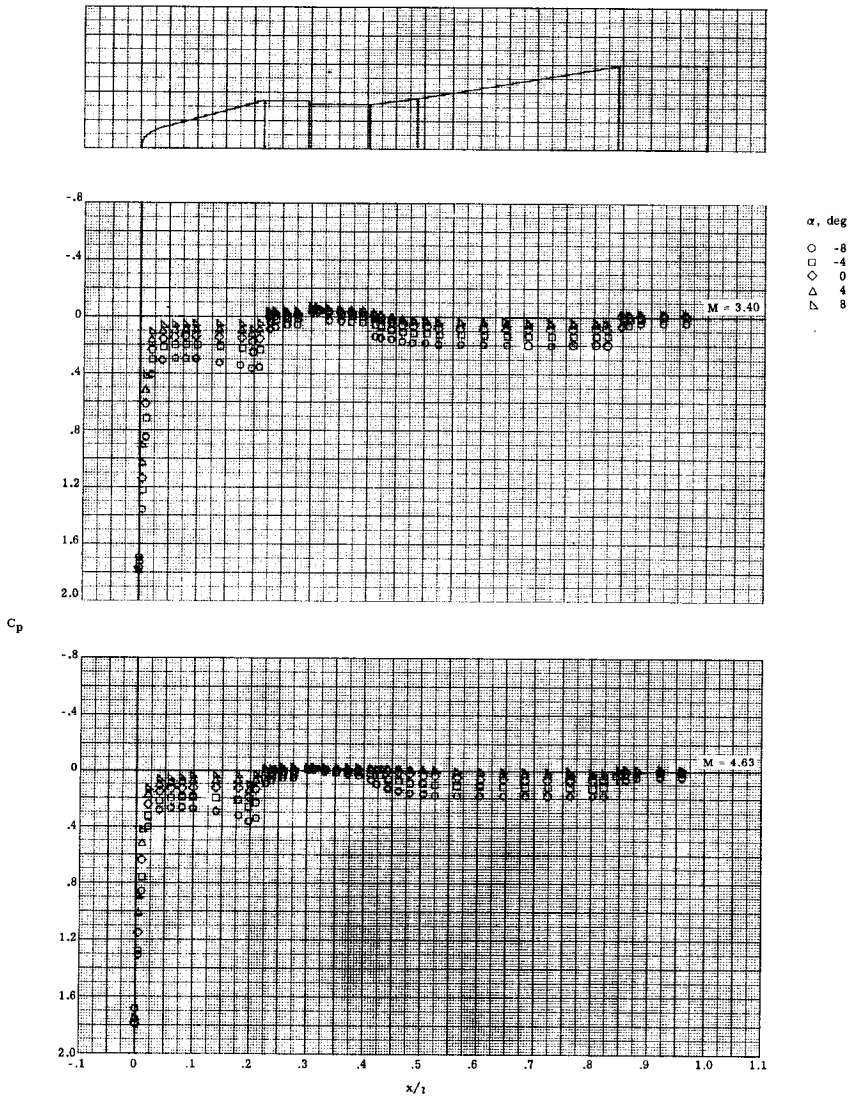
(a) $\phi = 0^{\circ}$.

Figure 5.- Pressure coefficients for model I for various roll angles.



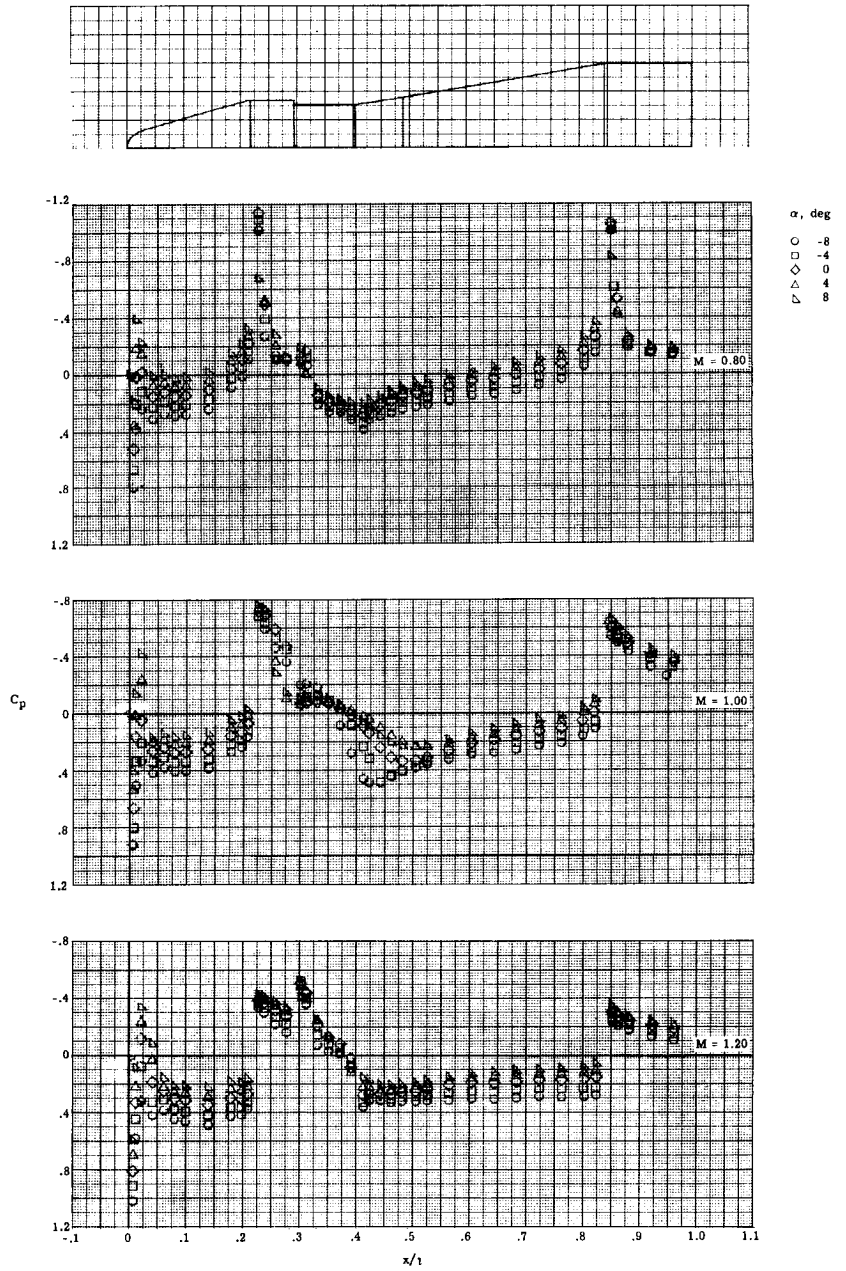
(a) Continued.

Figure 5.- Continued.



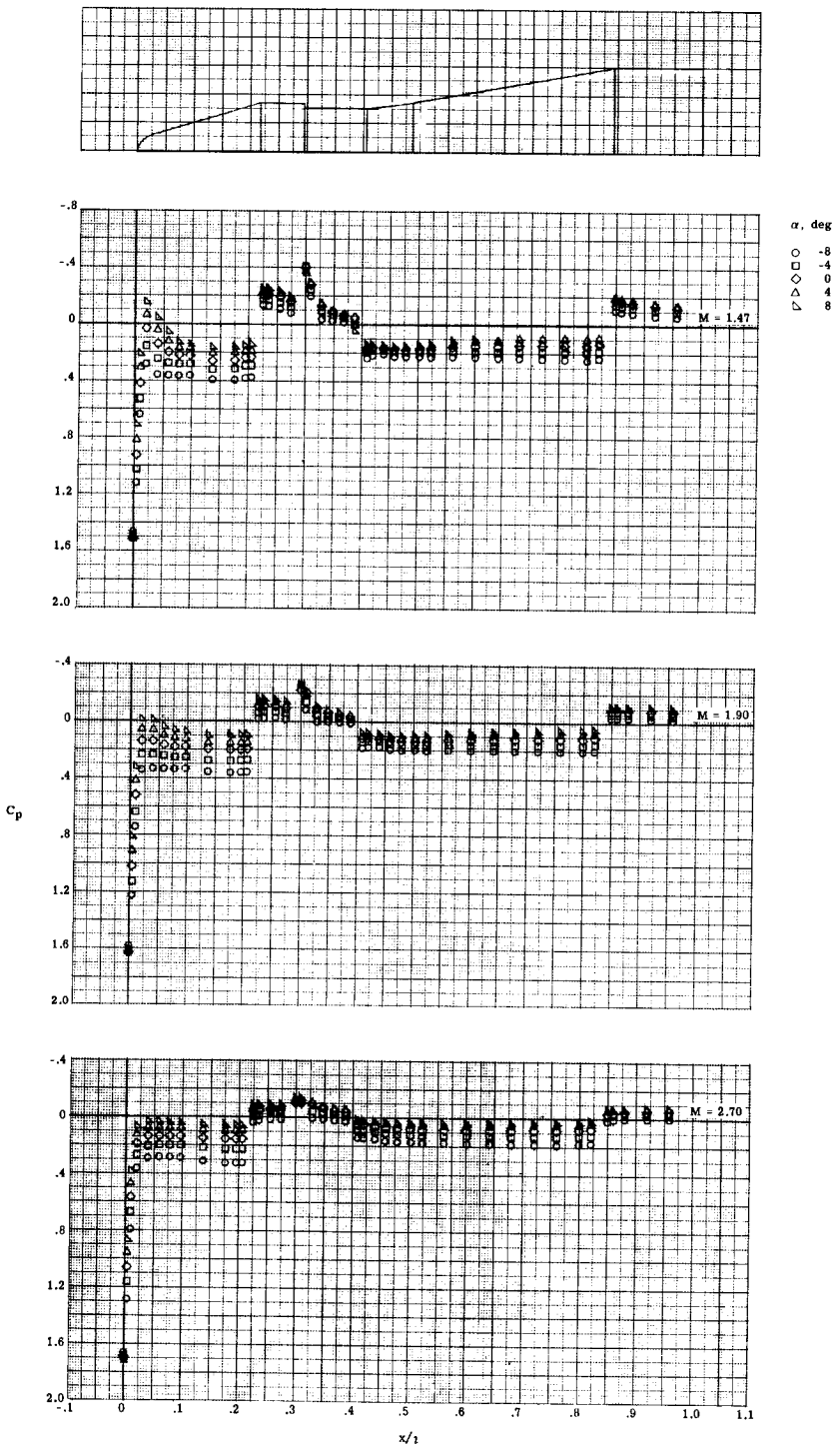
(a) Concluded.

Figure 5.- Continued.



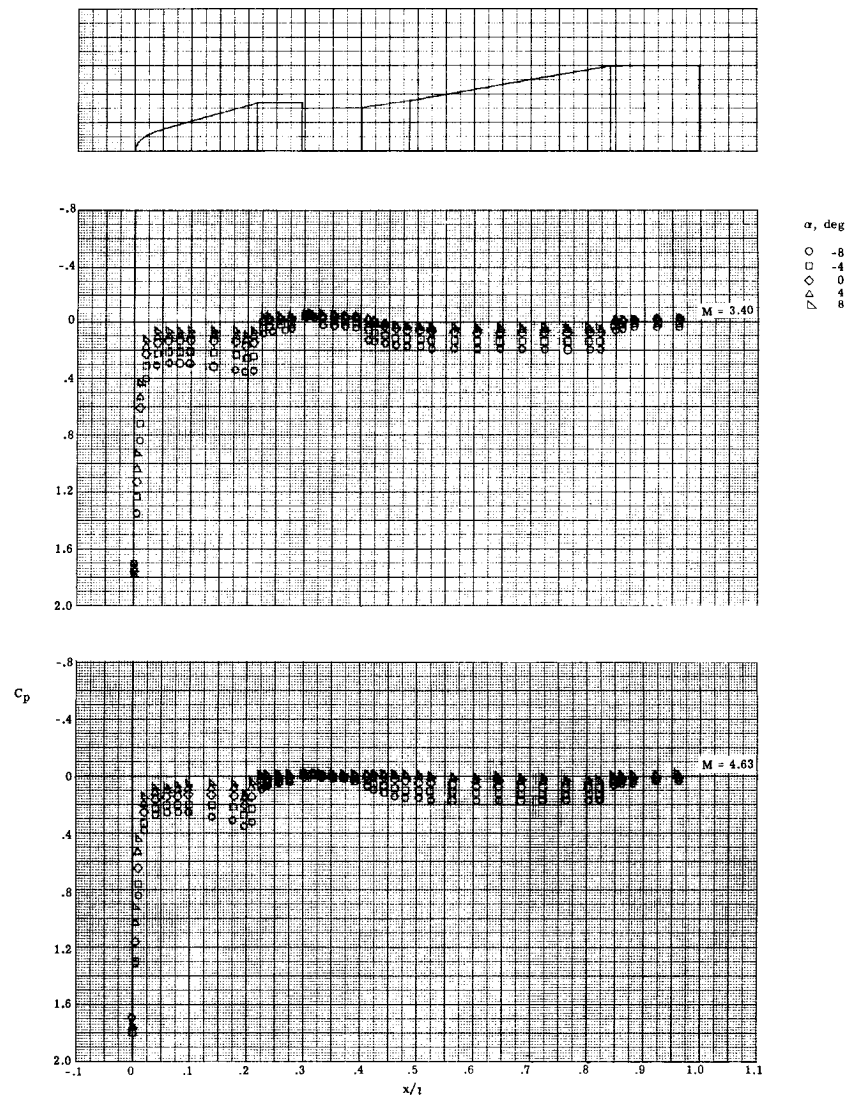
(b) $\phi = 15^{\circ}$.

Figure 5.- Continued.



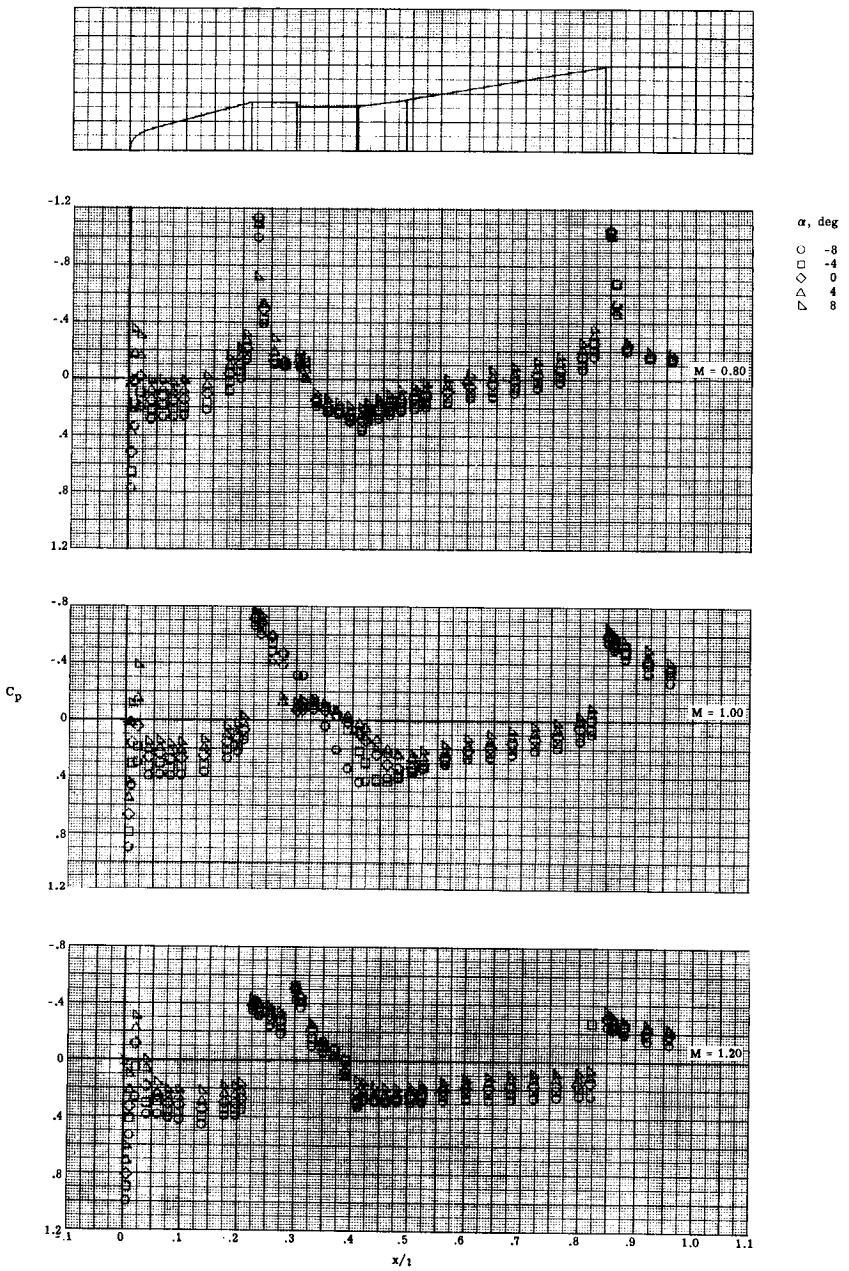
(b) Continued.

Figure 5.- Continued.



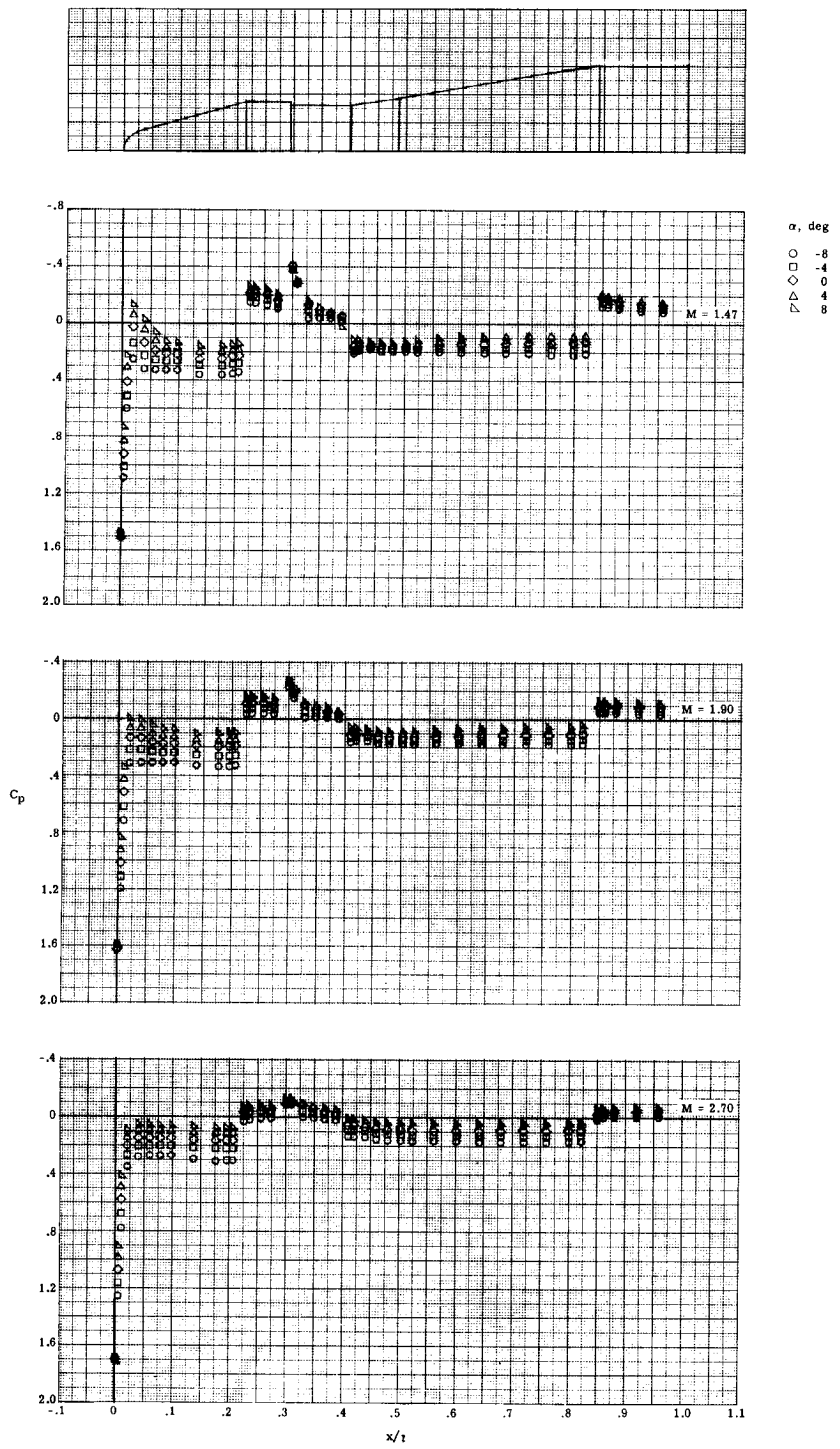
(b) Concluded.

Figure 5.- Continued.



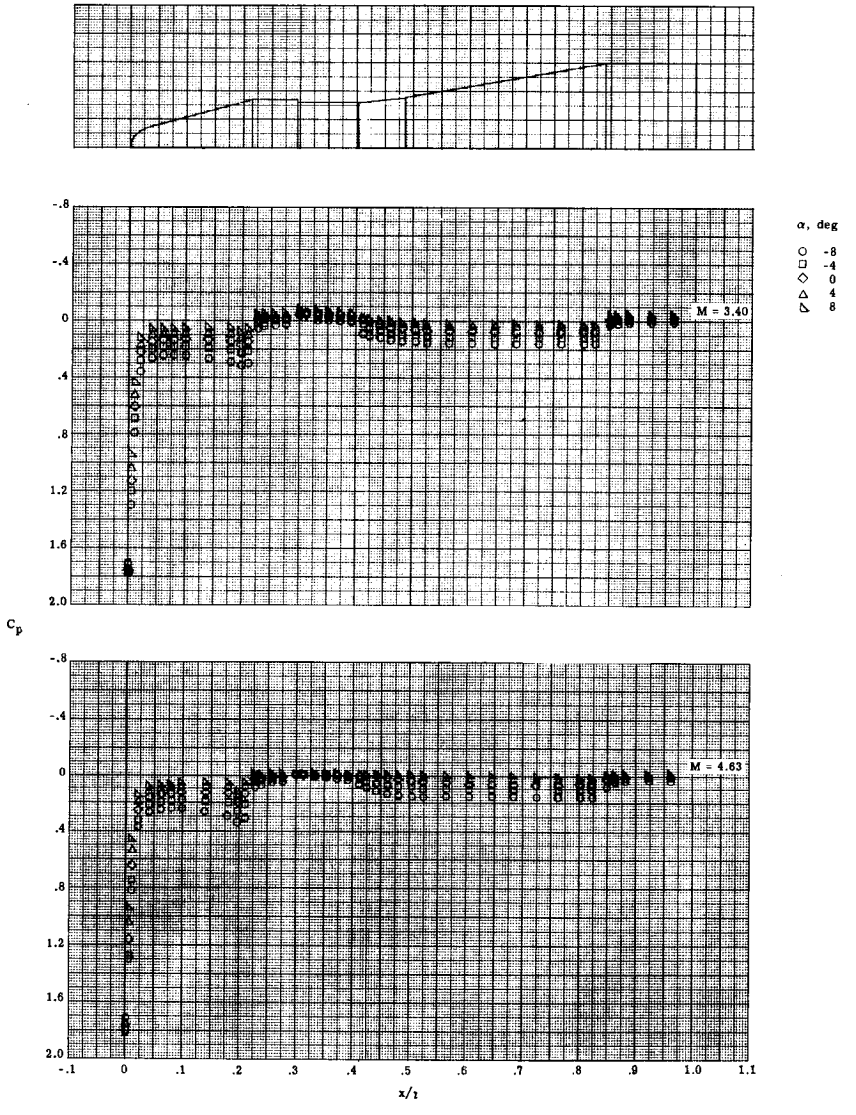
(c) $\phi = 30^\circ$.

Figure 5.- Continued.



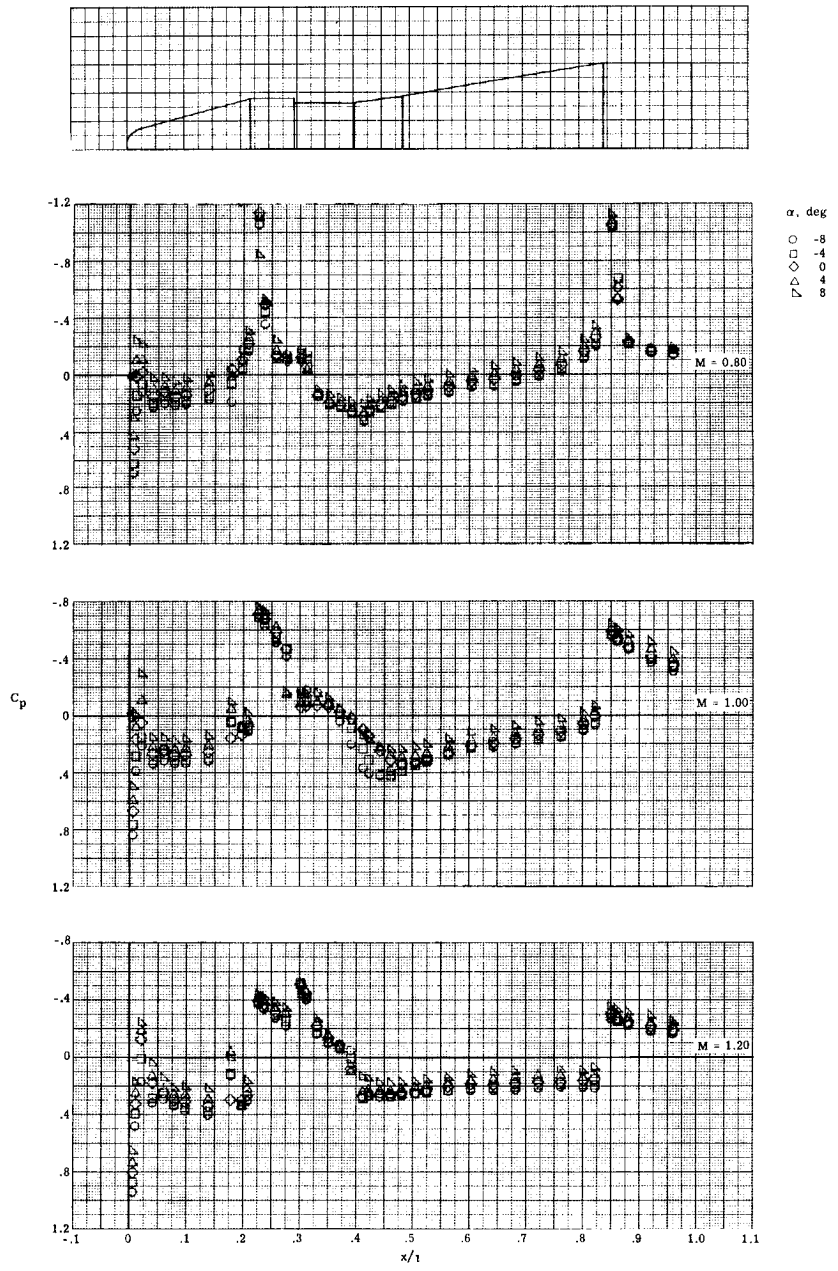
(c) Continued.

Figure 5.- Continued.



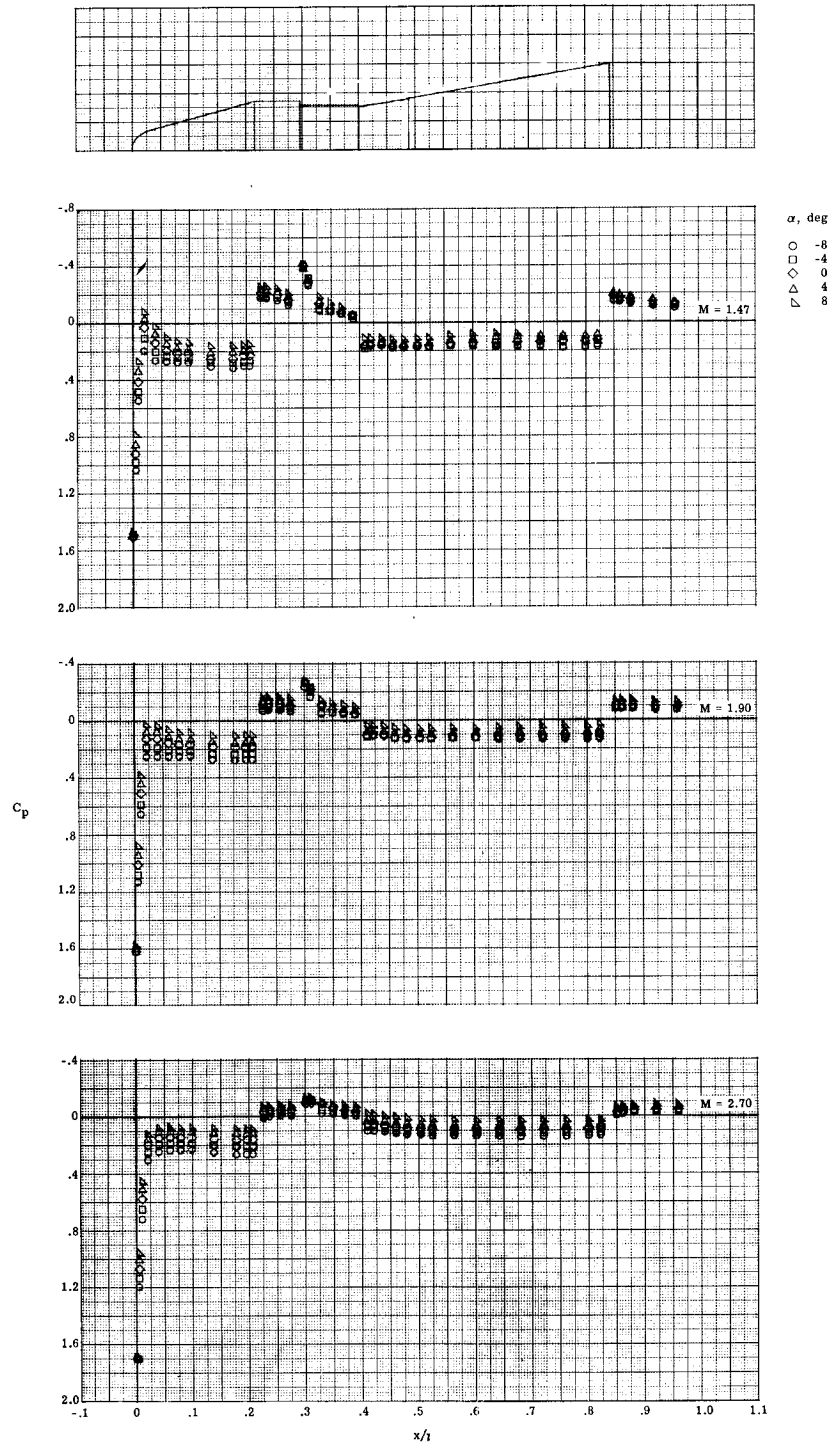
(c) Concluded.

Figure 5.- Continued.



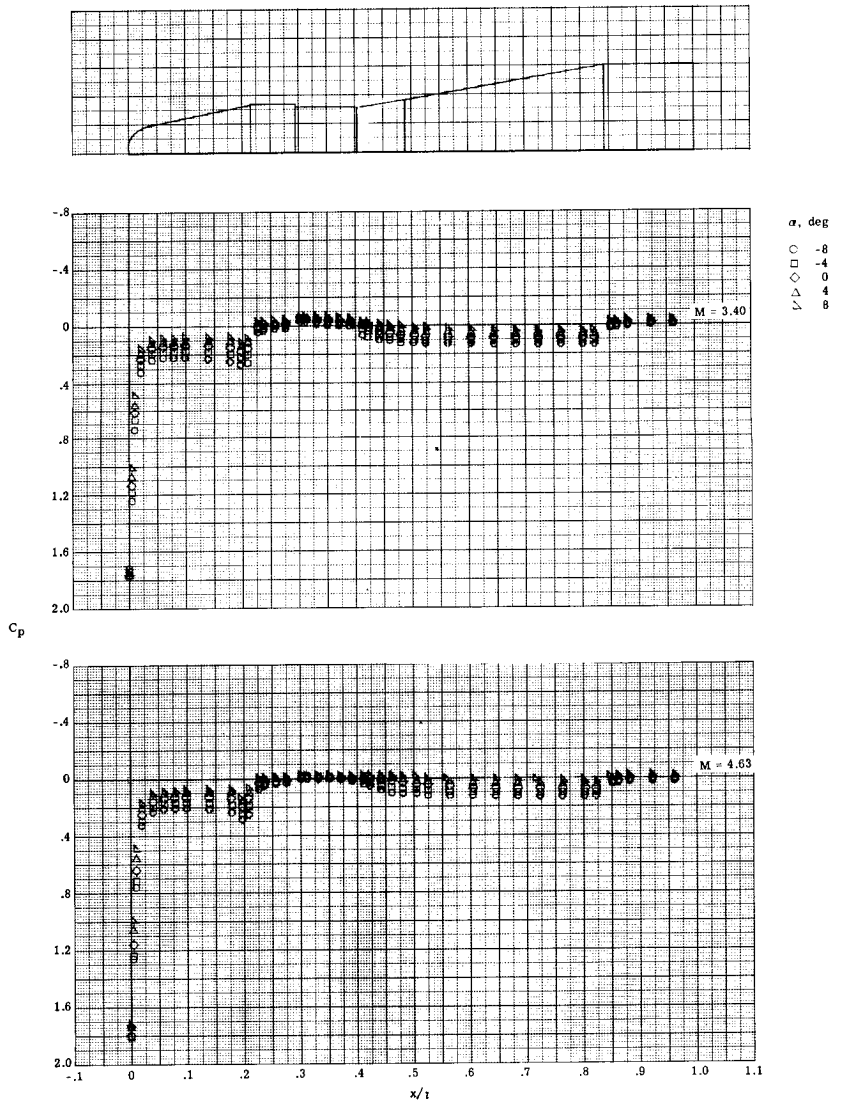
(d) $\phi = 50^{\circ}$.

Figure 5.- Continued.



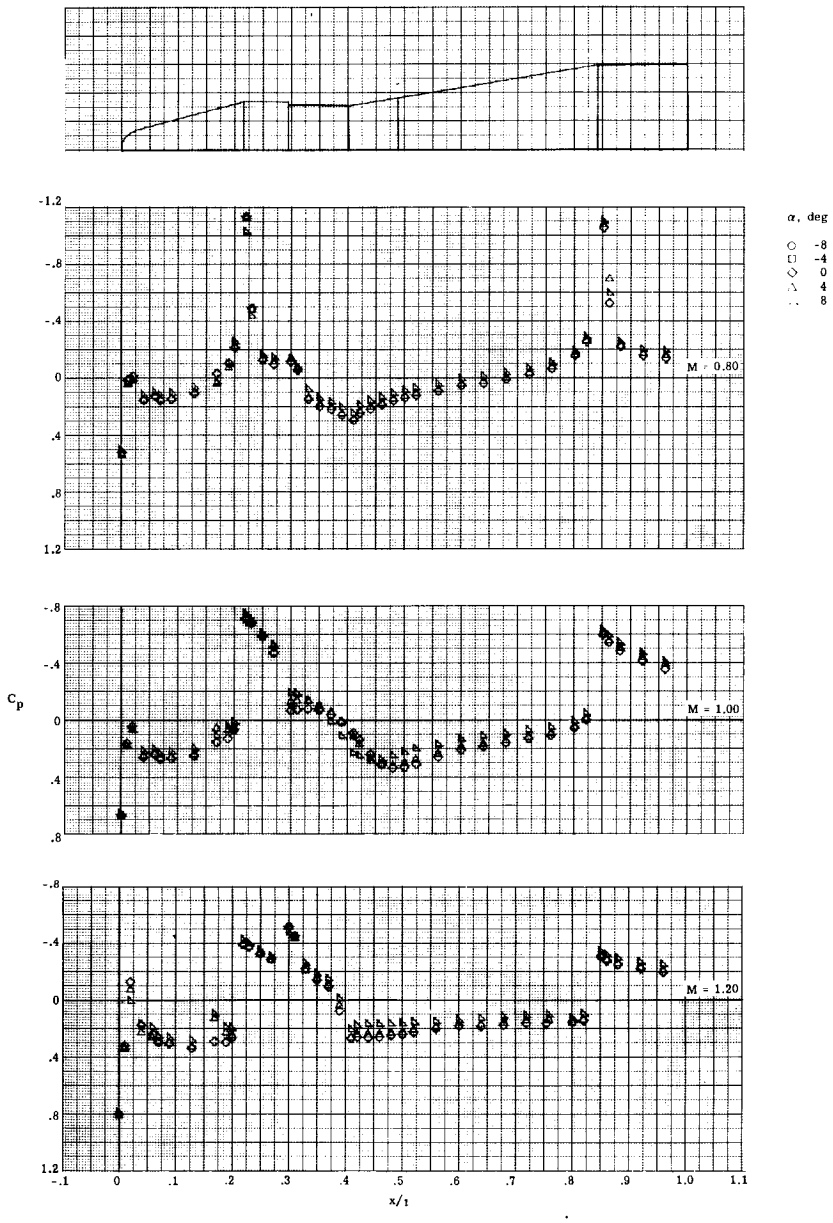
(d) Continued.

Figure 5.- Continued.



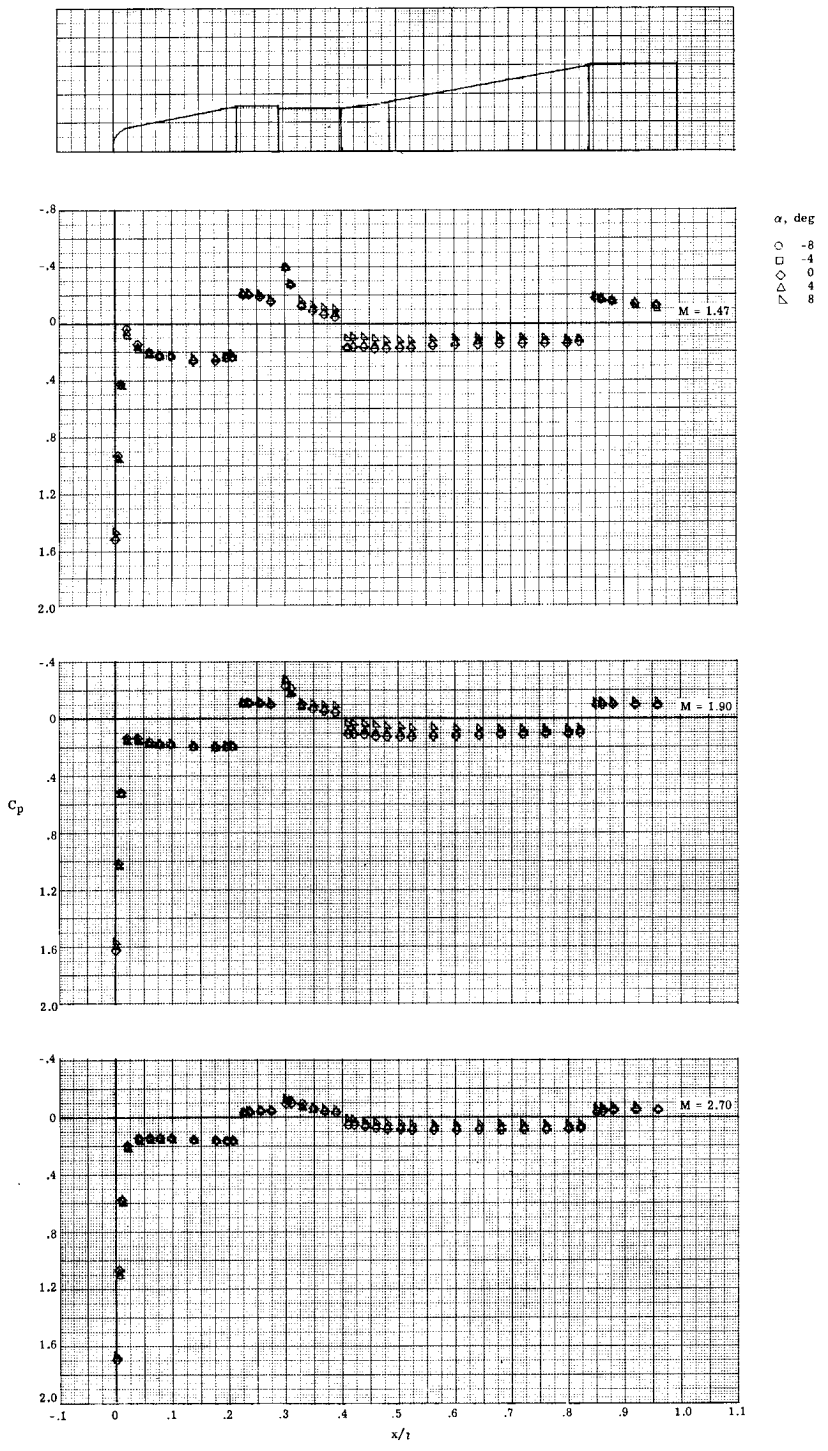
(d) Concluded.

Figure 5.- Continued.



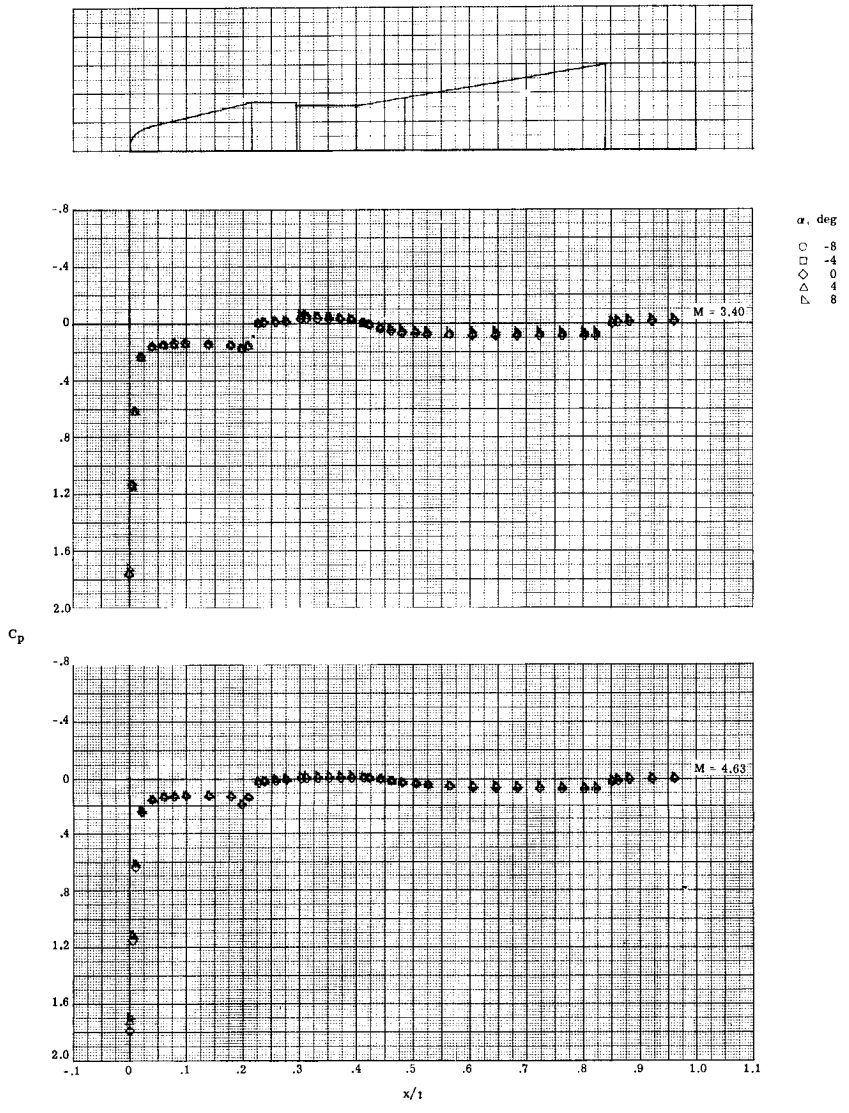
(e) $\phi = 90^\circ$.

Figure 5.- Continued.



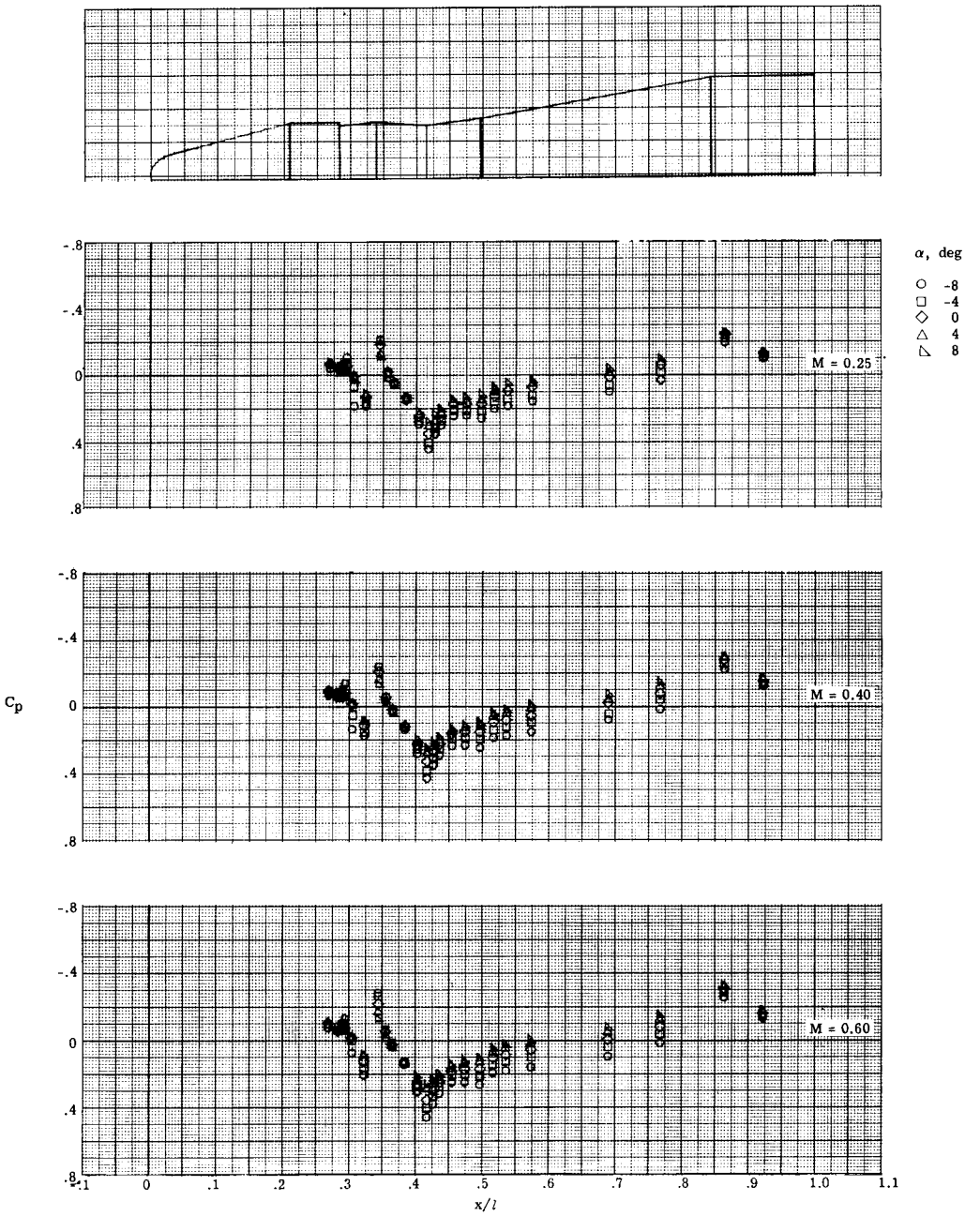
(e) Continued.

Figure 5.- Continued.



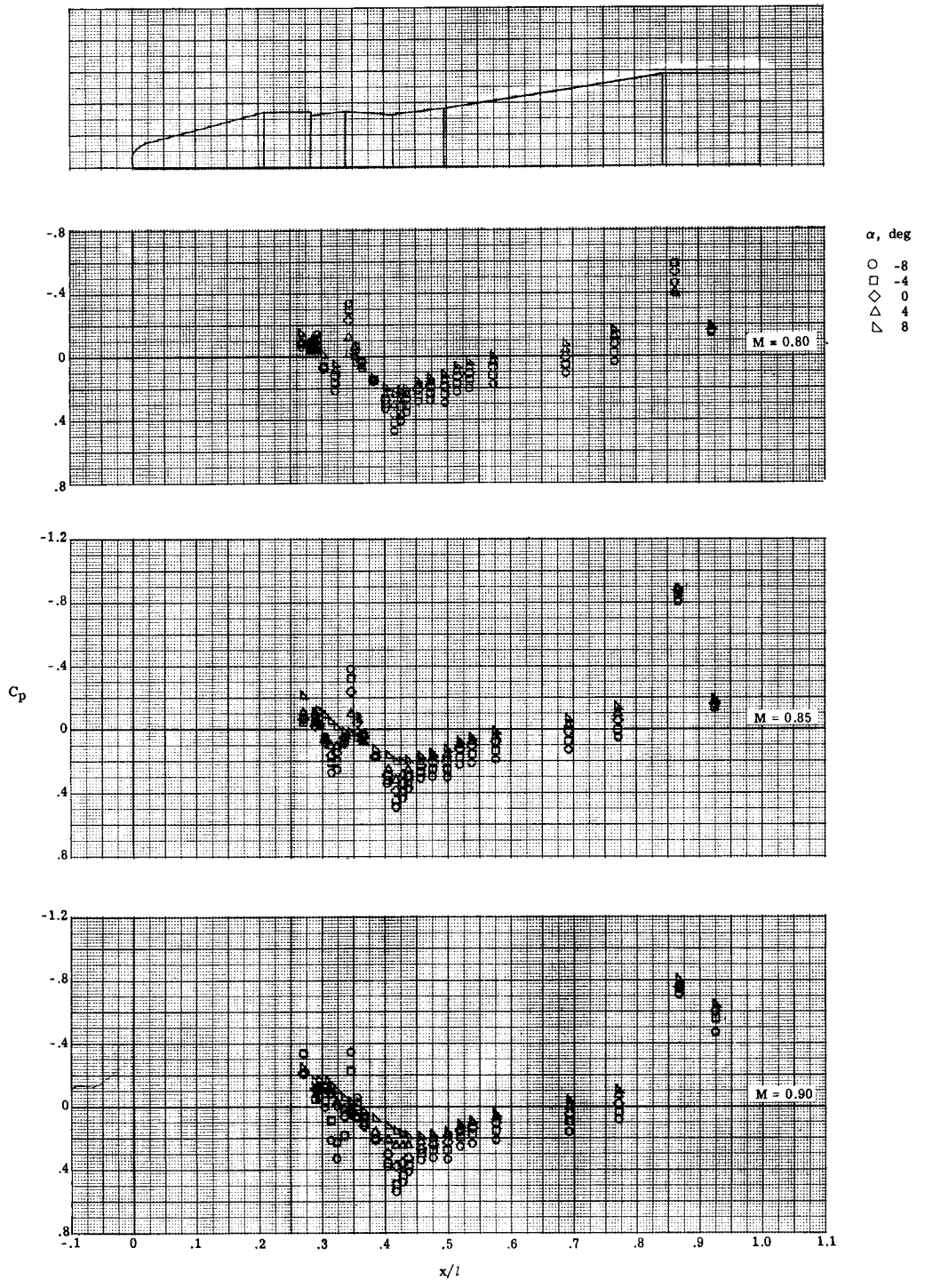
(e) Concluded.

Figure 5.- Concluded.



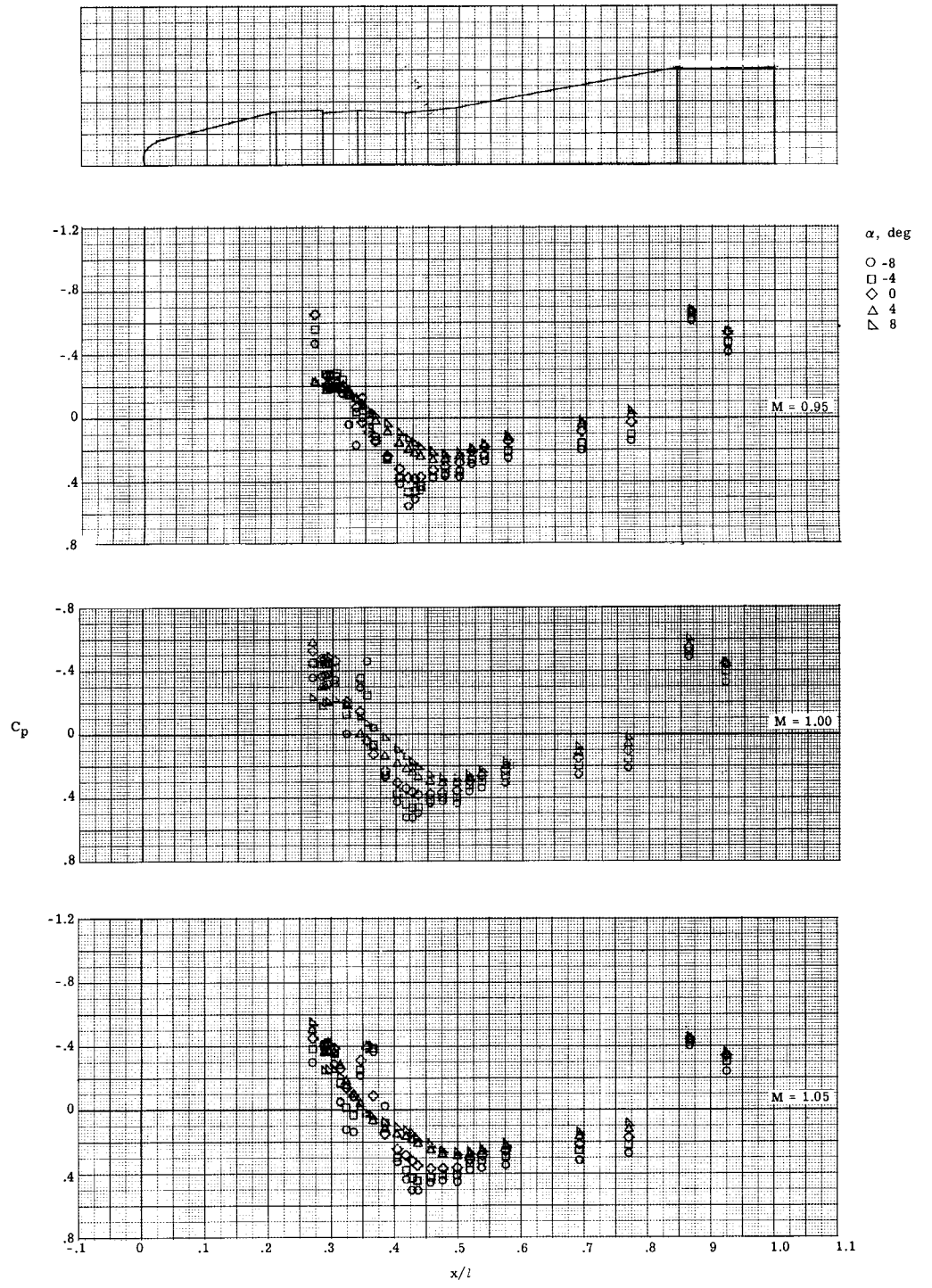
(a) $\phi = 0^{\circ}$.

Figure 6.- Pressure coefficients for model II for various angular locations of orifice rows.



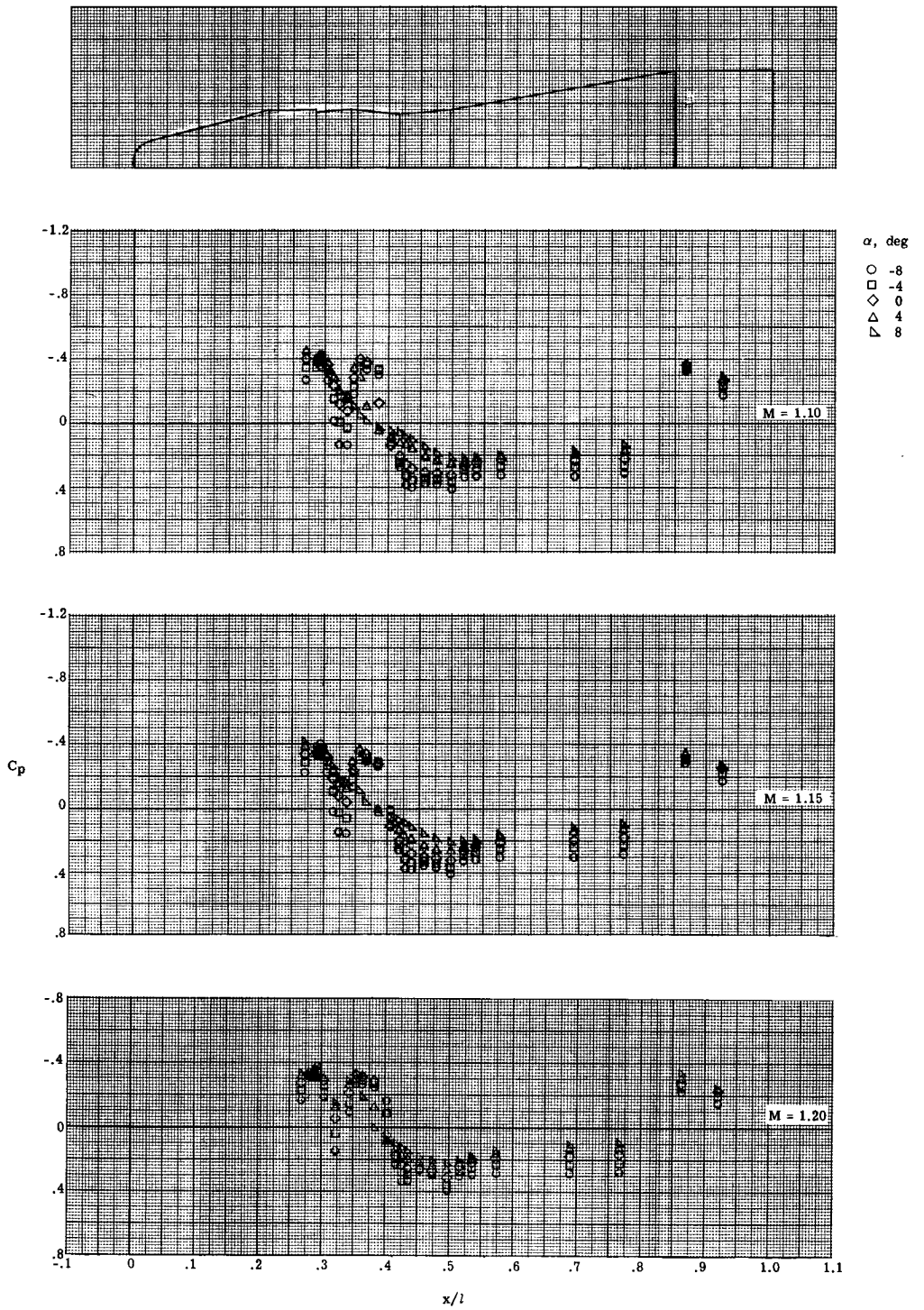
(a) Continued.

Figure 6.- Continued.



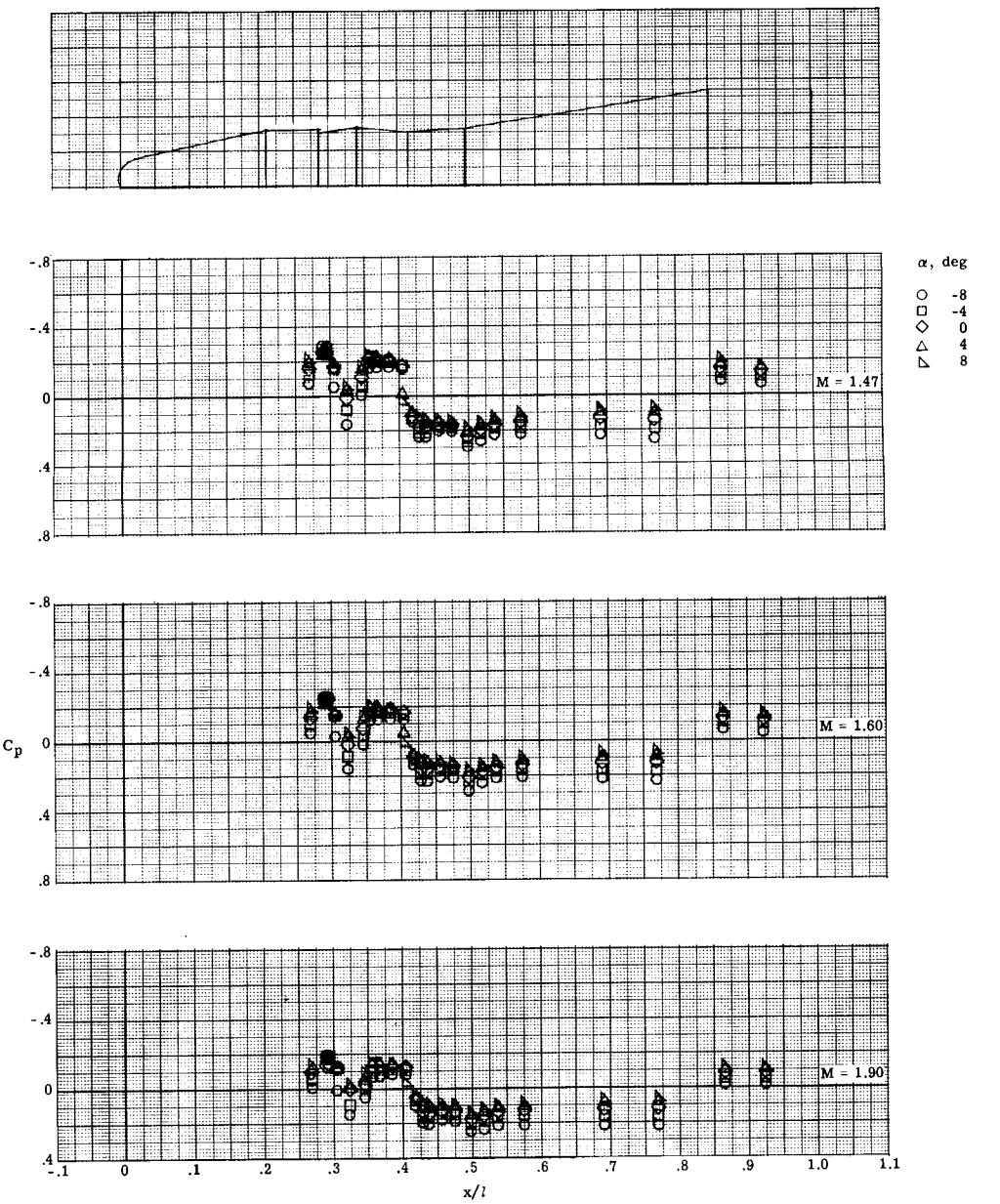
(a) Continued.

Figure 6.- Continued.



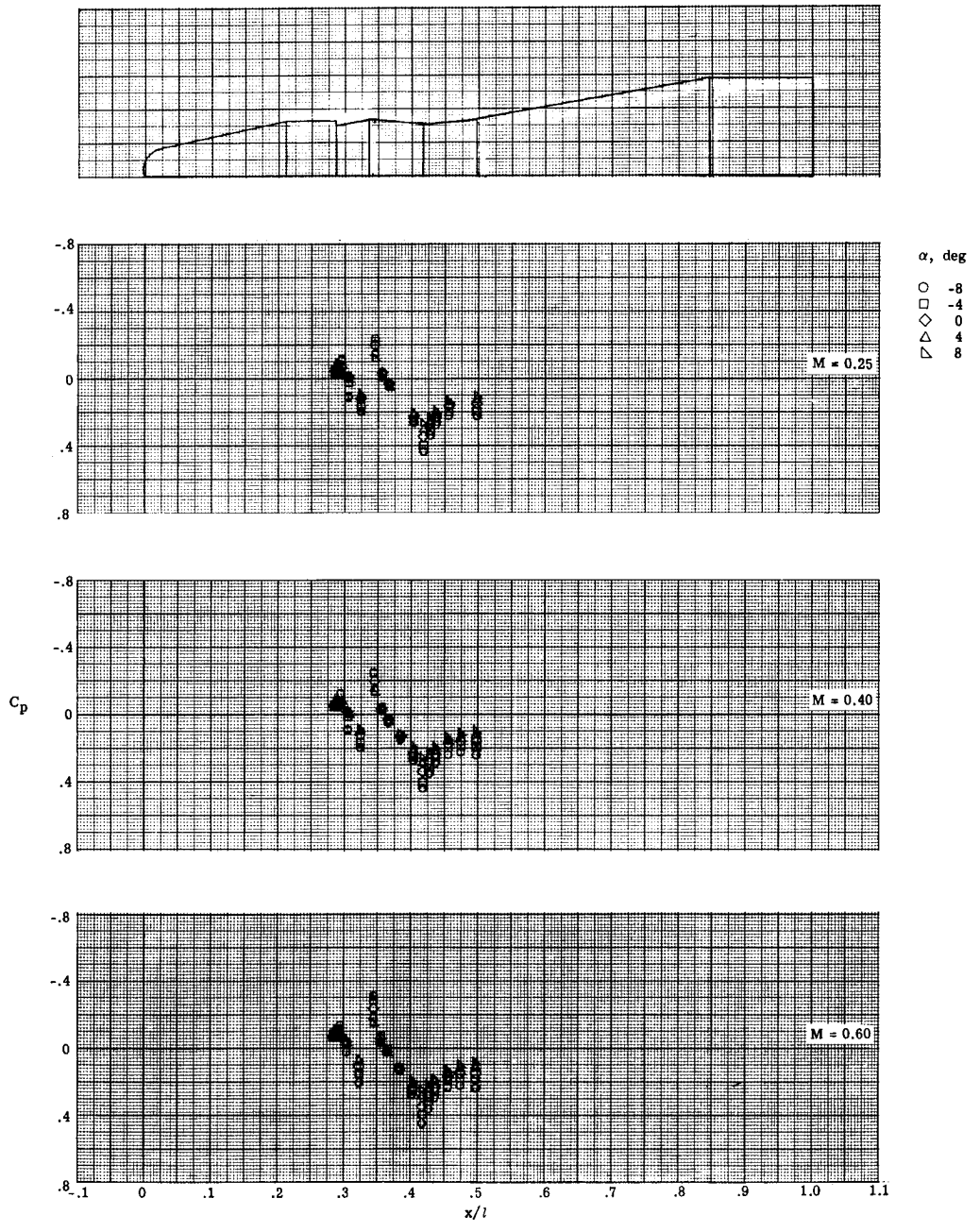
(a) Continued.

Figure 6.- Continued.



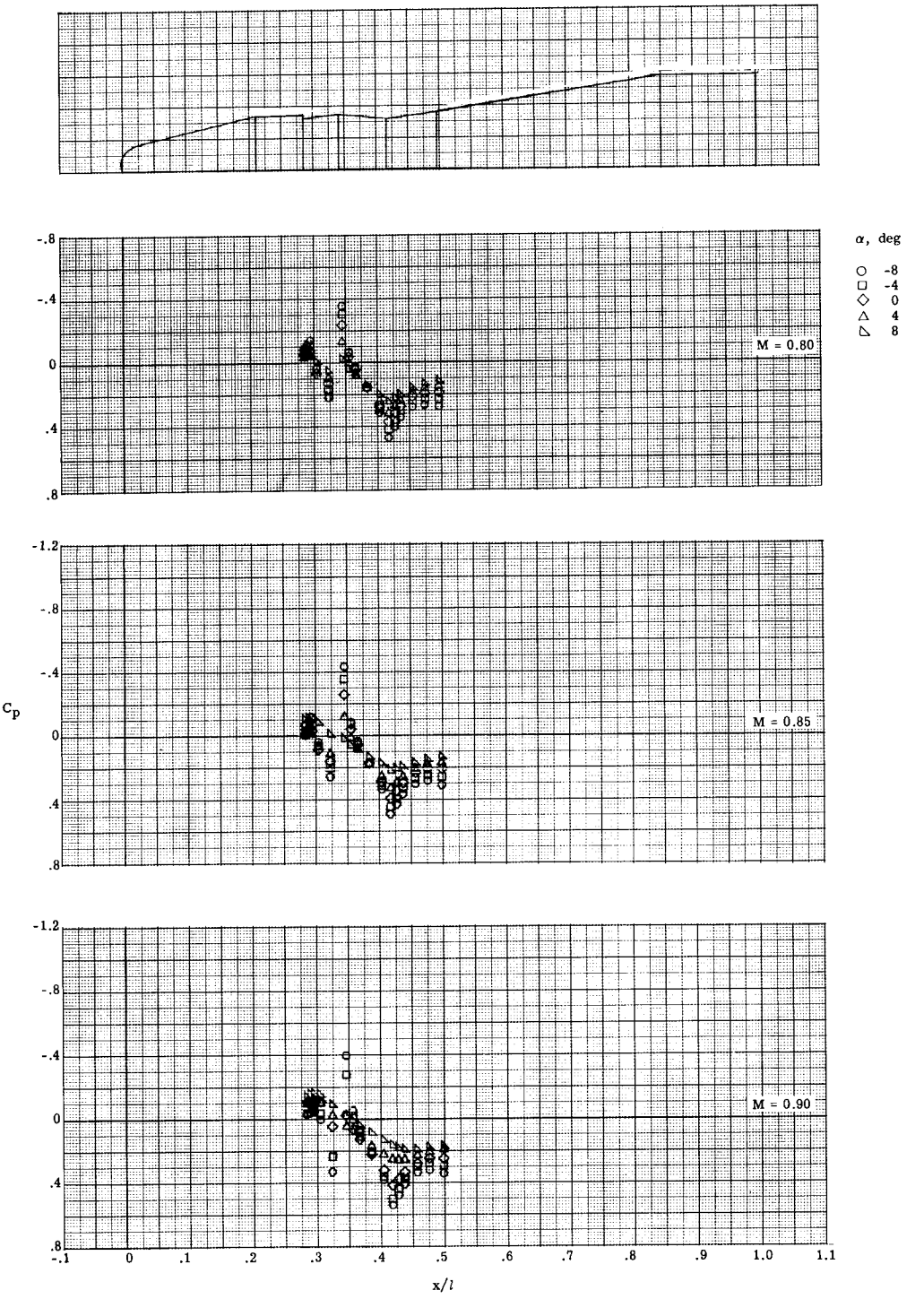
(a) Concluded.

Figure 6.- Continued.



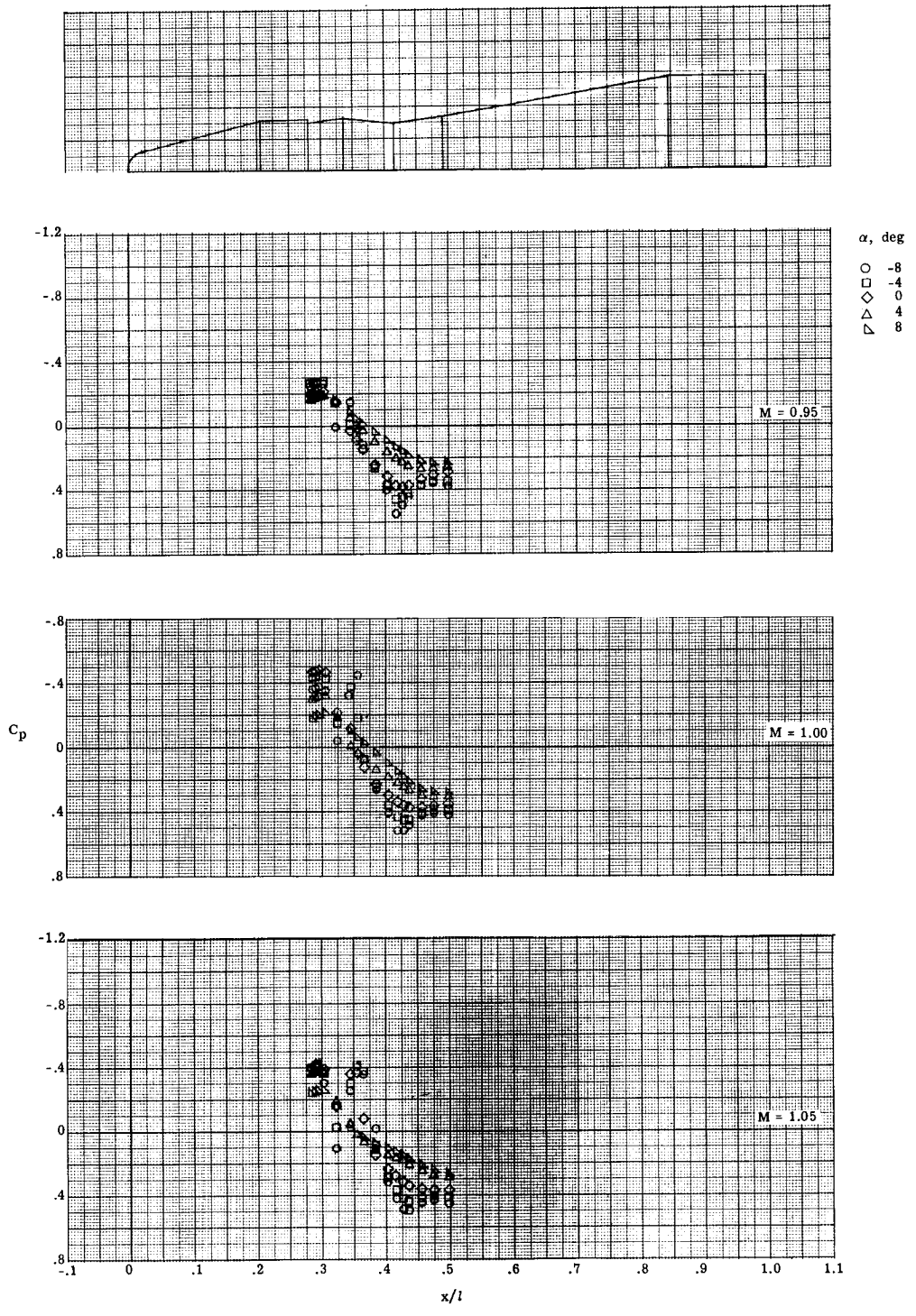
(b) $\phi = 15^{\circ}$.

Figure 6.- Continued.



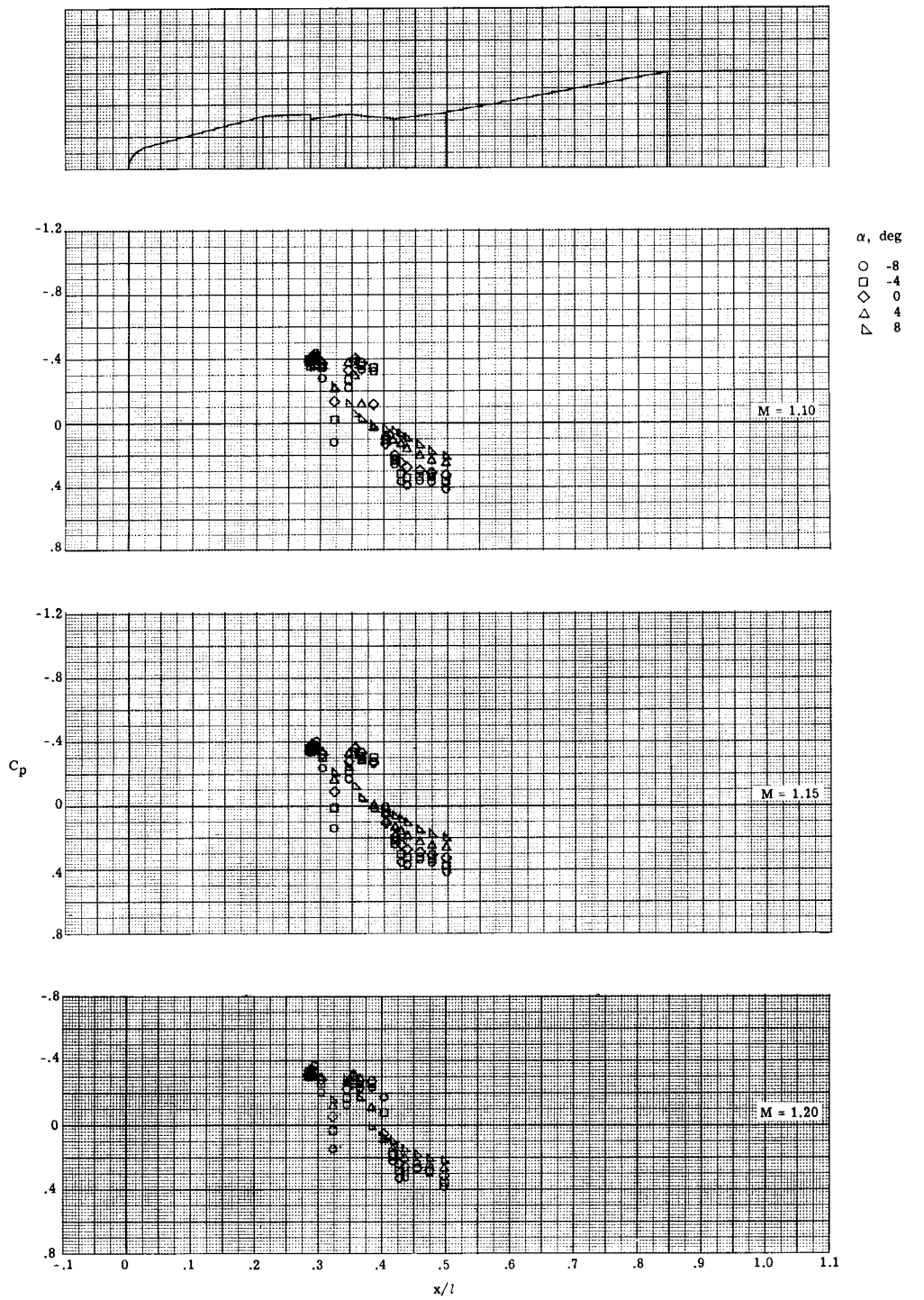
(b) Continued.

Figure 6.- Continued.



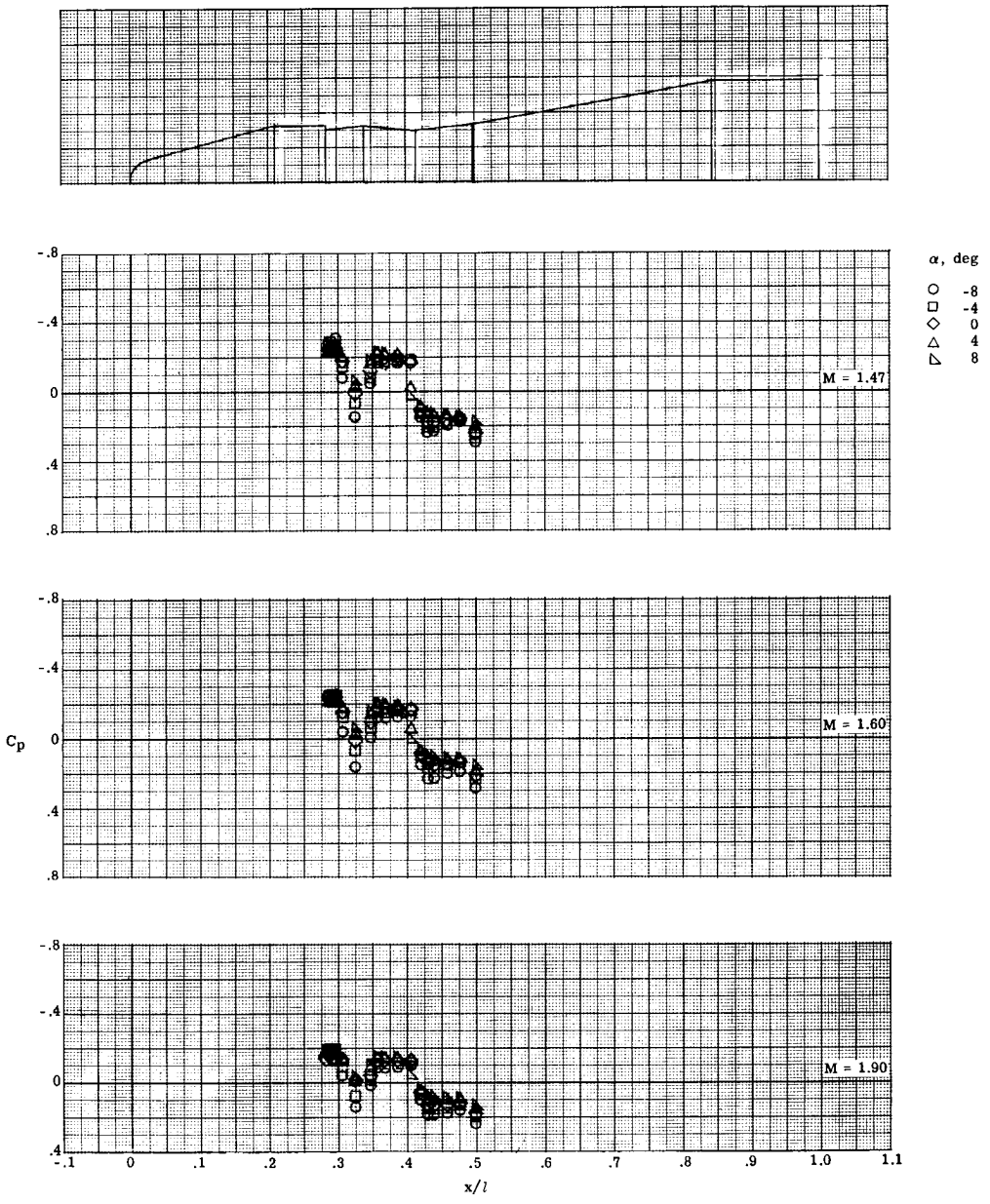
(b) Continued.

Figure 6.- Continued.



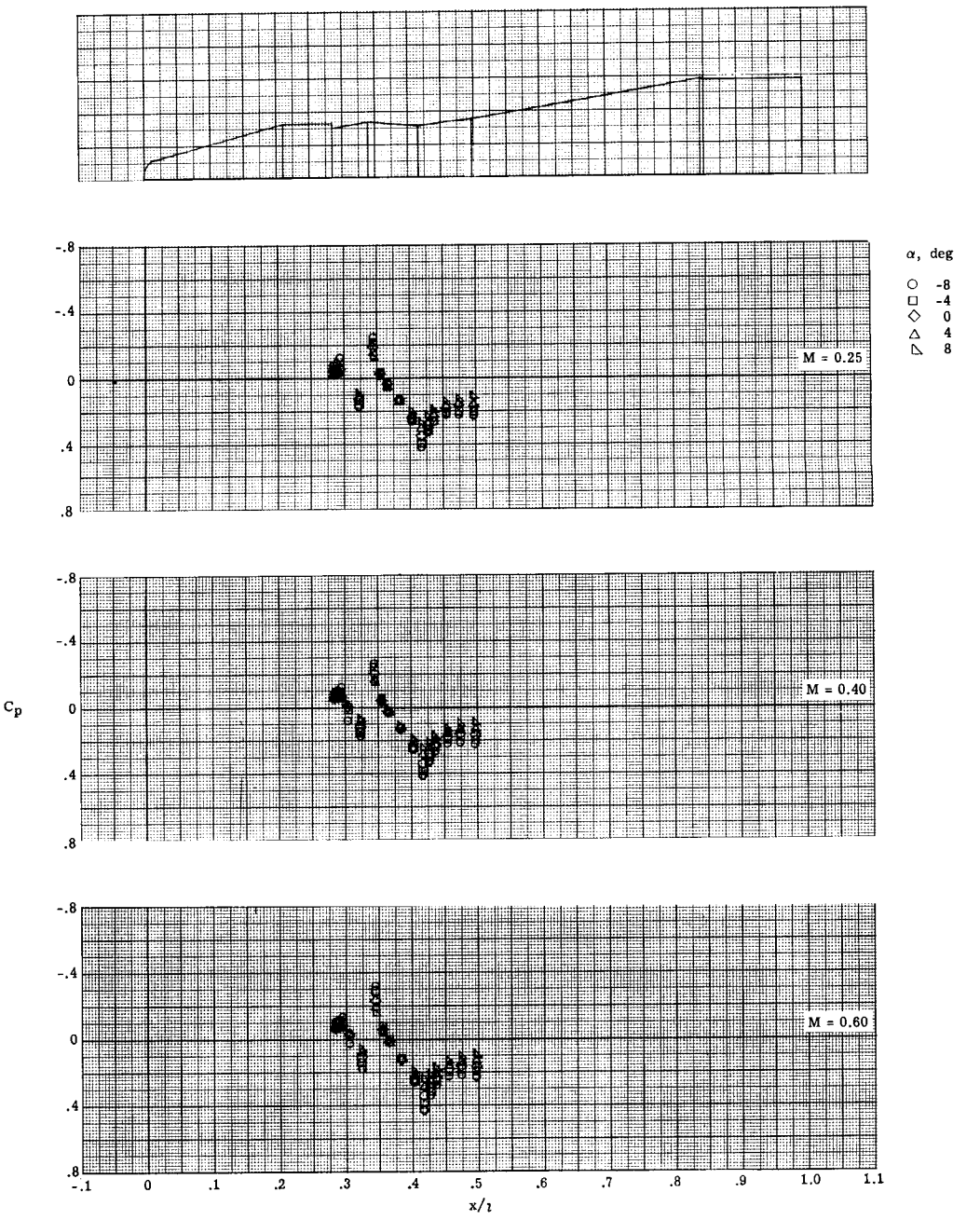
(b) Continued.

Figure 6.- Continued.



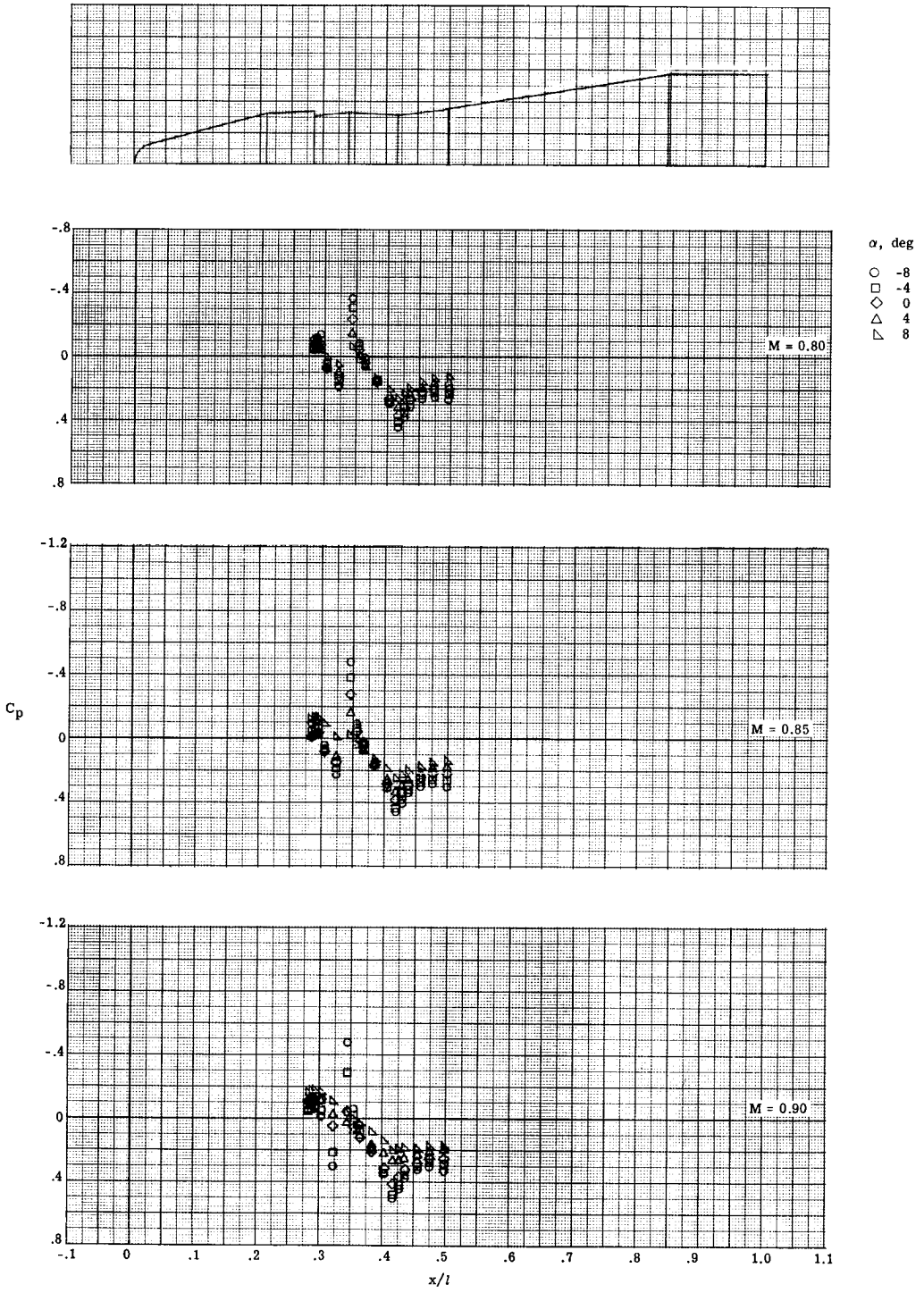
(b) Concluded.

Figure 6.- Continued.



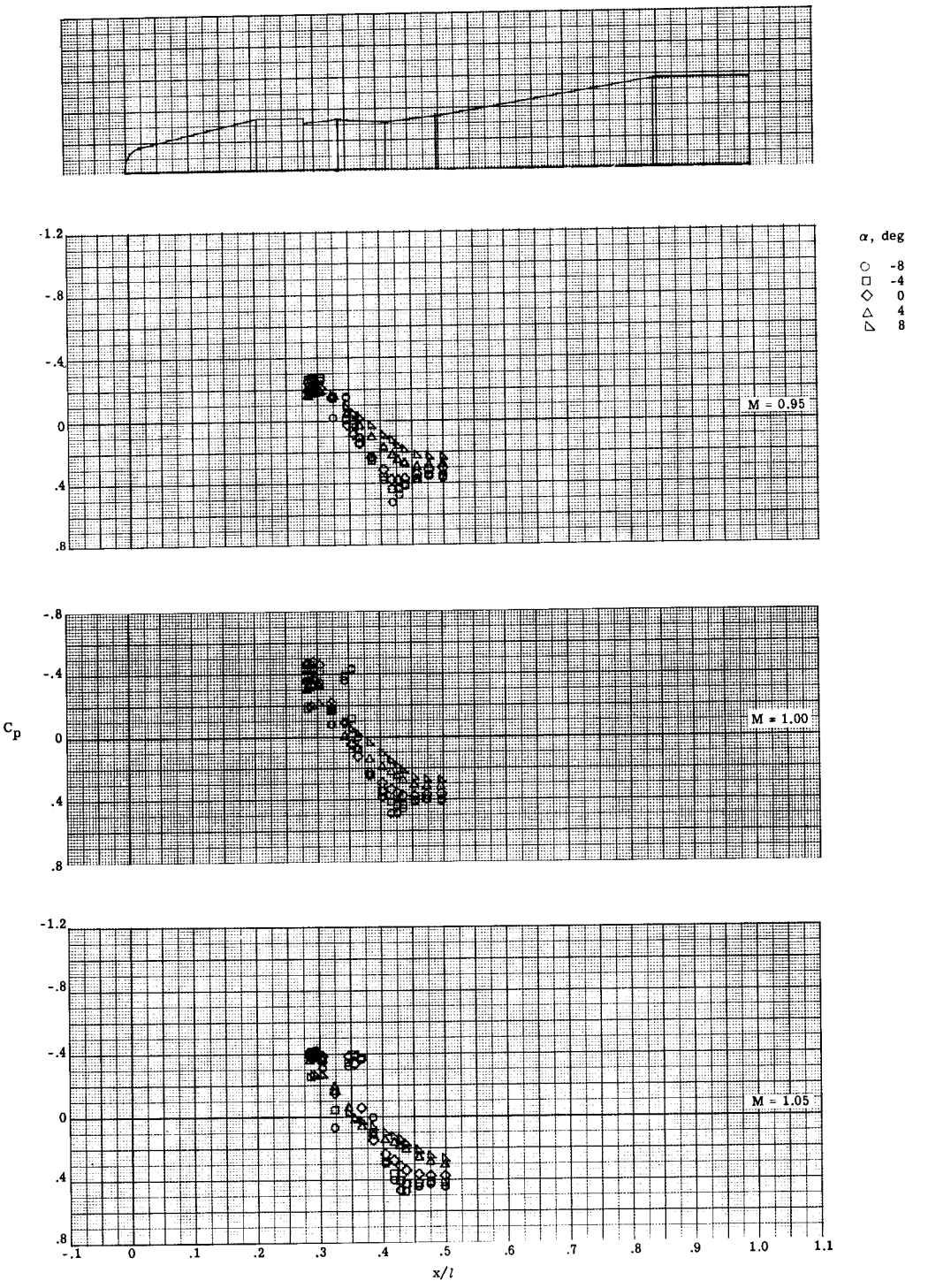
(c) $\phi = 30^\circ$.

Figure 6.- Continued.



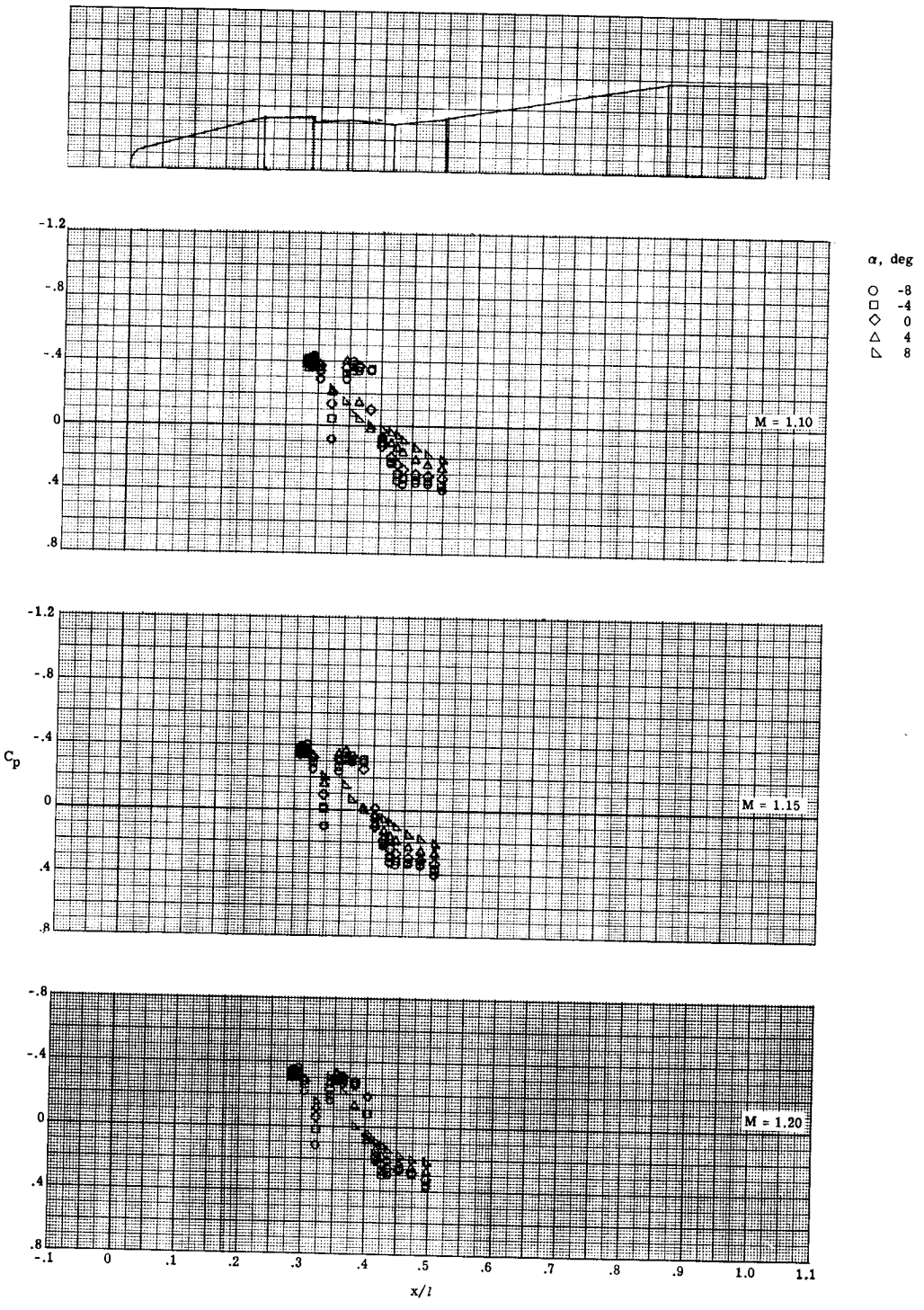
(c) Continued.

Figure 6.- Continued.



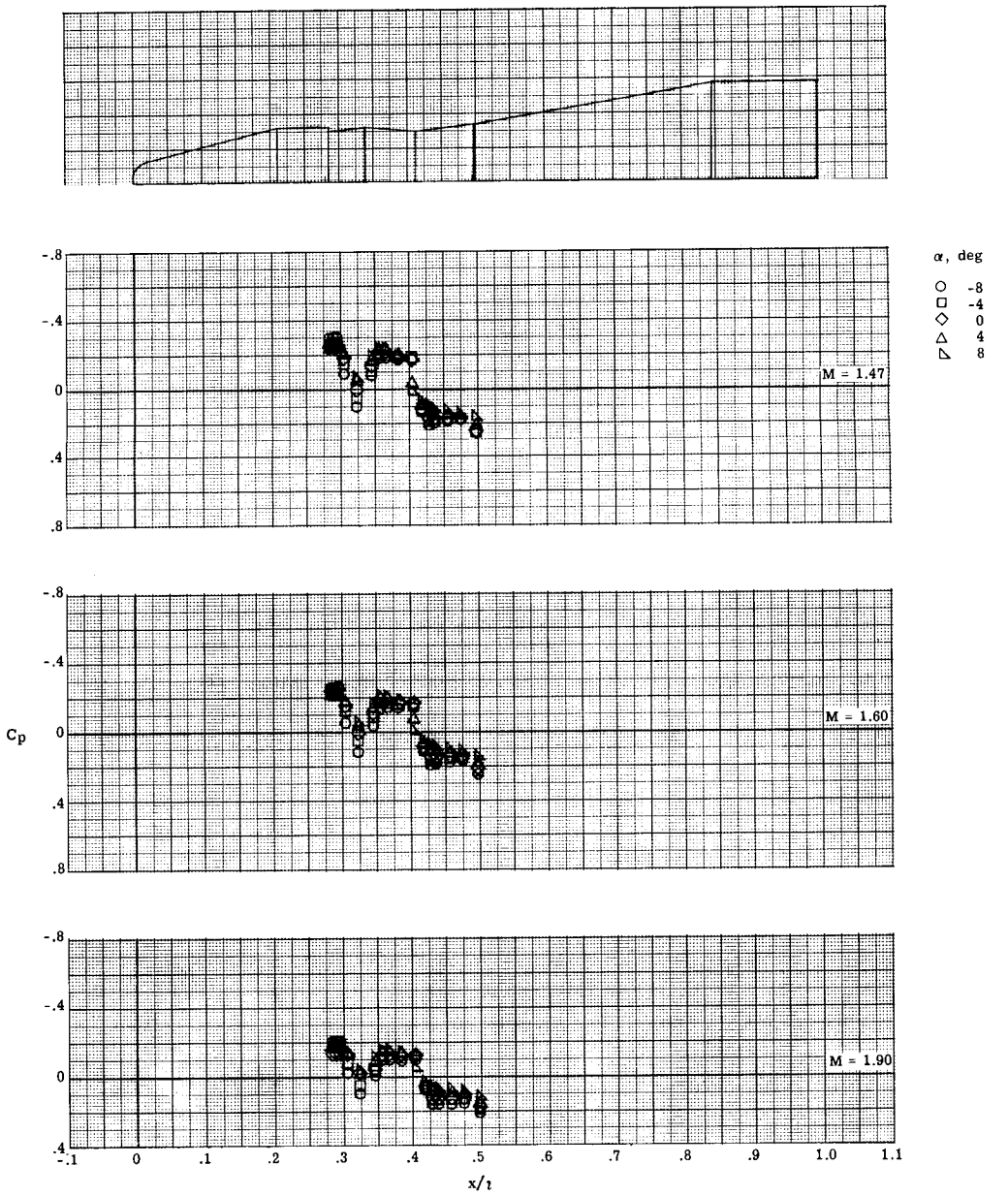
(c) Continued.

Figure 6.- Continued.



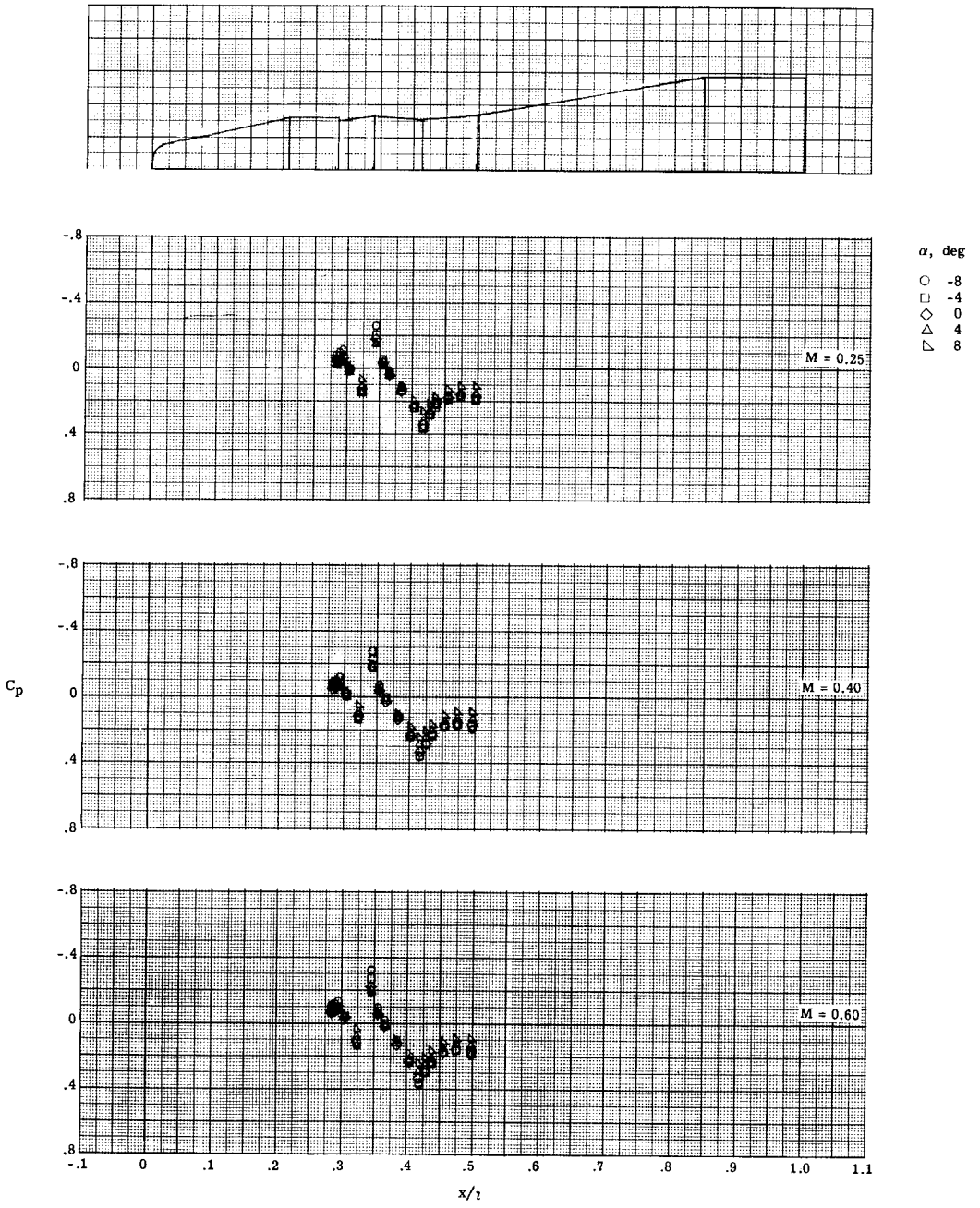
(c) Continued.

Figure 6.- Continued.



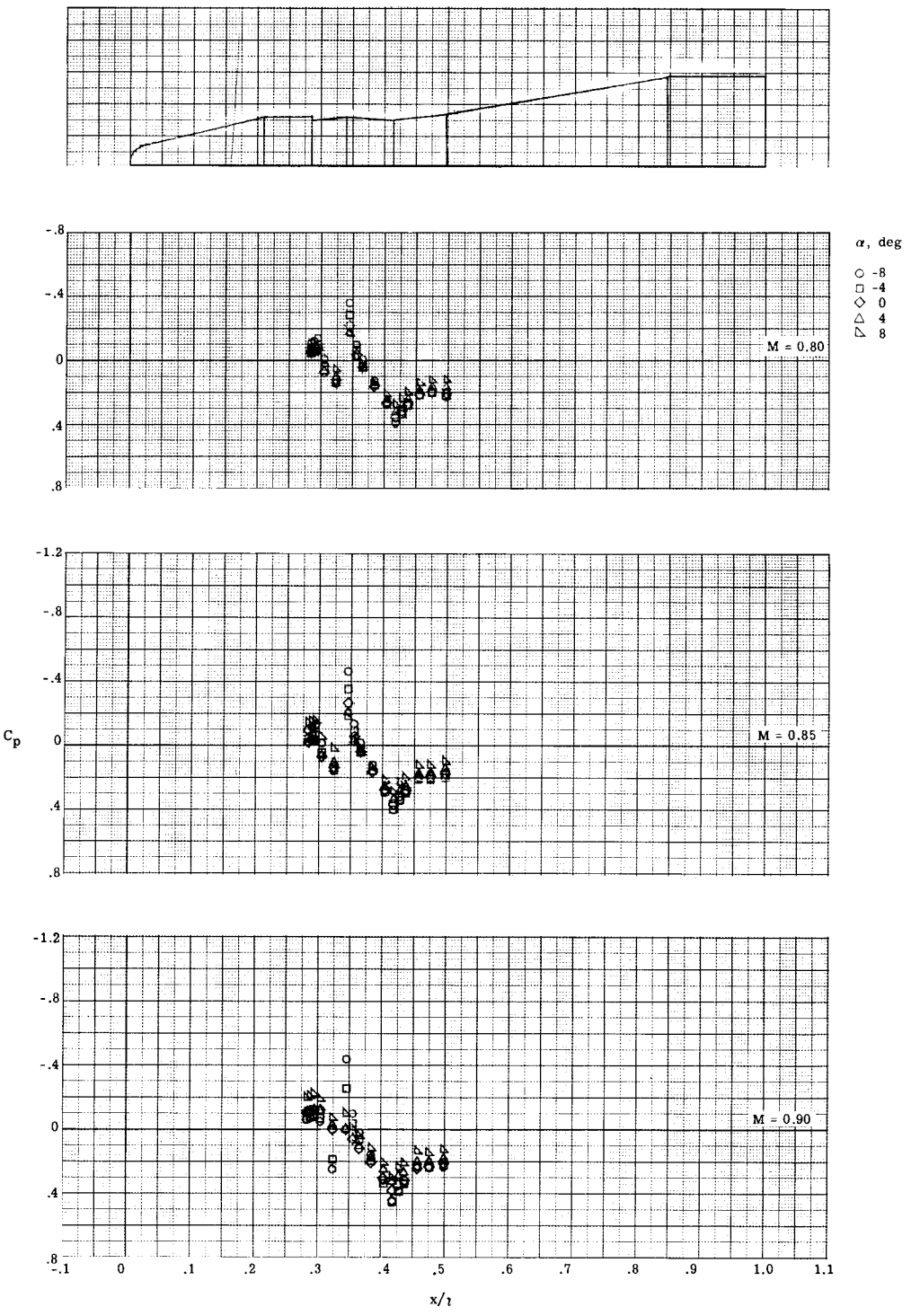
(c) Concluded.

Figure 6.- Continued.



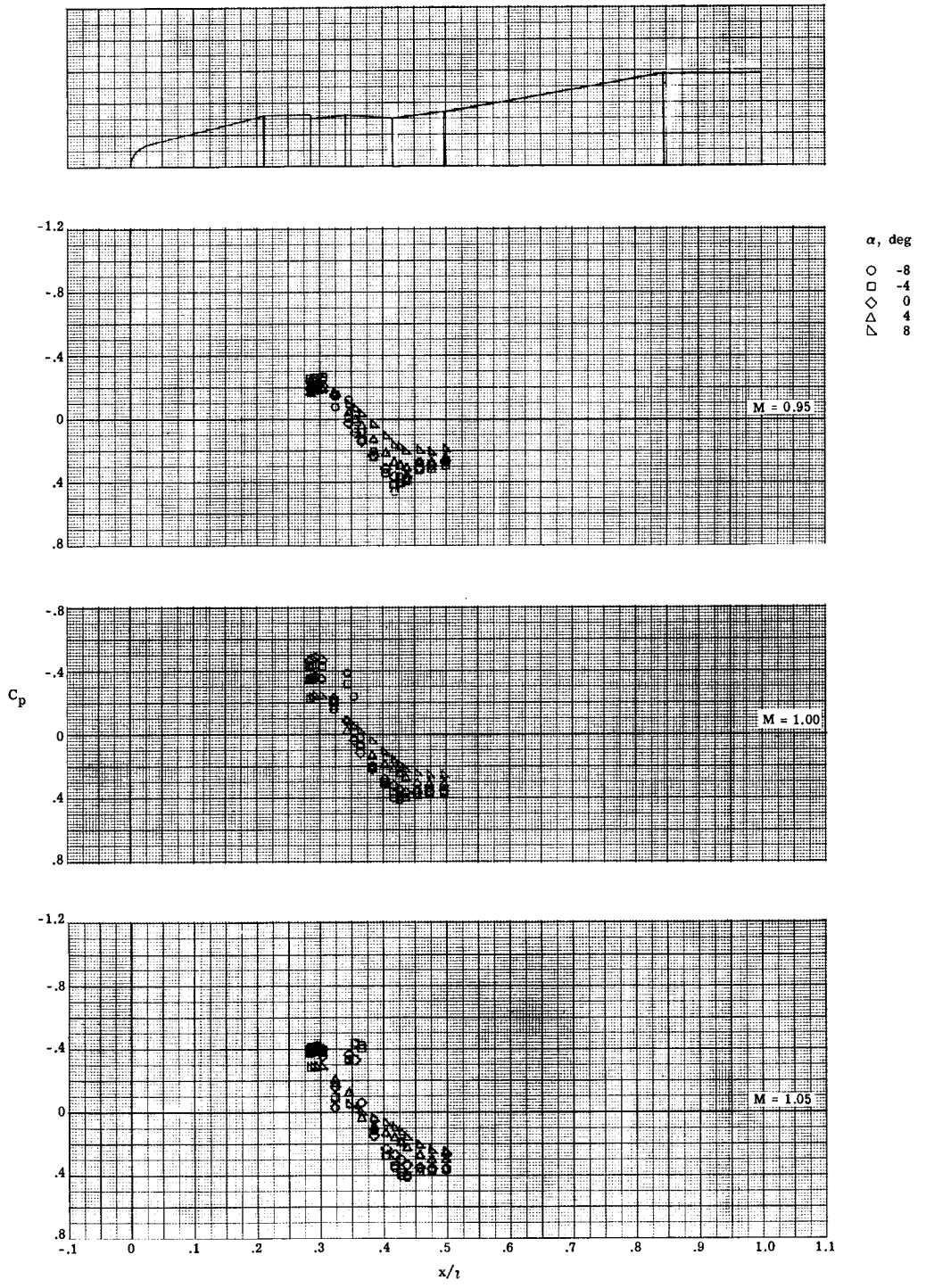
(d) $\phi = 50^{\circ}$.

Figure 6.- Continued.



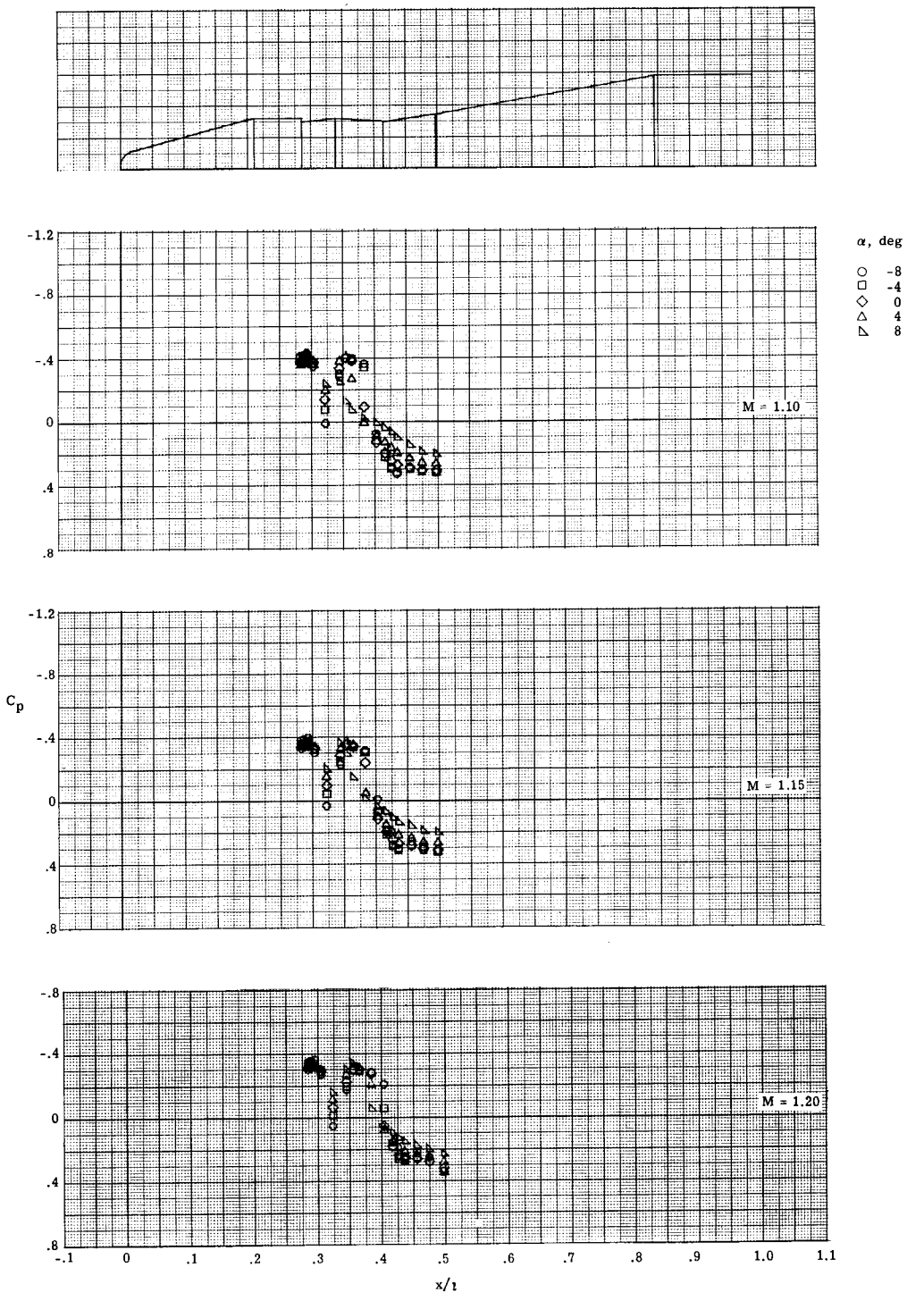
(d) Continued.

Figure 6.- Continued.



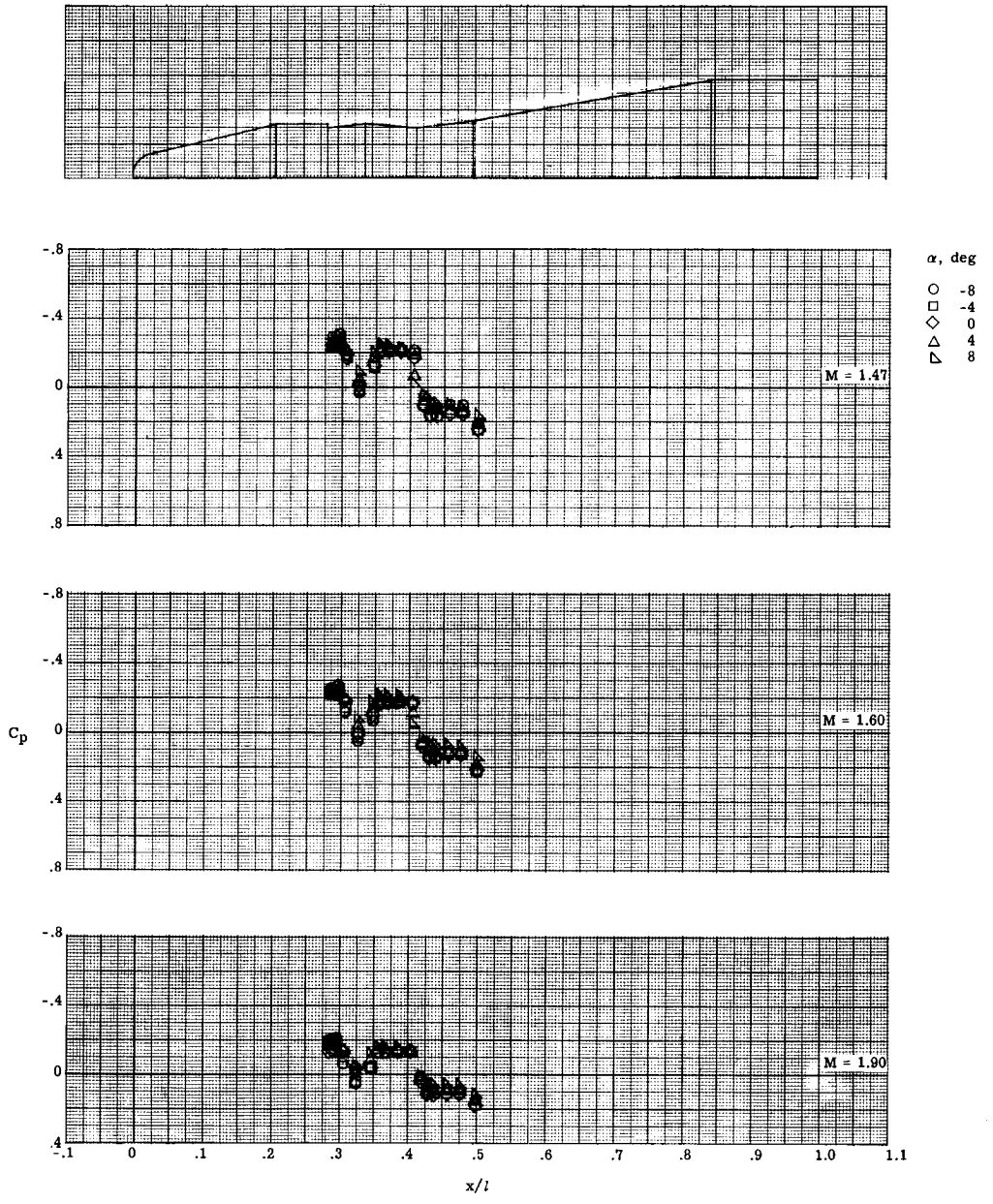
(d) Continued.

Figure 6.- Continued.



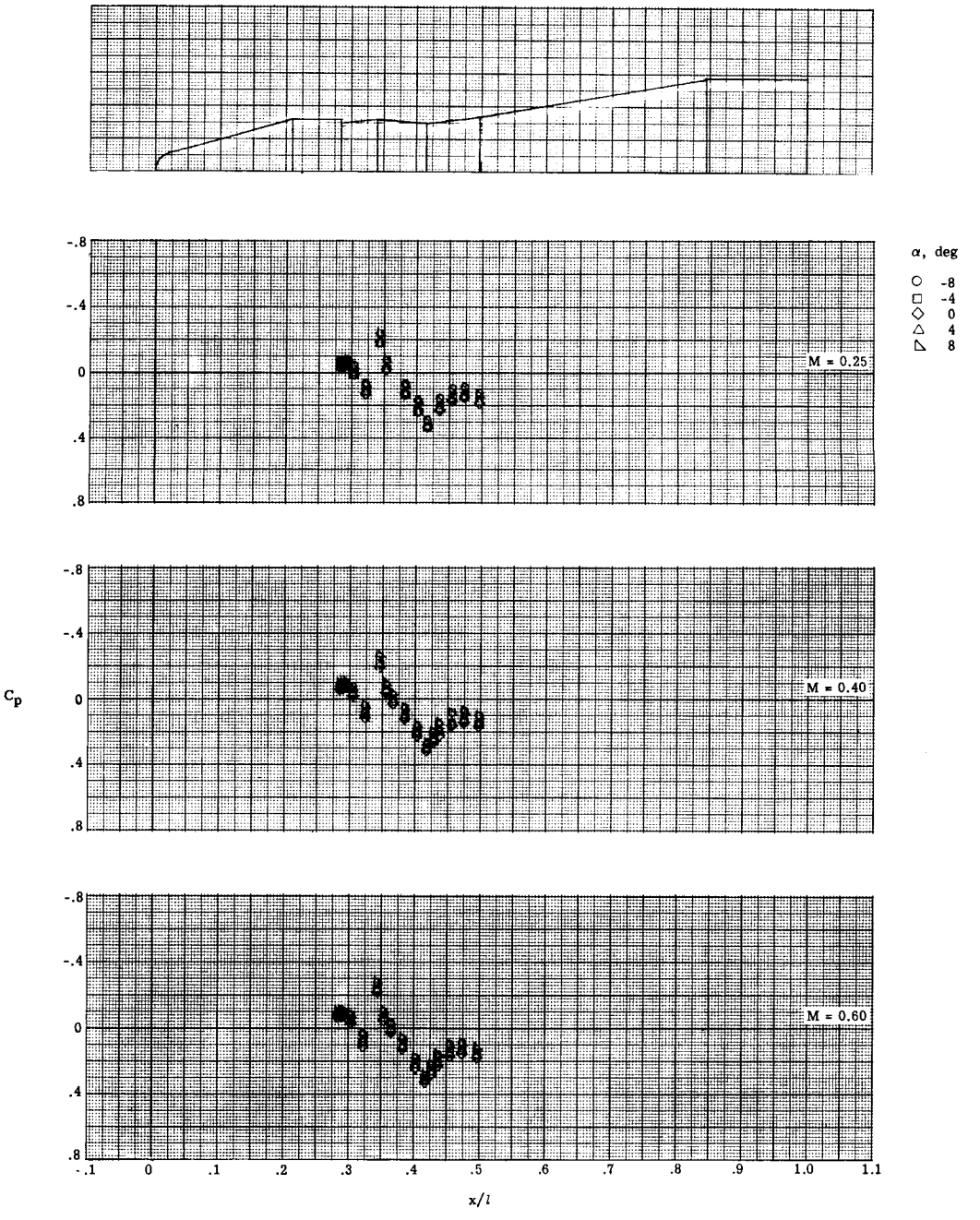
(d) Continued.

Figure 6.- Continued.



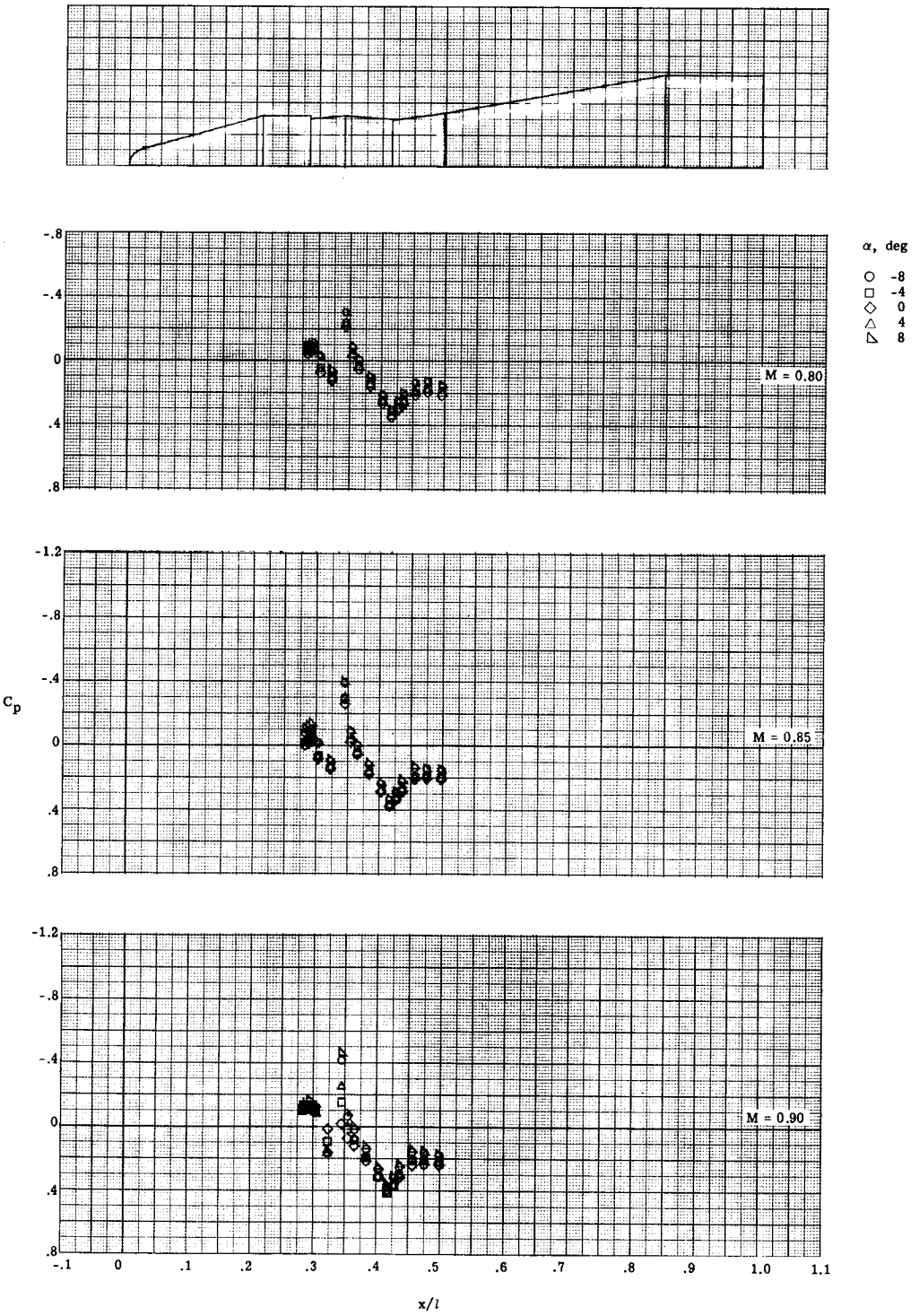
(d) Concluded.

Figure 6.- Continued.



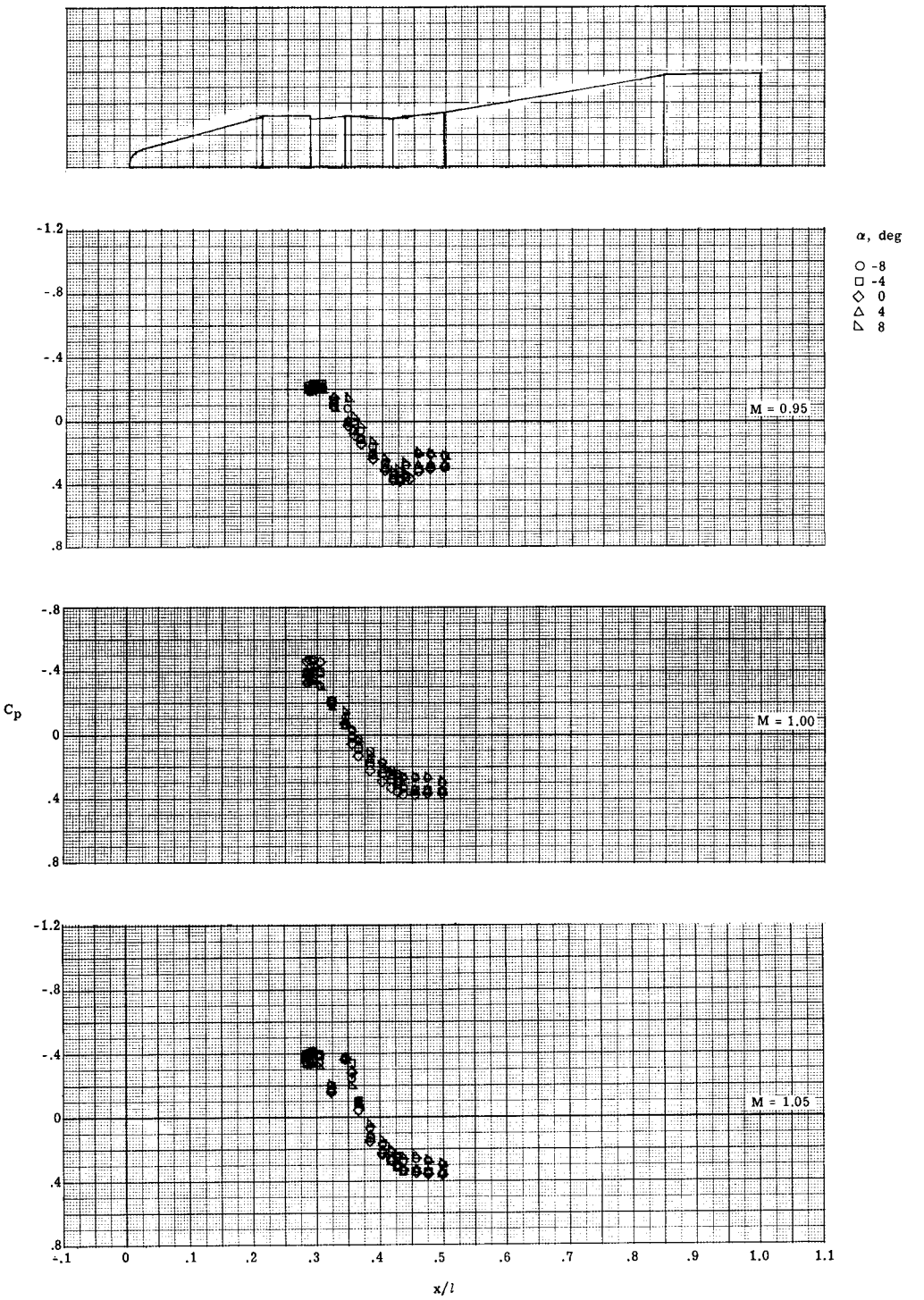
(e) $\phi = 90^{\circ}$.

Figure 6.- Continued.



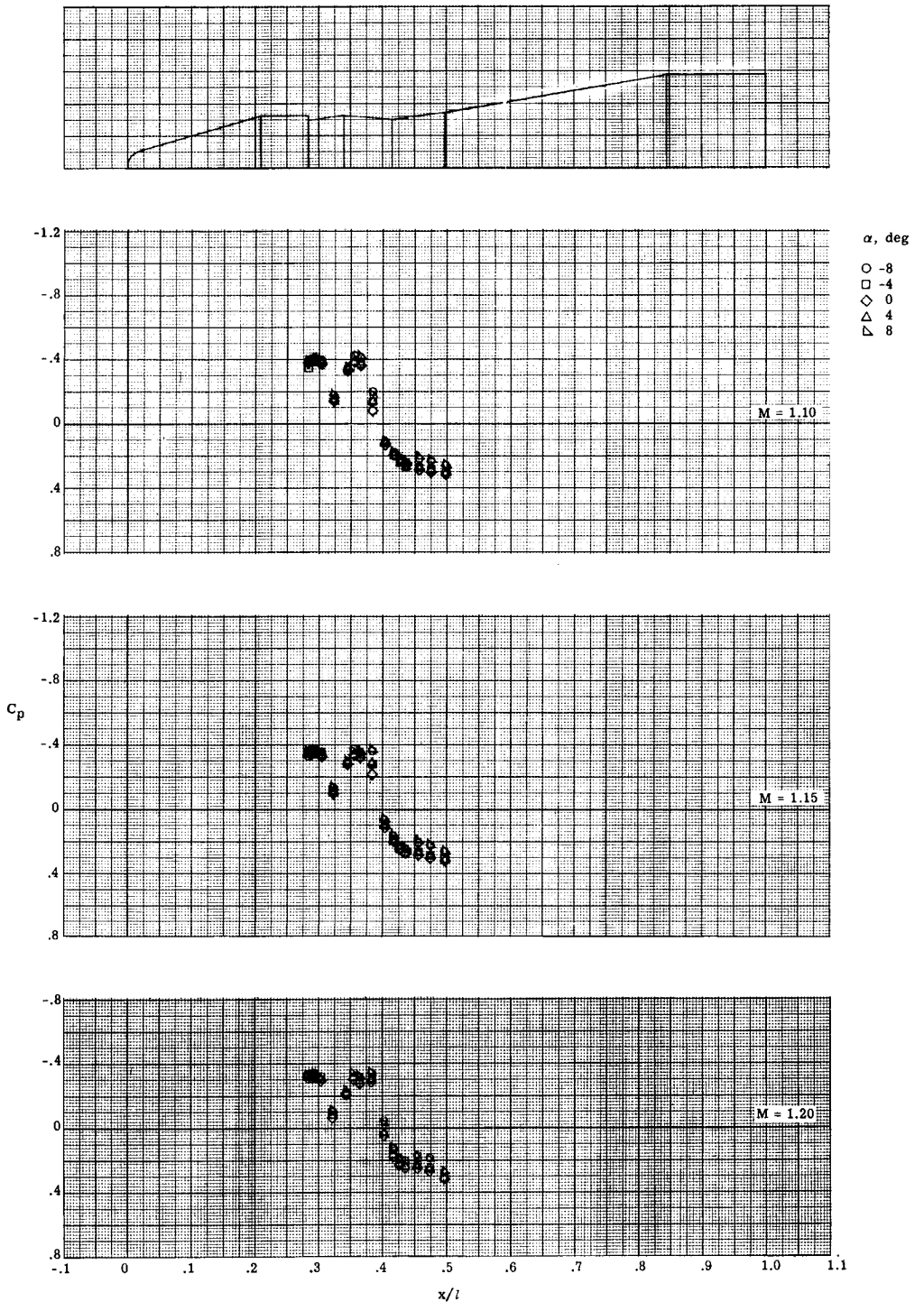
(e) Continued.

Figure 6.- Continued.



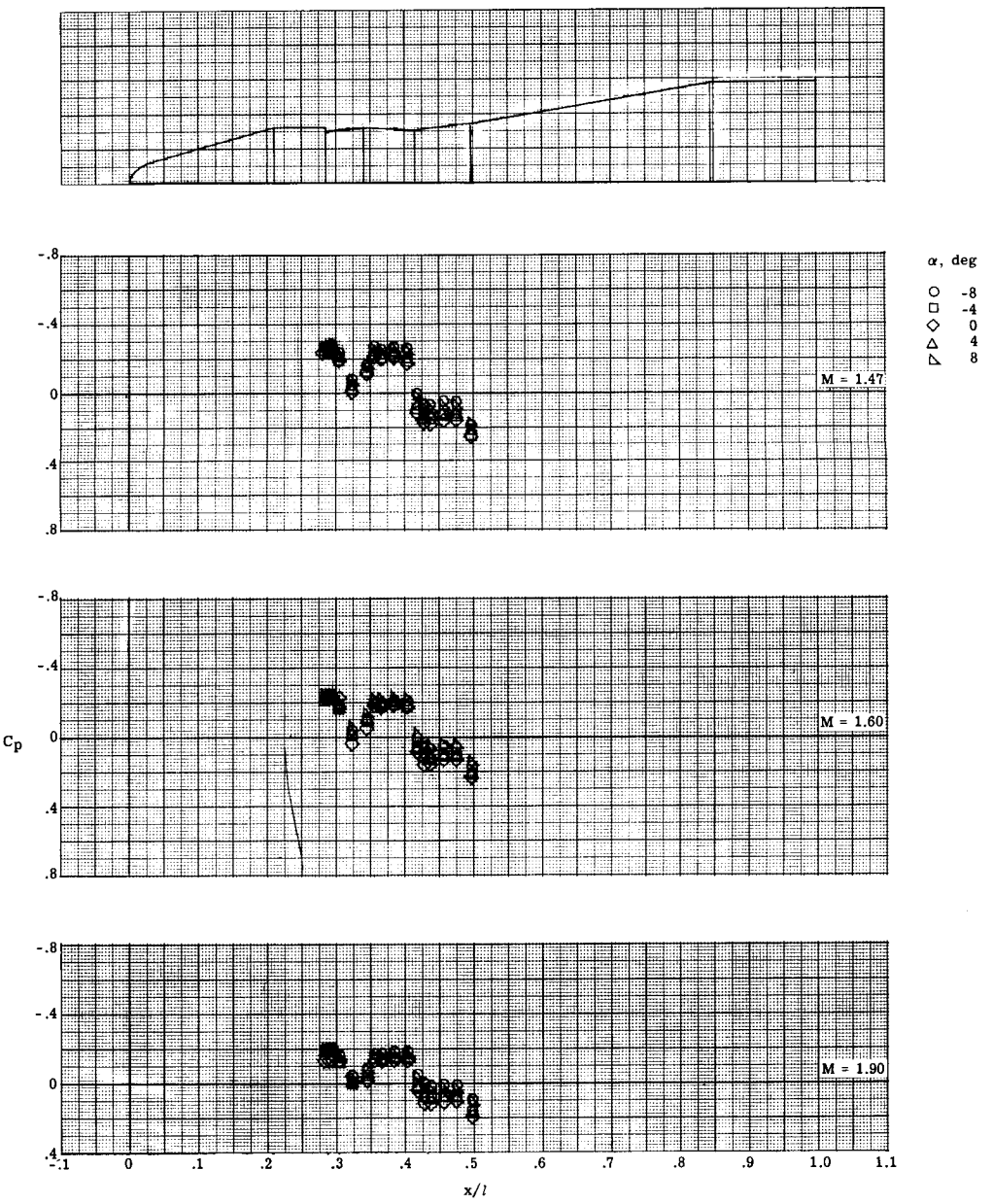
(c) Continued.

Figure 6.- Continued.



(e) Continued.

Figure 6.- Continued.



(e) Concluded.

Figure 6.- Concluded.

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