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Surface Pressure Data for a Supersonic-Cruise Airplane Configuration at Mach Numbers of 2.30, 2.96, and 3.30

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and Space Administration

**Scientific and Technical
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1979

SUMMARY

The tabulated results of surface pressure tests conducted on the wing and fuselage of an airplane model in the Langley Unitary Plan wind tunnel are presented without analysis. The model tested was that of a supersonic-cruise airplane with a highly swept arrow-wing planform, two engine nacelles mounted beneath the wing, and outboard vertical tails. Data were obtained at Mach numbers of 2.30, 2.96, and 3.30 for angles of attack from -4° to 12° . The Reynolds number for these tests was 6.56×10^6 per meter (2.0×10^6 per foot).

INTRODUCTION

As part of a continuing effort by the National Aeronautics and Space Administration to expand the aerodynamic data base for supersonic-cruise airplanes, a number of airplane configurations have been the subjects of extensive wind-tunnel and analytic evaluations. Some of these configurations (for instance, ref. 1) have been designed for best cruise performance at low supersonic Mach numbers with good transonic maneuvering capability preserved, whereas other configurations (refs. 2 and 3) have been designed for cruise at intermediate supersonic Mach numbers with some compromise in transonic maneuverability. A third group of configurations (for instance, ref. 4) is designed for good cruise performance at high supersonic Mach numbers with transonic maneuverability given little consideration in the design.

The configuration of this report falls into the third category, because it was designed for efficient cruise performance at Mach 3.0. Some of the characteristics of this configuration which contribute to its supersonic-cruise performance include a long, slender fuselage; a highly swept arrow wing with camber, twist, and thickness distributions designed for the cruise Mach number; and outboard engine nacelles located beneath the aft portion of the wing to provide favorable interference at supersonic speeds.

A 0.0375-scale model of this configuration was tested in the Langley Unitary Plan wind tunnel at Mach numbers of 2.30, 2.96, and 3.30. Forces and moments acting on the configuration were measured in the course of the tests, and the results are presented in reference 5. The purpose of the present tests was to measure surface pressures on the wing and fuselage on the same model and at the same Mach numbers as used in reference 5. The measured pressures are presented herein without analysis. Note that the configuration on which the pressures were measured did not include the fuselage chine (strake) and the ventral fin which were on the configuration of reference 5.

SYMBOLS

Values are given in both SI and U.S. Customary Units. The measurements and calculations were made in U.S. Customary Units.

b	wing span, 57.094 cm (22.478 in.)
C_p	pressure coefficient, $\frac{P_l - P_\infty}{q_\infty}$ (CP in table IV)
c	chord, cm (in.)
\bar{c}	wing reference chord, 54.333 cm (21.391 in.)
M_∞	free-stream Mach number (MACH NO. in table IV)
N	orifice number in pressure tabulation (see fig. 2 and table III)
P_l	local pressure, Pa
P_∞	free-stream static pressure, Pa
q_∞	free-stream dynamic pressure, Pa
t	thickness, cm (in.)
x	streamwise model station, positive rearward, model nose is at station 15.573 (6.131), cm (in.) (X in table IV)
y	spanwise distance from center line, cm (in.)
α	angle of attack, deg (ALPHA in table IV)
Λ	sweep angle, deg

Subscripts:

le	leading edge
max	maximum
te	trailing edge

DESCRIPTION OF MODEL

A three-view sketch of the model is shown in figure 1. The configuration has a modified arrow-wing planform with a leading-edge sweep of 75° on the main wing segment. A fillet is used to fair the wing leading edge smoothly into the side of the fuselage. At 73 percent of the wing semispan, the wing leading-

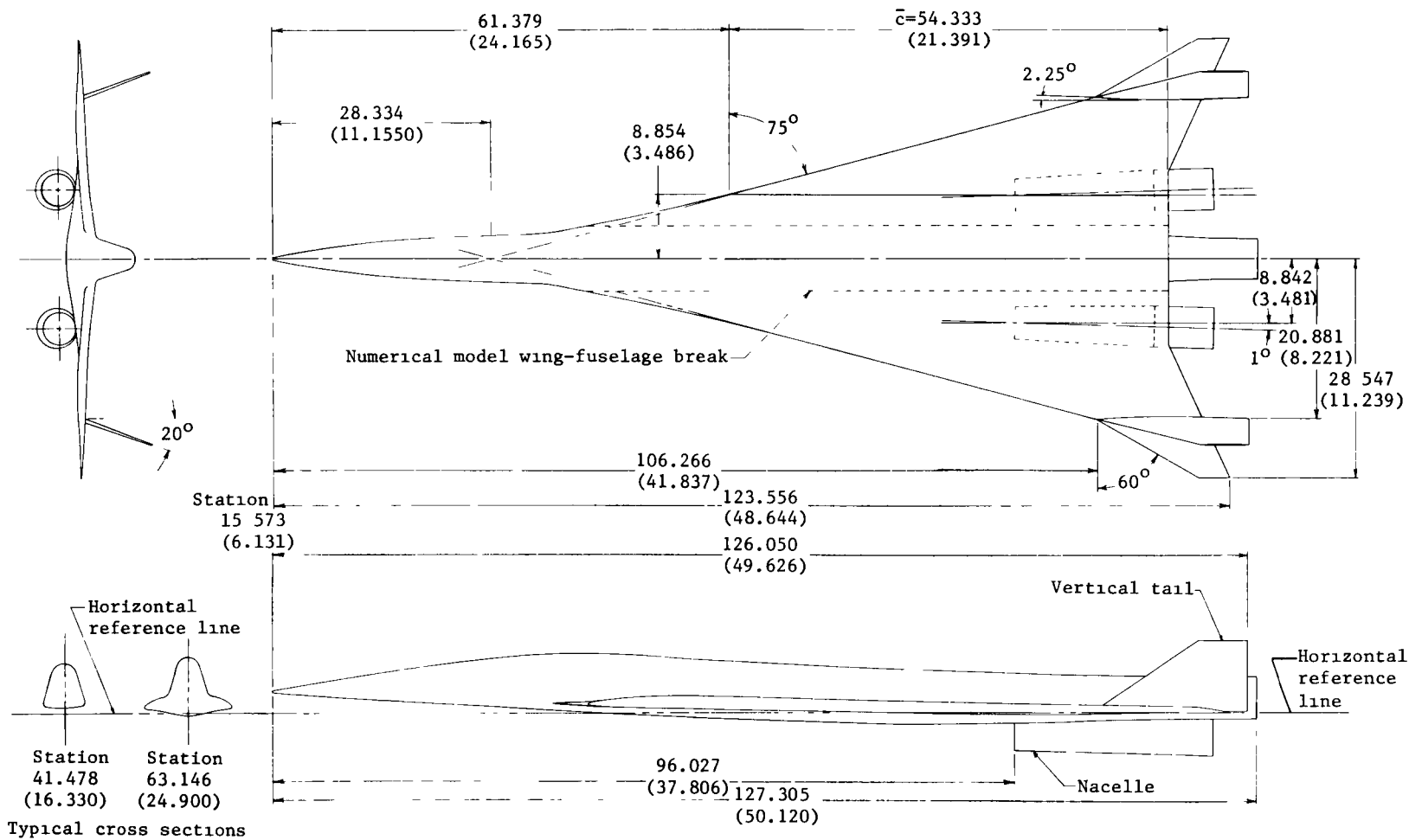


Figure 1.- Three-view sketch of model. (All linear dimensions are in centimeters (inches)).

edge sweep changes to 60° for the outboard segment. The wing is twisted and cambered to provide a more efficient lifting surface at the cruise Mach number of 3.0.

The engine nacelles are flow-through ducts and were mounted beneath the wing at approximately 31 percent semispan and extend aft of the wing trailing edge. The duct center line at the inlet face was tilted down 1.6° relative to the horizontal reference plane and also toed inboard 1° relative to the fuselage center line.

The vertical tails were mounted at the span station where the leading-edge break occurred. The tips of the tails were rolled outward 20° from the vertical and the leading edge of each vertical tail was toed out 2.25° .

Some of the pertinent geometric characteristics of the model are given in table I. In addition, a listing of the computer-card images is given in table II for a numerical description of the model. The format for the listing is described in reference 6. This numerical model description is for the actual wind-tunnel model which was measured on a three-axis dimension-recording machine. There were minor differences between the left and right wings in the thickness distribution and camber; therefore, the measurements were averaged to produce the numerical model description.

TESTS AND INSTRUMENTATION

Tests were conducted in the Langley Unitary Plan wind tunnel at Mach numbers of 2.30, 2.96, and 3.30 at stagnation pressures of 73.161 kPa (1528 lb/ft^2), 103.852 kPa (2169 lb/ft^2), and 124.344 kPa (2597 lb/ft^2), respectively. The Reynolds number for the tests was $6.56 \times 10^6/\text{m}$ ($2.0 \times 10^6/\text{ft}$) and the stagnation temperature was held constant at 339 K (150° F) throughout the tests. The dewpoint was maintained at a sufficiently low level to prevent condensation shocks in the tunnel.

Strips of No. 45 sand grit, for inducing boundary-layer transition, were applied at appropriate distances behind the leading edge of all airfoil-shaped surfaces, on the interior and exterior of the nacelles, and on the configuration nose. The grit size was selected according to the method of reference 7 to ensure that there was fully turbulent flow over the model.

Pressure orifices on the model wing and fuselage were located as shown in figure 2. Upper surface orifice numbers appear beside circles representing the orifice location, while the numbers in parentheses indicate lower surface orifices. Table III presents the x and y locations for all orifices. Each orifice was connected to one of four scanning valves located within the model by a tube buried in the wing and fuselage. Pressures were measured by transducers attached to the scanning valves and referenced to the free-stream static pressure. Electrical leads from the transducers were routed back through the model support sting to the Langley Unitary Plan wind tunnel data-acquisition system. The scanning valves were operated in a mode which provided a 3-sec delay at each point to stabilize the system and then provided a sampling period of 1 sec at a rate of 30 samples/sec.

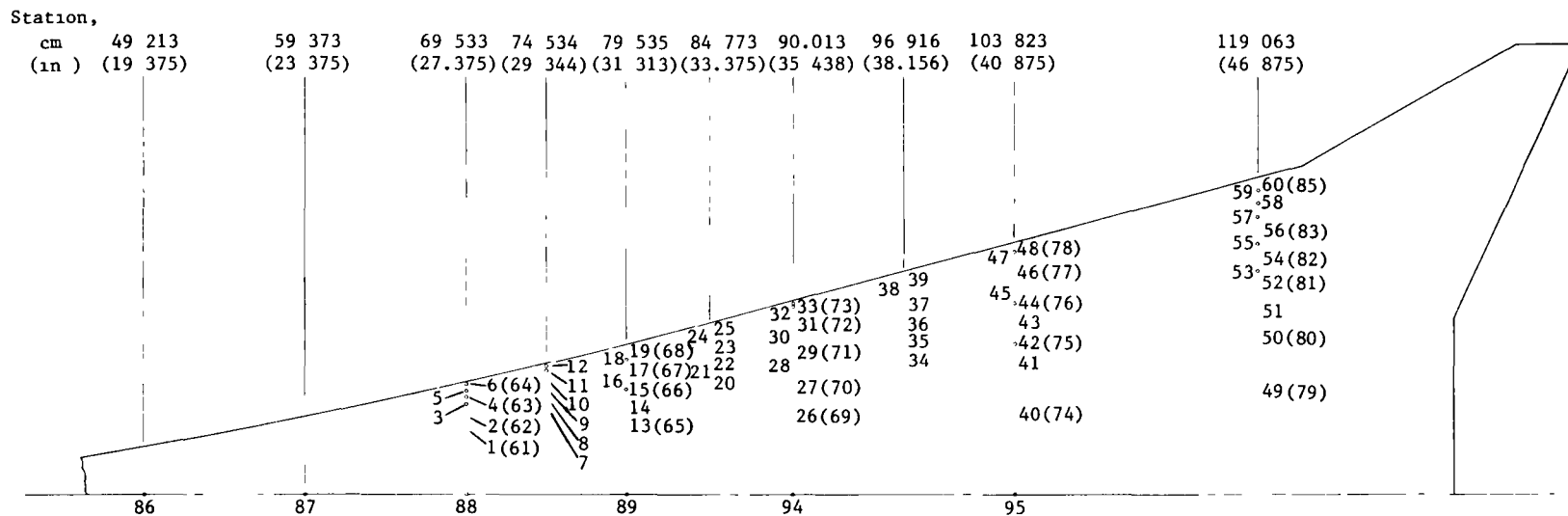


Figure 2.- Schematic drawing showing locations of pressure orifices. Numbers next to circles represent upper surface orifices; numbers in parentheses represent lower surface orifices.

All angles of attack have been adjusted for tunnel airflow misalignment and model deflection due to aerodynamic loads.

PRESENTATION OF RESULTS

The spanwise distributions of surface pressures on the configuration are given in table IV as a function of fuselage x station and orifice number for the various angles of attack (from -4° to 12°) and Mach numbers (2.30, 2.96, and 3.30) of this investigation. No analysis of the data is made.

Langley Research Center
National Aeronautics and Space Administration
Hampton, VA 23665
March 29, 1979

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TABLE I.- GEOMETRIC CHARACTERISTICS OF MODEL

Wing:

Area (reference), cm ² (ft ²)	2212.950 (2.382)
Aspect ratio	1.472
Span, cm (in.)	57.094 (22.478)
Λ_{le} (midwing), deg	75.00
Λ_{le} (tip), deg	60.00
\bar{c} , cm (in.)	54.333 (21.391)
Airfoil section ($2y/b < 0.7315$)	65A-00x
Airfoil section ($2y/b > 0.7315$)	Biconvex

Vertical tail (each):

Area, cm ² (in ²)	128.026 (19.844)
Aspect ratio	0.75
Λ_{le} , deg	53.95
Λ_{te} , deg	0.00
Mean geometric chord, cm (in.)	14.224 (5.600)
Airfoil section ($(t/c)_{max} = 2.4$ percent)	Biconvex

Nacelle:

Inlet capture area (each), cm ² (in ²)	13.794 (2.138)
Exit area (each), cm ² (in ²)	13.794 (2.138)
Nacelle base area (each), cm ² (in ²)	8.548 (1.325)

Fuselage:

Fuselage length, cm (in.)	128.194 (50.470)
Fuselage base area, cm ² (in ²)	7.742 (1.200)
Sting cavity area, cm ² (in ²)	6.587 (1.021)

TABLE II.- NUMERICAL MODEL

(a) SI Units. All linear dimensions are in centimeters

SUPERSONIC CRUISE VEHICLE (MEASURED COORDINATES)																			
1	1	1	1	13	26	3	22	15	23	11	16	3	1 4 1 10						
2712	90																		
0	0	50	75	1	25	2	50	5	0	7	5	10	15	20	XAF 10				
25		30	35	40	45	50	55	60	65	70					XAF 20				
75		80	85	90	95	100									XAF 26				
56.238		4.280	-19	050	75	057									WORG 2				
63.259		5.718	-19	050	68	036									WORG 3				
69.637		7.136	-19	050	61	659									WORG 4				
75.603		8.566	-19	050	55	687									WORG 5				
86.076		11.289	-19	050	45	248									WORG 6				
91.882		12.846	-19	050	40	119									WORG 7				
102.497		15.704	-19	050	30	805									WORG 8				
113.187		18.557	-19	050	21	420									WORG 9				
121.755		20.884	-19	050	13	904									WORG 10				
122.728		21.391	-19	050	13	167									WORG 11				
125.270		22.840	-19	050	11	293									WORG 12				
130.122		25.657	-19	050	7	737									WORG 13				
135.113		28.547	-19	050	4	031									WORG 14				
19.878		19.962	19	973	19	985	20	037	20	126	20	187	20	204	20.165	20	089	7 2	
19.969		19.815	19	649	19	500	19	350	19	232	19	127	19	039	18.978	18.965		7 2	
18.928		18.928	18	933	18	934	18	937	18	937								7 2	
19.789		19.823	19	834	19	851	19	898	19	989	20	048	20	072	20.057	20	001	7 3	
19.901		19.782	19	652	19	538	19	422	19	327	19	242	19	173	19	127	19	106	7 3
19.114		19.125	19	154	19	188	19	210	19	224								7 3	
19.622		19.667	19	675	19	691	19	742	19	835	19	902	19	948	19.958	19	915	7 4	
19.840		19.754	19	655	19	572	19	487	19	406	19	333	19	274	19	229	19	206	7 4
19.205		19.216	19	242	19	266	19	285	19	298								7 4	
19.482		19.508	19	520	19	539	19	590	19	690	19	766	19	813	19	865	19	835	7 5
19.790		19.733	19	667	19	604	19	540	19	472	19	413	19	373	19	341	19	323	7 5
19.302		19.294	19	281	19	267	19	253	19	246								7 5	
19.214		19.242	19	249	19	271	19	323	19	417	19	498	19	558	19	637	19	675	7 6
19.688		19.680	19	661	19	638	19	610	19	581	19	555	19	531	19	520	19	520	7 6
19.525		19.528	19	524	19	517	19	502	19	488								7 6	
19.091		19.111	19	121	19	141	19	188	19	282	19	362	19	428	19	528	19	583	7 7
19.622		19.637	19	637	19	634	19	625	19	613	19	601	19	594	19	590	19	595	7 7
19.604		19.616	19	632	19	634	19	633	19	624								7 7	
18.895		18.933	18	943	18	961	18	003	18	084	19	164	19	230	19	334	19	416	7 8
19.475		19.521	19	554	19	582	19	604	19	623	19	642	19	661	19	680	19	705	7 8
19.723		19.737	19	756	19	768	19	783	19	794								7 8	
18.854		18.877	18	884	18	894	18	923	18	979	19	035	19	088	19	177	19	254	7 9
19.322		19.388	19	449	19	495	19	544	19	590	19	630	19	667	19	704	19	731	7 9
19.759		19.784	19	802	19	832	19	860	19	878								7 9	
18.895		18.918	18	924	18	933	18	955	18	989	19	023	19	055	19	116	19	171	7 10
19.227		19.280	19	332	19	383	19	437	19	479	19	514	19	547	19	585	19	622	7 10
19.656		19.688	19	718	19	745	19	769	19	793								7 10	
18.938		18.952	18	957	18	964	18	979	19	007	19	033	19	056	19	103	19	149	7 11
19.194		19.238	19	286	19	333	19	378	19	420	19	458	19	496	19	535	19	573	7 11
19.609		19.644	19	676	19	707	19	733	19	759								7 11	
19.058		19.063	19	065	19	068	19	075	19	088	19	102	19	116	19	145	19	172	7 12
19.201		19.230	19	261	19	294	19	324	19	354	19	387	19	420	19	453	19	483	7 12
19.516		19.545	19	573	19	599	19	623	19	644								7 12	
19.186		19.190	19	192	19	197	19	205	19	211	19	216	19	221	19	233	19	243	7 13
19.256		19.267	19	280	19	294	19	307	19	319	19	332	19	345	19	357	19	368	7 13
19.378		19.389	19	397	19	404	19	413	19	422								7 13	
19.181		19.182	19	185	19	187	19	188	19	188	19	190	19	191	19	192	19	194	7 14
19.196		19.200	19	200	19	201	19	201	19	201	19	201	19	200	19	200	19	200	7 14
19.200		19.199	19	199	19	197	19	199	19	210								7 14	
0.0		2415	2930	3675	5205	7085	8510	9765	11750	13190	14920	16920	19150	21650	24450	27550	31000	34850	39100
1.4285		1.5075	1.5570	1.5830	1.5915	1.6030	1.5920	1.5655	1.4655	1.3430	1.2050	1.0550	0.8950	0.7250	0.5500	0.3750	0.2000	0.0250	0.0000
1.1945		1.0180	0.8120	0.5730	0.3010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0		2355	2885	3735	5145	7025	8490	9715	11655	13050	14920	16920	19150	21650	24450	27550	31000	34850	39100
1.4160		1.4950	1.5455	1.5710	1.5835	1.5935	1.5820	1.5355	1.4565	1.3170	1.1650	1.0050	0.8350	0.6600	0.4850	0.3100	0.1350	0.0000	0.0000
1.1805		1.0115	0.8045	0.5670	0.2970	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0		2310	2865	3625	5000	6935	8395	9470	11380	12835	14920	16920	19150	21650	24450	27550	31000	34850	39100
1.3920		1.4700	1.5190	1.5460	1.5575	1.5595	1.5510	1.5110	1.4170	1.2975	1.1600	1.0050	0.8350	0.6600	0.4850	0.3100	0.1350	0.0000	0.0000
1.1655		0.9930	0.7915	0.5585	0.2930	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0		2255	2790	3555	4875	6655	8045	9215	11160	12520	14920	16920	19150	21650	24450	27550	31000	34850	39100
1.3575		1.4350	1.4850	1.5105	1.5205	1.5210	1.5070	1.4575	1.3780	1.2740	1.1450	1.0000	0.8300	0.6550	0.4800	0.3050	0.1300	0.0000	0.0000
1.1390		0.9730	0.7765	0.5455	0.2875	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0		2245	2710	3420	4665	6560	7960	9005	10720	11925	14920	16920	19150	21650	24450	27550	31000	34850	39100
1.2895		1.3625	1.4115	1.4365	1.4490	1.4500	1.4290	1.3870	1.3150	1.2160	1.0800	0.9150	0.7400	0.5650	0.3900	0.2150	0.0400	0.0000	0.0000
1.0855		0.9265	0.7390	0.5205	0.2750	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0		2140	2600	3315	4535	6285	7640	8715	10420	11630	14920	16920	19150	21650	24450	27550	31000	34850	39100
1.2535		1.3240	1.3745	1.4030	1.4145	1.4155	1.3945	1.3495	1.2805	1.1860	1.0500	0.8850	0.7100	0.5350	0.3600	0.1850	0.0100	0.0000	0.0000
1.0605		0.9020	0.6995	0.5020	0.2665	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0		21685	2275	3090	4430	6170	7350	8480	10240	11515	14920	16920	19150	21650	24450	27550	31000	34850	39100
1.2515		1.3200	1.3580	1.3815	1.3925	1.3865	1.3670	1.3260	1.2545	1.1565	1.0200	0.8550	0.6800	0.5050	0.3300	0.1550	0.0000	0.0000	0.0000
1.0335		0.8665	0.6830	0.4920	0.2625	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0		2165	2600	3305	4650	6240	7490	8510	10285	11630	14920	16920	19150	21650	24450	27550	31000	34850	39100
1.2695		1.3290																	

TABLE II.- Continued

(a) Continued

.9985	1.0930	1.1695	1.2235	1.2525	1.2645	1.2505	1.2165	1.1800	1.1145	T	13
1.0290	.9220	.7975	.6510	.4825	0.0					T	13
0.0	.1205	.1805	.2970	.4245	.5215	.6285	.7255	.8840	1.0230	T	14
1.1085	1.1420	1.1940	1.2335	1.2515	1.2430	1.2660	1.2455	1.2150	1.1700	T	14
1.1185	1.0640	.9855	.8895	.7270	0.0					T	14
14.681	15.573	17.399	18.164	19.764	21.336	24.943	28.578	33.909	41.481	XFUS	10
47.628	49.784	52.032	54.595	57.153						XFUS	15
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Y	1
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Y	1
0.000	0.000									Y	1
2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	Z	1
2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	Z	1
2.416	2.416									Z	1
0.000	.043	.094	.094	.119	.119	.145	.145	.145	.145	Y	2
.145	.145	.145	.145	.147	.147	.147	.122	.122	.097	Y	2
.020	0.000									Y	2
2.314	2.314	2.314	2.314	2.339	2.339	2.339	2.339	2.339	2.339	Z	2
2.339	2.339	2.339	2.365	2.390	2.390	2.416	2.441	2.466	2.543	Z	2
2.568	2.568									Z	2
0.000	.069	.145	.196	.272	.348	.399	.450	.500	.500	Y	3
.500	.500	.500	.500	.475	.452	.427	.376	.325	.251	Y	3
.099	0.000									Y	3
2.187	2.212	2.212	2.210	2.210	2.210	2.210	2.210	2.261	2.261	Z	3
2.261	2.261	2.261	2.337	2.388	2.464	2.540	2.616	2.718	2.797	Z	3
2.873	2.901									Z	3
0.000	.043	.170	.272	.348	.475	.551	.556	.610	.610	Y	4
.610	.610	.610	.605	.594	.579	.554	.531	.480	.381	Y	4
.178	0.000									Y	4
2.136	2.136	2.162	2.134	2.134	2.159	2.182	2.182	2.233	2.233	Z	4
2.233	2.233	2.207	2.258	2.309	2.385	2.487	2.565	2.667	2.845	Z	4
3.000	3.053									Z	4
0.000	.191	.343	.445	.597	.749	.879	.897	.909	.897	Y	5
.897	.869	.861	.836	.823	.795	.754	.729	.704	.554	Y	5
.300	0.000									Y	5
2.009	2.009	2.007	2.032	2.032	2.029	2.055	2.080	2.103	2.154	Z	5
2.154	2.230	2.258	2.360	2.410	2.512	2.639	2.718	2.870	3.073	Z	5
3.254	3.307									Z	5
0.000	.249	.452	.655	.808	.960	1.118	1.168	1.191	1.184	Y	6
1.176	1.153	1.140	1.125	1.092	1.067	1.044	.993	.945	.719	Y	6
.442	0.000									Y	6
1.908	1.905	1.902	1.900	1.925	1.923	1.946	1.971	2.022	2.070	Z	6
2.047	2.149	2.200	2.250	2.355	2.456	2.558	2.685	2.865	3.223	Z	6
3.454	3.586									Z	6
0.000	.391	.620	.851	1.130	1.384	1.560	1.623	1.623	1.615	Y	7
1.615	1.598	1.572	1.554	1.547	1.506	1.440	1.316	1.118	.864	Y	7
.511	0.000									Y	7
1.654	1.651	1.648	1.648	1.671	1.694	1.720	1.793	1.819	1.849	Z	7
1.869	1.944	2.047	2.101	2.151	2.304	2.535	2.992	3.528	3.861	Z	7
4.117	4.196									Z	7
0.000	.391	.673	.953	1.308	1.613	1.920	1.984	2.004	1.986	Y	8
1.986	1.965	1.941	1.933	1.897	.849	1.725	1.527	1.278	.950	Y	8
.569	0.000									Y	8
1.450	1.444	1.471	1.468	1.516	1.539	1.613	1.661	1.712	1.760	Z	8
1.760	1.839	1.915	1.943	2.045	2.250	2.657	3.320	4.084	4.493	Z	8
4.752	4.831									Z	8
0.000	.490	.871	1.255	1.661	2.017	2.261	2.311	2.314	2.311	Y	9
2.306	2.289	2.261	2.258	2.250	2.174	1.951	1.577	1.252	1.001	Y	9
.544	0.000									Y	9
1.118	1.115	1.138	1.161	1.234	1.283	1.359	1.407	1.455	1.506	Z	9
1.532	1.582	1.687	1.737	1.791	1.994	2.835	3.932	4.823	5.156	Z	9
5.464	5.545									Z	9
0.000	.513	.998	1.481	1.966	2.499	2.672	2.690	2.690	2.672	Y	10
2.662	2.649	2.644	2.639	2.621	2.555	2.159	1.636	1.361	1.059	Y	10
.554	0.000									Y	10
.762	.785	.808	.879	.927	1.052	1.125	1.173	1.224	1.273	Z	10
1.323	1.351	1.377	1.405	1.455	1.687	3.063	4.719	5.585	6.045	Z	10
6.355	6.510									Z	10
0.000	.533	.965	1.501	2.111	2.670	2.982	3.012	3.023	3.020	Y	11
3.020	3.000	2.969	2.949	2.896	2.771	2.212	1.781	1.349	1.016	Y	11
.559	0.000									Y	11
.432	.432	.457	.508	.584	.711	.787	.838	.864	.965	Z	11
.965	1.044	1.146	1.196	1.400	1.730	3.485	5.034	6.281	6.764	Z	11
7.043	7.170									Z	11
0.000	.432	.813	1.323	1.984	2.593	2.873	3.099	3.139	3.147	Y	12
3.147	3.073	3.020	2.949	2.873	2.746	2.136	1.704	1.323	1.095	Y	12
.584	0.000									Y	12
.354	.330	.330	.406	.483	.610	.660	.737	.787	.838	Z	12
.838	1.044	1.196	1.400	1.628	1.933	3.866	5.342	6.459	6.891	Z	12
7.221	7.351									Z	12
0.000	.635	1.120	1.552	1.984	2.520	2.926	3.256	3.434	3.467	Y	13
3.467	3.404	3.264	3.081	2.903	2.700	2.118	1.689	1.308	1.029	Y	13
.572	0.000									Y	13
.229	.229	.277	.328	.378	.505	.605	.655	.732	.808	Z	13
.808	1.087	1.316	1.572	1.826	2.106	4.067	5.491	6.609	7.069	Z	13
7.348	7.478									Z	13
0.000	.686	1.196	1.679	2.136	2.644	3.076	3.510	3.942	4.018	Y	14
4.018	3.866	3.586	3.155	2.847	2.644	2.111	1.679	1.323	1.044	Y	14
.584	0.000									Y	14
.025	.051	.127	.203	.305	.432	.559	.610	.686	.838	Z	14
.813	1.196	1.476	1.755	2.009	2.314	4.171	5.570	6.637	7.018	Z	14
7.376	7.478									Z	14
0.000	.610	1.146	1.654	2.162	2.695	3.129	3.637	4.018	4.298	Y	15

TABLE II.- Continued

(a) Concluded

4 298	3.967	3 739	3 332	2 873	2.644	2.212	1.781	1.323	1.069	Y	15
.660	0.000									Y	15
-.076	-.051	-.025	076	.203	.381	.483	.584	.584	.660	Z	15
1.222	1.476	1.704	1.908	2.085	2.517	3.840	5.136	6.662	6.993	Z	15
7 325	7.452									Z	15
57.153	60.201	63 249	65 662	70.589	97 259	112.499	118.214	123.927	130.178	XFHIS	10
131.295										XFHIS	11
0.000	.610	1.171	1.628	2 113	2 697	3 129	3.640	4.021	4 300	Y	1
4.300	4 097	3.868	3 589	3.129	2 799	2.621	2.189	1 781	1 323	Y	1
1 095	663	0.000								Y	1
-.076	-.051	-.025	076	.178	.356	.483	.559	.584	.663	Z	1
1.222	1 374	1.577	1 755	2.012	2.189	2.494	3 818	5.166	6.668	Z	1
7.000	7 330	7.483								Z	1
0 000	.739	1.374	1 935	2.393	2.875	3 053	3.256	3.868	4.326	Y	2
4.323	4 018	3.711	3 330	2.924	2 718	2.591	2.207	1.824	1.336	Y	2
1.003	546	0.000								Y	2
-.229	-.203	-.099	003	.157	.310	.389	.389	.541	.569	Z	2
1.638	1 816	1.941	2.068	2 195	2 398	2 626	3 797	5.093	6 543	Z	2
7.000	7.330	7.432								Z	2
0.000	.765	1.400	1 910	2.393	2.824	3.104	3 386	3 894	4.300	Y	3
4.275	3 970	3.640	3 310	3.002	2.723	2.570	2.139	1.781	1 374	Y	3
1 069	.610	0 000								Y	3
-.381	-.356	-.254	- 127	-.025	.152	.229	.279	.406	.483	Z	3
1 910	2.012	2 088	2 139	2.240	2.418	2 697	4 021	5 116	6.363	Z	3
6.871	7 178	7.305								Z	3
0 000	.739	1 298	1 857	2.367	2.824	3 104	3 310	3 818	4.300	Y	4
4.275	3 894	3.589	3 284	2.926	2 647	2.469	2.037	1 704	1 374	Y	4
1.019	.610	0.000								Y	4
-.559	-.508	-.432	- 305	-.178	-.051	.076	.102	.229	.356	Z	4
1.935	2.062	2 139	2 164	2.240	2.367	2.748	4.072	5.192	6 236	Z	4
6.744	7 026	7.127								Z	4
0.000	.688	1.247	1 781	2 342	2 875	3.104	3.335	3.792	4.275	Y	5
4 275	4.021	3.741	3 437	2 951	2.697	2.469	2 037	1.679	1.349	Y	5
1.044	.508	0.000								Y	5
- 790	- 739	- 663	- 559	-.432	- 305	-.229	-.152	-.051	-.051	Z	5
2 037	2 062	2.088	2 113	2.113	2 215	2.494	3.843	5.014	5 931	Z	5
6.388	6 693	6.795								Z	5
0.000	.739	1.323	1 882	2 418	2 951	3.208	3.462	3.894	4 249	Y	6
4.249	4 021	3.792	3.487	3.078	2.697	2.418	2.012	1.679	1 323	Y	6
968	.508	0.000								Y	6
-1.403	-1.603	-1.577	-1 527	-1.476	-1.400	-1.349	-1.298	-1.222	-1.120	Z	6
1 273	1 247	1.247	1 196	1 196	1 247	1.501	2.545	3 665	4.760	Z	6
5.166	5.446	5.547								Z	6
0 000	.610	1.146	1.730	2.342	2.850	3.078	3 360	3.818	4 249	Y	7
4.275	3.970	3.716	3.411	3.129	2.748	2.443	2.037	1.679	1.323	Y	7
1 019	.584	0.000								Y	7
-1 374	-1.374	-1 374	-1 323	-1.273	-1.247	-1 196	-1 196	-1 095	-1.044	Z	7
.790	.739	.714	.663	.638	.714	.968	2.012	3.259	4.275	Z	7
4.735	5 039	5 116								Z	7
0.000	.663	1.250	1.885	2 443	2.979	3.157	3 310	3.767	4 328	Y	8
4 326	4.072	3.792	3 513	3.231	2.875	2.545	2.111	1.727	1 344	Y	8
1.011	.579	0.000								Y	8
-1.171	-1.171	-1.168	-1 118	-1.092	-1 039	-.988	-.988	-.912	-.808	Z	8
.541	.516	.462	.411	.386	.411	.665	1.732	3.030	4 176	Z	8
4.582	4.887	4.963								Z	8
0 000	.686	1 295	1.857	2.365	2 875	3.104	3.358	3.843	4.275	Y	9
4.277	3 995	3 716	3 411	3 183	2 901	2.621	2.116	1.709	1 356	Y	9
1.001	.594	0.000								Y	9
-.942	-.917	-.869	-.843	-.818	-.767	-.719	-.693	-.592	-.541	Z	9
.325	.274	.224	.173	.122	.122	.378	1.524	2.873	4 044	Z	9
4.478	4 757	4.862								Z	9
0.000	.688	1.247	1 831	2.418	2 926	3.129	3.310	3.792	4.249	Y	10
4.249	3.945	3.691	3 411	3.129	2 799	2 570	2 088	1 704	1.273	Y	10
942	.508	0.000								Y	10
- 815	-.790	-.765	- 714	-.610	- 559	-.457	-.457	-.356	-.254	Z	10
-.076	-.152	-.178	- 254	-.305	-.203	.076	1.450	2.723	3.970	Z	10
4.402	4.658	4.760								Z	10
0.000	.584	1.092	1.654	2.238	2.850	3.002	3.231	3.792	4.326	Y	11
4.326	3 995	3.665	3 307	2.951	2 875	2.748	2.268	1 811	1 407	Y	11
1.077	.645	0.000								Y	11
- 790	-.765	-.739	- 716	-.640	-.513	-.490	-.439	-.312	-.211	Z	11
-.711	-.262	-.338	- 414	-.462	-.361	-.183	1.166	2.517	3 891	Z	11
4.326	4 630	4 785								Z	11
131.295	137.160	142.837								XFHIS	9
0 000	.561	1.069	1 631	2.215	2.802	2.954	2.824	2 672	2.263	Y	1
1.981	1.676	1.344	1.036	.655	0 000					Y	1
-.765	-.787	-.762	- 711	-.632	-.505	-.480	-.328	-.147	1 072	Z	1
1.963	2.827	3.871	4 328	4.633	4 760					Z	1
0 000	.561	1.021	1 580	2.113	2 527	2 675	2.672	2.545	2.238	Y	2
1.956	1 674	1.288	1 008	.574	0.000					Y	2
-.765	-.737	-.762	- 683	-.630	-.554	-.452	-.274	.135	1 024	Z	2
1.989	2 931	3.922	4 354	4.658	4.785					Z	2
0.000	.584	1 041	1 527	1 984	2 365	2 570	2 621	2.570	2 217	Y	3
1.958	1.654	1.323	1 016	.610	0.000					Y	3
-.714	-.663	-.663	-.663	-.610	-.559	-.432	-.203	.127	1 044	Z	3
1 961	2 875	3.919	4.376	4.658	4.760					Z	3
111.597	9 065	-2.858								R000R6	
0.000	7.620	15 240	25 603							XPR0R	
2 096	2.266	2.436	2.667							R00R	
121.836	20.881	.254	19.784	135.295	24.232	9.462	6.335			F1N0R6	
0.0	10	20	30.	40.	50.	60.	80.	90	100.	XF1N	
0.0	.519	.819	1.039	1 161	1.203	1.161	.819	.519	0.0	F0R0	1 1

TABLE II.- Continued

(b) U.S. Customary Units. All linear dimensions are in inches

SUPERSONIC CRUISE VEHICLE (MEASURED COORDINATES)																		
1	1	1	1	13	26	3	22	15	23	11	16	3	1	4	1	10		
343.																		
0.0	.50		75	1.25	2.50		5.0	7.5	10.		15.	20.					XAF 10	
75.	30.	35.	40.	45.	50.	55.	60.	65.	70.								XAF 20	
75.	80.	85	90.	95.	100												XAF 26	
22.141	1.6851	-7.5			29.550												WDRG 2	
24.905	2.2512	-7.5			26.786												WDRG 3	
27.416	2.8093	-7.5			24.275												WDRG 4	
29.765	3.3726	-7.5			21.974												WDRG 5	
33.888	4.4445	-7.5			17.814												WDRG 6	
36.174	5.0576	-7.5			15.795												WDRG 7	
40.353	6.1828	-7.5			12.128												WDRG 8	
44.562	7.3058	-7.5			8.433												WDRG 9	
47.935	8.2221	-7.5			5.474												WDRG 10	
48.318	8.4216	-7.5			5.184												WDRG 11	
49.319	8.9922	-7.5			4.446												WDRG 12	
51.229	10.101	-7.5			3.046												WDRG 13	
53.194	11.239	-7.5			1.587												WDRG 14	
7.8260	7.8590	7.8635	7.8680	7.8885	7.9235	7.9475	7.9545	7.9390	7.9090								Z 2	
7.8620	7.8010	7.7360	7.6770	7.6180	7.5715	7.5305	7.4955	7.4715	7.4585								Z 2	
7.4520	7.4520	7.4540	7.4545	7.4555	7.4535												Z 2	
7.7910	7.8045	7.8085	7.8155	7.8340	7.8695	7.8930	7.9025	7.8965	7.8745								Z 3	
7.8350	7.7880	7.7370	7.6920	7.6465	7.6090	7.5755	7.5485	7.5305	7.5220								Z 3	
7.5250	7.5295	7.5410	7.5545	7.5630	7.5685												Z 3	
7.7250	7.7430	7.7460	7.7525	7.7725	7.8090	7.8355	7.8535	7.8575	7.8405								Z 4	
7.8110	7.7770	7.7380	7.7055	7.6720	7.6400	7.6115	7.5880	7.5705	7.5615								Z 4	
7.5610	7.5655	7.5755	7.5850	7.5925	7.5975												Z 4	
7.6700	7.6805	7.6850	7.6925	7.7125	7.7520	7.7820	7.8005	7.8130	7.8090								Z 5	
7.7915	7.7690	7.7430	7.7180	7.6930	7.6660	7.6430	7.6270	7.6145	7.6075								Z 5	
7.6015	7.5960	7.5910	7.5855	7.5800	7.5770												Z 5	
7.5645	7.5755	7.5785	7.5870	7.6075	7.6445	7.6765	7.7000	7.7310	7.7460								Z 6	
7.7510	7.7480	7.7405	7.7315	7.7205	7.7090	7.6990	7.6895	7.6850	7.6850								Z 6	
7.6870	7.6880	7.6865	7.6840	7.6780	7.6725												Z 6	
7.5160	7.5240	7.5280	7.5360	7.5545	7.5915	7.6230	7.6490	7.6880	7.7100								Z 7	
7.7250	7.7310	7.7310	7.7300	7.7265	7.7215	7.7170	7.7140	7.7125	7.7145								Z 7	
7.7180	7.7230	7.7290	7.7300	7.7295	7.7260												Z 7	
7.4390	7.4540	7.4580	7.4650	7.4815	7.5135	7.5450	7.5710	7.6120	7.6440								Z 8	
7.6675	7.6855	7.6985	7.7095	7.7190	7.7255	7.7330	7.7405	7.7480	7.7580								Z 8	
7.7650	7.7705	7.7780	7.7825	7.7885	7.7930												Z 8	
7.4230	7.4320	7.4345	7.4385	7.4500	7.4720	7.4940	7.5150	7.5500	7.5805								Z 9	
7.6070	7.6330	7.6570	7.6750	7.6945	7.7125	7.7285	7.7430	7.7575	7.7680								Z 9	
7.7790	7.7890	7.7960	7.8080	7.8190	7.8260												Z 9	
7.4390	7.4480	7.4505	7.4540	7.4625	7.4760	7.4895	7.5020	7.5260	7.5475								Z 10	
7.5695	7.5905	7.6110	7.6310	7.6525	7.6690	7.6825	7.6955	7.7105	7.7250								Z 10	
7.7385	7.7510	7.7630	7.7735	7.7830	7.7925												Z 10	
7.4560	7.4615	7.4635	7.4660	7.4720	7.4830	7.4935	7.5025	7.5210	7.5390								Z 11	
7.5565	7.5740	7.5930	7.6115	7.6290	7.6455	7.6605	7.6755	7.6910	7.7060								Z 11	
7.7200	7.7340	7.7465	7.7585	7.7690	7.7790												Z 11	
7.5030	7.5050	7.5060	7.5070	7.5100	7.5150	7.5205	7.5260	7.5375	7.5480								Z 12	
7.5595	7.5710	7.5830	7.5960	7.6080	7.6195	7.6325	7.6455	7.6585	7.6705								Z 12	
7.6835	7.6950	7.7060	7.7160	7.7255	7.7340												Z 12	
7.5535	7.5550	7.5560	7.5580	7.5610	7.5635	7.5655	7.5675	7.5720	7.5760								Z 13	
7.5810	7.5855	7.5905	7.5960	7.6010	7.6060	7.6110	7.6160	7.6210	7.6250								Z 13	
7.6290	7.6335	7.6365	7.6395	7.6430	7.6465												Z 13	
7.5515	7.5520	7.5520	7.5530	7.5540	7.5545	7.5550	7.5555	7.5560	7.5565								Z 14	
7.5575	7.5590	7.5590	7.5595	7.5595	7.5595	7.5595	7.5595	7.5590	7.5590								Z 14	
7.5590	7.5585	7.5585	7.5580	7.5585	7.5630												Z 14	
0.0	.2415	.2930	.3675	.5205	.7085	.8510	.9765	1.1750	1.3190								Z 2	
1.4285	1.5075	1.5570	1.5830	1.5915	1.6030	1.5920	1.5655	1.4655	1.3430								Z 2	
1.1945	1.0180	.8120	.5730	.3010	0.0												Z 2	
0.0	.2355	.2885	.3735	.5145	.7025	.8490	.9715	1.1655	1.3050								Z 3	
1.4160	1.4950	1.5455	1.5710	1.5835	1.5935	1.5820	1.5355	1.4565	1.3170								Z 3	
1.1805	1.0115	.8045	.5670	.2970	0.0												Z 3	
0.0	.2310	.2865	.3625	.5000	.6935	.8395	.9470	1.1380	1.2835								Z 4	
1.3920	1.4700	1.5190	1.5460	1.5575	1.5595	1.5510	1.5110	1.4170	1.2975								Z 4	
1.1655	.9930	.7915	.5585	.2930	0.0												Z 4	
0.0	.2255	.2790	.3555	.4875	.6655	.8045	.9215	1.1160	1.2520								Z 5	
1.3575	1.4350	1.4850	1.5105	1.5205	1.5210	1.5070	1.4575	1.3780	1.2740								Z 5	
1.1390	.9730	.7765	.5455	.2875	0.000												Z 5	
0.0	.2245	.2710	.3420	.4665	.6560	.7960	.9005	1.0720	1.1925								Z 6	
1.2895	1.3625	1.4115	1.4365	1.4490	1.4500	1.4290	1.3870	1.3150	1.2160								Z 6	
1.0855	.9265	.7390	.5205	.2760	0.0												Z 6	
0.0	.2140	.2600	.3315	.4595	.6285	.7640	.8715	1.0420	1.1630								Z 7	
1.2535	1.3240	1.3745	1.4030	1.4145	1.4155	1.3945	1.3495	1.2805	1.1860								Z 7	
1.0505	.9020	.6995	.5020	.2645	0.0												Z 7	
0.0	.1685	.2275	.3090	.4430	.6170	.7350	.8480	1.0240	1.1515								Z 8	
1.2515	1.3200	1.3580	1.3815	1.3925	1.3865	1.3670	1.3260	1.2545	1.1565								Z 8	
1.0335	.8665	.6830	.4920	.2625	0.0												Z 8	
0.0	.2165	.2600	.3305	.4450	.6240	.7490	.8510	1.0285	1.1630								Z 9	
1.2695	1.3290	1.3490	1.3935	1.3935	1.3855	1.3565	1.3040	1.2380	1.1365								Z 9	
1.0130	.8435	.6390	.4735	.2600	0.0												Z 9	
0.0	.1675	.2135	.2715	.3845	.5190	.6310	.7440	.9315	1.0895								Z 10	
1.2795	1.3440	1.4335	1.4865	1.5505	1.5490	1.4875	1.4090	1.3500	1.2470								Z 10	
1.1265	.9855	.8125	.6035	.3605	0.0												Z 10	
0.0	.1550	.1895	.2335	.3270	.4545	.5560	.6660	.8145	.9665								Z 11	
1.1035	1.2225	1.3145	1.3735	1.4070	1.4210	1.4095	1.3695	1.3050	1.2170								Z 11	
1.1095	.9800	.8320	.6480	.4330	0.0												Z 11	
0.0	.1345	.1595	.1945	.2740	.3975	.4995	.6030	.8130	.9585								Z 12	
1.0890	1.1950	1.2760	1.3435	1.3750	1.3795	1.3685	1.3295	1.2705	1.1930								Z 12	
1.0910	.9620	.8190	.6440	.4485	0.0												Z 12	
0.0	.0855	.1310	.2180	.3330	.4395	.5265	.6065	.7610	.8820								Z 13	

TABLE II.- Continued

(b) Continued

9985	1.0930	1.1695	1.2235	1.2525	1.2645	1.2505	1.2165	1.1800	1.1145	T 13
1.0290	.9220	.7975	.6510	.4825	0.0					T 13
0.0	.1205	.1805	.2970	.4245	.5215	.6285	.7255	.8840	1.0230	T 14
1.1085	1.1420	1.1940	1.2335	1.2515	1.2630	1.2660	1.2455	1.2150	1.1700	T 14
1.1185	1.0640	.9855	.8895	.7270	0.0					T 14
5.780	6.131	6.850	7.151	7.781	8.400	9.820	11.251	13.350	16.331	XFUS 10
18.751	19.600	20.485	21.494	22.501						XFUS 15
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Y 1
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Y 1
0.000	0.000									Y 1
.951	.951	.951	.951	.951	.951	.951	.951	.951	.951	Z 1
.951	.951	.951	.951	.951	.951	.951	.951	.951	.951	Z 1
.951	.951									Z 1
0.000	.017	.037	.037	.047	.047	.057	.057	.057	.057	Y 2
.057	.057	.057	.057	.058	.058	.058	.048	.048	.038	Y 2
.008	0.000									Y 2
.911	.911	.911	.911	.921	.921	.921	.921	.921	.921	Z 2
.921	.921	.921	.931	.941	.941	.951	.961	.971	1.001	Z 2
1.011	1.011									Z 2
0.000	.027	.057	.077	.107	.137	.157	.177	.197	.197	Y 3
.197	.197	.197	.197	.187	.178	.168	.148	.128	.099	Y 3
.039	0.000									Y 3
.861	.871	.871	.870	.870	.870	.870	.870	.890	.890	Z 3
.890	.890	.890	.920	.940	.970	1.000	1.030	1.070	1.101	Z 3
1.131	1.142									Z 3
0.000	.017	.067	.107	.137	.187	.217	.219	.240	.240	Y 4
.240	.240	.240	.238	.234	.228	.218	.209	.149	.150	Y 4
.070	0.000									Y 4
.841	.841	.851	.840	.840	.850	.859	.859	.879	.879	Z 4
.879	.879	.869	.889	.909	.939	.979	1.010	1.050	1.120	Z 4
1.181	1.202									Z 4
0.000	.075	.135	.175	.235	.295	.344	.353	.358	.353	Y 5
.353	.342	.339	.329	.324	.313	.297	.287	.277	.218	Y 5
.118	0.000									Y 5
.791	.791	.790	.800	.800	.799	.809	.819	.828	.848	Z 5
.848	.878	.889	.929	.949	.989	1.039	1.070	1.130	1.210	Z 5
1.281	1.302									Z 5
0.000	.098	.178	.258	.318	.378	.440	.460	.449	.466	Y 6
.463	.454	.449	.443	.430	.420	.411	.391	.372	.283	Y 6
.174	0.000									Y 6
.751	.750	.749	.748	.758	.757	.766	.776	.796	.815	Z 6
.806	.846	.866	.886	.927	.967	1.007	1.057	1.128	1.269	Z 6
1.360	1.412									Z 6
0.000	.154	.244	.335	.445	.545	.614	.639	.630	.636	Y 7
.636	.629	.619	.612	.609	.593	.567	.518	.440	.340	Y 7
.201	0.000									Y 7
.651	.650	.649	.649	.658	.667	.677	.706	.716	.736	Z 7
.736	.766	.806	.827	.847	.907	.998	1.178	1.389	1.520	Z 7
1.621	1.652									Z 7
0.000	.154	.265	.375	.515	.635	.756	.781	.780	.782	Y 8
.782	.774	.764	.761	.747	.728	.679	.601	.503	.374	Y 8
.224	0.000									Y 8
.571	.570	.579	.578	.597	.606	.635	.654	.674	.693	Z 8
.693	.724	.754	.765	.805	.886	1.046	1.307	1.608	1.769	Z 8
1.871	1.902									Z 8
0.000	.193	.343	.494	.654	.794	.890	.910	.911	.910	Y 9
.908	.901	.890	.880	.886	.854	.768	.621	.493	.394	Y 9
.215	0.000									Y 9
.440	.439	.448	.457	.486	.505	.535	.554	.573	.593	Z 9
.603	.623	.664	.684	.705	.785	1.116	1.548	1.899	2.030	Z 9
2.151	2.183									Z 9
0.000	.202	.393	.583	.774	.984	1.052	1.059	1.059	1.052	Y 10
1.048	1.043	1.041	1.039	1.032	1.006	.850	.644	.536	.417	Y 10
.218	0.000									Y 10
.300	.309	.318	.346	.365	.414	.443	.462	.482	.501	Z 10
.521	.532	.542	.553	.573	.664	1.206	1.858	2.199	2.380	Z 10
2.502	2.563									Z 10
0.000	.210	.380	.591	.831	1.051	1.174	1.186	1.190	1.189	Y 11
1.189	1.181	1.169	1.161	1.140	1.091	.871	.701	.531	.400	Y 11
.220	0.000									Y 11
.170	.170	.180	.200	.230	.280	.310	.330	.340	.340	Z 11
.380	.411	.451	.471	.551	.681	1.372	1.982	2.473	2.663	Z 11
2.773	2.823									Z 11
0.000	.170	.320	.521	.781	1.021	1.131	1.220	1.236	1.239	Y 12
1.239	1.210	1.189	1.161	1.131	1.081	.841	.671	.521	.431	Y 12
.230	0.000									Y 12
.140	.130	.130	.160	.190	.240	.260	.290	.310	.330	Z 12
.330	.411	.471	.551	.641	.761	1.522	2.103	2.543	2.713	Z 12
2.843	2.894									Z 12
0.000	.250	.441	.611	.781	.992	1.152	1.282	1.352	1.365	Y 13
1.365	1.340	1.285	1.213	1.143	1.063	.834	.665	.515	.405	Y 13
.225	0.000									Y 13
.090	.090	.109	.129	.149	.199	.238	.258	.288	.318	Z 13
.318	.428	.518	.619	.719	.829	1.601	2.162	2.602	2.783	Z 13
2.893	2.944									Z 13
0.000	.270	.471	.661	.841	1.041	1.211	1.382	1.552	1.582	Y 14
1.582	1.522	1.412	1.282	1.121	1.041	.831	.661	.521	.411	Y 14
.230	0.000									Y 14
.010	.020	.050	.080	.120	.170	.220	.240	.270	.330	Z 14
.320	.471	.581	.691	.791	.911	1.642	2.193	2.613	2.763	Z 14
2.904	2.944									Z 14
0.000	.240	.451	.651	.851	1.061	1.232	1.432	1.582	1.692	Y 15

TABLE II.- Concluded

(b) Concluded

1.692	1.562	1.472	1.312	1.131	1.041	.871	.701	.521	.421	Y	15
.260	0.0									Y	15
-.030	-.020	-.010	.030	.090	.150	.190	.230	.230	.260	Z	15
.481	.581	.671	.751	.821	.991	1.512	2.022	2.423	2.753	Z	15
2.884	2.934									Z	15
22.501	23.701	24.901	25.851	27.791	38.291	44.291	46.541	48.790	51.251	XFHS	10
51.691										XFHS	11
0.0	.240	.461	.641	.832	1.062	1.232	1.433	1.583	1.693	Y	1
1.693	1.613	1.523	1.413	1.232	1.102	1.032	.862	.701	.521	Y	1
.431	.261	0.000								Y	1
-.030	-.020	-.010	.030	.070	.140	.190	.220	.230	.261	Z	1
.481	.541	.621	.691	.792	.862	.982	1.503	2.034	2.425	Z	1
2.756	2.886	2.946								Z	1
.000	.291	.541	.762	.942	1.132	1.202	1.282	1.523	1.703	Y	2
1.702	1.582	1.461	1.311	1.151	1.070	1.020	.869	.718	.526	Y	2
.395	.215	0.0								Y	2
-.090	-.080	-.039	.001	.062	.122	.153	.153	.213	.224	Z	2
.645	.715	.764	.814	.864	.944	1.034	1.495	2.005	2.576	Z	2
2.756	2.886	2.926								Z	2
0.000	.301	.551	.752	.942	1.112	1.222	1.333	1.533	1.693	Y	3
1.683	1.563	1.433	1.303	1.132	1.072	1.012	.842	.701	.541	Y	3
.421	.240	0.000								Y	3
-.150	-.140	-.100	-.050	-.010	.060	.090	.110	.160	.190	Z	3
.752	.792	.822	.842	.882	.952	1.062	1.583	2.014	2.505	Z	3
2.705	2.826	2.876								Z	3
0.0	.291	.511	.731	.932	1.112	1.222	1.303	1.503	1.693	Y	4
1.683	1.533	1.413	1.293	1.152	1.042	.972	.802	.671	.541	Y	4
.401	.24	0.0								Y	4
-.220	-.200	-.170	-.120	-.070	-.020	.030	.040	.090	.140	Z	4
.762	.812	.842	.852	.882	.932	1.082	1.603	2.044	2.455	Z	4
2.655	2.766	2.806								Z	4
0.000	.271	.491	.701	.922	1.132	1.222	1.313	1.493	1.683	Y	5
1.683	1.583	1.473	1.353	1.162	1.062	.972	.802	.661	.531	Y	5
.411	.200	0.0								Y	5
-.311	-.291	-.261	-.220	-.170	-.120	-.090	-.060	-.020	.020	Z	5
.802	.812	.822	.832	.832	.872	.982	1.513	1.974	2.335	Z	5
2.515	2.635	2.675								Z	5
0.0	.291	.521	.741	.952	1.162	1.263	1.363	1.533	1.673	Y	6
1.673	1.583	1.493	1.373	1.212	1.062	.952	.792	.661	.521	Y	6
.381	.200	0.000								Y	6
-.631	-.631	-.621	-.601	-.581	-.551	-.531	-.511	-.481	-.441	Z	6
.501	.491	.491	.471	.471	.491	.591	1.002	1.443	1.874	Z	6
2.034	2.144	2.184								Z	6
0.000	.240	.451	.681	.922	1.122	1.212	1.323	1.503	1.673	Y	7
1.683	1.563	1.463	1.343	1.232	1.082	.962	.802	.661	.521	Y	7
.401	.230	0.0								Y	7
-.541	-.541	-.541	-.521	-.501	-.491	-.471	-.471	-.431	-.411	Z	7
.311	.291	.281	.261	.251	.281	.381	.792	1.283	1.683	Z	7
1.864	1.984	2.014								Z	7
0.0	.261	.492	.742	.962	1.173	1.243	1.303	1.483	1.704	Y	8
1.703	1.603	1.493	1.383	1.272	1.132	1.002	.831	.680	.529	Y	8
.398	.228	0.0								Y	8
-.461	-.461	-.460	-.440	-.430	-.409	-.389	-.389	-.359	-.318	Z	8
.213	.203	.182	.162	.152	.162	.262	.682	1.193	1.644	Z	8
1.804	1.924	1.954								Z	8
0.0	.270	.510	.731	.931	1.132	1.222	1.322	1.513	1.683	Y	9
1.684	1.573	1.463	1.343	1.253	1.142	1.032	.833	.673	.534	Y	9
.394	.234	0.0								Y	9
-.371	-.361	-.342	-.332	-.322	-.302	-.283	-.273	-.233	-.213	Z	9
.178	.108	.088	.068	.048	.048	.149	.600	1.131	1.592	Z	9
1.763	1.873	1.914								Z	9
0.0	.271	.491	.721	.952	1.152	1.232	1.303	1.493	1.673	Y	10
1.673	1.553	1.453	1.343	1.232	1.102	1.012	.822	.671	.501	Y	10
.371	.200	0.0								Y	10
-.321	-.311	-.301	-.281	-.240	-.220	-.180	-.180	-.140	-.100	Z	10
-.030	-.060	-.070	-.100	-.120	-.080	.030	.571	1.072	1.563	Z	10
1.733	1.834	1.874								Z	10
0.0	.230	.430	.651	.891	1.122	1.182	1.272	1.493	1.703	Y	11
1.703	1.573	1.443	1.302	1.162	1.132	1.082	.893	.713	.554	Y	11
.424	.254	0.0								Y	11
-.311	-.301	-.291	-.282	-.252	-.202	-.193	-.173	-.123	-.083	Z	11
-.083	-.103	-.133	-.163	-.182	-.142	-.072	.459	.991	1.532	Z	11
1.703	1.823	1.884								Z	11
51.691	54.000	56.235								XFHS	3
.000	.221	.421	.642	.872	1.103	1.163	1.112	1.052	.891	Y	1
.780	.660	.529	.408	.258	0.0					Y	1
-.301	-.310	-.300	-.280	-.249	-.199	-.189	-.129	-.058	.422	Z	1
.773	1.113	1.524	1.704	1.874	1.874					Z	1
0.0	.221	.402	.622	.832	.993	1.053	1.052	1.002	.881	Y	2
.770	.659	.507	.397	.276	0.0					Y	2
-.301	-.290	-.300	-.269	-.248	-.218	-.178	-.108	.053	.403	Z	2
.783	1.154	1.544	1.714	1.834	1.884					Z	2
0.0	.23	.41	.601	.781	.931	1.012	1.032	1.012	.871	Y	3
.771	.651	.521	.400	.240	0.0					Y	3
-.281	-.261	-.261	-.261	-.240	-.220	-.170	-.080	.050	.411	Z	3
.772	1.132	1.543	1.723	1.834	1.874					Z	3
43.936	3.569	-1.125								XXXXXX	
0.0	3.0	6.0	10.08							XXXX	
.825	.892	.959	1.05							XXXX	
47.967	8.221	.10	7.789	53.262	9.54	3.725	2.494			FINNRI	
0.0	10.	20	30.	40.	50.	60	80.	90.	100.	XFIN	
0.0	519	819	1.039	1.161	1.203	1.161	819	.519	0.0	FORN	1.1

TABLE III - COORDINATES OF ORIFICES ON MODFL

Model station, x, cm (in), of -																			
49 213 (19 375)		59 373 (23 375)		69 533 (27 375)		74 534 (29 344)		79 535 (31 313)		84 773 (33 375)		90 013 (35 438)		96 916 (38 156)		103 823 (40 875)		119 063 (46 875)	
N	y, cm (in)	N	y, cm (in)	N	y, cm (in)	N	y, cm (in)	N	y, cm (in)	N	y, cm (in)	N	y, cm (in)	N	y, cm (in)	N	y, cm (in)	N	y, cm (in)
Upper surface																			
86	0 000 (0 000)	87	0 000 (0 000)	88	0 000 (0 000)			89	0 000 (0 000)			94	0 000 (0 000)			95	0 000 (0 000)		
				1	4 115 (1 620)	7	5 664 (2 230)	13	4 338 (1 708)	20	6 960 (2 740)	26	4 892 (1 926)	34	8 585 (3 380)	40	5 080 (2 000)	49	6 467 (2 546)
				2	4 877 (1 920)	8	6 187 (2 436)	14	5 629 (2 216)	21	7 742 (3 048)	27	6 736 (2 652)	35	9 693 (3 816)	41	8 219 (3 236)	50	9 883 (3 891)
				3	5 690 (2 240)	9	6 711 (2 642)	15	6 596 (2 597)	22	8 524 (3 356)	28	8 118 (3 196)	36	10 800 (4 252)	42	9 512 (3 745)	51	11 593 (4 564)
				4	6 096 (2 400)	10	7 234 (2 848)	16	7 242 (2 851)	23	9 307 (3 664)	29	9 040 (3 559)	37	11 908 (4 688)	43	10 805 (4 254)	52	13 302 (5 237)
				5	6 502 (2 560)	11	7 757 (3 054)	17	7 887 (3 105)	24	10 089 (3 972)	30	9 962 (3 922)	38	13 015 (5 124)	44	12 098 (4 763)	53	14 155 (5 573)
				6	6 909 (2 720)	12	8 019 (3 157)	18	8 532 (3 359)	25	10 480 (4 126)	31	10 884 (4 285)	39	13 569 (5 342)	45	12 743 (5 017)	54	15 011 (5 910)
								19	9 177 (3 613)			32	11 806 (4 648)			46	14 036 (5 526)	55	15 865 (6 246)
												33	12 037 (4 739)			47	15 329 (6 035)	56	16 721 (6 583)
																48	15 651 (6 162)	57	17 574 (6 919)
																		58	18 430 (7 256)
																		59	19 284 (7 592)
																		60	19 710 (7 760)
Lower surface																			
				61	4 064 (1 600)			65	4 338 (1 708)			69	4 892 (1 926)			74	5 080 (2 000)	79	6 467 (2 546)
				62	4 877 (1 920)			66	6 596 (2 597)			70	6 736 (2 652)			75	9 512 (3 745)	80	9 883 (3 891)
				63	6 096 (2 400)			67	7 887 (3 105)			71	9 040 (3 559)			76	12 098 (4 763)	81	13 302 (5 237)
				64	6 909 (2 720)			68	9 177 (3 613)			72	10 884 (4 285)			77	14 036 (5 526)	82	15 011 (5 910)
												73	12 037 (4 739)			78	15 651 (6 162)	83	16 721 (6 583)
																		85	19 710 (7 760)

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = -1.18

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0981	87	-.0060	88	-.0293			89	-.0012			94	-.0303			95	-.0111		
				1	-.0088	7	-.0994	13	-.0221	20	-.0382	26	-.0068	34	-.0164	40	.0260	49	-.0940
				2	-.0301	8	-.0316	14	-.0297	21	-.0400	27	-.0103	35	-.0210	41	-.0017	50	-.0022
				3	-.0261	9	-.0329	15	-.0370	22	-.0294	28	-.0209	36	-.0198	42	-.0036	51	-.0076
				4	-.0169	10	-.0249	16	-.0386	23	-.0005	29	-.0294	37	-.0051	43	-.0066	52	-.0066
				5	-.0080	11	-.0107	17	-.0374	24	.0256	30	-.0356	38	.0226	44	-.0145	53	-.0038
				6	.0065	12	.0136	18	-.0297	25	.0482	31	-.0342	39	-.0967	45	-.0176	54	-.0150
								19	-.0088			32	-.0245			46	-.0221	55	-.0110
												33	.0172			47	-.0160	56	-.0079
																48	.0161	57	-.0578
																		58	-.0091
																		59	.0015
																		60	.0155
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0077			65	.0073			69	-.0028			74	-.0100	79	.0277
				62	-.0020			66	.0016			70	.0026			75	-.0020	80	.0258
				63	-.0189			67	-.0406			71	-.0249			76	-.0145	81	.0115
				64	.0415			68	.0306			72	-.0458			77	-.0539	82	-.0359
												73	.0598			78	.0494	83	-.0709
																		85	.0321

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = -.18

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0999	87	-.0098	88	-.0295			89	.0071			94	-.0432			95	-.0230		
				1	-.0118	7	-.1013	13	-.0291	20	-.0521	26	-.0140	34	-.0291	40	.0160	49	-.0959
				2	-.0403	8	-.0450	14	-.0375	21	-.0588	27	-.0206	35	-.0374	41	-.0109	50	-.0130
				3	-.0383	9	-.0481	15	-.0452	22	-.0481	28	-.0300	36	-.0412	42	-.0136	51	-.0180
				4	-.0319	10	-.0406	16	-.0516	23	-.0202	29	-.0428	37	-.0302	43	-.0204	52	-.0167
				5	-.0218	11	-.0291	17	-.0532	24	.0095	30	-.0517	38	.0008	44	-.0264	53	-.0167
				6	-.0074	12	-.0011	18	-.0468	25	.0241	31	-.0530	39	-.0983	45	-.0347	54	-.0280
								19	-.0287			32	-.0446			46	-.0419	55	-.0261
												33	-.0016			47	-.0389	56	-.0242
																48	-.0075	57	-.0707
																		58	-.0186
																		59	-.0242
																		60	-.0061
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0172			65	.0180			69	.0068			74	-.0041	79	.0269
				62	.0164			66	.0127			70	.0108			75	.0069	80	.0288
				63	.0051			67	-.0118			71	.0121			76	.0186	81	.0213
				64	.0260			68	.0160			72	-.0269			77	-.0344	82	-.0143
												73	.0445			78	.0299	83	-.0517
																		85	.0144

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = .82

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP		
86	-.0974	87	-.0113	88	-.0258			89	.0160			94	-.0534			95	-.0313		
				1	-.0150	7	-.0982	13	-.0339	20	-.0636	26	-.0175	34	-.0408	40	.0084	49	-.0943
				2	-.0463	8	-.0556	14	-.0447	21	-.0716	27	-.0273	35	-.0506	41	-.0181	50	-.0217
				3	-.0479	9	-.0574	15	-.0536	22	-.0640	28	-.0375	36	-.0653	42	-.0215	51	-.0251
				4	-.0447	10	-.0556	16	-.0632	23	-.0392	29	-.0534	37	-.0525	43	-.0294	52	-.0276
				5	-.0367	11	-.0419	17	-.0677	24	-.0148	30	-.0623	38	-.0237	44	-.0370	53	-.0273
				6	-.0226	12	-.0175	18	-.0632	25	.0002	31	-.0694	39	-.0960	45	-.0506	54	-.0382
								19	-.0431			32	-.0663			46	-.0570	55	-.0392
												33	-.0211			47	-.0646	56	-.0392
																48	-.0324	57	-.0825
																		58	-.0354
																		59	-.0519
																		60	-.0314
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0289			65	.0285			69	.0179			74	.0054	79	.0297
				62	.0305			66	.0261			70	.0224			75	.0179	80	.0319
				63	.0289			67	.0220			71	.0268			76	.0285	81	.0322
				64	.0076			68	-.0033			72	-.0024			77	.0073	82	-.0055
												73	.0188			78	.0054	83	-.0042
																		85	-.0170

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = 1.82

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
M	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0981	87	-.0134	88	-.0262			89	.0264			94	-.0635			95	-.0419		
				1	-.0190	7	-.0984	13	-.0407	20	-.0776	26	-.0237	34	-.0532	40	-.0014	49	-.0946
				2	-.0555	8	-.0675	14	-.0519	21	-.0878	27	-.0347	35	-.0679	41	-.0256	50	-.0302
				3	-.0595	9	-.0723	15	-.0615	22	-.0869	28	-.0471	36	-.0902	42	-.0313	51	-.0342
				4	-.0603	10	-.0723	16	-.0768	23	-.0617	29	-.0630	37	-.0785	43	-.0388	52	-.0367
				5	-.0551	11	-.0622	17	-.0832	24	-.0414	30	-.0768	38	-.0536	44	-.0494	53	-.0389
				6	-.0387	12	-.0369	18	-.0820	25	-.0272	31	-.0891	39	-.0963	45	-.0645	54	-.0513
								19	-.0644			32	-.0896			46	-.0751	55	-.0532
												33	-.0445			47	-.0906	56	-.0579
																48	-.0592	57	-.0946
																		58	-.0734
																		59	-.0834
																		60	-.0697
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0380			65	.0400			69	.0299			74	.0159	79	.0293
				62	.0421			66	.0384			70	.0343			75	.0299	80	.0339
				63	.0477			67	.0481			71	.0414			76	.0424	81	.0408
				64	-.0234			68	-.0266			72	.0171			77	.0450	82	.0069
												73	-.0095			78	-.0286	83	.0268
																		84	-.0507
																		85	-.0507

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = 2.81

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0995	87	-.0136	88	-.0253			89	.0353			94	-.0752			95	-.0538		
				1	-.0213	7	-.1009	13	-.0489	20	-.0916	26	-.0288	34	-.0644	40	-.0119	49	-.0961
				2	-.0638	8	-.0779	14	-.0586	21	-.1057	27	-.0438	35	-.0870	41	-.0346	50	-.0373
				3	-.0690	9	-.0876	15	-.0718	22	-.1079	28	-.0566	36	-.1202	42	-.0414	51	-.0438
				4	-.0746	10	-.0871	16	-.0899	23	-.0876	29	-.0752	37	-.1074	43	-.0497	52	-.0454
				5	-.0702	11	-.0818	17	-.0987	24	-.0659	30	-.0942	38	-.0817	44	-.0617	53	-.0497
				6	-.0546	12	-.0566	18	-.1007	25	-.0540	31	-.1141	39	-.0983	45	-.0825	54	-.0622
								19	-.0875			32	-.1159			46	-.0980	55	-.0662
												33	-.0717			47	-.1304	56	-.0727
																48	-.0934	57	-.1138
																		58	-.1014
																		59	-.1216
																		60	-.1007
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0481			65	.0502			69	.0384			74	.0243	79	.0296
				62	.0530			66	.0498			70	.0446			75	.0371	80	.0380
				63	.0606			67	.0642			71	.0499			76	.0530	81	.0473
				64	-.0437			68	-.0517			72	.0260			77	.0715	82	.0181
												73	-.0491			78	-.0670	83	.0454
																		84	-.0898
																		85	-.0898

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = 3.81

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.1008	87	-.0157	88	-.0250	7	-.1018	89	.0441	20	-.1036	94	-.0859	34	-.0796	95	-.0633	49	-.0968
				1	-.0245	8	-.0877	13	-.0562	21	-.1248	26	-.0346	35	-.1079	40	-.0173	50	-.0458
				2	-.0723	9	-.1018	14	-.0695	22	-.1337	27	-.0550	36	-.1475	41	-.0445	51	-.0532
				3	-.0779	10	-.1062	15	-.0811	23	-.1133	28	-.0664	37	-.1331	42	-.0520	52	-.0557
				4	-.0887	11	-.1040	16	-.1032	24	-.0987	29	-.0868	38	-.1098	43	-.0618	53	-.0576
				5	-.0879	12	-.0815	17	-.1136	25	-.0850	30	-.1098	39	-.0992	44	-.0724	54	-.0806
				6	-.0755			18	-.1236			31	-.1372			45	-.1022	55	-.0846
								19	-.1108			32	-.1398			46	-.1233	56	-.0974
												33	-.1058			47	-.1524	57	-.1300
																48	-.1214	58	-.1161
																		59	-.1453
																		60	-.1372
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0573			65	.0613			69	.0512			74	.0348	79	.0307
				62	.0629			66	.0601			70	.0551			75	.0487	80	.0419
				63	.0657			67	.0806			71	.0631			76	.0646	81	.0534
				64	-.0735			68	-.0863			72	.0352			77	.1020	82	.0292
												73	-.0939			78	-.1131	83	.0603
																		85	-.1456

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = 4.82

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
M	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0998	87	-.0172	88	-.0236			89	.0562			94	-.0932			95	-.0764		
				1	-.0276	7	-.1002	13	-.0661	20	-.1139	26	-.0393	34	-.0975	40	-.0232	49	-.0957
				2	-.0769	8	-.0971	14	-.0765	21	-.1400	27	-.0640	35	-.1194	41	-.0503	50	-.0538
				3	-.0857	9	-.1113	15	-.0909	22	-.1572	28	-.0799	36	-.1639	42	-.0654	51	-.0628
				4	-.0994	10	-.1219	16	-.1114	23	-.1365	29	-.0967	37	-.1552	43	-.0786	52	-.0774
				5	-.1050	11	-.1197	17	-.1306	24	-.1396	30	-.1281	38	-.1507	44	-.0941	53	-.0817
				6	-.0970	12	-.1131	18	-.1411	25	-.1219	31	-.1541	39	-.0979	45	-.1163	54	-.1153
								19	-.1298			32	-.1608			46	-.1360	55	-.1106
												33	-.1458			47	-.1635	56	-.1116
																48	-.1616	57	-.1321
																		58	-.1234
																		59	-.1644
																		60	-.1846
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0674			65	.0726			69	.0619			74	.0488	79	.0330
				62	.0754			66	.0726			70	.0694			75	.0620	80	.0466
				63	.0782			67	.0943			71	.0761			76	.0779	81	.0609
				64	-.1082			68	-.1266			72	.0522			77	.1186	82	.0448
												73	-.1497			78	-.1665	83	.0734
																		85	-.1924

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = 7.82

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0989	87	-.0182	88	-.0238			89	.0885			94	-.1612			95	-.1646		
				1	-.0379	7	-.1002	13	-.0924	20	-.1620	26	-.0577	34	-.1631	40	-.0348	49	-.0956
				2	-.1077	8	-.1470	14	-.1229	21	-.1700	27	-.1262	35	-.1642	41	-.0491	50	-.0484
				3	-.1354	9	-.1545	15	-.1510	22	-.1780	28	-.1607	36	-.1710	42	-.1687	51	-.1752
				4	-.1498	10	-.1612	16	-.1594	23	-.1864	29	-.1647	37	-.1744	43	-.1736	52	-.1880
				5	-.1558	11	-.1735	17	-.1635	24	-.1855	30	-.1691	38	-.1736	44	-.1706	53	-.1805
				6	-.1578	12	-.1771	18	-.1811	25	-.1788	31	-.1704	39	-.0978	45	-.1657	54	-.1746
								19	-.1791			32	-.1859			46	-.1680	55	-.1681
												33	-.1877			47	-.1676	56	-.1606
																48	-.1710	57	-.1435
																		58	-.1367
																		59	-.1640
																		60	-.1637
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.1037			65	.1121			69	.1010			74	.0871	79	.0484
				62	.1081			66	.1109			70	.1068			75	.1030	80	.0642
				63	.1077			67	.1302			71	.1165			76	.1169	81	.0804
				64	-.1566			68	-.1839			72	.0811			77	.1554	82	.0863
												73	-.1886			78	-.1698	83	.1112
																		85	-.1628

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = 9.81

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.1013	87	-.0207	88	-.0271			89	.1121			94	-.1842			95	-.1936		
				1	-.0456	7	-.1024	13	-.1121	20	-.1833	26	-.0684	34	-.1876	40	-.0499	49	-.0975
				2	-.1406	8	-.1811	14	-.1787	21	-.1877	27	-.1749	35	-.1846	41	-.0854	50	-.0842
				3	-.1795	9	-.1797	15	-.1883	22	-.1921	28	-.1992	36	-.1861	42	-.2072	51	-.2048
				4	-.1739	10	-.1806	16	-.1807	23	-.1939	29	-.1868	37	-.1838	43	-.2016	52	-.2169
				5	-.1759	11	-.1828	17	-.1835	24	-.1952	30	-.1881	38	-.1827	44	-.1936	53	-.1964
				6	-.1739	12	-.1873	18	-.1895	25	-.1855	31	-.1886	39	-.1001	45	-.1865	54	-.1905
								19	-.1887			32	-.1935			46	-.1842	55	-.1824
												33	-.1917			47	-.1827	56	-.1777
																48	-.1827	57	-.1522
																		58	-.1460
																		59	-.1715
																		60	-.1706
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.1285			65	.1410			69	.1292			74	.1131	79	.0583
				62	.1301			66	.1373			70	.1337			75	.1282	80	.0704
				63	.1217			67	.1450			71	.1421			76	.1429	81	.0931
				64	-.1751			68	-.1907			72	.1080			77	.1735	82	.1152
												73	-.1917			78	-.1816	83	.1301
																		85	-.1709

TABLE IV.- Continued

MACH NO. = 2.300 ALPHA = 11.82

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
M	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.1009	87	-.0243	88	-.0279			89	.1406			94	-.2001			95	-.2166		
				1	-.0491	7	-.1015	13	-.1402	20	-.1992	26	-.0763	34	-.2038	40	-.0653	49	-.0969
				2	-.1815	8	-.1926	14	-.2112	21	-.2032	27	-.1939	35	-.2008	41	-.1219	50	-.1305
				3	-.1931	9	-.1921	15	-.2044	22	-.2058	28	-.2226	36	-.1997	42	-.2261	51	-.2203
				4	-.1863	10	-.1952	16	-.1964	23	-.2089	29	-.2049	37	-.1970	43	-.2227	52	-.2231
				5	-.1855	11	-.1970	17	-.1992	24	-.2076	30	-.2018	38	-.1978	44	-.2072	53	-.2157
				6	-.1859	12	-.1992	18	-.2024	25	-.1983	31	-.2018	39	-.0993	45	-.1989	54	-.2132
								19	-.2008			32	-.2049			46	-.1978	55	-.2014
												33	-.2023			47	-.1948	56	-.1880
																48	-.1951	57	-.1628
																		58	-.1588
																		59	-.1827
																		60	-.1815
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	M	CP
				61	.1591			65	.1719			69	.1611			74	.1467	79	.0732
				62	.1583			66	.1667			70	.1669			75	.1599	80	.0854
				63	.1386			67	.1643			71	.1770			76	.1739	81	.1090
				64	-.1835			68	-.2040			72	.1315			77	.1999	82	.1497
												73	-.2032			78	-.1936	83	.1544
																		84	-.1827
																		85	-.1827

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = -4.04

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0749	87	.0149	88	-.0221	7	-.0756	89	-.0118	20	.0002	94	-.0040	34	.0121	95	.0152	49	-.0699
				1	-.0015	8	.0084	13	.0018	21	.0064	26	.0130	35	.0117	40	.0482	50	.0247
				2	.0041	9	.0130	14	-.0062	22	.0254	27	.0105	36	.0209	41	.0218	51	.0214
				3	.0111	10	.0254	15	-.0024	23	.0522	28	.0038	37	.0464	42	.0218	52	.0240
				4	.0261	11	.0404	16	.0009	24	.0792	29	.0007	38	.0711	43	.0192	53	.0283
				5	.0354	12	.0553	17	.0083	25	.0929	30	.0043	39	-.0727	44	.0143	54	.0211
				6	.0523			18	.0233			31	.0141			45	.0139	55	.0272
								19	.0425			32	.0337			46	.0134	56	.0320
												33	.0697			47	.0328	57	-.0166
																48	.0697	58	.0356
																		59	.0541
																		60	.0715
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	-.0417			65	-.0585			69	-.0107			74	-.0279	79	.0189
				62	-.0557			66	-.0665			70	-.0678			75	-.0767	80	-.0579
				63	-.0529			67	-.0646			71	-.0694			76	-.0749	81	-.0826
				64	.0696			68	.0668			72	-.0699			77	-.0727	82	-.0804
												73	.0991			78	.0882	83	-.0768
																		85	.0751

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = -3.06

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0738	87	.0091	88	-.0228			89	-.0050			94	-.0119			95	.0062		
				1	-.0012	7	-.0744	13	-.0045	20	-.0088	26	.0072	34	.0005	40	.0414	49	-.0680
				2	-.0036	8	-.0011	14	-.0111	21	-.0037	27	.0030	35	-.0026	41	.0150	50	.0158
				3	.0020	9	.0036	15	-.0111	22	.0154	28	-.0037	36	.0080	42	.0124	51	.0129
				4	.0165	10	.0154	16	-.0087	23	.0417	29	-.0109	37	.0339	43	.0088	52	.0154
				5	.0268	11	.0294	17	.0002	24	.0619	30	-.0062	38	.0599	44	.0044	53	.0173
				6	.0432	12	.0479	18	.0128	25	.0830	31	.0015	39	-.0713	45	-.0013	54	.0111
								19	.0334			32	.0201			46	.0000	55	.0151
												33	.0603			47	.0185	56	.0191
																48	.0568	57	-.0270
																		58	.0202
																		59	.0369
																		60	.0583
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	-.0111			65	-.0270			69	-.0073			74	-.0123	79	.0336
				62	-.0420			66	-.0504			70	-.0403			75	-.0572	80	-.0140
				63	-.0410			67	-.0518			71	-.0573			76	-.0656	81	-.0615
				64	.0662			68	.0601			72	-.0578			77	-.0634	82	-.0738
												73	.0882			78	.0775	83	-.0691
																		85	.0666

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = -2.05

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0758	87	.0022	88	-.0230	7	-.0759	13	-.0118	20	-.0219	26	.0012	34	-.0122	40	.0300	49	-.0715
				1	-.0053	8	-.0122	14	-.0198	21	-.0152	27	-.0070	35	-.0179	41	.0054	50	.0059
				2	-.0128	9	-.0070	15	-.0202	22	-.0003	28	-.0137	36	-.0087	42	.0032	51	.0045
				3	-.0076	10	.0022	16	-.0212	23	.0275	29	-.0214	37	.0194	43	-.0029	52	.0027
				4	.0036	11	.0172	17	-.0128	24	.0511	30	-.0214	38	.0462	44	-.0078	53	.0063
				5	.0162	12	.0377	18	-.0008	25	.0707	31	-.0132	39	-.0736	45	-.0161	54	-.0013
				6	.0325			19	.0199			32	.0074			46	-.0170	55	-.0006
												33	.0485			47	.0023	56	.0045
																48	.0427	57	-.0393
																		58	-.0013
																		59	.0200
																		60	.0403
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0050			65	-.0006			69	-.0039			74	-.0095	79	.0385
				62	-.0296			66	-.0333			70	-.0034			75	-.0227	80	.0135
				63	-.0286			67	-.0384			71	-.0456			76	-.0548	81	-.0332
				64	.0573			68	.0517			72	-.0456			77	-.0521	82	-.0664
												73	.0799			78	.0664	83	-.0585
																		85	.0580

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = -1.06

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
M	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0765	87	-.0023	88	-.0238	7	-.0777	89	.0047	20	-.0345	94	-.0345	34	-.0247	95	-.0159	49	-.0725
				1	-.0084	8	-.0222	13	-.0186	21	-.0294	26	-.0052	35	-.0317	40	.0218	50	-.0012
				2	-.0214	9	-.0181	14	-.0280	22	-.0155	27	-.0150	36	-.0243	41	-.0019	51	-.0037
				3	-.0172	10	-.0109	15	-.0303	23	.0138	28	-.0232	37	.0051	42	-.0054	52	-.0063
				4	-.0074	11	.0051	16	-.0317	24	.0380	29	-.0335	38	.0332	43	-.0124	53	-.0041
				5	.0043	12	.0287	17	-.0256	25	.0473	30	-.0361	39	-.0743	44	-.0199	54	-.0110
				6	.0215			18	-.0116			31	-.0289			45	-.0304	55	-.0128
								19	.0071			32	-.0078			46	-.0322	56	-.0106
												33	.0339			47	-.0151	57	-.0508
																48	.0293	58	-.0193
																		59	.0035
																		60	.0241
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0113			65	.0108			69	.0015			74	-.0041	79	.0426
				62	-.0079			66	-.0126			70	.0107			75	.0021	80	.0230
				63	-.0121			67	-.0214			71	-.0309			76	-.0383	81	-.0095
				64	.0495			68	.0500			72	-.0320			77	-.0383	82	-.0381
												73	.0668			78	.0578	83	-.0454
																		85	.0462

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = -.05

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0751	87	-.0059	88	-.0232			89	.0114			94	-.0447			95	-.0259		
				1	-.0096	7	-.0757	13	-.0246	20	-.0453	26	-.0097	34	-.0369	40	.0150	49	-.0699
				2	-.0293	8	-.0319	14	-.0353	21	-.0427	27	-.0216	35	-.0470	41	-.0088	50	-.0090
				3	-.0255	9	-.0283	15	-.0391	22	-.0293	28	-.0324	36	-.0374	42	-.0132	51	-.0116
				4	-.0176	10	-.0210	16	-.0419	23	.0016	29	-.0437	37	-.0092	43	-.0211	52	-.0134
				5	-.0063	11	-.0082	17	-.0377	24	.0238	30	-.0494	38	.0194	44	-.0312	53	-.0156
				6	.0119	12	.0228	18	-.0241	25	.0351	31	-.0447	39	-.0734	45	-.0448	54	-.0214
								19	-.0082			32	-.0216			46	-.0479	55	-.0264
												33	.0197			47	-.0312	56	-.0293
																48	.0176	57	-.0612
																		58	-.0362
																		59	-.0137
																		60	.0109
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0189			65	.0213			69	.0094			74	.0040	79	.0435
				62	.0096			66	.0175			70	.0181			75	.0106	80	.0316
				63	.0068			67	-.0059			71	.0042			76	.0040	81	-.0014
				64	.0386			68	.0334			72	-.0118			77	-.0193	82	-.0039
												73	.0583			78	.0502	83	-.0297
																		85	.0276

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = .95

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0752	87	-.0069	88	-.0228	7	-.0758	89	.0197	20	-.0562	94	-.0526	34	-.0489	95	-.0344	49	-.0697
				1	-.0111	8	-.0397	13	-.0312	26	-.0129	26	-.0129	35	-.0604	40	.0056	50	-.0160
				2	-.0355	9	-.0392	14	-.0397	27	-.0284	27	-.0284	36	-.0524	41	-.0155	51	-.0197
				3	-.0326	10	-.0320	15	-.0471	28	-.0449	28	-.0387	37	-.0247	42	-.0208	52	-.0208
				4	-.0275	11	-.0191	16	-.0528	29	-.0134	29	-.0552	38	.0074	43	-.0300	53	-.0255
				5	-.0177	12	.0092	17	-.0457	24	.0108	30	-.0629	39	-.0736	44	-.0419	54	-.0309
				6	.0005			18	-.0383	25	.0226	31	-.0557			45	-.0634	55	-.0400
								19	-.0186			32	-.0387			46	-.0648	56	-.0512
												33	.0067			47	-.0463	57	-.0711
																48	-.0023	58	-.0523
																		59	-.0302
																		60	-.0063
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0277			65	.0314			69	.0201			74	.0118	79	.0470
				62	.0291			66	.0305			70	.0268			75	.0197	80	.0376
				63	.0258			67	.0132			71	.0293			76	.0316	81	.0104
				64	.0221			68	.0193			72	.0082			77	.0012	82	.0115
												73	.0432			78	.0329	83	-.0095
																		85	.0137

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = 1.94

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0789	87	-.0106	88	-.0246			89	.0287			94	-.0643			95	-.0449		
				1	-.0148	7	-.0798	13	-.0382	20	-.0721	26	-.0205	34	-.0651	40	-.0194	49	-.0741
				2	-.0429	8	-.0514	14	-.0466	21	-.0700	27	-.0355	35	-.0783	41	-.0220	50	-.0230
				3	-.0424	9	-.0535	15	-.0569	22	-.0612	28	-.0499	36	-.0704	42	-.0308	51	-.0306
				4	-.0396	10	-.0484	16	-.0634	23	-.0288	29	-.0674	37	-.0414	43	-.0392	52	-.0317
				5	-.0326	11	-.0370	17	-.0606	24	-.0082	30	-.0782	38	-.0128	44	-.0568	53	-.0371
				6	-.0143	12	-.0097	18	-.0522	25	.0016	31	-.0736	39	-.0770	45	-.0810	54	-.0458
								19	-.0316			32	-.0530			46	-.0814	55	-.0625
												33	-.0066			47	-.0621	56	-.0752
																48	-.0207	57	-.0828
																		58	-.0690
																		59	-.0447
																		60	-.0240
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0348			65	.0418			69	.0279			74	.0189	79	.0474
				62	.0408			66	.0394			70	.0362			75	.0281	80	.0430
				63	.0432			67	.0376			71	.0418			76	.0395	81	.0166
				64	.0039			68	.0034			72	.0300			77	.0263	82	.0202
												73	.0207			78	.0101	83	.0198
																		85	-.0023

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = 2.95

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0795	87	-.0122	88	-.0248	7	-.0800	89	.0350	20	-.0831	94	-.0759	34	-.0794	95	-.0544	49	-.0743
				1	-.0173	8	-.0614	13	-.0454	26	-.0228	26	-.0228	35	-.0926	40	-.0152	50	-.0293
				2	-.0491	9	-.0645	14	-.0543	27	-.0434	27	-.0434	36	-.0829	41	-.0297	51	-.0395
				3	-.0510	10	-.0614	15	-.0655	22	-.0743	28	-.0568	37	-.0557	42	-.0398	52	-.0427
				4	-.0524	11	-.0506	16	-.0749	23	-.0450	29	-.0815	38	-.0288	43	-.0513	53	-.0496
				5	-.0440	12	-.0259	17	-.0749	24	-.0238	30	-.0893	39	-.0768	44	-.0706	54	-.0594
				6	-.0295			18	-.0693	25	-.0182	31	-.0872			45	-.0957	55	-.0812
								19	-.0501			32	-.0645			46	-.0953	56	-.0891
												33	-.0279			47	-.0799	57	-.0917
																48	-.0354	58	-.0826
																		59	-.0638
																		60	-.0387
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0444			65	.0505			69	.0380			74	.0279	79	.0508
				62	.0500			66	.0505			70	.0463			75	.0380	80	.0464
				63	.0589			67	.0579			71	.0550			76	.0508	81	.0280
				64	-.0155			68	-.0145			72	.0442			77	.0499	82	.0272
												73	-.0022			78	-.0126	83	.0472
																		85	-.0253

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = 3.95

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
M	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0788	87	-.0129	88	-.0237			89	.0446			94	-.0843			95	-.0810		
				1	-.0190	7	-.0797	13	-.0512	20	-.0915	26	-.0282	34	-.0845	40	-.0185	49	-.0730
				2	-.0536	8	-.0704	14	-.0606	21	-.0967	27	-.0529	35	-.0946	41	-.0357	50	-.0346
				3	-.0573	9	-.0766	15	-.0723	22	-.0874	28	-.0668	36	-.0977	42	-.0511	51	-.0506
				4	-.0615	10	-.0756	16	-.0835	23	-.0611	29	-.0910	37	-.0708	43	-.0625	52	-.0575
				5	-.0564	11	-.0663	17	-.0872	24	-.0457	30	-.0993	38	-.0458	44	-.0818	53	-.0658
				6	-.0461	12	-.0457	18	-.0816	25	-.0426	31	-.1008	39	-.0766	45	-.1034	54	-.0705
								19	-.0657			32	-.0828			46	-.1047	55	-.0861
												33	-.0472			47	-.0902	56	-.0922
																48	-.0541	57	-.0955
																		58	-.0912
																		59	-.0770
																		60	-.0556
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	M	CP
				61	.0544			65	.0600			69	.0465			74	.0386	79	.0534
				62	.0610			66	.0619			70	.0568			75	.0474	80	.0538
				63	.0722			67	.0708			71	.0651			76	.0633	81	.0393
				64	-.0386			68	-.0391			72	.0486			77	.0694	82	.0386
												73	-.0328			78	-.0361	83	.0661
																		85	-.0466

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = 4.95

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0796	87	-.0141	88	-.0249			89	.0536			94	-.0928			95	-.0918		
				1	-.0221	7	-.0805	13	-.0595	20	-.0954	26	-.0321	34	-.0914	40	-.0237	49	-.0751
				2	-.0595	8	-.0779	14	-.0674	21	-.1001	27	-.0599	35	-.0927	41	-.0421	50	-.0371
				3	-.0637	9	-.0862	15	-.0800	22	-.0995	28	-.0851	36	-.1010	42	-.0786	51	-.0788
				4	-.0721	10	-.0877	16	-.0908	23	-.0789	29	-.0975	37	-.0856	43	-.0892	52	-.0831
				5	-.0712	11	-.0805	17	-.0959	24	-.0738	30	-.1006	38	-.0707	44	-.0935	53	-.0885
				6	-.0651	12	-.0692	18	-.0950	25	-.0697	31	-.1037	39	-.0773	45	-.0940	54	-.0871
								19	-.0424			32	-.0975			46	-.0957	55	-.0885
												33	-.0692			47	-.0997	56	-.0871
																48	-.0760	57	-.0907
																		58	-.0914
																		59	-.0911
																		60	-.0791
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0630			65	.0704			69	.0586			74	.0506	79	.0545
				62	.0714			66	.0723			70	.0699			75	.0598	80	.0600
				63	.0760			67	.0830			71	.0786			76	.0766	81	.0491
				64	-.0665			68	-.0679			72	.0606			77	.0985	82	.0488
												73	-.0604			78	-.0623	83	.0777
																		85	-.0766

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = 5.94

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.023 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
M	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0790	87	-.0154	88	-.0252	7	-.0799	13	-.0677	20	-.1031	26	-.0366	34	-.1000	40	-.0283	49	-.0727
				1	-.0252	8	-.0850	14	-.0761	21	-.1041	27	-.0701	35	-.0987	41	-.0564	50	-.0419
				2	-.0668	9	-.0912	15	-.0883	22	-.1108	28	-.0989	36	-.1009	42	-.0956	51	-.0930
				3	-.0701	10	-.0953	16	-.0981	23	-.1005	29	-.1041	37	-.1013	43	-.1000	52	-.0981
				4	-.0790	11	-.0969	17	-.1005	24	-.0938	30	-.1067	38	-.0899	44	-.1000	53	-.0923
				5	-.0832	12	-.0953	18	-.1056	25	-.0948	31	-.1077	39	-.0771	45	-.0982	54	-.0923
				6	-.0850			19	-.1028			32	-.1129			46	-.0991	55	-.0897
												33	-.0922			47	-.1022	56	-.0923
																48	-.0943	57	-.0887
																		58	-.0934
																		59	-.0952
																		60	-.1003
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0721			65	.0824			69	.0716			74	.0610	79	.0581
				62	.0824			66	.0833			70	.0804			75	.0707	80	.0676
				63	.0856			67	.0987			71	.0902			76	.0869	81	.0610
				64	-.0939			68	-.0930			72	.0721			77	.1208	82	.0621
												73	-.0871			78	-.0903	83	.0897
																		85	-.1021

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = 7.94

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0804	87	-.0159	88	-.0276	7	-.0810	89	.0342	20	-.1130	94	-.1130	34	-.1114	95	-.1110	49	-.0754
				1	-.0304	8	-.1032	13	-.0827	26	-.0403	27	-.1151	35	-.1119	40	-.0335	50	-.0830
				2	-.0930	9	-.1068	14	-.1061	21	-.1145	27	-.1151	35	-.1119	41	-.0872	50	-.0830
				3	-.0986	10	-.1063	15	-.1094	22	-.1151	28	-.1120	36	-.1110	42	-.1119	51	-.1164
				4	-.0996	11	-.1078	16	-.1113	23	-.1218	29	-.1151	37	-.1158	43	-.1119	52	-.1102
				5	-.0986	12	-.1094	17	-.1136	24	-.1223	30	-.1151	38	-.1198	44	-.1105	53	-.1066
				6	-.1000			18	-.1122	25	-.1166	31	-.1161	39	-.0780	45	-.1127	54	-.1041
								19	-.1150			32	-.1176			46	-.1123	55	-.1063
												33	-.1243			47	-.1127	56	-.1052
																48	-.1193	57	-.0976
																		58	-.1099
																		59	-.1150
																		60	-.1160
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0964			65	.1062			69	.0968			74	.0865	79	.0667
				62	.1039			66	.1085			70	.1071			75	.0953	80	.0783
				63	.1081			67	.1212			71	.1159			76	.1138	81	.0873
				64	-.1024			68	-.1225			72	.0957			77	.1464	82	.0823
												73	-.1238			78	-.1250	83	.1167
																		85	-.1197

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = 9.95

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0803	87	-.0177	88	-.0294			89	.1099			94	-.1263			95	-.1231		
				1	-.0364	7	-.0810	13	-.1027	20	-.1263	26	-.0460	34	-.1227	40	-.0445	49	-.0756
				2	-.1149	8	-.1181	14	-.1289	21	-.1268	27	-.1361	35	-.1245	41	-.1056	50	-.1078
				3	-.1144	9	-.1212	15	-.1238	22	-.1274	28	-.1274	36	-.1253	42	-.1284	51	-.1281
				4	-.1140	10	-.1201	16	-.1256	23	-.1299	29	-.1268	37	-.1267	43	-.1236	52	-.1223
				5	-.1130	11	-.1217	17	-.1252	24	-.1330	30	-.1268	38	-.1280	44	-.1236	53	-.1191
				6	-.1140	12	-.1217	18	-.1261	25	-.1248	31	-.1284	39	-.0783	45	-.1262	54	-.1169
								19	-.1252			32	-.1289			46	-.1253	55	-.1194
												33	-.1346			47	-.1267	56	-.1176
																48	-.1267	57	-.1042
																		58	-.1191
																		59	-.1231
																		60	-.1213
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.1225			65	.1347			69	.1260			74	.1129	79	.0780
				62	.1295			66	.1337			70	.1343			75	.1239	80	.0943
				63	.1290			67	.1473			71	.1456			76	.1406	81	.1171
				64	-.1140			68	-.1289			72	.1147			77	.1718	82	.1099
												73	-.1387			78	-.1302	83	.1425
																		85	-.1227

TABLE IV.- Continued

MACH NO. = 2.960 ALPHA = 11.94

MODEL STATION, X																					
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)			
UPPER SURFACE																					
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP		
86	-.0804	87	-.0210	88	-.0317	1	-.0402	7	-.0811	13	-.1243	20	-.1363	26	-.0507	34	-.1320	40	-.0665	49	-.0748
				2	-.1281	8	-.1301	14	-.1370	21	-.1373	27	-.1394	35	-.1342	41	-.1105	50	-.1180		
				3	-.1257	9	-.1327	15	-.1365	22	-.1373	28	-.1409	36	-.1342	42	-.1412	51	-.1376		
				4	-.1253	10	-.1316	16	-.1346	23	-.1399	29	-.1368	37	-.1355	43	-.1373	52	-.1357		
				5	-.1239	11	-.1327	17	-.1365	24	-.1409	30	-.1378	38	-.1346	44	-.1333	53	-.1278		
				6	-.1248	12	-.1327	18	-.1351	25	-.1347	31	-.1378	39	-.0779	45	-.1338	54	-.1260		
								19	-.1360			32	-.1404			46	-.1342	55	-.1281		
												33	-.1414			47	-.1333	56	-.1260		
																48	-.1346	57	-.1096		
																		58	-.1245		
																		59	-.1285		
																		60	-.1274		
LOWER SURFACE																					
				N	CP			N	CP			N	CP			N	CP	N	CP		
				61	.1525			65	.1647			69	.1565			74	.1438	79	.0890		
				62	.1572			66	.1647			70	.1657			75	.1548	80	.1126		
				63	.1497			67	.1689			71	.1745			76	.1720	81	.1470		
				64	-.1253			68	-.1374			72	.1410			77	.1970	82	.1401		
												73	-.1450			78	-.1346	83	.1655		
																		85	-.1281		

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = -4.11

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	-.0394	87	.0147	88	-.0238			89	-.0155			94	-.0089			95	.0060		
				1	-.0087	7	-.0416	13	-.0009	20	-.0031	26	.0077	34	.0006	40	.0182	49	-.0349
				2	.0022	8	.0077	14	-.0056	21	.0054	27	-.0003	35	.0035	41	.0158	50	.0239
				3	.0110	9	.0118	15	-.0035	22	.0221	28	-.0031	36	.0172	42	.0148	51	-.0199
				4	.0261	10	.0238	16	.0011	23	.0496	29	-.0049	37	.0441	43	.0089	52	.0243
				5	.0339	11	.0393	17	.0121	24	.0656	30	.0009	38	.0691	44	.0060	53	.0243
				6	.0516	12	.0559	18	.0251	25	.0874	31	.0112	39	-.0376	45	.0040	54	.0183
								19	.0454			32	.0312			46	.0075	55	.0223
												33	.0685			47	.0304	56	.0264
																48	.0666	57	-.0168
																		58	.0272
																		59	.0514
																		60	.0711
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	-.0472			65	-.0529			69	-.0221			74	-.0395	79	.0122
				62	-.0503			66	-.0581			70	-.0628			75	-.0659	80	-.0563
				63	-.0483			67	-.0566			71	-.0622			76	-.0679	81	-.0680
				64	.0656			68	.0667			72	-.0628			77	-.0664	82	-.0720
												73	.0926			78	.0857	83	-.0632
																		85	.0800

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = -2.10

MODEL STATION, X																																																																																																																																																																																															
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)																																																																																																																																																																													
UPPER SURFACE																																																																																																																																																																																															
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP																																																																																																																																																																												
86	-.0394	87	.0001	88	-.0269	7	-.0410	89	-.0030	94	-.0278	95	-.0146	49	-.0357	1	-.0124	8	-.0123	13	-.0150	20	-.0249	26	-.0054	34	-.0224	40	.0158	50	.0078	2	-.0139	9	-.0077	14	-.0238	21	-.0192	27	-.0135	35	-.0195	41	.0011	51	.0050	3	-.0082	10	.0009	15	-.0223	22	-.0014	28	-.0226	36	-.0082	42	-.0033	52	.0030	4	.0048	11	.0169	16	-.0212	23	.0249	29	-.0255	37	.0207	43	-.0087	53	.0042	5	.0162	12	.0370	17	-.0113	24	.0473	30	-.0244	38	.0461	44	-.0175	54	-.0043	6	.0318	18	.0022	19	.0204	25	.0651	31	-.0135	39	-.0371	45	-.0195	55	-.0047													46	-.0185	56	-.0035													47	.0031	57	-.0374													48	.0461	58	.0005															59	.0191															60	.0461
LOWER SURFACE																																																																																																																																																																																															
				N	CP			N	CP			N	CP			N	CP	N	CP																																																																																																																																																																												
				61	-.0015			65	-.0051			69	-.0072			74	-.0097	79	.0340					62	-.0290			66	-.0347			70	-.0117	75	-.0283	80	.0042					63	-.0306			67	-.0368			71	-.0416	76	-.0478	81	-.0394					64	.0537			68	.0537			72	-.0433	77	-.0473	82	-.0587													73	.0765	78	.0686	83	-.0511															85	.0663																																																																																				

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = -1.11

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0196	87	-.0049	88	-.0283	7	.0189	89	.0019	20	-.0338	94	-.0356	34	-.0335	95	-.0242	49	.0252
				1	-.0137	8	-.0224	13	-.0215	21	-.0293	26	-.0098	35	-.0315	40	.0027	50	.0018
				2	-.0220	9	-.0166	14	-.0309	22	-.0126	27	-.0184	36	-.0203	41	-.0051	51	-.0010
				3	-.0168	10	-.0086	15	-.0319	23	.0149	28	-.0293	37	.0091	42	-.0114	52	-.0042
				4	-.0059	11	.0063	16	-.0314	24	.0407	29	-.0356	38	.0345	43	-.0168	53	-.0046
				5	.0055	12	.0315	17	-.0231	25	.0464	30	-.0350	39	.0218	44	-.0276	54	-.0143
				6	.0211			18	-.0101			31	-.0264			45	-.0330	55	-.0183
								19	.0071			32	-.0017			46	-.0305	56	-.0171
												33	.0378			47	-.0100	57	-.0461
																48	.0370	58	-.0131
																		59	.0087
																		60	.0373
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0060			65	.0076			69	-.0000			74	-.0031	79	.0434
				62	-.0122			66	-.0184			70	.0114			75	.0008	80	.0180
				63	-.0158			67	-.0220			71	-.0252			76	-.0349	81	-.0139
				64	.0492			68	.0513			72	-.0275			77	-.0325	82	-.0373
												73	.0642			78	.0644	83	-.0405
																		85	.0595

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = -.09

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0504	87	-.0083	88	-.0286			89	.0078			94	-.0450			95	-.0343		
				1	-.0161	7	.0495	13	-.0286	20	-.0456	26	-.0152	34	-.0455	40	-.0054	49	.0539
				2	-.0296	8	-.0307	14	-.0380	21	-.0393	27	-.0267	35	-.0440	41	-.0122	50	-.0045
				3	-.0276	9	-.0284	15	-.0411	22	-.0284	28	-.0382	36	-.0333	42	-.0196	51	-.0102
				4	-.0156	10	-.0210	16	-.0426	23	.0042	29	-.0473	37	-.0044	43	-.0269	52	-.0134
				5	-.0073	11	-.0066	17	-.0343	24	.0266	30	-.0479	38	.0220	44	-.0401	53	-.0162
				6	.0094	12	.0209	18	-.0239	25	.0363	31	-.0416	39	.0523	45	-.0470	54	-.0283
								19	-.0062			32	-.0141			46	-.0435	55	-.0343
												33	.0243			47	-.0225	56	-.0372
																48	.0259	57	-.0529
																		58	-.0295
																		59	-.0005
																		60	.0241
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0125			65	.0166			69	.0065			74	.0029	79	.0451
				62	.0031			66	.0062			70	.0151			75	.0112	80	.0241
				63	.0016			67	-.0073			71	-.0089			76	-.0162	81	-.0045
				64	.0353			68	.0338			72	-.0124			77	-.0176	82	-.0073
												73	.0547			78	.0538	83	-.0279
																		85	.0467

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = .90

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0492	87	-.0122	88	-.0293			89	.0143			94	-.0555			95	-.0433		
				1	-.0179	7	.0481	13	-.0361	20	-.0561	26	-.0195	34	-.0579	40	-.0085	49	.0533
				2	-.0361	8	-.0389	14	-.0444	21	-.0521	27	-.0332	35	-.0574	41	-.0203	50	-.0092
				3	-.0350	9	-.0401	15	-.0491	22	-.0361	28	-.0470	36	-.0472	42	-.0261	51	-.0180
				4	-.0272	10	-.0338	16	-.0517	23	-.0091	29	-.0584	37	-.0188	43	-.0364	52	-.0196
				5	-.0184	11	-.0177	17	-.0475	24	.0138	30	-.0584	38	.0139	44	-.0540	53	-.0265
				6	-.0018	12	.0063	18	-.0345	25	.0229	31	-.0498	39	.0511	45	-.0574	54	-.0426
								19	-.0179			32	-.0298			46	-.0555	55	-.0499
												33	.0103			47	-.0359	56	-.0503
																48	.0100	57	-.0595
																		58	-.0370
																		59	-.0196
																		60	.0110
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0201			65	.0247			69	.0132			74	.0100	79	.0465
				62	.0149			66	.0237			70	.0224			75	.0174	80	.0324
				63	.0149			67	.0076			71	.0166			76	.0271	81	.0025
				64	.0211			68	.0195			72	.0035			77	.0003	82	.0098
												73	.0436			78	.0389	83	-.0096
																		85	.0287

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = 1.89

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0495	87	-.0159	88	-.0284			89	.0210			94	-.0631			95	-.0546		
				1	-.0201	7	.0491	13	-.0424	20	-.0677	26	-.0230	34	-.0688	40	-.0141	49	.0536
				2	-.0424	8	-.0511	14	-.0476	21	-.0625	27	-.0385	35	-.0683	41	-.0248	50	-.0173
				3	-.0424	9	-.0488	15	-.0585	22	-.0511	28	-.0528	36	-.0576	42	-.0346	51	-.0238
				4	-.0393	10	-.0448	16	-.0596	23	-.0230	29	-.0688	37	-.0307	43	-.0463	52	-.0294
				5	-.0294	11	-.0310	17	-.0575	24	.0005	30	-.0683	38	-.0009	44	-.0644	53	-.0383
				6	-.0139	12	-.0058	18	-.0497	25	.0062	31	-.0620	39	.0524	45	-.0708	54	-.0584
								19	-.0274			32	-.0431			46	-.0649	55	-.0665
												33	.0022			47	-.0493	56	-.0629
																48	-.0067	57	-.0685
																		58	-.0524
																		59	-.0339
																		60	-.0057
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0272			65	.0329			69	.0239			74	.0172	79	.0507
				62	.0303			66	.0329			70	.0314			75	.0260	80	.0374
				63	.0329			67	.0241			71	.0360			76	.0397	81	.0133
				64	.0048			68	.0080			72	.0274			77	.0206	82	.0181
												73	.0251			78	.0236	83	.0100
																		85	.0165

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = 2.89

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0511	87	-.0154	88	-.0289			89	.0298			94	-.0706			95	-.0654		
				1	-.0201	7	.0503	13	-.0461	20	-.0746	26	-.0253	34	-.0742	40	-.0185	49	.0564
				2	-.0466	8	-.0568	14	-.0534	21	-.0711	27	-.0442	35	-.0776	41	-.0302	50	-.0206
				3	-.0487	9	-.0591	15	-.0643	22	-.0637	28	-.0597	36	-.0678	42	-.0424	51	-.0331
				4	-.0482	10	-.0539	16	-.0663	23	-.0322	29	-.0746	37	-.0395	43	-.0541	52	-.0351
				5	-.0404	11	-.0431	17	-.0679	24	-.0139	30	-.0774	38	-.0131	44	-.0742	53	-.0492
				6	-.0248	12	-.0190	18	-.0570	25	-.0110	31	-.0728	39	.0529	45	-.0800	54	-.0653
								19	-.0388			32	-.0528			46	-.0766	55	-.0737
												33	-.0098			47	-.0585	56	-.0709
																48	-.0204	57	-.0709
																		58	-.0596
																		59	-.0415
																		60	-.0177
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0360			65	.0438			69	.0343			74	.0280	79	.0540
				62	.0449			66	.0438			70	.0428			75	.0358	80	.0467
				63	.0506			67	.0459			71	.0486			76	.0505	81	.0233
				64	-.0128			68	-.0076			72	.0474			77	.0441	82	.0294
												73	.0068			78	.0060	83	.0403
																		85	.0012

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = 3.88

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0496	87	-.0180	88	-.0279			89	.0366			94	-.0757			95	-.0717		
				1	-.0237	7	.0480	13	-.0513	20	-.0786	26	-.0281	34	-.0751	40	-.0233	49	.0528
				2	-.0518	8	-.0665	14	-.0596	21	-.0814	27	-.0539	35	-.0810	41	-.0360	50	-.0282
				3	-.0549	9	-.0688	15	-.0694	22	-.0751	28	-.0740	36	-.0776	42	-.0575	51	-.0459
				4	-.0580	10	-.0682	16	-.0731	23	-.0476	29	-.0797	37	-.0512	43	-.0629	52	-.0524
				5	-.0513	11	-.0562	17	-.0767	24	-.0333	30	-.0849	38	-.0302	44	-.0791	53	-.0556
				6	-.0403	12	-.0367	18	-.0700	25	-.0339	31	-.0831	39	.0515	45	-.0859	54	-.0721
								19	-.0539			32	-.0637			46	-.0874	55	-.0790
												33	-.0316			47	-.0707	56	-.0798
																48	-.0336	57	-.0778
																		58	-.0721
																		59	-.0548
																		60	-.0350
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0454			65	.0522			69	.0417			74	.0373	79	.0536
				62	.0532			66	.0543			70	.0520			75	.0446	80	.0528
				63	.0647			67	.0657			71	.0583			76	.0608	81	.0290
				64	-.0346			68	-.0305			72	.0583			77	.0652	82	.0351
												73	-.0167			78	-.0155	83	.0609
																		85	-.0213

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = 4.90

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP		
86	.0504	87	-.0192	88	-.0275			89	.0463			94	-.0810			95	-.0777		
				1	-.0260	7	.0490	13	-.0592	20	-.0822	26	-.0318	34	-.0787	40	-.0274	49	.0534
				2	-.0571	8	-.0724	14	-.0544	21	-.0873	27	-.0621	35	-.0817	41	-.0426	50	-.0344
				3	-.0603	9	-.0753	15	-.0753	22	-.0844	28	-.0822	36	-.0861	42	-.0758	51	-.0666
				4	-.0655	10	-.0764	16	-.0805	23	-.0555	29	-.0862	37	-.0665	43	-.0768	52	-.0662
				5	-.0644	11	-.0701	17	-.0831	24	-.0570	30	-.0873	38	-.0509	44	-.0797	53	-.0719
				6	-.0571	12	-.0575	18	-.0810	25	-.0529	31	-.0902	39	.0518	45	-.0826	54	-.0715
								19	-.0686			32	-.0787			46	-.0836	55	-.0747
												33	-.0501			47	-.0797	56	-.0767
																48	-.0523	57	-.0759
																		58	-.0795
																		59	-.0687
																		60	-.0505
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0541			65	.0644			69	.0524			74	.0469	79	.0590
				62	.0650			66	.0655			70	.0622			75	.0567	80	.0582
				63	.0691			67	.0738			71	.0725			76	.0713	81	.0401
				64	-.0561			68	-.0509			72	.0576			77	.0806	82	.0470
												73	-.0375			78	-.0367	83	.0743
																		85	-.0433

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = 5.90

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0509	87	-.0193	88	-.0281			89	.0556			94	-.0885			95	-.0842		
				1	-.0281	7	.0495	13	-.0655	20	-.0874	26	-.0330	34	-.0837	40	-.0304	49	.0546
				2	-.0645	8	-.0765	14	-.0728	21	-.0902	27	-.0725	35	-.0851	41	-.0597	50	-.0486
				3	-.0660	9	-.0788	15	-.0806	22	-.0954	28	-.0902	36	-.0881	42	-.0832	51	-.0788
				4	-.0707	10	-.0811	16	-.0847	23	-.0788	29	-.0891	37	-.0783	43	-.0837	52	-.0780
				5	-.0733	11	-.0839	17	-.0858	24	-.0702	30	-.0914	38	-.0646	44	-.0842	53	-.0780
				6	-.0733	12	-.0759	18	-.0884	25	-.0742	31	-.0931	39	.0527	45	-.0832	54	-.0760
								19	-.0842			32	-.0908			46	-.0842	55	-.0772
												33	-.0685			47	-.0881	56	-.0768
																48	-.0661	57	-.0735
																		58	-.0800
																		59	-.0772
																		60	-.0671
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0655			65	.0753			69	.0638			74	.0596	79	.0610
				62	.0748			66	.0769			70	.0759			75	.0679	80	.0671
				63	.0790			67	.0888			71	.0850			76	.0840	81	.0505
				64	-.0759			68	-.0702			72	.0696			77	.1084	82	.0562
												73	-.0593			78	-.0587	83	.0880
																		85	-.0687

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = 7.89

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0499	87	-.0208	88	-.0301	7	.0484	89	.0775	20	-.1005	94	-.0982	34	-.0954	95	-.0954	49	.0550
				1	-.0338	8	-.0908	13	-.0805	21	-.0999	26	-.0392	35	-.0949	40	-.0377	50	-.0824
				2	-.0857	9	-.0908	14	-.0941	22	-.1022	27	-.0994	36	-.0968	41	-.0885	51	-.0912
				3	-.0852	10	-.0925	15	-.0946	23	-.1028	28	-.0982	37	-.0983	42	-.0949	52	-.0896
				4	-.0857	11	-.0931	16	-.0946	24	-.0953	29	-.1011	38	-.0905	43	-.0939	53	-.0872
				5	-.0847	12	-.0982	17	-.0961	25	-.1022	30	-.0999	39	.0523	44	-.0934	54	-.0884
				6	-.0868			18	-.0961			31	-.1016			45	-.0944	55	-.0888
								19	-.0987			32	-.1057			46	-.0929	56	-.0876
												33	-.0948			47	-.0963	57	-.0783
																48	-.0939	58	-.0864
																		59	-.0908
																		60	-.0953
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.0863			65	.0983			69	.0891			74	.0831	79	.0752
				62	.0983			66	.0998			70	.0994			75	.0924	80	.0812
				63	.1009			67	.1149			71	.1097			76	.1105	81	.0772
				64	-.0930			68	-.0987			72	.0948			77	.1427	82	.0804
												73	-.0931			78	-.0910	83	.1122
																		85	-.0977

TABLE IV.- Continued

MACH NO. = 3.300 ALPHA = 9.90

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0483	87	-.0213	88	-.0317			89	.1024			94	-.1091			95	-.1037		
				1	-.0384	7	.0472	13	-.0972	20	-.1091	26	-.0427	34	-.1046	40	-.0479	49	.0530
				2	-.0992	8	-.1011	14	-.1070	21	-.1096	27	-.1125	35	-.1041	41	-.0973	50	-.0900
				3	-.0998	9	-.1033	15	-.1049	22	-.1102	28	-.1096	36	-.1066	42	-.1061	51	-.1029
				4	-.0977	10	-.1045	16	-.1065	23	-.1148	29	-.1079	37	-.1100	43	-.1032	52	-.0989
				5	-.0982	11	-.1033	17	-.1055	24	-.1114	30	-.1096	38	-.1071	44	-.1046	53	-.0965
				6	-.0992	12	-.1074	18	-.1060	25	-.1125	31	-.1085	39	.0513	45	-.1037	54	-.0989
								19	-.1070			32	-.1131			46	-.1046	55	-.0977
												33	-.1125			47	-.1041	56	-.0981
																48	-.1100	57	-.0836
																		58	-.0965
																		59	-.1009
																		60	-.1021
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.1133			65	.1242			69	.1182			74	.1094	79	.0856
				62	.1221			66	.1278			70	.1274			75	.1212	80	.0993
				63	.1216			67	.1387			71	.1389			76	.1378	81	.1041
				64	-.1034			68	-.1117			72	.1142			77	.1700	82	.1065
												73	-.1114			78	-.1110	83	.1432
																		85	-.1069

TABLE IV.- Concluded

MACH NO. = 3.300 ALPHA = 11.88

MODEL STATION, X																			
49.213 (19.375)		59.373 (23.375)		69.533 (27.375)		74.534 (29.344)		79.535 (31.313)		84.773 (33.375)		90.013 (35.438)		96.916 (38.156)		103.823 (40.875)		119.063 (46.875)	
UPPER SURFACE																			
N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP
86	.0482	87	-.0219	88	-.0334			89	.1314			94	-.1138			95	-.1097		
				1	-.0417	7	.0477	13	-.1077	20	-.1132	26	-.0422	34	-.1101	40	-.0671	49	.0521
				2	-.1082	8	-.1086	14	-.1139	21	-.1155	27	-.1144	35	-.1092	41	-.0970	50	-.0930
				3	-.1082	9	-.1121	15	-.1124	22	-.1155	28	-.1161	36	-.1106	42	-.1136	51	-.1119
				4	-.1056	10	-.1115	16	-.1129	23	-.1195	29	-.1126	37	-.1131	43	-.1106	52	-.1103
				5	-.1066	11	-.1104	17	-.1118	24	-.1212	30	-.1144	38	-.1145	44	-.1106	53	-.1050
				6	-.1072	12	-.1138	18	-.1124	25	-.1172	31	-.1138	39	.0512	45	-.1097	54	-.1075
								19	-.1134			32	-.1161			46	-.1106	55	-.1059
												33	-.1224			47	-.1097	56	-.1079
																48	-.1141	57	-.0914
																		58	-.1042
																		59	-.1083
																		60	-.1067
LOWER SURFACE																			
				N	CP			N	CP			N	CP			N	CP	N	CP
				61	.1428			65	.1553			69	.1497			74	.1401	79	.0996
				62	.1485			66	.1579			70	.1588			75	.1528	80	.1173
				63	.1444			67	.1646			71	.1708			76	.1695	81	.1343
				64	-.1108			68	-.1186			72	.1405			77	.1993	82	.1338
												73	-.1224			78	-.1180	83	.1689
																		85	-.1099

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