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Subsonic Speeds on a Model of a Swept-Wing
Aircraft (Hawker P.1052) and some
Comparisons with Flight Data

By

J. R. COLLINGBOURNE and A. C. S. PINDAR

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Summary.—Basic results are given of measurements in the Royal Aircraft Establishment 10-ft × 7-ft Subsonic Wind Tunnel over a range of lift coefficient at Mach numbers up to 0.93, the Reynolds number being 1.75 million. Though a really full analysis has not been possible, the data are discussed briefly and are compared with flight results on two aircraft of the type.

The tunnel-flight comparisons show reasonable agreement as regards the onset of longitudinal instability and the general characteristics of the pressure distributions on the wing. Full comparisons are not possible because of the absence of comprehensive and accurate flight measurements of pressure distribution.

1. *Introduction.*—The Hawker P.1052 is a single-seat research aircraft powered by one Rolls-Royce *Nene* jet engine. The wings are sweptback 35 deg on the quarter-chord line and the wing section has a thickness/chord ratio of 10 per cent.

Pressure measurements have been made in flight on two aircraft, VX.272 and VX.279, the former at R.A.E. and the latter by Hawker Aircraft, Ltd. A 1/7 scale model of the aircraft less tail unit was made for test in the R.A.E. 10-ft by 7-ft Subsonic Wind Tunnel, the primary object being to make direct comparisons between the pressure distributions at high subsonic Mach numbers along four corresponding chordwise sections on the wings of the model and actual aircraft. These model tests were made during July and December, 1950.

For various reasons, no satisfactory flight programme of pressure plotting was completed. A fairly comprehensive set of results was obtained by the firm, but because the time available was short this adversely affected the experimental accuracy. The tests at R.A.E. on VX.272 were twice interrupted by accidents involving damage to the airframe, for which and other reasons pressure plots were obtained only at one spanwise station and over small ranges of speed and lift coefficient.

It has not, up to the present, been possible to make a thorough analysis of the wind-tunnel results, including comparisons with theory. This report gives the full results as tabulated pressure coefficients, and some of them are shown graphically so as to indicate the more general trends. So far as is possible, comparisons are made with the results from flight.

* R.A.E. Tech. Note Aero. 2221, received 13th July, 1953.

Balance measurements, made on the same wind-tunnel model, are also reported and compared briefly with flight data.

2. *Details of Wind-Tunnel Experiments.*—Fig. 1 is a general-arrangement sketch of the half-span model showing the positions of the four lines of pressure holes that were incorporated. The model had no tail unit; wing and fuselage were integral and made of laminated teak. Dimensions are given in Table 1, details of the wing sections in Fig. 2 and details of the engine duct in Fig. 3. The engine itself was not represented and the geometry of the duct was not altered during the experiment. The model, on a stub, was fixed to the main wind-tunnel balance, a small clearance being maintained between the base of the half-fuselage and the tunnel floor. Flow of air between the 'dead-space' and working-section of the wind tunnel by way of this clearance was prevented by a mercury-filled labyrinth seal.

The positions of the pressure orifices were as indicated in the first columns of the tabulated results (Table 2). Note that for the innermost line of holes, positions are given with respect to the 'basic' wing chord as are the section ordinates in Fig. 2. During pressure measurements, the internal tubes were connected to an alcohol-manometer installation; they were blanked off during balance measurements.

Pressures and force data were obtained separately over a range of Mach numbers between 0.4 and about 0.93. At each Mach number the attitude of the fuselage datum was varied between 0 deg and 15 deg for force data and between 0 deg and 9 deg for pressure data (the wing chord-plane was set at 0.5 deg to the datum). The balance measurements included lift, drag, pitching moment about the axis quoted in Table 1 and rolling moment of the half-model about the axis of symmetry. Some of the measurements were repeated with a thread near the leading edge of the wing to procure transition to turbulence in the boundary layer. A Nylon thread of about 0.01-in. diameter was used.

The Reynolds number of the tests was held constant at 1.75×10^6 on the basis of the standard mean wing chord.

The model incidence has been corrected for lifting constraint by standard methods and the Mach-number correction for blockage has been obtained by the methods of Ref. 1. Appropriate corrections have also been applied to the measured forces, moments and pressure coefficients.

3. *Details of Flight Data Used.*—The flight data used for comparison with the balance measurements are those reported in Ref. 2, the values of force and moment coefficients being adapted to the definition of wing area and mean chord used for the wind-tunnel model.

Pressure data taken in flight during 1949 on aircraft VX.279 were provided by Hawker Aircraft, Ltd. As the firm point out, the pressure gauges used had grave disadvantages. Some of the air-speed indicators, which could record only pressures positive with respect to an ambient-fuselage-pressure datum, were at times stuck at their bottom stops. Attempts have been made to eliminate readings which are clearly erroneous, but the data still show excessive scatter at the higher flight speeds. The aircraft wing was finished with a high-grade polished cellulose surface. Measurements by the Company of the contours at the lines of pressure holes showed that the sections were smoothly faired and to the theoretical shape within 0.0007 of the chord except for the air-intake lips, which were very slightly drooped, and the trailing edges, which had a finite thickness of the general order of 0.003 of the chord (this accuracy of profile is probably comparable with that of the model, though the latter was not measured except in routine workshop inspection). The flight data were obtained in level flight at altitudes of 6,000 ft, 20,000 ft and 35,000 ft. Position error applied to equivalent airspeed was based on tests made previously at the Aeroplane and Armament Experimental Establishment*.

* Revised position-error curves were supplied later by Hawker Aircraft. These gave speed differences, as compared with those embodied in the results, of up to 1 per cent. It has not been considered that the labour of applying this revision would be worthwhile for the tunnel-flight comparisons made.

The R.A.E. have provided results of flights on aircraft VX.272, additional to those of Ref. 2. During these flights the external condition of the aircraft was the same as during the drag measurements² and speed corrections applied were as detailed in Ref. 2.

4. *Results and Discussion.*—4.1. *Wind-Tunnel Balance Data and Flight Boundaries.*—The results of the balance measurements, with some flight results from Ref. 2 for comparison, are given in Figs. 4 to 9. Boundaries representing the onset in flight of buffeting and longitudinal instability, and also the maximum-lift boundary, have been superposed in Fig. 4 on the curves of lift against Mach number from the wind tunnel. No particularly striking correlation is noticeable, though there is a suggestion that pre-stall buffeting corresponds with the peaks in the \bar{C}_L v. M curves at constant incidence. The model reaches lift coefficients beyond the flight maximum-lift boundary; it will be realised, however, that trimming requirements would reduce the lift coefficients as measured by about 0.03 near the boundary and also that maximum lift is not easily determined precisely in flight. The buffeting and instability boundaries can be more closely related to changes in span loading and pitching moment. From Fig. 6 it can be seen that buffeting appears at the stage where, on account of tip stalling, the spanwise centre of load moves inboard as the load is increased at a given Mach number. Fig. 9 shows that buffeting and instability occur in the region of the marked change (in the unstable sense as lift is increased) in the slope of the pitching-moment curves which is an associated effect of tip stalling. These comparisons tend to suggest that buffeting arises as a wing vibration on this aircraft, since stalling of the wing tips would be unlikely to excite vibration of the tail structure directly. As regards longitudinal instability, it is of course possible that it is aggravated in flight by loss of the tailplane contribution because of increased downwash when the wing load becomes concentrated inboard.

Overall drag results are compared in Figs. 7 and 8. In view of the absence of a tailplane from the model and of the difference in Reynolds number at model and full scales, the agreement may be considered fairly good. The model results show some pessimism as regards drag divergence at low lift coefficients, but the drag increase due to lift is rather higher in flight.

4.2. *Pressure Distribution on Model.*—Not all the results given in Tables 2 and 3 have been plotted out for this report. A selection has been put into the form of isobar patterns on the upper surface of the wing, at various Mach numbers and low lift coefficients, in Fig. 10. For Mach numbers below 0.88, results for the smooth wing are shown because there is little difference between the results with and without transition thread on the model. Both results are shown for the Mach number 0.885 which represents an intermediate stage; for the two higher Mach numbers the results with thread are given because, as will be seen, they agree better with the flight data in detail. A full discussion of the isobar patterns is not given here; their general character and variation with Mach number are such as have become familiar for moderately swept, tapered wings of the order of 10 per cent thick (see, for example, Ref. 3).

The effect of transition thread at high speed is typified by the distributions shown in Fig. 11 for the Mach number 0.915 and lift coefficient about 0.1. The result is similar to that found in attempting to produce a turbulent boundary layer by such means in Ref. 4; the shock wave is made sharper and brought forward on the wing chord. Local irregularities near the position of the thread itself were faired, as indicated, in producing the isobars of Fig. 10.

The 'perspective' plots of Fig. 12 have been included to illustrate interesting features in the pressure levels on the model which occur near the leading edge and especially near the wing tip at high Mach numbers and lift coefficients. At low speeds, very high suction peaks near the leading edge are accompanied near the wing tip by a secondary peak towards the trailing edge. The latter peak is believed to indicate the existence of a 'tip vortex' as described in Ref. 5. For higher Mach numbers, however, at which the suction peaks near the leading edge collapse, the rear peak has lost its separate identity and becomes merged into the rather flatter pressure distribution associated with extensive flow separation on the upper surface of the stalled tip region. This change with Mach number can readily be seen in its effect on the local lift, loading and pitching moments, shown in Figs. 13 to 17. Part of Fig. 15 has been dotted to indicate that there

is probably a small local peak in the loading near the tip, associated with the 'tip vortex' just discussed. A noteworthy feature of the curves of local form drag (Fig. 16) is that increase of thrust near the wing tip as the Mach number is increased persists to a stage well beyond that at which increase of local drag near the root sets in

4.3. *Comparison of Pressure Distributions from Model and Flight Tests.*—Pressure distributions on the model are compared in Figs. 19, 20 and 21 with flight results by Hawker Aircraft, Ltd. for Mach numbers below 0.9 and in Fig. 22 with flight results by R.A.E. for Mach numbers between 0.88 and 0.93. The wind-tunnel results have of course been chosen (in some cases interpolated) to correspond with the others as regards lift coefficient.

For the lower flight speeds the agreement is reasonably good in the sense that the tunnel curves in many cases represent almost as good faired curves through the flight results as could be drawn. The curves incidentally show that, as indicated earlier, the transition-thread had little effect at low and moderate speeds. In some cases (for example $M = 0.4$, $C_L = 0.5$, 47.9 per cent semi-span) the pressure distributions from flight and tunnel differ systematically by a small amount over most of the rear of the profile: this appears to be bound up with difference in the boundary-layer conditions as shown by the differing amounts of pressure recovery at the trailing edge. It will be observed that the hump, suggestive of the existence of a tip vortex, which was noted in discussing the model plots of Fig. 12, can also be seen in the flight results for $C_L = 0.5$ (Fig. 19) in a more pronounced form (this might be due to a very small difference in the spanwise position of the vortex core).

The agreement between flight and tunnel for the higher Mach numbers (Figs. 21 and 22) is rather less close. The flight results are noticeably the more scattered in the sense that the chordwise distributions are not smooth. The comparison is pursued further in Fig. 23 as regards the position on the wing upper surface of the trace of the shock wave at Mach number 0.88 to 0.89. The position plotted as a locus is defined as indicated on the inset diagram. The agreement is fairly good if the tunnel results with transition thread are considered. At the highest Mach numbers reached in flight at R.A.E. (0.93 to 0.95) there appear to be large changes in the pressure distribution for small changes in Mach number at approximately constant lift coefficient. Figs. 24 and 25 illustrate this. On closer investigation (Fig. 26) it appears that as the Mach number is increased through the value 0.93, rearward shock movement is sharply accelerated. This suggestion cannot be firmly based because, among other things, of the variation in aileron angle between the flight points. However, it is perhaps significant that 0.93 is the value of Mach number at which 'wing dropping' is reported to be encountered on this aircraft.

As a final matter of incidental interest, Fig. 18 shows hinge-moment data obtained by integrating the wind-tunnel pressure plots on the outer stations. These of course correspond to zero control deflection. The analysis was made primarily in relation to reports of a tendency to aileron up-float on another somewhat similar swept-wing aircraft, and shows that it would be reasonable to expect such a tendency.

5. *Concluding Remarks.*—The wind-tunnel results should prove useful for comparisons with theory, on further analysis. The limited comparisons which have been made with flight tests, the primary object of the wind-tunnel experiments, have proved encouraging. They cannot, however, be extended very far at present because of the lack of comprehensive and accurate pressure measurements from flight.

6. *Acknowledgement.*—The authors are indebted, for the provision and interpretation of flight data, to Hawker Aircraft, Ltd., and to their colleagues at the Royal Aircraft Establishment.

NOTATION

C_p	Local pressure coefficient
c	Local wing chord
x	Distance along chord from leading edge
y	Spanwise distance from plane of symmetry
z	Distance normal to chord plane
η	Spanwise distance \div wing semi-span, y/s
\bar{C}_L	Overall lift coefficient (balance measurement or flight value)
\bar{C}_D	Overall drag coefficient (balance measurement or flight value)
\bar{C}_m	Overall pitching-moment coefficient (balance measurement or flight value)
α	Incidence of fuselage datum
M	Mach number
$\bar{\eta}_L$	Spanwise centre of lift (fraction of semi-span)
$k =$	$\pi A (\partial \bar{C}_D / \partial \bar{C}_L^2)$ with M constant
A	Aspect ratio
C_L	Local lift coefficient from pressure plots
\bar{c}	Wing mean chord
C_D	Local form-drag coefficient from pressure plots
C_m	Local pitching-moment coefficient from pressure plots (further suffix indicates axis)
C_H	Local hinge-moment coefficient from pressure plots
x_s	Chordwise location of shockwave (<i>see</i> Fig. 26), distance from leading edge
C_{La}	Lift coefficient of full-scale aircraft
x_T	Chordwise location of transition thread (distance from leading edge)

Overall coefficients are based on the geometry of the basic wing (*see* Fig. 1)

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TABLE 1

Dimensions of 1/7 Scale Model of Hawker P.1052

Basic Wing (dotted lines, Fig. 1)

Gross area	2.73 sq ft
Gross mean chord	1.213 ft
Gross semi-span	2.25 ft
Gross aspect ratio	3.71
Projected chord at plane of symmetry	1.85 ft
Projected tip chord	0.588 ft
Taper ratio	0.319
Sweepback of leading edge	35.25 deg
Sweepback of $\frac{1}{4}$ -chord line	35 deg
Sweepback of line of maximum thickness	32.8 deg
Dihedral	1.75 deg
Setting of wing to fuselage datum	0.5 deg
Section along wind	Symmetrical, 10 per cent thick (see Fig. 2)

Fuselage

Overall length	5.40 ft
Maximum half width/wing semi-span	0.154
Distance, nose to apex of leading edges	0.985 ft
Fineness ratio based on width	1 : 7.8

Axis of Moments

Distance, apex of leading edges to gross mean quarter-chord point	1.11 ft
Axis of moments at	0.27 \bar{c}

Position of Transition Thread

Thread was 2 in. from the leading edge on upper and lower surfaces

Spanwise position of station (η)	0.212	0.479	0.790	0.964
Position of thread (x_T/c)	0.105	0.134	0.196	0.263

TABLE 2

List of Measured Pressures on Smooth Wing

C_p at $\alpha = -0.6$ deg, $y/s = 0.212$

M	0.40	0.70	0.80	0.83	0.865	0.885	0.90	0.915	0.925
Upper									
$x/c = +0.05$	+0.819	+0.924	+0.968	+0.973	+0.990	+1.012	+1.014	+1.021	+1.038
0.07	-0.010	+0.016	+0.024	+0.014	+0.035	0.043	+0.057	+0.062	+0.064
0.10	-0.154	-0.153	-0.158	-0.157	-0.145	-0.139	-0.128	-0.124	-0.122
0.135	-0.205	-0.219	-0.229	-0.215	-0.223	-0.218	-0.212	-0.207	-0.203
0.245	-0.211	-0.230	-0.242	-0.228	-0.239	-0.237	-0.227	-0.221	-0.221
0.36	-0.226	-0.262	-0.294	-0.293	-0.313	-0.311	-0.298	-0.286	-0.278
0.47	-0.187	-0.224	-0.264	-0.255	-0.276	-0.284	-0.286	-0.292	-0.298
0.52	-0.190	-0.230	-0.272	-0.291	-0.305	-0.299	-0.294	-0.294	-0.298
0.565	-0.190	-0.237	-0.286	-0.306	-0.342	-0.344	-0.339	-0.334	-0.334
0.63	-0.177	-0.224	-0.274	-0.297	-0.346	-0.370	-0.377	-0.373	-0.378
0.70	-0.182	-0.232	-0.285	-0.312	-0.372	-0.388	-0.397	-0.395	-0.400
0.755	-0.159	-0.202	-0.242	-0.269	-0.355	-0.438	-0.434	-0.454	-0.457
0.81	-0.131	-0.164	-0.190	-0.204	-0.227	-0.349	-0.443	-0.460	-0.467
0.925	-0.105	-0.124	-0.134	-0.138	-0.134	-0.125	-0.144	-0.324	-0.539
1.035	+0.026	+0.028	+0.036	+0.039	0.047	+0.054	+0.051	+0.033	-0.039
+1.15	+0.099	+0.103	+0.110	+0.115	0.122	+0.130	+0.124	+0.119	+0.089
Lower									
$x/c = +1.035$	+0.011	+0.017	+0.026	+0.029	+0.045	+0.060	+0.060	+0.050	-0.018
0.925	-0.091	-0.108	-0.117	-0.119	-0.110	-0.100	-0.110	-0.188	-0.404
0.81	-0.128	-0.161	-0.187	-0.194	-0.208	-0.257	-0.417	-0.446	-0.465
0.70	-0.168	-0.214	-0.258	-0.284	-0.357	-0.422	-0.434	-0.445	-0.449
0.565	-0.230	-0.288	-0.349	-0.378	-0.412	-0.421	-0.420	-0.410	-0.403
0.47	-0.217	-0.272	-0.316	-0.333	-0.359	-0.364	-0.354	-0.344	-0.340
0.36	-0.256	-0.307	-0.344	-0.344	-0.339	-0.330	-0.323	-0.314	-0.308
0.245	-0.268	-0.310	-0.347	-0.324	-0.323	-0.312	-0.308	-0.292	-0.283
0.135	-0.219	-0.229	-0.205	-0.168	-0.122	-0.091	-0.072	-0.051	-0.037
0.10	-0.278	-0.380	-0.458	-0.443	-0.433	-0.419	-0.416	-0.377	-0.361
+0.08	+0.839	+0.944	+0.998	+1.017	+1.036	+1.059	+1.065	+1.075	+1.089

TABLE 2—continued

C_p at $\alpha = -0.6$ deg, $y/s = 0.479$

M	0.40	0.70	0.80	0.83	0.865	0.885	0.90	0.915	0.925
Upper									
$x/c = +0.00$	+0.556	+0.572	+0.573	+0.572	+0.586	+0.595	+0.599	+0.607	+0.614
0.02	-0.120	-0.097	-0.076	-0.068	-0.066	-0.060	-0.053	-0.044	-0.042
0.04	-0.201	-0.201	-0.191	-0.184	-0.182	-0.175	-0.172	-0.162	-0.158
0.07	-0.229	-0.246	-0.246	-0.238	-0.239	-0.232	-0.227	-0.216	-0.212
0.10	-0.255	-0.281	-0.287	-0.282	-0.284	-0.277	-0.270	-0.258	-0.253
0.20	-0.281	-0.330	-0.362	-0.363	-0.374	-0.388	-0.386	-0.377	-0.371
0.30	-0.289	-0.350	-0.403	-0.419	-0.443	-0.440	-0.448	-0.443	-0.439
0.35	-0.282	-0.346	-0.404	-0.424	-0.466	-0.458	-0.463	-0.474	-0.475
0.40	-0.277	-0.341	-0.407	-0.431	-0.477	-0.479	-0.468	-0.481	-0.493
0.45	-0.254	-0.320	-0.390	-0.442	-0.479	-0.487	-0.478	-0.472	-0.486
0.50	-0.240	-0.304	-0.371	-0.407	-0.485	-0.516	-0.509	-0.494	-0.498
0.55	-0.215	-0.272	-0.335	-0.375	-0.451	-0.514	-0.540	-0.527	-0.524
0.60	-0.168	-0.218	-0.263	-0.316	-0.423	-0.473	-0.511	-0.526	-0.522
0.70	-0.083	-0.105	-0.121	-0.113	-0.085	-0.404	-0.462	-0.481	-0.497
0.80	-0.023	-0.034	-0.039	-0.038	-0.013	+0.034	-0.051	-0.430	-0.459
0.90	+0.027	+0.031	+0.037	+0.042	+0.060	+0.085	+0.107	+0.106	-0.289
+1.00	+0.149	+0.173	+0.188	+0.202	+0.220	+0.241	+0.250	+0.263	+0.227
Lower									
$x/c = +0.90$	+0.018	+0.019	+0.027	+0.036	+0.057	+0.088	+0.115	+0.129	-0.192
0.80	-0.041	-0.053	-0.055	-0.047	-0.017	+0.039	-0.017	-0.447	-0.501
0.70	-0.120	-0.145	-0.159	-0.140	-0.091	-0.425	-0.505	-0.520	-0.544
0.60	-0.184	-0.240	-0.276	-0.324	-0.466	-0.491	-0.541	-0.568	-0.573
0.50	-0.258	-0.328	-0.399	-0.440	-0.523	-0.564	-0.570	-0.568	-0.565
0.40	-0.301	-0.375	-0.448	-0.483	-0.538	-0.557	-0.553	-0.540	-0.552
0.30	-0.306	-0.380	-0.445	-0.466	-0.493	-0.488	-0.474	-0.459	-0.453
0.20	-0.307	-0.373	-0.426	-0.432	-0.433	-0.420	-0.411	-0.403	-0.396
0.10	-0.328	-0.344	-0.385	-0.380	-0.369	-0.357	-0.348	-0.333	-0.322
+0.05	-0.234	-0.276	-0.300	-0.284	-0.261	-0.245	-0.251	-0.214	-0.202

TABLE 2—continued

C_p at $\alpha = -0.6$ deg, $y/s = 0.790$

M	0.40	0.70	0.80	0.83	0.865	0.885	0.90	0.915	0.925
Upper									
$x/c = +0.00$	+0.590	+0.608	+0.608	+0.606	+0.604	+0.610	+0.607	+0.608	+0.611
0.02	-0.109	-0.117	-0.116	-0.107	-0.110	-0.102	-0.099	-0.084	-0.079
0.04	-0.201	-0.229	-0.243	-0.244	-0.245	-0.237	-0.236	-0.224	-0.216
0.07	-0.264	-0.312	-0.344	-0.348	-0.357	-0.350	-0.349	-0.340	-0.330
0.10	-0.290	-0.348	-0.395	-0.410	-0.427	-0.421	-0.419	-0.412	-0.402
0.20	-0.295	-0.371	-0.442	-0.471	-0.535	-0.542	-0.543	-0.542	-0.530
0.25	-0.284	-0.359	-0.430	-0.463	-0.535	-0.544	-0.547	-0.546	-0.535
0.30	-0.284	-0.349	-0.434	-0.472	-0.560	-0.575	-0.576	-0.575	-0.563
0.35	-0.272	-0.345	-0.421	-0.463	-0.560	-0.618	-0.624	-0.627	-0.613
0.40	-0.248	-0.316	-0.386	-0.428	-0.512	-0.585	-0.595	-0.648	-0.638
0.45	-0.231	-0.292	-0.348	-0.389	-0.489	-0.547	-0.588	-0.656	-0.663
0.50	-0.207	-0.258	-0.298	-0.326	-0.471	-0.546	-0.566	-0.618	-0.674
0.60	-0.144	-0.161	-0.168	-0.123	-0.093	-0.346	-0.570	-0.585	-0.626
0.70	-0.051	-0.061	-0.061	-0.052	-0.020	+0.026	-0.080	-0.518	-0.611
0.80	-0.001	+0.002	+0.011	+0.019	+0.041	0.076	+0.086	-0.030	-0.460
0.90	+0.045	0.062	0.078	0.086	0.104	0.125	0.141	+0.115	-0.018
+1.00	+0.144	+0.175	+0.196	+0.206	+0.215	+0.220	+0.212	+0.190	+0.081
Lower									
$x/c = +0.90$	+0.041	+0.053	+0.068	+0.081	+0.102	+0.129	+0.136	+0.087	-0.057
0.80	-0.004	-0.002	+0.008	+0.017	+0.047	0.080	+0.057	-0.074	-0.253
0.70	-0.065	-0.073	-0.070	-0.061	-0.015	+0.011	-0.128	-0.362	-0.579
0.60	-0.164	-0.188	-0.184	-0.156	-0.090	-0.391	-0.597	-0.617	-0.616
0.50	-0.220	-0.287	-0.341	-0.347	-0.523	-0.585	-0.605	-0.620	-0.648
0.40	-0.280	-0.356	-0.431	-0.483	-0.589	-0.644	-0.675	-0.676	-0.671
0.30	-0.298	-0.381	-0.467	-0.510	-0.603	-0.614	-0.607	-0.597	-0.590
0.20	-0.302	-0.382	-0.459	-0.508	-0.549	-0.548	-0.539	-0.526	-0.517
0.10	-0.294	-0.360	-0.420	-0.443	-0.452	-0.442	-0.431	-0.417	-0.406
+0.05	-0.256	-0.307	-0.345	-0.405	-0.398	-0.386	-0.373	-0.361	-0.351

TABLE 2—continued

C_p at $\alpha = -0.6$ deg, $y/s = 0.964$

M	0.40	0.70	0.80	0.83	0.865	0.885	0.90	0.915	0.925
Upper									
$x/c = +0.00$	+0.529	+0.538	+0.533	+0.519	+0.516	+0.521	+0.517	+0.519	+0.525
0.02	-0.155	-0.187	-0.205	-0.200	-0.190	-0.178	-0.170	-0.155	-0.148
0.04	-0.254	-0.323	-0.377	-0.374	-0.376	-0.367	-0.354	-0.339	-0.331
0.07	-0.256	-0.360	-0.499	-0.520	-0.535	-0.523	-0.512	-0.497	-0.475
0.10	-0.258	-0.353	-0.470	-0.558	-0.620	-0.616	-0.608	-0.594	-0.574
0.15	-0.257	-0.340	-0.427	-0.499	-0.647	-0.659	-0.658	-0.650	-0.630
0.20	-0.242	-0.315	-0.387	-0.434	-0.616	-0.674	-0.684	-0.684	-0.666
0.25	-0.224	-0.291	-0.351	-0.379	-0.543	-0.632	-0.676	-0.694	-0.681
0.30	-0.215	-0.274	-0.324	-0.339	-0.464	-0.587	-0.653	-0.699	-0.709
0.35	-0.192	-0.240	-0.278	-0.274	-0.324	-0.545	-0.618	-0.674	-0.715
0.40	-0.167	-0.208	-0.233	-0.226	-0.176	-0.459	-0.581	-0.646	-0.702
0.50	-0.120	-0.158	-0.148	-0.155	-0.124	-0.077	-0.245	-0.521	-0.652
0.60	-0.069	-0.079	-0.076	-0.076	-0.059	-0.018	-0.053	-0.227	-0.548
0.70	-0.017	-0.016	-0.010	-0.010	+0.003	+0.030	+0.035	-0.077	-0.262
0.80	+0.011	+0.019	+0.030	+0.039	0.051	0.069	0.080	+0.028	-0.118
0.90	0.039	0.053	0.067	0.074	0.097	0.098	0.105	0.077	-0.047
+1.00	+0.106	+0.134	+0.154	+0.159	+0.172	+0.170	+0.150	+0.114	+0.000
Lower									
$x/c = +0.90$	+0.052	+0.070	+0.081	+0.099	+0.115	+0.124	0.124	+0.071	-0.065
0.80	-0.008	+0.002	+0.013	+0.029	0.048	0.069	0.071	-0.020	-0.145
0.70	-0.031	-0.029	-0.023	-0.015	+0.005	+0.032	0.011	-0.132	-0.222
0.60	-0.100	-0.101	-0.092	-0.078	-0.055	-0.021	-0.111	-0.240	-0.321
0.50	-0.164	-0.190	-0.194	-0.176	-0.127	-0.122	-0.303	-0.379	-0.521
0.40	-0.201	-0.243	-0.267	-0.244	-0.172	-0.492	-0.584	-0.598	-0.621
0.30	-0.238	-0.297	-0.349	-0.368	-0.554	-0.592	-0.608	-0.611	-0.643
0.20	-0.275	-0.348	-0.422	-0.484	-0.623	-0.663	-0.676	-0.667	-0.662
0.10	-0.298	-0.389	-0.497	-0.566	-0.598	-0.587	-0.574	-0.555	-0.541
+0.05	-0.267	-0.348	-0.420	-0.439	-0.452	-0.438	-0.425	-0.408	-0.393

TABLE 2—continued

C_p at $\alpha = -0.1$ deg, $y/s = 0.212$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.925
Upper									
$x/c = +0.05$	+0.854	+0.936	+0.975	+0.988	+1.007	+1.017	+1.026	+1.050	+1.047
0.07	-0.073	-0.043	-0.014	-0.043	-0.015	-0.007	-0.007	+0.028	+0.035
0.10	-0.201	-0.197	-0.026	-0.211	-0.188	-0.184	-0.168	-0.155	-0.147
0.135	-0.235	-0.250	-0.263	-0.257	-0.254	-0.252	-0.242	-0.229	-0.221
0.245	-0.232	-0.253	-0.269	-0.263	-0.263	-0.263	-0.251	-0.239	-0.236
0.36	-0.241	-0.282	-0.315	-0.326	-0.335	-0.334	-0.316	-0.298	-0.287
0.47	-0.196	-0.238	-0.277	-0.282	-0.297	-0.315	-0.315	-0.313	-0.312
0.52	-0.201	-0.243	-0.288	-0.316	-0.320	-0.322	-0.317	-0.313	-0.311
0.565	-0.201	-0.248	-0.301	-0.331	-0.359	-0.364	-0.357	-0.349	-0.345
0.63	-0.185	-0.234	-0.288	-0.313	-0.368	-0.393	-0.396	-0.389	-0.391
0.70	-0.189	-0.241	-0.296	-0.327	-0.386	-0.409	-0.416	-0.411	-0.412
0.755	-0.166	-0.211	-0.250	-0.276	-0.387	-0.459	-0.472	-0.468	-0.469
0.81	-0.136	-0.172	-0.197	-0.204	-0.226	-0.394	-0.466	-0.472	-0.478
0.925	-0.107	-0.127	-0.137	-0.137	-0.133	-0.128	-0.149	-0.370	-0.542
1.035	+0.026	+0.030	+0.035	+0.040	+0.048	+0.053	+0.051	+0.046	-0.005
+1.15	+0.100	+0.175	+0.110	+0.119	+0.128	+0.129	+0.126	+0.128	+0.108
Lower									
$x/c = +1.035$	+0.011	+0.017	+0.025	+0.033	+0.046	+0.055	+0.060	+0.065	+0.005
0.925	-0.085	-0.127	-0.117	-0.113	-0.107	-0.102	-0.110	-0.148	-0.341
0.81	-0.121	-0.155	-0.182	-0.183	-0.197	-0.230	-0.362	-0.419	-0.440
0.70	-0.158	-0.204	-0.247	-0.265	-0.313	-0.397	-0.414	-0.421	-0.427
0.565	-0.220	-0.274	-0.330	-0.355	-0.385	-0.404	-0.401	-0.392	-0.385
0.47	-0.203	-0.253	-0.296	-0.310	-0.329	-0.346	-0.339	-0.326	-0.317
0.36	-0.237	-0.285	-0.316	-0.318	-0.315	-0.312	-0.301	-0.289	-0.282
0.245	-0.245	-0.285	-0.302	-0.295	-0.292	-0.293	-0.281	-0.267	-0.258
0.135	-0.181	-0.197	-0.176	-0.147	-0.116	-0.097	-0.074	-0.048	-0.029
0.10	-0.210	-0.278	-0.319	-0.338	-0.327	-0.329	-0.322	-0.299	-0.284
+0.08	+0.883	+0.969	+0.464	+1.033	+1.053	+1.066	+1.076	+1.087	+1.098

TABLE 2—continued

C_p at $\alpha = -0.1$ deg, $y/s = 0.479$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.925
Upper									
$x/c = +0.00$	+0.560	+0.577	+0.577	+0.579	+0.590	+0.597	+0.600	+0.611	+0.619
0.02	-0.200	-0.184	-0.153	-0.146	-0.134	-0.128	-0.111	-0.097	-0.088
0.04	-0.267	-0.271	-0.257	-0.259	-0.245	-0.241	-0.225	-0.211	-0.202
0.07	-0.280	-0.302	-0.299	-0.301	-0.289	-0.286	-0.271	-0.256	-0.247
0.10	-0.297	-0.328	-0.335	-0.338	-0.328	-0.324	-0.308	-0.292	-0.281
0.20	-0.308	-0.364	-0.398	-0.409	-0.421	-0.434	-0.420	-0.405	-0.396
0.30	-0.308	-0.375	-0.431	-0.463	-0.466	-0.488	-0.481	-0.467	-0.478
0.35	-0.298	-0.368	-0.430	-0.465	-0.489	-0.497	-0.507	-0.501	-0.495
0.40	-0.291	-0.361	-0.430	-0.468	-0.505	-0.504	-0.507	-0.514	-0.516
0.45	-0.266	-0.338	-0.412	-0.458	-0.507	-0.512	-0.501	-0.503	-0.511
0.50	-0.250	-0.318	-0.390	-0.442	-0.514	-0.541	-0.527	-0.516	-0.519
0.55	-0.222	-0.283	-0.327	-0.406	-0.482	-0.546	-0.559	-0.541	-0.538
0.60	-0.167	-0.218	-0.263	-0.348	-0.455	-0.506	-0.541	-0.539	-0.535
0.70	-0.093	-0.114	-0.128	-0.118	-0.080	-0.447	-0.488	-0.496	-0.509
0.80	-0.027	-0.039	-0.043	-0.037	-0.021	+0.042	-0.113	-0.436	-0.471
0.90	+0.026	+0.028	+0.036	+0.044	+0.059	0.088	+0.114	+0.118	-0.159
+1.00	+0.149	+0.174	+0.188	+0.204	+0.222	+0.239	+0.251	+0.264	+0.251
Lower									
$x/c = +0.90$	+0.021	+0.021	+0.027	+0.039	+0.056	+0.079	+0.105	+0.134	-0.023
0.80	-0.035	-0.048	-0.052	-0.042	-0.021	+0.025	+0.033	-0.345	-0.473
0.70	-0.113	-0.135	-0.151	-0.131	-0.090	-0.367	-0.472	-0.489	-0.510
0.60	-0.181	-0.237	-0.274	-0.311	-0.423	-0.478	-0.511	-0.539	-0.548
0.50	-0.242	-0.309	-0.374	-0.408	-0.479	-0.534	-0.543	-0.539	-0.536
0.40	-0.280	-0.351	-0.419	-0.450	-0.496	-0.522	-0.525	-0.514	-0.507
0.30	-0.283	-0.350	-0.410	-0.408	-0.449	-0.462	-0.541	-0.434	-0.422
0.20	-0.279	-0.338	-0.386	-0.389	-0.392	-0.390	-0.376	-0.363	-0.355
0.10	-0.246	-0.293	-0.330	-0.326	-0.315	-0.311	-0.299	-0.287	-0.277
+0.05	-0.177	-0.205	-0.232	-0.221	-0.200	-0.192	-0.178	-0.163	-0.150

TABLE 2—continued

C_p at $\alpha = -0.1$ deg, $y/s = 0.790$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.925
Upper									
$x/c = +0.00$	+0.529	+0.609	+0.607	+0.608	+0.606	+0.606	+0.605	+0.613	+0.616
0.02	-0.191	-0.212	-0.202	-0.199	-0.192	-0.175	-0.167	-0.143	-0.132
0.04	-0.220	-0.310	-0.302	-0.341	-0.320	-0.312	-0.302	-0.280	-0.265
0.07	-0.275	-0.383	-0.418	-0.438	-0.426	-0.421	-0.411	-0.388	-0.373
0.10	-0.283	-0.406	-0.461	-0.496	-0.489	-0.488	-0.480	-0.460	-0.447
0.20	-0.279	-0.410	-0.493	-0.549	-0.598	-0.603	-0.595	-0.578	-0.568
0.25	-0.262	-0.392	-0.470	-0.527	-0.592	-0.599	-0.594	-0.577	-0.567
0.30	-0.257	-0.386	-0.468	-0.526	-0.611	-0.624	-0.618	-0.600	-0.588
0.35	-0.240	-0.368	-0.451	-0.517	-0.607	-0.659	-0.664	-0.648	-0.634
0.40	-0.213	-0.335	-0.412	-0.483	-0.560	-0.617	-0.664	-0.668	-0.659
0.45	-0.197	-0.308	-0.366	-0.438	-0.545	-0.586	-0.616	-0.642	-0.679
0.50	-0.166	-0.268	-0.302	-0.344	-0.529	-0.588	-0.601	-0.609	-0.650
0.60	-0.140	-0.160	-0.161	-0.133	-0.063	-0.210	-0.601	-0.584	-0.610
0.70	-0.062	-0.065	-0.064	-0.055	-0.010	+0.024	-0.116	-0.370	-0.590
0.80	-0.004	-0.002	+0.009	+0.023	+0.048	0.082	+0.074	-0.046	-0.240
0.90	+0.048	+0.061	0.078	0.090	0.110	0.141	0.145	+0.110	-0.016
+1.00	+0.145	+0.176	+0.195	+0.210	+0.220	+0.219	+0.217	+0.196	+0.120
Lower									
$x/c = +0.90$	+0.043	+0.053	+0.078	+0.081	+0.097	+0.119	+0.137	+0.120	+0.002
0.80	+0.003	+0.002	+0.009	+0.019	+0.041	0.069	+0.074	-0.019	-0.224
0.70	-0.053	-0.066	-0.068	-0.054	-0.023	+0.014	-0.095	-0.345	-0.579
0.60	-0.166	-0.192	-0.196	-0.155	-0.108	-0.354	-0.562	-0.581	-0.589
0.50	-0.213	-0.253	-0.332	-0.359	-0.461	-0.546	-0.570	-0.589	-0.632
0.40	-0.265	-0.334	-0.405	-0.436	-0.508	-0.597	-0.641	-0.643	-0.638
0.30	-0.278	-0.351	-0.427	-0.460	-0.545	-0.570	-0.566	-0.557	-0.550
0.20	-0.272	-0.342	-0.411	-0.442	-0.486	-0.501	-0.497	-0.484	-0.477
0.10	-0.249	-0.306	-0.358	-0.365	-0.382	-0.388	-0.380	-0.368	-0.359
+0.05	-0.193	-0.230	-0.269	-0.308	-0.315	-0.318	-0.310	-0.299	-0.289

TABLE 2—continued

C_p at $\alpha = -0.1$ deg, $y/s = 0.964$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.925
Upper									
$x/c = +0.00$	+0.529	+0.537	+0.532	+0.525	+0.525	+0.525	+0.524	+0.533	+0.536
0.02	-0.230	-0.283	-0.304	-0.294	-0.281	-0.257	-0.245	-0.217	-0.206
0.04	-0.313	-0.405	-0.471	-0.477	-0.473	-0.448	-0.432	-0.401	-0.387
0.07	-0.259	-0.420	-0.558	-0.616	-0.612	-0.590	-0.570	-0.541	-0.520
0.10	-0.254	-0.400	-0.534	-0.648	-0.692	-0.679	-0.662	-0.635	-0.614
0.15	-0.235	-0.372	-0.463	-0.570	-0.705	-0.714	-0.702	-0.679	-0.661
0.20	-0.215	-0.340	-0.415	-0.495	-0.652	-0.722	-0.725	-0.706	-0.689
0.25	-0.193	-0.312	-0.373	-0.425	-0.583	-0.676	-0.716	-0.713	-0.706
0.30	-0.181	-0.290	-0.339	-0.361	-0.510	-0.621	-0.684	-0.699	-0.718
0.35	-0.156	-0.252	-0.287	-0.280	-0.307	-0.598	-0.640	-0.666	-0.695
0.40	-0.128	-0.215	-0.237	-0.231	-0.153	-0.478	-0.613	-0.630	-0.654
0.50	—	-0.139	-0.167	-0.164	-0.117	-0.075	-0.231	-0.415	-0.588
0.60	-0.022	-0.076	-0.074	-0.082	-0.051	-0.017	-0.043	-0.192	-0.325
0.70	—	-0.011	-0.005	-0.014	+0.015	+0.035	+0.042	-0.053	-0.186
0.80	+0.016	+0.026	+0.038	+0.049	0.064	0.077	0.087	+0.050	-0.076
0.90	0.044	0.060	0.074	+0.083	+0.099	0.104	0.111	0.095	+0.003
+1.00	+0.108	+0.136	+0.155	—	—	+0.167	+0.153	+0.106	+0.046
Lower									
$x/c = +0.90$	+0.048	+0.060	+0.074	+0.092	+0.104	+0.112	+0.122	+0.105	-0.001
0.80	-0.008	-0.004	+0.007	+0.023	+0.037	0.055	0.074	+0.033	-0.095
0.70	-0.032	-0.032	-0.029	-0.017	-0.004	+0.024	+0.029	-0.075	-0.203
0.60	-0.107	-0.104	-0.097	-0.076	-0.059	-0.017	-0.079	-0.221	-0.335
0.50	-0.161	-0.192	-0.201	-0.172	-0.137	-0.103	-0.305	-0.428	-0.570
0.40	-0.194	-0.236	-0.268	-0.248	-0.179	-0.515	-0.592	-0.598	-0.607
0.30	-0.229	-0.284	-0.336	-0.351	-0.498	-0.565	-0.594	-0.611	-0.647
0.20	-0.272	-0.327	-0.397	-0.445	-0.586	-0.650	-0.654	-0.643	-0.632
0.10	-0.264	-0.329	-0.443	-0.494	-0.529	-0.536	-0.524	-0.507	-0.494
+0.05	-0.212	-0.287	-0.339	-0.340	-0.354	-0.366	-0.357	-0.343	-0.331

TABLE 2—continued
 C_p at $\alpha = 0.95$ deg, $y/s = 0.212$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.05$	+0.879	+0.952	+0.898	+1.004	+1.022	+1.030	+1.047	+1.058	+1.068
0.07	-0.215	-0.158	-0.148	-0.161	-0.130	-0.113	-0.089	-0.078	-0.057
0.10	-0.303	-0.288	-0.277	-0.303	-0.282	-0.272	-0.255	-0.241	-0.226
0.135	-0.304	-0.315	-0.330	-0.339	-0.323	-0.314	-0.303	-0.289	-0.272
0.245	-0.278	-0.303	-0.301	-0.327	-0.315	-0.310	-0.303	-0.294	-0.288
0.36	-0.277	-0.322	-0.345	-0.387	-0.377	-0.363	-0.347	-0.324	-0.307
0.47	-0.218	-0.264	-0.293	-0.334	-0.345	-0.365	-0.366	-0.354	-0.344
0.52	-0.222	-0.270	-0.304	-0.363	-0.354	-0.361	-0.362	-0.350	-0.340
0.565	-0.220	-0.271	-0.315	-0.381	-0.395	-0.395	-0.396	-0.382	-0.371
0.63	-0.203	-0.257	-0.314	-0.349	-0.410	-0.429	-0.433	-0.427	-0.414
0.70	-0.207	-0.261	-0.317	-0.359	-0.423	-0.447	-0.454	-0.448	-0.436
0.755	-0.180	-0.227	-0.266	-0.295	-0.443	-0.480	-0.513	-0.503	-0.493
0.81	-0.147	-0.182	-0.209	-0.215	-0.246	-0.459	-0.506	-0.512	-0.506
0.925	-0.113	-0.131	-0.141	-0.142	-0.133	-0.124	-0.164	-0.412	-0.568
1.035	+0.023	+0.029	+0.036	+0.041	+0.050	+0.056	+0.052	+0.041	-0.018
+1.15	+0.100	+0.106	+0.115	+0.122	+0.130	+0.131	+0.127	+0.129	+0.110
Lower									
$x/c = +1.035$	+0.008	+0.017	+0.023	+0.031	+0.043	+0.051	+0.052	+0.052	+0.014
0.925	-0.083	-0.096	-0.111	-0.110	-0.107	-0.101	-0.109	-0.149	-0.393
0.81	-0.112	-0.138	-0.167	-0.161	-0.185	-0.204	-0.279	-0.375	-0.401
0.70	-0.142	-0.183	-0.222	-0.240	-0.273	-0.340	-0.370	-0.383	-0.387
0.565	-0.199	-0.247	-0.294	-0.317	-0.346	-0.356	-0.360	-0.356	-0.349
0.47	-0.179	-0.223	-0.258	-0.268	-0.282	-0.292	-0.299	-0.295	-0.285
0.36	-0.204	-0.248	-0.272	-0.270	-0.274	-0.269	-0.264	-0.250	-0.239
0.245	-0.208	-0.238	-0.246	-0.238	-0.237	-0.238	-0.232	-0.219	-0.208
0.135	-0.121	-0.133	-0.115	-0.088	-0.074	-0.069	-0.057	-0.035	-0.017
0.10	-0.078	-0.146	-0.156	-0.126	-0.134	-0.142	-0.148	-0.122	-0.114
+0.08	+0.924	+1.004	+0.949	+1.056	+1.072	+1.080	+1.097	+1.108	+1.120

TABLE 2—continued
 C_p at $\alpha = 0.95$ deg, $y/s = 0.479$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.539	+0.556	+0.461	+0.560	+0.571	+0.578	+0.587	+0.599	+0.612
0.02	-0.380	-0.364	-0.318	-0.318	-0.281	-0.259	-0.246	-0.225	-0.204
0.04	-0.409	-0.425	-0.384	-0.412	-0.379	-0.360	-0.350	-0.329	-0.310
0.07	-0.386	-0.420	-0.404	-0.410	-0.370	-0.382	-0.372	-0.353	-0.339
0.10	-0.386	-0.431	-0.418	-0.433	-0.417	-0.400	-0.389	-0.368	-0.353
0.20	-0.365	-0.435	-0.456	-0.490	-0.509	-0.496	-0.486	-0.463	-0.447
0.30	-0.349	-0.428	-0.476	-0.537	-0.546	-0.545	-0.537	-0.514	-0.497
0.35	-0.334	-0.412	-0.471	-0.543	-0.550	-0.574	-0.570	-0.547	-0.530
0.40	-0.324	-0.402	-0.465	-0.528	-0.534	-0.580	-0.589	-0.573	-0.558
0.45	-0.292	-0.371	-0.440	-0.513	-0.557	-0.561	-0.577	-0.571	-0.563
0.50	-0.272	-0.345	-0.415	-0.501	-0.574	-0.571	-0.580	-0.577	-0.572
0.55	-0.233	-0.294	-0.348	-0.471	-0.561	-0.592	-0.596	-0.590	-0.582
0.60	-0.182	-0.220	-0.239	-0.358	-0.524	-0.567	-0.584	-0.580	-0.573
0.70	-0.109	-0.132	-0.126	-0.137	-0.132	-0.487	-0.537	-0.547	-0.549
0.80	-0.039	-0.049	-0.050	-0.040	+0.000	+0.040	-0.200	-0.475	-0.514
0.90	+0.019	+0.027	+0.036	+0.044	0.070	0.097	+0.117	+0.096	-0.157
+1.00	+0.147	+0.170	+0.184	+0.202	+0.221	+0.233	+0.246	+0.260	+0.243
Lower									
$x/c = +0.90$	+0.023	+0.026	+0.029	+0.041	+0.053	+0.067	+0.085	+0.113	-0.082
0.80	-0.027	-0.038	-0.043	-0.036	-0.026	+0.001	+0.034	-0.225	-0.424
0.70	-0.094	-0.122	-0.138	-0.125	-0.109	-0.195	-0.393	-0.443	-0.472
0.60	-0.162	-0.215	-0.256	-0.277	-0.342	-0.408	-0.454	-0.495	-0.503
0.50	-0.211	-0.275	-0.328	-0.358	-0.408	-0.474	-0.491	-0.490	-0.484
0.40	-0.243	-0.310	-0.367	-0.392	-0.438	-0.449	-0.457	-0.476	-0.452
0.30	-0.237	-0.298	-0.347	-0.360	-0.380	-0.390	-0.395	-0.386	-0.373
0.20	-0.222	-0.269	-0.306	-0.311	-0.317	-0.322	-0.298	-0.302	-0.288
0.10	-0.166	-0.199	-0.228	-0.222	-0.220	-0.225	-0.216	-0.202	-0.191
+0.05	-0.105	-0.086	-0.111	-0.100	-0.091	-0.095	-0.084	-0.070	-0.057

TABLE 2—continued
 C_p at $\alpha = 0.95$ deg, $y/s = 0.790$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.569	+0.588	+0.493	+0.588	+0.591	+0.590	+0.595	+0.603	+0.611
0.02	-0.388	-0.428	-0.408	-0.392	-0.354	-0.317	-0.298	-0.295	-0.249
0.04	-0.418	-0.489	-0.501	-0.508	-0.472	-0.442	-0.428	-0.398	-0.358
0.07	-0.445	-0.529	-0.572	-0.590	-0.559	-0.533	-0.515	-0.484	-0.446
0.10	-0.437	-0.537	-0.602	-0.641	-0.628	-0.604	-0.591	-0.561	-0.522
0.20	-0.389	-0.495	-0.602	-0.697	-0.715	-0.711	-0.706	-0.681	-0.644
0.25	-0.359	-0.461	-0.556	-0.658	-0.697	-0.700	-0.700	-0.683	-0.652
0.30	-0.345	-0.441	-0.534	-0.633	-0.704	-0.706	-0.703	-0.685	-0.656
0.35	-0.315	-0.411	-0.506	-0.602	-0.704	-0.730	-0.733	-0.713	-0.679
0.40	-0.280	-0.363	-0.440	-0.553	-0.664	-0.693	-0.720	-0.719	-0.693
0.45	-0.265	-0.328	-0.366	-0.440	-0.644	-0.665	-0.682	-0.684	-0.681
0.50	-0.221	-0.271	-0.283	-0.276	-0.610	-0.659	-0.669	-0.664	-0.649
0.60	-0.148	-0.166	-0.145	-0.147	-0.049	-0.419	-0.623	-0.653	-0.653
0.70	-0.077	-0.078	-0.053	-0.064	+0.011	-0.007	-0.166	-0.325	-0.483
0.80	-0.013	-0.006	+0.008	+0.026	0.064	+0.082	+0.026	-0.097	-0.223
0.90	+0.046	+0.064	—	0.095	0.119	0.137	0.121	+0.052	-0.056
+1.00	+0.143	+0.172	+0.190	+0.205	+0.215	+0.213	+0.195	+0.160	+0.086
Lower									
$x/c = +0.90$	+0.044	+0.052	+0.055	+0.077	+0.088	+0.099	+0.112	+0.111	+0.038
0.80	+0.011	+0.008	+0.012	+0.020	+0.033	+0.048	+0.066	+0.038	-0.382
0.70	-0.058	-0.062	-0.061	-0.050	-0.033	-0.014	-0.021	-0.361	-0.584
0.60	-0.114	-0.187	-0.206	-0.193	-0.201	-0.227	-0.461	-0.551	-0.600
0.50	-0.187	-0.240	-0.289	-0.313	-0.372	-0.455	-0.522	-0.579	-0.619
0.40	-0.231	-0.294	-0.353	-0.382	-0.438	-0.525	-0.584	-0.584	-0.574
0.30	-0.231	-0.295	-0.358	-0.387	-0.434	-0.481	-0.493	-0.488	-0.477
0.20	-0.207	-0.262	-0.315	-0.345	-0.388	-0.406	-0.413	-0.404	-0.396
0.10	-0.154	-0.193	-0.238	-0.253	-0.273	-0.282	-0.287	-0.277	-0.267
+0.05	-0.064	-0.085	-0.124	-0.171	-0.185	-0.194	-0.198	-0.189	-0.157

TABLE 2—continued

C_p at $\alpha = 0.95$ deg, $y/s = 0.964$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.503	+0.510	+0.412	+0.491	+0.498	+0.500	+0.507	+0.517	+0.526
0.02	-0.403	-0.495	-0.529	-0.522	-0.468	-0.417	-0.385	-0.350	-0.324
0.04	-0.454	-0.588	-0.703	-0.702	-0.645	-0.595	-0.563	-0.525	-0.497
0.07	-0.415	-0.552	-0.478	-0.804	-0.760	-0.718	-0.689	-0.649	-0.604
0.10	-0.365	-0.492	-0.679	-0.831	-0.830	-0.793	-0.770	-0.732	-0.686
0.15	-0.339	-0.437	-0.539	-0.709	-0.805	-0.806	-0.795	-0.764	-0.726
0.20	-0.306	-0.390	-0.461	-0.588	-0.740	-0.762	-0.769	-0.751	-0.730
0.25	-0.276	-0.354	-0.400	-0.450	-0.681	-0.725	-0.740	-0.727	-0.713
0.30	-0.256	-0.323	-0.353	-0.350	-0.632	-0.673	-0.706	-0.715	-0.710
0.35	-0.222	-0.275	-0.291	-0.273	-0.359	-0.629	-0.646	-0.659	-0.690
0.40	-0.190	-0.235	-0.240	-0.228	-0.155	-0.428	-0.550	-0.559	-0.636
0.50	—	-0.174	-0.174	-0.168	-0.112	-0.131	-0.267	-0.315	-0.382
0.60	-0.071	-0.084	-0.076	-0.080	-0.043	-0.040	-0.122	-0.219	-0.240
0.70	-0.011	-0.007	+0.001	-0.009	+0.025	+0.027	-0.015	-0.123	-0.167
0.80	+0.019	+0.029	0.039	+0.048	0.054	0.070	+0.050	-0.023	-0.123
0.90	0.038	0.051	0.064	+0.073	0.086	0.083	0.079	+0.036	-0.065
+1.00	+0.096	+0.121	+0.135	—	+0.158	+0.143	+0.118	+0.089	+0.010
Lower									
$x/c = +0.90$	+0.034	+0.043	+0.063	+0.071	+0.081	+0.082	+0.087	+0.079	-0.002
0.80	-0.021	-0.016	-0.008	+0.006	+0.015	+0.024	0.041	+0.032	-0.121
0.70	-0.046	-0.040	-0.034	-0.027	-0.021	-0.007	+0.019	-0.054	-0.313
0.60	-0.106	-0.122	-0.109	-0.080	-0.071	-0.040	-0.038	-0.248	-0.569
0.50	-0.154	-0.187	-0.204	-0.188	-0.139	-0.076	-0.310	-0.526	-0.591
0.40	-0.181	-0.222	-0.253	-0.256	-0.260	-0.494	-0.557	-0.569	-0.634
0.30	-0.206	-0.260	-0.307	-0.324	-0.432	-0.522	-0.578	-0.631	-0.648
0.20	-0.220	-0.283	-0.351	-0.339	-0.533	-0.586	-0.602	-0.589	-0.572
0.10	-0.199	-0.268	-0.347	-0.391	-0.426	-0.433	-0.439	-0.423	-0.405
+0.05	-0.109	-0.152	-0.197	-0.207	-0.218	-0.228	-0.237	-0.226	-0.212

TABLE 2—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.212$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.05$	+0.922	+0.956	+0.993	+1.017	+1.027	+1.043	+1.057	+1.069	+1.080
0.07	-0.290	-0.250	-0.285	-0.280	-0.271	-0.245	-0.238	-0.202	-0.181
0.10	-0.355	-0.352	-0.397	-0.397	-0.402	-0.380	-0.382	-0.355	-0.334
0.135	-0.343	-0.361	-0.397	-0.398	-0.400	-0.384	-0.380	-0.360	-0.344
0.245	-0.308	-0.334	-0.371	-0.369	-0.381	-0.378	-0.376	-0.362	-0.351
0.36	-0.297	-0.345	-0.441	-0.423	-0.413	-0.395	-0.377	-0.357	-0.345
0.47	-0.235	-0.281	-0.345	-0.357	-0.403	-0.414	-0.402	-0.388	-0.375
0.52	-0.241	-0.290	-0.359	-0.387	-0.398	-0.408	-0.400	-0.386	-0.372
0.565	-0.239	-0.290	-0.369	-0.146	-0.431	-0.437	-0.431	-0.416	-0.401
0.63	-0.225	-0.275	-0.344	-0.399	-0.458	-0.471	-0.474	-0.459	-0.444
0.70	0.223	-0.275	-0.343	-0.399	-0.470	-0.491	-0.493	-0.480	-0.467
0.755	-0.192	-0.238	-0.283	-0.320	-0.496	-0.540	-0.545	-0.533	-0.519
0.81	-0.157	-0.190	-0.221	-0.225	-0.286	-0.517	-0.551	-0.542	-0.534
0.925	-0.117	-0.135	-0.142	-0.141	-0.126	-0.122	-0.217	-0.384	-0.566
1.035	+0.023	+0.028	+0.035	+0.042	+0.052	+0.056	+0.041	+0.015	-0.047
+1.15	+0.101	+0.106	+0.114	+0.123	+0.127	+0.128	+0.120	+0.120	+0.098
Lower									
$x/c = +1.035$	+0.011	+0.013	+0.020	+0.028	+0.037	+0.040	+0.030	+0.022	+0.024
0.925	-0.073	-0.096	-0.104	-0.105	-0.103	-0.086	-0.119	-0.159	-0.386
0.81	-0.099	-0.132	-0.152	-0.156	-0.170	-0.186	-0.256	-0.330	-0.362
0.70	-0.128	-0.169	-0.197	-0.214	-0.240	-0.277	-0.334	-0.342	-0.348
0.565	-0.181	-0.227	-0.258	-0.277	-0.303	-0.313	-0.321	-0.317	-0.313
0.47	-0.158	-0.198	-0.219	-0.229	-0.240	-0.249	-0.256	-0.255	-0.250
0.36	-0.180	-0.216	-0.225	-0.225	-0.227	-0.231	-0.225	-0.214	-0.201
0.245	-0.167	-0.201	-0.191	-0.187	-0.185	-0.181	-0.180	-0.169	-0.160
0.135	-0.064	-0.081	-0.043	-0.028	-0.014	-0.009	+0.003	+0.016	+0.028
0.10	+0.019	-0.064	-0.019	-0.004	+0.010	+0.001	0.028	0.033	0.043
+0.08	+0.950	+1.017	+1.059	+1.077	+1.088	+1.101	+1.115	+1.126	+1.137

TABLE 2—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.479$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.460	+0.512	+0.509	+0.525	+0.531	+0.546	+0.559	+0.575	+0.589
0.02	-0.552	-0.464	-0.495	-0.477	-0.475	-0.450	-0.425	-0.382	-0.363
0.04	-0.539	-0.508	-0.557	-0.549	-0.546	-0.521	-0.498	-0.465	-0.443
0.07	-0.481	-0.486	-0.536	-0.533	-0.539	-0.523	-0.507	-0.481	-0.463
0.10	-0.463	-0.488	-0.538	-0.530	-0.529	-0.514	-0.501	-0.470	-0.463
0.20	-0.407	-0.475	-0.556	-0.589	-0.588	-0.570	-0.554	-0.537	-0.525
0.30	-0.376	-0.459	-0.560	-0.595	-0.619	-0.603	-0.584	-0.563	-0.545
0.35	-0.357	-0.440	-0.547	-0.596	-0.644	-0.632	-0.613	-0.591	-0.571
0.40	-0.345	-0.427	-0.539	-0.600	-0.648	-0.657	-0.642	-0.619	-0.597
0.45	-0.305	-0.387	-0.508	-0.587	-0.621	-0.651	-0.645	-0.628	-0.608
0.50	-0.286	-0.358	-0.461	-0.586	-0.624	-0.648	-0.651	-0.639	-0.624
0.55	-0.247	-0.306	-0.378	-0.544	-0.653	-0.649	-0.657	-0.646	-0.633
0.60	-0.196	-0.239	-0.272	-0.380	-0.598	-0.630	-0.640	-0.631	-0.617
0.70	-0.123	-0.146	-0.160	-0.127	-0.190	-0.541	-0.603	-0.603	-0.594
0.80	-0.047	-0.058	-0.056	-0.039	+0.005	+0.009	-0.328	-0.507	-0.560
0.90	+0.019	+0.021	+0.034	+0.048	0.074	0.101	+0.106	+0.063	-0.148
+1.00	+0.132	+0.163	+0.180	+0.200	+0.214	+0.227	+0.233	+0.238	+0.215
Lower									
$x/c = +0.90$	+0.030	+0.027	+0.031	+0.042	0.050	+0.057	+0.067	+0.085	-0.128
0.80	-0.019	-0.030	-0.035	-0.028	-0.025	-0.017	-0.010	-0.161	-0.377
0.70	-0.087	-0.112	-0.132	-0.122	-0.127	-0.136	-0.334	-0.396	-0.426
0.60	-0.136	-0.184	-0.220	-0.238	-0.280	-0.338	-0.416	-0.451	-0.461
0.50	-0.186	-0.242	-0.284	-0.308	-0.349	-0.413	-0.448	-0.444	-0.434
0.40	-0.211	-0.273	-0.313	-0.336	-0.371	-0.394	-0.400	-0.397	-0.391
0.30	-0.196	-0.256	-0.283	-0.297	-0.312	-0.323	-0.329	-0.327	-0.318
0.20	-0.166	-0.228	-0.232	-0.239	-0.243	-0.245	-0.251	-0.243	-0.230
0.10	-0.090	-0.153	-0.134	-0.135	-0.130	-0.129	-0.134	-0.123	-0.112
+0.05	+0.026	-0.036	+0.001	+0.003	+0.013	-0.084	0.012	+0.021	+0.034

TABLE 2—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.790$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.488	+0.521	+0.532	+0.552	+0.559	+0.569	+0.575	+0.587	+0.594
0.02	-0.586	-0.638	-0.651	-0.598	-0.553	-0.491	-0.456	-0.422	-0.398
0.04	-0.588	-0.678	-0.725	-0.676	-0.615	-0.579	-0.544	-0.515	-0.486
0.07	-0.571	-0.681	-0.769	-0.733	-0.680	-0.645	-0.610	-0.582	-0.552
0.10	-0.541	-0.663	-0.791	-0.791	-0.744	-0.713	-0.681	-0.652	-0.623
0.20	-0.452	-0.575	-0.745	-0.854	-0.837	-0.818	-0.790	-0.764	-0.736
0.25	-0.407	-0.521	-0.681	-0.817	-0.833	-0.822	-0.800	-0.766	-0.749
0.30	-0.386	-0.489	-0.622	-0.792	-0.827	-0.829	-0.813	-0.794	-0.769
0.35	-0.349	-0.445	-0.569	-0.762	-0.815	-0.812	-0.811	-0.802	-0.790
0.40	-0.307	-0.383	-0.459	-0.708	-0.781	-0.786	-0.778	-0.764	-0.760
0.45	-0.287	-0.339	-0.349	-0.511	-0.747	-0.769	-0.765	-0.748	-0.737
0.50	-0.237	-0.280	-0.274	-0.181	-0.670	-0.761	-0.760	-0.744	-0.730
0.60	-0.162	-0.183	-0.171	-0.109	-0.124	-0.400	-0.583	-0.644	-0.701
0.70	-0.087	-0.089	-0.074	-0.037	+0.000	-0.095	-0.251	-0.335	-0.432
0.80	-0.019	-0.012	+0.008	+0.034	0.065	+0.031	-0.081	-0.147	-0.254
0.90	+0.042	+0.060	0.083	0.099	0.119	0.109	+0.039	-0.035	-0.120
+1.00	+0.143	+0.166	+0.186	+0.203	+0.204	+0.188	+0.138	+0.081	+0.007
Lower									
$x/c = +0.90$	+0.045	+0.047	+0.083	+0.074	+0.078	+0.075	+0.062	+0.060	-0.007
0.80	+0.015	+0.007	+0.015	+0.020	+0.026	+0.027	+0.026	+0.017	-0.416
0.70	-0.075	-0.069	-0.074	-0.052	-0.042	-0.041	-0.042	-0.327	-0.547
0.60	-0.124	-0.162	-0.192	-0.201	-0.229	-0.270	-0.415	-0.516	-0.578
0.50	-0.161	-0.210	-0.250	-0.272	-0.314	-0.366	-0.480	-0.534	-0.566
0.40	-0.199	-0.255	-0.304	-0.332	-0.378	-0.435	-0.531	-0.530	-0.516
0.30	-0.187	-0.243	-0.290	-0.315	-0.353	-0.399	-0.424	-0.418	-0.409
0.20	-0.147	-0.200	-0.232	-0.259	-0.290	-0.322	-0.337	-0.329	-0.320
0.10	-0.068	-0.111	-0.130	-0.147	-0.170	-0.188	-0.197	-0.188	-0.181
+0.05	+0.049	+0.013	+0.005	-0.046	-0.070	-0.084	-0.094	-0.085	-0.080

TABLE 2—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.964$

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.453	+0.452	+0.456	+0.455	+0.466	+0.478	+0.486	+0.498	+0.507
0.02	-0.605	-0.782	-0.810	-0.725	-0.631	-0.572	-0.526	-0.484	-0.457
0.04	-0.603	-0.826	-0.961	-0.876	-0.786	-0.725	-0.676	-0.631	-0.602
0.07	-0.515	-0.704	-0.953	-0.968	-0.890	-0.835	-0.789	-0.747	-0.711
0.10	-0.444	-0.595	-0.870	-0.995	-0.941	—	-0.853	-0.815	-0.781
0.15	-0.395	-0.507	-0.696	-0.877	-0.876	-0.853	-0.831	-0.807	-0.793
0.20	-0.351	-0.443	-0.481	-0.787	-0.822	-0.807	-0.792	-0.771	-0.763
0.25	-0.314	-0.391	-0.414	-0.627	-0.752	-0.749	-0.746	-0.738	-0.745
0.30	-0.287	-0.349	-0.361	-0.300	-0.621	-0.625	-0.640	-0.656	-0.708
0.35	-0.245	-0.299	-0.297	-0.240	-0.421	-0.505	-0.521	-0.543	-0.627
0.40	-0.214	-0.256	-0.250	-0.220	-0.267	-0.405	-0.440	-0.480	-0.531
0.50	-0.161	0.000	-0.179	-0.155	-0.156	-0.256	-0.322	-0.323	-0.361
0.60	-0.082	-0.088	-0.085	-0.076	-0.073	-0.143	-0.241	-0.267	-0.281
0.70	-0.015	-0.021	-0.020	-0.016	-0.010	-0.058	-0.143	-0.209	-0.231
0.80	+0.004	+0.002	+0.010	+0.019	+0.026	-0.002	-0.062	-0.136	-0.200
0.90	0.014	0.016	0.027	0.036	0.042	+0.021	-0.019	-0.074	-0.158
+1.00	+0.071	+0.089	+0.105	+0.114	+0.098	+0.069	+0.034	-0.002	-0.076
Lower									
$x/c = +0.90$	+0.019	+0.022	+0.035	+0.049	+0.051	+0.042	+0.027	+0.021	-0.031
0.80	-0.030	-0.034	-0.027	-0.017	-0.008	-0.012	-0.010	-0.005	-0.145
0.70	-0.068	-0.059	-0.042	-0.039	-0.040	-0.039	-0.013	-0.082	-0.446
0.60	-0.105	-0.129	-0.135	-0.100	-0.083	-0.065	-0.072	-0.333	-0.587
0.50	-0.150	-0.184	-0.204	-0.201	-0.165	-0.124	-0.462	-0.545	-0.618
0.40	-0.171	-0.213	-0.244	-0.252	-0.350	-0.441	-0.516	-0.557	-0.633
0.30	-0.185	-0.238	-0.286	-0.319	-0.410	-0.505	-0.596	-0.611	-0.599
0.20	-0.188	-0.240	-0.316	-0.377	-0.472	-0.516	-0.544	-0.533	-0.521
0.10	-0.141	-0.197	-0.286	-0.300	-0.331	-0.348	-0.359	-0.345	-0.331
+0.05	-0.019	-0.044	-0.082	-0.091	-0.111	-0.126	-0.138	-0.128	-0.117

TABLE 2—continued
 C_p at $\alpha = 3.0$ deg, $y/s = 0.212$

M	0.40	0.70	0.81	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.05$	+0.854	+0.947	+0.952	+1.012	+1.038	+1.053	+1.055	+1.069	+1.087
0.07	-0.384	-0.422	-0.405	-0.443	-0.399	-0.385	-0.351	—	-0.280
0.10	-0.414	-0.471	-0.531	-0.534	-0.517	-0.522	-0.491	-0.471	-0.431
0.135	-0.380	-0.437	-0.472	-0.478	-0.469	-0.474	-0.454	-0.444	-0.414
0.245	-0.330	-0.386	-0.422	-0.428	-0.441	-0.451	-0.434	-0.423	-0.402
0.36	-0.312	-0.384	-0.454	-0.459	-0.439	-0.436	-0.417	-0.404	-0.386
0.47	-0.248	-0.312	-0.373	-0.402	-0.443	-0.449	-0.434	-0.421	-0.405
0.52	-0.256	-0.320	-0.388	-0.424	-0.443	-0.449	-0.434	-0.419	-0.401
0.565	-0.252	-0.320	-0.394	-0.458	-0.474	-0.482	-0.469	-0.450	-0.429
0.63	-0.235	-0.298	-0.365	-0.450	-0.502	-0.514	-0.509	-0.494	-0.480
0.70	-0.233	-0.293	-0.353	-0.435	-0.513	-0.533	-0.528	-0.515	-0.498
0.755	-0.203	-0.252	-0.291	-0.332	-0.550	-0.581	-0.578	-0.564	-0.549
0.81	-0.166	-0.204	-0.225	-0.242	-0.359	-0.568	-0.584	-0.577	-0.563
0.925	-0.123	-0.139	-0.139	-0.134	+0.113	-0.126	-0.191	-0.318	-0.532
1.035	+0.019	+0.027	+0.035	+0.046	0.058	+0.051	+0.023	-0.026	-0.075
+1.15	+0.097	+0.106	+0.105	+0.119	+0.125	+0.120	+0.110	+0.105	+0.084
Lower									
$x/c = +1.035$	+0.008	+0.012	+0.014	+0.020	+0.027	+0.019	+0.003	-0.017	-0.056
0.925	-0.069	-0.089	-0.097	-0.102	-0.102	-0.113	-0.128	-0.187	-0.326
0.81	-0.091	-0.116	-0.135	-0.142	-0.156	-0.180	-0.211	-0.297	-0.326
0.70	-0.113	-0.146	-0.169	-0.188	-0.211	-0.264	-0.287	-0.309	-0.314
0.565	-0.158	-0.195	-0.218	-0.240	-0.262	-0.286	-0.286	-0.284	-0.278
0.47	-0.128	-0.161	-0.171	-0.190	-0.201	-0.216	-0.219	-0.216	-0.240
0.36	-0.141	-0.170	-0.169	-0.180	-0.181	-0.191	-0.190	-0.181	-0.197
0.245	-0.124	-0.146	-0.129	-0.134	-0.129	-0.135	-0.132	-0.124	-0.117
0.135	-0.009	-0.009	+0.035	+0.044	+0.059	+0.058	+0.062	+0.072	+0.080
0.10	+0.058	+0.052	0.101	0.190	0.124	0.120	0.126	0.137	0.115
+0.08	+0.889	+1.020	+1.036	+1.088	+1.112	+1.125	+1.128	+1.136	+1.153

TABLE 2—continued
 C_p at $\alpha = 3.0$ deg, $y/s = 0.479$

M	0.40	0.70	0.81	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.369	+0.416	+0.406	+0.471	+0.500	+0.513	+0.523	+0.542	+0.559
0.02	-0.636	-0.710	-0.743	-0.721	-0.676	-0.642	-0.609	-0.570	-0.526
0.04	-0.604	-0.706	-0.764	-0.737	-0.705	-0.677	-0.644	-0.610	-0.568
0.07	-0.525	-0.647	-0.696	-0.697	-0.686	-0.674	-0.645	-0.620	-0.580
0.10	-0.501	-0.596	-0.652	-0.663	-0.660	-0.651	-0.625	-0.603	-0.567
0.20	-0.436	-0.540	-0.630	-0.672	-0.665	-0.671	-0.651	-0.639	-0.613
0.30	-0.399	-0.502	-0.612	-0.682	-0.666	-0.662	-0.642	-0.629	-0.609
0.35	-0.379	-0.476	-0.587	-0.688	-0.692	-0.679	-0.659	-0.640	-0.622
0.40	-0.365	-0.458	-0.564	-0.669	-0.720	-0.707	-0.685	-0.660	-0.640
0.45	-0.323	-0.412	-0.524	-0.644	-0.712	-0.715	-0.695	-0.669	-0.649
0.50	-0.301	-0.380	-0.472	-0.657	-0.705	-0.727	-0.712	-0.688	-0.669
0.55	-0.262	-0.327	-0.380	-0.616	-0.701	-0.728	-0.717	-0.703	-0.684
0.60	-0.211	-0.260	-0.286	-0.359	-0.673	-0.707	-0.698	-0.682	-0.664
0.70	-0.134	-0.162	-0.169	-0.133	-0.273	-0.607	-0.654	-0.645	-0.632
0.80	-0.056	-0.067	-0.062	-0.037	+0.009	-0.040	-0.263	-0.514	-0.590
0.90	+0.011	+0.018	+0.029	+0.052	0.084	+0.098	+0.083	+0.031	-0.084
+1.00	+0.132	+0.153	+0.160	+0.191	+0.212	+0.213	+0.204	—	+0.169
Lower									
$x/c = +0.90$	+0.030	+0.028	+0.029	+0.041	+0.050	+0.048	+0.038	+0.045	-0.132
0.80	+0.001	-0.024	-0.031	-0.025	-0.022	-0.027	-0.024	-0.151	-0.336
0.70	-0.074	-0.097	-0.115	-0.117	-0.130	-0.160	-0.238	-0.356	-0.415
0.60	-0.112	-0.148	-0.176	-0.203	-0.236	-0.286	-0.353	-0.414	-0.449
0.50	-0.153	-0.198	-0.231	-0.265	-0.303	-0.360	-0.403	-0.407	-0.425
0.40	-0.175	-0.221	-0.250	-0.284	-0.313	-0.351	-0.354	-0.349	-0.369
0.30	-0.164	-0.196	-0.214	-0.237	-0.252	-0.271	-0.274	-0.270	-0.290
0.20	-0.124	-0.156	-0.161	-0.171	-0.178	-0.189	-0.187	-0.182	-0.177
0.10	-0.041	-0.063	-0.053	-0.052	-0.053	-0.062	-0.056	-0.052	-0.046
+0.05	+0.080	+0.070	+0.087	+0.100	+0.101	+0.094	+0.098	+0.101	+0.107

TABLE 2—continued

C_p at $\alpha = 3.0$ deg, $y/s = 0.790$

M	0.40	0.70	0.81	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.343	+0.398	+0.434	+0.480	+0.515	+0.530	+0.537	+0.551	+0.567
0.02	-0.795	-0.920	-0.899	-0.830	-0.736	-0.681	-0.637	-0.588	-0.553
0.04	-0.737	-0.908	-0.931	-0.901	-0.806	-0.756	-0.716	—	-0.644
0.07	-0.684	-0.858	-0.934	-0.926	-0.845	-0.802	-0.766	-0.719	-0.697
0.10	-0.624	-0.800	-0.939	-0.943	-0.876	-0.839	-0.807	-0.763	-0.741
0.20	-0.497	-0.649	-0.880	-0.990	-0.946	-0.918	-0.890	-0.852	-0.835
0.25	-0.442	-0.564	-0.800	-0.974	-0.941	-0.917	-0.893	-0.852	-0.842
0.30	-0.417	-0.517	-0.690	-0.936	-0.922	-0.905	-0.892	-0.864	-0.856
0.35	-0.373	-0.460	-0.571	-0.892	-0.884	-0.868	-0.854	-0.837	-0.843
0.40	-0.330	-0.397	-0.421	-0.829	-0.871	-0.857	-0.841	-0.813	-0.810
0.45	-0.310	-0.361	-0.331	-0.570	-0.849	-0.847	-0.837	-0.809	-0.803
0.50	-0.260	-0.303	-0.273	-0.257	-0.674	-0.753	-0.784	-0.789	-0.795
0.60	-0.180	-0.197	-0.172	-0.110	-0.292	-0.452	-0.510	-0.559	-0.612
0.70	-0.098	-0.097	-0.076	-0.035	-0.100	-0.346	-0.335	-0.384	-0.439
0.80	-0.027	-0.017	+0.004	+0.036	+0.020	-0.114	-0.198	-0.261	-0.319
0.90	+0.038	+0.058	0.076	0.096	+0.091	+0.002	-0.080	-0.151	-0.216
+1.00	+0.131	+0.157	+0.170	+0.194	—	+0.071	+0.021	-0.041	-0.111
Lower									
$x/c = +0.90$	+0.030	+0.046	+0.056	+0.064	+0.063	+0.035	+0.011	0.000	-0.054
0.80	+0.001	+0.007	+0.010	+0.017	+0.019	+0.006	-0.010	-0.017	-0.408
0.70	-0.074	-0.063	-0.070	-0.029	-0.067	-0.086	-0.100	-0.335	-0.511
0.60	-0.112	-0.133	-0.159	-0.084	-0.223	-0.277	-0.338	-0.465	-0.541
0.50	-0.153	-0.172	-0.207	-0.213	-0.280	-0.331	-0.396	-0.511	-0.521
0.40	-0.175	-0.209	-0.250	-0.259	-0.329	-0.383	-0.461	-0.482	-0.471
0.30	-0.164	-0.184	-0.222	-0.253	-0.287	-0.328	-0.358	-0.359	-0.377
0.20	-0.124	-0.127	-0.159	-0.184	-0.211	-0.242	-0.262	-0.261	-0.256
0.10	-0.041	-0.019	-0.047	-0.057	-0.079	-0.102	-0.114	-0.112	-0.107
+0.05	+0.080	+0.121	+0.094	+0.059	+0.037	+0.026	+0.003	+0.021	+0.009

TABLE 2—continued
 C_p at $\alpha = 3.0$ deg, $y/s = 0.964$

M	0.40	0.70	0.81	0.835	0.865	0.885	0.90	0.915	0.93
Upper									
$x/c = +0.00$	+0.350	+0.357	+0.376	+0.406	+0.435	+0.450	+0.474	+0.469	+0.484
0.02	-0.865	-1.09	-1.018	-0.906	-0.799	-0.732	-0.676	-0.618	-0.580
0.04	-0.788	-1.05	-1.148	-1.046	-0.938	-0.872	-0.815	-0.767	-0.719
0.07	-0.629	-0.893	—	-1.111	-0.995	-0.927	-0.887	-0.841	-0.823
0.10	-0.523	-0.722	—	-1.042	-0.949	-0.895	-0.872	-0.846	-0.850
0.15	-0.455	-0.519	-0.899	-0.993	-0.891	-0.832	-0.813	-0.791	-0.803
0.20	-0.393	-0.464	-0.541	-0.829	-0.762	-0.719	-0.718	-0.719	-0.754
0.25	-0.346	-0.415	-0.389	-0.629	-0.623	-0.610	-0.610	-0.617	-0.684
0.30	-0.315	-0.374	-0.349	-0.442	-0.531	-0.529	-0.528	-0.530	-0.585
0.35	-0.270	-0.315	-0.299	-0.347	-0.471	-0.479	-0.476	-0.475	-0.514
0.40	-0.234	-0.264	-0.258	-0.290	-0.411	-0.443	-0.439	-0.436	-0.466
0.50	-0.172	—	-0.186	-0.191	-0.286	-0.368	-0.382	-0.369	-0.390
0.60	-0.094	-0.112	-0.110	-0.113	-0.185	-0.271	-0.325	-0.328	-0.336
0.70	-0.063	-0.058	-0.054	-0.062	-0.109	-0.181	-0.244	-0.291	-0.303
0.80	-0.033	-0.038	-0.034	-0.034	-0.060	-0.119	-0.169	-0.240	-0.315
0.90	-0.032	-0.034	-0.024	-0.025	-0.043	-0.091	-0.131	-0.183	-0.281
+1.00	+0.039	+0.054	+0.057	+0.047	+0.013	-0.051	-0.088	-0.155	-0.183
Lower									
$x/c = +0.90$	+0.003	+0.005	-0.011	+0.023	+0.013	-0.017	-0.042	-0.051	-0.078
0.80	-0.049	-0.047	-0.044	-0.036	-0.039	-0.062	-0.074	-0.047	-0.165
0.70	-0.077	-0.083	-0.065	-0.019	-0.060	-0.074	-0.063	-0.100	-0.485
0.60	-0.112	-0.132	-0.145	-0.182	-0.100	-0.073	-0.045	-0.418	-0.575
0.50	-0.152	-0.183	-0.199	-0.240	-0.225	-0.308	-0.472	-0.523	-0.623
0.40	-0.164	-0.204	-0.233	-0.285	-0.319	-0.412	-0.485	-0.577	-0.612
0.30	-0.177	-0.218	-0.265	-0.280	-0.410	-0.511	-0.563	-0.573	-0.563
0.20	-0.158	-0.214	-0.283	-0.347	-0.418	-0.459	-0.483	-0.482	-0.436
0.10	-0.087	-0.133	-0.199	-0.250	-0.250	-0.270	-0.283	-0.278	-0.266
+0.05	+0.063	+0.046	+0.006	-0.006	-0.020	-0.036	-0.050	-0.048	-0.038

TABLE 2—continued

C_p at $\alpha = 5.05$ deg, $y/s = 0.212$

M	0.40	0.695	0.80	0.83	0.865	0.88	0.90	0.915	0.925
Upper									
$x/c = +0.05$	+0.648	+0.815	+0.880	+0.939	+0.983	+1.009	+1.021	+1.036	+1.031
0.07	-0.705	-0.863	-0.809	-0.200	-0.650	-0.598	-0.557	-0.505	-0.457
0.10	-0.622	-0.738	-0.843	-0.848	-0.782	-0.754	-0.719	-0.668	-0.620
0.135	-0.509	-0.594	-0.715	-0.700	-0.667	-0.657	-0.639	-0.602	-0.563
0.245	-0.411	-0.487	-0.545	-0.543	-0.532	-0.537	-0.533	-0.515	-0.489
0.36	-0.373	-0.467	-0.555	-0.540	-0.526	-0.518	-0.499	-0.471	-0.436
0.47	-0.303	-0.382	-0.472	-0.509	-0.532	-0.535	-0.523	-0.501	-0.469
0.52	-0.303	-0.381	-0.484	-0.514	-0.525	-0.528	-0.522	-0.502	-0.470
0.565	-0.294	-0.374	-0.491	-0.538	-0.551	-0.546	-0.537	-0.515	-0.483
0.63	-0.273	-0.344	-0.439	-0.538	-0.584	-0.591	-0.581	-0.559	-0.522
0.70	-0.262	-0.327	-0.400	-0.504	-0.597	-0.610	-0.602	-0.582	-0.545
0.755	-0.225	-0.278	-0.321	-0.356	-0.620	-0.654	-0.645	-0.626	-0.588
0.81	-0.187	-0.226	-0.243	-0.241	-0.389	-0.638	-0.651	-0.635	-0.600
0.925	-0.130	-0.146	-0.140	-0.132	-0.109	-0.145	-0.183	-0.245	-0.503
1.035	+0.016	+0.022	+0.034	+0.040	+0.042	-0.003	-0.047	-0.095	-0.151
+1.15	+0.096	+0.102	+0.105	—	+0.106	+0.095	+0.074	+0.056	+0.009
Lower									
$x/c = +1.035$	+0.013	+0.010	+0.009	+0.007	+0.001	-0.041	-0.065	-0.093	-0.150
0.925	-0.051	-0.068	-0.082	+0.094	-0.103	-0.147	-0.169	-0.220	-0.308
0.81	-0.065	-0.085	-0.102	-0.115	-0.129	-0.173	-0.191	-0.230	-0.248
0.70	-0.074	-0.101	-0.141	-0.140	-0.159	-0.193	-0.222	-0.235	-0.241
0.565	-0.104	-0.132	-0.130	-0.173	-0.188	-0.215	-0.229	-0.223	-0.210
0.47	-0.069	-0.085	-0.097	-0.119	-0.129	-0.141	-0.150	-0.141	-0.130
0.36	-0.067	-0.078	-0.082	-0.100	-0.100	-0.108	-0.113	-0.104	-0.090
0.245	-0.024	-0.029	-0.016	-0.040	-0.037	-0.050	-0.040	-0.029	-0.018
0.135	+0.133	+0.147	+0.181	+0.163	+0.169	+0.178	+0.176	+0.186	+0.193
0.10	0.266	0.270	0.285	0.276	0.288	0.297	0.286	0.288	0.299
+0.08	+0.867	+0.987	+1.031	+1.075	+1.106	+1.126	+1.130	+1.140	+1.115

TABLE 2—continued
 C_p at $\alpha = 5.05$ deg, $y/s = 0.479$

M	0.40	0.695	0.80	0.83	0.865	0.88	0.90	0.915	0.925
Upper									
$x/c = +0.00$	-0.054	+0.110	+0.207	+0.339	+0.389	+0.417	+0.435	+0.458	+0.469
0.02	-1.131	-1.295	-1.240	-0.565	-0.997	-0.921	-0.874	-0.817	-0.753
0.04	-0.963	-1.209	-1.220	-1.145	-1.038	-0.983	-0.935	-0.876	-0.858
0.07	-0.755	-0.934	-1.118	-1.099	-1.021	-0.978	-0.935	-0.880	-0.818
0.10	-0.690	-0.812	-1.023	-1.051	-1.013	-0.949	-0.906	-0.853	-0.795
0.20	-0.550	-0.677	-0.804	-0.915	-0.912	-0.897	-0.871	-0.832	-0.784
0.30	-0.486	-0.605	-0.774	-0.757	-0.811	-0.827	-0.814	-0.784	-0.741
0.35	-0.463	-0.565	-0.750	-0.776	-0.771	-0.800	-0.793	-0.770	-0.731
0.40	-0.430	-0.535	-0.718	-0.816	-0.777	-0.780	-0.773	-0.753	-0.718
0.45	-0.381	-0.477	-0.644	-0.795	-0.782	-0.766	-0.750	-0.727	-0.692
0.50	-0.350	-0.434	-0.549	-0.765	-0.813	-0.794	-0.773	-0.740	-0.696
0.55	-0.305	-0.370	-0.418	-0.694	-0.829	-0.827	-0.810	-0.778	-0.732
0.60	-0.247	-0.296	-0.312	-0.353	-0.776	-0.805	-0.801	-0.778	-0.738
0.70	-0.159	-0.184	-0.181	-0.145	-0.231	-0.489	-0.693	-0.690	-0.656
0.80	-0.070	-0.083	-0.069	-0.047	-0.058	-0.141	-0.185	-0.772	-0.611
0.90	+0.007	+0.010	+0.026	+0.042	+0.050	+0.003	-0.049	-0.089	-0.141
+1.00	+0.123	+0.131	+0.133	—	+0.150	+0.115	+0.072	+0.034	-0.021
Lower									
$x/c = +0.90$	+0.038	+0.032	+0.028	+0.030	+0.020	-0.024	-0.047	-0.077	-0.230
0.80	+0.005	-0.008	-0.019	-0.022	-0.035	-0.078	-0.098	-0.141	-0.236
0.70	-0.043	-0.065	-0.084	-0.091	-0.111	-0.149	-0.192	-0.256	-0.286
0.60	-0.063	-0.094	-0.119	-0.143	-0.169	-0.213	-0.261	-0.303	-0.316
0.50	-0.091	-0.125	-0.155	-0.184	-0.124	-0.261	-0.299	-0.317	-0.310
0.40	-0.100	-0.131	-0.157	-0.191	-0.212	-0.244	-0.265	-0.265	-0.248
0.30	-0.066	-0.113	-0.109	-0.135	-0.146	-0.185	-0.179	-0.171	-0.158
0.20	+0.028	-0.028	-0.033	-0.059	-0.063	-0.086	-0.081	-0.074	-0.065
0.10	0.129	+0.096	+0.100	+0.077	+0.077	+0.071	+0.064	+0.071	+0.076
+0.05	+0.251	+0.245	+0.253	+0.235	+0.237	+0.234	+0.228	+0.231	+0.233

TABLE 2—continued

C_p at $\alpha = 5.05$ deg, $y/s = 0.790$

M	0.40	0.695	0.80	0.83	0.865	0.88	0.90	0.915	0.925
Upper									
$x/c =$ 0.00	-0.144	+0.088	+0.240	+0.324	+0.380	+0.420	+0.436	+0.458	+0.466
+0.02	-1.349	-1.611	-1.305	-0.612	-1.030	-0.936	-0.883	-0.825	-0.757
0.04	-1.130	-1.494	-1.334	-1.208	-1.083	-1.005	-0.955	-0.894	-0.825
0.07	-0.946	-1.390	-1.325	-1.233	-1.117	-1.045	-0.999	-0.939	-0.871
0.10	-0.813	-1.174	-1.318	-1.250	-1.143	-1.079	-1.035	-0.976	-0.908
0.20	-0.606	-0.738	-1.246	-1.181	-1.098	-1.065	-1.073	-1.031	-0.972
0.25	-0.540	-0.645	-1.185	-1.163	-1.074	-1.036	-1.022	-0.998	-0.956
0.30	-0.505	-0.596	-1.013	-1.010	-1.003	-1.013	-1.003	-0.966	-0.943
0.35	-0.449	-0.526	-0.696	-0.840	-0.855	-0.924	-0.987	-0.952	-0.921
0.40	-0.396	-0.450	-0.482	-0.728	-0.742	-0.790	-0.896	-0.925	-0.902
0.45	-0.359	-0.397	-0.377	-0.627	-0.662	-0.690	-0.752	-0.838	-0.872
0.50	-0.304	-0.334	-0.312	-0.545	-0.602	0.000	-0.660	—	-0.816
0.60	-0.211	-0.219	-0.213	-0.387	-0.480	-0.514	-0.532	-0.575	-0.667
0.70	-0.120	-0.112	-0.113	-0.256	-0.356	-0.391	-0.387	-0.405	-0.503
0.80	-0.040	-0.029	-0.024	-0.151	-0.255	-0.306	-0.305	-0.335	-0.409
0.90	+0.028	+0.023	+0.048	-0.057	-0.175	-0.235	-0.250	-0.301	-0.378
+1.00	+0.119	+0.126	+0.129	+0.041	-0.106	-0.158	-0.161	-0.204	-0.303
Lower									
$x/c =$ +0.90	+0.040	+0.034	+0.032	+0.005	-0.045	-0.095	-0.103	-0.136	-0.319
0.80	+0.017	+0.006	+0.004	-0.022	-0.052	-0.097	-0.124	-0.204	-0.363
0.70	-0.026	-0.042	-0.063	-0.088	-0.125	-0.185	-0.257	-0.325	-0.405
0.60	-0.070	-0.095	-0.125	-0.153	-0.197	-0.268	-0.319	-0.365	-0.433
0.50	-0.088	-0.118	-0.154	-0.186	-0.227	-0.283	-0.318	-0.378	-0.391
0.40	-0.100	-0.136	-0.172	-0.206	-0.241	-0.293	-0.332	-0.373	-0.367
0.30	-0.057	-0.092	-0.123	-0.148	-0.177	-0.214	-0.244	-0.251	-0.241
0.20	+0.010	-0.011	-0.041	-0.060	-0.082	-0.125	-0.135	-0.139	-0.131
0.10	0.135	+0.119	+0.093	+0.087	+0.068	+0.042	+0.022	+0.021	+0.026
+0.05	+0.287	+0.271	+0.240	+0.215	+0.197	+0.173	+0.153	+0.149	+0.151

TABLE 2—continued

C_p at $\alpha = 5.05$ deg, $y/s = 0.964$

M	0.40	0.695	0.80	0.83	0.865	0.88	0.90	0.915	0.925
Upper									
$x/c =$ 0.00	+0.029	+0.120	+0.232	+0.291	+0.337	+0.368	+0.383	+0.403	+0.412
+0.02	-1.366	-1.548	-1.103	-0.870	-0.784	-0.759	-0.754	-0.744	-0.745
0.04	-1.167	-1.446	-1.102	-0.859	-0.778	-0.757	-0.751	-0.742	-0.781
0.07	-0.885	-1.410	-1.000	-0.735	-0.658	—	-0.661	—	-0.756
0.10	-0.640	-1.008	-0.911	-0.694	-0.620	—	-0.612	-0.612	-0.692
0.15	-0.549	-0.649	-0.841	-0.672	-0.601	-0.589	-0.578	-0.568	-0.626
0.20	-0.475	-0.545	-0.756	-0.652	-0.590	-0.574	-0.559	-0.545	-0.581
0.25	-0.416	-0.483	-0.676	-0.632	-0.580	-0.565	-0.551	-0.532	-0.556
0.30	-0.372	-0.432	-0.584	-0.599	-0.567	-0.552	-0.539	-0.522	-0.540
0.35	-0.320	-0.376	-0.507	-0.560	-0.551	-0.539	-0.530	-0.515	-0.530
0.40	-0.277	-0.327	-0.455	-0.517	-0.533	-0.527	-0.522	-0.510	-0.524
0.50	-0.220	-0.266	—	-0.408	-0.461	-0.485	-0.497	-0.491	-0.506
0.60	-0.158	-0.190	-0.241	-0.321	-0.380	-0.432	-0.467	-0.472	-0.484
0.70	-0.124	-0.148	-0.194	-0.257	-0.306	-0.358	-0.418	-0.448	-0.465
0.80	-0.132	-0.147	-0.176	-0.214	-0.251	-0.294	-0.348	-0.404	-0.451
0.90	-0.146	-0.148	-0.162	-0.201	-0.231	-0.262	-0.295	-0.349	-0.427
+1.00	+0.022	-0.033	-0.103	-0.161	-0.207	-0.234	-0.248	-0.286	-0.381
Lower									
$x/c =$ +0.90	-0.043	-0.034	-0.040	-0.065	-0.100	-0.149	-0.165	-0.004	-0.280
0.80	-0.078	-0.084	-0.076	-0.093	-0.121	-0.172	-0.174	-0.003	-0.419
0.70	-0.096	-0.110	-0.114	-0.132	-0.144	-0.127	-0.080	-0.332	-0.488
0.60	-0.123	-0.149	-0.165	-0.186	-0.217	-0.268	-0.398	-0.460	-0.534
0.50	-0.153	-0.190	-0.221	-0.244	-0.279	-0.341	-0.426	-0.515	-0.591
0.40	-0.152	-0.197	-0.243	-0.271	-0.316	-0.415	-0.494	-0.532	-0.529
0.30	-0.138	-0.193	-0.253	-0.284	-0.354	-0.449	-0.477	-0.494	-0.477
0.20	-0.110	-0.166	-0.235	-0.263	-0.319	-0.378	-0.383	-0.386	-0.369
0.10	+0.005	-0.037	-0.089	-0.101	-0.125	-0.157	-0.158	-0.155	-0.142
+0.05	+0.187	+0.171	+0.135	+0.129	+0.114	+0.097	+0.083	+0.084	+0.089

TABLE 2—*continued*
 C_p at $\alpha = 7.1$ deg, $y/s = 0.212$

M	0.40	0.70	0.80	0.83	0.865	0.88
Upper						
$x/c = +0.05$	+0.012	+0.523	+0.736	+0.819	+0.875	+0.917
0.07	-1.182	-1.433	-1.153	-0.973	-0.858	-0.787
0.10	-0.892	-1.329	-1.238	-1.107	-1.010	-0.943
0.135	-0.659	-0.734	-1.073	-0.968	-0.892	-0.841
0.245	-0.516	-0.610	-0.637	-0.642	-0.656	-0.647
0.36	-0.452	-0.560	-0.647	-0.630	-0.617	-0.596
0.47	-0.357	-0.446	-0.570	-0.608	-0.631	-0.617
0.52	-0.348	-0.431	-0.554	-0.589	-0.616	-0.616
0.565	-0.333	-0.412	-0.550	-0.594	-0.633	-0.627
0.63	-0.301	-0.373	-0.455	-0.547	-0.659	-0.657
0.70	-0.282	-0.344	-0.386	-0.432	-0.630	-0.682
0.755	-0.241	-0.291	-0.314	-0.326	-0.466	-0.702
0.81	-0.195	-0.231	-0.245	-0.254	-0.269	-0.499
0.925	-0.130	-0.140	-0.146	-0.160	-0.159	-0.165
1.035	+0.018	+0.024	+0.022	+0.013	-0.003	-0.035
+1.15	+0.094	+0.095	+0.092	+0.088	+0.074	+0.057
Lower						
$x/c = +1.035$	+0.018	+0.011	-0.004	-0.010	-0.034	-0.064
0.925	-0.032	-0.052	-0.080	-0.090	-0.120	-0.146
0.81	-0.032	-0.055	-0.084	-0.093	-0.121	-0.142
0.70	-0.041	-0.060	-0.090	-0.100	-0.126	-0.146
0.565	-0.057	-0.080	-0.106	-0.112	-0.133	-0.148
0.47	-0.013	-0.025	-0.039	-0.051	-0.064	-0.073
0.36	+0.002	-0.005	-0.012	-0.021	-0.028	-0.035
0.245	0.064	+0.062	+0.054	+0.051	+0.054	+0.043
0.135	0.265	0.282	0.280	0.272	0.286	0.273
0.10	0.424	0.443	0.443	0.301	0.427	0.409
+0.08	+0.713	+0.928	+1.018	+1.036	+1.072	+1.095

TABLE 2—*continued*
 C_p at $\alpha = 7.1$ deg, $y/s = 0.479$

M	0.40	0.70	0.80	0.83	0.865	0.88
Upper						
$x/c =$ 0.00	-0.606	-0.091	+0.134	+0.188	+0.256	+0.298
+0.02	-1.872	-1.759	-1.450	-1.285	-1.159	-1.088
0.04	-1.420	-1.803	-1.465	-1.348	-1.234	-1.156
0.07	-1.035	-1.628	-1.447	-1.335	-1.230	-1.162
0.10	-0.935	-1.320	-1.415	-1.302	-1.205	-1.141
0.20	-0.705	-0.840	-1.309	-1.229	-1.155	-1.111
0.30	-0.595	-0.710	-0.953	-1.012	-1.053	-1.049
0.35	-0.546	-0.649	-0.856	-0.888	-0.918	-0.981
0.40	-0.508	-0.599	-0.849	-0.812	-0.812	-0.889
0.45	-0.445	-0.530	-0.612	-0.742	-0.736	-0.788
0.50	-0.404	-0.474	-0.420	-0.633	-0.708	-0.756
0.55	-0.349	-0.405	-0.359	-0.490	-0.671	-0.747
0.60	-0.283	-0.329	-0.308	-0.368	-0.567	-0.706
0.70	-0.181	-0.209	-0.220	-0.266	-0.376	-0.419
0.80	-0.086	-0.100	-0.124	-0.175	-0.273	-0.287
0.90	+0.000	-0.002	-0.027	-0.071	-0.160	-0.190
+1.00	+0.116	+0.095	+0.090	+0.065	-0.031	-0.072
Lower						
$x/c =$ +0.90	+0.050	+0.034	+0.006	-0.008	-0.053	-0.082
0.80	+0.027	+0.008	-0.021	-0.031	-0.068	-0.090
0.70	-0.014	-0.037	-0.064	-0.078	-0.114	-0.137
0.60	-0.023	-0.051	-0.081	-0.107	-0.142	-0.162
0.50	-0.040	-0.072	-0.103	-0.124	-0.159	-0.181
0.40	-0.036	-0.066	-0.095	-0.114	-0.143	-0.157
0.30	+0.012	-0.011	-0.032	-0.046	-0.066	-0.077
0.20	0.089	+0.069	+0.052	+0.041	+0.029	+0.018
0.10	0.237	0.220	0.197	0.185	0.183	0.171
+0.05	+0.403	+0.387	+0.361	+0.345	+0.344	+0.332

TABLE 2—continued

C_p at $\alpha = 7.1$ deg, $y/s = 0.790$

M	0.40	0.70	0.80	0.83	0.865	0.88
Upper						
$x/c = 0.00$	-0.876	-0.166	-0.088	+0.161	+0.244	+0.278
+0.02	-2.158	-1.609	-0.938	-0.954	-0.885	-0.945
0.04	-1.468	-1.669	-0.895	—	-0.902	-0.916
0.07	-1.268	-1.638	-0.872	-0.987	-0.846	-0.874
0.10	-1.074	-1.492	-0.855	-0.858	-0.794	-0.819
0.20	-0.767	-1.047	-0.826	-0.781	-0.722	-0.723
0.25	-0.673	-0.911	-0.806	-0.744	—	-0.688
0.30	-0.614	-0.809	-0.785	-0.711	-0.663	-0.664
0.35	-0.541	-0.712	-0.757	-0.684	-0.645	-0.646
0.40	-0.472	-0.626	-0.725	-0.653	-0.606	-0.624
0.45	-0.420	-0.548	-0.690	-0.618	-0.579	-0.599
0.50	-0.358	-0.475	-0.655	-0.590	-0.573	-0.580
0.60	-0.248	-0.349	-0.585	-0.523	-0.514	-0.539
0.70	-0.143	-0.229	-0.491	-0.450	-0.468	-0.499
0.80	-0.057	-0.128	-0.399	-0.379	-0.421	-0.463
0.90	+0.018	-0.048	-0.314	-0.316	-0.377	-0.428
+1.00	+0.106	+0.023	-0.239	-0.241	-0.304	-0.362
Lower						
$x/c = +0.90$	+0.041	-0.001	-0.110	-0.132	-0.186	-0.224
0.89	+0.028	-0.007	-0.083	-0.104	-0.154	-0.192
0.70	-0.008	-0.045	-0.105	-0.126	-0.187	-0.227
0.60	-0.038	-0.078	-0.141	-0.162	-0.224	-0.261
0.50	-0.042	-0.083	-0.145	-0.162	-0.213	-0.237
0.40	-0.039	-0.080	-0.136	-0.153	-0.195	-0.219
0.30	+0.019	-0.014	-0.051	-0.077	-0.111	-0.128
0.20	0.114	+0.087	+0.048	+0.022	-0.001	-0.017
0.10	0.271	0.223	0.207	0.185	+0.162	+0.149
+0.05	+0.433	+0.406	+0.367	+0.317	+0.298	+0.285

TABLE 2—continued

C_p at $\alpha = 7.1$ deg, $y/s = 0.964$

M	0.40	0.70	0.80	0.83	0.865	0.88
Upper						
$x/c =$ 0.00	-0.413	+0.041	+0.190	+0.186	+0.234	+0.266
+0.02	-1.933	-0.939	-0.665	-0.791	-0.900	-0.738
0.04	—	-0.871	-0.621	-0.755	-0.878	-0.732
0.07	-0.927	-0.813	-0.587	-0.753	-0.844	-0.741
0.10	-0.829	-0.805	-0.585	-0.753	-0.838	-0.730
0.15	-0.696	-0.780	-0.586	-0.739	-0.808	-0.716
0.20	-0.593	-0.724	-0.570	-0.702	-0.749	-0.674
0.25	-0.521	-0.666	-0.555	-0.655	-0.670	-0.640
0.30	-0.466	-0.600	-0.528	-0.605	-0.637	-0.606
0.35	-0.408	-0.544	-0.504	-0.570	-0.605	-0.577
0.40	-0.363	-0.490	—	-0.540	-0.580	-0.559
0.50	-0.311	-0.398	—	-0.483	-0.512	-0.535
0.60	-0.262	-0.327	-0.373	-0.431	-0.476	-0.488
0.70	-0.236	-0.291	-0.329	-0.382	-0.418	-0.424
0.80	-0.264	-0.276	-0.304	-0.340	-0.339	-0.381
0.90	-0.303	-0.266	-0.293	-0.311	-0.323	-0.356
+1.00	-0.104	+0.203	-0.269	-0.236	-0.234	-0.295
Lower						
$x/c =$ +0.90	-0.085	-0.102	-0.168	-0.154	-0.167	-0.213
0.80	-0.106	-0.110	-0.165	-0.167	-0.191	-0.217
0.70	-0.121	-0.127	-0.174	-0.182	-0.208	-0.238
0.60	-0.139	-0.161	-0.174	-0.219	-0.258	-0.316
0.50	-0.158	-0.197	-0.247	-0.266	-0.322	-0.386
0.40	-0.146	-0.193	-0.248	-0.274	-0.351	-0.401
0.30	-0.113	-0.172	-0.230	-0.264	-0.344	-0.383
0.20	-0.057	-0.122	-0.181	-0.214	-0.238	-0.288
0.10	+0.088	+0.036	-0.012	-0.026	-0.051	-0.060
+0.05	+0.293	+0.248	+0.212	+0.205	+0.101	+0.182

TABLE 2—continued

C_p at $\alpha = 9.1$ deg, $y/s = 0.212$

C_p at $\alpha = 9.1$ deg, $y/s = 0.479$

M	0.40	0.70	0.80	0.83
Upper $x/c = +0.05$	-1.035	+0.247	+0.561	+0.675
0.07	-1.574	-1.838	-1.348	-1.167
0.10	-1.168	-1.696	-1.414	-1.285
0.135	-0.823	-0.929	-1.277	-1.168
0.245	-0.620	-0.684	-0.785	-0.803
0.36	-0.516	-0.605	-0.698	-0.685
0.47	-0.401	-0.487	-0.529	-0.559
0.52	-0.384	-0.467	-0.492	-0.487
0.565	-0.364	-0.448	-0.498	-0.468
0.63	-0.322	-0.403	-0.488	-0.477
0.70	-0.298	-0.372	-0.470	-0.488
0.755	-0.252	-0.320	-0.411	-0.458
0.81	-0.205	-0.263	-0.338	-0.367
0.925	-0.133	-0.169	-0.228	-0.263
1.035	+0.014	-0.006	-0.040	-0.059
+1.15	+0.092	+0.077	+0.054	+0.047
Lower $x/c = +1.035$	+0.029	-0.002	-0.044	-0.060
0.925	-0.010	-0.049	-0.095	-0.111
0.81	-0.004	-0.038	-0.077	-0.086
0.70	-0.001	-0.033	-0.067	-0.074
0.565	-0.012	-0.040	-0.069	-0.069
0.47	+0.043	+0.024	0.000	+0.002
0.36	0.070	0.056	+0.037	0.044
0.245	0.142	0.136	0.124	0.130
0.135	0.361	0.367	0.366	0.364
0.10	0.529	0.537	0.543	0.523
+0.08	+0.663	+0.847	+0.974	+0.988

M	0.40	0.70	0.80	0.83
Upper $x/c = 0.00$	-1.384	-0.327	-0.024	+0.032
+0.02	-2.735	-1.872	-1.401	-1.277
0.04	-1.678	-1.868	-1.407	-1.293
0.07	-1.338	-1.780	-1.395	-1.261
0.10	-1.179	-1.619	-1.345	-1.210
0.20	-0.847	-1.098	-1.150	-1.029
0.30	-0.691	-0.851	-0.971	-0.895
0.35	-0.626	-0.764	-0.897	-0.843
0.40	-0.573	-0.695	-0.836	-0.797
0.45	-0.501	-0.619	-0.776	-0.752
0.50	-0.450	-0.559	-0.723	-0.716
0.55	-0.388	-0.495	-0.674	-0.679
0.60	-0.316	-0.424	-0.616	-0.635
0.70	-0.204	-0.308	-0.511	-0.555
0.80	-0.100	-0.205	-0.404	-0.457
0.90	-0.008	-0.097	-0.295	-0.363
+1.00	+0.095	+0.027	-0.165	-0.238
Lower $x/c = +0.90$	+0.057	+0.002	-0.075	-0.098
0.80	0.046	-0.003	-0.057	-0.068
0.70	0.017	-0.032	-0.081	-0.085
0.60	0.017	-0.032	-0.076	-0.090
0.50	0.013	-0.037	-0.080	-0.087
0.40	0.032	-0.014	-0.053	-0.059
0.30	0.092	+0.055	+0.023	+0.021
0.20	0.179	0.149	0.119	0.117
0.10	0.342	0.311	0.274	0.272
+0.05	+0.499	+0.472	+0.444	+0.426

TABLE 2—continued

C_p at $\alpha = 9.1$ deg, $y/s = 0.790$

C_p at $\alpha = 0.1$ deg, $y/s = 0.964$

M	0.40	0.70	0.80	0.83
Upper $x/c =$				
0.00	-1.728	-0.243	-0.015	+0.047
+0.02	-3.044	-0.844	-0.918	-0.695
0.04	-1.797	-0.849	-0.696	-0.701
0.07	-1.571	-0.847	-0.693	-0.682
0.10	-1.314	-0.837	-0.690	-0.671
0.20	-0.907	-0.792	-0.675	-0.657
0.25	-0.786	-0.759	-0.655	-0.636
0.30	-0.703	-0.730	-0.639	-0.618
0.35	-0.613	-0.699	-0.621	-0.621
0.40	-0.531	-0.655	-0.602	-0.580
0.45	-0.466	-0.632	-0.582	-0.556
0.50	-0.397	-0.541	-0.566	-0.544
0.60	-0.278	-0.472	-0.534	-0.501
0.70	-0.169	-0.412	-0.495	-0.470
0.80	-0.080	—	-0.459	-0.441
0.90	-0.004	-0.282	-0.423	-0.414
+1.00	+0.057	-0.248	-0.366	-0.346
Lower $x/c =$				
+0.90	+0.029	-0.135	-0.212	-0.217
0.80	0.036	-0.088	-0.151	-0.163
0.70	+0.018	-0.086	-0.155	-0.169
0.60	-0.003	-0.097	-0.169	-0.180
0.50	+0.004	-0.081	-0.141	-0.155
0.40	0.021	-0.060	-0.113	-0.126
0.30	0.092	+0.019	-0.021	-0.035
0.20	0.202	0.132	+0.091	+0.078
0.10	0.368	0.298	0.267	0.243
+0.05	+0.516	+0.453	+0.425	+0.373

M	0.40	0.70	0.80	0.83
Upper $x/c =$				
0.00	-0.983	+0.032	+0.109	+0.058
+0.02	-2.651	-0.629	-0.636	-0.972
0.04	-2.275	-0.584	-0.600	-0.948
0.07	-1.194	-0.554	-0.580	—
0.10	-1.013	-0.553	-0.574	—
0.15	-0.838	-0.553	-0.567	-0.874
0.20	-0.713	-0.539	-0.549	-0.817
0.25	-0.623	-0.526	-0.537	-0.771
0.30	-0.557	-0.504	-0.523	-0.733
0.35	-0.492	-0.487	-0.515	-0.712
0.40	-0.448	-0.469	-0.509	-0.685
0.50	-0.415	-0.437	-0.490	-0.626
0.60	-0.362	-0.398	-0.455	-0.552
0.70	-0.345	-0.368	-0.424	-0.491
0.80	-0.404	-0.359	-0.409	-0.431
0.90	-0.437	-0.343	-0.390	-0.389
+1.00	-0.200	-0.299	-0.335	-0.247
Lower $x/c =$				
+0.90	-0.120	-0.184	-0.242	-0.196
0.80	-0.134	-0.173	-0.232	-0.214
0.70	-0.139	-0.165	-0.225	-0.230
0.60	-0.154	-0.184	-0.223	-0.263
0.50	+0.162	-0.206	-0.269	-0.302
0.40	-0.136	-0.191	-0.253	-0.295
0.30	-0.092	-0.159	-0.221	-0.265
0.20	-0.024	-0.102	-0.157	-0.194
0.10	+0.153	+0.063	+0.028	-0.176
+0.05	+0.356	+0.267	+0.249	+0.245

TABLE 3

List of Measured Pressures on Wing with Transition Thread

C_p at $\alpha = -0.6$ deg, $y/s = 0.212$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_i/c = 0.12$								
$x/c = +0.05$	+0.813	+0.910	+0.957	+0.982	+0.995	+1.005	+1.023	+1.000	+1.040
0.07	-0.017	+0.007	+0.014	+0.030	+0.037	+0.043	+0.061	+0.072	+0.088
0.10	-0.068	-0.143	-0.143	-0.133	-0.125	-0.119	-0.105	-0.094	-0.077
0.135	-0.159	-0.170	-0.175	-0.168	-0.163	-0.165	-0.161	-0.168	-0.177
0.245	-0.165	-0.208	-0.219	-0.220	-0.216	-0.211	-0.203	-0.196	-0.176
0.36	-0.210	-0.249	-0.279	-0.293	-0.304	-0.300	-0.293	-0.286	-0.262
0.47	-0.174	-0.214	-0.246	-0.262	-0.264	-0.259	-0.271	-0.298	-0.265
0.52	-0.195	-0.236	-0.275	-0.297	-0.311	-0.305	-0.300	-0.304	-0.288
0.565	-0.191	-0.237	-0.283	-0.311	-0.347	-0.353	-0.345	-0.347	-0.330
0.63	-0.184	-0.225	-0.271	-0.300	-0.346	-0.373	-0.384	-0.384	-0.369
0.70	-0.188	-0.229	-0.277	-0.311	-0.368	-0.390	-0.402	-0.407	-0.393
0.755	-0.169	-0.201	-0.243	-0.266	-0.327	-0.435	-0.457	-0.463	-0.451
0.81	-0.135	-0.165	-0.194	-0.205	-0.218	-0.297	-0.446	-0.470	-0.461
0.925	-0.111	-0.124	-0.138	-0.138	-0.133	-0.138	-0.140	-0.219	-0.515
1.035	+0.014	+0.018	+0.025	+0.032	+0.039	+0.036	+0.037	+0.023	-0.028
+1.15	+0.095	+0.099	+0.103	+0.109	+0.112	+0.112	+0.100	+0.067	+0.062
Lower	$x_i/c = 0.19$								
$x/c = +1.035$	-0.003	+0.001	+0.008	+0.019	+0.026	+0.027	+0.033	-0.028	-0.021
0.925	-0.092	-0.107	-0.122	-0.120	-0.118	-0.122	-0.122	-0.172	-0.418
0.81	-0.132	-0.159	-0.186	-0.197	-0.205	-0.228	-0.402	-0.458	-0.459
0.70	-0.171	-0.213	-0.257	-0.282	-0.358	-0.420	-0.448	-0.459	-0.446
0.565	-0.232	-0.282	-0.340	-0.381	-0.409	-0.428	-0.432	-0.422	-0.400
0.47	-0.216	-0.250	-0.310	-0.334	-0.357	-0.364	-0.362	-0.349	-0.325
0.36	-0.250	-0.282	-0.329	-0.343	-0.333	-0.327	-0.319	-0.301	-0.276
0.245	-0.258	-0.300	-0.317	-0.320	-0.297	-0.280	-0.294	—	-0.302
0.135	-0.243	-0.211	-0.180	-0.149	-0.106	-0.081	-0.050	-0.034	-0.004
0.10	-0.268	-0.341	-0.420	-0.451	-0.422	-0.403	-0.403	-0.374	-0.342
+0.08	+0.852	+0.945	+1.000	+1.027	+1.045	+1.057	+1.075	+1.052	+1.099

TABLE 3—continued

C_p at $\alpha = -0.6$ deg, $y/s = 0.479$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_i/c = 0.15$								
$x/c =$ 0.00	+0.561	+0.576	+0.571	+0.523	+0.587	+0.593	+0.598	+0.577	+0.621
+0.02	-0.106	-0.090	-0.073	-0.070	-0.066	-0.060	-0.048	-0.040	-0.025
0.04	-0.188	-0.194	-0.184	-0.184	-0.180	-0.176	-0.164	-0.157	-0.140
0.07	-0.217	-0.237	-0.236	-0.238	-0.232	-0.226	-0.216	-0.208	-0.189
0.10	-0.239	-0.267	-0.273	-0.278	-0.276	-0.269	-0.259	-0.251	-0.229
0.20	-0.243	-0.296	-0.327	-0.341	-0.346	-0.360	-0.361	-0.355	-0.334
0.30	-0.265	-0.329	-0.379	-0.415	-0.434	-0.422	-0.443	-0.441	-0.417
0.35	-0.265	-0.329	-0.385	-0.417	-0.465	-0.453	-0.461	-0.483	-0.464
0.40	-0.258	-0.325	-0.387	-0.426	-0.466	-0.472	-0.457	-0.477	-0.476
0.45	-0.233	-0.297	-0.361	-0.416	-0.456	-0.468	-0.459	-0.452	-0.446
0.50	-0.231	-0.293	-0.355	-0.409	-0.499	-0.524	-0.515	-0.499	-0.479
0.55	-0.201	-0.254	-0.306	-0.343	-0.488	-0.553	-0.555	-0.541	-0.514
0.60	-0.163	-0.205	-0.242	-0.261	-0.310	-0.510	-0.543	-0.540	-0.515
0.70	-0.095	-0.122	-0.145	-0.150	-0.147	-0.173	-0.404	-0.497	-0.481
0.80	-0.036	-0.046	-0.056	-0.053	-0.046	-0.042	-0.064	-0.183	-0.454
0.90	+0.018	+0.019	+0.025	+0.032	+0.043	+0.048	+0.047	+0.023	-0.115
+1.00	+0.130	+0.144	+0.153	+0.160	+0.166	+0.169	+0.152	+0.103	+0.056
Lower	$x_i/c = 0.15$								
$x/c =$ +0.90	+0.013	+0.009	+0.017	+0.025	+0.038	+0.045	+0.046	+0.021	-0.075
0.80	-0.046	-0.058	-0.065	-0.062	-0.050	-0.047	-0.071	-0.167	-0.465
0.70	-0.116	-0.132	-0.164	-0.168	-0.163	-0.190	-0.433	-0.561	-0.553
0.60	-0.178	-0.208	-0.259	-0.278	-0.350	-0.560	-0.586	-0.582	-0.560
0.50	-0.240	-0.287	-0.360	-0.418	-0.548	-0.561	-0.570	-0.566	-0.548
0.40	-0.285	-0.341	-0.423	-0.488	-0.530	-0.556	-0.564	-0.553	-0.532
0.30	-0.290	-0.341	-0.418	-0.453	-0.477	-0.478	-0.469	-0.452	-0.427
0.20	-0.272	-0.330	-0.373	-0.386	-0.380	-0.370	-0.368	-0.347	-0.322
0.10	-0.285	-0.333	-0.364	-0.366	-0.351	-0.349	-0.342	-0.323	-0.303
+0.05	-0.230	-0.252	-0.282	-0.276	-0.250	-0.244	-0.235	-0.212	-0.194

TABLE 3—continued

C_p at $\alpha = -0.6$ deg, $y/s = 0.790$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.23$								
$x/c =$ 0.00	+0.597	+0.613	+0.610	+0.613	+0.606	+0.606	+0.605	+0.579	+0.618
+0.02	-0.103	-0.111	-0.114	-0.115	-0.105	-0.104	-0.099	-0.091	-0.071
0.04	-0.201	-0.224	-0.242	-0.248	-0.243	-0.242	-0.237	-0.226	-0.205
0.07	-0.264	-0.305	-0.337	-0.351	-0.354	-0.352	-0.351	-0.339	-0.316
0.10	-0.288	-0.345	-0.390	-0.414	-0.424	-0.419	-0.419	-0.405	-0.383
0.20	-0.283	-0.349	-0.410	-0.444	-0.486	-0.488	-0.491	-0.476	-0.452
0.25	-0.253	-0.292	-0.386	-0.461	-0.549	-0.558	-0.629	-0.653	-0.642
0.30	-0.260	-0.334	-0.404	-0.444	-0.518	-0.531	-0.536	-0.521	-0.497
0.35	-0.255	-0.319	-0.391	-0.467	-0.593	-0.609	-0.616	-0.607	-0.580
0.40	-0.229	-0.292	-0.347	-0.396	-0.569	-0.625	-0.638	-0.638	-0.617
0.45	-0.219	-0.271	-0.316	-0.343	-0.394	-0.647	-0.663	-0.662	-0.646
0.50	-0.199	-0.242	-0.276	-0.289	-0.293	-0.609	-0.678	-0.673	-0.663
0.60	-0.129	-0.159	-0.174	-0.172	-0.157	-0.149	-0.400	-0.680	-0.669
0.70	-0.068	-0.079	-0.082	-0.075	-0.057	-0.032	-0.061	-0.180	-0.637
0.80	-0.038	-0.011	-0.005	+0.006	+0.022	+0.041	+0.047	-0.026	-0.183
0.90	+0.013	+0.043	+0.066	0.077	0.094	0.106	0.120	+0.081	-0.056
+1.00	+0.134	+0.155	+0.171	+0.182	+0.190	+0.197	+0.186	+0.126	+0.026
Lower	$x_t/c = 0.25$								
$x/c =$ +0.90	+0.036	0.044	+0.060	+0.073	+0.091	+0.107	+0.115	+0.049	-0.077
0.80	-0.018	-0.015	-0.006	+0.005	+0.027	+0.048	+0.022	-0.074	-0.160
0.70	-0.081	-0.087	-0.089	-0.080	-0.050	-0.034	-0.103	-0.181	-0.408
0.60	-0.150	-0.177	-0.192	-0.186	-0.150	-0.177	-0.389	-0.725	-0.735
0.50	-0.207	-0.250	-0.285	-0.296	-0.313	-0.709	-0.728	-0.715	-0.691
0.40	-0.265	-0.335	-0.401	-0.466	-0.643	-0.680	-0.677	-0.665	-0.644
0.30	-0.263	-0.321	-0.416	-0.460	-0.542	-0.552	-0.582	-0.593	-0.595
0.20	-0.289	-0.364	-0.434	-0.474	-0.496	-0.497	-0.488	-0.489	-0.448
0.10	-0.287	-0.352	-0.410	-0.433	-0.445	-0.443	-0.433	-0.415	-0.391
+0.05	-0.290	-0.321	-0.398	-0.393	-0.400	-0.395	-0.378	-0.358	-0.338

TABLE 3—continued

C_p at $\alpha = -0.6$ deg, $y/s = 0.964$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.28$								
$x/c =$ 0.00	+0.521	+0.529	+0.521	+0.525	+0.519	+0.516	+0.515	+0.491	+0.531
+0.02	-0.153	-0.183	-0.201	-0.199	-0.188	-0.184	-0.178	-0.160	-0.139
0.04	-0.247	-0.314	-0.367	-0.375	-0.371	-0.369	-0.364	-0.349	-0.322
0.07	-0.266	-0.364	-0.471	-0.525	-0.530	-0.520	-0.518	-0.496	-0.466
0.10	-0.260	-0.355	-0.463	-0.569	-0.616	-0.610	-0.614	-0.593	-0.563
0.15	-0.257	-0.336	-0.419	-0.514	-0.637	-0.649	-0.661	-0.645	-0.619
0.20	-0.238	-0.307	-0.374	-0.442	-0.610	-0.644	-0.663	-0.655	-0.635
0.25	-0.195	-0.253	-0.303	-0.335	-0.518	-0.558	-0.587	-0.577	-0.561
0.30	-0.201	-0.264	-0.317	-0.329	-0.544	-0.778	-0.778	-0.746	-0.711
0.35	-0.180	-0.219	-0.247	-0.245	-0.206	-0.717	-0.805	-0.782	-0.752
0.40	-0.167	-0.201	-0.223	-0.220	-0.149	-0.237	-0.795	-0.795	-0.770
0.50	-0.130	-0.154	-0.166	-0.162	-0.138	0.057	-0.113	-0.468	-0.713
0.60	-0.080	-0.088	-0.089	-0.082	-0.067	-0.030	+0.007	-0.127	-0.457
0.70	-0.032	-0.031	-0.026	-0.017	-0.004	+0.016	0.055	-0.030	-0.170
0.80	+0.008	+0.011	+0.024	+0.034	+0.045	0.058	0.085	+0.055	-0.102
0.90	0.036	0.044	0.062	0.073	0.082	0.092	0.112	0.083	-0.056
+1.00	+0.108	+0.129	+0.146	+0.157	+0.166	+0.172	+0.164	+0.106	-0.010
Lower	$x_t/c = 0.25$								
$x/c =$ +0.90	+0.053	+0.063	+0.080	+0.091	+0.104	+0.111	+0.128	+0.104	-0.048
0.80	+0.005	+0.001	+0.016	+0.027	+0.041	0.053	0.083	+0.038	-0.093
0.70	-0.044	-0.037	-0.031	-0.021	-0.006	+0.017	0.055	-0.043	-0.152
0.60	-0.089	-0.093	-0.093	-0.086	-0.063	-0.019	+0.002	-0.157	-0.253
0.50	-0.150	-0.172	-0.183	-0.178	-0.133	-0.046	-0.242	-0.394	-0.626
0.40	-0.180	-0.214	-0.237	-0.228	-0.114	-0.400	-0.726	-0.736	-0.770
0.30	-0.184	-0.267	-0.335	-0.394	-0.629	-0.794	-0.782	-0.761	-0.729
0.20	-0.260	-0.332	-0.405	-0.483	-0.633	-0.661	-0.663	-0.652	-0.628
0.10	-0.287	-0.374	-0.480	-0.564	-0.589	-0.590	-0.576	-0.556	-0.530
+0.05	-0.253	-0.335	-0.409	-0.435	-0.444	-0.443	-0.427	-0.407	-0.383

TABLE 3—continued

C_p at $\alpha = -0.1$ deg, $y/s = 0.212$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_i/c = 0.12$								
$x/c = +0.05$	+0.844	+0.928	+0.973	+1.000	+1.002	+1.013	+1.034	+1.212	+1.052
0.07	-0.066	-0.043	-0.037	-0.017	-0.013	-0.007	+0.009	+0.030	+0.048
0.10	-0.172	-0.179	-0.183	-0.171	-0.239	-0.158	-0.146	-0.125	-0.109
0.135	-0.184	-0.195	-0.202	-0.194	-0.269	-0.208	-0.215	-0.229	-0.251
0.245	-0.203	-0.228	-0.242	-0.243	-0.315	-0.231	-0.224	-0.211	-0.195
0.36	-0.225	-0.267	-0.301	-0.318	-0.402	-0.319	-0.312	-0.298	-0.277
0.47	-0.203	-0.229	-0.264	-0.282	-0.357	-0.285	-0.295	-0.300	-0.290
0.52	-0.207	-0.250	-0.292	-0.317	-0.404	-0.319	-0.320	-0.321	-0.308
0.565	-0.201	-0.251	-0.299	-0.332	-0.446	-0.366	-0.364	-0.362	-0.319
0.63	-0.191	-0.236	-0.284	-0.314	-0.380	-0.395	-0.402	-0.399	-0.390
0.70	-0.193	-0.238	-0.289	-0.326	-0.394	-0.408	-0.422	-0.420	-0.411
0.755	-0.172	-0.211	-0.252	-0.276	-0.367	-0.452	-0.472	-0.476	-0.469
0.81	-0.141	-0.172	-0.200	-0.211	-0.233	-0.335	-0.447	-0.482	-0.488
0.925	-0.114	-0.129	-0.139	-0.138	-0.140	-0.135	-0.132	-0.208	-0.526
1.035	+0.015	+0.021	+0.026	+0.036	-0.032	+0.039	+0.041	+0.029	-0.031
+1.15	+0.095	+0.100	+0.104	+0.110	+0.104	+0.108	+0.109	+0.104	+0.062
Lower	$x_i/c = 0.19$								
$x/c = +1.035$	-0.002	+0.004	+0.028	+0.017	+0.017	+0.023	+0.021	+0.025	+0.030
0.925	-0.089	-0.105	-0.119	-0.118	-0.125	-0.122	-0.121	-0.178	-0.453
0.81	-0.125	-0.154	-0.181	-0.191	-0.208	-0.230	-0.336	-0.436	-0.447
0.70	-0.166	-0.205	-0.247	-0.270	-0.334	-0.397	-0.499	-0.438	-0.434
0.565	-0.219	-0.268	-0.324	-0.361	-0.397	-0.406	-0.410	-0.404	-0.390
0.47	-0.203	-0.250	-0.291	-0.312	-0.338	-0.342	-0.342	-0.333	-0.315
0.36	-0.235	-0.277	-0.307	0.319	-0.322	-0.304	-0.299	-0.287	-0.266
0.245	-0.233	-0.273	-0.292	-0.292	-0.287	-0.263	-0.251	-0.252	-0.258
0.135	-0.175	-0.179	-0.156	-0.133	-0.103	-0.079	-0.059	-0.032	-0.004
0.10	-0.218	-0.268	-0.312	-0.338	-0.329	-0.309	-0.299	-0.296	-0.270
+0.08	+0.887	+0.971	+1.016	+1.043	+1.049	+1.065	+1.082	1.262	1.109

TABLE 3—continued

C_p at $\alpha = -0.1$ deg, $y/s = 0.479$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_i/c = 0.15$								
$x/c =$ 0.00	+0.564	+0.578	+0.577	+0.586	+0.580	+0.593	+0.600	+0.783	+0.625
+0.02	-0.186	0.163	-0.143	-0.138	-0.131	-0.121	-0.111	-0.095	-0.078
0.04	-0.256	-0.256	-0.246	-0.206	-0.312	-0.232	-0.221	-0.224	-0.192
0.07	-0.269	-0.287	-0.286	-0.288	-0.354	-0.270	-0.260	-0.246	-0.230
0.10	-0.283	-0.312	-0.318	-0.323	-0.392	-0.307	-0.296	-0.280	-0.262
0.20	-0.273	-0.327	-0.360	-0.379	-0.468	-0.399	-0.393	-0.382	-0.362
0.30	-0.288	-0.354	-0.408	-0.450	-0.528	-0.470	-0.474	-0.461	-0.442
0.35	-0.283	-0.351	-0.410	-0.453	-0.563	-0.475	-0.505	-0.507	-0.491
0.40	-0.277	-0.343	-0.411	-0.448	-0.577	-0.484	-0.488	-0.518	-0.512
0.45	-0.257	-0.314	-0.382	-0.448	-0.567	-0.487	-0.475	-0.484	-0.488
0.50	-0.244	-0.307	-0.372	-0.439	-0.613	-0.541	-0.528	-0.516	-0.512
0.55	-0.212	-0.267	-0.318	-0.360	-0.621	-0.573	-0.569	-0.549	-0.539
0.60	-0.176	-0.214	-0.251	-0.270	-0.448	-0.548	-0.562	-0.549	-0.538
0.70	-0.101	-0.130	-0.150	-0.155	-0.226	-0.196	-0.387	-0.511	-0.504
0.80	-0.040	-0.051	-0.058	-0.056	-0.052	-0.042	-0.056	-0.170	-0.469
0.90	+0.017	+0.022	+0.025	+0.033	+0.038	+0.052	+0.054	+0.024	-0.095
+1.00	+0.128	+0.144	+0.154	+0.161	+0.157	+0.164	+0.162	+0.138	+0.062
Lower	$x_i/c = 0.15$								
$x/c =$ +0.90	+0.016	+0.014	+0.018	+0.025	+0.029	+0.042	+0.047	+0.020	-0.105
0.80	-0.041	-0.053	-0.062	-0.060	-0.059	-0.048	-0.053	-0.170	-0.474
0.70	-0.110	-0.135	-0.158	-0.164	-0.168	-0.175	-0.313	-0.532	-0.536
0.60	-0.169	-0.211	-0.249	-0.267	-0.315	-0.515	-0.555	-0.557	-0.545
0.50	-0.226	-0.285	-0.344	-0.393	-0.527	-0.532	-0.538	-0.537	-0.527
0.40	-0.269	-0.335	-0.400	-0.452	-0.501	-0.516	-0.527	-0.526	-0.513
0.30	-0.266	-0.330	-0.389	-0.419	-0.448	-0.449	-0.441	-0.426	-0.408
0.20	-0.243	-0.297	-0.340	-0.350	-0.358	-0.349	-0.338	-0.322	-0.303
0.10	-0.239	-0.285	-0.318	-0.320	-0.317	-0.301	-0.297	-0.281	-0.263
+0.05	-0.174	-0.209	-0.222	-0.216	-0.243	-0.190	-0.179	-0.162	-0.145

TABLE 3—continued

C_p at $\alpha = -0.1$ deg, $y/s = 0.790$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.23$								
$x/c =$ 0.00	+0.597	+0.613	+0.609	+0.611	+0.598	+0.604	+0.607	+0.781	+0.618
+0.02	-0.192	-0.214	-0.200	-0.201	-0.190	-0.175	-0.165	-0.151	-0.128
0.04	-0.275	-0.314	-0.323	-0.327	-0.320	-0.307	-0.302	-0.283	-0.264
0.07	-0.320	-0.381	-0.410	-0.425	-0.428	-0.414	-0.408	-0.391	-0.369
0.10	-0.339	-0.408	-0.456	-0.484	-0.488	-0.474	-0.471	-0.456	-0.438
0.20	-0.312	-0.390	-0.462	-0.506	-0.547	-0.530	-0.510	-0.508	-0.488
0.25	-0.246	-0.336	-0.446	-0.542	-0.651	-0.682	-0.713	-0.705	-0.683
0.30	-0.279	-0.358	-0.437	-0.472	-0.571	-0.564	-0.562	-0.554	-0.559
0.35	-0.272	-0.345	-0.419	-0.496	-0.648	-0.642	-0.643	-0.620	-0.594
0.40	-0.246	-0.309	-0.366	-0.425	-0.653	-0.661	-0.673	-0.671	-0.639
0.45	-0.234	-0.286	-0.329	-0.359	-0.509	-0.686	-0.697	-0.695	-0.677
0.50	-0.208	-0.255	-0.286	-0.294	-0.286	-0.681	-0.704	-0.710	-0.700
0.60	-0.138	-0.166	-0.178	-0.171	-0.217	-0.160	-0.305	-0.700	-0.712
0.70	-0.072	-0.083	-0.082	-0.072	-0.115	-0.023	-0.052	-0.161	-0.587
0.80	-0.016	-0.012	-0.004	+0.008	+0.021	+0.052	+0.066	-0.034	-0.156
0.90	+0.038	+0.054	+0.067	0.079	0.091	0.113	0.128	+0.081	-0.057
+1.00	+0.132	+0.156	+0.173	+0.184	+0.183	+0.193	+0.197	+0.169	+0.037
Lower	$x_t/c = 0.25$								
$x/c =$ +0.90	+0.036	+0.048	+0.059	+0.072	+0.080	+0.102	+0.118	+0.072	-0.068
0.80	-0.013	-0.012	-0.007	+0.004	+0.014	+0.041	+0.049	-0.052	-0.176
0.70	-0.074	-0.084	-0.088	-0.079	-0.067	-0.036	-0.061	-0.189	-0.636
0.60	-0.138	-0.169	-0.188	-0.185	-0.172	-0.166	-0.301	-0.716	-0.710
0.50	-0.191	-0.237	-0.276	-0.287	-0.296	-0.648	-0.693	-0.686	-0.671
0.40	-0.246	-0.312	-0.382	-0.436	-0.623	-0.641	-0.614	-0.634	-0.619
0.30	-0.237	-0.305	-0.381	-0.422	-0.511	-0.511	-0.507	-0.505	-0.531
0.20	-0.260	-0.323	-0.389	-0.422	-0.463	-0.457	-0.453	-0.439	-0.421
0.10	-0.239	-0.290	-0.346	-0.367	-0.392	-0.386	-0.381	-0.368	-0.353
+0.05	-0.218	-0.252	-0.298	-0.312	-0.331	-0.324	-0.315	-0.299	-0.286

TABLE 3—continued

C_p at $\alpha = -0.1$ deg, $y/s = 0.964$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.28$								
$x/c =$ 0.00	+0.519	+0.530	+0.526	+0.529	+0.517	+0.522	+0.527	+0.531	+0.540
+0.02	-0.233	-0.284	-0.302	-0.259	-0.285	-0.261	-0.248	-0.224	-0.197
0.04	-0.312	-0.401	-0.464	-0.475	-0.473	-0.448	-0.434	-0.407	-0.380
0.07	-0.316	-0.426	-0.561	-0.613	-0.611	-0.588	-0.575	-0.544	-0.515
0.10	-0.296	-0.401	-0.530	-0.651	-0.693	-0.675	-0.666	-0.638	-0.609
0.15	-0.281	-0.369	-0.457	-0.566	-0.707	-0.705	-0.703	-0.683	-0.657
0.20	-0.259	-0.333	-0.402	-0.483	-0.667	-0.695	-0.706	-0.696	-0.675
0.25	-0.210	-0.273	-0.321	-0.354	-0.579	-0.613	-0.630	-0.626	-0.611
0.30	-0.214	-0.283	-0.333	-0.339	-0.614	-0.796	-0.788	-0.765	-0.741
0.35	-0.190	-0.226	-0.252	-0.243	-0.234	-0.763	-0.801	-0.779	-0.754
0.40	-0.175	-0.208	-0.227	-0.220	-0.131	-0.285	-0.789	-0.795	-0.774
0.50	-0.136	-0.157	-0.167	-0.161	-0.132	-0.043	-0.108	-0.292	-0.765
0.60	-0.078	-0.087	-0.087	-0.078	-0.067	-0.016	+0.019	-0.130	-0.248
0.70	-0.030	-0.027	-0.021	-0.007	-0.004	+0.027	0.059	-0.041	-0.157
0.80	+0.011	+0.020	+0.029	+0.039	+0.044	0.068	0.090	+0.047	-0.100
0.90	0.038	0.052	0.064	0.078	0.081	0.099	0.116	0.103	-0.055
+1.00	+0.106	+0.128	+0.147	+0.157	+0.156	+0.167	+0.175	+0.160	-0.006
Lower	$x_t/c = 0.25$								
$x/c =$ +0.90	+0.061	+0.053	+0.074	+0.086	+0.092	+0.108	+0.124	+0.116	-0.043
0.80	-0.007	+0.001	+0.010	+0.021	+0.028	0.046	0.070	+0.048	-0.093
0.70	-0.042	-0.039	-0.034	-0.025	-0.018	+0.012	0.044	-0.023	-0.151
0.60	-0.087	-0.094	-0.096	-0.088	-0.077	-0.027	+0.023	-0.130	-0.319
0.50	-0.144	-0.169	-0.182	-0.177	-0.152	-0.049	-0.114	-0.543	-0.716
0.40	-0.172	-0.208	-0.233	-0.228	-0.131	-0.338	-0.720	-0.766	-0.768
0.30	-0.161	-0.248	-0.334	-0.397	-0.622	-0.793	-0.786	-0.756	-0.730
0.20	-0.244	-0.309	-0.380	-0.449	-0.602	-0.620	-0.625	-0.614	-0.599
0.10	-0.252	-0.330	-0.426	-0.500	-0.542	-0.533	-0.525	-0.506	-0.488
+0.05	-0.197	-0.261	-0.323	-0.343	-0.370	-0.363	-0.358	-0.344	-0.328

TABLE 3—continued

C_p at $\alpha = 0.95$ deg, $y/s = 0.212$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.12$								
$x/c = +0.05$	+0.874	+0.950	+0.986	+1.012	+1.026	+1.040	+1.046	+1.065	+1.068
0.07	-0.174	-0.154	-0.150	-0.140	-0.119	-0.114	-0.092	-0.071	-0.048
0.10	-0.248	-0.267	-0.272	-0.263	-0.248	-0.240	-0.225	-0.208	-0.187
0.135	-0.238	-0.252	-0.261	-0.263	-0.303	-0.335	-0.365	-0.374	-0.370
0.245	-0.243	-0.279	-0.292	-0.292	-0.282	-0.271	-0.263	-0.252	-0.242
0.36	0.257	-0.311	-0.348	-0.369	-0.370	-0.356	-0.343	-0.326	-0.230
0.47	-0.212	-0.264	-0.303	-0.319	-0.516	-0.339	-0.348	-0.349	-0.330
0.52	-0.229	-0.282	-0.328	-0.358	-0.360	-0.362	-0.366	-0.362	-0.342
0.565	-0.223	-0.280	-0.332	-0.374	-0.401	-0.402	-0.405	-0.401	-0.383
0.63	-0.208	-0.261	-0.313	-0.352	-0.425	-0.433	-0.437	-0.439	-0.423
0.70	-0.208	-0.260	-0.312	-0.356	-0.431	-0.451	-0.456	-0.459	-0.443
0.755	-0.186	-0.229	-0.268	-0.295	-0.417	-0.493	-0.508	-0.511	-0.496
0.81	-0.153	-0.187	-0.210	-0.222	-0.242	-0.379	-0.493	-0.521	-0.512
0.925	-0.121	-0.138	-0.142	-0.141	-0.132	-0.132	-0.130	-0.175	-0.459
1.035	+0.011	+0.021	+0.026	+0.033	+0.042	+0.039	+0.043	+0.031	-0.480
+1.15	+0.128	+0.100	+0.103	+0.109	+0.113	+0.112	+0.108	+0.105	+0.062
Lower	$x_t/c = 0.19$								
$x/c = +1.035$	+0.003	+0.028	+0.006	+0.013	+0.019	+0.015	+0.018	+0.007	-0.043
0.925	+0.083	+0.102	+0.114	+0.116	+0.116	+0.127	-0.127	+0.173	+0.439
0.81	-0.114	-0.145	-0.168	-0.178	-0.190	-0.212	-0.268	-0.393	-0.408
0.70	-0.152	-0.191	-0.225	-0.245	-0.278	-0.343	-0.375	-0.399	-0.396
0.565	-0.201	-0.247	-0.290	-0.319	-0.354	-0.362	-0.368	-0.374	-0.359
0.47	-0.180	-0.222	-0.259	-0.268	-0.285	-0.288	-0.299	-0.302	-0.283
0.36	-0.197	-0.242	-0.262	-0.270	-0.275	-0.264	-0.262	-0.253	-0.233
0.245	-0.194	-0.229	-0.236	-0.234	-0.229	-0.219	-0.221	-0.204	-0.180
0.135	-0.121	-0.125	-0.104	-0.085	-0.064	-0.046	-0.042	-0.025	-0.002
0.10	-0.110	-0.153	-0.137	-0.140	-0.144	-0.110	-0.132	-0.132	-0.109
+0.08	+0.924	+1.003	+1.035	+1.064	+1.077	+1.093	+1.097	+1.114	+1.124

TABLE 3—continued

C_p at $\alpha = 0.95$ deg, $y/s = 0.479$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_i/c = 0.15$								
$x/c =$ 0.00	+0.534	+0.562	+0.561	+0.569	+0.575	+0.580	+0.589	+0.608	+0.617
+0.02	-0.364	-0.350	-0.310	-0.291	-0.274	-0.264	-0.265	-0.223	-0.202
0.04	-0.392	-0.410	-0.394	-0.382	-0.370	-0.363	-0.346	-0.325	-0.305
0.07	-0.370	-0.408	-0.401	-0.393	-0.383	-0.371	-0.358	-0.341	-0.320
0.10	-0.370	-0.415	-0.421	-0.417	-0.399	-0.385	-0.370	-0.348	-0.324
0.20	-0.328	-0.398	-0.435	-0.451	-0.478	-0.469	-0.459	-0.446	-0.417
0.30	-0.330	-0.410	-0.472	-0.521	-0.538	-0.535	-0.525	-0.511	-0.485
0.35	-0.320	-0.400	-0.464	-0.535	-0.550	-0.574	-0.570	-0.558	-0.530
0.40	-0.309	-0.387	-0.460	-0.517	-0.537	-0.561	-0.596	-0.585	-0.562
0.45	-0.276	-0.351	-0.428	-0.491	-0.538	-0.525	-0.550	-0.567	-0.551
0.50	-0.269	-0.340	-0.408	-0.504	-0.583	-0.571	-0.570	-0.582	-0.571
0.55	-0.233	-0.295	-0.344	-0.398	-0.610	-0.608	-0.598	-0.600	-0.584
0.60	-0.188	-0.237	-0.270	-0.284	-0.498	-0.598	-0.594	-0.593	-0.577
0.70	-0.114	-0.146	-0.160	-0.160	-0.157	-0.234	-0.439	-0.551	-0.544
0.80	-0.049	-0.062	-0.062	-0.058	-0.043	-0.048	-0.072	-0.144	-0.428
0.90	+0.011	+0.019	+0.025	+0.034	+0.050	+0.053	+0.049	+0.020	-0.056
+1.00	+0.126	+0.144	+0.150	+0.158	+0.165	+0.165	+0.154	+0.129	+0.062
Lower	$x_i/c = 0.15$								
$x/c =$ +0.90	+0.019	+0.109	+0.019	+0.024	+0.031	+0.030	+0.032	+0.011	-0.140
0.80	-0.034	-0.048	-0.054	-0.055	-0.053	-0.055	-0.053	-0.145	-0.432
0.70	-0.095	-0.126	-0.146	-0.151	-0.158	-0.162	-0.219	-0.470	-0.484
0.60	-0.148	-0.192	-0.227	-0.243	-0.267	-0.389	-0.493	-0.515	-0.504
0.50	-0.201	-0.258	-0.308	-0.343	-0.433	-0.484	-0.488	-0.491	-0.478
0.40	-0.235	-0.299	-0.350	-0.384	-0.442	-0.449	-0.456	-0.470	-0.460
0.30	-0.224	-0.281	-0.328	-0.347	-0.374	-0.376	-0.395	-0.383	-0.363
0.20	-0.188	-0.240	-0.271	-0.276	-0.285	-0.287	-0.283	-0.274	-0.253
0.10	-0.157	-0.200	-0.223	-0.221	-0.220	-0.210	-0.212	-0.205	-0.194
+0.05	-0.064	-0.090	-0.104	-0.098	-0.099	+0.080	-0.082	-0.075	-0.055

TABLE 3—continued

C_p at $\alpha = 0.95$ deg, $y/s = 0.790$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.23$								
$x/c = 0.00$	+0.565	+0.587	+0.588	+0.590	+0.593	+0.596	+0.593	+0.606	+0.613
+0.02	-0.388	-0.433	-0.402	-0.385	-0.350	-0.324	-0.303	-0.279	-0.248
0.04	-0.420	-0.495	-0.502	-0.499	-0.468	-0.446	-0.427	-0.404	-0.371
0.07	-0.445	-0.529	-0.567	-0.580	-0.553	-0.533	-0.516	-0.493	-0.460
0.10	-0.439	-0.540	-0.601	-0.630	-0.619	-0.602	-0.587	-0.566	-0.534
0.20	-0.366	-0.468	-0.567	-0.641	-0.634	-0.620	-0.613	-0.596	-0.567
0.25	-0.322	-0.434	-0.547	-0.745	-0.810	-0.795	-0.774	-0.753	-0.717
0.30	-0.329	-0.414	-0.496	-0.589	-0.675	-0.722	-0.755	-0.760	-0.738
0.35	-0.311	-0.416	-0.475	-0.569	-0.705	-0.695	-0.696	-0.705	-0.693
0.40	-0.277	-0.348	-0.396	-0.432	-0.735	-0.733	-0.721	-0.701	-0.674
0.45	-0.260	-0.318	-0.346	-0.359	-0.722	-0.772	-0.767	-0.747	-0.713
0.50	-0.232	-0.280	-0.297	-0.289	-0.370	-0.789	-0.789	-0.777	-0.748
0.60	-0.154	-0.183	-0.184	-0.166	-0.116	-0.187	-0.284	-0.463	-0.769
0.70	-0.082	-0.094	-0.084	-0.067	-0.024	-0.026	-0.101	-0.175	-0.427
0.80	-0.023	-0.019	-0.004	+0.010	+0.042	+0.059	+0.025	-0.082	-0.164
0.90	+0.034	+0.053	+0.068	0.082	0.104	0.120	0.121	+0.032	-0.094
+1.00	+0.128	+0.155	+0.167	+0.179	+0.191	+0.198	+0.191	+0.148	+0.038
Lower	$x_t/c = 0.25$								
$x/c = +0.90$	+0.037	+0.049	+0.056	+0.067	+0.082	+0.088	+0.099	+0.074	-0.065
0.80	-0.009	-0.013	-0.004	+0.001	+0.013	+0.022	+0.033	-0.022	-0.300
0.70	-0.063	-0.076	-0.085	-0.081	-0.074	-0.062	-0.058	-0.199	-0.652
0.60	-0.119	-0.155	-0.177	-0.182	-0.190	-0.187	-0.238	-0.655	-0.646
0.50	-0.169	-0.214	-0.255	-0.272	-0.307	-0.396	-0.608	-0.631	-0.616
0.40	-0.210	-0.275	-0.337	-0.374	-0.450	-0.570	-0.583	-0.582	-0.564
0.20	-0.193	-0.256	-0.316	-0.351	-0.403	-0.442	-0.446	-0.444	-0.429
0.20	-0.199	-0.252	-0.301	-0.328	-0.364	-0.376	-0.378	-0.377	-0.361
0.10	-0.149	-0.187	-0.231	-0.249	-0.273	-0.284	-0.285	-0.282	-0.269
+0.05	-0.091	-0.111	-0.157	-0.168	-0.188	-0.200	-0.201	-0.197	-0.183

TABLE 3—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.964$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.28$								
$x/c =$ 0.00	+0.489	+0.497	+0.490	+0.494	+0.500	+0.504	+0.504	+0.519	+0.526
+0.02	-0.406	-0.509	-0.530	-0.520	-0.468	-0.424	-0.397	-0.357	-0.322
0.04	-0.449	-0.589	-0.690	-0.694	-0.644	-0.601	-0.572	-0.535	-0.497
0.07	-0.420	-0.560	-0.748	-0.802	-0.757	-0.722	-0.696	-0.659	-0.619
0.10	-0.370	-0.496	-0.671	-0.836	-0.828	-0.797	-0.774	-0.741	-0.702
0.15	-0.337	-0.436	-0.532	-0.718	-0.828	-0.816	-0.802	-0.776	-0.741
0.20	-0.301	-0.389	-0.439	-0.594	-0.787	-0.807	-0.800	-0.781	-0.750
0.25	-0.244	-0.316	-0.337	-0.361	-0.703	-0.740	-0.740	-0.724	-0.695
0.30	-0.244	-0.318	-0.359	-0.296	-0.673	-0.852	-0.855	-0.841	-0.810
0.35	-0.208	-0.250	-0.267	-0.246	-0.373	-0.775	-0.823	-0.820	-0.797
0.40	-0.192	-0.225	-0.236	-0.220	-0.112	-0.352	-0.745	-0.764	-0.779
0.50	-0.145	-0.169	-0.174	-0.163	-0.098	-0.052	-0.153	-0.237	-0.317
0.60	-0.084	-0.094	-0.090	-0.080	-0.050	-0.011	-0.018	-0.152	-0.199
0.70	-0.033	-0.034	-0.024	-0.012	+0.006	+0.031	+0.047	-0.064	-0.157
0.80	+0.004	+0.016	+0.022	+0.033	0.047	0.064	0.084	+0.023	-0.119
0.90	0.027	0.043	0.055	0.066	0.074	0.086	0.104	0.080	-0.079
+1.00	+0.087	+0.112	+0.124	+0.135	+0.147	+0.154	+0.154	+0.120	-0.004
Lower	$x_t/c = 0.25$								
$x/c =$ +0.90	+0.034	+0.046	+0.056	+0.067	+0.080	+0.085	+0.096	+0.092	-0.055
0.80	-0.023	-0.018	+0.006	+0.004	+0.016	+0.025	0.043	0.052	-0.108
0.70	-0.049	-0.049	-0.046	-0.038	-0.027	-0.013	+0.016	+0.003	-0.198
0.60	-0.087	-0.100	-0.103	-0.097	-0.084	-0.060	-0.013	-0.118	-0.697
0.50	-0.138	-0.167	-0.183	-0.182	-0.166	-0.111	-0.108	-0.720	-0.705
0.40	-0.157	-0.199	-0.227	-0.229	-0.178	-0.218	-0.620	-0.647	-0.642
0.30	-0.127	-0.206	-0.288	-0.367	-0.586	-0.768	-0.778	-0.782	-0.730
0.20	-0.210	-0.251	-0.336	-0.395	-0.521	-0.558	-0.563	-0.560	-0.542
0.10	-0.190	-0.257	-0.332	-0.390	-0.426	-0.440	-0.436	-0.427	-0.405
+0.05	-0.099	-0.142	-0.185	-0.204	-0.220	-0.218	-0.215	-0.229	-0.213

TABLE 3—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.212$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.935
Upper	$x_t/c = 0.12$								
$x/c = +0.05$	+0.893	+0.964	+1.004	+1.024	+1.038	+1.048	+1.064	+1.069	+1.091
0.07	-0.292	-0.190	-0.275	-0.285	-0.265	-0.252	-0.234	-0.189	-0.161
0.10	-0.238	-0.320	-0.361	-0.369	-0.362	-0.357	-0.349	-0.313	-0.293
0.135	-0.294	-0.278	-0.324	-0.392	-0.492	-0.484	-0.475	-0.447	-0.412
0.245	-0.282	-0.295	-0.344	-0.343	-0.383	-0.329	-0.344	-0.345	-0.332
0.36	-0.288	-0.320	-0.400	-0.422	-0.408	-0.383	-0.369	-0.349	-0.322
0.47	-0.237	-0.266	-0.343	-0.360	-0.395	-0.398	-0.395	-0.381	-0.353
0.52	-0.251	-0.281	-0.366	-0.396	-0.410	-0.412	-0.408	-0.395	-0.367
0.565	-0.243	-0.277	-0.367	-0.423	-0.444	-0.446	-0.446	-0.451	-0.405
0.63	-0.222	-0.280	-0.340	-0.395	-0.469	-0.474	-0.481	-0.475	-0.439
0.70	-0.220	-0.276	-0.332	-0.383	-0.479	-0.489	-0.498	-0.493	-0.456
0.755	-0.195	-0.242	-0.282	-0.311	-0.477	-0.535	-0.549	-0.547	-0.511
0.81	-0.163	-0.196	-0.221	-0.231	-0.264	-0.453	-0.546	-0.558	-0.545
0.925	-0.126	-0.141	-0.145	-0.141	-0.129	-0.125	-0.135	-0.198	-0.422
1.035	+0.010	+0.021	+0.024	+0.034	+0.042	+0.041	+0.034	+0.003	-0.061
+1.15	+0.054	+0.099	+0.109	+0.109	+0.112	+0.109	+0.100	+0.089	+0.064
Lower	$x_t/c = 0.19$								
$x/c = +1.035$	0.000	+0.005	+0.005	+0.011	+0.012	+0.007	-0.004	-0.027	-0.089
0.925	-0.076	-0.095	-0.108	-0.110	-0.116	-0.125	-0.139	-0.242	-0.422
0.81	-0.102	-0.133	-0.154	-0.164	-0.177	-0.194	-0.254	-0.377	-0.376
0.70	-0.135	-0.174	-0.203	-0.220	-0.249	-0.285	-0.342	-0.365	-0.363
0.565	-0.178	-0.224	-0.258	-0.279	-0.311	-0.325	-0.332	-0.333	-0.326
0.47	-0.155	-0.198	-0.218	-0.226	-0.236	-0.242	-0.248	-0.434	-0.240
0.36	-0.170	-0.213	-0.222	-0.222	-0.220	-0.221	-0.219	-0.390	-0.189
0.245	-0.152	-0.188	-0.183	-0.173	-0.166	-0.167	-0.164	-0.160	-0.146
0.135	-0.058	-0.074	-0.043	-0.018	+0.002	+0.007	+0.017	+0.023	+0.047
0.10	-0.023	-0.065	-0.025	+0.010	0.030	0.024	0.038	0.090	0.034
+0.08	+0.958	+1.023	+1.064	+1.083	+1.098	+1.106	+1.123	+1.126	+1.147

TABLE 3—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.479$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.855	0.90	0.915	0.935
Upper	$x_t/c = 0.15$								
$x/c =$ 0.00	+0.469	+0.522	+0.526	+0.529	+0.556	+0.549	+0.560	+0.571	+0.597
+0.02	-0.548	-0.485	-0.492	-0.489	-0.472	-0.454	-0.425	-0.390	-0.355
0.04	-0.534	-0.500	-0.549	-0.553	-0.541	-0.522	-0.501	-0.471	-0.442
0.07	-0.476	-0.475	-0.524	-0.528	-0.521	-0.508	-0.495	-0.477	-0.456
0.10	-0.454	-0.470	-0.525	-0.516	-0.499	-0.483	-0.470	-0.454	-0.434
0.20	-0.385	-0.428	-0.520	-0.560	-0.554	-0.535	-0.511	-0.486	-0.462
0.30	-0.373	-0.429	-0.543	-0.580	-0.607	-0.590	-0.575	-0.551	-0.518
0.35	-0.357	-0.414	-0.526	-0.591	-0.646	-0.630	-0.615	-0.591	-0.556
0.40	-0.341	-0.398	-0.511	-0.595	-0.650	-0.657	-0.648	-0.626	-0.591
0.45	-0.303	-0.357	-0.478	-0.567	-0.595	-0.630	-0.618	-0.623	-0.592
0.50	-0.294	-0.342	-0.446	-0.563	-0.617	-0.638	-0.652	-0.644	-0.620
0.55	-0.254	-0.292	-0.369	-0.454	-0.646	-0.648	-0.660	-0.653	-0.630
0.60	-0.206	-0.231	-0.287	-0.302	-0.591	-0.635	-0.646	-0.639	-0.613
0.70	-0.124	-0.134	-0.170	-0.164	-0.177	-0.307	-0.521	-0.597	-0.578
0.80	-0.066	-0.069	-0.067	-0.058	-0.047	-0.064	-0.105	-0.174	-0.421
0.90	+0.009	+0.017	+0.024	+0.037	+0.053	+0.049	+0.020	-0.021	-0.074
+1.00	+0.128	+0.141	+0.154	+0.160	+0.161	+0.154	+0.125	+0.082	+0.038
Lower	$x_t/c = 0.15$								
$x/c =$ +0.90	+0.023	+0.023	+0.021	+0.025	+0.027	+0.022	+0.009	-0.027	-0.219
0.80	-0.023	-0.040	-0.046	-0.048	-0.051	-0.057	-0.067	-0.211	-0.396
0.70	-0.081	-0.112	-0.130	-0.139	-0.151	-0.160	-0.218	-0.604	-0.427
0.60	-0.130	-0.174	-0.202	-0.219	-0.244	-0.284	-0.444	-0.648	-0.455
0.50	-0.175	-0.231	-0.271	-0.299	-0.350	-0.426	-0.448	-0.625	-0.426
0.40	-0.201	-0.264	-0.303	-0.328	-0.373	-0.397	-0.401	-0.584	-0.392
0.30	-0.182	-0.242	-0.272	-0.285	-0.302	-0.312	-0.317	-0.500	-0.304
0.20	-0.132	-0.191	-0.205	-0.206	-0.207	-0.220	-0.222	-0.217	-0.204
0.10	-0.081	-0.135	-0.136	-0.128	-0.122	-0.128	-0.126	-0.122	-0.110
+0.05	+0.031	-0.020	-0.011	+0.010	+0.020	+0.014	+0.018	+0.019	+0.042

TABLE 3—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.790$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.935
Upper	$x_t/c = 0.23$								
$x/c =$ 0.00	+0.484	+0.517	+0.541	+0.551	+0.560	+0.570	+0.577	+0.580	+0.603
+0.02	-0.590	-0.659	-0.644	-0.589	-0.532	-0.499	-0.459	-0.422	-0.383
0.04	-0.599	-0.691	-0.715	-0.675	-0.617	-0.575	-0.551	-0.514	-0.480
0.07	-0.578	-0.689	-0.758	-0.733	-0.681	-0.641	-0.618	-0.581	-0.547
0.10	-0.549	-0.671	-0.783	-0.790	-0.743	-0.707	-0.686	-0.650	-0.616
0.20	-0.446	-0.554	-0.705	-0.766	-0.755	-0.730	-0.719	-0.690	-0.661
0.25	-0.379	-0.516	-0.682	-0.899	-0.850	-0.837	-0.818	-0.783	-0.749
0.30	-0.376	-0.464	-0.554	-0.803	-0.879	-0.858	-0.844	-0.808	-0.776
0.35	-0.346	-0.434	-0.538	-0.741	-0.873	-0.880	-0.880	-0.850	-0.824
0.40	-0.310	-0.381	-0.426	-0.563	-0.807	-0.823	-0.849	-0.837	-0.824
0.45	-0.288	-0.344	-0.372	-0.325	-0.807	-0.819	-0.815	-0.793	-0.778
0.50	-0.257	-0.301	-0.299	-0.252	-0.501	-0.824	-0.832	-0.807	-0.778
0.60	-0.170	-0.172	-0.184	-0.151	-0.153	-0.249	-0.285	-0.322	-0.650
0.70	-0.094	-0.077	-0.084	-0.060	-0.022	-0.113	-0.189	-0.219	-0.249
0.80	-0.028	-0.023	-0.004	+0.016	+0.052	+0.017	-0.083	-0.155	-0.206
0.90	+0.032	+0.052	+0.068	0.084	0.109	0.113	+0.029	-0.070	-0.149
+1.00	+0.130	+0.151	+0.172	+0.178	+0.188	+0.183	+0.125	+0.039	-0.044
Lower	$x_t/c = 0.25$								
$x/c =$ +0.90	+0.040	+0.046	+0.053	+0.065	+0.076	+0.077	+0.058	+0.016	-0.173
0.80	-0.002	-0.009	-0.006	+0.001	+0.007	+0.008	+0.001	-0.068	-0.506
0.70	-0.049	-0.073	-0.078	-0.077	-0.088	-0.084	-0.096	-0.354	-0.590
0.60	-0.104	-0.144	-0.165	-0.173	-0.192	-0.228	-0.269	-0.600	-0.576
0.50	-0.142	-0.192	-0.227	-0.249	-0.288	-0.301	-0.537	-0.578	-0.544
0.40	-0.178	-0.240	-0.289	-0.322	-0.380	-0.477	-0.531	-0.542	-0.496
0.30	-0.155	-0.212	-0.258	-0.285	-0.322	-0.361	-0.384	-0.395	-0.364
0.20	-0.139	-0.185	-0.223	-0.244	-0.276	-0.303	-0.311	-0.308	-0.292
0.10	-0.063	-0.097	-0.130	-0.146	-0.170	-0.189	-0.198	-0.198	-0.184
+0.05	+0.023	-0.008	-0.034	-0.048	-0.070	-0.086	-0.095	-0.094	-0.076

TABLE 3—continued

C_p at $\alpha = 2.0$ deg, $y/s = 0.964$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.935
Upper	$x_t/c = 0.28$								
$x/c =$ 0.00	+0.448	+0.441	+0.450	+0.456	+0.466	+0.478	+0.488	+0.493	+0.514
+0.02	-0.616	-0.788	-0.799	-0.725	-0.629	-0.581	-0.540	-0.495	-0.446
0.04	-0.605	-0.820	-0.940	-0.876	-0.783	-0.731	-0.689	-0.644	-0.590
0.07	-0.528	-0.711	-0.950	-0.969	-0.884	-0.837	-0.798	-0.748	-0.707
0.10	-0.450	-0.601	-0.865	-0.984	-0.940	-0.899	-0.869	-0.818	-0.778
0.15	-0.400	-0.506	-0.684	-0.876	-0.934	-0.913	-0.889	-0.849	-0.813
0.20	-0.350	-0.436	-0.451	-0.773	-0.885	-0.902	-0.883	-0.850	-0.817
0.25	-0.286	-0.351	-0.347	-0.577	-0.803	-0.846	-0.834	-0.803	-0.775
0.30	-0.275	-0.352	-0.368	-0.288	-0.727	-0.901	-0.889	-0.864	-0.863
0.35	-0.231	-0.272	-0.284	-0.237	-0.579	-0.750	-0.758	-0.753	-0.837
0.40	-0.210	-0.245	-0.250	-0.216	-0.271	-0.412	-0.494	-0.519	-0.751
0.50	-0.158	-0.187	-0.189	-0.164	-0.102	-0.147	-0.254	-0.285	-0.341
0.60	-0.095	-0.110	-0.105	-0.088	-0.055	-0.067	-0.134	-0.234	-0.243
0.70	-0.047	-0.050	-0.044	-0.028	-0.009	-0.007	-0.053	-0.208	-0.198
0.80	-0.011	-0.016	-0.005	+0.006	+0.021	+0.027	+0.002	-0.184	-0.150
0.90	+0.003	+0.005	+0.013	0.022	0.033	0.038	0.029	-0.132	-0.103
+1.00	+0.065	+0.079	+0.098	+0.100	+0.107	+0.107	+0.075	+0.035	-0.040
Lower	$x_t/c = 0.25$								
$x/c =$ +0.90	+0.017	+0.024	+0.034	+0.045	+0.055	+0.057	+0.048	+0.038	-0.065
0.80	-0.034	-0.036	-0.026	-0.015	-0.004	-0.002	+0.004	+0.012	-0.134
0.70	-0.055	-0.067	-0.061	-0.052	-0.043	-0.038	-0.014	-0.041	-0.383
0.60	-0.089	-0.112	-0.113	-0.107	-0.099	-0.088	-0.043	-0.260	-0.716
0.50	-0.135	-0.169	-0.185	-0.185	-0.181	-0.165	-0.245	-0.712	-0.678
0.40	-0.148	-0.194	-0.221	-0.229	-0.235	-0.326	-0.621	-0.631	-0.589
0.30	-0.097	-0.165	-0.238	-0.322	-0.524	-0.621	-0.733	-0.756	-0.696
0.20	-0.178	-0.238	-0.302	-0.369	-0.464	-0.494	-0.517	-0.515	-0.494
0.10	-0.130	-0.185	-0.255	-0.301	-0.334	-0.347	-0.359	-0.352	-0.331
+0.05	-0.008	-0.034	-0.074	-0.094	-0.114	-0.125	-0.137	-0.134	-0.118

TABLE 3—continued

C_p at $\alpha = 3.0$ deg, $y/s = 0.212$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.91	0.935
Upper	$x_t/c = 0.12$								
$x/c = +0.05$	+0.882	+0.969	+0.990	+1.021	+1.035	+1.044	+1.055	+1.066	+1.095
0.07	-0.386	-0.405	-0.443	-0.432	-0.394	-0.395	-0.352	-0.324	-0.275
0.10	-0.396	-0.445	-0.474	-0.485	-0.483	-0.499	-0.473	-0.452	-0.412
0.135	-0.330	-0.366	-0.426	-0.549	-0.547	-0.537	-0.502	-0.484	-0.437
0.245	-0.313	-0.368	-0.399	-0.394	-0.412	-0.424	-0.419	-0.413	-0.383
0.36	-0.309	-0.384	-0.457	-0.463	-0.433	-0.424	-0.413	-0.402	-0.370
0.47	-0.254	-0.321	-0.384	-0.413	-0.443	-0.439	-0.430	-0.424	-0.395
0.52	-0.266	-0.334	-0.406	-0.433	-0.454	-0.453	-0.441	-0.430	-0.401
0.565	-0.256	-0.326	-0.405	-0.465	-0.488	-0.487	-0.479	-0.467	-0.435
0.63	-0.237	-0.302	-0.371	-0.457	-0.515	-0.515	-0.517	-0.509	-0.480
0.70	-0.233	-0.293	-0.318	-0.420	-0.520	-0.527	-0.533	-0.525	-0.495
0.755	-0.207	-0.256	-0.298	-0.328	-0.549	-0.572	-0.582	-0.575	-0.545
0.81	-0.171	-0.203	-0.233	-0.238	-0.325	-0.500	-0.585	-0.587	-0.563
0.925	-0.131	-0.142	-0.149	-0.138	-0.125	-0.124	-0.151	-0.179	-0.392
1.035	+0.008	+0.019	+0.024	+0.035	+0.040	+0.036	+0.010	-0.012	-0.082
+1.15	+0.091	+0.102	+0.102	+0.109	+0.105	+0.100	+0.089	+0.079	+0.044
Lower	$x_t/c = 0.19$								
$x/c = +1.035$	-0.002	+0.004	+0.004	+0.009	+0.003	-0.004	-0.030	-0.044	-0.113
0.925	-0.072	-0.085	-0.100	-0.102	-0.113	-0.128	-0.156	-0.188	-0.386
0.81	-0.090	-0.115	-0.138	-0.148	-0.164	-0.182	-0.234	-0.304	-0.332
0.70	-0.123	-0.153	-0.179	-0.195	-0.222	-0.248	-0.300	-0.323	-0.319
0.565	-0.161	-0.197	-0.224	-0.241	-0.269	-0.292	-0.298	-0.290	-0.283
0.47	-0.132	-0.165	-0.176	-0.186	-0.199	-0.204	-0.209	-0.210	-0.199
0.36	-0.144	-0.171	-0.170	-0.174	-0.180	-0.179	-0.179	-0.177	-0.155
0.245	-0.094	-0.140	-0.125	-0.120	-0.121	-0.116	-0.113	-0.112	-0.094
0.135	-0.013	-0.013	+0.029	+0.045	+0.055	+0.056	+0.075	+0.076	+0.097
0.10	+0.040	+0.043	0.092	0.110	0.114	0.135	0.137	0.133	0.153
+0.08	+0.924	+1.036	+1.067	+1.096	+1.108	+1.119	+1.124	+1.135	+1.158

TABLE 3—continued

C_p at $\alpha = 3.0$ deg, $y/s = 0.479$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.91	0.935
Upper	$x_t/c = 0.15$								
$x/c =$ 0.00	+0.396	+0.459	+0.446	+0.471	+0.499	+0.509	+0.531	+0.535	+0.563
+0.02	-0.658	-0.705	-0.740	-0.702	-0.673	-0.652	-0.612	-0.570	-0.515
0.04	-0.623	-0.702	-0.752	-0.721	-0.701	-0.685	-0.650	-0.612	-0.558
0.07	-0.538	-0.631	-0.685	-0.673	-0.677	-0.672	-0.641	-0.615	-0.567
0.10	-0.505	-0.601	-0.641	-0.625	-0.633	-0.630	-0.606	-0.581	-0.538
0.20	-0.423	-0.522	-0.615	-0.641	-0.606	-0.602	-0.610	-0.632	-0.625
0.30	-0.404	-0.506	-0.633	-0.676	-0.654	-0.636	-0.611	-0.602	-0.570
0.35	-0.385	-0.483	-0.604	-0.691	-0.691	-0.671	-0.644	-0.629	-0.592
0.40	-0.366	-0.460	-0.562	-0.660	-0.724	-0.705	-0.679	-0.663	-0.622
0.45	-0.324	-0.413	-0.521	-0.631	-0.703	-0.699	-0.679	-0.665	-0.627
0.50	-0.313	-0.392	-0.484	-0.655	-0.703	-0.715	-0.706	-0.698	-0.662
0.55	-0.270	-0.338	-0.390	-0.539	-0.707	-0.719	-0.715	-0.712	-0.682
0.60	-0.220	-0.272	-0.301	-0.321	-0.668	-0.694	-0.694	-0.687	-0.657
0.70	-0.136	-0.168	-0.176	-0.163	-0.216	-0.325	-0.565	-0.632	-0.614
0.80	-0.064	-0.072	-0.071	-0.054	-0.059	-0.089	-0.142	-0.173	-0.423
0.90	+0.005	+0.014	+0.024	+0.040	+0.047	+0.030	-0.019	-0.050	-0.096
+1.00	+0.123	+0.141	+0.144	+0.154	+0.149	+0.136	+0.087	+0.052	-0.002
Lower	$x_t/c = 0.15$								
$x/c =$ +0.90	+0.027	+0.026	+0.023	+0.027	+0.021	+0.011	-0.019	-0.041	-0.244
0.80	-0.016	-0.027	-0.037	-0.039	-0.049	-0.062	-0.089	-0.124	-0.345
0.70	-0.072	-0.096	-0.112	-0.123	-0.141	-0.159	-0.180	-0.352	-0.383
0.60	-0.114	-0.150	-0.175	-0.193	-0.219	-0.247	-0.371	-0.416	-0.413
0.50	-0.155	-0.200	-0.231	-0.258	-0.302	-0.339	-0.403	-0.409	-0.389
0.40	-0.178	-0.224	-0.250	-0.277	-0.310	-0.345	-0.357	-0.358	-0.342
0.30	-0.155	-0.194	-0.210	-0.227	-0.245	-0.257	-0.262	-0.263	-0.249
0.20	-0.107	-0.138	-0.137	-0.145	-0.152	-0.160	-0.159	-0.178	-0.146
0.10	-0.044	-0.063	-0.045	-0.049	-0.051	-0.051	-0.051	-0.053	-0.037
+0.05	+0.079	+0.082	+0.101	+0.092	+0.097	+0.118	+0.099	+0.100	+0.114

TABLE 3—continued

C_p at $\alpha = 3.0$ deg, $y/s = 0.790$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.91	0.935	
Upper	$x_t/c = 0.23$									
$x/c =$	0.00	+0.335	+0.408	+0.449	+0.410	+0.507	+0.526	+0.531	+0.545	+0.570
+	0.02	-0.802	-0.961	-0.932	-0.825	-0.737	-0.686	-0.639	-0.603	-0.549
	0.04	-0.779	-0.949	-0.981	-0.899	-0.811	-0.763	-0.713	-0.669	-0.626
	0.07	-0.712	-0.890	-0.965	-0.923	-0.849	-0.806	-0.760	-0.719	-0.679
	0.10	-0.653	-0.763	-0.979	-0.939	-0.878	-0.839	-0.799	-0.760	-0.722
	0.20	-0.493	-0.649	-0.905	-0.931	-0.888	-0.859	-0.826	-0.795	-0.763
	0.25	-0.433	-0.571	-0.915	-1.003	-0.957	-0.931	-0.896	-0.865	-0.831
	0.30	-0.419	-0.520	-0.649	-0.988	-0.948	-0.923	-0.889	-0.858	-0.826
	0.35	-0.381	-0.473	-0.535	-0.992	-0.978	-0.954	-0.915	-0.890	-0.855
	0.40	-0.340	-0.413	-0.424	-0.786	-0.987	-0.974	-0.930	-0.919	-0.879
	0.45	-0.314	-0.369	-0.348	-0.377	-0.912	-0.947	-0.931	-0.929	-0.905
	0.50	-0.277	-0.320	-0.293	-0.261	-0.482	-0.586	-0.711	-0.820	-0.913
	0.60	-0.185	-0.206	-0.182	-0.134	-0.273	-0.328	-0.352	-0.380	-0.510
	0.70	-0.104	-0.106	-0.082	-0.052	-0.124	-0.219	-0.272	-0.292	-0.323
	0.80	-0.035	-0.023	-0.003	+0.020	-0.009	-0.096	-0.189	-0.223	-0.251
	0.90	+0.028	+0.050	+0.068	0.084	+0.076	+0.020	-0.082	-0.141	-0.195
	+1.00	+0.123	+0.149	+0.162	+0.175	+0.158	+0.118	+0.014	-0.040	-0.113
Lower	$x_t/c = 0.25$									
$x/c =$	+0.90	+0.038	+0.044	+0.052	+0.064	+0.054	+0.035	-0.002	-0.022	-0.206
	0.80	+0.000	-0.004	-0.004	-0.001	-0.009	-0.020	-0.047	-0.069	-0.465
	0.70	-0.045	-0.064	-0.071	-0.075	-0.089	-0.103	-0.155	-0.233	-0.548
	0.60	-0.094	-0.127	-0.148	-0.163	-0.196	-0.237	-0.289	-0.501	-0.536
	0.50	-0.127	-0.167	-0.198	-0.222	-0.267	-0.298	-0.432	-0.518	-0.506
	0.40	-0.153	-0.204	-0.244	-0.274	-0.324	-0.369	-0.471	-0.482	-0.459
	0.30	-0.117	-0.163	-0.201	-0.227	-0.262	-0.291	-0.326	-0.325	-0.307
	0.20	-0.085	-0.117	-0.149	-0.172	-0.198	-0.222	-0.244	-0.247	-0.228
	0.10	+0.010	-0.008	-0.035	-0.057	-0.079	-0.099	-0.116	-0.116	-0.099
	+0.05	+0.109	+0.110	+0.079	+0.056	+0.036	+0.014	-0.001	+0.001	+0.012

TABLE 3—continued

C_p at $\alpha = 3.0$ deg, $y/s = 0.964$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.91	0.935
Upper	$x_i/c = 0.28$								
$x/c =$ 0.00	+0.346	+0.363	+0.385	+0.413	+0.429	+0.444	+0.453	+0.463	+0.486
+0.02	-0.872	-0.955	-1.026	-0.909	-0.798	-0.744	-0.675	-0.636	-0.576
0.04	-0.788	-0.988	-1.160	-1.049	-0.936	-0.882	-0.815	-0.779	-0.718
0.07	-0.649	-0.914	-1.125	-1.120	-0.997	-0.963	-0.886	-0.893	-0.806
0.10	-0.536	-0.763	-1.066	-1.049	-0.955	-0.924	-0.877	-0.893	-0.855
0.15	-0.463	-0.511	-0.960	-1.003	-0.900	-0.864	-0.822	-0.798	-0.840
0.20	-0.396	-0.459	-0.555	-0.847	-0.775	-0.754	-0.733	-0.722	-0.811
0.25	-0.320	-0.380	-0.341	-0.631	-0.626	-0.613	-0.608	-0.606	-0.760
0.30	-0.303	-0.393	-0.381	-0.448	-0.536	-0.522	-0.523	-0.517	-0.723
0.35	-0.294	-0.306	-0.302	-0.350	-0.479	-0.468	-0.464	-0.462	-0.625
0.40	-0.233	-0.245	-0.268	-0.289	-0.423	-0.430	-0.420	-0.421	-0.533
0.50	-0.180	-0.211	-0.208	-0.192	-0.298	-0.342	-0.354	-0.344	-0.384
0.60	-0.117	-0.135	-0.130	-0.153	-0.198	-0.242	-0.288	-0.297	-0.312
0.70	-0.069	-0.081	-0.076	-0.068	-0.122	-0.158	-0.208	-0.255	-0.266
0.80	-0.044	-0.056	-0.049	-0.043	-0.072	-0.098	-0.142	-0.188	-0.234
0.90	-0.045	-0.055	-0.045	-0.038	-0.056	-0.075	-0.105	-0.138	-0.199
+1.00	+0.027	+0.044	+0.049	+0.040	-0.006	-0.029	-0.074	-0.101	-0.139
Lower	$x_i/c = 0.25$								
$x/c =$ +0.90	-0.003	+0.002	+0.012	+0.018	+0.003	-0.013	-0.034	-0.047	-0.114
0.80	-0.053	-0.052	-0.044	-0.036	-0.045	-0.057	-0.065	-0.053	-0.175
0.70	-0.070	-0.081	-0.076	-0.069	-0.075	-0.082	-0.074	-0.045	-0.453
0.60	-0.100	-0.121	-0.124	-0.122	-0.128	-0.127	-0.088	-0.256	-0.685
0.50	-0.142	-0.174	-0.190	-0.198	-0.207	-0.200	-0.310	-0.672	-0.669
0.40	-0.146	-0.190	-0.220	-0.241	-0.272	-0.358	-0.587	-0.613	-0.590
0.30	-0.085	-0.134	-0.198	-0.280	-0.455	-0.511	-0.595	-0.643	-0.657
0.20	-0.148	-0.202	-0.278	-0.341	-0.413	-0.438	-0.468	-0.469	-0.444
0.10	-0.072	-0.118	-0.190	-0.225	-0.253	-0.266	-0.286	-0.282	-0.258
+0.05	+0.077	+0.061	+0.016	-0.003	-0.025	-0.034	-0.053	-0.050	-0.032

TABLE 3—continued

C_p at $\alpha = 5.05$ deg, $y/s = 0.212$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.12$								
$x/c = +0.05$	+0.771	+0.878	+0.906	+0.939	+0.983	+1.003	+1.031	+1.041	+0.621
0.07	-0.648	-0.766	-0.794	-0.741	-0.642	-0.604	-0.541	-0.512	-0.648
0.10	-0.592	-0.661	-0.783	-0.817	-0.773	-0.754	-0.697	-0.673	-0.618
0.135	-0.437	-0.516	-0.676	-0.721	-0.688	-0.678	-0.643	-0.630	-0.586
0.245	-0.387	-0.470	-0.521	-0.551	-0.537	-0.525	-0.504	-0.494	-0.463
0.36	-0.365	-0.464	-0.555	-0.549	-0.531	-0.521	-0.496	-0.483	-0.450
0.47	-0.296	-0.380	-0.473	-0.523	-0.536	-0.535	-0.517	-0.510	-0.480
0.52	-0.303	-0.386	-0.490	-0.528	-0.532	-0.535	-0.521	-0.513	-0.484
0.565	-0.290	-0.372	-0.489	-0.553	-0.564	-0.556	-0.540	-0.531	-0.504
0.63	-0.268	-0.340	-0.428	-0.548	-0.600	-0.594	-0.585	-0.574	-0.544
0.70	-0.257	-0.323	-0.390	-0.491	-0.604	-0.605	-0.599	-0.587	-0.561
0.755	-0.223	-0.279	-0.319	-0.351	-0.625	-0.648	-0.645	-0.634	-0.608
0.81	-0.181	-0.227	-0.247	-0.244	-0.382	-0.588	-0.651	-0.645	-0.620
0.925	-0.135	-0.151	-0.150	-0.134	-0.122	-0.138	-0.180	-0.233	-0.459
1.035	+0.008	+0.015	+0.023	+0.032	+0.025	-0.003	-0.059	-0.111	-0.161
+1.15	+0.095	+0.100	+0.100	+0.101	+0.089	+0.080	+0.061	+0.030	-0.012
Lower	$x_t/c = 0.19$								
$x/c = +1.035$	+0.004	+0.003	+0.001	+0.003	+0.014	-0.040	-0.083	-0.120	-0.184
0.925	-0.054	-0.068	-0.082	-0.098	-0.112	-0.140	-0.182	-0.246	-0.321
0.81	-0.068	-0.086	-0.105	-0.115	-0.140	-0.166	-0.198	-0.247	-0.255
0.70	-0.088	-0.108	-0.130	-0.144	-0.171	-0.200	-0.229	-0.245	-0.251
0.565	-0.115	-0.133	-0.155	-0.171	-0.194	-0.219	-0.238	-0.238	-0.224
0.47	-0.073	-0.088	-0.102	-0.120	-0.122	-0.133	-0.137	-0.138	-0.125
0.36	-0.069	-0.077	-0.081	-0.097	-0.095	-0.099	-0.099	-0.098	-0.084
0.245	-0.040	-0.028	-0.018	-0.014	-0.023	-0.023	-0.020	-0.015	-0.005
0.135	+0.095	+0.132	+0.065	+0.184	+0.176	+0.179	+0.185	+0.193	+0.201
0.10	0.203	0.237	0.278	0.284	0.282	0.294	0.289	0.292	0.301
+0.08	+0.938	+1.002	+1.052	+1.081	+1.103	+1.113	+1.140	+1.141	+1.157

TABLE 3—continued

C_p at $\alpha = 5.05$ deg, $y/s = 0.479$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_i/c = 0.15$								
$x/c =$ 0.00	+0.074	+0.157	+0.257	+0.326	+0.385	+0.409	+0.445	+0.457	+0.494
+0.02	-1.065	-1.245	-1.213	-1.110	-0.980	-0.929	-0.861	-0.822	-0.767
0.04	-0.919	-1.162	-1.214	-1.152	-1.034	-0.989	-0.918	-0.880	-0.823
0.07	-0.718	-0.884	-1.127	-1.093	-1.003	-0.970	-0.906	-0.873	-0.818
0.10	-0.649	-0.772	-1.027	-1.036	-0.955	-0.923	-0.876	-0.833	-0.780
0.20	-0.528	-0.664	-0.796	-0.891	-0.939	-0.935	-0.892	-0.863	-0.819
0.30	-0.475	-0.599	-0.784	-0.778	-0.773	-0.770	-0.762	-0.760	-0.734
0.35	-0.445	-0.560	-0.767	-0.803	-0.773	-0.761	-0.740	-0.727	-0.698
0.40	-0.417	-0.524	-0.723	-0.829	-0.792	-0.776	-0.751	-0.733	-0.700
0.45	-0.368	-0.466	-0.637	-0.798	-0.790	-0.777	-0.750	-0.733	-0.698
0.50	-0.349	-0.431	-0.536	-0.776	-0.818	-0.811	-0.785	-0.767	-0.732
0.55	-0.300	-0.369	-0.407	-0.655	-0.829	-0.834	-0.796	-0.799	-0.765
0.60	-0.246	-0.298	-0.309	-0.356	-0.761	-0.804	-0.798	-0.793	-0.762
0.70	-0.157	-0.185	-0.182	-0.167	-0.261	-0.351	-0.580	-0.699	-0.682
0.80	-0.076	-0.086	-0.078	-0.059	-0.113	-0.169	-0.214	-0.256	-0.516
0.90	+0.000	+0.006	+0.021	+0.032	+0.010	-0.047	-0.116	-0.145	-0.178
+1.00	+0.121	+0.126	+0.154	+0.140	+0.117	+0.081	+0.008	-0.031	-0.078
Lower	$x_i/c = 0.15$								
$x/c =$ +0.90	+0.037	+0.032	+0.028	+0.028	+0.005	-0.026	-0.078	-0.118	-0.245
0.80	+0.004	-0.007	-0.019	-0.024	-0.049	-0.078	-0.120	-0.172	-0.245
0.70	-0.039	-0.056	-0.077	-0.101	-0.120	-0.152	-0.200	-0.271	-0.290
0.60	-0.073	-0.095	-0.123	-0.152	-0.174	-0.207	-0.266	-0.304	-0.312
0.50	-0.098	-0.125	-0.159	-0.193	-0.219	-0.255	-0.290	-0.315	-0.314
0.40	-0.106	-0.131	-0.161	-0.183	-0.215	-0.241	-0.262	-0.273	-0.262
0.30	-0.071	-0.086	-0.108	-0.122	-0.142	-0.158	-0.166	-0.167	-0.154
0.20	-0.016	-0.015	-0.022	-0.027	-0.042	-0.070	-0.055	-0.050	-0.040
0.10	+0.077	+0.087	+0.091	+0.093	+0.078	+0.071	+0.070	+0.072	+0.082
+0.05	+0.223	+0.232	+0.242	+0.240	+0.235	+0.232	+0.230	+0.227	+0.238

TABLE 3—continued

C_p at $\alpha = 5.05$ deg, $y/s = 0.790$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_t/c = 0.23$								
$x/c =$ 0.00	-0.153	+0.087	+0.249	+0.320	+0.381	+0.408	+0.440	+0.457	+0.472
+0.02	-1.318	-1.619	-1.289	-1.153	-1.010	-0.949	-0.879	-0.831	-0.780
0.04	-1.190	-1.550	-1.355	-1.213	-1.077	-1.012	-0.948	-0.738	-0.848
0.07	-0.985	-1.427	-1.368	-1.239	-1.111	-1.051	-0.991	-0.783	-0.893
0.10	-0.855	-1.204	-1.371	-1.250	-1.138	-1.082	-1.026	-0.820	-0.931
0.20	-0.605	-0.691	-1.271	-1.176	-1.084	-1.053	-1.040	-0.853	-0.969
0.25	-0.565	-0.657	-1.207	-1.134	-1.070	-1.040	-1.037	-0.881	-1.004
0.30	-0.527	-0.599	-0.969	-0.988	-0.989	-1.007	-1.018	-0.860	-0.989
0.35	-0.466	-0.527	-0.695	-0.836	-0.841	-0.888	-0.976	-0.838	-0.989
0.40	-0.413	-0.451	-0.531	-0.726	-0.736	-0.753	-0.841	-0.926	-0.961
0.45	-0.371	-0.392	-0.429	-0.629	-0.659	-0.663	-0.702	-0.775	-0.891
0.50	-0.322	-0.336	-0.359	-0.554	-0.602	-0.605	-0.622	-0.497	-0.791
0.60	-0.210	-0.216	-0.245	-0.398	-0.484	-0.504	-0.510	-0.529	-0.619
0.70	-0.119	-0.111	-0.137	-0.266	-0.365	-0.390	-0.393	-0.405	-0.507
0.80	-0.046	-0.031	-0.043	-0.164	-0.268	-0.295	-0.306	-0.320	-0.413
0.90	+0.023	+0.041	+0.031	-0.071	-0.186	-0.221	-0.247	-0.275	-0.365
+1.00	+0.116	+0.121	+0.122	+0.028	-0.103	-0.133	-0.185	-0.179	-0.262
Lower	$x_t/c = 0.25$								
$x/c =$ +0.90	+0.038	+0.032	+0.031	-0.002	-0.062	-0.098	-0.127	-0.180	-0.359
0.80	+0.028	-0.001	-0.011	-0.031	-0.073	-0.101	-0.155	-0.266	-0.363
0.70	-0.026	-0.043	-0.063	-0.083	-0.128	-0.162	-0.274	-0.317	-0.403
0.60	-0.063	-0.088	-0.119	-0.144	-0.199	-0.255	-0.318	-0.380	-0.415
0.50	-0.078	-0.107	-0.144	-0.171	-0.223	-0.263	-0.303	-0.372	-0.382
0.40	-0.089	-0.121	-0.162	-0.190	-0.240	-0.276	-0.334	-0.370	-0.370
0.30	-0.037	-0.067	-0.102	-0.134	-0.161	-0.191	-0.220	-0.231	-0.220
0.20	+0.017	-0.002	-0.030	-0.047	-0.079	-0.098	-0.118	-0.128	-0.119
0.10	0.143	+0.129	+0.102	+0.089	+0.064	+0.044	+0.028	+0.020	+0.028
+0.05	+0.270	+0.257	+0.226	+0.212	+0.189	+0.173	+0.158	+0.147	+0.152

TABLE 3—continued

C_p at $\alpha = 5.05$ deg, $y/s = 0.964$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90	0.915	0.93
Upper	$x_i/c = 0.28$								
$x/c =$ 0.00	+0.005	+0.119	+0.20	+0.289	+0.334	+0.356	+0.387	+0.402	+0.422
+0.02	-1.357	-1.523	-1.059	-0.876	-0.786	-0.778	-0.772	-0.768	-0.774
0.04	-1.159	-1.423	-1.053	-0.865	-0.781	-0.774	-0.768	-0.768	-0.830
0.07	-0.932	-1.213	-0.933	-0.738	-0.669	-0.668	-0.683	-0.705	-0.814
0.10	-0.670	-1.028	-0.867	-0.700	-0.629	-0.618	-0.622	-0.639	-0.752
0.15	-0.572	-0.655	-0.808	-0.677	-0.608	-0.590	-0.584	-0.590	-0.680
0.20	-0.491	-0.543	-0.741	-0.654	-0.592	-0.574	-0.563	-0.560	-0.619
0.25	-0.398	-0.457	-0.665	-0.630	-0.581	-0.563	-0.551	-0.546	-0.584
0.30	-0.376	-0.446	-0.587	-0.594	-0.563	-0.548	-0.537	-0.534	-0.564
0.35	-0.330	-0.377	-0.520	-0.555	-0.548	-0.535	-0.529	-0.528	-0.552
0.40	-0.301	-0.332	-0.457	-0.513	-0.530	-0.521	-0.519	-0.523	-0.562
0.50	-0.239	-0.268	-0.343	-0.409	-0.458	-0.475	-0.483	-0.339	-0.517
0.60	-0.182	-0.205	-0.266	-0.363	-0.381	-0.412	-0.452	-0.316	-0.490
0.70	-0.152	-0.167	-0.221	-0.264	-0.308	-0.337	-0.394	-0.280	-0.464
0.80	-0.147	-0.155	-0.189	-0.235	-0.255	-0.280	-0.320	-0.377	-0.437
0.90	-0.167	-0.159	-0.178	-0.220	-0.235	-0.250	-0.271	-0.317	-0.406
+1.00	-0.037	-0.030	-0.111	-0.161	-0.197	-0.210	-0.240	-0.244	-0.329
Lower	$x_i/c = 0.25$								
$x/c =$ +0.90	-0.038	-0.036	-0.052	-0.080	-0.115	-0.136	-0.161	-0.186	-0.295
0.80	-0.083	-0.085	-0.090	-0.112	-0.144	-0.162	-0.177	-0.177	-0.359
0.70	-0.093	-0.104	-0.110	-0.128	-0.158	-0.173	-0.157	-0.214	-0.488
0.60	-0.115	-0.137	-0.152	-0.171	-0.197	-0.205	-0.238	-0.525	-0.596
0.50	-0.141	-0.178	-0.211	-0.235	-0.276	-0.286	-0.531	-0.585	-0.607
0.40	-0.132	-0.180	-0.226	-0.256	-0.308	-0.402	-0.484	-0.525	-0.532
0.30	-0.067	-0.117	-0.176	-0.211	-0.313	-0.380	-0.435	-0.479	-0.482
0.20	-0.094	-0.156	-0.222	-0.259	-0.317	-0.352	-0.372	-0.380	-0.365
0.10	+0.023	-0.025	-0.077	-0.098	-0.130	-0.145	-0.155	-0.156	-0.144
+0.05	+0.205	+0.181	+0.145	+0.133	+0.109	+0.096	+0.088	+0.084	+0.094

TABLE 3—continued

C_p at $\alpha = 7.1$ deg, $y/s = 0.212$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90
Upper	$x_t/c = 0.12$						
$x/c = +0.05$	-0.999	+0.638	+0.752	+0.835	+0.889	+0.907	+0.933
0.07	-0.989	-1.280	-1.076	-0.952	-0.848	-0.801	-0.749
0.10	-0.775	-1.028	-1.139	-1.084	-0.999	-0.956	-0.903
0.135	-0.589	-0.728	-0.936	-0.956	-0.911	-0.883	-0.839
0.245	-0.485	-0.586	-0.662	-0.648	-0.652	-0.642	-0.620
0.36	-0.439	-0.550	-0.641	-0.636	-0.615	-0.594	-0.577
0.47	-0.351	-0.444	-0.547	-0.626	-0.633	-0.617	-0.601
0.52	-0.354	-0.441	-0.543	-0.610	-0.632	-0.621	-0.607
0.565	-0.334	-0.420	-0.528	-0.623	-0.644	-0.634	-0.622
0.63	-0.305	-0.378	-0.438	-0.587	-0.673	-0.661	-0.648
0.70	-0.290	-0.352	-0.392	-0.456	-0.661	-0.676	-0.668
0.755	-0.252	-0.303	-0.329	-0.329	-0.570	-0.700	-0.707
0.81	-0.205	-0.243	-0.259	-0.255	-0.302	-0.498	-0.672
0.925	-0.144	-0.158	-0.164	-0.162	-0.154	-0.171	-0.212
1.035	+0.006	+0.009	+0.008	+0.006	-0.008	-0.046	-0.094
+1.15	+0.093	+0.095	+0.089	+0.081	+0.067	+0.048	+0.024
Lower	$x_t/c = 0.19$						
$x/c = +1.035$	+0.011	+0.005	-0.008	-0.019	-0.045	-0.079	-0.114
0.925	-0.034	-0.048	-0.074	-0.094	-0.123	-0.151	-0.181
0.81	-0.037	-0.052	-0.080	-0.100	-0.127	-0.147	-0.162
0.70	-0.049	-0.062	-0.091	-0.114	-0.136	-0.152	-0.167
0.565	-0.064	-0.072	-0.101	-0.122	-0.138	-0.151	-0.156
0.47	-0.017	-0.019	-0.036	-0.053	-0.059	-0.063	-0.066
0.36	-0.004	+0.007	-0.006	-0.020	-0.021	-0.021	-0.023
0.245	+0.042	0.071	+0.068	+0.057	+0.062	+0.065	+0.067
0.135	0.208	0.257	0.276	0.270	0.282	0.287	0.291
0.10	0.349	0.398	0.424	0.418	0.423	0.431	0.425
+0.08	+0.774	+0.919	+0.998	+1.049	+1.076	+1.086	+1.102

TABLE 3—continued

C_p at $\alpha = 7.1$ deg, $y/s = 0.479$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90
Upper	$x_t/c = 0.15$						
$x/c =$ 0.00	-0.504	-0.172	+0.075	+0.200	+0.261	+0.288	+0.309
+0.02	-1.700	-1.734	-1.462	-1.290	-1.160	-1.093	-1.047
0.04	-1.272	-1.682	-1.513	-1.356	-1.228	-1.161	-1.110
0.07	-0.954	-1.372	-1.471	-1.340	-1.222	-1.161	-1.112
0.10	-0.858	-1.078	-1.419	-1.303	-1.190	-1.133	-1.086
0.20	-0.668	-0.832	-1.186	-1.256	-1.171	-1.123	-1.077
0.30	-0.573	-0.697	-0.889	-0.993	-1.039	-1.034	-1.001
0.35	-0.529	-0.637	-0.842	-0.880	-0.936	-0.963	-0.953
0.40	-0.488	-0.585	-0.746	-0.820	-0.848	-0.869	-0.880
0.45	-0.430	-0.519	-0.562	-0.753	-0.797	-0.789	-0.803
0.50	-0.400	-0.470	-0.482	-0.670	-0.776	-0.780	-0.795
0.55	-0.345	-0.404	-0.409	-0.483	-0.751	-0.775	-0.801
0.60	-0.284	-0.330	-0.345	-0.388	-0.558	-0.723	-0.773
0.70	-0.183	-0.210	-0.239	-0.294	-0.351	-0.396	-0.464
0.80	-0.091	-0.105	-0.138	-0.169	-0.237	-0.275	-0.314
0.90	-0.007	-0.008	-0.033	-0.070	-0.127	-0.174	-0.216
+1.00	+0.108	+0.107	+0.093	+0.056	-0.007	-0.059	-0.105
Lower	$x_t/c = 0.15$						
$x/c =$ +0.90	+0.047	+0.035	+0.013	-0.014	-0.053	-0.086	-0.118
0.80	+0.025	+0.013	-0.015	-0.039	-0.070	-0.097	-0.121
0.70	-0.008	-0.024	-0.058	-0.086	-0.116	-0.142	-0.164
0.60	-0.028	-0.046	-0.085	-0.117	-0.143	-0.167	-0.183
0.50	-0.042	-0.062	-0.104	-0.137	-0.162	-0.182	-0.197
0.40	-0.038	-0.053	-0.091	-0.119	-0.141	-0.158	-0.167
0.30	+0.011	+0.007	-0.025	-0.045	-0.059	-0.067	-0.073
0.20	0.084	0.089	+0.067	+0.054	+0.047	+0.042	+0.040
0.10	0.203	0.213	0.198	0.187	0.182	0.179	0.174
+0.05	+0.356	+0.362	+0.358	+0.350	+0.342	+0.340	+0.334

TABLE 3—continued

C_p at $\alpha = 7.1$ deg, $y/s = 0.790$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90
Upper	$x_t/c = 0.23$						
$x/c =$ 0.00	-0.893	-0.223	+0.063	+0.171	+0.238	+0.270	+0.291
+0.02	-2.105	-1.704	-1.093	-0.882	-0.917	-0.974	-1.010
0.04	-1.469	-1.683	-1.073	0.891	-0.899	-0.960	-1.023
0.07	-1.252	-1.591	-1.040	-0.854	-0.859	-0.922	-1.000
0.10	-1.070	-1.410	-0.997	-0.821	-0.812	-0.873	-0.950
0.20	-0.737	-0.943	-0.893	-0.771	-0.730	-0.764	-0.854
0.25	-0.675	-0.821	-0.838	-0.748	-0.704	-0.719	-0.782
0.30	-0.612	-0.725	-0.791	-0.727	-0.685	-0.688	-0.735
0.35	-0.536	-0.636	-0.747	-0.703	-0.666	-0.665	-0.700
0.40	-0.471	-0.554	-0.695	-0.674	-0.641	-0.642	-0.669
0.45	-0.415	-0.482	-0.646	-0.642	-0.615	-0.613	-0.638
0.50	-0.359	-0.419	-0.610	-0.616	-0.595	-0.587	-0.617
0.60	-0.243	-0.297	-0.515	-0.537	-0.541	-0.541	-0.558
0.70	-0.142	-0.189	-0.420	-0.467	-0.498	-0.496	-0.502
0.80	-0.060	-0.099	-0.330	-0.416	-0.454	-0.457	-0.457
0.90	+0.013	-0.027	-0.247	-0.349	-0.404	-0.417	-0.421
+1.00	+0.091	+0.042	-0.175	-0.273	-0.316	-0.342	-0.365
Lower	$x_t/c = 0.25$						
$x/c =$ +0.90	+0.034	+0.004	-0.092	-0.156	-0.201	-0.226	-0.260
0.80	+0.018	-0.009	-0.075	-0.123	-0.164	-0.196	-0.236
0.70	-0.009	-0.032	-0.097	-0.139	-0.183	-0.227	-0.261
0.60	-0.034	-0.062	-0.125	-0.168	-0.215	-0.257	-0.277
0.50	-0.036	-0.064	-0.123	-0.162	-0.199	-0.226	-0.236
0.40	-0.030	-0.060	-0.117	-0.152	-0.185	-0.209	-0.222
0.30	+0.036	+0.009	-0.036	-0.066	-0.089	-0.107	-0.118
0.20	0.116	0.087	+0.052	+0.030	+0.011	-0.006	-0.015
0.10	0.266	0.233	0.203	0.185	0.166	+0.150	+0.142
+0.05	+0.396	+0.363	+0.333	+0.319	+0.298	+0.281	+0.276

TABLE 3—continued

C_p at $\alpha = 7.1$ deg, $y/s = 0.964$, Transition thread at x_i/c

M	0.40	0.70	0.80	0.835	0.865	0.885	0.90
Upper	$x_i/c = 0.28$						
$x/c =$ 0.00	-0.474	-0.042	+0.138	+0.204	+0.242	+0.258	+0.273
+0.02	-1.950	-1.079	-0.753	-0.767	-0.734	-0.735	-0.720
0.04	-1.717	-1.018	-0.713	-0.737	-0.712	-0.727	-0.712
0.07	-0.963	-0.986	-0.709	-0.646	-0.662	-0.701	-0.720
0.10	-0.841	-0.932	-0.703	-0.644	-0.655	-0.688	-0.705
0.15	-0.696	-0.860	-0.691	-0.639	-0.639	-0.677	-0.699
0.20	-0.588	-0.766	-0.659	-0.616	-0.612	-0.643	-0.671
0.25	-0.487	-0.675	-0.621	-0.589	-0.584	-0.612	-0.644
0.30	-0.465	-0.595	-0.579	-0.555	-0.557	-0.583	-0.615
0.35	-0.405	-0.531	-0.547	-0.532	-0.539	-0.560	-0.587
0.40	-0.372	-0.476	-0.519	-0.511	-0.528	-0.545	-0.570
0.50	-0.320	-0.382	-0.457	-0.466	-0.498	-0.521	-0.543
0.60	-0.285	-0.323	-0.402	-0.420	-0.452	-0.476	-0.519
0.70	-0.279	-0.293	-0.353	-0.372	-0.401	-0.416	-0.460
0.80	-0.286	-0.266	-0.313	-0.338	-0.360	-0.372	-0.395
0.90	-0.315	-0.248	-0.289	-0.317	-0.335	-0.342	-0.359
+1.00	-0.106	-0.166	-0.243	-0.266	-0.280	-0.288	-0.311
Lower	$x_i/c = 0.25$						
$x/c =$ +0.90	-0.075	+0.004	-0.142	-0.175	-0.204	-0.222	-0.235
0.80	-0.117	-0.009	-0.165	-0.194	-0.222	-0.240	-0.253
0.70	-0.123	-0.032	-0.168	-0.193	-0.220	-0.228	-0.264
0.60	-0.138	-0.062	-0.195	-0.220	-0.243	-0.285	-0.376
0.50	-0.153	-0.064	-0.235	-0.269	-0.315	-0.402	-0.482
0.40	-0.133	-0.060	-0.231	-0.269	-0.325	-0.394	-0.424
0.30	-0.061	+0.009	-0.161	-0.201	-0.266	-0.326	-0.345
0.20	-0.057	0.087	-0.173	-0.212	-0.254	-0.280	-0.291
0.10	+0.096	0.233	-0.002	-0.027	-0.048	-0.059	-0.060
+0.05	+0.296	+0.363	+0.219	+0.204	+0.191	+0.183	+0.180

TABLE 3—continued

C_p at $\alpha = 9.1$ deg, $y/s = 0.212$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885
Upper	$x_t/c = 0.12$					
$x/c = +0.05$	-0.766	+0.341	+0.588	+0.677	+0.799	+0.782
0.07	-1.507	-1.728	-1.335	-1.159	-1.023	-0.973
0.10	-1.076	-1.600	-1.422	-1.272	-1.152	-1.109
0.135	-0.802	-0.917	-1.285	-1.170	-1.069	-1.038
0.245	-0.603	-0.679	-0.763	-0.805	-0.793	-0.787
0.36	-0.510	-0.604	-0.668	-0.690	-0.683	-0.672
0.47	-0.398	-0.485	-0.506	-0.592	-0.675	-0.683
0.52	-0.390	-0.476	-0.508	-0.518	-0.645	-0.674
0.565	-0.366	-0.453	-0.492	-0.483	-0.613	-0.665
0.63	-0.330	-0.410	-0.483	-0.476	-0.547	-0.628
0.70	-0.303	-0.382	-0.466	-0.497	-0.495	-0.597
0.755	-0.263	-0.333	-0.412	-0.478	-0.473	-0.580
0.81	-0.210	-0.271	-0.338	-0.376	-0.404	-0.457
0.925	-0.141	-0.181	-0.238	-0.272	-0.310	-0.307
1.035	+0.000	-0.012	-0.046	-0.068	-0.093	-0.120
+1.15	+0.087	+0.079	+0.057	+0.041	+0.015	-0.008
Lower	$x_t/c = 0.19$					
$x/c = +1.035$	+0.016	-0.005	-0.045	-0.073	-0.111	-0.140
0.925	-0.015	-0.042	-0.084	-0.115	-0.145	-0.170
0.81	-0.008	-0.032	-0.069	-0.094	-0.114	-0.126
0.70	-0.009	-0.031	-0.064	-0.084	-0.102	-0.112
0.565	-0.014	-0.030	-0.057	-0.074	-0.087	-0.094
0.47	+0.040	+0.029	+0.015	+0.004	-0.005	-0.005
0.36	0.070	0.067	0.055	0.048	+0.042	+0.044
0.245	0.146	0.150	0.147	0.140	0.132	0.140
0.135	0.351	0.363	0.368	0.368	0.360	0.373
0.10	0.508	0.517	0.523	0.526	0.517	0.526
+0.08	+0.655	+0.839	+0.830	+0.991	+1.026	+1.037

TABLE 3—*continued*

C_p at $\alpha = 9.1$ deg, $y/s = 0.479$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885
Upper	$x_t/c = 0.15$					
$x/c =$ 0.00	-1.296	-0.426	-0.129	+0.036	+0.110	+0.152
+0.02	-2.614	-1.799	-1.378	-1.274	-1.213	-1.193
0.04	-1.592	-1.793	-1.398	-1.287	-1.242	-1.241
0.07	-1.268	-1.648	-1.386	-1.268	-1.224	-1.226
0.10	-1.122	-1.506	-1.326	-1.224	-1.190	-1.198
0.20	-0.826	-1.086	-1.117	-1.035	-1.040	-1.092
0.30	-0.678	-0.845	-0.932	-0.890	-0.875	-0.927
0.35	-0.616	-0.760	-0.867	-0.841	-0.829	-0.874
0.40	-0.561	-0.688	-0.807	-0.800	-0.790	-0.824
0.45	-0.492	-0.614	-0.749	-0.756	-0.751	-0.773
0.50	-0.449	-0.562	-0.703	-0.720	-0.724	-0.742
0.55	-0.385	-0.498	-0.652	-0.680	-0.697	-0.712
0.60	-0.315	-0.429	-0.596	-0.639	-0.661	-0.673
0.70	-0.279	-0.309	-0.492	-0.561	-0.594	-0.595
0.80	-0.103	-0.178	-0.369	-0.474	-0.518	-0.523
0.90	-0.009	-0.080	-0.251	-0.378	-0.435	-0.448
+1.00	+0.093	+0.054	-0.113	-0.260	-0.319	-0.347
Lower	$x_t/c = 0.15$					
$x/c =$ +0.90	+0.055	+0.018	-0.056	-0.107	-0.139	-0.154
0.80	0.045	+0.010	-0.044	-0.075	-0.100	-0.113
0.70	0.021	-0.016	-0.063	-0.090	-0.115	-0.129
0.60	0.011	-0.025	-0.069	-0.094	-0.116	-0.129
0.50	0.006	-0.030	-0.070	-0.091	-0.114	-0.124
0.40	0.025	-0.004	-0.041	-0.061	-0.079	-0.108
0.30	0.089	+0.064	+0.038	+0.025	+0.012	+0.006
0.20	0.184	0.165	0.145	0.130	0.120	0.117
0.10	0.332	0.304	0.285	0.271	0.260	0.261
+0.05	+0.495	+0.451	+0.433	+0.430	+0.416	+0.416

TABLE 3—continued

C_p at $\alpha = 9.1$ deg, $y/s = 0.790$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885
Upper	$x_t/c = 0.23$					
$x/c =$ 0.00	-1.784	-0.334	-0.057	+0.053	+0.101	+0.126
+0.02	-3.070	-0.978	-0.777	-0.691	-0.675	-0.688
0.04	-1.787	-1.030	-0.781	-0.674	-0.670	-0.673
0.07	-1.562	-1.007	-0.761	-0.657	-0.647	-0.651
0.10	-1.311	-0.976	-0.744	-0.646	-0.633	-0.636
0.20	-0.882	-0.875	-0.708	-0.639	-0.623	-0.626
0.25	-0.791	-0.810	-0.675	-0.620	-0.609	-0.617
0.30	-0.701	-0.755	-0.652	-0.604	-0.600	-0.610
0.35	-0.612	-0.707	-0.632	-0.592	-0.592	-0.604
0.40	-0.530	-0.652	-0.604	-0.571	-0.576	-0.592
0.45	-0.461	-0.600	-0.575	-0.546	-0.558	-0.578
0.50	-0.398	-0.565	-0.559	-0.539	-0.548	-0.570
0.60	-0.273	-0.467	-0.500	-0.505	-0.516	-0.549
0.70	-0.165	-0.384	-0.451	-0.471	-0.497	-0.531
0.80	-0.080	-0.322	-0.405	-0.549	-0.476	-0.514
0.90	-0.008	-0.259	-0.370	-0.414	-0.458	-0.494
+1.00	+0.046	-0.199	-0.295	-0.350	-0.391	-0.433
Lower	$x_t/c = 0.25$					
$x/c =$ +0.90	+0.025	-0.101	-0.189	-0.228	-0.273	-0.307
0.80	0.025	-0.069	-0.143	-0.178	-0.218	-0.242
0.70	+0.009	-0.068	-0.141	-0.176	-0.217	-0.237
0.60	-0.004	-0.077	-0.147	-0.184	-0.218	-0.234
0.50	+0.006	-0.061	-0.123	-0.153	-0.175	-0.186
0.40	0.027	-0.039	-0.097	-0.122	-0.141	-0.151
0.30	0.108	+0.043	-0.003	-0.021	-0.035	-0.042
0.20	0.202	0.138	+0.097	+0.086	+0.073	+0.068
0.10	0.368	0.293	0.254	0.246	0.233	0.231
+0.05	+0.502	+0.421	+0.383	+0.376	+0.363	+0.361

TABLE 3—continued

C_p at $\alpha = 9.1$ deg, $y/s = 0.964$, Transition thread at x_t/c

M	0.40	0.70	0.80	0.835	0.865	0.885
Upper	$x_t/c = 0.28$					
$x/c =$ 0.00	-1.027	-0.106	+0.005	+0.056	+0.109	+0.141
+0.02	-2.651	-0.885	-0.938	-0.996	-0.920	-0.855
0.04	-2.263	-0.849	-0.914	-0.970	-0.965	-0.834
0.07	-1.202	-0.777	-0.849	-0.997	-0.971	-0.830
0.10	-1.011	-0.764	-0.828	-0.973	-0.962	-0.829
0.15	-0.830	-0.741	-0.792	-0.913	-0.894	-0.794
0.20	-0.699	-0.698	-0.744	-0.846	-0.829	-0.749
0.25	-0.588	-0.654	-0.702	-0.794	-0.785	-0.723
0.30	-0.556	-0.615	-0.669	-0.755	-0.753	-0.694
0.35	-0.487	-0.587	-0.646	-0.741	-0.740	-0.684
0.40	-0.458	-0.561	-0.622	-0.714	-0.731	-0.677
0.50	-0.422	-0.510	-0.574	-0.648	-0.674	-0.661
0.60	-0.366	-0.460	-0.515	-0.567	-0.574	-0.572
0.70	-0.333	-0.415	-0.462	-0.500	-0.505	-0.491
0.80	-0.366	-0.385	-0.411	-0.433	-0.444	-0.449
0.90	-0.396	-0.339	-0.365	-0.383	-0.403	-0.424
+1.00	-0.199	-0.260	-0.257	-0.241	-0.271	-0.299
Lower	$x_t/c = 0.25$					
$x/c =$ +0.90	-0.103	-0.146	-0.179	-0.189	-0.234	-0.280
0.80	-0.140	-0.165	-0.210	-0.230	-0.272	-0.300
0.70	-0.142	-0.161	-0.213	-0.239	-0.273	-0.312
0.60	-0.150	-0.174	-0.233	-0.265	-0.297	-0.396
0.50	-0.155	-0.195	-0.263	-0.306	-0.394	-0.441
0.40	-0.125	-0.174	-0.245	-0.291	-0.361	-0.378
0.30	-0.049	-0.095	-0.164	-0.213	-0.269	-0.282
0.20	-0.021	-0.090	-0.159	-0.194	-0.222	-0.226
0.10	+0.157	+0.083	+0.032	+0.018	+0.009	+0.007
+0.05	+0.357	+0.286	+0.215	+0.247	+0.242	+0.242

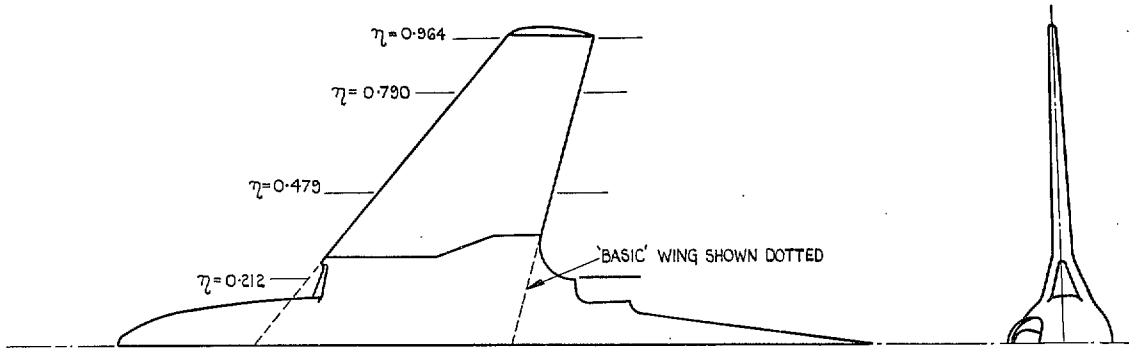
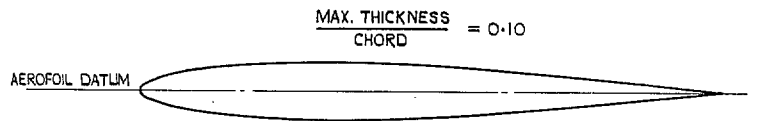


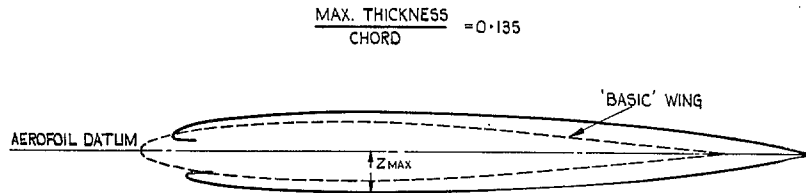
FIG. 1. General arrangement of Hawker P.1052 half-model.



SECTION IS SYMMETRICAL AND STRAIGHT FROM $x/c = 0.65$ TO $x/c = 1$

x/c	0	0.02	0.025	0.04	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.70	0.80	0.90	1.00
z/z_{MAX}	0	.352	.398	.430	.540	.736	.840	.920	.972	.990	1.000	.990	.952	.908	.842	.768	.588	.392	.196	0

TYPICAL SECTION BETWEEN $\eta = 0.336$ & $\eta = 0.973$



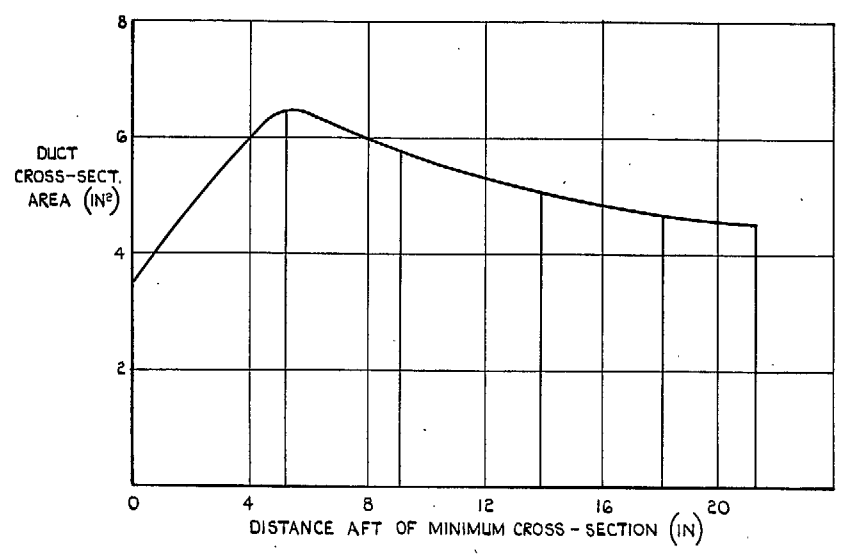
CHORD = 1.15 x 'BASIC' WING CHORD, ASSUMING L.E. TO COINCIDE WITH BASIC WING L.E.

x/c	0.050	0.068	0.078	0.098	0.133	0.246	0.359	0.472	0.519	0.566	0.632	0.698	0.755	0.811	0.924	1.037	1.150
Z_{UPPER} / Z_{MAX}	.333	.511	-	.436	.704	.870	.922	.922	.909	.878	.859	.820	.744	.704	.562	.346	0
Z_{LOWER} / Z_{MAX}	-	-	.601	.744	.839	.974	1.00	.974	-	.935	-	.846	-	.744	.576	.383	0

SECTION AT $\eta = 0.212$

FIG. 2. Typical wing sections. Hawker P.1052 half-model.

(78428)



MINIMUM CROSS-SECTION IS 6.919 IN. AFT OF BASIC WING APEX

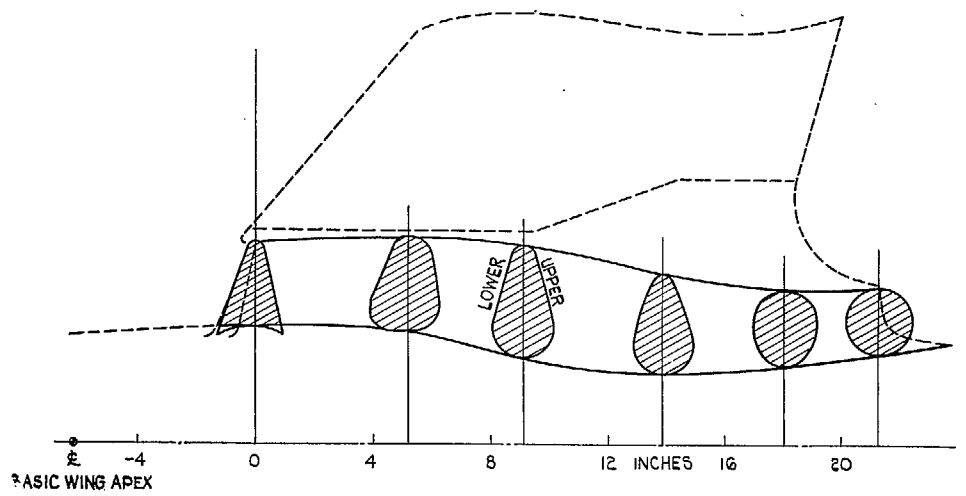


FIG. 3. Details of duct. Hawker P.1052 half-model.

71

C*2

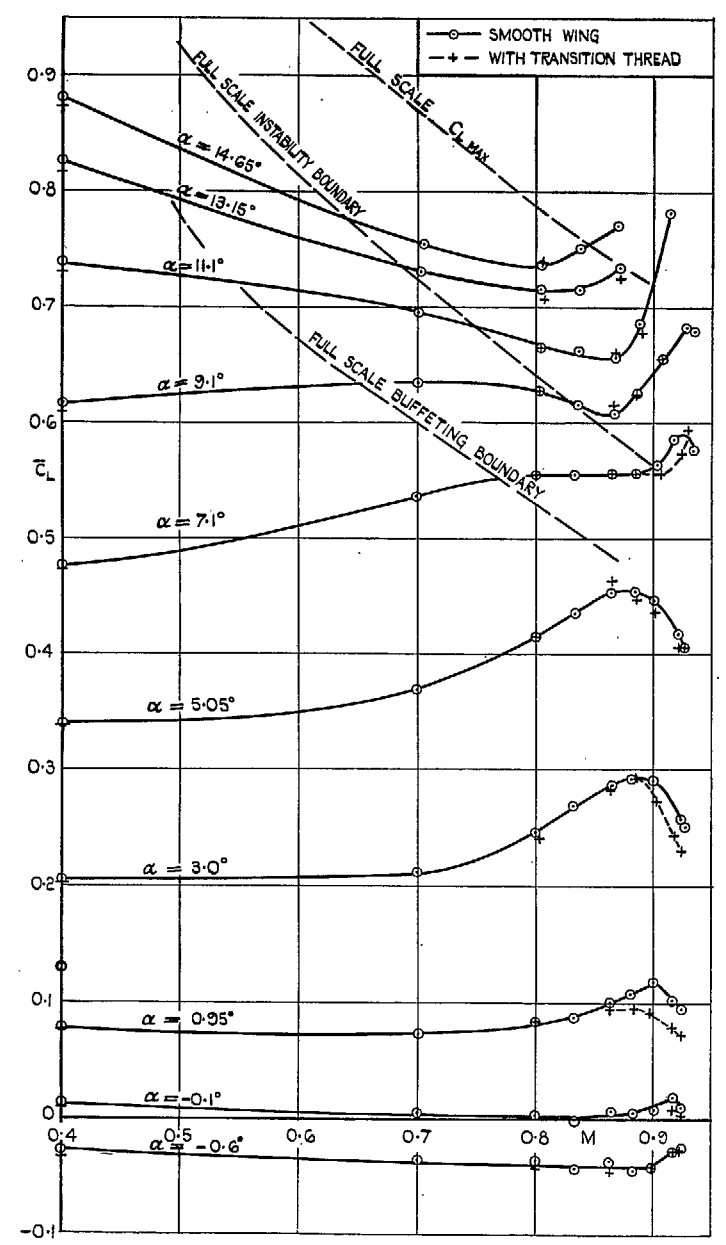


FIG. 4. \bar{C}_L vs. Mach number at constant incidence. Force tests on Hawker P.1052 half-model.

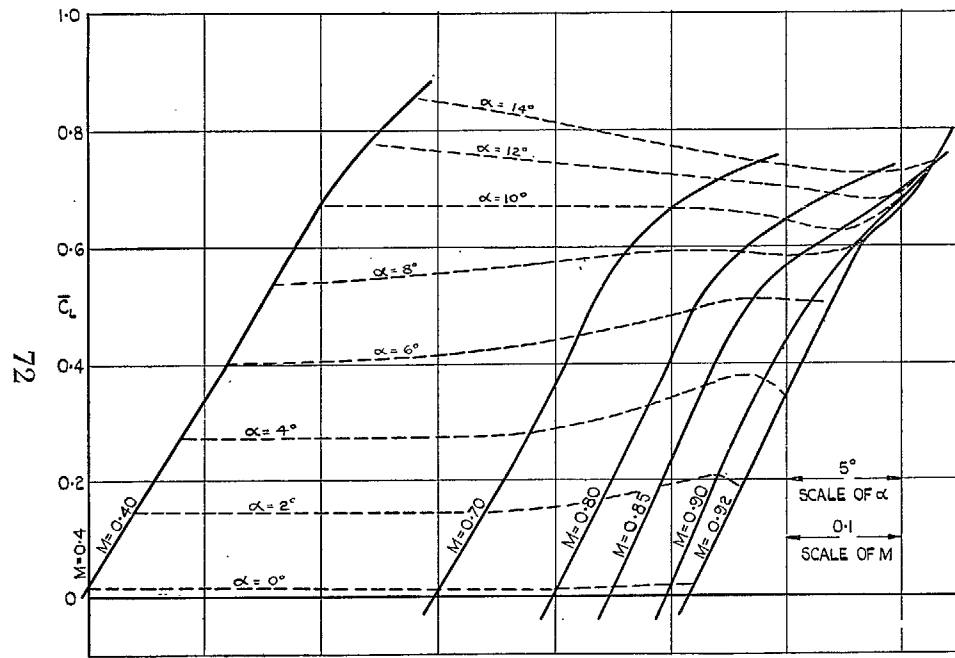


FIG. 5. Lift carpet for smooth wing. Force tests on Hawker P.1052 half-model.

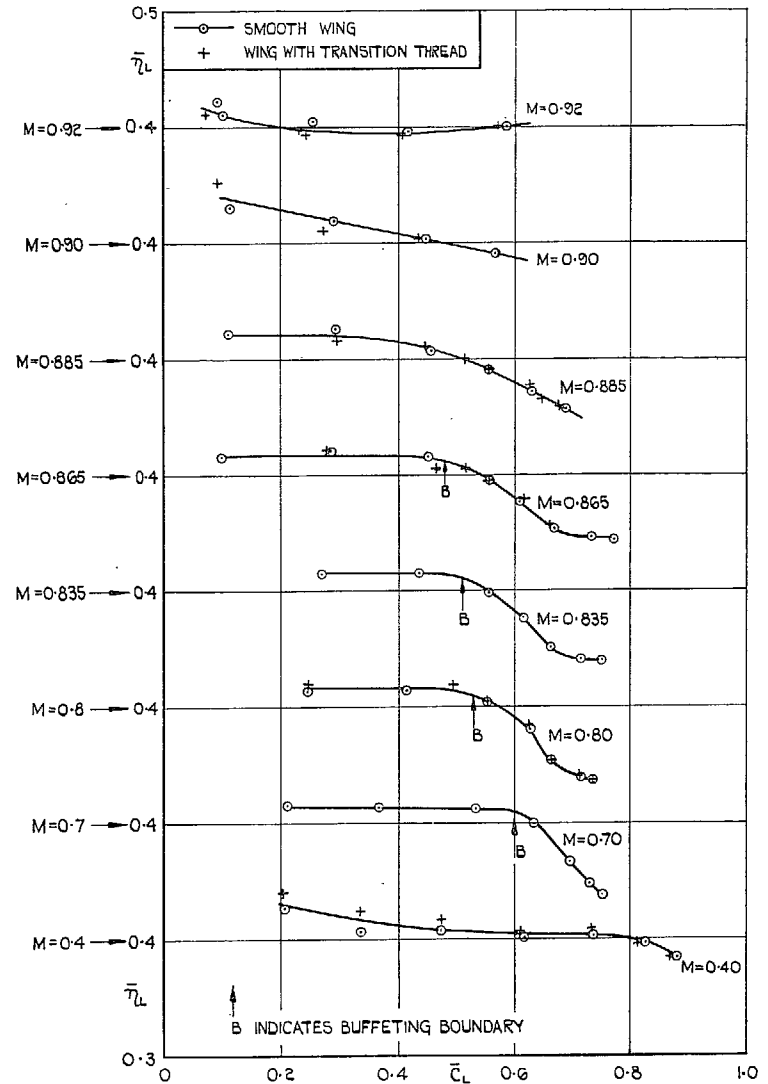


FIG. 6. Spanwise lift centre $\bar{\eta}_L$ vs. \bar{C}_L at constant Mach number, including comparison with full-scale buffeting boundary. Force tests on Hawker P.1052 half-model.

73

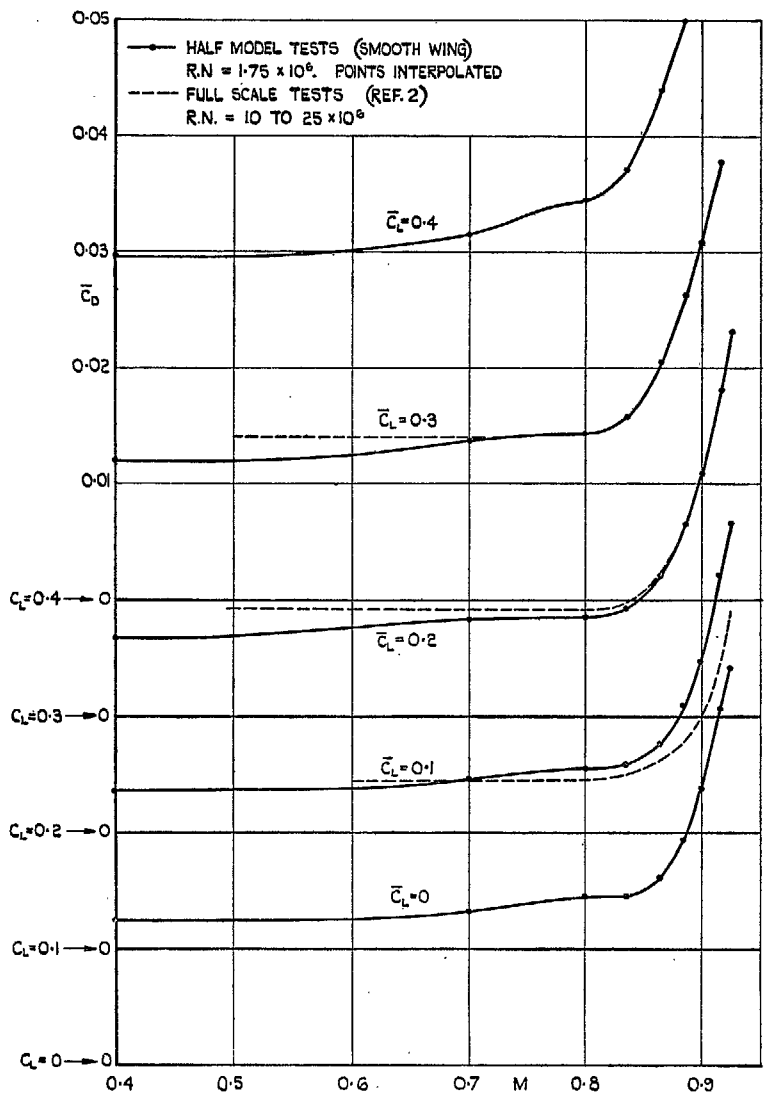


FIG. 7. \bar{C}_D vs. Mach number at constant \bar{C}_L (smooth wing), including flight/tunnel comparison. Force tests on Hawker P.1052 half-model.

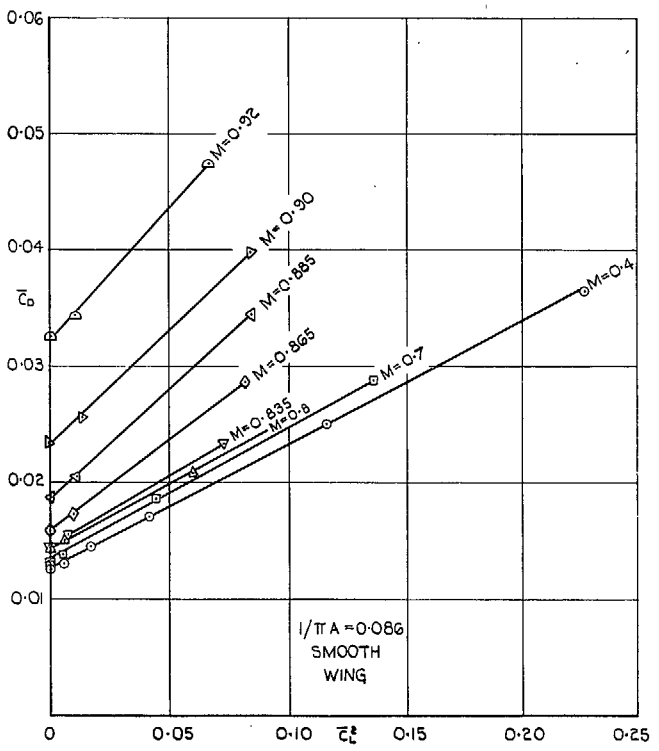
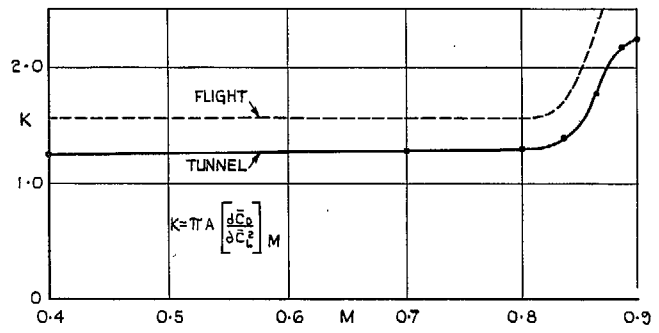


FIG. 8. Variation of effective induced drag factor with Mach number including flight/tunnel comparison. Force tests on Hawker P.1052 half-model.

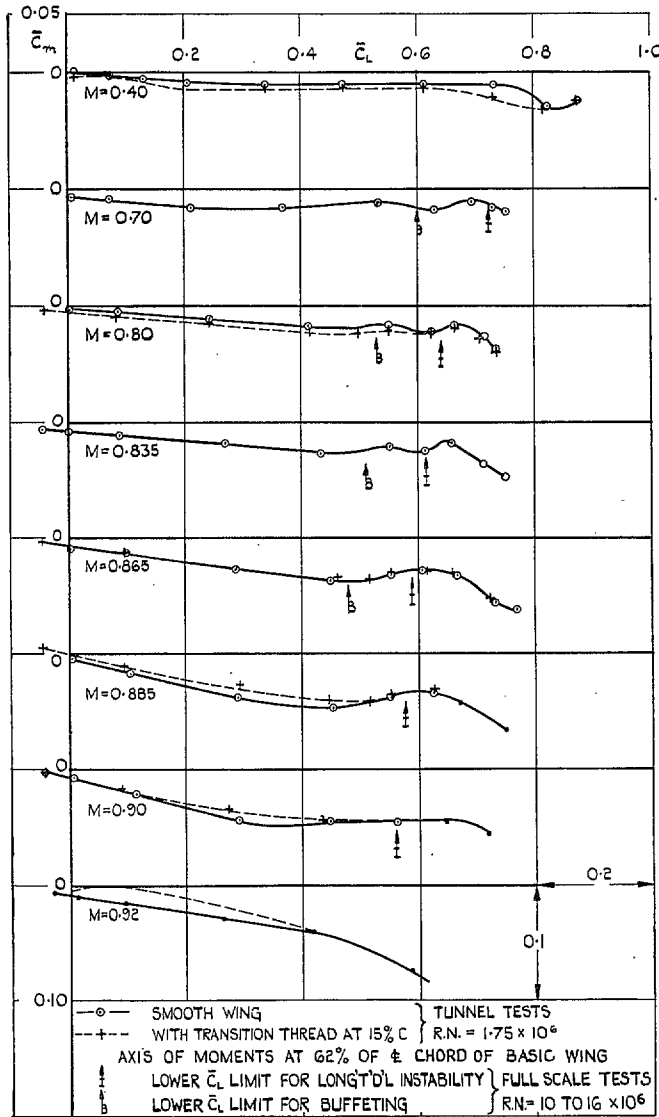


FIG. 9. \bar{C}_m vs. \bar{C}_L at constant Mach number, including comparison with full-scale buffeting and instability boundaries. Force tests on Hawker P.1052 half-model.

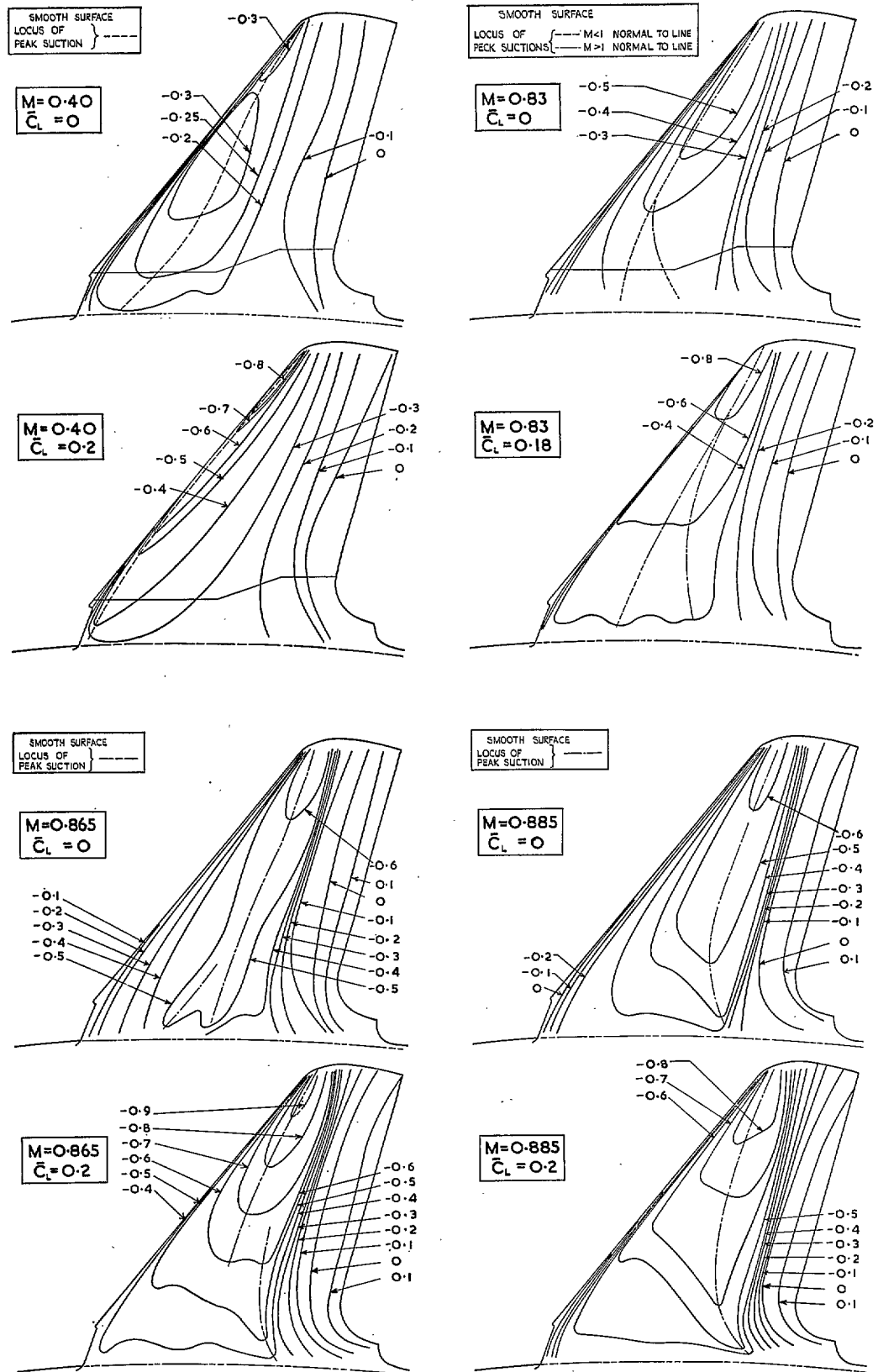


FIG. 10a. Upper-surface isobars at low \bar{C}_L . Pressure plotting on Hawker P.1052 half-model.

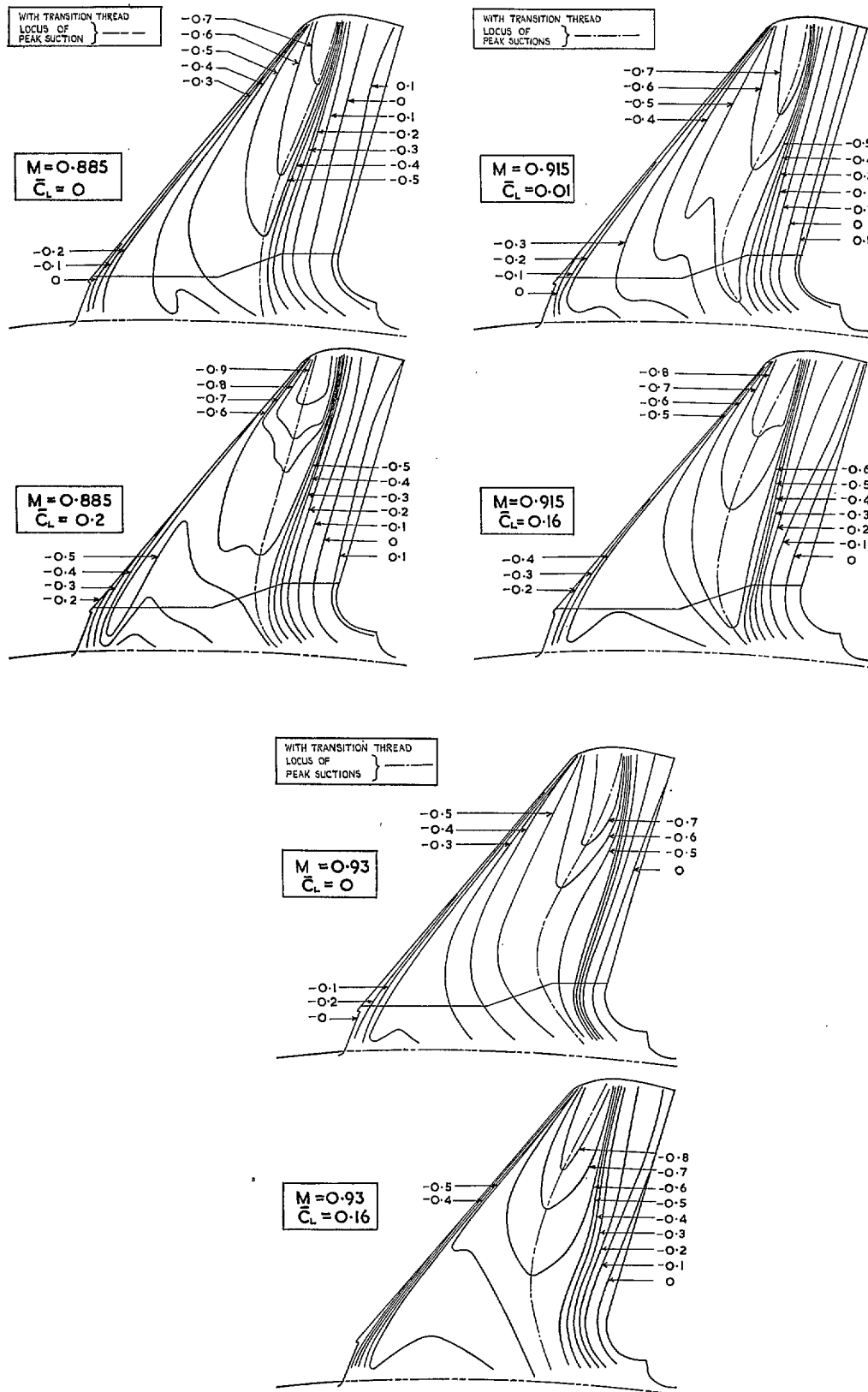


FIG. 10b. Upper-surface isobars at low \bar{C}_L . Pressure plotting on Hawker P.1052 half-model.

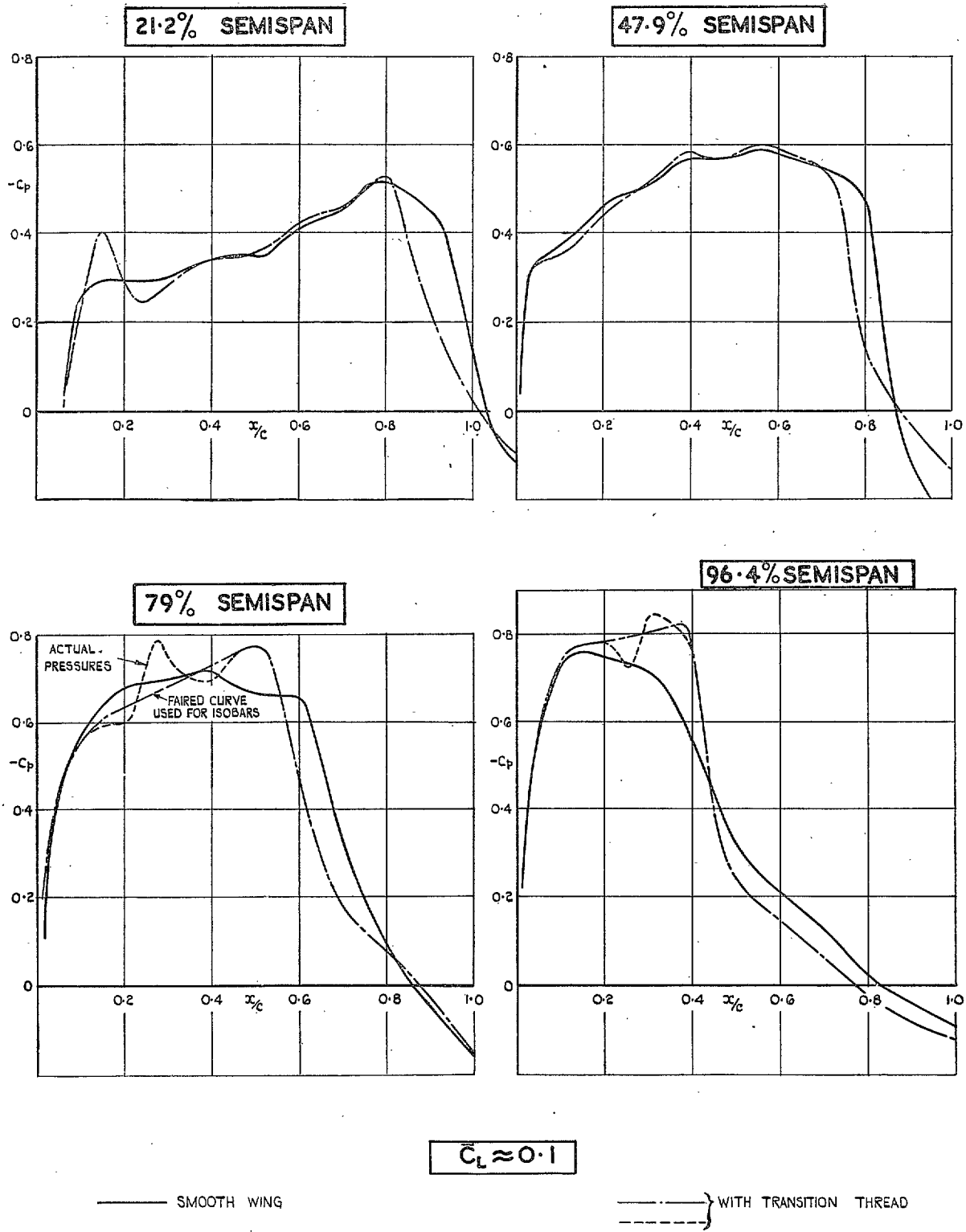


FIG. 11. $-C_p$ vs. x/c . Typical effect of thread on upper-surface pressures at $M = 0.915$. Pressure plotting on Hawker P.1052 half-model.

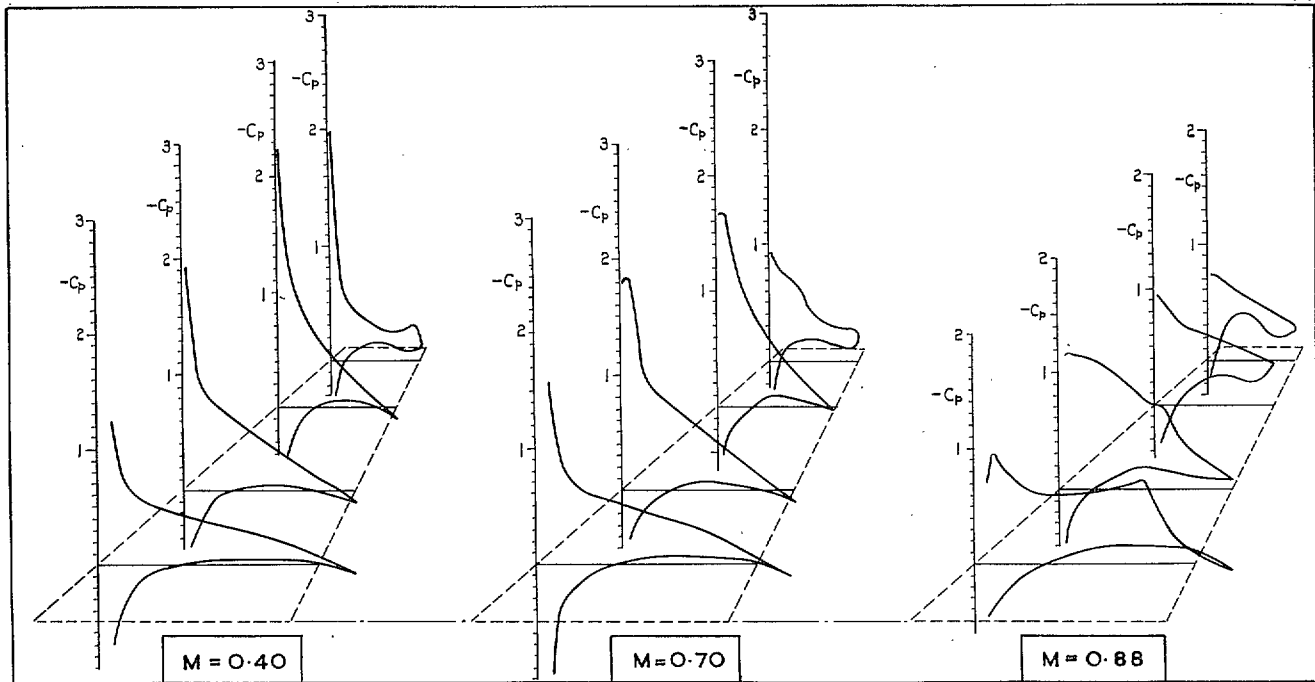


FIG. 12a. Distribution of $-C_p$ at $\alpha = 7.1$ deg (smooth wing). Pressure plotting on Hawker P.1052 half-model.

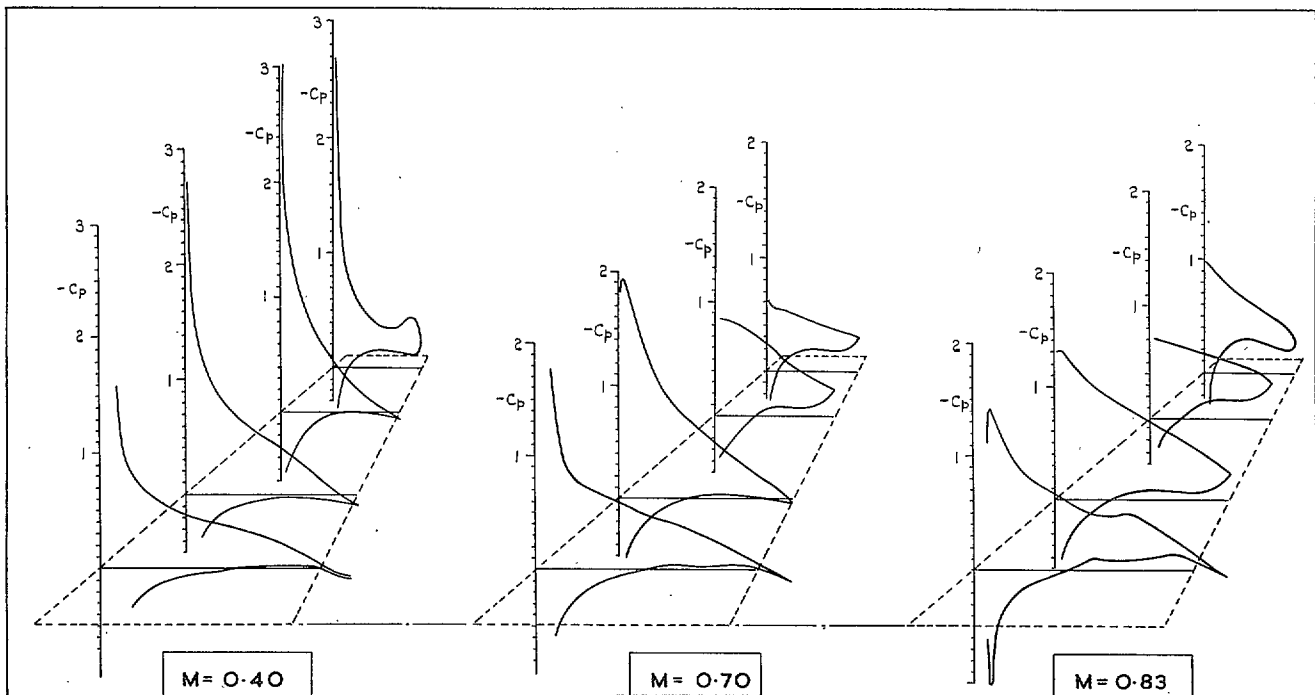


FIG. 12b. Distribution of $-C_p$ at $\alpha = 9.1$ deg (smooth wing). Pressure plotting on Hawker P.1052 half-model.

79

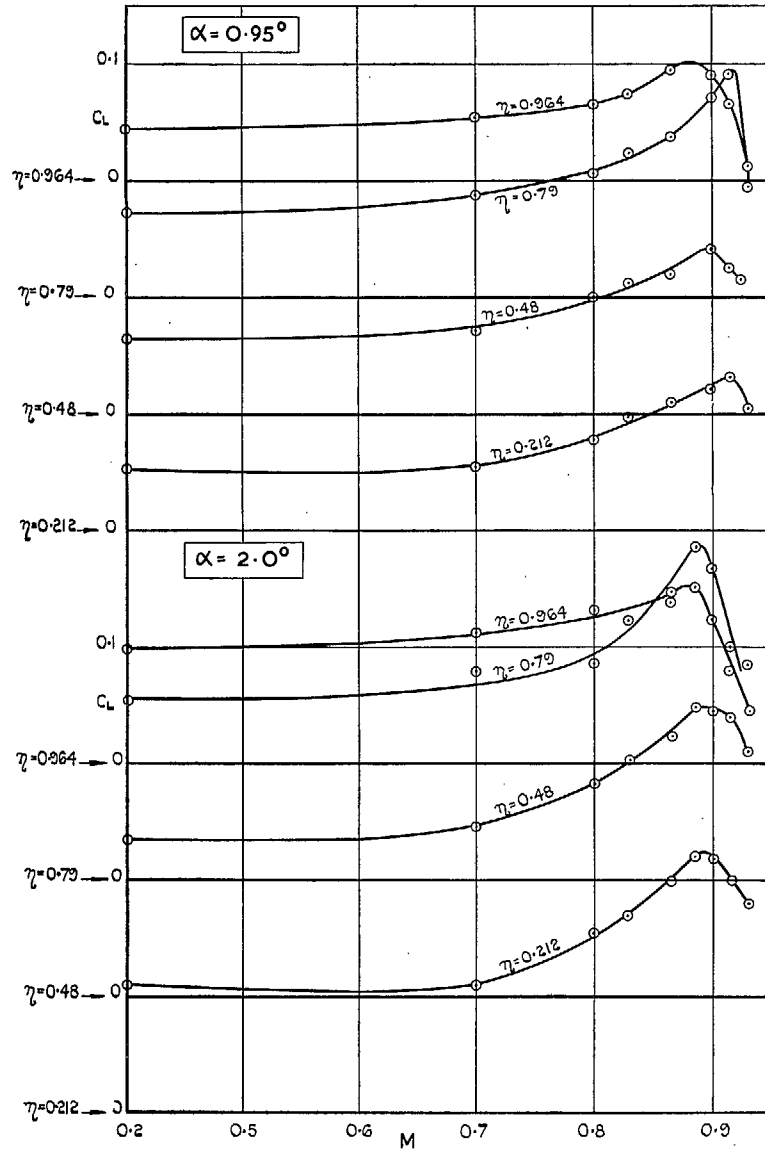


FIG. 13. Local C_L vs. Mach number at constant α (smooth wing). Pressure plotting on Hawker P.1052 half-model.

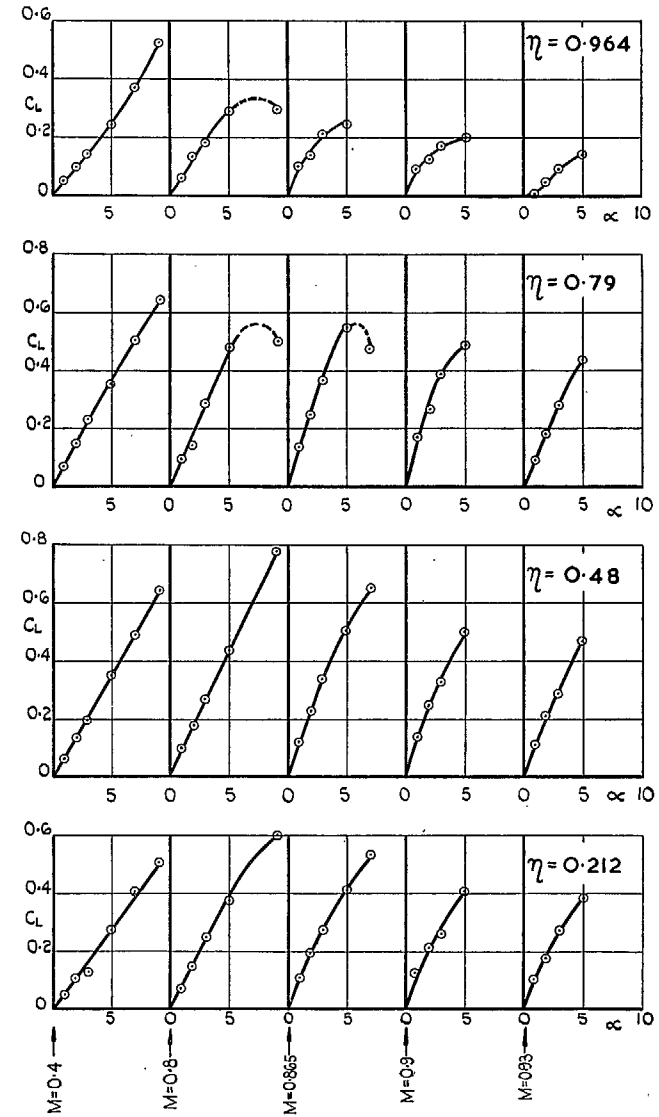


FIG. 14. Local C_L vs. α at constant Mach number (smooth wing). Pressure plotting on Hawker P.1052 half-model.

88

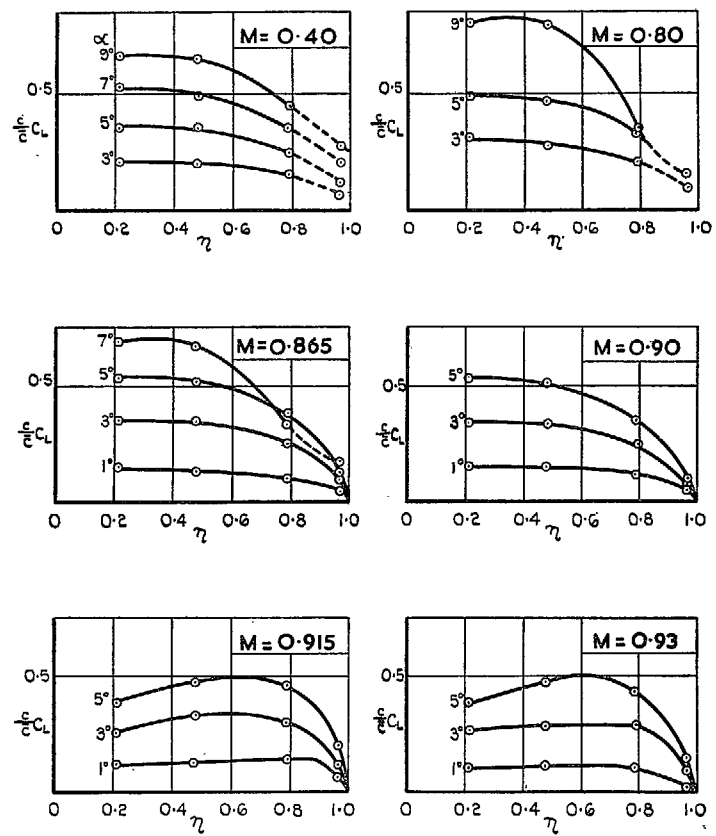


FIG. 15. Span loading (smooth wing). $(c/\bar{c})C_L$ vs. η at constant α and Mach number. Pressure plotting on Hawker P.1052 half-model.

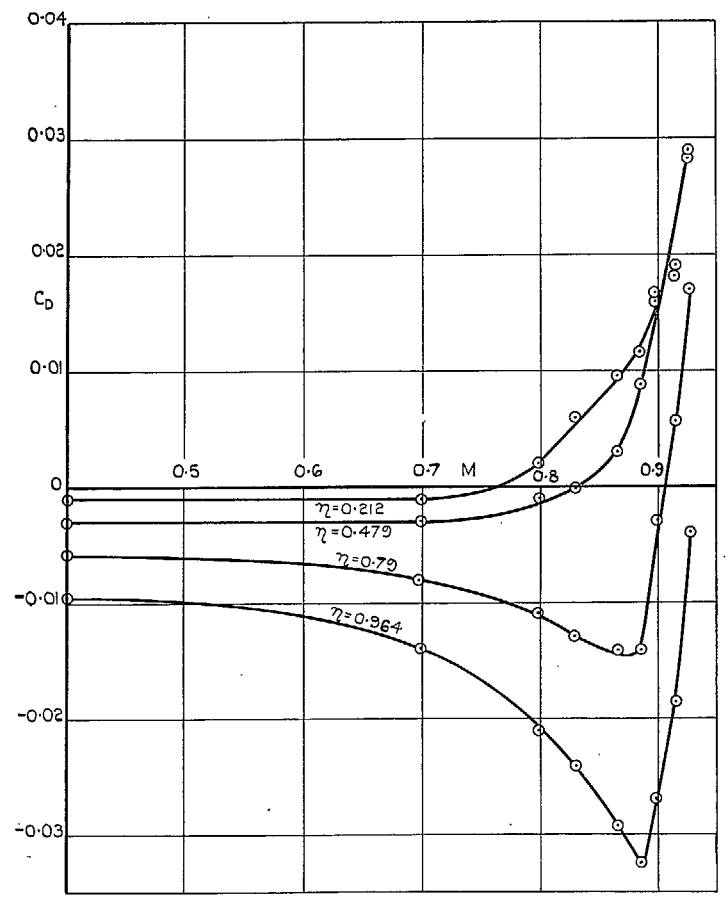


FIG. 16. Local form-drag coefficients vs. Mach number at $C_L = 0$ (smooth wing). Pressure plotting on Hawker P.1052 half-model.

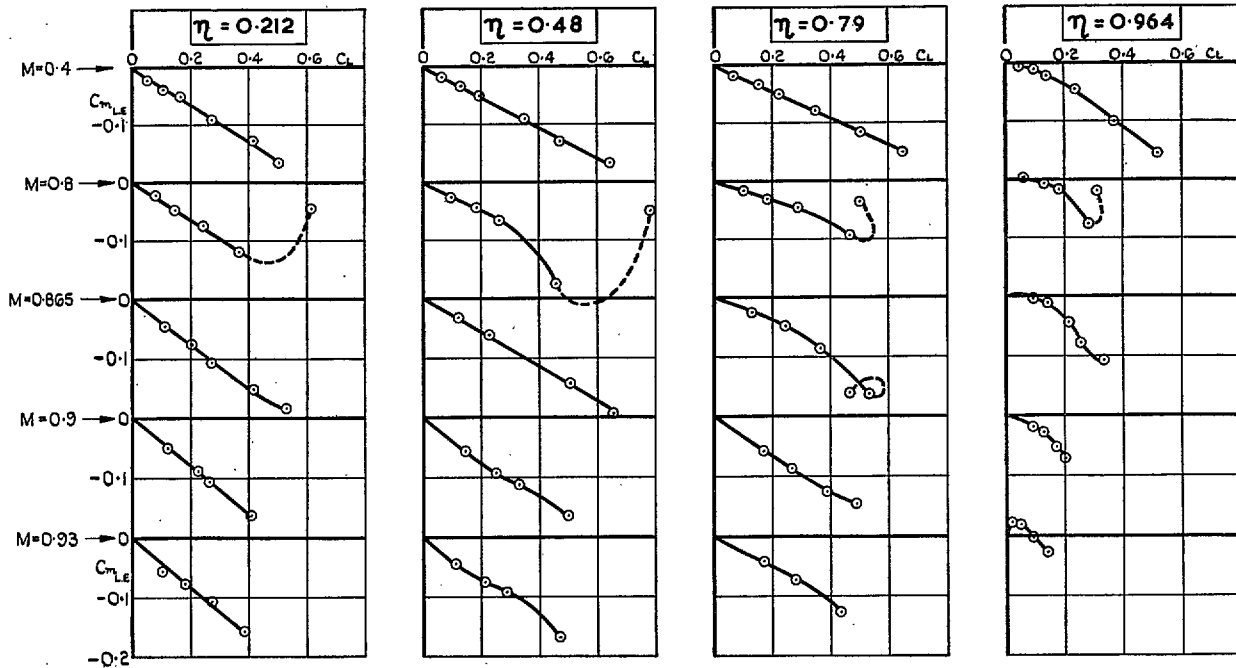


FIG. 17. $C_{m,LE}$ vs. local C_L at constant Mach number (smooth wing). Pressure plotting on Hawker P.1052 half-model.

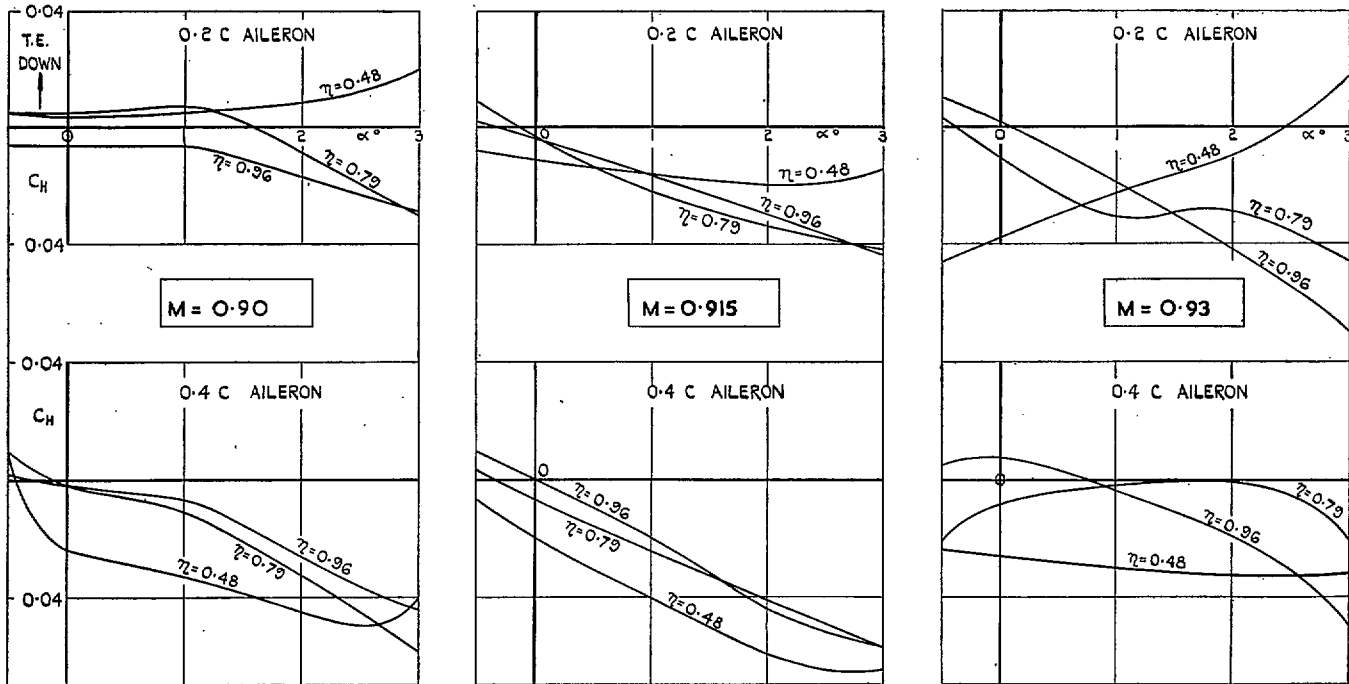


FIG. 18. Local hinge-moment coefficient C_H vs. α deg at high constant Mach number for 0.2c and 0.4c aileron, undeflected. Pressure plotting on Hawker P.1052 half-model.

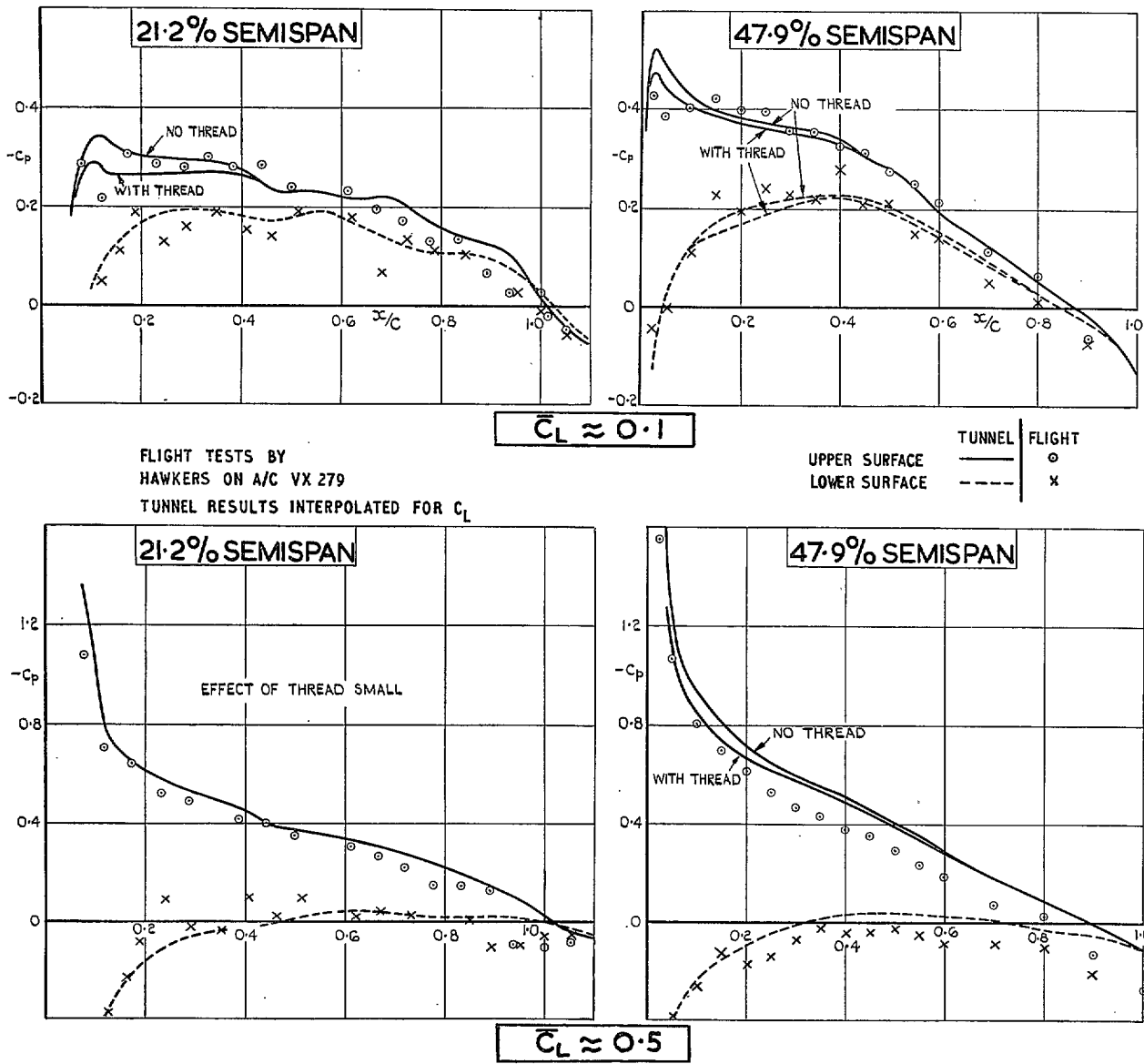


FIG. 19a. $-C_p$ vs. x/c . Flight/tunnel comparison at $M = 0.4 - 0.5$. Pressure plotting on Hawker P.1052.

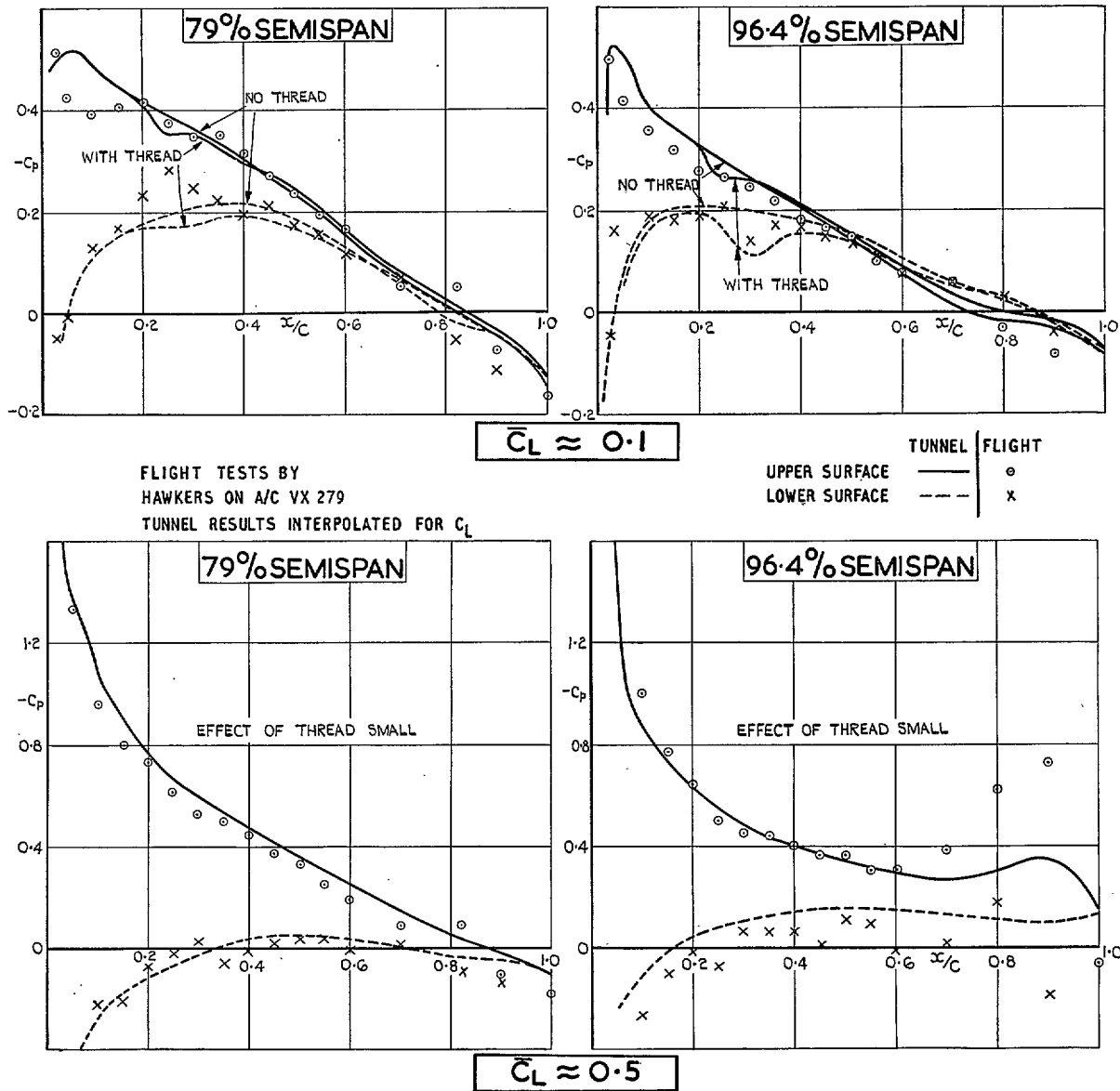


FIG. 19b. $-C_p$ vs. x/c . Flight/tunnel comparison at $M = 0.4 - 0.5$. Pressure plotting on Hawker P.1052.

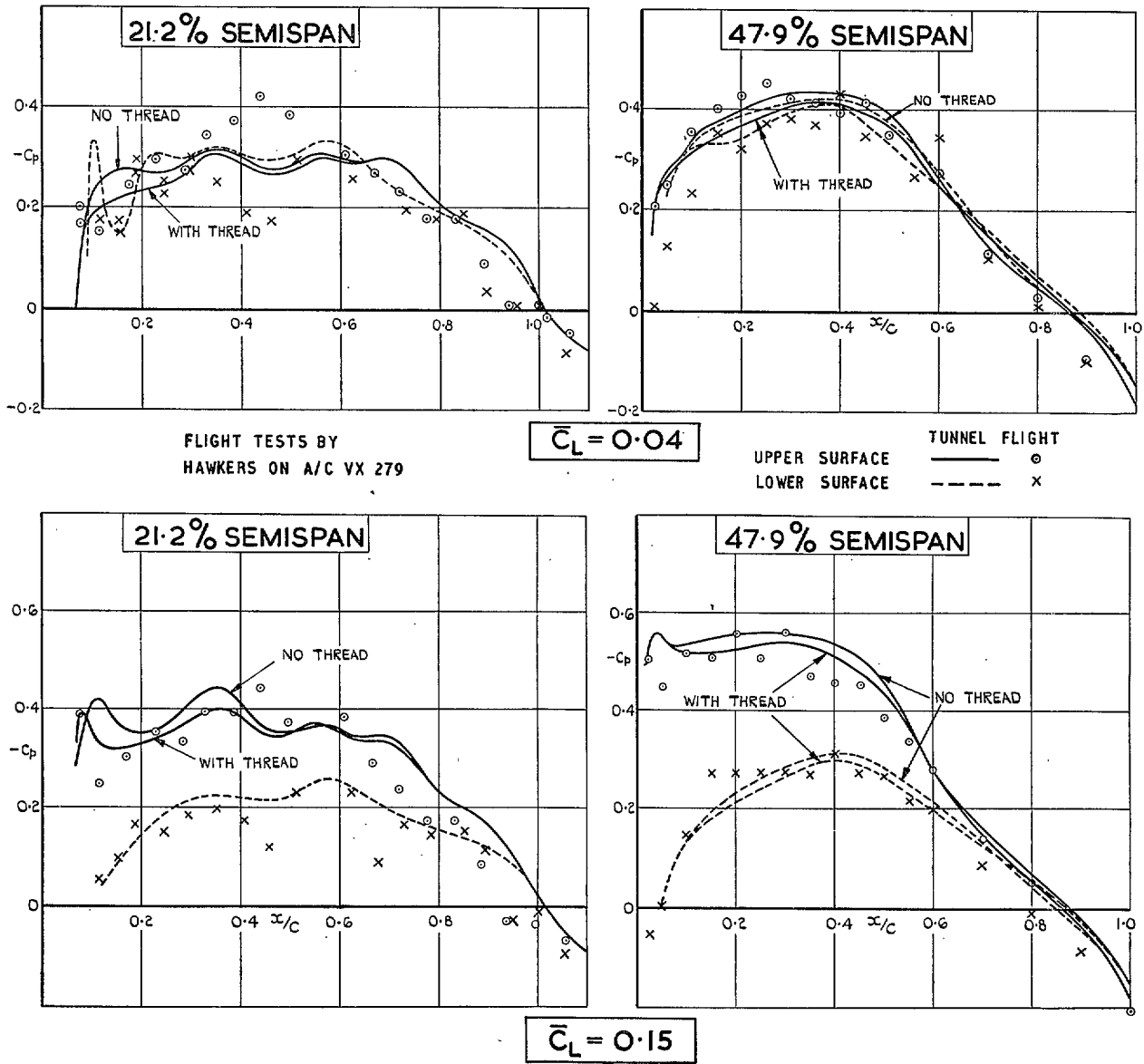


FIG. 20a. $-C_p$ vs. x/c . Flight/tunnel comparison at $M = 0.8$. Pressure plotting on Hawker P.1052.

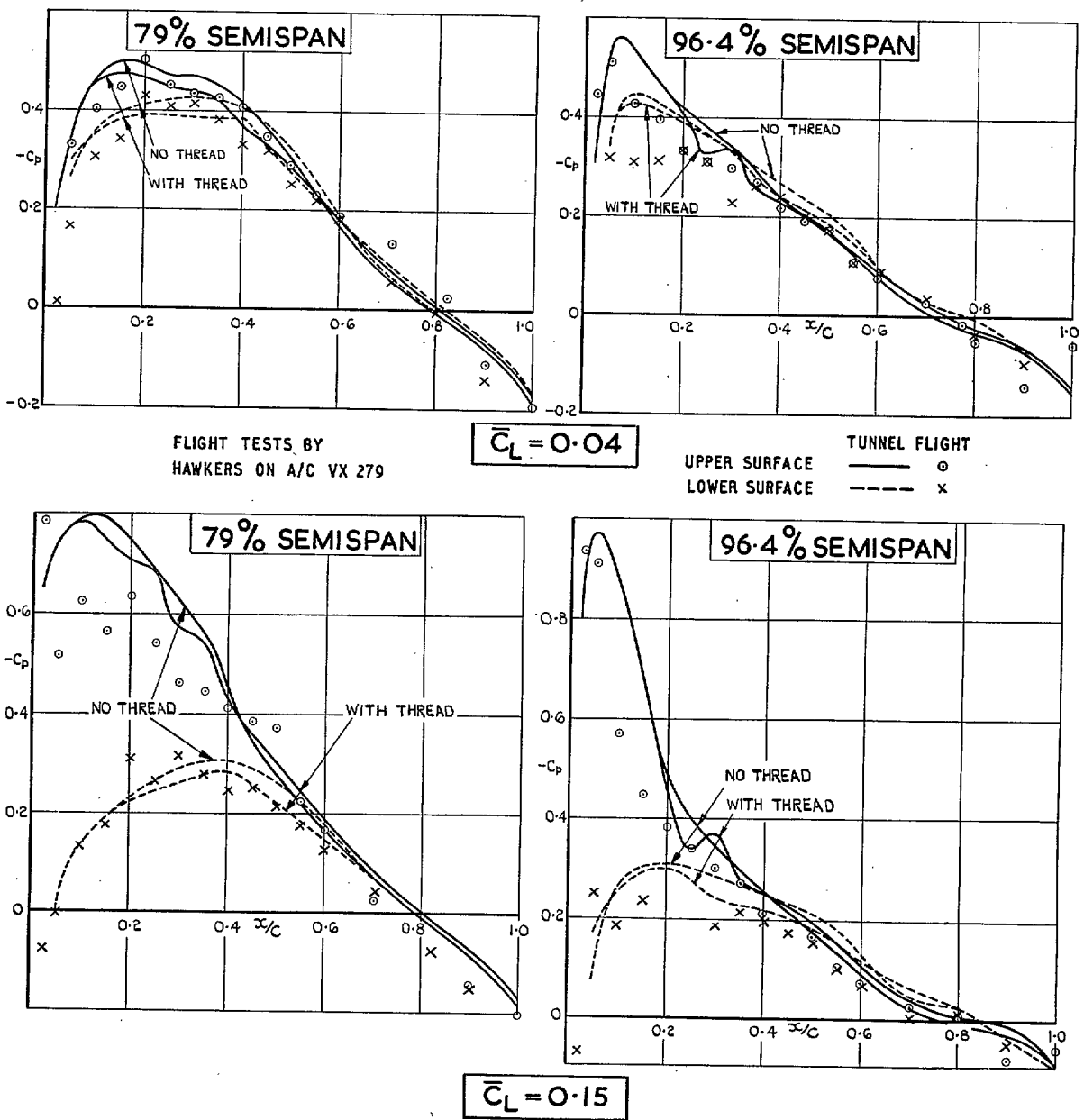
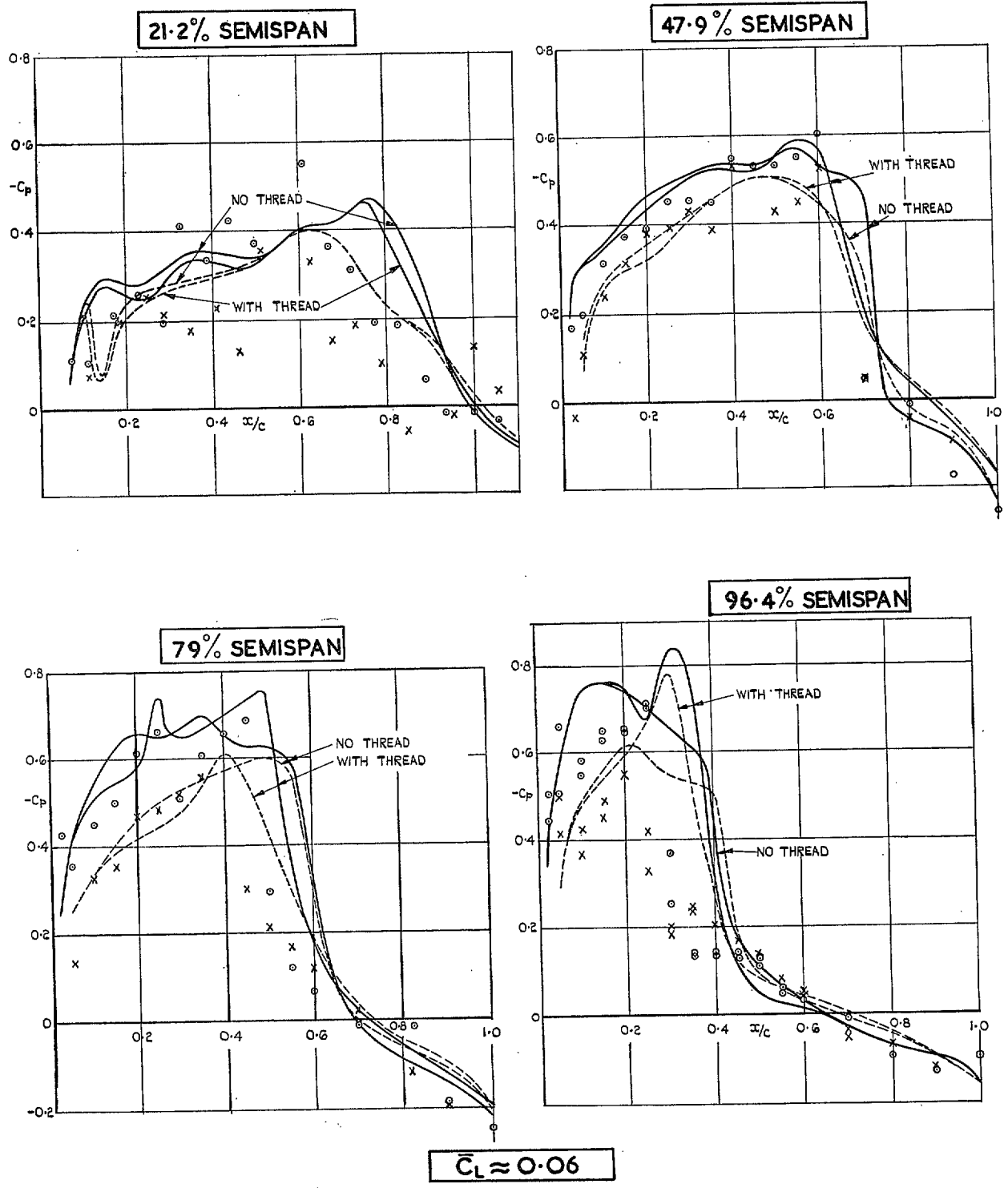


FIG. 20b. — C_p vs. x/c . Flight/tunnel comparison at $M = 0.8$. Pressure plotting on Hawker P.1052.

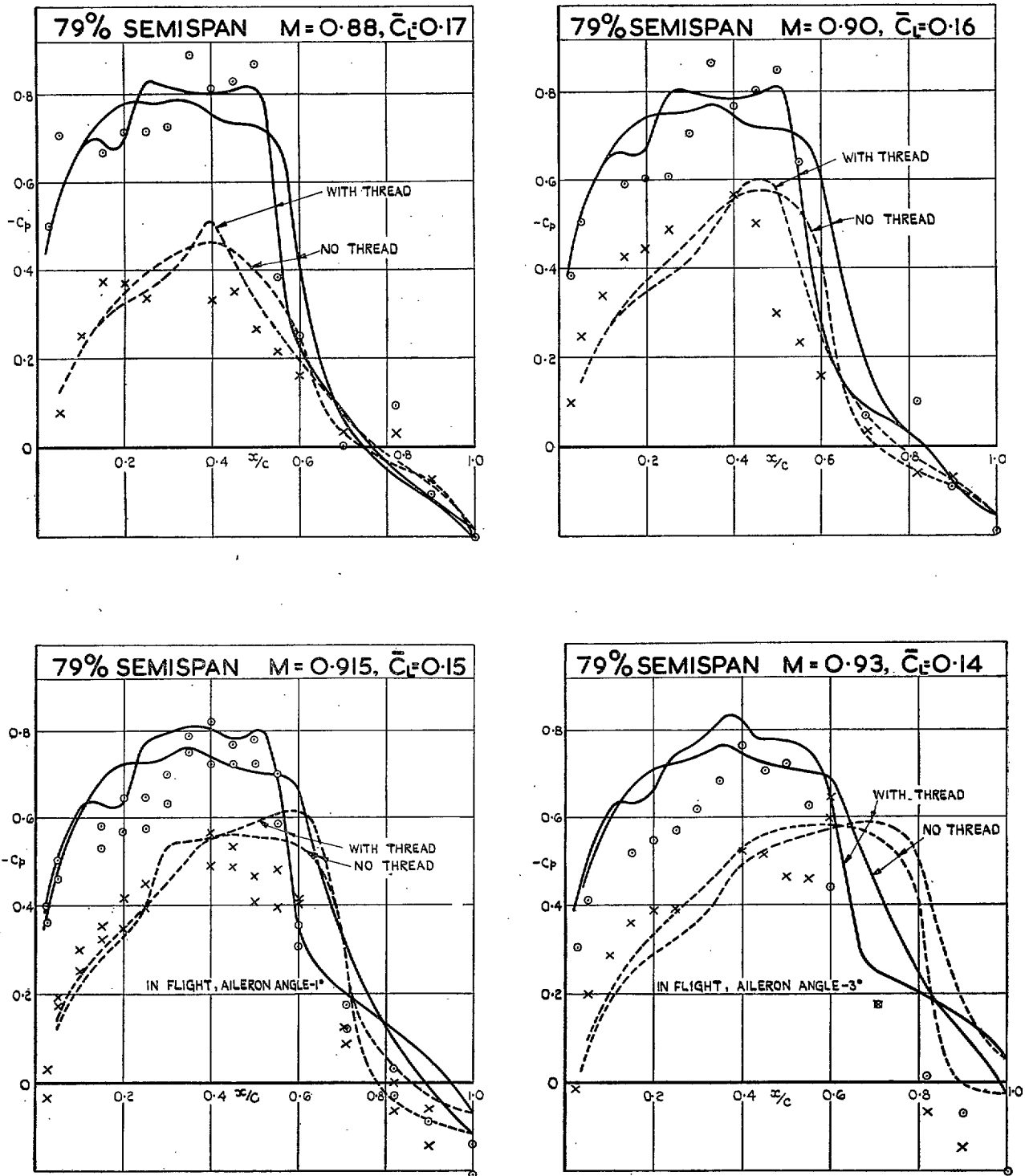


TUNNEL RESULTS
 INTERPOLATED FOR C_L

FLIGHT TESTS BY HAWKERS ON A/C VX 279

	TUNNEL	FLIGHT
UPPER SURFACE	—	○
LOWER SURFACE	- - -	x

FIG. 21. — C_p vs. x/c . Flight/tunnel comparison at $M = 0.885$. Pressure plotting on Hawker P.1052.



FLIGHT TESTS BY R.A.E.
 ON A/C VX 272

	TUNNEL	FLIGHT
UPPER SURFACE	—	○
LOWER SURFACE	- - -	x

FIG. 22. — C_p vs. x/c . Flight/tunnel comparison at $M = 0.88-0.93$ at 79 per cent semi-span. Pressure plotting on Hawker P.1052.

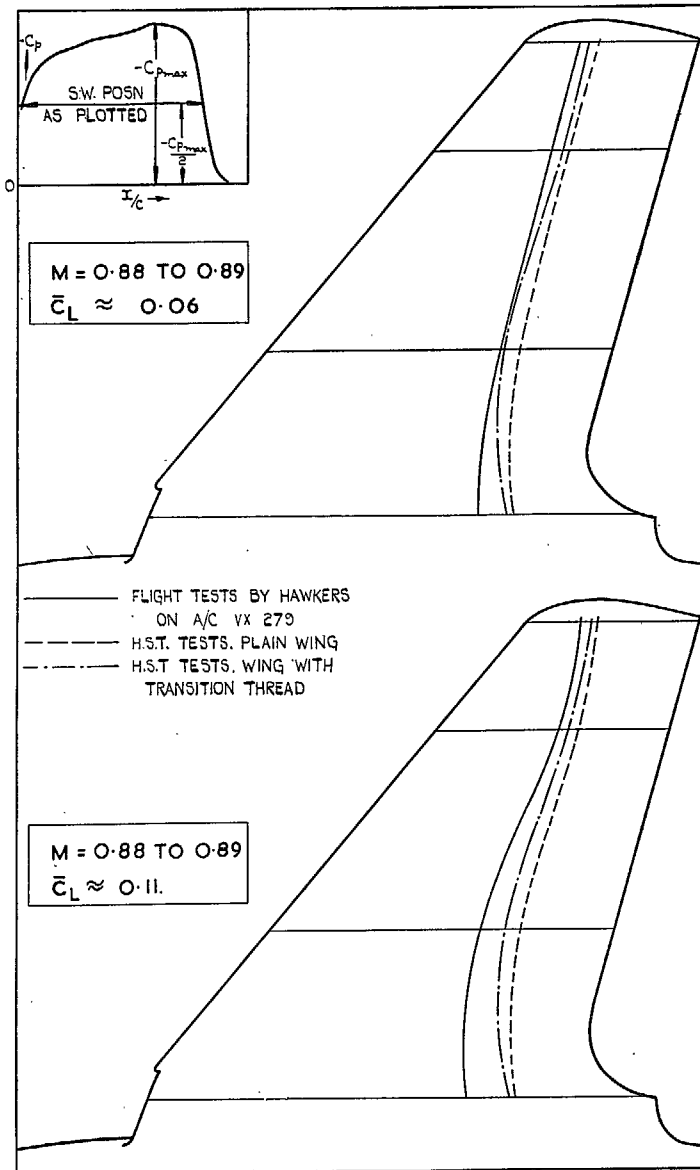


FIG. 23. Locus of shock wave. Comparison between flight and tunnel tests. Pressure plotting on Hawker P.1052.

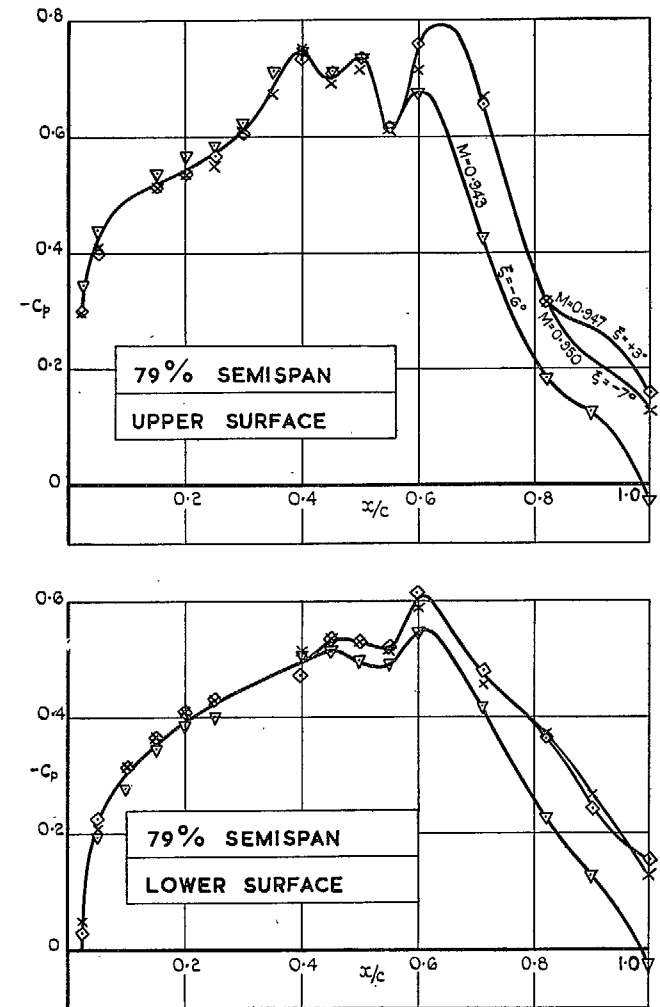


FIG. 24. $-C_p$ vs. x/c at $\bar{C}_L \approx 0.10$, $M = 0.94$ to 0.95 . Flight tests on VX.272. Pressure plotting on Hawker P.1052.

(79428) WIL 3523/8210 K.17 1/60 HW.

89

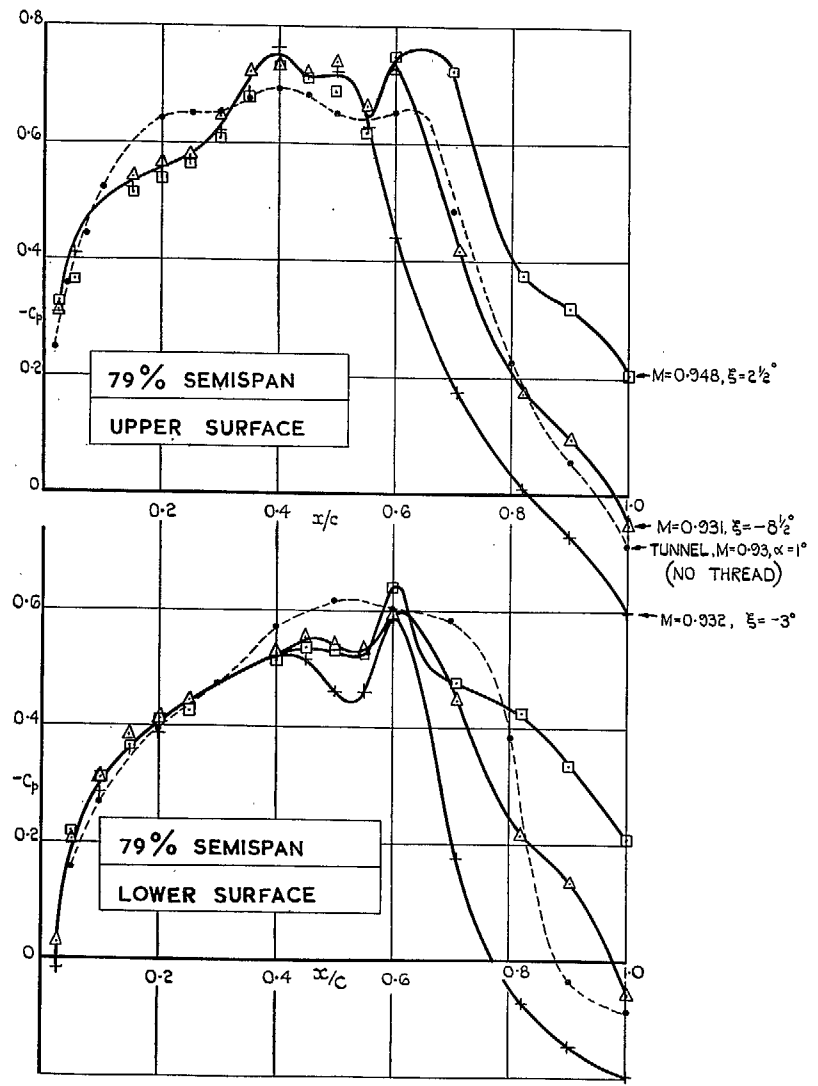


FIG. 25. $-C_p$ vs. x/c at $\bar{C}_x \approx 0.14$, $M = 0.93$ to 0.95 . Flight tests on VX.272. Pressure plotting on Hawker P.1052.

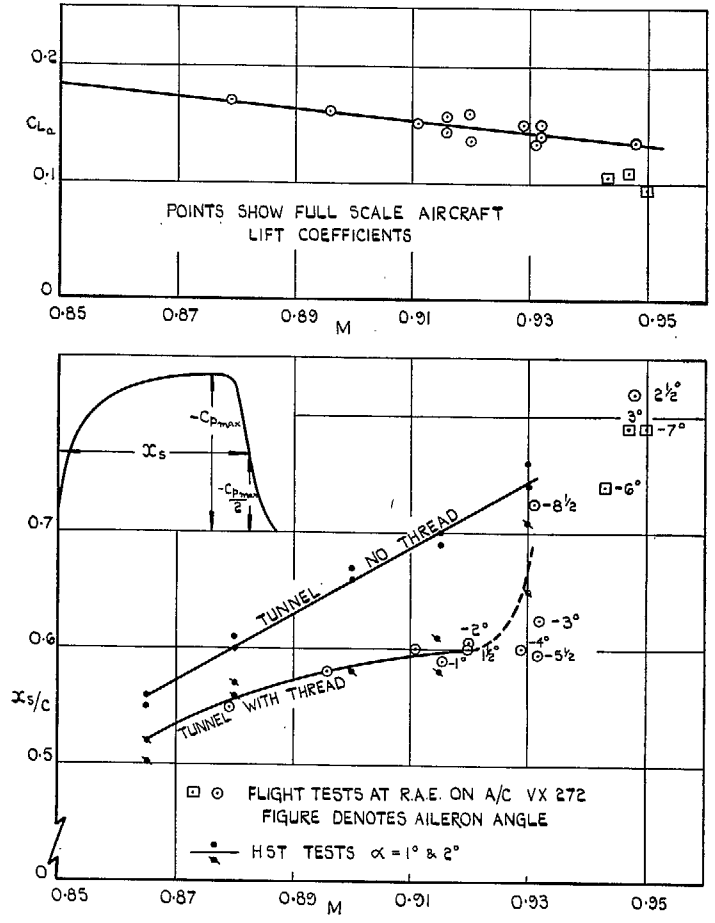


FIG. 26. Position of upper-surface shock wave at 79 per cent semi-span. Comparison between flight and tunnel tests. Pressure plotting on Hawker P.1052.

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