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# High-Reynolds-Number Test of a 5-Percent-Thick Low-Aspect-Ratio Semispan Wing in the Langley 0.3-Meter Transonic Cryogenic Tunnel

## *Wing Pressure Distributions*

Julio Chu and Pierce L. Lawing

DECEMBER 1990

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Transonic Cryogenic Tunnel

*Wing Pressure Distributions*

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## Summary

A wind-tunnel investigation of a 5-percent-thick low-aspect-ratio semispan wing model has been conducted in the Langley 0.3-Meter Transonic Cryogenic Tunnel. The model has a trapezoidal planform and an NACA 64A-105 airfoil section. Pressure data are presented for Mach numbers of 0.3, 0.7, and 0.9 and for Reynolds numbers from  $3 \times 10^6$  to  $31 \times 10^6$  based on the mean geometric chord. The angle of attack ranged from  $-4^\circ$  to  $15^\circ$ . The primary purpose of this investigation was to validate construction and test techniques for obtaining detailed pressure measurements on a thin wing at flight Reynolds numbers and transonic Mach numbers. This test was a free-transition investigation. Complex leading-edge pressure distributions and shock waves were noted for high Mach numbers and moderate to high angles of attack. A summary of the wing chordwise pressure distributions is presented without analysis.

## Introduction

The National Aeronautics and Space Administration (NASA) Langley Research Center (LaRC) recently sponsored a research and development program for the fabrication of pressure instrumented thin airfoils for cryogenic tunnels (PITACT) (refs. 1 and 2). The main objective of the program was to develop the capability of locating pressure orifices in thin wing models for transonic and high-Reynolds-number research. A need also exists for a transonic experimental data base to assist in computational codes comparison.

As a result of the PITACT program, the multiple-sheet method (ref. 3) for constructing thin airfoil models instrumented with a dense array of pressure taps was validated, and the fabrication technique was documented in detail (refs. 1 and 2). In providing a focus for the validation of the program, a pressure-instrumented low-aspect-ratio semispan wing model was constructed as a proof-of-concept article (fig. 1). The wing has a trapezoidal planform (fig. 2) and an NACA 64A-105 airfoil section having a maximum thickness of 5 percent of the chord. The planform chosen was that of the pressure-instrumented canard of the X-29 experimental aircraft currently undergoing flight research. The pressure ports on the present semispan model not only match those on the canard but the number of pressure ports has been increased as well.

The model was tested in the Langley 0.3-Meter Transonic Cryogenic Tunnel (0.3-m TCT) using the 13- by 13-in. adaptive wall test section (AWTS). Although this 3-D model was tested in a 2-D test section, a wall adaptation strategy was employed

for proper wall control to achieve minimum wall interference (see "Procedures" section). Pressure data are presented for Mach numbers of 0.3, 0.7, and 0.9 and for Reynolds numbers ranging from  $3 \times 10^6$  to  $31 \times 10^6$  based on the mean geometric chord. This Reynolds number range encompasses most of the flight regime of the X-29 canard. This test was a free-transition investigation. The angle of attack ranged from  $-4^\circ$  to  $15^\circ$ . A summary of the wing chordwise pressure distributions is presented without analysis. Additionally, upper and lower flexible wall pressure measurements for the AWTS are presented since the wall pressure definition may serve as boundary conditions for computational investigations.

## Symbols

$b$	wingspan, $b/2 = 2.76$ in.
$C_p$	pressure coefficient, $\frac{p-p_\infty}{q_\infty}$
$c$	local chord
$\bar{c}$	mean geometric chord, 3.76 in.
$c_{\text{root}}$	root chord, 5.70 in.
$D$	diameter
$M$	Mach number
$p$	static pressure
$q$	dynamic pressure
$R_{\bar{c}}$	Reynolds number based on mean geometric chord
$X, Y, Z$	model Cartesian coordinates with top and upstream corner of model insert as origin, in.
$X', Y', Z'$	tunnel Cartesian coordinate system with origin passing through the center of the model insert, in.
$x, y, z$	local section Cartesian coordinates with section leading edge as origin, in.
$\alpha$	angle of attack, deg
$\Delta$	incremental quantity
$\eta$	nondimensional semispan fraction, $2y/b$
Subscripts:	
abs	absolute
corr	corrected
$l$	lower surface
nom	nominal value

$u$	upper surface
$\infty$	free-stream condition

#### Abbreviations:

AWTS	adaptive wall test section
BLC	boundary-layer control
LN <sub>2</sub>	liquid nitrogen
N <sub>2</sub>	gaseous nitrogen
NACA	National Advisory Committee for Aeronautics
PITACT	pressure instrumented thin airfoils for cryogenic tunnels
0.3-m TCT	0.3-Meter Transonic Cryogenic Tunnel
2-D	two-dimensional
3-D	three-dimensional

## Wind Tunnel and Model

### Wind Tunnel

The test was conducted in the NASA Langley 0.3-m TCT using the 13- by 13-in. AWTS. A schematic of the tunnel is shown in figure 3, and a photograph of the test section leg of the tunnel circuit is shown in figure 4. The tunnel is a continuous-flow transonic tunnel that uses nitrogen gas as the test medium. It is capable of being operated at temperatures varying from about 80 K (-316°F) to about 327 K (129°F) and at stagnation pressures ranging from 1.2 to 6.1 atm. Note that the sidewall boundary-layer control system shown was not employed for this investigation. The test section Mach number can be varied continuously from about 0.20 to 1.06. A maximum Reynolds number of about  $100 \times 10^6$  can be attained for a 12-in-chord model.

Figure 5 is a schematic of the adaptive wall test section, and figure 6 is a photograph of the test section (with the left turntable and angle-of-attack drive rod removed). Circular turntables are located on both sidewalls and are connected to the computer-controlled angle-of-attack drive system. Portions of the upper and lower flexible walls and their drive rods are visible. There is a system of 21 jacks supporting each flexible wall (sidewalls are rigid). The viewing port shown can be incorporated into both turntables for limited flow-visualization capability. Also shown in this figure is the removable, rectangular, model mounting plate used to secure test models to the turntable. Detailed discussion regarding the adaptive wall test section of the 0.3-m TCT is presented in

references 4-6, whereas discussion on the adaptive wall test technique is presented in reference 7.

### Model

The test model is a trapezoidal semispan wing with an NACA 64A-105 airfoil section. The model setup and mounting system to the sidewall of the 0.3-m TCT test section are shown in figure 7(a). Note that the wingtip of the model is squared off (fig. 7(b)). The model chord is 5.70 in. at the root and 1.81 in. at the tip with the leading edge swept back 42° and the trailing edge swept forward 27° (see fig. 2). The aspect ratio of the thin wing model is 1.47, and the model planform area is 10.343 in<sup>2</sup>. The design and measured model ordinates are presented in tables I and II, respectively. Note that the wing root is displaced off the sidewall of the test section to accommodate a 0.5-in-wide aerodynamic fairing (described in table III) between the wing and the tunnel wall (ref. 8). The purpose of this fairing is to minimize "juncture flow interference" (ref. 9) between the wing and the wall by promoting smooth transition flow at the root of the wing.

This pressure-instrumented model was constructed of A286 stainless steel sheets by using a novel fabrication concept called the multiple-sheet method. Sheets of 0.032-in-thick metal, many with preformed pressure channels of 0.015 in. depth, were stacked together and vacuum brazed to form a brazed block. This block was then machined and finished to the desired airfoil shape according to typical machine shop practices. Orifices were formed by drilling from the outer surface into the model to intersect the embedded channels. This is in contrast to the conventional approach of routing numerous small tubes within a hollowed model interior to be linked to the surface orifices. Details of the manufacturing technique as well as the material selection for this model are documented in reference 3. All pressure orifices were 0.010 in. in diameter. There were a total of 87 pressure orifices distributed among three spanwise stations,  $2y/b = 0.28, 0.62,$  and  $0.91$ , based on a semispan of 2.76 in. The measured locations of these pressure ports are presented in table IV(a).

## Test Instrumentation and Procedures

### Test Instrumentation

A detailed discussion of the instrumentation and procedures for the calibration and control of the 0.3-m TCT is presented in reference 10. Subsequent modifications to various systems for improved operations have been documented in reference 5. The tunnel is equipped to obtain static pressure measurements on the test model surface, total pressure

measurements in the model wake, and static pressure measurements on all four test section walls. With the exception of the wall pressures, all measurements are obtained using individual pressure transducers.

**Tunnel test conditions.** The tunnel test conditions are determined by three primary measurements: the total pressure, the static pressure, and the total temperature. The total pressure and the static pressure are measured by individual quartz differential pressure transducers referenced to a vacuum. The transducer has a range of  $\pm 100$  psi and an accuracy of  $\pm 0.006$  psi, or  $\pm 0.012$  percent of the pressure reading. The total temperature is measured by a platinum resistance thermometer. The analog output from each of these devices is converted to digital form by individual digital voltmeters for display and recording. Further details of this instrumentation are presented in reference 10.

**Airfoil model pressures.** The pressures on the airfoil model are measured by individual transducers connected by tubing to each orifice on the model. The transducers are of a commercially available, high-precision, variable-capacitance type. The maximum range of these differential transducers is from  $-100$  to  $+100$  psid ( $-6.8$  to  $+6.8$  atm) with an accuracy of  $\pm 0.25$  percent of the reading from  $-25$  to  $+100$  percent of full scale. They are located external to the tunnel and its high-pressure cryogenic environment, but as close as possible to the test section to minimize response time due to tubing length. To provide increased accuracy, the transducers are mounted both on thermostatically controlled heater bases to maintain a constant temperature and on "shock" mounts to reduce possible vibration effects. The electrical signals from the transducers are connected to individual signal conditioners in the tunnel control room. The signal conditioners are autoranging and have seven ranges available. As a result of this capability, the analog output to the data acquisition system is kept at a high level even though the pressure transducer may be operating at the low end of its range.

**Wall pressures.** Both the upper and the lower flexible wall pressures are measured using a scanivalve system capable of operating ten 48-port scanivalves. Because of the large pressure changes in the tunnel over its operational range, the same type of variable-capacitance pressure transducers and autoranging signal conditioners previously described are used with the scanivalves instead of the more typical strain-gage transducer. Figure 7(c) and table IV(b) together indicate the relative position of the

wing model (projected onto the lower flexible wall) with respect to the lower flexible wall pressure row. Note that the situation is similar with respect to the upper flexible wall. The corresponding wall pressure signature from these pressure ports for most wing data points presented is tabulated in table V.

## Procedures

For this experiment, two combinations of tunnel parameters were used to obtain aerodynamic data. First, the Mach number and the Reynolds number were held constant while the angle of attack was varied from  $-4.0^\circ$  to  $12.0^\circ$ . Next, the Mach number and the angle of attack were held constant while the Reynolds number was varied. The range of Reynolds number per foot was from  $10 \times 10^6$  to  $100 \times 10^6$ . This corresponded to a range of  $3 \times 10^6$  to  $31 \times 10^6$  based on the mean geometric chord of the wing model. The following procedure was used to set the test conditions. The tunnel total pressure, total temperature, and fan speed were set for the desired Mach number and Reynolds number. Once these test conditions become stable, the 2-D adaptive wall strategy (employed as an interface with the tunnel main computer, see ref. 11) and the wall adaptation method (ref. 12) are initiated and iterated successively to minimize tunnel wall interference. With acceptable wall settings, the airfoil static pressures and various test conditions are then recorded. Twenty samples of airfoil static pressures and test conditions are recorded over 1 sec. Since each orifice is connected to individual transducers, each sample consisted of simultaneous static measurements from all orifices on the wing.

This experiment was conducted in an AWTS normally used for 2-D testing. In this test a 3-D semi-span wing model was mounted from one sidewall (left side of the test section looking upstream) and spanned 25 percent of the tunnel width. A wall adaptation technique was used to minimize the wall interference for 3-D model testing in a 2-D test section. Its essential features are (ref. 12)

1. Accurate on-line wall interference assessment based on flow measurements at the tunnel boundary (two-variable method).
2. Elimination of wall interference at a user-defined straight (streamwise) line in the test section. The line chosen for this test was the wing root chord.
3. Evaluation of residual interference in terms of Mach number ( $\Delta M_\infty$ ) and angle-of-attack ( $\Delta \alpha_{\text{abs}}$ ) corrections.

The corrected and uncorrected data were obtained from the post-test review of the available

records in an auxiliary computer, and they are tabulated in table VI. Note that a row marked with an asterisk indicates data obtained with two or more adaptive wall procedure iterations. The remaining data points represent data taken based on an initial wall shape input.

## Data Reduction

Since the tunnel operating envelope includes high pressures and low temperatures, real-gas effects are included in the data reduction for the tunnel test conditions by using the thermodynamic properties of nitrogen gas calculated from the Beattie-Bridgeman equation of state. This equation of state has been shown in reference 13 to give essentially the same thermodynamic properties and flow calculation results in the temperature-pressure regime of the 0.3-m TCT as those given by the more complicated Jacobsen equation of state. Detailed discussion of real-gas effects when testing in cryogenic nitrogen is contained in references 14 and 15.

## Presentation of Results

The surface pressure data for the semispan model are presented in tabular and graphical form in figures 8 through 16. Each figure is arranged so that the tabular data and the associated graphical representation are on facing pages. The data for various test conditions are presented in the following order:

	Figure
Angle-of-attack sweep:	
$R_{\bar{c}} = 3.8 \times 10^6; M_{\infty} = 0.3$ . . . . .	8
$R_{\bar{c}} = 3.8 \times 10^6; M_{\infty} = 0.7$ . . . . .	9
$R_{\bar{c}} = 3.8 \times 10^6; M_{\infty} = 0.9$ . . . . .	10
$R_{\bar{c}} = 14.1 \times 10^6; M_{\infty} = 0.7$ . . . . .	11
$R_{\bar{c}} = 14.1 \times 10^6; M_{\infty} = 0.9$ . . . . .	12
$R_{\bar{c}} = 28.2 \times 10^6; M_{\infty} = 0.7$ . . . . .	13
$R_{\bar{c}} = 28.2 \times 10^6; M_{\infty} = 0.9$ . . . . .	14
Reynolds number sweep:	
$\alpha_{\text{nom}} = 5^{\circ}; M_{\infty} = 0.7$ . . . . .	15
$\alpha_{\text{nom}} = 5^{\circ}; M_{\infty} = 0.9$ . . . . .	16

A set of 5 1/4-in. floppy disks containing the model geometry and the pressure tabulations in this report is available upon request.\* These data are recorded in the American Standard Code for Information Interchange (ASCII) format.

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## Discussion of Results

Surface pressure data of the semispan model are presented in figures 8 through 16. This is a free-transition data set since this test was conducted without boundary-layer transition trips. Although the data are presented without analysis, interesting features regarding the data set are briefly noted.

The effects of angle of attack on the chordwise pressure distributions for constant Reynolds number and Mach number combinations are presented in figures 8 through 14. The Reynolds numbers presented are categorized as low ( $3.8 \times 10^6$ ), medium ( $14.1 \times 10^6$ ), and high ( $28.2 \times 10^6$ ). The Mach numbers associated with each Reynolds number category are 0.7 and 0.9. Additionally, the low-Reynolds-number ( $3.8 \times 10^6$ ) pressure data were obtained for a Mach number of 0.3. The low-Reynolds-number pressure distributions generally indicate good pressure recovery on the upper surface from wing root to tip for low angles of attack. However, as angle of attack increases, flow separation occurs at the wingtip and progresses inboard, typical of low-aspect-ratio sweptback wings. These low-Reynolds-number pressure distributions for moderate angles of attack and Mach numbers of 0.7 and 0.9 also indicate the presence of a shock wave, as shown by the steep adverse pressure gradients. The medium- and high-Reynolds-number data show similar trends. The adverse pressure patterns at  $M_{\infty} = 0.9$  and high angles of attack for all three constant Reynolds numbers are specially complex. Figures 10(f), 10(g), 12(f), 12(g), 14(f), and 14(g) show pressure distributions with high suction pressure near the leading edge followed by pressure jumps downstream. These figures also show complicated shock systems that dominate the majority of the wing upper surface.

The effects of Reynolds number on the chordwise pressure distributions for a nominal angle of attack of  $5^{\circ}$  and nominal Mach numbers of 0.7 and 0.9 are shown in figures 15 and 16. Note that there are slight variations in the Mach number and angle of attack values during each Reynolds number sweep. This variation is caused by employing a fixed wall adaptation as the Reynolds number is changed. The pressure distributions for a Mach number of 0.7 remain essentially the same as Reynolds number is increased. However, for a Mach number of 0.9 and Reynolds numbers of  $12.5 \times 10^6$  and  $15.7 \times 10^6$ , the adverse pressure gradient is shown to be less severe at the innermost wing station.

## Concluding Remarks

Surface pressures have been measured on a 5-percent-thick low-aspect-ratio semispan wing model

in the Langley 0.3-Meter Transonic Cryogenic Tunnel. Free-transition data are presented without analysis for Mach numbers of 0.3, 0.7, and 0.9 over a range of Reynolds numbers including the flight regime. Complex leading-edge and shock wave pressure distributions were noted for high Mach number and moderate to high angle-of-attack conditions. The experimental data presented here are useful for computational codes comparison.

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Table I. Theoretical Airfoil Coordinates

Upper surface							
$x/c$	$z/c$	$x/c$	$z/c$	$x/c$	$z/c$	$x/c$	$z/c$
0.00000	0.00000	0.01228	0.00683	0.24980	0.02746	0.75012	0.01787
.00021	.00097	.01477	.00745	.25981	.02782	.76012	.01726
.00044	.00140	.01727	.00801	.26981	.02815	.77012	.01664
.00068	.00172	.01976	.00854	.27982	.02845	.78012	.01602
.00092	.00200	.02226	.00903	.28983	.02874	.79012	.01539
.00116	.00224	.02475	.00950	.29984	.02900	.80012	.01475
.00140	.00245	.02725	.00994	.30985	.02923	.81012	.01410
.00164	.00265	.02974	.01037	.31985	.02945	.82012	.01346
.00189	.00283	.03224	.01078	.32986	.02964	.83011	.01280
.00213	.00301	.03474	.01117	.33987	.02981	.84011	.01214
.00237	.00317	.03723	.01155	.34988	.02996	.85011	.01148
.00262	.00332	.03973	.01192	.35989	.03009	.86011	.01081
.00286	.00347	.04223	.01227	.36989	.03019	.87011	.01013
.00311	.00361	.04473	.01262	.37990	.03027	.88010	.00945
.00335	.00374	.04723	.01296	.38991	.03032	.89010	.00876
.00359	.00387	.04973	.01328	.39992	.03035	.90009	.00805
.00384	.00399	.05222	.01360	.40993	.03034	.91009	.00732
.00409	.00411	.05472	.01392	.41993	.03031	.92008	.00658
.00433	.00423	.05722	.01422	.42994	.03025	.93008	.00583
.00458	.00433	.05972	.01452	.43995	.03015	.94007	.00508
.00482	.00444	.06222	.01481	.44996	.03003	.95006	.00434
.00507	.00455	.06472	.01509	.45997	.02989	.96006	.00362
.00532	.00465	.06722	.01537	.46998	.02973	.97005	.00290
.00557	.00475	.06972	.01565	.47998	.02954	.98004	.00218
.00581	.00484	.07222	.01592	.48999	.02933	.99003	.00139
.00606	.00494	.07472	.01618	.50000	.02909	1.00000	.00002
.00631	.00503	.07722	.01644	.51001	.02884		
.00656	.00512	.07972	.01669	.52001	.02857		
.00681	.00521	.08222	.01695	.53002	.02828		
.00706	.00530	.08472	.01719	.54003	.02796		
.00730	.00538	.08722	.01743	.55003	.02763		
.00755	.00546	.08972	.01767	.56004	.02728		
.00780	.00555	.09222	.01791	.57005	.02692		
.00805	.00563	.09472	.01814	.58005	.02654		
.00830	.00571	.09722	.01837	.59006	.02614		
.00855	.00578	.09972	.01859	.60006	.02573		
.00880	.00586	.10972	.01945	.61007	.02530		
.00904	.00594	.11972	.02026	.62007	.02485		
.00929	.00601	.12973	.02102	.63008	.02440		
.00954	.00608	.13973	.02173	.64008	.02392		
.00979	.00616	.14974	.02241	.65009	.02343		
.01004	.00623	.15974	.02305	.66009	.02293		
.01029	.00630	.16975	.02366	.67010	.02242		
.01054	.00637	.17975	.02424	.68010	.02189		
.01079	.00644	.18976	.02479	.69010	.02135		
.01104	.00651	.19976	.02530	.70011	.02079		
.01128	.00657	.20977	.02579	.71011	.02023		
.01153	.00664	.21978	.02625	.72011	.01965		
.01178	.00671	.22978	.02668	.73011	.01907		
.01203	.00677	.23979	.02708	.74011	.01848		



Table I. Concluded

Lower surface							
$x/c$	$z/c$	$x/c$	$z/c$	$x/c$	$z/c$	$x/c$	$z/c$
0.00000	0.00000	0.01272	-0.00577	0.25020	-0.01851	0.74988	-0.00892
.00029	-.00094	.01523	-.00621	.26019	-.01869	.75988	-.00849
.00056	-.00133	.01773	-.00661	.27019	-.01886	.76988	-.00806
.00082	-.00162	.02024	-.00698	.28018	-.01901	.77988	-.00763
.00108	-.00187	.02274	-.00732	.29017	-.01915	.78988	-.00721
.00134	-.00208	.02525	-.00764	.30016	-.01927	.79988	-.00679
.00160	-.00227	.02775	-.00794	.31015	-.01938	.80988	-.00637
.00186	-.00245	.03026	-.00822	.32015	-.01947	.81988	-.00595
.00212	-.00260	.03276	-.00850	.33014	-.01955	.82988	-.00555
.00237	-.00275	.03526	-.00876	.34013	-.01961	.83988	-.00514
.00263	-.00289	.03777	-.00901	.35012	-.01966	.84989	-.00475
.00288	-.00302	.04027	-.00924	.36011	-.01969	.85989	-.00436
.00314	-.00315	.04277	-.00948	.37010	-.01970	.86989	-.00398
.00339	-.00326	.04527	-.00970	.38010	-.01970	.87990	-.00361
.00365	-.00337	.04777	-.00992	.39009	-.01968	.88990	-.00324
.00390	-.00348	.05027	-.01013	.40008	-.01963	.89990	-.00287
.00416	-.00357	.05278	-.01033	.41007	-.01957	.90991	-.00251
.00441	-.00367	.05528	-.01053	.42006	-.01948	.91991	-.00215
.00467	-.00377	.05778	-.01072	.43006	-.01937	.92992	-.00180
.00492	-.00385	.06028	-.01091	.44005	-.01924	.93993	-.00147
.00518	-.00394	.06278	-.01109	.45004	-.01908	.94993	-.00118
.00543	-.00403	.06528	-.01127	.46003	-.01891	.95994	-.00094
.00568	-.00411	.06778	-.01144	.47002	-.01872	.96995	-.00076
.00593	-.00418	.07028	-.01161	.48001	-.01852	.97995	-.00062
.00618	-.00426	.07278	-.01178	.49001	-.01830	.98996	-.00050
.00644	-.00434	.07528	-.01194	.50000	-.01806	1.00000	-.00001
.00669	-.00441	.07778	-.01210	.50999	-.01781		
.00694	-.00448	.08028	-.01226	.51999	-.01755		
.00719	-.00454	.08278	-.01241	.52998	-.01727		
.00744	-.00461	.08528	-.01256	.53997	-.01698		
.00770	-.00468	.08778	-.01271	.54996	-.01668		
.00795	-.00474	.09028	-.01286	.55996	-.01637		
.00820	-.00480	.09278	-.01300	.56995	-.01604		
.00845	-.00487	.09528	-.01314	.57994	-.01571		
.00870	-.00493	.09778	-.01328	.58994	-.01537		
.00895	-.00499	.10028	-.01342	.59993	-.01502		
.00920	-.00504	.11028	-.01393	.60993	-.01465		
.00945	-.00510	.12027	-.01442	.61992	-.01428		
.00971	-.00516	.13027	-.01487	.62992	-.01391		
.00996	-.00521	.14027	-.01529	.63991	-.01352		
.01021	-.00527	.15026	-.01569	.64991	-.01313		
.01046	-.00532	.16026	-.01606	.65990	-.01273		
.01071	-.00537	.17025	-.01641	.66990	-.01232		
.01096	-.00543	.18025	-.01674	.67990	-.01191		
.01121	-.00547	.19024	-.01705	.68989	-.01149		
.01147	-.00552	.20023	-.01734	.69989	-.01107		
.01172	-.00557	.21023	-.01761	.70989	-.01065		
.01197	-.00562	.22022	-.01786	.71989	-.01022		
.01222	-.00567	.23022	-.01809	.72988	-.00979		
.01247	-.00572	.24021	-.01831	.73988	-.00936		

Table II. Measured Airfoil Coordinates

[ $Y_{nom} = 0.55$  in.]

Upper surface			Lower surface			Nose region		
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
3.8504	0.5494	-1.2291	3.8501	0.5506	-1.2755	3.8361	0.5496	-1.2669
3.9626	.5493	-1.1985	3.9618	.5506	-1.2989	3.8358	.5496	-1.2664
4.0741	.5493	-1.1809	4.0733	.5506	-1.3112	3.8291	.5496	-1.2590
4.1864	.5494	-1.1664	4.1861	.5506	-1.3198	3.8291	.5496	-1.2574
4.2979	.5494	-1.1547	4.3007	.5506	-1.3273	3.8290	.5496	-1.2527
4.4098	.5494	-1.1442	4.4090	.5506	-1.3334	3.8295	.5496	-1.2481
4.5230	.5494	-1.1347	4.5227	.5506	-1.3390	3.8326	.5496	-1.2449
4.6350	.5494	-1.1275	4.6347	.5506	-1.3434	3.8350	.5496	-1.2418
4.7469	.5494	-1.1198	4.7462	.5506	-1.3479	3.8388	.5496	-1.2370
4.8586	.5494	-1.1133	4.8578	.5506	-1.3517	3.8424	.5496	-1.2339
4.9704	.5494	-1.1071	4.9703	.5506	-1.3546	3.8471	.5496	-1.2307
5.0821	.5494	-1.1020	5.0819	.5506	-1.3576			
5.1939	.5494	-1.0970	5.1950	.5506	-1.3601			
5.3075	.5494	-1.0935	5.3065	.5506	-1.3620			
5.4189	.5494	-1.0898	5.4186	.5506	-1.3641			
5.5293	.5494	-1.0866	5.5303	.5506	-1.3653			
5.6426	.5494	-1.0843	5.6419	.5505	-1.3666			
5.7561	.5494	-1.0820	5.7560	.5506	-1.3668			
5.8660	.5494	-1.0808	5.8692	.5505	-1.3672			
5.9781	.5494	-1.0797	5.9795	.5505	-1.3669			
6.0915	.5494	-1.0788	6.0909	.5505	-1.3668			
6.2018	.5494	-1.0792	6.2025	.5506	-1.3659			
6.3149	.5494	-1.0801	6.3144	.5505	-1.3643			
6.4267	.5494	-1.0814	6.4263	.5506	-1.3621			
6.5387	.5494	-1.0834	6.5388	.5506	-1.3594			
6.6504	.5494	-1.0858	6.6503	.5506	-1.3571			
6.7623	.5494	-1.0886	6.7634	.5506	-1.3540			
6.8759	.5494	-1.0921	6.8758	.5506	-1.3506			
6.9875	.5494	-1.0954	6.9872	.5505	-1.3472			
7.0979	.5494	-1.0992	7.0988	.5505	-1.3435			
7.2112	.5494	-1.1038	7.2106	.5505	-1.3400			
7.3231	.5494	-1.1086	7.3225	.5506	-1.3361			
7.4347	.5494	-1.1135	7.4355	.5506	-1.3328			
7.5467	.5494	-1.1193	7.5480	.5506	-1.3287			
7.6598	.5494	-1.1248	7.6595	.5506	-1.3255			
7.7717	.5494	-1.1315	7.7700	.5506	-1.3220			
7.8839	.5494	-1.1371	7.8834	.5506	-1.3187			
7.9956	.5494	-1.1438	7.9948	.5506	-1.3154			
8.1074	.5494	-1.1502	8.1087	.5506	-1.3117			
8.2195	.5494	-1.1571	8.2185	.5506	-1.3087			
8.3311	.5494	-1.1647	8.3338	.5506	-1.3054			
8.4438	.5494	-1.1720	8.4421	.5505	-1.3020			
8.5563	.5494	-1.1790	8.5556	.5506	-1.2985			
8.6681	.5494	-1.1868	8.6671	.5506	-1.2954			
8.7794	.5493	-1.1943	8.7792	.5506	-1.2913			
8.8919	.5494	-1.2017	8.8911	.5505	-1.2879			
9.0034	.5494	-1.2096	9.0047	.5505	-1.2844			
9.1154	.5494	-1.2175	9.1165	.5505	-1.2811			
9.2286	.5493	-1.2257	9.2280	.5505	-1.2778			
9.3405	.5494	-1.2330	9.3400	.5506	-1.2747			
9.4523	.5494	-1.2412	9.4519	.5505	-1.2690			

Table II. Continued

[ $Y_{\text{nom}} = 1.20 \text{ in.}$ ]

Upper surface			Lower surface			Nose region		
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
4.4315	1.1998	-1.2334	4.4392	1.2009	-1.2739	4.4294	1.2000	-1.2700
4.5342	1.1997	-1.2065	4.5342	1.1994	-1.2925	4.4265	1.2000	-1.2685
4.6267	1.1997	-1.1921	4.6263	1.1994	-1.3031	4.4193	1.1999	-1.2628
4.7216	1.1997	-1.1802	4.7213	1.1994	-1.3102	4.4145	1.1999	-1.2574
4.8145	1.1997	-1.1705	4.8139	1.1994	-1.3164	4.4143	1.1999	-1.2543
4.9090	1.1997	-1.1615	4.9088	1.1994	-1.3216	4.4145	1.1999	-1.2496
5.0020	1.1997	-1.1541	5.0016	1.1994	-1.3261	4.4163	1.1999	-1.2465
5.0963	1.1997	-1.1475	5.0960	1.1994	-1.3298	4.4201	1.1999	-1.2417
5.1893	1.1997	-1.1411	5.1891	1.1994	-1.3332	4.4225	1.1999	-1.2385
5.2821	1.1997	-1.1360	5.2841	1.1994	-1.3364	4.4293	1.1999	-1.2339
5.3766	1.1997	-1.1312	5.3762	1.1994	-1.3393	4.4360	1.1999	-1.2307
5.4697	1.1997	-1.1268	5.4708	1.1994	-1.3412			
5.5641	1.1997	-1.1227	5.5639	1.1994	-1.3435			
5.6575	1.1997	-1.1192	5.6589	1.1994	-1.3451			
5.7512	1.1997	-1.1166	5.7514	1.1994	-1.3467			
5.8445	1.1998	-1.1134	5.8454	1.1994	-1.3478			
5.9386	1.1997	-1.1119	5.9383	1.1994	-1.3486			
6.0321	1.1997	-1.1099	6.0313	1.1994	-1.3491			
6.1268	1.1997	-1.1085	6.1241	1.1994	-1.3494			
6.2193	1.1997	-1.1079	6.2186	1.1994	-1.3493			
6.3120	1.1997	-1.1077	6.3133	1.1994	-1.3487			
6.4063	1.1997	-1.1080	6.4059	1.1994	-1.3482			
6.4993	1.1997	-1.1083	6.5006	1.1994	-1.3469			
6.5938	1.1997	-1.1096	6.5935	1.1994	-1.3454			
6.6868	1.1997	-1.1112	6.6884	1.1994	-1.3434			
6.7812	1.1997	-1.1130	6.7806	1.1994	-1.3413			
6.8741	1.1997	-1.1157	6.8762	1.1994	-1.3383			
6.9687	1.1997	-1.1185	6.9680	1.1994	-1.3361			
7.0615	1.1997	-1.1212	7.0609	1.1994	-1.3335			
7.1561	1.1998	-1.1245	7.1561	1.1994	-1.3302			
7.2490	1.1997	-1.1283	7.2484	1.1994	-1.3275			
7.3435	1.1998	-1.1323	7.3432	1.1994	-1.3242			
7.4365	1.1998	-1.1364	7.4358	1.1994	-1.3217			
7.5293	1.1997	-1.1410	7.5312	1.1994	-1.3185			
7.6241	1.1998	-1.1460	7.6236	1.1994	-1.3159			
7.7168	1.1997	-1.1513	7.7177	1.1994	-1.3134			
7.8114	1.1998	-1.1562	7.8106	1.1994	-1.3110			
7.9039	1.1997	-1.1612	7.9069	1.1994	-1.3080			
7.9982	1.1998	-1.1672	7.9979	1.1994	-1.3056			
8.0916	1.1998	-1.1727	8.0911	1.1994	-1.3030			
8.1858	1.1998	-1.1787	8.1840	1.1994	-1.3002			
8.2792	1.1998	-1.1845	8.2783	1.1994	-1.2976			
8.3735	1.1998	-1.1905	8.3735	1.1994	-1.2945			
8.4664	1.1998	-1.1964	8.4677	1.1994	-1.2918			
8.5605	1.1997	-1.2031	8.5602	1.1994	-1.2891			
8.6538	1.1998	-1.2092	8.6533	1.1994	-1.2867			
8.7467	1.1998	-1.2157	8.7476	1.1994	-1.2841			
8.8410	1.1998	-1.2220	8.8409	1.1994	-1.2812			
8.9356	1.1998	-1.2281	8.9367	1.1994	-1.2786			
9.0282	1.1998	-1.2341	9.0280	1.1994	-1.2762			
9.1216	1.1998	-1.2407	9.1227	1.1994	-1.2701			

Table II. Continued

[ $Y_{nom} = 1.90$  in.]

Upper surface			Lower surface			Nose region		
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
5.0694	1.8998	-1.2330	5.0708	1.9001	-1.2724	5.0637	1.9007	-1.2701
5.1438	1.9005	-1.2157	5.1448	1.9001	-1.2861	5.0564	1.9008	-1.2668
5.2172	1.9005	-1.2047	5.2189	1.9001	-1.2940	5.0554	1.8992	-1.2669
5.2912	1.9005	-1.1955	5.2928	1.9001	-1.2996	5.0459	1.8991	-1.2591
5.3658	1.9005	-1.1873	5.3669	1.9001	-1.3046	5.0451	1.8992	-1.2574
5.4394	1.9005	-1.1808	5.4393	1.9001	-1.3085	5.0462	1.9008	-1.2527
5.5139	1.9005	-1.1742	5.5136	1.9001	-1.3122	5.0465	1.9007	-1.2496
5.5873	1.9005	-1.1694	5.5856	1.9001	-1.3151	5.0480	1.8992	-1.2464
5.6613	1.9005	-1.1646	5.6616	1.9001	-1.3179	5.0531	1.9007	-1.2417
5.7356	1.9006	-1.1601	5.7366	1.9001	-1.3205	5.0561	1.8992	-1.2386
5.8095	1.9005	-1.1564	5.8077	1.9001	-1.3225	5.0622	1.8992	-1.2355
5.8839	1.9005	-1.1530	5.8817	1.9001	-1.3243			
5.9577	1.9005	-1.1496	5.9580	1.9001	-1.3256			
6.0315	1.9005	-1.1471	6.0316	1.9001	-1.3270			
6.1056	1.9005	-1.1449	6.1060	1.9001	-1.3280			
6.1797	1.9005	-1.1428	6.1810	1.9001	-1.3291			
6.2519	1.9005	-1.1413	6.2520	1.9001	-1.3298			
6.3263	1.9005	-1.1396	6.3283	1.9001	-1.3298			
6.4003	1.9005	-1.1387	6.3998	1.9001	-1.3305			
6.4745	1.9005	-1.1380	6.4754	1.9001	-1.3304			
6.5486	1.9005	-1.1377	6.5495	1.9001	-1.3300			
6.6227	1.9005	-1.1380	6.6225	1.9001	-1.3290			
6.6962	1.9005	-1.1386	6.6962	1.9001	-1.3280			
6.7708	1.9005	-1.1393	6.7714	1.9001	-1.3270			
6.8443	1.9005	-1.1405	6.8443	1.9001	-1.3254			
6.9185	1.9005	-1.1423	6.9182	1.9001	-1.3235			
6.9907	1.9005	-1.1443	6.9924	1.9001	-1.3213			
7.0667	1.9005	-1.1461	7.0677	1.9001	-1.3194			
7.1405	1.9005	-1.1486	7.1407	1.9001	-1.3171			
7.2149	1.9005	-1.1512	7.2158	1.9001	-1.3155			
7.2869	1.9005	-1.1544	7.2884	1.9001	-1.3129			
7.3627	1.9005	-1.1574	7.3604	1.9001	-1.3114			
7.4363	1.9005	-1.1605	7.4362	1.9001	-1.3094			
7.5107	1.9005	-1.1646	7.5103	1.9001	-1.3077			
7.5833	1.9005	-1.1677	7.5847	1.9001	-1.3054			
7.6585	1.9005	-1.1721	7.6562	1.9001	-1.3039			
7.7315	1.9005	-1.1760	7.7303	1.9001	-1.3020			
7.8065	1.9005	-1.1805	7.8047	1.9001	-1.3000			
7.8794	1.9005	-1.1846	7.8803	1.9001	-1.2983			
7.9512	1.9005	-1.1890	7.9541	1.9001	-1.2961			
8.0274	1.9005	-1.1934	8.0280	1.9001	-1.2942			
8.1015	1.9005	-1.1979	8.1010	1.9001	-1.2924			
8.1753	1.9005	-1.2027	8.1750	1.9001	-1.2904			
8.2492	1.9005	-1.2073	8.2488	1.9001	-1.2881			
8.3231	1.9005	-1.2123	8.3230	1.9001	-1.2861			
8.3971	1.9005	-1.2171	8.3968	1.9001	-1.2846			
8.4711	1.9005	-1.2220	8.4722	1.9001	-1.2828			
8.5452	1.9005	-1.2267	8.5432	1.9001	-1.2813			
8.6175	1.9005	-1.2310	8.6189	1.9001	-1.2791			
8.6932	1.9005	-1.2360	8.6925	1.9001	-1.2772			
8.7672	1.9005	-1.2416	8.7666	1.9001	-1.2750			
8.7656	1.9005	-1.2409	8.7651	1.9001	-1.2750			

Table II. Continued

[ $Y_{\text{nom}} = 2.60 \text{ in.}$ ]

Upper surface			Lower surface			Nose region		
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
5.6899	2.5997	-1.2393	5.6880	2.5994	-1.2670	5.6787	2.6000	-1.2606
5.7435	2.5998	-1.2263	5.7444	2.5994	-1.2784	5.6769	2.6000	-1.2590
5.7985	2.5998	-1.2176	5.7981	2.5994	-1.2842	5.6783	2.5999	-1.2607
5.8522	2.5998	-1.2108	5.8534	2.5994	-1.2887	5.6755	2.6000	-1.2559
5.9071	2.5997	-1.2048	5.9088	2.5994	-1.2922	5.6760	2.5999	-1.2543
5.9626	2.5998	-1.1997	5.9617	2.5994	-1.2954	5.6757	2.6000	-1.2527
6.0145	2.5997	-1.1953	6.0172	2.5994	-1.2980	5.6757	2.6000	-1.2527
6.0718	2.5998	-1.1908	6.0709	2.5994	-1.3004	5.6764	2.6000	-1.2496
6.1262	2.5998	-1.1882	6.1260	2.5994	-1.3024	5.6780	2.6000	-1.2480
6.1798	2.5998	-1.1843	6.1796	2.5994	-1.3043	5.6788	2.6000	-1.2464
6.2334	2.5998	-1.1819	6.2328	2.5994	-1.3058	5.6806	2.6000	-1.2448
6.2886	2.5998	-1.1795	6.2881	2.5994	-1.3068			
6.3419	2.5998	-1.1772	6.3433	2.5994	-1.3082			
6.3974	2.5997	-1.1745	6.3969	2.5994	-1.3094			
6.4525	2.5997	-1.1731	6.4524	2.5994	-1.3098			
6.5064	2.5997	-1.1716	6.5075	2.5994	-1.3102			
6.5613	2.5997	-1.1704	6.5608	2.5994	-1.3112			
6.6144	2.5998	-1.1694	6.6161	2.5994	-1.3111			
6.6696	2.5997	-1.1685	6.6694	2.5994	-1.3116			
6.7251	2.5997	-1.1679	6.7247	2.5994	-1.3115			
6.7786	2.5997	-1.1678	6.7784	2.5994	-1.3109			
6.8335	2.5997	-1.1681	6.8332	2.5994	-1.3109			
6.8869	2.5998	-1.1686	6.8884	2.5994	-1.3100			
6.9403	2.5997	-1.1689	6.9418	2.5994	-1.3087			
6.9952	2.5997	-1.1701	6.9969	2.5994	-1.3078			
7.0511	2.5998	-1.1711	7.0505	2.5994	-1.3065			
7.1046	2.5998	-1.1722	7.1055	2.5994	-1.3054			
7.1594	2.5997	-1.1738	7.1591	2.5994	-1.3039			
7.2127	2.5997	-1.1757	7.2140	2.5994	-1.3029			
7.2680	2.5998	-1.1775	7.2680	2.5994	-1.3015			
7.3235	2.5997	-1.1800	7.3229	2.5994	-1.3005			
7.3767	2.5997	-1.1820	7.3777	2.5994	-1.2991			
7.4317	2.5997	-1.1842	7.4315	2.5994	-1.2979			
7.4854	2.5997	-1.1868	7.4867	2.5994	-1.2968			
7.5404	2.5998	-1.1898	7.5402	2.5994	-1.2954			
7.5957	2.5998	-1.1924	7.5955	2.5994	-1.2946			
7.6492	2.5997	-1.1959	7.6491	2.5994	-1.2935			
7.7043	2.5997	-1.1988	7.7039	2.5994	-1.2924			
7.7577	2.5997	-1.2021	7.7576	2.5994	-1.2910			
7.8115	2.5997	-1.2051	7.8129	2.5994	-1.2897			
7.8663	2.5997	-1.2083	7.8676	2.5994	-1.2887			
7.9213	2.5997	-1.2119	7.9194	2.5994	-1.2879			
7.9750	2.5997	-1.2150	7.9766	2.5994	-1.2863			
8.0303	2.5997	-1.2183	8.0299	2.5994	-1.2856			
8.0834	2.5997	-1.2215	8.0850	2.5994	-1.2842			
8.1388	2.5997	-1.2251	8.1387	2.5994	-1.2828			
8.1941	2.5997	-1.2283	8.1936	2.5994	-1.2820			
8.2474	2.5997	-1.2319	8.2484	2.5994	-1.2805			
8.3010	2.5997	-1.2346	8.3023	2.5994	-1.2795			
8.3562	2.5997	-1.2379	8.3575	2.5994	-1.2786			
8.4112	2.5997	-1.2425	8.4113	2.5994	-1.2770			

Table II. Concluded

[ $Y_{\text{nom}} = 3.20 \text{ in.}$ ]

Upper surface			Lower surface			Nose region		
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
6.2204	3.1997	-1.2449	6.2202	3.1994	-1.2613	6.2160	3.1968	-1.2606
6.2572	3.1998	-1.2340	6.2580	3.1994	-1.2684	6.2171	3.2000	-1.2590
6.2945	3.1998	-1.2280	6.2943	3.1994	-1.2735	6.2162	3.2000	-1.2575
6.3323	3.1997	-1.2232	6.3337	3.1994	-1.2783	6.2158	3.2000	-1.2559
6.3683	3.1997	-1.2189	6.3710	3.1994	-1.2809	6.2157	3.2000	-1.2543
6.4084	3.1997	-1.2153	6.4078	3.1994	-1.2831	6.2157	3.2000	-1.2527
6.4462	3.1997	-1.2120	6.4456	3.1994	-1.2849	6.2157	3.2000	-1.2511
6.4836	3.1997	-1.2093	6.4834	3.1994	-1.2866	6.2162	3.2000	-1.2496
6.5215	3.1997	-1.2066	6.5230	3.1994	-1.2884	6.2177	3.2000	-1.2480
6.5596	3.1997	-1.2045	6.5588	3.1994	-1.2898	6.2193	3.2000	-1.2463
6.5968	3.1997	-1.2026	6.5973	3.1994	-1.2909	6.2187	3.1999	-1.2464
6.6350	3.1997	-1.2001	6.6346	3.1994	-1.2920			
6.6728	3.1997	-1.1990	6.6722	3.1994	-1.2926			
6.7109	3.1997	-1.1973	6.7101	3.1994	-1.2934			
6.7467	3.1997	-1.1964	6.7462	3.1994	-1.2943			
6.7867	3.1997	-1.1952	6.7861	3.1994	-1.2944			
6.8243	3.1997	-1.1947	6.8236	3.1994	-1.2950			
6.8622	3.1997	-1.1939	6.8614	3.1994	-1.2953			
6.8993	3.1997	-1.1937	6.8993	3.1994	-1.2954			
6.9357	3.1997	-1.1929	6.9370	3.1994	-1.2954			
6.9737	3.1997	-1.1927	6.9749	3.1994	-1.2952			
7.0131	3.1997	-1.1928	7.0127	3.1994	-1.2943			
7.0512	3.1997	-1.1930	7.0503	3.1994	-1.2939			
7.0869	3.1997	-1.1938	7.0884	3.1994	-1.2935			
7.1246	3.1997	-1.1946	7.1263	3.1994	-1.2925			
7.1624	3.1997	-1.1949	7.1640	3.1994	-1.2921			
7.2001	3.1997	-1.1959	7.2019	3.1994	-1.2913			
7.2379	3.1998	-1.1971	7.2399	3.1994	-1.2909			
7.2775	3.1997	-1.1983	7.2774	3.1994	-1.2902			
7.3135	3.1997	-1.1991	7.3145	3.1994	-1.2898			
7.3516	3.1997	-1.2009	7.3529	3.1994	-1.2891			
7.3893	3.1997	-1.2027	7.3908	3.1994	-1.2885			
7.4271	3.1998	-1.2041	7.4286	3.1994	-1.2879			
7.4648	3.1997	-1.2057	7.4646	3.1994	-1.2872			
7.5024	3.1997	-1.2078	7.5021	3.1994	-1.2865			
7.5405	3.1997	-1.2098	7.5414	3.1994	-1.2860			
7.5786	3.1998	-1.2123	7.5777	3.1994	-1.2860			
7.6163	3.1998	-1.2142	7.6175	3.1994	-1.2854			
7.6538	3.1998	-1.2159	7.6546	3.1994	-1.2853			
7.6917	3.1998	-1.2185	7.6897	3.1994	-1.2847			
7.7294	3.1998	-1.2210	7.7294	3.1994	-1.2838			
7.7672	3.1997	-1.2228	7.7685	3.1994	-1.2832			
7.8049	3.1998	-1.2252	7.8051	3.1994	-1.2824			
7.8430	3.1998	-1.2274	7.8420	3.1994	-1.2821			
7.8807	3.1998	-1.2294	7.8804	3.1994	-1.2813			
7.9184	3.1998	-1.2315	7.9179	3.1994	-1.2809			
7.9560	3.1998	-1.2339	7.9564	3.1994	-1.2803			
7.9941	3.1998	-1.2356	7.9932	3.1994	-1.2802			
8.0320	3.1998	-1.2378	8.0320	3.1994	-1.2791			
8.0696	3.1998	-1.2403	8.0706	3.1994	-1.2788			
8.1071	3.1998	-1.2441	8.1066	3.1994	-1.2783			

Table III. Measured Glove Coordinates

(a) Windward glove definition

Upper surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
2.2594	-0.0007	-1.2393	2.5602	0.0306	-1.2393	2.8594	0.1003	-1.2409
2.2594	-.0002	-1.1906	2.5602	.0175	-1.1905	2.8595	.0771	-1.1906
2.2594	-.0003	-1.1402	2.5602	.0075	-1.1402	2.8594	.0516	-1.1410
2.2594	-.0003	-1.0897	2.5602	.0016	-1.0899	2.8594	.0315	-1.0903
2.2594	-.0002	-1.0393	2.5602	-.0003	-1.0394	2.8595	.0168	-1.0394
2.2594	-.0001	-.9906	2.5603	.0003	-.9895	2.8594	.0067	-.9905
2.2594	.0000	-.9400	2.5602	.0000	-.9417	2.8595	.0008	-.9402
2.2594	.0001	-.8898	2.5602	.0003	-.8882	2.8594	-.0031	-.8913
2.2594	.0001	-.8394	2.5602	.0004	-.8394	2.8594	-.0001	-.8394
2.2594	.0001	-.7906	2.5602	.0004	-.7906	2.8594	.0005	-.7906
2.2594	.0003	-.7402	2.5602	.0005	-.7401	2.8595	.0007	-.7402
2.2594	.0004	-.6897	2.5602	.0007	-.6889	2.8595	.0008	-.6897
2.2594	.0005	-.6394	2.5602	.0008	-.6409	2.8595	.0009	-.6393
2.2594	.0004	-.5906	2.5602	.0008	-.5905	2.8594	.0010	-.5899
2.2594	.0000	-.5402	2.5602	.0010	-.5402	2.8595	.0011	-.5402
2.2594	-.0003	-.5197	2.5602	.0011	-.5197	2.8594	.0012	-.5196
2.3602	.0030	-1.2393	2.6594	.0515	-1.2394	2.9602	.1297	-1.2394
2.3602	-.0002	-1.1906	2.6594	.0332	-1.1906	2.9601	.1055	-1.1906
2.3602	-.0002	-1.1401	2.6594	.0186	-1.1402	2.9602	.0741	-1.1410
2.3602	.0002	-1.0898	2.6594	.0078	-1.0898	2.9602	.0488	-1.0906
2.3602	.0000	-1.0394	2.6594	.0016	-1.0394	2.9602	.0291	-1.0394
2.3602	.0000	-.9906	2.6594	-.0003	-.9906	2.9602	.0156	-.9906
2.3602	.0001	-.9402	2.6594	-.0036	-.9401	2.9603	.0060	-.9402
2.3602	.0001	-.8898	2.6595	-.0051	-.8888	2.9602	.0012	-.8897
2.3602	.0002	-.8394	2.6594	-.0029	-.8394	2.9602	.0006	-.8394
2.3602	.0004	-.7906	2.6594	.0001	-.7906	2.9601	.0012	-.7906
2.3602	.0005	-.7402	2.6594	.0006	-.7402	2.9602	.0008	-.7402
2.3602	.0005	-.6898	2.6596	.0008	-.6888	2.9602	.0009	-.6898
2.3602	.0007	-.6394	2.6594	.0008	-.6410	2.9603	.0011	-.6394
2.3602	.0007	-.5906	2.6594	.0009	-.5906	2.9602	.0012	-.5902
2.3602	.0008	-.5407	2.6595	.0010	-.5402	2.9602	.0012	-.5402
2.3602	.0009	-.5196	2.6594	.0011	-.5197	2.9602	.0013	-.5197
2.4594	.0141	-1.2394	2.7602	.0749	-1.2393	3.0595	.1632	-1.2399
2.4594	.0056	-1.1906	2.7602	.0530	-1.1906	3.0594	.1398	-1.1912
2.4594	.0007	-1.1402	2.7602	.0329	-1.1402	3.0595	.1009	-1.1413
2.4594	-.0004	-1.0898	2.7602	.0180	-1.0898	3.0595	.0691	-1.0897
2.4594	.0002	-1.0394	2.7602	.0075	-1.0394	3.0595	.0445	-1.0393
2.4594	.0001	-.9906	2.7602	-.0028	-.9905	3.0594	.0265	-.9895
2.4594	.0001	-.9401	2.7602	-.0068	-.9402	3.0595	.0136	-.9401
2.4594	.0002	-.8897	2.7603	-.0052	-.8888	3.0595	.0047	-.8899
2.4594	.0002	-.8394	2.7602	-.0051	-.8410	3.0595	.0007	-.8399
2.4594	.0004	-.7905	2.7602	-.0044	-.7906	3.0594	.0011	-.7906
2.4594	.0004	-.7402	2.7603	.0006	-.7402	3.0595	.0009	-.7406
2.4594	.0005	-.6898	2.7602	.0008	-.6913	3.0595	.0010	-.6897
2.4594	.0007	-.6394	2.7602	.0008	-.6394	3.0595	.0011	-.6394
2.4594	.0008	-.5906	2.7602	.0009	-.5906	3.0594	.0012	-.5906
2.4594	.0009	-.5402	2.7602	.0011	-.5402	3.0594	.0012	-.5401
2.4594	.0010	-.5196	2.7602	.0011	-.5197	3.0594	.0013	-.5197

Table III. Continued

(a) Continued

Upper surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
3.1602	0.2002	-1.2393	3.4594	0.3360	-1.2393	3.7304	0.4934	-1.2394
3.1602	.1784	-1.1905	3.4594	.3166	-1.1896	3.7302	.4692	-1.1906
3.1602	.1314	-1.1401	3.4595	.2537	-1.1402	3.7302	.3760	-1.1391
3.1602	.0941	-1.0903	3.4594	.1858	-1.0898	3.7319	.2660	-1.0897
3.1602	.0636	-1.0390	3.4595	.1345	-1.0394	3.7303	.1921	-1.0410
3.1602	.0406	-.9889	3.4594	.0957	-.9906	3.7301	.1357	-.9887
3.1602	.0238	-.9402	3.4595	.0645	-.9402	3.7304	.0959	-.9401
3.1602	.0109	-.8877	3.4594	.0408	-.8914	3.7304	.0639	-.8898
3.1602	.0035	-.8394	3.4595	.0225	-.8394	3.7303	.0393	-.8395
3.1602	.0004	-.7906	3.4594	.0106	-.7906	3.7304	.0223	-.7906
3.1602	.0012	-.7402	3.4595	.0030	-.7391	3.7303	.0097	-.7391
3.1602	.0008	-.6899	3.4594	.0006	-.6913	3.7303	.0030	-.6897
3.1602	.0011	-.6393	3.4595	.0016	-.6394	3.7303	.0007	-.6399
3.1603	.0012	-.5913	3.4595	.0012	-.5906	3.7303	.0025	-.5901
3.1602	.0013	-.5402	3.4594	.0014	-.5402	3.7302	.0016	-.5402
3.1603	.0013	-.5197	3.4595	.0015	-.5197	3.7304	.0016	-.5194
3.2595	.2411	-1.2394	3.5602	.3904	-1.2409			
3.2595	.2220	-1.1906	3.5602	.3682	-1.1905			
3.2595	.1685	-1.1402	3.5602	.2993	-1.1401			
3.2594	.1217	-1.0899	3.5602	.2189	-1.0901			
3.2595	.0860	-1.0394	3.5601	.1574	-1.0387			
3.2594	.0582	-.9906	3.5602	.1135	-.9905			
3.2594	.0361	-.9402	3.5602	.0777	-.9401			
3.2596	.0192	-.8876	3.5602	.0513	-.8923			
3.2595	.0086	-.8394	3.5602	.0298	-.8400			
3.2594	.0023	-.7905	3.5602	.0154	-.7902			
3.2596	.0005	-.7402	3.5602	.0056	-.7401			
3.2596	.0010	-.6898	3.5602	.0013	-.6897			
3.2595	.0010	-.6394	3.5602	.0016	-.6402			
3.2594	.0012	-.5905	3.5603	.0015	-.5905			
3.2595	.0014	-.5402	3.5603	.0016	-.5399			
3.2594	.0013	-.5197	3.5602	.0016	-.5196			
3.3602	.2867	-1.2393	3.6594	.4503	-1.2393			
3.3602	.2676	-1.1894	3.6594	.4276	-1.1905			
3.3602	.2093	-1.1402	3.6594	.3446	-1.1401			
3.3602	.1527	-1.0898	3.6594	.2483	-1.0903			
3.3603	.1100	-1.0395	3.6594	.1786	-1.0400			
3.3602	.0770	-.9906	3.6611	.1287	-.9906			
3.3602	.0501	-.9400	3.6594	.0891	-.9401			
3.3602	.0303	-.8914	3.6594	.0599	-.8923			
3.3602	.0154	-.8393	3.6594	.0360	-.8402			
3.3603	.0060	-.7905	3.6594	.0191	-.7890			
3.3602	.0011	-.7393	3.6594	.0082	-.7401			
3.3603	.0009	-.6898	3.6594	.0023	-.6897			
3.3602	.0011	-.6394	3.6594	.0011	-.6394			
3.3601	.0012	-.5906	3.6594	.0021	-.5906			
3.3602	.0014	-.5402	3.6594	.0016	-.5401			
3.3602	.0013	-.5197	3.6594	.0016	-.5197			



Table III. Continued

(a) Continued

Lower surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
2.2611	-0.0016	-1.9595	2.5604	-0.0019	-1.9595	2.8595	-0.0018	-1.9597
2.2595	-.0008	-1.9106	2.5604	-.0006	-1.9107	2.8596	-.0004	-1.9107
2.2596	-.0006	-1.8602	2.5604	-.0005	-1.8603	2.8597	-.0004	-1.8603
2.2596	-.0005	-1.8098	2.5604	-.0005	-1.8099	2.8597	-.0005	-1.8099
2.2596	-.0004	-1.7594	2.5604	-.0004	-1.7594	2.8597	-.0006	-1.7596
2.2596	-.0004	-1.7106	2.5604	-.0005	-1.7107	2.8596	-.0008	-1.7108
2.2596	-.0004	-1.6603	2.5604	-.0005	-1.6604	2.8596	-.0012	-1.6595
2.2596	-.0004	-1.6099	2.5604	-.0005	-1.6099	2.8596	-.0021	-1.6099
2.2596	-.0002	-1.5594	2.5604	-.0004	-1.5595	2.8596	-.0009	-1.5595
2.2596	-.0001	-1.5106	2.5604	-.0001	-1.5107	2.8596	.0048	-1.5106
2.2596	-.0001	-1.4602	2.5604	-.0009	-1.4603	2.8595	.0144	-1.4603
2.2596	-.0001	-1.4099	2.5604	.0007	-1.4099	2.8595	.0283	-1.4099
2.2596	-.0001	-1.3594	2.5604	.0066	-1.3595	2.8595	.0477	-1.3594
2.2596	.0001	-1.3107	2.5604	.0162	-1.3107	2.8595	.0720	-1.3107
2.2596	-.0005	-1.2901	2.5604	.0211	-1.2902	2.8596	.0843	-1.2902
2.3604	-.0019	-1.9595	2.6596	-.0018	-1.9595	2.9604	-.0017	-1.9594
2.3604	-.0007	-1.9107	2.6596	-.0006	-1.9107	2.9606	-.0004	-1.9112
2.3604	-.0007	-1.8603	2.6596	-.0005	-1.8603	2.9604	-.0004	-1.8603
2.3604	-.0005	-1.8099	2.6596	-.0004	-1.8099	2.9604	-.0006	-1.8085
2.3604	-.0004	-1.7595	2.6596	-.0005	-1.7595	2.9603	-.0006	-1.7595
2.3604	-.0004	-1.7107	2.6596	-.0005	-1.7107	2.9604	-.0004	-1.7108
2.3604	-.0004	-1.6603	2.6596	-.0023	-1.6586	2.9604	-.0005	-1.6602
2.3604	-.0004	-1.6099	2.6596	-.0048	-1.6099	2.9604	-.0004	-1.6096
2.3604	-.0003	-1.5595	2.6596	-.0070	-1.5594	2.9603	.0039	-1.5595
2.3604	-.0002	-1.5106	2.6596	-.0034	-1.5105	2.9603	.0124	-1.5107
2.3604	-.0003	-1.4602	2.6598	.0007	-1.4609	2.9604	.0259	-1.4603
2.3604	.0000	-1.4099	2.6596	.0064	-1.4098	2.9605	.0444	-1.4099
2.3604	-.0006	-1.3594	2.6596	.0168	-1.3595	2.9603	.0688	-1.3595
2.3604	-.0003	-1.3107	2.6596	.0308	-1.3107	2.9603	.0991	-1.3107
2.3604	.0011	-1.2902	2.6596	.0380	-1.2902	2.9603	.1137	-1.2902
2.4596	-.0019	-1.9595	2.7605	-.0019	-1.9596	3.0596	-.0014	-1.9594
2.4596	-.0007	-1.9107	2.7604	-.0005	-1.9107	3.0596	-.0004	-1.9117
2.4596	-.0007	-1.8603	2.7604	-.0004	-1.8603	3.0595	-.0003	-1.8603
2.4596	-.0005	-1.8099	2.7604	-.0004	-1.8099	3.0597	-.0006	-1.8086
2.4596	-.0005	-1.7596	2.7604	-.0006	-1.7596	3.0596	-.0005	-1.7595
2.4596	-.0004	-1.7108	2.7604	-.0012	-1.7108	3.0596	-.0003	-1.7108
2.4596	-.0004	-1.6603	2.7604	-.0052	-1.6619	3.0596	-.0006	-1.6602
2.4596	-.0005	-1.6099	2.7604	-.0095	-1.6099	3.0596	.0026	-1.6094
2.4596	-.0003	-1.5595	2.7604	-.0137	-1.5595	3.0596	.0100	-1.5610
2.4596	-.0002	-1.5107	2.7604	-.0130	-1.5107	3.0595	.0226	-1.5107
2.4596	.0001	-1.4603	2.7604	.0059	-1.4602	3.0597	.0403	-1.4603
2.4596	-.0008	-1.4099	2.7604	.0161	-1.4099	3.0596	.0638	-1.4099
2.4596	.0006	-1.3595	2.7605	.0309	-1.3595	3.0595	.0939	-1.3595
2.4596	.0053	-1.3107	2.7604	.0500	-1.3107	3.0596	.1308	-1.3107
2.4596	.0085	-1.2902	2.7604	.0596	-1.2902	3.0596	.1478	-1.2902

Table III. Continued

(a) Concluded

Lower surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
3.1605	-0.0017	-1.9595	3.4596	-0.0018	-1.9596	3.7305	-0.0018	-1.9595
3.1605	-.0004	-1.9106	3.4598	-.0004	-1.9113	3.7306	-.0002	-1.9107
3.1605	-.0005	-1.8603	3.4596	-.0003	-1.8608	3.7305	-.0004	-1.8603
3.1605	-.0006	-1.8088	3.4596	-.0008	-1.8115	3.7306	-.0002	-1.8099
3.1605	-.0003	-1.7595	3.4596	.0003	-1.7596	3.7306	.0048	-1.7595
3.1604	-.0007	-1.7106	3.4595	.0059	-1.7106	3.7306	.0149	-1.7110
3.1603	.0011	-1.6603	3.4598	.0172	-1.6588	3.7306	.0302	-1.6605
3.1603	.0077	-1.6098	3.4595	.0328	-1.6094	3.7304	.0519	-1.6099
3.1603	.0196	-1.5590	3.4596	.0548	-1.5595	3.7305	.0814	-1.5595
3.1604	.0357	-1.5107	3.4597	.0829	-1.5107	3.7306	.1181	-1.5107
3.1603	.0577	-1.4603	3.4596	.1206	-1.4603	3.7305	.1688	-1.4587
3.1602	.0866	-1.4099	3.4595	.1685	-1.4099	3.7305	.2330	-1.4099
3.1605	.1233	-1.3595	3.4595	.2340	-1.3595	3.7304	.3359	-1.3595
3.1603	.1682	-1.3107	3.4596	.3090	-1.3108	3.7305	.4726	-1.3108
3.1603	.1866	-1.2902	3.4595	.3268	-1.2889	3.7305	.4892	-1.2901
3.2596	-.0017	-1.9595	3.5604	-.0019	-1.9594			
3.2597	-.0004	-1.9107	3.5603	-.0002	-1.9105			
3.2596	-.0005	-1.8603	3.5603	.0002	-1.8602			
3.2595	-.0004	-1.8087	3.5603	-.0008	-1.8098			
3.2596	-.0007	-1.7594	3.5605	.0022	-1.7595			
3.2596	-.0001	-1.7106	3.5605	.0099	-1.7106			
3.2597	.0048	-1.6603	3.5603	.0231	-1.6592			
3.2596	.0151	-1.6099	3.5605	.0407	-1.6098			
3.2597	.0304	-1.5594	3.5605	.0659	-1.5594			
3.2595	.0503	-1.5107	3.5603	.0987	-1.5106			
3.2596	.0771	-1.4603	3.5605	.1425	-1.4587			
3.2597	.1116	-1.4098	3.5605	.1967	-1.4099			
3.2596	.1557	-1.3595	3.5603	.2759	-1.3595			
3.2596	.2108	-1.3107	3.5604	.3633	-1.3113			
3.2597	.2288	-1.2896	3.5603	.3811	-1.2908			
3.3604	-.0019	-1.9595	3.6596	-.0018	-1.9594			
3.3605	-.0004	-1.9107	3.6596	-.0002	-1.9106			
3.3604	-.0006	-1.8603	3.6595	-.0001	-1.8603			
3.3604	-.0004	-1.8115	3.6597	-.0005	-1.8099			
3.3604	-.0007	-1.7595	3.6595	.0038	-1.7594			
3.3604	.0024	-1.7108	3.6596	.0132	-1.7107			
3.3604	.0106	-1.6604	3.6597	.0281	-1.6589			
3.3605	.0240	-1.6099	3.6595	.0479	-1.6099			
3.3605	.0426	-1.5595	3.6597	.0758	-1.5595			
3.3605	.0666	-1.5107	3.6595	.1111	-1.5107			
3.3605	.0989	-1.4603	3.6595	.1597	-1.4586			
3.3606	.1398	-1.4098	3.6595	.2206	-1.4098			
3.3605	.1936	-1.3595	3.6595	.3140	-1.3595			
3.3604	.2585	-1.3107	3.6598	.4239	-1.3115			
3.3605	.2755	-1.2902	3.6596	.4430	-1.2897			

Table III. Continued

(b) Leeward glove definition

Upper surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
9.5410	0.4842	-1.2292	9.8402	0.3054	-1.2307	10.1394	0.1620	-1.2307
9.5394	.3274	-1.1803	9.8402	.2225	-1.1803	10.1394	.1165	-1.1803
9.5394	.2282	-1.1299	9.8401	.1601	-1.1299	10.1394	.0813	-1.1302
9.5395	.1634	-1.0795	9.8402	.1142	-1.0796	10.1397	.0531	-1.0796
9.5394	.1165	-1.0307	9.8401	.0794	-1.0308	10.1394	.0317	-1.0292
9.5394	.0791	-.9803	9.8402	.0511	-.9803	10.1394	.0165	-.9803
9.5395	.0505	-.9299	9.8402	.0296	-.9300	10.1394	.0055	-.9300
9.5395	.0290	-.8795	9.8401	.0143	-.8795	10.1395	-.0006	-.8796
9.5394	.0141	-.8307	9.8401	.0042	-.8307	10.1394	-.0019	-.8307
9.5394	.0041	-.7803	9.8402	-.0006	-.7803	10.1394	-.0015	-.7804
9.5395	-.0006	-.7299	9.8402	-.0015	-.7299	10.1394	-.0017	-.7299
9.5395	-.0009	-.6795	9.8401	-.0012	-.6796	10.1394	-.0018	-.6796
9.5393	-.0013	-.6307	9.8401	-.0017	-.6307	10.1394	-.0016	-.6307
9.5394	-.0008	-.5803	9.8401	-.0010	-.5803	10.1394	-.0013	-.5803
9.5394	-.0005	-.5299	9.8402	-.0009	-.5299	10.1395	-.0012	-.5299
9.5393	-.0058	-.5000	9.8401	-.0058	-.5000	10.1395	-.0027	-.5006
9.6401	.4192	-1.2307	9.9394	.2535	-1.2307	10.2402	.1258	-1.2307
9.6402	.2986	-1.1803	9.9394	.1842	-1.1803	10.2402	.0890	-1.1803
9.6402	.2106	-1.1299	9.9394	.1324	-1.1299	10.2402	.0595	-1.1299
9.6401	.1508	-1.0795	9.9394	.0930	-1.0796	10.2402	.0366	-1.0796
9.6401	.1071	-1.0307	9.9394	.0628	-1.0307	10.2402	.0201	-1.0305
9.6401	.0721	-.9803	9.9395	.0388	-.9804	10.2402	.0079	-.9803
9.6401	.0452	-.9299	9.9394	.0209	-.9299	10.2402	.0007	-.9300
9.6401	.0250	-.8796	9.9394	.0083	-.8796	10.2402	-.0021	-.8786
9.6402	.0115	-.8307	9.9394	.0009	-.8308	10.2402	-.0018	-.8307
9.6402	.0026	-.7803	9.9395	-.0016	-.7803	10.2402	-.0019	-.7803
9.6402	-.0010	-.7299	9.9393	-.0013	-.7299	10.2402	-.0017	-.7299
9.6402	-.0008	-.6796	9.9394	-.0017	-.6796	10.2402	-.0017	-.6796
9.6402	-.0014	-.6307	9.9394	-.0017	-.6307	10.2402	-.0014	-.6307
9.6402	-.0009	-.5803	9.9394	-.0013	-.5803	10.2402	-.0013	-.5803
9.6402	-.0003	-.5299	9.9394	-.0012	-.5299	10.2402	-.0013	-.5299
9.6401	-.0058	-.5000	9.9393	-.0061	-.5000	10.2402	-.0050	-.5008
9.7394	.3598	-1.2307	10.0402	.2033	-1.2307	10.3394	.0943	-1.2307
9.7395	.2612	-1.1803	10.0402	.1479	-1.1803	10.3394	.0641	-1.1803
9.7394	.1342	-1.0796	10.0402	.0721	-1.0796	10.3395	.0226	-1.0796
9.7394	.0944	-1.0307	10.0402	.0468	-1.0308	10.3394	.0101	-1.0301
9.7394	.0627	-.9803	10.0402	.0268	-.9804	10.3394	.0018	-.9803
9.7394	.0381	-.9300	10.0402	.0126	-.9299	10.3394	-.0035	-.9299
9.7394	.0205	-.8811	10.0401	.0027	-.8796	10.3393	-.0059	-.8787
9.7393	.0081	-.8308	10.0402	-.0013	-.8292	10.3394	-.0065	-.8292
9.7395	.0010	-.7803	10.0402	-.0015	-.7803	10.3394	-.0025	-.7804
9.7394	-.0013	-.7299	10.0402	-.0017	-.7299	10.3394	-.0017	-.7299
9.7394	-.0009	-.6796	10.0402	-.0018	-.6796	10.3394	-.0017	-.6796
9.7394	-.0015	-.6307	10.0402	-.0017	-.6307	10.3394	-.0016	-.6307
9.7393	-.0009	-.5803	10.0402	-.0014	-.5803	10.3394	-.0015	-.5803
9.7393	-.0007	-.5299	10.0402	-.0011	-.5299	10.3394	-.0014	-.5299
9.7393	-.0063	-.5000	10.0402	-.0056	-.5000	10.3394	-.0054	-.5000

Table III. Continued

(b) Continued

Upper surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
10.4402	0.0685	-1.2307	10.6402	0.0283	-1.2307	10.8402	0.0006	-1.2291
10.4402	.0438	-1.1803	10.6402	.0141	-1.1803	10.8402	-.0030	-1.1803
10.4402	.0250	-1.1299	10.6402	.0041	-1.1299	10.8402	-.0032	-1.1299
10.4401	.0113	-1.0796	10.6402	-.0017	-1.0796	10.8402	-.0023	-1.0796
10.4402	.0026	-1.0307	10.6402	-.0032	-1.0292	10.8402	-.0032	-1.0307
10.4402	-.0018	-.9803	10.6402	-.0024	-.9803	10.8402	-.0030	-.9804
10.4402	-.0050	-.9299	10.6402	-.0025	-.9299	10.8402	-.0026	-.9300
10.4402	-.0077	-.8811	10.6402	-.0024	-.8811	10.8402	-.0025	-.8795
10.4402	-.0097	-.8307	10.6401	-.0024	-.8307	10.8402	-.0024	-.8307
10.4402	-.0100	-.7803	10.6402	-.0021	-.7803	10.8402	-.0024	-.7803
10.4402	-.0017	-.7299	10.6402	-.0021	-.7299	10.8402	-.0023	-.7299
10.4402	-.0017	-.6796	10.6402	-.0021	-.6796	10.8402	-.0023	-.6796
10.4402	-.0017	-.6307	10.6402	-.0021	-.6307	10.8402	-.0022	-.6307
10.4402	-.0017	-.5803	10.6402	-.0020	-.5803	10.8402	-.0021	-.5803
10.4401	-.0017	-.5299	10.6401	-.0020	-.5299	10.8402	-.0021	-.5299
10.4402	-.0060	-.5000	10.6402	-.0062	-.5001	10.8402	-.0097	-.5000
10.5393	.0473	-1.2307	10.7394	.0120	-1.2292	10.9394	-.0035	-1.2291
10.5395	.0277	-1.1803	10.7394	.0033	-1.1803	10.9395	-.0028	-1.1803
10.5394	.0133	-1.1299	10.7394	-.0020	-1.1299	10.9394	-.0031	-1.1299
10.5394	.0033	-1.0796	10.7395	-.0032	-1.0796	10.9395	-.0032	-1.0796
10.5394	-.0016	-1.0307	10.7393	-.0028	-1.0307	10.9394	-.0034	-1.0307
10.5393	-.0027	-.9804	10.7394	-.0033	-.9804	10.9395	-.0029	-.9803
10.5393	-.0035	-.9299	10.7394	-.0028	-.9300	10.9394	-.0027	-.9296
10.5393	-.0043	-.8811	10.7394	-.0024	-.8795	10.9394	-.0026	-.8796
10.5394	-.0057	-.8307	10.7410	-.0024	-.8284	10.9394	-.0025	-.8307
10.5395	-.0020	-.7803	10.7395	-.0023	-.7803	10.9394	-.0024	-.7803
10.5394	-.0019	-.7299	10.7394	-.0023	-.7299	10.9394	-.0024	-.7299
10.5394	-.0018	-.6796	10.7394	-.0022	-.6796	10.9394	-.0024	-.6796
10.5394	-.0018	-.6307	10.7394	-.0021	-.6307	10.9395	-.0024	-.6307
10.5393	-.0018	-.5803	10.7394	-.0021	-.5803	10.9394	-.0071	-.5803
10.5395	-.0018	-.5299	10.7394	-.0021	-.5299	10.9394	-.0036	-.5299
10.5394	-.0063	-.5001	10.7394	-.0078	-.5000	10.9394	-.0039	-.5000

Table III. Continued

(b) Continued

Lower surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
9.5405	-0.0018	-1.9466	9.8396	-0.0045	-1.9492	10.1403	-0.0045	-1.9484
9.5403	-.0020	-1.9005	9.8396	-.0019	-1.9005	10.1403	-.0019	-1.9005
9.5403	-.0015	-1.8500	9.8396	-.0020	-1.8501	10.1403	-.0020	-1.8501
9.5404	-.0019	-1.7997	9.8396	-.0018	-1.7997	10.1403	-.0022	-1.7997
9.5404	.0011	-1.7492	9.8396	-.0021	-1.7493	10.1403	-.0020	-1.7494
9.5403	.0091	-1.6998	9.8396	.0011	-1.7003	10.1403	-.0018	-1.7003
9.5403	.0225	-1.6501	9.8396	.0092	-1.6501	10.1404	-.0019	-1.6501
9.5403	.0421	-1.5988	9.8396	.0225	-1.5997	10.1403	.0021	-1.5996
9.5404	.0674	-1.5494	9.8396	.0413	-1.5493	10.1403	.0110	-1.5494
9.5404	.1005	-1.5004	9.8396	.0657	-1.5005	10.1404	.0241	-1.5005
9.5404	.1443	-1.4500	9.8396	.0984	-1.4501	10.1403	.0429	-1.4501
9.5403	.2025	-1.3997	9.8396	.1400	-1.3996	10.1403	.0681	-1.3996
9.5403	.2863	-1.3493	9.8396	.1949	-1.3493	10.1403	.0999	-1.3493
9.5403	.4622	-1.3005	9.8396	.2694	-1.3005	10.1403	.1388	-1.3005
9.5403	.4894	-1.2501	9.8396	.3147	-1.2500	10.1403	.1802	-1.2501
9.5403	.4892	-1.2501	9.8396	.3146	-1.2500	10.1403	.1802	-1.2501
9.6396	-.0036	-1.9492	9.9403	-.0051	-1.9492	10.2396	-.0060	-1.9492
9.6395	-.0017	-1.9004	9.9403	-.0020	-1.9005	10.2396	-.0020	-1.9005
9.6395	-.0018	-1.8500	9.9403	-.0020	-1.8501	10.2396	-.0020	-1.8501
9.6395	-.0023	-1.7997	9.9403	-.0018	-1.7997	10.2395	-.0023	-1.7997
9.6396	-.0001	-1.7493	9.9403	-.0023	-1.7494	10.2396	-.0023	-1.7494
9.6395	.0064	-1.7014	9.9403	-.0012	-1.7004	10.2396	-.0018	-1.7005
9.6396	.0187	-1.6501	9.9404	.0041	-1.6501	10.2395	-.0023	-1.6501
9.6396	.0375	-1.5980	9.9403	.0145	-1.6003	10.2395	-.0012	-1.5997
9.6396	.0610	-1.5493	9.9403	.0300	-1.5493	10.2396	.0038	-1.5493
9.6396	.0920	-1.5005	9.9403	.0508	-1.5005	10.2396	.0136	-1.5005
9.6396	.1330	-1.4500	9.9404	.0784	-1.4501	10.2396	.0280	-1.4501
9.6396	.1865	-1.3997	9.9403	.1144	-1.3997	10.2396	.0481	-1.3997
9.6395	.2621	-1.3493	9.9404	.1599	-1.3493	10.2396	.0743	-1.3493
9.6396	.3870	-1.3005	9.9403	.2186	-1.3005	10.2396	.1065	-1.3005
9.6396	.4264	-1.2501	9.9404	.2660	-1.2501	10.2396	.1412	-1.2501
9.6395	.4265	-1.2500	9.9403	.2661	-1.2501	10.2395	.1412	-1.2501
9.7403	-.0021	-1.9477	10.0396	-.0041	-1.9480	10.3403	-.0056	-1.9492
9.7403	-.0018	-1.9004	10.0396	-.0019	-1.9000	10.3403	-.0022	-1.9005
9.7403	-.0020	-1.8500	10.0396	-.0021	-1.8501	10.3404	-.0022	-1.8500
9.7403	-.0021	-1.7997	10.0396	-.0021	-1.7996	10.3403	-.0023	-1.7997
9.7403	-.0012	-1.7492	10.0396	-.0017	-1.7494	10.3403	-.0023	-1.7495
9.7403	.0037	-1.7014	10.0396	-.0023	-1.7004	10.3403	-.0022	-1.7004
9.7404	.0144	-1.6500	10.0396	.0004	-1.6502	10.3403	-.0042	-1.6501
9.7403	.0301	-1.5997	10.0396	.0075	-1.5996	10.3403	-.0071	-1.5998
9.7403	.0518	-1.5493	10.0396	.0198	-1.5493	10.3403	-.0056	-1.5493
9.7403	.0799	-1.5005	10.0396	.0366	-1.5005	10.3403	.0029	-1.5005
9.7403	.1171	-1.4501	10.0396	.0599	-1.4501	10.3403	.0159	-1.4501
9.7403	.1651	-1.3996	10.0396	.0903	-1.3997	10.3403	.0311	-1.3997
9.7403	.2303	-1.3493	10.0396	.1288	-1.3493	10.3403	.0525	-1.3493
9.7403	.3266	-1.3005	10.0396	.1773	-1.3003	10.3403	.0784	-1.3005
9.7403	.3677	-1.2500	10.0396	.2218	-1.2502	10.3403	.1066	-1.2491
9.7403	.3677	-1.2500	10.0396	.2218	-1.2502	10.3403	.1072	-1.2514

Table III. Continued

(b) Concluded

Lower surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
10.4396	-0.0030	-1.9492	10.6396	-0.0056	-1.9494	10.8396	-0.0104	-1.9493
10.4396	-.0024	-1.9005	10.6396	-.0027	-1.8995	10.8396	-.0028	-1.9004
10.4396	-.0023	-1.8501	10.6396	-.0026	-1.8501	10.8396	-.0028	-1.8501
10.4396	-.0023	-1.7997	10.6396	-.0026	-1.7997	10.8396	-.0027	-1.7997
10.4396	-.0023	-1.7493	10.6396	-.0025	-1.7492	10.8396	-.0028	-1.7492
10.4396	-.0028	-1.7004	10.6396	-.0025	-1.7005	10.8396	-.0027	-1.7006
10.4396	-.0070	-1.6494	10.6396	-.0024	-1.6500	10.8396	-.0027	-1.6501
10.4396	-.0073	-1.5995	10.6396	-.0024	-1.5997	10.8396	-.0027	-1.5997
10.4396	-.0099	-1.5493	10.6396	-.0024	-1.5492	10.8396	-.0027	-1.5493
10.4396	-.0118	-1.5005	10.6396	-.0022	-1.5004	10.8396	-.0026	-1.5005
10.4396	.0044	-1.4501	10.6395	-.0028	-1.4498	10.8396	-.0027	-1.4500
10.4396	.0181	-1.3997	10.6396	.0009	-1.3997	10.8396	-.0023	-1.3997
10.4396	.0341	-1.3493	10.6396	.0088	-1.3484	10.8396	-.0030	-1.3509
10.4396	.0552	-1.3005	10.6396	.0202	-1.3004	10.8396	-.0012	-1.3005
10.4394	.0788	-1.2494	10.6396	.0347	-1.2500	10.8396	.0027	-1.2501
10.4396	.0793	-1.2517	10.6396	.0347	-1.2500	10.8396	.0027	-1.2501
10.5403	-.0049	-1.9493	10.7403	-.0073	-1.9493	10.9403	-.0049	-1.9493
10.5403	-.0025	-1.8996	10.7403	-.0027	-1.8998	10.9403	-.0046	-1.9004
10.5403	-.0025	-1.8500	10.7403	-.0027	-1.8501	10.9403	-.0094	-1.8501
10.5404	-.0025	-1.7997	10.7403	-.0026	-1.7997	10.9403	-.0053	-1.7997
10.5403	-.0024	-1.7495	10.7404	-.0027	-1.7509	10.9403	-.0045	-1.7491
10.5403	-.0023	-1.7003	10.7404	-.0026	-1.7004	10.9403	-.0044	-1.7007
10.5404	-.0033	-1.6500	10.7403	-.0026	-1.6501	10.9403	-.0043	-1.6497
10.5403	-.0049	-1.5994	10.7403	-.0025	-1.5997	10.9403	-.0041	-1.5997
10.5403	-.0067	-1.5490	10.7404	-.0025	-1.5493	10.9403	-.0041	-1.5493
10.5403	-.0030	-1.5006	10.7403	-.0024	-1.5005	10.9403	-.0038	-1.5005
10.5403	.0004	-1.4498	10.7403	-.0026	-1.4500	10.9403	-.0037	-1.4501
10.5403	.0077	-1.3997	10.7403	-.0030	-1.3997	10.9403	-.0034	-1.3996
10.5403	.0200	-1.3483	10.7403	.0004	-1.3509	10.9403	-.0030	-1.3492
10.5403	.0362	-1.3005	10.7404	.0072	-1.3005	10.9403	-.0034	-1.3005
10.5403	.0556	-1.2500	10.7403	.0162	-1.2501	10.9403	-.0034	-1.2500
10.5403	.0556	-1.2500	10.7403	.0162	-1.2501	10.9403	-.0034	-1.2501

Table III. Continued

(c) Chordwise glove definition

Upper surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
2.6539	0.0501	-1.2356	3.2805	0.2501	-1.2236	3.6585	0.4501	-1.2276
2.8111	.0501	-1.1576	3.4145	.2501	-1.1511	3.7759	.4501	-1.1579
2.9689	.0501	-1.0874	3.5482	.2501	-1.1130	3.8964	.4501	-1.1354
3.1278	.0501	-1.0218	3.6804	.2501	-1.0876	4.0159	.4501	-1.1238
3.2849	.0501	-.9628	3.8143	.2501	-1.0716	4.1356	.4501	-1.1154
3.4444	.0501	-.9141	3.9500	.2501	-1.0616	4.2537	.4501	-1.1079
3.6035	.0501	-.8800	4.0836	.2501	-1.0533	4.3703	.4501	-1.1002
3.7609	.0501	-.8587	4.2160	.2501	-1.0443	4.4901	.4501	-1.0924
3.9182	.0501	-.8452	4.3499	.2501	-1.0357	4.6096	.4501	-1.0843
4.0772	.0501	-.8349	4.4834	.2501	-1.0272	4.7277	.4501	-1.0772
4.2367	.0501	-.8246	4.6177	.2501	-1.0182	4.8454	.4501	-1.0703
4.3940	.0501	-.8140	4.7513	.2501	-1.0098	4.9671	.4501	-1.0630
4.5515	.0501	-.8037	4.8853	.2501	-1.0021	5.0837	.4501	-1.0575
4.7090	.0501	-.7935	5.0192	.2501	-.9952	5.2033	.4501	-1.0539
4.8662	.0501	-.7843	5.1527	.2501	-.9897	5.3229	.4501	-1.0503
5.0255	.0501	-.7759	5.2869	.2501	-.9857	5.4411	.4501	-1.0462
5.1842	.0501	-.7698	5.4206	.2501	-.9811	5.5608	.4501	-1.0426
5.3420	.0501	-.7647	5.5544	.2501	-.9780	5.6805	.4501	-1.0404
5.4993	.0501	-.7602	5.6883	.2501	-.9753	5.7967	.4501	-1.0394
5.6584	.0501	-.7568	5.8221	.2501	-.9735	5.9165	.4501	-1.0383
5.8160	.0501	-.7546	5.9559	.2501	-.9723	6.0364	.4501	-1.0374
5.9749	.0501	-.7535	6.0897	.2501	-.9716	6.1530	.4501	-1.0364
6.1323	.0501	-.7529	6.2235	.2501	-.9721	6.2726	.4501	-1.0377
6.2931	.0501	-.7541	6.3575	.2501	-.9739	6.3923	.4501	-1.0401
6.4489	.0501	-.7565	6.4900	.2501	-.9759	6.5105	.4501	-1.0415
6.6065	.0501	-.7595	6.6238	.2501	-.9784	6.6301	.4501	-1.0437
6.7656	.0501	-.7636	6.7590	.2501	-.9820	6.7498	.4501	-1.0464
6.9245	.0501	-.7687	6.8916	.2501	-.9861	6.8668	.4501	-1.0508
7.0837	.0501	-.7748	7.0253	.2501	-.9912	6.9866	.4501	-1.0553
7.2395	.0501	-.7811	7.1593	.2501	-.9963	7.1040	.4501	-1.0594
7.3970	.0501	-.7880	7.2961	.2501	-1.0020	7.2254	.4501	-1.0643
7.5545	.0501	-.7961	7.4301	.2501	-1.0078	7.3416	.4501	-1.0691
7.7135	.0501	-.8048	7.5639	.2501	-1.0149	7.4601	.4501	-1.0746
7.8709	.0501	-.8137	7.6964	.2501	-1.0220	7.5814	.4501	-1.0811
8.0301	.0501	-.8228	7.8283	.2501	-1.0294	7.7012	.4501	-1.0877
8.1891	.0501	-.8328	7.9655	.2501	-1.0365	7.8175	.4501	-1.0938
8.3465	.0501	-.8434	8.0961	.2501	-1.0446	7.9388	.4501	-1.1007
8.5040	.0501	-.8542	8.2316	.2501	-1.0530	8.0551	.4501	-1.1070
8.6616	.0501	-.8650	8.3644	.2501	-1.0616	8.1734	.4501	-1.1143
8.8206	.0501	-.8761	8.5009	.2501	-1.0713	8.2946	.4501	-1.1225
8.9797	.0501	-.8871	8.6333	.2501	-1.0798	8.4116	.4501	-1.1302
9.1371	.0501	-.8981	8.7654	.2501	-1.0890	8.5326	.4501	-1.1385
9.2962	.0501	-.9081	8.9012	.2501	-1.0983	8.6490	.4501	-1.1461
9.4537	.0501	-.9207	9.0330	.2501	-1.1071	8.7684	.4501	-1.1539
9.6112	.0501	-.9365	9.1687	.2501	-1.1161	8.8884	.4501	-1.1618
9.7702	.0501	-.9621	9.3010	.2501	-1.1244	9.0064	.4501	-1.1701
9.9276	.0501	-1.0019	9.4346	.2501	-1.1349	9.1245	.4501	-1.1779
10.0868	.0501	-1.0539	9.5701	.2501	-1.1479	9.2443	.4501	-1.1847
10.2458	.0501	-1.1126	9.7043	.2501	-1.1676	9.3624	.4501	-1.1931
10.4033	.0501	-1.1788	9.8380	.2501	-1.1984	9.4819	.4501	-1.2028
10.5609	.0501	-1.2468	9.9718	.2501	-1.2454	9.6002	.4501	-1.2452
10.5608	.0501	-1.2468	9.9702	.2501	-1.2440			

Table III. Continued

(c) Concluded

Lower surface								
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
2.6436	0.0500	-1.2559	3.2798	0.2500	-1.2532	3.6577	0.4494	-1.2601
2.8073	.0504	-1.3290	3.4137	.2504	-1.3343	3.7772	.4504	-1.3346
2.9647	.0504	-1.3965	3.5473	.2504	-1.3694	3.8952	.4504	-1.3472
3.1240	.0504	-1.4603	3.6818	.2504	-1.3925	4.0169	.4504	-1.3530
3.2812	.0504	-1.5165	3.8150	.2504	-1.4060	4.1335	.4504	-1.3587
3.4419	.0504	-1.5624	3.9491	.2504	-1.4137	4.2517	.4504	-1.3642
3.5992	.0504	-1.5942	4.0829	.2504	-1.4199	4.3714	.4504	-1.3699
3.7569	.0504	-1.6145	4.2167	.2504	-1.4267	4.4896	.4504	-1.3755
3.9180	.0504	-1.6257	4.3507	.2504	-1.4328	4.6090	.4504	-1.3811
4.0734	.0504	-1.6338	4.4845	.2504	-1.4398	4.7274	.4504	-1.3857
4.2326	.0504	-1.6416	4.6184	.2504	-1.4455	4.8483	.4504	-1.3895
4.3899	.0504	-1.6495	4.7524	.2504	-1.4507	4.9651	.4504	-1.3924
4.5474	.0504	-1.6572	4.8863	.2504	-1.4546	5.0861	.4504	-1.3953
4.7066	.0504	-1.6637	5.0182	.2504	-1.4579	5.2028	.4504	-1.3979
4.8655	.0504	-1.6685	5.1521	.2504	-1.4614	5.3227	.4504	-1.4004
5.0233	.0504	-1.6727	5.2879	.2504	-1.4641	5.4405	.4504	-1.4020
5.1821	.0504	-1.6764	5.4215	.2504	-1.4656	5.5603	.4504	-1.4027
5.3399	.0504	-1.6793	5.5539	.2504	-1.4671	5.6784	.4504	-1.4037
5.4973	.0504	-1.6810	5.6877	.2504	-1.4681	5.7966	.4504	-1.4046
5.6562	.0504	-1.6823	5.8218	.2504	-1.4689	5.9162	.4504	-1.4050
5.8151	.0504	-1.6833	5.9554	.2504	-1.4690	6.0342	.4504	-1.4046
5.9727	.0504	-1.6835	6.0894	.2504	-1.4683	6.1524	.4504	-1.4034
6.1303	.0504	-1.6823	6.2247	.2504	-1.4668	6.2720	.4504	-1.4016
6.2894	.0504	-1.6802	6.3570	.2504	-1.4648	6.3915	.4504	-1.3999
6.4467	.0504	-1.6775	6.4908	.2504	-1.4623	6.5098	.4504	-1.3981
6.6057	.0504	-1.6742	6.6246	.2504	-1.4596	6.6294	.4504	-1.3956
6.7633	.0504	-1.6701	6.7584	.2504	-1.4561	6.7473	.4504	-1.3925
6.9223	.0504	-1.6655	6.8923	.2504	-1.4522	6.8675	.4504	-1.3884
7.0799	.0504	-1.6606	7.0263	.2504	-1.4480	6.9855	.4504	-1.3849
7.2388	.0504	-1.6556	7.1600	.2504	-1.4438	7.1048	.4504	-1.3809
7.3964	.0504	-1.6505	7.2942	.2504	-1.4395	7.2229	.4504	-1.3776
7.5536	.0504	-1.6454	7.4278	.2504	-1.4353	7.3444	.4504	-1.3735
7.7129	.0504	-1.6402	7.5617	.2504	-1.4312	7.4606	.4504	-1.3700
7.8718	.0504	-1.6352	7.6954	.2504	-1.4268	7.5789	.4504	-1.3665
8.0296	.0504	-1.6301	7.8292	.2504	-1.4226	7.6986	.4504	-1.3627
8.1869	.0504	-1.6248	7.9631	.2504	-1.4182	7.8164	.4504	-1.3589
8.3442	.0504	-1.6197	8.0970	.2504	-1.4139	7.9362	.4504	-1.3549
8.5051	.0504	-1.6145	8.2310	.2504	-1.4100	8.0543	.4504	-1.3512
8.6625	.0504	-1.6091	8.3633	.2504	-1.4055	8.1740	.4504	-1.3477
8.8199	.0504	-1.6041	8.4986	.2504	-1.4009	8.2921	.4504	-1.3440
8.9774	.0504	-1.5996	8.6325	.2504	-1.3972	8.4120	.4504	-1.3400
9.1367	.0504	-1.5957	8.7663	.2504	-1.3929	8.5299	.4504	-1.3362
9.2956	.0504	-1.5925	8.9001	.2504	-1.3886	8.6496	.4504	-1.3327
9.4529	.0504	-1.5863	9.0325	.2504	-1.3855	8.7679	.4504	-1.3291
9.6104	.0504	-1.5723	9.1678	.2504	-1.3826	8.8861	.4504	-1.3251
9.7695	.0504	-1.5457	9.3018	.2504	-1.3807	9.0055	.4504	-1.3224
9.9272	.0504	-1.5044	9.4340	.2504	-1.3754	9.1236	.4504	-1.3201
10.0862	.0504	-1.4525	9.5682	.2504	-1.3642	9.2435	.4504	-1.3188
10.2436	.0504	-1.3920	9.7034	.2504	-1.3441	9.3615	.4504	-1.3155
10.4026	.0504	-1.3258	9.8360	.2504	-1.3117	9.4810	.4504	-1.3098
10.5600	.0504	-1.2566	9.9697	.2504	-1.2632	9.5992	.4504	-1.2672
			9.9696	.2504	-1.2634			



Table III. Concluded

(d) Spanwise glove definition

Upper surface			Lower surface		
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
4.7495	0.0045	-0.6293	4.7504	0.0048	-1.8115
4.7498	.0549	-.8013	4.7507	.0552	-1.6558
4.7497	.1052	-.8813	4.7507	.1055	-1.5775
4.7496	.1524	-.9347	4.7506	.1544	-1.5233
4.7497	.2043	-.9794	4.7507	.2048	-1.4810
4.7500	.2549	-1.0129	4.7505	.2551	-1.4479
4.7499	.3052	-1.0379	4.7506	.3055	-1.4234
4.7498	.3556	-1.0580	4.7491	.3544	-1.4042
4.7499	.4029	-1.0691	4.7506	.4048	-1.3927
4.7499	.4549	-1.0761	4.7505	.4551	-1.3861
4.7500	.4958	-1.0784	4.7506	.4945	-1.3844
6.7498	.0045	-.5972	6.7509	.0048	-1.8186
6.7497	.0548	-.7732	6.7506	.0552	-1.6612
6.7496	.1052	-.8530	6.7507	.1055	-1.5832
6.7497	.1556	-.9097	6.7506	.1547	-1.5289
6.7497	.2045	-.9512	6.7492	.2047	-1.4868
6.7498	.2548	-.9846	6.7507	.2551	-1.4539
6.7498	.3052	-1.0101	6.7507	.3056	-1.4289
6.7498	.3540	-1.0288	6.7491	.3543	-1.4099
6.7496	.4029	-1.0403	6.7505	.4047	-1.3980
6.7498	.4549	-1.0471	6.7489	.4551	-1.3922
6.7499	.4958	-1.0491	6.7507	.4945	-1.3899
8.7497	.0044	-.7165	8.7507	.0048	-1.7497
8.7497	.0549	-.8804	8.7506	.0552	-1.5971
8.7498	.1052	-.9600	8.7506	.1023	-1.5233
8.7496	.1541	-1.0149	8.7507	.1543	-1.4654
8.7497	.2044	-1.0576	8.7507	.2048	-1.4232
8.7497	.2549	-1.0907	8.7507	.2551	-1.3905
8.7498	.3053	-1.1158	8.7506	.3055	-1.3657
8.7500	.3557	-1.1355	8.7508	.3544	-1.3466
8.7497	.4045	-1.1466	8.7507	.4048	-1.3351
8.7497	.4548	-1.1535	8.7507	.4552	-1.3291
8.7497	.4942	-1.1555	8.7507	.4945	-1.3272

Table IV. Measured Pressure Orifice Locations

(a) Wing

Upper surface						Lower surface		
X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.	X, in.	Y, in.	Z, in.
4.5649	1.3461	-1.2409	8.0572	2.2184	-1.1987	4.6555	1.3015	-1.2821
4.5669	1.3474	-1.2283	8.2525	2.1729	-1.2081	4.8494	1.2925	-1.2915
4.7180	1.3223	-1.1906	6.1171	3.0485	-1.2302	5.0369	1.3083	-1.3025
4.8251	1.3238	-1.1779	6.1951	3.0206	-1.2098	5.3992	1.2685	-1.3151
4.9369	1.2592	-1.1606	6.2691	3.0269	-1.2082	5.7381	1.3076	-1.3214
5.0566	1.2844	-1.1528	6.3983	3.0166	-1.1987	6.0696	1.2465	-1.3308
5.1756	1.3015	-1.1465	6.6339	3.0081	-1.1861	6.4309	1.2946	-1.3246
5.2899	1.2730	-1.1370	6.7977	2.9889	-1.1830	6.7420	1.2835	-1.3246
5.3954	1.2824	-1.1323	6.9497	2.9547	-1.1782	7.0733	1.2280	-1.3104
5.6026	1.2856	-1.1228	7.1078	3.0083	-1.1813	7.4144	1.2704	-1.3010
5.8202	1.2580	-1.1102	7.2720	2.9826	-1.1845	7.7625	1.3004	-1.2916
6.0187	1.2589	-1.1117	7.4310	2.9889	-1.1924	8.0979	1.2343	-1.2823
6.2297	1.2817	-1.1054	7.5913	3.0243	-1.1971	8.4286	1.2594	-1.2728
6.4215	1.2469	-1.1039	7.7489	2.9786	-1.2082	5.4554	2.2462	-1.2727
6.6411	1.2666	-1.1039	7.9157	2.9976	-1.2160	5.5983	2.2483	-1.2790
6.8464	1.2755	-1.1087				5.7361	2.2670	-1.2838
7.0417	1.2351	-1.1150				6.2340	2.2432	-1.2996
7.2606	1.2476	-1.1260				6.4848	2.2055	-1.3059
7.4746	1.2786	-1.1339				6.7092	2.2129	-1.3062
7.6717	1.2337	-1.1449				6.9459	2.2248	-1.3012
7.8826	1.2394	-1.1575				7.1887	2.1720	-1.2949
8.0783	1.2798	-1.1732				7.4297	2.1960	-1.2886
8.2999	1.2593	-1.1810				7.6632	2.2287	-1.2806
8.6013	1.2382	-1.2031				7.9120	2.1751	-1.2743
8.9079	1.2492	-1.2220				8.1552	2.1847	-1.2665
5.4096	2.2791	-1.2286				6.1383	3.0027	-1.2617
5.4950	2.2271	-1.2050				6.2650	2.9980	-1.2697
5.6085	2.2523	-1.1924				6.4808	2.9965	-1.2759
5.7019	2.2239	-1.1830				6.7289	2.9973	-1.2775
5.8028	2.2193	-1.1751				6.9572	2.9700	-1.2852
5.9093	2.2098	-1.1672				7.2345	2.9748	-1.2743
6.0007	2.1909	-1.1594				7.4900	3.0121	-1.2727
6.1817	2.1974	-1.1546				7.6664	2.9680	-1.2680
6.3703	2.2224	-1.1499				7.6822	3.0010	-1.2665
6.5602	2.1692	-1.1452						
6.7506	2.1960	-1.1435						
6.9265	2.2079	-1.1468						
7.1231	2.1747	-1.1483						
7.3154	2.1831	-1.1577						
7.5012	2.2165	-1.1687						
7.7194	2.1840	-1.1767						
7.8972	2.1943	-1.1876						

Table IV. Concluded

(b) Upper and lower flexible wall coordinates

$C_p$ names	$X'$	$Y'$	$Z'$
CP1U	-20.25	0	6.50
CP1L	-20.25	0	-6.50
CP2U	-15.25	0	6.50
CP2L	-15.25	0	-6.50
CP3U	-11.25	0	6.50
CP3L	-11.25	0	-6.50
CP4U	-8.25	0	6.50
CP4L	-8.25	0	-6.50
CP5U	-6.25	0	6.50
CP5L	-6.25	0	-6.50
CP6U	-4.25	0	6.50
CP6L	-4.25	0	-6.50
CP7U	-3.25	0	6.50
CP7L	-3.25	0	-6.50
CP8U	-1.75	0	6.50
CP8L	-1.75	0	-6.50
CP9U	-0.25	0	6.50
CP9L	-0.25	0	-6.50
CP10U	1.25	0	6.50
CP10L	1.25	0	-6.50
CP11U	2.75	0	6.50
CP11L	2.75	0	-6.50
CP12U	4.75	0	6.50
CP12L	4.75	0	-6.50
CP13U	6.75	0	6.50
CP13L	6.75	0	-6.50
CP14U	8.75	0	6.50
CP14L	8.75	0	-6.50
CP15U	11.75	0	6.50
CP15L	11.25	0	-6.50
CP16U	15.75	0	6.50
CP16L	15.75	0	-6.50
CP17U	20.75	0	6.50
CP17L	20.75	0	-6.50

Table V. Upper and Lower Flexible Wall Pressure Measurements

Figure	CP1U CP1L	CP2U CP2L	CP3U CP3L	CP4U CP4L	CP5U CP5L	CP6U CP6L	CP7U CP7L	CP8U CP8L	CP9U CP9L	CP10U CP10L	CP11U CP11L	CP12U CP12L	CP13U CP13L	CP14U CP14L	CP15U CP15L	CP16U CP16L	CP17U CP17L
8(b)	0.0330	0.0374	0.0389	0.0100	0.0185	0.0209	0.0324	0.0414	0.0188	0.0202	0.0144	0.0167	0.0378	0.0359	0.0278	0.0243	0.0243
	0.0333	0.0187	0.0111	0.0248	0.0525	0.0295	0.0177	0.0227	0.0236	0.0343	0.0280	0.0273	0.0220	0.0273	0.0134	0.0138	0.0425
8(f)	0.0341	0.0405	0.0437	0.0170	0.0241	0.0283	0.0377	0.0344	0.0178	0.0331	0.0310	0.0264	0.0401	0.0410	0.0360	0.0228	0.0196
	0.0350	0.0209	0.0126	0.0237	0.0425	0.0241	0.0051	-0.0020	0.0050	0.0329	0.0327	0.0268	0.0191	0.0294	0.0194	0.0150	0.0321
8(h)	0.0376	0.0364	0.0420	0.0198	0.0286	0.0298	0.0414	0.0534	0.0300	0.0291	0.0200	0.0217	0.0375	0.0227	0.0190	0.0271	0.0344
	0.0357	0.0171	0.0089	0.0199	0.0420	0.0138	-0.0069	0.0019	0.0067	0.0178	0.0075	0.0116	0.0089	0.0048	0.0001	0.0238	0.0461
8(i)	0.0350	0.0393	0.0411	0.0092	0.0185	0.0360	0.0384	0.0579	0.0338	0.0366	0.0277	0.0263	0.0390	0.0383	0.0284	0.0190	0.0229
	0.0308	0.0209	0.0063	0.0065	0.0286	0.0151	-0.0002	0.0009	0.0033	0.0188	0.0101	0.0123	0.0081	0.0184	0.0083	0.0144	0.0399
9(d)	0.0311	0.0460	0.0505	0.0145	0.0272	0.0286	0.0389	0.0478	0.0190	0.0204	0.0114	0.0141	0.0417	0.0408	0.0306	0.0180	0.0149
	0.0430	0.0213	0.0204	0.0312	0.0604	0.0309	0.0074	0.0163	0.0220	0.0278	0.0274	0.0250	0.0194	0.0297	0.0153	0.0098	0.0465
9(f)	0.0363	0.0447	0.0510	0.0196	0.0292	0.0276	0.0377	0.0476	0.0197	0.0209	0.0167	0.0146	0.0393	0.0360	0.0279	0.0050	0.0085
	0.0392	0.0204	0.0194	0.0250	0.0585	0.0236	-0.0031	0.0055	0.0128	0.0278	0.0210	0.0217	0.0146	0.0236	0.0063	0.0016	0.0349
9(g)	0.0003	0.0230	0.0248	-0.0158	0.0028	-0.0001	0.0119	0.0238	-0.0014	0.0032	-0.0167	-0.0239	0.0119	0.0161	0.0158	-0.0139	-0.0097
	0.0107	0.0133	-0.0142	0.0107	0.0376	0.0116	-0.0010	0.0033	-0.0006	0.0047	-0.0032	-0.0026	-0.0010	0.0099	0.0000	0.0010	0.0206
9(i)	-0.0054	0.0333	0.0443	0.0080	0.0102	0.0078	0.0147	0.0229	-0.0068	0.0049	-0.0084	-0.0066	0.0096	0.0168	0.0081	-0.0173	-0.0102
	0.0150	0.0256	-0.0078	0.0172	0.0346	0.0124	-0.0072	0.0032	-0.0116	0.0039	-0.0090	0.0046	0.0042	0.0140	-0.0117	0.0052	0.0208
9(j)	-0.0180	0.0278	0.0325	-0.0105	0.0100	0.0098	0.0066	0.0183	-0.0042	0.0068	-0.0119	-0.0132	0.0073	0.0138	0.0126	-0.0204	-0.0169
	0.0133	0.0044	-0.0247	0.0094	0.0345	0.0152	-0.0121	0.0023	0.0029	0.0061	-0.0161	-0.0095	0.0023	0.0136	-0.0136	0.0045	0.0124
10(b)	0.0020	0.0365	0.0457	0.0070	0.0179	0.0194	0.0426	0.0558	0.0186	0.0277	0.0177	0.0190	0.0488	0.0500	0.0254	0.0845	-0.3116
	0.0030	0.0167	0.0021	0.0336	0.0569	0.0356	0.0136	0.0286	0.0258	0.0316	0.0240	0.0293	0.0328	0.0316	0.0018	0.0406	-0.2525
10(c)	0.0019	0.0372	0.0449	0.0071	0.0187	0.0246	0.0448	0.0697	0.0240	0.0305	0.0204	0.0184	0.0498	0.0490	0.0248	0.0841	-0.3032
	0.0041	0.0245	0.0016	0.0342	0.0537	0.0298	0.0106	0.0184	0.0189	0.0272	0.0184	0.0276	0.0334	0.0300	-0.0001	0.0475	-0.2657
10(d)	-0.0190	0.0231	0.0209	-0.0227	-0.0146	-0.0144	0.0066	0.0173	-0.0208	-0.0100	-0.0200	-0.0090	0.0281	0.0228	0.0110	0.0844	0.0393
	-0.0149	-0.0104	-0.0164	0.0051	0.0228	0.0016	-0.0150	-0.0133	-0.0137	-0.0053	-0.0085	-0.0018	-0.0037	-0.0082	-0.0344	0.0472	0.0691
10(e)	-0.0018	0.0432	0.0441	-0.0029	-0.0001	0.0055	0.0199	0.0450	0.0058	0.0122	-0.0050	0.0064	0.0290	0.0406	0.0167	0.0630	-0.0626
	0.0062	0.0476	-0.0600	0.0193	0.0476	0.0414	0.0030	0.0046	0.0086	0.0192	0.0090	0.0124	0.0220	0.0262	0.0039	0.0471	-0.0145
10(f)	-0.0199	0.0299	0.0411	-0.0084	-0.0039	0.0000	0.0122	0.0259	-0.0037	0.0066	-0.0080	-0.0054	0.0189	0.0271	0.0203	0.0773	-0.0548
	-0.0015	0.0432	-0.0256	0.0112	0.0389	0.0292	-0.0028	-0.0045	-0.0105	0.0056	-0.0077	0.0033	0.0080	0.0133	-0.0215	0.0237	-0.0176
10(h)	-0.0466	0.0510	0.0367	-0.0230	-0.0049	0.0050	0.0099	0.0188	-0.0074	0.0108	-0.0050	-0.0014	0.0214	0.0301	0.0271	0.0487	0.0091
	0.0078	0.0307	-0.0265	0.0104	0.0407	0.0263	0.0046	0.0047	-0.0081	0.0071	-0.0105	-0.0051	0.0083	0.0198	0.0070	0.0084	0.0539
11(a)	0.0380	0.0664	0.0637	0.0299	0.0380	0.0353	0.0368	0.0605	0.0331	0.0366	0.0186	0.0366	0.0584	0.0662	0.0556	0.0324	0.0177
	0.0585	0.0372	0.0392	0.0545	0.0821	0.0536	0.0358	0.0352	0.0367	0.0644	0.0550	0.0444	0.0382	0.0373	0.0233	0.0162	0.0366

Table V. Continued

Figure	CP1U CP1L	CP2U CP2L	CP3U CP3L	CP4U CP4L	CP5U CP5L	CP6U CP6L	CP7U CP7L	CP8U CP8L	CP9U CP9L	CP10U CP10L	CP11U CP11L	CP12U CP12L	CP13U CP13L	CP14U CP14L	CP15U CP15L	CP16U CP16L	CP17U CP17L
11(b)	0.0408 0.0580	0.0664 0.0389	0.0555 0.0275	0.0233 0.0415	0.0308 0.0793	0.0310 0.0578	0.0596 0.0297	0.0585 0.0353	0.0322 0.0351	0.0329 0.0581	0.0068 0.0412	0.0291 0.0335	0.0459 0.0320	0.0519 0.0338	0.0584 0.0226	0.0236 0.0158	0.0040 0.0355
11(c)	0.0376 0.0576	0.0617 0.0344	0.0544 0.0251	0.0197 0.0362	0.0326 0.0768	0.0340 0.0309	0.0346 0.0237	0.0632 0.0370	0.0272 0.0385	0.0339 0.0364	0.0055 0.0361	0.0334 0.0346	0.0654 0.0386	0.0404 0.0400	0.0405 0.0252	0.0235 0.0151	0.0063 0.0382
11(d)	0.0400 0.0592	0.0627 0.0348	0.0546 0.0249	0.0211 0.0359	0.0350 0.0771	0.0355 0.0401	0.0376 0.0232	0.0637 0.0265	0.0332 0.0269	0.0329 0.0374	0.0057 0.0317	0.0302 0.0291	0.0484 0.0326	0.0390 0.0379	0.0407 0.0224	0.0186 0.0064	0.0059 0.0378
11(g)	0.0364 0.0312	0.0524 0.0312	0.0543 0.0137	0.0167 0.0294	0.0203 0.0618	0.0204 0.0200	0.0346 0.0010	0.0576 0.0127	0.0309 0.0162	0.0323 0.0226	0.0133 0.0203	0.0287 0.0176	0.0322 0.0177	0.0341 0.0189	0.0288 0.0143	0.0135 -0.0027	-0.0015 0.0199
11(h)	-0.0012 0.0230	0.0376 0.0040	0.0294 -0.0037	-0.0001 0.0137	0.0171 0.0636	0.0053 0.0183	0.0075 0.0028	0.0249 0.0066	0.0036 0.0132	0.0155 0.0157	0.0042 0.0026	0.0161 0.0048	0.0159 0.0031	0.0211 0.0144	0.0152 0.0111	0.0025 -0.0003	-0.0008 0.0205
11(i)	-0.0225 0.0183	0.0271 0.0105	0.0293 -0.0067	-0.0042 0.0136	0.0115 0.0540	-0.0013 0.0147	-0.0014 0.0000	0.0111 -0.0059	-0.0017 0.0072	0.0166 0.0133	-0.0224 0.0042	0.0140 0.0022	0.0145 -0.0035	0.0172 0.0128	0.0176 -0.0015	0.0004 0.0017	-0.0027 0.0157
12(a)	0.0154 0.0048	0.0535 0.0468	0.0558 0.0177	0.0302 0.0479	0.0285 0.0921	0.0421 0.0582	0.0499 0.0399	0.0721 0.0430	0.0387 0.0507	0.0545 0.0700	0.0452 0.0409	0.0543 0.0532	0.0851 0.0755	0.0872 0.0472	0.0535 0.0431	0.1240 0.1001	-0.0475 0.0307
12(b)	0.0260 0.0258	0.0640 0.0525	0.0629 0.0252	0.0360 0.0536	0.0325 0.0921	0.0496 0.0577	0.0566 0.0479	0.0988 0.0498	0.0621 0.0557	0.0604 0.0578	0.0485 0.0557	0.0478 0.0516	0.0831 0.0522	0.0919 0.0462	0.0573 0.0514	0.1354 0.1164	0.0037 0.0554
12(c)	0.0226 0.0229	0.0918 0.0526	0.0559 0.0321	0.0401 0.0610	0.0368 0.0942	0.0488 0.0573	0.0528 0.0317	0.0988 0.0393	0.0718 0.0543	0.0849 0.0900	0.0650 0.0691	0.0676 0.0607	0.0841 0.0648	0.0906 0.0507	0.0618 0.0523	0.1353 0.1121	0.0014 0.0559
12(d)	-0.0030 0.0346	0.0357 -0.0062	0.0378 -0.0062	0.0155 0.0358	-0.0037 0.0695	0.0136 0.0347	0.0226 0.0123	0.0525 0.0096	0.0185 0.0097	0.0295 0.0340	0.0148 0.0365	0.0329 0.0334	0.0629 0.0394	0.0676 0.0384	0.0247 0.0225	0.1153 0.0716	-0.1846 -0.0118
12(e)	0.0051 0.0424	0.0435 0.0027	0.0464 0.0127	0.0232 0.0392	0.0119 0.0801	0.0290 0.0442	0.0421 0.0187	0.0795 0.0148	0.0343 0.0163	0.0426 0.0315	0.0240 0.0318	0.0328 0.0312	0.0547 0.0308	0.0663 0.0287	0.0250 0.0213	0.1052 0.0728	-0.1150 -0.0105
12(f)	0.0043 0.0406	0.0434 0.0028	0.0476 0.0086	0.0254 0.0418	0.0140 0.0711	0.0306 0.0386	0.0431 0.0089	0.0713 -0.0064	0.0298 -0.0173	0.0373 0.0115	0.0162 0.0206	0.0285 0.0212	0.0586 0.0299	0.0623 0.0304	0.0236 0.0169	0.0955 0.0663	-0.3106 -0.2382
12(g)	-0.0033 0.0415	0.0399 0.0008	0.0332 0.0024	0.0031 0.0163	-0.0136 0.0510	0.0114 0.0201	0.0193 -0.0060	0.0376 -0.0192	-0.0097 -0.0415	-0.0110 -0.0423	-0.0305 -0.0105	-0.0044 -0.0401	0.0206 -0.0152	0.0283 -0.0167	-0.0019 -0.0053	0.0908 0.0491	-0.0093 0.0214
12(h)	-0.0198 0.0471	0.0391 -0.0081	0.0309 -0.0273	-0.0051 0.0175	-0.0118 0.0477	0.0001 0.0292	0.0052 0.0043	0.0321 -0.0039	-0.0117 -0.0341	-0.0090 0.0025	-0.0357 -0.0069	-0.0058 -0.0043	0.0170 -0.0106	0.0157 -0.0118	0.0034 -0.0027	0.0825 0.0530	-0.0382 0.0167
13(a)	0.0392 0.0375	0.0532 0.0325	0.0500 0.0184	0.0194 0.0359	0.0070 0.0876	0.0219 0.0345	0.0303 0.0330	0.0540 0.0189	0.0264 0.0460	0.0314 0.0598	0.0166 0.0366	0.0432 0.0390	0.0472 0.0352	0.0496 0.0322	0.0522 0.0280	0.0316 0.0184	0.0189 0.0594
13(b)	0.0371 0.0352	0.0521 0.0335	0.0467 0.0137	0.0161 0.0308	0.0102 0.0846	0.0236 0.0344	0.0357 0.0333	0.0559 0.0178	0.0290 0.0273	0.0321 0.0543	0.0156 0.0375	0.0377 0.0364	0.0509 0.0351	0.0531 0.0341	0.0615 0.0327	0.0349 0.0242	0.0163 0.0622

Table V. Continued

Figure	CP1U CP1L	CP2U CP2L	CP3U CP3L	CP4U CP4L	CP5U CP5L	CP6U CP6L	CP7U CP7L	CP8U CP8L	CP9U CP9L	CP10U CP10L	CP11U CP11L	CP12U CP12L	CP13U CP13L	CP14U CP14L	CP15U CP15L	CP16U CP16L	CP17U CP17L
13(c)	0.0449	0.0593	0.0526	0.0178	0.0096	0.0212	0.0433	0.0638	0.0324	0.0371	0.0159	0.0345	0.0521	0.0570	0.0594	0.0358	0.0178
	0.0454	0.0431	0.0168	0.0337	0.0786	0.0325	0.0267	0.0206	0.0336	0.0527	0.0367	0.0332	0.0283	0.0340	0.0360	0.0249	0.0647
13(d)	0.0320	0.0540	0.0507	0.0142	0.0112	0.0185	0.0625	0.0665	0.0313	0.0298	0.0178	0.0319	0.0547	0.0593	0.0677	0.0262	0.0122
	0.0294	0.0321	0.0130	0.0324	0.0704	0.0328	0.0229	0.0217	0.0213	0.0600	0.0298	0.0325	0.0343	0.0392	0.0246	0.0156	0.0524
13(g)	-0.0158	0.0347	0.0354	-0.0210	0.0051	-0.0002	0.0004	0.0261	0.0065	0.0032	-0.0191	0.0106	0.0028	0.0239	0.0071	0.0023	0.0029
	0.0189	0.0163	-0.0251	0.0055	0.0622	0.0129	-0.0024	0.0039	0.0059	0.0138	-0.0028	-0.0033	-0.0005	0.0186	0.0041	0.0005	0.0194
13(h)	-0.0130	0.0447	0.0328	-0.0054	0.0111	0.0099	0.0082	0.0286	-0.0055	0.0083	-0.0099	0.0124	0.0079	0.0244	0.0262	-0.0092	-0.0070
	0.0264	0.0161	-0.0099	0.0133	0.0465	0.0125	0.0128	0.0126	-0.0159	0.0081	-0.0108	-0.0139	0.0073	0.0193	0.0106	0.0098	0.0304
14(a)	-0.0022	0.0742	0.0863	0.0544	0.0669	0.0677	0.0756	0.0999	0.0677	0.0792	0.0613	0.0709	0.0909	0.0984	0.0724	0.1309	-0.0244
	0.0127	0.0508	0.0459	0.0762	0.1131	0.0874	0.0594	0.0707	0.0752	0.0882	0.0704	0.0739	0.0750	0.0832	0.0471	0.1168	0.0553
14(b)	-0.0006	0.0663	0.0800	0.0464	0.0608	0.0609	0.1135	0.1000	0.0660	0.0599	0.0611	0.0687	0.0881	0.0944	0.0724	0.1270	-0.0075
	0.0115	0.0419	0.0389	0.0677	0.1050	0.0775	0.0504	0.0590	0.0703	0.1202	0.0609	0.0640	0.0650	0.0550	0.0415	0.1011	0.0496
14(c)	-0.0005	0.0583	0.0613	0.0335	0.0387	0.0467	0.0615	0.0939	0.0529	0.0560	0.0386	0.0572	0.0730	0.0792	0.0551	0.1174	-0.0403
	0.0069	0.0325	0.0173	0.0483	0.0897	0.0585	0.0364	0.0377	0.0410	0.0579	0.0524	0.0501	0.0527	0.0560	0.0353	0.0913	0.0123
14(d)	-0.0044	0.0544	0.0514	0.0156	0.0154	0.0150	0.0250	0.0568	0.0239	0.0360	0.0131	0.0287	0.0494	0.0596	0.0361	0.0996	-0.4287
	0.0061	0.0386	0.0024	0.0337	0.0735	0.0445	0.0187	0.0164	0.0184	0.0392	0.0327	0.0303	0.0327	0.0385	0.0095	0.0722	-0.3722
14(e)	-0.0400	0.0089	0.0114	-0.0331	-0.0455	-0.0452	-0.0467	0.0089	-0.0420	-0.0316	-0.0597	-0.0199	0.0098	0.0096	0.0116	0.0789	0.0301
	-0.0144	-0.0071	-0.0351	-0.0150	0.0083	-0.0114	-0.0222	-0.0200	-0.0440	-0.0381	-0.0372	-0.0402	-0.0193	-0.0155	-0.0420	0.0502	0.0386
14(g)	-0.0478	0.0523	0.0367	-0.0175	0.0044	0.0067	0.0041	0.0256	-0.0062	0.0100	-0.0165	0.0014	0.0128	0.0360	0.0125	0.0526	-0.4454
	-0.0110	0.0357	-0.0276	0.0092	0.0496	0.0330	-0.0048	-0.0169	-0.0270	-0.0091	-0.0058	-0.0077	-0.0013	0.0157	0.0005	0.0513	-0.3539
15(d)	0.0326	0.0545	0.0539	0.0278	0.0387	0.0336	0.0337	0.0521	0.0313	0.0389	0.0159	0.0384	0.0389	0.0497	0.0497	0.0327	0.0172
	0.0428	0.0352	0.0214	0.0405	0.0735	0.0419	0.0292	0.0318	0.0347	0.0347	0.0330	0.0315	0.0314	0.0353	0.0277	0.0278	0.0524
15(e)	0.0199	0.0468	0.0452	0.0169	0.0299	0.0276	0.0288	0.0465	0.0278	0.0400	0.0149	0.0451	0.0297	0.0441	0.0385	0.0281	0.0176
	0.0297	0.0277	0.0127	0.0303	0.0829	0.0415	0.0253	0.0266	0.0251	0.0427	0.0310	0.0326	0.0288	0.0412	0.0252	0.0227	0.0493
15(f)	0.0203	0.0454	0.0401	0.0150	0.0264	0.0256	0.0267	0.0491	0.0262	0.0377	0.0130	0.0393	0.0379	0.0483	0.0441	0.0384	0.0235
	0.0302	0.0244	0.0100	0.0241	0.0694	0.0402	0.0230	0.0261	0.0366	0.0412	0.0382	0.0264	0.0254	0.0394	0.0248	0.0247	0.0526
16(g)	0.0169	0.0435	0.0409	0.0124	0.0205	0.0176	0.0207	0.0340	0.0226	0.0350	0.0097	0.0378	0.0335	0.0440	0.0414	0.0334	0.0183
	0.0300	0.0221	0.0115	0.0246	0.0668	0.0306	0.0178	0.0211	0.0227	0.0389	0.0221	0.0367	0.0240	0.0370	0.0194	0.0208	0.0394
15(h)	0.0174	0.0405	0.0420	0.0136	0.0206	0.0185	0.0300	0.0548	0.0260	0.0330	0.0098	0.0397	0.0378	0.0416	0.0417	0.0314	0.0225
	0.0330	0.0238	0.0153	0.0242	0.0743	0.0316	0.0206	0.0253	0.0261	0.0383	0.0305	0.0338	0.0344	0.0386	0.0215	0.0199	0.0609
15(i)	0.0255	0.0447	0.0365	0.0165	0.0276	0.0254	0.0261	0.0525	0.0326	0.0400	0.0100	0.0414	0.0360	0.0524	0.0524	0.0378	0.0255
	0.0325	0.0250	0.0151	0.0251	0.0837	0.0383	0.0221	0.0234	0.0362	0.0372	0.0385	0.0366	0.0360	0.0338	0.0328	0.0276	0.0611

Table V. Concluded

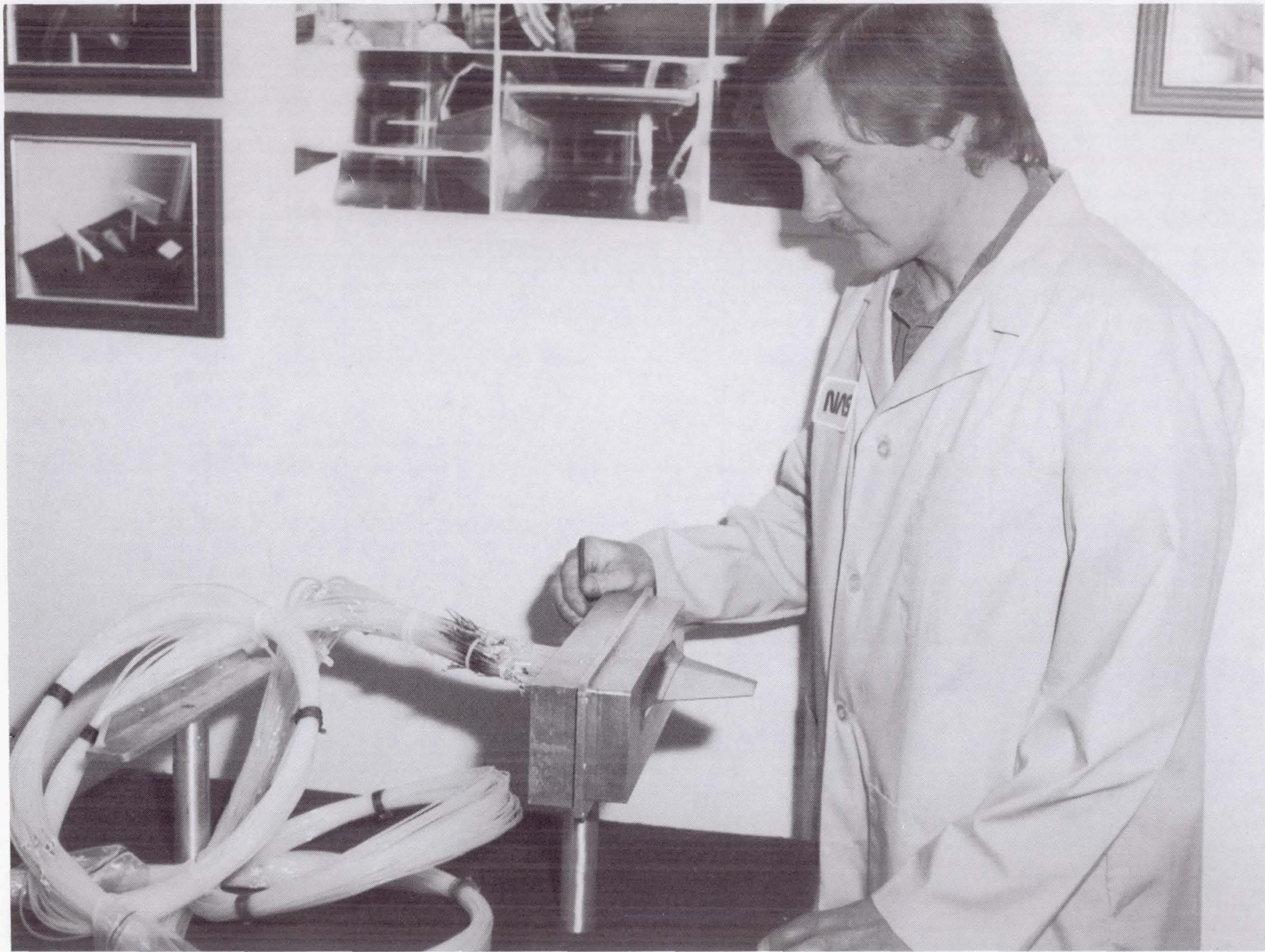
Figure	CP1U CP1L	CP2U CP2L	CP3U CP3L	CP4U CP4L	CP5U CP5L	CP6U CP6L	CP7U CP7L	CP8U CP8L	CP9U CP9L	CP10U CP10L	CP11U CP11L	CP12U CP12L	CP13U CP13L	CP14U CP14L	CP15U CP15L	CP16U CP16L	CP17U CP17L
15(j)	0.0200	0.0405	0.0382	0.0133	0.0236	0.0232	0.0260	0.0549	0.0269	0.0347	0.0133	0.0395	0.0321	0.0563	0.0454	0.0297	0.0205
	0.0327	0.0234	0.0065	0.0229	0.0800	0.0365	0.0212	0.0257	0.0268	0.0369	0.0308	0.0334	0.0236	0.0298	0.0247	0.0197	0.0571
16(c)	0.0237	0.0789	0.0756	0.0450	0.0690	0.0587	0.0586	0.0770	0.0542	0.0766	0.0524	0.0572	0.0578	0.0441	0.0906	0.1572	0.0245
	0.0236	0.0582	0.0192	0.0693	0.1154	0.0745	0.0430	0.0485	0.0521	0.0808	0.0697	0.0576	0.0741	0.0799	0.0825	0.1408	0.0717
16(d)	0.0183	0.0811	0.0853	0.0466	0.0680	0.0614	0.0605	0.0786	0.0620	0.0767	0.0489	0.0625	0.0610	0.0478	0.0979	0.1598	0.0141
	0.0217	0.0590	0.0272	0.0698	0.0988	0.0780	0.0451	0.0461	0.0666	0.0814	0.0675	0.0669	0.0748	0.0751	0.0743	0.1422	0.1184
16(e)	0.0218	0.0804	0.1137	0.0602	0.0749	0.0666	0.0668	0.0752	0.0625	0.0791	0.0471	0.0594	0.0631	0.0598	0.1107	0.1746	0.0480
	0.0226	0.0547	0.0284	0.0745	0.1080	0.0825	0.0499	0.0512	0.0664	0.1105	0.0673	0.0632	0.0690	0.0937	0.0967	0.1569	0.1239
16(f)	0.0208	0.0819	0.0837	0.0483	0.0775	0.0629	0.0616	0.0818	0.0561	0.0791	0.0612	0.0638	0.0649	0.0525	0.1024	0.1718	0.0346
	0.0214	0.0593	0.0246	0.0725	0.1105	0.0884	0.0442	0.0534	0.0576	0.0865	0.0838	0.0638	0.0624	0.0839	0.0898	0.1539	0.1088
16(g)	0.0270	0.0911	0.0888	0.0503	0.0758	0.0620	0.0646	0.0891	0.0619	0.0801	0.0560	0.0756	0.0758	0.0584	0.1097	0.1773	0.0376
	0.0256	0.0668	0.0312	0.0751	0.1126	0.0793	0.0439	0.0569	0.0574	0.0854	0.0759	0.0791	0.0854	0.0920	0.0935	0.1562	0.1180
16(h)	0.0062	0.0818	0.0901	0.0514	0.0612	0.0543	0.0492	0.0855	0.0745	0.0851	0.0497	0.0526	0.0677	0.0414	0.1540	0.1888	0.0383
	0.0236	0.0702	0.0298	0.0836	0.1108	0.0839	0.0330	0.0395	0.0775	0.0896	0.0591	0.0805	0.0726	0.0885	0.1076	0.1696	0.1188
16(i)	0.0024	0.0629	0.0617	0.0184	0.0498	0.0314	0.0280	0.0550	0.0270	0.0313	0.0238	0.0274	0.0484	0.0324	0.0795	0.1582	0.0140
	-0.0009	0.0266	-0.0003	0.0291	0.0783	0.0506	0.0134	0.0291	0.0286	0.0559	0.0369	0.0277	0.0529	0.0670	0.0707	0.1345	0.0665

Table VI. Test Mach Number, Angle of Attack, and Associated Corrections

Figure	$M_\infty$	$\alpha$	$\Delta M_\infty$	$\Delta\alpha_{\text{abs}}$	$M_{\infty, \text{corr}}$	$\alpha_{\text{corr}}$
8(b)	0.300	-2.010	-0.003	-0.280	0.297	-2.290
8(f)	.301	5.010	-.003	-.110	.297	4.890
8(h)	.298	10.010	-.003	.040	.296	10.050
8(i)	.298	11.990	-.003	.090	.295	12.080
9(d)	0.701	2.000	-0.009	0.170	0.692	2.170
9(f)	.699	5.020	-.008	.330	.691	5.350
*9(g)	.700	8.010	.000	.220	.700	8.230
*9(i)	.700	11.990	-.001	.430	.699	12.410
*9(j)	.700	15.000	.000	.480	.700	15.480
10(b)	0.900	-1.990	-0.010	0.170	0.891	-1.820
10(c)	.900	-.020	-.009	.220	.891	.200
*10(d)	.901	2.020	.006	.020	.907	2.040
*10(e)	.901	5.030	-.005	.270	.896	5.290
*10(f)	.899	8.010	.000	.380	.899	8.400
*10(h)	.902	12.000	-.001	.280	.902	12.280
11(a)	0.699	-4.030	-0.015	-0.060	0.684	-4.080
11(b)	.699	-2.040	-.013	.040	.686	-2.000
11(c)	.701	.000	-.012	.090	.688	.090
11(d)	.701	2.000	-.012	.160	.688	2.160
11(g)	.702	6.010	-.008	.360	.693	6.370
*11(h)	.702	8.000	-.003	.230	.700	8.240
*11(i)	.701	10.050	-.001	.200	.700	10.250
12(a)	0.901	-4.030	-0.024	0.110	0.877	-3.920
12(b)	.903	-2.000	-.029	.200	.874	-1.800
12(c)	.905	.000	-.029	.280	.876	.280
12(d)	.900	1.980	-.010	.260	.891	2.240
12(e)	.900	5.000	-.014	.460	.886	5.450
12(f)	.900	7.980	-.008	.570	.892	8.550
12(g)	.903	10.000	.004	.310	.907	10.310
12(h)	.898	12.020	.001	.410	.899	12.430
13(a)	0.701	-3.990	-0.013	0.040	0.688	-3.950
13(b)	.703	-2.000	-.012	.120	.691	-1.880
13(c)	.703	-.010	-.013	.150	.690	.140
13(d)	.701	1.990	-.011	.250	.690	2.240
*13(g)	.700	10.010	-.001	.290	.699	10.300
*13(h)	.703	12.010	-.002	.480	.701	12.490
14(a)	0.901	-4.070	-0.036	0.100	0.866	-3.970
14(b)	.902	-2.030	-.033	.160	.869	-1.860
14(c)	.901	-.050	-.024	.300	.877	.250
*14(d)	.897	2.050	-.008	.260	.889	2.320
14(e)	.900	5.000	.016	-.090	.916	4.910
14(g)	.900	9.960	.005	.620	.905	10.580
15(d)	0.701	5.020	-0.012	0.210	0.689	5.230
15(e)	.700	4.990	-.011	.200	.689	5.190
15(f)	.701	4.990	-.011	.200	.690	5.190
15(g)	.700	5.000	-.009	.160	.691	5.160
15(h)	.701	5.020	-.100	.150	.691	5.160
15(i)	.702	5.020	-.012	.190	.690	5.210
15(j)	.701	5.020	-.010	.180	.690	5.190
16(c)	0.898	5.090	-0.027	0.590	0.870	5.680
16(d)	.901	5.000	-.029	.640	.871	5.640
16(e)	.902	5.020	-.032	.750	.870	5.770
16(f)	.899	5.020	-.030	.650	.869	5.670
16(g)	.904	5.020	-.032	.660	.872	5.680
16(h)	.905	5.050	-.030	.560	.876	5.610
16(i)	.904	5.020	-.015	.770	.889	5.790
16(j)	.899	5.060	.024	.690	.923	5.750

\* Point obtained with two or more adaptive wall procedure iterations.





L-88-4181

Figure 1. Photograph of low-aspect-ratio, thin wing model on the tunnel sidewall insert.

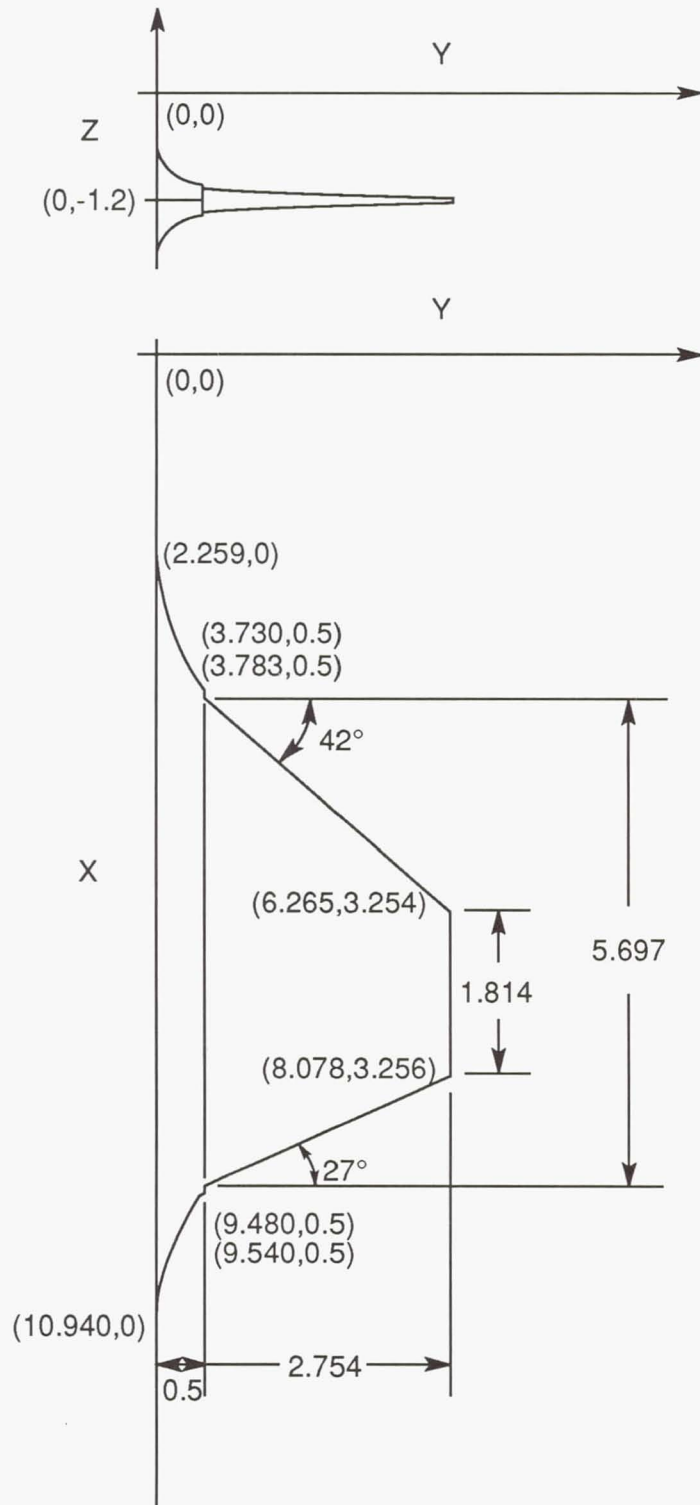


Figure 2. Sketch of the model as laid out from a global coordinate system. Distances are in inches.

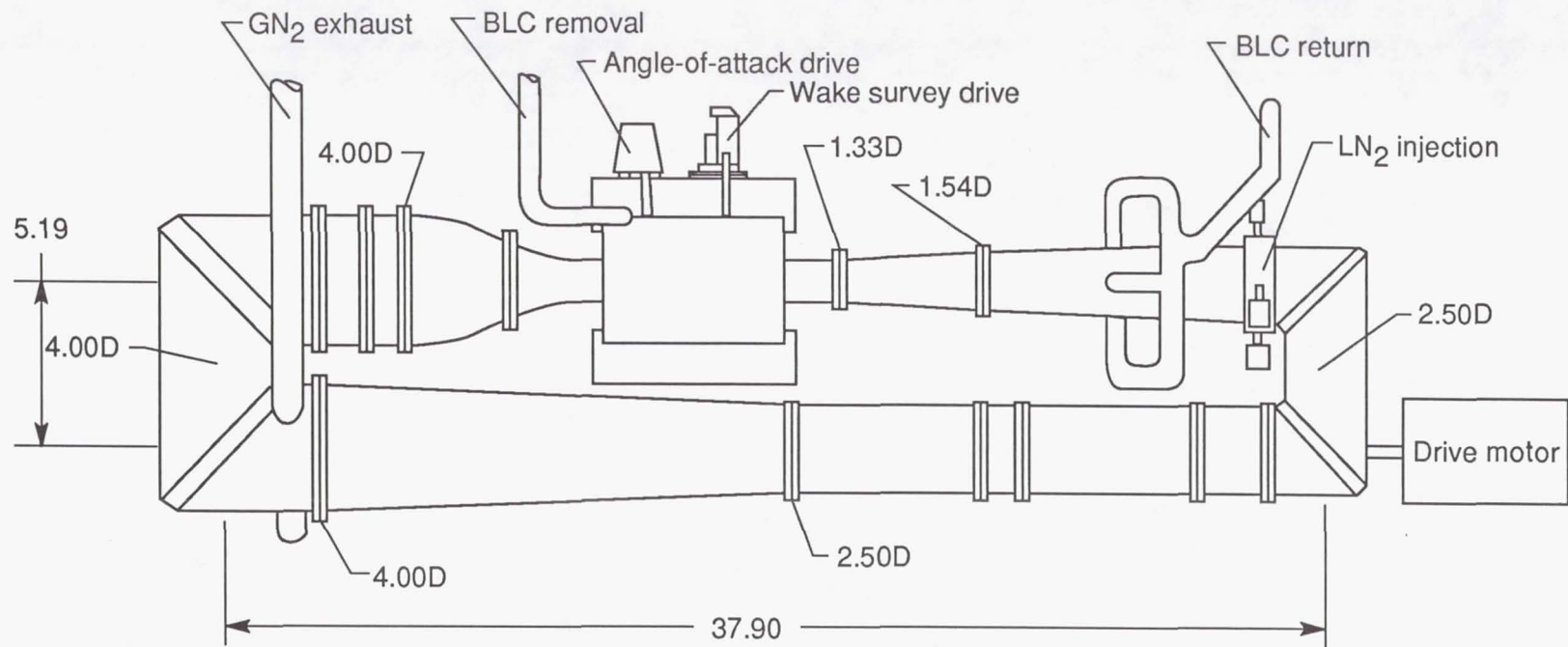


Figure 3. Schematic of 0.3-m TCT circuit with 13- by 13-in. adaptive wall test section. Dimensions are in feet.

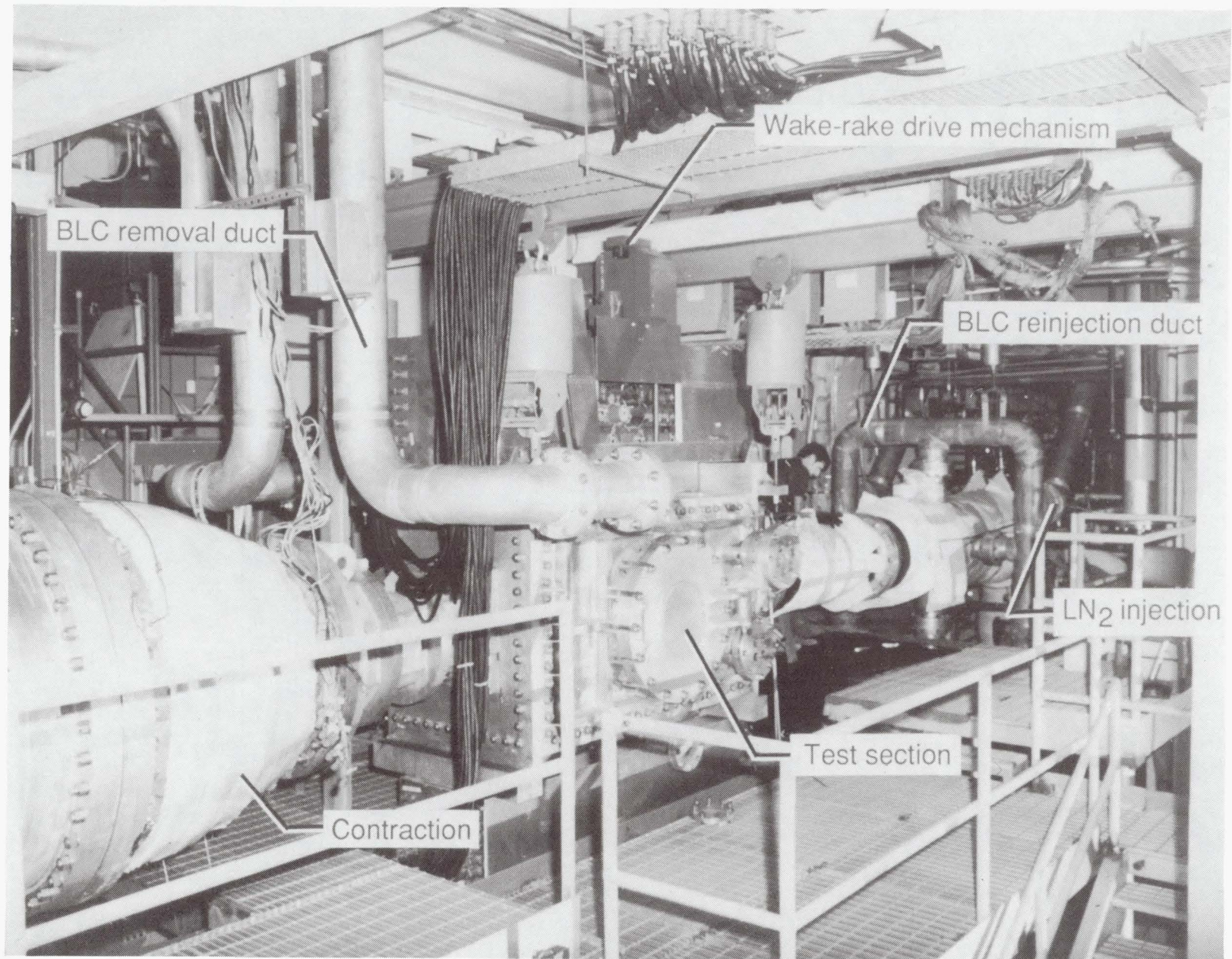


Figure 4. Photograph of upper leg of 0.3-m TCT with 13- by 13-in. adaptive wall test section.

L-89-45

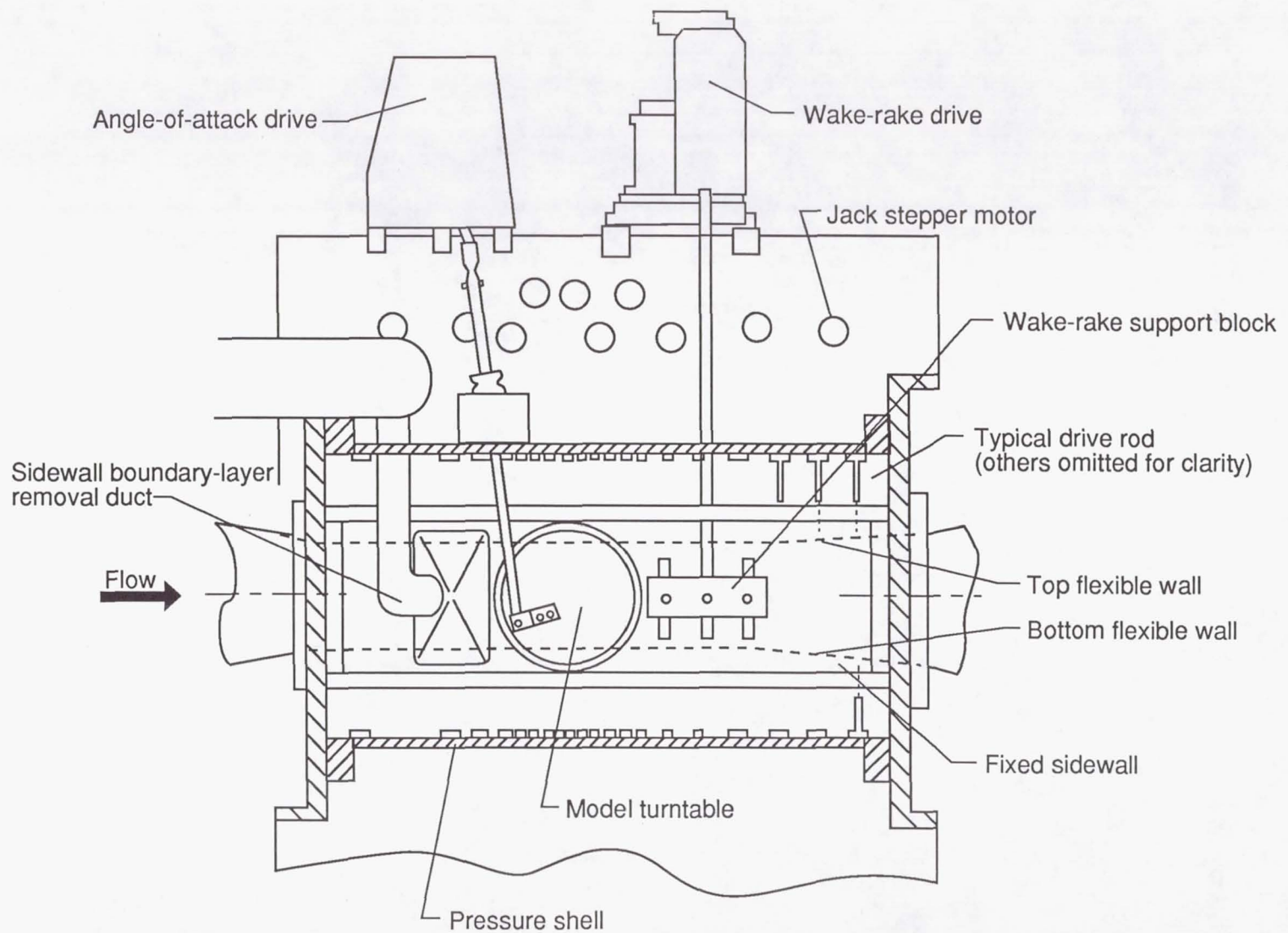
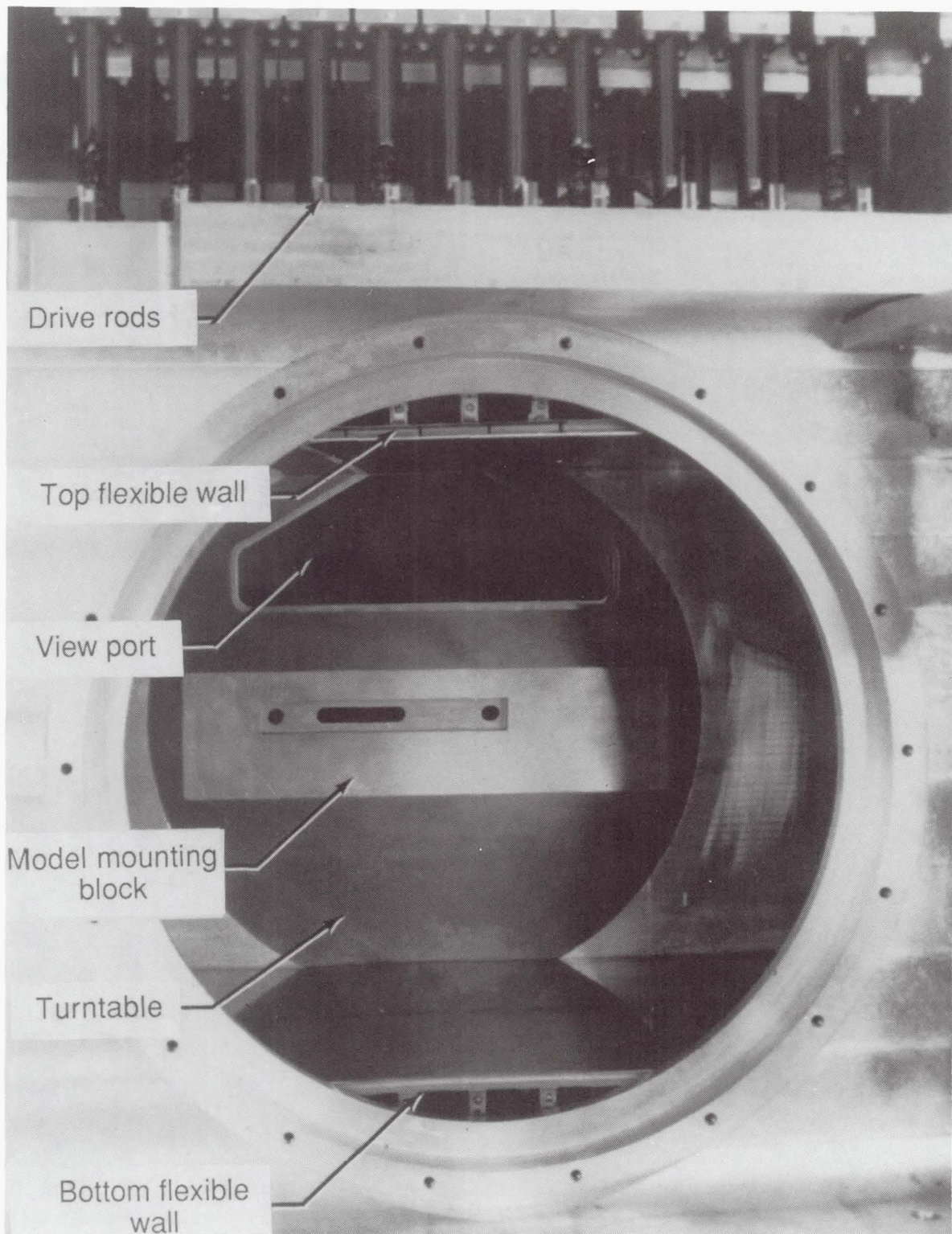


Figure 5. Schematic of 13- by 13-in. adaptive wall test section with plenum sidewall removed.



Drive rods

Top flexible wall

View port

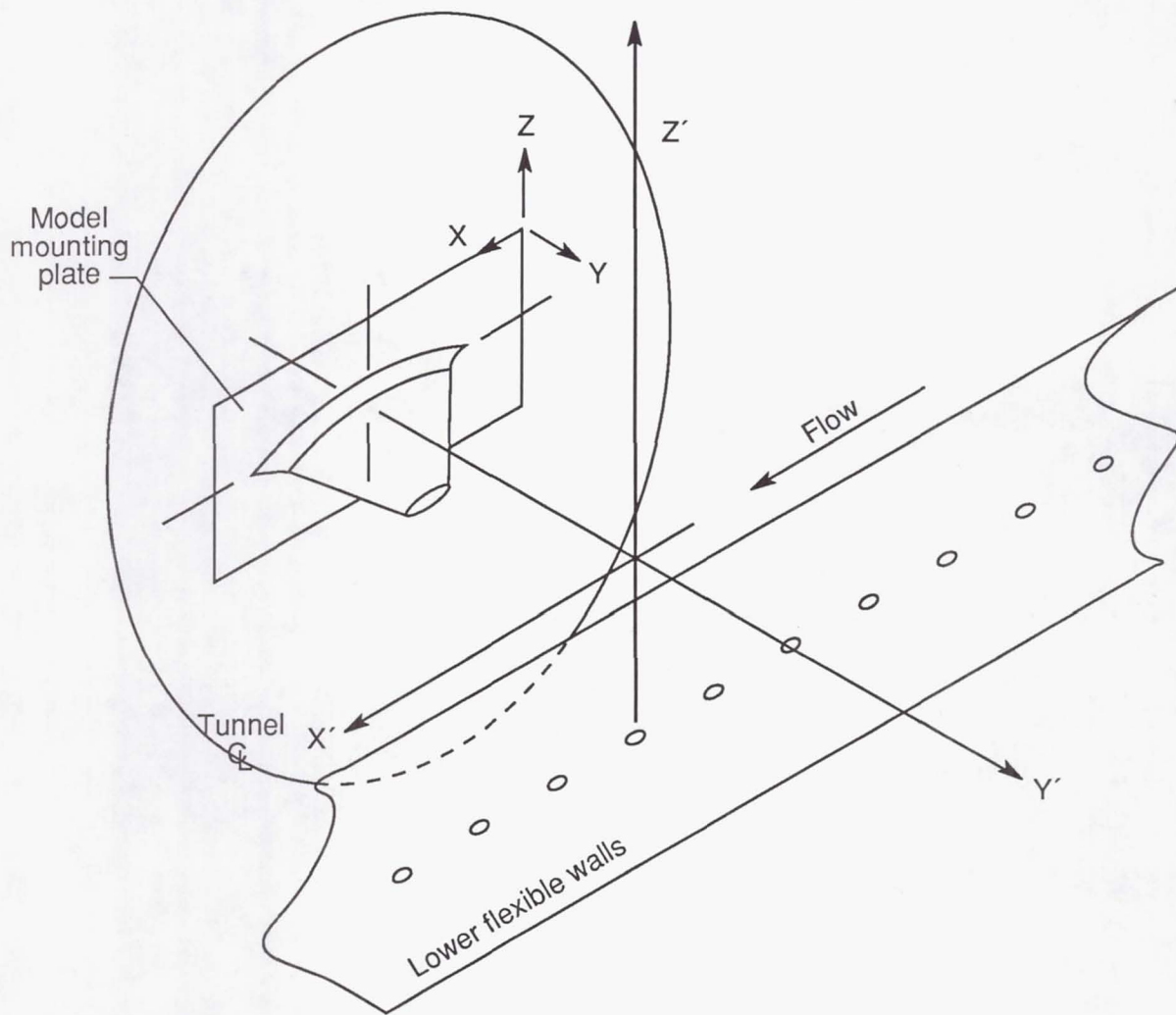
Model mounting block

Turntable

Bottom flexible wall

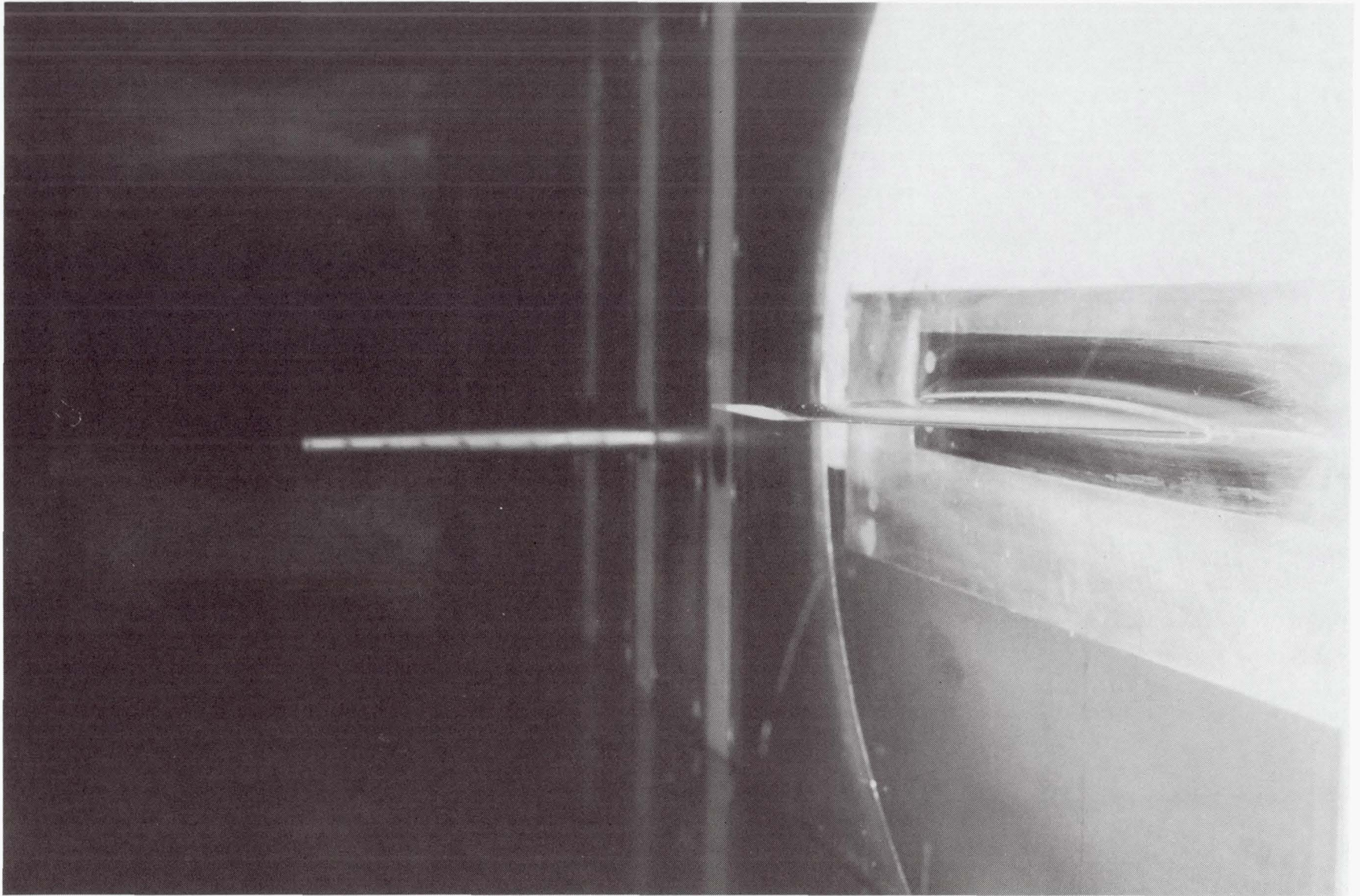
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Figure 6. Photograph of region where the model is installed.



(a) Schematic of model.

Figure 7. Model setup and mounting system (not to scale).

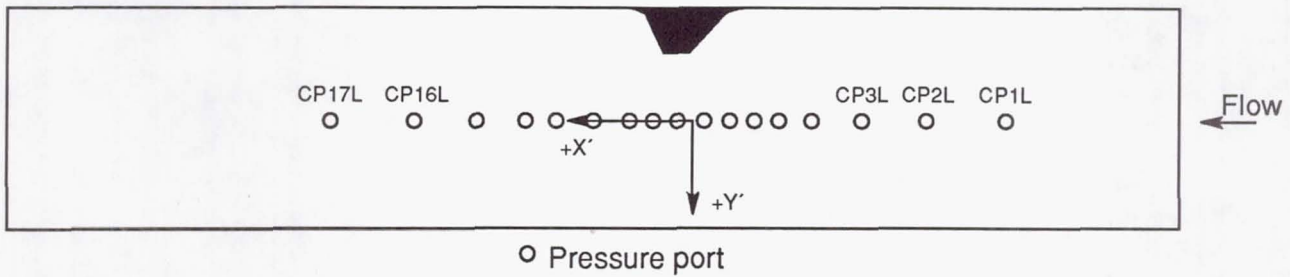


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(b) Photograph of model.

Figure 7. Continued.





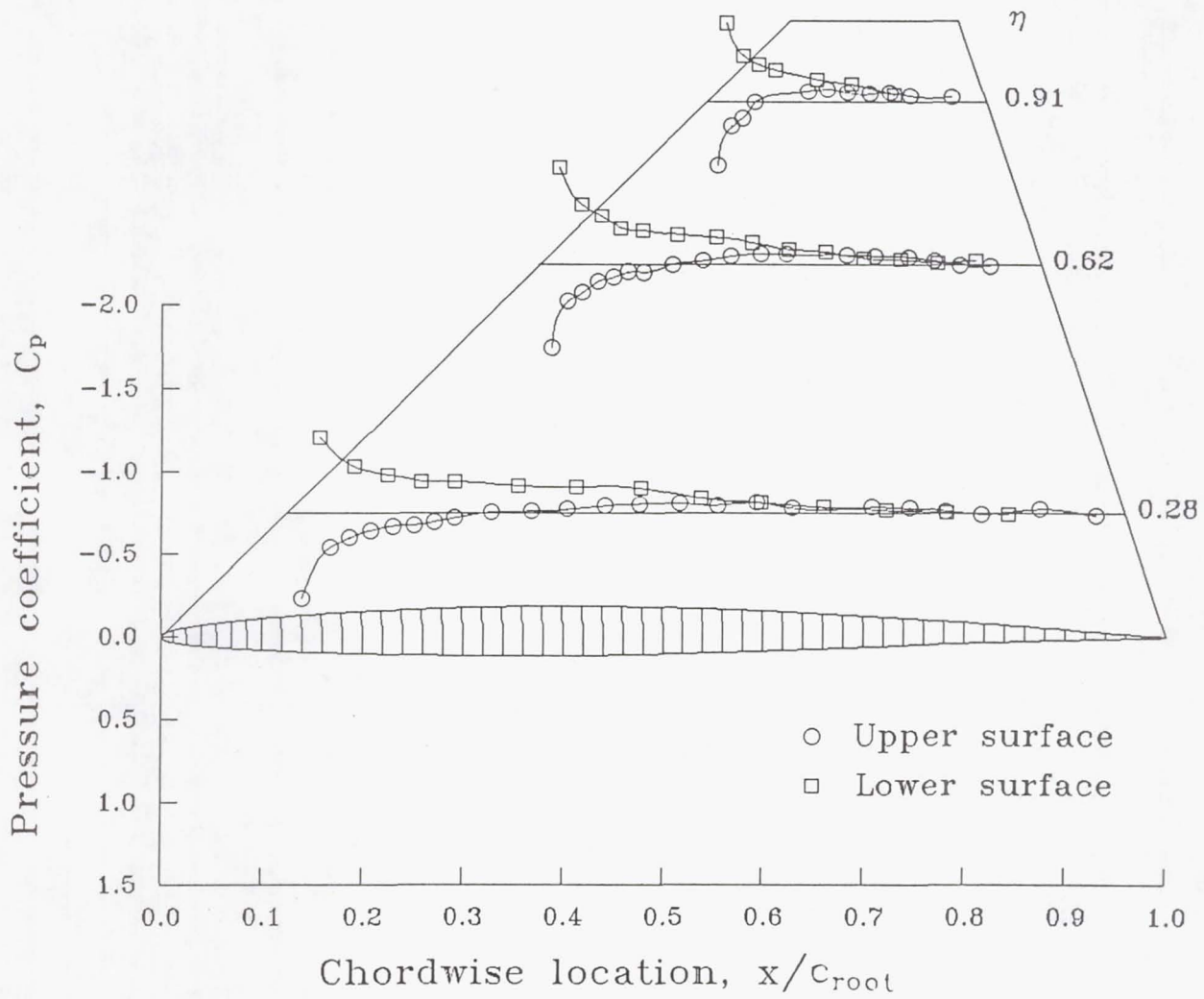
(c) Wing model projected onto lower flexible wall.

Figure 7. Concluded.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.5135	0.0269	0.5030	0.0406	0.3881
.0513	.2087	.0576	.2231	.0869	.1467
.0748	.1492	.0874	.1689	.1268	.1016
.1001	.1069	.1184	.0977	.1719	.0028
.1263	.0784	.1496	.0756	.3627	-.0639
.1523	.0729	.1779	.0406	.4311	-.0823
.1759	.0542	.2080	.0464	.5052	-.0595
.1998	.0295	.2674	-.0017	.5821	-.0520
.2436	-.0029	.3260	-.0247	.6553	-.0616
.2912	-.0091	.3818	-.0514	.7267	-.0408
.3345	-.0225	.4423	-.0686	.8756	-.0336
.3798	-.0453	.4942	-.0636		
.4213	-.0542	.6137	-.0623		
.4697	-.0596	.6687	-.0538		
.5154	-.0483	.7353	-.0478		
.5617	-.0644	.7874	-.0283		
.6041	-.0294	.8384	-.0028		
.6988	-.0361	.8982	.0054		
.7449	-.0295				
.7865	-.0150				
.8302	.0093				
.8994	-.0253				
.9651	.0152				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.4586	0.0408	-0.5974	0.0605	-0.4879
.0793	-.2849	.0833	-.3747	.1095	-.2867
.1201	-.2353	.1251	-.2971	.1584	-.2311
.1598	-.1953	.1625	-.2222	.2060	-.2037
.1996	-.1920	.2055	-.2042	.3295	-.1423
.2753	-.1653	.2761	-.1809	.4349	-.1106
.3449	-.1604	.3535	-.1656	.5604	-.0458
.4232	-.1524	.4252	-.1339		
.4951	-.0904	.4977	-.0949		
.5671	-.0638	.5720	-.0807		
.6411	-.0382	.6464	-.0425		
.7156	-.0165	.7193	-.0311		
.7886	-.0037	.7945	-.0158		
.8611	.0064	.8688	-.0291		

(a)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.297$ ;  $\alpha = -4.26^\circ$ .

Figure 8. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test angle-of-attack range at nominal conditions of  $M_{\infty} = 0.3$  and  $R_{\bar{c}} = 3.76 \times 10^6$ .



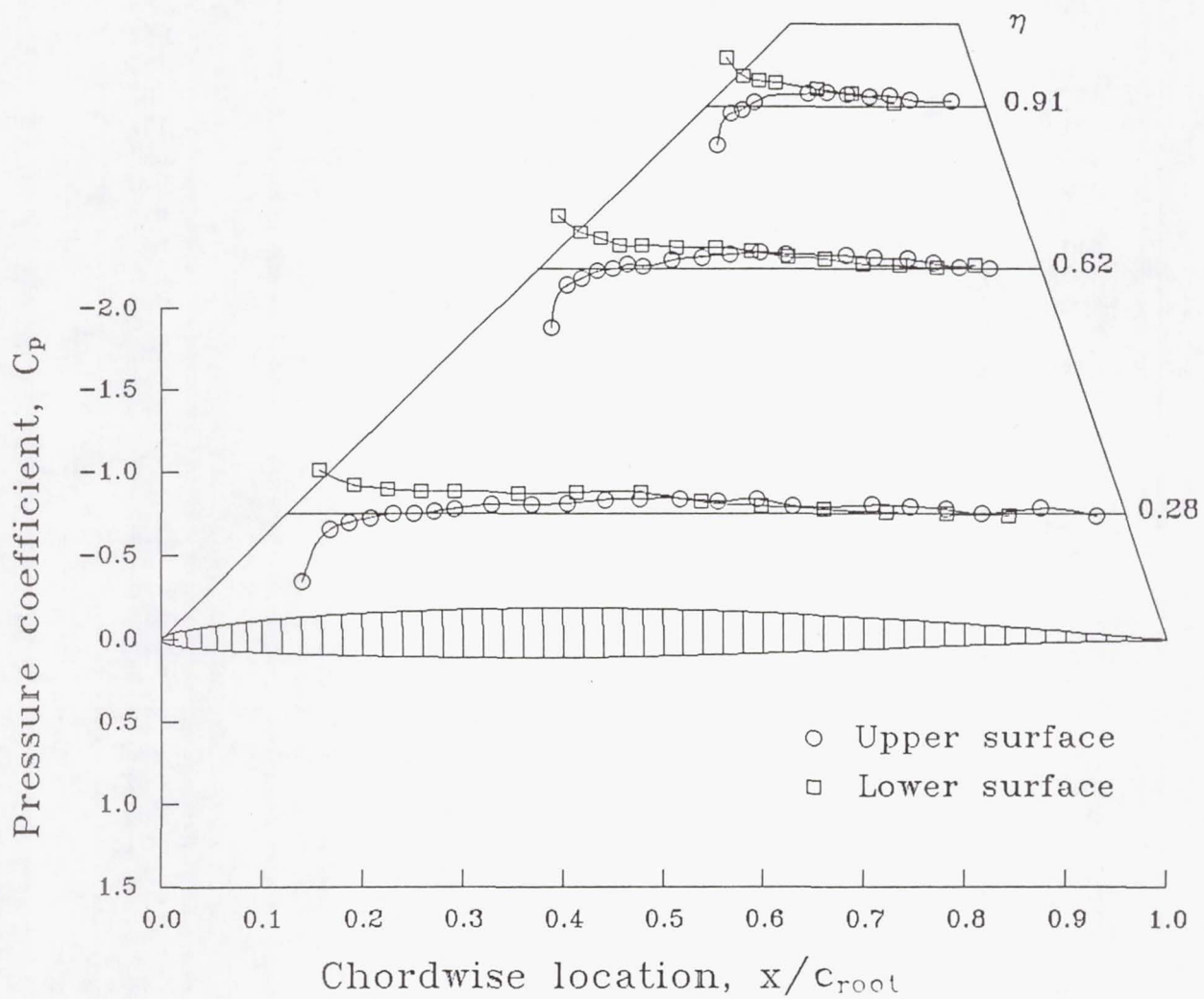
(a) Concluded.

Figure 8. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.4003	0.0269	0.3666	0.0406	0.2351
.0513	.0958	.0576	.0972	.0869	.0380
.0748	.0521	.0874	.0625	.1268	.0212
.1001	.0254	.1184	.0143	.1719	-.0301
.1263	.0021	.1496	.0015	.3627	-.0784
.1523	.0042	.1779	-.0262	.4311	-.0882
.1759	-.0111	.2080	-.0160	.5052	-.0722
.1998	-.0275	.2674	-.0548	.5821	-.0614
.2436	-.0540	.3260	-.0691	.6553	-.0666
.2912	-.0527	.3818	-.0865	.7267	-.0424
.3345	-.0610	.4423	-.0980	.8756	-.0308
.3798	-.0812	.4942	-.0886		
.4213	-.0855	.6137	-.0785		
.4697	-.0876	.6687	-.0662		
.5154	-.0722	.7353	-.0568		
.5617	-.0852	.7874	-.0350		
.6041	-.0476	.8384	-.0073		
.6988	-.0492	.8982	.0029		
.7449	-.0405				
.7865	-.0238				
.8302	.0023				
.8994	-.0296				
.9651	.0132				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.2675	0.0408	-0.3310	0.0605	-0.3031
.0793	-.1715	.0833	-.2292	.1095	-.1843
.1201	-.1483	.1251	-.1875	.1584	-.1599
.1598	-.1295	.1625	-.1416	.2060	-.1481
.1996	-.1335	.2055	-.1376	.3295	-.1048
.2753	-.1197	.2761	-.1296	.4349	-.0808
.3449	-.1254	.3535	-.1282	.5604	-.0199
.4232	-.1252	.4252	-.1047		
.4951	-.0689	.4977	-.0716		
.5671	-.0469	.5720	-.0617		
.6411	-.0245	.6464	-.0275		
.7156	-.0062	.7193	-.0187		
.7886	.0040	.7945	-.0052		
.8611	.0122	.8688	-.0203		

(b)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.297$ ;  $\alpha = -2.29^\circ$ .

Figure 8. Continued.



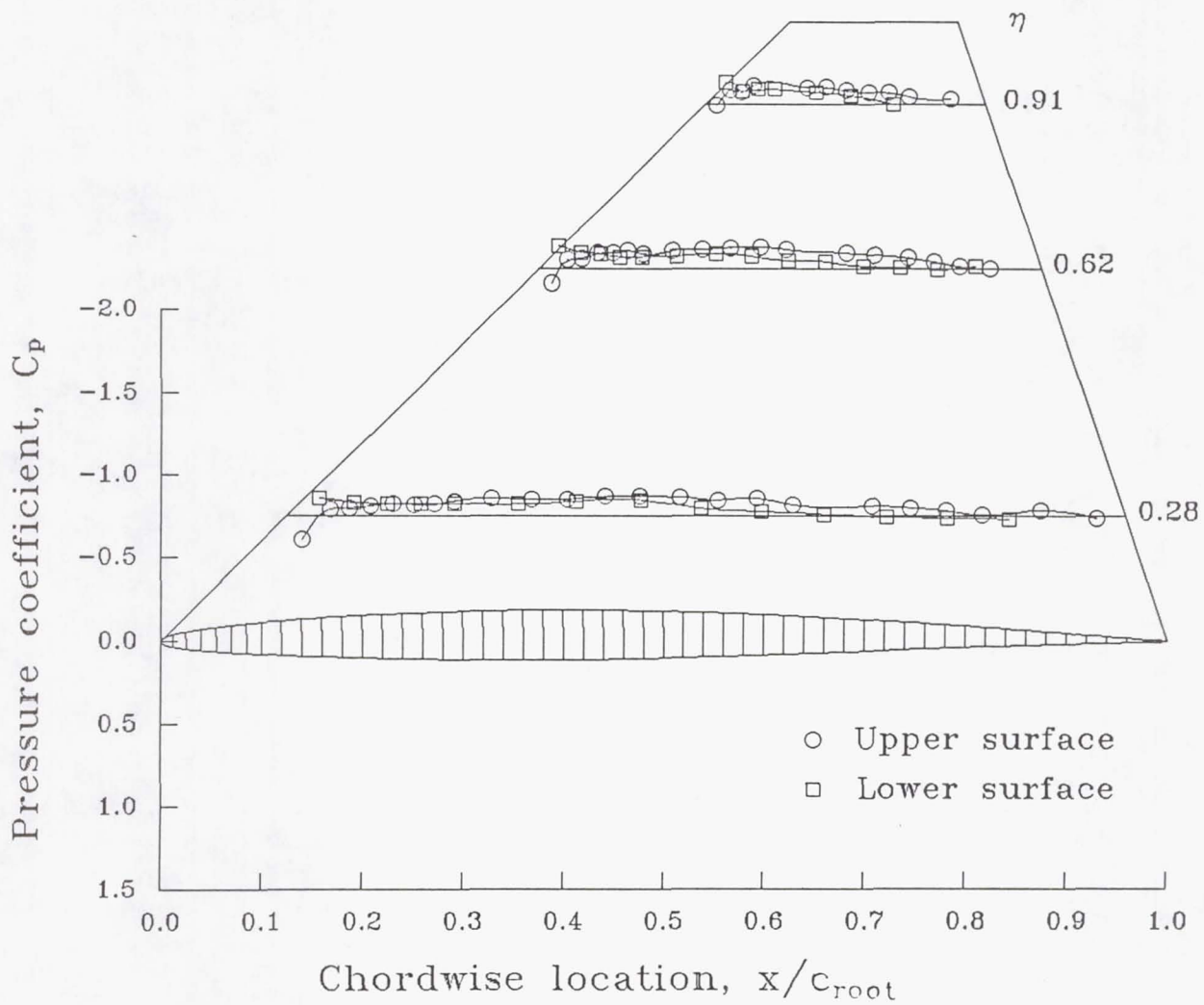
(b) Concluded.

Figure 8. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.1412	0.0269	0.0843	0.0406	0.0045
.0513	-.0374	.0576	-.0516	.0869	-.0884
.0748	-.0474	.0874	-.0576	.1268	-.0725
.1001	-.0618	.1184	-.0929	.1719	-.1165
.1263	-.0726	.1496	-.0933	.3627	-.1024
.1523	-.0668	.1779	-.1065	.4311	-.1074
.1759	-.0695	.2080	-.0833	.5052	-.0840
.1998	-.0886	.2674	-.1070	.5821	-.0707
.2436	-.1064	.3260	-.1127	.6553	-.0725
.2912	-.0977	.3818	-.1219	.7267	-.0453
.3345	-.1017	.4423	-.1272	.8756	-.0307
.3798	-.1160	.4942	-.1117		
.4213	-.1157	.6137	-.0920		
.4697	-.1134	.6687	-.0767		
.5154	-.0945	.7353	-.0641		
.5617	-.1038	.7874	-.0404		
.6041	-.0629	.8384	-.0108		
.6988	-.0593	.8982	.0005		
.7449	-.0486				
.7865	-.0302				
.8302	-.0023				
.8994	-.0327				
.9651	.0122				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.1078	0.0408	-0.1312	0.0605	-0.1328
.0793	-.0808	.0833	-.0953	.1095	-.0820
.1201	-.0733	.1251	-.0870	.1584	-.0925
.1598	-.0743	.1625	-.0665	.2060	-.0951
.1996	-.0732	.2055	-.0681	.3295	-.0713
.2753	-.0691	.2761	-.0765	.4349	-.0562
.3449	-.0866	.3535	-.0879	.5604	-.0010
.4232	-.0946	.4252	-.0729		
.4951	-.0438	.4977	-.0463		
.5671	-.0273	.5720	-.0415		
.6411	-.0088	.6464	-.0118		
.7156	.0059	.7193	-.0065		
.7886	.0131	.7945	.0046		
.8611	.0190	.8688	-.0128		

(c)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.298$ ;  $\alpha = -0.01^{\circ}$ .

Figure 8. Continued.



(c) Concluded.

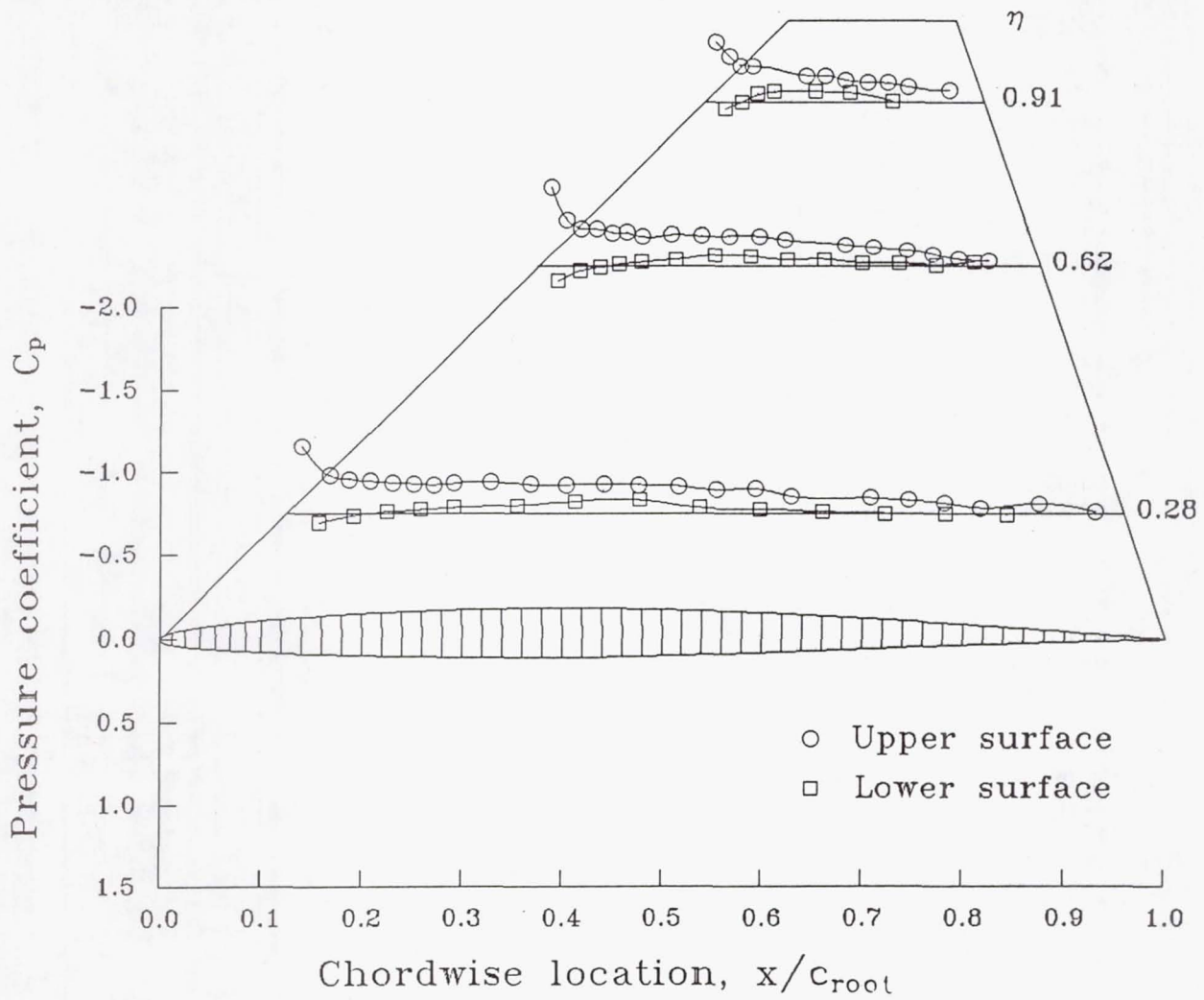
Figure 8. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.4116	0.0269	-0.4865	0.0406	-0.3704
.0513	-.2308	.0576	-.2865	.0869	-.2818
.0748	-.2089	.0874	-.2322	.1268	-.2234
.1001	-.1966	.1184	-.2346	.1719	-.2228
.1263	-.1866	.1496	-.2094	.3627	-.1627
.1523	-.1805	.1779	-.2100	.4311	-.1638
.1759	-.1739	.2080	-.1844	.5052	-.1360
.1998	-.1861	.2674	-.1971	.5821	-.1184
.2436	-.1934	.3260	-.1909	.6553	-.1195
.2912	-.1760	.3818	-.1899	.7267	-.0936
.3345	-.1745	.4423	-.1879	.8756	-.0759
.3798	-.1807	.4942	-.1654		
.4213	-.1755	.6137	-.1354		
.4697	-.1680	.6687	-.1167		
.5154	-.1443	.7353	-.1006		
.5617	-.1499	.7874	-.0750		
.6041	-.1059	.8384	-.0432		
.6988	-.0957	.8982	-.0300		
.7449	-.0829				
.7865	-.0626				
.8302	-.0324				
.8994	-.0597				
.9651	-.0116				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.0559	0.0408	0.0845	0.0605	0.0422
.0793	.0140	.0833	.0280	.1095	-.0022
.1201	-.0093	.1251	.0065	.1584	-.0507
.1598	-.0227	.1625	-.0119	.2060	-.0651
.1996	-.0361	.2055	-.0251	.3295	-.0655
.2753	-.0477	.2761	-.0414	.4349	-.0573
.3449	-.0724	.3535	-.0658	.5604	-.0102
.4232	-.0840	.4252	-.0609		
.4951	-.0357	.4977	-.0427		
.5671	-.0262	.5720	-.0423		
.6411	-.0119	.6464	-.0181		
.7156	-.0016	.7193	-.0170		
.7886	.0016	.7945	-.0082		
.8611	.0046	.8688	-.0289		

(d)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.298$ ;  $\alpha = 1.96^\circ$ .

Figure 8. Continued.





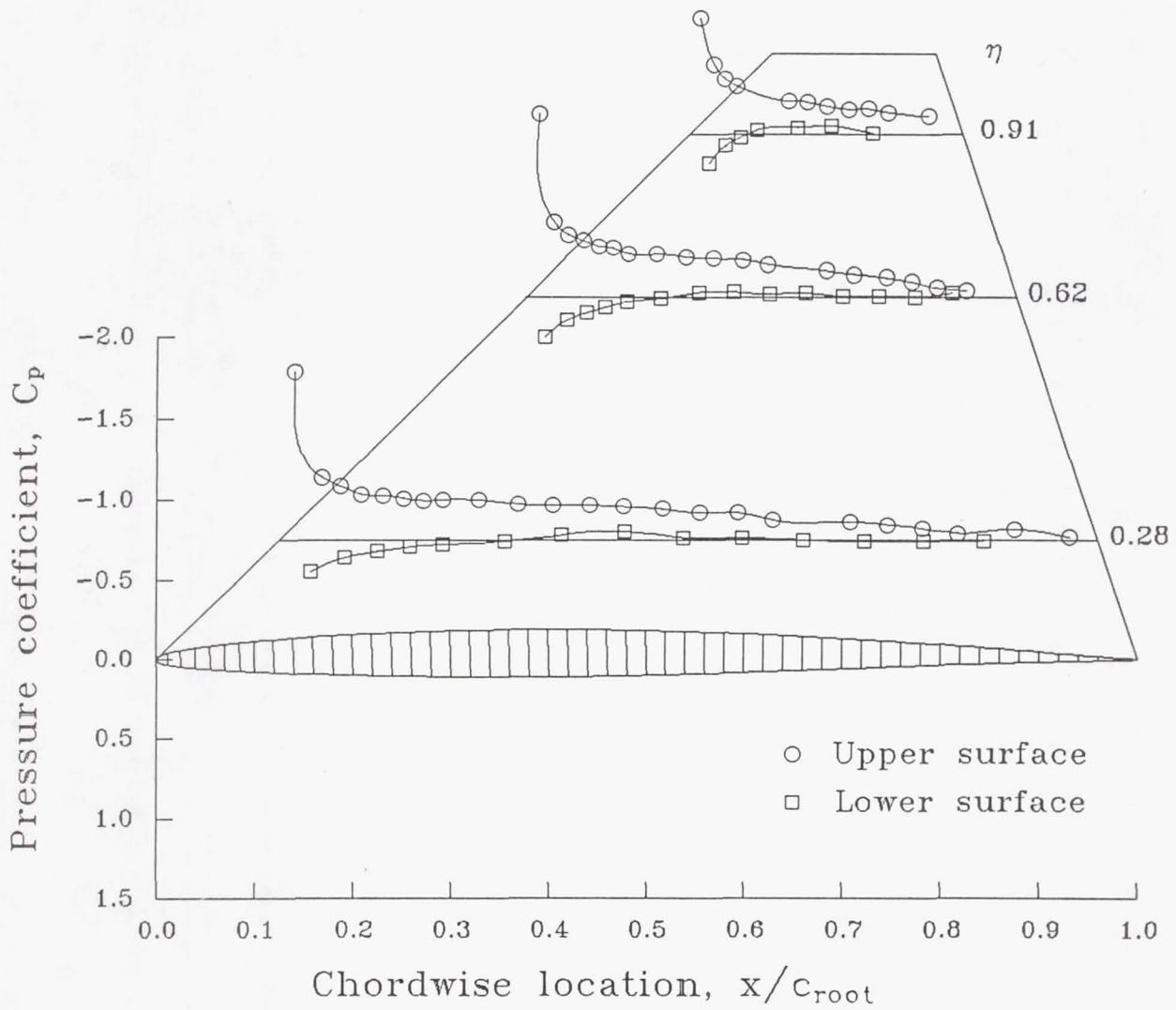
(d) Concluded.

Figure 8. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0390	0.0269	-1.1240	0.0406	-0.7257
.0513	-.3939	.0576	-.4605	.0869	-.4364
.0748	-.3394	.0874	-.3800	.1268	-.3500
.1001	-.2878	.1184	-.3469	.1719	-.3036
.1263	-.2791	.1496	-.3097	.3627	-.2059
.1523	-.2621	.1779	-.2973	.4311	-.2019
.1759	-.2482	.2080	-.2612	.5052	-.1738
.1998	-.2539	.2674	-.2596	.5821	-.1553
.2436	-.2510	.3260	-.2419	.6553	-.1580
.2912	-.2259	.3818	-.2319	.7267	-.1362
.3345	-.2158	.4423	-.2225	.8756	-.1135
.3798	-.2190	.4942	-.1958		
.4213	-.2092	.6137	-.1574		
.4697	-.1963	.6687	-.1364		
.5154	-.1702	.7353	-.1183		
.5617	-.1722	.7874	-.0903		
.6041	-.1245	.8384	-.0582		
.6988	-.1107	.8982	-.0429		
.7449	-.0950				
.7865	-.0732				
.8302	-.0410				
.8994	-.0665				
.9651	-.0162				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.1947	0.0408	0.2471	0.0605	0.1826
.0793	.1100	.0833	.1378	.1095	.0685
.1201	.0692	.1251	.0962	.1584	.0206
.1598	.0427	.1625	.0600	.2060	-.0288
.1996	.0293	.2055	.0277	.3295	-.0438
.2753	.0083	.2761	.0081	.4349	-.0523
.3449	-.0303	.3535	-.0297	.5604	-.0053
.4232	-.0531	.4252	-.0329		
.4951	-.0154	.4977	-.0215		
.5671	-.0101	.5720	-.0281		
.6411	-.0004	.6464	-.0067		
.7156	.0069	.7193	-.0092		
.7886	.0081	.7945	-.0030		
.8611	.0083	.8688	-.0264		

(e)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.298$ ;  $\alpha = 3.94^{\circ}$ .

Figure 8. Continued.



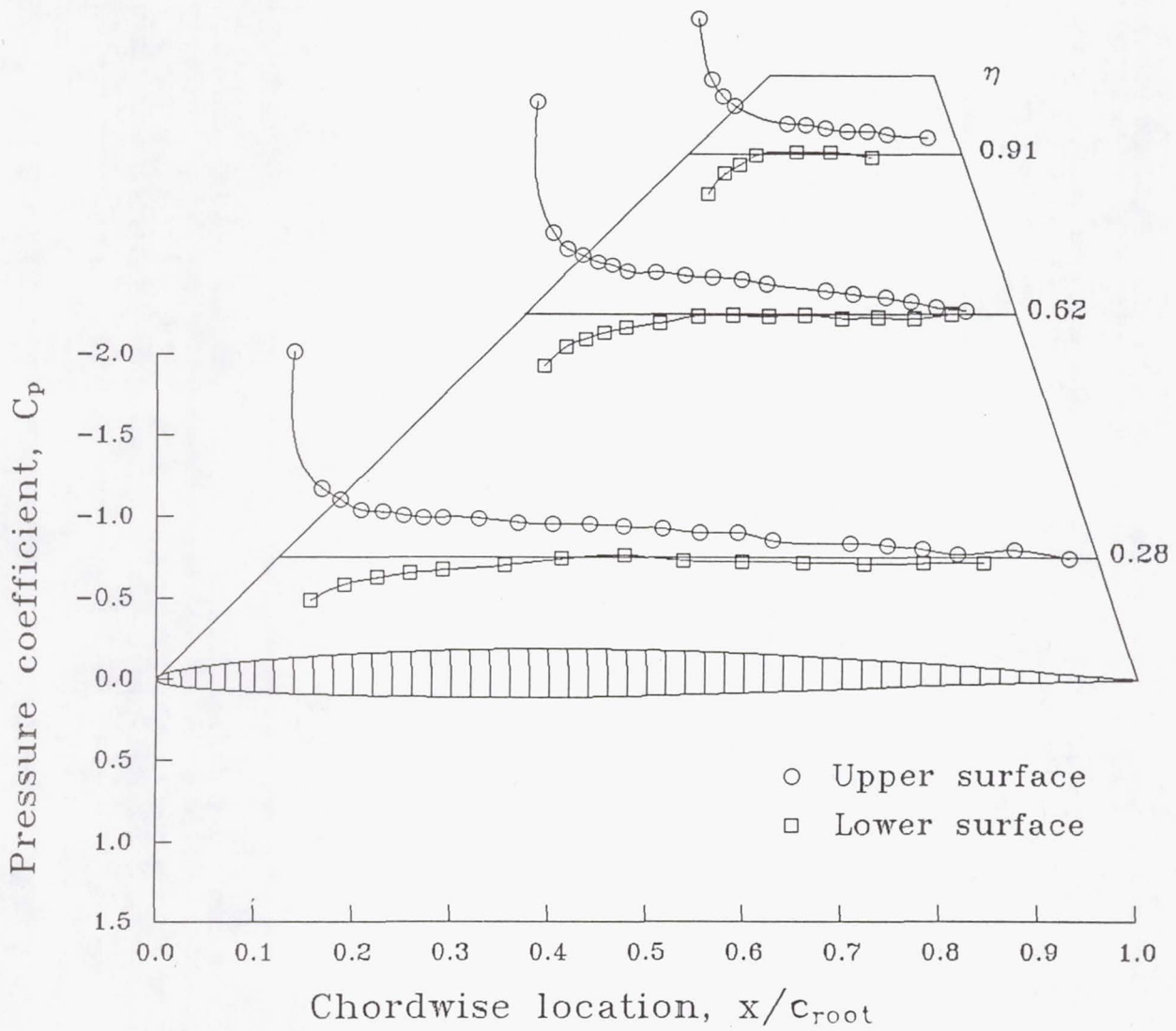
(e) Concluded.

Figure 8. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.2680	0.0269	-1.3330	0.0406	-0.8591
.0513	-.4289	.0576	-.5079	.0869	-.4735
.0748	-.3588	.0874	-.4078	.1268	-.3694
.1001	-.2953	.1184	-.3637	.1719	-.3080
.1263	-.2825	.1496	-.3177	.3627	-.1960
.1523	-.2621	.1779	-.3000	.4311	-.1905
.1759	-.2441	.2080	-.2585	.5052	-.1646
.1998	-.2482	.2674	-.2526	.5821	-.1465
.2436	-.2420	.3260	-.2314	.6553	-.1506
.2912	-.2138	.3818	-.2178	.7267	-.1303
.3345	-.2038	.4423	-.2066	.8756	-.1063
.3798	-.2034	.4942	-.1780		
.4213	-.1917	.6137	-.1383		
.4697	-.1778	.6687	-.1173		
.5154	-.1506	.7353	-.0987		
.5617	-.1517	.7874	-.0706		
.6041	-.1035	.8384	-.0382		
.6988	-.0884	.8982	-.0224		
.7449	-.0725				
.7865	-.0510				
.8302	-.0186				
.8994	-.0437				
.9651	.0073				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2599	0.0408	0.3182	0.0605	0.2510
.0793	.1652	.0833	.1974	.1095	.1206
.1201	.1217	.1251	.1514	.1584	.0663
.1598	.0972	.1625	.1119	.2060	.0091
.1996	.0768	.2055	.0822	.3295	-.0128
.2753	.0510	.2761	.0519	.4349	-.0159
.3449	.0110	.3535	.0103	.5604	.0220
.4232	-.0142	.4252	.0054		
.4951	.0217	.4977	.0143		
.5671	.0246	.5720	.0052		
.6411	.0325	.6464	.0246		
.7156	.0380	.7193	.0209		
.7886	.0378	.7945	.0257		
.8611	.0364	.8688	.0004		

(f)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.298$ ;  $\alpha = 4.90^\circ$ .

Figure 8. Continued.



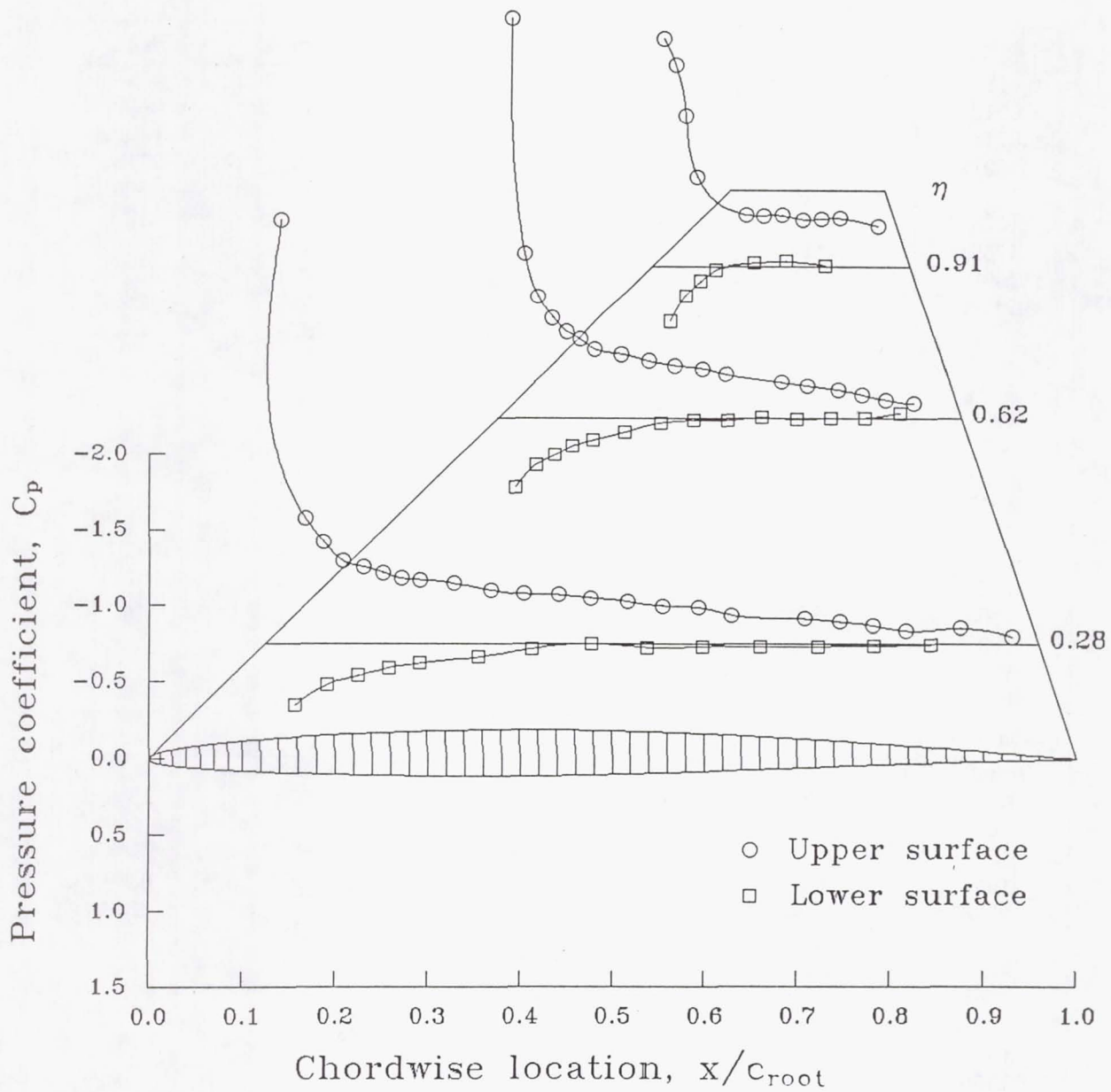
(f) Concluded.

Figure 8. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-2.8040	0.0269	-2.6350	0.0406	-1.5010
.0513	-.8352	.0576	-1.0900	.0869	-1.3310
.0748	-.6718	.0874	-.7985	.1268	-.9888
.1001	-.5446	.1184	-.6553	.1719	-.5848
.1263	-.5068	.1496	-.5686	.3627	-.3382
.1523	-.4679	.1779	-.5201	.4311	-.3350
.1759	-.4298	.2080	-.4553	.5052	-.3402
.1998	-.4220	.2674	-.4232	.5821	-.3096
.2436	-.3982	.3260	-.3832	.6553	-.3163
.2912	-.3537	.3818	-.3481	.7267	-.3202
.3345	-.3302	.4423	-.3283	.8756	-.2688
.3798	-.3240	.4942	-.2922		
.4213	-.3021	.6137	-.2377		
.4697	-.2802	.6687	-.2124		
.5154	-.2477	.7353	-.1876		
.5617	-.2413	.7874	-.1549		
.6041	-.1879	.8384	-.1195		
.6988	-.1643	.8982	-.0971		
.7449	-.1442				
.7865	-.1191				
.8302	-.0823				
.8994	-.1037				
.9651	-.0463				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4011	0.0408	0.4607	0.0605	0.3664
.0793	.2702	.0833	.3113	.1095	.1908
.1201	.2097	.1251	.2480	.1584	.0947
.1598	.1617	.1625	.1885	.2060	.0214
.1996	.1300	.2055	.1481	.3295	-.0271
.2753	.0888	.2761	.0909	.4349	-.0373
.3449	.0343	.3535	.0313	.5604	-.0088
.4232	-.0021	.4252	.0148		
.4951	.0248	.4977	.0131		
.5671	.0192	.5720	-.0041		
.6411	.0197	.6464	.0093		
.7156	.0187	.7193	-.0019		
.7886	.0133	.7945	-.0021		
.8611	.0061	.8688	-.0351		

(g)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.309$ ;  $\alpha = 8.54^\circ$ .

Figure 8. Continued.



(g) Concluded.

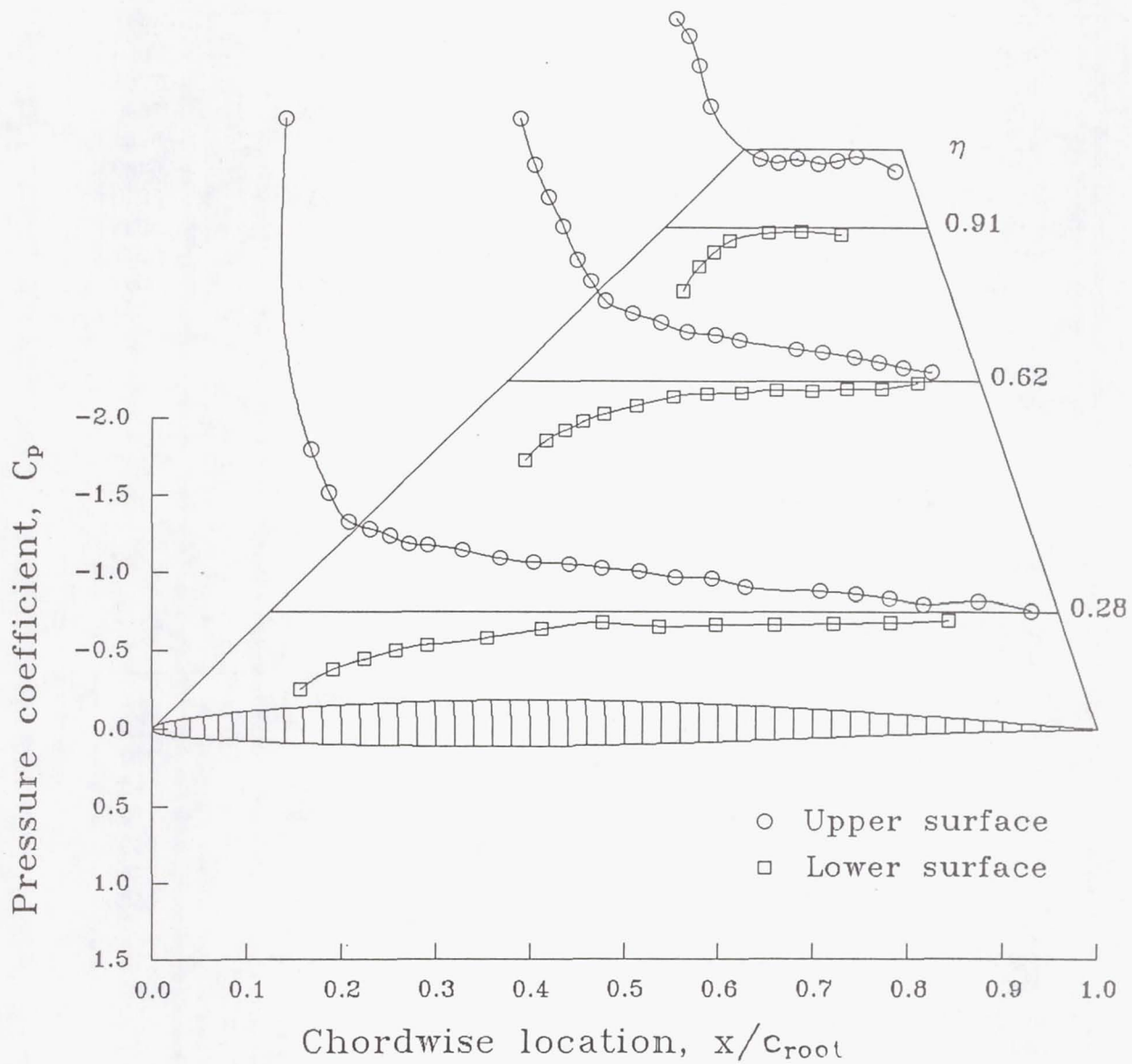
Figure 8. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-3.1950	0.0269	-1.6930	0.0406	-1.3410
.0513	-1.0450	.0576	-1.3980	.0869	-1.2300
.0748	-.7638	.0874	-1.1930	.1268	-1.0320
.1001	-.5796	.1184	-1.0080	.1719	-.7718
.1263	-.5348	.1496	-.7936	.3627	-.4398
.1523	-.4911	.1779	-.6457	.4311	-.4132
.1759	-.4419	.2080	-.5227	.5052	-.4389
.1998	-.4305	.2674	-.4388	.5821	-.4095
.2436	-.3998	.3260	-.3820	.6553	-.4259
.2912	-.3453	.3818	-.3185	.7267	-.4561
.3345	-.3170	.4423	-.3019	.8756	-.3623
.3798	-.3069	.4942	-.2670		
.4213	-.2819	.6137	-.2089		
.4697	-.2570	.6687	-.1838		
.5154	-.2213	.7353	-.1551		
.5617	-.2143	.7874	-.1230		
.6041	-.1590	.8384	-.0874		
.6988	-.1336	.8982	-.0607		
.7449	-.1119				
.7865	-.0855				
.8302	-.0476				
.8994	-.0677				
.9651	-.0081				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4938	0.0408	0.5226	0.0605	0.4184
.0793	.3681	.0833	.3924	.1095	.2559
.1201	.3044	.1251	.3264	.1584	.1609
.1598	.2469	.1625	.2676	.2060	.0858
.1996	.2139	.2055	.2212	.3295	.0360
.2753	.1680	.2761	.1663	.4349	.0232
.3449	.1096	.3535	.1039	.5604	.0480
.4232	.0699	.4252	.0842		
.4951	.0928	.4977	.0784		
.5671	.0828	.5720	.0577		
.6411	.0794	.6464	.0680		
.7156	.0756	.7193	.0532		
.7886	.0680	.7945	.0502		
.8611	.0577	.8688	.0131		

(h)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.295$ ;  $\alpha = 10.05^\circ$ .

Figure 8. Continued.





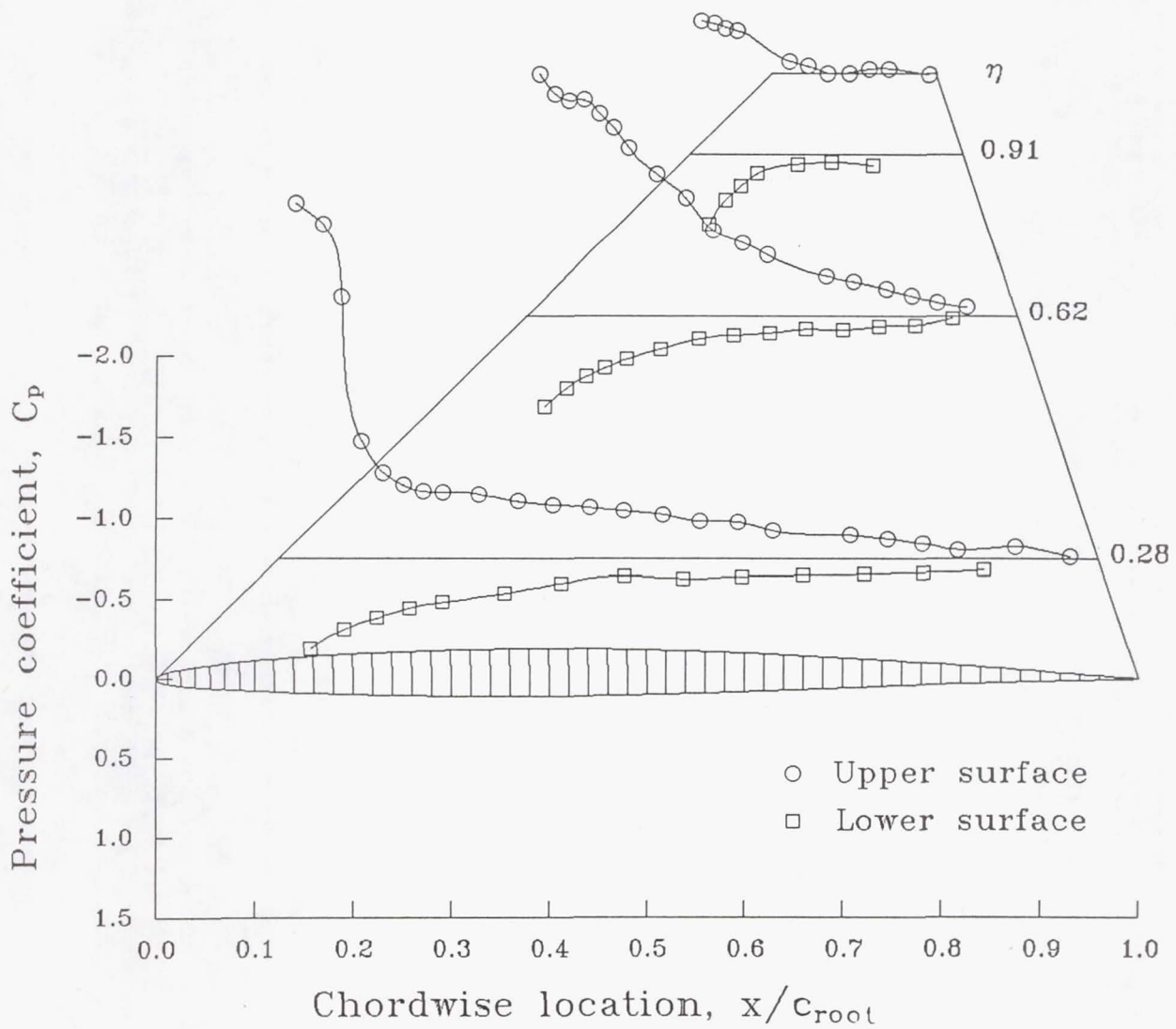
(h) Concluded.

Figure 8. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-2.1970	0.0269	-1.4970	0.0406	-0.8224
.0513	-2.0730	.0576	-1.3730	.0869	-.8090
.0748	-1.6190	.0874	-1.3320	.1268	-.7768
.1001	-.7252	.1184	-1.3400	.1719	-.7596
.1263	-.5354	.1496	-1.2540	.3627	-.5755
.1523	-.4567	.1779	-1.1680	.4311	-.5489
.1759	-.4158	.2080	-1.0420	.5052	-.5040
.1998	-.4148	.2674	-.8788	.5821	-.5038
.2436	-.4009	.3260	-.7305	.6553	-.5277
.2912	-.3558	.3818	-.5322	.7267	-.5301
.3345	-.3336	.4423	-.4568	.8756	-.4933
.3798	-.3191	.4942	-.3784		
.4213	-.2974	.6137	-.2470		
.4697	-.2730	.6687	-.2110		
.5154	-.2329	.7353	-.1650		
.5617	-.2282	.7874	-.1276		
.6041	-.1713	.8384	-.0880		
.6988	-.1426	.8982	-.0571		
.7449	-.1203				
.7865	-.0919				
.8302	-.0540				
.8994	-.0726				
.9651	-.0106				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.5634	0.0408	0.5635	0.0605	0.4265
.0793	.4421	.0833	.4453	.1095	.2797
.1201	.3711	.1251	.3746	.1584	.1908
.1598	.3054	.1625	.3230	.2060	.1133
.1996	.2689	.2055	.2692	.3295	.0595
.2753	.2171	.2761	.2064	.4349	.0466
.3449	.1532	.3535	.1404	.5604	.0668
.4232	.1079	.4252	.1174		
.4951	.1265	.4977	.1071		
.5671	.1116	.5720	.0813		
.6411	.1035	.6464	.0866		
.7156	.0958	.7193	.0657		
.7886	.0847	.7945	.0573		
.8611	.0707	.8688	.0128		

(i)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.295$ ;  $\alpha = 12.08^\circ$ .

Figure 8. Continued.



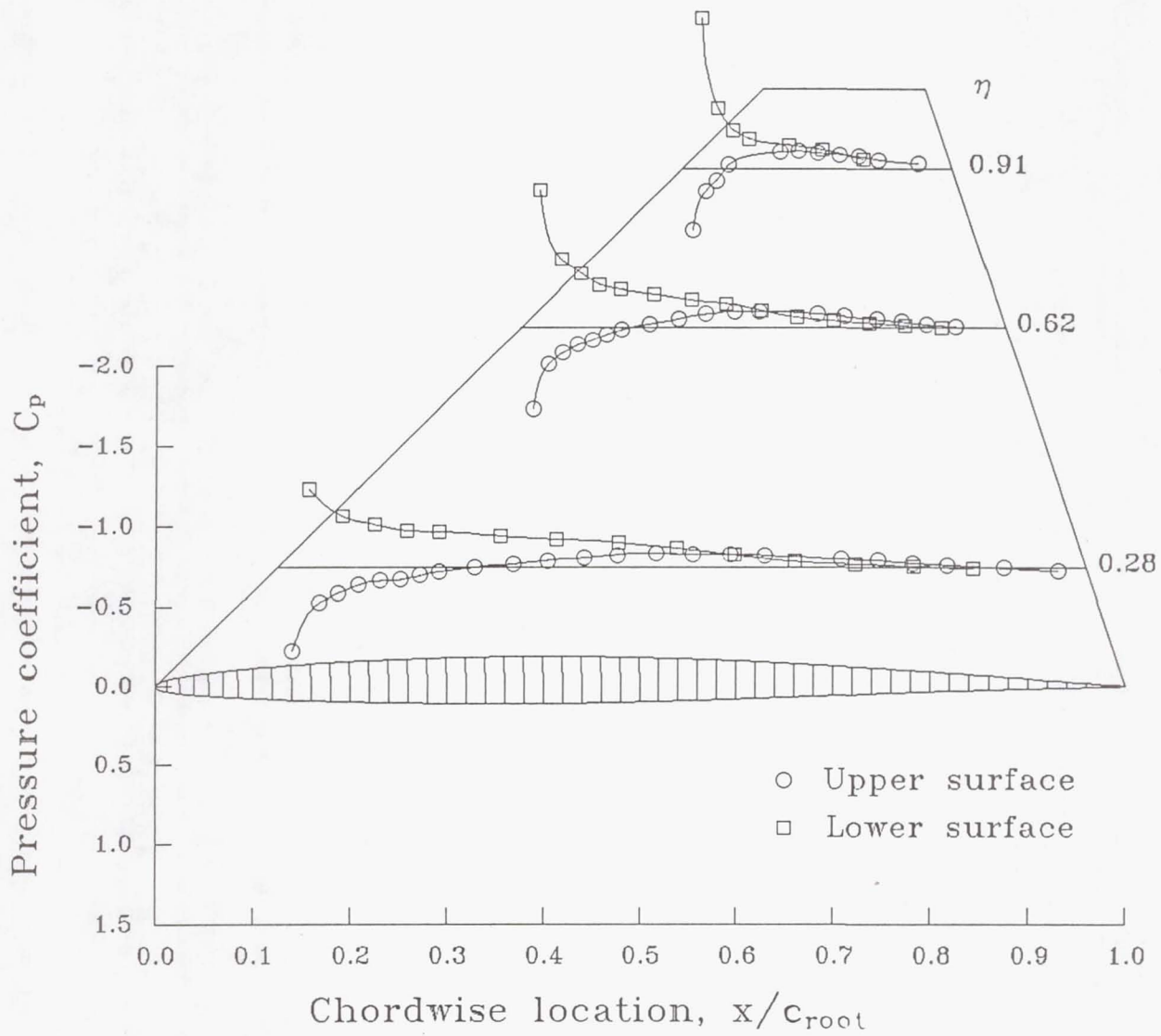
(i) Concluded.

Figure 8. Concluded.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.5261	0.0269	0.5150	0.0406	0.3804
.0513	.2212	.0576	.2305	.0869	.1384
.0748	.1607	.0874	.1595	.1268	.0703
.1001	.1068	.1184	.1094	.1719	-.0250
.1263	.0840	.1496	.0787	.3627	-.1040
.1523	.0774	.1779	.0452	.4311	-.1149
.1759	.0498	.2080	.0164	.5052	-.0995
.1998	.0301	.2674	-.0219	.5821	-.0885
.2436	.0002	.3260	-.0545	.6553	-.0801
.2912	-.0198	.3818	-.0835	.7267	-.0552
.3345	-.0413	.4423	-.0996	.8756	-.0339
.3798	-.0597	.4942	-.1031		
.4213	-.0752	.6137	-.0868		
.4697	-.0874	.6687	-.0709		
.5154	-.0761	.7353	-.0523		
.5617	-.0808	.7874	-.0378		
.6041	-.0729	.8384	-.0205		
.6988	-.0530	.8982	-.0052		
.7449	-.0435				
.7865	-.0273				
.8302	-.0113				
.8994	.0040				
.9651	.0211				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.4877	0.0408	-0.8682	0.0605	-0.9412
.0793	-.3199	.0833	-.4348	.1095	-.3823
.1201	-.2642	.1251	-.3403	.1584	-.2439
.1598	-.2268	.1625	-.2684	.2060	-.1885
.1996	-.2195	.2055	-.2392	.3295	-.1506
.2753	-.1922	.2761	-.2076	.4349	-.1194
.3449	-.1738	.3535	-.1725	.5604	-.0624
.4232	-.1535	.4252	-.1498		
.4951	-.1174	.4977	-.1070		
.5671	-.0760	.5720	-.0643		
.6411	-.0378	.6464	-.0435		
.7156	-.0200	.7193	-.0293		
.7886	-.0051	.7945	-.0123		
.8611	.0106	.8688	-.0005		

(a)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.692$ ;  $\alpha = -3.96^\circ$ .

Figure 9. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test angle-of-attack range at nominal conditions of  $M_{\infty} = 0.7$  and  $R_{\bar{c}} = 3.76 \times 10^6$ .



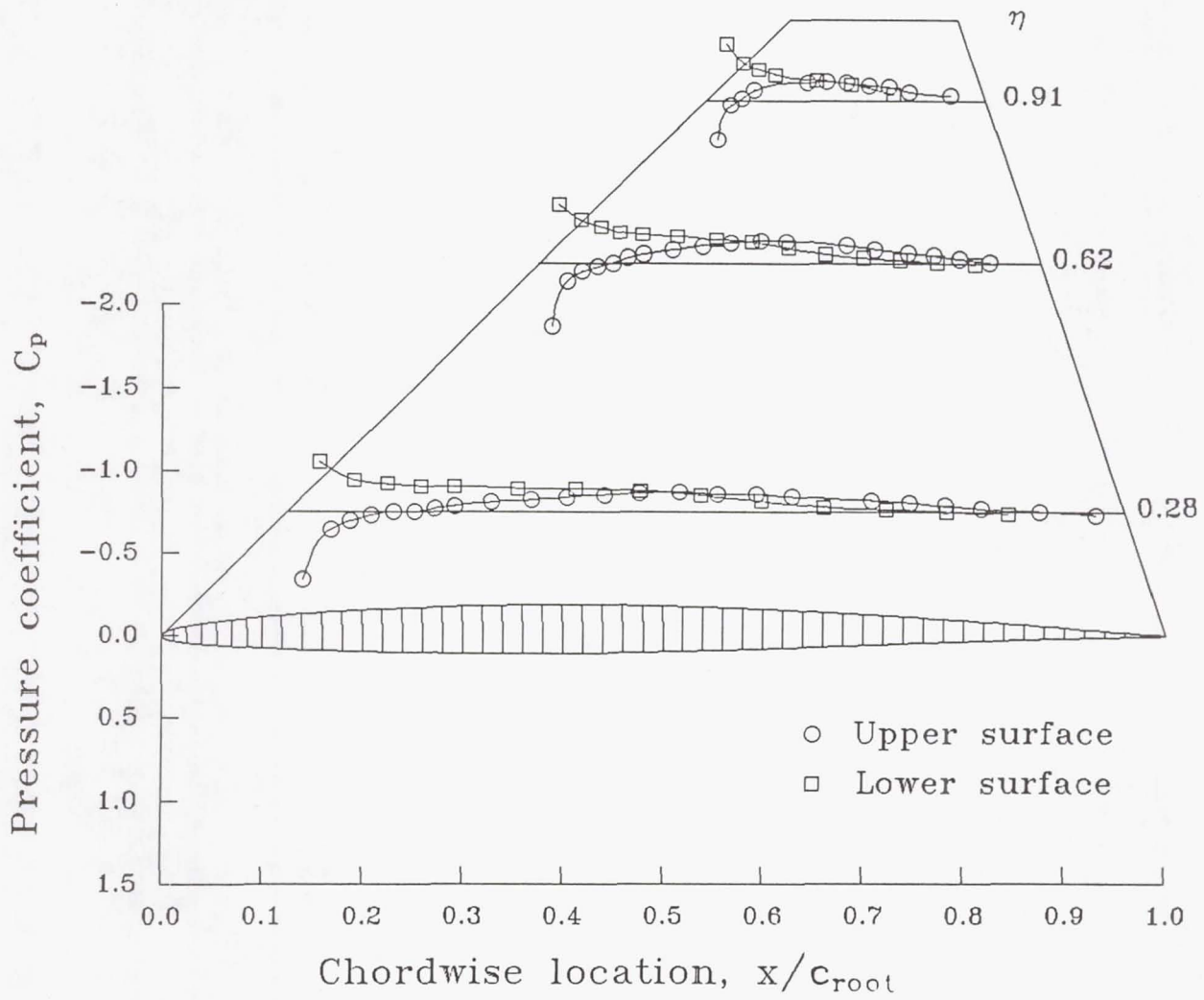
(a) Concluded.

Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.4077	0.0269	0.3810	0.0406	0.2420
.0513	.1059	.0576	.1036	.0869	.0275
.0748	.0576	.0874	.0492	.1268	-.0154
.1001	.0192	.1184	.0190	.1719	-.0652
.1263	.0003	.1496	-.0025	.3627	-.1159
.1523	.0021	.1779	-.0312	.4311	-.1199
.1759	-.0198	.2080	-.0539	.5052	-.1106
.1998	-.0345	.2674	-.0803	.5821	-.0966
.2436	-.0584	.3260	-.1030	.6553	-.0846
.2912	-.0706	.3818	-.1218	.7267	-.0569
.3345	-.0869	.4423	-.1312	.8756	-.0334
.3798	-.1021	.4942	-.1299		
.4213	-.1121	.6137	-.1034		
.4697	-.1194	.6687	-.0830		
.5154	-.1036	.7353	-.0609		
.5617	-.1045	.7874	-.0440		
.6041	-.0923	.8384	-.0248		
.6988	-.0673	.8982	-.0072		
.7449	-.0545				
.7865	-.0358				
.8302	-.0177				
.8994	-.0003				
.9651	.0187				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.3056	0.0408	-0.3597	0.0605	-0.3551
.0793	-.1951	.0833	-.2661	.1095	-.2355
.1201	-.1695	.1251	-.2215	.1584	-.1934
.1598	-.1544	.1625	-.1859	.2060	-.1632
.1996	-.1548	.2055	-.1722	.3295	-.1302
.2753	-.1422	.2761	-.1592	.4349	-.1029
.3449	-.1375	.3535	-.1401	.5604	-.0400
.4232	-.1264	.4252	-.1271		
.4951	-.0979	.4977	-.0906		
.5671	-.0627	.5720	-.0509		
.6411	-.0280	.6464	-.0318		
.7156	-.0131	.7193	-.0203		
.7886	-.0011	.7945	-.0048		
.8611	.0132	.8688	.0049		

(b)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.690$ ;  $\alpha = -1.91^{\circ}$ .

Figure 9. Continued.



(b) Concluded.

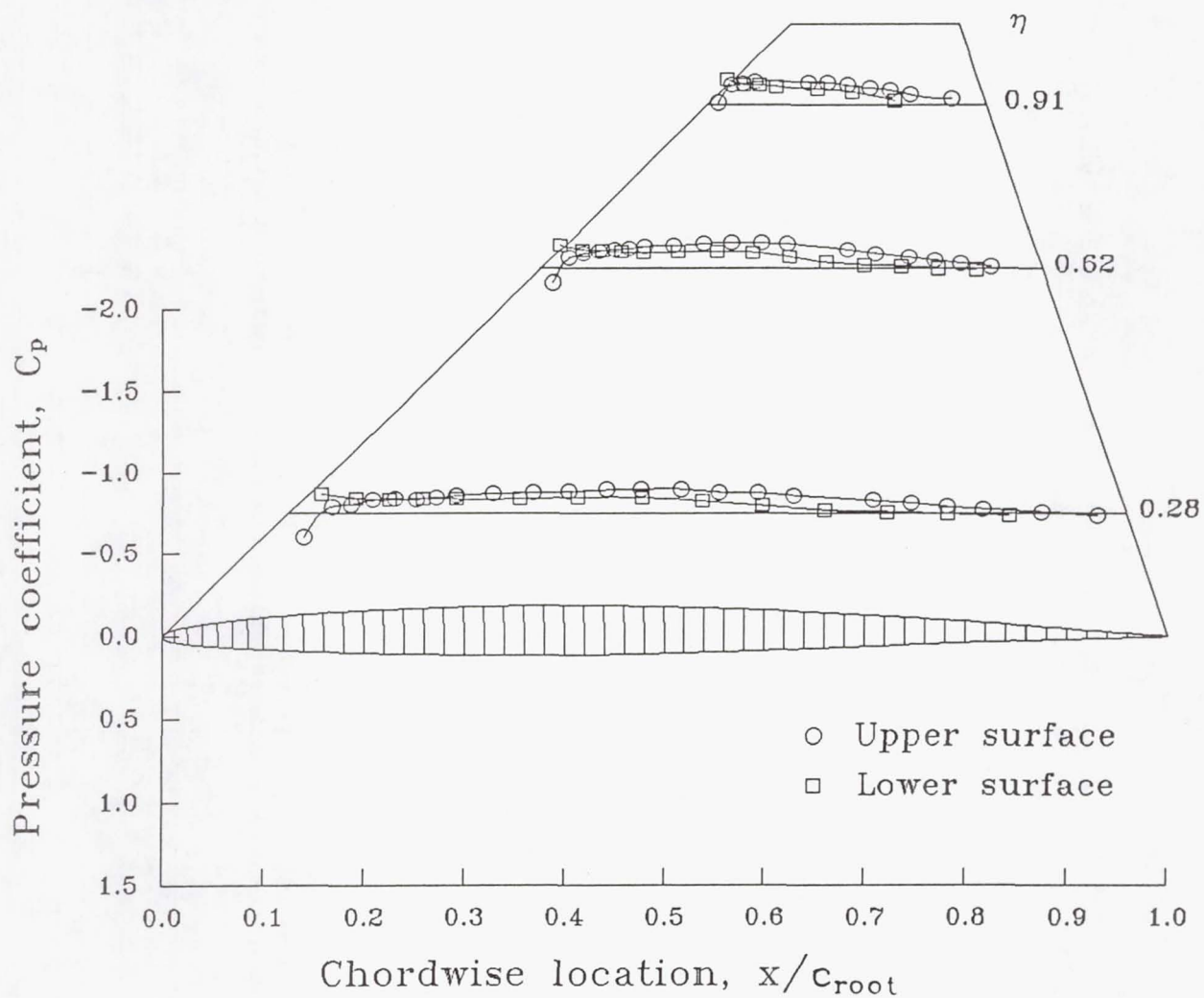
Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.1495	0.0269	0.0870	0.0406	-0.0154
.0513	-.0412	.0576	-.0657	.0869	-.1263
.0748	-.0551	.0874	-.0918	.1268	-.1369
.1001	-.0839	.1184	-.1090	.1719	-.1481
.1263	-.0907	.1496	-.1180	.3627	-.1437
.1523	-.0875	.1779	-.1259	.4311	-.1429
.1759	-.0992	.2080	-.1404	.5052	-.1251
.1998	-.1111	.2674	-.1483	.5821	-.1085
.2436	-.1261	.3260	-.1598	.6553	-.0932
.2912	-.1301	.3818	-.1675	.7267	-.0641
.3345	-.1376	.4423	-.1678	.8756	-.0385
.3798	-.1499	.4942	-.1595		
.4213	-.1540	.6137	-.1216		
.4697	-.1549	.6687	-.0965		
.5154	-.1337	.7353	-.0710		
.5617	-.1301	.7874	-.0518		
.6041	-.1134	.8384	-.0318		
.6988	-.0823	.8982	-.0127		
.7449	-.0668				
.7865	-.0454				
.8302	-.0255				
.8994	-.0067				
.9651	.0134				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.1207	0.0408	-0.1453	0.0605	-0.1622
.0793	-.0925	.0833	-.1164	.1095	-.1244
.1201	-.0824	.1251	-.1104	.1584	-.1290
.1598	-.0946	.1625	-.1036	.2060	-.1164
.1996	-.0898	.2055	-.0979	.3295	-.1028
.2753	-.0905	.2761	-.1055	.4349	-.0836
.3449	-.1001	.3535	-.1037	.5604	-.0274
.4232	-.0993	.4252	-.1022		
.4951	-.0783	.4977	-.0727		
.5671	-.0494	.5720	-.0368		
.6411	-.0189	.6464	-.0231		
.7156	-.0081	.7193	-.0151		
.7886	.0012	.7945	-.0020		
.8611	.0135	.8688	.0060		

(c)  $R_c = 3.76 \times 10^6$ ;  $M_\infty = 0.692$ ;  $\alpha = -0.11^\circ$ .

Figure 9. Continued.





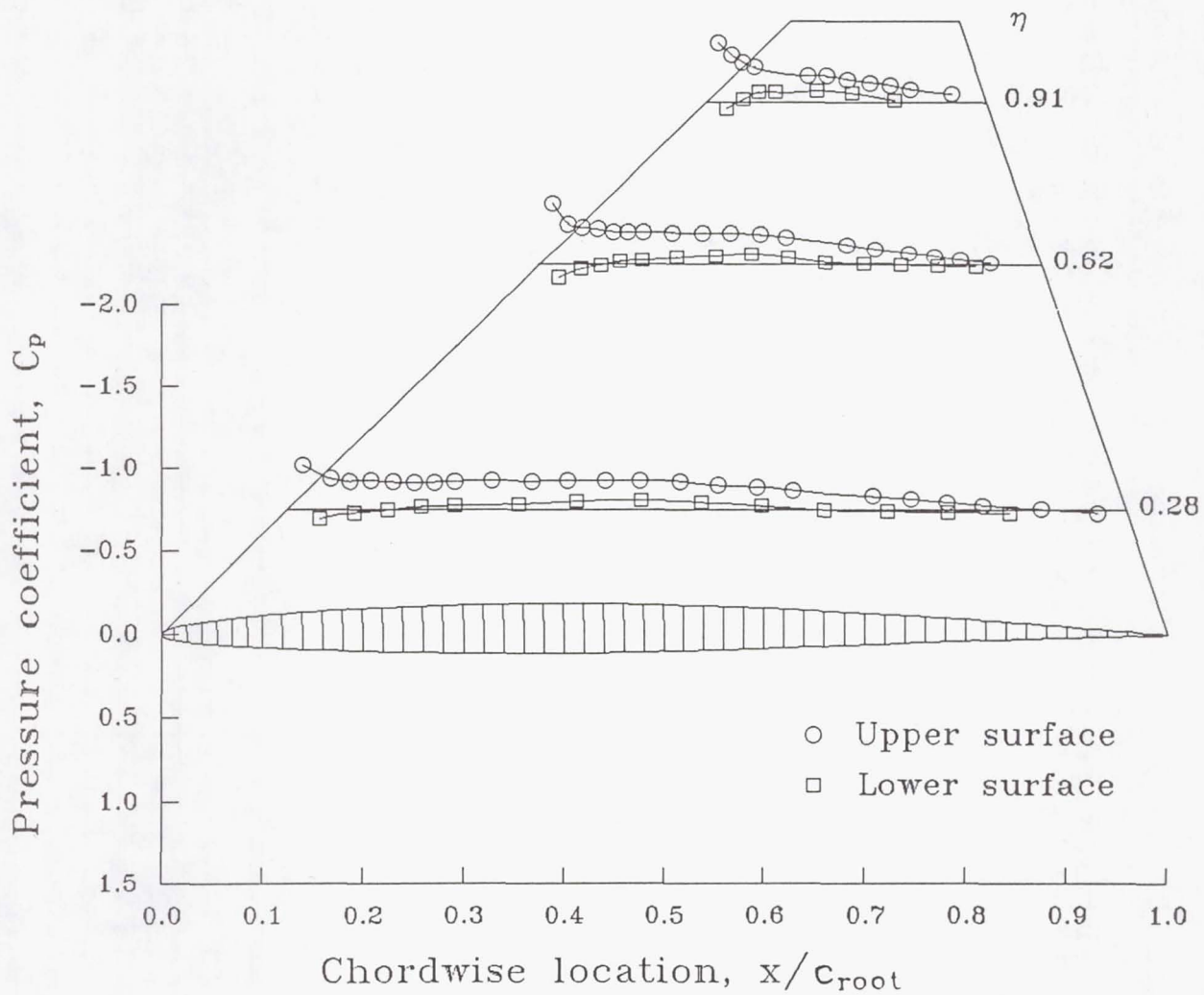
(c) Concluded.

Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.2713	0.0269	-0.3800	0.0406	-0.3651
.0513	-.1905	.0576	-.2554	.0869	-.2947
.0748	-.1752	.0874	-.2303	.1268	-.2486
.1001	-.1802	.1184	-.2267	.1719	-.2174
.1263	-.1691	.1496	-.2071	.3627	-.1678
.1523	-.1657	.1779	-.2047	.4311	-.1640
.1759	-.1684	.2080	-.2069	.5052	-.1433
.1998	-.1745	.2674	-.2029	.5821	-.1238
.2436	-.1792	.3260	-.2011	.6553	-.1094
.2912	-.1748	.3818	-.1985	.7267	-.0824
.3345	-.1809	.4423	-.1906	.8756	-.0557
.3798	-.1806	.4942	-.1747		
.4213	-.1790	.6137	-.1283		
.4697	-.1748	.6687	-.1027		
.5154	-.1491	.7353	-.0755		
.5617	-.1409	.7874	-.0554		
.6041	-.1215	.8384	-.0334		
.6988	-.0845	.8982	-.0139		
.7449	-.0680				
.7865	-.0465				
.8302	-.0254				
.8994	-.0042				
.9651	.0181				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.0533	0.0408	0.0783	0.0605	0.0374
.0793	.0188	.0833	.0267	.1095	-.0205
.1201	.0031	.1251	.0077	.1584	-.0645
.1598	-.0168	.1625	-.0208	.2060	-.0645
.1996	-.0226	.2055	-.0235	.3295	-.0736
.2753	-.0329	.2761	-.0437	.4349	-.0598
.3449	-.0502	.3535	-.0563	.5604	-.0111
.4232	-.0585	.4252	-.0644		
.4951	-.0446	.4977	-.0438		
.5671	-.0227	.5720	-.0133		
.6411	.0029	.6464	-.0049		
.7156	.0095	.7193	-.0009		
.7886	.0149	.7945	.0093		
.8611	.0239	.8688	.0141		

(d)  $R_c = 3.76 \times 10^6$ ;  $M_\infty = 0.692$ ;  $\alpha = 2.17^\circ$ .

Figure 9. Continued.



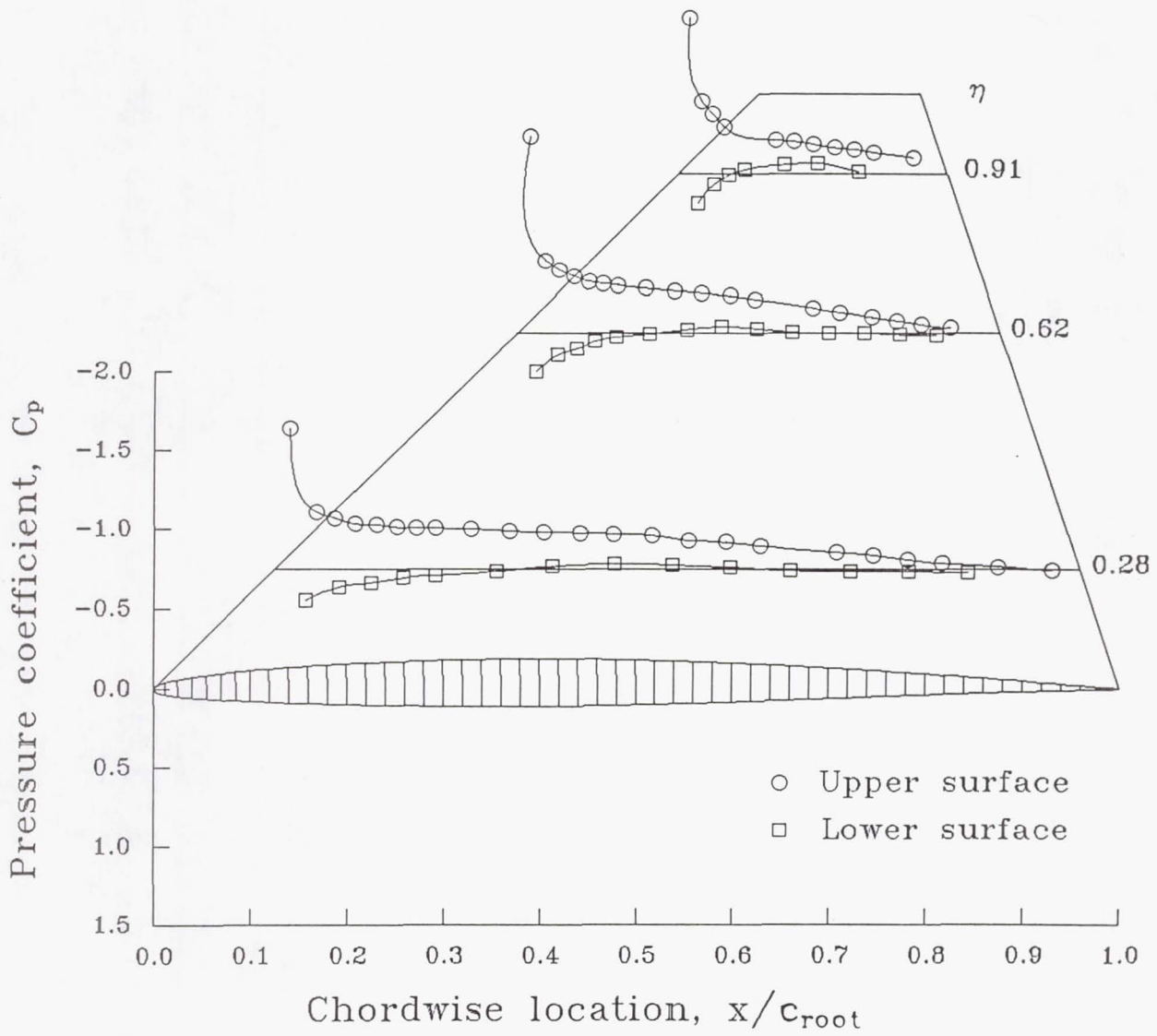
(d) Concluded.

Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.8911	0.0269	-1.2330	0.0406	-0.9729
.0513	-.3612	.0576	-.4566	.0869	-.4535
.0748	-.3188	.0874	-.3966	.1268	-.3748
.1001	-.2854	.1184	-.3515	.1719	-.2914
.1263	-.2761	.1496	-.3218	.3627	-.2144
.1523	-.2625	.1779	-.3072	.4311	-.2061
.1759	-.2578	.2080	-.2966	.5052	-.1854
.1998	-.2566	.2674	-.2768	.5821	-.1666
.2436	-.2508	.3260	-.2602	.6553	-.1557
.2912	-.2380	.3818	-.2462	.7267	-.1368
.3345	-.2296	.4423	-.2303	.8756	-.1031
.3798	-.2287	.4942	-.2099		
.4213	-.2217	.6137	-.1557		
.4697	-.2103	.6687	-.1265		
.5154	-.1806	.7353	-.0976		
.5617	-.1692	.7874	-.0751		
.6041	-.1450	.8384	-.0538		
.6988	-.1046	.8982	-.0316		
.7449	-.0845				
.7865	-.0606				
.8302	-.0373				
.8994	-.0150				
.9651	.0088				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.1916	0.0408	0.2461	0.0605	0.1878
.0793	.1156	.0833	.1399	.1095	.0643
.1201	.0850	.1251	.1007	.1584	.0073
.1598	.0541	.1625	.0524	.2060	-.0298
.1996	.0402	.2055	.0284	.3295	-.0588
.2753	.0148	.2761	.0063	.4349	-.0654
.3449	-.0156	.3535	-.0213	.5604	-.0118
.4232	-.0321	.4252	-.0401		
.4951	-.0258	.4977	-.0282		
.5671	-.0101	.5720	-.0050		
.6411	.0101	.6464	.0008		
.7156	.0130	.7193	.0014		
.7886	.0163	.7945	.0099		
.8611	.0227	.8688	.0115		

(e)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.691$ ;  $\alpha = 4.25^\circ$ .

Figure 9. Continued.



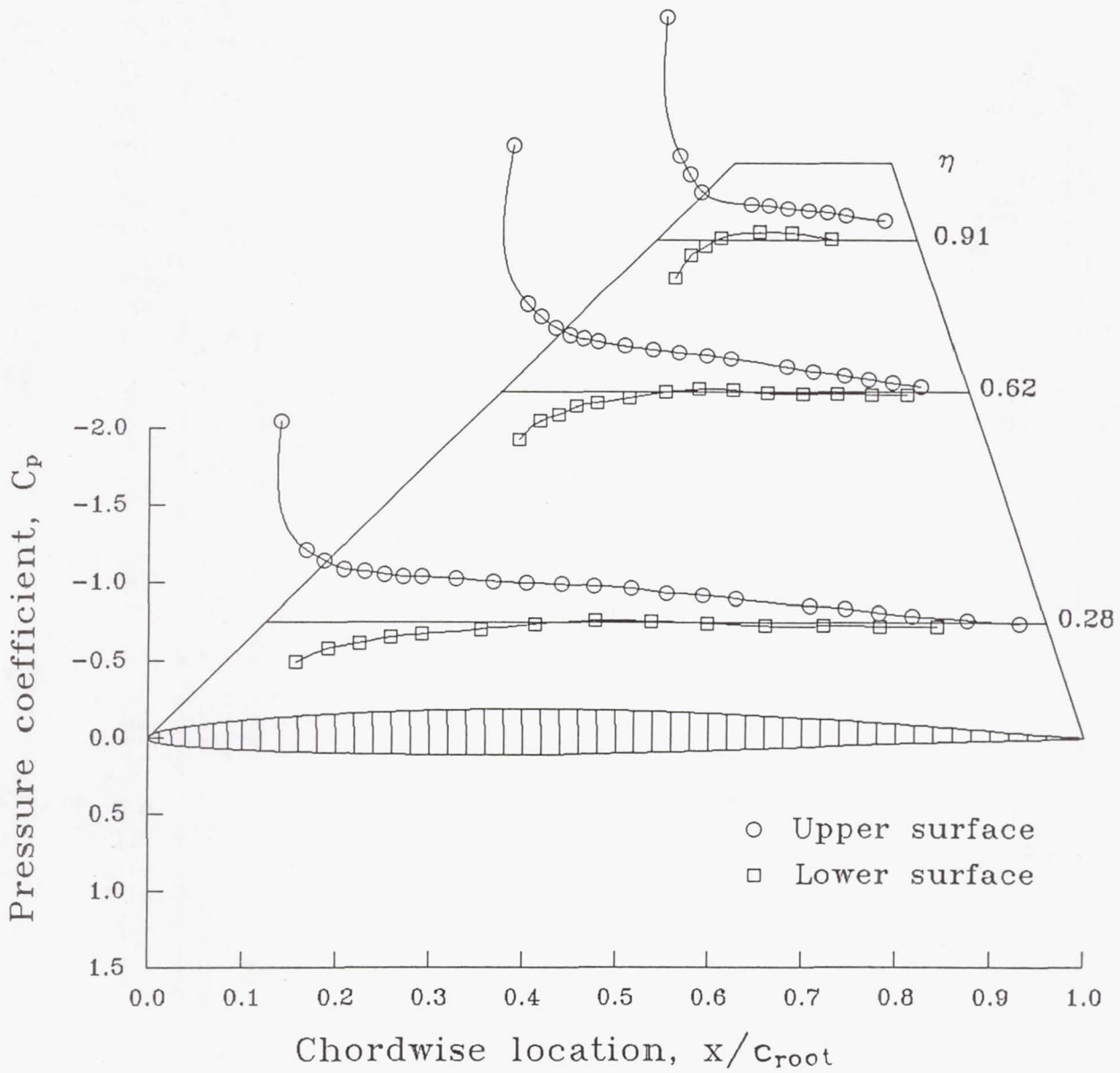
(e) Concluded.

Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3020	0.0269	-1.6140	0.0406	-1.4450
.0513	-.4589	.0576	-.5755	.0869	-.5474
.0748	-.3935	.0874	-.4921	.1268	-.4249
.1001	-.3408	.1184	-.4178	.1719	-.3148
.1263	-.3250	.1496	-.3766	.3627	-.2355
.1523	-.3058	.1779	-.3505	.4311	-.2240
.1759	-.2953	.2080	-.3327	.5052	-.2096
.1998	-.2906	.2674	-.3036	.5821	-.1934
.2436	-.2797	.3260	-.2825	.6553	-.1817
.2912	-.2616	.3818	-.2618	.7267	-.1589
.3345	-.2526	.4423	-.2423	.8756	-.1253
.3798	-.2444	.4942	-.2201		
.4213	-.2346	.6137	-.1634		
.4697	-.2204	.6687	-.1347		
.5154	-.1887	.7353	-.1046		
.5617	-.1753	.7874	-.0817		
.6041	-.1501	.8384	-.0581		
.6988	-.1067	.8982	-.0356		
.7449	-.0863				
.7865	-.0622				
.8302	-.0385				
.8994	-.0149				
.9651	.0104				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2574	0.0408	0.3173	0.0605	0.2539
.0793	.1652	.0833	.1959	.1095	.1023
.1201	.1317	.1251	.1511	.1584	.0391
.1598	.0942	.1625	.0964	.2060	-.0129
.1996	.0755	.2055	.0723	.3295	-.0506
.2753	.0454	.2761	.0375	.4349	-.0482
.3449	.0114	.3535	.0022	.5604	-.0064
.4232	-.0092	.4252	-.0186		
.4951	-.0061	.4977	-.0104		
.5671	.0062	.5720	.0092		
.6411	.0239	.6464	.0123		
.7156	.0245	.7193	.0112		
.7886	.0253	.7945	.0176		
.8611	.0295	.8688	.0169		

(f)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.691$ ;  $\alpha = 5.35^\circ$ .

Figure 9. Continued.



(f) Concluded.

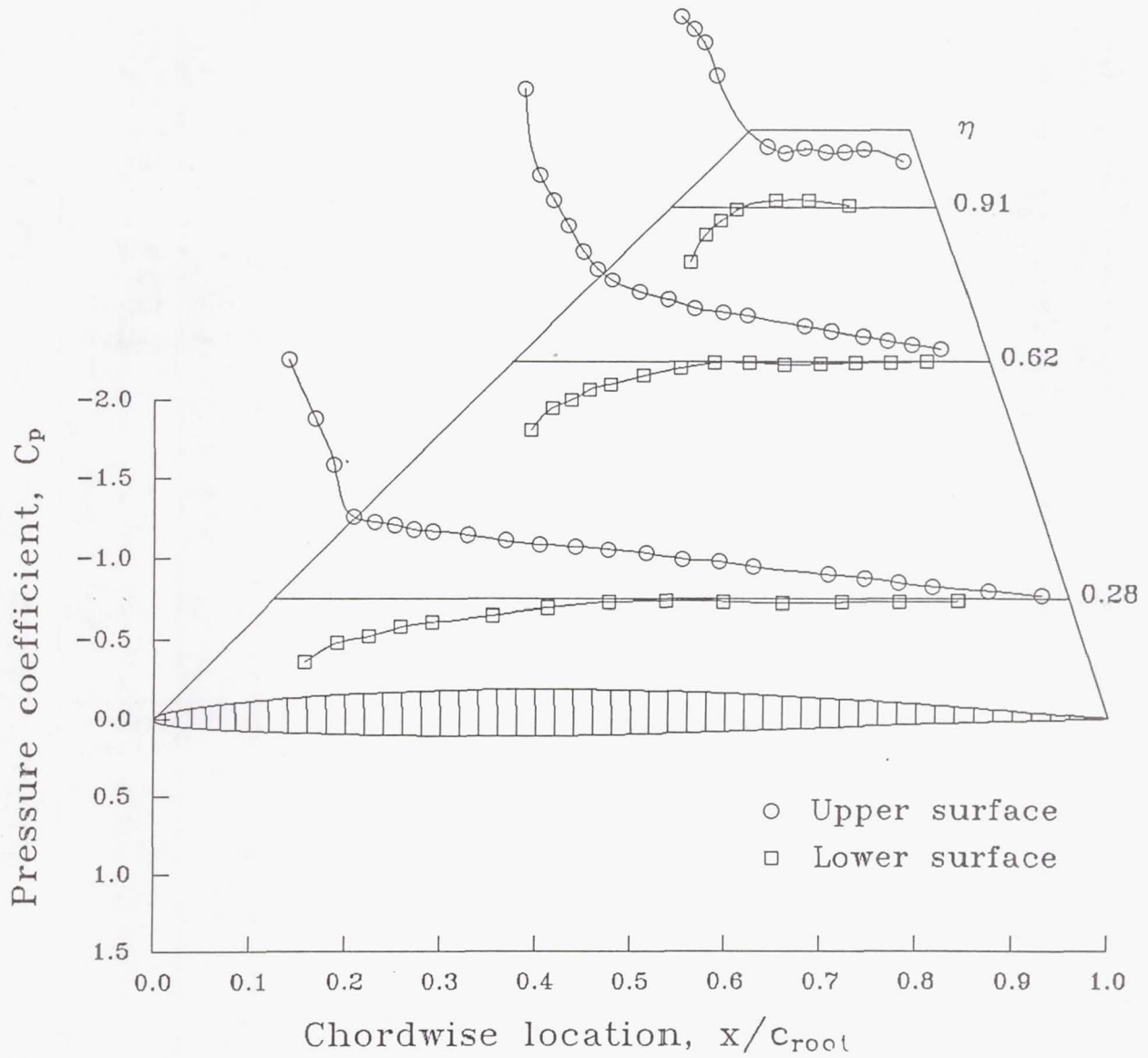
Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.5100	0.0269	-1.7600	0.0406	-1.2260
.0513	-1.1350	.0576	-1.2110	.0869	-1.1500
.0748	-.8391	.0874	-1.0450	.1268	-1.0590
.1001	-.5098	.1184	-.8783	.1719	-.8467
.1263	-.4815	.1496	-.7112	.3627	-.3935
.1523	-.4606	.1779	-.6028	.4311	-.3543
.1759	-.4309	.2080	-.5259	.5052	-.3871
.1998	-.4220	.2674	-.4466	.5821	-.3587
.2436	-.3988	.3260	-.4010	.6553	-.3585
.2912	-.3633	.3818	-.3405	.7267	-.3780
.3345	-.3412	.4423	-.3166	.8756	-.3017
.3798	-.3262	.4942	-.2901		
.4213	-.3078	.6137	-.2242		
.4697	-.2862	.6687	-.1935		
.5154	-.2461	.7353	-.1582		
.5617	-.2298	.7874	-.1339		
.6041	-.2004	.8384	-.1088		
.6988	-.1507	.8982	-.0789		
.7449	-.1275				
.7865	-.0993				
.8302	-.0736				
.8994	-.0473				
.9651	-.0183				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3903	0.0408	0.4399	0.0605	0.3540
.0793	.2711	.0833	.2988	.1095	.1775
.1201	.2285	.1251	.2449	.1584	.0884
.1598	.1684	.1625	.1771	.2060	.0145
.1996	.1408	.2055	.1462	.3295	-.0475
.2753	.0990	.2761	.0891	.4349	-.0474
.3449	.0525	.3535	.0399	.5604	-.0152
.4232	.0216	.4252	.0078		
.4951	.0150	.4977	.0055		
.5671	.0188	.5720	.0178		
.6411	.0297	.6464	.0150		
.7156	.0235	.7193	.0073		
.7886	.0192	.7945	.0090		
.8611	.0178	.8688	.0011		

(g)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.700$ ;  $\alpha = 8.23^\circ$ .

Figure 9. Continued.





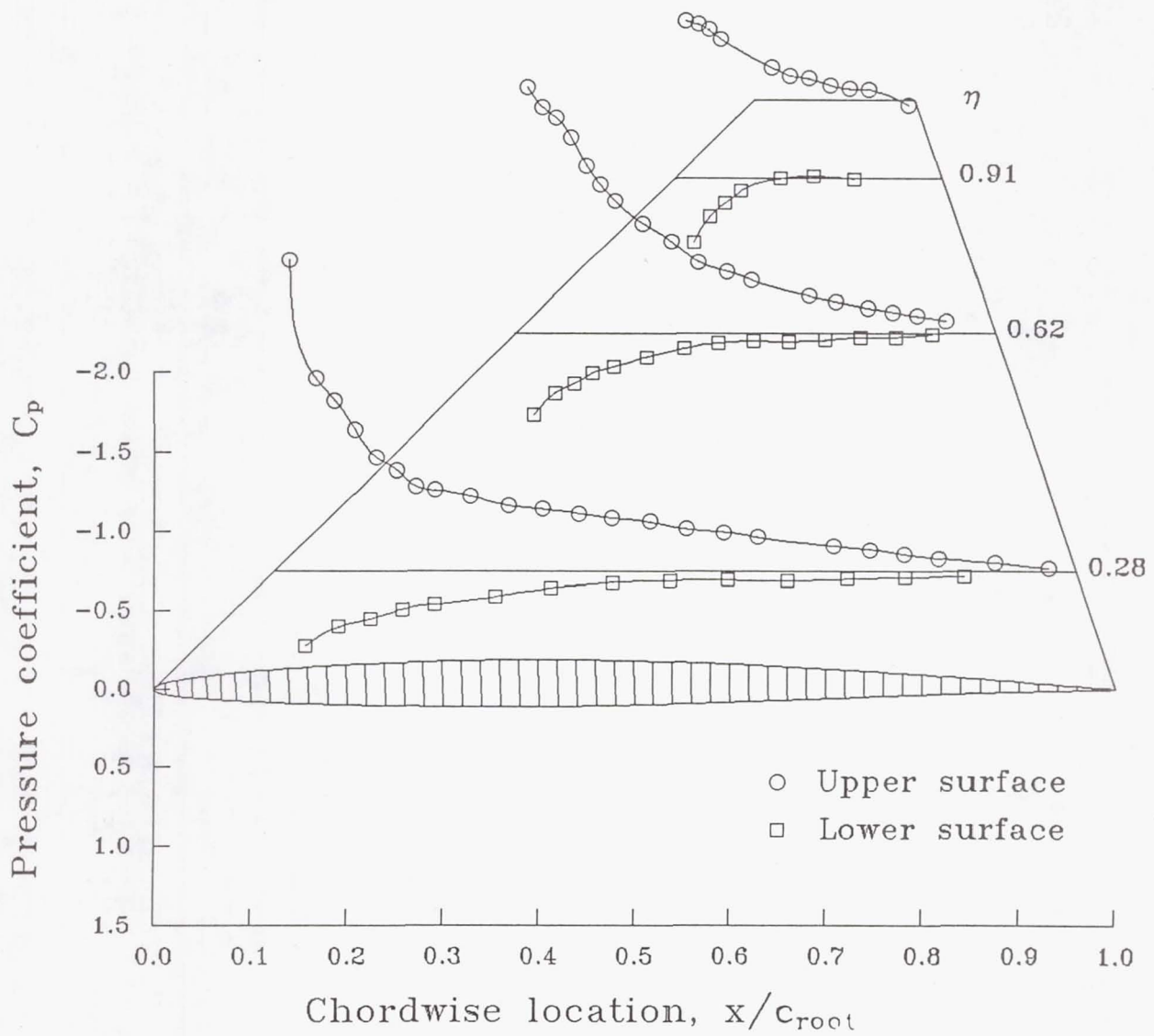
(g) Concluded.

Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.9680	0.0269	-1.5790	0.0406	-1.0080
.0513	-1.2120	.0576	-1.4550	.0869	-.9904
.0748	-1.0750	.0874	-1.3850	.1268	-.9537
.1001	-.8913	.1184	-1.2590	.1719	-.8885
.1263	-.7190	.1496	-1.0830	.3627	-.7100
.1523	-.6410	.1779	-.9572	.4311	-.6565
.1759	-.5394	.2080	-.8542	.5052	-.6400
.1998	-.5160	.2674	-.7047	.5821	-.5947
.2436	-.4794	.3260	-.5953	.6553	-.5709
.2912	-.4204	.3818	-.4546	.7267	-.5661
.3345	-.3958	.4423	-.3950	.8756	-.4664
.3798	-.3675	.4942	-.3416		
.4213	-.3390	.6137	-.2368		
.4697	-.3159	.6687	-.1991		
.5154	-.2702	.7353	-.1590		
.5617	-.2488	.7874	-.1353		
.6041	-.2157	.8384	-.1101		
.6988	-.1593	.8982	-.0817		
.7449	-.1351				
.7865	-.1066				
.8302	-.0793				
.8994	-.0499				
.9651	-.0175				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4743	0.0408	0.5125	0.0605	0.4157
.0793	.3514	.0833	.3776	.1095	.2469
.1201	.3000	.1251	.3194	.1584	.1602
.1598	.2383	.1625	.2524	.2060	.0803
.1996	.2082	.2055	.2136	.3295	.0016
.2753	.1611	.2761	.1511	.4349	-.0146
.3449	.1086	.3535	.0944	.5604	.0061
.4232	.0714	.4252	.0574		
.4951	.0590	.4977	.0473		
.5671	.0563	.5720	.0521		
.6411	.0615	.6464	.0427		
.7156	.0499	.7193	.0287		
.7886	.0405	.7945	.0250		
.8611	.0345	.8688	.0098		

(h)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.700$ ;  $\alpha = 9.88^\circ$ .

Figure 9. Continued.



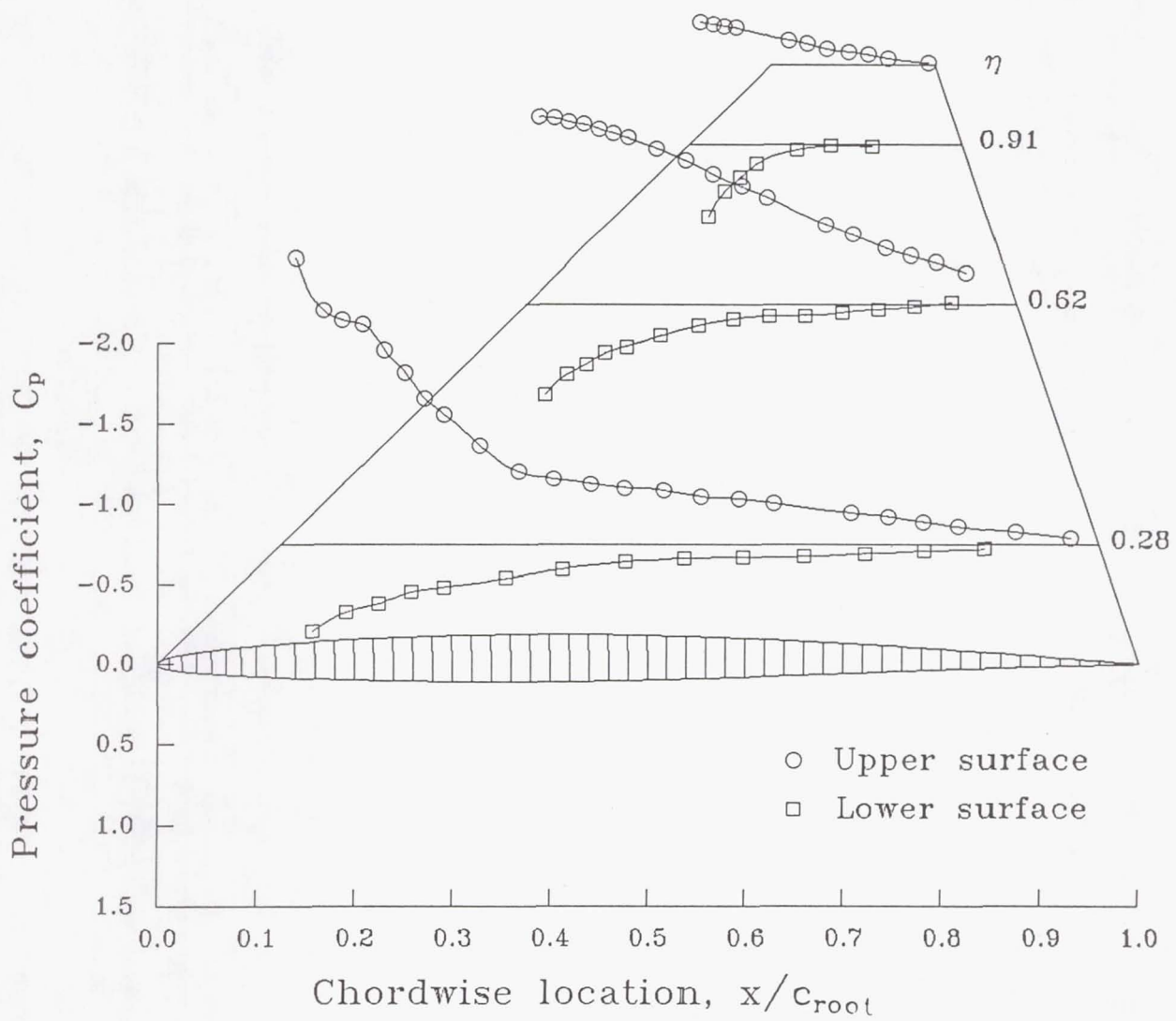
(h) Concluded.

Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.7800	0.0269	-1.1830	0.0406	-0.7650
.0513	-1.4590	.0576	-1.1760	.0869	-.7536
.0748	-1.3990	.0874	-1.1450	.1268	-.7421
.1001	-1.3700	.1184	-1.1310	.1719	-.7310
.1263	-1.2150	.1496	-1.1010	.3627	-.6540
.1523	-1.0760	.1779	-1.0730	.4311	-.6338
.1759	-.9120	.2080	-1.0450	.5052	-.5989
.1998	-.8146	.2674	-.9730	.5821	-.5842
.2436	-.6216	.3260	-.9025	.6553	-.5674
.2912	-.4603	.3818	-.8116	.7267	-.5416
.3345	-.4145	.4423	-.7372	.8756	-.5136
.3798	-.3817	.4942	-.6674		
.4213	-.3557	.6137	-.4944		
.4697	-.3406	.6687	-.4324		
.5154	-.2983	.7353	-.3446		
.5617	-.2849	.7874	-.2980		
.6041	-.2566	.8384	-.2572		
.6988	-.1996	.8982	-.1945		
.7449	-.1745				
.7865	-.1421				
.8302	-.1107				
.8994	-.0759				
.9651	-.0387				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.5429	0.0408	0.5619	0.0605	0.4500
.0793	.4208	.0833	.4368	.1095	.2940
.1201	.3663	.1251	.3726	.1584	.2086
.1598	.2972	.1625	.3027	.2060	.1226
.1996	.2651	.2055	.2645	.3295	.0329
.2753	.2113	.2761	.1967	.4349	.0052
.3449	.1522	.3535	.1334	.5604	.0137
.4232	.1084	.4252	.0908		
.4951	.0895	.4977	.0729		
.5671	.0796	.5720	.0703		
.6411	.0776	.6464	.0532		
.7156	.0589	.7193	.0304		
.7886	.0433	.7945	.0165		
.8611	.0309	.8688	-.0145		

(i)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.699$ ;  $\alpha = 12.42^\circ$ .

Figure 9. Continued.



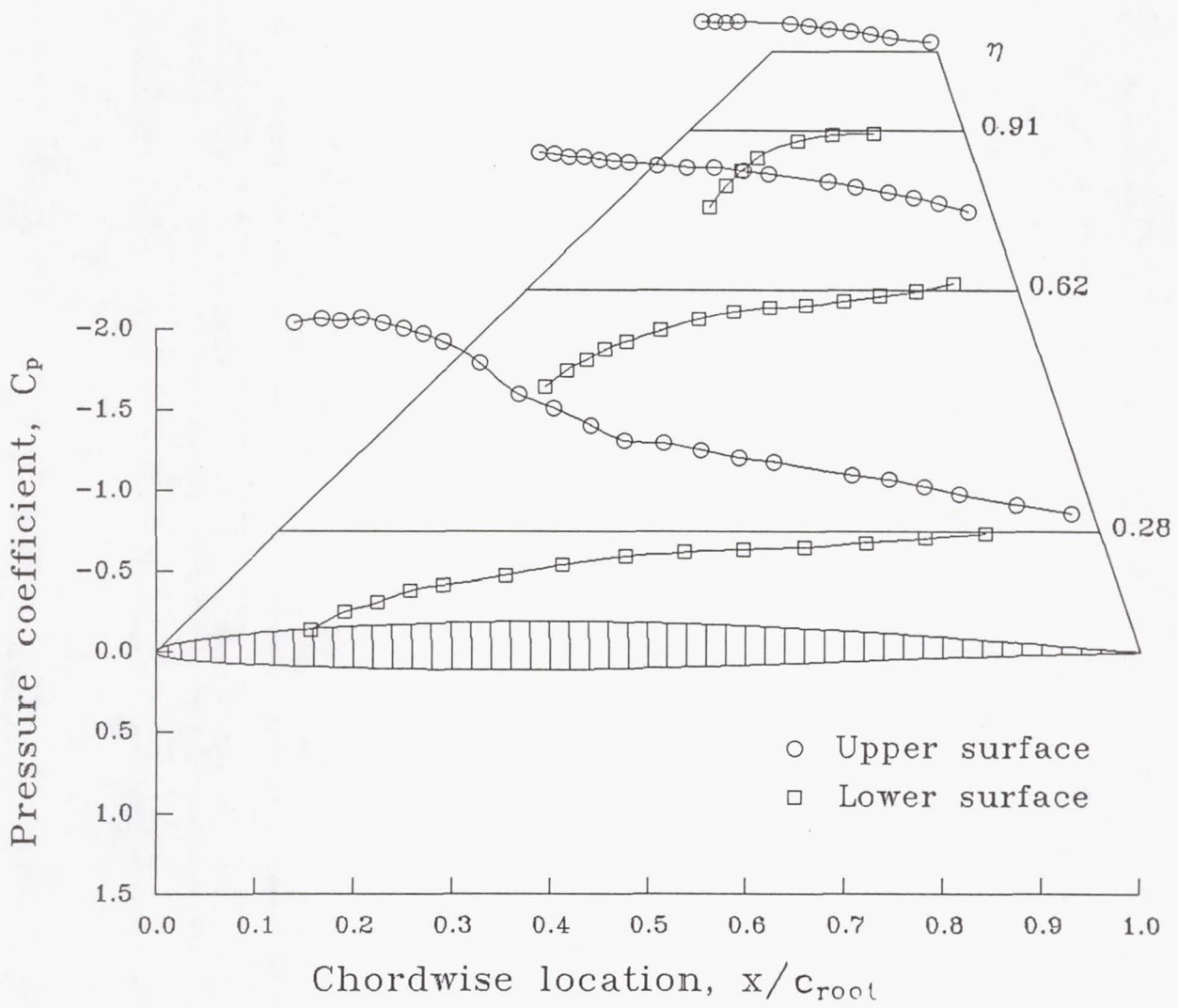
(i) Concluded.

Figure 9. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.2910	0.0269	-0.8625	0.0406	-0.6904
.0513	-1.3180	.0576	-.8546	.0869	-.6844
.0748	-1.3050	.0874	-.8341	.1268	-.6817
.1001	-1.3270	.1184	-.8315	.1719	-.6843
.1263	-1.2960	.1496	-.8168	.3627	-.6731
.1523	-1.2610	.1779	-.8073	.4311	-.6628
.1759	-1.2230	.2080	-.7980	.5052	-.6438
.1998	-1.1790	.2674	-.7836	.5821	-.6268
.2436	-1.0440	.3260	-.7695	.6553	-.6101
.2912	-.8549	.3818	-.7688	.7267	-.5875
.3345	-.7678	.4423	-.7471	.8756	-.5578
.3798	-.6615	.4942	-.7271		
.4213	-.5670	.6137	-.6790		
.4697	-.5495	.6687	-.6492		
.5154	-.5085	.7353	-.6137		
.5617	-.4603	.7874	-.5817		
.6041	-.4335	.8384	-.5451		
.6988	-.3556	.8982	-.4968		
.7449	-.3230				
.7865	-.2809				
.8302	-.2296				
.8994	-.1685				
.9651	-.1104				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.6160	0.0408	0.6034	0.0605	0.4802
.0793	.5033	.0833	.4978	.1095	.3438
.1201	.4428	.1251	.4313	.1584	.2517
.1598	.3683	.1625	.3676	.2060	.1723
.1996	.3333	.2055	.3191	.3295	.0640
.2753	.2735	.2761	.2500	.4349	.0257
.3449	.2084	.3535	.1809	.5604	.0208
.4232	.1564	.4252	.1333		
.4951	.1305	.4977	.1071		
.5671	.1118	.5720	.0958		
.6411	.1009	.6464	.0691		
.7156	.0714	.7193	.0367		
.7886	.0438	.7945	.0100		
.8611	.0154	.8688	-.0411		

(j)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.700$ ;  $\alpha = 15.48^\circ$ .

Figure 9. Continued.



(j) Concluded.

Figure 9. Concluded.

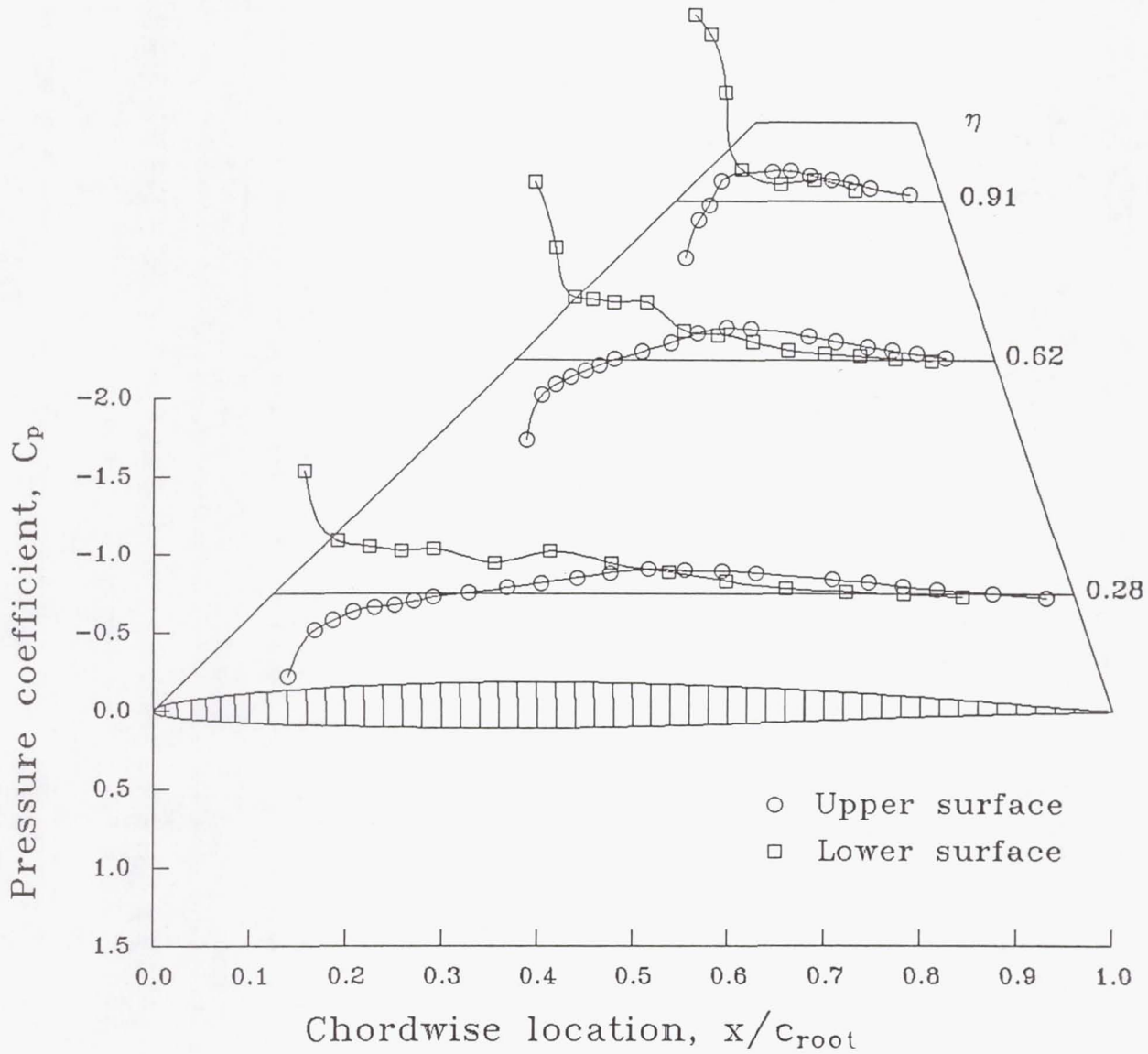
$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.5298	0.0269	0.5045	0.0406	0.3599
.0513	.2279	.0576	.2234	.0869	.1207
.0748	.1665	.0874	.1531	.1268	.0251
.1001	.1127	.1184	.1056	.1719	-.1275
.1263	.0890	.1496	.0694	.3627	-.1864
.1523	.0744	.1779	.0310	.4311	-.1924
.1759	.0509	.2080	-.0039	.5052	-.1587
.1998	.0240	.2674	-.0538	.5821	-.1360
.2436	-.0068	.3260	-.1086	.6553	-.1174
.2912	-.0363	.3818	-.1663	.7267	-.0806
.3345	-.0685	.4423	-.1986	.8756	-.0420
.3798	-.1017	.4942	-.1930		
.4213	-.1336	.6137	-.1446		
.4697	-.1575	.6687	-.1162		
.5154	-.1491	.7353	-.0824		
.5617	-.1465	.7874	-.0589		
.6041	-.1320	.8384	-.0373		
.6988	-.0898	.8982	-.0141		
.7449	-.0712				
.7865	-.0468				
.8302	-.0239				
.8994	.0030				
.9651	.0264				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.7959	0.0408	-1.1230	0.0605	-1.1900
.0793	-.3438	.0833	-.7080	.1095	-1.0610
.1201	-.3077	.1251	-.3851	.1584	-.6905
.1598	-.2807	.1625	-.3746	.2060	-.1975
.1996	-.2922	.2055	-.3530	.3295	-.1082
.2753	†-.2010	.2761	-.3533	.4349	-.1342
.3449	-.2757	.3535	-.1792	.5604	-.0675
.4232	-.1963	.4252	-.1566		
.4951	-.1381	.4977	-.1129		
.5671	-.0787	.5720	-.0590		
.6411	-.0328	.6464	-.0385		
.7156	-.0135	.7193	-.0263		
.7886	.0035	.7945	-.0085		
.8611	.0212	.8688	.0065		

†Coefficient reflects abnormal pressure level.

(a)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.900$ ;  $\alpha = -3.99^\circ$ .

Figure 10. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test angle-of-attack range at nominal conditions of  $M_{\infty} = 0.9$  and  $R_{\bar{c}} = 3.76 \times 10^6$ .





(a) Concluded.

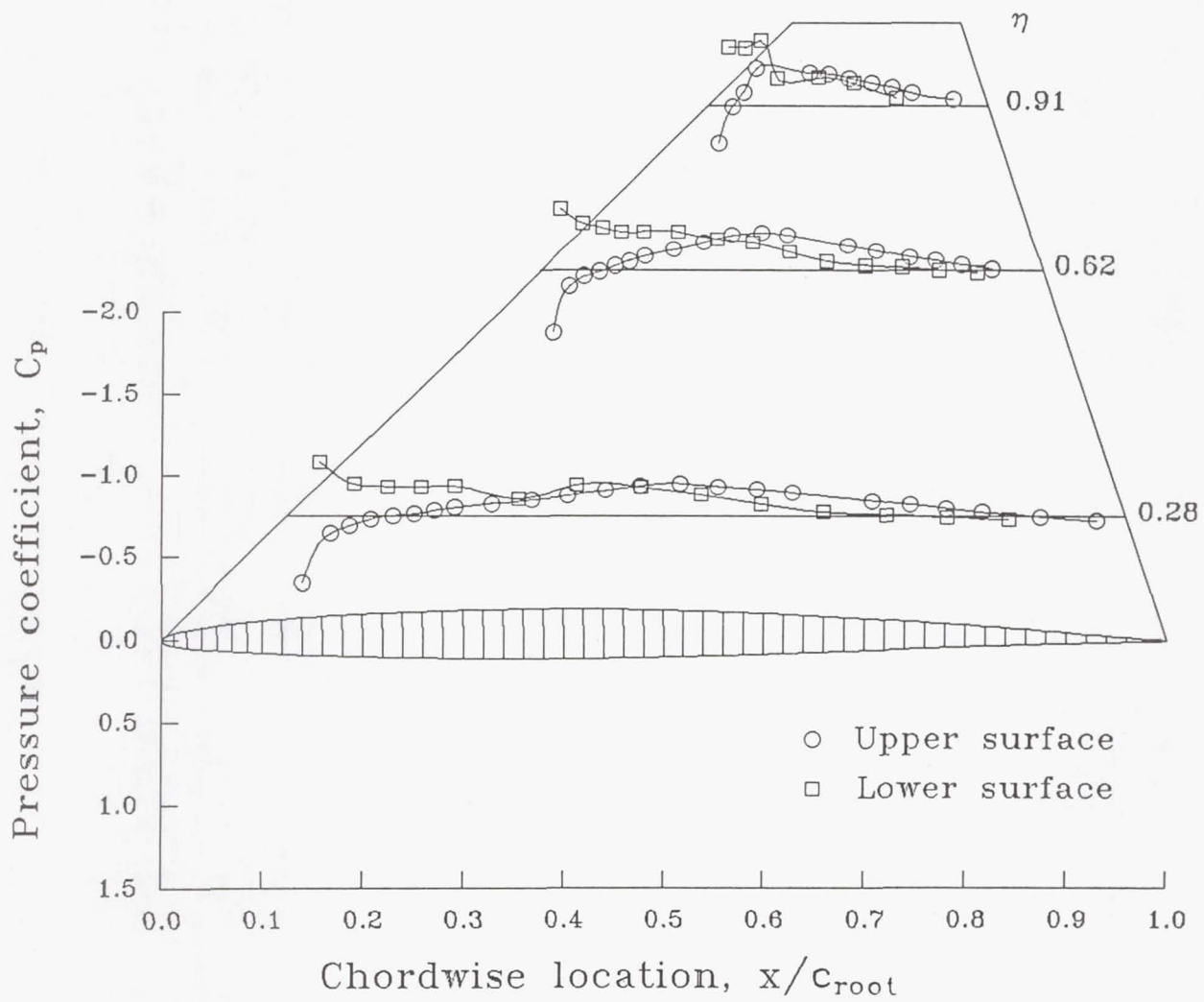
Figure 10. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.4103	0.0269	0.3710	0.0406	0.2281
.0513	.1093	.0576	.0938	.0869	.0041
.0748	.0600	.0874	.0365	.1268	-.0796
.1001	.0189	.1184	.0052	.1719	-.2273
.1263	-.0021	.1496	-.0244	.3627	-.1982
.1523	-.0110	.1779	-.0562	.4311	-.1963
.1759	-.0347	.2080	-.0854	.5052	-.1682
.1998	-.0507	.2674	-.1248	.5821	-.1395
.2436	-.0750	.3260	-.1719	.6553	-.1167
.2912	-.0969	.3818	-.2180	.7267	-.0780
.3345	-.1257	.4423	-.2343	.8756	-.0409
.3798	-.1565	.4942	-.2177		
.4213	-.1848	.6137	-.1524		
.4697	-.2023	.6687	-.1196		
.5154	-.1815	.7353	-.0831		
.5617	-.1679	.7874	-.0580		
.6041	-.1457	.8384	-.0342		
.6988	-.0950	.8982	-.0089		
.7449	-.0737				
.7865	-.0474				
.8302	-.0229				
.8994	.0054				
.9651	.0299				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.3337	0.0408	-0.3816	0.0605	-0.3552
.0793	-.1989	.0833	-.2940	.1095	-.3490
.1201	-.1821	.1251	-.2679	.1584	-.3945
.1598	-.1786	.1625	-.2372	.2060	-.1644
.1996	-.1849	.2055	-.2421	.3295	-.1735
.2753	†-.1064	.2761	-.2400	.4349	-.1384
.3449	-.1931	.3535	-.1921	.5604	-.0482
.4232	-.1792	.4252	-.1725		
.4951	-.1296	.4977	-.1142		
.5671	-.0718	.5720	-.0525		
.6411	-.0252	.6464	-.0295		
.7156	-.0066	.7193	-.0178		
.7886	.0068	.7945	-.0021		
.8611	.0238	.8688	.0124		

†Coefficient reflects abnormal pressure level.

(b)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.890$ ;  $\alpha = -1.82^\circ$ .

Figure 10. Continued.



(b) Concluded.

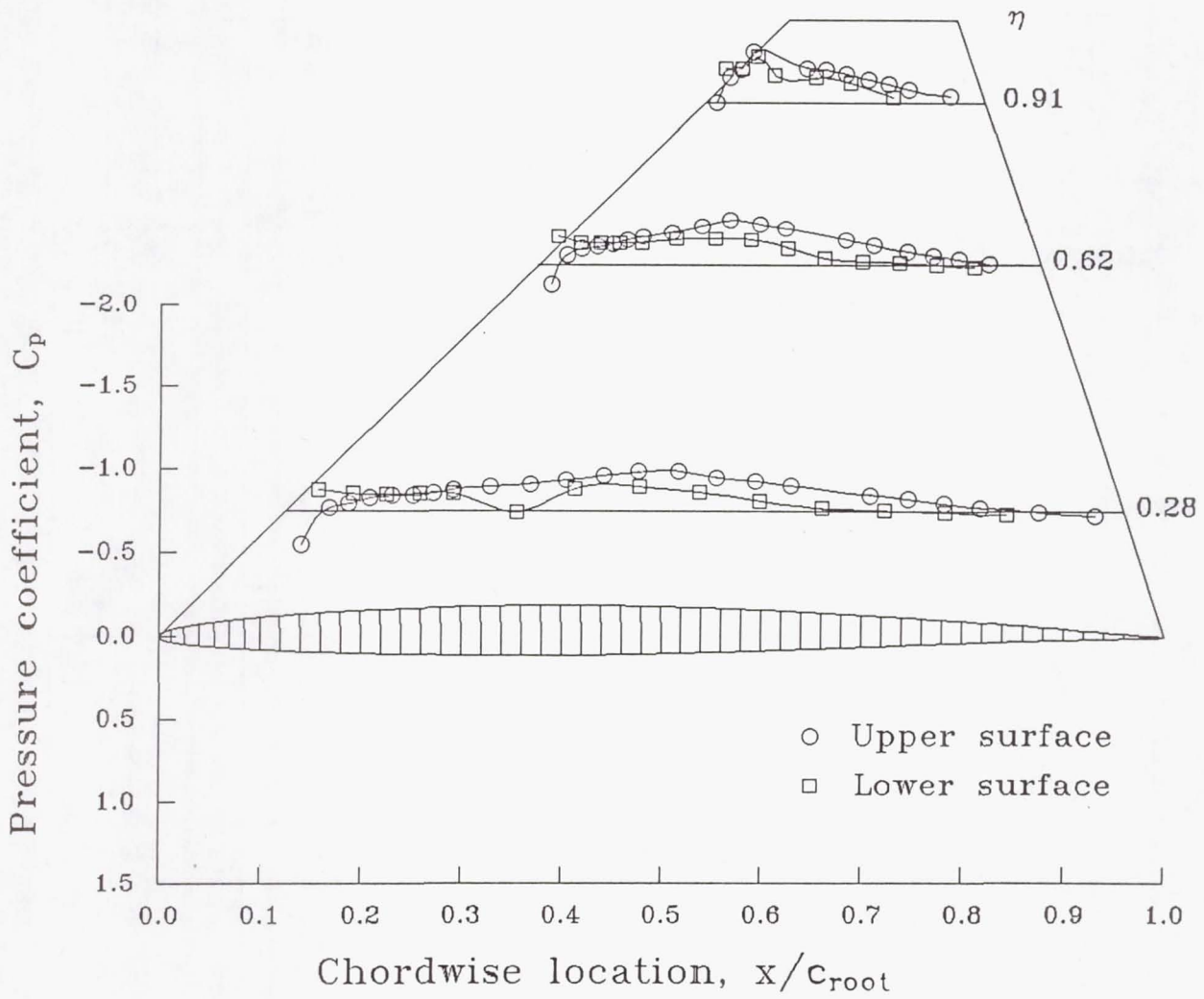
Figure 10. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.1987	0.0269	0.1193	0.0406	-0.0034
.0513	-.0209	.0576	-.0630	.0869	-.1522
.0748	-.0451	.0874	-.0973	.1268	-.2012
.1001	-.0760	.1184	-.1105	.1719	-.3058
.1263	-.0893	.1496	-.1293	.3627	-.2090
.1523	-.0906	.1779	-.1523	.4311	-.2038
.1759	-.1048	.2080	-.1735	.5052	-.1712
.1998	-.1266	.2674	-.2019	.5821	-.1406
.2436	-.1450	.3260	-.2404	.6553	-.1172
.2912	-.1607	.3818	-.2803	.7267	-.0796
.3345	-.1845	.4423	-.2525	.8756	-.0425
.3798	-.2122	.4942	-.2284		
.4213	-.2357	.6137	-.1537		
.4697	-.2417	.6687	-.1175		
.5154	-.2002	.7353	-.0802		
.5617	-.1784	.7874	-.0556		
.6041	-.1514	.8384	-.0317		
.6988	-.0954	.8982	-.0062		
.7449	-.0733				
.7865	-.0464				
.8302	-.0218				
.8994	.0066				
.9651	.0305				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.1287	0.0408	-0.1718	0.0605	-0.2044
.0793	-.1038	.0833	-.1359	.1095	-.2061
.1201	-.0984	.1251	-.1365	.1584	-.2801
.1598	-.1053	.1625	-.1307	.2060	-.1691
.1996	-.1049	.2055	-.1351	.3295	-.1515
.2753	†.0073	.2761	-.1569	.4349	-.1210
.3449	-.1327	.3535	-.1607	.5604	-.0358
.4232	-.1432	.4252	-.1545		
.4951	-.1113	.4977	-.1024		
.5671	-.0602	.5720	-.0389		
.6411	-.0169	.6464	-.0221		
.7156	-.0027	.7193	-.0140		
.7886	.0088	.7945	.0000		
.8611	.0245	.8688	.0130		

†Coefficient reflects abnormal pressure level.

(c)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.892$ ;  $\alpha = 0.20^\circ$ .

Figure 10. Continued.



(c) Concluded.

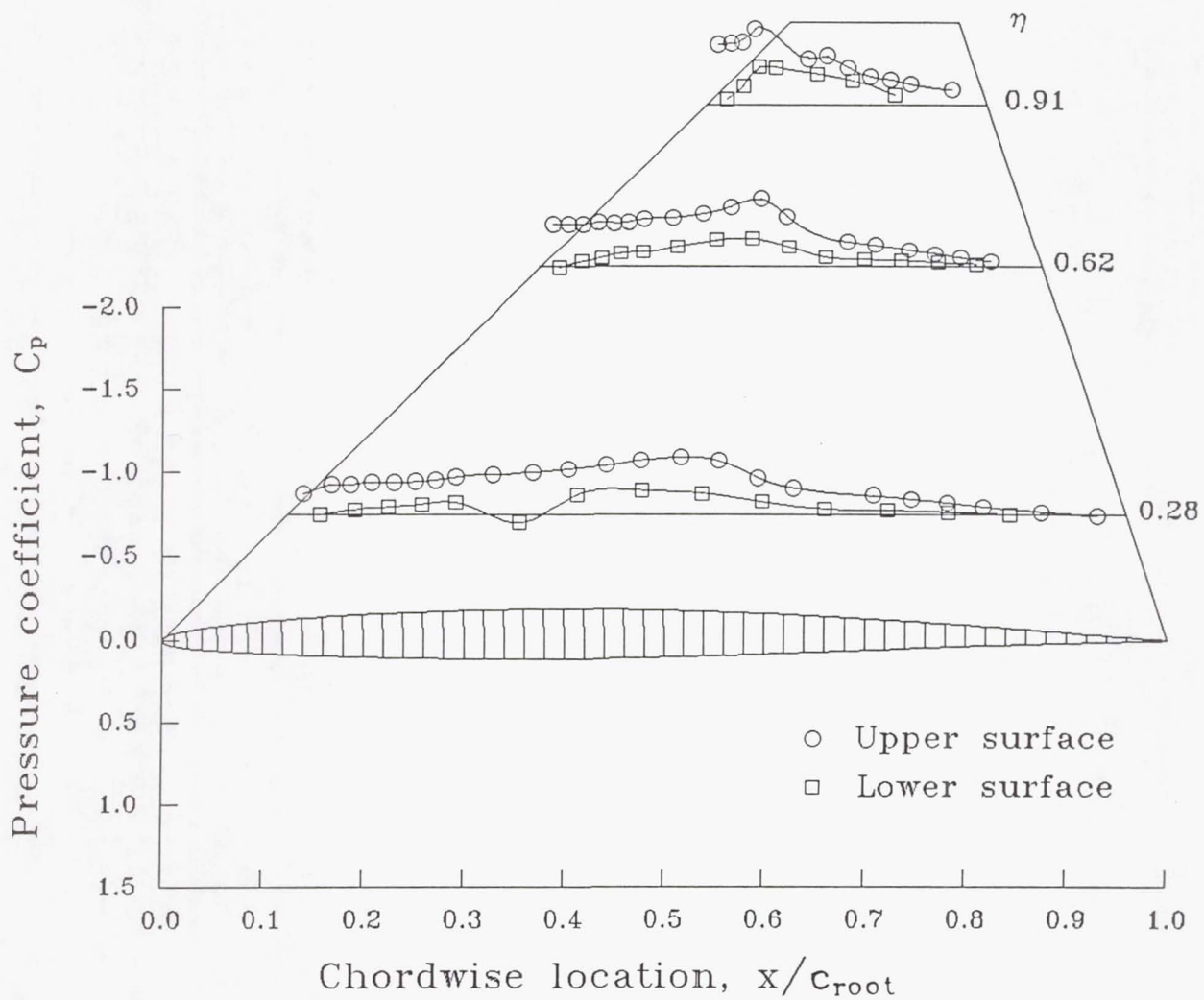
Figure 10. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.1286	0.0269	-0.2684	0.0406	-0.3679
.0513	-.1790	.0576	-.2670	.0869	-.3728
.0748	-.1792	.0874	-.2651	.1268	-.3806
.1001	-.1945	.1184	-.2801	.1719	-.4628
.1263	-.1892	.1496	-.2764	.3627	-.2833
.1523	-.1991	.1779	-.2802	.4311	-.2984
.1759	-.2055	.2080	-.2974	.5052	-.2296
.1998	-.2255	.2674	-.3084	.5821	-.1737
.2436	-.2393	.3260	-.3336	.6553	-.1569
.2912	-.2526	.3818	-.3747	.7267	-.1251
.3345	-.2751	.4423	-.4272	.8756	-.0914
.3798	-.2958	.4942	-.3119		
.4213	-.3285	.6137	-.1567		
.4697	-.3463	.6687	-.1373		
.5154	-.3256	.7353	-.1060		
.5617	-.2186	.7874	-.0823		
.6041	-.1606	.8384	-.0569		
.6988	-.1164	.8982	-.0315		
.7449	-.0952				
.7865	-.0697				
.8302	-.0447				
.8994	-.0145				
.9651	.0108				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.0012	0.0408	0.0100	0.0605	-0.0369
.0793	-.0283	.0833	-.0315	.1095	-.1151
.1201	-.0444	.1251	-.0515	.1584	-.2365
.1598	-.0606	.1625	-.0838	.2060	-.2304
.1996	-.0730	.2055	-.0913	.3295	-.1879
.2753	†.0505	.2761	-.1298	.4349	-.1497
.3449	-.1189	.3535	-.1711	.5604	-.0594
.4232	-.1482	.4252	-.1799		
.4951	-.1287	.4977	-.1271		
.5671	-.0782	.5720	-.0588		
.6411	-.0343	.6464	-.0440		
.7156	-.0231	.7193	-.0383		
.7886	-.0142	.7945	-.0267		
.8611	.0003	.8688	-.0155		

†Coefficient reflects abnormal pressure level.

(d)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.907$ ;  $\alpha = 2.04^\circ$ .

Figure 10. Continued.



(d) Concluded.

Figure 10. Continued.

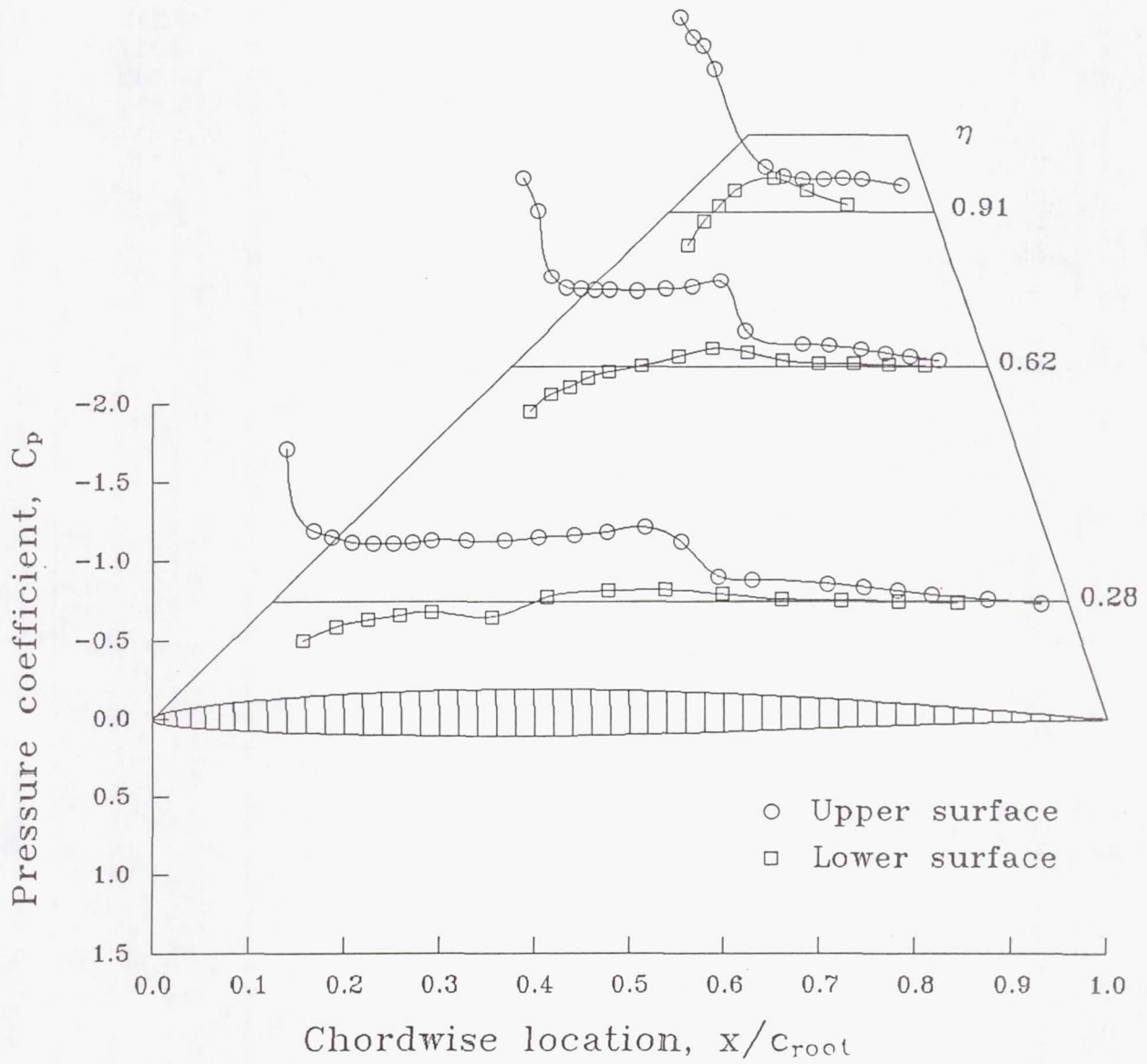
$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.9662	0.0269	-1.2180	0.0406	-1.2490
.0513	-.4466	.0576	-1.0050	.0869	-1.1240
.0748	-.4088	.0874	-.5834	.1268	-1.0650
.1001	-.3709	.1184	-.5052	.1719	-.9237
.1263	-.3682	.1496	-.5000	.3627	-.2914
.1523	-.3665	.1779	-.4944	.4311	-.2352
.1759	-.3704	.2080	-.4947	.5052	-.2166
.1998	-.3884	.2674	-.4836	.5821	-.2132
.2436	-.3846	.3260	-.4987	.6553	-.2194
.2912	-.3833	.3818	-.5136	.7267	-.2137
.3345	-.4041	.4423	-.5548	.8756	-.1726
.3798	-.4199	.4942	-.2319		
.4213	-.4414	.6137	-.1470		
.4697	-.4726	.6687	-.1372		
.5154	-.3765	.7353	-.1133		
.5617	-.1544	.7874	-.0898		
.6041	-.1352	.8384	-.0662		
.6988	-.1078	.8982	-.0400		
.7449	-.0877				
.7865	-.0634				
.8302	-.0386				
.8994	-.0103				
.9651	.0137				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2481	0.0408	0.2920	0.0605	0.2117
.0793	.1586	.0833	.1782	.1095	.0603
.1201	.1172	.1251	.1320	.1584	-.0416
.1598	.0860	.1625	.0713	.2060	-.1397
.1996	.0658	.2055	.0354	.3295	-.2230
.2753	†.0988	.2761	-.0052	.4349	-.1373
.3449	-.0235	.3535	-.0684	.5604	-.0439
.4232	-.0634	.4252	-.1173		
.4951	-.0702	.4977	-.0942		
.5671	-.0433	.5720	-.0389		
.6411	-.0112	.6464	-.0231		
.7156	-.0053	.7193	-.0192		
.7886	.0007	.7945	-.0099		
.8611	.0105	.8688	-.0058		

†Coefficient reflects abnormal pressure level.

(e)  $R_{\bar{c}} = 3.76 \times 10^6$ ;  $M_{\infty} = 0.896$ ;  $\alpha = 5.30^\circ$ .

Figure 10. Continued.





(e) Concluded.

Figure 10. Continued.

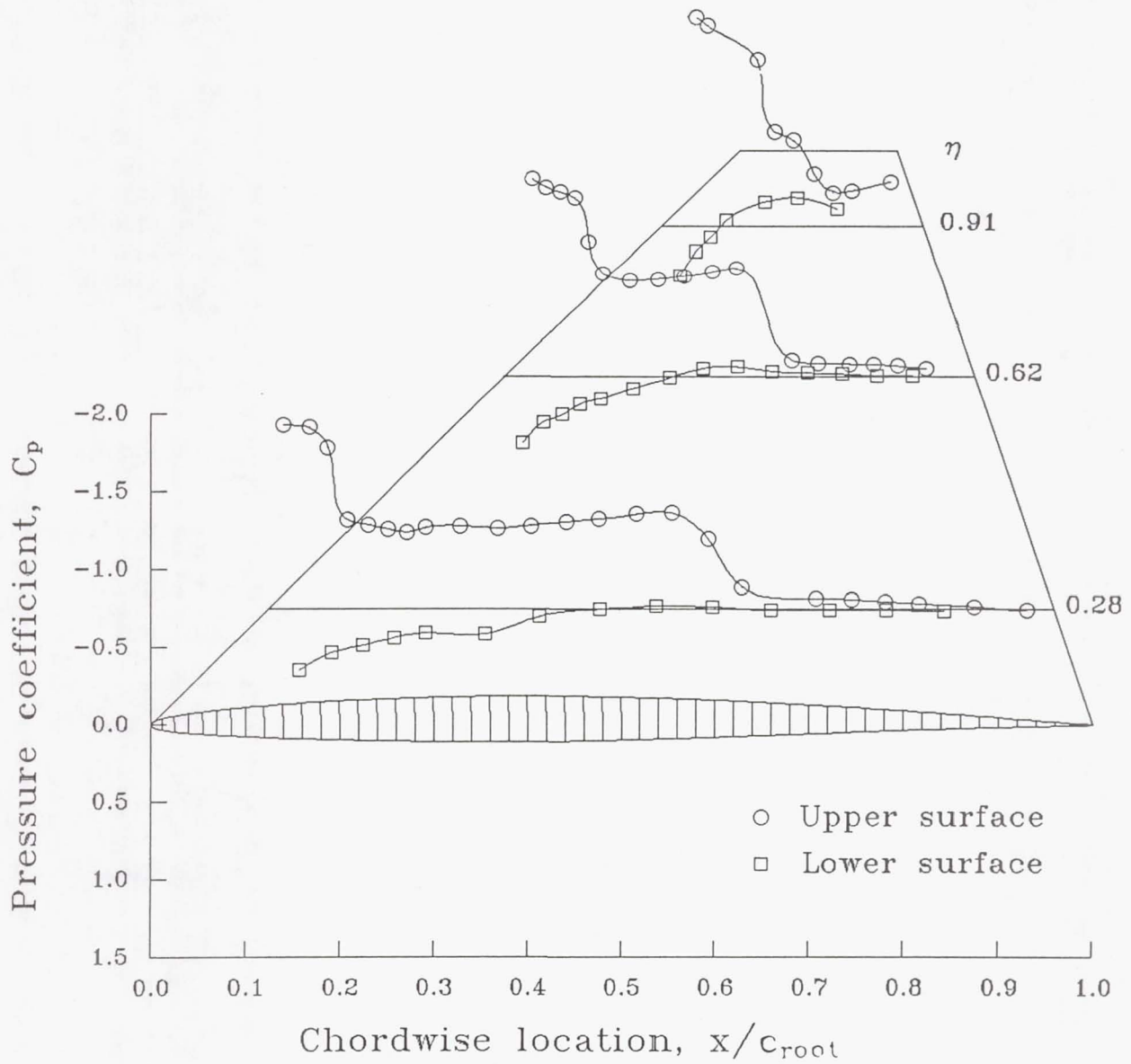
$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.1820	0.0269	*-0.2910	0.0406	*-0.2910
.0513	-1.1640	.0576	-1.3120	.0869	*-.2910
.0748	-1.0350	.0874	-1.2570	.1268	-1.3580
.1001	-.5733	.1184	-1.2270	.1719	-1.3000
.1263	-.5386	.1496	-1.1850	.3627	-1.0790
.1523	-.5124	.1779	-.8922	.4311	-.6206
.1759	-.4947	.2080	-.6834	.5052	-.5666
.1998	-.5228	.2674	-.6326	.5821	-.3482
.2436	-.5333	.3260	-.6425	.6553	-.2235
.2912	-.5206	.3818	-.6636	.7267	-.2367
.3345	-.5353	.4423	-.6915	.8756	-.2959
.3798	-.5581	.4942	-.7193		
.4213	-.5767	.6137	-1.1063		
.4697	-.6096	.6687	-.0842		
.5154	-.6179	.7353	-.0832		
.5617	-.4495	.7874	-.0801		
.6041	-.1395	.8384	-.0710		
.6988	-.0668	.8982	-.0518		
.7449	-.0605				
.7865	-.0470				
.8302	-.0322				
.8994	-.0114				
.9651	.0104				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3949	0.0408	0.4321	0.0605	0.3328
.0793	.2831	.0833	.2985	.1095	.1687
.1201	.2353	.1251	.2485	.1584	.0700
.1598	.1850	.1625	.1827	.2060	-.0385
.1996	.1564	.2055	.1461	.3295	-.1637
.2753	†.1622	.2761	.0785	.4349	-.1900
.3449	.0504	.3535	.0071	.5604	-.1170
.4232	.0017	.4252	-.0520		
.4951	-.0180	.4977	-.0649		
.5671	-.0109	.5720	-.0331		
.6411	.0082	.6464	-.0236		
.7156	.0080	.7193	-.0181		
.7886	.0098	.7945	-.0056		
.8611	.0145	.8688	-.0047		

\* Actual pressure value was beyond measurement range.

† Coefficient reflects abnormal pressure level.

$$(f) R_{\bar{c}} = 3.76 \times 10^6; M_{\infty} = 0.899; \alpha = 8.39^\circ.$$

Figure 10. Continued.



(f) Concluded.

Figure 10. Continued.

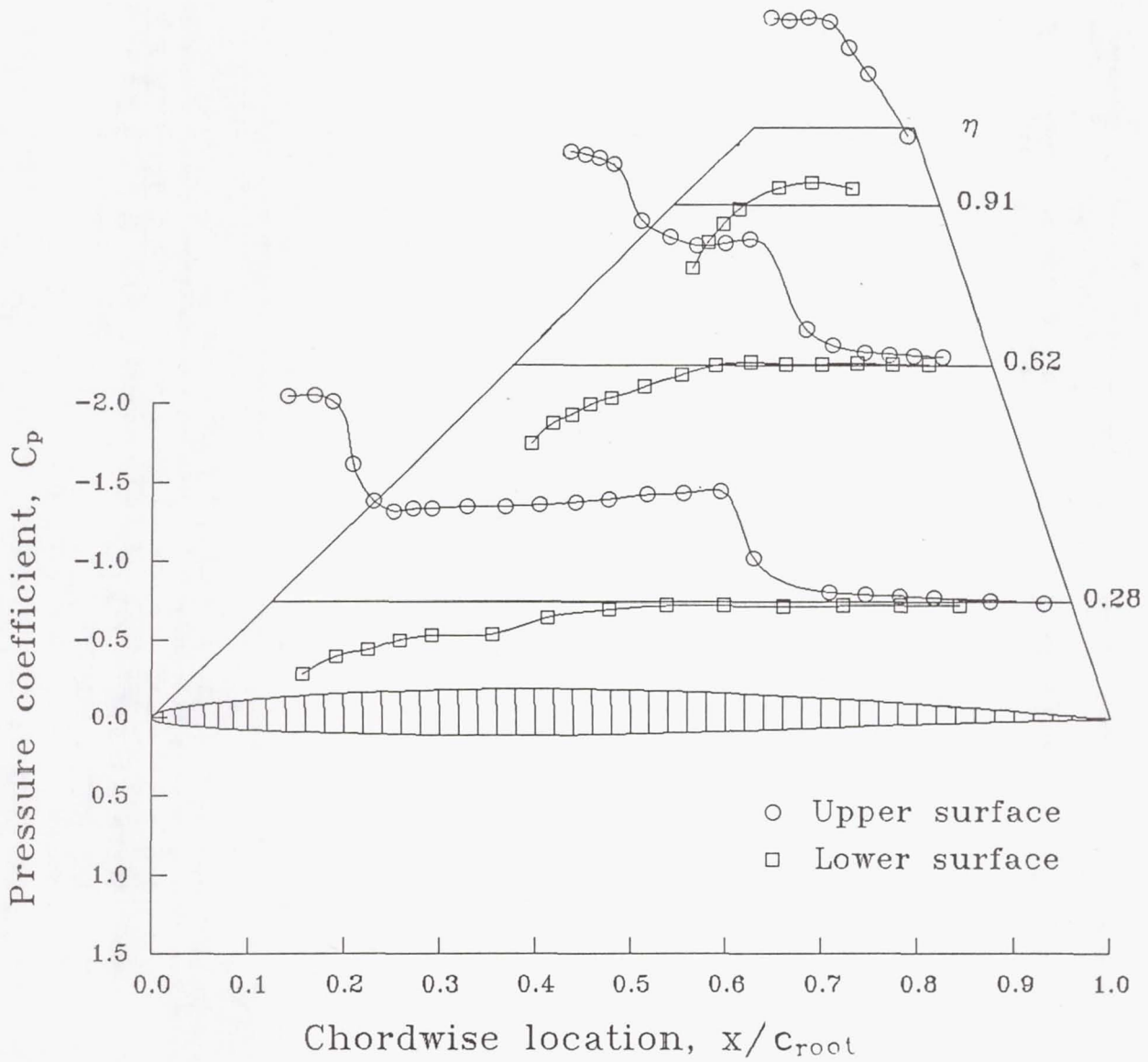
$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3010	0.0269	*-0.2783	0.0406	*-0.2783
.0513	-1.3070	.0576	*-.2783	.0869	*-.2783
.0748	-1.2670	.0874	*-.2783	.1268	*-.2783
.1001	-.8728	.1184	-1.3470	.1719	*-.2783
.1263	-.6395	.1496	-1.3300	.3627	-1.2100
.1523	-.5739	.1779	-1.3050	.4311	-1.1890
.1759	-.5919	.2080	-1.2670	.5052	-1.2090
.1998	-.5942	.2674	-.9026	.5821	-1.1840
.2436	-.6051	.3260	-.7971	.6553	-1.0130
.2912	-.6077	.3818	-.7468	.7267	-.8487
.3345	-.6179	.4423	-.7593	.8756	-.4468
.3798	-.6355	.4942	-.7902		
.4213	-.6536	.6137	-.2238		
.4697	-.6840	.6687	-.1265		
.5154	-.6938	.7353	-.0824		
.5617	-.7088	.7874	-.0682		
.6041	-.2776	.8384	-.0596		
.6988	-.0597	.8982	-.0512		
.7449	-.0439				
.7865	-.0348				
.8302	-.0246				
.8994	-.0080				
.9651	.0104				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4712	0.0408	0.4959	0.0605	0.3909
.0793	.3537	.0833	.3665	.1095	.2300
.1201	.3069	.1251	.3113	.1584	.1195
.1598	.2453	.1625	.2472	.2060	.0235
.1996	.2145	.2055	.2056	.3295	-.1117
.2753	†.2051	.2761	.1333	.4349	-.1506
.3449	.1000	.3535	.0596	.5604	-.1047
.4232	.0481	.4252	-.0013		
.4951	.0238	.4977	-.0224		
.5671	.0217	.5720	-.0055		
.6411	.0311	.6464	-.0087		
.7156	.0231	.7193	-.0148		
.7886	.0204	.7945	-.0049		
.8611	.0212	.8688	-.0058		

\* Actual pressure value was beyond measurement range.

† Coefficient reflects abnormal pressure level.

$$(g) R_{\bar{c}} = 3.76 \times 10^6; M_{\infty} = 0.902; \alpha = 10.44^{\circ}.$$

Figure 10. Continued.



(g) Concluded.

Figure 10. Continued.

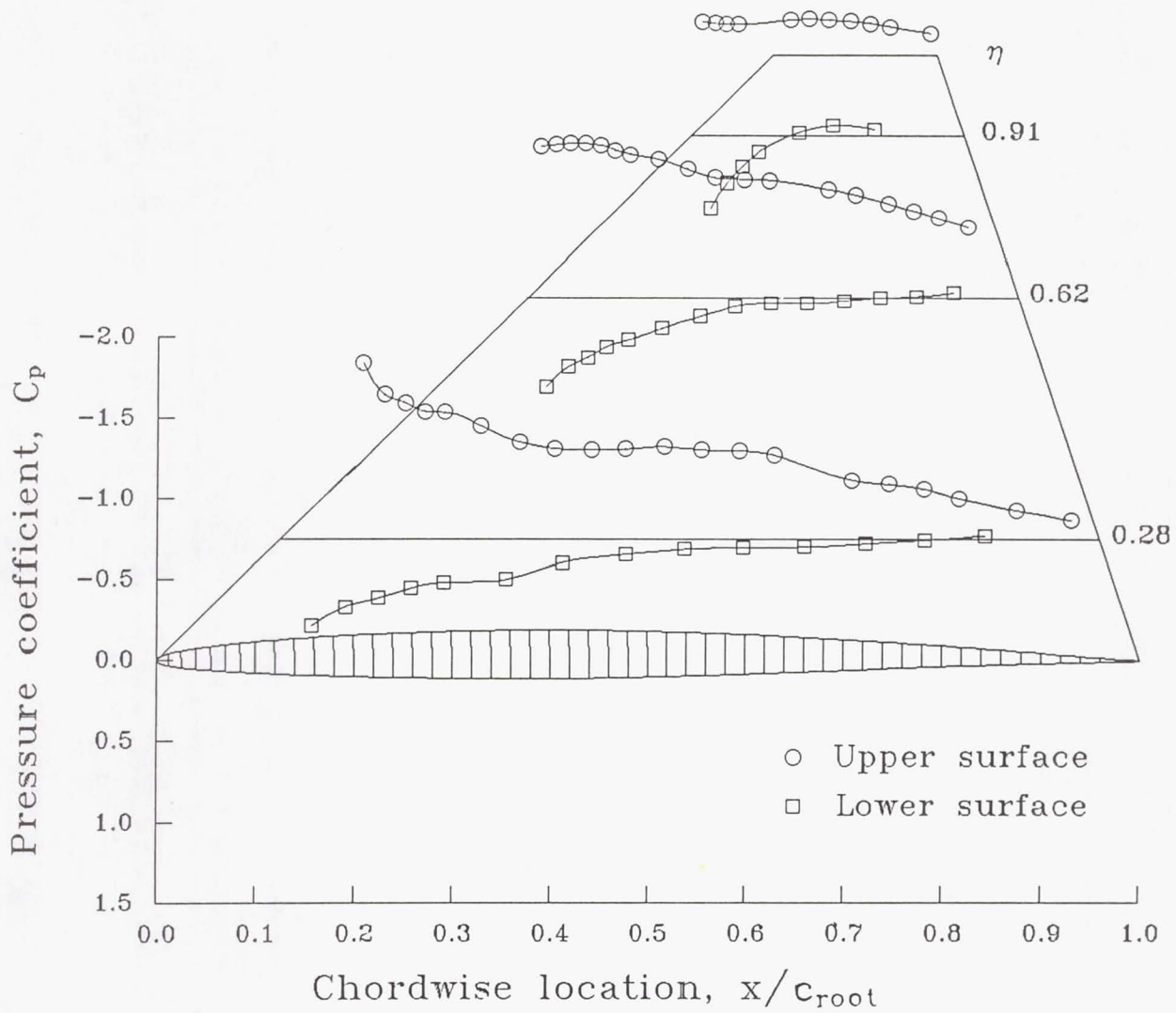
$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	*-0.2532	0.0269	-0.9360	0.0406	-0.7073
.0513	*-.2532	.0576	-.9460	.0869	-.6991
.0748	*-.2532	.0874	-.9559	.1268	-.6955
.1001	-1.0900	.1184	-.9519	.1719	-.6940
.1263	-.8968	.1496	-.9405	.3627	-.7179
.1523	-.8472	.1779	-.9086	.4311	-.7248
.1759	-.7934	.2080	-.8831	.5052	-.7202
.1998	-.7898	.2674	-.8529	.5821	-.7117
.2436	-.7076	.3260	-.7904	.6553	-.6969
.2912	-.6061	.3818	-.7386	.7267	-.6767
.3345	-.5676	.4423	-.7303	.8756	-.6362
.3798	-.5567	.4942	-.7210		
.4213	-.5630	.6137	-.6688		
.4697	-.5762	.6687	-.6345		
.5154	-.5578	.7353	-.5808		
.5617	-.5534	.7874	-.5365		
.6041	-.5268	.8384	-.4930		
.6988	-.3661	.8982	-.4327		
.7449	-.3426				
.7865	-.3135				
.8302	-.2532				
.8994	-.1792				
.9651	-.1159				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.5369	0.0408	0.5525	0.0605	0.4457
.0793	.4189	.0833	.4279	.1095	.2943
.1201	.3638	.1251	.3712	.1584	.1902
.1598	.3017	.1625	.3044	.2060	.1012
.1996	.2694	.2055	.2622	.3295	-.0206
.2753	†.2491	.2761	.1895	.4349	-.0653
.3449	.1477	.3535	.1154	.5604	-.0425
.4232	.0932	.4252	.0553		
.4951	.0642	.4977	.0302		
.5671	.0529	.5720	.0354		
.6411	.0511	.6464	.0210		
.7156	.0282	.7193	.0008		
.7886	.0063	.7945	-.0081		
.8611	-.0203	.8688	-.0332		

\*Actual pressure value was beyond measurement range.

†Coefficient reflects abnormal pressure level.

$$(h) R_{\bar{c}} = 3.76 \times 10^6; M_{\infty} = 0.901; \alpha = 12.28^{\circ}.$$

Figure 10. Continued.



(h) Concluded.

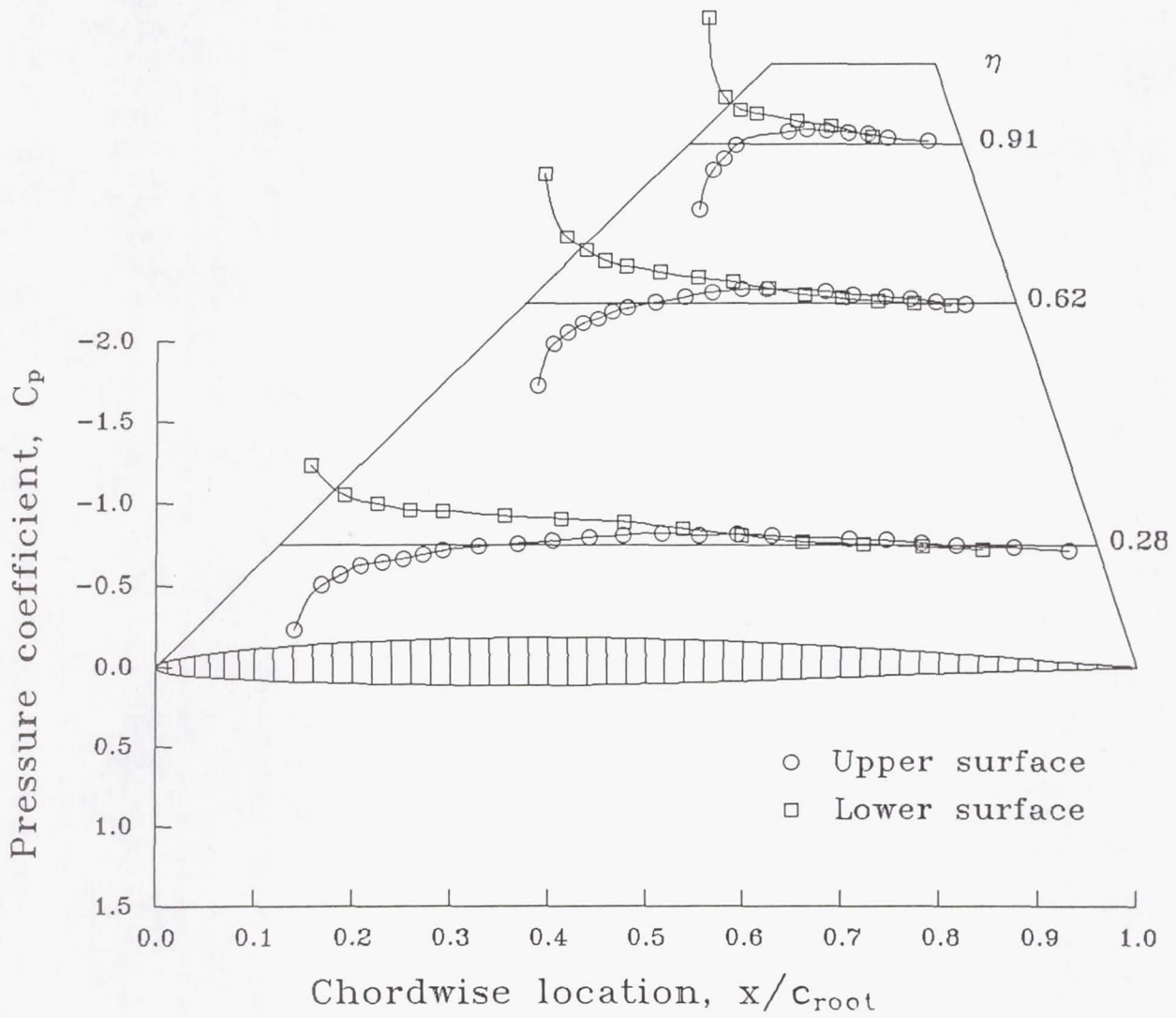
Figure 10. Concluded.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.5174	0.0269	0.5224	0.0406	0.4161
.0513	.2420	.0576	.2587	.0869	.1693
.0748	.1830	.0874	.1854	.1268	.0913
.1001	.1251	.1184	.1282	.1719	.0044
.1263	.1056	.1496	.0975	.3627	-.0790
.1523	.0849	.1779	.0568	.4311	-.0934
.1759	.0605	.2080	.0301	.5052	-.0860
.1998	.0356	.2674	-.0088	.5821	-.0750
.2436	.0111	.3260	-.0388	.6553	-.0660
.2912	-.0061	.3818	-.0697	.7267	-.0415
.3345	-.0261	.4423	-.0838	.8756	-.0210
.3798	-.0457	.4942	-.0875		
.4213	-.0610	.6137	-.0735		
.4697	-.0733	.6687	-.0558		
.5154	-.0608	.7353	-.0393		
.5617	-.0684	.7874	-.0239		
.6041	-.0574	.8384	-.0063		
.6988	-.0397	.8982	.0093		
.7449	-.0303				
.7865	-.0124				
.8302	.0042				
.8994	.0158				
.9651	.0351				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.4876	0.0408	-0.8043	0.0605	-0.7795
.0793	-.3031	.0833	-.4163	.1095	-.2933
.1201	-.2510	.1251	-.3251	.1584	-.2144
.1598	-.2123	.1625	-.2570	.2060	-.1967
.1996	-.2065	.2055	-.2263	.3295	-.1458
.2753	-.1779	.2761	-.1932	.4349	-.1123
.3449	-.1606	.3535	-.1594	.5604	-.0495
.4232	-.1402	.4252	-.1329		
.4951	-.1020	.4977	-.0929		
.5671	-.0601	.5720	-.0518		
.6411	-.0221	.6464	-.0302		
.7156	-.0050	.7193	-.0156		
.7886	.0110	.7945	.0026		
.8611	.0253	.8688	.0112		

(a)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.684$ ;  $\alpha = -4.09^\circ$ .

Figure 11. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test angle-of-attack range at nominal conditions of  $M_{\infty} = 0.7$  and  $R_{\bar{c}} = 14.1 \times 10^6$ .





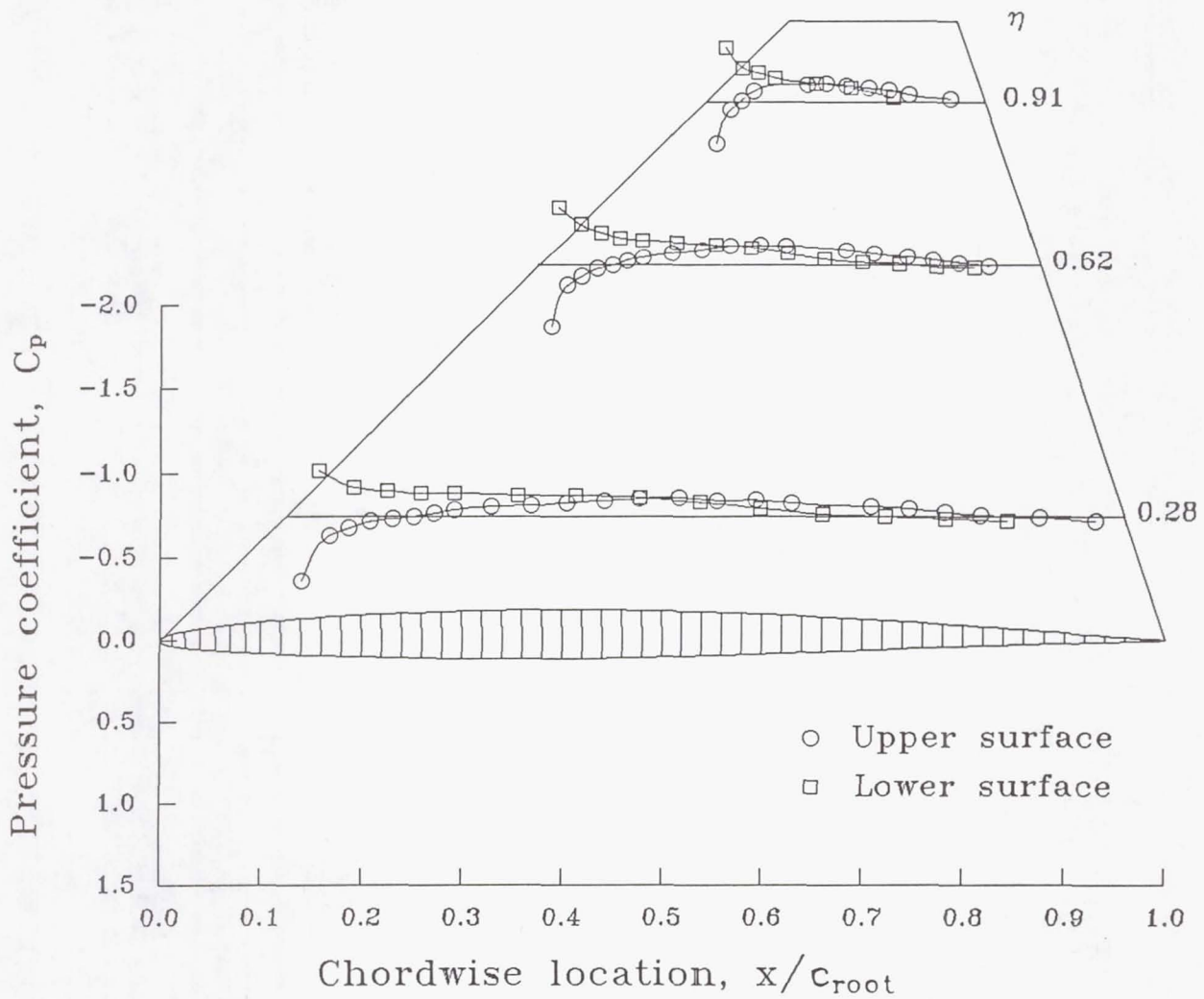
(a) Concluded.

Figure 11. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.3899	0.0269	0.3737	0.0406	0.2531
.0513	.1141	.0576	.1216	.0869	.0474
.0748	.0709	.0874	.0642	.1268	-.0083
.1001	.0287	.1184	.0234	.1719	-.0693
.1263	.0155	.1496	.0027	.3627	-.1053
.1523	.0012	.1779	-.0289	.4311	-.1141
.1759	-.0176	.2080	-.0488	.5052	-.0997
.1998	-.0386	.2674	-.0761	.5821	-.0862
.2436	-.0558	.3260	-.0959	.6553	-.0742
.2912	-.0653	.3818	-.1173	.7267	-.0462
.3345	-.0792	.4423	-.1233	.8756	-.0232
.3798	-.0949	.4942	-.1200		
.4213	-.1048	.6137	-.0946		
.4697	-.1116	.6687	-.0728		
.5154	-.0940	.7353	-.0524		
.5617	-.0971	.7874	-.0341		
.6041	-.0821	.8384	-.0137		
.6988	-.0575	.8982	.0041		
.7449	-.0451				
.7865	-.0248				
.8302	-.0060				
.8994	.0082				
.9651	.0301				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.2698	0.0408	-0.3551	0.0605	-0.3367
.0793	-.1748	.0833	-.2504	.1095	-.2086
.1201	-.1514	.1251	-.2001	.1584	-.1774
.1598	-.1372	.1625	-.1672	.2060	-.1491
.1996	-.1398	.2055	-.1540	.3295	-.1167
.2753	-.1260	.2761	-.1415	.4349	-.0864
.3449	-.1237	.3535	-.1245	.5604	-.0240
.4232	-.1135	.4252	-.1084		
.4951	-.0824	.4977	-.0752		
.5671	-.0472	.5720	-.0371		
.6411	-.0129	.6464	-.0185		
.7156	.0008	.7193	-.0074		
.7886	.0138	.7945	.0093		
.8611	.0263	.8688	.0160		

(b)  $R_c = 14.1 \times 10^6$ ;  $M_\infty = 0.686$ ;  $\alpha = -2.00^\circ$ .

Figure 11. Continued.



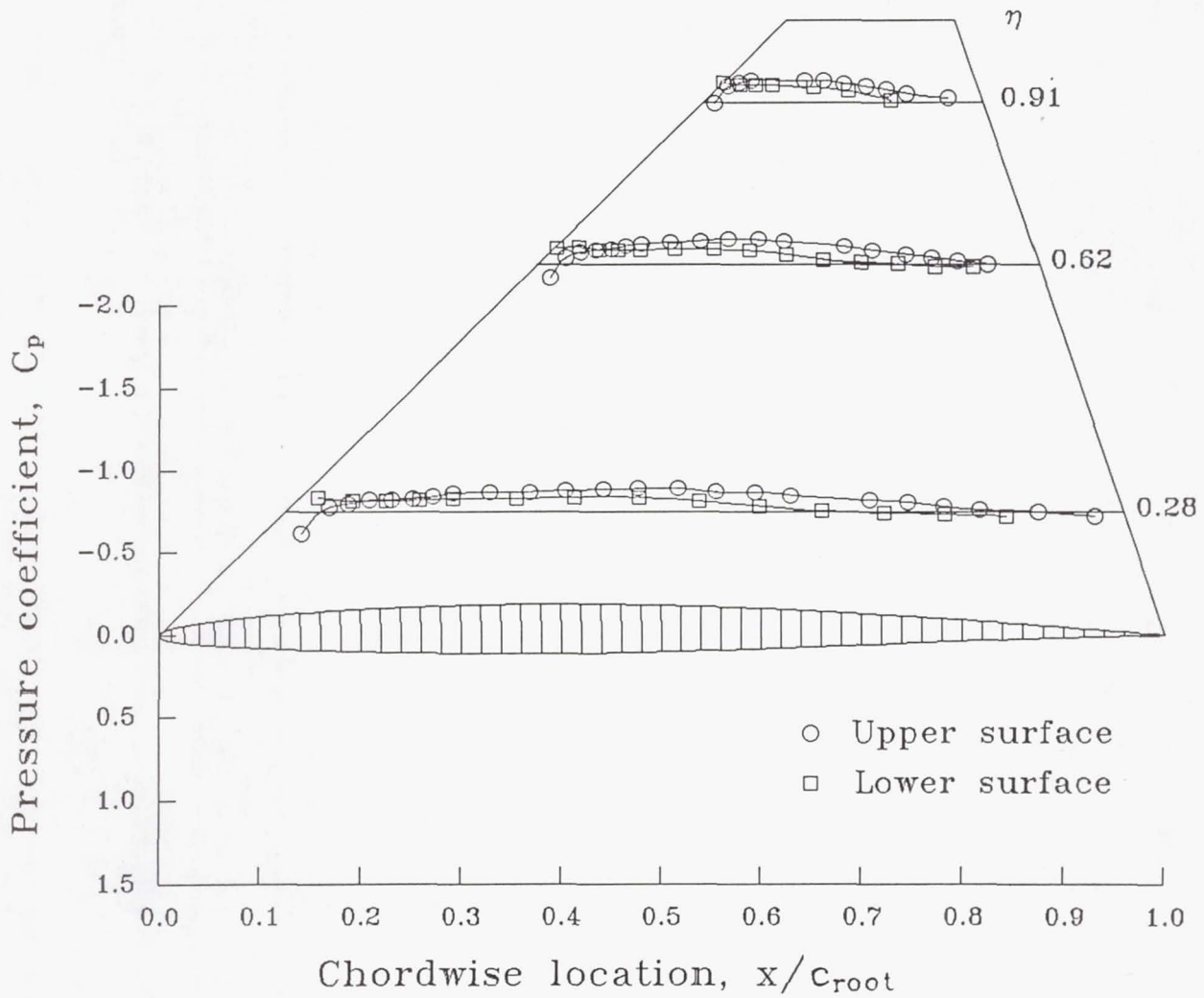
(b) Concluded.

Figure 11. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.1313	0.0269	0.0807	0.0406	0.0073
.0513	-.0267	.0576	-.0419	.0869	-.0984
.0748	-.0479	.0874	-.0699	.1268	-.1197
.1001	-.0691	.1184	-.0895	.1719	-.1361
.1263	-.0745	.1496	-.0956	.3627	-.1320
.1523	-.0820	.1779	-.1149	.4311	-.1350
.1759	-.0931	.2080	-.1273	.5052	-.1145
.1998	-.1106	.2674	-.1404	.5821	-.0979
.2436	-.1196	.3260	-.1496	.6553	-.0833
.2912	-.1209	.3818	-.1596	.7267	-.0546
.3345	-.1310	.4423	-.1572	.8756	-.0292
.3798	-.1390	.4942	-.1474		
.4213	-.1433	.6137	-.1113		
.4697	-.1446	.6687	-.0866		
.5154	-.1224	.7353	-.0630		
.5617	-.1209	.7874	-.0429		
.6041	-.1020	.8384	-.0210		
.6988	-.0714	.8982	-.0019		
.7449	-.0568				
.7865	-.0346				
.8302	-.0144				
.8994	.0018				
.9651	.0254				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.0869	0.0408	-0.1022	0.0605	-0.1197
.0793	-.0643	.0833	-.1055	.1095	-.1058
.1201	-.0643	.1251	-.0889	.1584	-.1097
.1598	-.0700	.1625	-.0845	.2060	-.1051
.1996	-.0792	.2055	-.0867	.3295	-.0921
.2753	-.0789	.2761	-.0917	.4349	-.0714
.3449	-.0881	.3535	-.0909	.5604	-.0153
.4232	-.0872	.4252	-.0846		
.4951	-.0636	.4977	-.0596		
.5671	-.0350	.5720	-.0268		
.6411	-.0051	.6464	-.0121		
.7156	.0053	.7193	-.0038		
.7886	.0157	.7945	.0106		
.8611	.0261	.8688	.0155		

(c)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.689$ ;  $\alpha = 0.09^\circ$ .

Figure 11. Continued.



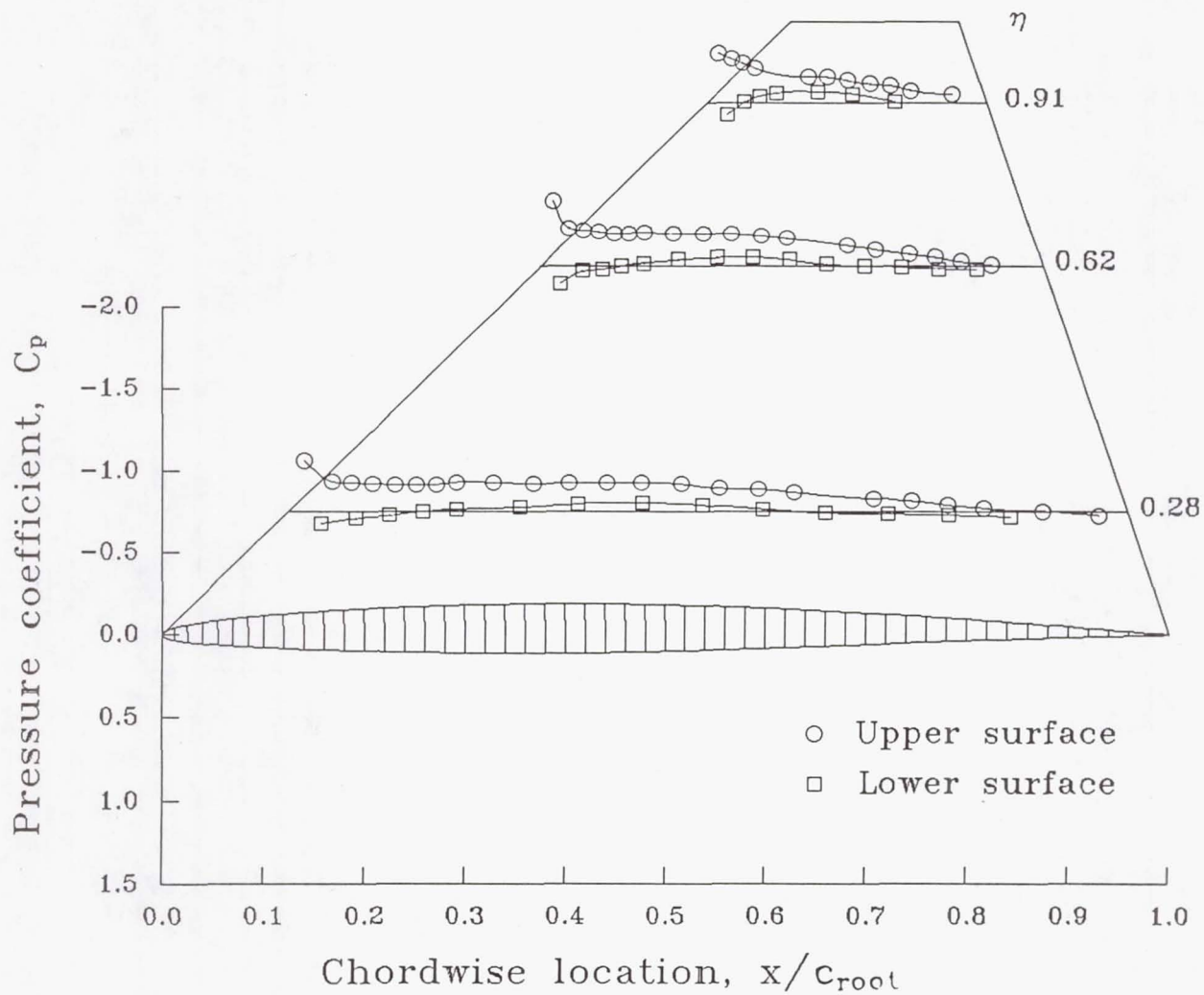
(c) Concluded.

Figure 11. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.3116	0.0269	-0.4012	0.0406	-0.3088
.0513	-.1867	.0576	-.2335	.0869	-.2717
.0748	-.1785	.0874	-.2213	.1268	-.2452
.1001	-.1711	.1184	-.2117	.1719	-.2125
.1263	-.1668	.1496	-.1990	.3627	-.1613
.1523	-.1648	.1779	-.2028	.4311	-.1610
.1759	-.1677	.2080	-.2048	.5052	-.1376
.1998	-.1808	.2674	-.2010	.5821	-.1178
.2436	-.1801	.3260	-.1987	.6553	-.1041
.2912	-.1722	.3818	-.1971	.7267	-.0770
.3345	-.1790	.4423	-.1877	.8756	-.0509
.3798	-.1771	.4942	-.1702		
.4213	-.1760	.6137	-.1250		
.4697	-.1717	.6687	-.0975		
.5154	-.1448	.7353	-.0718		
.5617	-.1388	.7874	-.0504		
.6041	-.1165	.8384	-.0269		
.6988	-.0800	.8982	-.0072		
.7449	-.0637				
.7865	-.0402				
.8302	-.0184				
.8994	-.0003				
.9651	.0250				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.0766	0.0408	0.1085	0.0605	0.0726
.0793	.0438	.0833	.0301	.1095	-.0040
.1201	.0243	.1251	.0182	.1584	-.0413
.1598	.0011	.1625	.0002	.2060	-.0607
.1996	-.0140	.2055	-.0160	.3295	-.0698
.2753	-.0248	.2761	-.0369	.4349	-.0559
.3449	-.0454	.3535	-.0503	.5604	-.0072
.4232	-.0536	.4252	-.0532		
.4951	-.0375	.4977	-.0370		
.5671	-.0153	.5720	-.0100		
.6411	.0099	.6464	-.0004		
.7156	.0163	.7193	.0047		
.7886	.0236	.7945	.0169		
.8611	.0315	.8688	.0190		

(d)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.689$ ;  $\alpha = 2.16^\circ$ .

Figure 11. Continued.



(d) Concluded.

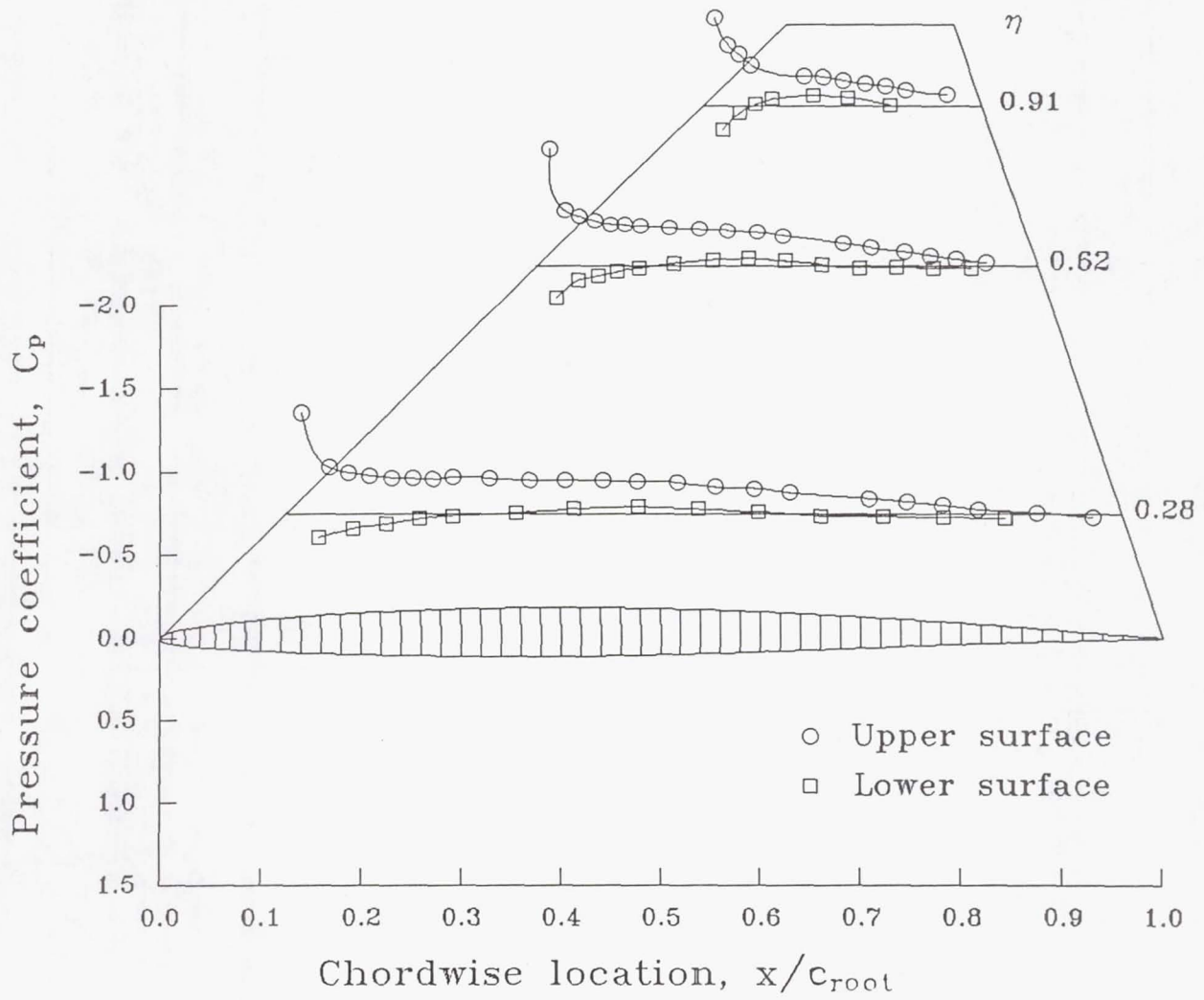
Figure 11. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.6145	0.0269	-0.7361	0.0406	-0.5379
.0513	-.2824	.0576	-.3505	.0869	-.3752
.0748	-.2551	.0874	-.3125	.1268	-.3196
.1001	-.2325	.1184	-.2845	.1719	-.2568
.1263	-.2221	.1496	-.2614	.3627	-.1875
.1523	-.2163	.1779	-.2570	.4311	-.1839
.1759	-.2144	.2080	-.2521	.5052	-.1605
.1998	-.2244	.2674	-.2401	.5821	-.1402
.2436	-.2185	.3260	-.2302	.6553	-.1283
.2912	-.2059	.3818	-.2233	.7267	-.1037
.3345	-.2087	.4423	-.2101	.8756	-.0752
.3798	-.2037	.4942	-.1893		
.4213	-.1998	.6137	-.1395		
.4697	-.1923	.6687	-.1110		
.5154	-.1626	.7353	-.0843		
.5617	-.1547	.7874	-.0620		
.6041	-.1306	.8384	-.0379		
.6988	-.0913	.8982	-.0172		
.7449	-.0737				
.7865	-.0495				
.8302	-.0267				
.8994	-.0075				
.9651	.0190				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.1436	0.0408	0.1909	0.0605	0.1483
.0793	.0884	.0833	.0880	.1095	.0386
.1201	.0605	.1251	.0630	.1584	-.0148
.1598	.0294	.1625	.0348	.2060	-.0447
.1996	.0118	.2055	.0126	.3295	-.0652
.2753	-.0044	.2761	-.0154	.4349	-.0555
.3449	-.0302	.3535	-.0359	.5604	-.0100
.4232	-.0425	.4252	-.0433		
.4951	-.0299	.4977	-.0308		
.5671	-.0107	.5720	-.0070		
.6411	.0123	.6464	.0103		
.7156	.0167	.7193	.0038		
.7886	.0226	.7945	.0150		
.8611	.0291	.8688	.0154		

(e)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.691$ ;  $\alpha = 3.17^\circ$ .

Figure 11. Continued.





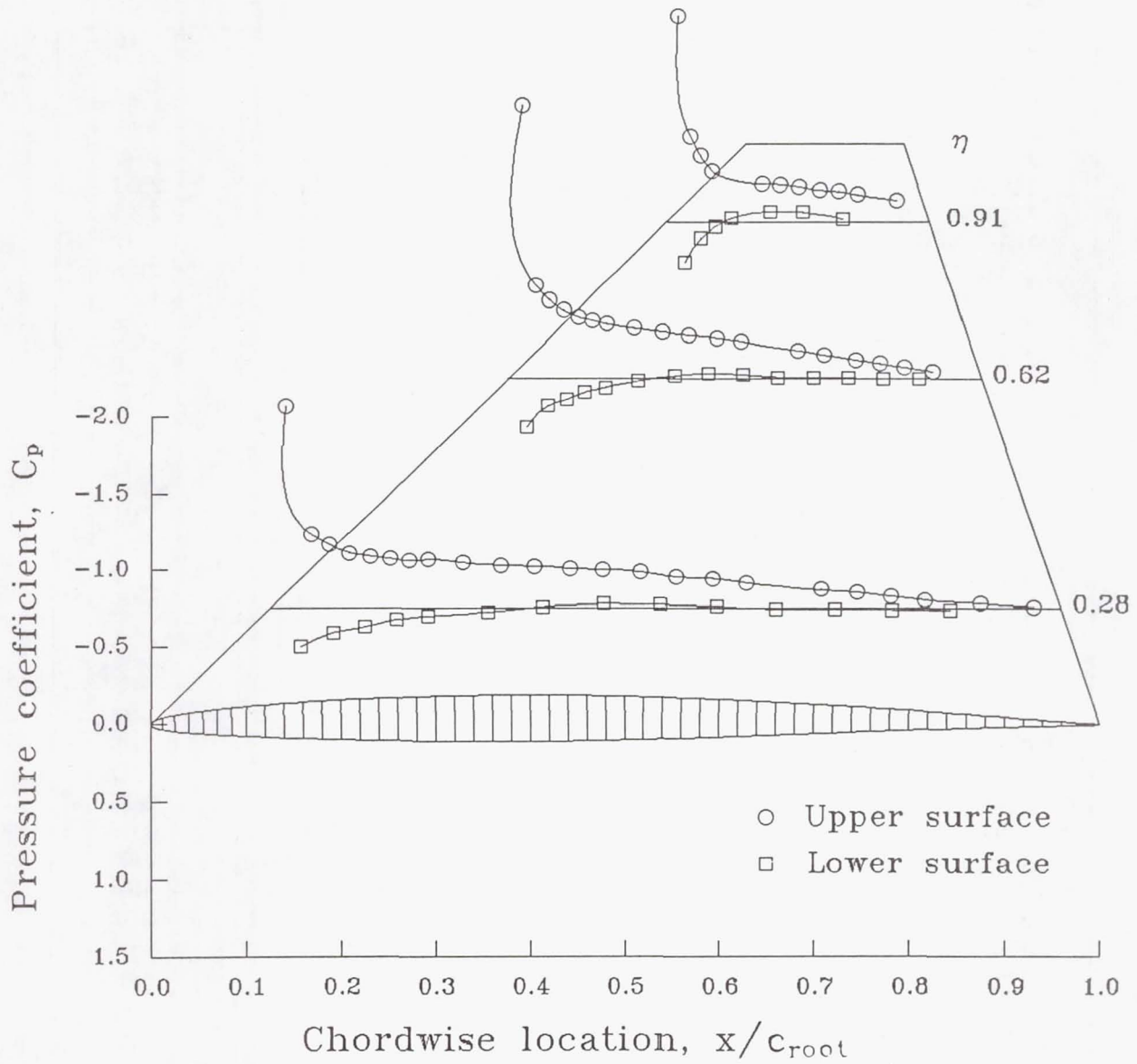
(e) Concluded.

Figure 11. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3200	0.0269	-1.7460	0.0406	-1.3280
.0513	-.4859	.0576	-.5915	.0869	-.5453
.0748	-.4183	.0874	-.4999	.1268	-.4251
.1001	-.3623	.1184	-.4375	.1719	-.3290
.1263	-.3409	.1496	-.3936	.3627	-.2488
.1523	-.3263	.1779	-.3726	.4311	-.2434
.1759	-.3127	.2080	-.3527	.5052	-.2266
.1998	-.3172	.2674	-.3241	.5821	-.2083
.2436	-.3008	.3260	-.2998	.6553	-.1990
.2912	-.2787	.3818	-.2825	.7267	-.1780
.3345	-.2745	.4423	-.2626	.8756	-.1436
.3798	-.2622	.4942	-.2368		
.4213	-.2533	.6137	-.1807		
.4697	-.2398	.6687	-.1510		
.5154	-.2052	.7353	-.1207		
.5617	-.1943	.7874	-.0978		
.6041	-.1668	.8384	-.0729		
.6988	-.1225	.8982	-.0488		
.7449	-.1029				
.7865	-.0767				
.8302	-.0522				
.8994	-.0313				
.9651	-.0025				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2504	0.0408	0.3151	0.0605	0.2498
.0793	.1617	.0833	.1750	.1095	.1015
.1201	.1223	.1251	.1335	.1584	.0237
.1598	.0757	.1625	.0893	.2060	-.0256
.1996	.0534	.2055	.0574	.3295	-.0667
.2753	.0265	.2761	.0168	.4349	-.0647
.3449	-.0087	.3535	-.0170	.5604	-.0233
.4232	-.0291	.4252	-.0329		
.4951	-.0231	.4977	-.0279		
.5671	-.0099	.5720	-.0087		
.6411	.0086	.6464	-.0050		
.7156	.0091	.7193	-.0060		
.7886	.0117	.7945	.0027		
.8611	.0151	.8688	-.0005		

(f)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.690$ ;  $\alpha = 5.26^\circ$ .

Figure 11. Continued.



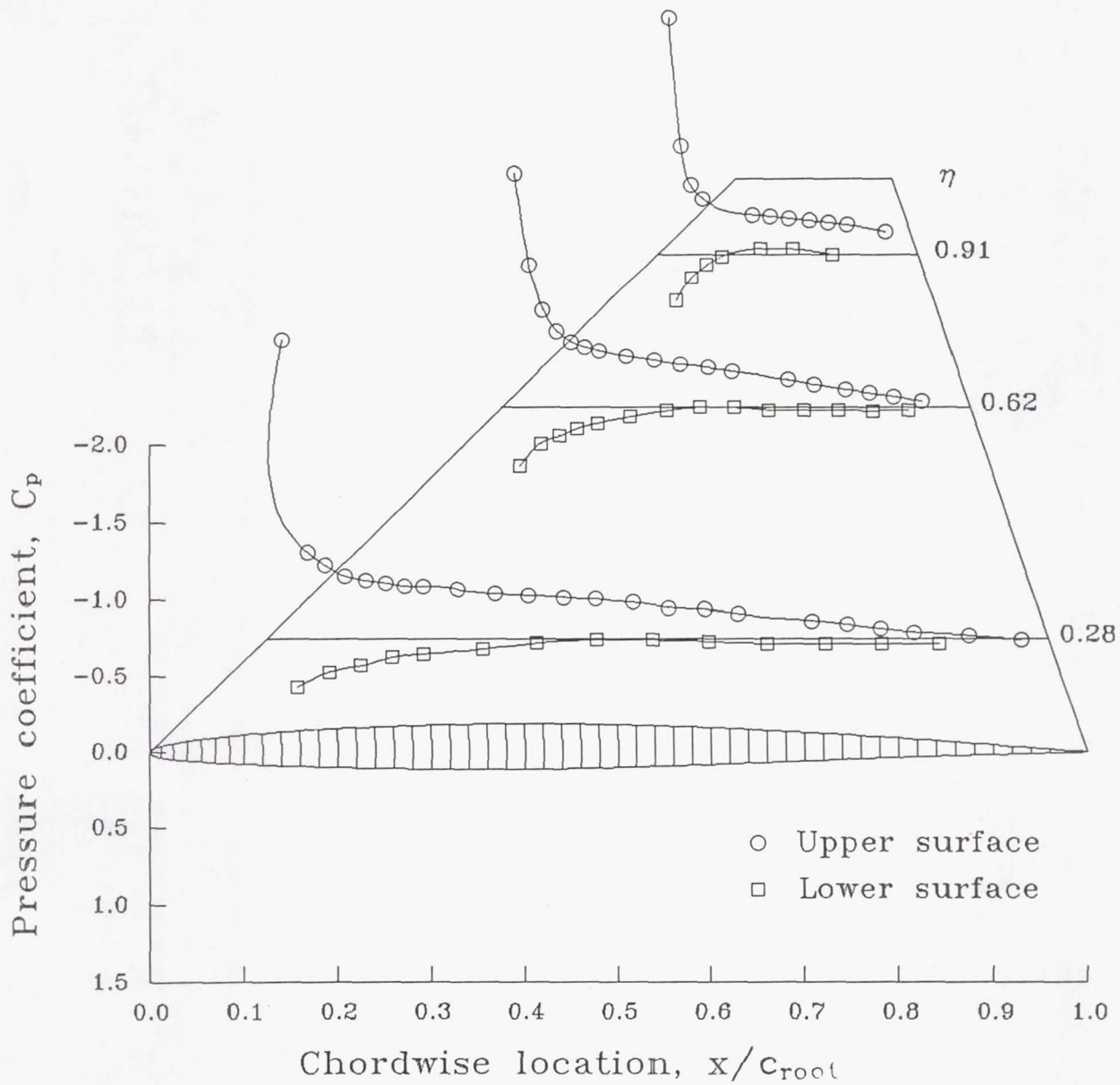
(f) Concluded.

Figure 11. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.9430	0.0269	-.5350	0.0406	-1.5470
.0513	-.5618	.0576	-.9366	.0869	-.7134
.0748	-.4768	.0874	-.6352	.1268	-.4587
.1001	-.4052	.1184	-.4936	.1719	-.3669
.1263	-.3769	.1496	-.4292	.3627	-.2625
.1523	-.3597	.1779	-.3935	.4311	-.2554
.1759	-.3400	.2080	-.3688	.5052	-.2399
.1998	-.3408	.2674	-.3348	.5821	-.2242
.2436	-.3191	.3260	-.3068	.6553	-.2138
.2912	-.2915	.3818	-.2824	.7267	-.1993
.3345	-.2809	.4423	-.2598	.8756	-.1569
.3798	-.2682	.4942	-.2346		
.4213	-.2557	.6137	-.1769		
.4697	-.2388	.6687	-.1464		
.5154	-.2022	.7353	-.1162		
.5617	-.1898	.7874	-.0922		
.6041	-.1609	.8384	-.0672		
.6988	-.1148	.8982	-.0411		
.7449	-.0940				
.7865	-.0664				
.8302	-.0415				
.8994	-.0202				
.9651	.0101				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3190	0.0408	0.3814	0.0605	0.3089
.0793	.2195	.0833	.2372	.1095	.1537
.1201	.1766	.1251	.1890	.1584	.0655
.1598	.1240	.1625	.1403	.2060	.0096
.1996	.1000	.2055	.1050	.3295	-.0403
.2753	.0689	.2761	.0598	.4349	-.0408
.3449	.0304	.3535	.0216	.5604	-.0016
.4232	.0073	.4252	.0016		
.4951	.0097	.4977	.0030		
.5671	.0194	.5720	.0187		
.6411	.0348	.6464	.0186		
.7156	.0330	.7193	.0173		
.7886	.0338	.7945	.0239		
.8611	.0349	.8688	.0180		

(g)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.694$ ;  $\alpha = 6.37^\circ$ .

Figure 11. Continued.



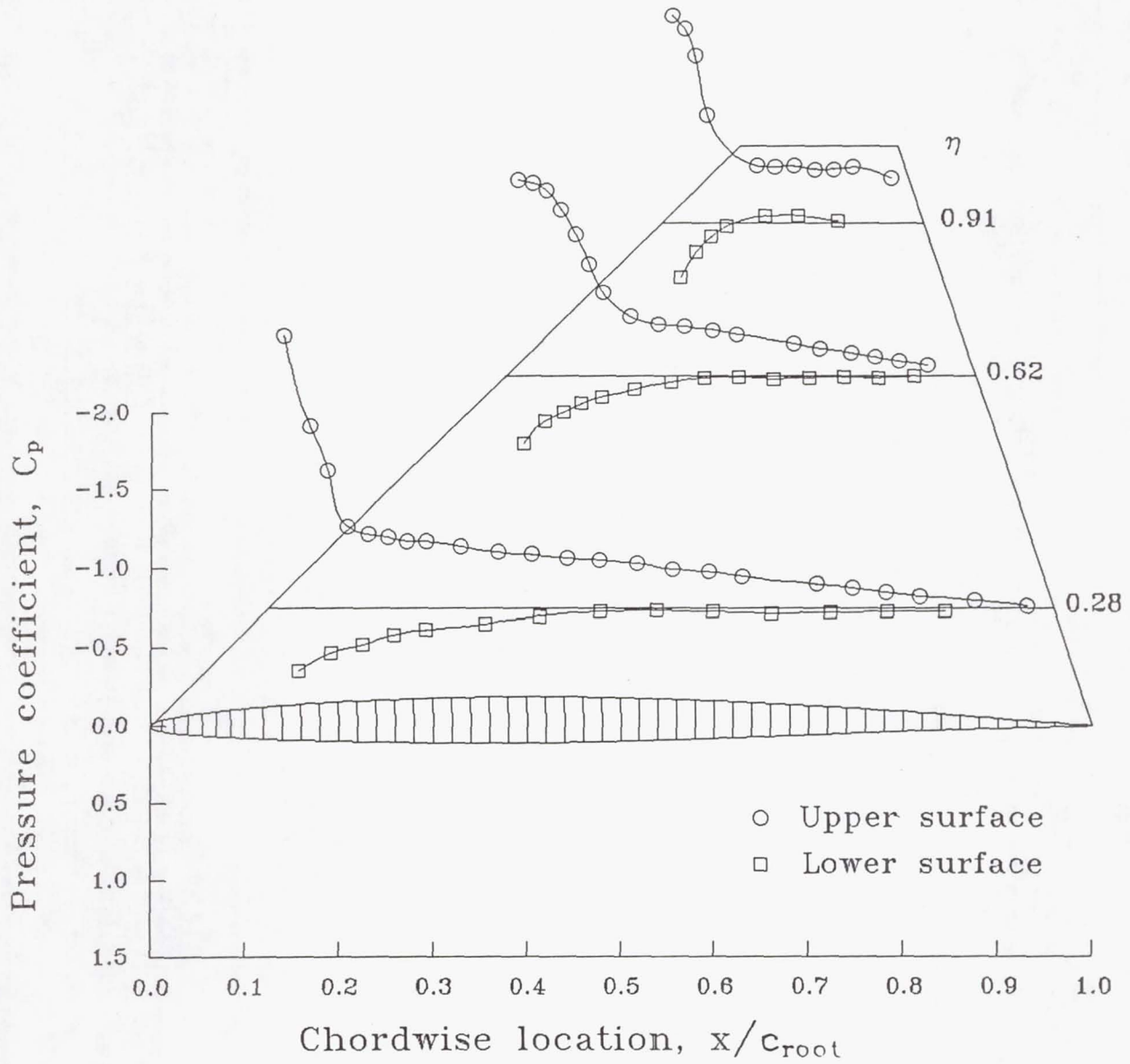
(g) Concluded.

Figure 11. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.7680	0.0269	-1.2800	0.0406	-1.3490
.0513	-1.1670	.0576	-1.2630	.0869	-1.2630
.0748	-.8795	.0874	-1.2160	.1268	-1.0850
.1001	-.5175	.1184	-1.0870	.1719	-.7007
.1263	-.4712	.1496	-.9276	.3627	-.3722
.1523	-.4505	.1779	-.7330	.4311	-.3644
.1759	-.4249	.2080	-.5472	.5052	-.3726
.1998	-.4252	.2674	-.3905	.5821	-.3506
.2436	-.3941	.3260	-.3414	.6553	-.3497
.2912	-.3559	.3818	-.3253	.7267	-.3647
.3345	-.3432	.4423	-.3029	.8756	-.2955
.3798	-.3216	.4942	-.2752		
.4213	-.3063	.6137	-.2163		
.4697	-.2864	.6687	-.1828		
.5154	-.2446	.7353	-.1532		
.5617	-.2310	.7874	-.1279		
.6041	-.1998	.8384	-.0998		
.6988	-.1490	.8982	-.0729		
.7449	-.1271				
.7865	-.0981				
.8302	-.0717				
.8994	-.0478				
.9651	-.0142				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3950	0.0408	0.4481	0.0605	0.3534
.0793	.2802	.0833	.2972	.1095	.1883
.1201	.2290	.1251	.2406	.1584	.0869
.1598	.1658	.1625	.1830	.2060	.0207
.1996	.1377	.2055	.1411	.3295	-.0451
.2753	.0982	.2761	.0870	.4349	-.0478
.3449	.0515	.3535	.0394	.5604	-.0119
.4232	.0210	.4252	.0130		
.4951	.0174	.4977	.0077		
.5671	.0216	.5720	.0186		
.6411	.0329	.6464	.0105		
.7156	.0266	.7193	.0082		
.7886	.0238	.7945	.0118		
.8611	.0214	.8688	.0007		

(h)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.699$ ;  $\alpha = 8.23^\circ$ .

Figure 11. Continued.



(h) Concluded.

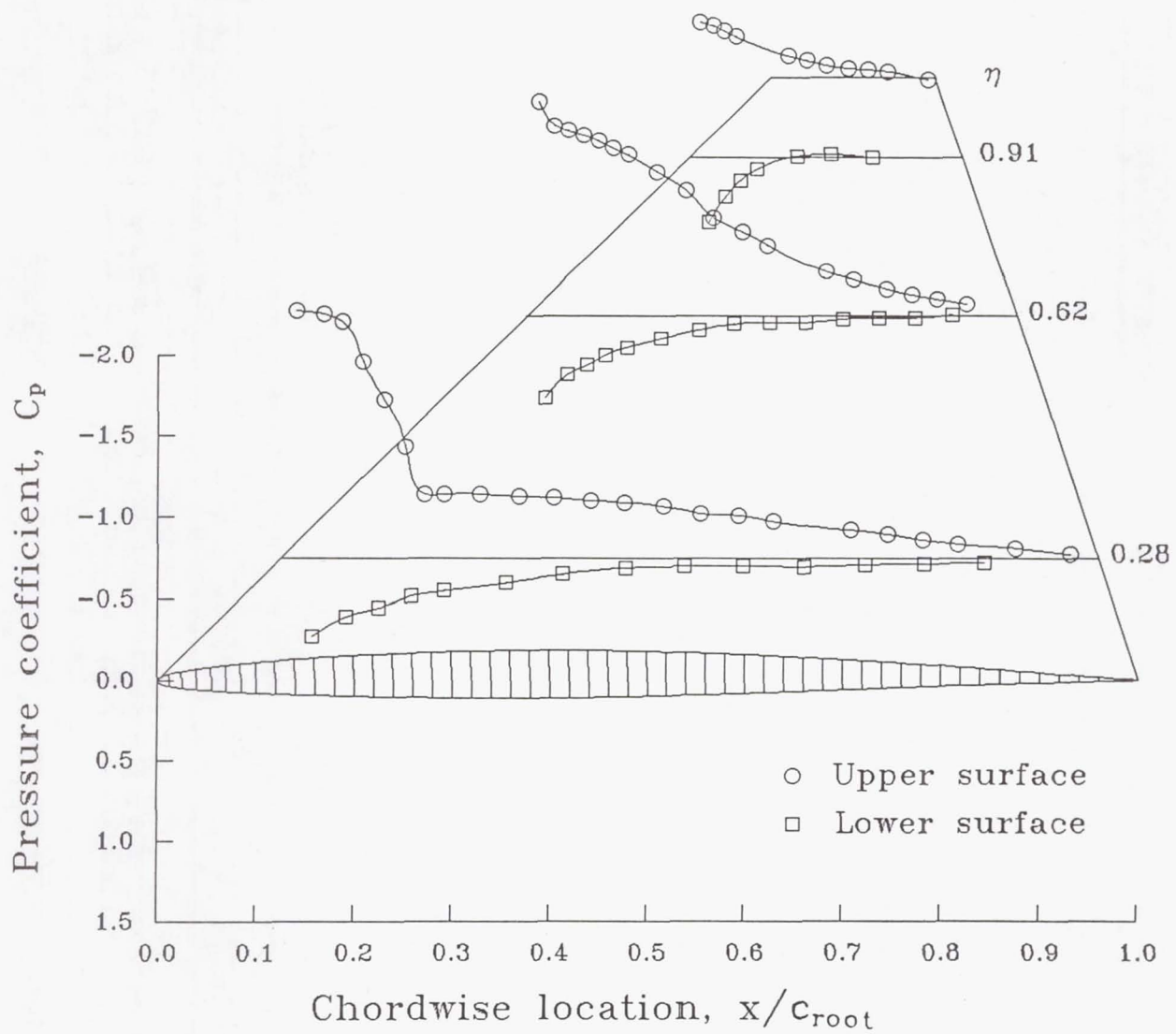
Figure 11. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.5360	0.0269	-1.3530	0.0406	-0.8400
.0513	-1.5130	.0576	-1.2010	.0869	-.8210
.0748	-1.4650	.0874	-1.1720	.1268	-.7867
.1001	-1.2120	.1184	-1.1390	.1719	-.7516
.1263	-.9727	.1496	-1.1060	.3627	-.6325
.1523	-.6869	.1779	-1.0620	.4311	-.6065
.1759	-.3925	.2080	-1.0180	.5052	-.5716
.1998	-.3928	.2674	-.9049	.5821	-.5571
.2436	-.3940	.3260	-.7941	.6553	-.5481
.2912	-.3812	.3818	-.6234	.7267	-.5374
.3345	-.3705	.4423	-.5337	.8756	-.4851
.3798	-.3534	.4942	-.4487		
.4213	-.3405	.6137	-.2775		
.4697	-.3187	.6687	-.2267		
.5154	-.2738	.7353	-.1677		
.5617	-.2598	.7874	-.1353		
.6041	-.2254	.8384	-.1058		
.6988	-.1701	.8982	-.0735		
.7449	-.1457				
.7865	-.1145				
.8302	-.0863				
.8994	-.0611				
.9651	-.0253				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4759	0.0408	0.5114	0.0605	0.4072
.0793	.3562	.0833	.3694	.1095	.2492
.1201	.3005	.1251	.3068	.1584	.1431
.1598	.2288	.1625	.2451	.2060	.0707
.1996	.1977	.2055	.1994	.3295	-.0083
.2753	.1505	.2761	.1391	.4349	-.0220
.3449	.0972	.3535	.0836	.5604	.0018
.4232	.0605	.4252	.0497		
.4951	.0495	.4977	.0369		
.5671	.0471	.5720	.0403		
.6411	.0518	.6464	.0203		
.7156	.0398	.7193	.0164		
.7886	.0329	.7945	.0133		
.8611	.0260	.8688	-.0069		

(i)  $R_c = 14.1 \times 10^6$ ;  $M_\infty = 0.700$ ;  $\alpha = 10.25^\circ$ .

Figure 11. Continued.





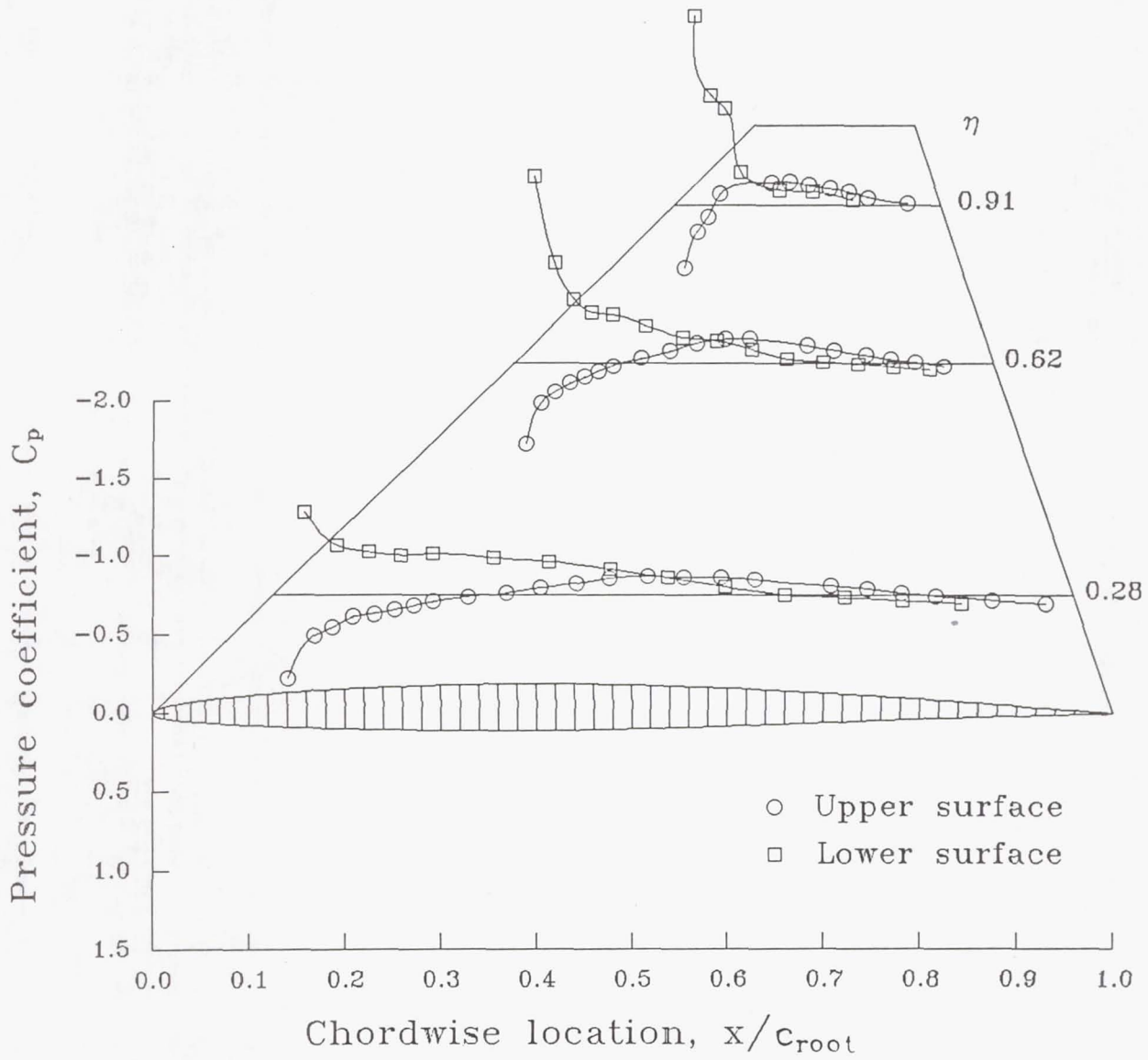
(i) Concluded.

Figure 11. Concluded.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.5264	0.0269	0.5183	0.0406	0.3962
.0513	.2554	.0576	.2598	.0869	.1632
.0748	.1984	.0874	.1853	.1268	.0701
.1001	.1377	.1184	.1291	.1719	-.0742
.1263	.1182	.1496	.0901	.3627	-.1411
.1523	.0959	.1779	.0520	.4311	-.1451
.1759	.0675	.2080	.0179	.5052	-.1264
.1998	.0424	.2674	-.0299	.5821	-.1042
.2436	.0131	.3260	-.0770	.6553	-.0845
.2912	-.0104	.3818	-.1268	.7267	-.0501
.3345	-.0442	.4423	-.1506	.8756	-.0121
.3798	-.0726	.4942	-.1505		
.4213	-.1052	.6137	-.1101		
.4697	-.1213	.6687	-.0806		
.5154	-.1101	.7353	-.0499		
.5617	-.1102	.7874	-.0265		
.6041	-.0961	.8384	-.0060		
.6988	-.0565	.8982	.0177		
.7449	-.0396				
.7865	-.0143				
.8302	.0078				
.8994	.0333				
.9651	.0569				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.5297	0.0408	-1.1780	0.0605	-1.1920
.0793	-.3217	.0833	-.6432	.1095	-.6902
.1201	-.2762	.1251	-.4034	.1584	-.6080
.1598	-.2556	.1625	-.3190	.2060	-.2055
.1996	-.2636	.2055	-.3056	.3295	-.0961
.2753	-.2386	.2761	-.2364	.4349	-.0869
.3449	-.2143	.3535	-.1614	.5604	-.0327
.4232	-.1632	.4252	-.1393		
.4951	-.1091	.4977	-.0853		
.5671	-.0494	.5720	-.0293		
.6411	-.0017	.6464	-.0083		
.7156	.0175	.7193	.0051		
.7886	.0344	.7945	.0242		
.8611	.0522	.8688	.0396		

(a)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.877$ ;  $\alpha = -3.92^\circ$ .

Figure 12. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test angle-of-attack range at nominal conditions of  $M_{\infty} = 0.9$  and  $R_{\bar{c}} = 14.1 \times 10^6$ .



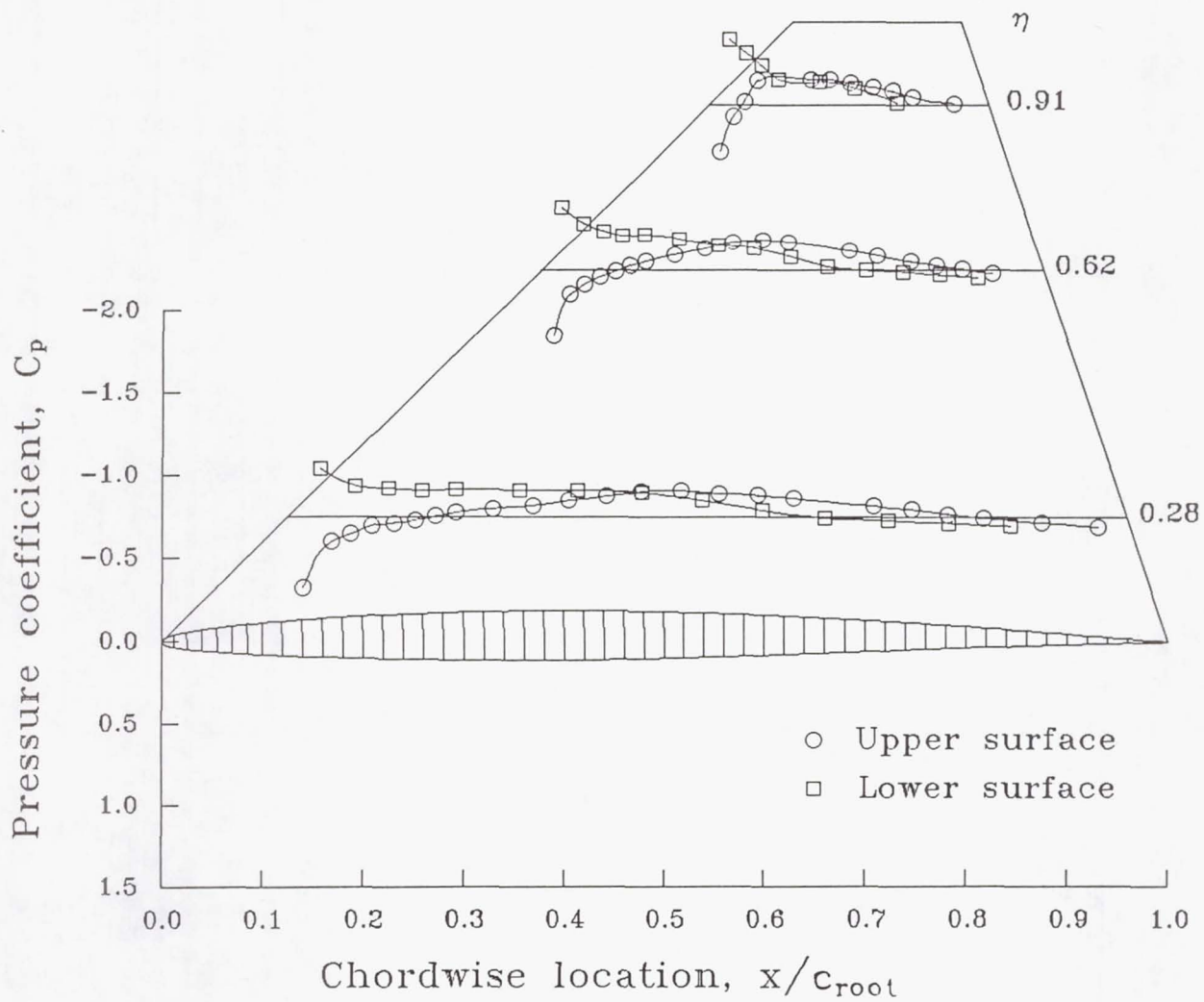
(a) Concluded.

Figure 12. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.4238	0.0269	0.4010	0.0406	0.2724
.0513	.1509	.0576	.1501	.0869	.0630
.0748	.1040	.0874	.0839	.1268	-.0205
.1001	.0550	.1184	.0389	.1719	-.1477
.1263	.0394	.1496	.0061	.3627	-.1544
.1523	.0213	.1779	-.0262	.4311	-.1566
.1759	-.0025	.2080	-.0542	.5052	-.1316
.1998	-.0249	.2674	-.0940	.5821	-.1068
.2436	-.0488	.3260	-.1333	.6553	-.0848
.2912	-.0672	.3818	-.1729	.7267	-.0472
.3345	-.0959	.4423	-.1841	.8756	-.0104
.3798	-.1226	.4942	-.1734		
.4213	-.1502	.6137	-.1187		
.4697	-.1600	.6687	-.0857		
.5154	-.1397	.7353	-.0519		
.5617	-.1310	.7874	-.0265		
.6041	-.1103	.8384	-.0037		
.6988	-.0629	.8982	.0219		
.7449	-.0428				
.7865	-.0155				
.8302	.0080				
.8994	.0355				
.9651	.0598				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.2904	0.0408	-0.3857	0.0605	-0.3950
.0793	-.1887	.0833	-.2891	.1095	-.3147
.1201	-.1708	.1251	-.2392	.1584	-.2414
.1598	-.1599	.1625	-.2149	.2060	-.1536
.1996	-.1658	.2055	-.2174	.3295	-.1399
.2753	-.1595	.2761	-.1941	.4349	-.1013
.3449	-.1595	.3535	-.1550	.5604	-.0165
.4232	-.1437	.4252	-.1357		
.4951	-.0969	.4977	-.0804		
.5671	-.0401	.5720	-.0208		
.6411	.0066	.6464	.0008		
.7156	.0234	.7193	.0128		
.7886	.0387	.7945	.0295		
.8611	.0556	.8688	.0448		

(b)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.874$ ;  $\alpha = -1.80^\circ$ .

Figure 12. Continued.



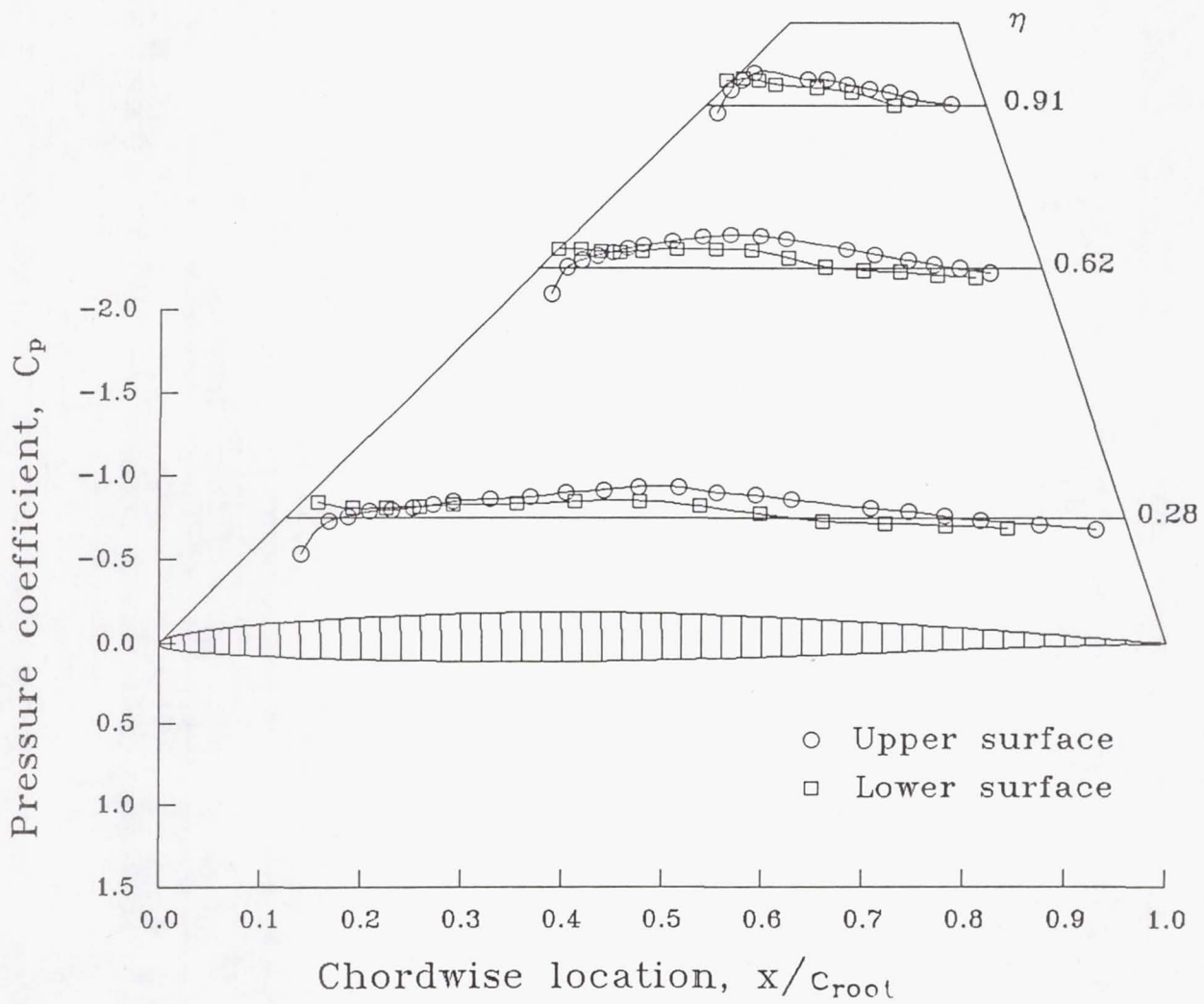
(b) Concluded.

Figure 12. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.2154	0.0269	0.1525	0.0406	0.0445
.0513	.0218	.0576	-.0044	.0869	-.0939
.0748	-.0072	.0874	-.0480	.1268	-.1516
.1001	-.0375	.1184	-.0753	.1719	-.2013
.1263	-.0469	.1496	-.0940	.3627	-.1622
.1523	-.0594	.1779	-.1170	.4311	-.1597
.1759	-.0762	.2080	-.1367	.5052	-.1293
.1998	-.0963	.2674	-.1643	.5821	-.1024
.2436	-.1134	.3260	-.1909	.6553	-.0800
.2912	-.1242	.3818	-.2083	.7267	-.0436
.3345	-.1535	.4423	-.2026	.8756	-.0076
.3798	-.1683	.4942	-.1800		
.4213	-.1875	.6137	-.1159		
.4697	-.1849	.6687	-.0815		
.5154	-.1538	.7353	-.0468		
.5617	-.1372	.7874	-.0211		
.6041	-.1117	.8384	.0027		
.6988	-.0595	.8982	.0282		
.7449	-.0385				
.7865	-.0105				
.8302	.0134				
.8994	.0413				
.9651	.0652				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.0892	0.0408	-0.1136	0.0605	-0.1520
.0793	-.0575	.0833	-.1105	.1095	-.1678
.1201	-.0595	.1251	-.0983	.1584	-.1567
.1598	-.0664	.1625	-.0944	.2060	-.1301
.1996	-.0775	.2055	-.1017	.3295	-.1094
.2753	-.0830	.2761	-.1154	.4349	-.0789
.3449	-.0974	.3535	-.1145	.5604	-.0003
.4232	-.1021	.4252	-.1067		
.4951	-.0705	.4977	-.0615		
.5671	-.0234	.5720	-.0066		
.6411	.0189	.6464	.0114		
.7156	.0329	.7193	.0214		
.7886	.0459	.7945	.0371		
.8611	.0613	.8688	.0502		

(c)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.876$ ;  $\alpha = 0.28^\circ$ .

Figure 12. Continued.



(c) Concluded.

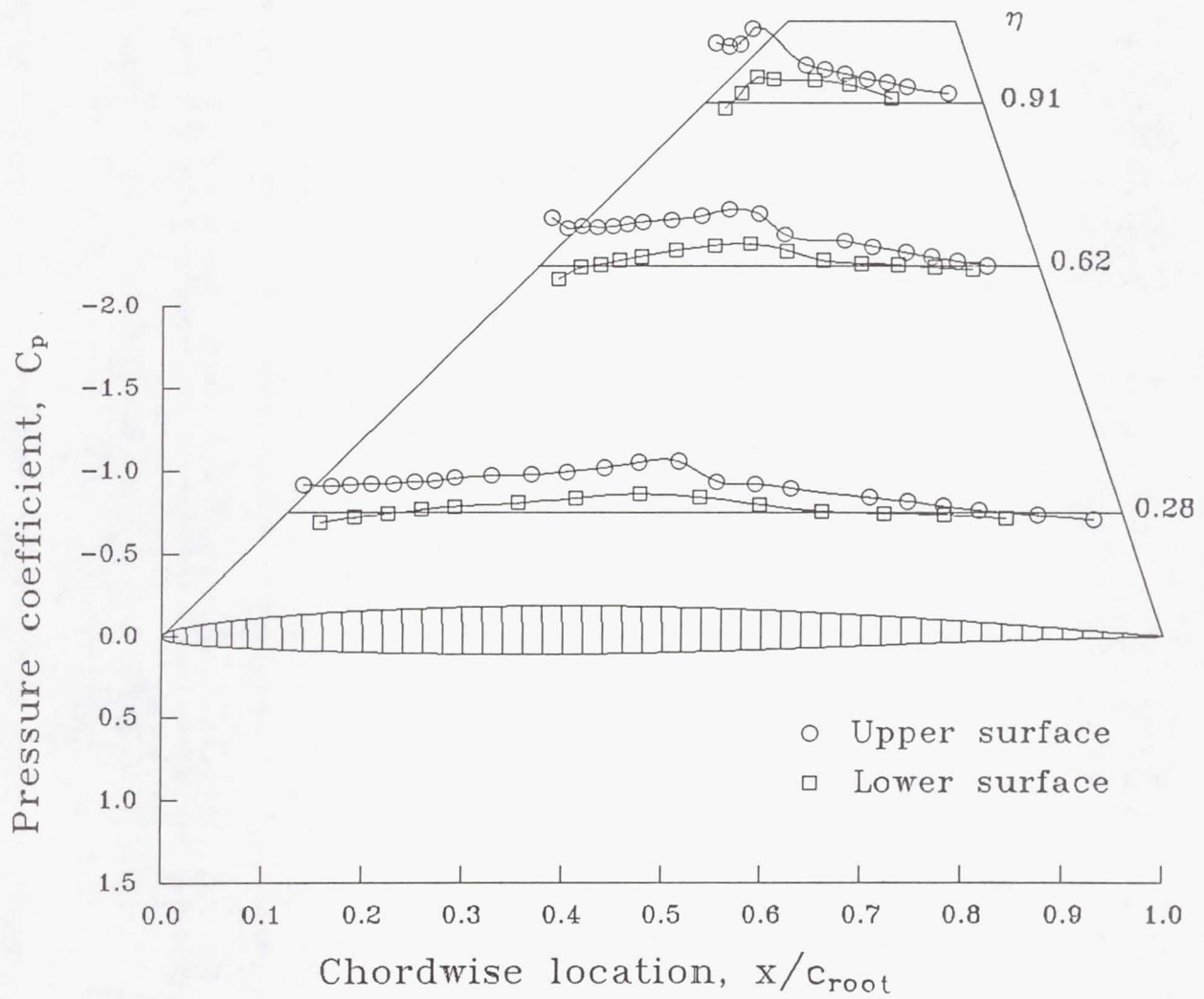
Figure 12. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.1626	0.0269	-0.2986	0.0406	-0.3675
.0513	-.1589	.0576	-.2309	.0869	-.3467
.0748	-.1668	.0874	-.2460	.1268	-.3583
.1001	-.1706	.1184	-.2416	.1719	-.4534
.1263	-.1752	.1496	-.2479	.3627	-.2341
.1523	-.1843	.1779	-.2617	.4311	-.2094
.1759	-.1927	.2080	-.2766	.5052	-.1797
.1998	-.2098	.2674	-.2889	.5821	-.1499
.2436	-.2237	.3260	-.3112	.6553	-.1300
.2912	-.2312	.3818	-.3554	.7267	-.0978
.3345	-.2482	.4423	-.3238	.8756	-.0619
.3798	-.2731	.4942	-.1945		
.4213	-.3063	.6137	-.1509		
.4697	-.3101	.6687	-.1153		
.5154	-.1864	.7353	-.0784		
.5617	-.1713	.7874	-.0513		
.6041	-.1471	.8384	-.0270		
.6988	-.0900	.8982	-.0003		
.7449	-.0663				
.7865	-.0369				
.8302	-.0117				
.8994	.0171				
.9651	.0414				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.0615	0.0408	0.0828	0.0605	0.0358
.0793	.0305	.0833	.0074	.1095	-.0625
.1201	.0093	.1251	-.0094	.1584	-.1608
.1598	-.0171	.1625	-.0312	.2060	-.1502
.1996	-.0350	.2055	-.0527	.3295	-.1404
.2753	-.0556	.2761	-.0904	.4349	-.1126
.3449	-.0870	.3535	-.1200	.5604	-.0302
.4232	-.1097	.4252	-.1305		
.4951	-.0912	.4977	-.0897		
.5671	-.0471	.5720	-.0329		
.6411	-.0063	.6464	-.0156		
.7156	.0056	.7193	-.0070		
.7886	.0178	.7945	.0070		
.8611	.0329	.8688	.0190		

(d)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.890$ ;  $\alpha = 2.24^\circ$ .

Figure 12. Continued.





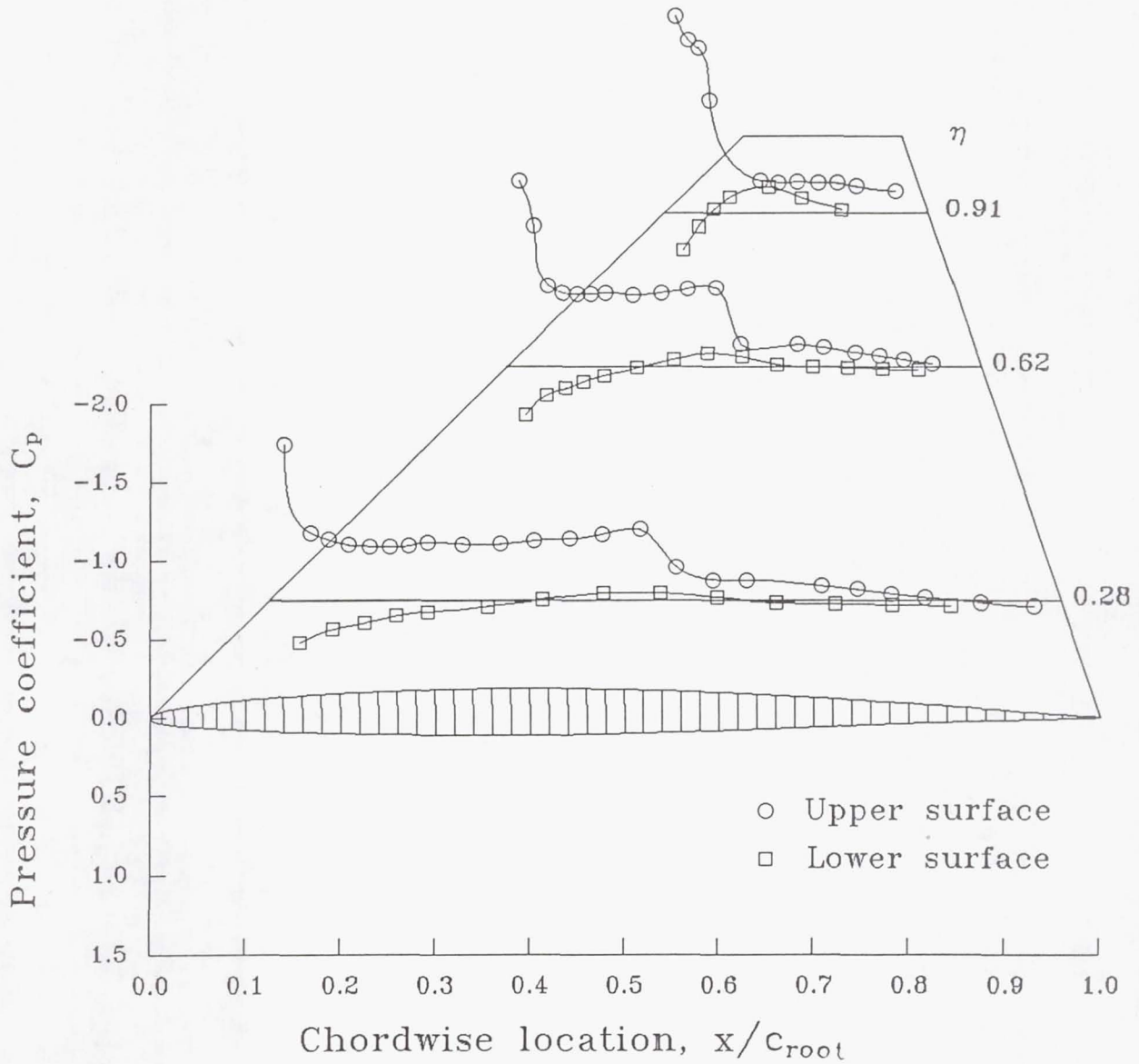
(d) Concluded.

Figure 12. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.9943	0.0269	-1.2160	0.0406	-1.2650
.0513	-.4329	.0576	-.9199	.0869	-1.1140
.0748	-.3907	.0874	-.5226	.1268	-1.0600
.1001	-.3566	.1184	-.4729	.1719	-.7250
.1263	-.3486	.1496	-.4674	.3627	-.2134
.1523	-.3436	.1779	-.4692	.4311	-.2025
.1759	-.3524	.2080	-.4767	.5052	-.2068
.1998	-.3727	.2674	-.4583	.5821	-.2007
.2436	-.3624	.3260	-.4731	.6553	-.2001
.2912	-.3631	.3818	-.4996	.7267	-.1788
.3345	-.3871	.4423	-.5087	.8756	-.1440
.3798	-.3977	.4942	-.1454		
.4213	-.4255	.6137	-.1443		
.4697	-.4559	.6687	-.1261		
.5154	-.2119	.7353	-.0953		
.5617	-.1288	.7874	-.0701		
.6041	-.1272	.8384	-.0464		
.6988	-.0909	.8982	-.0179		
.7449	-.0691				
.7865	-.0415				
.8302	-.0161				
.8994	.0124				
.9651	.0372				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2659	0.0408	0.3139	0.0605	0.2377
.0793	.1837	.0833	.1861	.1095	.0863
.1201	.1427	.1251	.1433	.1584	-.0243
.1598	.0971	.1625	.0983	.2060	-.1079
.1996	.0730	.2055	.0627	.3295	-.1767
.2753	.0389	.2761	.0074	.4349	-.1038
.3449	-.0062	.3535	-.0468	.5604	-.0231
.4232	-.0434	.4252	-.0845		
.4951	-.0443	.4977	-.0634		
.5671	-.0176	.5720	-.0135		
.6411	.0141	.6464	.0002		
.7156	.0196	.7193	.0047		
.7886	.0264	.7945	.0149		
.8611	.0362	.8688	.0199		

(e)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.886$ ;  $\alpha = 5.46^\circ$ .

Figure 12. Continued.



(e) Concluded.

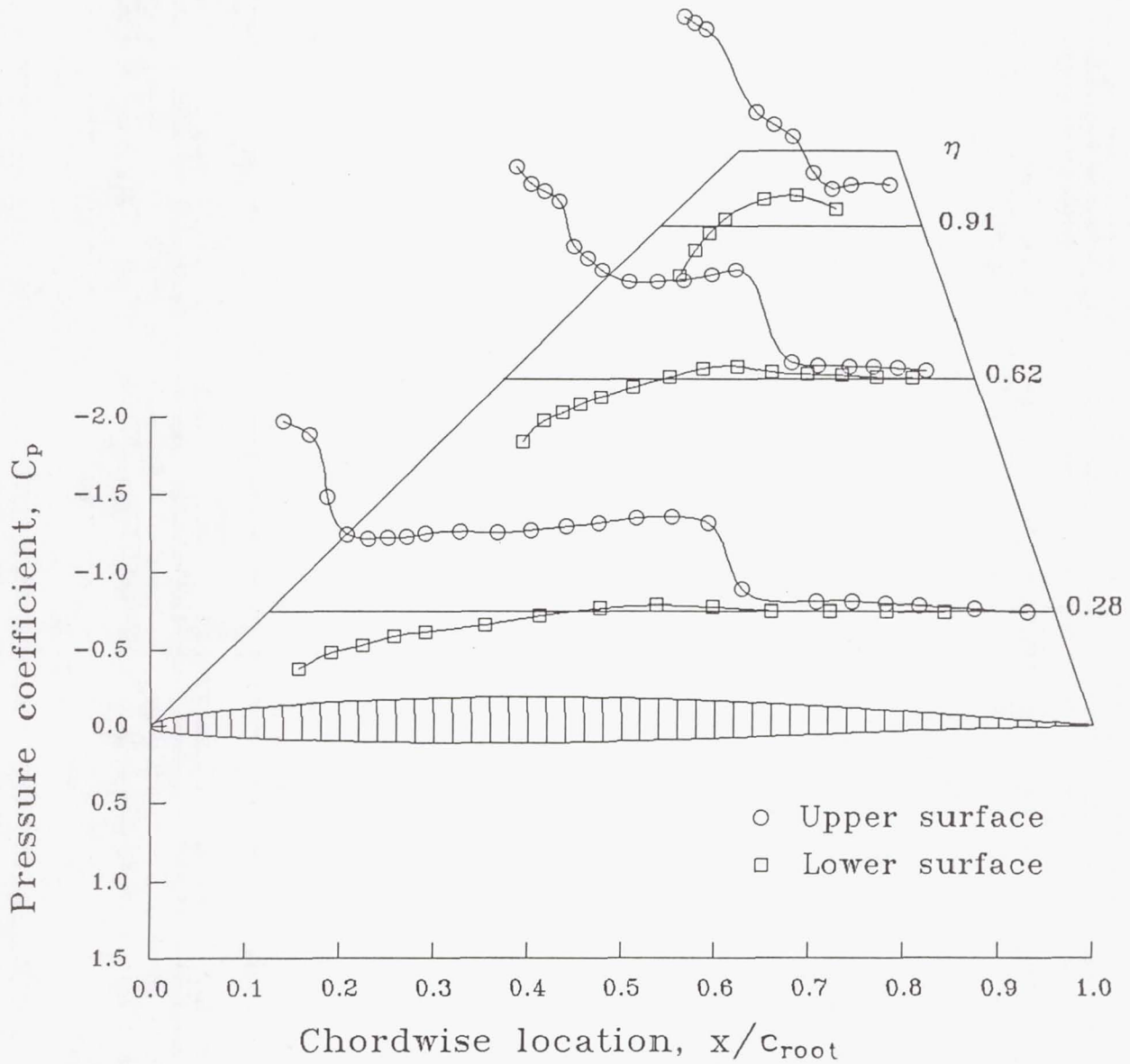
Figure 12. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.2180	0.0269	-1.3910	0.0406	*-0.5145
.0513	-1.1350	.0576	-1.2830	.0869	-1.3700
.0748	-.7322	.0874	-1.2330	.1268	-1.3260
.1001	-.4947	.1184	-1.1670	.1719	-1.2850
.1263	-.4662	.1496	-.8682	.3627	-.7557
.1523	-.4733	.1779	-.7856	.4311	-.6740
.1759	-.4762	.2080	-.7053	.5052	-.5919
.1998	-.4959	.2674	-.6242	.5821	-.3558
.2436	-.5127	.3260	-.6269	.6553	-.2471
.2912	-.5052	.3818	-.6369	.7267	-.2747
.3345	-.5224	.4423	-.6733	.8756	-.2765
.3798	-.5432	.4942	-.7097		
.4213	-.5665	.6137	-.1046		
.4697	-.5985	.6687	-.0839		
.5154	-.6089	.7353	-.0824		
.5617	-.5659	.7874	-.0798		
.6041	-.1370	.8384	-.0713		
.6988	-.0597	.8982	-.0508		
.7449	-.0597				
.7865	-.0459				
.8302	-.0321				
.8994	-.0119				
.9651	.0098				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3740	0.0408	0.4160	0.0605	0.3300
.0793	.2701	.0833	.2766	.1095	.1612
.1201	.2189	.1251	.2221	.1584	.0473
.1598	.1610	.1625	.1662	.2060	-.0503
.1996	.1322	.2055	.1224	.3295	-.1776
.2753	.0876	.2761	.0564	.4349	-.2041
.3449	.0309	.3535	-.0118	.5604	-.1148
.4232	-.0189	.4252	-.0693		
.4951	-.0358	.4977	-.0818		
.5671	-.0255	.5720	-.0437		
.6411	-.0020	.6464	-.0316		
.7156	-.0009	.7193	-.0238		
.7886	.0033	.7945	-.0110		
.8611	.0099	.8688	-.0082		

\*Actual pressure value was beyond measurement range.

$$(f) R_{\bar{c}} = 14.1 \times 10^6; M_{\infty} = 0.892; \alpha = 8.55^{\circ}.$$

Figure 12. Continued.



(f) Concluded.

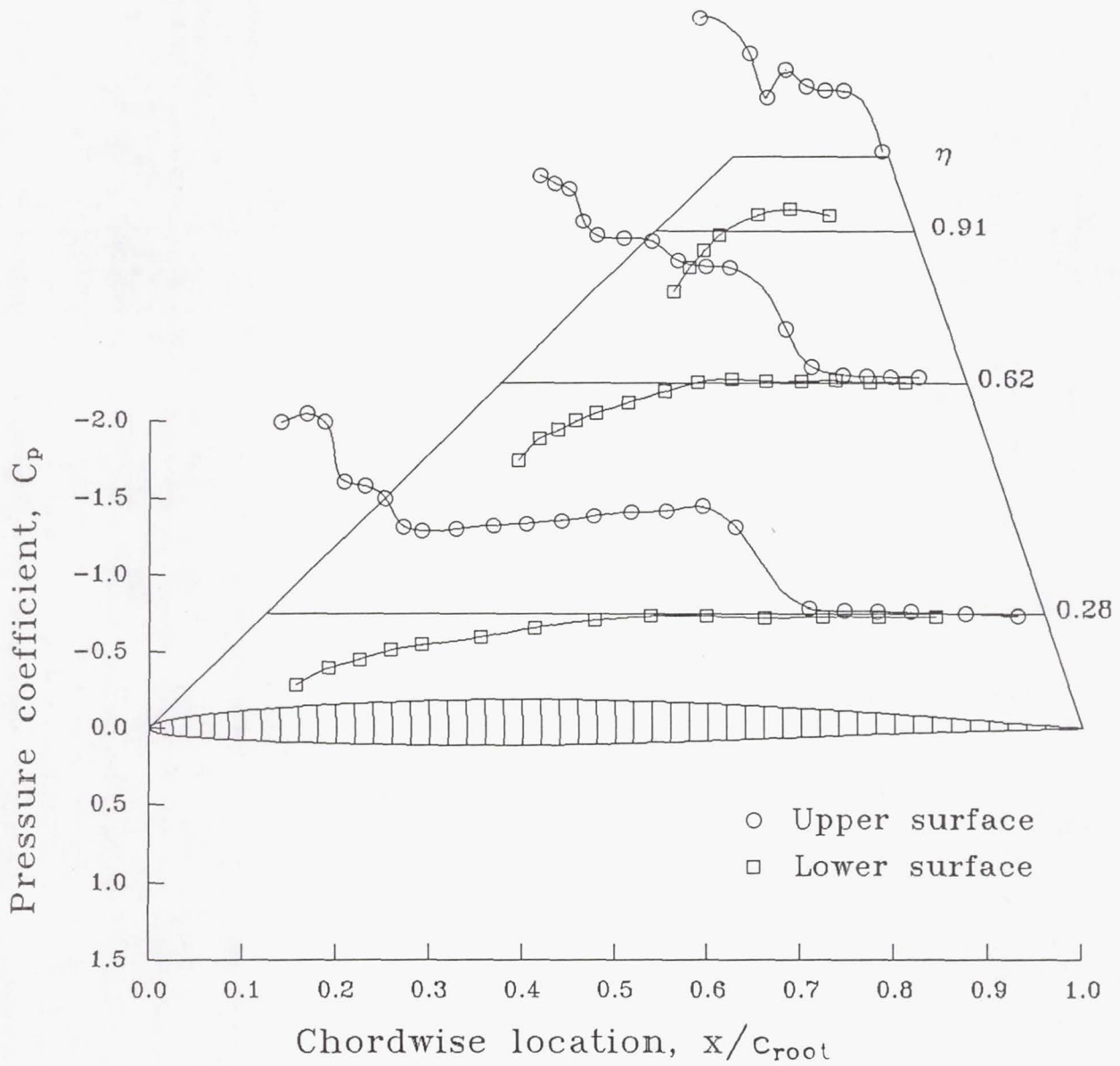
Figure 12. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.2430	0.0269	*-0.5045	0.0406	*-0.5045
.0513	-1.2970	.0576	*-.5045	.0869	*-.5045
.0748	-1.2430	.0874	-1.3770	.1268	*-.5045
.1001	-.8613	.1184	-1.3210	.1719	-1.4110
.1263	-.8321	.1496	-1.2900	.3627	-1.1770
.1523	-.7511	.1779	-1.0690	.4311	-.8887
.1759	-.5677	.2080	-.9706	.5052	-1.0690
.1998	-.5393	.2674	-.9555	.5821	-.9579
.2436	-.5529	.3260	-.9353	.6553	-.9314
.2912	-.5737	.3818	-.8062	.7267	-.9363
.3345	-.5892	.4423	-.7689	.8756	-.5316
.3798	-.6090	.4942	-.7616		
.4213	-.6382	.6137	-.3536		
.4697	-.6679	.6687	-.1086		
.5154	-.6752	.7353	-.0552		
.5617	-.7036	.7874	-.0460		
.6041	-.5661	.8384	-.0429		
.6988	-.0344	.8982	-.0369		
.7449	-.0189				
.7865	-.0125				
.8302	-.0088				
.8994	.0012				
.9651	.0161				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4676	0.0408	0.4982	0.0605	0.4053
.0793	.3560	.0833	.3613	.1095	.2423
.1201	.2992	.1251	.3021	.1584	.1271
.1598	.2356	.1625	.2422	.2060	.0283
.1996	.2046	.2055	.1956	.3295	-.1110
.2753	.1547	.2761	.1263	.4349	-.1527
.3449	.0933	.3535	.0557	.5604	-.1061
.4232	.0407	.4252	-.0052		
.4951	.0174	.4977	-.0291		
.5671	.0161	.5720	-.0102		
.6411	.0273	.6464	-.0127		
.7156	.0194	.7193	-.0174		
.7886	.0187	.7945	-.0065		
.8611	.0211	.8688	-.0053		

\* Actual pressure value was beyond measurement range.

(g)  $R_{\bar{c}} = 14.1 \times 10^6$ ;  $M_{\infty} = 0.907$ ;  $\alpha = 10.31^\circ$ .

Figure 12. Continued.



(g) Concluded.

Figure 12. Continued.

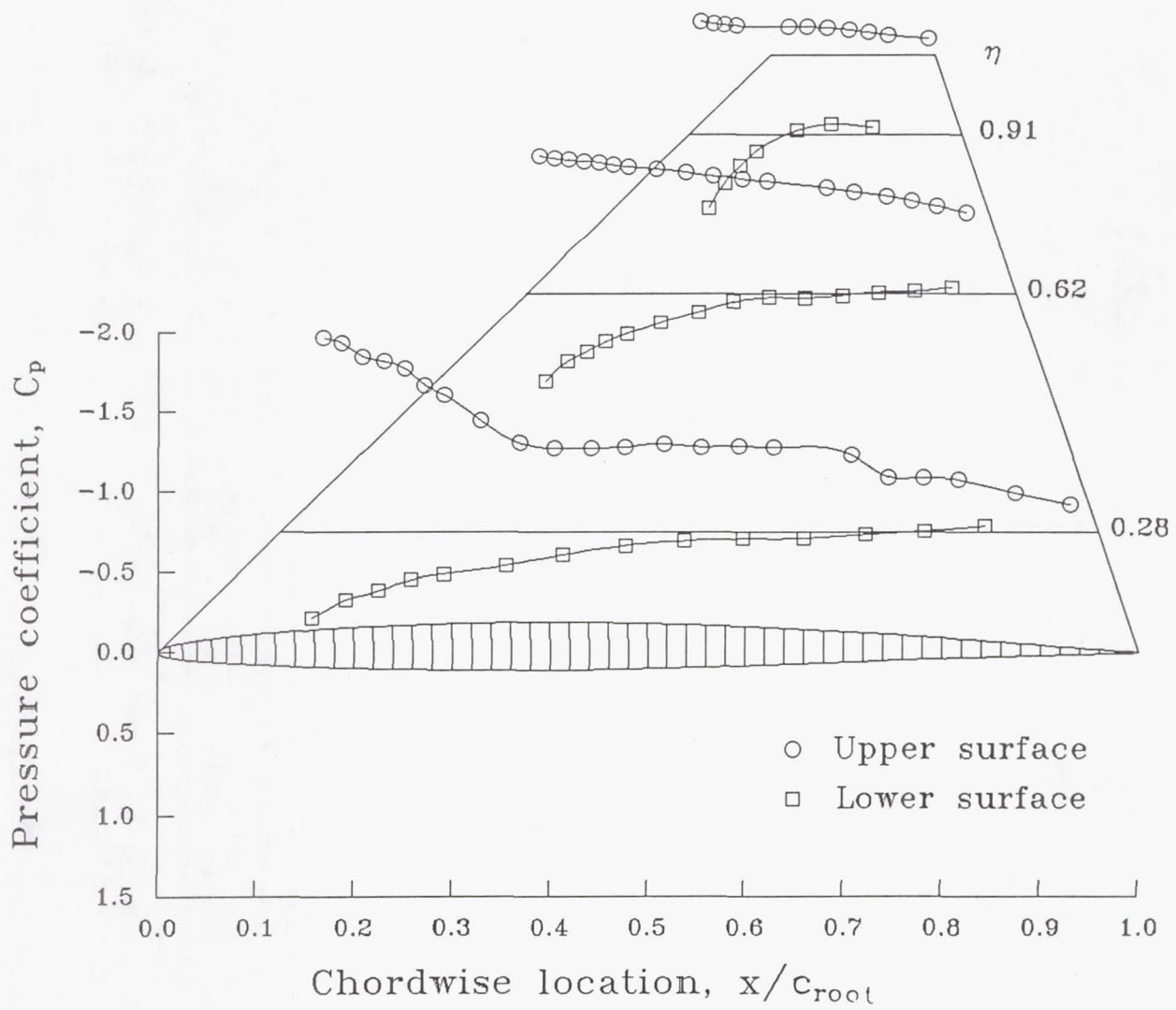
$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	*-0.5042	0.0269	-0.8592	0.0406	-0.7114
.0513	-1.2190	.0576	-.8457	.0869	-.6991
.0748	-1.1850	.0874	-.8374	.1268	-.6919
.1001	-1.1020	.1184	-.8278	.1719	-.6848
.1263	-1.0700	.1496	-.8198	.3627	-.6840
.1523	-1.0250	.1779	-.8042	.4311	-.6816
.1759	-.9227	.2080	-.7970	.5052	-.6722
.1998	-.8576	.2674	-.7795	.5821	-.6604
.2436	-.6994	.3260	-.7616	.6553	-.6472
.2912	-.5584	.3818	-.7371	.7267	-.6309
.3345	-.5266	.4423	-.7192	.8756	-.6046
.3798	-.5248	.4942	-.7042		
.4213	-.5343	.6137	-.6675		
.4697	-.5515	.6687	-.6434		
.5154	-.5355	.7353	-.6147		
.5617	-.5393	.7874	-.5854		
.6041	-.5323	.8384	-.5555		
.6988	-.4852	.8982	-.5125		
.7449	-.3475				
.7865	-.3481				
.8302	-.3311				
.8994	-.2428				
.9651	-.1713				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.5370	0.0408	0.5562	0.0605	0.4583
.0793	.4241	.0833	.4249	.1095	.3056
.1201	.3629	.1251	.3641	.1584	.1964
.1598	.2948	.1625	.3013	.2060	.1041
.1996	.2617	.2055	.2529	.3295	-.0246
.2753	.2076	.2761	.1818	.4349	-.0679
.3449	.1414	.3535	.1104	.5604	-.0447
.4232	.0851	.4252	.0496		
.4951	.0563	.4977	.0219		
.5671	.0443	.5720	.0273		
.6411	.0422	.6464	.0117		
.7156	.0168	.7193	-.0087		
.7886	-.0069	.7945	-.0185		
.8611	-.0379	.8688	-.0424		

\*Actual pressure value was beyond measurement range.

$$(h) R_{\bar{c}} = 14.1 \times 10^6; M_{\infty} = 0.899; \alpha = 12.43^{\circ}.$$

Figure 12. Continued.





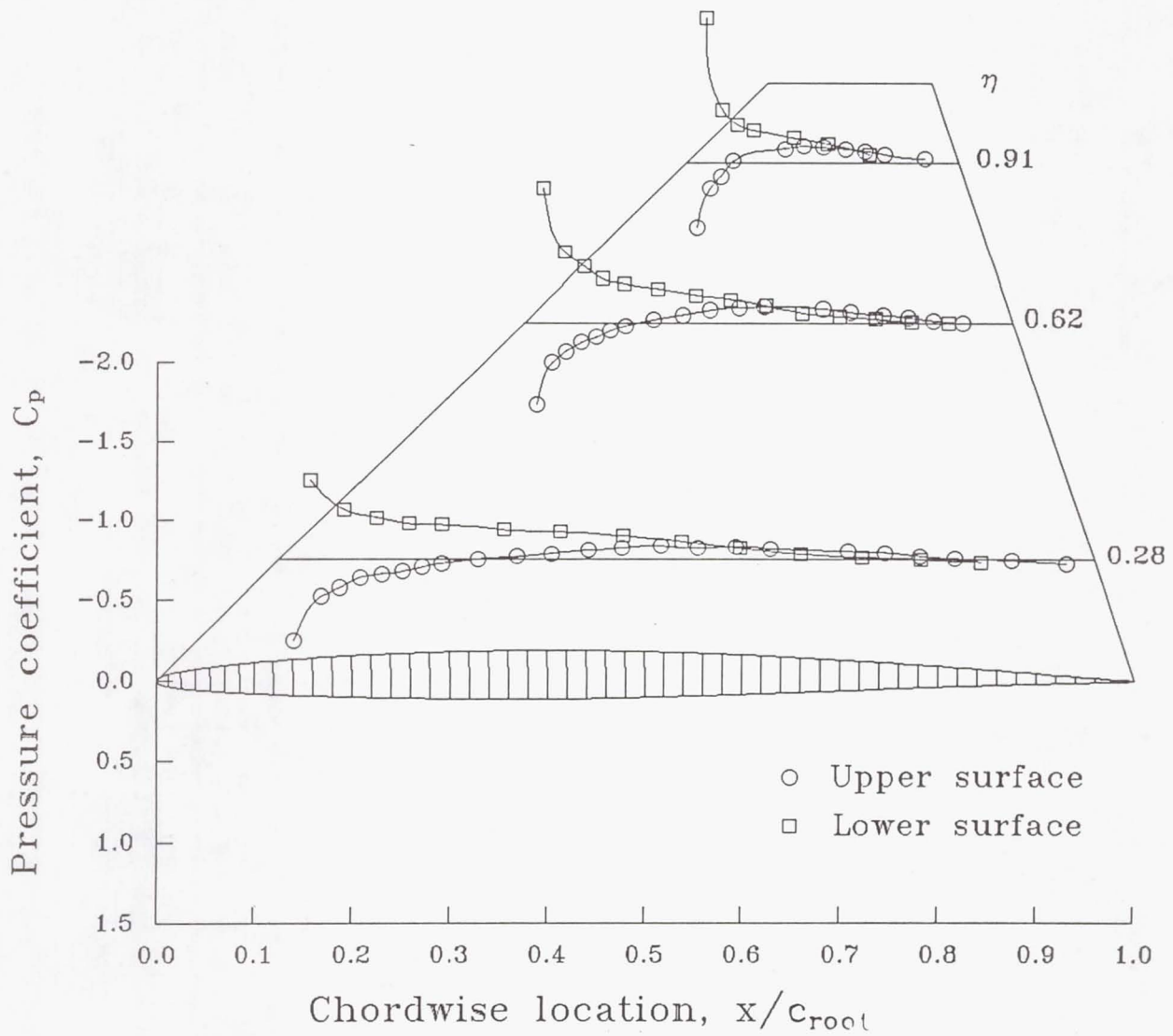
(h) Concluded.

Figure 12. Concluded.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.5003	0.0269	0.5148	0.0406	0.4077
.0513	.2293	.0576	.2503	.0869	.1621
.0748	.1731	.0874	.1776	.1268	.0843
.1001	.1131	.1184	.1205	.1719	-.0121
.1263	.0917	.1496	.0895	.3627	-.0897
.1523	.0746	.1779	.0480	.4311	-.1055
.1759	.0486	.2080	.0204	.5052	-.0976
.1998	.0249	.2674	-.0207	.5821	-.0866
.2436	-.0007	.3260	-.0493	.6553	-.0767
.2912	-.0156	.3818	-.0802	.7267	-.0516
.3345	-.0350	.4423	-.0935	.8756	-.0292
.3798	-.0566	.4942	-.0994		
.4213	-.0736	.6137	-.0851		
.4697	-.0853	.6687	-.0661		
.5154	-.0700	.7353	-.0480		
.5617	-.0806	.7874	-.0329		
.6041	-.0680	.8384	-.0161		
.6988	-.0510	.8982	.0007		
.7449	-.0408				
.7865	-.0221				
.8302	-.0041				
.8994	.0088				
.9651	.0264				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.5050	0.0408	-0.8399	0.0605	-0.9065
.0793	-.3180	.0833	-.4415	.1095	-.3367
.1201	-.2690	.1251	-.3454	.1584	-.2378
.1598	-.2291	.1625	-.2714	.2060	-.2077
.1996	-.2232	.2055	-.2409	.3295	-.1575
.2753	-.1914	.2761	-.2072	.4349	-.1204
.3449	-.1757	.3535	-.1694	.5604	-.0569
.4232	-.1518	.4252	-.1426		
.4951	-.1126	.4977	-.1037		
.5671	-.0705	.5720	-.0606		
.6411	-.0312	.6464	-.0395		
.7156	-.0133	.7193	-.0249		
.7886	.0027	.7945	-.0061		
.8611	.0183	.8688	.0030		

(a)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.688$ ;  $\alpha = -3.95^\circ$ .

Figure 13. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test angle-of-attack range at nominal conditions of  $M_{\infty} = 0.7$  and  $R_{\bar{c}} = 28.2 \times 10^6$ .



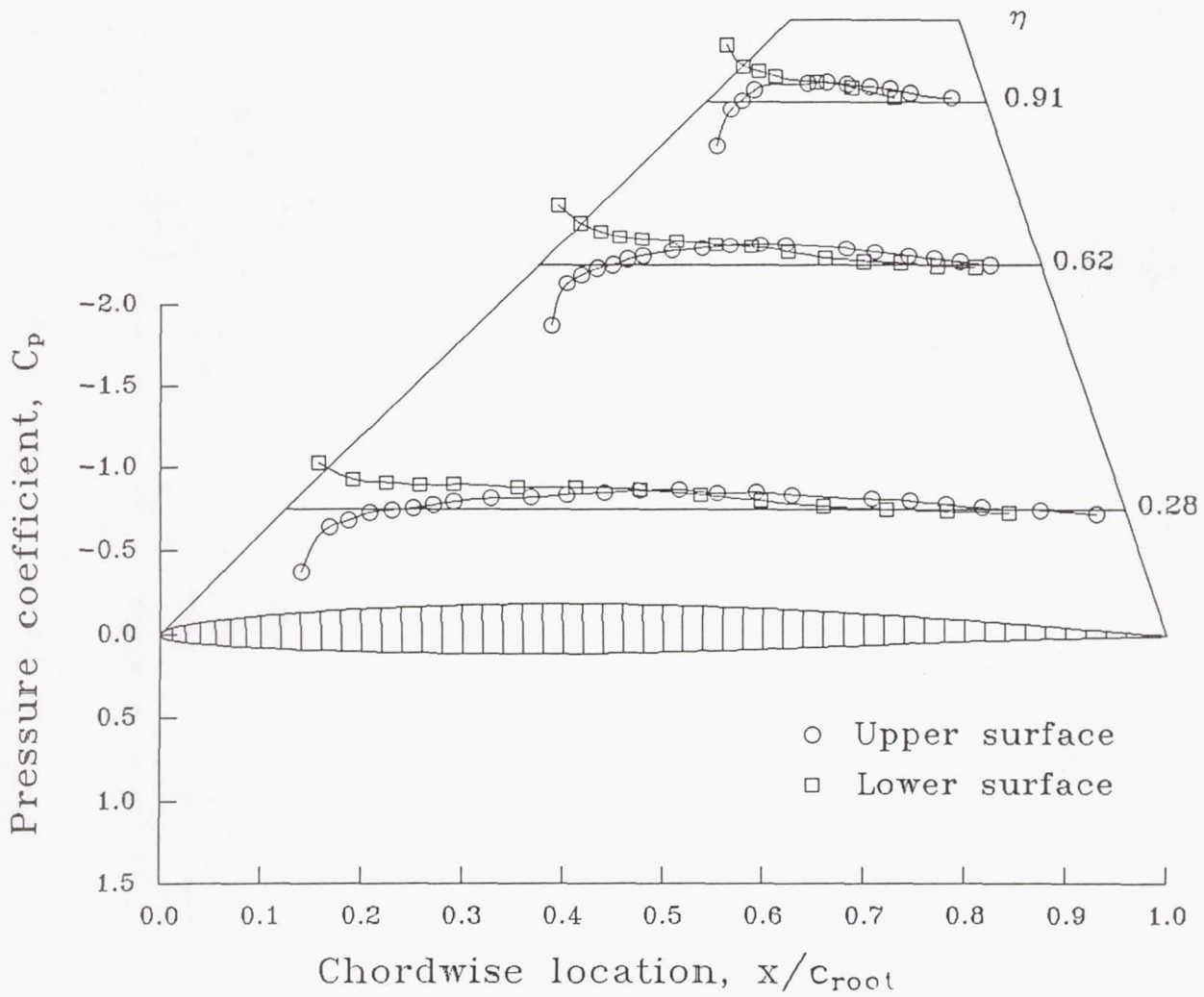
(a) Concluded.

Figure 13. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.3722	0.0269	0.3714	0.0406	0.2692
.0513	.1062	.0576	.1162	.0869	.0491
.0748	.0650	.0874	.0599	.1268	-.0091
.1001	.0206	.1184	.0189	.1719	-.0731
.1263	.0062	.1496	-.0013	.3627	-.1106
.1523	-.0048	.1779	-.0327	.4311	-.1216
.1759	-.0248	.2080	-.0545	.5052	-.1066
.1998	-.0449	.2674	-.0835	.5821	-.0931
.2436	-.0630	.3260	-.1018	.6553	-.0807
.2912	-.0700	.3818	-.1231	.7267	-.0514
.3345	-.0861	.4423	-.1283	.8756	-.0275
.3798	-.1007	.4942	-.1271		
.4213	-.1120	.6137	-.1023		
.4697	-.1192	.6687	-.0778		
.5154	-.0988	.7353	-.0558		
.5617	-.1043	.7874	-.0382		
.6041	-.0875	.8384	-.0183		
.6988	-.0631	.8982	.0008		
.7449	-.0504				
.7865	-.0292				
.8302	-.0092				
.8994	.0074				
.9651	.0266				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.2817	0.0408	-0.3677	0.0605	-0.3504
.0793	-.1820	.0833	-.2630	.1095	-.2171
.1201	-.1620	.1251	-.2091	.1584	-.1855
.1598	-.1453	.1625	-.1727	.2060	-.1531
.1996	-.1499	.2055	-.1614	.3295	-.1235
.2753	-.1317	.2761	-.1490	.4349	-.0905
.3449	-.1323	.3535	-.1290	.5604	-.0246
.4232	-.1193	.4252	-.1115		
.4951	-.0872	.4977	-.0797		
.5671	-.0521	.5720	-.0400		
.6411	-.0164	.6464	-.0222		
.7156	-.0019	.7193	-.0109		
.7886	.0105	.7945	.0063		
.8611	.0244	.8688	.0134		

(b)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.691$ ;  $\alpha = -1.88^\circ$ .

Figure 13. Continued.



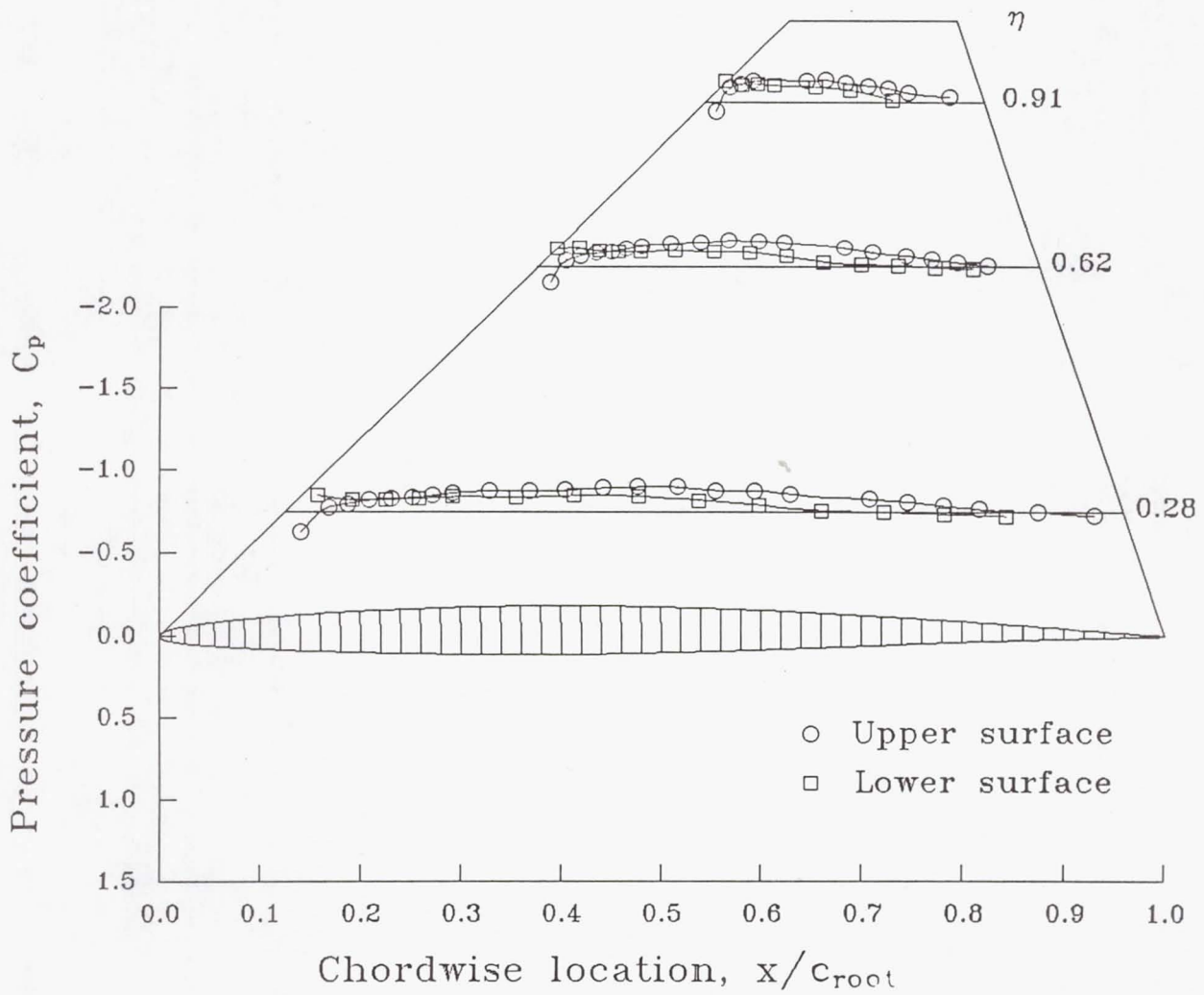
(b) Concluded.

Figure 13. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.1232	0.0269	0.0923	0.0406	0.0507
.0513	-.0271	.0576	-.0390	.0869	-.0923
.0748	-.0482	.0874	-.0693	.1268	-.1136
.1001	-.0720	.1184	-.0853	.1719	-.1329
.1263	-.0796	.1496	-.0952	.3627	-.1359
.1523	-.0848	.1779	-.1141	.4311	-.1399
.1759	-.0975	.2080	-.1296	.5052	-.1187
.1998	-.1134	.2674	-.1449	.5821	-.1024
.2436	-.1241	.3260	-.1532	.6553	-.0871
.2912	-.1235	.3818	-.1635	.7267	-.0580
.3345	-.1294	.4423	-.1607	.8756	-.0321
.3798	-.1438	.4942	-.1530		
.4213	-.1499	.6137	-.1170		
.4697	-.1504	.6687	-.0904		
.5154	-.1256	.7353	-.0649		
.5617	-.1264	.7874	-.0453		
.6041	-.1062	.8384	-.0244		
.6988	-.0758	.8982	-.0036		
.7449	-.0604				
.7865	-.0377				
.8302	-.0159				
.8994	.0019				
.9651	.0236				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.0988	0.0408	-0.1157	0.0605	-0.1371
.0793	-.0710	.0833	-.1174	.1095	-.1055
.1201	-.0744	.1251	-.0983	.1584	-.1161
.1598	-.0780	.1625	-.0913	.2060	-.1073
.1996	-.0892	.2055	-.0938	.3295	-.0964
.2753	-.0853	.2761	-.0997	.4349	-.0746
.3449	-.0974	.3535	-.0941	.5604	-.0147
.4232	-.0931	.4252	-.0890		
.4951	-.0686	.4977	-.0646		
.5671	-.0395	.5720	-.0295		
.6411	-.0088	.6464	-.0141		
.7156	.0028	.7193	-.0058		
.7886	.0135	.7945	.0084		
.8611	.0247	.8688	.0140		

(c)  $R_c = 28.2 \times 10^6$ ;  $M_\infty = 0.690$ ;  $\alpha = 0.14^\circ$ .

Figure 13. Continued.



(c) Concluded.

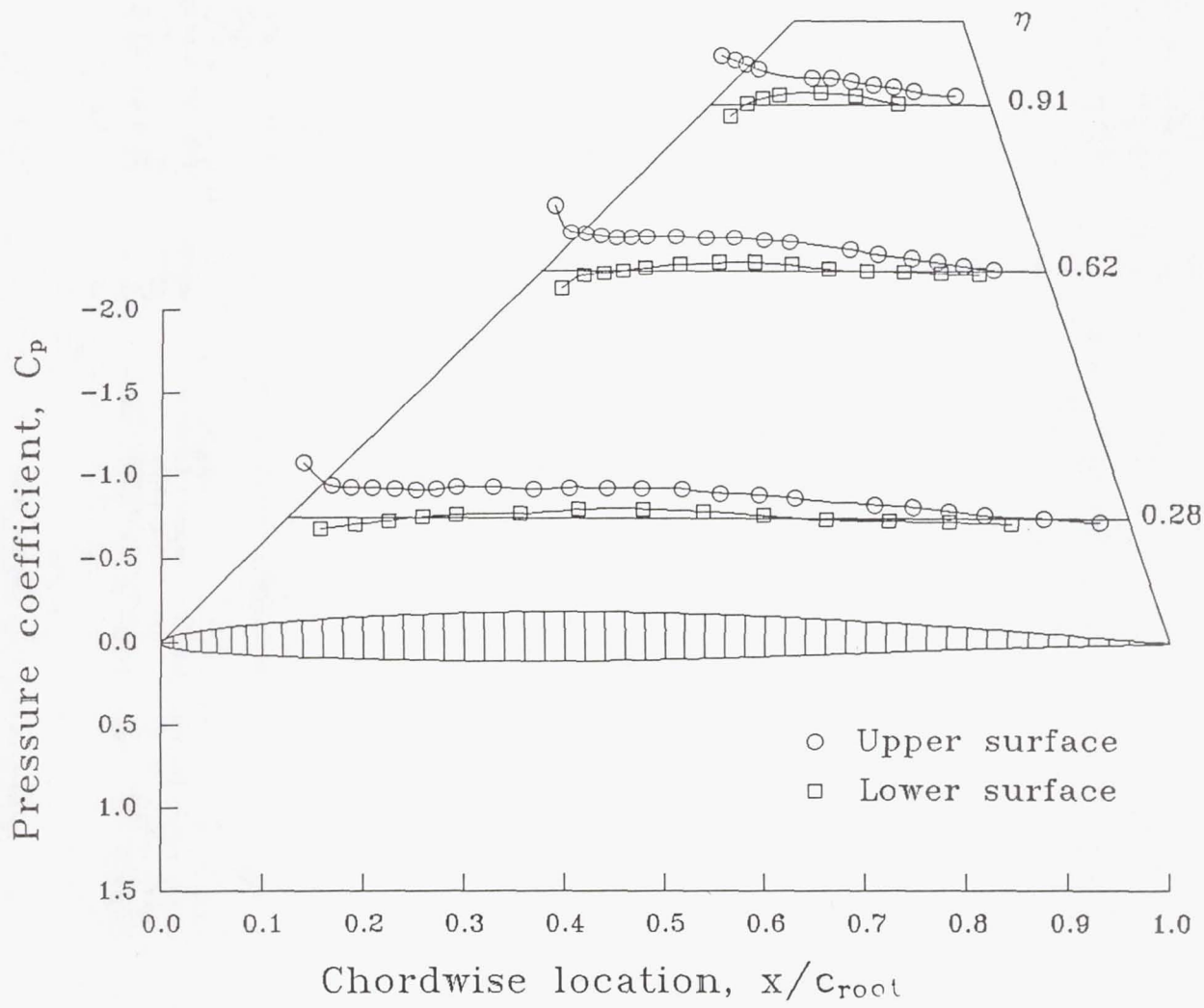
Figure 13. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.3303	0.0269	-0.3978	0.0406	-0.2940
.0513	-.1902	.0576	-.2340	.0869	-.2672
.0748	-.1816	.0874	-.2235	.1268	-.2419
.1001	-.1767	.1184	-.2115	.1719	-.2128
.1263	-.1734	.1496	-.1984	.3627	-.1615
.1523	-.1667	.1779	-.2023	.4311	-.1632
.1759	-.1707	.2080	-.2064	.5052	-.1392
.1998	-.1838	.2674	-.2041	.5821	-.1200
.2436	-.1840	.3260	-.2008	.6553	-.1063
.2912	-.1725	.3818	-.1985	.7267	-.0781
.3345	-.1819	.4423	-.1887	.8756	-.0533
.3798	-.1787	.4942	-.1729		
.4213	-.1785	.6137	-.1273		
.4697	-.1749	.6687	-.0984		
.5154	-.1460	.7353	-.0717		
.5617	-.1417	.7874	-.0511		
.6041	-.1176	.8384	-.0280		
.6988	-.0816	.8982	-.0076		
.7449	-.0654				
.7865	-.0408				
.8302	-.0181				
.8994	.0012				
.9651	.0240				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.0705	0.0408	0.1062	0.0605	0.0684
.0793	.0414	.0833	.0250	.1095	-.0069
.1201	.0192	.1251	.0155	.1584	-.0427
.1598	-.0026	.1625	-.0011	.2060	-.0594
.1996	-.0201	.2055	-.0188	.3295	-.0723
.2753	-.0267	.2761	-.0396	.4349	-.0553
.3449	-.0506	.3535	-.0504	.5604	-.0041
.4232	-.0554	.4252	-.0525		
.4951	-.0390	.4977	-.0376		
.5671	-.0172	.5720	-.0099		
.6411	.0088	.6464	-.0013		
.7156	.0161	.7193	.0040		
.7886	.0224	.7945	.0167		
.8611	.0320	.8688	.0192		

(d)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.690$ ;  $\alpha = 2.24^\circ$ .

Figure 13. Continued.





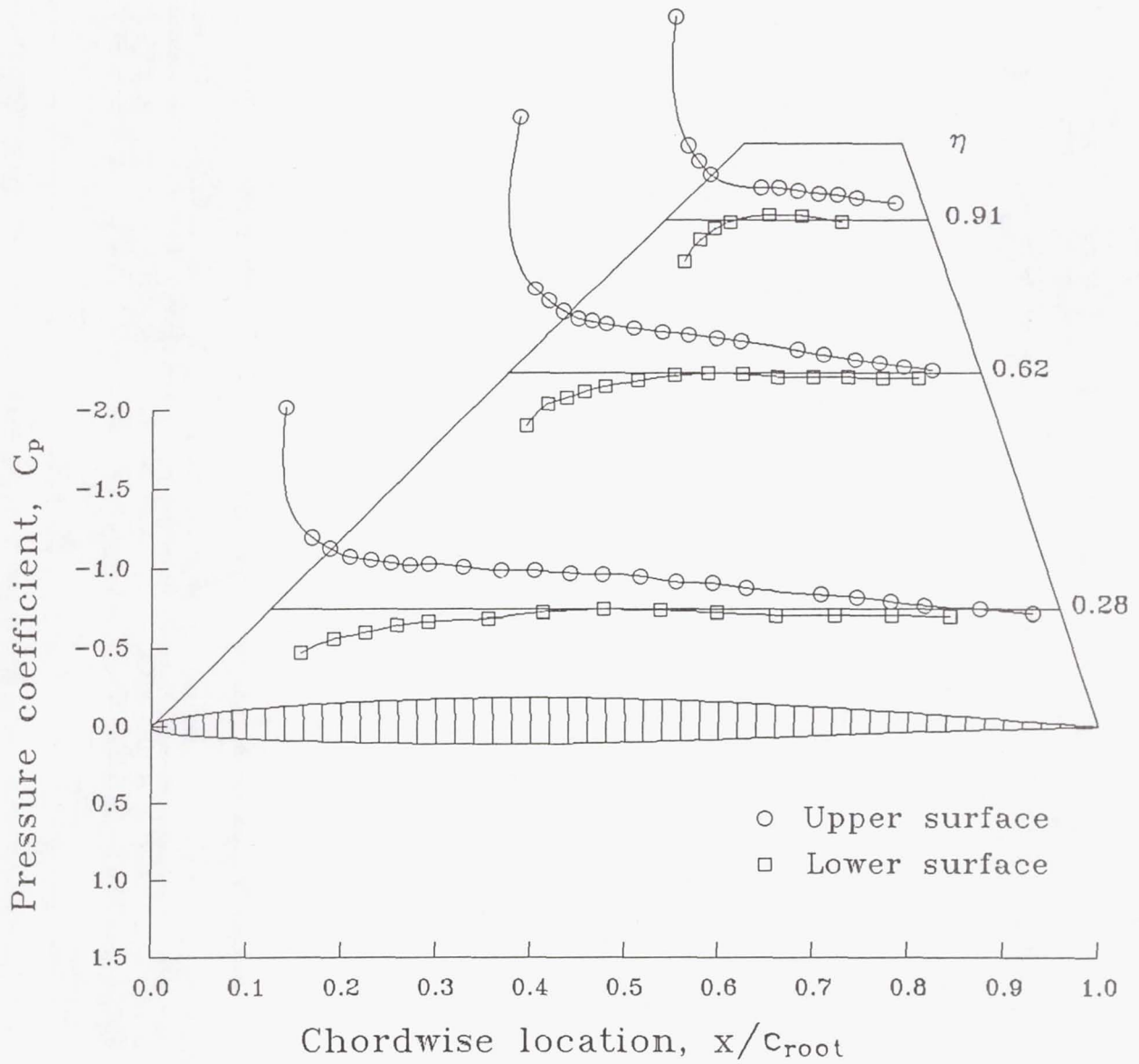
(d) Concluded.

Figure 13. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.2720	0.0269	-1.6650	0.0406	-1.3180
.0513	-.4523	.0576	-.5464	.0869	-.4894
.0748	-.3860	.0874	-.4638	.1268	-.3865
.1001	-.3329	.1184	-.4017	.1719	-.2983
.1263	-.3103	.1496	-.3561	.3627	-.2140
.1523	-.2925	.1779	-.3374	.4311	-.2113
.1759	-.2796	.2080	-.3192	.5052	-.1933
.1998	-.2847	.2674	-.2915	.5821	-.1759
.2436	-.2688	.3260	-.2672	.6553	-.1674
.2912	-.2436	.3818	-.2489	.7267	-.1454
.3345	-.2438	.4423	-.2288	.8756	-.1149
.3798	-.2266	.4942	-.2049		
.4213	-.2199	.6137	-.1501		
.4697	-.2077	.6687	-.1178		
.5154	-.1715	.7353	-.0875		
.5617	-.1624	.7874	-.0662		
.6041	-.1338	.8384	-.0414		
.6988	-.0905	.8982	-.0177		
.7449	-.0721				
.7865	-.0458				
.8302	-.0204				
.8994	.0018				
.9651	.0272				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2727	0.0408	0.3421	0.0605	0.2762
.0793	.1888	.0833	.1997	.1095	.1290
.1201	.1474	.1251	.1624	.1584	.0557
.1598	.1043	.1625	.1204	.2060	.0102
.1996	.0793	.2055	.0866	.3295	-.0350
.2753	.0588	.2761	.0477	.4349	-.0291
.3449	.0210	.3535	.0162	.5604	.0128
.4232	.0038	.4252	.0033		
.4951	.0101	.4977	.0066		
.5671	.0222	.5720	.0258		
.6411	.0419	.6464	.0268		
.7156	.0425	.7193	.0255		
.7886	.0428	.7945	.0354		
.8611	.0486	.8688	.0320		

(e)  $R_{\bar{c}} = 28.45 \times 10^6$ ;  $M_{\infty} = 0.701$ ;  $\alpha = 4.92^\circ$ .

Figure 13. Continued.



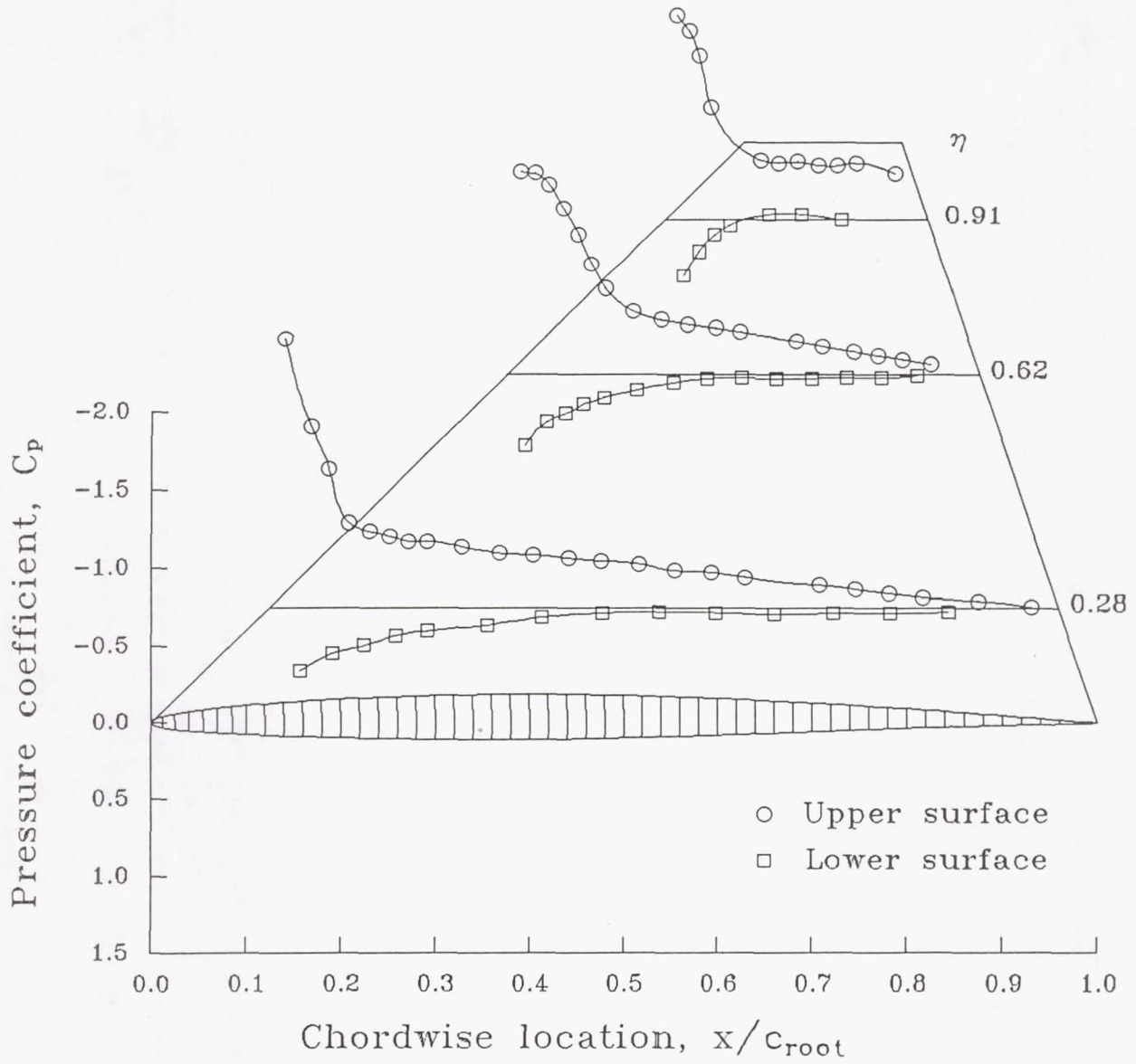
(e) Concluded.

Figure 13. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.7250	0.0269	-1.3150	0.0406	-1.3200
.0513	-1.1600	.0576	-1.3070	.0869	-1.2190
.0748	-.8831	.0874	-1.2280	.1268	-1.0630
.1001	-.5474	.1184	-1.0710	.1719	-.7268
.1263	-.4892	.1496	-.9022	.3627	-.3889
.1523	-.4619	.1779	-.7138	.4311	-.3705
.1759	-.4276	.2080	-.5541	.5052	-.3801
.1998	-.4251	.2674	-.4047	.5821	-.3541
.2436	-.3932	.3260	-.3503	.6553	-.3530
.2912	-.3519	.3818	-.3228	.7267	-.3694
.3345	-.3378	.4423	-.2982	.8756	-.3013
.3798	-.3162	.4942	-.2721		
.4213	-.3017	.6137	-.2127		
.4697	-.2810	.6687	-.1792		
.5154	-.2389	.7353	-.1469		
.5617	-.2257	.7874	-.1222		
.6041	-.1934	.8384	-.0955		
.6988	-.1425	.8982	-.0669		
.7449	-.1214				
.7865	-.0921				
.8302	-.0649				
.8994	-.0415				
.9651	-.0073				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4098	0.0408	0.4635	0.0605	0.3666
.0793	.2957	.0833	.3086	.1095	.2030
.1201	.2440	.1251	.2550	.1584	.0999
.1598	.1798	.1625	.1967	.2060	.0367
.1996	.1501	.2055	.1535	.3295	-.0349
.2753	.1114	.2761	.0997	.4349	-.0351
.3449	.0628	.3535	.0527	.5604	.0018
.4232	.0332	.4252	.0264		
.4951	.0294	.4977	.0186		
.5671	.0320	.5720	.0296		
.6411	.0429	.6464	.0259		
.7156	.0367	.7193	.0176		
.7886	.0331	.7945	.0197		
.8611	.0304	.8688	.0097		

(f)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.695$ ;  $\alpha = 8.24^\circ$ .

Figure 13. Continued.



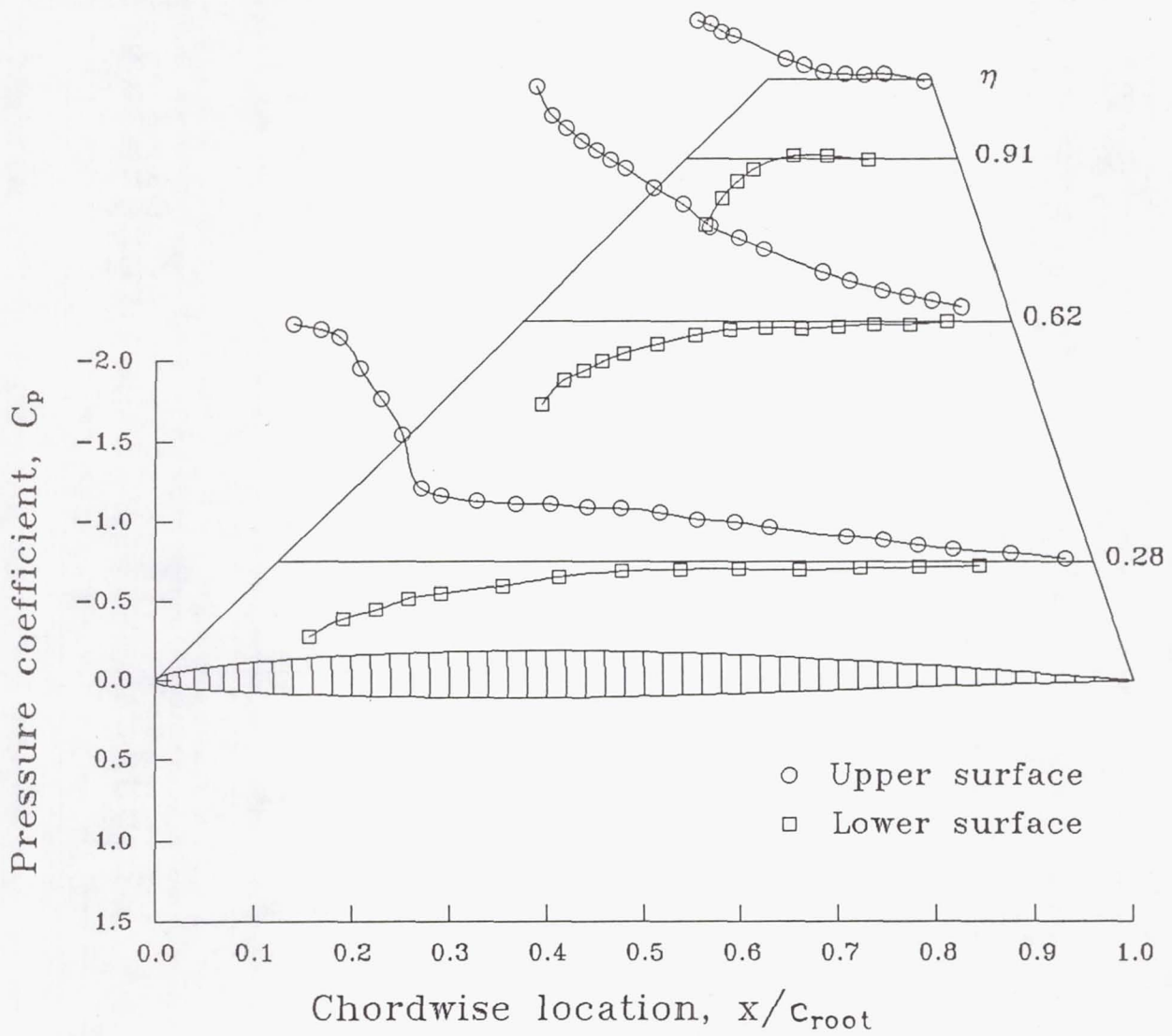
(f) Concluded.

Figure 13. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.4820	0.0269	-1.4550	0.0406	-0.8682
.0513	-1.4460	.0576	-1.2720	.0869	-.8472
.0748	-1.4030	.0874	-1.1930	.1268	-.7976
.1001	-1.2090	.1184	-1.1170	.1719	-.7715
.1263	-1.0180	.1496	-1.0560	.3627	-.6252
.1523	-.7982	.1779	-.9964	.4311	-.5884
.1759	-.4632	.2080	-.9386	.5052	-.5452
.1998	-.4179	.2674	-.8199	.5821	-.5314
.2436	-.3830	.3260	-.7192	.6553	-.5305
.2912	-.3686	.3818	-.5833	.7267	-.5356
.3345	-.3658	.4423	-.5103	.8756	-.4844
.3798	-.3440	.4942	-.4411		
.4213	-.3363	.6137	-.3003		
.4697	-.3131	.6687	-.2481		
.5154	-.2660	.7353	-.1893		
.5617	-.2532	.7874	-.1558		
.6041	-.2172	.8384	-.1241		
.6988	-.1620	.8982	-.0861		
.7449	-.1397				
.7865	-.1074				
.8302	-.0792				
.8994	-.0552				
.9651	-.0205				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4766	0.0408	0.5138	0.0605	0.4067
.0793	.3596	.0833	.3679	.1095	.2457
.1201	.3026	.1251	.3097	.1584	.1368
.1598	.2318	.1625	.2479	.2060	.0674
.1996	.1990	.2055	.2005	.3295	-.0178
.2753	.1541	.2761	.1408	.4349	-.0221
.3449	.0990	.3535	.0860	.5604	.0091
.4232	.0637	.4252	.0538		
.4951	.0534	.4977	.0394		
.5671	.0499	.5720	.0444		
.6411	.0554	.6464	.0351		
.7156	.0440	.7193	.0203		
.7886	.0363	.7945	.0191		
.8611	.0297	.8688	-.0008		

(g)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.699$ ;  $\alpha = 10.30^\circ$ .

Figure 13. Continued.



(g) Concluded.

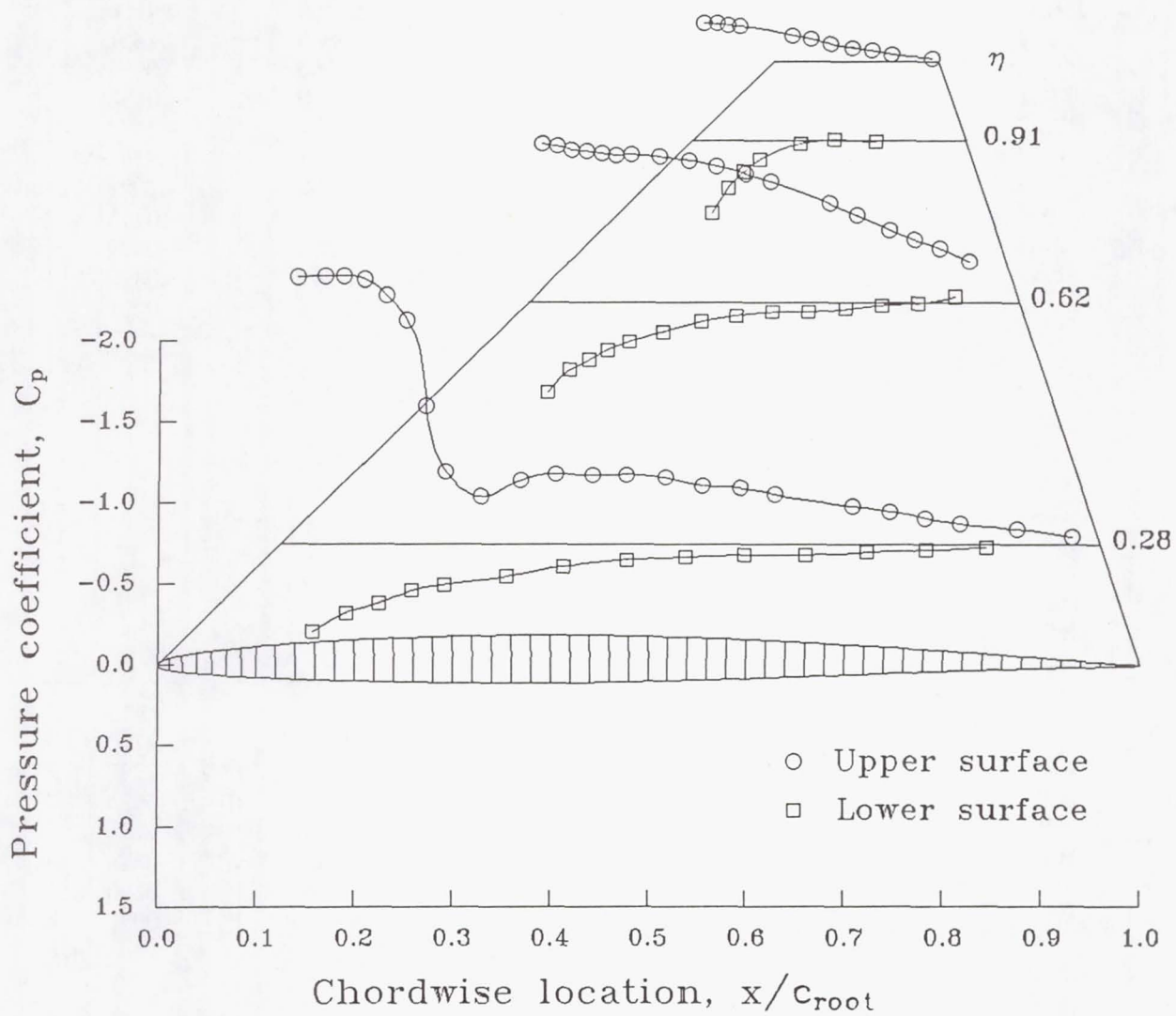
Figure 13. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.6480	0.0269	-0.9823	0.0406	-0.7472
.0513	-1.6530	.0576	-.9655	.0869	-.7457
.0748	-1.6540	.0874	-.9397	.1268	-.7320
.1001	-1.6340	.1184	-.9308	.1719	-.7289
.1263	-1.5420	.1496	-.9175	.3627	-.6688
.1523	-1.3860	.1779	-.9090	.4311	-.6461
.1759	-.8533	.2080	-.9109	.5052	-.6113
.1998	-.4457	.2674	-.8995	.5821	-.5906
.2436	-.2898	.3260	-.8764	.6553	-.5728
.2912	-.3921	.3818	-.8437	.7267	-.5493
.3345	-.4327	.4423	-.7964	.8756	-.5238
.3798	-.4233	.4942	-.7459		
.4213	-.4291	.6137	-.6109		
.4697	-.4094	.6687	-.5406		
.5154	-.3610	.7353	-.4494		
.5617	-.3450	.7874	-.3873		
.6041	-.3028	.8384	-.3355		
.6988	-.2323	.8982	-.2548		
.7449	-.2016				
.7865	-.1614				
.8302	-.1238				
.8994	-.0910				
.9651	-.0486				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.5414	0.0408	0.5591	0.0605	0.4446
.0793	.4248	.0833	.4232	.1095	.2952
.1201	.3654	.1251	.3613	.1584	.1921
.1598	.2891	.1625	.2987	.2060	.1179
.1996	.2532	.2055	.2487	.3295	.0169
.2753	.2011	.2761	.1839	.4349	-.0058
.3449	.1396	.3535	.1230	.5604	.0085
.4232	.0979	.4252	.0846		
.4951	.0807	.4977	.0622		
.5671	.0700	.5720	.0586		
.6411	.0675	.6464	.0417		
.7156	.0490	.7193	.0181		
.7886	.0352	.7945	.0038		
.8611	.0217	.8688	-.0323		

(h)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.701$ ;  $\alpha = 12.49^\circ$ .

Figure 13. Continued.





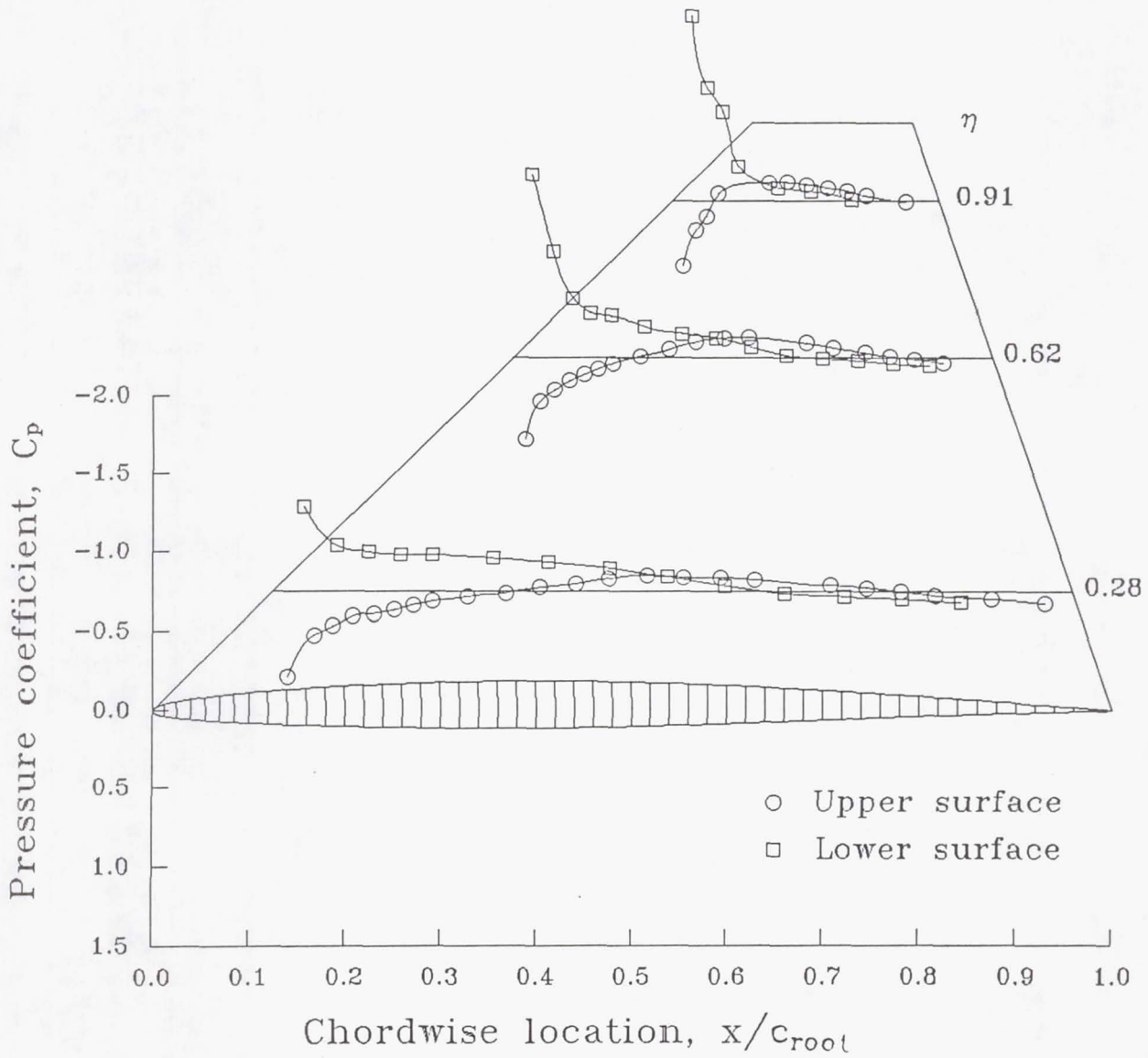
(h) Concluded.

Figure 13. Concluded.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.5344	0.0269	0.5304	0.0406	0.4156
.0513	.2731	.0576	.2777	.0869	.1881
.0748	.2177	.0874	.2065	.1268	.0968
.1001	.1566	.1184	.1488	.1719	-.0483
.1263	.1387	.1496	.1099	.3627	-.1156
.1523	.1165	.1779	.0726	.4311	-.1201
.1759	.0877	.2080	.0400	.5052	-.1021
.1998	.0626	.2674	-.0085	.5821	-.0811
.2436	.0336	.3260	-.0525	.6553	-.0634
.2912	.0113	.3818	-.1000	.7267	-.0313
.3345	-.0226	.4423	-.1232	.8756	.0057
.3798	-.0484	.4942	-.1254		
.4213	-.0799	.6137	-.0903		
.4697	-.0974	.6687	-.0612		
.5154	-.0863	.7353	-.0306		
.5617	-.0881	.7874	-.0084		
.6041	-.0735	.8384	.0103		
.6988	-.0369	.8982	.0343		
.7449	-.0218				
.7865	.0023				
.8302	.0250				
.8994	.0476				
.9651	.0712				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.5399	0.0408	-1.1690	0.0605	-1.1770
.0793	-.2917	.0833	-.6800	.1095	-.7227
.1201	-.2505	.1251	-.3754	.1584	-.5695
.1598	-.2310	.1625	-.2801	.2060	-.2224
.1996	-.2328	.2055	-.2651	.3295	-.0818
.2753	-.2106	.2761	-.1911	.4349	-.0600
.3449	-.1854	.3535	-.1493	.5604	-.0087
.4232	-.1455	.4252	-.1210		
.4951	-.0899	.4977	-.0679		
.5671	-.0312	.5720	-.0121		
.6411	.0151	.6464	.0092		
.7156	.0334	.7193	.0216		
.7886	.0494	.7945	.0408		
.8611	.0671	.8688	.0528		

(a)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.865$ ;  $\alpha = -3.97^\circ$ .

Figure 14. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test angle-of-attack range at nominal conditions of  $M_{\infty} = 0.9$  and  $R_{\bar{c}} = 28.2 \times 10^6$ .



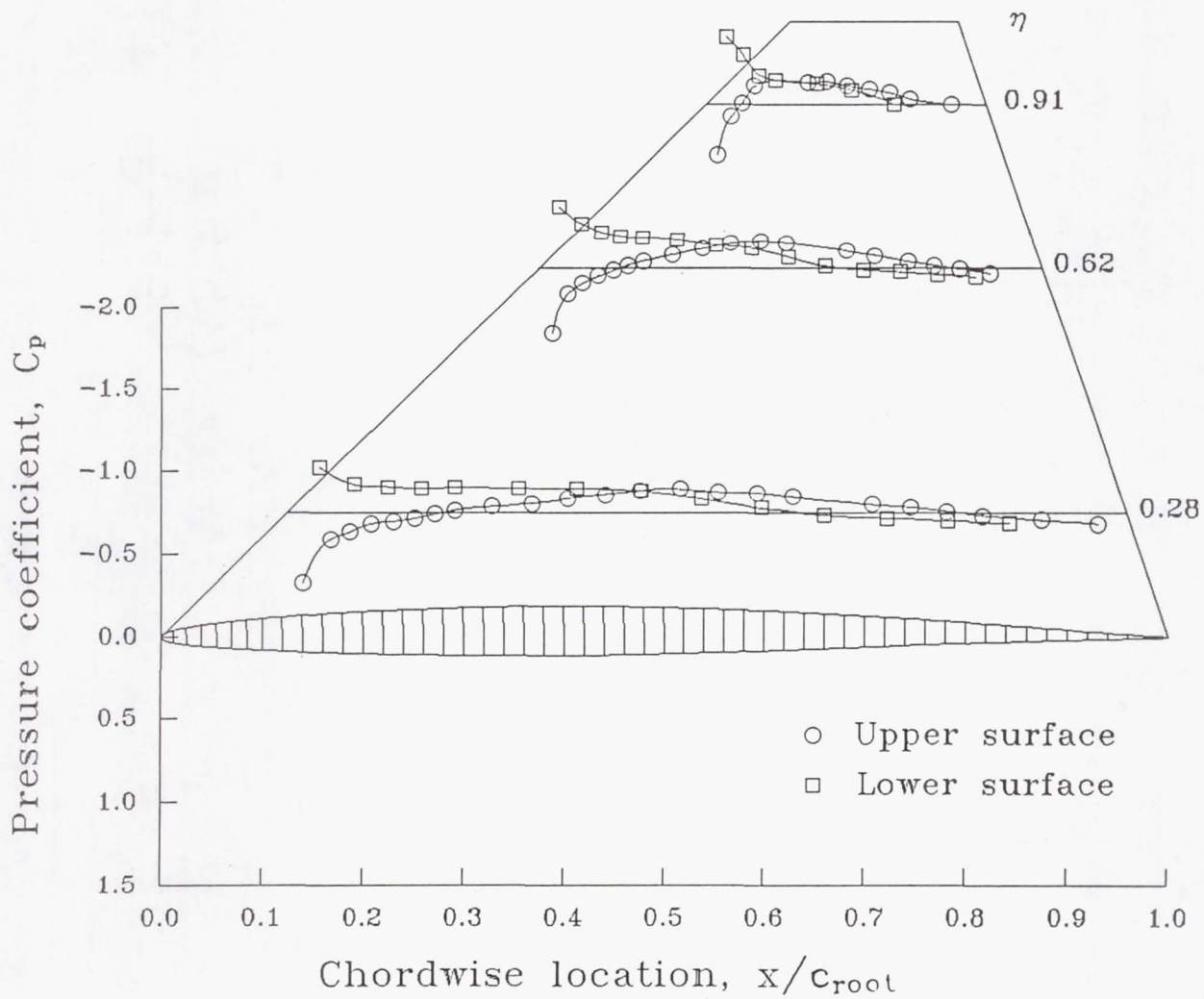
(a) Concluded.

Figure 14. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.4198	0.0269	0.4041	0.0406	0.3079
.0513	.1600	.0576	.1576	.0869	.0760
.0748	.1142	.0874	.0944	.1268	-.0044
.1001	.0649	.1184	.0490	.1719	-.1158
.1263	.0513	.1496	.0166	.3627	-.1343
.1523	.0335	.1779	-.0155	.4311	-.1391
.1759	.0091	.2080	-.0415	.5052	-.1157
.1998	-.0137	.2674	-.0814	.5821	-.0928
.2436	-.0368	.3260	-.1168	.6553	-.0726
.2912	-.0540	.3818	-.1534	.7267	-.0363
.3345	-.0840	.4423	-.1638	.8756	-.0004
.3798	-.1063	.4942	-.1553		
.4213	-.1327	.6137	-.1055		
.4697	-.1429	.6687	-.0743		
.5154	-.1231	.7353	-.0406		
.5617	-.1164	.7874	-.0164		
.6041	-.0956	.8384	.0052		
.6988	-.0508	.8982	.0312		
.7449	-.0328				
.7865	-.0065				
.8302	.0179				
.8994	.0427				
.9651	.0670				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.2695	0.0408	-0.3824	0.0605	-0.4043
.0793	-.1701	.0833	-.2737	.1095	-.3035
.1201	-.1551	.1251	-.2226	.1584	-.1750
.1598	-.1434	.1625	-.1934	.2060	-.1493
.1996	-.1505	.2055	-.1869	.3295	-.1250
.2753	-.1434	.2761	-.1736	.4349	-.0870
.3449	-.1442	.3535	-.1407	.5604	-.0023
.4232	-.1302	.4252	-.1210		
.4951	-.0833	.4977	-.0691		
.5671	-.0289	.5720	-.0111		
.6411	.0165	.6464	.0107		
.7156	.0334	.7193	.0217		
.7886	.0469	.7945	.0398		
.8611	.0643	.8688	.0510		

(b)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.869$ ;  $\alpha = -1.87^\circ$ .

Figure 14. Continued.



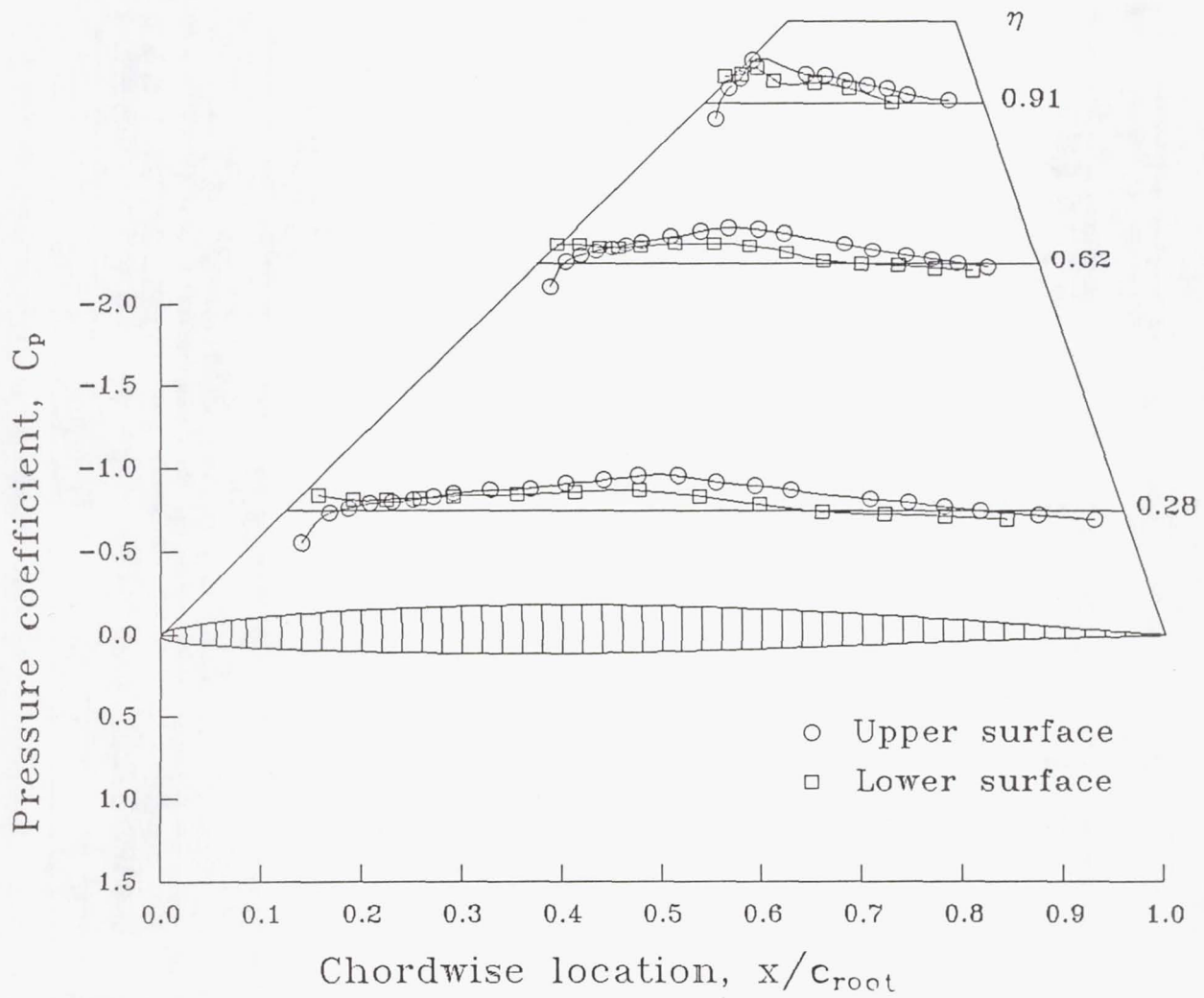
(b) Concluded.

Figure 14. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	0.1921	0.0269	0.1372	0.0406	0.1002
.0513	.0171	.0576	-.0121	.0869	-.0954
.0748	-.0125	.0874	-.0537	.1268	-.1509
.1001	-.0435	.1184	-.0799	.1719	-.2662
.1263	-.0516	.1496	-.1015	.3627	-.1790
.1523	-.0654	.1779	-.1267	.4311	-.1767
.1759	-.0835	.2080	-.1467	.5052	-.1427
.1998	-.1044	.2674	-.1775	.5821	-.1145
.2436	-.1227	.3260	-.2118	.6553	-.0926
.2912	-.1343	.3818	-.2339	.7267	-.0558
.3345	-.1626	.4423	-.2250	.8756	-.0184
.3798	-.1848	.4942	-.1987		
.4213	-.2105	.6137	-.1318		
.4697	-.2094	.6687	-.0948		
.5154	-.1737	.7353	-.0575		
.5617	-.1542	.7874	-.0318		
.6041	-.1258	.8384	-.0079		
.6988	-.0712	.8982	.0192		
.7449	-.0507				
.7865	-.0222				
.8302	.0037				
.8994	.0306				
.9651	.0554				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	-0.0924	0.0408	-0.1247	0.0605	-0.1683
.0793	-.0629	.0833	-.1237	.1095	-.1777
.1201	-.0682	.1251	-.1096	.1584	-.2205
.1598	-.0748	.1625	-.1061	.2060	-.1436
.1996	-.0883	.2055	-.1139	.3295	-.1264
.2753	-.0961	.2761	-.1339	.4349	-.0917
.3449	-.1147	.3535	-.1347	.5604	-.0078
.4232	-.1226	.4252	-.1232		
.4951	-.0862	.4977	-.0764		
.5671	-.0360	.5720	-.0186		
.6411	.0080	.6464	.0003		
.7156	.0226	.7193	.0096		
.7886	.0338	.7945	.0269		
.8611	.0518	.8688	.0373		

(c)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.877$ ;  $\alpha = 0.25^\circ$ .

Figure 14. Continued.



(c) Concluded.

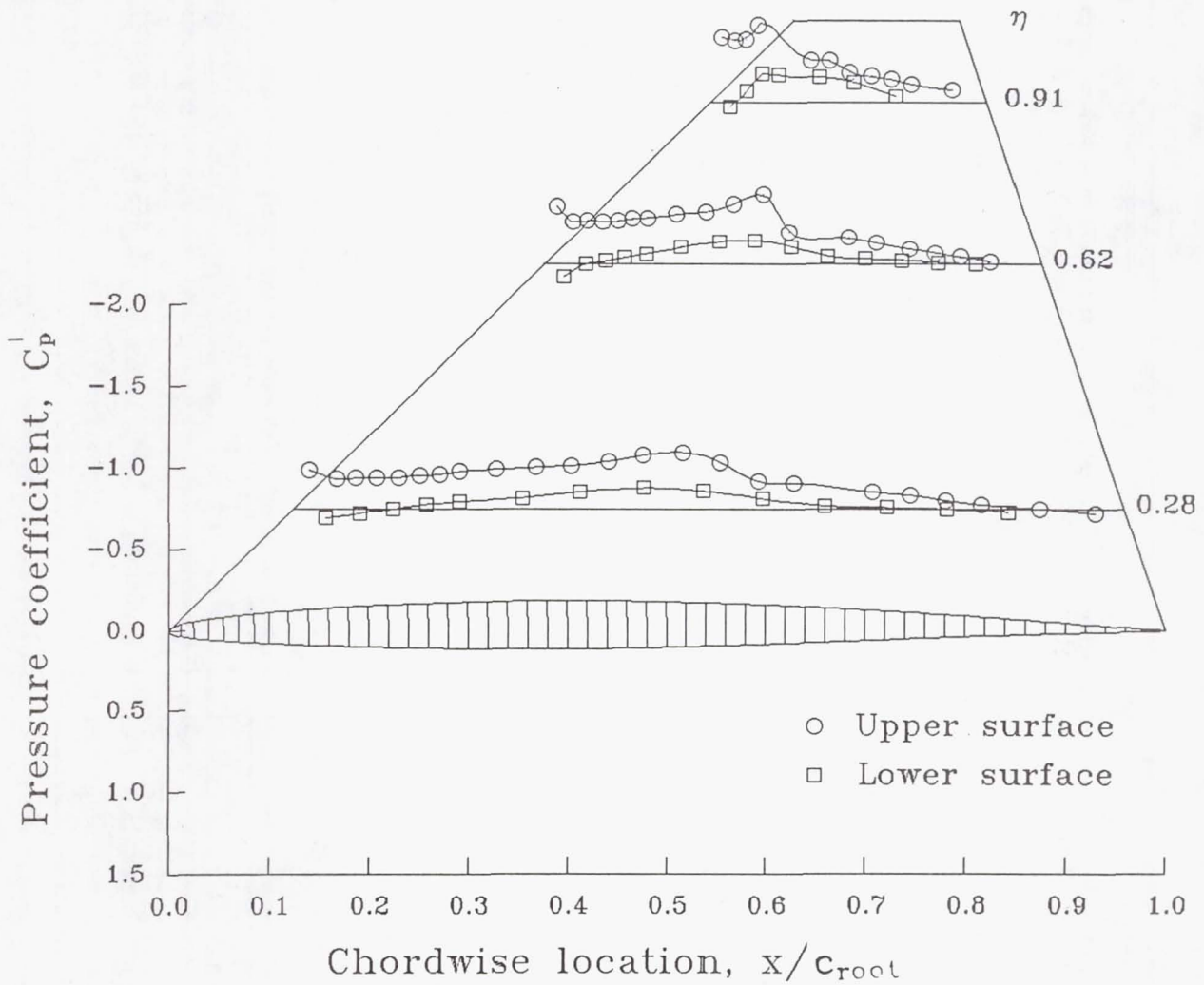
Figure 14. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.2373	0.0269	-0.3633	0.0406	-0.3992
.0513	-.1840	.0576	-.2640	.0869	-.3837
.0748	-.1904	.0874	-.2727	.1268	-.3842
.1001	-.1929	.1184	-.2676	.1719	-.4748
.1263	-.1947	.1496	-.2712	.3627	-.2600
.1523	-.2060	.1779	-.2859	.4311	-.2583
.1759	-.2131	.2080	-.2890	.5052	-.1901
.1998	-.2306	.2674	-.3136	.5821	-.1642
.2436	-.2438	.3260	-.3300	.6553	-.1482
.2912	-.2572	.3818	-.3735	.7267	-.1169
.3345	-.2687	.4423	-.4330	.8756	-.0808
.3798	-.2935	.4942	-.2010		
.4213	-.3334	.6137	-.1636		
.4697	-.3482	.6687	-.1311		
.5154	-.2880	.7353	-.0936		
.5617	-.1697	.7874	-.0669		
.6041	-.1573	.8384	-.0432		
.6988	-.1044	.8982	-.0151		
.7449	-.0823				
.7865	-.0533				
.8302	-.0263				
.8994	.0008				
.9651	.0261				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.0571	0.0408	0.0811	0.0605	0.0282
.0793	.0261	.0833	-.0016	.1095	-.0721
.1201	.0009	.1251	-.0168	.1584	-.1779
.1598	-.0256	.1625	-.0392	.2060	-.1712
.1996	-.0458	.2055	-.0611	.3295	-.1617
.2753	-.0679	.2761	-.1043	.4349	-.1281
.3449	-.1029	.3535	-.1392	.5604	-.0413
.4232	-.1294	.4252	-.1486		
.4951	-.1091	.4977	-.1081		
.5671	-.0632	.5720	-.0491		
.6411	-.0218	.6464	-.0310		
.7156	-.0091	.7193	-.0231		
.7886	.0009	.7945	-.0076		
.8611	.0181	.8688	.0009		

(d)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.889$ ;  $\alpha = 2.31^\circ$ .

Figure 14. Continued.





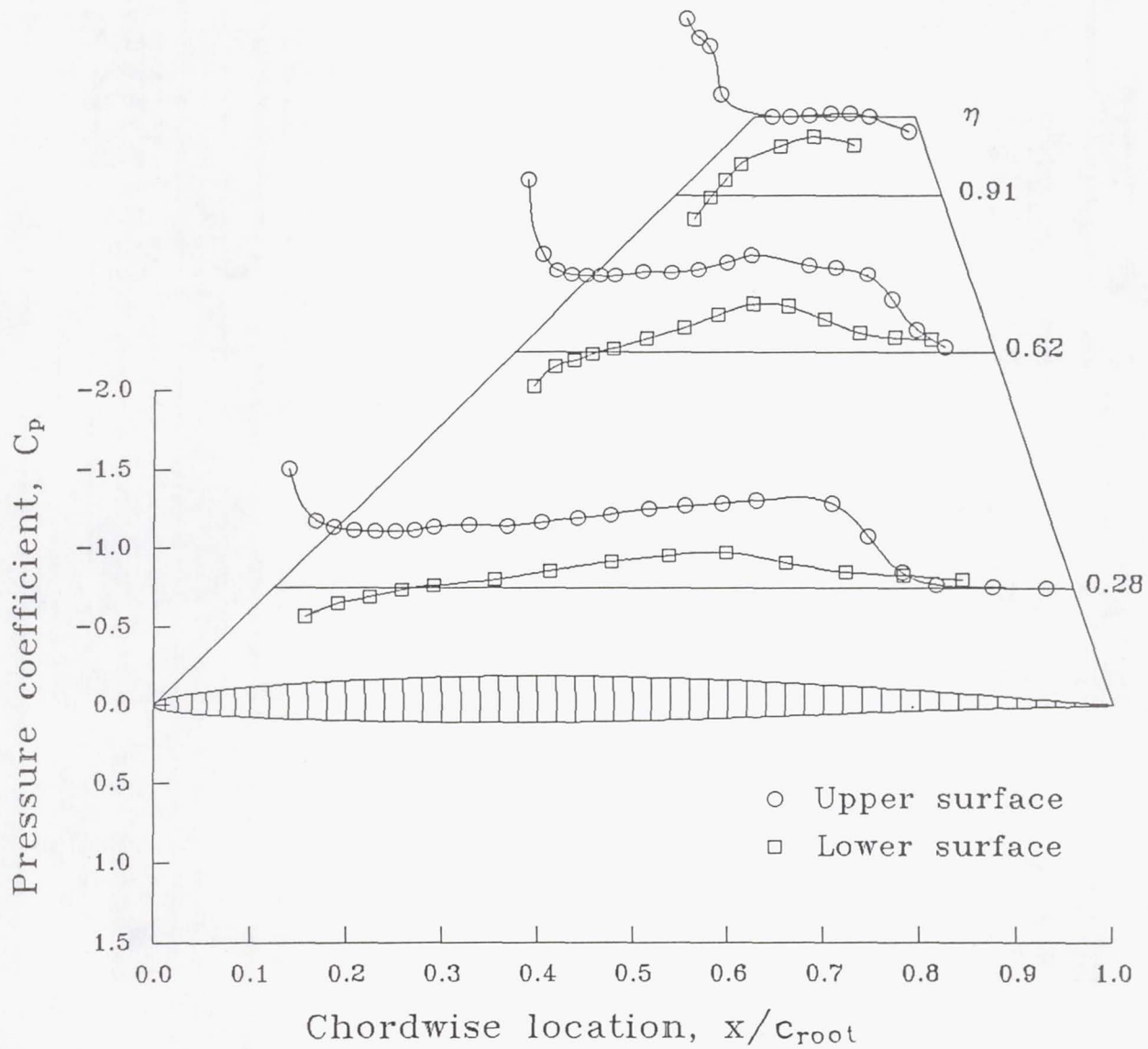
(d) Concluded.

Figure 14. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-0.7600	0.0269	-1.0990	0.0406	-1.1200
.0513	-.4353	.0576	-.6276	.0869	-1.0030
.0748	-.3928	.0874	-.5231	.1268	-.9473
.1001	-.3713	.1184	-.4961	.1719	-.6423
.1263	-.3664	.1496	-.4868	.3627	-.5041
.1523	-.3630	.1779	-.4842	.4311	-.5028
.1759	-.3714	.2080	-.4850	.5052	-.5068
.1998	-.3926	.2674	-.5120	.5821	-.5192
.2436	-.4081	.3260	-.5094	.6553	-.5234
.2912	-.4006	.3818	-.5290	.7267	-.4978
.3345	-.4248	.4423	-.5750	.8756	-.4093
.3798	-.4530	.4942	-.6189		
.4213	-.4756	.6137	-.5516		
.4697	-.5149	.6687	-.5397		
.5154	-.5302	.7353	-.4933		
.5617	-.5488	.7874	-.3273		
.6041	-.5642	.8384	-.1397		
.6988	-.5485	.8982	-.0360		
.7449	-.3318				
.7865	-.0961				
.8302	-.0180				
.8994	-.0029				
.9651	.0018				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.1781	0.0408	0.2226	0.0605	0.1538
.0793	.1030	.0833	.0915	.1095	.0155
.1201	.0596	.1251	.0549	.1584	-.1014
.1598	.0142	.1625	.0112	.2060	-.2021
.1996	-.0136	.2055	-.0230	.3295	-.3148
.2753	-.0518	.2761	-.0844	.4349	-.3737
.3449	-.1078	.3535	-.1535	.5604	-.3239
.4232	-.1669	.4252	-.2338		
.4951	-.2066	.4977	-.2970		
.5671	-.2251	.5720	-.2837		
.6411	-.1596	.6464	-.2047		
.7156	-.1000	.7193	-.1208		
.7886	-.0779	.7945	-.0914		
.8611	-.0490	.8688	-.0788		

(e)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.902$ ;  $\alpha = 4.91^{\circ}$ .

Figure 14. Continued.



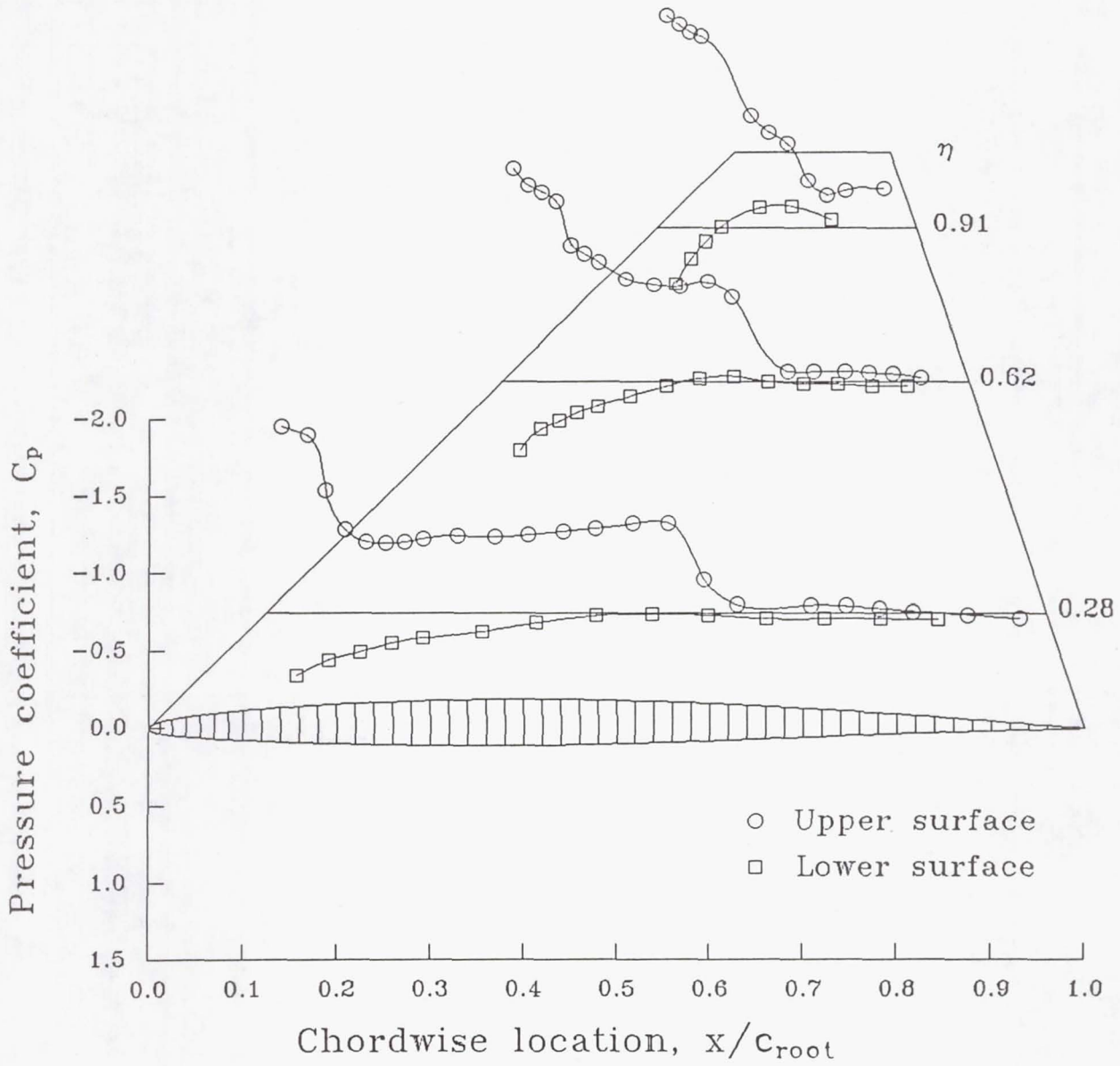
(e) Concluded.

Figure 14. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.2070	0.0269	-1.3920	0.0406	-1.4150
.0513	-1.1500	.0576	-1.2810	.0869	-1.3530
.0748	-.7924	.0874	-1.2360	.1268	-1.3020
.1001	-.5379	.1184	-1.1760	.1719	-1.2720
.1263	-.4575	.1496	-.8904	.3627	-.7507
.1523	-.4520	.1779	-.8357	.4311	-.6375
.1759	-.4584	.2080	-.7817	.5052	-.5580
.1998	-.4799	.2674	-.6684	.5821	-.3161
.2436	-.4974	.3260	-.6289	.6553	-.2161
.2912	-.4892	.3818	-.6167	.7267	-.2503
.3345	-.5041	.4423	-.6506	.8756	-.2595
.3798	-.5247	.4942	-.5501		
.4213	-.5465	.6137	-.0674		
.4697	-.5769	.6687	-.0672		
.5154	-.5822	.7353	-.0655		
.5617	-.2113	.7874	-.0608		
.6041	-.0491	.8384	-.0502		
.6988	-.0479	.8982	-.0256		
.7449	-.0443				
.7865	-.0278				
.8302	-.0086				
.8994	.0124				
.9651	.0365				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4071	0.0408	0.4504	0.0605	0.3643
.0793	.3060	.0833	.3080	.1095	.1980
.1201	.2518	.1251	.2567	.1584	.0860
.1598	.1947	.1625	.2015	.2060	-.0080
.1996	.1636	.2055	.1575	.3295	-.1311
.2753	.1209	.2761	.0923	.4349	-.1429
.3449	.0635	.3535	.0277	.5604	-.0527
.4232	.0173	.4252	-.0226		
.4951	.0050	.4977	-.0347		
.5671	.0148	.5720	-.0004		
.6411	.0359	.6464	.0106		
.7156	.0365	.7193	.0145		
.7886	.0373	.7945	.0275		
.8611	.0444	.8688	.0241		

(f)  $R_c = 28.2 \times 10^6$ ;  $M_\infty = 0.884$ ;  $\alpha = 8.38^\circ$ .

Figure 14. Continued.



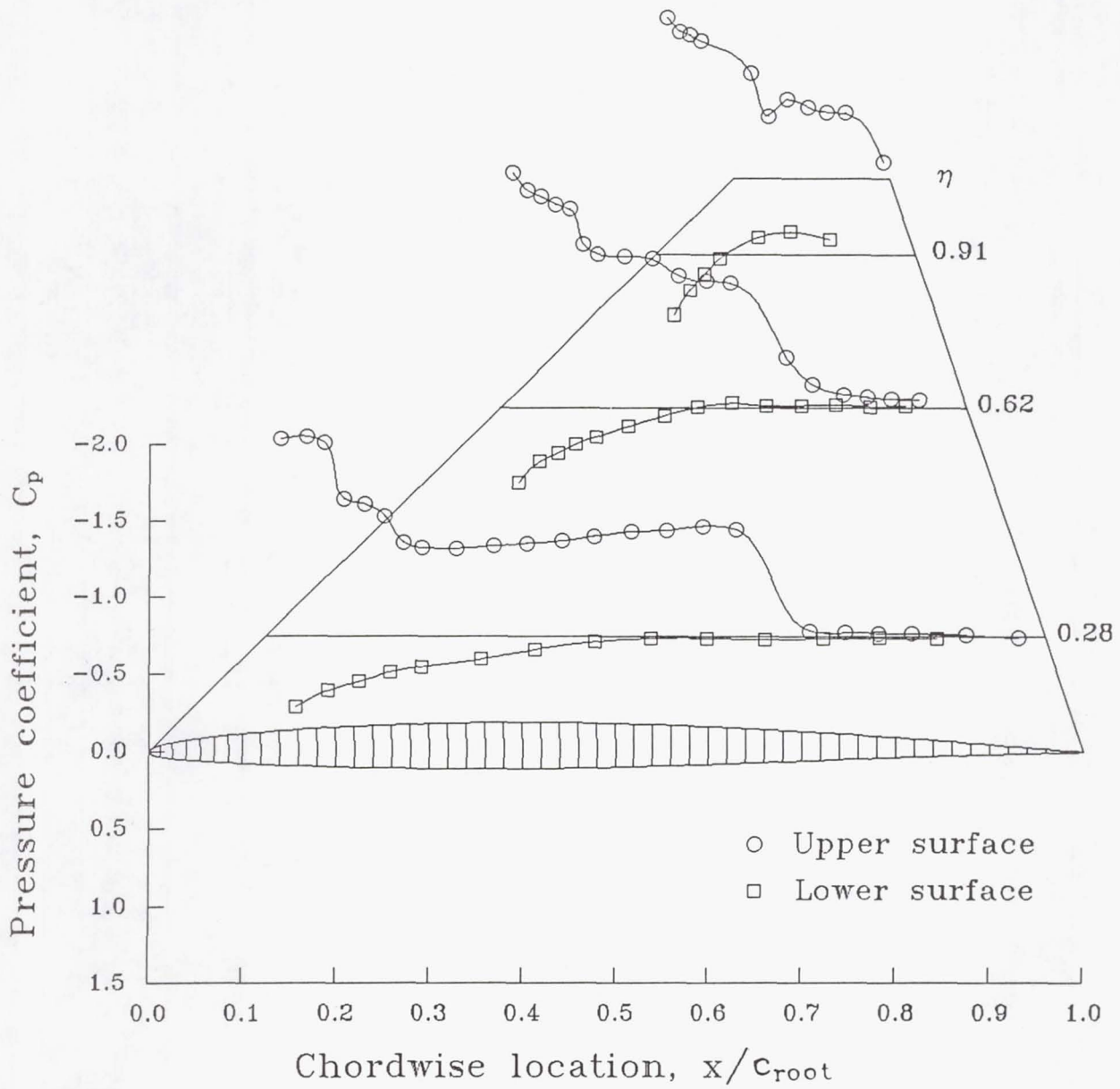
(f) Concluded.

Figure 14. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.2930	0.0269	-1.5320	0.0406	-1.5640
.0513	-1.3090	.0576	-1.4190	.0869	-1.4710
.0748	-1.2650	.0874	-1.3790	.1268	-1.4450
.1001	-.9014	.1184	-1.3290	.1719	-1.4070
.1263	-.8672	.1496	-1.2990	.3627	-1.1950
.1523	-.7883	.1779	-1.0650	.4311	-.9079
.1759	-.6140	.2080	-.9995	.5052	-1.0240
.1998	-.5803	.2674	-.9866	.5821	-.9662
.2436	-.5737	.3260	-.9705	.6553	-.9376
.2912	-.5906	.3818	-.8578	.7267	-.9331
.3345	-.6079	.4423	-.8250	.8756	-.6060
.3798	-.6245	.4942	-.8114		
.4213	-.6553	.6137	-.3317		
.4697	-.6864	.6687	-.1516		
.5154	-.6941	.7353	-.0881		
.5617	-.7221	.7874	-.0714		
.6041	-.6982	.8384	-.0623		
.6988	-.0324	.8982	-.0520		
.7449	-.0260				
.7865	-.0221				
.8302	-.0176				
.8994	-.0099				
.9651	.0066				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.4644	0.0408	0.4957	0.0605	0.4022
.0793	.3555	.0833	.3554	.1095	.2385
.1201	.2966	.1251	.2996	.1584	.1238
.1598	.2337	.1625	.2402	.2060	.0260
.1996	.1994	.2055	.1924	.3295	-.1154
.2753	.1510	.2761	.1224	.4349	-.1511
.3449	.0871	.3535	.0527	.5604	-.1032
.4232	.0351	.4252	-.0054		
.4951	.0141	.4977	-.0318		
.5671	.0127	.5720	-.0137		
.6411	.0231	.6464	-.0154		
.7156	.0158	.7193	-.0212		
.7886	.0109	.7945	-.0080		
.8611	.0158	.8688	-.0133		

(g)  $R_{\bar{c}} = 28.2 \times 10^6$ ;  $M_{\infty} = 0.905$ ;  $\alpha = 10.58^\circ$ .

Figure 14. Continued.



(g) Concluded.

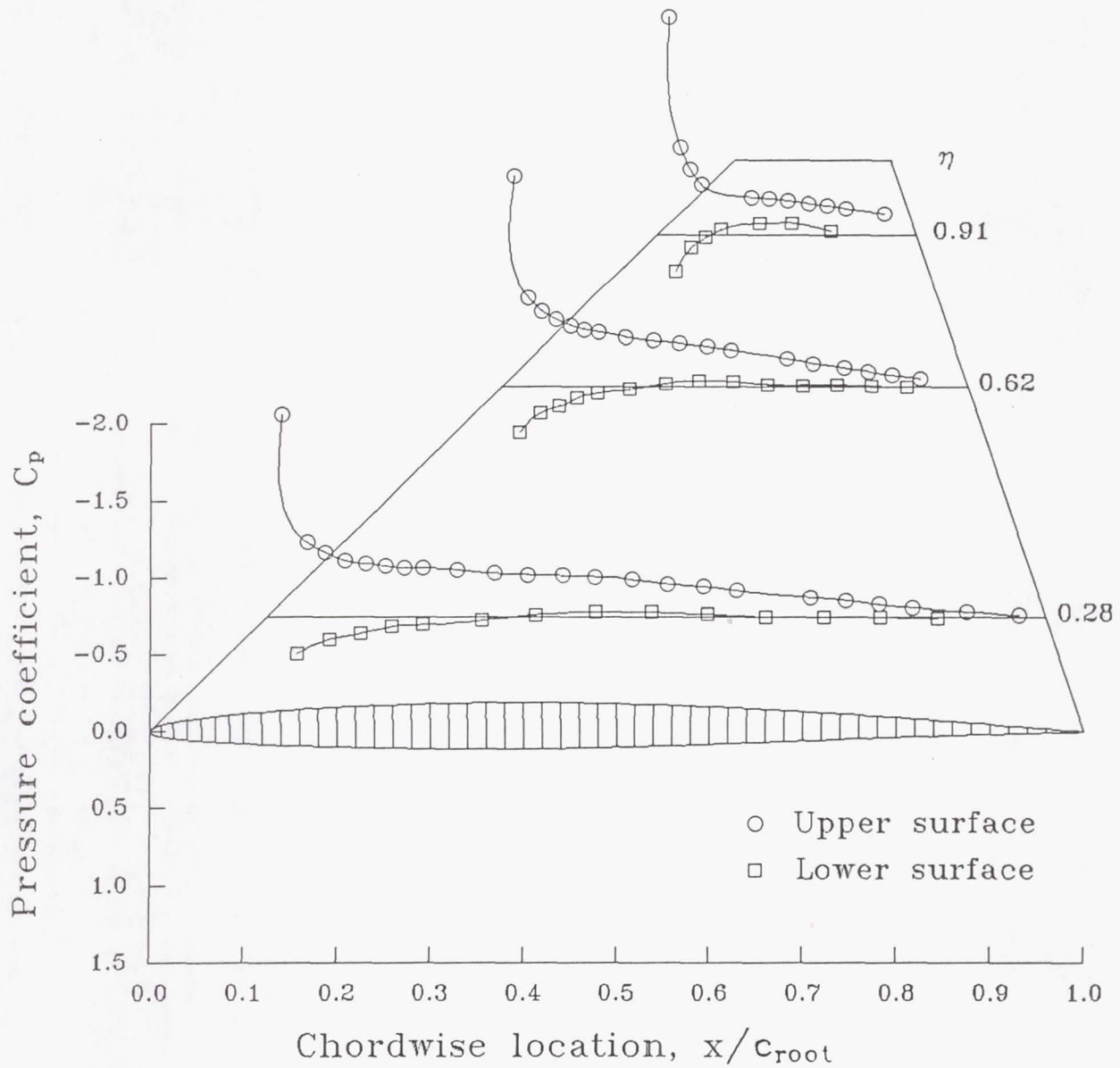
Figure 14. Concluded.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3150	0.0269	-1.3910	0.0406	-1.4350
.0513	-.4852	.0576	-.5819	.0869	-.5824
.0748	-.4206	.0874	-.4968	.1268	-.4393
.1001	-.3658	.1184	-.4397	.1719	-.3375
.1263	-.3470	.1496	-.4021	.3627	-.2560
.1523	-.3334	.1779	-.3764	.4311	-.2465
.1759	-.3194	.2080	-.3594	.5052	-.2317
.1998	-.3210	.2674	-.3299	.5821	-.2143
.2436	-.3047	.3260	-.3047	.6553	-.2026
.2912	-.2852	.3818	-.2877	.7267	-.1812
.3345	-.2751	.4423	-.2664	.8756	-.1451
.3798	-.2693	.4942	-.2425		
.4213	-.2622	.6137	-.1863		
.4697	-.2440	.6687	-.1558		
.5154	-.2132	.7353	-.1253		
.5617	-.1981	.7874	-.1019		
.6041	-.1722	.8384	-.0802		
.6988	-.1283	.8982	-.0552		
.7449	-.1076				
.7865	-.0822				
.8302	-.0585				
.8994	-.0351				
.9651	-.0096				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2399	0.0408	0.3003	0.0605	0.2365
.0793	.1461	.0833	.1745	.1095	.0824
.1201	.1078	.1251	.1293	.1584	.0158
.1598	.0637	.1625	.0727	.2060	-.0377
.1996	.0507	.2055	.0428	.3295	-.0779
.2753	.0231	.2761	.0154	.4349	-.0829
.3449	-.0129	.3535	-.0208	.5604	-.0264
.4232	-.0336	.4252	-.0411		
.4951	-.0305	.4977	-.0348		
.5671	-.0172	.5720	-.0141		
.6411	.0007	.6464	-.0098		
.7156	.0017	.7193	-.0107		
.7886	.0033	.7945	-.0039		
.8611	.0083	.8688	-.0021		

(a)  $\alpha = 4.92^\circ$ ;  $M_\infty = 0.702$ ;  $R_c = 3.16 \times 10^6$ .

Figure 15. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test Reynolds number range at nominal conditions of  $M_\infty = 0.7$  and  $\alpha = 5^\circ$ .





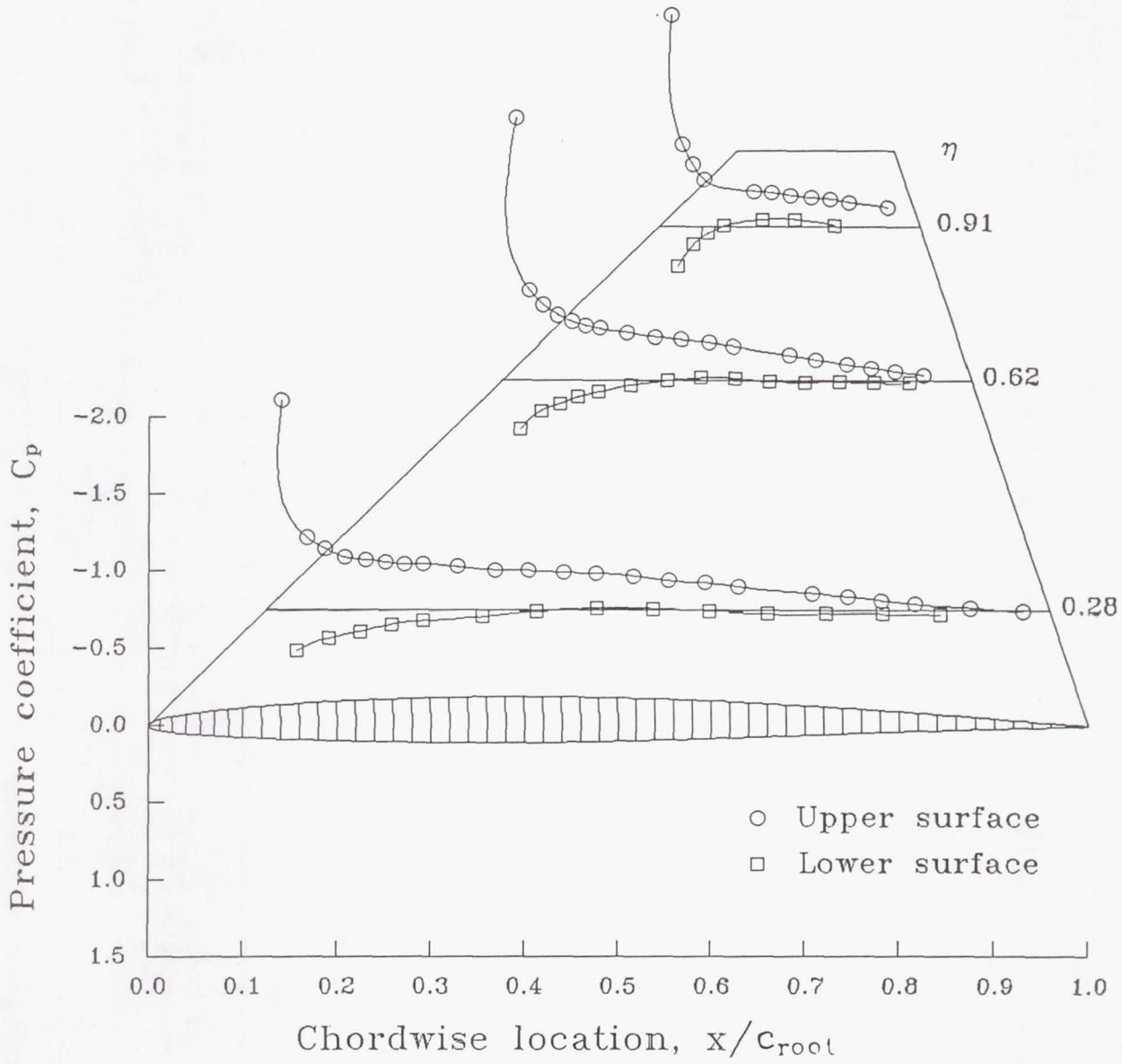
(a) Concluded.

Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3640	0.0269	-1.7140	0.0406	-1.3900
.0513	-.4724	.0576	-.5824	.0869	-.5388
.0748	-.4018	.0874	-.4868	.1268	-.4110
.1001	-.3466	.1184	-.4226	.1719	-.3125
.1263	-.3264	.1496	-.3809	.3627	-.2360
.1523	-.3107	.1779	-.3558	.4311	-.2266
.1759	-.2968	.2080	-.3372	.5052	-.2104
.1998	-.3002	.2674	-.3074	.5821	-.1933
.2436	-.2829	.3260	-.2823	.6553	-.1831
.2912	-.2619	.3818	-.2659	.7267	-.1635
.3345	-.2561	.4423	-.2446	.8756	-.1304
.3798	-.2446	.4942	-.2204		
.4213	-.2399	.6137	-.1641		
.4697	-.2215	.6687	-.1354		
.5154	-.1892	.7353	-.1048		
.5617	-.1764	.7874	-.0827		
.6041	-.1504	.8384	-.0588		
.6988	-.1062	.8982	-.0353		
.7449	-.0869				
.7865	-.0617				
.8302	-.0385				
.8994	-.0153				
.9651	.0107				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2583	0.0408	0.3224	0.0605	0.2587
.0793	.1802	.0833	.1981	.1095	.1148
.1201	.1385	.1251	.1522	.1584	.0408
.1598	.0918	.1625	.1099	.2060	-.0054
.1996	.0709	.2055	.0759	.3295	-.0493
.2753	.0427	.2761	.0342	.4349	-.0494
.3449	.0090	.3535	-.0001	.5604	-.0100
.4232	-.0116	.4252	-.0175		
.4951	-.0073	.4977	-.0119		
.5671	.0056	.5720	.0075		
.6411	.0237	.6464	.0106		
.7156	.0240	.7193	.0096		
.7886	.0244	.7945	.0162		
.8611	.0296	.8688	.0162		

(b)  $\alpha = 4.96^\circ$ ;  $M_\infty = 0.700$ ;  $R_{\bar{c}} = 6.27 \times 10^6$ .

Figure 15. Continued.



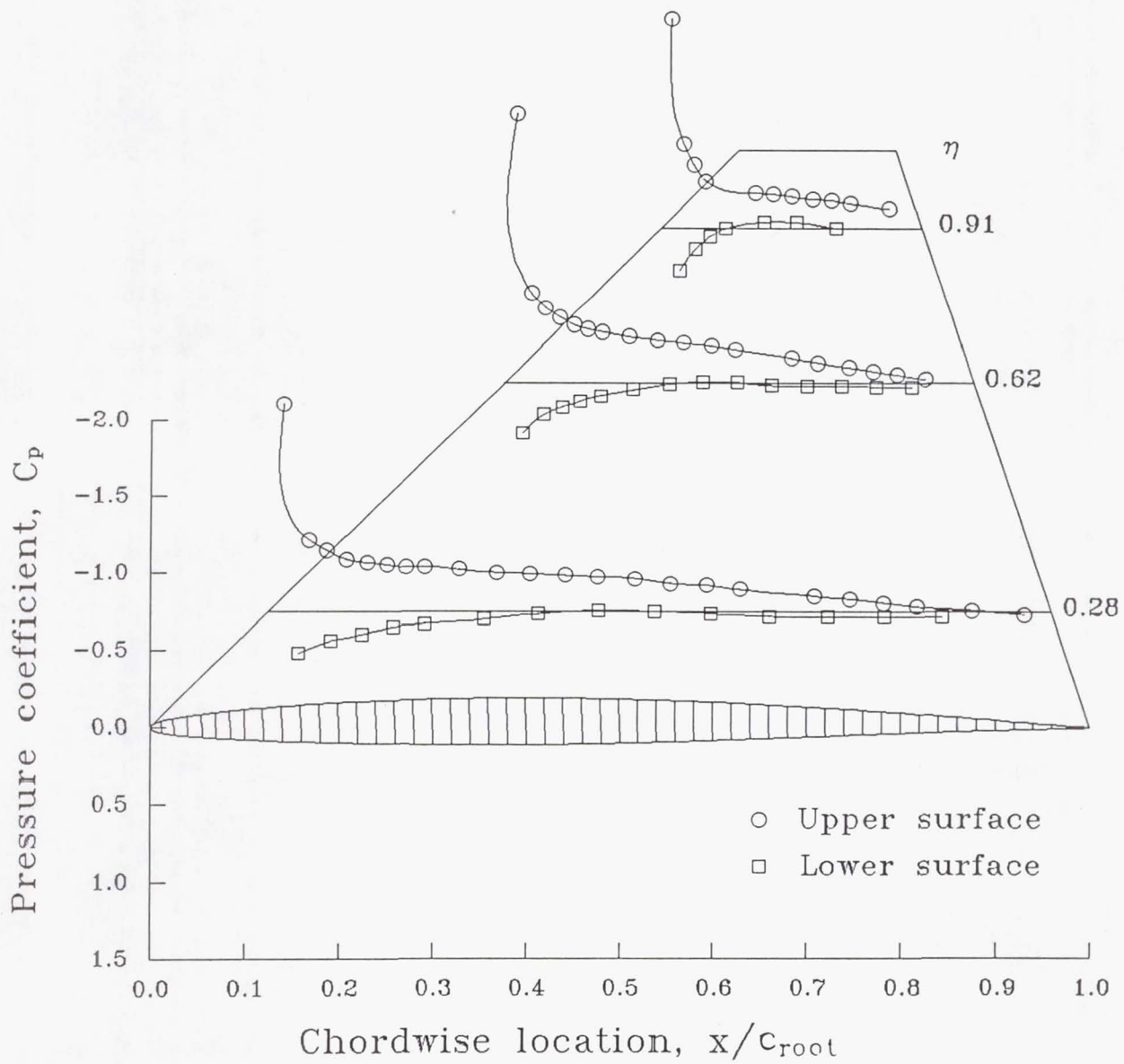
(b) Concluded.

Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3600	0.0269	-1.7330	0.0406	-1.3540
.0513	-.4684	.0576	-.5792	.0869	-.5379
.0748	-.3979	.0874	-.4829	.1268	-.4059
.1001	-.3412	.1184	-.4182	.1719	-.3027
.1263	-.3201	.1496	-.3730	.3627	-.2263
.1523	-.3048	.1779	-.3488	.4311	-.2199
.1759	-.2904	.2080	-.3290	.5052	-.2047
.1998	-.2943	.2674	-.2994	.5821	-.1859
.2436	-.2765	.3260	-.2765	.6553	-.1777
.2912	-.2548	.3818	-.2574	.7267	-.1587
.3345	-.2479	.4423	-.2373	.8756	-.1244
.3798	-.2368	.4942	-.2132		
.4213	-.2277	.6137	-.1570		
.4697	-.2141	.6687	-.1281		
.5154	-.1808	.7353	-.0978		
.5617	-.1692	.7874	-.0756		
.6041	-.1426	.8384	-.0513		
.6988	-.0989	.8982	-.0279		
.7449	-.0792				
.7865	-.0537				
.8302	-.0303				
.8994	-.0087				
.9651	.0182				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2712	0.0408	0.3356	0.0605	0.2758
.0793	.1883	.0833	.2049	.1095	.1296
.1201	.1465	.1251	.1595	.1584	.0505
.1598	.0997	.1625	.1173	.2060	.0023
.1996	.0784	.2055	.0840	.3295	-.0411
.2753	.0507	.2761	.0428	.4349	-.0407
.3449	.0167	.3535	.0089	.5604	-.0013
.4232	-.0038	.4252	-.0083		
.4951	.0011	.4977	-.0035		
.5671	.0138	.5720	.0151		
.6411	.0315	.6464	.0186		
.7156	.0318	.7193	.0176		
.7886	.0323	.7945	.0270		
.8611	.0376	.8688	.0248		

(c)  $\alpha = 5.01^\circ$ ;  $M_\infty = 0.701$ ;  $R_{\bar{c}} = 9.43 \times 10^6$ .

Figure 15. Continued.



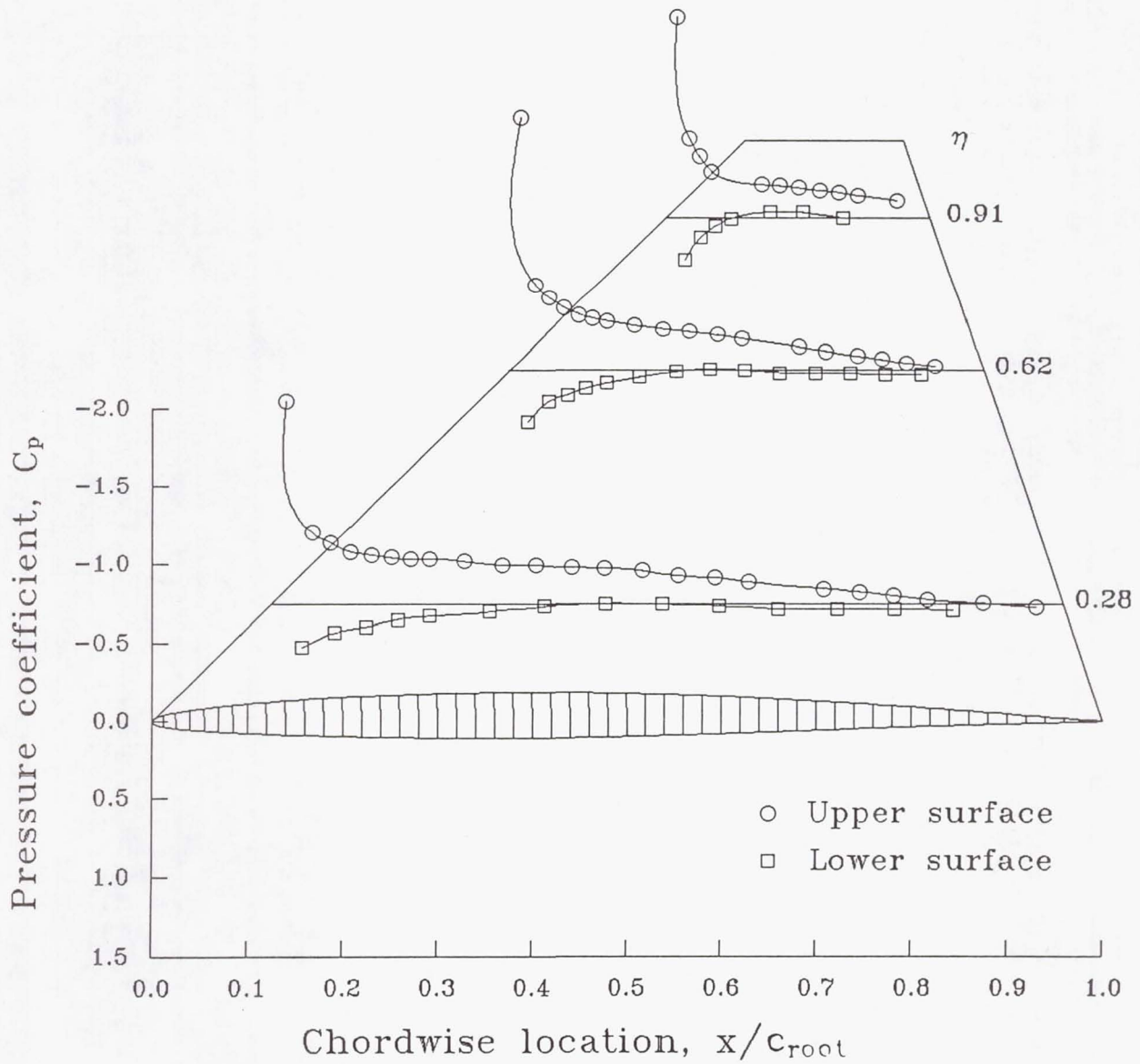
(c) Concluded.

Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3030	0.0269	-1.6500	0.0406	-1.2820
.0513	-.4582	.0576	-.5618	.0869	-.5145
.0748	-.3901	.0874	-.4706	.1268	-.3992
.1001	-.3334	.1184	-.4068	.1719	-.3023
.1263	-.3127	.1496	-.3625	.3627	-.2202
.1523	-.2976	.1779	-.3401	.4311	-.2139
.1759	-.2836	.2080	-.3228	.5052	-.1981
.1998	-.2871	.2674	-.2922	.5821	-.1800
.2436	-.2696	.3260	-.2696	.6553	-.1701
.2912	-.2474	.3818	-.2509	.7267	-.1496
.3345	-.2428	.4423	-.2302	.8756	-.1156
.3798	-.2310	.4942	-.2076		
.4213	-.2257	.6137	-.1517		
.4697	-.2091	.6687	-.1221		
.5154	-.1758	.7353	-.0917		
.5617	-.1645	.7874	-.0703		
.6041	-.1383	.8384	-.0473		
.6988	-.0945	.8982	-.0235		
.7449	-.0748				
.7865	-.0497				
.8302	-.0270				
.8994	-.0028				
.9651	.0216				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2735	0.0408	0.3360	0.0605	0.2717
.0793	.1843	.0833	.2005	.1095	.1266
.1201	.1450	.1251	.1571	.1584	.0502
.1598	.0983	.1625	.1143	.2060	.0035
.1996	.0769	.2055	.0824	.3295	-.0396
.2753	.0508	.2761	.0418	.4349	-.0381
.3449	.0176	.3535	.0102	.5604	.0013
.4232	-.0018	.4252	-.0065		
.4951	.0019	.4977	-.0020		
.5671	.0146	.5720	.0178		
.6411	.0334	.6464	.0204		
.7156	.0338	.7193	.0203		
.7886	.0349	.7945	.0270		
.8611	.0405	.8688	.0270		

(d)  $\alpha = 5.23^\circ$ ;  $M_\infty = 0.689$ ;  $R_c = 12.5 \times 10^6$ .

Figure 15. Continued.



(d) Concluded.

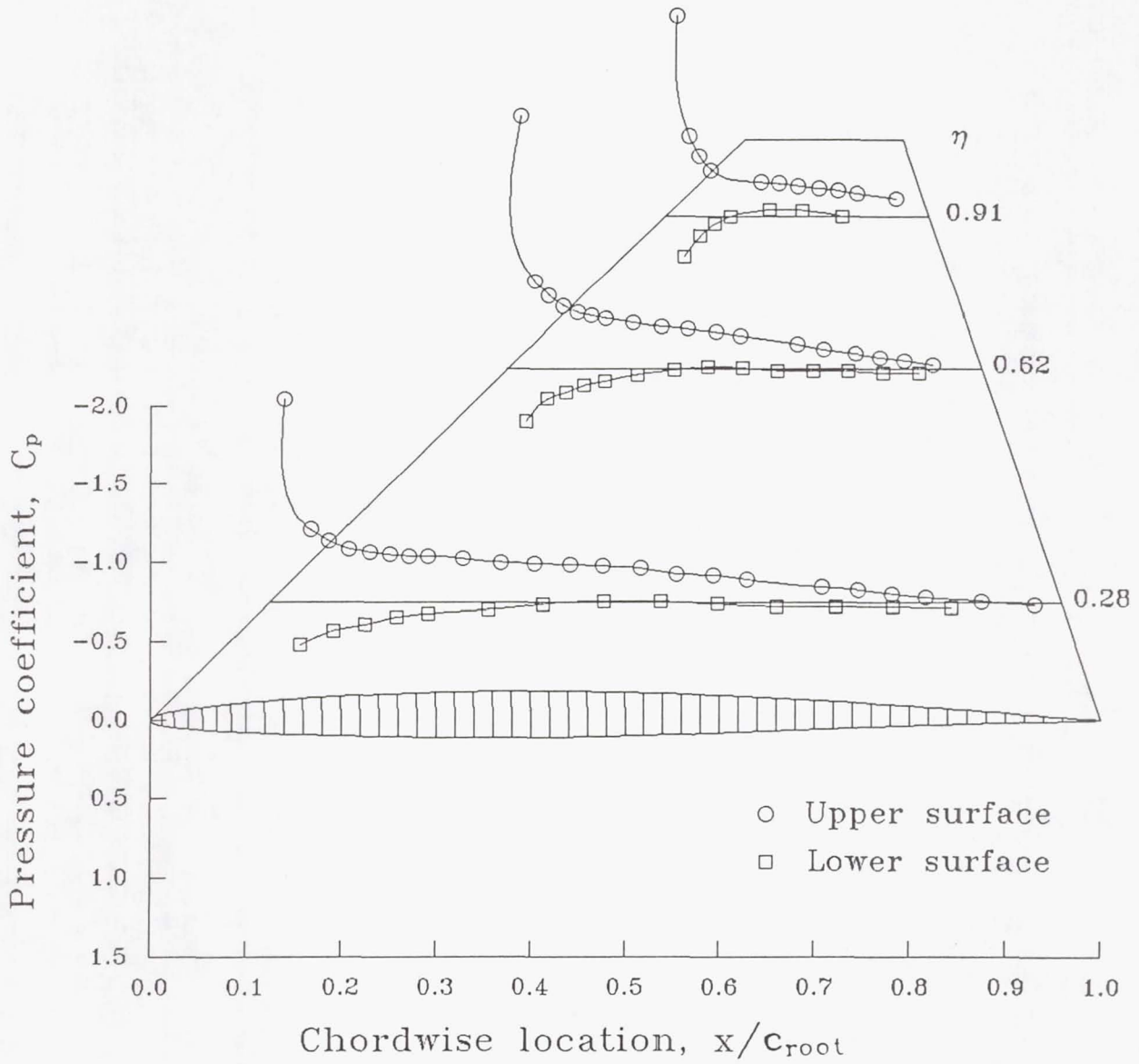
Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3030	0.0269	-1.6490	0.0406	-1.2910
.0513	-.4632	.0576	-.5660	.0869	-.5213
.0748	-.3954	.0874	-.4757	.1268	-.3971
.1001	-.3404	.1184	-.4098	.1719	-.3024
.1263	-.3204	.1496	-.3689	.3627	-.2245
.1523	-.3054	.1779	-.3456	.4311	-.2198
.1759	-.2923	.2080	-.3298	.5052	-.2030
.1998	-.2947	.2674	-.3001	.5821	-.1844
.2436	-.2773	.3260	-.2763	.6553	-.1750
.2912	-.2552	.3818	-.2581	.7267	-.1553
.3345	-.2449	.4423	-.2367	.8756	-.1209
.3798	-.2390	.4942	-.2141		
.4213	-.2302	.6137	-.1582		
.4697	-.2162	.6687	-.1281		
.5154	-.1816	.7353	-.0973		
.5617	-.1717	.7874	-.0754		
.6041	-.1439	.8384	-.0526		
.6988	-.1009	.8982	-.0281		
.7449	-.0805				
.7865	-.0551				
.8302	-.0313				
.8994	-.0084				
.9651	.0170				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2702	0.0408	0.3381	0.0605	0.2695
.0793	.1812	.0833	.1959	.1095	.1267
.1201	.1416	.1251	.1533	.1584	.0460
.1598	.0940	.1625	.1095	.2060	-.0013
.1996	.0721	.2055	.0776	.3295	-.0445
.2753	.0456	.2761	.0372	.4349	-.0433
.3449	.0113	.3535	.0055	.5604	-.0023
.4232	-.0078	.4252	-.0117		
.4951	-.0032	.4977	-.0074		
.5671	.0095	.5720	.0120		
.6411	.0280	.6464	.0157		
.7156	.0287	.7193	.0155		
.7886	.0306	.7945	.0243		
.8611	.0355	.8688	.0243		

(e)  $\alpha = 5.19^\circ$ ;  $M_\infty = 0.689$ ;  $R_c = 15.7 \times 10^6$ .

Figure 15. Continued.





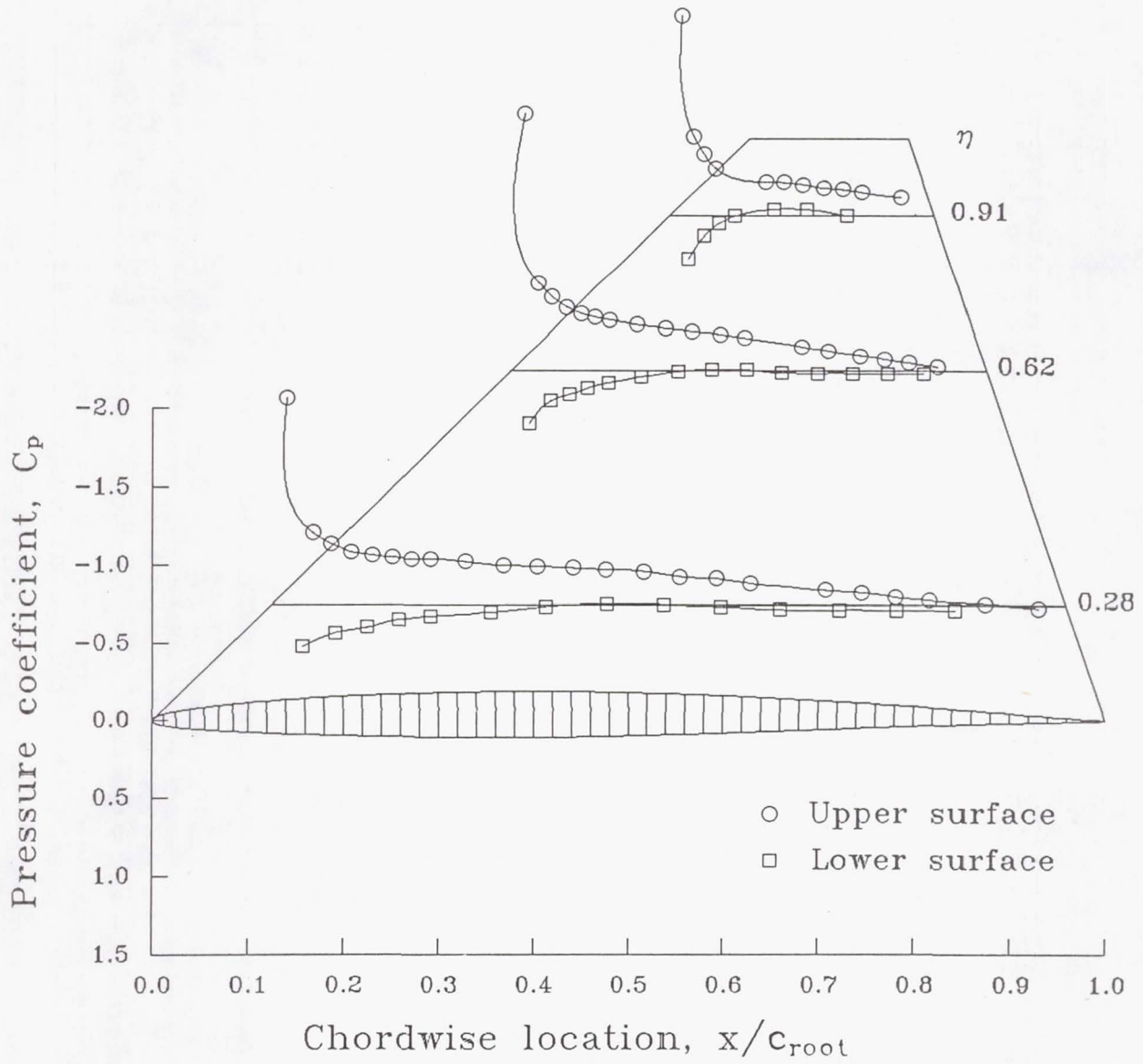
(e) Concluded.

Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3180	0.0269	-1.6620	0.0406	-1.2930
.0513	-.4638	.0576	-.5629	.0869	-.5172
.0748	-.3955	.0874	-.4743	.1268	-.3989
.1001	-.3395	.1184	-.4100	.1719	-.3066
.1263	-.3186	.1496	-.3662	.3627	-.2218
.1523	-.3030	.1779	-.3446	.4311	-.2182
.1759	-.2898	.2080	-.3276	.5052	-.2016
.1998	-.2930	.2674	-.2982	.5821	-.1827
.2436	-.2758	.3260	-.2745	.6553	-.1737
.2912	-.2524	.3818	-.2563	.7267	-.1531
.3345	-.2463	.4423	-.2350	.8756	-.1190
.3798	-.2360	.4942	-.2120		
.4213	-.2279	.6137	-.1561		
.4697	-.2142	.6687	-.1261		
.5154	-.1800	.7353	-.0955		
.5617	-.1698	.7874	-.0740		
.6041	-.1418	.8384	-.0505		
.6988	-.0987	.8982	-.0263		
.7449	-.0790				
.7865	-.0533				
.8302	-.0294				
.8994	-.0070				
.9651	.0188				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2707	0.0408	0.3393	0.0605	0.2697
.0793	.1820	.0833	.1960	.1095	.1248
.1201	.1428	.1251	.1545	.1584	.0469
.1598	.0958	.1625	.1111	.2060	.0006
.1996	.0734	.2055	.0787	.3295	-.0435
.2753	.0476	.2761	.0389	.4349	-.0409
.3449	.0129	.3535	.0070	.5604	.0001
.4232	-.0062	.4252	-.0087		
.4951	-.0006	.4977	-.0047		
.5671	.0118	.5720	.0142		
.6411	.0303	.6464	.0173		
.7156	.0312	.7193	.0172		
.7886	.0325	.7945	.0229		
.8611	.0375	.8688	.0217		

(f)  $\alpha = 5.19^\circ$ ;  $M_\infty = 0.690$ ;  $R_{\bar{c}} = 18.8 \times 10^6$ .

Figure 15. Continued.



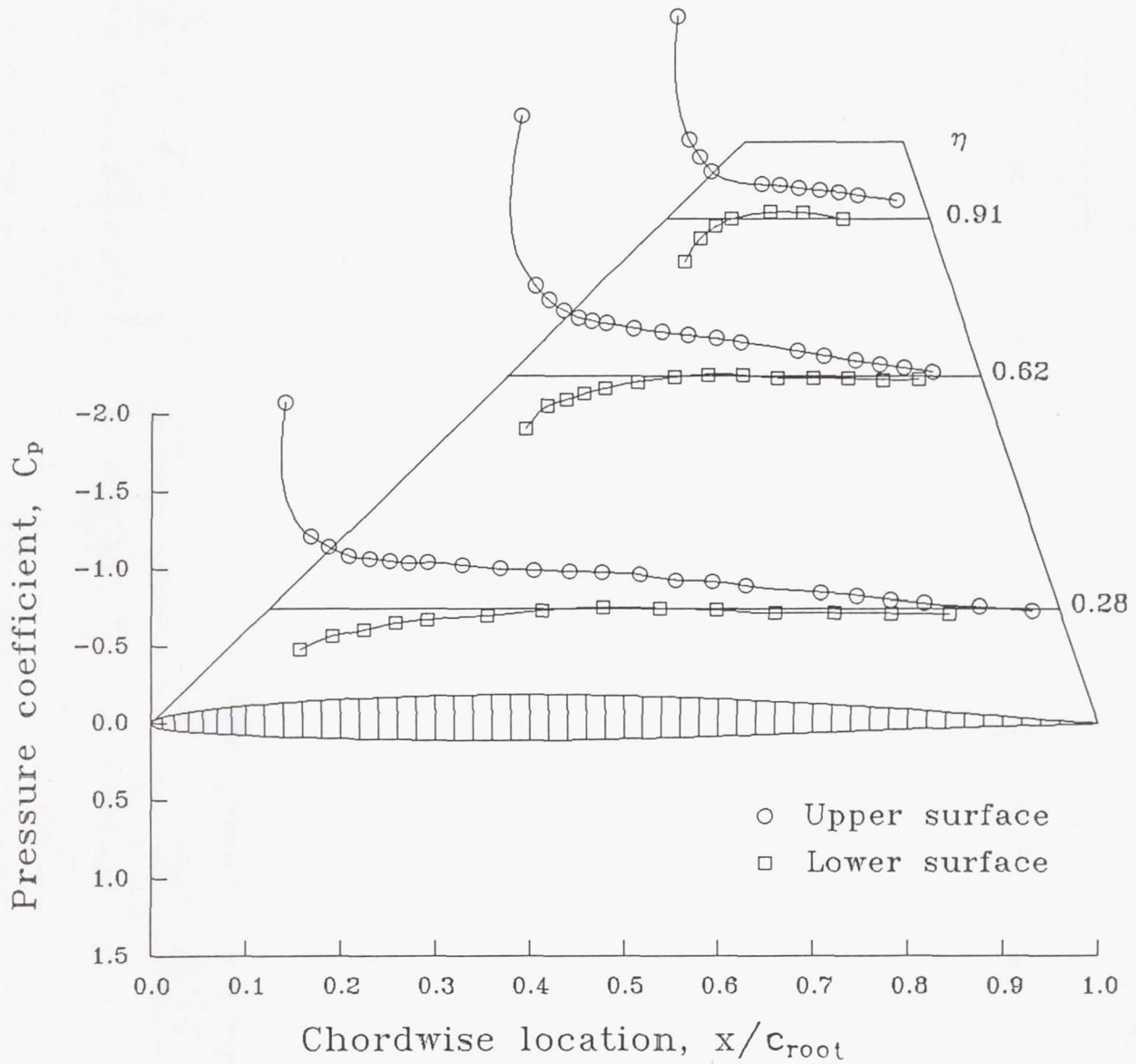
(f) Concluded.

Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3250	0.0269	-1.6680	0.0406	-1.3050
.0513	-.4665	.0576	-.5642	.0869	-.5160
.0748	-.3977	.0874	-.4778	.1268	-.4009
.1001	-.3419	.1184	-.4120	.1719	-.3083
.1263	-.3218	.1496	-.3695	.3627	-.2245
.1523	-.3060	.1779	-.3475	.4311	-.2202
.1759	-.2932	.2080	-.3306	.5052	-.2039
.1998	-.2959	.2674	-.3014	.5821	-.1853
.2436	-.2787	.3260	-.2771	.6553	-.1758
.2912	-.2557	.3818	-.2593	.7267	-.1553
.3345	-.2485	.4423	-.2377	.8756	-.1213
.3798	-.2388	.4942	-.2142		
.4213	-.2336	.6137	-.1584		
.4697	-.2165	.6687	-.1288		
.5154	-.1821	.7353	-.0976		
.5617	-.1722	.7874	-.0758		
.6041	-.1435	.8384	-.0526		
.6988	-.1006	.8982	-.0280		
.7449	-.0807				
.7865	-.0551				
.8302	-.0307				
.8994	-.0089				
.9651	.0171				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2697	0.0408	0.3391	0.0605	0.2720
.0793	.1816	.0833	.1947	.1095	.1248
.1201	.1414	.1251	.1544	.1584	.0472
.1598	.0949	.1625	.1106	.2060	.0009
.1996	.0721	.2055	.0779	.3295	-.0443
.2753	.0464	.2761	.0382	.4349	-.0413
.3449	.0112	.3535	.0060	.5604	.0004
.4232	-.0077	.4252	-.0095		
.4951	-.0017	.4977	-.0057		
.5671	.0106	.5720	.0128		
.6411	.0287	.6464	.0162		
.7156	.0298	.7193	.0157		
.7886	.0315	.7945	.0236		
.8611	.0357	.8688	.0226		

(g)  $\alpha = 5.17^\circ$ ;  $M_\infty = 0.691$ ;  $R_{\bar{c}} = 21.9 \times 10^6$ .

Figure 15. Continued.



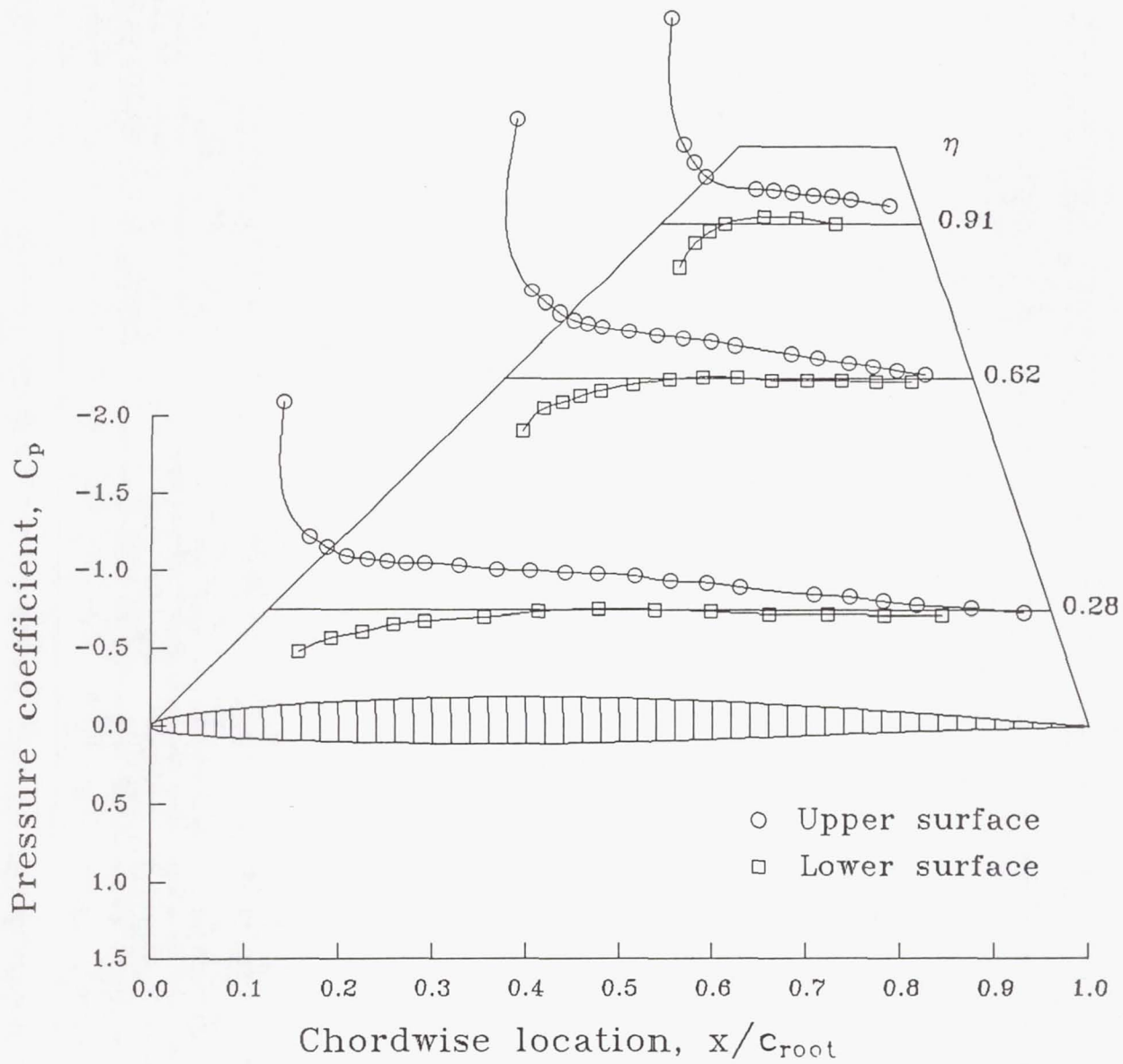
(g) Concluded.

Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3460	0.0269	-1.6810	0.0406	-1.3440
.0513	-.4724	.0576	-.5669	.0869	-.5122
.0748	-.4033	.0874	-.4836	.1268	-.4004
.1001	-.3463	.1184	-.4172	.1719	-.3081
.1263	-.3260	.1496	-.3728	.3627	-.2275
.1523	-.3094	.1779	-.3513	.4311	-.2233
.1759	-.2962	.2080	-.3343	.5052	-.2063
.1998	-.2997	.2674	-.3042	.5821	-.1877
.2436	-.2825	.3260	-.2800	.6553	-.1789
.2912	-.2580	.3818	-.2619	.7267	-.1574
.3345	-.2537	.4423	-.2401	.8756	-.1237
.3798	-.2408	.4942	-.2162		
.4213	-.2339	.6137	-.1601		
.4697	-.2193	.6687	-.1300		
.5154	-.1842	.7353	-.0989		
.5617	-.1744	.7874	-.0774		
.6041	-.1455	.8384	-.0536		
.6988	-.1020	.8982	-.0291		
.7449	-.0827				
.7865	-.0564				
.8302	-.0318				
.8994	-.0101				
.9651	.0166				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2705	0.0408	0.3400	0.0605	0.2717
.0793	.1820	.0833	.1942	.1095	.1228
.1201	.1407	.1251	.1545	.1584	.0464
.1598	.0954	.1625	.1107	.2060	-.0001
.1996	.0722	.2055	.0773	.3295	-.0463
.2753	.0466	.2761	.0376	.4349	-.0419
.3449	.0108	.3535	.0051	.5604	.0001
.4232	-.0085	.4252	-.0096		
.4951	-.0019	.4977	-.0064		
.5671	.0101	.5720	.0125		
.6411	.0286	.6464	.0150		
.7156	.0297	.7193	.0144		
.7886	.0322	.7945	.0227		
.8611	.0355	.8688	.0201		

(h)  $\alpha = 5.17^\circ$ ;  $M_\infty = 0.691$ ;  $R_{\bar{c}} = 25.1 \times 10^6$ .

Figure 15. Continued.



(h) Concluded.

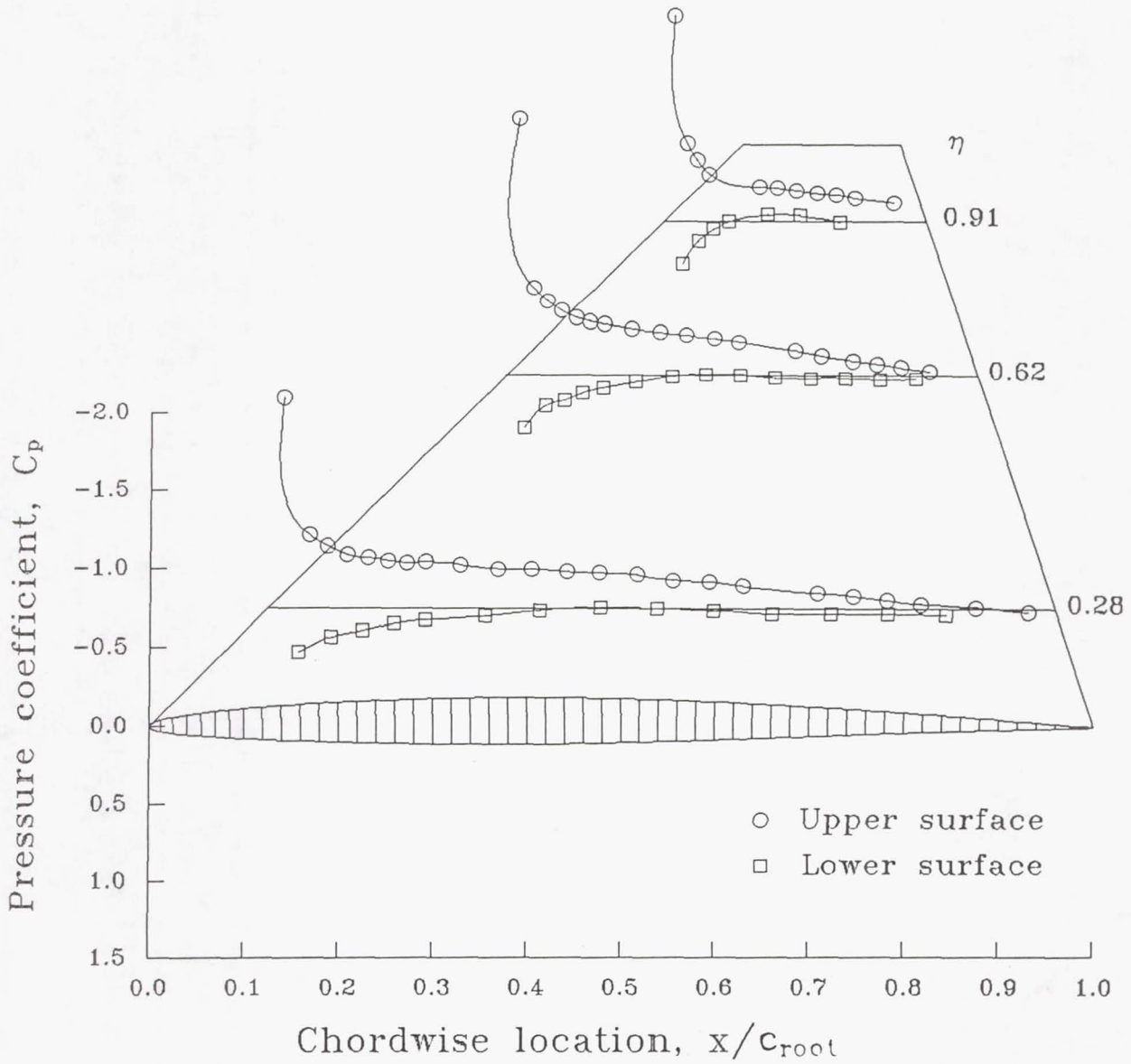
Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3530	0.0269	-1.6700	0.0406	-1.3450
.0513	-.4715	.0576	-.5652	.0869	-.5064
.0748	-.4020	.0874	-.4807	.1268	-.3989
.1001	-.3442	.1184	-.4170	.1719	-.3080
.1263	-.3236	.1496	-.3702	.3627	-.2244
.1523	-.3064	.1779	-.3494	.4311	-.2206
.1759	-.2923	.2080	-.3316	.5052	-.2033
.1998	-.2970	.2674	-.3017	.5821	-.1850
.2436	-.2801	.3260	-.2777	.6553	-.1760
.2912	-.2545	.3818	-.2594	.7267	-.1542
.3345	-.2534	.4423	-.2380	.8756	-.1203
.3798	-.2374	.4942	-.2134		
.4213	-.2297	.6137	-.1574		
.4697	-.2167	.6687	-.1267		
.5154	-.1814	.7353	-.0962		
.5617	-.1714	.7874	-.0746		
.6041	-.1427	.8384	-.0500		
.6988	-.0988	.8982	-.0259		
.7449	-.0803				
.7865	-.0535				
.8302	-.0287				
.8994	-.0074				
.9651	.0196				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2723	0.0408	0.3418	0.0605	0.2729
.0793	.1842	.0833	.1956	.1095	.1238
.1201	.1423	.1251	.1570	.1584	.0486
.1598	.0978	.1625	.1133	.2060	.0023
.1996	.0743	.2055	.0796	.3295	-.0442
.2753	.0494	.2761	.0401	.4349	-.0385
.3449	.0131	.3535	.0074	.5604	.0035
.4232	-.0061	.4252	-.0063		
.4951	.0012	.4977	-.0032		
.5671	.0127	.5720	.0159		
.6411	.0321	.6464	.0177		
.7156	.0331	.7193	.0171		
.7886	.0351	.7945	.0257		
.8611	.0389	.8688	.0218		

(i)  $\alpha = 5.21^\circ$ ;  $M_\infty = 0.690$ ;  $R_c = 28.2 \times 10^6$ .

Figure 15. Continued.





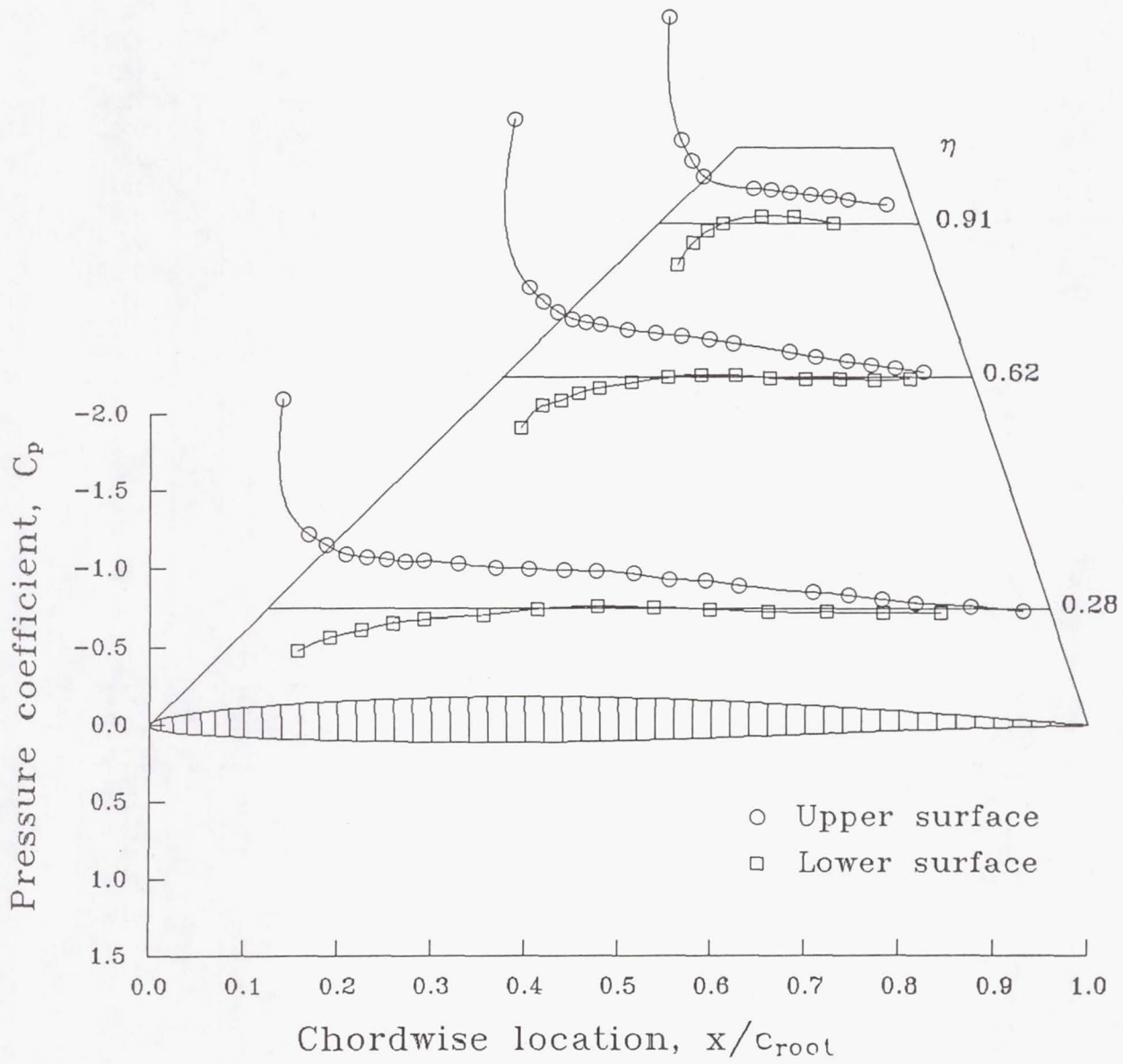
(i) Concluded.

Figure 15. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.3560	0.0269	-1.6820	0.0406	-1.3550
.0513	-.4746	.0576	-.5788	.0869	-.5463
.0748	-.4050	.0874	-.4894	.1268	-.4147
.1001	-.3480	.1184	-.4206	.1719	-.3161
.1263	-.3285	.1496	-.3766	.3627	-.2346
.1523	-.3122	.1779	-.3554	.4311	-.2259
.1759	-.3003	.2080	-.3384	.5052	-.2088
.1998	-.3027	.2674	-.3092	.5821	-.1911
.2436	-.2864	.3260	-.2835	.6553	-.1818
.2912	-.2620	.3818	-.2660	.7267	-.1605
.3345	-.2546	.4423	-.2445	.8756	-.1271
.3798	-.2448	.4942	-.2207		
.4213	-.2380	.6137	-.1651		
.4697	-.2233	.6687	-.1348		
.5154	-.1868	.7353	-.1036		
.5617	-.1790	.7874	-.0813		
.6041	-.1488	.8384	-.0584		
.6988	-.1065	.8982	-.0332		
.7449	-.0864				
.7865	-.0605				
.8302	-.0353				
.8994	-.0148				
.9651	.0124				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2676	0.0408	0.3364	0.0605	0.2692
.0793	.1813	.0833	.1889	.1095	.1231
.1201	.1360	.1251	.1514	.1584	.0447
.1598	.0916	.1625	.1061	.2060	-.0022
.1996	.0681	.2055	.0740	.3295	-.0489
.2753	.0415	.2761	.0340	.4349	-.0444
.3449	.0051	.3535	.0027	.5604	-.0012
.4232	-.0124	.4252	-.0139		
.4951	-.0061	.4977	-.0117		
.5671	.0054	.5720	.0075		
.6411	.0227	.6464	.0119		
.7156	.0245	.7193	.0112		
.7886	.0280	.7945	.0207		
.8611	.0303	.8688	.0159		

(j)  $\alpha = 5.20^\circ$ ;  $M_\infty = 0.691$ ;  $R_{\bar{c}} = 31.3 \times 10^6$ .

Figure 15. Continued.



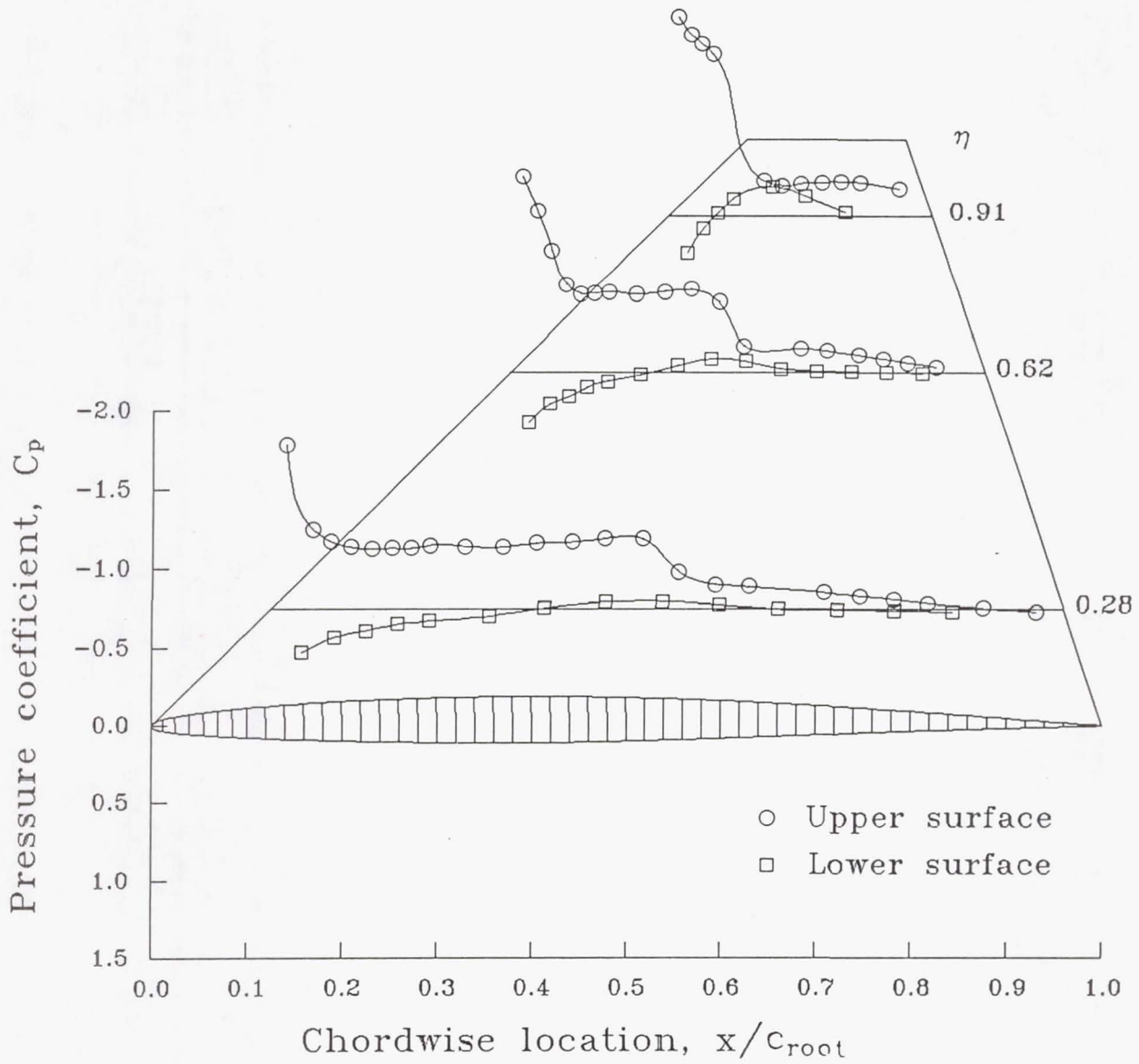
(j) Concluded.

Figure 15. Concluded.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0330	0.0269	-1.2580	0.0406	-1.2950
.0513	-.5022	.0576	-1.0330	.0869	-1.1800
.0748	-.4258	.0874	-.7722	.1268	-1.1220
.1001	-.3895	.1184	-.5558	.1719	-1.0520
.1263	-.3803	.1496	-.4938	.3627	-.2319
.1523	-.3826	.1779	-.5017	.4311	-.1975
.1759	-.3837	.2080	-.5079	.5052	-.2147
.1998	-.4017	.2674	-.4919	.5821	-.2238
.2436	-.3941	.3260	-.5073	.6553	-.2306
.2912	-.3917	.3818	-.5248	.7267	-.2223
.3345	-.4163	.4423	-.4452	.8756	-.1821
.3798	-.4235	.4942	-.1679		
.4213	-.4453	.6137	-.1550		
.4697	-.4450	.6687	-.1398		
.5154	-.2292	.7353	-.1118		
.5617	-.1545	.7874	-.0873		
.6041	-.1423	.8384	-.0623		
.6988	-.1036	.8982	-.0365		
.7449	-.0820				
.7865	-.0577				
.8302	-.0334				
.8994	-.0041				
.9651	.0211				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2751	0.0408	0.3201	0.0605	0.2374
.0793	.1813	.0833	.2022	.1095	.0797
.1201	.1380	.1251	.1549	.1584	-.0203
.1598	.0975	.1625	.0937	.2060	-.1140
.1996	.0777	.2055	.0569	.3295	-.1961
.2753	.0470	.2761	.0168	.4349	-.1332
.3449	-.0023	.3535	-.0455	.5604	-.0258
.4232	-.0428	.4252	-.0872		
.4951	-.0482	.4977	-.0712		
.5671	-.0241	.5720	-.0215		
.6411	.0044	.6464	-.0088		
.7156	.0088	.7193	-.0060		
.7886	.0136	.7945	.0006		
.8611	.0209	.8688	.0053		

(a)  $\alpha = 5.68^\circ$ ;  $M_\infty = 0.895$ ;  $R_{\bar{c}} = 3.13 \times 10^6$ .

Figure 16. Upper and lower surface chordwise pressure distributions for the low-aspect-ratio wing over the test Reynolds number range at nominal conditions of  $M_\infty = 0.9$  and  $\alpha = 5^\circ$ .



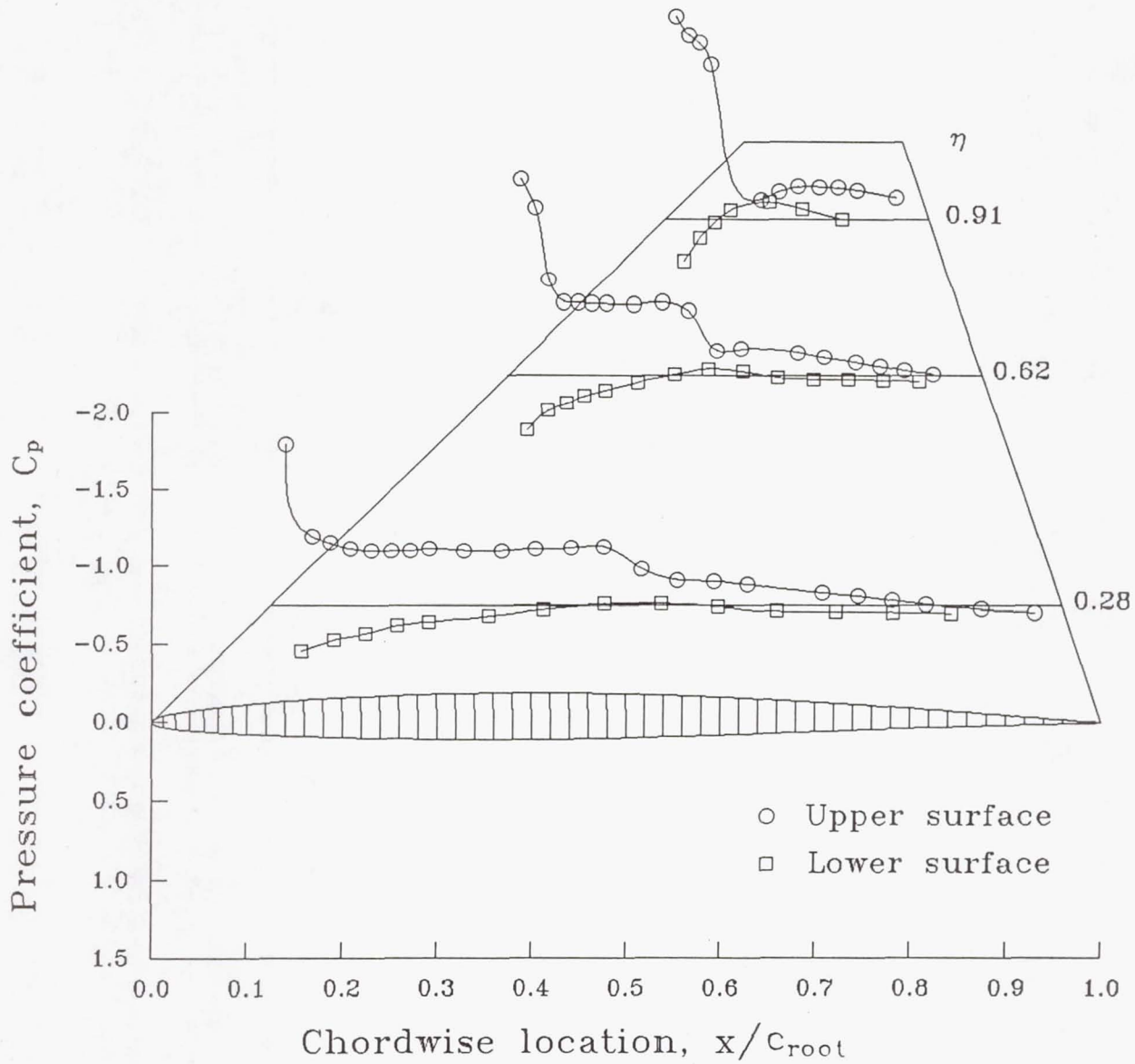
(a) Concluded.

Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0480	0.0269	-1.2580	0.0406	-1.3070
.0513	-.4464	.0576	-1.0730	.0869	-1.1890
.0748	-.4035	.0874	-.6140	.1268	-1.1430
.1001	-.3633	.1184	-.4688	.1719	-1.0040
.1263	-.3527	.1496	-.4676	.3627	-.1270
.1523	-.3506	.1779	-.4618	.4311	-.1807
.1759	-.3520	.2080	-.4572	.5052	-.2129
.1998	-.3676	.2674	-.4531	.5821	-.2068
.2436	-.3545	.3260	-.4678	.6553	-.2040
.2912	-.3552	.3818	-.4154	.7267	-.1873
.3345	-.3649	.4423	-.1609	.8756	-.1428
.3798	-.3738	.4942	-.1700		
.4213	-.3824	.6137	-.1493		
.4697	-.2338	.6687	-.1187		
.5154	-.1616	.7353	-.0843		
.5617	-.1538	.7874	-.0587		
.6041	-.1329	.8384	-.0351		
.6988	-.0806	.8982	-.0064		
.7449	-.0571				
.7865	-.0294				
.8302	-.0046				
.8994	.0242				
.9651	.0488				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2975	0.0408	0.3517	0.0605	0.2683
.0793	.2228	.0833	.2301	.1095	.1200
.1201	.1794	.1251	.1836	.1584	.0182
.1598	.1294	.1625	.1359	.2060	-.0605
.1996	.1065	.2055	.0994	.3295	-.1122
.2753	.0702	.2761	.0441	.4349	-.0703
.3449	.0264	.3535	-.0083	.5604	-.0001
.4232	-.0089	.4252	-.0425		
.4951	-.0112	.4977	-.0275		
.5671	.0106	.5720	.0132		
.6411	.0371	.6464	.0236		
.7156	.0403	.7193	.0257		
.7886	.0451	.7945	.0343		
.8611	.0527	.8688	.0380		

(b)  $\alpha = 5.67^\circ$ ;  $M_\infty = 0.912$ ;  $R_{\bar{c}} = 6.27 \times 10^6$ .

Figure 16. Continued.



(b) Concluded.

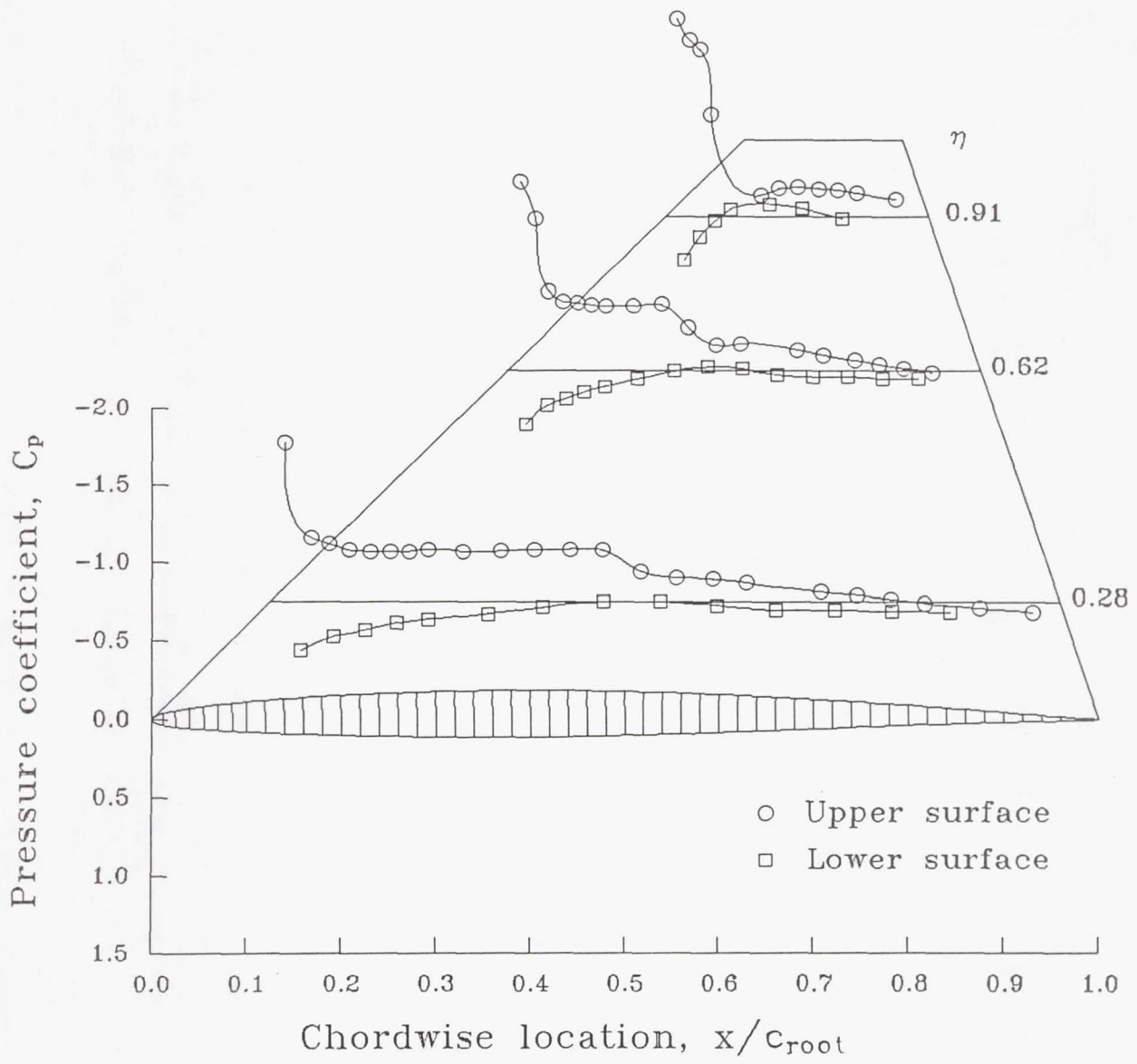
Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0280	0.0269	-1.2300	0.0406	-1.2810
.0513	-.4144	.0576	-.9893	.0869	-1.1390
.0748	-.3692	.0874	-.5121	.1268	-1.0810
.1001	-.3316	.1184	-.4453	.1719	-.6600
.1263	-.3199	.1496	-.4390	.3627	-.1397
.1523	-.3188	.1779	-.4272	.4311	-.1847
.1759	-.3209	.2080	-.4211	.5052	-.1944
.1998	-.3351	.2674	-.4208	.5821	-.1822
.2436	-.3190	.3260	-.4328	.6553	-.1758
.2912	-.3229	.3818	-.2816	.7267	-.1549
.3345	-.3338	.4423	-.1633	.8756	-.1115
.3798	-.3351	.4942	-.1753		
.4213	-.3299	.6137	-.1329		
.4697	-.1929	.6687	-.1012		
.5154	-.1556	.7353	-.0663		
.5617	-.1438	.7874	-.0406		
.6041	-.1181	.8384	-.0159		
.6988	-.0632	.8982	.0117		
.7449	-.0400				
.7865	-.0122				
.8302	.0126				
.8994	.0411				
.9651	.0656				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3071	0.0408	0.3510	0.0605	0.2801
.0793	.2210	.0833	.2297	.1095	.1303
.1201	.1801	.1251	.1846	.1584	.0243
.1598	.1340	.1625	.1397	.2060	-.0495
.1996	.1114	.2055	.1046	.3295	-.0834
.2753	.0780	.2761	.0520	.4349	-.0510
.3449	.0360	.3535	.0035	.5604	.0143
.4232	.0020	.4252	-.0267		
.4951	.0026	.4977	-.0107		
.5671	.0250	.5720	.0286		
.6411	.0525	.6464	.0381		
.7156	.0559	.7193	.0406		
.7886	.0610	.7945	.0504		
.8611	.0688	.8688	.0538		

(c)  $\alpha = 5.68^\circ$ ;  $M_\infty = 0.871$ ;  $R_{\bar{c}} = 9.40 \times 10^6$ .

Figure 16. Continued.





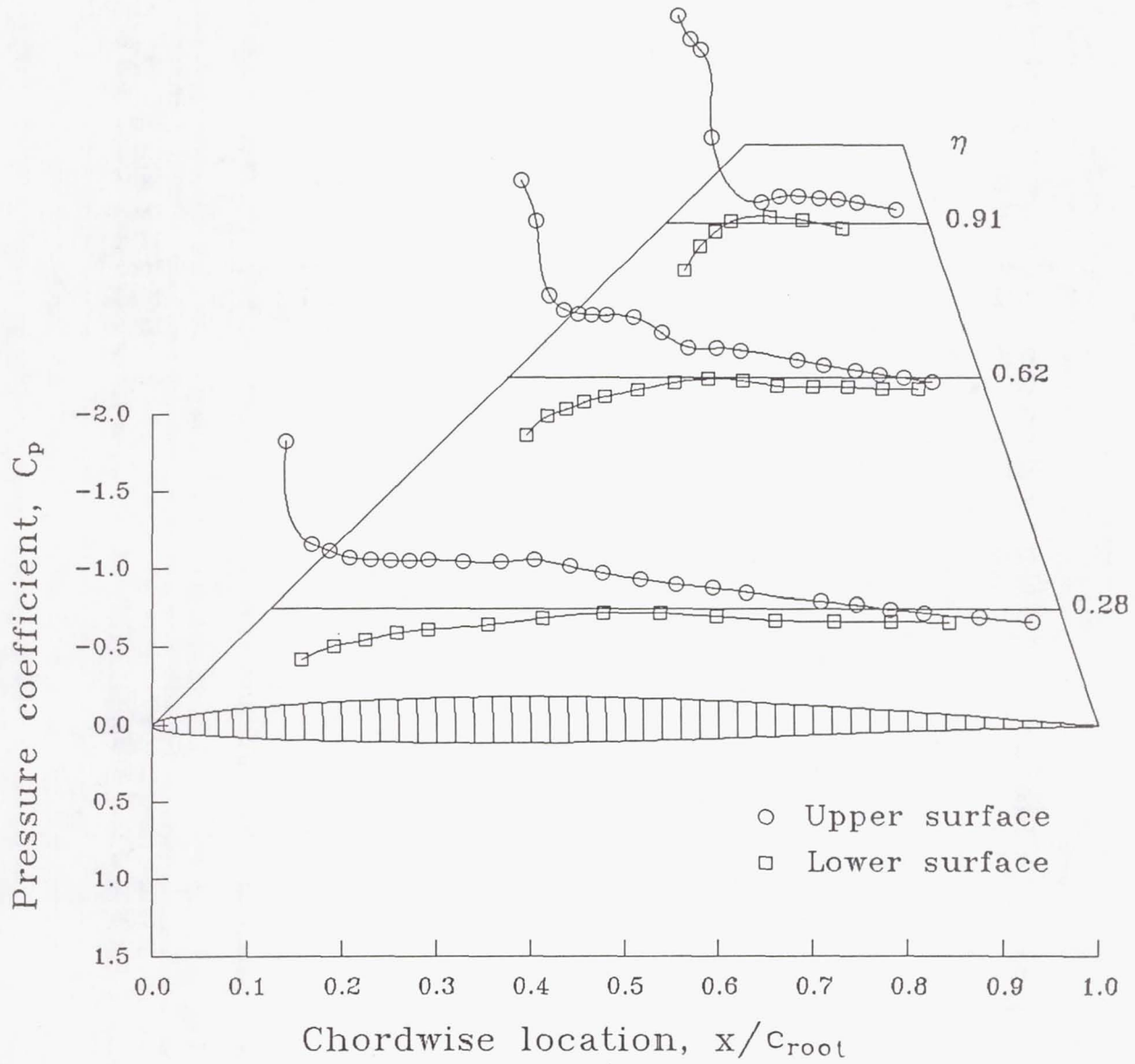
(c) Concluded.

Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0800	0.0269	-1.2760	0.0406	-1.3260
.0513	-.4157	.0576	-1.0160	.0869	-1.1740
.0748	-.3713	.0874	-.5347	.1268	-1.1070
.1001	-.3248	.1184	-.4396	.1719	-.5468
.1263	-.3116	.1496	-.4145	.3627	-.1359
.1523	-.3065	.1779	-.4044	.4311	-.1732
.1759	-.3059	.2080	-.4038	.5052	-.1763
.1998	-.3109	.2674	-.3932	.5821	-.1632
.2436	-.2997	.3260	-.2920	.6553	-.1532
.2912	-.2972	.3818	-.1935	.7267	-.1333
.3345	-.3107	.4423	-.1917	.8756	-.0878
.3798	-.2707	.4942	-.1764		
.4213	-.2236	.6137	-.1154		
.4697	-.1884	.6687	-.0829		
.5154	-.1509	.7353	-.0488		
.5617	-.1300	.7874	-.0232		
.6041	-.1011	.8384	.0009		
.6988	-.0450	.8982	.0280		
.7449	-.0230				
.7865	.0046				
.8302	.0288				
.8994	.0573				
.9651	.0817				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3289	0.0408	0.3818	0.0605	0.3085
.0793	.2417	.0833	.2528	.1095	.1490
.1201	.2022	.1251	.2081	.1584	.0530
.1598	.1572	.1625	.1636	.2060	-.0121
.1996	.1343	.2055	.1288	.3295	-.0428
.2753	.1027	.2761	.0782	.4349	-.0237
.3449	.0615	.3535	.0335	.5604	.0360
.4232	.0294	.4252	.0061		
.4951	.0307	.4977	.0183		
.5671	.0500	.5720	.0534		
.6411	.0755	.6464	.0602		
.7156	.0779	.7193	.0618		
.7886	.0814	.7945	.0705		
.8611	.0884	.8688	.0738		

(d)  $\alpha = 5.46^\circ$ ;  $M_\infty = 0.872$ ;  $R_{\bar{c}} = 12.5 \times 10^6$ .

Figure 16. Continued.



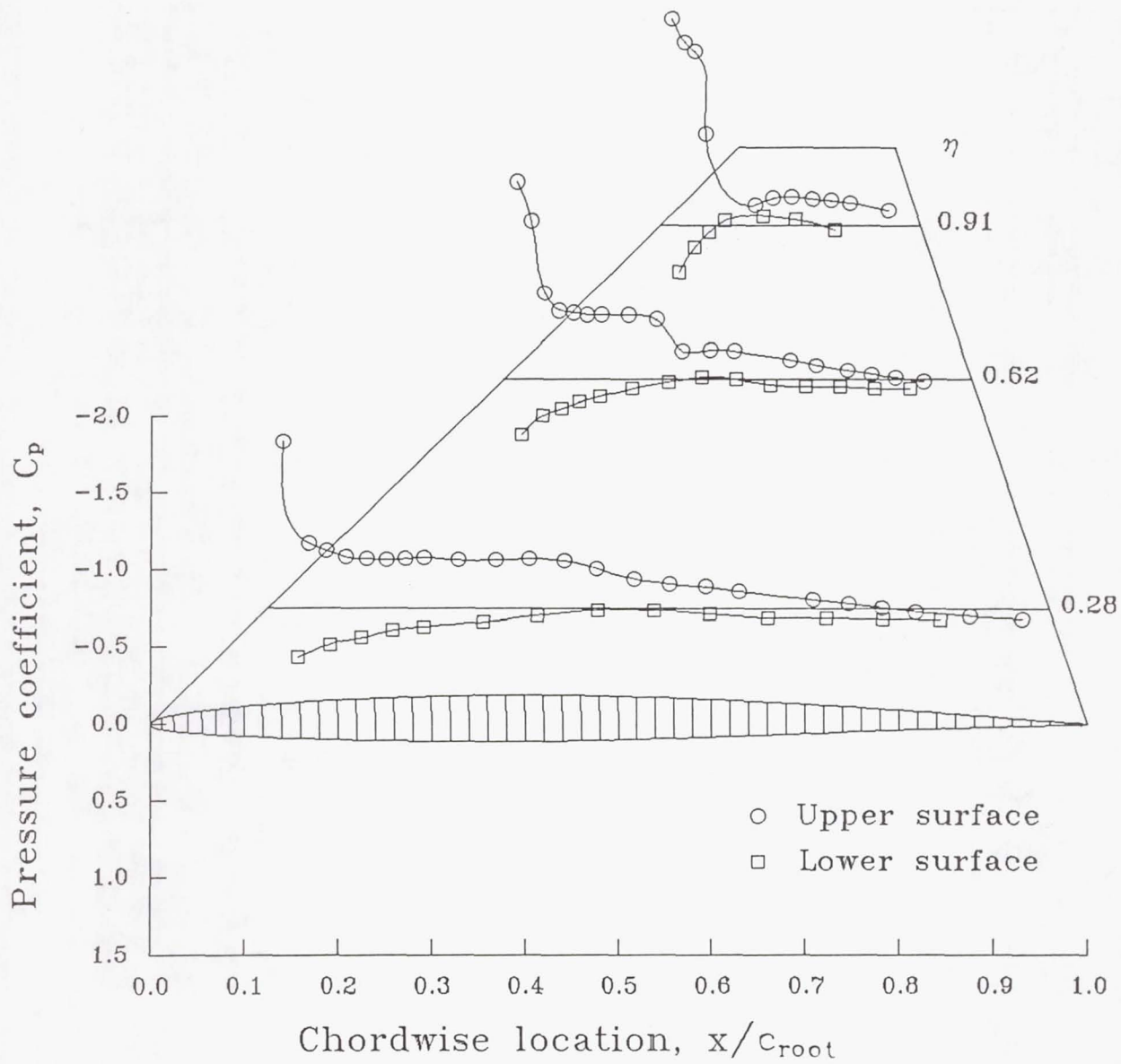
(d) Concluded.

Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0890	0.0269	-1.2830	0.0406	-1.3340
.0513	-.4261	.0576	-1.0270	.0869	-1.1780
.0748	-.3790	.0874	-.5579	.1268	-1.1190
.1001	-.3371	.1184	-.4489	.1719	-.5859
.1263	-.3244	.1496	-.4339	.3627	-.1314
.1523	-.3208	.1779	-.4178	.4311	-.1804
.1759	-.3243	.2080	-.4189	.5052	-.1866
.1998	-.3327	.2674	-.4168	.5821	-.1752
.2436	-.3166	.3260	-.3936	.6553	-.1662
.2912	-.3194	.3818	-.1845	.7267	-.1483
.3345	-.3239	.4423	-.1912	.8756	-.1005
.3798	-.3139	.4942	-.1849		
.4213	-.2581	.6137	-.1291		
.4697	-.1937	.6687	-.0964		
.5154	-.1603	.7353	-.0610		
.5617	-.1429	.7874	-.0353		
.6041	-.1137	.8384	-.0117		
.6988	-.0584	.8982	.0164		
.7449	-.0352				
.7865	-.0071				
.8302	.0181				
.8994	.0460				
.9651	.0704				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3175	0.0408	0.3700	0.0605	0.2969
.0793	.2319	.0833	.2387	.1095	.1414
.1201	.1899	.1251	.1952	.1584	.0379
.1598	.1438	.1625	.1493	.2060	-.0323
.1996	.1204	.2055	.1146	.3295	-.0629
.2753	.0879	.2761	.0628	.4349	-.0404
.3449	.0450	.3535	.0176	.5604	.0230
.4232	.0130	.4252	-.0126		
.4951	.0136	.4977	.0000		
.5671	.0340	.5720	.0373		
.6411	.0599	.6464	.0464		
.7156	.0632	.7193	.0483		
.7886	.0680	.7945	.0577		
.8611	.0752	.8688	.0606		

(e)  $\alpha = 5.77^\circ$ ;  $M_\infty = 0.870$ ;  $R_{\bar{c}} = 15.7 \times 10^6$ .

Figure 16. Continued.



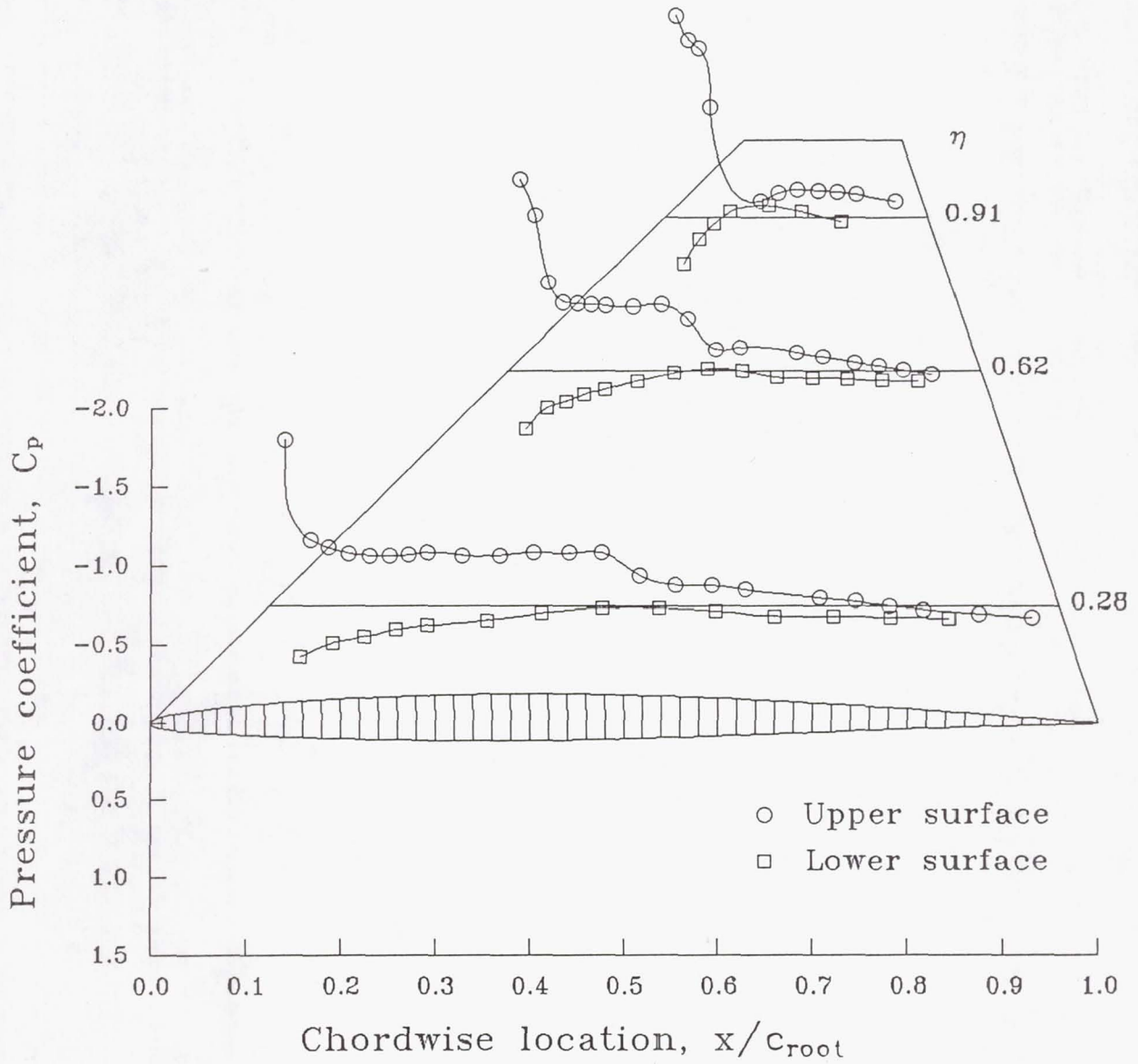
(e) Concluded.

Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0530	0.0269	-1.2450	0.0406	-1.2920
.0513	-.4197	.0576	-1.0160	.0869	-1.1440
.0748	-.3719	.0874	-.5746	.1268	-1.0900
.1001	-.3345	.1184	-.4486	.1719	-.7133
.1263	-.3213	.1496	-.4372	.3627	-.1077
.1523	-.3188	.1779	-.4358	.4311	-.1633
.1759	-.3231	.2080	-.4267	.5052	-.1817
.1998	-.3404	.2674	-.4198	.5821	-.1738
.2436	-.3210	.3260	-.4319	.6553	-.1690
.2912	-.3216	.3818	-.3416	.7267	-.1521
.3345	-.3399	.4423	-.1387	.8756	-.1089
.3798	-.3360	.4942	-.1523		
.4213	-.3397	.6137	-.1214		
.4697	-.1907	.6687	-.0908		
.5154	-.1341	.7353	-.0557		
.5617	-.1290	.7874	-.0302		
.6041	-.1050	.8384	-.0054		
.6988	-.0511	.8982	.0227		
.7449	-.0290				
.7865	-.0010				
.8302	.0248				
.8994	.0525				
.9651	.0776				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3211	0.0408	0.3728	0.0605	0.2984
.0793	.2349	.0833	.2410	.1095	.1427
.1201	.1938	.1251	.1984	.1584	.0377
.1598	.1485	.1625	.1533	.2060	-.0383
.1996	.1243	.2055	.1174	.3295	-.0790
.2753	.0928	.2761	.0643	.4349	-.0382
.3449	.0481	.3535	.0155	.5604	.0285
.4232	.0132	.4252	-.0136		
.4951	.0150	.4977	.0000		
.5671	.0364	.5720	.0404		
.6411	.0647	.6464	.0492		
.7156	.0684	.7193	.0517		
.7886	.0728	.7945	.0625		
.8611	.0812	.8688	.0645		

(f)  $\alpha = 5.67^\circ$ ;  $M_\infty = 0.869$ ;  $R_{\bar{c}} = 18.8 \times 10^6$ .

Figure 16. Continued.



(f) Concluded.

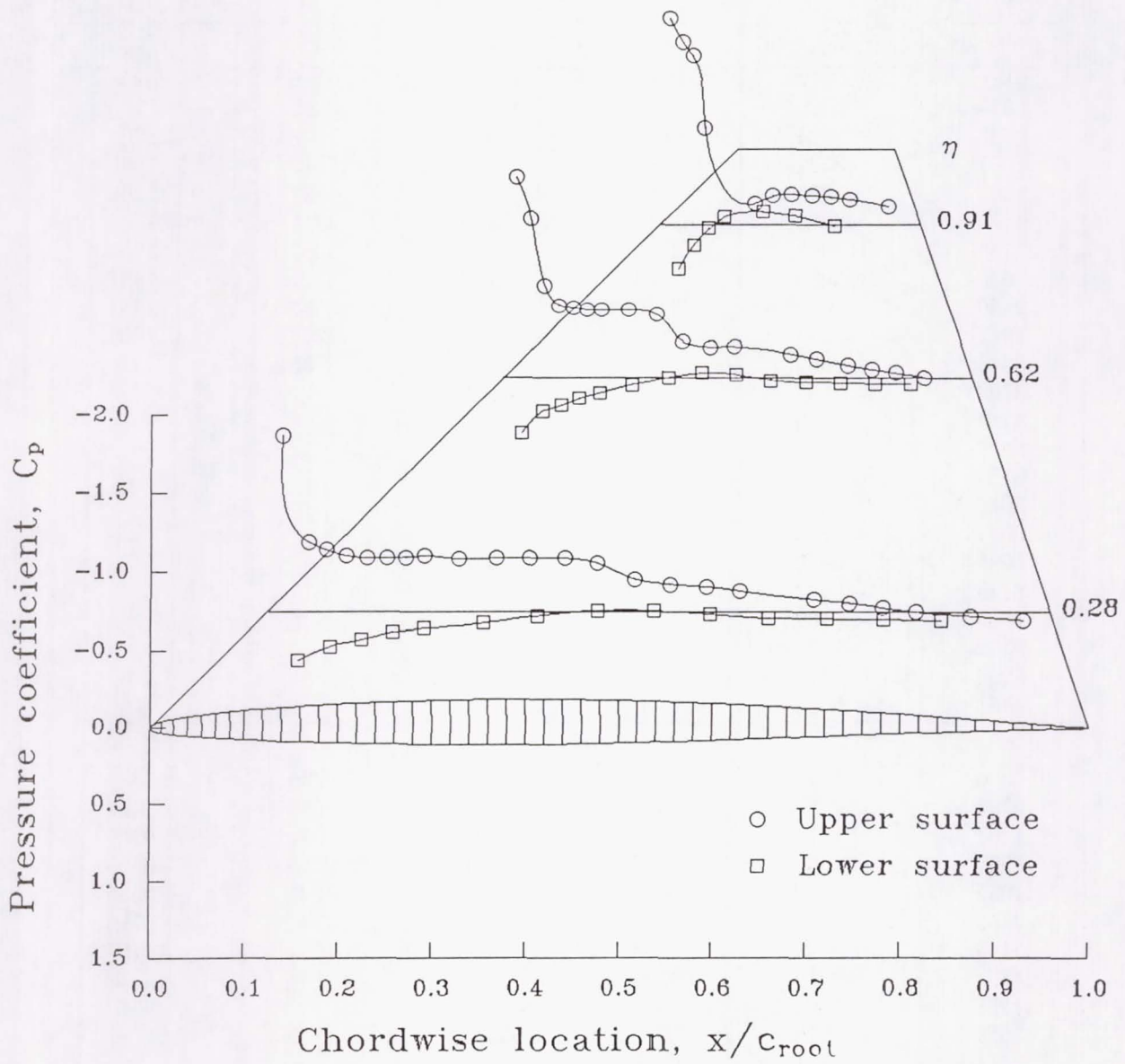
Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-.1180	0.0269	-1.3130	0.0406	-1.3570
.0513	-.4463	.0576	-1.0380	.0869	-1.2040
.0748	-.3973	.0874	-.5980	.1268	-1.1160
.1001	-.3571	.1184	-.4663	.1719	-.6434
.1263	-.3455	.1496	-.4535	.3627	-.1407
.1523	-.3438	.1779	-.4430	.4311	-.1943
.1759	-.3490	.2080	-.4399	.5052	-.2035
.1998	-.3593	.2674	-.4399	.5821	-.1927
.2436	-.3412	.3260	-.4099	.6553	-.1844
.2912	-.3446	.3818	-.2339	.7267	-.1683
.3345	-.3442	.4423	-.1941	.8756	-.1235
.3798	-.3444	.4942	-.1974		
.4213	-.3102	.6137	-.1493		
.4697	-.2071	.6687	-.1170		
.5154	-.1743	.7353	-.0808		
.5617	-.1615	.7874	-.0545		
.6041	-.1315	.8384	-.0326		
.6988	-.0780	.8982	-.0021		
.7449	-.0536				
.7865	-.0264				
.8302	.0008				
.8994	.0270				
.9651	.0529				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3049	0.0408	0.3579	0.0605	0.2831
.0793	.2194	.0833	.2224	.1095	.1297
.1201	.1748	.1251	.1801	.1584	.0225
.1598	.1279	.1625	.1329	.2060	-.0509
.1996	.1037	.2055	.0983	.3295	-.0844
.2753	.0698	.2761	.0450	.4349	-.0584
.3449	.0253	.3535	-.0003	.5604	.0078
.4232	-.0068	.4252	-.0327		
.4951	-.0058	.4977	-.0207		
.5671	.0149	.5720	.0173		
.6411	.0402	.6464	.0286		
.7156	.0445	.7193	.0306		
.7886	.0501	.7945	.0398		
.8611	.0562	.8688	.0415		

(g)  $\alpha = 5.68^\circ$ ;  $M_\infty = 0.872$ ;  $R_{\bar{c}} = 21.9 \times 10^6$ .

Figure 16. Continued.





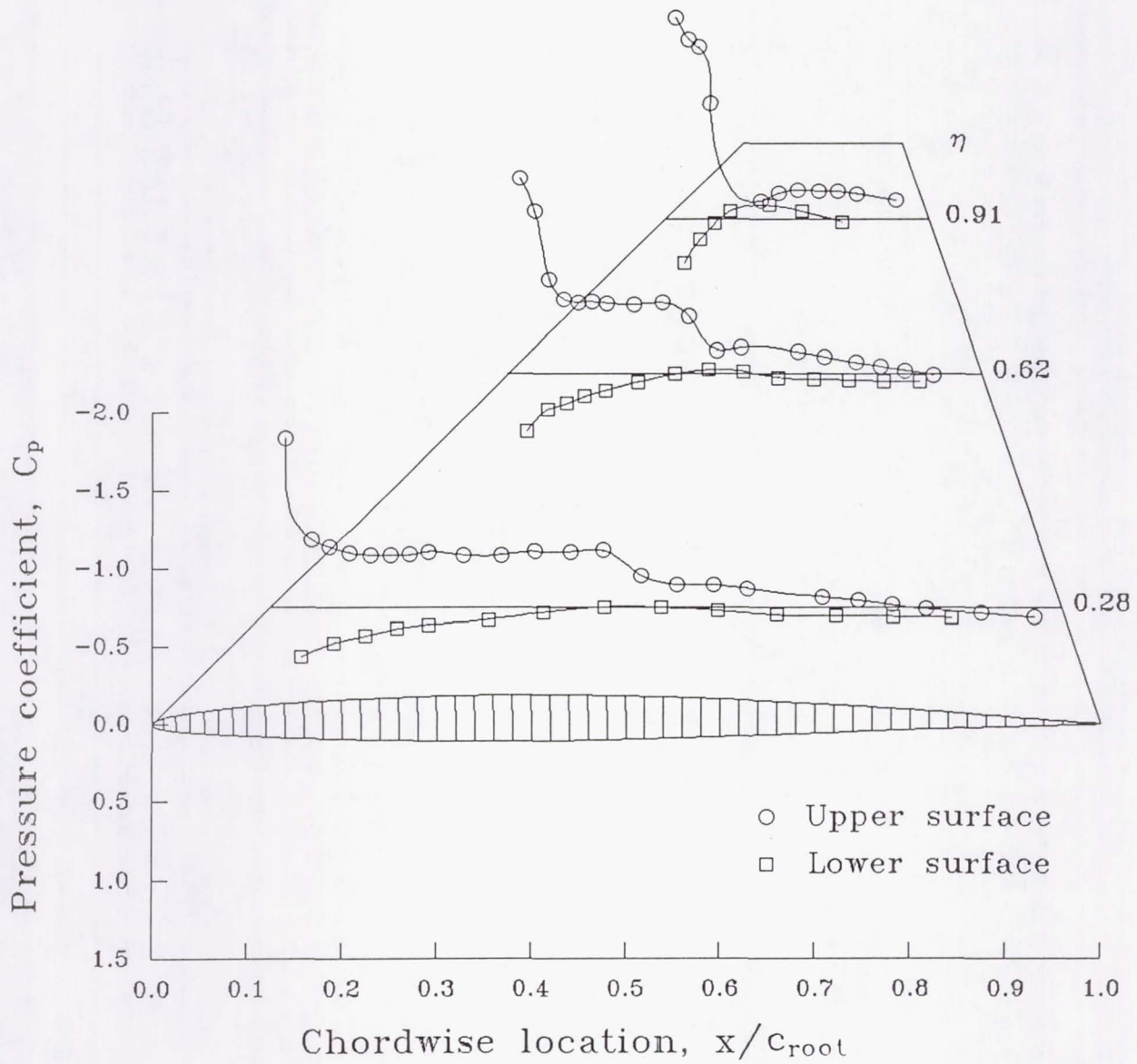
(g) Concluded.

Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0870	0.0269	-1.2770	0.0406	-1.3050
.0513	-.4420	.0576	-1.0510	.0869	-1.1710
.0748	-.3924	.0874	-.6099	.1268	-1.1200
.1001	-.3541	.1184	-.4705	.1719	-.7555
.1263	-.3399	.1496	-.4565	.3627	-.1203
.1523	-.3380	.1779	-.4586	.4311	-.1760
.1759	-.3429	.2080	-.4495	.5052	-.1953
.1998	-.3621	.2674	-.4392	.5821	-.1887
.2436	-.3422	.3260	-.4541	.6553	-.1851
.2912	-.3415	.3818	-.3698	.7267	-.1700
.3345	-.3632	.4423	-.1483	.8756	-.1270
.3798	-.3588	.4942	-.1647		
.4213	-.3710	.6137	-.1378		
.4697	-.2055	.6687	-.1074		
.5154	-.1468	.7353	-.0721		
.5617	-.1444	.7874	-.0460		
.6041	-.1198	.8384	-.0218		
.6988	-.0670	.8982	.0072		
.7449	-.0443				
.7865	-.0162				
.8302	.0105				
.8994	.0370				
.9651	.0630				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.3117	0.0408	0.3639	0.0605	0.2885
.0793	.2267	.0833	.2292	.1095	.1322
.1201	.1827	.1251	.1872	.1584	.0260
.1598	.1366	.1625	.1411	.2060	-.0513
.1996	.1120	.2055	.1053	.3295	-.0935
.2753	.0787	.2761	.0512	.4349	-.0516
.3449	.0331	.3535	.0023	.5604	.0167
.4232	-.0015	.4252	-.0279		
.4951	.0003	.4977	-.0152		
.5671	.0219	.5720	.0251		
.6411	.0491	.6464	.0352		
.7156	.0534	.7193	.0375		
.7886	.0584	.7945	.0481		
.8611	.0663	.8688	.0493		

(h)  $\alpha = 5.61^\circ$ ;  $M_\infty = 0.875$ ;  $R_{\bar{c}} = 25.1 \times 10^6$ .

Figure 16. Continued.



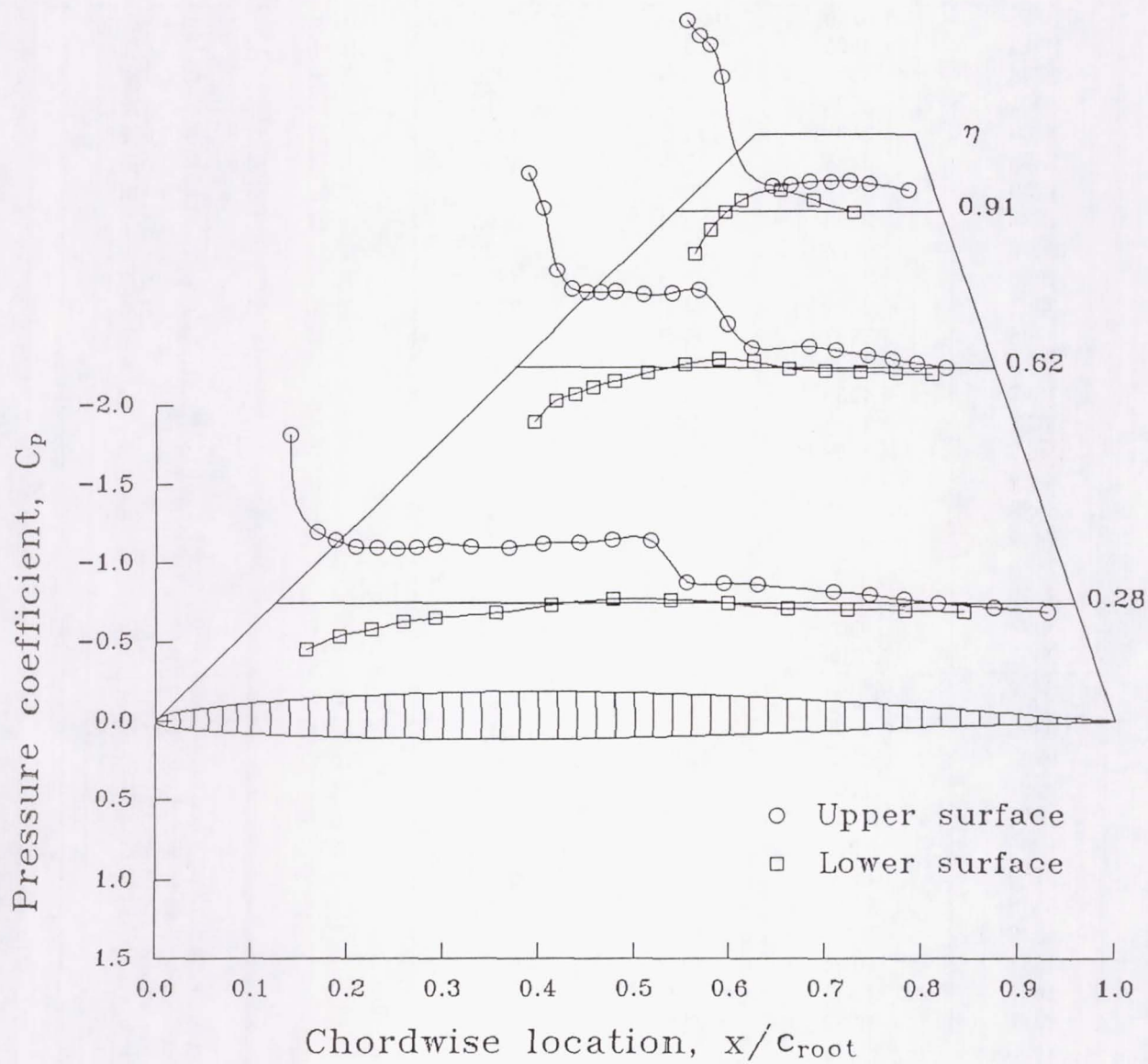
(h) Concluded.

Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0640	0.0269	-1.2450	0.0406	-1.2370
.0513	-.4528	.0576	-1.0210	.0869	-1.1350
.0748	-.3979	.0874	-.6140	.1268	-1.0770
.1001	-.3594	.1184	-.4909	.1719	-.8702
.1263	-.3509	.1496	-.4729	.3627	-.1676
.1523	-.3454	.1779	-.4747	.4311	-.1768
.1759	-.3501	.2080	-.4804	.5052	-.1962
.1998	-.3728	.2674	-.4572	.5821	-.1971
.2436	-.3618	.3260	-.4679	.6553	-.1973
.2912	-.3547	.3818	-.4880	.7267	-.1834
.3345	-.3820	.4423	-.2743	.8756	-.1426
.3798	-.3850	.4942	-.1288		
.4213	-.4088	.6137	-.1351		
.4697	-.4005	.6687	-.1116		
.5154	-.1353	.7353	-.0789		
.5617	-.1243	.7874	-.0532		
.6041	-.1158	.8384	-.0298		
.6988	-.0725	.8982	.0003		
.7449	-.0510				
.7865	-.0235				
.8302	.0033				
.8994	.0298				
.9651	.0558				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2956	0.0408	0.3467	0.0605	0.2713
.0793	.2117	.0833	.2117	.1095	.1171
.1201	.1675	.1251	.1708	.1584	.0066
.1598	.1211	.1625	.1246	.2060	-.0769
.1996	.0955	.2055	.0885	.3295	-.1405
.2753	.0630	.2761	.0321	.4349	-.0752
.3449	.0143	.3535	-.0218	.5604	.0040
.4232	-.0229	.4252	-.0544		
.4951	-.0212	.4977	-.0387		
.5671	.0033	.5720	.0077		
.6411	.0338	.6464	.0197		
.7156	.0397	.7193	.0236		
.7886	.0458	.7945	.0349		
.8611	.0557	.8688	.0372		

(i)  $\alpha = 5.79^\circ$ ;  $M_\infty = 0.889$ ;  $R_c = 28.2 \times 10^6$ .

Figure 16. Continued.



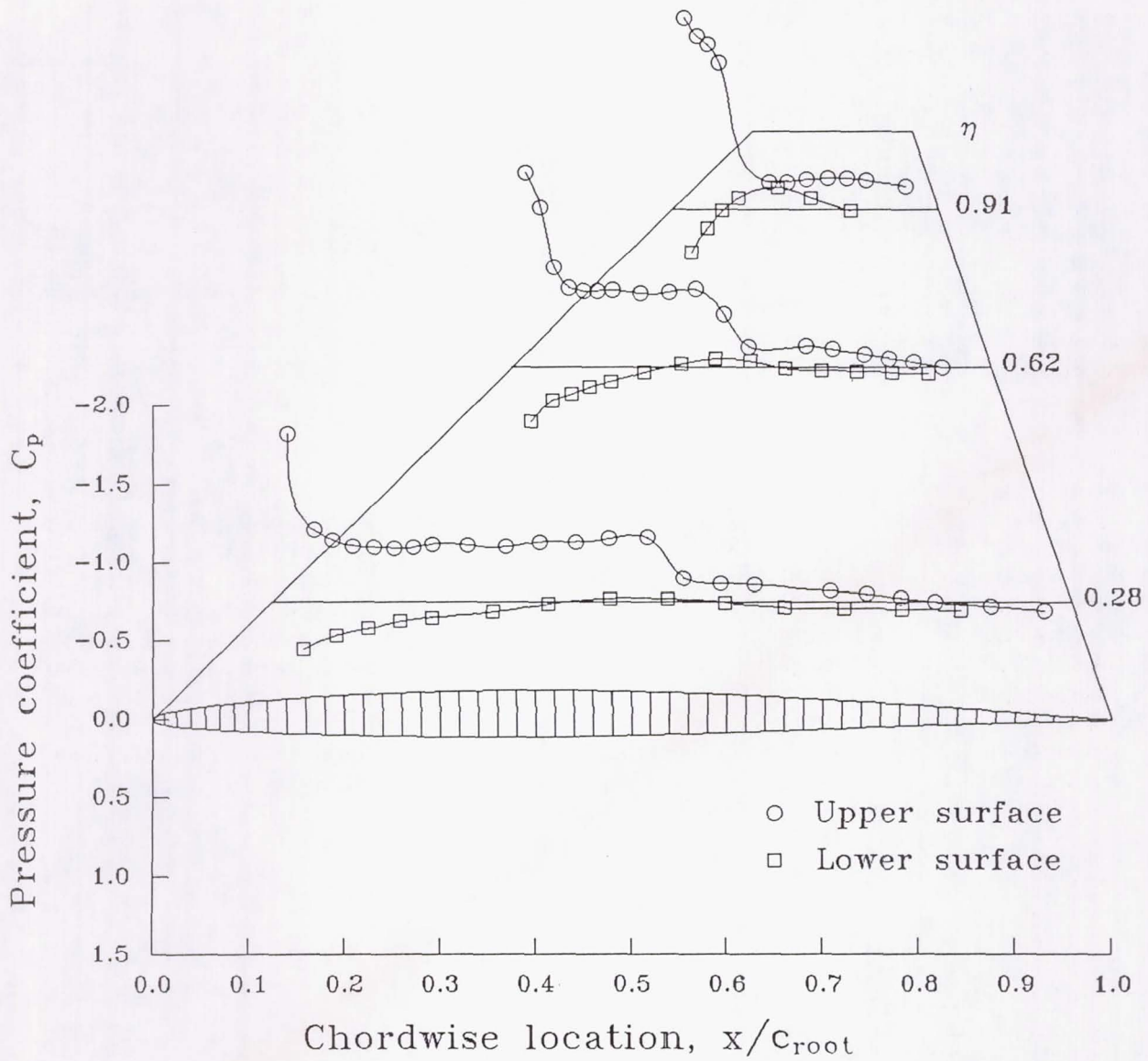
(i) Concluded.

Figure 16. Continued.

$\eta = 0.28$		$\eta = 0.62$		$\eta = 0.91$	
$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$	$x/c$	$C_{p,u}$
0.0188	-1.0710	0.0269	-1.2350	0.0406	-1.2300
.0513	-.4625	.0576	-1.0160	.0869	-1.1170
.0748	-.4019	.0874	-.6296	.1268	-1.0640
.1001	-.3623	.1184	-.5015	.1719	-.9403
.1263	-.3538	.1496	-.4791	.3627	-.1751
.1523	-.3485	.1779	-.4798	.4311	-.1760
.1759	-.3512	.2080	-.4863	.5052	-.1946
.1998	-.3753	.2674	-.4653	.5821	-.1977
.2436	-.3666	.3260	-.4730	.6553	-.1988
.2912	-.3568	.3818	-.4937	.7267	-.1860
.3345	-.3882	.4423	-.3331	.8756	-.1464
.3798	-.3887	.4942	-.1293		
.4213	-.4120	.6137	-.1330		
.4697	-.4159	.6687	-.1117		
.5154	-.1513	.7353	-.0806		
.5617	-.1198	.7874	-.0551		
.6041	-.1126	.8384	-.0312		
.6988	-.0713	.8982	-.0016		
.7449	-.0507				
.7865	-.0230				
.8302	.0039				
.8994	.0302				
.9651	.0568				
$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$	$x/c$	$C_{p,l}$
0.0386	0.2990	0.0408	0.3501	0.0605	0.2739
.0793	.2151	.0833	.2149	.1095	.1183
.1201	.1706	.1251	.1738	.1584	.0094
.1598	.1241	.1625	.1292	.2060	-.0742
.1996	.0979	.2055	.0915	.3295	-.1432
.2753	.0644	.2761	.0345	.4349	-.0755
.3449	.0164	.3535	-.0204	.5604	.0056
.4232	-.0215	.4252	-.0515		
.4951	-.0194	.4977	-.0374		
.5671	.0047	.5720	.0089		
.6411	.0352	.6464	.0205		
.7156	.0411	.7193	.0245		
.7886	.0468	.7945	.0368		
.8611	.0568	.8688	.0378		

(j)  $\alpha = 5.75^\circ$ ;  $M_\infty = 0.923$ ;  $R_c = 31.3 \times 10^6$ .

Figure 16. Continued.



(j) Concluded.

Figure 16. Concluded.



Report Documentation Page

1. Report No. NASA TM-4227	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle High-Reynolds-Number Test of a 5-Percent-Thick Low-Aspect-Ratio Semispan Wing in the Langley 0.3-Meter Transonic Cryogenic Tunnel <i>Wing Pressure Distributions</i>		5. Report Date December 1990	6. Performing Organization Code
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9. Performing Organization Name and Address NASA Langley Research Center Hampton, VA 23665-5225		11. Contract or Grant No.	13. Type of Report and Period Covered Technical Memorandum
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12. Sponsoring Agency Name and Address National Aeronautics and Space Administration Washington, DC 20546-0001			
15. Supplementary Notes			
16. Abstract A high-Reynolds-number test of a 5-percent-thick low-aspect-ratio semispan wing was conducted in the adaptive wall test section (AWTS) of the Langley 0.3-Meter Transonic Cryogenic Tunnel. The model tested had a planform and an NACA 64A-105 airfoil section similar to that of the pressure-instrumented canard on the X-29 experimental aircraft. Chordwise pressure data for Mach numbers of 0.3, 0.7, and 0.9 were measured for an angle-of-attack range of $-4^\circ$ to $15^\circ$ . The associated Reynolds numbers, based on the mean geometric chord, encompass most of the flight regime of the canard. This test was a free-transition investigation. A summary of the wing pressures is presented without analysis. Additionally, upper and lower flexible wall pressure measurements for the AWTS are presented. The presented graphical data indicate complex leading-edge flow phenomena. This data set supplements the existing high-Reynolds-number data base and is useful for computational codes comparison.			
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