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RESEARCH MEMORANDUM

PRESSURE DISTRIBUTIONS ON THE BLADE SECTIONS OF THE NACA 10-(3)(049)-033 PROPELLER UNDER OPERATING CONDITIONS

By W. H. Gray and Robert M. Hunt

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Langley Air Force Base, Va.

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PRESSURE DISTRIBUTIONS ON THE BLADE SECTIONS OF THE NACA 10-(3)(049)-033 PROPELLER UNDER OPERATING CONDITIONS

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SUMMARY

This paper presents the results obtained from pressure-distribution measurements on the thinnest of a family of five related propellers incorporating 16-series blade sections. Nine radial stations were investigated with a variation of thickness ratio from 2.6 percent to 8.9 percent and covering a section Mach number range from 0.375 to 1.197.

The data are presented in tabular form and no attempt is made to analyze the data.

INTRODUCTION

The need for propeller-blade-section characteristics for use in the design and performance analysis of high-speed propellers has long been recognized. With aircraft operating at flight Mach numbers of 0.5 and greater, propeller blade sections operate at transonic and low supersonic speeds. In this speed range data have not been obtainable from wind-tunnel tests of airfoils. The direct determination of blade-section characteristics from measurements of the pressure distribution on operating propellers has been undertaken at the Langley 16-foot high-speed tunnel. In the present investigation pressure measurements were obtained with five 10-foot-diameter propellers identical in plan form and pitch distribution but differing in blade-section camber and thickness ratio, although all of the blades were made with NACA 16-series sections. Three of the blades had a design lift coefficient of 0.3 for all blade sections and thickness ratios at the 0.7-tip radius station of 0.049, 0.066, and 0.090, respectively. The other two blades each had a thickness ratio of 0.066 at the 0.7-tip radius station, and values of design lift coefficient of 0 and 0.5, respectively, at all radii.

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The results obtained with the propeller having a design lift coefficient of 0.3 and thickness ratio of 0.066, the NACA 10-(3)(066)-033 propeller, are presented in reference 1. The present paper, the second of the series, presents the results obtained with the NACA 10-(3)(049)-033 blade design which is the thinnest of the five investigated. Although considerable analysis was performed to verify the precision of the data, no attempt has been made to include results of analysis in this paper.

SYMBOLS

The symbols used throughout this paper, some of which are defined in figure 1, are as follows:

b	blade chord, feet
c	distance from section leading edge to any point on chord, feet
$\bar{c}$	distance from section leading edge to any point about which pitching moments are taken, feet
c_c	section chordwise-force coefficient
c_d	section drag coefficient
c_{l_d}	blade-section design lift coefficient
c_m	section pitching-moment coefficient about quarter-chord point
c_n	section normal-force coefficient
D	propeller diameter, feet
F_c	section chordwise pressure force, pounds
F_n	section normal pressure force, pounds
h	blade-section maximum thickness, feet
J	advance ratio (V/nD)
M	Mach number of advance
M_x	helical section Mach number $\left(M\sqrt{1 + \left(\frac{\pi x}{J}\right)^2}\right)$

m	section pitching moment, pound-feet
N	propeller rotational speed, revolutions per minute
n	propeller rotational speed. revolutions per second
P	pressure coefficient $\left(\frac{p - p_o}{q_x}\right)$
p	static pressure at a point on airfoil surface, pounds per square foot
p_o	free-stream static pressure, pounds per square foot
q_x	resultant dynamic pressure at a radial station x, pounds per square foot $\left(\frac{1}{2}\rho W_o^2\right)$
R	propeller-tip radius, feet
r	radius to a blade element, feet
r_p	polar ordinate, feet
s	distance along surface of the blade section, feet
V	velocity of advance (corrected for wind-tunnel-wall-interference effects), feet per second
W_o	velocity vector $\left(V\sqrt{1 + \left(\frac{\pi x}{J}\right)^2}\right)$
W	resultant velocity at blade section, feet per second
w_i	induced velocity at blade section, feet per second
x	fraction of propeller-tip radius (r/R)
α_i	induced angle of attack, degrees
α_x	angle of attack of blade element, corrected for induced flow and blade deflection, at radial station x, degrees $(\beta_x - \phi + \Delta\beta)$
α_x'	geometric angle of attack of blade element at radial station x, degrees $(\beta_x - \phi_o)$
β	blade angle, degrees (equal to 45° at $x = 0.75$)

$\beta_{0.75R}$ blade angle at 0.75-tip radius, degrees

β_t twist in blade measured from station $x = 0.75$, degrees

β_x blade angle at station x, degrees $\left(\beta_{0.75R} = \beta_t\right)$

$\Delta\beta$ change in blade angle caused by operating loads, degrees

θ polar angular ordinate, radians

ρ mass density of air in free stream, slugs per cubic foot

ϕ helix angle, degrees

ϕ_o geometric helix angle, degrees $\left[\tan^{-1} (J/\pi x)\right]$

ψ slope angle at surface of section, referenced to chord, degrees

Subscripts:

L lower-surface value

U upper-surface value

APPARATUS

Basic equipment.- The investigation was conducted in the Langley 16-foot high-speed tunnel using the 2000-horsepower dynamometer, pressure-transfer device, optical deflectometer, and other equipment described in reference 1.

Propeller.- The blade design dealt with in this paper is designated as the NACA 10-(3)(049)-033, which indicates a 10-foot-diameter propeller having at the $x = 0.7$ station a section with design lift coefficient of 0.3, thickness ratio of 0.049, and solidity per blade of 0.033. Of the five blade designs used in the investigation, this is the thinnest. The measured diameter of the propeller was 10.05 feet. Curves showing the blade form and design parameters are presented in figure 2. The thickness ratio of the blade sections varied from 0.129 at the spinner surface to 0.034 at $x = 0.95$. The design lift coefficient of the 16-series sections used was maintained at a constant value of 0.3 from the innermost sections outboard almost to $x = 0.975$. Near this station the corners of the rectangular plan form were rounded off and the thickness tapered rapidly so that at stations between about $x = 0.97$ and the extreme tip the sections were no longer true 16-series sections.

In the two-blade configuration all dimensions closely approximated those specified. The manufacturing tolerances were 0.001 inch for the section ordinates. Before making the one-blade tests it was necessary to retube the blade on which pressures were measured. In the tubing and refinishing process some of the sections were changed inadvertently. After the blades were retubed, the section ordinates were measured to within ±0.001 inch. The measured section ordinates are given in table 1. Changes in the value of design lift coefficients and thickness ratio are indicated in figure 2, and a comparison showing the magnitude of the changes at the $x = 0.70$ station is shown in figure 3.

The thin sections used throughout and the additional thinning of the tip sections required, respectively, the omission of the lower-surface orifice locations at 97.5 percent of chord included on the other blades of this series, and the omission of the upper-surface orifice at 95 percent of chord at $x = 0.975$.

TESTS

The techniques and testing procedures used in this investigation are described in detail in reference 1. A schedule of tests for the NACA 10-(3)(049)-033 propeller, which serves also as an index to the data tables, is presented in table 2. All tests with this propeller were made with the blade angle set at 45° at the three-quarters radius.

REDUCTION OF DATA

The following equations, taken from reference 1, have been used in the reduction of the data presented herein.

The pressure coefficient is defined as

$$P = \frac{p - p_o}{q_x}$$

and the normal force is defined as

$$F_n = \oint p \cos \psi \, ds = \int_0^b \left[\left(p_L - p_o\right) - \left(p_U - p_o\right)\right] d_c$$

The normal-force coefficient is thus

$$c_n = \frac{F_n}{q_x b} = \int_0^{1.0} \left(P_L - P_U\right) d\,\frac{c}{b}$$

The chordwise force is

$$F_c = \oint p \sin \psi \, ds = \int_0^b \left[\left(p_U - p_o\right) \tan \psi_U - \left(p_L - p_o\right) \tan \psi_L\right] dc$$

and the chordwise-force coefficient is thus

$$c_c = \frac{F_c}{q_x b} = \int_0^{1.0} \left(P_U \tan \psi_U - P_L \tan \psi_L\right) d\,\frac{c}{b} \tag{1}$$

or, in polar coordinates,

$$c_c = \int_0^{2\pi} \left[P \frac{\sin \psi}{\sin(\theta - \psi)}\right]\left(\frac{r_p}{b}\right) d\theta \tag{2}$$

where equation (1) is used to evaluate that portion of chordwise-force coefficient from $\frac{c}{b} = 0.025$ to $\frac{c}{b} = 1.0$ and equation (2) is used to evaluate the chordwise-force coefficient from $\frac{c}{b} = 0$ to $\frac{c}{b} = 0.025$.

The pitching-moment coefficient

$$c_m = \frac{m}{q_x b^2} = \frac{\bar{c}}{b}\int_0^{1.0} \left(P_L - P_U\right) d\,\frac{c}{b} - \int_0^{1.0} \left(P_L - P_U\right)\frac{c}{b}\, d\left(\frac{c}{b}\right)$$

and the moments have been taken about $\frac{\bar{c}}{b} = 0.25$.

RESULTS

Tunnel-wall correction.- The usual wind-tunnel-wall corrections, as described in reference 2, have been applied to obtain the equivalent free-air speed.

Tables.- The data are presented in tabular form (tables 3 to 11); each tabular page contains the results from one test, and it will be noted that all values for a given operating condition lie in a vertical column.

The nominal Mach number is listed at the top of each table for constant Mach number runs. The exact Mach number of advance for any point may be obtained with the equation

$$M = \frac{M_x}{\sqrt{1 + \left(\frac{\pi x}{J}\right)^2}}$$

Pressure coefficients.- A value of pressure coefficient is tabulated for the leading and trailing edges and for each orifice location that actually was incorporated in the blade. In addition, there are included faired values of pressure coefficient for orifice locations at $\frac{c}{b} = 0.975$ at all radial stations and $\frac{c}{b} = 0.950$ at the 0.975 radial station. The latter bear the footnote "no orifice."

The leading-edge pressure coefficient was computed for the value of section helical Mach number obtained in the test. In using this value of pressure coefficient, the assumption is made that there is no movement of the stagnation point away from the leading edge. The assumption is not strictly valid, especially at the high values of angle of attack and normal-force coefficient, but the error involved is negligible.

The trailing-edge pressure coefficients were obtained from the faired pressure plots of which figure 4 is an example. When the fairing of the upper- and lower-surface pressures do not close at a common value, only the lower-surface value is presented and is indicated by the footnote "lower surface only."

Blade-angle deflection.- The blade-angle deflection under operating conditions has been determined in most cases by measurement with an optical deflectometer. Doubtful measurements have been checked by calculation, and the final tabulated values of blade deflection, whether determined from measurements or computations, are considered to be accurate to within 0.1°. Blade-deflection angles have not been included in the tables for cases requiring too great or doubtful extrapolations, table 11(i), for instance. A rough approximation of the blade-angle deflection for these conditions may be made from an extrapolation of the curve obtained by plotting the tabulated values within a given table in the form of $\Delta\beta$ against J.

Induced-angle correction.- The use of the Goldstein factor allows an approximation of the induced angle of attack α_i to be made. However, this value for the induced angle will usually be in error because the blade loading was seldom, if ever, the Betz or optimum loading, the only condition for which the correction is strictly applicable. The calculation of the induced angles for a propeller with arbitrary loading, which is required for a complete analysis of these data, is a subject for further work and is not treated in this paper. In references 3, 4, and 5 the induced angle for a propeller having an arbitrary loading is considered in detail.

Chordwise-force coefficient.- The method used for obtaining the chordwise-force coefficient was the same as described in detail in reference 1.

DISCUSSION

The present paper is primarily a presentation of data with little or no analysis. Several representative plots have been presented for the x = 0.95 station, however, to show typical data.

Figure 4 shows three pressure-coefficient plots for widely variant Mach numbers and slightly different advance ratios, although all represent maximum loads for the power available and the configuration of the model employed.

The data for figure 4(a) may be obtained from table 10(a). This distribution, which is for a relatively low Mach number, gives a high negative peak near the leading edge. Figure 4(b), from table 10(j), is a distribution for a somewhat higher Mach number. It shows the peak reduced somewhat in magnitude but extending aft for a considerable distance and then breaking more gently than in figure 4(a). Figure 4(c), from table 10(n), is for a low supersonic Mach number and shows the load shifted aft with a shock condition near the trailing edge.

The values of c_n and c_m may be obtained from the integration of pressure plots such as those of figure 4. These values may then be plotted as shown in figure 5, along with the other pertinent data presented in the tables.

The variation of normal-force and pitching-moment coefficients with Mach number and advance ratio, figures 6 and 7, may be obtained from a cross plot of a series of c_n and c_m curves such as those presented in figure 5. Advance ratio was used as a parameter for the curves in figures 6 and 7. It is usually more desirable to use angle of attack

as a parameter; however, the precise values of angle of attack have yet to be determined for these investigations.

The differences in the c_n values for the three plots of figure 4 may be associated with the effects indicated in figure 6, which plot shows the trend of the normal-force coefficient with the helical Mach number. Both figures 6 and 7 give a comparison between the one-blade and two-blade data and indicate the extension of the range of both normal-force coefficient and section helical Mach number obtained from tests of the one-blade propeller. The differences between the one-blade and two-blade data, indicated in figures 6 and 7 and encountered in the data from the tables, are a problem of analysis involving consideration of several factors including the change in airfoil section caused by retubing and refinishing the one-blade sections and will not be treated in this paper. The data should be regarded as propeller section data which are not necessarily directly comparable with two-dimensional airfoil data.

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TABLE 1

MEASURED SECTION ORDINATES AND SLOPES FOR THE
NACA 10-(3)(050)-033 ONE-BLADE PROPELLER

Upper surface station (in.)	One-blade stations											
	x = 0.70		x = 0.78		x = 0.85		x = 0.90		x = 0.95		x = 0.975	
	Ordinate	Slope	Ordinate	Slope	Ordinate	Slope	Ordinate	Slope	Ordinate	Slope	Ordinate	Slope
0	0		0		0		0		0		0	
.200	.064	0.2365	.071	0.2320	.053	0.2089	.060	0.1877	.077	0.2239	.057	0.1547
.400	.107	.1844	.108	.1634	.090	.1669	.092	.1429	.108	.1224	.082	.1036
.800	.167	.1215	.163	.1141	.144	.1134	.143	.1168	.150	.0916	.116	.0610
1.600	.241	.0778	.236	.0729	.213	.0644	.215	.0694	.206	.0514	.153	.0360
2.400	.292	.0543	.283	.0508	.258	.0507	.266	.0590	.238	.0333	.175	.0204
3.200	.321	.0124	.311	.0203	.280	.0196	.283	.0103	.260	.0188	.189	.0151
4.000	.320	-.0066	.316	-.0092	.290	.0000	.289	.0040	.268	.0000	.198	.0071
4.800	.311	-.0135	.298	-.0553	.280	-.0228	.281	-.0266	.253	-.0288	.198	-.0036
5.600	.286	-.0511	.263	-.0514	.258	-.0365	.248	-.0523	.226	-.0438	.184	-.0278
6.400	.238	-.0771	.212	-.0722	.208	-.0789	.202	-.0644	.181	-.0668	.152	-.0565
7.200	.165	-.1260	.150	-.0949	.127	-.1195	.125	-.1227	.108	-.1150	.100	-.0834
7.600	.093	-.2150	.091	-.2162	.079	-.1272	.072	-.1467	.060	-.1276	.062	-.1180
8.000	0		0		0		0		0		0	
Lower surface station (in.)												
0	0		0		0		0		0		0	
.300	-.009	-.0091	-.025	-.0466	-.017	-.0080	-.011	-.0152	-.007	-.0070	-.006	.0040
.600	-.010	.0000	-.030	.0000	-.017	.0000	-.012	.0000	-.005	.0150	-.001	.0107
1.20	-.011	-.0118	-.030	.0000	-.018	.0047	-.007	.0149	.008	.0180	.000	.0000
2.00	-.029	-.0236	-.030	.0038	-.012	.0095	.002	.0118	.014	.0127	.000	.0000
2.80	-.050	-.0225	-.029	-.0013	-.010	.0000	.005	-.0010	.013	.0050	.000	.0000
3.60	-.058	-.0070	-.027	.0063	-.009	.0000	.003	.0000	.019	-.0057	.000	.0000
4.40	-.057	-.0114	-.027	-.0094	-.009	.0000	.003	.0000	.016	.0204	.005	.0000
5.20	-.060	.0054	-.029	.0066	-.009	-.0050	.003	.0000	.017	-.0250	.002	-.0113
6.00	-.050	.0180	-.023	.0094	-.010	.0000	.000	-.0040	.004	.0023	.000	.0085
6.80	-.037	.0222	-.017	.0158	-.010	.0067	.000	.0016	.010	.0126	.008	.0043
7.40	-.021	.0259	-.006	.0197	-.004	.0018	.002	.0000	.010	-.0120	.007	-.0047
7.80	-.013	.0353	-.004	.0127	-.007	.0087	.000	-.0025	.001	-.0166	.003	-.0115
8.00	0		0		0		0		0		0	

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TABLE 2

INDEX OF TABLES AND SUMMARY OF TESTS

Table	x Radial station	β_x (deg)	No. of blades	Blade section	1140 rpm	1350 rpm	1500 rpm	1600 rpm	M = 0.56	M = 0.58	M = 0.60	M = 0.65
3	0.345	65.9	2	16-308-94	a	b	c	d	e	—	f	g
4	.450	59.3	2	16-307.00	a	b	c	d	e	f	g	h
5	.600	51.4	2	16-305.50	a	b	c	d	e	—	f	g
6	.700	47.0	2	16-304.90	a	b	c	d	e	f	g	h
			1		—	—	—	—	i	j	k	l
7	.780	43.9	2	16-304.42	a	b	c	d	e	f	g	h
			1				i	j	k	l	m	n
8	.850	41.5	2	16-304.00	a	b	c	d	e	f	g	h
			1		—	—	—	—	i	j	k	l
9	.900	39.7	2	16-303.70	a	b	c	d	e	f	g	h
			1		—	—	—	i	j	k	l	m
10	.950	38.1	2	16-303.40	a	b	c	d	e	f	g	h
			1		—	—	i	j	k	l	m	n
11	.975	37.3	2	—	a	b	c	d	e	f	g	h
			1		—	—	i	j	k	l	m	n

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-308.94 PROPELLER BLADE SECTION (x = 0.345)

(a) N = 1140 rpm; $\beta_{0.75R}$ = 45°.

	J	1.881	1.934	2.025	2.164	2.246	2.318	2.402	2.485	2.537	2.447	2.356	2.281	2.203	2.103	2.069	1.996	1.909
	M_T	.375	.382	.395	.418	.431	.443	.453	.467	.476	.462	.448	.435	.422	.407	.403	.389	.377
	α_R	5.85	5.17	4.06	2.50	1.66	.96	.18	-.54	-.97	-.21	.60	1.32	2.10	3.17	3.55	4.40	5.49
	$\Delta\beta$	.23	.19	.15	.11	.09	.06	.03	.01	-.01	.02	.05	.07	.10	.13	.14	.16	.21
	α_i	1.59	1.48	1.23	.88	.72	.58	.45	.33	.23	.37	.50	.65	.80	.99	1.11	1.31	1.52
	c_n	.6671	.6226	.5245	.3800	.3110	.2500	.1955	.1455	.1029	.1619	.2210	.2823	.3435	.4258	.4729	.5581	.6432
	c_m	-.0415	-.0323	-.0315	-.0338	-.0367	-.0388	-.0441	-.0498	-.0523	-.0471	-.0401	-.0368	-.0347	-.0326	-.0329	-.0331	-.0365
	c_o																	
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.036	1.037	1.040	1.045	1.048	1.050	1.053	1.056	1.058	1.055	1.051	1.049	1.046	1.042	1.041	1.039	1.036
	.025	-1.570	-1.337	-1.039	-.595	-.396	-.223	-.050	.104	.192	.147	-.144	-.301	-.493	-.741	-.886	-1.135	-1.435
	.050	-1.157	-1.011	-.806	-.515	-.381	-.259	-.135	-.026	.039	-.074	-.206	-.313	-.447	-.620	-.710	-.867	-1.072
	.100	-.963	-.871	-.730	-.522	-.428	-.342	-.252	-.175	-.071	-.207	-.308	-.381	-.480	-.596	-.660	-.782	-.914
	.200	-.785	-.731	-.646	-.502	-.434	-.384	-.323	-.272	-.239	-.296	-.364	-.408	-.473	-.558	-.596	-.670	-.756
	.300	-.668	-.638	-.573	-.472	-.421	-.384	-.345	-.307	-.286	-.321	-.376	-.405	-.451	-.513	-.540	-.589	-.657
	.400	-.591	-.568	-.522	-.443	-.403	-.378	-.345	-.321	-.305	-.329	-.376	-.393	-.428	-.478	-.497	-.529	-.582
	.500	-.535	-.522	-.482	-.426	-.396	-.378	-.357	-.342	-.328	-.346	-.376	-.393	-.418	-.450	-.462	-.488	-.534
	.600	-.466	-.460	-.434	-.393	-.378	-.366	-.357	-.348	-.341	-.346	-.370	-.375	-.389	-.412	-.423	-.436	-.467
	.700	-.377	-.382	-.362	-.340	-.327	-.330	-.320	-.326	-.323	-.321	-.335	-.338	-.338	-.340	-.356	-.358	-.384
	.800	-.243	-.250	-.241	-.244	-.233	-.235	-.255	-.266	-.265	-.261	-.253	-.236	-.244	-.256	-.239	-.239	-.250
	.900	-.017	-.017	-.008	-.016	-.020	-.028	-.027	-.058	-.066	-.047	-.038	-.028	-.021	-.012	-.009	-.005	-.021
	.950	.076	.092	.109	.140	.143	.134	.120	.096	.092	.109	.123	.135	.134	.130	.118	.106	.078
Lower surface	.0375	.630	.542	.429	.226	.118	-.001	-.127	-.272	-.354	-.202	-.070	.049	.167	.296	.359	.478	.568
	.075	.460	.387	.298	.146	.071	-.016	-.107	-.204	-.260	-.157	-.070	.018	.102	.196	.249	.340	.410
	.150	.311	.255	.192	.080	.030	-.034	-.090	-.161	-.197	-.130	-.070	-.009	.047	.116	.154	.221	.272
	.250	.218	.177	.123	.044	.005	-.043	-.084	-.134	-.158	-.108	-.070	-.025	.018	.068	.097	.147	.189
	.350	.165	.123	.083	.021	-.008	-.043	-.073	-.104	-.123	-.085	-.070	-.031	-.001	.037	.062	.106	.138
	.450	.116	.084	.050	-.006	-.026	-.055	-.084	-.107	-.123	-.096	-.079	-.043	-.024	.012	.030	.069	.090
	.550	.072	.045	.017	-.026	-.042	-.067	-.084	-.110	-.123	-.096	-.085	-.061	-.037	-.015	.001	.036	.051
	.650	.036	-.006	-.019	-.046	-.055	-.076	-.084	-.104	-.110	-.096	-.094	-.074	-.056	-.039	-.027	-.001	.011
	.750	.007	-.009	-.026	-.046	-.055	-.070	-.073	-.083	-.084	-.080	-.082	-.068	-.056	-.046	-.037	-.016	-.013
	.850	.019	.002	-.008	-.019	-.020	-.028	-.016	-.007	-.003	-.008	-.035	-.028	-.024	-.022	-.016	-.001	.003
	.925	.048	.030	.025	.027	.043	.047	.066	.077	.081	.073	.047	.043	.025	.012	.019	.028	.027
	[a].975	.090	.069	.068	.092	.108	.109	.113	.121	.121	.120	.114	.108	.084	.070	.072	.089	.059
	[a]1.000	.120	.140	.125	.176	.188	.157	.153	.139	.134	.138	.163	.174	.158	.160	.141	.145	.081

[a]No orifice.

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TABLE 3.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-308.94 PROPELLER BLADE SECTION ($x = 0.345$) – Continued

(b) $N = 1350$ rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	1.975	2.023	2.100	2.158	2.209	2.279	2.340	2.421	2.528	2.472	2.395	2.318	2.257	2.176	2.141	2.083	2.021
	M_x	.458	.466	.479	.492	.500	.515	.527	.543	.564	.550	.538	.522	.510	.494	.489	.479	.465
	α_x'	4.66	4.08	3.20	2.57	2.04	1.33	.73	.02	−.89	−.43	.25	.96	1.55	2.38	2.73	3.39	4.10
	$\Delta\beta$	.30	.24	.18	.14	.11	.07	.02	0	−.04	−.02	0	.04	.08	.13	.14	.19	.24
	α_1	1.50	1.37	1.15	1.00	.85	.70	.60	.43	.25	.35	.50	.63	.77	.93	1.03	1.20	1.41
	c_n	.6323	.5819	.4903	.4300	.3668	.3055	.2623	.1894	.1081	.1526	.2177	.2748	.3329	.3977	.4439	.5123	.5987
	c_m	−.0318	−.0318	−.0316	−.0317	−.0316	−.0370	−.0421	−.0509	−.0544	−.0512	−.0481	−.0407	−.0336	−.0313	−.0303	−.0306	−.0311
	c_o																	
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.054	1.056	1.059	1.062	1.064	1.068	1.071	1.076	1.082	1.078	1.074	1.070	1.066	1.062	1.061	1.059	1.056
	.025	−1.319	−1.159	−.874	−.695	−.506	−.321	−.184	−.010	.197	.090	−.067	−.228	−.398	−.621	−.736	−.964	−1.195
	.050	−1.010	−.890	−.717	−.593	−.465	−.337	−.241	−.116	.041	−.040	−.155	−.270	−.391	−.543	−.621	−.773	−.917
	.100	−.892	−.814	−.681	−.598	−.506	−.412	−.345	−.249	−.130	−.194	−.282	−.369	−.449	−.560	−.616	−.721	−.830
	.200	−.758	−.714	−.625	−.563	−.506	−.440	−.401	−.337	−.256	−.299	−.357	−.414	−.465	−.538	−.575	−.650	−.721
	.300	−.668	−.636	−.565	−.526	−.484	−.438	−.410	−.363	−.302	−.334	−.377	−.416	−.454	−.508	−.535	−.585	−.636
	.400	−.595	−.573	−.522	−.489	−.458	−.422	−.414	−.369	−.324	−.348	−.379	−.410	−.435	−.476	−.495	−.535	−.573
	.500	−.542	−.527	−.486	−.462	−.441	−.415	−.407	−.380	−.348	−.365	−.385	−.410	−.426	−.454	−.467	−.496	−.521
	.600	−.480	−.468	−.442	−.427	−.410	−.396	−.396	−.380	−.360	−.369	−.381	−.394	−.402	−.417	−.427	−.449	−.467
	.700	−.393	−.389	−.372	−.363	−.355	−.350	−.354	−.346	−.340	−.340	−.344	−.354	−.349	−.359	−.364	−.375	−.382
	.800	−.253	−.254	−.249	−.251	−.252	−.247	−.257	−.270	−.274	−.272	−.263	−.252	−.251	−.248	−.251	−.250	−.249
	.900	−.012	−.010	−.004	−.005	−.014	−.022	−.037	−.042	−.053	−.046	−.040	−.030	−.017	−.003	−.005	−.002	−.003
	.950	.086	.099	.127	.138	.144	.141	.127	.119	.111	.115	.122	.132	.144	.142	.136	.119	.100
Lower surface	.0375	.518	.454	.343	.262	.163	.058	−.044	−.171	−.360	−.256	−.121	−.012	.104	.225	.279	.385	.477
	.075	.370	.318	.235	.173	.101	.022	−.051	−.137	−.264	−.198	−.104	−.023	.057	.144	.186	.262	.338
	.150	.241	.204	.145	.099	.043	−.006	−.059	−.118	−.200	−.157	−.093	−.039	.018	.078	.108	.166	.220
	.250	.162	.131	.089	.054	.014	−.024	−.064	−.105	−.160	−.130	−.087	−.045	−.008	.039	.060	.103	.144
	.350	.117	.090	.055	.029	−.005	−.034	−.062	−.080	−.128	−.101	−.067	−.048	−.017	.017	.033	.072	.103
	.450	.072	.053	.024	.002	−.026	−.047	−.073	−.092	−.128	−.109	−.082	−.059	−.036	−.008	.008	.035	.065
	.550	.036	.017	−.004	−.023	−.046	−.066	−.086	−.101	−.126	−.112	−.091	−.075	−.055	−.032	−.020	.004	.027
	.650	−.001	−.015	−.032	−.045	−.065	−.079	−.090	−.099	−.117	−.107	−.091	−.086	−.071	−.052	−.043	−.025	−.006
	.750	−.020	−.031	−.043	−.053	−.065	−.073	−.082	−.084	−.089	−.085	−.078	−.077	−.069	−.057	−.053	−.038	−.022
	.850	−.009	−.015	−.020	−.023	−.031	−.034	−.026	−.014	−.005	−.009	−.014	−.025	−.029	−.027	−.025	−.017	−.009
	.925	.019	.015	.014	.017	.017	.038	.049	.068	.085	.074	.066	.049	.029	.014	.015	.017	.021
	[a].975	.072	.071	.087	.072	.068	.113	.136	.142	.167	.155	.140	.148	.113	.065	.082	.080	.091
	[a]1.000	.170	.170	.240	[b].140	[b].140	.205	.204	.185	.214	.227	.187	.244	.244	[b].130	.209	.210	.194

[a]Faired value.
[b]Lower surface only.

NACA

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-308.94 PROPELLER BLADE SECTION (x = 0.345) - Continued

(c) N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.165	2.206	2.252	2.315	2.370	2.414	2.463	2.484	2.445	2.388	2.346	2.296	2.218	2.184
	M_x	.546	.560	.568	.583	.596	.604	.614	.620	.611	.598	.589	.577	.560	.554
	α_x'	2.49	2.07	1.60	.99	.48	.08	-.35	-.53	-.19	.31	.70	1.17	1.94	2.29
	$\Delta\beta$	.18	.16	.12	.07	.03	.01	0	0	0	.02	.05	.08	.15	.16
	α_i	1.09	.95	.83	.71	.56	.45	.34	.28	.39	.49	.64	.75	.88	1.00
	c_n	.4716	.4097	.3597	.3081	.2435	.1994	.1484	.1242	.1700	.2168	.2777	.3258	.3816	.4294
	c_m	-.0331	-.0346	-.0385	-.0455	-.0492	-.0509	-.0543	-.0551	-.0526	-.0518	-.0469	-.0431	-.0358	-.0333
	c_c														
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.076	1.080	1.083	1.088	1.091	1.094	1.097	1.099	1.096	1.092	1.089	1.085	1.080	1.079
	.025	-.778	-.594	-.428	-.242	-.111	-.005	.124	.170	.068	-.058	-.175	-.310	-.504	-.660
	.050	-.661	-.534	-.422	-.289	-.193	-.116	-.020	.017	-.060	-.153	-.240	-.336	-.478	-.582
	.100	-.661	-.568	-.487	-.389	-.319	-.261	-.189	-.158	-.216	-.291	-.354	-.425	-.532	-.602
	.200	-.624	-.558	-.504	-.440	-.396	-.359	-.311	-.287	-.325	-.378	-.417	-.463	-.540	-.582
	.300	-.580	-.528	-.490	-.441	-.413	-.386	-.351	-.334	-.360	-.399	-.428	-.457	-.518	-.549
	.400	-.536	-.496	-.469	-.432	-.413	-.395	-.369	-.355	-.372	-.403	-.421	-.444	-.494	-.512
	.500	-.505	-.473	-.457	-.432	-.418	-.404	-.390	-.379	-.388	-.412	-.424	-.440	-.478	-.486
	.600	-.457	-.435	-.428	-.415	-.409	-.402	-.395	-.389	-.388	-.405	-.411	-.419	-.444	-.445
	.700	-.386	-.369	-.367	-.368	-.367	-.365	-.365	-.363	-.355	-.366	-.368	-.367	-.381	-.380
	.800	-.252	-.250	-.259	-.259	-.265	-.275	-.287	-.287	-.276	-.271	-.260	-.258	-.269	-.257
	.900	.009	.006	-.014	-.029	-.031	-.034	-.044	-.050	-.033	-.032	-.031	-.022	-.020	-.004
	.950	.138	.151	.148	.133	.130	.127	.120	.115	.130	.129	.133	.140	.138	.141
Lower surface	.0375	.293	.213	.125	.015	-.087	-.173	-.292	-.341	-.228	-.130	-.031	.057	.142	.235
	.075	.199	.138	.072	-.008	-.078	-.143	-.224	-.256	-.179	-.112	-.042	.023	.084	.154
	.150	.117	.076	.027	-.027	-.076	-.122	-.177	-.198	-.144	-.101	-.051	-.004	.032	.084
	.250	.069	.038	.003	-.038	-.075	-.107	-.149	-.165	-.125	-.092	-.053	-.022	.004	.043
	.350	.040	.020	-.011	-.031	-.058	-.086	-.117	-.131	-.097	-.072	-.044	-.025	-.014	.021
	.450	.013	-.006	-.032	-.051	-.076	-.098	-.126	-.138	-.107	-.088	-.063	-.043	-.034	-.006
	.550	-.016	-.035	-.050	-.066	-.087	-.107	-.126	-.136	-.112	-.097	-.076	-.060	-.059	-.032
	.650	-.041	-.051	-.069	-.078	-.091	-.107	-.121	-.127	-.111	-.097	-.083	-.073	-.077	-.051
	.750	-.052	-.055	-.065	-.070	-.080	-.088	-.096	-.100	-.088	-.085	-.074	-.068	-.077	-.061
	.850	-.023	-.023	-.020	-.008	-.012	-.016	-.014	-.015	-.011	-.016	-.009	-.010	-.036	-.028
	.925	.013	.022	.042	.068	.068	.070	.075	.079	.074	.065	.072	.057	.020	.013
	[a].975	.051	.071	.106	.141	.155	.157	.162	.166	.149	.153	.165	.126	.092	.070
	[a]1.000	[b].105	[b].130	.199	.185	.225	.210	.216	.215	.190	.215	.238	.201	.183	[b].127

[a]No orifice.

[b]Lower surface only.

TABLE 3.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-308.94 PROPELLER BLADE SECTION (x = 0.345) – Continued

(d) N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.233	2.263	2.304	2.340	2.377	2.411	2.447	2.456	2.423	2.393	2.360	2.320	2.280	2.248
	M_x	.601	.608	.619	.627	.635	.644	.652	.654	.645	.639	.631	.621	.612	.603
	α_r'	1.79	1.49	1.09	.75	.41	.11	–.21	–.29	0	.27	.57	.94	1.33	1.64
	$\Delta\beta$	.19	.14	.08	.05	.02	–.01	–.07	–.09	–.02	.02	.04	.06	.11	.18
	α_i	.95	.86	.78	.66	.54	.44	.33	.32	.39	.49	.60	.71	.83	.91
	c_n	.4123	.3742	.3381	.2865	.2352	.1926	.1448	.1390	.1697	.2158	.2623	.3084	.3623	.3926
	c_m	–.0380	–.0426	–.0460	–.0490	–.0488	–.0533	–.0539	–.0549	–.0529	–.0533	–.0497	–.0479	–.0438	–.0415
	c_c														
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.093	1.095	1.099	1.102	1.105	1.108	1.110	1.111	1.108	1.106	1.103	1.100	1.096	1.094
	.025	–.528	–.407	–.293	–.172	–.062	.038	.141	.162	.079	–.016	–.106	–.221	–.350	–.453
	.050	–.499	–.416	–.333	–.246	–.162	–.087	–.012	.007	–.057	–.130	–.200	–.281	–.375	–.446
	.100	–.555	–.494	–.435	–.368	–.304	–.244	–.187	–.170	–.221	–.278	–.334	–.396	–.466	–.517
	.200	–.557	–.522	–.480	–.439	–.392	–.352	–.312	–.299	–.336	–.377	–.412	–.454	–.499	–.533
	.300	–.535	–.512	–.480	–.452	–.417	–.388	–.358	–.349	–.380	–.407	–.432	–.463	–.496	–.517
	.400	–.507	–.487	–.464	–.446	–.417	–.398	–.377	–.370	–.391	–.412	–.430	–.453	–.477	–.492
	.500	–.485	–.478	–.461	–.449	–.427	–.412	–.397	–.392	–.409	–.424	–.435	–.453	–.470	–.478
	.600	–.447	–.448	–.440	–.436	–.421	–.411	–.403	–.400	–.409	–.420	–.423	–.437	–.445	–.446
	.700	–.377	–.384	–.383	–.388	–.376	–.372	–.371	–.368	–.375	–.376	–.376	–.386	–.382	–.380
	.800	–.253	–.266	–.265	–.270	–.266	–.275	–.280	–.280	–.279	–.272	–.264	–.269	–.266	–.259
	.900	.010	–.013	–.018	–.030	–.023	–.025	–.032	–.031	–.030	–.024	–.020	–.022	–.015	–.004
	.950	.155	.144	.147	.135	.140	.138	.133	.136	.136	.139	.142	.142	.146	.150
Lower surface	.0375	.183	.109	.046	–.042	–.117	–.198	–.293	–.317	–.247	–.155	–.073	0	.082	.143
	.075	.119	.059	.015	–.049	–.102	–.159	–.224	–.240	–.193	–.128	–.067	–.019	.043	.086
	.150	.061	.019	–.012	–.057	–.094	–.133	–.179	–.189	–.159	–.112	–.067	–.036	.006	.039
	.250	.028	–.004	–.026	–.060	–.086	–.117	–.150	–.157	–.135	–.100	–.067	–.043	–.009	.014
	.350	.019	–.002	–.019	–.047	–.069	–.092	–.120	–.125	–.109	–.079	–.051	–.033	–.006	.009
	.450	–.009	–.031	–.045	–.069	–.086	–.104	–.129	–.133	–.119	–.093	–.069	–.057	–.034	–.020
	.550	–.035	–.056	–.064	–.084	–.096	–.110	–.133	–.133	–.124	–.103	–.086	–.074	–.055	–.043
	.650	–.054	–.070	–.075	–.091	–.099	–.110	–.128	–.127	–.120	–.103	–.089	–.082	–.069	–.057
	.750	–.058	–.070	–.071	–.081	–.086	–.091	–.101	–.100	–.101	–.087	–.076	–.074	–.069	–.061
	.850	–.015	–.017	–.012	–.013	–.013	–.014	–.016	–.014	–.018	–.013	–.009	–.010	–.009	–.011
	.925	.039	.052	.062	.068	.070	.076	.077	.082	.071	.072	.074	.069	.061	.052
	[a].975	.104	.126	.135	.149	.165	.158	.157	.168	.150	.144	.148	.152	.127	.124
	[a]1.000	[b].172	.200	.214	.238	.258	.205	.200	.215	.193	.184	.192	.233	.202	.205

[a]No orifice.
[b]Lower surface only.

NACA

TABLE 3.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-308.94 PROPELLER BLADE SECTION ($x = 0.345$) – Continued

(e) $M = 0.56$; $\beta_{0.75R} = 45°$.

J	2.227	2.247	2.272	2.280	2.302	2.329	2.343	2.342	2.385	2.405	2.427	2.454	2.472
M_x	.627	.626	.628	.622	.621	.623	.623	.618	.620	.620	.619	.618	.617
α_x'	1.85	1.65	1.40	1.33	1.12	.86	.72	.73	.34	.16	-.04	-.27	-.43
$\Delta\beta$	.11	.10	.09	.09	.08	.07	.07	.07	.04	.03	.02	-.01	-.02
α_i	.95	.93	.86	.82	.74	.64	.62	.57	.48	.46	.40	.34	.31
c_n	.4129	.4052	.3723	.3552	.3239	.2810	.2726	.2506	.2084	.1994	.1752	.1484	.1352
c_m	-.0397	-.0410	-.0450	-.0439	-.0455	-.0482	-.0486	-.0499	-.0510	-.0492	-.0522	-.0539	-.0535
c_o													
	o/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.102	1.101	1.102	1.100	1.100	1.100	1.100	1.098	1.099	1.099	1.099	1.098	1.098
	.025	-.480	-.437	-.352	-.323	-.250	-.183	-.153	-.126	-.032	.009	.054	.118	.161
	.050	-.472	-.441	-.390	-.356	-.303	-.253	-.230	-.209	-.138	-.107	-.071	-.027	.008
	.100	-.543	-.517	-.477	-.453	-.411	-.385	-.353	-.340	-.282	-.258	-.228	-.192	-.165
	.200	-.558	-.542	-.511	-.494	-.463	-.442	-.425	-.416	-.373	-.356	-.332	-.307	-.289
	.300	-.541	-.529	-.504	-.492	-.469	-.456	-.440	-.435	-.400	-.390	-.367	-.350	-.336
	.400	-.510	-.503	-.483	-.473	-.456	-.448	-.435	-.431	-.405	-.396	-.379	-.368	-.370
	.500	-.494	-.490	-.474	-.468	-.452	-.449	-.438	-.437	-.415	-.409	-.394	-.385	-.379
	.600	-.455	-.452	-.442	-.443	-.433	-.436	-.426	-.425	-.409	-.406	-.394	-.392	-.388
	.700	-.382	-.385	-.378	-.383	-.380	-.386	-.379	-.380	-.366	-.366	-.356	-.361	-.360
	.800	-.250	-.258	-.258	-.262	-.261	-.269	-.263	-.266	-.265	-.272	-.269	-.280	-.284
	.900	.018	.004	-.001	-.009	-.013	-.023	-.022	-.025	-.022	-.025	-.023	-.037	-.044
	.950	.162	.157	.158	.153	.150	.140	.142	.139	.141	.134	.139	.127	.121
Lower surface	.0375	.167	.138	.105	.071	.027	-.037	-.047	-.075	-.141	-.181	-.212	-.275	-.329
	.075	.106	.084	.060	.035	.003	-.045	-.053	-.072	-.117	-.149	-.166	-.213	-.248
	.150	.054	.038	.023	.003	-.019	-.056	-.059	-.073	-.104	-.126	-.136	-.170	-.194
	.250	.027	.013	.001	-.014	-.030	-.059	-.061	-.072	-.094	-.111	-.116	-.144	-.160
	.350	.023	.013	.006	-.009	-.023	-.047	-.046	-.058	-.073	-.089	-.090	-.113	-.127
	.450	-.009	-.018	-.025	-.035	-.047	-.067	-.066	-.073	-.090	-.101	-.102	-.121	-.132
	.550	-.034	-.043	-.048	-.057	-.064	-.085	-.082	-.089	-.099	-.107	-.107	-.121	-.132
	.650	-.054	-.060	-.060	-.066	-.073	-.091	-.090	-.095	-.100	-.109	-.106	-.116	-.124
	.750	-.058	-.062	-.060	-.067	-.069	-.085	-.080	-.085	-.085	-.092	-.088	-.094	-.099
	.850	-.007	-.009	-.004	-.009	-.008	-.018	-.012	-.016	-.015	-.018	-.01	-.013	-.013
	.925	.050	.055	.063	.062	.068	.060	.067	.063	.067	.064	.073	.072	.075
	[a].975	.113	.120	.133	.134	.136	.136	.142	.138	.138	.150	.129	.145	.134
	[a]1.000	.200	.205	.215	.210	.225	.216	.228	.222	.223	.225	.205	.188	.161

[a]No orifice.

NACA

TABLE 3.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-308.94 PROPELLER BLADE SECTION (x = 0.345) – Continued

(f) M = 0.60; $\beta_{0.75R}$ = 45°.

	J	2.204	2.231	2.265	2.280	2.301	2.318	2.349	2.361	2.383	2.383	2.399	2.418	2.435
	M_r	.657	.656	.660	.655	.654	.652	.653	.652	.655	.650	.648	.648	.649
	α_r'	2.09	1.81	1.47	1.33	1.12	.96	.67	.56	.36	.36	.21	.04	–.11
	$\Delta\beta$	.23	.21	.17	.15	.12	.10	.04	.02	.01	.01	0	–.03	–.05
	α_1	.92	.88	.78	.77	.72	.68	.55	.51	.50	.45	.40	.38	.32
	c_n	.3961	.3794	.3377	.3352	.3135	.2965	.2403	.2239	.2187	.1952	.1771	.1655	.1423
	c_m	–.0388	–.0400	–.0420	–.0441	–.0444	–.0457	–.0483	–.0482	–.0501	–.0495	–.0499	–.0515	–.0523
	c_o													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.112	1.112	1.114	1.112	1.111	1.110	1.111	1.110	1.112	1.110	1.109	1.109	1.110
	.025	–.464	–.412	–.303	–.268	–.221	–.175	–.076	–.046	–.012	.010	.050	.085	.134
	.050	–.467	–.429	–.380	–.325	–.288	–.255	–.177	–.154	–.126	–.110	–.081	–.053	–.016
	.100	–.553	–.522	–.461	–.440	–.410	–.384	–.320	–.302	–.279	–.267	–.242	–.221	–.191
	.200	–.581	–.556	–.513	–.497	–.473	–.456	–.411	–.398	–.381	–.373	–.353	–.337	–.317
	.300	–.567	–.544	–.514	–.504	–.484	–.472	–.436	–.428	–.413	–.408	–.391	–.379	–.364
	.400	–.535	–.518	–.495	–.486	–.472	–.463	–.436	–.430	–.416	–.415	–.402	–.395	–.383
	.500	–.515	–.500	–.488	–.480	–.470	–.467	–.444	–.441	–.429	–.429	–.418	–.411	–.404
	.600	–.470	–.461	–.456	–.453	–.446	–.448	–.431	–.430	–.421	–.424	–.417	–.411	–.410
	.700	–.393	–.387	–.388	–.388	–.386	–.394	–.384	–.383	–.408	–.381	–.377	–.377	–.378
	.800	–.246	–.248	–.261	–.261	–.259	–.270	–.265	–.269	–.266	–.273	–.277	–.282	–.288
	.900	.033	.024	.002	–.002	–.004	–.016	–.015	–.020	–.018	–.025	–.027	–.031	–.039
	.950	.162	.163	.157	.157	.156	.147	.148	.144	.146	.139	.137	.134	.130
Lower surface	.0375	.150	.127	.059	.036	.010	–.034	–.104	–.137	–.153	–.187	–.219	–.256	–.304
	.075	.093	.075	.023	.010	–.011	–.043	–.093	–.118	–.128	–.155	–.178	–.201	–.236
	.150	.040	.029	–.007	–.017	–.030	–.054	–.088	–.106	–.114	–.132	–.149	–.166	–.188
	.250	.015	.007	–.023	–.029	–.038	–.057	–.085	–.098	–.101	–.118	–.129	–.142	–.159
	.350	.010	.005	–.017	–.024	–.030	–.046	–.068	–.079	–.082	–.096	–.104	–.114	–.129
	.450	–.021	–.025	–.045	–.049	–.054	–.067	–.085	–.097	–.096	–.110	–.117	–.124	–.135
	.550	–.046	–.050	–.099	–.068	–.073	–.083	–.098	–.106	–.106	–.116	–.123	–.129	–.137
	.650	–.065	–.068	–.078	–.081	–.082	–.093	–.101	–.110	–.107	–.118	–.123	–.126	–.132
	.750	–.073	–.072	–.078	–.079	–.079	–.086	–.091	–.097	–.093	–.104	–.104	–.105	–.108
	.850	–.021	–.019	–.020	–.017	–.016	–.021	–.022	–.024	–.018	–.027	–.025	–.024	–.024
	.925	.033	.043	.053	.055	.061	.061	.066	.062	.068	.062	.063	.063	.069
	[a].975	.108	.115	.125	.135	.141	.137	.147	.140	.145	.145	.143	.146	.151
	[a]1.000	.199	.200	.215	.230	.248	.217	.213	.205	.215	.203	.206	.193	.195

[a]No orifice.

NACA

TABLE 3.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-308.94 PROPELLER BLADE SECTION ($x = 0.345$) — Concluded

(g) $M = 0.65$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.175	2.191	2.216	2.222	2.243	2.254	2.275	2.280	2.299	2.318	2.340	2.361	2.374
	M_x	.733	.732	.731	.729	.727	.727	.728	.725	.724	.721	.723	.722	.718
	α_x'	2.39	2.22	1.96	1.90	1.69	1.58	1.37	1.33	1.14	.96	.75	.56	.44
	$\Delta\beta$	.11	.09	.06	.05	.03	.02	.01	0	-.01	-.02	-.03	-.04	-.04
	α_i	1.03	1.01	.94	.91	.84	.81	.76	.70	.65	.57	.52	.47	.43
	c_n	.4429	.4348	.4045	.3890	.3623	.3490	.3294	.3032	.2842	.2487	.2290	.2039	.1877
	c_m	-.0416	-.0394	-.0423	-.0440	-.0449	-.0461	-.0458	-.0474	-.0475	-.0493	-.0507	-.0503	-.0510
	c_o	-.0045	-.0038	-.0018	-.0014	.0011	.0014	.0032	.0042	.0055	.0061	.0072	.0086	.0089
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.142	1.142	1.141	1.141	1.140	1.140	1.140	1.139	1.138	1.137	1.138	1.138	1.136
	.025	-.438	-.373	-.333	-.301	-.246	-.212	-.164	-.126	-.089	-.038	.001	.049	.082
	.050	-.468	-.413	-.390	-.363	-.320	-.294	-.258	-.229	-.197	-.161	-.127	-.088	-.064
	.100	-.606	-.554	-.536	-.513	-.472	-.449	-.415	-.390	-.364	-.329	-.300	-.265	-.236
	.200	-.692	-.642	-.631	-.605	-.570	-.549	-.524	-.502	-.481	-.452	-.425	-.398	-.382
	.300	-.687	-.642	-.636	-.616	-.588	-.568	-.548	-.530	-.513	-.487	-.463	-.440	-.430
	.400	-.646	-.605	-.610	-.597	-.573	-.557	-.542	-.530	-.514	-.495	-.475	-.455	-.449
	.500	-.617	-.579	-.596	-.585	-.566	-.554	-.545	-.534	-.524	-.508	-.490	-.476	-.472
	.600	-.537	-.506	-.532	-.529	-.517	-.513	-.506	-.502	-.496	-.485	-.474	-.465	-.465
	.700	-.420	-.395	-.428	-.429	-.428	-.424	-.425	-.426	-.425	-.420	-.414	-.409	-.414
	.800	-.233	-.209	-.253	-.259	-.264	-.264	-.269	-.273	-.277	-.278	-.274	-.277	-.283
	.900	.061	.086	.042	.033	.027	.026	.018	.015	.010	.006	.004	0	-.005
	.950	.162	.191	.164	.165	.165	.167	.160	.158	.160	.159	.162	.159	.153
Lower surface	.0375	.159	.166	.097	.069	.030	.011	-.024	-.057	-.090	-.130	-.157	-.200	-.243
	.075	.098	.108	.047	.027	0	-.015	-.043	-.065	-.090	-.121	-.138	-.166	-.196
	.150	.043	.059	.006	-.009	-.031	-.039	-.058	-.077	-.093	-.115	-.125	-.144	-.167
	.250	.010	.030	-.018	-.028	-.044	-.051	-.068	-.079	-.093	-.111	-.117	-.133	-.150
	.350	.005	.026	-.018	-.028	-.042	-.046	-.058	-.070	-.082	-.094	-.099	-.110	-.126
	.450	-.032	-.009	-.050	-.058	-.069	-.073	-.084	-.093	-.101	-.114	-.116	-.126	-.139
	.550	-.061	-.037	-.073	-.082	-.091	-.093	-.101	-.107	-.115	-.125	-.127	-.133	-.144
	.650	-.084	-.057	-.092	-.100	-.104	-.105	-.112	-.120	-.125	-.130	-.130	-.133	-.144
	.750	-.092	-.065	-.095	-.100	-.104	-.104	-.105	-.110	-.114	-.118	-.116	-.116	-.123
	.850	-.036	-.008	-.032	-.033	-.035	-.032	-.035	-.035	-.036	-.038	-.032	-.032	-.038
	.925	.021	.051	.032	.036	.040	.044	.045	.044	.047	.048	.057	.060	.058
	[a].975	.113	.111	.110	.125	.128	.146	.150	.140	.127	.150	.151	.153	.170
	[a]1.000	.209	[b].163	[b].185	[b].222	[b].228	.250	.253	.245	.215	.254	.234	.247	.280

[a]No orifice.
[b]Lower surface only.

TABLE 4.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-307.00 PROPELLER BLADE SECTION (x = 0.45)

(a) N = 1140 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	1.925	2.016	2.108	2.197	2.288	2.424	2.500	2.580	2.550	2.485	2.374	2.260	2.158	2.077	1.958
	M_x	.409	.421	.435	.447	.461	.482	.492	.505	.501	.491	.473	.456	.443	.431	.414
	α_x'	5.59	4.34	3.15	2.06	1.01	-.45	-1.21	-1.98	-1.70	-1.06	.07	1.33	2.53	3.54	5.13
	$\Delta\beta$	.52	.43	.35	.27	.19	.06	-.01	-.08	-.05	0	.11	.22	.31	.38	.49
	α_i	1.79	1.49	1.24	.98	.74	.42	.25	.10	.15	.32	.54	.81	1.08	1.35	1.70
	c_n	.7400	.6194	.5200	.4106	.3126	.1790	.1055	.0429	.0632	.1365	.2303	.3435	.4542	.5639	.7026
	c_m	-.0354	-.0447	-.0442	-.0421	-.0447	-.0492	-.0527	-.0519	-.0519	-.0504	-.0488	-.0446	-.0434	-.0429	-.0405
	c_c															
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.043	1.045	1.048	1.051	1.054	1.059	1.062	1.065	1.064	1.062	1.057	1.053	1.050	1.047	1.044
	.025	-1.920	-1.361	-.976	-.655	-.347	.005	.186	.327	.278	.123	-.126	-.439	-.801	-1.083	-2.049
	.050	-1.733	-1.014	-.816	-.596	-.397	-.148	-.017	.098	.057	-.060	-.244	-.459	-.705	-.897	-1.380
	.100	-1.149	-.802	-.649	-.499	-.367	-.195	-.102	-.017	-.045	-.130	-.260	-.408	-.579	-.708	-.856
	.200	-.689	-.658	-.563	-.473	-.386	-.275	-.214	-.150	-.154	-.230	-.318	-.414	-.528	-.667	-.700
	.300	-.606	-.576	-.501	-.438	-.375	-.293	-.249	-.198	-.212	-.258	-.323	-.394	-.483	-.538	-.609
	.400	-.540	-.518	-.458	-.411	-.367	-.301	-.269	-.226	-.238	-.273	-.326	-.377	-.453	-.487	-.535
	.500	-.506	-.495	-.451	-.420	-.386	-.340	-.316	-.279	-.289	-.315	-.358	-.397	-.453	-.474	-.504
	.600	-.436	-.436	-.405	-.385	-.364	-.329	-.316	-.288	-.294	-.313	-.342	-.368	-.414	-.427	-.437
	.700	-.350	-.357	-.340	-.329	-.319	-.301	-.293	-.272	-.277	-.288	-.307	-.323	-.356	-.358	-.356
	.800	-.236	-.250	-.245	-.241	-.244	-.236	-.239	-.224	-.226	-.230	-.241	-.241	-.263	-.257	-.244
	.900	-.073	-.073	-.065	-.074	-.083	-.086	-.097	-.093	-.091	-.087	-.086	-.079	-.089	-.077	-.072
	.950	.030	.035	.049	.052	.049	.046	.032	.036	.040	.043	.047	.052	.034	.040	.033
Lower surface	.0375	.632	.525	.404	.246	.082	-.153	-.321	-.427	-.391	-.245	-.054	.137	.293	.437	.598
	.075	.480	.384	.287	.167	.049	-.114	-.221	-.293	-.263	-.172	-.049	.089	.200	.311	.449
	.150	.349	.270	.200	.112	.026	-.083	-.154	-.205	-.183	-.120	-.036	.054	.130	.216	.324
	.250	.266	.198	.148	.079	.015	-.063	-.114	-.150	-.132	-.090	-.030	.032	.085	.153	.239
	.350	.207	.152	.111	.052	.001	-.057	-.099	-.124	-.112	-.075	-.033	.018	.058	.115	.189
	.450	.155	.107	.073	.023	-.016	-.063	-.097	-.114	-.103	-.075	-.044	-.002	.022	.074	.135
	.550	.113	.067	.046	.002	-.030	-.068	-.097	-.110	-.103	-.080	-.052	-.016	.001	.043	.101
	.650	.079	.041	.024	-.009	-.038	-.063	-.082	-.091	-.083	-.065	-.049	-.025	-.014	.024	.067
	.750	.058	.028	.015	-.012	-.030	-.050	-.062	-.064	-.059	-.052	-.041	-.025	-.023	.011	.050
	.850	.051	.028	.028	.005	-.002	-.003	-.012	-.007	-.004	-.002	-.001	.001	-.005	.018	.050
	.925	.055	.041	.043	.032	.032	.038	.040	.050	.047	.046	.036	.032	.016	.030	.053
	[a].975	.068	.073	.078	.073	.064	.082	.084	.094	.091	.084	.065	.065	.045	.062	.078
	[a]1.000	[b].089	[b].094	[b].102	[b].102	[b].079	[b].116	.108	.117	.116	[b].104	[b].083	[b].083	[b].062	[b].079	[b].089

[a]No orifice.
[b]Lower surface only.

NACA

TABLE 4.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-307.00 PROPELLER BLADE SECTION (x = 0.45) – Continued

(b) N = 1350 rpm; $\beta_{0.75R}$ = 45°.

	J	1.959	2.030	2.127	2.224	2.296	2.371	2.476	2.521	2.487	2.425	2.356	2.246	2.272	2.183	2.088	1.988
	M_R	.487	.499	.516	.532	.545	.558	.578	.587	.580	.569	.556	.536	.540	.526	.509	.491
	α_r'	5.11	4.15	2.91	1.74	.92	.11	–.97	–1.42	–1.09	–.46	.27	1.49	1.19	2.23	3.40	4.72
	$\Delta\beta$	.73	.62	.46	.31	.20	.08	–.09	–.16	–.10	–.01	.11	.27	.23	.38	.53	.68
	α_i	1.83	1.55	1.28	1.00	.79	.58	.30	.19	.27	.46	.60	.92	.85	1.12	1.40	1.74
	c_n	.7574	.6458	.5342	.4213	.3316	.2481	.1297	.0829	.1171	.1939	.2561	.3865	.3584	.4710	.5871	.7219
	c_m	–.0382	–.0447	–.0452	–.0456	–.0456	–.0513	–.0526	–.0521	–.0530	–.0514	–.0497	–.0455	–.0459	–.0442	–.0424	–.0398
	c_o																
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.061	1.063	1.068	1.072	1.076	1.080	1.086	1.088	1.086	1.083	1.079	1.074	1.075	1.071	1.066	1.062
	.025	–2.224	–1.441	–.999	–.632	–.356	–.123	.159	.269	.189	.018	–.165	–.543	–.444	–.804	–1.129	–2.011
	.050	–1.650	–1.092	–.855	–.602	–.415	–.252	–.044	.043	–.016	–.147	–.281	–.541	–.476	–.625	–.967	–1.333
	.100	–1.005	–.866	–.689	–.513	–.388	–.274	–.126	–.064	–.106	–.198	–.295	–.474	–.431	–.589	–.759	–.924
	.200	–.776	–.720	–.608	–.493	–.413	–.340	–.239	–.195	–.224	–.287	–.352	–.465	–.440	–.544	–.651	–.757
	.300	–.675	–.629	–.549	–.463	–.400	–.348	–.273	–.240	–.260	–.307	–.356	–.442	–.423	–.498	–.576	–.657
	.400	–.598	–.566	–.505	–.436	–.388	–.350	–.294	–.268	–.283	–.316	–.356	–.422	–.406	–.464	–.524	–.585
	.500	–.560	–.542	–.498	–.445	–.413	–.387	–.342	–.322	–.333	–.358	–.389	–.437	–.427	–.466	–.460	–.553
	.600	–.484	–.474	–.450	–.406	–.383	–.371	–.340	–.326	–.333	–.348	–.371	–.401	–.395	–.422	–.448	–.478
	.700	–.390	–.388	–.379	–.347	–.335	–.332	–.313	–.305	–.308	–.314	–.332	–.344	–.344	–.359	–.373	–.388
	.800	–.266	–.266	–.268	–.251	–.249	–.254	–.248	–.245	–.243	–.242	–.251	–.249	–.253	–.256	–.255	–.264
	.900	–.075	–.076	–.080	–.073	–.072	–.083	–.092	–.094	–.089	–.078	–.065	–.072	–.079	–.071	–.067	–.079
	.950	.019	.031	.042	.056	.060	.054	.046	.043	.048	.061	.057	.036	.055	.059	.046	.028
Lower surface	.0375	.605	.523	.373	.228	.090	–.060	–.290	–.406	–.321	–.153	–.031	.185	.127	.304	.458	.581
	.075	.456	.381	.263	.152	.054	–.052	–.203	–.269	–.217	–.112	–.031	.122	.081	.210	.333	.432
	.150	.326	.267	.178	.101	.033	–.038	–.141	–.189	–.150	–.070	–.024	.079	.049	.141	.232	.310
	.250	.242	.194	.125	.069	.021	–.032	–.103	–.140	–.112	–.059	–.022	.053	.032	.099	.171	.230
	.350	.184	.145	.088	.047	.006	–.034	–.092	–.122	–.096	–.053	–.026	.032	.013	.072	.126	.172
	.450	.133	.099	.054	.019	–.011	–.044	–.090	–.114	–.095	–.057	–.039	.010	–.008	.041	.086	.123
	.550	.090	.062	.022	–.005	–.028	–.054	–.094	–.114	–.096	–.065	–.051	–.014	–.025	.014	.051	.083
	.650	.059	.031	.003	–.014	–.032	–.052	–.080	–.095	–.081	–.059	–.051	–.022	–.034	–.002	.027	.055
	.750	.034	.014	–.008	–.016	–.028	–.040	–.059	–.069	–.060	–.043	–.039	–.022	–.030	–.022	.016	.030
	.850	.029	.019	.003	.003	.004	–.002	–.008	–.011	–.007	0	–.002	.001	–.002	.007	.023	.030
	.925	.029	.021	.019	.030	.037	.040	.044	.045	.047	.048	.039	.029	.030	.029	.030	.030
	[a].975	.047	.054	.062	.066	.071	.078	.080	.086	.089	.084	.082	.065	.068	.070	.069	.043
	[a]1.000	.062	.081	.099	.090	.094	.100	.100	.109	.112	.104	.109	.090	.097	.109	.100	.090

[a]No orifice.

NACA

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-307.00 PROPELLER BLADE SECTION (x = 0.45) - Continued

(c) N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.125	2.185	2.234	2.295	2.367	2.423	2.506	2.457	2.408	2.325	2.277	2.217	2.161
	M_x	.565	.577	.586	.599	.614	.624	.641	.631	.620	.605	.595	.581	.571
	α_x'	2.96	2.20	1.62	.93	.15	-.44	-1.27	-.78	-.28	.60	1.14	1.83	2.49
	$\Delta\beta$	.63	.51	.40	.29	.12	.01	-.18	-.06	.04	.22	.32	.44	.56
	α_i	1.42	1.20	1.02	.87	.69	.49	.25	.39	.54	.79	.91	1.08	1.29
	c_n	.5961	.5058	.4297	.3665	.2916	.2084	.1048	.1661	.2290	.3358	.3823	.4542	.5516
	c_m	-.0511	-.0497	-.0497	-.0554	-.0621	-.0628	-.0650	-.0639	-.0623	-.0576	-.0531	-.0492	-.0504
	c_c													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.082	1.085	1.089	1.092	1.097	1.101	1.107	1.103	1.099	1.094	1.091	1.087	1.084
	.025	-1.087	-.842	-.595	-.381	-.156	.049	.271	.150	.004	-.284	-.457	-.689	-.665
	.050	-.975	-.771	-.605	-.454	-.293	-.140	.036	-.062	-.174	-.384	-.507	-.667	-.870
	.100	-.768	-.633	-.524	-.423	-.313	-.204	-.071	-.146	-.227	-.374	-.455	-.560	-.698
	.200	-.667	-.583	-.513	-.445	-.372	-.299	-.206	-.261	-.315	-.411	-.465	-.537	-.622
	.300	-.591	-.529	-.481	-.430	-.379	-.325	-.255	-.296	-.339	-.406	-.444	-.498	-.542
	.400	-.539	-.494	-.460	-.423	-.385	-.344	-.290	-.323	-.353	-.402	-.431	-.471	-.515
	.500	-.523	-.492	-.469	-.434	-.406	-.376	-.336	-.361	-.384	-.420	-.441	-.477	-.507
	.600	-.461	-.442	-.430	-.412	-.395	-.376	-.349	-.368	-.381	-.402	-.413	-.431	-.450
	.700	-.382	-.373	-.368	-.366	-.360	-.349	-.334	-.346	-.350	-.363	-.358	-.367	-.376
	.800	-.260	-.260	-.264	-.272	-.288	-.291	-.285	-.292	-.291	-.273	-.260	-.260	-.261
	.900	-.067	-.069	-.078	-.097	-.105	-.108	-.117	-.117	-.107	-.097	-.082	-.068	-.067
	.950	.045	.056	.061	.057	.050	.041	.024	.029	.043	.057	.063	.061	.052
Lower surface	.0375	.443	.323	.213	.109	-.019	-.178	-.418	-.279	-.141	.063	.155	.258	.386
	.075	.320	.226	.144	.069	-.021	-.130	-.263	-.197	-.107	.036	.104	.179	.277
	.150	.226	.157	.095	.044	-.017	-.091	-.184	-.134	-.074	.022	.069	.122	.195
	.250	.168	.114	.065	.027	-.015	-.069	-.137	-.101	-.058	.014	.045	.085	.142
	.350	.126	.082	.040	.015	-.019	-.062	-.117	-.087	-.053	.004	.028	.059	.105
	.450	.086	.047	.016	-.007	-.031	-.064	-.110	-.085	-.057	-.013	.006	.028	.070
	.550	.053	.020	-.009	-.024	-.045	-.074	-.110	-.094	-.069	-.027	-.014	.002	.036
	.650	.029	.004	-.020	-.029	-.040	-.062	-.089	-.077	-.058	-.031	-.023	-.011	.019
	.750	.019	-.002	-.018	-.020	-.026	-.041	-.058	-.052	-.039	-.018	-.016	-.011	.011
	.850	.033	.018	.006	.013	.016	.008	.003	.004	.009	.018	.010	.009	.027
	.925	.053	.041	.033	.055	.065	.065	.073	.066	.062	.063	.045	.034	.050
	[a].975	.082	.078	.064	.100	.113	.112	.115	.117	.108	.099	.078	.061	.073
	[a]1.000	[b].097	[b].100	[b].086	.124	.136	.137	.129	.144	.131	[b].119	[b].097	[b].079	[b].086

[a]No orifice.

[b]Lower surface only.

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-307.00 PROPELLER BLADE SECTION (x = 0.45) - Continued

(d) N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.196	2.275	2.319	2.371	2.427	2.458	2.448	2.403	2.368	2.354	2.282	2.219
	M_r	.627	.644	.655	.666	.679	.684	.683	.671	.666	.661	.647	.631
	α_r'	2.07	1.16	.67	.11	-.48	-.79	-.69	-.23	.14	.29	1.08	1.90
	$\Delta\beta$	.61	.41	.26	.07	-.17	-.31	-.27	-.06	.08	.14	.38	.56
	α_1	1.29	1.01	.84	.61	.40	.28	.30	.53	.64	.70	.95	1.19
	c_n	.5432	.4274	.3558	.2587	.1719	.1197	.1277	.2239	.2716	.2984	.4032	.5019
	c_m	-.0500	-.0489	-.0524	-.0581	-.0590	-.0582	-.0573	-.0567	-.0591	-.0580	-.0494	-.0462
	c_a												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.102	1.108	1.112	1.116	1.121	1.123	1.122	1.118	1.116	1.114	1.109	1.103
	.025	-.917	-.504	-.294	-.071	.122	.235	.202	.023	-.103	-.164	-.458	-.793
	.050	-.828	-.541	-.395	-.230	-.079	.013	-.017	-.157	-.254	-.300	-.512	-.748
	.100	-.679	-.484	-.391	-.275	-.164	-.096	-.116	-.223	-.294	-.327	-.468	-.625
	.200	-.628	-.499	-.444	-.366	-.257	-.239	-.254	-.331	-.378	-.402	-.492	-.599
	.300	-.574	-.475	-.439	-.385	-.326	-.288	-.299	-.354	-.392	-.410	-.473	-.553
	.400	-.531	-.453	-.433	-.394	-.348	-.320	-.325	-.375	-.400	-.413	-.457	-.516
	.500	-.526	-.470	-.462	-.432	-.401	-.381	-.384	-.419	-.439	-.449	-.476	-.518
	.600	-.469	-.429	-.433	-.418	-.397	-.384	-.384	-.409	-.420	-.427	-.439	-.466
	.700	-.387	-.362	-.375	-.371	-.360	-.355	-.352	-.367	-.372	-.377	-.372	-.387
	.800	-.260	-.252	-.272	-.276	-.276	-.276	-.272	-.277	-.276	-.277	-.264	-.265
	.900	-.050	-.047	-.066	-.076	-.084	-.090	-.084	-.081	-.075	-.075	-.060	-.054
	.950	.073	.038	.077	.070	.063	.058	.061	.065	.072	.070	.080	.072
Lower surface	.0375	.339	.182	.053	-.098	-.262	-.403	-.349	-.174	-.072	-.029	.146	.286
	.075	.242	.126	.029	-.077	-.186	-.266	-.239	-.131	-.059	-.031	.094	.199
	.150	.169	.090	.018	-.057	-.132	-.188	-.161	-.095	-.044	-.024	.065	.139
	.250	.125	.064	.009	-.045	-.099	-.145	-.128	-.073	-.036	-.023	.044	.100
	.350	.093	.047	-.003	-.043	-.090	-.127	-.113	-.067	-.036	-.026	.026	.070
	.450	.059	.023	-.018	-.053	-.091	-.121	-.110	-.072	-.045	-.037	.004	.040
	.550	.032	.002	-.034	-.065	-.096	-.121	-.111	-.082	-.059	-.051	-.018	.013
	.650	.012	-.008	-.034	-.060	-.084	-.105	-.096	-.073	-.055	-.049	-.026	-.002
	.750	.003	-.006	-.030	-.046	-.061	-.076	-.071	-.055	-.042	-.039	-.024	-.010
	.850	.018	.021	.007	0	-.006	-.014	-.008	-.004	.003	.004	.007	.008
	.925	.034	.052	.045	.045	.050	.047	.048	.045	.047	.046	.039	.028
	[a].975	.078	.089	.087	.086	.096	.093	.085	.084	.081	.085	.080	.068
	[a]1.000	.110	.114	.114	.113	.121	.117	.106	.107	.102	.105	[b].111	[b].095

[a]No orifice.

[b]Lower surface only.

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TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-307.00 PROPELLER BLADE SECTION (x = 0.45) - Continued

(e) $M = 0.56$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.227	2.243	2.260	2.275	2.304	2.329	2.355	2.377	2.399	2.424	2.450	2.478
	M_x	.669	.666	.664	.662	.662	.660	.658	.656	.656	.654	.652	.652
	α_x'	1.71	1.52	1.33	1.16	.83	.56	.28	.04	-.19	-.45	-.72	-.99
	$\Delta\beta$	.39	.37	.35	.32	.27	.22	.16	.10	.04	-.04	-.13	-.23
	α_i	1.14	1.10	1.03	.97	.89	.80	.69	.61	.54	.44	.35	.27
	c_n	.4816	.4629	.4368	.4110	.3774	.3387	.2923	.2597	.2297	.1861	.1497	.1158
	c_m	-.0504	-.0520	-.0524	-.0558	-.0586	-.0624	-.0630	-.0654	-.0571	-.0637	-.0651	-.0639
	c_c												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.117	1.116	1.115	1.114	1.114	1.114	1.113	1.112	1.112	1.111	1.111	1.111
	.025	-.623	-.586	-.518	-.426	-.327	-.206	-.113	-.057	.035	.116	.189	.259
	.050	-.665	-.636	-.581	-.511	-.437	-.345	-.273	-.228	-.156	-.094	-.035	.026
	.100	-.578	-.560	-.522	-.475	-.420	-.357	-.305	-.273	-.218	-.171	-.128	-.078
	.200	-.575	-.560	-.530	-.499	-.459	-.419	-.381	-.357	-.317	-.284	-.250	-.212
	.300	-.540	-.529	-.504	-.481	-.450	-.422	-.392	-.373	-.344	-.318	-.294	-.260
	.400	-.516	-.507	-.486	-.470	-.447	-.425	-.404	-.386	-.363	-.344	-.324	-.295
	.500	-.522	-.513	-.463	-.480	-.459	-.447	-.429	-.415	-.397	-.382	-.366	-.340
	.600	-.471	-.467	-.456	-.450	-.436	-.432	-.419	-.407	-.395	-.385	-.376	-.353
	.700	-.390	-.390	-.383	-.392	-.387	-.387	-.380	-.372	-.363	-.360	-.353	-.337
	.800	-.266	-.270	-.268	-.279	-.280	-.297	-.303	-.303	-.301	-.304	-.300	-.289
	.900	-.054	-.063	-.062	-.084	-.088	-.098	-.103	-.102	-.108	-.115	-.120	-.115
	.950	.082	.078	.084	.070	.070	.060	.054	.053	.045	.034	.028	.026
Lower surface	.0375	.241	.219	.195	.141	.095	.033	-.051	-.086	-.164	-.241	-.318	-.400
	.075	.194	.150	.134	.092	.060	.001	-.046	-.069	-.121	-.174	-.221	-.257
	.150	.116	.105	.095	.063	.040	-.002	-.033	-.049	-.084	-.121	-.152	-.178
	.250	.084	.074	.068	.042	.027	-.005	-.029	-.040	-.065	-.094	-.115	-.134
	.350	.057	.050	.046	.025	.016	-.011	-.030	-.038	-.059	-.080	-.099	-.115
	.450	.031	.024	.023	.004	-.003	-.024	-.041	-.045	-.060	-.080	-.096	-.107
	.550	.006	-.001	-.001	-.018	-.022	-.040	-.054	-.057	-.073	-.089	-.101	-.109
	.650	-.008	-.013	-.010	-.024	-.025	-.038	-.049	-.051	-.060	-.075	-.085	-.088
	.750	-.008	-.012	-.009	-.016	-.014	-.024	-.032	-.032	-.040	-.049	-.056	-.056
	.850	.016	.013	.021	.015	.022	.019	.014	.018	.011	.005	.005	.007
	.925	.043	.043	.052	.056	.070	.066	.065	.070	.069	.068	.071	.076
	[a].975	.075	.082	.089	.091	.117	.111	.110	.111	.114	.114	.122	.133
	[a]1.000	[b].093	[b].102	[b].115	[b].111	.143	.134	.132	.133	.139	.139	.150	.162

[a]No orifice.

[b]Lower surface only.

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TABLE 4.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-307.00 PROPELLER BLADE SECTION ($x = 0.45$) – Continued

(f) $M = 0.58$; $\beta_{0,75R} = 45^{\circ}$.

	J	2.230	2.234	2.270	2.286	2.313	2.342	2.363	2.390	2.406	2.436	2.445	2.462
	M_x	.692	.686	.689	.684	.683	.684	.680	.681	.677	.679	.672	.674
	α_r'	1.68	1.62	1.21	1.03	.73	.42	.19	–.10	–.26	–.57	–.66	–.84
	$\Delta\beta$	.54	.53	.40	.35	.26	.15	.07	–.02	–.07	–.18	–.22	–.27
	α_i	1.11	1.09	.98	.93	.85	.72	.66	.52	.48	.37	.35	.29
	c_n	.4665	.4590	.4113	.3935	.3594	.3061	.2787	.2203	.2039	.1597	.1474	.1239
	c_m	–.0565	–.0566	–.0616	–.0646	–.0652	–.0677	–.0687	–.0677	–.0669	–.0674	–.0670	–.0678
	c_o												
	o/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.126	1.124	1.125	1.123	1.123	1.123	1.121	1.122	1.120	1.121	1.118	1.119
	.025	–.539	–.526	–.365	–.315	–.228	–.107	–.063	.067	.109	.184	.217	.253
	.050	–.619	–.604	–.479	–.440	–.369	–.276	–.239	–.137	–.101	–.038	–.014	.017
	.100	–.554	–.545	–.457	–.429	–.379	–.312	–.283	–.210	–.180	–.131	–.113	–.090
	.200	–.567	–.559	–.497	–.479	–.444	–.393	–.371	–.320	–.295	–.259	–.244	–.226
	.300	–.538	–.532	–.487	–.473	–.446	–.407	–.389	–.352	–.330	–.298	–.290	–.276
	.400	–.517	–.513	–.478	–.471	–.450	–.419	–.402	–.376	–.358	–.330	–.324	–.312
	.500	–.527	–.525	–.493	–.486	–.471	–.447	–.434	–.414	–.397	–.374	–.370	–.360
	.600	–.477	–.477	–.463	–.462	–.452	–.435	–.425	–.414	–.400	–.382	–.381	–.374
	.700	–.395	–.399	–.400	–.408	–.404	–.392	–.386	–.382	–.371	–.358	–.359	–.355
	.800	–.267	–.273	–.283	–.291	–.298	–.304	–.307	–.316	–.309	–.300	–.304	–.303
	.900	–.051	–.058	–.077	–.089	–.094	–.096	–.100	–.113	–.110	–.111	–.118	–.121
	.950	.090	.086	.079	.070	.066	.063	.058	.044	.044	.039	.033	.028
Lower surface	.0375	.210	.198	.121	.087	.035	–.044	–.079	–.202	–.236	–.303	–.350	–.404
	.075	.148	.137	.079	.052	.015	–.039	–.064	–.151	–.171	–.212	–.238	–.262
	.150	.103	.095	.055	.036	.009	–.029	–.046	–.108	–.119	–.143	–.164	–.182
	.250	.074	.068	.038	.022	.003	–.023	–.037	–.084	–.090	–.108	–.124	–.139
	.350	.050	.044	.024	.012	–.004	–.027	–.037	–.075	–.081	–.095	–.110	–.122
	.450	.026	.020	.005	–.006	–.019	–.035	–.044	–.075	–.079	–.092	–.101	–.113
	.550	0	–.004	–.018	–.026	–.036	–.050	–.058	–.087	–.090	–.098	–.109	–.116
	.650	–.011	–.016	–.022	–.027	–.036	–.045	–.049	–.074	–.075	–.079	–.090	–.095
	.750	–.009	–.013	–.013	–.018	–.021	–.029	–.032	–.051	–.050	–.052	–.060	–.059
	.850	.017	.014	.023	.021	.021	.020	.016	.004	.006	.009	.003	.003
	.925	.050	.047	.066	.066	.069	.071	.070	.064	.068	.076	.071	.072
	[a].975	.092	.086	.108	.107	.109	.111	.119	.118	.118	.126	.126	.120
	[a]1.000	.122	.117	.132	.130	.130	.133	.140	.150	.143	.153	.150	.142

[a]No orifice.

TABLE 4.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-307.00 PROPELLER BLADE SECTION ($x = 0.45$) – Continued

(g) $M = 0.60$; $\beta_{0.75R} = 45^{\circ}$.

J	2.208	2.235	2.244	2.270	2.306	2.313	2.332	2.356	2.366	2.377	2.403	2.426
M_x	.716	.714	.711	.708	.712	.708	.707	.708	.704	.702	.702	.698
α_x'	1.93	1.61	1.51	1.21	.81	.73	.52	.27	.16	.04	–.23	–.47
$\Delta\beta$	.54	.44	.41	.31	.17	.14	.07	–.04	–.07	–.11	–.22	–.30
α_i	1.16	1.08	1.02	.97	.77	.74	.65	.59	.54	.48	.39	.31
c_n	.4868	.4548	.4313	.4110	.3258	.3145	.2765	.2503	.2303	.2039	.1658	.1323
c_m	–.0494	–.0529	–.0552	–.0554	–.0588	–.0601	–.0612	–.0582	–.0566	–.0566	–.0578	–.0574
c_o	–.0036											
	c/b	Pressure coefficient, P										
Upper surface	[a]0.000	1.135	1.135	1.134	1.132	1.134	1.132	1.132	1.132	1.131	1.130	1.130	1.129
	.025	–.587	–.485	–.421	–.350	–.184	–.152	–.087	.012	.026	.075	.158	.211
	.050	–.670	–.583	–.513	–.458	–.327	–.301	–.250	–.187	–.157	–.118	–.050	–.010
	.100	–.599	–.538	–.489	–.450	–.355	–.336	–.298	–.250	–.227	–.197	–.144	–.112
	.200	–.627	–.575	–.539	–.509	–.440	–.426	–.397	–.357	–.342	–.320	–.278	–.255
	.300	–.594	–.552	–.524	–.502	–.451	–.441	–.415	–.383	–.372	–.354	–.318	–.302
	.400	–.564	–.530	–.509	–.492	–.454	–.445	–.426	–.399	–.389	–.375	–.345	–.334
	.500	–.572	–.545	–.533	–.519	–.491	–.485	–.469	–.446	–.439	–.428	–.403	–.395
	.600	–.508	–.492	–.486	–.479	–.464	–.461	–.449	–.432	–.426	–.419	–.400	–.395
	.700	–.410	–.403	–.405	–.403	–.399	–.398	–.394	–.379	–.379	–.377	–.361	–.362
	.800	–.262	–.263	–.273	–.275	–.280	–.282	–.283	–.275	–.279	–.280	–.272	–.279
	.900	–.030	–.033	–.041	–.047	–.055	–.060	–.063	–.060	–.068	–.073	–.073	–.083
	.950	.093	.096	.092	.092	.088	.084	.081	.085	.078	.075	.074	.064
Lower surface	.0375	.221	.180	.135	.099	–.003	–.027	–.073	–.119	–.166	–.216	–.288	–.364
	.075	.152	.122	.088	.063	–.011	–.029	–.062	–.090	–.124	–.158	–.203	–.248
	.150	.103	.084	.059	.041	–.011	–.023	–.047	–.066	–.091	–.115	–.142	–.176
	.250	.074	.061	.044	.030	–.010	–.020	–.037	–.050	–.070	–.087	–.106	–.135
	.350	.050	.040	.025	.014	–.017	–.025	–.039	–.047	–.067	–.082	–.097	–.122
	.450	.024	.019	.007	–.001	–.028	–.036	–.049	–.056	–.071	–.085	–.097	–.116
	.550	–.005	–.008	–.017	–.024	–.046	–.052	–.063	–.067	–.081	–.092	–.100	–.117
	.650	–.017	–.018	–.024	–.029	–.046	–.050	–.059	–.060	–.074	–.083	–.087	–.103
	.750	–.021	–.018	–.023	–.024	–.035	–.039	–.044	–.045	–.055	–.063	–.064	–.075
	.850	.007	.013	.012	.013	.004	.007	.001	.005	–.002	–.008	–.005	–.013
	.925	.036	.046	.047	.050	.050	.050	.048	.054	.046	.044	.050	.045
	[a].975	.066	.091	.088	.087	.091	.100	.091	.100	.090	.094	.093	.089
	[a]1.000	[b].086	[b].125	[b].115	[b].115	[b].124	.147	.122	.136	.125	.128	.125	.120

[a]No orifice.
[b]Lower surface only.

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TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-307.00 PROPELLER BLADE SECTION (x = 0.45) - Concluded

(h) M = 0.65; $\beta_{0.75R}$ = 45°.

	J	2.169	2.198	2.210	2.229	2.253	2.263	2.275	2.290	2.291	2.311	2.331	2.353	2.375
	M_x	.775	.775	.772	.769	.770	.767	.766	.764	.758	.757	.756	.754	.748
	α_x'	2.40	2.05	1.91	1.68	1.41	1.29	1.16	.99	.98	.75	.54	.30	.07
	$\Delta\beta$	.20	.13	.10	.07	.02	0	-.03	-.05	-.06	-.09	-.11	-.13	-.15
	α_1	1.25	1.17	1.12	1.07	.96	.91	.85	.77	.73	.66	.59	.52	.42
	c_n	.5232	.4942	.4729	.4490	.4058	.3819	.3597	.3268	.3065	.2781	.2506	.2203	.1774
	c_m	-.0654	-.0649	-.0646	-.0644	-.0650	-.0655	-.0639	-.0646	-.0668	-.0669	-.0660	-.0645	-.0650
	c_o	-.0012	-.0001	.0015	.0026	.0047	.0052	.0059	.0070	.0078	.0087	.0104	.0111	.0132
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.160	1.160	1.158	1.157	1.158	1.156	1.156	1.155	1.153	1.152	1.152	1.151	1.149
	.025	-.426	-.359	-.325	-.275	-.202	-.168	-.126	-.083	-.061	-.015	.050	.099	.167
	.050	-.617	-.542	-.508	-.458	-.394	-.364	-.328	-.290	-.271	-.230	-.173	-.130	-.071
	.100	-.569	-.517	-.505	-.467	-.418	-.393	-.368	-.337	-.323	-.290	-.247	-.212	-.167
	.200	-.664	-.607	-.599	-.562	-.520	-.497	-.475	-.446	-.436	-.406	-.372	-.343	-.307
	.300	-.676	-.617	-.604	-.571	-.536	-.515	-.499	-.473	-.465	-.439	-.411	-.387	-.356
	.400	-.696	-.644	-.634	-.592	-.558	-.539	-.524	-.499	-.492	-.488	-.445	-.422	-.396
	.500	-.738	-.684	-.677	-.640	-.611	-.589	-.575	-.550	-.545	-.518	-.498	-.475	-.454
	.600	-.687	-.636	-.635	-.602	-.579	-.557	-.548	-.527	-.525	-.504	-.490	-.472	-.456
	.700	-.461	-.439	-.465	-.453	-.452	-.448	-.449	-.437	-.441	-.430	-.426	-.416	-.407
	.800	-.274	-.258	-.289	-.285	-.290	-.289	-.296	-.288	-.296	-.293	-.294	-.293	-.295
	.900	-.036	-.017	-.046	-.043	-.046	-.049	-.057	-.055	-.061	-.063	-.069	-.073	-.082
	.950	.096	.118	.095	.099	.097	.098	.093	.095	.088	.089	.089	.080	.072
Lower surface	.0375	.189	.182	.121	.099	.051	.029	-.009	-.037	-.065	-.100	-.161	-.211	-.291
	.075	.127	.126	.075	.061	.023	.010	-.021	-.040	-.061	-.084	-.124	-.158	-.213
	.150	.084	.090	.045	.037	.011	.002	-.021	-.034	-.051	-.065	-.094	-.116	-.150
	.250	.049	.057	.018	.014	-.006	-.012	-.030	-.035	-.048	-.059	-.079	-.097	-.122
	.350	.028	.040	.004	.003	-.015	-.019	-.034	-.041	-.052	-.060	-.077	-.089	-.113
	.450	.003	.017	-.016	-.017	-.031	-.032	-.045	-.051	-.061	-.067	-.078	-.092	-.110
	.550	-.033	-.019	-.049	-.046	-.058	-.059	-.070	-.075	-.084	-.088	-.098	-.109	-.123
	.650	-.046	-.029	-.056	-.050	-.058	-.059	-.069	-.072	-.078	-.081	-.088	-.097	-.109
	.750	-.047	-.026	-.050	-.043	-.049	-.045	-.052	-.054	-.063	-.061	-.066	-.072	-.081
	.850	-.015	.008	-.011	-.003	-.005	.001	-.005	-.006	-.012	-.010	-.011	-.014	-.019
	.925	.024	.050	.034	.045	.045	.050	.047	.049	.042	.045	.046	.048	.046
	[a].975	.067	.104	.090	.098	.098	.096	.092	.100	.092	.096	.099	.098	.097
	[a]1.000	[b].090	[b].137	[b].126	[b].129	.129	.124	.125	.132	.121	.126	.134	.126	.123

[a]No orifice.
[b]Lower surface only.

NACA

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-305.50 PROPELLER BLADE SECTION (x = 0.60)

(a) N = 1140 rpm; $\beta_{0.75R}$ = 45°.

	J	1.889	1.948	2.032	2.116	2.205	2.293	2.382	2.467	2.558	2.508	2.431	2.352	2.264	2.158	2.083	1.990	1.903
	M_x	.459	.467	.477	.490	.501	.514	.525	.537	.550	.542	.533	.521	.510	.496	.484	.475	.464
	α_x'	6.34	5.46	4.25	3.10	1.93	.82	-.24	-1.22	-2.21	-1.67	-.81	.11	1.18	2.54	3.54	4.85	6.13
	$\Delta\beta$	1.27	1.13	.94	.75	.55	.37	.14	-.06	-.27	-.15	.03	.22	.43	.66	.83	1.03	1.24
	α_1	2.01	1.90	1.63	1.36	1.03	.74	.51	.22	0	.13	.34	.59	.84	1.15	1.46	1.79	1.97
	c_n	.7813	.7413	.6381	.5335	.4052	.2935	.2026	.0868	.0013	.0510	.1352	.2274	.3310	.4529	.5729	.6994	.7645
	c_m	-.0285	-.0306	-.0429	-.0487	-.0457	-.0453	-.0501	-.0494	-.0483	-.0492	-.0492	-.0482	-.0438	-.0472	-.0475	-.0380	-.0300
	c_o																	
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.054	1.056	1.058	1.061	1.064	1.067	1.070	1.074	1.078	1.075	1.073	1.069	1.066	1.063	1.052	1.058	1.056
	.025	-1.616	-2.508	-2.121	-1.377	-.777	-.448	-.165	.082	.269	.176	-.008	-.251	-.554	-.889	-1.685	-2.317	-1.733
	.050	-1.636	-1.927	-1.600	-.984	-.739	-.527	-.324	-.142	.013	-.067	-.208	-.385	-.591	-.837	-1.078	-1.880	-1.739
	.100	-1.616	-1.404	-.952	-.825	-.650	-.491	-.356	-.228	-.112	-.172	-.277	-.397	-.527	-.700	-.849	-1.142	-1.650
	.200	-1.321	-.936	-.788	-.710	-.592	-.484	-.391	-.310	-.231	-.269	-.341	-.419	-.504	-.616	-.730	-.833	-1.163
	.300	-.944	-.795	-.745	-.683	-.594	-.518	-.446	-.385	-.323	-.351	-.407	-.465	-.527	-.606	-.695	-.758	-.825
	.400	-.750	-.716	-.686	-.636	-.568	-.506	-.448	-.404	-.354	-.374	-.420	-.465	-.508	-.570	-.648	-.695	-.701
	.500	-.649	-.660	-.640	-.599	-.547	-.497	-.452	-.419	-.378	-.394	-.428	-.462	-.494	-.541	-.608	-.643	-.634
	.600	-.575	-.596	-.594	-.562	-.521	-.482	-.450	-.427	-.396	-.407	-.434	-.458	-.476	-.512	-.566	-.589	-.571
	.700	-.510	-.541	-.546	-.521	-.493	-.468	-.446	-.433	-.412	-.417	-.437	-.449	-.453	-.476	-.524	-.534	-.509
	.800	-.422	-.440	-.449	-.432	-.415	-.400	-.389	-.385	-.372	-.374	-.388	-.390	-.384	-.395	-.439	-.438	-.419
	.900	-.321	-.315	-.313	-.295	-.274	-.267	-.265	-.272	-.269	-.265	-.268	-.260	-.247	-.253	-.292	-.303	-.301
	.950	-.256	-.225	-.209	-.189	-.161	-.147	-.141	-.150	-.150	-.145	-.144	-.138	-.132	-.142	-.193	-.207	-.231
Lower surface	.0375	.411	.378	.294	.213	.057	-.107	-.263	-.479	-.658	-.557	-.385	-.204	-.022	.158	.250	.349	.415
	.075	.255	.245	.182	.120	.006	-.111	-.217	-.364	-.489	-.411	-.302	-.176	-.049	.084	.145	.222	.256
	.150	.157	.134	.080	.036	-.044	-.120	-.191	-.287	-.372	-.318	-.247	-.162	-.070	.019	.058	.115	.164
	.250	.064	.046	.003	-.030	-.095	-.152	-.193	-.274	-.329	-.293	-.242	-.171	-.113	-.039	-.011	.035	.072
	.350	.009	-.004	-.035	-.059	-.105	-.147	-.182	-.241	-.285	-.252	-.215	-.165	-.111	-.058	-.044	-.009	.021
	.450	-.040	-.049	-.074	-.091	-.133	-.165	-.191	-.241	-.275	-.250	-.219	-.176	-.136	-.087	-.081	-.054	-.028
	.550	-.078	-.081	-.096	-.108	-.135	-.161	-.178	-.218	-.245	-.223	-.200	-.167	-.132	-.096	-.098	-.080	-.061
	.650	-.122	-.116	-.130	-.135	-.164	-.179	-.191	-.224	-.243	-.223	-.208	-.182	-.155	-.125	-.128	-.113	-.106
	.750	-.152	-.142	-.148	-.150	-.171	-.179	-.181	-.205	-.218	-.205	-.193	-.178	-.157	-.133	-.141	-.134	-.134
	.850	-.171	-.153	-.148	-.143	-.152	-.152	-.145	-.168	-.168	-.159	-.155	-.143	-.132	-.121	-.133	-.139	-.150
	.925	-.204	-.172	-.145	-.135	-.152	-.150	-.130	-.140	-.136	-.133	-.134	-.134	-.132	-.121	-.128	-.144	-.174
	[a].975	-.229	-.184	-.141	-.118	-.143	-.145	-.120	-.122	-.112	-.117	-.110	-.125	-.121	-.110	-.097	-.116	-.180
	[a]1.000	[b]-.239	[b]-.185	[b]-.140	-.105	[b]-.130	[b]-.137	[b]-.110	[b]-.113	[b]-.100	[b]-.104	[b]-.095	[b]-.115	[b]-.110	[b]-.097	-.077	[b]-.092	[b]-.180

[a]No orifice.

[b]Lower surface only.

NACA

TABLE 5.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-305.50 PROPELLER BLADE SECTION (x = 0.60) – Continued

(b) N = 1350 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	1.968	2.035	2.084	2.176	2.239	2.328	2.398	2.463	2.517	2.499	2.428	2.298	2.196	2.141	2.067	2.008
	M_x	.554	.566	.574	.588	.597	.614	.625	.638	.646	.642	.629	.607	.591	.581	.570	.561
	α_x'	5.16	4.21	3.53	2.30	1.49	.40	-.43	-1.17	-1.77	-1.57	-.78	.76	2.04	2.76	3.76	4.59
	$\Delta\beta$	1.60	1.39	1.22	.91	.68	.38	.12	-.18	-.46	-.35	-.02	.47	.84	1.02	1.28	1.48
	α_i	2.12	1.91	1.67	1.27	1.05	.73	.53	.28	.07	.15	.40	.84	1.21	1.41	1.78	2.02
	c_n	.8290	.7490	.6574	.5019	.4129	.2890	.2084	.1100	.0284	.0577	.1568	.3332	.4748	.5555	.7000	.7923
	c_m	-.0313	-.0375	-.0446	-.0487	-.0497	-.0534	-.0553	-.0592	-.0563	-.0582	-.0583	-.0522	-.0453	-.0488	-.0388	-.0323
	c_c																
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.079	1.082	1.084	1.089	1.092	1.097	1.101	1.105	1.109	1.107	1.102	1.095	1.090	1.087	1.083	1.081
	.025	-2.235	-2.201	-1.863	-.833	-.598	-.213	.003	.249	.404	.358	.143	-.339	-.752	-1.155	-2.034	-2.357
	.050	-1.723	-1.834	-1.253	-.798	-.609	-.342	-.158	.008	.138	.098	-.009	-.428	-.733	-.899	-1.596	-1.838
	.100	-1.483	-1.176	-.842	-.642	-.511	-.334	-.210	-.085	.011	-.018	-.149	-.383	-.592	-.724	-.964	-1.373
	.200	-1.003	-.757	-.669	-.545	-.465	-.348	-.268	-.183	-.114	-.138	-.228	-.378	-.516	-.598	-.692	-.861
	.300	-.723	-.632	-.618	-.530	-.476	-.391	-.333	-.267	-.215	-.233	-.303	-.412	-.510	-.568	-.634	-.673
	.400	-.592	-.578	-.555	-.489	-.449	-.386	-.341	-.291	-.249	-.263	-.319	-.399	-.473	-.517	-.567	-.583
	.500	-.512	-.516	-.507	-.453	-.425	-.379	-.348	-.309	-.275	-.287	-.331	-.387	-.443	-.475	-.512	-.516
	.600	-.440	-.454	-.452	-.418	-.400	-.370	-.350	-.319	-.296	-.305	-.340	-.371	-.410	-.431	-.455	-.450
	.700	-.366	-.388	-.398	-.375	-.369	-.353	-.345	-.326	-.311	-.317	-.340	-.328	-.373	-.384	-.394	-.381
	.800	-.266	-.281	-.290	-.279	-.282	-.281	-.283	-.272	-.267	-.271	-.282	-.271	-.280	-.283	-.284	-.276
	.900	-.136	-.127	-.123	-.111	-.118	-.128	-.136	-.136	-.137	-.138	-.140	-.114	-.112	-.112	-.123	-.133
	.950	-.056	-.028	-.012	.005	.003	.003	0	0	-.005	-.007	-.005	.012	.007	0	-.014	-.040
Lower surface	.0375	.599	.543	.464	.318	.190	-.011	-.174	-.357	-.509	-.474	-.265	.070	.280	.386	.504	.570
	.075	.463	.415	.347	.237	.139	-.002	-.112	-.234	-.348	-.315	-.176	.057	.207	.289	.380	.439
	.150	.344	.307	.255	.172	.101	.003	-.075	-.151	-.231	-.208	-.115	.048	.152	.209	.282	.325
	.250	.248	.214	.168	.103	.048	-.023	-.075	-.135	-.192	-.176	-.112	.007	.088	.133	.191	.230
	.350	.198	.176	.140	.089	.044	-.011	-.054	-.098	-.143	-.128	-.080	.016	.077	.113	.160	.187
	.450	.143	.124	.092	.050	.013	-.032	-.066	-.100	-.135	-.125	-.086	-.009	.040	.071	.109	.135
	.550	.114	.106	.082	.048	.015	-.020	-.047	-.073	-.103	-.095	-.064	0	.040	.063	.095	.109
	.650	.067	.058	.035	.011	-.016	-.042	-.061	-.080	-.103	-.095	-.075	-.027	.005	.021	.048	.062
	.750	.036	.032	.018	0	-.021	-.037	-.047	-.060	-.075	-.071	-.056	-.025	-.004	.008	.026	.038
	.850	.020	.028	.019	.011	-.001	-.006	-.006	-.013	-.021	-.020	-.014	0	.010	.016	.028	.026
	.925	-.007	.004	-.002	0	-.005	.005	.012	.015	.015	.015	.010	.005	.001	-.002	.001	0
	[a].975	0	.001	0	.015	.002	.023	.024	.033	.027	.040	.026	.019	.008	-.008	-.015	-.020
	[a]1.000	0	[b]0	[b].005	[b].010	[b].010	[b].035	[b].029	[b].044	[b].031	[b].055	[b].037	[b].030	[b].015	[b]0	[b]-.020	[b]-.025

[a]No orifice.
[b]Lower surface only.

TABLE 5.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-305.50 PROPELLER BLADE SECTION (x = 0.60) – Continued

(c) N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.158	2.203	2.269	2.323	2.377	2.457	2.500	2.477	2.420	2.360	2.292	2.229	2.193
	M_r	.650	.658	.670	.681	.691	.707	.714	.708	.699	.686	.673	.661	.655
	α_r	2.54	1.95	1.12	.46	–.18	–1.10	–1.58	–1.33	–.69	.02	.83	1.62	2.08
	$\Delta\beta$	1.31	1.06	.72	.48	.14	–.51	–.98	–.72	–.13	.24	.63	.93	1.12
	α_i	1.61	1.32	1.08	.84	.60	.25	.07	.15	.37	.67	.95	1.21	1.41
	c_n	.6303	.5187	.4258	.3316	.2390	.0987	.0271	.0600	.1452	.2671	.3752	.4768	.5535
	c_m	–.0482	–.0526	–.0532	–.0572	–.0650	–.0633	–.0610	–.0620	–.0642	–.0615	–.0541	–.0542	–.0528
	c_c													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.110	1.113	1.117	1.122	1.126	1.132	1.135	1.132	1.129	1.124	1.118	1.114	1.112
	.025	–1.747	–.791	–.504	–.221	.038	.337	.458	.393	.219	–.034	–.367	–.672	–.863
	.050	–.949	–.818	–.569	–.363	–.168	.076	.185	.128	–.020	–.219	–.465	–.697	–.892
	.100	–.790	–.656	–.484	–.352	–.216	–.037	.048	.003	–.111	–.255	–.416	–.577	–.708
	.200	–.659	–.566	–.454	–.372	–.281	–.155	–.091	–.126	–.208	–.307	–.410	–.515	–.597
	.300	–.622	–.558	–.476	–.420	–.356	–.255	–.205	–.233	–.297	–.373	–.447	–.521	–.574
	.400	–.558	–.517	–.453	–.416	–.366	–.289	–.248	–.270	–.321	–.379	–.430	–.487	–.525
	.500	–.507	–.479	–.429	–.405	–.371	–.313	–.279	–.297	–.336	–.381	–.415	–.457	–.483
	.600	–.453	–.437	–.403	–.393	–.372	–.330	–.307	–.320	–.349	–.378	–.394	–.423	–.438
	.700	–.393	–.389	–.367	–.370	–.365	–.339	–.322	–.332	–.349	–.366	–.364	–.381	–.385
	.800	–.275	–.281	–.269	–.283	–.290	–.279	–.270	–.276	–.283	–.289	–.271	–.278	–.273
	.900	–.087	–.096	–.091	–.108	–.119	–.123	–.124	–.125	–.121	–.116	–.094	–.096	–.087
	.950	.025	.024	.035	.029	.026	.018	.014	.016	.020	.026	.034	.028	.027
Lower surface	.0375	.440	.314	.181	.030	–.168	–.422	–.498	–.462	–.299	–.091	.113	.256	.367
	.075	.335	.238	.142	.033	–.081	–.274	–.366	–.323	–.192	–.049	.093	.197	.280
	.150	.256	.180	.112	.033	–.046	–.175	–.246	–.211	–.120	–.025	.074	.150	.213
	.250	.174	.116	.066	.012	–.049	–.146	–.199	–.174	–.110	–.031	.040	.091	.141
	.350	.153	.102	.064	.015	–.028	–.103	–.145	–.125	–.074	–.017	.040	.083	.125
	.450	.106	.062	.030	–.008	–.044	–.103	–.138	–.121	–.080	–.032	.014	.047	.081
	.550	.098	.062	.038	.007	–.020	–.071	–.098	–.086	–.052	–.013	.022	.050	.078
	.650	.053	.022	.004	–.020	–.038	–.076	–.097	–.088	–.064	–.035	–.007	.012	.038
	.750	.033	.011	.001	–.016	–.026	–.050	–.066	–.060	–.043	–.025	–.009	.003	.024
	.850	.042	.026	.022	.018	.017	.002	–.005	–.003	.005	.017	.019	.022	.035
	.925	.022	.016	.024	.029	.036	.037	.037	.033	.033	.032	.022	.015	.021
	[a].975	.011	.010	.027	.035	.046	.057	.057	.055	.047	.044	.037	.030	.030
	[a]1.000	[b].010	[b].015	[b].030	[b].040	[b].054	[b].065	.065	.067	[b].054	[b].053	[b].045	[b].047	[b].041

[a]No orifice.
[b]Lower surface only.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-305.50 PROPELLER BLADE SECTION (x = 0.60) - Continued

(d) N = 1600 rpm; $\beta_{0.75R}$ = 45°.

	J	2.205	2.258	2.300	2.347	2.392	2.439	2.445	2.418	2.364	2.322	2.281	2.235
	M_x	.703	.716	.723	.734	.743	.753	.752	.747	.737	.726	.719	.709
	α_x'	1.93	1.26	.74	.17	-.36	-.90	-.97	-.66	-.03	.47	.97	1.54
	$\Delta\beta$	1.34	.97	.70	.35	-.14	-.74	-.82	-.47	.19	.54	.82	1.12
	α_i	1.47	1.24	1.00	.77	.48	.22	.13	.28	.66	.84	1.08	1.35
	c_n	.5800	.4923	.3955	.3035	.1884	.0868	.0526	.1110	.2594	.3339	.4284	.5323
	c_m	-.0574	-.0565	-.0605	-.0674	-.0677	-.0671	-.0665	-.0678	-.0683	-.0651	-.0578	-.0575
	c_o												
	c/b	Pressure Coefficient, P											
Upper surface	[a]0.000	1.130	1.135	1.138	1.142	1.146	1.150	1.150	1.148	1.144	1.140	1.137	1.133
	.025	-.831	-.634	-.329	-.066	.198	.377	.421	.328	.039	-.170	-.428	-.729
	.050	-.993	-.716	-.467	-.257	-.045	.110	.151	.065	-.175	-.338	-.541	-.833
	.100	-.748	-.594	-.434	-.290	-.132	-.013	.017	-.049	-.228	-.346	-.479	-.671
	.200	-.647	-.544	-.441	-.348	-.236	-.147	-.123	-.176	-.306	-.385	-.474	-.595
	.300	-.634	-.560	-.493	-.423	-.335	-.263	-.242	-.285	-.390	-.450	-.513	-.598
	.400	-.579	-.525	-.481	-.429	-.362	-.305	-.290	-.324	-.404	-.449	-.490	-.552
	.500	-.528	-.489	-.463	-.429	-.381	-.337	-.327	-.352	-.411	-.442	-.468	-.509
	.600	-.473	-.446	-.435	-.420	-.390	-.362	-.353	-.371	-.410	-.426	-.437	-.462
	.700	-.411	-.395	-.396	-.397	-.383	-.369	-.365	-.376	-.393	-.399	-.392	-.403
	.800	-.287	-.278	-.289	-.301	-.304	-.301	-.302	-.305	-.302	-.298	-.281	-.284
	.900	-.087	-.081	-.092	-.108	-.116	-.123	-.127	-.125	-.111	-.104	-.085	-.085
	.950	.032	.041	.040	.035	.031	.024	.020	.025	.034	.036	.042	.036
Lower surface	.0375	.341	.241	.093	-.061	-.269	-.423	-.576	-.406	-.134	.003	.146	.288
	.075	.257	.188	.081	-.029	-.172	-.317	-.348	-.279	-.080	.014	.118	.222
	.150	.199	.148	.068	-.009	-.107	-.208	-.243	-.180	-.044	.022	.097	.171
	.250	.130	.090	.029	-.022	-.101	-.174	-.200	-.157	-.050	-.004	.050	.108
	.350	.115	.085	.035	-.011	-.069	-.129	-.152	-.113	-.033	.006	.052	.098
	.450	.073	.049	.007	-.031	-.077	-.125	-.144	-.113	-.048	-.017	.021	.059
	.550	.072	.051	.015	-.013	-.050	-.092	-.107	-.081	-.026	-.003	.026	.058
	.650	.030	.014	-.014	-.034	-.061	-.092	-.103	-.084	-.044	-.028	-.006	.021
	.750	.016	.009	-.014	-.024	-.041	-.060	-.070	-.056	-.029	-.022	-.009	.011
	.850	.030	.029	.016	.015	.009	0	-.006	.001	.013	.014	.018	.026
	.925	.017	.023	.019	.033	.037	.038	.035	.037	.036	.026	.018	.018
	[a].975	.017	.012	.028	.050	.063	.055	.068	.055	.053	.043	.033	.025
	[a]1.000	[b].028	[b].005	[b].035	[b].069	[b].080	[b].065	.089	[b].063	[b].064	[b].064	[b].045	[b].038

[a]No orifice.

[b]Lower surface only.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-305.50 PROPELLER BLADE SECTION ($x = 0.60$) - Continued

(e) $M = 0.56$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.228	2.242	2.267	2.291	2.313	2.335	2.355	2.377	2.393	2.418	2.438	2.466	2.483
	M_x	.737	.733	.733	.729	.727	.725	.723	.720	.718	.716	.712	.711	.709
	α_r	1.63	1.45	1.14	.85	.52	.31	-.07	-.18	-.37	-.66	-.89	-1.21	-1.40
	$\Delta\beta$	1.03	.93	.75	.59	.45	.30	.16	-.02	-.14	-.33	-.48	-.71	-.85
	α_i	1.39	1.31	1.17	1.02	.91	.77	.68	.59	.50	.38	.27	.14	.08
	c_n	.5477	.5168	.4639	.4035	.3610	.3045	.2697	.2329	.1994	.1513	.1087	.0558	.0313
	c_m	-.0567	-.0577	-.0575	-.0589	-.0616	-.0640	-.0636	-.0628	-.0633	-.0621	-.0629	-.0607	-.0597
	c_o													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.144	1.142	1.142	1.140	1.140	1.139	1.138	1.137	1.136	1.135	1.134	1.134	1.132
	.025	-.681	-.625	-.497	-.335	-.211	-.081	.001	.080	.140	.249	.313	.399	.436
	.050	-.844	-.741	-.613	-.478	-.378	-.272	-.205	-.141	-.094	-.002	.054	.129	.162
	.100	-.668	-.616	-.529	-.438	-.372	-.294	-.246	-.196	-.167	-.100	-.056	.003	.031
	.200	-.610	-.577	-.514	-.448	-.401	-.344	-.310	-.273	-.254	-.203	-.169	-.126	-.105
	.300	-.630	-.604	-.553	-.501	-.462	-.414	-.384	-.354	-.341	-.297	-.268	-.233	-.216
	.400	-.584	-.566	-.527	-.489	-.461	-.419	-.395	-.370	-.363	-.325	-.301	-.272	-.258
	.500	-.533	-.522	-.494	-.468	-.450	-.416	-.398	-.377	-.373	-.343	-.322	-.299	-.288
	.600	-.476	-.473	-.454	-.438	-.429	-.405	-.392	-.377	-.377	-.355	-.338	-.322	-.313
	.700	-.408	-.410	-.399	-.397	-.396	-.383	-.376	-.365	-.369	-.355	-.342	-.332	-.326
	.800	-.276	-.283	-.279	-.284	-.291	-.287	-.286	-.282	-.292	-.284	-.278	-.274	-.273
	.900	-.070	-.079	-.079	-.088	-.098	-.097	-.105	-.104	-.116	-.118	-.117	-.122	-.125
	.950	.050	.043	.047	.042	.038	.043	.037	.037	.027	.025	.024	.017	.014
Lower surface	.0375	.285	.241	.184	.103	.032	-.035	-.099	-.153	-.220	-.321	-.394	-.471	-.482
	.075	.222	.188	.147	.086	.036	-.010	-.055	-.092	-.140	-.208	-.255	-.330	-.362
	.150	.176	.148	.120	.075	.039	.008	-.025	-.050	-.086	-.131	-.162	-.215	-.240
	.250	.110	.089	.066	.031	.005	-.010	-.037	-.057	-.090	-.123	-.141	-.179	-.198
	.350	.103	.082	.065	.037	.016	.001	-.020	-.033	-.057	-.085	-.100	-.132	-.146
	.450	.065	.047	.033	.011	-.009	-.019	-.037	-.044	-.069	-.087	-.100	-.125	-.138
	.550	.065	.047	.036	.018	.003	-.002	-.018	-.025	-.045	-.062	-.070	-.092	-.102
	.650	.026	.010	.003	-.011	-.022	-.024	-.037	-.040	-.056	-.068	-.074	-.091	-.101
	.750	.017	.005	-.001	-.011	-.017	-.016	-.024	-.025	-.041	-.047	-.051	-.064	-.069
	.850	.036	.025	.022	.018	.016	.023	.018	.017	.007	.003	.003	-.007	-.011
	.925	.026	.017	.021	.020	.024	.034	.035	.040	.031	.031	.032	.029	.027
	[a].975	.038	.022	.029	.031	.035	.042	.050	.055	.049	.050	.049	.054	.053
	[ab]1.000	.051	.034	.038	.045	.047	.050	.058	.065	.062	.061	.059	.070	.066

[a]No orifice.

[b]Lower surface only.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-305.50 PROPELLER BLADE SECTION (x = 0.60) - Continued

(f) M = 0.60; $\beta_{0.75R} = 45^{\circ}$.

	J	2.222	2.230	2.261	2.266	2.294	2.316	2.341	2.354	2.379	2.394	2.405	2.418
	M_x	.794	.793	.789	.785	.782	.776	.776	.774	.776	.774	.768	.765
	α_x'	1.71	1.61	1.22	1.15	.81	.54	.24	.08	-.21	-.38	-.51	-.66
	$\Delta\beta$	.71	.65	.42	.38	.17	-.02	-.24	-.36	-.62	-.78	-.91	-1.06
	α_1	1.30	1.25	1.10	1.06	.89	.75	.58	.52	.39	.31	.24	.14
	c_n	.5142	.4910	.4323	.4165	.3516	.2952	.2281	.2081	.1558	.1235	.0948	.0571
	c_m	-.0678	-.0664	-.0701	-.0706	-.0737	-.0742	-.0718	-.0722	-.0722	-.0708	-.0690	-.0688
	c_o	-.0012	-.0003	.0032									
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.168	1.167	1.166	1.164	1.162	1.160	1.160	1.159	1.160	1.159	1.157	1.155
	.025	-.419	-.384	-.240	-.193	-.061	.034	.165	.199	.293	.331	.371	.408
	.050	-.602	-.560	-.424	-.381	-.266	-.189	-.077	-.046	.035	.066	.105	.139
	.100	-.546	-.514	-.422	-.394	-.304	-.246	-.160	-.137	-.074	-.048	-.019	.008
	.200	-.536	-.509	-.452	-.437	-.373	-.330	-.266	-.247	-.201	-.180	-.156	-.129
	.300	-.651	-.614	-.557	-.540	-.474	-.433	-.375	-.356	-.316	-.298	-.276	-.250
	.400	-.645	-.618	-.572	-.556	-.497	-.460	-.410	-.392	-.359	-.343	-.324	-.299
	.500	-.653	-.614	-.569	-.556	-.504	-.472	-.433	-.417	-.390	-.377	-.359	-.337
	.600	-.579	-.545	-.538	-.533	-.495	-.471	-.443	-.430	-.412	-.400	-.384	-.369
	.700	-.442	-.434	-.449	-.459	-.447	-.438	-.425	-.416	-.408	-.401	-.392	-.376
	.800	-.272	-.270	-.288	-.304	-.311	-.316	-.317	-.315	-.317	-.318	-.315	-.304
	.900	-.051	-.052	-.065	-.080	-.090	-.099	-.106	-.106	-.114	-.120	-.122	-.124
	.950	.058	.062	.060	.052	.053	.046	.041	.042	.036	.030	.026	.024
Lower surface	.0375	.191	.175	.092	.052	-.032	-.107	-.230	-.261	-.362	-.396	-.436	-.633
	.075	.152	.144	.082	.052	-.007	-.061	-.146	-.165	-.237	-.277	-.316	-.332
	.150	.126	.119	.074	.049	.007	-.030	-.091	-.102	-.153	-.184	-.212	-.232
	.250	.074	.071	.037	.020	-.007	-.038	-.089	-.098	-.138	-.159	-.178	-.197
	.350	.072	.069	.040	.022	-.001	-.022	-.063	-.069	-.100	-.118	-.133	-.147
	.450	.034	.034	.010	-.003	-.023	-.042	-.074	-.078	-.104	-.118	-.131	-.141
	.550	.038	.039	.021	.010	-.004	-.021	-.047	-.051	-.072	-.086	-.096	-.105
	.650	.001	.002	-.011	-.022	-.028	-.040	-.061	-.061	-.077	-.087	-.095	-.102
	.750	-.005	-.003	-.010	-.018	-.018	-.026	-.042	-.040	-.050	-.059	-.064	-.070
	.850	.019	.024	.022	.018	.022	.018	.009	.012	.008	.002	-.002	-.005
	.925	.013	.019	.026	.026	.039	.039	.036	.040	.041	.037	.035	.036
	[a].975	.038	.030	.035	.037	.049	.052	.054	.062	.064	.060	.059	.060
	[ab]1.000	.057	.040	.043	.048	.060	.060	.065	.074	.077	.073	.073	.073

[a]No orifice.

[b]Lower surface only.

NACA

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-305.50 PROPELLER BLADE SECTION (x = 0.60) - Concluded

(g) $M = 0.65$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.172	2.191	2.204	2.220	2.239	2.258	2.267	2.294	2.314	2.324	2.347	2.362	2.376
	M_x	.869	.865	.860	.855	.852	.850	.848	.848	.846	.841	.841	.835	.833
	α_x'	2.35	2.10	1.94	1.73	1.49	1.26	1.14	.81	.57	.44	.17	-.01	-.18
	$\Delta\beta$	.19	.09	.02	-.07	-.17	-.27	-.31	-.44	-.51	-.55	-.61	-.65	-.68
	α_i	1.23	1.22	1.16	1.03	.95	.78	.72	.61	.52	.45	.35	.27	.18
	c_n	.4839	.4794	.4568	.4045	.3748	.3058	.2848	.2400	.2074	.1781	.1377	.1052	.0716
	c_m	-.0947	-.0965	-.0972	-.0996	-.0957	-.0923	-.0851	-.0862	-.0852	-.0854	-.0814	-.0776	-.0780
	c_o	.0155	.0164	.0160	.0167	.0154	.0162	.0156	.0167	.0168	.0175	.0175	.0172	.0174
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.203	1.200	1.198	1.196	1.195	1.194	1.193	1.193	1.192	1.189	1.189	1.186	1.185
	.025	-.133	-.103	-.077	-.011	.027	.115	.148	.224	.266	.291	.344	.382	.404
	.050	-.355	-.327	-.304	-.241	-.206	-.126	-.097	-.031	.008	.029	.078	.113	.140
	.100	-.376	-.353	-.333	-.285	-.258	-.199	-.175	-.123	-.092	-.078	-.038	-.009	.008
	.200	-.446	-.430	-.413	-.357	-.332	-.295	-.279	-.242	-.219	-.209	-.177	-.153	-.140
	.300	-.551	-.536	-.520	-.488	-.473	-.432	-.413	-.387	-.362	-.348	-.314	-.289	-.276
	.400	-.588	-.573	-.558	-.534	-.510	-.477	-.462	-.430	-.415	-.411	-.384	-.361	-.349
	.500	-.639	-.626	-.617	-.596	-.578	-.547	-.530	-.503	-.481	-.468	-.440	-.425	-.419
	.600	-.695	-.683	-.675	-.656	-.633	-.601	-.581	-.553	-.535	-.526	-.499	-.481	-.471
	.700	-.793	-.787	-.779	-.755	-.734	-.706	-.690	-.667	-.646	-.635	-.608	-.591	-.583
	.800	-.445	-.483	-.493	-.537	-.496	-.513	-.466	-.513	-.494	-.469	-.429	-.372	-.370
	.900	-.231	-.215	-.195	-.164	-.119	-.092	-.070	-.067	-.065	-.074	-.079	-.083	-.091
	.950	-.196	-.171	-.144	-.100	-.049	-.015	.022	.028	.045	.044	-.048	.049	.045
Lower surface	.0375	.121	.092	.066	-.007	-.033	-.133	-.167	-.253	-.317	-.377	-.505	-.638	-.732
	.075	.107	.083	.063	.006	-.010	-.082	-.104	-.163	-.200	-.229	-.252	-.294	-.400
	.150	.092	.074	.059	.013	.003	-.052	-.066	-.107	-.135	-.163	-.198	-.218	-.232
	.250	.040	.026	.015	-.019	-.031	-.075	-.086	-.119	-.139	-.158	-.180	-.196	-.210
	.350	.032	.021	.013	-.020	-.024	-.063	-.071	-.097	-.114	-.131	-.147	-.160	-.172
	.450	-.008	-.015	-.023	-.050	-.052	-.087	-.092	-.116	-.128	-.140	-.153	-.161	-.172
	.550	-.013	-.020	-.023	-.048	-.049	-.078	-.080	-.100	-.108	-.118	-.127	-.132	-.140
	.650	-.065	-.067	-.067	-.086	-.082	-.108	-.105	-.119	-.123	-.128	-.132	-.134	-.140
	.750	-.089	-.085	-.080	-.092	-.083	-.102	-.096	-.102	-.100	-.101	-.101	-.099	-.103
	.850	-.089	-.075	-.063	-.064	-.049	-.062	-.049	-.048	-.039	-.036	-.033	-.030	-.031
	.925	-.147	-.124	-.100	-.083	-.057	-.058	-.039	-.028	-.010	-.003	.008	.012	.015
	[a].975	-.189	-.164	-.122	-.095	-.040	-.028	-.015	-.017	.005	.012	.056	.044	.045
	[ab]1.000	-.205	-.181	-.133	-.091	-.027	-.005	.003	-.009	.012	.017	.083	.057	.070

[a]No orifice.
[b]Lower surface only.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70)

(a) N = 1140 rpm; $\beta_{0.75R}$ = 45°.

J	1.875	1.935	1.999	2.088	2.157	2.215	2.288	2.351	2.452	2.567	2.514	2.402	2.323	2.259	2.192	2.140	2.063	1.978	1.915
M_x	.501	.508	.517	.525	.533	.541	.550	.557	.573	.587	.580	.565	.554	.544	.537	.532	.521	.512	.502
α_x'	6.55	5.66	4.73	3.48	2.56	1.79	.86	.09	-1.11	-2.42	-1.82	-.53	.43	1.23	2.09	2.78	3.83	5.03	5.95
$\Delta\beta$	1.80	1.64	1.45	1.17	.94	.74	.47	.24	-.13	-.54	-.35	.05	.34	.58	.82	.99	1.25	1.51	1.69
α_1	2.34	2.17	1.98	1.65	1.37	1.16	.82	.63	.31	-.10	.12	.47	.75	1.00	1.25	1.45	1.74	2.06	2.28
c_n	.8342	.7748	.7084	.5910	.4916	.4165	.2958	.2281	.1113	-.0365	.0429	.1694	.2697	.3626	.4497	.5194	.6213	.7368	.8155
c_m	-.0272	-.0283	-.0354	-.0439	-.0503	-.0488	-.0546	-.0553	-.0528	-.0547	-.0508	-.0530	-.0538	-.0498	-.0483	-.0465	-.0438	-.0321	-.0251
c_a																			
	o/b	Pressure coefficient, P																	
Upper surface	[a]0.000	1.064	1.066	1.069	1.071	1.073	1.075	1.078	1.080	1.085	1.089	1.086	1.082	1.079	1.076	1.074	1.072	1.069	1.067	1.064
	.025	-1.522	-1.977	-1.827	-1.402	-.900	-.671	-.304	-.118	.204	.464	.360	.052	-.223	-.477	-.775	-.998	-1.700	-1.894	-1.989
	.050	-1.532	-1.913	-1.722	-.930	-.667	-.506	-.281	-.159	.062	.268	.180	-.043	-.230	-.392	-.575	-.730	-1.246	-1.807	-1.934
	.100	-1.517	-1.518	-1.201	-.704	-.574	-.470	-.313	-.230	-.068	.094	.026	-.145	-.277	-.390	-.514	-.621	-.746	-1.352	-1.552
	.200	-1.234	-.794	-.627	-.585	-.504	-.438	-.342	-.290	-.182	-.061	-.116	-.232	-.322	-.395	-.467	-.530	-.593	-.666	-.917
	.300	-.789	-.591	-.545	-.508	-.447	-.401	-.330	-.292	-.206	-.118	-.160	-.248	-.314	-.367	-.421	-.468	-.515	-.549	-.637
	.400	-.525	-.479	-.491	-.456	-.412	-.377	-.321	-.298	-.236	-.159	-.192	-.262	-.312	-.354	-.390	-.426	-.465	-.487	-.512
	.500	-.420	-.453	-.449	-.424	-.392	-.367	-.323	-.306	-.257	-.195	-.221	-.276	-.316	-.348	-.377	-.404	-.429	-.447	-.447
	.600	-.369	-.412	-.423	-.411	-.392	-.369	-.346	-.337	-.301	-.254	-.273	-.316	-.343	-.365	-.382	-.399	-.413	-.417	-.401
	.700	-.300	-.340	-.351	-.350	-.341	-.332	-.313	-.308	-.285	-.250	-.265	-.292	-.312	-.329	-.336	-.346	-.347	-.344	-.323
	.800	-.213	-.240	-.253	-.255	-.254	-.253	-.244	-.243	-.230	-.208	-.217	-.232	-.244	-.252	-.254	-.255	-.251	-.247	-.229
	.900	-.105	-.113	-.108	-.102	-.104	-.107	-.107	-.114	-.107	-.101	-.104	-.107	-.112	-.112	-.106	-.104	-.102	-.108	-.111
	.950	-.037	-.034	-.019	.002	-.006	.006	.006	.001	-.004	0	.002	.002	0	.002	.007	.007	0	-.021	-.039
Lower surface	.0375	.650	.606	.551	.463	.348	.249	.088	-.032	-.249	-.843	-.396	-.135	.033	.161	.297	.388	.498	.575	.632
	.075	.515	.472	.422	.345	.254	.176	.056	-.025	-.182	-.397	-.277	-.101	.020	.110	.212	.293	.375	.446	.495
	.150	.386	.348	.308	.246	.177	.120	.035	-.025	-.133	-.238	-.196	-.077	.008	.070	.147	.200	.272	.326	.367
	.250	.305	.271	.240	.196	.142	.099	.048	.001	-.080	-.163	-.127	-.039	.024	.064	.116	.155	.213	.253	.285
	.350	.247	.214	.191	.151	.111	.082	.035	-.005	-.064	-.129	-.096	-.035	.016	.049	.090	.122	.169	.203	.229
	.450	.203	.176	.154	.124	.089	.060	.029	-.005	-.050	-.101	-.077	-.025	.012	.036	.075	.100	.140	.161	.188
	.550	.149	.126	.109	.086	.054	.028	-.003	-.027	-.064	-.101	-.081	-.045	-.015	.008	.042	.064	.099	.121	.138
	.650	.110	.090	.081	.065	.039	.017	-.005	-.025	-.052	-.080	-.066	-.039	-.015	.002	.029	.047	.074	.088	.101
	.750	.066	.054	.046	.038	.019	.004	-.009	-.025	-.044	-.057	-.050	-.035	-.017	-.006	.012	.024	.046	.055	.060
	.850	.042	.037	.039	.038	.028	.017	.014	.001	-.009	-.012	-.010	-.002	.008	.011	.025	.029	.044	.043	.041
	.925	.002	.009	.016	.025	.023	.017	.025	.018	.017	.019	.019	.016	.020	.015	.020	.020	.026	.017	.002
	[a].975	.002	.013	.048	.063	.060	.070	.095	.081	.078	.082	.087	.075	.071	.054	.090	.068	.080	.032	.010
	[a]1.000	.030	.042	.080	.107	.092	.124	.149	.145	.116	.122	.130	.118	.108	.098	.140	.104	.137	.050	.031

[a]No orifice.

NACA

TABLE 6.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) – Continued

(b) N = 1350 rpm; $\beta_{0.75R}$ = 45°.

J	1.988	2.057	2.125	2.200	2.274	2.362	2.432	2.510	2.480	2.405	2.340	2.257	2.177	2.109	2.044
M_x	.611	.622	.627	.639	.651	.665	.677	.689	.684	.671	.659	.646	.636	.623	.617
α_x'	4.88	3.91	2.98	1.99	1.04	-.05	-.88	-1.78	-1.44	-.56	.22	1.25	2.29	3.20	4.09
$\Delta\beta$	2.22	1.92	1.58	1.20	.78	.29	-.11	-.66	-.43	.05	.41	.88	1.32	1.67	1.98
α_i	2.36	2.15	1.75	1.42	1.07	.74	.41	.03	.19	.51	.82	1.17	1.53	1.86	2.17
c_n	.8445	.7716	.6258	.5097	.3839	.2658	.1497	.0119	.0694	.1835	.2974	.4213	.5490	.6652	.7787
c_m	-.0282	-.0357	-.0483	-.0529	-.0556	-.0596	-.0598	-.0603	-.0605	-.0601	-.0569	-.0533	-.0508	-.0438	-.0341
c_c															
c/b	Pressure coefficient, P														
Upper surface															
[a]0.000	1.096	1.100	1.102	1.106	1.110	1.115	1.120	1.125	1.123	1.118	1.113	1.109	1.105	1.100	1.098
.025	-2.005	-2.590	-1.839	-.913	-.469	-.106	.178	.439	.338	.095	-.195	-.595	-.988	-2.158	-2.651
.050	-1.890	-1.717	-.848	-.666	-.396	-.158	.040	.243	.163	-.021	-.219	-.473	-.748	-.947	-1.639
.100	-1.573	-.954	-.761	-.599	-.414	-.243	-.095	.067	.001	-.142	-.287	-.463	-.687	-.789	-1.038
.200	-1.011	-.733	-.633	-.534	-.420	-.311	-.212	-.095	-.145	-.245	-.342	-.452	-.565	-.660	-.772
.300	-.703	-.606	-.549	-.479	-.399	-.319	-.245	-.157	-.194	-.270	-.340	-.421	-.501	-.566	-.614
.400	-.552	-.529	-.492	-.442	-.385	-.324	-.268	-.201	-.234	-.289	-.342	-.401	-.458	-.507	-.534
.500	-.468	-.479	-.457	-.421	-.378	-.333	-.290	-.238	-.261	-.306	-.347	-.389	-.433	-.466	-.481
.600	-.412	-.442	-.443	-.424	-.398	-.368	-.339	-.304	-.319	-.353	-.379	-.404	-.429	-.448	-.442
.700	-.326	-.363	-.373	-.367	-.352	-.336	-.317	-.297	-.307	-.328	-.343	-.355	-.369	-.376	-.362
.800	-.222	-.247	-.265	-.267	-.264	-.259	-.249	-.243	-.246	-.256	-.264	-.265	-.269	-.263	-.248
.900	-.101	-.094	-.094	-.100	-.105	-.107	-.108	-.112	-.109	-.113	-.110	-.105	-.101	-.095	-.102
.950	-.033	-.003	.017	.018	.017	.014	.016	.007	.010	.012	.013	.016	.017	.012	-.015
Lower surface															
.0375	.639	.579	.466	.333	.166	-.024	-.212	-.647	-.361	-.163	.027	.217	.381	.497	.587
.075	.508	.454	.353	.250	.121	-.014	-.157	-.339	-.252	-.102	.030	.169	.296	.392	.468
.150	.382	.333	.254	.173	.080	-.016	-.111	-.238	-.185	-.085	.006	.105	.200	.274	.335
.250	.310	.273	.210	.150	.080	.009	-.060	-.157	-.118	-.044	.024	.097	.168	.224	.272
.350	.251	.221	.167	.116	.059	.005	-.047	-.121	-.091	-.035	.018	.074	.132	.179	.221
.450	.206	.182	.138	.096	.049	.008	-.034	-.092	-.069	-.025	.014	.061	.109	.148	.180
.550	.145	.126	.089	.051	.015	-.021	-.049	-.095	-.077	-.044	-.013	.023	.065	.096	.123
.650	.109	.097	.066	.036	.007	-.003	-.040	-.074	-.062	-.036	-.013	.015	.049	.075	.093
.750	.066	.060	.039	.018	-.004	-.003	-.034	-.056	-.048	-.033	-.018	.002	.031	.044	.058
.850	.048	.055	.044	.033	.022	.014	.010	-.004	.001	.009	.014	.023	.038	.047	.050
.925	.010	.031	.032	.031	.030	.033	.037	.032	.034	.032	.032	.028	.034	.030	.022
[a].975	.007	.031	.055	.060	.048	.063	.068	.067	.074	.063	.065	.054	.074	.054	.036
[a]1.000	.011	.035	.070	.083	.061	.086	.088	.091	.103	.086	.093	.075	.105	.078	.049

[a]No orifice.

NACA

TABLE 6.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) – Continued

(c) N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.171	2.229	2.287	2.341	2.391	2.448	2.473	2.427	2.370	2.329	2.271	2.213
	M_x	.712	.719	.728	.737	.746	.757	.760	.750	.739	.733	.720	.714
	α_x'	2.37	1.61	.88	.21	-.40	-1.07	-1.36	-.82	-.14	.36	1.08	1.82
	$\Delta\beta$	1.78	1.31	.86	.41	-.04	-.68	-1.07	-.41	.15	.52	.98	1.44
	α_i	1.97	1.53	1.16	.87	.56	.23	-.03	.38	.66	.95	1.26	1.67
	α_n	.7065	.5535	.4187	.3142	.2013	.0816	-.0097	.1374	.2390	.3435	.4542	.6006
	α_m	-.0467	-.0556	-.0608	-.0634	-.0673	-.0684	-.0732	-.0669	-.0658	-.0630	-.0598	-.0513
	α_o												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.134	1.137	1.140	1.144	1.148	1.152	1.153	1.149	1.145	1.142	1.137	1.135
	.025	-1.601	-1.053	-.477	-.147	.128	.366	.450	.259	.032	-.238	-.606	-1.292
	.050	-1.441	-.665	-.413	-.193	.002	.189	.261	.102	-.032	-.255	-.496	-.900
	.100	-1.158	-.665	-.455	-.288	-.138	.016	.079	-.057	-.192	-.333	-.509	-.718
	.200	-.673	-.595	-.471	-.369	-.264	-.148	-.100	-.210	-.301	-.395	-.506	-.639
	.300	-.604	-.531	-.444	-.375	-.299	-.208	-.172	-.257	-.326	-.394	-.472	-.560
	.400	-.541	-.492	-.435	-.380	-.329	-.254	-.226	-.290	-.344	-.395	-.451	-.510
	.500	-.497	-.463	-.425	-.387	-.346	-.290	-.269	-.320	-.361	-.397	-.435	-.475
	.600	-.481	-.463	-.445	-.424	-.400	-.362	-.349	-.384	-.408	-.430	-.449	-.468
	.700	-.401	-.395	-.389	-.382	-.371	-.345	-.341	-.360	-.374	-.383	-.389	-.397
	.800	-.274	-.277	-.281	-.283	-.280	-.270	-.271	-.278	-.286	-.283	-.279	-.277
	.900	-.080	-.087	-.095	-.104	-.106	-.104	-.112	-.108	-.108	-.103	-.095	-.088
	.950	.032	.032	.030	.026	.025	.026	.017	.023	.024	.025	.029	.030
Lower surface	.0375	.468	.335	.176	.010	-.181	-.422	-1.219	-.285	-.113	.060	.226	.385
	.075	.378	.268	.146	.024	-.110	-.253	-.348	-.208	-.066	.056	.180	.305
	.150	.267	.183	.090	.003	-.092	-.201	-.244	-.151	-.058	.027	.116	.210
	.250	.221	.157	.087	.022	-.048	-.127	-.171	-.096	-.027	.039	.105	.175
	.350	.181	.125	.066	.014	-.039	-.098	-.134	-.070	-.023	.029	.082	.142
	.450	.149	.102	.057	.013	-.029	-.071	-.103	-.054	-.016	.025	.067	.118
	.550	.097	.057	.018	-.015	-.048	-.079	-.105	-.065	-.039	-.007	.027	.069
	.650	.075	.044	.011	-.013	-.039	-.061	-.080	-.052	-.034	-.008	.019	.052
	.750	.048	.024	-.001	-.016	-.033	-.045	-.058	-.041	-.031	-.012	.005	.028
	.850	.051	.035	.022	.015	.008	.006	-.004	.001	.007	.017	.025	.039
	.925	.041	.037	.033	.037	.038	.044	.038	.039	.039	.035	.027	.036
	[a].975	.072	.063	.045	.057	.062	.080	.070	.071	.070	.058	.055	.060
	[a]1.000	.120	.105	[b].058	.083	.084	.102	.102	.097	.105	.090	.085	.088

[a]No orifice.
[b]Lower surface only.

TABLE 6.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) – Continued

(d) N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.213	2.261	2.306	2.349	2.388	2.429	2.448	2.417	2.380	2.330	2.289	2.251
	M_x	.763	.773	.782	.789	.797	.804	.808	.802	.794	.782	.775	.769
	α_x'	1.82	1.20	.64	.11	–.36	–.84	–1.07	–.70	–.26	.35	.85	1.33
	$\Delta\beta$	1.84	1.27	.76	.31	–.28	–1.06	–1.41	–.84	–.13	.51	.96	1.38
	α_1	1.76	1.45	1.11	.77	.44	–.04	–.17	.20	.57	.94	1.22	1.46
	c_n	.6348	.5252	.4000	.2797	.1613	–.0135	–.0600	.0710	.2058	.3394	.4390	.5284
	c_m	–.0592	–.0653	–.0700	–.0708	–.0724	–.0808	–.0787	–.0754	–.0718	–.0705	–.0678	–.0630
	c_o												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.154	1.158	1.162	1.165	1.169	1.172	1.174	1.171	1.167	1.162	1.160	1.157
	.025	–1.068	–.668	–.271	.041	.269	.432	.487	.379	.192	–.112	–.389	–.728
	.050	–.981	–.545	–.290	–.066	.108	.249	.296	.202	.047	–.179	–.371	–.578
	.100	–.787	–.609	–.385	–.202	–.058	.068	.112	.025	–.108	–.293	–.447	–.629
	.200	–.785	–.627	–.467	–.332	–.222	–.118	–.080	–.152	–.257	–.402	–.509	–.639
	.300	–.705	–.581	–.471	–.368	–.284	–.197	–.164	–.223	–.310	–.422	–.499	–.586
	.400	–.598	–.546	–.474	–.397	–.331	–.260	–.231	–.280	–.350	–.438	–.490	–.546
	.500	–.540	–.515	–.476	–.424	–.376	–.319	–.295	–.332	–.388	–.455	–.484	–.511
	.600	–.506	–.504	–.498	–.477	–.454	–.413	–.396	–.418	–.456	–.494	–.495	–.498
	.700	–.416	–.419	–.427	–.423	–.420	–.405	–.396	–.398	–.415	–.431	–.421	–.417
	.800	–.277	–.283	–.293	–.295	–.299	–.296	–.294	–.289	–.292	–.299	–.288	–.281
	.900	–.072	–.076	–.085	–.090	–.096	–.099	–.099	–.093	–.090	–.091	–.082	–.077
	.950	.044	.045	.042	.041	.036	.033	.032	.039	.042	.039	.044	.045
Lower surface	.0375	.375	.256	.095	–.100	–.281	–1.063	–1.156	–.932	–.212	.003	.154	.270
	.075	.285	.192	.069	–.066	–.217	–.870	–1.023	–.282	–.155	.003	.115	.201
	.150	.210	.138	.047	–.051	–.163	–.229	–.337	–.214	–.115	–.001	.080	.145
	.250	.172	.122	.037	–.015	–.099	–.176	–.192	–.144	–.063	.019	.080	.120
	.350	.139	.098	.044	–.015	–.078	–.145	–.170	–.114	–.049	.013	.063	.097
	.450	.117	.080	.034	–.011	–.062	–.114	–.133	–.087	–.038	.009	.051	.079
	.550	.073	.040	.002	–.034	–.071	–.114	–.132	–.090	–.052	–.017	.017	.045
	.650	.053	.029	0	–.029	–.058	–.089	–.102	–.071	–.043	–.017	.010	.029
	.750	.032	.014	–.005	–.025	–.043	–.063	–.073	–.050	–.032	–.017	.003	.014
	.850	.041	.034	.021	.013	.004	–.005	–.012	.002	.012	.014	.028	.029
	.925	.039	.039	.036	.038	.037	.034	.035	.041	.040	.034	.039	.032
	[a].975	.045	.055	.060	.053	.043	.050	.055	.055	.050	.043	.040	.040
	[a]1.000	.080	.080	.085	.073	.070	.080	.090	.090	.075	.065	.070	.065

[a]No orifice.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) - Continued

(e) $M = 0.56$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.237	2.243	2.275	2.290	2.308	2.343	2.357	2.378	2.408	2.425	2.438	2.457	2.484
	M_x	.794	.785	.783	.778	.776	.773	.768	.767	.764	.760	.757	.755	.751
	α_x'	1.31	1.43	1.02	.84	.62	.19	.02	-.24	-.60	-.80	-.95	-1.17	-1.48
	$\Delta\beta$	1.36	1.30	.96	.79	.60	.21	.06	-.18	-.51	-.71	-.84	-1.06	-1.35
	α_i	1.61	1.57	1.37	1.18	1.09	.90	.77	.64	.46	.35	.26	.14	-.01
	c_n	.5832	.5677	.4945	.4261	.3939	.3258	.2784	.2319	.1652	.1271	.0952	.0503	-.0045
	c_m	-.0687	-.0692	-.0696	-.0688	-.0697	-.0707	-.0709	-.0692	-.0686	-.0687	-.0681	-.0713	-.0737
	c_o													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.168	1.164	1.163	1.161	1.160	1.159	1.157	1.156	1.155	1.153	1.152	1.151	1.150
	.025	-.764	-.724	-.504	-.338	-.263	-.085	.005	.096	.233	.297	.345	.405	.461
	.050	-.586	-.565	-.439	-.331	-.281	-.156	-.089	-.021	.081	.131	.170	.222	.267
	.100	-.619	-.623	-.523	-.422	-.372	-.269	-.216	-.159	-.076	-.034	-.001	.044	.086
	.200	-.669	-.646	-.579	-.494	-.456	-.378	-.330	-.287	-.223	-.192	-.162	-.127	-.093
	.300	-.644	-.641	-.561	-.487	-.458	-.394	-.359	-.322	-.272	-.247	-.223	-.192	-.165
	.400	-.608	-.596	-.546	-.487	-.460	-.411	-.381	-.351	-.310	-.289	-.268	-.241	-.219
	.500	-.598	-.579	-.527	-.481	-.460	-.421	-.396	-.373	-.340	-.325	-.305	-.282	-.263
	.600	-.562	-.549	-.523	-.500	-.487	-.463	-.443	-.422	-.401	-.389	-.374	-.354	-.339
	.700	-.420	-.431	-.429	-.426	-.422	-.411	-.396	-.389	-.376	-.369	-.358	-.343	-.334
	.800	-.263	-.276	-.286	-.293	-.293	-.295	-.291	-.286	-.283	-.284	-.278	-.272	-.265
	.900	-.055	-.068	-.077	-.084	-.088	-.097	-.097	-.099	-.102	-.110	-.109	-.111	-.109
	.950	.060	.050	.050	.047	.044	.040	.038	.034	.032	.022	.023	.021	.019
Lower surface	.0375	.306	.283	.207	.134	.096	-.008	-.071	-.145	-.246	-.297	-.366	-.699	-1.187
	.075	.224	.206	.153	.100	.069	-.004	-.047	-.099	-.191	-.242	-.265	-.278	-.319
	.150	.174	.155	.111	.070	.049	-.004	-.036	-.075	-.134	-.174	-.198	-.226	-.248
	.250	.147	.131	.096	.065	.050	.016	-.006	-.034	-.076	-.106	-.122	-.147	-.168
	.350	.121	.106	.082	.058	.046	.016	-.004	-.025	-.058	-.082	-.094	-.113	-.131
	.450	.105	.092	.069	.050	.038	.015	.001	-.016	-.041	-.060	-.071	-.084	-.100
	.550	.057	.045	.027	.012	.004	-.014	-.025	-.038	-.057	-.074	-.080	-.089	-.101
	.650	.045	.032	.021	.008	.001	-.010	-.019	-.029	-.045	-.058	-.061	-.069	-.077
	.750	.026	.015	.007	0	-.004	-.010	-.017	-.024	-.034	-.045	-.046	-.049	-.056
	.850	.045	.036	.035	.031	.028	.027	.022	.018	.014	.005	.006	.004	.002
	.925	.046	.037	.043	.042	.042	.046	.045	.041	.044	.037	.040	.041	.062
	[a].975	.100	.093	.081	.079	.075	.079	.082	.066	.065	.064	.069	.090	.115
	[a]1.000	.123	.125	.098	.098	.100	.104	.115	.083	.078	.082	.085	.120	.145

[a]No orifice.

NACA

TABLE 6.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) – Continued

(f) M = 0.58; $\beta_{0.75R}$ = 45°.

J	2.226	2.247	2.258	2.290	2.308	2.325	2.352	2.387	2.395	2.384	2.402	2.416	2.448	2.456
M_r	.827	.820	.814	.815	.811	.804	.804	.801	.797	.801	.796	.790	.789	.784
α_r'	1.65	1.38	1.24	.84	.62	.40	.08	-.35	-.44	-.31	-.53	-.69	-1.07	-1.16
$\Delta\beta$	1.11	.94	.85	.54	.34	.12	-.27	-.73	-.82	-.68	-.90	-1.05	-1.32	-1.38
α_1	1.59	1.48	1.43	1.20	1.08	.99	.76	.51	.44	.53	.41	.26	.06	-.08
c_n	.5716	.5330	.5142	.4314	.3889	.3585	.2738	.1853	.1574	.1902	.1475	.0936	.0215	-.0270
c_m	-.0827	-.0811	-.0792	-.0800	-.0785	-.0773	-.0774	-.0756	-.0748	-.0756	-.0746	-.0755	-.0771	-.0793
c_c	-.0005													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.183	1.180	1.177	1.177	1.175	1.172	1.172	1.171	1.169	1.171	1.169	1.166	1.165	1.163
	.025	-.542	-.440	-.404	-.212	-.119	-.067	.114	.253	.284	.242	.303	.355	.436	.467
	.050	-.449	-.392	-.370	-.242	-.177	-.139	-.029	.098	.125	.091	.139	.182	.252	.278
	.100	-.531	-.493	-.480	-.362	-.304	-.270	-.174	-.067	-.046	-.075	-.032	.006	.071	.094
	.200	-.600	-.551	-.539	-.475	-.423	-.392	-.319	-.232	-.212	-.234	-.201	-.167	-.112	.092
	.300	-.606	-.577	-.565	-.493	-.454	-.424	-.364	-.291	-.274	-.293	-.265	-.235	-.186	-.169
	.400	-.625	-.582	-.560	-.504	-.482	-.456	-.402	-.340	-.324	-.340	-.316	-.289	-.244	-.231
	.500	-.650	-.610	-.591	-.532	-.505	-.479	-.437	-.383	-.369	-.382	-.359	-.336	-.296	-.283
	.600	-.719	-.683	-.662	-.614	-.582	-.551	-.512	-.465	-.448	-.463	-.440	-.416	-.379	-.370
	.700	-.565	-.546	-.515	-.499	-.484	-.463	-.454	-.429	-.422	-.428	-.415	-.396	-.373	-.365
	.800	-.246	-.266	-.275	-.288	-.299	-.300	-.306	-.302	-.304	-.303	-.302	-.295	-.285	-.283
	.900	-.040	-.052	-.057	-.067	-.078	-.081	-.093	-.096	-.101	-.096	-.102	-.104	-.103	-.105
	.950	.062	.062	.062	.060	.053	.057	.044	.041	.037	.041	.035	.031	.033	.030
Lower surface	.0375	.262	.209	.192	.095	.031	-.004	-.130	-.236	-.323	-.241	-.373	-.747	-1.105	-1.187
	.075	.194	.158	.146	.073	.027	.002	-.087	-.199	-.227	-.198	-.234	-.248	-.537	-.898
	.150	.146	.116	.109	.053	.018	.001	-.066	-.146	-.171	-.142	-.177	-.207	-.228	-.229
	.250	.127	.103	.096	.061	.036	.024	-.025	-.083	-.100	-.080	-.109	-.132	-.160	-.174
	.350	.105	.086	.080	.049	.027	.017	-.023	-.064	-.080	-.063	-.084	-.104	-.128	-.142
	.450	.090	.074	.070	.043	.024	.017	-.015	-.046	-.058	-.046	-.062	-.077	-.096	-.107
	.550	.041	.028	.024	.007	-.009	-.013	-.039	-.061	-.070	-.060	-.074	-.086	-.098	-.108
	.650	.029	.020	.018	-.004	-.009	-.012	-.030	-.046	-.054	-.046	-.056	-.066	-.073	-.081
	.750	.011	.005	.004	-.002	-.011	-.012	-.025	-.034	-.041	-.034	-.041	-.049	-.051	-.057
	.850	.034	.033	.033	.032	.028	.026	.019	.014	.010	.015	.010	.006	.008	.002
	.925	.036	.038	.041	.047	.044	.046	.044	.046	.043	.047	.045	.041	.046	.042
	[a].975	.070	.086	.086	.094	.086	.078	.075	.085	.077	.080	.080	.097	.102	.097
	[a]1.000	.098	.140	.127	.140	.129	.116	.101	.115	.102	.104	.102	.138	.143	.140

[a]No orifice.

TABLE 6.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) – Continued

(g) $M = 0.60$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.209	2.228	2.247	2.280	2.293	2.309	2.318	2.352	2.368	2.378	2.383	2.416	2.431
	M_x	.848	.844	.841	.842	.837	.834	.830	.831	.828	.824	.821	.818	.816
	α_r'	1.87	1.68	1.32	.97	.80	.60	.49	.08	-.12	-.24	-.30	-.69	-.87
	$\Delta\beta$	.93	.76	.58	.20	.04	-.18	-.29	-.73	-.95	-1.09	-1.16	-1.69	-1.94
	α_1	1.52	1.43	1.27	1.10	.96	.83	.73	.47	.40	.28	.17	-.02	-.11
	c_n	.5503	.5155	.4587	.3961	.3477	.3019	.2652	.1684	.1445	.1006	.0632	-.0065	-.0400
	c_m	-.0905	-.0877	-.0867	-.0819	-.0853	-.0850	-.0842	-.0847	-.0837	-.0839	-.0849	-.0826	-.0841
	c_a	.0049	.0049	.0063	.0092	.0098	.0114	.0131	.0149	.0150				
	c/h	Pressure coefficient, P												
Upper surface	[a]0.000	1.192	1.191	1.189	1.189	1.187	1.186	1.183	1.184	1.183	1.181	1.180	1.179	1.178
	.025	-.400	-.343	-.237	-.082	-.022	.061	.121	.256	.280	.334	.346	.416	.436
	.050	-.370	-.335	-.268	-.158	-.115	-.055	-.013	.094	.116	.161	.170	.231	.248
	.100	-.482	-.455	-.398	-.297	-.259	-.206	-.169	-.075	-.058	-.015	-.006	.047	.063
	.200	-.565	-.536	-.497	-.439	-.403	-.357	-.328	-.250	-.233	-.197	-.188	-.138	-.126
	.300	-.601	-.568	-.530	-.469	-.453	-.412	-.386	-.319	-.305	-.271	-.264	-.221	-.209
	.400	-.620	-.590	-.549	-.490	-.474	-.456	-.439	-.379	-.364	-.332	-.327	-.287	-.276
	.500	-.660	-.637	-.597	-.553	-.529	-.499	-.484	-.437	-.424	-.395	-.388	-.350	-.340
	.600	-.765	-.733	-.695	-.649	-.632	-.609	-.595	-.554	-.540	-.508	-.498	-.457	-.443
	.700	-.799	-.764	-.738	-.704	-.682	-.645	-.619	-.575	-.549	-.513	-.496	-.461	-.446
	.800	-.317	-.307	-.311	-.325	-.324	-.328	-.337	-.346	-.344	-.338	-.343	-.336	-.334
	.900	-.100	-.079	-.073	-.075	-.084	-.092	-.101	-.111	-.114	-.113	-.124	-.126	-.130
	.950	-.021	.009	.024	.033	.031	.029	.024	.019	.017	.019	.009	-.008	-.003
Lower surface	.0375	.187	.157	.093	-.007	-.060	-.133	-.203	-.529	-.646	-.826	-.916	-1.091	-1.140
	.075	.136	.113	.066	-.008	-.046	-.098	-.144	-.237	-.240	-.350	-.530	-.935	-.996
	.150	.090	.074	.038	-.014	-.043	-.084	-.118	-.199	-.216	-.235	-.251	-.253	-.286
	.250	.074	.063	.037	-.002	-.023	-.047	-.075	-.138	-.149	-.167	-.186	-.209	-.218
	.350	.053	.045	.022	-.008	-.024	-.046	-.068	-.115	-.125	-.140	-.158	-.183	-.194
	.450	.040	.032	.013	-.009	-.022	-.041	-.059	-.097	-.103	-.114	-.129	-.148	-.158
	.550	-.011	-.011	-.024	-.044	-.055	-.066	-.080	-.110	-.113	-.120	-.134	-.149	-.158
	.650	-.024	-.022	-.033	-.045	-.053	-.061	-.073	-.092	-.097	-.098	-.111	-.120	-.128
	.750	-.044	-.038	-.043	-.050	-.053	-.057	-.066	-.078	-.079	-.078	-.090	-.095	-.102
	.850	-.027	-.015	-.016	-.014	-.016	-.017	-.022	-.026	-.027	-.024	-.034	-.035	-.041
	.925	-.032	-.016	-.009	.001	.003	.007	.003	.007	.009	.014	.004	.007	.003
	[a].975	-.003	.018	.022	.036	.040	.045	.039	.050	.054	.049	.048	.041	.060
	[a]1.000	.020	.050	.055	.083	.067	.089	.060	.080	.087	.068	.078	.077	.099

[a]No orifice.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) - Continued

(h) $M = 0.65$; $\beta_{0.75R} = 45°$.

	J	2.171	2.196	2.203	2.241	2.254	2.262	2.284	2.296	2.313	2.328	2.335	2.367
	M_x	.931	.928	.920	.920	.918	.910	.909	.907	.905	.902	.897	.895
	a_x	2.37	2.04	1.95	1.46	1.29	1.19	.92	.76	.56	.37	.28	-.10
	$\Delta\beta$	0	-.16	-.21	-.51	-.61	-.67	-.83	-.90	-.99	-1.07	-1.10	-1.22
	α_i	.62	.57	.53	.40	.36	.31	.23	.21	.17	.13	.10	0
	c_n	.2206	.2029	.1910	.1429	.1300	.1106	.0832	.0768	.0594	.0455	.0381	-.0016
	c_m	-.1141	-.1039	-.1006	-.0941	-.0901	-.0890	-.0849	-.0873	-.0877	-.0882	-.0855	-.0872
	c_o	.0231	.0230	.0227	.0239	.0237	.0239	.0240	.0239	.0237	.0228	.0228	.0232
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.236	1.234	1.230	1.230	1.229	1.224	1.224	1.223	1.222	1.220	1.217	1.216
	.025	-.069	-.007	.020	.158	.186	.225	.286	.298	.329	.354	.377	.432
	.050	-.114	-.073	-.055	.047	.066	.094	.143	.153	.177	.243	.219	.267
	.100	-.238	-.211	-.200	-.108	-.091	-.067	-.022	-.014	.010	.032	.048	.092
	.200	-.350	-.323	-.317	-.263	-.260	-.246	-.203	-.193	-.171	-.150	-.133	-.095
	.300	-.411	-.390	-.382	-.314	-.307	-.292	-.271	-.271	-.257	-.233	-.218	-.181
	.400	-.454	-.426	-.417	-.355	-.349	-.342	-.309	-.302	-.291	-.280	-.279	-.256
	.500	-.501	-.480	-.474	-.425	-.421	-.410	-.384	-.380	-.372	-.358	-.344	-.323
	.600	-.611	-.597	-.594	-.548	-.544	-.536	-.513	-.511	-.498	-.482	-.479	-.450
	.700	-.657	-.646	-.644	-.601	-.597	-.594	-.573	-.570	-.562	-.551	-.546	-.529
	.800	-.734	-.722	-.723	-.680	-.679	-.679	-.664	-.663	-.655	-.643	-.643	-.623
	.900	-.355	-.313	-.289	-.252	-.228	-.205	-.188	-.173	-.155	-.136	-.128	-.110
	.950	-.302	-.266	-.248	-.205	-.185	-.165	-.143	-.127	-.104	-.079	-.063	-.031
Lower surface	.0375	.158	.103	.066	-.056	-.108	-.203	-.381	-.449	-.547	-.616	-.665	-.739
	.075	.129	.085	.057	-.027	-.063	-.112	-.188	-.238	-.396	-.493	-.564	-.663
	.150	.095	.059	.036	-.030	-.062	-.107	-.157	-.173	-.193	-.204	-.244	-.537
	.250	.090	.063	.044	-.006	-.031	-.065	-.104	-.116	-.142	-.152	-.169	-.192
	.350	.062	.039	.023	-.019	-.040	-.069	-.102	-.114	-.133	-.144	-.159	-.182
	.450	.043	.024	.010	-.026	-.044	-.069	-.098	-.106	-.123	-.130	-.142	-.166
	.550	-.016	-.031	-.044	-.072	-.089	-.110	-.136	-.142	-.154	-.157	-.166	-.188
	.650	-.048	-.058	-.069	-.092	-.104	-.121	-.142	-.147	-.153	-.151	-.155	-.170
	.750	-.099	-.106	-.112	-.127	-.134	-.142	-.154	-.153	-.151	-.120	-.141	-.147
	.850	-.107	-.109	-.114	-.114	-.116	-.114	-.115	-.109	-.102	-.087	-.084	-.078
	.925	-.172	-.175	-.177	-.167	-.165	-.150	-.134	-.123	-.107	-.082	-.072	-.052
	[a].975	-.242	-.232	-.228	-.189	-.172	-.158	-.140	-.128	-.100	-.074	-.060	-.030
	[a]1.000	-.271	-.252	-.238	-.191	-.179	-.159	-.140	-.129	-.092	-.070	-.055	-.018

[a]No orifice.

NACA

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) - Continued

(i) One-blade propeller; $M = 0.56$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.420	2.316	2.281	2.252	2.225	2.189	2.163	2.151	2.119	2.102	2.079	2.052	2.028	2.010	1.988
	M_x	.768	.783	.784	.788	.793	.796	.800	.807	.812	.814	.819	.824	.830	.834	.838
	α_x'	-.74	.52	.95	1.32	1.66	2.13	2.47	2.63	3.06	3.29	3.61	3.98	4.32	4.57	4.89
	$\Delta\beta$	-.64	.47	.68	.85	1.03	1.32	1.61	1.78	2.21	2.40	2.65	2.90	3.08	3.20	3.32
	α_i	.42	.92	.12	1.29	1.42	1.57	1.72	1.85	1.98	2.09	2.19	2.32	2.37	2.43	2.49
	c_n	.1806	.3929	.4832	.5523	.6074	.6735	.7387	.7935	.8503	.8987	.9439	.9955	1.0245	1.0464	1.0684
	c_m	-.0164	-.0983	-.0929	-.0879	-.0810	-.0811	-.0842	-.0914	-.0995	-.1088	-.1203	-.1306	-.1381	-.1406	-.1468
	c_a												-.0159	-.0151	-.0152	-.0129
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.156	1.163	1.163	1.165	1.167	1.168	1.170	1.173	1.176	1.177	1.179	1.181	1.184	1.186	1.188
	.025	.399	0	-.223	-.359	-.504	-.637	-.746	-.814	-.893	-.950	-.990	-1.040	-1.071	-1.086	-1.101
	.050	.165	-.163	-.332	-.436	-.571	-.673	-.730	-.806	-.866	-.904	-.938	-.981	-1.004	-1.014	-1.031
	.100	-.021	-.306	-.462	-.582	-.672	-.743	-.816	-.845	-.887	-.917	-.945	-.981	-1.004	-1.018	-1.029
	.200	-.150	-.362	-.464	-.589	-.652	-.755	-.805	-.838	-.882	-.917	-.954	-.988	-.998	-1.007	-1.016
	.300	-.235	-.418	-.504	-.582	-.636	-.765	-.849	-.871	-.903	-.930	-.954	-.992	-1.015	-1.031	-1.039
	.400	-.291	-.447	-.512	-.562	-.625	-.710	-.832	-.898	-.933	-.952	-.970	-1.005	-1.025	-1.040	-1.051
	.500	-.339	-.481	-.537	-.583	-.613	-.700	-.804	-.896	-.955	-.979	-.999	-1.028	-1.046	-1.060	-1.069
	.600	-.378	-.491	-.523	-.562	-.593	-.599	-.639	-.798	-.967	-1.028	-1.054	-1.078	-1.066	-1.052	-1.051
	.700	-.380	-.453	-.464	-.452	-.422	-.417	-.394	-.378	-.411	-.467	-.509	-.578	-.697	-.756	-.766
	.800	-.343	-.398	-.307	-.303	-.280	-.273	-.255	-.237	-.240	-.276	-.350	-.404	-.426	-.413	-.423
	.900	-.224	-.117	-.111	-.088	-.059	-.061	-.052	-.048	-.058	-.087	-.163	-.220	-.235	-.263	-.302
	.950	-.011	0	.019	.040	.054	.048	.051	.049	.038	.013	-.057	-.114	-.151	-.210	-.269
Lower surface	.0375	-.303	.020	.166	.242	.315	.360	.407	.440	.470	.495	.517	.543	.567	.586	.600
	.075	-.206	.037	.144	.201	.257	.294	.334	.363	.386	.409	.429	.452	.472	.488	.502
	.150	-.128	.045	.120	.160	.203	.230	.262	.286	.305	.324	.341	.361	.379	.392	.404
	.250	-.087	.040	.095	.127	.159	.179	.206	.226	.241	.257	.270	.287	.302	.313	.324
	.350	-.062	.035	.081	.103	.131	.146	.167	.185	.197	.212	.223	.236	.250	.259	.267
	.450	-.041	.037	.073	.091	.110	.121	.139	.155	.164	.176	.185	.196	.208	.215	.222
	.550	-.025	.037	.068	.082	.099	.107	.121	.132	.139	.147	.154	.161	.171	.174	.180
	.650	-.017	.027	.051	.060	.074	.078	.093	.102	.105	.114	.114	.120	.123	.123	.175
	.750	.033	.060	.073	.078	.084	.087	.096	.104	.106	.110	.109	.111	.110	.107	.103
	.850	.058	.071	.073	.071	.069	.069	.073	.079	.078	.078	.071	.067	.059	.047	.033
	.925	.122	.124	.116	.104	.085	.081	.085	.089	.086	.081	.065	.052	.034	.010	-.016
	[a].975	.178	.173	.164	.139	.106	.105	.102	.103	.100	.094	.071	.049	.023	-.010	-.043
	[a]1.000	.210	.200	.191	.159	.117	.122	.112	.116	.108	.102	.075	.048	.019	-.022	-.060

[a]No orifice.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) - Continued

(j) One-blade propeller; M = 0.58; $\beta_{0.75R} = 45^{\circ}$.

	J	2.015	2.059	2.082	2.094	2.130	2.156	2.180	2.198	2.233	2.250	2.285	2.368
	M_x	.864	.855	.851	.844	.841	.836	.831	.825	.822	.815	.813	.801
	α_x'	4.50	3.89	3.57	3.40	2.91	2.57	2.25	2.01	1.57	1.35	.90	-.12
	$\Delta\beta$					1.77	1.44	1.20	1.05	.80	.71	.52	-.48
	α_i	2.07	1.99	1.97	1.96	1.80	1.68	1.57	1.46	1.32	1.21	1.02	.60
	c_n	.8961	.8613	.8477	.8464	.7768	.7181	.6729	.6245	.5639	.5174	.4368	.2581
	c_m	-.1277	-.1345	-.1286	-.1275	-.1180	-.1103	-.1047	-.1013	-.1068	-.1027	-.1103	-.1054
	c_c	-.0049	-.0042	-.0046	-.0071	-.0070	-.0071	-.0080	-.0064				
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.200	1.196	1.194	1.190	1.189	1.187	1.184	1.182	1.180	1.177	1.176	1.171
	.025	-.829	-.743	-.710	-.733	-.599	-.505	-.434	-.347	-.225	-.160	.027	.323
	.050	-.806	-.745	-.719	-.725	-.626	-.573	-.540	-.465	-.344	-.298	-.151	.089
	.100	-.827	-.784	-.769	-.786	-.706	-.661	-.621	-.579	-.500	-.444	-.300	-.084
	.200	-.855	-.800	-.785	-.797	-.721	-.689	-.662	-.610	-.501	-.456	-.364	-.204
	.300	-.867	-.836	-.826	-.837	-.776	-.747	-.709	-.640	-.563	-.539	-.438	-.294
	.400	-.893	-.868	-.861	-.872	-.808	-.761	-.702	-.640	-.585	-.546	-.477	-.353
	.500	-.927	-.903	-.893	-.902	-.835	-.784	-.724	-.675	-.620	-.591	-.538	-.412
	.600	-.983	-.962	-.946	-.961	-.887	-.828	-.777	-.735	-.673	-.648	-.595	-.466
	.700	-.477	-.535	-.563	-.573	-.721	-.754	-.721	-.701	-.654	-.620	-.572	-.456
	.800	-.411	-.399	-.387	-.372	-.295	-.262	-.249	-.289	-.304	-.296	-.407	-.398
	.900	-.387	-.362	-.332	-.278	-.160	-.096	-.056	-.056	-.067	-.086	-.102	-.118
	.950	-.375	-.342	-.298	-.216	-.091	-.023	.027	.044	.044	.031	.017	-.009
Lower surface	.0375	.540	.475	.546	.475	.410	.368	.328	.276	.214	.162	.088	-.242
	.075	.453	.415	.398	.394	.363	.303	.271	.227	.182	.143	.044	-.145
	.150	.365	.332	.318	.314	.269	.239	.214	.182	.150	.119	.052	-.081
	.250	.290	.264	.251	.250	.213	.188	.168	.143	.120	.096	.045	-.052
	.350	.236	.213	.203	.201	.171	.150	.133	.113	.097	.077	.039	-.040
	.450	.194	.177	.167	.168	.142	.126	.112	.096	.087	.071	.043	-.019
	.550	.154	.142	.134	.137	.117	.105	.096	.082	.077	.063	.038	-.009
	[a].650	.112	.109	.106	.122	.096	.092	.093	.080	.075	.077	.050	.017
	.750	.073	.071	.073	.085	.080	.077	.077	.073	.080	.073	.064	.048
	.850	-.004	0	.008	.026	.036	.040	.049	.055	.070	.067	.068	.066
	.925	-.073	-.057	-.038	-.006	.024	.041	.060	.083	.116	.116	.122	.129
	[a].975	-.089	-.070	-.046	-.010	.024	.041	.083	.130	.175	.175	.203	.205
	[a]1.000	-.093	-.073	-.047	-.012	.027	.041	.097	.153	.212	.215	.270	.256

[a]No orifice.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) - Continued

(k) One-blade propeller; M = 0.60; $\beta_{0.75R} = 45^{\circ}$.

	J	2.345	2.283	2.238	2.217	2.190	2.166	2.150	2.119	2.098	2.081	2.058	2.038	2.024
	M_x	.820	.833	.844	.848	.852	.856	.862	.866	.871	.877	.881	.886	.893
	α_x'	.16	.93	1.50	1.77	2.12	2.43	2.65	3.06	3.35	3.58	3.90	4.18	4.37
	$\Delta\beta$	-.63	.17	.30	.38	.47	.55	.62	.77	.88	.97	1.10	1.22	1.30
	α_i	.52	.86	1.19	1.28	1.44	1.52	1.54	1.66	1.72	1.79	1.80	1.85	1.91
	c_n	.2242	.3687	.5094	.5503	.6168	.6516	.6619	.7116	.7458	.7677	.7742	.7968	.8200
	c_m	-.1137	-.1200	-.1222	-.1239	-.1242	-.1239	-.1250	-.1224	-.1277	-.1277	-.1303	-.1342	-.1401
	c_o		.0085	.0049	.0038	.0019	.0008	.0011	.0026	.0026	.0036	.0045	.0036	.0038
	o/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.179	1.185	1.190	1.192	1.195	1.197	1.199	1.201	1.204	1.207	1.209	1.212	1.215
	.025	.386	.191	-.043	-.103	-.189	-.253	-.273	-.373	-.436	-.475	-.495	-.523	-.537
	.050	.155	-.002	-.203	-.247	-.303	-.359	-.388	-.455	-.489	-.513	-.521	-.543	-.554
	.100	-.035	-.184	-.362	-.413	-.471	-.504	-.513	-.569	-.600	-.614	-.622	-.635	-.637
	.200	-.170	-.279	-.401	-.447	-.517	-.561	-.575	-.613	-.632	-.645	-.653	-.665	-.668
	.300	-.269	-.368	-.495	-.513	-.573	-.618	-.636	-.676	-.695	-.702	-.710	-.719	-.719
	.400	-.336	-.421	-.524	-.551	-.585	-.628	-.653	-.705	-.730	-.743	-.749	-.759	-.759
	.500	-.411	-.496	-.574	-.599	-.627	-.661	-.685	-.739	-.764	-.777	-.785	-.795	-.794
	.600	-.498	-.570	-.651	-.675	-.706	-.729	-.744	-.797	-.827	-.840	-.847	-.857	-.855
	.700	-.531	-.635	-.697	-.716	-.752	-.793	-.814	-.850	-.844	-.822	-.822	-.857	-.871
	.800	-.463	-.577	-.619	-.626	-.588	-.493	-.457	-.341	-.343	-.354	-.370	-.392	-.408
	.900	-.099	-.073	-.074	-.101	-.116	-.147	-.204	-.263	-.303	-.324	-.344	-.369	-.383
	.950	.002	.034	.057	.049	.028	-.042	-.123	-.234	-.287	-.317	-.339	-.366	-.382
Lower surface	.0375	-.446	-.098	.112	.167	.237	.284	.298	.362	.394	.414	.433	.459	.478
	.075	-.171	-.041	.108	.150	.203	.241	.252	.303	.327	.347	.362	.384	.401
	.150	-.115	-.005	.095	.126	.167	.195	.203	.241	.261	.278	.289	.308	.323
	.250	-.081	.002	.075	.098	.132	.153	.158	.190	.205	.218	.227	.243	.257
	.350	-.062	.002	.059	.080	.104	.122	.123	.150	.163	.174	.180	.195	.206
	.450	-.039	.012	.055	.070	.090	.102	.103	.123	.131	.141	.147	.158	.169
	.550	-.023	.012	.045	.057	.074	.084	.078	.097	.103	.111	.113	.123	.130
	[a].650	.007	.025	.046	.048	.066	.067	.065	.074	.082	.085	.091	.089	.099
	.750	.038	.044	.050	.053	.058	.056	.045	.044	.042	.042	.040	.044	.050
	.850	.067	.061	.052	.049	.045	.032	.011	-.007	-.017	-.019	-.024	-.024	-.019
	.925	.133	.122	.100	.093	.078	.046	.006	-.044	-.065	-.072	-.078	-.080	-.074
	[a].975	.187	.185	.141	.118	.111	.060	.002	-.046	-.082	-.089	-.106	-.110	-.102
	[a]1.000	.217	.223	.162	.136	.125	.071	.000	-.043	-.092	-.096	-.120	-.125	-.117

[a]No orifice.

TABLE 6.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.90 PROPELLER BLADE SECTION (x = 0.70) – Concluded

(1) One-blade propeller; $M = 0.65$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.223	2.181	2.160	2.138	2.119	2.102	2.082	2.056	2.038	2.022	2.003
	M_x	.910	.915	.919	.922	.927	.934	.938	.944	.946	.953	.958
	α_x'	1.69	2.24	2.51	2.81	3.06	3.29	3.57	3.93	4.18	4.40	4.67
	$\Delta\beta$	-.38	-.06	.05	.15	.23	.30	.39	.50	.59	.70	.82
	α_i	.67	.95	1.06	1.22	1.32	1.42	1.50	1.60	1.63	1.69	1.77
	c_n	.2890	.4074	.4529	.5252	.5677	.6065	.6426	.6871	.7000	.7284	.7632
	c_m	-.1204	-.1354	-.1377	-.1454	-.1458	-.1514	-.1542	-.1581	-.1594	-.1675	-.1744
	c_c	.0224	.0208	.0206	.0186	.0191	.0183	.0181	.0166	.0168	.0168	.0170
	c/b	Pressure coefficient, P										
Upper surface	[a]0.000	1.224	1.227	1.229	1.230	1.233	1.237	1.240	1.243	1.244	1.248	1.251
	.025	.317	.185	.125	.038	.005	-.057	-.097	-.163	-.169	-.211	-.271
	.050	.101	-.003	-.052	-.118	-.145	-.194	-.228	-.288	-.290	-.310	-.336
	.100	-.077	-.181	-.228	-.290	-.306	-.336	-.359	-.400	-.401	-.423	-.448
	.200	-.180	-.261	-.304	-.368	-.385	-.419	-.443	-.470	-.469	-.481	-.499
	.300	-.295	-.357	-.391	-.445	-.461	-.492	-.513	-.538	-.535	-.546	-.564
	.400	-.345	-.407	-.431	-.479	-.494	-.525	-.549	-.580	-.577	-.591	-.610
	.500	-.411	-.467	-.486	-.525	-.540	-.569	-.590	-.616	-.613	-.629	-.648
	.600	-.508	-.554	-.570	-.599	-.606	-.627	-.649	-.679	-.677	-.691	-.708
	.700	-.591	-.634	-.651	-.676	-.682	-.698	-.715	-.745	-.742	-.756	-.771
	.800	-.610	-.690	-.751	-.776	-.780	-.792	-.805	-.825	-.822	-.833	-.847
	.900	-.472	-.543	-.515	-.525	-.555	-.536	-.515	-.464	-.470	-.535	-.580
	.950	-.300	-.361	-.317	-.355	-.376	-.406	-.421	-.425	-.425	-.455	-.480
Lower surface	.0375	-.158	.033	.098	.195	.232	.290	.323	.376	.389	.411	.443
	.075	-.070	.058	.103	.178	.208	.254	.279	.323	.333	.352	.378
	.150	-.017	.064	.097	.153	.177	.213	.230	.265	.274	.287	.308
	.250	-.017	.049	.074	.119	.140	.169	.183	.211	.219	.230	.247
	.350	-.028	.030	.053	.089	.108	.134	.145	.168	.175	.185	.199
	.450	-.027	.022	.037	.069	.089	.109	.116	.137	.143	.151	.163
	.550	-.038	.002	.015	.042	.060	.076	.081	.099	.106	.110	.122
	[a].650	-.050	-.021	-.012	.013	.025	.038	.049	.061	.072	.072	.087
	[a].750	-.060	-.044	-.035	-.018	-.010	0	.013	.022	.032	.033	.046
	[a].850	-.069	-.066	-.060	-.052	-.047	-.038	-.024	-.016	-.011	-.005	.004
	.925	-.076	-.080	-.077	-.075	-.076	-.064	-.058	-.048	-.042	-.036	-.029
	[a].975	-.078	-.087	-.088	-.088	-.098	-.079	-.078	-.064	-.063	-.052	-.050
	[a]1.000	-.080	-.090	-.093	-.096	-.108	-.085	-.089	-.074	-.074	-.062	-.058

[a]No orifice.

NACA

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78)

(a) N = 1140 rpm; $\beta_{0.75R}$ = 45°.

	J	1.880	1.971	2.055	2.124	2.210	2.285	2.374	2.460	2.532	2.487	2.431	2.349	2.261	2.186	2.092	2.027	1.923
	M_R	.539	.551	.559	.567	.578	.583	.593	.610	.617	.608	.602	.590	.580	.572	.564	.554	.544
	α_R'	6.40	5.09	3.92	2.98	1.85	.90	-.19	-1.21	-2.04	-1.52	-.87	.11	1.20	2.16	3.41	4.30	5.78
	$\Delta\beta$	1.94	1.74	1.48	1.22	.86	.52	.11	-.28	-.62	-.40	-.15	.22	.63	.97	1.35	1.58	1.86
	α_i	2.53	2.24	1.95	1.60	1.20	.89	.54	.18	-.14	.03	.31	.66	1.03	1.35	1.75	2.10	2.44
	c_n	.8077	.7194	.6265	.5135	.3871	.2858	.1739	.0574	-.0445	.0090	.0994	.2139	.3313	.4329	.5632	.6735	.7787
	c_m	-.0306	-.0362	-.0454	-.0549	-.0535	-.0518	-.0550	-.0546	-.0585	-.0597	-.0544	-.0519	-.0525	-.0538	-.0498	-.0428	-.0321
	c_o																	
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.061	1.078	1.080	1.082	1.086	1.087	1.090	1.096	1.098	1.095	1.093	1.089	1.086	1.084	1.082	1.079	1.076
	.025	-1.484	-1.579	-1.744	-.899	-.491	-.186	.118	.380	.519	.444	.284	.021	-.325	-.637	-1.321	-1.732	-1.481
	.050	-1.523	-1.554	-1.242	-.757	-.487	-.292	-.075	.133	.258	.187	.032	-.148	-.380	-.594	-.876	-1.539	-1.507
	.100	-1.486	-1.358	-.731	-.587	-.405	-.277	-.132	.017	.113	.055	-.042	-.180	-.332	-.474	-.651	-.996	-1.455
	.200	-1.087	-.712	-.559	-.485	-.382	-.296	-.199	-.098	-.027	-.069	-.140	-.232	-.334	-.425	-.527	-.574	-.974
	.300	-.665	-.501	-.483	-.427	-.353	-.292	-.221	-.144	-.090	-.124	-.175	-.243	-.319	-.383	-.459	-.495	-.589
	.400	-.489	-.442	-.436	-.397	-.341	-.294	-.237	-.178	-.135	-.166	-.204	-.256	-.313	-.364	-.419	-.449	-.464
	.500	-.405	-.398	-.401	-.373	-.331	-.294	-.250	-.203	-.169	-.195	-.226	-.264	-.311	-.350	-.390	-.410	-.402
	.600	-.342	-.356	-.368	-.351	-.324	-.296	-.263	-.230	-.202	-.223	-.245	-.275	-.309	-.336	-.362	-.373	-.352
	.700	-.274	-.305	-.327	-.323	-.308	-.291	-.265	-.243	-.225	-.241	-.253	-.275	-.296	-.316	-.329	-.327	-.294
	.800	-.201	-.225	-.253	-.259	-.252	-.243	-.228	-.214	-.207	-.218	-.222	-.232	-.248	-.257	-.258	-.250	-.217
	.900	-.108	-.107	-.120	-.122	-.123	-.120	-.114	-.108	-.109	-.117	-.111	-.115	-.120	-.128	-.122	-.121	-.114
	.950	-.053	-.029	-.026	-.022	-.020	-.017	-.014	-.015	-.018	-.024	-.015	-.016	-.018	-.026	-.024	-.034	-.032
Lower surface	.0375	.681	.579	.489	.384	.221	.072	-.099	-.323	-.328	-.569	-.231	-.040	.141	.285	.437	.523	.610
	.075	.526	.459	.378	.294	.166	.055	-.060	-.210	-.424	-.264	-.155	-.023	.105	.214	.335	.409	.488
	.150	.406	.352	.288	.222	.131	.053	-.024	-.132	-.202	-.174	-.090	.001	.087	.163	.254	.309	.376
	.250	.317	.274	.222	.172	.102	.044	-.013	-.089	-.141	-.124	-.061	.012	.066	.124	.195	.237	.290
	.350	.255	.217	.175	.134	.077	.032	-.007	-.066	-.109	-.094	-.044	.010	.051	.096	.152	.189	.230
	.450	.207	.179	.142	.110	.061	.025	-.007	-.053	-.088	-.076	-.037	.006	.039	.079	.124	.156	.189
	.550	.163	.143	.112	.086	.046	.015	-.009	-.044	-.069	-.064	-.033	.001	.028	.057	.098	.120	.148
	.650	.118	.105	.081	.060	.026	.002	-.018	-.044	-.062	-.062	-.035	-.010	.013	.037	.069	.087	.105
	.750	.085	.080	.064	.052	.024	.004	-.007	-.023	-.036	-.037	-.019	-.001	.013	.031	.057	.068	.077
	.850	.066	.074	.066	.060	.040	.027	.022	.011	.024	0	.014	.023	.032	.045	.061	.068	.064
	.925	.033	.057	.066	.066	.052	.040	.043	.040	.038	.031	.039	.044	.043	.057	.065	.064	.045
	[a].975	.010	.040	.060	.070	.056	.045	.060	.070	.040	.050	.050	.058	.048	.065	.060	.060	.035
	[a]1.000	0	.038	.060	.075	.058	.048	.070	.088	.040	.060	.055	.063	.050	.070	.050	.060	.030

[a]No orifice.

NACA

TABLE 7.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION ($x = 0.78$) — Continued

(b) $N = 1350$ rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.023	2.127	2.201	2.293	2.346	2.419	2.482	2.508	2.455	2.389	2.326	2.238	2.174	2.091
	M_x	.658	.670	.678	.694	.700	.710	.721	.724	.716	.705	.696	.681	.674	.661
	α_x'	4.36	2.94	1.97	.80	.15	-.73	-1.47	-1.76	-1.16	-.37	.39	1.49	2.32	3.43
	$\Delta\beta$	2.54	1.90	1.43	.76	.35	-.18	-.67	-.93	-.44	.04	.50	1.18	1.61	2.14
	α_i	2.51	1.87	1.47	1.01	.67	.38	.05	-.16	.18	.47	.79	1.28	1.64	2.10
	c_n	.8052	.6045	.4758	.3252	.2171	.1245	.0181	-.0523	.0577	.1506	.2561	.4100	.5277	.6781
	c_m	-.0313	-.0621	-.0565	-.0397	-.0619	-.0628	-.0622	-.0688	-.0633	-.0614	-.0626	-.0574	-.0547	-.0421
	c_o														
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.113	1.117	1.120	1.127	1.129	1.133	1.138	1.139	1.135	1.131	1.128	1.122	1.119	1.114
	.025	-2.323	-1.694	-.692	-.199	.075	.298	.484	.550	.405	.229	-.038	-.490	-.908	-1.993
	.050	-2.102	-.953	-.656	-.314	-.116	.060	.225	.290	.156	.005	-.199	-.504	-.783	-1.730
	.100	-1.647	-.670	-.523	-.308	-.170	-.038	.093	.144	.035	-.082	-.228	-.423	-.608	-.668
	.200	-.627	-.590	-.485	-.341	-.257	-.169	-.071	-.032	-.112	-.195	-.291	-.424	-.536	-.617
	.300	-.563	-.511	-.436	-.332	-.273	-.208	-.133	-.103	-.164	-.226	-.297	-.394	-.473	-.534
	.400	-.510	-.470	-.417	-.338	-.296	-.248	-.187	-.163	-.210	-.260	-.315	-.386	-.442	-.486
	.500	-.465	-.439	-.400	-.341	-.309	-.272	-.225	-.206	-.242	-.282	-.322	-.376	-.418	-.450
	.600	-.414	-.405	-.380	-.341	-.322	-.295	-.261	-.247	-.273	-.300	-.329	-.364	-.390	-.411
	.700	-.361	-.368	-.356	-.335	-.325	-.308	-.285	-.278	-.292	-.311	-.328	-.347	-.362	-.366
	.800	-.267	-.284	-.285	-.276	-.274	-.267	-.253	-.256	-.257	-.266	-.275	-.282	-.286	-.278
	.900	-.116	-.124	-.130	-.130	-.135	-.134	-.133	-.137	-.130	-.134	-.134	-.132	-.131	-.122
	.950	-.021	-.017	-.018	-.018	-.025	-.024	-.025	-.035	-.023	-.024	-.023	-.019	-.020	-.021
Lower surface	.0375	.567	.418	.284	.075	-.099	-.271	-.565	-1.273	-.412	-.218	-.021	.200	.350	.475
	.075	.450	.322	.214	.059	-.066	-.191	-.317	-.402	-.264	-.147	-.011	.150	.267	.369
	.150	.344	.243	.163	.055	-.031	-.113	-.212	-.247	-.165	-.086	.006	.115	.201	.281
	.250	.265	.184	.123	.044	-.019	-.079	-.147	-.182	-.115	-.059	.008	.088	.152	.213
	.350	.209	.142	.093	.032	-.018	-.061	-.112	-.140	-.088	-.047	.006	.066	.115	.165
	.450	.174	.118	.079	.031	-.016	-.051	-.088	-.109	-.068	-.037	.004	.055	.097	.139
	.550	.137	.090	.055	.016	-.021	-.046	-.074	-.093	-.060	-.037	-.004	.036	.071	.107
	.650	.094	.056	.029	0	-.029	-.046	-.066	-.080	-.055	-.041	-.017	.013	.041	.069
	.750	.070	.040	.023	.003	-.019	-.029	-.040	-.051	-.034	-.027	-.008	.011	.032	.053
	.850	.063	.046	.035	.028	.011	.006	.001	-.004	.007	.007	.018	.028	.040	.052
	.925	.049	.043	.041	.044	.035	.039	.038	.035	.038	.033	.037	.039	.041	.044
	[a].975	.052	.060	.043	.058	.055	.065	.055	.061	.058	.050	.054	.047	.051	.057
	[a]1.000	.060	.069	.044	.065	.067	.078	.062	.067	.065	.058	.063	.047	.063	.072

[a]No orifice.

NACA

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) - Continued

(c) N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.169	2.219	2.282	2.337	2.384	2.443	2.477	2.416	2.365	2.314	2.262	2.202
	M_x	.754	.761	.770	.782	.787	.797	.806	.792	.783	.776	.767	.757
	α_x	2.39	1.74	.94	.26	-.31	-1.01	-1.41	-.69	-.08	.54	1.19	1.96
	$\Delta\beta$	2.22	1.70	1.06	.46	-.08	-.83	-1.40	-.47	.13	.71	1.26	1.86
	α_i	2.16	1.75	1.25	.86	.51	.04	-.26	.32	.68	1.03	1.42	1.87
	c_n	.6955	.5645	.4048	.2777	.1648	.0116	-.0845	.1052	.2181	.3323	.4568	.6032
	c_m	-.0459	-.0570	-.0651	-.0695	-.0705	-.0778	-.0862	-.0714	-.0696	-.0674	-.0631	-.0539
	c_o												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.151	1.153	1.158	1.162	1.164	1.169	1.173	1.167	1.163	1.160	1.156	1.152
	.025	-1.288	-.912	-.295	.055	.306	.494	.583	.407	.190	-.100	-.495	-1.065
	.050	-1.261	-.889	-.450	-.161	.051	.229	.316	.144	-.052	-.273	-.621	-1.015
	.100	-1.119	-.734	-.380	-.201	-.050	.092	.168	.023	-.122	-.280	-.466	-.904
	.200	-.941	-.553	-.418	-.298	-.189	-.074	-.012	-.130	-.240	-.350	-.474	-.559
	.300	-.481	-.495	-.403	-.321	-.240	-.148	-.098	-.193	-.278	-.359	-.440	-.503
	.400	-.456	-.464	-.404	-.347	-.288	-.213	-.171	-.248	-.315	-.375	-.428	-.469
	.500	-.435	-.440	-.399	-.361	-.318	-.259	-.227	-.288	-.337	-.380	-.415	-.444
	.600	-.403	-.407	-.385	-.366	-.340	-.299	-.278	-.319	-.350	-.376	-.393	-.409
	.700	-.364	-.371	-.362	-.357	-.348	-.325	-.313	-.334	-.351	-.362	-.367	-.371
	.800	-.266	-.275	-.276	-.280	-.280	-.269	-.267	-.271	-.278	-.280	-.276	-.274
	.900	-.089	-.097	-.101	-.106	-.112	-.109	-.110	-.106	-.109	-.107	-.101	-.100
	.950	.022	.018	.019	.013	.008	.009	.010	.013	.012	.014	.019	.014
Lower surface	.0375	.456	.350	.169	-.018	-.215	-1.081	-1.236	-.414	-.119	.064	.242	.386
	.075	.363	.275	.134	-.004	-.152	-.447	-1.087	-.189	-.075	.055	.189	.304
	.150	.286	.217	.115	.035	-.082	-.145	-.335	-.124	-.027	.060	.154	.239
	.250	.227	.173	.096	.030	-.048	-.109	-.117	-.079	-.011	.055	.121	.189
	.350	.182	.136	.074	.024	-.037	-.083	-.101	-.056	-.007	.044	.095	.149
	.450	.153	.113	.062	.017	-.028	-.066	-.082	-.044	-.007	.035	.080	.125
	.550	.125	.092	.050	.011	-.026	-.051	-.066	-.035	-.007	.024	.060	.096
	.650	.089	.060	.026	.003	-.031	-.047	-.057	-.037	-.017	.007	.038	.068
	.750	.077	.055	.029	.008	-.013	-.021	-.027	-.014	-.002	.014	.036	.059
	.850	.081	.067	.050	.038	.026	.023	.021	.028	.032	.039	.055	.067
	.925	.079	.072	.064	.060	.056	.061	.060	.060	.058	.058	.067	.079
	[a].975	.072	.080	.067	.073	.074	.092	.091	.086	.073	.065	.072	.090
	[a]1.000	.068	.082	.068	.080	.083	.110	.108	.098	.081	.067	.073	.098

[a]No orifice.

TABLE 7.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) – Continued

(d) N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.239	2.280	2.323	2.373	2.411	2.443	2.434	2.399	2.364	2.346	2.316	2.269	2.222
	M_R	.817	.822	.829	.839	.846	.851	.848	.842	.834	.831	.827	.814	.805
	α_R'	1.48	.96	.43	–.18	–.64	–1.01	–.91	–.49	–.07	.15	.52	1.10	1.70
	$\Delta\beta$	1.86	1.21	.52	–.31	–1.12	–1.81	–1.60	–.84	–.15	.16	.63	1.40	2.12
	α_1	1.81	1.41	1.03	.46	.02	–.29	–.21	.20	.63	.82	1.13	1.47	1.86
	c_n	.5877	.4555	.3319	.1500	.0071	–.0929	–.0665	.0645	.2026	.2632	.3642	.4771	.6019
	c_m	–.0674	–.0728	–.0801	–.0861	–.0939	–.0982	–.0975	–.0911	–.0809	–.0799	–.0764	–.0706	–.0640
	c_o													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.178	1.180	1.183	1.188	1.191	1.194	1.193	1.189	1.185	1.184	1.182	1.177	1.173
	.025	–.527	–.197	.097	.395	.525	.599	.574	.473	.332	.227	.013	–.278	–.678
	.050	–.704	–.409	–.125	.140	.268	.345	.319	.218	.082	–.012	–.196	–.528	–.730
	.100	–.664	–.378	–.202	.007	.115	.185	.162	.072	–.041	–.114	–.251	–.422	–.693
	.200	–.690	–.477	–.334	–.161	–.068	–.008	–.026	–.105	–.203	–.260	–.371	–.523	–.761
	.300	–.649	–.485	–.372	–.233	–.154	–.101	–.119	–.187	–.267	–.312	–.399	–.508	–.682
	.400	–.624	–.519	–.417	–.305	–.237	–.187	–.204	–.264	–.332	–.369	–.434	–.529	–.611
	.500	–.601	–.534	–.455	–.359	–.304	–.260	–.275	–.328	–.382	–.409	–.463	–.521	–.516
	.600	–.427	–.451	–.478	–.415	–.371	–.336	–.348	–.389	–.434	–.450	–.461	–.422	–.404
	.700	–.357	–.394	–.445	–.459	–.447	–.427	–.436	–.456	–.455	–.441	–.423	–.391	–.362
	.800	–.250	–.274	–.291	–.300	–.308	–.314	–.314	–.304	–.300	–.293	–.286	–.272	–.256
	.900	–.068	–.079	–.089	–.093	–.097	–.095	–.094	–.097	–.095	–.091	–.087	–.081	–.072
	.950	.041	.038	.030	.031	.027	.032	.031	.029	.028	.032	.033	.036	.038
Lower surface	.0375	.313	.179	–.009	–.608	–.960	–1.047	–1.023	–.898	–.229	–.116	.051	.215	.346
	.075	.251	.145	.003	–.174	–.841	–.931	–.906	–.700	–.147	–.069	.048	.174	.239
	.150	.203	.126	.028	–.110	–.408	–.845	–.807	–.139	–.079	–.020	.058	.145	.223
	.250	.165	.107	.036	–.064	–.107	–.249	–.150	–.099	–.043	0	.057	.121	.179
	.350	.132	.083	.029	–.049	–.091	–.110	–.102	–.077	–.032	0	.046	.093	.144
	.450	.111	.070	.022	–.034	–.066	–.078	–.075	–.055	–.021	.003	.039	.080	.122
	.550	.085	.052	.013	–.030	–.054	–.059	–.039	–.046	–.021	–.003	.027	.059	.096
	.650	.058	.031	.001	–.030	–.047	–.047	–.047	–.041	–.025	–.010	.011	.039	.067
	.750	.050	.028	.006	–.015	–.022	–.019	–.022	–.021	–.012	–.001	.013	.032	.061
	.850	.070	.056	.041	.033	.030	.034	.031	.029	.032	.038	.046	.058	.073
	.925	.078	.069	.065	.064	.067	.072	.069	.064	.063	.066	.067	.073	.082
	[a].975	.104	.088	.088	.083	.088	.102	.092	.097	.083	.088	.086	.089	.102
	[a]1.000	.125	.107	.107	.097	.101	.120	.109	.118	.096	.103	.098	.101	.115

[a]No orifice.

TABLE 7.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) – Continued

(e) M = 0.56; $\beta_{0.75R}$ = 45°.

	J	2.218	2.251	2.271	2.294	2.321	2.343	2.368	2.385	2.410	2.439	2.464
	M_r	.837	.834	.830	.825	.822	.818	.813	.807	.803	.801	.797
	α_x'	1.75	1.33	1.08	.79	.45	.18	–.12	–.32	–.62	–.97	–1.26
	$\Delta\beta$	1.79	1.42	1.18	.88	.47	.16	–.21	–.44	–.78	–1.14	–1.45
	α_i	1.89	1.63	1.41	1.26	1.04	.83	.64	.52	.27	.05	–.18
	c_n	.6103	.5252	.4568	.4071	.3345	.2674	.2058	.1681	.0877	.0148	–.0581
	c_m	–.0806	–.0769	–.0764	–.0816	–.0746	–.0737	–.0721	–.0692	–.0728	–.0773	–.0793
	c_c											
	c/b	Pressure coefficient, P										
Upper surface	[a]0.000	1.187	1.185	1.184	1.182	1.180	1.179	1.176	1.173	1.172	1.171	1.169
	.025	–.492	–.322	–.198	–.181	.051	.172	.282	.353	.432	.502	.556
	.050	–.610	–.554	–.442	–.289	–.178	–.070	.028	.093	.168	.238	.291
	.100	–.601	–.494	–.423	–.347	–.265	–.181	–.104	–.049	.012	.073	.120
	.200	–.681	–.545	–.458	–.395	–.331	–.267	–.207	–.162	–.113	–.067	–.026
	.300	–.642	–.555	–.477	–.420	–.366	–.313	–.263	–.223	–.183	–.143	–.108
	.400	–.674	–.582	–.517	–.455	–.404	–.357	–.314	–.277	–.242	–.207	–.176
	.500	–.698	–.601	–.546	–.486	–.428	–.388	–.351	–.317	–.287	–.257	–.229
	.600	–.700	–.641	–.533	–.453	–.433	–.403	–.376	–.346	–.324	–.300	–.275
	.700	–.396	–.373	–.377	–.416	–.406	–.395	–.376	–.355	–.341	–.325	–.307
	.800	–.204	–.232	–.262	–.282	–.283	–.285	–.282	–.273	–.275	–.269	–.263
	.900	–.043	–.056	–.073	–.084	–.088	–.094	–.098	–.098	–.104	–.107	–.110
	.950	.049	.047	.040	.033	.033	.028	.026	.024	.018	.011	.007
Lower surface	.0375	.314	.245	.171	.086	.011	–.065	–.173	–.222	–.775	–1.071	–1.222
	.075	.255	.198	.141	.074	.019	–.049	–.122	–.161	–.181	–.605	–1.048
	.150	.208	.165	.124	.077	.039	–.007	–.058	–.091	–.131	–.144	–.174
	.250	.170	.136	.107	.073	.046	.009	–.026	–.048	–.083	–.108	–.123
	.350	.136	.107	.086	.059	.036	.008	–.020	–.035	–.062	–.083	–.098
	.450	.113	.089	.070	.045	.027	.007	–.013	–.025	–.047	–.065	–.079
	.550	.087	.068	.053	.033	.019	.003	–.013	–.020	–.037	–.051	–.063
	.650	.057	.041	.026	.009	.001	–.011	–.023	–.027	–.040	–.050	–.057
	.750	.051	.040	.032	.021	.014	.006	–.002	–.004	–.013	–.018	–.026
	.850	.066	.060	.054	.055	.043	.038	.033	.035	.029	.024	.018
	.925	.071	.071	.071	.066	.067	.066	.065	.066	.064	.062	.058
	[a].975	.080	.074	.074	.070	.066	.070	.067	.067	.068	.070	.071
	[a]1.000	.090	.073	.074	.069	.065	.073	.070	.064	.071	.077	.082

[a]No orifice.

TABLE 7.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) – Continued

(f) $M = 0.58$; $\beta_{0.75R} = 45^{\circ}$.

J	2.218	2.231	2.246	2.273	2.304	2.323	2.345	2.371	2.389	2.418	2.437
M_x	.873	.866	.860	.857	.856	.849	.844	.844	.836	.836	.828
α_x'	1.75	1.58	1.39	1.05	.66	.43	.16	–.16	–.37	–.72	–.94
$\Delta\beta$	1.35	1.22	1.06	.72	.28	–.02	–.40	–.80	–1.03	–1.38	–1.58
α_1	1.73	1.63	1.40	1.24	1.09	.89	.73	.45	.29	.06	–.14
c_n	.3639	.3252	.4323	.4013	.3523	.2868	.2365	.1458	.0942	.0187	–.0458
c_m	–.0968	–.0928	–.0875	–.0829	–.0846	–.0839	–.0819	–.0837	–.0864	–.0869	–.0867
c_c	.0030	.0038	.0060	.0068	.0092						
c/b	Pressure coefficient, P										
Upper surface											
[a]0.000	1.205	1.201	1.198	1.197	1.197	1.193	1.191	1.191	1.187	1.187	1.183
.025	–.109	–.077	.001	.055	.144	.229	.303	.403	.453	.516	.558
.050	–.644	–.581	–.390	–.288	–.173	–.077	.006	.110	.163	.232	.288
.100	–.354	–.313	–.247	–.216	–.158	–.101	–.049	.027	.068	.124	.159
.200	–.514	–.468	–.400	–.366	–.315	–.261	–.215	–.152	–.114	–.065	–.031
.300	–.536	–.505	–.445	–.403	–.361	–.319	–.280	–.225	–.190	–.149	–.116
.400	–.577	–.544	–.499	–.468	–.425	–.374	–.345	–.296	–.262	–.225	–.193
.500	–.610	–.587	–.543	–.510	–.478	–.439	–.401	–.356	–.323	–.287	–.257
.600	–.680	–.654	–.616	–.587	–.544	–.496	–.464	–.416	–.373	–.345	–.315
.700	–.736	–.721	–.688	–.556	–.600	–.529	–.492	–.460	–.419	–.389	–.357
.800	–.243	–.244	–.247	–.234	–.255	–.278	–.286	–.296	–.291	–.288	–.280
.900	–.065	–.050	–.042	–.043	–.058	–.073	–.081	–.090	–.094	–.099	–.100
.950	0	.022	.042	.052	.044	.044	.039	.032	.029	.026	.023
Lower surface											
.0375	.263	.216	.133	.083	–.001	–.086	–.145	–.645	–.848	–1.004	–1.094
.075	.217	.179	.115	.076	.013	–.045	–.110	–.201	–.469	–.864	–.965
.150	.189	.157	.108	.082	.038	–.006	–.049	–.109	–.121	–.194	–.557
.250	.161	.137	.100	.081	.047	.014	–.017	–.065	–.081	–.100	–.105
.350	.128	.108	.078	.063	.036	.010	–.014	–.050	–.062	–.084	–.093
.450	.104	.088	.061	.051	.029	.010	–.007	–.036	–.046	–.062	–.069
.550	.078	.063	.042	.035	.019	.005	–.009	–.030	–.037	–.049	–.055
.650	.042	.031	.016	.013	0	–.008	–.019	–.034	–.037	–.046	–.049
.750	.033	.027	.018	.019	.011	.006	0	–.011	–.011	–.018	–.019
.850	.044	.043	.042	.047	.043	.041	.038	.033	.034	.029	.029
.925	.040	.046	.053	.065	.066	.068	.067	.065	.069	.067	.068
[a].975	.040	.035	.053	[b].082	[b].068	.077	.075	.072	.090	.080	.100
[a]1.000	.040	.020	[b].060	[b].100	[b].070	.075	.080	.079	.100	.090	.120

[a]No orifice.

[b]Lower surface only.

TABLE 7.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) – Continued

(g) M = 0.60; $\beta_{0.75R}$ = 45°.

J	2.203	2.226	2.243	2.267	2.289	2.302	2.323	2.341	2.347	2.362	2.383	2.397	2.415
M_x	.903	.898	.892	.889	.885	.879	.879	.876	.872	.869	.868	.865	.862
α_x'	1.94	1.65	1.43	1.13	.83	.69	.43	.21	.13	–.05	–.32	–.47	–.68
$\Delta\beta$	1.02	.82	.64	.28	–.08	–.30	–.66	–.96	–1.06	–1.32	–1.69	–1.88	–2.16
α_1	1.49	1.43	1.32	1.16	.90	.80	.73	.48	.40	.24	–.06	–.15	–.29
c_n	.4806	.4994	.4245	.3742	.2894	.2594	.2374	.1555	.1265	.0774	–.0187	–.0477	–.0929
c_m	–.1093	–.1086	–.1041	–.1055	–.1059	–.1047	–.1012	–.1066	–.1016	–.1034	–.1037	–.1029	–.1019
c_c	.0145	.0140	.0147	.0163	.0183	.0179	.0185	.0183	.0189	.0186	.0197	.0197	.0197
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.220	1.218	1.214	1.213	1.211	1.208	1.208	1.206	1.204	1.203	1.202	1.201	1.199
	.025	–.026	.017	.069	.170	.300	.334	.374	.430	.455	.486	.551	.572	.597
	.050	–.216	–.183	–.144	–.060	.051	.082	.120	.171	.196	.226	.289	.311	.335
	.100	–.248	–.213	–.175	–.125	–.046	–.024	.005	.050	.068	.133	.148	.169	.189
	.200	–.393	–.371	–.333	–.288	–.215	–.193	–.166	–.127	–.110	–.086	–.037	–.019	–.001
	.300	–.441	–.422	–.386	–.338	–.277	–.261	–.241	–.207	–.193	–.171	–.128	–.114	–.096
	.400	–.492	–.467	–.448	–.408	–.356	–.333	–.308	–.283	–.275	–.253	–.214	–.200	–.184
	.500	–.538	–.524	–.500	–.464	–.415	–.402	–.389	–.357	–.345	–.323	–.287	–.274	–.260
	.600	–.618	–.598	–.582	–.550	–.507	–.488	–.472	–.444	–.432	–.418	–.385	–.363	–.339
	.700	–.685	–.670	–.655	–.629	–.589	–.575	–.558	–.533	–.527	–.503	–.467	–.458	–.442
	.800	–.508	–.487	–.501	–.595	–.646	–.619	–.610	–.582	–.553	–.484	–.479	–.422	–.376
	.900	–.190	–.159	–.125	–.103	–.079	–.064	–.062	–.058	–.062	–.064	–.074	–.078	–.084
	.950	–.164	–.126	–.077	–.043	–.002	.022	.032	.043	.045	.048	.044	.044	.040
Lower surface	.0375	.186	.151	.102	.014	–.167	–.283	–.453	–.649	–.745	–.815	–.911	–.951	–.999
	.075	.157	.131	.093	.024	–.078	–.110	–.151	–.429	–.589	–.693	–.805	–.843	–.888
	.150	.144	.126	.099	.051	–.026	–.053	–.084	–.109	–.131	–.239	–.708	–.763	–.813
	.250	.121	.109	.089	.053	–.003	–.021	–.044	–.071	–.089	–.098	–.142	–.182	–.344
	.350	.089	.078	.061	.035	–.008	–.021	–.037	–.058	–.074	–.084	–.110	–.112	–.124
	.450	.068	.063	.049	.027	–.004	–.012	–.024	–.039	–.051	–.057	–.078	–.079	–.085
	.550	.038	.035	.027	.010	–.013	–.019	–.026	–.035	–.045	–.046	–.061	–.060	–.062
	.650	–.003	–.001	–.007	–.016	–.032	–.033	–.037	–.040	–.047	–.046	–.052	–.051	–.051
	.750	–.022	–.014	–.012	–.016	–.024	–.021	–.022	–.021	–.023	–.021	–.024	–.019	–.019
	.850	–.022	–.009	.001	.002	.007	.013	.017	.023	.022	.027	.026	.033	.033
	.925	–.056	–.035	–.012	.002	.020	.032	.041	.052	.053	.060	.064	.069	.071
	[a].975	–.096	–.064	–.031	–.008	.028	.043	.054	.044	.078	.072	.082	.093	.102
	[a]1.000	–.120	–.093	–.049	–.018	.032	.046	.060	.050	.095	.080	.089	.110	.128

[a]No orifice.

TABLE 7.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) – Continued

(h) M = 0.65; $\beta_{0.75R}$ = 45°.

	J	2.168	2.185	2.204	2.215	2.249	2.254	2.273	2.290	2.298	2.319	2.335	2.341	2.362	2.373
	M_x	.990	.985	.983	.977	.972	.967	.963	.960	.953	.954	.953	.950	.945	.946
	α_x'	2.40	2.18	1.93	1.79	1.35	1.29	1.05	.84	.74	.48	.28	.21	–.05	–.18
	$\Delta\beta$	–.20	–.32	–.47	–.59	–.92	–.97	–1.14	–1.30	–1.37	–1.55	–1.68	–1.73	–1.88	–1.96
	α_i	1.24	1.14	1.02	.86	.62	.52	.35	.19	.09	0	–.07	–.19	–.37	–.44
	c_n	.3994	.3665	.3290	.2755	.1994	.1671	.1123	.0619	.0284	–.0013	–.0226	–.0606	–.1197	–.1423
	c_m	–.1419	–.1414	–.1377	–.1311	–.1242	–.1170	–.1098	–.1037	–.1008	–.0982	–.0947	–.0918	–.0821	–.0832
	c_o	.0311	.0322	.0340	.0323	.0322	.0309	.0303	.0296	.0293	.0287	.0281	.0271	.0273	.0261
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.269	1.266	1.265	1.261	1.258	1.255	1.253	1.251	1.248	1.248	1.247	1.246	1.243	1.243
	.025	.247	.276	.313	.359	.415	.428	.456	.486	.499	.517	.531	.549	.580	.591
	.050	.037	.060	.094	.133	.183	.197	.224	.253	.265	.281	.294	.313	.342	.355
	.100	–.023	–.007	.006	.028	.066	.075	.096	.119	.128	.144	.155	.171	.198	.208
	.200	–.226	–.204	–.168	–.144	–.113	–.103	–.080	–.055	–.047	–.032	–.021	–.006	.018	.028
	.300	–.263	–.250	–.230	–.205	–.172	–.164	–.147	–.124	–.120	–.109	–.102	–.088	–.068	–.060
	.400	–.319	–.313	–.296	–.277	–.248	–.240	–.228	–.215	–.207	–.192	–.179	–.163	–.151	–.145
	.500	–.375	–.369	–.356	–.337	–.310	–.303	–.294	–.275	–.272	–.261	–.256	–.248	–.231	–.222
	.600	–.457	–.452	–.438	–.420	–.401	–.397	–.384	–.370	–.367	–.357	–.350	–.338	–.326	–.317
	.700	–.525	–.524	–.511	–.500	–.480	–.476	–.467	–.456	–.456	–.445	–.441	–.430	–.418	–.411
	.800	–.613	–.611	–.602	–.594	–.579	–.574	–.570	–.559	–.561	–.550	–.545	–.537	–.528	–.533
	.900	–.727	–.731	–.723	–.718	–.704	–.702	–.697	–.678	–.619	–.577	–.508	–.433	–.393	–.369
	.950	–.735	–.743	–.729	–.703	–.589	–.409	–.293	–.234	–.189	–.169	–.151	–.129	–.110	–.099
Lower surface	.0375	.111	.056	–.006	–.107	–.282	–.346	–.417	–.480	–.525	–.549	–.577	–.616	–.679	–.700
	.075	.103	.057	.009	–.049	–.182	–.256	–.351	–.414	–.455	–.477	–.504	–.540	–.601	–.619
	.150	.113	.077	.041	–.001	–.067	–.093	–.205	–.355	–.404	–.429	–.453	–.487	–.549	–.567
	.250	.105	.073	.044	.007	–.036	–.050	–.074	–.113	–.153	–.240	–.323	–.393	–.478	–.495
	.350	.081	.053	.028	–.005	–.052	–.072	–.102	–.125	–.141	–.148	–.157	–.181	–.370	–.421
	.450	.061	.039	.020	–.007	–.050	–.064	–.097	–.124	–.141	–.150	–.156	–.161	–.197	–.207
	.550	.023	.004	–.010	–.030	–.072	–.085	–.119	–.146	–.158	–.167	–.172	–.173	–.197	–.198
	.650	–.034	–.053	–.064	–.082	–.109	–.118	–.146	–.176	–.185	–.197	–.201	–.193	–.222	–.218
	.750	–.071	–.069	–.095	–.108	–.121	–.122	–.134	–.158	–.151	–.158	–.149	–.119	–.147	–.142
	.850	–.059	–.074	–.075	–.083	–.086	–.081	–.076	–.077	–.070	–.065	–.060	–.052	–.055	–.049
	.925	–.063	–.076	–.079	–.088	–.090	–.093	–.093	–.090	–.087	–.081	–.073	–.063	–.055	–.045
	[a].975	–.060	–.077	–.080	–.089	–.090	–.096	–.106	–.095	–.091	–.099	–.077	–.062	–.055	–.045
	[a]1.000	–.063	–.080	–.083	–.089	–.091	–.100	–.119	–.110	–.100	–.105	–.079	–.065	–.055	–.045

[a]No orifice.

NACA

TABLE 7.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) – Continued

(i) One-blade propeller; N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

J	2.499	2.430	2.396	2.356	2.288	2.252	2.215	2.190	2.140	2.110
M_x	.789	.773	.768	.762	.749	.743	.740	.734	.727	.722
α_x'	-1.66	-.86	-.46	.03	.86	1.32	1.79	2.11	2.77	3.17
$\Delta\beta$	-1.78	-.66	-.22	.23	.99	1.31	1.78	2.08	2.84	3.45
α_i	-.20	.38	.49	.70	1.05	1.21	1.41	1.58	1.85	2.18
c_n	-.0768	.1497	.1935	.2726	.4123	.4748	.5497	.6194	.7252	.8516
c_m	-.1005	-.0948	-.0902	-.0900	-.0857	-.0798	-.0762	-.0728	-.0639	-.0511
c_c										
c/b	Pressure coefficient, P									
Upper surface										
[a]0.000	1.166	1.159	1.157	1.154	1.149	1.147	1.145	1.143	1.140	1.137
.025	.651	.458	.413	.187	-.192	-.432	-.710	-1.011	-1.500	-1.756
.050	.386	.201	.113	-.028	-.321	-.488	-.740	-1.020	-1.421	-1.648
.100	.191	.020	-.040	-.156	-.368	-.470	-.593	-.736	-1.315	-1.552
.200	.027	-.113	-.153	-.234	-.378	-.428	-.502	-.551	-.600	-1.341
.300	-.076	-.193	-.220	-.284	-.389	-.422	-.473	-.507	-.496	-.495
.400	-.176	-.265	-.290	-.336	-.406	-.436	-.469	-.493	-.504	-.451
.500	-.247	-.319	-.340	-.375	-.420	-.443	-.463	-.480	-.492	-.461
.600	-.282	-.338	-.344	-.371	-.400	-.407	-.417	-.428	-.435	-.416
.700	-.330	-.362	-.364	-.380	-.389	-.389	-.390	-.395	-.398	-.380
.800	-.307	-.321	-.317	-.323	-.331	-.312	-.306	-.308	-.305	-.291
.900	-.158	-.190	-.157	-.160	-.150	-.137	-.130	-.129	-.129	-.121
.950	-.029	[b]-.070	[b]-.026	[b]-.025	[b]-.002	[b]-.007	[b]-.002	[b]0	[b].006	[b].019
Lower surface										
.0375	-1.351	-.396	-.220	-.093	.126	.231	.334	.399	.502	.576
.075	-1.243	-.219	-.173	-.066	.089	.167	.246	.298	.385	.451
.150	-.375	-.128	-.078	-.009	.096	.148	.204	.242	.309	.362
.250	-.119	-.089	-.052	-.005	.072	.109	.153	.182	.237	.281
.350	-.099	-.056	-.026	.007	.065	.093	.126	.151	.195	.233
.450	-.058	-.020	.005	.031	.076	.093	.121	.140	.180	.211
.550	-.048	-.017	.001	.020	.056	.071	.094	.111	.143	.172
.650	-.031	-.010	.003	.017	.044	.055	.072	.085	.112	.137
.750	.013	.028	.037	.046	.065	.073	.084	.091	.109	.129
.850	.057	.065	.069	.076	.084	.083	.092	.099	.114	.185
.925	.108	.119	.116	.120	.126	.116	.117	.121	.130	.140
[a].975	.154	.152	.143	.144	.164	.144	.132	.143	.143	.162
[a]1.000	.180	.166	.158	.159	.183	.160	.144	.159	.152	.175

[a]No orifice.

[b]Faired value.

TABLE 7.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) – Continued

(j) One-blade propeller; N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.428	2.339	2.315	2.288	2.260	2.235	2.197	2.170	2.143	2.103	2.080	2.047
	M_x	.830	.812	.807	.800	.795	.792	.785	.777	.772	.764	.762	.757
	α_x'	–.84	.23	.53	.86	1.22	1.53	2.02	2.37	2.73	3.26	3.57	4.03
	$\Delta\beta$	–1.48	.26	.60	.96	1.36	1.78	2.56	3.18	3.74	4.36	4.64	4.98
	α_i	.10	.80	.95	1.13	1.33	1.49	1.79	2.10	2.35	2.56	2.72	2.78
	c_n	.0413	.3145	.3745	.4442	.5245	.5892	.7032	.8271	.9258	1.0103	1.0742	1.1019
	c_m	–.1144	–.0982	–.1008	–.0934	–.0846	–.0798	–.0746	–.0660	–.0682	–.0667	–.0677	–.0657
	c_c												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.184	1.176	1.175	1.171	1.168	1.167	1.164	1.160	1.158	1.155	1.154	1.152
	.025	.580	.217	.048	–.148	–.382	–.587	–.865	–1.188	–1.351	–1.515	–1.635	–1.722
	.050	.319	–.005	–.150	–.309	–.531	–.735	–.912	–1.162	–1.295	–1.444	–1.545	–1.615
	.100	.126	–.145	–.257	–.382	–.525	–.683	–.920	–1.120	–1.251	–1.380	–1.473	–1.545
	.200	–.031	–.241	–.327	–.414	–.494	–.603	–.885	–1.067	–1.187	–1.306	–1.395	–1.463
	.300	–.133	–.304	–.370	–.434	–.474	–.544	–.781	–1.052	–1.160	–1.283	–1.372	–1.439
	.400	–.240	–.376	–.418	–.459	–.491	–.525	–.522	–.726	–1.111	–1.295	–1.372	–1.248
	.500	–.311	–.432	–.457	–.478	–.495	–.500	–.473	–.427	–.451	–.564	–.662	–.701
	.600	–.363	–.440	–.451	–.456	–.452	–.448	–.426	–.382	–.335	–.344	–.386	–.427
	.700	–.442	–.455	–.440	–.430	–.416	–.407	–.393	–.362	–.320	–.278	–.264	–.277
	.800	–.359	–.341	–.347	–.324	–.308	–.299	–.291	–.278	–.253	–.222	–.200	–.194
	.900	–.140	–.139	–.137	–.133	–.114	–.107	–.104	–.102	–.093	–.081	–.072	–.072
	[a].950	.009	.002	.013	.004	.024	.025	.086	.107	.100	.035	.036	.027
Lower surface	.0375	–1.074	–.089	.025	.143	.253	.333	.437	.506	.558	.603	.639	.670
	.075	–.993	–.062	.022	.105	.187	.249	.334	.394	.440	.481	.512	.540
	.150	–.281	.001	.058	.112	.169	.213	.276	.323	.362	.393	.420	.443
	.250	–.094	.001	.045	.084	.127	.160	.211	.248	.281	.309	.330	.349
	.350	–.071	.012	.048	.076	.110	.137	.179	.211	.239	.263	.281	.295
	.450	–.024	.040	.068	.089	.112	.132	.169	.196	.221	.241	.256	.269
	.550	–.020	.027	.048	.066	.087	.104	.134	.158	.180	.197	.210	.220
	.650	–.005	.024	.064	.052	.068	.082	.109	.128	.147	.161	.172	.178
	.750	.038	.054	.067	.074	.087	.095	.110	.126	.142	.153	.162	.164
	.850	.084	.083	.093	.095	.101	.105	.119	.131	.144	.149	.153	.149
	.925	.137	.127	.141	.136	.133	.134	.141	.153	.164	.166	.164	.155
	[a].975	.174	.162	.178	.170	.165	.167	.156	.183	.174	.186	.181	.160
	[a]1.000	.193	.183	.199	.184	.184	.187	.166	.203	.177	.200	.191	.162

[a]No orifice.

TABLE 7.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) — Continued

(k) One-blade propeller; M = 0.56; $\beta_{0.75R}$ = 45°.

	J	2.410	2.313	2.277	2.260	2.228	2.196	2.174	2.149	2.122	2.107	2.076	2.048	2.026	2.007	1.984
	M_x	.803	.820	.826	.832	.838	.842	.848	.854	.860	.868	.871	.873	.879	.887	.893
	α_x'	-.62	.55	1.00	1.21	1.62	2.07	2.32	2.65	3.01	3.21	3.63	4.01	4.32	4.58	4.90
	$\Delta\beta$	-.78	.56	.79	.90	1.14	1.43	1.69	2.04	2.38	2.55	2.88	3.16	3.34	3.46	3.61
	α_i	.42	.96	1.17	1.35	1.54	1.76	1.84	1.97	2.07	2.10	2.22	2.31	2.35	2.40	2.44
	c_n	.1668	.3745	.4590	.5313	.6058	.6923	.7219	.7761	.8103	.8200	.8710	.9045	.9219	.9419	.9587
	c_m	-.0980	-.1044	-.1018	-.1065	-.1078	-.1075	-.1185	-.1255	-.1293	-.1304	-.1344	-.1321	-.1347	-.1358	-.1419
	c_c								-.0022	-.0019	-.0016	-.0014	-.0027	-.0023	-.0028	-.0013
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.172	1.179	1.182	1.183	1.187	1.189	1.192	1.193	1.198	1.202	1.203	1.205	1.208	1.212	1.215
	.025	.447	.089	-.061	-.181	-.297	-.441	-.476	-.533	-.571	-.586	-.709	-.753	-.783	-.813	-.817
	.050	.203	-.113	-.239	-.339	-.473	-.566	-.582	-.615	-.658	-.675	-.729	-.758	-.788	-.816	-.820
	.100	.025	-.223	-.320	-.406	-.495	-.606	-.623	-.664	-.705	-.711	-.769	-.787	-.806	-.827	-.827
	.200	-.109	-.300	-.377	-.439	-.537	-.643	-.662	-.706	-.740	-.743	-.791	-.809	-.822	-.835	-.834
	.300	-.203	-.361	-.427	-.497	-.586	-.676	-.698	-.745	-.779	-.782	-.831	-.845	-.851	-.859	-.860
	.400	-.274	-.420	-.508	-.560	-.613	-.722	-.742	-.778	-.813	-.822	-.867	-.881	-.891	-.901	-.901
	.500	-.341	-.483	-.530	-.592	-.648	-.744	-.774	-.816	-.846	-.849	-.876	-.894	-.912	-.927	-.925
	.600	-.363	-.498	-.573	-.638	-.695	-.770	-.808	-.849	-.892	-.899	-.930	-.935	-.931	-.935	-.940
	.700	-.394	-.488	-.479	-.566	-.702	-.622	-.707	-.655	-.524	-.492	-.431	-.426	-.433	-.434	-.457
	.800	-.329	-.328	-.306	-.258	-.221	-.208	-.229	-.280	-.320	-.337	-.364	-.376	-.390	-.402	-.418
	.900	-.144	-.115	-.100	-.075	-.051	-.050	-.101	-.159	-.241	-.288	-.334	-.356	-.373	-.385	-.401
	[a].950	-.006	.006	.023	.039	.042	.036	-.013	-.035	-.137	-.228	-.258	-.258	-.313	-.301	-.326
Lower surface	.0375	-.595	.009	.119	.205	.278	.361	.387	.436	.472	.487	.533	.556	.577	.603	.615
	.075	-.174	.016	.054	.157	.213	.280	.302	.342	.373	.387	.428	.449	.468	.493	.503
	.150	-.100	.037	.108	.153	.193	.244	.260	.292	.317	.328	.361	.378	.396	.418	.427
	.250	-.067	.050	.088	.120	.149	.191	.204	.230	.249	.258	.286	.301	.315	.336	.343
	.350	-.041	.045	.077	.103	.128	.158	.170	.190	.205	.213	.240	.252	.264	.282	.289
	.450	.002	.070	.096	.114	.130	.157	.164	.183	.196	.202	.222	.231	.243	.258	.264
	.550	.002	.055	.073	.090	.101	.112	.126	.138	.147	.160	.170	.181	.191	.206	.217
	.650	.010	.046	.060	.073	.082	.097	.100	.106	.111	.112	.122	.127	.133	.145	.149
	.750	.045	.074	.082	.093	.098	.105	.103	.111	.102	.097	.103	.103	.106	.116	.118
	.850	.086	.103	.107	.115	.116	.116	.109	.106	.087	.074	.070	.066	.065	.074	.075
	.925	.132	.140	.143	.148	.143	.134	.123	.101	.071	.048	.033	.025	.023	.031	.033
	[a].975	.165	.165	.173	.172	.170	.150	.140	.104	.070	.049	.035	.026	.023	.030	.033
	[a]1.000	.182	.180	.190	.186	.186	.160	.148	.104	.070	.050	.038	.030	.030	.030	.034

[a]No orifice.

TABLE 7.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) — Continued

(i) One-blade propeller; M = 0.58; $\beta_{0.75R} = 45^{\circ}$.

	J	2.342	2.256	2.219	2.208	2.175	2.151	2.130	2.110	2.089	2.062	2.041	2.020	1.996
	M_x	.845	.861	.865	.871	.875	.879	.887	.892	.898	.902	.908	.913	.920
	α_x'	.20	1.27	1.74	1.88	1.99	2.62	2.90	3.17	3.50	3.82	4.11	4.40	4.74
	$\Delta\beta$	-.34	.70	1.00	1.10	1.43	1.74	2.09	2.48					
	α_i	.69	1.16	1.41	1.50	1.64	1.73	1.84	1.96	1.99	2.03	2.10	2.19	2.23
	c_n	.2703	.4558	.5503	.5852	.6426	.6761	.7213	.7645	.7800	.7961	.8206	.8561	.8819
	c_m	-.1136	-.1213	-.1147	-.1173	-.1196	-.1254	-.1299	-.1365	-.1404	-.1406	-.1481	-.1549	-.1619
	c_o		.0112	.0064	.0063	.0053	.0059	.0051	.0056	.0057	.0067	.0078	.0061	.0066
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.191	1.199	1.200	1.204	1.206	1.208	1.212	1.215	1.218	1.220	1.223	1.226	1.230
	.025	.360	.052	-.131	-.170	-.276	-.315	-.392	-.431	-.450	-.451	-.471	-.512	-.549
	.050	.115	-.143	-.296	-.368	-.465	-.489	-.512	-.538	-.549	-.555	-.556	-.598	-.623
	.100	-.050	-.257	-.388	-.417	-.500	-.527	-.558	-.581	-.597	-.600	-.617	-.644	-.667
	.200	-.178	-.341	-.454	-.479	-.555	-.577	-.613	-.638	-.652	-.654	-.665	-.682	-.698
	.300	-.258	-.400	-.500	-.535	-.594	-.613	-.648	-.671	-.686	-.688	-.700	-.720	-.735
	.400	-.353	-.497	-.569	-.602	-.664	-.681	-.707	-.727	-.738	-.743	-.756	-.775	-.790
	.500	-.435	-.540	-.614	-.637	-.692	-.712	-.746	-.765	-.774	-.777	-.784	-.795	-.807
	.600	-.499	-.607	-.670	-.693	-.748	-.758	-.784	-.809	-.823	-.828	-.836	-.847	-.856
	.700	-.573	-.685	-.750	-.762	-.826	-.846	-.851	-.838	-.823	-.848	-.865	-.895	-.913
	.800	-.435	-.583	-.362	-.333	-.311	-.315	-.322	-.337	-.354	-.381	-.399	-.429	-.461
	.900	-.114	-.075	-.098	-.143	-.198	-.238	-.276	-.300	-.320	-.346	-.366	-.396	-.423
	[a].950	.013	.031	.010	-.038	-.103	-.164	-.177	-.228	-.255	-.253	-.308	-.311	-.326
Lower surface	.0375	-.207	.074	.221	.241	.308	.345	.398	.427	.456	.472	.496	.525	.544
	.075	-.152	.057	.157	.184	.236	.266	.311	.336	.360	.373	.394	.421	.438
	.150	-.064	.083	.151	.170	.208	.233	.268	.288	.308	.320	.335	.358	.371
	.250	-.043	.066	.117	.129	.158	.178	.207	.223	.240	.249	.263	.282	.293
	.350	-.021	.059	.099	.109	.131	.148	.174	.186	.199	.206	.218	.233	.243
	.450	.013	.077	.106	.112	.127	.144	.163	.175	.186	.193	.203	.217	.225
	.550	.017	.052	.064	.080	.084	.101	.119	.130	.142	.152	.162	.173	.181
	.650	.007	.037	.052	.053	.057	.066	.076	.082	.088	.084	.096	.106	.111
	.750	.043	.059	.068	.063	.060	.064	.067	.068	.070	.070	.074	.082	.086
	.850	.081	.083	.079	.070	.056	.050	.048	.043	.044	.041	.046	.051	.056
	.925	.122	.093	.103	.081	.055	.041	.026	.017	.017	.014	.017	.023	.027
	[a].975	.152	.102	.127	.090	.055	.041	.027	.018	.011	-.002	.001	.011	.011
	[a]1.000	.169	.108	.137	.094	.054	.040	.029	.020	.010	-.008	-.003	.005	.007

[a]No orifice.

TABLE 7.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) — Continued

(m) One-blade propeller; M = 0.60; $\beta_{0.75R}$ = 45°.

	J	2.335	2.282	2.264	2.222	2.200	2.175	2.156	2.124	2.111	2.089	2.067	2.043	2.017	2.011
	M_x	.881	.890	.899	.899	.904	.909	.913	.921	.928	.934	.940	.944	.948	.959
	α_x'	.28	.94	1.16	1.70	1.98	2.31	2.56	2.98	3.16	3.45	3.75	4.08	4.43	4.53
	$\Delta\beta$	-.86	.04	.17	.35	.44	.54	.62	.80	.86	.99	1.11	1.26	1.42	1.46
	α_1	.35	.82	.97	1.21	1.31	1.45	1.54	1.62	1.69	1.77	1.86	1.96	2.00	2.05
	c_n	.1374	.3852	.3832	.4774	.5142	.5677	.6019	.6348	.6652	.6955	.7316	.7710	.7871	.8058
	c_m	-.1340	-.1340	-.1352	-.1424	-.1357	-.1337	-.1386	-.1431	-.1483	-.1535	-.1621	-.1668	-.1696	-.1776
	c_o	.0209	.0208	.0205	.0186	.0170	.0169	.0168	.0165	.0177	.0170	.0175	.0171	.0173	.0170
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.209	1.215	1.219	1.219	1.221	1.224	1.226	1.230	1.234	1.237	1.241	1.243	1.245	1.251
	.025	.513	.344	.270	.128	.058	-.022	-.069	-.113	-.149	-.183	-.235	-.289	-.316	-.311
	.050	.253	.111	.055	-.077	-.146	-.221	-.278	-.297	-.328	-.345	-.369	-.396	-.422	-.420
	.100	.086	-.051	-.102	-.195	-.247	-.303	-.332	-.365	-.393	-.414	-.441	-.463	-.476	-.469
	.200	-.062	-.176	-.215	-.292	-.341	-.389	-.417	-.445	-.466	-.481	-.508	-.532	-.544	-.536
	.300	-.158	-.256	-.293	-.368	-.409	-.456	-.479	-.498	-.516	-.531	-.555	-.576	-.585	-.577
	.400	-.264	-.378	-.404	-.456	-.490	-.531	-.554	-.573	-.589	-.598	-.617	-.635	-.646	-.641
	.500	-.357	-.439	-.461	-.512	-.538	-.573	-.594	-.609	-.626	-.636	-.657	-.672	-.678	-.667
	.600	-.441	-.514	-.537	-.579	-.602	-.631	-.652	-.665	-.678	-.684	-.705	-.724	-.732	-.722
	.700	-.537	-.610	-.628	-.667	-.681	-.712	-.730	-.742	-.753	-.758	-.769	-.784	-.792	-.779
	.800	-.653	-.718	-.738	-.766	-.770	-.743	-.740	-.772	-.805	-.823	-.845	-.853	-.865	-.857
	.900	-.133	-.172	-.192	-.204	-.220	-.248	-.270	-.308	-.339	-.362	-.403	-.439	-.465	-.502
	.950	.005	-.094	-.125	-.148	-.176	-.208	-.236	-.274	-.307	-.331	-.371	-.402	-.423	-.436
Lower surface	.0375	-.743	-.174	-.054	.076	.146	.222	.265	.310	.345	.377	.408	.448	.472	.485
	.075	-.688	-.108	-.033	.060	.122	.173	.207	.239	.269	.298	.323	.357	.378	.389
	.150	-.266	-.028	.031	.093	.128	.172	.195	.221	.243	.265	.284	.312	.330	.340
	.250	-.102	-.022	.022	.070	.095	.129	.147	.167	.186	.204	.220	.244	.258	.269
	.350	-.073	-.008	.025	.061	.080	.108	.124	.137	.154	.169	.181	.202	.216	.228
	.450	-.024	.023	.047	.076	.090	.112	.125	.136	.148	.162	.172	.190	.204	.212
	.550	-.022	.010	.026	.043	.052	.070	.080	.088	.100	.111	.119	.134	.146	.156
	.650	-.014	-.003	.008	.016	.021	.033	.041	.045	.052	.063	.069	.082	.092	.102
	.750	.024	.019	.024	[b].022	[b].022	[b].026	[b].027	[b].031	[b].033	[b].040	[b].042	[b].053	[b].070	[b].076
	.850	.062	.040	.037	.029	.024	.022	.024	.023	.027	.035	.036	.045	.053	.065
	.925	.102	.058	.048	.033	.020	.014	.014	.014	.017	.024	.027	.037	.045	.057
	[a].975	.110	.037	-.007	.009	.017	-.021	-.044	-.060	-.109	-.072	-.048	-.075	-.067	-.027
	[a]1.000	.110	.015	-.039	0	.015	-.050	-.112	-.121	-.204	-.185	-.145	-.233	-.202	-.150

[a]No orifice.

[b]Faired value.

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.42 PROPELLER BLADE SECTION (x = 0.78) - Concluded

(n) One-blade propeller; M = 0.65; $\beta_{0.75R}$ = 45°.

J	2.221	2.188	2.164	2.138	2.116	2.104	2.084	2.059	2.040	2.017	2.004	1.989
M_x	.963	.970	.973	.978	.984	.990	.996	.999	1.005	1.012	1.019	1.023
α_x	1.70	2.14	2.44	2.79	3.09	3.26	3.52	3.86	4.12	4.44	4.63	4.83
$\Delta\beta$	-.64	-.34	-.17	0	.12	.20	.32	.48	.61	.80	.92	1.06
α_i	.60	.85	1.06	1.21	1.35	1.47	1.56	1.87	1.74	1.76	1.84	1.88
c_n	.2352	.3329	.4148	.4710	.5271	.5716	.6084	.6535	.6800	.6903	.7174	.7342
c_m	-.1424	-.1583	-.1703	-.1740	-.1803	-.1832	-.1914	-.1947	-.1958	-.1957	-.1991	-.2021
c_d	.0313	.0333	.0348	.0322	.0319	.0302	.0300	.0294	.0281	.0283	.0275	.0288
c/b	Pressure coefficient, P											
Upper surface												
[a]0.000	1.253	1.257	1.259	1.262	1.265	1.269	1.272	1.274	1.278	1.282	1.287	1.289
.025	.455	.374	.296	.228	.169	.120	.075	.025	.005	-.020	-.056	-.082
.050	.221	.156	.282	.027	-.025	-.076	-.122	-.177	-.185	-.198	-.211	-.221
.100	.058	-.005	-.057	-.108	-.145	-.175	-.203	-.246	-.259	-.276	-.293	-.300
.200	-.070	-.122	-.172	-.218	-.245	-.274	-.304	-.338	-.343	-.356	-.371	-.377
.300	-.157	-.213	-.256	-.296	-.321	-.342	-.364	-.394	-.398	-.410	-.425	-.428
.400	-.271	-.309	-.344	-.378	-.399	-.419	-.436	-.466	-.473	-.484	-.494	-.495
.500	-.330	-.367	-.397	-.424	-.440	-.459	-.474	-.500	-.502	-.510	-.522	-.526
.600	-.406	-.437	-.464	-.488	-.499	-.518	-.532	-.552	-.553	-.561	-.574	-.576
.700	-.498	-.524	-.546	-.570	-.580	-.586	-.602	-.626	-.623	-.625	-.628	-.628
.800	-.601	-.625	-.642	-.659	-.667	-.679	-.685	-.701	-.704	-.710	-.712	-.707
.900	-.708	-.726	-.746	-.755	-.755	-.764	-.772	-.786	-.783	-.783	-.785	-.784
.950	-.486	-.707	-.765	-.768	-.781	-.785	-.794	-.810	-.805	-.806	-.804	-.887
Lower surface												
.0375	-.287	-.073	.039	.132	.215	.271	.317	.361	.391	.408	.438	.463
.075	-.285	-.079	.030	.105	.173	.220	.256	.290	.317	.330	.355	.378
.150	-.063	.025	.089	.137	.187	.220	.246	.271	.293	.301	.321	.340
.250	-.067	.008	.060	.100	.144	.172	.195	.214	.233	.240	.255	.273
.350	-.057	.010	.052	.083	.121	.146	.164	.180	.197	.202	.217	.232
.450	-.016	.039	.070	.094	.127	.148	.164	.176	.193	.198	.209	.223
.550	-.031	.008	.033	.049	.076	.096	.110	.121	.137	.139	.150	.162
.650	-.048	-.026	-.009	.003	.028	.046	.061	.066	.082	.082	.091	.107
.750	-.008	-.001	.011	.019	.043	.062	.072	.079	.092	.090	.097	.108
.850	-.008	-.001	.007	.012	.028	.040	.051	.057	.070	.073	.082	.090
.925	.009	.018	.026	.033	.048	.060	.070	.076	.087	.090	.100	.108
[a].975	.022	.036	.045	.058	.081	.090	.097	.104	.114	.104	.111	.127
[a]1.000	.027	.047	.054	.071	.099	.109	.111	.122	.129	.116	.120	.140

[a]No orifice.

TABLE 8.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.00 PROPELLER BLADE SECTION (x = 0.85)

(a) N = 1140 rpm; $\beta_{0.75R}$ = 45°.

	J	1.897	1.983	2.062	2.172	2.255	2.362	2.450	2.573	2.540	2.407	2.325	2.217	2.180	2.130	2.028	1.943
	M_x	.568	.575	.582	.594	.604	.616	.627	.643	.635	.623	.609	.596	.595	.590	.579	.571
	α_x'	6.11	4.90	3.82	2.38	1.32	.01	-1.04	-2.44	-2.07	-.53	.46	1.80	2.27	2.92	4.28	5.46
	$\Delta\beta$	1.97	1.79	1.54	1.09	.68	.12	-.35	-1.05	-.86	-.11	.31	.87	1.05	1.28	1.66	1.89
	α_i	2.80	2.52	2.07	1.55	1.15	.65	.29	-.32	-.14	.43	.78	1.34	1.52	1.76	2.30	2.65
	c_n	.7574	.6742	.5606	.4190	.3097	.1781	.0794	-.0877	-.0387	.1181	.2119	.3648	.4126	.4768	.6181	.7135
	c_m	-.0254	-.0321	-.0426	-.0523	-.0542	-.0574	-.0582	-.0659	-.0603	-.0580	-.0610	-.0524	-.0516	-.0485	-.0397	-.0272
	c_d																
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.083	1.085	1.087	1.091	1.094	1.098	1.101	1.107	1.104	1.100	1.096	1.091	1.091	1.090	1.086	1.084
	.025	-1.725	-1.663	-1.466	-.603	-.240	.099	.337	.554	.496	.246	-.002	-.418	-.575	-.840	-1.588	-1.702
	.050	-1.684	-1.601	-1.022	-.329	-.285	-.044	.143	.336	.281	.070	-.116	-.401	-.514	-.638	-1.429	-1.662
	.100	-1.434	-1.148	-.626	-.466	-.306	-.145	-.006	.146	.102	-.063	-.194	-.387	-.457	-.541	-.886	-1.339
	.200	-.858	-.578	-.502	-.411	-.306	-.201	-.111	-.003	-.035	-.147	-.233	-.356	-.402	-.451	-.514	-.683
	.300	-.565	-.454	-.420	-.352	-.285	-.219	-.140	-.055	-.082	-.173	-.243	-.314	-.345	-.382	-.431	-.486
	.400	-.451	-.412	-.392	-.345	-.290	-.236	-.183	-.116	-.140	-.206	-.252	-.314	-.338	-.363	-.404	-.424
	.500	-.375	-.367	-.357	-.323	-.280	-.239	-.200	-.147	-.163	-.216	-.250	-.297	-.316	-.337	-.362	-.375
	.600	-.317	-.325	-.327	-.304	-.276	-.246	-.217	-.180	-.193	-.230	-.254	-.286	-.299	-.315	-.327	-.330
	.700	-.267	-.284	-.296	-.289	-.272	-.257	-.235	-.211	-.216	-.244	-.261	-.277	-.284	-.292	-.291	-.284
	.800	-.189	-.206	-.222	-.228	-.218	-.215	-.201	-.188	-.193	-.207	-.250	-.226	-.220	-.225	-.214	-.203
	.900	-.099	-.092	-.100	-.108	-.107	-.110	-.106	-.107	-.108	-.111	-.111	-.102	-.102	-.102	-.096	-.099
	.950	-.043	-.022	-.022	-.022	-.024	-.029	-.030	-.035	-.035	-.033	-.030	-.022	-.019	-.018	-.019	-.036
Lower surface	.0375	.592	.520	.420	.257	.095	-.114	-.319	-1.033	-.928	-.235	-.131	.188	.264	.341	.478	.549
	.075	.472	.409	.321	.192	.073	-.077	-.208	-.722	-.494	-.159	-.115	.142	.198	.257	.372	.430
	.150	.370	.320	.258	.163	.080	-.022	-.118	-.363	-.214	-.082	.007	.128	.168	.212	.295	.336
	.250	.293	.258	.206	.133	.075	-.001	-.066	-.155	-.121	-.042	.023	.109	.135	.169	.235	.269
	.350	.233	.200	.157	.098	.053	-.002	-.050	-.106	-.093	-.033	.012	.078	.102	.130	.182	.207
	.450	.199	.173	.138	.089	.053	-.008	-.026	-.068	-.060	-.014	.025	.077	.095	.117	.158	.180
	.550	.149	.131	.100	.059	.030	-.002	-.030	-.060	-.054	-.020	.005	.049	.065	.082	.120	.130
	.650	.123	.111	.086	.054	.033	.008	-.013	-.035	-.032	-.008	.012	.047	.060	.072	.103	.111
	.750	.093	.088	.073	.050	.033	.017	.004	-.011	-.042	.006	.021	.044	.054	.065	.085	.087
	.850	.073	.078	.069	.054	.048	.039	.031	.024	.024	.034	.041	.055	.060	.067	.079	.073
	.925	.041	.057	.058	.054	.055	.053	.052	.048	.046	.049	.049	.055	.058	.057	.062	.043
	[a].975	.028	.048	.052	.059	.059	.062	.068	.058	.055	.058	.050	.056	.053	.055	.058	.034
	[a]1.000	.020	.041	.049	.060	.062	.067	.075	.064	.059	.062	.051	.056	.049	.052	.054	.030

[a]No orifice.

TABLE 8.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.00 PROPELLER BLADE SECTION ($x = 0.85$) – Continued

(b) $N = 1350$ rpm; $\beta_{0.75R} = 45°$.

J	1.998	2.063	2.132	2.221	2.285	2.365	2.433	2.517	2.462	2.408	2.344	2.277	2.203	2.116	2.056
M_x	.684	.690	.699	.710	.720	.732	.741	.754	.743	.735	.725	.717	.701	.694	.688
α_x'	4.70	3.81	2.90	1.75	.95	-.03	-.84	-1.81	-1.18	-.54	.22	1.05	1.98	3.11	3.91
$\Delta\beta$	3.07	2.62	2.11	1.42	.88	.11	-.50	-1.35	-.78	-.27	.31	.96	1.57	2.23	2.67
α_i	2.96	2.61	2.12	1.54	1.22	.79	.45	-.17	.23	.55	.83	1.23	1.67	2.22	2.73
c_n	.8000	.7058	.5735	.4171	.3310	.2155	.1219	-.0465	.0619	.1516	.2245	.3345	.4529	.5987	.7406
c_m	-.0275	-.0382	-.0467	-.0579	-.0610	-.0660	-.0683	-.0777	-.0688	-.0677	-.0663	-.0615	-.0577	-.0451	-.0303
c_c															
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.123	1.125	1.129	1.133	1.137	1.142	1.146	1.151	1.146	1.143	1.139	1.136	1.130	1.127	1.125
	.025	-2.215	-1.981	-1.885	-.503	-.214	.128	.340	.542	.421	.260	.060	-.272	-.604	-1.735	-2.069
	.050	-2.001	-1.756	-1.075	-.491	-.287	-.025	.149	.330	.221	.081	-.078	-.325	-.584	-1.491	-1.853
	.100	-1.812	-1.413	-.609	-.465	-.327	-.148	-.016	.138	.042	-.070	-.185	-.350	-.521	-.598	-1.584
	.200	-.668	-.518	-.532	-.418	-.331	-.224	-.135	-.023	-.094	-.172	-.220	-.345	-.448	-.531	-.511
	.300	-.460	-.471	-.448	-.370	-.311	-.233	-.171	-.083	-.139	-.198	-.225	-.324	-.391	-.455	-.459
	.400	-.445	-.443	-.420	-.365	-.323	-.269	-.221	-.152	-.196	-.241	-.282	-.331	-.378	-.425	-.438
	.500	-.406	-.400	-.384	-.343	-.312	-.272	-.237	-.183	-.220	-.254	-.283	-.317	-.352	-.385	-.394
	.600	-.359	-.362	-.355	-.331	-.309	-.282	-.261	-.223	-.246	-.272	-.292	-.311	-.335	-.355	-.355
	.700	-.315	-.323	-.326	-.317	-.306	-.296	-.283	-.257	-.274	-.290	-.303	-.308	-.320	-.321	-.315
	.800	-.226	-.235	-.242	-.246	-.245	-.248	-.245	-.231	-.221	-.248	-.253	-.242	-.242	-.238	-.228
	.900	-.097	-.096	-.101	-.108	-.112	-.121	-.127	-.128	-.127	-.127	-.126	-.112	-.107	-.099	-.095
	.950	-.016	-.006	-.007	-.012	-.013	-.021	-.027	-.034	-.030	-.027	-.024	-.012	-.009	-.007	-.007
Lower surface	.0375	.574	.498	.391	.214	.079	-.138	-.331	-1.443	-.623	-.236	-.093	.106	.271	.422	.521
	.075	.461	.399	.308	.165	.062	-.081	-.203	-.542	-.282	-.163	-.058	.082	.208	.333	.419
	.150	.368	.320	.252	.149	.080	-.020	-.108	-.173	-.146	-.079	-.003	.093	.182	.272	.336
	.250	.295	.258	.202	.124	.076	.005	-.055	-.119	-.086	-.037	.016	.083	.146	.217	.269
	.350	.241	.210	.166	.103	.065	.013	-.031	-.083	-.054	-.016	.020	.071	.122	.176	.221
	.450	.199	.176	.139	.087	.058	.021	-.015	-.056	-.033	-.005	.023	.062	.105	.149	.186
	.550	.151	.131	.101	.059	.036	.006	-.019	-.050	-.034	-.012	.008	.037	.071	.108	.139
	.650	.126	.112	.088	.054	.037	.017	-.003	-.025	-.014	.003	.016	.037	.065	.093	.118
	.750	.102	.093	.075	.050	.040	.028	.016	.001	.006	.018	.027	.038	.059	.077	.098
	.850	.090	.087	.078	.061	.058	.054	.048	.038	.042	.046	.052	.054	.066	.077	.089
	.925	.064	.066	.063	.059	.065	.070	.067	.064	.064	.065	.066	.060	.062	.063	.068
	[a].975	.053	.054	.063	.057	.068	.070	.084	.061	.073	.065	.073	.060	.062	.061	.060
	[a]1.000	.052	.052	.073	.058	.072	.070	.094	.057	.078	.064	.075	.060	.063	.064	.062

[a]No orifice.

NACA

TABLE 8. - PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.00 PROPELLER BLADE SECTION (x = 0.85) - Continued

(a) N = 1500 rpm; $\beta_{0.75R}$ = 45°.

	J	2.166	2.214	2.286	2.323	2.389	2.452	2.489	2.421	2.351	2.315	2.256	2.207
	M_x	.784	.788	.800	.804	.816	.825	.833	.822	.810	.803	.792	.782
	α_x'	2.46	1.84	.94	.48	-.32	-1.06	-1.49	-.70	.14	.58	1.31	1.93
	$\Delta\beta$	2.59	1.98	1.10	.60	-.28	-1.20	-1.77	-.73	.20	.70	1.46	2.07
	α_i	2.47	2.08	1.46	1.14	.73	.12	-.32	.41	.96	1.23	1.68	2.11
	c_n	.6690	.5652	.3977	.3103	.1981	.0323	-.0871	.1110	.2600	.3368	.4565	.5716
	c_m	-.0462	-.0575	-.0660	-.0730	-.0780	-.0929	-.1008	-.0844	-.0760	-.0732	-.0623	-.0542
	c_a												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.163	1.165	1.170	1.171	1.177	1.182	1.185	1.180	1.175	1.171	1.167	1.162
	.025	-1.242	-.941	-.265	-.005	.274	.689	.570	.393	.138	-.040	-.477	-1.001
	.050	-1.126	-.813	-.356	-.148	.090	.273	.361	.196	-.026	-.176	-.509	-.875
	.100	-1.091	-.814	-.413	-.262	-.079	.081	.162	.013	-.167	-.276	-.547	-.853
	.200	-1.000	-.653	-.401	-.313	-.184	-.062	.002	-.114	-.246	-.322	-.465	-.627
	.300	-.548	-.431	-.384	-.330	-.238	-.145	-.090	-.183	-.285	-.332	-.422	-.430
	.400	-.344	-.433	-.384	-.352	-.287	-.216	-.171	-.245	-.320	-.352	-.410	-.432
	.500	-.364	-.408	-.367	-.347	-.303	-.250	-.214	-.270	-.325	-.344	-.385	-.404
	.600	-.367	-.390	-.362	-.354	-.330	-.296	-.270	-.308	-.342	-.352	-.373	-.384
	.700	-.349	-.364	-.351	-.359	-.353	-.341	-.327	-.341	-.356	-.357	-.353	-.358
	.800	-.252	-.261	-.256	-.276	-.279	-.283	-.278	-.279	-.284	-.279	-.256	-.257
	.900	-.093	-.097	-.092	-.108	-.114	-.124	-.123	-.118	-.117	-.111	-.095	-.096
	.950	.008	.006	.013	.004	-.001	-.008	-.010	-.003	-.001	.005	.011	.010
Lower surface	.0375	.423	.329	.135	-.014	-.190	-1.048	-1.156	-.890	-.124	.013	.216	.343
	.075	.342	.259	.109	-.003	-.141	-.902	-1.033	-.220	-.070	.016	.169	.270
	.150	.284	.222	.116	.039	-.063	-.110	-.916	-.089	-.009	.055	.159	.233
	.250	.230	.182	.106	.051	-.019	-.045	-.040	-.047	.015	.060	.131	.187
	.350	.189	.149	.089	.046	-.004	-.033	-.012	-.023	.023	.057	.109	.153
	.450	.156	.122	.074	.044	.005	-.020	-.011	-.009	.025	.055	.094	.129
	.550	.113	.084	.045	.018	-.007	-.027	-.022	-.016	.007	.028	.057	.089
	.650	.101	.076	.047	.028	.010	-.005	-.003	.005	.020	.037	.057	.082
	.750	.088	.071	.050	.037	.028	.017	.020	.026	.034	.045	.054	.074
	.850	.091	.077	.067	.061	.059	.058	.057	.063	.064	.069	.067	.079
	.925	.079	.071	.072	.073	.078	.081	.083	.086	.081	.084	.067	.073
	[a].975	.073	.071	.073	.083	.089	.092	.112	.110	.083	.088	.072	.080
	[a]1.000	.073	.075	.078	.092	.096	.100	.142	.130	.083	.092	.079	.088

[a]No orifice.

NACA

TABLE 8.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.00 PROPELLER BLADE SECTION (x = 0.85) – Continued

(d) N = 1600 rpm; $\beta_{0.75R}$ = 45°.

	J	2.207	2.278	2.321	2.381	2.434	2.453	2.446	2.418	2.393	2.367	2.349	2.305	2.256	2.233
	M_x	.843	.854	.863	.874	.885	.889	.885	.880	.874	.869	.869	.859	.852	.845
	α_x'	1.93	1.03	.50	-.22	-.85	-1.07	-.99	-.66	-.36	-.05	.16	.70	1.31	1.60
	$\Delta\beta$	2.64	1.38	.47	-.84	-2.06	-2.50	-2.36	-1.68	-1.11	-.52	-.12	.82	1.80	2.22
	α_i	2.25	1.61	1.19	.62	-.22	-.53	-.46	.04	.30	.74	.99	1.33	1.79	2.00
	c_n	.6123	.4371	.3239	.1687	-.0587	-.1452	-.1258	.0103	.0819	.1994	.2690	.3619	.4890	.5442
	c_m	-.0641	-.0755	-.0887	-.1091	-.1196	-.1203	-.1216	-.1185	-.1114	-.0993	-.0967	-.0796	-.0728	-.0745
	c_c					.0191	.0207	.0205	.0180						
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.190	1.195	1.200	1.205	1.211	1.214	1.211	1.208	1.205	1.203	1.203	1.198	1.194	1.191
	.025	-.656	-.151	.122	.379	.559	.618	.610	.513	.448	.350	.252	.026	-.286	-.451
	.050	-.603	-.275	-.047	.186	.358	.414	.406	.312	.250	.155	.067	-.133	-.376	-.449
	.100	-.672	-.397	-.204	0	.157	.211	.202	.114	.053	-.025	-.104	-.266	-.507	-.588
	.200	-.747	-.464	-.328	-.164	-.029	.018	.012	-.066	-.116	-.186	-.251	-.378	-.543	-.645
	.300	-.744	-.479	-.366	-.222	-.105	-.060	-.068	-.138	-.180	-.242	-.301	-.409	-.553	-.628
	.400	-.754	-.532	-.404	-.294	-.196	-.159	-.163	-.220	-.268	-.308	-.353	-.444	-.588	-.659
	.500	-.776	-.501	-.407	-.333	-.249	-.213	-.242	-.271	-.304	-.344	-.378	-.402	-.562	-.621
	.600	-.273	-.343	-.434	-.370	-.324	-.290	-.296	-.339	-.349	-.380	-.404	-.416	-.318	-.293
	.700	-.277	-.458	-.483	-.462	-.427	-.406	-.411	-.433	-.447	-.467	-.480	-.479	-.422	-.355
	.800	-.212	-.253	-.348	-.519	-.526	-.515	-.518	-.521	-.531	-.499	-.444	-.278	-.247	-.235
	.900	-.059	-.071	-.075	-.071	-.077	-.085	-.084	-.073	-.075	-.073	-.074	-.071	-.066	-.063
	.950	.038	.036	.033	.039	.041	.045	.043	.041	.036	.035	.034	.036	.039	.038
Lower surface	.0375	.337	.138	-.051	-.721	-.956	-1.007	-1.004	-.915	-.855	-.645	-.185	.028	.209	.271
	.075	.267	.109	-.033	-.537	-.860	-.908	-.904	-.816	-.748	-.320	-.106	.028	.165	.208
	.150	.232	.117	.018	-.059	-.795	-.848	-.845	-.741	-.484	-.070	-.037	.061	.155	.192
	.250	.190	.107	.036	-.018	-.628	-.760	-.755	-.149	-.022	-.023	-.001	.067	.134	.160
	.350	.156	.088	.034	0	-.023	-.444	-.343	.008	-.010	-.007	.009	.057	.110	.131
	.450	.135	.079	.036	.004	.030	-.001	.012	.017	0	.004	.017	.055	.095	.113
	.550	.090	.044	.009	-.014	.012	.038	.034	-.003	-.018	-.013	-.003	.025	.057	.073
	.650	.084	.047	.020	.004	.023	.048	.042	.012	0	.005	.011	.033	.057	.070
	.750	.076	.048	.032	.024	.039	.057	.052	.030	.019	.024	.027	.039	.055	.065
	.850	.085	.069	.061	.061	.072	.084	.082	.066	.058	.060	.062	.067	.071	.076
	.925	.082	.081	.082	.087	.096	.106	.101	.091	.083	.085	.084	.083	.077	.076
	[a].975	.084	.089	.097	.095	.099	.120	.110	.120	.088	.106	.102	.095	.083	.077
	[a]1.000	.084	.093	.104	.098	.099	.123	.112	.135	.080	.117	.112	.100	.084	.077

[a]No orifice.

NACA

TABLE 8.– PRESSURE COEFFICIENT AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.00 PROPELLER BLADE SECTION (x = 0.85) – Continued

(e) $M = 0.56$; $\beta_{0.75R} = 45°$.

	J	2.216	2.244	2.250	2.271	2.308	2.326	2.339	2.361	2.401	2.428	2.436	2.466	2.492
	M_x	.877	.872	.868	.863	.861	.855	.850	.846	.844	.839	.833	.830	.822
	α_x'	1.81	1.46	1.38	1.12	.66	.44	.28	.02	–.46	–.78	–.87	–1.22	–1.52
	$\Delta\beta$	1.94	1.64	1.56	1.30	.76	.46	.24	–.19	–.87	–1.26	–1.37	–1.76	–2.07
	α_1	2.09	1.93	1.79	1.59	1.27	1.09	.96	.73	.45	.23	.09	–.13	–.42
	c_n	.5684	.5232	.4877	.4348	.3455	.2948	.2613	.2000	.1213	.0613	.0258	–.0361	–.1155
	c_m	–.0945	–.0864	–.0837	–.0814	–.0859	–.0876	–.0887	–.0878	–.0954	–.0970	–.0968	–.0998	–.1014
	c_a	.0006												
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.206	1.204	1.203	1.199	1.198	1.195	1.194	1.191	1.190	1.188	1.185	1.183	1.180
	.025	–.276	–.218	–.177	–.096	.058	.154	.218	.307	.392	.456	.484	.524	.580
	.050	–.343	–.316	–.290	–.230	–.100	–.017	.039	.118	.195	.254	.329	.318	.371
	.100	–.484	–.455	–.422	–.357	–.247	–.177	–.127	–.059	.011	.064	.088	.121	.171
	.200	–.516	–.490	–.469	–.426	–.338	–.282	–.240	–.183	–.127	–.086	–.066	–.037	.004
	.300	–.556	–.534	–.510	–.463	–.395	–.339	–.298	–.244	–.196	–.159	–.142	–.115	–.078
	.400	–.600	–.586	–.564	–.525	–.433	–.382	–.349	–.304	–.264	–.233	–.217	–.194	–.160
	.500	–.641	–.622	–.593	–.534	–.415	–.386	–.353	–.320	–.289	–.265	–.232	–.230	–.201
	.600	–.690	–.652	–.592	–.436	–.420	–.403	–.351	–.359	–.335	–.313	–.301	–.279	–.251
	.700	–.700	–.551	–.414	–.423	–.472	–.475	–.463	–.420	–.394	–.364	–.351	–.331	–.302
	.800	–.188	–.189	–.233	–.283	–.306	–.307	–.311	–.307	–.300	–.294	–.291	–.279	–.261
	.900	–.021	–.030	–.053	–.064	–.077	–.090	–.098	–.107	–.111	–.119	–.128	–.125	–.124
	.950	.059	.063	.054	.045	.039	.027	.021	.014	.010	.003	–.008	–.007	–.012
Lower surface	.0375	.249	.207	.172	.115	0	–.083	–.128	–.399	–.810	–.965	–1.051	–1.115	–1.211
	.075	.198	.164	.135	.090	.004	–.059	–.095	–.123	–.439	–.802	–.909	–1.101	–1.084
	.150	.186	.161	.140	.107	.049	.003	–.026	–.061	–.063	–.073	–.187	–.455	–.888
	.250	.159	.140	.124	.099	.058	.026	.006	–.019	–.033	–.036	–.038	–.030	–.031
	.350	.133	.118	.105	.088	.058	.032	.018	0	–.013	–.022	–.029	–.026	–.024
	.450	.113	.100	.091	.077	.052	.032	.022	.009	–.002	–.010	–.018	–.015	–.019
	.550	.072	.064	.056	.045	.027	.014	.007	–.001	–.009	–.016	–.024	–.024	–.026
	.650	.069	.064	.058	.050	.035	.026	.021	.015	.011	.005	–.003	–.002	–.004
	.750	.065	.064	.060	.054	.045	.039	.037	.033	.032	.027	.019	.022	.017
	.850	.081	.084	.082	.079	.075	.071	.071	.070	.070	.066	.059	.060	.058
	.925	.084	.091	.092	.090	.091	.088	.090	.091	.094	.089	.083	.086	.081
	[a].975	.085	.094	.094	.093	.093	.090	.093	.095	.100	.090	.089	.092	.087
	[a]1.000	.085	.095	.093	.095	.096	.090	.098	.098	.103	.093	.090	.099	.090

[a]No orifice.

NACA

TABLE 8.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.00 PROPELLER BLADE SECTION ($x = 0.85$) – Continued

(f) $M = 0.58$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.208	2.233	2.254	2.266	2.303	2.328	2.347	2.367	2.388	2.413	2.423	2.465
	M_x	.913	.912	.902	.896	.896	.892	.883	.879	.875	.868	.862	.854
	α_x'	1.92	1.60	1.33	1.18	.72	.42	.19	–.05	–.31	–.60	–.72	–1.21
	$\Delta\beta$	1.61	1.31	1.01	.83	.14	–.34	–.66	–.98	–1.28	–1.60	–1.73	–2.24
	α_i	1.84	1.78	1.63	1.48	1.10	.86	.72	.54	.34	.13	–.02	–.40
	c_n	.4968	.4832	.4445	.4006	.2997	.2348	.1952	.1458	.0923	.0355	–.0052	–.1084
	c_m	–.1108	–.1145	–.1117	–.1110	–.1068	–.1082	–.1104	–.1118	–.1144	–.1142	–.1108	–.1060
	c_c	.0112	.0116	.0114	.0111	.0140	.0149	.0153	.0163	.0171			
	x/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.226	1.225	1.220	1.217	1.217	1.214	1.209	1.207	1.205	1.202	1.199	1.195
	.025	–.035	–.004	.052	.093	.251	.325	.362	.406	.447	.506	.523	.597
	.050	–.163	–.140	–.095	–.062	.073	.139	.172	.213	.252	.306	.321	.391
	.100	–.304	–.285	–.244	–.214	–.098	–.039	–.011	.027	.061	.109	.124	.189
	.200	–.372	–.358	–.327	–.304	–.221	–.174	–.151	–.120	–.092	–.050	–.037	.018
	.300	–.432	–.422	–.394	–.374	–.304	–.264	–.238	–.205	–.178	–.139	–.127	–.074
	.400	–.493	–.486	–.463	–.448	–.374	–.332	–.312	–.288	–.263	–.228	–.213	–.164
	.500	–.537	–.531	–.506	–.486	–.412	–.369	–.351	–.328	–.296	–.267	–.255	–.210
	.600	–.589	–.576	–.546	–.526	–.443	–.414	–.396	–.372	–.356	–.325	–.315	–.275
	.700	–.647	–.635	–.607	–.567	–.513	–.483	–.472	–.458	–.445	–.429	–.419	–.359
	.800	–.495	–.590	–.620	–.609	–.586	–.569	–.564	–.546	–.532	–.459	–.368	–.291
	.900	–.123	–.105	–.078	–.070	–.087	–.095	–.095	–.097	–.099	–.099	–.106	–.112
	.950	–.077	–.038	.023	.044	.043	.044	.043	.039	.031	.025	.015	.008
Lower surface	.0375	.161	.129	.069	.026	–.154	–.505	–.647	–.757	–.846	–.926	–.984	–1.107
	.075	.133	.107	.060	.026	–.076	–.235	–.456	–.633	–.744	–.828	–.882	–.996
	.150	.142	.124	.090	.068	–.013	–.042	–.049	–.163	–.469	–.712	–.795	–.919
	.250	.130	.116	.095	.077	.023	.001	–.010	–.012	–.010	–.001	–.061	–.478
	.350	.109	.100	.082	.068	.029	.011	.003	–.002	–.002	.011	.010	.021
	.450	.092	.084	.070	.061	.029	.017	.011	.006	.003	.013	.010	.021
	.550	.048	.044	.034	.029	.007	0	–.005	–.007	–.009	–.002	–.005	.003
	.650	.044	.043	.038	.034	.019	.015	.013	.012	.010	.016	.012	.018
	.750	.036	.038	.042	.040	.032	.032	.031	.032	.031	.035	.033	.035
	.850	.041	.051	.062	.067	.063	.068	.069	.070	.069	.074	.070	.071
	.925	.021	.036	.062	.074	.080	.088	.091	.093	.093	.098	.095	.094
	[a].975	–.004	.014	.062	.080	.094	.098	.100	.096	.111	.102	.100	.108
	[a]1.000	–.021	.002	.066	.086	.102	.102	.105	.096	.120	.103	.100	.112

[a]No orifice.

NACA

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.00 PROPELLER BLADE SECTION (x = 0.85) - Continued

(g) $M = 0.60$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.200	2.235	2.260	2.264	2.302	2.328	2.345	2.352	2.360	2.390	2.404	2.424
	M_r	.945	.939	.938	.929	.930	.924	.920	.918	.912	.911	.909	.905
	α_r'	2.02	1.57	1.26	1.21	.74	.42	.21	.13	.03	-.33	-.49	-.73
	$\Delta\beta$	1.07	.76	.35	.26	-.54	-1.08	-1.44	-1.58	-1.73	-2.19	-2.38	-2.64
	α_i	1.64	1.39	1.29	1.19	.83	.46	.32	.33	.10	-.11	-.19	-.44
	c_n	.4445	.3777	.3497	.3216	.2242	.1232	.0877	.0968	.0264	-.0290	-.0523	-.1200
	c_m	-.1152	-.1118	-.1062	-.1055	-.1082	-.1144	-.1160	-.1162	-.1178	-.1237	-.1200	-.1152
	c_d	.0162	.0162	.0163	.0169	.0182	.0196	.0200	.0197	.0206	.0209	.0212	.0210
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.244	1.240	1.240	1.235	1.235	1.232	1.230	1.229	1.225	1.225	1.223	1.222
	.025	.075	.144	.209	.245	.390	.440	.475	.474	.511	.561	.573	.613
	.050	-.068	-.011	.043	.071	.165	.251	.282	.281	.315	.364	.375	.412
	.100	-.222	-.170	-.122	-.100	-.015	.064	.093	.090	.121	.166	.176	.211
	.200	-.324	-.289	-.252	-.238	-.172	-.103	-.080	-.081	-.056	-.016	-.008	.021
	.300	-.366	-.331	-.297	-.288	-.233	-.177	-.152	-.153	-.128	-.093	-.090	-.057
	.400	-.429	-.400	-.373	-.365	-.304	-.253	-.233	-.236	-.218	-.185	-.177	-.153
	.500	-.481	-.453	-.423	-.413	-.358	-.306	-.289	-.292	-.275	-.244	-.236	-.209
	.600	-.536	-.503	-.473	-.466	-.417	-.375	-.360	-.364	-.346	-.315	-.309	-.293
	.700	-.607	-.578	-.550	-.550	-.512	-.474	-.456	-.458	-.444	-.425	-.421	-.397
	.800	-.673	-.651	-.616	-.607	-.587	-.558	-.550	-.556	-.544	-.524	-.523	-.512
	.900	-.217	-.182	-.163	-.152	-.160	-.194	-.200	-.179	-.185	-.177	-.168	-.140
	.950	-.162	-.119	-.086	-.064	-.046	-.028	-.015	-.004	.007	.027	.033	.045
Lower surface	.0375	.124	.062	.002	-.054	-.459	-.648	-.700	-.710	-.776	-.850	-.881	-.933
	.075	.106	.060	.013	-.031	-.292	-.566	-.617	-.626	-.691	-.763	-.791	-.841
	.150	.124	.093	.063	.027	-.041	-.473	-.553	-.559	-.631	-.706	-.735	-.784
	.250	.117	.097	.076	.049	.006	-.050	-.160	-.189	-.429	-.621	-.653	-.705
	.350	.096	.083	.069	.049	.020	.007	.006	.009	-.010	-.161	-.266	-.570
	.450	.078	.071	.061	.042	.025	.021	.026	.026	.028	.031	.025	-.017
	.550	.027	.024	.018	.005	-.008	-.006	0	.001	.007	.026	.028	.043
	.650	.017	.019	.017	.007	-.001	.003	.011	.011	.016	.037	.038	.056
	.750	-.002	.006	.010	.006	.001	.009	.017	.020	.026	.044	.046	.062
	.850	-.008	.006	.017	.017	.021	.030	.041	.047	.052	.069	.070	.086
	.925	-.053	-.033	-.007	.005	.014	.030	.042	.049	.058	.078	.083	.100
	[a].975	-.107	-.061	-.029	-.006	0	.020	.050	.050	.090	.112	.120	.127
	[a]1.000	-.137	-.074	-.040	-.010	-.004	.017	.055	.048	.120	.148	.140	.140

[a]No orifice.

TABLE 8. – PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.00 PROPELLER BLADE SECTION ($x = 0.85$) – Continued

(h) $M = 0.65$; $\beta_{0.75R} = 45^\circ$.

	J	2.170	2.186	2.209	2.227	2.247	2.265	2.286	2.293	2.312	2.326	2.340	2.364	2.374
	M_x	1.037	1.032	1.026	1.023	1.017	1.008	1.007	1.001	.998	.994	.991	.990	.980
	α_x'	2.40	2.20	1.90	1.67	1.42	1.20	.94	.85	.61	.44	.27	-.02	-.14
	$\Delta\beta$	-.37	-.51	-.75	-.99	-1.23	-1.45	-1.66	-1.73	-1.88	-1.99	-2.08	-2.22	-2.27
	α_i	1.40	1.15	.96	.71	.52	.34	.19	.07	-.08	-.23	-.31	-.48	-.62
	α_n	.3787	.3126	.2606	.1919	.1400	.0919	.0513	.0187	-.0229	-.0610	-.0826	-.1306	-.1681
	c_m	-.1275	-.1268	-.1232	-.1227	-.1198	-.1188	-.1162	-.1159	-.1182	-.1089	-.1048	-.0956	-.0900
	c_d	.0274	.0278	.0288	.0291	.0292	.0296	.0295	.0296	.0298	.0297	.0308	.0296	.0293
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.298	1.294	1.291	1.289	1.285	1.279	1.278	1.275	1.273	1.271	1.270	1.269	1.262
	.025	.281	.316	.363	.443	.442	.467	.493	.510	.536	.552	.570	.585	.592
	.050	.122	.152	.193	.230	.262	.285	.309	.326	.349	.365	.382	.401	.411
	.100	-.039	-.015	.023	-.059	.089	.109	.132	.148	.170	.185	.200	.216	.224
	.200	-.154	-.136	-.107	-.079	-.056	-.045	-.030	-.017	.006	.019	.031	.045	.051
	.300	-.211	-.192	-.165	-.141	-.122	-.112	-.098	-.089	-.074	-.067	-.053	-.038	-.031
	.400	-.276	-.261	-.241	-.221	-.203	-.190	-.172	-.164	-.145	-.136	-.128	-.118	-.115
	.500	-.332	-.319	-.299	-.280	-.260	-.250	-.234	-.225	-.207	-.197	-.188	-.181	-.181
	.600	-.394	-.380	-.360	-.341	-.324	-.315	-.300	-.292	-.275	-.266	-.261	-.256	-.259
	.700	-.472	-.457	-.442	-.426	-.411	-.404	-.390	-.387	-.373	-.369	-.365	-.360	-.364
	.800	-.542	-.532	-.521	-.508	-.496	-.493	-.483	-.481	-.468	-.463	-.459	-.452	-.456
	.900	-.614	-.607	-.598	-.591	-.582	-.580	-.569	-.564	-.548	-.542	-.540	-.539	-.548
	.950	-.630	-.630	-.623	-.615	-.605	-.602	-.587	-.584	-.556	-.526	-.476	-.388	-.297
Lower surface	.0375	.069	.006	-.125	-.257	-.329	-.388	-.436	-.478	-.526	-.556	-.586	-.624	-.669
	.075	.054	-.003	-.081	-.212	-.285	-.339	-.381	-.420	-.464	-.493	-.520	-.557	-.600
	.150	.095	.049	-.008	-.133	-.231	-.287	-.333	-.381	-.424	-.451	-.479	-.513	-.555
	.250	.111	.081	.031	-.023	-.118	-.231	-.285	-.329	-.371	-.399	-.424	-.459	-.499
	.350	.096	.078	.049	-.020	-.063	-.107	-.205	-.297	-.352	-.382	-.408	-.443	-.483
	.450	.087	.072	.055	.015	-.033	-.070	-.097	-.137	-.231	-.325	-.368	-.410	-.452
	.550	.016	.004	-.009	-.027	-.052	-.088	-.113	-.137	-.150	-.178	-.216	-.321	-.397
	.650	.003	-.006	-.016	-.031	-.037	-.052	-.063	-.084	-.081	-.098	-.092	-.123	-.158
	.750	-.020	-.029	-.036	-.048	-.048	-.051	-.043	-.034	-.008	0	.011	.014	.011
	.850	-.044	-.050	-.054	-.061	-.053	-.045	-.030	-.017	.001	.007	.012	.021	.020
	.925	-.046	-.053	-.057	-.061	-.055	-.056	-.046	-.025	-.035	-.033	-.032	-.026	-.023
	[a].975	-.043	-.053	-.058	-.058	-.054	-.067	-.062	-.032	-.072	-.083	-.127	-.130	-.094
	[a]1.000	-.041	-.052	-.058	-.057	-.053	-.072	-.070	-.037	-.102	-.112	-.190	-.194	-.137

[a]No orifice.

NACA

TABLE 8.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-304.00 PROPELLER BLADE SECTION (x = 0.85) – Continued

(i) One-blade propeller; M = 0.56; $\beta_{0.75R}$ = 45°.

	J	2.007	2.031	2.056	2.081	2.103	2.119	2.153	2.180	2.206	2.232	2.262	2.297	2.328	2.351	2.451
	M_x	.936	.924	.922	.916	.909	.902	.897	.891	.885	.879	.873	.870	.864	.855	.836
	α_x'	4.57	4.24	3.91	3.57	3.28	3.07	2.62	2.27	1.94	1.61	1.23	.80	.42	.14	-1.05
	$\Delta\beta$	3.66	3.47	3.25	3.00	2.76	2.57	2.12	1.75	1.45	1.20	.96	.72	.40	-.02	-1.57
	α_i	2.61	2.61	2.46	2.39	2.33	2.24	2.09	1.98	1.90	1.67	1.53	1.21	1.01	.82	.17
	c_n	.8490	.8503	.8013	.7813	.7581	.7348	.6872	.6490	.6200	.5461	.4994	.3955	.3290	.2694	.0548
	c_m	-.1521	-.1465	-.1378	-.1285	-.1209	-.1163	-.1157	-.1159	-.1113	-.1132	-.1123	-.1173	-.1141	-.1110	-.1167
	c_o	.0015	-.0009	-.0025	-.0020	-.0018	-.0020	-.0017	-.0017	-.0014	.0003					
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.238	1.232	1.230	1.227	1.224	1.220	1.217	1.214	1.211	1.208	1.205	1.203	1.200	1.196	1.187
	.025	-.602	-.621	-.581	-.532	-.463	-.435	-.348	-.274	-.215	-.105	-.035	.133	.243	.332	.566
	.050	-.224	-.432	-.526	-.536	-.517	-.507	-.470	-.427	-.381	-.297	-.229	-.097	.003	.087	.288
	.100	-.643	-.642	-.603	-.588	-.572	-.577	-.532	-.493	-.459	-.376	-.324	-.192	-.109	-.041	.147
	.200	-.673	-.682	-.671	-.667	-.660	-.661	-.612	-.563	-.523	-.444	-.387	-.308	-.239	-.184	-.020
	.300	-.715	-.721	-.707	-.698	-.684	-.686	-.642	-.597	-.557	-.503	-.464	-.373	-.330	-.280	-.128
	.400	-.737	-.747	-.735	-.726	-.713	-.714	-.673	-.633	-.602	-.549	-.511	-.429	-.364	-.322	-.186
	.500	-.768	-.779	-.768	-.760	-.749	-.750	-.717	-.684	-.652	-.597	-.551	-.439	-.394	-.337	-.237
	.600	-.823	-.840	-.833	-.827	-.818	-.821	-.796	-.764	-.733	-.663	-.589	-.480	-.440	-.430	-.316
	.700	-.729	-.623	-.522	-.478	-.444	-.402	-.479	-.620	-.756	-.649	-.556	-.526	-.511	-.490	-.380
	.800	-.389	-.375	-.346	-.326	-.307	-.293	-.267	-.245	-.220	-.368	-.456	-.563	-.532	-.460	-.318
	.900	-.361	-.353	-.325	-.303	-.281	-.265	-.227	-.185	-.097	-.047	-.067	-.079	-.096	-.113	-.144
	.950	-.323	-.342	-.322	-.300	-.276	-.257	-.211	-.155	-.050	.044	.054	.053	.043	.032	.019
Lower surface	.0375	.583	.567	.537	.510	.479	.463	.405	.356	.308	.218	.158	.029	-.054	-.265	-1.025
	.075	.486	.474	.447	.424	.396	.381	.332	.291	.252	.181	.134	.043	-.032	-.077	-.905
	.150	.392	.382	.358	.338	.314	.302	.263	.230	.200	.146	.113	.052	.002	-.040	-.204
	.250	.324	.315	.295	.280	.259	.248	.218	.192	.170	.129	.107	.062	.028	-.001	-.010
	.350	.283	.276	.260	.246	.229	.220	.196	.175	.158	.127	.110	.084	.057	.034	.018
	.450	.235	.229	.215	.203	.189	.181	.162	.146	.135	.115	.102	.077	.057	.040	.027
	.550	.206	[b].184	[b].176	[b].163	[b].151	[b].145	[b].127	[b].118	[b].110	[b].094	[b].083	[b].068	[b].051	[b].040	[b].030
	.650	.148	.141	.133	.122	.112	.108	.099	.093	.092	.085	.077	.068	.057	.047	.049
	.750	.118	.113	.104	.097	.089	.087	.083	.086	.096	.098	.095	.089	.082	.077	.085
	.850	.093	.086	.078	.070	.062	.062	.068	.078	.096	.110	.112	.113	.108	.105	.117
	.925	.052	.041	.033	.027	.021	.020	.032	.052	.082	.114	.126	.133	.132	.130	.144
	[a].975	.055	.042	.034	.026	.021	.020	.032	.052	.082	.114	.127	.131	.132	.130	.143
	[a]1.000	.039	.026	.005	.016	.020	.007	.030	.049	.080	.114	.127	.130	.132	.127	.143

[a]No orifice.
[b]Faired value.

TABLE 8.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.00 PROPELLER BLADE SECTION (x = 0.85) – Continued

(j) One-blade propeller; M = 0.58; $\beta_{0.75R} = 45^{\circ}$.

	J	2.357	2.284	2.258	2.231	2.206	2.173	2.149	2.122	2.107	2.087	2.064	2.042	2.015
	M_x	.882	.902	.908	.913	.918	.919	.925	.930	.935	.945	.950	.956	.959
	α_x'	.07	.96	1.28	1.62	1.94	2.36	2.67	3.03	3.23	3.49	3.80	4.09	4.46
	$\Delta\beta$	-.83	.40	.68	.95	1.20	1.62	2.00	2.58	2.96				
	α_i	.57	1.08	1.25	1.45	1.57	1.69	1.81	1.90	2.01	2.13	2.25	2.37	2.47
	c_n	.1845	.3529	.4103	.4748	.5161	.5516	.5955	.6194	.6600	.6968	.7374	.7755	.8065
	c_m	-.1180	-.1131	-.1196	-.1200	-.1213	-.1111	-.1131	-.1219	-.1275	-.1381	-.1524	-.1544	-.1676
	c_a	.0148	.0128	.0111	.0107	.0087	.0062	.0052	.0059	.0054	.0062	.0073	.0089	.0081
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.210	1.220	1.223	1.225	1.229	1.229	1.232	1.235	1.238	1.243	1.246	1.249	1.251
	.025	.443	.259	.169	.086	.009	-.077	-.133	-.169	-.215	-.244	-.266	-.285	-.354
	.050	.230	.115	.044	-.034	-.098	-.174	-.233	-.275	-.302	-.324	-.342	-.354	-.380
	.100	.053	-.095	-.167	-.231	-.284	-.344	-.387	-.406	-.429	-.440	-.450	-.455	-.476
	.200	-.110	-.234	-.270	-.313	-.369	-.427	-.463	-.484	-.512	-.527	-.539	-.546	-.568
	.300	-.222	-.312	-.363	-.395	-.433	-.472	-.503	-.524	-.550	-.563	-.573	-.580	-.602
	.400	-.283	-.377	-.415	-.450	-.484	-.520	-.546	-.562	-.582	-.594	-.604	-.611	-.631
	.500	-.322	-.425	-.466	-.504	-.539	-.573	-.597	-.611	-.627	-.637	-.644	-.650	-.667
	.600	-.413	-.493	-.535	-.579	-.618	-.653	-.677	-.691	-.705	-.711	-.717	-.718	-.731
	.700	-.484	-.540	-.590	-.621	-.671	-.721	-.746	-.758	-.767	-.770	-.774	-.773	-.776
	.800	-.599	-.628	-.647	-.675	-.569	-.325	-.314	-.362	-.385	-.481	-.623	-.754	-.806
	.900	-.103	-.113	-.121	-.133	-.169	-.200	-.234	-.270	-.289	-.317	-.342	-.367	-.401
	.950	.041	-.008	-.034	-.064	-.112	-.166	-.206	-.242	-.264	-.289	-.315	-.338	-.364
Lower surface	[a].0375	-.370	.230	.152	.270	.215	.460	.435	.500	.460	.475	.515	.852	.615
	.075	-.657	.035	.048	.113	.166	.228	.269	.291	.330	.352	.373	.593	.423
	.150	-.148	.003	.057	.103	.141	.186	.217	.233	.264	.282	.299	.310	.340
	.250	-.027	.029	.063	.095	.121	.157	.180	.191	.218	.231	.245	.255	.281
	.350	.009	.052	.076	.100	.120	.147	.164	.174	.195	.207	.220	.227	.248
	.450	.015	.047	.066	.085	.099	.122	.136	.142	.161	.170	.181	.187	.204
	.550	.018	.040	.053	.067	.076	.092	.103	.108	.124	.132	.143	.148	.163
	.650	.025	.037	.044	.054	.057	.068	.075	.077	.092	.098	.106	.109	.123
	.750	.055	.057	.057	.062	.062	.066	.067	.067	.080	.085	.091	.094	.105
	.850	.084	.073	.068	.067	.058	.054	.053	.051	.061	.066	.074	.077	.087
	.925	.102	.072	.059	.049	.029	.014	.008	.006	.016	.023	.029	.035	.044
	[a].975	.132	.079	.055	.038	.010	-.006	-.021	-.030	-.015	0	-.004	.006	-.001
	[a]1.000	.150	.081	.058	.035	.002	-.015	-.035	-.050	-.028	-.012	-.027	-.011	-.030

[a]No orifice.

NACA

TABLE 8.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.00 PROPELLER BLADE SECTION ($x = 0.85$) – Continued

(x) One-blade propeller; $M = 0.60$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.372	2.310	2.266	2.250	2.223	2.205	2.172	2.150	2.122	2.103	2.079	2.056	2.037	2.020	1.995
	M_x	.908	.924	.928	.934	.941	.950	.953	.959	.966	.971	.978	.983	.989	.998	1.003
	α_x'	-.11	.64	1.19	1.38	1.73	1.95	2.38	2.66	3.03	3.28	3.60	3.91	4.16	4.40	4.74
	$\Delta\beta$	-1.92	-.70	.10	.19	.33	.41	.56	.68	.82	.93	1.08	1.22	1.34	1.46	1.62
	α_l	-.01	.43	.79	1.00	1.16	1.29	1.49	1.61	1.76	1.88	2.01	2.10	2.19	2.27	2.39
	c_n	-.0026	.1406	.2590	.3290	.3813	.4197	.4845	.5284	.5768	.6135	.6561	.6877	.7200	.7432	.7819
	c_m	-.1395	-.1372	-.1250	-.1258	-.1318	-.1367	-.1435	-.1499	-.1557	-.1622	-.1708	-.1778	-.1866	-.1929	-.2024
	c_c	.0204	.0196	.0168	.0164	.0164	.0161	.0161	.0160	.0152	.0149	.0151	.0155	.0170	.0176	.0187
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.223	1.231	1.234	1.237	1.241	1.246	1.248	1.251	1.255	1.258	1.262	1.265	1.268	1.274	1.276
	.025	.581	.505	.369	.307	.253	.200	.126	.085	.020	-.023	-.052	-.078	-.097	-.131	-.155
	.050	.338	.311	.198	.142	.103	.053	-.001	-.039	-.093	-.140	-.166	-.186	-.202	-.219	-.231
	.100	.180	.098	0	-.051	-.094	-.135	-.189	-.215	-.264	-.292	-.308	-.319	-.325	-.337	-.347
	.200	.003	-.077	-.153	-.188	-.207	-.235	-.286	-.315	-.356	-.382	-.396	-.410	-.420	-.433	-.444
	.300	-.117	-.198	-.240	-.276	-.301	-.322	-.358	-.375	-.403	-.426	-.440	-.454	-.462	-.473	-.481
	.400	-.193	-.266	-.313	-.340	-.361	-.380	-.412	-.427	-.453	-.471	-.479	-.490	-.497	-.508	-.514
	.500	-.245	-.329	-.371	-.398	-.420	-.440	-.470	-.484	-.507	-.524	-.530	-.537	-.541	-.549	-.553
	.600	-.361	-.340	-.462	-.482	-.502	-.525	-.554	-.566	-.586	-.601	-.607	-.614	-.616	-.621	-.622
	.700	-.451	-.523	-.540	-.556	-.568	-.588	-.625	-.640	-.660	-.672	-.677	-.679	-.681	-.684	-.684
	.800	-.572	-.635	-.631	-.647	-.658	-.669	-.696	-.717	-.741	-.753	-.754	-.754	-.748	-.745	-.739
	.900	-.241	-.283	-.240	-.280	-.337	-.380	-.435	-.486	-.497	-.538	-.665	-.733	-.763	-.770	-.769
	.950	-.029	-.089	-.110	-.131	-.155	-.185	-.229	-.262	-.301	-.327	-.366	-.425	-.589	-.710	-.759
Lower surface	.0375	-.833	-.686	-.405	-.129	.009	.094	.180	.230	.303	.344	.383	.410	.439	.467	.504
	.075	-.764	-.615	-.236	-.029	.036	.090	.152	.192	.249	.285	.318	.340	.366	.389	.423
	.150	-.692	-.477	-.047	.009	.053	.090	.132	.161	.204	.232	.258	.276	.296	.316	.345
	.250	-.635	-.056	-.003	.033	.065	.088	.120	.142	.176	.195	.217	.231	.248	.265	.290
	.350	-.031	.023	.036	.058	.081	.099	.119	.134	.161	.180	.197	.209	.223	.237	.259
	.450	.047	.032	.034	.051	.067	.081	.096	.110	.132	.149	.164	.174	.187	.198	.219
	.550	.043	.026	.023	.035	.046	.057	.068	.079	.098	.112	.125	.134	.145	.156	.175
	.650	.043	.021	.017	.024	.032	.038	.045	.053	.067	.077	.089	.097	.106	.116	.133
	.750	.066	.041	.032	.037	.040	.045	.049	.053	.063	.071	.082	.088	.094	.104	.120
	.850	.082	.055	.043	.043	.043	.045	.047	.052	.059	.067	.076	.083	.090	.098	.113
	.925	.085	.046	.025	.018	.016	.017	.018	.024	.030	.038	.048	.057	.068	.076	.091
	[a].975	.087	.041	.011	-.004	-.001	-.004	.001	.003	.014	.017	.023	.038	.056	.058	.078
	[a]1.000	.087	.038	.004	-.016	-.010	-.015	-.009	-.008	.005	.005	.012	.028	.050	.050	.070

[a]No orifice.

TABLE 8.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.00 PROPELLER BLADE SECTION (x = 0.85) – Concluded

(i) One-blade propeller; M = 0.65; $\beta_{0.75R}$ = 45°.

	J	2.208	2.171	2.147	2.126	2.107	2.090	2.069	2.046	2.031	2.014	1.995	1.979
	M_r	1.004	1.013	1.017	1.021	1.027	1.035	1.042	1.046	1.054	1.060	1.066	1.074
	α_r'	1.91	2.39	2.70	2.98	3.22	3.45	3.73	4.04	4.24	4.48	4.74	4.96
	$\Delta\beta$	-.74	-.38	-.19	-.04	.10	.22	.39	.58	.72	.89	1.08	1.27
	α_i	.77	.98	1.11	1.27	1.42	1.53	1.67	1.75	1.88	1.94	2.00	2.08
	c_n	.2516	.3194	.3600	.4116	.4581	.4948	.5413	.5645	.6077	.6284	.6484	.6735
	c_m	-.1555	-.1519	-.1513	-.1557	-.1578	-.1614	-.1642	-.1680	-.1729	-.1767	-.1763	-.1804
	c_o	.0274	.0258	.0253	.0237	.0241	.0230	.0217	.0206	.0208	.0200	.0192	.0199
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.277	1.283	1.285	1.287	1.291	1.296	1.301	1.304	1.309	1.312	1.316	1.322
	.025	.437	.388	.353	.294	.274	.220	.174	.143	.104	.080	.057	.028
	.050	.242	.217	.197	.160	.143	.093	.056	.011	-.018	-.036	-.055	-.070
	.100	.078	.034	.006	-.040	-.049	-.088	-.114	-.136	-.163	-.174	-.184	-.196
	.200	-.064	-.085	-.107	-.146	-.155	-.195	-.220	-.242	-.264	-.275	-.285	-.298
	.300	-.158	-.181	-.198	-.227	-.227	-.255	-.271	-.290	-.308	-.322	-.331	-.344
	.400	-.224	-.245	-.259	-.282	-.281	-.307	-.319	-.335	-.352	-.361	-.369	-.380
	.500	-.287	-.308	-.321	-.342	-.339	-.364	-.373	-.388	-.401	-.407	-.413	-.423
	.600	-.375	-.395	-.406	-.425	-.423	-.444	-.453	-.466	-.477	-.481	-.484	-.490
	.700	-.453	-.468	-.476	-.499	-.494	-.517	-.522	-.534	-.542	-.544	-.547	-.553
	.800	-.553	-.559	-.565	-.583	-.580	-.603	-.608	-.618	-.622	-.622	-.622	-.623
	.900	-.626	-.626	-.627	-.631	-.621	-.637	-.636	-.646	-.647	-.645	-.645	-.645
	.950	-.662	-.643	-.642	-.639	-.623	-.633	-.630	-.643	-.650	-.651	-.655	-.657
Lower surface	.0375	-.276	-.091	.017	.144	.213	.269	.340	.368	.420	.452	.479	.506
	.075	-.222	-.057	.021	.125	.186	.231	.295	.315	.358	.385	.408	.432
	.150	-.118	.001	.051	.129	.175	.201	.248	.265	.300	.323	.341	.361
	.250	-.048	.038	.079	.127	.164	.184	.221	.234	.262	.281	.295	.311
	.350	.035	.080	.102	.136	.167	.180	.209	.221	.243	.262	.274	.287
	.450	.045	.072	.087	.112	.141	.154	.182	.192	.212	.227	.236	.248
	.550	.025	.044	.057	.078	.104	.111	.139	.148	.167	.183	.192	.203
	.650	.003	.015	.023	.040	.065	.070	.096	.103	.121	.135	.145	.154
	.750	.007	.012	.018	.033	.054	.056	.081	.087	.104	.116	.122	.131
	.850	.033	.038	.042	.053	.074	.070	.089	.096	.107	.119	.128	.136
	.925	.029	.042	.048	.062	.084	.082	.100	.106	.119	.131	.137	.147
	[a].975	.028	.040	.050	.062	.081	.081	.099	.109	.119	.130	.139	.145
	[a]1.000	.030	.037	.046	.064	.080	.071	.090	.110	.117	.125	.134	.131

[a]No orifice.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90)

(a) N = 1140 rpm; $\beta_{0.75R} = 45^{\circ}$.

J	1.872	1.980	2.039	2.151	2.214	2.282	2.340	2.406	2.478	2.574	2.519	2.451	2.376	2.327	2.238	2.200	2.112	2.008	1.934
M_r	.589	.601	.604	.618	.623	.630	.638	.643	.655	.662	.655	.647	.640	.634	.625	.620	.612	.601	.590
α_r	6.19	4.70	3.90	2.44	1.64	.79	.09	-.70	-1.53	-2.61	-2.00	-1.22	-.34	.25	1.34	1.81	2.94	4.32	5.33
$\Delta\beta$	2.05	1.85	1.67	1.21	.91	.55	.22	-.16	-.60	-1.22	-.87	-.44	.01	.30	.79	.98	1.39	1.77	1.95
α_i	3.16	2.80	2.31	1.81	1.53	1.16	.90	.60	.28	-.37	-.08	.39	.72	.99	1.32	1.56	1.97	2.53	2.93
c_n	.7058	.6239	.5161	.4065	.3423	.2603	.2013	.1355	.0626	-.0826	-.0187	.0871	.1600	.2226	.2961	.3468	.4406	.5652	.6523
c_m	-.0226	-.0292	-.0393	-.0464	-.0461	-.0511	-.0566	-.0585	-.0621	-.0744	-.0680	-.0601	-.0585	-.0545	-.0479	-.0454	-.0432	-.0369	-.0265
c_c																			
c/b	Pressure coefficient, P																		
Upper surface																			
[a]0.000	1.089	1.093	1.094	1.099	1.100	1.103	1.106	1.108	1.112	1.114	1.112	1.109	1.106	1.104	1.101	1.099	1.096	1.093	1.090
.025	-1.586	-1.683	-1.276	-.700	-.472	-.168	.049	.226	.373	.539	.470	.326	.155	-.035	-.306	-.504	-.819	-1.644	-1.660
.050	-1.552	-1.511	-.853	-.546	-.410	-.215	-.067	.062	.179	.327	.263	.142	.006	-.127	-.306	-.428	-.656	-1.214	-1.560
.100	-1.331	-1.013	-.640	-.457	-.360	-.238	-.143	-.052	.032	.154	.100	.004	-.093	-.182	-.299	-.372	-.523	-.726	-1.200
.200	-.787	-.525	-.473	-.371	-.314	-.253	-.196	-.142	-.087	0	-.039	-.106	-.168	-.222	-.292	-.324	-.414	-.491	-.595
.300	-.521	-.428	-.405	-.335	-.294	-.253	-.216	-.174	-.136	-.072	-.102	-.151	-.196	-.234	-.282	-.300	-.362	-.416	-.450
.400	-.404	-.380	-.369	-.318	-.287	-.250	-.223	-.194	-.165	-.117	-.140	-.177	-.211	-.235	-.270	-.293	-.336	-.374	-.391
.500	-.344	-.337	-.333	-.290	-.268	-.235	-.223	-.200	-.179	-.142	-.159	-.190	-.216	-.234	-.256	-.272	-.307	-.336	-.347
.600	-.297	-.308	-.315	-.288	-.270	-.248	-.241	-.226	-.213	-.186	-.200	-.221	-.238	-.249	-.265	-.276	-.297	-.314	-.313
.700	-.249	-.269	-.286	-.269	-.258	-.245	-.239	-.230	-.222	-.204	-.212	-.229	-.239	-.245	-.258	-.262	-.276	-.279	-.272
.800	-.181	-.200	-.222	-.215	-.208	-.201	-.208	-.205	-.203	-.195	-.198	-.206	-.215	-.212	-.210	-.212	-.219	-.215	-.204
.900	-.097	-.096	-.111	-.110	-.105	-.104	-.130	-.151	-.150	-.139	-.143	-.153	-.157	-.123	-.111	-.108	-.111	-.106	-.104
.950	-.044	-.028	-.035	-.030	-.027	-.016	-.017	-.003	-.013	-.066	-.043	-.011	-.010	-.020	-.026	-.025	-.031	-.031	-.040
Lower surface																			
.0375	.597	.531	.438	.297	.203	.061	-.057	-.181	-.479	-1.015	-.914	-.319	-.135	-.017	.123	.215	.361	.488	.551
.075	.470	.411	.332	.224	.155	.061	-.024	-.112	-.213	-.803	-.503	-.185	-.083	.003	.097	.160	.271	.373	.429
.150	.357	.309	.244	.170	.122	.061	.005	-.054	-.115	-.338	-.176	-.101	-.037	.022	.080	.125	.204	.280	.321
.250	.273	.236	.183	.130	.095	.058	.020	-.018	-.061	-.123	-.095	-.054	-.012	.032	.063	.094	.151	.209	.243
.350	.218	.189	.144	.104	.078	.049	.020	-.008	-.040	-.080	-.067	-.034	-.004	.028	.053	.078	.124	.169	.195
.450	.173	.152	.112	.081	.061	.046	.025	.002	-.021	-.052	-.042	-.017	.006	.032	.042	.061	.096	.135	.154
.550	.138	.119	.088	.065	.049	.036	.020	.002	-.016	-.039	-.032	-.013	.003	.022	.032	.047	.076	.105	.121
.650	.110	.096	.068	.053	.040	.034	.023	.011	-.004	-.019	-.016	-.003	.010	.025	.027	.039	.061	.087	.097
.750	.085	.079	.058	.050	.038	.043	.038	.029	.020	.011	.009	.018	.024	.035	.025	.035	.053	.071	.075
.850	.057	.061	.047	.048	.042	.043	.040	.037	.032	.025	.025	.029	.033	.038	.032	.039	.050	.060	.058
.925	.038	.054	.047	.057	.052	.058	.063	.064	.060	.054	.056	.058	.057	.057	.049	.049	.057	.056	.047
[a].975	.038	.054	.047	.068	.060	.073	.082	.082	.085	.073	.088	.085	.082	.078	.072	.070	.060	.052	.047
[a]1.000	.038	.055	.048	.073	.064	.082	.093	.092	.099	.087	.108	.104	[b].097	.094	.088	.083	.062	.050	.047

[a]No orifice.

[b]Lower surface only.

NACA

TABLE 9.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) -- Continued

(b) N = 1350; $\beta_{0.75R}$ = 45°.

	J	2.031	2.099	2.180	2.271	2.341	2.424	2.524	2.480	2.383	2.310	2.241	2.150	2.070	2.081
	M_x	.719	.728	.735	.750	.761	.771	.785	.778	.764	.751	.745	.730	.720	.719
	α_x'	4.01	3.11	2.07	.93	.08	-.91	-2.06	-1.55	-.42	.45	1.30	2.45	3.49	3.35
	$\Delta\beta$	3.06	2.53	1.82	1.02	.29	-.60	-1.75	-1.23	-.16	.62	1.29	2.09	2.75	2.66
	α_i	3.11	2.63	1.99	1.41	.96	.51	-.36	.06	.71	1.10	1.57	2.14	3.04	2.82
	c_n	.6927	.5860	.4421	.3132	.2148	.1145	-.0800	.0129	.1590	.2452	.3494	.4744	.6751	.6276
	c_m	-.0293	-.0400	-.0509	-.0586	-.0623	-.0645	-.0813	-.0736	-.0631	-.0597	-.0563	-.0506	-.0319	-.0354
	c_c														
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.137	1.140	1.143	1.149	1.154	1.158	1.164	1.161	1.155	1.150	1.147	1.141	1.137	1.137
	.025	-1.747	-1.427	-.802	-.257	.083	.346	.565	.488	.239	-.020	-.387	-.919	-1.678	-1.538
	.050	-1.685	-1.380	-.678	-.302	-.065	.149	.347	.327	.060	-.135	-.387	-.840	-1.626	-1.489
	.100	-1.570	-1.072	-.503	-.314	-.145	.017	.168	.110	-.060	-.196	-.367	-.533	-1.455	-1.264
	.200	-.426	-.444	-.414	-.314	-.239	-.108	.008	-.035	-.157	-.243	-.349	-.444	-.386	-.428
	.300	-.377	-.412	-.371	-.304	-.238	-.165	-.076	-.110	-.201	-.258	-.330	-.391	-.405	-.414
	.400	-.373	-.378	-.341	-.292	-.247	-.194	-.129	-.154	-.221	-.260	-.311	-.356	-.381	-.380
	.500	-.353	-.349	-.319	-.282	-.248	-.209	-.160	-.178	-.231	-.258	-.298	-.330	-.355	-.350
	.600	-.345	-.342	-.324	-.298	-.277	-.251	-.217	-.229	-.266	-.282	-.309	-.331	-.346	-.344
	.700	-.304	-.306	-.295	-.284	-.272	-.256	-.237	-.244	-.266	-.272	-.291	-.302	-.306	-.305
	.800	-.234	-.239	-.236	-.244	-.234	-.227	-.221	-.221	-.233	-.231	-.245	-.241	-.238	-.238
	.900	-.107	-.108	-.107	-.094	-.106	-.108	-.114	-.112	-.113	-.100	-.108	-.112	-.109	-.109
	.950	-.021	-.021	-.019	0	-.005	-.011	-.019	-.015	-.013	0	-.015	-.022	-.023	-.022
Lower surface	.0375	.547	.448	.310	.123	-.077	-.322	-1.400	-1.296	-.165	-.016	.168	.350	.512	.471
	.075	.433	.347	.239	.105	-.030	-.150	-1.201	-.397	-.110	.007	.133	.324	.403	.368
	.150	.331	.263	.184	.091	.005	-.085	-.141	-.104	-.050	.028	.108	.203	.307	.277
	.250	.252	.200	.140	.076	.005	-.037	-.066	-.071	-.018	.029	.084	.152	.231	.210
	.350	.203	.155	.113	.066	.021	-.020	-.057	-.049	-.007	.032	.070	.124	.186	.169
	.450	.165	.129	.091	.052	.026	-.004	-.038	-.028	.004	.032	.055	.098	.150	.135
	.550	.131	.102	.071	.042	.018	-.004	-.033	-.023	0	.024	.043	.075	.120	.107
	.650	.108	.085	.060	.039	.025	.009	-.013	-.005	.010	.027	.038	.064	.101	.089
	.750	.091	.070	.053	.040	.040	.029	.014	.019	.029	.041	.038	.054	.084	.074
	.850	.080	.068	.057	.051	.048	.045	.033	.038	.041	.047	.045	.056	.075	.069
	.925	.077	.070	.068	.070	.063	.068	.062	.064	.063	.061	.065	.065	.074	.071
	[a].975	.077	.078	.085	.091	.083	.089	.083	.085	.085	.077	.092	.080	.083	.083
	[a]1.000	.077	.081	.093	.101	.094	.100	.100	.098	.095	.085	.110	.090	.089	.091

[a]No orifice.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) - Continued

(c) N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

J	2.153	2.219	2.251	2.311	2.355	2.423	2.472	2.499	2.448	2.402	2.330	2.287	2.241	2.192
M_x	.812	.822	.828	.835	.842	.850	.858	.865	.852	.847	.836	.826	.822	.815
α_x'	2.41	1.58	1.18	.44	-.09	-.90	-1.46	-1.77	-1.19	-.65	.21	.73	1.30	1.91
$\Delta\beta$	3.01	2.05	1.58	.75	.12	-.87	-1.65	-2.06	-1.27	-.57	.47	1.09	1.74	2.44
α_i	2.76	2.08	1.72	1.29	.93	.34	-.26	-.42	.03	.58	1.09	1.44	1.80	2.38
c_n	.6158	.4637	.3833	.2872	.2073	.0770	-.0587	-.0935	.0077	.1306	.2449	.3213	.4001	.5279
c_m	-.0335	-.0535	-.0580	-.0662	-.0705	-.0875	-.0991	-.1023	-.0928	-.0798	-.0688	-.0633	-.0550	-.0482
c_o														
c/b	Pressure coefficient, P													
Upper surface														
[a]0.000	1.175	1.180	1.183	1.186	1.189	1.193	1.197	1.200	1.194	1.192	1.187	1.182	1.180	1.178
.025	-.889	-.551	-.328	.004	.221	.417	.555	.601	.493	.353	.117	-.133	-.398	-.679
.050	-.951	-.683	-.401	-.131	.042	.217	.345	.388	.286	.158	-.039	-.241	-.474	-.837
.100	-.971	-.651	-.442	-.229	-.096	.051	.164	.203	.111	0	-.158	-.307	-.489	-.834
.200	-.936	-.553	-.397	-.292	-.200	-.091	-.005	.028	-.045	-.132	-.246	-.339	-.412	-.765
.300	-.703	-.355	-.358	-.298	-.245	-.165	-.098	-.072	-.131	-.198	-.275	-.326	-.362	-.327
.400	-.256	-.362	-.346	-.305	-.274	-.219	-.168	-.149	-.192	-.243	-.293	-.326	-.354	-.337
.500	-.292	-.341	-.323	-.292	-.273	-.233	-.197	-.180	-.211	-.253	-.287	-.308	-.329	-.340
.600	-.342	-.362	-.352	-.332	-.323	-.298	-.274	-.259	-.285	-.314	-.334	-.342	-.355	-.365
.700	-.328	-.336	-.335	-.328	-.330	-.323	-.315	-.305	-.319	-.332	-.335	-.333	-.334	-.338
.800	-.244	-.246	-.252	-.255	-.266	-.271	-.274	-.269	-.272	-.276	-.268	-.252	-.248	-.248
.900	-.093	-.088	-.091	-.090	-.102	-.109	-.115	-.113	-.115	-.112	-.103	-.092	-.090	-.092
.950	.006	.013	.015	.016	.008	.005	.001	.006	.003	.003	.007	.016	.014	.007
Lower surface														
.0375	.433	.286	.179	.012	-.110	-.911	-1.060	-1.096	-1.017	-.812	-.070	.085	.211	.363
.075	.343	.227	.149	.035	-.068	-.744	-.956	-.994	-.910	-.268	-.030	.082	.168	.286
.150	.263	.176	.123	.049	-.023	-.023	-.850	-.909	-.465	-.041	.008	.081	.138	.221
.250	.204	.139	.101	.057	.007	-.008	-.079	-.320	.017	-.024	.020	.072	.107	.168
.350	.165	.110	.081	.048	.012	.008	.051	.066	.009	-.010	.025	.063	.088	.136
.450	.132	.087	.063	.046	.017	.001	.027	.055	.005	0	.027	.057	.068	.108
.550	.104	.068	.048	.034	.013	0	.011	.031	0	-.001	.020	.041	.052	.085
.650	.087	.055	.040	.034	.017	.008	.014	.028	.011	.007	.021	.037	.042	.071
.750	.082	.052	.041	.043	.036	.029	.030	.039	.028	.025	.028	.040	.041	.058
.850	.071	.052	.046	.046	.044	.045	.045	.052	.044	.041	.041	.044	.046	.060
.925	.073	.060	.060	.067	.070	.076	.076	.082	.075	.070	.064	.060	.057	.065
[a].975	.091	.100	.082	.093	.105	.110	.108	.113	.110	.093	.090	.086	.080	.081
[a]1.000	.113	.130	.098	.110	.128	.138	.130	.134	.130	.108	.108	.106	.101	.091

[a]No orifice.

TABLE 9.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) – Continued

(d) N = 1600 rpm; $\beta_{0.75R}$ = 45°.

J	2.229	2.300	2.362	2.421	2.438	2.401	2.386	2.350	2.329	2.285	2.265	2.218
M_x	.885	.894	.908	.916	.920	.910	.910	.903	.896	.887	.888	.876
α_x'	1.45	.57	–.18	–.87	–1.07	–.64	–.46	–.03	.20	.76	1.00	1.59
$\Delta\beta$	2.45	.96	–.68	–2.09	–2.50	–2.61	–1.25	–.37	.22	1.31	1.75	2.63
α_i	2.45	1.49	.65	–.26	–.54	.06	.37	.81	1.22	1.67	1.92	2.45
c_n	.5467	.3323	.1452	–.0574	–.1200	.0129	.0819	.1803	.2723	.3723	.4267	.5467
c_m	–.0695	–.0889	–.1081	–.1242	–.1219	–.1155	–.1141	–.1024	–.0946	–.0843	–.0782	–.0645
c_c			.0158	.0212	.0223	.0183	.0172	.0147				
c/b	Pressure coefficient, P											
Upper surface												
[a]0.000	1.211	1.216	1.223	1.227	1.230	1.224	1.224	1.221	1.217	1.212	1.213	1.207
.025	–.329	.105	.386	.584	.617	.616	.460	.347	.224	–.011	–.151	–.403
.050	–.478	–.050	.194	.378	.410	.413	.260	.158	.046	–.148	–.271	–.557
.100	–.499	–.173	.036	.201	.232	.243	.096	.005	–.086	–.255	–.362	–.573
.200	–.561	–.311	–.129	.021	.048	.069	–.076	–.156	–.240	–.379	–.456	–.603
.300	–.635	–.372	–.218	–.093	–.066	–.039	–.178	–.239	–.299	–.481	–.523	–.678
.400	–.648	–.363	–.266	–.173	–.148	–.110	–.240	–.277	–.318	–.425	–.509	–.704
.500	–.600	–.361	–.291	–.221	–.195	–.157	–.275	–.300	–.343	–.370	–.428	–.654
.600	–.444	–.378	–.332	–.291	–.277	–.209	–.306	–.341	–.368	–.383	–.343	–.234
.700	–.267	–.429	–.402	–.390	–.373	–.291	–.390	–.411	–.424	–.420	–.367	–.255
.800	–.234	–.505	–.503	–.485	–.472	–.374	–.487	–.509	–.517	–.488	–.430	–.240
.900	–.062	–.066	–.137	–.201	–.224	–.050	–.146	–.112	–.091	–.050	–.052	–.068
.950	.042	.056	.032	.027	.031	.138	.034	.037	.044	.057	.050	.036
Lower surface												
.0375	.271	–.023	–.681	–.912	–.939	–.750	–.788	–.633	–.240	.057	.157	.311
.075	.220	.013	–.594	–.830	–.853	–.667	–.709	–.490	–.021	.064	.134	.251
.150	.178	.041	–.228	–.769	–.797	–.600	–.619	–.001	.007	.070	.117	.202
.250	.140	.050	.044	–.692	–.733	–.460	0	.016	.019	.059	.091	.153
.350	.110	.046	.026	–.388	–.618	.186	.064	.014	.023	.053	.077	.126
.450	.085	.043	.021	.104	.048	.181	.045	.016	.028	.046	.064	.097
.550	.065	.028	.008	.094	.118	.147	.021	.006	.018	.033	.050	.076
.650	.054	.033	.015	.072	.095	.140	.022	.016	.025	.033	.050	.065
.750	.054	.050	.037	.072	.089	.155	.042	.038	.044	.044	.059	.062
.850	.062	.061	.055	.076	.088	.166	.058	.056	.062	.051	.061	.071
.925	.086	.083	.081	.093	.102	.191	.084	.086	.086	.075	.081	.089
[a].975	.107	.102	.108	.128	.133	.120	.125	.113	.110	.097	.102	.123
[a]1.000	.119	.112	.122	.153	.156	.145	.150	[b].126	.123	.110	.113	.143

[a]No orifice.

[b]Lower surface only.

NACA

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) - Continued

(c) $M = 0.56$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.242	2.264	2.284	2.296	2.311	2.328	2.352	2.367	2.381	2.399	2.415	2.430	2.449	2.474	2.494
	M_r	.908	.902	.898	.893	.890	.887	.880	.877	.874	.870	.867	.864	.860	.855	.851
	α_r'	1.29	1.02	.77	.62	.44	.23	-.06	-.24	-.40	-.61	-.80	-.98	-1.20	-1.49	-1.72
	$\Delta\beta$	1.74	1.48	1.20	1.01	.76	.44	-.02	-.34	-.68	-1.00	-1.26	-1.48	-1.72	-2.03	-2.26
	α_1	2.32	2.13	1.86	1.71	1.43	1.26	1.00	.77	.62	.48	.33	.06	-.15	-.32	-.45
	c_n	.5174	.4755	.4158	.3832	.3190	.2810	.2223	.1716	.1381	.1071	.0735	.0142	-.0342	-.0710	-.1013
	c_m	-.0951	-.0923	-.0882	-.0867	-.0882	-.0861	-.0877	-.0878	-.0888	-.0918	-.0928	-.0960	-.0986	-.0983	-.0973
	c_a	.0035	.0044													
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.223	1.220	1.218	1.215	1.213	1.212	1.208	1.206	1.205	1.203	1.201	1.200	1.198	1.195	1.194
	.025	-.189	-.123	-.032	-.001	.119	.185	.263	.325	.358	.395	.429	.486	.523	.567	.595
	.050	-.302	-.234	-.161	-.133	-.037	.020	.086	.138	.168	.201	.230	.283	.318	.356	.383
	.100	-.373	-.338	-.276	-.250	-.170	-.121	-.065	-.018	.009	.038	.064	.110	.141	.176	.198
	.200	-.464	-.434	-.389	-.374	-.299	-.252	-.198	-.157	-.133	-.108	-.086	-.048	-.021	.007	.026
	.300	-.536	-.507	-.458	-.431	-.349	-.298	-.259	-.227	-.206	-.185	-.166	-.135	-.113	-.089	-.070
	.400	-.563	-.528	-.475	-.434	-.352	-.318	-.294	-.271	-.254	-.237	-.222	-.196	-.178	-.160	-.144
	.500	-.545	-.501	-.412	-.371	-.359	-.322	-.289	-.268	-.257	-.246	-.236	-.218	-.203	-.188	-.176
	.600	-.494	-.455	-.402	-.383	-.372	-.342	-.345	-.338	-.328	-.316	-.307	-.292	-.276	-.261	-.247
	.700	-.521	-.486	-.451	-.430	-.431	-.437	-.427	-.414	-.401	-.387	-.359	-.332	-.314	-.300	-.285
	.800	-.531	-.508	-.494	-.493	-.504	-.454	-.360	-.308	-.292	-.286	-.282	-.278	-.270	-.265	-.255
	.900	-.015	-.022	-.035	-.046	-.059	-.065	-.072	-.081	-.086	-.116	-.099	-.107	-.110	-.115	-.115
	.950	.073	.070	.064	.058	.051	.043	.037	.029	.027	.021	.018	.011	.007	.001	0
Lower surface	.0375	.219	.161	.091	.058	-.030	-.085	-.389	-.648	-.756	-.827	-.880	-.962	-1.021	-1.089	-1.142
	.075	.188	.147	.095	.071	.004	-.031	-.062	-.315	-.532	-.685	-.766	-.860	-.916	-.980	-1.026
	.150	.161	.130	.095	.077	.035	.005	-.013	-.009	-.002	-.022	-.115	-.578	-.784	-.885	-.937
	.250	.132	.112	.090	.076	.048	.026	.011	.002	.002	.007	.015	.036	.015	-.082	-.180
	.350	.109	.088	.071	.062	.039	.024	.012	.002	0	0	.004	.018	.032	.044	.043
	.450	.088	.079	.065	.057	.038	.027	.020	.011	.009	.008	.008	.015	.018	.026	.031
	.550	.064	.056	.045	.039	.025	.018	.013	.005	.003	.002	.002	.004	.008	.010	.013
	.650	.058	.049	.043	.038	.027	.023	.020	.014	.013	.012	.013	.013	.014	.015	.016
	.750	.066	.057	.054	.050	.045	.040	.040	.037	.035	.036	.035	.036	.036	.035	.034
	.850	.056	.060	.061	.059	.054	.055	.055	.053	.053	.052	.053	.053	.052	.051	.050
	.925	.073	.081	.084	.084	.083	.084	.087	.085	.084	.085	.084	.085	.083	.081	.080
	[a].975	.088	.104	.112	.114	.102	.111	.105	.120	.112	.106	.117	.112	.119	.111	.110
	[a]1.000	.097	.115	.126	.130	.112	.125	.108	.137	.128	.120	.131	.128	.139	.131	.128

[a]No orifice.

TABLE 9. - PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) - Continued

(f) $M = 0.58$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.219	2.245	2.263	2.282	2.310	2.334	2.346	2.373	2.398	2.416	2.451
	M_r	.951	.944	.939	.930	.928	.922	.915	.908	.903	.899	.896
	α_r	1.58	1.25	1.03	.79	.45	.16	.02	-.31	-.60	-.81	-1.22
	$\Delta\beta$	1.61	1.23	.92	.53	-.14	-.62	-.82	-1.24	-1.60	-1.84	-2.32
	α_i	2.03	1.81	1.68	1.42	1.23	.98	.79	.51	.31	-.06	-.40
	c_n	.4548	.4052	.3745	.3184	.2745	.2194	.1755	.1155	.0684	-.0148	-.0890
	c_m	-.1159	-.1109	-.1027	-.1013	-.1051	-.1046	-.1097	-.1100	-.1103	-.1127	-.1142
	c_o	.0136	.0138	.0127	.0139	.0140	.0157	.0162	.0163	.0175		
	c/b	Pressure coefficient, P										
Upper surface	[a]0.000	1.246	1.243	1.240	1.235	1.233	1.230	1.227	1.223	1.220	1.218	1.216
	.025	.031	.100	.133	.211	.273	.331	.412	.415	.477	.528	.592
	.050	-.102	-.046	-.021	.044	.096	.146	.179	.220	.277	.323	.385
	.100	-.219	-.175	-.154	-.099	-.055	-.013	.016	.053	.103	.144	.202
	.200	-.329	-.296	-.279	-.238	-.260	-.168	-.140	-.104	-.061	-.025	.027
	.300	-.411	-.380	-.359	-.311	-.279	-.250	-.227	-.199	-.163	-.132	-.082
	.400	-.446	-.419	-.400	-.363	-.333	-.299	-.282	-.260	-.235	-.212	-.167
	.500	-.468	-.438	-.421	-.382	-.333	-.309	-.308	-.287	-.263	-.234	-.198
	.600	-.462	-.431	-.412	-.381	-.357	-.347	-.337	-.321	-.301	-.307	-.281
	.700	-.488	-.475	-.466	-.444	-.433	-.421	-.414	-.398	-.398	-.392	-.366
	.800	-.535	-.521	-.523	-.516	-.506	-.502	-.499	-.496	-.485	-.474	-.432
	.900	-.398	-.342	-.214	-.203	-.192	-.198	-.183	-.143	-.106	-.092	-.075
	.950	-.129	-.096	-.036	-.009	.013	.022	.026	.037	.044	.038	.046
Lower surface	.0375	.148	.077	.036	-.102	-.318	-.511	-.625	-.715	-.807	-.902	-.959
	.075	.145	.095	.063	.014	-.075	-.367	-.533	-.640	-.731	-.821	-.872
	.150	.138	.102	.082	.040	.026	.012	-.126	-.437	-.646	-.752	-.806
	.250	.121	.098	.083	.052	.040	.036	.040	.059	-.018	-.465	-.717
	.350	.099	.080	.068	.044	.034	.027	.026	.041	.071	.079	-.015
	.450	.083	.067	.059	.040	.034	.026	.022	.029	.049	.069	.106
	.550	.057	.045	.040	.025	.022	.017	.012	.016	.029	.041	.078
	.650	.040	.032	.031	.020	.021	.017	.013	.017	.026	.031	.063
	.750	.045	.035	.034	.029	.032	.032	.029	.036	.042	.043	.069
	.850	.028	.026	.034	.032	.044	.046	.047	.053	.060	.058	.079
	.925	.027	.027	.038	.045	.061	.070	.072	.083	.089	.087	.106
	[a].975	.036	.037	.059	.061	.076	.090	.097	.117	.120	.104	.123
	[a]1.000	.040	.043	.075	.072	.085	.102	.111	.140	.137	.110	.134

[a]No orifice.

TABLE 9.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) – Continued

(g) M = 0.60; $\beta_{0.75R}$ = 45°.

J	2.206	2.215	2.237	2.253	2.278	2.284	2.328	2.346	2.361	2.376	2.392	2.409	2.429
M_x	.987	.979	.974	.966	.963	.955	.957	.947	.944	.945	.937	.933	.929
α_x'	1.74	1.63	1.35	1.15	.84	.77	.23	.02	-.16	-.34	-.53	-.73	-.96
$\Delta\beta$	1.03	.96	.74	.48	-.14	-.28	-1.35	-1.78	-2.06	-2.29	-2.49	-2.71	-2.85
α_i	1.92	1.82	1.68	1.49	1.30	1.16	.65	.27	-.02	-.13	-.22	-.50	-.62
c_n	.4281	.4045	.3726	.3319	.2874	.2571	.1429	.0587	-.0042	-.0290	-.0497	-.1097	-.1374
c_m	-.1193	-.1154	-.1121	-.1093	-.1095	-.1091	-.1218	-.1245	-.1263	-.1304	-.1308	-.1301	-.1280
c_d	.0190	.0189	.0187	.0194	.0195	.0190	.0217	.0225	.0237	.0234	.0237	.0241	.0239
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.267	1.262	1.260	1.254	1.253	1.248	1.249	1.244	1.243	1.244	1.238	1.236	1.234
	.025	.125	.159	.197	.248	.299	.326	.449	.506	.548	.563	.581	.615	.639
	.050	-.019	.009	.040	.081	.124	.148	.256	.309	.350	.362	.378	.410	.432
	.100	-.141	-.121	-.097	-.059	-.023	-.003	.094	.139	.175	.186	.199	.228	.248
	.200	-.261	-.247	-.231	-.209	-.170	-.149	-.069	-.024	.006	.015	.026	.051	.069
	.300	-.346	-.335	-.317	-.289	-.250	-.232	-.161	-.129	-.101	-.095	-.085	-.061	-.044
	.400	-.391	-.381	-.364	-.338	-.313	-.298	-.233	-.205	-.180	-.177	-.173	-.154	-.138
	.500	-.419	-.408	-.392	-.368	-.353	-.344	-.288	-.260	-.237	-.231	-.223	-.203	-.184
	.600	-.443	-.431	-.412	-.391	-.376	-.367	-.331	-.313	-.296	-.295	-.287	-.270	-.259
	.700	-.465	-.461	-.448	-.437	-.425	-.418	-.405	-.397	-.383	-.382	-.381	-.374	-.365
	.800	-.521	-.521	-.511	-.505	-.495	-.488	-.482	-.484	-.471	-.474	-.475	-.470	-.460
	.900	-.600	-.597	-.575	-.553	-.524	-.441	-.463	-.441	-.482	-.467	-.442	-.433	-.393
	.950	-.304	-.218	-.151	-.121	-.097	-.066	-.054	-.044	-.040	-.033	-.024	-.014	.002
Lower surface	.0375	.129	.088	.035	-.099	-.294	-.395	-.576	-.677	-.743	-.760	-.800	-.853	-.887
	.075	.131	.101	.068	.016	-.146	-.288	-.516	-.609	-.670	-.687	-.725	-.776	-.808
	.150	.133	.113	.093	.062	.053	.020	-.443	-.547	-.612	-.630	-.667	-.717	-.749
	.250	.115	.102	.088	.062	.053	.049	-.131	-.465	-.538	-.563	-.599	-.649	-.679
	.350	.096	.085	.075	.056	.046	.042	.086	-.020	-.362	-.419	-.504	-.597	-.633
	.450	.079	.071	.064	.047	.039	.037	.071	.097	.078	.063	.029	-.128	-.190
	.550	.046	.039	.036	.021	.016	.016	.039	.066	.091	.097	.103	.080	.062
	.650	.022	.019	.018	.006	.004	.005	.022	.040	.064	.071	.082	.103	.116
	.750	.018	.013	.015	.006	.008	.011	.025	.038	.060	.060	.063	.082	.100
	.850	-.014	-.011	[b]-.007	-.011	-.006	.003	.016	.028	.041	.051	.061	.078	.095
	[a].925	-.034	-.035	[b]-.025	-.030	-.018	0	.018	.032	.050	.054	.063	.082	.100
	[a].975	-.040	-.042	-.031	-.037	-.016	.004	.029	.043	.075	.090	.100	.110	.132
	[a]1.000	-.040	-.043	-.032	-.037	-.013	.008	.037	.053	.095	.129	.140	.141	.177

[a]No orifice.

[b]Faired value.

TABLE 9.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) – Continued

(h) $M = 0.65$; $\beta_{0.75R} = 45°$.

	J	2.160	2.182	2.203	2.218	2.243	2.261	2.275	2.297	2.304	2.340	2.355	2.363
	M_x	1.077	1.071	1.065	1.056	1.055	1.049	1.041	1.039	1.030	1.032	1.025	1.015
	α_x'	2.32	2.04	1.78	1.59	1.27	1.05	.88	.61	.52	.09	-.09	-.19
	$\Delta\beta$	-.37	-.57	-.80	-1.01	-1.37	-1.63	-1.81	-2.04	-2.10	-2.35	-2.42	-2.47
	α_i	1.32	1.19	.99	.77	.48	.34	.14	-.14	-.24	-.64	-.73	-.88
	c_n	.2931	.2645	.2206	.1717	.1086	.0749	.0317	-.0301	-.0533	-.1400	-.1626	-.1948
	c_m	-.1089	-.1104	-.1077	-.1108	-.1073	-.1058	-.1035	-.0988	-.0985	-.0849	-.0810	-.0786
	c_o	.0242	.0244	.0252	.0259	.0269	.0271	.0270	.0279	.0282	.0283	.0287	.0291
	o/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.324	1.320	1.316	1.310	1.310	1.305	1.301	1.299	1.293	1.294	1.290	1.284
	.025	.328	.353	.396	.424	.467	.485	.509	.539	.554	.583	.603	.609
	.050	.178	.198	.235	.259	.297	.314	.333	.361	.372	.408	.427	.432
	.100	.051	.062	.096	.116	.150	.164	.181	.205	.216	.247	.263	.268
	.200	-.080	-.073	-.051	-.038	-.010	.004	.016	.034	.042	.076	.090	.094
	.300	-.175	-.170	-.145	-.130	-.102	-.092	-.079	-.062	-.055	-.025	-.017	-.016
	.400	-.228	-.228	-.205	-.191	-.167	-.157	-.147	-.128	-.121	-.092	-.086	-.087
	.500	-.277	-.273	-.252	-.241	-.218	-.209	-.201	-.185	-.181	-.158	-.155	-.155
	.600	-.324	-.324	-.304	-.298	-.283	-.278	-.271	-.258	-.250	-.228	-.220	-.222
	.700	-.373	-.377	-.362	-.359	-.345	-.338	-.331	-.318	-.314	-.293	-.292	-.297
	.800	-.420	-.429	-.419	-.421	-.411	-.409	-.407	-.399	-.397	-.379	-.383	-.388
	.900	-.490	-.499	-.494	-.500	-.494	-.492	-.493	-.485	-.485	-.472	-.477	-.483
	.950	-.485	-.499	-.494	-.501	-.495	-.494	-.496	-.488	-.488	-.472	-.476	-.479
Lower surface	.0375	.029	-.049	-.137	-.204	-.275	-.323	-.372	-.426	-.467	-.525	-.566	-.604
	.075	.055	-.022	-.115	-.181	-.244	-.290	-.330	-.378	-.416	-.466	-.504	-.538
	.150	.111	.054	-.051	-.135	-.209	-.255	-.295	-.341	-.378	-.429	-.464	-.499
	.250	.119	.096	-.029	-.064	-.162	-.214	-.254	-.300	-.335	-.389	-.421	-.454
	.350	.123	.117	.107	.061	-.104	-.175	-.225	-.276	-.312	-.361	-.395	-.426
	.450	.092	.082	.073	.063	.035	-.053	-.176	-.260	-.298	-.357	-.391	-.423
	.550	.060	.049	.041	.032	.024	.020	-.014	-.160	-.216	-.274	-.305	-.336
	.650	.042	.031	.026	.017	.015	.013	.010	-.016	-.044	-.211	-.246	-.277
	.750	.014	.003	-.001	-.008	-.008	-.007	-.008	-.005	.009	-.060	-.063	-.110
	.850	-.031	-.041	-.042	-.048	-.044	-.039	-.031	-.012	.013	.025	.031	.020
	.925	-.021	-.034	-.037	-.043	-.038	-.032	-.027	-.012	-.007	.004	.003	-.004
	[a].975	-.002	-.012	-.024	-.028	-.023	-.015	-.019	-.010	.003	0	0	-.004
	[a]1.000	-.011	0	-.015	-.018	-.014	-.005	-.014	-.007	0	0	0	0

[a]No orifice.

TABLE 9.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) — Continued

(i) One-blade propeller; N = 1600 rpm; $\beta_{0.75R} = 45°$.

	J	2.451	2.381	2.353	2.331	2.297	2.263	2.230	2.189	2.166	2.143	2.115	2.075
	M_x	.884	.871	.866	.863	.855	.851	.848	.842	.834	.831	.827	.820
	α_x'	-1.22	-.40	-.07	.20	.61	1.03	1.44	1.95	2.25	2.54	2.90	3.43
	$\Delta\beta$	-2.80	-1.14	-.46	.12	.86	1.53	2.24	3.26	3.84	4.38	4.90	5.47
	α_i	-.17	.60	.90	1.08	1.29	1.54	1.84	2.18	2.58	2.82	3.13	3.35
	c_n	-.0452	.1632	.2432	.2913	.3494	.4174	.4916	.5852	.6968	.7639	.8445	.9045
	c_m	-.1290	-.1118	-.0988	-.0924	-.0881	-.0830	-.0751	-.0685	-.0667	-.0647	-.0649	-.0644
	c_c												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.211	1.204	1.201	1.199	1.195	1.194	1.193	1.189	1.186	1.185	1.183	1.180
	.025	.619	.427	.319	.213	.063	-.148	-.319	-.563	-.727	-.935	-1.092	-1.224
	.050	.386	.227	.125	.035	-.079	-.234	-.389	-.628	-.804	-.930	-1.058	-1.177
	.100	.200	.033	-.051	-.132	-.242	-.396	-.510	-.708	-.854	-.957	-1.083	-1.182
	.200	.026	-.109	-.172	-.232	-.306	-.431	-.568	-.729	-.870	-.964	-1.061	-1.155
	.300	-.106	-.215	-.266	-.309	-.354	-.382	-.461	-.768	-.905	-.993	-1.077	-1.155
	.400	-.172	-.252	-.287	-.314	-.341	-.363	-.337	-.349	-.781	-.997	-1.092	-1.170
	.500	-.220	-.280	-.303	-.321	-.339	-.356	-.367	-.300	-.289	-.385	-.491	-.567
	.600	-.288	-.334	-.350	-.361	-.374	-.387	-.402	-.374	-.289	-.259	-.311	-.384
	.700	-.372	-.416	-.428	-.433	-.425	-.417	-.402	-.384	-.325	-.271	-.228	-.221
	.800	-.448	-.421	-.380	-.340	-.324	-.310	-.305	-.300	-.278	-.250	-.212	-.189
	.900	-.137	-.139	-.135	-.127	-.124	-.118	-.115	-.119	-.114	-.107	-.091	-.083
	.950	.010	.004	.004	.005	.006	.006	.005	-.006	-.007	-.003	.002	.002
Lower surface	.0375	-1.088	-.888	-.512	-.089	.033	.153	.246	.362	.450	.507	.559	.595
	.075	-1.002	-.709	-.054	-.019	.062	.143	.205	.292	.364	.411	.456	.487
	.150	-.868	.007	-.002	.025	.079	.134	.169	.232	.286	.324	.361	.384
	.250	-.448	.022	.022	.042	.078	.114	.137	.184	.225	.256	.285	.304
	.350	.046	.029	.034	.051	.076	.103	.120	.156	.191	.217	.241	.257
	.450	.093	.031	.034	.046	.065	.088	.100	.123	.154	.176	.198	.209
	.550	.080	.043	.047	.053	.064	.081	.090	.103	.127	.143	.156	.166
	.650	.062	.038	.043	.049	.060	.071	.083	.094	.115	.132	.147	.154
	.750	.071	.055	.059	.060	.066	.073	.081	.087	.105	.118	.131	.134
	.850	.096	.087	.088	.085	.088	.089	.093	.096	.110	.122	.131	.132
	.925	.117	.109	.109	.105	.104	.099	.100	.106	.116	.125	.131	.129
	[a].975	.135	.123	.123	.122	.117	.104	.103	.113	.124	.120	.131	.127
	[a]1.000	.145	.133	.133	.131	.124	.108	.105	.118	.130	.119	.131	.126

[a]No orifice.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) - Continued

(j) One-blade propeller; M = 0.56; $\beta_{0.75R} = 45^{\circ}$.

	J	2.010	2.027	2.059	2.085	2.109	2.132	2.159	2.185	2.211	2.238	2.274	2.295	2.332	2.357	2.462
	M_x	.970	.961	.955	.949	.942	.935	.928	.921	.916	.909	.905	.895	.888	.882	.860
	α_x'	4.31	4.06	3.64	3.29	2.98	2.68	2.33	2.00	1.68	1.34	.89	.63	.18	-.12	-1.35
	$\Delta\beta$	3.72	3.60	3.30	3.03	2.76	2.46	2.10	1.78	1.49	1.22	.92	.76	.36	-.12	-1.90
	α_i	2.92	2.94	2.79	2.66	2.52	2.41	2.30	2.21	2.08	1.86	1.59	1.34	1.09	.87	-.17
	c_n	.7897	.7897	.7510	.7142	.6794	.6516	.6203	.5939	.5584	.5003	.4271	.3619	.2952	.2361	-.0458
	c_m	-.1372	-.1321	-.1283	-.1234	-.1204	-.1179	-.1191	-.1176	-.1166	-.1096	-.1072	-.1071	-.1064	-.1103	-.1172
	c_d	.0014	-.0006	-.0003	0	.0006	.0005	.0012	.0016	.0019	.0022	.0052				
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.257	1.252	1.249	1.245	1.241	1.238	1.234	1.230	1.227	1.224	1.222	1.216	1.213	1.210	1.198
	.025	-.372	-.403	-.391	-.361	-.332	-.298	-.235	-.183	-.125	-.057	.074	.172	.281	.355	.581
	.050	-.357	-.464	-.497	-.492	-.469	-.440	-.406	-.371	-.315	-.238	-.120	-.037	.055	.131	.330
	.100	-.560	-.575	-.550	-.518	-.495	-.474	-.437	-.397	-.355	-.317	-.237	-.166	-.076	-.020	.167
	.200	-.605	-.622	-.602	-.571	-.552	-.532	-.507	-.487	-.463	-.425	-.340	-.280	-.204	-.153	0
	.300	-.651	-.669	-.655	-.629	-.616	-.603	-.580	-.561	-.536	-.503	-.421	-.360	-.294	-.259	-.120
	.400	-.688	-.710	-.695	-.675	-.666	-.652	-.632	-.617	-.590	-.531	-.443	-.355	-.323	-.285	-.180
	.500	-.715	-.736	-.729	-.713	-.705	-.694	-.668	-.626	-.562	-.498	-.393	-.379	-.333	-.294	-.227
	.600	-.750	-.776	-.769	-.731	-.697	-.649	-.604	-.562	-.521	-.470	-.418	-.405	-.369	-.367	-.293
	.700	-.635	-.599	-.603	-.605	-.617	-.606	-.586	-.565	-.544	-.505	-.477	-.456	-.437	-.427	-.361
	.800	-.342	-.335	-.317	-.322	-.336	-.374	-.510	-.608	-.617	-.578	-.556	-.548	-.547	-.534	-.356
	.900	-.299	-.302	-.279	-.250	-.232	-.204	-.167	-.123	-.096	-.084	-.111	-.121	-.117	-.120	-.161
	.950	-.293	-.299	-.274	-.242	-.220	-.181	-.119	-.044	-.003	.034	.036	.032	.029	.022	-.012
Lower surface	.0375	.564	.544	.500	.460	.421	.385	.335	.290	.239	.178	.083	-.016	-.326	-.668	-1.103
	.075	.476	.458	.419	.386	.352	.322	.281	.246	.208	.171	.103	.028	-.023	-.290	-1.006
	.150	.390	.374	.344	.317	.290	.267	.234	.208	.184	.159	.113	.063	.025	.023	-.830
	.250	.317	.302	.275	.255	.235	.217	.196	.176	.161	.145	.113	.076	.049	.038	-.046
	.350	.270	.257	.236	.216	.197	.181	.161	.147	.135	.122	.100	.072	.051	.041	.067
	.450	.217	.203	.184	.169	.152	.139	.125	.114	.106	.099	.084	.063	.049	.040	.043
	.550	.186	.173	.157	.143	.129	.118	.108	.100	.096	.092	.084	.066	.057	.050	.038
	.650	.152	.138	.123	.112	.100	.089	.079	.076	.075	.073	.067	.055	.049	.044	.037
	.750	.114	.101	.088	.078	.066	.063	.058	.063	.068	.075	.075	.066	.062	.062	.053
	.850	.102	.087	.075	.066	.056	.053	.056	.067	.079	.091	.097	.092	.093	.092	.081
	.925	.083	.067	.055	.046	.037	.035	.044	.066	.083	.101	.113	.111	.114	.116	.104
	[a].975	.074	.058	.049	.036	.026	.027	.038	.066	.091	.107	.128	.127	.132	.137	.124
	[a]1.000	.073	.054	.044	.032	.022	.025	.035	.066	.096	.110	.136	.133	.141	.147	.135

[a]No orifice.

NACA

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) - Continued

(k) One-blade propeller; M = 0.58; $\beta_{0.75R}$ = 45°.

	J	2.363	2.291	2.255	2.229	2.217	2.178	2.154	2.129	2.108	2.085	2.063	2.043	2.017
	M_r	.911	.931	.935	.942	.950	.954	.961	.968	.974	.981	.986	.992	1.001
	α_r'	-.18	.68	1.13	1.44	1.59	2.09	2.41	2.72	2.99	3.29	3.59	3.85	4.20
	$\Delta\beta$	-1.08	.23	.71	1.00	1.14	1.64	2.06	2.62	3.20				
	α_i	.53	1.21	1.45	1.70	1.79	2.03	2.17	2.26	2.39	2.54	2.66	2.88	2.82
	c_n	.1439	.3290	.3923	.4558	.4800	.5477	.5823	.6094	.6439	.6868	.7165	.7729	.7587
	c_m	-.1262	-.1311	-.1177	-.1161	-.1203	-.1264	-.1295	-.1349	-.1428	-.1523	-.1596	-.1649	-.1711
	c_c	.0162	.0138	.0112	.0099	.0109	.0093	.0088	.0085	.0090	.0083	.0087	.0089	.0101
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.225	1.235	1.238	1.241	1.246	1.248	1.252	1.256	1.260	1.263	1.265	1.270	1.275
	.025	.464	.312	.182	.099	.079	-.019	-.070	-.097	-.137	-.182	-.218	-.226	-.239
	.050	.241	.128	.018	-.059	-.080	-.165	-.222	-.254	-.283	-.313	-.346	-.348	-.358
	.100	.075	-.058	-.159	-.210	-.214	-.273	-.309	-.327	-.354	-.381	-.397	-.404	-.411
	.200	-.078	-.185	-.272	-.325	-.330	-.385	-.406	-.414	-.430	-.447	-.460	-.464	-.472
	.300	-.198	-.304	-.350	-.400	-.408	-.459	-.477	-.483	-.498	-.513	-.523	-.524	-.530
	.400	-.261	-.342	-.410	-.469	-.481	-.524	-.539	-.544	-.556	-.571	-.584	-.586	-.589
	.500	-.311	-.344	-.419	-.456	-.473	-.542	-.576	-.588	-.602	-.613	-.626	-.625	-.627
	.600	-.325	-.384	-.426	-.456	-.463	-.508	-.552	-.572	-.602	-.644	-.663	-.665	-.670
	.700	-.407	-.444	-.476	-.500	-.504	-.527	-.541	-.552	-.565	-.587	-.605	-.616	-.630
	.800	-.512	-.533	-.556	-.579	-.578	-.599	-.609	-.616	-.622	-.631	-.640	-.639	-.645
	.900	-.242	-.314	-.277	-.264	-.325	-.331	-.325	-.372	-.403	-.404	-.477	-.512	-.573
	.950	.015	-.052	-.070	-.091	-.114	-.137	-.172	-.208	-.242	-.271	-.320	-.331	-.393
Lower surface	.0375	-.792	-.401	.020	.112	.145	.235	.289	.319	.359	.405	.436	.458	.479
	.075	-.701	-.097	.061	.123	.149	.214	.249	.273	.306	.342	.369	.388	.405
	.150	-.577	.028	.083	.127	.146	.193	.215	.230	.256	.285	.307	.322	.336
	.250	.054	.047	.080	.109	.124	.159	.174	.186	.206	.230	.248	.261	.272
	.350	.070	.053	.078	.099	.110	.136	.150	.158	.175	.197	.211	.223	.232
	.450	.049	.042	.061	.076	.083	.104	.111	.120	.136	.165	.162	.173	.180
	.550	.065	.106	.120	.139	.157	.169	.187	.204	.220	.241	.268	.283	.296
	.650	.034	.029	.039	.045	.046	.056	.064	.071	.085	.095	.098	.107	.111
	.750	.049	.037	.041	.043	.040	.044	.048	.054	.067	.075	.073	.080	.083
	.850	.082	.063	.060	.056	.053	.051	.056	.060	.070	.079	.084	.092	.115
	.925	.092	.058	.047	.037	.030	.024	.032	.037	.045	.056	.067	.076	.080
	[a].975	.109	.046	.044	.016	.009	-.010	-.007	.016	.019	.033	.040	.038	.041
	[a]1.000	.122	.039	.043	.004	-.003	-.026	-.026	.005	.006	.021	.025	.015	.020

[a]No orifice.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) - Continued

(i) One-blade propeller; M = 0.60; $\beta_{0.75R} = 45^{\circ}$.

	J	2.369	2.302	2.273	2.243	2.223	2.202	2.174	2.152	2.129	2.108	2.078	2.053	2.039	2.011
	M_x	.942	.957	.963	.969	.977	.983	.990	.996	1.003	1.009	1.015	1.021	1.029	1.035
	α_x'	-.26	.55	.88	1.28	1.52	1.79	2.14	2.42	2.72	2.99	3.39	3.72	3.90	4.28
	$\Delta\beta$	-2.18	-.74	0	.20	.30	.41	.55	.66	.80	.92	1.10	1.28	1.37	1.56
	α_1	.08	.67	.86	1.14	1.35	1.55	1.71	1.86	1.96	2.06	2.20	2.31	2.35	2.51
	c_n	.0213	.1810	.2355	.3097	.3665	.4168	.4695	.4997	.5274	.5574	.5942	.6200	.6342	.6739
	c_m	-.1390	-.1341	-.1317	-.1298	-.1302	-.1388	-.1502	-.1540	-.1581	-.1611	-.1640	-.1662	-.1692	-.1754
	c_c	.0227	.0212	.0204	.0192	.0189	.0178	.0208	.0210	.0201	.0204	.0195	.0195	.0200	.0200
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.241	1.248	1.253	1.256	1.261	1.265	1.269	1.272	1.276	1.280	1.285	1.287	1.293	1.296
	.025	.586	.464	.410	.343	.291	.245	.197	.146	.110	.078	.029	0	-.010	-.056
	.050	.336	.266	.218	.159	.113	.073	.032	-.013	-.058	-.093	-.142	-.174	-.189	-.209
	.100	.192	.088	.041	-.016	-.061	-.093	-.119	-.047	-.160	-.182	-.223	-.248	-.250	-.277
	.200	.023	-.063	-.101	-.147	-.183	-.215	-.239	-.266	-.279	-.295	-.319	-.334	-.332	-.350
	.300	-.143	-.206	-.244	-.284	-.311	-.336	-.357	-.378	-.388	-.400	-.421	-.432	-.430	-.445
	.400	-.189	-.256	-.285	-.329	-.351	-.375	-.402	-.425	-.432	-.446	-.464	-.475	-.472	-.488
	.500	-.243	-.308	-.329	-.353	-.375	-.394	-.412	-.448	-.469	-.483	-.501	-.511	-.507	-.519
	.600	-.303	-.354	-.375	-.389	-.405	-.428	-.443	-.460	-.469	-.489	-.530	-.560	-.562	-.573
	.700	-.387	-.420	-.428	-.432	-.444	-.456	-.465	-.479	-.483	-.496	-.514	-.534	-.540	-.558
	.800	-.502	-.507	-.509	-.515	-.524	-.531	-.538	-.547	-.548	-.555	-.565	-.572	-.572	-.576
	.900	-.432	-.547	-.572	-.589	-.597	-.604	-.610	-.616	-.615	-.619	-.626	-.630	-.628	-.629
	.950	-.057	-.121	-.163	-.223	-.331	-.452	-.591	-.632	-.641	-.644	-.649	-.650	-.646	-.646
Lower surface	.0375	-.794	-.597	-.503	-.338	-.101	.042	.129	.187	.236	.278	.335	.368	.391	.438
	.075	-.718	-.523	-.428	-.174	.020	.094	.148	.188	.225	.258	.297	.321	.341	.379
	.150	-.625	-.422	-.217	.051	.084	.115	.151	.180	.209	.234	.261	.278	.293	.323
	.250	-.579	-.025	.066	.066	.077	.100	.126	.146	.170	.188	.215	.230	.243	.266
	.350	-.252	.092	.075	.070	.077	.094	.113	.129	.150	.165	.187	.200	.212	.231
	.450	.097	.073	.054	.052	.060	.072	.088	.099	.116	.129	.148	.159	.169	.182
	.550	.110	.065	.053	.056	.065	.079	.093	.103	.117	.129	.136	.149	.163	.172
	.650	.082	.036	.024	.024	.027	.034	.042	.048	.059	.066	.080	.089	.096	.108
	.750	.073	.032	.022	.024	.023	.026	.032	.035	.043	.048	.060	.065	.068	.080
	.850	.075	.043	.034	.036	.035	.040	.044	.049	.057	.062	.071	.070	.079	.089
	.925	.071	.037	.026	.025	.026	.033	.040	.045	.057	.066	.076	.085	.093	.103
	[a].975	.075	.030	.020	.013	.014	.016	.034	.038	.057	.067	.080	.093	.102	.110
	[a]1.000	.076	.028	.015	.005	.008	.006	.031	.035	.057	.070	.082	.097	.107	.114

[a]No orifice.

TABLE 9.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.70 PROPELLER BLADE SECTION (x = 0.90) – Concluded

(m) One-blade propeller; M = 0.65; $\beta_{0.75R}$ = 45°.

	J	2.204	2.174	2.161	2.128	2.109	2.090	2.069	2.046	2.031	2.015	1.990	1.974
	M_x	1.049	1.060	1.064	1.069	1.075	1.082	1.089	1.097	1.102	1.111	1.117	1.121
	α_x'	1.76	2.14	2.31	2.73	2.98	3.23	3.50	3.81	4.01	4.22	4.56	4.78
	$\Delta\beta$	–.81	–.50	–.38	–.10	.05	.21	.39	.59	.73	.91	1.19	1.40
	α_1	.57	.91	1.06	1.26	1.40	1.56	1.64	1.80	1.92	1.97	2.05	2.15
	c_n	.1535	.2439	.2819	.3352	.3732	.4139	.4365	.4774	.5129	.5239	.5426	.5723
	c_m	–.1332	–.1352	–.1326	–.1277	–.1259	–.1285	–.1281	–.1385	–.1414	–.1427	–.1442	–.1494
	c_o	.0259	.0247	.0244	.0229	.0216	.0203	.0192	.0194	.0190	.0185	.0179	.0173
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.306	1.313	1.317	1.320	1.323	1.327	1.332	1.338	1.342	1.347	1.351	1.354
	.025	.504	.449	.419	.373	.334	.292	.261	.226	.190	.177	.155	.129
	.050	.325	.274	.239	.198	.165	.130	.102	.069	.024	.008	–.016	–.037
	.100	.147	.102	.076	.038	.014	–.007	–.025	–.046	–.072	–.081	–.102	–.121
	.200	.007	–.029	–.050	–.087	–.110	–.130	–.144	–.160	–.179	–.182	–.192	–.205
	.300	–.130	–.157	–.170	–.202	–.221	–.236	–.249	–.261	–.277	–.279	–.287	–.295
	.400	–.180	–.221	–.238	–.258	–.271	–.286	–.299	–.311	–.327	–.327	–.335	–.344
	.500	–.222	–.246	–.268	–.305	–.318	–.326	–.338	–.352	–.366	–.367	–.373	–.381
	.600	–.289	–.305	–.317	–.339	–.351	–.361	–.373	–.391	–.413	–.416	–.428	–.437
	.700	–.345	–.358	–.361	–.384	–.392	–.397	–.403	–.415	–.432	–.435	–.449	–.465
	.800	–.423	–.430	–.434	–.443	–.448	–.447	–.447	–.452	–.465	–.465	–.473	–.484
	.900	–.491	–.501	–.503	–.510	–.512	–.510	–.507	–.508	–.517	–.515	–.516	–.521
	.950	–.511	–.528	–.529	–.535	–.537	–.534	–.530	–.528	–.535	–.531	–.531	–.533
Lower surface	.0375	–.352	–.224	–.140	–.021	.103	.207	.265	.311	.359	.386	.419	.456
	.075	–.298	–.179	–.107	0	.127	.216	.263	.301	.335	.352	.375	.404
	.150	–.229	–.094	.010	.110	.171	.216	.251	.280	.307	.322	.337	.357
	.250	–.202	0	.084	.123	.154	.187	.214	.237	.261	.273	.286	.305
	.350	–.084	.092	.118	.125	.145	.171	.192	.211	.233	.245	.256	.272
	.450	.062	.083	.087	.090	.107	.132	.153	.169	.188	.198	.206	.221
	.550	.076	.077	.080	.082	.094	.116	.132	.148	.162	.172	.182	.193
	.650	.057	.050	.050	.050	.060	.078	.093	.107	.120	.129	.138	.151
	.750	.024	.014	.014	.013	.023	.042	.057	.069	.081	.087	.095	.107
	.850	.049	.024	.019	.014	.022	.038	.050	.061	.070	.076	.081	.091
	.925	.080	.073	.071	.068	.073	.091	.106	.116	.125	.130	.135	.142
	[a].975	.104	.106	.103	.126	.121	.147	.166	.171	.191	.192	.195	.206
	[a]1.000	.121	.120	.119	.154	.149	.178	.198	.198	.227	.224	.229	.240

[a]No orifice.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95)

(a) N = 1140 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	1.923	2.023	2.051	2.125	2.257	2.335	2.391	2.487	2.551	2.529	2.457	2.375	2.304	2.244	2.170	2.107	1.996	1.935
	M_x	.615	.624	.629	.633	.650	.661	.667	.675	.682	.678	.672	.662	.656	.650	.639	.633	.621	.617
	α_x'	5.31	3.97	3.60	2.65	1.00	.06	-.60	-1.70	-2.42	-2.18	-1.36	-.41	.43	1.16	2.08	2.88	4.33	5.14
	$\Delta\beta$	1.99	1.74	1.64	1.35	.70	.24	-.10	-.74	-1.20	-1.04	-.53	0	.42	.77	1.14	1.43	1.82	1.97
	C_l	3.46	2.78	2.57	2.20	1.37	1.03	.71	.26	-.18	-.11	.39	.81	1.16	1.56	1.93	2.35	3.05	3.46
	C_n	.5518	.4451	.4093	.3515	.2198	.1655	.1132	.0413	-.0297	-.0168	.0629	.1303	.1865	.2492	.3103	.3762	.4901	.5505
	C_m	-.0275	-.0355	-.0365	-.0358	-.0399	-.0433	-.0443	-.0497	-.0588	-.0547	-.0475	-.0430	-.0406	-.0375	-.0370	-.0342	-.0319	-.0275
	C_c																		
	c/b	Pressure coefficient, P																	
Upper surface	[a]0.000	1.098	1.101	1.102	1.104	1.110	1.114	1.116	1.120	1.122	1.121	1.118	1.114	1.112	1.110	1.106	1.104	1.100	1.098
	.025	-1.445	-1.411	-1.001	-.584	-.110	.090	.245	.403	.482	.467	.354	.197	.012	-.186	-.435	-.645	-1.542	-1.468
	.050	-1.373	-.869	-.701	-.555	-.238	-.101	.012	.145	.216	.202	.101	-.024	-.153	-.288	-.451	-.604	-1.139	-1.371
	.100	-1.068	-.596	-.573	-.487	-.310	-.220	-.143	-.043	.013	0	-.076	-.166	-.251	-.333	-.425	-.511	-.636	-1.012
	.200	-.468	-.379	-.353	-.301	-.193	-.145	-.104	-.044	-.013	-.020	-.065	-.119	-.160	-.206	-.264	-.318	-.389	-.444
	.300	-.343	-.312	-.294	-.254	-.180	-.145	-.120	-.076	-.054	-.060	-.091	-.128	-.155	-.186	-.229	-.268	-.321	-.337
	.400	-.337	-.319	-.303	-.271	-.220	-.194	-.179	-.146	-.132	-.137	-.158	-.185	-.201	-.225	-.252	-.281	-.325	-.334
	.500	-.288	-.267	-.256	-.230	-.185	-.164	-.152	-.125	-.114	-.118	-.134	-.156	-.168	-.190	-.215	-.239	-.274	-.286
	.600	-.274	-.258	-.249	-.230	-.195	-.177	-.168	-.148	-.141	-.144	-.156	-.172	-.179	-.201	-.218	-.237	-.264	-.272
	.700	-.269	-.260	-.253	-.238	-.214	-.204	-.196	-.180	-.177	-.180	-.187	-.197	-.201	-.212	-.228	-.242	-.264	-.269
	.800	-.232	-.226	-.221	-.211	-.198	-.193	-.191	-.183	-.186	-.186	-.187	-.192	-.190	-.196	-.206	-.215	-.230	-.232
	.900	-.125	-.116	-.110	-.103	-.097	-.094	-.096	-.092	-.099	-.097	-.094	-.097	-.091	-.093	-.102	-.108	-.119	-.125
	.950	-.059	-.047	-.040	-.032	-.031	-.030	-.033	-.032	-.039	-.039	-.033	-.031	-.024	-.027	-.030	-.037	-.051	-.060
Lower surface	.0375	.509	.431	.395	.305	.081	-.022	-.138	-.610	-.828	-.814	-.370	-.103	.027	.126	.240	.332	.458	.504
	.075	.371	.303	.274	.206	.047	-.041	-.120	-.229	-.618	-.560	-.162	-.098	-.005	.076	.156	.225	.326	.364
	.150	.284	.236	.213	.168	.068	.019	-.033	-.075	-.160	-.130	-.067	-.018	.043	.090	.134	.181	.252	.281
	.250	.204	.168	.152	.118	.062	.027	-.008	-.038	-.054	-.053	-.030	.001	.043	.075	.100	.124	.179	.201
	.350	.152	.123	.110	.087	.031	.009	-.015	-.035	-.051	-.048	-.030	-.009	.022	.044	.069	.092	.133	.150
	.450	.120	.097	.090	.070	.036	.019	.001	-.014	-.029	-.027	-.010	.005	.030	.047	.060	.076	.106	.121
	.550	.090	.074	.067	.051	.018	.006	-.008	-.015	-.029	-.027	-.014	-.006	.014	.028	.042	.054	.081	.092
	.650	.064	.052	.045	.035	.013	.006	-.005	-.008	-.017	-.018	-.008	-.003	.014	.021	.029	.035	.057	.064
	.750	.050	.041	.036	.030	.020	.016	.0[illegible]7	.008	.001	0	.007	.008	.020	.028	.029	.030	.047	.050
	.850	.040	.036	.032	.030	.017	.019	.017	.020	.014	.014	.017	.016	.022	.023	.027	.030	.037	.040
	.925	.046	.048	.047	.049	.039	.046	.042	.049	.044	.042	.044	.041	.046	.042	.045	.046	.048	.047
	[a].975	.041	.046	.048	.071	.063	.074	.069	.075	.075	.055	.065	.067	.067	.062	.066	.065	.051	.051
	[a]1.000	.041	.046	.046	.083	.075	.090	.082	.089	.090	.058	.078	.080	.080	.075	.076	.074	.051	.051

[a]No orifice.

NACA

TABLE 10.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) – Continued

(b) N = 1350 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.016	2.088	2.183	2.248	2.335	2.405	2.479	2.528	2.512	2.447	2.400	2.350	2.300	2.239	2.153	2.067
	M_x	.741	.751	.760	.769	.779	.789	.797	.806	.803	.792	.785	.781	.775	.762	.752	.742
	α_x'	4.06	3.12	1.92	1.11	.06	-.76	-1.61	-2.17	-1.99	-1.25	-.70	-.12	.48	1.22	2.29	3.39
	$\Delta\beta$	3.32	2.70	1.85	1.24	.33	-.53	-1.40	-2.00	-1.80	-1.02	-.46	.14	.73	1.32	2.13	2.89
	c_l	3.95	3.25	2.23	1.79	1.18	.81	.17	-.20	-.10	.43	.75	1.04	1.39	1.84	2.45	3.45
	c_n	.6334	.5229	.3560	.2858	.1903	.1300	.0277	-.0323	-.0161	.0681	.1200	.1665	.2223	.2948	.3913	.5515
	c_m	-.0472	-.0360	-.0441	-.0443	-.0480	-.0500	-.0618	-.0667	-.0692	-.0562	-.0524	-.0484	-.0457	-.0408	-.0445	-.0306
	c_c																
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.146	1.150	1.153	1.157	1.161	1.165	1.169	1.173	1.171	1.167	1.164	1.162	1.160	1.154	1.150	1.146
	.025	-1.568	-1.327	-.529	-.190	.119	.308	.457	.550	.519	.411	.294	.178	-.008	-.258	-.774	-1.430
	.050	-1.508	-1.303	-.578	-.334	-.103	.050	.184	.272	.241	.141	.037	-.059	-.201	-.384	-.753	-1.395
	.100	-1.458	-.972	-.524	-.406	-.256	-.146	-.036	.041	.015	-.071	-.154	-.224	-.320	-.431	-.573	-1.174
	.200	-.382	-.338	-.304	-.238	-.167	-.111	-.047	-.002	-.019	-.070	-.116	-.154	-.201	-.258	-.338	-.337
	.300	-.302	-.309	-.260	-.216	-.166	-.133	-.087	-.055	-.068	-.104	-.135	-.159	-.188	-.230	-.285	-.316
	.400	-.347	-.335	-.285	-.258	-.220	-.199	-.170	-.149	-.157	-.180	-.199	-.217	-.235	-.268	-.304	-.343
	.500	-.305	-.288	-.245	-.218	-.187	-.172	-.147	-.127	-.137	-.158	-.173	-.187	-.201	-.230	-.264	-.297
	.600	-.306	-.289	-.254	-.234	-.210	-.201	-.181	-.167	-.176	-.190	-.201	-.210	-.221	-.243	-.272	-.300
	.700	-.310	-.297	-.266	-.253	-.234	-.230	-.218	-.210	-.216	-.223	-.230	-.237	-.241	-.259	-.281	-.304
	.800	-.273	-.262	-.239	-.230	-.221	-.224	-.219	-.217	-.220	-.223	-.224	-.227	-.226	-.236	-.252	-.267
	.900	-.141	-.131	-.110	-.105	-.100	-.105	-.104	-.103	-.108	-.106	-.105	-.106	-.104	-.111	-.124	-.139
	.950	-.062	-.049	-.027	-.022	-.020	-.025	-.026	-.028	-.031	-.028	-.028	-.025	-.022	-.026	-.040	-.054
Lower surface	.0375	.512	.430	.271	.136	-.023	-.157	-.985	-1.235	-1.215	-.588	-.161	-.075	.049	.158	.326	.451
	.075	.378	.309	.181	.086	-.098	-.136	-.163	-.816	-.494	-.138	-.132	-.075	.009	.098	.222	.324
	.150	.292	.241	.152	.086	.022	-.043	-.069	-.098	-.067	-.072	-.039	-.003	.052	.093	.179	.253
	.250	.210	.171	.107	.061	.031	-.012	-.041	-.039	-.047	-.039	-.012	.010	.047	.060	.121	.177
	.350	.156	.124	.075	.041	.012	-.019	-.038	-.048	-.050	-.037	-.017	-.001	.024	.040	.088	.130
	.450	.127	.102	.062	.045	.021	-.002	-.018	-.027	-.028	-.016	-.002	.010	.028	.035	.073	.105
	.550	.095	.076	.043	.020	.003	-.014	-.024	-.032	-.034	-.023	-.013	-.005	.009	.018	.048	.078
	.650	.067	.052	.029	.020	.007	-.007	-.014	-.019	-.022	-.014	-.007	-.003	.009	.015	.031	.054
	.750	.058	.045	.041	.034	.023	.014	.012	.009	.005	.009	.013	.016	.023	.030	.035	.044
	.850	.049	.043	.034	.023	.023	.019	.021	.021	.017	.019	.018	.018	.020	.017	.035	.041
	.925	.063	.064	.054	.048	.052	.052	.056	.056	.052	.052	.050	.048	.048	.043	.057	.058
	[a].975	.073	.088	.058	.087	.094	.097	.093	.100	.090	.084	.086	.075	.082	.071	.091	.079
	[a]1.000	.082	.106	.111	.115	.122	.125	.115	.120	.110	.103	.105	.090	.099	.087	.109	.089

[a]No orifice.

TABLE 10.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION ($x = 0.95$) – Continued

(c) $N = 1500$ rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.176	2.209	2.281	2.328	2.373	2.429	2.486	2.456	2.399	2.376	2.355	2.305	2.286	2.267	2.203	2.218
	M_x	.849	.850	.860	.870	.874	.884	.891	.886	.876	.873	.872	.864	.859	.855	.847	.848
	α_x'	2.00	1.59	.71	.14	-.39	-1.04	-1.69	-1.35	-.69	-.42	-.18	.42	.65	.88	1.67	1.48
	$\Delta\beta$	2.82	2.30	1.18	.49	-.22	-1.08	-1.95	-1.50	-.62	-.28	.06	.83	1.11	1.40	2.39	2.14
	α_i	3.05	2.51	1.78	1.41	1.02	.34	-.38	-.04	.67	.88	1.15	1.50	1.67	1.90	2.54	2.46
	c_n	.4881	.4035	.2851	.2255	.1642	.0548	-.0613	-.0065	.1077	.1410	.1842	.2403	.2682	.3048	.4055	.3951
	c_m	-.0434	-.0448	-.0516	-.0543	-.0592	-.0751	-.0865	-.0801	-.0657	-.0615	-.0564	-.0528	-.0516	-.0501	-.0441	-.0444
	c_c																
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.193	1.194	1.198	1.203	1.205	1.211	1.214	1.212	1.206	1.204	1.204	1.200	1.198	1.196	1.192	1.192
	.025	-.575	-.359	-.042	.148	.308	.462	.585	.521	.379	.328	.267	.082	-.011	-.126	-.399	-.340
	.050	-.715	-.575	-.283	-.109	.038	.186	.307	.244	.104	.056	0	-.167	-.250	-.358	-.613	-.565
	.100	-.834	-.731	-.468	-.312	-.182	-.049	.061	.003	-.121	-.164	-.211	-.351	-.423	-.532	-.753	-.721
	.200	-.775	-.349	-.253	-.199	-.139	-.065	-.004	-.034	-.107	-.131	-.156	-.217	-.240	-.260	-.330	-.272
	.300	-.244	-.248	-.230	-.193	-.158	-.108	-.073	-.090	-.138	-.154	-.168	-.205	-.219	-.238	-.248	-.259
	.400	-.266	-.293	-.267	-.240	-.218	-.189	-.166	-.177	-.207	-.217	-.225	-.248	-.259	-.272	-.294	-.295
	.500	-.259	-.266	-.235	-.212	-.195	-.170	-.148	-.160	-.187	-.195	-.201	-.220	-.227	-.239	-.267	-.266
	.600	-.298	-.295	-.270	-.250	-.239	-.221	-.205	-.213	-.234	-.239	-.242	-.254	-.261	-.269	-.292	-.290
	.700	-.320	-.312	-.292	-.281	-.274	-.265	-.255	-.260	-.272	-.274	-.276	-.280	-.283	-.288	-.308	-.307
	.800	-.282	-.273	-.262	-.257	-.261	-.264	-.270	-.267	-.263	-.263	-.260	-.255	-.254	-.256	-.269	-.267
	.900	-.118	-.110	-.100	-.094	-.097	-.100	-.105	-.104	-.100	-.101	-.099	-.097	-.096	-.098	-.109	-.109
	.950	-.020	-.015	-.006	-.001	-.001	-.001	-.004	-.004	-.004	-.005	-.003	-.002	-.002	-.003	-.014	-.014
Lower surface	.0375	.366	.276	.112	.007	-.253	-.823	-.974	-.926	-.712	-.429	-.063	.043	.098	.163	.290	.261
	.075	.257	.188	.070	-.027	-.067	-.728	-.889	-.837	-.256	-.065	-.085	.002	.056	.107	.199	.176
	.150	.209	.159	.089	.039	-.006	-.025	-.805	-.640	.012	-.009	0	.056	.085	.108	.167	.151
	.250	.146	.111	.073	.046	.012	.042	-.152	.056	.003	.002	.013	.051	.069	.076	.114	.102
	.350	.112	.084	.042	.022	-.001	.001	.047	.028	-.010	-.008	.002	.028	.041	.058	.089	.079
	.450	.096	.074	.041	.028	.011	.006	.048	.016	.003	.006	.014	.032	.042	.054	.079	.071
	.550	.064	.041	.017	.008	-.005	-.011	.012	-.008	-.012	-.009	-.003	.010	.019	.027	.045	.038
	.650	.053	.035	.017	.011	.002	-.002	.005	-.003	-.005	-.003	.002	.013	.019	.025	.039	.033
	.750	.056	.040	.029	.028	.022	.023	.025	.021	.019	.018	.022	.026	.031	.036	.045	.040
	.850	.040	.030	.026	.029	.029	.033	.035	.032	.027	.026	.028	.026	.028	.030	.032	.029
	.925	.060	.053	.055	.063	.067	.072	.074	.072	.065	.063	.064	.058	.060	.059	.054	.052
	[a].975	.090	.085	.091	.100	.104	.130	.115	.110	.105	.102	.100	.090	.094	.089	.081	.080
	[a]1.000	.105	.101	.111	.120	.123	.160	.134	.132	.128	.123	.120	.108	.111	.104	.099	.096

[a]No orifice.

NACA

TABLE 10.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) – Continued

(d) N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.227	2.300	2.351	2.423	2.451	2.413	2.382	2.364	2.336	2.295	2.263	2.244
	M_x	.914	.926	.932	.946	.950	.943	.936	.937	.930	.923	.919	.918
	α_x'	1.37	.48	-.13	-.97	-1.29	-.86	-.49	-.88	.05	.54	.93	1.16
	γ_s	2.59	.96	-.54	-2.39	-3.06	-2.14	-1.36	-.88	-.06	1.11	1.91	2.30
	α_i	2.82	1.65	.87	-.29	-.74	-.01	.43	.91	1.27	1.70	2.26	2.61
	c_n	.4512	.2635	.1400	-.0465	-.1181	-.0006	.0687	.1452	.1981	.2732	.3630	.4176
	c_m	-.0569	-.0660	-.0889	-.1142	-.1134	-.1054	-.0998	-.0882	-.0757	-.0673	-.0604	-.0592
	c_o	-.008	.0083	.0131	.0187	.0216	.0175	.0154	.0139	.0108	.0080	.0035	.0008
	o/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.226	1.233	1.236	1.244	1.246	1.242	1.238	1.238	1.235	1.231	1.229	1.229
	.025	-.200	.195	.389	.589	.646	.554	.471	.392	.310	.166	-.018	-.145
	.050	-.430	-.073	.114	.314	.375	.281	.196	.116	.034	-.100	-.269	-.388
	.100	-.597	-.323	-.139	.065	.127	.030	-.054	-.130	-.214	-.336	-.481	-.562
	.200	-.555	-.269	-.145	-.001	.044	-.026	-.087	-.140	-.194	-.284	-.396	-.505
	.300	-.467	-.221	-.172	-.089	-.049	-.109	-.151	-.169	-.187	-.236	-.346	-.432
	.400	-.415	-.279	-.239	-.200	-.166	-.217	-.228	-.236	-.262	-.284	-.340	-.397
	.500	-.381	-.256	-.215	-.199	-.170	-.209	-.196	-.213	-.231	-.259	-.301	-.362
	.600	-.384	-.271	-.246	-.240	-.218	-.237	-.219	-.243	-.259	-.274	-.297	-.359
	.700	-.373	-.360	-.338	-.333	-.340	-.310	-.318	-.333	-.345	-.362	-.348	-.361
	.800	-.260	-.436	-.417	-.395	-.415	-.388	-.403	-.414	-.424	-.439	-.413	-.294
	.900	-.078	-.093	-.220	-.345	-.387	-.302	-.233	-.196	-.135	-.091	-.073	-.080
	.950	.017	.034	.026	.011	-.006	.026	.032	.033	.034	.032	.026	.020
Lower surface	.0375	.294	.030	-.562	-.790	-.845	-.769	-.678	-.565	-.310	.041	.177	.261
	.075	.205	-.017	-.484	-.726	-.775	-.702	-.612	-.480	-.083	-.006	.119	.179
	.150	.175	.050	-.045	-.663	-.717	-.637	-.523	-.037	.027	.055	.122	.158
	.250	.118	.048	.055	-.511	-.582	-.458	.030	.054	.021	.045	.086	.103
	.350	.081	.021	.011	-.273	-.484	-.031	.060	.013	.003	.020	.052	.070
	.450	.067	.025	.011	.051	-.211	.077	.042	.013	.011	.023	.050	.058
	.550	.040	.002	-.014	.061	.035	.048	.004	-.012	-.008	.001	.021	.034
	.650	.022	0	-.014	.042	.063	.028	-.002	-.010	-.008	-.001	.016	.018
	.750	.026	.015	.004	.043	.065	.032	.013	.009	.008	.012	.026	.027
	.850	.034	.018	.014	.048	.068	.039	.023	.017	.017	.015	.024	.031
	.925	.067	.057	.059	.090	.102	.083	.069	.063	.060	.055	.058	.064
	[a].975	.096	.113	.133	.198	.208	.178	.132	.115	.125	.107	.101	.101
	[a]1.000	.116	.148	.172	.275	.280	.255	.170	.150	.165	.135	.124	.124

[a]No orifice.

TABLE 10.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) – Continued

(e) M = 0.56; $\beta_{0.75R}$ = 45°.

	J	2.215	2.249	2.256	2.289	2.311	2.340	2.362	2.394	2.421	2.438	2.460	2.490
	M_x	.943	.938	.933	.927	.923	.916	.910	.908	.897	.893	.888	.882
	α_x'	1.32	1.10	1.01	.61	.35	0	-.26	-.63	-.95	-1.14	-1.40	-1.74
	$\Delta\beta$	2.06	1.68	1.60	1.14	.77	.22	-.28	-1.04	-1.51	-1.72	-2.01	-2.33
	α_1	2.62	2.36	2.15	1.82	1.47	1.21	.91	.63	.32	-.04	-.22	-.47
	c_n	.4191	.3785	.3449	.2925	.2361	.1945	.1452	.1010	.0516	-.0065	-.0355	-.0748
	c_m	-.0785	-.0722	-.0670	-.0667	-.0653	-.0705	-.0732	-.0772	-.0778	-.0869	-.0885	-.0888
	c_o	.0053	.0058	.0061	.0072	.0092	.0100						
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.242	1.239	1.236	1.234	1.231	1.227	1.224	1.223	1.218	1.215	1.212	1.209
	.025	-.023	.034	.076	.139	.245	.299	.360	.416	.476	.507	.543	.590
	.050	-.271	-.221	-.180	-.123	-.025	.024	.085	.140	.198	.231	.265	.312
	.100	-.464	-.443	-.413	-.363	-.277	-.222	-.156	-.099	-.043	-.012	.020	.067
	.200	-.407	-.367	-.339	-.300	-.230	-.176	-.131	-.097	-.064	-.044	-.026	.003
	.300	-.383	-.347	-.316	-.269	-.194	-.186	-.158	-.133	-.112	-.098	-.086	-.064
	.400	-.377	-.355	-.331	-.293	-.266	-.230	-.211	-.201	-.189	-.183	-.177	-.162
	.500	-.338	-.318	-.291	-.263	-.228	-.218	-.190	-.177	-.167	-.161	-.154	-.137
	.600	-.348	-.326	-.297	-.277	-.256	-.252	-.250	-.231	-.218	-.211	-.205	-.188
	.700	-.426	-.407	-.380	-.367	-.348	-.344	-.336	-.321	-.288	-.266	-.258	-.243
	.800	-.493	-.472	-.457	-.441	-.426	-.419	-.358	-.290	-.261	-.277	-.273	-.260
	.900	-.149	-.117	-.093	-.092	-.063	-.061	-.073	-.082	-.092	-.098	-.109	-.107
	.950	.004	.028	.036	.037	.042	.032	.021	.016	.007	.003	-.004	-.005
Lower surface	.0375	.238	.180	.133	.076	-.005	-.247	-.569	-.689	-.804	-.868	-.934	-1.000
	.075	.169	.124	.077	.023	-.037	-.042	-.311	-.579	-.728	-.790	-.851	-.913
	.150	.157	.133	.108	.076	.036	.021	.043	.056	-.307	-.562	-.742	-.820
	.250	.111	.100	.085	.064	.042	.025	.023	.042	.069	.071	.025	-.080
	.350	.074	.058	.046	.033	.019	.007	0	.008	.022	.033	.044	.054
	.450	.068	.054	.044	.035	.025	.017	.010	.013	.016	.020	.024	.041
	.550	.034	.022	.016	.009	.004	-.003	-.008	-.005	-.006	-.003	-.003	.008
	.650	.026	.016	.010	.006	.003	-.002	.005	0	-.002	.001	-.001	.008
	.750	.030	.024	.020	.017	.019	.017	.016	.023	.022	.024	.022	.027
	.850	.014	.018	.019	.018	.025	.026	.027	.033	.035	.036	.034	.038
	.925	.041	.047	.052	.056	.065	.068	.069	.076	.075	.079	.076	.080
	[a].975	.076	.081	.091	.091	.108	.105	.108	.118	.115	.123	.114	.130
	[a]1.000	.093	.099	.111	.114	.130	.125	.130	.143	.138	.148	.134	.160

[a]No orifice.

NACA

TABLE 10.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) – Continued

(f) $M = 0.58$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.215	2.241	2.254	2.287	2.300	2.318	2.342	2.370	2.405	2.417	2.433	2.450
	M_x	.983	.977	.968	.964	.957	.957	.946	.939	.936	.933	.929	.925
	α_x'	1.52	1.20	1.04	.64	.48	.26	–.02	–.35	–.76	–.90	–1.09	–1.28
	$\Delta\beta$	1.74	1.34	1.12	.36	0	–.42	–.88	–1.33	–1.84	–2.00	–2.24	–2.49
	α_1	2.29	2.21	1.97	1.73	1.47	1.16	.81	.67	.12	–.08	–.16	–.48
	c_n	.3667	.3542	.3154	.2761	.2355	.1852	.1000	.1058	.0194	–.0123	–.0265	–.0768
	c_m	–.0912	–.0871	–.0875	–.0875	–.0873	–.0914	–.0914	–.0941	–.0990	–.1011	–.1013	–.0991
	c_o	.0125	.0133	.0133	.0134	.0144	.0152	.0169	.0161	.0173	.0173	.0172	.0185
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.264	1.261	1.256	1.254	1.250	1.250	1.244	1.240	1.238	1.236	1.234	1.232
	.025	.139	.189	.218	.284	.321	.394	.431	.458	.538	.556	.573	.606
	.050	–.116	–.074	–.049	.010	.048	.120	.157	.181	.261	.278	.295	.329
	.100	–.341	–.315	–.296	–.245	–.214	–.138	–.098	–.071	.012	.029	.046	.078
	.200	–.289	–.262	–.248	–.213	–.189	–.143	–.121	–.103	–.042	–.029	–.016	.005
	.300	–.295	–.274	–.265	–.237	–.215	–.174	–.175	–.167	–.122	–.108	–.098	–.081
	.400	–.330	–.317	–.305	–.275	–.253	–.226	–.232	–.227	–.222	–.211	–.198	–.191
	.500	–.296	–.287	–.277	–.256	–.240	–.216	–.217	–.211	–.213	–.209	–.199	–.196
	.600	–.299	–.291	–.283	–.262	–.253	–.230	–.230	–.225	–.212	–.210	–.212	–.221
	.700	–.383	–.379	–.370	–.355	–.347	–.324	–.327	–.322	–.308	–.308	–.303	–.302
	.800	–.448	–.444	–.439	–.428	–.424	–.401	–.405	–.403	–.391	–.389	–.386	–.373
	.900	–.493	–.488	–.469	–.452	–.428	–.385	–.353	–.289	–.213	–.155	–.112	–.099
	.950	–.172	–.138	–.086	–.061	–.039	–.007	.002	.016	.030	.031	.031	.025
Lower surface	.0375	.190	.134	.101	–.020	–.218	–.441	–.566	–.619	–.732	–.780	–.814	–.863
	.075	.139	.088	.052	.003	–.068	–.362	–.505	–.558	–.669	–.712	–.743	–.790
	.150	.148	.118	.099	.065	.054	–.027	–.322	–.441	–.603	–.648	–.678	–.723
	.250	.116	.094	.080	.055	.042	.075	.083	.068	–.350	–.436	–.488	–.576
	.350	.067	.052	.044	.027	.016	.030	.041	.054	.049	.037	.012	–.142
	.450	.068	.055	.049	.038	.027	.034	.034	.043	.080	.064	.066	.068
	.550	.028	.019	.017	.007	.001	.006	0	.006	.039	.044	.051	.062
	.650	.014	.007	.007	.001	–.005	.002	–.004	0	.022	.026	.032	.043
	.750	.012	.008	.010	.007	.005	.016	.010	.015	.031	.036	.040	.049
	.850	–.008	.009	–.002	.001	.002	.017	.016	.025	.042	.045	.052	.056
	.925	0	.001	.007	.015	.023	.048	.053	.065	.083	.089	.092	.096
	[a].975	0	0	.025	.030	.031	.080	.099	.119	.130	.134	.135	.135
	[a]1.000	0	0	.035	.040	.069	.100	.129	.149	.160	.159	.160	.160

[a]No orifice.

TABLE 10.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) – Continued

(g) M = 0.60; $\beta_{0.75R} = 45^{\circ}$.

	J	2.200	2.221	2.240	2.256	2.269	2.289	2.304	2.331	2.350	2.362	2.378	2.399	2.430
	M_x	1.018	1.016	1.011	1.002	.999	.993	.990	.988	.983	.975	.971	.966	.963
	c_x'	1.70	1.44	1.21	1.01	.85	.61	.44	.11	.12	-.26	-.45	-.69	-1.05
	$\Delta\beta$	1.06	.91	.70	.36	0	-.54	-.92	-1.61	-2.06	-2.27	-2.53	-2.80	-3.11
	α_1	2.09	1.97	1.82	1.62	1.46	1.27	.92	.44	.18	-.01	-.14	-.22	-.65
	c_n	.3329	.3132	.2912	.2595	.2344	.2017	.1471	.0703	.0287	-.0016	-.0219	-.0355	-.1032
	c_m	-.0967	-.0978	-.0959	-.0955	-.0924	-.0941	-.1001	-.1052	-.1065	-.1082	-.1095	-.1098	-.1034
	c_o	.0166	.0179	.0182	.0185	.0186	.0187	.0192	.0200	.0208	.0214	.0213	.0220	.0230
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.286	1.284	1.281	1.276	1.274	1.270	1.269	1.267	1.264	1.260	1.258	1.255	1.253
	.025	.250	.290	.321	.357	.384	.412	.451	.520	.553	.570	.580	.613	.651
	.050	-.008	.025	.053	.086	.113	.139	.179	.248	.280	.296	.306	.339	.377
	.100	-.226	-.208	-.190	-.166	-.146	-.124	-.079	-.001	.032	.048	.058	.093	.130
	.200	-.222	-.200	-.180	-.159	-.142	-.123	-.098	-.042	-.018	-.009	-.004	.018	.043
	.300	-.215	-.201	-.192	-.179	-.172	-.165	-.151	-.123	-.111	-.100	-.088	-.064	-.041
	.400	-.291	-.291	-.284	-.266	-.259	-.259	-.253	-.223	-.207	-.199	-.195	-.177	-.157
	.500	-.241	-.243	-.235	-.220	-.213	-.211	-.214	-.197	-.189	-.189	-.188	-.175	-.162
	.600	-.261	-.264	-.257	-.242	-.237	-.233	-.233	-.234	-.233	-.237	-.237	-.226	-.215
	.700	-.340	-.347	-.342	-.333	-.328	-.326	-.320	-.320	-.326	-.335	-.339	-.334	-.326
	.800	-.401	-.407	-.403	-.397	-.396	-.393	-.386	-.378	-.384	-.395	-.398	-.402	-.405
	.900	-.431	-.440	-.418	-.433	-.429	-.426	-.416	-.404	-.402	-.408	-.404	-.403	-.411
	.950	-.434	-.468	-.461	-.434	-.396	-.332	-.253	-.192	-.151	-.130	-.094	-.070	-.058
Lower surface	.0375	.169	.127	.058	-.102	-.225	-.312	-.402	-.521	-.575	-.620	-.655	-.703	-.752
	.075	.136	.092	.063	-.020	-.150	-.261	-.355	-.471	-.522	-.563	-.595	-.640	-.687
	.150	.146	.119	.098	.092	.072	-.061	-.259	-.410	-.468	-.514	-.548	-.593	-.635
	.250	.118	.097	.082	.074	.077	.088	.012	-.253	-.321	-.369	-.404	-.459	-.516
	.350	.075	.057	.046	.040	.037	.046	.069	-.039	-.164	-.263	-.303	-.370	-.430
	.450	.068	.055	.049	.042	.038	.041	.057	.089	.082	.050	.029	-.105	-.310
	.550	.032	.022	.016	.013	.007	.007	.017	.055	.070	.070	.071	.062	-.013
	.650	.018	.006	.002	-.001	-.005	-.007	-.002	.026	.040	.045	.049	.063	.067
	.750	.016	0	-.002	-.003	-.005	-.005	-.001	.017	.028	.031	.039	.054	.070
	.850	-.017	-.025	-.023	-.021	-.022	-.019	-.013	.001	.013	.017	.027	.044	.065
	.925	.030	.011	.007	.004	.002	.001	.007	.022	.034	.040	.054	.071	.089
	[a].975	.093	.050	.039	.030	.033	.027	.030	.048	.059	.068	.084	.210	.138
	[a]1.000	.131	.075	.058	.045	.050	.040	.043	.063	.075	.080	.100	.260	.159

[a]No orifice.

TABLE 10.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) – Continued

(h) $M = 0.65$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.172	2.197	2.222	2.242	2.263	2.283	2.308	2.339	2.381	2.162
	M_x	1.119	1.109	1.099	1.091	1.085	1.074	1.067	1.059	1.039	1.116
	α_x'	2.06	1.74	1.43	1.19	.93	.69	.39	.01	-.48	2.18
	$\Delta\beta$	-.53	-.80	-1.13	-1.44	-1.80	-2.07	-2.31	-2.51	-2.69	-.44
	α_1	1.38	1.11	.83	.54	.35	.05	-.22	-.55	-.96	1.50
	c_n	.2226	.1788	.1344	.0867	.0566	.0081	-.0361	-.0890	-.1545	.2425
	c_m	-.0864	-.0860	-.0883	-.0904	-.0900	-.0818	-.0776	-.0730	-.0605	-.0859
	c_o	.0195	.0209	.0215	.0227	.0228	.0231	.0236	.0245	.0252	.0192
	c/b	Pressure coefficient, P									
Upper surface	[a]0.000	1.352	1.345	1.338	1.333	1.329	1.322	1.317	1.313	1.299	1.349
	.025	.457	.490	.521	.542	.558	.584	.602	.626	.646	.442
	.050	.188	.221	.253	.273	.289	.314	.336	.363	.387	.171
	.100	-.046	-.022	.003	.017	.028	.059	.086	.118	.139	-.059
	.200	-.042	-.018	.003	.013	.021	.037	.051	.065	.078	-.033
	.300	-.091	-.075	-.054	-.044	-.036	-.024	-.009	-.002	.001	-.101
	.400	-.210	-.206	-.193	-.188	-.183	-.170	-.156	-.145	-.142	-.215
	.500	-.155	-.153	-.145	-.146	-.142	-.133	-.125	-.118	-.118	-.162
	.600	-.169	-.172	-.170	-.173	-.172	-.166	-.160	-.155	-.162	-.178
	.700	-.251	-.258	-.258	-.265	-.266	-.263	-.255	-.257	-.267	-.258
	.800	-.307	-.314	-.317	-.327	-.330	-.329	-.323	-.327	-.340	-.312
	.900	-.347	-.354	-.358	-.371	-.378	-.375	-.369	-.376	-.390	-.353
	.950	-.376	-.380	-.383	-.399	-.403	-.402	-.395	-.400	-.418	-.382
Lower surface	.0375	.067	-.047	-.125	-.201	-.255	-.318	-.372	-.442	-.523	.113
	.075	.069	-.047	-.116	-.184	-.228	-.283	-.335	-.400	-.479	.094
	.150	.134	.023	-.044	-.116	-.165	-.224	-.275	-.342	-.425	.164
	.250	.148	.053	-.003	-.059	-.102	-.155	-.198	-.254	-.322	.155
	.350	.098	.044	-.023	-.081	-.111	-.151	-.183	-.227	-.286	.098
	.450	.097	.077	.042	-.046	-.082	-.121	-.147	-.183	-.235	.095
	.550	.073	.063	.058	.012	-.048	-.109	-.132	-.168	-.206	.070
	.650	.042	.036	.037	.023	.008	-.084	-.138	-.179	-.230	.041
	.750	.018	.009	.010	.006	.007	-.014	-.058	-.138	-.224	.015
	.850	-.015	-.027	-.023	-.023	-.016	-.009	.004	-.018	-.136	-.015
	.925	.014	.001	.001	0	.006	.012	.029	.022	-.022	.015
	[a].975	.049	.036	.030	.031	.036	.035	.046	.035	.033	.047
	[a]1.000	.065	.055	.047	.048	.050	.048	.055	.042	.049	.064

[a] No orifice.

TABLE 10.— PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) – Continued

(i) One-blade propeller; N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.385	2.333	2.230	2.053	2.020	2.046	2.116	2.148	2.211	2.182	2.138	2.090
	M_x	.871	.861	.845	.817	.814	.815	.826	.830	.842	.837	.829	.821
	α_x'	-.53	.09	1.33	3.58	4.01	3.67	2.76	2.36	1.57	1.93	2.48	3.10
	$\Delta\beta$	-.42	.42	1.99				4.53	3.68	2.35	2.90	3.94	
	α_i	.70	1.19	1.91	3.80	4.16	3.91	3.21	2.82	2.11	2.30	2.82	3.40
	c_n	.1332	.2258	.3635	.7323	.8000	.7535	.6110	.5361	.4048	.4406	.5439	.6555
	c_m	-.0858	-.0778	-.0681	-.0628	-.0616	-.0623	-.0624	-.0629	-.0665	-.0665	-.0623	-.0608
	c_c												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.204	1.199	1.191	1.178	1.177	1.177	1.182	1.184	1.189	1.187	1.184	1.180
	.025	.391	.205	-.196	-1.087	-1.240	-1.160	-.916	-.679	-.368	-.488	-.665	-.958
	.050	.155	-.029	-.347	-1.070	-1.218	-1.139	-.989	-.831	-.568	-.614	-.780	-.984
	.100	-.022	-.158	-.491	-1.145	-1.247	-1.187	-.987	-.859	-.609	-.710	-.880	-1.063
	.200	-.102	-.190	-.281	-1.056	-1.183	-1.113	-.961	-.818	-.305	-.321	-.798	-.994
	.300	-.123	-.184	-.260	-.749	-.983	-.817	-.344	-.257	-.271	-.263	-.259	-.468
	.400	-.149	-.199	-.255	-.328	-.387	-.341	-.266	-.266	-.266	-.273	-.260	-.283
	.500	-.198	-.237	-.280	-.300	-.303	-.301	-.295	-.300	-.289	-.299	-.297	-.295
	.600	-.232	-.266	-.300	-.327	-.328	-.326	-.325	-.324	-.306	-.316	-.322	-.326
	.700	-.264	-.291	-.314	-.349	-.351	-.350	-.346	-.336	-.316	-.324	-.333	-.346
	.800	-.286	-.305	-.311	-.352	-.351	-.346	-.338	-.324	-.305	-.313	-.323	-.341
	.900	-.147	-.167	-.173	-.215	-.216	-.215	-.200	-.189	-.173	-.177	-.189	-.205
	.950	-.029	-.050	-.060	-.094	-.096	-.094	-.081	-.072	-.057	-.063	-.073	-.085
Lower surface	.0375	-.688	-.016	.197	.553	.599	.568	.471	.401	.264	.323	.420	.509
	.075	-.253	-.016	.148	.430	.471	.443	.356	.298	.193	.239	.316	.391
	.150	.013	-.014	.094	.298	.334	.308	.242	.197	.126	.156	.211	.268
	.250	.029	.027	.101	.232	.258	.237	.187	.157	.118	.137	.169	.209
	.350	.015	.015	.059	.179	.203	.187	.145	.118	.076	.092	.124	.159
	.450	.040	.038	.069	.154	.169	.160	.139	.120	.088	.099	.124	.142
	.550	.037	.033	.051	.130	.144	.132	.106	.088	.060	.071	.093	.113
	.650	.039	.029	.045	.107	.114	.107	.092	.078	.056	.065	.084	.099
	.750	.061	.047	.054	.101	.106	.101	.089	.078	.061	.067	.082	.093
	.850	.106	.090	.088	.120	.119	.119	.109	.101	.091	.095	.105	.113
	.925	.132	.110	.101	.115	.120	.118	.110	.107	.104	.103	.108	.109
	[a].975	.142	.118	.107	.115	.120	.115	.110	.108	.107	.110	.110	.108
	[a]1.000	.144	.121	.110	.108	.119	.118	.108	.108	.108	.115	.110	.108

[a]No orifice.

NACA

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-303.40 PROPELLER BLADE SECTION ($x = 0.95$) - Continued

(j) One-blade propeller; N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.331	2.291	2.237	2.190	2.132	2.111	2.027	1.971	1.927	1.997	2.072	2.135	2.169	2.228	2.261
	M_x	.918	.908	.899	.892	.882	.878	.863	.857	.848	.859	.872	.878	.886	.896	.899
	α_x'	.11	.59	1.25	1.83	2.31	2.83	3.92	4.66	5.25	4.31	3.33	2.52	2.09	1.36	.95
	$\Delta\beta$	.02	.98	2.18	3.34	4.32	5.11	6.14	6.50		6.35	5.67	4.68	3.91	2.38	1.63
	α_i	.95	1.40	1.91	2.56	3.19	3.73	4.28	4.58	4.71	4.54	4.07	3.52	2.96	2.15	1.70
	c_n	.1819	.2677	.3629	.4894	.6084	.7103	.8264	.8871	.9142	.8742	.7819	.6729	.5677	.4119	.3245
	c_m	-.0903	-.0775	-.0745	-.0729	-.0747	-.0800	-.0832	-.0839	-.0791	-.0849	-.0839	-.0793	-.0749	-.0759	-.0773
	c_c	.0137														
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.228	1.223	1.218	1.215	1.209	1.207	1.200	1.197	1.193	1.198	1.204	1.208	1.212	1.217	1.218
	.025	.332	.167	-.070	-.344	-.524	-.746	-1.000	-1.148	-1.230	-1.118	-.917	-.648	-.474	-.182	.035
	.050	.101	-.049	-.254	-.489	-.658	-.817	-1.020	-1.140	-1.208	-1.126	-.970	-.769	-.604	-.404	-.179
	.100	-.092	-.240	-.418	-.598	-.752	-.874	-1.044	-1.153	-1.208	-1.118	-.980	-.818	-.696	-.480	-.349
	.200	-.175	-.253	-.447	-.666	-.794	-.883	-1.013	-1.119	-1.170	-1.086	-.945	-.857	-.732	-.556	-.325
	.300	-.184	-.217	-.286	-.478	-.658	-.764	-.924	-1.031	-1.086	-.990	-.850	-.726	-.594	-.317	-.238
	.400	-.205	-.250	-.268	-.377	-.500	-.569	-.690	-.791	-.813	-.752	-.630	-.544	-.459	-.285	-.264
	.500	-.223	-.249	-.259	-.341	-.475	-.539	-.635	-.638	-.554	-.544	-.590	-.515	-.419	-.268	-.263
	.600	-.261	-.285	-.294	-.302	-.373	-.519	-.563	-.434	-.379	-.465	-.573	-.446	-.316	-.301	-.298
	.700	-.319	-.341	-.358	-.340	-.306	-.325	-.318	-.353	-.357	-.339	-.314	-.304	-.319	-.362	-.351
	.800	-.398	-.418	-.437	-.402	-.359	-.314	-.325	-.365	-.369	-.349	-.305	-.333	-.365	-.430	-.425
	.900	-.182	-.145	-.141	-.166	-.184	-.187	-.213	-.229	-.224	-.224	-.194	-.186	-.175	-.147	-.138
	.950	-.003	-.015	-.021	-.042	-.054	-.060	-.086	-.100	-.109	-.095	-.069	-.057	-.050	-.031	-.020
Lower surface	.0375	-.525	.019	.184	.315	.421	.502	.581	.633	.663	.620	.548	.469	.382	.226	.108
	.075	-.209	.053	.176	.264	.347	.415	.482	.527	.555	.518	.456	.388	.325	.209	.117
	.150	.018	.013	.085	.152	.216	.271	.329	.366	.390	.358	.305	.251	.195	.107	.049
	.250	.019	.036	.089	.134	.181	.224	.267	.295	.316	.291	.251	.207	.166	.102	.062
	.350	-.006	.010	.041	.074	.109	.144	.179	.201	.217	.200	.169	.134	.100	.054	.029
	.450	.025	.037	.063	.091	.119	.147	.172	.192	.207	.193	.167	.140	.111	.077	.055
	.550	-.004	.009	.026	.046	.072	.100	[b].140	[b].160	[b].168	[b].169	[b].138	[b].115	[b].092	[b].065	[b].044
	.650	.014	.023	.039	.057	.076	.097	.110	.122	.133	.124	.108	.089	.071	.046	.033
	.750	.035	.039	.049	.064	.077	.093	.099	.106	.116	.110	.101	.089	.076	.058	.048
	.850	.082	.083	.085	.094	.102	.114	.112	.114	.119	.119	.117	.110	.100	.088	.084
	.925	.109	.103	.101	.106	.109	.115	.105	.098	.100	.110	.118	.120	.113	.109	.108
	[a].975	.118	.100	.105	.107	.108	.113	.105	.085	.083	.100	.119	.115	.121	.118	.119
	[a]1.000	.123	.100	.105	.107	.108	.114	.103	.080	.076	.098	.120	.110	.124	.122	.125

[a]No orifice.
[b]Faired value.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION ($x = 0.95$) - Continued

(k) One-blade propellar; $M = 0.56$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.350	2.340	2.282	2.266	2.227	2.211	2.182	2.160	2.137	2.122	2.101	2.085	2.063	2.052	2.024	2.017
	M_x	.913	.920	.934	.941	.948	.956	.962	.969	.976	.980	.987	.992	.997	1.001	1.007	1.013
	α_x'	-.12	0	.70	.89	1.37	1.57	1.93	2.21	2.50	2.68	2.96	3.16	3.45	3.59	3.96	4.05
	$\Delta\beta$	.02	.22	.90	1.02	1.36	1.52	1.86	2.12	2.44	2.64	2.89	3.07	3.30	3.42	3.66	3.72
	α_i	.68	.92	1.35	1.58	1.89	2.07	2.28	2.45	2.60	2.75	2.89	3.03	3.15	3.22	3.35	3.43
	c_n	.1303	.1761	.2603	.3048	.3632	.3981	.4400	.4723	.5003	.5287	.5565	.5806	.6081	.6197	.6419	.6558
	c_m	-.0928	-.0928	-.0921	-.0941	-.0946	-.1007	-.1049	-.1085	-.1119	-.1142	-.1272	-.1263	-.1336	-.1359	-.1392	-.1408
	c_d		.0144	.0144	.0136	.0128	.0125	.0117	.0114	.0116	.0125	.0131	.0119	.0129	.0126	.0128	.0121
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.226	1.230	1.237	1.241	1.245	1.249	1.252	1.257	1.260	1.263	1.267	1.268	1.274	1.275	1.278	1.283
	.025	.383	.338	.241	.187	.113	.057	.001	-.034	-.073	-.101	-.138	-.190	-.219	-.226	-.238	-.253
	.050	.183	.142	.052	.012	-.051	-.106	-.161	-.186	-.218	-.230	-.249	-.277	-.297	-.303	-.311	-.327
	.100	-.037	-.079	-.168	-.218	-.269	-.302	-.338	-.358	-.383	-.394	-.409	-.436	-.447	-.447	-.454	-.462
	.200	-.139	-.169	-.231	-.276	-.328	-.375	-.429	-.453	-.481	-.491	-.505	-.521	-.528	-.526	-.525	-.529
	.300	-.168	-.182	-.188	-.248	-.321	-.330	-.365	-.379	-.399	-.417	-.434	-.467	-.483	-.489	-.498	-.510
	.400	-.193	-.201	-.225	-.236	-.275	-.303	-.327	-.340	-.354	-.368	-.383	-.408	-.421	-.427	-.435	-.447
	.500	-.222	-.220	-.251	-.262	-.290	-.313	-.356	-.344	-.356	-.362	-.371	-.390	-.400	-.402	-.406	-.413
	.600	-.257	-.260	-.283	-.290	-.308	-.334	-.357	-.364	-.376	-.382	-.390	-.403	-.410	-.411	-.412	-.417
	.700	-.316	-.316	-.334	-.338	-.356	-.372	-.398	-.407	-.419	-.424	-.431	-.443	-.447	-.448	-.447	-.449
	.800	-.388	-.393	-.411	-.415	-.429	-.442	-.459	-.469	-.481	-.483	-.492	-.501	-.506	-.505	-.503	-.503
	.900	-.173	-.227	-.394	-.432	-.465	-.495	-.525	-.540	-.557	-.561	-.570	-.578	-.581	-.581	-.576	-.576
	.950	-.014	-.008	-.034	-.051	-.079	-.115	-.148	-.228	-.286	-.384	-.493	-.563	-.611	-.644	-.643	-.644
Lower surface	.0375	-.665	-.596	-.049	.072	.142	.203	.259	.301	.337	.368	.394	.429	.450	.465	.491	.515
	.075	-.585	-.338	.030	.065	.117	.162	.203	.237	.263	.290	.311	.340	.357	.370	.395	.413
	.150	-.032	.016	-.001	.034	.067	.100	.136	.162	.182	.203	.218	.239	.252	.263	.283	.300
	.250	.037	.023	.028	.055	.077	.099	.112	.140	.154	.169	.179	.194	.202	.211	.228	.241
	.350	.014	.012	.024	.043	.057	.072	.087	.101	.113	.126	.134	.148	.157	.164	.178	.191
	.450	.018	.022	.032	.048	.058	.068	.079	.091	.100	.111	.119	.128	.135	.142	.153	.164
	.550	.007	.012	.020	.033	.037	.046	.052	.061	.068	.066	.081	.090	.095	.100	.112	.122
	.650	.008	.012	.016	.028	.030	.035	.038	.043	.047	.053	.057	.063	.067	.072	.083	.092
	.750	.030	.034	.032	.039	.037	.040	.038	.041	.042	.047	.049	.054	.057	.060	.069	.078
	.850	.076	.077	.070	.071	.067	.064	.058	.059	.058	.063	.044	.067	.070	.074	.082	.090
	.925	.109	.110	.093	.090	.081	.072	.065	.065	.064	.071	.071	.077	.081	.087	.096	.105
	[a].975	.142	.124	.112	.115	.094	.092	.070	.074	.065	.074	.118	.090	.082	.087	.109	.117
	[a]1.000	.168	.128	.123	.127	.106	.101	.070	.078	.065	.073	.150	.097	.082	.085	.115	.122

[a]No orifice

NACA

TABLE 10.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-303.40 PROPELLER BLADE SECTION ($x = 0.95$) – Continued

(i) One-blade propeller; $M = 0.58$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.346	2.288	2.260	2.231	2.206	2.180	2.157	2.132	2.119	2.087	2.063	2.050	2.025	2.007	1.993
	M_x	.950	.963	.977	.982	.989	.999	1.005	1.013	1.021	1.028	1.034	1.042	1.047	1.057	1.062
	α_x'	-.07	.62	.97	1.32	1.63	1.95	2.24	2.56	2.73	3.14	3.45	3.62	3.94	4.18	4.37
	$\Delta\beta$	-.96	.22	.66	1.00	1.31	1.67	2.08	2.66	3.02						
	α_1	.44	.92	1.24	1.48	1.69	1.93	2.03	2.26	2.38	2.46	2.61	2.70	2.74	2.82	2.87
	c_n	.0826	.1765	.2368	.2823	.3213	.3713	.3881	.4306	.4558	.4719	.4987	.5165	.5271	.5423	.5484
	c_m	-.1104	-.1035	-.1021	-.1045	-.1053	-.1120	-.1127	-.1166	-.1171	-.1202	-.1216	-.1255	-.1233	-.1264	-.1280
	c_o	.0200	.0179	.0176	.0180	.0175	.0163	.0164	.0155	.0148	.0150	.0143	.0141	.0139	.0133	.0128
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.246	1.253	1.261	1.264	1.268	1.274	1.278	1.283	1.287	1.292	1.296	1.301	1.304	1.311	1.314
	.025	.479	.379	.324	.262	.231	.178	.150	.100	.067	.055	.042	-.001	-.014	-.037	-.044
	.050	.249	.165	.113	.055	.030	-.014	-.045	-.098	-.124	-.133	-.133	-.162	-.166	-.174	-.177
	.100	.041	-.053	-.100	-.154	-.174	-.206	-.222	-.249	-.267	-.275	-.271	-.298	-.299	-.307	-.305
	.200	-.097	-.154	-.182	-.229	-.247	-.287	-.313	-.350	-.371	-.379	-.373	-.396	-.396	-.398	-.393
	.300	-.133	-.176	-.197	-.231	-.243	-.270	-.286	-.304	-.321	-.331	-.329	-.361	-.367	-.377	-.379
	.400	-.200	-.192	-.208	-.240	-.250	-.269	-.283	-.296	-.305	-.317	-.309	-.337	-.342	-.351	-.356
	.500	-.213	-.217	-.235	-.259	-.264	-.279	-.292	-.303	-.310	-.317	-.301	-.325	-.327	-.331	-.332
	.600	-.233	-.250	-.261	-.286	-.284	-.298	-.311	-.321	-.325	-.331	-.313	-.334	-.336	-.337	-.336
	.700	-.281	-.302	-.308	-.332	-.332	-.340	-.352	-.360	-.364	-.370	-.354	-.374	-.376	-.375	-.373
	.800	-.359	-.376	-.379	-.400	-.397	-.401	-.409	-.418	-.421	-.427	-.407	-.428	-.428	-.429	-.423
	.900	-.432	-.451	-.455	-.474	-.473	-.478	-.484	-.493	-.496	-.502	-.483	-.501	-.500	-.499	-.493
	.930	-.076	-.160	-.292	-.414	-.501	-.539	-.558	-.568	-.568	-.572	-.551	-.570	-.567	-.565	-.558
Lower surface	.0375	-.650	-.463	-.297	-.007	.117	.195	.228	.284	.330	.351	.410	.420	.440	.470	.488
	.075	-.585	-.402	-.058	.063	.110	.165	.188	.230	.267	.283	.337	.342	.357	.382	.400
	.150	-.548	-.052	.029	.024	.064	.102	.116	.156	.188	.201	.248	.247	.261	.283	.297
	.250	-.126	.065	.046	.043	.076	.105	.112	.140	.163	.171	.213	.208	.216	.232	.243
	.350	.082	.042	.037	.032	.057	.077	.083	.102	.121	.127	.165	.159	.176	.183	.193
	.450	.074	.041	.041	.034	.056	.070	.073	.089	.105	.109	.145	.137	.145	.156	.167
	.550	.041	.019	.022	.019	.033	.046	.046	.059	.072	.074	.108	.099	.106	.116	.126
	.650	.026	.011	.012	.003	.018	.029	.027	.038	.051	.049	.083	.072	.078	.088	.096
	.750	.035	.022	.020	.009	.022	.031	.027	.034	.044	.043	.072	.059	.064	.073	.079
	.850	.072	.054	.051	.039	.050	.057	.054	.059	.068	.067	.096	.079	.082	.089	.095
	.925	.097	.073	.065	.050	.064	.072	.074	.083	.097	.102	.136	.127	.136	.147	.159
	[a].975	.113	.085	.070	.053	.068	.075	.085	.098	.115	.125	.165	.159	.173	.185	.202
	[a]1.000	.120	.090	.070	.054	.069	.078	.090	.105	.124	.139	.178	.174	.192	.205	.223

[a]No orifice.

TABLE 10.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN

NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) – Continued

(m) One-blade propeller; M = 0.60; $\beta_{0.75R}$ = 45°.

J	2.318	2.273	2.255	2.228	2.205	2.180	2.156	2.131	2.109	2.088	2.067	2.044	2.018	2.005	1.981	1.963
M_x	.991	1.007	1.012	1.020	1.027	1.032	1.040	1.048	1.055	1.062	1.069	1.076	1.080	1.090	1.097	1.099
α_r'	.26	.78	1.03	1.36	1.64	1.95	2.26	2.57	2.85	3.12	3.39	3.69	4.04	4.21	4.53	4.77
$\Delta\beta$	-1.30	-.04	.10	.25	.37	.50	.64	.79	.93	1.06	1.20	1.38	1.56	1.66	1.84	1.98
α_i	.13	.65	.81	1.11	1.27	1.49	1.61	1.72	1.86	1.98	2.15	2.23	2.34	2.46	2.58	2.71
c_n	.0245	.1219	.1532	.2110	.2419	.2826	.3042	.3300	.3587	.3829	.4181	.4352	.4555	.4771	.5000	.5229
c_m	-.1186	-.1154	-.1099	-.1054	-.1046	-.1019	-.1020	-.1035	-.1055	-.1085	-.1079	-.1100	-.1112	-.1127	-.1168	-.1185
c_c	.0244	.0226	.0214	.0200	.0193	.0190	.0181	.0180	.0170	.0164	.0158	.0158	.0153	.0144	.0144	.0137
	Pressure coefficient, P															
Upper surface																
[a]0.000	1.270	1.279	1.282	1.287	1.292	1.295	1.300	1.305	1.310	1.314	1.319	1.324	1.326	1.333	1.337	1.338
.025	.607	.473	.433	.378	.351	.313	.290	.265	.229	.207	.165	.145	.120	.091	.072	.025
.050	.322	.265	.226	.176	.148	.115	.091	.068	.030	.012	-.025	-.041	-.055	-.071	-.079	-.106
.100	.112	.040	.011	-.040	-.064	-.092	-.106	-.123	-.143	-.156	-.182	-.193	-.206	-.217	-.241	-.243
.200	-.035	-.075	-.095	-.137	-.154	-.181	-.202	-.222	-.252	-.267	-.295	-.305	-.313	-.319	-.321	-.335
.300	-.082	-.116	-.132	-.161	-.172	-.190	-.202	-.216	-.232	-.242	-.267	-.278	-.290	-.302	-.310	-.331
.400	-.158	-.180	-.191	-.204	-.209	-.220	-.230	-.240	-.251	-.257	-.278	-.282	-.289	-.295	-.302	-.319
.500	-.200	-.218	-.222	-.223	-.224	-.234	-.244	-.250	-.261	-.263	-.280	-.281	-.282	-.283	-.305	-.296
.600	-.245	-.246	-.243	-.247	-.249	-.255	-.265	-.270	-.279	-.279	-.293	-.295	-.293	-.292	-.311	-.301
.700	-.297	-.283	-.280	-.288	-.293	-.298	-.303	-.308	-.317	-.317	-.330	-.330	-.330	-.327	-.329	-.336
.800	-.354	-.343	-.343	-.349	-.352	-.355	-.361	-.361	-.367	-.367	-.379	-.379	-.377	-.375	-.375	-.381
.900	-.414	-.413	-.416	-.425	-.427	-.431	-.437	-.436	-.441	-.439	-.450	-.451	-.449	-.447	-.445	-.452
.950	-.380	-.470	-.490	-.504	-.506	-.508	-.512	-.510	-.513	-.509	-.518	-.519	-.517	-.513	-.510	-.517
Lower surface																
.0375	-.587	-.468	-.401	-.285	-.169	.041	.139	.202	.260	.302	.345	.378	.411	.449	.473	.510
.075	-.528	-.409	-.347	-.203	-.055	.099	.135	.173	.218	.250	.283	.311	.339	.370	.391	.423
.150	-.492	-.365	-.277	-.027	.048	.077	.092	.119	.153	.180	.208	.231	.255	.280	.297	.323
.250	-.350	-.127	0	.068	.067	.077	.087	.109	.135	.158	.175	.195	.216	.238	.252	.274
.350	-.251	.037	.069	.051	.049	.059	.065	.081	.099	.116	.128	.142	.159	.179	.191	.209
.450	.044	.080	.069	.049	.049	.059	.062	.074	.088	.103	.112	.123	.137	.156	.166	.180
.550	.079	.051	.032	.021	.025	.034	.038	.049	.062	.073	.080	.091	.102	.118	.127	.140
.650	.057	.021	.008	.003	.007	.016	.016	.027	.037	.049	.052	.060	.072	.087	.096	.107
.750	.045	.018	.005	.002	.003	.008	.006	.014	.022	.031	.032	.039	.050	.064	.072	.081
.850	.062	.048	.039	.038	.041	.045	.039	.046	.049	.057	.055	.057	.066	.079	.085	.093
.925	.071	.069	.065	.070	.079	.087	.090	.100	.111	.122	.127	.133	.142	.157	.164	.172
[a].975	.083	.083	.083	.086	.101	.110	.130	.140	.142	.159	.164	.178	.188	.202	.206	.212
[a]1.000	.091	.093	.093	.093	.110	.120	.151	.160	.154	.171	.178	.195	.204	.219	.220	.227

[a]No orifice.

NACA

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-303.40 PROPELLER BLADE SECTION (x = 0.95) - Concluded

(n) One-blade propeller; M = 0.65; $\beta_{0.75R}$ = 45°.

	J	2.215	2.182	2.160	2.136	2.125	2.094	2.077	2.052	2.030	2.016	2.002	1.987	1.968
	M_x	1.078	1.086	1.094	1.100	1.109	1.115	1.120	1.127	1.134	1.143	1.148	1.161	1.166
	α_x'	1.52	1.93	2.21	2.51	2.65	3.05	3.27	3.59	3.88	4.06	4.25	4.44	4.70
	$\Delta\beta$	-1.03	-.68	-.42	-.25	-.11	.14	.29	.53	.76	.91	1.08	1.26	1.51
	α_i	.40	.72	.95	1.14	1.34	1.48	1.59	1.72	1.86	2.00	2.15	2.25	2.35
	c_n	.0758	.1371	.1819	.2161	.2529	.2790	.2977	.3258	.3552	.3819	.4077	.4268	.4461
	c_m	-.1051	-.1015	-.0980	-.0955	-.0947	-.0955	-.0967	-.0989	-.1023	-.1042	-.1058	-.1077	-.1104
	c_c	.0238	.0217	.0206	.0198	.0188	.0183	.0177	.0174	.0162	.0159	.0162	.0158	.0154
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.325	1.330	1.335	1.339	1.345	1.349	1.353	1.358	1.363	1.370	1.373	1.382	1.386
	.025	.526	.481	.445	.419	.390	.364	.342	.318	.292	.259	.233	.212	.181
	.050	.306	.263	.227	.197	.133	.113	.096	.081	.067	.046	.028	.017	-.001
	.100	.096	.057	.029	.009	-.018	-.033	-.043	-.056	-.075	-.095	-.108	-.118	-.132
	.200	-.016	-.043	-.081	-.107	-.127	-.147	-.163	-.176	-.190	-.206	-.217	-.222	-.234
	.300	-.074	-.093	-.109	-.118	-.139	-.149	-.147	-.154	-.169	-.190	-.208	-.218	-.237
	.400	-.135	-.151	-.163	-.170	-.180	-.189	-.191	-.197	-.207	-.219	-.230	-.236	-.253
	.500	-.167	-.174	-.176	-.183	-.189	-.195	-.197	-.200	-.205	-.212	-.220	-.221	-.234
	.600	-.199	-.203	-.205	-.203	-.209	-.216	-.216	-.216	-.218	-.224	-.229	-.229	-.240
	.700	-.250	-.250	-.248	-.245	-.248	-.255	-.255	-.255	-.258	-.262	-.267	-.266	-.277
	.800	-.303	-.299	-.298	-.296	-.297	-.300	-.302	-.300	-.301	-.304	-.308	-.306	-.313
	.900	-.377	-.372	-.372	-.373	-.373	-.376	-.377	-.373	-.374	-.376	-.380	-.379	-.388
	.950	-.425	-.434	-.438	-.436	-.438	-.439	-.439	-.437	-.433	-.433	-.436	-.435	-.441
Lower surface	.0375	-.316	-.209	-.123	-.039	.116	.217	.274	.320	.368	.414	.448	.477	.501
	.075	-.255	-.150	-.063	.020	.126	.188	.230	.270	.314	.352	.380	.404	.422
	.150	-.248	-.144	-.040	.050	.116	.146	.170	.200	.231	.262	.287	.310	.326
	.250	-.123	-.032	.054	.098	.123	.141	.158	.180	.207	.230	.248	.266	.276
	.350	-.106	-.011	.058	.074	.089	.102	.116	.135	.154	.174	.189	.203	.211
	.450	-.020	.059	.078	.083	.091	.102	.114	.128	.146	.162	.175	.188	.193
	.550	.038	.068	.065	.066	.076	.084	.095	.108	.124	.138	.148	.159	.163
	.650	.042	.038	.030	.033	.042	.048	.056	.068	.083	.096	.106	.116	.120
	.750	.029	.015	.009	.013	.021	.028	.036	.047	.059	.072	.080	.089	.090
	.850	.042	.021	.014	.018	.025	.030	.038	.051	.062	.074	.080	.089	.088
	.925	.101	.089	.083	.088	.094	.098	.105	.118	.131	.142	.147	.154	.151
	[a].975	.153	.154	.147	.162	.163	.166	.179	.177	.205	.209	.216	.221	.215
	[a]1.000	.182	.191	.182	.199	.202	.203	.223	.208	.245	.247	.253	.258	.252

[a]No orifice.

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS

(a) N = 1140 rpm; $\beta_{0.975} = 45^{\circ}$.

	J	1.923	2.009	2.081	2.187	2.281	2.373	2.455	2.578	2.536	2.436	2.354	2.230	2.142	2.071	1.977
	M_x	.617	.624	.629	.638	.654	.658	.668	.680	.677	.663	.658	.640	.630	.625	.619
	α_x'	5.18	4.04	3.11	1.87	.63	-.47	-1.41	-2.79	-2.32	-1.19	-.24	1.24	2.33	3.24	4.46
	$\Delta\beta$	2.00	1.79	1.54	1.05	.56	0	-.55	-1.42	-1.12	-.42	.12	.85	1.28	1.58	1.88
	α_i	3.72	3.10	2.34	1.79	1.13	.64	.28	-.39	-.24	.37	.84	1.42	1.99	2.52	3.25
	c_n	.4656	.3865	.2920	.2232	.1419	.0787	.0345	-.0490	-.0297	.0448	.1032	.1762	.2504	.3148	.4049
	c_m	-.0288	-.0308	-.0327	-.0273	-.0265	-.0266	-.0270	-.0316	-.0329	-.0279	-.0271	-.0266	-.0290	-.0326	-.0291
	c_c															
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.098	1.101	1.102	1.106	1.111	1.113	1.117	1.121	1.120	1.115	1.113	1.106	1.103	1.101	1.099
	.025	-1.600	-1.367	-.735	-.470	-.171	.044	.222	.385	.338	.173	-.025	-.309	-.603	-.839	-1.490
	.050	-1.283	-.788	-.515	-.342	-.177	-.054	.065	.187	.149	.031	-.093	-.257	-.421	-.561	-.950
	.100	-.662	-.456	-.364	-.262	-.166	-.095	-.023	.060	.033	-.042	-.114	-.208	-.304	-.384	-.489
	.200	-.344	-.307	-.254	-.201	-.141	-.105	-.065	-.019	-.036	-.075	-.112	-.168	-.222	-.267	-.325
	.300	-.279	-.247	-.203	-.161	-.115	-.092	-.067	-.038	-.049	-.074	-.094	-.138	-.174	-.212	-.264
	.400	-.260	-.228	-.187	-.151	-.114	-.095	-.075	-.053	-.062	-.080	-.094	-.132	-.164	-.198	-.245
	.500	-.260	-.230	-.193	-.160	-.125	-.108	-.092	-.074	-.083	-.096	-.109	-.141	-.171	-.201	-.247
	.600	-.262	-.237	-.203	-.169	-.138	-.124	-.109	-.096	-.101	-.112	-.124	-.155	-.181	-.212	-.250
	.700	-.262	-.240	-.210	-.181	-.149	-.137	-.123	-.111	-.117	-.126	-.136	-.165	-.191	-.215	-.252
	.800	-.246	-.226	-.200	-.176	-.145	-.134	-.123	-.116	-.120	-.126	-.132	-.161	-.183	-.205	-.238
	.900	-.180	-.162	-.141	-.121	-.096	-.086	-.078	-.074	-.080	-.079	-.090	-.108	-.127	-.145	-.174
	[a].950	-.002	.004	.010	.017	.027	.023	.023	.017	.018	.024	.030	.022	.019	.010	-.005
Lower surface	.0375	.472	.413	.326	.214	.087	-.033	-.147	-.780	-.650	-.156	-.001	.130	.261	.348	.418
	.075	.343	.295	.226	.139	.055	-.028	-.106	-.393	-.219	-.085	.007	.092	.186	.249	.306
	.150	.215	.179	.130	.064	-.003	-.051	-.094	-.140	-.129	-.080	-.027	.028	.101	.149	.186
	.250	.155	.130	.098	.057	.024	-.011	-.040	-.079	-.072	-.034	.003	.035	.077	.104	.128
	.350	.115	.095	.074	.047	.024	-.003	-.021	-.077	-.045	-.015	.011	.033	.063	.080	.095
	.450	.083	.067	.051	.027	.012	-.009	-.021	-.047	-.039	-.017	.003	.017	.043	.058	.067
	.550	.066	.054	.041	.022	.012	-.006	-.014	-.032	-.028	-.010	.006	.015	.036	.046	.050
	[a].650	.043	.038	.030	.015	.007	-.006	-.010	-.020	-.022	-.009	.004	.006	.020	.038	.032
	.750	.024	.018	.010	-.003	-.006	-.015	-.017	-.028	-.027	-.015	-.009	-.008	.004	.012	.008
	[a].850	.012	.002	.001	-.010	-.008	-.013	-.014	-.012	-.015	-.007	-.004	-.008	-.012	.002	0
	.925	.012	.008	.010	.007	.014	.012	.018	.017	.013	-.016	.017	.008	.007	.010	.001
	[a].975	.012	.008	.018	.040	.046	.047	.057	.050	.035	.035	.038	.024	.040	.010	.008
	[a]1.000	.019	.015	.022	.060	.065	.065	.077	.070	.048	.047	.050	.033	.060	.018	.010

[a]No orifice.

NACA

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(b) $N = 1350$ rpm; $\beta_{0.75R} = 45^{\circ}$.

J	1.995	2.059	2.140	2.226	2.329	2.427	2.532	2.495	2.384	2.288	2.189	2.095	2.041
M_x	.734	.743	.751	.760	.777	.789	.804	.798	.782	.768	.756	.745	.739
α_x'	4.22	3.39	2.36	1.29	.05	-1.09	-2.28	-1.86	-.59	.54	1.75	2.93	3.62
$\Delta\beta$	3.55	3.00	2.27	1.45	.38	-.82	-2.10	-1.64	-.30	.86	1.80	2.68	3.15
α_i	4.12	3.47	2.66	1.85	1.04	.47	-.07	.07	.71	1.32	2.12	3.15	3.65
c_n	.5194	.4399	.3350	.2322	.1290	.0590	-.0084	.0084	.0884	.1658	.2674	.4006	.4614
c_m	-.0382	-.0361	-.0375	-.0329	-.0320	-.0336	-.0447	-.0374	-.0311	-.0320	-.0344	-.0326	-.0365
c_c													
c/b	Pressure coefficient, P												
Upper surface													
[a]0.000	1.143	1.146	1.150	1.153	1.161	1.165	1.172	1.169	1.163	1.157	1.152	1.147	1.145
.025	-1.622	-1.473	-1.105	-.467	-.055	.207	.413	.332	.106	-.216	-.646	-1.309	-1.529
.050	-1.554	-1.421	-.563	-.357	-.131	.045	.202	.137	-.027	-.226	-.435	-1.152	-1.482
.100	-.899	-.444	-.389	-.280	-.155	-.049	.061	.016	-.094	-.205	-.327	-.376	-.533
.200	-.339	-.313	-.272	-.205	-.139	-.089	-.031	-.055	-.109	-.165	-.237	-.295	-.322
.300	-.294	-.264	-.219	-.164	-.118	-.089	-.047	-.062	-.100	-.138	-.189	-.241	-.276
.400	-.282	-.254	-.209	-.160	-.122	-.099	-.072	-.081	-.107	-.137	-.183	-.229	-.265
.500	-.288	-.258	-.214	-.168	-.132	-.112	-.090	-.098	-.119	-.146	-.189	-.235	-.271
.600	-.297	-.271	-.231	-.188	-.152	-.135	-.116	-.123	-.141	-.166	-.208	-.249	-.283
.700	-.300	-.276	-.240	-.200	-.166	-.149	-.135	-.139	-.155	-.179	-.220	-.257	-.287
.800	-.285	-.264	-.231	-.193	-.162	-.148	-.139	-.141	-.152	-.174	-.212	-.247	-.273
.900	-.208	-.188	-.160	-.129	-.102	-.091	-.088	-.087	-.094	-.113	-.146	-.172	-.197
[a].950	-.095	-.082	-.060	-.055	-.030	-.023	.005	-.018	-.029	-.035	-.068	-.081	-.097
Lower surface													
.0375	.493	.437	.341	.214	.048	-.102	-.779	-.523	-.083	.105	.249	.384	.449
.075	.366	.312	.238	.137	.018	-.101	-.268	-.125	-.052	.067	.170	.273	.327
.150	.213	.166	.106	.038	-.033	-.099	-.138	-.127	-.069	-.004	.064	.153	.188
.250	.165	.136	.098	.050	.001	-.041	-.082	-.066	-.027	.018	.059	.112	.137
.350	.122	.100	.077	.049	.010	-.019	-.052	-.036	-.008	.026	.055	.086	.105
.450	.086	.069	.050	.024	-.003	-.024	-.050	-.036	-.014	.009	.029	.057	.072
.550	.067	.054	.039	.023	0	-.016	-.038	-.024	-.009	.009	.023	.044	.056
[a].650	.051	.040	.030	.015	-.004	-.015	-.018	-.018	-.010	.005	.015	.035	.047
.750	.027	.018	.009	-.002	-.012	-.019	.021	-.020	-.017	-.009	-.003	.013	.019
[a].850	.010	.009	.008	.003	-.003	-.003	.045	0	-.004	-.001	-.002	.005	.005
.925	.011	.010	.013	.014	.016	.019	.073	.025	.016	.014	.008	.010	.006
[a].975	.030	.040	.040	.025	.043	.040	.108	.053	.039	.038	.023	.025	.020
[a]1.000	.040	.056	.060	.030	.060	.060	.129	.073	.055	.054	.033	.035	.034

[a]No orifice.

NACA

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(c) N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.116	2.187	2.238	2.274	2.329	2.377	2.439	2.499	2.465	2.416	2.375	2.316	2.271	2.223	2.170
	M_r	.835	.844	.853	.859	.864	.873	.881	.891	.884	.875	.870	.859	.854	.844	.836
	α_r'	2.66	1.77	1.14	.71	.05	-.51	-1.23	-1.91	-1.53	-.97	-.49	.21	.75	2.33	1.98
	$\Delta\beta$	3.92	2.70	1.86	1.29	.48	-.28	-1.27	-2.18	-1.68	-.91	-.26	.67	1.34	2.10	2.98
	α_i	3.61	2.90	2.13	1.66	1.14	.85	.33	-.74	-.18	.33	.76	1.32	1.67	2.29	2.85
	c_n	.4520	.3576	.2640	.2072	.1413	.1052	.0406	-.0910	-.0223	.0403	.0955	.1635	.2075	.2859	.3556
	c_m	-.0421	-.0418	-.0387	-.0371	-.0361	-.0356	-.0442	-.0545	-.0530	-.0454	-.0382	-.0370	-.0377	-.0381	-.0408
	c_c															
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.186	1.191	1.195	1.198	1.200	1.205	1.209	1.215	1.211	1.206	1.203	1.198	1.195	1.191	1.187
	.025	-.951	-.676	-.425	-.246	.001	.148	.309	.441	.371	.262	.148	-.103	-.266	-.490	-.728
	.050	-.996	-.782	-.542	-.314	-.116	-.010	.114	.224	.165	.080	-.009	-.187	-.310	-.624	-.812
	.100	-.875	-.692	-.356	-.273	-.165	-.097	-.011	.067	.023	-.035	-.096	-.201	-.271	-.393	-.712
	.200	-.458	-.269	-.227	-.198	-.154	-.125	-.084	-.057	-.070	-.095	-.123	-.171	-.199	-.236	-.266
	.300	-.252	-.202	-.183	-.159	-.125	-.108	-.085	-.071	-.076	-.089	-.107	-.134	-.158	-.189	-.209
	.400	-.246	-.206	-.184	-.165	-.134	-.121	-.103	-.067	-.096	-.106	-.119	-.142	-.162	-.189	-.214
	.500	-.261	-.219	-.193	-.174	-.145	-.134	-.120	-.105	-.114	-.121	-.132	-.153	-.174	-.200	-.228
	.600	-.290	-.245	-.218	-.199	-.173	-.159	-.150	-.138	-.148	-.152	-.162	-.182	-.200	-.226	-.256
	.700	-.316	-.270	-.239	-.221	-.194	-.183	-.174	-.164	-.170	-.174	-.182	-.201	-.220	-.246	-.276
	.800	-.316	-.267	-.236	-.220	-.193	-.182	-.176	-.173	-.176	-.175	-.182	-.201	-.219	-.244	-.273
	.900	-.224	-.177	-.151	-.136	-.112	-.102	-.098	-.097	-.099	-.096	-.102	-.119	-.137	-.158	-.184
	[a].950	-.116	-.082	-.068	-.063	-.040	-.030	-.025	-.023	-.025	-.024	-.033	-.045	-.060	-.073	-.080
Lower surface	.0375	.393	.341	.237	.163	.046	-.006	-.434	-.805	-.813	-.695	-.087	.058	.146	.251	.334
	.075	.289	.233	.159	.096	.014	-.039	-.456	-.709	-.637	-.113	-.046	.055	.101	.181	.244
	.150	.168	.129	.064	.016	-.027	-.061	-.044	-.620	-.141	-.068	-.064	-.007	.019	.085	.137
	.250	.115	.099	.062	.035	.009	-.014	-.019	-.043	-.018	-.031	-.022	.014	.031	.065	.095
	.350	.082	.075	.050	.027	.010	-.005	-.015	-.006	-.015	-.014	-.005	.020	.031	.057	.071
	.450	.054	.049	.027	.009	0	-.013	-.022	-.021	-.026	-.019	-.013	.005	.012	.033	.048
	.550	.046	.042	.022	.007	.001	-.008	-.016	-.022	-.021	-.013	-.009	.005	.009	.026	.036
	[a].650	.030	.039	.015	0	-.003	-.008	-.014	-.042	-.020	-.010	-.011	0	.002	.015	.022
	.750	.006	.010	.005	.013	-.014	-.017	-.019	-.030	-.027	-.020	-.020	-.014	-.013	-.004	.003
	[a].850	0	.010	-.003	-.005	-.003	-.003	.004	.001	-.002	0	-.003	-.004	-.005	-.004	0
	.925	0	.013	.010	.008	.018	.022	.030	.028	.027	.025	.020	.016	.010	.009	.008
	[a].975	0	.029	.021	.020	.035	.040	.053	.053	.052	.048	.040	.030	.023	.020	.020
	[a]1.000	.015	.034	.028	.026	.041	.050	.064	.063	.063	.060	.050	.040	.030	.025	.030

[a]No orifice.

NACA

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(d) N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.190	2.281	2.344	2.414	2.465	2.449	2.437	2.408	2.370	2.338	2.312	2.262	2.228
	M_x	.905	.918	.926	.935	.943	.940	.938	.934	.928	.920	.916	.908	.904
	α_x'	1.74	.63	-.12	-.94	-1.53	-1.34	-1.21	-.87	-.57	-.05	.25	.86	1.27
	$\Delta\beta$	3.16	1.48	-.36	-2.23	-3.49	-3.08	-2.80	-2.08	-1.12	-.18	.64	1.96	2.61
	α_i	3.12	1.80	.99	.07	-.81	-.55	-.25	.11	.65	1.13	1.38	2.01	2.54
	c_n	.3865	.2223	.1223	.0087	-.0994	-.0677	-.0303	.0142	.0797	.1397	.1700	.2473	.3118
	c_m	-.0436	-.0424	-.0427	-.0584	-.0633	-.0628	-.0575	-.0583	-.0483	-.0406	-.0409	-.0411	-.0426
	c_c			.0073	.0095	.0111	.0104	.0099	.0093	.0081				
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.222	1.228	1.233	1.238	1.242	1.240	1.239	1.237	1.234	1.229	1.227	1.223	1.221
	.025	-.455	-.125	.158	.345	.493	.492	.410	.330	.218	.107	.017	-.204	-.330
	.050	-.599	-.252	-.007	.145	.275	.280	.202	.132	.039	-.053	-.138	-.339	-.503
	.100	-.568	-.267	-.111	0	.112	.121	.049	-.007	-.069	-.138	-.206	-.310	-.466
	.200	-.482	-.289	-.141	-.124	-.046	-.031	-.092	-.122	-.127	-.156	-.180	-.344	-.416
	.300	-.337	-.151	-.115	-.112	-.084	-.056	-.106	-.098	-.108	-.125	-.139	-.158	-.210
	.400	-.302	-.171	-.136	-.119	-.127	-.097	-.125	-.113	-.129	-.144	-.158	-.174	-.195
	.500	-.253	-.180	-.147	-.130	-.174	-.117	-.116	-.126	-.142	-.158	-.167	-.186	-.195
	.600	-.241	-.218	-.185	-.176	-.189	-.117	-.157	-.172	-.184	-.196	-.207	-.227	-.235
	.700	-.300	-.284	-.247	-.230	-.208	-.161	-.208	-.226	-.239	-.255	-.267	-.292	-.299
	.800	-.314	-.318	-.297	-.286	-.251	-.217	-.264	-.280	-.288	-.296	-.294	-.295	-.301
	.900	-.177	-.124	-.091	-.113	-.111	-.072	-.098	-.094	-.091	-.102	-.114	-.138	-.157
	[a].950	.042	.055	.070	.061	.070	.111	.070	.066	.067	.063	.056	.050	.046
Lower surface	.0375	.330	.153	-.058	-.589	-.712	-.667	-.673	-.595	-.441	.018	.068	.179	.259
	.075	.243	.097	-.009	-.479	-.613	-.540	-.538	-.456	-.171	-.010	.039	.130	.189
	.150	.130	.010	-.051	-.446	-.592	-.516	-.509	-.375	-.040	-.046	-.019	.032	.083
	.250	.091	.035	-.002	-.034	-.431	-.369	-.320	.013	-.016	-.012	.005	.040	.065
	.350	.067	.026	.001	.025	-.356	-.148	.016	.021	-.027	-.001	.012	.039	.056
	.450	.042	.007	-.011	-.001	-.082	.060	.025	-.003	-.017	-.012	-.002	.016	.033
	.550	.033	.007	-.009	-.012	.022	.064	.013	-.008	-.013	-.010	-.002	.013	.029
	[a].650	.023	-.002	-.015	-.020	.024	.056	-.010	-.013	-.017	-.015	-.010	.005	.019
	.750	.006	-.020	-.028	-.036	-.003	.026	-.020	-.029	-.031	-.029	-.024	-.014	-.004
	[a].850	-.006	-.028	-.034	-.030	-.002	.020	-.030	-.010	-.025	-.025	-.024	-.017	.010
	.925	.012	.009	.018	.025	.049	.083	.040	.031	.020	.014	.013	.011	.035
	[a].975	.068	.070	.085	.085	.109	.148	.119	.073	.080	.075	.066	.060	.063
	[a]1.000	.109	.110	.129	.124	.145	.190	.160	.104	.118	.110	.100	.095	.083

[a]No orifice.

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(e) $M = 0.56$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.222	2.235	2.248	2.256	2.278	2.299	2.314	2.330	2.344	2.359	2.377	2.403	2.426	2.445	2.468	2.492
	M_x	.960	.957	.953	.951	.945	.944	.937	.933	.930	.926	.922	.915	.910	.906	.900	.895
	α_x'	1.34	1.18	1.03	.93	.66	.41	.23	.04	-.12	-.30	-.51	-.81	-1.08	-1.30	-1.56	-1.83
	$\Delta\beta$	2.02	1.89	1.74	1.64	1.35	1.02	.76	.44	.14	-.23	-.66	-1.20	-1.59	-1.86	-2.15	-2.38
	α_i	2.57	2.45	2.28	2.14	1.96	1.61	1.31	1.11	.94	.81	.62	.39	-.13	-.40	-.47	-.71
	c_n	.3194	.3045	.2841	.2660	.2415	.1985	.1642	.1390	.1171	.1013	.0774	.0484	-.0155	-.0500	-.0581	-.0877
	c_m	-.0636	-.0618	-.0591	-.0565	-.0528	-.0493	-.0469	-.0428	-.0420	-.0441	-.0465	-.0469	-.0547	-.0558	-.0544	-.0519
	c_c	.0062	.0062	.0063	.0060	.0059	.0067	.0077	.0076	.0073	.0079						
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.252	1.250	1.248	1.247	1.244	1.243	1.239	1.237	1.235	1.233	1.230	1.227	1.225	1.222	1.219	1.217
	.025	-.142	-.123	-.097	-.083	-.058	.023	.099	.144	.179	.201	.235	.303	.362	.396	.427	.465
	.050	-.322	-.296	-.262	-.240	-.202	-.114	-.054	-.018	.011	.029	.056	.110	.160	.187	.212	.246
	.100	-.318	-.297	-.265	-.249	-.224	-.191	-.154	-.122	-.097	-.082	-.062	-.020	.015	.039	.059	.086
	.200	-.353	-.342	-.328	-.322	-.309	-.248	-.192	-.149	-.133	-.125	-.113	-.096	-.082	-.072	-.061	-.046
	.300	-.247	-.236	-.221	-.209	-.176	-.127	-.121	-.117	-.112	-.107	-.099	-.089	-.078	-.073	-.069	-.063
	.400	-.221	-.213	-.199	-.195	-.186	-.162	-.154	-.145	-.132	-.127	-.120	-.108	-.098	-.092	-.089	-.081
	.500	-.252	-.246	-.236	-.212	-.217	-.183	-.167	-.153	-.143	-.138	-.131	-.125	-.115	-.109	-.104	-.097
	.600	-.284	-.277	-.266	-.257	-.235	-.206	-.194	-.187	-.178	-.180	-.173	-.164	-.155	-.148	-.140	-.130
	.700	-.336	-.329	-.316	-.306	-.290	-.268	-.259	-.248	-.240	-.235	-.220	-.205	-.188	-.176	-.168	-.156
	.800	-.387	-.379	-.365	-.355	-.342	-.327	-.314	-.305	-.295	-.284	-.248	-.216	-.197	-.187	-.177	-.168
	.900	-.457	-.450	-.430	-.406	-.340	-.276	-.211	-.130	-.091	-.087	-.090	-.091	-.092	-.091	-.092	-.090
	[a].950	-.009	.009	.032	.050	.068	.074	.075	.079	.077	.070	.065	.057	.053	.049	.046	.042
Lower surface	.0375	.232	.239	.225	.204	.173	.125	.069	.016	-.135	-.280	-.449	-.573	-.675	-.722	-.771	-.830
	.075	.195	.175	.152	.136	.110	.061	.012	-.002	-.023	-.078	-.201	-.444	-.541	-.591	-.647	-.715
	.150	.077	.062	.052	.040	.022	-.004	-.033	-.044	-.044	-.043	-.032	-.057	-.363	-.498	-.584	-.661
	.250	.069	.061	.052	.042	.031	.017	-.002	-.008	-.011	-.013	-.013	.003	.011	.001	-.024	-.078
	.350	.058	.050	.044	.038	.031	.022	.008	.003	.002	-.001	0	.003	.013	.014	.011	.001
	.450	.029	.024	.019	.014	.010	.004	-.007	-.010	-.009	-.012	-.013	-.011	-.008	-.005	-.007	-.011
	.550	.019	.016	.013	.009	.006	.003	-.007	-.008	-.008	-.010	-.008	-.008	-.008	-.009	-.009	-.012
	[a].650	.002	.001	-.001	-.001	-.004	-.006	-.013	-.015	-.015	-.011	-.008	-.010	-.010	-.010	-.005	-.013
	.750	-.024	-.024	-.024	-.024	-.024	-.024	-.030	-.029	-.027	-.027	-.021	-.018	-.017	-.017	-.019	-.022
	[a].850	-.039	-.044	-.045	-.040	-.036	-.037	-.038	-.034	-.030	-.020	-.003	-.002	.005	.001	0	-.003
	.925	-.045	-.041	-.033	-.024	-.012	-.002	.001	.011	.020	.022	.028	.034	.037	.037	.036	.033
	[a].975	-.006	.012	.032	.049	.072	.072	.082	.086	.099	.080	.072	.075	.075	.067	.062	.078
	[a]1.000	.033	.057	.088	.102	.128	.126	.137	.137	.146	.116	.103	.102	.101	.087	.079	.102

[a]No orifice.

NACA

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(f) $M = 0.58$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.242	2.259	2.282	2.301	2.321	2.339	2.359	2.386	2.408	2.432	2.463
	M_x	.993	.988	.982	.976	.972	.962	.957	.955	.950	.944	.937
	α_x'	1.10	.89	.61	.36	.15	-.06	-.30	-.62	-.87	-1.15	-1.50
	$\Delta\beta$	1.35	1.03	.48	-.07	-.50	-.85	-1.20	-1.61	-1.92	-2.26	-2.73
	α_i	1.84	1.69	1.52	1.21	1.08	.83	.56	.20	-.11	-.39	-.65
	c_n	.2292	.2094	.1885	.1500	.1342	.1023	.0694	.0248	-.0139	-.0481	-.0803
	c_m	-.0569	-.0535	-.0516	-.0516	-.0513	-.0545	-.0596	-.0629	-.0657	-.0611	-.0600
	c_c	.0091	.0092	.0089	.0100	.0099	.0096	.0099	.0102	.0106	.0105	.0107
	c/b	Pressure coefficient, P										
Upper surface	[a]0.000	1.271	1.268	1.264	1.261	1.258	1.253	1.250	1.249	1.246	1.243	1.239
	.025	.037	.068	.107	.178	.196	.246	.291	.358	.397	.440	.476
	.050	-.123	-.080	-.042	.015	.030	.071	.108	.162	.195	.231	.262
	.100	-.167	-.155	-.141	-.104	-.091	-.054	-.027	.017	.043	.074	.099
	.200	-.253	-.235	-.212	-.179	-.178	-.161	-.146	-.119	-.096	-.072	-.054
	.300	-.179	-.161	-.140	-.111	-.101	-.086	-.111	-.131	-.118	-.102	-.091
	.400	-.159	-.152	-.144	-.128	-.126	-.122	-.121	-.131	-.139	-.132	-.127
	.500	-.200	-.190	-.177	-.156	-.156	-.143	-.133	-.123	-.120	-.140	-.139
	.600	-.227	-.213	-.200	-.181	-.181	-.169	-.164	-.150	-.147	-.147	-.145
	.700	-.278	-.266	-.254	-.240	-.240	-.231	-.225	-.210	-.205	-.198	-.187
	.800	-.327	-.316	-.307	-.296	-.295	-.287	-.281	-.272	-.266	-.258	-.233
	.900	-.398	-.386	-.378	-.362	-.360	-.347	-.330	-.278	-.186	-.101	-.076
	[a].950	-.087	-.050	-.019	.005	.019	.040	.053	.072	.079	.077	.069
Lower surface	.0375	.177	.152	.121	-.013	-.154	-.310	-.419	-.505	-.597	-.665	-.723
	.075	.129	.098	.065	.013	-.066	-.233	-.326	-.423	-.494	-.561	-.619
	.150	.041	.024	.005	-.017	-.020	-.068	-.263	-.404	-.474	-.537	-.594
	.250	.043	.031	.020	.005	.002	.019	.021	-.138	-.300	-.385	-.434
	.350	.040	.034	.028	.017	.010	.017	.030	.041	.017	-.105	-.224
	.450	.021	.017	.013	.005	-.002	0	.006	.026	.032	.030	.069
	.550	.011	.008	.006	0	-.006	-.005	-.004	.008	.017	.023	.025
	[a].650	-.005	-.008	-.009	-.013	-.015	-.015	-.015	-.013	0	.003	.005
	.750	-.035	-.034	-.032	-.033	-.038	-.036	-.035	-.027	-.021	-.015	-.005
	[a].850	-.050	-.050	-.045	-.040	-.042	-.030	-.024	-.020	-.009	.003	.018
	.925	-.055	-.054	-.049	-.041	-.035	-.017	-.001	.021	.035	.044	.047
	[a].975	-.055	-.045	-.028	-.003	-.002	.028	.050	.080	.093	.085	.070
	[a]1.000	-.055	-.035	0	.025	.032	.069	.088	.115	.130	.110	.085

[a]No orifice.

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(g) $M = 0.60$; $\beta_{0.75R} = 45^{\circ}$.

J	2.238	2.250	2.266	2.293	2.312	2.330	2.350	2.375	2.395	2.421
M_x	1.030	1.021	1.016	1.008	1.004	.996	.991	.987	.979	.976
α_x'	1.15	1.00	.81	.48	.25	.04	-.20	-.49	-.72	-1.02
$\Delta\beta$	.72	.55	.07	-.67	-1.18	-1.63	-2.09	-2.53	-2.81	-3.11
α_i	1.52	1.31	1.20	.96	.61	.44	.08	-.35	-.61	-.90
c_n	.1904	.1635	.1503	.1192	.0761	.0545	.0100	-.0442	-.0765	-.1129
c_m	-.0665	-.0596	-.0588	-.0569	-.0594	-.0605	-.0644	-.0673	-.0678	-.0681
c_c	.0132	.0123	.0123	.0122	.0120	.0123	.0127	.0132	.0134	.0134
	c/b	Pressure coefficient, P								
Upper surface	[a]0.000	1.293	1.287	1.284	1.280	1.277	1.272	1.269	1.267	1.263	1.260
	.025	.156	.186	.207	.258	.308	.337	.388	.446	.473	.497
	.050	-.003	.029	.047	.088	.130	.155	.197	.245	.270	.290
	.100	-.081	-.073	-.069	-.040	.001	.023	.055	.094	.113	.129
	.200	-.186	-.167	-.155	-.137	-.121	-.105	-.087	-.059	-.042	-.029
	.300	-.146	-.133	-.126	-.130	-.126	-.113	-.107	-.096	-.090	-.079
	.400	-.130	-.123	-.120	-.117	-.135	-.139	-.140	-.129	-.125	-.122
	.500	-.170	-.160	-.155	-.147	-.156	-.161	-.174	-.169	-.164	-.160
	.600	-.193	-.181	-.178	-.168	-.164	-.162	-.180	-.196	-.195	-.192
	.700	-.241	-.232	-.229	-.221	-.213	-.211	-.214	-.235	-.241	-.242
	.800	-.287	-.280	-.278	-.270	-.263	-.263	-.260	-.266	-.269	-.274
	.900	-.355	-.348	-.348	-.339	-.332	-.329	-.325	-.322	-.320	-.321
	[a].950	-.398	-.358	-.292	-.201	-.135	-.095	-.051	-.029	-.001	.023
Lower surface	.0375	.111	.093	.012	-.146	-.286	-.356	-.433	-.518	-.580	-.626
	.075	.097	.053	.011	-.129	-.221	-.272	-.352	-.442	-.492	-.534
	.150	.030	.012	-.001	-.111	-.237	-.284	-.354	-.432	-.476	-.516
	.250	.031	.019	.017	.028	-.114	-.181	-.253	-.313	-.347	-.377
	.350	.031	.024	.024	.036	.045	.023	-.149	-.264	-.294	-.323
	.450	.021	.015	.012	.014	.031	.040	.028	-.164	-.242	-.298
	.550	.008	.004	.001	.001	.013	.021	.034	.016	-.007	-.071
	[a].650	-.020	-.023	-.018	-.015	-.010	-.013	.005	.025	.015	.002
	.750	-.040	-.045	-.047	-.048	-.045	-.041	-.029	-.012	-.003	.005
	[a].850	-.049	-.055	-.057	-.059	-.059	-.052	-.042	-.021	-.005	.013
	.925	-.049	-.057	-.059	-.059	-.059	-.055	-.041	-.016	.007	.028
	[a].975	-.049	-.058	-.059	-.055	-.055	-.055	-.033	-.008	.017	.040
	[a]1.000	-.045	-.056	-.055	-.053	-.054	-.052	-.018	-.005	.023	.048

[a]No orifice.

NACA

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(h) $M = 0.65$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.159	2.177	2.200	2.209	2.221	2.238	2.259	2.270	2.280	2.308	2.318	2.342	2.368	2.375
	M_x	1.136	1.129	1.122	1.116	1.107	1.102	1.095	1.087	1.084	1.077	1.070	1.067	1.059	1.054
	α_x'	2.12	1.90	1.61	1.50	1.35	1.14	.89	.76	.64	.30	.18	-.10	-.41	-.49
	$\Delta\beta$	-.42	-.60	-.85	-.96	-1.14	-1.42	-1.79	-1.96	-2.09	-2.36	-2.43	-2.57	-2.69	-2.72
	α_i	1.58	1.39	1.17	.90	.75	.64	.44	.33	.04	-.30	-.47	-.77	-1.09	-1.32
	c_n	.1830	.1613	.1360	.1039	.0868	.0743	.0507	.0378	.0042	-.0352	-.0548	-.0890	-.1255	-.1535
	c_m	-.0536	-.0543	-.0575	-.0561	-.0584	-.0588	-.0583	-.0560	-.0543	-.0496	-.0454	-.0408	-.0287	-.0225
	c_c	.0137	.0137	.0143	.0140	.0145	.0149	.0151	.0152	.0151	.0153	.0157	.0158	.0164	.0163
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.364	1.360	1.354	1.350	1.344	1.341	1.336	1.331	1.328	1.324	1.319	1.317	1.312	1.310
	.025	.277	.284	.313	.327	.349	.363	.392	.400	.428	.457	.467	.483	.502	.509
	.050	.098	.113	.148	.163	.182	.194	.219	.224	.248	.271	.279	.292	.309	.312
	.100	.030	.034	.054	.057	.067	.073	.089	.091	.115	.137	.143	.153	.165	.166
	.200	-.092	-.087	-.067	-.062	-.049	-.042	-.025	-.027	-.014	0	.003	.008	.014	.012
	.300	-.087	-.087	-.074	-.079	-.076	-.074	-.062	-.065	-.049	-.037	-.036	-.036	-.038	-.046
	.400	-.064	-.068	-.066	-.074	-.076	-.077	-.070	-.077	-.068	-.063	-.067	-.067	-.068	-.074
	.500	-.096	-.100	-.100	-.113	-.114	-.116	-.110	-.117	-.112	-.111	-.113	-.116	-.118	-.120
	.600	-.124	-.126	-.122	-.133	-.137	-.140	-.135	-.141	-.137	-.135	-.139	-.142	-.144	-.149
	.700	-.172	-.172	-.166	-.177	-.182	-.187	-.183	-.192	-.186	-.189	-.192	-.196	-.200	-.205
	.800	-.214	-.215	-.209	-.216	-.217	-.223	-.224	-.234	-.234	-.236	-.241	-.246	-.252	-.256
	.900	-.275	-.275	-.270	-.277	-.276	-.279	-.277	-.290	-.290	-.296	-.302	-.303	-.311	-.316
	[a].950	-.336	-.340	-.335	-.343	-.346	-.351	-.349	-.357	-.355	-.357	-.360	-.364	-.367	-.370
Lower surface	.0375	.238	.227	.156	.070	-.025	-.077	-.121	-.168	-.222	-.275	-.310	-.342	-.389	-.426
	.075	.171	.141	.097	.043	.002	-.029	-.060	-.099	-.143	-.191	-.214	-.258	-.305	-.342
	.150	.101	.060	.014	-.021	-.052	-.081	-.112	-.149	-.183	-.221	-.246	-.275	-.317	-.348
	.250	.106	.086	.037	-.009	-.035	-.055	-.072	-.097	-.119	-.147	-.166	-.189	-.221	-.249
	.350	.091	.082	.059	.005	-.033	-.053	-.069	-.091	-.111	-.134	-.150	-.169	-.196	-.220
	.450	.066	.058	.059	.031	-.017	-.051	-.075	-.099	-.117	-.138	-.153	-.173	-.199	-.221
	.550	.047	.043	.064	.039	.029	.001	-.050	-.086	-.110	-.133	-.150	-.170	-.198	-.220
	[a].650	.022	.019	.038	.014	.020	.006	-.025	-.046	-.090	-.124	-.153	-.178	-.208	-.225
	.750	-.010	-.016	-.018	-.025	-.021	-.017	-.008	-.020	-.051	-.116	-.159	-.192	-.225	-.246
	[a].850	-.024	-.034	-.038	-.044	-.043	-.039	-.020	-.030	-.030	-.072	-.103	-.135	-.204	-.231
	.925	-.025	-.034	-.037	-.049	-.047	-.047	-.037	-.038	-.024	-.021	-.027	-.061	-.150	-.189
	[a].975	-.025	-.034	-.037	-.050	-.050	-.047	-.048	-.040	-.021	.005	.013	-.018	-.110	-.185
	[a]1.000	-.025	-.035	-.035	-.053	-.055	-.047	-.052	-.038	-.021	.015	.030	0	-.093	-.178

[a]No orifice.

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(i) One-blade propeller; N = 1500 rpm; $\beta_{0.75R} = 45^{\circ}$.

	J	2.334	2.244	2.081	2.029	1.976	2.010	2.058	2.127	2.185	2.285
	M_x	.871	.857	.833	.825	.818	.822	.830	.838	.850	.864
	α_x'	-.01	1.07	3.11	3.78	4.47	4.03	3.40	2.52	1.80	.58
	$\Delta\beta$	.40	1.76						4.30	2.88	1.12
	α_i	.97	1.68	3.91	4.51	4.71	4.52	4.22	3.22	2.41	1.32
	c_n	.1535	.2661	.6181	.7142	.7529	.7206	.6665	.5065	.3813	.2071
	c_m	-.0559	-.0547	-.0685	-.0751	-.0744	-.0769	-.0723	-.0626	-.0575	-.0569
	c_c										
	c/b	Pressure coefficient, P									
Upper surface	[a]0.000	1.204	1.197	1.185	1.182	1.179	1.180	1.184	1.188	1.194	1.200
	.025	.171	-.155	-.996	-1.204	-1.330	-1.236	-1.152	-.780	-.420	-.019
	.050	-.094	-.391	-1.063	-1.225	-1.319	-1.257	-1.207	-1.011	-.797	-.285
	.100	-.117	-.266	-1.012	-1.153	-1.238	-1.178	-1.088	-.859	-.603	-.202
	.200	-.105	-.188	-.757	-.912	-.982	-.901	-.854	-.485	-.241	-.154
	.300	-.136	-.187	-.383	-.566	-.622	-.594	-.462	-.275	-.222	-.167
	.400	-.139	-.183	-.312	-.371	-.375	-.381	-.339	-.261	-.223	-.168
	.500	-.156	-.197	-.313	-.350	-.357	-.354	-.332	-.276	-.237	-.180
	.600	-.175	-.216	-.330	-.362	-.375	-.367	-.347	-.299	-.256	-.199
	.700	-.224	-.264	-.390	-.421	-.434	-.426	-.405	-.354	-.304	-.249
	.800	-.237	-.275	-.401	-.430	-.444	-.433	-.419	-.372	-.320	-.267
	.900	-.193	-.233	-.373	-.409	-.422	-.409	-.391	-.329	-.275	-.219
	[a].950	-.117	-.160	-.283	-.340	-.380	-.334	-.323	-.242	-.198	-.140
Lower surface	.0375	.026	.190	.498	.555	.581	.569	.527	.427	.315	.104
	.075	-.028	.103	.339	.392	.414	.405	.366	.279	.196	.041
	.150	.005	.086	.242	.281	.297	.290	.262	.197	.145	.046
	.250	-.015	.031	.143	.172	.183	.179	.158	.112	.072	.007
	.350	.026	.058	.112	.130	.138	.136	.122	.127	.094	.043
	.450	-.030	-.015	.067	.083	.088	.088	.077	.032	.009	-.025
	.550	0	.013	.065	.078	.082	.082	.074	.053	.033	.005
	.650	.013	.022	.067	.072	.072	.074	.070	.059	.041	.018
	.750	-.013	-.023	.017	.027	.028	.029	.022	.004	-.004	-.015
	.850	.045	.046	.065	.067	.041	.070	.067	.057	.048	.040
	.925	.063	.050	.043	.042	.039	.045	.047	.048	.051	.054
	[a].975	.065	.035	.010	.003	.029	-.006	.008	.015	.043	.039
	[a]1.000	.065	.025	-.012	-.023	.026	-.036	-.013	-.004	.038	.023

[a]No orifice.

NACA

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(j) One-blade propeller; N = 1600 rpm; $\beta_{0.75R} = 45^{\circ}$.

J	2.345	2.323	2.286	2.252	2.216	2.188	2.162	2.135	2.107	2.079	2.048	2.012	1.980	1.960	1.930
M_x	.938	.932	.925	.917	.911	.908	.903	.901	.895	.891	.887	.880	.875	.872	.867
α_x'	-.14	.12	.56	.98	1.42	1.76	2.08	2.42	2.78	3.13	3.53	4.00	4.42	4.68	5.08
$\Delta\beta$	-.44	.26	1.10	1.86	2.69	3.44	4.11	4.71	5.23	5.63	6.00				
α_1	.80	1.11	1.42	1.73	2.28	2.80	3.29	3.66	3.98	4.20	4.40	4.70	4.98	5.17	5.21
c_n	.1274	.1761	.2294	.2784	.3639	.4419	.5239	.5832	.6329	.6703	.7058	.7523	.7961	.8232	.8252
c_m	-.0824	-.0796	-.0783	-.0719	-.0728	-.0775	-.0828	-.0888	-.0908	-.0941	-.0967	-.0990	-.1026	-.1042	-.0993
c_c	.0131	.0123	.0110												
c/b	Pressure coefficient, P														
Upper surface															
[a]0.000	1.240	1.236	1.232	1.228	1.225	1.223	1.221	1.220	1.217	1.215	1.212	1.208	1.206	1.204	1.202
.025	.313	.233	.119	-.012	-.160	-.299	-.393	-.520	-.673	-.798	-.889	-.999	-1.081	-1.144	-1.183
.050	.012	-.055	-.168	-.328	-.504	-.639	-.745	-.782	-.856	-.933	-.994	-1.070	-1.126	-1.170	-1.206
.100	-.075	-.120	-.186	-.250	-.441	-.567	-.674	-.745	-.816	-.885	-.936	-1.004	-1.054	-1.104	-1.133
.200	-.122	-.147	-.178	-.260	-.356	-.446	-.554	-.621	-.679	-.732	-.775	-.838	-.882	-.918	-.947
.300	-.148	-.164	-.179	-.196	-.272	-.352	-.413	-.461	-.500	-.541	-.582	-.643	-.686	-.727	-.751
.400	-.146	-.165	-.184	-.199	-.242	-.310	-.374	-.414	-.452	-.496	-.524	-.569	-.603	-.640	-.664
.500	-.153	-.169	-.188	-.203	-.245	-.321	-.398	-.440	-.475	-.511	-.539	-.587	-.619	-.649	-.650
.600	-.174	-.190	-.206	-.221	-.237	-.309	-.407	-.456	-.494	-.533	-.561	-.607	-.641	-.669	-.546
.700	-.249	-.268	-.288	-.308	-.328	-.334	-.374	-.464	-.541	-.587	-.609	-.653	-.659	-.554	-.478
.800	-.287	-.305	-.323	-.343	-.365	-.366	-.343	-.340	-.356	-.377	-.381	-.395	-.397	-.401	-.468
.900	-.368	-.369	-.372	-.347	-.373	-.383	-.411	-.411	-.385	-.378	-.398	-.404	-.431	-.490	-.482
[a].950	-.402	-.416	-.403	-.342	-.375	-.392	-.448	-.448	-.398	-.310	-.327	-.297	-.317	-.322	-.336
Lower surface															
.0375	-.494	-.220	.071	.159	.262	.333	.398	.444	.484	.516	.536	.568	.587	.608	.618
.075	-.351	-.034	.004	.069	.148	.203	.259	.294	.331	.360	.378	.407	.424	.443	.453
.150	-.002	-.001	.021	.059	.112	.149	.188	.215	.234	.257	.269	.293	.305	.320	.327
.250	-.005	-.031	-.014	.005	.035	.058	.086	.106	.132	.150	.159	.176	.187	.198	.204
.350	.023	.012	.025	.040	.063	.080	.101	.116	.103	.109	.115	.127	.134	.142	.146
.450	-.046	-.051	-.042	-.034	-.019	-.010	.004	.014	.044	.057	.062	.071	.073	.081	.084
.550	-.012	-.016	-.011	-.004	.009	.018	.027	.035	.045	.053	.055	.060	.065	.069	.072
.650	-.004	-.009	0	.004	.018	.025	.034	.042	.041	.044	.044	.048	.050	.053	.056
.750	-.033	-.039	-.034	-.034	-.027	-.023	-.019	-.016	-.009	-.004	.003	.009	.009	.014	.016
.850	.031	.024	.028	.026	.030	.036	.042	.045	.049	.050	.050	.049	.047	.050	.047
.925	.055	.046	.045	.043	.040	.041	.041	.040	.039	.035	.032	.026	.024	.024	.021
[a].975	.063	.056	.053	.049	.040	.041	.037	.037	.022	.019	.015	.008	.004	0	.008
[a]1.000	.066	.061	.055	.050	.039	.040	.033	.036	.012	.012	.004	0	-.005	-.013	0

[a]No orifice.

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(k) One-blade propeller; $M = 0.56$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.371	2.347	2.317	2.293	2.260	2.238	2.213	2.179	2.157	2.132	2.110	2.087	2.062	2.045	2.018	1.989	1.982
	M_x	.923	.934	.937	.946	.943	.961	.966	.969	.981	.986	.993	1.001	1.007	1.018	1.022	1.027	1.037
	α_x	-.44	-.16	.20	.48	.88	1.15	1.45	1.87	2.15	2.46	2.74	3.03	3.35	3.57	3.92	4.30	4.40
	$\Delta\beta$	-.52	.08	.56	.82	1.08	1.26	1.50	1.89	2.17	2.50	2.79	3.06	3.32	3.48	3.70	3.92	3.96
	α_1	.41	.63	.82	1.07	1.30	1.54	1.78	2.00	2.26	2.49	2.60	2.76	2.89	2.96	3.17	3.29	3.32
	c_n	.0652	.0990	.1297	.1690	.2052	.2432	.2800	.3142	.3548	.3884	.4045	.4290	.4535	.4684	.4994	.5219	.5284
	c_m	-.0714	-.0659	-.0628	-.0687	-.0618	-.0636	-.0693	-.0659	-.0737	-.0801	-.0852	-.0900	-.0952	-.1008	-.1013	-.1042	-.1065
	c_c	.0105	.0107	.0103	.0098	.0094	.0085	.0085	.0083	.0084	.0083	.0092	.0096	.0101	.0099	.0104	.0098	.0098
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.231	1.237	1.239	1.244	1.243	1.252	1.255	1.257	1.263	1.266	1.271	1.275	1.279	1.286	1.288	1.291	1.297
	.025	.383	.344	.298	.245	.191	.126	.090	.044	.001	-.031	-.048	-.076	-.106	-.125	-.138	-.161	-.168
	.050	.079	.052	.008	-.043	-.096	-.174	-.227	-.293	-.347	-.380	-.395	-.409	-.424	-.437	-.448	-.463	-.453
	.100	-.029	-.058	-.088	-.117	-.138	-.158	-.192	-.262	-.319	-.346	-.356	-.373	-.395	-.407	-.418	-.446	-.440
	.200	-.072	-.093	-.112	-.124	-.150	-.191	-.217	-.250	-.276	-.296	-.310	-.323	-.339	-.351	-.363	-.381	-.376
	.300	-.127	-.137	-.148	-.147	-.159	-.180	-.205	-.233	-.259	-.271	-.280	-.286	-.300	-.308	-.312	-.333	-.327
	.400	-.130	-.139	-.145	-.150	-.155	-.169	-.183	-.205	-.225	-.235	-.243	-.252	-.268	-.276	-.277	-.296	-.289
	.500	-.148	-.151	-.150	-.165	-.179	-.196	-.216	-.236	-.239	-.261	-.271	-.278	-.293	-.299	-.302	-.318	-.310
	.600	-.169	-.170	-.172	-.181	-.196	-.213	-.235	-.258	-.278	-.285	-.293	-.299	-.314	-.323	-.328	-.345	-.338
	.700	-.232	-.242	-.246	-.257	-.271	-.285	-.300	-.327	-.344	-.352	-.358	-.363	-.375	-.384	-.388	-.403	-.396
	.800	-.276	-.281	-.286	-.298	-.311	-.326	-.340	-.369	-.390	-.401	-.409	-.415	-.424	-.430	-.434	-.448	-.441
	.900	-.243	-.328	-.368	-.390	-.407	-.424	-.440	-.463	-.485	-.495	-.502	-.508	-.515	-.521	-.525	-.538	-.530
	[a].950	-.018	-.025	-.011	-.010	-.014	-.051	-.095	-.141	-.197	-.271	-.422	-.522	-.575	-.595	-.598	-.603	-.594
Lower surface	.0375	-.642	-.582	-.470	-.112	.071	.158	.207	.262	.321	.360	.383	.419	.442	.468	.494	.529	.547
	.075	-.493	-.413	-.195	-.011	.023	.080	.117	.158	.206	.241	.260	.293	.312	.334	.358	.389	.406
	.150	-.208	-.044	.021	.017	.030	.067	.092	.125	.159	.185	.199	.224	.238	.257	.277	.302	.318
	.250	.010	.001	-.014	-.015	-.006	.015	.028	.046	.068	.086	.096	.115	.125	.139	.155	.175	.189
	.350	.028	.027	.026	.028	.036	.054	.063	.077	.094	.109	.116	.131	.139	.150	.165	.182	.192
	.450	-.041	-.042	-.041	-.039	-.035	-.024	-.020	-.015	-.006	.003	.006	.017	.020	.028	.039	.051	.064
	.550	-.017	-.016	-.013	-.012	-.009	.001	.004	.009	.017	.026	.027	.037	.040	.047	.059	.070	.080
	.650	.003	.006	.011	.011	.011	.020	.021	.024	.032	.038	.035	.044	.045	.050	.060	.069	.080
	.750	-.024	-.025	-.026	-.028	-.031	-.027	-.029	-.032	-.033	-.032	-.036	-.032	-.035	-.034	-.026	-.019	-.008
	.850	.044	.038	.034	.027	.023	.041	.020	.018	.021	.023	.021	.027	.027	.029	.036	.045	.054
	.925	.072	.064	.058	.040	.023	.014	.007	.005	.009	.013	.016	.022	.025	.032	.042	.052	.066
	[a].975	.111	.105	.097	.149	.091	.040	.036	.038	.031	.031	.018	.015	.011	.029	.039	.042	.059
	[a]1.000	.140	.132	.118	.183	.129	.060	.062	.062	.058	.040	.020	.012	.009	.022	.035	.039	.051

[a]No orifice.

NACA

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(i) One-blade propeller; $M = 0.58$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.344	2.328	2.309	2.267	2.242	2.220	2.191	2.166	2.141	2.108	2.096	2.056	2.039	2.022	1.998
	M_x	.969	.974	.982	.985	.992	1.002	1.009	1.017	1.025	1.032	1.040	1.042	1.054	1.060	1.069
	α_x'	-.12	.07	.29	.80	1.10	1.37	1.72	2.04	2.35	2.77	2.92	3.43	3.65	3.87	4.18
	$\Delta\beta$	-.95	-.64	-.24	.56	.87	1.14	1.51	1.94	2.47	3.40					
	α_i	.43	.56	.69	.94	1.29	1.41	1.63	1.89	2.02	2.28	2.37	2.61	2.76	2.81	2.89
	c_n	.0681	.0881	.1090	.1471	.2023	.2200	.2558	.2965	.3174	.3574	.3716	.4055	.4326	.4400	.4539
	c_m	-.0902	-.0873	-.0779	-.0789	-.0728	-.0781	-.0767	-.0801	-.0814	-.0852	-.0868	-.0926	-.0951	-.0956	-.0976
	c_c	.0152	.0151	.0143	.0140	.0139	.0135	.0133	.0130	.0124	.0122	.0116	.0117	.0115	.0116	.0109
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.257	1.260	1.264	1.266	1.270	1.276	1.280	1.285	1.290	1.295	1.300	1.301	1.309	1.313	1.319
	.025	.440	.408	.370	.300	.260	.227	.196	.162	.142	.100	.084	.036	-.001	-.002	-.012
	.050	.128	.107	.078	.008	-.040	-.077	-.114	-.163	-.201	-.251	-.268	-.300	-.325	-.326	-.333
	.100	.022	-.005	-.033	-.075	-.083	-.090	-.113	-.161	-.191	-.242	-.254	-.289	-.308	-.303	-.310
	.200	-.112	-.123	-.120	-.130	-.143	-.160	-.176	-.195	-.227	-.233	-.242	-.269	-.287	-.283	-.288
	.300	-.144	-.142	-.137	-.134	-.139	-.150	-.165	-.182	-.192	-.213	-.217	-.239	-.248	-.244	-.250
	.400	-.152	-.141	-.118	-.125	-.130	-.137	-.148	-.158	-.165	-.181	-.188	-.209	-.217	-.213	-.219
	.500	-.133	-.135	-.136	-.150	-.158	-.167	-.178	-.188	-.193	-.208	-.213	-.228	-.239	-.235	-.241
	.600	-.136	-.141	-.147	-.165	-.179	-.186	-.199	-.213	-.223	-.236	-.239	-.256	-.264	-.261	-.266
	.700	-.209	-.219	-.222	-.238	-.249	-.255	-.265	-.278	-.287	-.300	-.303	-.321	-.326	-.322	-.327
	.800	-.253	-.262	-.266	-.283	-.289	-.295	-.301	-.315	-.327	-.343	-.345	-.362	-.367	-.363	-.366
	.900	-.346	-.355	-.355	-.375	-.382	-.390	-.398	-.409	-.420	-.436	-.438	-.454	-.459	-.456	-.458
	[a].950	-.429	-.420	-.420	-.435	-.453	-.456	-.483	-.507	-.486	-.498	-.508	-.539	-.524	-.536	-.538
Lower surface	.0375	-.562	-.515	-.418	-.223	.061	.163	.204	.271	.308	.360	.390	.437	.469	.484	.505
	.075	-.424	-.371	-.295	-.126	.029	.076	.109	.167	.199	.243	.267	.306	.334	.348	.367
	.150	-.332	-.284	-.185	.025	.052	.076	.099	.138	.163	.200	.221	.250	.273	.285	.299
	.250	-.217	-.080	.020	.006	.003	.019	.034	.059	.074	.099	.110	.135	.153	.162	.174
	.350	.058	.067	.065	.042	.045	.056	.065	.083	.094	.113	.126	.143	.160	.170	.178
	.450	.014	-.001	-.012	-.033	-.029	-.021	-.016	-.006	-.002	.010	.016	.026	.039	.044	.049
	.550	.024	.013	.006	-.005	0	.008	.011	.021	.025	.036	.042	.052	.064	.070	.074
	.650	.020	.011	.007	-.001	.003	.009	.011	.020	.024	.035	.041	.051	.062	.069	.074
	.750	-.025	-.034	-.036	-.046	-.045	-.042	-.044	-.039	-.039	-.032	-.029	-.025	-.015	-.011	-.007
	.850	.035	.024	.020	.010	.012	.017	.017	.023	.024	.030	.037	.040	.050	.052	.055
	.925	.049	.029	.017	.004	.005	.013	.016	.027	.034	.042	.052	.061	.072	.079	.087
	[a].975	.050	.024	.003	-.022	-.026	-.008	.008	.018	.020	.037	.049	.053	.060	.068	.098
	[a]1.000	.050	.021	-.006	-.035	-.042	-.022	.002	.012	.007	.032	.046	.045	.062	.090	.100

[a]No orifice.

NACA

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Continued

(m) One-blade propeller; $M = 0.60$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.304	2.291	2.265	2.244	2.211	2.190	2.162	2.135	2.122	2.083	2.058	2.038	2.018	1.995
	M_x	1.010	1.014	1.021	1.032	1.037	1.047	1.051	1.060	1.069	1.072	1.079	1.087	1.094	1.103
	α_x'	.35	.51	.82	1.07	1.48	1.74	2.08	2.42	2.59	3.08	3.40	3.66	3.92	4.22
	$\Delta\beta$	-.98	-.62	.04	.17	.34	.46	.60	.76	.84	1.10	1.27	1.42	1.56	1.73
	α_i	.18	.27	.51	.71	.98	1.16	1.38	1.47	1.59	1.95	2.07	2.13	2.30	2.35
	c_n	.0284	.0432	.0790	.1100	.1526	.1832	.2181	.2348	.2529	.3097	.3290	.3406	.3639	.3748
	c_m	-.0862	-.0856	-.0816	-.0751	-.0733	-.0703	-.0696	-.0706	-.0751	-.0783	-.0805	-.0806	-.0832	-.0852
	c_c	.0162	.0156	.0151	.0143	.0142	.0132	.0132	.0132	.0130	.0124	.0121	.0120	.0121	.0117
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.281	1.283	1.288	1.295	1.298	1.305	1.307	1.313	1.319	1.321	1.326	1.331	1.335	1.341
	.025	.480	.459	.423	.386	.336	.304	.290	.268	.247	.205	.179	.172	.156	.136
	.050	.177	.166	.129	.097	.037	-.008	-.027	-.057	-.091	-.140	-.171	-.184	-.196	-.207
	.100	.066	.047	.021	-.003	-.029	-.041	-.051	-.073	-.100	-.152	-.178	-.184	-.193	-.201
	.200	-.054	-.057	-.065	-.072	-.096	-.108	-.113	-.124	-.137	-.163	-.178	-.182	-.190	-.195
	.300	-.100	-.106	-.118	-.121	-.121	-.121	-.124	-.132	-.143	-.162	-.172	-.177	-.180	-.188
	.400	-.124	-.122	-.125	-.116	-.106	-.108	-.111	-.116	-.123	-.137	-.145	-.149	-.154	-.156
	.500	-.159	-.156	-.153	-.135	-.131	-.138	-.140	-.145	-.151	-.165	-.171	-.175	-.177	-.177
	.600	-.170	-.162	-.156	-.143	-.150	-.159	-.162	-.171	-.180	-.193	-.198	-.200	-.202	-.203
	.700	-.216	-.209	-.209	-.203	-.214	-.222	-.224	-.231	-.239	-.253	-.258	-.262	-.263	-.262
	.800	-.247	-.242	-.247	-.245	-.253	-.260	-.260	-.268	-.277	-.293	-.298	-.302	-.303	-.304
	.900	-.330	-.327	-.332	-.331	-.344	-.354	-.354	-.361	-.368	-.383	-.389	-.391	-.393	-.392
	[a].950	-.393	-.410	-.446	-.447	-.458	-.463	-.460	-.462	-.463	-.472	-.474	-.475	-.474	-.472
Lower surface	.0375	-.484	-.440	-.360	-.256	-.061	.123	.200	.256	.300	.363	.403	.424	.457	.487
	.075	-.352	-.310	-.245	-.168	-.047	.060	.106	.151	.001	.248	.283	.301	.328	.355
	.150	-.278	-.241	-.186	-.114	.018	.087	.106	.133	.160	.206	.236	.251	.275	.297
	.250	-.253	-.220	-.175	-.067	.021	.030	.038	.055	.073	.102	.123	.131	.151	.171
	.350	-.177	-.120	-.034	.057	.061	.065	.074	.087	.100	.120	.137	.145	.160	.178
	.450	-.053	-.009	.012	.004	-.017	-.018	-.012	-.004	.004	.015	.027	.031	.043	.055
	.550	.041	.041	.032	.019	.010	.014	.020	.027	.035	.046	.056	.061	.071	.083
	.650	.035	.031	.020	.014	.011	.015	.022	.028	.036	.046	.058	.062	.073	.085
	.750	-.028	-.031	-.047	-.052	-.056	-.053	-.047	-.042	-.036	-.028	-.018	-.016	-.008	.003
	.850	.018	.018	.007	.007	.008	.010	.013	.015	.021	.028	.036	.034	.041	.052
	.925	.017	.017	.012	.017	.026	.037	.044	.049	.059	.068	.080	.080	.088	.100
	[a].975	.012	.015	.016	.027	.038	.053	.062	.063	.069	.095	.109	.121	.109	.138
	[a]1.000	.010	.013	.018	.034	.044	.061	.070	.074	.075	.111	.121	.142	.119	.158

[a]No orifice.

TABLE 11.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF

THE BLADE SECTION AT THE 0.975 RADIUS - Concluded

(n) One-blade propeller; $M = 0.65$; $\beta_{0.75R} = 45^{\circ}$.

	J	2.258	2.240	2.209	2.192	2.167	2.153	2.128	2.114	2.093	2.075	2.053	2.027	2.011	1.994
	M_x	1.104	1.110	1.115	1.124	1.132	1.141	1.145	1.153	1.161	1.168	1.176	1.183	1.190	1.197
	α_x'	.90	1.12	1.50	1.71	2.02	2.20	2.51	2.69	2.96	3.19	3.47	3.80	4.01	4.24
	$\Delta\beta$	-1.78	-1.45	-.96	-.76	-.50	-.37	-.14	-.01	.15	.30	.51	.80	.97	1.19
	α_i	-.22	-.11	.06	.28	.44	.68	.91	1.10	1.28	1.40	1.54	1.63	1.83	1.92
	c_n	-.0342	-.0161	.0100	.0435	.0700	.1065	.1439	.1742	.2013	.2197	.2426	.2558	.2871	.3003
	c_m	-.0497	-.0547	-.0552	-.0595	-.0576	-.0628	-.0605	-.0575	-.0595	-.0627	-.0638	-.0643	-.0699	-.0701
	c_c	.0162	.0159	.0155	.0150	.0151	.0146	.0141	.0142	.0134	.0135	.0133	.0128	.0129	.0127
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.341	1.345	1.349	1.355	1.361	1.368	1.370	1.377	1.383	1.388	1.394	1.399	1.404	1.409
	.025	.522	.514	.497	.481	.463	.444	.425	.416	.399	.383	.368	.348	.325	.317
	.050	.237	.231	.206	.185	.160	.135	.109	.092	.066	.041	.019	-.006	-.028	-.035
	.100	.151	.143	.112	.100	.089	.078	.060	.044	.023	.002	-.016	-.041	-.057	-.060
	.200	.049	.050	.038	.028	.015	.006	-.006	-.013	-.026	-.036	-.042	-.054	-.066	-.068
	.300	-.041	-.038	-.043	-.046	-.050	-.048	-.048	-.049	-.056	-.061	-.066	-.078	-.086	-.085
	.400	-.050	-.045	-.048	-.048	-.048	-.040	-.034	-.031	-.037	-.040	-.042	-.051	-.059	-.058
	.500	-.085	-.080	-.082	-.081	-.080	-.070	-.062	-.003	-.062	-.065	-.068	-.078	-.083	-.080
	.600	-.113	-.108	-.110	-.108	-.106	-.094	-.085	-.084	-.091	-.094	-.098	-.050	-.111	-.108
	.700	-.175	-.168	-.169	-.166	-.162	-.149	-.140	-.140	-.147	-.151	-.153	-.163	-.169	-.165
	.800	-.211	-.204	-.201	-.196	-.189	-.176	-.171	-.171	-.179	-.186	-.189	-.197	-.204	-.201
	.900	-.295	-.287	-.285	-.276	-.269	-.262	-.258	-.257	-.265	-.270	-.274	-.282	-.288	-.285
	[a].950	-.391	-.387	-.386	-.381	-.374	-.363	-.358	-.354	-.356	-.357	-.357	-.363	-.367	-.361
Lower surface	.0375	-.274	-.233	-.177	-.122	-.055	.043	.169	.289	.350	.388	.426	.455	.489	.524
	.075	-.176	-.142	-.100	-.057	-.007	.057	.115	.170	.216	.261	.304	.332	.363	.396
	.150	-.130	-.100	-.062	-.026	.017	.073	.129	.178	.211	.239	.269	.289	.312	.340
	.250	-.134	-.108	-.081	-.055	-.021	.028	.084	.120	.138	.155	.173	.185	.199	.220
	.350	-.090	-.068	-.044	-.021	.010	.064	.115	.141	.153	.152	.188	.197	.208	.228
	.450	-.151	-.132	-.112	-.089	-.048	.017	.047	.059	.064	.074	.088	.093	.102	.119
	.550	-.122	-.102	-.079	-.046	.019	.062	.072	.080	.083	.092	.103	.107	.116	.133
	.650	-.098	-.073	-.042	.009	.049	.064	.070	.079	.083	.092	.102	.105	.113	.129
	.750	-.148	-.114	-.057	-.025	-.019	-.014	-.007	.003	.007	.015	.025	.028	.035	.048
	.850	-.055	-.014	.008	.015	.012	.015	.024	.035	.039	.047	.056	.058	.064	.077
	.925	.036	.047	.004	.040	.035	.041	.052	.063	.067	.074	.083	.084	.088	.103
	[a].975	.104	.086	-.013	.048	.049	.063	.074	.080	.087	.095	.106	.100	.104	.116
	[a]1.000	.137	.104	-.023	.051	.057	.074	.084	.089	.096	.105	.118	.109	.111	.124

[a]No orifice.

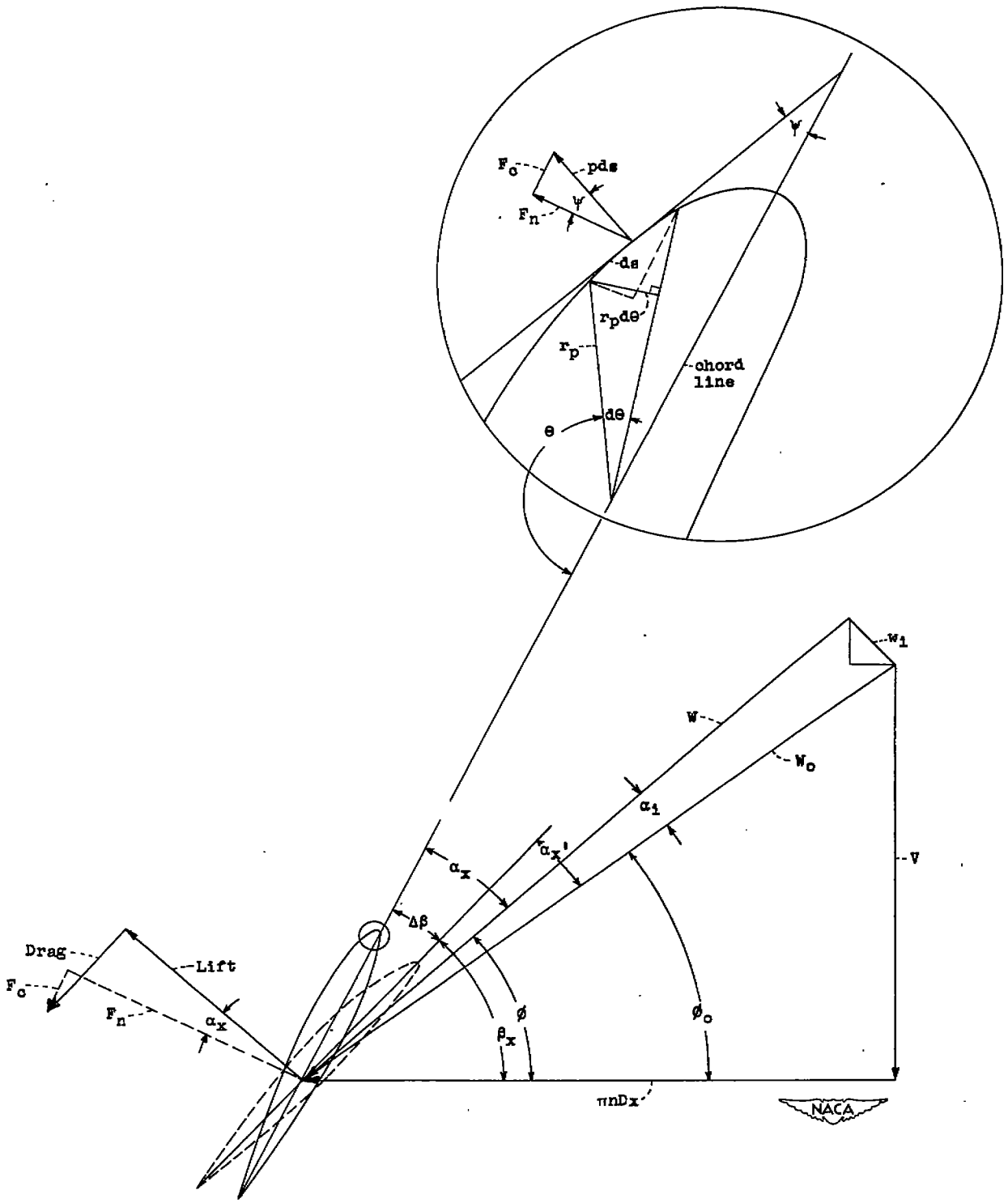


Figure 1.- Vector diagram of the velocities and forces acting on a blade section.

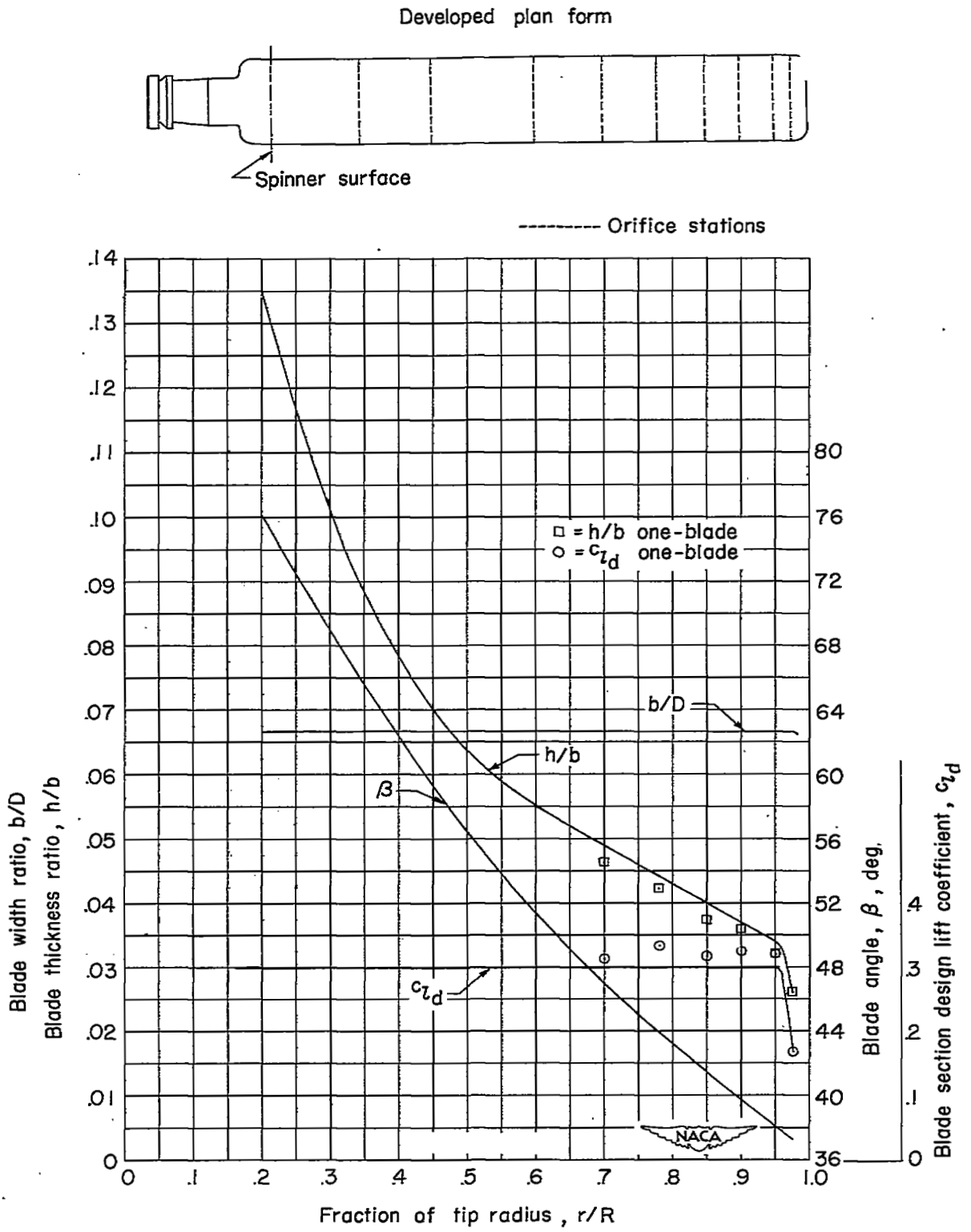
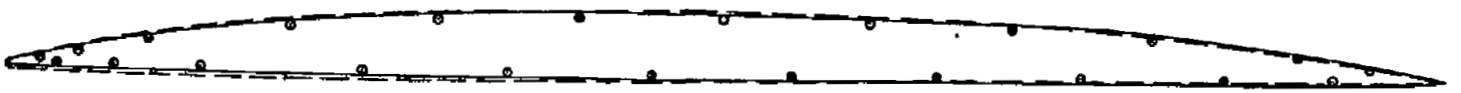


Figure 2.- Blade-form curves for NACA 10-(3)(049)-033 propeller.



——— True 16-3049 section

——— Section as used for one-blade configuration.

o Orifice locations.

Figure 3.- Blade sections at $x = 0.70$ station.

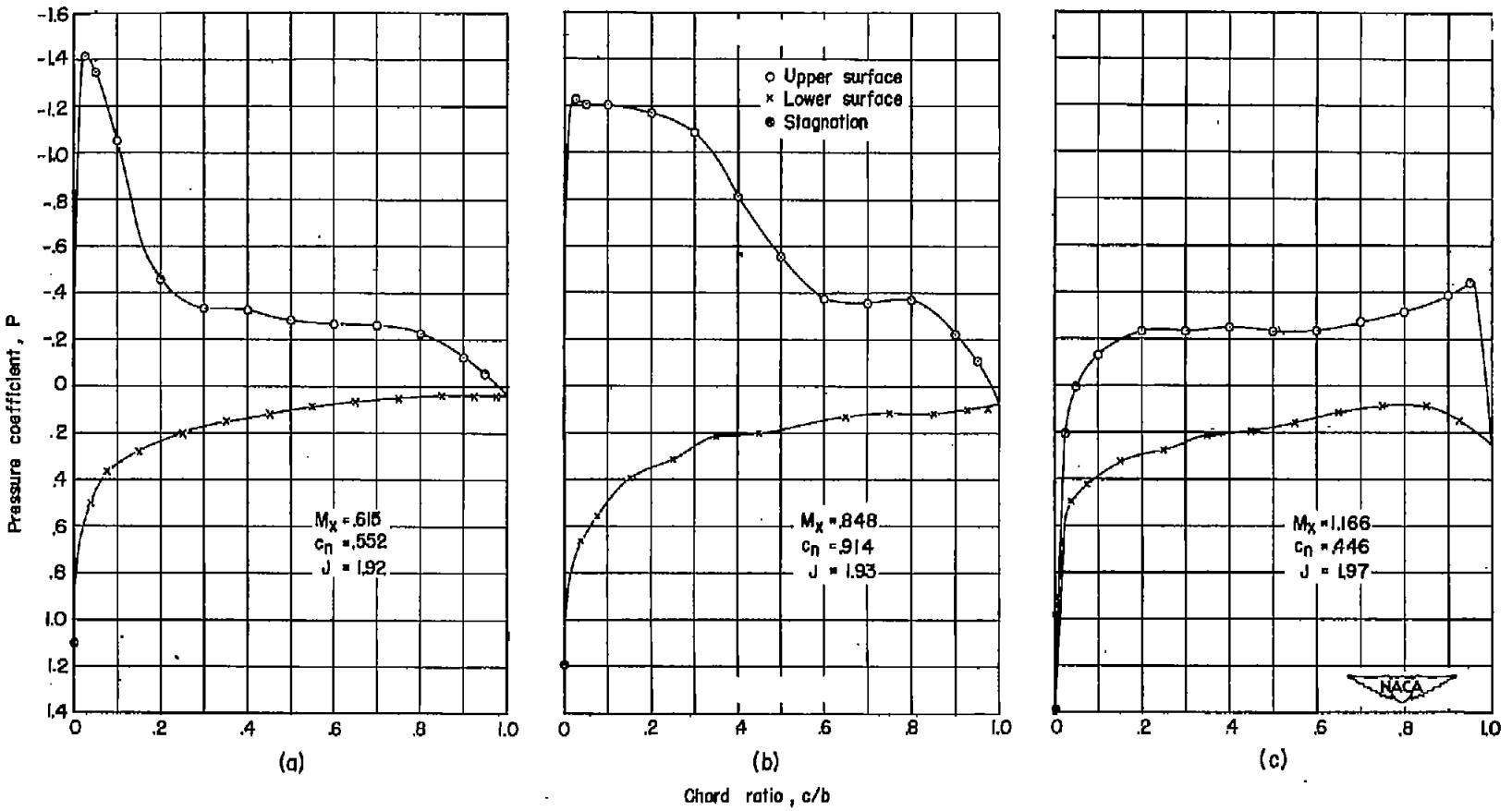


Figure 4.- Variation of pressure coefficient along the chord of a 16-303.4 section.

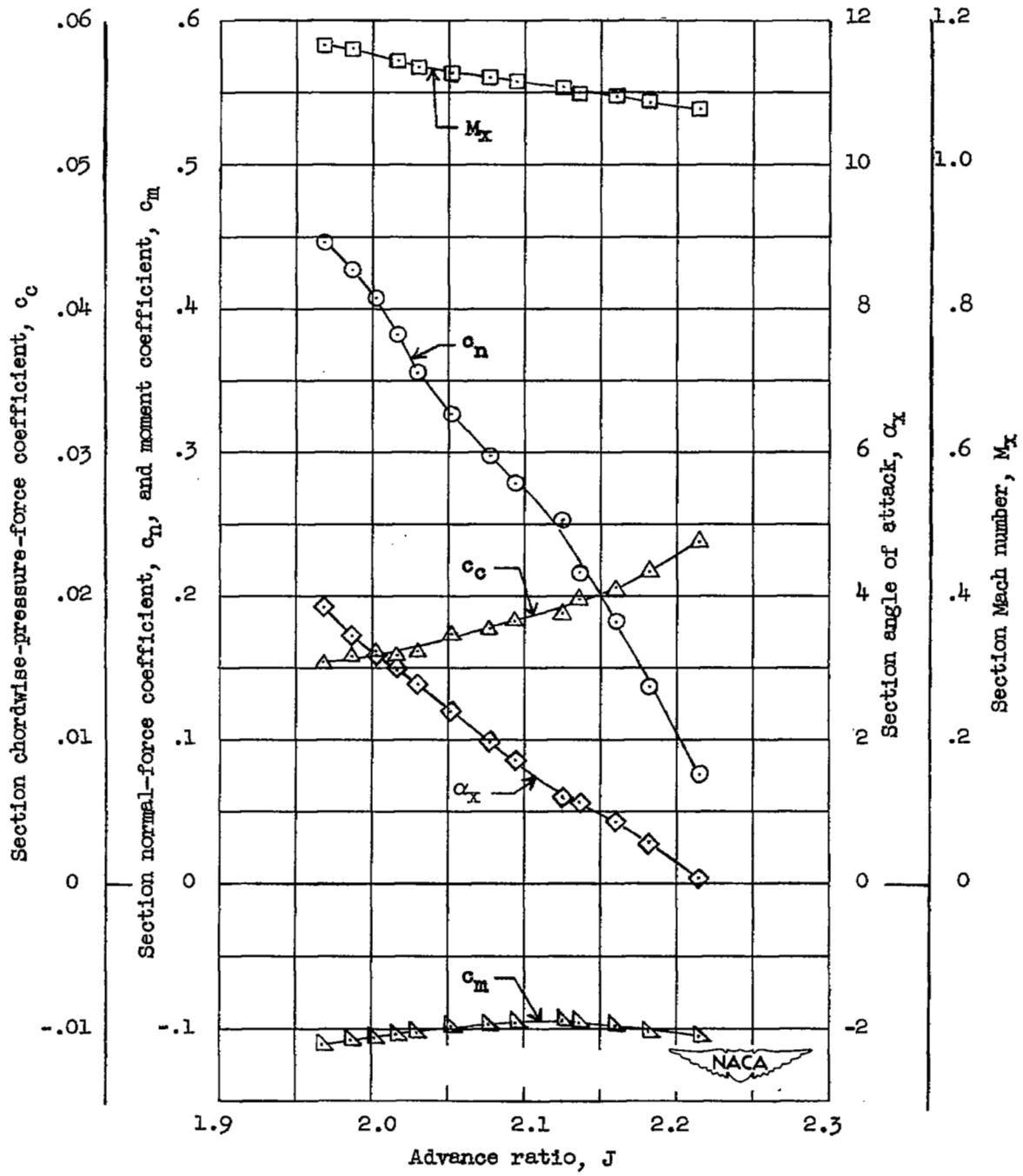


Figure 5.- Variation of section normal-force coefficient, moment coefficient, chordwise-pressure-force coefficient, angle of attack, and Mach number with advance ratio for the blade section at the x = 0.95 radius, from table 10(n).

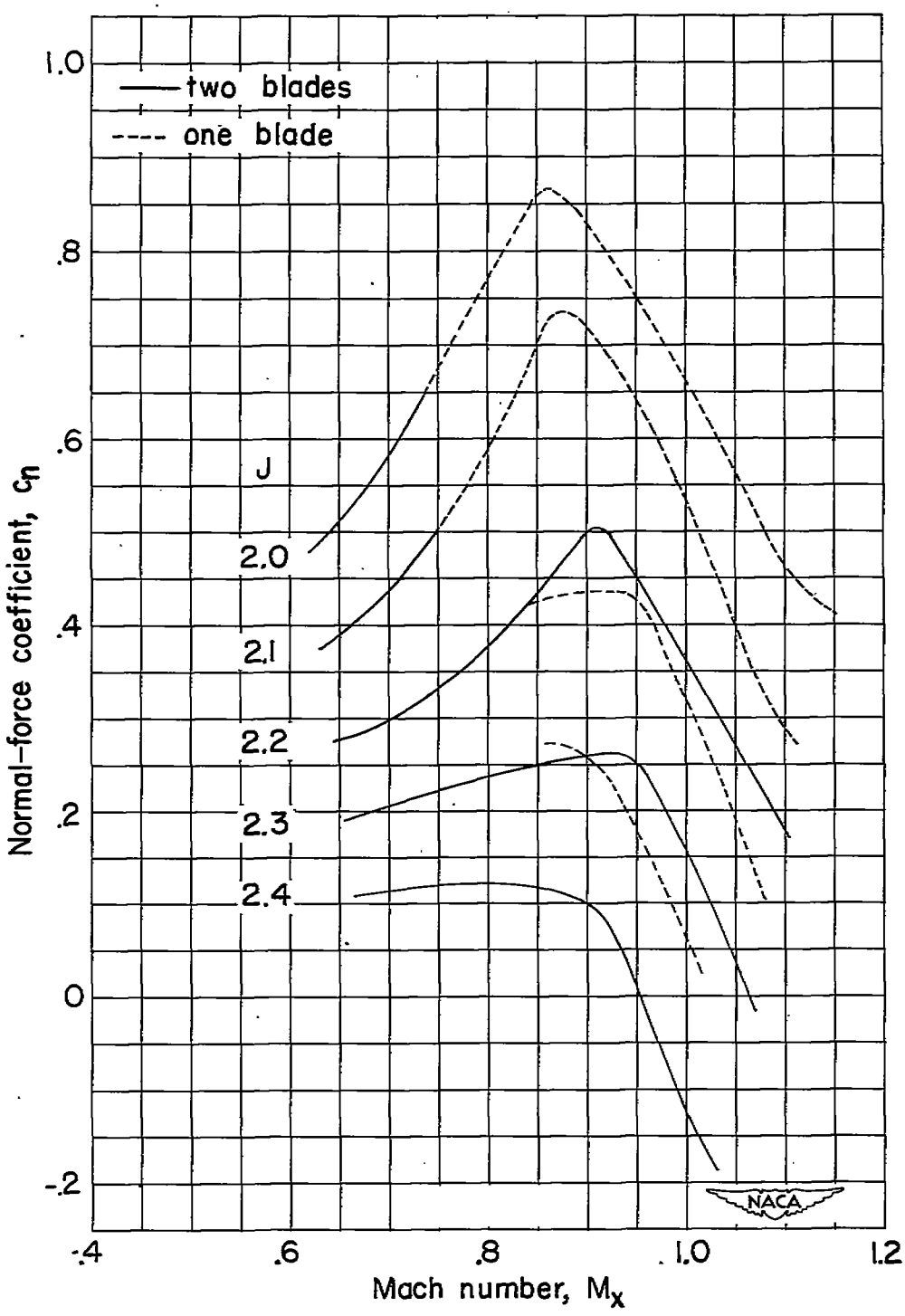


Figure 6.- Effect of Mach number on normal-force coefficient at a 16-303.4 section.

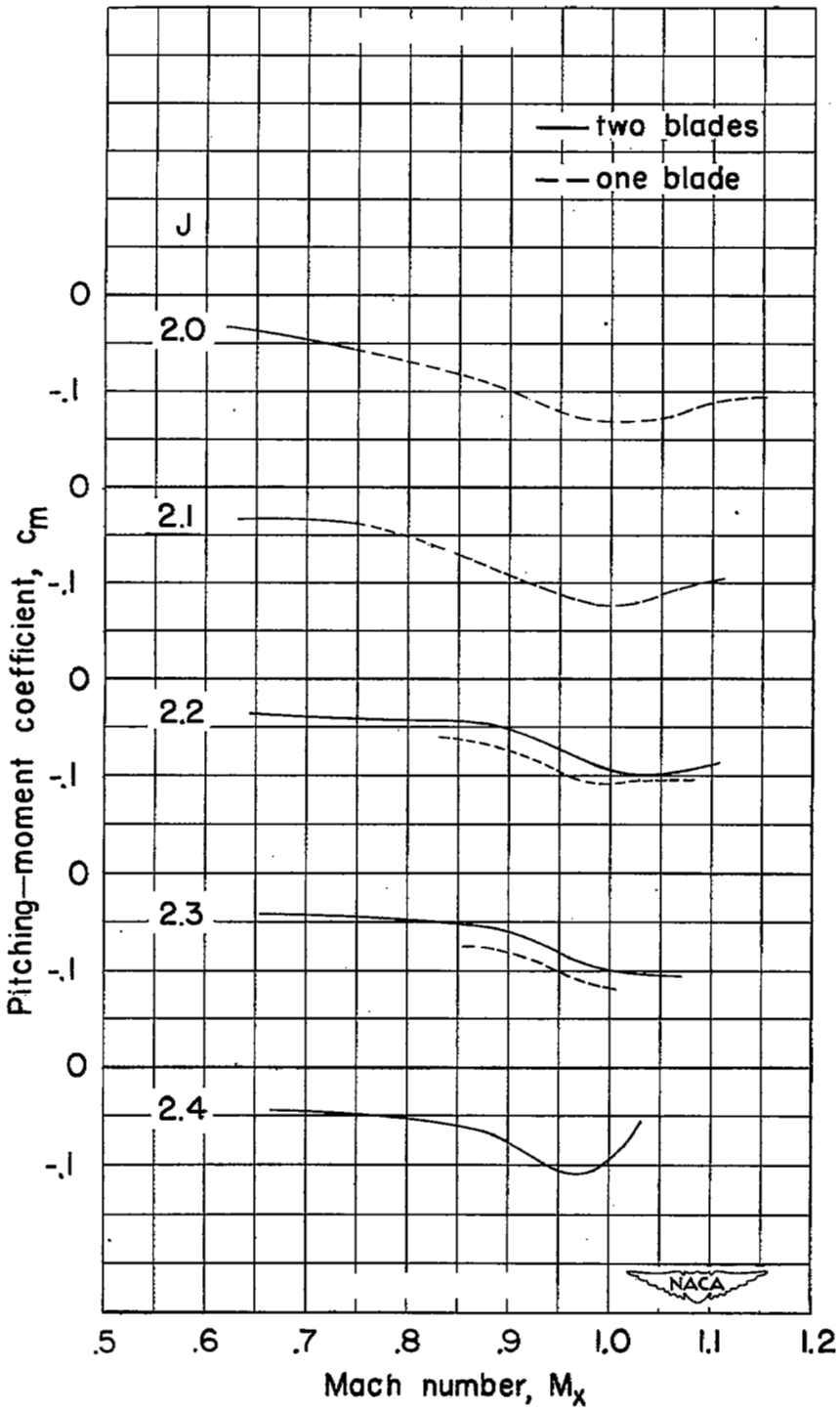


Figure 7.- Effect of Mach number on pitching-moment coefficient at a 16-303.4 section.

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