Copy
RM L50B21

NACA RM L50B21

NACA

RESEARCH MEMORANDUM

PRESSURE DISTRIBUTIONS ON THE BLADE SECTIONS OF THE NACA 10-(5)(066)-03 PROPELLER UNDER OPERATING CONDITIONS

By Albert J. Evans and Wallace Luchuk

Langley Aeronautical Laboratory
Langley Air Force Base, Va.

NATIONAL ADVISORY COMMITTEE
FOR AERONAUTICS

WASHINGTON
April 18, 1950

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

RESEARCH MEMORANDUM

PRESSURE DISTRIBUTIONS ON THE BLADE SECTIONS OF THE NACA 10-(5)(066)-03 PROPELLER UNDER OPERATING CONDITIONS

By Albert J. Evans and Wallace Luchuk

SUMMARY

A broad investigation has been made in the Langley 16-foot high-speed tunnel to determine propeller section aerodynamic characteristics by measuring the surface pressure distribution on the airfoil sections of a rotating propeller. Five specially designed propellers incorporating NACA 16-series airfoil sections were tested. The design parameters of the five propellers covered a range of section thickness ratio and design camber.

This paper presents the data obtained from the tests of one of the five propellers. The present tests were conducted on the NACA 10-(5)(066)-03 propeller which had the highest cambered blades of the group. The design camber of all the sections tested was 0.5 and the thickness-chord ratio varied from 16 percent to 4 percent. The data are presented in tabular form as pressure coefficient, normal-force coefficient, chordwise-force coefficient, and moment coefficient. A geometric angle-of-attack range from -3.5° to 11° was covered in the Mach number range from 0.40 to 0.80. For higher Mach numbers, from 0.80 to 1.15, the section nominal angle of attack varied from -2.5° to 3.5°.

The results are presented as preliminary data for each propeller test made and no attempt has been made to analyze the data.

INTRODUCTION

Since propeller sections operate at speeds considerably higher than those encountered on other parts of an airplane, the propeller designer and analyst have continually been faced with a lack of airfoil data in the transonic speed range. At subsonic speeds above the critical speed of the airfoil nearly all available data are subject to wind-tunnel

choking effects, and attempts at extrapolation to higher values of Mach number have yielded uncertain results. Even if the two-dimensional data were available for supercritical values of Mach number, the effects of velocity gradient along the blade, the three-dimensional tip effects, and the action of the centrifugal force on the boundary layer along the blade impose problems that need to be investigated on the operating propeller.

As a first step toward obtaining propeller section data, tests were made in the Langley 16-foot high-speed tunnel whereby section aerodynamic characteristics were determined by measuring the surface pressure distributions on the operating propeller blade sections of an NACA 10-(3)(08)-03 propeller. Preliminary results of these tests are presented in reference 1.

The success of the initial investigation led to the inauguration of a broad program of tests during which five propellers were tested in the two-blade configuration and to a limited extent in the one-blade configuration. The five propellers were designed especially for this investigation and the design parameters covered a range of section thickness-chord ratio and a range of section design lift coefficient. The propellers tested are designated as follows:

NACA 10-(3)(066)-03
NACA 10-(3)(049)-03
NACA 10-(3)(090)-03
NACA 10-(5)(066)-03
NACA 10-(0)(066)-03

The results of the tests of the NACA 10-(3)(066)-03, the NACA 10-(3)(049)-03, and the NACA 10-(3)(090)-03 propellers were reported in references 2, 3, and 4, respectively. It is pointed out that the propeller designations as given in references 2 and 3 are in error in that the digits after the last hyphen in the designation should read 03 instead of 033.

This paper presents the results of the NACA 10-(5)(066)-03 propeller which is the highest cambered propeller of the present program. The results are presented as pressure coefficient, normal-force coefficient, pitching-moment coefficient, and chordwise-force coefficient in tabular form. No analysis of the data is presented other than that which is considered essential for a clear understanding of the data presented.

[redacted]

SYMBOLS

The symbols used throughout this paper, some of which are defined in figure 3, are as follows:

B	number of blades
b	blade chord, feet
c	distance from section leading edge to any point on the 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_l	section lift coefficient
c_{l_d}	blade-section design lift coefficient
c_m	section pitching-moment coefficient about the 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
G	Goldstein induced-velocity correction factor for a finite number of blades
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, rpm

[redacted]

n	propeller rotational speed, rps
P	pressure coefficient $\left(\frac{p - p_o}{q_x}\right)$
p	static pressure at a point on the 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 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_1	induced velocity at blade section, feet per second
x	fraction of propeller-tip radius (r/R)
y	normal distance from chord line to upper or lower surface of airfoil, inches
α_1	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

$\beta_{0.75R}$	blade angle at 0.75 tip radius, degrees
β_x	blade angle at station x, degrees
$\Delta\beta$	change in blade angle caused by operation loads, degrees
γ	ratio of specific heats for air (1.4)
θ	polar angular ordinate, radians
ρ	mass density of air in free stream, slugs per cubic foot
σ	solidity $\left(B \frac{b}{D}/\pi x\right)$
ϕ	helix angle, degrees
ϕ_o	geometric helix angle, degrees $\left(\tan^{-1} (J/\pi x)\right)$
Ψ	slope angle at the surface of the section, referenced to chord, degrees
ω	propeller rotational speed, radians per second

Subscripts:

L	lower-surface value
U	upper-surface value

APPARATUS

Basic equipment.- The tests were made with the NACA 2000-horsepower propeller dynamometer in the Langley 16-foot high-speed tunnel. A complete description of the dynamometer is contained in reference 5. The pressure-transfer device used to transfer the pressures measured at the blade surface orifices from the rotating members of the test setup to the stationary manometers is described in reference 2 together with a description of the optical deflectometer. The deflectometer was necessary for an accurate determination of the blade-section angles of attack because the blades twisted due to the air loads and centrifugal force acting on the blade when the propeller was operating. A schematic diagram of the test setup is shown in figure 1.

Propellers.- The propeller blades were of solid duralumin construction and were designated the NACA 10-(5)(066)-03 design. The digits

[redacted]

in the propeller designation describe the propeller diameter and the airfoil section at the design radius $\left(\frac{r}{R} = 0.70\right)$ as follows: propeller diameter, 10 feet; section design lift coefficient, 0.50; section thickness-chord ratio, 0.066; and solidity per blade, 0.03. The blades had a rectangular plan form with a blade width of 8 inches and were made up of NACA 16-series sections throughout having a design lift coefficient of 0.50 along the entire radius with the exception of a small portion near the tip. Due to inaccuracies in the fabrication process the section at the $\frac{r}{R} = 0.975$ station was not precisely an NACA 16-series section. From measurements made at the $\frac{r}{R} = 0.975$ station the actual section was determined and the ordinates are given in table 1 together with a sketch of the actual section compared with an NACA 16-series section. Blade-form characteristic curves are presented in figure 2.

Twenty-four pressure tubes were imbedded in the surface of one of the blades together with a resistance thermometer imbedded in the thrust face. Details of the blade construction, pressure tube and orifice installation, and temperature measurements are described in reference 2.

TESTS

The tests were made at a blade-angle setting of 45° at the $\frac{r}{R} = 0.75$ station. For most of the tests a constant rotational speed was used and a range of advance ratio was covered by changing the tunnel airspeed, which was varied from about 215 to 500 miles per hour. At higher speeds, however, the dynamometer could not deliver sufficient torque for operation at constant rotational speed and for this reason high-speed data were obtained by operating the tunnel at constant high values of Mach number and the advance ratio was varied by changing rotational speed. The test procedure and techniques employed are described in detail in reference 2.

Pressure-distribution data were obtained on the sections located at the following stations with the test blade operating in a two-blade propeller; $\frac{r}{R} = 0.30, 0.45, 0.60, 0.70, 0.78, 0.85, 0.90, 0.95,$ and 0.975.

In order to extend the range of advance ratio to lower values and, consequently, to extend the range of angle of attack and normal-force coefficient to high values, pressure data were obtained on the section

at the $\frac{r}{R} = 0.95$ station with the test blade operating as a one-blade propeller. The details of the one-blade test procedure are also described in reference 2.

The range of Mach number and angle of attack covered and the operating conditions for each test are specified in tables 2 to 10. The table index provides an outline of the test schedule.

REDUCTION OF DATA

The following equations, which are explained in detail in reference 2, have been used in the reduction of the section data presented herein.

Section pressure coefficient:

$$P = \frac{p - p_o}{q_x} \tag{1}$$

Section normal force:

$$F_n = \oint p \cos \psi \, ds = \int_0^b \left[\left(p_L - p_o\right) - \left(p_U - p_o\right)\right] dc \tag{2}$$

Section normal-force coefficient:

$$c_n = \frac{F_n}{q_x b} = \int_0^{1.0} \left(P_L - P_U\right) d\frac{c}{b} \tag{3}$$

Section chordwise force:

$$F_c = \oint p \sin \psi \, ds = \int_0^b \left[\left(p_U - p_o\right)\tan \psi_U - \left(p_L - p_o\right)\tan \psi_L\right] dc \tag{4}$$

Section chordwise-force coefficient:

$$c_c = \frac{F_c}{q_x b} = \int_0^{1.0} \left[P_U \tan \psi_U - P_L \tan \psi_L\right] d\frac{c}{b} \tag{5}$$

[redacted]

or, in polar coordinates,

$$c_c = \int_0^{2\pi} (P) \left[\frac{\sin \psi}{\sin(\theta - \psi)}\right]\left(\frac{r_p}{b}\right) d\theta \qquad (6)$$

Equation (5) was used to evaluate that portion of chordwise-force coefficient from $\frac{c}{b} = 0.025$ to $\frac{c}{b} = 1.0$ and equation (6) was used to evaluate the chordwise-force coefficient from $\frac{c}{b} = 0$ to $\frac{c}{b} = 0.025$.

Section pitching-moment coefficient:

$$c_m = \frac{m}{q_x b^2} = \frac{\bar{c}}{b}\int_0^{1.0} \left(P_L - P_U\right) d\frac{c}{b} - \int_0^{1.0} \left(P_L - P_U\right) \frac{c}{b}\, d\frac{c}{b} \qquad (7)$$

where $\frac{\bar{c}}{b} = 0.25$.

Section angle of attack:

$$\alpha_x = \alpha_x' + \Delta\beta - \alpha_i$$

where α_i, the induced angle of attack, was computed by use of Goldstein's correction for a finite number of blades as applied by Lock in reference 6 as described in reference 2.

The torsional deflection of the blades $\Delta\beta$ due to the combination of the air loads and centrifugal loads on the blades was measured during the tests as described in reference 2 and were verified by independent calculations. The accuracy of the measurements is believed to be within 0.1°.

For the one-blade propeller tests no torsional deflection measurements were made and values for the angle-of-blade twist for the one-blade tests were estimated by extrapolation of the two-blade data to lower values of advance ratio. The extrapolation was determined by computing the twist for the higher values of normal-force and moment coefficients obtained at the lower values of advance ratio with the one-blade propeller. A knowledge of the blade loading needed for calculating $\Delta\beta$ was obtained from wake-survey measurements made during the one-blade tests, and the moment coefficient was determined by extrapolation of the curve of moment coefficient against normal-force coefficient from the two-blade propeller tests. Some accuracy in the estimation of the value of the deflection angle was lost by the extrapolation process, but the values presented are believed to be within 0.2°. In certain cases

for which the values of the blade deflection angle were determined by extrapolations which were considered too great, or doubtful, the value of the angle has been omitted from the tables. Extrapolated values have been identified in the tables.

Values of the induced angles and the blade torsional deflection angles are presented for each test point in tables 2 to 10.

Tunnel-wall interference.- The data presented herein have been corrected to equivalent free air by the application of the Glauert tunnel-wall interference correction (reference 7).

RESULTS AND DISCUSSION

Pressure distribution.- The values of pressure coefficient obtained on the surface of the propeller sections are presented in tabular form in tables 2 to 10, and three typical pressure plots are shown in figure 4. The curves shown in figure 4 are plotted from the data presented in tables 8(a), 8(d), and 8(h). The three curves in figure 4 are plotted for a value of angle of attack close to 0° and are typical of the pressure distribution obtained in the subsonic and transonic speed ranges.

The symbols on the curves of figure 4 represent the chordwise points at which pressure orifices were located on the upper and lower surfaces of the blade section. The value of stagnation pressure on the leading edge of the section, which is recorded on the plots and appears in the data tables, was determined by computation from the equation

$$P = 1.0 + \frac{1}{4}M_x^2 + \frac{1}{4}\left(\frac{2 - \gamma}{6}\right)M_x^4$$

The value of the pressure coefficient at the trailing edge of the sections was determined from plots such as those in figure 4 by fairing the pressure-distribution curves of the upper and lower surface to a common value at the trailing edge. The notation "faired value" which appears in the data tables occurs wherever a pressure reading was either not obtained or was considered faulty.

The high negative pressure peaks near the nose on the lower surface of the section, shown in figure 4, were caused by a reverse curvature of the airfoil section. The reverse curvature of the section surface occurred because of the relatively high camber and low thickness ratio of the section at the $\frac{r}{R} = 0.90$ radius station.

[redacted]

Aerodynamic coefficients.- Values of normal-force coefficient, moment coefficient, and chordwise-force coefficient obtained by integration of the pressure-distribution plots are presented for each test run in tables 2 to 10. A detailed description of the method used to obtain values of chordwise-force coefficient is presented in reference 2.

A typical plot of the aerodynamic coefficients obtained is shown in figure 5 with propeller advance ratio as a common parameter. The propeller advance ratio provides a convenient parameter against which to plot the aerodynamic coefficients since both the angle of attack and section Mach number varied simultaneously during a test run. From plots such as the one illustrated in figure 5, cross plots can be made to obtain the variation of the aerodynamic coefficients with angle of attack or Mach number. The data plotted in figure 5 were obtained from table 8(d).

Induced angle.- The values of the section induced angle of attack presented herein have been computed by Goldstein's vortex theory as applied by Lock in reference 6. Goldstein's theory assumes that the blades operate with the Betz loading for minimum induced energy loss. The present blades were designed for the purpose of supplying section data on a given family of airfoil sections, and the loading was not considered in the design. As a consequence the test blades never operate with the ideal loading assumed in the theory used for calculating the induced angle of attack. The values of induced angle presented in the tables are therefore admittedly not precise, particularly for stations near the tip but are of sufficient interest to have warranted their calculation. Work is progressing on the problem of obtaining values of induced angle of attack for this propeller when operating with the arbitrary loadings obtained during the tests. An analysis of the problem of the calculation of the induced flow for propellers with arbitrary loading is beyond the scope of this paper, but some of the work that has been done on this problem has been reported in references 8, 9, and 10.

The relative magnitude of the induced angle of attack and the effect of its application on the lift-curve slope is shown for one section in figure 6. Figure 6 is a plot of normal-force coefficient against the uncorrected angle of attack $(\beta_x + \Delta\beta - \phi_o)$ compared with a plot of normal-force coefficient against angle of attack corrected for the induced angle $(\beta_x + \Delta\beta - \phi)$. Also shown in figure 6 is a plot of lift coefficient against angle of attack as determined from wind-tunnel tests on a two-dimensional model (reference 11). The application of the induced angle to the geometric angle of attack brought the lift curve for the propeller data much closer to that for the tunnel data. The lack of agreement between the propeller data and the wind-tunnel model data is due, in part, to the inexact value of induced angle used for correcting the angle of attack and may also be due to the fact that,

even though the correct value of induced angle were known, the boundary-layer flow on the blade due to centrifugal force and the presence of a Mach number gradient along the blade radius would affect the data obtained on the propeller blade so that it would not be in complete agreement with data from two-dimensional model tests.

Langley Aeronautical Laboratory
National Advisory Committee for Aeronautics
Langley Air Force Base, Va.

[redacted]

REFERENCES

1. Evans, Albert J., and Liner, George: Preliminary Investigation to Determine Propeller Section Characteristics by Measuring the Pressure Distribution on an NACA 10-(3)(08)-03 Propeller under Operating Conditions. NACA RM L8E11, 1948.

2. Maynard, Julian D., and Murphy, Maurice P.: Pressure Distributions on the Blade Sections of the NACA 10-(3)(066)-033 Propeller under Operating Conditions. NACA RM L9L12, 1950.

3. Gray, W. H., and Hunt, Robert M.: Pressure Distributions on the Blade Sections of the NACA 10-(3)(049)-033 Propeller under Operating Conditions. NACA RM L9L23, 1950.

4. Johnson, Peter J.: Pressure Distributions on the Blade Sections of the NACA 10-(3)(090)-03 Propeller under Operating Conditions. NACA RM L50A26, 1950.

5. Corson, Blake W., Jr., and Maynard, Julian D.: The NACA 2000-Horsepower Propeller Dynamometer and Tests at High Speed of an NACA 10-(3)(08)-03 Two-Blade Propeller. NACA RM L7L29, 1948.

6. Lock, C. N. H., and Yeatman, D.: Tables for Use in an Improved Method of Airscrew Strip Theory Calculation. R. & M. No. 1674, British A.R.C., 1935.

7. Glauert, H.: The Elements of Aerofoil and Airscrew Theory. American ed., The Macmillan Co., 1943, pp. 222-226.

8. Theodorsen, Theodore: The Theory of Propellers. II - Method for Calculating the Axial Interference Velocity. NACA Rep. 776, 1944.

9. Kawada, Sandi: Calculation of Induced Velocity by Helical Vortices and Its Application to Propeller Theory. Rep. No. 172, (vol. XIV, 1), Aero. Res. Inst., Tokyo Imperial Univ., Jan. 1939.

10. Tsien, Hsue-Shen, and Lees, Lester: The Glauert-Prandtl Approximation for Subsonic Flows of a Compressible Fluid. Jour. Aero. Sci., vol. 12, no. 2, April 1945, pp. 173-187, 202.

11. Lindsey, W. F., Stevenson, D. B., and Daley, Bernard N.: Aerodynamic Characteristics of 24 NACA 16-Series Airfoils at Mach Numbers between 0.3 and 0.8. NACA TN 1546, 1948.

TABLE INDEX

Table 5.- Pressure Coefficients and Aerodynamic Characteristics of an NACA 16-506.62 Propeller Blade Section ($x = 0.70$; $\beta_x = 47.00°$; $\beta_{0.75R} = 45°$; B = 2)

(a) N = 1140 rpm
(b) N = 1350 rpm
(c) N = 1500 rpm
(d) N = 1600 rpm
(e) M = 0.56
(f) M = 0.58
(g) M = 0.60
(h) M = 0.65

Table 6.- Pressure Coefficients and Aerodynamic Characteristics of an NACA 16-505.85 Propeller Blade Section ($x = 0.78$; $\beta_x = 43.90°$; $\beta_{0.75R} = 45°$; B = 2)

(a) N = 1140 rpm
(b) N = 1350 rpm
(c) N = 1500 rpm
(d) N = 1600 rpm
(e) M = 0.56
(f) M = 0.58
(g) M = 0.60
(h) M = 0.65

Table 7.- Pressure Coefficients and Aerodynamic Characteristics of an NACA 16-505.30 Propeller Blade Section ($x = 0.85$; $\beta_x = 41.10°$; $\beta_{0.75R} = 45°$; B = 2)

(a) N = 1140 rpm
(b) N = 1350 rpm
(c) N = 1500 rpm
(d) N = 1600 rpm
(e) M = 0.56
(f) M = 0.58
(g) M = 0.60
(h) M = 0.65

Table 8.- Pressure Coefficients and Aerodynamic Characteristics of an NACA 16-504.80 Propeller Blade Section ($x = 0.90$; $\beta_x = 39.50^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2)

(a) N = 1140 rpm
(b) N = 1350 rpm
(c) N = 1500 rpm
(d) N = 1600 rpm
(e) M = 0.56
(f) M = 0.58
(g) M = 0.60
(h) M = 0.65

Table 9.- Pressure Coefficients and Aerodynamic Characteristics of an NACA 16-504.40 Propeller Blade Section ($x = 0.95$; $\beta_x = 38.35^\circ$; $\beta_{0.75R} = 45^\circ$)

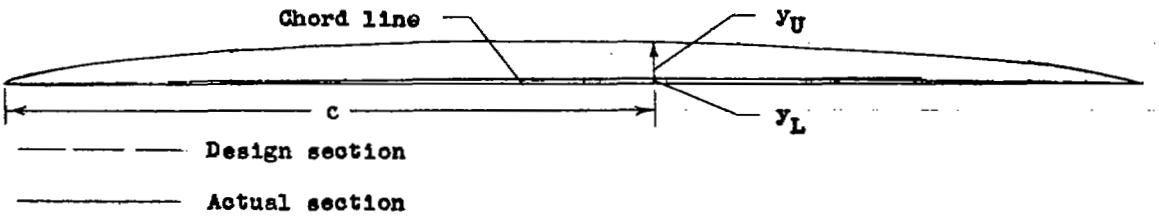
(a) N = 1140 rpm; B = 2
(b) N = 1350 rpm; B = 2
(c) N = 1500 rpm; B = 2
(d) N = 1600 rpm; B = 2
(e) M = 0.56; B = 2
(f) M = 0.58; B = 2
(g) M = 0.60; B = 2
(h) M = 0.65; B = 2
(i) N = 1500 rpm; B = 1
(j) M = 0.56; B = 1
(k) M = 0.58; B = 1
(l) M = 0.60; B = 1
(m) M = 0.65; B = 1

Table 10.- Pressure Coefficients and Aerodynamic Characteristics of the Blade Section ($x = 0.975$; $\beta_x = 37.90^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2)

(a) N = 1140 rpm
(b) N = 1350 rpm
(c) N = 1500 rpm
(d) N = 1600 rpm
(e) M = 0.56
(f) M = 0.58
(g) M = 0.60
(h) M = 0.65

[redacted]

TABLE 1.- ORDINATES FOR THE BLADE SECTION AT THE 0.975 RADIUS OF THE NACA 10-(5)(066)-03 PROPELLER



c (in.)	y_U (in.)	y_L (in.)
0	0	0
.048	.028	.006
.10	.040	.008
.20	.062	.009
.40	.102	.010
.60	.134	.006
.80	.161	.004
1.20	.203	.006
1.60	.235	.008
2.00	.263	-.005
2.40	.283	-.022
3.20	.305	-.028
4.00	.312	-.032
4.80	.296	-.028
5.60	.267	-.023
6.40	.212	-.020
7.20	.158	-.015
7.60	.097	-.008
8.00	0	0

[redacted]

TABLE 2.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-516.25 PROPELLER BLADE SECTION ($x = 0.30$; $\beta_x = 68.78^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2)

(a) N = 1140 rpm.

	J	1.661	1.811	1.949	2.095	2.236	2.432	2.614	2.715	2.658	2.554	2.361	2.176	2.035	1.887	1.752
	M_x	.336	.361	.383	.403	.427	.459	.489	.508	.497	.477	.445	.416	.393	.369	.351
	α_x,	8.27	6.19	4.51	2.92	1.55	-.12	-1.47	-2.16	-1.78	-1.04	.46	2.12	3.55	5.24	6.98
	$\Delta\beta$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	α_i	1.75	1.36	1.06	.78	.50	.18	-.05	-.16	-.10	.06	.30	.63	.89	1.19	1.51
	c_n	.7174	.5677	.4503	.3368	.2165	.0794	-.0242	-.0723	-.0439	.0258	.1303	.2710	.3813	.5039	.6245
	c_m	-.0051	-.0090	-.0131	-.0170	-.0186	-.0217	-.0313	-.0338	-.0313	-.0272	-.0198	-.0172	-.0174	-.0107	-.0087
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.029	1.033	1.037	1.042	1.047	1.054	1.061	1.066	1.063	1.058	1.051	1.044	1.040	1.035	1.031
	.025	-1.373	-.833	-.461	-.151	.103	.365	.549	.630	.587	.493	.292	.002	-.257	-.611	-1.030
	.050	-1.521	-1.163	-.871	-.614	-.385	-.127	.063	.099	.099	-.002	-.212	-.490	-.720	-1.004	-1.297
	.100	-1.266	-1.042	-.840	-.667	-.499	-.306	-.162	-.098	-.136	-.206	-.368	-.572	-.741	-.934	-1.127
	.200	-1.123	-.992	-.871	-.767	-.652	-.518	-.417	-.373	-.398	-.445	-.563	-.699	-.809	-.934	-1.044
	.300	-.927	-.846	-.762	-.701	-.620	-.529	-.457	-.432	-.449	-.477	-.557	-.650	-.727	-.802	-.882
	.400	-.853	-.808	-.754	-.715	-.652	-.591	-.542	-.527	-.537	-.547	-.607	-.673	-.727	-.777	-.827
	.500	-.721	-.703	-.668	-.649	-.605	-.566	-.537	-.532	-.537	-.535	-.575	-.619	-.657	-.686	-.716
	.600	-.602	-.620	-.610	-.610	-.582	-.563	-.552	-.555	-.557	-.545	-.563	-.589	-.608	-.616	-.620
	.700	-.416	-.460	-.465	-.475	-.459	-.457	-.460	-.470	-.466	-.445	-.451	-.458	-.468	-.466	-.448
	.800	-.185	-.209	-.215	-.208	-.195	-.206	-.230	-.250	-.240	-.208	-.197	-.199	-.204	-.219	-.200
	.900	-.093	-.009	.039	.051	.084	.110	.126	.123	.122	.129	.109	.072	.048	.017	-.042
	.950	-.077	0	.057	.054	.084	.119	.136	.136	.136	.139	.113	.072	.055	.037	-.024
Lower surface	.0375	.653	.443	.261	.034	-.179	-.493	-.792	-.961	-.867	-.652	-.374	-.072	.059	.348	.530
	.075	.447	.277	.139	-.029	-.170	-.373	-.557	-.672	-.611	-.469	-.298	-.095	.044	.204	.346
	.150	.271	.139	.042	-.079	-.172	-.309	-.428	-.498	-.459	-.367	-.257	-.122	-.023	.087	.193
	.250	.158	.057	-.020	-.114	-.185	-.281	-.360	-.418	-.387	-.315	-.245	-.148	-.075	.014	.096
	.350	.074	-.013	-.075	-.149	-.201	-.273	-.337	-.380	-.361	-.299	-.247	-.169	-.116	-.049	.022
	.450	-.014	-.091	-.145	-.212	-.252	-.309	-.357	-.389	-.373	-.325	-.286	-.225	-.182	-.127	-.056
	.550	-.077	-.139	-.176	-.225	-.258	-.298	-.333	-.359	-.349	-.307	-.283	-.235	-.204	-.165	-.117
	.650	-.141	-.178	-.193	-.236	-.256	-.281	-.302	-.323	-.314	-.284	-.271	-.238	-.216	-.190	-.172
	.750	-.181	-.209	-.215	-.236	-.246	-.256	-.257	-.269	-.265	-.245	-.251	-.235	-.224	-.215	-.190
	.850	-.181	-.191	-.173	-.180	-.170	-.166	-.152	-.152	-.153	-.146	-.168	-.171	-.171	-.181	-.177
	.925	-.137	-.130	-.091	-.082	-.064	-.050	-.027	-.023	-.025	-.025	-.053	-.068	-.082	-.111	-.126
	.975	-.112	-.087	-.020	-.088	.014	.035	.065	.073	.067	.063	.029	.005	-.009	-.049	-.088
	[a]1.000	-.106	-.066	.024	.036	.056	.095	.114	.128	.118	.110	.072	.043	.036	-.012	-.063

[a]No orifice.

TABLE 2.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-516.25 PROPELLER BLADE SECTION (x = 0.30; β_x = 68.78°; $\beta_{0.75R}$ = 45°; B = 2) - Continued

(b) N = 1350 rpm.

	J	1.801	1.925	2.061	2.188	2.372	2.522	2.657	2.576	2.431	2.271	2.125	1.986	1.852
	M_x	.416	.439	.465	.490	.527	.556	.583	.568	.535	.503	.476	.449	.425
	α_x'	6.32	4.79	3.27	2.00	.37	-.81	-1.77	-1.20	-.11	1.24	2.62	4.09	5.67
	$\Delta\beta$	.02	.02	.01	.01	0	0	-.01	-.01	0	0	.01	.01	.02
	α_1	1.42	1.13	.86	.57	.26	0	-.16	-.05	.14	.42	.72	1.02	1.29
	c_n	.5935	.4768	.3690	.2477	.1155	-.0013	-.0723	-.0245	.0632	.1806	.3116	.4348	.5445
	c_m	-.0033	-.0093	-.0151	-.0172	-.0179	-.0213	-.0262	-.0275	-.0203	-.0172	-.0151	-.0134	-.0046
	c_c													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.044	1.049	1.055	1.062	1.071	1.079	1.087	1.083	1.073	1.065	1.058	1.052	1.046
	.025	-1.057	-.621	-.262	.008	.291	.485	.605	.539	.382	.148	-.133	-.443	-.876
	.050	-1.227	-.942	-.674	-.445	-.191	.002	.136	.064	-.103	-.323	-.567	-.812	-1.107
	.100	-1.090	-.902	-.712	-.550	-.360	-.214	-.108	-.168	-.299	-.461	-.641	-.809	-1.017
	.200	-1.030	-.920	-.803	-.696	-.566	-.469	-.392	-.437	-.529	-.641	-.760	-.864	-.991
	.300	-.867	-.799	-.720	-.651	-.559	-.500	-.445	-.474	-.542	-.617	-.694	-.757	-.844
	.400	-.820	-.781	-.729	-.681	-.615	-.579	-.545	-.564	-.609	-.660	-.715	-.751	-.808
	.500	-.703	-.687	-.654	-.625	-.579	-.565	-.545	-.556	-.583	-.612	-.649	-.664	-.706
	.600	-.613	-.624	-.605	-.590	-.566	-.567	-.564	-.566	-.576	-.595	-.607	-.606	-.622
	.700	-.420	-.442	-.443	-.437	-.423	-.434	-.439	-.435	-.440	-.440	-.449	-.437	-.439
	.800	-.180	-.200	-.191	-.183	-.177	-.180	-.191	-.182	-.185	-.187	-.199	-.193	-.195
	.900	-.033	.021	.050	.070	.100	.114	.123	.082	.103	.078	.052	.042	-.012
	.950	-.020	.039	.061	.073	.106	.122	.130	.088	.109	.081	.057	.059	.001
Lower surface	.0375	.483	.300	.105	-.108	-.394	-.685	-.925	-.786	-.548	-.258	-.006	.222	.403
	.075	.310	.167	.029	-.121	-.307	-.500	-.653	-.564	-.408	-.227	-.054	.109	.242
	.150	.170	.064	-.032	-.138	-.262	-.394	-.479	-.429	-.334	-.211	-.093	.024	.117
	.250	.073	-.006	-.078	-.158	-.249	-.341	-.411	-.369	-.302	-.215	-.130	-.031	.033
	.350	0	-.067	-.120	-.183	-.253	-.328	-.380	-.353	-.299	-.230	-.162	-.086	-.034
	.450	-.090	-.145	-.188	-.239	-.293	-.357	-.394	-.373	-.334	-.278	-.225	-.159	-.124
	.550	-.137	-.176	-.207	-.249	-.289	-.339	-.365	-.351	-.325	-.282	-.238	-.185	-.163
	.650	-.170	-.200	-.218	-.249	-.280	-.316	-.331	-.323	-.308	-.278	-.246	-.202	-.191
	.750	-.210	-.224	-.227	-.244	-.260	-.278	-.282	-.280	-.278	-.263	-.249	-.220	-.220
	.850	-.197	-.191	-.174	-.178	-.173	-.172	-.161	-.168	-.185	-.187	-.188	-.176	-.201
	.925	-.137	-.109	-.078	-.070	-.057	-.043	-.027	-.037	-.059	-.072	-.083	-.086	-.130
	.975	-.097	-.042	-.002	.010	.033	.051	.068	.060	.032	.009	-.004	-.016	-.079
	[a]1.000	-.050	.011	.051	.053	.087	.108	.120	.083	.086	.062	.040	.050	-.030

[a]No orifice.

TABLE 2.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-516.25 PROPELLER BLADE SECTION ($x = 0.30$; $\beta_x = 68.78^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(c) N = 1500 rpm.

	J	1.962	2.048	2.132	2.238	2.322	2.412	2.501	2.599	2.543	2.467	2.361	2.283	2.185	2.114	2.139
	M_x	.495	.514	.531	.555	.575	.595	.614	.639	.623	.605	.581	.564	.543	.529	.507
	α_x'	4.34	3.40	2.55	1.52	.78	.03	-.66	-1.38	-.98	-.40	.45	1.12	2.02	2.72	3.76
	$\Delta\beta$	.02	.02	.02	.01	.01	0	0	0	0	0	.01	.01	.01	.02	.02
	α_i	1.09	.93	.75	.50	.34	.17	.02	-.14	-.05	.08	.26	.42	.62	.78	1.00
	c_n	.4645	.3974	.3226	.2181	.1497	.0761	.0068	-.0613	-.0226	.0361	.1135	.1819	.2690	.3355	.4258
	c_m	-.0044	-.0085	-.0102	-.0133	-.0142	-.0149	-.0151	-.0221	-.0203	-.0161	-.0151	-.0138	-.0123	-.0113	-.0077
	c_c															
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.064	1.068	1.072	1.079	1.085	1.091	1.097	1.107	1.100	1.094	1.087	1.082	1.075	1.072	1.066
	.025	-.502	-.282	-.097	.107	.257	.387	.498	.598	.545	.453	.321	.188	.012	-.146	-.377
	.050	-.889	-.715	-.555	-.372	-.239	-.113	.006	.117	.059	-.040	-.177	-.296	-.456	-.596	-.788
	.100	-.879	-.762	-.645	-.511	-.411	-.315	-.221	-.132	-.180	-.258	-.367	-.454	-.572	-.672	-.807
	.200	-.923	-.854	-.780	-.692	-.631	-.562	-.494	-.432	-.466	-.519	-.601	-.653	-.735	-.796	-.875
	.300	-.803	-.762	-.712	-.656	-.616	-.569	-.523	-.483	-.506	-.539	-.601	-.629	-.682	-.723	-.771
	.400	-.788	-.764	-.732	-.694	-.672	-.641	-.611	-.591	-.740	-.619	-.664	-.675	-.714	-.738	-.767
	.500	-.692	-.681	-.660	-.635	-.628	-.608	-.591	-.586	-.589	-.594	-.626	-.627	-.648	-.663	-.677
	.600	-.618	-.620	-.610	-.601	-.601	-.591	-.584	-.591	-.589	-.584	-.603	-.595	-.606	-.610	-.613
	.700	-.438	-.447	-.442	-.437	-.440	-.433	-.431	-.440	-.435	-.428	-.443	-.434	-.443	-.441	-.438
	.800	-.187	-.187	-.175	-.168	-.161	-.144	-.132	-.135	-.134	-.135	-.158	-.159	-.174	-.175	-.183
	.900	.017	.030	.048	.066	.077	.093	.107	.112	.107	.103	.081	.075	.054	.042	.027
	.950	.032	.046	.056	.073	.082	.099	.112	.115	.114	.108	.085	.082	.065	.053	.046
Lower surface	.0375	.238	.123	-.009	-.201	-.355	-.507	-.682	-.905	-.790	-.605	-.443	-.274	-.113	.027	.186
	.075	.135	.035	-.055	-.182	-.293	-.393	-.504	-.649	-.576	-.455	-.350	-.233	-.126	-.031	.082
	.150	.039	-.030	-.094	-.182	-.258	-.326	-.398	-.482	-.441	-.366	-.301	-.217	-.145	-.075	.006
	.250	-.025	-.079	-.127	-.191	-.248	-.297	-.347	-.415	-.381	-.323	-.282	-.217	-.166	-.113	-.051
	.350	-.081	-.125	-.162	-.215	-.260	-.297	-.336	-.391	-.365	-.319	-.287	-.233	-.193	-.153	-.100
	.450	-.158	-.197	-.225	-.270	-.308	-.335	-.368	-.407	-.389	-.351	-.329	-.284	-.253	-.217	-.176
	.550	-.190	-.218	-.243	-.276	-.308	-.330	-.352	-.384	-.370	-.342	-.327	-.288	-.265	-.235	-.202
	.650	-.212	-.234	-.249	-.276	-.301	-.315	-.331	-.354	-.346	-.323	-.318	-.284	-.267	-.242	-.218
	.750	-.236	-.245	-.254	-.270	-.285	-.290	-.293	-.303	-.302	-.290	-.295	-.272	-.267	-.250	-.235
	.850	-.199	-.194	-.193	-.197	-.198	-.194	-.185	-.182	-.186	-.187	-.204	-.195	-.198	-.191	-.192
	.925	-.116	-.102	-.090	-.084	-.080	-.069	-.056	-.044	-.050	-.058	-.082	-.079	-.090	-.091	-.103
	.975	-.052	-.023	-.007	.001	.009	.023	.040	.054	.046	.035	.011	.010	-.005	-.009	-.032
	[a]1.000	.040	.035	.049	.071	.070	.087	.098	.102	.115	.096	.059	.068	.035	.026	.001

[a]No orifice.

TABLE 2.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-516.25 PROPELLER BLADE SECTION ($x = c.30$; $\beta_I = 68.78^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$) - Continued

(d) N = 1600 rpm.

	J	2.134	2.224	2.303	2.395	2.474	2.554	2.611	2.585	2.510	2.436	2.350	2.253	2.182
	M_x	.553	.574	.591	.613	.632	.651	.664	.658	.639	.621	.601	.578	.562
	α_I	2.53	1.67	.96	.18	-.45	-1.05	-1.45	-1.27	-.72	-.15	.55	1.40	2.06
	$\Delta\beta$	.01	.01	.01	.01	0	0	0	0	0	0	.01	.01	.01
	α_i	.86	.68	.50	.32	.17	.01	-.10	-.05	.09	.25	.44	.61	.78
	c_n	.3710	.2948	.2206	.1416	.0742	.0058	-.0445	-.0206	.0381	.1097	.1935	.2639	.3374
	c_m	-.0077	-.0084	-.0087	-.0102	-.0108	-.0129	-.0154	-.0144	-.0126	-.0113	-.0107	-.0100	-.0090
	c_c													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.078	1.084	1.090	1.097	1.103	1.110	1.115	1.113	1.106	1.100	1.093	1.086	1.081
	.025	-.203	-.005	.143	.285	.407	.513	.577	.546	.461	.347	.205	.039	-.123
	.050	-.681	-.512	-.370	-.226	-.107	.006	.079	.048	-.048	-.162	-.300	-.454	-.598
	.100	-.753	-.627	-.524	-.416	-.319	-.229	-.170	-.197	-.274	-.362	-.469	-.585	-.691
	.200	-.871	-.788	-.727	-.652	-.588	-.525	-.482	-.499	-.557	-.616	-.686	-.766	-.827
	.300	-.778	-.720	-.684	-.636	-.595	-.557	-.531	-.539	-.576	-.611	-.655	-.710	-.747
	.400	-.782	-.744	-.727	-.696	-.672	-.655	-.644	-.644	-.665	-.678	-.706	-.741	-.761
	.500	-.696	-.670	-.665	-.646	-.635	-.633	-.633	-.628	-.635	-.635	-.650	-.671	-.679
	.600	-.628	-.613	-.621	-.611	-.610	-.617	-.627	-.617	-.614	-.604	-.606	-.622	-.619
	.700	-.442	-.437	-.442	-.435	-.433	-.441	-.448	-.440	-.436	-.429	-.432	-.445	-.436
	.800	-.173	-.157	-.153	-.129	-.113	-.104	-.098	-.097	-.105	-.117	-.135	-.162	-.161
	.900	.027	.043	.052	.068	.084	.090	.094	.096	.089	.081	.063	.049	.042
	.950	.042	.057	.059	.072	.085	.093	.097	.099	.093	.085	.070	.099	.056
Lower surface	.0375	.081	-.062	-.214	-.365	-.523	-.712	-.862	-.782	-.612	-.428	-.265	-.122	.032
	.075	.007	-.087	-.201	-.303	-.408	-.536	-.630	-.579	-.468	-.344	-.234	-.132	-.026
	.150	-.053	-.118	-.199	-.270	-.341	-.423	-.479	-.450	-.382	-.293	-.220	-.153	-.075
	.250	-.096	-.145	-.207	-.257	-.307	-.368	-.413	-.388	-.335	-.274	-.220	-.170	-.113
	.350	-.144	-.180	-.233	-.271	-.312	-.363	-.401	-.382	-.337	-.281	-.238	-.201	-.153
	.450	-.214	-.244	-.290	-.321	-.354	-.396	-.423	-.407	-.375	-.328	-.293	-.262	-.221
	.550	-.236	-.262	-.298	-.321	-.347	-.381	-.402	-.389	-.363	-.326	-.300	-.276	-.241
	.650	-.251	-.266	-.299	-.314	-.336	-.360	-.377	-.367	-.349	-.317	-.298	-.280	-.251
	.750	-.265	-.272	-.294	-.300	-.309	-.321	-.327	-.323	-.315	-.296	-.287	-.280	-.259
	.850	-.214	-.207	-.216	-.213	-.209	-.210	-.206	-.207	-.211	-.202	-.207	-.211	-.201
	.925	-.117	-.103	-.103	-.090	-.080	-.075	-.067	-.068	-.077	-.079	-.089	-.101	-.101
	.975	-.041	-.019	-.013	.001	.013	.024	.032	.031	.018	.012	0	-.015	-.020
	[a]1.000	0	.030	.033	.073	.065	.075	.085	.081	.071	.060	.047	.050	.038

[a]No orifice.

TABLE 2.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-516.25 PROPELLER BLADE SECTION ($x = 0.30$; $\beta_x = 68.78^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$) - Continued

(e) $M = 0.56$.

	J	2.111	2.138	2.180	2.218	2.259	2.314	2.358	2.393	2.442	2.485	2.540	2.622
	M_x	.623	.620	.614	.617	.612	.615	.614	.610	.609	.604	.606	.604
	α_x'	2.74	2.49	2.08	1.77	1.35	.86	.49	.20	-.20	-.53	-.94	-1.53
	$\Delta\beta$	.04	.03	.02	.02	.02	.02	.02	.01	0	0	0	-.01
	α_i	.70	.64	.57	.49	.43	.32	.22	.16	.08	.02	-.08	-.17
	c_n	.3032	.2774	.2452	.2116	.1858	.1381	.0974	.0684	.0348	.0065	-.0361	-.0774
	c_m	-.0070	-.0082	-.0084	-.0090	-.0111	-.0133	-.0147	-.0164	-.0175	-.0203	-.0249	-.0272
	c_c												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.100	1.099	1.097	1.098	1.096	1.098	1.097	1.096	1.095	1.094	1.095	1.094
	.025	.033	.073	.124	.187	.235	.307	.367	.409	.457	.499	.560	.614
	.050	-.310	-.469	-.414	-.350	-.300	-.224	-.160	-.111	-.055	-.009	.061	.127
	.100	-.648	-.614	-.567	-.516	-.472	-.411	-.355	-.317	-.272	-.231	-.178	-.122
	.200	-.828	-.800	-.768	-.731	-.695	-.649	-.604	-.572	-.536	-.502	-.461	-.412
	.300	-.754	-.738	-.714	-.690	-.665	-.635	-.600	-.579	-.552	-.529	-.500	-.466
	.400	-.771	-.760	-.745	-.732	-.711	-.691	-.665	-.652	-.630	-.613	-.594	-.565
	.500	-.679	-.677	-.669	-.666	-.651	-.642	-.623	-.616	-.603	-.593	-.585	-.565
	.600	-.606	-.612	-.607	-.610	-.604	-.602	-.593	-.593	-.589	-.584	-.586	-.578
	.700	-.410	-.420	-.421	-.431	-.428	-.432	-.428	-.436	-.438	-.437	-.448	-.448
	.800	-.116	-.125	-.122	-.127	-.125	-.125	-.123	-.132	-.139	-.145	-.163	-.179
	.900	.040	.042	.049	.051	.061	.069	.082	.088	.096	.103	.106	.115
	.950	.049	.052	.061	.063	.070	.062	.088	.093	.101	.108	.113	.122
Lower surface	.0375	-.022	-.075	-.126	-.207	-.256	-.352	-.426	-.503	-.587	-.661	-.802	-.924
	.075	-.065	-.102	-.138	-.195	-.228	-.294	-.340	-.393	-.447	-.493	-.583	-.656
	.150	-.102	-.130	-.155	-.199	-.218	-.265	-.293	-.329	-.361	-.392	-.447	-.490
	.250	-.137	-.153	-.169	-.204	-.218	-.252	-.272	-.295	-.320	-.342	-.384	-.414
	.350	-.168	-.186	-.201	-.228	-.237	-.265	-.277	-.297	-.317	-.331	-.368	-.385
	.450	-.240	-.253	-.264	-.286	-.293	-.315	-.325	-.338	-.352	-.364	-.391	-.403
	.550	-.256	-.269	-.278	-.296	-.300	-.317	-.321	-.333	-.343	-.349	-.369	-.376
	.650	-.268	-.279	-.285	-.300	-.300	-.312	-.312	-.320	-.324	-.328	-.343	-.345
	.750	-.276	-.283	-.285	-.293	-.290	-.294	-.291	-.294	-.294	-.292	-.298	-.291
	.850	-.218	-.220	-.216	-.220	-.211	-.210	-.200	-.198	-.192	-.186	-.187	-.174
	.925	-.113	-.115	-.106	-.105	-.097	-.090	-.077	-.074	-.066	-.057	-.052	-.039
	.975	-.037	-.033	-.023	-.019	-.007	.001	.014	.018	.028	.036	.047	.059
	[a]1.000	.005	.012	.025	.027	.047	.035	.056	.067	.072	.081	.093	.106

[a]No orifice.

TABLE 2.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-516.25 PROPELLER BLADE SECTION ($x = 0.30$; $\beta_x = 68.78^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(f) M = 0.58.

	J	2.106	2.140	2.172	2.212	2.253	2.288	2.327	2.371	2.416	2.462	2.525	2.566	2.598
	M_x	.646	.643	.639	.639	.638	.635	.633	.632	.630	.629	.631	.625	.621
	α_x'	2.81	2.47	2.16	1.78	1.40	1.09	.75	.38	.01	-.35	-.83	-1.13	-1.36
	$\Delta\beta$	.05	.05	.04	.04	.03	.03	.03	.02	.02	.01	.01	0	0
	c_l	.70	.63	.56	.47	.39	.35	.28	.21	.13	.04	-.05	-.10	-.16
	c_n	.3006	.2716	.2413	.2058	.1716	.1510	.1242	.0939	.0594	.0168	-.0206	-.0439	-.0710
	c_m	.0003	-.0044	-.0041	-.0066	-.0088	-.0085	-.0088	-.0097	-.0098	-.0142	-.0162	-.0177	-.0213
	c_c													
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.108	1.107	1.106	1.106	1.105	1.104	1.104	1.103	1.102	1.102	1.103	1.101	1.100
	.025	.047	.108	.169	.218	.267	.310	.358	.395	.457	.499	.559	.588	.618
	.050	-.509	-.444	-.377	-.325	-.270	-.225	-.173	-.130	-.064	-.016	.056	.092	.128
	.100	-.662	-.604	-.549	-.502	-.455	-.418	-.375	-.339	-.280	-.241	-.180	-.152	-.125
	.200	-.864	-.814	-.770	-.733	-.694	-.665	-.632	-.602	-.554	-.519	-.467	-.439	-.421
	.300	-.782	-.750	-.720	-.697	-.666	-.652	-.626	-.605	-.569	-.546	-.504	-.487	-.473
	.400	-.800	-.776	-.756	-.741	-.717	-.709	-.692	-.677	-.650	-.632	-.598	-.586	-.579
	.500	-.701	-.686	-.677	-.669	-.652	-.654	-.643	-.635	-.618	-.608	-.585	-.577	-.578
	.600	-.619	-.614	-.613	-.611	-.601	-.608	-.606	-.603	-.596	-.593	-.578	-.577	-.586
	.700	-.414	-.416	-.420	-.421	-.417	-.428	-.432	-.433	-.432	-.436	-.430	-.434	-.447
	.800	-.117	-.114	-.113	-.114	-.106	-.115	-.118	-.118	-.117	-.124	-.131	-.148	-.169
	.900	.031	.043	.048	.054	.061	.062	.071	.077	.089	.094	.112	.114	.110
	.950	.039	.051	.060	.064	.073	.070	.078	.082	.092	.099	.117	.120	.116
Lower surface	.0375	-.029	-.080	-.154	-.213	-.268	-.345	-.413	-.480	-.575	-.661	-.765	-.843	-.943
	.075	-.077	-.116	-.164	-.203	-.238	-.293	-.338	-.381	-.441	-.497	-.561	-.608	-.670
	.150	-.116	-.141	-.176	-.201	-.225	-.265	-.294	-.324	-.363	-.397	-.430	-.460	-.500
	.250	-.142	-.160	-.186	-.205	-.222	-.252	-.274	-.295	-.321	-.346	-.372	-.395	-.425
	.350	-.184	-.198	-.219	-.231	-.243	-.267	-.284	-.300	-.321	-.341	-.355	-.373	-.399
	.450	-.254	-.265	-.281	-.291	-.298	-.318	-.333	-.346	-.360	-.375	-.382	-.395	-.415
	.550	-.274	-.278	-.291	-.299	-.303	-.322	-.331	-.342	-.351	-.361	-.366	-.375	-.390
	.650	-.290	-.291	-.300	-.304	-.305	-.318	-.326	-.332	-.336	-.343	-.342	-.347	-.360
	.750	-.297	-.293	-.296	-.297	-.293	-.305	-.306	-.309	-.306	-.307	-.298	-.300	-.306
	.850	-.235	-.227	-.225	-.221	-.214	-.218	-.215	-.213	-.204	-.200	-.185	-.182	-.186
	.925	-.192	-.116	-.110	-.104	-.094	-.097	-.090	-.087	-.075	-.068	-.050	-.046	-.046
	.975	-.049	-.034	-.024	-.017	-.005	-.007	.003	.008	.018	.030	.048	.052	.054
	[a]1.000	.072	.028	.036	.056	.058	.051	.079	.070	.080	.094	.100	.110	.105

[a]No orifice.

NACA

TABLE 2.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-516.25 PROPELLER BLADE SECTION ($x = 0.30$; $\beta_x = 68.78^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$) - Continued

(g) $M = 0.60$.

	J	2.108	2.142	2.180	2.224	2.262	2.296	2.344	2.380	2.426	2.473	2.520	2.578
	M_x	.665	.660	.658	.660	.659	.654	.655	.651	.649	.647	.646	.644
	α_T'	2.79	2.45	2.08	1.67	1.32	1.02	.60	.30	-.07	-.44	-.79	-1.22
	$\Delta\beta$	.06	.06	.04	.03	.02	.01	0	0	0	0	0	0
	α_i	.69	.61	.53	.45	.38	.31	.22	.16	.08	.01	-.07	-.14
	c_n	.2968	.2645	.2310	.1935	.1639	.1348	.0977	.0703	.0352	.0035	-.0290	-.0639
	c_m	-.0043	-.0066	-.0059	-.0082	-.0079	-.0113	-.0121	-.0118	-.0135	-.0132	-.0167	-.0213
	c_o												
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.116	1.114	1.113	1.114	1.113	1.111	1.111	1.110	1.109	1.108	1.108	1.107
	.025	.035	.108	.156	.220	.278	.314	.366	.406	.449	.498	.536	.592
	.050	-.501	-.428	-.372	-.301	-.237	-.197	-.140	-.096	-.047	.007	.053	.117
	.100	-.668	-.601	-.550	-.489	-.435	-.400	-.352	-.315	-.271	-.227	-.187	-.198
	.200	-.905	-.840	-.790	-.739	-.694	-.662	-.625	-.591	-.556	-.521	-.485	-.437
	.300	-.822	-.776	-.738	-.704	-.673	-.651	-.630	-.606	-.579	-.554	-.531	-.492
	.400	-.847	-.810	-.779	-.756	-.732	-.718	-.705	-.685	-.666	-.651	-.631	-.600
	.500	-.734	-.714	-.694	-.682	-.668	-.662	-.699	-.646	-.635	-.628	-.617	-.597
	.600	-.643	-.634	-.626	-.621	-.617	-.617	-.624	-.617	-.613	-.614	-.612	-.600
	.700	-.427	-.424	-.422	-.422	-.423	-.427	-.435	-.435	-.437	-.442	-.447	-.447
	.800	-.135	-.127	-.116	-.106	-.102	-.105	-.106	-.102	-.104	-.109	-.114	-.128
	.900	.014	.029	.039	.049	.056	.066	.069	.078	.085	.090	.095	.105
	.950	.025	.042	.051	.059	.064	.071	.072	.083	.090	.095	.100	.110
Lower surface	.0375	-.050	-.112	-.163	-.234	-.310	-.367	-.461	-.527	-.601	-.709	-.802	-.917
	.075	-.097	-.138	-.171	-.221	-.274	-.308	-.371	-.411	-.460	-.531	-.588	-.657
	.150	-.135	-.161	-.184	-.216	-.251	-.274	-.320	-.347	-.376	-.421	-.455	-.489
	.250	-.163	-.180	-.195	-.216	-.243	-.260	-.293	-.310	-.334	-.366	-.395	-.421
	.350	-.202	-.215	-.226	-.243	-.262	-.274	-.301	-.316	-.331	-.358	-.380	-.395
	.450	-.278	-.284	-.291	-.303	-.320	-.327	-.351	-.360	-.369	-.390	-.408	-.413
	.550	-.297	-.298	-.302	-.311	-.321	-.327	-.346	-.353	-.361	-.378	-.387	-.390
	.650	-.314	-.313	-.310	-.314	-.321	-.325	-.339	-.342	-.347	-.358	-.364	-.361
	.750	-.319	-.313	-.308	-.306	-.307	-.306	-.315	-.313	-.311	-.318	-.317	-.307
	.850	-.253	-.242	-.233	-.226	-.221	-.217	-.218	-.215	-.207	-.206	-.202	-.186
	.925	-.141	-.125	-.114	-.102	-.096	-.089	-.089	-.081	-.076	-.072	-.066	-.048
	.975	-.060	-.038	-.024	-.011	-.004	.004	.002	.012	.019	.025	.032	.048
	[a]1.000	-.002	.006	.030	.034	.040	.055	.050	.062	.072	.080	.091	.096

[a]No orifice.

TABLE 2.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-516.25 PROPELLER BLADE SECTION ($x = 0.30$; $\beta_x = 68.78^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Concluded

(h) M = 0.65.

	J	2.077	2.101	2.130	2.151	2.184	2.208	2.239	2.261	2.293	2.319	2.350	2.383	2.412	2.451
	M_x	.730	.727	.725	.722	.720	.719	.717	.715	.713	.710	.709	.707	.705	.703
	α_x,	3.11	2.86	2.57	2.36	2.04	1.81	1.53	1.33	1.04	.82	.55	.28	.04	-.27
	$\Delta\beta$	.06	.06	.05	.05	.04	.04	.03	.02	0	0	0	-.01	-.01	-.01
	α_i	.63	.61	.54	.50	.44	.38	.33	.27	.22	.18	.12	.04	.01	-.09
	c_n	.2684	.2613	.2342	.2142	.1903	.1665	.1419	.1187	.0968	.0774	.0510	.0181	.0039	-.0381
	c_m	-.0029	-.0007	-.0003	-.0015	-.0002	0	-.0033	-.0046	-.0048	-.0062	-.0046	-.0085	-.0066	-.0121
	c_c	.0041	.0041	.0042	.0041	.0052	.0057	.0063	.0072	.0085	.0079	.0080	.0098	.0100	.0137
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.141	1.140	1.139	1.138	1.137	1.137	1.136	1.135	1.134	1.133	1.133	1.132	1.131	1.131
	.025	.196	.216	.250	.279	.313	.339	.367	.391	.427	[b].390	[b].265	[b].460	[b].365	[b].580
	.050	-.385	-.361	-.320	-.290	-.251	-.225	-.188	-.159	-.116	-.092	-.049	-.014	.012	.228
	.100	-.594	-.571	-.535	-.508	-.472	-.447	-.414	-.388	-.349	-.328	-.288	-.256	-.234	-.198
	.200	-.919	-.909	-.884	-.855	-.818	-.790	-.750	-.717	-.678	-.654	-.616	-.585	-.563	-.525
	.300	-.834	-.825	-.810	-.794	-.774	-.760	-.733	-.709	-.681	-.667	-.638	-.613	-.598	-.568
	.400	-1.065	-1.034	-1.006	-.964	-.930	-.898	-.858	-.828	-.799	-.785	-.758	-.734	-.718	-.690
	.500	-.841	-.808	-.798	-.781	-.772	-.766	-.747	-.731	-.720	-.713	-.700	-.688	-.680	-.666
	.600	-.641	-.645	-.652	-.650	-.651	-.656	-.650	-.649	-.647	-.644	-.644	-.639	-.640	-.638
	.700	-.363	-.376	-.385	-.385	-.388	-.395	-.400	-.406	-.411	-.414	-.416	-.416	-.424	-.430
	.800	-.091	-.092	-.089	-.078	-.066	-.063	-.060	-.059	-.058	-.053	-.047	-.042	-.046	-.051
	.900	-.015	-.003	.007	.020	.028	.036	.043	.048	.055	.051	.060	.072	.074	.080
	.950	-.009	.002	.014	.026	.032	.040	.050	.053	.062	.057	.066	.078	.080	.084
Lower surface	.0375	-.076	-.107	-.160	-.194	-.247	-.285	-.328	-.378	-.440	-.494	-.564	-.616	-.679	-.770
	.075	-.121	-.143	-.178	-.204	-.241	-.270	-.297	-.333	-.374	-.410	-.456	-.488	-.525	-.583
	.150	-.158	-.172	-.196	-.213	-.240	-.260	-.277	-.301	-.328	-.352	-.382	-.398	-.421	-.454
	.250	-.186	-.193	-.217	-.223	-.242	-.257	-.269	-.287	-.304	-.324	-.344	-.357	-.375	-.400
	.350	-.234	-.240	-.252	-.262	-.279	-.291	-.297	-.311	-.325	-.339	-.354	-.362	-.375	-.394
	.450	-.317	-.322	-.330	-.336	-.349	-.357	-.360	-.371	-.381	-.392	-.402	-.404	-.414	-.426
	.550	-.341	-.340	-.346	-.350	-.359	-.364	-.365	-.372	-.378	-.388	-.395	-.394	-.401	-.408
	.650	-.369	-.366	-.369	-.369	-.374	-.377	-.373	-.375	-.378	-.385	-.387	-.385	-.389	-.391
	.750	-.379	-.370	-.367	-.363	-.366	-.364	-.356	-.354	-.354	-.357	-.352	-.345	-.344	-.343
	.850	-.307	-.296	-.285	-.279	-.277	-.273	-.259	-.255	-.248	-.249	-.241	-.232	-.229	-.222
	.925	-.190	-.172	-.160	-.150	-.146	-.137	-.122	-.117	-.109	-.108	-.099	-.089	-.087	-.078
	.975	-.109	-.086	-.071	-.061	-.052	-.042	-.026	-.020	-.011	-.010	-.003	.009	.010	.019
	[a]1.000	-.009	-.001	.013	.010	.027	.026	.044	.044	.048	.048	.058	.055	.067	.078

[a]No orifice.

[b]Faired value.

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-510.00 PROPELLER BLADE SECTION ($x = 0.45$; $\beta_x = 59.25°$; $\beta_{0.75R} = 45°$; $B = 2$)

(a) $N = 1140$ rpm.

	J	1.589	1.778	1.965	2.152	2.285	2.400	2.522	2.659	2.594	2.469	2.338	2.190	2.049	1.872	1.679	1.541
	M_x	.369	.395	.422	.450	.468	.487	.506	.527	.516	.498	.477	.454	.434	.411	.381	.364
	α_x'	10.91	7.74	4.98	2.55	.99	-.25	-1.48	-2.75	-2.24	-.95	.41	2.09	3.85	6.31	9.35	11.79
	$\Delta\beta$	.17	.13	.10	.06	.04	.01	-.01	-.03	-.02	0	.03	.05	.08	.11	.15	.17
	α_i	2.62	2.12	1.64	1.19	.88	.62	.35	.09	.23	.47	.78	1.07	1.43	1.87	2.37	2.78
	α_n	1.0555	.8684	.6774	.5000	.3703	.2645	.1497	.0394	.0987	.2000	.3290	.4510	.5942	.7703	.9626	1.1174
	α_m	-.0311	-.0462	-.0600	-.0728	-.0767	-.0803	-.0796	-.0808	-.0813	-.0805	-.0791	-.0757	-.0669	-.0537	-.0421	-.0223
	α_o																
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.035	1.040	1.046	1.052	1.056	1.061	1.065	1.071	1.068	1.063	1.058	1.053	1.048	1.043	1.037	1.034
	.025	-2.885	-1.912	-1.161	-.523	-.158	.103	.339	.524	.443	.236	-.033	-.399	-.851	-1.564	-2.351	-3.024
	.050	-2.176	-1.561	-1.049	-.617	-.354	-.147	.039	.205	.131	-.045	-.264	-.532	-.845	-1.321	-1.851	-2.699
	.100	-1.592	-1.207	-.872	-.593	-.411	-.264	-.124	.006	-.051	-.188	-.354	-.537	-.745	-1.036	-1.401	-1.984
	.200	-1.200	-.986	-.777	-.602	-.476	-.375	-.282	-.186	-.229	-.326	-.444	-.566	-.701	-.887	-1.103	-1.218
	.300	-1.008	-.872	-.731	-.605	-.517	-.441	-.373	-.300	-.331	-.405	-.497	-.584	-.679	-.811	-.955	-1.008
	.400	-.866	-.791	-.688	-.602	-.536	-.477	-.430	-.371	-.398	-.452	-.526	-.589	-.658	-.748	-.845	-.867
	.500	-.741	-.709	-.652	-.591	-.541	-.502	-.471	-.429	-.449	-.489	-.542	-.581	-.633	-.689	-.747	-.743
	.600	-.612	-.625	-.603	-.573	-.541	-.515	-.497	-.467	-.484	-.506	-.547	-.569	-.598	-.627	-.642	-.610
	.700	-.441	-.488	-.501	-.508	-.490	-.472	-.440	-.445	-.456	-.472	-.505	-.514	-.511	-.505	-.485	-.439
	.800	-.211	-.260	-.314	-.353	-.357	-.360	-.353	-.338	-.350	-.358	-.383	-.356	-.346	-.297	-.246	-.229
	.900	-.086	-.024	-.019	-.083	-.085	-.087	-.088	-.083	-.088	-.087	-.104	-.091	-.053	-.016	-.039	-.101
	.950	-.078	.010	.066	.099	.097	.098	.104	.107	.106	.101	.078	.093	.097	.036	-.039	-.084
Lower surface	.0375	.836	.651	.411	.129	-.085	-.279	-.516	-.757	-.643	-.407	-.197	.052	.284	.532	.747	.853
	.075	.682	.515	.325	.111	-.041	-.175	-.332	-.489	-.414	-.257	-.123	.058	.224	.414	.595	.699
	.150	.498	.367	.220	.070	-.039	-.127	-.248	-.344	-.296	-.193	-.099	.026	.150	.289	.426	.520
	.250	.369	.264	.155	.032	-.049	-.125	-.205	-.275	-.241	-.171	-.099	.001	.097	.203	.309	.383
	.350	.285	.198	.112	.017	-.041	-.092	-.155	-.208	-.181	-.126	-.081	-.008	.065	.130	.235	.297
	.450	.219	.183	.073	-.001	-.044	-.084	-.136	-.177	-.153	-.111	-.081	-.022	.037	.105	.172	.229
	.550	.144	.094	.039	-.018	-.058	-.084	-.126	-.154	-.139	-.107	-.083	-.040	.009	.095	.113	.151
	.650	.085	.050	.014	-.027	-.055	-.074	-.104	-.125	-.114	-.092	-.081	-.045	-.009	.029	.063	.087
	.750	.027	.013	-.009	-.030	-.044	-.051	-.073	-.085	-.077	-.065	-.062	-.043	-.022	-.006	.012	.023
	.850	.006	.013	.014	.014	.010	.015	.003	-.003	.006	.012	.002	.006	.012	.022	0	-.003
	.925	-.011	.021	.050	.070	.084	.088	.082	.078	.085	.086	.071	.073	.050	.033	0	-.020
	.975	-.057	.010	.063	.123	.135	.144	.137	.138	.141	.143	.131	.127	.084	.036	-.027	-.071
	[a]1.000	-.082	0	.071	.153	.160	.172	.160	.169	.176	.172	.165	.153	.105	.033	-.048	-.119

[a]No orifice.

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-510.00 PROPELLER BLADE SECTION ($x = 0.45$; $\beta_x = 59.25°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(b) N = 1350 rpm.

	J	2.647	2.473	2.329	2.207	2.087	1.978	1.872	1.768	1.819	1.926	2.027	2.143	2.269	2.408	2.550
	M_x	.626	.590	.565	.543	.522	.504	.487	.468	.477	.495	.513	.532	.557	.582	.609
	α_x'	-2.64	-.99	.51	1.89	3.29	4.80	6.31	7.90	7.10	5.53	4.14	2.66	1.17	-.33	-1.75
	$\Delta\beta$	-.08	-.02	.03	.08	.11	.16	.20	.23	.21	.18	.14	.09	.05	0	-.04
	α_l	.10	.43	.75	1.05	1.39	1.65	1.94	2.25	2.10	1.80	1.55	1.23	.92	.59	.26
	c_n	.0426	.1852	.3187	.4445	.5800	.6858	.7981	.9200	.8606	.7426	.6439	.5148	.3890	.2503	.1097
	c_m	-.0751	-.0726	-.0711	-.0706	-.0657	-.0560	-.0475	-.0408	-.0444	-.0524	-.0582	-.0688	-.0688	-.0705	-.0719
	c_o															
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.101	1.090	1.082	1.077	1.070	1.065	1.061	1.056	1.059	1.063	1.067	1.072	1.080	1.087	1.095
	.025	.549	.289	-.021	-.354	-.769	-1.188	-1.669	-2.065	-1.922	-1.425	-1.007	-.554	-.190	.145	.425
	.050	.228	-.008	-.262	-.518	-.808	-1.096	-1.434	-1.734	-1.570	-1.256	-.970	-.662	-.393	-.127	.109
	.100	.015	-.172	-.362	-.544	-.737	-.922	-1.105	-1.319	-1.216	-.999	-.843	-.642	-.452	-.260	-.080
	.200	-.195	-.329	-.466	-.593	-.714	-.828	-.948	-1.062	-1.007	-.882	-.776	-.655	-.526	-.393	-.265
	.300	-.322	-.424	-.524	-.616	-.701	-.787	-.863	-.933	-.901	-.820	-.743	-.659	-.565	-.467	-.374
	.400	-.412	-.483	-.558	-.627	-.683	-.743	-.794	-.832	-.816	-.761	-.712	-.655	-.586	-.513	-.447
	.500	-.474	-.521	-.574	-.623	-.657	-.697	-.722	-.739	-.732	-.704	-.675	-.642	-.590	-.540	-.495
	.600	-.519	-.539	-.574	-.605	-.623	-.644	-.647	-.641	-.647	-.635	-.628	-.616	-.579	-.547	-.525
	.700	-.486	-.491	-.508	-.525	-.526	-.526	-.511	-.480	-.495	-.508	-.518	-.526	-.504	-.488	-.480
	.800	-.351	-.342	-.346	-.350	-.339	-.313	-.277	-.228	-.253	-.283	-.317	-.344	-.333	-.334	-.340
	.900	-.041	-.027	-.029	-.033	-.025	-.008	-.007	-.029	-.015	.002	-.004	-.030	-.016	-.022	-.032
	.950	.120	.118	.103	.090	.093	.052	.024	-.010	.009	.044	.076	.095	.101	.115	.119
Lower surface	.0375	-.789	-.470	-.196	.020	.238	.391	.544	.687	.620	.478	.338	.136	-.063	-.319	-.637
	.075	-.544	-.300	-.121	.033	.195	.309	.428	.548	.493	.378	.272	.121	-.022	-.205	-.418
	.150	-.392	-.229	-.101	.007	.127	.207	.299	.395	.348	.262	.181	.068	-.030	-.157	-.306
	.250	-.315	-.196	-.111	-.035	.059	.120	.197	.283	.242	.165	.104	.016	-.059	-.146	-.253
	.350	-.243	-.149	-.081	-.023	.050	.096	.153	.220	.186	.133	.085	.016	-.038	-.106	-.196
	.450	-.209	-.133	-.079	-.033	.027	.062	.112	.165	.136	.091	.052	-.002	-.044	-.098	-.173
	.550	-.187	-.129	-.087	-.052	-.003	.023	.060	.108	.086	.049	.020	-.024	-.059	-.102	-.160
	.650	-.156	-.112	-.085	-.059	-.019	-.003	.024	.061	.043	.017	-.004	-.037	-.059	-.093	-.137
	.750	-.111	-.084	-.069	-.052	-.025	-.020	-.002	.023	.009	-.005	-.015	-.037	-.048	-.072	-.101
	.850	-.022	-.010	-.011	-.008	.009	-.001	.006	.015	.009	.007	.008	.005	.001	-.007	-.021
	.925	.056	.057	.049	.043	.047	.018	.009	.004	.009	.019	.036	.051	.052	.056	.053
	.975	.108	.100	.083	.073	.072	-.014	-.012	-.034	-.023	.004	.041	.077	.083	.096	.103
	[a]1.000	.165	.170	.131	.117	.132	.044	-.036	-.064	-.050	-.014	.063	.100	.123	.160	.168

[a]No orifice.

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-510.00 PROPELLER BLADE SECTION ($x = 0.45$; $\beta_x = 59.25°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(c) N = 1500 rpm.

	J	2.584	2.511	2.431	2.345	2.284	2.201	2.139	2.068	1.983	2.021	2.084	2.158	2.227	2.318	2.395	2.480	2.547
	M_x	.690	.674	.654	.635	.621	.604	.592	.577	.560	.569	.582	.595	.612	.629	.646	.664	.678
	α_x'	-2.07	-1.37	-.57	.33	1.01	1.96	2.71	3.61	4.74	4.22	3.40	2.48	1.65	.63	-.20	-1.07	-.72
	$\Delta\beta$	-.07	-.03	.03	.10	.15	.20	.22	.23	.23	.23	.23	.21	.19	.12	.06	0	-.05
	α_1	.11	.30	.49	.70	.86	1.14	1.30	1.51	1.70	1.61	1.45	1.23	1.06	.80	.58	.38	.23
	c_n	.0477	.1271	.2103	.2948	.3800	.4806	.5458	.6303	.7071	.6703	.6065	.5174	.4458	.3368	.2484	.1616	.0974
	c_m	-.0775	-.0728	-.0734	-.0728	-.0698	-.0710	-.0693	-.0665	-.0577	-.0616	-.0695	-.0708	-.0714	-.0719	-.0713	-.0735	-.0755
	c_a																	
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.125	1.119	1.111	1.104	1.100	1.094	1.090	1.085	1.080	1.083	1.087	1.091	1.096	1.102	1.109	1.115	1.120
	.025	.523	.420	.263	.090	-.110	-.367	-.568	-.843	-1.197	-1.033	-.778	-.488	-.262	-.002	.190	.349	.475
	.050	.202	.102	-.039	-.190	-.344	-.542	-.691	-.889	-1.137	-1.019	-.845	-.636	-.466	-.262	-.101	.040	.154
	.100	-.008	-.091	-.204	-.319	-.431	-.572	-.676	-.810	-.962	-.893	-.780	-.639	-.521	-.370	-.252	-.143	-.047
	.200	-.227	-.292	-.372	-.460	-.529	-.628	-.697	-.783	-.871	-.831	-.766	-.676	-.596	-.491	-.407	-.330	-.257
	.300	-.361	-.411	-.473	-.537	-.581	-.655	-.702	-.762	-.824	-.796	-.749	-.687	-.633	-.553	-.497	-.440	-.385
	.400	-.460	-.496	-.538	-.584	-.610	-.664	-.697	-.739	-.780	-.760	-.734	-.691	-.653	-.594	-.556	-.515	-.478
	.500	-.522	-.545	-.570	-.603	-.612	-.650	-.673	-.700	-.723	-.712	-.697	-.671	-.646	-.603	-.582	-.557	-.532
	.600	-.567	-.578	-.584	-.604	-.600	-.626	-.637	-.653	-.660	-.657	-.653	-.639	-.626	-.599	-.591	-.583	-.570
	.700	-.513	-.514	-.512	-.522	-.509	-.525	-.531	-.539	-.529	-.534	-.539	-.536	-.532	-.514	-.514	-.513	-.514
	.800	-.337	-.337	-.331	-.336	-.317	-.325	-.324	-.327	-.296	-.308	-.328	-.332	-.333	-.323	-.329	-.331	-.338
	.900	.010	.008	.006	-.004	.011	.004	-.002	-.007	.006	.004	-.007	-.006	-.003	.012	.017	.019	.011
	.950	.126	.122	.116	.102	.105	.091	.083	.084	.055	.072	.083	.082	.088	.105	.110	.115	.125
Lower surface	.0375	-.969	-.573	-.448	-.287	-.106	.051	.154	.271	.396	.341	.246	.110	-.017	-.192	-.368	-.532	-.607
	.075	-.497	-.419	-.287	-.183	-.047	.062	.137	.223	.315	.274	.204	.102	.013	-.111	-.237	-.345	-.459
	.150	-.382	-.312	-.220	-.146	-.047	.030	.085	.145	.213	.183	.131	.058	-.006	-.092	-.183	-.265	-.339
	.250	-.315	-.261	-.194	-.146	-.073	-.015	.026	.070	.124	.099	.060	.005	-.042	-.106	-.168	-.226	-.281
	.350	-.246	-.204	-.149	-.109	-.046	-.003	.029	.066	.104	.086	.057	.012	-.028	-.077	-.126	-.174	-.217
	.450	-.215	-.182	-.140	-.108	-.053	-.017	.009	.035	.067	.054	.030	-.008	-.037	-.077	-.118	-.157	-.191
	.550	-.197	-.171	-.138	-.114	-.066	-.039	-.017	.004	.029	.016	-.001	-.032	-.054	-.085	-.121	-.152	-.180
	.650	-.170	-.151	-.127	-.111	-.070	-.048	-.032	-.017	-.004	-.010	-.020	-.043	-.061	-.085	-.113	-.135	-.152
	.750	-.125	-.116	-.101	-.093	-.061	-.046	-.034	-.027	-.020	-.023	-.026	-.043	-.056	-.070	-.091	-.105	-.112
	.850	-.032	-.032	-.026	-.027	-.008	.001	.005	.006	-.004	0	.007	-.001	-.005	-.011	-.021	-.025	-.026
	.925	.050	.040	.043	.037	.049	.048	.048	.036	.021	.028	.045	.043	.045	.045	.043	.046	.054
	.975	.099	.090	.083	.077	.079	.071	.065	.052	.015	.030	.060	.067	.070	.078	.077	.082	.096
	[a]1.000	.120	.115	.101	.098	.092	.088	.074	.067	0	.033	.071	.078	.084	.090	.104	.115	.114

[a]No orifice.

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-510.00 PROPELLER BLADE SECTION ($x = 0.45$; $\beta_x = 59.25°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(a) N = 1600 rpm.

	J	2.136	2.227	2.330	2.424	2.514	2.469	2.381	2.295	2.188	2.108
	M_R	.634	.656	.677	.701	.719	.708	.687	.667	.641	.626
	α_R[1]	2.75	1.66	.50	-.50	-1.40	-.96	-.05	.88	2.12	3.09
	$\Delta\beta$	.16	.11	.04	-.04	-.09	-.06	-.01	.06	.13	.17
	α_i	1.36	1.11	.81	.56	.24	.40	.67	.89	1.20	1.45
	c_n	.5716	.4671	.3432	.2368	.1013	.1703	.2892	.3781	.5032	.6052
	c_m	-.0744	-.0777	-.0805	-.0832	-.0855	-.0849	-.0826	-.0798	-.0760	-.0731
	c_a				.0162	.0209	.0204				
	c/b	Pressure coefficient, P									
Upper surface	[a]0.000	1.104	1.112	1.120	1.129	1.137	1.132	1.124	1.116	1.107	1.102
	.025	-.537	-.213	.081	.300	.478	.395	.210	-.014	-.342	-.648
	.050	-.701	-.452	-.205	-.016	.153	.075	-.093	-.284	-.545	-.778
	.100	-.710	-.527	-.341	-.189	-.048	-.117	-.253	-.401	-.594	-.758
	.200	-.743	-.623	-.492	-.379	-.269	-.321	-.425	-.531	-.660	-.768
	.300	-.763	-.681	-.585	-.503	-.414	-.455	-.536	-.609	-.698	-.773
	.400	-.760	-.707	-.641	-.586	-.523	-.553	-.608	-.651	-.710	-.760
	.500	-.730	-.697	-.658	-.630	-.592	-.608	-.641	-.659	-.691	-.724
	.600	-.673	-.676	-.658	-.656	-.644	-.648	-.653	-.648	-.660	-.676
	.700	-.560	-.564	-.562	-.570	-.569	-.572	-.569	-.548	-.547	-.551
	.800	-.331	-.333	-.335	-.344	-.345	-.349	-.344	-.326	-.323	-.323
	.900	.001	.012	.022	.034	.036	.036	.033	.022	.011	-.001
	.950	.065	.076	.084	.092	.102	.101	.093	.087	.080	.070
Lower surface	.0375	.145	-.030	-.245	-.468	-1.069	-.588	-.367	-.164	.057	.201
	.075	.132	0	-.152	-.309	-.438	-.377	-.237	-.096	.065	.174
	.150	.078	-.014	-.111	-.225	-.351	-.288	-.174	-.078	.034	.109
	.250	.024	-.043	-.122	-.203	-.295	-.245	-.171	-.089	-.004	.051
	.350	.023	-.032	-.093	-.152	-.230	-.190	-.126	-.071	-.001	.044
	.450	.004	-.041	-.090	-.137	-.202	-.169	-.115	-.074	-.016	.020
	.550	-.022	-.059	-.099	-.133	-.188	-.160	-.117	-.085	-.039	-.008
	.650	-.036	-.065	-.093	-.115	-.157	-.138	-.105	-.085	-.049	-.025
	.750	-.039	-.056	-.074	-.085	-.115	-.098	-.079	-.071	-.045	-.032
	.850	.001	-.003	-.007	-.007	-.024	-.013	-.006	-.008	.004	.006
	.925	.046	.056	.051	.057	.052	.058	.057	.050	.053	.047
	.975	.061	.066	.072	.077	.081	.082	.078	.070	.070	.061
	[a]1.000	.071	.071	.084	.086	.093	.098	.083	.075	.069	.065

[a]No orifice.

NACA

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-510.00 PROPELLER BLADE SECTION ($x = 0.45$; $\beta_x = 59.25°$; $\beta_{0.75R} = 45°$; $B = 2$) - Continued

(e) $M = 0.56$.

	J	2.655	2.600	2.559	2.512	2.466	2.429	2.384	2.347	2.318	2.280	2.252	2.214	2.178	2.140	2.117
	M_x	.646	.646	.649	.652	.655	.657	.661	.659	.665	.668	.673	.675	.676	.676	.678
	α_x'	-2.71	-2.22	-1.83	-1.38	-.92	-.55	-.08	.31	.63	1.05	1.37	1.81	2.24	2.70	2.98
	$A\beta$	-.08	-.05	-.03	0	.03	.05	.08	.10	.11	.13	.14	.15	.16	.17	.18
	α_i	.04	.13	.19	.29	.42	.47	.57	.67	.74	.87	.97	1.08	1.15	1.28	1.34
	c_n	.0168	.0542	.0826	.1239	.1806	.2000	.2406	.2832	.3148	.3690	.4084	.4548	.4826	.5355	.5613
	c_m	-.0782	-.0778	-.0773	-.0770	-.0747	-.0760	-.0754	-.0749	-.0754	-.0746	-.0760	-.0721	-.0708	-.0710	-.0698
	c_p															
	x/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.108	1.109	1.110	1.111	1.112	1.113	1.114	1.113	1.116	1.116	1.119	1.120	1.120	1.120	1.120
	.025	.573	.519	.480	.413	.327	.282	.205	.129	.127	-.033	-.111	-.189	-.263	-.383	-.423
	.050	.250	.198	.158	.097	.022	-.021	-.090	-.156	-.214	-.298	-.365	-.428	-.492	-.592	-.626
	.100	.040	-.009	-.041	-.093	-.154	-.190	-.244	-.294	-.341	-.405	-.460	-.511	-.562	-.639	-.665
	.200	-.176	-.215	-.244	-.287	-.332	-.362	-.401	-.445	-.485	-.534	-.579	-.621	-.661	-.721	-.744
	.300	-.305	-.341	-.365	-.400	-.436	-.462	-.501	-.532	-.564	-.603	-.645	-.679	-.715	-.762	-.782
	.400	-.399	-.429	-.451	-.480	-.506	-.531	-.564	-.588	-.614	-.646	-.682	-.710	-.739	-.778	-.795
	.500	-.464	-.488	-.505	-.527	-.546	-.564	-.590	-.607	-.627	-.648	-.674	-.695	-.723	-.737	-.745
	.600	-.510	-.528	-.544	-.558	-.567	-.583	-.599	-.609	-.622	-.634	-.653	-.665	-.675	-.686	-.689
	.700	-.477	-.489	-.497	-.503	-.503	-.512	-.522	-.522	-.527	-.528	-.536	-.538	-.541	-.537	-.533
	.800	-.343	-.344	-.343	-.340	-.328	-.328	-.328	-.323	-.319	-.309	-.308	-.302	-.293	-.280	-.268
	.900	-.023	-.016	-.007	-.003	.011	.014	.016	.019	.020	.023	.018	.021	.024	.024	.030
	.950	.131	.128	.125	.123	.120	.116	.108	.103	.100	.096	.087	.084	.079	.075	.078
Lower surface	.0375	-.855	-.705	-.657	-.598	-.497	-.456	-.377	-.298	-.239	-.151	-.094	-.035	.014	.096	.121
	.075	-.542	-.499	-.464	-.405	-.316	-.289	-.244	-.187	-.145	-.079	-.039	.005	.043	.100	.119
	.150	-.390	-.362	-.338	-.300	-.242	-.222	-.187	-.147	-.119	-.073	-.045	-.014	.012	.056	.071
	.250	-.314	-.293	-.276	-.250	-.207	-.193	-.168	-.142	-.125	-.098	-.073	-.048	-.029	.006	.016
	.350	-.240	-.227	-.213	-.192	-.157	-.148	-.128	-.106	-.089	-.062	-.048	-.029	-.014	.015	.022
	.450	-.260	-.194	-.187	-.171	-.143	-.134	-.122	-.103	-.089	-.067	-.056	-.040	-.029	-.005	.004
	.550	-.181	-.178	-.171	-.160	-.136	-.133	-.123	-.109	-.100	-.079	-.073	-.060	-.050	-.029	-.025
	.650	-.148	-.150	-.145	-.139	-.120	-.118	-.114	-.103	-.097	-.081	-.077	-.069	-.061	-.044	-.043
	.750	-.101	-.107	-.105	-.103	-.091	-.093	-.090	-.084	-.081	-.070	-.068	-.063	-.058	-.044	-.044
	.850	-.011	-.019	-.020	-.023	-.014	-.018	-.020	-.018	-.019	-.011	-.014	-.012	-.012	-.005	-.005
	.925	.069	.062	.059	.053	.056	.049	.045	.047	.044	.045	.041	.040	.037	.038	.035
	.975	.115	.108	.103	.097	.095	.086	.081	.078	.075	.075	.067	.066	.060	.055	.044
	[a]1.000	.135	.125	.128	.124	.112	.102	.102	.092	.082	.093	.070	.082	.072	.065	.044

[a]No orifice.

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-510.00 PROPELLER BLADE SECTION ($x = 0.45$; $\beta_x = 59.25°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(r) M = 0.58.

	J	2.138	2.164	2.196	2.216	2.247	2.271	2.299	2.327	2.357	2.384	2.419	2.447	2.482	2.510	2.544	2.583
	M_x	.703	.700	.699	.695	.694	.691	.689	.687	.684	.683	.680	.678	.676	.674	.672	.669
	α_x'	2.72	2.41	2.02	1.79	1.42	1.15	.84	.53	.21	−.08	−.45	−.73	−1.08	−1.36	−1.69	−2.06
	$\Delta\beta$	.16	.15	.13	.13	.11	.10	.09	.07	.05	.04	.02	.01	−.01	−.03	−.04	−.06
	α_1	1.28	1.19	1.12	1.06	.98	.91	.82	.74	.68	.62	.53	.44	.38	.33	.27	.16
	c_n	.5381	.4994	.4703	.4458	.4135	.3845	.3490	.3161	.2897	.2632	.2245	.1897	.1639	.1406	.1055	.0690
	c_m	−.0793	−.0767	−.0752	−.0754	−.0744	−.0752	−.0767	−.0749	−.0755	−.0770	−.0767	−.0770	−.0773	−.0777	−.0778	−.0780
	c_o	−.0060	−.0031														
	x/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.131	1.129	1.129	1.127	1.127	1.126	1.125	1.124	1.123	1.122	1.121	1.120	1.119	1.119	1.118	1.117
	.025	−.306	−.223	−.157	−.114	−.055	−.006	.053	.108	.173	.217	.290	.337	.386	.423	.464	.521
	.050	−.538	−.471	−.414	−.374	−.324	−.281	−.232	−.108	−.127	−.088	−.022	.021	.069	.103	.141	.197
	.100	−.615	−.556	−.511	−.477	−.434	−.401	−.361	−.324	−.277	−.247	−.192	−.158	−.119	−.088	−.057	−.008
	.200	−.720	−.670	−.634	−.602	−.570	−.541	−.510	−.479	−.440	−.415	−.371	−.342	−.311	−.286	−.259	−.219
	.300	−.794	−.745	−.716	−.685	−.656	−.630	−.602	−.577	−.542	−.521	−.483	−.458	−.429	−.409	−.387	−.354
	.400	−.833	−.789	−.762	−.730	−.705	−.680	−.657	−.636	−.607	−.588	−.554	−.533	−.508	−.491	−.473	−.444
	.500	−.784	−.753	−.739	−.716	−.697	−.682	−.666	−.651	−.631	−.617	−.591	−.576	−.556	−.542	−.529	−.506
	.600	−.729	−.706	−.702	−.686	−.676	−.667	−.659	−.649	−.634	−.629	−.609	−.597	−.584	−.573	−.566	−.540
	.700	−.551	−.547	−.552	−.549	−.550	−.548	−.549	−.548	−.542	−.547	−.534	−.529	−.521	−.519	−.516	−.509
	.800	−.286	−.288	−.296	−.299	−.303	−.306	−.317	−.320	−.322	−.338	−.337	−.339	−.340	−.348	−.352	−.354
	.900	.012	.019	.020	.026	.028	.033	.032	.033	.035	.035	.025	.020	.016	.017	.008	0
	.950	.057	.064	.064	.070	.074	.079	.084	.087	.095	.108	.115	.119	.123	.127	.129	.130
Lower surface	.0375	.066	.016	−.037	−.066	−.114	−.153	−.210	−.264	−.322	−.376	−.457	−.513	−.542	−.558	−.588	−.717
	.075	.073	.036	−.002	−.024	−.058	−.085	−.126	−.165	−.206	−.244	−.293	−.327	−.364	−.395	−.445	−.492
	.150	.038	.013	−.015	−.029	−.053	−.071	−.101	−.128	−.152	−.179	−.220	−.249	−.276	−.297	−.325	−.363
	.250	−.007	−.025	−.046	−.054	−.073	−.085	−.110	−.134	−.155	−.174	−.198	−.217	−.234	−.250	−.271	−.298
	.350	−.003	−.016	−.034	−.042	−.055	−.065	−.084	−.101	−.114	−.130	−.149	−.164	−.179	−.192	−.208	−.227
	.450	−.020	−.031	−.046	−.050	−.062	−.068	−.086	−.099	−.108	−.121	−.135	−.148	−.159	−.168	−.181	−.196
	.550	−.045	−.051	−.065	−.067	−.077	−.083	−.095	−.108	−.113	−.122	−.134	−.144	−.151	−.158	−.167	−.177
	.650	−.056	−.062	−.072	−.073	−.080	−.083	−.095	−.102	−.105	−.113	−.119	−.127	−.130	−.133	−.141	−.146
	.750	−.055	−.057	−.066	−.066	−.070	−.071	−.078	−.084	−.083	−.086	−.090	−.095	−.096	−.097	−.102	−.103
	.850	−.008	−.008	−.012	−.010	−.012	−.010	−.016	−.018	−.014	−.013	−.015	−.016	−.015	−.012	−.014	−.013
	.925	.044	.046	.044	.046	.047	.048	.045	.045	.050	.053	.056	.056	.059	.063	.064	.066
	.975	.064	.065	.063	.064	.065	.067	.065	.066	.074	.082	.086	.090	.094	.102	.103	.110
	[a]1.000	.074	.074	.088	.072	.071	.072	.080	.076	.085	.092	.100	.107	.113	.118	.119	.127

[a]No orifice.

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-510.00 PROPELLER BLADE SECTION ($x = 0.45$; $\beta_x = 59.25^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(g) M = 0.60.

	J	2.169	2.192	2.217	2.238	2.266	2.293	2.319	2.346	2.378	2.411	2.430	2.468	2.492	2.525	2.561
	M_x	.725	.723	.718	.716	.713	.711	.709	.706	.707	.705	.700	.701	.696	.693	.691
	α_x,	2.34	2.07	1.78	1.53	1.21	.90	.61	.32	-.02	-.36	-.56	-.95	-1.18	-1.51	-1.85
	$\Delta\beta$	.18	.16	.14	.11	.08	.06	.03	.01	-.02	-.04	-.05	-.06	-.08	-.09	-.10
	α_i	1.14	1.09	1.01	.95	.86	.79	.72	.65	.58	.51	.45	.38	.32	.25	.17
	c_n	.4768	.4606	.4265	.4000	.3626	.3323	.3045	.2735	.2492	.2187	.1935	.1619	.1368	.1065	.0729
	c_m	-.0808	-.0773	-.0724	-.0752	-.0757	-.0769	-.0770	-.0793	-.0793	-.0770	-.0770	-.0788	-.0777	-.0793	-.0793
	c_o	.0009	.0005	.0021	.0040	.0072	.0094	.0112	.0132	.0151	.0163	.0175	.0198			
	x/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.139	1.138	1.136	1.135	1.134	1.133	1.133	1.132	1.132	1.131	1.129	1.129	1.128	1.126	1.126
	.025	.032	-.102	-.060	-.010	.065	.119	.160	.217	.266	.304	.344	.399	.437	.479	.516
	.050	-.408	-.376	-.338	-.293	-.230	-.179	-.141	-.093	-.047	-.012	.025	.079	.112	.153	.189
	.100	-.507	-.482	-.445	-.411	-.358	-.319	-.288	-.247	-.210	-.181	-.152	-.108	-.080	-.046	-.013
	.200	-.657	-.627	-.594	-.564	-.520	-.486	-.460	-.427	-.395	-.368	-.346	-.306	-.286	-.257	-.227
	.300	-.760	-.723	-.692	-.663	-.627	-.595	-.571	-.542	-.513	-.488	-.468	-.435	-.417	-.390	-.364
	.400	-.859	-.810	-.777	-.741	-.705	-.673	-.650	-.623	-.596	-.569	-.554	-.522	-.508	-.485	-.459
	.500	-.830	-.784	-.756	-.731	-.709	-.688	-.670	-.652	-.630	-.609	-.598	-.575	-.564	-.544	-.524
	.600	-.768	-.736	-.715	-.700	-.691	-.679	-.670	-.688	-.674	-.627	-.618	-.603	-.597	-.583	-.566
	.700	-.557	-.550	-.541	-.543	-.546	-.549	-.552	-.549	-.545	-.536	-.536	-.530	-.532	-.524	-.514
	.800	-.293	-.291	-.289	-.295	-.301	-.311	-.318	-.322	-.326	-.323	-.330	-.333	-.341	-.343	-.340
	.900	.015	.021	.023	.023	.021	.019	.015	.014	.012	.017	.009	.008	-.002	-.006	-.007
	.950	.096	.104	.109	.111	.111	.112	.111	.115	.116	.120	.122	.125	.122	.126	.130
Lower surface	.0375	-.041	-.061	-.093	-.139	-.202	-.259	-.307	-.363	-.425	-.463	-.514	-.530	-.542	-.630	-.790
	.075	-.146	.009	-.043	-.076	-.122	-.162	-.196	-.237	-.277	-.295	-.326	-.371	-.419	-.452	-.478
	.150	-.023	-.029	-.046	-.068	-.098	-.124	-.147	-.179	-.209	-.223	-.248	-.281	-.314	-.338	-.355
	.250	-.059	-.061	-.071	-.088	-.111	-.132	-.153	-.169	-.190	-.198	-.216	-.239	-.265	-.280	-.295
	.350	-.048	-.047	-.057	-.071	-.088	-.102	-.117	-.132	-.148	-.155	-.168	-.186	-.208	-.221	-.228
	.450	-.060	-.059	-.065	-.073	-.090	-.102	-.113	-.124	-.138	-.140	-.153	-.167	-.184	-.194	-.199
	.550	-.084	-.080	-.085	-.090	-.102	-.111	-.121	-.129	-.139	-.140	-.149	-.131	-.173	-.179	-.181
	.650	-.095	-.089	-.091	-.096	-.104	-.109	-.115	-.122	-.128	-.126	-.133	-.140	-.151	-.154	-.151
	.750	-.089	-.082	-.084	-.088	-.091	-.092	-.095	-.099	-.100	-.100	-.104	-.105	-.114	-.114	-.109
	.850	-.034	-.026	-.026	-.027	-.026	-.025	-.012	-.024	-.024	-.022	-.022	-.020	-.025	-.022	-.017
	.925	-.026	.035	.036	.037	.041	.043	.044	.047	.050	.054	.054	.059	.056	.061	.067
	.975	.064	.072	.075	.080	.085	.089	.090	.096	.099	.103	.107	.112	.141	.117	.124
	[a]1.000	.085	.099	.094	.108	.107	.095	.120	.122	.122	.132	.138	.155	.175	.140	.156

[a]No orifice.

TABLE 3.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-510.00 PROPELLER BLADE SECTION ($x = 0.45$; $\beta_x = 59.25°$; $\beta_{0.75R} = 45°$; $B = 2$) - Concluded

(h) $M = 0.65$.

	J	2.123	2.139	2.172	2.179	2.206	2.218	2.253	2.273	2.299	2.303	2.333	2.356	2.380	2.417
	M_x	.808	.801	.801	.794	.791	.785	.788	.782	.780	.774	.772	.770	.765	.764
	α_r'	2.91	2.71	2.31	2.23	1.90	1.76	1.36	1.13	.84	.80	.47	.21	-.04	-.43
	$\Delta\beta$	.11	.09	.06	.05	.03	.01	-.01	-.03	-.05	-.05	-.07	-.09	-.11	-.13
	c_l	1.06	1.02	.96	.91	.86	.83	.75	.71	.64	.62	.56	.46	.40	.33
	c_n	.4419	.4265	.4013	.3832	.3600	.3503	.3161	.2987	.2697	.2626	.2374	.1968	.1703	.1400
	c_m	-.0968	-.0983	-.0960	-.0911	-.0934	-.0921	-.0901	-.0888	-.0875	-.0888	-.0849	-.0836	-.0846	-.0846
	c_a	.0240	.0248	.0234	.0230	.0232	.0222	.0220	.0191	.0197	.0201	.0199	.0203	.0205	.0210
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.174	1.171	1.171	1.168	1.166	1.164	1.165	1.162	1.162	1.159	1.158	1.158	1.155	1.155
	.025	.062	.081	.118	.133	.171	.185	.224	.239	.282	.291	.326	.368	.395	.436
	.050	-.231	-.217	-.183	-.171	-.137	-.123	-.088	-.074	-.033	-.025	.007	.046	.072	.113
	.100	-.361	-.348	-.318	-.310	-.284	-.276	-.244	-.235	-.200	-.197	-.170	-.136	-.116	-.079
	.200	-.566	-.548	-.512	-.505	-.483	-.476	-.449	-.440	-.409	-.407	-.383	-.355	-.337	-.304
	.300	-.654	-.659	-.637	-.638	-.620	-.618	-.595	-.587	-.560	-.559	-.535	-.509	-.493	-.461
	.400	-.789	-.795	-.771	-.775	-.760	-.760	-.740	-.736	-.713	-.714	-.691	-.667	-.652	-.612
	.500	-.909	-.921	-.895	-.896	-.880	-.875	-.845	-.827	-.800	-.800	-.779	-.750	-.732	-.693
	.600	-1.002	-1.006	-.976	-.975	-.960	-.960	-.939	-.919	-.878	-.863	-.831	-.799	-.790	-.766
	.700	-.499	-.473	-.464	-.507	-.554	-.613	-.636	-.668	-.665	-.713	-.700	-.685	-.669	-.625
	.800	-.368	-.370	-.327	-.310	-.294	-.270	-.246	-.230	-.228	-.246	-.248	-.263	-.285	-.297
	.900	-.286	-.293	-.250	-.228	-.202	-.166	-.129	-.077	-.040	-.029	-.002	.011	.016	.026
	.950	-.181	-.198	-.164	-.146	-.131	-.100	-.065	-.020	.009	.019	.039	.058	.070	.088
Lower surface	.0375	-.102	-.141	-.167	-.207	-.257	-.294	-.331	-.358	-.415	-.469	-.521	-.640	-.745	-.868
	.075	-.050	-.080	-.096	-.128	-.165	-.193	-.217	-.235	-.277	-.312	-.338	-.362	-.364	-.370
	.150	-.056	-.079	-.088	-.110	-.136	-.156	-.170	-.182	-.208	-.238	-.257	-.289	-.312	-.328
	.250	-.092	-.109	-.115	-.132	-.155	-.171	-.183	-.192	-.209	-.230	-.242	-.263	-.278	-.289
	.350	-.086	-.101	-.101	-.118	-.135	-.148	-.155	-.162	-.174	-.193	-.200	-.218	-.230	-.237
	.450	-.105	-.117	-.115	-.128	-.142	-.153	-.158	-.162	-.170	-.187	-.191	-.204	-.213	-.216
	.550	-.142	-.152	-.144	-.157	-.168	-.178	-.178	-.179	-.183	-.197	-.197	-.206	-.212	-.210
	.650	-.168	-.174	-.164	-.184	-.181	-.188	-.183	-.179	-.180	-.189	-.186	-.191	-.194	-.188
	.750	-.181	-.183	-.165	-.172	-.176	-.178	-.170	-.163	-.157	-.164	-.157	-.158	-.157	-.148
	.850	-.132	-.129	-.107	-.108	-.108	-.105	-.095	-.084	-.075	-.079	-.069	-.066	-.064	-.053
	.925	-.086	-.082	-.054	-.051	-.046	-.039	-.027	-.015	0	-.003	.008	.014	.020	.036
	.975	-.084	-.092	-.058	-.046	-.037	-.022	-.010	.013	.031	.032	.043	.053	.069	.089
	[a]1.000	-.080	-.099	-.064	-.047	-.036	-.021	-.010	.025	.047	.048	.062	.072	.100	.106

[a]No orifice.

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-507.50 PROPELLER BLADE SECTION ($x = 0.60$; $\beta_x = 51.33^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2)

(a) N = 1140 rpm.

J	1.569	1.718	1.860	1.998	2.150	2.309	2.459	2.554	2.685	2.621	2.511	2.380	2.231	2.079	1.931	1.796	1.636
M_x	.419	.434	.454	.472	.489	.511	.532	.544	.562	.552	.535	.519	.497	.478	.461	.439	.426
α_x'	11.56	8.98	6.71	4.66	2.57	.56	-1.20	-2.24	-3.60	-2.95	-1.77	-.29	1.52	3.53	5.64	7.72	10.38
$\Delta\beta$	.50	.42	.35	.29	.20	.10	.01	-.06	-.14	-.10	-.03	.06	.15	.25	.32	.39	.46
α_i	2.84	2.58	2.13	1.75	1.35	.93	.56	.34	.02	.17	.41	.74	1.14	1.54	1.96	2.33	2.68
c_n	1.0852	.9890	.8264	.6832	.5316	.3661	.2229	.1361	.0071	.0665	.1642	.2923	.4465	.6019	.7587	.9000	1.0245
c_m	-.0562	-.0439	-.0378	-.0659	-.0767	-.0784	-.0789	-.0864	-.0900	-.0847	-.0819	-.0793	-.0787	-.0813	-.0619	-.0505	-.0442
c_q																	
c/b	Pressure coefficient, P																
Upper surface [a]0.000	1.045	1.048	1.053	1.057	1.061	1.067	1.073	1.076	1.081	1.078	1.073	1.069	1.063	1.059	1.054	1.050	1.047
.025	-1.807	-2.745	-1.643	-1.109	-.560	-.086	.264	.441	.618	.553	.380	.095	-.288	-.798	-1.399	-2.384	-2.040
.050	-1.750	-2.149	-1.430	-1.038	-.667	-.309	-.029	.117	.283	.217	.067	-.164	-.468	-.835	-1.244	-1.602	-1.807
.100	-1.730	-1.587	-1.098	-.842	-.603	-.356	-.158	-.050	.085	.030	-.092	-.252	-.468	-.714	-.972	-1.174	-1.768
.200	-1.475	-1.001	-.879	-.722	-.578	-.409	-.274	-.197	-.099	-.143	-.230	-.340	-.483	-.645	-.799	-.928	-1.414
.300	-1.156	-.826	-.785	-.679	-.578	-.454	-.351	-.298	-.214	-.247	-.319	-.400	-.508	-.624	-.731	-.819	-1.005
.400	-.898	-.738	-.733	-.662	-.596	-.499	-.423	-.379	-.315	-.347	-.402	-.460	-.542	-.629	-.697	-.747	-.761
.500	-.693	-.632	-.640	-.597	-.550	-.480	-.425	-.392	-.345	-.367	-.411	-.451	-.513	-.574	-.618	-.651	-.612
.600	-.542	-.536	-.561	-.534	-.511	-.458	-.420	-.396	-.364	-.380	-.411	-.439	-.483	-.524	-.547	-.557	-.502
.700	-.411	-.414	-.447	-.447	-.442	-.409	-.387	-.375	-.356	-.363	-.384	-.398	-.424	-.447	-.445	-.437	-.385
.800	-.324	-.295	-.319	-.349	-.371	-.361	-.360	-.357	-.360	-.359	-.367	-.363	-.365	-.362	-.335	-.302	-.288
.900	-.234	-.108	-.079	-.096	-.113	-.124	-.136	-.142	-.158	-.151	-.145	-.127	-.115	-.104	-.083	-.085	-.171
.950	-.197	-.027	.002	.035	.038	.052	.051	-.048	.036	.042	.045	.055	.055	.042	.025	-.013	-.125
Lower surface .0375	.807	.753	.630	.446	.222	-.043	-.349	-.550	-1.123	-.818	-.511	-.196	.079	.322	.546	.689	.777
.075	.669	.616	.504	.362	.194	.004	-.194	-.315	-.610	-.434	-.280	-.088	.104	.274	.444	.556	.637
.150	.505	.454	.358	.245	.114	-.017	-.154	-.229	-.360	-.297	-.217	-.097	.045	.169	.302	.400	.472
.250	.401	.363	.280	.196	.104	.009	-.083	-.140	-.222	-.189	-.389	-.035	.060	.147	.243	.318	.375
.350	.334	.304	.236	.171	.099	.028	-.047	-.091	-.149	-.128	-.082	-.009	.065	.132	.209	.264	.310
.450	.283	.235	.177	.122	.063	.004	-.052	-.086	-.127	-.114	-.082	-.023	.040	.092	.152	.201	.235
.550	.159	.157	.110	.068	.022	-.022	-.065	-.088	-.117	-.110	-.088	-.042	.005	.044	.093	.132	.154
.650	.119	.129	.090	.059	.028	-.005	-.043	-.061	-.079	-.074	-.058	-.023	.013	.042	.079	.108	.115
.750	.045	.073	.043	.029	.010	-.010	-.034	-.044	-.048	-.052	-.044	-.021	.003	.015	.039	.060	.050
.850	.038	.089	.069	.068	.061	.052	.042	.038	.034	.032	.034	.049	.065	.066	.070	.078	.050
.925	-.052	.036	.029	.035	.053	.061	.064	.065	.067	.065	.060	.062	.065	.052	.042	.029	-.021
.975	-.113	.023	.020	.037	.074	.094	.106	.114	.119	.119	.108	.104	.089	.068	.042	.017	-.057
[a]1.000	-.142	.029	.019	.072	.102	.119	.138	.140	.151	.145	.134	.128	.107	.095	.061	.035	-.060

[a]No orifice.

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-507.50 PROPELLER BLADE SECTION ($x = 0.60$; $\beta_x = 51.33°$; $\beta_{0.75R} = 45°$; $B = 2$) - Continued

(b) N = 1350 rpm.

	J	1.709	1.822	1.937	2.081	2.199	2.322	2.450	2.580	2.668	2.625	2.524	2.388	2.282	2.136	2.025	1.875	1.762
	M_x	.517	.531	.550	.571	.587	.609	.630	.651	.666	.659	.640	.618	.600	.576	.561	.536	.520
	α_x'	9.13	7.30	5.26	3.50	1.93	.40	-1.10	-2.52	-3.43	-2.99	-1.92	-.38	.89	2.76	4.28	6.48	8.26
	$\Delta\beta$	.69	.58	.44	.32	.22	.09	-.05	-.17	-.25	-.21	-.12	.01	.13	.27	.37	.53	.64
	α_l	2.76	2.39	2.00	1.65	1.26	.93	.57	.24	.04	.14	.40	.75	1.04	1.47	1.81	2.18	2.59
	c_n	1.0626	.9252	.7781	.6471	.4935	.3674	.2271	.0977	.0161	.0574	.1603	.2965	.4097	.5768	.7071	.8432	.9994
	c_m	-.0416	-.0487	-.0708	-.0772	-.0803	-.0790	-.0858	-.0928	-.1000	-.0939	-.0882	-.0855	-.0856	-.0821	-.0742	-.0649	-.0416
	c_c																	
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.068	1.072	1.078	1.084	1.089	1.096	1.103	1.110	1.116	1.113	1.106	1.099	1.093	1.085	1.081	1.073	1.069
	.025	-2.868	-2.664	-1.411	-.867	-.359	.009	.309	.571	.636	.581	.446	.177	-.126	-.593	-1.107	-1.612	-2.874
	.050	-2.213	-1.626	-1.294	-.927	-.563	-.272	-.010	.199	.300	.249	.119	-.127	-.383	-.735	-1.089	-1.527	-2.288
	.100	-1.807	-1.250	-1.001	-.785	-.548	-.342	-.151	.011	.096	.052	-.054	-.237	-.420	-.661	-.880	-1.153	-1.534
	.200	-1.227	-.990	-.837	-.707	-.561	-.417	-.284	-.165	-.101	-.135	-.214	-.348	-.471	-.630	-.763	-.932	-1.097
	.300	-.937	-.871	-.772	-.685	-.582	-.477	-.378	-.285	-.235	-.261	-.324	-.427	-.516	-.630	-.722	-.835	-.945
	.400	-.795	-.800	-.741	-.685	-.614	-.532	-.460	-.391	-.354	-.373	-.419	-.499	-.561	-.646	-.708	-.783	-.858
	.500	-.672	-.695	-.661	-.681	-.572	-.513	-.462	-.413	-.388	-.402	-.433	-.490	-.532	-.593	-.632	-.680	-.738
	.600	-.561	-.585	-.579	-.564	-.534	-.489	-.458	-.426	-.413	-.420	-.438	-.480	-.504	-.546	-.566	-.590	-.628
	.700	-.426	-.448	-.468	-.472	-.461	-.433	-.419	-.405	-.405	-.405	-.411	-.432	-.440	-.464	-.466	-.466	-.490
	.800	-.310	-.294	-.341	-.364	-.376	-.367	-.370	-.378	-.390	-.381	-.374	-.374	-.365	-.369	-.351	-.319	-.352
	.900	-.149	-.077	-.074	-.088	-.096	-.097	-.109	-.125	-.142	-.130	-.118	-.107	-.093	-.090	-.080	-.072	-.154
	.950	-.083	-.023	.020	.036	.048	.063	.067	.066	.056	.063	.069	.063	.062	.046	.032	-.006	-.083
Lower surface	.0375	.751	.684	.525	.349	.126	-.092	-.385	-.765	-1.219	-1.037	-.759	-.255	-.003	.237	.434	.618	.685
	.075	.612	.554	.422	.287	.126	-.020	-.207	-.417	-.816	-.557	-.316	-.125	.047	.212	.354	.497	.550
	.150	.446	.397	.289	.183	.061	-.045	-.167	-.279	-.377	-.308	-.238	-.125	-.003	.119	.233	.346	.389
	.250	.354	.317	.235	.157	.069	-.004	-.090	-.177	-.235	-.200	-.139	-.055	.032	.117	.194	.278	.297
	.350	.295	.270	.203	.141	.073	.016	-.050	-.120	-.161	-.138	-.089	-.025	.045	.111	.172	.239	.244
	.450	.224	.203	.148	.097	.040	-.002	-.057	-.110	-.137	-.122	-.086	-.037	.021	.074	.123	.176	.175
	.550	.139	.127	.083	.044	.001	-.031	-.071	-.110	-.126	-.117	-.091	-.057	-.012	.027	.065	.108	.097
	.650	.106	.102	.071	.042	.008	-.016	-.047	-.073	-.082	-.077	-.058	-.037	.001	.029	.057	.086	.069
	.750	.044	.006	.035	.016	-.005	-.018	-.037	-.050	-.051	-.050	-.043	-.032	-.006	.009	.027	.040	.011
	.850	.054	.068	.069	.060	.050	.049	.040	.068	.035	.036	.039	.040	.056	.062	.065	.066	.025
	.925	-.005	.019	.037	.042	.048	.058	.060	.066	.070	.070	.067	.056	.060	.050	.043	.025	-.028
	.975	-.034	-.001	.035	.054	.069	.090	.101	.113	.117	.116	.112	.091	.086	.064	.047	.011	-.046
	[a]1.000	-.041	-.009	.033	.062	.043	.127	.145	.160	.146	.145	.142	.125	.108	.073	.052	.010	-.040

[a]No orifice.

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-507.50 PROPELLER BLADE SECTION ($x = 0.60$; $\beta_x = 51.33^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(a) N = 1500 rpm.

	J	2.027	2.105	2.193	2.306	2.417	2.520	2.589	2.559	2.483	2.383	2.254	2.171	2.069	1.981
	M_x	.638	.650	.663	.684	.705	.727	.740	.732	.715	.694	.674	.655	.639	.623
	α_x'	4.25	3.17	2.01	.59	-.72	-1.87	-2.61	-2.29	-1.47	-.33	1.23	2.30	3.66	4.90
	$\Delta\beta$	.56	.48	.37	.20	0	-.19	-.33	-.26	-.11	.06	.29	.40	.52	.60
	α_1	1.89	1.62	1.30	.92	.59	.22	-.05	.10	.42	.69	1.07	1.40	1.75	2.08
	c_n	.7361	.6342	.5119	.3645	.2316	.0865	-.0181	.0400	.1652	.2732	.4206	.5497	.6871	.8110
	c_m	-.0762	-.0793	-.0850	-.0880	-.0905	-.0973	-.1078	-.1021	-.0905	-.0880	-.0854	-.0818	-.0783	-.0723
	c_o														
	o/h	Pressure coefficient, P													
Upper surface	[a]0.000	1.106	1.110	1.115	1.123	1.131	1.140	1.145	1.142	1.135	1.127	1.119	1.112	1.106	1.100
	.025	-1.012	-.644	-.292	.100	.374	.558	.639	.599	.488	.286	-.044	-.380	-.822	-1.352
	.050	-1.166	-.862	-.575	-.243	.010	.193	.282	.238	.120	-.075	-.364	-.641	-1.000	-1.432
	.100	-.886	-.722	-.545	-.317	-.127	.021	.098	.060	-.043	-.193	-.401	-.585	-.802	-.937
	.200	-.802	-.691	-.583	-.488	-.289	-.176	-.112	-.145	-.227	-.339	-.485	-.604	-.743	-.887
	.300	-.761	-.685	-.603	-.489	-.382	-.295	-.244	-.269	-.336	-.418	-.526	-.613	-.720	-.813
	.400	-.744	-.693	-.639	-.561	-.477	-.411	-.369	-.389	-.441	-.506	-.583	-.642	-.717	-.776
	.500	-.658	-.686	-.594	-.543	-.484	-.442	-.415	-.425	-.464	-.505	-.555	-.591	-.643	-.680
	.600	-.608	-.589	-.572	-.544	-.507	-.487	-.474	-.480	-.501	-.521	-.548	-.567	-.600	-.619
	.700	-.543	-.539	-.539	-.532	-.516	-.521	-.527	-.523	-.505	-.523	-.528	-.529	-.543	-.540
	.800	-.334	-.339	-.347	-.350	-.343	-.354	-.361	-.357	-.356	-.333	-.344	-.338	-.341	-.325
	.900	-.062	-.064	-.074	-.079	-.078	-.091	-.101	-.097	-.093	-.081	-.075	-.065	-.069	-.064
	.950	.030	.045	.052	.064	.080	.078	.078	.078	.076	.071	.064	.057	.035	.014
Lower surface	.0375	.407	.280	.110	-.151	-.418	-1.238	-1.572	-1.515	-.562	-.315	-.038	.167	.342	.501
	.075	.345	.253	.131	-.044	-.210	-.387	-1.192	-.600	-.312	-.150	.030	.174	.297	.415
	.150	.247	.180	.090	-.035	-.149	-.259	-.274	-.269	-.225	-.110	.021	.124	.212	.301
	.250	.202	.149	.080	-.008	-.088	-.178	-.212	-.198	-.147	-.063	.035	.108	.172	.240
	.350	.165	.133	.079	.004	-.056	-.130	-.166	-.148	-.103	-.037	.041	.102	.143	.197
	.450	.127	.095	.049	-.010	-.058	-.117	-.147	-.131	-.096	-.043	.019	.070	.108	.154
	.550	.093	.064	.025	-.020	-.055	-.102	-.127	-.115	-.088	-.046	.004	.044	.078	.116
	.650	.060	.035	.003	-.034	-.058	-.092	-.108	-.100	-.083	-.052	-.015	.019	.046	.074
	.750	.045	.025	.003	-.020	-.035	-.056	-.064	-.060	-.051	-.031	-.007	.019	.035	.054
	.850	.062	.068	.054	.040	.038	.025	.022	.024	.028	.037	.050	.065	.065	.069
	.925	.073	.071	.066	.067	.075	.073	.076	.077	.073	.072	.071	.076	.071	.073
	.975	.055	.064	.071	.084	.104	.111	.120	.118	.109	.096	.082	.076	.060	.045
	[a]1.000	.032	.058	.072	.088	.122	.178	.183	.199	.155	.144	.127	.117	.108	.019

[a]No orifice.

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-507.50 PROPELLER BLADE SECTION. ($x = 0.60$; $\beta_x = 51.33°$; $\beta_{0.75R} = 45°$; $B = 2$) - Continued

(d) N = 1600 rpm.

	J	2.095	2.183	2.237	2.314	2.383	2.458	2.551	2.509	2.434	2.354	2.280	2.221	2.141
	M_x	.683	.699	.712	.726	.738	.753	.774	.764	.746	.730	.716	.702	.687
	α_x'	3.31	2.14	1.45	.50	-.32	-1.19	-2.21	-1.75	-.91	.02	.91	1.65	2.69
	$\Delta\beta$	.43	.30	.21	.08	-.07	-.23	-.41	-.34	-.18	0	.14	.23	.37
	α_i	1.79	1.50	1.29	1.00	.79	.46	.14	.28	.62	.87	1.10	1.35	1.62
	c_n	.7032	.5897	.5077	.3948	.3135	.1839	.0548	.1103	.2439	.3426	.4342	.5316	.6381
	c_m	-.0862	-.0864	-.0942	-.0942	-.0944	-.0986	-.1047	-.1041	-.0929	-.0921	-.0921	-.0895	-.0860
	c_c						.0215	.0264	.0239					
	o/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.122	1.129	1.134	1.139	1.144	1.150	1.159	1.155	1.148	1.141	1.135	1.130	1.124
	.025	-.718	-.347	-.127	.129	.297	.483	.604	.552	.432	.229	.048	-.197	-.518
	.050	-1.010	-.635	-.438	-.208	-.074	.131	.270	.206	.055	-.129	-.293	-.507	-.795
	.100	-.841	-.628	-.493	-.323	-.197	-.053	.070	.014	-.105	-.264	-.357	-.536	-.795
	.200	-.806	-.668	-.576	-.452	-.356	-.243	-.136	-.185	-.283	-.410	-.497	-.600	-.728
	.300	-.801	-.712	-.648	-.554	-.477	-.386	-.291	-.334	-.417	-.521	-.586	-.659	-.747
	.400	-.809	-.762	-.723	-.661	-.603	-.531	-.447	-.485	-.551	-.636	-.674	-.720	-.773
	.500	-.711	-.693	-.677	-.644	-.610	-.564	-.501	-.528	-.574	-.631	-.644	-.663	-.691
	.600	-.628	-.625	-.624	-.616	-.609	-.602	-.568	-.580	-.591	-.600	-.608	-.609	-.621
	.700	-.505	-.512	-.520	-.525	-.526	-.543	-.562	-.548	-.513	-.510	-.509	-.498	-.500
	.800	-.333	-.343	-.354	-.365	-.339	-.383	-.387	-.385	-.370	-.383	-.363	-.346	-.340
	.900	-.044	-.040	-.043	-.045	-.040	-.049	-.049	-.049	-.040	-.060	-.046	-.036	-.041
	.950	.033	.044	.049	.056	.067	.069	.077	.075	.075	.050	.056	.055	.041
Lower surface	.0375	.332	.175	.043	-.143	-.311	-.986	-1.369	-1.250	-.416	-.269	-.086	.096	.250
	.075	.285	.171	.079	-.056	-.153	-.281	-1.268	-.611	-.248	-.133	-.007	.119	.226
	.150	.183	.097	.026	-.066	-.135	-.251	-.271	-.269	-.206	-.139	-.044	.055	.136
	.250	.151	.099	.048	-.020	-.067	-.157	-.207	-.191	-.116	-.067	.003	.075	.133
	.350	.154	.106	.063	.008	-.027	-.101	-.152	-.129	-.069	-.033	.025	.082	.127
	.450	.110	.071	.035	-.010	-.038	-.100	-.147	-.122	-.070	-.047	.002	.052	.089
	.550	.052	.022	-.006	-.039	-.059	-.109	-.147	-.126	-.085	-.072	-.031	.011	.039
	.650	.055	.031	.006	-.022	-.036	-.076	-.102	-.087	-.057	-.050	-.017	.018	.041
	.750	.028	.004	-.010	-.025	-.031	-.059	-.075	-.063	-.046	-.050	-.024	.005	.018
	.850	.075	.068	.056	.045	.045	.028	.026	.032	.038	.025	.045	.063	.069
	.925	.055	.056	.052	.051	.057	.049	.054	.058	.055	.033	.046	.058	.053
	.975	.052	.060	.060	.067	.078	.077	.090	.091	.081	.053	.062	.063	.053
	[a]1.000	.062	.079	.085	.100	.102	.110	.126	.135	.116	.089	.090	.080	.070

[a]No orifice.

NACA

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-507.50 PROPELLER BLADE SECTION ($x = 0.60$; $\beta_x = 51.33°$; $\beta_{0.75R} = 45°$; $B = 2$) - Continued

(a) $M = 0.56$.

	J	2.621	2.563	2.527	2.492	2.447	2.403	2.379	2.338	2.302	2.269	2.246	2.212	2.188	2.168	2.135	2.117
	M_x	.700	.701	.709	.715	.717	.722	.727	.732	.734	.738	.744	.745	.748	.754	.756	.759
	α_x'	-2.95	-2.34	-1.95	-1.57	-1.06	-.56	-.28	.21	.64	1.05	1.34	1.77	2.07	2.33	2.77	3.01
	$\Delta\beta$	-.23	-.19	-.16	-.13	-.08	-.01	.03	.07	.09	.11	.12	.14	.17	.19	.25	.30
	α_i	.01	.13	.26	.38	.47	.62	.69	.81	.92	1.03	1.12	1.22	1.29	1.37	1.47	1.53
	c_n	.0052	.0535	.1026	.1487	.1874	.2439	.2735	.3203	.3613	.4071	.4426	.4794	.5077	.5400	.5755	.6006
	c_m	-.0908	-.0852	-.0857	-.0844	-.0844	-.0846	-.0850	-.0865	-.0840	-.0824	-.0828	-.0839	-.0872	-.0865	-.0885	-.0869
	c_o														-.0002	-.0031	-.0051
	x/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.129	1.130	1.133	1.135	1.136	1.138	1.140	1.142	1.143	1.144	1.146	1.147	1.148	1.151	1.152	1.153
	.025	.636	.589	.551	.497	.445	.357	.309	.217	.131	.040	-.009	-.080	-.141	-.201	-.276	-.328
	.050	.294	.244	.206	.155	.104	.024	-.019	-.101	-.173	-.249	-.293	-.356	-.411	-.466	-.538	-.594
	.100	.105	.062	.029	-.012	-.053	-.115	-.150	-.213	-.270	-.329	-.362	-.407	-.447	-.481	-.528	-.557
	.200	-.095	-.132	-.161	-.196	-.232	-.286	-.313	-.368	-.415	-.462	-.491	-.527	-.560	-.586	-.622	-.649
	.300	-.224	-.258	-.282	-.315	-.347	-.394	-.419	-.469	-.511	-.553	-.581	-.613	-.642	-.669	-.721	-.754
	.400	-.338	-.370	-.393	-.422	-.453	-.494	-.520	-.568	-.609	-.652	-.688	-.725	-.761	-.791	-.819	-.829
	.500	-.376	-.404	-.422	-.446	-.470	-.501	-.521	-.560	-.592	-.620	-.646	-.671	-.707	-.765	-.823	-.864
	.600	-.435	-.456	-.470	-.487	-.508	-.528	-.542	-.571	-.592	-.612	-.631	-.644	-.659	-.669	-.683	-.680
	.700	-.414	-.429	-.437	-.443	-.455	-.464	-.469	-.484	-.493	-.497	-.500	-.499	-.498	-.491	-.487	-.479
	.800	-.370	-.372	-.368	-.360	-.360	-.352	-.347	-.344	-.341	-.329	-.324	-.313	-.305	-.289	-.281	-.270
	.900	-.120	-.111	-.098	-.085	-.078	-.065	-.058	-.053	-.051	-.044	-.040	-.034	-.034	-.030	-.031	-.030
	.950	.059	.063	.071	.073	.074	.075	.074	.065	.058	.054	.049	.044	.037	.033	.023	.020
Lower surface	.0375	-1.318	-1.161	-.889	-.551	-.414	-.311	-.238	-.198	-.121	-.025	.021	.080	.120	.165	.207	.238
	.075	-.707	-.542	-.428	-.349	-.310	-.236	-.189	-.119	-.063	-.005	.024	.063	.091	.125	.157	.184
	.150	-.369	-.312	-.275	-.238	-.208	-.155	-.129	-.087	-.053	-.013	.007	.038	.057	.083	.107	.127
	.250	-.237	-.213	-.184	-.155	-.133	-.093	-.073	-.044	-.020	.009	.025	.047	.063	.082	.100	.117
	.350	-.171	-.156	-.134	-.111	-.095	-.063	-.047	-.025	-.008	.016	.028	.047	.059	.074	.088	.102
	.450	-.147	-.137	-.121	-.102	-.089	-.065	-.052	-.036	-.023	-.005	.005	.019	.029	.042	.054	.064
	.550	-.122	-.117	-.104	-.089	-.079	-.061	-.051	-.039	-.030	-.014	-.008	.004	.012	.021	.030	.039
	.650	-.101	-.100	-.092	-.081	-.076	-.061	-.052	-.047	-.041	-.031	-.025	-.016	-.011	-.003	.002	.008
	.750	-.058	-.062	-.056	-.049	-.048	-.038	-.034	-.031	-.029	-.022	-.020	-.013	-.011	-.006	-.003	.001
	.850	.023	.018	.023	.026	.025	.031	.033	.032	.031	.032	.034	.038	.037	.041	.041	.043
	.925	.072	.068	.071	.072	.069	.069	.069	.063	.059	.058	.056	.057	.053	.053	.050	.049
	.975	.115	.109	.108	.106	.100	.094	.091	.081	.072	.066	.061	.057	.051	.048	.039	.035
	[a]1.000	.130	.130	.120	.130	.113	.109	.100	.090	.075	.069	.060	.059	.050	.040	.030	.030

[a]No orifice.

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-307.50 PROPELLER BLADE SECTION ($x = 0.60$; $\beta_x = 51.33°$ $\beta_{0.75R} = 45°$; B = 2) - Continued

(f) M = 0.58.

	J	2.584	2.549	2.509	2.471	2.421	2.381	2.343	2.315	2.289	2.260	2.241	2.211	2.185	2.152	2.131
	M_x	.727	.735	.739	.743	.744	.749	.753	.757	.760	.764	.772	.775	.779	.781	.788
	α_x'	-2.56	-2.18	-1.75	-1.33	-.76	-.30	.15	.49	.81	1.16	1.40	1.78	2.12	2.54	2.81
	$\Delta\beta$	-.33	-.27	-.21	-.17	-.12	-.10	-.08	-.05	0	.05	.09	.16	.22	.30	.34
	α_i	-.03	.10	.21	.37	.51	.61	.76	.83	.91	1.00	1.08	1.16	1.25	1.36	1.44
	α_n	-.0110	.0394	.0852	.1484	.2006	.2423	.3006	.3271	.3574	.3926	.4239	.4568	.4910	.5355	.5652
	α_m	-.0988	-.0964	-.0932	-.0909	-.0893	-.0879	-.0892	-.0886	-.0890	-.0882	-.0918	-.0911	-.0928	-.0973	-.1009
	α_c						.0192	.0159	.0141	.0128	.0108	.0097	.0077	.0067	.0031	.0024
	o/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.140	1.143	1.145	1.147	1.147	1.149	1.150	1.152	1.153	1.155	1.158	1.159	1.161	1.162	1.165
	.025	.634	.590	.556	.492	.435	.372	.284	.247	.200	.135	.089	.039	-.026	-.127	-.173
	.050	.289	.246	.204	.148	.093	.034	-.045	-.075	-.116	-.173	-.213	-.257	-.316	-.410	-.459
	.100	.102	.067	.037	-.014	-.062	-.110	-.170	-.193	-.227	-.270	-.302	-.331	-.372	-.438	-.464
	.200	-.102	-.133	-.162	-.205	-.249	-.290	-.342	-.357	-.387	-.422	-.448	-.471	-.503	-.553	-.584
	.300	-.236	-.261	-.288	-.327	-.368	-.411	-.457	-.469	-.499	-.530	-.552	-.573	-.615	-.683	-.699
	.400	-.359	-.381	-.408	-.445	-.490	-.532	-.579	-.597	-.630	-.663	-.692	-.721	-.741	-.767	-.796
	.500	-.399	-.416	-.441	-.471	-.510	-.548	-.583	-.591	-.622	-.666	-.721	-.760	-.792	-.839	-.853
	.600	-.462	-.472	-.493	-.512	-.547	-.577	-.603	-.608	-.637	-.669	-.681	-.725	-.807	-.872	-.925
	.700	-.441	-.442	-.456	-.463	-.485	-.497	-.503	-.497	-.508	-.513	-.516	-.514	-.510	-.506	-.494
	.800	-.372	-.361	-.359	-.351	-.355	-.349	-.338	-.317	-.319	-.306	-.295	-.281	-.270	-.256	-.249
	.900	-.099	-.079	-.071	-.059	-.057	-.051	-.043	-.028	-.034	-.029	-.053	-.028	-.031	-.047	-.064
	.950	.073	.084	.084	.082	.076	.070	.064	.070	.058	.050	.045	.036	.023	-.003	-.027
Lower surface	.0375	-1.562	-1.398	-1.262	-.749	-.414	-.299	-.212	-.195	-.170	-.083	.024	.023	.081	.152	.190
	.075	-.878	-.581	-.462	-.319	-.290	-.251	-.163	-.110	-.087	-.037	-.001	.028	.067	.116	.145
	.150	-.325	-.276	-.256	-.221	-.198	-.166	-.115	-.079	-.066	-.035	-.009	.014	.042	.079	.100
	.250	-.233	-.195	-.179	-.145	-.126	-.102	-.063	-.035	-.029	-.004	.014	.030	.051	.079	.095
	.350	-.176	-.143	-.129	-.103	-.089	-.072	-.040	-.016	-.013	.003	.020	.032	.050	.070	.082
	.450	-.152	-.126	-.118	-.096	-.087	-.075	-.051	-.030	-.029	-.016	-.002	.007	.021	.036	.047
	.550	-.127	-.107	-.101	-.085	-.080	-.071	-.051	-.034	-.036	-.025	-.015	-.008	.002	.014	.020
	.650	-.106	-.092	-.089	-.079	-.079	-.075	-.059	-.043	-.047	-.041	-.033	-.030	-.023	-.015	-.011
	.750	-.061	-.052	-.053	-.047	-.049	-.050	-.040	-.027	-.031	-.029	-.026	-.024	-.020	-.019	-.019
	.850	.021	.028	.027	.029	.023	.021	.025	.035	.029	.028	.031	.028	.028	.024	.023
	.925	.073	.078	.075	.074	.066	.059	.059	.067	.058	.054	.054	.050	.046	.037	.029
	.975	.113	.115	.111	.106	.093	.083	.077	.082	.070	.061	.058	.048	.039	.020	.005
	[a]1.000	.125	.150	.150	.128	.115	.102	.098	.096	.081	.074	.080	.057	.042	.010	-.024

[a]No orifice.

TABLE 4.– PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-507.50 PROPELLER BLADE SECTION ($x = 0.60$; $\beta_x = 51.33^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) – Continued

(g) M = 0.60.

	J	2.112	2.148	2.192	2.229	2.275	2.307	2.348	2.387	2.431	2.477	2.533	2.567
	M_x	.814	.808	.800	.796	.794	.785	.780	.771	.766	.760	.762	.754
	α_x'	3.08	2.60	2.02	1.55	.97	.58	.09	−.37	−.88	−1.40	−2.02	−2.38
	$\Delta\beta$	.18	.15	.10	.05	−.02	−.07	−.14	−.19	−.25	−.30	−.37	−.42
	α_1	1.46	1.39	1.25	1.09	.95	.83	.70	.57	.45	.34	.17	.05
	c_n	.5729	.5458	.4910	.4297	.3755	.3258	.2771	.2274	.1768	.1329	.0658	.0194
	c_m	−.1259	−.1208	−.1160	−.1085	−.1059	−.1031	−.1032	−.1045	−.1065	−.1042	−.1119	−.1159
	c_0	.0182	.0162	.0154	.0159	.0165	.0177	.0191	.0200	.0219	.0232	.0254	.0265
	o/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.177	1.174	1.171	1.168	1.168	1.164	1.162	1.158	1.156	1.153	1.154	1.151
	.025	−.009	.038	.097	.177	.258	.315	.369	.417	.476	.524	.579	.614
	.050	−.375	−.324	−.253	−.177	−.097	−.038	.019	.066	.124	.176	.234	.271
	.100	−.357	−.394	−.344	−.286	−.223	−.177	−.134	−.097	−.051	−.009	.041	.074
	.200	−.573	−.516	−.481	−.438	−.390	−.355	−.320	−.288	−.246	−.209	−.165	−.136
	.300	−.680	−.657	−.626	−.564	−.517	−.487	−.456	−.427	−.390	−.354	−.313	−.286
	.400	−.789	−.766	−.724	−.706	−.673	−.636	−.613	−.583	−.542	−.503	−.464	−.435
	.500	−.856	−.833	−.803	−.765	−.724	−.692	−.645	−.601	−.571	−.539	−.506	−.479
	.600	−.921	−.899	−.863	−.834	−.789	−.735	−.704	−.671	−.631	−.588	−.554	−.527
	.700	−.719	−.716	−.789	−.805	−.729	−.710	−.658	−.587	−.555	−.533	−.527	−.508
	.800	−.381	−.354	−.301	−.276	−.280	−.304	−.331	−.355	−.381	−.391	−.411	−.416
	.900	−.305	−.232	−.160	−.092	−.049	−.027	−.024	−.030	−.043	−.054	−.068	−.080
	.950	−.249	−.171	−.100	−.042	.001	.030	.047	.066	.066	.074	.076	.080
Lower surface	.0375	.072	.021	−.042	−.138	−.227	−.329	−.446	−.641	−1.032	−1.204	−1.360	−1.476
	.075	.103	.069	.016	−.047	−.108	−.159	−.213	−.245	−.281	−.412	−.930	−1.213
	.150	.047	.021	−.011	−.060	−.100	−.142	−.178	−.208	−.245	−.264	−.266	−.275
	.250	.077	.059	.031	−.002	−.031	−.063	−.091	−.111	−.147	−.169	−.191	−.200
	.350	.061	.049	.028	0	−.021	−.046	−.066	−.084	−.111	−.127	−.150	−.158
	.450	.024	.016	−.001	−.020	−.035	−.054	−.070	−.084	−.105	−.117	−.133	−.140
	.550	−.007	−.011	−.021	−.035	−.044	−.057	−.070	−.079	−.094	−.102	−.113	−.116
	.650	−.044	−.041	−.046	−.054	−.056	−.065	−.073	−.076	−.087	−.091	−.095	−.096
	.750	−.067	−.060	−.053	−.056	−.051	−.053	−.056	−.057	−.061	−.060	−.058	−.056
	.850	−.029	−.010	.001	.007	.016	.019	.019	.023	.022	.025	.028	.032
	.925	−.055	−.021	.004	.017	.033	.041	.046	.053	.056	.062	.068	.073
	.975	−.118	−.063	−.017	.007	.028	.041	.051	.064	.074	.084	.092	.098
	[a]1.000	−.160	−.095	−.032	−.012	.020	.043	.053	.076	.082	.101	.106	.109

[a]No orifice.

TABLE 4.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-307.50 PROPELLER BLADE SECTION ($x = 0.60$; $\beta_x = 51.33°$; $\beta_{0.75R} = 45°$; B = 2) - Concluded

(h) M = 0.65.

	J	2.448	2.403	2.388	2.350	2.313	2.299	2.264	2.235	2.202	2.183	2.162	2.125	2.116
	M_x	.830	.834	.841	.843	.846	.853	.856	.861	.865	.871	.877	.878	.885
	α_x'	-1.07	-.56	-.38	.06	.51	.68	1.11	1.47	1.89	2.14	2.41	2.90	3.02
	$\Delta\beta$	-.44	-.38	-.37	-.32	-.28	-.27	-.23	-.19	-.15	-.13	-.10	-.06	-.05
	α_1	.06	.19	.27	.38	.47	.52	.62	.68	.80	.86	.93	1.01	1.08
	c_n	.0232	.0748	.1058	.1484	.1852	.2045	.2419	.2658	.3155	.3374	.3645	.3929	.4219
	c_m	-.1001	-.1008	-.1016	-.1021	-.1037	-.1045	-.1021	-.1013	-.1045	-.1080	-.1083	-.1093	-.1072
	c_o	.0301	.0310	.0319	.0320	.0326	.0335	.0343	.0350	.0350	.0355	.0350	.0344	.0333
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.184	1.186	1.189	1.190	1.192	1.195	1.197	1.199	1.201	1.204	1.207	1.208	1.211
	.025	.574	.540	.519	.488	.448	.432	.392	.359	.315	.296	.273	.225	.185
	.050	.239	.205	.187	.155	.115	.101	.065	.037	-.004	-.021	-.041	-.095	-.124
	.100	.074	.045	.031	.005	-.029	-.039	-.067	-.088	-.119	-.130	-.141	-.174	-.197
	.200	-.132	-.158	-.169	-.191	-.220	-.226	-.249	-.264	-.286	-.294	-.297	-.330	-.355
	.300	-.273	-.296	-.304	-.322	-.349	-.354	-.387	-.414	-.435	-.438	-.438	-.455	-.469
	.400	-.433	-.451	-.461	-.487	-.512	-.513	-.522	-.527	-.550	-.556	-.557	-.572	-.585
	.500	-.515	-.536	-.545	-.560	-.586	-.590	-.610	-.625	-.632	-.635	-.634	-.654	-.660
	.600	-.617	-.649	-.649	-.669	-.693	-.695	-.712	-.720	-.732	-.736	-.733	-.749	-.759
	.700	-.706	-.749	-.760	-.772	-.791	-.791	-.804	-.815	-.826	-.826	-.827	-.835	-.830
	.800	-.297	-.308	-.311	-.313	-.320	-.324	-.336	-.355	-.369	-.384	-.379	-.390	-.387
	.900	-.075	-.111	-.140	-.163	-.197	-.217	-.242	-.267	-.286	-.300	-.302	-.319	-.327
	.950	-.016	-.054	-.085	-.116	-.163	-.197	-.233	-.267	-.291	-.307	-.309	-.327	-.335
Lower surface	.0375	-.962	-.915	-.841	-.767	-.682	-.603	-.456	-.326	-.210	-.155	-.078	-.017	.060
	.075	-.911	-.848	-.765	-.672	-.542	-.456	-.319	-.247	-.135	-.098	-.051	-.023	.016
	.150	-.627	-.394	-.293	-.206	-.170	-.159	-.138	-.117	-.076	-.053	-.020	-.001	.033
	.250	-.183	-.171	-.162	-.150	-.136	-.120	-.099	-.082	-.048	-.028	.001	.014	.042
	.350	-.157	-.152	-.143	-.130	-.117	-.103	-.087	-.071	-.042	-.027	-.001	.009	.030
	.450	-.166	-.162	-.155	-.143	-.135	-.123	-.110	-.100	-.075	-.062	-.037	-.030	-.012
	.550	-.165	-.163	-.158	-.149	-.145	-.137	-.129	-.124	-.103	-.092	-.069	-.065	-.048
	.650	-.165	-.168	-.165	-.160	-.164	-.161	-.159	-.159	-.144	-.136	-.114	-.114	-.097
	.750	-.133	-.142	-.142	-.143	-.152	-.155	-.161	-.167	-.159	-.156	-.137	-.139	-.126
	.850	-.044	-.059	-.063	-.070	-.087	-.095	-.109	-.122	-.118	-.118	-.104	-.109	-.099
	.925	-.002	-.023	-.034	-.046	-.072	-.088	-.110	-.130	-.135	-.139	-.128	-.134	-.127
	.975	.020	-.011	-.033	-.057	-.101	-.132	-.172	-.207	-.226	-.239	-.236	-.249	-.246
	[a]1.000	.032	-.009	-.035	-.059	-.124	-.187	-.228	-.272	-.309	-.319	-.323	-.344	-.355

[a]No orifice.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-506.62 PROPELLER BLADE SECTION ($x = 0.70$; $\beta_x = 47.00°$; $\beta_{0.75R} = 45°$; $B = 2$)

(a) $N = 1140$ rpm.

J	1.608	1.766	1.945	2.139	2.254	2.367	2.514	2.654	2.592	2.443	2.321	2.195	2.066	1.875	1.667
M_x	.473	.487	.507	.532	.546	.562	.579	.598	.587	.570	.552	.538	.521	.501	.478
α_x'	10.83	8.23	5.51	2.79	1.29	-.11	-1.82	-3.35	-2.69	-1.01	.46	2.05	3.79	6.55	9.84
$\Delta\beta$	.74	.62	.48	.33	.22	.11	-.05	-.22	-.15	.03	.16	.27	.39	.54	.69
α_i	2.97	2.69	2.13	1.57	1.21	.87	.48	.06	.28	.65	1.00	1.38	1.78	2.35	2.89
c_n	1.0445	.9568	.7639	.5645	.4400	.3158	.1752	.0213	.1032	.2371	.3613	.4968	.6387	.8374	1.0219
c_m	-.0465	-.0634	-.0829	-.0928	-.0944	-.0955	-.0950	-.1062	-.0990	-.0925	-.0928	-.0933	-.0887	-.0757	-.0503
c_c															
c/b	Pressure coefficient, P														
Upper surface [a] 0.000	1.057	1.061	1.066	1.072	1.076	1.081	1.086	1.092	1.088	1.083	1.078	1.074	1.070	1.064	1.059
.025	-2.456	-2.495	-1.220	-.517	-.143	.162	.429	.593	.533	.321	.063	-.326	-.776	-1.531	-2.639
.050	-2.250	-2.162	-1.268	-.714	-.427	-.180	.072	.245	.180	-.036	-.263	-.573	-.909	-1.430	-2.349
.100	-1.824	-1.299	-.933	-.627	-.436	-.269	-.081	.063	.006	-.162	-.327	-.534	-.758	-1.096	-1.689
.200	-1.233	-.923	-.782	-.579	-.453	-.340	-.210	-.101	-.142	-.265	-.378	-.517	-.658	-.860	-1.096
.300	-.899	-.808	-.706	-.570	-.478	-.401	-.298	-.211	-.245	-.342	-.428	-.526	-.626	-.757	-.886
.400	-.710	-.716	-.649	-.552	-.484	-.429	-.354	-.282	-.307	-.384	-.447	-.517	-.594	-.683	-.702
.500	-.574	-.639	-.606	-.541	-.491	-.450	-.392	-.342	-.355	-.418	-.463	-.517	-.571	-.624	-.598
.600	-.466	-.558	-.549	-.512	-.478	-.454	-.411	-.373	-.383	-.427	-.461	-.495	-.535	-.555	-.502
.700	-.363	-.471	-.497	-.492	-.474	-.464	-.438	-.417	-.419	-.447	-.467	-.487	-.503	-.487	-.401
.800	-.265	-.299	-.339	-.357	-.351	-.356	-.346	-.339	-.333	-.344	-.352	-.356	-.356	-.319	-.263
.900	-.189	-.113	-.116	-.149	-.154	-.169	-.177	-.185	-.172	-.119	-.163	-.154	-.140	-.103	-.135
.950	-.154	-.031	.010	.015	.018	.009	.005	-.007	.007	.012	.013	.017	.011	-.005	-.087
Lower surface .0375	.779	.689	.522	.236	.043	-.192	-.511	-1.159	-.924	-.330	-.103	.143	.342	.607	.748
.075	.640	.557	.413	.192	.052	-.117	-.298	-.904	-.527	-.210	-.055	.126	.271	.484	.610
.150	.505	.434	.320	.161	.058	-.052	-.173	-.393	-.224	-.115	-.004	.113	.214	.376	.477
.250	.407	.347	.263	.136	.067	-.015	-.104	-.189	-.133	-.059	.013	.102	.180	.307	.384
.350	.383	.281	.203	.099	.045	-.023	-.093	-.134	-.108	-.057	0	.070	.127	.241	.307
.450	.255	.209	.132	.052	.014	-.041	-.097	-.120	-.105	-.071	-.022	.033	.077	.172	.237
.550	.201	.178	.137	.072	.039	-.007	-.047	-.069	-.054	-.028	.009	.054	.091	.157	.195
.650	.136	.127	.096	.048	.024	-.011	-.041	-.052	-.041	-.028	0	.035	.059	.113	.136
.750	.101	.112	.094	.061	.045	.017	-.001	-.007	.002	.008	.027	.052	.068	.103	.110
.850	.068	.102	.099	.085	.077	.060	.051	.048	.056	.055	.067	.083	.084	.101	.088
.925	.060	.117	.129	.130	.132	.121	.114	.108	.118	.121	.125	.130	.123	.125	.088
.975	.142	.191	.203	.221	.244	.235	.237	.238	.245	.237	.236	.217	.210	.192	.179
[a] 1.000	.235	.248	.250	.285	.328	.332	.383	.338	.335	.350	.340	.287	.271	.308	.279

[a] No orifice.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-506.62 PROPELLER BLADE SECTION ($x = 0.70$; $\beta_x = 47.00^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(b) N = 1350 rpm.

	J	1.663	1.786	1.885	1.984	2.095	2.209	2.312	2.438	2.547	2.637	2.584	2.486	2.371	2.249	2.162	2.068	1.958	1.845	1.734
	M_x	.569	.580	.598	.606	.625	.642	.656	.676	.695	.708	.700	.684	.664	.644	.631	.618	.603	.587	.572
	α_x'	9.90	7.92	6.40	4.94	3.39	1.87	.57	-.95	-2.19	-3.17	-2.60	-1.51	-.16	1.36	2.49	3.76	5.32	7.00	8.74
	$\Delta\beta$	1.12	.93	.77	.62	.45	.27	.10	-.09	-.26	-.39	-.32	-.17	.01	.21	.34	.49	.66	.84	1.01
	α_i	3.00	2.82	2.57	2.15	1.77	1.43	1.06	.69	.34	.07	.24	.51	.89	1.26	1.61	1.96	2.31	2.73	3.02
	c_n	1.0639	1.0052	.9168	.7710	.6374	.5174	.3852	.2516	.1226	.0245	.0890	.1852	.3219	.4581	.5810	.7039	.8277	.9742	1.0742
	c_m	-.0452	-.0598	-.0744	-.0847	-.0944	-.0991	-.1006	-.1031	-.1082	-.1167	-.1091	-.1032	-.0989	-.0992	-.0950	-.0860	-.0821	-.0633	-.0519
	c_c																			
c/b		Pressure coefficient, P																		
Upper surface	[a]0.000	1.083	1.087	1.092	1.095	1.101	1.107	1.112	1.120	1.127	1.133	1.130	1.123	1.115	1.108	1.103	1.099	1.094	1.089	1.084
	.025	-2.235	-2.939	-2.278	-1.103	-.663	-.248	.096	.361	.538	.633	.581	.460	.235	-.094	-.412	-.823	-1.221	-2.641	-3.241
	.050	-2.169	-2.653	-1.487	-1.328	-.903	-.563	-.264	-.014	.171	.276	.219	.086	-.137	-.430	-.699	-1.028	-1.470	-2.239	-2.947
	.100	-1.979	-1.252	-1.190	-.996	-.773	-.555	-.346	-.157	-.010	.081	.089	-.081	-.253	-.466	-.642	-.854	-1.065	-1.168	-1.624
	.200	-1.350	-.980	-.929	-.815	-.687	-.555	-.415	-.282	-.175	-.102	-.143	-.226	-.351	-.499	-.608	-.728	-.847	-.963	-.978
	.300	-.888	-.868	-.829	-.749	-.667	-.574	-.477	-.375	-.289	-.232	-.265	-.330	-.429	-.535	-.610	-.688	-.774	-.846	-.876
	.400	-.700	-.765	-.741	-.689	-.632	-.568	-.501	-.428	-.364	-.320	-.344	-.395	-.467	-.543	-.593	-.646	-.707	-.749	-.770
	.500	-.592	-.684	-.678	-.649	-.613	-.571	-.523	-.468	-.425	-.394	-.413	-.446	-.498	-.555	-.584	-.620	-.658	-.679	-.679
	.600	-.484	-.589	-.601	-.587	-.571	-.545	-.515	-.479	-.453	-.437	-.446	-.464	-.498	-.535	-.550	-.577	-.586	-.596	-.581
	.700	-.376	-.491	-.525	-.532	-.533	-.529	-.517	-.498	-.492	-.490	-.493	-.495	-.508	-.528	-.530	-.526	-.535	-.509	-.475
	.800	-.256	-.295	-.334	-.351	-.368	-.373	-.374	-.367	-.372	-.380	-.376	-.368	-.371	-.378	-.370	-.355	-.349	-.316	-.286
	.900	-.162	-.086	-.096	-.107	-.125	-.139	-.146	-.150	-.164	-.177	-.169	-.157	-.148	-.146	-.132	-.114	-.106	-.089	-.097
	.950	-.122	-.017	-.004	.015	.023	.028	.029	.034	.026	.015	.021	.032	.030	.024	.029	.022	.008	-.007	-.030	
Lower surface	.0375	.767	.700	.601	.468	.304	.112	-.120	-.357	-.948	-1.202	-1.082	-.584	-.242	.014	.201	.369	.511	.650	.742
	.075	.633	.569	.482	.372	.242	.104	-.066	-.229	-.548	-.936	-.749	-.323	-.148	.031	.169	.297	.406	.523	.608
	.150	.499	.447	.376	.293	.201	.095	-.014	-.121	-.236	-.474	-.306	-.178	-.068	.044	.145	.238	.319	.411	.478
	.250	.415	.366	.308	.241	.168	.095	.013	-.064	-.145	-.231	-.169	-.106	-.024	.057	.130	.200	.261	.335	.392
	.350	.323	.291	.234	.179	.120	.066	.001	-.059	-.119	-.157	-.132	-.091	-.030	.032	.091	.145	.195	.258	.313
	.450	.245	.220	.159	.118	.071	.024	-.025	-.072	-.114	-.131	-.125	-.097	-.049	-.002	.044	.091	.130	.182	.240
	.550	.205	.190	.159	.125	.084	.049	.007	-.026	-.063	-.078	-.070	-.047	-.011	.026	.068	.104	.134	.177	.207
	.650	.144	.140	.113	.088	.059	.031	.001	-.026	-.048	-.056	-.054	-.039	-.016	.011	.044	.072	.096	.129	.150
	.750	.112	.119	.104	.088	.067	.049	.026	.011	-.004	-.006	-.006	.003	.017	.034	.059	.079	.094	.116	.128
	.850	.084	.111	.104	.097	.084	.079	.068	.063	.052	.050	.050	.057	.061	.070	.084	.095	.097	.108	.112
	.925	.080	.125	.126	.129	.129	.132	.125	.127	.115	.109	.114	.115	.124	.122	.132	.133	.130	.127	.124
	.975	.132	.163	.182	.197	.203	.218	.230	.239	.241	.239	.238	.241	.234	.220	.213	.205	.192	.173	.175
	[a]1.000	.235	.191	.189	.241	.249	.283	.322	.327	.356	.375	.331	.499	.330	.300	.268	.269	.252	.215	.215

[a]No orifice.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-506.62 PROPELLER BLADE SECTION ($x = 0.70$; $\beta_x = 47.00^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(c) N = 1500 rpm.

	J	1.962	2.051	2.130	2.212	2.315	2.388	2.475	2.595	2.528	2.436	2.341	2.267	2.173	2.096	2.013
	M_x	.667	.680	.696	.709	.728	.740	.756	.777	.765	.746	.731	.715	.700	.687	.671
	α_x'	5.26	4.00	2.91	1.83	.53	-.36	-1.38	-2.72	-1.98	-.93	.21	1.13	2.34	3.37	4.52
	$\Delta\beta$	.95	.74	.56	.38	.12	-.05	-.25	-.59	-.39	-.15	.06	.24	.46	.63	.83
	α_i	2.51	2.17	1.80	1.46	1.14	.84	.49	-.07	.31	.69	1.00	1.27	1.59	1.92	2.26
	c_n	.9032	.7794	.6510	.5274	.4132	.3068	.1800	-.0245	.1116	.2526	.3639	.4600	.5735	.6929	.8189
	c_m	-.0785	-.0898	-.0991	-.1023	-.1042	-.1074	-.1144	-.1332	-.1183	-.1095	-.1057	-.1016	-.1012	-.0928	-.0867
	c_c															
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.116	1.121	1.128	1.133	1.140	1.145	1.152	1.160	1.155	1.148	1.141	1.135	1.129	1.124	1.118
	.025	-1.418	-.817	-.458	-.135	.146	.334	.499	.643	.572	.429	.226	.011	-.284	-.625	-1.041
	.050	-1.397	-1.159	-.830	-.515	-.241	-.059	.120	.287	.203	.042	-.161	-.372	-.654	-.994	-1.277
	.100	-1.457	-.938	-.750	-.545	-.345	-.205	-.059	.089	.014	-.125	-.288	-.443	-.644	-.852	-1.138
	[a].200	-1.102	-.972	-.723	-.590	-.450	-.335	-.236	-.118	-.176	-.291	-.413	-.523	-.647	-.778	-.948
	.300	-.848	-.787	-.713	-.632	-.529	-.453	-.361	-.257	-.308	-.403	-.497	-.580	-.672	-.740	-.808
	.400	-.760	-.720	-.675	-.624	-.555	-.503	-.437	-.348	-.397	-.467	-.534	-.590	-.650	-.694	-.736
	.500	-.706	-.686	-.662	-.635	-.590	-.562	-.518	-.453	-.487	-.536	-.576	-.611	-.648	-.670	-.692
	.600	-.623	-.616	-.605	-.594	-.568	-.559	-.541	-.509	-.525	-.547	-.564	-.579	-.600	-.607	-.615
	.700	-.548	-.557	-.560	-.567	-.558	-.566	-.574	-.592	-.578	-.568	-.564	-.562	-.566	-.555	-.548
	.800	-.338	-.352	-.359	-.370	-.368	-.374	-.381	-.381	-.378	-.376	-.372	-.369	-.368	-.353	-.341
	.900	-.093	-.098	-.103	-.111	-.108	-.113	-.120	-.119	-.119	-.116	-.111	-.110	-.108	-.098	-.093
	.950	.004	.009	.020	.025	.040	.041	.043	.047	.048	.044	.039	.033	.021	.018	.008
Lower surface	.0375	.513	.378	.238	.064	-.133	-.318	-1.031	-1.541	-1.447	-.424	-.216	-.031	.150	.314	.444
	.075	.413	.306	.197	.066	-.072	-.206	-.315	-1.396	-.744	-.265	-.127	0	.131	.255	.357
	.150	.327	.244	.166	.072	-.014	-.102	-.188	-.536	-.220	-.155	-.050	.031	.117	.208	.285
	.250	.246	.209	.153	.083	.022	-.038	-.119	-.178	-.149	-.100	-.027	.036	.099	.167	.227
	.350	.205	.150	.104	.049	.001	-.050	-.109	-.125	-.127	-.078	-.020	.025	.075	.131	.178
	.450	.126	.082	.044	0	-.032	-.074	-.120	-.139	-.138	-.097	-.054	-.016	.019	.066	.104
	.550	.140	.103	.073	.033	.007	-.027	-.063	-.087	-.075	-.044	-.009	.021	.051	.089	.121
	.650	.099	.070	.047	.015	-.004	-.029	-.056	-.073	-.064	-.040	-.017	.007	.028	.060	.085
	.750	.096	.076	.060	.036	.026	.008	-.010	-.021	-.015	0	.016	.003	.044	.070	.086
	.850	.099	.088	.078	.066	.063	.053	.044	.038	.042	.054	.058	.064	.072	.086	.094
	.925	.127	.124	.123	.116	.121	.114	.110	.107	.111	.114	.116	.119	.118	.095	.127
	.975	.180	.186	.195	.197	.211	.219	.231	.236	.238	.231	.222	.214	.195	.194	.186
	[a]1.000	.235	.232	.240	.262	.275	.300	.320	.320	.338	.325	.298	.266	.248	.297	.250

[a]No orifice.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-506.62 PROPELLER BLADE SECTION ($x = 0.70$; $\beta_x = 47.00°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(d) N = 1600 rpm.

	J	2.071	2.144	2.212	2.290	2.370	2.450	2.536	2.480	2.418	2.329	2.259	2.183	2.100
	M_x	.729	.745	.756	.771	.787	.804	.821	.809	.796	.777	.763	.748	.736
	α_m'	3.72	2.73	1.83	.84	-.14	-1.09	-2.07	-1.44	-.71	.36	1.23	2.21	3.32
	$\Delta\beta$	.71	.53	.35	.14	-.09	-.35	-.65	-.47	-.24	.03	.23	.43	.64
	α_i	2.09	1.76	1.52	1.22	.93	.47	0	.27	.68	1.06	1.33	1.62	1.93
	c_n	.7548	.6348	.5484	.4445	.3368	.1710	-.0013	.0968	.2484	.3845	.4839	.5839	.6961
	c_m	-.0967	-.1006	-.1067	-.1111	-.1139	-.1247	-.1308	-.1250	-.1185	-.1119	-.1080	-.1032	-.0977
	c_c						.0226	.0285	.0244					
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.141	1.147	1.152	1.158	1.165	1.172	1.180	1.174	1.168	1.160	1.154	1.148	1.143
	.025	-.584	-.278	-.044	.186	.383	.528	.625	.574	.466	.291	.092	-.138	-.435
	.050	-.948	-.705	-.454	-.218	-.013	.151	.268	.206	.081	-.110	-.311	-.549	-.855
	.100	-.990	-.693	-.517	-.337	-.173	-.030	.077	.019	-.091	-.252	-.410	-.592	-.791
	[b].200	-.957	-.742	-.622	-.490	-.349	-.221	-.128	-.189	-.278	-.405	-.543	-.672	-.820
	.300	-.878	-.767	-.693	-.584	-.473	-.366	-.275	-.325	-.410	-.524	-.629	-.727	-.835
	.400	-.765	-.729	-.674	-.607	-.532	-.449	-.370	-.416	-.484	-.568	-.637	-.701	-.759
	.500	-.742	-.737	-.715	-.671	-.613	-.552	-.487	-.527	-.580	-.643	-.694	-.729	-.749
	.600	-.630	-.649	-.703	-.766	-.745	-.687	-.613	-.657	-.712	-.756	-.730	-.673	-.643
	.700	-.549	-.566	-.580	-.599	-.688	-.760	-.719	-.749	-.720	-.619	-.590	-.579	-.563
	.800	-.320	-.332	-.341	-.341	-.341	-.338	-.351	-.344	-.338	-.342	-.344	-.340	-.332
	.900	-.070	-.073	-.076	-.073	-.073	-.073	-.065	-.073	-.071	-.073	-.077	-.078	-.076
	.950	-.022	.026	.027	.034	.036	.039	.044	.040	.042	.037	.031	.024	.021
Lower surface	0.375	.347	.193	.046	-.142	-.315	-1.196	-1.304	-1.286	-.988	-.257	-.061	.108	.272
	.075	.286	.167	.054	-.075	-.225	-.909	-1.190	-1.159	-.256	-.153	-.023	.102	.226
	.150	.234	.147	.070	-.015	-.120	-.175	-.956	-.343	-.156	-.065	.022	.101	.191
	[b].250	.183	.124	.075	-.003	-.083	-.132	-.250	-.164	-.120	-.039	.030	.080	.166
	.350	.153	.100	.052	.002	-.061	-.118	-.118	-.128	-.091	-.027	.020	.069	.124
	.450	.085	.042	.004	-.034	-.084	-.136	-.138	-.145	-.110	-.058	-.021	.015	.061
	.550	.108	.071	.037	.005	-.011	-.075	-.090	-.087	-.053	-.016	.016	.048	.087
	.650	.075	.044	.019	-.007	-.013	-.069	-.082	-.081	-.053	-.024	.001	.025	.057
	.750	.083	.060	.041	.023	0	-.021	-.089	-.029	-.008	.012	.028	.044	.068
	.850	.096	.083	.071	.062	.049	.034	.029	.028	.044	.054	.063	.070	.087
	.925	.134	.128	.121	.119	.109	.101	.100	.097	.107	.115	.116	.120	.128
	.975	.189	.194	.197	.203	.205	.223	.233	.224	.215	.206	.199	.193	.189
	[a]1.000	.230	.240	.240	.260	.270	.340	.330	.320	.310	.265	.260	.250	.250

[a]No orifice.

[b]Faired value.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-506.62 PROPELLER BLADE SECTION ($x = 0.70$; $\beta_x = 47.00^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$) - Continued

(e) $M = 0.56$.

	c/b													
	J	2.116	2.156	2.179	2.206	2.241	2.276	2.304	2.362	2.388	2.424	2.468	2.512	2.552	2.622
	M_x	.818	.813	.805	.796	.791	.786	.778	.779	.772	.763	.761	.755	.750	.741
	α_x'	3.10	2.57	2.26	1.91	1.46	1.01	.66	-.05	-.36	-.79	-1.30	-1.80	-2.25	-3.01
	$\Delta\beta$	.30	.17	.12	.07	.04	.02	.01	-.06	-.11	-.18	-.27	-.34	-.38	-.43
	α_i	1.77	1.69	1.57	1.50	1.34	1.23	1.13	.92	.79	.67	.52	.37	.22	.03
	c_n	.6400	.6110	.5652	.5432	.4877	.4477	.4123	.3326	.2877	.2442	.1910	.1348	.0813	.0097
	c_m	-.1314	-.1278	-.1236	-.1226	-.1177	-.1145	-.1129	-.1108	-.1084	-.1091	-.1096	-.1150	-.1152	-.1173
	c_c	.0070	.0070	.0066											
		Pressure coefficient, P													
Upper surface	[a]0.000	1.179	1.176	1.173	1.169	1.166	1.164	1.161	1.161	1.158	1.155	1.154	1.151	1.149	1.146
	.025	-.039	.012	.057	.090	.160	.206	.259	.363	.415	.455	.507	.550	.593	.657
	.050	-.484	-.427	-.371	-.335	-.257	-.206	-.148	-.037	.021	.064	.125	.172	.225	.301
	.100	-.509	-.486	-.454	-.429	-.367	-.327	-.281	-.188	-.139	-.105	-.050	-.011	.035	.103
	.200	-.599	-.581	-.574	-.568	-.512	-.477	-.437	-.359	-.319	-.288	-.239	-.205	-.165	-.104
	.300	-.682	-.653	-.640	-.631	-.604	-.592	-.557	-.483	-.441	-.413	-.364	-.331	-.294	-.236
	.400	-.762	-.729	-.695	-.671	-.628	-.598	-.583	-.534	-.499	-.473	-.428	-.401	-.368	-.318
	.500	-.815	-.794	-.777	-.769	-.726	-.694	-.659	-.620	-.586	-.555	-.507	-.481	-.448	-.400
	.600	-.931	-.910	-.889	-.865	-.793	-.787	-.771	-.674	-.596	-.573	-.533	-.513	-.485	-.446
	.700	-.782	-.825	-.827	-.813	-.793	-.696	-.623	-.602	-.599	-.592	-.565	-.556	-.536	-.508
	.800	-.340	-.310	-.292	-.292	-.298	-.312	-.334	-.348	-.359	-.367	-.367	-.374	-.373	-.372
	.900	-.197	-.148	-.109	-.091	-.073	-.066	-.071	-.075	-.007	-.098	-.105	-.118	-.130	-.149
	.950	-.136	-.083	-.037	-.018	.002	.019	.033	.044	.050	.048	.053	.047	.045	.034
Lower surface	.0375	.145	.094	.036	-.003	-.082	-.139	-.210	-.302	-.352	-.360	-.975	-1.335	-1.527	-1.722
	.075	.135	.097	.054	.024	-.032	-.070	-.119	-.201	-.235	-.252	-.293	-.439	-.634	-.898
	.150	.135	.108	.077	.056	.017	-.009	-.042	-.097	-.129	-.156	-.174	-.189	-.222	-.360
	.250	.090	.080	.060	.046	.022	.006	-.017	-.056	-.079	-.102	-.119	-.142	-.153	-.191
	.350	.085	.070	.053	.037	.016	.001	-.017	-.047	-.064	-.083	-.096	-.117	-.129	-.155
	.450	.024	.013	0	-.011	-.025	-.036	-.052	-.072	-.084	-.099	-.110	-.128	-.137	-.153
	.550	.048	.041	.031	.021	.010	.001	-.009	-.024	-.033	-.045	-.051	-.066	-.073	-.083
	.650	.013	.012	.005	-.001	-.010	-.013	-.020	-.029	-.033	-.042	-.044	-.055	-.061	-.064
	.750	.024	.026	.023	.021	.017	.016	.014	.009	.005	0	.001	-.008	-.009	-.011
	.850	.038	.046	.045	.051	.052	.055	.055	.054	.055	.051	.056	.050	.049	.049
	.925	.073	.085	.094	.098	.105	.110	.111	.115	.117	.114	.119	.114	.114	.114
	.975	.178	.186	.191	.192	.196	.200	.202	.209	.213	.214	.224	.224	.226	.236
	[a]1.000	.238	.261	.260	.270	.265	.278	.272	.280	.285	.305	.305	.340	.365	.390

[a]No orifice.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-506.62 PROPELLER BLADE SECTION ($x = 0.70$; $\beta_x = 47.00^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(f) M = 0.58.

J	2.609	2.570	2.528	2.487	2.446	2.407	2.376	2.337	2.297	2.271	2.234	2.208	2.167	2.137
M_x	.768	.775	.781	.786	.792	.798	.805	.809	.813	.819	.826	.833	.838	.844
α_x,	-2.87	-2.45	-1.98	-1.52	-1.04	-.58	-.21	.26	.75	1.08	1.55	1.88	2.42	2.82
$\Delta\beta$	-.64	-.55	-.45	-.38	-.31	-.27	-.26	-.23	-.16	-.09	.03	.12	.25	.35
c_l	-.11	-.01	.15	.30	.46	.58	.72	.86	.99	1.10	1.22	1.35	1.48	1.52
c_n	-.0394	-.0026	.0529	.1090	.1677	.2103	.2619	.3135	.3600	.3974	.4394	.4858	.5342	.5471
c_m	-.1163	-.1177	-.1154	-.1124	-.1121	-.1134	-.1108	-.1082	-.1075	-.1119	-.1173	-.1214	-.1272	-.1377
c_c							.0174	.0162	.0143	.0136	.0142	.0148	.0145	.0138
c/b	Pressure coefficient, P													
Upper surface [a] 0.000	1.157	1.160	1.162	1.164	1.167	1.169	1.172	1.175	1.177	1.179	1.182	1.185	1.188	1.191
.025	.654	.621	.588	.552	.507	.462	.421	.373	.321	.275	.233	.200	.125	.089
.050	.254	.216	.175	.130	.076	.022	-.027	-.085	-.145	-.201	-.249	-.295	-.389	-.444
.100	.116	.083	.051	.014	-.029	-.071	-.108	-.153	-.197	-.234	-.267	-.293	-.349	-.376
.200	-.097	-.126	-.156	-.189	-.229	-.267	-.299	-.338	-.376	-.412	-.449	-.476	-.505	-.522
.300	-.225	-.254	-.280	-.312	-.348	-.384	-.415	-.453	-.490	-.507	-.525	-.540	-.570	-.593
.400	-.319	-.346	-.373	-.402	-.437	-.467	-.489	-.506	-.519	-.553	-.569	-.598	-.633	-.660
.500	-.409	-.436	-.466	-.497	-.537	-.553	-.576	-.609	-.629	-.650	-.670	-.680	-.713	-.732
.600	-.463	-.488	-.516	-.546	-.614	-.687	-.712	-.715	-.741	-.743	-.785	-.801	-.828	-.848
[b] .700	-.462	-.471	-.484	-.505	-.530	-.579	-.619	-.633	-.682	-.632	-.691	-.709	-.710	-.738
.800	-.365	-.361	-.357	-.347	-.342	-.327	-.308	-.300	-.299	-.313	-.341	-.359	-.366	-.378
.900	-.136	-.122	-.111	-.097	-.089	-.077	-.072	-.076	-.085	-.110	-.154	-.203	-.247	-.289
.950	.046	.052	.055	.058	.052	.048	.036	.015	-.006	-.038	-.089	-.143	-.201	-.262
Lower surface .0375	-1.582	-1.460	-1.377	-1.306	-1.213	-1.066	-.740	-.420	-.309	-.222	-.164	-.106	-.022	.019
.075	-1.160	-1.144	-1.013	-.756	-.547	-.359	-.269	-.217	-.156	-.104	-.065	-.023	.036	.065
.150	-.505	-.423	-.358	-.263	-.213	-.162	-.137	-.104	-.062	-.026	-.001	.030	.067	.086
.250	-.305	-.235	-.204	-.162	-.142	-.114	-.092	-.063	-.032	-.004	.013	.035	.064	.078
.350	-.203	-.167	-.149	-.124	-.112	-.096	-.079	-.058	-.034	-.016	-.003	.015	.038	.047
.450	-.156	-.142	-.133	-.120	-.113	-.103	-.091	-.075	-.059	-.045	-.041	-.024	-.008	-.002
.550	-.088	-.083	-.079	-.070	-.068	-.060	-.053	-.042	-.028	-.017	-.014	-.003	.007	.010
.650	-.063	-.064	-.063	-.057	-.058	-.055	-.052	-.046	-.038	-.031	-.031	-.026	-.020	-.022
.750	-.010	-.011	-.012	-.008	-.012	-.012	-.012	-.011	-.006	-.002	-.008	-.007	-.008	-.014
.850	.048	.047	.045	.047	.042	.040	.036	.034	.033	.031	.021	.017	.006	-.009
.925	.112	.112	.110	.112	.106	.104	.098	.092	.088	.081	.065	.054	.035	.015
.975	.210	.210	.206	.207	.199	.195	.189	.187	.185	.184	.174	.173	.160	.143
[a] 1.000	.270	.270	.250	.250	.250	.250	.240	.250	.260	.255	.250	.270	.265	.298

[a] No orifice.

[b] Faired value.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-506.62 PROPELLER BLADE SECTION ($x = 0.70$; $\beta_x = 47.00°$; $\beta_{0.75R} = 45°$; $B = 2$) - Continued

(g) $M = 0.60$.

J	2.553	2.528	2.489	2.460	2.419	2.377	2.338	2.311	2.281	2.246	2.220	2.197	2.164	2.128	2.106
M_x	.796	.806	.811	.820	.826	.828	.830	.839	.849	.851	.856	.863	.870	.869	.873
α_x'	-2.26	-1.98	-1.54	-1.20	-.73	-.23	.25	.58	.95	1.40	1.73	2.03	2.46	2.94	3.24
$\Delta\beta$	-.66	-.63	-.57	-.53	-.46	-.38	-.31	-.24	-.17	-.10	-.05	-.02	0	.04	.07
α_i	-.14	-.03	.11	.21	.32	.49	.59	.70	.82	.95	1.03	1.14	1.24	1.31	1.39
c_n	-.0497	-.0103	.0406	.0768	.1174	.1774	.2155	.2535	.2955	.3439	.3710	.4097	.4465	.4735	.4994
c_m	-.1132	-.1091	-.1118	-.1080	-.1091	-.1078	-.1096	-.1114	-.1108	-.1118	-.1118	-.1137	-.1147	-.1200	-.1249
c_c		.0241	.0233	.0222	.0247	.0204	.0210	.0216	.0220	.0212	.0208	.0210	.0211	.0208	.0203
c/b	Pressure coefficient, P														
Upper surface [a]0.000	1.169	1.173	1.175	1.180	1.182	1.183	1.184	1.188	1.193	1.194	1.196	1.200	1.203	1.203	1.205
.025	.635	.607	.578	.554	.520	.474	.446	.417	.389	.337	.298	.261	.223	.184	.148
.050	.231	.199	.163	.134	.092	.036	-.001	-.034	-.070	-.132	-.177	-.225	-.278	-.322	-.380
.100	.099	.073	.044	.022	-.012	-.055	-.083	-.107	-.132	-.177	-.209	-.237	-.267	-.296	-.317
.200	-.117	-.138	-.166	-.184	-.213	-.252	-.279	-.298	-.322	-.367	-.404	-.419	-.429	-.438	-.452
.300	-.249	-.268	-.295	-.311	-.339	-.374	-.403	-.421	-.429	-.458	-.477	-.487	-.509	-.528	-.531
.400	-.350	-.368	-.392	-.406	-.427	-.446	-.452	-.460	-.482	-.513	-.540	-.559	-.573	-.599	-.615
.500	-.455	-.475	-.498	-.501	-.522	-.553	-.570	-.575	-.587	-.611	-.627	-.642	-.658	-.674	-.676
.600	-.529	-.566	-.625	-.644	-.663	-.670	-.697	-.690	-.697	-.737	-.746	-.775	-.774	-.790	-.793
.700	-.358	-.375	-.428	-.463	-.490	-.510	-.525	-.538	-.538	-.552	-.574	-.586	-.604	-.623	-.629
.800	-.350	-.340	-.333	-.316	-.320	-.323	-.344	-.356	-.361	-.356	-.352	-.354	-.372	-.391	-.402
.900	-.102	-.089	-.080	-.073	-.085	-.102	-.138	-.172	-.214	-.244	-.274	-.297	-.325	-.348	-.359
.950	.053	.053	.047	.038	0	-.028	-.074	-.119	-.176	-.214	-.255	-.286	-.322	-.346	-.359
Lower surface .0375	-1.404	-1.327	-1.272	-1.223	-1.163	-1.106	-1.039	-.850	-.563	-.304	-.244	-.188	-.138	-.079	-.027
.075	-1.336	-1.256	-1.181	-1.110	-.957	-.527	-.338	-.235	-.202	-.161	-.130	-.075	-.015	.014	.057
.150	-.828	-.684	-.539	-.368	-.239	-.173	-.156	-.127	-.095	-.058	-.040	0	.037	.060	.088
.250	-.217	-.170	-.145	-.133	-.129	-.113	-.099	-.076	-.055	-.028	-.013	.014	.040	.050	.066
.350	-.132	-.131	-.133	-.129	-.122	-.108	-.093	-.074	-.058	-.040	-.029	-.007	.018	.027	.046
.450	-.147	-.143	-.145	-.140	-.135	-.120	-.114	-.098	-.083	-.072	-.066	-.048	-.024	-.022	-.010
.550	-.098	-.094	-.096	-.091	-.089	-.076	-.074	-.063	-.056	-.047	-.046	-.034	-.018	-.015	-.003
.650	-.082	-.081	-.085	-.083	-.084	-.076	-.080	-.073	-.070	-.067	-.070	-.062	-.053	-.053	-.043
.750	-.028	-.027	-.032	-.032	-.038	-.035	-.042	-.041	-.043	-.045	-.054	-.050	-.048	-.050	-.042
.850	.031	.032	.026	.024	.014	.011	-.001	-.006	-.015	-.024	-.037	-.040	-.045	-.049	-.044
.925	.101	.101	.095	.091	.077	.069	.052	.042	.025	.010	-.008	-.016	-.024	-.030	-.027
.975	.199	.197	.193	.192	.185	.182	.175	.172	.163	.150	.133	.114	.086	.060	.030
[a]1.000	.280	.265	.253	.270	.270	.270	.270	.288	.280	.278	.260	.263	.172	.140	.100

[a]No orifice.

TABLE 5.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-306.62 PROPELLER BLADE SECTION ($x = 0.70$; $\beta_x = 47.00^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Concluded

(h) M = 0.65.

J		2.124	2.152	2.183	2.219	2.259	2.286	2.326	2.364	2.397	2.434	2.456	2.098
M_x		.943	.932	.922	.917	.911	.903	.896	.889	.879	.874	.867	.948
α_x,		3.00	2.62	2.21	1.74	1.23	.89	.39	-.07	-.47	-.90	-1.16	3.35
$\Delta\beta$		-.25	-.29	-.34	-.40	-.46	-.50	-.56	-.61	-.66	-.71	-.75	-.21
α_i		1.18	1.08	.93	.80	.67	.57	.42	.26	.12	.01	-.05	1.27
c_n		.4232	.3897	.3348	.2890	.2419	.2065	.1503	.0929	.0452	.0026	-.0181	.4574
c_m		-.1608	-.1576	-.1522	-.1501	-.1413	-.1360	-.1295	-.1254	-.1224	-.1226	-.1222	-.1593
c_c		.0428	.0434	.0426	.0418	.0406	.0388	.0381	.0366	.0358	.0347	.0335	.0420
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.242	1.236	1.231	1.228	1.225	1.221	1.217	1.213	1.208	1.205	1.202	1.245
	.025	.410	.419	.453	.470	.495	.518	.552	.572	.587	.608	.627	.363
	.050	-.001	.011	.053	.077	.106	.130	.173	.206	.225	.248	.270	-.037
	.100	-.133	-.128	-.095	-.077	-.052	-.031	.005	.034	.047	.068	.085	-.156
	[b].200	-.299	-.294	-.281	-.273	-.246	-.221	-.187	-.163	-.152	-.133	-.116	-.297
	.300	-.352	-.356	-.342	-.337	-.328	-.322	-.318	-.310	-.305	-.285	-.270	-.363
	.400	-.448	-.450	-.435	-.426	-.412	-.394	-.366	-.344	-.346	-.341	-.340	-.462
	.500	-.522	-.533	-.523	-.518	-.507	-.494	-.478	-.466	-.474	-.461	-.456	-.524
	.600	-.637	-.650	-.641	-.637	-.627	-.626	-.596	-.597	-.604	-.594	-.588	-.635
	.700	-.749	-.762	-.752	-.748	-.739	-.731	-.735	-.733	-.744	-.729	-.720	-.742
	.800	-.849	-.863	-.863	-.859	-.823	-.705	-.621	-.520	-.442	-.386	-.376	-.839
	.900	-.473	-.466	-.416	-.378	-.337	-.301	-.279	-.255	-.233	-.199	-.176	-.467
	.950	-.444	-.440	-.397	-.364	-.326	-.292	-.271	-.245	-.220	-.176	-.143	-.441
Lower surface	.0375	-.157	-.235	-.455	-.568	-.653	-.737	-.829	-.890	-.969	-1.021	-1.077	-.068
	.075	-.066	-.121	-.231	-.371	-.520	-.622	-.720	-.786	-.863	-.910	-.963	-.008
	.150	.013	-.027	-.075	-.093	-.130	-.248	-.561	-.675	-.760	-.808	-.862	.056
	.250	.024	-.012	-.052	-.073	-.087	-.102	-.135	-.178	-.347	-.465	-.588	.058
	.350	.001	-.033	-.071	-.091	-.107	-.120	-.131	-.130	-.154	-.157	-.176	.031
	.450	-.054	-.087	-.123	-.140	-.153	-.163	-.174	-.172	-.183	-.167	-.161	-.030
	.550	-.031	-.063	-.091	-.106	-.116	-.122	-.134	-.133	-.148	-.135	-.126	-.009
	.650	-.076	-.107	-.130	-.142	-.145	-.143	-.151	-.150	-.161	-.143	-.129	-.056
	.750	-.060	-.087	-.104	-.110	-.111	-.108	-.113	-.109	-.114	-.096	-.083	-.043
	.850	-.035	-.057	-.070	-.076	-.077	-.074	-.078	-.071	-.072	-.052	-.038	-.018
	.925	.012	-.008	-.021	-.029	-.031	-.033	-.036	-.029	-.026	-.002	.014	.031
	.975	-.099	-.103	-.088	-.065	-.032	.012	.044	.084	.113	.151	.168	-.095
	[a]1.000	-.264	-.239	-.175	-.108	-.060	.101	.120	.195	.285	.250	.303	-.308

[a]No orifice.

[b]Paired value.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.85 PROPELLER BLADE SECTION ($x = 0.78$; $\beta_x = 43.90°$; $\beta_{0.75R} = 45°$; B = 2)

(a) N = 1140 rpm.

	J	1.606	1.689	1.816	1.928	2.052	2.169	2.300	2.423	2.549	2.649	2.601	2.492	2.367	2.258	2.106	1.982	1.876	1.774	1.652
	M_x	.503	.509	.524	.534	.551	.566	.579	.593	.608	.624	.616	.600	.586	.573	.555	.544	.528	.520	.506
	α_x'	10.66	9.32	7.36	5.70	3.96	2.39	.71	-.78	-2.23	-3.33	-2.81	-1.58	-.11	1.24	3.22	4.93	6.46	8.00	9.91
	$\Delta\beta$	.94	.85	.72	.59	.46	.33	.16	-.02	-.20	-.36	-.28	-.12	.06	.22	.41	.54	.65	.76	.89
	c_l	3.11	3.05	2.77	2.35	1.99	1.57	1.15	.72	.31	-.01	.15	.54	.92	1.29	1.77	2.20	2.52	2.88	3.09
	c_n	.9058	.9671	.8781	.7503	.6387	.5023	.3703	.2313	.0994	-.0019	.0471	.1761	.2965	.4158	.5658	.7039	.8026	.9123	.9755
	c_m	-.0539	-.0542	-.0718	-.0831	-.0893	-.0932	-.0918	-.0919	-.0983	-.1031	-.1009	-.0932	-.0931	-.0921	-.0910	-.0846	-.0783	-.0674	-.0518
	c_c																			
	c/b	Pressure coefficient, P																		
Upper surface	[a]0.000	1.065	1.066	1.070	1.073	1.078	1.082	1.086	1.091	1.095	1.101	1.098	1.093	1.088	1.084	1.079	1.076	1.071	1.069	1.065
	.025	-1.841	-2.126	-2.290	-1.161	-.788	-.345	.027	.328	.507	.605	.558	.424	.198	-.093	-.567	-1.005	-1.600	-2.285	-1.989
	.050	-1.846	-2.078	-1.655	-1.085	-.765	-.462	-.187	.054	.227	.325	.275	.147	-.055	-.279	-.613	-.934	-1.201	-2.026	-1.977
	.100	-1.780	-1.788	-1.085	-.903	-.696	-.490	-.295	-.120	.017	.101	.058	-.047	-.197	-.362	-.592	-.806	-.982	-1.327	-1.841
	.200	-1.153	-1.013	-.804	-.722	-.605	-.488	-.358	-.239	-.132	.070	-.103	-.181	-.291	-.403	-.547	-.669	-.751	-.791	-1.090
	.300	-.937	-.753	-.719	-.661	-.578	-.488	-.393	-.304	-.220	-.168	-.197	-.261	-.343	-.424	-.526	-.624	-.692	-.724	-.806
	.400	-.682	-.620	-.626	-.583	-.520	-.454	-.380	-.315	-.247	-.208	-.229	-.279	-.343	-.405	-.483	-.555	-.605	-.630	-.617
	.500	-.543	-.557	-.585	-.565	-.528	-.480	-.424	-.380	-.323	-.296	-.312	-.348	-.395	-.442	-.500	-.551	-.576	-.584	-.534
	.600	-.432	-.469	-.508	-.504	-.480	-.450	-.408	-.380	-.338	-.318	-.330	-.355	-.388	-.422	-.463	-.495	-.510	-.502	-.448
	.700	-.344	-.394	-.445	-.456	-.452	-.438	-.408	-.395	-.366	-.354	-.363	-.377	-.397	-.418	-.442	-.459	-.452	-.431	-.362
	.800	-.261	-.285	-.327	-.352	-.362	-.365	-.351	-.350	-.334	-.333	-.337	-.339	-.346	-.354	-.360	-.360	-.337	-.314	-.268
	.900	-.172	-.141	-.131	-.133	-.151	-.164	-.162	-.172	-.167	-.175	-.174	-.167	-.161	-.160	-.154	-.146	-.129	-.131	-.143
	.950	-.138	-.077	-.031	-.018	-.013	-.019	-.015	-.026	-.025	-.034	-.033	-.024	-.017	-.015	-.012	-.015	-.022	-.039	-.095
Lower surface	.0375	.744	.712	.638	.527	.377	.184	-.029	-.295	-.902	-1.074	-1.076	-.544	-.159	.052	.293	.459	.585	.667	.733
	.075	.618	.585	.518	.423	.300	.154	.006	-.180	-.460	-.790	-.679	-.254	-.080	.060	.235	.366	.470	.545	.606
	.150	.492	.462	.407	.333	.245	.142	.051	-.078	-.185	-.474	-.309	-.123	-.010	.083	.200	.291	.368	.431	.482
	.250	[b].399	[b].370	[b].330	.248	.186	.116	.045	-.048	-.107	-.194	-.132	-.078	0	.071	[b].172	[b].239	[b].286	[b].327	[b].390
	.350	.334	.313	.279	.231	.176	.116	.060	-.013	-.055	-.096	-.075	-.034	.028	.079	.151	.206	.255	.296	.327
	.450	.263	.249	.222	.181	.138	.090	.045	-.013	-.041	-.064	-.057	-.027	.020	.062	.118	.161	.204	.236	.261
	.550	.227	.221	.202	.168	.132	.092	.054	.011	-.011	-.029	-.024	.002	.036	.069	.116	.148	.182	.213	.227
	.650	.152	.155	.147	.120	.092	.062	.037	-.002	-.011	-.021	-.021	-.005	.020	.048	.081	.105	.133	.156	.163
	.750	.122	.131	.132	.111	.092	.070	.054	.028	.021	.014	.014	.025	.043	.062	.085	.103	.120	.137	.134
	.850	.096	.114	.127	.117	.109	.100	.089	.070	.067	.060	.062	.071	.083	.093	.107	.114	.120	.131	.113
	.925	.064	.095	.123	.120	.124	.122	.120	.108	.108	.100	.100	.111	.119	.122	.126	.120	.120	.121	.089
	[b].975	.040	.081	.128	.126	.150	.138	.144	.142	.140	.125	.050	.140	.146	.143	.142	.128	.125	.116	.068
	[a]1.000	.025	.074	.130	.128	.164	.148	.157	.161	.155	.140	.130	.155	.160	.155	.150	.130	.128	.110	.057

[a]No orifice.

[b]Faired value.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.85 PROPELLER BLADE SECTION ($x = 0.78$; $\beta_x = 43.90°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(b) N = 1350 rpm.

	J	1.793	1.890	1.988	2.130	2.272	2.420	2.567	2.634	2.606	2.490	2.367	2.223	2.087	1.945	1.837
	M_x	.630	.640	.652	.674	.696	.717	.740	.750	.744	.727	.705	.685	.665	.645	.632
	α_x	7.71	6.26	4.85	2.90	1.06	-.74	-2.43	-3.17	-2.86	-1.56	-.11	1.69	3.48	5.46	7.04
	$\Delta\beta$	1.12	.92	.71	.43	.16	-.13	-.46	-.62	-.55	-.27	-.03	.26	.51	.80	1.03
	α_i	3.14	2.70	2.35	1.85	1.38	.80	.28	0	.07	.60	1.02	1.54	2.04	2.51	2.98
	c_n	.9961	.8619	.7523	.5939	.4439	.2594	.0903	.0013	.0219	.1932	.3287	.4942	.6535	.8013	.9497
	c_m	-.0688	-.0816	-.0906	-.0991	-.1023	-.1048	-.1150	-.1180	-.1219	-.1045	-.1031	-.0986	-.0967	-.0928	-.0777
	c_c															
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.103	1.106	1.111	1.120	1.128	1.136	1.145	1.149	1.147	1.140	1.131	1.123	1.113	1.108	1.103
	.025	-2.597	-2.084	-1.227	-.488	-.041	.356	.574	.643	.609	.471	.231	-.220	-.733	-1.593	-2.374
	.050	-2.368	-1.864	-1.091	-.561	-.223	.103	.311	.380	.349	.209	-.005	-.371	-.748	-1.289	-2.181
	.100	-2.164	-1.008	-.919	-.584	-.350	-.094	.088	.153	.125	-.005	-.182	-.468	-.721	-.990	-1.803
	.200	-.687	-.728	-.712	-.556	-.421	-.245	-.103	-.048	-.073	-.173	-.307	-.503	-.631	-.736	-.720
	.300	-.746	-.748	-.689	-.547	-.460	-.332	-.221	-.174	-.194	-.274	-.376	-.529	-.618	-.719	-.756
	.400	-.656	-.654	-.615	-.508	-.451	-.361	-.275	-.238	-.254	-.316	-.392	-.511	-.567	-.635	-.660
	.500	-.622	-.624	-.599	-.522	-.494	-.433	-.371	-.346	-.357	-.400	-.452	-.546	-.571	-.610	-.625
	.600	-.536	-.541	-.531	-.475	-.470	-.435	-.398	-.384	-.392	-.414	-.446	-.514	-.518	-.537	-.537
	.700	-.465	-.480	-.485	-.452	-.466	-.453	-.447	-.447	-.446	-.445	-.455	-.502	-.485	-.484	-.478
	.800	-.328	-.340	-.358	-.340	-.370	-.373	-.382	-.388	-.385	-.372	-.372	-.403	-.371	-.354	-.332
	.900	-.106	-.103	-.117	-.100	-.136	-.145	-.161	-.170	-.166	-.148	-.143	-.168	-.130	-.111	-.102
	.950	-.003	.001	.005	.040	.013	.010	0	-.009	-.006	.009	.010	-.021	.005	.005	.001
Lower surface	.0375	.698	.605	.485	.299	.025	-.315	-1.370	-1.125	-1.722	-.657	-.190	.075	.349	.547	.657
	.075	.576	.495	.393	.254	.053	-.189	-.652	-.970	-.935	-.336	-.103	.079	.283	.443	.541
	.150	.470	.407	.329	.238	.090	-.071	-.267	-.656	-.554	-.134	-.013	.099	.251	.367	.441
	.250	.308	.238	.215	.192	.072	-.043	-.138	-.343	-.223	-.086	-.002	.067	.177	.231	.276
	.350	.323	.280	.227	.182	.084	-.003	-.073	-.137	-.096	-.039	.027	.075	.175	.252	.303
	.450	.267	.228	.184	.151	.066	-.003	-.053	-.067	-.055	-.028	.021	.052	.141	.205	.248
	.550	.239	.208	.168	.151	.075	.021	-.019	-.024	-.020	.003	.039	.058	.134	.188	.226
	.650	.183	.154	.123	.114	.048	.010	-.016	-.011	-.012	-.003	.021	.029	.093	.138	.172
	.750	.164	.141	.118	.120	.068	.039	.023	.027	.025	.031	.048	.041	.096	.130	.153
	.850	.158	.143	.129	.145	.103	.087	.075	.072	.072	.081	.091	.073	.117	.137	.151
	.925	.152	.141	.136	.164	.133	.124	.115	.107	.108	.121	.126	.099	.131	.140	.146
	[b].975	.250	.246	.245	.303	.267	.252	.260	.255	.236	.257	.258	.243	.247	.272	.250
	[a]1.000	.387	.407	.430	.458	.395	.410	.417	.460	.428	.440	.414	.380	.453	.463	.445

[a]No orifice.

[b]Paired value.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.85 PROPELLER BLADE SECTION ($x = 0.78$; $\beta_x = 43.90°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(c) N = 1500 rpm.

	J	2.003	2.100	2.169	2.305	2.409	2.505	2.582	2.547	2.470	2.359	2.252	2.148	2.063
	M_x	.721	.736	.747	.768	.787	.802	.815	.808	.793	.774	.757	.737	.725
	α_x'	4.64	3.30	2.39	.65	-.61	-1.73	-2.60	-2.21	-1.33	-.01	1.32	2.66	3.81
	$\Delta\beta$	.96	.67	.46	.02	-.27	-.56	-.82	-.70	-.45	-.13	.20	.53	.78
	α_1	2.40	2.10	1.81	1.28	.87	.34	-.02	.13	.55	1.06	1.46	1.91	2.24
	c_n	.7671	.6742	.5819	.4126	.2803	.1084	-.0065	.0439	.1781	.3406	.4710	.6135	.7174
	c_m	-.0975	-.1037	-.1071	-.1154	-.1200	-.1324	-.1362	-.1331	-.1268	-.1147	-.1143	-.1064	-.0968
	c_c						.0265	.0298	.0287					
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.137	1.143	1.148	1.157	1.165	1.171	1.177	1.173	1.167	1.159	1.152	1.144	1.139
	.025	-.948	-.503	-.186	.195	.429	.570	.657	.622	.523	.336	.050	-.319	-.655
	.050	-1.003	-.670	-.408	-.073	.141	.289	.378	.341	.237	.049	-.205	-.519	-.819
	.100	-1.107	-.756	-.530	-.295	-.068	.067	.152	.117	.020	-.150	-.364	-.618	-.918
	.200	-.689	-.635	-.567	-.383	-.245	-.134	-.056	-.089	-.173	-.308	-.458	-.593	-.648
	.300	-.708	-.668	-.596	-.462	-.352	-.258	-.190	-.219	-.292	-.399	-.518	-.626	-.695
	.400	-.688	-.675	-.628	-.525	-.429	-.346	-.282	-.306	-.375	-.469	-.567	-.643	-.680
	.500	-.644	-.625	-.608	-.557	-.504	-.451	-.402	-.419	-.469	-.527	-.579	-.612	-.634
	.600	-.568	-.561	-.563	-.551	-.535	-.504	-.464	-.480	-.518	-.542	-.557	-.561	-.566
	.700	-.508	-.511	-.524	-.543	-.592	-.582	-.557	-.565	-.597	-.561	-.533	-.519	-.511
	.800	-.359	-.366	-.378	-.384	-.387	-.386	-.381	-.380	-.390	-.386	-.386	-.376	-.365
	.900	-.101	-.103	-.111	-.114	-.114	-.116	-.103	-.110	-.117	-.115	-.116	-.112	-.104
	.950	.013	.020	.022	.027	.030	.031	.040	.038	.030	.031	.022	.021	.016
Lower surface	.0375	.457	.319	.168	-.098	-.468	-1.293	-1.353	-1.351	-1.237	-.243	.013	.237	.376
	.075	.374	.265	.150	-.035	-.245	-1.181	-1.274	-1.260	-.694	-.129	.037	.201	.308
	.150	.310	.232	.154	.031	-.081	-.222	-.936	-.489	-.110	-.033	.085	.188	.262
	.250	.117	.140	.117	.029	-.047	-.079	-.225	-.103	-.079	-.010	.064	.126	.149
	.350	.225	.177	.126	.055	-.006	-.046	-.051	-.042	-.037	.022	.084	.149	.193
	.450	.180	.139	.099	.042	-.005	-.038	-.031	-.036	-.031	.017	.064	.115	.155
	.550	.168	.135	.102	.057	.022	-.007	-.004	-.006	0	.038	.072	.115	.146
	.650	.121	.097	.069	.036	.009	-.012	-.008	-.010	-.007	.021	.047	.081	.105
	.750	.117	.099	.079	.057	.039	.023	.028	.025	.028	.047	.063	.087	.105
	.850	.131	.121	.109	.098	.087	.078	.082	.080	.081	.093	.101	.115	.123
	.925	.141	.138	.133	.132	.125	.118	.123	.121	.119	.128	.130	.135	.137
	[b].975	.255	.261	.245	.255	.260	.253	.270	.260	.255	.260	.242	.243	.260
	[a]1.000	.380	.360	.358	.380	.393	.420	.405	.430	.405	.425	.375	.390	.440

[a]No orifice.

[b]Faired value.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.85 PROPELLER BLADE SECTION ($x = 0.78$; $\beta_x = 43.90^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$) - Continued

(d) N = 1600 rpm.

	J	2.165	2.267	2.349	2.444	2.528	2.483	2.406	2.315	2.235	2.130
	M_x	.796	.816	.831	.847	.864	.854	.838	.820	.804	.788
	α_x'	2.44	1.13	.11	-1.02	-1.99	-1.48	-.58	.53	1.53	2.90
	$\Delta\beta$	.54	.15	-.16	-.57	-.91	-.75	-.40	-.03	.28	.67
	α_i	1.79	1.44	.99	.38	-.14	.16	.66	1.19	1.54	1.98
	c_n	.5735	.4626	.3187	.1245	-.0445	.0535	.2123	.3826	.4942	.6374
	c_m	-.1150	-.1265	-.1401	-.1422	-.1468	-.1473	-.1298	-.1232	-.1200	-.1167
	c_c	.0021	.0137	.0243	.0328	.0385	.0343	.0258	.0192		
	c/b	Pressure coefficient, P									
Upper surface	[a]0.000	1.169	1.186	1.185	1.192	1.200	1.195	1.188	1.180	1.172	1.165
	.025	-.058	.220	.422	.565	.659	.608	.505	.342	.129	-.212
	.050	-.305	-.052	.137	.311	.390	.336	.224	.057	-.135	-.434
	.100	-.463	-.245	-.075	.069	.170	.116	.008	-.149	-.319	-.591
	.200	-.560	-.403	-.255	-.127	-.037	-.086	-.185	-.321	-.446	-.610
	.300	-.633	-.481	-.364	-.249	-.170	-.214	-.300	-.417	-.524	-.709
	.400	-.604	-.478	-.424	-.351	-.282	-.322	-.389	-.457	-.511	-.658
	.500	-.760	-.691	-.623	-.531	-.464	-.500	-.576	-.661	-.724	-.796
	.600	-.802	-.751	-.673	-.575	-.450	-.510	-.622	-.707	-.773	-.808
	.700	-.510	-.763	-.711	-.616	-.571	-.598	-.651	-.733	-.638	-.460
	.800	-.310	-.300	-.571	-.529	-.701	-.625	-.408	-.316	-.321	-.324
	.900	-.074	-.070	-.075	-.090	-.114	-.100	-.076	-.075	-.077	-.074
	.950	.028	.024	.003	-.030	-.068	-.045	-.004	.020	.027	.032
Lower surface	.0375	.144	-.071	-.730	-1.082	-1.147	-1.121	-1.040	-.199	-.009	.235
	.075	.136	-.013	-.132	-.922	-1.087	-1.048	-.890	-.111	.031	.205
	.150	.149	.047	-.059	-.551	-.926	-.874	-.095	-.022	.079	.196
	.250	.120	.047	-.038	-.073	-.811	-.213	-.060	-.005	.070	.121
	.350	.127	.066	-.001	-.031	-.208	-.047	-.025	.025	.082	.155
	.450	.097	.049	-.004	-.033	-.059	-.031	-.025	.015	.062	.124
	.550	.100	.062	.014	-.003	-.007	-.006	.001	.033	.070	.122
	.650	.065	.036	-.002	-.019	-.018	-.022	-.014	.011	.041	.086
	.750	.078	.054	.021	.009	.007	.008	.015	.034	.059	.092
	.850	.111	.094	.069	.056	.049	.054	.061	.078	.096	.121
	.925	.132	.122	.099	.084	.072	.080	.093	.110	.126	.141
	[b].975	.155	.155	.120	.115	.090	.100	.120	.139	.150	.160
	[a]1.000	.165	.170	.132	.130	.105	.115	.133	.153	.162	.167

[a]No orifice.

[b]Faired value.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.85 PROPELLER BLADE SECTION ($x = 0.78$; $\beta_x = 43.90°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(e) M = 0.56.

	J	2.114	2.146	2.192	2.229	2.278	2.326	2.371	2.417	2.489	2.542	2.578	2.620
	M_x	.879	.868	.858	.847	.837	.828	.817	.805	.800	.789	.784	.778
	α_x'	3.12	2.69	2.09	1.61	.99	.39	-.16	-.71	-1.55	-2.15	-2.56	-3.02
	$\Delta\beta$	.30	.17	.04	-.03	-.07	-.10	-.18	-.32	-.49	-.58	-.64	-.70
	α_i	1.82	1.70	1.57	1.45	1.32	1.15	.93	.74	.45	.22	.12	-.05
	c_n	.5826	.5445	.5045	.4665	.4239	.3690	.2987	.2400	.1471	.0710	.0374	-.0174
	c_m	-.1434	-.1385	-.1350	-.1355	-.1309	-.1222	-.1257	-.1263	-.1273	-.1286	-.1286	-.1306
	c_c	.0153	.0173	.0182	.0174	.0174	.0184	.0196	.0217	.0232			
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.208	1.203	1.198	1.192	1.187	1.183	1.178	1.172	1.170	1.166	1.163	1.161
	.025	.053	.098	.151	.207	.271	.338	.409	.482	.532	.590	.613	.650
	.050	-.138	-.105	-.062	-.018	.037	.095	.162	.201	.280	.337	.361	.396
	.100	-.319	-.289	-.253	-.216	-.169	-.116	-.054	-.018	.056	.110	.132	.167
	.200	-.444	-.430	-.381	-.374	-.338	-.290	-.235	-.206	-.138	-.090	-.070	-.040
	.300	-.553	-.521	-.511	-.468	-.434	-.404	-.352	-.326	-.264	-.193	-.202	-.173
	.400	-.583	-.554	-.510	-.491	-.452	-.407	-.402	-.400	-.344	-.297	-.281	-.252
	.500	-.708	-.697	-.679	-.663	-.628	-.627	-.606	-.548	-.453	-.406	-.389	-.361
	.600	-.756	-.743	-.736	-.722	-.706	-.666	-.584	-.542	-.511	-.464	-.447	-.416
	.700	-.848	-.838	-.827	-.798	-.788	-.735	-.642	-.640	-.524	-.470	-.459	-.433
	.800	-.336	-.310	-.304	-.298	-.307	-.307	-.337	-.371	-.284	-.389	-.393	-.391
	.900	-.295	-.256	-.218	-.167	-.104	-.065	-.076	-.096	-.109	-.123	-.133	-.143
	.950	.293	-.247	-.196	-.130	-.052	.020	.043	.039	.040	.034	.025	.019
Lower surface	.0375	.153	.093	.018	-.060	-.144	-.218	-.672	-1.075	-1.271	-1.430	-1.495	-1.591
	.075	.157	.112	.054	-.004	-.068	-.118	-.152	-.307	-.890	-1.269	-1.346	-1.440
	.150	.180	.148	.107	.066	.022	-.016	-.053	-.074	-.095	-.220	-.332	-.473
	.250	.133	.113	.084	.057	.026	-.002	-.033	-.057	-.070	-.081	-.093	-.108
	.350	.135	.116	.091	.068	.046	.027	.004	-.017	-.032	-.047	-.060	-.071
	.450	.098	.084	.066	.048	.033	.021	.004	-.013	-.024	-.037	-.049	-.057
	.550	.090	.080	.067	.054	.045	.038	.027	.014	.007	-.003	-.013	-.020
	.650	.036	.032	.025	.019	.017	.017	.013	.003	.002	-.005	-.013	-.017
	.750	.030	.032	.029	.030	.034	.042	.043	.036	.038	.034	.028	.025
	.850	.038	.044	.050	.059	.072	.085	.091	.086	.091	.088	.084	.081
	.925	.027	.038	.051	.071	.093	.118	.128	.126	.132	.130	.126	.123
	[b].975	.250	.310	.340	.340	.280	.290	.280	.350	.360	.345	.360	.348
	[a]1.000	.500	.470	.512	.495	.550	.550	.500	.510	.570	.490	.570	.470

[a]No orifice.

[b]Paired value.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.85 PROPELLER BLADE SECTION ($x = 0.78$; $\beta_x = 43.90°$; $\beta_{0.75R} = 45°$; $B = 2$) - Continued

(f) $M = 0.58$.

	J	2.110	2.152	2.198	2.244	2.281	2.329	2.370	2.422	2.488	2.519	2.551	2.596
	M_x	.907	.897	.887	.878	.867	.858	.847	.838	.830	.824	.819	.810
	α_x'	3.16	2.60	2.00	1.41	.95	.35	-.15	-.77	-1.64	-1.90	-2.26	-2.76
	$\Delta\beta$	.42	.24	.05	-.13	-.27	-.37	-.40	-.44	-.56	-.64	-.73	-.86
	α_i	1.63	1.51	1.38	1.24	1.09	.96	.79	.59	.33	.17	.04	-.11
	c_n	.5219	.4826	.4445	.3974	.3510	.3090	.2529	.1916	.1065	.0555	.0123	-.0348
	c_m	-.1417	-.1350	-.1319	-.1244	-.1226	-.1272	-.1293	-.1309	-.1345	-.1352	-.1370	-.1395
	c_c	.0251	.0252	.0250	.0249	.0258	.0255	.0253	.0258	.0279	.0292	.0305	.0323
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.223	1.217	1.212	1.207	1.203	1.197	1.192	1.188	1.184	1.181	1.179	1.175
	.025	.165	.212	.254	.310	.358	.400	.438	.500	.558	.591	.616	.650
	.050	-.038	-.003	.033	.081	.122	.158	.193	.251	.309	.342	.367	.400
	.100	-.226	-.194	-.165	-.124	-.089	-.055	-.023	.032	.084	.116	.140	.172
	.200	-.379	-.350	-.308	-.296	-.270	-.239	-.212	-.163	-.117	-.088	-.067	-.037
	.300	-.475	-.446	-.437	-.394	-.365	-.356	-.334	-.290	-.250	-.222	-.203	-.176
	.400	-.513	-.486	-.445	-.422	-.402	-.371	-.355	-.350	-.335	-.315	-.295	-.268
	.500	-.638	-.628	-.611	-.597	-.584	-.563	-.576	-.555	-.509	-.448	-.419	-.389
	.600	-.684	-.679	-.667	-.657	-.644	-.641	-.620	-.572	-.527	-.482	-.474	-.466
	.700	-.786	-.775	-.767	-.745	-.736	-.726	-.706	-.657	-.623	-.616	-.596	-.537
	.800	-.430	-.388	-.348	-.328	-.331	-.343	-.382	-.384	-.381	-.364	-.374	-.394
	.900	-.337	-.301	-.265	-.230	-.202	-.158	-.105	-.066	-.075	-.085	-.097	-.115
	.950	-.338	-.301	-.260	-.219	-.180	-.120	-.049	.025	.039	.047	.046	.040
Lower surface	.0375	.089	.017	-.039	-.119	-.344	-.659	-.888	-1.058	-1.182	-1.263	-1.326	-1.423
	.075	.112	.056	.013	-.050	-.094	-.166	-.503	-.912	-1.069	-1.161	-1.220	-1.310
	.150	.150	.111	.083	.039	-.005	-.027	-.049	-.102	-.433	-.635	-.790	-.996
	.250	.118	.090	.071	.037	.002	-.019	-.043	-.052	-.059	-.072	-.107	-.180
	.350	.115	.093	.079	.055	.028	.012	-.009	-.019	-.029	-.029	-.032	-.040
	.450	.080	.063	.054	.036	.014	.004	-.012	-.019	-.029	-.029	-.030	-.037
	.550	.074	.061	.055	.043	.027	.020	.010	.009	.001	.001	0	-.006
	.650	.017	.009	.008	.002	-.008	-.007	-.009	-.005	-.009	-.005	-.005	-.009
	.750	.013	.008	.011	.010	.006	.013	.016	.027	.027	.032	.032	.030
	.850	.027	.024	.029	.034	.036	.050	.061	.079	.080	.087	.089	.086
	.925	.025	.019	.025	.036	.043	.065	.086	.113	.120	.128	.130	.129
	[b].975	.031	.010	.020	.037	.050	.072	.098	.140	.150	.159	.160	.160
	[a]1.000	.020	.002	.016	.037	.050	.078	.102	.160	.168	.178	.175	.175

[a]No orifice.

[b]Paired value.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.85 PROPELLER BLADE SECTION ($x = 0.78$; $\beta_x = 43.90°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(g) M = 0.60.

	J	2.103	2.142	2.174	2.206	2.244	2.275	2.323	2.362	2.407	2.443	2.486	2.534	2.566
	M_x	.940	.933	.922	.915	.908	.898	.891	.883	.875	.865	.858	.850	.845
	α_x'	3.26	2.74	2.32	1.91	1.42	1.03	.43	-.05	-.59	-1.01	-1.51	-2.06	-2.42
	$\Delta\beta$	-.06	-.11	-.14	-.17	-.23	-.31	-.45	-.55	-.66	-.73	-.81	-.89	-.94
	α_i	1.64	1.52	1.47	1.29	1.11	.96	.74	.62	.42	.30	.19	.03	-.12
	c_n	.5265	.4877	.4697	.4129	.3548	.3071	.2387	.1994	.1355	.0955	.0619	.0097	-.0374
	c_m	-.1752	-.1719	-.1689	-.1590	-.1516	-.1467	-.1444	-.1426	-.1460	-.1478	-.1509	-.1544	-.1509
	c_c	.0361	.0364	.0367	.0359	.0345	.0337	.0338	.0341	.0343	.0347	.0347	.0350	.0351
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.241	1.237	1.231	1.227	1.223	1.218	1.214	1.210	1.206	1.201	1.198	1.194	1.191
	.025	.251	.297	.313	.347	.393	.417	.469	.498	.535	.561	.588	.624	.653
	.050	.041	.082	.091	.121	.161	.181	.231	.258	.293	.317	.344	.379	.408
	.100	-.148	-.113	-.107	-.084	-.048	-.029	.018	.042	.075	.095	.120	.154	.181
	.200	-.308	-.277	-.261	-.241	-.227	-.213	-.170	-.149	-.120	-.103	-.083	-.052	-.029
	.300	-.404	-.373	-.382	-.370	-.334	-.309	-.285	-.275	-.248	-.232	-.216	-.190	-.169
	[b].400	-.490	-.465	-.483	-.470	-.434	-.408	-.400	-.390	-.373	-.362	-.351	-.319	-.293
	.500	-.569	-.560	-.562	-.551	-.535	-.528	-.502	-.498	-.500	-.498	-.495	-.455	-.418
	.600	-.662	-.611	-.615	-.609	-.595	-.593	-.569	-.570	-.546	-.534	-.514	-.484	-.461
	.700	-.718	-.706	-.713	-.711	-.691	-.682	-.664	-.659	-.639	-.625	-.614	-.592	-.581
	.800	-.838	-.828	-.837	-.790	-.708	-.619	-.574	-.552	-.554	-.571	-.606	-.636	-.581
	.900	-.414	-.393	-.372	-.332	-.285	-.259	-.230	-.208	-.178	-.152	-.110	-.067	-.063
	.950	-.409	-.387	-.366	-.325	-.278	-.251	-.217	-.186	-.147	-.108	-.056	.014	.041
Lower surface	.0375	.052	-.008	-.058	-.226	-.491	-.608	-.739	-.840	-.946	-1.035	-1.105	-1.194	-1.257
	.075	.086	.039	-.005	-.058	-.148	-.338	-.657	-.751	-.856	-.939	-1.012	-1.110	-1.171
	.150	.141	.109	.074	.028	.002	-.009	-.064	-.302	-.599	-.766	-.850	-.935	-.993
	.250	.111	.088	.059	.024	.002	-.013	-.031	-.047	-.072	-.124	-.210	-.355	-.490
	.350	.113	.095	.070	.043	.028	.016	-.002	-.018	-.023	-.030	-.035	-.053	-.093
	.450	.078	.063	.041	.020	.011	.002	-.011	-.025	-.029	-.031	-.030	-.023	-.017
	.550	.073	.060	.041	.024	.020	.013	.006	-.005	-.006	-.008	-.006	.003	.008
	.650	.015	.005	-.011	-.022	-.022	-.024	-.027	-.032	-.027	-.026	-.022	-.009	-.001
	.750	.016	.007	-.009	-.017	-.013	-.013	-.011	-.011	-.004	.001	.009	.024	.031
	.850	.041	.033	.017	.009	.013	.013	.020	.023	.036	.044	.057	.075	.085
	.925	.051	.041	.024	.013	.015	.016	.025	.033	.051	.065	.082	.107	.120
	[b].975	.056	.040	.025	0	.015	.022	.022	.038	.056	.076	.096	.112	.130
	[a]1.000	.060	.044	.025	0	.014	.023	.020	.039	.052	.080	.100	.111	.130

[a]No orifice.

[b]Faired value.

TABLE 6.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.65 PROPELLER BLADE SECTION ($x = 0.78$; $\beta_x = 43.90^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Concluded

(h) M = 0.65.

	J	2.089	2.102	2.132	2.160	2.179	2.213	2.243	2.268	2.299	2.326	2.359	2.386	2.418	2.451
	M_x	1.026	1.015	1.007	.999	.989	.983	.977	.969	.962	.956	.949	.941	.934	.923
	α_x'	3.45	3.28	2.88	2.50	2.26	1.81	1.43	1.11	.73	.39	-.01	-.34	-.72	-1.11
	$\Delta\beta$	-.39	-.41	-.47	-.52	-.56	-.63	-.69	-.73	-.79	-.82	-.89	-.93	-.98	-1.03
	α_1	1.44	1.38	1.21	1.12	1.01	.87	.70	.58	.42	.27	.12	0	-.12	-.30
	c_n	.4613	.4406	.3858	.3587	.3239	.2781	.2239	.1858	.1342	.0855	.0394	.0013	-.0381	-.0961
	c_a	-.1922	-.1929	-.1875	-.1870	-.1829	-.1780	-.1696	-.1671	-.1516	-.1457	-.1383	-.1367	-.1327	-.1296
	c_c	.0506	.0528	.0515	.0521	.0529	.0534	.0509	.0506	.0471	.0450	.0446	.0446	.0440	.0434
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.291	1.284	1.279	1.274	1.268	1.265	1.261	1.257	1.253	1.250	1.245	1.241	1.237	1.231
	.025	.399	.419	.451	.463	.471	.491	.513	.524	.545	.559	.589	.602	.615	.631
	.050	.199	.214	.240	.251	.257	.273	.292	.298	.318	.330	.361	.371	.385	.398
	.100	.008	.021	.045	.052	.056	.071	.088	.093	.110	.120	.150	.159	.170	.182
	.200	-.156	-.145	-.118	-.100	-.097	-.093	-.090	-.092	-.076	-.067	-.039	-.031	-.024	-.014
	.300	-.255	-.243	-.220	-.223	-.230	-.220	-.195	-.197	-.175	-.171	-.158	-.157	-.152	-.143
	[b].400	-.335	-.320	-.308	-.317	-.324	-.316	-.297	-.290	-.281	-.273	-.270	-.264	-.279	-.269
	.500	-.415	-.410	-.404	-.404	-.407	-.402	-.394	-.401	-.391	-.390	-.375	-.373	-.381	-.392
	.600	-.467	-.467	-.453	-.454	-.461	-.454	-.448	-.458	-.454	-.456	-.442	-.448	-.453	-.448
	[b].700	-.554	-.554	-.550	-.545	-.559	-.555	-.561	-.556	-.578	-.586	-.573	-.579	-.595	-.578
	.800	-.669	-.669	-.664	-.672	-.683	-.681	-.679	-.689	-.687	-.693	-.692	-.700	-.707	-.713
	.900	-.810	-.814	-.817	-.830	-.843	-.843	-.837	-.817	-.539	-.412	-.349	-.329	-.287	-.245
	.950	-.860	-.865	-.835	-.836	-.822	-.638	-.517	-.455	-.395	-.356	-.317	-.303	-.269	-.228
Lower surface	.0375	-.050	-.139	-.260	-.314	-.368	-.418	-.486	-.536	-.604	-.654	-.726	-.784	-.837	-.907
	.075	.032	-.026	-.188	-.266	-.331	-.382	-.447	-.492	-.552	-.600	-.661	-.711	-.763	-.833
	.150	.129	.115	.090	.055	-.060	-.204	-.305	-.357	-.424	-.474	-.534	-.580	-.630	-.701
	.250	.099	.085	.055	.036	.007	-.021	-.093	-.200	-.359	-.438	-.497	-.540	-.589	-.654
	.350	.115	.103	.073	.055	.021	0	-.021	-.045	-.103	-.188	-.345	-.420	-.509	-.580
	.450	.080	.068	.041	.023	-.015	-.038	-.057	-.074	-.089	-.101	-.125	-.152	-.260	-.397
	.550	.086	.071	.050	.054	-.001	-.021	-.041	-.057	-.069	-.075	-.069	-.075	-.103	-.123
	.650	.013	0	-.015	-.027	-.065	-.079	-.094	-.103	-.102	-.096	-.078	-.082	-.094	-.087
	.750	.020	.008	.003	-.005	-.033	-.034	-.041	-.045	-.045	-.043	-.035	-.042	-.048	-.042
	.850	.097	.081	.076	.064	.044	.040	.031	.022	.016	.013	.014	.004	-.001	.003
	.925	.138	.123	.110	.098	.079	.072	.063	.049	.040	.031	.028	.017	.011	.012
	[b].975	.145	.138	.127	.113	.095	.093	.078	.057	.050	.041	.035	.021	.029	.029
	[a]1.000	.142	.140	.131	.116	.096	.100	.082	.060	.050	.045	.038	.023	.034	.032

[a]No orifice.

[b]Paired value.

NACA

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.30 PROPELLER BLADE SECTION ($x = 0.85$; $\beta_x = 41.10°$; $\beta_{0.75R} = 45°$; B = 2)

(a) N = 1140 rpm.

	J	2.709	2.541	2.376	2.183	2.178	2.030	1.879	1.710	1.551	1.629	1.799	1.959	2.086	2.267	2.426	2.614
	M_x	.650	.628	.612	.587	.589	.573	.554	.536	.520	.530	.548	.563	.580	.604	.620	.643
	α_x'	-4.31	-2.48	-.56	1.83	1.90	3.86	5.97	8.46	10.95	9.72	7.13	4.84	3.11	.77	-1.16	-3.29
	$\Delta\beta$	-.63	-.32	-.04	.30	.30	.50	.72	.96	1.18	1.08	.84	.60	.43	.16	-.13	-.45
	α_i	-.21	.47	1.06	1.75	1.70	2.37	2.86	3.42	3.60	3.51	3.17	2.61	2.10	1.40	.88	.15
	c_n	-.0581	.1277	.2890	.4735	.4613	.6387	.7697	.9148	.9568	.9387	.8477	.6994	.5652	.3787	.2387	.0400
	c_m	-.1019	-.1006	-.0929	-.0950	-.0954	-.0891	-.0823	-.0600	-.0760	-.0580	-.0744	-.0887	-.0928	-.0985	-.0954	-.1049
	c_c																
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.110	1.102	1.097	1.088	1.089	1.084	1.079	1.073	1.069	1.072	1.077	1.081	1.087	1.086	1.099	1.107
	.025	.695	.501	.250	-.277	-.272	-.890	-1.518	-1.969	-1.381	-1.721	-2.167	-1.153	-.613	.011	.348	.572
	.050	.393	.237	.001	-.408	-.399	-.810	-1.178	-1.885	-1.391	-1.680	-1.836	-1.049	-.641	-.186	.090	.309
	.100	.179	.045	-.134	-.419	-.412	-.670	-.907	-1.655	-1.402	-1.621	-1.179	-.837	-.564	-.265	-.071	.109
	.200	-.009	-.112	-.243	-.429	-.417	-.584	-.705	-.940	-1.052	-1.052	-.720	-.671	-.494	-.326	-.199	-.064
	.300	-.119	-.202	-.299	-.438	-.433	-.546	-.633	-.695	-.986	-.870	-.664	-.641	-.502	-.365	-.268	-.163
	.400	-.179	-.242	-.317	-.431	-.426	-.498	-.557	-.599	-.729	-.620	-.583	-.584	-.463	-.367	-.295	-.214
	.500	-.249	-.311	-.354	-.434	-.429	-.484	-.517	-.486	-.547	-.482	-.527	-.527	-.457	-.389	-.337	-.276
	.600	-.301	-.331	-.372	-.423	-.420	-.462	-.472	-.424	-.423	-.393	-.475	-.525	-.445	-.398	-.362	-.317
	.700	-.338	-.356	-.381	-.413	-.410	-.430	-.422	-.350	-.322	-.316	-.407	-.482	-.420	-.393	-.370	-.344
	.800	-.302	-.304	-.314	-.331	-.326	-.326	-.299	-.243	-.254	-.234	-.291	-.374	-.326	-.321	-.310	-.301
	.900	-.188	-.176	-.169	-.174	-.171	-.149	-.115	-.121	-.187	-.152	-.130	-.192	-.157	-.168	-.171	-.178
	.950	-.080	-.005	-.002	-.005	-.001	-.001	.001	-.047	-.149	-.107	-.016	-.054	.004	-.001	0	-.008
Lower surface	.0375	-.767	-.837	-.180	.164	.161	.419	.607	.735	.802	.761	.667	.454	.321	.002	-.293	-.811
	.075	-.787	-.646	-.062	.152	.152	.339	.491	.603	.671	.630	.542	.356	.266	.061	-.122	-.784
	.150	-.727	-.186	-.018	.133	.132	.263	.381	.476	.536	.495	.422	.264	.215	.065	-.058	-.519
	.250	-.450	-.048	.023	.129	.131	.223	.309	.336	.297	.257	.315	.187	.174	.078	-.005	-.149
	.350	-.200	-.024	.034	.118	.117	.189	.263	.327	.365	.334	.289	.170	.164	.076	.014	-.034
	.450	-.055	.010	.056	.129	.129	.171	.233	.280	.311	.285	.250	.144	.156	.091	.042	.009
	.550	-.009	.014	.049	.100	.102	.151	.195	.233	.253	.232	.207	.119	.135	.076	.037	.014
	.650	.017	.021	.045	.079	.083	.119	.161	.189	.197	.180	.169	.085	.107	.063	.037	.022
	.750	.050	.055	.074	.100	.102	.127	.161	.178	.173	.161	.167	.089	.121	.087	.069	.056
	.850	.077	.086	.099	.114	.115	.127	.149	.149	.122	.123	.149	.085	.125	.107	.097	.086
	.925	.106	.117	.128	.137	.138	.139	.149	.131	.082	.093	.143	.091	.145	.135	.129	.116
	[b].975	.130	.140	.150	.157	.150	.145	.153	.130	.067	.070	.148	.104	.167	.160	.150	.140
	[a]1.000	.140	.151	.160	.171	.160	.150	.160	.128	.066	.060	.150	.111	.180	.173	.163	.154

[a]No orifice.

[b]Faired value.

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.30 PROPELLER BLADE SECTION ($x = 0.85$; $\beta_r = 41.10°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(b) N = 1350 rpm.

	J	1.762	1.887	2.053	2.186	2.344	2.464	2.610	2.700	2.654	2.538	2.413	2.276	2.126	1.972	1.856
	M_r	.649	.662	.682	.697	.723	.743	.763	.776	.769	.750	.729	.707	.690	.670	.655
	α_r'	7.68	5.85	3.55	1.80	-.18	-1.60	-3.25	-4.22	-3.72	-2.44	-1.00	.66	2.58	4.66	6.30
	$\Delta\beta$	1.33	1.01	.61	.31	-.05	-.33	-.79	-1.02	-.92	-.54	-.21	.10	.44	.80	1.09
	α_i	3.63	3.13	2.46	1.88	1.22	.79	.15	-.27	-.06	.42	1.03	1.50	2.10	2.74	3.30
	c_n	.9716	.8413	.6639	.5097	.3332	.2142	.0400	-.0723	-.0174	.1135	.2800	.4058	.5681	.7355	.8890
	c_m	-.0655	-.0814	-.0944	-.1029	-.1064	-.1082	-.1040	-.1209	-.1240	-.1196	-.1081	-.1048	-.1001	-.0890	-.0762
	c_o															
	o/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.109	1.114	1.122	1.128	1.138	1.146	1.154	1.160	1.157	1.149	1.140	1.131	1.123	1.117	1.111
	.025	-2.374	-1.848	-.799	-.202	.249	.484	.634	.702	.668	.566	.385	.069	-.433	-1.246	-2.001
	.050	-2.244	-1.721	-.848	-.384	-.009	.207	.365	.438	.401	.292	.113	-.164	-.566	-1.169	-1.873
	.100	-2.040	-1.222	-.708	-.436	-.171	.002	.141	.209	.174	.076	-.074	-.284	-.554	-.825	-1.558
	.200	-.620	-.635	-.604	-.452	-.292	-.172	-.061	-.005	-.034	-.113	-.223	-.370	-.533	-.643	-.630
	.300	-.648	-.672	-.584	-.482	-.361	-.271	-.183	-.137	-.161	-.227	-.307	-.416	-.527	-.626	-.667
	.400	-.601	-.600	-.537	-.474	-.394	-.330	-.262	-.229	-.246	-.297	-.352	-.434	-.500	-.565	-.596
	.500	-.560	-.562	-.529	-.477	-.424	-.375	-.330	-.310	-.319	-.353	-.390	-.448	-.501	-.541	-.556
	.600	-.509	-.515	-.500	-.471	-.441	-.411	-.385	-.379	-.383	-.401	-.415	-.456	-.486	-.502	-.508
	.700	-.444	-.458	-.462	-.454	-.442	-.435	-.425	-.440	-.437	-.433	-.427	-.449	-.460	-.457	-.448
	.800	-.309	-.318	-.335	-.342	-.347	-.348	-.356	-.377	-.367	-.355	-.335	-.347	-.345	-.324	-.309
	.900	-.123	-.114	-.128	-.144	-.155	-.162	-.176	-.199	-.189	-.174	-.147	-.154	-.144	-.116	-.107
	.950	-.006	-.004	.004	.015	.014	.015	.008	-.010	-.001	.008	-.027	.011	.008	0	.004
Lower surface	.0375	.689	.588	.388	.154	-.161	-.511	-.985	-1.006	-1.005	-1.008	-.271	-.018	.257	.489	.622
	.075	.569	.481	.321	.152	-.042	-.186	-.860	-.949	-.924	-.702	-.113	.058	.225	.400	.511
	.150	.448	.376	.255	.137	-.003	-.106	-.548	-.763	-.682	-.280	-.046	.061	.185	.312	.400
	.250	.288	.242	.210	.129	.035	-.035	-.212	-.465	-.349	-.075	.013	.082	.172	.232	.272
	.350	.311	.263	.189	.127	.046	-.007	-.070	-.239	-.150	-.031	.030	.078	.151	.224	.282
	.450	.270	.231	.187	.135	.069	.030	0	-.092	-.038	.007	.059	.093	.154	.212	.251
	.550	.229	.197	.149	.109	.059	.028	.014	-.032	-.005	.012	.055	.077	.123	.174	.216
	.650	.186	.158	.119	.087	.051	.031	.029	.009	.019	.021	.052	.064	.098	.137	.170
	.750	.183	.159	.131	.109	.082	.068	.063	.047	.056	.057	.086	.090	.116	.144	.170
	.850	.165	.151	.134	.124	.107	.101	.095	.080	.094	.092	.115	.111	.126	.141	.159
	.925	.161	.153	.148	.148	.140	.135	.127	.109	.116	.124	.149	.140	.146	.149	.161
	[b].975	.165	.185	.160	.166	.170	.160	.150	.130	.143	.153	.174	.164	.161	.154	.189
	[a]1.000	.170	.210	.165	.178	.185	.173	.159	.140	.157	.167	.187	.175	.169	.160	.210

[a]No orifice.

[b]Faired value.

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.30 PROPELLER BLADE SECTION ($x = 0.85$; $\beta_x = 41.10^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(c) N = 1500 rpm.

	J	2.038	2.104	2.233	2.313	2.436	2.540	2.611	2.678	2.497	2.385	2.273	2.177	2.062	1.968
	M_x	.753	.763	.786	.799	.819	.837	.848	.841	.827	.806	.790	.776	.756	.744
	α_x,	3.75	2.86	1.20	.20	-1.27	-2.47	-3.26	-2.89	-1.98	-.67	.70	1.91	3.43	4.71
	$\Delta\beta$	.88	.65	.20	-.10	-.53	-.96	-1.22	-1.11	-.78	-.35	.05	.40	.80	1.12
	α_i	2.60	2.33	1.79	1.38	.78	.20	-.08	.01	.54	1.11	1.61	1.97	2.48	2.93
	c_n	.7032	.6303	.4852	.3768	.2123	.0542	-.0219	.0026	.1471	.3039	.4381	.5348	.6703	.7871
	c_m	-.1000	-.1052	-.1124	-.1170	-.1308	-.1447	-.1573	-.1504	-.1383	-.1209	-.1141	-.1114	-.1029	-.0898
	c_o						.0310	.0358	.0329	.0275					
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.151	1.155	1.164	1.170	1.179	1.188	1.193	1.189	1.183	1.173	1.166	1.160	1.152	1.147
	.025	-.693	-.389	.035	.283	.509	.643	.775	.739	.652	.433	.182	-.116	-.327	-1.070
	.050	-.860	-.596	-.209	.013	.233	.374	.505	.464	.371	.156	-.078	-.342	-.766	-1.100
	.100	-.920	-.619	-.332	-.159	.027	.152	.275	.237	.153	-.041	-.232	-.437	-.796	-1.137
	.200	-.655	-.610	-.438	-.315	-.164	-.056	.053	.019	-.056	-.219	-.410	-.485	-.640	-.757
	.300	-.615	-.598	-.495	-.406	-.286	-.193	-.096	-.123	-.188	-.328	-.442	-.541	-.598	-.623
	.400	-.595	-.571	-.502	-.444	-.358	-.282	-.195	-.219	-.273	-.390	-.470	-.539	-.595	-.554
	.500	-.607	-.613	-.580	-.551	-.487	-.426	-.351	-.370	-.415	-.511	-.565	-.595	-.609	-.574
	.600	-.548	-.548	-.529	-.508	-.462	-.419	-.363	-.366	-.398	-.480	-.521	-.537	-.547	-.536
	.700	-.495	-.502	-.498	-.517	-.660	-.632	-.599	-.608	-.639	-.620	-.517	-.505	-.499	-.482
	.800	-.332	-.343	-.339	-.345	-.335	-.332	-.409	-.316	-.287	-.341	-.344	-.343	-.336	-.324
	.900	-.109	-.117	-.114	-.116	-.113	-.098	-.036	-.045	-.060	-.111	-.114	-.116	-.110	-.105
	.950	.021	.026	.034	.034	.038	.046	.096	.095	.092	.041	.035	.032	.026	.020
Lower surface	.0375	.403	.282	.034	-.154	-1.054	-1.238	-1.281	-1.258	-1.196	-.686	-.056	.149	.358	.513
	.075	.340	.249	.107	-.033	-.573	-1.125	-1.179	-1.152	-1.062	-.082	.038	.154	.304	.424
	.150	[b].273	.207	.107	.007	-.046	-.907	-1.059	-1.023	-.135	-.051	.052	.142	[b].248	[b].338
	.250	.222	.163	.117	.049	-.009	-.043	-.353	-.143	.049	.009	.079	.130	[b].194	[b].272
	.350	.204	.164	.108	.056	.008	.021	-.057	.062	.058	.026	.080	.132	.190	.246
	.450	.193	.167	.121	.080	.041	.047	.105	.104	.090	.057	.099	.141	.185	.223
	.550	.162	.135	.099	.066	.036	.040	.108	.095	.084	.049	.081	.114	.154	.192
	.650	.127	.105	.082	.057	.036	.036	.103	.092	.081	.046	.067	.091	.122	.151
	.750	.140	.123	.105	.086	.071	.073	.132	.127	.122	.080	.095	.112	.136	.158
	.850	.142	.133	.126	.114	.105	.108	.161	.161	.158	.111	.119	.129	.141	.157
	.925	.156	.153	.152	.145	.141	.143	.193	.195	.195	.145	.147	.153	.157	.165
	[b].975	.170	.172	.180	.172	.171	.175	.220	.219	.226	.166	.175	.180	.167	.178
	[a]1.000	.177	.182	.192	.188	.186	.189	.235	.230	.240	.178	.190	.193	.172	.183

[a]No orifice.

[b]Paired value.

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.30 PROPELLER BLADE SECTION ($x = 0.85$; $\beta_x = 41.10^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$) - Continued

(d) $n = 1600$ rps.

	J	2.545	2.493	2.438	2.360	2.302	2.240	2.151	2.080	2.115	2.191	2.269	2.337	2.396	2.469	2.529
	M_x	.903	.886	.876	.861	.852	.840	.826	.815	.817	.831	.843	.858	.867	.881	.894
	α_x'	-2.52	-1.93	-1.30	-.37	.34	1.11	2.25	3.18	2.72	1.73	.75	-.09	-.80	-1.66	-2.34
	$\Delta\beta$	-1.13	-.94	-.67	-.31	-.05	.22	.62	.95	.79	.44	.09	-.21	-.47	-.81	-1.08
	c_l	-.38	.07	.53	.93	1.35	1.74	2.22	2.52	2.32	1.98	1.56	1.12	.77	.36	-.10
	c_n	-.1019	.0194	.1445	.2523	.3665	.4723	.6013	.6800	.6277	.5361	.4245	.3045	.2103	.0981	-.0277
	c_m	-.1516	-.1622	-.1472	-.1368	-.1257	-.1255	-.1226	-.1141	-.1173	-.1255	-.1259	-.1311	-.1386	-.1560	-.1598
	c_o	.0425	.0393	.0327	.0253	.0193	.0121	.0017			.0069	.0155	.0226	.0280	.0363	.0411
	o/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.221	1.211	1.206	1.199	1.195	1.190	1.182	1.177	1.178	1.185	1.191	1.197	1.202	1.209	1.216
	.025	.715	.659	.585	.482	.363	.187	-.084	-.292	-.162	.055	.276	.426	.514	.624	.693
	.050	.460	.398	.318	.211	.093	-.074	-.323	-.526	-.396	-.196	.007	.152	.244	.374	.434
	.100	.245	.184	.110	.009	-.096	-.236	-.427	-.636	-.499	-.330	-.167	-.043	.041	.148	.217
	.200	.032	-.026	-.096	-.184	-.274	-.379	-.536	-.548	-.544	-.464	-.331	-.227	-.159	-.061	.003
	.300	-.109	-.165	-.227	-.307	-.378	-.491	-.649	-.762	-.704	-.565	-.454	-.348	-.287	-.198	-.138
	.400	-.188	-.230	-.279	-.363	-.441	-.530	-.670	-.818	-.717	-.599	-.497	-.406	-.334	-.255	-.211
	.500	-.328	-.377	-.423	-.474	-.520	-.589	-.675	-.791	-.714	-.640	-.556	-.499	-.466	-.403	-.355
	.600	-.431	-.484	-.535	-.588	-.627	-.664	-.730	-.643	-.733	-.694	-.650	-.612	-.579	-.512	-.458
	.700	-.577	-.625	-.667	-.699	-.743	-.776	-.635	-.445	-.463	-.751	-.765	-.730	-.701	-.648	-.605
	.800	-.678	-.678	-.487	-.378	-.308	-.269	-.276	-.294	-.284	-.262	-.286	-.346	-.428	-.605	-.697
	.900	-.155	-.145	-.124	-.102	-.088	-.071	-.074	-.082	-.073	-.070	-.078	-.103	-.120	-.130	-.145
	.950	-.093	-.082	-.061	-.040	-.026	-.002	.023	.040	.040	.009	-.014	-.043	-.060	-.069	-.087
Lower surface	.0375	-1.083	-1.052	-.986	-.865	-.316	-.029	.172	.302	.235	.071	-.123	-.749	-.932	-1.026	-1.080
	.075	-.997	-.962	-.893	-.640	-.052	.060	.172	.268	.220	.113	-.006	-.186	-.827	-.935	-.993
	.150	-.903	-.864	-.776	-.015	.019	.065	.155	.224	.192	.114	.022	-.034	-.210	-.832	-.895
	.250	-.790	-.720	-.007	.017	.032	.081	.122	.131	.131	.115	.055	.009	.012	-.331	-.772
	.350	-.737	-.067	.037	.026	.040	.082	.137	.180	.163	.109	.061	.023	.015	.026	-.351
	.450	-.130	.065	.059	.053	.063	.098	.143	.178	.168	.117	.080	.049	.040	.069	-.002
	.550	.029	.064	.042	.039	.048	.075	.113	.149	.136	.092	.061	.034	.025	.051	.068
	.650	.075	.048	.028	.028	.035	.060	.088	.117	.108	.073	.048	.025	.014	.036	.065
	.750	.089	.066	.056	.060	.064	.085	.110	.134	.127	.095	.075	.055	.045	.060	.078
	.850	.091	.080	.078	.084	.089	.106	.124	.144	.141	.114	.097	.079	.068	.078	.086
	.925	.093	.092	.096	.106	.112	.127	.146	.166	.163	.135	.121	.101	.091	.095	.093
	[b].975	.099	.110	.110	.125	.130	.147	.168	.180	.178	.156	.140	.120	.119	.110	.108
	[a]1.000	.100	.118	.118	.134	.141	.155	.179	.190	.185	.166	.150	.126	.132	.118	.111

[a]No orifice.

[b]Faired value.

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.30 PROPELLER BLADE SECTION ($x = 0.85$; $\beta_x = 41.10°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(e) M = 0.56.

	J	2.128	2.152	2.192	2.235	2.276	2.323	2.367	2.414	2.453	2.514	2.564	2.602	2.639	2.460
	M_x	.918	.903	.894	.885	.876	.868	.859	.850	.840	.832	.823	.814	.805	.838
	α_x'	2.55	2.24	1.72	1.17	.66	.08	-.45	-1.01	-1.47	-2.17	-2.74	-3.16	-3.78	-1.55
	$\Delta\beta$	.18	.08	-.03	-.12	-.17	-.21	-.30	-.45	-.58	-.74	-.86	-.94	-1.06	-.60
	c_l	1.98	1.86	1.74	1.57	1.46	1.21	1.08	.90	.73	.39	.21	.02	-.16	.69
	c_n	.5361	.5026	.4729	.4258	.3968	.3290	.2942	.2452	.1994	.1071	.0568	.0065	-.0439	.1890
	c_m	-.1385	-.1350	-.1299	-.1247	-.1245	-.1257	-.1316	-.1342	-.1321	-.1372	-.1417	-.1419	-.1347	-.1314
	c_o	.0202	.0203	.0205	.0213	.0213	.0222	.0231	.0249	.0262	.0289				
	x/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.228	1.221	1.216	1.211	1.207	1.202	1.198	1.194	1.189	1.185	1.181	1.177	1.173	1.188
	.025	.210	.219	.253	.303	.338	.425	.464	.513	.553	.610	.657	.678	.708	.537
	.050	-.050	-.043	-.015	.031	.063	.148	.188	.238	.281	.338	.437	.409	.444	.265
	.100	-.212	-.207	-.186	-.152	-.128	-.051	-.014	.032	.070	.122	.167	.185	.217	.055
	.200	-.359	-.367	-.358	-.324	-.308	-.238	-.205	-.167	-.133	-.086	-.044	-.029	-.001	-.145
	.300	-.462	-.469	-.455	-.430	-.406	-.347	-.324	-.290	-.260	-.220	-.180	-.166	-.139	-.272
	.400	-.544	-.546	-.532	-.507	-.491	-.436	-.400	-.381	-.356	-.314	-.271	-.256	-.229	-.369
	.500	-.610	-.617	-.607	-.588	-.586	-.526	-.498	-.471	-.439	-.427	-.374	-.354	-.327	-.454
	.600	-.668	-.683	-.680	-.670	-.697	-.594	-.583	-.547	-.513	[b]-.453	-.448	-.434	-.410	-.522
	.700	-.794	-.815	-.815	-.802	-.793	-.723	-.702	-.679	-.639	-.623	-.588	-.551	-.507	-.634
	.800	-.324	-.317	-.293	-.284	-.280	-.319	-.380	-.406	-.362	-.340	-.355	-.373	-.383	-.384
	.900	-.280	-.269	-.243	-.222	-.180	-.113	-.072	-.068	-.092	-.113	-.136	-.130	-.180	-.110
	.950	-.274	-.261	-.233	-.206	-.155	-.070	.001	.036	.049	.047	.043	.031	.010	.029
Lower surface	.0375	.096	.022	-.039	-.116	-.191	-.646	-.811	-.975	-1.091	-1.209	-1.322	-1.403	-1.429	-1.117
	.075	.157	.105	.057	-.007	-.032	-.061	-.352	-.814	-.963	-1.099	-1.206	-1.283	-1.294	-.992
	.150	.144	.096	.061	.016	-.006	-.018	-.019	-.015	-.065	-.445	-.739	-.788	-.661	-.110
	.250	.152	.111	.086	.053	.039	.032	.022	.013	.008	.007	-.033	-.083	-.215	-.009
	.350	.130	.095	.074	.049	.040	.040	.020	.021	.014	.012	.006	-.007	-.105	-.005
	.450	.132	.100	.084	.063	.060	.065	.062	.053	.046	.018	.035	.024	-.034	.027
	.550	.093	.063	.052	.036	.036	.047	.048	.042	.038	.011	.032	.021	-.008	.019
	.650	.055	.030	.021	.011	.014	.033	.039	.038	.037	.011	.034	.026	.014	.017
	.750	.064	.041	.035	.029	.037	.061	.072	.074	.076	.076	.074	.066	.057	.037
	.850	.058	.036	.034	.032	.046	.078	.097	.105	.108	.107	.107	.100	.090	.087
	.925	.056	.034	.034	.036	.055	.095	.123	.137	.145	.147	.146	.140	.126	.123
	[b].975	.059	.037	.039	.035	.059	.110	.145	.164	.175	.185	.178	.170	.160	.156
	[a]1.000	.062	.038	.040	.035	.060	.120	.157	.180	.190	.217	.195	.188	.180	.173

[a]No orifice.

[b]Faired value.

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.30 PROPELLER BLADE SECTION ($x = 0.85$; $\beta_x = 41.10°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(f) M = 0.58.

	J	2.163	2.177	2.216	2.240	2.270	2.324	2.350	2.387	2.414	2.449	2.481	2.526	2.563	2.601	2.636
	M_x	.934	.923	.915	.906	.899	.897	.884	.881	.871	.869	.858	.854	.843	.837	.831
	α_x'	2.09	1.91	1.41	1.11	.73	.07	-.25	-.69	-1.01	-1.42	-1.80	-2.31	-2.73	-3.15	-3.53
	$\Delta\beta$	.09	.02	-.16	-.26	-.38	-.50	-.53	-.56	-.59	-.65	-.73	-.86	-.99	-1.11	-1.22
	α_1	1.79	1.62	1.50	1.39	1.32	1.08	.93	.84	.72	.65	.53	.34	.09	-.04	-.21
	c_n	.4839	.4374	.4058	.3768	.3594	.2948	.2535	.2284	.1974	.1761	.1439	.0916	.0252	-.0103	-.0581
	c_m	-.1553	-.1414	-.1416	-.1354	-.1331	-.1390	-.1421	-.1434	-.1481	-.1527	-.1552	-.1596	-.1540	-.1499	-.1496
	c_c	.0283	.0269	.0262	.0262	.0262	.0290	.0295	.0296	.0308	.0319	.0319	.0338	.0343	.0343	.0356
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.237	1.231	1.227	1.222	1.218	1.217	1.210	1.209	1.204	1.203	1.197	1.195	1.190	1.187	1.184
	.025	.317	.345	.375	.394	.413	.479	.502	.530	.549	.577	.608	.645	.676	.695	.723
	.050	.055	.080	.108	.125	.143	.209	.231	.258	.278	.307	.337	.377	.410	.430	.460
	.100	-.120	-.102	-.079	-.067	-.054	.005	.024	.048	.065	.092	.118	.155	.184	.202	.230
	.200	-.270	-.265	-.244	-.241	-.233	-.184	-.169	-.149	-.135	-.112	-.089	-.057	-.032	-.016	.009
	.300	-.386	-.376	-.363	-.354	-.351	-.304	-.289	-.275	-.265	-.244	-.222	-.194	-.172	-.157	-.133
	.400	-.472	-.462	-.441	-.433	-.420	-.381	-.370	-.351	-.335	-.308	-.322	-.300	-.275	-.262	-.239
	.500	-.487	-.479	-.465	-.470	-.471	-.437	-.432	-.424	-.429	-.422	-.411	-.410	-.406	-.402	-.368
	.600	-.608	-.607	-.599	-.606	-.608	-.576	-.571	-.562	-.557	-.538	-.506	-.487	-.416	-.402	-.401
	.700	-.706	-.715	-.707	-.717	-.725	-.702	-.708	-.697	-.692	-.678	-.668	-.642	-.643	-.649	-.625
	.800	-.598	-.478	-.411	-.383	-.371	-.434	-.441	-.435	-.465	-.506	-.539	-.576	-.458	-.381	-.359
	.900	-.315	-.285	-.251	-.235	-.214	-.200	-.175	-.151	-.142	-.113	-.068	-.064	-.080	-.103	-.124
	.950	-.297	-.266	-.234	-.214	-.184	-.160	-.123	-.083	-.063	-.041	-.001	.022	-.040	.041	.040
Lower surface	.0375	0	-.093	-.215	-.356	-.487	-.720	-.805	-.876	-.948	-1.011	-1.083	-1.165	-1.250	-1.313	-1.380
	.075	.102	.053	.017	0	-.046	-.594	-.702	-.779	-.855	-.917	-.987	-1.068	-1.148	-1.209	-1.272
	.150	.104	.067	.040	.017	.002	-.009	-.078	-.246	-.459	-.675	-.785	-.941	-1.026	-1.081	-1.138
	.250	.117	.092	.076	.059	.048	.033	.029	.032	.027	.017	.008	-.090	-.207	-.290	-.382
	.350	.116	.092	.080	.066	.055	.040	.032	.035	.031	.036	.042	.043	.028	0	-.057
	.450	.120	.100	.091	.079	.073	.060	.056	.058	.054	.057	.061	.066	.064	.060	.057
	.550	.085	.069	.063	.054	.049	.040	.036	.041	.038	.044	.051	.052	.052	.048	.049
	.650	.048	.034	.032	.026	.025	.017	.017	.025	.024	.033	.043	.048	.047	.044	.046
	.750	.061	.049	.069	.044	.044	.041	.044	.054	.056	.065	.079	.082	.083	.079	.080
	.850	.063	.054	.076	.050	.054	.054	.060	.075	.080	.092	.108	.113	.116	.111	.111
	.925	.065	.054	.076	.054	.059	.062	.074	.093	.102	.118	.138	.143	.146	.144	.144
	[b].975	.069	.052	.074	.057	.058	.069	.086	.109	.120	.135	.161	.173	.175	.170	.175
	[a]1.000	.071	.051	.077	.055	.055	.070	.092	.117	.129	.145	.177	.190	.189	.182	.189

[a]No orifice.

[b]Faired value.

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.30 PROPELLER BLADE SECTION ($x = 0.85$; $\beta_x = 41.10°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(g) M = 0.60.

	J	2.135	2.158	2.173	2.220	2.240	2.265	2.290	2.314	2.346	2.370	2.392	2.429	2.464	2.496	2.522	2.560
	M_x	.977	.970	.958	.959	.951	.945	.939	.933	.926	.921	.911	.908	.901	.898	.890	.883
	α_x'	2.46	2.16	1.96	1.36	1.11	.80	.48	.19	-.20	-.49	-.75	-1.19	-1.60	-1.97	-2.26	-2.69
	$\Delta\beta$	-.25	-.27	-.28	-.33	-.37	-.44	-.51	-.60	-.72	-.79	-.85	-.94	-1.01	-1.07	-1.11	-1.16
	α_i	1.69	1.55	1.49	1.29	1.18	1.10	.98	.90	.71	.59	.49	.28	.13	.02	-.04	-.20
	c_n	.4574	.4200	.4026	.3497	.3200	.2974	.2665	.2452	.1929	.1594	.1323	.0774	.0348	.0052	-.0123	-.0542
	c_m	-.1794	-.1726	-.1680	-.1639	-.1601	-.1624	-.1614	-.1650	-.1622	-.1621	-.1626	-.1590	-.1576	-.1573	-.1599	-.1588
	c_a	.0407	.0379	.0370	.0373	.0370	.0375	.0378	.0380	.0384	.0387	.0387	.0397	.0399	.0399	.0396	.0400
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.261	1.237	1.250	1.251	1.247	1.244	1.240	1.237	1.233	1.230	1.225	1.223	1.220	1.218	1.214	1.210
	.025	.406	.418	.420	.465	.479	.499	.529	.555	.565	.579	.595	.619	.642	.661	.671	.705
	.050	.154	.163	.161	.206	.218	.238	.268	.291	.303	.316	.332	.359	.380	.403	.412	.447
	.100	-.015	-.010	-.014	.024	.032	.050	.075	.094	.105	.116	.130	.153	.171	.189	.196	.228
	.200	-.209	-.196	-.197	-.156	-.152	-.140	-.118	-.101	-.090	-.082	-.070	-.051	-.035	-.019	-.015	.014
	.300	-.312	-.296	-.300	-.271	-.263	-.252	-.240	-.224	-.210	-.208	-.201	-.185	-.174	-.160	-.155	-.129
	.400	-.383	-.382	-.390	-.356	-.348	-.332	-.314	-.303	-.294	-.282	-.270	-.240	-.228	-.222	-.228	-.221
	.500	-.437	-.443	-.447	-.414	-.410	-.405	-.393	-.385	-.380	-.378	-.373	-.370	-.373	-.368	-.369	-.358
	.600	-.539	-.541	-.548	-.524	-.525	-.520	-.513	-.507	-.505	-.502	-.498	-.494	-.488	-.477	-.471	-.447
	.700	-.642	-.652	-.663	-.636	-.638	-.636	-.634	-.631	-.634	-.635	-.634	-.625	-.628	-.620	-.617	-.608
	.800	-.752	-.756	-.767	-.751	-.757	-.753	-.747	-.742	-.737	-.739	-.730	-.727	-.715	-.699	-.692	-.682
	.900	-.667	-.487	-.408	-.371	-.349	-.313	-.282	-.257	-.247	-.233	-.208	-.196	-.177	-.155	-.136	-.102
	.950	-.455	-.411	-.371	-.339	-.320	-.283	-.254	-.229	-.215	-.198	-.169	-.155	-.129	-.102	-.077	-.041
Lower surface	.0375	-.154	-.252	-.318	-.446	-.511	-.569	-.629	-.672	-.751	-.807	-.854	-.921	-.982	-1.031	-1.084	-1.148
	.075	.047	-.044	-.114	-.352	-.441	-.498	-.556	-.597	-.675	-.729	-.774	-.838	-.899	-.947	-.997	-1.061
	.150	.069	.036	.020	-.012	-.094	-.228	-.379	-.472	-.578	-.634	-.678	-.745	-.804	-.851	-.898	-.960
	.250	.107	.085	.071	.054	.040	.040	.038	.031	-.124	-.235	-.340	-.572	-.671	-.723	-.771	-.840
	.350	.100	.083	.071	.061	.051	.051	.055	.061	.040	.035	.030	-.024	-.104	-.163	-.165	-.230
	.450	.109	.095	.083	.079	.078	.073	.077	.085	.070	.070	.073	.068	.054	.042	.033	-.013
	.550	.069	.058	.049	.048	.042	.045	.050	.058	.046	.045	.051	.055	.057	.063	.062	.067
	.650	.089	.080	.013	.015	.010	.014	.019	.028	.018	.019	.026	.032	.038	.048	.051	.068
	.750	.046	.039	.031	.033	.028	.033	.038	.044	.035	.035	.043	.047	.052	.062	.066	.084
	.850	.066	.058	.047	.049	.043	.043	.047	.054	.043	.043	.052	.055	.060	.072	.080	.098
	.925	.085	.074	.061	.061	.052	.051	.052	.059	.046	.046	.056	.059	.067	.079	.091	.113
	[b].975	.100	.082	.070	.070	.069	.065	.056	.067	.044	.047	.057	.066	.074	.088	.106	.128
	[a]1.000	.110	.085	.077	.077	.075	.067	.058	.070	.044	.047	.057	.070	.080	.093	.110	.132

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

TABLE 7.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-505.30 PROPELLER BLADE SECTION ($x = 0.85$; $\beta_x = 41.10°$; $\beta_{0.75R} = 45°$; $B = 2$) - Concluded

(h) $M = 0.65$.

	J	2.472	2.446	2.411	2.374	2.351	2.317	2.280	2.264	2.233	2.205	2.170	2.147	2.117
	M_x	.947	.956	.964	.972	.985	.989	.995	1.007	1.015	1.023	1.031	1.037	1.046
	α_x'	-1.69	-1.39	-.98	-.54	-.26	.15	.61	.81	1.20	1.55	2.00	2.30	2.69
	$\Delta\beta$	-1.37	-1.33	-1.28	-1.21	-1.17	-1.11	-1.03	-1.00	-.93	-.87	-.79	-.74	-.66
	α_i	-.52	-.38	-.15	.06	.24	.43	.58	.73	.90	1.03	1.17	1.31	1.41
	c_n	-.1426	-.1045	-.0413	.0168	.0658	.1174	.1568	.1974	.2426	.2787	.3174	.3529	.3794
	c_m	-.1281	-.1336	-.1416	-.1580	-.1706	-.1742	-.1785	-.1898	-.1939	-.1925	-.1894	-.1917	-.1904
	c_c	.0449	.0449	.0457	.0499	.0518	.0514	.0508	.0539	.0543	.0520	.0508	.0499	.0490
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.244	1.249	1.254	1.258	1.266	1.268	1.272	1.279	1.284	1.285	1.294	1.301	1.304
	.025	.712	.694	.695	.644	.637	.619	.597	.586	.568	.554	.535	.513	.505
	.050	.461	.445	.414	.394	.386	.371	.348	.336	.319	.303	.286	.265	.261
	.100	.255	.243	.215	.197	.194	.181	.160	.151	.137	.123	.112	.098	.096
	.200	.050	.040	.016	0	.001	-.011	-.030	-.037	-.044	-.054	-.069	-.084	-.091
	.300	-.085	-.093	-.109	-.115	-.114	-.133	-.143	-.145	-.162	-.169	-.171	-.183	-.191
	.400	-.143	-.157	-.184	-.205	-.205	-.211	-.226	-.234	-.246	-.258	-.266	-.275	-.274
	.500	-.277	-.274	-.282	-.290	-.286	-.292	-.299	-.300	-.307	-.317	-.324	-.332	-.328
	.600	-.396	-.395	-.406	-.414	-.406	-.409	-.414	-.414	-.416	-.420	-.423	-.431	-.426
	.700	-.508	-.526	-.533	-.532	-.521	-.522	-.524	-.519	-.520	-.524	-.525	-.527	-.521
	.800	-.643	-.640	-.643	-.650	-.643	-.640	-.641	-.637	-.635	-.635	-.635	-.638	-.627
	.900	-.249	-.295	-.409	-.683	-.795	-.795	-.798	-.793	-.788	-.784	-.778	-.775	-.763
	.950	-.201	-.232	-.286	-.344	-.421	-.477	-.585	-.805	-.828	-.822	-.815	-.812	-.800
Lower surface	.0375	-.889	-.835	-.775	-.723	-.662	-.617	-.560	-.501	-.442	-.380	-.321	-.253	-.182
	.075	-.813	-.762	-.704	-.654	-.597	-.553	-.500	-.446	-.391	-.333	-.276	-.214	-.141
	.150	-.731	-.681	-.624	-.577	-.519	-.475	-.425	-.373	-.315	-.256	-.202	-.133	-.018
	.250	-.628	-.577	-.520	-.475	-.419	-.379	-.334	-.292	-.234	-.133	-.013	.051	.096
	.350	-.612	-.566	-.277	-.475	-.419	-.370	-.285	-.209	-.077	0	.034	.060	.102
	.450	-.545	-.496	-.420	-.346	-.220	-.076	-.016	-.018	.017	.044	.073	.091	.119
	.550	-.218	-.172	-.100	-.065	.002	.037	.037	.018	.025	.039	.052	.060	.084
	.650	.033	.045	.042	.037	.040	.045	.037	.022	.010	.005	.009	.013	.032
	.750	.085	.085	.072	.061	.063	.064	.060	.051	.043	.037	.035	.033	.047
	.850	.086	.085	.074	.068	.072	.077	.078	.081	.081	.084	.087	.090	.100
	[b].925	.073	.072	.066	.066	.077	.085	.093	.102	.109	.118	.127	.133	.148
	.975	.074	.070	.068	.070	.077	.095	.110	.120	.127	.142	.154	.165	.182
	[a]1.000	.075	.071	.070	.076	.077	.100	.115	.130	.140	.160	.169	.182	.200

[a]No orifice.

[b]Faired value.

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.80 PROPELLER BLADE SECTION ($x = 0.90$; $\beta_x = 39.50°$; $\beta_{0.75R} = 45°$; B = 2)

(a) N = 1140 rpm.

	J	1.579	1.739	1.876	1.983	2.114	2.255	2.379	2.505	2.635	2.712	2.667	2.578	2.445	2.313	2.170	2.053	1.913	1.806	1.649
	M_x	.558	.571	.588	.596	.611	.627	.640	.653	.667	.679	.675	.662	.645	.628	.616	.602	.589	.579	.568
	α_x'	10.32	7.90	5.93	4.45	2.71	.92	-.58	-2.04	-3.49	-4.31	-3.83	-2.86	-1.36	.21	1.99	3.51	5.41	6.93	9.24
	$\Delta\beta$	1.26	.99	.76	.56	.40	.12	-.12	-.36	-.61	-.76	-.68	-.50	-.24	.01	.29	.47	.70	.88	1.14
	α_1	3.97	3.68	3.14	2.67	2.18	1.65	1.19	.66	.12	-.19	-.05	.35	.94	1.47	1.98	2.44	2.93	3.45	3.79
	c_n	.8716	.8239	.6948	.6000	.4916	.3638	.2577	.1432	.0213	-.0510	-.0116	.0839	.2084	.3219	.4361	.5387	.6471	.7458	.8329
	c_m	-.0513	-.0629	-.0801	-.0852	-.0878	-.0902	-.0918	-.0993	-.1057	-.1042	-.1073	-.1044	-.0955	-.0916	-.0890	-.0852	-.0814	-.0711	-.0523
	c_c																			
	x/b	Pressure coefficient, P																		
Upper surface	[a]0.000	1.080	1.084	1.089	1.091	1.096	1.102	1.106	1.111	1.116	1.121	1.119	1.114	1.108	1.102	1.098	1.093	1.089	1.086	1.083
	.025	-1.770	-1.979	-1.183	-.766	-.364	.042	.311	.491	.617	.677	.649	.562	.416	.170	-.170	-.554	-.923	-1.916	-1.693
	.050	-1.715	-1.793	-.982	-.738	-.474	-.171	.044	.215	.341	.404	.374	.284	.140	-.070	-.294	-.595	-.883	-1.302	-1.652
	.100	-1.513	-1.283	-.822	-.662	-.483	-.284	-.131	.002	.109	.166	.138	.061	-.058	-.216	-.393	-.547	-.751	-.894	-1.494
	.200	-.913	-.672	-.604	-.514	-.423	-.295	-.182	-.118	-.040	.001	-.020	-.075	-.159	-.263	-.380	-.458	-.560	-.631	-.878
	.300	-.746	-.589	-.557	-.499	-.430	-.339	-.271	-.202	-.142	-.108	-.126	-.169	-.231	-.308	-.391	-.447	-.526	-.576	-.645
	.400	-.567	-.527	-.506	-.465	-.405	-.347	-.300	-.248	-.202	-.174	-.190	-.221	-.269	-.326	-.377	-.428	-.485	-.517	-.509
	.500	-.457	-.482	-.479	-.454	-.408	-.365	-.332	-.296	-.263	-.239	-.250	-.273	-.308	-.350	-.386	-.425	-.461	-.478	-.446
	.600	-.379	-.434	-.444	-.431	-.403	-.369	-.346	-.323	-.301	-.286	-.294	-.308	-.330	-.359	-.384	-.410	-.432	-.437	-.388
	.700	-.309	-.369	-.395	-.393	-.375	-.353	-.340	-.327	-.314	-.306	-.313	-.316	-.330	-.346	-.364	-.378	-.388	-.381	-.325
	.800	-.233	-.288	-.315	-.328	-.324	-.309	-.308	-.305	-.306	-.302	-.304	-.300	-.303	-.310	-.316	-.319	-.315	-.299	-.242
	.900	-.153	-.138	-.149	-.165	-.172	-.169	-.176	-.179	-.190	-.194	-.192	-.179	-.172	-.173	-.170	-.164	-.151	-.143	-.136
	.950	-.109	-.037	-.026	-.027	-.027	-.023	-.031	-.036	-.047	-.055	-.051	-.037	-.028	-.028	-.024	-.023	-.021	-.029	-.067
Lower surface	.0375	.707	.638	.525	.398	.229	.016	-.164	-.783	-.838	-.841	-.838	-.858	-.500	-.074	.113	.300	.475	.582	.660
	.075	.580	.517	.419	.320	.198	.060	-.079	-.458	-.806	-.805	-.824	-.719	-.147	.008	.135	.258	.383	.469	.541
	.150	.459	.410	.333	.259	.178	.114	.012	-.072	-.509	-.645	-.610	-.276	-.026	.067	.142	.217	.307	.371	.427
	.250	.248	.297	.244	.187	.130	.084	.023	-.020	-.164	-.345	-.247	-.046	.003	.064	.120	.169	.221	.260	.249
	.350	.299	.266	.216	.172	.128	.079	.027	-.011	-.050	-.155	-.081	-.016	.011	.055	.106	.151	.202	.240	.277
	.450	.248	.230	.189	.153	.119	.084	.044	.011	-.005	-.048	-.017	.009	.031	.064	.102	.138	.177	.209	.235
	.550	.217	.203	.169	.146	.121	.090	.057	.033	.020	.007	.018	.030	.050	.074	.110	.134	.164	.185	.204
	.650	.162	.161	.134	.110	.090	.065	.040	.026	.022	.022	.023	.028	.038	.053	.077	.101	.126	.144	.152
	.750	.139	.149	.130	.113	.101	.084	.066	.056	.049	.050	.050	.056	.065	.074	.093	.110	.128	.141	.141
	.850	.117	.143	.130	.123	.119	.111	.098	.087	.080	.079	.078	.088	.097	.104	.115	.123	.131	.139	.125
	.925	.113	.161	.156	.153	.156	.149	.139	.133	.122	.116	.119	.132	.142	.143	.153	.156	.158	.158	.133
	[b].975	.119	.180	.180	.184	.185	.182	.163	.185	.160	.142	.150	.170	.184	.180	.190	.185	.185	.180	.155
	[a]1.000	.125	.190	.197	.200	.200	.200	.180	.215	.180	.158	.169	.190	.210	.199	.210	.200	.200	.197	.170

[a] No orifice.

[b] Faired value.

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.80 PROPELLER BLADE SECTION ($x = 0.90$; $\beta_x = 39.50°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(b) N = 1350 rpm.

	J	2.711	2.635	2.501	2.402	2.300	2.211	2.111	2.022	1.926	1.830	1.733	1.653	1.693	1.763	1.869	1.970	2.062	2.157	2.257	2.320	2.447	2.599	2.626	2.678
	M_x	.798	.785	.765	.749	.737	.724	.712	.700	.691	.679	.666	.662	.668	.673	.686	.698	.708	.720	.734	.741	.759	.776	.786	.796
	β_x'	-4.30	-3.48	-1.99	-.85	.37	1.48	2.75	3.93	5.24	6.59	8.00	9.19	8.59	7.26	6.03	4.63	3.40	2.16	.90	.13	-1.37	-2.65	-3.38	-3.94
	$\Delta\beta$	-1.27	-1.06	-.59	-.29	-.08	.21	.46	.70	.95	1.20	1.45	1.66	1.56	1.32	1.10	.84	.60	.35	.09	-.07	-.42	-.78	-1.03	-1.19
	α_i	-.31	.03	.74	1.17	1.60	1.98	2.40	2.80	3.27	3.76	4.00	4.08	4.12	3.94	3.62	3.02	2.62	2.19	1.80	1.49	.95	.44	.05	-.09
	α_p	-.0710	.0098	.1698	.2619	.3568	.4406	.5355	.6232	.7258	.8400	.8864	.9026	.9148	.8761	.8058	.6716	.5832	.4890	.4026	.3345	.2139	.0987	.0123	-.0194
	α_M	-.1147	-.1238	-.1141	-.1050	-.1036	-.1037	-.0977	-.0937	-.0905	-.0775	-.0729	-.0554	-.0634	-.0724	-.0796	-.0870	-.0967	-.1035	-.1023	-.1032	-.1037	-.1201	-.1211	-.1245
	α_c																								
	c/b	Pressure coefficient, P																							
Upper surface	0.000	1.169	1.163	1.155	1.148	1.144	1.138	1.134	1.129	1.125	1.121	1.116	1.114	1.116	1.119	1.123	1.128	1.132	1.137	1.142	1.146	1.153	1.160	1.164	1.168
	.025	.737	.682	.605	.434	.244	.005	-.304	-.688	-1.164	-1.757	-2.079	-2.099	-2.241	-1.969	-1.622	-.856	-.508	-.149	.104	.284	.498	.628	.681	.707
	.050	.465	.405	.276	.147	-.023	-.226	-.476	-.766	-1.110	-1.679	-1.967	-2.131	-2.085	-1.857	-1.523	-1.008	-.643	-.353	-.143	.010	.210	.344	.404	.434
	.100	.212	.155	.039	-.067	-.206	-.353	-.523	-.689	-.825	-1.514	-1.865	-1.899	-1.954	-1.752	-1.119	-.779	-.623	-.444	-.293	-.179	-.017	.099	.155	.183
	.200	.015	-.027	-.110	-.182	-.280	-.377	-.473	-.548	-.683	-.620	-.651	-.663	-.651	-.592	-.622	-.592	-.523	-.432	-.333	-.261	-.148	-.063	-.021	0
	.300	-.113	-.149	-.216	-.267	-.336	-.403	-.463	-.518	-.569	-.598	-.567	-.632	-.577	-.581	-.589	-.548	-.493	-.441	-.373	-.327	-.254	-.182	-.147	-.127
	.400	-.198	-.227	-.272	-.308	-.365	-.421	-.457	-.488	-.505	-.551	-.540	-.549	-.541	-.545	-.538	-.509	-.465	-.433	-.389	-.353	-.298	-.248	-.222	-.206
	.500	-.282	-.299	-.335	-.357	-.396	-.433	-.450	-.476	-.502	-.521	-.513	-.478	-.499	-.515	-.510	-.493	-.467	-.436	-.408	-.389	-.353	-.319	-.302	-.290
	.600	-.349	-.354	-.373	-.381	-.398	-.419	-.440	-.454	-.468	-.479	-.468	-.407	-.448	-.471	-.473	-.462	-.452	-.436	-.415	-.403	-.384	-.366	-.358	-.353
	.700	-.395	-.389	-.388	-.383	-.390	-.402	-.411	-.416	-.422	-.426	-.410	-.333	-.378	-.409	-.421	-.423	-.421	-.413	-.401	-.397	-.365	-.389	-.392	-.391
	.800	-.375	-.356	-.344	-.331	-.334	-.340	-.342	-.333	-.330	-.329	-.308	-.235	-.283	-.315	-.325	-.333	-.340	-.344	-.338	-.339	-.342	-.349	-.357	-.360
	.900	-.213	-.192	-.175	-.161	-.164	-.165	-.161	-.146	-.140	-.141	-.136	-.126	-.186	-.133	-.135	-.145	-.154	-.163	-.161	-.164	-.170	-.178	-.190	-.194
	.950	-.046	-.026	-.011	0	-.003	-.006	-.004	-.004	-.004	-.014	-.018	-.065	-.090	-.011	-.004	-.005	-.009	-.007	-.003	-.004	-.006	-.014	-.024	-.027
Lower surface	.0375	-.949	-.994	-1.241	-.272	-.098	.052	.228	.372	.497	.583	.660	.709	.687	.633	.538	.449	.322	.164	.020	-.108	-.440	-1.267	-1.053	-.967
	.075	-.853	-.861	-.264	-.117	.005	.095	.211	.321	.411	.478	.549	.588	.566	.518	.456	.365	.270	.150	.061	-.028	-.150	-.616	-.846	-.898
	.150	-.670	-.580	-.067	-.003	.073	.124	.193	.269	.336	.386	.440	.472	.455	.418	.370	.301	.233	.153	.124	.054	-.037	-.200	-.541	-.626
	.250	-.436	-.260	-.027	.025	.075	.111	.161	.217	.264	.295	.307	.310	.306	.322	.280	.240	.188	.131	.105	.061	-.004	-.070	-.248	-.341
	.350	-.270	-.098	-.007	.033	.071	.106	.144	.185	.224	.254	.291	.310	.302	.276	.246	.203	.164	.118	.090	.058	.021	-.023	-.099	-.166
	.450	-.134	-.018	.021	.032	.079	.106	.132	.166	.198	.221	.253	.263	.258	.240	.215	.179	.148	.114	.096	.069	.034	.010	-.019	-.054
	.550	-.043	.024	.042	.058	.090	.109	.129	.154	.181	.198	.226	.230	.227	.216	.194	.166	.141	.113	.101	.080	.052	.037	.025	.010
	.650	.009	.035	.037	.054	.068	.082	.098	.118	.142	.152	.176	.175	.177	.169	.150	.127	.108	.087	.077	.061	.043	.036	.037	.035
	.750	.030	.066	.067	.082	.093	.102	.117	.130	.145	.152	.169	.160	.169	.165	.153	.137	.123	.107	.097	.086	.073	.067	.067	.068
	.850	.085	.099	.106	.118	.124	.129	.142	.148	.155	.157	.169	.149	.164	.167	.160	.149	.144	.133	.126	.117	.109	.104	.098	.099
	.925	.121	.138	.149	.162	.166	.171	.179	.179	.183	.179	.185	.150	.179	.186	.184	.179	.179	.172	.166	.160	.154	.146	.138	.135
	[b].975	.148	.169	.175	.198	.201	.208	.221	.205	.210	.209	.200	.150	.188	.208	.208	.200	.210	.204	.192	.195	.189	.175	.165	.170
	[a]1.000	.162	.189	.189	.216	.219	.217	.245	.220	.222	.230	.209	.150	.199	.215	.225	.215	.230	.220	.208	.212	.207	.190	.180	.190

[a]No orifice.

[b]Faired value.

NACA

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.80 PROPELLER BLADE SECTION ($x = 0.90$; $\beta_x = 39.50°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(c) N = 1500 rpm.

	J	2.004	2.059	2.153	2.218	2.304	2.392	2.476	2.563	2.634	2.596	2.523	2.438	2.352	2.261	2.186	2.106	2.048
	M_x	.783	.793	.807	.817	.828	.842	.858	.874	.885	.877	.867	.851	.837	.821	.813	.798	.791
	α_x'	4.17	3.44	2.21	1.39	.32	-.73	-1.71	-2.69	-3.47	-3.03	-2.24	-1.27	-.26	.85	1.79	2.82	3.43
	$\Delta\beta$	1.02	.81	.46	.21	-.11	-.45	-.81	-1.22	-1.58	-1.39	-1.03	-.64	-.29	.05	.33	.64	.85
	α_i	3.01	2.72	2.41	2.03	1.63	1.23	.78	.34	-.31	-.07	.51	.98	1.38	1.93	2.24	2.59	2.83
	c_n	.6697	.6065	.5384	.4555	.3642	.2768	.1742	.0768	-.0690	-.0161	.1148	.2200	.3090	.4310	.5000	.5790	.6290
	c_m	-.1000	-.1037	-.1104	-.1112	-.1155	-.1229	-.1434	-.1619	-.1632	-.1598	-.1555	-.1298	-.1184	-.1139	-.1084	-.1077	-.1016
	c_c							.0288	.0343	.0391	.0369	.0320	.0247					
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.163	1.167	1.173	1.178	1.183	1.189	1.197	1.205	1.211	1.207	1.202	1.194	1.187	1.180	1.176	1.169	1.166
	.025	-.505	-.317	-.045	.146	.353	.497	.604	.691	.760	.729	.650	.559	.434	.252	.043	-.192	-.375
	.050	-.743	-.547	-.301	-.130	.064	.205	.319	.413	.488	.454	.367	.271	.142	-.031	-.221	-.430	-.611
	.100	-.842	-.710	-.448	-.306	-.149	-.022	.084	.168	.239	.205	.128	.035	-.082	-.229	-.380	-.591	-.759
	.200	-.714	-.667	-.537	-.370	-.268	-.172	-.089	-.018	.045	.014	-.052	-.127	-.217	-.320	-.424	-.605	-.677
	.300	-.552	-.450	-.484	-.447	-.372	-.294	-.225	-.168	-.110	-.138	-.192	-.255	-.331	-.410	-.472	-.486	-.427
	.400	-.479	-.524	-.491	-.464	-.423	-.371	-.312	-.265	-.219	-.242	-.285	-.340	-.397	-.445	-.481	-.510	-.516
	.500	-.533	-.545	-.527	-.516	-.486	-.438	-.400	-.368	-.337	-.356	-.380	-.416	-.459	-.496	-.522	-.534	-.546
	.600	-.515	-.524	-.512	-.499	-.503	-.500	-.473	-.443	-.441	-.442	-.456	-.487	-.507	-.489	-.508	-.520	-.522
	.700	-.463	-.473	-.482	-.508	-.534	-.523	-.512	-.493	-.503	-.488	-.498	-.519	-.523	-.523	-.492	-.478	-.472
	.800	-.344	-.350	-.346	-.348	-.342	-.334	-.515	-.628	-.607	-.623	-.580	-.387	-.334	-.347	-.349	-.349	-.348
	.900	-.128	-.130	-.123	-.125	-.124	-.115	-.101	-.080	-.067	-.076	-.086	-.107	-.118	-.123	-.126	-.128	-.129
	.950	.013	.012	.020	.022	.023	.032	.038	.041	.046	.044	.045	.038	.031	.025	.018	.017	.012
Lower surface	.0375	.397	.308	.164	.033	-.098	-.883	-1.045	-1.093	-1.134	-1.164	-1.100	-1.021	-.544	-.050	.099	.237	.334
	.075	.363	.264	.164	.086	-.025	-.268	-.965	-1.086	-1.080	-1.070	-1.004	-.883	-.032	.044	.121	.223	.291
	.150	.287	.235	.194	.145	.055	.037	-.292	-.822	-.924	-.914	-.780	.026	.038	.104	.175	.207	.254
	.250	.048	.085	.159	.121	.062	.035	.067	-.213	-.814	-.631	.027	.045	.047	.095	.138	.120	.053
	.350	.200	.167	.133	.100	.056	.035	.044	.055	-.234	-.091	.070	.034	.046	.083	.116	.154	.179
	.450	.185	.158	.129	.102	.069	.051	.051	.091	-.005	.088	.068	.049	.056	.090	.114	.146	.169
	.550	.174	.151	.129	.107	.081	.068	.063	.090	.112	.109	.076	.066	.076	.098	.117	.144	.161
	.650	.131	.109	.093	.078	.057	.049	.045	.062	.103	.079	.055	.049	.055	.071	.084	.103	.118
	.750	.137	.121	.110	.102	.089	.080	.077	.085	.111	.093	.084	.080	.084	.095	.104	.119	.128
	.850	.151	.140	.134	.127	.118	.118	.114	.117	.130	.120	.121	.119	.119	.127	.129	.139	.145
	.925	.185	.177	.174	.169	.164	.116	.161	.161	.163	.162	.167	.166	.166	.169	.170	.177	.180
	[b].975	.213	.206	.206	.197	.198	.207	.201	.204	.196	.207	.200	.208	.205	.204	.210	.211	.214
	[a]1.000	.228	.223	.224	.213	.217	.230	.223	.226	.212	.228	.219	.230	.227	.223	.232	.229	.232

[a]No orifice.

[b]Faired value.

NACA

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.80 PROPELLER BLADE SECTION ($r = 0.90$; $\beta_r = 39.50°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(d) N = 1600 rpm.

	J	2.103	2.170	2.240	2.295	2.352	2.410	2.457	2.509	2.561	2.554	2.499	2.439	2.389	2.337	2.275	2.224	2.161
	M_x	.856	.866	.876	.885	.896	.908	.916	.924	.934	.933	.923	.908	.902	.892	.881	.873	.860
	α_x'	2.86	1.99	1.11	.43	-.26	-.94	-1.49	-2.08	-2.67	-2.59	-1.97	-1.28	-.70	-.08	.68	1.31	2.11
	$\Delta\beta$	.86	.52	.17	-.11	-.40	-.70	-.93	-1.17	-1.33	-1.31	-1.13	-.84	-.59	-.33	-.01	.25	.57
	α_1	2.69	2.30	1.98	1.64	1.30	.89	.56	-.06	-.51	-.53	.09	.65	.99	1.37	1.79	1.98	2.32
	c_n	.6003	.5142	.4426	.3687	.2910	.1994	.1251	-.0148	-.1155	-.1194	.0194	.1465	.2226	.3077	.4006	.4432	.5194
	c_m	-.1209	-.1211	-.1237	-.1355	-.1481	-.1542	-.1588	-.1504	-.1393	-.1404	-.1581	-.1586	-.1547	-.1424	-.1288	-.1216	-.1180
	c_c	.0009	.0083	.0144	.0214	.0274	.0321	.0362	.0397	.0420	.0414	.0394	.0344	.0308	.0263	.0191	.0124	.0058
	c/b	Pressure coefficient, P																
Upper surface	[a]0.000	1.196	1.201	1.206	1.211	1.217	1.223	1.227	1.231	1.237	1.237	1.231	1.223	1.220	1.215	1.209	1.204	1.198
	.025	-.008	.178	.317	.428	.516	.593	.610	.716	.761	.737	.705	.632	.566	.500	.395	.276	.121
	.050	-.261	-.098	.030	.139	.230	.311	.334	.445	.494	.491	.432	.352	.282	.215	.107	-.007	-.149
	.100	-.451	-.288	-.174	-.081	.002	.077	.099	.208	.254	.252	.194	.118	.051	-.014	-.111	-.208	-.334
	.200	-.543	-.447	-.354	-.219	-.154	-.091	-.081	.023	.065	.064	.010	-.057	-.113	-.165	-.245	-.385	-.464
	.300	-.612	-.495	-.407	-.347	-.287	-.230	-.228	-.129	-.088	-.089	-.139	-.202	-.249	-.295	-.363	-.424	-.520
	.400	-.647	-.571	-.496	-.431	-.387	-.334	-.328	-.231	-.195	-.197	-.242	-.303	-.355	-.388	-.439	-.511	-.594
	.500	-.663	-.579	-.524	-.503	-.463	-.438	-.444	-.359	-.323	-.324	-.368	-.413	-.448	-.466	-.514	-.535	-.577
	.600	-.663	-.616	-.582	-.561	-.520	-.516	-.537	-.451	-.416	-.416	-.458	-.506	-.503	-.524	-.566	-.597	-.615
	.700	-.675	-.658	-.641	-.620	-.591	-.569	-.617	-.540	-.507	-.505	-.544	-.581	-.573	-.598	-.625	-.650	-.659
	.800	-.240	-.307	-.380	-.524	-.644	-.655	-.711	-.659	-.633	-.632	-.666	-.647	-.671	-.627	-.473	-.355	-.275
	.900	-.062	-.064	-.073	-.091	-.103	-.105	-.164	-.133	-.139	-.132	-.124	-.105	-.103	-.093	-.077	-.065	-.063
	.950	.026	.002	-.018	-.042	-.061	-.062	-.134	-.104	-.108	-.102	-.096	-.065	-.059	-.044	-.020	0	.021
Lower surface	.0375	.202	.081	-.023	-.402	-.654	-.804	-.908	-.916	-.941	-.962	-.948	-.902	-.847	-.771	-.338	-.034	.103
	.075	.205	.113	.057	.006	-.613	-.765	-.862	-.864	-.888	-.893	-.870	-.823	-.767	-.618	.015	.072	.135
	.150	.226	.173	.119	.073	.051	-.535	-.713	-.727	-.754	-.765	-.739	-.689	-.448	.076	.076	.128	.189
	.250	.141	.122	.095	.062	.073	.068	-.471	-.638	-.676	-.684	-.650	-.203	.088	.042	.074	.099	.121
	.350	.153	.116	.091	.056	.054	.086	.002	-.509	-.648	-.664	-.314	.096	.066	.049	.065	.071	.124
	.450	.146	.115	.095	.065	.060	.077	.067	-.008	-.400	-.332	.061	.097	.064	.058	.074	.096	.120
	.550	.141	.116	.101	.074	.064	.075	.058	.108	-.002	-.007	.123	.088	.066	.066	.081	.101	.121
	.650	.101	.080	.067	.042	.033	.037	.011	.099	.082	.088	.089	.048	.033	.033	.051	.067	.084
	.750	.116	.098	.087	.065	.055	.057	.020	.092	.112	.115	.084	.063	.054	.060	.074	.089	.103
	.850	.138	.122	.112	.092	.082	.082	.035	.089	.107	.107	.089	.085	.081	.087	.099	.115	.127
	.925	.174	.156	.145	.122	.114	.112	.057	.099	.103	.106	.103	.110	.111	.118	.134	.150	.165
	[b].975	.202	.183	.173	.154	.139	.137	.077	.105	.096	.106	.120	.130	.138	.141	.167	.178	.197
	[a]1.000	.218	.198	.187	.169	.152	.153	.089	.110	.093	.107	.130	.140	.150	.155	.184	.192	.215

[a]No orifice.

[b]Faired value.

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.80 PROPELLER BLADE SECTION ($x = 0.90$; $\beta_x = 39.50°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(c) M = 0.56.

	J	2.677	2.641	2.588	2.547	2.512	2.482	2.429	2.398	2.346	2.316	2.281	2.254	2.221	2.185	2.159	2.127
	M_x	.826	.832	.837	.849	.855	.864	.872	.878	.885	.896	.900	.911	.920	.927	.938	.946
	α_x'	-3.93	-3.55	-2.97	-2.51	-2.12	-1.78	-1.16	-.80	-.18	.18	.61	.94	1.35	1.80	2.13	2.55
	$\Delta\beta$	-1.32	-1.26	-1.13	-1.01	-.90	-.81	-.63	-.50	-.34	-.29	-.25	-.22	-.16	-.08	0	.14
	α_i	-.29	-.08	.11	.37	.55	.70	1.00	1.12	1.37	1.45	1.57	1.76	1.82	1.98	2.08	2.28
	c_n	-.0545	-.0174	.0258	.0839	.1226	.1574	.2245	.2516	.3058	.3239	.3503	.3942	.4055	.4423	.4655	.5090
	c_m	-.1262	-.1427	-.1442	-.1462	-.1491	-.1542	-.1442	-.1501	-.1490	-.1436	-.1424	-.1427	-.1408	-.1431	-.1463	-.1496
	c_d				.0323	.0321	.0308	.0284	.0272	.0265	.0263	.0260	.0252	.0245	.0244	.0243	.0236
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.182	1.185	1.187	1.193	1.196	1.200	1.204	1.207	1.211	1.217	1.219	1.225	1.230	1.234	1.239	1.244
	.025	.752	.738	.711	.677	.653	.628	.579	.555	.512	.493	.466	.444	.419	.390	.374	.340
	.050	.481	.462	.432	.398	.372	.347	.297	.273	.228	.211	.185	.164	.142	.116	.103	.075
	.100	.227	.207	.176	.147	.124	.104	.056	.036	-.007	-.022	-.046	-.062	-.081	-.102	-.114	-.142
	.200	.028	.010	-.011	-.035	-.055	-.072	-.110	-.128	-.163	-.175	-.194	-.240	-.280	-.301	-.308	-.325
	.300	-.105	-.123	-.143	-.170	-.191	-.206	-.241	-.259	-.286	-.297	-.313	-.322	-.329	-.346	-.356	-.376
	.400	-.204	-.221	-.237	-.259	-.277	-.297	-.317	-.330	-.366	-.387	-.411	-.420	-.432	-.439	-.445	-.455
	.500	-.296	-.314	-.337	-.364	-.376	-.385	-.419	-.431	-.451	-.454	-.480	-.513	-.528	-.535	-.539	-.546
	.600	-.367	-.384	-.406	-.404	-.437	-.454	-.486	-.514	-.523	-.526	-.538	-.537	-.556	-.576	-.599	-.621
	.700	-.445	-.467	-.498	-.508	-.518	-.518	-.549	-.561	-.596	-.591	-.604	-.604	-.613	-.622	-.631	-.640
	.800	-.392	-.380	-.365	-.463	-.571	-.610	-.643	-.663	-.675	-.674	-.682	-.686	-.681	-.660	-.661	-.664
	.900	-.201	-.172	-.155	-.127	-.113	-.085	-.063	-.059	-.075	-.101	-.127	-.145	-.168	-.188	-.218	-.246
	.950	-.026	.007	.019	.034	.037	.050	.049	.032	-.010	-.051	-.087	-.112	-.139	-.165	-.199	-.229
Lower surface	.0375	-1.041	-1.348	-1.284	-1.200	-1.142	-1.063	-.973	-.913	-.819	-.717	-.633	-.503	-.362	-.158	-.061	.022
	.075	-.910	-1.218	-1.174	-1.091	-1.040	-.966	-.862	-.798	-.668	-.504	-.311	-.037	.066	.078	.094	.113
	.150	-.647	[b]-.755	[b]-.770	[b]-.719	[b]-.640	[b]-.529	-.204	-.023	[b]-.035	[b].021	[b].042	.101	.109	.137	.154	.182
	.250	-.413	-.302	-.159	.005	.031	.083	.084	.079	.070	.079	.077	.088	.098	.121	.132	.150
	.350	-.246	.005	.056	.060	.059	.063	.059	.057	.054	.063	.063	.074	.081	.102	.109	.122
	.450	-.116	.046	.058	.060	.059	.065	.065	.064	.063	.070	.068	.079	.083	.100	.107	.117
	.550	-.028	.059	.066	.069	.068	.074	.076	.075	.072	.078	.074	.082	.084	.099	.103	.110
	.650	.020	.051	.053	.055	.051	.055	.056	.051	.045	.045	.038	.042	.044	.052	.054	.060
	.750	.062	.080	.083	.085	.083	.086	.086	.081	.072	.068	.058	.059	.057	.065	.065	.069
	.850	.098	.119	.121	.126	.124	.127	.125	.118	.105	.097	.083	.082	.077	.082	.081	.085
	.925	.135	.162	.168	.171	.170	.171	.169	.159	.142	.129	.111	.106	.098	.102	.096	.103
	[b].975	.175	.211	.220	.216	.209	.216	.195	.199	.174	.150	.120	.125	.111	.121	.108	.116
	[a]1.000	.198	.245	.250	.248	.230	.240	.210	.225	.189	.162	.130	.140	.118	.134	.115	.124

[a]No orifice.

[b]Faired value.

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.80 PROPELLER BLADE SECTION ($x = 0.90$; $\beta_x = 39.50°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(f) M = 0.58.

	J	2.637	2.585	2.544	2.512	2.476	2.424	2.391	2.354	2.319	2.280	2.249	2.220	2.185	2.149
	M_x	.863	.870	.877	.887	.894	.905	.912	.920	.929	.935	.946	.954	.961	.972
	α_x'	-3.50	-2.94	-2.48	-2.12	-1.71	-1.11	-.72	-.28	.14	.62	1.00	1.36	1.80	2.26
	$\Delta\beta$	-1.42	-1.24	-1.09	-.97	-.86	-.73	-.68	-.64	-.61	-.52	-.41	-.29	-.11	.10
	α_i	-.21	0	.16	.30	.47	.69	.85	.97	1.10	1.26	1.44	1.58	1.77	1.99
	c_n	-.0465	0	.0348	.0665	.1065	.1542	.1890	.2168	.2452	.2816	.3219	.3542	.3945	.4413
	c_m	-.1558	-.1552	-.1540	-.1557	-.1562	-.1540	-.1513	-.1534	-.1534	-.1526	-.1533	-.1513	-.1541	-.1560
	c_c	.0383	.0363	.0350	.0341	.0336	.0326	.0322	.0320	.0318	.0305	.0308	.0294	.0294	.0286
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.200	1.203	1.207	1.212	1.216	1.222	1.225	1.230	1.235	1.238	1.244	1.249	1.252	1.259
	.025	.757	.727	.703	.678	.661	.617	.594	.580	.561	.530	.518	.487	.464	.430
	.050	.485	.452	.426	.399	.380	.335	.314	.298	.282	.250	.239	.211	.193	.160
	.100	.236	.208	.186	.162	.146	.105	.084	.073	.059	.030	.022	0	-.015	-.046
	.200	.039	.015	-.006	-.025	-.038	-.071	-.085	-.092	-.101	-.122	-.148	-.204	-.223	-.247
	.300	-.113	-.137	-.155	-.172	-.186	-.214	-.223	-.228	-.235	-.251	-.255	-.265	-.278	-.304
	.400	-.220	-.241	-.260	-.279	-.286	-.313	-.329	-.336	-.342	-.360	-.361	-.373	-.380	-.397
	.500	-.335	-.352	-.363	-.390	-.407	-.424	-.434	-.446	-.454	-.467	-.468	-.476	-.481	-.492
	.600	-.387	-.425	-.437	-.461	-.487	-.508	-.518	-.524	-.529	-.543	-.547	-.560	-.566	-.574
	.700	-.490	-.481	-.493	-.509	-.534	-.562	-.573	-.576	-.583	-.584	-.585	-.589	-.595	-.603
	.800	-.598	-.603	-.621	-.630	-.626	-.646	-.647	-.648	-.655	-.664	-.664	-.667	-.674	-.683
	.900	-.104	-.085	-.067	-.060	-.067	-.092	-.114	-.133	-.154	-.179	-.210	-.231	-.267	-.303
	.950	.039	.045	.046	.026	.001	-.042	-.075	-.100	-.127	-.153	-.183	-.204	-.236	-.268
Lower surface	.0375	-1.235	-1.182	-1.116	-1.042	-.988	-.908	-.841	-.766	-.707	-.632	-.561	-.474	-.359	-.181
	.075	-1.142	-1.084	-1.021	-.951	-.902	-.827	-.764	-.694	-.635	-.548	-.479	-.312	-.076	.110
	.150	-.992	-.928	-.866	-.799	-.733	-.679	-.610	-.506	-.375	-.049	.081	.126	.136	.156
	.250	-.390	-.345	-.286	-.253	-.214	0	.060	.099	.106	.103	.105	.106	.117	.136
	.350	-.159	-.065	.019	.064	.083	.093	.090	.090	.087	.082	.083	.087	.098	.114
	.450	.042	.080	.099	.103	.102	.087	.080	.081	.080	.079	.082	.087	.097	.112
	.550	.096	.098	.100	.099	.095	.080	.075	.079	.078	.078	.083	.086	.094	.108
	.650	.057	.076	.074	.070	.062	.044	.037	.037	.034	.032	.034	.037	.044	.054
	.750	.097	.093	.093	.088	.080	.063	.054	.053	.050	.049	.049	.054	.059	.070
	.850	.124	.123	.122	.115	.107	.089	.078	.075	.069	.069	.068	.076	.082	.091
	[b].925	.162	.160	.160	.149	.138	.118	.104	.101	.093	.091	.090	.097	.105	.117
	.975	.189	.180	.188	.178	.162	.140	.124	.128	.117	.108	.108	.112	.121	.137
	[a]1.000	.202	.192	.202	.191	.178	.150	.134	.138	.129	.117	.116	.120	.129	.147

[a]No orifice.

[b]Faired value.

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.80 PROPELLER BLADE SECTION ($x = 0.90$; $\beta_x = 39.50°$; $\beta_{0.75R} = 45°$; $B = 2$) - Continued

(g) $M = 0.60$.

	J	2.611	2.563	2.522	2.485	2.445	2.405	2.374	2.344	2.303	2.271	2.253	2.209	2.167	2.150	2.131
	M_x	.901	.905	.913	.921	.929	.939	.945	.957	.963	.971	.984	.986	.993	1.003	1.009
	α_x'	-3.22	-2.69	-2.23	-1.81	-1.35	-.88	-.52	-.16	.34	.73	.95	1.50	2.03	2.25	2.49
	$\Delta\beta$	-1.43	-1.35	-1.29	-1.24	-1.18	-1.07	-.97	-.86	-.69	-.58	-.52	-.41	-.38	-.37	-.37
	α_1	-.38	-.21	-.08	.14	.27	.44	.54	.74	.99	1.08	1.29	1.60	1.78	1.95	2.05
	c_n	-.0845	-.0477	-.0174	.0310	.0613	.0981	.1213	.1645	.2206	.2419	.2890	.3568	.3961	.4355	.4568
	c_m	-.1496	-.1542	-.1531	-.1583	-.1647	-.1568	-.1563	-.1594	-.1570	-.1601	-.1668	-.1703	-.1799	-.1953	-.1981
	c_a	.0400	.0393	.0393	.0387	.0385	.0377	.0377	.0379	.0362	.0366	.0375	.0377	.0403	.0424	.0423
	x/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.220	1.222	1.226	1.230	1.235	1.240	1.244	1.250	1.254	1.258	1.265	1.264	1.275	1.277	1.280
	.025	.775	.748	.726	.780	.762	.661	.646	.630	.597	.582	.567	.546	.520	.596	.594
	.050	.506	.476	.454	.501	.481	.388	.371	.356	.323	.309	.296	.275	.251	.320	.319
	.100	.262	.234	.216	.259	.243	.157	.145	.131	.102	.092	.082	.062	.042	.105	.104
	.200	.063	.043	.027	.069	.059	-.015	-.023	-.032	-.051	-.061	-.102	-.141	-.165	-.107	-.103
	.300	-.091	-.112	-.124	-.082	-.090	-.155	-.161	-.167	-.184	-.190	-.192	-.204	-.225	-.170	-.169
	.400	-.202	-.228	-.231	-.187	-.195	-.263	-.271	-.276	-.295	-.297	-.300	-.311	-.325	-.271	-.266
	.500	-.320	-.344	-.356	-.316	-.315	-.378	-.385	-.391	-.404	-.404	-.404	-.413	-.425	-.370	-.366
	.600	-.423	-.434	-.448	-.408	-.412	-.464	-.470	-.474	-.489	-.490	-.492	-.504	-.515	-.461	-.454
	.700	-.521	-.532	-.533	-.499	-.499	-.549	-.549	-.550	-.561	-.560	-.558	-.570	-.583	-.535	-.530
	.800	-.640	-.653	-.657	-.618	-.621	-.667	-.663	-.659	-.664	-.658	-.652	-.656	-.661	-.613	-.600
	.900	-.057	-.076	-.099	-.060	-.083	-.164	-.196	-.224	-.250	-.310	-.405	-.516	-.736	-.702	-.690
	.950	.009	-.026	-.064	-.029	-.059	-.141	-.171	-.195	-.217	-.248	-.278	-.305	-.378	-.485	-.616
Lower surface	.0375	-1.079	-1.049	-.986	-.889	-.829	-.812	-.764	-.709	-.631	-.569	-.507	-.440	-.367	-.262	-.196
	.075	-1.020	-.969	-.909	-.817	-.758	-.747	-.699	-.643	-.568	-.513	-.450	-.380	-.306	-.189	-.077
	.150	-.875	-.829	-.773	-.679	-.626	-.622	-.575	-.518	-.430	-.365	-.291	-.133	.074	.199	.247
	.250	-.792	-.743	-.690	-.597	-.538	-.528	-.473	-.390	-.043	.063	.111	.127	.127	.204	.226
	.350	-.380	-.322	-.360	-.130	-.017	.017	.053	.089	.118	.118	.116	.112	.106	.182	.200
	.450	-.108	-.028	.018	.146	.180	.126	.125	.125	.110	.109	.108	.107	.103	.179	.197
	.550	.051	.100	.118	.192	.192	.121	.115	.113	.100	.100	.102	.102	.099	.173	.191
	.650	.118	.112	.104	.153	.144	.069	.061	.057	.043	.044	.045	.044	.039	.108	.125
	.750	.128	.112	.099	.150	.142	.069	.063	.062	.056	.056	.061	.063	.058	.128	.145
	.850	.134	.117	.102	.155	.149	.079	.072	.076	.075	.080	.088	.095	.095	.170	.144
	.925	.149	.131	.115	.168	.161	.093	.088	.095	.099	.106	.120	.119	.132	.212	.230
	[b].975	.154	.148	.120	.178	.182	.102	.100	.119	.118	.120	.142	.128	.168	.250	.278
	[a]1.000	.160	.158	.129	.182	.199	.110	.110	.128	.129	.130	.158	.130	.182	.270	.298

[a]No orifice.

[b]Paired value.

NACA

TABLE 8.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.80 PROPELLER BLADE SECTION ($x = 0.90$; $\beta_x = 39.50^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$) - Concluded

(h) $M = 0.65$.

	J	2.110	2.142	2.161	2.194	2.213	2.255	2.284	2.312	2.336	2.371	2.405	2.439	2.471	2.501
	M_x	1.095	1.088	1.074	1.064	1.055	1.047	1.039	1.031	1.022	1.013	1.005	.997	.985	.978
	α_x'	2.77	2.35	2.11	1.69	1.45	.93	.57	.23	-.06	-.48	-.88	-1.28	-1.65	-1.99
	$\Delta\beta$	-.79	-.89	-.94	-1.03	-1.08	-1.20	-1.26	-1.33	-1.38	-1.45	-1.50	-1.55	-1.59	-1.62
	α_l	1.54	1.38	1.29	1.09	.96	.80	.68	.54	.38	.14	-.08	-.29	-.50	-.73
	c_n	.3413	.3071	.2871	.2429	.2132	.1781	.1516	.1213	.0852	.0316	-.0181	-.0639	-.1123	-.1639
	c_m	-.1803	-.1858	-.1847	-.1857	-.1817	-.1820	-.1821	-.1819	-.1799	-.1735	-.1580	-.1480	-.1368	-.1206
	c_c	.0432	.0458	.0467	.0478	.0478	.0485	.0503	.0514	.0522	.0533	.0515	.0505	.0476	.0456
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.336	1.331	1.322	1.315	1.310	1.304	1.300	1.294	1.288	1.283	1.276	1.273	1.266	1.262
	.025	.606	.626	.629	.631	.644	.654	.669	.684	.712	.720	.737	.749	.764	.777
	.050	.348	.367	.369	.373	.383	.394	.407	.424	.451	.458	.473	.486	.501	.515
	.100	.144	.161	.161	.164	.172	.181	.192	.206	.230	.234	.248	.258	.272	.283
	.200	-.045	-.037	-.041	-.039	-.030	-.005	.031	.050	.067	.067	.076	.082	.092	.101
	.300	-.113	-.104	-.107	-.103	-.100	-.095	-.089	-.078	-.085	-.066	-.059	-.056	-.052	-.046
	.400	-.202	-.196	-.202	-.204	-.203	-.199	-.195	-.186	-.172	-.174	-.168	-.164	-.155	-.148
	.500	-.297	-.294	-.301	-.305	-.308	-.306	-.302	-.295	-.286	-.291	-.287	-.284	-.274	-.270
	.600	-.377	-.379	-.389	-.395	-.398	-.396	-.393	-.387	-.379	-.382	-.379	-.378	-.373	-.372
	.700	-.449	-.460	-.473	-.479	-.484	-.480	-.478	-.470	-.463	-.468	-.467	-.467	-.463	-.461
	.800	-.543	-.549	-.562	-.568	-.575	-.575	-.575	-.571	-.567	-.576	-.576	-.580	-.582	-.581
	.900	-.631	-.643	-.659	-.669	-.679	-.683	-.687	-.666	-.687	-.701	-.706	-.698	-.511	-.345
	.950	-.654	-.672	-.690	-.704	-.715	-.722	-.730	-.732	-.737	-.742	-.473	-.309	-.231	-.198
Lower surface	.0375	-.179	-.217	-.264	-.326	-.371	-.419	-.471	-.534	-.577	-.630	-.670	-.711	-.768	-.807
	.075	-.130	-.190	-.237	-.298	-.341	-.387	-.440	-.497	-.537	-.589	-.628	-.668	-.721	-.756
	.150	-.007	-.068	-.120	-.178	-.223	-.266	-.315	-.368	-.407	-.461	-.511	-.558	-.606	-.635
	.250	.124	.008	-.070	-.141	-.188	-.231	-.279	-.329	-.365	-.416	-.456	-.494	-.544	-.575
	.350	.153	.102	.004	-.101	-.170	-.221	-.271	-.319	-.354	-.408	-.446	-.484	-.532	-.562
	.450	.160	.148	.120	.064	-.018	-.112	-.205	-.266	-.313	-.374	-.415	-.454	-.501	-.530
	.550	.168	.156	.139	.122	.112	.092	.047	.022	-.024	-.180	-.250	-.304	-.359	-.408
	.650	.078	.067	.054	.046	.049	.064	.080	.117	.105	.055	.034	.014	-.005	-.034
	.750	.093	.081	.070	.064	.069	.083	.098	.113	.121	.103	.109	.107	.100	.091
	.850	.128	.115	.113	.112	.117	.122	.126	.129	.131	.116	.119	.117	.112	.109
	.925	.224	.210	.199	.181	.176	.169	.163	.155	.153	.132	.127	.118	.109	.104
	[b].975	.297	.308	.278	.250	.224	.203	.193	.177	.170	.149	.138	.129	.123	.108
	[a]1.000	.330	.370	.322	.290	.248	.222	.212	.189	.180	.157	.140	.142	.133	.117

[a]No orifice.

[b]Paired value.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION (x = 0.95; $\beta_x = 38.35°$; $\beta_{0.75R} = 45°$)

(a) N = 1140 rpm; B = 2.

	J	2.793	2.616	2.419	2.224	2.039	1.875	1.682	1.598	1.777	1.939	2.135	2.311	2.523	2.704
	M_x	.707	.683	.662	.639	.619	.603	.589	.585	.598	.611	.632	.650	.675	.697
	α_x	-4.75	-2.89	-.68	1.66	4.01	6.21	8.95	10.18	7.58	5.34	2.77	.60	-1.86	-3.83
	$\Delta\beta$	-.92	-.66	-.25	.06	.49	.78	1.14	1.29	.96	.66	.33	-.02	-.46	-.84
	α_i	-.53	.33	1.26	2.05	2.86	3.65	4.64	4.83	4.19	3.30	2.41	1.72	.82	-.04
	c_n	-.0852	.0542	.2039	.3316	.4597	.5858	.7445	.7755	.6697	.5323	.3890	.2787	.1329	-.0071
	c_m	-.1121	-.0983	-.0885	-.0885	-.0821	-.0800	-.0675	-.0623	-.0749	-.0811	-.0864	-.0899	-.0928	-.1014
	c_c														
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.132	1.123	1.115	1.106	1.099	1.094	1.089	1.088	1.092	1.096	1.104	1.110	1.119	1.128
	.025	[b].680	.625	.428	.068	-.412	-.916	-1.823	-1.665	-1.717	-.684	-.153	.252	.541	.680
	.050	.434	.322	.132	-.153	-.483	-.815	-1.600	-1.579	-1.087	-.675	-.308	-.015	.237	.381
	.100	.178	.081	-.072	-.267	-.443	-.646	-1.118	-1.348	-.760	-.561	-.359	-.177	.011	.131
	.200	-.020	-.088	-.187	-.299	-.406	-.513	-.604	-.755	-.559	-.458	-.352	-.249	-.134	-.054
	.300	-.106	-.153	-.223	-.299	-.364	-.438	-.505	-.582	-.487	-.406	-.333	-.268	-.187	-.130
	.400	-.193	-.226	-.274	-.324	-.391	-.442	-.486	-.471	-.478	-.418	-.354	-.301	-.246	-.210
	.500	-.191	-.215	-.252	-.292	-.343	-.389	-.425	-.419	-.416	-.368	-.318	-.277	-.230	-.204
	.600	-.258	-.273	-.300	-.327	-.362	-.394	-.421	-.405	-.416	-.379	-.345	-.319	-.282	-.266
	.700	-.263	-.273	-.290	-.314	-.341	-.367	-.381	-.363	-.381	-.354	-.328	-.308	-.275	-.267
	.800	-.265	-.264	-.269	-.285	-.299	-.314	-.318	-.298	-.325	-.306	-.294	-.281	-.261	-.264
	.900	-.248	-.230	-.225	-.232	-.214	-.210	-.216	-.205	-.217	-.213	-.209	-.234	-.221	-.238
	.950	-.087	-.069	-.064	-.065	-.058	-.065	-.086	-.094	-.076	-.059	-.062	-.065	-.060	-.076
Lower surface	.0375	-.763	-.889	-.305	.019	.261	.449	.584	.619	.530	.376	.135	-.105	-.745	-.871
	.075	-.714	-.673	-.125	.069	.215	.355	.462	.492	.416	.301	.128	-.013	-.316	-.702
	.150	-.646	-.337	-.048	.074	.168	.265	.344	.368	.310	.228	.113	.020	-.099	-.566
	.250	-.421	-.082	.006	.089	.140	.209	.261	.267	.229	.176	.103	.051	-.017	-.252
	.350	-.206	-.009	.009	.068	.119	.172	.219	.230	.197	.151	.091	.039	-.004	-.085
	.450	-.090	0	.027	.073	.107	.149	.182	.191	.167	.132	.088	.051	.017	-.017
	.550	-.033	.011	.027	.061	.088	.123	.150	.156	.138	.109	.072	.046	.022	.005
	.650	.012	.037	.051	.081	.100	.129	.146	.150	.139	.119	.089	.067	.048	.035
	.750	.029	.044	.051	.071	.079	.100	.112	.112	.108	.094	.074	.062	.053	.044
	.850	.061	.075	.079	.093	.089	.100	.104	.100	.102	.100	.089	.088	.082	.072
	.925	.099	.117	.127	.139	.126	.127	.123	.113	.126	.130	.134	.136	.129	.113
	[b].975	.124	.147	.170	.177	.162	.150	.148	.132	.149	.159	.178	.182	.164	.145
	[a]1.000	.140	.161	.195	.198	.182	.169	.160	.140	.160	.170	.205	.206	.182	.160

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

NACA

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35^\circ$; $\beta_{0.75R} = 45^\circ$) - Continued

(b) N = 1350 rpm; B = 2.

	J	2.038	2.179	2.296	2.427	2.563	2.673	2.603	2.493	2.352	2.229	2.110
	M_x	.738	.756	.771	.788	.810	.823	.814	.799	.776	.760	.746
	α_x'	4.02	2.22	.78	-.77	-2.30	-3.50	-2.74	-1.52	.11	1.58	3.07
	$\Delta\beta$	.67	.27	-.07	-.45	-.91	-1.29	-1.06	-.67	-.23	.12	.47
	α_i	3.03	2.32	1.73	1.09	.36	-.19	.09	.78	1.44	2.02	2.64
	c_n	.4887	.3732	.2781	.1768	.0581	-.0316	.0142	.1258	.2335	.3258	.4245
	c_m	-.0870	-.0872	-.0880	-.0930	-.1073	-.1149	-.1121	-.1016	-.0891	-.0874	-.0866
	c_c											
	c/b	Pressure coefficient, P										
Upper surface	[a]0.000	1.144	1.151	1.158	1.165	1.175	1.181	1.176	1.170	1.160	1.153	1.148
	.025	-.377	.031	.312	.515	.650	.732	.690	.584	.412	.174	-.163
	.050	-.526	-.226	.009	.196	.334	.423	.376	.263	.098	-.112	-.374
	.100	-.510	-.311	-.153	-.010	.104	.178	.141	.045	-.087	-.235	-.405
	.200	-.453	-.355	-.268	-.181	-.105	-.051	-.082	-.145	-.229	-.313	-.399
	.300	-.401	-.336	-.278	-.219	-.166	-.133	-.150	-.193	-.250	-.308	-.367
	.400	-.421	-.369	-.327	-.284	-.245	-.219	-.232	-.265	-.305	-.346	-.390
	.500	-.378	-.340	-.307	-.278	-.257	-.244	-.250	-.266	-.293	-.325	-.357
	.600	-.399	-.367	-.343	-.322	-.311	-.307	-.307	-.315	-.331	-.357	-.382
	.700	-.383	-.356	-.336	-.322	-.320	-.322	-.321	-.319	-.330	-.349	-.368
	.800	-.334	-.313	-.300	-.292	-.295	-.307	-.298	-.291	-.295	-.308	-.322
	.900	-.217	-.205	-.198	-.197	-.207	-.223	-.212	-.200	-.197	-.202	-.210
	.950	-.051	-.036	-.028	-.022	-.025	-.032	-.028	-.021	-.024	-.032	-.044
Lower surface	.0375	.273	.071	-.120	-.565	-1.319	-1.335	-1.371	-1.241	-.187	-.016	.178
	.075	.229	.105	-.019	-.107	-.816	-1.183	-1.126	-.276	-.074	.052	.162
	.150	.181	.102	.019	-.046	-.099	-.513	-.309	-.050	-.016	.062	.136
	.250	.149	.103	.049	.002	-.009	-.133	-.013	-.010	.026	.078	.132
	.350	.126	.079	.041	.009	-.011	-.027	-.016	-.002	.026	.062	.101
	.450	.113	.078	.048	.024	.003	-.011	-.003	.014	.036	.062	.094
	.550	.087	.061	.036	.019	.005	-.006	-.001	.013	.029	.047	.072
	.650	.101	.079	.061	.048	.035	.025	.030	.043	.053	.068	.090
	.750	.057	.042	.032	.028	.021	.016	.019	.027	.029	.035	.048
	.850	.093	.086	.079	.078	.073	.067	.070	.078	.078	.080	.089
	.925	.122	.121	.119	.119	.114	.106	.111	.118	.117	.119	.118
	[b].975	.138	.142	.145	.151	.140	.137	.150	.150	.150	.150	.132
	[a]1.000	.145	.156	.160	.171	.161	.159	.170	.170	.175	.171	.165

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

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35°$; $\beta_{0.75R} = 45°$) - Continued

(c) N = 1500 rpm; B = 2.

	J	2.028	2.188	2.198	2.294	2.389	2.474	2.564	2.614	2.520	2.434	2.343	2.247	2.168	2.093
	M_x	.822	.833	.845	.858	.875	.885	.904	.912	.894	.880	.863	.851	.837	.826
	α_x'	4.15	2.86	1.98	.80	-.33	-1.31	-2.32	-2.86	-1.83	-.85	.22	1.37	2.36	3.31
	$\Delta\beta$	.93	.53	.26	-.10	-.48	-.87	-1.34	-1.61	-1.11	-.68	-.29	.07	.38	.68
	c_l	3.31	2.84	2.35	1.91	1.38	.86	.18	-.36	.43	1.10	1.60	2.10	2.58	3.05
	c_n	.5332	.4561	.3794	.3087	.2239	.1394	.0297	-.0574	.0703	.1794	.2581	.3387	.4145	.4906
	c_m	-.0914	-.0969	-.0977	-.0984	-.1101	-.1240	-.1288	-.1367	-.1296	-.1159	-.1041	-.0973	-.0950	-.0952
	c_c							.0336	.0374						
c/b		Pressure coefficient, P													
Upper surface	[a]0.000	1.180	1.185	1.191	1.197	1.206	1.211	1.221	1.225	1.216	1.208	1.200	1.194	1.187	1.182
	.025	-.220	.038	.221	.399	.529	.629	.721	.769	.680	.586	.482	.324	.131	-.065
	.050	-.433	-.243	-.085	.082	.210	.313	.412	.465	.366	.267	.162	.009	-.162	-.317
	.100	-.691	-.498	-.298	-.122	-.012	.081	.170	.220	.129	.040	-.053	-.182	-.320	-.570
	.200	-.775	-.490	-.365	-.283	-.211	-.146	-.081	-.037	-.109	-.172	-.237	-.317	-.400	-.522
	.300	-.407	-.375	-.347	-.297	-.254	-.209	-.182	-.149	-.189	-.227	-.269	-.318	-.361	-.392
	.400	-.448	-.428	-.405	-.368	-.336	-.299	-.274	-.260	-.280	-.317	-.349	-.383	-.413	-.444
	.500	-.413	-.390	-.378	-.352	-.331	-.305	-.285	-.332	-.288	-.314	-.335	-.359	-.380	-.405
	.600	-.445	-.428	-.422	-.419	-.410	-.387	-.362	-.375	-.377	-.398	-.408	-.411	-.418	-.440
	.700	-.441	-.426	-.428	-.417	-.417	-.408	-.396	-.386	-.399	-.413	-.420	-.424	-.423	-.436
	.800	-.370	-.352	-.345	-.338	-.378	-.442	-.447	-.440	-.443	-.411	-.344	-.340	-.347	-.363
	.900	-.204	-.188	-.180	-.168	-.159	-.141	-.124	-.119	-.139	-.153	-.166	-.175	-.184	-.197
	.950	-.030	-.018	-.009	.003	.011	.021	.034	.038	.029	.016	.007	-.005	-.013	-.027
Lower surface	.0375	.279	.138	.011	-.108	-.851	-.958	-1.017	-1.064	-1.020	-.949	-.747	-.068	.077	.196
	.075	.242	.155	.080	-.006	-.428	-.838	-.921	-.975	-.913	-.822	-.011	.023	.119	.183
	.150	.193	.141	.086	.028	.045	-.335	-.785	-.893	-.783	-.008	.015	.073	.115	.153
	.250	.153	.136	.094	.055	.040	.086	-.868	-.712	-.039	.061	.040	.072	.116	.149
	.350	.137	.105	.076	.050	.030	.058	.030	-.163	.090	.034	.034	.061	.091	.112
	.450	.123	.098	.076	.055	.038	.046	.101	.038	.070	.037	.043	.061	.087	.103
	.550	.096	.076	.059	.042	.026	.030	.068	.086	.043	.025	.031	.049	.068	.080
	.650	.110	.095	.079	.067	.055	.055	.074	.094	.063	.054	.058	.071	.087	.097
	.750	.068	.055	.043	.037	.029	.032	.044	.061	.036	.029	.031	.040	.049	.054
	.850	.103	.098	.092	.090	.084	.088	.095	.104	.092	.085	.086	.089	.096	.095
	.925	.134	.134	.132	.133	.131	.135	.139	.144	.136	.133	.132	.130	.133	.129
	[b].975	.156	.164	.162	.166	.170	.176	.160	.171	.172	.164	.164	.159	.156	.151
	a1.000	.166	.180	.175	.184	.187	.200	.170	.180	.190	.180	.177	.174	.167	.160

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

NACA

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.39^\circ$; $\beta_{0.75R} = 45^\circ$) - Continued

(d) N = 1600 rps; B = 2.

	J	2.097	2.185	2.269	2.343	2.435	2.521	2.549	2.479	2.392	2.322	2.240	2.151
	M_x	.891	.904	.919	.928	.946	.961	.965	.951	.934	.920	.906	.893
	α_x'	3.26	2.14	1.10	.22	-.86	-1.84	-2.15	-1.36	-.36	.47	1.46	2.57
	$\Delta\beta$	.90	.43	-.03	-.44	-.91	-1.32	-1.40	-1.14	-.69	-.32	.12	.61
	α_i	3.04	2.45	1.84	1.32	.53	-.19	-.53	.19	.93	1.46	2.02	2.76
	c_n	.4903	.3939	.2977	.2142	.0852	-.0303	-.0852	.0316	.1497	.2361	.3261	.4429
	c_m	-.1163	-.1110	-.1113	-.1173	-.1327	-.1290	-.1196	-.1334	-.1239	-.1145	-.1103	-.1129
	c_c		.0154	.0219	.0275	.0338	.0391	.0408	.0369	.0306	.0252	.0190	
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.214	1.222	1.229	1.234	1.244	1.219	1.254	1.247	1.237	1.230	1.222	1.215
	.025	.139	.329	.465	.570	.670	.749	.773	.714	.620	.530	.418	.226
	.050	-.136	.020	.151	.253	.363	.451	.478	.409	.309	.214	.103	-.069
	.100	-.413	-.189	-.067	.025	.130	.215	.241	.175	.078	-.007	-.109	-.325
	.200	-.472	-.389	-.303	-.213	-.114	-.036	-.010	-.071	-.159	-.235	-.338	-.432
	.300	-.504	-.422	-.320	-.305	-.217	-.146	-.121	-.176	-.255	-.282	-.331	-.453
	.400	-.477	-.390	-.358	-.322	-.312	-.255	-.236	-.280	-.337	-.333	-.366	-.450
	.500	-.446	-.390	-.364	-.338	-.355	-.312	-.294	-.332	-.338	-.348	-.376	-.409
	.600	-.495	-.463	-.438	-.408	-.402	-.394	-.380	-.409	-.381	-.414	-.450	-.487
	.700	-.535	-.508	-.479	-.455	-.425	-.442	-.432	-.451	-.427	-.457	-.488	-.525
	.800	-.582	-.569	-.537	-.515	-.484	-.513	-.508	-.494	-.493	-.517	-.545	-.576
	.900	-.107	-.111	-.126	-.163	-.194	-.196	-.213	-.192	-.168	-.133	-.110	-.105
	.950	-.028	-.035	-.043	-.050	-.051	-.084	-.092	-.056	-.040	-.037	-.026	-.019
Lower surface	.0375	.144	-.010	-.541	-.727	-.799	-.853	-.868	-.853	-.791	-.704	-.237	.073
	.075	.168	.071	-.041	-.606	-.709	-.764	-.782	-.761	-.690	-.562	.035	.123
	.150	.151	.082	.052	-.168	-.597	-.668	-.685	-.664	-.575	.064	.046	.118
	.250	.140	.091	.058	.101	-.375	-.553	-.576	-.524	.055	.073	.065	.118
	.350	.108	.074	.046	.061	.072	-.419	-.460	-.193	.095	.047	.055	.091
	.450	.099	.072	.048	.049	.103	-.146	-.316	.071	.074	.044	.056	.087
	.550	.074	.050	.026	.020	.064	.049	-.070	.079	.036	.021	.037	.064
	.650	.090	.069	.047	.040	.064	.086	.069	.082	.049	.044	.058	.082
	.750	.042	.025	.006	-.006	.010	.049	.056	.029	.004	.002	.016	.035
	.850	.088	.073	.055	.047	.054	.072	.077	.062	.053	.053	.067	.084
	.925	.119	.108	.093	.087	.088	.088	.087	.090	.091	.092	.105	.121
	[b].975	.142	.135	.119	.115	.100	.100	.095	.112	.125	.122	.130	.144
	[a]1.000	.156	.151	.135	.130	.110	.111	.102	.129	.148	.140	.145	.157

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

NACA

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35°$; $\beta_{0.75R} = 45°$) - Continued

(c) $M = 0.56$; $B = 2$.

	J	2.122	2.162	2.195	2.236	2.270	2.314	2.363	2.416	2.465	2.517	2.549	2.612	2.653
	M_x	.982	.970	.960	.951	.938	.927	.918	.906	.895	.884	.875	.863	.850
	α_x'	2.94	2.43	2.02	1.51	1.09	.56	-.02	-.64	-1.20	-1.79	-2.15	-2.84	-3.28
	$\Delta\beta$	.12	-.04	-.15	-.22	-.28	-.35	-.46	-.65	-.85	-1.03	-1.13	-1.32	-1.44
	α_1	2.46	2.32	2.10	1.91	1.69	1.42	1.29	.96	.68	.48	.28	.03	-.24
	c_n	.3965	.3713	.3384	.3074	.2716	.2297	.2090	.1555	.1103	.0787	.0452	.0045	-.0387
	c_m	-.1379	-.1363	-.1240	-.1216	-.1154	-.1154	-.1150	-.1221	-.1250	-.1270	-.1263	-.1229	-.1208
	c_c	.0866	.0278	.0855	.0851	.0843	.0851	.0856	.0880	.0303	.0319	.0322	.0344	.0357
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.264	1.257	1.251	1.246	1.239	1.233	1.228	1.221	1.217	1.210	1.206	1.199	1.194
	.025	.433	.451	.467	.484	.502	.534	.560	.609	.644	.672	.694	.729	.754
	.050	.143	.150	.161	.177	.193	.221	.244	.293	.330	.359	.381	.420	.447
	.100	-.125	-.080	-.056	-.042	-.027	-.001	.019	.064	.097	.124	.141	.177	.201
	.200	-.265	-.268	-.270	-.272	-.267	-.232	-.213	-.170	-.138	-.113	-.095	-.062	-.039
	.300	-.352	-.357	-.358	-.355	-.333	-.298	-.267	-.231	-.206	-.187	-.174	-.146	-.126
	.400	-.391	-.384	-.368	-.348	-.336	-.327	-.317	-.300	-.288	-.275	-.264	-.234	-.215
	.500	-.363	-.362	-.355	-.352	-.348	-.344	-.346	-.327	-.305	-.291	-.284	-.259	-.243
	.600	-.412	-.420	-.421	-.419	-.420	-.415	-.405	-.397	-.384	-.377	-.360	-.333	-.314
	.700	-.448	-.462	-.463	-.463	-.464	-.461	-.454	-.439	-.416	-.400	-.396	-.365	-.340
	.800	-.512	-.519	-.484	-.521	-.523	-.515	-.510	-.492	-.455	-.419	-.367	-.319	-.310
	.900	-.616	-.562	-.404	-.290	-.188	-.139	-.110	-.101	-.124	-.151	-.117	-.189	-.204
	.950	-.254	-.212	-.167	-.130	-.082	-.040	-.004	.026	.030	.024	.010	.003	-.010
Lower surface	.0375	-.025	-.155	-.335	-.464	-.771	-.675	-.749	-.858	-.948	-1.015	-1.095	-1.185	-1.282
	.075	.113	.104	.066	-.101	-.310	-.534	-.631	-.753	-.842	-.909	-.990	-1.082	-1.175
	.150	.115	.099	.084	.085	.090	.082	.023	-.332	-.754	-.647	-.732	-.561	-.519
	.250	.112	.098	.083	.074	.071	.078	.087	.101	.077	.030	-.045	-.178	-.299
	.350	.096	.085	.070	.061	.053	.051	.054	.068	.075	.080	.074	.059	.007
	.450	.092	.081	.069	.062	.053	.047	.047	.053	.058	.058	.052	.056	.047
	.550	.056	.049	.039	.032	.028	.023	.025	.031	.033	.037	.029	.033	.031
	.650	.071	.064	.055	.050	.047	.044	.049	.053	.059	.059	.055	.055	.050
	.750	.016	.011	.004	.001	.002	.005	.013	.025	.033	.037	.033	.035	.033
	.850	.066	.057	.049	.046	.047	.053	.067	.081	.090	.093	.088	.089	.083
	.925	.108	.097	.085	.079	.082	.093	.111	.128	.136	.140	.132	.133	.124
	[a].975	.138	.125	.115	.110	.108	.122	.138	.156	.170	.171	.169	.172	.155
	[a]1.000	.153	.141	.130	.127	.121	.137	.151	.170	.185	.188	.188	.192	.171

[a]No orifice.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35°$; $\beta_{0.75R} = 45°$) - Continued

(f) $M = 0.58$; $B = 2$.

	J	2.129	2.161	2.197	2.229	2.264	2.296	2.337	2.388	2.426	2.471	2.520	2.573	2.637
	M_x	1.019	1.009	.999	.988	.975	.963	.952	.943	.931	.920	.910	.899	.882
	α_x'	2.85	2.44	1.99	1.60	1.17	.78	.29	-.31	-.76	-1.27	-1.83	-2.41	-3.11
	$\Delta\beta$	.18	-.04	-.26	-.42	-.56	-.65	-.71	-.76	-.82	-.95	-1.12	-1.32	-1.55
	α_i	2.41	2.19	1.95	1.85	1.62	1.47	1.25	.97	.84	.60	.46	.22	-.20
	c_n	.3884	.3532	.3142	.2981	.2610	.2374	.2019	.1555	.1368	.0981	.0748	.0348	-.0329
	c_m	-.1610	-.1526	-.1439	-.1392	-.1386	-.1322	-.1281	-.1259	-.1272	-.1281	-.1322	-.1288	-.1281
	c_c	.0341	.0332	.0325	.0328	.0340	.0310	.0306	.0304	.0308	.0310	.0317		
	c/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.286	1.280	1.274	1.268	1.260	1.253	1.248	1.242	1.236	1.230	1.224	1.219	1.210
	.025	.502	.522	.538	.552	.613	.587	.604	.636	.654	.692	.701	.728	.762
	.050	.207	.225	.238	.250	.268	.281	.296	.328	.346	.384	.393	.423	.459
	.100	-.040	.009	.025	.036	.051	.061	.073	.100	.115	.149	.155	.178	.211
	.200	-.211	-.205	-.201	-.203	-.195	-.179	-.166	-.144	-.132	-.099	-.095	-.073	-.040
	.300	-.299	-.293	-.277	-.292	-.274	-.272	-.269	-.249	-.232	-.199	-.196	-.175	-.142
	.400	-.368	-.358	-.347	-.348	-.348	-.346	-.343	-.331	-.329	-.294	-.280	-.271	-.239
	.500	-.338	-.324	-.318	-.329	-.330	-.330	-.346	-.351	-.345	-.306	-.299	-.272	-.263
	.600	-.389	-.381	-.378	-.384	-.383	-.381	-.386	-.377	-.369	-.360	-.358	-.364	-.340
	.700	-.422	-.417	-.414	-.420	-.420	-.420	-.425	-.419	-.424	-.405	-.403	-.385	-.378
	.800	-.478	-.470	-.470	-.478	-.480	-.482	-.485	-.480	-.484	-.459	-.456	-.430	-.384
	.900	-.588	-.585	-.589	-.595	-.577	-.401	-.281	-.188	-.145	-.101	-.110	-.139	-.175
	.950	-.645	-.491	-.321	-.243	-.184	-.125	-.091	-.047	-.019	.036	.035	.088	.013
Lower surface	.0375	-.209	-.308	-.383	-.457	-.540	-.607	-.679	-.758	-.833	-.911	-.970	-1.060	-1.162
	.075	.009	-.165	-.269	-.353	-.438	-.507	-.584	-.668	-.744	-.816	-.873	-.968	-1.073
	.150	.135	.137	.121	-.002	-.178	-.318	-.459	-.554	-.632	-.707	-.761	-.845	-.929
	.250	.124	.124	.125	.127	.131	.129	.096	-.005	-.083	-.142	-.175	-.250	-.364
	.350	.098	.096	.093	.089	.094	.099	.123	.112	.106	.102	.079	.002	-.119
	.450	.098	.093	.087	.078	.077	.077	.077	.089	.092	.108	.102	.099	.073
	.550	.060	.057	.052	.043	.041	.041	.038	.049	.052	.071	.067	.068	.070
	.650	.071	.069	.065	.055	.051	.052	.047	.054	.057	.077	.074	.073	.073
	.750	.037	.036	.033	.026	.029	.022	.019	.029	.035	.061	.061	.062	.064
	.850	.079	.074	.067	.056	.049	.046	.043	.054	.063	.093	.094	.095	.095
	.925	.150	.141	.127	.115	.102	.096	.092	.104	.114	.146	.148	.146	.144
	[b].975	.227	.216	.186	.171	.166	.140	.130	.150	.156	.186	.200	.189	.189
	[a]1.000	.280	.265	.225	.205	.205	.166	.150	.170	.177	.210	.225	.210	.210

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

NACA

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($r = 0.95$; $\beta_x = 38.35^\circ$; $\beta_{0.75R} = 45^\circ$) - Continued

(g) $M = 0.60$; $B = 2$.

	J	2.132	2.161	2.189	2.222	2.253	2.287	2.312	2.353	2.381	2.412	2.451	2.490	2.527	2.568	2.599
	M_x	1.050	1.040	1.031	1.023	1.014	1.005	.993	.987	.975	.967	.958	.949	.941	.932	.921
	α_x'	2.81	2.44	2.09	1.68	1.30	.89	.59	.10	-.23	-.59	-1.04	-1.49	-1.91	-2.36	-2.70
	$\Delta\beta$	-.45	-.46	-.48	-.53	-.61	-.72	-.81	-.99	-1.10	-1.20	-1.30	-1.37	-1.42	-1.47	-1.51
	α_i	2.09	1.97	1.85	1.70	1.55	1.25	1.11	.85	.73	.53	.25	.13	-.09	-.22	-.40
	c_n	.3371	.3181	.2971	.2745	.2481	.2003	.1790	.1381	.1177	.0868	.0406	.0206	-.0155	-.0348	-.0658
	c_m	-.1565	-.1604	-.1615	-.1631	-.1592	-.1540	-.1525	-.1531	-.1490	-.1460	-.1399	-.1388	-.1355	-.1360	-.1388
	c_a	.0355	.0371	.0377	.0391	.0386	.0384	.0389	.0397	.0392	.0378	.0365	.0368	.0365	.0367	.0376
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.306	1.300	1.294	1.289	1.283	1.277	1.271	1.267	1.260	1.256	1.251	1.246	1.241	1.236	1.230
	.025	.564	.576	.581	.633	.610	.636	.642	.665	.677	.688	.709	.721	.740	.759	.778
	.050	.272	.280	.284	.296	.311	.336	.341	.364	.375	.386	.402	.421	.439	.458	.477
	.100	.041	.061	.070	.081	.096	.120	.122	.142	.151	.159	.172	.186	.201	.217	.233
	.200	-.154	-.154	-.156	-.153	-.147	-.125	-.117	-.099	-.094	-.088	-.077	-.064	-.051	-.038	-.023
	.300	-.241	-.245	-.248	-.244	-.229	-.213	-.217	-.204	-.203	-.198	-.185	-.174	-.164	-.153	-.142
	.400	-.331	-.334	-.328	-.315	-.311	-.299	-.302	-.289	-.290	-.290	-.285	-.279	-.272	-.261	-.250
	.500	-.315	-.331	-.331	-.335	-.335	-.327	-.336	-.332	-.337	-.338	-.334	-.333	-.331	-.329	-.324
	.600	-.359	-.371	-.374	-.378	-.382	-.389	-.402	-.402	-.406	-.409	-.408	-.411	-.413	-.412	-.404
	.700	-.385	-.395	-.398	-.400	-.401	-.402	-.414	-.417	-.428	-.432	-.438	-.450	-.449	-.444	-.423
	.800	-.444	-.449	-.451	-.453	-.454	-.455	-.465	-.467	-.474	-.477	-.481	-.491	-.484	-.471	-.453
	.900	-.550	-.559	-.563	-.564	-.566	-.567	-.577	-.571	-.511	-.375	-.231	-.172	-.120	-.099	-.096
	.950	-.648	-.661	-.665	-.637	-.501	-.370	-.265	-.188	-.141	-.107	-.068	-.048	-.008	.023	.042
Lower surface	.0375	-.245	-.309	-.363	-.418	-.474	-.539	-.587	-.644	-.696	-.745	-.798	-.859	-.920	-.970	-1.030
	.075	-.164	-.221	-.270	-.324	-.383	-.453	-.503	-.565	-.617	-.663	-.715	-.773	-.831	-.881	-.946
	.150	.085	-.072	-.139	-.218	-.279	-.351	-.402	-.463	-.517	-.563	-.616	-.675	-.729	-.774	-.830
	.250	.153	.143	.134	.095	.028	-.140	-.223	-.320	-.376	-.425	-.483	-.549	-.608	-.657	-.714
	.350	.116	.116	.116	.122	.128	.121	.108	.055	.016	-.016	-.094	-.199	-.253	-.253	-.223
	.450	.112	.106	.103	.105	.110	.120	.117	.122	.115	.110	.100	.071	.050	.035	.033
	.550	.064	.056	.054	.058	.064	.074	.072	.084	.085	.086	.090	.086	.087	.087	.085
	.650	.070	.063	.061	.062	.067	.072	.068	.078	.079	.080	.085	.086	.092	.097	.100
	.750	.030	.022	.020	.018	.027	.031	.029	.039	.039	.042	.050	.053	.066	.076	.084
	.850	.078	.073	.069	.068	.065	.061	.054	.057	.054	.054	.063	.066	.083	.096	.106
	.925	.172	.161	.150	.141	.132	.123	.111	.107	.100	.096	.103	.106	.124	.140	.153
	[b].975	.259	.248	.218	.195	.188	.172	.162	.147	.153	.133	.137	.140	.161	.180	.188
	[a]1.000	.305	.298	.255	.222	.218	.195	.188	.168	.183	.151	.154	.160	.180	.200	.202

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

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35^\circ$; $\beta_{0.75R} = 45^\circ$) - Continued

(h) $M = 0.65$; $B = 2$.

	J	2.104	2.132	2.157	2.189	2.212	2.243	2.266	2.304	2.326	2.356	2.390	2.413	2.455	2.483
	M_x	1.136	1.127	1.117	1.108	1.095	1.087	1.076	1.069	1.060	1.045	1.037	1.028	1.020	1.009
	α_x'	3.17	2.81	2.49	2.09	1.81	1.42	1.14	.68	.42	.06	-.34	-.61	-1.09	-1.41
	$\Delta\beta$	-.90	-.98	-1.06	-1.16	-1.23	-1.31	-1.37	-1.46	-1.51	-1.57	-1.63	-1.67	-1.73	-1.76
	α_i	1.77	1.55	1.39	1.29	1.08	.89	.80	.63	.47	.27	.12	-.09	-.34	-.64
	c_n	.2839	.2481	.2235	.2077	.1748	.1432	.1297	.1019	.0768	.0432	.0187	-.0155	-.0552	-.1032
	c_m	-.1467	-.1483	-.1482	-.1526	-.1515	-.1511	-.1513	-.1480	-.1501	-.1462	-.1420	-.1406	-.1268	-.1163
	c_c	.0342	.0376	.0390	.0412	.0418	.0429	.0442	.0445	.0460	.0471	.0493	.0482	.0469	.0391
	c/b	Pressure coefficient, P													
Upper surface	[a]0.000	1.364	1.358	1.351	1.344	1.336	1.331	1.323	1.319	1.312	1.303	1.298	1.292	1.287	1.280
	.025	.659	.671	.674	.687	.698	.710	.717	.729	.738	.746	.757	.763	.780	.795
	.050	.378	.390	.389	.400	.409	.421	.428	.440	.450	.455	.466	.473	.489	.504
	.100	.121	.161	.167	.184	.193	.204	.212	.223	.232	.234	.243	.247	.262	.273
	.200	-.038	-.036	-.043	-.038	-.038	-.035	-.032	-.017	-.004	-.003	.003	.004	.016	.025
	.300	-.124	-.124	-.134	-.129	-.130	-.125	-.115	-.111	-.109	-.113	-.110	-.112	-.100	-.090
	.400	-.227	-.223	-.234	-.222	-.217	-.213	-.214	-.207	-.203	-.208	-.208	-.211	-.205	-.202
	.500	-.241	-.240	-.255	-.251	-.256	-.259	-.258	-.252	-.252	-.259	-.262	-.267	-.260	-.256
	.600	-.291	-.297	-.316	-.316	-.325	-.329	-.331	-.327	-.329	-.340	-.342	-.347	-.341	-.340
	.700	-.310	-.320	-.339	-.341	-.350	-.356	-.358	-.356	-.360	-.372	-.376	-.383	-.381	-.384
	.800	-.358	-.370	-.392	-.395	-.407	-.414	-.420	-.418	-.427	-.442	-.447	-.455	-.454	-.460
	.900	-.453	-.465	-.487	-.494	-.509	-.517	-.525	-.524	-.535	-.553	-.559	-.570	-.570	-.579
	.950	-.540	-.552	-.575	-.583	-.599	-.610	-.618	-.620	-.634	-.651	-.658	-.640	-.609	-.868
Lower surface	.0375	-.124	-.186	-.234	-.280	-.330	-.376	-.424	-.466	-.512	-.554	-.600	-.644	-.686	-.741
	.075	-.058	-.112	-.157	-.203	-.256	-.305	-.356	-.398	-.443	-.487	-.532	-.574	-.615	-.666
	.150	.023	-.035	-.086	-.129	-.181	-.228	-.276	-.318	-.362	-.405	-.450	-.491	-.533	-.583
	.250	.091	.028	-.020	-.059	-.107	-.150	-.192	-.228	-.265	-.307	-.354	-.393	-.436	-.488
	.350	.146	.067	-.001	-.036	-.077	-.113	-.147	-.175	-.203	-.240	-.282	-.313	-.344	-.387
	.450	.169	.155	.088	.031	-.033	-.067	-.096	-.116	-.139	-.171	-.205	-.230	-.254	-.288
	.550	.131	.125	.104	.087	.085	-.035	-.078	-.102	-.123	-.167	-.200	-.221	-.242	-.269
	.650	.131	.125	.109	.107	.096	.074	.049	.040	.029	-.045	-.113	-.131	-.146	-.194
	.750	.076	.068	.055	.058	.056	.061	.067	.078	.072	.044	.010	.008	.002	-.026
	.850	.063	.053	.043	.059	.076	.098	.113	.122	.113	.098	.091	.085	.084	.074
	.925	.220	.207	.194	.199	.195	.193	.187	.181	.168	.149	.138	.126	.120	.106
	[b].975	.392	.370	.304	.352	.301	.284	.252	.230	.210	.175	.149	.148	.138	.117
	1.000	.485	.450	.446	.440	.356	.335	.288	.255	.232	.187	.157	.156	.146	.123

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

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35°$; $\beta_{0.75R} = 45°$) - Continued

(i) N = 1500 rpm; B = 1.

	J	2.592	2.512	2.399	2.288	2.185	2.092	2.059	2.033	1.990	1.965	1.930	1.897	1.849	1.812	1.785	1.751
	M_x	.883	.871	.851	.833	.821	.805	.799	.798	.791	.789	.784	.781	.777	.771	.770	.765
	$\alpha_{x'}$	-2.62	-1.74	-.44	.88	2.14	3.32	3.75	4.09	4.66	4.99	5.46	5.91	6.57	7.09	7.47	7.95
	$c_{\Delta\beta}$	-1.48	-1.06	-.52	-.08	.30	.68	.82	.92	1.08	1.17	1.29	1.40	1.54	1.64	1.70	1.77
	α_i	.25	.75	1.24	1.70	2.23	2.72	2.90	3.06	3.35	3.47	3.72	3.93	4.23	4.46	4.57	4.76
	c_m	.0477	.1439	.2368	.3268	.4313	.5235	.5545	.5826	.6323	.6548	.6955	.7316	.7897	.8355	.8594	.9000
	c_a	-.1504	-.1386	-.1287	-.1133	-.1050	-.1045	-.1031	-.0985	-.1073	-.1021	-.0995	-.1014	-.0968	-.0968	-.0950	-.0944
	x/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.210	1.204	1.194	1.185	1.180	1.173	1.170	1.169	1.166	1.166	1.163	1.162	1.160	1.158	1.158	1.155
	.025	.698	.571	.430	.228	-.060	-.354	-.488	-.628	-.747	-.829	-.880	-.963	-1.177	-1.282	-1.366	-1.454
	.050	.423	.345	.225	.064	-.148	-.340	-.480	-.519	-.659	-.754	-.835	-.905	-1.059	-1.175	-1.251	-1.326
	.100	.136	.062	-.044	-.176	-.352	-.603	-.699	-.774	-.829	-.883	-.983	-1.072	-1.178	-1.252	-1.304	-1.362
	[b].200	-.209	-.270	-.314	-.380	-.440	-.597	-.695	-.668	-.660	-.669	-.683	-.708	-.780	-.827	-.896	-1.029
	.300	-.305	-.332	-.371	-.416	-.467	-.496	-.496	-.501	-.505	-.500	-.495	-.496	-.533	-.568	-.594	-.640
	.400	-.236	-.256	-.293	-.330	-.378	-.403	-.414	-.423	-.432	-.435	-.436	-.439	-.453	-.455	-.458	-.453
	.500	-.290	-.305	-.330	-.356	-.388	-.413	-.424	-.434	-.445	-.449	-.452	-.455	-.469	-.472	-.473	-.470
	.600	-.304	-.313	-.324	-.341	-.367	-.385	-.391	-.399	-.409	-.412	-.417	-.422	-.433	-.435	-.436	-.432
	.700	-.373	-.378	-.367	-.373	-.393	-.404	-.408	-.415	-.425	-.430	-.435	-.440	-.453	-.455	-.459	-.459
	.800	-.395	-.358	-.327	-.328	-.340	-.343	-.343	-.350	-.357	-.360	-.365	-.373	-.383	-.388	-.390	-.391
	.900	-.146	-.151	-.154	-.156	-.165	-.169	-.171	-.174	-.180	-.183	-.188	-.193	-.202	-.203	-.209	-.215
	.950	.088	.021	.012	.004	-.006	-.015	-.019	-.022	-.028	-.031	-.034	-.039	-.046	-.050	-.055	-.058
Lower surface	.0375	-1.071	-1.022	-.895	-.074	.094	.224	.272	.318	.363	.397	.436	.474	.517	.548	.569	.601
	.075	-.967	-.916	-.101	-.020	.102	.198	.229	.262	.295	.321	.353	.380	.414	.438	.455	.484
	.150	-.881	-.188	-.020	0	.073	.149	.169	.190	.213	.232	.254	.276	.297	.317	.333	.356
	.250	-.205	.070	.022	.057	.107	.141	.156	.173	.189	.200	.218	.236	.254	.270	.280	.298
	.350	.065	.021	.007	.041	.073	.114	.124	.135	.146	.157	.169	.183	.197	.209	.217	.234
	.450	.084	.052	.049	.072	.100	.116	.123	.131	.141	.149	.162	.174	.184	.192	.199	.212
	.550	.050	.034	.035	.051	.073	.091	.098	.104	.112	.119	.128	.139	.146	.155	.160	.172
	.650	.055	.050	.050	.064	.080	.090	.094	.100	.106	.113	.120	.130	.134	.141	.145	.156
	.750	.066	.062	.059	.065	.076	.079	.082	.087	.091	.095	.103	.109	.114	.119	.122	.131
	.850	.098	.095	.090	.090	.091	.088	.088	.073	.092	.095	.101	.106	.108	.110	.111	.120
	[b].925	.183	.114	.113	.120	.112	.107	.104	.062	.090	.094	.097	.092	.098	.095	.100	.109
	[b].975	.144	.130	.132	.144	.129	.123	.114	.058	.090	.090	.094	.087	.094	.086	.090	.100
	[a]1.000	.153	.140	.142	.157	.138	.131	.120	.055	.090	.090	.092	.084	.092	.082	.086	.095

[a]No orifice.

[b]Faired value.

[c]Extrapolated value.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35^\circ$; $\beta_{0.75R} = 45^\circ$) - Continued

(j) $M = 0.56$; $B = 1.$

	c/b													
	J	2.336	2.301	2.267	2.252	2.222	2.194	2.172	2.145	2.128	2.106	2.079	2.049	2.030	2.006
	M_x	.933	.938	.942	.951	.959	.966	.972	.980	.989	.996	1.003	1.009	1.015	1.024
	$\alpha_{r'}$	.30	.72	1.13	1.31	1.68	2.03	2.30	2.64	2.86	3.14	3.49	3.88	4.13	4.44
	$c_{\Delta\beta}$	-.39	-.33	-.28	-.25	-.20	-.14	-.08	.02	.10	.20	.31	.43	.49	.57
	α_i	1.28	1.43	1.53	1.55	1.72	1.85	2.00	2.10	2.21	2.37	2.51	2.66	2.78	2.82
	c_n	.2442	.2758	.2942	.2981	.3335	.3565	.3865	.4042	.4242	.4526	.4784	.5061	.5252	.5306
	c_m	-.1209	-.1192	-.1195	-.1154	-.1179	-.1233	-.1230	-.1275	-.1343	-.1391	-.1528	-.1637	-.1682	-.1682
	c_o	.0255	.0242	.0239	.0235	.0233	.0233	.0228	.0235	.0249	.0256	.0281	.0305	.0307	.0306
		Pressure coefficient, P													
Upper surface	[a]0.000	1.238	1.240	1.242	1.247	1.251	1.255	1.259	1.263	1.268	1.272	1.276	1.280	1.284	1.290
	.025	.490	.501	.510	.520	.533	.543	.553	.560	.574	.587	.601	.610	.621	.632
	.050	.256	.230	.213	.208	.196	.183	.173	.159	.150	.146	.149	.129	.119	.115
	.100	-.021	-.047	-.063	-.067	-.079	-.098	-.117	-.133	-.147	-.154	-.160	-.165	-.168	-.167
	[b].200	-.305	-.333	-.342	-.352	-.372	-.387	-.401	-.402	-.403	-.418	-.423	-.422	-.419	-.417
	.300	-.390	-.417	-.439	-.448	-.454	-.462	-.464	-.466	-.469	-.470	-.470	-.473	-.476	-.475
	.400	-.312	-.318	-.325	-.334	-.349	-.361	-.365	-.374	-.378	-.386	-.390	-.395	-.403	-.407
	.500	-.367	-.378	-.378	-.378	-.382	-.393	-.398	-.402	-.407	-.410	-.413	-.414	-.415	-.414
	.600	-.339	-.354	-.357	-.355	-.360	-.368	-.368	-.373	-.375	-.378	-.380	-.382	-.386	-.386
	.700	-.431	-.438	-.444	-.441	-.443	-.449	-.451	-.454	-.456	-.456	-.455	-.455	-.459	-.459
	.800	-.488	-.496	-.500	-.499	-.493	-.503	-.504	-.507	-.508	-.507	-.507	-.507	-.508	-.507
	[b].900	-.268	-.292	-.282	-.291	-.328	-.368	-.387	-.419	-.448	-.507	-.535	-.603	-.607	-.613
	.950	-.027	-.050	-.076	-.096	-.130	-.162	-.199	-.249	-.310	-.406	-.584	-.684	-.714	-.723
Lower surface	.0375	-.693	-.608	-.537	-.476	-.372	-.233	-.066	.011	.038	.089	.122	.149	.178	.201
	.075	-.568	-.405	-.225	-.107	.035	.073	.074	.083	.107	.130	.156	.185	.211	.231
	.150	.048	.052	.035	.031	.028	.032	.045	.058	.079	.096	.114	.134	.150	.165
	.250	.079	.069	.066	.068	.075	.083	.095	.105	.119	.132	.146	.161	.175	.185
	.350	.045	.041	.041	.046	.052	.059	.069	.074	.087	.095	.105	.117	.127	.135
	.450	.065	.066	.068	.071	.078	.083	.092	.096	.107	.116	.124	.136	.144	.152
	.550	.036	.037	.037	.040	.044	.048	.055	.057	.067	.074	.081	.091	.099	.106
	.650	.053	.053	.052	.054	.058	.060	.067	.068	.076	.082	.090	.097	.106	.111
	.750	.028	.024	.022	.022	.023	.022	.027	.027	.033	.038	.044	.051	.058	.061
	.850	.053	.047	.043	.040	.041	.043	.047	.049	.055	.062	.069	.075	.084	.089
	[b].925	.092	.092	.093	.077	.077	.086	.086	.089	.102	.107	.123	.130	.141	.145
	[b].975	.120	.136	.142	.112	.112	.126	.123	.131	.150	.151	.178	.183	.204	.188
	[a]1.000	.134	.162	.173	.133	.133	.146	.146	.157	.182	.177	.214	.218	.248	.232

[a]No orifice.

[b]Faired value.

[c]Extrapolated value.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35°$; $\beta_{0.75R} = 45°$) - Continued

(k) $M = 0.58$; $B = 1$.

J	2.454	2.379	2.311	2.279	2.245	2.225	2.198	2.172	2.154	2.129	2.103	2.084	2.063	2.043	2.022	2.003	1.986	1.956	1.951
M_r	.930	.949	.965	.974	.980	.985	.991	.999	1.008	1.016	1.021	1.029	1.036	1.043	1.050	1.057	1.065	1.069	1.079
α_{M_r}	-1.10	-.23	.58	.96	1.38	1.63	1.96	2.28	2.51	2.83	3.16	3.40	3.68	3.94	4.21	4.46	4.69	5.09	5.16
$\alpha_{\Delta\beta}$	-.90	-.75	-.68	-.61	-.59	-.40	-.26	-.12	0	.15									
c_l	.67	.88	1.13	1.28	1.45	1.57	1.68	1.83	2.01	2.07	2.20	2.24	2.34	2.40	2.45	2.52	2.55	2.57	2.58
c_n	.1297	.1684	.2161	.2468	.2803	.3016	.3255	.3589	.3868	.3952	.4197	.4252	.4432	.4523	.4581	.4687	.4768	.4823	.4835
c_m	-.1273	-.1193	-.1213	-.1226	-.1230	-.1274	-.1330	-.1452	-.1540	-.1541	-.1595	-.1597	-.1626	-.1610	-.1635	-.1698	-.1664	-.1635	-.1649
c_c	.0295	.0282	.0278	.0281	.0272	.0278	.0289	.0301	.0334	.0325	.0326	.0334	.0333	.0325	.0332	.0331	.0329	.0335	.0328
x/b	Pressure coefficient, P																		
Upper surface																			
[a]0.000	1.235	1.246	1.254	1.259	1.263	1.266	1.270	1.275	1.280	1.285	1.288	1.293	1.296	1.302	1.306	1.311	1.317	1.319	1.325
.025	.547	.571	.598	.609	.617	.627	.639	.650	.664	.674	.683	.694	.707	.716	.723	.730	.741	.752	.763
.050	.364	.332	.302	.289	.263	.255	.246	.238	.234	.226	.216	.213	.204	.199	.195	.190	.183	.174	.175
.100	.076	.048	.022	.010	-.014	-.023	-.036	-.051	-.062	-.069	-.076	-.075	-.073	-.079	-.072	-.069	-.060	-.050	-.037
[b].200	-.228	-.247	-.284	-.287	-.317	-.317	-.324	-.326	-.334	-.328	-.332	-.326	-.335	-.353	-.328	-.339	-.320	-.278	-.278
.300	-.366	-.375	-.386	-.393	-.410	-.412	-.414	-.414	-.410	-.411	-.413	-.409	-.410	-.411	-.410	-.413	-.413	-.417	-.410
.400	-.312	-.319	-.320	-.327	-.333	-.337	-.334	-.336	-.335	-.341	-.349	-.349	-.354	-.358	-.361	-.364	-.366	-.375	-.369
.500	-.342	-.361	-.354	-.356	-.358	-.362	-.364	-.369	-.371	-.374	-.378	-.378	-.377	-.380	-.376	-.377	-.374	-.378	-.363
.600	-.301	-.311	-.320	-.323	-.329	-.333	-.333	-.337	-.336	-.337	-.343	-.343	-.343	-.344	-.347	-.348	-.344	-.353	-.346
.700	-.404	-.403	-.406	-.408	-.413	-.414	-.413	-.417	-.415	-.415	-.418	-.416	-.414	-.415	-.414	-.416	-.410	-.417	-.410
.800	-.463	-.461	-.462	-.464	-.468	-.469	-.467	-.469	-.468	-.466	-.469	-.468	-.464	-.465	-.464	-.466	-.459	-.465	-.458
[b].900	-.185	-.186	-.277	-.323	-.347	-.382	-.462	-.477	-.549	-.558	-.572	-.573	-.574	-.572	-.558	-.563	-.564	-.573	-.562
.950	.010	-.040	-.104	-.153	-.189	-.250	-.309	-.469	-.621	-.671	-.688	-.689	-.683	-.683	-.677	-.677	-.666	-.667	-.658
Lower surface																			
.0375	-.811	-.717	-.593	-.534	-.475	-.420	-.364	-.302	-.225	-.150	-.092	-.063	-.039	-.022	-.009	0	.015	.028	.043
.075	-.730	-.638	-.508	-.451	-.373	-.289	-.169	-.033	.080	.111	.118	.135	.164	.184	.203	.220	.247	.262	.283
.150	-.685	-.584	-.353	-.197	.037	.082	.079	.073	.073	.079	.091	.106	.127	.141	.156	.167	.188	.199	.216
.250	-.020	.103	.138	.131	.110	.105	.104	.107	.115	.125	.135	.146	.163	.172	.182	.192	.208	.216	.231
.350	.113	.101	.081	.072	.060	.059	.064	.069	.080	.089	.096	.103	.117	.125	.130	.137	.152	.153	.165
.450	.101	.094	.088	.086	.083	.086	.093	.095	.109	.118	.123	.132	.144	.150	.157	.162	.176	.178	.191
.550	.056	.045	.039	.037	.038	.041	.047	.052	.061	.069	.076	.082	.094	.099	.106	.109	.122	.126	.136
.650	.060	.049	.048	.046	.049	.051	.058	.062	.071	.079	.082	.089	.100	.103	.108	.112	.130	.124	.134
.750	.043	.032	.026	.024	.026	.027	.033	.034	.041	.049	.050	.056	.066	.067	.071	.075	.090	.087	.096
.850	.066	.048	.041	.040	.043	.047	.054	.058	.066	.073	.076	.081	.091	.091	.095	.097	.112	.105	.111
[b].925	.092	.063	.066	.072	.077	.081	.097	.102	.116	.108	.106	.118	.130	.129	.134	.122	.145	.132	.146
[a].975	.118	.083	.090	.102	.110	.113	.138	.145	.162	.136	.130	.148	.168	.167	.187	.142	.174	.155	.174
[a]1.000	.131	.092	.104	.120	.130	.133	.163	.170	.188	.151	.142	.163	.190	.188	.185	.153	.190	.168	.188

[a]No orifice.

[b]Faired value.

[c]Extrapolated value.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-504.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35^\circ$; $\beta_{0.75R} = 45^\circ$) - Continued

(1) $M = 0.60$; $B = 1$.

J	2.323	2.289	2.257	2.230	2.211	2.183	2.160	2.141	2.115	2.102	2.072	2.049	2.030	2.010	1.983	1.970
M_x	.995	1.004	1.008	1.016	1.025	1.028	1.036	1.042	1.050	1.060	1.063	1.071	1.077	1.085	1.093	1.104
α_x,	.45	.86	1.25	1.58	1.82	2.17	2.46	2.70	3.03	3.19	3.58	3.88	4.13	4.39	4.72	4.92
$\sigma_{\Delta\beta}$	-.86	-.73	-.62	-.55	-.51	-.48	-.46	-.45	-.44	-.44	-.42	-.40	-.38	-.34	-.28	-.23
α_i	1.02	1.20	1.36	1.55	1.59	1.67	1.81	1.85	1.92	1.89	2.07	2.19	2.29	2.37	2.43	2.47
c_n	.1939	.2306	.2619	.2994	.3084	.3216	.3468	.3538	.3652	.3584	.3890	.4100	.4287	.4451	.4541	.4632
c_m	-.1357	-.1390	-.1435	-.1495	-.1509	-.1483	-.1493	-.1513	-.1496	-.1384	-.1436	-.1450	-.1442	-.1473	-.1481	-.1485
c_c	.0334	.0345	.0353	.0367	.0367	.0366	.0361	.0361	.0352	.0345	.0333	.0330	.0326	.0324	.0322	.0315
c/b	Pressure coefficient, P															
Upper surface																
[a]0.000	1.272	1.277	1.280	1.285	1.290	1.293	1.297	1.301	1.306	1.313	1.315	1.320	1.324	1.329	1.334	1.342
.025	.507	.505	.509	.521	.535	.542	.553	.566	.576	.587	.596	.606	.615	.628	.641	.652
.050	.352	.339	.319	.310	.306	.291	.285	.283	.272	.270	.262	.251	.247	.244	.241	.230
.100	.069	.058	.039	.029	.022	.002	-.012	-.020	-.035	-.041	-.052	-.063	-.066	-.066	-.067	-.069
[b].200	-.252	-.249	-.268	-.287	-.278	-.298	-.268	-.246	-.258	-.257	-.268	-.271	-.316	-.322	-.302	-.309
.300	-.344	-.350	-.361	-.363	-.364	-.370	-.369	-.365	-.369	-.364	-.365	-.371	-.369	-.367	-.367	-.367
.400	-.296	-.301	-.311	-.317	-.321	-.327	-.326	-.325	-.327	-.322	-.326	-.335	-.332	-.329	-.330	-.331
.500	-.375	-.367	-.365	-.352	-.359	-.361	-.357	-.354	-.358	-.357	-.360	-.367	-.362	-.357	-.356	-.354
.600	-.339	-.330	-.324	-.317	-.308	-.312	-.314	-.314	-.320	-.318	-.319	-.327	-.324	-.317	-.317	-.315
.700	-.400	-.396	-.394	-.394	-.393	-.392	-.387	-.388	-.392	-.388	-.388	-.394	-.390	-.382	-.382	-.379
.800	-.448	-.445	-.445	-.442	-.444	-.450	-.442	-.438	-.439	-.438	-.438	-.442	-.438	-.430	-.427	-.424
[b].900	-.415	-.486	-.491	-.525	-.558	-.568	-.567	-.558	-.557	-.557	-.548	-.556	-.562	-.558	-.552	-.548
.950	-.267	-.388	-.513	-.612	-.649	-.666	-.667	-.664	-.664	-.657	-.652	-.653	-.649	-.639	-.631	-.627
Lower surface																
.0375	-.551	-.509	-.465	-.415	-.370	-.322	-.272	-.229	-.164	-.070	.038	.121	.153	.187	.217	.255
.075	-.471	-.435	-.391	-.343	-.295	-.243	-.185	-.114	.024	.115	.145	.164	.186	.215	.239	.273
.150	-.430	-.409	-.355	-.258	-.170	-.008	.080	.103	.098	.100	.107	.124	.142	.164	.182	.207
.250	-.117	.047	.138	.165	.154	.136	.130	.131	.129	.138	.147	.159	.173	.191	.206	.228
.350	.101	.087	.063	.065	.118	.105	.091	.088	.089	.097	.105	.113	.124	.141	.151	.172
[b].450	.082	.072	.049	.052	.071	.016	.102	.089	.072	.055	.087	.083	.102	.116	.127	.142
.550	.063	.057	.051	.052	.029	-.033	.067	.093	.083	.078	.084	.088	.097	.111	.119	.136
.650	.060	.058	.055	.061	.063	.058	.009	.061	.114	.111	.103	.101	.107	.122	.131	.146
[b].750	.055	.055	.054	.065	.072	.063	.037	.053	.111	.082	.097	.097	.103	.118	.134	.148
.850	.043	.047	.047	.054	.059	.060	.070	.071	.068	.012	.069	.078	.076	.092	.097	.105
[b].925	.031	.038	.040	.039	.042	.041	.047	.047	.003	-.053	.014	.035	.036	.052	.045	.042
[b].975	.023	.033	.035	.028	.027	.016	.003	-.003	-.052	-.100	-.032	-.003	.002	.013	.005	-.013
[a]1.000	.019	.029	.032	.022	.020	-.003	-.027	-.035	-.082	-.124	-.058	-.025	-.013	-.008	-.016	-.041

[a]No orifice.

[b]Faired value.

[c]Extrapolated value.

TABLE 9.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF AN NACA 16-304.40 PROPELLER BLADE SECTION ($x = 0.95$; $\beta_x = 38.35^\circ$; $\beta_{0.75R} = 45^\circ$) - Concluded

(m) $M = 0.65$; $B = 1$.

J		2.277	2.245	2.225	2.199	2.178	2.159	2.125	2.116	2.103	2.068	2.064	2.042	2.019
M_x		1.060	1.069	1.076	1.082	1.089	1.100	1.103	1.115	1.123	1.126	1.136	1.144	1.150
$\alpha_{x'}$		1.01	1.40	1.65	1.97	2.23	2.47	2.90	3.01	3.18	3.63	3.68	3.97	4.27
$c_{\Delta\beta}$		-1.40	-1.33	-1.27	-1.19	-1.13	-1.07	-.96	-.93	-.89	-.77	-.76	-.68	-.60
α_i		.95	1.06	1.10	1.20	1.30	1.35	1.47	1.57	1.64	1.80	1.84	1.91	1.95
c_n		.1832	.2038	.2119	.2303	.2481	.2574	.2768	.2965	.3084	.3361	.3439	.3577	.3635
c_m		-.1523	-.1485	-.1458	-.1454	-.1416	-.1390	-.1369	-.1364	-.1345	-.1337	-.1360	-.1363	-.1337
c_o		.0410	.0401	.0395	.0392	.0384	.0367	.0360	.0363	.0354	.0349	.0346	.0343	.0332
	o/b	Pressure coefficient, P												
Upper surface	[a]0.000	1.313	1.319	1.324	1.327	1.331	1.339	1.342	1.349	1.355	1.357	1.364	1.370	1.374
	.025	.618	.632	.641	.652	.663	.673	.679	.698	.710	.717	.730	.740	.745
	.050	.480	.407	.403	.399	.395	.386	.372	.372	.372	.362	.361	.353	.347
	.100	.145	.130	.125	.120	.112	.099	.079	.077	.073	.068	.075	.077	.078
	[b].200	-.159	-.147	-.177	-.155	-.155	-.156	-.164	-.162	-.156	-.163	-.156	-.164	-.164
	.300	-.264	-.272	-.270	-.269	-.265	-.267	-.271	-.265	-.268	-.266	-.264	-.270	-.272
	.400	-.223	-.237	-.235	-.236	-.235	-.238	-.245	-.243	-.242	-.244	-.242	-.247	-.250
	.500	-.307	-.313	-.312	-.307	-.305	-.305	-.309	-.305	-.299	-.301	-.294	-.297	-.296
	.600	-.288	-.292	-.287	-.281	-.277	-.274	-.272	-.264	-.254	-.250	-.245	-.247	-.250
	.700	-.369	-.370	-.365	-.356	-.348	-.343	-.338	-.330	-.321	-.319	-.312	-.314	-.317
	.800	-.417	-.416	-.409	-.395	-.386	-.380	-.378	-.371	-.366	-.364	-.356	-.357	-.361
	[b].900	-.532	-.517	-.530	-.518	-.510	-.487	-.501	-.492	-.503	-.487	-.476	-.474	-.465
	.950	-.605	-.616	-.609	-.597	-.588	-.583	-.580	-.571	-.568	-.564	-.555	-.551	-.553
Lower surface	.0375	-.427	-.378	-.348	-.308	-.272	-.236	-.193	-.144	-.106	-.075	-.044	-.019	-.006
	.075	-.354	-.315	-.287	-.247	-.211	-.171	-.122	-.067	-.024	.023	.084	.154	.185
	.150	-.341	-.298	-.274	-.240	-.211	-.179	-.138	-.086	-.024	.129	.167	.174	.182
	.250	-.198	-.152	-.124	-.084	-.030	.002	.083	.161	.192	.193	.205	.214	.221
	.350	-.142	-.104	-.070	-.009	.047	.109	.126	.134	.143	.148	.157	.164	.170
	.450	.009	.075	.106	.148	.156	.163	.162	.168	.176	.179	.189	.196	.199
	.550	.095	.098	.100	.107	.106	.103	.093	.095	.104	.111	.123	.131	.133
	.650	.110	.103	.102	.105	.104	.104	.101	.107	.116	.124	.136	.144	.145
	.750	.066	.056	.055	.058	.059	.061	.059	.067	.076	.086	.099	.106	.109
	.850	.085	.063	.051	.047	.045	.041	.036	.042	.049	.059	.073	.078	.078
	[b].925	.108	.083	.064	.054	.051	.048	.047	.052	.045	.043	.060	.065	.063
	[c].975	.124	.098	.077	.061	.058	.058	.058	.062	.045	.038	.055	.057	.056
	[a]1.000	.133	.106	.084	.065	.064	.064	.065	.068	.045	.038	.054	.054	.052

[a]No orifice.

[b]Faired value.

[c]Extrapolated value.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF THE BLADE SECTION ($x = 0.975$; $\beta_x = 37.90^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$)

(a) $N = 1140$ rpm.

	J	1.679	1.794	1.898	1.974	2.080	2.201	2.317	2.445	2.563	2.744	2.646	2.511	2.391	2.275	2.147	2.032	1.939	1.830	1.749	1.600
	M_x	.607	.618	.627	.637	.644	.654	.668	.685	.695	.716	.704	.688	.678	.664	.642	.635	.629	.622	.615	.602
	α_x'	9.17	7.54	6.12	5.10	3.72	2.20	.80	-.70	-2.02	-3.95	-2.92	-1.45	-.08	1.30	2.87	4.34	5.57	7.04	8.17	10.32
	$\Delta\beta$	1.16	.94	.74	.60	.45	.20	-.05	-.32	-.57	-.95	-.75	-.46	-.20	.05	.32	.50	.67	.87	1.02	1.31
	α_i	5.87	5.17	4.28	3.67	3.05	2.30	1.61	1.09	.55	-.47	.09	.81	1.32	1.83	2.55	3.28	3.85	4.67	5.31	6.10
	c_n	.6819	.5987	.4935	.4229	.3548	.2700	.1884	.1265	.0639	-.0548	.0110	.0942	.1529	.2139	.2981	.3813	.4432	.5406	.6123	.7097
	c_m	-.0787	-.0785	-.0793	-.0753	-.0723	-.0702	-.0679	-.0674	-.0705	-.0767	-.0764	-.0688	-.0666	-.0678	-.0696	-.0725	-.0771	-.0785	-.0831	-.0773
	c_c	-.0394	-.0251	-.0180	-.0079	-.0034	.0025	.0073	.0143	.0174	.0223	.0192	.0151	.0105	.0067	.0011	-.0038	-.0083	-.0165	-.0280	-.0455
	c/b	Pressure coefficient, P																			
Upper surface	[a]0.000	1.095	1.099	1.102	1.105	1.108	1.111	1.117	1.123	1.127	1.135	1.131	1.125	1.121	1.115	1.111	1.104	1.102	1.100	1.098	1.093
	.025	-1.638	-1.587	-.847	-.448	-.272	-.016	.237	.448	.535	.658	.604	.486	.336	.153	-.112	-.379	-.525	-1.396	-1.619	-1.510
	.050	-1.540	-1.072	-.569	-.442	-.324	-.164	-.002	.161	.286	.338	.287	.186	.067	-.056	-.232	-.372	-.517	-.711	-1.259	-1.523
	.100	-.860	-.542	-.483	-.409	-.325	-.244	-.147	-.031	.001	.086	.047	-.025	-.104	-.181	-.281	-.379	-.463	-.535	-.582	-1.277
	.200	-.460	-.439	-.384	-.338	-.291	-.246	-.196	-.118	-.121	-.076	-.097	-.137	-.172	-.213	-.270	-.327	-.380	-.427	-.460	-.493
	.300	-.415	-.379	-.327	-.289	-.249	-.215	-.182	-.118	-.139	-.118	-.129	-.142	-.164	-.194	-.236	-.280	-.326	-.365	-.401	-.430
	.400	-.433	-.391	-.341	-.306	-.272	-.244	-.210	-.156	-.178	-.152	-.163	-.184	-.198	-.223	-.262	-.300	-.340	-.377	-.414	-.454
	.500	-.391	-.351	-.309	-.275	-.241	-.214	-.183	-.125	-.146	-.150	-.140	-.151	-.170	-.194	-.231	-.272	-.311	-.346	-.378	-.409
	.600	-.399	-.361	-.320	-.289	-.256	-.231	-.201	-.145	-.171	-.160	-.163	-.173	-.189	-.211	-.249	-.285	-.323	-.355	-.385	-.415
	.700	-.397	-.363	-.323	-.296	-.266	-.241	-.210	-.156	-.184	-.177	-.179	-.187	-.200	-.223	-.260	-.292	-.328	-.355	-.385	-.413
	.800	-.366	-.337	-.306	-.279	-.254	-.235	-.207	-.151	-.178	-.170	-.175	-.181	-.195	-.219	-.254	-.282	-.313	-.332	-.356	-.378
	.900	-.349	-.326	-.303	-.282	-.261	-.244	-.219	-.165	-.201	-.211	-.203	-.199	-.207	-.231	-.260	-.285	-.313	-.328	-.346	-.361
	.950	-.220	-.204	-.181	-.165	-.144	-.132	-.108	-.057	-.093	-.106	-.095	-.091	-.099	-.121	-.144	-.168	-.195	-.205	-.218	-.232
Lower surface	.0375	.521	.453	.363	.281	.178	.036	-.125	-.232	-.534	-1.004	-.838	-.362	-.195	-.072	.079	.211	.294	.401	.467	.544
	.075	.385	.331	.262	.202	.130	.032	-.061	-.116	-.273	-.598	-.427	-.211	-.106	-.037	.058	.148	.206	.288	.338	.401
	.150	.278	.241	.193	.156	.110	.049	0	-.020	-.125	-.326	-.208	-.089	-.031	.010	.060	.116	.150	.208	.244	.288
	.250	.205	.181	.148	.124	.093	.049	.019	.024	-.055	-.177	-.097	-.034	.002	.028	.056	.001	.112	.153	.179	.207
	.350	.167	.149	.124	.105	.083	.058	.028	.042	-.022	-.103	-.048	-.007	.015	.034	.053	.077	.091	.125	.145	.166
	.450	.161	.145	.127	.113	.097	.065	.044	.063	.006	-.050	-.013	.017	.035	.050	.070	.089	.098	.127	.141	.159
	.550	.138	.126	.112	.100	.087	.060	.042	.066	.015	-.024	.002	.023	.035	.045	.061	.077	.085	.108	.120	.133
	.650	.111	.099	.089	.078	.067	.047	.033	.060	.015	-.013	.005	.020	.027	.034	.043	.057	.061	.083	.095	.103
	.750	.100	.094	.086	.078	.070	.050	.041	.072	.028	.010	.022	.033	.036	.041	.047	.057	.059	.076	.084	.092
	[b].850	.085	.087	.085	.078	.077	.060	.058	.092	.051	.041	.052	.057	.055	.054	.053	.061	.058	.066	.070	.070
	.925	.076	.078	.082	.083	.083	.073	.074	.112	.075	.069	.074	.077	.073	.071	.066	.067	.059	.067	.066	.066
	[b].975	.139	.135	.120	.145	.136	.135	.145	.164	.128	.116	.143	.114	.113	.103	.091	.093	.078	.118	.118	.118
	[a]1.000	.215	.200	.153	.220	.200	.197	.212	.208	.183	.162	.197	.145	.152	.127	.108	.122	.115	.187	.200	.200

[a]No orifice.

[b]Faired value.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF THE BLADE SECTION ($x = 0.975$; $\beta_x = 37.90^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(b) N = 1350 rpm.

	J	2.739	2.628	2.502	2.408	2.323	2.231	2.152	2.049	2.097	2.169	2.267	2.355	2.470	2.575	2.696
	M_x	.855	.835	.817	.804	.791	.778	.769	.760	.763	.764	.782	.796	.811	.828	.845
	α_x'	-3.90	-2.73	-1.35	-.27	.73	1.83	2.81	4.12	3.50	2.60	1.40	.35	-.98	-2.37	-3.45
	$\Delta\beta$	-1.52	-1.19	-.72	-.43	-.18	.09	.33	.64	.50	.28	-.01	-.27	-.62	-.98	-1.40
	α_l	-.50	.12	.86	1.40	1.85	2.31	2.90	3.49	3.21	2.74	2.12	1.65	1.04	.47	-.23
	c_n	-.0594	.0135	.0994	.1632	.2155	.2703	.3394	.4058	.3755	.3213	.2471	.1935	.1213	.0548	-.0271
	c_m	-.0882	-.0926	-.0859	-.0783	-.0793	-.0824	-.0826	-.0839	-.0832	-.0836	-.0810	-.0777	-.0813	-.0882	-.0918
	c_o	.0266	.0223	.0174	.0130	.0069	.0049	.0002	-.0049	-.0019	.0026	.0071	.0104	.0155	.0190	.0214
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.195	1.186	1.178	1.172	1.167	1.161	1.157	1.153	1.155	1.155	1.162	1.168	1.175	1.183	1.191
	.025	.708	.643	.536	.443	.303	.132	-.089	-.344	-.214	-.018	.195	.355	.498	.595	.679
	.050	.394	.327	.227	.138	.030	-.096	-.245	-.418	-.329	-.196	-.049	.070	.193	.283	.364
	.100	.118	.063	-.009	-.077	-.151	-.231	-.317	-.409	-.362	-.291	-.201	-.126	-.034	.030	.093
	.200	-.086	-.113	-.148	-.183	-.220	-.259	-.302	-.353	-.325	-.288	-.244	-.210	-.158	-.188	-.098
	.300	-.139	-.151	-.161	-.175	-.198	-.228	-.258	-.300	-.278	-.248	-.214	-.193	-.163	-.155	-.143
	.400	-.173	-.171	-.182	-.195	-.213	-.239	-.265	-.303	-.283	-.257	-.226	-.209	-.184	-.170	-.171
	.500	-.187	-.175	-.171	-.188	-.208	-.233	-.262	-.296	-.277	-.253	-.221	-.203	-.175	-.162	-.182
	.600	-.212	-.195	-.202	-.215	-.231	-.256	-.285	-.317	-.300	-.277	-.245	-.228	-.204	-.197	-.199
	.700	-.226	-.215	-.219	-.230	-.246	-.273	-.298	-.327	-.311	-.291	-.261	-.242	-.218	-.212	-.216
	.800	-.229	-.243	-.223	-.232	-.251	-.276	-.299	-.325	-.311	-.294	-.267	-.248	-.223	-.217	-.221
	.900	-.276	-.244	-.231	-.237	-.254	-.281	-.301	-.327	-.313	-.296	-.268	-.250	-.229	-.233	-.254
	.950	-.107	-.086	-.085	-.097	-.113	-.138	-.156	-.181	-.166	-.152	-.126	-.110	-.087	-.081	-.093
Lower surface	.0375	-1.193	-1.178	-.981	-.198	-.158	-.034	.099	.201	.154	.059	-.070	-.193	-.775	-1.101	-1.191
	.075	-.965	-1.006	-.158	-.141	-.073	-.011	.075	.140	.110	.048	-.033	-.105	-.126	-.748	-1.049
	.150	-.306	-.119	-.071	-.055	-.014	.019	.067	.103	.089	.055	.015	-.036	-.063	-.068	-.205
	.250	-.212	-.096	-.027	-.010	.014	.037	.062	.082	.073	.055	.032	.001	-.014	-.041	-.130
	.350	-.162	-.055	0	.016	.031	.048	.062	.074	.069	.058	.045	.021	.011	-.015	-.097
	.450	-.100	-.015	.021	.034	.045	.058	.079	.086	.085	.074	.055	.036	.029	.009	-.049
	.550	-.054	.011	.034	.041	.052	.063	.083	.086	.086	.078	.063	.044	.043	.028	-.014
	.650	-.032	.013	.029	.034	.040	.046	.058	.059	.061	.055	.046	.032	.034	.023	-.003
	[b].750	.001	.033	.042	.041	.046	.049	.058	.058	.060	.056	.051	.040	.046	.040	.021
	[b].850	.048	.063	.068	.067	.060	.060	.063	.060	.068	.067	.068	.059	.067	.049	.040
	.925	.084	.098	.095	.088	.083	.078	.080	.070	.078	.081	.083	.081	.095	.098	.094
	[b].975	.142	.152	.175	.162	.158	.162	.172	.138	.142	.140	.152	.181	.160	.183	.172
	[a]1.000	.188	.205	.250	.258	.250	.282	.284	.220	.222	.205	.230	.300	.220	.270	.260

[a]No orifice.

[b]Faired value.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF THE BLADE SECTION ($r = 0.975$; $\beta_x = 37.90^\circ$; $\beta_{0.75R} = 45^\circ$; $B = 2$) - Continued

(c) $N = 1500$ rpm.

	J	2.067	2.145	2.254	2.378	2.475	2.581	2.551	2.434	2.336	2.235	2.119	2.040
	M_x	.844	.852	.865	.884	.899	.917	.910	.890	.874	.860	.842	.833
	α_x'	3.89	2.90	1.55	.08	-1.04	-2.22	-1.89	-.57	.57	1.78	3.22	4.23
	$\Delta\beta$	.78	.46	.03	-.45	-.89	-1.45	-1.29	-.70	-.28	.11	.57	.88
	α_i	3.73	3.03	2.35	1.55	.89	.16	.34	1.15	1.85	2.30	3.26	3.91
	c_n	.4381	.3552	.2748	.1797	.1045	.0187	.0400	.1342	.2168	.2700	.3826	.4577
	c_m	-.0915	-.0896	-.0885	-.0901	-.1008	-.1137	-.1055	-.0960	-.0864	-.0882	-.0882	-.0909
	c_c	-.0019	.0028	.0096	.0157	.0199	.0248	.0216	.0180	.0137	.0090	.0021	-.0045
	c/b	Pressure coefficient, P											
Upper surface	[a]0.000	1.191	1.195	1.201	1.210	1.219	1.228	1.224	1.214	1.206	1.199	1.190	1.185
	.025	-.189	.046	.274	.412	.567	.665	.642	.528	.398	.225	-.047	-.272
	.050	-.347	-.179	0	.158	.260	.356	.333	.222	.105	-.035	-.246	-.406
	.100	-.473	-.313	-.193	-.076	.002	.085	.063	-.028	-.116	-.217	-.357	-.521
	.200	-.371	-.315	-.259	-.206	-.180	-.151	-.162	-.182	-.222	-.267	-.338	-.388
	.300	-.303	-.263	-.232	-.198	-.179	-.209	-.192	-.183	-.208	-.237	-.276	-.315
	.400	-.329	-.294	-.262	-.236	-.219	-.233	-.208	-.225	-.242	-.266	-.308	-.340
	.500	-.312	-.274	-.244	-.213	-.193	-.169	-.169	-.198	-.220	-.248	-.287	-.321
	.600	-.347	-.309	-.286	-.262	-.252	-.236	-.240	-.254	-.265	-.284	-.321	-.354
	.700	-.377	-.342	-.316	-.293	-.285	-.275	-.274	-.287	-.293	-.314	-.350	-.379
	.800	-.364	-.337	-.324	-.316	-.313	-.293	-.297	-.307	-.296	-.309	-.341	-.368
	.900	-.357	-.318	-.285	-.246	-.237	-.333	-.238	-.230	-.254	-.290	-.333	-.366
	.950	-.164	-.135	-.108	-.074	-.047	-.017	-.026	-.059	-.084	-.116	-.150	-.176
Lower surface	.0375	.198	.079	-.097	-.625	-.801	-.888	-.879	-.771	-.377	-.060	.118	.229
	.075	.144	.065	-.043	-.259	-.746	-.843	-.835	-.697	-.071	-.019	.090	.166
	.150	.121	.074	.033	.004	-.277	-.700	-.691	.036	-.008	.040	.099	.143
	.250	.092	.072	.041	.016	.054	-.317	-.021	.027	.021	.050	.086	.109
	.350	.085	.077	.044	.024	.035	.053	.065	.023	.030	.050	.077	.099
	.450	.105	.090	.062	.044	.045	.078	.068	.044	.051	.067	.088	.106
	.550	.097	.085	.062	.046	.043	.063	.056	.044	.051	.064	.082	.097
	.650	.071	.062	.046	.033	.030	.041	.043	.031	.037	.049	.059	.072
	.750	.067	.062	.049	.040	.038	.045	.037	.038	.042	.049	.056	.067
	[b].850	.079	.079	.070	.069	.070	.080	.075	.060	.065	.069	.070	.075
	.925	.087	.092	.091	.094	.103	.118	.113	.098	.092	.089	.084	.083
	[b].975	.100	.106	.105	.118	.120	.152	.162	.132	.114	.102	.094	.102
	[a]1.000	.104	.114	.114	.138	.125	.170	.200	.157	.125	.110	.099	.115

[a]No orifice.

[b]Paired value.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF THE BLADE SECTION ($x = 0.975$; $\beta_x = 37.90^\circ$; $\beta_{0.75R} = 45^\circ$; B = 2) - Continued

(d) N = 1600 rpm.

	J	2.177	2.278	2.370	2.460	2.555	2.581	2.507	2.423	2.323	2.232	2.119
	M_x	.907	.925	.940	.955	.973	.973	.960	.946	.928	.912	.893
	α_x,	2.50	1.26	.17	-.87	-1.93	-2.22	-1.40	-.44	.72	1.82	3.22
	$\Delta\beta$	.47	-.10	-.60	-1.07	-1.45	-1.51	-1.30	-.88	-.34	.17	.78
	α_l	2.92	2.21	1.37	.67	-.34	-.79	.20	1.07	1.76	2.53	3.35
	c_n	.3419	.2590	.1619	.0781	-.0394	-.0929	.0232	.1252	.2065	.2955	.3923
	c_m	-.1010	-.0980	-.1069	-.1116	-.1113	-.1049	-.1144	-.1090	-.1009	-.0974	-.1024
	α_c	.0123	.0190	.0241	.0283	.0347	.0373	.0312	.0266	.0220	.0154	.0051
	x/b	Pressure coefficient, P										
Upper surface	[a]0.000	1.223	1.232	1.241	1.249	1.259	1.259	1.252	1.244	1.234	1.225	1.216
	.025	.214	.391	.520	.620	.710	.733	.666	.577	.462	.304	.066
	.050	-.040	.105	.218	.320	.410	.433	.366	.277	.165	.032	-.150
	.100	-.230	-.121	-.027	.063	.143	.166	.101	.023	-.071	-.174	-.333
	.200	-.347	-.289	-.248	-.176	-.098	-.077	-.137	-.209	-.253	-.313	-.384
	.300	-.266	-.213	-.200	-.213	-.174	-.163	-.195	-.233	-.211	-.237	-.301
	.400	-.280	-.233	-.201	-.274	-.237	-.224	-.259	-.228	-.224	-.249	-.328
	.500	-.269	-.244	-.214	-.245	-.248	-.239	-.269	-.203	-.232	-.263	-.312
	.600	-.318	-.303	-.268	-.255	-.302	-.298	-.294	-.252	-.285	-.323	-.358
	.700	-.383	-.340	-.305	-.281	-.336	-.351	-.302	-.292	-.318	-.360	-.416
	.800	-.422	-.384	-.347	-.316	-.334	-.362	-.316	-.333	-.365	-.404	-.445
	.900	-.448	-.471	-.504	-.485	-.472	-.485	-.477	-.504	-.494	-.437	-.337
	.950	-.073	-.069	-.080	-.097	-.110	-.124	-.088	-.093	-.068	-.069	-.100
Lower surface	.0375	.009	-.319	-.560	-.679	-.754	-.780	-.739	-.661	-.525	-.088	.110
	.075	.022	-.022	-.503	-.644	-.724	-.749	-.706	-.624	-.449	-.033	.087
	.150	.070	.022	-.221	-.506	-.610	-.642	-.587	-.481	.057	.037	.103
	.250	.065	.033	.078	-.365	-.451	-.474	-.423	-.003	.033	.044	.084
	.350	.063	.038	.056	.018	-.369	-.399	-.297	.075	.031	.048	.078
	.450	.076	.037	.058	.088	-.248	-.337	.035	.075	.046	.062	.086
	.550	.073	.052	.049	.074	-.003	-.203	.067	.056	.044	.061	.083
	.650	.051	.033	.026	.043	.040	-.006	.051	.029	.024	.040	.061
	.750	.049	.031	.022	.030	.041	.026	.040	.023	.024	.039	.057
	[b].850	.060	.046	.037	.043	.058	.051	.051	.040	.041	.054	.066
	.925	.076	.063	.056	.063	.071	.070	.070	.058	.061	.071	.082
	[b].975	.088	.076	.074	.085	.089	.078	.086	.071	.076	.085	.100
	[a]1.000	.095	.082	.082	.098	.094	.080	.091	.080	.084	.092	.108

[a]No orifice.

[b]Paired value.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF THE BLADE SECTION ($r = 0.975$; $\beta_x = 37.90°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(e) M = 0.56.

	J	2.147	2.179	2.218	2.258	2.284	2.314	2.354	2.395	2.434	2.475	2.517	2.560	2.610	2.654	2.697
	M_x	.988	.978	.968	.960	.950	.942	.932	.922	.913	.904	.895	.886	.879	.870	.859
	α_x'	2.87	2.47	1.99	1.51	1.19	.83	.36	-.12	-.57	-1.04	-1.51	-1.99	-2.53	-3.01	-3.46
	$\Delta\beta$	0	-.12	-.21	-.28	-.32	-.36	-.46	-.61	-.76	-.92	-1.07	-1.20	-1.36	-1.48	-1.60
	α_1	2.80	2.62	2.30	2.14	1.91	1.82	1.60	1.44	1.18	.93	.54	.15	-.09	-.36	-.53
	α_n	.3265	.3077	.2684	.2490	.2239	.2110	.1877	.1677	.1368	.1077	.0626	.0174	-.0097	-.0413	-.0619
	α_m	-.1255	-.1254	.1170	-.1080	-.1019	-.0998	-.0990	-.1013	-.1006	-.1001	-.1008	-.1024	-.0985	-.0995	-.0926
	α_c	.0295	.0294	.0271	.0249	.0238	.0227	.0203	.0210	.0201	.0193	.0197	.0204	.0214	.0221	.0238
	x/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.268	1.262	1.257	1.252	1.246	1.242	1.236	1.231	1.226	1.222	1.217	1.212	1.211	1.203	1.198
	.025	.360	.381	.404	.438	.455	.466	.487	.520	.548	.570	.611	.636	.665	.685	.698
	.050	.094	.105	.121	.147	.160	.168	.186	.216	.240	.260	.297	.322	.351	.370	.382
	.100	-.120	-.109	-.098	-.078	-.071	-.066	-.054	-.031	-.012	.003	.033	.053	.080	.095	.108
	.200	-.287	-.288	-.288	-.285	-.285	-.279	-.260	-.224	-.200	-.186	-.160	-.145	-.124	-.109	-.092
	.300	-.239	-.239	-.239	-.223	-.200	-.199	-.205	-.198	-.186	-.178	-.164	-.157	-.142	-.137	-.136
	.400	-.264	-.260	-.253	-.226	-.222	-.221	-.226	-.226	-.220	-.218	-.208	-.203	-.189	-.181	-.179
	.500	-.255	-.247	-.232	-.221	-.222	-.226	-.289	-.214	-.203	-.194	-.178	-.171	-.156	-.156	-.173
	.600	-.295	-.286	-.286	-.279	-.279	-.286	-.279	-.267	-.256	-.254	-.233	-.216	-.200	-.193	-.193
	.700	-.334	-.333	-.331	-.321	-.319	-.317	-.309	-.303	-.296	-.287	-.261	-.251	-.230	-.219	-.216
	.800	-.386	-.383	-.380	-.368	-.362	-.363	-.357	-.350	-.337	-.318	-.283	-.260	-.225	-.209	-.186
	.900	-.543	-.542	-.542	-.535	-.532	-.520	-.478	-.398	-.297	-.237	-.215	-.216	-.212	-.214	-.228
	.950	-.632	-.615	-.507	-.309	-.174	-.105	-.065	-.038	-.034	-.041	-.044	-.049	-.050	-.060	-.079
Lower surface	.0375	-.059	-.156	-.268	-.343	-.422	-.504	-.573	-.652	-.716	-.783	-.878	-.958	-1.028	-1.102	-1.160
	.075	.009	-.024	-.151	-.279	-.376	-.459	-.533	-.614	-.674	-.736	-.827	-.903	-.967	-1.036	-1.069
	.150	.064	.049	.045	.068	.073	.067	.025	-.124	-.203	-.300	-.511	-.673	-.748	-.811	-.323
	.250	.064	.055	.042	.047	.045	.043	.048	.060	.063	.059	.055	.038	.017	-.016	-.108
	[b].350	.065	.063	.037	.047	.043	.036	.042	.070	.052	.051	.060	.053	.030	.007	-.075
	.450	.073	.066	.055	.062	.053	.045	.044	.047	.049	.046	.048	.042	.039	.027	-.038
	.550	.064	.058	.053	.052	.048	.042	.041	.044	.048	.046	.049	.044	.044	.034	-.008
	.650	.035	.032	.022	.026	.023	.019	.001	.026	.031	.031	.034	.031	.030	.024	-.001
	[b].750	.021	.021	.012	.018	.016	.014	.001	.029	.037	.041	.046	.043	.045	.039	.023
	[b].850	.027	.027	.015	.021	.015	.024	.021	.049	.070	.069	.076	.070	.074	.071	.061
	.925	.057	.048	.035	.035	.035	.044	.061	.081	.098	.103	.112	.112	.117	.112	.100
	[b].975	.103	.075	.060	.060	.061	.072	.108	.127	.128	.140	.154	.156	.162	.164	.134
	[a]1.000	.135	.095	.080	.077	.081	.091	.140	.156	.145	.164	.182	.185	.192	.197	.156

[a]No orifice.

[b]Paired value.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF THE BLADE SECTION ($x = 0.975$; $\beta_T = 37.90°$; $\beta_{0.75R} = 45°$; B = 2) - Continued

(f) M = 0.58.

	J	2.148	2.181	2.214	2.251	2.285	2.318	2.354	2.394	2.434	2.473	2.519	2.555	2.593	2.647	2.693
	M_x	1.024	1.014	1.004	.995	.985	.976	.967	.957	.947	.938	.930	.919	.912	.901	.892
	α_T	2.86	2.45	2.04	1.59	1.18	.78	.36	-.11	-.57	-1.02	-1.53	-1.93	-2.35	-2.93	-3.42
	$\Delta\beta$	.01	-.20	-.38	-.54	-.65	-.72	-.75	-.79	-.88	-.99	-1.16	-1.31	-1.45	-1.64	-1.78
	α_i	2.55	2.34	2.17	2.00	1.81	1.60	1.35	1.15	1.02	.79	.61	.40	.22	-.21	-.42
	c_p	.2987	.2729	.2542	.2339	.2103	.1871	.1590	.1355	.1200	.0935	.0716	.0463	.0258	-.0245	-.0490
	c_m	-.1218	-.1200	-.1168	-.1191	-.1213	-.1160	-.1122	-.1109	-.1075	-.1095	-.1101	-.1083	-.1055	-.1082	-.1062
	c_c	.0315	.0307	.0290	.0306	.0322	.0299	.0265	.0264	.0263	.0246	.0248	.0242	.0235	.0241	.0243
	o/b	Pressure coefficient, P														
Upper surface	0.000	1.290	1.283	1.277	1.272	1.266	1.261	1.256	1.250	1.244	1.240	1.235	1.230	1.224	1.220	1.215
	.025	.430	.455	.459	.485	.508	.523	.545	.567	.590	.613	.635	.657	.680	.709	.726
	.050	.169	.185	.188	.204	.219	.229	.247	.265	.287	.308	.326	.346	.367	.394	.413
	.100	-.060	-.041	-.042	-.025	-.013	-.007	.006	.019	.033	.048	.060	.076	.094	.117	.133
	.200	-.231	-.231	-.239	-.234	-.234	-.233	-.224	-.216	-.204	-.187	-.175	-.160	-.141	-.120	-.104
	.300	-.208	-.213	-.232	-.240	-.243	-.242	-.241	-.240	-.233	-.226	-.222	-.215	-.194	-.186	-.180
	.400	-.231	-.226	-.233	-.222	-.233	-.235	-.247	-.258	-.257	-.250	-.252	-.235	-.212	-.205	-.194
	.500	-.220	-.211	-.209	-.198	-.204	-.202	-.203	-.209	-.204	-.187	-.180	-.173	-.164	-.174	-.185
	.600	-.258	-.247	-.252	-.249	-.252	-.253	-.255	-.256	-.247	-.238	-.236	-.237	-.230	-.213	-.212
	.700	-.293	-.290	-.296	-.292	-.294	-.295	-.292	-.287	-.281	-.277	-.281	-.277	-.259	-.252	-.243
	.800	-.342	-.338	-.340	-.335	-.334	-.332	-.331	-.330	-.325	-.319	-.317	-.299	-.279	-.264	-.245
	.900	-.487	-.486	-.490	-.489	-.491	-.493	-.495	-.494	-.484	-.448	-.402	-.325	-.247	-.220	-.222
	.950	-.572	-.572	-.576	-.576	-.554	-.402	-.248	-.153	-.084	-.030	-.016	-.015	-.028	-.038	-.056
Lower surface	.0375	-.125	-.196	-.250	-.321	-.400	-.457	-.527	-.593	-.657	-.728	-.795	-.859	-.938	-1.006	-1.075
	.075	-.073	-.187	-.249	-.314	-.385	-.436	-.503	-.565	-.625	-.691	-.757	-.816	-.889	-.954	-1.018
	.150	.100	.115	.056	-.094	-.231	-.296	-.368	-.429	-.488	-.556	-.623	-.679	-.746	-.807	-.870
	.250	.082	.086	.080	.092	.086	.081	.089	-.069	-.137	-.198	-.269	-.295	-.276	-.365	-.360
	.350	.071	.066	.057	.065	.073	.076	.081	.078	.077	.074	.061	.054	.043	.019	-.017
	.450	.092	.084	.071	.070	.072	.072	.077	.078	.082	.084	.080	.077	.066	.054	.026
	.550	.080	.072	.060	.058	.055	.055	.057	.058	.063	.067	.064	.065	.058	.053	.036
	.650	.050	.042	.032	.029	.023	.024	.025	.026	.033	.040	.038	.040	.039	.037	.027
	.750	.031	.026	.018	.015	.011	.012	.014	.017	.025	.036	.038	.044	.046	.047	.038
	[b].850	.057	.048	.036	.028	.023	.020	.021	.030	.047	.064	.070	.076	.079	.081	.083
	.925	.096	.083	.067	.056	.044	.038	.036	.039	.061	.089	.101	.113	.119	.123	.118
	[b].975	.137	.117	.098	.087	.067	.056	.073	.067	.087	.149	.138	.140	.160	.171	.182
	[a]1.000	.159	.136	.115	.105	.080	.067	.112	.085	.110	.208	.165	.168	.205	.215	.300

[a]No orifice.

[b]Paired value.

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF THE BLADE SECTION ($x = 0.975$; $\beta_x = 37.90°$; $\beta_{0.75R} = .45°$; $B = 2$) - Continued

(g) $M = 0.60$.

	J	2.143	2.172	2.205	2.243	2.275	2.308	2.330	2.375	2.411	2.447	2.477	2.525	2.555	2.600	2.642
	M_x	1.059	1.050	1.039	1.034	1.025	1.015	1.004	.997	.988	.979	.967	.960	.949	.939	.931
	α_x'	2.92	2.56	2.15	1.68	1.30	.90	.64	.11	-.31	-.72	-1.06	-1.60	-1.93	-2.43	-2.88
	$\Delta\beta$	-.48	-.49	-.52	-.60	-.70	-.83	-.92	-1.11	-1.23	-1.32	-1.38	-1.45	-1.50	-1.57	-1.64
	c_l	2.20	2.07	1.79	1.60	1.44	1.23	1.03	.93	.64	.45	.31	.10	-.04	-.36	-.60
	c_n	.2552	.2416	.2084	.1868	.1687	.1445	.1200	.1094	.0752	.0523	.0358	.0123	-.0045	-.0413	-.0703
	c_m	-.1220	-.1206	-.1173	-.1186	-.1214	-.1209	-.1236	-.1236	-.1204	-.1183	-.1171	-.1191	-.1209	-.1183	-.1200
	c_c	.0293	.0310	.0305	.0315	.0330	.0324	.0338	.0345	.0335	.0311	.0309	.0306	.0302	.0296	.0293
	c/b	Pressure coefficient, P														
Upper surface	[a]0.000	1.312	1.307	1.299	1.296	1.290	1.284	1.277	1.273	1.267	1.262	1.256	1.251	1.245	1.240	1.235
	.025	.485	.494	.522	.541	.552	.569	.581	.600	.623	.646	.655	.678	.691	.713	[b].750
	.050	.215	.217	.241	.255	.266	.279	.288	.305	.326	.345	.353	.374	.386	.405	.423
	.100	-.003	0	.020	.031	.038	.047	.052	.063	.076	.091	.094	.110	.118	.133	.147
	.200	-.193	-.197	-.191	-.188	-.187	-.186	-.184	-.175	-.163	-.150	-.147	-.133	-.127	-.111	-.096
	.300	-.208	-.216	-.216	-.215	-.209	-.206	-.207	-.203	-.199	-.197	-.202	-.196	-.198	-.194	-.189
	.400	-.227	-.236	-.247	-.246	-.245	-.253	-.259	-.257	-.255	-.250	-.258	-.258	-.260	-.253	-.245
	.500	-.206	-.207	-.202	-.203	-.209	-.226	-.240	-.248	-.257	-.263	-.272	-.267	-.272	-.274	-.278
	.600	-.237	-.235	-.229	-.230	-.232	-.240	-.251	-.261	-.273	-.280	-.289	-.295	-.293	-.289	-.275
	.700	-.262	-.265	-.260	-.259	-.260	-.265	-.271	-.272	-.272	-.274	-.279	-.278	-.278	-.266	-.252
	.800	-.315	-.314	-.307	-.304	-.304	-.306	-.306	-.308	-.307	-.305	-.311	-.307	-.303	-.286	-.262
	.900	-.463	-.467	-.459	-.458	-.461	-.465	-.469	-.472	-.471	-.472	-.478	-.471	-.462	-.432	-.380
	.950	-.537	-.541	-.533	-.535	-.538	-.544	-.548	-.528	-.364	-.215	-.118	-.048	-.013	.005	-.004
Lower surface	.0375	-.143	-.181	-.243	-.292	-.345	-.395	-.456	-.510	-.574	-.626	-.692	-.752	-.816	-.884	-.948
	.075	-.140	-.178	-.245	-.295	-.347	-.397	-.455	-.504	-.561	-.606	-.665	-.719	-.778	-.840	-.899
	.150	-.028	-.081	-.149	-.189	-.227	-.274	-.330	-.378	-.434	-.482	-.546	-.601	-.658	-.715	-.768
	.250	.112	.109	.014	-.060	-.102	-.178	-.229	-.267	-.314	-.348	-.394	-.435	-.479	-.523	-.567
	[b].350	.117	.107	.090	.046	.029	-.013	-.053	-.098	-.191	-.147	-.154	-.202	-.220	-.282	-.289
	.450	.095	.093	.098	.104	.105	.105	.098	.092	.079	.066	.049	.026	.023	.011	.002
	.550	.076	.073	.076	.081	.081	.083	.082	.081	.082	.083	.074	.071	.066	.061	.053
	.650	.040	.037	.039	.042	.044	.045	.046	.048	.052	.057	.051	.055	.053	.054	.051
	.750	.022	.017	.018	.020	.021	.023	.027	.029	.036	.043	.041	.050	.051	.058	.058
	[b].850	.053	.051	.043	.041	.040	.028	.023	.032	.038	.048	.050	.078	.080	.080	.093
	.925	.113	.103	.093	.084	.072	.064	.054	.049	.047	.054	.060	.089	.103	.122	.130
	[b].975	.169	.143	.134	.120	.100	.101	.084	.060	.056	.077	.096	.143	.160	.180	.179
	[a]1.000	.204	.167	.157	.140	.113	.123	.103	.069	.060	.112	.150	.212	.208	.220	.210

[a]No orifice.

[b]Faired value.

NACA

TABLE 10.- PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS OF THE BLADE SECTION ($x = 0.975$; $\beta_x = 37.90°$; $\beta_{0.75R} = 45°$; $B = 2$) - Concluded

(h) $M = 0.65$.

	J	2.110	2.136	2.150	2.164	2.199	2.222	2.235	2.273	2.293	2.324	2.354	2.383	2.413	2.450	2.483	2.520
	M_x	1.162	1.152	1.144	1.135	1.127	1.121	1.113	1.101	1.090	1.080	1.072	1.060	1.052	1.042	1.034	1.025
	α_x,	3.34	3.01	2.83	2.66	2.22	1.94	1.78	1.32	1.08	.71	.36	.02	-.33	-.76	-1.13	-1.54
	$\Delta\beta$	-.950	-1.038	-1.080	-1.130	-1.235	-1.300	-1.338	-1.432	-1.480	-1.550	-1.618	-1.670	-1.718	-1.765	-1.810	-1.840
	α_i	1.90	1.68	1.57	1.43	1.27	1.18	1.06	.82	.63	.47	.27	.02	-.28	-.36	-.59	-.87
	c_n	.2187	.1935	.1813	.1639	.1477	.1368	.1226	.0961	.0742	.0548	.0316	.0026	-.0323	-.0426	-.0697	-.1019
	c_m	-.1036	-.1070	-.1044	-.1047	-.1055	-.1047	-.1027	-.1029	-.1014	-.1000	-.0998	-.0909	-.0900	-.0891	-.0857	-.0865
	c_c	.0309	.0317	.0324	.0332	.0334	.0338	.0345	.0355	.0360	.0375	.0382	.0395	.0400	.0410	.0421	.0430
	c/b	Pressure coefficient, P															
Upper surface	[a]0.000	1.383	1.375	1.370	1.363	1.357	1.353	1.348	1.340	1.333	1.326	1.321	1.313	1.307	1.301	1.297	1.290
	.025	.582	.611	.607	.609	.616	.623	.637	.655	.660	.678	.684	.695	.703	.712	.728	.741
	.050	.322	.344	.336	.336	.341	.346	.356	.372	.377	.392	.397	.405	.414	.419	.436	.446
	.100	.098	.126	.121	.118	.124	.128	.133	.146	.149	.160	.162	.168	.170	.172	.184	.191
	.200	-.077	-.066	-.076	-.084	-.084	-.086	-.085	-.080	-.081	-.075	-.074	-.072	-.070	-.069	-.056	-.050
	.300	-.109	-.100	-.113	-.124	-.128	-.134	-.135	-.134	-.134	-.127	-.129	-.134	-.139	-.143	-.140	-.131
	.400	-.144	-.142	-.157	-.172	-.175	-.181	-.184	-.173	-.175	-.170	-.176	-.181	-.183	-.185	-.181	-.186
	.500	-.144	-.138	-.155	-.169	-.173	-.178	-.178	-.179	-.186	-.187	-.195	-.208	-.216	-.223	-.222	-.215
	.600	-.166	-.160	-.177	-.188	-.193	-.203	-.210	-.210	-.215	-.217	-.228	-.239	-.248	-.255	-.257	-.257
	.700	-.184	-.179	-.199	-.216	-.223	-.234	-.242	-.243	-.249	-.255	-.265	-.276	-.284	-.290	-.288	-.292
	.800	-.224	-.216	-.236	-.252	-.258	-.270	-.275	-.274	-.278	-.282	-.293	-.303	-.308	-.314	-.314	-.323
	.900	-.354	-.347	-.364	-.376	-.383	-.393	-.401	-.404	-.410	-.418	-.432	-.446	-.455	-.463	-.465	-.475
	.950	-.420	-.416	-.431	-.425	-.450	-.460	-.468	-.473	-.480	-.489	-.504	-.520	-.532	-.540	-.546	-.555
Lower surface	.0375	-.004	-.052	-.083	-.117	-.150	-.184	-.211	-.249	-.291	-.339	-.386	-.429	-.480	-.522	-.573	-.624
	.075	-.002	-.045	-.078	-.111	-.141	-.178	-.215	-.259	-.302	-.351	-.397	-.442	-.489	-.528	-.573	-.615
	.150	.040	.004	-.027	-.061	-.087	-.121	-.152	-.186	-.225	-.264	-.304	-.344	-.387	-.424	-.467	-.511
	.250	.051	.024	-.004	-.034	-.053	-.081	-.103	-.127	-.153	-.180	-.211	-.247	-.279	-.309	-.340	-.374
	[b].350	.109	.084	.031	-.017	-.022	-.043	-.066	-.085	-.103	-.120	-.150	-.200	-.232	-.240	-.290	-.314
	.450	.162	.133	.083	.037	.013	-.012	-.033	-.053	-.075	-.096	-.124	-.155	-.184	-.208	-.234	-.261
	.550	.147	.155	.125	.074	.041	.004	-.020	-.038	-.056	-.075	-.103	-.135	-.162	-.187	-.213	-.240
	.650	.103	.115	.096	.079	.059	.024	-.016	-.047	-.075	-.096	-.127	-.166	-.192	-.214	-.236	-.262
	.750	.083	.091	.072	.063	.059	.050	.040	.021	.009	-.009	-.037	-.119	-.146	-.156	-.175	-.178
	[b].850	.107	.116	.094	.069	.082	.090	.091	.086	.072	.059	.044	-.010	-.029	-.038	-.050	-.049
	.925	.139	.151	.129	.120	.122	.124	.130	.138	.133	.123	.110	.091	.082	.075	.070	.062
	[b].975	.167	.188	.148	.160	.154	.152	.161	.180	.175	.180	.179	.171	.171	.157	.161	.151
	[a]1.000	.180	.207	.158	.180	.170	.166	.176	.201	.195	.218	.231	.215	.218	.200	.210	.197

[a]No orifice.

[b]Faired value.

NACA

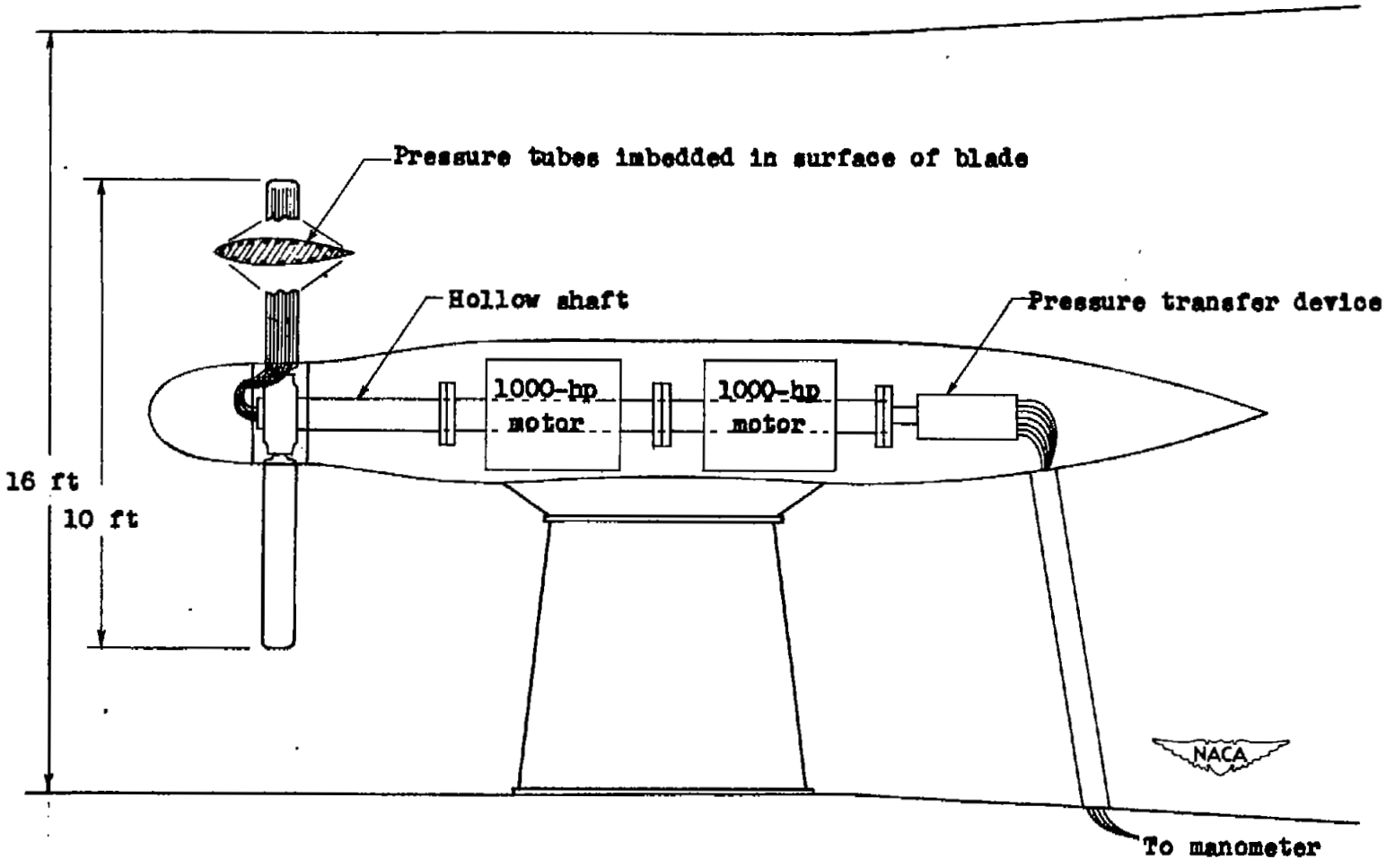


Figure 1.- Diagram of the apparatus used to obtain pressure distributions on the sections of operating propellers.

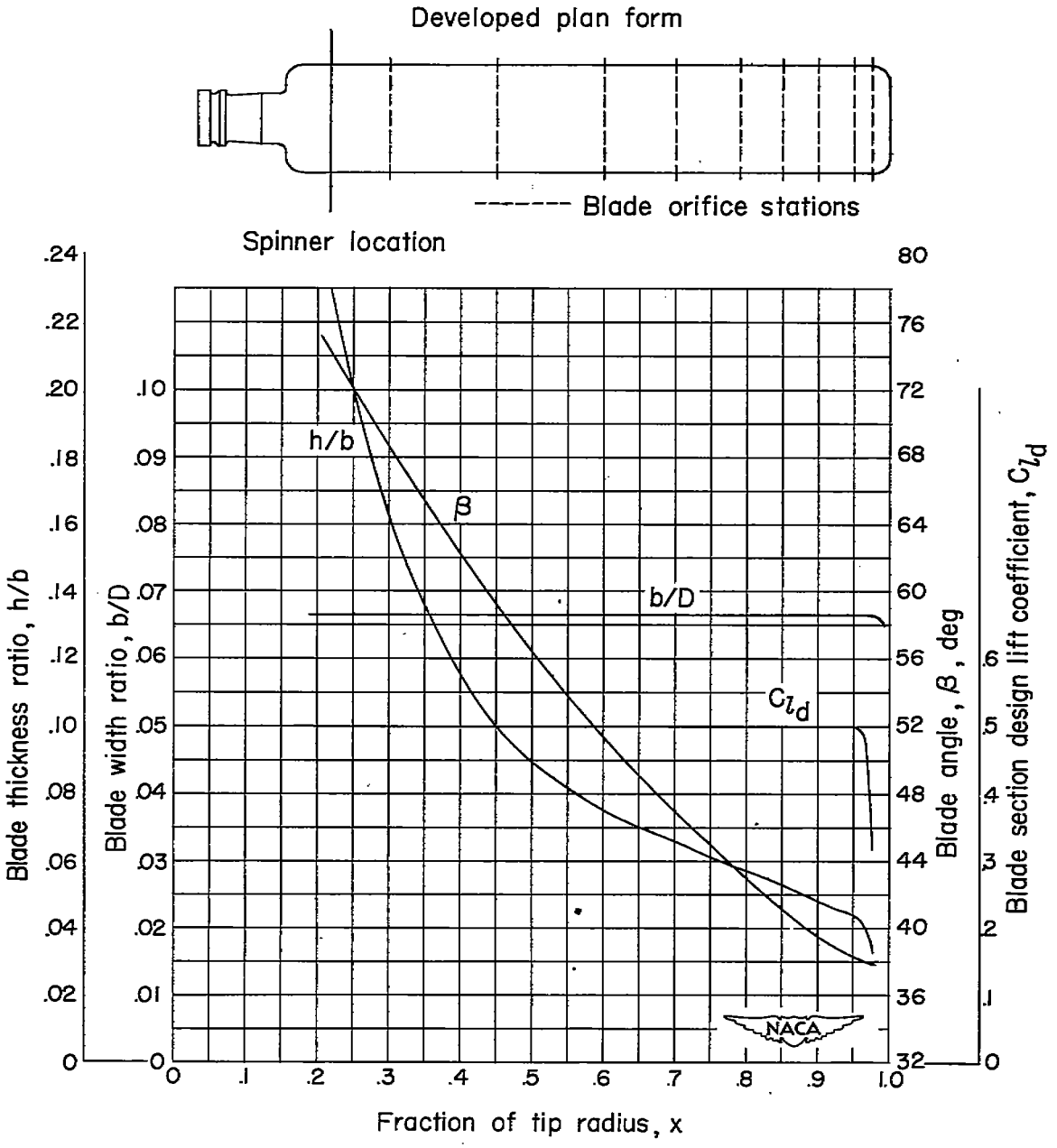


Figure 2.- Blade-form curves for NACA 10-(5)(066)-03.

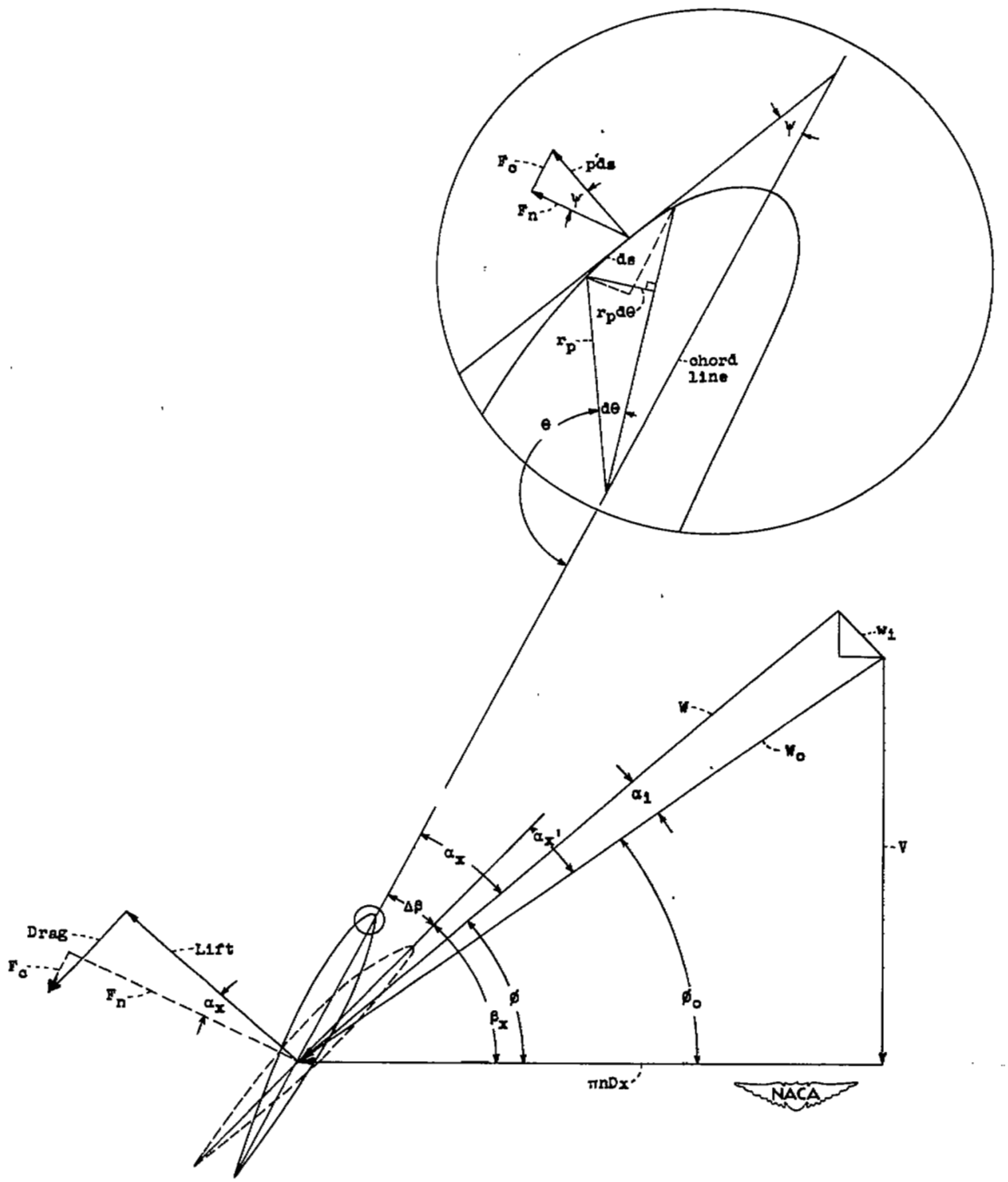


Figure 3.- Vector diagram of the velocities and forces acting on a blade section.

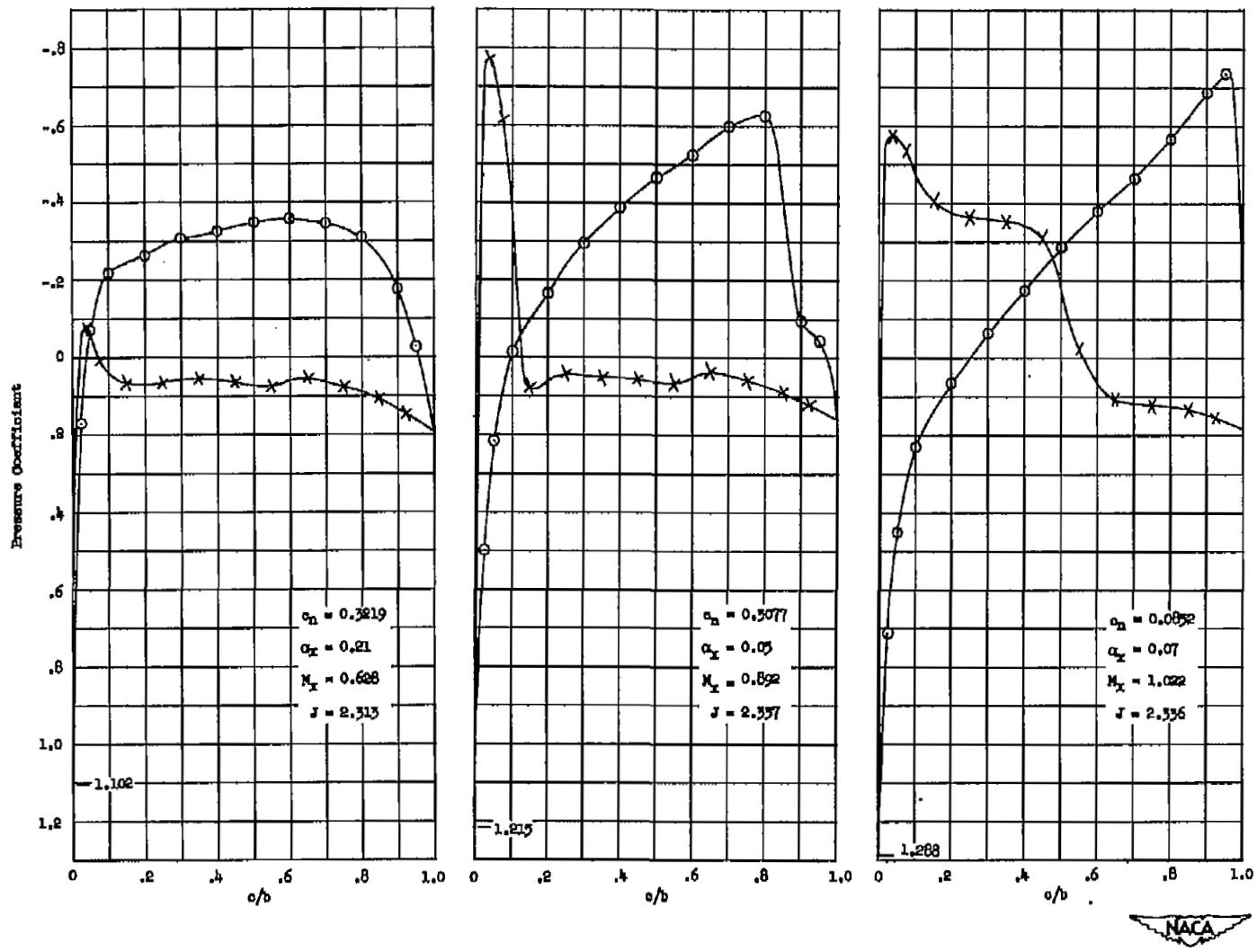


Figure 4.- Typical pressure distributions along the chord of the NACA 16-504.80 blade section located at the x = 0.90 radius.

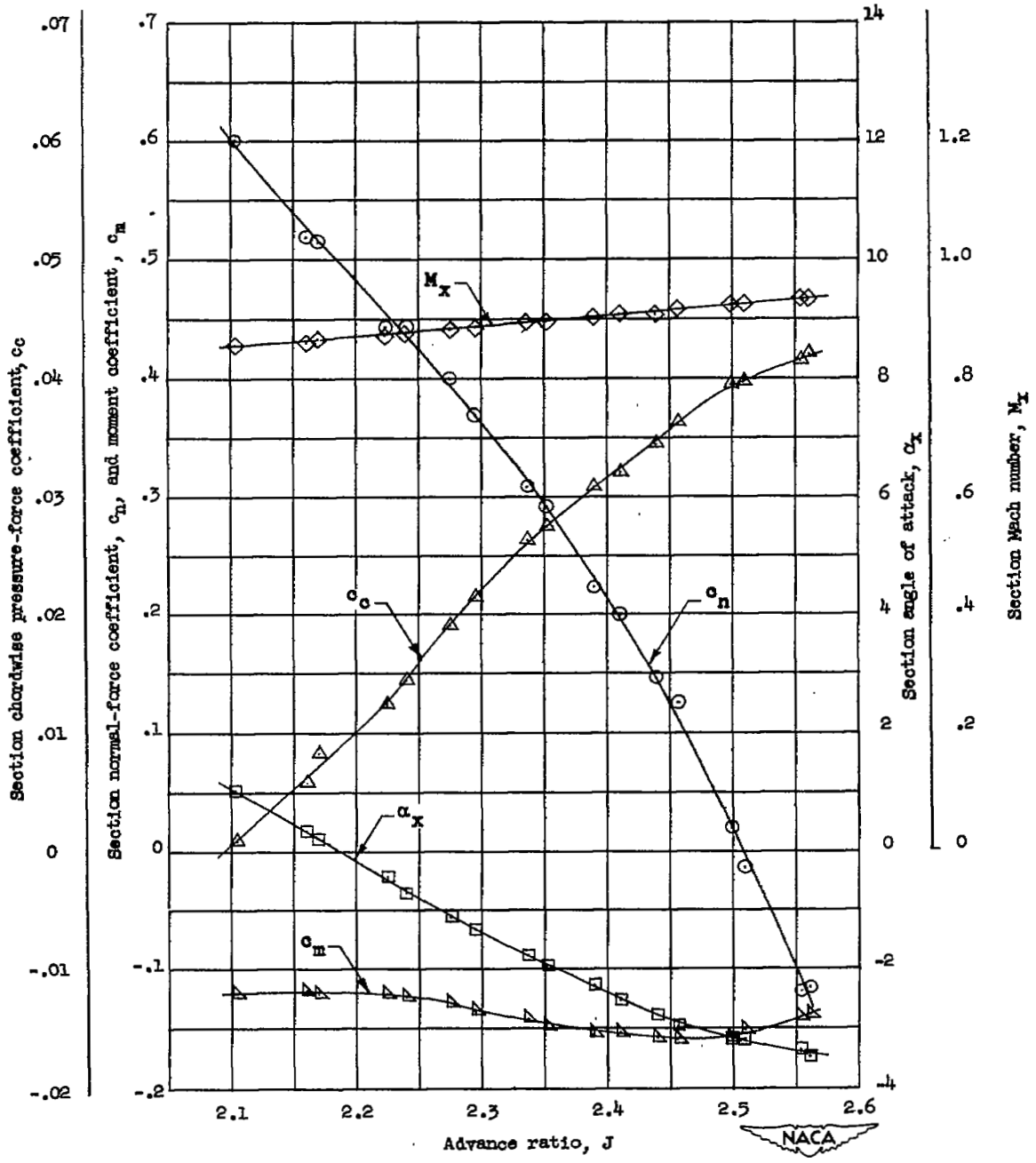


Figure 5.- Variation of section normal-force coefficient, moment coefficient, chordwise pressure-force coefficient, angle of attack, and Mach number with advance ratio for the blade section at the 0.90 radius, from table 8(d). $\beta_{0.75R} = 45°$; 1600 rpm.

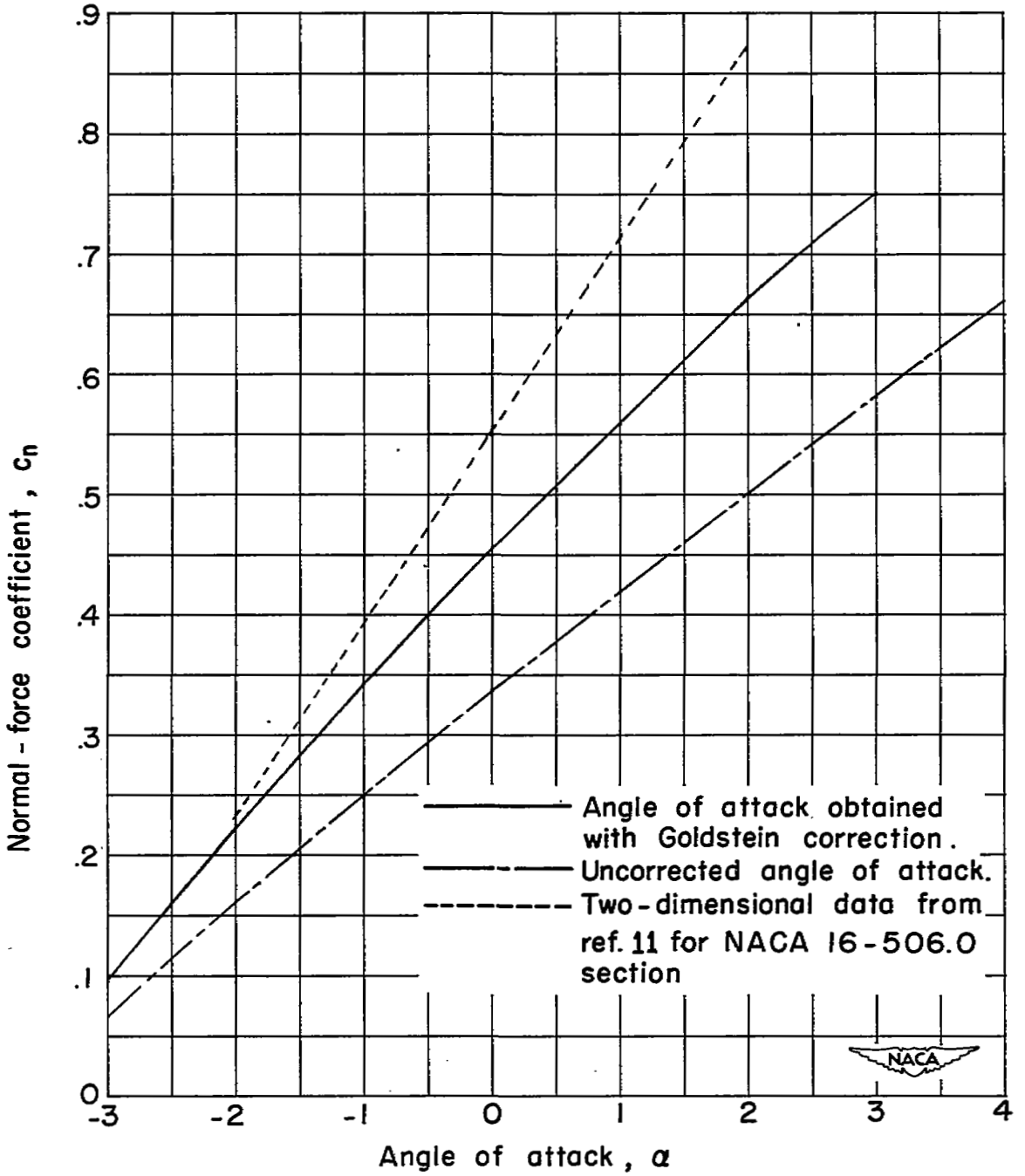


Figure 6.- Variation of normal-force coefficient with angle of attack for NACA 16-505.85 section showing effect of induced angle correction. $x = 0.78$; $M_x = 0.70$.