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WING PRESSURE MEASUREMENTS WITHIN THE PROPELLER SLIPSTREAM FOR A LARGE-SCALE V/STOL WIND-TUNNEL MODEL SIMULATING TRANSITION

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SUMMARY

Pressure data are presented in tabular form for a wide range of flight conditions of vertical or short take-off and landing (V/STOL) configurations from measurements on a wing segment in the propeller slipstream of a large-scale model in the Langley full-scale tunnel. These data provide information on the type of flow and load distribution to be considered in the design of V/STOL configurations ranging from unflapped tilt-wing types to highly flapped deflected-slipstream arrangements.

A brief analysis of the spanwise wing loading and effective angles of attack within the slipstream is made. The results indicate that the extent to which the relative intensities of the free-stream and slipstream velocity components affect the spanwise wing loading was dependent upon the wing-flap configuration.

Also, the results of tuft observations and pressure measurements indicate that significant flow improvements (including stall delay, more uniform spanwise loading, and more desirable spanwise stall progression) were obtained by addition of a leading-edge slat to the wing behind the upward-turning propeller blade.

INTRODUCTION

The high-energy slipstreams, large wing-incidence angles, and highly flapped wings of aircraft designed for V/STOL operation have focused attention upon the effects of nonuniform flow and slipstream—free-stream interaction on wing aerodynamics. Several theoretical and experimental studies have been made to obtain basic data and to attempt to correlate experimental results with the existing theories. (See refs. 1 to 6, for example.) These investigations, however, were made with small models, with idealized conditions, and for only a limited portion of the V/STOL flight envelope. Thus, there exists a need for information on the flow and resulting load distribution over the wing of large-scale V/STOL configurations for a wide range of aerodynamic parameters.

As a step toward fulfilling this need, the present investigation was conducted with a large-scale model in the Langley full-scale tunnel where the flow and load distribution in the slipstream were studied for a wide range of configurations and flight conditions.

SYMBOLS

The positive senses of forces, angles, and pressures are given in figure 1.

b propeller blade chord, ft

c wing chord, ft

c_c vector summation of section force coefficients, resolved parallel to basic wing-chord plane

$c_{c,w}, c_{c,f}$ section chord-force coefficients for wing (forward of deflected flap) and flap, respectively,

$$\int_{(t/c)_{min}}^{(t/c)_{max}} \left(C_{p,b} - C_{p,a}\right) d(t/c)$$

c_n vector summation of section force coefficients, resolved normal to basic wing-chord plane

$c_{n,w}, c_{n,f}$ section normal-force coefficients for wing (forward of deflected flap) and flap, respectively,

$$\int_{(x/c)_{min}}^{(x/c)_{max}} \left(C_{p,l} - C_{p,u}\right) d(x/c)$$

C_D drag coefficient, $\frac{D}{qS}$

C_L lift coefficient, $\frac{L}{qS}$

C_p pressure coefficient, $\frac{\text{Static pressure - Atmospheric pressure}}{q_s}$

D drag, lb

h propeller blade thickness, ft

i_w wing incidence angle, angle between wing chord and fuselage center line, deg

L	lift, lb
N	propeller rotational speed, rpm
q	free-stream dynamic pressure, $1/2\left(\rho V^2\right)$, lb/sq ft
q_s	slipstream dynamic pressure, $q + \frac{T_c' qS}{6\pi R^2}$, lb/sq ft
r	radius to any propeller blade section, ft
R	radius to propeller tip, ft
S	wing surface area, sq ft
t	wing section thickness at any point along chord measured from chord to surface, positive to upper surface, ft
T	total propeller thrust, lb
T_c'	effective thrust coefficient, $\sin \alpha_t\left(C_{L,\text{power on}} - C_{L,\text{power off}}\right) - \cos \alpha_t\left(C_{D,\text{power on}} - C_{D,\text{power off}}\right)$
V	free-stream velocity, ft/sec
V_R	resultant of vector summation of free-stream and propeller-induced velocities
x	any distance from leading edge parallel to basic wing-chord plane, ft
y	any distance from center of rotation of propeller along wing span, positive behind upsweeping blade, ft
α	fuselage angle of attack measured with respect to V, deg
α_t	total angle between wing chord and free stream, $i_w + \alpha$, deg
$\bar{\alpha}$	effective angle of attack of wing with respect to resultant of free-stream and propeller-induced velocities, deg
δ_f	flap deflection, deg
δ_s	slat deflection, positive when leading edge down, deg
ρ	mass density of air, slugs/cu ft
μ	velocity ratio, $\frac{V}{V_R}$

Subscripts:

30	30-percent-chord flap
55	55-percent-chord flap
a	ahead of maximum ordinates of wing or flap
b	aft of maximum ordinates of wing or flap
l	lower surface of wing or flap
u	upper surface of wing or flap
max	maximum
min	minimum

MODEL, TESTS, METHODS, AND CORRECTIONS

Model

Basic dimensions of the model are shown in figure 2, and photographs of the model installed in the Langley full-scale tunnel are shown in figure 3. The wing is of rectangular planform having a span of 35 feet, a chord of 4.375 feet, and an NACA 63_2A215 airfoil section. The double-slotted flaps (55- and 30-percent wing chord) are manually adjustable in 10° increments. During tests where only the trailing-edge (30-percent chord) flap was deflected, the slot of the forward (55-percent chord) flap was sealed. (See fig. 4.) The fixed-incidence, leading-edge slat used in a few of the tests was constructed of sheet metal and followed the contour of the first 19 percent of the upper wing surface and the first 5 percent of the lower wing surface. A sketch showing the slat geometry is given in figure 4. The 5-foot-diameter propellers have four solid aluminum blades with manually adjustable pitch. Blade pitch at the 0.75 radius was set at 16.3° for these tests. Propeller-blade-form curves are presented in figure 5. The center propeller of the right-hand wing panel behind which the pressure orifices are located rotates clockwise as viewed from the front. Locations of the orifices are given in figure 6.

Tests, Methods, and Corrections

The model forces, moments, and wing pressures were measured over a range of wing incidence angles and fuselage angles of attack corresponding to transition of a V/STOL aircraft. The test procedure was as follows:

With the fuselage angle of attack at 0°, and at a given wing incidence angle and flap deflection, the propeller rotational speed (at fixed blade pitch) and the tunnel airspeed were varied to obtain approximately 3,500 pounds of lift and zero

net drag. Then, with the wing incidence angle held constant, the fuselage angle of attack was varied to simulate accelerating and decelerating conditions. Wing incidence angles for these tests covered a range from 0° to 80°. The ranges of wing incidence and fuselage angles of attack were repeated for the various flap settings.

Forces and moments were measured, and pressures at five spanwise stations on the wing and flaps were indicated on a fluid manometer and photographically recorded for each test condition. Force data from these tests were reported in reference 7. The pressure data are included in the present paper.

For purposes of analysis, portions of the pressure coefficients tabulated herein were plotted against the chord and thickness ratios (x/c and t/c) to obtain normal- and chord-force coefficients.

The data have been corrected for airstream misalinement, buoyancy, and mean jet-boundary effects. The jet-boundary corrections were applied according to the methods of reference 8. The application of these corrections to the data of the present investigation is discussed in reference 7.

PRESENTATION OF DATA AND RESULTS

Pressure Data

The tables of pressure data contain a range of fuselage angles of attack and accelerating and decelerating conditions. The tabulated pressure coefficients are given as follows:

	Table
Tilt-wing configuration $\left(\delta_{f,55} = 0^{\circ}\right)$; slat off:	
$\delta_{f,30} = 0^{\circ}$ to 60°; $i_w = 0^{\circ}$; propellers removed $\left(T_c' = 0\right)$	1 to 7
$\delta_{f,30} = 0^{\circ}$; $i_w = 0^{\circ}$ to 80°	8 to 16
$\delta_{f,30} = 10^{\circ}$; $i_w = 0^{\circ}$ to 70°	17 to 24
$\delta_{f,30} = 20^{\circ}$; $i_w = 0^{\circ}$ to 60°	25 to 31
$\delta_{f,30} = 30^{\circ}$; $i_w = 0^{\circ}$ to 70°	32 to 39
$\delta_{f,30} = 40^{\circ}$; $i_w = 0^{\circ}$ to 50°	40 to 45
$\delta_{f,30} = 50^{\circ}$; $i_w = 0^{\circ}$ to 50°	46 to 51
Tilt-wing configuration $\left(\delta_{f,55} = 0^{\circ}\right)$; slat on:	
$\delta_{f,30} = 0^{\circ}$; $i_w = 20^{\circ}$ to 60°	52 to 56
$\delta_{f,30} = 20^{\circ}$; $i_w = 20^{\circ}$ to 40°	57 to 59
$\delta_{f,30} = 30^{\circ}$; $i_w = 20^{\circ}$ to 60°	60 to 64
Deflected-slipstream configuration; slat off:	
$\delta_{f,55} = 20^{\circ}$; $\delta_{f,30} = 40^{\circ}$; $i_w = 10^{\circ}$ to 40°	65 to 68

Table

$\delta_{f,55} = 40^{\circ}$; $\delta_{f,30} = 40^{\circ}$; $i_w = 20^{\circ}, 30^{\circ}$ 69, 70

$\delta_{f,55} = 40^{\circ}$; $\delta_{f,30} = 50^{\circ}$; $i_w = 0^{\circ}$ to 30° . . . . . 71 to 74

It should be pointed out that, because of the method used to nondimensionalize the pressure data, some of the pressure coefficients, particularly for the deflected-slipstream configurations, are greater than unity. This result is due to nonuniformity of flow in the propeller slipstream. That is, the mean dynamic pressure, determined from the effective thrust coefficient, is less than some local values of dynamic pressure.

Analysis and Results

Samples of the chordwise pressure distribution on the wing and flaps for a tilt-wing configuration with trailing-edge flaps deflected 0° and 30° are given in figures 7 and 8, respectively. Although data are available for a number of configurations, the analysis included herein is restricted to tilt-wing configurations having 0° and 30° trailing-edge flap deflection.

The results of this analysis are presented in terms of the ratio of free-stream velocity to resultant velocity at the wing, inasmuch as the magnitude of spanwise loading variations in the slipstream has previously been found to be dependent upon the relative intensities of the free-stream and slipstream velocities. (See refs. 1 to 4 and 6.) The velocity ratio μ as used in previous studies has been defined only for conditions where the propeller slipstream remained parallel to the free stream. The use of the resultant velocity as calculated in this paper (see appendix) makes the present velocity ratio compatible with that of previous studies while extending the range of investigation to nonparallel free stream and slipstream. In addition, the approach used herein permits calculation of the average flow angle at the wing. Typical variations in velocity ratio with wing attitude at $D/L \approx 0$ and for $\delta_{f,30} = 0^{\circ}$ and 30° are given in figure 9. The remaining results of the analysis are given in figures 10 to 13.

DISCUSSION

Effective Angle of Attack in Slipstream

The average effective angle of attack of the wing in the slipstream was calculated for a tilt-wing configuration with 0° flap deflection. The variation of this calculated angle of attack $\bar{\alpha}$ with velocity ratio μ and wing attitude is given in figure 10 for unaccelerated, accelerating, and decelerating transitions. The effective angle of attack was below the measured power-off stall angle for the unaccelerated and accelerating conditions, but above the angle of attack for stall during a large portion of the decelerating transition. Additional calculations indicate that increased flap deflection resulted in lower effective angles of attack throughout the transition range. It should be pointed out that, because

of the assumptions (fully developed slipstream and no upwash due to the wing) made in the development of the equations for $\bar{\alpha}$ and μ (see appendix), the calculated values of both quantities are less than in the actual case. It is probable, therefore, that portions of the steady-level-flight curve are, in reality, also above the stall angle. Descent limitations due to stall, such as indicated here, have been experimentally found in both wind-tunnel and flight investigations of other propeller-driven V/STOL configurations. (See refs. 9 and 10.) One method of alleviating this problem has been the installation of leading-edge, high-lift devices.

Spanwise Load Distribution in Slipstream

The spanwise distribution of wing loading is shown in figure 11 for a range of velocity ratios from 0.15 to 0.80 for a tilt-wing configuration with 0° and 30° flap deflection. The results are presented in terms of spanwise variations of normal and chordwise forces on the wing, inasmuch as the more conventional lift and drag are shared by the wing and propellers in varying proportions during the transition maneuver. For example, the wing normal forces, usually associated with lift in the conventional sense, contribute a large part of the total drag and very little lift at high wing incidence angles and low forward speeds.

For the configuration with 0° flap deflection (fig. 11(a)), increased values of velocity ratio resulted in increased overall loading and reductions in the degree of asymmetric loading behind the propeller. The overall increases in loading merely reflect the transfer of lift from the propellers to the wing as the wing incidence is decreased. The reductions in asymmetry were a result of the closer approach to uniform flow over the wing at higher free-stream velocities. The asymmetry in the spanwise loading profiles at the upper end of the forward speed range is believed to be dependent upon the wing planform, inasmuch as the effects of the propeller-induced flow are greatly diminished in forward flight.

For the deflected-flap configuration (fig. 11(b)), the degree of asymmetry of the loading about the propeller axis was also reduced with increasing velocity ratio. However, the original degree of asymmetry was greater and the rate of change with increasing velocity ratio was less rapid than for the configuration having the undeflected flap. Comparison of the pressure distributions of figure 7 with those of figure 8 verifies that flap deflection did result in accentuating and sustaining the type of spanwise loading associated with highly nonuniform flow. Thus, the extent to which the velocity ratio affects the spanwise loading appears to be dependent also upon the wing-flap configuration.

The chord forces shown in figure 11 indicate the same general trends as discussed for the normal forces. The chord forces were very small compared with the propeller thrust and are of little consequence for the samples shown; however, for configurations having highly deflected flaps, chord forces become significantly large.

Variations in spanwise center-of-pressure location and wing bending moments as a result of large changes in the spanwise loading profiles have been evaluated in reference 7. Furthermore, future V/STOL designs may require evaluation with

regard to effective camber changes and associated pitching moments resulting from steep spanwise pressure gradients. (See refs. 11 and 12.)

Effects of Leading-Edge Slat in Slipstream

Modifications to the wing were made in efforts to delay flow separation to higher angles of attack. The most successful of these modifications was the addition of leading-edge slats. Because flow separation was being initiated at the wing-fuselage juncture and behind the upward-turning propeller blades at the wing leading edge, partial-span slat segments were installed across the fuselage and between the two outboard nacelles as shown in figure 4. The air loads on the slat were not measured; however, the effects of the slat on the spanwise force distribution and flow-separation characteristics of the wing were determined from pressure measurements and visual observations of tufts. Sample results are given in figures 12 and 13.

The effect of the slat on the spanwise distribution of wing loading behind the propeller is shown in figure 12 for unaccelerated flight conditions at a wing incidence angle of 40° with and without flaps deflected. The presence of the slat resulted in large reductions in normal loading behind the upward-sweeping propeller blade and consequent changes in the spanwise distribution of loading. These results indicate that part of the load was shifted from the wing to the slat, inasmuch as the lift and drag were constant for both slat-off and slat-on configurations. As compared with the configuration with flaps undeflected, a greater change in spanwise loading resulted from the presence of the slat with the flaps deflected. This result suggests that, if uniform spanwise loading is desired, the highly flapped configurations may receive the greatest benefit from leading-edge devices of this type. Also, as expected, the slat delayed flow separation to much higher angles of attack (as much as 14°, in some cases).

The results of visual observations of tufts on the wing showing the effects of the slat on the flow are given in figure 13. On both slat-off and slat-on configurations, separation always occurred initially at the wing-fuselage juncture.

With the slat off, as the angle of attack was increased, flow separation started behind the upward-turning propeller blades at the wing leading edge and abruptly spread outward along the trailing edge as shown in figures 13(a), (b), and (c). With separation progressing in this manner, the outboard flap section, which may be used as a control surface, stalled much earlier than large portions of the wing farther inboard. This type of stall progression is obviously undesirable.

For comparable conditions of wing attitude, propeller rotational speed, and free-stream velocity, comparison of figure 13(a) with 13(d) indicates that the presence of the slat reduced the area of initial flow separation at the wing root. Further increases in angle of attack with the slat installed caused the area of separation to gradually spread from the wing root outboard along the trailing edge and toward the leading edge as shown in figures 13(e) and (f). The previously mentioned delay of separation along with these improvements in spanwise progression of separation represent significant aerodynamic gains.

Reductions in vibratory loads and erratic wing bending moments for the present model are pointed out in reference 7. Increased rate-of-descent capabilities afforded by a slat on a small-scale model and a drooped leading edge on an experimental aircraft are reported in references 9 and 10. Thus, the benefits derived from the use of leading-edge devices on propeller-driven V/STOL configurations appear promising; and more detailed investigation appears necessary, inasmuch as the optimum design of such devices may vary widely for the various wing-propeller arrangements being considered.

SUMMARY OF RESULTS

An investigation conducted in the Langley full-scale tunnel to obtain information from pressure measurements on the flow characteristics and resulting wing load distributions in the propeller slipstream of a large-scale V/STOL model indicates the following:

1. The average effective angles of attack of the wing, as determined from measurements, were above the power-off stall angle over most of the decelerating transition range.

2. The extent to which the relative intensities of the free-stream and slipstream velocity components affect the spanwise wing loading was dependent upon the wing-flap configuration.

3. Partial-span, leading-edge slats in the slipstream, in addition to delaying flow separation on the wing to much higher angles of attack, also provided more uniform spanwise loading and more desirable spanwise stall progression.

Langley Research Center,
National Aeronautics and Space Administration,
Langley Station, Hampton, Va., July 24, 1963.

APPENDIX

EQUATIONS FOR VELOCITY RATIO AND AVERAGE EFFECTIVE ANGLE OF ATTACK

Symbols which are used exclusively in this appendix and are not included in the section of this paper entitled "Symbols" are as follows:

A_m total propeller momentum area, $6\pi R^2$, sq ft

D_i drag component of propeller thrust, $T \cos \alpha_t$, lb

L_i lifting component of propeller thrust, $T \sin \alpha_t$, lb

u_0 horizontal induced velocity, at the propeller, required to produce a given horizontal force, positive rearward, ft/sec

w_h vertical induced velocity when $V = 0$ and $D_i = 0$, positive upward, ft/sec

w_0 vertical induced velocity, at the propeller, required to produce a given vertical force, positive upward, ft/sec

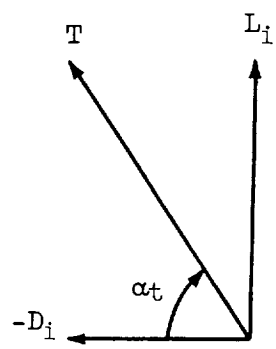
θ angle between resultant velocity V_R and free stream, deg

Two primary assumptions have been made in the development of the equations herein. They are (1) that the propeller slipstream is fully developed at the wing, and (2) that there is no effect on the propeller wake due to the presence of the wing.

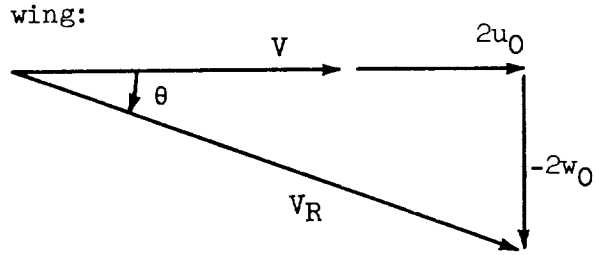
The magnitudes of the errors introduced into both μ and $\bar{\alpha}$ by these assumptions are dependent upon: (1) the deviation of the horizontal and vertical components of propeller-induced velocity at the wing from their final theoretical values, and (2) the magnitude of the upwash due to the wing. In other words, the effect of the previously mentioned assumptions results in calculated values of μ and $\bar{\alpha}$ which are less than those for the actual conditions.

In order to determine the velocity ratio and effective angles of attack from the data given in tables 8 to 74, the following velocity relationships and equations must be applied:

Force vectors at the propeller:



Velocity vectors at the wing:



It can be shown that the velocity ratio is given by

$$\mu = \frac{V}{V_R} = \frac{1}{\left\{\left(\frac{w_0}{V}\right)^2\left[4 + \left(\frac{V}{w_0} - 2 \cot \alpha_t\right)^2\right]\right\}^{1/2}} \tag{A1}$$

the angle between V and V_R is given by

$$\theta = \tan^{-1} \frac{-2}{\frac{V}{w_0} + 2\frac{u_0}{w_0}} \tag{A2}$$

and the effective angle of attack with respect to V_R is $\bar{\alpha} = \alpha_t - \theta$.

In order to solve equations (A1) and (A2) from the data given in tables 8 to 74, it is more convenient to have the velocity ratio expressed as

$$\mu = \frac{1}{\left\{\left(\frac{w_0}{w_h}\frac{w_h}{V}\right)^2\left[4 + \left(\frac{V}{w_h}\frac{w_h}{w_0} - 2 \cot \alpha_t\right)^2\right]\right\}^{1/2}} \tag{A3}$$

It is then necessary to know the values of w_0/w_h, V/w_h, V/w_0, and u_0/w_0. Equation (8) of reference 13 gives the vertical induced velocity as

$$w_h = \pm\sqrt{\frac{L_i}{2\rho A_m}} \tag{A4}$$

It can be shown that

$$\frac{V}{w_h} = \frac{2}{\sqrt{\frac{S}{A_m} T_c' \sin \alpha_t}} \tag{A5}$$

With $D_i/L_i = -\cot \alpha_t$ from the force vector diagram previously given and V/w_h from equation (A5), w_0/w_h can be obtained from figure 2 of reference 13; and

$$\frac{V}{w_0} = \frac{V}{w_h} \frac{1}{w_0/w_h} \tag{A6}$$

From equation (4) of reference 13, $u_0/w_0 = D_i/L_i$, and from the vector diagram, $D_i/L_i = -\cot \alpha_t$; therefore,

$$\frac{u_0}{w_0} = -\cot \alpha_t \tag{A7}$$

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TABLE 1

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	$\frac{x}{c}$	$\alpha = -8.50$ $C_D = .066$ $C_L = -.492$ $T_c' = .00$ $q = 15.05$ lb/sq ft					$\alpha = -4.50$ $C_D = .046$ $C_L = -.197$ $T_c' = .00$ $q = 14.76$ lb/sq ft					$\alpha = -.50$ $C_D = .040$ $C_L = .089$ $T_c' = .00$ $q = 14.98$ lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-1.571	-1.719		-2.079	-1.673	.146	.152		-.089	.136	.923	.960		.908	.934	0
2	1.5	.960	.960		.960		.811	.800		.779		.320	.263		.206		2.23
3	5.0	.657	.642		.662	.667	.298	.309		.319	.335	-.212	-.217		-.165	-.098	3.96
4	15.0	.226	.139		.144	.185	-.037	-.136		-.042	-.099	-.366	-.480		-.459	-.418	6.76
5	30.0	-.092	-.087		-.123	-.103	-.288	-.293		-.303	-.309	-.480	-.516		-.511	-.500	8.53
6	50.0	-.200	-.190		-.180	-.216	-.335	-.309		-1.214	-.303	-.469	-.433		-.402	-.428	8.19
7	1.5	-2.915	-2.808		-2.967	-2.371	-1.475	-1.512		-1.731	-1.344	-.304	-.289		-.444	-.222	-1.77
8	5.0	-1.807	-1.981		-2.007	-1.642	-1.046	-1.208		-.816	-.931	-.387	-.459		-.480	-.330	-3.18
9	15.0				-1.206	-1.211				-.675	-.821				-.469	-.464	-5.14
10	30.0	-.806	-.934		-.903	-.780	-.591	-.758		-.685	-.575	-.418	-.542		-.485	-.397	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.133	-.087	-.098	-.098	-.123	-.235	-.173	-.152	-.162	-.188	-.248	-.237	-.227	-.212	-.232	6.42
18	71.5		-.087	-.087		-.092		-.141	-.136		-.136		-.186	-.181		-.181	5.41
19	48.3	-.405	-.334	.031	-.303	-.298	-.110	-.188	.194	-.194	-.173	-.160	-.093	.402	-.160	-.036	-5.52
20	55.0	-.164	-.159	-.164	-.282	-.339	-.288	-.131	-.120	-.183	-.262	-.098	-.108	-.108	-.103	-.181	-5.05
21	65.0	-.216	-.205	-.056	-.200	-.180	-.126	-.105	.047	-.115	-.120	-.119	-.057	.026	-.062	-.072	-3.92
22	69.9	-.098	-.056	.339	-.031	-.056	-.178	.026	.340	.037	.000	.036	.083	.299	.093	.046	-0.90
23	73.4	-.123	-.164	-.149	-.185	-.103	-.021	-.194	-.183	-.204	-.120	-.170	-.227	-.222	-.196	-.129	2.50
24	70.0	-.092	-.041	.339	-.036	-.036	-.126	.026	.330	.037	.021	.036	.072	.294	.108	.088	-0.95
25	72.6	-.113	-.164	-.149	-.185	-.098	.000	-.183	-.204	-.194	-.110	-.160	-.222	-.217	-.206	-.119	3.26
26	76.5	-.072	-.087	-.077	-.108	-.051	-.126	-.105	-.110	-.131	-.099	-.150	-.175	-.144	-.031	-.124	4.48
27	84.9	-.021	.005	.015	.005	-.010	-.115	-.010	.005	-.021	-.031	-.046	-.031	-.026	.088	-.046	3.01
28	93.3	.046	.067	.108	.056	.072	-.031	.089	.115	.089	.084	.072	.072	.093	.005	.119	1.37
29	78.5	-.051	-.098	.031	-.103	-.031	-.031	-.058	.047	-.058	-.005	.010	.005	.062	.067	.026	-2.19
30	89.5	.041	-.005	.082	-.021	.082	.073	.031	.068	.016	.094	.103	.072	.088	.021	.119	-1.07

ORIFICE (FIG.6)	$\frac{x}{c}$	$\alpha = 3.50$ $C_D = .046$ $C_L = .381$ $T_c' = .00$ $q = 14.25$ lb/sq ft					$\alpha = 7.50$ $C_D = .066$ $C_L = .676$ $T_c' = .00$ $q = 14.18$ lb/sq ft					$\alpha = 11.50$ $C_D = .097$ $C_L = .955$ $T_c' = .00$ $q = 13.98$ lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.850	.780		.915	.942	-.169	-.451		-.076	-.038	-1.940	-2.844		-2.150	-1.692	0
2	1.5	-.563	-.628		-.677		-1.718	-1.794		-1.838		-3.528	-3.109		-3.142		2.23
3	5.0	-.780	-.726		-.650	-.596	-1.593	-1.484		-1.375	-1.310	-2.447	-2.260		-2.001	-1.973	3.96
4	15.0	-.677	-.737		-.726	-.715	-1.060	-1.109		-1.076	-1.060	-1.383	-1.466		-1.422	-1.383	6.76
5	30.0	-.693	-.666		-.693	-.682	-.908	-.902		-.951	-.892	-1.080	-1.069		-1.097	-1.036	8.53
6	50.0	-.590	-.487		-.504	-.520	-.674	-.631		-.614	-.636	-.694	-.683		-.656	-.672	8.19
7	1.5	.514	.525		.406	.460	.913	.935		.870	.870	.937	1.025		.970	.965	-1.77
8	5.0	.130	.108		.065	.130	.582	.565		.527	.560	.871	.849		.827	.832	-3.18
9	15.0				-.162	-.179				.120	.114				.391	.375	-5.14
10	30.0	-.217	-.309		-.298	-.244	-.011	-.120		-.109	-.038	.187	.061		.088	.143	-6.25
11	45.0																-2.59
12	46.6																#1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.325	-.282	-.287	-.282	-.303	-.348	-.353	-.337	-.326	-.332	-.331	-.342	-.347	-.320	-.320	6.42
18	71.5		-.217	-.244		-.217		-.256	-.266		-.245		-.231	-.243		-.215	5.41
19	48.3	.011	.032	.439	-.087	.081	.033	.098	.478	-.022	.109	.132	.176	.419	.088	.209	-5.52
20	55.0	-.119	-.076	-.103	-.043	-.125	-.092	-.076	-.082	.043	-.016	-.044	-.066	-.077	.121	.072	-5.05
21	65.0	-.087	.011	.049	.011	-.005	-.005	.109	.098	.054	.060	.077	.132	.143	.121	.116	-3.92
22	69.9	.087	.162	.292	.157	.119	.103	.239	.321	.201	.130	.187	.270	.347	.243	.176	-0.90
23	73.4	-.211	-.217	-.249	-.217	-.152	-.250	-.239	-.256	-.217	-.158	-.187	-.193	-.209	-.154	-.121	2.50
24	70.0	.076	.162	.276	.157	.114	.114	.228	.315	.201	.141	.204	.281	.342	.248	.187	-0.95
25	72.6	-.179	-.227	-.260	-.227	-.141	-.212	-.239	-.250	-.228	-.158	-.127	-.176	-.215	-.160	-.116	3.26
26	76.5	-.184	-.146	-.179	-.152	-.152	-.201	-.158	-.201	-.179	-.130	-.110	-.143	-.198	-.143	-.132	4.48
27	84.9	-.065	-.022	-.038	-.032	-.049	-.054	-.038	-.054	-.043	-.038	-.028	-.055	-.055	-.061	-.022	3.01
28	93.3	.076	.097	.097	.097	.081	.043	.071	.082	.065	.092	.028	.000	.039	.011	.077	1.37
29	78.5	.043	.065	.087	.060	.043	.082	.087	.125	.082	.136	.143	.143	.143	.127	.149	-2.19
30	89.5	.103	.114	.092	.076	.114	.120	.125	.136	.114	.125	.132	.127	.121	.121	.132	-1.07

TABLE 1.- Concluded

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	x/c	α = 15.50 C_D = .142 C_L = 1.215 T_c' = .00 q = 13.95 lb/sq ft					α = 17.50 C_D = .181 C_L = 1.263 T_c' = .00 q = 13.91 lb/sq ft					α = 19.50 C_D = .281 C_L = 1.104 T_c' = .00 q = 13.73 lb/sq ft					ΔC_p
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-4.309	-5.850		-4.960	-3.966	-5.667	-7.296		-6.282	-5.285	-2.093	-4.624		-5.376	-5.702	0
2	1.5	-4.590	-4.800		-4.927		-2.858	-4.171		-4.792		-1.689	-3.407		-4.669		2.23
3	5.0	-3.187	-2.983		-2.696	-2.618	-3.479	-3.135		-2.892	-2.930	-1.409	-2.077		-2.509	-2.991	3.96
4	15.0	-1.707	-1.718		-1.712	-1.663	-1.734	-1.601		-1.717	-1.789	-.859	-1.111		-1.493	-1.779	6.76
5	30.0	-1.188	-1.143		-1.149	-1.127	-1.108	-.803		-1.097	-1.174	-.814	-.859		-1.005	-1.151	8.53
6	50.0	-.668	-.547		-.541	-.646	-.493	-.476		-.576	-.620	-.735	-.797		-.746	-.634	8.19
7	1.5	.597	.624		.757	.834	.781	.676		.726	.737	.898	.730		.696	.685	-1.77
8	5.0	1.011	1.066		1.005	.989	1.019	1.030		1.014	.992	.960	.982		.993	1.021	-3.18
9	15.0				.624	.569				.687	.654				.651	.662	-5.14
10	30.0	.354	.249		.293	.309	.421	.305		.332	.366	.303	.196		.281	.365	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.293	-.359	-.348	-.376	-.304	-.343	-.438	-.526	-.349	-.277	-.741	-.786	-.730	-.595	-.410	6.42
18	71.5		-.276	-.304		-.210		-.432	-.521		-.211		-.786	-.707		-.370	5.41
19	48.3	.215	.293	.425	.193	.282	.255	.294	.415	.211	.294	.118	.208	.376	.140	.264	-5.52
20	55.0	-.039	-.039	-.055	.215	.138	-.033	-.022	-.044	.222	.183	-.056	-.051	-.045	.168	.140	-5.05
21	65.0	.138	.204	.182	.193	.193	.144	.211	.166	.199	.211	.011	.101	.140	.123	.140	-3.92
22	69.9	.204	.348	.381	.293	.193	.183	.332	.349	.288	.211	.006	.269	.348	.213	.140	-0.90
23	73.4	-.243	-.204	-.304	-.182	-.144	-.432	-.332	-.499	-.255	-.150	-.769	-.690	-.651	-.533	-.320	2.50
24	70.0	.226	.342	.392	.320	.243	.205	.343	.366	.316	.249	.028	.247	.359	.253	.163	-0.95
25	72.6	-.193	-.199	-.304	-.182	-.144	-.338	-.332	-.510	-.255	-.133	-.668	-.696	-.634	-.539	-.297	3.26
26	76.5	-.138	-.238	-.282	-.232	-.166	-.271	-.404	-.460	-.244	-.150	-.589	-.690	-.651	-.533	-.387	4.48
27	84.9	-.105	-.193	-.204	-.177	-.094	-.222	-.371	-.399	-.205	-.111	-.634	-.730	-.629	-.471	-.258	3.01
28	93.3	-.077	-.133	-.105	-.110	-.033	-.211	-.288	-.310	-.122	-.055	-.567	-.640	-.533	-.376	-.224	1.37
29	78.5	.160	.171	.171	.160	.171	.166	.144	.111	.150	.177	.006	.022	.056	.067	.107	-2.19
30	89.5	.149	.138	.110	.122	.149	.094	.078	.033	.094	.133	-.101	-.090	-.045	-.034	.045	-1.07

TABLE 2

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	% c	α = -8.50 C_D = .054 C_L = -.257 T_c' = .00 q = 15.36 lb/sq ft					α = -4.50 C_D = .045 C_L = .032 T_c' = .00 q = 14.91 lb/sq ft					α = -.50 C_D = .050 C_L = .337 T_c' = .00 q = 15.23 lb/sq ft					% t
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.856	-.811		-1.093	-.967	.410	.498		.275	.306	.965	.970		.960	.980	0
2	1.5	.947	.952		.937		.659	.612		.602		-.041	-.102		-.107		2.23
3	5.0	.534	.519		.514	.569	.156	.161		.197	.244	-.411	-.315		-.264	-.259	3.96
4	15.0	.111	.005		.015	.055	-.150	-.259		-.223	-.182	-.503	-.549		-.528	-.528	6.76
5	30.0	-.222	-.227		-.232	-.212	-.405	-.410		-.410	-.405	-.610	-.615		-.610	-.615	8.53
6	50.0	-.327	-.332		-.307	-.332	-.441	-.425		-.415	-.431	-.610	-.528		-.477	-.559	8.19
7	1.5	-2.412	-2.428		-2.700	-2.161	-.939	-.944		-1.188	-.918	.097	.102		-.122	.036	-1.77
8	5.0	-1.466	-1.546		-1.586	-1.350	-.815	-.939		-.986	-.783	-.193	-.284		-.325	-.178	-3.18
9	15.0				-.982	-1.022				-.664	-.726				-.361	-.340	-5.14
10	30.0	-.660	-.791		-.725	-.640	-.483	-.607		-.540	-.472	-.295	-.406		-.356	-.310	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.282	-.227	-.247	-.227	-.262	-.342	-.301	-.316	-.280	-.316	-.406	-.350	-.391	-.345	-.381	6.42
18	71.5		-.242	-.272		-.252		-.275	-.316		-.285		-.315	-.376		-.350	5.41
19	48.3	-.287	-.196	.126	-.166	-.161	-.140	-.083	.348	-.119	-.088	-.081	.010	.427	-.071	-.030	-5.52
20	55.0	-.156	-.146	-.161	-.131	-.191	-.119	-.114	-.114	-.042	-.140	-.112	-.097	-.112	.020	-.086	-5.05
21	65.0	-.065	-.040	.010	-.025	-.045	-.036	.000	.109	.026	.005	-.005	.066	.107	.066	.051	-3.92
22	69.9	.015	.106	.272	.086	.060	.042	.114	.389	.119	.099	.157	.152	.376	.208	.168	-0.90
23	73.4	-.257	-.322	-.614	-.217	-.101	-.259	-.306	-.669	-.239	-.130	-.320	-.300	-.691	-.239	-.127	2.50
24	70.0	-.065	-.091	-.549	-.096	-.071	-.036	-.042	-.420	-.062	-.083	.015	.005	-.356	-.046	-.122	-0.95
25	72.6	-.252	-.408	-.630	-.247	-.141	-.280	-.379	-.716	-.275	-.130	-.330	-.350	-.721	-.279	-.147	3.26
26	76.5	-.619	-.614	-.635	-.640	-.604	-.617	-.566	-.649	-.654	-.638	-.650	-.472	-.660	-.655	-.696	4.48
27	84.9	-.121	-.131	-.146	-.106	-.111	-.119	-.104	-.130	-.130	-.099	-.122	-.157	-.168	-.112	-.132	3.01
28	93.3	.030	.015	.030	.025	.025	-.005	-.026	.026	.005	-.016	-.036	-.091	-.036	-.015	-.036	1.37
29	78.5	.161	.096	.272	.096	.212	.213	.140	.301	.171	.244	.254	.213	.284	.249	.269	-2.19
30	89.5	.111	.065	.171	.055	.141	.140	.099	.161	.088	.135	.147	.127	.152	.127	.152	-1.07

ORIFICE (FIG.6)	% c	α = 3.50 C_D = .067 C_L = .631 T_c' = .00 q = 14.64 lb/sq ft					α = 7.50 C_D = .095 C_L = .924 T_c' = .00 q = 14.40 lb/sq ft					α = 11.50 C_D = .136 C_L = 1.234 T_c' = .00 q = 14.11 lb/sq ft					% t
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.698	.476		.703	.740	-.596	-1.048		-.526	-.338	-2.992	-4.061		-3.118	-2.433	0
2	1.5	-.925	-.972		-1.004		-2.117	-2.074		-2.079		-4.198	-3.732		-3.962		2.23
3	5.0	-1.015	-1.025		-.919	-.819	-1.886	-1.676		-1.456	-1.467	-2.839	-2.630		-2.307	-2.252	3.96
4	15.0	-.798	-.914		-.893	-.803	-1.155	-1.219		-1.177	-1.160	-1.589	-1.633		-1.595	-1.551	6.76
5	30.0	-.798	-.745		-.867	-.777	-1.005	-.978		-1.021	-.962	-1.211	-1.217		-1.233	-1.151	8.53
6	50.0	-.682	-.645		-.634	-.666	-.779	-.709		-.720	-.736	-.855	-.827		-.817	-.817	8.19
7	1.5	.698	.703		.581	.629	.962	.951		.929	.919	.888	.932		.992	.992	-1.77
8	5.0	.306	.296		.233	.285	.672	.661		.591	.629	.926	.932		.904	.877	-3.18
9	15.0				-.032	-.042				.236	.231				.499	.460	-5.14
10	30.0	-.095	-.217		-.174	-.100	.107	-.005		.021	.064	.307	.186		.214	.241	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.460	-.391	-.412	-.407	-.433	-.478	-.424	-.446	-.435	-.457	-.526	-.455	-.488	-.460	-.488	6.42
18	71.5		-.338	-.359		-.359		-.328	-.381		-.333		-.351	-.378		-.400	5.41
19	48.3	.048	.106	.513	.011	.116	.129	.188	.467	.086	.199	.219	.290	.482	.192	.296	-5.52
20	55.0	-.053	-.085	-.090	.063	.005	-.070	-.054	-.070	.156	.102	-.055	-.060	-.055	.241	.181	-5.05
21	65.0	.053	.127	.137	.111	.106	.129	.188	.161	.172	.177	.192	.258	.252	.230	.219	-3.92
22	69.9	.217	.190	.412	.243	.264	.285	.220	.408	.312	.312	.318	.263	.471	.395	.373	-0.90
23	73.4	-.338	-.296	-.634	-.233	-.095	-.381	-.279	-.596	-.220	-.091	-.406	-.301	-.581	-.203	-.077	2.50
24	70.0	.053	.000	-.233	-.053	-.122	.091	.016	-.210	-.011	-.118	.126	.033	-.170	.033	-.126	-0.95
25	72.6	-.343	-.349	-.676	-.291	-.137	-.381	-.338	-.639	-.263	-.134	-.411	-.367	-.630	-.269	-.132	3.26
26	76.5	-.624	-.380	-.624	-.602	-.671	-.607	-.285	-.548	-.494	-.618	-.559	-.269	-.570	-.351	-.614	4.48
27	84.9	-.116	-.122	-.164	-.122	-.127	-.118	-.086	-.124	-.091	-.118	-.115	-.088	-.121	-.088	-.110	3.01
28	93.3	-.026	-.143	-.042	-.063	-.037	-.021	-.107	-.054	-.059	-.027	-.027	-.104	-.055	-.088	.000	1.37
29	78.5	.296	.264	.317	.275	.317	.344	.306	.338	.306	.328	.373	.356	.384	.395	.373	-2.19
30	89.5	.169	.153	.169	.132	.180	.204	.183	.172	.172	.199	.230	.230	.208	.219	.230	-1.07

TABLE [illegible] - Concluded

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30}$ = 10 $\delta_{f,55}$ = 00 i_w = 00 N = 0000 rpm

ORIFICE (FIG. 6)	x/c	α = 15.50 C_D = .190 C_L = 1.481 T_c' = .00 q = 14.11 lb/sq ft					α = 19.50 C_D = .342 C_L = 1.245 T_c' = .00 q = 13.99 lb/sq ft					α = C_D = C_L = T_c' = q = lb/sq ft					z/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-5.716	-7.327		-6.165	-5.453	-1.056	-3.145		-5.079	-5.638						0
2	1.5	-5.381	-5.496		-5.491		-.940	-1.713		-4.096							2.23
3	5.0	-3.633	-3.365		-3.014	-3.052	-.912	-1.454		-2.244	-2.902						3.96
4	15.0	-1.896	-1.880		-1.880	-1.874	-.680	-.945		-1.277	-1.686						6.76
5	30.0	-1.348	-1.299		-1.326	-1.228	-.647	-.774		-.890	-1.083						8.53
6	50.0	-.844	-.723		-.800	-.784	-.652	-.763		-.763	-.735						8.19
7	1.5	.406	.477		.597	.707	.934	.862		.730	.647						-1.77
8	5.0	1.025	1.003		1.003	1.003	.978	.984		1.006	1.034						-3.18
9	15.0				.696	.701				.685	.707						-5.14
10	30.0	.460	.345		.378	.433	.354	.271		.354	.409						-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.466	-.455	-.460	-.460	-.438	-.691	-.796	-.763	-.763	-.625						6.42
18	71.5		-.373	-.290		-.351		-.835	-.790		-.625						5.41
19	48.3	.340	.362	.493	.279	.378	.216	.271	.453	.238	.332						-5.52
20	55.0	-.022	-.049	-.055	.301	.285	-.022	-.039	-.044	.260	.221						-5.05
21	65.0	.279	.301	.307	.274	.296	.116	.199	.199	.216	.221						-3.92
22	69.9	.406	.258	.499	.416	.422	.243	.310	.370	.343	.381						-0.90
23	73.4	-.334	-.312	-.548	-.214	-.038	-.901	-.835	-1.150	-.613	-.249						2.50
24	70.0	.164	.016	-.170	.011	-.077	-.072	-.193	-.580	-.298	-.293						-0.95
25	72.6	-.406	-.427	-.625	-.285	-.077	-.901	-1.006	-1.221	-.713	-.310						3.26
26	76.5	-.427	-.236	-.570	-.395	-.460	-.685	-.757	-.735	-.835	-.757						4.48
27	84.9	-.148	-.170	-.153	-.132	-.110	-.553	-.691	-.597	-.647	-.459						3.01
28	93.3	-.071	-.197	-.099	-.132	-.022	-.536	-.663	-.625	-.602	-.370						1.37
29	78.5	.427	.395	.427	.400	.422	.304	.282	.310	.326	.354						-2.19
30	89.5	.274	.241	.236	.219	.241	.039	.033	.028	.061	.116						-1.07

TABLE 3

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	x/c	α = -8.50 C_D = .061 C_L = -.015 T_c' = .00 q = 14.82 lb/sq ft					α = -4.50 C_D = .063 C_L = .313 T_c' = .00 q = 14.58 lb/sq ft					α = -.50 C_D = .079 C_L = .641 T_c' = .00 q = 14.96 lb/sq ft					ΔC_p
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.375	-.568		-.714	-.583	.704	.736		.556	.609	.944	.934		.986	.981	0
2	1.5	.901	.891		.875		.482	.445		.450		-.268	-.289		-.274		2.23
3	5.0	.453	.401		.448	.495	-.026	.016		.069	.111	-.676	-.609		-.516	-.470	3.96
4	15.0	.026	-.083		-.063	.010	-.312	-.376		-.328	-.291	-.640	-.733		-.697	-.692	6.76
5	30.0	-.281	-.313		-.328	-.271	-.524	-.530		-.524	-.514	-.764	-.764		-.764	-.743	8.53
6	50.0	-.406	-.427		-.422	-.401	-.588	-.556		-.545	-.545	-.743	-.671		-.686	-.712	8.19
7	1.5	-1.891	-1.990		-2.199	-1.724	-.545	-.567		-.794	-.620	.320	.299		.155	.217	-1.77
8	5.0	-1.188	-1.412		-1.375	-1.136	-.567	-.667		-.736	-.545	.057	.005		-.083	.083	-3.18
9	15.0				-.844	-.844				-.508	-.545				-.181	-.160	-5.14
10	30.0	-.495	-.625		-.599	-.485	-.334	-.440		-.397	-.318	-.124	-.243		-.196	-.134	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.328	-.396	-.396	-.359	-.339	-.450	-.450	-.487	-.455	-.450	-.547	-.516	-.552	-.526	-.532	6.42
18	71.5		-.443	-.448		-.307		-.487	-.545		-.408		-.495	-.588		-.495	5.41
19	48.3	-.146	-.099	.193	-.068	-.073	-.090	.026	.434	.005	-.021	.057	.145	.501	.072	.114	-5.52
20	55.0	-.135	-.141	-.135	.010	-.031	-.122	-.111	-.111	.101	.016	-.083	-.072	-.072	.155	.093	-5.05
21	65.0	.094	.068	.151	.120	.146	.122	.138	.244	.169	.159	.145	.227	.243	.206	.206	-3.92
22	69.9	.130	.156	.229	.188	.141	.191	.175	.196	.265	.244	.268	.279	.237	.320	.274	-0.90
23	73.4	-.141	-.479	-.771	-.292	-.109	-.281	-.440	-.874	-.344	-.148	-.372	-.444	-.815	-.351	-.196	2.50
24	70.0	.010	-.203	-.620	-.172	-.078	-.037	-.117	-.593	-.154	-.122	.005	-.072	-.475	-.170	-.155	-0.95
25	72.6	-.219	-.703	-.865	-.469	-.177	-.371	-.620	-1.001	-.551	-.259	-.495	-.645	-.970	-.563	-.341	3.26
26	76.5	-.443	-1.302	-1.328	-1.167	-.646	-.858	-1.075	-1.419	-1.334	-.932	-1.110	-.970	-1.383	-1.270	-1.223	4.48
27	84.9	-.219	-.292	-.276	-.234	-.208	-.265	-.291	-.312	-.265	-.259	-.253	-.274	-.299	-.263	-.232	3.01
28	93.3	-.224	-.141	-.036	-.141	-.193	-.238	-.238	-.079	-.175	-.244	-.227	-.237	-.093	-.186	-.206	1.37
29	78.5	.349	.250	.542	.287	.422	.487	.312	.567	.339	.519	.532	.413	.537	.501	.532	-2.19
30	89.5	.229	.156	.297	.167	.219	.217	.196	.286	.196	.228	.263	.243	.289	.274	.279	-1.07

ORIFICE (FIG.6)	x/c	α = 3.50 C_D = .107 C_L = .956 T_c' = .00 q = 14.32 lb/sq ft					α = 7.50 C_D = .147 C_L = 1.264 T_c' = .00 q = 14.09 lb/sq ft					α = 11.50 C_D = .197 C_L = 1.566 T_c' = .00 q = 14.02 lb/sq ft					ΔC_p
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.280	.005		.356	.399	-1.528	-2.142		-1.402	-1.210	-4.313	-5.502		-4.379	-3.703	0
2	1.5	-1.412	-1.466		-1.460		-3.127	-3.067		-3.067		-4.379	-4.687				2.23
3	5.0	-1.320	-1.283		-1.142	-1.072	-2.383	-2.098		-1.824	-1.857	-3.356	-3.009		-2.663	-2.696	3.96
4	15.0	-.981	-1.083		-1.045	-1.008	-1.419	-1.462		-1.386	-1.391	-1.838	-1.821		-1.794	-1.805	6.76
5	30.0	-.889	-.965		-1.013	-.911	-1.194	-1.189		-1.210	-1.156	-1.436	-1.364		-1.397	-1.381	8.53
6	50.0	-.835	-.808		-.792	-.814	-.937	-.909		-.898	-.909	-1.040	-.985		-.974	-.974	8.19
7	1.5	.868	.862		.760	.792	1.019	1.019		1.030	1.030	.666	.704		.847	.902	-1.77
8	5.0	.501	.469		.410	.453	.827	.805		.767	.778	1.001	1.001		.996	.979	-3.18
9	15.0				.113	.092				.389	.367				.627	.611	-5.14
10	30.0	.049	-.043		-.032	-.000	.246	.137		.192	.197	.468	.352		.369	.374	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.609	-.593	-.604	-.593	-.587	-.663	-.641	-.685	-.646	-.663	-.704	-.660	-.688	-.710	-.693	6.42
18	71.5		-.560	-.620		-.550		-.586	-.657		-.586		-.583	-.627		-.611	5.41
19	48.3	.167	.237	.614	.151	.210	.252	.312	.575	.257	.312	.352	.424	.561	.352	.413	-5.52
20	55.0	-.065	-.032	-.065	.243	.156	-.066	-.055	-.049	.307	.285	-.028	-.028	-.022	.396	.358	-5.05
21	65.0	.205	.291	.280	.248	.259	.285	.334	.340	.329	.312	.369	.418	.413	.385	.407	-3.92
22	69.9	.296	.334	.280	.377	.286	.340	.356	.340	.427	.340	.396	.429	.429	.446	.380	-0.90
23	73.4	-.415	-.523	-.825	-.404	-.237	-.433	-.548	-.871	-.400	-.257	-.473	-.534	-.754	-.385	-.193	2.50
24	70.0	.032	-.146	-.437	-.194	-.205	.011	-.142	-.433	-.170	-.214	-.182	-.088	-.330	-.154	-.226	-0.95
25	72.6	-.587	-.744	-.997	-.652	-.410	-.608	-.800	-1.052	-.701	-.466	-.638	-.759	-.963	-.726	-.506	3.26
26	76.5	-1.148	-.954	-1.315	-1.229	-1.234	-1.123	-.849	-1.276	-1.221	-1.232	-1.056	-.660	-1.287	-.963	-1.210	4.48
27	84.9	-.210	-.253	-.275	-.264	-.216	-.181	-.197	-.263	-.197	-.192	-.154	-.121	-.204	-.138	-.198	3.01
28	93.3	-.189	-.167	-.086	-.178	-.178	-.142	-.170	-.082	-.115	-.131	-.077	-.105	-.044	-.055	-.072	1.37
29	78.5	.555	.474	.577	.555	.544	.586	.548	.592	.597	.581	.633	.633	.627	.638	.644	-2.19
30	89.5	.296	.291	.318	.296	.275	.318	.345	.334	.329	.334	.413	.413	.385	.385	.385	-1.07

TABLE 3.- Concluded

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	$\frac{x}{c}$	α = 15.50 C_D = .266 C_L = 1.779 T_c' = .00 q = 13.93 lb/sq ft					α = 19.50 C_D = .423 C_L = 1.357 T_c' = .00 q = 13.86 lb/sq ft					α = C_D = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-7.586	-9.363		-8.018	-7.115	-1.575	-1.658		-4.853	-6.250						0
2	1.5	-6.268	-6.373		-6.467		-.701	-.740		-3.578							2.23
3	5.0	-4.236	-3.859		-3.488	-3.571	-1.163	-.890		-1.948	-2.972						3.96
4	15.0	-2.226	-2.159		-2.171	-2.193	-.868	-.790		-1.107	-1.697						6.76
5	30.0	-1.606	-1.556		-1.556	-1.539	-.807	-.696		-.807	-1.069						8.53
6	50.0	-1.063	-1.019		-1.041	-1.047	-.723	-.718		-.746	-.807						8.19
7	1.5	.089	.177		.316	.449	.963	.941		.735	.590						-1.77
8	5.0	1.035	1.030		1.013	1.030	.946	1.002		1.002	.996						-3.18
9	15.0				.770	.775				.723	.740						-5.14
10	30.0	.576	.476		.498	.509	.440	.351		.417	.467						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.687	-.670	-.687	-.709	-.703	-.757	-.757	-.746	-.762	-.746						6.42
18	71.5		-.559	-.581		-.604		-.813	-.774		-.768						5.41
19	48.3	.449	.493	.570	.449	.493	.312	.367	.495	.317	.395						-5.52
20	55.0	-.011	-.033	-.033	.443	.410	-.033	-.022	-.033	.351	.339						-5.05
21	65.0	.421	.465	.449	.460	.454	.289	.356	.328	.323	.356						-3.92
22	69.9	.443	.465	.465	.443	.432	.306	.395	.384	.323	.317						-0.90
23	73.4	-.476	-.509	-.692	-.360	-.244	-.723	-.813	-1.018	-.557	-.434						2.50
24	70.0	.039	-.116	-.282	-.166	-.210	-.145	-.256	-.562	-.356	-.373						-0.95
25	72.6	-.664	-.775	-.897	-.681	-.498	-.935	-1.158	-1.224	-.890	-.696						3.26
26	76.5	-.958	-.526	-1.213	-.819	-1.052	-.757	-.718	-.857	-.968	-1.018						4.48
27	84.9	-.194	-.166	-.188	-.172	-.172	-.462	-.568	-.634	-.696	-.618						3.01
28	93.3	-.066	-.133	-.055	-.089	-.044	-.440	-.557	-.590	-.612	-.540						1.37
29	78.5	.676	.659	.631	.653	.664	.557	.573	.562	.568	.568						-2.19
30	89.5	.432	.421	.388	.399	.421	.256	.245	.200	.211	.245						-1.07

TABLE 4

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	$\frac{x}{c}$	α = -8.50 C_D = .081 C_L = .177 T_c' = .00 q = 14.69 lb/sq ft					α = -4.50 C_D = .093 C_L = .511 T_c' = .00 q = 14.51 lb/sq ft					α = -.50 C_D = .117 C_L = .848 T_c' = .00 q = 14.49 lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.115	-.178		-.472	-.252	.850	.887		.770	.712	.867	.798		.926	.936	0
2	1.5	.871	.845		.840		.361	.308		.361		-.388	-.372		-.404		2.23
3	5.0	.367	.325		.399	.430	-.106	-.122		-.064	.011	-.809	-.734		-.596	-.607	3.96
4	15.0	-.031	-.136		-.089	-.058	-.367	-.446		-.414	-.372	-.755	-.819		-.766	-.777	6.76
5	30.0	-.357	-.378		-.367	-.336	-.584	-.584		-.595	-.574	-.830	-.819		-.814	-.798	8.53
6	50.0	-.462	-.514		-.483	-.451	-.664	-.542		-.616	-.611	-.819	-.755		-.729	-.777	8.19
7	1.5	-1.548	-1.627		-1.889	-1.490	-.292	-.175		-.595	-.367	.436	.388		.255	.356	-1.77
8	5.0	-1.018	-1.265		-1.223	-.939	-.414	-.457		-.483	-.457	.192	.112		.032	.192	-3.18
9	15.0				-.735	-.740				-.351	-.436				-.085	-.064	-5.14
10	30.0	-.394	-.488		-.472	-.399	-.218	-.308		-.287	-.234	-.021	-.133		-.085	-.032	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.409	-.451	-.457	-.409	-.430	-.531	-.510	-.542	-.521	-.515	-.633	-.628	-.622	-.564	-.617	6.42
18	71.5		-.504	-.520		-.415		-.526	-.606		-.489		-.612	-.665		-.585	5.41
19	48.3	-.063	-.031	.262	.026	.016	-.005	.117	.489	.117	.085	.165	.213	.521	.176	.213	-5.52
20	55.0	-.126	-.142	-.126	.094	.089	-.106	-.064	-.074	.239	.149	-.069	-.090	-.080	.261	.192	-5.05
21	65.0	.189	.136	.215	.205	.226	.213	.287	.329	.383	.276	.303	.293	.346	.330	.319	-3.92
22	69.9	.199	.189	.220	.231	.226	.234	.085	.213	.361	.276	.341	.346	.255	.399	.356	-0.90
23	73.4	-.178	-.472	-.745	-.273	-.199	-.313	-.404	-.829	-.398	-.202	-.346	-.495	-.766	-.341	-.266	2.50
24	70.0	-.016	-.283	-.687	-.247	-.163	-.149	-.186	-.712	-.250	-.234	-.117	-.234	-.580	-.234	-.298	-0.95
25	72.6	-.462	-.861	-.934	-.567	-.462	-.669	-.765	-1.094	-.765	-.515	-.713	-.894	-1.059	-.660	-.724	3.26
26	76.5	-.567	-1.317	-1.323	-.703	-.939	-.994	-.818	-1.610	-1.275	-.818	-1.000	-1.080	-1.490	-.729	-1.373	4.48
27	84.9	-.310	-.399	-.388	-.357	-.346	-.340	-.404	-.372	-.404	-.335	-.330	-.404	-.378	-.362	-.356	3.01
28	93.3	-.283	-.294	-.310	-.336	-.315	-.340	-.191	-.255	-.319	-.340	-.362	-.341	-.298	-.362	-.319	1.37
29	78.5	.504	.352	.714	.362	.541	.691	.425	.744	.494	.691	.692	.532	.686	.596	.718	-2.19
30	89.5	.310	.220	.388	.252	.320	.319	.287	.377	.313	.324	.372	.351	.383	.335	.367	-1.07

ORIFICE (FIG.6)	$\frac{x}{c}$	α = 3.50 C_D = .153 C_L = 1.170 T_c' = .00 q = 14.04 lb/sq ft					α = 7.50 C_D = .199 C_L = 1.490 T_c' = .00 q = 14.00 lb/sq ft					α = 11.50 C_D = .258 C_L = 1.793 T_c' = .00 q = 13.84 lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.110	-.483		.011	.154	-2.108	-2.581		-1.943	-1.783	-5.206	-6.987		-5.651	-4.621	0
2	1.5	-1.697	-1.702		-1.713		-3.924	-3.418		-3.517		-5.078	-5.312		-5.267		2.23
3	5.0	-1.559	-1.537		-1.351	-1.235	-2.592	-2.235		-2.003	-2.069	-3.608	-3.374		-3.001	-2.951	3.96
4	15.0	-1.087	-1.213		-1.164	-1.104	-1.552	-1.580		-1.481	-1.541	-1.988	-2.027		-1.982	-1.943	6.76
5	30.0	-1.065	-1.065		-1.109	-1.005	-1.337	-1.293		-1.326	-1.249	-1.565	-1.514		-1.537	-1.481	8.53
6	50.0	-.933	-.911		-.890	-.890	-1.040	-1.007		-1.007	-1.002	-1.136	-1.119		-1.130	-1.108	8.19
7	1.5	.939	.922		.868	.868	.914	.930		.991	1.007	.479	.540		.668	.768	-1.77
8	5.0	.593	.494		.516	.555	.908	.875		.848	.864	1.019	1.030		.997	.985	-3.18
9	15.0				.225	.214				.473	.468				.707	.640	-5.14
10	30.0	.176	.071		.099	.132	.347	.248		.275	.314	.529	.440		.468	.457	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.681	-.697	-.708	-.692	-.670	-.743	-.765	-.793	-.771	-.732	-.785	-.807	-.830	-.857	-.779	6.42
18	71.5		-.697	-.708		-.593		-.721	-.787		-.649		-.741	-.791		-.696	5.41
19	48.3	.291	.313	.609	.258	.329	.369	.391	.600	.352	.418	.457	.512	.629	.496	.484	-5.52
20	55.0	-.055	-.049	-.033	.346	.275	-.028	-.044	-.033	.440	.413	-.028	-.017	-.017	.507	.434	-5.05
21	65.0	.368	.390	.384	.379	.368	.413	.435	.435	.435	.446	.490	.507	.523	.507	.496	-3.92
22	69.9	.390	.357	.318	.439	.417	.402	.446	.380	.451	.440	.484	.484	.395	.440	.462	-0.90
23	73.4	-.362	-.577	-.818	-.478	-.302	-.413	-.633	-.886	-.550	-.319	-.429	-.629	-.824	-.579	-.356	2.50
24	70.0	-.110	-.313	-.582	-.445	-.362	-.110	-.369	-.611	-.391	-.358	-.095	-.312	-.540	-.429	-.423	-0.95
25	72.6	-.791	-.972	-1.137	-.928	-.763	-.820	-.985	-1.205	-1.062	-.815	-.852	-.930	-1.203	-1.091	-.863	3.26
26	76.5	-1.153	-1.049	-1.515	-1.263	-1.367	-1.205	-1.046	-1.618	-1.574	-1.365	-1.180	-.958	-1.665	-1.414	-1.331	4.48
27	84.9	-.286	-.351	-.340	-.390	-.297	-.253	-.292	-.314	-.325	-.270	-.200	-.245	-.245	-.251	-.273	3.01
28	93.3	-.313	-.302	-.258	-.346	-.302	-.259	-.193	-.160	-.253	-.259	-.206	-.195	-.089	-.139	-.228	1.37
29	78.5	.725	.626	.725	.741	.725	.754	.699	.749	.765	.771	.779	.779	.779	.791	.757	-2.19
30	89.5	.373	.412	.406	.395	.395	.457	.468	.446	.451	.451	.501	.529	.507	.496	.484	-1.07

TABLE 4.- Concluded

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE	x/c	α = 15.50 C_D = .330 C_L = 1.970 T_c' = .00 q = 13.57 lb/sq ft					α = 19.50 C_D = .492 C_L = 1.490 T_c' = .00 q = 13.73 lb/sq ft					α = C_D = C_L = T_c' = q = lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-8.387	-.232		-9.517	-8.182	-.650	-1.032		-4.788	-6.128						0
2	1.5	-7.007	-6.439		-7.115		-.583	-.589		-3.409							2.23
3	5.0	-4.440	-3.952		-3.873	-3.827	-.555	-.740		-1.789	-2.742						3.96
4	15.0	-2.311	-2.453		-2.339	-2.328	-.555	-.734		-1.043	-1.503						6.76
5	30.0	-1.675	-1.613		-1.664	-1.647	-.583	-.718		-.779	-.936						8.53
6	50.0	-1.147	-1.090		-1.147	-1.141	-.617	-.729		-.729	-.712						8.19
7	1.5	-.187	-.034		.102	.295	.953	.959		.746	.594						-1.77
8	5.0	1.016	1.011		1.045	1.016	1.020	.987		1.015	1.048						-3.18
9	15.0				.857	.823				.757	.796						-5.14
10	30.0	.636	.556		.596	.585	.499	.376		.482	.549						-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.784	-.744	-.767	-.818	-.801	-.684	-.785	-.656	-.729	-.729						6.42
18	71.5		-.636	-.630		-.693		-.813	-.690		-.751						5.41
19	48.3	.528	.568	.636	.534	.562	.426	.426	.533	.404	.521						-5.52
20	55.0	-.011	-.011	-.017	.562	.505	-.011	-.022	-.017	.437	.477						-5.05
21	65.0	.522	.556	.574	.551	.500	.415	.437	.460	.415	.482						-3.92
22	69.9	.522	.539	.545	.522	.466	.404	.415	.387	.308	.454						-0.90
23	73.4	-.454	-.545	-.710	-.477	-.369	-.561	-.718	-.813	-.527	-.454						2.50
24	70.0	-.114	-.363	-.443	-.358	-.397	-.241	-.376	-.527	-.482	-.493						-0.95
25	72.6	-.829	-.750	-1.022	-.920	-.874	-.852	-.942	-.948	-.931	-.908						3.26
26	76.5	-1.102	-.568	-1.306	-1.124	-1.255	-.852	-.695	-.847	-1.004	-1.076						4.48
27	84.9	-.227	-.170	-.244	-.233	-.273	-.460	-.527	-.656	-.718	-.690						3.01
28	93.3	-.159	-.091	-.119	-.136	-.250	-.426	-.533	-.577	-.650	-.589						1.37
29	78.5	.795	.795	.801	.823	.801	.763	.712	.712	.740	.768						-2.19
30	89.5	.534	.551	.505	.545	.522	.404	.381	.336	.353	.398						-1.07

TABLE 5

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 40$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	% c	α = -8.50 C_D = .112 C_L = .288 T_c' = .00 q = 14.75 lb/sq ft					α = -4.50 C_D = .129 C_L = .628 T_c' = .00 q = 14.33 lb/sq ft					α = -.50 C_D = .158 C_L = .963 T_c' = .00 q = 14.71 lb/sq ft					δ_f
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.126	.058		-.231	.105	.960	.998		.933	.944	.768	.668		.841	.873	0
2	1.5	.797	.771		.776		.232	.200		.216		-.694	-.710		-.673		2.23
3	5.0	.294	.330		.367	.330	-.313	-.275		-.200	-.124	-.915	-.852		-.757	-.684	3.96
4	15.0	-.089	-.163		-.126	-.178	-.475	-.566		-.539	-.475	-.805	-.894		-.868	-.831	6.76
5	30.0	-.393	-.388		-.377	-.398	-.636	-.663		-.663	-.642	-.857	-.873		-.889	-.841	8.53
6	50.0	-.508	-.498		-.477	-.498	-.712	-.663		-.647	-.658	-.857	-.778		-.784	-.820	8.19
7	1.5	-1.164	-1.237		-1.515	-1.227	-.011	-.119		-.313	-.189	.621	.615		.463	.515	-1.77
8	5.0	-.891	-1.069		-1.048	-.771	-.183	-.232		-.302	-.205	.310	.242		.184	.252	-3.18
9	15.0				-.598	-.592				-.253	-.248				.016	.005	-5.14
10	30.0	-.273	-.325		-.356	-.283	-.097	-.146		-.167	-.086	.053	-.032		-.021	.021	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.461	-.398	-.435	-.409	-.461	-.582	-.529	-.539	-.512	-.582	-.657	-.610	-.621	-.600	-.663	6.42
18	71.5		-.425	-.440		-.430		-.529	-.550		-.561		-.557	-.621		-.631	5.41
19	48.3	.021	.042	.294	.126	.131	.129	.178	.561	.205	.183	.252	.321	.621	.268	.289	-5.52
20	55.0	-.105	-.126	-.115	.210	.241	-.102	-.086	-.092	.318	.286	-.021	-.068	-.063	.363	.295	-5.05
21	65.0	.283	.189	.320	.304	.315	.345	.307	.421	.415	.415	.389	.421	.458	.484	.431	-3.92
22	69.9	.294	.220	.220	.304	.315	.345	.307	.291	.431	.329	.431	.436	.337	.536	.447	-0.90
23	73.4	-.157	-.231	-.446	-.210	-.152	-.227	-.275	-.539	-.189	-.232	-.268	-.252	-.473	-.189	-.226	2.50
24	70.0	-.157	-.304	-.645	-.304	-.252	-.302	-.324	-.787	-.286	-.518	-.326	-.284	-.663	-.295	-.568	-0.95
25	72.6	-.980	-1.027	-1.174	-1.006	-.949	-1.154	-1.230	-1.483	-1.052	-1.294	-1.231	-1.120	-1.499	-1.110	-1.388	3.26
26	76.5	-.514	-.472	-.514	-.498	-.561	-.604	-.588	-.701	-.496	-.777	-.673	-.515	-.736	-.505	-.931	4.48
27	84.9	-.398	-.404	-.398	-.430	-.398	-.399	-.437	-.453	-.415	-.475	-.410	-.410	-.431	-.410	-.473	3.01
28	93.3	-.393	-.419	-.398	-.430	-.398	-.431	-.437	-.448	-.415	-.475	-.426	-.415	-.436	-.410	-.484	1.37
29	78.5	.765	.393	.870	.440	.587	.831	.502	.895	.609	.831	.841	.615	.847	.799	.841	-2.19
30	89.5	.430	.294	.503	.398	.472	.442	.415	.507	.458	.437	.484	.447	.500	.473	.473	-1.07

ORIFICE (FIG.6)	% c	α = 3.50 C_D = .199 C_L = 1.280 T_c' = .00 q = 14.26 lb/sq ft					α = 7.50 C_D = .255 C_L = 1.612 T_c' = .00 q = 14.11 lb/sq ft					α = 11.50 C_D = .315 C_L = 1.935 T_c' = .00 q = 13.86 lb/sq ft					δ_f
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.369	-.699		-.135	-.119	-2.711	-3.429		-2.421	-2.284	-6.142	-7.669		-6.242	-5.373	0
2	1.5	-1.994	-2.032		-2.022		-4.108	-3.670		-3.801		-5.752	-5.897		-5.819		2.23
3	5.0	-1.756	-1.588		-1.404	-1.360	-2.854	-2.492		-2.163	-2.295	-3.924	-3.534		-3.132	-3.171	3.96
4	15.0	-1.214	-1.241		-1.181	-1.154	-1.681	-1.687		-1.616	-1.660	-2.129	-2.084		-2.062	-2.084	6.76
5	30.0	-1.127	-1.106		-1.122	-1.041	-1.413	-1.375		-1.304	-1.194	-1.666	-1.583		-1.605	-1.577	8.53
6	50.0	-.986	-.916		-.894	-.943	-1.123	-1.063		-1.074	-1.095	-1.215	-1.120		-1.170	-1.193	8.19
7	1.5	.981	.986		.932	.954	.876	.915		.997	.997	.268	.329		.502	.619	-1.77
8	5.0	.683	.623		.580	.629	.953	.937		.887	.937	1.037	1.026		1.014	1.020	-3.18
9	15.0				.293	.276				.537	.542				.752	.747	-5.14
10	30.0	.249	.146		.168	.190	.433	.318		.351	.394	.596	.507		.535	.546	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.748	-.683	-.721	-.683	-.737	-.805	-.761	-.778	-.800	-.816	-.856	-.780	-.869	-.875	-.897	6.42
18	71.5		-.602	-.677		-.694		-.685	-.652		-.657		-.686	-.736		-.780	5.41
19	48.3	.347	.390	.591	.352	.401	.455	.493	.657	.433	.487	.546	.574	.641	.546	.568	-5.52
20	55.0	-.049	-.038	-.049	.444	.352	-.011	-.022	-.033	.515	.444	.011	.011	-.011	.568	.546	-5.05
21	65.0	.455	.466	.488	.531	.455	.526	.537	.559	.542	.548	.580	.585	.607	.568	.602	-3.92
22	69.9	.472	.461	.439	.488	.488	.526	.504	.438	.542	.526	.580	.563	.535	.568	.552	-0.90
23	73.4	-.298	-.298	-.526	-.309	-.260	-.323	-.351	-.515	-.361	-.290	-.334	-.340	-.446	-.407	-.351	2.50
24	70.0	-.347	-.336	-.688	-.504	-.612	-.361	-.405	-.624	-.581	-.652	-.379	-.412	-.568	-.647	-.725	-0.95
25	72.6	-1.366	-1.100	-1.518	-1.398	-1.409	-1.435	-1.183	-1.451	-1.545	-1.495	-1.432	-1.053	-1.505	-1.499	-1.594	3.26
26	76.5	-.824	-.499	-.726	-.813	-.965	-1.035	-.570	-.635	-1.002	-1.221	-1.176	-.490	-.713	-1.081	-1.471	4.48
27	84.9	-.417	-.385	-.444	-.428	-.434	-.367	-.389	-.394	-.411	-.411	-.279	-.312	-.390	-.368	-.390	3.01
28	93.3	-.428	-.374	-.417	-.428	-.444	-.372	-.296	-.356	-.351	-.389	-.301	-.139	-.290	-.368	-.418	1.37
29	78.5	.867	.715	.867	.873	.873	.904	.827	.876	.898	.904	.925	.881	.892	.908	.908	-2.19
30	89.5	.466	.515	.499	.504	.509	.575	.570	.553	.553	.548	.630	.624	.602	.602	.613	-1.07

TABLE 5.- Concluded

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 40$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	% c	α = 15.50 C_D = .431 C_L = 2.017 T_c' = .00 q = 13.61 lb/sq ft					α = 17.50 C_D = .534 C_L = 1.603 T_c' = .00 q = 13.72 lb/sq ft					α = C_D = C_L = T_c' = q = lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-9.064	-9.921		-8.956	-9.042	-.642	-1.025		-4.403	-5.670						0
2	1.5	-7.237	-5.829		-7.498		-.935	-.974		-4.009							2.23
3	5.0	-4.575	-3.990		-3.723	-4.070	-.619	-.732		-1.745	-2.748						3.96
4	15.0	-2.355	-2.299		-2.333	-2.486	-.642	-.709		-1.013	-1.565						6.76
5	30.0	-1.697	-1.646		-1.737	-1.782	-.664	-.687		-.777	-1.008						8.53
6	50.0	-1.118	-1.226		-1.277	-1.260	-.715	-.698		-.698	-.794						8.19
7	1.5	-.261	-.040		-.006	.182	.890	.884		.642	.512						-1.77
8	5.0	.999	1.022		1.016	1.022	.991	.968		1.008	1.030						-3.18
9	15.0				.806	.880				.749	.777						-5.14
10	30.0	.692	.556		.613	.653	.535	.428		.518	.563						-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.817	-.965	-.919	-.999	-.931	-.749	-.732	-.861	-.698	-.788						6.42
18	71.5		-.925	-.868		-.851		-.777	-.861		-.822						5.41
19	48.3	.573	.602	.692	.545	.522	.495	.518	.614	.490	.563						-5.52
20	55.0	-.017	-.011	-.028	.602	.664	-.011	.023	-.034	.569	.569						-5.05
21	65.0	.613	.602	.653	.602	.624	.529	.552	.557	.540	.586						-3.92
22	69.9	.579	.568	.534	.573	.511	.524	.495	.524	.428	.524						-0.90
23	73.4	-.375	-.562	-.670	-.539	-.403	-.462	-.507	-.670	-.394	-.388						2.50
24	70.0	-.386	-.658	-.772	-.795	-.778	-.495	-.580	-.799	-.631	-.771						-0.95
25	72.6	-1.147	-1.555	-1.913	-1.873	-1.532	-1.104	-1.047	-1.132	-1.081	-1.171						3.26
26	76.5	-1.022	-1.078	-1.470	-1.663	-1.374	-.890	-.788	-.839	-1.081	-1.205						4.48
27	84.9	-.312	-.448	-.301	-.386	-.363	-.462	-.518	-.569	-.676	-.676						3.01
28	93.3	-.261	-.341	-.170	-.272	-.369	-.428	-.518	-.512	-.608	-.597						1.37
29	78.5	.919	.942	.925	.914	.919	.901	.850	.873	.884	.906						-2.19
30	89.5	.647	.641	.607	.624	.641	.563	.546	.546	.518	.552						-1.07

TABLE 6

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	x/c	α = -8.50 C_D = .142 C_L = .404 T_c' = .00 q = 14.47 lb/sq ft					α = -4.50 C_D = .160 C_L = .728 T_c' = .00 q = 14.12 lb/sq ft					α = -.50 C_D = .192 C_L = 1.059 T_c' = .00 q = 14.52 lb/sq ft					1/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.410	.490		.229	.261	.961	1.005		.972	.956	.622	.558		.765	.685	0
2	1.5	.730	.693		.688		.082	.038		.060		-.738	-.754		-.792		2.23
3	5.0	.192	.160		.208	.283	-.322	-.306		-.224	-.147	-1.057	-.972		-.813	-.866	3.96
4	15.0	-.155	-.299		-.245	-.165	-.481	-.612		-.552	-.530	-.877	-.914		-.882	-.914	6.76
5	30.0	-.458	-.490		-.490	-.458	-.688	-.705		-.716	-.683	-.930	-.882		-.898	-.919	8.53
6	50.0	-.565	-.597		-.565	-.554	-.737	-.705		-.421	-.694	-.903	-.829		-.818	-.866	8.19
7	1.5	-.922	-.896		-1.199	-.928	.082	.093		-.137	-.005	.659	.632		.526	.579	-1.77
8	5.0	-.698	-.757		-.832	-.645	-.071	-.153		-.229	-.120	.398	.377		.287	.388	-3.18
9	15.0				-.426	-.512				-.153	-.186				.117	.112	-5.14
10	30.0	-.181	-.149		-.160	-.192	-.005	-.016		-.027	-.022	.154	.096		.106	.133	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.533	-.490	-.480	-.496	-.554	-.628	-.563	-.568	-.530	-.634	-.712	-.648	-.643	-.637	-.701	6.42
18	71.5		-.501	-.480		-.485		-.541	-.568		-.595		-.563	-.616		-.595	5.41
19	48.3	.096	.091	.416	.224	.085	.175	.229	.546	.322	.262	.319	.388	.595	.351	.244	-5.52
20	55.0	-.117	-.139	-.112	.288	.251	-.082	-.082	-.104	.486	.322	-.069	-.064	-.069	.425	.382	-5.05
21	65.0	.309	.213	.320	.304	.357	.399	.344	.464	.519	.470	.483	.505	.510	.537	.526	-3.92
22	69.9	.336	.176	.133	.416	.330	.448	.300	.333	.513	.486	.505	.499	.398	.542	.462	-0.90
23	73.4	.000	-.085	-.149	.005	-.011	.044	-.033	-.126	.038	.044	.005	.042	-.037	.085	.058	2.50
24	70.0	-.560	-.538	-.645	-.469	-.682	-.699	-.563	-.896	-.535	-.885	-.701	-.590	-.834	-.754	-.807	-0.95
25	72.6	-1.450	-1.226	-1.162	-1.274	-1.525	-1.693	-1.327	-1.437	-1.306	-1.764	-1.726	-1.307	-1.440	-1.588	-1.673	3.26
26	76.5	-.608	-.528	-.480	-.549	-.704	-.623	-.552	-.524	-.519	-.645	-.669	-.510	-.521	-.590	-.552	4.48
27	84.9	-.501	-.490	-.458	-.490	-.522	-.486	-.486	-.475	-.442	-.481	-.483	-.436	-.441	-.436	-.478	3.01
28	93.3	-.512	-.490	-.458	-.480	-.522	-.503	-.481	-.481	-.442	-.492	-.505	-.436	-.441	-.436	-.483	1.37
29	78.5	.933	.426	.688	.501	.928	.945	.541	.912	.661	.961	.946	.744	.908	.935	.930	-2.19
30	89.5	.549	.336	.629	.554	.560	.601	.541	.650	.574	.584	.600	.579	.574	.600	.574	-1.07

ORIFICE (FIG.6)	x/c	α = 3.50 C_D = .240 C_L = 1.384 T_c' = .00 q = 13.96 lb/sq ft					α = 7.50 C_D = .292 C_L = 1.706 T_c' = .00 q = 13.74 lb/sq ft					α = 11.50 C_D = .354 C_L = 1.997 T_c' = .00 q = 13.49 lb/sq ft					1/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.762	-1.082		-.486	-.503	-3.086	-4.837		-3.703	-2.828	-6.540	-8.791		-7.174	-6.192	0
2	1.5	-2.314	-2.314		-2.215		-4.062	-4.023		-4.231		-6.009	-6.060		-6.009		2.23
3	5.0	-1.988	-1.729		-1.502	-1.563	-2.968	-2.845		-2.502	-2.458	-4.033	-3.787		-3.330	-3.370	3.96
4	15.0	-1.298	-1.292		-1.226	-1.298	-1.756	-1.840		-1.762	-1.745	-2.211	-2.205		-2.153	-2.171	6.76
5	30.0	-1.082	-1.055		-1.171	-1.143	-1.470	-1.436		-1.464	-1.262	-1.702	-1.639		-1.634	-1.634	8.53
6	50.0	-1.044	-.944		-.961	-1.011	-1.167	-1.111		-1.105	-1.156	-1.262	-1.182		-1.194	-1.245	8.19
7	1.5	1.005	1.005		.977	.961	.808	.842		.920	.943	.183	.251		.446	.571	-1.77
8	5.0	.723	.740		.668	.723	.965	.976		.959	.943	1.017	1.011		1.022	1.022	-3.18
9	15.0				.364	.370				.634	.561				.760	.788	-5.14
10	30.0	.171	.243		.260	.287	.488	.438		.471	.449	.640	.565		.600	.600	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.795	-.696	-.740	-.734	-.795	-.858	-.780	-.802	-.842	-.887	-.914	-.817	-.823	-.880	-.920	6.42
18	71.5		-.613	-.552		-.734		-.673	-.707		-.662		-.720	-.691		-.834	5.41
19	48.3	.425	.475	.619	.458	.480	.522	.567	.662	.533	.466	.600	.634	.691	.617	.605	-5.52
20	55.0	-.028	-.033	-.050	.641	.447	-.045	.017	-.034	.679	.567	-.023	-.017	-.023	.645	.623	-5.05
21	65.0	.547	.563	.563	.585	.569	.600	.612	.634	.628	.617	.663	.634	.680	.640	.663	-3.92
22	69.9	.536	.563	.508	.585	.569	.589	.522	.572	.483	.550	.628	.605	.640	.634	.560	-0.90
23	73.4	.028	.028	-.044	.039	.044	.034	.006	.000	.006	.039	.034	-.023	.051	.023	.017	2.50
24	70.0	-.795	-.619	-.906	-.801	-1.011	-.847	-.685	-.830	-.920	-1.004	-.823	-.720	-.754	-.903	-1.080	-0.95
25	72.6	-1.883	-1.132	-1.441	-1.668	-1.894	-1.919	-.774	-1.375	-1.840	-1.874	-1.868	-1.142	-1.268	-1.605	-1.914	3.26
26	76.5	-.712	-.425	-.486	-.563	-.878	-.814	-.370	-.449	-.584	-.976	-.948	-.388	-.360	-.497	-1.165	4.48
27	84.9	-.464	-.381	-.409	-.403	-.486	-.426	-.331	-.348	-.382	-.460	-.377	-.297	-.286	-.331	-.423	3.01
28	93.3	-.469	-.370	-.414	-.425	-.486	-.426	-.331	-.348	-.382	-.471	-.377	-.297	-.291	-.331	-.423	1.37
29	78.5	.955	.795	.939	.966	.966	.982	.892	.954	.959	.976	1.011	.948	.965	.965	.988	-2.19
30	89.5	.619	.624	.652	.641	.635	.679	.718	.673	.673	.673	.731	.754	.697	.697	.708	-1.07

TABLE 6.- Concluded

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30}$ = 50 $\delta_{f,55}$ = 00 i_w = 00 N = 0000 rpm

ORIFICE (FIG.4)	M c	α = 15.50 C_D = .493 C_L = 1.928 T_c' = .00 q = 13.35 lb/sq ft					α = C_D = C_L = T_c' = q = lb/sq ft					α = C_D = C_L = T_c' = q = lb/sq ft					η
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-9.899	-.551		-.349	-9.685											0
2	1.5	-7.480	-5.004		-7.723												2.23
3	5.0	-4.837	-4.127		-4.058	-4.185											3.96
4	15.0	-2.499	-2.638		-2.482	-2.534											6.76
5	30.0	-1.784	-1.760		-1.795	-1.795											8.53
6	50.0	-1.183	-1.241		-1.293	-1.264											8.19
7	1.5	-.456	-.098		-.167	.040											-1.77
8	5.0	.975	.987		1.010	.987											-3.18
9	15.0				.848	.895											-5.14
10	30.0	.733	.675		.698	.687											-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.848	-.918	-.860	-.987	-.924											6.42
18	71.5		-.837	-.820		-.750											5.41
19	48.3	.670	.698	.745	.652	.635											-5.52
20	55.0	-.006	-.006	-.006	.698	.733											-5.05
21	65.0	.704	.693	.721	.698	.698											-3.92
22	69.9	.652	.629	.675	.629	.583											-0.90
23	73.4	.052	-.035	-.087	-.040	.035											2.50
24	70.0	-.797	-.918	-1.045	-1.045	-1.039											-0.95
25	72.6	-1.379	-1.304	-1.945	-1.951	-1.639											3.26
26	76.5	-.975	-.710	-1.045	-1.235	-.941											4.48
27	84.9	-.317	-.323	-.392	-.410	-.392											3.01
28	93.3	-.300	-.283	-.260	-.335	-.341											1.37
29	78.5	1.010	.999	.999	.993	.999											-2.19
30	89.5	.773	.779	.745	.739	.745											-1.07

TABLE 7

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 60$ $\delta_{f,55} = 00$ $i_w = 00$ N = 0000 rpm

ORIFICE (FIG.6)	a%	α = -8.50 C_D = .173 C_L = .513 T_c' = .00 q = 14.23 lb/sq ft					α = -4.50 C_D = .190 C_L = .837 T_c' = .00 q = 14.10 lb/sq ft					α = -.50 C_D = .223 C_L = 1.149 T_c' = .00 q = 14.16 lb/sq ft					a%
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.617	.617		.379	.476	.966	.955		.999	.933	.614	.370		.641	.652	0
2	1.5	.633	.633		.633		.033	-.033		-.005		-1.087	-1.125		-1.066		2.23
3	5.0	.087	.119		.173	.216	-.480	-.442		-.355	-.267	-1.038	-1.038		-.908	-.864	3.96
4	15.0	-.243	-.303		-.281	-.227	-.562	-.660		-.633	-.595	-.886	-1.000		-.962	-.930	6.76
5	30.0	-.530	-.519		-.525	-.498	-.698	-.759		-.753	-.649	-.957	-.968		-.984	-.951	8.53
6	50.0	-.638	-.617		-.611	-.606	-.720	-.753		-.737	-.666	-.951	-.897		-.875	-.908	8.19
7	1.5	-.736	-.752		-1.017	-.790	.169	.186		-.022	.104	.826	.805		.674	.674	-1.77
8	5.0	-.498	-.606		-.698	-.530	.076	.000		-.082	.044	.429	.419		.337	.408	-3.18
9	15.0				-.346	-.400				-.082	-.033				.158	.158	-5.14
10	30.0	-.081	-.027		-.097	-.108	.093	.076		.022	.065	.234	.141		.141	.185	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.568	-.530	-.552	-.530	-.590	-.682	-.606	-.617	-.611	-.589	-.756	-.685	-.718	-.701	-.761	6.42
18	71.5		-.552	-.552		-.600		-.611	-.617		-.382		-.620	-.669		-.712	5.41
19	48.3	.151	.162	.498	.281	.249	.327	.251	.502	.355	.087	.381	.446	.555	.408	.429	-5.52
20	55.0	-.114	-.119	-.114	.325	.319	-.071	-.082	-.098	.442	.338	-.049	-.065	-.076	.489	.451	-5.05
21	65.0	.357	.276	.362	.330	.411	.480	.344	.497	.502	.437	.527	.544	.565	.560	.571	-3.92
22	69.9	.400	.287	.319	.465	.427	.464	.387	.377	.540	.311	.527	.560	.473	.576	.576	-0.90
23	73.4	.227	.087	.054	.173	.270	.246	.131	.115	.251	.164	.299	.256	.217	.283	.364	2.50
24	70.0	-1.104	-.887	-1.006	-.882	-1.298	-1.266	-.949	-1.211	-1.042	-.753	-1.278	-1.011	-1.343	-1.245	-1.408	-0.95
25	72.6	-1.931	-1.196	-1.190	-1.287	-1.834	-1.964	-1.261	-1.310	-1.501	-1.195	-2.158	-1.093	-1.326	-1.745	-1.935	3.26
26	76.5	-.692	-.563	-.546	-.568	-.622	-.595	-.529	-.557	-.551	-.338	-.636	-.489	-.484	-.544	-.565	4.48
27	84.9	-.606	-.552	-.557	-.536	-.530	-.524	-.524	-.518	-.491	-.426	-.544	-.478	-.457	-.462	-.506	3.01
28	93.3	-.584	-.557	-.557	-.514	-.530	-.535	-.524	-.513	-.480	-.404	-.549	-.440	-.457	-.468	-.500	1.37
29	78.5	.963	.454	.644	.563	.957	.988	.535	.873	.928	.829	.984	.712	.935	.968	.973	-2.19
30	89.5	.649	.503	.741	.671	.665	.698	.573	.753	.709	.568	.701	.641	.745	.701	.701	-1.07

ORIFICE (FIG.6)	a%	α = 3.50 C_D = .269 C_L = 1.452 T_c' = .00 q = 13.80 lb/sq ft					α = 7.50 C_D = .314 C_L = 1.742 T_c' = .00 q = 13.63 lb/sq ft					α = 11.50 C_D = .380 C_L = 2.021 T_c' = .00 q = 13.36 lb/sq ft					a%
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.937	-1.477		-.825	-.591	-3.572	-4.604		-3.572	-3.318	-6.965	-8.571		-7.005	-6.136	0
2	1.5	-2.598	-2.620		-2.487		-4.029	-3.995		-4.170		-6.182	-6.251		-6.182		2.23
3	5.0	-2.085	-1.879		-1.600	-1.611	-3.081	-2.827		-2.488	-2.573	-4.144	-3.724		-3.333	-3.362	3.96
4	15.0	-1.338	-1.399		-1.360	-1.316	-1.789	-1.834		-1.794	-1.817	-2.251	-2.193		-2.153	-2.187	6.76
5	30.0	-1.215	-1.227		-1.254	-1.171	-1.478	-1.461		-1.484	-1.444	-1.727	-1.675		-1.664	-1.646	8.53
6	50.0	-1.048	-1.004		-1.009	-1.043	-1.162	-1.128		-1.134	-1.157	-1.255	-1.220		-1.215	-1.232	8.19
7	1.5	1.004	1.015		1.004	.987	.779	.812		.908	.948	.109	.178		.386	.524	-1.77
8	5.0	.814	.786		.730	.764	.982	.982		.976	.970	1.013	1.030		1.030	1.007	-3.18
9	15.0				.440	.407				.649	.643				.812	.783	-5.14
10	30.0	.385	.323		.318	.357	.542	.446		.480	.502	.656	.604		.604	.599	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.814	-.753	-.775	-.797	-.808	-.858	-.829	-.812	-.863	-.880	-.873	-.875	-.892	-.904	-.927	6.42
18	71.5		-.675	-.691		-.753		-.728	-.717		-.790		-.771	-.731		-.829	5.41
19	48.3	.491	.541	.647	.479	.524	.553	.604	.688	.581	.598	.627	.679	.720	.639	.650	-5.52
20	55.0	-.028	-.039	-.045	.558	.585	-.034	-.034	-.023	.626	.592	-.023	-.023	-.029	.708	.639	-5.05
21	65.0	.613	.619	.630	.619	.641	.655	.643	.677	.671	.660	.685	.691	.725	.714	.714	-3.92
22	69.9	.597	.624	.558	.619	.608	.609	.615	.581	.542	.598	.622	.627	.662	.650	.633	-0.90
23	73.4	.329	.262	.251	.301	.374	.327	.237	.305	.333	.339	.345	.253	.340	.351	.357	2.50
24	70.0	-1.333	-1.098	-1.366	-1.411	-1.483	-1.360	-1.202	-1.286	-1.456	-1.529	-1.405	-1.272	-1.226	-1.428	-1.594	-0.95
25	72.6	-2.147	-1.009	-1.282	-2.013	-1.929	-2.065	-1.100	-1.196	-1.873	-1.868	-1.969	-1.226	-1.099	-1.600	-1.900	3.26
26	76.5	-.630	-.446	-.463	-.552	-.608	-.609	-.434	-.418	-.480	-.615	-.593	-.443	-.386	-.409	-.679	4.48
27	84.9	-.513	-.418	-.429	-.474	-.479	-.485	-.384	-.372	-.418	-.463	-.449	-.363	-.334	-.363	-.455	3.01
28	93.3	-.491	-.401	-.407	-.468	-.474	-.446	-.395	-.344	-.429	-.468	-.426	-.363	-.328	-.363	-.449	1.37
29	78.5	1.015	.836	.970	1.009	1.015	1.004	.931	.970	1.016	.999	1.025	.979	.996	1.019	1.007	-2.19
30	89.5	.758	.736	.753	.730	.742	.779	.784	.767	.767	.767	.800	.823	.783	.777	.794	-1.07

TABLE 7.- Concluded

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30}$ = 60 $\delta_{f,55}$ = 00 i_w = 00 N = 0000 rpm

ORIFICE (FIG. 2)	$\frac{x}{c}$	α = 15.50 C_D = .523 C_L = 1.922 T_c' = .00 q = 13.22 lb/sq ft					α = C_D = C_L = T_c' = q = lb/sq ft					α = C_D = C_L = T_c' = q = lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-9.494	-.244		-1.018	-9.342											0
2	1.5	-7.737	-5.358		-7.882												2.23
3	5.0	-4.735	-3.944		-4.200	-4.119											3.96
4	15.0	-2.466	-2.885		-2.536	-2.519											6.76
5	30.0	-1.792	-1.734		-1.803	-1.803											8.53
6	50.0	-1.257	-1.193		-1.286	-1.274											8.19
7	1.5	-.611	-.239		-.273	-.017											-1.77
8	5.0	.995	.971		1.012	1.035											-3.18
9	15.0				.937	.919											-5.14
10	30.0	.745	.698		.739	.733											-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.873	-.890	-.919	-.948	-.925											6.42
18	71.5		-.809	-.849		-.739											5.41
19	48.3	.704	.733	.750	.710	.524											-5.52
20	55.0	-.000	-.012	-.035	.750	.721											-5.05
21	65.0	.745	.739	.710	.774	.762											-3.92
22	69.9	.686	.669	.669	.698	.634											-0.90
23	73.4	.384	.268	.273	.343	.343											2.50
24	70.0	-1.350	-1.425	-1.542	-1.489	-1.396											-0.95
25	72.6	-1.582	-1.396	-1.867	-1.751	-1.687											3.26
26	76.5	-.745	-.727	-.820	-.582	-.698											4.48
27	84.9	-.396	-.320	-.500	-.401	-.384											3.01
28	93.3	-.337	-.256	-.332	-.320	-.384											1.37
29	78.5	1.065	1.035	1.006	1.047	1.035											-2.19
30	89.5	.855	.884	.791	.832	.849											-1.07

TABLE 8

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 00$ N = 2355 rpm

ORIFICE (FIG.6)	x/c	α = -.56 D/L = -.519 C_L = .079 T_c' = .08 q = 17.06 lb/sq ft					α = 4.41 D/L = -.100 C_L = .482 T_c' = .10 q = 16.68 lb/sq ft					α = 9.41 D/L = -.035 C_L = .939 T_c' = .13 q = 16.35 lb/sq ft					ϕ_f
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.926	.841		.947	1.053	1.028	.922		.747	.845	-.125	-.386		-1.193	-.779	0
2	1.5	.437	.404		.212		-1.306	-1.228		-1.579		-2.005	-1.876		-2.298		2.23
3	5.0	-.114	-.033		-.127	-.135	-.775	-.653		-.710	-.731	-1.860	-1.539		-1.442	-1.619	3.96
4	15.0	-.294	-.375		-.412	-.433	-.641	-.726		-.714	-.743	-1.113	-1.133		-1.081	-1.157	6.76
5	30.0	-.441	-.473		-.526	-.486	-.677	-.645		-.686	-.677	-.944	-.916		-.896	-.892	8.53
6	50.0	-.457	-.433		-.416	-.457	-.575	-.498		-.506	-.535	-.703	-.623		-.562	-.599	8.19
7	1.5	-.482	-.531		-.445	-.171	.930	.865		.759	.918	1.109	1.032		.852	1.004	-1.77
8	5.0	-.490	-.604		-.437	-.278	.151	.057		.175	.282	.703	.663		.679	.751	-3.18
9	15.0				-.441	-.490				-.078	-.098				.297	.257	-5.14
10	30.0	-.420	-.535		-.486	-.388	-.208	-.318		-.229	-.167	.060	-.088		.028	.092	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.261	-.249	-.237	-.216	-.249	-.318	-.282	-.294	-.273	-.282	-.358	-.321	-.321	-.289	-.313	6.42
18	71.5		-.200	-.188		-.188		-.224	-.216		-.204		-.253	-.233		-.209	5.41
19	48.3	-.184	-.106	.106	-.155	-.065	-.061	-.024	.175	-.016	.078	-.012	.108	.261	.044	.104	-5.52
20	55.0	-.110	-.118	-.135	-.135	-.196	-.102	-.098	-.049	-.049	-.094	-.064	-.068	-.072	.084	.016	-5.05
21	65.0	-.139	-.082	-.008	-.078	-.082	-.061	.000	.090	-.008	.004	.028	.104	.129	.084	.080	-3.92
22	69.9	.037	.049	.224	.106	.057	.086	.114	.290	.155	.110	.153	.233	.317	.225	.181	-0.90
23	73.4	-.175	-.233	-.220	-.192	-.143	-.216	-.237	-.216	-.196	-.151	-.269	-.257	-.221	-.181	-.129	2.50
24	70.0	.037	.041	.224	.118	.073	.110	.118	.298	.171	.139	.193	.229	.321	.225	.197	-0.95
25	72.6	-.147	-.220	-.208	-.196	-.139	-.180	-.233	-.204	-.196	-.143	-.201	-.257	-.221	-.197	-.125	3.26
26	76.5	-.147	-.155	-.147	-.159	-.143	-.180	-.159	-.127	-.163	-.151	-.189	-.185	-.137	-.153	-.149	4.48
27	84.9	-.033	-.024	-.004	-.033	-.033	-.049	-.041	-.024	-.024	-.029	-.028	-.056	-.036	-.024	-.028	3.01
28	93.3	.090	.078	.094	.098	.114	.094	.073	.073	.098	.102	.096	.072	.056	.072	.096	1.37
29	78.5	.000	-.020	.049	-.008	.008	.057	.037	.118	.045	.053	.129	.112	.129	.108	.112	-2.19
30	89.5	.094	.065	.078	.082	.102	.118	.102	.118	.102	.118	.157	.165	.137	.108	.133	-1.07

ORIFICE (FIG.6)	x/c	α = 14.41 D/L = .007 C_L = 1.387 T_c' = .18 q = 16.36 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					ϕ_f
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-2.191	-3.308		-4.628	-3.665											0
2	1.5	-3.868	-3.600		-4.167												2.23
3	5.0	-2.874	-2.521		-2.276	-2.479											3.96
4	15.0	-1.527	-1.546		-1.416	-1.516											6.76
5	30.0	-1.163	-1.132		-1.032	-1.048											8.53
6	50.0	-.791	-.714		-.595	-.614											8.19
7	1.5	1.213	1.205		.729	.898											-1.77
8	5.0	1.005	1.090		.971	.990											-3.18
9	15.0				.629	.576											-5.14
10	30.0	.288	.119		.272	.303											-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.395	-.368	-.357	-.265	-.269											6.42
18	71.5		-.276	-.246		-.169											5.41
19	48.3	.138	.238	.426	.196	.246											-5.52
20	55.0	-.038	-.012	-.050	.207	.146											-5.05
21	65.0	.127	.219	.219	.169	.169											-3.92
22	69.9	.242	.349	.453	.322	.238											-0.90
23	73.4	-.292	-.272	-.249	-.187	-.107											2.50
24	70.0	.276	.345	.464	.342	.272											-0.95
25	72.6	-.223	-.272	-.242	-.161	-.111											3.26
26	76.5	-.180	-.223	-.177	-.134	-.123											4.48
27	84.9	-.027	-.050	-.065	-.096	-.061											3.01
28	93.3	.088	.084	.046	-.046	-.012											1.37
29	78.5	.203	.203	.207	.169	.173											-2.19
30	89.5	.200	.203	.146	.127	.142											-1.07

TABLE 9

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 10$ N = 2355 rpm

ORIFICE (FIG.6)	$\frac{x}{c}$	α = -10.56 D/L = -1.127 C_L = .030 T_c' = .09 q = 17.12 lb/sq ft					α = -5.51 D/L = -.100 C_L = .450 T_c' = .11 q = 16.74 lb/sq ft					α = -.51 D/L = -.037 C_L = .890 T_c' = .13 q = 16.48 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.896	.848		.933	1.026	1.010	.905		.695	.711	-.020	-.376		-1.256	-.736	0
2	1.5	.448	.432		.254		-.448	-.408		-.727		-1.903	-1.803		-2.239		2.23
3	5.0	-.117	-.028		-.113	-.105	-.772	-.683		-.735	-.828	-1.727	-1.543		-1.467	-1.559	3.96
4	15.0	-.287	-.359		-.400	-.396	-.630	-.743		-.739	-.776	-1.060	-1.160		-1.088	-1.128	6.76
5	30.0	-.432	-.452		-.517	-.472	-.671	-.683		-.711	-.687	-.900	-.928		-.904	-.872	8.53
6	50.0	-.448	-.420		-.400	-.440	-.574	-.513		-.489	-.533	-.688	-.644		-.572	-.612	8.19
7	1.5	-.513	-.549		-.460	-.190	.489	.392		.432	.618	1.104	1.028		.852	1.012	-1.77
8	5.0	-.521	-.638		-.485	-.307	.137	.069		.190	.352	.680	.664		.700	.736	-3.18
9	15.0				-.444	-.521				-.053	-.053				.316	.260	-5.14
10	30.0	-.440	-.529		-.497	-.400	-.186	-.303		-.222	-.129	.048	-.088		.052	.088	-6.25
11	45.0																-2.59
12	46.6																•1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.258	-.226	-.230	-.210	-.234	-.307	-.295	-.287	-.271	-.275	-.352	-.340	-.324	-.296	-.308	6.42
18	71.5		-.186	-.186		-.174		-.218	-.218		-.170		-.272	-.252		-.208	5.41
19	48.3	-.206	-.085	.105	-.186	-.052	-.162	-.016	.093	-.073	.024	-.028	.096	.280	.068	.096	-5.52
20	55.0	-.129	-.133	-.133	-.137	-.206	-.089	-.077	-.101	-.036	-.093	-.056	-.064	-.068	.088	.024	-5.05
21	65.0	-.149	-.057	-.000	-.073	-.073	-.061	.016	.053	-.008	.004	.024	.104	.124	.088	.080	-3.92
22	69.9	.008	.065	.246	.097	.048	.097	.149	.234	.162	.121	.152	.256	.320	.248	.176	-0.90
23	73.4	-.182	-.210	-.214	-.202	-.141	-.210	-.222	-.230	-.206	-.117	-.264	-.248	-.240	-.176	-.128	2.50
24	70.0	.020	.048	.234	.105	.081	.121	.149	.230	.166	.154	.196	.264	.308	.248	.200	-0.95
25	72.6	-.153	-.222	-.210	-.218	-.141	-.170	-.230	-.226	-.198	-.129	-.196	-.252	-.232	-.180	-.128	3.26
26	76.5	-.157	-.145	-.149	-.153	-.121	-.174	-.149	-.149	-.174	-.125	-.180	-.192	-.152	-.144	-.132	4.48
27	84.9	-.057	-.028	-.020	-.020	-.024	-.048	-.028	-.036	-.020	-.016	-.040	-.040	-.044	-.020	-.024	3.01
28	93.3	.077	.085	.085	.081	.097	.097	.089	.085	.089	.129	.104	.092	.060	.068	.092	1.37
29	78.5	-.004	-.016	.032	-.008	.016	.065	.053	.081	.044	.069	.132	.132	.120	.116	.116	-2.19
30	89.5	.085	.057	.085	.073	.089	.133	.113	.097	.093	.121	.152	.152	.116	.112	.112	-1.07

ORIFICE (FIG.6)	$\frac{x}{c}$	α = 4.46 D/L = .000 C_L = 1.343 T_c' = .18 q = 16.39 lb/sq ft					α = 9.48 D/L = .046 C_L = 1.794 T_c' = .41 q = 16.12 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-1.984	-2.966		-4.346	-3.505	-4.196	-5.483		-7.170	-6.105						0
2	1.5	-3.555	-3.207		-3.811		-4.596	-4.568		-5.049							2.23
3	5.0	-2.752	-2.408		-2.171	-2.416	-3.224	-2.846		-2.496	-2.787						3.96
4	15.0	-1.464	-1.483		-1.364	-1.483	-1.590	-1.559		-1.356	-1.518						6.76
5	30.0	-1.112	-1.078		-1.001	-1.024	-1.119	-1.059		-.800	-.875						8.53
6	50.0	-.764	-.680		-.596	-.608	-.744	-.656		-.412	-.425						8.19
7	1.5	1.231	1.223		.791	.959	.081	.837		.237	.444						-1.77
8	5.0	.994	1.074		.986	.994	.712	1.081		.947	.922						-3.18
9	15.0				.615	.566				.712	.644						-5.14
10	30.0	.275	.103		.256	.290	.356	.222		.369	.369						-6.25
11	45.0																-2.59
12	46.6																•1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.378	-.352	-.336	-.271	-.268	-.378	-.362	-.353	-.362	-.375						6.42
18	71.5		-.279	-.252		-.183		-.281	-.309		-.387						5.41
19	48.3	.122	.233	.436	.172	.226	.181	.275	.378	.241	.156						-5.52
20	55.0	-.046	-.046	-.057	.199	.168	-.031	-.031	-.019	.247	.172						-5.05
21	65.0	.115	.214	.218	.168	.187	.150	.225	.231	.209	.172						-3.92
22	69.9	.214	.367	.455	.325	.222	.209	.394	.447	.328	.156						-0.90
23	73.4	-.290	-.252	-.226	-.153	-.096	-.344	-.269	-.303	-.294	-.306						2.50
24	70.0	.279	.363	.455	.340	.268	.241	.394	.444	.337	.197						-0.95
25	72.6	-.214	-.252	-.233	-.141	-.099	-.247	-.266	-.297	-.281	-.281						3.26
26	76.5	-.187	-.203	-.153	-.118	-.130	-.197	-.194	-.241	-.319	-.344						4.48
27	84.9	-.023	-.034	-.057	-.069	-.065	-.056	-.075	-.175	-.275	-.253						3.01
28	93.3	.092	.099	.054	-.015	.011	.056	.056	-.075	-.191	-.169						1.37
29	78.5	.191	.206	.191	.164	.180	.194	.203	.197	.162	.141						-2.19
30	89.5	.191	.203	.145	.130	.153	.169	.181	.144	.100	.094						-1.07

TABLE 10

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 0^0$ $\delta_{f,55} = 0^0$ $i_w = 2^0$ N = 2178 rpm

ORIFICE (FIG.6)	$\frac{x}{c}$	α = -10.65 D/L = -.137 C_L = .803 T_c' = .22 q = 12.61 lb/sq ft					α = -5.63 D/L = -.055 C_L = 1.313 T_c' = .26 q = 12.50 lb/sq ft					α = -.63 D/L = -.005 C_L = 1.873 T_c' = .52 q = 12.11 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.348	.238		-.648	-.448	-1.128	-1.867		-3.507	-3.004	-3.167	-4.497		-6.303	-9.280	0
2	1.5	-1.377	-1.286		-1.882		-3.165	-2.847		-3.595		-3.839	-3.893		-4.638		2.23
3	5.0	-1.405	-1.167		-1.191	-1.415	-2.329	-1.996		-1.913	-2.246	-2.881	-2.596		-2.349	-2.570	3.96
4	15.0	-.919	-.943		-.924	-1.048	-1.271	-1.308		-1.252	-1.396	-1.460	-1.490		-1.330	-1.452	6.76
5	30.0	-.815	-.791		-.781	-.810	-1.017	-.989		-.938	-.980	-1.045	-1.019		-.852	-.886	8.53
6	50.0	-.629	-.557		-.505	-.562	-.712	-.638		-.559	-.582	-.699	-.635		-.414	-.399	8.19
7	1.5	.962	.876		.810	.996	1.215	1.206		.795	.989	.490	.939		.365	.582	-1.77
8	5.0	.572	.505		.600	.700	.887	.961		.943	.966	.737	1.034		.935	.920	-3.18
9	15.0				.257	.224				.559	.527	-.046			.684	.608	-5.14
10	30.0	.014	-.105		.010	.057	.213	.051		.226	.263	.312	.182		.350	.342	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.319	-.286	-.281	-.252	-.276	-.365	-.342	-.333	-.273	-.259	-.350	-.350	-.327	-.312	-.323	6.42
18	71.5		-.219	-.205		-.162		-.268	-.259		-.152		-.281	-.266		-.266	5.41
19	48.3	-.052	.086	.157	.043	.138	.092	.189	.384	.176	.213	.190	.247	.346	.232	.232	-5.52
20	55.0	-.081	-.081	-.095	.067	.014	-.046	-.055	-.065	.171	.120	-.030	-.027	-.027	.232	.194	-5.05
21	65.0	.000	.095	.100	.067	.076	.083	.180	.176	.152	.162	.129	.220	.220	.194	.179	-3.92
22	69.9	.138	.205	.281	.200	.176	.231	.310	.407	.300	.231	.258	.354	.407	.319	.236	-0.90
23	73.4	-.210	-.229	-.214	-.171	-.114	-.273	-.254	-.250	-.134	-.083	-.285	-.270	-.270	-.251	-.224	2.50
24	70.0	.200	.205	.291	.214	.205	.254	.310	.402	.305	.263	.274	.346	.411	.335	.266	-0.95
25	72.6	-.176	-.224	-.205	-.152	-.105	-.189	-.263	-.245	-.120	-.088	-.220	-.258	-.266	-.243	-.213	3.26
26	76.5	-.176	-.171	-.138	-.124	-.119	-.185	-.217	-.171	-.106	-.102	-.190	-.198	-.186	-.258	-.251	4.48
27	84.9	-.038	-.029	-.029	.000	.000	-.037	-.032	-.060	-.009	-.028	-.046	-.057	-.103	-.201	-.194	3.01
28	93.3	.110	.091	.067	.086	.124	.111	.092	.074	.042	.032	.076	.080	.011	-.110	-.106	1.37
29	78.5	.133	.119	.119	.114	.114	.171	.171	.180	.162	.162	.175	.205	.198	.175	.163	-2.19
30	89.5	.133	.148	.119	.114	.129	.171	.171	.152	.139	.148	.179	.186	.167	.122	.122	-1.07

ORIFICE (FIG.6)	$\frac{x}{c}$	α = 4.41 D/L = .074 C_L = 1.964 T_c' = .64 q = 11.85 lb/sq ft					α = 9.42 D/L = .148 C_L = 1.941 T_c' = .67 q = 11.63 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-4.997	-5.615		-7.230	-5.068	-6.376	-6.586		-4.616	-4.136						0
2	1.5	-4.129	-4.445		-5.021		-4.495	-4.780		-1.604							2.23
3	5.0	-2.930	-2.749		-2.191	-2.002	-2.870	-2.888		-1.326	-1.284						3.96
4	15.0	-1.415	-1.465		-1.078	-.996	-1.437	-1.412		-1.294	-.651						6.76
5	30.0	-.964	-.999		-.676	-.701	-.903	-.789		-.825	-.466						8.53
6	50.0	-.683	-.647		-.537	-.512	-.605	-.548		-.477	-.459						8.19
7	1.5	-.270	.768		.153	.473	-.704	.779		.484	.715						-1.77
8	5.0	.530	1.085		.971	.896	.484	1.166		1.070	.946						-3.18
9	15.0				.743	.580				.797	.590						-5.14
10	30.0	.309	.213		.377	.324	.381	.260		.405	.359						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.413	-.388	-.366	-.441	-.452	-.352	-.462	-.491	-.452	-.445						6.42
18	71.5		-.327	-.306		-.491		-.420	-.473		-.445						5.41
19	48.3	.114	.256	.356	.217	.057	.203	.277	.377	.252	.263						-5.52
20	55.0	-.014	-.014	-.018	.228	.135	-.007	-.014	-.011	.235	.160						-5.05
21	65.0	.103	.206	.213	.167	.124	.153	.206	.206	.164	.139						-3.92
22	69.9	.142	.363	.427	.295	.103	.203	.356	.420	.313	.160						-0.90
23	73.4	-.477	-.320	-.317	-.413	-.366	-.437	-.405	-.462	-.413	-.395						2.50
24	70.0	.171	.352	.423	.306	.153	.238	.356	.469	.334	.217						-0.95
25	72.6	-.349	-.320	-.309	-.402	-.341	-.334	-.395	-.459	-.420	-.373						3.26
26	76.5	-.299	-.256	-.231	-.413	-.398	-.281	-.384	-.427	-.448	-.402						4.48
27	84.9	-.171	-.139	-.156	-.409	-.338	-.203	-.356	-.395	-.452	-.427						3.01
28	93.3	-.057	-.018	-.050	-.366	-.295	-.117	-.270	-.405	-.437	-.409						1.37
29	78.5	.128	.167	.171	.110	.078	.153	.139	.124	.100	.096						-2.19
30	89.5	.107	.139	.135	.032	.018	.100	.064	.007	-.036	-.014						-1.07

TABLE 11

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 0^0$ $\delta_{f,55} = 0^0$ $i_w = 3^0$ N = 2260 rpm

ORIFICE (FIG.6)	$\frac{x}{c}$	α = -10.85 D/L = -.193 C_L = 2.187 T_c' = 1.05 q = 8.03 lb/sq ft					α = -.56 D/L = -.005 C_L = 2.920 T_c' = 1.49 q = 7.63 lb/sq ft					α = 4.61 D/L = .059 C_L = 3.188 T_c' = 1.60 q = 7.22 lb/sq ft					$\frac{x}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	+1.168	+2.373		-5.295	-3.970	-3.970	-4.667		-6.757	-3.239	-4.968	-5.599		-4.889	-3.161	0
2	1.5	+2.551	+2.486		-3.808		-3.212	-3.795		-4.430		-2.562	-4.439		-4.729		2.23
3	5.0	+2.045	+1.888		-1.985	-2.296	-2.268	-2.402		-1.983	-1.211	-2.115	-2.666		-1.288	-1.084	3.96
4	15.0	+1.055	+1.160		-1.136	-1.277	-1.160	-1.290		-.920	-.501	-1.167	-1.357		-1.233	-.537	6.76
5	30.0	-.800	-.837		-.788	-.821	-.748	-.892		-.535	-.405	-.731	-.782		-.717	-.419	8.53
6	50.0	-.598	-.554		-.477	-.461	-.501	-.576		-.467	-.429	-.460	-.488		-.447	-.419	8.19
7	1.5	.667	1.067		.582	.881	-.549	.878		.323	.752	-.762	.900		.384	.235	-1.77
8	5.0	.534	.966		.974	.978	.281	1.060		1.026	.779	.184	1.174		1.132	.582	-3.18
9	15.0				.659	.538				.745	.426				.769	.360	-5.14
10	30.0	.210	.093		.299	.275	.268	.165		.357	.281	.284	.166		.364	.274	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.311	-.307	-.287	-.247	-.190	-.275	-.336	-.350	-.405	-.408	-.291	-.384	-.377	-.436	-.412	6.42
18	71.5		-.247	-.230		-.117		-.292	-.336		-.384		-.367	-.381		-.405	5.41
19	48.3	.109	.218	.247	.190	.222	.182	.230	.329	.237	.268	.197	.242	.294	.242	.263	-5.52
20	55.0	-.016	-.012	-.036	.202	.137	-.003	-.003	-.007	.223	.154	.007	-.003	.007	.225	.170	-5.05
21	65.0	.105	.198	.226	.174	.170	.148	.199	.189	.165	.161	.163	.194	.187	.159	.170	-3.92
22	69.9	.210	.319	.348	.327	.243	.199	.347	.384	.312	.172	.177	.339	.467	.339	.190	-0.90
23	73.4	-.251	-.251	-.251	-.162	-.065	-.281	-.288	-.347	-.408	-.316	-.315	-.336	-.374	-.412	-.367	2.50
24	70.0	.234	.315	.340	.336	.271	.216	.336	.429	.329	.226	.204	.339	.464	.360	.246	-0.95
25	72.6	-.182	-.251	-.251	-.174	-.057	-.202	-.271	-.343	-.401	-.305	-.239	-.336	-.374	-.409	-.350	3.26
26	76.5	-.182	-.178	-.198	-.125	-.081	-.165	-.209	-.251	-.391	-.357	-.184	-.305	-.291	-.429	-.384	4.48
27	84.9	-.049	-.044	-.073	-.044	-.024	-.075	-.096	-.240	-.401	-.357	-.128	-.270	-.277	-.429	-.381	3.01
28	93.3	.093	.089	.040	.053	.028	-.010	.021	-.127	-.343	-.323	-.083	-.184	-.194	-.388	-.374	1.37
29	78.5	.166	.178	.178	.170	.170	.172	.175	.154	.137	.127	.163	.159	.152	.118	.125	-2.19
30	89.5	.178	.198	.158	.141	.146	.151	.158	.100	.065	.058	.128	.121	.097	.028	.052	-1.07

ORIFICE (FIG.6)	$\frac{x}{c}$	α = 9.74 D/L = .119 C_L = 3.295 T_c' = 1.82 q = 6.96 lb/sq ft					α = 14.66 D/L = .159 C_L = 3.129 T_c' = 1.85 q = 6.88 lb/sq ft					α = D/L = C_L = . T_c' = q = lb/sq ft					$\frac{x}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	+3.687	+5.130		+4.541	+2.614	-2.967	-3.173		-3.491	-1.780						0
2	1.5	+1.564	+4.037		+1.613		-1.168	-1.731		-.913							2.23
3	5.0	+1.423	+2.274		+1.178	-.602	-1.135	-.864		-.680	-.429						3.96
4	15.0	+1.184	+1.145		+1.001	-.448	-1.073	-.690		-.556	-.379						6.76
5	30.0	-.746	-.644		-.608	-.419	-.690	-.494		-.465	-.360						8.53
6	50.0	-.455	-.471		-.468	-.419	-.474	-.458		-.425	-.370						8.19
7	1.5	-.697	.981		.707	-.033	-.540	1.188		.909	-.016						-1.77
8	5.0	.128	1.161		1.135	.330	.173	1.138		1.086	.311						-3.18
9	15.0				.713	.291				.628	.301						-5.14
10	30.0	.314	.144		.343	.265	.291	.167		.330	.281						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.330	-.435	-.442	-.442	-.412	-.412	-.471	-.432	-.419	-.366						6.42
18	71.5		-.406	-.435		-.393		-.484	-.432		-.363						5.41
19	48.3	.213	.222	.258	.170	.239	.209	.229	.206	.180	.255						-5.52
20	55.0	.003	.007	.000	.193	.164	.000	.000	.000	.209	.180						-5.05
21	65.0	.160	.167	.164	.144	.157	.157	.170	.154	.150	.164						-3.92
22	69.9	.134	.327	.399	.304	.170	.088	.340	.353	.265	.150						-0.90
23	73.4	-.379	-.383	-.399	-.402	-.389	-.550	-.438	-.419	-.383	-.327						2.50
24	70.0	.170	.321	.393	.317	.226	.131	.334	.357	.275	.190						-0.95
25	72.6	-.294	-.366	-.396	-.393	-.366	-.445	-.438	-.406	-.379	-.321						3.26
26	76.5	-.242	-.379	-.396	-.422	-.409	-.386	-.465	-.432	-.393	-.343						4.48
27	84.9	-.206	-.321	-.386	-.422	-.399	-.337	-.442	-.435	-.393	-.347						3.01
28	93.3	-.154	-.304	-.347	-.396	-.389	-.281	-.406	-.409	-.383	-.343						1.37
29	78.5	.141	.131	.121	.092	.105	.128	.118	.095	.092	.105						-2.19
30	89.5	.085	.079	.039	-.007	.029	.052	.046	.013	-.010	.026						-1.07

TABLE 12

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 40$ N = 2290 rpm

ORIFICE (FIG.6)	x/c	α = -10.51 D/L = -.167 C_L = 4.412 T_c' = 2.93 q = 4.52 lb/sq ft					α = -4.92 D/L = -.065 C_L = 4.973 T_c' = 3.08 q = 4.18 lb/sq ft					α = .43 D/L = .006 C_L = 5.284 T_c' = 3.50 q = 3.98 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	+1.304	+2.641		-5.697	-4.164	-2.177	-3.502		-6.100	-4.157	-3.026	-3.476		-4.411	-2.753	0
2	1.5	+1.643	+2.404		-3.846		-2.089	-3.128		-4.248		-2.095	-3.116		-3.182		2.23
3	5.0	+1.361	+1.777		-1.893	-2.274	-1.526	-2.086		-1.921	-1.486	-1.475	-1.932		-1.125	-.665	3.96
4	15.0	-.772	+1.019		-1.019	-1.121	-.849	-1.149		-.911	-.849	-.803	-.966		-.616	-.526	6.76
5	30.0	-.585	-.712		-.680	-.649	-.626	-.787		-.589	-.637	-.575	-.602		-.492	-.478	8.53
6	50.0	-.398	-.448		-.423	-.367	-.421	-.516		-.413	-.450	-.412	-.436		-.429	-.464	8.19
7	1.5	.067	.962		.455	.716	-.315	1.028		.545	.366	-.551	1.014		.689	.180	-1.77
8	5.0	.204	.895		.966	.716	.172	1.003		1.072	.542	.087	1.039		1.070	.398	-3.18
9	15.0				.642	.345				.651	.285				.637	.215	-5.14
10	30.0	.173	.053		.268	.219	.194	.062		.282	.216	.208	.069		.294	.184	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.208	-.240	-.254	-.226	-.152	-.216	-.267	-.274	-.322	-.329	-.246	-.346	-.388	-.395	-.409	6.42
18	71.5		-.194	-.201		-.088		-.216	-.212		-.293		-.325	-.360		-.374	5.41
19	48.3	.120	.176	.208	.197	.222	.165	.183	.227	.205	.241	.166	.197	.201	.166	.229	-5.52
20	55.0	.007	-.004	.004	.190	.141	.007	.011	.011	.179	.143	.007	.014	.000	.170	.145	-5.05
21	65.0	.106	.162	.166	.155	.155	.150	.172	.176	.150	.183	.132	.166	.149	.132	.142	-3.92
22	69.9	.176	.317	.345	.303	.229	.084	.322	.381	.282	.198	.132	.315	.319	.294	.177	-0.90
23	73.4	-.190	-.208	-.215	-.162	-.060	-.183	-.209	-.234	-.252	-.194	-.211	-.301	-.343	-.315	-.284	2.50
24	70.0	.197	.303	.324	.314	.264	.190	.340	.402	.326	.256	.166	.346	.350	.315	.211	-0.95
25	72.6	-.134	-.197	-.222	-.166	-.046	-.132	-.223	-.241	-.252	-.183	-.152	-.305	-.350	-.308	-.280	3.26
26	76.5	-.099	-.137	-.162	-.130	-.056	-.084	-.154	-.161	-.252	-.212	-.125	-.263	-.291	-.367	-.325	4.48
27	84.9	-.021	-.018	-.053	-.042	.014	-.026	-.048	-.088	-.209	-.124	-.035	-.215	-.256	-.291	-.325	3.01
28	93.3	.042	.078	.060	.056	.071	.033	.059	.022	-.113	-.139	.007	-.125	-.170	-.256	-.270	1.37
29	78.5	.141	.152	.152	.152	.155	.157	.161	.161	.132	.143	.138	.152	.132	.118	.121	-2.19
30	89.5	.137	.152	.152	.127	.145	.132	.154	.128	.095	.121	.114	.125	.083	.052	.073	-1.07

ORIFICE (FIG.6)	x/c	α = 5.78 D/L = .071 C_L = 5.451 T_c' = 3.69 q = 3.86 lb/sq ft					α = 16.27 D/L = .179 C_L = 5.410 T_c' = 3.98 q = 3.75 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	+3.491	+3.485		-3.819	-2.152	-2.337	-2.832		-2.717	-.845						0
2	1.5	+2.190	+3.143		-1.609		-1.070	-2.915		-.832							2.23
3	5.0	+1.414	+1.920		-.820	-.543	-.924	-1.733		-.548	-.340						3.96
4	15.0	-.813	-.939		-.577	-.454	-.766	-.700		-.423	-.324						6.76
5	30.0	-.560	-.581		-.502	-.444	-.522	-.376		-.357	-.333						8.53
6	50.0	-.383	-.465		-.465	-.424	-.324	-.337		-.343	-.324						8.19
7	1.5	-.779	1.056		.834	.014	-.621	.961		.578	-.132						-1.77
8	5.0	.007	.998		1.039	.284	.007	.693		.647	.135						-3.18
9	15.0				.594	.188				.376	.172						-5.14
10	30.0	.225	.061		.280	.184	.201	.135		.228	.191						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.239	-.396	-.448	-.434	-.393	-.238	-.317	-.370	-.333	-.317						6.42
18	71.5		-.376	-.441		-.369		-.317	-.370		-.314						5.41
19	48.3	.188	.184	.205	.147	.219	.175	.201	.201	.168	.178						-5.52
20	55.0	-.007	-.003	-.000	.167	.147	.003	.000	.003	.165	.149						-5.05
21	65.0	.147	.140	.140	.130	.143	.145	.142	.155	.145	.132						-3.92
22	69.9	.133	.338	.359	.270	.140	.102	.271	.274	.178	.079						-0.90
23	73.4	-.215	-.348	-.386	-.362	-.307	-.224	-.264	-.330	-.300	-.277						2.50
24	70.0	.164	.335	.321	.287	.191	.119	.271	.261	.195	.106						-0.95
25	72.6	-.150	-.348	-.383	-.355	-.297	-.178	-.264	-.320	-.297	-.277						3.26
26	76.5	-.137	-.342	-.400	-.393	-.335	-.162	-.267	-.350	-.317	-.294						4.48
27	84.9	-.055	-.294	-.366	-.366	-.325	-.135	-.228	-.327	-.297	-.297						3.01
28	93.3	-.007	-.191	-.318	-.318	-.307	-.116	-.205	-.274	-.271	-.290						1.37
29	78.5	.143	.143	.113	.106	.113	.125	.132	.122	.112	.099						-2.19
30	89.5	.116	.106	.058	.048	.061	.089	.089	.073	.063	.050						-1.07

TABLE 13

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 50$ N = 2522 rpm

ORIFICE (FIG.6)	$\frac{x}{c}$	α = -9.06 D/L = -.101 C_L = 7.781 T_c' = 5.86 q = 2.95 lb/sq ft					α = -3.31 D/L = -.018 C_L = 8.295 T_c' = 6.28 q = 2.79 lb/sq ft					α = 2.48 D/L = .070 C_L = 8.575 T_c' = 6.54 q = 2.67 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.241	-1.779		-4.728	-4.489	-.231	-1.936		-4.295	-3.221	-.498	-2.112		-3.952	-2.155	0
2	1.5	-.975	-2.051		-3.518		-1.084	-2.310		-3.400		-1.143	-2.445		-2.943		2.23
3	5.0	-1.060	-1.507		-1.745	-1.999	-1.198	-1.598		-1.580	-.861	-1.180	-1.690		-1.336	-.630	3.96
4	15.0	-.682	-.899		-.969	-.950	-.718	-.928		-.791	-.658	-.746	-.935		-.639	-.550	6.76
5	30.0	-.565	-.648		-.642	-.562	-.584	-.664		-.502	-.554	-.584	-.645		-.483	-.489	8.53
6	50.0	-.406	-.431		-.385	-.318	-.447	-.435		-.362	-.414	-.455	-.410		-.394	-.397	8.19
7	1.5	.232	.999		.669	.223	.210	1.062		.752	.076	.183	1.073		.782	-.076	-1.77
8	5.0	.196	.798		.944	.440	.186	.788		.938	.298	.171	.755		.899	.196	-3.18
9	15.0				.544	.208				.524	.152				.504	.141	-5.14
10	30.0	.134	-.009		.223	.162	.134	.021		.234	.152	.119	.046		.220	.153	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.226	-.226	-.235	-.211	-.193	-.247	-.237	-.250	-.280	-.304	-.257	-.257	-.321	-.355	-.336	6.42
18	71.5		-.183	-.189		-.150		-.189	-.216		-.265		-.220	-.303		-.318	5.41
19	48.3	.116	.141	.232	.162	.202	.119	.149	.167	.122	.192	.116	.156	.144	.095	.196	-5.52
20	55.0	.006	.012	.043	.144	.119	.006	.015	.009	.122	.140	.000	.009	.021	.119	.122	-5.05
21	65.0	.113	.134	.144	.107	.138	.116	.125	.116	.097	.140	.113	.119	.101	.104	.119	-3.92
22	69.9	.104	.281	.355	.275	.229	.113	.265	.317	.250	.146	.092	.266	.266	.232	.131	-0.90
23	73.4	-.159	-.205	-.211	-.174	-.113	-.177	-.207	-.231	-.237	-.177	-.196	-.217	-.300	-.287	-.241	2.50
24	70.0	.144	.272	.355	.287	.260	.122	.271	.301	.259	.231	.116	.263	.260	.235	.177	-0.95
25	72.6	-.122	-.199	-.211	-.171	-.101	-.143	-.207	-.228	-.234	-.170	-.147	-.217	-.284	-.278	-.241	3.26
26	76.5	-.119	-.141	-.174	-.125	-.125	-.143	-.149	-.164	-.234	-.207	-.144	-.138	-.254	-.296	-.284	4.48
27	84.9	-.028	-.034	-.052	-.052	-.073	-.055	-.033	-.107	-.170	-.155	-.061	-.098	-.150	-.189	-.244	3.01
28	93.3	.061	.058	.043	.003	-.024	.040	.043	-.003	-.097	-.140	.037	-.012	-.119	-.174	-.226	1.37
29	78.5	.122	.131	.125	.101	.128	.119	.122	.113	.091	.122	.125	.119	.104	.101	.095	-2.19
30	89.5	.119	.131	.119	.095	.110	.116	.122	.094	.064	.097	.116	.119	.070	.073	.064	-1.07

ORIFICE (FIG.6)	$\frac{x}{c}$	α = 8.17 D/L = .133 C_L = 8.852 T_c' = 6.96 q = 2.55 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.314	-1.851		-3.226	-1.558											0
2	1.5	-1.121	-2.452		-2.646												2.23
3	5.0	-1.148	-1.649		-.957	-.495											3.96
4	15.0	-.716	-.894		-.510	-.417											6.76
5	30.0	-.571	-.589		-.438	-.399											8.53
6	50.0	-.432	-.381		-.384	-.365											8.19
7	1.5	.148	1.012		.719	-.130											-1.77
8	5.0	.160	.637		.794	.163											-3.18
9	15.0				.393	.115											-5.14
10	30.0	.124	.072		.160	.130											-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.245	-.266	-.317	-.375	-.329											6.42
18	71.5		-.236	-.293		-.302											5.41
19	48.3	.118	.145	.121	.109	.163											-5.52
20	55.0	.015	.015	.009	.115	.115											-5.05
21	65.0	.112	.121	.136	.094	.103											-3.92
22	69.9	.082	.239	.220	.139	.091											-0.90
23	73.4	-.178	-.227	-.275	-.296	-.245											2.50
24	70.0	.097	.251	.223	.160	.115											-0.95
25	72.6	-.145	-.230	-.272	-.293	-.236											3.26
26	76.5	-.145	-.160	-.245	-.335	-.275											4.48
27	84.9	-.060	-.124	-.196	-.281	-.269											3.01
28	93.3	.027	-.033	-.115	-.220	-.242											1.37
29	78.5	.109	.124	.103	.094	.088											-2.19
30	89.5	.106	.103	.069	.069	.057											-1.07

TABLE 14

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 60$ N = 2631 rpm

ORIFICE (FIG.6)	$\frac{x}{c}$	α = -6.55 D/L = -.030 C_L =14.501 T_c' =12.12 q = 1.56 lb/sq ft					α = -.15 D/L = .051 C_L = 15.784 T_c' = 13.34 q = 1.42 lb/sq ft					α = 6.20 D/L = .156 C_L = 16.266 T_c' = 13.99 q = 1.35 lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.591	-.659		-3.220	-3.641	.590	-.665		-3.106	-3.707	.652	-.528		-2.961	-3.622	0
2	1.5	-.659	-1.318		-2.856		-.593	-1.346		-2.773		-.492	-1.322		-2.682		2.23
3	5.0	-.771	-1.009		-1.412	-1.665	-.747	-1.001		-1.378	-1.608	-.652	-.963		-1.328	-1.556	3.96
4	15.0	-.482	-.659		-.823	-.818	-.487	-.651		-.800	-.797	-.430	-.646		-.794	-.779	6.76
5	30.0	-.444	-.512		-.571	-.473	-.438	-.499		-.555	-.482	-.397	-.495		-.545	-.453	8.53
6	50.0	-.368	-.356		-.359	-.265	-.379	-.344		-.368	-.283	-.350	-.344		-.362	-.273	8.19
7	1.5	.503	.909		.768	-.029	.452	.919		.762	-.137	.430	.919		.765	-.053	-1.77
8	5.0	.197	.615		.812	.235	.161	.607		.782	.213	.172	.563		.759	.219	-3.18
9	15.0				.426	.141				.409	.108				.370	.095	-5.14
10	30.0	.029	-.047		.165	.126	.020	-.032		.146	.093	.018	-.018		.124	.092	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.194	-.185	-.185	-.224	-.132	-.201	-.181	-.190	-.222	-.155	-.190	-.172	-.193	-.225	-.142	6.42
18	71.5		-.168	-.156		-.103		-.146	-.093		-.117		-.136	-.160		-.110	5.41
19	48.3	.053	.100	.135	.076	.159	.050	.076	.114	.070	.137	.056	.101	.095	.065	.133	-5.52
20	55.0	.006	.000	.006	.088	.088	.047	.102	.003	.076	.067	.012	.012	.009	.080	.071	-5.05
21	65.0	.059	.088	.091	.071	.091	.108	.090	.085	.073	.073	.142	.092	.083	.071	.101	-3.92
22	69.9	.141	.212	.235	.229	.176	.096	.204	.207	.187	.108	.130	.166	.172	.148	.056	-0.90
23	73.4	-.159	-.197	-.203	-.188	-.074	-.178	-.184	-.198	-.178	-.090	-.163	-.184	-.204	-.178	-.065	2.50
24	70.0	.159	.209	.238	.241	.200	.149	.198	.201	.198	.158	.163	.196	.175	.160	.142	-0.95
25	72.6	-.132	-.197	-.197	-.179	-.071	-.140	-.184	-.201	-.175	-.090	-.133	-.190	-.202	-.178	-.071	3.26
26	76.5	-.126	-.135	-.135	-.159	-.074	-.131	-.123	-.126	-.152	-.085	-.119	-.056	-.133	-.124	-.068	4.48
27	84.9	-.035	-.032	-.044	-.082	-.026	-.050	-.026	-.044	-.090	-.038	-.039	.009	-.050	-.021	-.018	3.01
28	93.3	.053	.041	.068	-.009	.003	.044	.044	.096	-.015	.015	.047	.033	.015	-.018	.030	1.37
29	78.5	.103	.088	.088	.071	.085	.076	.088	.088	.076	.067	.107	.089	.080	.080	.074	-2.19
30	89.5	.115	.106	.085	.074	.079	.096	.105	.088	.076	.055	.107	.092	.080	.077	.077	-1.07

ORIFICE (FIG.6)	$\frac{x}{c}$	α =13.48 D/L = .265 C_L =16.675 T_c' =14.83 q = 1.30 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α = D/L = C_L = . T_c' = q = lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.633	-.507		-2.902	-3.458											0
2	1.5	-.428	-1.265		-2.612												2.23
3	5.0	-.618	-.969		-1.312	-1.435											3.96
4	15.0	-.407	-.630		-.779	-.717											6.76
5	30.0	-.404	-.486		-.551	-.422											8.53
6	50.0	-.334	-.328		-.363	-.246											8.19
7	1.5	.398	.902		.688	-.108											-1.77
8	5.0	.152	.539		.674	.117											-3.18
9	15.0				.302	.053											-5.14
10	30.0	.023	-.018		.100	.094											-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.193	-.158	-.179	-.225	-.141											6.42
18	71.5		-.138	-.149		-.120											5.41
19	48.3	.053	.097	.088	.059	.111											-5.52
20	55.0	.020	.003	.023	.073	.076											-5.05
21	65.0	.061	.091	.111	.082	.076											-3.92
22	69.9	.129	.199	.143	.061	.082											-0.90
23	73.4	-.132	-.187	-.187	-.196	-.082											2.50
24	70.0	.143	.205	.164	.123	.100											-0.95
25	72.6	-.120	-.176	-.184	-.190	-.076											3.26
26	76.5	-.111	-.123	-.105	-.158	-.070											4.48
27	84.9	-.044	-.032	-.026	-.088	-.029											3.01
28	93.3	.047	.041	.018	-.018	.044											1.37
29	78.5	.097	.097	.079	.073	.070											-2.19
30	89.5	.094	.064	.079	.070	.064											-1.07

TABLE 15

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 70$ N = 2822 rpm

ORIFICE (FIG. 2)	$\frac{x}{c}$	α = -5.15 D/L = -.089 C_L = 27.976 T_c' = 26.63 q = .75 lb/sq ft					α = 1.83 D/L = .034 C_L = 27.341 T_c' = 25.87 q = .76 lb/sq ft					α = 8.34 D/L = .144 C_L = 24.815 T_c' = 23.72 q = .83 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.921	.669		-1.579	-.994	.887	.651		-1.457	-.904	.934	.695		-1.920	-1.108	0
2	1.5	.130	.168		-1.845		.128	.119		-1.937		.108	.090		-1.990		2.23
3	5.0	-.168	-.067		-.884	-1.176	-.137	-.047		-.852	-1.154	-.175	-.215		-.995	-1.170	3.96
4	15.0	-.110	-.275		-.521	-.620	-.076	-.262		-.509	-.614	-.137	-.337		-.579	-.620	6.76
5	30.0	-.180	-.298		-.379	-.391	-.140	-.294		-.363	-.384	-.175	-.317		-.384	-.378	8.53
6	50.0	-.214	-.232		-.240	-.249	-.198	-.218		-.233	-.250	-.227	-.186		-.241	-.239	8.19
7	1.5	.096	.159		.791	.834	.137	.236		.788	.773	.140	.244		.809	.652	-1.77
8	5.0	-.017	.020		.687	.629	-.061	-.006		.666	.628	-.035	.183		.759	.596	-3.18
9	15.0				.298	.229				.297	.230				.340	.259	-5.14
10	30.0	-.156	-.211		-.020	.133	-.163	-.204		-.006	.137	-.151	-.177		.020	.151	-6.25
11	45.0																-2.59
12	46.6																.1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.104	-.101	-.130	-.127	-.107	-.096	-.099	-.122	-.110	-.105	-.108	-.108	-.134	-.119	-.096	6.42
18	71.5		-.093	-.101		-.064		-.093	-.099		-.055		-.090	-.105		-.047	5.41
19	48.3	-.023	.026	.067	.000	.145	-.052	.029	.081	.023	.148	-.047	.052	.099	.029	.163	-5.52
20	55.0	-.035	-.012	-.020	.003	.046	-.012	-.003	.006	.012	.064	-.012	.012	-.006	.038	.064	-5.05
21	65.0	-.052	.043	.038	.003	.087	-.044	.029	.032	.012	.113	-.038	.044	.047	.032	.099	-3.92
22	69.9	.110	.116	.165	.194	.209	.119	.110	.166	.206	.221	.119	.143	.198	.224	.218	-0.90
23	73.4	-.096	-.125	-.130	-.096	-.043	-.073	-.122	-.125	-.084	-.032	-.090	-.122	-.137	-.081	-.026	2.50
24	70.0	.116	.107	.165	.209	.238	.125	.116	.174	.221	.253	.131	.154	.183	.236	.250	-0.95
25	72.6	-.067	-.125	-.130	-.093	-.038	-.052	-.116	-.125	-.081	-.023	-.067	-.125	-.134	-.090	-.023	3.26
26	76.5	-.067	-.061	-.087	-.055	-.035	-.044	-.047	-.070	-.055	-.023	-.067	-.038	-.087	-.055	-.023	4.48
27	84.9	-.003	.009	-.009	.023	.012	.003	.003	.038	-.006	.032	.000	.017	-.015	-.003	.023	3.01
28	93.3	.075	.067	.049	.049	.087	.090	.070	.061	.058	.099	.084	.084	.052	.052	.093	1.37
29	78.5	.041	.041	.032	.061	.090	.052	.047	.032	.049	.099	.052	.096	.049	.058	.099	-2.19
30	89.5	.096	.084	.064	.035	.087	.099	.081	.055	.055	.099	.090	.093	.058	.044	.099	-1.07

ORIFICE (FIG. 2)	$\frac{x}{c}$	α = 15.92 D/L = .270 C_L = 24.206 T_c' = 23.71 q = .83 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.914	.660		-1.798	-1.591											0
2	1.5	.082	.099		-1.932												2.23
3	5.0	-.234	-.152		-.987	-1.124											3.96
4	15.0	-.152	-.277		-.549	-.578											6.76
5	30.0	-.204	-.295		-.371	-.347											8.53
6	50.0	-.236	-.222		-.219	-.210											8.19
7	1.5	.181	.283		.844	.727											-1.77
8	5.0	.023	.152		.747	.546											-3.18
9	15.0				.324	.304											-5.14
10	30.0	-.108	-.169		.029	.213											-6.25
11	45.0																-2.59
12	46.6																.1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.108	-.093	-.123	-.108	-.082											6.42
18	71.5		-.082	-.088		-.026											5.41
19	48.3	-.041	.041	.131	.064	.181											-5.52
20	55.0	-.006	-.003	-.006	.035	.093											-5.05
21	65.0	-.041	.055	.058	.035	.111											-3.92
22	69.9	.128	.140	.219	.219	.213											-0.90
23	73.4	-.099	-.114	-.128	-.064	-.020											2.50
24	70.0	.126	.146	.222	.225	.242											-0.95
25	72.6	-.073	-.114	-.128	-.064	-.018											3.26
26	76.5	-.038	-.041	-.076	-.023	-.015											4.48
27	84.9	.018	.015	-.006	.026	.038											3.01
28	93.3	.076	.070	.058	.064	.090											1.37
29	78.5	.044	.050	.064	.058	.099											-2.19
30	89.5	.088	.093	.076	.064	.096											-1.07

TABLE 16

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 0^0$ $\delta_{f,55} = 0^0$ $i_w = 8^0$ N = 2806 rpm

ORIFICE (FIG.6)	% M	α = -7.63 D/L = -.100 C_L = 45.650 T_c' = 44.97 q = .43 lb/sq ft					α = -.41 D/L = .031 C_L = 51.260 T_c' = 50.36 q = .39 lb/sq ft					α = 10.33 D/L = .196 C_L = 57.345 T_c' = 57.58 q = .34 lb/sq ft					$\frac{\Delta C_p}{q}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.768	.474		-.924	-.282	.864	.527		-.956	-.590	.611	.558		-.831	-.534	0
2	1.5	.252	.453		-1.462		.250	.417		-1.334		.229	.439		-1.377		2.23
3	5.0	-.048	.054		-.737	-.912	-.086	.068		-.721	-.992	.012	.030		-.671	-.968	3.96
4	15.0	.036	-.207		-.462	-.498	-.015	-.202		-.459	-.530	.074	-.240		-.445	-.513	6.76
5	30.0	-.048	-.258		-.339	-.321	-.089	-.241		-.331	-.334	-.012	-.264		-.315	-.309	8.53
6	50.0	-.138	-.195		-.204	-.222	-.152	-.191		-.202	-.232	-.116	-.190		-.199	-.202	8.19
7	1.5	-.093	-.270		.765	.954	-.182	-.289		.744	.914	-.080	-.279		.695	.905	-1.77
8	5.0	-.150	-.174		.636	.612	-.131	-.200		.622	.646	-.172	-.232		.588	.686	-3.18
9	15.0				.261	.231	.000			.259	.238				.226	.282	-5.14
10	30.0	-.180	-.210		-.036	.108	-.158	-.223		-.030	.137	-.175	-.232		-.065	.134	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.042	-.084	-.108	-.087	-.096	-.054	-.077	-.098	-.092	-.095	-.033	-.071	-.101	-.089	-.074	6.42
18	71.5		-.078	-.078		-.060		-.074	-.071		-.066		-.074	-.083		-.047	5.41
19	48.3	-.135	.015	.021	-.009	.135	-.137	.015	.015	-.015	.134	-.139	.003	.006	-.047	.128	-5.52
20	55.0	-.006	-.000	.000	.003	.030	-.000	-.009	.003	.012	.048	-.003	.000	-.006	-.009	.050	-5.05
21	65.0	-.042	.006	-.006	.024	.087	-.039	.003	.071	.012	.092	-.033	.003	-.006	.006	.089	-3.92
22	69.9	.123	.111	.150	.201	.204	.125	.101	.149	.194	.205	.122	.113	.148	.190	.211	-0.90
23	73.4	-.048	-.108	-.030	-.081	-.030	-.054	-.107	-.098	-.068	-.030	-.039	-.116	-.107	-.092	-.021	2.50
24	70.0	.129	.096	.156	.204	.234	.125	.107	.134	.205	.229	.134	.113	.151	.202	.234	-0.95
25	72.6	-.030	-.111	-.105	-.081	-.030	-.027	-.101	-.098	-.074	-.030	-.018	-.113	-.107	-.086	-.027	3.26
26	76.5	-.018	-.030	-.066	-.045	-.024	-.021	-.039	-.024	-.030	-.030	-.003	-.042	-.045	-.042	-.012	4.48
27	84.9	.033	.024	.024	.027	.024	.027	.024	.024	.027	.024	.042	.021	.012	.003	.027	3.01
28	93.3	.096	.072	.078	.099	.108	.101	.080	.074	.089	.095	.104	.071	.071	.071	.113	1.37
29	78.5	.060	.057	.048	.060	.099	.060	.045	.045	.086	.095	.062	.045	.047	.036	.101	-2.19
30	89.5	.081	.081	.057	.081	.102	.119	.074	.060	.077	.095	.113	.083	.059	.059	.110	-1.07

TABLE 17

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 00$ N = 2375 rpm

ORIFICE	% c	α = -.58 D/L = -.161 C_L = .323 T_c' = .11 q = 17.63 lb/sq ft					α = 3.40 D/L = -.060 C_L = .668 T_c' = .12 q = 17.46 lb/sq ft					α = 7.42 D/L = -.023 C_L = 1.066 T_c' = .13 q = 17.04 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.968	.836		.944	1.045	.944	.836		.663	.752	.179	-.066		-.674	-.374	0
2	1.5	.281	.289		.035		-.520	-.474		-.779		-1.639	-1.585		-2.044		2.23
3	5.0	-.235	-.119		-.204	-.243	-.748	-.659		-.690	-.775	-1.542	-1.324		-1.262	-1.409	3.96
4	15.0	-.370	-.409		-.443	-.451	-.644	-.709		-.702	-.744	-1.005	-1.043		-1.005	-1.063	6.76
5	30.0	-.486	-.505		-.570	-.520	-.682	-.682		-.709	-.702	-.903	-.888		-.876	-.872	8.53
6	50.0	-.528	-.474		-.474	-.505	-.617	-.547		-.532	-.597	-.728	-.646		-.615	-.666	8.19
7	1.5	-.193	-.258		-.100	.062	.544	.443		.501	.617	1.016	.919		.798	.962	-1.77
8	5.0	-.293	-.412		-.274	-.096	.162	.100		.208	.305	.627	.568		.588	.666	-3.18
9	15.0				-.297	-.312				-.008	-.039				.265	.238	-5.14
10	30.0	-.278	-.385		-.335	-.243	-.119	-.216		-.139	-.081	.082	-.043		.047	.093	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.347	-.316	-.308	-.305	-.339	-.401	-.332	-.358	-.316	-.374	-.444	-.385	-.401	-.374	-.413	6.42
18	71.5		-.289	-.278		-.293		-.285	-.305		-.328		-.331	-.343		-.343	5.41
19	48.3	-.162	-.004	.204	-.073	-.069	-.062	.073	.224	-.012	-.154	.062	.164	.273	.078	-.109	-5.52
20	55.0	-.093	-.085	-.085	-.027	-.062	-.073	-.066	-.081	.058	.000	-.055	-.058	-.062	.148	.097	-5.05
21	65.0	.000	.058	.085	.062	.054	.050	.123	.131	.116	.096	.113	.195	.195	.171	.156	-3.92
22	69.9	.112	.127	.266	.170	.150	.181	.181	.270	.227	.212	.238	.241	.311	.276	.292	-0.90
23	73.4	-.274	-.243	-.490	-.197	-.108	-.312	-.243	-.470	-.170	-.104	-.358	-.280	-.494	-.202	-.093	2.50
24	70.0	.000	-.012	-.270	-.042	-.100	.035	.027	-.235	-.027	-.104	.078	.023	-.241	-.031	-.117	-0.95
25	72.6	-.281	-.301	-.524	-.247	-.131	-.316	-.320	-.505	-.208	-.135	-.362	-.350	-.549	-.245	-.128	3.26
26	76.5	-.594	-.455	-.520	-.513	-.586	-.632	-.385	-.455	-.455	-.594	-.662	-.487	-.471	-.459	-.600	4.48
27	84.9	-.104	-.112	-.108	-.081	-.108	-.104	-.108	-.096	-.062	-.108	-.101	-.097	-.093	-.070	-.109	3.01
28	93.3	-.004	-.062	-.039	.035	-.023	-.019	-.062	-.062	-.035	-.027	-.016	-.031	-.058	-.047	-.019	1.37
29	78.5	.270	.158	.251	.243	.293	.301	.239	.254	.270	.297	.374	.319	.327	.308	.347	-2.19
30	89.5	.162	.104	.143	.127	.166	.173	.154	.143	.139	.173	.218	.210	.183	.171	.210	-1.07

ORIFICE	% c	α = 10.59 D/L = -.006 C_L = 1.541 T_c' = .16 q = 16.09 lb/sq ft					α = 15.27 D/L = .033 C_L = 1.935 T_c' = .24 q = 16.07 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-1.338	-2.117		-3.403	-2.485	-3.377	-4.937		-6.586	-5.252						0
2	1.5	-3.343	-3.020		-3.619		-4.433	-4.459		-5.082							2.23
3	5.0	-2.524	-2.205		-2.025	-2.201	-3.332	-2.980		-2.676	-2.880						3.96
4	15.0	-1.402	-1.458		-1.358	-1.466	-1.738	-1.749		-1.605	-1.724						6.76
5	30.0	-1.162	-1.130		-1.086	-1.094	-1.301	-1.268		-1.160	-1.190						8.53
6	50.0	-.891	-.783		-.723	-.763	-.930	-.838		-.741	-.752						8.19
7	1.5	1.238	1.230		.835	1.019	.819	1.082		.508	.730						-1.77
8	5.0	.915	.991		.915	.931	.923	1.149		1.030	1.027						-3.18
9	15.0				.559	.487				.741	.686						-5.14
10	30.0	.248	.112		.260	.264	.389	.245		.397	.404						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.531	-.471	-.467	-.431	-.463	-.545	-.497	-.482	-.430	-.423						6.42
18	71.5		-.391	-.395		-.387		-.397	-.411		-.326						5.41
19	48.3	.160	.276	.527	.200	-.096	.263	.341	.541	.293	.204						-5.52
20	55.0	-.040	-.040	-.044	.252	.196	-.030	-.022	-.030	.334	.263						-5.05
21	65.0	.184	.284	.288	.232	.232	.245	.330	.326	.282	.278						-3.92
22	69.9	.363	.348	.487	.407	.391	.404	.389	.526	.474	.437						-0.90
23	73.4	-.451	-.328	-.687	-.220	-.076	-.452	-.326	-.686	-.226	-.033						2.50
24	70.0	.148	.068	-.264	-.032	-.104	.167	.074	-.256	-.030	-.082						-0.95
25	72.6	-.443	-.407	-.739	-.288	-.120	-.452	-.415	-.752	-.308	-.070						3.26
26	76.5	-.767	-.591	-.599	-.523	-.607	-.723	-.504	-.582	-.549	-.441						4.48
27	84.9	-.128	-.108	-.132	-.080	-.104	-.096	-.100	-.130	-.111	-.111						3.01
28	93.3	.000	-.076	-.024	-.028	.000	.015	-.078	-.019	-.067	-.074						1.37
29	78.5	.431	.419	.439	.399	.399	.423	.456	.493	.408	.426						-2.19
30	89.5	.264	.280	.248	.236	.244	.278	.304	.293	.248	.248						-1.07

TABLE 18

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 10$ N = 2375 rpm

ORIFICE	x/c	α = -8.58, D/L = -.085, C_L = .449, T_c' = .11, q = 17.79 lb/sq ft					α = -.57, D/L = -.004, C_L = 1.209, T_c' = .15, q = 17.44 lb/sq ft					α = 3.44, D/L = .016, C_L = 1.645, T_c' = .20, q = 16.71 lb/sq ft					z/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.055	.982		.936	1.005	-.457	-.685		-1.629	-1.251	-1.970	-3.091		-4.562	-3.501	0
2	1.5	-.127	-.096		-.349		-2.134	-1.992		-2.569		-3.836	-3.545		-4.112		2.23
3	5.0	-.464	-.368		-.426	-.499	-1.958	-1.614		-1.513	-1.726	-2.730	-2.410		-2.216	-2.424	3.96
4	15.0	-.487	-.560		-.576	-.591	-1.146	-1.164		-1.108	-1.217	-1.486	-1.505		-1.404	-1.516	6.76
5	30.0	-.579	-.610		-.652	-.618	-.981	-.959		-.936	-.959	-1.155	-1.140		-1.061	-1.087	8.53
6	50.0	-.579	-.522		-.514	-.545	-.771	-.678		-.629	-.685	-.864	-.771		-.696	-.741	8.19
7	1.5	.257	.161		.242	.388	1.105	1.045		.839	1.000	1.184	1.181		.719	.909	-1.77
8	5.0	-.073	-.177		-.038	.111	.779	.738		.726	.809	.972	1.065		.968	.983	-3.18
9	15.0				-.177	-.188				.386	.371				.641	.581	-5.14
10	30.0	-.215	-.315		-.246	-.165	.165	.026		.131	.187	.313	.168		.324	.350	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.372	-.334	-.338	-.330	-.368	-.468	-.416	-.423	-.389	-.431	-.518	-.451	-.462	-.436	-.432	6.42
18	71.5		-.292	-.299		-.326		-.344	-.363		-.363		-.380	-.384		-.358	5.41
19	48.3	-.119	.031	.219	-.046	-.054	.116	.210	.393	.157	.139	.212	.305	.529	.220	-.119	-5.52
20	55.0	-.104	-.100	-.096	.015	-.035	-.037	-.052	-.052	.183	.150	-.026	-.034	-.037	.287	.227	-5.05
21	65.0	.031	.084	.111	.088	.081	.146	.228	.240	.213	.198	.201	.305	.313	.264	.257	-3.92
22	69.9	.142	.153	.272	.177	.165	.322	.296	.393	.315	.337	.395	.384	.533	.432	.410	-0.90
23	73.4	-.292	-.246	-.480	-.200	-.119	-.382	-.303	-.547	-.191	-.075	-.428	-.298	-.667	-.220	-.048	2.50
24	70.0	.019	.015	-.253	-.046	-.111	.120	.004	-.236	-.034	-.112	.164	.086	-.264	-.034	-.097	-0.95
25	72.6	-.311	-.292	-.514	-.219	-.134	-.386	-.389	-.599	-.255	-.112	-.425	-.395	-.737	-.294	-.097	3.26
26	76.5	-.629	-.422	-.491	-.468	-.595	-.681	-.524	-.535	-.446	-.588	-.715	-.525	-.551	-.570	-.559	4.48
27	84.9	-.115	-.130	-.104	-.096	-.115	-.105	-.112	-.109	-.071	-.101	-.108	-.112	-.130	-.104	-.093	3.01
28	93.3	-.004	-.092	-.050	-.046	-.019	.007	-.071	-.030	-.030	.004	.019	-.082	.000	-.019	.007	1.37
29	78.5	.288	.196	.253	.238	.295	.389	.344	.371	.344	.367	.432	.421	.462	.413	.406	-2.19
30	89.5	.173	.123	.150	.127	.165	.247	.236	.221	.187	.210	.272	.287	.283	.250	.253	-1.07

ORIFICE	x/c	α = 7.47, D/L = .044, C_L = 2.089, T_c' = .28, q = 16.37 lb/sq ft					α = 11.52, D/L = .117, C_L = 2.032, T_c' = .39, q = 16.14 lb/sq ft					α = , D/L = , C_L = , T_c' = , q = lb/sq ft					z/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-4.235	-6.319		-7.846	-6.386	-6.238				-8.050						0
2	1.5	-5.252	-5.210		-5.826		-4.786	-5.371		-6.151							2.23
3	5.0	-3.559	-3.298		-2.957	-3.091	-3.219				-3.302						3.96
4	15.0	-1.802	-1.841		-1.700	-1.778	-1.584				-1.773						6.76
5	30.0	-1.324	-1.306		-1.169	-1.197	-1.076				-1.076						8.53
6	50.0	-.940	-.848		-.690	-.704	-.742				-.527						8.19
7	1.5	-.049	.919		.257	.532	-.376	.720		-.019	.241						-1.77
8	5.0	.827	1.207		1.063	1.021	.659				.980						-3.18
9	15.0				.824	.715					.742						-5.14
10	30.0	.419	.303		.475	.429	.424				.469						-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.556	-.503	-.496	-.398	-.387	-.485		-.498		-.363						6.42
18	71.5		-.405	-.412		-.352			-.427		-.308						5.41
19	48.3	.271	.377	.546	.292	-.493	.286		.485		-.932						-5.52
20	55.0	-.032	-.021	-.025	.356	.271	-.010		-.022		.296						-5.05
21	65.0	.243	.345	.334	.278	.282	.254		.315		.312						-3.92
22	69.9	.384	.408	.493	.496	.419	.424		.434		.463						-0.90
23	73.4	-.475	-.341	-.679	-.232	-.067	-.482		-.671		-.006						2.50
24	70.0	.134	.070	-.222	-.039	-.130	.173		-.215		-.100						-0.95
25	72.6	-.461	-.447	-.746	-.313	-.123	-.482		-.726		-.051						3.26
26	76.5	-.750	-.510	-.602	-.468	-.363	-.687		-.626		-.279						4.48
27	84.9	-.123	-.081	-.130	-.134	-.158	-.238		-.157		-.154						3.01
28	93.3	.011	-.046	-.028	-.123	-.158	-.106		-.055		-.119						1.37
29	78.5	.415	.482	.479	.461	.419	.382		.447		.427						-2.19
30	89.5	.278	.320	.285	.257	.225	.238		.254		.251						-1.07

TABLE [illegible]

[illegible] WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 20$ [illegible] = 2113 rpm

[illegible] DRIFTSCE	x/c	α = -12.69 D/L = -.179 C_L = .888 T_c' = .28 q = 11.07 lb/sq ft					α = -4.64 D/L = -.049 C_L = 1.808 T_c' = .37 q = 10.68 lb/sq ft					α = 3.46 D/L = .041 C_L = 2.591 T_c' = .86 q = 10.03 lb/sq ft					[illegible]
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.738	.562		-.263	.222	-1.770	-2.678		-4.790	-3.843	-4.694	-5.236		-7.519	-6.123	0
2	1.5	-.851	-.763		-1.413		-3.476	-3.084		-4.042		-3.736	-4.211		-5.009		2.23
3	5.0	-1.011	-.923		-1.037	-1.068	-2.589	-2.202		-2.147	-2.465	-2.670	-2.614		-2.421	-2.688	3.96
4	15.0	-.696	-.841		-.856	-.872	-1.393	-1.398		-1.334	-1.498	-1.329	-1.448		-1.359	-1.452	6.76
5	30.0	-.727	-.738		-.763	-.758	-1.076	-1.066		-.992	-1.066	-.913	-1.014		-.910	-.906	8.53
6	50.0	-.629	-.573		-.552	-.593	-.813	-.744		-.660	-.709	-.650	-.668		-.568	-.483	8.19
7	1.5	.753	.629		.696	.898	1.116	1.146		.679	.903	-.394	.709		.089	.386	-1.77
8	5.0	.382	.335		.500	.557	.883	1.031		.987	1.017	.475	1.003		.880	.854	-3.18
9	15.0				.217	.155				.655	.610				.724	.579	-5.14
10	30.0	-.026	-.119		.000	.036	.302	.144		.327	.342	.327	.245		.405	.360	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.402	-.356	-.351	-.346	-.377	-.486	-.431	-.441	-.402	-.402	-.427	-.408	-.394	-.345	-.297	6.42
18	71.5		-.294	-.299		-.320		-.352	-.372		-.317		-.353	-.338		-.256	5.41
19	48.3	-.021	.119	.134	.041	-.041	.198	.268	.293	.193	-.089	.215	.297	.312	.245	-.059	-5.52
20	55.0	-.077	-.072	-.072	.108	.062	-.010	-.025	-.035	.283	.233	.000	.004	-.000	.301	.230	-5.05
21	65.0	.077	.155	.155	.150	.144	.203	.302	.283	.258	.263	.204	.282	.267	.241	.230	-3.92
22	69.9	.196	.201	.237	.284	.279	.402	.377	.476	.436	.426	.342	.308	.353	.412	.368	-0.90
23	73.4	-.325	-.242	-.392	-.181	-.083	-.397	-.288	-.590	-.203	-.025	-.379	-.293	-.524	-.193	-.019	2.50
24	70.0	.052	.046	-.170	-.036	-.103	.174	.094	-.203	-.020	-.084	.134	.033	-.160	-.059	-.097	-0.95
25	72.6	-.320	-.299	-.438	-.227	-.129	-.417	-.372	-.655	-.263	-.064	-.382	-.382	-.564	-.267	-.059	3.26
26	76.5	-.650	-.408	-.459	-.438	-.573	-.694	-.451	-.590	-.565	-.486	-.594	-.479	-.546	-.472	-.230	4.48
27	84.9	-.103	-.108	-.093	-.072	-.093	-.104	-.084	-.134	-.099	-.069	-.163	-.085	-.115	-.108	-.100	3.01
28	93.3	.031	-.062	-.041	-.036	-.015	.055	-.069	-.015	-.010	-.005	-.045	-.037	-.037	-.045	-.104	1.37
29	78.5	.330	.284	.273	.299	.340	.422	.407	.446	.426	.412	.319	.382	.382	.397	.353	-2.19
30	89.5	.196	.165	.160	.170	.201	.273	.283	.268	.253	.258	.204	.253	.234	.238	.215	-1.07

[illegible] DRIFTSCE	x/c	α = 11.44 D/L = .170 C_L = 2.284 T_c' = .85 q = 9.98 lb/sq ft					α = 15.46 D/L = .206 C_L = 2.369 T_c' = .98 q = 9.79 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					[illegible]
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-5.994	-6.293		-4.404	-3.646	-3.402	-5.128		-4.729	-2.868						0
2	1.5	-3.468	-4.597		-1.449		-1.694	-3.405		-1.591							2.23
3	5.0	-2.238	-2.734		-1.465	-1.090	-1.288	-1.737		-1.388	-.754						3.96
4	15.0	-1.386	-1.325		-1.023	-.530	-1.292	-1.310		-1.221	-.416						6.76
5	30.0	-.825	-.742		-.814	-.401	-1.000	-.747		-.669	-.377						8.53
6	50.0	-.534	-.557		-.470	-.401	-.552	-.534		-.441	-.377						8.19
7	1.5	-.788	.753		.811	.716	-.566	.804		.498	.359						-1.77
8	5.0	.379	1.136		1.045	.833	.370	1.153		1.078	.584						-3.18
9	15.0				.784	.523				.786	.434						-5.14
10	30.0	.379	.254		.405	.360	.352	.246		.413	.331						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.386	-.507	-.492	-.458	-.409	-.406	-.459	-.473	-.413	-.381						6.42
18	71.5		-.511	-.477		-.428		-.441	-.477		-.395						5.41
19	48.3	.246	.295	.322	.220	-.061	.228	.281	.299	.228	-.053						-5.52
20	55.0	.008	-.011	.000	.269	.223	.000	-.007	-.011	.267	.221						-5.05
21	65.0	.212	.227	.242	.174	.197	.199	.206	.206	.181	.192						-3.92
22	69.9	.333	.337	.447	.390	.360	.295	.352	.399	.384	.345						-0.90
23	73.4	-.424	-.500	-.753	-.379	-.167	-.423	-.470	-.705	-.327	-.157						2.50
24	70.0	.129	-.095	-.363	-.235	-.284	.093	-.064	-.359	-.167	-.270						-0.95
25	72.6	-.413	-.629	-.810	-.462	-.212	-.427	-.598	-.762	-.406	-.192						3.26
26	76.5	-.541	-.549	-.560	-.553	-.492	-.452	-.484	-.516	-.509	-.466						4.48
27	84.9	-.265	-.394	-.439	-.443	-.390	-.317	-.370	-.423	-.427	-.377						3.01
28	93.3	-.182	-.329	-.401	-.443	-.382	-.267	-.331	-.384	-.416	-.381						1.37
29	78.5	.292	.352	.363	.337	.314	.256	.327	.324	.292	.270						-2.19
30	89.5	.159	.163	.129	.098	.110	.121	.146	.089	.078	.100						-1.07

TABLE 20

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 30$ N = 2252 rpm

ORIFICE	X/c	α = -12.88 D/L = -.208 C_L = 2.415 T_c' = 1.09 q = 7.47 lb/sq ft					α = -4.57 D/L = -.059 C_L = 3.378 T_c' = 1.68 q = 7.00 lb/sq ft					α = -.43 D/L = .003 C_L = 3.508 T_c' = 1.79 q = 6.79 lb/sq ft					Y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.539	-1.468		-4.426	-3.073	-2.276	-3.466		-6.310	-3.635	-3.476	-4.270		-6.558	-3.307	0
2	1.5	-2.215	-2.184		-3.551		-2.743	-3.128		-4.228		-2.972	-3.498		-4.323		2.23
3	5.0	-1.786	-1.583		-1.822	-2.105	-2.039	-2.035		-2.039	-1.780	-2.100	-2.269		-1.959	-1.387	3.96
4	15.0	-.960	-1.070		-1.088	-1.238	-1.010	-1.176		-1.118	-.852	-1.105	-1.260		-.953	-.604	6.76
5	30.0	-.800	-.831		-.805	-.867	-.766	-.856		-.748	-.608	-.762	-.896		-.572	-.469	8.53
6	50.0	-.646	-.601		-.548	-.575	-.575	-.593		-.475	-.507	-.561	-.621		-.462	-.452	8.19
7	1.5	.902	1.079		.677	.973	-.007	.877		.316	.769	-.466	.882		.328	.741	-1.77
8	5.0	.557	.876		.960	.964	.352	.949		.935	.848	.229	1.016		.988	.731	-3.18
9	15.0				.628	.517				.680	.464				.716	.392	-5.14
10	30.0	.177	.088		.283	.279	.227	.147		.334	.273	.251	.152		.342	.258	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.416	-.358	-.376	-.336	-.345	-.381	-.370	-.367	-.320	-.424	-.364	-.409	-.381	-.434	-.445	6.42
18	71.5		-.323	-.336		-.279		-.331	-.334		-.395		-.381	-.371		-.476	5.41
19	48.3	.097	.243	.270	.159	-.146	.151	.248	.266	.191	-.144	.173	.244	.268	.173	-.131	-5.52
20	55.0	-.009	-.013	-.013	.248	.168	-.004	-.004	.000	.248	.165	.007	.004	.004	.244	.166	-5.05
21	65.0	.146	.256	.226	.203	.203	.151	.237	.230	.183	.176	.166	.215	.215	.145	.159	-3.92
22	69.9	.310	.336	.438	.407	.398	.277	.316	.338	.388	.338	.258	.293	.374	.371	.325	-0.90
23	73.4	-.336	-.279	-.526	-.190	-.013	-.324	-.309	-.485	-.209	-.122	-.314	-.392	-.579	-.349	-.205	2.50
24	70.0	.141	.062	-.133	-.027	-.049	.097	.043	-.147	-.076	-.212	.102	-.007	-.268	-.187	-.328	-0.95
25	72.6	-.340	-.358	-.570	-.261	-.049	-.324	-.403	-.525	-.273	-.155	-.314	-.498	-.621	-.427	-.251	3.26
26	76.5	-.668	-.509	-.597	-.495	-.504	-.503	-.514	-.554	-.464	-.338	-.434	-.589	-.572	-.611	-.424	4.48
27	84.9	-.124	-.080	-.146	-.093	-.057	-.129	-.097	-.133	-.137	-.212	-.127	-.152	-.205	-.364	-.300	3.01
28	93.3	.035	-.044	.000	.018	.027	-.004	-.047	-.014	-.040	-.201	-.032	-.074	-.095	-.325	-.300	1.37
29	78.5	.336	.380	.389	.402	.376	.288	.352	.367	.374	.324	.254	.342	.353	.349	.304	-2.19
30	89.5	.226	.252	.248	.243	.248	.191	.234	.212	.209	.165	.173	.208	.180	.152	.131	-1.07

ORIFICE	X/c	α = 7.80 D/L = .089 C_L = 3.687 T_c' = 2.04 q = 6.28 lb/sq ft					α = 15.83 D/L = .171 C_L = 3.537 T_c' = 2.13 q = 6.16 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					Y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-4.649	-5.236		-6.096	-3.059	-3.400	-2.980		-3.235	-1.866						0
2	1.5	-2.821	-4.058		-2.367		-1.431	-1.969		-.810							2.23
3	5.0	-1.870	-2.517		-1.681	-.787	-1.252	-.748		-.614	-.455						3.96
4	15.0	-1.038	-1.297		-.944	-.507	-1.072	-.624		-.517	-.390						6.76
5	30.0	-.696	-.842		-.612	-.444	-.624	-.476		-.441	-.372						8.53
6	50.0	-.486	-.535		-.493	-.444	-.490	-.445		-.410	-.372						8.19
7	1.5	-.818	.947		.629	.105	-.679	1.114		.890	-.031						-1.77
8	5.0	.122	1.136		1.105	.405	.138	1.100		1.083	.303						-3.18
9	15.0				.738	.287				.624	.266						-5.14
10	30.0	.266	.157		.357	.248	.269	.145		.324	.255						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.336	-.395	-.451	-.465	-.430	-.435	-.448	-.445	-.390	-.352						6.42
18	71.5		-.374	-.458		-.447		-.455	-.445		-.362						5.41
19	48.3	.203	.238	.273	.192	-.549	.210	.235	.238	.145	-.100						-5.52
20	55.0	-.003	.010	.031	.227	.178	-.003	.007	.010	.214	.190						-5.05
21	65.0	.178	.192	.192	.161	.150	.172	.166	.148	.166	.166						-3.92
22	69.9	.241	.322	.367	.329	.297	.183	.300	.310	.269	.231						-0.90
23	73.4	-.315	-.405	-.647	-.378	-.203	-.469	-.517	-.621	-.324	-.172						2.50
24	70.0	.073	-.045	-.294	-.192	-.402	-.003	-.131	-.241	-.172	-.331						-0.95
25	72.6	-.322	-.507	-.696	-.458	-.241	-.479	-.648	-.666	-.386	-.203						3.26
26	76.5	-.399	-.531	-.535	-.563	-.489	-.524	-.490	-.459	-.448	-.410						4.48
27	84.9	-.171	-.227	-.339	-.416	-.381	-.338	-.407	-.407	-.372	-.324						3.01
28	93.3	-.084	-.150	-.283	-.388	-.374	-.276	-.386	-.386	-.359	-.310						1.37
29	78.5	.224	.329	.318	.262	.231	.207	.283	.248	.214	.197						-2.19
30	89.5	.150	.196	.147	.098	.098	.117	.128	.079	.069	.086						-1.07

TABLE 21

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 40$ N = 2352 rpm

ORIFICE	$\frac{x}{c}$	α = -15.74 D/L = -.221 C_L = 4.309 T_c' = 2.75 q = 4.49 lb/sq ft					α = -7.92 D/L = -.086 C_L = 5.415 T_c' = 3.39 q = 4.18 lb/sq ft					α = .84 D/L = .028 C_L = 5.845 T_c' = 3.80 q = 3.79 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.487	-1.592		-4.935	-3.347	-1.379	-2.640		-5.787	-4.625	-3.014	-3.454		-5.422	-2.905	0
2	1.5	-1.309	-1.837		-3.488		-1.662	-2.606		-4.023		-2.149	-3.154		-3.706		2.23
3	5.0	-1.290	-1.454		-1.752	-2.105	-1.335	-1.768		-1.931	-2.405	-1.488	-2.037		-1.642	-.725	3.96
4	15.0	-.755	-.922		-.989	-1.131	-.797	-1.056		-1.076	-1.199	-.834	-1.117		-.746	-.572	6.76
5	30.0	-.643	-.710		-.714	-.721	-.627	-.770		-.746	-.729	-.616	-.766		-.538	-.511	8.53
6	50.0	-.532	-.506		-.476	-.480	-.477	-.531		-.501	-.456	-.460	-.518		-.490	-.484	8.19
7	1.5	.443	.956		.554	.926	-.075	.950		.463	.463	-.582	1.029		.678	.116	-1.77
8	5.0	.283	.837		.933	.866	.174	.896		.957	.593	.068	.974		1.070	.378	-3.18
9	15.0				.621	.409				.630	.300				.640	.208	-5.14
10	30.0	.138	.060		.260	.234	.177	.054		.276	.208	.215	.051		.300	.194	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.350	-.316	-.327	-.305	-.275	-.317	-.327	-.330	-.324	-.269	-.310	-.354	-.375	-.456	-.412	6.42
18	71.5		-.286	-.298		-.227		-.307	-.303		-.259		-.334	-.375		-.436	5.41
19	48.3	.093	.208	.212	.134	-.149	.123	.194	.198	.129	-.232	.167	.187	.204	.112	-.140	-5.52
20	55.0	.004	.004	-.004	.212	.149	.000	.003	.000	.201	.150	.003	.003	.003	.184	.146	-5.05
21	65.0	.108	.216	.182	.179	.175	.123	.181	.177	.119	.146	.143	.157	.150	.126	.133	-3.92
22	69.9	.253	.294	.342	.379	.368	.204	.255	.330	.344	.317	.208	.266	.320	.283	.272	-0.90
23	73.4	-.305	-.253	-.431	-.182	.011	-.293	-.300	-.439	-.208	-.044	-.245	-.337	-.531	-.320	-.208	2.50
24	70.0	.082	.074	-.089	-.045	-.067	.041	.010	-.187	-.095	-.160	.065	-.037	-.232	-.187	-.409	-0.95
25	72.6	-.309	-.320	-.472	-.238	-.026	-.286	-.371	-.480	-.269	-.068	-.255	-.429	-.572	-.392	-.249	3.26
26	76.5	-.539	-.517	-.562	-.461	-.446	-.381	-.518	-.562	-.525	-.395	-.358	-.511	-.480	-.456	-.351	4.48
27	84.9	-.134	-.071	-.134	-.097	-.056	-.102	-.085	-.116	-.123	-.068	-.095	-.163	-.259	-.320	-.255	3.01
28	93.3	.007	.007	.011	.022	.037	-.014	-.014	.020	.003	.014	-.017	-.072	-.191	-.286	-.235	1.37
29	78.5	.271	.327	.335	.368	.350	.215	.296	.317	.324	.276	.187	.279	.269	.235	.221	-2.19
30	89.5	.182	.212	.208	.219	.208	.157	.194	.181	.167	.170	.146	.174	.126	.102	.119	-1.07

ORIFICE	$\frac{x}{c}$	α = 9.27 D/L = .125 C_L = 5.954 T_c' = 4.09 q = 3.64 lb/sq ft					α = 17.61 D/L = .202 C_L = 5.846 T_c' = 4.33 q = 3.58 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.400	-3.183		-3.511	-1.583	-3.370	-2.808		-2.578	-.769						0
2	1.5	-2.078	-3.089		-1.730		-1.675	-2.889		-.922							2.23
3	5.0	-1.362	-1.904		-.770	-.435	-1.130	-1.776		-.536	-.328						3.96
4	15.0	-.813	-.927		-.559	-.382	-.740	-.734		-.406	-.321						6.76
5	30.0	-.586	-.546		-.438	-.372	-.506	-.406		-.347	-.321						8.53
6	50.0	-.405	-.435		-.425	-.372	-.341	-.357		-.347	-.328						8.19
7	1.5	-.736	1.068		.820	-.077	-.851	.896		.458	-.130						-1.77
8	5.0	.000	.914		.991	.214	-.071	.682		.607	.110						-3.18
9	15.0				.552	.171				.364	.156						-5.14
10	30.0	.218	.084		.264	.187	.205	.133		.224	.179						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.264	-.418	-.452	-.418	-.355	-.231	-.351	-.390	-.338	-.325						6.42
18	71.5		-.432	-.455		-.375		-.360	-.403		-.325						5.41
19	48.3	.184	.191	.197	.094	-.127	.169	.192	.195	.104	-.114						-5.52
20	55.0	.010	.003	.003	.157	.151	.003	.006	.006	.162	.142						-5.05
21	65.0	.151	.124	.107	.134	.137	.143	.136	.123	.120	.133						-3.92
22	69.9	.177	.254	.264	.228	.167	.143	.221	.182	.153	.101						-0.90
23	73.4	-.208	-.448	-.609	-.321	-.201	-.185	-.386	-.529	-.260	-.185						2.50
24	70.0	.077	-.104	-.244	-.174	-.351	.062	-.117	-.227	-.140	-.243						-0.95
25	72.6	-.211	-.582	-.656	-.385	-.234	-.185	-.497	-.562	-.302	-.205						3.26
26	76.5	-.271	-.465	-.452	-.432	-.378	-.208	-.380	-.396	-.364	-.351						4.48
27	84.9	-.097	-.308	-.365	-.341	-.298	-.088	-.269	-.344	-.299	-.295						3.01
28	93.3	-.047	-.234	-.318	-.321	-.284	-.068	-.208	-.299	-.289	-.282						1.37
29	78.5	.164	.238	.214	.181	.164	.149	.195	.175	.153	.140						-2.19
30	89.5	.124	.147	.097	.084	.094	.107	.127	.094	.078	.081						-1.07

TABLE [illegible]

PRESSURE COEFFICIENTS, C_p, ON WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 50$ $\Omega = 2550$ rpm

ORIFICE	x/c	α = -14.24 D/L = -.181 C_L = 9.308 T_c' = 7.04 q = 2.36 lb/sq ft					α = -5.74 D/L = -.046 C_L = 11.020 T_c' = 8.25 q = 2.10 lb/sq ft					α = -1.00 D/L = .017 C_L = 11.458 T_c' = 8.71 q = 2.02 lb/sq ft					x
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.632	-.780		-3.933	-3.488	.508	-1.169		-4.187	-4.607	.495	-1.381		-4.028	-4.545	0
2	1.5	-.800	-1.486		-3.198		-.881	-1.692		-3.287		-.842	-1.889		-3.362		2.23
3	5.0	-.916	-1.099		-1.535	-2.044	-1.009	-1.285		-1.680	-2.137	-.997	-1.344		-1.635	-1.762	3.96
4	15.0	-.564	-.738		-.890	-1.012	-.611	-.805		-.956	-1.034	-.616	-.830		-.926	-.885	6.76
5	30.0	-.519	-.587		-.648	-.625	-.545	-.611		-.674	-.614	-.542	-.619		-.641	-.551	8.53
6	50.0	-.464	-.438		-.445	-.413	-.470	-.454		-.464	-.379	-.468	-.446		-.427	-.347	8.19
7	1.5	.419	.935		.712	.613	.436	.975		.743	.166	.359	1.009		.749	-.223	-1.77
8	5.0	.171	.700		.909	.654	.166	.668		.874	.382	.152	.715		.876	.211	-3.18
9	15.0				.516	.271				.479	.166				.486	.124	-5.14
10	30.0	.084	-.039		.181	.177	.081	-.019		.194	.147	.080	-.003		.207	.127	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.310	-.284	-.284	-.303	-.235	-.326	-.298	-.301	-.313	-.232	-.310	-.288	-.297	-.272	-.254	6.42
18	71.5		-.271	-.274		-.213		-.282	-.270		-.197		-.282	-.272		-.217	5.41
19	48.3	.077	.142	.152	.110	-.142	.075	.122	.141	.028	-.132	.071	.136	.133	.059	-.136	-5.52
20	55.0	.010	-.000	-.003	.148	.123	.003	.003	.006	.128	.125	.006	.012	.000	.111	.118	-5.05
21	65.0	.097	.139	.126	.139	.135	.091	.103	.094	.119	.122	.087	.099	.080	.111	.099	-3.92
22	69.9	.229	.219	.284	.310	.335	.201	.191	.263	.254	.282	.170	.204	.223	.226	.229	-0.90
23	73.4	-.284	-.242	-.419	-.200	-.006	-.276	-.279	-.411	-.166	-.013	-.282	-.272	-.399	-.155	-.056	2.50
24	70.0	.074	.010	-.181	-.087	-.110	.041	-.028	-.166	-.097	-.172	.037	-.043	-.161	-.071	-.201	-0.95
25	72.6	-.293	-.313	-.461	-.251	-.032	-.285	-.345	-.454	-.210	-.038	-.285	-.350	-.430	-.214	-.077	3.26
26	76.5	-.567	-.503	-.542	-.484	-.413	-.558	-.523	-.542	-.461	-.345	-.545	-.526	-.542	-.433	-.260	4.48
27	84.9	-.119	-.084	-.161	-.142	-.058	-.122	-.116	-.147	-.144	-.050	-.130	-.105	-.155	-.121	-.105	3.01
28	93.3	.029	.003	.000	-.006	.045	.025	.003	-.006	-.013	.028	.012	.009	-.003	.000	-.062	1.37
29	78.5	.226	.251	.268	.280	.277	.194	.213	.216	.197	.207	.173	.211	.189	.167	.161	-2.19
30	89.5	.152	.161	.148	.142	.164	.138	.138	.116	.116	.132	.118	.136	.105	.105	.102	-1.07

ORIFICE	x/c	α = 3.69 D/L = .077 C_L = 11.743 T_c' = 9.07 q = 1.93 lb/sq ft					α = 8.57 D/L = .139 C_L = 12.110 T_c' = 9.55 q = 1.84 lb/sq ft					α = 13.48 D/L = .199 C_L = 12.544 T_c' = 10.06 q = 1.76 lb/sq ft					x
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.506	-1.436		-3.858	-3.674	.518	-1.435		-3.731	-3.238	.515	-1.242		-3.575	-2.549	0
2	1.5	-.821	-1.969		-3.277		-.802	-2.028		-3.232		-.767	-1.959		-3.051		2.23
3	5.0	-.974	-1.395		-1.582	-1.161	-.951	-1.435		-1.510	-.970	-.920	-1.369		-1.426	-.792	3.96
4	15.0	-.612	-.843		-.865	-.771	-.611	-.855		-.802	-.702	-.590	-.808		-.752	-.605	6.76
5	30.0	-.543	-.621		-.581	-.527	-.549	-.630		-.537	-.508	-.527	-.602		-.499	-.474	8.53
6	50.0	-.462	-.440		-.375	-.371	-.468	-.443		-.362	-.368	-.443	-.430		-.353	-.353	8.19
7	1.5	.334	1.024		.768	-.259	.281	1.020		.746	-.231	.343	1.004		.686	-.190	-1.77
8	5.0	.137	.715		.877	.181	.103	.668		.817	.168	.097	.618		.721	.115	-3.18
9	15.0				.481	.125				.424	.097				.343	.075	-5.14
10	30.0	.091	.003		.197	.125	.075	.016		.156	.115	.069	.031		.140	.112	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.312	-.281	-.284	-.250	-.272	-.321	-.290	-.287	-.262	-.278	-.293	-.278	-.265	-.262	-.268	6.42
18	71.5		-.268	-.259		-.234		-.293	-.265		-.250		-.278	-.237		-.243	5.41
19	48.3	.084	.140	.144	.047	-.128	.072	.125	.134	.056	-.125	.075	.122	.137	.059	-.125	-5.52
20	55.0	.009	.016	.000	.119	.112	.000	.006	-.003	.103	.100	.012	.016	.006	.109	.106	-5.05
21	65.0	.087	.087	.075	.100	.103	.081	.081	.072	.090	.087	.084	.087	.087	.084	.094	-3.92
22	69.9	.169	.203	.203	.197	.181	.150	.187	.165	.137	.119	.150	.181	.156	.109	.094	-0.90
23	73.4	-.272	-.268	-.368	-.165	-.084	-.256	-.287	-.353	-.184	-.103	-.243	-.278	-.337	-.181	-.115	2.50
24	70.0	.034	-.050	-.131	-.084	-.197	.031	-.059	-.134	-.090	-.187	.031	-.062	-.143	-.106	-.162	-0.95
25	72.6	-.277	-.343	-.412	-.194	-.106	-.265	-.346	-.381	-.221	-.125	-.250	-.334	-.365	-.218	-.134	3.26
26	76.5	-.521	-.515	-.496	-.353	-.228	-.505	-.505	-.490	-.349	-.200	-.484	-.499	-.462	-.340	-.193	4.48
27	84.9	-.112	-.103	-.140	-.137	-.122	-.112	-.109	-.153	-.172	-.143	-.109	-.112	-.140	-.175	-.156	3.01
28	93.3	.016	.006	-.016	-.062	-.100	.006	.000	-.019	-.090	-.119	.012	.003	-.022	-.109	-.137	1.37
29	78.5	.169	.206	.169	.159	.137	.153	.181	.147	.128	.119	.159	.172	.140	.119	.109	-2.19
30	89.5	.125	.131	.094	.103	.094	.119	.122	.097	.087	.081	.115	.125	.097	.090	.087	-1.07

TABLE 23

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 60$ N = 2750 rpm

ORIFICE	x/c	α = -11.75 D/L = -.143 C_L = 21.620 T_c' = 18.55 q = 1.04 lb/sq ft					α = -6.50 D/L = -.026 C_L = 25.252 T_c' = 20.99 q = .92 lb/sq ft					α = -1.15 D/L = .043 C_L = 26.160 T_c' = 22.09 q = .86 lb/sq ft					↓
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.881	.393		-2.358	-2.143	.822	.000		-2.747	-2.789	.877	-.009		-2.904	-2.577	0
2	1.5	-.284	-.455		-2.317		-.442	-.872		-2.655		-.423	-.889		-2.786		2.23
3	5.0	-.511	-.485		-1.153	-1.516	-.629	-.727		-1.299	-1.632	-.608	-.753		-1.358	-1.627	3.96
4	15.0	-.343	-.461		-.680	-.777	-.409	-.549		-.768	-.825	-.393	-.587		-.799	-.829	6.76
5	30.0	-.358	-.414		-.496	-.494	-.409	-.472		-.561	-.525	-.408	-.487		-.578	-.526	8.53
6	50.0	-.361	-.340		-.352	-.337	-.409	-.362		-.380	-.347	-.408	-.381		-.399	-.357	8.19
7	1.5	.449	.674		.810	.674	.501	.845		.834	.395	.442	.862		.847	.484	-1.77
8	5.0	.174	.411		.783	.553	.172	.525		.816	.451	.094	.523		.850	.538	-3.18
9	15.0				.390	.204				.406	.175				.414	.160	-5.14
10	30.0	-.041	-.095		.106	.145	-.036	-.089		.122	.125	-.097	-.163		.079	.091	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.248	-.228	-.222	-.260	-.207	-.276	-.252	-.246	-.282	-.228	-.278	-.269	-.266	-.296	-.230	6.42
18	71.5		-.228	-.204		-.177		-.252	-.237		-.190		-.272	-.251		-.200	5.41
19	48.3	-.012	.095	.112	.077	-.145	-.012	.083	.092	.033	-.166	-.073	.036	.054	.000	-.172	-5.52
20	55.0	.006	.006	.012	.098	.092	-.012	-.009	-.009	.071	.077	-.024	-.030	-.027	.042	.048	-5.05
21	65.0	.047	.092	.092	.106	.112	.030	.065	.074	.086	.086	-.042	.042	.039	.076	.085	-3.92
22	69.9	.213	.163	.245	.242	.272	.193	.163	.240	.222	.255	.160	.142	.233	.224	.254	-0.90
23	73.4	-.248	-.242	-.355	-.163	-.012	-.297	-.276	-.395	-.184	-.024	-.312	-.284	-.423	-.197	-.018	2.50
24	70.0	.056	-.015	-.142	-.056	-.065	.036	-.042	-.175	-.083	-.107	.003	-.045	-.188	-.103	-.082	-0.95
25	72.6	-.248	-.296	-.384	-.213	-.030	-.297	-.335	-.439	-.228	-.053	-.309	-.348	-.463	-.257	-.060	3.26
26	76.5	-.585	-.458	-.461	-.402	-.393	-.638	-.537	-.516	-.457	-.389	-.647	-.554	-.544	-.490	-.417	4.48
27	84.9	-.112	-.100	-.127	-.133	-.056	-.142	-.136	-.157	-.157	-.080	-.166	-.154	-.178	-.169	-.094	3.01
28	93.3	.041	.018	.006	-.027	.035	.018	.000	-.012	-.039	.012	.000	-.012	-.030	-.051	.003	1.37
29	78.5	.260	.198	.216	.219	.228	.214	.187	.199	.169	.184	.181	.175	.191	.175	.188	-2.19
30	89.5	.148	.124	.118	.100	.121	.119	.107	.104	.068	.083	.085	.091	.073	.051	.082	-1.07

ORIFICE	x/c	α = 4.06 D/L = .108 C_L = 26.488 T_c' = 22.83 q = .84 lb/sq ft					α = 8.54 D/L = .157 C_L = 24.707 T_c' = 21.67 q = .86 lb/sq ft					α = 11.97 D/L = .219 C_L = 19.374 T_c' = 17.22 q = 1.09 lb/sq ft					↓
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.886	.181		-2.853	-2.772	.929	.266		-2.664	-2.435	.859	.511		-2.391	-1.968	0
2	1.5	-.256	-.705		-2.462		-.245	-.601		-2.723		-.151	-.520		-2.524		2.23
3	5.0	-.551	-.642		-1.305	-1.618	-.517	-.613		-1.255	-1.521	-.302	-.411		-1.119	-1.282	3.96
4	15.0	-.365	-.518		-.753	-.813	-.347	-.520		-.740	-.774	-.206	-.426		-.647	-.659	6.76
5	30.0	-.389	-.452		-.545	-.509	-.366	-.458		-.539	-.489	-.257	-.393		-.460	-.420	8.53
6	50.0	-.392	-.356		-.374	-.340	-.369	-.359		-.356	-.328	-.305	-.308		-.308	-.278	8.19
7	1.5	.301	.756		.832	.494	.356	.734		.849	.424	.311	.677		.819	.441	-1.77
8	5.0	.084	.473		.838	.488	.062	.437		.833	.480	.054	.305		.765	.447	-3.18
9	15.0				.386	.163				.375	.149		-.009		.351	.230	-5.14
10	30.0	-.099	-.175		.054	.102	-.115	-.198		.025	.121	-.091	-.145		.048	.187	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.268	-.244	-.250	-.265	-.226	-.248	-.242	-.248	-.257	-.198	-.197	-.200	-.227	-.206	-.175	6.42
18	71.5		-.256	-.250		-.190		-.254	-.239		-.173		-.212	-.212		-.151	5.41
19	48.3	-.066	.036	.051	.003	-.163	-.062	.034	.056	.000	-.139	-.042	.073	.073	.006	-.121	-5.52
20	55.0	-.039	-.030	-.039	.033	.054	-.025	-.028	-.019	.025	.090	-.018	-.012	-.009	.057	.121	-5.05
21	65.0	-.039	.042	.018	.084	.072	-.025	.043	.037	.096	.108	.012	.085	.048	.112	.133	-3.92
22	69.9	.151	.139	.193	.223	.247	.177	.152	.217	.223	.260	.187	.169	.218	.236	.272	-0.90
23	73.4	-.301	-.274	-.407	-.190	-.024	-.266	-.263	-.384	-.170	.006	-.236	-.230	-.354	-.127	.012	2.50
24	70.0	.003	-.048	-.187	-.078	-.081	.025	-.031	-.161	-.071	-.037	.051	-.006	-.139	-.030	-.009	-0.95
25	72.6	-.292	-.331	-.440	-.229	-.048	-.279	-.328	-.415	-.217	-.025	-.224	-.281	-.387	-.157	-.012	3.26
26	76.5	-.633	-.530	-.527	-.455	-.386	-.613	-.520	-.502	-.437	-.362	-.538	-.466	-.472	-.369	-.311	4.48
27	84.9	-.160	-.151	-.163	-.157	-.075	-.136	-.130	-.155	-.133	-.059	-.100	-.091	-.139	-.091	-.054	3.01
28	93.3	.003	-.009	-.033	-.048	.003	.034	.003	-.009	-.028	.022	.039	.036	-.003	.015	.027	1.37
29	78.5	.178	.166	.169	.169	.175	.211	.173	.204	.170	.217	.224	.206	.197	.209	.224	-2.19
30	89.5	.087	.087	.066	.048	.075	.112	.099	.090	.056	.112	.127	.133	.094	.091	.121	-1.07

TABLE 24

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 10$ $\delta_{f,55} = 00$ $i_w = 70$ N = 2710 rpm

ORIFICE (FIG. 5)	% c	α = -11.21 D/L = -.182 C_L = 32.461 T_c' = 31.10 q = .56 lb/sq ft					α = -6.66 D/L = -.094 C_L = 33.899 T_c' = 31.99 q = .55 lb/sq ft					α = -.56 D/L = .024 C_L = 33.523 T_c' = 31.37 q = .57 lb/sq ft					$\frac{1}{\lambda}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.713	.614		-1.250	-.396	.848	.595		-1.416	-.414	.860	.600		-1.252	-.662	0
2	1.5	.165	.406		-1.524		.240	.427		-1.469		.198	.347		-1.635		2.23
3	5.0	-.040	.040		-.828	-1.029	-.072	-.007		-.903	-.995	-.123	.062		-.779	-1.100	3.96
4	15.0	-.020	-.221		-.498	-.568	-.013	-.250		-.532	-.549	-.023	-.217		-.477	-.600	6.76
5	30.0	-.066	-.290		-.373	-.376	-.085	-.286		-.384	-.361	-.097	-.285		-.360	-.393	8.53
6	50.0	-.178	-.247		-.261	-.274	-.177	-.243		-.269	-.263	-.191	-.230		-.256	-.276	8.19
7	1.5	.033	-.172		.779	1.003	-.079	-.253		.795	.972	.062	-.091		.814	.957	-1.77
8	5.0	-.135	-.106		.709	.686	-.128	-.079		.703	.667	-.068	-.107		.639	.688	-3.18
9	15.0				.307	.244				.289	.250				.292	.263	-5.14
10	30.0	-.172	-.188		-.010	.145	-.168	-.207		-.023	.128	-.152	-.185		-.003	.156	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.122	-.162	-.185	-.178	-.168	-.125	-.161	-.191	-.184	-.158	-.130	-.146	-.175	-.178	-.178	6.42
18	71.5		-.178	-.185		-.155		-.168	-.171		-.158		-.169	-.165		-.149	5.41
19	48.3	-.026	.046	.066	-.007	-.092	-.016	.036	.066	-.039	-.092	-.019	.062	.081	.006	-.097	-5.52
20	55.0	.000	.003	-.007	.049	.109	-.003	-.003	-.000	.026	.099	.000	-.003	-.003	.042	.101	-5.05
21	65.0	.046	.082	.056	.162	.155	.026	.062	.046	.135	.141	.023	.081	.058	.149	.152	-3.92
22	69.9	.185	.152	.172	.247	.297	.181	.138	.174	.233	.289	.191	.156	.185	.237	.289	-0.90
23	73.4	-.155	-.191	-.251	-.109	.020	-.151	-.187	-.240	-.092	.026	-.159	-.178	-.243	-.114	.023	2.50
24	70.0	.053	-.013	-.053	-.010	.000	.085	-.007	-.046	-.023	-.007	.078	-.003	-.062	-.013	-.006	-0.95
25	72.6	-.172	-.247	-.271	-.148	-.000	-.154	-.246	-.269	-.141	-.007	-.159	-.247	-.269	-.136	-.006	3.26
26	76.5	-.472	-.439	-.406	-.366	-.436	-.473	-.427	-.388	-.371	-.447	-.483	-.428	-.383	-.350	-.428	4.48
27	84.9	-.073	-.076	-.082	-.056	-.053	-.072	-.072	-.082	-.062	-.053	-.078	-.068	-.081	-.052	-.049	3.01
28	93.3	.066	.049	.036	.043	.069	.072	.046	.030	.026	.059	.058	.058	.036	.055	.058	1.37
29	78.5	.238	.178	.198	.254	.317	.250	.177	.187	.230	.302	.243	.185	.208	.256	.308	-2.19
30	89.5	.172	.135	.122	.142	.185	.164	.128	.118	.122	.171	.165	.139	.127	.143	.178	-1.07

ORIFICE (FIG. 5)	% c	α = 5.94 D/L = .141 C_L = 33.942 T_c' = 31.99 q = .56 lb/sq ft					α = 11.93 D/L = .247 C_L = 31.830 T_c' = 30.47 q = .59 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{1}{\lambda}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.981	.544		-1.197	-1.013	.965	.458		-1.237	-1.176						0
2	1.5	.180	.196		-1.924		.170	.369		-1.526							2.23
3	5.0	-.148	.035		-.788	-1.148	-.163	.006		-.827	-1.151						3.96
4	15.0	-.074	-.225		-.489	-.595	-.099	-.224		-.487	-.590						6.76
5	30.0	-.158	-.283		-.370	-.380	-.176	-.269		-.362	-.369						8.53
6	50.0	-.222	-.232		-.254	-.251	-.240	-.231		-.240	-.256						8.19
7	1.5	.097	.158		.814	.846	.103	-.131		.798	.878						-1.77
8	5.0	-.026	-.068		.659	.659	-.029	-.074		.673	.619						-3.18
9	15.0				.293	.296				.288	.314						-5.14
10	30.0	-.125	-.167		-.006	.167	-.135	-.163		-.013	.202						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.151	-.145	-.209	-.161	-.148	-.160	-.141	-.183	-.147	-.144						6.42
18	71.5		-.161	-.180		-.125		-.154	-.167		-.131						5.41
19	48.3	-.029	.048	.061	.013	-.100	-.029	.061	.096	-.010	-.119						-5.52
20	55.0	.016	-.000	-.006	.051	.113	.010	-.003	.010	.051	.106						-5.05
21	65.0	.039	.074	.068	.154	.158	.029	.064	.067	.157	.144						-3.92
22	69.9	.199	.151	.187	.238	.312	.199	.157	.189	.244	.305						-0.90
23	73.4	-.161	-.193	-.261	-.103	.039	-.176	-.189	-.247	-.074	.042						2.50
24	70.0	.093	.000	-.064	.006	.016	.074	-.003	-.045	.006	-.006						-0.95
25	72.6	-.164	-.241	-.283	-.135	.016	-.179	-.244	-.263	-.115	.010						3.26
26	76.5	-.486	-.415	-.392	-.354	-.380	-.510	-.397	-.369	-.362	-.359						4.48
27	84.9	-.077	-.074	-.106	-.045	-.029	-.087	-.071	-.080	-.048	-.032						3.01
28	93.3	.068	.048	.013	.051	.125	.051	.045	.022	.048	.061						1.37
29	78.5	.264	.180	.199	.254	.290	.244	.189	.199	.250	.288						-2.19
30	89.5	.161	.135	.113	.142	.174	.160	.144	.135	.144	.163						-1.07

TABLE 2[illegible]

PRESSURE COEFFICIENTS C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 00$ $\Omega = 2230$ rpm

ORIFICE	%	α = -4.61 D/L = -.254 C_L = .306 T_c' = .14 q = 13.72 lb/sq ft					α = 3.40 D/L = -.039 C_L = 1.071 T_c' = .16 q = 13.48 lb/sq ft					α = 7.42 D/L = -.002 C_L = 1.529 T_c' = .18 q = 13.23 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.751	.463		.789	.973	.855	.684		.309	.523	-.422	-.586		-1.684	-1.257	0
2	1.5	.647	.694		.486		-.846	-.832		-1.297		-2.355	-2.139		-2.759		2.23
3	5.0	.043	.194		.099	.043	-1.041	-.903		-.969	-1.017	-2.055	-1.665		-1.628	-1.834	3.96
4	15.0	-.217	-.373		-.302	-.331	-.817	-.903		-.889	-.941	-1.271	-1.281		-1.229	-1.328	6.76
5	30.0	-.420	-.463		-.529	-.472	-.851	-.846		-.893	-.874	-1.121	-1.093		-1.084	-1.079	8.53
6	50.0	-.548	-.515		-.510	-.557	-.794	-.732		-.713	-.756	-.943	-.873		-.830	-.859	8.19
7	1.5	-.850	-.968		-.666	-.444	.751	.660		.703	.846	1.178	1.112		.882	1.070	-1.77
8	5.0	-.614	-.831		-.623	-.406	.366	.295		.423	.504	.798	.737		.774	.868	-3.18
9	15.0				-.458	-.477				.133	.119				.441	.418	-5.14
10	30.0	-.316	-.406		-.401	-.298	.029	-.076		.019	.048	.225	.084		.206	.253	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.411	-.425	-.453	-.397	-.453	-.584	-.532	-.570	-.523	-.580	-.662	-.624	-.657	-.610	-.633	6.42
18	71.5		-.472	-.486		-.453		-.532	-.565		-.542		-.624	-.629		-.577	5.41
19	48.3	-.118	.033	.241	-.009	-.099	.090	.228	.242	.133	-.133	.206	.310	.403	.244	-.075	-5.52
20	55.0	-.099	-.094	-.094	.076	.014	-.067	-.052	-.062	.209	.166	-.038	-.038	-.038	.305	.267	-5.05
21	65.0	.113	.137	.194	.189	.198	.219	.285	.285	.276	.271	.286	.375	.371	.324	.338	-3.92
22	69.9	.246	.217	.236	.288	.302	.323	.342	.328	.347	.323	.371	.436	.432	.361	.361	-0.90
23	73.4	-.264	-.420	-.699	-.260	-.222	-.399	-.461	-.665	-.304	-.228	-.441	-.521	-.788	-.380	-.230	2.50
24	70.0	-.014	-.132	-.477	-.104	-.175	.033	-.095	-.347	-.124	-.190	.038	-.113	-.427	-.202	-.202	-0.95
25	72.6	-.345	-.614	-.817	-.434	-.349	-.532	-.665	-.817	-.542	-.418	-.633	-.774	-.957	-.680	-.441	3.26
26	76.5	-.793	-1.138	-1.228	-.940	-1.242	-1.193	-1.064	-1.102	-1.064	-1.297	-1.285	-1.276	-1.257	-1.215	-1.267	4.48
27	84.9	-.227	-.255	-.255	-.250	-.250	-.200	-.209	-.209	-.209	-.204	-.188	-.221	-.258	-.211	-.183	3.01
28	93.3	-.231	-.170	-.161	-.213	-.165	-.181	-.133	-.086	-.157	-.105	-.174	-.131	-.052	-.070	-.080	1.37
29	78.5	.529	.326	.510	.496	.604	.618	.485	.489	.546	.613	.671	.591	.619	.610	.638	-2.19
30	89.5	.236	.222	.264	.255	.274	.337	.318	.295	.295	.328	.375	.389	.375	.352	.371	-1.07

ORIFICE	%	α = 11.45 D/L = .032 C_L = 1.975 T_c' = .20 q = 13.01 lb/sq ft					α = 15.49 D/L = .059 C_L = 2.363 T_c' = .26 q = 12.65 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-2.024	-3.157		-4.812	-3.772	-4.490	-6.083		-8.205	-6.698						0
2	1.5	-4.085	-3.712		-4.421		-5.187	-5.227		-6.124							2.23
3	5.0	-2.896	-2.583		-2.401	-2.649	-3.802	-3.422		-3.118	-3.372						3.96
4	15.0	-1.623	-1.674		-1.585	-1.707	-1.978	-2.019		-1.887	-2.009						6.76
5	30.0	-1.338	-1.329		-1.268	-1.278	-1.475	-1.512		-1.399	-1.417						8.53
6	50.0	-1.054	-.975		-.937	-.961	-1.122	-1.064		-.987	-.996						8.19
7	1.5	1.194	1.240		.751	.979	.149	1.041		.344	.625						-1.77
8	5.0	1.012	1.119		1.026	1.068	.878	1.285		1.141	1.141						-3.18
9	15.0				.695	.644				.883	.792						-5.14
10	30.0	.368	.224		.396	.406	.480	.344		.525	.511						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.732	-.690	-.709	-.695	-.685	-.747	-.733	-.742	-.702	-.697						6.42
18	71.5		-.657	-.690		-.620		-.670	-.720		-.606						5.41
19	48.3	.303	.415	.541	.354	-.061	.362	.471	.566	.462	-.081						-5.52
20	55.0	-.028	-.023	-.019	.420	.354	-.014	-.018	-.023	.489	.394						-5.05
21	65.0	.345	.443	.434	.406	.401	.376	.493	.466	.444	.434						-3.92
22	69.9	.438	.508	.466	.476	.396	.475	.570	.516	.493	.434						-0.90
23	73.4	-.476	-.546	-.923	-.424	-.252	-.484	-.548	-.932	-.425	-.249						2.50
24	70.0	.089	-.103	-.462	-.228	-.219	.122	-.077	-.398	-.240	-.208						-0.95
25	72.6	-.667	-.844	-1.142	-.760	-.494	-.697	-.851	-1.181	-.774	-.484						3.26
26	76.5	-1.343	-1.348	-1.380	-1.404	-1.301	-1.362	-1.186	-1.484	-1.444	-1.159						4.48
27	84.9	-.196	-.228	-.294	-.228	-.196	-.208	-.204	-.290	-.240	-.177						3.01
28	93.3	-.168	-.149	-.042	-.033	-.047	-.122	-.149	-.054	-.023	-.072						1.37
29	78.5	.699	.685	.755	.704	.676	.683	.778	.760	.769	.702						-2.19
30	89.5	.387	.466	.466	.420	.401	.398	.507	.466	.480	.439						-1.07

TABLE 26

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 10$ N = 2205 rpm

ORIFICE (FIG. 6)	x/c	α = -12.63 D/L = -.209 C_L = .478 T_c' = .18 q = 12.75 lb/sq ft					α = -4.62 D/L = -.045 C_L = 1.323 T_c' = .22 q = 12.43 lb/sq ft					α = -.58 D/L = -.001 C_L = 1.817 T_c' = .25 q = 12.24 lb/sq ft					$\frac{1}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.019	.838		1.048	1.160	.363	.102		-.920	-.450	-1.046	-1.673		-3.437	-2.629	0
2	1.5	.395	.463		.102		-1.598	-1.473		-2.117		-2.919	-2.639		-3.428		2.23
3	5.0	-.195	-.029		-.185	-.253	-1.448	-1.313		-1.351	-1.511	-2.358	-2.082		-2.025	-2.253	3.96
4	15.0	-.370	-.419		-.478	-.497	-1.017	-1.090		-1.080	-1.167	-1.374	-1.445		-1.388	-1.502	6.76
5	30.0	-.526	-.561		-.643	-.590	-.949	-.983		-.993	-.993	-1.170	-1.189		-1.141	-1.160	8.53
6	50.0	-.619	-.565		-.575	-.609	-.867	-.799		-.765	-.809	-.956	-.913		-.865	-.884	8.19
7	1.5	-.297	-.453		-.102	.054	1.061	.959		.862	1.051	1.227	1.184		.861	1.055	-1.77
8	5.0	-.312	-.478		-.253	-.049	.601	.596		.668	.727	.922	.960		.937	.984	-3.18
9	15.0				-.253	-.273				.368	.300				.599	.561	-5.14
10	30.0	-.224	-.302		-.288	-.180	.126	.039		.165	.170	.304	.162		.314	.347	-6.25
11	45.0																-2.59
12	46.6																.1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.453	-.463	-.458	-.429	-.473	-.605	-.586	-.601	-.562	-.601	-.680	-.666	-.656	-.637	-.623	6.42
18	71.5		-.483	-.492		-.478		-.586	-.601		-.567		-.632	-.642		-.575	5.41
19	48.3	-.049	.102	.244	.039	-.044	.136	.291	.344	.213	-.044	.266	.366	.504	.338	.271	-5.52
20	55.0	-.097	-.097	-.093	.127	.058	-.053	-.039	-.048	.291	.223	-.024	-.029	-.019	.376	.314	-5.05
21	65.0	.146	.180	.200	.224	.214	.252	.339	.349	.339	.295	.314	.399	.404	.361	.390	-3.92
22	69.9	.273	.253	.249	.341	.283	.334	.407	.402	.358	.329	.414	.471	.490	.418	.399	-0.90
23	73.4	-.292	-.424	-.639	-.253	-.234	-.431	-.480	-.688	-.339	-.242	-.442	-.523	-.765	-.380	-.219	2.50
24	70.0	.015	-.107	-.380	-.088	-.214	.010	-.097	-.344	-.179	-.281	.086	-.095	-.357	-.238	-.247	-0.95
25	72.6	-.409	-.629	-.765	-.448	-.370	-.572	-.731	-.843	-.620	-.455	-.618	-.822	-.975	-.689	-.461	3.26
26	76.5	-.955	-1.155	-1.116	-.887	-1.277	-1.255	-1.201	-1.138	-1.167	-1.293	-1.284	-1.341	-1.336	-1.269	-1.274	4.48
27	84.9	-.224	-.244	-.239	-.224	-.224	-.199	-.213	-.213	-.170	-.194	-.181	-.238	-.276	-.219	-.171	3.01
28	93.3	-.229	-.156	-.175	-.185	-.127	-.179	-.111	-.058	-.092	-.092	-.157	-.138	-.014	-.043	-.038	1.37
29	78.5	.556	.341	.468	.517	.590	.625	.562	.562	.581	.615	.685	.637	.675	.666	.656	-2.19
30	89.5	.278	.234	.253	.268	.307	.339	.368	.349	.349	.344	.380	.418	.423	.399	.404	-1.07

ORIFICE (FIG. 6)	x/c	α = 7.50 D/L = .055 C_L = 2.780 T_c' = .41 q = 11.39 lb/sq ft					α = 15.49 D/L = .184 C_L = 2.373 T_c' = .58 q = 11.13 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{1}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-6.613	-7.582		-.052	-8.450	-7.236	-7.291		-8.875	-4.680						0
2	1.5	-5.546	-5.581		-6.560		-5.048	-5.585		-5.707							2.23
3	5.0	-4.046	-3.727		-3.395	-3.731	-3.207	-3.318		-2.540	-1.611						3.96
4	15.0	-2.040	-2.089		-1.956	-2.102	-1.651	-1.754		-1.205	-.822						6.76
5	30.0	-1.447	-1.509		-1.385	-1.399	-1.082	-1.213		-.766	-.577						8.53
6	50.0	-1.076	-1.027		-.960	-.925	-.857	-.869		-.695	-.533						8.19
7	1.5	-.390	.899		.124	.482	-.920	.782		.122	.766						-1.77
8	5.0	.664	1.279		1.142	1.142	.506	1.268		1.130	1.055						-3.18
9	15.0				.943	.819				.924	.683						-5.14
10	30.0	.487	.381		.580	.531	.462	.352		.521	.427						-6.25
11	45.0																-2.59
12	46.6																.1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.721	-.699	-.739	-.668	-.606	-.596	-.660	-.620	-.667	-.541						6.42
18	71.5		-.651	-.704		-.527		-.671	-.691		-.498						5.41
19	48.3	.385	.482	.571	.367	-.084	.336	.415	.549	.336	-.099						-5.52
20	55.0	.009	.004	-.004	.505	.398	.000	.008	-.004	.403	.300						-5.05
21	65.0	.403	.482	.465	.425	.443	.332	.395	.395	.300	.308						-3.92
22	69.9	.482	.536	.527	.491	.443	.399	.419	.454	.375	.257						-0.90
23	73.4	-.434	-.518	-.868	-.350	-.199	-.490	-.585	-.904	-.462	-.292						2.50
24	70.0	.128	-.040	-.363	-.252	-.208	.032	-.126	-.431	-.304	-.292						-0.95
25	72.6	-.642	-.841	-1.120	-.677	-.416	-.660	-.904	-1.157	-.806	-.490						3.26
26	76.5	-1.275	-1.275	-1.447	-1.288	-.872	-1.173	-1.268	-1.169	-.940	-.577						4.48
27	84.9	-.190	-.177	-.274	-.208	-.150	-.324	-.308	-.533	-.537	-.395						3.01
28	93.3	-.075	-.093	-.035	-.022	-.075	-.182	-.174	-.407	-.506	-.359						1.37
29	78.5	.651	.792	.744	.792	.730	.529	.711	.695	.687	.600						-2.19
30	89.5	.407	.500	.429	.474	.438	.304	.395	.340	.316	.269						-1.07

TABLE [illegible]

[illegible] C_p ON WING AND FLAP AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 20$ [illegible] = 2020 rpm

ORIFICE	x/c	α = -12.78 D/L = -.185 C_L = 1.818 T_c' = .59 q = 7.04 lb/sq ft					α = -.40 D/L = .001 C_L = 3.510 T_c' = 1.15 q = 6.56 lb/sq ft					α = 3.69 D/L = .061 C_L = 3.342 T_c' = 1.16 q = 6.39 lb/sq ft					ψ
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.404	-.230		-.363	-1.020	-4.266	-4.995		-7.873	-5.987	-4.822	-5.042		-7.896	-4.171	0
2	1.5	-1.592	-1.293		-.543		-3.918	-4.266		-5.446		-3.888	-4.089		-4.999		2.23
3	5.0	-1.362	-1.330		-1.548	-1.648	-2.718	-2.681		-2.577	-2.911	-2.701	-2.672		-2.428	-1.733	3.96
4	15.0	-.926	-1.076		-.107	-1.125	-1.406	-1.543		-1.458	-1.585	-1.427	-1.508		-1.264	-.766	6.76
5	30.0	-.852	-.926		.939	-.914	-.988	-1.124		-1.039	-1.035	-.977	-1.106		-.848	-.603	8.53
6	50.0	-.771	-.769		.709	-.740	-.771	-.785		-.734	-.696	-.757	-.790		-.608	-.603	8.19
7	1.5	1.051	.982		.877	1.119	-.546	.851		.146	.597	-.512	.905		.268	.833	-1.77
8	5.0	.616	.734		.883	.870	.390	1.082		1.025	.974	.302	1.125		1.063	.929	-3.18
9	15.0				.485	.404				.800	.616				.814	.536	-5.14
10	30.0	.162	.044		.206	.255	.325	.254		.456	.381	.330	.259		.441	.340	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.566	-.572	-.560	-.541	-.553	-.531	-.555	-.578	-.536	-.480	-.555	-.575	-.541	-.532	-.622	6.42
18	71.5		-.584	-.566		-.522		-.527	-.536		-.423		-.579	-.551		-.627	5.41
19	48.3	.162	.311	.361	.236	-.050	.263	.362	.456	.372	.301	.268	.364	.460	.350	-.038	-5.52
20	55.0	-.025	-.044	-.025	.323	.255	.014	.014	-.000	.381	.466	.005	.005	-.005	.359	.244	-5.05
21	65.0	.249	.361	.361	.317	.330	.282	.376	.367	.329	.301	.259	.359	.340	.283	.259	-3.92
22	69.9	.348	.354	.385	.367	.361	.348	.456	.419	.372	.320	.306	.469	.402	.350	.254	-0.90
23	73.4	-.354	-.479	-.647	-.330	-.218	-.375	-.419	-.607	-.301	-.155	-.373	-.436	-.651	-.359	-.369	2.50
24	70.0	.099	-.099	-.317	.193	-.249	.089	-.005	-.240	-.198	-.183	.043	-.048	-.259	-.220	-.402	-0.95
25	72.6	-.510	-.759	-.833	.616	-.404	-.484	-.677	-.804	-.593	-.325	-.527	-.699	-.843	-.646	-.579	3.26
26	76.5	-1.150	-1.337	-1.200	-1.175	-1.299	-.974	-1.021	-1.232	-1.105	-.856	-.967	-1.154	-1.116	-.967	-.508	4.48
27	84.9	-.174	-.224	-.242	-.193	-.168	-.188	-.132	-.230	-.212	-.108	-.235	-.177	-.287	-.359	-.340	3.01
28	93.3	-.168	-.106	-.012	-.025	-.062	-.056	-.075	-.066	.000	-.009	-.077	-.091	-.115	-.254	-.311	1.37
29	78.5	.640	.584	.622	.647	.647	.475	.635	.616	.673	.588	.431	.627	.618	.656	.556	-2.19
30	89.5	.336	.367	.385	.385	.392	.296	.376	.367	.404	.357	.268	.373	.340	.345	.273	-1.07

ORIFICE	x/c	α = 7.64 D/L = .100 C_L = 3.280 T_c' = 1.25 q = 6.1[illegible] lb/sq ft					α = 15.72 D/L = .184 C_L = 3.222 T_c' = 1.46 q = 5.08 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					ψ
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-5.758	-6.038		8.352	-4.007	-4.327	-6.315		-4.951	-3.253						0
2	1.5	-3.617	-4.569		5.244		-1.916	-4.733		-1.573							2.24
3	5.0	-2.556	-2.922		2.379	-1.409	-1.689	-2.750		-1.324	-.891						3.96
4	15.0	-1.437	-1.556		1.095	-.581	-1.466	-1.292		-1.252	-.486						6.76
5	30.0	-.971	-1.099		-.666	-.481	-.931	-.731		-.735	-.432						8.53
6	50.0	-.700	-.776		-.623	-.495	-.575	-.553		-.481	-.432						8.19
7	1.5	-.828	.918		.276	.804	-.882	.949		.686	.053						-1.77
8	5.0	.243	1.233		1.161	.861	.214	1.257		1.234	.459						-3.18
9	15.0				.866	.500				.820	.365						-5.14
10	30.0	.357	.262		.452	.352	.343	.223		.419	.321						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.519	-.598	-.547	-.595	-.485	-.450	-.517	-.544	-.481	-.432						6.42
18	71.5		-.609	-.609		-.528		-.521	-.544		-.432						5.41
19	48.3	.286	.352	.476	.343	-.067	.267	.321	.357	.290	-.080						-5.52
20	55.0	.005	.010	.000	.338	.257	.009	.004	.018	.285	.241						-5.05
21	65.0	.290	.328	.324	.247	.257	.254	.227	.241	.259	.218						-3.92
22	69.9	.247	.376	.333	.324	.271	.263	.321	.250	.250	.218						-0.90
23	73.4	-.362	-.495	-.738	-.419	-.324	-.325	-.455	-.606	-.312	-.258						2.50
24	70.0	.057	-.081	-.362	-.276	-.343	.027	-.165	-.307	-.147	-.316						-0.95
25	72.6	-.523	-.785	-.976	-.776	-.509	-.459	-.686	-.775	-.570	-.414						3.26
26	76.5	-.771	-1.161	-1.142	-.980	-.595	-.535	-.624	-.660	-.624	-.575						4.48
27	84.9	-.274	-.243	-.400	-.519	-.400	-.281	-.379	-.437	-.455	-.446						3.01
28	93.3	-.090	-.119	-.238	-.490	-.390	-.209	-.321	-.374	-.414	-.419						1.37
29	78.5	.428	.642	.619	.623	.557	.334	.539	.517	.419	.406						-2.19
30	89.5	.276	.347	.295	.257	.238	.205	.263	.201	.129	.192						-1.07

TABLE 28

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 30$ N = 2232 rpm

ORIFICE (FIG.)	%	α = -12.81 D/L = -.174 C_L = 3.612 T_c' = 1.65 q = 5.20 lb/sq ft					α = -3.99 D/L = -.038 C_L = 4.801 T_c' = 2.38 q = 4.79 lb/sq ft					α = 4.61 D/L = .063 C_L = 5.048 T_c' = 2.71 q = 4.47 lb/sq ft					$\frac{\delta_f}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.197	-1.162		-4.619	-3.363	-2.140	-3.093		-6.448	-4.774	-3.623	-4.288		-6.839	-3.634	0
2	1.5	-1.878	-2.127		-3.794		-2.438	-3.144		-4.566	-.016	-2.642	-3.733		-4.721		2.23
3	5.0	-1.494	-1.457		-1.874	-2.235	-1.780	-1.991		-2.148	-2.575	-1.828	-2.349		-2.045	-1.102	3.96
4	15.0	-.899	-1.017		-1.110	-1.293	-.964	-1.188		-1.211	-1.348	-1.042	-1.296		-.973	-.726	6.76
5	30.0	-.787	-.834		-.867	-.899	-.753	-.894		-.882	-.862	-.753	-.928		-.646	-.593	8.53
6	50.0	-.675	-.670		-.656	-.670	-.600	-.659		-.635	-.588	-.570	-.646		-.563	-.536	8.19
7	1.5	.595	1.068		.628	1.007	-.263	.956		.357	.655	-.673	.950		.449	.156	-1.77
8	5.0	.459	.848		.988	1.007	.243	.933		.964	.815	.133	1.080		1.099	.544	-3.18
9	15.0				.665	.534	.000	-.008		.682	.415				.734	.308	-5.14
10	30.0	.173	.112		.314	.309	.220	.122		.325	.286	.255	.114		.350	.251	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.492	-.492	-.520	-.515	-.478	-.423	-.470	-.498	-.490	-.400	-.414	-.460	-.449	-.502	-.498	6.42
18	71.5		-.511	-.534		-.459	-.858	-.470	-.482	-.286	-.388		-.468	-.464		-.475	5.41
19	48.3	.126	.304	.328	.220	-.126	.180	.267	.376	.129	-.596	.209	.247	.354	.270	-.072	-5.52
20	55.0	.009	-.005	-.009	.333	.253	.012	.004	.008	.282	.223	.027	.008	.004	.251	.198	-5.05
21	65.0	.230	.347	.300	.333	.319	.196	.286	.286	.251	.243	.201	.239	.232	.209	.194	-3.92
22	69.9	.333	.426	.337	.365	.337	.263	.357	.345	.274	.259	.232	.316	.266	.266	.201	-0.90
23	73.4	-.337	-.436	-.675	-.319	-.183	-.298	-.372	-.584	-.306	-.141	-.266	-.388	-.604	-.323	-.285	2.50
24	70.0	.066	-.047	-.300	-.206	-.183	.027	-.027	-.247	-.208	-.176	.011	-.061	-.308	-.171	-.346	-0.95
25	72.6	-.468	-.689	-.862	-.586	-.361	-.423	-.604	-.768	-.564	-.298	-.376	-.604	-.775	-.578	-.445	3.26
26	76.5	-1.040	-1.279	-1.312	-1.096	-1.115	-.753	-.972	-1.152	-1.082	-.886	-.574	-.935	-.863	-.673	-.426	4.48
27	84.9	-.197	-.215	-.300	-.192	-.112	-.169	-.141	-.184	-.220	-.102	-.152	-.186	-.209	-.323	-.266	3.01
28	93.3	-.126	-.070	-.019	.000	.037	-.047	-.078	-.059	-.016	.020	-.053	-.110	-.133	-.278	-.236	1.37
29	78.5	.525	.548	.586	.646	.618	.368	.517	.549	.584	.529	.323	.532	.509	.460	.416	-2.19
30	89.5	.286	.361	.365	.384	.379	.223	.286	.298	.317	.302	.209	.278	.236	.194	.201	-1.07

ORIFICE (FIG.)	%	α = 8.48 D/L = .103 C_L = 4.830 T_c' = 2.70 q = 4.42 lb/sq ft					α = 15.46 D/L = .164 C_L = 4.597 T_c' = 2.82 q = 4.37 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{\delta_f}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.891	-4.670		-5.668	-2.782	-3.984	-4.214		-3.296	-1.960						0
2	1.5	-2.755	-3.653		-2.176		-1.813	-3.386		-.925							2.23
3	5.0	-1.873	-2.410		-1.497	-.656	-1.539	-1.941		-.700	-.497						3.96
4	15.0	-1.005	-1.247		-.844	-.487	-.997	-.835		-.576	-.421						6.76
5	30.0	-.706	-.806		-.595	-.422	-.617	-.576		-.474	-.399						8.53
6	50.0	-.541	-.560		-.545	-.422	-.467	-.512		-.451	-.406						8.19
7	1.5	-.791	1.017		.752	.200	-.888	1.102		.914	-.056						-1.77
8	5.0	.119	1.128		1.147	.499	.038	.997		1.046	.271						-3.18
9	15.0				.725	.276				.594	.229						-5.14
10	30.0	.269	.127		.345	.242	.278	.109		.308	.229						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.391	-.484	-.533	-.526	-.418	-.369	-.489	-.478	-.448	-.410						6.42
18	71.5		-.518	-.533		-.472		-.523	-.478		-.436						5.41
19	48.3	.226	.253	.315	.219	-.119	.218	.229	.260	.102	-.128						-5.52
20	55.0	.015	.008	.000	.246	.211	.000	.000	.015	.214	.199						-5.05
21	65.0	.215	.223	.196	.196	.177	.207	.169	.166	.166	.177						-3.92
22	69.9	.238	.292	.230	.246	.177	.222	.229	.207	.211	.177						-0.90
23	73.4	-.276	-.453	-.675	-.353	-.292	-.263	-.444	-.587	-.316	-.290						2.50
24	70.0	.019	-.127	-.460	-.200	-.380	.011	-.150	-.260	-.233	-.350						-0.95
25	72.6	-.391	-.691	-.852	-.610	-.445	-.391	-.688	-.741	-.515	-.410						3.26
26	76.5	-.683	-.806	-.606	-.564	-.460	-.594	-.594	-.534	-.504	-.470						4.48
27	84.9	-.184	-.295	-.391	-.391	-.307	-.214	-.384	-.403	-.384	-.354						3.01
28	93.3	-.092	-.215	-.345	-.376	-.288	-.135	-.324	-.372	-.365	-.339						1.37
29	78.5	.311	.510	.468	.399	.361	.271	.414	.395	.301	.256						-2.19
30	89.5	.196	.253	.188	.157	.188	.177	.207	.150	.124	.135						-1.07

TABLE 29

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 40$ N = 2550 rpm

ORIFICE	x/c	α = -15.44 D/L = -.223 C_L = 5.754 T_c' = 3.59 q = 3.61 lb/sq ft					α = -2.18 D/L = -.001 C_L = 8.336 T_c' = 5.22 q = 3.13 lb/sq ft					α = 2.19 D/L = .050 C_L = 8.558 T_c' = 5.49 q = 3.00 lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.365	-.895		-4.781	-3.319	-.793	-2.136		-5.319	-4.994	-.660	-2.405		-5.253	-4.459	0
2	1.5	-1.100	-1.820		-3.752		-1.215	-2.402		-3.976		-1.363	-2.639		-4.070		2.23
3	5.0	-1.175	-1.302		-1.809	-2.301	-1.146	-1.705		-1.933	-2.302	-1.276	-1.830		-1.904	-1.341	3.96
4	15.0	-.731	-.899		-1.052	-1.249	-.793	-1.027		-1.112	-1.149	-.822	-1.077		-1.039	-1.039	6.76
5	30.0	-.679	-.753		-.813	-.824	-.671	-.775		-.781	-.740	-.672	-.800		-.710	-.753	8.53
6	50.0	-.615	-.586		-.600	-.608	-.531	-.562		-.556	-.503	-.545	-.560		-.485	-.501	8.19
7	1.5	.492	1.070		.720	1.085	.078	1.043		.640	.166	.075	1.086		.691	-.075	-1.77
8	5.0	.280	.832		1.048	.966	.159	.874		.993	.484	.177	.871		1.008	.339	-3.18
9	15.0				.653	.444				.603	.222				.579	.168	-5.14
10	30.0	.142	.019		.254	.261	.128	.019		.256	.178	.165	.031		.261	.168	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.466	-.436	-.481	-.474	-.440	-.390	-.387	-.403	-.400	-.369	-.377	-.380	-.383	-.349	-.358	6.42
18	71.5		-.474	-.481		-.418		-.387	-.403		-.340		-.355	-.373		-.321	5.41
19	48.3	.108	.246	.295	.216	-.142	.141	.175	.284	.187	-.169	.149	.187	.240	.184	.121	-5.52
20	55.0	.011	-.000	.004	.250	.209	.000	.009	.009	.187	.153	-.000	.016	.006	.165	.152	-5.05
21	65.0	.172	.291	.250	.257	.265	.141	.169	.181	.150	.150	.140	.140	.152	.131	.134	-3.92
22	69.9	.269	.384	.332	.310	.328	.166	.256	.215	.228	.162	.159	.205	.193	.196	.140	-0.90
23	73.4	-.365	-.399	-.600	-.332	-.164	-.253	-.315	-.497	-.250	-.175	-.218	-.299	-.436	-.215	-.184	2.50
24	70.0	-.007	-.048	-.224	-.220	-.164	-.016	-.069	-.244	-.112	-.247	.009	-.090	-.215	-.121	-.268	-0.95
25	72.6	-.481	-.645	-.787	-.623	-.328	-.362	-.490	-.640	-.450	-.297	-.314	-.473	-.573	-.405	-.277	3.26
26	76.5	-1.115	-1.130	-1.264	-1.145	-1.111	-.659	-.737	-1.002	-.968	-.531	-.629	-.691	-.887	-.710	-.342	4.48
27	84.9	-.216	-.183	-.298	-.242	-.123	-.128	-.144	-.141	-.187	-.141	-.121	-.124	-.121	-.187	-.165	3.01
28	93.3	-.090	-.097	-.048	-.011	.034	-.078	-.084	-.078	-.037	-.075	-.072	-.075	-.072	-.109	-.140	1.37
29	78.5	.477	.518	.571	.645	.623	.222	.422	.456	.431	.369	.202	.386	.398	.349	.271	-2.19
30	89.5	.257	.310	.317	.351	.343	.153	.209	.206	.191	.191	.140	.193	.174	.149	.159	-1.07

ORIFICE	x/c	α = 6.62 D/L = .098 C_L = 8.612 T_c' = 5.72 q = 2.89 lb/sq ft					α = 10.90 D/L = .141 C_L = 8.521 T_c' = 5.89 q = 2.92 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.928	-2.389		-4.791	-3.157	-.871	-2.302		-4.134	-1.925						0
2	1.5	-1.390	-2.695		-3.663		-1.390	-2.678		-3.113							2.23
3	5.0	-1.296	-1.839		-1.705	-.887	-1.281	-1.820		-1.362	-.535						3.96
4	15.0	-.840	-1.068		-.862	-.753	-.812	-1.023		-.653	-.463						6.76
5	30.0	-.684	-.787		-.609	-.659	-.659	-.722		-.541	-.467						8.53
6	50.0	-.534	-.547		-.468	-.528	-.529	-.498		-.454	-.467						8.19
7	1.5	.091	1.118		.765	-.031	.068	1.107		.802	-.062						-1.77
8	5.0	.153	.843		.984	.256	.162	.799		.946	.215						-3.18
9	15.0				.562	.141				.541	.137						-5.14
10	30.0	.156	.041		.253	.156	.149	.062		.243	.156						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.372	-.372	-.378	-.394	-.415	-.364	-.364	-.417	-.435	-.398						6.42
18	71.5		-.356	-.390		-.394		-.364	-.426		-.432						5.41
19	48.3	.147	.169	.209	.116	-.128	.137	.177	.177	.124	-.168						-5.52
20	55.0	.006	.006	.003	.150	.150	.000	.006	.006	.143	.137						-5.05
21	65.0	.153	.122	.122	.122	.128	.134	.112	.109	.115	.124						-3.92
22	69.9	.150	.184	.166	.197	.134	.131	.152	.143	.162	.121						-0.90
23	73.4	-.203	-.297	-.456	-.256	-.259	-.205	-.320	-.485	-.302	-.305						2.50
24	70.0	.003	-.103	-.200	-.147	-.337	-.016	-.124	-.224	-.190	-.358						-0.95
25	72.6	-.306	-.462	-.581	-.440	-.362	-.292	-.491	-.603	-.482	-.404						3.26
26	76.5	-.565	-.665	-.725	-.556	-.303	-.554	-.628	-.628	-.507	-.339						4.48
27	84.9	-.109	-.122	-.187	-.225	-.200	-.118	-.143	-.252	-.305	-.255						3.01
28	93.3	-.075	-.087	-.128	-.175	-.172	-.081	-.109	-.193	-.267	-.239						1.37
29	78.5	.181	.350	.325	.300	.240	.174	.314	.289	.243	.196						-2.19
30	89.5	.137	.175	.141	.141	.147	.131	.174	.124	.118	.118						-1.07

[illegible]

[illegible] $\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 50$ $\delta_e = 2560$ rpm

ORIFICE	x/c	α = -13.02 D/L = -.146 C_L = 13.849 T_c' = 10.24 q = 1.54 lb/sq ft					α = -4.13 D/L = -.013 C_L = 15.974 T_c' = 11.93 q = 1.37 lb/sq ft					α = .84 D/L = .051 C_L = 16.583 T_c' = 12.64 q = 1.32 lb/sq ft					α
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.800	-.066		-3.258	-2.695	.701	-.325		-3.266	-3.391	.679	-.398		-3.247	-3.541	0
2	1.5	-.605	-.961		-2.877		-.647	-1.155		-2.924		-.629	-1.204		-2.929		2.23
3	5.0	-.734	-.794		-1.409	-1.849	-.769	-.894		-1.436	-1.894	-.752	-.936		-1.434	-1.816	3.96
4	15.0	-.479	-.629		-.839	-.954	-.484	-.654		-.854	-.966	-.475	-.652		-.846	-.926	6.76
5	30.0	-.479	-.549		-.447	-.615	-.474	-.545		-.537	-.610	-.461	-.532		-.629	-.585	8.53
6	50.0	-.479	-.447		-.475	-.465	-.464	-.427		-.471	-.430	-.461	-.428		-.455	-.411	8.19
7	1.5	.612	.867		.794	.780	.566	.915		.810	.444	.568	.930		.816	.197	-1.77
8	5.0	.227	.584		.884	.717	.241	.617		.874	.505	.217	.609		.856	.358	-3.18
9	15.0				.468	.297				.461	.196				.455	.171	-5.14
10	30.0	.017	-.070		.140	.175	.014	-.047		.156	.156	.017	-.037		.174	.144	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.367	-.339	-.353	-.385	-.332	-.362	-.318	-.329	-.386	-.315	-.344	-.311	-.321	-.378	-.304	6.42
18	71.5		-.360	-.378		-.332		-.335	-.342		-.315		-.311	-.324		-.294	5.41
19	48.3	.063	.147	.273	.161	-.150	.061	.136	.237	.105	-.159	.060	.134	.201	.077	-.144	-5.54
20	55.0	.010	.003	-.003	.147	.143	.007	.007	.010	.129	.112	.003	.003	-.010	.120	.104	-5.05
21	65.0	.133	.175	.164	.147	.178	.125	.142	.119	.105	.132	.110	.120	.097	.090	.104	-3.92
22	69.9	.227	.262	.206	.210	.255	.203	.166	.156	.196	.193	.174	.201	.144	.160	.171	-0.90
23	73.4	-.301	-.301	-.472	-.287	-.126	-.274	-.291	-.430	-.251	-.152	-.294	-.267	-.408	-.237	-.137	2.50
24	70.0	.017	-.059	-.231	-.140	-.129	-.017	-.068	-.210	-.125	-.180	-.017	-.053	-.197	-.134	-.181	-0.95
25	72.6	-.402	-.461	-.612	-.486	-.255	-.393	-.440	-.549	-.434	-.264	-.391	-.408	-.527	-.418	-.237	3.26
26	76.5	-1.094	-.839	-1.024	-.937	-.930	-1.054	-.772	-.952	-.891	-.796	-1.020	-.729	-.909	-.853	-.679	4.48
27	84.9	-.199	-.206	-.255	-.234	-.129	-.203	-.183	-.220	-.220	-.125	-.197	-.184	-.194	-.207	-.117	3.01
28	93.3	-.084	-.164	-.091	-.056	.014	-.078	-.146	-.095	-.054	-.017	-.064	-.134	-.104	-.050	-.023	1.37
29	78.5	.447	.395	.440	.479	.479	.403	.373	.369	.356	.356	.395	.368	.334	.308	.308	-2.19
30	89.5	.210	.196	.210	.206	.238	.186	.190	.159	.142	.159	.177	.174	.140	.124	.144	-1.07

ORIFICE	x/c	α = 5.99 D/L = .124 C_L = 17.035 T_c' = 13.14 q = 1.27 lb/sq ft					α = 11.38 D/L = .202 C_L = 17.346 T_c' = 13.71 q = 1.22 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.676	-.488		-3.211	-3.640	.688	-.520		-3.078	-3.759						0
2	1.5	-.609	-1.288		-2.914		-.547	-1.265		.822							2.23
3	5.0	-.736	-.967		-1.438	-1.733	-.708	-1.007		-1.427	-1.668						3.96
4	15.0	-.478	-.662		-.856	-.900	-.463	-.695		-.863	-.869						6.76
5	30.0	-.468	-.542		-.636	-.569	-.463	-.557		-.638	-.550						8.53
6	50.0	-.452	-.428		-.468	-.398	-.443	-.453		-.467	-.389						8.19
7	1.5	.535	.950		.826	-.007	.507	-2.863		.000	-.148						-1.77
8	5.0	.211	.629		.850	.271	.198	.621		.839	.262						-3.18
9	15.0				.455	.147				.440	.141						-5.14
10	30.0	.013	-.040		.167	.137	.034	-.054		.148	.114						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.42
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.345	-.311	-.308	-.378	-.294	-.349	-.316	-.309	-.376	-.295						6.42
18	71.5		-.321	-.321		-.284		-.332	-.316		-.279						5.41
19	48.3	.060	.127	.167	.094	.003	.070	.114	.144	.060	-.141						-5.52
20	55.0	.000	.017	.003	.094	.100	-.000	.003	.010	.084	.087						-5.05
21	65.0	.100	.104	.097	.064	.077	.131	.074	.077	.050	.074						-3.92
22	69.9	.174	.177	.137	.137	.107	.175	.154	.117	.084	.094						-0.90
23	73.4	-.294	-.281	-.385	-.251	-.147	-.282	-.289	-.379	-.252	-.144						2.50
24	70.0	-.020	-.090	-.194	-.151	-.194	-.010	-.101	-.185	-.168	-.188						-0.95
25	72.6	-.395	-.421	-.495	-.415	-.234	-.376	-.416	-.480	-.403	-.218						3.26
26	76.5	-1.014	-.716	-.886	-.853	-.629	-.980	-.708	-.843	-.836	-.604						4.48
27	84.9	-.201	-.181	-.204	-.207	-.114	-.188	-.185	-.185	-.205	-.114						3.01
28	93.3	-.080	-.137	-.114	-.064	-.030	-.081	-.138	-.124	-.077	-.040						1.37
29	78.5	.368	.345	.294	.254	.234	.356	.319	.265	.191	.175						-2.19
30	89.5	.167	.154	.114	.107	.100	.154	.138	.101	.077	.091						-1.07

TABLE 5.

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 60$ N = 2706 rpm

ORIFICE	x/c	α = -10.90 D/L = -.174 C_L = 34.667 T_c' = 30.59 q = .54 lb/sq ft					α = -2.81 D/L = -.042 C_L = 26.011 T_c' = 22.82 q = .74 lb/sq ft					α = 2.58 D/L = .043 C_L = 25.566 T_c' = 22.53 q = .75 lb/sq ft					z
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.054	.735		-1.914	-1.037	.998	.739		-1.778	-.698	.963	.712		-1.428	-.810	0
2	1.5	.118	.146		-2.039		.146	.255		-1.999		.132	.132		-2.079		2.23
3	5.0	-.277	-.170		-1.040	-1.345	-.194	-.099		-.988	-1.172	-.176	-.024		-.872	-1.190	3.96
4	15.0	-.208	-.371		-.621	-.735	-.116	-.307		-.582	-.630	-.129	-.271		-.546	-.648	6.76
5	30.0	-.270	-.413		-.485	-.499	-.194	-.364		-.443	-.433	-.197	-.336		-.421	-.444	8.53
6	50.0	-.343	-.361		-.381	-.385	-.276	-.296		-.341	-.334	-.292	-.129		-.329	-.353	8.19
7	1.5	.083	.187		.839	1.002	.099	.078		.855	.988	.132	.224		.868	.926	-1.77
8	5.0	-.049	.111		.791	.742	-.037	.065		.790	.698	-.047	-.024		.695	.658	-3.18
9	15.0				.364	.257				.358	.266				.322	.265	-5.14
10	30.0	-.177	-.201		.007	.118	-.133	-.167		.020	.163	-.142	-.183		.007	.183	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.277	-.284	-.298	-.319	-.298	-.225	-.249	-.279	-.286	-.249	-.237	-.231	-.292	-.265	-.265	6.42
18	71.5		-.336	-.326		-.322		-.293	-.303		-.262		-.271	-.305		-.281	5.41
19	48.3	-.062	.080	.107	.049	-.128	-.017	.102	.133	.048	-.095	-.034	.105	.142	.051	-.115	-5.52
20	55.0	-.035	-.024	-.028	.083	.118	-.017	-.003	-.003	.109	.163	-.017	-.003	-.014	.105	.163	-5.05
21	65.0	.076	.153	.104	.121	.218	.119	.163	.140	.146	.249	.109	.159	.142	.142	.244	-3.92
22	69.9	.215	.205	.208	.225	.309	.238	.245	.235	.245	.317	.234	.227	.231	.248	.326	-0.90
23	73.4	-.253	-.343	-.402	-.225	-.104	-.204	-.296	-.361	-.198	-.072	-.210	-.271	-.373	-.200	-.081	2.50
24	70.0	-.035	-.111	-.170	-.139	-.066	.048	-.058	-.112	-.112	-.058	.027	-.058	-.139	-.105	-.041	-0.95
25	72.6	-.368	-.506	-.503	-.420	-.243	-.283	-.470	-.487	-.388	-.218	-.305	-.414	-.485	-.383	-.210	3.26
26	76.5	-.985	-.964	-.933	-.843	-.988	-.926	-.920	-.896	-.817	-.957	-.950	-.824	-.909	-.804	-.916	4.48
27	84.9	-.215	-.208	-.232	-.191	-.142	-.150	-.170	-.211	-.157	-.143	-.166	-.153	-.210	-.146	-.136	3.01
28	93.3	-.121	-.090	-.055	-.035	-.024	-.051	-.068	-.027	-.014	-.003	-.054	-.058	-.031	.003	-.007	1.37
29	78.5	.472	.326	.374	.479	.527	.487	.344	.392	.497	.542	.478	.332	.393	.471	.536	-2.19
30	89.5	.201	.208	.184	.218	.250	.242	.232	.208	.245	.272	.244	.227	.207	.231	.271	-1.07

ORIFICE	x/c	α = 8.50 D/L = .165 C_L = 24.146 T_c' = 21.18 q = .82 lb/sq ft					α = 14.71 D/L = .273 C_L = 24.037 T_c' = 21.61 q = .80 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					z
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.909	.694		-1.695	-.879	1.018	.673		-1.754	-1.237						0
2	1.5	.139	.228		-1.883		.186	.249		-1.761							2.23
3	5.0	-.132	-.119		-.952	-1.117	-.222	-.126		-.968	-1.217						3.96
4	15.0	-.069	-.317		-.572	-.601	-.156	-.308		-.570	-.653						6.76
5	30.0	-.162	-.360		-.423	-.403	-.222	-.345		-.418	-.425						8.53
6	50.0	-.251	-.311		-.344	-.324	-.289	-.298		-.315	-.325						8.19
7	1.5	.096	.076		.842	.958	.086	.096		.842	.856						-1.77
8	5.0	-.053	.036		.753	.648	-.013	.060		.759	.657						-3.18
9	15.0				.337	.307				.342	.302						-5.14
10	30.0	-.126	-.168		.013	.205	-.116	-.163		.023	.202						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.211	-.248	-.254	-.271	-.244	-.222	-.229	-.239	-.249	-.245						6.42
18	71.5		-.284	-.287		-.258		-.272	-.265		-.255						5.41
19	48.3	-.013	.099	.155	.066	.066	-.013	.103	.153	.056	-.103						-5.52
20	55.0	.000	-.007	.003	.102	.172	.003	.010	.003	.096	.166						-5.05
21	65.0	.119	.152	.149	.135	.248	.109	.169	.146	.156	.232						-3.92
22	69.9	.241	.225	.235	.235	.330	.226	.216	.226	.242	.318						-0.90
23	73.4	-.195	-.278	-.340	-.192	-.066	-.212	-.272	-.332	-.176	-.070						2.50
24	70.0	.046	-.059	-.106	-.093	-.020	.030	-.056	-.119	-.083	-.040						-0.95
25	72.6	-.264	-.423	-.453	-.383	-.198	-.289	-.415	-.444	-.352	-.206						3.26
26	76.5	-.899	-.833	-.836	-.793	-.862	-.932	-.842	-.832	-.766	-.829						4.48
27	84.9	-.145	-.145	-.185	-.149	-.122	-.159	-.149	-.159	-.129	-.116						3.01
28	93.3	-.033	-.059	-.023	-.013	.000	-.053	-.063	.000	.010	-.003						1.37
29	78.5	.472	.330	.387	.463	.515	.478	.345	.385	.474	.514						-2.19
30	89.5	.241	.215	.211	.225	.264	.235	.222	.206	.229	.249						-1.07

TABLE 32

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 00$ N = 2145 rpm

ORIFICE (FIG. 2)	% c	α = -4.64 D/L = -.225 C_L = .565 T_c' = .22 q = 11.36 lb/sq ft					α = -.65 D/L = -.100 C_L = .979 T_c' = .22 q = 11.33 lb/sq ft					α = 3.36 D/L = -.054 C_L = 1.468 T_c' = .25 q = 10.97 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.790	.590		1.011	1.106	1.101	1.032		.990	1.032	.668	.636		-.005	.191	0
2	1.5	.590	.658		.337		.395	.053		-.432		-.488	-1.055		-1.676		2.23
3	5.0	.053	.179		-.005	-.037	-.453	-.342		-.527	-.590	-1.066	-.960		-1.087	-1.193	3.96
4	15.0	-.263	-.290		-.369	-.379	-.553	-.569		-.664	-.706	-.880	-.949		-.986	-1.024	6.76
5	30.0	-.464	-.469		-.558	-.521	-.664	-.695		-.758	-.716	-.891	-.907		-.928	-.923	8.53
6	50.0	-.579	-.548		-.558	-.606	-.706	-.658		-.674	-.711	-.849	-.801		-.790	-.811	8.19
7	1.5	-.195	-.753		-.348	-.158	-.053	.074		.379	.527	-.053	.705		.790	.986	-1.77
8	5.0	-.490	-.664		-.390	-.232	.047	-.111		.132	.284	.504	.371		.525	.663	-3.18
9	15.0				-.284	-.348				.000	-.026				.270	.249	-5.14
10	30.0	-.221	-.258		-.226	-.195	-.037	-.111		-.042	.005	.133	.042		.159	.170	-6.25
11	45.0																-2.59
12	46.6																.1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.479	-.448	-.464	-.437	-.516	-.553	-.527	-.548	-.532	-.574	-.621	-.636	-.652	-.621	-.631	6.42
18	71.5		-.500	-.495		-.521		-.548	-.553		-.590		-.647	-.652		-.610	5.41
19	48.3	-.053	-.063	-.053	-.063	-.058	.032	.005	.011	.047	.074	-.058	-.037	.032	-.085	-.101	-5.52
20	55.0	-.084	-.068	-.084	.121	.137	-.063	-.058	-.058	.226	.400	-.037	-.048	-.032	.260	.281	-5.05
21	65.0	.248	.258	.258	.316	.348	.300	.311	.316	.342	.332	.366	.382	.403	.414	.392	-3.92
22	69.9	.269	.306	.300	.316	.284	.374	.358	.348	.385	.400	.424	.440	.446	.435	.435	-0.90
23	73.4	-.263	-.379	-.548	-.274	-.284	-.316	-.390	-.553	-.348	-.274	-.355	-.472	-.658	-.382	-.276	2.50
24	70.0	-.079	-.179	-.369	-.200	-.274	-.090	-.158	-.342	-.269	-.284	-.138	-.212	-.382	-.329	-.334	-0.95
25	72.6	-.611	-.758	-.790	-.595	-.648	-.706	-.769	-.806	-.701	-.758	-.806	-.912	-.976	-.769	-.774	3.26
26	76.5	-.932	-1.069	-.927	-.774	-1.301	-1.006	-1.001	-.917	-1.006	-1.554	-1.220	-1.257	-1.305	-.997	-1.517	4.48
27	84.9	-.327	-.353	-.369	-.348	-.369	-.337	-.332	-.327	-.342	-.327	-.308	-.339	-.318	-.318	-.292	3.01
28	93.3	-.327	-.311	-.332	-.321	-.295	-.316	-.295	-.284	-.284	-.258	-.270	-.255	-.217	-.276	-.244	1.37
29	78.5	.590	.490	.495	.569	.837	.632	.527	.537	.600	.806	.743	.658	.658	.642	.817	-2.19
30	89.5	.348	.358	.337	.358	.400	.374	.353	.337	.363	.421	.440	.435	.435	.398	.461	-1.07

ORIFICE (FIG. 2)	% c	α = 11.46 D/L = .032 C_L = 2.467 T_c' = .30 q = 10.51 lb/sq ft					α = 17.48 D/L = .084 C_L = 2.957 T_c' = .68 q = 10.13 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-2.959	-3.748		-5.960	-4.691	-5.537	-5.928		-8.145	-6.857						0
2	1.5	-4.038	-3.843		-4.712		-5.216	-4.813		-5.457							2.23
3	5.0	-2.838	-2.717		-2.627	-2.896	-2.990	-2.998		-2.849	-3.091						3.96
4	15.0	-1.748	-1.769		-1.674	-1.848	-1.678	-1.767		-1.674	-1.795						6.76
5	30.0	-1.421	-1.395		-1.332	-1.395	-1.223	-1.288		-1.215	-1.235						8.53
6	50.0	-1.148	-1.063		-1.006	-1.053	-.930	-.930		-.893	-.861						8.19
7	1.5	-.779	1.069		.669	.958	-1.730	.580		.089	.427						-1.77
8	5.0	.984	1.195		1.121	1.148	.539	1.070		.978	.982						-3.18
9	15.0				.811	.742				.805	.696						-5.14
10	30.0	.442	.316		.532	.505	.410	.346		.531	.459						-6.25
11	45.0																-2.59
12	46.6																.1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.800	-.795	-.827	-.790	-.779	-.656	-.664	-.676	-.688	-.636						6.42
18	71.5		-.795	-.832		-.721		-.636	-.652		-.571						5.41
19	48.3	.063	.063	.111	.000	-.021	.093	.068	.125	-.020	-.032						-5.52
20	55.0	.000	-.005	-.011	.526	.442	-.004	-.000	.016	.415	.386						-5.05
21	65.0	.495	.553	.548	.574	.521	.406	.459	.471	.487	.455						-3.92
22	69.9	.569	.584	.516	.542	.469	.467	.491	.503	.435	.370						-0.90
23	73.4	-.400	-.574	-.963	-.590	-.353	-.334	-.431	-.720	-.479	-.298						2.50
24	70.0	-.116	-.279	-.537	-.490	-.374	-.064	-.161	-.350	-.419	-.330						-0.95
25	72.6	-.963	-1.132	-1.306	-1.116	-.884	-.777	-.901	-1.022	-.889	-.700						3.26
26	76.5	-1.443	-1.585	-1.769	-1.890	-1.527	-1.079	-1.139	-1.312	-1.501	-1.054						4.48
27	84.9	-.347	-.358	-.379	-.268	-.247	-.266	-.250	-.245	-.245	-.161						3.01
28	93.3	-.326	-.263	-.190	-.111	-.205	-.221	-.209	-.137	-.056	-.097						1.37
29	78.5	.911	.932	.916	.942	.869	.736	.813	.809	.793	.740						-2.19
30	89.5	.553	.616	.600	.616	.537	.439	.515	.511	.511	.471						-1.07

TABLE [illegible]

[illegible] ON WING AND BODY AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 10$ [illegible] = 2100 rpm

ORIFICE	%	α = -8.68 D/L = -.114 C_L = 1.149 T_c' = .28 q = 10.09 lb/sq ft					α = -.59 D/L = -.002 C_L = 2.214 T_c' = .33 q = 9.77 lb/sq ft					α = 7.59 D/L = .063 C_L = 3.285 T_c' = .51 q = 9.03 lb/sq ft					$\frac{x}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.033	.944		.500	.635	-.973	-2.083		-4.193	-2.792	-7.137	-7.291		-9.941	-8.413	0
2	1.5	-.112	-.427		-1.028		-3.028	-2.924		-3.858		-5.845	-5.588		-6.711		2.23
3	5.0	-.713	-.674		-.848	-.938	-2.176	-2.154		-2.182	-2.303	-3.697	-3.666		-3.456	-3.809	3.96
4	15.0	-.657	-.786		-.814	-.882	-1.385	-1.506		-1.462	-1.572	-2.071	-2.102		-2.005	-2.169	6.76
5	30.0	-.747	-.798		-.831	-.826	-1.187	-1.220		-1.215	-1.231	-1.451	-1.538		-1.451	-1.482	8.53
6	50.0	-.758	-.713		-.719	-.747	-1.017	-.989		-.940	-.956	-1.113	-1.102		-1.066	-1.051	8.19
7	1.5	.152	.466		.618	.842	1.110	1.231		.830	1.083	-1.789	.928		.108	.559	-1.77
8	5.0	.241	.208		.404	.534	.929	1.055		1.077	1.061	.590	1.277		1.225	1.205	-3.18
9	15.0				.191	.146				.709	.621				.995	.851	-5.14
10	30.0	.039	-.006		.084	.095	.341	.247		.440	.418	.518	.420		.646	.559	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.578	-.562	-.595	-.584	-.607	-.725	-.753	-.780	-.753	-.736	-.764	-.779	-.846	-.815	-.779	6.42
18	71.5		-.562	-.595		-.595		-.709	-.786		-.681		-.728	-.810		-.718	5.41
19	48.3	.045	.011	.034	-.017	-.006	.126	.071	.126	.088	.121	.026	.005	.062	-.062	-.051	-5.52
20	55.0	-.062	-.045	-.056	.292	.315	-.022	-.011	-.005	.506	.390	.005	.000	.000	.590	.395	-5.05
21	65.0	.303	.371	.371	.359	.388	.429	.539	.572	.528	.478	.482	.559	.549	.584	.523	-3.92
22	69.9	.371	.421	.382	.427	.427	.517	.572	.467	.561	.473	.538	.590	.574	.543	.487	-0.90
23	73.4	-.337	-.388	-.567	-.393	-.275	-.363	-.539	-.879	-.539	-.319	-.359	-.461	-.902	-.574	-.385	2.50
24	70.0	-.062	-.163	-.331	-.298	-.303	-.011	-.242	-.588	-.429	-.368	.010	-.138	-.559	-.502	-.431	-0.95
25	72.6	-.708	-.775	-.865	-.820	-.786	-.835	-1.088	-1.259	-1.022	-.863	-.841	-1.015	-1.323	-1.082	-.892	3.26
26	76.5	-1.090	-.915	-1.067	-1.337	-1.533	-1.231	-1.605	-1.847	-1.775	-1.533	-1.241	-1.277	-1.856	-1.805	-1.420	4.48
27	84.9	-.320	-.315	-.320	-.320	-.315	-.319	-.346	-.390	-.247	-.264	-.323	-.297	-.349	-.292	-.190	3.01
28	93.3	-.309	-.253	-.247	-.247	-.253	-.352	-.242	-.099	-.110	-.192	-.282	-.236	-.174	-.036	-.062	1.37
29	78.5	.680	.618	.567	.696	.809	.863	.868	.857	.901	.852	.902	.989	.923	1.000	.918	-2.19
30	89.5	.410	.421	.371	.421	.444	.489	.588	.588	.572	.517	.523	.610	.579	.636	.590	-1.07

ORIFICE	%	α = 11.68 D/L = .111 C_L = 3.357 T_c' = .82 q = 8.10 lb/sq ft					α = 15.55 D/L = .178 C_L = 2.775 T_c' = .69 q = 8.79 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{x}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-6.638	-6.771		-8.678	-8.279	-7.046	-7.202		-9.100	-5.038						0
2	1.5	-5.336	-5.387		-6.401		-5.544	-5.480		-5.890							2.23
3	5.0	-3.132	-3.256		-3.188	-3.549	-3.200	-3.339		-2.685	-1.796						3.96
4	15.0	-1.680	-1.822		-1.800	-1.925	-1.741	-1.837		-1.317	-.769						6.76
5	30.0	-1.134	-1.280		-1.263	-1.267	-1.160	-1.303		-.810	-.589						8.53
6	50.0	-.872	-.937		-.919	-.864	-.889	-.944		-.728	-.594						8.19
7	1.5	-1.925	.687		-.073	.357	-2.017	.801		.138	.806						-1.77
8	5.0	.438	.971		1.057	.997	.456	1.266		1.197	1.096						-3.18
9	15.0				.859	.662				.958	.691						-5.14
10	30.0	.434	.352		.533	.473	.456	.350		.571	.465						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.649	-.700	-.696	-.713	-.632	-.682	-.732	-.672	-.686	-.617						6.42
18	71.5		-.679	-.670		-.593		-.769	-.741		-.659						5.41
19	48.3	.056	.000	.047	-.069	-.064	-.097	-.097	.028	-.074	-.074						-5.52
20	55.0	.021	.000	.009	.503	.335	.028	.014	.005	.507	.359						-5.05
21	65.0	.404	.443	.451	.451	.430	.419	.456	.451	.461	.405						-3.92
22	69.9	.447	.477	.516	.425	.382	.447	.507	.516	.451	.373						-0.90
23	73.4	-.348	-.434	-.748	-.477	-.327	-.414	-.543	-.852	-.534	-.414						2.50
24	70.0	-.039	-.142	-.455	-.430	-.391	-.083	-.244	-.520	-.461	-.484						-0.95
25	72.6	-.752	-.915	-1.083	-.902	-.726	-.857	-1.105	-1.147	-.949	-.783						3.26
26	76.5	-1.203	-1.186	-1.452	1.435	-1.100	-1.437	-1.464	-1.432	-1.124	-.700						4.48
27	84.9	-.288	-.288	-.262	-.258	-.146	-.332	-.327	-.456	-.520	-.442						3.01
28	93.3	-.189	-.232	-.180	-.043	-.043	-.226	-.230	-.304	-.474	-.405						1.37
29	78.5	.756	.829	.833	.842	.795	.806	.912	.898	.916	.820						-2.19
30	89.5	.447	.494	.477	.511	.485	.451	.507	.502	.461	.414						-1.07

TABLE 54

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 20$ $N = 2050$ rpm

ORIFICE	$\frac{x}{c}$	$\alpha = -12.82$ D/L = -.181 $C_L = 2.232$ $T_c' = .73$ q = 6.32 lb/sq ft					$\alpha = -4.60$ D/L = -.049 $C_L = 3.545$ $T_c' = .91$ q = 5.88 lb/sq ft					$\alpha = -.21$ D/L = .005 $C_L = 4.115$ $T_c' = 1.37$ q = 5.66 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.545	.288		-1.797	-1.046	-1.871	-2.984		-6.613	-4.970	-3.261	-4.173		-7.205	-5.698	0
2	1.5	-1.365	-1.115		-2.517		-3.478	-3.345		-5.157		-3.383	-3.680		-5.065		2.23
3	5.0	-1.215	-1.021		-1.415	-1.628	-2.401	-2.305		-2.557	-2.906	-2.291	-2.452		-2.520	-2.861	3.96
4	15.0	-.845	-.927		-1.033	-1.146	-1.384	-1.498		-1.534	-1.727	-1.272	-1.477		-1.448	-1.594	6.76
5	30.0	-.839	-.877		-.920	-.946	-1.143	-1.185		-1.167	-1.221	-.970	-1.077		-1.053	-1.068	8.53
6	50.0	-.789	-.751		-.745	-.764	-.963	-.933		-.915	-.933	-.790	-.819		-.799	-.780	8.19
7	1.5	1.008	.927		.895	1.152	.554	1.215		.572	1.035	-.073	.955		.297	.756	-1.77
8	5.0	.614	.683		.895	.933	.638	1.143		1.203	1.209	.375	1.024		1.053	1.038	-3.18
9	15.0				.557	.457				.866	.722				.804	.619	-5.14
10	30.0	.182	.113		.282	.301	.319	.247		.493	.463	.317	.229		.458	.400	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.582	-.595	-.695	-.607	-.601	-.698	-.704	-.788	-.740	-.728	-.570	-.580	-.639	-.634	-.580	6.42
18	71.5		-.657	-.031		-.601		-.722	-.794		-.686		-.556	-.639		-.556	5.41
19	48.3	-.019	-.050	-.038	-.063	-.031	-.024	-.048	-.012	-.120	-.096	-.034	-.049	.000	-.083	-.073	-5.52
20	55.0	-.019	-.025	.501	.413	.369	.006	.024	-.018	.511	.325	.000	.019	.005	.419	.229	-5.05
21	65.0	.376	.457	.513	.457	.451	.391	.530	.542	.530	.481	.317	.419	.453	.419	.375	-3.92
22	69.9	.495	.513	-.701	.501	.488	.481	.602	.487	.554	.457	.385	.468	.424	.424	.356	-0.90
23	73.4	-.269	-.488	-.438	-.413	-.276	-.319	-.536	-.818	-.560	-.379	-.307	-.366	-.639	-.448	-.312	2.50
24	70.0	.038	-.200	-1.064	-.351	-.332	.012	-.229	-.530	-.469	-.427	-.024	-.117	-.380	-.400	-.375	-0.95
25	72.6	-.695	-.989	-1.584	-.883	-.764	-.758	-1.101	-1.270	-1.041	-.897	-.663	-.809	-1.019	-.877	-.721	3.26
26	76.5	-.964	-1.622	-.338	-1.540	-1.572	-1.029	-1.643	-2.010	-1.721	-1.673	-1.082	-1.004	-1.560	-1.472	-1.262	4.48
27	84.9	-.294	-.313	-.081	-.250	-.232	-.379	-.331	-.427	-.271	-.174	-.258	-.253	-.273	-.263	-.151	3.01
28	93.3	-.294	-.188	.758	-.125	-.157	-.355	-.241	-.108	-.030	-.060	-.171	-.200	-.161	-.039	-.015	1.37
29	78.5	.827	.726	.495	.845	.858	.812	.921	.872	.975	.921	.600	.785	.756	.848	.775	-2.19
30	89.5	.426	.520	-.006	.532	.507	.445	.590	.584	.620	.572	.351	.453	.468	.507	.473	-1.07

ORIFICE	$\frac{x}{c}$	$\alpha = 7.97$ D/L = .105 $C_L = 3.957$ $T_c' = 1.54$ q = 5.48 lb/sq ft					$\alpha = 15.93$ D/L = .179 $C_L = 3.665$ $T_c' = 1.70$ q = 5.40 lb/sq ft					$\alpha =$ D/L = $C_L =$ $T_c' =$ q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-4.985	-5.586		-7.966	-4.440	-5.066	-6.092		-5.154	-3.460						0
2	1.5	-3.764	-4.337		-5.276		-2.402	-4.619		-1.659							2.23
3	5.0	-2.328	-2.741		-2.403	-1.784	-1.827	-2.805		-1.389	-.894						3.96
4	15.0	-1.300	-1.526		-1.169	-.850	-1.283	-1.425		-1.274	-.531						6.76
5	30.0	-.925	-1.094		-.723	-.681	-.823	-.832		-.717	-.451						8.53
6	50.0	-.737	-.793		-.624	-.662	-.584	-.566		-.509	-.447						8.19
7	1.5	-.784	.911		.286	.732	-.960	.951		.703	.102						-1.77
8	5.0	.230	1.173		1.159	.812	.142	1.190		1.217	.473						-3.18
9	15.0				.864	.469				.810	.354						-5.14
10	30.0	.352	.272		.474	.357	.363	.212		.420	.327						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.582	-.582	-.573	-.587	-.662	-.473	-.531	-.562	-.495	-.429						6.42
18	71.5		-.596	-.610		-.643		-.540	-.571		-.429						5.41
19	48.3	-.019	-.038	.028	-.089	-.080	.000	-.035	.013	-.084	-.071						-5.52
20	55.0	.009	.028	.014	.399	.230	.004	.009	.013	.323	.217						-5.05
21	65.0	.310	.376	.404	.357	.305	.283	.270	.301	.265	.252						-3.92
22	69.9	.333	.446	.413	.380	.249	.296	.283	.274	.265	.186						-0.90
23	73.4	-.352	-.385	-.695	-.432	-.432	-.279	-.394	-.624	-.332	-.296						2.50
24	70.0	-.080	-.131	-.460	-.394	-.526	-.049	-.217	-.434	-.296	-.398						-0.95
25	72.6	-.690	-.854	-.995	-.793	-.760	-.500	-.708	-.770	-.615	-.571						3.26
26	76.5	-1.108	-1.089	-1.272	-.981	-.563	-.664	-.770	-.792	-.664	-.571						4.48
27	84.9	-.296	-.282	-.324	-.422	-.338	-.248	-.341	-.460	-.456	-.407						3.01
28	93.3	-.146	-.197	-.216	-.380	-.310	-.159	-.261	-.385	-.416	-.385						1.37
29	78.5	.507	.798	.765	.798	.713	.416	.695	.659	.518	.518						-2.19
30	89.5	.314	.446	.394	.371	.333	.270	.327	.270	.239	.257						-1.07

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 30$ $= 2250$ rpm

ORIFICE	x/c	α = -12.64, D/L = -.154, C_L = 4.530, T_c' = 2.06, q = 4.30 lb/sq ft					α = -3.21, D/L = -.016, C_L = 6.028, T_c' = 2.95, q = 3.85 lb/sq ft					i = .97, D/L = .026, C_L = 6.299, T_c' = 3.24, q = 3.70 lb/sq ft					y
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.039	-.993		-4.715	-3.262	-1.195	-2.740		-6.251	-4.652	-2.121	-3.507		-6.649	-5.283	0
2	1.5	-1.435	-1.837		-3.693		-1.945	-2.674		-4.384		-2.109	-3.039		-4.584		2.23
3	5.0	-1.308	-1.391		-1.914	-2.254	-1.368	-1.891		-2.167	-2.588	-1.434	-2.121		-2.276	-2.614	3.96
4	15.0	-.867	-1.032		-1.139	-1.323	-.907	-1.174		-1.240	-1.397	-.906	-1.251		-1.279	-1.370	6.76
5	30.0	-.814	-.882		-.906	-.940	-.771	-.898		-.915	-.931	-.751	-.918		-.898	-.878	8.53
6	50.0	-.737	-.722		-.722	-.746	-.663	-.680		-.709	-.684	-.600	-.683		-.663	-.620	8.19
7	1.5	.669	1.106		.727	1.139	.000	1.022		.478	.804	-.214	1.025		.481	.500	-1.77
8	5.0	.460	.858		1.066	1.056	.239	.952		1.043	.882	.187	.989		1.080	.679	-3.18
9	15.0				.708	.533				.721	.445				.719	.342	-5.14
10	30.0	.189	.121		.369	.325	.198	.111		.342	.280	.242	.091		.346	.254	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.567	-.562	-.591	-.606	-.577	-.511	-.507	-.556	-.581	-.532	-.465	-.496	-.516	-.489	-.469	6.42
18	71.5		-.606	-.649	-.412	-.615		-.507	-.560		-.532		-.473	-.516		-.441	5.41
19	48.3	-.087	-.141	-.082	-.126	-.116	-.058	-.103	-.066	-.136	-.115	-.048	-.099	-.040	-.115	-.103	-5.52
20	55.0	.010	.010	.010	.393	.233	.016	.008	.000	.317	.239	.016	.020	.008	.282	.159	-5.05
21	65.0	.286	.431	.475	.426	.407	.231	.342	.354	.297	.260	.226	.266	.302	.242	.226	-3.92
22	69.9	.339	.509	.388	.446	.417	.247	.391	.350	.326	.288	.258	.338	.338	.282	.214	-0.90
23	73.4	-.310	-.456	-.669	-.460	-.315	-.305	-.334	-.560	-.408	-.301	-.274	-.318	-.508	-.314	-.270	2.50
24	70.0	-.068	-.184	-.451	-.393	-.378	-.087	-.128	-.354	-.379	-.375	-.064	-.135	-.354	-.266	-.373	-0.95
25	72.6	-.669	-.945	-1.047	-.906	-.804	-.610	-.729	-.898	-.828	-.680	-.532	-.683	-.814	-.683	-.556	3.26
26	76.5	-1.003	-1.483	-1.754	-.565	-1.580	-.997	-.886	-1.360	-1.455	-1.224	-.838	-.806	-1.172	-1.192	-.727	4.48
27	84.9	-.349	-.305	-.388	.281	-.174	-.227	-.243	-.251	-.284	-.165	-.214	-.242	-.214	-.191	-.171	3.01
28	93.3	-.315	-.208	-.087	.015	-.029	-.161	-.177	-.181	-.070	-.012	-.131	-.179	-.155	-.099	-.111	1.37
29	78.5	.722	.741	.756	.867	.829	.474	.688	.684	.771	.709	.405	.679	.667	.639	.612	-2.19
30	89.5	.354	.480	.465	.548	.494	.255	.383	.354	.383	.383	.242	.346	.334	.282	.288	-1.07

ORIFICE	x/c	α = 9.28, D/L = .110, C_L = 6.116, T_c' = 3.49, q = 3.57 lb/sq ft					α = 17.27, D/L = .172, C_L = 5.683, T_c' = 3.62, q = 3.52 lb/sq ft					α = , D/L = , C_L = , T_c' = , q = lb/sq ft					y
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.607	-4.087		-6.219	-3.208	-3.707	-3.604		-3.650	-1.844						0
2	1.5	-2.268	-3.205		2.996		-2.246	-3.251		-1.260							2.23
3	5.0	-1.591	-2.276		1.951	-.797	-1.343	-2.022		-.774	-.474						3.96
4	15.0	-.940	-1.269		-.898	-.642	-.857	-.926		-.561	-.406						6.76
5	30.0	-.712	-.902		-.662	-.581	-.630	-.565		-.463	-.406						8.53
6	50.0	-.573	-.647		-.581	-.553	-.470	-.486		-.451	-.406						8.19
7	1.5	-.631	1.107		.790	.279	-.838	1.142		.926	-.011						-1.77
8	5.0	.062	1.053		1.153	.414	-.011	.998		1.070	.239						-3.18
9	15.0				.697	.221				.615	.197						-5.14
10	30.0	.240	.093		.341	.217	.277	.129		.311	.216						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.476	-.461	-.441	-.530	-.503	-.357	-.470	-.505	-.448	-.395						6.42
18	71.5		-.484	-.464		-.468		-.505	-.505		-.417						5.41
19	48.3	-.108	-.116	-.046	-.132	-.116	-.057	-.064	-.046	-.118	-.114						-5.52
20	55.0	.008	.015	.031	.248	.248	.000	.019	.004	.228	.144						-5.05
21	65.0	.201	.224	.267	.197	.182	.190	.171	.190	.197	.186						-3.92
22	69.9	.213	.248	.286	.139	.139	.212	.167	.175	.201	.152						-0.90
23	73.4	-.244	-.356	-.507	-.321	-.372	-.190	-.372	-.512	-.300	-.304						2.50
24	70.0	-.066	-.205	-.341	-.298	-.441	-.015	-.239	-.345	-.243	-.372						-0.95
25	72.6	-.488	-.697	-.673	-.623	-.608	-.372	-.637	-.637	-.524	-.478						3.26
26	76.5	-.735	-.836	-.739	-.588	-.410	-.508	-.694	-.573	-.463	-.402						4.48
27	84.9	-.186	-.259	-.271	-.290	-.255	-.152	-.315	-.368	-.322	-.285						3.01
28	93.3	-.120	-.163	-.232	-.267	-.252	-.106	-.262	-.322	-.315	-.273						1.37
29	78.5	.325	.631	.631	.464	.395	.262	.512	.493	.372	.285						-2.19
30	89.5	.217	.294	.286	.209	.197	.186	.243	.197	.182	.167						-1.07

TABLE 36

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 40$ $N = 2505$ rpm

ORIFICE (FIGURE)	% M	α = -14.27 D/L = 1.929 C_L = 8.292 T_c' = 5.51 q = 2.45 lb/sq ft					α = -5.73 D/L = -.042 C_L = 10.998 T_c' = 6.74 q = 2.19 lb/sq ft					α = -.80 D/L = .022 C_L = 11.574 T_c' = 8.22 q = 2.07 lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.813	-.145		-3.488	-2.630	.624	-.918		-4.341	-3.803	.557	-1.192		-4.495	-4.474	0
2	1.5	-.744	-1.160		-3.240		-.936	-1.715		-3.580		-1.010	-1.816		-3.629		2.23
3	5.0	-.836	-.950		-1.675	-2.019	-.954	-1.223		-1.772	-2.224	-1.006	-1.329		-1.802	-2.317	3.96
4	15.0	-.599	-.752		-.992	-1.126	-.667	-.861		-1.037	-1.166	-.684	-.883		-1.062	-1.185	6.76
5	30.0	-.595	-.664		-.767	-.771	-.617	-.696		-.793	-.768	-.628	-.708		-.792	-.761	8.53
6	50.0	-.595	-.569		-.607	-.614	-.588	-.560		-.617	-.585	-.575	-.554		-.621	-.561	8.19
7	1.5	.519	.977		.801	1.111	.495	1.044		.775	.664	.505	1.034		.775	.431	-1.77
8	5.0	.210	.584		.992	.912	.201	.717		.990	.710	.203	.764		.978	.582	-3.18
9	15.0				.565	.389				.560	.301	.004			.547	.228	-5.14
10	30.0	.088	.000		.225	.233	.093	-.018		.215	.194	.091	-.021		.217	.186	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.454	-.450	-.485	-.515	-.485	-.441	-.420	-.456	-.524	-.452	-.442	-.400	-.428	-.512	-.438	6.42
18	71.5		-.485	-.531		-.504		-.420	-.488		-.466		-.400	-.449		-.428	5.41
19	48.3	-.111	-.137	-.099	-.141	-.130	-.108	-.129	-.093	-.151	-.151	-.123	-.144	-.098	-.154	-.147	-5.52
20	55.0	-.004	.011	.008	.248	.183	.004	.000	.004	.197	.143	.011	.004	.000	.175	.165	-5.05
21	65.0	.218	.294	.336	.298	.324	.179	.230	.248	.201	.215	.165	.182	.203	.161	.179	-3.92
22	69.9	.294	.370	.332	.347	.382	.244	.294	.265	.258	.226	.221	.245	.224	.231	.186	-0.90
23	73.4	-.302	-.332	-.538	-.359	-.256	-.298	-.269	-.470	-.366	-.265	-.284	-.245	-.435	-.358	-.270	2.50
24	70.0	-.080	-.149	-.332	-.347	-.302	-.086	-.118	-.323	-.323	-.352	-.081	-.112	-.294	-.263	-.340	-0.95
25	72.6	-.664	-.729	-.893	-.779	-.676	-.639	-.613	-.786	-.757	-.617	-.614	-.550	-.729	-.715	-.582	3.26
26	76.5	-1.252	-1.111	-1.572	-1.477	-1.427	-1.191	-.728	-1.363	-1.396	-1.216	-1.122	-.578	-1.160	-1.304	-1.111	4.48
27	84.9	-.305	-.332	-.385	-.279	-.172	-.276	-.265	-.298	-.301	-.169	-.263	-.252	-.277	-.280	-.161	3.01
28	93.3	-.221	-.290	-.099	-.042	-.042	-.197	-.248	-.208	-.079	-.043	-.186	-.231	-.245	-.098	-.056	1.37
29	78.5	.637	.588	.683	.779	.752	.491	.574	.606	.656	.624	.442	.554	.554	.540	.522	-2.19
30	89.5	.290	.324	.382	.420	.408	.226	.273	.283	.283	.294	.210	.242	.224	.207	.235	-1.07

ORIFICE (FIGURE)	% M	α = 8.57 D/L = .127 C_L = 12.381 T_c' = 8.36 q = 1.88 lb/sq ft					α = 13.08 D/L = .166 C_L = 12.602 T_c' = 8.88 q = 1.81 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.498	-1.375		-4.421	-5.124	.529	-1.468		-4.121	-4.669						0
2	1.5	-.931	-2.030		-3.653		-.882	-2.094		-3.606							2.23
3	5.0	-.959	-1.399		-1.805	-2.101	-.919	-1.437		-1.734	-1.596						3.96
4	15.0	-.669	-.901		-1.047	-1.064	-.643	-.902		-1.013	-.943						6.76
5	30.0	-.607	-.686		-.744	-.662	-.596	-.673		-.714	-.619						8.53
6	50.0	-.546	-.515		-.559	-.474	-.522	-.495		-.495	-.428						8.19
7	1.5	.413	1.078		.791	.290	.337	1.077		.788	-.374						-1.77
8	5.0	.167	.730		.921	.225	.138	.734		.912	.168						-3.18
9	15.0				.515	.136				.498	.128						-5.14
10	30.0	.089	.007		.229	.157	.094	.003		.199	.138						-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.409	-.358	-.375	-.433	-.362	-.394	-.327	-.350	-.350	-.327						6.42
18	71.5		-.338	-.372		-.355		-.296	-.323		-.306						5.41
19	48.3	-.099	-.102	-.085	-.102	-.102	-.081	-.094	-.077	-.135	-.145						-5.52
20	55.0	.007	.014	.003	.157	.198	.013	.010	.000	.121	.104						-5.05
21	65.0	.143	.143	.147	.116	.126	.128	.125	.135	.104	.111						-3.92
22	69.9	.184	.188	.167	.157	.096	.158	.168	.145	.125	.081						-0.90
23	73.4	-.256	-.205	-.331	-.256	-.218	-.232	-.168	-.266	-.209	-.189						2.50
24	70.0	-.075	-.099	-.218	-.215	-.314	-.071	-.084	-.162	-.172	-.246						-0.95
25	72.6	-.546	-.461	-.546	-.532	-.426	-.508	-.391	-.448	-.421	-.353						3.26
26	76.5	-.945	-.464	-.658	-.914	-.658	-.862	-.353	-.471	-.660	-.404						4.48
27	84.9	-.239	-.205	-.222	-.208	-.136	-.226	-.178	-.209	-.212	-.148						3.01
28	93.3	-.167	-.198	-.198	-.164	-.085	-.158	-.168	-.185	-.165	-.111						1.37
29	78.5	.355	.478	.403	.351	.307	.337	.434	.337	.266	.219						-2.19
30	89.5	.184	.208	.160	.154	.150	.175	.192	.138	.125	.128						-1.07

TABLE 57

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 50$ N = 2700 rpm

ORIFICE	X/c	α = -10.79 D/L = -.086 C_L = 22.856 T_c' = 16.40 q = 1.01 lb/sq ft					α = -6.85 D/L = -.026 C_L = 23.330 T_c' = 16.82 q = .96 lb/sq ft					α = 3.36 D/L = .098 C_L = 24.414 T_c' = 18.56 q = .87 lb/sq ft					Y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.971	.405		-2.752	-2.289	1.002	.473		-2.599	-2.307	1.043	.499		-2.683	-2.275	0
2	1.5	-.377	-.631		-2.694		-.393	-.699		-2.805		-.246	-.527		-2.746		2.23
3	5.0	-.635	-.649		-1.441	-1.812	-.612	-.633		-1.461	-1.830	-.520	-.569		-1.313	-1.749	3.96
4	15.0	-.426	-.576		-.861	-.947	-.421	-.546		-.863	-.957	-.376	-.558		-.808	-.924	6.76
5	30.0	-.480	-.542		-.652	-.652	-.473	-.522		-.640	-.647	-.421	-.534		-.625	-.629	8.53
6	50.0	-.511	-.504		-.528	-.525	-.498	-.477		-.525	-.525	-.471	-.478		-.509	-.506	8.19
7	1.5	.480	.796		.899	.975	.480	.835		.926	.960	.337	.706		.888	.874	-1.77
8	5.0	.172	.439		.920	.800	.129	.376		.884	.804	.021	.393		.881	.699	-3.18
9	15.0				.446	.292				.400	.282				.407	.214	-5.14
10	30.0	-.034	-.110		.124	.151	-.066	-.115		.118	.157	-.144	-.214		.035	.119	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.412	-.408	-.426	-.480	-.436	-.407	-.404	-.445	-.473	-.431	-.383	-.397	-.428	-.457	-.418	6.42
18	71.5		-.477	-.467		-.463		-.449	-.501		-.459		-.478	-.474		-.442	5.41
19	48.3	.021	.117	.233	-.010	-.185	-.003	.084	.216	-.059	-.188	-.056	.091	.169	.049	-.183	-5.52
20	55.0	-.021	-.017	-.017	.151	.141	-.028	-.014	-.028	.139	.136	-.060	-.035	-.049	.105	.130	-5.05
21	65.0	.151	.209	.233	.233	.230	.143	.202	.209	.230	.230	.112	.183	.169	.239	.232	-3.92
22	69.9	.233	.281	.247	.271	.292	.233	.268	.240	.264	.282	.211	.260	.232	.225	.288	-0.90
23	73.4	-.302	-.388	-.563	-.343	-.244	-.306	-.348	-.595	-.320	-.251	-.291	-.393	-.562	-.383	-.228	2.50
24	70.0	-.117	-.196	-.391	-.323	-.268	-.115	-.202	-.418	-.303	-.296	-.126	-.228	-.386	-.337	-.249	-0.95
25	72.6	-.638	-.769	-.837	-.721	-.621	-.640	-.724	-.870	-.682	-.616	-.593	-.762	-.832	-.730	-.586	3.26
26	76.5	-1.187	-1.311	-1.476	-1.373	-1.342	-1.194	-1.180	-1.559	-1.368	-1.322	-1.039	-1.254	-1.489	-1.327	-1.194	4.48
27	84.9	-.364	-.377	-.384	-.312	-.216	-.372	-.383	-.418	-.303	-.226	-.393	-.372	-.404	-.330	-.253	3.01
28	93.3	-.343	-.295	-.144	-.103	-.117	-.358	-.320	-.157	-.111	-.115	-.355	-.291	-.162	-.119	-.151	1.37
29	78.5	.631	.535	.576	.669	.655	.623	.543	.578	.640	.668	.632	.485	.562	.632	.653	-2.19
30	89.5	.240	.261	.285	.281	.292	.233	.264	.264	.275	.271	.225	.249	.253	.253	.263	-1.07

ORIFICE	X/c	α = 7.55 D/L = .13[illegible] C_L = 22.670 T_c' = 17.77 q = .90 lb/sq ft					α = 11.83 D/L = .218 C_L = 18.234 T_c' = 14.39 q = 1.12 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					Y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.997	.619		-2.741	-1.534	1.074	.628		-2.808	-1.867						0
2	1.5	-.182	-.449		-2.784		.028	-.014		-2.348							2.23
3	5.0	-.409	-.434		-1.324	-1.517	-.390	-.411		-1.309	-1.576						3.96
4	15.0	-.292	-.502		-.769	-.833	-.267	-.481		-.769	-.828						6.76
5	30.0	-.356	-.498		-.605	-.577	-.326	-.484		-.583	-.565						8.53
6	50.0	-.420	-.434		-.470	-.459	-.393	-.418		-.456	-.449						8.19
7	1.5	.296	.662		.904	.819	.263	.397		.891	.913						-1.77
8	5.0	.075	.320		.911	.584	.091	.351		.920	.621						-3.18
9	15.0				.424	.228				.446	.253						-5.14
10	30.0	-.110	-.171		.039	.174	-.074	-.147		.060	.211						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.345	-.370	-.408	-.424	-.397	-.316	-.351	-.354	-.418	-.372						6.42
18	71.5		-.427	-.456		-.406		-.411	-.411		-.386						5.41
19	48.3	.000	.121	.171	.078	-.171	.028	.151	.193	.074	-.179						-5.52
20	55.0	-.036	-.028	-.028	.128	.189	.000	.004	.000	.154	.239						-5.05
21	65.0	.157	.221	.189	.285	.285	.197	.242	.263	.326	.326						-3.92
22	69.9	.242	.299	.246	.260	.331	.281	.316	.298	.253	.369						-0.90
23	73.4	-.274	-.360	-.523	-.356	-.189	-.249	-.333	-.446	-.333	-.168						2.50
24	70.0	-.096	-.192	-.349	-.296	-.189	-.077	-.154	-.256	-.277	-.172						-0.95
25	72.6	-.587	-.705	-.790	-.684	-.538	-.562	-.688	-.712	-.677	-.537						3.26
26	76.5	-1.168	-1.139	-1.417	-1.232	-1.065	-1.106	-1.077	-1.260	-1.225	-1.085						4.48
27	84.9	-.296	-.320	-.367	-.278	-.246	-.288	-.305	-.288	-.270	-.211						3.01
28	93.3	-.228	-.249	-.142	-.114	-.164	-.207	-.260	-.126	-.063	-.116						1.37
29	78.5	.627	.498	.563	.669	.652	.691	.502	.565	.684	.730						-2.19
30	89.5	.278	.285	.263	.299	.299	.319	.305	.298	.326	.351						-1.07

TABLE [illegible]

PRESSURE COEFFICIENTS C_p ON WING AND FLAP A.

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $\delta_w = 60$ $\Omega = 2800$ rpm

ORIFICE	%	α = -11.44, D/L = -.224, C_L = 37.095, T_c' = 33.74, q = .51 lb/sq ft					α = -6.95, D/L = -.145, C_L = 38.972, T_c' = 35.61, q = .48 lb/sq ft					α = -.13, D/L = .001, C_L = 40.715, T_c' = 35.58, q = .49 lb/sq ft					x
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.845	.473		-.611	.057	.695	.438		-.411	.154	.828	.442		-.722	-.213	0
2	1.5	.231	.537		-1.255		.230	.451		-1.587		.289	.456		-1.686		2.23
3	5.0	-.013	.158		-.681	.906	-.037	.144		-.615	-.865	-.040	.106		-.745	-1.028	3.96
4	15.0	.047	-.198		-.463	.527	.070	-.200		-.441	-.508	.043	-.233		-.499	-.589	6.76
5	30.0	-.060	-.289		-.386	-.346	-.017	-.277		-.364	-.337	-.053	-.316		-.399	-.399	8.53
6	50.0	-.174	-.265		-.299	-.278	-.154	-.264		.271	-.277	-.180	-.286		-.289	-.336	8.19
7	1.5	-.134	-.470		.817	1.023	-.037	-.294		.825	1.052	-.113	-.259		.871	1.051	-1.77
8	5.0	-.161	-.302		.551	.698	-.164	-.347		.638	.671	-.150	-.236		.688	.725	-3.18
9	15.0				.282	.245				.267	.230				.286	.279	-5.14
10	30.0	-.121	-.148		-.013	.158	-.130	-.140		-.007	.130	-.133	-.150		-.017	.190	-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.158	-.228	-.255	-.265	-.235	-.157	-.210	-.287	-.247	-.230	-.166	-.243	-.303	-.243	-.266	6.42
18	71.5		-.289	-.322		-.282		-.284	-.347		-.287		-.316	-.359		-.299	5.41
19	48.3	.030	.114	.097	.094	-.087	.037	.127	.120	.104	-.094	.033	.123	.116	.110	-.106	-5.52
20	55.0	-.003	.000	.003	.164	.235	-.007	.003	-.013	.170	.217	.007	.000	-.010	.170	.233	-5.05
21	65.0	.215	.215	.228	.342	.356	.217	.214	.217	.344	.351	.206	.210	.223	.343	.353	-3.92
22	69.9	.295	.238	.302	.292	.403	.297	.237	.297	.281	.397	.283	.229	.283	.316	.386	-0.90
23	73.4	-.141	-.285	-.342	-.275	-.097	-.144	-.271	-.367	-.257	-.097	-.150	-.303	-.389	-.256	-.126	2.50
24	70.0	.010	-.151	-.174	-.221	-.097	.010	-.137	-.177	-.204	-.100	-.013	-.176	-.210	-.190	-.140	-0.95
25	72.6	-.399	-.560	-.604	-.601	-.456	-.418	-.554	-.631	-.581	-.464	-.432	-.595	-.645	-.569	-.489	3.26
26	76.5	-.959	-.996	-1.013	-1.288	-1.268	-1.066	-.972	-1.092	-1.286	-1.253	-1.041	-1.088	-1.111	-1.267	-1.234	4.48
27	84.9	-.181	-.201	-.188	-.158	-.195	-.187	-.190	-.214	-.147	-.190	-.186	-.203	-.213	-.156	-.223	3.01
28	93.3	-.107	-.107	-.057	.020	-.044	-.070	-.104	-.073	.023	-.043	-.093	-.073	-.053	.023	-.080	1.37
29	78.5	.664	.396	.497	.661	.775	.651	.418	.491	.678	.778	.645	.419	.496	.698	.762	-2.19
30	89.5	.349	.275	.292	.369	.429	.361	.304	.277	.391	.431	.353	.296	.283	.396	.416	-1.07

ORIFICE	%	α = 6.19, D/L = .109, C_L = 40.337, T_c' = 35.53, q = .49 lb/sq ft					α = 12.22, D/L = .219, C_L = 38.210, T_c' = 34.33, q = .51 lb/sq ft					α = , D/L = , C_L = , T_c' = , q = lb/sq ft					x
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.824	.473		-.817	-.177	.716	.433		-.305	-.128						0
2	1.5	.282	.381		-1.569		.269	.492		-1.431							2.23
3	5.0	-.072	.056		-.749	-.952	.026	.138		-.604	-.946						3.96
4	15.0	-.003	-.230		-.489	-.538	.033	-.194		-.424	-.522						6.76
5	30.0	-.089	-.295		-.384	-.355	-.069	-.266		-.361	-.351						8.53
6	50.0	-.204	-.276		-.292	-.282	-.194	-.236		-.276	-.286						8.19
7	1.5	-.144	.256		.854	.985	-.069	-.312		.811	.985						-1.77
8	5.0	-.164	-.181		.650	.676	-.177	-.253		.594	.703						-3.18
9	15.0				.282	.250				.256	.259						-5.14
10	30.0	-.121	-.158		.007	.158	-.108	-.128		.016	.161						-6.25
11	45.0																-2.59
12	46.6																+1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.167	-.230	-.302	-.250	-.230	-.167	-.200	-.276	-.227	-.240						6.42
18	71.5		-.295	-.361		-.279		-.253	-.335		-.286						5.41
19	48.3	.030	.098	.105	.112	-.089	.036	.128	.131	.049	-.056						-5.52
20	55.0	-.003	-.007	-.007	.164	.210	.016	.007	.000	.194	.240						-5.05
21	65.0	.194	.210	.217	.332	.322	.194	.220	.230	.338	.338						-3.92
22	69.9	.272	.187	.282	.243	.384	.263	.243	.286	.332	.384						-0.90
23	73.4	-.144	-.263	-.397	-.246	-.098	-.141	-.220	-.364	-.190	-.098						2.50
24	70.0	.000	-.141	-.217	-.194	-.102	.000	-.102	-.194	-.171	-.108						-0.95
25	72.6	-.401	-.545	-.650	-.545	-.427	-.394	-.499	-.617	-.509	-.453						3.26
26	76.5	-.880	-.992	-1.051	-1.182	-1.149	-.903	-.886	-1.080	-1.175	-1.133						4.48
27	84.9	-.190	-.200	-.197	-.164	-.197	-.181	-.190	-.190	-.154	-.184						3.01
28	93.3	-.112	-.098	-.026	.007	-.059	-.105	-.089	-.003	.010	-.053						1.37
29	78.5	.643	.407	.509	.650	.739	.627	.430	.519	.683	.735						-2.19
30	89.5	.345	.282	.295	.358	.397	.341	.295	.312	.384	.397						-1.07

TABLE [illegible]

PRESSURE COEFFICIENTS, C_p, ON WING AND FLAPS A.

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 70$ $n = 2820$ rpm

ORIFICE	$\frac{x}{c}$	α = -4.42 D/L = .076 C_L = 41.658 T_c' = 36.65 q = .48 lb/sq ft					α = -.57 D/L = .145 C_L = 43.148 T_c' = 38.51 q = .46 lb/sq ft					α = 5.56 D/L = .249 C_L = 40.258 T_c' = 36.86 q = .48 lb/sq ft					[illegible]
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.951	.474		-1.022	-.269	.892	.436		-.662	-.055	.189	.593		-.896	-.020	0
2	1.5	.256	.357		-1.493		.226	.575		-1.386		.251	.499		-1.316		2.43
3	5.0	-.068	.062		-.818	-.996	-.016	.136		-.714	-.895	.036	.065		-.759	-.906	3.96
4	15.0	-.013	-.237		-.509	-.552	.003	-.191		-.459	-.472	.114	-.241		-.499	-.525	6.76
5	30.0	-.097	-.305		-.399	-.360	-.097	-.268		-.368	-.310	.039	-.316		-.391	-.332	8.53
6	50.0	-.214	-.286		-.295	-.289	-.197	-.249		-.268	-.242	-.101	-.277		-.293	-.264	8.19
7	1.5	-.036	-.182		.879	1.048	-.194	-.549		.824	1.050	-.088	-.345		.789	.997	-2.07
8	5.0	-.165	-.127		.707	.737	-.184	-.233		.643	.695	-.310	-.199		.668	.694	-3.18
9	15.0				.305	.289				.271	.252				.300	.251	-5.24
10	30.0	-.123	-.140		.003	.185	-.123	-.142		-.010	.155	-.111	-.147		.013	.156	-6.45
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.96
16	55.0																7.33
17	65.0	-.178	-.237	-.299	-.269	-.237	-.162	-.220	-.278	-.239	-.207	-.091	-.225	-.270	-.270	-.218	6.42
18	71.5		-.308	-.354		-.282		-.291	-.339		-.252		-.290	-.319		-.261	5.41
19	48.3	.039	.117	.156	.104	-.094	.039	.110	.094	.094	-.042	.039	.137	.124	.101	-.085	-5.52
20	55.0	.000	-.003	-.003	.165	.224	.006	.003	-.010	.168	.210	.000	.007	.003	.169	.225	-5.05
21	65.0	.204	.204	.224	.341	.341	.200	.191	.187	.320	.330	.202	.225	.199	.326	.339	-3.92
22	69.9	.276	.217	.315	.295	.393	.271	.210	.297	.307	.378	.267	.261	.277	.293	.391	-0.90
23	73.4	-.143	-.295	-.383	-.263	-.107	-.116	-.288	-.362	-.236	-.090	-.091	-.270	-.349	-.244	-.078	2.50
24	70.0	.010	-.162	-.208	-.201	-.107	.016	-.158	-.181	-.194	-.090	.029	-.130	-.169	-.199	-.085	-0.95
25	72.6	-.406	-.584	-.633	-.581	-.458	-.375	-.559	-.620	-.562	-.417	-.329	-.541	-.577	-.551	-.417	3.26
26	76.5	-.899	-1.055	-1.045	-1.210	-1.181	-.814	-1.015	-1.089	-1.234	-1.089	-.886	-.867	-.965	-1.160	-1.154	4.48
27	84.9	-.198	-.208	-.185	-.143	-.191	-.168	-.191	-.187	-.152	-.187	-.137	-.205	-.166	-.156	-.179	3.01
28	93.3	-.140	-.088	-.003	.016	-.052	-.110	-.078	-.019	.029	-.039	-.020	-.127	-.046	.020	-.033	1.37
29	78.5	.675	.389	.524	.665	.750	.617	.404	.491	.679	.733	.525	.401	.472	.658	.749	-2.19
30	89.5	.347	.286	.327	.367	.412	.320	.288	.288	.381	.401	.326	.290	.280	.371	.424	-1.07

TABLE [illegible]

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 40$ $\delta_{f,55} = 00$ $i_w = 00$ $\lambda = 2130$ rpm

ORIFICE	$\frac{x}{c}$	$\alpha = -4.71$ D/L = -.196 C_L = .775 T_c' = .28 q = 10.34 lb/sq ft					$\alpha = 3.45$ D/L = -.037 C_L = 1.720 T_c' = .30 q = 10.10 lb/sq ft					$\alpha = 7.40$ D/L = .025 C_L = 2.313 T_c' = .33 q = 9.71 lb/sq ft					$\frac{x}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.868	.781		1.125	1.185	.599	.528		-.418	.011	-1.174	-1.041		-3.040	-2.448	0
2	1.5	.617	.448		-.022		-.451	-1.116		-1.683		-2.298	-2.492		-3.079		2.23
3	5.0	.000	.087		-.115	-.115	-1.094	-1.045		-1.215	-1.265	-2.099	-1.805		-1.922	-2.215	3.96
4	15.0	-.300	-.333		-.431	-.420	-.913	-.984		-1.034	-1.067	-1.418	-1.368		-1.373	-1.573	6.76
5	30.0	-.486	-.502		-.584	-.541	-.913	-.951		-.979	-.951	-1.235	-1.191		-1.196	-1.257	8.53
6	50.0	-.584	-.573		-.579	-.633	-.836	-.841		-.819	-.847	-1.019	-.975		-.958	-1.019	8.19
7	1.5	-.126	-.546		-.175	.022	-.176	.462		.764	.885	-.421	.742		.886	.969	-1.77
8	5.0	-.377	-.464		-.169	-.087	.539	.456		.643	.737	.919	.969		.969	1.052	-3.18
9	15.0				-.175	-.240				.379	.324				.648	.604	-5.14
10	30.0	-.115	-.131		-.120	-.082	.198	.143		.220	.242	.354	.260		.410	.432	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.486	-.453	-.475	-.491	-.551	-.632	-.638	-.660	-.654	-.676	-.748	-.742	-.781	-.781	-.786	6.42
18	71.5		-.464	-.475		-.595		-.610	-.638		-.649		-.709	-.742		-.748	5.41
19	48.3	-.038	-.016	-.044	.005	-.027	.027	.038	.055	-.071	-.077	.044	.066	.105	-.006	-.039	-5.52
20	55.0	-.071	-.055	-.087	.289	.229	-.044	-.027	-.038	.396	.385	-.028	-.017	-.022	.526	.476	-5.05
21	65.0	.322	.355	.360	.415	.409	.456	.445	.473	.478	.495	.521	.521	.570	.587	.570	-3.92
22	69.9	.382	.404	.360	.453	.475	.489	.484	.533	.478	.517	.604	.598	.570	.559	.559	-0.90
23	73.4	-.191	-.202	-.262	-.207	-.213	-.231	-.231	-.368	-.264	-.220	-.260	-.299	-.471	-.382	-.244	2.50
24	70.0	-.213	-.235	-.328	.415	-.551	-.286	-.297	-.401	-.522	-.583	-.332	-.432	-.559	-.665	-.620	-0.95
25	72.6	-1.081	-1.108	-1.065	-1.332	-1.518	-1.243	-1.303	-1.369	-1.485	-1.485	-1.451	-1.512	-1.717	-1.800	-1.562	3.26
26	76.5	-.535	-.530	-.502	-.923	-1.414	-.583	-.610	-.660	-.968	-1.149	-.687	-.709	-.908	-1.562	-1.141	4.48
27	84.9	-.404	-.388	-.393	-.442	-.502	-.379	-.429	-.467	-.456	-.456	-.438	-.454	-.504	-.421	-.476	3.01
28	93.3	-.415	-.399	-.393	-.426	-.448	-.396	-.401	-.423	-.495	-.462	-.432	-.421	-.449	-.393	-.421	1.37
29	78.5	.775	.699	.611	.939	1.010	.935	.830	.808	.896	.968	1.008	.897	.958	.980	.997	-2.19
30	89.5	.475	.480	.448	.524	.541	.561	.572	.539	.539	.561	.631	.692	.676	.659	.620	-1.07

ORIFICE	$\frac{x}{c}$	$\alpha = 11.47$ D/L = .043 C_L = 2.781 T_c' = .36 q = 9.46 lb/sq ft					$\alpha = 15.51$ D/L = .077 C_L = 3.132 T_c' = .48 q = 9.14 lb/sq ft					$\alpha =$ D/L = C_L = T_c' = q = lb/sq ft					$\frac{x}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.191	-4.033		-6.805	-5.149	-5.415	-6.678		-9.659	-7.105						0
2	1.5	-4.317	-3.799		-4.418		-5.493	-4.666		-5.175							2.23
3	5.0	-2.945	-2.862		-2.895	-3.079	-3.381	-3.568		-3.402	-3.506						3.96
4	15.0	-1.791	-1.846		-1.796	-1.936	-1.935	-2.101		-2.008	-2.091						6.76
5	30.0	-1.428	-1.456		-1.422	-1.445	-1.467	-1.550		-1.472	-1.493						8.53
6	50.0	-1.127	-1.110		-1.088	-1.127	-1.129	-1.113		-1.108	-1.118						8.19
7	1.5	-1.010	.692		.764	.842	-1.883	.541		.479	.655						-1.77
8	5.0	.937	1.216		1.183	1.205	.759	1.363		1.207	1.191						-3.18
9	15.0				.865	.781				.967	.811						-5.14
10	30.0	.446	.368		.563	.530	.453	.406		.609	.557						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.787	-.792	-.865	-.881	-.870	-.770	-.749	-.785	-.848	-.895						6.42
18	71.5		-.736	-.803		-.814		-.661	-.707		-.869						5.41
19	48.3	.078	.067	.095	-.028	-.017	.104	.104	.130	-.036	-.057						-5.52
20	55.0	-.006	-.000	-.000	.614	.547	.000	-.000	.005	.635	.515						-5.05
21	65.0	.580	.563	.630	.664	.625	.531	.520	.583	.655	.593						-3.92
22	69.9	.681	.658	.658	.586	.586	.655	.687	.593	.583	.510						-0.90
23	73.4	-.245	-.301	-.502	-.441	-.312	-.224	-.208	-.364	-.427	-.411						2.50
24	70.0	-.357	-.374	-.597	-.753	-.708	-.286	-.333	-.468	-.775	-.822						-0.95
25	72.6	-1.461	-1.517	-1.791	-2.081	-1.701	-1.311	-1.306	-1.488	-1.898	-1.852						3.26
26	76.5	-.658	-.664	-.887	-2.025	-1.355	-.583	-.499	-.603	-1.560	-1.779						4.48
27	84.9	-.430	-.396	-.496	-.407	-.457	-.395	-.354	-.374	-.432	-.354						3.01
28	93.3	-.418	-.396	-.457	-.296	-.335	-.380	-.328	-.374	-.395	-.198						1.37
29	78.5	1.116	1.104	1.093	1.110	1.060	1.092	1.196	1.139	1.165	1.051						-2.19
30	89.5	.669	.770	.759	.759	.708	.635	.765	.744	.744	.713						-1.07

[illegible]

[illegible]

$b_{f,m}$ = 40 $b_{f,55}$ = 60d i_w = 10 2110 rpm

ORIFICE	x/c	α = -12.73 D/L = -.191 C_L = .872 T_c' = .32 q = 9.70 lb/sq ft					α = -.59 D/L = .008 C_L = 2.509 T_c' = .39 q = 9.11 lb/sq ft					α = 7.57 D/L = .069 C_L = 3.549 T_c' = .77 q = 8.24 lb/sq ft				
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION				
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5
1	0	1.051	.922		1.167	1.169	-1.703	-2.243		-4.672	-3.401	-5.792	-6.285		-9.101	-7.078
2	1.5	.601	.315		-.180		-2.693	-2.783		-3.379		-5.112	-4.450		-4.976	
3	5.0	-.152	-.034		-.264	-.410	-2.294	-2.243		-2.350	-3.519	-3.192	-3.253		-3.098	-3.366
4	15.0	-.365	-.427		-.511	-.596	-1.462	-1.552		-1.546	-1.675	-1.798	-1.901		-1.812	-1.948
5	30.0	-.528	-.584		-.663	-.635	-1.276	-1.287		-1.282	-1.299	-1.314	-1.385		-1.319	-1.352
6	50.0	-.618	-.607		-.618	-.680	-1.012	-1.023		-1.023	-1.029	-1.009	-.986		-.990	-1.019
7	1.5	-.101	-.382		.062	.236	-.478	.759		.843	.978	-1.915	.465		.314	.544
8	5.0	-.208	-.360		-.039	.197	.916	1.039		1.085	1.096	.577	1.206		1.112	1.094
9	15.0				-.079	-.079				.759	.675				.836	.732
10	30.0	-.051	-.112		-.118	.006	.388	.315		.478	.472	.432	.357		.569	.493
11	45.0															
12	46.6															
13	50.0															
14	45.0															
15	50.0															
16	55.0															
17	65.0	-.500	-.466	-.500	-.494	-.573	-.748	-.765	-.793	-.832	-.798	-.671	-.671	-.685	-.756	-.793
18	71.5		-.483	-.494		-.612		-.731	-.770		-.742		-.591	-.606		-.793
19	48.3	-.039	-.045	-.034	.028	.011	.017	.000	.039	.017	.017	.005	.005	-.006	-.042	-.047
20	55.0	-.084	-.073	-.084	.292	.270	.006	-.011	-.000	.568	.500	.005	.000	-.005	.544	.451
21	65.0	.354	.371	.382	.393	.433	.540	.540	.585	.618	.596	.474	.474	.493	.568	.516
22	69.9	.416	.444	.421	.421	.483	.646	.669	.607	.585	.590	.530	.530	.568	.512	.479
23	73.4	-.185	-.202	-.253	.225	-.219	-.270	-.304	-.489	-.394	-.259	-.174	-.160	-.296	-.371	-.380
24	80.0	-.202	-.242	-.281	.376	-.584	-.320	-.365	-.590	-.697	-.618	-.221	-.258	-.380	-.676	-.765
25	82.6	-1.096	-1.131	-1.084	-.214	-1.556	-1.462	-1.535	-1.748	-1.917	-1.568	-1.155	-1.206	-1.272	-1.619	-1.657
26	76.5	-.551	-.551	-.506	.618	-1.410	-.686	-.708	-.933	-1.776	-1.141	-.502	-.483	-.530	-1.277	-1.638
27	84.9	-.410	-.399	-.399	.405	-.478	-.433	-.450	-.534	-.416	-.461	-.347	-.314	-.333	-.371	-.286
28	93.3	-.410	-.405	-.399	.393	-.433	-.416	-.427	-.472	-.326	-.388	-.347	-.305	-.300	-.338	-.146
29	98.5	.753	.635	.612	.936	.995	1.018	1.012	.967	1.034	1.001	.962	1.084	.995	1.037	.967
30	89.5	.466	.461	.427	.483	.551	.630	.714	.697	.675	.641	.559	.671	.615	.652	.638

ORIFICE	x/c	α = 11.79 D/L = .114 C_L = 3.792 T_c' = .99 q = 7.82 lb/sq ft					α = 15.63 D/L = .176 C_L = 3.177 T_c' = .92 q = 7.84 lb/sq ft					α = D/L = C_L = T_c' q = lb/sq ft				
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION				
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5
1	0	-6.287	-6.705		-9.556	-7.775	-6.664	-6.825		-8.163	-5.093					
2	1.5	-5.208	-4.752		-5.191		-5.308	-4.762		-4.171						
3	5.0	-2.924	-3.221		-3.045	-3.466	-3.088	-3.200		-2.641	-1.911					
4	15.0	-1.557	-1.823		-1.733	-1.901	-1.660	-1.745		-1.258	-.904					
5	30.0	-1.114	-1.299		-1.239	-1.256	-1.132	-1.244		-.797	-.738					
6	50.0	-.869	-.920		-.907	-.890	-.891	-.913		-.716	-.716					
7	1.5	-2.112	.366		.185	.430	-2.139	.452		.380	.725					
8	5.0	.434	1.157		1.049	.963	.465	1.271		1.182	1.003					
9	15.0				.856	.628				.922	.618					
10	30.0	.404	.323		.516	.434	.407	.318		.528	.439					
11	45.0															
12	46.6															
13	50.0															
14	45.0															
15	50.0															
16	55.0															
17	65.0	-.624	-.619	-.624	-.688	-.692	-.689	-.689	-.644	-.667	-.671					
18	71.5		-.546	-.550		-.679		-.689	-.680		-.680					
19	48.3	-.009	-.009	.004	-.054	-.056	.009	-.004	.040	-.067	-.054					
20	55.0	.009	.004	.004	.439	.374	.009	.004	.018	.465	.380					
21	65.0	.409	.409	.443	.499	.430	.416	.394	.448	.488	.421					
22	69.9	.499	.529	.538	.460	.374	.501	.537	.537	.483	.371					
23	73.4	-.185	-.133	-.258	-.314	-.323	-.273	-.277	-.430	-.371	-.354					
24	70.0	-.228	-.241	-.340	-.619	-.705	-.376	-.425	-.542	-.689	-.765					
25	72.6	-1.135	-1.131	-1.165	1.376	-1.368	-1.414	-1.526	-1.495	-1.217	-.940					
26	76.5	-.619	-.460	-.460	-.963	-1.325	-.922	-.806	-.989	-1.208	-.689					
27	84.9	-.370	-.314	-.297	-.318	-.237	-.461	-.452	-.434	-.515	-.412					
28	93.3	-.314	-.292	-.275	-.301	-.099	-.354	-.403	-.371	-.457	-.376					
29	98.5	.856	1.011	.981	.963	.916	.926	1.079	1.047	1.047	.949					
30	89.5	.482	.576	.589	.555	.525	.497	.582	.586	.519	.492					

TABLE 42

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30}$ = 40 $\delta_{f,55}$ = 00 i_w = 20 V = 2115 rpm

ORIFICE	x/c %	α = -12.86 D/L = -.187 C_L = 2.918 T_c' = .99 q = 5.34 lb/sq ft					α = -4.44 D/L = -.050 C_L = 4.411 T_c' = 1.32 q = 4.88 lb/sq ft					α = .13 D/L = .007 C_L = 4.697 T_c' = 1.65 q = 4.46 lb/sq ft					z/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.757	.319		-2.749	-1.381	-1.385	-2.260		-6.350	-4.479	-3.067	-3.536		-7.205	-5.445	0
2	1.5	-.611	-1.142		-2.676		-2.619	-2.735		-4.102		-3.057	-3.052		-4.195		2.23
3	5.0	-.976	-1.082		-1.660	-1.859	-1.860	-2.045		-2.422	-2.775	-2.189	-2.322		-2.562	-2.965	3.96
4	15.0	-.810	-1.003		-1.162	-1.281	-1.159	-1.391		-1.443	-1.651	-1.225	-1.434		-1.475	-1.658	6.76
5	30.0	-.843	-.949		-1.009	-1.022	-1.002	-1.124		-1.136	-1.182	-.980	-1.087		-1.102	-1.107	8.53
6	50.0	-.843	-.817		-.823	-.850	-.852	-.892		-.904	-.927	-.796	-.816		-.837	-.862	8.19
7	1.5	-.080	.691		.969	1.155	-.805	.805		.684	1.002	-1.128	.704		.531	.837	-1.77
8	5.0	.598	.764		1.062	1.069	.562	1.078		1.159	1.176	.398	1.026		1.123	1.072	-3.18
9	15.0				.671	.538				.834	.643				.806	.577	-5.14
10	30.0	.212	.166		.378	.359	.267	.209		.464	.400	.286	.204		.439	.373	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.617	-.651	-.704	-.710	-.664	-.649	-.655	-.713	-.788	-.753	-.587	-.572	-.623	-.694	-.679	6.42
18	71.5		-.677	-.750		-.664		-.614	-.689		-.759		-.520	-.577		-.704	5.41
19	48.3	-.106	-.133	-.093	-.080	-.053	-.116	-.127	-.104	-.133	-.116	-.102	-.097	-.077	-.122	-.133	-5.52
20	55.0	-.007	-.007	-.013	.518	.478	.000	.006	.012	.521	.411	.020	.010	-.010	.439	.352	-5.05
21	65.0	.498	.471	.525	.604	.604	.429	.417	.458	.585	.550	.352	.362	.388	.495	.454	-3.92
22	69.9	.637	.651	.617	.571	.651	.591	.649	.591	.521	.527	.495	.536	.526	.459	.362	-0.90
23	73.4	-.226	-.312	-.491	-.378	-.179	-.243	-.249	-.440	-.440	-.336	-.179	-.168	-.316	-.342	-.316	2.50
24	70.0	-.266	-.378	-.551	-.657	-.551	-.272	-.342	-.527	-.765	-.724	-.204	-.265	-.398	-.674	-.725	-0.95
25	72.6	-1.434	-1.640	-1.906	-1.826	-1.547	-1.304	-1.391	-1.686	-1.935	-1.692	-1.056	-1.112	-1.291	-1.618	-1.602	3.26
26	76.5	-.691	-.810	-1.281	-1.613	-1.076	-.614	-.591	-.886	-1.981	-1.443	-.536	-.459	-.546	-1.398	-1.607	4.48
27	84.9	-.425	-.491	-.518	-.458	-.451	-.423	-.388	-.464	-.423	-.353	-.337	-.321	-.347	-.378	-.250	3.01
28	93.3	-.432	-.445	-.412	-.385	-.405	-.435	-.359	-.423	-.301	-.209	-.321	-.316	-.327	-.316	-.107	1.37
29	78.5	.956	.923	.943	1.082	1.115	.962	.985	.979	1.112	1.049	.832	.929	.934	1.046	.985	-2.19
30	89.5	.611	.671	.657	.717	.691	.562	.649	.643	.742	.684	.469	.572	.572	.617	.587	-1.07

ORIFICE	x/c %	α = 8.69 D/L = .101 C_L = 5.212 T_c' = 2.16 q = 4.48 lb/sq ft					α = 16.58 D/L = .176 C_L = 4.603 T_c' = 2.25 q = 4.42 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					z/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-4.418	-4.774		-8.215	-5.891	-5.249	-5.280		-6.562	-3.361						0
2	1.5	-3.779	-3.738		-4.526		-3.472	-3.219		-.868							2.23
3	5.0	-2.265	-2.599		-2.626	-2.635	-2.270	-2.693		-1.758	-.761						3.96
4	15.0	-1.216	-1.504		-1.459	-1.482	-1.229	-1.442		-.971	-.565						6.76
5	30.0	-.901	-1.090		-1.018	-1.022	-.837	-.935		-.699	-.494						8.53
6	50.0	-.716	-.775		-.703	-.716	-.623	-.654		-.623	-.503						8.19
7	1.5	-1.684	.577		.432	.329	-1.491	.792		.935	.307						-1.77
8	5.0	.266	1.099		1.112	.644	.191	1.202		1.238	.476						-3.18
9	15.0				.811	.374				.784	.303						-5.14
10	30.0	.284	.171		.414	.297	.289	.142		.383	.240						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.527	-.527	-.545	-.518	-.549	-.521	-.552	-.565	-.597	-.490						6.42
18	71.5		-.491	-.477		-.500		-.605	-.592		-.508						5.41
19	48.3	-.081	-.086	-.099	-.104	-.104	-.076	-.076	-.036	-.116	-.102						-5.52
20	55.0	.005	.018	.014	.333	.261	.013	.009	-.000	.285	.249						-5.05
21	65.0	.297	.284	.302	.347	.293	.289	.267	.334	.276	.258						-3.92
22	69.9	.374	.428	.419	.338	.225	.298	.298	.298	.209	.174						-0.90
23	73.4	-.185	-.144	-.239	-.194	-.185	-.240	-.294	-.356	-.272	-.263						2.50
24	70.0	-.239	-.261	-.338	-.419	-.581	-.352	-.485	-.512	-.467	-.641						-0.95
25	72.6	-.986	-1.103	-1.085	-1.072	-.707	-.948	-1.171	-.815	-.824	-.672						3.26
26	76.5	-.558	-.477	-.446	-.766	-.689	-.748	-.801	-.654	-.735	-.543						4.48
27	84.9	-.311	-.311	-.306	-.315	-.239	-.298	-.392	-.396	-.401	-.347						3.01
28	93.3	-.266	-.297	-.279	-.302	-.194	-.240	-.371	-.361	-.374	-.329						1.37
29	78.5	.725	.932	.914	.851	.757	.694	.904	.859	.632	.556						-2.19
30	89.5	.365	.477	.464	.378	.356	.334	.401	.374	.289	.280						-1.07

[illegible]

$\delta_{f,30}$ = 40 $\delta_{f,55}$ = 00 i_w = 30 [illegible] rpm

ORIFICE	%	α = -12.20 D/L = -.144 C_L = 5.974 T_c' = 2.63 q = 3.4 lb/sq ft					α = -2.57 D/L = -.005 C_L = 3.684 T_c' = 3.79 q = 3.12 lb/sq ft					α = 6.19 D/L = .084 C_L = 5.087 T_c' = 4.44 q = 2.89 lb/sq ft				
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION				
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5
1	0	.065	-.497		4.728	-3.077	-1.202	-1.713		-5.457	-4.322	-2.277	-2.720		-6.083	-5.550
2	1.5	-.890	-1.521		3.306		-1.562	-2.199		-3.522		-2.039	-2.580		-3.643	
3	5.0	-1.223	-1.218		1.894	-2.292	-1.428	-1.491		-2.031	-2.588	-1.572	-1.950		-2.199	-2.296
4	15.0	-.810	-.964		1.138	-1.342	-.860	-1.055		-1.194	-1.395	-.926	-1.171		-1.257	-1.308
5	30.0	-.771	-.846		-.926	-.969	-.737	-.829		-.906	-.930	-.739	-.852		-.876	-.868
6	50.0	-.711	-.696		-.766	-.790	-.641	-.641		-.708	-.712	-.584	-.627		.642	-.695
7	1.5	-.323	.771		.795	1.099	.360	.733		.657	.787	-1.086	.716		.665	.214
8	5.0	.413	.838		1.304	1.084	.306	.871		1.043	.863	.163	.891		1.055	.451
9	15.0				.716	.627				.678	.402				.638	.223
10	30.0	.149	.983		.338	.413	.172	.054		.302	.239	.210	.058		.292	.195
11	45.0															
12	46.6															
13	50.0															
14	45.0															
15	50.0															
16	55.0															
17	65.0	-.542	-.567	-.616	-.691	-.661	-.490	-.473	-.490	-.590	-.565	-.436	-.428	-.436	-.463	-.475
18	71.5		-.567	-.636		-.681		-.436	-.465		-.590		-.409	-.397		-.467
19	48.3				-.139	-.144	-.168	-.168	-.147	-.138	-.159	-.156	-.136	-.132	-.074	-.082
20	55.0	-.299	-.299	-.194	.447	.368	.008	.013	.000	.322	.230	.000	.008	.000	.230	.187
21	65.0	.020	.010	.000	.522	.522	.272	.281	.293	.373	.322	.195	.214	.237	.249	.198
22	69.9	.398	.388	.423	.457	.542	.377	.431	.410	.377	.364	.234	.269	.304	.245	.175
23	73.4	.532	.577	.492	-.457	-.293	-.188	-.168	-.239	-.297	-.306	-.156	-.140	-.198	-.144	-.210
24	70.0	-.214	-.250	-.453	-.756	-.681	-.230	-.247	-.322	-.590	-.666	-.206	-.257	-.304	-.354	-.568
25	72.6	-.264	-.323	-.622	-1.039	-1.651	-.097	-.097	-1.093	-1.407	-1.399	-.782	-.969	-.957	-.833	-.712
26	76.4	1.268	-1.462	-1.733	-2.328	-1.521	-.540	-.431	-.473	-1.173	-1.411	-.405	-.440	-.401	-.409	-.665
27	84.4	-.441	-.706	-1.168	-.431	-.333	-.366	-.322	-.318	-.396	-.264	-.241	-.288	-.280	-.234	-.195
28	93.3	-.423	-.458	-.472	-.316	-.224	-.327	-.306	-.306	-.314	-.151	-.230	-.272	-.261	-.214	-.163
29	78.5	-.403	-.388	-.398	1.[illegible]	1.009	.687	.776	.804	.925	.871	.584	.782	.774	.681	.568
30	89.5	.870	.815	.848	.[illegible]	.631	.364	.461	.456	.448	.431	.269	.358	.374	.300	.249

ORIFICE	%	α = 13.44 D/L = .114 C_L = 8.054 T_c' = 4.7[illegible] q = [illegible] lb/sq ft					α = 14.56 D/L = .167 C_L = 7.879 T_c' = 4.85 q = 2.78 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft				
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION				
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5
1	0	-2.551	-3.033		-6.028	-4.992	-2.657	-2.902		-5.232	-3.458					
2	1.5	-2.179	-2.812		-3.721		-2.193	-2.447		-3.293						
3	5.0	-1.636	-2.065		-2.171	-1.579	-1.669	-2.056		-1.812	-.962					
4	15.0	-.941	-1.213		-1.218	-1.226	-.940	-1.184		-.925	-.853					
5	30.0	-.752	-.865		-.899	-.888	-.748	-.849		-.669	-.744					
6	50.0	-.562	-.619		-.569	-.588	-.556	-.600		-.549	-.609					
7	1.5	-1.169	.736		.608	-.095	-1.194	.752		.771	-.011					
8	5.0	.159	.892		1.051	.315	.139	.864		1.030	.271					
9	15.0				.615	.182				.594	.162					
10	30.0	.186	.661		.288	.182	.192	.071		.271	.180					
11	45.0															
12	46.6															
13	50.0															
14	45.0															
15	50.0															
16	55.0															
17	65.0	-.422	-.421	-.4[illegible]	-.410	-.448	-.398	-.398	-.435	-.459	-.470					
18	71.5		-.462	-.3[illegible]		-.402		-.376	-.398		-.428					
19	48.3	-.140	-.148	-.1[illegible]	-.144	-.148	-.138	-.128	-.117	-.150	-.150					
20	55.0	.004	.004	.0[illegible]	.205	.178	-.004	.008	.011	.188	.173					
21	65.0	.182	.186	.127	.213	.175	.177	.177	.129	.180	.165					
22	69.9	.209	.220	.245	.205	.118	.177	.165	.173	.162	.090					
23	73.4	-.133	-.133	-.182	.129	-.178	-.139	-.120	-.272	-.203	-.226					
24	70.0	-.209	-.270	-.296	.307	-.478	-.214	-.259	-.342	-.368	-.485					
25	72.6	-.706	-.934	-.833	.167	-.501	-.699	-.801	-.468	.685	-.474					
26	76.4	-.349	-.414	-.342	.474	-.440	-.376	-.338	-.391	.447	-.293					
27	84.4	-.216	-.262	-.2[illegible]2	.339	-.194	-.207	-.226	-.253	-.226	-.207					
28	93.3	-.255	-.235	-.216	.197	-.159	-.180	-.218	-.229	-.203	-.188					
29	78.5	.520	.717	.710	.560	.433	.485	.628	.639	.485	.360					
30	89.5	.235	.304	.248	.247	.205	.318	.252	.253	.214	.188					

TABLE 44

PRESSURE COEFFICIENTS C_p ON WING AND FLAPS AT

$\delta_{f,30} = 40$ $\delta_{f,55} = 00$ $i_w = 40$ $N = 2475$ rpm

ORIFICE	x/c	α = -13.71, D/L = -.167, C_L = 11.366; T_c' = 6.92, q = 1.84 lb/sq ft					α = -4.85, D/L = -.025, C_L = 13.410; T_c' = 8.22, q = 1.65 lb/sq ft					α = .12, D/L = .042, C_L = 14.069; T_c' = 8.84, q = 1.59 lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.645	.272		-3.394	-2.187	.346	-.326		-3.879	-3.219	.201	-.569		-3.963	-3.781	0
2	1.5	-.726	-.842		-2.790		-.612	-1.276		-3.052		-.732	-1.414		-3.092		2.23
3	5.0	-.737	-.742		-1.563	-1.927	-.902	-.978		-1.677	-2.134	-.965	-1.085		-1.697	-2.200	3.96
4	15.0	-.536	-.679		-.930	-1.077	-.600	-.759		-.986	-1.148	-.624	-.786		-1.007	-1.139	6.76
5	30.0	-.557	-.620		-.729	-.763	-.588	-.636		-.763	-.763	-.593	-.655		-.771	-.744	8.53
6	50.0	-.561	-.545		-.595	-.633	-.560	-.525		-.592	-.612	-.550	-.523		-.593	-.577	8.19
7	1.5	-.126	.704		.867	1.102	-.211	.783		.842	.791	-.232	.790		.841	.620	-1.77
8	5.0	.243	.570		.980	.901	.266	.672		.982	.783	.279	.693		.961	.662	-3.18
9	15.0				.561	.369				.536	.322				.519	.252	-5.14
10	30.0	.029	-.029		.201	.226	.044	-.040		.191	.195	.039	-.054		.178	.170	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.436	-.444	-.469	-.570	-.532	-.421	-.389	-.429	-.533	-.521	-.403	-.380	-.399	-.504	-.473	6.42
18	71.5		-.473	-.499		-.566		-.393	-.429		-.556		-.380	-.387		-.484	5.41
19	48.3	-.226	-.230	-.201	-.159	-.159	-.199	-.195	-.183	-.167	-.175	-.178	-.170	-.167	-.159	-.163	-5.52
20	55.0	-.017	.000	.000	.306	.281	.000	.008	.004	.230	.195	.012	.008	.008	.194	.170	-5.05
21	65.0	.323	.327	.352	.385	.423	.262	.270	.282	.290	.290	.232	.236	.252	.221	.252	-3.92
22	69.9	.419	.440	.402	.385	.461	.346	.362	.342	.342	.354	.302	.298	.279	.279	.287	-0.90
23	73.4	-.176	-.214	-.365	-.365	-.243	-.171	-.139	-.278	-.306	-.282	-.167	-.116	-.244	-.229	-.232	2.50
24	70.0	-.235	-.281	-.427	-.662	-.570	-.227	-.227	-.354	-.560	-.632	-.213	-.209	-.314	-.415	-.566	-0.95
25	72.6	-1.131	-1.236	-1.437	-1.634	-1.483	-1.021	-.946	-1.141	-1.387	-1.395	-.988	-.922	-1.034	-1.139	-1.158	3.26
26	76.5	-.570	-.595	-.892	-1.789	-1.416	-.505	-.405	-.552	-1.387	-1.415	-.496	-.399	-.477	-.817	-1.054	4.48
27	84.9	-.394	-.398	-.415	-.423	-.348	-.370	-.294	-.362	-.389	-.302	-.349	-.298	-.322	-.360	-.279	3.01
28	93.3	-.394	-.381	-.377	-.176	-.226	-.346	-.302	-.334	-.330	-.187	-.314	-.287	-.306	-.325	-.205	1.37
29	78.5	.788	.696	.742	.955	.947	.727	.707	.719	.854	.839	.709	.693	.713	.736	.713	-2.19
30	89.5	.423	.440	.453	.570	.528	.354	.378	.378	.374	.389	.322	.329	.329	.267	.302	-1.07

ORIFICE	x/c	α = 5.15, D/L = .100, C_L = 15.056; T_c' = 9.80, q = 1.47 lb/sq ft					α = 14.46, D/L = .201, C_L = 14.778; T_c' = 10.45, q = 1.44 lb/sq ft					α = , D/L = , C_L = ; T_c' = , q = lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.107	-.683		-4.023	-4.240	.018	-.925		-3.741	-4.515						0
2	1.5	-.824	-1.557		-3.011		-.844	-1.626		-2.856							2.23
3	5.0	-1.004	-1.164		-1.779	-2.198	-.999	-1.222		-1.659	-1.982						3.96
4	15.0	-.622	-.809		-1.042	-1.156	-.602	-.815		-.977	-1.035						6.76
5	30.0	-.584	-.649		-.752	-.737	-.565	-.639		-.709	-.653						8.53
6	50.0	-.538	-.515		-.569	-.546	-.503	-.470		-.514	-.466						8.19
7	1.5	-.309	.752		.840	.294	-.367	.756		.841	-.140						-1.77
8	5.0	.252	.634		.908	.473	.213	.690		.899	.239						-3.18
9	15.0				.469	.176				.477	.140						-5.14
10	30.0	.042	-.038		.187	.156	.048	-.026		.176	.128						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.401	-.378	-.378	-.450	-.416	-.367	-.316	-.323	-.371	-.330						6.42
18	71.5		-.351	-.359		-.420		-.290	-.290		-.319						5.41
19	48.3	-.164	-.168	-.156	-.130	-.156	-.147	-.125	-.125	-.140	-.169						-5.52
20	55.0	.004	-.004	-.008	.156	.145	.007	.015	.007	.110	.110						-5.05
21	65.0	.206	.218	.221	.183	.187	.169	.184	.198	.125	.110						-3.92
22	69.9	.252	.248	.240	.225	.210	.202	.180	.184	.132	.110						-0.90
23	73.4	-.168	-.122	-.202	-.168	-.195	-.125	-.073	-.125	-.106	-.121						2.50
24	70.0	-.221	-.218	-.286	-.363	-.485	-.195	-.184	-.209	-.209	-.327						-0.95
25	72.6	-.947	-.878	-.924	-.897	-.893	-.800	-.716	-.734	-.631	-.591						3.26
26	76.5	-.477	-.397	-.408	-.542	-.695	-.378	-.294	-.308	-.275	-.330						4.48
27	84.9	-.347	-.294	-.294	-.290	-.286	-.286	-.231	-.228	-.213	-.220						3.01
28	93.3	-.305	-.282	-.286	-.267	-.229	-.257	-.231	-.228	-.217	-.187						1.37
29	78.5	.683	.687	.668	.607	.603	.609	.620	.569	.367	.341						-2.19
30	89.5	.286	.298	.279	.214	.221	.253	.242	.217	.132	.125						-1.07

TABLE [illegible]

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30}$ = 40 $\delta_{f,55}$ = 00 i_w = 50 Ω = 2750 rpm

ORIFICE	$\frac{x}{c}$	α = -11.83, D/L = -.115, C_L = 19.111, T_c' = 13.98, q = 1.15 lb/sq ft					α = -7.92, D/L = -.060, C_L = 20.100, T_c' = 14.81, q = 1.09 lb/sq ft					α = -3.27, D/L = -.009, C_L = 19.745, T_c' = 14.95, q = 1.06 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.280	.977		-2.790	-1.744	1.286	1.022		-2.907	-1.695	1.292	.998		-2.323	-1.760	0
2	1.5	.427	-.092		-2.886		.385	-.158		-2.944		.407	-.066		-3.057		2.23
3	5.0	-.450	-.413		-1.583	-1.982	-.418	-.395		-1.584	-1.960	-.369	-.308		-1.424	-1.997	3.96
4	15.0	-.413	-.615		-.991	-1.129	-.399	-.599		-.994	-1.138	-.355	-.544		-.937	-1.131	6.76
5	30.0	-.509	-.647		-.780	-.789	-.502	-.646		-.790	-.776	-.473	-.610		-.743	-.771	8.53
6	50.0	-.597	-.601		-.679	-.652	-.576	-.590		-.650	-.641	-.558	-.558		-.601	-.629	8.19
7	1.5	-.064	.436		1.202	1.446	-.056	.488		1.198	1.412	-.123	.298		1.202	1.391	-1.77
8	5.0	.092	.262		1.074	1.069	.009	.325		1.133	1.045	-.028	.180		.937	1.084	-3.18
9	15.0				.473	.376				.516	.353	-.052			.397	.360	-5.14
10	30.0	-.110	-.239		.032	.202	-.158	-.228		.060	.186	-.189	-.251		-.005	.199	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.500	-.523	-.532	-.670	-.574	-.488	-.511	-.562	-.632	-.553	-.454	-.464	-.544	-.591	-.539	6.42
18	71.5		-.587	-.583		-.624		-.590	-.604		-.622		-.511	-.587		-.591	5.41
19	48.3	-.202	-.220	-.188	-.202	-.179	-.204	-.200	-.190	-.190	-.181	-.185	-.194	-.189	-.170	-.170	-5.52
20	55.0	-.028	-.046	-.032	.202	.294	-.046	-.037	-.046	.260	.307	-.047	-.043	-.052	.218	.322	-5.05
21	65.0	.367	.358	.395	.349	.496	.353	.376	.390	.381	.511	.364	.374	.388	.355	.521	-3.92
22	69.9	.477	.441	.450	.390	.546	.446	.488	.460	.437	.567	.454	.473	.468	.431	.582	-0.90
23	73.4	-.229	-.275	-.436	-.450	-.248	-.232	-.283	-.460	-.432	-.228	-.213	-.222	-.421	-.407	-.199	2.50
24	70.0	-.285	-.353	-.473	-.776	-.624	-.293	-.344	-.492	-.762	-.594	-.265	-.279	-.468	-.710	-.587	-0.95
25	72.6	-1.514	-1.505	-1.730	-1.918	-1.762	-1.500	-1.588	-1.793	-1.844	-1.681	-1.448	-1.349	-1.666	-1.746	-1.656	3.26
26	76.5	-.909	-.803	-1.184	-2.097	-1.817	-.901	-.920	-1.300	-1.927	-1.704	-.814	-.681	-1.079	-1.784	-1.628	4.48
27	84.9	-.578	-.564	-.564	-.546	-.477	-.576	-.585	-.604	-.534	-.502	-.549	-.497	-.525	-.530	-.502	3.01
28	93.3	-.551	-.566	-.496	-.307	-.330	-.534	-.529	-.506	-.320	-.362	-.502	-.483	-.487	-.341	-.360	1.37
29	78.5	.982	.753	.817	1.101	1.207	.957	.794	.836	1.147	1.198	.975	.743	.833	1.055	1.240	-2.19
30	89.5	.500	.450	.482	.546	.633	.511	.525	.474	.585	.599	.544	.497	.497	.535	.606	-1.07

ORIFICE	$\frac{x}{c}$	α = 1.87, D/L = .055, C_L = 20.874, T_c' = 16.14, q = .99 lb/sq ft					α = 7.57, D/L = .152, C_L = 21.203, T_c' = 16.50, q = .98 lb/sq ft					α = , D/L = , C_L = , T_c' = , q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.981	.754		-2.246	-1.002	.828	.726		-2.222	-.838						0
2	1.5	.359	.060		-2.246	-.032	.377	.102		-2.251							2.23
3	5.0	-.178	-.178		-1.191	-1.404	-.106	-.141		-1.169	-1.310						3.96
4	15.0	-.217	-.384		-.704	-.810	-.095	-.359		-.690	-.761						6.76
5	30.0	-.306	-.451		-.544	-.547	-.204	-.419		-.518	-.514						8.53
6	50.0	-.384	-.412		-.448	-.455	-.321	-.373		-.430	-.426						8.19
7	1.5	-.014	.242		.928	1.091	.007	.208		.933	.997						-1.77
8	5.0	-.018	.107		.885	.746	-.014	.127		.895	.761						-3.18
9	15.0				.395	.263				.423	.292						-5.14
10	30.0	-.092	-.153		.025	.217	-.074	-.106		.056	.232						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.323	-.348	-.387	-.423	-.380	-.278	-.303	-.384	-.402	-.373						6.42
18	71.5		-.391	-.427		-.419		-.338	-.405		-.419						5.41
19	48.3	-.132	-.135	-.178	-.117	-.107	-.116	-.120	-.120	-.035	.004						-5.52
20	55.0	-.011	-.028	-.011	.213	.320	.007	-.004	.007	.239	.338						-5.05
21	65.0	.299	.302	.327	.334	.462	.321	.296	.306	.345	.475						-3.92
22	69.9	.387	.373	.384	.363	.491	.394	.387	.391	.373	.500						-0.90
23	73.4	-.135	-.181	-.299	-.291	-.128	-.116	-.137	-.268	-.268	-.120						2.50
24	70.0	-.185	-.220	-.331	-.544	-.412	-.169	-.173	-.306	-.514	-.423						-0.95
25	72.6	-1.013	-1.077	-1.272	-1.290	-1.230	-1.007	-.947	-1.212	-1.278	-1.226						3.26
26	76.5	-.562	-.554	-.913	-1.244	-1.269	-.620	-.444	-.831	-1.338	-1.300						4.48
27	84.9	-.377	-.380	-.395	-.370	-.363	-.345	-.306	-.377	-.335	-.352						3.01
28	93.3	-.338	-.355	-.341	-.249	-.256	-.299	-.303	-.331	-.204	-.236						1.37
29	78.5	.725	.554	.640	.903	.995	.708	.549	.627	.902	1.004						-2.19
30	89.5	.441	.391	.402	.491	.526	.437	.409	.409	.493	.546						-1.07

[illegible]

[illegible] WIRE AND PLATE [illegible]

$\delta_{f,30} = 50$ $\delta_{f,55} = 00$ $i_w = 00$ [illegible] = 2150 rpm

ORIFICE [illegible]	% c	α = -4.76 D/L = -.205 C_L = .989 T_c' = .35 q = 9.62 lb/sq ft					α = -.74 D/L = -.113 C_L = 1.441 T_c' = .36 q = 9.53 lb/sq ft					α = 7.38 D/L = -.004 C_L = 2.551 T_c' = .42 q = 8.96 lb/sq ft					[illegible]
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.058	.871		1.158	1.224	1.108	1.036		.634	.871	-.962	-1.247		-3.797	-2.589	0
2	1.5	.606	.469		-.072		.353	-.099		-.838		-2.131	-2.477		-3.517		2.23
3	5.0	-.143	.028		-.220	-.331	-.524	-.551		-.772	-.783	-2.008	-1.840		-2.047	-2.326	3.96
4	15.0	-.369	-.408		-.491	-.551	-.595	-.722		-.788	-.788	-1.348	-1.387		-1.409	-1.594	6.76
5	30.0	-.551	-.573		-.650	-.623	-.689	-.772		-.838	-.783	-1.186	-1.186		-1.225	-1.275	8.53
6	50.0	-.650	-.612		-.617	-.689	-.722	-.728		-.744	-.766	-1.018	-.973		-.967	-1.046	8.19
7	1.5	-.055	-.314		.160	.331	-.033	.259		.623	.871	-.296	1.051		.867	1.180	-1.77
8	5.0	-.149	-.375		-.033	.149	.237	.176		.419	.529	.900	1.007		1.068	1.102	-3.18
9	15.0				-.061	-.072				.237	.165				.727	.637	-5.14
10	30.0	-.006	-.017		-.044	.033	.149	.110		.165	.182	.380	.319		.492	.459	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.529	-.496	-.518	-.513	-.595	-.562	-.568	-.579	-.606	-.634	-.749	-.699	-.749	-.788	-.822	6.42
18	71.5		-.496	-.491		-.606		-.535	-.551		-.650		-.649	-.699		-.777	5.41
19	48.3	.039	.039	.050	.028	.006	.094	.077	.116	.066	.066	.089	.095	.123	.022	.017	-5.52
20	55.0	-.072	-.055	-.066	.391	.364	-.039	-.044	-.044	.419	.419	-.011	.006	-.011	.626	.559	-5.05
21	65.0	.435	.446	.469	.562	.540	.502	.491	.524	.584	.590	.643	.643	.688	.682	.665	-3.92
22	69.9	.485	.474	.496	.491	.579	.513	.491	.496	.502	.617	.744	.755	.688	.671	.665	-0.90
23	73.4	.088	.055	.006	.055	.138	.110	.055	-.033	.088	.138	.151	.157	.034	.067	.112	2.50
24	70.0	-.474	-.529	-.513	-.684	-.915	-.496	-.518	-.590	-.838	-.943	-.610	-.621	-.839	-.984	-1.012	-0.95
25	72.6	-1.284	-1.306	-1.224	-1.582	-1.968	-1.273	-1.246	-1.362	-1.731	-1.957	-1.499	-1.465	-1.706	-2.315	-2.086	3.26
26	76.5	-.502	-.507	-.474	-.568	-.805	-.480	-.485	-.496	-.601	-.722	-.537	-.487	-.554	-1.292	-.973	4.48
27	84.9	-.435	-.446	-.430	-.458	-.551	-.408	-.430	-.441	-.446	-.502	-.442	-.419	-.453	-.509	-.559	3.01
28	93.3	-.441	-.446	-.430	-.452	-.551	-.413	-.441	-.446	-.458	-.507	-.442	-.408	-.464	-.509	-.487	1.37
29	78.5	.849	.805	.711	1.064	1.152	.904	.799	.728	1.009	1.136	1.146	1.046	1.023	1.141	1.113	-2.19
30	89.5	.590	.606	.546	.650	.700	.650	.606	.551	.617	.706	.772	.850	.811	.839	.766	-1.07

ORIFICE [illegible]	% c	α = 11.46 D/L = .035 C_L = 3.039 T_c' = .45 q = 8.60 lb/sq ft					α = 15.53 D/L = .075 C_L = 3.461 T_c' = .64 q = 8.28 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					[illegible]
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.234	-4.017		-7.161	-5.561	-5.087	-5.798		-9.154	-6.945						0
2	1.5	-4.273	-4.114		-5.300		-5.204	-4.879		-5.996							2.23
3	5.0	-2.939	-2.837		-2.945	-3.246	-3.178	-3.275		-3.214	-3.483						3.96
4	15.0	-1.765	-1.827		-1.810	-2.014	-1.772	-1.975		-1.884	-2.046						6.76
5	30.0	-1.419	-1.453		-1.430	-1.487	-1.340	-1.482		-1.411	-1.432						8.53
6	50.0	-1.141	-1.112		-1.089	-1.152	-1.046	-1.071		-1.051	-1.071						8.19
7	1.5	-1.038	1.072		.641	1.004	-1.736	.838		.269	.777						-1.77
8	5.0	.817	1.265		1.260	1.271	.574	1.284		1.188	1.208						-3.18
9	15.0				.931	.817				.949	.797						-5.14
10	30.0	.460	.386		.607	.562	.457	.371		.594	.548						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.794	-.760	-.828	-.851	-.891	-.721	-.736	-.746	-.787	-.812						6.42
18	71.5		-.658	-.726		-.840		-.630	-.640		-.767						5.41
19	48.3	.096	.125	.131	-.006	-.023	.122	.122	.147	-.030	-.025						-5.52
20	55.0	.011	-.006	.006	.687	.607	.005	-.005	-.005	.655	.548						-5.05
21	65.0	.664	.687	.709	.738	.721	.574	.584	.614	.650	.650						-3.92
22	69.9	.789	.840	.749	.726	.664	.696	.721	.685	.655	.630						-0.90
23	73.4	.148	.176	.068	.131	.079	.132	.147	.122	.137	.081						2.50
24	70.0	-.636	-.692	-.874	-1.016	-1.135	-.558	-.726	-.772	-.934	-1.056						-0.95
25	72.6	-1.538	-1.441	-1.640	-2.264	-2.185	-1.361	-1.345	-1.437	-1.863	-1.939						3.26
26	76.5	-.528	-.426	-.499	-.789	-1.106	-.477	-.406	-.421	-.558	-.990						4.48
27	84.9	-.477	-.392	-.420	-.505	-.556	-.426	-.360	-.360	-.391	-.447						3.01
28	93.3	-.465	-.392	-.403	-.465	-.465	-.386	-.366	-.340	-.381	-.366						1.37
29	78.5	1.254	1.265	1.214	1.271	1.192	1.158	1.279	1.198	1.218	1.163						-2.19
30	89.5	.817	.948	.925	.919	.828	.736	.883	.878	.838	.762						-1.07

TABLE 47

PRESSURE COEFFICIENTS C_p ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 00$ $i_w = 10$ N = 2115 rpm

ORIFICE	x/c	α = -12.79 D/L = -.203 C_L = 1.100 T_c' = .41 q = 8.82 lb/sq ft					α = -4.71 D/L = -.057 C_L = 2.142 T_c' = .46 q = 8.36 lb/sq ft					α = -.62 D/L = -.004 C_L = 02.763 T_c' = .49 q = 8.12 lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.127	1.087		1.064	1.138	.052	.000		-1.924	-1.423	-1.312	-1.858		-4.644	-3.396	0
2	1.5	.526	.223		-.383		-.956	-1.446		-2.662		-2.734	-2.955		-4.174		2.23
3	5.0	-.229	-.154		-.452	-.503	-1.498	-1.314		-1.550	-1.913	-2.183	-2.072		-2.293	-2.560	3.96
4	15.0	-.429	-.498		-.618	-.646	-1.106	-1.129		-1.187	-1.394	-1.399	-1.486		-1.515	-1.683	6.76
5	30.0	-.578	-.629		-.709	-.692	-1.049	-1.037		-1.077	-1.147	-1.207	-1.242		-1.277	-1.306	8.53
6	50.0	-.669	-.635		-.663	-.715	-.956	-.887		-.876	-.968	-1.028	-.998		-1.004	-1.051	8.19
7	1.5	-.023	-.029		.400	.601	-.092	.968		.922	1.204	-.395	1.178		.813	1.173	-1.77
8	5.0	-.023	-.126		.194	.297	.726	.795		.910	.980	.871	1.074		1.144	1.173	-3.18
9	15.0				.080	.017				.617	.542	-.023			.801	.708	-5.14
10	30.0	.040	.034		.057	.103	.311	.259		.403	.403	.389	.331		.522	.505	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.532	-.503	-.549	-.549	-.623	-.697	-.668	-.697	-.714	-.772	-.743	-.726	-.772	-.819	-.830	6.42
18	71.5		-.498	-.532		-.635		-.628	-.680		-.738		-.662	-.720		-.778	5.41
19	48.3	.040	.051	.046	.051	.029	.075	.069	.098	.017	-.006	.070	.070	.099	.081	.070	-5.52
20	55.0	-.069	-.069	-.063	.395	.395	-.023	-.023	-.017	.559	.519	-.012	.012	-.023	.650	.581	-5.05
21	65.0	.452	.469	.492	.583	.566	.599	.605	.657	.668	.645	.633	.656	.691	.702	.702	-3.92
22	69.9	.492	.498	.458	.509	.606	.668	.703	.668	.553	.645	.737	.749	.679	.679	.639	-0.90
23	73.4	.069	.063	-.017	.074	.137	.104	.109	-.006	.098	.121	.122	.168	.046	.064	.087	2.50
24	70.0	-.458	-.469	-.526	-.818	-.955	-.599	-.617	-.830	-.870	-.980	-.592	-.644	-.906	-1.028	-1.033	-0.95
25	72.6	-1.253	-1.235	-1.275	-1.756	-2.036	-1.498	-1.406	-1.821	-2.092	-1.942	-1.567	-1.504	-1.776	-2.339	-2.032	3.26
26	76.5	-.480	-.480	-.480	-.635	-.812	-.547	-.496	-.588	-.882	-.732	-.569	-.499	-.563	-1.190	-.906	4.48
27	84.9	-.423	-.423	-.429	-.458	-.566	-.449	-.444	-.490	-.484	-.519	-.464	-.424	-.476	-.546	-.557	3.01
28	93.3	-.423	-.423	-.435	-.469	-.566	-.455	-.421	-.467	-.519	-.472	-.470	-.424	-.464	-.546	-.459	1.37
29	78.5	.841	.761	.658	1.052	1.132	1.077	.945	.968	1.072	1.112	1.126	1.097	1.080	1.190	1.132	-2.19
30	89.5	.601	.606	.543	.641	.715	.749	.789	.755	.749	.749	.778	.888	.842	.830	.789	-1.07

ORIFICE	x/c	α = 3.49 D/L = .034 C_L = 03.341 T_c' = .55 q = 7.13 lb/sq ft					α = 11.82 D/L = .114 C_L = 4.013 T_c' = 1.12 q = 7.22 lb/sq ft					α = 16.16 D/L = .186 C_L = 3.593 T_c' = 1.09 q = 7.21 lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.141	-4.586		-7.976	-5.631	-5.544	-6.669		-8.911	-7.276	-6.607	-6.740		-9.110	-4.797	0
2	1.5	-4.394	-4.273		-5.648		-5.165	-5.069		-6.050		-4.983	-5.027		-5.618		2.23
3	5.0	-2.868	-3.013		-3.053	-3.257	-2.901	-3.267		-3.171	-3.376	-2.973	-3.181		-2.702	-1.793	3.96
4	15.0	-1.707	-1.892		-1.846	-2.014	-1.614	-1.832		-1.788	-1.876	-1.642	-1.770		-1.327	-.830	6.76
5	30.0	-1.370	-1.451		-1.405	-1.434	-1.125	-1.300		-1.261	-1.248	-1.131	-1.265		-.848	-.710	8.53
6	50.0	-1.138	-1.091		-1.080	-1.144	-.881	-.925		-.890	-.885	-.865	-.914		-.759	-.710	8.19
7	1.5	-1.266	1.149		.557	1.016	-2.085	.641		-.004	.493	-2.068	.732		.160	.759	-1.77
8	5.0	.720	1.329		1.289	1.277	.332	1.003		1.117	1.021	.235	1.229		1.167	.892	-3.18
9	15.0				.975	.807				.881	.646				.910	.541	-5.14
10	30.0	.441	.389		.639	.551	.384	.349		.545	.441	.399	.315		.515	.408	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.807	-.772	-.853	-.842	-.882	-.615	-.615	-.637	-.654	-.641	-.657	-.670	-.639	-.710	-.714	6.42
18	71.5		-.679	-.726		-.842		-.632	-.550		-.598		-.626	-.617		-.697	5.41
19	48.3	.058	.052	.075	.029	.023	.035	.017	.026	-.044	-.044	-.031	-.035	.031	-.564	-.555	-5.52
20	55.0	.006	-.012	.006	.714	.598	-.000	.009	.000	.502	.427	-.000	.000	-.000	.479	.386	-5.05
21	65.0	.639	.650	.679	.737	.708	.445	.462	.480	.502	.506	.435	.408	.461	.430	.457	-3.92
22	69.9	.772	.824	.755	.731	.662	.528	.558	.589	.545	.471	.484	.524	.577	.510	.408	-0.90
23	73.4	.145	.163	.064	.139	.081	.052	.148	.113	.131	.105	.018	.111	.018	.071	.049	2.50
24	70.0	-.586	-.743	-.911	-1.033	-1.115	-.497	-.650	-.680	-.820	-.890	-.635	-.834	-.856	-.985	-1.074	-0.95
25	72.6	-1.515	-1.434	-1.713	-2.160	-2.142	-1.090	-1.195	-1.226	-1.387	-1.422	-1.278	-1.535	-1.491	-1.367	-.998	3.26
26	76.5	-.522	-.447	-.528	-.720	-1.057	-.388	-.349	-.345	-.515	-.759	-.564	-.546	-.568	-1.003	-.692	4.48
27	84.9	-.470	-.389	-.453	-.493	-.575	-.349	-.288	-.292	-.279	-.305	-.444	-.422	-.426	-.435	-.395	3.01
28	93.3	-.459	-.389	-.435	-.476	-.453	-.323	-.288	-.284	-.266	-.284	-.377	-.408	-.404	-.399	-.373	1.37
29	78.5	1.213	1.295	1.219	1.312	1.202	.990	1.169	1.095	1.086	1.051	.981	1.216	1.158	1.131	1.043	-2.19
30	89.5	.807	.981	.923	.923	.824	.584	.715	.702	.619	.593	.541	.692	.683	.581	.501	-1.07

TABLE [illegible]

PRESSURE DISTRIBUTIONS [illegible] ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 00$ $i_w = 20$ $\eta = 2160$ rpm

ORIFICE	x/c	α = -12.89 D/L = -.182 C_L = 2.968; T_c' = 1.04 q = 5.48 lb/sq ft					α = .11 D/L = .014 C_L = 05.139; T_c' = 1.84 q = 4.72 lb/sq ft					α = 8.84 D/L = .113 C_L = 5.506; T_c' = 2.34 q = 4.48 lb/sq ft					z/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.713	.485		-2.337	-1.084	-2.436	-3.238		-7.128	-5.113	-4.737	-4.737		-8.092	-5.932	0
2	1.5	-.581	-.977		-2.912		-2.958	-3.146		-4.461		-3.478	-4.020		-5.424		2.23
3	5.0	-.983	-.875		-1.498	-1.695	-2.083	-2.218		-2.489	-2.914	-2.330	-2.599		-2.637	-2.475	3.96
4	15.0	-.779	-.887		-1.060	-1.174	-1.155	-1.392		-1.445	-1.624	-1.221	-1.507		-1.477	-1.524	6.76
5	30.0	-.809	-.857		-.935	-.959	-.942	-1.083		-1.083	-1.112	-.875	-1.084		-1.041	-1.088	8.53
6	50.0	-.785	-.755		-.773	-.815	-.788	-.807		-.826	-.841	-.649	-.764		-.708	-.717	8.19
7	1.5	.048	.917		.971	1.294	-1.160	.909		.599	.909	-1.622	.935		.341	.329	-1.77
8	5.0	.581	.659		1.006	.995	.309	1.083		1.126	1.063	.128	1.084		1.139	.563	-3.18
9	15.0				.647	.515				.817	.570				.726	.354	-5.14
10	30.0	.252	.192		.395	.377	.271	.217		.440	.382	.320	.171		.401	.294	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.587	-.587	-.677	-.671	-.647	-.565	-.570	-.575	-.652	-.648	-.478	-.504	-.512	-.516	-.559	6.42
18	71.5		-.575	-.677		-.617		-.503	-.512		-.633		-.444	-.444		-.516	5.41
19	48.3	-.006	-.054	-.018	-.024	-.012	.048	.014	.068	.058	.039	-.060	-.060	-.047	-.085	-.102	-5.52
20	55.0	-.012	-.012	-.018	.563	.539	.000	.010	.014	.507	.387	.009	.004	.000	.350	.282	-5.05
21	65.0	.581	.551	.587	.677	.683	.435	.440	.503	.527	.522	.333	.350	.363	.329	.324	-3.92
22	69.9	.671	.701	.641	.623	.701	.503	.633	.623	.556	.522	.358	.427	.465	.363	.316	-0.90
23	73.4	.210	.138	-.024	.114	.186	.082	.106	.145	.135	.092	.043	.171	.107	.149	.090	2.50
24	70.0	-.443	-.563	-.875	-.893	-.863	-.406	-.565	-.667	-.875	-.952	-.418	-.572	-.602	-.644	-.871	-0.95
25	72.6	-1.318	-1.498	-2.049	-2.091	-1.797	-1.165	-1.131	-1.315	-1.720	-1.740	-.794	-1.067	-1.058	-1.071	-.794	3.26
26	76.5	-.467	-.515	-.701	-.989	-.659	-.469	-.367	-.401	-.527	-.899	-.350	-.303	-.303	-.376	-.606	4.48
27	84.9	-.395	-.443	-.539	-.509	-.467	-.401	-.329	-.348	-.377	-.416	-.282	-.256	-.218	-.226	-.235	3.01
28	93.3	-.395	-.431	-.515	-.539	-.419	-.377	-.324	-.329	-.353	-.329	-.252	-.252	-.235	-.239	-.209	1.37
29	78.5	1.048	.941	.977	1.102	1.168	.918	1.015	1.015	1.155	1.097	.854	1.097	1.050	.888	.836	-2.19
30	89.5	.725	.779	.755	.779	.797	.570	.720	.715	.701	.619	.440	.563	.555	.427	.393	-1.07

ORIFICE	x/c	α = 12.87 D/L = .156 C_L = 5.235; T_c' = 2.39 q = 4.46 lb/sq ft					α = 16.70 D/L = .194 C_L = 4.785; T_c' = 2.35 q = 4.47 lb/sq ft					α = D/L = C_L = ; T_c' = q = lb/sq ft					z/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-5.044	-5.276		-7.754	-5.107	-4.998	-5.237		-5.804	-3.397						0
2	1.5	-3.765	-4.301		-5.137		-3.619	-3.845		-2.198							2.23
3	5.0	-2.326	-2.731		-2.385	-1.650	-2.292	-2.646		-1.519	-.785						3.96
4	15.0	-1.211	-1.536		-1.161	-1.233	-1.212	-1.383		-.977	-.576						6.76
5	30.0	-.874	-1.076		-.832	-.988	-.858	-.871		-.679	-.525						8.53
6	50.0	-.637	-.747		-.688	-.743	-.653	-.610		-.580	-.533						8.19
7	1.5	-1.802	.950		.477	.152	-1.635	1.011		.807	.260						-1.77
8	5.0	.097	1.127		1.195	.494	.081	1.225		1.263	.504						-3.18
9	15.0				.798	.325				.798	.307						-5.14
10	30.0	.312	.173		.401	.295	.303	.154		.388	.226						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.477	-.515	-.540	-.616	-.566	-.495	-.563	-.576	-.559	-.521						6.42
18	71.5		-.469	-.507		-.507		-.593	-.593		-.521						5.41
19	48.3	-.051	-.055	-.030	-.097	-.089	-.051	-.047	-.034	-.077	-.077						-5.52
20	55.0	.017	.013	.004	.333	.274	.004	.021	.030	.307	.273						-5.05
21	65.0	.333	.325	.346	.291	.295	.316	.320	.337	.282	.290						-3.92
22	69.9	.350	.376	.350	.257	.203	.329	.341	.218	.282	.205						-0.90
23	73.4	.038	.114	-.004	.068	.080	.000	.021	-.030	.085	.026						2.50
24	70.0	-.393	-.642	-.806	-.743	-.840	-.508	-.879	-.922	-.700	-.892						-0.95
25	72.6	-.810	-1.148	-1.224	-.975	-.650	-.926	-1.178	-.999	-.845	-.734						3.26
26	76.5	-.333	-.371	-.439	-.545	-.473	-.491	-.563	-.653	-.615	-.482						4.48
27	84.9	-.257	-.304	-.329	-.308	-.245	-.354	-.358	-.397	-.363	-.324						3.01
28	93.3	-.253	-.283	-.291	-.270	-.211	-.312	-.324	-.354	-.341	-.303						1.37
29	78.5	.819	1.089	1.043	.819	.718	.824	1.093	1.037	.768	.657						-2.19
30	89.5	.418	.502	.494	.393	.350	.401	.469	.465	.371	.337						-1.07

TABLE 49

PRESSURE COEFFICIENTS C_p ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 00$ $i_w = 30$ N = 2328 rpm

ORIFICE	x/c	α = -15.75 D/L = -.210 C_L = 5.506 T_c' = 2.59 q = 3.40 lb/sq ft					α = -7.38 D/L = -.061 C_L = 6.938 T_c' = 3.32 q = 3.20 lb/sq ft					α = 1.88 D/L = .048 C_L = 8.050 T_c' = 4.20 q = 2.88 lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.775	.434		-3.308	-1.912	-.195	-1.038		-4.981	-3.390	-1.352	-2.312		-5.905	-4.665	0
2	1.5	-.238	-.858		-3.275		-1.079	-1.836		-3.744		-1.768	-2.493		-4.141		2.23
3	5.0	-.806	-.796		-1.633	-1.912	-1.251	-1.410		-1.963	-2.384	-1.397	-1.825		-2.196	-2.654	3.96
4	15.0	-.620	-.786		-1.323	-1.194	-.780	-1.011		-1.169	-1.346	-.775	-1.146		-1.269	-1.405	6.76
5	30.0	-.667	-.744		-.848	-.894	-.739	-.829		-.916	-.943	-.684	-.853		-.923	-.915	8.53
6	50.0	-.667	-.662		-.687	-.734	-.662	-.671		-.721	-.748	-.585	-.639		-.696	-.663	8.19
7	1.5	-.119	.858		.894	1.292	-.467	.975		.725	1.115	-.808	.981		.655	.630	-1.77
8	5.0	.326	.641		1.275	1.060	.281	.843		1.097	1.024	.214	.898		1.092	.783	-3.18
9	15.0				.672	.501				.693	.490				.680	.363	-5.14
10	30.0	.150	.134		.341	.341	.172	.077		.331	.299	.190	.041		.293	.239	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.512	-.517	-.558	-.600	-.579	-.503	-.490	-.521	-.594	-.589	-.453	-.449	-.466	-.511	-.478	6.42
18	71.5		-.532	-.548		-.579		-.458	-.485		-.603		-.408	-.416		-.466	5.41
19	48.3	-.196	-.191	-.145	-.098	-.093	-.168	-.168	-.150	-.131	-.136	-.140	-.128	-.128	-.128	-.136	-5.52
20	55.0	.000	.016	.010	.538	.507	.014	.000	.005	.444	.381	.012	.004	.000	.305	.235	-5.05
21	65.0	.553	.548	.589	.662	.662	.426	.422	.440	.530	.530	.313	.309	.334	.354	.338	-3.92
22	69.9	.615	.641	.579	.589	.687	.535	.585	.517	.494	.571	.387	.408	.457	.416	.412	-0.90
23	73.4	.176	.129	.041	.109	.171	.091	.113	.100	.136	.118	.058	.091	.095	.152	.132	2.50
24	70.0	-.569	-.569	-.765	.889	-.827	-.435	-.499	-.657	-.852	-.884	-.387	-.523	-.581	-.663	-.775	-0.95
25	72.6	-1.385	-1.494	-1.747	-1.995	-1.701	-1.206	-1.174	-1.401	-1.727	-1.731	-.948	-1.051	-1.146	-1.174	-1.108	3.26
26	76.5	-.517	-.486	-.558	-.158	-.713	-.449	-.440	-.467	-.576	-.789	-.424	-.420	-.367	-.383	-.445	4.48
27	84.9	-.403	-.414	-.439	.496	-.491	-.390	-.344	-.363	-.394	-.476	-.338	-.321	-.313	-.293	-.326	3.01
28	93.3	-.382	-.414	-.419	.460	-.388	-.367	-.331	-.349	-.376	-.344	-.330	-.326	-.313	-.297	-.309	1.37
29	78.5	1.023	.920	.905	1.168	1.137	.902	.866	.893	1.120	1.079	.779	.960	.940	1.001	.964	-2.19
30	89.5	.703	.729	.687	.837	.770	.567	.662	.630	.703	.662	.445	.565	.569	.445	.404	-1.07

ORIFICE	x/c	α = 10.64 D/L = .144 C_L = 8.190 T_c' = 4.73 q = 2.86 lb/sq ft					α = 18.85 D/L = .206 C_L = 7.679 T_c' = 5.00 q = 2.79 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					y/c
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-2.063	-2.916		-6.118	-5.364	-2.161	-2.739		-4.566	-2.463						0
2	1.5	-1.924	-2.897		-4.470		-1.970	-3.016		-3.476							2.23
3	5.0	-1.562	-2.056		-2.222	-1.848	-1.557	-1.988		-1.403	-.703						3.96
4	15.0	-.917	-1.211		-1.252	-1.328	-.873	-1.130		-.685	-.600						6.76
5	30.0	-.736	-.868		-.868	-.917	-.711	-.777		-.582	-.582						8.53
6	50.0	-.543	-.604		-.596	-.607	-.523	-.534		-.530	-.549						8.19
7	1.5	-.871	1.139		.640	-.083	-.965	1.145		.806	-.077						-1.77
8	5.0	.113	.973		1.086	.351	.085	.847		1.013	.247						-3.18
9	15.0				.653	.196				.574	.155						-5.14
10	30.0	.181	.057		.309	.196	.180	.081		.272	.173						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.373	-.381	-.407	-.400	-.464	-.357	-.376	-.460	-.519	-.479						6.42
18	71.5		-.332	-.347		-.415		-.376	-.438		-.460						5.41
19	48.3	-.041	-.072	-.075	-.113	-.128	-.077	-.088	-.077	-.129	-.133						-5.52
20	55.0	.008	.011	.015	.234	.200	.004	.011	.004	.188	.166						-5.05
21	65.0	.211	.223	.241	.211	.207	.180	.184	.188	.169	.166						-3.92
22	69.9	.230	.268	.317	.268	.170	.177	.173	.184	.188	.110						-0.90
23	73.4	.011	.151	.113	.166	.034	.000	.092	-.011	.000	-.077						2.50
24	70.0	-.204	-.490	-.513	-.430	-.702	-.191	-.534	-.659	-.563	-.644						-0.95
25	72.6	-.475	-.852	-.913	-.837	-.611	-.431	-.788	-.825	-.619	-.427						3.26
26	76.5	-.196	-.196	-.238	-.234	-.347	-.195	-.239	-.306	-.328	-.276						4.48
27	84.9	-.196	-.189	-.196	-.189	-.204	-.195	-.217	-.236	-.225	-.210						3.01
28	93.3	-.196	-.196	-.196	-.174	-.181	-.188	-.217	-.228	-.214	-.203						1.37
29	78.5	.626	.890	.875	.720	.536	.490	.696	.659	.497	.324						-2.19
30	89.5	.275	.362	.377	.324	.256	.221	.269	.258	.232	.195						-1.07

TABLE 50

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 00$ $i_w = 40$ N = 2552 rpm

ORIFICE (FIG. 6)	% c	α = -13.33, D/L = -.164, C_L = 13.278, T_c' = 8.21, q = 1.59 lb/sq ft					α = -4.39, D/L = -.017, C_L = 15.061, T_c' = 9.28, q = 1.48 lb/sq ft					α = .67, D/L = .049, C_L = 15.843, T_c' = 10.03, q = 1.41 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.866	.584		-3.138	-1.973	.632	.103		-3.402	-2.794	.496	-.093		-3.514	-3.262	0
2	1.5	.000	-.506		-2.910		-.330	-.986		-3.131		-.446	-1.116		-3.173		2.23
3	5.0	-.601	-.551		-1.484	-1.869	-.759	-.835		-1.629	-2.051	-.829	-.899		-1.658	-2.104	3.96
4	15.0	-.464	-.605		-.891	-1.053	-.521	-.699		-.982	-1.101	-.550	-.721		-.992	-1.123	6.76
5	30.0	-.518	-.593		-.709	-.738	-.536	-.620		-.747	-.743	-.550	-.620		-.748	-.748	8.53
6	50.0	-.535	-.514		-.572	-.613	-.536	-.521		-.580	-.576	-.550	-.519		-.573	-.573	8.19
7	1.5	.000	.750		.937	1.235	-.103	.894		.922	.990	-.120	.938		.914	.848	-1.77
8	5.0	.228	.502		1.007	.941	.242	.568		.997	.858	.248	.604		.969	.748	-3.18
9	15.0				.547	.406				.505	.346				.496	.271	-5.14
10	30.0	.017	-.017		.199	.249	.032	-.048		.175	.211	.023	-.054		.170	.178	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.410	-.398	-.452	-.526	-.510	-.397	-.393	-.413	-.485	-.473	-.407	-.387	-.399	-.480	-.457	6.42
18	71.5		-.410	-.452		-.535		-.393	-.413		-.489		-.368	-.384		-.457	5.41
19	48.3	-.211	-.216	-.199	-.153	-.153	-.163	-.183	-.171	-.151	-.163	-.151	-.159	-.155	-.147	-.163	-5.52
20	55.0	.000	.004	.000	.373	.377	.012	.016	.004	.282	.266	.000	.000	.008	.232	.209	-5.05
21	65.0	.460	.456	.477	.551	.547	.385	.381	.397	.437	.425	.345	.345	.356	.353	.337	-3.92
22	69.9	.518	.489	.493	.477	.572	.445	.449	.433	.421	.457	.387	.387	.364	.395	.407	-0.90
23	73.4	.141	.108	.058	.124	.162	.123	.099	.060	.111	.139	.101	.085	.054	.108	.085	2.50
24	70.0	-.410	-.448	-.655	-.850	-.808	-.449	-.429	-.584	-.735	-.787	-.473	-.446	-.558	-.659	-.732	-0.95
25	72.6	-1.206	-1.202	-1.546	-1.857	-1.795	-1.164	-1.097	-1.296	-1.439	-1.514	-1.201	-1.073	-1.205	-1.263	-1.286	3.26
26	76.5	-.460	-.485	-.510	-1.202	-.916	-.413	-.449	-.457	-.556	-.707	-.438	-.430	-.426	-.480	-.562	4.48
27	84.9	-.369	-.356	-.402	-.473	-.506	-.374	-.350	-.370	-.397	-.461	-.391	-.341	-.349	-.380	-.418	3.01
28	93.3	-.352	-.365	-.398	-.452	-.427	-.350	-.338	-.374	-.378	-.378	-.353	-.329	-.349	-.364	-.364	1.37
29	78.5	.924	.775	.846	1.111	1.103	.882	.779	.807	1.037	1.045	.868	.817	.814	.953	.930	-2.19
30	89.5	.589	.605	.580	.688	.692	.513	.525	.521	.521	.525	.473	.469	.469	.407	.411	-1.07

ORIFICE (FIG. 6)	% c	α = 5.76, D/L = .111, C_L = 16.584, T_c' = 10.86, q = 1.34 lb/sq ft					α = 10.57, D/L = .164, C_L = 16.866, T_c' = 11.51, q = 1.30 lb/sq ft					α = , D/L = , C_L = , T_c' = , q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.380	-.289		-3.585	-3.596	.282	-.385		-3.551	-3.910						0
2	1.5	-.623	-1.310		-3.289		-.667	-1.390		-3.180							2.23
3	5.0	-.881	-.987		-1.641	-2.096	-.912	-1.001		-1.631	-2.027						3.96
4	15.0	-.566	-.760		-.987	-1.113	-.567	-.741		-.979	-1.082						6.76
5	30.0	-.562	-.638		-.752	-.737	-.523	-.608		-.730	-.701						8.53
6	50.0	-.535	-.509		-.562	-.547	-.526	-.489		-.537	-.515						8.19
7	1.5	-.152	.980		.908	.513	-.200	.934		.893	.230						-1.77
8	5.0	.300	.661		.961	.608	.245	.630		.904	.415						-3.18
9	15.0				.498	.224				.474	.174						-5.14
10	30.0	.023	-.061		.175	.160	.030	-.052		.182	.104						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.391	-.372	-.384	-.456	-.429	-.371	-.352	-.352	-.430	-.397						6.42
18	71.5		-.368	-.361		-.372		-.326	-.341		-.378						5.41
19	48.3	-.129	-.141	-.129	-.099	-.099	-.170	-.167	-.170	-.115	-.137						-5.52
20	55.0	.019	.000	.004	.194	.190	.015	.000	.004	.148	.141						-5.05
21	65.0	.315	.311	.319	.285	.289	.282	.289	.289	.241	.208						-3.92
22	69.9	.349	.330	.315	.315	.330	.289	.304	.282	.222	.204						-0.90
23	73.4	.118	.103	.061	.103	.099	.096	.104	.056	.044	.078						2.50
24	70.0	-.456	-.441	-.532	-.543	-.638	-.448	-.445	-.482	-.497	-.600						-0.95
25	72.6	-1.117	-1.029	-1.124	-1.082	-1.071	-1.067	-.971	-1.023	-.941	-.901						3.26
26	76.5	-.410	-.361	-.391	-.403	-.429	-.367	-.330	-.356	-.348	-.356						4.48
27	84.9	-.353	-.319	-.311	-.338	-.349	-.289	-.282	-.297	-.300	-.311						3.01
28	93.3	-.330	-.323	-.311	-.346	-.319	-.304	-.285	-.297	-.304	-.282						1.37
29	78.5	.866	.820	.813	.820	.820	.830	.808	.771	.671	.671						-2.19
30	89.5	.448	.437	.403	.296	.338	.400	.393	.348	.245	.237						-1.07

[illegible]

$\delta_{f,30} = 50$ $\delta_{f,55} = 00$ $i_w = 50$ [illegible] 2800 rpm

Station	x/c	α = -10.23 D/L = -.104 C_L = 29.706 T_0' = 21.97 q = .79 lb/sq ft					α = -6.46 D/L = -.056 C_L = 30.636 T_0' = 22.81 q = .68 lb/sq ft					α = -2.57 D/L = -.012 C_L = 24.875 T_0' = 19.06 q = .82 lb/sq ft					
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.092	.857		-1.680	-.913	1.017	.845		-1.741	-.889	.931	.756		-1.765	-.465	[illegible]
2	1.5	.320	.224		-2.128		.408	.162		-2.105		.422	.327		-2.023		[illegible]
3	5.0	-.194	-.164		-1.129	-1.461	-.154	-.121		-1.136	-1.425	-.087	-.044		-1.136	-1.265	[illegible]
4	15.0	-.238	-.399		-.712	-.850	-.213	-.382		-.698	-.830	-.138	-.335		-.680	-.742	[illegible]
5	30.0	-.335	-.455		-.578	-.581	-.305	-.448		-.555	-.569	-.236	-.411		-.524	-.517	[illegible]
6	50.0	-.417	-.478		-.469	-.469	-.397	-.415		-.452	-.470	-.338	-.382		-.415	-.422	[illegible]
7	1.5	.071	.186		.906	1.174	.015	.184		.937	1.183	.022	-.004		.843	1.179	[illegible]
8	5.0	.000	.060		.842	.879	-.070	.044		.848	.856	-.098	.044		.891	.771	[illegible]
9	15.0				.469	.320				.378	.298				.418	.280	[illegible]
10	30.0	-.097	-.156		.167	.201	-.107	-.140		.066	.184	-.099	-.051		.102	.211	[illegible]
11	45.0																[illegible]
12	46.0																[illegible]
13	50.0																[illegible]
14	55.0																[illegible]
15	60.0																[illegible]
16	65.0																[illegible]
17	65.0	-.347	-.350	-.358	-.417	-.391	-.323	-.334	-.375	-.419	-.397	-.273	-.291	-.357	-.378	-.353	6.42
18	71.5		-.369	-.4[illegible]		-.428		-.356	-.393		-.430		-.320	-.357		-.393	5.41
19	48.5	-.138	-.142	-.152	-.108	-.108	-.123	-.114	-.114	-.095	-.095	-.087	-.102	-.087	-.084	-.091	-5.56
20	55.0	-.034	-.030	-.037	.279	.380	-.026	-.029	-.048	.286	.382	-.015	.000	-.015	.342	.407	-5.06
21	65.0	.414	.41[illegible]	.436	.544	.566	.389	.404	.415	.525	.555	.400	.404	.422	.597	.568	-3.92
22	69.9	.469	.417	.451	.477	.596	.420	.437	.455	.459	.569	.415	.455	.437	.509	.604	-5.90
23	73.4	.164	.097	.041	.127	.235	.147	.099	.037	.121	.213	.175	.113	.047	.160	.244	2.50
24	70.0	-.399	-.365	-.5[illegible]	-.730	-.701	-.433	-.367	-.466	-.731	-.735	-.342	-.324	-.448	-.659	-.702	-6.95
25	72.6	-1.282	-1.144	-1.3[illegible]	-1.543	-1.576	-1.293	-1.135	-1.322	-1.557	-1.668	-1.172	-1.066	-1.292	-1.506	-1.612	3.26
26	76.5	-.496	-.447	-.4[illegible]	-.730	-.730	-.507	-.452	-.496	-.837	-.867	-.426	-.375	-.444	-.728	-.833	4.28
27	84.9	-.428	-.388	-.4[illegible]	-.455	-.477	-.426	-.386	-.404	-.481	-.492	-.375	-.320	-.346	-.422	-.462	3.01
28	93.3	-.399	-.388	-.4[illegible]	-.455	-.428	-.386	-.382	-.404	-.452	-.404	-.327	-.313	-.353	-.404	-.400	1.39
29	98.5	.864	.663	.618	1.[illegible]	1.148	.809	.633	.683	1.025	1.135	.779	.626	.669	1.062	1.117	-2.19
30	99.5	.566	.499	.454	.[illegible]	.633	.544	.500	.503	.606	.668	.542	.517	.488	.662	.673	-1.07

Station	x/c	α = 2.96 D/L = .094 C_L = 22.777 T_0' = 17.36 q = .92 lb/sq ft					α = 8.40 D/L = .189 C_L = 21.575 T_0' = 16.60 q = .96 lb/sq ft					α = D/L = C_L = T_0' = q = lb/sq ft					
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.017	.729		-1.811	-.846	1.020	.782		-1.912	-.800						0
2	1.5	.398	.359		-2.[illegible]94		.423	.402		-2.026							[illegible]
3	5.0	-.135	.021		-1.[illegible]	-1.365	-.114	-.036		-1.102	-1.351						[illegible]
4	15.0	-.164	-.288		-.618	-.782	-.142	-.327		-.564	-.778						[illegible]
5	30.0	-.252	-.366		-.494	-.540	-.242	-.391		-.505	-.530						[illegible]
6	50.0	-.348	-.348		-.391	-.434	-.331	-.363		-.398	-.427						[illegible]
7	1.5	.064	.004		.936	1.187	.039	-.071		.928	1.145						[illegible]
8	5.0	-.029	-.039		.829	.814	-.038	.032		.885	.818						[illegible]
9	15.0				.391	.341				.416	.338						[illegible]
10	30.0	-.060	-.039		.196	.259	-.060	-.050		.085	.249						[illegible]
11	45.0																[illegible]
12	46.0																[illegible]
13	50.0																[illegible]
14	55.0																[illegible]
15	60.0																[illegible]
16	65.0																[illegible]
17	65.0	-.288	-.272	-.303	-.338	-.366	-.281	-.270	-.320	-.355	-.363						6.42
18	71.5		-.295	-.307		-.395		-.291	-.331		-.402						5.41
19	48.5	-.078	-.078	-.068	-.068	-.082	-.043	-.068	-.043	.466	.455						-5.56
20	55.0	-.007	-.004	.0[illegible]4	.346	.416	-.004	.004	-.004	.331	.409						-5.06
21	65.0	.412	.398	.412	.580	.579	.402	.427	.427	.579	.579						-3.92
22	69.9	.455	.419	.444	.501	.594	.451	.444	.462	.494	.597						-5.90
23	73.4	.185	.114	.0[illegible]	.178	.245	.178	.110	.053	.139	.242						2.50
24	70.0	-.348	-.302	-.407	-.643	.704	-.341	-.306	-.444	-.650	-.711						-6.95
25	72.6	-1.194	-1.027	-1.128	-1.461	-1.582	-1.233	-1.020	-1.255	-1.440	-1.599						3.26
26	76.5	-.434	-.402	-.3[illegible]	-.597	-.846	-.476	-.366	-.423	-.754	-.878						4.28
27	84.9	-.388	-.316	-.316	-.398	-.430	-.384	-.306	-.341	-.398	-.444						3.01
28	93.3	-.324	-.302	-.3[illegible]2	-.370	-.366	-.327	-.302	-.316	-.363	-.366						1.39
29	98.5	.803	.596	.614	1.031	1.155	.803	.611	.661	1.031	1.148						-2.19
30	99.5	.558	.473	.4[illegible]7	.650	.696	.558	.512	.496	.636	.677						-1.07

TABLE 52

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 20$ $N = 2150$ rpm

$\delta_b = 30$

ORIFICE	[illegible]	$\alpha = -8.64$ D/L = -.116 $C_L = .756$ $T_c' = .20$ $q = 12.29$ lb/sq ft					$\alpha = -.63$ D/L = -.007 $C_L = 1.680$ $T_c' = .46$ $q = 11.95$ lb/sq ft					$\alpha = 7.44$ D/L = .064 $C_L = 2.246$ $T_c' = .76$ $q = 11.31$ lb/sq ft					[illegible]
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.253	-.058		-.444	-.366	-3.562	-.098		-.704	-.450	-2.137	-.075		-.630	-.362	0
2	1.5	-1.618	-1.414		-1.306	-1.375	-4.046	-4.011		-1.994	-2.049	-.770	-3.936		-1.798	-2.059	2.23
3	5.0	-1.389	-1.355		-1.248	-1.355	-2.670	-2.600		-1.630	-1.841	-.627	-2.327		-1.384	-1.779	3.96
4	15.0	-.990	-1.058		-.985	-1.072	-1.497	-1.486		-1.169	-1.298	-.604	-1.136		-1.018	-1.172	6.76
5	30.0	-.838	-.834		-.799	-.814	-1.056	-1.028		-.864	-.884	-.640	-.721		-.760	-.757	8.53
6	50.0	-.643	-.585		-.478	-.507	-.688	-.645		-.477	-.485	-.581	-.578		-.490	-.395	8.19
7	1.5	1.043	.912		-.141	-.239	.594	.915		.066	-.008	.091	.695		.255	.186	-1.77
8	5.0	.624	.604		-.127	-.166	.719	1.044		.594	.622	.506	1.034		.793	.656	-3.18
9	15.0	.258	.200		.575	.712	.563	.614		.692	.688	.463	.653		.672	.587	-5.14
10	30.0	.019	-.088		.229	.297	.321	.195		.340	.344	.313	.225		.372	.330	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.312	-.307	-.263	-.229	-.229	-.336	-.336	-.305	-.235	-.215	-.519	-.499	-.496	-.343	-.179	6.42
18	71.5		-.229	-.195	-.166	-.141		-.254	-.235	-.172	-.137		-.503	-.529	-.114	-.108	5.41
19	48.3	-.083	-.068		-.034	-.054	-.176	-.106		.235	.192	.003	.007		-.036	-.033	-5.52
20	55.0	.000	.083	.073	.117	.063	.168	.215	.274	.227	.164	.153	.206	.255	.235	.166	-5.05
21	65.0	-.005	.088	.073	.117	.107	.137	.207	.231	.184	.180	.111	.258	.202	.186	.176	-3.92
22	69.9	.127	.244	.268	.253	.229	.195	.383	.446	.313	.250	.111	.349	.405	.326	.258	-0.90
23	73.4	-.224	-.234	-.195	-.097	-.093	-.270	-.238	-.219	-.160	-.102	-.450	-.427	-.483	-.268	-.108	2.50
24	70.0	.171	.234	.263	.263	.239	.235	.371	.446	.324	.274	.157	.339	.405	.320	.271	-0.95
25	72.6	-.180	-.224	-.195	-.102	-.088	-.203	-.238	-.211	-.160	-.090	-.375	-.434	-.470	-.261	-.098	3.26
26	76.5	-.161	-.190	-.132	-.112	-.107	-.164	-.176	-.156	-.160	-.094	-.330	-.476	-.486	-.219	-.104	4.48
27	84.9	-.034	-.049	-.058	-.068	-.024	-.031	-.039	-.063	-.098	-.035	-.349	-.490	-.535	-.215	-.065	3.01
28	93.3	.102	.078	.029	-.019	.024	.082	.090	.051	-.043	.023	-.268	-.418	-.490	-.157	-.029	1.37
29	78.5	.097	.117	.107	.102	.112	.195	.184	.203	.176	.176	.101	.121	.147	.147	.173	-2.19
30	89.5	.156	.146	.107	.097	.093	.172	.168	.172	.125	.141	.029	.033	.049	.091	.131	-1.07

ORIFICE	[illegible]	$\alpha = 11.44$ D/L = .112 $C_L = 2.247$ $T_c' = .79$ $q = 11.20$ lb/sq ft					$\alpha = 15.45$ D/L = .145 $C_L = 2.332$ $T_c' = .87$ $q = 11.01$ lb/sq ft					$\alpha =$ D/L = $C_L =$ $T_c' =$ $q =$ lb/sq ft					[illegible]
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-1.404	-.078		-.628	-.298	-1.180	-.078		-.519	-.177						0
2	1.5	-.534	-2.692		-1.773	-2.116	-.366	-2.239		-1.503	-1.991						2.23
3	5.0	-.375	-1.647		-1.398	-1.780	-.354	-1.382		-1.220	-1.696						3.96
4	15.0	-.356	-1.482		-1.013	-1.097	-.357	-1.326		-.863	-.994						6.76
5	30.0	-.382	-.728		-.612	-.644	-.366	-.568		-.491	-.528						8.53
6	50.0	-.417	-.466		-.460	-.346	-.397	-.366		-.419	-.335						8.19
7	1.5	.045	.825		.333	.272	.031	.882		.401	.391						-1.77
8	5.0	.495	1.107		.890	.689	.443	1.127		.956	.634						-3.18
9	15.0	.489	.673		.709	.544	.481	.655		.714	.481						-5.14
10	30.0	.346	.243		.388	.317	.354	.252		.397	.323						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.427	-.443	-.472	-.395	-.252	-.404	-.388	-.410	-.438	-.307						6.42
18	71.5		-.466	-.498	-.104	-.214		-.391	-.422	-.140	-.276						5.41
19	48.3	.029	.032		-.039	-.049	.053	.059		-.037	-.047						-5.52
20	55.0	.175	.207	.259	.239	.184	.196	.196	.217	.255	.211						-5.05
21	65.0	.126	.188	.207	.178	.181	.146	.186	.208	.180	.196						-3.92
22	69.9	.087	.353	.440	.343	.259	.084	.354	.435	.332	.261						-0.90
23	73.4	-.505	-.430	-.476	-.411	-.184	-.506	-.373	-.404	-.416	-.255						2.50
24	70.0	.139	.346	.450	.346	.282	.130	.338	.441	.357	.289						-0.95
25	72.6	-.398	-.437	-.472	-.395	-.172	-.410	-.363	-.401	-.416	-.248						3.26
26	76.5	-.327	-.472	-.498	-.395	-.184	-.335	-.391	-.419	-.441	-.267						4.48
27	84.9	-.362	-.495	-.537	-.447	-.155	-.348	-.407	-.441	-.472	-.258						3.01
28	93.3	-.333	-.466	-.531	-.411	-.113	-.326	-.382	-.432	-.453	-.211						1.37
29	78.5	.091	.113	.142	.129	.155	.109	.118	.127	.127	.161						-2.19
30	89.5	-.003	-.013	.013	.045	.107	.006	.022	-.006	.016	.096						-1.07

TABLE 53

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30}$ = 00 $\delta_{f,55}$ = 00 i_w = 30 N = 2050 rpm

δ_s = [illegible]

ORIFICE	x/c	α = -12.77 D/L = -.175 C_L = 1.468 T_c' = .53 q = 7.88 lb/sq ft					α = -8.76 D/L = -.108 C_L = 1.988 T_c' = .83 q = 7.63 lb/sq ft					α = -.55 D/L = -.003 C_L = 2.855 T_c' = 1.29 q = 7.13 lb/sq ft					$\frac{1}{x}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.984	-.061		-.539	-.362	-2.569	-.064		-.597	-.335	-2.356	-.103		-.676	-.289	0
2	1.5	-2.870	-2.725		-1.763	-1.869	-3.318	-3.263		-1.774	-1.815	-.954	-3.921		-1.790	-1.926	2.23
3	5.0	-1.958	-1.897		-1.424	-1.702	-2.178	-2.146		-1.397	-1.613	-.923	-2.534		-1.425	-1.691	3.96
4	15.0	-1.174	-1.218		-1.029	-1.207	-1.255	-1.268		-1.006	-1.117	-.840	-1.318		-1.033	-1.083	6.76
5	30.0	-.918	-.907		-.795	-.840	-.869	-.873		-.768	-.763	-.707	-.825		-.726	-.665	8.53
6	50.0	-.645	-.601		-.495	-.484	-.607	-.565		-.478	-.427	-.540	-.490		-.433	-.327	8.19
7	1.5	1.123	1.224		-.028	-.078	.308	.961		.078	.005	-.201	.749		.194	.171	-1.77
8	5.0	.751	.979		.239	.234	.538	.993		.506	.358	.315	1.007		.813	.460	-3.18
9	15.0	.434	.445		.784	.818	.446	.561		.689	.708	.372	.616		.657	.513	-5.14
10	30.0	.189	.056		.317	.300	.253	.147		.331	.303	.270	.209		.346	.266	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.317	-.306	-.295	-.250	-.200	-.308	-.294	-.271	-.253	-.170	-.445	-.346	-.365	-.236	-.144	6.42
18	71.5		-.239	-.239	-.167	-.117		-.211	-.216	-.175	-.097		-.312	-.342	-.114	-.106	5.41
19	48.3	.968	.996		-.033	-.050	.777	.790		-.037	-.051	.597	.619		-.087	-.110	-5.52
20	55.0	.100	.172	.167	.206	.122	.138	.202	.230	.216	.147	.171	.224	.251	.239	.163	-5.05
21	65.0	.072	.211	.184	.167	.139	.133	.202	.207	.179	.165	.141	.217	.186	.190	.171	-3.92
22	69.9	.195	.323	.362	.323	.250	.198	.386	.368	.326	.267	.122	.361	.410	.334	.258	-0.90
23	73.4	-.250	-.245	-.256	-.128	-.078	-.225	-.234	-.234	-.156	-.064	-.338	-.236	-.289	-.137	-.072	2.50
24	70.0	.228	.323	.356	.328	.273	.234	.368	.363	.313	.290	.156	.361	.414	.353	.274	-0.95
25	72.6	-.189	-.245	-.256	-.117	-.078	-.175	-.234	-.244	-.156	-.051	-.277	-.236	-.281	-.148	-.076	3.26
26	76.5	-.184	-.178	-.211	-.100	-.083	-.156	-.161	-.175	-.110	-.051	-.258	-.247	-.300	-.118	-.068	4.48
27	84.9	-.044	-.033	-.061	-.039	-.028	-.032	-.028	-.055	-.055	-.014	-.243	-.205	-.300	-.080	-.042	3.01
28	93.3	.100	.111	.056	.039	.028	.087	.097	.055	.028	.032	-.171	-.125	-.232	-.011	-.004	1.37
29	78.5	.139	.178	.178	.156	.150	.179	.184	.198	.165	.179	.137	.179	.179	.171	.167	-2.19
30	89.5	.161	.172	.172	.133	.111	.175	.179	.179	.138	.133	.080	.133	.122	.133	.133	-1.07

ORIFICE	x/c	α = 11.64 D/L = .119 C_L = 3.064 T_c' = 1.55 q = 6.81 lb/sq ft					α = 15.60 D/L = .166 C_L = 2.915 T_c' = 1.51 q = 6.79 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{1}{x}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.803	-.112		-.536	-.196	-.646	-.129		-.430	-.108						0
2	1.5	-.294	-2.422		-1.286	-1.696	-.276	-2.464		-1.201	-1.144						2.23
3	5.0	-.270	-1.391		-1.030	-1.374	-.276	-1.320		-.886	-.872						3.96
4	15.0	-.270	-.782		-.645	-.743	-.283	-.520		-.502	-.603						6.76
5	30.0	-.291	-.400		-.393	-.378	-.301	-.316		-.427	-.516						8.53
6	50.0	-.308	-.315		-.396	-.301	-.312	-.276		-.348	-.373						8.19
7	1.5	-.063	1.016		.200	.305	-.068	1.040		.208	.398						-1.77
8	5.0	.284	.981		.838	.498	.273	.814		.739	.481						-3.18
9	15.0	.357	.449		.624	.343	.359	.402		.588	.330						-5.14
10	30.0	.294	.193		.347	.273	.301	.230		.326	.280						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.308	-.319	-.350	-.386	-.315	-.305	-.276	-.301	-.323	-.359						6.42
18	71.5		-.322	-.364	-.214	-.336		-.283	-.301	-.240	-.344						5.41
19	48.3	.641	.652		-.074	-.091	.674	.678		-.082	-.104						-5.52
20	55.0	.189	.182	.193	.221	.189	.208	.194	.215	.215	.190						-5.05
21	65.0	.147	.189	.161	.168	.172	.165	.183	.183	.176	.172						-3.92
22	69.9	.077	.340	.357	.305	.242	.072	.298	.301	.283	.172						-0.90
23	73.4	-.350	-.280	-.319	-.319	-.301	-.348	-.251	-.244	-.269	-.298						2.50
24	70.0	.123	.329	.357	.308	.266	.129	.294	.330	.283	.244						-0.95
25	72.6	-.298	-.266	-.305	-.322	-.280	-.276	-.226	-.240	-.262	-.291						3.26
26	76.5	-.259	-.308	-.336	-.357	-.322	-.251	-.262	-.287	-.312	-.319						4.48
27	84.9	-.266	-.294	-.340	-.354	-.312	-.265	-.251	-.273	-.287	-.308						3.01
28	93.3	-.259	-.280	-.305	-.336	-.270	-.265	-.237	-.262	-.258	-.287						1.37
29	78.5	.105	.123	.123	.123	.140	.122	.129	.129	.122	.133						-2.19
30	89.5	.035	.032	.032	.046	.088	.032	.050	.039	.047	.061						-1.07

TABLE [illegible]

PRESSURE COEFFICIENTS C_p [illegible] AND [illegible] AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 40$ [illegible] $= 2230$ rpm

$\delta_h =$ [illegible]

ORIFICE	X/C	α = -12.79, D/L = -.188, C_L = 3.333; T_c' = 2.02, q = 5.11 lb/sq ft					α = -4.14, D/L = -.045, C_L = 4.698; T_c' = 2.80, q = 4.51 lb/sq ft					α = .38, D/L = .016, C_L = 4.739; T_c' = 2.85, q = 4.50 lb/sq ft					Y/C
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-1.540	-.111		-.572	-.384	-3.407	-.155		-.674	-.350	-2.425	-.180		-.691	-.384	0
2	1.5	-2.227	-2.764		-1.582	-1.674	-2.291	-3.322		-1.597	-1.705	-1.129	-3.574		-1.603	-1.717	2.23
3	5.0	-1.436	-1.835		-1.248	-1.474	-1.314	-2.150		-1.257	-1.473	-.965	-2.225		-1.266	-1.470	3.96
4	15.0	-.852	-1.087		-.875	-.975	-.762	-1.156		-.903	-.913	-.822	-1.146		-.912	-.882	6.76
5	30.0	-.614	-.737		-.653	-.630	-.445	-.721		-.640	-.546	-.541	-.658		-.598	-.478	8.53
6	50.0	-.422	-.465		-.434	-.353	-.263	-.414		-.421	-.256	-.351	-.371		-.381	-.207	8.19
7	1.5	.061	.933		-.012	.012	-.593	.842		-.017	.037	-.521	.919		-.010	.090	-1.77
8	5.0	.269	.898		.691	.292	.111	.940		.708	.421	.077	.935		.645	.468	-3.18
9	15.0	.280	.491		.676	.603	.259	.472		.627	.367	.261	.414		.601	.317	-5.14
10	30.0	.184	.096		.311	.238	.229	.101		.290	.212	.244	.110		.284	.200	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.211	-.234	-.261	-.219	-.154	-.179	-.209	-.249	-.222	-.108	-.267	-.271	-.234	-.194	-.134	6.42
18	71.5		-.192	-.207	-.138	-.100		-.168	-.199	-.108	-.067		-.220	-.214	-.130	-.100	5.41
19	48.3	.411	.419		-.065	-.100	.320	.334		-.084	-.108	.267	.294		.094	.067	-5.52
20	55.0	.194	.177	.177	.200	.123	.175	.155	.222	.192	.145	.180	.157	.200	.184	.167	-5.05
21	65.0	.111	.196	.161	.173	.150	.142	.182	.138	.148	.168	.154	.164	.147	.144	.174	-3.92
22	69.9	.154	.346	.323	.334	.253	.142	.337	.381	.317	.283	.114	.331	.381	.314	.281	-0.90
23	73.4	-.177	-.200	-.223	-.131	-.058	-.189	-.168	-.195	-.152	-.057	-.217	-.187	-.180	-.134	-.080	2.50
24	70.0	.196	.338	.338	.330	.265	.172	.317	.391	.330	.300	.144	.321	.387	.324	.294	-0.95
25	72.6	-.134	-.192	-.230	-.138	-.046	-.155	-.168	-.199	-.152	-.044	-.170	-.174	-.187	-.130	-.077	3.26
26	76.5	-.100	-.123	-.177	-.092	-.042	-.121	-.101	-.158	-.118	-.044	-.167	-.190	-.167	-.127	-.080	4.48
27	84.9	-.031	-.015	-.058	-.038	.008	-.108	-.057	.051	-.044	-.007	-.164	-.144	-.144	-.110	-.043	3.01
28	93.3	.031	.092	.058	.058	.061	-.084	.013	.054	.047	.030	-.110	-.097	-.097	-.063	.007	1.37
29	78.5	.150	.177	.169	.177	.161	.138	.155	.175	.145	.162	.140	.154	.174	.140	.164	-2.19
30	89.5	.134	.173	.161	.154	.138	.094	.142	.148	.128	.135	.104	.117	.137	.114	.130	-1.07

ORIFICE	X/C	α = 4.76, D/L = .070, C_L = 4.977; T_c' = 3.06, q = 4.28 lb/sq ft					α = 8.69, D/L = .112, C_L = 4.731; T_c' = 2.98, q = 4.28 lb/sq ft					α = 16.71, D/L = .174, C_L = 4.544; T_c' = 3.15, q = 4.18 lb/sq ft					Y/C
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-1.927	-.159		-.708	-.352	-.901	-.184		-.563	-.239	-.545	-.169		-.425	-.070	0
2	1.5	-.874	-3.625		-1.535	-1.685	-.365	-2.879		-1.300	-1.317	-.262	-2.163		-1.090	-.837	2.23
3	5.0	-.874	-2.200		-1.223	-1.422	-.372	-1.624		-1.020	-.962	-.262	-1.116		-.781	-.628	3.96
4	15.0	-.817	-1.103		-.897	-.817	-.348	-.652		-.710	-.512	-.256	-.412		-.495	-.449	6.76
5	30.0	-.578	-.615		-.601	-.385	-.362	-.389		-.471	-.454	-.269	-.286		-.349	-.409	8.53
6	50.0	-.375	-.382		-.382	-.233	-.362	-.317		-.338	-.345	-.286	-.236		-.262	-.282	8.19
7	1.5	-.555	.967		.003	.176	-.232	1.034		.031	.242	-.166	.698		.116	.246	-1.77
8	5.0	.053	.954		.648	.459	.126	.788		.553	.403	.116	.502		.545	.276	-3.18
9	15.0	.259	.399		.591	.249	.242	.310		.546	.229	.223	.262		.369	.203	-5.14
10	30.0	.256	.116		.289	.213	.239	.130		.276	.201	.219	.176		.223	.203	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.289	-.279	-.289	-.223	-.176	-.348	-.310	-.317	-.324	-.259	-.262	-.233	-.246	-.236	-.236	6.42
18	71.5		-.246	-.266	-.166	-.136		-.304	-.314	-.215	-.218		-.236	-.239	-.189	-.236	5.41
19	48.3	.395	.405		-.033	-.050	.430	.430		-.123	-.143	.442	.445		-.116	-.140	-5.52
20	55.0	.193	.153	.173	.193	.176	.177	.150	.157	.188	.174	.169	.163	.169	.179	.163	-5.05
21	65.0	.166	.166	.133	.150	.169	.143	.150	.140	.150	.164	.136	.153	.153	.143	.150	-3.92
22	69.9	.110	.332	.349	.299	.243	.061	.307	.307	.256	.218	.063	.233	.233	.193	.146	-0.90
23	73.4	-.213	-.173	-.199	-.183	-.110	-.310	-.232	-.232	-.235	-.184	-.272	-.189	-.176	-.183	-.183	2.50
24	70.0	.133	.336	.349	.299	.266	.099	.287	.327	.263	.232	.093	.209	.233	.189	.156	-0.95
25	72.6	-.163	-.166	-.196	-.186	-.100	-.263	-.215	-.229	-.225	-.171	-.229	-.169	-.179	-.186	-.176	3.26
26	76.5	-.173	-.199	-.226	-.186	-.110	-.256	-.280	-.287	-.283	-.208	-.216	.206	-.223	-.223	-.213	4.48
27	84.9	-.143	-.166	-.203	-.189	-.083	-.259	-.256	-.266	-.276	-.174	-.223	-.199	-.193	-.213	-.189	3.01
28	93.3	-.110	-.106	-.136	-.130	-.056	-.259	-.211	-.215	-.218	-.167	-.236	-.203	-.189	-.196	-.176	1.37
29	78.5	.150	.156	.146	.143	.153	.109	.136	.136	.126	.150	.110	.126	.126	.116	.133	-2.19
30	89.5	.106	.120	.106	.106	.130	.055	.085	.075	.082	.102	.053	.076	.073	.070	.083	-1.07

TABLE 55

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 50$ N = 2512 rpm

$\delta_s = 30$

ORIFICE	%	α = -11.49, D/L = -.175, C_L = 7.557, T_c' = 5.65, q = 2.64 lb/sq ft					α = -6.71, D/L = -.094, C_L = 8.340, T_c' = 6.19, q = 2.53 lb/sq ft					α = -1.75, D/L = .000, C_L = 8.909, T_c' = 6.56, q = 2.44 lb/sq ft					$\frac{1}{\alpha}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.169	-.134		-.520	-.357	-.024	-.150		-.533	-.389	-.131	-.155		-.574	-.404	0
2	1.5	-.893	-1.878		-1.208	-1.425	-.995	-2.055		-1.207	-1.406	-1.048	-2.218		-1.224	-1.440	2.23
3	5.0	-.893	-1.275		-.966	-1.278	-.946	-1.403		-.998	-1.262	-.969	-1.516		-1.018	-1.261	3.96
4	15.0	-.654	-.778		-.765	-.826	-.652	-.854		-.787	-.805	-.702	-.914		-.805	-.805	6.76
5	30.0	-.532	-.580		-.612	-.532	-.536	-.600		-.609	-.511	-.553	-.617		-.598	-.498	8.53
6	50.0	-.408	-.370		-.402	-.300	-.404	-.383		-.392	-.279	-.413	-.398		-.404	-.283	8.19
7	1.5	.287	1.030		-.089	-.089	.251	1.029		-.083	-.080	.228	1.033		-.100	.009	-1.77
8	5.0	.188	.803		.300	.300	.190	.759		.254	.383	.161	.684		.264	.404	-3.18
9	15.0	.150	.300		.622	.500	.156	.260		.582	.371	.134	.240		.556	.258	±5.14
10	30.0	.118	-.019		.223	.185	.119	-.006		.236	.168	.122	.024		.234	.158	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.207	-.204	-.175	-.233	-.143	-.211	-.211	-.202	-.245	-.119	-.231	-.210	-.204	-.225	-.134	6.42
18	71.5		-.166	-.169	-.159	-.089		-.171	-.162	-.150	-.077		-.179	-.167	-.143	-.088	5.41
19	48.3	.354	.344		-.118	-.137	.315	.306		-.126	-.132	.295	.298		-.140	-.131	-5.52
20	55.0	.112	.121	.131	.159	.112	.113	.113	.141	.144	.126	.106	.100	.125	.137	.115	-5.05
21	65.0	.089	.137	.124	.118	.131	.107	.132	.129	.113	.138	.106	.118	.125	.097	.094	-3.92
22	69.9	.115	.271	.306	.300	.261	.095	.279	.322	.291	.248	.064	.255	.273	.270	.231	-0.90
23	73.4	-.169	-.191	-.201	-.179	-.048	-.153	-.190	-.205	-.175	-.046	-.158	-.179	-.191	-.176	-.061	2.50
24	70.0	.134	.287	.306	.312	.281	.119	.245	.328	.300	.269	.061	.261	.289	.270	.249	-0.95
25	72.6	-.128	-.188	-.198	-.185	-.035	-.113	-.193	-.205	-.190	-.034	-.118	-.185	-.194	-.182	-.058	3.26
26	76.5	-.131	-.118	-.131	-.153	-.057	-.116	-.126	-.126	-.147	-.046	-.115	-.103	-.122	-.143	-.046	4.48
27	84.9	-.026	-.019	-.038	-.080	.003	-.028	-.024	-.037	-.083	.000	-.046	-.033	-.039	-.076	-.003	3.01
28	93.3	.064	.077	.054	.032	.118	.070	.058	.052	.015	.049	.049	.049	.058	.009	.015	1.37
29	78.5	.124	.131	.134	.124	.140	.132	.122	.126	.110	.141	.122	.118	.134	.112	.131	-2.19
30	89.5	.102	.131	.128	.118	.118	.126	.119	.119	.110	.119	.122	.115	.122	.106	.103	-1.07

ORIFICE	%	α = 7.96, D/L = .133, C_L = 9.754, T_c' = 7.45, q = 2.27 lb/sq ft					α = 12.93, D/L = .200, C_L = 10.140, T_c' = 7.97, q = 2.09 lb/sq ft					α = , D/L = , C_L = , T_c' = , q = lb/sq ft					$\frac{1}{\alpha}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.018	-.161		-.578	-.292	.196	-.166		-.587	-.243						0
2	1.5	-.998	-2.287		-1.242	-1.316	-.914	-2.130		-1.216	-1.237						2.23
3	5.0	-.971	-1.519		-.995	-1.120	-.928	-1.456		-.985	-1.065						3.96
4	15.0	-.691	-.890		-.795	-.709	-.670	-.854		-.783	-.661						6.76
5	30.0	-.554	-.593		-.536	-.432	-.531	-.575		-.543	-.406						8.53
6	50.0	-.399	-.378		-.363	-.220	-.400	-.359		-.362	-.217						8.19
7	1.5	.200	.953		-.107	.092	.258	.753		.000	.113						-1.77
8	5.0	.125	.566		.357	.313	.107	.439		.495	.267						-3.18
9	15.0	.122	.191		.438	.167	.107	.166		.294	.122						-5.14
10	30.0	.101	.066		.161	.116	.104	.071		.131	.110						-6.25
11	45.0																-2.59
12	46.6																±1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.223	-.202	-.200	-.202	-.131	-.217	-.208	-.199	-.202	-.131						6.42
18	71.5		-.149	-.167	-.113	-.092		-.148	-.163	-.128	-.101						5.41
19	48.3	.339	.345		-.107	-.110	.353	.350		-.142	-.151						-5.52
20	55.0	.095	.101	.116	.125	.125	.098	.107	.107	.113	.110						-5.05
21	65.0	.095	.131	.113	.107	.104	.098	.110	.107	.095	.110						-3.92
22	69.9	.063	.220	.220	.188	.155	.062	.199	.187	.131	.116						-0.90
23	73.4	-.149	-.152	-.176	-.158	-.071	-.151	-.148	-.160	-.172	-.089						2.50
24	70.0	.080	.217	.220	.167	.167	.086	.199	.184	.131	.119						-0.95
25	72.6	-.119	-.149	-.173	-.179	-.071	-.122	-.139	-.166	-.175	-.092						3.26
26	76.5	-.116	-.083	-.116	-.137	-.071	-.125	-.080	-.107	-.148	-.092						4.48
27	84.9	-.045	-.030	-.036	-.063	-.048	-.039	-.018	-.042	-.068	-.068						3.01
28	93.3	.042	.054	.042	.006	-.012	.044	.050	.039	.012	-.027						1.37
29	78.5	.107	.131	.119	.110	.107	.110	.119	.107	.101	.104						-2.19
30	89.5	.107	.119	.113	.107	.098	.110	.116	.104	.092	.098						-1.07

TABLE [illegible]

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 00$ $\delta_{f,55} = 00$ $i_w = 60$ $n = 2685$ rpm

$\delta_a = 10$

ORIFICE	x/c	α = -13.32, D/L = -.182, C_L = 13.189, T_c' = 11.19, q = 1.51 lb/sq ft					α = -9.35, D/L = -.118, C_L = 14.554, T_c' = 12.34, q = 1.40 lb/sq ft					α = -4.19, D/L = -.038, C_L = 15.801, T_c' = 13.41, q = 1.29 lb/sq ft					ψ
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.730	-.132		-.362	-.320	.707	-.130		-.340	-.328	.696	-.127		-.315	-.292	0
2	1.5	-.581	-.994		-1.021	-1.180	-.577	-1.027		-1.003	-1.178	-.560	-1.079		-1.014	-1.144	2.23
3	5.0	-.608	-.739		-.817	-1.087	-.604	-.778		-.829	-1.062	-.587	-.796		-.811	-1.005	3.96
4	15.0	-.446	-.578		-.632	-.698	-.450	-.577		-.639	-.684	-.448	-.581		-.628	-.654	6.76
5	30.0	-.413	-.446		-.506	-.464	-.408	-.453		-.494	-.447	-.407	-.445		-.481	-.419	8.53
6	50.0	-.356	-.311		-.344	-.260	-.361	-.311		-.349	-.263	-.342	-.312		-.342	-.245	8.19
7	1.5	.560	.871		-.057	-.135	.553	.885		-.056	-.109	.519	.884		-.041	-.085	-1.77
8	5.0	.225	.572		.045	.165	.228	.571		.036	.175	.212	.575		.035	.195	-3.18
9	15.0	.063	.183		.572	.458	.074	.181		.539	.399	.077	.180		.525	.345	-5.14
10	30.0	-.009	-.063		.204	.159	.006	-.059		.204	.151	.000	-.050		.218	.162	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.174	-.153	-.159	-.225	-.114	-.175	-.163	-.154	-.222	-.136	-.177	-.162	-.150	-.209	-.106	6.42
18	71.5		-.135	-.132	-.129	-.078		-.121	-.127	-.127	-.083		-.136	-.136	-.112	-.071	5.41
19	48.3	.117	.117		-.114	-.123	.104	.092		-.118	-.127	.080	.088		-.115	-.112	-5.52
20	55.0	.033	.096	.102	.129	.087	.041	.074	.104	.118	.083	.041	.074	.088	.112	.091	-5.05
21	65.0	.051	.111	.093	.090	.117	.047	.098	.095	.077	.101	.047	.091	.080	.077	.097	-3.92
22	69.9	.135	.231	.263	.272	.237	.133	.228	.269	.257	.213	.130	.233	.245	.245	.221	-0.90
23	73.4	-.153	-.174	-.168	-.156	-.036	-.160	-.166	-.169	-.154	-.044	-.168	-.162	-.171	-.144	-.044	2.50
24	70.0	.156	.231	.269	.281	.248	.163	.210	.272	.252	.231	.147	.224	.248	.254	.236	-0.95
25	72.6	-.117	-.168	-.180	-.159	-.036	-.121	-.169	-.175	-.160	-.056	-.124	-.168	-.174	-.153	-.035	3.26
26	76.5	-.102	-.087	-.084	-.147	-.039	-.115	-.101	-.080	-.139	-.047	-.112	-.091	-.085	-.133	-.041	4.48
27	84.9	-.021	-.027	-.027	-.090	-.003	-.027	-.021	-.030	-.083	-.015	-.029	-.021	-.029	-.077	-.003	3.01
28	93.3	.078	.069	.054	-.006	.045	.065	.062	.053	-.009	.030	.071	.062	.047	-.006	.038	1.37
29	78.5	.105	.108	.102	.099	.111	.104	.101	.101	.086	.095	.106	.094	.097	.085	.100	-2.19
30	89.5	.117	.102	.102	.087	.093	.109	.107	.098	.086	.080	.118	.100	.094	.085	.083	-1.07

ORIFICE	x/c	α = 1.20, D/L = .042, C_L = 16.924, T_c' = 14.49, q = 1.21 lb/sq ft					α = 7.10, D/L = .118, C_L = 17.561, T_c' = 15.21, q = 1.17 lb/sq ft					α = , D/L = , C_L = , T_c' = , q = lb/sq ft					ψ
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.711	-.126		-.314	-.294	.708	-.128		-.338	-.271						0
2	1.5	-.532	-1.101		-1.010	-1.107	-.498	-1.125		-1.003	-1.070						2.23
3	5.0	-.579	-.793		-.805	-.978	-.536	-.828		-.804	-.941						3.96
4	15.0	-.438	-.573		-.620	-.634	-.417	-.603		-.638	-.621						6.76
5	30.0	-.405	-.441		-.461	-.417	-.385	-.452		-.481	-.399						8.53
6	50.0	-.341	-.308		-.329	-.241	-.329	-.309		-.347	-.233						8.19
7	1.5	.511	.896		-.050	-.062	.472	.901		-.055	-.067						-1.77
8	5.0	.200	.552		.035	.176	.189	.574		.038	.172						-3.18
9	15.0	.065	.167		.490	.314	.064	.143		.463	.312						-5.14
10	30.0	.006	-.044		.203	.135	.009	-.047		.189	.125						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.170	-.150	-.156	-.200	-.126	-.160	-.154	-.146	-.207	-.114						6.42
18	71.5		-.132	-.132	-.106	-.085		-.137	-.125	-.102	-.085						5.41
19	48.3	.059	.056		-.106	-.106	.038	.026		.020	.029						-5.52
20	55.0	.047	.076	.076	.103	.070	.044	.055	.073	.090	.073						-5.05
21	65.0	.047	.082	.076	.073	.082	.052	.067	.076	.061	.085						-3.92
22	69.9	.129	.211	.220	.214	.188	.137	.224	.221	.195	.175						-0.90
23	73.4	-.162	-.162	-.173	-.141	-.062	-.149	-.172	-.169	-.172	-.050						2.50
24	70.0	.150	.211	.223	.226	.200	.154	.219	.201	.201	.189						-0.95
25	72.6	-.117	-.162	-.179	-.150	-.053	-.108	-.169	-.172	-.169	-.050						3.26
26	76.5	-.112	-.097	-.088	-.120	-.047	-.102	-.111	-.093	-.134	-.050						4.48
27	84.9	-.026	-.026	-.029	-.079	-.015	-.026	-.029	-.035	-.085	-.012						3.01
28	93.3	.065	.053	.044	-.003	.021	.067	.041	.032	-.012	.026						1.37
29	78.5	.091	.091	.091	.085	.079	.102	.082	.085	.073	.079						-2.19
30	89.5	.106	.103	.088	.079	.065	.102	.087	.085	.070	.073						-1.07

TABLE [illegible]

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 20$ $\omega = 2010$ rpm

$\delta_s = 00$

ORIFICE	% c	α = -12.75 D/L = -.180 C_L = 1.251 T_c' = .41 q = 7.89 lb/sq ft					α = -4.67 D/L = -.043 C_L = 2.457 T_c' = .54 q = 7.02 lb/sq ft					α = -.56 D/L = .001 C_L = 2.840 T_c' = .87 q = 7.27 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.736	-.032		-.577	-.323	-2.373	-.084		-1.329	-.535	-4.367	-.084		-1.203	-.555	0
2	1.5	-.964	-.799		-1.250	-1.313	-3.934	-3.560		-2.431	-2.348	-3.976	-4.055		-2.169	-2.228	2.23
3	5.0	-1.142	-.983		-1.167	-1.364	-2.851	-2.619		-1.928	-2.257	-2.738	-2.733		-1.748	-2.020	3.96
4	15.0	-.882	-.932		-.977	-1.110	-1.703	-1.703		-1.438	-1.638	-1.540	-1.614		-1.302	-1.411	6.76
5	30.0	-.806	-.844		-.869	-.932	-1.309	-1.271		-1.180	-1.245	-1.094	-1.159		-1.050	-1.035	8.53
6	50.0	-.767	-.704		-.698	-.748	-1.013	-.929		-.903	-.890	-.822	-.792		-.772	-.733	8.19
7	1.5	.894	.729		-.140	-.197	1.225	1.354		-.052	-.026	-.074	.906		.208	.054	-1.77
8	5.0	.552	.488		.013	-.095	.838	1.225		.961	.639	.485	1.119		.961	.664	-3.18
9	15.0	.266	.241		.679	.958	.613	.709		.909	.922	.500	.683		.772	.698	-5.14
10	30.0	.108	.019		.298	.362	.393	.264		.503	.451	.352	.277		.456	.386	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.539	-.526	-.539	-.545	-.558	-.703	-.677	-.709	-.664	-.639	-.560	-.564	-.579	-.564	-.495	6.42
18	71.5		-.520	-.526	-.368	-.533		-.639	-.671	-.368	-.593		-.545	-.555	-.238	-.451	5.41
19	48.3	1.180	1.161		-.070	-.044	1.161	1.180		-.084	-.071	.881	.891		-.114	-.129	-5.52
20	55.0	.203	.292	.273	.317	.266	.329	.426	.445	.484	.335	.292	.371	.376	.406	.297	-5.05
21	65.0	.228	.393	.298	.330	.362	.458	.497	.471	.419	.413	.297	.406	.381	.371	.342	-3.92
22	69.9	.298	.362	.260	.362	.374	.387	.451	.497	.516	.439	.381	.431	.431	.456	.332	-0.90
23	73.4	-.368	-.438	-.603	-.311	-.216	-.432	-.548	-.780	-.355	-.239	-.342	-.431	-.629	-.287	-.168	2.50
24	70.0	.038	-.203	-.101	-.178	-.184	.103	-.135	-.142	-.200	-.200	.094	-.059	-.074	-.139	-.158	-0.95
25	72.6	-.514	-.672	-.799	-.565	-.444	-.658	-.858	-1.045	-.697	-.484	-.530	-.703	-.847	-.604	-.396	3.26
26	76.5	-1.148	-1.161	-1.110	-1.110	-1.173	-1.303	-1.271	-1.419	-1.361	-1.174	-1.020	-1.000	-1.134	-1.129	-.916	4.48
27	84.9	-.184	-.222	-.228	-.165	-.190	-.245	-.252	-.316	-.226	-.206	-.188	-.163	-.238	-.208	-.149	3.01
28	93.3	-.190	-.121	-.019	-.044	-.013	-.206	-.161	.013	-.019	-.026	-.129	-.089	-.025	.005	-.030	1.37
29	78.5	.622	.520	.469	.634	.672	.690	.755	.748	.774	.755	.515	.659	.624	.654	.644	-2.19
30	89.5	.330	.349	.247	.387	.393	.393	.497	.516	.503	.458	.302	.421	.396	.426	.391	-1.07

ORIFICE	% c	α = 7.84 D/L = .072 C_L = 3.593 T_c' = 1.35 q = 6.59 lb/sq ft					α = 15.73 D/L = .150 C_L = 3.289 T_c' = 1.36 q = 6.43 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.405	-.119		-1.259	-.483	-1.121	-.129		-1.074	-.414						0
2	1.5	-1.671	-4.961		-2.175	-2.370	-.474	-4.036		-1.768	-2.346						2.23
3	5.0	-1.408	-3.074		-1.666	-2.057	-.392	-2.311		-1.332	-1.889						3.96
4	15.0	-1.319	-1.641		-1.268	-1.336	-.401	-.875		-.962	-1.074						6.76
5	30.0	-1.052	-1.056		-.984	-.895	-.405	-.578		-.642	-.612						8.53
6	50.0	-.717	-.661		-.649	-.555	-.435	-.470		-.569	-.405						8.19
7	1.5	-.670	.687		.365	.170	-.138	.987		.224	.267						-1.77
8	5.0	.263	1.141		.980	.687	.336	1.220		1.052	.612						-3.18
9	15.0	.433	.678		.755	.564	.410	.630		.802	.448						-5.14
10	30.0	.369	.267		.437	.339	.345	.241		.440	.328						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.496	-.534	-.492	-.462	-.356	-.479	-.500	-.530	-.573	-.401						6.42
18	71.5		-.505	-.475	-.144	-.318		-.578	-.561	-.185	-.423						5.41
19	48.3	.801	.801		-.059	-.064	.828	.828		-.091	-.086						-5.52
20	55.0	.293	.284	.352	.343	.271	.280	.272	.293	.319	.267						-5.05
21	65.0	.280	.343	.271	.288	.310	.241	.319	.310	.259	.259						-3.92
22	69.9	.305	.360	.360	.352	.310	.250	.276	.285	.298	.280						-0.90
23	73.4	-.322	-.399	-.589	-.212	-.098	-.440	-.487	-.655	-.332	-.203						2.50
24	70.0	.051	-.076	-.093	-.085	-.110	-.034	-.134	-.160	-.155	-.241						-0.95
25	72.6	-.462	-.649	-.776	-.471	-.250	-.608	-.755	-.811	-.625	-.375						3.26
26	76.5	-.305	-.449	-.645	-.806	-.674	-.358	-.375	-.457	-.655	-.703						4.48
27	84.9	-.178	-.199	-.208	-.174	-.102	-.302	-.310	-.341	-.401	-.328						3.01
28	93.3	-.153	-.161	-.182	-.072	-.013	-.280	-.276	-.336	-.379	-.267						1.37
29	78.5	.390	.564	.581	.581	.560	.328	.535	.513	.457	.457						-2.19
30	89.5	.246	.305	.297	.314	.327	.185	.250	.237	.198	.237						-1.07

TABLE 58

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 30$ N = 2150 rpm

$\delta_s = 30$

ORIFICE	$\frac{x}{c}$	α = -12.79 D/L = -.160 C_L = 3.285 T_c' = 1.43 q = 5.11 lb/sq ft					α = -3.96 D/L = -.030 C_L = 4.529 T_c' = 2.06 q = 4.70 lb/sq ft					α = .67 D/L = .017 C_L = 5.039 T_c' = 2.42 q = 4.49 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.073	-.062		-.950	-.389	-3.470	-.132		-1.095	-.495	-4.408	-.173		-1.146	-.485	0
2	1.5	-2.154	-2.248		-1.812	-1.786	-2.852	-3.656		-1.943	-2.163	-2.946	-4.043		-1.923	-2.116	2.23
3	5.0	-1.396	-1.588		-1.329	-1.635	-1.991	-2.252		-1.466	-1.837	-2.009	-2.539		-1.500	-1.816	3.96
4	15.0	-.955	-1.121		-.986	-1.168	-1.157	-1.338		-1.117	-1.236	-1.167	-1.409		-1.142	-1.208	6.76
5	30.0	-.799	-.877		-.851	-.862	-.852	-.958		-.927	-.874	-.781	-.949		-.900	-.822	8.53
6	50.0	-.685	-.664		-.664	-.628	-.636	-.684		-.706	-.614	-.522	-.641		-.670	-.534	8.19
7	1.5	.737	1.116		-.031	-.062	-.481	.980		.040	.018	-.879	.945		.049	.049	-1.77
8	5.0	.535	.945		.782	.306	.208	1.064		.896	.503	.123	1.085		.867	.518	-3.18
9	15.0	.353	.493		.763	.789	.340	.583		.742	.614	.308	.583		.735	.501	-5.14
10	30.0	.197	.151		.395	.343	.283	.168		.384	.287	.275	.152		.366	.271	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.493	-.488	-.519	-.509	-.462	-.446	-.495	-.495	-.525	-.428	-.329	-.448	-.452	-.477	-.378	6.42
18	71.5		-.493	-.524	-.353	-.446		-.468	-.503	-.336	-.393		-.427	-.452	-.271	-.320	5.41
19	48.3	.758	.768		-.078	-.093	.583	.592		-.132	-.146	.522	.522		-.119	-.131	-5.52
20	55.0	.208	.343	.337	.374	.260	.238	.287	.291	.318	.221	.255	.238	.288	.288	.238	-5.05
21	65.0	.228	.379	.363	.332	.332	.243	.327	.309	.287	.291	.275	.259	.263	.259	.238	-3.92
22	69.9	.327	.426	.395	.452	.353	.296	.349	.384	.411	.318	.259	.345	.329	.325	.271	-0.90
23	73.4	-.327	-.415	-.607	-.296	-.166	-.296	-.366	-.574	-.283	-.146	-.193	-.345	-.534	-.222	-.115	2.50
24	70.0	.047	-.073	-.099	-.176	-.156	.031	-.057	-.075	-.150	-.146	.053	-.037	-.078	-.082	-.136	-0.95
25	72.6	-.478	-.659	-.799	-.587	-.353	-.437	-.609	-.755	-.552	-.318	-.304	-.567	-.690	-.468	-.259	3.26
26	76.5	-1.064	-1.152	-1.235	-1.090	-.976	-.702	-.918	-1.099	-1.144	-.834	-.386	-.859	-1.002	-.974	-.670	4.48
27	84.9	-.208	-.182	-.280	-.208	-.140	-.159	-.150	-.194	-.216	-.128	-.099	-.127	-.144	-.177	-.103	3.01
28	93.3	-.135	-.083	-.010	.005	.005	-.053	-.079	-.026	-.022	.004	-.025	-.037	-.016	-.004	.000	1.37
29	78.5	.587	.613	.592	.675	.649	.402	.565	.583	.600	.578	.353	.546	.542	.530	.538	-2.19
30	89.5	.301	.410	.395	.431	.389	.260	.327	.309	.358	.336	.238	.300	.275	.283	.296	-1.07

ORIFICE	$\frac{x}{c}$	α = 9.05 D/L = .097 C_L = 5.346 T_c' = 2.82 q = 4.24 lb/sq ft					α = 16.83 D/L = .160 C_L = 4.840 T_c' = 2.82 q = 4.17 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-2.574	-.185		-1.227	-.525	-.764	-.196		-1.050	-.329						0
2	1.5	-1.196	-4.345		-1.898	-2.126	-.392	-3.271		-1.602	-1.931						2.23
3	5.0	-1.123	-2.624		-1.462	-1.829	-.321	-1.931		-1.214	-1.277						3.96
4	15.0	-1.073	-1.378		-1.100	-1.115	-.306	-.791		-.878	-.666						6.76
5	30.0	-.810	-.826		-.864	-.660	-.306	-.458		-.595	-.435						8.53
6	50.0	-.521	-.498		-.540	-.347	-.341	-.384		-.458	-.321						8.19
7	1.5	-.756	1.015		-.046	.150	-.215	1.156		-.098	.278						-1.77
8	5.0	.050	1.123		.837	.529	.149	.964		.725	.423						-3.18
9	15.0	.274	.475		.687	.289	.274	.396		.615	.266						-5.14
10	30.0	.270	.147		.340	.235	.266	.157		.325	.243						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.363	-.409	-.397	-.340	-.228	-.360	-.396	-.392	-.435	-.306						6.42
18	71.5		-.378	-.401	-.162	-.212		-.462	-.427	-.204	-.306						5.41
19	48.3	.579	.587		-.123	-.150	.611	.607		-.165	-.161						-5.52
20	55.0	.235	.201	.212	.255	.208	.219	.196	.204	.243	.219						-5.05
21	65.0	.239	.193	.185	.212	.197	.196	.184	.204	.204	.196						-3.92
22	69.9	.228	.255	.224	.259	.205	.196	.215	.200	.219	.196						-0.90
23	73.4	-.212	-.328	-.436	-.181	-.081	-.298	-.376	-.478	-.255	-.176						2.50
24	70.0	.031	-.108	-.112	-.058	-.139	-.012	-.118	-.121	-.153	-.196						-0.95
25	72.6	-.351	-.517	-.563	-.386	-.189	-.435	-.595	-.592	-.462	-.290						3.26
26	76.5	-.220	-.212	-.401	-.617	-.316	-.290	-.294	-.302	-.415	-.400						4.48
27	84.9	-.147	-.158	-.162	-.135	-.077	-.227	-.227	-.219	-.255	-.215						3.01
28	93.3	-.116	-.143	-.150	-.123	-.035	-.231	-.188	-.200	-.239	-.196						1.37
29	78.5	.255	.436	.397	.367	.328	.223	.368	.392	.321	.266						-2.19
30	89.5	.181	.235	.205	.201	.205	.137	.196	.208	.180	.168						-1.07

TABLE [illegible]

[illegible] $\delta_{f,30} = 20$ $\delta_{f,55} = 00$ $i_w = 40$ $i_t = 2325$ rpm

ORDINATE	x/c	α = -15.18 D/L = -.206 C_L = 6.022 T_c' = 3.69 q = 2.95 lb/sq ft					α = -2.28 D/L = -.009 C_L = 7.926 T_c' = 4.82 q = 2.61 lb/sq ft					α = 2.41 D/L = .051 C_L = 8.305 T_c' = 5.17 q = 2.51 lb/sq ft					
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.222	-.120		.853	-.413	-1.144	-.177		-1.072	-.544	-1.121	-.205		-1.065	-.600	0
2	1.5	-1.094	-1.783		-1.538	-1.698	-1.466	-2.610		-1.680	-1.905	-1.570	-2.829		-1.716	-1.910	2.43
3	5.0	-.960	-1.347		-1.174	-1.534	-1.196	-1.841		-1.329	-1.644	-1.267	-1.894		-1.334	-1.673	3.96
4	15.0	-.693	-.929		.894	-1.031	-.886	-1.120		-1.015	-1.088	-.908	-1.132		-1.034	-1.089	6.76
5	30.0	-.587	-.716		.800	-.738	-.701	-.790		-.858	-.729	-.718	-.805		-.829	-.722	8.53
6	50.0	-.547	-.551		.587	-.538	-.540	-.564		-.645	-.504	-.545	-.556		-.627	-.489	8.14
7	2.5	.498	1.089		.178	-.071	.048	1.168		-.246	-.073	.000	1.172		-.272	-.051	-1.73
8	5.0	.253	.853		.351	.253	.165	.975		.359	.439	.154	.900		.304	.493	-3.18
9	15.0	.218	.387		.756	.742	.193	.391		.725	.479	.166	.327		.706	.359	-5.24
10	30.0	.160	.018		.311	.284	.177	.028		.306	.222	.182	.039		.296	.182	-6.25
11	45.0																-4.59
12	45.0																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.427	-.422	-.413	-.485	-.396	-.371	-.391	-.387	-.471	-.371	-.367	-.375	-.375	-.454	-.359	6.42
18	71.5		-.427	-.445	-.373	-.382		-.387	-.415	-.270	-.298		-.355	-.379	-.264	-.300	5.41
19	68.5	.178	.169		-.124	-.124	.044	.040		-.137	-.145	-.020	-.024		.067	.059	-6.52
20	65.0	.169	.258	.164	.280	.204	.177	.173	.201	.230	.165	.162	.150	.182	.209	.162	-6.65
21	60.0	.169	.293	.284	.276	.276	.181	.193	.189	.185	.185	.154	.150	.154	.150	.126	-3.92
22	64.4	.258	.360	.338	.356	.342	.181	.282	.270	.266	.222	.154	.225	.233	.217	.174	-0.90
23	70.4	-.289	-.347	-.613	-.262	-.133	-.230	-.322	-.524	-.258	-.129	-.201	-.304	-.489	-.233	-.134	2.50
24	75.4	.009	-.049	-.067	-.124	-.116	.016	-.077	-.064	-.145	-.173	.000	-.138	-.083	-.134	-.174	-0.95
25	80.4	-.427	-.556	-.769	-.533	-.302	-.330	-.504	-.669	-.500	-.270	-.308	-.466	-.631	-.450	-.253	4.28
26	82.5	-.987	-.991	-1.222	1.089	-.853	-.556	-.765	-1.019	-1.120	-.705	-.529	-.679	-.947	-1.030	-.588	4.48
27	86.5	-.187	-.164	-.298	-.227	-.129	-.109	-.145	-.145	-.234	-.117	-.107	-.122	-.134	-.201	-.107	3.01
28	84.4	-.089	-.102	-.040	-.009	.013	-.044	-.073	-.052	-.024	-.012	-.071	-.079	-.067	-.028	-.020	1.37
29	88.4	.436	.511	.525	.627	.622	.262	.443	.483	.491	.479	.209	.399	.418	.402	.379	-2.19
30	94.5	.240	.311	.307	.367	.347	.181	.234	.222	.238	.234	.150	.205	.189	.189	.197	-1.07

ORDINATE	x/c	α = 11.63 D/L = .155 C_L = 8.646 T_c' = 5.82 q = 2.35 lb/sq ft					α = 20.47 D/L = .238 C_L = 8.609 T_c' = 6.39 q = 2.26 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-1.113	-.201		-1.668	-.515	-.446	-.203		-.936	-.330						0
2	1.5	-1.568	-2.934		-1.658	-1.799	-1.348	-2.591		-1.511	-1.504						2.43
3	5.0	-1.284	-1.965		-1.297	-1.522	-1.207	-1.761		-1.174	-1.243						3.96
4	15.0	-.882	-1.136		-.992	-.962	-.815	-.993		-.881	-.765						6.76
5	30.0	-.674	-.761		-.776	-.621	-.616	-.649		-.631	-.457						8.53
6	50.0	-.496	-.485		-.541	-.386	-.446	-.370		-.399	-.265						8.14
7	2.5	-.008	1.094		-.265	.102	.149	.612		-.054	.130						-1.73
8	5.0	.136	.750		.310	.401	.130	.457		.486	.246						-3.18
9	15.0	.170	.250		.583	.220	.141	.196		.319	.120						-5.14
10	30.0	.140	.083		.242	.167	.127	.127		.167	.138						-6.25
11	45.0																-4.59
12	45.0																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.303	-.318	-.326	-.348	-.250	-.243	-.214	-.228	-.217	-.192						6.42
18	72.5		-.288	-.314	-.197	-.220		-.156	-.188	-.145	-.159						5.41
19	68.5	.322	.326		-.159	-.155	.344	.359		-.178	-.141						-6.52
20	65.0	.155	.140	.140	.171	.151	.127	.134	.127	.145	.134						-6.65
21	60.0	.151	.121	.178	.133	.151	.127	.130	.105	.127	.130						-3.92
22	69.9	.159	.144	.102	.136	.129	.127	.138	.105	.127	.112						-0.90
23	73.4	-.133	-.227	-.337	-.163	-.102	-.058	-.112	-.181	-.072	-.083						2.50
24	70.0	.038	-.072	-.090	-.106	-.148	.047	-.036	-.051	-.033	-.072						-0.95
25	72.5	-.220	-.348	-.439	-.341	-.186	-.120	-.188	-.243	-.178	-.134						4.28
26	76.5	-.363	-.386	-.651	-.806	-.288	-.185	-.196	-.246	-.312	-.134						4.48
27	84.4	-.068	-.053	-.076	-.087	-.064	-.033	-.007	-.040	-.029	-.062						3.01
28	93.4	-.042	-.023	-.027	-.019	-.019	-.040	-.004	-.022	-.007	-.058						1.37
29	88.5	.174	.284	.273	.239	.239	.159	.185	.167	.170	.152						-2.19
30	94.5	.140	.167	.163	.140	.155	.112	.127	.112	.130	.123						-1.07

TABLE 60

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 20$ N = 1962 rpm

$\delta_s = 30$

ORIFICE	$\frac{x}{c}$	α = -12.81 D/L = -.187 C_L = 1.714 T_c' = .58 q = 6.39 lb/sq ft					α = -4.58 D/L = -.046 C_L = 2.915 T_c' = .81 q = 5.93 lb/sq ft					α = -.31 D/L = .005 C_L = 3.510 T_c' = 1.12 q = 5.71 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.676	-.020		-.398	-.259	-1.598	-.030		-.655	-.451	-3.788	-.036		-.723	-.516	0
2	1.5	-1.213	-1.041		-1.359	-1.379	-3.112	-2.932		-1.929	-2.043	-3.659	-3.804		-2.070	-2.157	2.23
3	5.0	-1.120	-.968		-1.154	-1.379	-2.121	-2.187		-1.628	-1.959	-2.354	-2.488		-1.657	-1.946	3.96
4	15.0	-.855	-.928		-.994	-1.127	-1.316	-1.460		-1.226	-1.412	-1.383	-1.523		-1.228	-1.394	6.76
5	30.0	-.822	-.868		-.902	-.928	-1.075	-1.111		-1.051	-1.111	-.981	-1.120		-1.017	-1.032	8.53
6	50.0	-.762	-.756		-.769	-.769	-.895	-.877		-.859	-.841	-.805	-.836		-.826	-.779	8.19
7	1.5	.941	.862		-.080	-.166	.667	1.148		.036	-.048	-.191	.914		.062	.046	-1.77
8	5.0	.530	.564		.106	-.040	.589	1.057		.589	.403	.361	1.053		.774	.501	-3.18
9	25.0	.298	.305		.743	.928	.457	.607		.817	.835	.434	.630		.754	.723	-5.14
10	30.0	.146	.106		.345	.411	.306	.234		.439	.421	.341	.248		.428	.372	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.564	-.603	-.650	-.643	-.636	-.655	-.655	-.661	-.715	-.655	-.583	-.588	-.604	-.676	-.588	6.42
18	71.5		-.623	-.683	-.358	-.617		-.661	-.691	-.348	-.625		-.542	-.604	-.206	-.552	5.41
19	48.3	.133	.133		.000	.007	.126	.138		.000	-.018	.098	.108		-.057	-.093	-5.52
20	55.0	.298	.391	.365	.385	.345	.318	.433	.415	.439	.354	.294	.377	.387	.403	.315	-5.05
21	65.0	.318	.411	.418	.424	.444	.342	.463	.457	.475	.445	.330	.418	.397	.439	.403	-3.92
22	69.9	.411	.418	.404	.391	.438	.427	.499	.481	.505	.421	.377	.465	.428	.434	.346	-0.90
23	73.4	-.265	-.457	-.683	-.431	-.305	-.300	-.505	-.721	-.487	-.312	-.315	-.372	-.635	-.470	-.289	2.50
24	70.0	.040	-.219	-.411	-.371	-.331	-.012	-.246	-.457	-.403	-.354	-.036	-.150	-.392	-.351	-.310	-0.95
25	72.6	-.696	-.928	-1.081	-.895	-.815	-.763	-1.003	-1.130	-.991	-.787	-.697	-.795	-.991	-.929	-.692	3.26
26	76.5	-.961	-1.313	-1.618	-1.518	-1.419	-1.057	-1.400	-1.802	-1.604	-1.346	-1.099	-.821	-1.533	-1.559	-1.223	4.48
27	84.9	-.292	-.345	-.371	-.252	-.239	-.330	-.336	-.360	-.306	-.246	-.274	-.248	-.263	-.289	-.191	3.01
28	93.3	-.312	-.245	-.099	-.139	-.133	-.330	-.258	-.120	-.054	-.132	-.196	-.217	-.155	-.036	-.072	1.37
29	78.5	.769	.670	.610	.789	.835	.703	.811	.769	.817	.823	.568	.764	.738	.774	.764	-2.19
30	89.5	.378	.471	.418	.491	.504	.366	.535	.511	.541	.499	.320	.459	.480	.506	.475	-1.07

ORIFICE	$\frac{x}{c}$	α = 8.44 D/L = .088 C_L = 4.236 T_c' = 1.63 q = 5.34 lb/sq ft					α = 16.26 D/L = .159 C_L = 3.834 T_c' = 1.67 q = 5.32 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.410	-.077		-.816	-.408	-1.264	-.081		-.734	-.384						0
2	1.5	-1.877	-4.487		-2.091	-2.134	-.538	-3.886		-1.776	-2.092						2.23
3	5.0	-1.460	-2.748		-1.615	-1.894	-.508	-2.118		-1.337	-1.776						3.96
4	15.0	-1.378	-1.503		-1.194	-1.275	-.521	-.850		-.914	-1.102						6.76
5	30.0	-1.039	-.953		-.949	-.867	-.551	-.576		-.683	-.675						8.53
6	50.0	-.644	-.648		-.696	-.588	-.568	-.525		-.559	-.453						8.19
7	1.5	-.777	.691		.210	.133	-.235	.893		.141	.179						-1.77
8	5.0	.155	1.048		.876	.524	.252	1.076		.914	.530						-3.18
9	15.0	.382	.601		.687	.545	.363	.521		.722	.418						-5.14
10	30.0	.348	.228		.369	.305	.325	.209		.367	.290						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.455	-.498	-.494	-.524	-.421	-.602	-.517	-.602	-.568	-.384						6.42
18	71.5		-.498	-.511	-.146	-.395		-.547	-.555	-.158	-.384						5.41
19	48.3	.094	.086		-.017	-.017	.098	.107		-.038	-.043						-5.52
20	55.0	.305	.266	.331	.301	.249	.273	.235	.273	.265	.252						-5.05
21	65.0	.309	.262	.271	.292	.301	.252	.235	.222	.222	.252						-3.92
22	69.9	.253	.331	.365	.326	.258	.239	.248	.273	.248	.205						-0.90
23	73.4	-.198	-.348	-.550	-.331	-.167	-.393	-.406	-.555	-.337	-.209						2.50
24	70.0	.000	-.189	-.348	-.266	-.232	-.137	-.260	-.363	-.273	-.265						-0.95
25	72.6	-.386	-.640	-.803	-.700	-.481	-.478	-.564	-.641	-.636	-.478						3.26
26	76.5	-.301	-.593	-.949	-1.207	-.897	-.273	-.312	-.389	-.602	-.726						4.48
27	84.9	-.155	-.210	-.189	-.219	-.129	-.231	-.231	-.265	-.299	-.239						3.01
28	93.3	-.133	-.189	-.142	-.060	-.034	-.209	-.222	-.239	-.269	-.196						1.37
29	78.5	.369	.674	.657	.657	.661	.333	.585	.572	.517	.530						-2.19
30	89.5	.249	.313	.331	.344	.361	.214	.278	.248	.239	.290						-1.07

TABLE [illegible]

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 30$ $N = 2235$ rpm

$\delta_s = 00$

ORIFICE	X/c	α = -12.71 D/L = -.162 C_L = 4.145 T_c' = 1.81 q = 4.36 lb/sq ft					α = -3.33 D/L = -.021 C_L = 5.736 T_c' = 2.68 q = 3.90 lb/sq ft					α = 1.30 D/L = .033 C_L = 6.347 T_c' = 3.09 q = 3.73 lb/sq ft					$\frac{1}{x}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-.010	-.059		-.558	-.402	-2.485	-.101		-.684	-.449	-3.391	-.140		-.735	-.479	0
2	1.5	-1.499	-1.724		-1.548	-1.714	-2.230	-2.971		-1.761	-1.866	-2.497	-3.504		-1.784	-1.920	2.23
3	5.0	-1.249	-1.460		-1.264	-1.646	-1.534	-1.947		-1.352	-1.695	-1.610	-2.165		-1.392	-1.701	3.96
4	15.0	-.891	-1.058		-.931	-1.176	-.988	-1.190		-1.040	-1.166	-.992	-1.267		-1.071	-1.143	6.76
5	30.0	-.803	-.843		-.872	-.896	-.761	-.842		-.890	-.830	-.728	-.894		-.875	-.811	8.53
6	50.0	-.715	-.691		-.754	-.715	-.595	-.672		-.720	-.619	-.547	-.641		-.705	-.585	8.19
7	1.5	.764	1.063		-.069	-.098	-.190	1.000		-.020	-.004	-.709	.977		-.072	-.026	-1.77
8	5.0	.421	.901		.465	.201	.174	1.012		.704	.360	.060	.984		.637	.411	-3.18
9	15.0	.289	.456		.794	.828	.287	.510		.720	.627	.245	.475		.690	.490	-5.14
10	30.0	.171	.108		.382	.333	.255	.097		.324	.275	.238	.083		.298	.238	-6.25
11	45.0																-2.59
12	46.6																-1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.573	-.519	-.588	-.642	-.578	-.445	-.486	-.506	-.583	-.474	-.392	-.456	-.471	-.543	-.441	6.42
18	71.5		-.539	-.627	-.377	-.583		-.478	-.518	-.275	-.478		-.460	-.479	-.305	-.422	5.41
19	48.3	.078	.088		-.073	-.083	.077	.085		-.105	-.109	.087	.094		.038	.026	-5.52
20	55.0	.235	.367	.289	.392	.294	.247	.279	.275	.291	.223	.215	.200	.253	.238	.204	-5.05
21	65.0	.255	.426	.411	.441	.411	.223	.328	.308	.316	.283	.207	.230	.200	.230	.238	-3.92
22	69.9	.328	.485	.402	.514	.402	.255	.368	.348	.360	.312	.241	.279	.298	.279	.230	-0.90
23	73.4	-.338	-.407	-.686	-.500	-.304	-.251	-.324	-.506	-.433	-.239	-.204	-.302	-.502	-.332	-.215	2.50
24	70.0	-.088	-.186	-.485	-.392	-.323	-.036	-.162	-.291	-.336	-.279	-.023	-.185	-.336	-.260	-.275	-0.95
25	72.6	-.725	-.833	-1.063	-.960	-.754	-.502	-.696	-.870	-.850	-.627	-.411	-.652	-.784	-.709	-.524	3.26
26	76.5	-1.195	-1.058	-1.773	-1.602	-1.362	-.733	-.769	-1.320	-1.522	-1.093	-.554	-.713	-1.067	-1.305	-.924	4.48
27	84.9	-.348	-.294	-.411	-.323	-.206	-.210	-.243	-.223	-.291	-.170	-.151	-.234	-.196	-.200	-.151	3.01
28	93.3	-.265	-.265	-.098	-.039	-.069	-.146	-.186	-.150	-.065	-.036	-.117	-.170	-.124	-.087	-.057	1.37
29	78.5	.705	.710	.666	.798	.813	.405	.664	.664	.708	.708	.321	.630	.611	.603	.603	-2.19
30	89.5	.338	.456	.456	.524	.495	.231	.364	.352	.409	.376	.215	.298	.287	.283	.298	-1.07

ORIFICE	X/c	α = 9.92 D/L = .115 C_L = 6.606 T_c' = 3.55 q = 3.53 lb/sq ft					α = 17.78 D/L = .165 C_L = 6.182 T_c' = 3.69 q = 3.44 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{1}{x}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-2.784	-.150		-.765	-.498	-1.965	-.145		-.723	-.370						0
2	1.5	-1.858	-3.692		-1.702	-1.944	-.942	-3.362		-1.531	-1.718						2.23
3	5.0	-1.157	-2.275		-1.378	-1.652	-.914	-2.018		-1.217	-1.422						3.96
4	15.0	-.933	-1.260		-1.068	-1.072	-.804	-1.005		-.921	-.808						6.76
5	30.0	-.602	-.819		-.822	-.701	-.610	-.568		-.667	-.483						8.53
6	50.0	-.381	-.527		-.627	-.459	-.434	-.399		-.420	-.367						8.19
7	1.5	-.947	.983		-.064	.046	-.642	.995		-.021	.226						-1.77
8	5.0	-.032	.961		.563	.495	.000	.751		.536	.399						-3.18
9	15.0	.246	.392		.648	.285	.222	.293		.550	.215						-5.14
10	30.0	.253	.085		.292	.192	.240	.138		.258	.194						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.285	-.356	-.420	-.459	-.338	-.314	-.342	-.349	-.349	-.272						6.42
18	71.5		-.356	-.424	-.210	-.296		-.303	-.332	-.127	-.243						5.41
19	48.3	.032	.028		-.107	-.114	.032	.028		-.113	-.123						-5.52
20	55.0	.203	.167	.192	.192	.182	.194	.166	.180	.180	.176						-5.05
21	65.0	.182	.171	.142	.164	.182	.166	.155	.134	.155	.173						-3.92
22	69.9	.189	.192	.214	.192	.125	.166	.138	.162	.155	.138						-0.90
23	73.4	-.125	-.242	-.459	-.267	-.164	-.173	-.229	-.317	-.215	-.145						2.50
24	70.0	.004	-.164	-.303	-.214	-.246	-.018	-.148	-.194	-.173	-.180						-0.95
25	72.6	-.267	-.506	-.719	-.577	-.374	-.279	-.346	-.420	-.395	-.300						3.26
26	76.5	-.203	-.595	-.947	-1.065	-.530	-.183	-.190	-.275	-.325	-.300						4.48
27	84.9	-.117	-.132	-.140	-.150	-.093	-.131	-.127	-.123	-.148	-.113						3.01
28	93.3	-.100	-.093	-.078	-.039	-.039	-.113	-.109	-.109	-.127	-.085						1.37
29	78.5	.239	.506	.495	.406	.345	.215	.321	.363	.286	.265						-2.19
30	89.5	.160	.256	.271	.210	.203	.148	.187	.180	.166	.173						-1.07

TABLE 62

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 40$ N = 2415 rpm

$\delta_s = 30$

ORIFICE	x/c	α = -14.42 D/L = -.165 C_L = 7.927 T_c' = 4.69 q = 2.49 lb/sq ft					α = -5.72 D/L = -.030 C_L = 9.883 T_c' = 5.82 q = 2.17 lb/sq ft					α = -1.11 D/L = .020 C_L = 10.347 T_c' = 6.30 q = 2.06 lb/sq ft					η
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.698	-.104		-.519	-.315	.468	-.151		-.570	-.415	.394	-.145		-.554	-.457	0
2	1.5	-.790	-1.404		-1.324	-1.532	-1.038	-1.857		-1.404	-1.638	-1.082	-1.993		-1.421	-1.655	2.23
3	5.0	-.858	-1.057		-1.049	-1.392	-.996	-1.340		-1.121	-1.445	-1.041	-1.398		-1.164	-1.465	3.96
4	15.0	-.634	-.798		-.814	-.973	-.706	-.887		-.902	-.977	-.759	-.926		-.898	-.982	6.76
5	30.0	-.606	-.658		-.766	-.722	-.634	-.668		-.789	-.698	-.655	-.688		-.766	-.703	8.53
6	50.0	-.570	-.538		-.614	-.566	-.562	-.555		-.630	-.540	-.576	-.532		-.625	-.524	8.19
7	1.5	.391	1.025		-.144	-.100	.377	1.057		-.098	-.147	.402	1.093		-.086	-.130	-1.77
8	5.0	.172	.746		.211	.112	.200	.811		.166	.223	.197	.755		.126	.286	-3.18
9	15.0	.152	.303		.738	.746	.147	.306		.679	.615	.141	.298		.669	.517	-5.14
10	30.0	.112	-.016		.259	.255	.106	-.008		.238	.230	.078	.011		.245	.201	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.435	-.423	-.435	-.582	-.483	-.434	-.396	-.423	-.558	-.442	-.420	-.383	-.390	-.536	-.428	6.42
18	71.5		-.447	-.475	-.351	-.495		-.396	-.445	-.332	-.442		-.372	-.409	-.320	-.428	5.41
19	48.3	.507	.518		-.104	-.128	.570	.558		-.128	-.140	.580	.580		-.130	-.149	-5.52
20	55.0	.168	.255	.179	.271	.211	.151	.158	.170	.200	.170	.149	.145	.175	.193	.149	-5.05
21	65.0	.195	.307	.315	.319	.315	.162	.215	.215	.238	.245	.145	.186	.190	.171	.205	-3.92
22	69.9	.275	.363	.283	.391	.347	.219	.275	.272	.215	.287	.167	.238	.249	.205	.223	-0.90
23	73.4	-.267	-.303	-.586	-.455	-.243	-.242	-.268	-.442	-.404	-.223	-.245	-.245	-.387	-.338	-.223	2.50
24	70.0	-.076	-.136	-.427	-.339	-.267	-.087	-.140	-.257	-.332	-.275	-.112	-.130	-.275	-.495	-.283	-0.95
25	72.6	-.610	-.670	-.897	-.870	-.658	-.562	-.574	-.777	-.796	-.589	-.558	-.536	-.688	-.714	-.543	3.26
26	76.5	-1.077	-.862	-1.564	-1.532	-1.173	-.981	-.574	-1.313	-1.430	-1.068	-.926	-.513	-1.082	-1.294	-.989	4.48
27	84.9	-.295	-.279	-.371	-.315	-.203	-.264	-.242	-.260	-.313	-.185	-.271	-.234	-.249	-.290	-.186	3.01
28	93.3	-.259	-.287	-.136	-.040	-.076	-.215	-.245	-.219	-.068	-.064	-.216	-.212	-.223	-.100	-.067	1.37
29	78.5	.566	.582	.622	.718	.742	.415	.566	.577	.657	.657	.364	.539	.539	.584	.580	-2.19
30	89.5	.239	.339	.375	.435	.395	.200	.257	.272	.317	.313	.193	.234	.227	.257	.260	-1.07

ORIFICE	x/c	α = 8.26 D/L = .124 C_L = 10.907 T_c' = 7.13 q = 1.89 lb/sq ft					α = 12.98 D/L = .171 C_L = 11.343 T_c' = 7.80 q = 1.78 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					η
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.372	-.148		-.575	-.481	.405	-.163		-.532	-.429						0
2	1.5	-1.009	-2.177		-1.410	-1.605	-.919	-2.147		-1.363	-1.530						2.23
3	5.0	-.987	-1.519		-1.172	-1.428	-.909	-1.491		-1.122	-1.299						3.96
4	15.0	-.712	-.951		-.904	-.940	-.689	-.923		-.894	-.866						6.76
5	30.0	-.615	-.687		-.734	-.644	-.575	-.671		-.699	-.589						8.53
6	50.0	-.524	-.503		-.575	-.463	-.497	-.468		-.532	-.401						8.19
7	1.5	.311	1.092		-.083	-.069	.316	1.082		-.089	-.025						-1.77
8	5.0	.155	.745		.094	.376	.138	.724		.089	.327						-3.18
9	15.0	.123	.242		.615	.315	.110	.209		.568	.277						-5.14
10	30.0	.098	.011		.242	.174	.085	.007		.213	.156						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.372	-.340	-.347	-.459	-.369	-.355	-.305	-.312	-.376	-.298						6.42
18	71.5		-.307	-.325	-.249	-.347		-.266	-.287	-.209	-.270						5.41
19	48.3	.380	.380		-.076	-.072	.355	.348		-.121	-.117						-5.52
20	55.0	.134	.101	.130	.141	.145	.121	.096	.114	.121	.121						-5.05
21	65.0	.141	.134	.119	.105	.148	.146	.106	.099	.085	.121						-3.92
22	69.9	.166	.155	.177	.141	.141	.160	.138	.146	.124	.089						-0.90
23	73.4	-.195	-.199	-.300	-.260	-.177	-.177	-.177	-.241	-.181	-.142						2.50
24	70.0	-.051	-.119	-.177	-.228	-.249	-.046	-.103	-.131	-.142	-.195						-0.95
25	72.6	-.445	-.445	-.535	-.550	-.423	-.412	-.376	-.437	-.398	-.312						3.26
26	76.5	-.665	-.398	-.622	-.944	-.669	-.589	-.305	-.444	-.621	-.451						4.48
27	84.9	-.224	-.181	-.206	-.206	-.137	-.209	-.170	-.170	-.177	-.131						3.01
28	93.3	-.170	-.188	-.181	-.155	-.065	-.142	-.167	-.156	-.160	-.096						1.37
29	78.5	.296	.441	.398	.354	.398	.273	.398	.323	.277	.291						-2.19
30	89.5	.163	.192	.155	.145	.181	.149	.177	.138	.128	.138						-1.07

TABLE 63

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 50$ N = 2605 rpm

$\delta_s = 30$

ORIFICE	$\frac{x}{c}$	α = D/L = C_L = T_c' = q = lb/sq ft					α = -7.14 D/L = -.033 C_L = 20.218 T_c' = 14.29 q = .98 lb/sq ft					α = -1.96 D/L = .035 C_L = 21.160 T_c' = 15.25 q = .92 lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0						.907	-.146		-.395	-.329	.970	-.151		-.389	-.305	0
2	1.5						-.475	-.859		-1.163	-1.349	-.448	-.808		-1.132	-1.334	2.23
3	5.0						-.625	-.753		-.965	-1.240	-.562	-.738		-.959	-1.223	3.96
4	15.0						-.472	-.625		-.764	-.826	-.459	-.628		-.761	-.827	6.76
5	30.0						-.479	-.556		-.673	-.618	-.467	-.540		-.654	-.614	8.53
6	50.0						-.494	-.483		-.556	-.494	-.489	-.489		-.562	-.500	8.19
7	1.5						.523	.900		-.055	-.168	.496	.874		-.066	-.151	-1.77
8	5.0						.197	.541		.015	.062	.125	.467		.004	.029	-3.18
9	15.0						.048	.139		.647	.647	.004	.077		.562	.621	-5.14
10	30.0						-.033	-.135		.161	.183	-.096	-.191		.107	.162	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0						-.406	-.399	-.402	-.563	-.428	-.397	-.400	-.408	-.547	-.426	6.42
18	71.5							-.450	-.475	-.366	-.464		-.467	-.474	-.356	-.452	5.41
19	48.3						.037	.033		-.172	-.161	.048	.033		-.176	-.151	-5.52
20	55.0						.040	.121	.088	.143	.128	.037	.088	.066	.096	.107	-5.05
21	65.0						.143	.190	.183	.168	.223	.103	.158	.169	.151	.213	-3.92
22	69.9						.223	.241	.212	.238	.289	.202	.213	.206	.217	.276	-0.90
23	73.4						-.304	-.388	-.578	-.413	-.249	-.312	-.404	-.569	-.393	-.231	2.50
24	70.0						-.121	-.238	-.388	-.344	-.267	-.129	-.250	-.393	-.353	-.268	-0.95
25	72.6						-.633	-.768	-.911	-.804	-.625	-.628	-.768	-.867	-.772	-.621	3.26
26	76.5						-1.203	-1.199	-1.591	-1.455	-1.166	-1.132	-1.190	-1.565	-1.381	-1.157	4.48
27	84.9						-.336	-.391	-.431	-.355	-.227	-.367	-.400	-.430	-.334	-.231	3.01
28	93.3						-.311	-.344	-.157	-.110	-.106	-.349	-.327	-.151	-.121	-.110	1.37
29	78.5						.607	.512	.523	.647	.651	.603	.489	.500	.606	.647	-2.19
30	89.5						.230	.238	.249	.296	.289	.198	.228	.242	.265	.283	-1.07

ORIFICE	$\frac{x}{c}$	α = 3.25 D/L = .103 C_L = 21.004 T_c' = 15.64 q = .89 lb/sq ft					α = 7.92 D/L = .150 C_L = 20.444 T_c' = 15.69 q = .87 lb/sq ft					α = 12.84 D/L = .204 C_L = 20.224 T_c' = 16.11 q = .86 lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.025	-.152		-.390	-.351	1.078	-.167		-.390	-.298	.961	-.149		-.358	-.283	0
2	1.5	-.363	-.698		-1.162	-1.345	-.362	-.716		-1.178	-1.333	-.238	-.499		-1.114	-1.244	2.23
3	5.0	-.585	-.768		-1.006	-1.302	-.529	-.688		-.971	-1.277	-.462	-.618		-.909	-1.189	3.96
4	15.0	-.476	-.651		-.791	-.893	-.438	-.589		-.772	-.859	-.402	-.563		-.715	-.794	6.76
5	30.0	-.479	-.561		-.678	-.670	-.454	-.541		-.672	-.629	-.421	-.492		-.615	-.581	8.53
6	50.0	-.511	-.495		-.596	-.526	-.481	-.485		-.569	-.501	-.432	-.447		-.518	-.458	8.19
7	1.5	.433	.850		-.023	-.125	.442	.855		-.044	-.111	.391	.715		.007	-.011	-1.77
8	5.0	.078	.487		.000	.070	.072	.469		.012	.064	.056	.462		.022	.115	-3.18
9	15.0	-.043	.105		.620	.624	-.040	.080		.589	.637	-.041	.093		.592	.469	-5.14
10	30.0	-.129	-.199		.125	.148	-.119	-.207		.119	.167	-.108	-.190		.127	.145	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.421	-.417	-.425	-.581	-.464	-.390	-.402	-.410	-.541	-.438	-.361	-.365	-.387	-.499	-.384	6.42
18	71.5		-.472	-.487	-.370	-.491		-.450	-.477	-.318	-.454		-.425	-.432	-.246	-.406	5.41
19	48.3	.062	.051		-.168	-.168	.080	.056		-.095	-.088	.004	-.004		-.134	-.123	-5.52
20	55.0	-.008	.082	.074	.113	.086	.016	.119	.072	.119	.123	.048	.119	.119	.127	.149	-5.05
21	65.0	.090	.168	.183	.160	.203	.111	.179	.163	.167	.239	.115	.194	.183	.179	.246	-3.92
22	69.9	.187	.230	.222	.230	.273	.211	.231	.227	.231	.302	.205	.253	.231	.242	.291	-0.90
23	73.4	-.324	-.405	-.592	-.409	-.265	-.302	-.398	-.581	-.394	-.243	-.287	-.380	-.525	-.373	-.197	2.50
24	70.0	-.148	-.246	-.398	-.347	-.265	-.131	-.243	-.402	-.326	-.243	-.112	-.231	-.365	-.306	-.183	-0.95
25	72.6	-.663	-.795	-.893	-.803	-.651	-.649	-.756	-.903	-.776	-.613	-.600	-.741	-.812	-.741	-.533	3.26
26	76.5	-1.181	-1.204	-1.633	-1.477	-1.201	-1.178	-1.166	-1.627	-1.424	-1.146	-1.159	-1.200	-1.446	-1.349	-1.025	4.48
27	84.9	-.401	-.433	-.433	-.366	-.257	-.390	-.382	-.442	-.350	-.239	-.335	-.350	-.369	-.332	-.216	3.01
28	93.3	-.363	-.370	-.144	-.144	-.152	-.326	-.310	-.147	-.135	-.131	-.246	-.287	-.112	-.104	-.138	1.37
29	78.5	.612	.526	.538	.651	.647	.656	.521	.561	.649	.704	.592	.514	.563	.633	.618	-2.19
30	89.5	.203	.234	.253	.277	.265	.239	.259	.279	.282	.310	.216	.268	.287	.291	.287	-1.07

TABLE 64

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 30$ $\delta_{f,55} = 00$ $i_w = 60$ N = 2755 rpm

$\delta_s = 30$

ORIFICE	% M	α = -11.94 D/L = -.196 C_L = 24.829 T_c' = 21.87 q = .69 lb/sq ft					α = -7.51 D/L = -.110 C_L = 26.319 T_c' = 22.80 q = .67 lb/sq ft					α = -1.86 D/L = -.020 C_L = 27.456 T_c' = 23.92 q = .65 lb/sq ft					$\frac{1}{\alpha}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.916	-.103		-.155	-.214	.960	-.103		-.154	-.240	.955	-.085		-.152	-.223	0
2	1.5	.248	.482		-.730	-.941	.226	.432		-.744	-.909	.193	.521		-.670	-.918	2.23
3	5.0	-.014	.090		-.648	-.920	-.041	.021		-.679	-.926	-.007	.027		-.684	-.897	3.96
4	15.0	-.034	-.234		-.503	-.641	-.055	-.268		-.504	-.638	-.034	-.244		-.505	-.606	6.76
5	30.0	-.124	-.303		-.420	-.448	-.147	-.326		-.422	-.453	-.119	-.305		-.420	-.423	8.53
6	50.0	-.248	-.303		-.351	-.351	-.261	-.312		-.367	-.364	-.227	-.295		-.332	-.339	8.19
7	1.5	-.048	-.327		.034	-.045	.041	-.185		.041	-.024	.051	-.372		.047	-.034	-1.77
8	5.0	-.117	-.234		.048	.076	-.154	-.096		.065	.051	-.163	-.112		.068	.081	-3.18
9	15.0	-.103	-.162		.358	.555	-.144	-.086		.456	.532	-.108	-.102		.406	.549	-5.14
10	30.0	-.124	-.155		.110	.282	-.171	-.147		.134	.247	-.129	-.129		.142	.274	-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.193	-.248	-.324	-.314	-.303	-.216	-.257	-.312	-.333	-.302	-.196	-.230	-.281	-.305	-.278	6.42
18	71.5		-.320	-.386	-.220	-.341		-.319	-.364	-.168	-.336		-.291	-.359	-.210	-.332	5.41
19	48.3	.024	.000		-.100	-.083	.003	.010		-.089	-.096	.000	-.007		-.095	-.088	-5.52
20	55.0	.100	.131	.138	.179	.231	.072	.158	.151	.202	.213	.095	.146	.146	.203	.223	-5.05
21	65.0	.196	.203	.227	.248	.345	.178	.223	.226	.257	.329	.183	.223	.223	.278	.332	-3.92
22	69.9	.310	.220	.220	.296	.372	.288	.254	.240	.281	.360	.291	.257	.237	.328	.352	-0.90
23	73.4	-.152	-.269	-.469	-.282	-.141	-.175	-.268	-.453	-.278	-.151	-.159	-.227	-.433	-.230	-.132	2.50
24	70.0	.014	-.124	-.331	-.255	-.131	.000	-.113	-.295	-.257	-.137	-.007	-.085	-.291	-.213	-.122	-0.95
25	72.6	-.444	-.596	-.727	-.613	-.506	-.449	-.580	-.707	-.610	-.514	-.444	-.498	-.687	-.562	-.494	3.26
26	76.5	-.954	-1.009	-1.254	-1.264	-1.282	-.912	-.892	-1.231	-1.204	-1.269	-.968	-.806	-1.209	-1.165	-1.239	4.48
27	84.9	-.231	-.251	-.234	-.183	-.196	-.247	-.233	-.233	-.185	-.206	-.217	-.227	-.220	-.176	-.203	3.01
28	93.3	-.189	-.158	-.021	-.010	-.076	-.199	-.182	-.017	-.003	-.093	-.166	-.176	-.041	-.007	-.061	1.37
29	78.5	.675	.372	.482	.658	.710	.676	.401	.487	.683	.707	.670	.413	.477	.657	.698	-2.19
30	89.5	.338	.255	.289	.396	.413	.322	.278	.302	.394	.388	.325	.278	.284	.386	.389	-1.07

ORIFICE	% M	α = 4.10 D/L = .091 C_L = 26.773 T_c' = 23.03 q = .67 lb/sq ft					α = 10.18 D/L = .203 C_L = 25.516 T_c' = 22.29 q = .70 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{1}{\alpha}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.843	-.099		-.126	-.221	.852	-.107		-.174	-.217						0
2	1.5	.207	.347		-.782	-.980	.194	.261		-.802	-.989						2.23
3	5.0	.007	.153		-.622	-.918	-.003	-.023		-.712	-.899						3.96
4	15.0	.007	-.214		-.473	-.633	-.017	-.267		-.528	-.612						6.76
5	30.0	-.095	-.292		-.401	-.442	-.094	-.311		-.421	-.424						8.53
6	50.0	-.221	-.282		-.323	-.354	-.197	-.301		-.348	-.334						8.19
7	1.5	.054	-.017		.027	-.020	.077	.007		.050	-.013						-1.77
8	5.0	-.095	-.245		.078	.102	-.110	.013		.067	.100						-3.18
9	15.0	-.099	-.173		.337	.551	-.110	-.040		.421	.525						-5.14
10	30.0	-.122	-.146		.126	.282	-.134	-.120		.134	.251						-6.25
11	45.0																-2.59
12	46.6																1.75
13	50.0																5.41
14	45.0																-2.03
15	50.0																5.26
16	55.0																7.33
17	65.0	-.190	-.238	-.313	-.292	-.292	-.184	-.254	-.307	-.317	-.277						6.42
18	71.5		-.296	-.371	-.146	-.330		-.321	-.351	-.174	-.304						5.41
19	48.3	-.014	-.017		-.099	-.088	-.007	-.017		-.104	-.100						-5.52
20	55.0	.095	.126	.143	.194	.245	.090	.150	.150	.190	.217						-5.05
21	65.0	.204	.201	.211	.255	.347	.184	.214	.227	.247	.317						-3.92
22	69.9	.310	.224	.241	.316	.367	.277	.254	.257	.307	.354						-0.90
23	73.4	-.160	-.248	-.408	-.275	-.119	-.164	-.277	-.404	-.274	-.110						2.50
24	70.0	.007	-.126	-.279	-.221	-.116	-.010	-.140	-.261	-.234	-.117						-0.95
25	72.6	-.442	-.554	-.687	-.588	-.490	-.438	-.575	-.672	-.585	-.465						3.26
26	76.5	-.973	-.942	-1.224	-1.190	-1.201	-1.003	-.986	-1.176	-1.143	-1.143						4.48
27	84.9	-.207	-.221	-.252	-.156	-.204	-.201	-.234	-.234	-.180	-.190						3.01
28	93.3	-.129	-.146	-.054	.014	-.078	-.194	-.134	-.040	.000	-.077						1.37
29	78.5	.677	.364	.483	.656	.697	.632	.401	.488	.648	.662						-2.19
30	89.5	.340	.245	.286	.391	.391	.321	.284	.284	.368	.364						-1.07

TABLE 95

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 40$ $\delta_{f,55} = 20$ $i_w = 10$ $N = 2030$ rpm

ORIFICE	$\frac{x}{c}$	$\alpha = -12.94$ $D/L = -.202$ $C_L = 3.323$ $T_c' = .98$ $q = 4.20$ lb/sq ft					$\alpha = -4.33$ $D/L = -.053$ $C_L = 5.052$ $T_c' = 1.06$ $q = 3.82$ lb/sq ft					$\alpha = .35$ $D/L = .012$ $C_L = 5.843$ $T_c' = 1.15$ $q = 3.61$ lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.411	.097		.049	.438	.787	.051		-4.697	-2.429	.334	.017		-6.880	-4.236	0
2	1.5	-.227	.211		-1.419	-1.630	-1.811	-1.617		-4.333	-4.173	-2.516	-2.833		-5.511	-5.502	2.23
3	5.0	-.616	-.357		-1.046	-1.257	-1.473	-1.507		-2.387	-2.531	-1.925	-2.122		-2.892	-3.252	3.96
4	15.0	-.649	-.786		-.949	-1.070	-1.185	-1.371		-1.608	-1.718	-1.438	-1.677		-1.883	-2.105	6.76
5	30.0	-.859	-.940		-1.030	-1.030	-1.244	-1.380		-1.498	-1.464	-1.403	-1.523		-1.669	-1.686	8.53
6	50.0	-1.232	-1.240		-1.289	-1.273	-1.515	-1.523		-1.600	-1.617	-1.626	-1.617		-1.746	-1.771	8.19
7	1.5	.640	.243		1.005	1.321	1.244	1.329		1.049	1.591	1.061	1.583		.967	1.626	-1.77
8	5.0	.373	.292		.867	.965	.719	1.033		1.371	1.380	.710	1.258		1.506	1.523	-3.18
9	15.0	.308	.365		.624	.503	.482	.652		.973	.770	.479	.719		1.078	.864	-5.14
10	30.0	.340	.454		.486	.486	.432	.449		.677	.643	.394	.385		.676	.616	-6.25
11	45.0	.405	.535	.543	.551	.519	.457	.449	.753	.652	.686	.479	.565	.796	.599	.685	-2.59
12	46.6	.203	.227	.211	.389	.632	.186	.195	.330	.567	.559	.188	.317	.402	.616	.513	1.75
13	50.0	-.357	-.454	-.470	-.178	.186	-.465	-.576	-.576	-.161	.093	-.471	-.608	-.599	-.231	.043	5.41
14	45.0	.065	.089	.089	.227	.389	.017	-.025	.118	.288	.389	.060	.128	.128	.257	.377	-2.03
15	50.0	-2.456	-2.156	-2.108	-1.565	-1.184	-2.895	-2.658	-2.700	-1.997	-1.371	-3.029	-2.773	-2.884	-2.225	-1.489	5.26
16	55.0	-2.992	-2.837	-2.708	-2.951	-2.935	-3.436	-3.385	-3.132	-3.326	-3.394	-3.594	-3.560	-3.346	-3.440	-3.577	7.33
17	65.0	-1.240	-1.232	-1.321	-1.305	-1.289	-1.456	-1.481	-1.490	-1.498	-1.515	-1.523	-1.557	-1.557	-1.523	-1.592	6.42
18	71.5		-.940	-1.094	-.649	-1.046		-1.109	-1.168	-.821	-1.261		-1.155	-1.172	-.727	-1.301	5.41
19	48.3	.689	.592		1.038	1.338	.686	.855		1.244	.965	.659	.899		1.403	.941	-5.52
20	55.0	1.013	.827	.811	.989	1.151	1.160	1.041	1.100	1.227	1.219	1.053	1.189	1.164	1.309	1.249	-5.05
21	65.0	.843	.851	.738	.843	.997	.914	.999	.982	1.083	1.092	.864	1.053	1.087	1.130	1.130	-3.92
22	69.9	.746	.803	.657	.689	.819	.897	.948	.846	.821	.906	.847	1.010	.984	.839	.916	-0.90
23	73.4	-.422	-.381	-.689	-.495	-.405	-.465	-.516	-.728	-.618	-.550	-.505	-.531	-.727	-.625	-.599	2.50
24	70.0	-.430	-.430	-.819	-.786	-.811	-.415	-.592	-.846	-.999	-.999	-.513	-.608	-.847	-.993	-1.061	-0.95
25	72.6	-1.816	-1.532	-2.043	-2.019	-2.059	-1.870	-1.811	-2.065	-2.480	-2.260	-1.848	-1.831	-2.037	-2.465	-2.336	3.26
26	76.5	-1.330	-.673	-1.257	-1.411	-1.897	-1.270	-.736	-.855	-2.285	-1.904	-1.189	-.710	-.787	-2.114	-1.977	4.48
27	84.9	-.357	-.365	-.430	-.470	-.446	-.449	-.465	-.550	-.465	-.415	-.471	-.479	-.548	-.582	-.394	3.01
28	93.3	-.300	-.324	-.324	-.308	-.373	-.355	-.398	-.482	-.339	-.381	-.351	-.436	-.479	-.488	-.325	1.37
29	78.5	1.257	1.005	.965	1.143	1.354	1.422	1.312	1.219	1.439	1.363	1.369	1.369	1.326	1.489	1.421	-2.19
30	89.5	.851	.811	.649	.827	.965	.872	1.041	.965	1.075	1.007	.822	1.018	1.027	1.095	1.044	-1.07

ORIFICE	$\frac{x}{c}$	$\alpha = 9.67$ $D/L = .119$ $C_L = 7.000$ $T_c' = 1.87$ $q = 3.28$ lb/sq ft					$\alpha = 14.29$ $D/L = .161$ $C_L = 7.277$ $T_c' = 2.30$ $q = 3.21$ lb/sq ft					$\alpha =$ $D/L =$ $C_L =$ $T_c' =$ $q =$ lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	-3.381	-.034		-8.670	-6.530	-4.453	-.096		-8.965	-7.106						0
2	1.5	-3.381	-4.199		-6.509	-6.577	-3.183	-4.284		-6.270	-6.547						2.23
3	5.0	-2.399	-2.747		-3.122	-3.803	-2.238	-2.918		-3.159	-3.767						3.96
4	15.0	-1.595	-1.806		-1.902	-2.195	-1.462	-1.823		-1.871	-2.070						6.76
5	30.0	-1.363	-1.486		-1.574	-1.636	-1.191	-1.408		-1.468	-1.462						8.53
6	50.0	-1.384	-1.445		-1.581	-1.568	-1.101	-1.300		-1.372	-1.324						8.19
7	1.5	-.348	1.350		.545	1.104	-.668	1.233		.475	.758						-1.77
8	5.0	.266	1.295		1.363	1.240	.102	1.203		1.312	.963						-3.18
9	15.0	.375	.688		.988	.647	.349	.620		.915	.493						-5.14
10	30.0	.327	.198		.498	.443	.343	.156		.433	.337						-6.25
11	45.0	.327	.463	.593	.375	.382	.301	.367	.530	.259	.277						-2.59
12	46.6	.157	.211	.259	.463	.293	.108	.150	.181	.361	.241						1.75
13	50.0	-.361	-.511	-.586	-.259	-.068	-.325	-.451	-.517	-.241	-.072						5.41
14	45.0	.082	.089	.020	.157	.191	.024	.042	-.048	.078	.144						-2.03
15	50.0	-2.413	-2.331	-2.481	-1.983	-1.275	-2.004	-2.064	-2.172	-1.637	-1.053						5.26
16	55.0	-2.535	-3.006	-2.958	-2.869	-2.924	-1.883	-2.641	-2.623	-2.473	-2.395						7.33
17	65.0	-1.097	-1.322	-1.377	-1.315	-1.254	-.824	-1.119	-1.191	-1.119	-.969						6.42
18	71.5		-1.043	-1.043	-.593	-1.016		-.897	-.927	-.511	-.770						5.41
19	48.3	.498	.559		1.281	.573	.493	.373		1.059	.493						-5.52
20	55.0	.600	.988	.961	1.063	.920	.469	.818	.848	.891	.746						-5.05
21	65.0	.484	.716	.757	.804	.695	.361	.493	.596	.548	.481						-3.92
22	69.9	.504	.593	.695	.613	.545	.409	.325	.554	.439	.343						-0.90
23	73.4	-.320	-.538	-.607	-.470	-.525	-.205	-.475	-.566	-.373	-.367						2.50
24	70.0	-.293	-.736	-.750	-.811	-1.043	-.120	-.692	-.698	-.710	-.806						-0.95
25	72.6	-1.022	-1.820	-1.827	-1.861	-1.731	-.668	-1.607	-1.667	-1.474	-1.173						3.26
26	76.5	-.559	-.879	-.757	-1.097	-1.506	-.385	-.878	-.710	-.842	-.969						4.48
27	84.9	-.293	-.416	-.470	-.443	-.314	-.193	-.265	-.385	-.331	-.217						3.01
28	93.3	-.259	-.354	-.395	-.354	-.232	-.193	-.217	-.301	-.247	-.193						1.37
29	78.5	.736	1.261	1.145	1.186	1.200	.548	1.077	1.011	.939	.963						-2.19
30	89.5	.436	.702	.627	.647	.634	.361	.511	.517	.451	.457						-1.07

TABLE 66

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 40$ $\delta_{f,55} = 20$ $i_w = 20$ $N = 2315$ rpm

ORIFICE (FIG. 6)	$\frac{x}{c}$	$\alpha = -11.79$ D/L = -.184 $C_L = 8.526$; $T_c' = 3.07$ q = 2.23 lb/sq ft					$\alpha = -1.39$ D/L = -.001 $C_L = 11.084$; $T_c' = 3.95$ q = 1.97 lb/sq ft					$\alpha = 3.81$ D/L = .072 $C_L = 12.087$; $T_c' = 4.53$ q = 1.84 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.438	.021		-3.392	-1.335	1.166	-.045		-5.065	-2.912	1.020	-.073		-5.457	-3.703	0
2	1.5	-.605	-.186		-3.378	-3.337	-1.045	-1.338		-4.409	-4.511	-1.244	-1.900		-4.753	-4.947	2.23
3	5.0	-.888	-.599		-1.796	-2.030	-1.166	-1.198		-2.236	-2.670	-1.263	-1.469		-2.374	-2.877	3.96
4	15.0	-.771	-.826		-1.204	-1.335	-.937	-1.096		-1.408	-1.618	-.983	-1.178		-1.469	-1.675	6.76
5	30.0	-.894	-.956		-1.087	1.115	-.988	-1.045		-1.236	-1.255	-.983	-1.087		-1.263	-1.238	8.53
6	50.0	-1.232	-1.176		-1.273	-1.259	-1.268	-1.198		-1.325	-1.357	-1.226	-1.196		-1.311	-1.305	8.19
7	1.5	.867	.709		1.183	1.665	.879	1.249		1.102	1.599	.759	1.342		1.038	1.469	-1.77
8	5.0	.392	.557		1.287	1.259	.350	.898		1.351	1.249	.297	.929		1.348	1.226	-3.18
9	15.0	.248	.406		.826	.619	.204	.395		.809	.567	.212	.376		.771	.522	-5.14
10	30.0	.296	.385		.475	.550	.185	.134		.382	.395	.170	.030		.322	.340	-6.25
11	45.0	.296	.289	.633	.571	.660	.248	.268	.554	.401	.548	.273	.273	.540	.322	.467	-2.59
12	46.6	.083	.144	.261	.475	.488	.070	.159	.268	.471	.401	.109	.140	.237	.413	.340	1.75
13	50.0	-.399	-.509	-.488	-.186	.151	-.395	-.516	-.503	-.229	.038	-.364	-.492	-.504	-.225	.018	5.41
14	45.0	-.048	-.048	.069	.220	.372	.013	-.006	.064	.191	.306	.049	-.006	.000	.164	.273	-2.03
15	50.0	-2.415	-2.071	-2.181	-1.706	-1.080	-2.300	-2.115	-2.185	-1.765	-1.121	-2.185	-2.052	-2.137	-1.681	-1.062	5.26
16	55.0	-3.103	-2.793	-2.676	-2.786	-2.890	-3.039	-2.803	-2.644	-2.657	-2.899	-2.896	-2.762	-2.598	-2.610	-2.798	7.33
17	65.0	-1.280	-1.287	-1.369	-1.287	-1.266	-1.268	-1.274	-1.312	-1.300	-1.312	-1.172	-1.232	-1.281	-1.305	-1 57	6.42
18	71.5		-1.060	-1.190	-.571	-1.087		-.988	-1.070	-.663	-1.128		-.977	-1.032	-.735	-1.062	5.41
19	48.3	.502	.633		1.190	.826	.363	.663		1.249	.573	.328	.577		1.087	.498	-5.52
20	55.0	1.087	.874	.998	1.121	1.232	.854	.898	.975	1.115	1.077	.735	.904	.971	1.038	.983	-5.05
21	65.0	.826	.846	.853	.963	1.080	.707	.790	.822	.911	.937	.595	.710	.765	.783	.789	-3.92
22	69.9	.784	.812	.743	.736	.915	.694	.803	.714	.675	.835	.589	.662	.668	.619	.722	-0.90
23	73.4	-.433	-.550	-.812	-.626	-.433	-.452	-.484	-.752	-.637	-.522	-.431	-.492	-.656	-.613	-.510	2.50
24	70.0	-.440	-.633	-.970	-.922	-.846	-.421	-.573	-.911	-.968	-.962	-.413	-.625	-.807	-.965	-.953	-0.95
25	72.6	-1.858	-1.878	-2.587	-2.442	-2.105	-1.688	-1.701	-2.243	-2.459	-2.147	-1.439	-1.754	-2.112	-2.331	-2.058	3.26
26	76.5	-1.321	-.846	-2.105	-2.360	-1.913	-1.077	-.714	-1.217	-2.536	-1.988	-.911	-.795	-1.081	-2.204	-1.930	4.48
27	84.9	-.378	-.530	-.550	-.427	-.475	-.471	-.491	-.612	-.535	-.427	-.431	-.516	-.546	-.540	-.376	3.01
28	93.3	-.378	-.399	-.323	-.193	-.406	-.376	-.421	-.503	-.331	-.357	-.382	-.431	-.449	-.407	-.285	1.37
29	78.5	1.362	1.176	1.142	1.397	1.410	1.147	1.140	1.140	1.383	1.319	.977	1.105	1.153	1.281	1.269	-2.19
30	89.5	.812	.908	.819	1.004	.977	.637	.796	.790	.905	.841	.516	.674	.704	.704	.741	-1.07

ORIFICE (FIG. 6)	$\frac{x}{c}$	$\alpha = 8.74$ D/L = .129 $C_L = 12.553$; $T_c' = 5.04$ q = 1.78 lb/sq ft					$\alpha = 13.41$ D/L = .178 $C_L = 12.674$; $T_c' = 5.54$ q = 1.74 lb/sq ft					$\alpha =$ D/L = $C_L =$; $T_c' =$ q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	.857	-.104		-5.773	-4.376	.706	-.102		-5.717	-5.114						0
2	1.5	-1.323	-2.202		-4.876	-5.210	-1.401	-2.306		-4.763	-5.281						2.23
3	5.0	-1.300	-1.627		-2.421	-3.002	-1.342	-1.687		-2.436	-3.045						3.96
4	15.0	-1.012	-1.231		-1.484	-1.679	-1.008	-1.207		-1.460	-1.660						6.76
5	30.0	-.995	-1.081		-1.265	-1.242	-.970	-1.024		-1.191	-1.196						8.53
6	50.0	-1.196	-1.150		-1.277	-1.265	-1.121	-1.062		-1.191	-1.180						8.19
7	1.5	.742	1.340		.995	1.144	.711	1.309		.970	.851						-1.77
8	5.0	.276	.995		1.300	1.052	.259	.932		1.234	.868						-3.18
9	15.0	.178	.380		.759	.431	.156	.350		.690	.329						-5.14
10	30.0	.127	-.012		.276	.316	.097	-.005		.253	.237						-6.25
11	45.0	.224	.253	.466	.247	.345	.172	.216	.420	.210	.259						-2.59
12	46.6	.086	.092	.138	.351	.247	.032	.081	.102	.264	.216						1.75
13	50.0	-.380	-.523	-.512	-.276	-.017	-.366	-.436	-.480	-.237	-.075						5.41
14	45.0	.006	-.046	-.086	.092	.201	-.022	-.038	-.129	.065	.129						-2.03
15	50.0	-2.082	-1.898	-2.041	-1.668	-1.024	-1.940	-1.762	-1.881	-1.390	-.948						5.26
16	55.0	-2.714	-2.605	-2.478	-2.427	-2.611	-2.506	-2.414	-2.274	-2.252	-2.360						7.33
17	65.0	-1.098	-1.156	-1.202	-1.208	-1.173	-1.018	-1.040	-1.083	-1.072	-1.035						6.42
18	71.5		-.926	-.943	-.610	-.995		-.819	-.841	-.647	-.868						5.41
19	48.3	.270	.426		1.104	.420	.275	.296		.781	.399						-5.52
20	55.0	.633	.840	.880	.943	.840	.550	.727	.798	.803	.690						-5.05
21	65.0	.495	.558	.621	.644	.615	.377	.426	.480	.458	.447						-3.92
22	69.9	.495	.437	.569	.512	.523	.410	.372	.447	.399	.377						-0.90
23	73.4	-.403	-.477	-.615	-.564	-.489	-.377	-.383	-.533	-.431	-.420						2.50
24	70.0	-.408	-.679	-.765	-.886	-.978	-.383	-.587	-.668	-.771	-.894						-0.95
25	72.6	-1.248	-1.696	-1.880	-2.018	-1.857	-1.094	-1.450	-1.660	-1.563	-1.498						3.26
26	76.5	-.736	-.782	-.868	-1.645	-1.714	-.641	-.625	-.744	-1.051	-1.288						4.48
27	84.9	-.391	-.460	-.489	-.500	-.351	-.334	-.329	-.404	-.404	-.313						3.01
28	93.3	-.362	-.380	-.420	-.426	-.270	-.307	-.302	-.334	-.350	-.248						1.37
29	78.5	.857	1.127	1.075	1.127	1.133	.727	.975	.959	.911	.921						-2.19
30	89.5	.420	.546	.546	.535	.541	.361	.415	.388	.372	.388						-1.07

TABLE 67

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30}$ = 40 $\delta_{f,55}$ = 20 i_w = 30 N = 2730 rpm

ORIFICE	x/c	α = -8.63 D/L = -.099 C_L = 18.766 T_c' = 9.15 q = 1.31 lb/sq ft					α = -2.29 D/L = .033 C_L = 21.008 T_c' = 9.73 q = 1.18 lb/sq ft					α = 2.91 D/L = .104 C_L = 21.202 T_c' = 10.20 q = 1.15 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.446	-.055		-2.774	-1.346	1.471	-.071		-3.436	-2.056	1.476	-.099		-3.151	-2.039	0
2	1.5	-.160	-.005		-3.052	-3.102	-.438	-.452		-3.607	-3.717	-.397	-.483		-3.549	-3.596	2.23
3	5.0	-.493	-.347		-1.551	-1.911	-.681	-.619		-1.823	-2.222	-.667	-.615		-1.760	-2.181	3.96
4	15.0	-.488	-.630		-.999	-1.159	-.619	-.790		-1.156	-1.309	-.610	-.776		-1.121	-1.301	6.76
5	30.0	-.607	-.721		-.894	-.899	-.719	-.852		-1.023	-1.014	-.710	-.833		-.984	-.998	8.53
6	50.0	-.949	-.931		-1.017	-1.008	-1.061	-1.056		-1.123	-1.114	-1.055	-1.022		-1.093	-1.079	8.19
7	1.5	.538	.552		1.127	1.519	.661	.895		1.185	1.580	.577	.861		1.183	1.439	-1.77
8	5.0	.201	.360		1.122	1.118	.219	.485		1.190	1.161	.147	.445		1.145	1.126	-3.18
9	15.0	.096	.196		.607	.470	.090	.167		.609	.476	.028	.151		.582	.468	-5.14
10	30.0	.119	.109		.283	.351	.086	.000		.209	.347	.028	.009		.189	.331	-6.25
11	45.0	.119	.201	.484	.424	.515	.100	.138	.485	.376	.481	.099	.137	.464	.369	.473	-2.59
12	46.6	.005	.078	.155	.333	.415	-.005	.038	.176	.309	.405	-.009	.024	.161	.308	.397	1.75
13	50.0	-.374	-.411	-.388	-.155	.132	-.405	-.495	-.447	-.205	.081	-.416	-.483	-.421	-.203	.090	5.41
14	45.0	-.123	-.036	.018	.173	.319	-.119	-.105	.005	.148	.305	-.132	-.104	-.009	.128	.308	-2.03
15	50.0	-1.848	-1.642	-1.674	-1.296	-.835	-2.042	-1.818	-1.808	-1.423	-.933	-1.978	-1.770	-1.774	-1.382	-.923	5.26
16	55.0	-2.559	-2.336	-2.199	-2.244	-2.363	-2.808	-2.565	-2.389	-2.398	-2.517	-2.754	-2.498	-2.347	-2.333	-2.409	7.33
17	65.0	-1.072	-1.086	-1.140	-1.086	-1.054	-1.180	-1.228	-1.233	-1.228	-1.142	-1.164	-1.174	-1.216	-1.174	-1.112	6.42
18	71.5		-.894	-.990	-.639	-.903		-1.018	-1.071	-.704	-.999		-.975	-1.055	-.639	-.975	5.41
19	48.3	.461	.411		.721	.611	.371	.400		.752	.628	.317	.388		.781	.662	-5.52
20	55.0	.944	.716	.858	.972	1.054	.947	.742	.904	.999	1.066	.899	.705	.861	.965	1.022	-5.05
21	65.0	.661	.684	.689	.776	.899	.657	.666	.723	.771	.885	.639	.644	.686	.743	.861	-3.92
22	69.9	.639	.684	.620	.648	.817	.661	.657	.638	.661	.814	.634	.639	.629	.634	.767	-0.90
23	73.4	-.433	-.497	-.730	-.538	-.360	-.462	-.566	-.780	-.638	-.433	-.445	-.549	-.781	-.606	-.421	2.50
24	70.0	-.465	-.588	-.862	-.830	-.725	-.471	-.685	-.928	-.961	-.842	-.445	-.644	-.932	-.918	-.833	-0.95
25	72.6	-1.793	-1.706	-2.336	-2.139	-1.907	-1.918	-1.899	-2.437	-2.370	-1.961	-1.841	-1.798	-2.442	-2.267	-1.902	3.26
26	76.5	-1.460	-.853	-1.930	-2.181	-1.902	-1.556	-.971	-1.827	-2.479	-1.923	-1.391	-.880	-1.912	-2.380	-1.869	4.48
27	84.9	-.429	-.493	-.557	-.447	-.442	-.500	-.609	-.661	-.547	-.481	-.530	-.573	-.639	-.516	-.483	3.01
28	93.3	-.388	-.401	-.374	-.192	-.351	-.424	-.514	-.533	-.214	-.385	-.464	-.502	-.473	-.218	-.369	1.37
29	78.5	1.209	.967	1.031	1.223	1.227	1.194	1.052	1.099	1.261	1.280	1.174	1.055	1.088	1.221	1.230	-2.19
30	89.5	.693	.730	.652	.785	.812	.657	.695	.671	.771	.809	.634	.696	.625	.724	.790	-1.07

ORIFICE	x/c	α = 8.17 D/L = .179 C_L = 20.832 T_c' = 10.51 q = 1.11 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.420	-.095		-3.057	-1.808											0
2	1.5	-.355	-.341		-3.421	-3.440											2.23
3	5.0	-.591	-.596		-1.704	-2.082											3.96
4	15.0	-.549	-.767		-1.112	-1.226											6.76
5	30.0	-.662	-.804		-.965	-.956											8.53
6	50.0	-.994	-.994		-1.069	-1.041											8.19
7	1.5	.554	.752		1.169	1.510											-1.77
8	5.0	.076	.435		1.121	1.055											-3.18
9	15.0	-.033	.132		.554	.388											-5.14
10	30.0	-.009	-.014		.170	.293											-6.25
11	45.0	.109	.142	.450	.331	.426											-2.59
12	46.6	-.019	.038	.151	.279	.407											*1.75
13	50.0	-.407	-.473	-.416	-.218	.104											5.41
14	45.0	-.118	-.109	.005	.109	.289											-2.03
15	50.0	-1.898	-1.741	-1.727	-1.391	-.894											5.26
16	55.0	-2.640	-2.442	-2.304	-2.267	-2.295											7.33
17	65.0	-1.121	-1.150	-1.207	-1.169	-1.060											6.42
18	71.5		-.970	-1.065	-.521	-.909											5.41
19	48.3	.284	.379		.757	.606											-5.52
20	55.0	.833	.719	.856	.923	1.013											-5.05
21	65.0	.610	.658	.686	.696	.842											-3.92
22	69.9	.610	.644	.629	.596	.757											-0.90
23	73.4	-.445	-.549	-.814	-.620	-.379											2.50
24	70.0	-.445	-.672	-.956	-.899	-.752											-0.95
25	72.6	-1.808	-1.827	-2.508	-2.252	-1.770											3.26
26	76.5	-1.448	-.927	-2.196	-2.338	-1.685											4.48
27	84.9	-.511	-.577	-.639	-.535	-.483											3.01
28	93.3	-.426	-.502	-.412	-.251	-.393											1.37
29	78.5	1.107	1.027	1.036	1.145	1.235											-2.19
30	89.5	.606	.700	.639	.691	.733											-1.07

TABLE 68

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 40$ $\delta_{f,55} = 20$ $i_w = 40$ $n = 2815$ rpm

ORIFICE (PERCENT)	%	α = -8.73 D/L = -.172 C_L = 25.878 T_c' = 17.90 q = .74 lb/sq ft					α = -2.65 D/L = -.053 C_L = 28.318 T_c' = 19.08 q = .70 lb/sq ft					α = 3.11 D/L = .042 C_L = 28.833 T_c' = 19.56 q = .70 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.237	-.021		-.295	.150	1.040	-.013		-.531	.193	1.156	-.029		-.511	.151	0
2	1.5	.308	.719		-1.597	-1.729	.295	.796		-1.558	-1.738	.369	.771		-1.399	-1.625	2.23
3	5.0	-.034	.201		-.822	-1.134	.060	.205		-.882	-1.109	-.008	.184		-.833	-1.110	3.96
4	15.0	-.064	-.291		-.629	-.736	.056	-.270		-.629	-.689	-.025	-.289		-.599	-.712	6.76
5	30.0	-.193	-.428		-.569	-.569	-.094	-.424		-.557	-.518	-.168	-.448		-.557	-.540	8.53
6	50.0	-.501	-.642		-.681	-.634	-.411	-.616		-.689	-.599	-.486	-.599		-.649	-.628	8.19
7	1.5	-.116	-.462		1.045	1.353	-.086	-.578		1.062	1.378	-.109	-.553		.988	1.302	-1.77
8	5.0	-.146	-.223		.805	.916	-.094	-.244		.856	.933	-.101	-.247		.833	.892	-3.18
9	15.0	-.026	.051		.441	.394	.034	.047		.445	.407	.017	.038		.452	.410	-5.14
10	30.0	.094	.240		.218	.402	.154	.235		.235	.398	.121	.230		.222	.410	-6.25
11	45.0	.270	.321	.360	.351	.475	.295	.330	.377	.360	.501	.260	.389	.369	.343	.469	-2.59
12	46.6	.171	.171	.167	.321	.557	.214	.180	.193	.330	.578	.176	.214	.197	.289	.565	1.75
13	50.0	-.094	-.184	-.223	-.017	.265	-.056	-.184	-.210	-.017	.291	-.084	-.188	-.193	-.063	.281	5.41
14	45.0	.128	.116	.120	.240	.420	.150	.133	.146	.231	.441	.117	.130	.138	.163	.419	-2.03
15	50.0	-1.143	-1.203	-1.263	-.856	-.586	-1.087	-1.194	-1.216	-.869	-.561	-1.139	-1.135	-1.189	-.888	-.561	5.26
16	55.0	-1.742	-1.824	-1.845	-1.845	-1.781	-1.631	-1.811	-1.789	-1.824	-1.742	-1.683	-1.750	-1.725	-1.755	-1.717	7.33
17	65.0	-.693	-.805	-.912	-.813	-.741	-.604	-.796	-.873	-.835	-.698	-.653	-.775	-.846	-.779	-.704	6.42
18	71.5		-.719	-.826	-.445	-.625		-.698	-.809	-.437	-.599		-.699	-.787	-.222	-.611	5.41
19	48.3	.355	.334		.711	.856	.424	.342		.689	.899	.389	.364		.632	.917	-5.52
20	55.0	.809	.479	.582	.882	1.122	.848	.492	.608	.886	1.134	.817	.486	.570	.879	1.080	-5.05
21	65.0	.685	.544	.561	.749	.950	.693	.548	.582	.741	.967	.657	.570	.570	.733	.921	-3.92
22	69.9	.634	.492	.501	.689	.830	.664	.544	.522	.681	.856	.628	.549	.507	.657	.825	-0.90
23	73.4	-.240	-.377	-.693	-.411	-.180	-.193	-.351	-.676	-.407	-.137	-.209	-.356	-.641	-.456	-.151	2.50
24	70.0	-.300	-.437	-.813	-.693	-.548	-.235	-.407	-.805	-.685	-.514	-.251	-.423	-.771	-.674	-.528	-0.95
25	72.6	-1.451	-1.575	-2.008	-1.884	-1.592	-1.366	-1.562	-2.042	-1.888	-1.562	-1.386	-1.566	-1.960	-1.884	-1.549	3.26
26	76.5	-1.323	-1.079	-1.747	-2.012	-1.712	-1.259	-1.019	-1.811	-2.008	-1.717	-1.265	-1.055	-1.759	-1.993	-1.675	4.48
27	84.9	-.291	-.342	-.308	-.270	-.368	-.253	-.355	-.300	-.253	-.338	-.268	-.339	-.264	-.209	-.348	3.01
28	93.3	-.223	-.223	-.060	-.026	-.223	-.184	-.253	-.039	-.021	-.176	-.184	-.230	-.025	.029	-.188	1.37
29	78.5	1.164	.715	.860	1.100	1.348	1.156	.715	.882	1.113	1.344	1.110	724	.846	1.093	1.307	-2.19
30	89.5	.796	.548	.578	.826	.925	.771	.561	.591	.818	.937	.754	.565	.582	.800	.896	-1.07

ORIFICE (PERCENT)	%	α = 9.95 D/L = .171 C_L = 30.621 T_c' = 20.80 q = .66 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.247	-.046		-1.475	-.137											0
2	1.5	.311	.708		-1.475	-1.690											2.23
3	5.0	-.037	.021		-1.164	-1.251											3.96
4	15.0	-.062	-.352		-.742	-.754											6.76
5	30.0	-.207	-.468		-.617	-.568											8.53
6	50.0	-.518	-.650		-.700	-.642											8.19
7	1.5	-.058	-.456		.974	1.301											-1.77
8	5.0	-.058	.079		.990	.940											-3.18
9	15.0	.033	.112		.497	.447											-5.14
10	30.0	.137	.191		.228	.439											-6.25
11	45.0	.261	.348	.402	.423	.443											-2.59
12	46.6	.182	.178	.211	.331	.617											1.75
13	50.0	-.099	-.220	-.191	-.029	.294											5.41
14	45.0	.128	.095	.141	.236	.435											-2.03
15	50.0	-1.160	-1.239	-1.193	-.907	-.617											5.26
16	55.0	-1.728	-1.810	-1.723	-1.819	-1.757											7.33
17	65.0	-.688	-.858	-.829	-.820	-.742											6.42
18	71.5		-.766	-.758	-.385	-.638											5.41
19	48.3	.311	.402		.655	1.048											-5.52
20	55.0	.820	.526	.609	.907	1.081											-5.05
21	65.0	.646	.580	.584	.775	.916											-3.92
22	69.9	.605	.551	.539	.713	.829											-0.90
23	73.4	-.220	-.431	-.613	-.418	-.170											2.50
24	70.0	-.265	-.510	-.713	-.663	-.551											-0.95
25	72.6	-1.326	-1.781	-1.897	-1.910	-1.554											3.26
26	76.5	-1.085	-1.442	-1.645	-2.026	-1.686											4.48
27	84.9	-.286	-.369	-.290	-.228	-.344											3.01
28	93.3	-.211	-.178	-.033	.012	-.178											1.37
29	78.5	1.069	.754	.849	1.127	1.309											-2.19
30	89.5	.721	.630	.592	.816	.874											-1.07

TABLE 69

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30}$ = 40 $\delta_{f,55}$ = 40 i_w = 20 N = 2710 rpm

ORIFICE (FIG. 6)	$\frac{x}{c}$	α = -8.35 D/L = -.076 C_L = 19.448 T_c' = 6.02 q = 1.17 lb/sq ft					α = -2.29 D/L = .028 C_L = 21.517 T_c' = 6.73 q = 1.08 lb/sq ft					α = 3.34 D/L = .124 C_L = 22.548 T_c' = 6.79 q = 1.04 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	2.332	.007		-3.166	-.900	2.251	.066		-3.457	-1.352	2.333	.045		-4.078	-1.685	0
2	1.5	.000	.480		-3.845	-3.845	-.058	.336		-4.115	-4.086	-.173	.181		-4.500	-4.515	2.23
3	5.0	-.487	-.214		-2.059	-2.421	-.570	-.314		-2.156	-2.624	-.700	-.429		-2.370	-2.822	3.96
4	15.0	-.576	-.812		-1.432	-1.572	-.636	-.892		-1.484	-1.674	-.722	-.948		-1.565	-1.776	6.76
5	30.0	-.849	-1.092		-1.387	-1.269	-.884	-1.118		-1.418	-1.316	-.956	-1.189		-1.490	-1.430	8.53
6	50.0	-1.528	-1.660		-1.786	-1.594	-1.542	-1.667		-1.769	-1.630	-1.791	-1.731		-1.866	-1.731	8.19
7	1.5	.753	.384		1.660	2.266	.782	.570		1.674	2.251	.858	.783		1.746	2.340	-1.77
8	5.0	.354	.450		1.660	1.697	.344	.504		1.689	1.681	.376	.609		1.813	1.776	-3.18
9	15.0	.406	.539		1.092	.886	.344	.504		1.067	.826	.369	.512		1.121	.895	-5.14
10	30.0	.649	.753		.782	.959	.563	.680		.738	.884	.587	.662		.768	.933	-6.25
11	45.0	.819	.841	.922	.908	1.107	.753	.753	.936	.892	1.075	.752	.722	.963	.948	1.159	-2.59
12	46.6	.915	.900	.915	1.063	1.432	.841	.826	.958	1.016	1.330	.843	.813	1.031	1.053	1.332	1.75
13	50.0	-.214	-.347	-.362	.133	.745	-.270	-.365	-.358	.102	.665	-.309	-.421	-.339	.075	.587	5.41
14	45.0	-.590	-.649	-.613	-.406	.184	-.629	-.694	-.607	-.431	.110	-.707	-.730	-.655	-.467	.090	-2.03
15	50.0	-4.044	-4.450	-4.199	-4.413	-4.221	-4.035	-4.437	-4.108	-4.342	-4.203	-4.244	-4.590	-4.184	-4.455	-4.379	5.26
16	55.0	-6.251	-5.860	-5.646	-5.830	-5.550	-6.250	-5.833	-5.614	-5.643	-5.526	-6.501	-6.005	-5.771	-5.749	-5.658	7.33
17	65.0	-1.948	-2.015	-2.118	-1.985	-1.897	-1.981	-2.010	-2.069	-1.966	-1.922	-2.077	-2.069	-2.137	-1.986	-1.994	6.42
18	71.5		-1.446	-1.587	-1.269	-1.476		-1.469	-1.528	-1.323	-1.520		-1.512	-1.595	-1.324	-1.595	5.41
19	48.3	.502	.738		1.041	1.144	.431	.687		1.023	1.082	.421	.722		1.136	1.068	-5.52
20	55.0	2.140	1.255	1.461	1.874	2.207	2.127	1.301	1.506	1.901	2.120	2.152	1.354	1.610	1.971	2.152	-5.05
21	65.0	1.535	1.380	1.321	1.505	1.889	1.528	1.374	1.330	1.484	1.827	1.573	1.430	1.385	1.580	1.896	-3.92
22	69.9	1.314	1.269	1.188	1.314	1.660	1.294	1.279	1.213	1.184	1.630	1.309	1.332	1.226	1.226	1.685	-0.90
23	73.4	-.664	-.672	-.967	-.856	-.524	-.680	-.716	-.877	-.797	-.548	-.737	-.752	-.941	-.805	-.602	2.50
24	70.0	-.583	-.701	-1.107	-1.269	-1.107	-.621	-.782	-1.023	-1.221	-1.104	-.640	-.828	-1.068	-1.234	-1.196	-0.95
25	72.6	-2.517	-2.155	-2.878	-3.203	-2.561	-2.617	-2.178	-2.756	-3.077	-2.566	-2.679	-2.227	-2.904	-3.145	-2.506	3.26
26	76.5	-2.125	-.959	-1.587	-3.129	-2.207	-2.244	-1.001	-1.323	-3.019	-2.164	-2.235	-.978	-1.467	-3.085	-2.099	4.48
27	84.9	-.435	-.546	-.686	-.458	-.627	-.475	-.563	-.680	-.519	-.651	-.497	-.632	-.737	-.527	-.685	3.01
28	93.3	-.391	-.428	-.421	-.074	-.487	-.395	-.446	-.526	-.146	-.519	-.421	-.467	-.542	-.203	-.549	1.37
29	78.5	1.993	1.542	1.513	1.786	2.155	1.937	1.615	1.535	1.791	2.091	2.039	1.716	1.595	1.911	2.144	-2.19
30	89.5	1.432	1.387	1.166	1.351	1.668	1.352	1.396	1.184	1.294	1.594	1.369	1.482	1.234	1.369	1.618	-1.07

ORIFICE (FIG. 6)	$\frac{x}{c}$	α = 9.29 D/L = .221 C_L = 20.838 T_c' = 6.72 q = 1.02 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	2.225	-.047		-3.326	-2.008											0
2	1.5	-.031	.256		-3.884	-4.411											2.23
3	5.0	-.636	-.465		-2.225	-2.884											3.96
4	15.0	-.729	-1.000		-1.582	-1.737											6.76
5	30.0	-.992	-1.256		-1.543	-1.442											8.53
6	50.0	-1.706	-1.791		-1.930	-1.783											8.19
7	1.5	.411	.364		1.512	2.217											-1.77
8	5.0	.093	.380		1.512	1.737											-3.18
9	15.0	.171	.372		.938	.868											-5.14
10	30.0	.434	.581		.659	.923											-6.25
11	45.0	.698	.682	.853	.814	1.062											-2.59
12	46.6	.814	.783	.876	1.000	1.426											1.75
13	50.0	-.341	-.473	-.403	-.016	.636											5.41
14	45.0	-.729	-.783	-.674	-.519	.062											-2.03
15	50.0	-4.264	-4.745	-4.357	-4.528	-4.411											5.26
16	55.0	-6.621	-6.187	-5.892	-5.838	-5.597											7.33
17	65.0	-2.140	-2.209	-2.209	-2.085	-2.031											6.42
18	71.5		-1.620	-1.636	-1.124	-1.628											5.41
19	48.3	.388	.612		.899	1.062											-5.52
20	55.0	2.070	1.264	1.349	1.837	2.217											-5.05
21	65.0	1.527	1.380	1.287	1.411	1.845											-3.92
22	69.9	1.310	1.271	1.186	1.233	1.636											-0.90
23	73.4	-.760	-.845	-1.062	-.861	-.605											2.50
24	70.0	-.643	-.954	-1.155	-1.271	-1.240											-0.95
25	72.6	-2.806	-2.496	-3.016	-3.148	-2.419											3.26
26	76.5	-2.473	-1.217	-1.806	-2.985	-2.078											4.48
27	84.9	-.597	-.705	-.729	-.566	-.674											3.01
28	93.3	-.512	-.519	-.465	-.225	-.504											1.37
29	78.5	1.992	1.651	1.512	1.744	2.124											-2.19
30	89.5	1.349	1.403	1.140	1.264	1.582											-1.07

TABLE 70

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 40$ $\delta_{f,55} = 40$ $i_w = 30$ N = 2810 rpm

ORIFICE	$\frac{x}{c}$	α = -7.01 D/L = -.093 C_L = 30.481 T_c' = 15.42 q = .60 lb/sq ft					α = -1.18 D/L = .013 C_L = 30.155 T_c' = 15.10 q = .62 lb/sq ft					α = 4.83 D/L = .111 C_L = 30.506 T_c' = 15.54 q = .61 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.723	.018		-.357	.478	1.814	.018		-.272	.508	1.778	.035		-.750	.295	0
2	1.5	.429	1.016		-1.790	-2.026	.381	1.082		-1.681	-2.110	.366	1.016		-1.837	-2.162	2.23
3	5.0	-.060	.278		-1.046	-1.427	-.042	.320		-1.034	-1.385	-.041	.159		-1.193	-1.453	3.96
4	15.0	-.115	-.399		-.822	-.937	-.091	-.387		-.804	-.877	-.106	-.425		-.868	-.921	6.76
5	30.0	-.266	-.629		-.810	-.738	-.302	-.611		-.804	-.683	-.295	-.644		-.833	-.715	8.53
6	50.0	-.804	-1.052		-1.113	-.931	-.846	-1.022		-1.064	-.877	-.833	-1.040		-1.081	-.927	8.19
7	1.5	.067	-.327		1.404	1.820	.079	-.411		1.373	1.856	.159	-.307		1.406	1.837	-1.77
8	5.0	-.054	.054		1.149	1.312	.067	.042		1.191	1.360	.035	.201		1.217	1.347	-3.18
9	15.0	.254	.453		.768	.738	.320	.429		.768	.762	.289	.455		.756	.768	-5.14
10	30.0	.532	.544		.544	.865	.550	.556		.580	.853	.538	.508		.561	.833	-6.25
11	45.0	.659	.732	.659	.623	.859	.647	.695	.653	.683	.901	.626	.626	.638	.650	.856	-2.59
12	46.6	.786	.726	.653	.859	1.391	.786	.726	.665	.937	1.385	.756	.662	.662	.945	1.323	1.75
13	50.0	.054	-.139	-.127	.206	.865	.048	-.103	-.115	.314	.883	.024	-.142	-.106	.295	.827	5.41
14	45.0	-.206	-.314	-.320	-.139	.423	-.230	-.296	-.290	-.006	.429	-.260	-.319	-.295	-.035	.360	-2.03
15	50.0	-2.546	-3.180	-3.126	-3.108	-2.866	-2.570	-3.114	-3.090	-3.023	-2.769	-2.587	-3.072	-2.965	-3.012	-2.847	5.26
16	55.0	-4.148	-4.208	-4.239	-4.329	-3.809	-4.166	-4.154	-4.226	-4.184	-3.658	-4.200	-4.093	-4.028	-4.135	-3.786	7.33
17	65.0	-1.246	-1.445	-1.518	-1.409	-1.209	-1.227	-1.421	-1.506	-1.360	-1.131	-1.240	-1.406	-1.429	-1.347	-1.181	6.42
18	71.5		-1.125	-1.233	-.713	-.943		-1.119	-1.240	-.786	-.901		-1.087	-1.175	-.821	-.981	5.41
19	48.3	.393	.629		.514	.895	.417	.593		.586	.931	.390	.567		.602	.963	-5.52
20	55.0	1.717	.822	1.088	1.572	2.019	1.651	.865	1.028	1.602	2.044	1.618	.792	1.057	1.589	1.985	-5.05
21	65.0	1.366	.943	.980	1.252	1.705	1.300	.986	.973	1.306	1.705	1.288	.880	.975	1.311	1.654	-3.92
22	69.9	1.119	.883	.901	1.209	1.518	1.131	.925	.877	1.258	1.536	1.087	.839	.886	1.240	1.500	-0.90
23	73.4	-.435	-.574	-.943	-.665	-.236	-.345	-.532	-.913	-.574	-.212	-.402	-.573	-.874	-.591	-.266	2.50
24	70.0	-.435	-.617	-1.088	-1.028	-.756	-.345	-.586	-1.046	-.973	-.726	-.402	-.626	-1.010	-.969	-.768	-0.95
25	72.6	-2.195	-2.092	-2.697	-2.697	-1.959	-1.935	-2.128	-2.642	-2.558	-1.893	-2.014	-2.073	-2.534	-2.516	-1.920	3.26
26	76.5	-2.225	-1.373	-2.334	-2.806	-2.013	-1.832	-1.469	-2.255	-2.654	-1.965	-1.961	-1.477	-2.162	-2.658	-1.955	4.48
27	84.9	-.272	-.357	-.284	-.314	-.363	-.212	-.320	-.302	-.296	-.327	-.266	-.307	-.284	-.284	-.348	3.01
28	93.3	-.157	-.115	.097	.133	-.169	-.109	-.085	.079	.115	-.103	-.136	-.071	.083	.106	-.154	1.37
29	78.5	1.802	1.088	1.227	1.548	1.977	1.753	1.137	1.197	1.590	1.983	1.701	1.028	1.181	1.595	1.920	-2.19
30	89.5	1.379	.943	.901	1.197	1.566	1.360	.937	.859	1.264	1.554	1.323	.862	.886	1.288	1.494	-1.07

ORIFICE	$\frac{x}{c}$	α = 11.01 D/L = .222 C_L = 29.186 T_c' = 15.14 q = .65 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.610	.000		-.923	.080											0
2	1.5	.487	.705		-2.252	-2.367											2.23
3	5.0	.023	.189		-1.192	-1.501											3.96
4	15.0	-.040	-.413		-.842	-.940											6.76
5	30.0	-.241	-.619		-.791	-.711											8.53
6	50.0	-.762	-.963		-1.031	-.928											8.19
7	1.5	.069	.034		1.404	1.851											-1.77
8	5.0	-.006	.178		1.180	1.301											-3.18
9	15.0	.264	.447		.762	.722											-5.14
10	30.0	.499	.521		.556	.791											-6.25
11	45.0	.596	.636	.625	.602	.825											-2.59
12	46.6	.716	.653	.625	.865	1.295											1.75
13	50.0	-.034	-.103	-.120	.269	.791											5.41
14	45.0	-.241	-.241	-.315	-.057	.332											-2.03
15	50.0	-2.447	-2.923	-2.923	-2.871	-2.779											5.26
16	55.0	-4.006	-3.897	-3.903	-3.931	-3.633											7.33
17	65.0	-1.169	-1.318	-1.427	-1.295	-1.169											6.42
18	71.5		-1.014	-1.163	-.814	-.951											5.41
19	48.3	.384	.556		.596	.905											-5.52
20	55.0	1.547	.791	1.043	1.524	1.914											-5.05
21	65.0	1.249	.900	.934	1.226	1.587											-3.92
22	69.9	1.054	.842	.854	1.180	1.433											-0.90
23	73.4	-.378	-.550	-.888	-.539	-.275											2.50
24	70.0	-.384	-.579	-1.026	-.877	-.756											-0.95
25	72.6	-1.931	-1.937	-2.533	-2.361	-1.857											3.26
26	76.5	-1.897	-1.329	-2.183	-2.453	-1.862											4.48
27	84.9	-.241	-.298	-.275	-.241	-.350											3.01
28	93.3	-.126	-.069	.109	.103	-.160											1.37
29	78.5	1.639	1.043	1.163	1.501	1.840											-2.19
30	89.5	1.272	.917	.900	1.192	1.421											-1.07

TABLE 71

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 40$ $i_w = 00$ $N = 2223$ rpm

ORIFICE	$\frac{x}{c}$	α = -8.64 D/L = -.127 C_L = 4.599 T_c' = .71 q = 3.88 lb/sq ft					α = -4.14 D/L = -.055 C_L = 5.421 T_c' = .71 q = 3.70 lb/sq ft					α = .81 D/L = .021 C_L = 6.528 T_c' = .63 q = 3.41 lb/sq ft					$\frac{z}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	2.216	.226		.246	1.128	2.200	.195		-1.896	-.076	2.110	.186		-6.143	-2.656	0
2	1.5	.021	.687		-1.559	-1.898	-.802	-.195		-3.728	-3.555	-1.526	-1.142		-6.193	-5.833	2.23
3	5.0	-.574	-.205		-1.313	-1.570	-1.051	-.661		-2.102	-2.297	-1.849	-1.514		-3.363	-3.785	3.96
4	15.0	-.739	-.964		-1.313	-1.354	-1.084	-1.279		-1.766	-1.831	-1.700	-1.862		-2.482	-2.718	6.76
5	30.0	-1.149	-1.405		-1.580	-1.457	-1.496	-1.669		-1.940	-1.810	-1.961	-2.147		-2.532	-2.482	8.53
6	50.0	-1.980	-2.103		-2.247	-2.113	-2.308	-2.406		-2.514	-2.460	-2.755	-2.879		-3.152	-3.090	8.19
7	1.5	.893	.421		1.549	2.072	1.485	.845		1.712	2.395	1.489	1.700		1.837	2.805	-1.77
8	5.0	.616	.657		1.426	1.508	.878	.878		1.680	1.788	.918	1.514		2.234	2.308	-3.18
9	15.0	.739	.882		1.159	.995	.813	1.019		1.387	1.138	.906	1.303		1.787	1.489	-5.14
10	30.0	.923	1.057		1.016	1.098	.964	1.192		1.214	1.225	1.154	1.378		1.514	1.514	-6.25
11	45.0	1.005	1.128	1.026	1.067	1.159	1.127	1.246	1.203	1.181	1.322	1.291	1.303	1.489	1.452	1.700	-2.59
12	46.6	1.139	1.087	.964	1.231	1.467	1.290	1.268	1.192	1.333	1.506	1.452	1.340	1.526	1.688	1.750	1.75
13	50.0	-.318	-.451	-.523	-.010	.677	-.347	-.499	-.542	-.054	.553	-.422	-.683	-.645	-.149	.509	5.41
14	45.0	-.810	-.800	-.862	-.533	-.103	-.813	-.910	-.986	-.650	-.293	-1.067	-1.142	-1.229	-.918	-.347	-2.03
15	50.0	-4.760	-5.335	-5.304	-5.519	-5.273	-5.310	-5.841	-5.711	-5.960	-5.884	-6.180	-6.987	-6.826	-7.099	-7.049	5.26
16	55.0	-6.935	-6.617	-6.761	-7.315	-6.822	-7.716	-7.261	-7.044	-7.727	-7.402	-8.761	-8.687	-8.389	-8.898	-8.637	7.33
17	65.0	-2.113	-2.124	-2.288	-2.339	-2.288	-2.319	-2.362	-2.449	-2.493	-2.503	-2.743	-2.879	-2.954	-2.879	-2.929	6.42
18	71.5		-1.395	-1.570		-1.744		-1.550	-1.636		-1.918		-2.010	-1.973		-2.283	5.41
19	48.3	.934	.995		1.149	1.518	1.192	1.149		1.452	1.712	1.080	1.365		1.762	2.010	-5.52
20	55.0	2.154	1.323	1.416	1.877	2.308	1.875	1.539	1.626	1.896	2.308	2.631	1.973	1.973	2.296	2.569	-5.05
21	65.0	1.765	1.518	1.334	1.539	1.990	1.756	1.636	1.615	1.626	2.048	2.184	2.085	1.961	1.973	2.383	-3.92
22	69.9	1.395	1.477	1.231	1.344	1.518	1.636	1.517	1.528	1.420	1.647	1.812	1.787	1.837	1.626	2.060	-0.90
23	73.4	.205	.328	.021	.082	.185	.293	.152	.065	.065	.141	.161	.087	.000	.124	.124	2.50
24	70.0	-1.416	-.964	-1.529	-1.785	-2.134	-1.398	-1.387	-1.333	-1.886	-2.243	-1.762	-2.023	-1.725	-2.110	-2.494	-0.95
25	72.6	-2.749	-1.600	-2.349	-3.047	-3.129	-2.677	-2.167	-2.102	-3.359	-2.850	-2.867	-2.767	-2.681	-4.145	-2.904	3.26
26	76.5	-1.272	-.503	-.626	-1.180	-1.580	-1.008	-.639	-.629	-1.409	-1.290	-1.365	-.794	-.819	-1.824	-1.291	4.48
27	84.9	-.482	-.369	-.492	-.667	-.492	-.553	-.477	-.520	-.639	-.574	-.683	-.645	-.707	-.819	-.670	3.01
28	93.3	-.421	-.349	-.441	-.451	-.380	-.444	-.412	-.433	-.433	-.499	-.621	-.521	-.621	-.695	-.571	1.37
29	78.5	2.216	1.744	1.590	1.836	2.329	2.308	1.777	1.821	1.886	2.341	2.631	2.408	2.234	2.283	2.594	-2.19
30	89.5	1.816	1.539	1.241	1.436	2.011	1.940	1.658	1.658	1.496	1.994	2.159	2.296	1.973	1.862	2.259	-1.07

ORIFICE	$\frac{x}{c}$	α = 10.15 D/L = .138 C_L = 7.385 T_c' = .70 q = 3.18 lb/sq ft					α = 14.71 D/L = .174 C_L = 7.894 T_c' = 1.25 q = 3.01 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{z}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.602	.177		-1.049	-6.382	.166	.029		-9.993	-6.623						0
2	1.5	-2.914	-3.633		-8.728	-8.703	-2.688	-3.954		-7.850	-7.792						2.23
3	5.0	-2.624	-2.863		-4.541	-5.222	-2.376	-2.766		-3.876	-4.685						3.96
4	15.0	-2.056	-2.384		-2.800	-3.305	-1.802	-2.075		-2.337	-2.805						6.76
5	30.0	-1.993	-2.119		-2.497	-2.750	-1.656	-1.704		-1.938	-2.152						8.53
6	50.0	-2.056	-1.917		-2.422	-3.002	-1.480	-1.334		-1.675	-2.152						8.19
7	1.5	1.678	2.573		1.715	2.851	.740	2.230		1.325	2.201						-1.77
8	5.0	.959	2.157		2.712	2.586	.526	1.802		2.152	2.075						-3.18
9	15.0	.782	1.425		2.031	1.526	.594	1.032		1.549	1.091						-5.14
10	30.0	1.009	1.287		1.589	1.400	.594	.730		1.110	.954						-6.25
11	45.0	1.337	1.198	1.501	1.577	1.741	1.032	1.023	1.149	1.169	1.256						-2.59
12	46.6	1.425	1.387	1.703	1.766	1.879	1.032	1.208	1.422	1.364	1.441						+1.75
13	50.0	.101	-.038	-.063	.315	.530	.195	.146	.185	.429	.565						5.41
14	45.0	-.265	-.605	-.593	-.467	-.025	.039	-.234	-.253	-.136	.088						-2.03
15	50.0	-3.670	-3.734	-4.162	-4.970	-6.622	-2.221	-2.415	-2.649	-3.107	-4.461						5.26
16	55.0	-2.535	-1.892	-3.532	-5.171	-7.682	-1.188	-.838	-1.519	-2.805	-4.675						7.33
17	65.0	-1.223	-1.173	-1.451	-1.438	-2.321	-.701	-.526	-.623	-.701	-1.344						6.42
18	71.5		-1.173	-1.337		-1.816		-.536	-.623		-1.071						5.41
19	48.3	1.173	1.589		1.816	1.615	.935	1.023		1.364	1.023						-5.52
20	55.0	2.422	2.447	1.968	2.674	2.674	1.393	2.104	1.656	2.162	2.143						-5.05
21	65.0	2.094	2.258	2.119	2.233	2.472	1.510	1.812	1.763	1.782	1.948						-3.92
22	69.9	1.993	1.980	2.018	1.842	2.321	1.441	1.529	1.685	1.519	1.831						-0.90
23	73.4	.605	.454	.202	.530	.303	.526	.653	.467	.623	.390						2.50
24	70.0	-.946	-1.526	-1.501	-1.438	-2.245	-.380	-.877	-.711	-.789	-1.441						-0.95
25	72.6	-1.728	-1.867	-1.968	-2.169	-3.116	-1.149	-1.217	-1.247	-1.198	-1.734						3.26
26	76.5	-1.665	-1.299	-1.186	-1.804	-2.371	-1.130	-.954	-.896	-1.110	-1.500						4.48
27	84.9	-.883	-.706	-.769	-.870	-.933	-.604	-.467	-.506	-.565	-.701						3.01
28	93.3	-.744	-.643	-.719	-.769	-.757	-.575	-.438	-.448	-.497	-.584						1.37
29	78.5	2.624	2.699	2.333	2.422	2.724	1.812	2.279	1.899	1.928	2.260						-2.19
30	89.5	1.867	2.624	2.094	2.043	2.397	1.237	1.967	1.675	1.558	1.812						-1.07

TABLE 72

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 40$ $i_w = 10$ N = 2510 rpm

ORIFICE	$\frac{x}{c}$	α = -11.49 D/L = -.201 C_L = 10.313 T_c' = 2.65 q = 1.93 lb/sq ft					α = -6.24 D/L = -.104 C_L = 12.044 T_c' = 2.76 q = 1.76 lb/sq ft					α = -.64 D/L = -.004 C_L = 13.989 T_c' = 2.92 q = 1.60 lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	2.462	.143		-1.898	.054	2.528	.152		-3.820	-1.074	2.599	.130		-5.539	-2.219	0
2	1.5	-.018	.591		-3.196	-3.205	-.371	.295		-4.476	-4.343	-.660	-.170		-5.649	-5.549	2.23
3	5.0	-.618	-.206		-1.826	-2.112	-.874	-.409		-2.395	-2.756	-1.170	-.790		-3.029	-3.419	3.96
4	15.0	-.662	-.904		-1.423	-1.504	-.893	-1.045		-1.730	-1.882	-1.140	-1.320		-2.009	-2.229	6.76
5	30.0	-.985	-1.235		-1.522	-1.343	-1.197	-1.416		-1.730	-1.606	-1.400	-1.590		-1.959	-1.900	8.53
6	50.0	-1.772	-1.844		-2.005	-1.763	-2.015	-2.015		-2.233	-2.072	-2.239	-2.249		-2.429	-2.319	8.19
7	1.5	1.003	.474		1.754	2.426	1.264	.732		1.891	2.633	1.330	1.200		1.979	2.779	-1.77
8	5.0	.528	.662		1.674	1.808	.627	.827		1.958	1.996	.700	1.050		2.189	2.119	-3.18
9	15.0	.600	.877		1.244	1.092	.637	.912		1.416	1.197	.600	.920		1.510	1.150	-5.14
10	30.0	.859	1.011		1.074	1.173	.922	1.131		1.169	1.302	.880	1.110		1.220	1.250	-6.25
11	45.0	1.038	1.137	1.047	1.182	1.280	1.131	1.216	1.226	1.293	1.426	1.060	1.120	1.130	1.300	1.510	-2.59
12	46.6	1.092	1.065	1.011	1.271	1.602	1.169	1.207	1.207	1.388	1.673	1.160	1.110	1.270	1.460	1.620	1.75
13	50.0	-.215	-.322	-.313	.116	.841	-.285	-.342	-.409	.076	.817	-.380	-.490	-.440	.070	.650	5.41
14	45.0	-.752	-.662	-.555	-.349	.125	-.808	-.722	-.732	-.494	.029	-.900	-.920	-.880	-.610	-.030	-2.03
15	50.0	-4.502	-4.950	-4.780	-4.959	-4.708	-4.951	-5.341	-5.132	-5.417	-5.294	-5.339	-5.789	-5.419	-5.769	-5.779	5.26
16	55.0	-6.803	-6.266	-6.185	-6.597	-6.194	-7.460	-6.843	-6.624	-7.090	-6.909	-8.008	-7.428	-7.138	-7.398	-7.458	7.33
17	65.0	-1.978	-2.005	-2.121	-2.104	-2.014	-2.252	-2.233	-2.347	-2.281	-2.357	-2.429	-2.459	-2.569	-2.369	-2.579	6.42
18	71.5		-1.325	-1.486		-1.513		-1.473	-1.635		-1.796		-1.700	-1.830		-2.039	5.41
19	48.3	.850	.967		1.137	1.584	.741	1.083		1.388	1.749	.680	1.110		1.450	1.690	-5.52
20	55.0	2.327	1.343	1.396	1.916	2.408	2.537	1.587	1.739	2.062	2.518	2.569	1.740	1.930	2.339	2.539	-5.05
21	65.0	1.853	1.504	1.352	1.875	2.130	1.958	1.720	1.616	1.730	2.243	1.920	1.830	1.720	1.850	2.319	-3.92
22	69.9	1.647	1.396	1.235	1.477	1.754	1.559	1.540	1.473	1.568	1.910	1.590	1.650	1.560	1.480	2.059	-0.90
23	73.4	.322	.304	.027	.134	.349	.257	.238	.000	.114	.295	.220	.190	.090	.160	.090	2.50
24	70.0	-1.173	-.931	-1.540	-1.701	-1.916	-1.540	-1.254	-1.530	-1.872	-2.167	-1.670	-1.550	-1.680	-1.989	-2.359	-0.95
25	72.6	-2.676	-1.683	-2.471	-3.079	-3.545	-3.117	-1.958	-2.595	-3.763	-3.706	-3.199	-2.269	-2.879	-4.039	-3.669	3.26
26	76.5	-.976	-.555	-.662	-1.226	-1.790	-1.369	-.570	-.675	-1.711	-1.673	-1.350	-.680	-.810	-1.910	-1.720	4.48
27	84.9	-.483	-.439	-.564	-.761	-.591	-.599	-.437	-.532	-.770	-.722	-.690	-.590	-.590	-.830	-.850	3.01
28	93.3	-.394	-.394	-.465	-.519	-.465	-.475	-.409	-.504	-.570	-.618	-.550	-.490	-.630	-.700	-.730	1.37
29	78.5	2.238	1.745	1.629	1.871	2.453	2.452	1.901	1.825	2.091	2.556	2.509	2.139	1.989	2.259	2.619	-2.19
30	89.5	1.880	1.629	1.253	1.549	2.112	1.948	1.806	1.492	1.625	2.157	1.930	2.049	1.670	1.750	2.219	-1.07

ORIFICE	$\frac{x}{c}$	α = 5.24 D/L = .100 C_L = 15.364 T_c' = 3.20 q = 1.49 lb/sq ft					α = 11.19 D/L = .190 C_L = 16.302 T_c' = 3.00 q = 1.39 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{y}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	2.551	.020		-6.572	-3.011	2.728	.023		-8.185	-4.426						0
2	1.5	-.880	-.680		-6.331	-6.271	-1.325	-1.415		-7.834	-7.755						2.23
3	5.0	-1.370	-1.120		-3.331	-3.851	-1.777	-1.574		-4.030	-4.789						3.96
4	15.0	-1.240	-1.490		-2.181	-2.401	-1.551	-1.800		-2.581	-2.966						6.76
5	30.0	-1.470	-1.710		-2.110	-1.980	-1.789	-2.026		-2.434	-2.389						8.53
6	50.0	-2.461	-2.291		-2.511	-2.451	-2.830	-2.785		-2.887	-2.887						8.19
7	1.5	1.400	1.590		2.050	2.831	1.608	2.094		2.355	3.181						-1.77
8	5.0	.660	1.190		2.271	2.181	.657	1.494		2.626	2.400						-3.18
9	15.0	.530	.850		1.490	1.080	.487	.872		1.608	1.109						-5.14
10	30.0	.790	.920		1.040	1.170	.747	.826		1.087	1.177						-6.25
11	45.0	1.010	.890	1.200	1.230	1.570	.974	.815	1.257	1.358	1.664						-2.59
12	46.6	1.100	.970	1.340	1.400	1.630	1.109	1.008	1.494	1.517	1.664						1.75
13	50.0	-.450	-.610	-.530	.020	.510	-.645	-.860	-.611	-.023	.487						5.41
14	45.0	-.950	-1.110	-1.000	-.670	.000	-1.177	-1.426	-1.223	-.940	-.079						-2.03
15	50.0	-5.441	-5.931	-5.401	-5.791	-5.821	-6.215	-6.792	-6.181	-6.487	-6.713						5.26
16	55.0	-8.152	-7.602	-7.252	-7.312	-7.322	-9.294	-8.626	-8.423	-8.094	-8.366						7.33
17	65.0	-2.501	-2.591	-2.621	-2.451	-2.691	-2.966	-2.966	-3.057	-2.887	-3.091						6.42
18	71.5		-1.790	-1.840		-2.131		-2.060	-2.140		-2.479						5.41
19	48.3	.730	1.020		1.350	1.310	.611	.974		1.404	1.370						-5.52
20	55.0	2.491	1.850	1.970	2.461	2.371	2.694	2.128	2.355	2.819	2.570						-5.05
21	65.0	1.850	1.850	1.790	1.910	2.341	1.947	2.106	2.049	2.219	2.592						-3.92
22	69.9	1.640	1.640	1.610	1.430	2.131	1.845	1.868	1.857	1.596	2.366						-0.90
23	73.4	.250	.120	.080	.150	.150	.226	.125	.102	.192	.079						2.50
24	70.0	-1.610	-1.730	-1.740	-2.090	-2.371	-1.800	-2.106	-2.049	-2.332	-2.819						-0.95
25	72.6	-3.101	-2.501	-2.981	-4.181	-3.261	-3.441	-2.943	-3.475	-4.732	-3.883						3.26
26	76.5	-1.290	-.770	-.860	-1.830	-1.590	-1.483	-.860	-1.030	-1.698	-2.094						4.48
27	84.9	-.690	-.650	-.750	-.890	-.870	-.826	-.792	-.894	-1.030	-1.053						3.01
28	93.3	-.560	-.560	-.720	-.830	-.730	-.725	-.702	-.860	-1.008	-.894						1.37
29	78.5	2.511	2.251	2.020	2.331	2.571	2.728	2.649	2.389	2.649	2.909						-2.19
30	89.5	1.810	2.141	1.740	1.700	2.171	1.891	2.445	1.981	1.857	2.389						-1.07

TABLE 73

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 40$ $i_w = 20$ N = 2700 rpm

ORIFICE (FIG.6)	x/c	α = -12.79 D/L = -.174 C_L = 18.371 T_c' = 6.21 q = 1.14 lb/sq ft					α = -8.74 D/L = -.103 C_L = 20.391 T_c' = 6.69 q = 1.05 lb/sq ft					α = -2.25 D/L = .013 C_L = 23.238 T_c' = 7.55 q = .95 lb/sq ft					$\frac{1}{t}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	2.350	.075		-2.312	-.425	2.365	.053		-2.817	-.738	2.380	.015		-3.088	-.987	0
2	1.5	.067	.649		-3.252	-3.319	.098	.640		-3.563	-3.630	.090	.587		-3.887	-3.947	2.23
3	5.0	-.425	-.052		-1.760	-2.133	-.482	-.121		-1.891	-2.335	-.475	-.166		-2.079	-2.440	3.96
4	15.0	-.462	-.738		-1.298	-1.417	-.512	-.761		-1.363	-1.521	-.595	-.806		-1.408	-1.567	6.76
5	30.0	-.768	-1.067		-1.290	-1.179	-.791	-1.062		-1.318	-1.235	-.798	-1.062		-1.371	-1.265	8.53
6	50.0	-1.492	-1.589		-1.708	-1.514	-1.506	-1.597		-1.710	-1.552	-1.529	-1.589		-1.740	-1.567	8.19
7	1.5	.813	.343		1.671	2.275	.783	.362		1.717	2.305	.783	.407		1.732	2.305	-1.77
8	5.0	.403	.530		1.619	1.701	.362	.512		1.672	1.702	.354	.467		1.717	1.710	-3.18
9	15.0	.522	.724		1.104	.992	.452	.716		1.137	.957	.452	.610		1.130	.942	-5.14
10	30.0	.738	.843		.843	1.067	.693	.889		.881	1.054	.738	.866		.889	1.009	-6.25
11	45.0	.880	1.029	.888	.910	1.149	.919	1.054	.972	.957	1.175	.911	.934	1.062	1.002	1.152	-2.59
12	46.6	.917	.962	.888	1.111	1.626	.994	.964	.926	1.077	1.559	1.002	.979	.964	1.145	1.582	1.75
13	50.0	-.134	-.224	-.209	.149	.880	-.151	-.241	-.233	.098	.821	-.173	-.264	-.286	.218	.829	5.41
14	45.0	-.597	-.492	-.410	-.269	.283	-.565	-.527	-.407	-.346	.271	-.535	-.535	-.490	-.256	.264	-2.03
15	50.0	-3.931	-4.252	-4.088	-4.296	-4.125	-3.939	-4.323	-4.097	-4.301	-4.158	-3.939	-4.331	-4.075	-4.286	-4.158	5.26
16	55.0	-6.124	-5.452	-5.452	-5.751	-5.408	-6.146	-5.544	-5.491	-5.717	-5.453	-6.154	-5.687	-5.566	-5.657	-5.461	7.33
17	65.0	-1.813	-1.805	-1.880	-1.865	-1.835	-1.838	-1.823	-1.913	-1.868	-1.845	-1.868	-1.898	-1.958	-1.860	-1.860	6.42
18	71.5		-1.223	-1.372		-1.432		-1.243	-1.363		-1.431		-1.288	-1.371		-1.461	5.41
19	48.3	.664	.798		.932	1.268	.618	.851		.942	1.235	.580	.821		1.047	1.243	-5.52
20	55.0	2.223	1.149	1.179	1.790	2.260	2.229	1.152	1.220	1.808	2.260	2.177	1.273	1.454	1.815	2.252	-5.05
21	65.0	1.716	1.313	1.156	1.432	2.006	1.717	1.363	1.220	1.424	1.958	1.657	1.408	1.356	1.537	1.966	-3.92
22	69.9	1.454	1.253	1.022	1.358	1.716	1.431	1.296	1.100	1.318	1.740	1.363	1.318	1.250	1.424	1.740	-0.90
23	73.4	.283	.261	-.015	.060	.298	.286	.233	.015	.068	.286	.241	.158	.068	.128	.301	2.50
24	70.0	-1.238	-.835	-1.454	-1.671	-1.820	-1.235	-.911	-1.439	-1.604	-1.830	-1.265	-1.122	-1.393	-1.634	-1.800	-0.95
25	72.6	-2.745	-1.529	-2.409	-3.252	-2.939	-2.742	-1.552	-2.403	-3.216	-3.088	-2.704	-1.845	-2.486	-3.284	-3.081	3.26
26	76.5	-1.111	-.530	-.664	-1.522	-1.447	-1.054	-.550	-.678	-1.537	-1.521	-1.077	-.595	-.685	-1.627	-1.499	4.48
27	84.9	-.507	-.425	-.604	-.731	-.634	-.520	-.377	-.610	-.731	-.700	-.565	-.437	-.603	-.716	-.700	3.01
28	93.3	-.403	-.388	-.477	-.448	-.477	-.459	-.399	-.497	-.467	-.512	-.490	-.437	-.520	-.512	-.557	1.37
29	78.5	2.185	1.574	1.447	1.768	2.335	2.169	1.597	1.514	1.785	2.305	2.132	1.604	1.619	1.860	2.275	-2.19
30	89.5	1.753	1.462	1.082	1.387	1.954	1.717	1.476	1.145	1.333	1.936	1.702	1.544	1.265	1.424	1.906	-1.07

ORIFICE (FIG.6)	x/c	α = 3.61 D/L = .114 C_L = 23.500 T_c' = 7.76 q = .92 lb/sq ft					α = 8.90 D/L = .189 C_L = 22.606 T_c' = 7.97 q = .87 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{1}{t}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	2.276	.060		-3.519	-1.161	2.267	-.054		-3.090	-1.413						0
2	1.5	.023	.422		-3.994	-3.919	-.054	.287		-3.750	-4.006						2.23
3	5.0	-.558	-.256		-2.163	-2.442	-.520	-.295		-2.081	-2.570						3.96
4	15.0	-.610	-.829		-1.500	-1.575	-.613	-.908		-1.475	-1.654						6.76
5	30.0	-.874	-1.108		-1.417	-1.274	-.870	-1.188		-1.429	-1.374						8.53
6	50.0	-1.598	-1.613		-1.778	-1.590	-1.553	-1.724		-1.801	-1.662						8.19
7	1.5	.814	.528		1.673	2.291	.621	.396		1.522	2.228						-1.77
8	5.0	.286	.528		1.718	1.635	.124	.365		1.568	1.708						-3.18
9	15.0	.354	.625		1.138	.927	.264	.497		.963	.932						-5.14
10	30.0	.633	.859		.867	1.040	.590	.730		.753	1.110						-6.25
11	45.0	.844	.927	1.025	.987	1.123	.784	.901	.885	.901	1.165						-2.59
12	46.6	.980	.972	1.025	1.130	1.477	.963	.932	.885	.986	1.592						+1.75
13	50.0	-.181	-.271	-.256	.151	.739	-.186	-.311	-.349	.078	.761						5.41
14	45.0	-.618	-.558	-.505	-.332	.166	-.629	-.598	-.575	-.388	.155						-2.03
15	50.0	-4.107	-4.378	-4.069	-4.280	-4.152	-4.045	-4.495	-4.270	-4.332	-4.247						5.26
16	55.0	-6.375	-5.712	-5.516	-5.592	-5.328	-6.289	-5.792	-5.730	-5.629	-5.388						7.33
17	65.0	-1.974	-1.884	-1.929	-1.861	-1.884	-1.972	-1.980	-2.042	-1.941	-1.972						6.42
18	71.5		-1.304	-1.364		-1.500		-1.382	-1.483		-1.553						5.41
19	48.3	.580	.844		1.078	1.213	.481	.761		.986	1.196						-5.52
20	55.0	2.118	1.296	1.507	1.892	2.155	2.104	1.227	1.335	1.840	2.259						-5.05
21	65.0	1.628	1.454	1.507	1.537	1.892	1.646	1.366	1.281	1.498	1.964						-3.92
22	69.9	1.469	1.349	1.296	1.356	1.673	1.374	1.258	1.219	1.374	1.700						-0.90
23	73.4	.211	.151	.083	.098	.256	.217	.124	-.016	.078	.248						2.50
24	70.0	-1.274	-1.168	-1.387	-1.658	-1.869	-1.359	-1.258	-1.498	-1.669	-1.941						-0.95
25	72.6	-2.977	-1.861	-2.434	-3.346	-2.879	-3.059	-2.042	-2.523	-3.261	-2.834						3.26
26	76.5	-1.289	-.550	-.723	-1.771	-1.552	-1.390	-.699	-.839	-1.607	-1.568						4.48
27	84.9	-.633	-.497	-.610	-.708	-.686	-.683	-.559	-.745	-.792	-.707						3.01
28	93.3	-.482	-.437	-.543	-.528	-.505	-.528	-.512	-.637	-.551	-.543						1.37
29	78.5	2.087	1.650	1.643	1.854	2.185	2.135	1.584	1.584	1.848	2.283						-2.19
30	89.5	1.635	1.575	1.326	1.394	1.824	1.662	1.429	1.227	1.444	1.856						-1.07

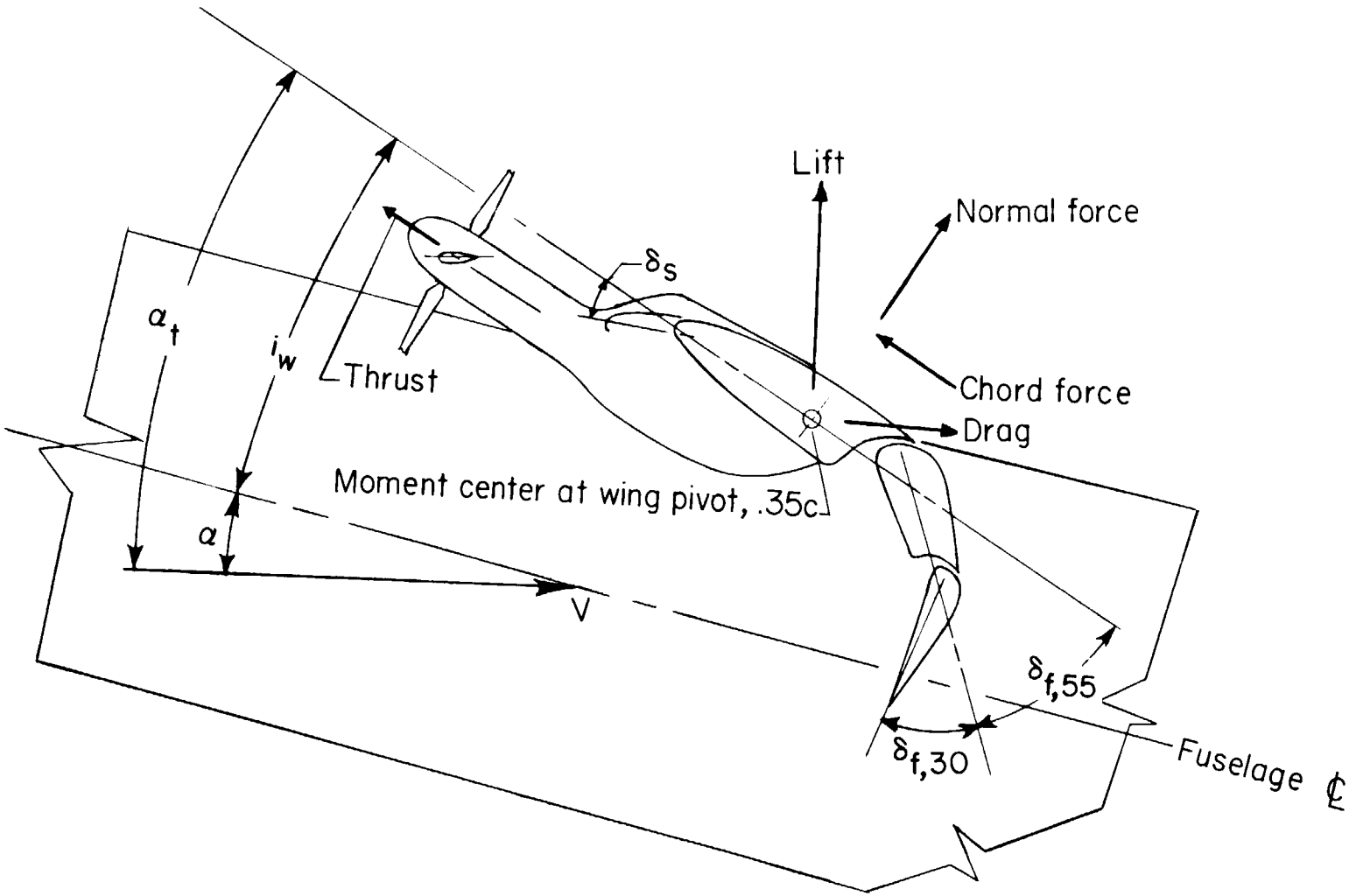
TABLE 74

PRESSURE COEFFICIENT C_p ON WING AND FLAPS AT

$\delta_{f,30} = 50$ $\delta_{f,55} = 40$ $i_w = 30$ N = 2833 rpm

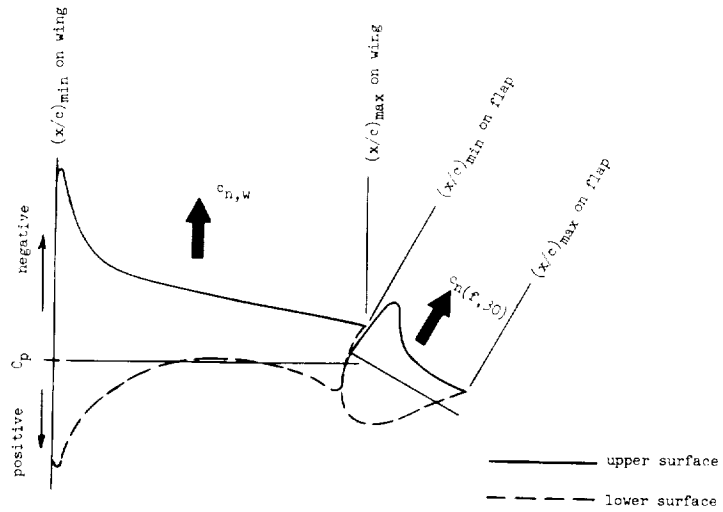
ORIFICE (FIG.6)	$\frac{x}{c}$	α = -10.01 D/L = -.132 C_L = 37.097 T_c' = 18.28 q = .48 lb/sq ft					α = -5.37 D/L = -.055 C_L = 39.825 T_c' = 19.58 q = .46 lb/sq ft					α = .83 D/L = .054 C_L = 39.350 T_c' = 19.33 q = .47 lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.665	.077		.269	.621	1.392	.038		-.340	.750	1.423	.018		-.667	.420	0
2	1.5	.474	1.159		-1.781	-2.203	.441	1.298		-1.594	-2.167	.438	.847		-2.174	-2.348	2.23
3	5.0	.045	.474		-.922	-1.454	.265	.290		-1.109	-1.355	.114	.216		-1.165	-1.453	3.96
4	15.0	.013	-.327		-.769	-.929	.158	-.416		-.876	-.863	.102	-.438		-.853	-.949	6.76
5	30.0	-.186	-.589		-.775	-.724	-.082	-.668		-.819	-.668	-.084	-.637		-.793	-.721	8.53
6	50.0	-.756	-.974		-1.050	-.942	-.680	-1.071		-1.115	-.876	-.673	-.997		-1.051	-.925	8.19
7	1.5	.032	-.314		1.531	2.063	.069	-.617		1.500	2.010	.168	-.048		1.489	1.928	-1.77
8	5.0	.038	.013		1.243	1.454	.195	.164		1.260	1.443	.132	.198		1.291	1.375	-3.18
9	15.0	.378	.519		.871	.839	.454	.529		.869	.857	.396	.486		.853	.805	-5.14
10	30.0	.653	.673		.698	.986	.743	.636		.680	.995	.655	.582		.649	.931	-6.25
11	45.0	.769	.846	.775	.807	1.025	.800	.788	.743	.750	1.071	.685	.745	.691	.727	.961	-2.59
12	46.6	.916	.846	.801	1.050	1.544	.920	.788	.762	1.008	1.550	.841	.745	.703	.997	1.417	1.75
13	50.0	.122	-.006	-.038	.397	.993	.164	-.050	-.032	.328	1.002	.078	-.072	-.096	.312	.889	5.41
14	45.0	-.160	-.205	-.237	.026	.461	-.120	-.239	-.252	-.025	.504	-.186	-.198	-.276	-.024	.408	-2.03
15	50.0	-2.556	-3.203	-3.267	-3.181	-2.966	-2.413	-3.257	-3.175	-3.194	-2.892	-2.438	-3.021	-3.105	-3.015	-2.943	5.26
16	55.0	-4.196	-4.285	-4.490	-4.420	-3.959	-3.982	-4.284	-4.391	-4.417	-3.856	-3.975	-3.969	-4.216	-4.204	-3.897	7.33
17	65.0	-1.211	-1.396	-1.505	-1.422	-1.243	-1.084	-1.399	-1.462	-1.411	-1.172	-1.075	-1.291	-1.441	-1.303	-1.219	6.42
18	71.5		-1.050	-1.172		-.980		-1.008	-1.159		-.907		-.931	-1.111		-.973	5.41
19	48.3	.532	.756		.724	1.095	.636	.693		.693	1.134	.528	.685		.661	1.069	-5.52
20	55.0	1.787	.999	1.211	1.768	2.210	1.701	.901	1.191	1.701	2.205	1.663	.859	1.117	1.681	2.072	-5.05
21	65.0	1.531	1.115	1.121	1.486	1.909	1.437	.989	1.084	1.411	1.915	1.405	.973	1.045	1.399	1.778	-3.92
22	69.9	1.281	1.031	.980	1.384	1.685	1.298	.989	1.033	1.317	1.701	1.225	.973	.967	1.291	1.597	-0.90
23	73.4	.384	.154	-.083	.102	.474	.422	.139	-.082	.113	.504	.372	.144	-.102	.120	.396	2.50
24	70.0	-.961	-1.070	-1.486	-1.550	-1.390	-.806	-1.014	-1.500	-1.474	-1.342	-.841	-.925	-1.441	-1.423	-1.381	-0.95
25	72.6	-2.537	-2.127	-2.812	-3.593	-2.620	-2.224	-1.777	-2.905	-3.314	-2.564	-2.246	-1.729	-2.684	-3.219	-2.456	3.26
26	76.5	-1.236	-.756	-1.057	-2.434	-1.621	-1.033	-.617	-1.203	-2.098	-1.575	-1.153	-.570	-1.099	-1.988	-1.507	4.48
27	84.9	-.391	-.512	-.666	-.461	-.525	-.328	-.460	-.624	-.554	-.435	-.336	-.432	-.564	-.486	-.456	3.01
28	93.3	-.256	-.307	-.301	.019	-.295	-.189	-.309	-.277	-.113	-.227	-.204	-.288	-.246	-.096	-.228	1.37
29	78.5	2.043	1.320	1.416	1.819	2.235	1.915	1.210	1.386	1.745	2.205	1.868	1.177	1.309	1.717	2.078	-2.19
30	89.5	1.710	1.070	1.076	1.505	1.896	1.613	1.046	1.046	1.411	1.865	1.537	1.009	1.003	1.435	1.754	-1.07

ORIFICE (FIG.6)	$\frac{x}{c}$	α = 5.98 D/L = .124 C_L = 35.812 T_c' = 18.32 q = .51 lb/sq ft					α = 11.26 D/L = .212 C_L = 31.816 T_c' = 16.81 q = .57 lb/sq ft					α = D/L = C_L = T_c' = q = lb/sq ft					$\frac{t}{c}$
		C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					C_p AT SPANWISE STATION					
		92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	92.0	110.0	118.0	126.0	140.5	
1	0	1.814	.006		-1.160	-.126	1.533	.000		-.893	.529						0
2	1.5	.559	.877		-1.971	-2.355	.452	.699		-2.044	-2.402						2.23
3	5.0	-.072	.066		-1.376	-1.706	.094	.082		-1.233	-1.345						3.96
4	15.0	-.162	-.481		-.949	-1.039	.023	-.470		-.875	-.822						6.76
5	30.0	-.348	-.709		-.841	-.805	-.211	-.687		-.822	-.617						8.53
6	50.0	-.859	-1.093		-1.057	-1.027	-.752	-1.057		-1.022	-.799						8.19
7	1.5	-.006	-.024		1.472	1.899	.200	-.012		1.474	1.938						-1.77
8	5.0	.048	.397		1.346	1.496	.135	.352		1.222	1.339						-3.18
9	15.0	.366	.553		.877	.859	.408	.523		.822	.793						-5.14
10	30.0	.619	.613		.673	.895	.670	.605		.628	.899						-6.25
11	45.0	.673	.721	.643	.721	.943	.675	.722	.623	.705	.946						-2.59
12	46.6	.793	.715	.667	.997	1.406	.805	.722	.658	.957	1.386						+1.75
13	50.0	.048	-.096	-.066	.306	.859	.082	-.076	-.076	.270	.887						5.41
14	45.0	-.228	-.276	-.270	-.036	.385	-.159	-.241	-.288	-.053	.429						-2.03
15	50.0	-2.626	-3.100	-2.920	-2.980	-2.974	-2.443	-3.025	-2.884	-2.890	-2.696						5.26
16	55.0	-4.320	-4.055	-3.947	-4.110	-3.869	-3.970	-3.941	-3.953	-4.006	-3.518						7.33
17	65.0	-1.244	-1.340	-1.352	-1.286	-1.268	-1.110	-1.286	-1.322	-1.233	-1.040						6.42
18	71.5		-.967	-1.075		-1.003		-.928	-1.051		-.863						5.41
19	48.3	.463	.649		.685	1.069	.529	.652		.981	1.057						-5.52
20	55.0	1.562	.793	1.039	1.652	2.049	1.492	.840	1.087	1.574	2.020						-5.05
21	65.0	1.382	.883	.955	1.370	1.742	1.333	.928	.922	1.316	1.739						-3.92
22	69.9	1.196	.859	.907	1.280	1.562	1.216	.905	.940	1.222	1.556						-0.90
23	73.4	.348	.078	-.126	.126	.397	.376	.117	-.123	.141	.446						2.50
24	70.0	-.889	-.997	-1.448	-1.882	-1.412	-.728	-.934	-1.445	-1.316	-1.245						-0.95
25	72.6	-2.307	-1.802	-2.788	-3.178	-2.433	-2.097	-1.721	-2.766	-3.025	-2.267						3.26
26	76.5	-.979	-.637	-1.418	-2.007	-1.514	-.940	-.611	-1.398	-1.844	-1.451						4.48
27	84.9	-.373	-.457	-.475	-.505	-.439	-.308	-.429	-.517	-.470	-.382						3.01
28	93.3	-.258	-.252	-.180	-.084	-.252	-.206	-.247	-.206	-.112	-.176						1.37
29	78.5	1.838	1.081	1.226	1.694	2.067	1.744	1.134	1.286	1.603	2.026						-2.19
30	89.5	1.520	.937	.955	1.430	1.724	1.433	1.004	1.040	1.351	1.727						-1.07

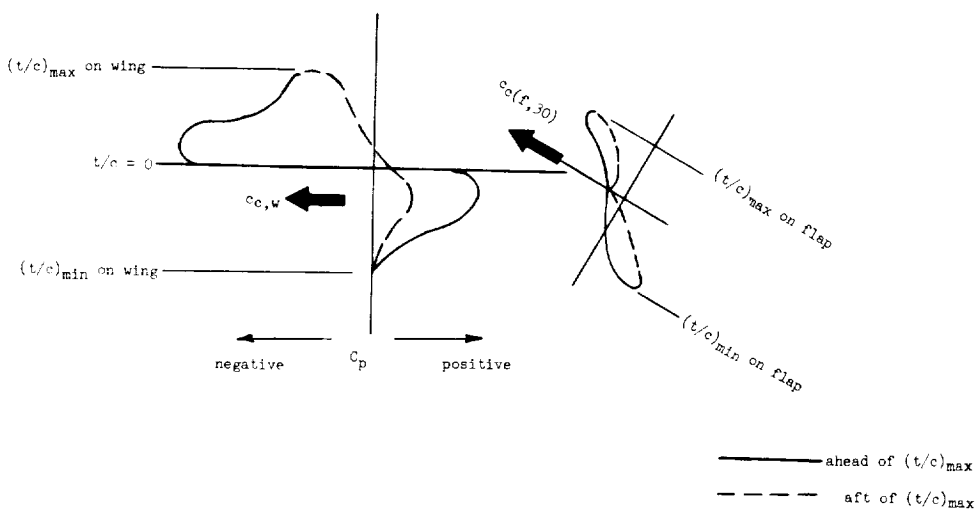


(a) Forces and angles.

Figure 1.- Conventions used to define positive senses of forces, angles, and pressures.



Pressure normal to wing and flap chord



Pressure parallel to wing and flap chord

(b) Chordwise pressure distributions.

Figure 1.- Concluded.

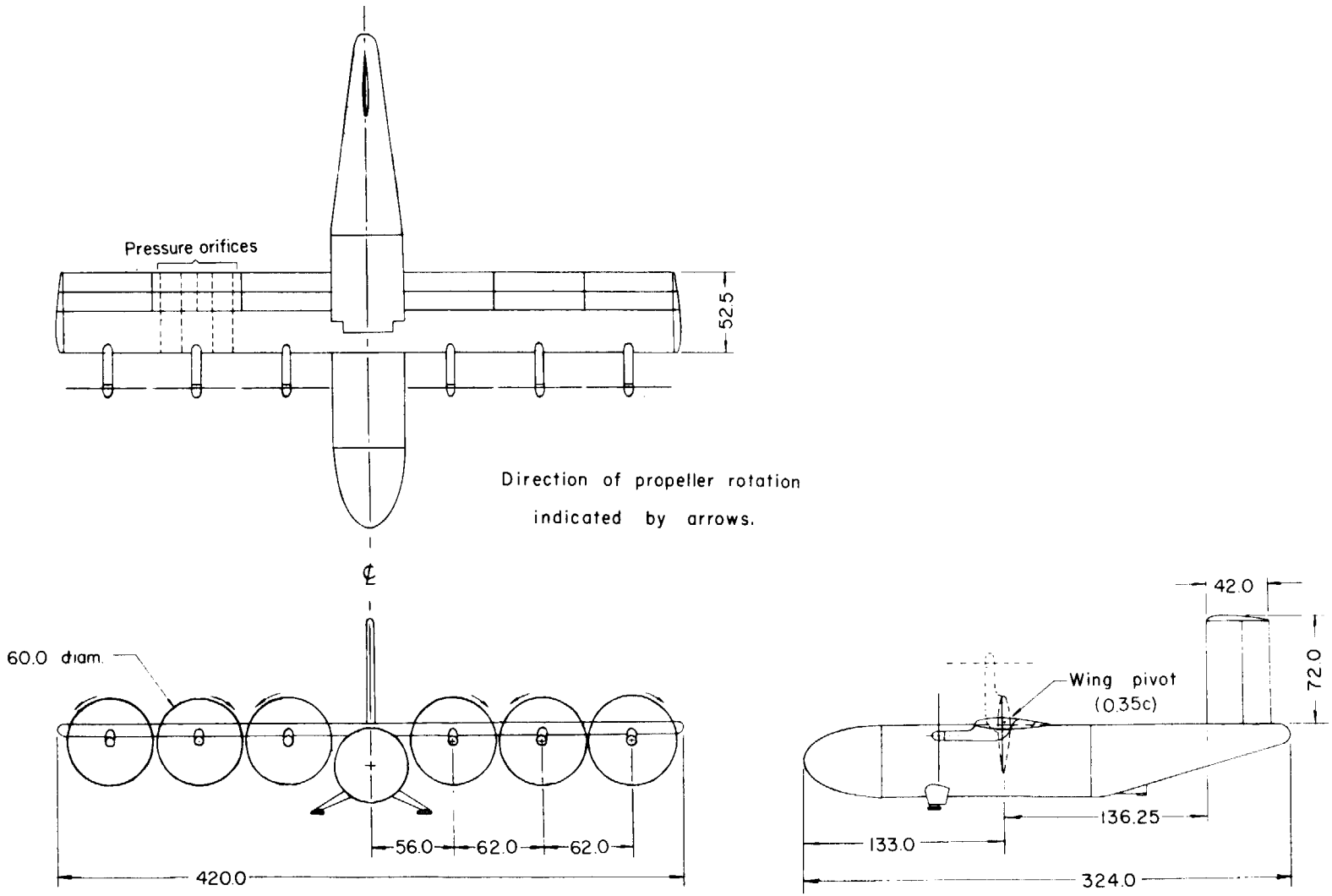
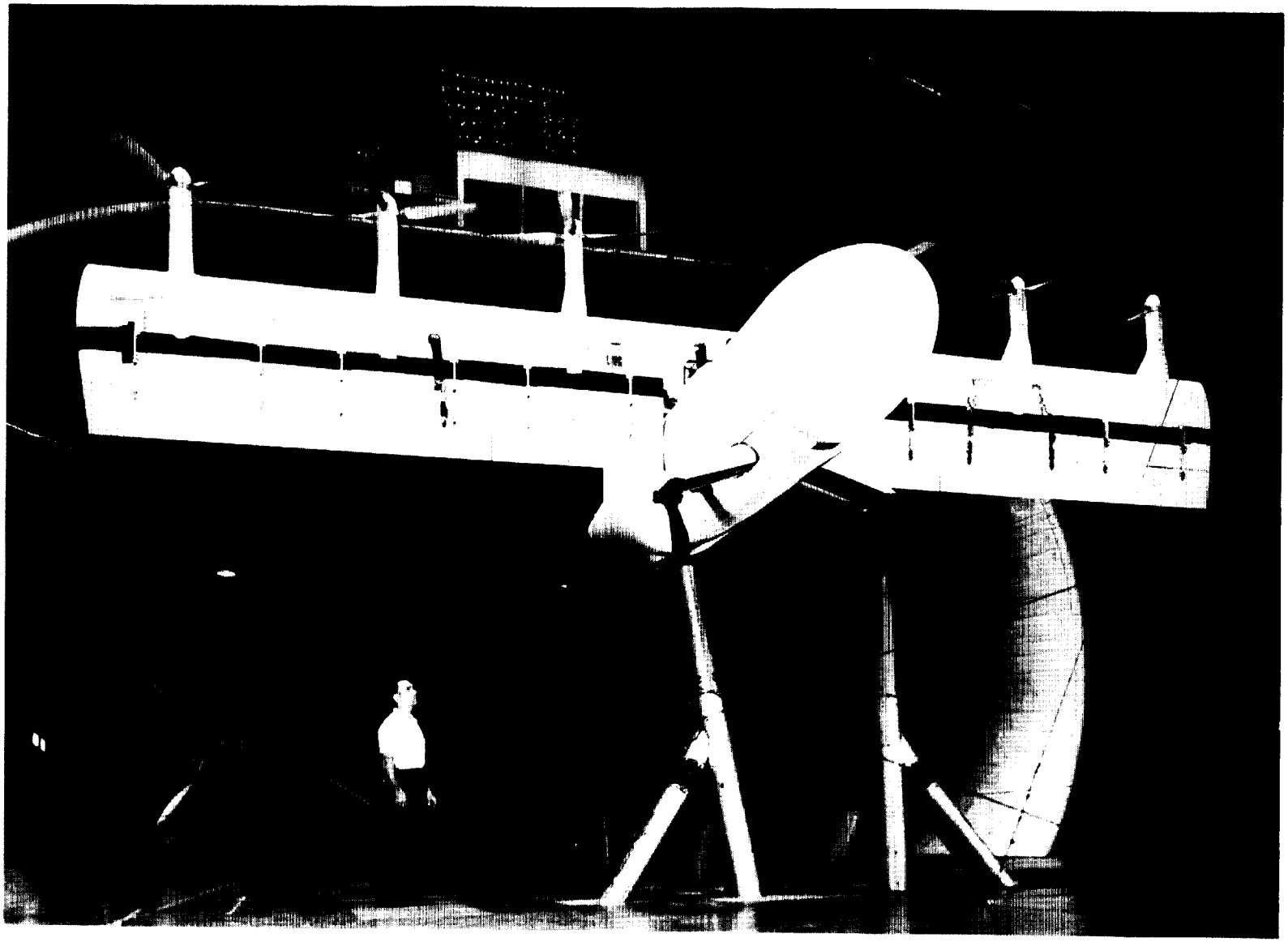


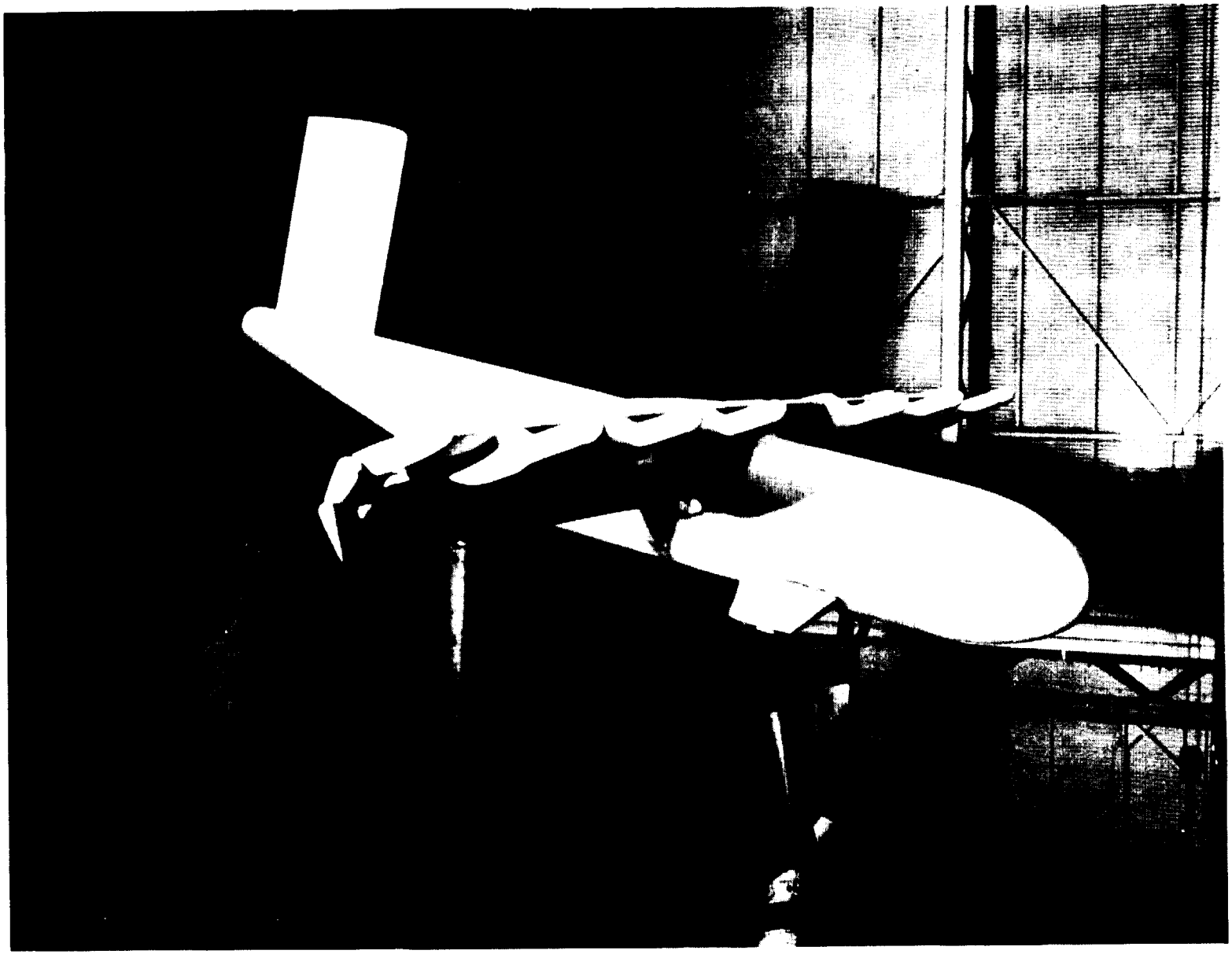
Figure 2.- Three-view sketch of model. All dimensions are in inches.



(a) Tilt-wing configuration.

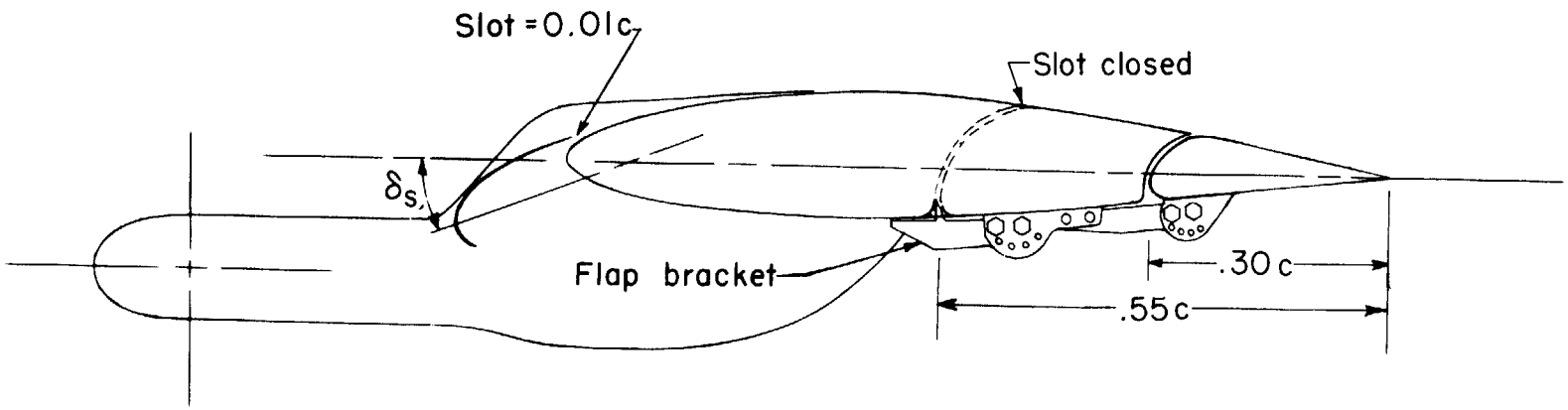
L-60-3155

Figure 3.- Model used in investigation.



(b) Deflected-slipstream configuration. L-62-3218

Figure 3.- Concluded.



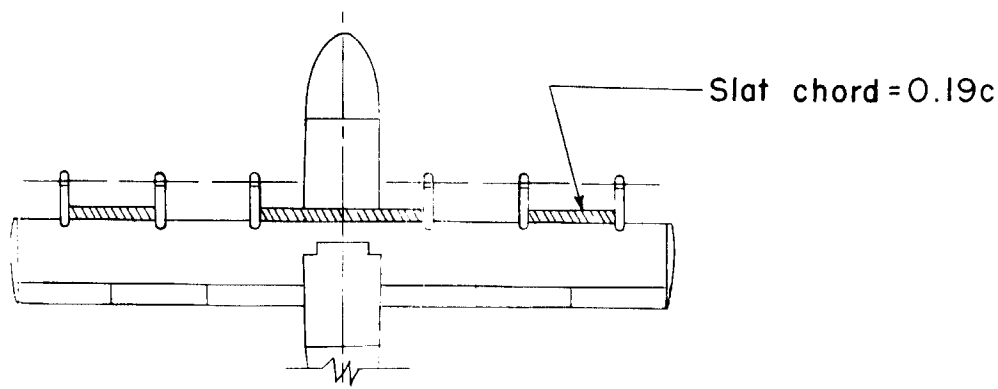


Figure 4.- Slat location and geometry.

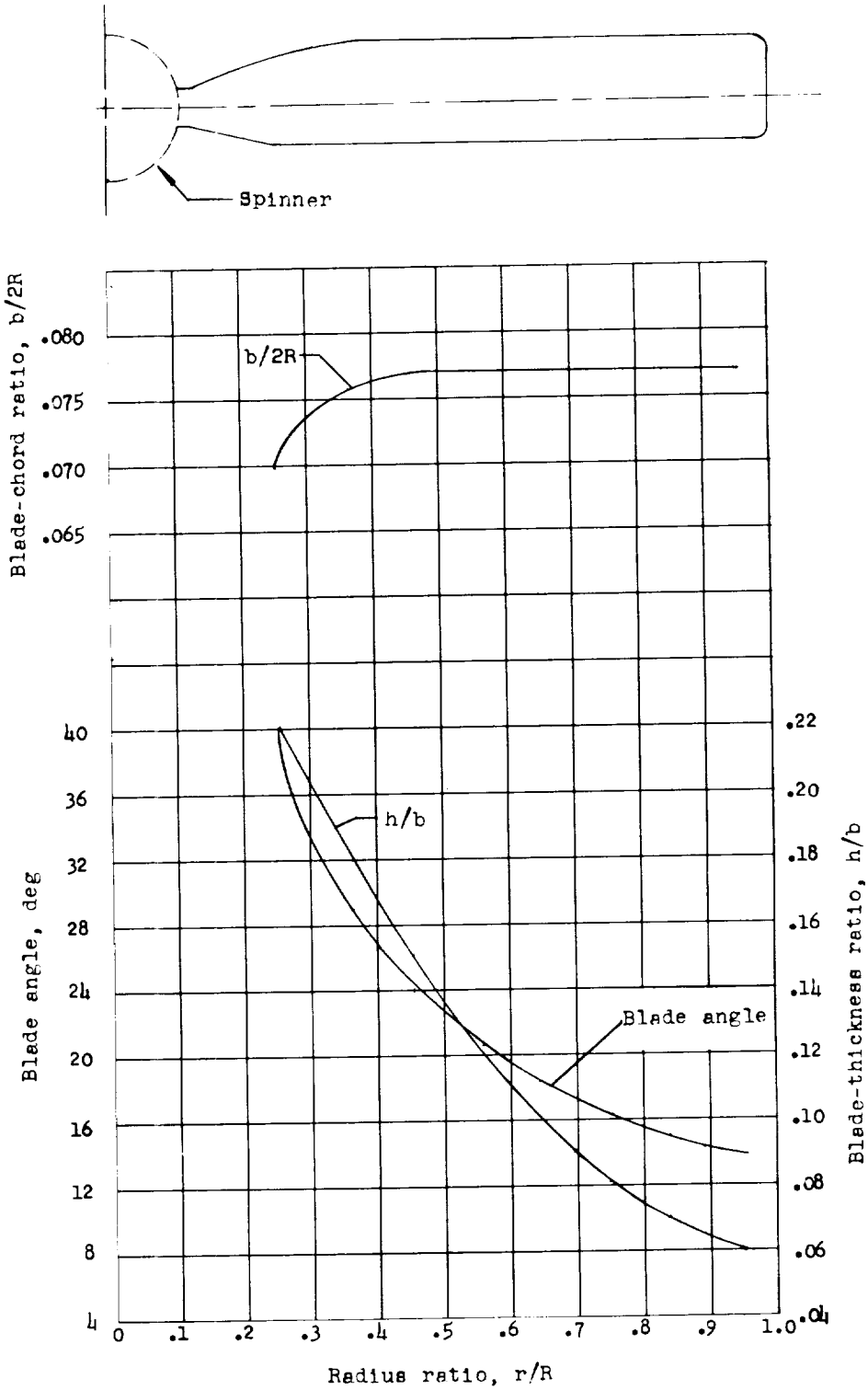
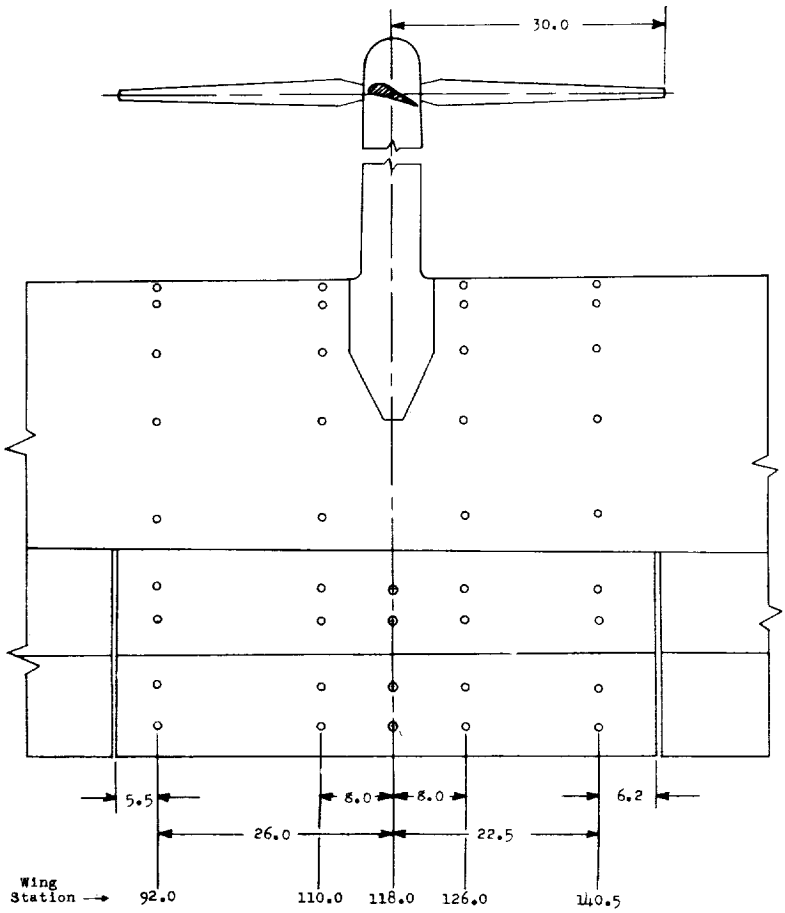


Figure 5.- Propeller-blade-form curves.



Orifice Locations		
Tube	Station, percent chord	Ordinate, percent chord
1	0	0
2	1.5	2.23
3	5.0	3.96
4	15.0	6.76
5	30.0	8.53
6	50.0	8.19
7	1.5	-1.77
8	5.0	-3.18
9	15.0	-5.14
10	30.0	-6.25
11	45.0	-2.59
12	46.6	1.75
13	50.0	5.41
14	45.0	-2.03
15	50.0	5.26
16	55.0	7.33
17	65.0	6.42
18	71.5	5.41
19	48.3	-5.52
20	55.0	-5.05
21	65.0	-3.92
22	69.9	-0.90
23	73.4	2.50
24	70.0	-0.95
25	72.6	3.26
26	76.5	4.48
27	84.9	3.01
28	93.3	1.37
29	78.5	-2.19
30	89.5	-1.07

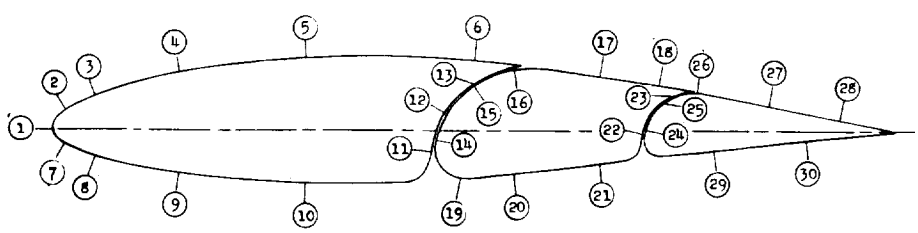
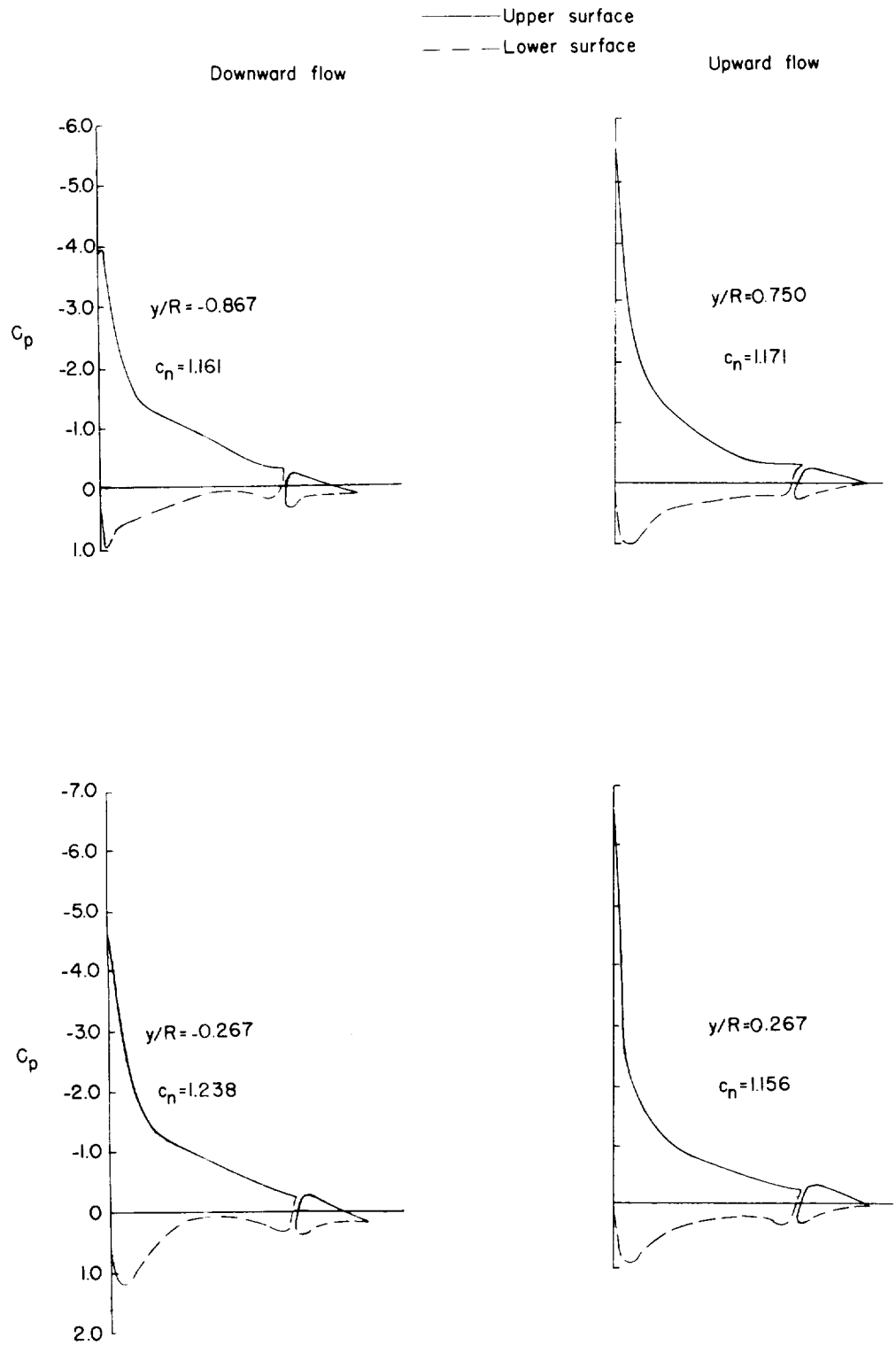
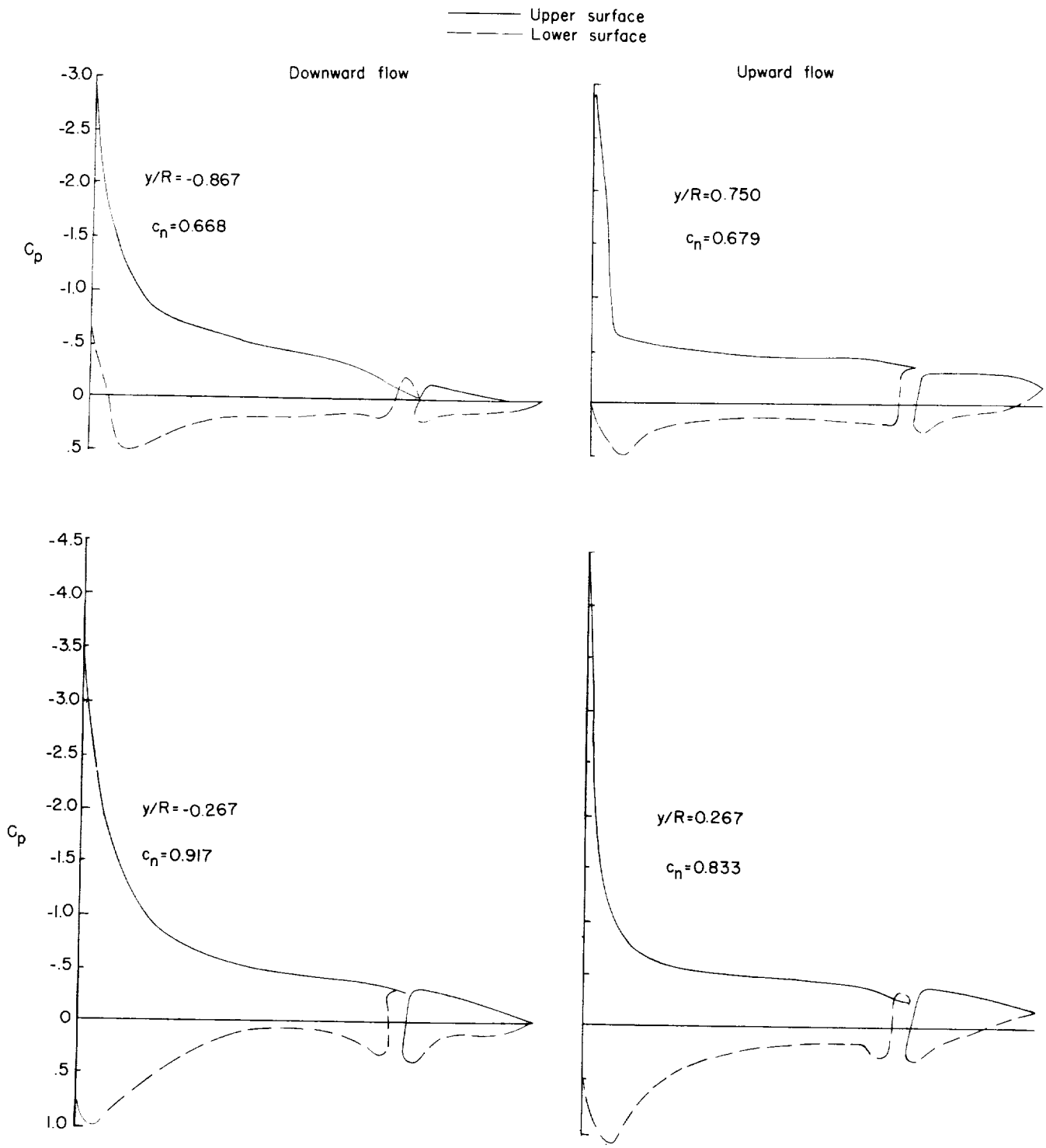


Figure 6.- Orifice locations on wing and flaps. All dimensions are in inches.



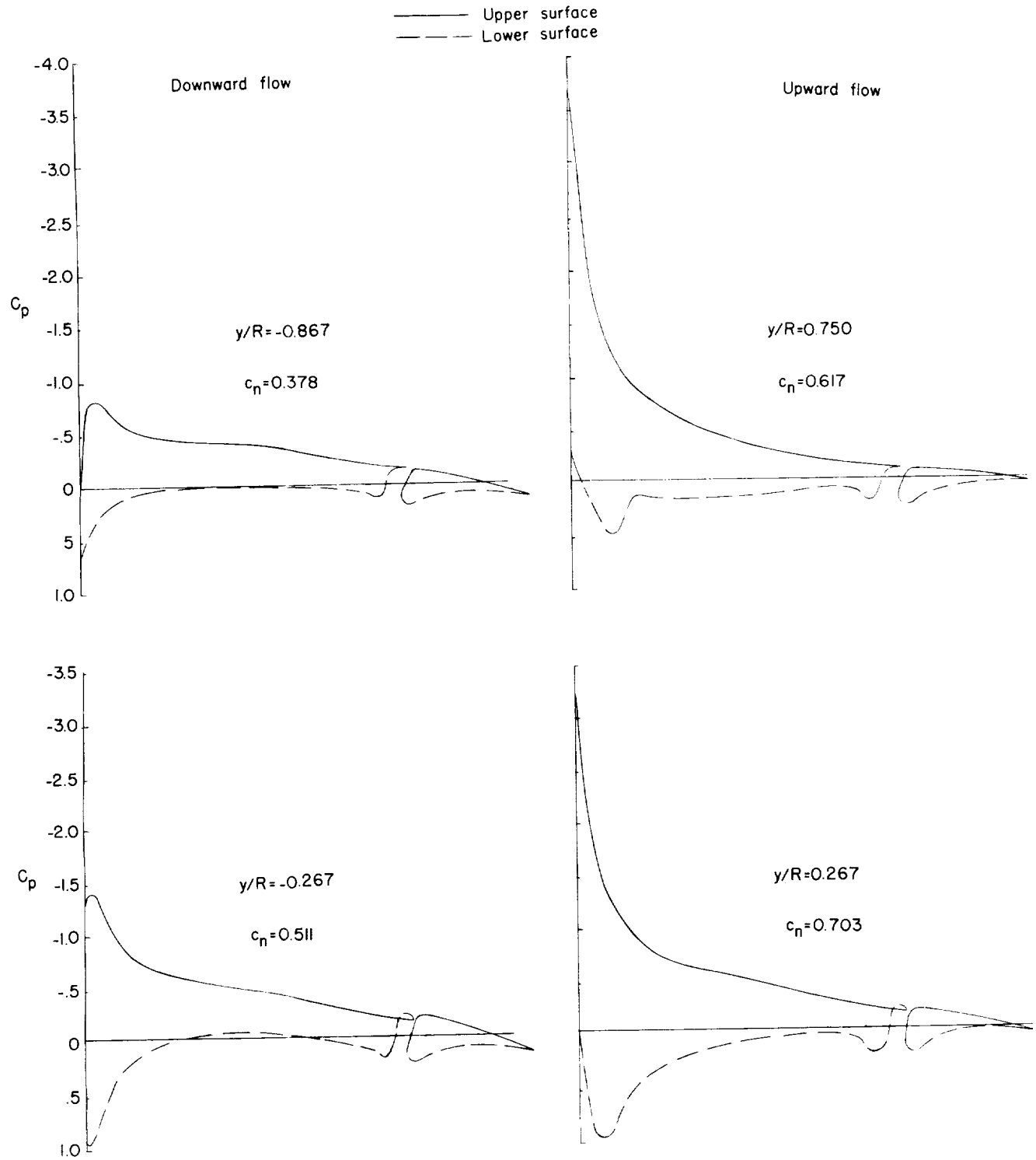
(a) $i_w = 20^\circ$; $\alpha = -0.63^\circ$; $D/L = 0.005$.

Figure 7.- Chordwise distribution of pressure normal to wing and flap chord. Tilt-wing configuration; $\delta_{f,55} = 0^\circ$; $\delta_{f,30} = 0^\circ$.



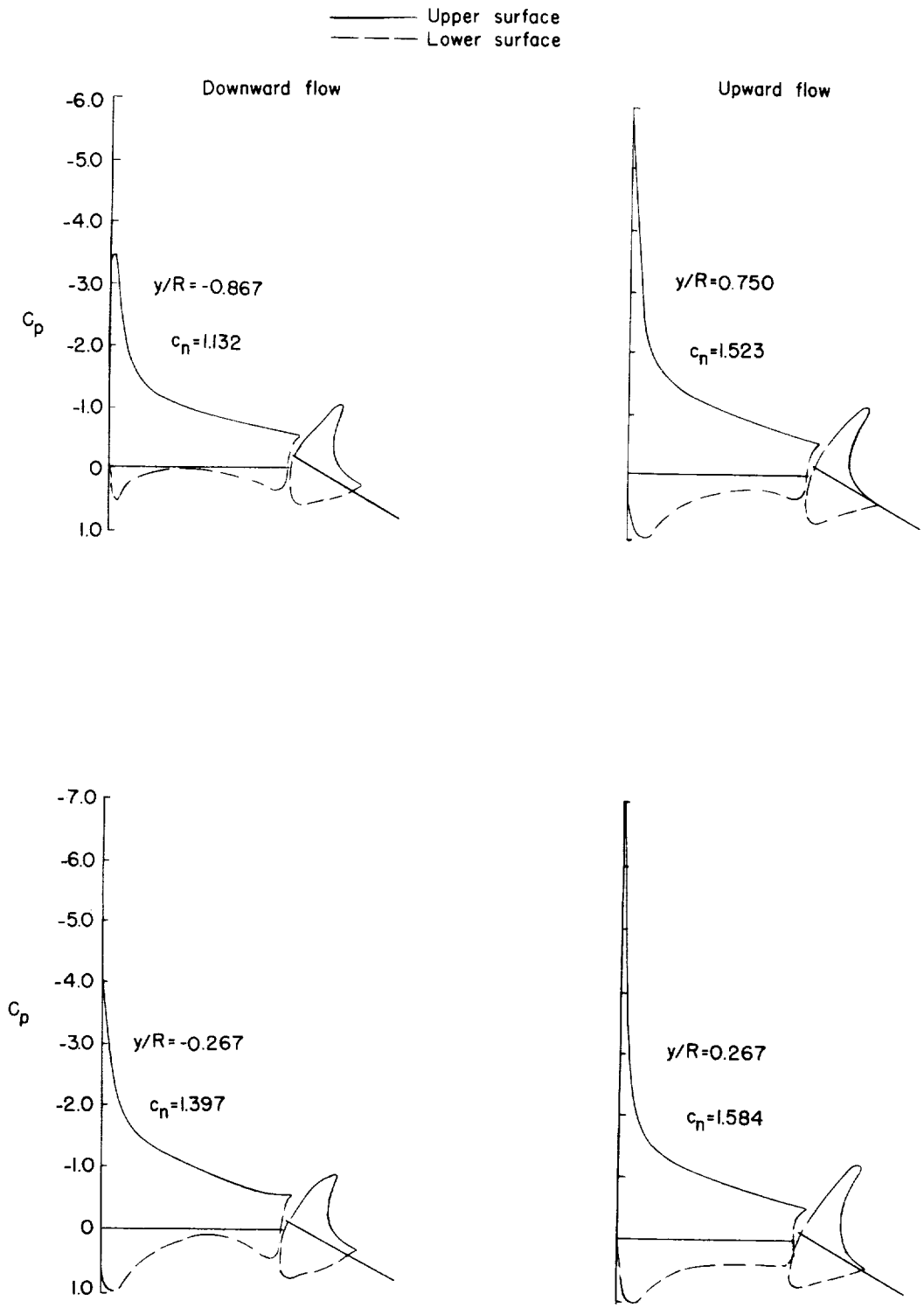
(b) $i_w = 40^\circ$; $\alpha = 0.43^\circ$; $D/L = 0.006$.

Figure 7.- Continued.



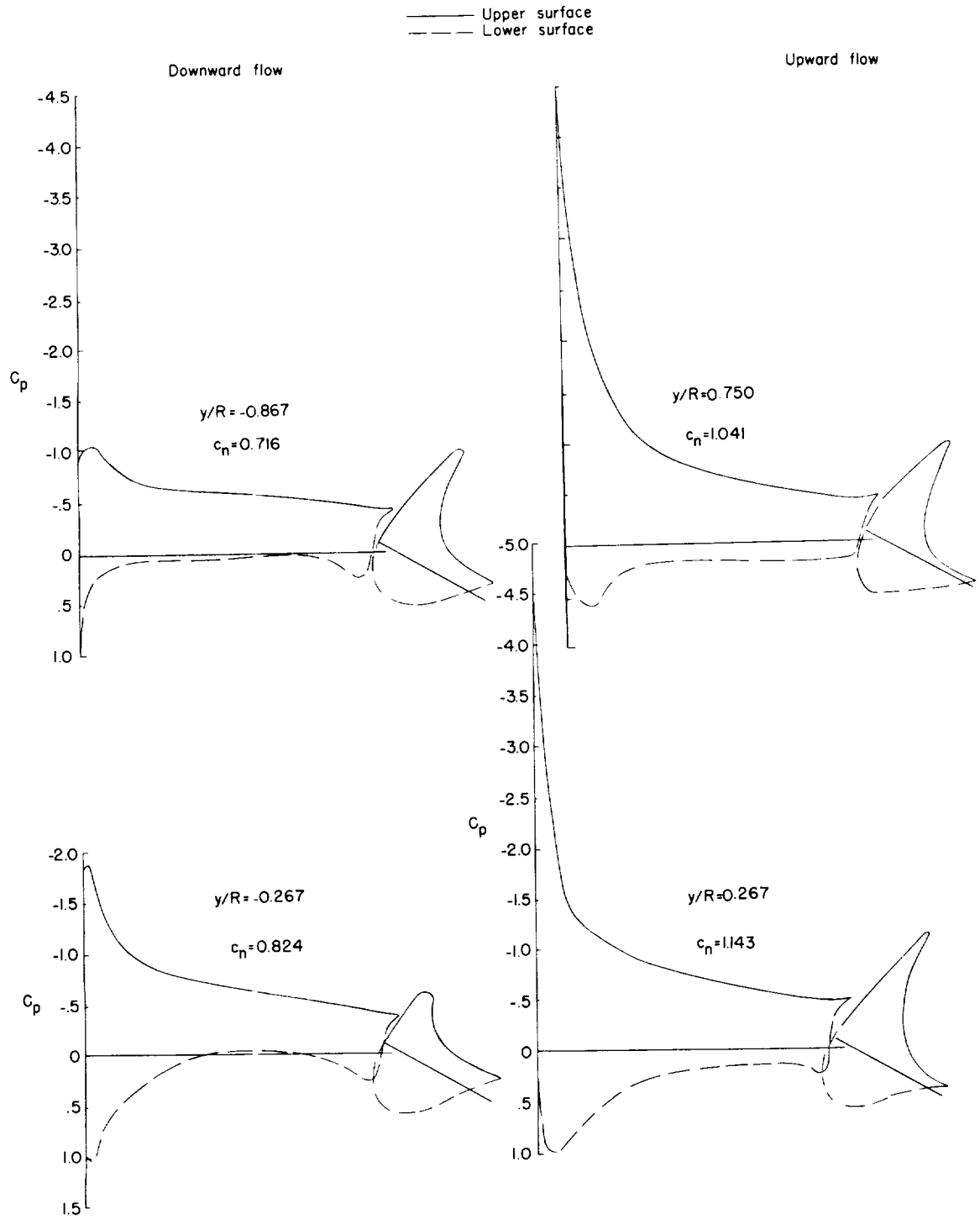
(c) $i_w = 60^\circ$; $\alpha = -6.55^\circ$; D/L = -0.030.

Figure 7.- Concluded.



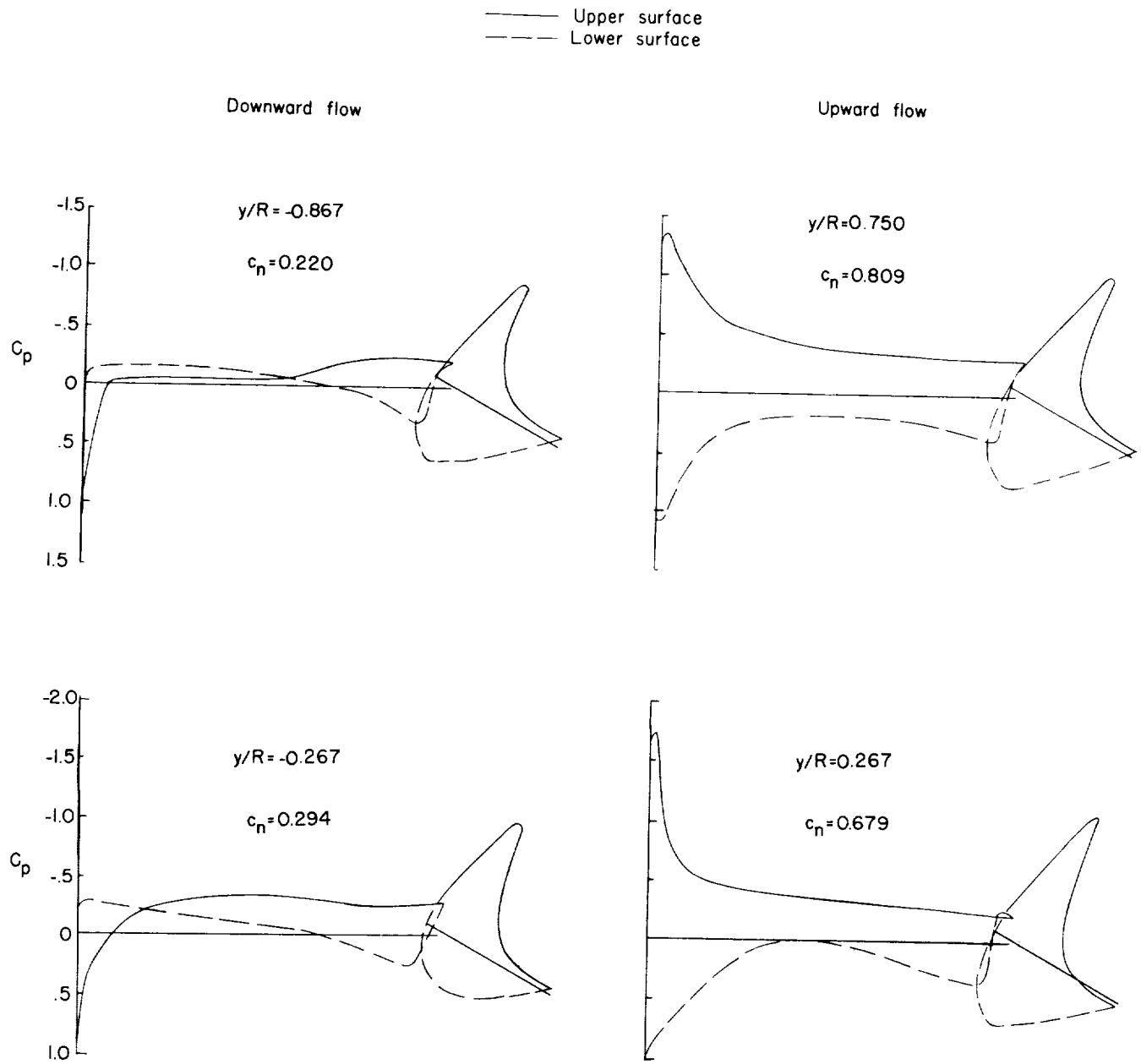
(a) $i_w = 20^\circ$; $\alpha = 0.21^\circ$; $D/L = 0.005$.

Figure 8.- Chordwise distribution of pressure normal to wing and flap chord. Tilt-wing configuration; $\delta_{f,55} = 0^\circ$; $\delta_{f,30} = 30^\circ$.



(b) $i_w = 40^\circ$; $\alpha = -0.8^\circ$; $D/L = 0.022$.

Figure 8.- Continued.



(c) $i_w = 60^\circ$; $\alpha = -0.13^\circ$; $D/L = 0.001$.

Figure 8.- Concluded.

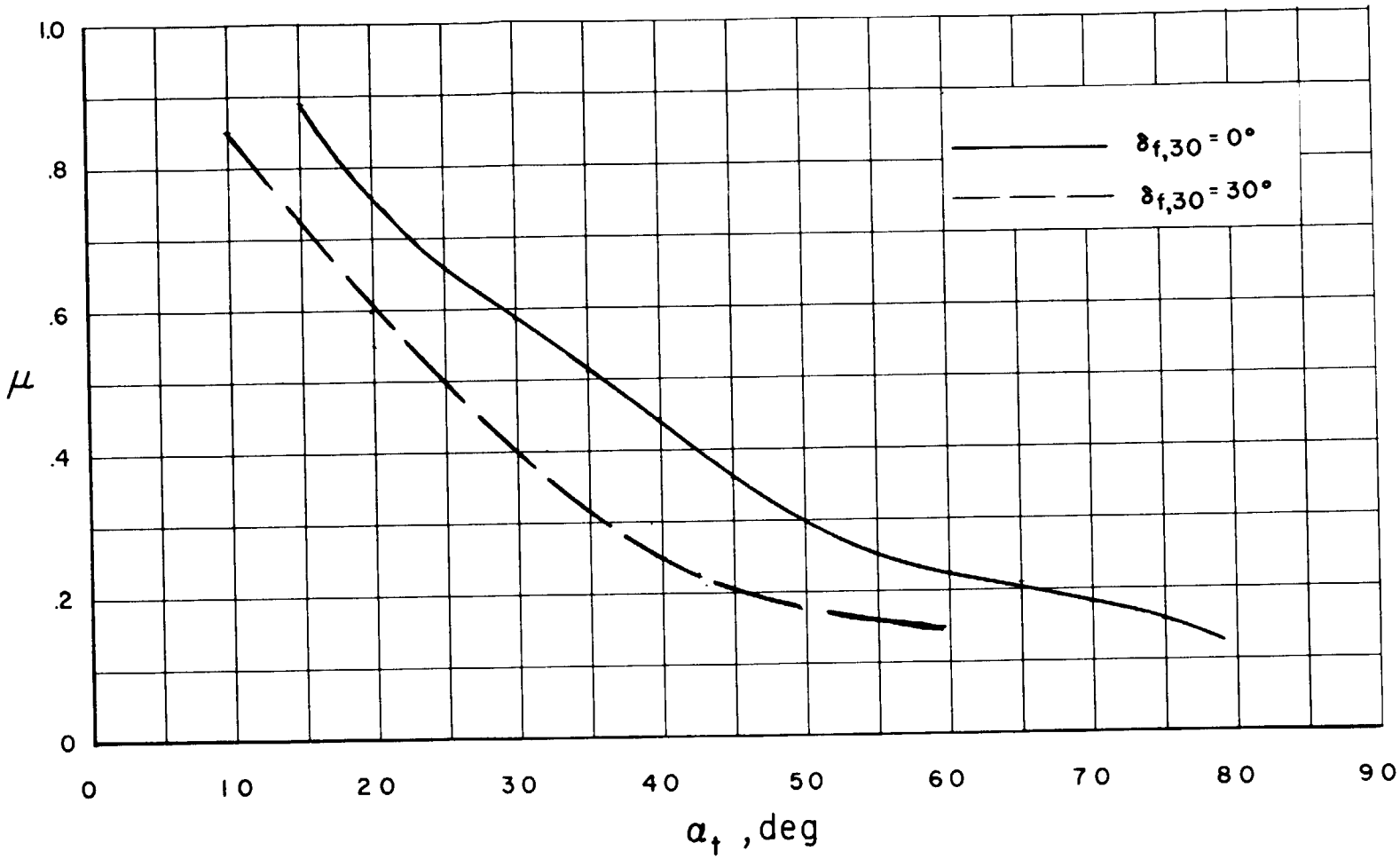
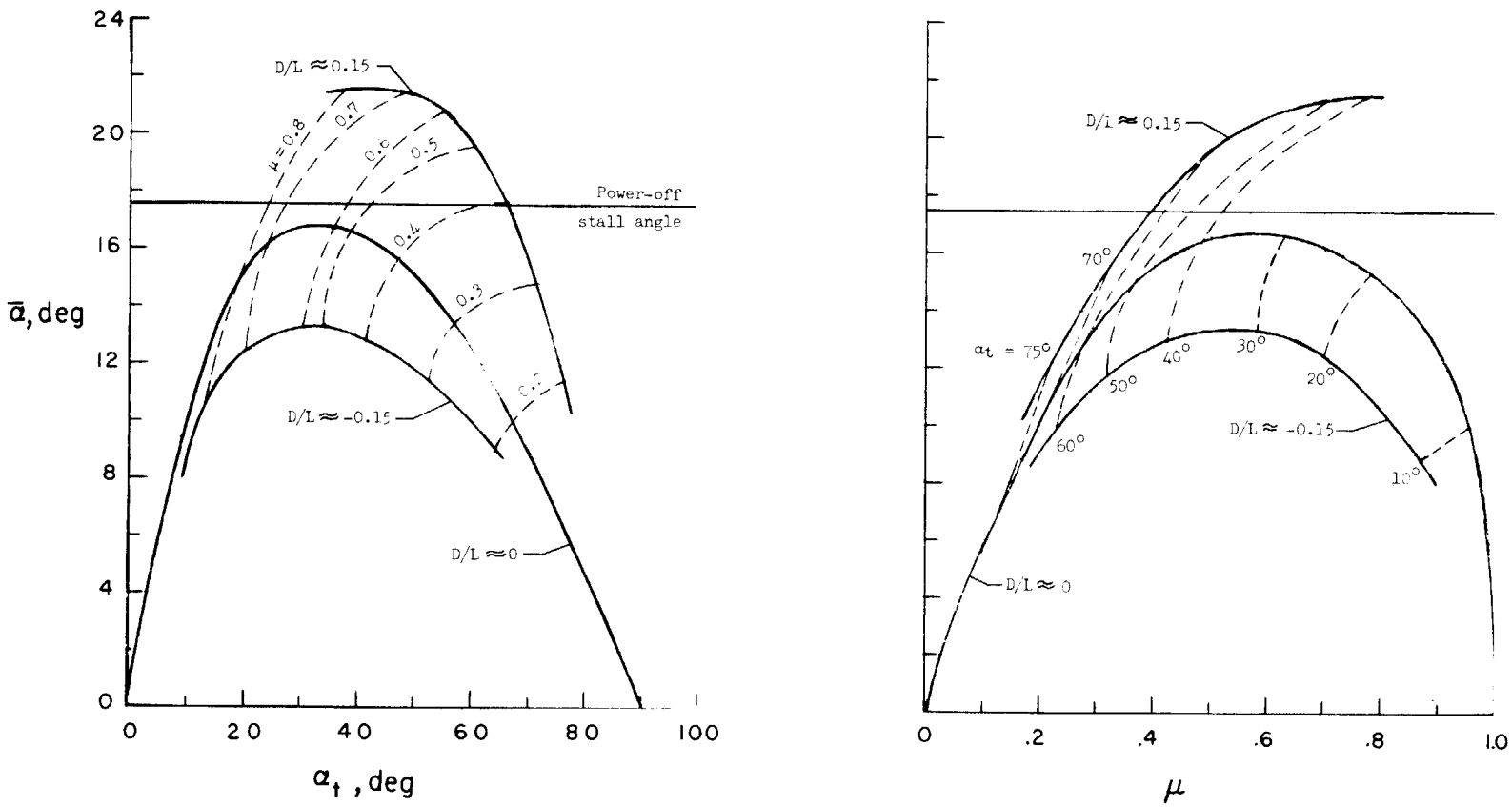


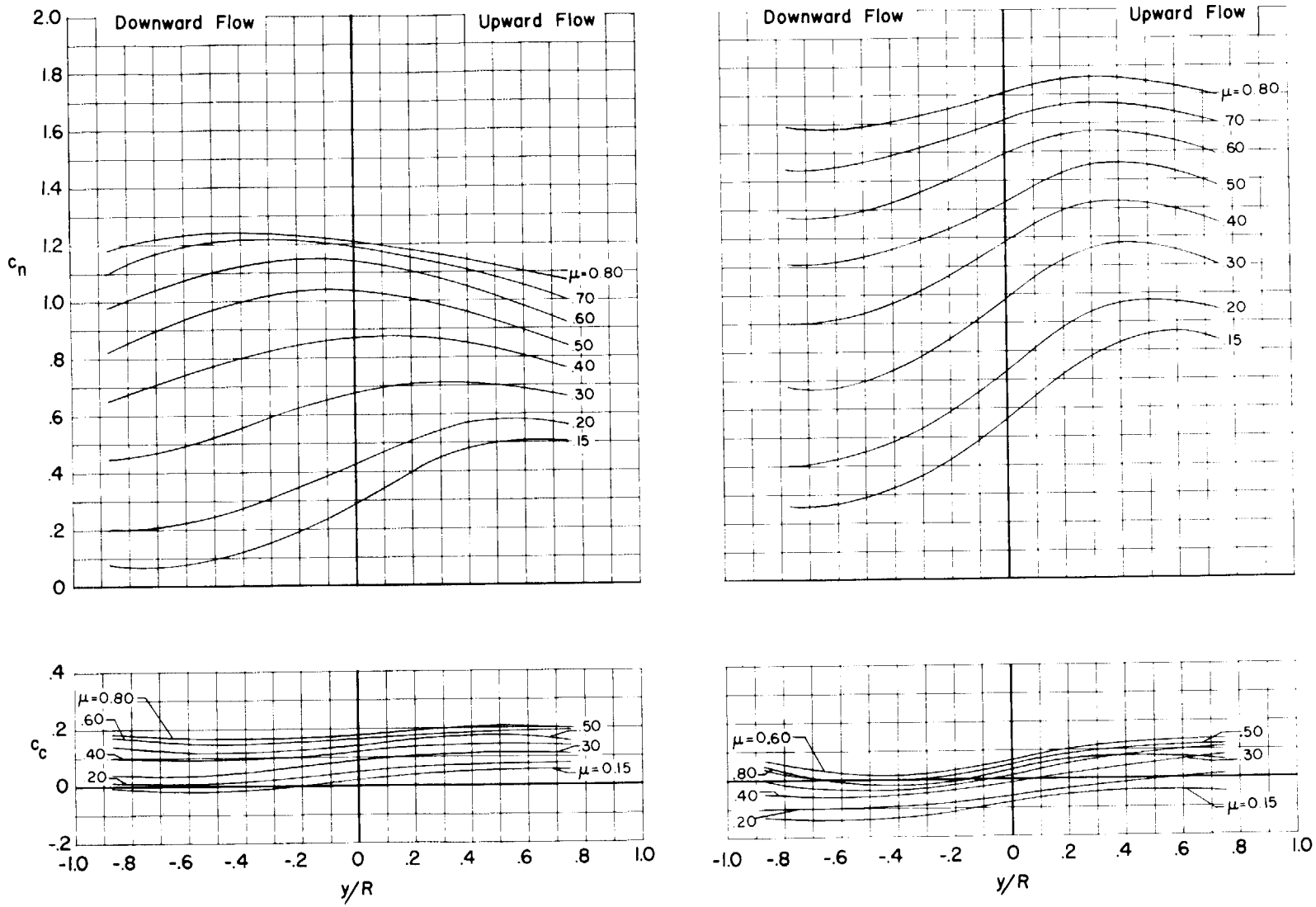
Figure 9.- Variation of velocity ratio with total wing angle. $D/L \approx 0$; $\delta_{f,55} = 0^{\circ}$.



(a) Variation with total wing angle.

(b) Variation with velocity ratio.

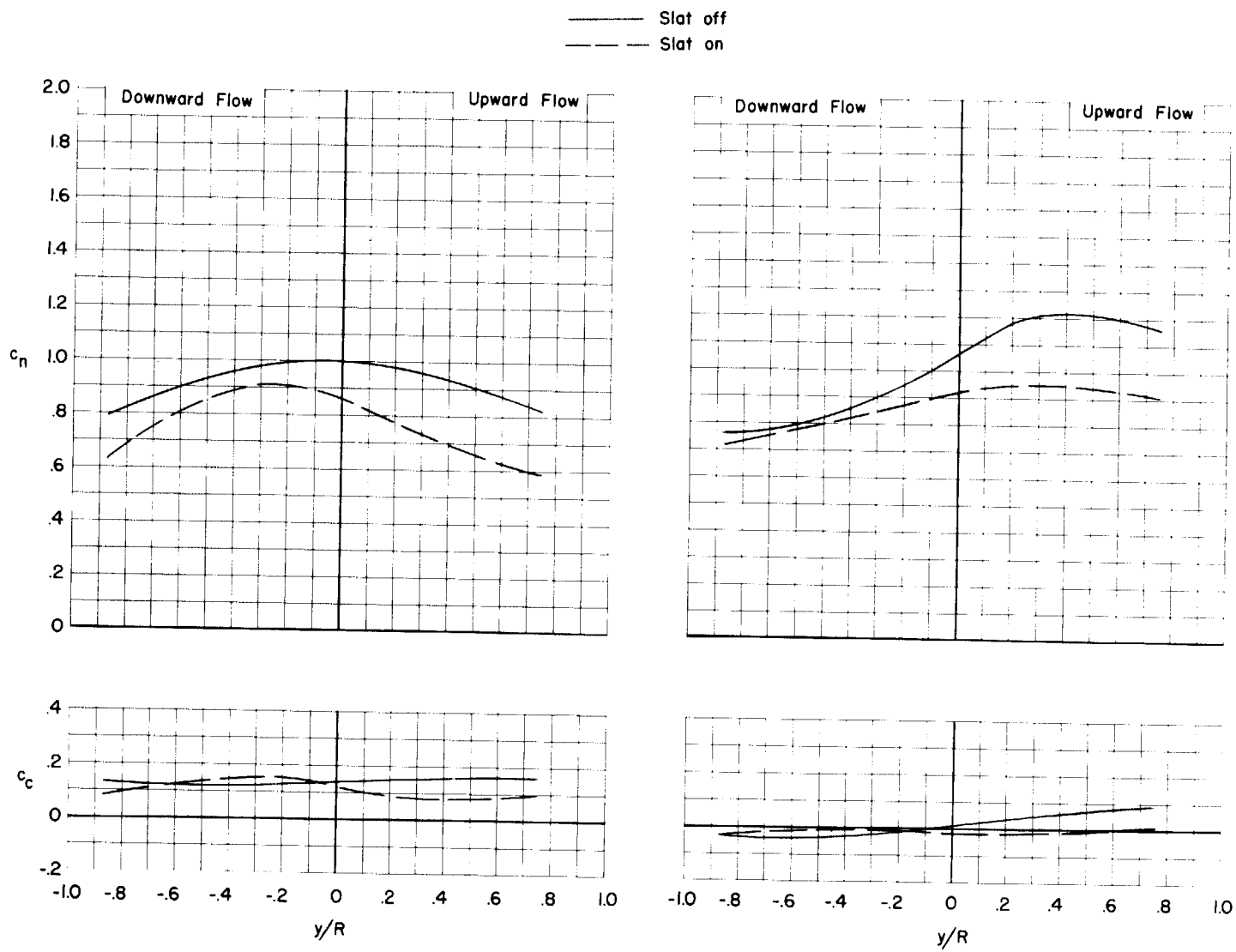
Figure 10.- Variation of average effective angle of attack over transition range. $\delta_{f,55} = 0^{\circ}$; $\delta_{f,30} = 0^{\circ}$.



(a) $\delta_{f,30} = 0^{\circ}$.

(b) $\delta_{f,30} = 30^{\circ}$.

Figure 11.- Spanwise variation of normal and chordwise forces. $D/L \approx 0$; $\delta_{f,55} = 0^{\circ}$.



(a) $\delta_{f,30} = 0^{\circ}$.

(b) $\delta_{f,30} = 30^{\circ}$.

Figure 12.- Spanwise variation of normal and chordwise forces showing effect of leading-edge slat. $D/L = 0$; $i_w = 40^{\circ}$; $\alpha = 0^{\circ}$; $\delta_{f,55} = 0^{\circ}$.

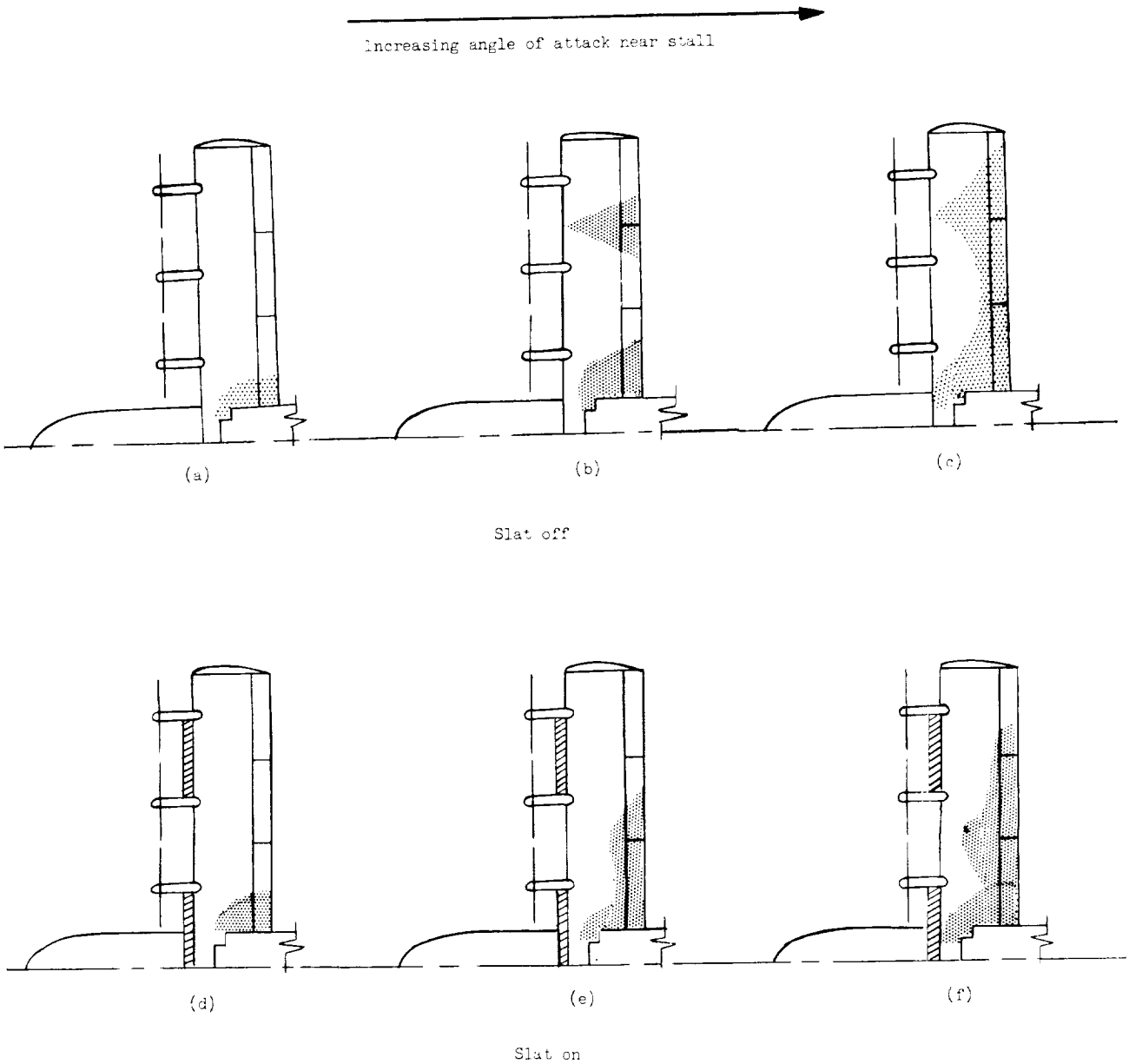


Figure 13.- Patterns of flow separation on wing. $\delta_{f,55} = 0^{\circ}$; $\delta_{f,30} = 0^{\circ}$.