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AN EXPERIMENTAL INVESTIGATION OF A COLD JET EMITTING FROM A BODY OF REVOLUTION INTO A SUBSONIC FREE STREAM

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16. Abstract

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SUMMARY

An experimental program was undertaken to determine the pressure distribution induced on aerodynamic bodies by a subsonic cold-air jet exhausting normal to the body surface and into a subsonic free stream. The investigation was limited to two bodies with single-exhaust jets - a flat plate at zero angle of attack with respect to the free-stream flow and a cylinder, fitted with a conical nose, with the longitudinal axis aligned with the free-stream flow. Experimental data were obtained for free-stream velocity to jet-velocity ratios between 0.3 and 0.5. The experimental data are presented in tabular form with appropriate graphs to indicate pressure coefficient contours, pressure coefficient decay, pitching moments, and lift characteristics.

INTRODUCTION

The aerodynamic characteristics of lifting and/or propulsive devices for V/STOL aircraft have recently come under the scrutiny of a considerable number of researchers. The fundamental problem in the development of a procedure for predicting the aerodynamic characteristics of lift and vectored thrust in V/STOL aircraft is that of formulating a suitable mathematical model. The mathematical model must be sophisticated to the extent that the interaction between jet efflux and free-stream flow can be determined. In an effort to help formulate the mathematical model and to help understand the complex flow field generated by a jet-free-stream interaction, a considerable amount of experimental research evidence has been presented. Wind-tunnel experiments of single jets exhausting at right angles to a flat plate and into a free stream have shown that there is

an extensive area of negative pressure on the surface of the plate surrounding the jet (refs. 1 to 5). The majority of wind-tunnel investigations, reported to date, have been concerned with determining flat-plate surface pressure distributions caused by single round jet-free-stream interactions. Some experimental evidence of induced pressure distributions for multiple round jets and jets of noncircular cross section have been reported (refs. 5 and 6). A limited amount of experimental data are available for induced lift and pitching moments on aerodynamic shapes other than flat plates (ref. 7).

The data presented in this report were obtained from an experimental investigation of jet-induced pressure distributions on a cylindrical afterbody in a subsonic free stream. In order to complete the objectives of the investigation, a limited experimental study of the pressure distribution on a flat plate was undertaken. The purpose of the flat-plate study was to check the experimental procedure as well as to form a "base" for comparing data obtained in the primary investigation. The experimental program was undertaken by measuring the surface pressure distributions for various jet-velocity to free-stream velocity ratios. This report contains the data obtained during the experimental investigations. The models, test procedures, and results of the investigation are discussed.

SYMBOLS

The units of measure used in this report are given in both the International System of Units (SI) and, parenthetically, in the U. S. Customary Units. (See ref. 8.) All of the data are presented with respect to a set of axes located at the center of the nozzle-exit area on the model surface.

C_p pressure coefficient, $(p_b - p_\infty)/q_\infty$

D nozzle exit diameter, centimeters (inches)

ΔL jet-induced increment of lift, newtons (pounds)

ΔM jet-induced increment of pitching moment, meter-newtons (foot-pounds)

p_b body surface static pressure, newtons/meter^2 (pounds/inch^2)

p_∞ free-stream static pressure, newtons/meter^2 (pounds/inch^2)

q_j nozzle-exit dynamic pressure, newtons/meter^2 (pounds/inch^2)

q_z jet-stream dynamic pressure, newtons/meter^2 (pounds/inch^2)

Q volume flow rate, meters^3/second (feet^3/minute)

r radius, centimeters (inches)

S surface displacement, $r\Theta$, centimeters (inches)

T thrust, newtons (pounds)

V_e effective velocity ratio , V_∞/V_j

V_j jet-exit velocity, meters/second (feet/second)

V_∞ free-stream velocity, meters/second (feet/second)

X,Y,Z Cartesian coordinates

x,y,z coordinate displacements, centimeters (inches)

β pressure port angle on flat plate, degrees (see fig. 2)

Θ pressure port angle on cylinder, degrees (see fig. 4)

Subscripts:

b body

e effective

J jet

∞ free stream

TEST FACILITY AND MODELS

Wind Tunnel

The experimental investigations were conducted in the 28- by 40-inch open circuit low-speed wind tunnel. The tunnel was designed with an operating test-section static pressure of approximately atmospheric pressure and a turbulence level of less than one-quarter of one percent at the operating levels used during the experiment. The tunnel was equipped with a six-component strain-gage balance to measure the lift and pitching moments. The models were mounted

directly on the balance system; however, the lift and pitching moments generated by the jet-free-stream interaction were not of significant magnitude to be accurately measured by the balance system. The tunnel speed could be accurately maintained over the range of 6.10 to 61.0 meters/second (20 to 200 ft/sec).

The jet flow to the model was generated from a blowdown facility of a supersonic wind tunnel, and the flow rate was accurately maintained by pressure regulators and a volume flow-rate meter. The jet-efflux temperature was maintained at approximately 26.7°C (80°F), the same as the mean operating temperature in the wind-tunnel test section.

Models

The flat-plate model (fig. 1) has overall dimensions as shown in figure 2. The leading edge of the plate was rounded to facilitate transition, and the initial 2.54 centimeters (1 in.) of the plate surface was fitted with emory paper to assure a turbulent boundary layer. The test section of the plate was a 35.56-centimeter (14-in.) diameter circle which contained 38 static pressure port taps of nominally 0.10-centimeter (0.04-in.) diameter (fig. 2). The pressure port spacings were as listed in Table 1. As indicated in figure 2, the circular test section of the plate could be rotated through an angle β, with β measured from the free-stream direction. Since the pressure ports were located along a radius both upstream and downstream of the nozzle axis, pressure measurements over the surface of the plate could be obtained by rotating the model test section. The circular test section was of tongue and groove design to minimize any misalignment that might occur when the test section was rotated with respect to the main plate. The model was mounted directly to the tunnel balance system in such a manner that the upper surface of the model was 10.16 centimeters (4 in.) above the tunnel floor, well outside of the floor boundary layer.

The jet-nozzle housing was made stationary with respect to the test section. The nozzle-exit diameter was 0.95 centimeters (0.375 in.), and the area reduction was 9 to 1. The nozzle plenum chamber was fitted with two 100-mesh screens and a static pressure tap.

The circular cylinder model (figs. 3 and 4) was of 10.16-centimeter (4.0-in.) nominal diameter and had 56 pressure taps of 0.10-centimeter (0.04-in.) diameter imbedded in its surface. The cylindrical afterbody was fitted with an approximately 9° cone to act as an aerodynamic frontal piece. Two jet-nozzle housing assemblies were designed for the model - one with an exit diameter of 0.64 centimeters (0.25 in.) and the other with an exit diameter of 0.95 centimeters (0.375 in.). The contraction ratio for the two nozzles was 10 to 1 and 9 to 1 for the 0.64-centimeter (0.25-in.) and 0.95-centimeter (0.375-in.) nozzles respectively. The surface pressure tap spacing was as indicated in Table 1.

The cylinder was designed so that the portions of the cylinder containing the pressure taps could be rotated with respect to the stationary nozzle assembly. Rotation, from outside the tunnel, of the pressure measuring sections was accomplished by a suitable internal gear arrangement. Rotation through $\pm 80°$ was possible without fouling the internal pressure tap and nozzle flow connections.

Instrumentation

The wind-tunnel stream flow was measured utilizing a pitot-static tube which was connected to both a manometer board and pressure transducer. The output of the transducer was continuously monitored for variations in pressure level by recording the signal on a galvanometer strip chart recorder. Jet-flow levels were obtained by observing the quantity of flow as indicated by a volume flowmeter as well as by monitoring the pressure transducer output of the jet plenum chamber static pressure.

The static pressure taps on both models were connected to a pressure transducer through a pressure sensing instrument, and the output levels were recorded. Inasmuch as the recorded surface pressures indicate some fluctuation, an average value of the static pressure was obtained by recording an integrated value of the fluctuating level being monitored. The integrated signal was obtained from modular analog components. The pressure sensing and integrating systems are shown in figure 5.

PROCEDURE

Nozzle Calibration

An initial study was undertaken to determine the nozzle calibration and jet-decay characteristics. The calibration was completed for the same jet-exit velocities that were to be used in the jet-free-stream interaction studies. For each jet-exit velocity, the indicated volume flow rate and the jet-plenum static pressure were recorded to establish a nozzle calibration. At each jet-exit velocity, the maximum total pressure within the jet plume was measured at various locations above the jet exit to establish the static jet-decay characteristics.

Model Check

After the model was placed in the test section, a tunnel calibration was completed to determine the blockage effects the model had on the test-section velocity profiles. The static pressure distribution over the surface of the model was then determined for zero jet flow at various tunnel dynamic pressure settings. In all cases, a small negative pressure of nearly uniform magnitude was found to exist over the surface of the model.

Prior to running the jet, cotton tufts were placed on the walls of the test section to check for any possible jet-wall interaction that could effect the surface pressure measurements. A free-stream flow was then maintained for numerous jet flows. For the various jet velocities used in this study, there were no indications that the jet plume impinged on the walls of the tunnel. These results were further verified through the use of the empirical relations stated in reference 9.

Surface Pressures

The jet-dynamic pressures could be varied with the wind tunnel in operation. In each case, however, the jet-dynamic pressure was established prior to setting the tunnel dynamic pressure. After establishing the tunnel dynamic pressure, the jet-dynamic pressure, as indicated by the jet-plenum static pressure calibration, was checked for accuracy and readjusted as necessary. Surface static

pressure measurements were then recorded for various angles of Θ or β from 0-90° or until the indicated pressure level was nearly zero. The jet-dynamic pressure was then varied, to obtain a new effective jet-free-stream velocity ratio, and the procedure repeated. For both models (cylinder and flat plate), one run was made in order to check the symmetry of the surface pressure distributions with respect to the nozzle-efflux axis.

Data Reduction

The data recorded were the surface static pressure, integrated surface static pressure, angle, pressure port number, jet-plenum static pressure, and tunnel dynamic pressure. The surface pressure data were reduced to obtain the pressure coefficients (C_p) at each pressure port location (X). The calculated values of C_p were then plotted versus a normalized length ratio (X/D) as functions of the effective velocity ratios (V_e). The indicated values of pressure were further reduced to obtain the incremental components of induced pitching moment (ΔM) and lift (ΔL) generated over the model surface.

Measurement Accuracy

The tunnel dynamic pressure, jet-plenum chamber pressure, surface static pressure, and jet-decay total pressures were measured using pressure transducers with a stated accuracy of at least $\pm$0.05 percent. The accuracy of the transducers was verified using both a dead-weight testor and a micromanometer as pressure-inducing instruments. Errors involved in the determination of the pressure coefficients (C_p) were estimated (ref. 10) to be approximately $\pm$0.05 percent. The error encountered in measuring the jet volume flow rate was estimated to be a maximum of $\pm$2.0 percent.

DISCUSSIONS OF RESULTS

Surface pressure distribution data were obtained for the following effective free-stream to jet-velocity ratios (V_e):

Flat plate	Circular cylinder	
0.95 cm (0.375 in.) Jet Diameter V_e	0.95 cm (0.375 in.) Jet Diameter V_e	0.64 cm (0.25 in.) Jet Diameter V_e
0.421	0.519	0.511
0.351	0.415	0.410
0.301	0.346	0.341
	0.297	0.292

The collection of data was limited to those cases where the effective velocity ratio was greater than approximately 0.3 because of possible flow interactions between the test-section sidewalls and the jet flow. Consideration was given to the following in limiting the lower bound of V_e : physical dimensions of the test section and model; the relative location of the model in the test section; the sidewall boundary-layer thickness; and the deflected-jet path. The effective velocity ratio (V_e) used in this report does not contain the ratio of densities as suggested in reference 3. All of the flow conditions used in this study were in the subsonic regime with the jet-efflux temperature approximately equal to the temperature in the tunnel test section. Thus, the densities of the two flow fields were assumed equal.

The results of the data reduction are presented in Tables 2, 3, and 4. The three tables contain the pressure port numbers, and the location of each port with respect to the jet-efflux axis. The results of the data reduction for values of pressure coefficient (C_p) on the surface of the flat plate are given in Table 2 for each angle β . Tables 3 and 4 are compilations of the reduced data for the induced pressure fields on the cylindrical surface due to the 0.95-centimeter (0.375-in.) and 0.64-centimeter (0.25-in.) diameter nozzles respectively. The data have been reduced to yield the pressure coefficients (C_p) as well as the incremental contributions of lift and pitching moment over each pressure port. The lift (ΔL) and pitching moments (ΔM) have been normalized with the jet thrust (T) and the product of jet thrust and jet diameter (TD) respectively. A summary at the bottom of each table includes (for each angular setting of the pressure ports): The jet and free-stream dynamic pressure levels; volume flow rate (Q) through the nozzle; jet-efflux

velocity (VJ); effective velocity ratio (VE); total lift and pitching moment; and total normalized values of lift and pitching moments.

Jet Decay

The static jet total pressure decay characteristics as a function of the nondimensionalized length ratio (Z/D) are shown in figure 6. The decay characteristics appear similar to those previously reported (refs. 9, 11, 12, and 13); however, there is a noted difference in the length of the potential core, or the initial zone, between the various data reported. Previous results have shown that the potential core extends anywhere from 0.5 to 6.0 nozzle diameters downstream from the nozzle with most of the data showing the decay beginning at approximately 6 diameters from the nozzle exit. The results of this study indicate that the jet potential core extends approximately 0.5 and 2.0 diameters from the nozzle exit for the 0.95-centimeter (0.375-in.) and 0.64-centimeter (0.25 in.) diameter nozzles, respectively. Similar variations in the decay characteristics were noted in reference 14. While it is true that the total pressure prob[illegible].10-centimeter (0.04-in.) nominal diameter) used in these studies had a blockage effect on the jet efflux, it is not believed that the difference in decay characteristics is due totally to experimental error. Rather, it is believed to be a combination of nozzle design and sidewall effects. Some decay characteristics for nozzles of different designs are presented in reference 14. The rate of momentum exchange between quiescent air and the jet stream can be influenced by the shape of the surface in which the nozzle is imbedded. It would seem reasonable to assume that the amount of jet-entrained fluid would be different for a jet emitting from cylindrical surface as compared to that of a jet discharging from a flat plate. If this assumption is true, then the surface pressure distributions induced by jet-free-stream interactions would vary according to the jet-decay characteristics.

Flow Symmetry

Prior to initiating the complete wind-tunnel studies, an investigation was undertaken to determine the symmetry of the surface pressure distributions for

positive and negative values of Θ and β (figs. 2 and 4). A comparison of pressure coefficients (C_p), where C_p is defined as

$$C_p = \frac{p_b - p_\infty}{q_\infty}$$

on the surface of the cylinder at four different angles is shown in figure 7.

The maximum variation in C_p shown is nearly 25 percent, and this occurs in a region where the pressure changes most rapidly with Θ. By varying the test-section position a fraction of a degree, reasonable accuracies of ± 2.0 percent could be obtained for flow over the circular cylinder. Similar results were obtained with the flat plate. Based on these results, symmetry of the flow field was assumed.

Surface Pressures

A representative set of data for the pressure coefficients on the surface of the cylinder for zero jet flow are shown in figure 8. The slight amount of scatter in the data points for the most part may be attributed to measurement inaccuracies. The forward most pressure port on the cylinder, port no. 1 (fig. 4), indicated a negative pressure somewhat greater than that noted elsewhere on the body. It was further observed that the pressure at port no. 1 remained relatively constant for all angles of Θ - whether or not there was a jet flow. It was also noted that the observed negative pressure coefficient decayed to nearly a zero value at ports 4 and 5. Hence, it was evident that port no. 1 was near the outer boundary of an area under the influence of an adverse pressure gradient caused by the junction of the front piece and afterbody.

Flat plate. - The data for the flat-plate study are presented in Table 2, and pressure coefficient decay characteristics as functions of X/D and β are shown in figures 9, 10, and 11 for V_e ratios of 0.421, 0.351, and 0.301, repsectively. The characteristics of the data presented in figures 9, 10, and 11 are similar to those previously reported. (See refs. 1, 3, and 5.) The area immediately in front of the nozzle is an area of positive C_p due to the blockage effect the jet flow has on the free-stream flow; the area downstream of the nozzle is characterized by a negative C_p field. With $V_e = 0.421$ and $\beta = 0°$,

the positive values of C_p upstream of the jet axis decayed to the values measured in the boundary layer for the jet-off condition within approximately 3-nozzle diameters; whereas, the negative values of C_p existed for nearly 6-nozzle diameters downstream of the jet axis. As the V_e ratio decreased (increased jet flow), the C_p decay for $\beta = 0$ became more rapid as can be seen by comparing figures 9(a), 10(a), and 11(a). With a V_e of 0.301, the positive and negative values of C_p existed for approximately one-half the distances indicated for a value of $V_e = 0.421$. The positive C_p field was confined to an area between $\beta = 145°$ and $\beta = 215°$ for a V_e of 0.421. When the value of V_e was lowered to 0.301, the positive values of C_p were confined to the sector between $\beta = 160°$ and $\beta = 200°$. The negative C_p values extended further from the nozzle axis as the angle β was increased. With β set at 90°, the pressure port axis was normal to the free-stream flow, and the C_p decay curves indicated that the flow field was symmetric with respect to the jet. The maximum error encountered in checking the flow symmetry was found to be nearly 2.0 percent.

Figure 12 is a comparison of negative C_p contour data from this study with that obtained by Dr. Richard Fearn from the University of Florida in studying C_p distributions on a flat plate. (Dr. Fearn's data were obtained using the Langley V/STOL tunnel during 1970-71.) Although the data presented were obtained for the same effective velocity ratios, there is very little, if any, similarity in the C_p contours presented. However, some indication of the differences may be obtained from the static-jet dynamic-pressure decay characteristics of the nozzles used in the investigations. As previously stated in this report, the decay characteristics of the 0.95-centimeter (0.375-in.) nozzle indicated that the potential core existed for approximately 0.5-nozzle diameters from the nozzle exit. The pressure distribution data obtained at the Langley V/STOL tunnel were generated by a nozzle with a potential core of approximately 4.0-nozzle diameters. In figure 12, it may be noted that the rate of C_p decay along the X/D axis ($\beta = 0$) is more rapid for the "short" potential core nozzle; whereas, the rate of C_p decay in the Y/D direction is, in general, less for the "short" nozzle than for the "long" nozzle. In figure 12, it may also be noted that a "short" nozzle subjects a larger surface area to the influence of the jet than a "long" nozzle.

Cylinder. - Table 3 and figures 13 to 17 are summaries of the data for the cylindrical body study with the 0.95-centimeter (0.375-in.) nozzle in place. Figure 13 to 16 show the C_p decay as a function of X/D and Θ for four values of V_e - 0.519, 0.415, 0.346, and 0.297. From the data presented, it is evident that the major portion of the pressure coefficient decay, for negative values of X/D, occurs within a distance of 5-6 jet diameters downstream of the jet. This agrees favorably with the C_p decay characteristics of the flat plate. The pressure coefficients also decay with increasing Θ, and the values of C_p were found to diminish to nearly the no-jet-boundary condition values within approximately 25° of the jet axis. This was found to be the case regardless of the effective velocity ratio. It was further noted that a 50-percent decay in C_p occurred within 7°-10° of the jet axis depending on the value of V_e. Composite C_p contours over the surface of the cylinder are shown in figure 17.

Results of the experimental data obtained from the cylinder with the 0.64-centimeter (0.25-in.) nozzle are presented in Table 3 and figures 18 to 22. The decay characteristics of figures 18 to 21 are similar to those of figures 13 to 16 in that the decay occurs within approximately 6-nozzle diameters downstream of the jet. Similarly, for most practical purposes, total decay was accomplished within 25° of the jet axis with 50 percent of the decay occurring within the first 7° to 12°. Composite C_p contours for the 0.64-centimeter (0.25-in.) nozzle study are shown in figure 22.

The C_p decay characteristics as functions of Θ for constant values of X/D are shown in figures 23 and 24. It may be noted that the pressure coefficients forward of the jet change from positive to negative values at nearly 5° from the jet axis. The positive C_p values were, of course, caused by the blockage effect the jet flow had on the free-stream flow field.

Comparison of cylinder data. - A comparison of figures 18 and 22 yields some information on the effect the 0.95-centimeter (0.375-in.) and 0.64-centimeter (0.25-in.) nozzles had on the C_p distribution over the cylindrical surface. In both cases, decreasing the value of V_e, that is, increasing the jet flow, had a tendency to enlarge the surface area under the influence of the jet-free-stream interaction. The displacement of the C_p contours around the body (Θ direction) was about the same for both nozzle configurations over the range

of V_e used. The C_p contour distortion parallel to the X/D axis was considerably more pronounced for the 0.95-centimeter (0.375-in.) nozzle, especially in the positive X/D direction.

A further comparison of the generated flow fields was made by comparing the pressure induced increments of lift and pitching moments. The lift characteristics were obtained, to a first approximation, by dividing the area between pressure port locations into equal increments and assuming that the pressure over each area was uniform. Where the pressure port location varied, a linear interpolation was used to determine the intermediate values of pressure. The lift forces were then evaluated by summing the incremental values of the pressure-area product over each area. The pitching moments were obtained by summing the moments produced by the incremental lift forces with respect to an axis normal to the X-Z plane. Dimensionless plots of the lift and moment characteristics for the cylinder and flat-plate models are shown in figures 25 and 26, respectively. The values of the lift and pitching moment for the cylindrical models were determined by carrying the summation process through an angle of $\Theta = 20°$. From the cylindrical data presented, it may be noted that the values of $\Delta L/T$ obtained with the 0.95-centimeter (0.375-in.) nozzle are greater than those obtained with the 0.64-centimeter (0.24-in.) nozzle only for values of V_e less than approximately 0.4 Whereas, the pitching moment for the 0.95-centimerer (0.375-in.) study was always less than that of the 0.64-centimeter (0.25-in.) study for all values of V_e . The tendency of the moment curves is, however, to intersect in the neighborhood of $V_e = 0.25$.

It may also be noted that the lift and pitching-moment characteristics generated on the cylindrical model with the 0.95-centimeter (0.375-in.) nozzle are greater in magnitude than the similar characteristics of the flat plate with the same size nozzle.

Whether the indicated comparison for the cylindrical data is real or not is open to question. It would seem reasonable to believe that the lift and moment curves for the individual models would be real but that a true comparison of the two flow fields should be made only when the static-jet dynamic-pressure decay curves of the nozzles inducing the pressure field are nearly identical.

Flat-plate cylinder comparison. - A comparison of the streamwise pressure coefficient profile decay characteristics of the flat plate and cylinder are shown in figures 27, 28, and 29. The comparison is made for the 0.95-centimeter (0.375-in.) jet-induced pressure fields along the longitudinal axes parallel to, but at various surface displacements (s = y), from the X-axis. In general, it is noted that: The maximum pressure coefficient is found on the flat plate. (The maximum C_p of the cylinder is greater than that of the flat plate only in the region of $\Theta = 0.$); the rate of C_p decay for increasing Θ is approximately the same on the two surfaces; and the C_p profiles for the cylinder extend further in the streamwise direction than the corresponding profiles for the flat plate.

CONCLUSIONS

Based on the data presented in this report, the following conclusions may be drawn:

1. The influence of the jet-free-stream interactions on surface pressures is damped out within approximately 6-nozzle diameters of the jet axis.

2. The rate of pressure coefficient decay, in the free-stream direction, is less for a cylindrical surface than for the corresponding C_p decay on a flat plate.

3. The rate of C_p decay in a direction normal to the plane of the jet axis and free-stream direction is approximately the same on a cylindrical surface as on a flat plate.

4. The jet-induced increments of lift and pitching moments are influenced by the static-jet dynamic-pressure decay characteristics.

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TABLE I. - PRESSURE PORT LOCATIONS

	Flat Plate	Cylinder	
	Nozzle Diameter 0.95 cm (0.375-in.)	Nozzle Diameter 0.64 cm (0.25-in.)	Nozzle Diameter 0.95 cm (0.375-in.)
Port No.	X/D	X/D	X/D
1	+6.000	+7.0	+4.833
2	+5.667	+6.0	+4.167
3	+5.333	+5.5	+3.833
4	+5.000	+5.0	+3.500
5	+4.667	+4.5	+3.167
6	+4.333	+4.0	+2.833
7	+4.000	+3.5	+2.500
8	+3.667	+3.0	+2.167
9	+3.333	+2.5	+1.833
10	+3.000	+2.0	+1.500
11	+2.667	+1.5	+1.167
12	+2.333	+1.0	+0.833
13	+2.000	-1.0	-0.833
14	+1.667	-1.5	-1.167
15	+1.333	-2.0	-1.500
16	+1.000	-2.5	-1.833
17	-1.000	-3.0	-2.167
18	-1.333	-3.5	-2.500
19	-1.667	-4.0	-2.833
20	-2.000	-4.5	-3.167
21	-2.333	-5.0	-3.500
22	-2.667	-5.5	-3.833
23	-3.000	-6.0	-4.167
24	-3.333	-6.5	-4.500
25	-3.667	-7.0	-4.833
26	-4.000	-7.5	-5.167
27	-4.333	-8.0	-5.500
28	-4.667	-8.5	-5.833
29	-5.000	-9.0	-6.167
30	-5.333	-9.5	-6.500
31	-5.667	-10.0	-6.833
32	-6.000	-10.5	-7.167
33	-6.667	-11.0	-7.500
34	-7.333	-11.5	-7.833
35	-8.000	-12.0	-8.167
36	-8.667	-12.5	-8.500
37	-9.333	-13.0	-8.833
38	-10.000	-14.0	-9.500
39		-15.0	-10.167
40		-16.0	-10.833
41		-17.0	
42		-18.0	
43		-19.0	

TABLE I. - CONTINUED

	Cylinder	
	Nozzle Diameters	
	0.64 cm (0.25-in.)	0.95 cm (0.375-in.)
	Degree (Θ)	Degree (Θ)
A	-45	-45
B	-40	-40
C	-35	-35
D	-30	-30
E	-25	-25
F	-20	-20
G	-15	-15
H	-10	-10
J	+10	+10
K	+15	+15
L	+20	+20
M	+25	+25
N	+30	+30
O	+35	+35
P	+40	+40
Q	+45	+45

TABLE 2

C_p DATA FOR FLAT PLATE

[V_e = 0.420]

PORT NO.	X/D	CP	CP	CP	CP	CP	CP	CP
		BETA= 0.0DEG	BETA= 5.0DEG	BETA=10.0DEG	BETA=15.0DEG	BETA=20.0DEG	BETA=25.0DEG	BETA=30.0DEG
1	6.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	5.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
3	5.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
4	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
5	4.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	4.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	3.000	0.5436E-02	0.5436E-02	0.5436E-02	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
11	2.666	0.2718E-01	0.2718E-01	0.1630E-01	0.1087E-01	0.0000E 00	0.0000E 00	0.0000E 00
12	2.333	0.3805E-01	0.3805E-01	0.3805E-01	0.2718E-01	0.1630E-01	0.5436E-02	0.0000E 00
13	2.000	0.5979E-01	0.5436E-01	0.5436E-01	0.4348E-01	0.3261E-01	0.1630E-01	0.0000E 00
14	1.666	0.8697E-01	0.8154E-01	0.7066E-01	0.5979E-01	0.4892E-01	0.3261E-01	0.5436E-02
15	1.333	0.1359E 00	0.1304E 00	0.1250E 00	0.1032E 00	0.8697E-01	0.5436E-01	0.2718E-01
16	1.000	0.2011E 00	0.2011E 00	0.1793E 00	0.1576E 00	0.1250E 00	0.9241E-01	0.3805E-01
17	-1.000	-0.6737E 00	-0.6924E 00	-0.7611E 00	-0.8734E 00	-0.9545E 00	-0.1048E 01	-0.1191E 01
18	-1.333	-0.2932E 00	-0.3056E 00	-0.3618E 00	-0.4304E 00	-0.5053E 00	-0.5926E 00	-0.6987E 00
19	-1.666	-0.1497E 00	-0.1871E 00	-0.2121E 00	-0.2557E 00	-0.3181E 00	-0.3680E 00	-0.4616E 00
20	-2.000	-0.1122E 00	-0.1247E 00	-0.1559E 00	-0.1871E 00	-0.2183E 00	-0.2557E 00	-0.3181E 00
21	-2.333	-0.9357E-01	-0.1122E 00	-0.1247E 00	-0.1372E 00	-0.1684E 00	-0.1933E 00	-0.2495E 00
22	-2.666	-0.7486E-01	-0.8734E-01	-0.1122E 00	-0.1185E 00	-0.1247E 00	-0.1434E 00	-0.1871E 00
23	-3.000	-0.7486E-01	-0.8110E-01	-0.9981E-01	-0.9357E-01	-0.1060E 00	-0.1247E 00	-0.1434E 00
24	-3.333	-0.6862E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01	-0.8734E-01	-0.1060E 00	-0.1247E 00
25	-3.666	-0.6238E-01	-0.6862E-01	-0.6862E-01	-0.6238E-01	-0.6862E-01	-0.8734E-01	-0.1060E 00
26	-4.000	-0.6238E-01	-0.6862E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6862E-01	-0.8734E-01
27	-4.333	-0.6238E-01	-0.6238E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.6238E-01	-0.7486E-01
28	-4.666	-0.5614E-01	-0.6238E-01	-0.5614E-01	-0.4990E-01	-0.5614E-01	-0.6238E-01	-0.6862E-01
29	-5.000	-0.4990E-01	-0.5614E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.5614E-01	-0.6238E-01
30	-5.333	-0.4990E-01	-0.5614E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4990E-01	-0.5614E-01
31	-5.666	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4990E-01	-0.5614E-01
32	-6.000	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4990E-01
33	-6.666	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01
34	-7.333	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01
35	-8.000	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01
36	-8.666	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01
37	-9.333	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01
38	-10.000	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01

Q = 0.028 CMM (10.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.420
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 2 – Continued

C_p DATA FOR FLAT PLATE

[V_e = 0.420]

PORT NO.	X/D	CP BETA=35.0DEG	CP BETA=40.0DEG	CP BETA=45.0DEG	CP BETA=50.0DEG	CP BETA=55.0DEG	CP BETA=60.0DEG	CP BETA=65.0DEG
1	6.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02
2	5.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02
3	5.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.1247E-01
4	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.1247E-01
5	4.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.1247E-01
6	4.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.1871E-01
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.1247E-01	-0.2495E-01
8	3.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.2495E-01	-0.3743E-01
9	3.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.1247E-01	-0.3119E-01	-0.4367E-01
10	3.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.1247E-01	-0.3743E-01	-0.5614E-01
11	2.666	0.0000E 00	0.0000E 00	0.0000E 00	-0.1247E-01	-0.3119E-01	-0.4990E-01	-0.6862E-01
12	2.333	0.0000E 00	0.0000E 00	0.0000E 00	-0.1247E-01	-0.4990E-01	-0.6238E-01	-0.8734E-01
13	2.000	0.0000E 00	0.0000E 00	-0.6238E-02	-0.3743E-01	-0.6238E-01	-0.9357E-01	-0.1247E 00
14	1.666	0.0000E 00	0.0000E 00	-0.2495E-01	-0.6238E-01	-0.1122E 00	-0.1434E 00	-0.1871E 00
15	1.333	0.0000E 00	0.0000E 00	-0.4990E-01	-0.1060E 00	-0.1559E 00	-0.2370E 00	-0.3056E 00
16	1.000	0.0000E 00	-0.3119E-01	-0.1247E 00	-0.2058E 00	-0.3181E 00	-0.4367E 00	-0.5552E 00
17	-1.000	-0.1310E 01	-0.1372E 01	-0.1360E 01	-0.1459E 01	-0.1559E 01	-0.1540E 01	-0.1509E 01
18	-1.333	-0.7985E 00	-0.8297E 00	-0.8796E 00	-0.9295E 00	-0.9357E 00	-0.9420E 00	-0.9357E 00
19	-1.666	-0.5489E 00	-0.5864E 00	-0.5989E 00	-0.6238E 00	-0.6238E 00	-0.6363E 00	-0.6238E 00
20	-2.000	-0.3743E 00	-0.4117E 00	-0.4304E 00	-0.4367E 00	-0.4429E 00	-0.4429E 00	-0.4367E 00
21	-2.333	-0.2932E 00	-0.3056E 00	-0.3119E 00	-0.3181E 00	-0.3181E 00	-0.3181E 00	-0.3244E 00
22	-2.666	-0.2183E 00	-0.2370E 00	-0.2370E 00	-0.2495E 00	-0.2495E 00	-0.2495E 00	-0.2495E 00
23	-3.000	-0.1746E 00	-0.1871E 00	-0.1871E 00	-0.1871E 00	-0.1933E 00	-0.1871E 00	-0.1996E 00
24	-3.333	-0.1310E 00	-0.1434E 00	-0.1497E 00	-0.1559E 00	-0.1559E 00	-0.1497E 00	-0.1622E 00
25	-3.666	-0.1185E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00	-0.1372E 00
26	-4.000	-0.9981E-01	-0.1060E 00	-0.1122E 00	-0.1060E 00	-0.1122E 00	-0.1122E 00	-0.9981E-01
27	-4.333	-0.8110E-01	-0.8110E-01	-0.8734E-01	-0.9357E-01	-0.8734E-01	-0.8734E-01	-0.8734E-01
28	-4.666	-0.6862E-01	-0.6862E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01	-0.5862E-01
29	-5.000	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01
30	-5.333	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01
31	-5.666	-0.5614E-01	-0.5614E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.5614E-01	-0.5614E-01
32	-6.000	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.499CE-01	-0.5614E-01
33	-6.666	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4990E-01
34	-7.333	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.4990E-01
35	-8.000	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.4990E-01
36	-8.666	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.4990E-01
37	-9.333	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.4990E-01
38	-10.000	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.4990E-01

Q = 0.028 CMM (10.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.420
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 2 – Continued

C_p DATA FOR FLAT PLATE

[V_e = 0.420]

PORT NO.	X/D	CP	CP	CP	CP	CP
		BETA=70.0DEG	BETA=75.0DEG	BETA=80.0DEG	BETA=85.0DEG	BETA=90.0DEG
1	6.000	-0.1247E-01	-0.1871E-01	-0.1871E-01	-0.2495E-01	-0.3743E-01
2	5.666	-0.1247E-01	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.3743E-01
3	5.333	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.3743E-01	-0.4367E-01
4	5.000	-0.1871E-01	-0.2495E-01	-0.3743E-01	-0.4367E-01	-0.4990E-01
5	4.666	-0.2495E-01	-0.3119E-01	-0.4367E-01	-0.4990E-01	-0.5614E-01
6	4.333	-0.2495E-01	-0.4367E-01	-0.4990E-01	-0.5614E-01	-0.6238E-01
7	4.000	-0.3119E-01	-0.4990E-01	-0.5614E-01	-0.6238E-01	-0.6862E-01
8	3.666	-0.4367E-01	-0.5614E-01	-0.6238E-01	-0.7486E-01	-0.8734E-01
9	3.333	-0.6238E-01	-0.6238E-01	-0.7486E-01	-0.9981E-01	-0.1185E 00
10	3.000	-0.6238E-01	-0.8110E-01	-0.1060E 00	-0.1247E 00	-0.1310E 00
11	2.666	-0.8734E-01	-0.1122E 00	-0.1310E 00	-0.1497E 00	-0.1809E 00
12	2.333	-0.1247E 00	-0.1497E 00	-0.1809E 00	-0.1933E 00	-0.2433E 00
13	2.000	-0.1684E 00	-0.1996E 00	-0.2495E 00	-0.2682E 00	-0.3181E 00
14	1.666	-0.2495E 00	-0.3119E 00	-0.3556E 00	-0.4055E 00	-0.4554E 00
15	1.333	-0.3805E 00	-0.4678E 00	-0.5552E 00	-0.6238E 00	-0.7112E 00
16	1.000	-0.6862E 00	-0.8172E 00	-0.9357E 00	-0.1048E 01	-0.1185E 01
17	-1.000	-0.1497E 01	-0.1416E 01	-0.1347E 01	-0.1297E 01	-0.1191E 01
18	-1.333	-0.8796E 00	-0.8359E 00	-0.8172E 00	-0.7798E 00	-0.6987E 00
19	-1.666	-0.5926E 00	-0.5489E 00	-0.5427E 00	-0.4990E 00	-0.4429E 00
20	-2.000	-0.4055E 00	-0.3743E 00	-0.3743E 00	-0.3431E 00	-0.3119E 00
21	-2.333	-0.2994E 00	-0.2744E 00	-0.2620E 00	-0.2495E 00	-0.2308E 00
22	-2.666	-0.2245E 00	-0.2058E 00	-0.1933E 00	-0.1871E 00	-0.1746E 00
23	-3.000	-0.1809E 00	-0.1746E 00	-0.1559E 00	-0.1434E 00	-0.1310E 00
24	-3.333	-0.1372E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00	-0.1122E 00
25	-3.666	-0.1122E 00	-0.1122E 00	-0.1060E 00	-0.9357E-01	-0.8110E-01
26	-4.000	-0.9357E-01	-0.8734E-01	-0.8734E-01	-0.7486E-01	-0.6862E-01
27	-4.333	-0.7486E-01	-0.6862E-01	-0.6862E-01	-0.6238E-01	-0.6238E-01
28	-4.666	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.5614E-01	-0.5614E-01
29	-5.000	-0.6238E-01	-0.6238E-01	-0.5614E-01	-0.5614E-01	-0.4990E-01
30	-5.333	-0.5614E-01	-0.5614E-01	-0.4990E-01	-0.4990E-01	-0.4990E-01
31	-5.666	-0.5614E-01	-0.4990E-01	-0.4990E-01	-0.4990E-01	-0.4367E-01
32	-6.000	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01
33	-6.666	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.3119E-01	-0.3743E-01
34	-7.333	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.3119E-01	-0.3743E-01
35	-8.000	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.3119E-01	-0.3743E-01
36	-8.666	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.3119E-01	-0.3743E-01
37	-9.333	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.3119E-01	-0.3743E-01
38	-10.000	-0.4367E-01	-0.4367E-01	-0.3743E-01	-0.3119E-01	-0.3743E-01

Q = 0.028 CMM (10.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.420
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 2

C_p DATA FOR FLAT PLATE

[V_e = 0.350]

PORT NO.	X/D	CP BETA= 0.0DEG	CP BETA= 5.0DEG	CP BETA=10.0DEG	CP BETA=15.0DEG	CP BETA=20.0DEG	CP BETA=25.0DEG	CP BETA=30.0DEG
1	6.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	5.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
3	5.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
4	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
5	4.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	4.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	3.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
11	2.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
12	2.333	0.1087E-01	0.1630E-01	0.1630E-01	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
13	2.000	0.2718E-01	0.3261E-01	0.2174E-01	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
14	1.666	0.4892E-01	0.4892E-01	0.4348E-01	0.2174E-01	0.0000E 00	0.0000E 00	0.0000E 00
15	1.333	0.9241E-01	0.9241E-01	0.8154E-01	0.5436E-01	0.1087E-01	0.0000E 00	0.0000E 00
16	1.000	0.1685E 00	0.1576E 00	0.1359E 00	0.9784E-01	0.5436E-01	0.1087E-01	-0.6238E-02
17	-1.000	-0.5053E 00	-0.5365E 00	-0.6301E 00	-0.6363E 00	-0.7174E 00	-0.8172E 00	-0.9233E 00
18	-1.333	-0.1809E 00	-0.1996E 00	-0.2495E 00	-0.2807E 00	-0.3556E 00	-0.4179E 00	-0.5178E 00
19	-1.666	-0.8110E-01	-0.1185E 00	-0.1434E 00	-0.1809E 00	-0.2183E 00	-0.2744E 00	-0.3680E 00
20	-2.000	-0.6238E-01	-0.6862E-01	-0.9357E-01	-0.1247E 00	-0.1372E 00	-0.1996E 00	-0.2620E 00
21	-2.333	-0.6238E-01	-0.6238E-01	-0.8110E-01	-0.8110E-01	-0.1060E 00	-0.1434E 00	-0.1996E 00
22	-2.666	-0.4990E-01	-0.4990E-01	-0.6862E-01	-0.6862E-01	-0.8110E-01	-0.1247E 00	-0.1684E 00
23	-3.000	-0.3743E-01	-0.4367E-01	-0.6238E-01	-0.5614E-01	-0.6862E-01	-0.9981E-01	-0.1372E 00
24	-3.333	-0.3743E-01	-0.4367E-01	-0.5614E-01	-0.4990E-01	-0.6238E-01	-0.8734E-01	-0.1185E 00
25	-3.666	-0.3743E-01	-0.3743E-01	-0.4990E-01	-0.3743E-01	-0.5614E-01	-0.7486E-01	-0.1060E 00
26	-4.000	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.3119E-01	-0.5614E-01	-0.6862E-01	-0.8734E-01
27	-4.333	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.2495E-01	-0.4990E-01	-0.6238E-01	-0.7486E-01
28	-4.666	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.2495E-01	-0.3743E-01	-0.6238E-01	-0.6862E-01
29	-5.000	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.3119E-01	-0.5614E-01	-0.6862E-01
30	-5.333	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.4990E-01	-0.6238E-01
31	-5.666	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.4367E-01	-0.6238E-01
32	-6.000	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.3743E-01	-0.5614E-01
33	-6.666	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.4990E-01
34	-7.333	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.4367E-01
35	-8.000	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.4367E-01
36	-8.666	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.4367E-01
37	-9.333	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.4367E-01
38	-10.000	-0.3119E-01	-0.3743E-01	-0.4367E-01	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.4367E-01

Q = 0.033 CMM (12.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.350
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 3644.6 NT/SQ M (76.1 PSF)

TABLE 2 – Continued

C_p DATA FOR FLAT PLATE

[V_e = 0.350]

PORT NO.	X/D	CP BETA=35.0DEG	CP BETA=40.0DEG	CP BETA=45.0DEG	CP BETA=50.0DEG	CP BETA=55.0DEG	CP BETA=60.0DEG	CP BETA=65.0DEG
1	6.000	0.0000E 00	0.0000E 00	-0.6238E-02	-0.6238E-02	-0.6238E-02	-0.1247E-01	-0.1871E-01
2	5.666	0.0000E 00	0.0000E 00	-0.6238E-02	-0.6238E-02	-0.1247E-01	-0.1247E-01	-0.1871E-01
3	5.333	0.0000E 00	0.0000E 00	-0.6238E-02	-0.6238E-02	-0.1247E-01	-0.1871E-01	-0.2495E-01
4	5.000	0.0000E 00	0.0000E 00	-0.6238E-02	-0.1247E-01	-0.2495E-01	-0.1871E-01	-0.2495E-01
5	4.666	0.0000E 00	0.0000E 00	-0.6238E-02	-0.1247E-01	-0.1871E-01	-0.2495E-01	-0.3743E-01
6	4.333	0.0000E 00	0.0000E 00	-0.1247E-01	-0.1871E-01	-0.2495E-01	-0.3743E-01	-0.5614E-01
7	4.000	0.0000E 00	0.0000E 00	-0.1871E-01	-0.1871E-01	-0.3119E-01	-0.4990E-01	-0.6238E-01
8	3.666	0.0000E 00	-0.6238E-02	-0.1871E-01	-0.2495E-01	-0.4367E-01	-0.6238E-01	-0.7486E-01
9	3.333	0.0000E 00	-0.1247E-01	-0.2495E-01	-0.4367E-01	-0.6238E-01	-0.7486E-01	-0.8734E-01
10	3.000	0.0000E 00	-0.1871E-01	-0.3119E-01	-0.5614E-01	-0.7486E-01	-0.8734E-01	-0.1185E 00
11	2.666	-0.6238E-02	-0.1871E-01	-0.4990E-01	-0.6862E-01	-0.9357E-01	-0.1247E 00	-0.1372E 00
12	2.333	-0.1247E-01	-0.3119E-01	-0.6862E-01	-0.8734E-01	-0.1310E 00	-0.1559E 00	-0.1996E 00
13	2.000	-0.1871E-01	-0.5614E-01	-0.8110E-01	-0.1310E 00	-0.1809E 00	-0.2121E 00	-0.2620E 00
14	1.666	-0.3743E-01	-0.8110E-01	-0.1310E 00	-0.1933E 00	-0.2557E 00	-0.3181E 00	-0.3431E 00
15	1.333	-0.5614E-01	-0.1185E 00	-0.1933E 00	-0.2620E 00	-0.3743E 00	-0.4491E 00	-0.5178E 00
16	1.000	-0.8110E-01	-0.1933E 00	-0.3244E 00	-0.4491E 00	-0.6113E 00	-0.7548E 00	-0.8671E 00
17	-1.000	-0.1010E 01	-0.1122E 01	-0.1204E 01	-0.1316E 01	-0.1384E 01	-0.1459E 01	-0.1565E 01
18	-1.333	-0.6363E 00	-0.7548E 00	-0.8234E 00	-0.8858E 00	-0.9420E 00	-0.9919E 00	-0.1023E 01
19	-1.666	-0.4554E 00	-0.5365E 00	-0.6238E 00	-0.6425E 00	-0.6924E 00	-0.8983E 00	-0.7548E 00
20	-2.000	-0.3306E 00	-0.3930E 00	-0.4491E 00	-0.4928E 00	-0.5115E 00	-0.5178E 00	-0.5552E 00
21	-2.333	-0.2620E 00	-0.3181E 00	-0.3493E 00	-0.3805E 00	-0.3867E 00	-0.3992E 00	-0.4304E 00
22	-2.666	-0.2058E 00	-0.2495E 00	-0.2744E 00	-0.3056E 00	-0.3119E 00	-0.3244E 00	-0.3244E 00
23	-3.000	-0.1746E 00	-0.1996E 00	-0.2245E 00	-0.2433E 00	-0.2557E 00	-0.2557E 00	-0.2620E 00
24	-3.333	-0.1434E 00	-0.1746E 00	-0.1871E 00	-0.1996E 00	-0.1996E 00	-0.2058E 00	-0.2121E 00
25	-3.666	-0.1310E 00	-0.1372E 00	-0.1559E 00	-0.1622E 00	-0.1684E 00	-0.1746E 00	-0.1809E 00
26	-4.000	-0.1185E 00	-0.1247E 00	-0.1372E 00	-0.1372E 00	-0.1372E 00	-0.1372E 00	-0.1434E 00
27	-4.333	-0.8734E-01	-0.1060E 00	-0.1185E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00
28	-4.666	-0.8110E-01	-0.9357E-01	-0.9981E-01	-0.9981E-01	-0.1060E 00	-0.1060E 00	-0.1122E 00
29	-5.000	-0.7486E-01	-0.8110E-01	-0.8110E-01	-0.8110E-01	-0.8734E-01	-0.8734E-01	-0.9357E-01
30	-5.333	-0.6862E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01
31	-5.666	-0.6238E-01	-0.7486E-01	-0.7486E-01	-0.6862E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01
32	-6.000	-0.6238E-01	-0.6862E-01	-0.6862E-01	-0.6862E-01	-0.6862E-01	-0.7486E-01	-0.6862E-01
33	-6.666	-0.5614E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01
34	-7.333	-0.4367E-01	-0.4990E-01	-0.5614E-01	-0.4990E-01	-0.5614E-01	-0.4990E-01	-0.6238E-01
35	-8.000	-0.3743E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01	-0.4990E-01
36	-8.666	-0.3743E-01	-0.4990E-01	-0.4367E-01	-0.3743E-01	-0.4367E-01	-0.4367E-01	-0.3119E-01
37	-9.333	-0.3743E-01	-0.4990E-01	-0.4367E-01	-0.3743E-01	-0.4367E-01	-0.4367E-01	-0.3119E-01
38	-10.000	-0.3743E-01	-0.4990E-01	-0.4367E-01	-0.3743E-01	-0.4367E-01	-0.4367E-01	-0.3119E-01

Q = 0.033 CMM (12.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.350
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 3644.6 NT/SQ M (76.1 PSF)

TABLE 2 – Continued

C_p DATA FOR FLAT PLATE

[V_e = 0.350]

PORT NO.	X/D	CP	CP	CP	CP	CP
		BETA=70.0DEG	BETA=75.0DEG	BETA=80.0DEG	BETA=85.0DEG	BETA=90.0DEC
1	6.000	-0.2495E-01	-0.3119E-01	-0.4367E-01	-0.6862E-01	-0.3743E-01
2	5.666	-0.2495E-01	-0.3743E-01	-0.4990E-01	-0.7486E-01	-0.6862E-01
3	5.333	-0.4367E-01	-0.4367E-01	-0.5614E-01	-0.6862E-01	-0.7486E-01
4	5.000	-0.4990E-01	-0.5614E-01	-0.6238E-01	-0.7486E-01	-0.8110E-01
5	4.666	-0.5614E-01	-0.6862E-01	-0.7486E-01	-0.8110E-01	-0.8734E-01
6	4.333	-0.6862E-01	-0.7486E-01	-0.8110E-01	-0.9357E-01	-0.1122E 00
7	4.000	-0.7486E-01	-0.8734E-01	-0.9981E-01	-0.1185E 00	-0.1372E 00
8	3.666	-0.8734E-01	-0.1122E 00	-0.1310E 00	-0.1372E 00	-0.1497E 00
9	3.333	-0.1185E 00	-0.1372E 00	-0.1434E 00	-0.1746E 00	-0.1996E 00
10	3.000	-0.1372E 00	-0.1559E 00	-0.1871E 00	-0.1996E 00	-0.2308E 00
11	2.666	-0.1809E 00	-0.1996E 00	-0.2370E 00	-0.2620E 00	-0.2807E 00
12	2.333	-0.2308E 00	-0.2620E 00	-0.3119E 00	-0.3306E 00	-0.3805E 00
13	2.000	-0.3119E 00	-0.3493E 00	-0.3930E 00	-0.4491E 00	-0.4990E 00
14	1.666	-0.4429E 00	-0.4990E 00	-0.5677E 00	-0.6238E 00	-0.6862E 00
15	1.333	-0.6363E 00	-0.7423E 00	-0.8172E 00	-0.8858E 00	-0.9607E 00
16	1.000	-0.1023E 01	-0.1147E 01	-0.1272E 01	-0.1397E 01	-0.1509E 01
17	-1.000	-0.1578E 01	-0.1578E 01	-0.1572E 01	-0.1559E 01	-0.1509E 01
18	-1.333	-0.1035E 01	-0.1016E 01	-0.1016E 01	-0.9669E 00	-0.9420E 00
19	-1.666	-0.7548E 00	-0.7423E 00	-0.7049E 00	-0.6862E 00	-0.6363E 00
20	-2.000	-0.5614E 00	-0.5240E 00	-0.5115E 00	-0.4928E 00	-0.4554E 00
21	-2.333	-0.4179E 00	-0.3992E 00	-0.3867E 00	-0.3743E 00	-0.3368E 00
22	-2.666	-0.3244E 00	-0.3181E 00	-0.3055E 00	-0.2807E 00	-0.2620E 00
23	-3.000	-0.2620E 00	-0.2557E 00	-0.2495E 00	-0.2308E 00	-0.2058E 00
24	-3.333	-0.2058E 00	-0.1996E 00	-0.1996E 00	-0.1871E 00	-0.1746E 00
25	-3.666	-0.1746E 00	-0.1622E 00	-0.1559E 00	-0.1434E 00	-0.1372E 00
26	-4.000	-0.1434E 00	-0.1372E 00	-0.1372E 00	-0.1310E 00	-0.1185E 00
27	-4.333	-0.1310E 00	-0.1247E 00	-0.1185E 00	-0.1060E 00	-0.9981E-01
28	-4.666	-0.1060E 00	-0.9981E-01	-0.9981E-01	-0.8734E-01	-0.8110E-01
29	-5.000	-0.8734E-01	-0.8734E-01	-0.8110E-01	-0.7486E-01	-0.7486E-01
30	-5.333	-0.8110E-01	-0.7486E-01	-0.7486E-01	-0.7486E-01	-0.6862E-01
31	-5.666	-0.7486E-01	-0.7486E-01	-0.7486E-01	-0.6862E-01	-0.6862E-01
32	-6.000	-0.6862E-01	-0.6862E-01	-0.6862E-01	-0.6238E-01	-0.6238E-01
33	-6.666	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.5614E-01
34	-7.333	-0.5614E-01	-0.5614E-01	-0.4990E-01	-0.4367E-01	-0.3743E-01
35	-8.000	-0.4990E-01	-0.3743E-01	-0.4367E-01	-0.3743E-01	-0.3743E-01
36	-8.666	-0.4367E-01	-0.3743E-01	-0.3743E-01	-0.3119E-01	-0.3119E-01
37	-9.333	-0.4367E-01	-0.3743E-01	-0.3743E-01	-0.3119E-01	-0.3119E-01
38	-10.000	-0.4367E-01	-0.3743E-01	-0.3743E-01	-0.3119E-01	-0.3119E-01

Q = 0.033 CMM (12.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.350
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 3644.6 NT/SQ M (76.1 PSF)

TABLE 2

C_p DATA FOR FLAT PLATE

[V_e = 0.300]

PORT NO.	X/D	CP BETA= 0.0DEG	CP BETA= 5.0DEG	CP BETA=10.0DEG	CP BETA=15.0DEG	CP BETA=20.0DEG	CP BETA=25.0DEG	CP BETA=30.0DEG
1	6.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	5.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
3	5.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
4	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
5	4.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	4.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02
8	3.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.1247E-01
9	3.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.2495E-01
10	3.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.3119E-01
11	2.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.1247E-01	-0.4367E-01
12	2.333	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.6238E-02	-0.3119E-01	-0.5614E-01
13	2.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.1247E-01	-0.4367E-01	-0.6862E-01
14	1.666	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	-0.1247E-01	-0.5614E-01	-0.8734E-01
15	1.333	0.3261E-01	0.2174E-01	0.5436E-02	0.0000E 00	-0.6238E-02	-0.5614E-01	-0.1122E 00
16	1.000	0.9241E-01	0.8154E-01	0.5979E-01	0.1630E-01	0.0000E 00	-0.5614E-01	-0.1622E 00
17	-1.000	-0.3119E 00	-0.3244E 00	-0.3743E 00	-0.4367E 00	-0.4990E 00	-0.5801E 00	-0.6987E 00
18	-1.333	-0.1060E 00	-0.1247E 00	-0.1559E 00	-0.2121E 00	-0.2557E 00	-0.3181E 00	-0.4117E 00
19	-1.666	-0.6238E-01	-0.6238E-01	-0.8734E-01	-0.1247E 00	-0.1809E 00	-0.2245E 00	-0.3119E 00
20	-2.000	-0.3743E-01	-0.3743E-01	-0.6238E-01	-0.9357E-01	-0.1247E 00	-0.1746E 00	-0.2433E 00
21	-2.333	-0.2495E-01	-0.3119E-01	-0.4990E-01	-0.6862E-01	-0.8734E-01	-0.1372E 00	-0.1871E 00
22	-2.666	-0.1871E-01	-0.2495E-01	-0.4367E-01	-0.6238E-01	-0.7486E-01	-0.1122E 00	-0.1684E 00
23	-3.000	-0.1871E-01	-0.1871E-01	-0.3119E-01	-0.5614E-01	-0.6862E-01	-0.9981E-01	-0.1434E 00
24	-3.333	-0.1871E-01	-0.1871E-01	-0.3119E-01	-0.4990E-01	-0.6238E-01	-0.8734E-01	-0.1247E 00
25	-3.666	-0.1871E-01	-0.1871E-01	-0.3119E-01	-0.4367E-01	-0.5614E-01	-0.8110E-01	-0.1185E 00
26	-4.000	-0.1871E-01	-0.1871E-01	-0.2495E-01	-0.3743E-01	-0.5614E-01	-0.8110E-01	-0.1122E 00
27	-4.333	-0.1871E-01	-0.1871E-01	-0.2495E-01	-0.3743E-01	-0.4990E-01	-0.7486E-01	-0.9357E-01
28	-4.666	-0.1871E-01	-0.1871E-01	-0.2495E-01	-0.3119E-01	-0.4990E-01	-0.6862E-01	-0.9357E-01
29	-5.000	-0.1871E-01	-0.1871E-01	-0.1871E-01	-0.3119E-01	-0.4367E-01	-0.6238E-01	-0.8734E-01
30	-5.333	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.6238E-01	-0.7486E-01
31	-5.666	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.5614E-01	-0.7486E-01
32	-6.000	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.5614E-01	-0.6862E-01
33	-6.666	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.5614E-01	-0.6238E-01
34	-7.333	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.4990E-01	-0.6238E-01
35	-8.000	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.4990E-01	-0.5614E-01
36	-8.666	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.4990E-01	-0.5614E-01
37	-9.333	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.4990E-01	-0.5614E-01
38	-10.000	-0.1871E-01	-0.1871E-01	-0.1247E-01	-0.1871E-01	-0.3743E-01	-0.4990E-01	-0.5614E-01

Q = 0.039 CMM (14.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.300
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 4960.8 NT/SQ M (103.6 PSF)

TABLE 2 – Continued

C_p DATA FOR FLAT PLATE

[V_e = 0.300]

PORT NO.	X/D	CP	CP	CP	CP	CP	CP	CP
		BETA=35.0DEG	BETA=40.0DEG	BETA=45.0DEG	BETA=50.0DEG	BETA=55.0DEG	BETA=60.0DEG	BETA=65.0DEG
1	6.000	0.0000E 00	-0.6238E-02	-0.1247E-01	-0.1247E-01	-0.2495E-01	-0.3119E-01	-0.4367E-01
2	5.666	-0.6238E-02	-0.6238E-02	-0.1247E-01	-0.1871E-01	-0.3119E-01	-0.4367E-01	-0.4990E-01
3	5.333	-0.6238E-02	-0.1247E-01	-0.1871E-01	-0.3119E-01	-0.3743E-01	-0.4990E-01	-0.5614E-01
4	5.000	-0.6238E-02	-0.1247E-01	-0.2495E-01	-0.3743E-01	-0.4367E-01	-0.5614E-01	-0.6238E-01
5	4.666	-0.6238E-02	-0.1871E-01	-0.3119E-01	-0.4367E-01	-0.4990E-01	-0.6238E-01	-0.6862E-01
6	4.333	-0.1247E-01	-0.2495E-01	-0.4367E-01	-0.4990E-01	-0.6238E-01	-0.6862E-01	-0.8110E-01
7	4.000	-0.1871E-01	-0.3743E-01	-0.4990E-01	-0.6238E-01	-0.7486E-01	-0.8110E-01	-0.1060E 00
8	3.666	-0.3119E-01	-0.4990E-01	-0.6238E-01	-0.6862E-01	-0.8734E-01	-0.1060E 00	-0.1247E 00
9	3.333	-0.4367E-01	-0.5614E-01	-0.6862E-01	-0.8110E-01	-0.1060E 00	-0.1247E 00	-0.1372E 00
10	3.000	-0.5614E-01	-0.6238E-01	-0.8110E-01	-0.1060E 00	-0.1310E 00	-0.1497E 00	-0.1809E 00
11	2.666	-0.6238E-01	-0.7486E-01	-0.1122E 00	-0.1247E 00	-0.1622E 00	-0.1871E 00	-0.2121E 00
12	2.333	-0.8110E-01	-0.1060E 00	-0.1372E 00	-0.1684E 00	-0.1996E 00	-0.2433E 00	-0.2682E 00
13	2.000	-0.1060E 00	-0.1310E 00	-0.1809E 00	-0.2183E 00	-0.2557E 00	-0.3119E 00	-0.3556E 00
14	1.666	-0.1372E 00	-0.1871E 00	-0.2433E 00	-0.3056E 00	-0.3618E 00	-0.4242E 00	-0.4803E 00
15	1.333	-0.1809E 00	-0.2495E 00	-0.3181E 00	-0.4117E 00	-0.4990E 00	-0.5240E 00	-0.6737E 00
16	1.000	-0.2744E 00	-0.4242E 00	-0.5614E 00	-0.7112E 00	-0.8546E 00	-0.9857E 00	-0.1079E 01
17	-1.000	-0.8110E 00	-0.9357E 00	-0.1048E 01	-0.1129E 01	-0.1260E 01	-0.1366E 01	-0.1441E 01
18	-1.333	-0.5240E 00	-0.6301E 00	-0.7423E 00	-0.8172E 00	-0.9046E 00	-0.9545E 00	-0.9981E 00
19	-1.666	-0.3805E 00	-0.4866E 00	-0.5614E 00	-0.6301E 00	-0.6862E 00	-0.7361E 00	-0.7548E 00
20	-2.000	-0.3119E 00	-0.3743E 00	-0.4367E 00	-0.4866E 00	-0.5365E 00	-0.5677E 00	-0.5926E 00
21	-2.333	-0.2557E 00	-0.3119E 00	-0.3618E 00	-0.3867E 00	-0.4304E 00	-0.4491E 00	-0.4678E 00
22	-2.666	-0.2121E 00	-0.2557E 00	-0.2994E 00	-0.3244E 00	-0.3493E 00	-0.3680E 00	-0.3743E 00
23	-3.000	-0.1871E 00	-0.2245E 00	-0.2495E 00	-0.2682E 00	-0.2932E 00	-0.3056E 00	-0.3119E 00
24	-3.333	-0.1684E 00	-0.1933E 00	-0.2183E 00	-0.2308E 00	-0.2495E 00	-0.2495E 00	-0.2557E 00
25	-3.666	-0.1497E 00	-0.1746E 00	-0.1871E 00	-0.1996E 00	-0.2121E 00	-0.2183E 00	-0.2183E 00
26	-4.000	-0.1372E 00	-0.1497E 00	-0.1684E 00	-0.1809E 00	-0.1871E 00	-0.1871E 00	-0.1871E 00
27	-4.333	-0.1247E 00	-0.1310E 00	-0.1434E 00	-0.1559E 00	-0.1622E 00	-0.1684E 00	-0.1622E 00
28	-4.666	-0.1122E 00	-0.1247E 00	-0.1310E 00	-0.1310E 00	-0.1372E 00	-0.1434E 00	-0.1372E 00
29	-5.000	-0.1060E 00	-0.1122E 00	-0.1185E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00
30	-5.333	-0.8734E-01	-0.9981E-01	-0.1122E 00	-0.1122E 00	-0.1122E 00	-0.1122E 00	-0.1122E 00
31	-5.666	-0.8734E-01	-0.9357E-01	-0.9981E-01	-0.1060E 00	-0.9981E-01	-0.1060E 00	-0.1060E 00
32	-6.000	-0.7486E-01	-0.8734E-01	-0.9357E-01	-0.9357E-01	-0.9357E-01	-0.9357E-01	-0.9357E-01
33	-6.666	-0.6862E-01	-0.6862E-01	-0.7486E-01	-0.8110E-01	-0.8110E-01	-0.8110E-01	-0.8110E-01
34	-7.333	-0.6238E-01	-0.6238E-01	-0.6862E-01	-0.6862E-01	-0.6862E-01	-0.6862E-01	-0.6862E-01
35	-8.000	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.5614E-01	-0.6238E-01
36	-8.666	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01
37	-9.333	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.4990E-01	-0.5614E-01
38	-10.000	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.4990E-01	-0.5614E-01

Q = 0.039 CMM (14.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.300
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 4960.8 NT/SQ M (103.6 PSF)

TABLE 2 – Concluded

C_p DATA FOR FLAT PLATE

[V_e = 0.300]

PORT NO.	X/D	CP	CP	CP	CP	CP
		BETA=70.0DEG	BETA=75.0DEG	BETA=80.0DEG	BETA=85.0DEG	BETA=90.0DEG
1	6.000	-0.4990E-01	-0.5614E-01	-0.6238E-01	-0.6238E-01	-0.6862E-01
2	5.666	-0.5614E-01	-0.5614E-01	-0.6238E-01	-0.6862E-01	-0.8110E-01
3	5.333	-0.6238E-01	-0.6238E-01	-0.7486E-01	-0.8110E-01	-0.9357E-01
4	5.000	-0.6862E-01	-0.7486E-01	-0.8734E-01	-0.9357E-01	-0.1060E 00
5	4.666	-0.8110E-01	-0.9357E-01	-0.1060E 00	-0.1185E 00	-0.1185E 00
6	4.333	-0.9981E-01	-0.1060E 00	-0.1185E 00	-0.1247E 00	-0.1372E 00
7	4.000	-0.1185E 00	-0.1247E 00	-0.1372E 00	-0.1559E 00	-0.1684E 00
8	3.666	-0.1310E 00	-0.1559E 00	-0.1746E 00	-0.1809E 00	-0.1933E 00
9	3.333	-0.1684E 00	-0.1871E 00	-0.1933E 00	-0.2245E 00	-0.2433E 00
10	3.000	-0.1996E 00	-0.2308E 00	-0.2433E 00	-0.2557E 00	-0.2932E 00
11	2.666	-0.2495E 00	-0.2744E 00	-0.3056E 00	-0.3181E 00	-0.3556E 00
12	2.333	-0.3119E 00	-0.3493E 00	-0.3743E 00	-0.4117E 00	-0.4367E 00
13	2.000	-0.4055E 00	-0.4429E 00	-0.4928E 00	-0.5302E 00	-0.5614E 00
14	1.666	-0.5552E 00	-0.5926E 00	-0.6550E 00	-0.6987E 00	-0.7486E 00
15	1.333	-0.7611E 00	-0.8297E 00	-0.9170E 00	-0.9607E 00	-0.1023E 01
16	1.000	-0.1241E 01	-0.1322E 01	-0.1422E 01	-0.1534E 01	-0.1597E 01
17	-1.000	-0.1503E 01	-0.1540E 01	-0.1603E 01	-0.1597E 01	-0.1559E 01
18	-1.333	-0.1048E 01	-0.1041E 01	-0.1060E 01	-0.1054E 01	-0.1010E 01
19	-1.666	-0.7735E 00	-0.7798E 00	-0.7798E 00	-0.7611E 00	-0.7361E 00
20	-2.000	-0.5926E 00	-0.5926E 00	-0.5864E 00	-0.5677E 00	-0.5489E 00
21	-2.333	-0.4741E 00	-0.4678E 00	-0.4554E 00	-0.4429E 00	-0.4304E 00
22	-2.666	-0.3743E 00	-0.3743E 00	-0.3680E 00	-0.3493E 00	-0.3244E 00
23	-3.000	-0.3119E 00	-0.3056E 00	-0.3056E 00	-0.2932E 00	-0.2620E 00
24	-3.333	-0.2495E 00	-0.2495E 00	-0.2433E 00	-0.2370E 00	-0.2245E 00
25	-3.666	-0.2121E 00	-0.2058E 00	-0.1996E 00	-0.1933E 00	-0.1871E 00
26	-4.000	-0.1871E 00	-0.1809E 00	-0.1809E 00	-0.1684E 00	-0.1559E 00
27	-4.333	-0.1622E 00	-0.1559E 00	-0.1434E 00	-0.1372E 00	-0.1310E 00
28	-4.666	-0.1372E 00	-0.1310E 00	-0.1247E 00	-0.1247E 00	-0.1247E 00
29	-5.000	-0.1247E 00	-0.1247E 00	-0.1185E 00	-0.1122E 00	-0.1122E 00
30	-5.333	-0.1185E 00	-0.1122E 00	-0.1060E 00	-0.9981E-01	-0.8734E-01
31	-5.666	-0.1060E 00	-0.9981E-01	-0.9357E-01	-0.9357E-01	-0.8110E-01
32	-6.000	-0.9357E-01	-0.8110E-01	-0.8110E-01	-0.8110E-01	-0.7486E-01
33	-6.666	-0.8110E-01	-0.6862E-01	-0.6862E-01	-0.6862E-01	-0.6238E-01
34	-7.333	-0.6862E-01	-0.6238E-01	-0.6238E-01	-0.6238E-01	-0.5614E-01
35	-8.000	-0.6238E-01	-0.5614E-01	-0.5614E-01	-0.5614E-01	-0.4990E-01
36	-8.666	-0.5614E-01	-0.5614E-01	-0.4990E-01	-0.4990E-01	-0.4990E-01
37	-9.333	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01
38	-10.000	-0.4990E-01	-0.4990E-01	-0.4367E-01	-0.4367E-01	-0.4367E-01

Q = 0.039 CMM (14.00 CFM)
VINF = 27.8 M/S (91.4 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.300
DYN PRES INF = 448.5 NT/SQ M (9.3 PSF)
DYN PRES JET = 4960.8 NT/SQ M (103.6 PSF)

TABLE 3

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

(V_e = 0.518)

PORT NO.	X/D	THETA = 0.0 DEGREES CP	L/T	M/TD	THETA = 2.5 DEGREES CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-02	0.4254E-04	-0.1914E-03	-0.3607E-02	0.8501E-04	-0.3825E-03
3	4.166	-0.6422E-02	0.8509E-04	-0.3545E-03	-0.8107E-02	0.1700E-03	-0.7084E-03
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.1119E-01	-0.1483E-03	0.4201E-03	0.1125E-01	-0.1481E-03	0.4197E-03
8	2.500	0.4476E-01	-0.5932E-03	0.1483E-02	0.7590E-01	-0.8889E-03	0.2222E-02
9	2.166	0.6715E-01	-0.8898E-03	0.1927E-02	0.1563E 00	-0.1629E-02	0.3531E-02
10	1.833	0.1175E 00	-0.1557E-02	0.2854E-02	0.3034E 00	-0.2815E-02	0.5160E-02
11	1.500	0.2070E 00	-0.2743E-02	0.4115E-02	0.5742E 00	-0.4741E-02	0.7111E-02
12	1.166	0.3301E 00	-0.4374E-02	0.5104E-02	0.9880E 00	-0.7259E-02	0.8469E-02
13	0.833	0.4476E 00	-0.5932E-02	0.4943E-02	0.1585E 01	-0.1037E-01	0.8642E-02
14	-0.833	-0.1335E 01	0.1770E-01	0.1475E-01	-0.8881E 01	0.5169E-01	0.4307E-01
15	-1.166	-0.7192E 00	0.9531E-02	0.1111E-01	-0.5514E 01	0.2856E-01	0.3332E-01
16	-1.500	-0.5266E 00	0.6978E-02	0.1046E-01	-0.3835E 01	0.1768E-01	0.2652E-01
17	-1.833	-0.3853E 00	0.5105E-02	0.9360E-02	-0.2942E 01	0.1207E-01	0.2213E-01
18	-2.166	-0.2761E 00	0.3659E-02	0.7928E-02	-0.2328E 01	0.8501E-02	0.1842E-01
19	-2.500	-0.1990E 00	0.2638E-02	0.6595E-02	-0.1726E 01	0.5611E-02	0.1402E-01
20	-2.833	-0.1412E 00	0.1872E-02	0.5304E-02	-0.1352E 01	0.3910E-02	0.1108E-01
21	-3.166	-0.1220E 00	0.1616E-02	0.5120E-02	-0.1321E 01	0.3400E-02	0.1076E-01
22	-3.500	-0.7706E-01	0.1021E-02	0.3574E-02	-0.9647E 00	0.2210E-02	0.7796E-02
23	-3.833	-0.7706E-01	0.1021E-02	0.3914E-02	-0.1000E 01	0.2040E-02	0.7821E-02
24	-4.166	-0.6422E-01	0.8509E-03	0.3545E-02	-0.1030E 01	0.1870E-02	0.7793E-02
25	-4.500	-0.6422E-01	0.8509E-03	0.3829E-02	-0.1052E 01	0.1700E-02	0.7651E-02
26	-4.833	-0.5779E-01	0.7658E-03	0.3701E-02	-0.1064E 01	0.1530E-02	0.7396E-02
27	-5.166	-0.5779E-01	0.7658E-03	0.3957E-02	-0.6645E 00	0.8501E-03	0.4392E-02
28	-5.500	-0.5779E-01	0.7658E-03	0.4212E-02	-0.7466E 00	0.8501E-03	0.4675E-02
29	-5.833	-0.5779E-01	0.7658E-03	0.4467E-02	-0.8389E 00	0.8501E-03	0.4959E-02
30	-6.166	-0.5779E-01	0.7658E-03	0.4722E-02	-0.9426E 00	0.8501E-03	0.5242E-02
31	-6.500	-0.5779E-01	0.7658E-03	0.4978E-02	-0.1059E 01	0.8501E-03	0.5526E-02
32	-6.833	-0.5779E-01	0.7658E-03	0.5233E-02	-0.1190E 01	0.8501E-03	0.5809E-02
33	-7.166	-0.5779E-01	0.7658E-03	0.5488E-02	-0.1337E 01	0.8501E-03	0.6092E-02
34	-7.500	-0.5779E-01	0.7658E-03	0.5744E-02	-0.1502E 01	0.8501E-03	0.6376E-02
35	-7.833	-0.5779E-01	0.7658E-03	0.5999E-02	-0.1688E 01	0.8501E-03	0.6659E-02
36	-8.166	-0.5779E-01	0.7658E-03	0.6254E-02	-0.1896E 01	0.8501E-03	0.6943E-02
37	-8.500	-0.5779E-01	0.7658E-03	0.6510E-02	-0.2131E 01	0.8501E-03	0.7226E-02
38	-8.833	-0.5779E-01	0.7658E-03	0.6765E-02	-0.2394E 01	0.8501E-03	0.7509E-02
39	-9.166	-0.5779E-01	0.7658E-03	0.7020E-02	-0.2690E 01	0.8501E-03	0.7793E-02
40	-9.500	-0.5779E-01	0.7658E-03	0.7275E-02	-0.3023E 01	0.8501E-03	0.8076E-02
41	-9.833	-0.5779E-01	0.7658E-03	0.7531E-02	-0.3396E 01	0.8501E-03	0.8360E-02
42	-10.166	-0.5779E-01	0.7658E-03	0.7786E-02	-0.3816E 01	0.8501E-03	0.8643E-02
43	-10.500	-0.2889E-01	0.3829E-03	0.4020E-02	-0.2144E 01	0.4250E-03	0.4463E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.01157 NT (0.00260 LB)			TOTAL LIFT = 0.04094 NT (0.00920 LB)		
		TOTAL L/T = 0.05013			TOTAL L/T = 0.17735		
		TOTAL MOMENT = 0.00045 NT-M (0.00033 LB-FT)			TOTAL MOMENT = 0.00124 NT-M (0.00092 LB-FT)		
		TOTAL M/TD = 0.20748			TOTAL M/TD = 0.56845		

Q = 0.022 CMM (8.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 52.9 M/S (173.8 F/S)
VE = 0.518
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 1619.8 NT/SQ M (33.8 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.518]

PORT		THETA = 5.0 DEGREES			THETA = 7.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-02	0.8477E-04	-0.3814E-03	-0.3607E-02	0.8437E-04	-0.3796E-03
3	4.166	-0.6422E-02	0.1695E-03	-0.7064E-03	-0.8107E-02	0.1687E-03	-0.7030E-03
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.1678E-01	-0.4432E-03	0.1108E-02	0.1265E-01	-0.1470E-03	0.3675E-03
9	2.166	0.5595E-01	-0.1477E-02	0.3200E-02	0.8529E-01	-0.8821E-03	0.1911E-02
10	1.833	0.8953E-01	-0.2363E-02	0.4333E-02	0.1756E 00	-0.1617E-02	0.2965E-02
11	1.500	0.1343E 00	-0.3545E-02	0.5318E-02	0.3230E 00	-0.2646E-02	0.3969E-02
12	1.166	0.1958E 00	-0.5170E-02	0.6032E-02	0.4234E 00	-0.3087E-02	0.3602E-02
13	0.833	0.2294E 00	-0.6057E-02	0.5047E-02	0.4078E 00	-0.2646E-02	0.2205E-02
14	-0.833	-0.1483E 01	0.3916E-01	0.3263E-01	-0.4060E 01	0.2345E-01	0.1954E-01
15	-1.166	-0.1040E 01	0.2746E-01	0.3204E-01	-0.4201E 01	0.2159E-01	0.2519E-01
16	-1.500	-0.7192E 00	0.1898E-01	0.2848E-01	-0.3835E 01	0.1754E-01	0.2632E-01
17	-1.833	-0.5137E 00	0.1356E-01	0.2486E-01	-0.2983E 01	0.1214E-01	0.2227E-01
18	-2.166	-0.3467E 00	0.9155E-02	0.1983E-01	-0.2421E 01	0.8774E-02	0.1901E-01
19	-2.500	-0.2504E 00	0.6612E-02	0.1653E-01	-0.1935E 01	0.6243E-02	0.1560E-01
20	-2.833	-0.1862E 00	0.4916E-02	0.1393E-01	-0.1704E 01	0.4893E-02	0.1386E-01
21	-3.166	-0.1412E 00	0.3730E-02	0.1181E-01	-0.1453E 01	0.3712E-02	0.1175E-01
22	-3.500	-0.9633E-01	0.2543E-02	0.8901E-02	-0.1187E 01	0.2699E-02	0.9449E-02
23	-3.833	-0.8348E-01	0.2204E-02	0.8449E-02	-0.1084E 01	0.2193E-02	0.8408E-02
24	-4.166	-0.7706E-01	0.2034E-02	0.8477E-02	-0.1124E 01	0.2024E-02	0.8437E-02
25	-4.500	-0.7064E-01	0.1865E-02	0.8392E-02	-0.1158E 01	0.1856E-02	0.8352E-02
26	-4.833	-0.6422E-01	0.1695E-02	0.8194E-02	-0.1182E 01	0.1687E-02	0.8155E-02
27	-5.166	-0.4495E-01	0.1186E-02	0.6132E-02	-0.1196E 01	0.1518E-02	0.7846E-02
28	-5.500	-0.4495E-01	0.1186E-02	0.6527E-02	-0.1343E 01	0.1518E-02	0.8352E-02
29	-5.833	-0.4495E-01	0.1186E-02	0.6923E-02	-0.1510E 01	0.1518E-02	0.8858E-02
30	-6.166	-0.4495E-01	0.1186E-02	0.7318E-02	-0.1696E 01	0.1518E-02	0.9365E-02
31	-6.500	-0.4495E-01	0.1186E-02	0.7714E-02	-0.1906E 01	0.1518E-02	0.9871E-02
32	-6.833	-0.4495E-01	0.1186E-02	0.8110E-02	-0.2142E 01	0.1518E-02	0.1037E-01
33	-7.166	-0.4495E-01	0.1186E-02	0.8505E-02	-0.2406E 01	0.1518E-02	0.1088E-01
34	-7.500	-0.4495E-01	0.1186E-02	0.8901E-02	-0.2704E 01	0.1518E-02	0.1138E-01
35	-7.833	-0.4495E-01	0.1186E-02	0.9296E-02	-0.3038E 01	0.1518E-02	0.1189E-01
36	-8.166	-0.4495E-01	0.1186E-02	0.9692E-02	-0.3414E 01	0.1518E-02	0.1240E-01
37	-8.500	-0.4495E-01	0.1186E-02	0.1008E-01	-0.3836E 01	0.1518E-02	0.1290E-01
38	-8.833	-0.4495E-01	0.1186E-02	0.1048E-01	-0.4310E 01	0.1518E-02	0.1341E-01
39	-9.166	-0.4495E-01	0.1186E-02	0.1087E-01	-0.4842E 01	0.1518E-02	0.1392E-01
40	-9.500	-0.4495E-01	0.1186E-02	0.1127E-01	-0.5441E 01	0.1518E-02	0.1442E-01
41	-9.833	-0.4495E-01	0.1186E-02	0.1167E-01	-0.6113E 01	0.1518E-02	0.1493E-01
42	-10.166	-0.4495E-01	0.1186E-02	0.1206E-01	-0.6869E 01	0.1518E-02	0.1543E-01
43	-10.500	-0.2247E-01	0.5934E-03	0.6230E-02	-0.3859E 01	0.7593E-03	0.7972E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.07204 NT (0.01619 LB)			TOTAL LIFT = 0.10046 NT (0.02258 LB)		
		TOTAL L/T = 0.31207			TOTAL L/T = 0.43519		
		TOTAL MOMENT = 0.00212 NT-M (0.00156 LB-FT)			TOTAL MOMENT = 0.00301 NT-M (0.00222 LB-FT)		
		TOTAL M/TD = 0.96679			TOTAL M/TD = 1.37137		

Q = 0.022 CMM (8.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 52.9 M/S (173.8 F/S)
VE = 0.518
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 1619.8 NT/SQ M (33.8 PSF)

TABLE 3 — Continued

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.518]

PORT		THETA = 10.0 DEGREES			THETA = 12.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.7215E-02	0.1661E-03	-0.7477E-03
3	4.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.1621E-01	0.3323E-03	-0.1384E-02
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.9109E-02	0.1661E-03	-0.6369E-03
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.5595E-02	-0.1460E-03	0.3164E-03	0.0000E 00	0.0000E 00	0.0000E 00
10	1.833	0.4476E-01	-0.1168E-02	0.2142E-02	0.1597E-01	-0.1447E-03	0.2654E-03
11	1.500	0.6155E-01	-0.1606E-02	0.2409E-02	0.5383E-01	-0.4343E-03	0.6515E-03
12	1.166	0.6155E-01	-0.1606E-02	0.1874E-02	0.4032E-01	-0.2895E-03	0.3378E-03
13	0.833	0.1119E-01	-0.2920E-03	0.2434E-03	0.0000E 00	0.0000E 00	0.0000E 00
14	-0.833	-0.5844E 00	0.1525E-01	0.1271E-01	-0.1723E 01	0.9803E-02	0.8169E-02
15	-1.166	-0.5779E 00	0.1508E-01	0.1759E-01	-0.2068E 01	0.1046E-01	0.1221E-01
16	-1.500	-0.4688E 00	0.1223E-01	0.1835E-01	-0.1917E 01	0.8640E-02	0.1296E-01
17	-1.833	-0.3981E 00	0.1039E-01	0.1905E-01	-0.2072E 01	0.8308E-02	0.1523E-01
18	-2.166	-0.3082E 00	0.8045E-02	0.1743E-01	-0.1815E 01	0.6480E-02	0.1404E-01
19	-2.500	-0.2247E 00	0.5866E-02	0.1466E-01	-0.1674E 01	0.5317E-02	0.1329E-01
20	-2.833	-0.1798E 00	0.4693E-02	0.1329E-01	-0.1469E 01	0.4154E-02	0.1176E-01
21	-3.166	-0.1412E 00	0.3687E-02	0.1167E-01	-0.1387E 01	0.3489E-02	0.1104E-01
22	-3.500	-0.1091E 00	0.2849E-02	0.9972E-02	-0.1187E 01	0.2658E-02	0.9305E-02
23	-3.833	-0.8990E-01	0.2346E-02	0.8995E-02	-0.1084E 01	0.2160E-02	0.8280E-02
24	-4.166	-0.7706E-01	0.2011E-02	0.8380E-02	-0.1124E 01	0.1993E-02	0.8308E-02
25	-4.500	-0.7064E-01	0.1843E-02	0.8296E-02	-0.1158E 01	0.1827E-02	0.8225E-02
26	-4.833	-0.5779E-01	0.1508E-02	0.7291E-02	-0.1064E 01	0.1495E-02	0.7228E-02
27	-5.166	-0.3853E-01	0.1005E-02	0.5195E-02	-0.9303E 00	0.1163E-02	0.6009E-02
28	-5.500	-0.3853E-01	0.1005E-02	0.5531E-02	-0.1045E 01	0.1163E-02	0.6397E-02
29	-5.833	-0.3853E-01	0.1005E-02	0.5866E-02	-0.1174E 01	0.1163E-02	0.6784E-02
30	-6.166	-0.3853E-01	0.1005E-02	0.6201E-02	-0.1319E 01	0.1163E-02	0.7172E-02
31	-6.500	-0.3853E-01	0.1005E-02	0.6536E-02	-0.1482E 01	0.1163E-02	0.7560E-02
32	-6.833	-0.3853E-01	0.1005E-02	0.6872E-02	-0.1666E 01	0.1163E-02	0.7948E-02
33	-7.166	-0.3853E-01	0.1005E-02	0.7207E-02	-0.1871E 01	0.1163E-02	0.8335E-02
34	-7.500	-0.3853E-01	0.1005E-02	0.7542E-02	-0.2103E 01	0.1163E-02	0.8723E-02
35	-7.833	-0.3853E-01	0.1005E-02	0.7877E-02	-0.2363E 01	0.1163E-02	0.9111E-02
36	-8.166	-0.3853E-01	0.1005E-02	0.8212E-02	-0.2655E 01	0.1163E-02	0.9498E-02
37	-8.500	-0.3853E-01	0.1005E-02	0.8548E-02	-0.2983E 01	0.1163E-02	0.9886E-02
38	-8.833	-0.3853E-01	0.1005E-02	0.8883E-02	-0.3352E 01	0.1163E-02	0.1027E-01
39	-9.166	-0.3853E-01	0.1005E-02	0.9218E-02	-0.3766E 01	0.1163E-02	0.1066E-01
40	-9.500	-0.3853E-01	0.1005E-02	0.9553E-02	-0.4232E 01	0.1163E-02	0.1104E-01
41	-9.833	-0.3853E-01	0.1005E-02	0.9889E-02	-0.4755E 01	0.1163E-02	0.1143E-01
42	-10.166	-0.3853E-01	0.1005E-02	0.1022E-01	-0.5343E 01	0.1163E-02	0.1182E-01
43	-10.500	-0.1926E-01	0.5028E-03	0.5279E-02	-0.3001E 01	0.5815E-03	0.6106E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.12299 NT (0.02765 LB)			TOTAL LIFT = 0.14279 NT (0.03210 LB)		
		TOTAL L/T = 0.53278			TOTAL L/T = 0.61857		
		TOTAL MOMENT = 0.00368 NT-M (0.00271 LB-FT)			TOTAL MOMENT = 0.00431 NT-M (0.00318 LB-FT)		
		TOTAL M/TD = 1.67472			TOTAL M/TD = 1.96207		

Q = 0.022 CMM (8.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 52.9 M/S (173.8 F/S)
VE = 0.518
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 1619.8 NT/SQ M (33.8 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.518]

PORT		THETA = 15.0 DEGREES			THETA = 17.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-02	0.8219E-04	-0.3698E-03	-0.7215E-02	0.1623E-03	-0.7304E-03
3	4.166	-0.6422E-02	0.1643E-03	-0.6849E-03	-0.1621E-01	0.3246E-03	-0.1352E-02
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.9109E-02	0.1623E-03	-0.6222E-03
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	1.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
11	1.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
12	1.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
13	0.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.1300E 00	0.8115E-03	-0.6763E-03
14	-0.833	-0.2697E 00	0.6904E-02	0.5753E-02	-0.8764E 00	0.4869E-02	0.4057E-02
15	-1.166	-0.3146E 00	0.8055E-02	0.9398E-02	-0.1181E 01	0.5843E-02	0.6817E-02
16	-1.500	-0.2697E 00	0.6904E-02	0.1035E-01	-0.1180E 01	0.5194E-02	0.7791E-02
17	-1.833	-0.2633E 00	0.6740E-02	0.1235E-01	-0.1357E 01	0.5356E-02	0.9820E-02
18	-2.166	-0.2055E 00	0.5260E-02	0.1139E-01	-0.1303E 01	0.4544E-02	0.9847E-02
19	-2.500	-0.1733E 00	0.4438E-02	0.1109E-01	-0.1203E 01	0.3733E-02	0.9333E-02
20	-2.833	-0.1412E 00	0.3616E-02	0.1024E-01	-0.1234E 01	0.3408E-02	0.9658E-02
21	-3.166	-0.1220E 00	0.3123E-02	0.9891E-02	-0.1122E 01	0.2759E-02	0.8738E-02
22	-3.500	-0.9633E-01	0.2465E-02	0.8630E-02	-0.9647E 00	0.2110E-02	0.7385E-02
23	-3.833	-0.8348E-01	0.2137E-02	0.8192E-02	-0.1000E 01	0.1947E-02	0.7466E-02
24	-4.166	-0.7064E-01	0.1808E-02	0.7534E-02	-0.1124E 01	0.1947E-02	0.8115E-02
25	-4.500	-0.6422E-01	0.1643E-02	0.7397E-02	-0.1158E 01	0.1785E-02	0.8034E-02
26	-4.833	-0.5779E-01	0.1479E-02	0.7151E-02	-0.1064E 01	0.1460E-02	0.7060E-02
27	-5.166	-0.3853E-01	0.9863E-03	0.5096E-02	-0.6645E 00	0.8115E-03	0.4193E-02
28	-5.500	-0.3853E-01	0.9863E-03	0.5425E-02	-0.1045E 01	0.1136E-02	0.6249E-02
29	-5.833	-0.3853E-01	0.9863E-03	0.5753E-02	-0.1174E 01	0.1136E-02	0.6626E-02
30	-6.166	-0.3853E-01	0.9863E-03	0.6082E-02	-0.1319E 01	0.1136E-02	0.7006E-02
31	-6.500	-0.3853E-01	0.9863E-03	0.6411E-02	-0.1482E 01	0.1136E-02	0.7385E-02
32	-6.833	-0.3853E-01	0.9863E-03	0.6740E-02	-0.1666E 01	0.1136E-02	0.7764E-02
33	-7.166	-0.3853E-01	0.9863E-03	0.7069E-02	-0.1871E 01	0.1136E-02	0.8143E-02
34	-7.500	-0.3853E-01	0.9863E-03	0.7397E-02	-0.2103E 01	0.1136E-02	0.8521E-02
35	-7.833	-0.3853E-01	0.9863E-03	0.7726E-02	-0.2363E 01	0.1136E-02	0.8900E-02
36	-8.166	-0.3853E-01	0.9863E-03	0.8055E-02	-0.2655E 01	0.1136E-02	0.9279E-02
37	-8.500	-0.3853E-01	0.9863E-03	0.8384E-02	-0.2983E 01	0.1136E-02	0.9658E-02
38	-8.833	-0.3853E-01	0.9863E-03	0.8713E-02	-0.3352E 01	0.1136E-02	0.1003E-01
39	-9.166	-0.3853E-01	0.9863E-03	0.9041E-02	-0.3766E 01	0.1136E-02	0.1041E-01
40	-9.500	-0.3853E-01	0.9863E-03	0.9370E-02	-0.4232E 01	0.1136E-02	0.1079E-01
41	-9.833	-0.3853E-01	0.9863E-03	0.9699E-02	-0.4755E 01	0.1136E-02	0.1117E-01
42	-10.166	-0.3853E-01	0.9863E-03	0.1002E-01	-0.5343E 01	0.1136E-02	0.1155E-01
43	-10.500	-0.1926E-01	0.4931E-03	0.5178E-02	-0.3001E 01	0.5681E-03	0.5965E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.15921 NT (0.03579 LB)			TOTAL LIFT = 0.17418 NT (0.03915 LB)		
		TOTAL L/T = 0.68967			TOTAL L/T = 0.75452		
		TOTAL MOMENT = 0.00485 NT-M (0.00357 LB-FT)			TOTAL MOMENT = 0.00538 NT-M (0.00397 LB-FT)		
		TOTAL M/TD = 2.20659			TOTAL M/TD = 2.45101		

Q = 0.022 CMM (8.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 52.9 M/S (173.8 F/S)
VE = 0.518
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 1619.8 NT/SQ M (33.8 PSF)

TABLE 3 -- Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.518]

PORT		THETA = 20.0 DEGREES			THETA = 25.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-02	0.7996E-04	-0.3598E-03	-0.1443E-01	0.3085E-03	-0.1388E-02
3	4.166	-0.6422E-02	0.1599E-03	-0.6663E-03	-0.3243E-01	0.6170E-03	-0.2570E-02
4	3.833	-0.6422E-02	0.1599E-03	-0.6130E-03	-0.2732E-01	0.4627E-03	-0.1773E-02
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.2047E-01	0.3085E-03	-0.1079E-02
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.1150E-01	0.1542E-03	-0.4894E-03
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.1292E-01	0.1542E-03	-0.4370E-03
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1451E-01	0.1542E-03	-0.3856E-03
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.1631E-01	0.1542E-03	-0.3342E-03
10	1.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.1833E-01	0.1542E-03	-0.2827E-03
11	1.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.2059E-01	0.1542E-03	-0.2313E-03
12	1.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.4628E-01	0.3085E-03	-0.3599E-03
13	0.833	-0.1926E-01	0.4797E-03	-0.3998E-03	-0.2340E 00	0.1388E-02	-0.1156E-02
14	-0.833	-0.1412E 00	0.3518E-02	0.2932E-02	-0.3797E 00	0.2005E-02	0.1671E-02
15	-1.166	-0.1926E 00	0.4797E-02	0.5597E-02	-0.6565E 00	0.3085E-02	0.3599E-02
16	-1.500	-0.1733E 00	0.4318E-02	0.6477E-02	-0.7007E 00	0.2930E-02	0.4396E-02
17	-1.833	-0.1798E 00	0.4478E-02	0.8209E-02	-0.8702E 00	0.3239E-02	0.5938E-02
18	-2.166	-0.1477E 00	0.3678E-02	0.7969E-02	-0.8381E 00	0.2776E-02	0.6015E-02
19	-2.500	-0.1348E 00	0.3358E-02	0.8396E-02	-0.8371E 00	0.2468E-02	0.6170E-02
20	-2.833	-0.1220E 00	0.3038E-02	0.8609E-02	-0.8817E 00	0.2313E-02	0.6555E-02
21	-3.166	-0.9633E-01	0.2398E-02	0.7596E-02	-0.8586E 00	0.2005E-02	0.6349E-02
22	-3.500	-0.8348E-01	0.2079E-02	0.7276E-02	-0.8905E 00	0.1851E-02	0.6478E-02
23	-3.833	-0.7706E-01	0.1919E-02	0.7356E-02	-0.1000E 01	0.1851E-02	0.7095E-02
24	-4.166	-0.7064E-01	0.1759E-02	0.7330E-02	-0.1030E 01	0.1696E-02	0.7069E-02
25	-4.500	-0.7064E-01	0.1759E-02	0.7916E-02	-0.1158E 01	0.1696E-02	0.7635E-02
26	-4.833	-0.6422E-01	0.1599E-02	0.7730E-02	-0.1182E 01	0.1542E-02	0.7455E-02
27	-5.166	-0.3853E-01	0.9595E-03	0.4957E-02	-0.7974E 00	0.9255E-03	0.4781E-02
28	-5.500	-0.3853E-01	0.9595E-03	0.5277E-02	-0.8959E 00	0.9255E-03	0.5090E-02
29	-5.833	-0.3853E-01	0.9595E-03	0.5597E-02	-0.1006E 01	0.9255E-03	0.5398E-02
30	-6.166	-0.3853E-01	0.9595E-03	0.5917E-02	-0.1131E 01	0.9255E-03	0.5707E-02
31	-6.500	-0.3853E-01	0.9595E-03	0.6237E-02	-0.1270E 01	0.9255E-03	0.6015E-02
32	-6.833	-0.3853E-01	0.9595E-03	0.6557E-02	-0.1428E 01	0.9255E-03	0.6324E-02
33	-7.166	-0.3853E-01	0.9595E-03	0.6877E-02	-0.1604E 01	0.9255E-03	0.6632E-02
34	-7.500	-0.3853E-01	0.9595E-03	0.7196E-02	-0.1802E 01	0.9255E-03	0.6941E-02
35	-7.833	-0.3853E-01	0.9595E-03	0.7516E-02	-0.2025E 01	0.9255E-03	0.7249E-02
36	-8.166	-0.3853E-01	0.9595E-03	0.7836E-02	-0.2276E 01	0.9255E-03	0.7558E-02
37	-8.500	-0.3853E-01	0.9595E-03	0.8156E-02	-0.2557E 01	0.9255E-03	0.7866E-02
38	-8.833	-0.3853E-01	0.9595E-03	0.8476E-02	-0.2873E 01	0.9255E-03	0.8175E-02
39	-9.166	-0.3853E-01	0.9595E-03	0.8796E-02	-0.3228E 01	0.9255E-03	0.8483E-02
40	-9.500	-0.3853E-01	0.9595E-03	0.9116E-02	-0.3627E 01	0.9255E-03	0.8792E-02
41	-9.833	-0.3853E-01	0.9595E-03	0.9436E-02	-0.4075E 01	0.9255E-03	0.9100E-02
42	-10.166	-0.3853E-01	0.9595E-03	0.9755E-02	-0.4579E 01	0.9255E-03	0.9409E-02
43	-10.500	-0.1926E-01	0.4797E-03	0.5037E-02	-0.2572E 01	0.4627E-03	0.4858E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.18697 NT (0.04203 LB)			TOTAL LIFT = 0.19829 NT (0.04457 LB)		
		TOTAL L/T = 0.80993			TOTAL L/T = 0.85898		
		TOTAL MOMENT = 0.00586 NT-M (0.00432 LB-FT)			TOTAL MOMENT = 0.00626 NT-M (0.00462 LB-FT)		
		TOTAL M/TD = 2.66512			TOTAL M/TD = 2.84944		

Q = 0.022 CMM (8.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 52.9 M/S (173.8 F/S)
VE = 0.518
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 1619.8 NT/SQ M (33.8 PSF)

TABLE 3

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.414]

PORT		THETA = 0.0 DEGREES			THETA = 2.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
3	4.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.1119E-01	-0.9491E-04	0.2689E-03	0.1125E-01	-0.9482E-04	0.2686E-03
8	2.500	0.3357E-01	-0.2847E-03	0.7118E-03	0.7590E-01	-0.5689E-03	0.1422E-02
9	2.166	0.6155E-01	-0.5220E-03	0.1131E-02	0.1421E 00	-0.9482E-03	0.2054E-02
10	1.833	0.1119E 00	-0.9491E-03	0.1740E-02	0.2715E 00	-0.1611E-02	0.2955E-02
11	1.500	0.1846E 00	-0.1566E-02	0.2349E-02	0.5204E 00	-0.2749E-02	0.4124E-02
12	1.166	0.3133E 00	-0.2657E-02	0.3100E-02	0.8469E 00	-0.3982E-02	0.4646E-02
13	0.833	0.5036E 00	-0.4271E-02	0.3559E-02	0.1382E 01	-0.5784E-02	0.4820E-02
14	-0.833	-0.1689E 01	0.1432E-01	0.1193E-01	-0.1162E 02	0.4331E-01	0.3609E-01
15	-1.166	-0.6550E 00	0.5555E-02	0.6481E-02	-0.5941E 01	0.1969E-01	0.2297E-01
16	-1.500	-0.3403E 00	0.2886E-02	0.4329E-02	-0.3356E 01	0.9902E-02	0.1485E-01
17	-1.833	-0.2183E 00	0.1851E-02	0.3394E-02	-0.2113E 01	0.5549E-02	0.1017E-01
18	-2.166	-0.1412E 00	0.1198E-02	0.2596E-02	-0.1490E 01	0.3482E-02	0.7545E-02
19	-2.500	-0.9633E-01	0.8169E-03	0.2042E-02	-0.1046E 01	0.2176E-02	0.5441E-02
20	-2.833	-0.7064E-01	0.5990E-03	0.1697E-02	-0.8229E 00	0.1523E-02	0.4316E-02
21	-3.166	-0.6422E-01	0.5446E-03	0.1724E-02	-0.7265E 00	0.1197E-02	0.3790E-02
22	-3.500	-0.4495E-01	0.3812E-03	0.1334E-02	-0.5937E 00	0.8705E-03	0.3047E-02
23	-3.833	-0.3853E-01	0.3267E-03	0.1252E-02	-0.6670E 00	0.8705E-03	0.3337E-02
24	-4.166	-0.3211E-01	0.2723E-03	0.1134E-02	-0.5621E 00	0.6529E-03	0.2720E-02
25	-4.500	-0.3211E-01	0.2723E-03	0.1225E-02	-0.4210E 00	0.4352E-03	0.1958E-02
26	-4.833	-0.2568E-01	0.2178E-03	0.1052E-02	-0.3548E 00	0.3264E-03	0.1577E-02
27	-5.166	-0.2568E-01	0.2178E-03	0.1125E-02	-0.3987E 00	0.3264E-03	0.1686E-02
28	-5.500	-0.2568E-01	0.2178E-03	0.1198E-02	-0.4479E 00	0.3264E-03	0.1795E-02
29	-5.833	-0.2568E-01	0.2178E-03	0.1270E-02	-0.5033E 00	0.3264E-03	0.1904E-02
30	-6.166	-0.2568E-01	0.2178E-03	0.1343E-02	-0.5655E 00	0.3264E-03	0.2013E-02
31	-6.500	-0.2568E-01	0.2178E-03	0.1416E-02	-0.6354E 00	0.3264E-03	0.2122E-02
32	-6.833	-0.2568E-01	0.2178E-03	0.1488E-02	-0.7140E 00	0.3264E-03	0.2230E-02
33	-7.166	-0.2568E-01	0.2178E-03	0.1561E-02	-0.8022E 00	0.3264E-03	0.2339E-02
34	-7.500	-0.2568E-01	0.2178E-03	0.1633E-02	-0.9014E 00	0.3264E-03	0.2448E-02
35	-7.833	-0.2568E-01	0.2178E-03	0.1706E-02	-0.1012E 01	0.3264E-03	0.2557E-02
36	-8.166	-0.2568E-01	0.2178E-03	0.1779E-02	-0.1138E 01	0.3264E-03	0.2666E-02
37	-8.500	-0.2568E-01	0.2178E-03	0.1851E-02	-0.1278E 01	0.3264E-03	0.2774E-02
38	-8.833	-0.2568E-01	0.2178E-03	0.1924E-02	-0.1436E 01	0.3264E-03	0.2883E-02
39	-9.166	-0.2568E-01	0.2178E-03	0.1996E-02	-0.1614E 01	0.3264E-03	0.2992E-02
40	-9.500	-0.2568E-01	0.2178E-03	0.2069E-02	-0.1813E 01	0.3264E-03	0.3101E-02
41	-9.833	-0.2568E-01	0.2178E-03	0.2142E-02	-0.2037E 01	0.3264E-03	0.3210E-02
42	-10.166	-0.2568E-01	0.2178E-03	0.2214E-02	-0.2289E 01	0.3264E-03	0.3319E-02
43	-10.500	-0.1284E-01	0.1089E-03	0.1143E-02	-0.1286E 01	0.1632E-03	0.1713E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.00811 NT (0.00182 LB)			TOTAL LIFT = 0.03684 NT (0.00828 LB)		
		TOTAL L/T = 0.02249			TOTAL L/T = 0.10213		
		TOTAL MOMENT = 0.00027 NT-M (0.00020 LB-FT)			TOTAL MOMENT = 0.00089 NT-M (0.00066 LB-FT)		
		TOTAL M/TD = 0.08093			TOTAL M/TD = 0.26081		

Q = 0.028 CMM (10.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.414
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.414]

PORT		THETA = 5.0 DEGREES			THETA = 7.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-02	0.5425E-04	-0.2441E-03	-0.3607E-02	0.5399E-04	-0.2429E-03
3	4.166	-0.6422E-02	0.1085E-03	-0.4521E-03	-0.8107E-02	0.1079E-03	-0.4499E-03
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.1119E-01	-0.1891E-03	0.4727E-03	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.4476E-01	-0.7564E-03	0.1638E-02	0.5686E-01	-0.3764E-03	0.8155E-03
10	1.833	0.6715E-01	-0.1134E-02	0.2080E-02	0.1437E 00	-0.8469E-03	0.1552E-02
11	1.500	0.1119E 00	-0.1891E-02	0.2836E-02	0.2153E 00	-0.1129E-02	0.1693E-02
12	1.166	0.1454E 00	-0.2458E-02	0.2868E-02	0.2621E 00	-0.1223E-02	0.1427E-02
13	0.833	0.1231E 00	-0.2080E-02	0.1733E-02	0.0000E 00	0.0000E 00	0.0000E 00
14	-0.833	-0.2132E 01	0.3602E-01	0.3002E-01	-0.5989E 01	0.2213E-01	0.1844E-01
15	-1.166	-0.1400E 01	0.2365E-01	0.2759E-01	-0.5678E 01	0.1868E-01	0.2179E-01
16	-1.500	-0.8348E 00	0.1410E-01	0.2115E-01	-0.4499E 01	0.1317E-01	0.1976E-01
17	-1.833	-0.5073E 00	0.8572E-02	0.1571E-01	-0.3563E 01	0.9287E-02	0.1702E-01
18	-2.166	-0.3339E 00	0.5642E-02	0.1222E-01	-0.2793E 01	0.6479E-02	0.1403E-01
19	-2.500	-0.2183E 00	0.3689E-02	0.9223E-02	-0.2145E 01	0.4427E-02	0.1106E-01
20	-2.833	-0.1477E 00	0.2495E-02	0.7071E-02	-0.1763E 01	0.3239E-02	0.9179E-02
21	-3.166	-0.1155E 00	0.1953E-02	0.6185E-02	-0.1453E 01	0.2375E-02	0.7523E-02
22	-3.500	-0.7064E-01	0.1193E-02	0.4177E-02	-0.1261E 01	0.1835E-02	0.6425E-02
23	-3.833	-0.6422E-01	0.1085E-02	0.4159E-02	-0.1084E 01	0.1403E-02	0.5381E-02
24	-4.166	-0.5137E-01	0.8680E-03	0.3617E-02	-0.9369E 00	0.1079E-02	0.4499E-02
25	-4.500	-0.4495E-01	0.7595E-03	0.3418E-02	-0.9474E 00	0.9719E-03	0.4373E-02
26	-4.833	-0.3853E-01	0.6510E-03	0.3146E-02	-0.9462E 00	0.8639E-03	0.4175E-02
27	-5.166	-0.3853E-01	0.6510E-03	0.3363E-02	-0.6645E 00	0.5399E-03	0.2789E-02
28	-5.500	-0.3853E-01	0.6510E-03	0.3580E-02	-0.7466E 00	0.5399E-03	0.2969E-02
29	-5.833	-0.3853E-01	0.6510E-03	0.3797E-02	-0.8389E 00	0.5399E-03	0.3149E-02
30	-6.166	-0.3853E-01	0.6510E-03	0.4014E-02	-0.9426E 00	0.5399E-03	0.3329E-02
31	-6.500	-0.3853E-01	0.6510E-03	0.4231E-02	-0.1059E 01	0.5399E-03	0.3509E-02
32	-6.833	-0.3853E-01	0.6510E-03	0.4448E-02	-0.1190E 01	0.5399E-03	0.3689E-02
33	-7.166	-0.3853E-01	0.6510E-03	0.4665E-02	-0.1337E 01	0.5399E-03	0.3869E-02
34	-7.500	-0.3853E-01	0.6510E-03	0.4883E-02	-0.1502E 01	0.5399E-03	0.4049E-02
35	-7.833	-0.3853E-01	0.6510E-03	0.5100E-02	-0.1688E 01	0.5399E-03	0.4229E-02
36	-8.166	-0.3853E-01	0.6510E-03	0.5317E-02	-0.1896E 01	0.5399E-03	0.4409E-02
37	-8.500	-0.3853E-01	0.6510E-03	0.5534E-02	-0.2131E 01	0.5399E-03	0.4589E-02
38	-8.833	-0.3853E-01	0.6510E-03	0.5751E-02	-0.2394E 01	0.5399E-03	0.4769E-02
39	-9.166	-0.3853E-01	0.6510E-03	0.5968E-02	-0.2690E 01	0.5399E-03	0.4949E-02
40	-9.500	-0.3853E-01	0.6510E-03	0.6185E-02	-0.3023E 01	0.5399E-03	0.5129E-02
41	-9.833	-0.3853E-01	0.6510E-03	0.6402E-02	-0.3396E 01	0.5399E-03	0.5309E-02
42	-10.166	-0.3853E-01	0.6510E-03	0.6619E-02	-0.3816E 01	0.5399E-03	0.5489E-02
43	-10.500	-0.1926E-01	0.3255E-03	0.3418E-02	-0.2144E 01	0.2699E-03	0.2834E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.07402 NT (0.01664 LB)			TOTAL LIFT = 0.10701 NT (0.02405 LB)		
		TOTAL L/T = 0.20523			TOTAL L/T = 0.29668		
		TOTAL MOMENT = 0.00172 NT-M (0.00127 LB-FT)			TOTAL MOMENT = 0.00247 NT-M (0.00182 LB-FT)		
		TOTAL M/TD = 0.50275			TOTAL M/TD = 0.72032		

Q = 0.028 CMM (10.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.414
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.414]

PORT		THETA = 10.0 DEGREES			THETA = 12.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-02	0.5363E-04	-0.2413E-03	-0.3607E-02	0.5317E-04	-0.2392E-03
3	4.166	-0.6422E-02	0.1072E-03	-0.4469E-03	-0.8107E-02	0.1063E-03	-0.4430E-03
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	1.833	0.1119E-01	-0.1869E-03	0.3427E-03	0.0000E 00	0.0000E 00	0.0000E 00
11	1.500	0.3357E-01	-0.5608E-03	0.8412E-03	0.0000E 00	0.0000E 00	0.0000E 00
12	1.166	0.5595E-02	-0.9347E-04	0.1090E-03	0.0000E 00	0.0000E 00	0.0000E 00
13	0.833	-0.3211E-01	0.5363E-03	-0.4469E-03	-0.2860E 00	0.1169E-02	-0.9748E-03
14	-0.833	-0.8348E 00	0.1394E-01	0.1162E-01	-0.2541E 01	0.9251E-02	0.7709E-02
15	-1.166	-0.8027E 00	0.1340E-01	0.1564E-01	-0.2954E 01	0.9570E-02	0.1116E-01
16	-1.500	-0.6293E 00	0.1051E-01	0.1576E-01	-0.2692E 01	0.7763E-02	0.1164E-01
17	-1.833	-0.5009E 00	0.8367E-02	0.1533E-01	-0.2569E 01	0.6593E-02	0.1208E-01
18	-2.166	-0.3660E 00	0.6114E-02	0.1324E-01	-0.2328E 01	0.5317E-02	0.1152E-01
19	-2.500	-0.2633E 00	0.4398E-02	0.1099E-01	-0.2040E 01	0.4147E-02	0.1036E-01
20	-2.833	-0.2055E 00	0.3432E-02	0.9725E-02	-0.1822E 01	0.3296E-02	0.9340E-02
21	-3.166	-0.1733E 00	0.2896E-02	0.9171E-02	-0.1783E 01	0.2871E-02	0.9092E-02
22	-3.500	-0.1284E 00	0.2145E-02	0.7508E-02	-0.1558E 01	0.2233E-02	0.7816E-02
23	-3.833	-0.1027E 00	0.1716E-02	0.6579E-02	-0.1584E 01	0.2020E-02	0.7745E-02
24	-4.166	-0.7064E-01	0.1179E-02	0.4916E-02	-0.1218E 01	0.1382E-02	0.5760E-02
25	-4.500	-0.6422E-01	0.1072E-02	0.4827E-02	-0.1263E 01	0.1276E-02	0.5742E-02
26	-4.833	-0.5779E-01	0.9654E-03	0.4666E-02	-0.1301E 01	0.1169E-02	0.5653E-02
27	-5.166	-0.3853E-01	0.6436E-03	0.3325E-02	-0.1063E 01	0.8507E-03	0.4395E-02
28	-5.500	-0.4495E-01	0.7508E-03	0.4129E-02	-0.1343E 01	0.9570E-03	0.5264E-02
29	-5.833	-0.3853E-01	0.6436E-03	0.3754E-02	-0.1510E 01	0.9570E-03	0.5583E-02
30	-6.166	-0.3211E-01	0.5363E-03	0.3307E-02	-0.1696E 01	0.9570E-03	0.5902E-02
31	-6.500	-0.2568E-01	0.4290E-03	0.2789E-02	-0.1906E 01	0.9570E-03	0.6221E-02
32	-6.833	-0.2568E-01	0.4290E-03	0.2932E-02	-0.2142E 01	0.9570E-03	0.6540E-02
33	-7.166	-0.2568E-01	0.4290E-03	0.3075E-02	-0.2406E 01	0.9570E-03	0.6859E-02
34	-7.500	-0.2568E-01	0.4290E-03	0.3218E-02	-0.2704E 01	0.9570E-03	0.7178E-02
35	-7.833	-0.2568E-01	0.4290E-03	0.3361E-02	-0.3038E 01	0.9570E-03	0.7497E-02
36	-8.166	-0.2568E-01	0.4290E-03	0.3504E-02	-0.3414E 01	0.9570E-03	0.7816E-02
37	-8.500	-0.2568E-01	0.4290E-03	0.3647E-02	-0.3836E 01	0.9570E-03	0.8135E-02
38	-8.833	-0.2568E-01	0.4290E-03	0.3790E-02	-0.4310E 01	0.9570E-03	0.8454E-02
39	-9.166	-0.2568E-01	0.4290E-03	0.3933E-02	-0.4842E 01	0.9570E-03	0.8773E-02
40	-9.500	-0.2568E-01	0.4290E-03	0.4076E-02	-0.5441E 01	0.9570E-03	0.9092E-02
41	-9.833	-0.2568E-01	0.4290E-03	0.4219E-02	-0.6113E 01	0.9570E-03	0.9411E-02
42	-10.166	-0.2568E-01	0.4290E-03	0.4362E-02	-0.6869E 01	0.9570E-03	0.9730E-02
43	-10.500	-0.1284E-01	0.2145E-03	0.2252E-02	-0.3859E 01	0.4785E-03	0.5024E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.13513 NT (0.03037 LB)			TOTAL LIFT = 0.16179 NT (0.03637 LB)		
		TOTAL L/T = 0.37463			TOTAL L/T = 0.44854		
		TOTAL MOMENT = 0.00312 NT-M (0.00230 LB-FT)			TOTAL MOMENT = 0.00393 NT-M (0.00290 LB-FT)		
		TOTAL M/TD = 0.91017			TOTAL M/TD = 1.14604		

Q = 0.028 CMM (10.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.414
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.414]

PORT		THETA = 15.0 DEGREES			THETA = 17.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.6422E-02	0.1052E-03	-0.4734E-03	-0.7215E-02	0.1038E-03	-0.4674E-03
3	4.166	-0.1284E-01	0.2104E-03	-0.8767E-03	-0.1621E-01	0.2077E-03	-0.8657E-03
4	3.833	-0.6422E-02	0.1052E-03	-0.4033E-03	-0.9109E-02	0.1038E-03	-0.3982E-03
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	1.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
11	1.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
12	1.166	-0.6422E-02	0.1052E-03	-0.1227E-03	-0.6942E-01	0.3116E-03	-0.3635E-03
13	0.833	-0.9633E-01	0.1578E-02	-0.1315E-02	-0.3900E 00	0.1558E-02	-0.1298E-02
14	-0.833	-0.3853E 00	0.6312E-02	0.5260E-02	-0.1256E 01	0.4467E-02	0.3722E-02
15	-1.166	-0.4110E 00	0.6733E-02	0.7856E-02	-0.1641E 01	0.5194E-02	0.6059E-02
16	-1.500	-0.3467E 00	0.5681E-02	0.8522E-02	-0.1549E 01	0.4363E-02	0.6544E-02
17	-1.833	-0.3211E 00	0.5260E-02	0.9644E-02	-0.1699E 01	0.4259E-02	0.7808E-02
18	-2.166	-0.2568E 00	0.4208E-02	0.9118E-02	-0.1583E 01	0.3532E-02	0.7652E-02
19	-2.500	-0.2119E 00	0.3472E-02	0.8680E-02	-0.1569E 01	0.3116E-02	0.7791E-02
20	-2.833	-0.1798E 00	0.2945E-02	0.8347E-02	-0.1469E 01	0.2597E-02	0.7358E-02
21	-3.166	-0.1477E 00	0.2419E-02	0.7663E-02	-0.1453E 01	0.2285E-02	0.7237E-02
22	-3.500	-0.1220E 00	0.1999E-02	0.6996E-02	-0.1410E 01	0.1973E-02	0.6908E-02
23	-3.833	-0.1091E 00	0.1788E-02	0.6856E-02	-0.1334E 01	0.1662E-02	0.6371E-02
24	-4.166	-0.8990E-01	0.1472E-02	0.6137E-02	-0.1311E 01	0.1454E-02	0.6059E-02
25	-4.500	-0.7706E-01	0.1262E-02	0.5681E-02	-0.1263E 01	0.1246E-02	0.5609E-02
26	-4.833	-0.6422E-01	0.1052E-02	0.5085E-02	-0.1301E 01	0.1142E-02	0.5523E-02
27	-5.166	-0.5137E-01	0.8417E-03	0.4348E-02	-0.1196E 01	0.9349E-03	0.4830E-02
28	-5.500	-0.4495E-01	0.7364E-03	0.4050E-02	-0.1343E 01	0.9349E-03	0.5142E-02
29	-5.833	-0.4495E-01	0.7364E-03	0.4296E-02	-0.1510E 01	0.9349E-03	0.5453E-02
30	-6.166	-0.4495E-01	0.7364E-03	0.4541E-02	-0.1696E 01	0.9349E-03	0.5765E-02
31	-6.500	-0.4495E-01	0.7364E-03	0.4787E-02	-0.1906E 01	0.9349E-03	0.6077E-02
32	-6.833	-0.4495E-01	0.7364E-03	0.5032E-02	-0.2142E 01	0.9349E-03	0.6388E-02
33	-7.166	-0.4495E-01	0.7364E-03	0.5278E-02	-0.2406E 01	0.9349E-03	0.6700E-02
34	-7.500	-0.4495E-01	0.7364E-03	0.5523E-02	-0.2704E 01	0.9349E-03	0.7012E-02
35	-7.833	-0.4495E-01	0.7364E-03	0.5769E-02	-0.3038E 01	0.9349E-03	0.7323E-02
36	-8.166	-0.4495E-01	0.7364E-03	0.6014E-02	-0.3414E 01	0.9349E-03	0.7635E-02
37	-8.500	-0.4495E-01	0.7364E-03	0.6260E-02	-0.3836E 01	0.9349E-03	0.7947E-02
38	-8.833	-0.4495E-01	0.7364E-03	0.6505E-02	-0.4310E 01	0.9349E-03	0.8258E-02
39	-9.166	-0.4495E-01	0.7364E-03	0.6751E-02	-0.4842E 01	0.9349E-03	0.8570E-02
40	-9.500	-0.4495E-01	0.7364E-03	0.6996E-02	-0.5441E 01	0.9349E-03	0.8882E-02
41	-9.833	-0.4495E-01	0.7364E-03	0.7242E-02	-0.6113E 01	0.9349E-03	0.9193E-02
42	-10.166	-0.4495E-01	0.7364E-03	0.7487E-02	-0.6869E 01	0.9349E-03	0.9505E-02
43	-10.500	-0.2247E-01	0.3682E-03	0.3866E-02	-0.3859E 01	0.4674E-03	0.4908E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.18306 NT (0.04115 LB)			TOTAL LIFT = 0.20290 NT (0.04561 LB)		
		TOTAL L/T = 0.50752			TOTAL L/T = 0.56252		
		TOTAL MOMENT = 0.00458 NT-M (0.00337 LB-FT)			TOTAL MOMENT = 0.00527 NT-M (0.00388 LB-FT)		
		TOTAL M/TD = 1.33345			TOTAL M/TD = 1.53430		

Q = 0.028 CMM (10.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.414
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 3 -- Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.414]

PORT		THETA = 20.0 DEGREES			THETA = 25.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.6422E-02	0.1023E-03	-0.4606E-03	-0.1082E-01	0.1480E-03	-0.6663E-03
3	4.166	-0.1284E-01	0.2047E-03	-0.8529E-03	-0.2432E-01	0.2961E-03	-0.1234E-02
4	3.833	-0.6422E-02	0.1023E-03	-0.3923E-03	-0.2732E-01	0.2961E-03	-0.1135E-02
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1023E-01	0.9872E-04	-0.3455E-03
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.2300E-01	0.1974E-03	-0.6252E-03
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.1292E-01	0.9872E-04	-0.2797E-03
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1451E-01	0.9872E-04	-0.2468E-03
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.1631E-01	0.9872E-04	-0.2138E-03
10	1.833	-0.6422E-02	0.1023E-03	-0.1876E-03	-0.5499E-01	0.2961E-03	-0.5429E-03
11	1.500	-0.6422E-02	0.1023E-03	-0.1535E-03	-0.8238E-01	0.3948E-03	-0.5923E-03
12	1.166	-0.3211E-01	0.5117E-03	-0.5970E-03	-0.1619E 00	0.6910E-03	-0.8062E-03
13	0.833	-0.8348E-01	0.1330E-02	-0.1108E-02	-0.3380E 00	0.1283E-02	-0.1069E-02
14	-0.833	-0.2055E 00	0.3275E-02	0.2729E-02	-0.5550E 00	0.1875E-02	0.1563E-02
15	-1.166	-0.2504E 00	0.3991E-02	0.4657E-02	-0.8206E 00	0.2468E-02	0.2879E-02
16	-1.500	-0.2119E 00	0.3377E-02	0.5066E-02	-0.8114E 00	0.2171E-02	0.3257E-02
17	-1.833	-0.2183E 00	0.3480E-02	0.6380E-02	-0.1035E 01	0.2468E-02	0.4524E-02
18	-2.166	-0.1926E 00	0.3070E-02	0.6653E-02	-0.9778E 00	0.2073E-02	0.4491E-02
19	-2.500	-0.1605E 00	0.2558E-02	0.6397E-02	-0.1046E 01	0.1974E-02	0.4936E-02
20	-2.833	-0.1477E 00	0.2354E-02	0.6670E-02	-0.1116E 01	0.1875E-02	0.5314E-02
21	-3.166	-0.1348E 00	0.2149E-02	0.6806E-02	-0.1122E 01	0.1678E-02	0.5314E-02
22	-3.500	-0.1155E 00	0.1842E-02	0.6448E-02	-0.9647E 00	0.1283E-02	0.4491E-02
23	-3.833	-0.1091E 00	0.1740E-02	0.6670E-02	-0.1084E 01	0.1283E-02	0.4919E-02
24	-4.166	-0.8348E-01	0.1330E-02	0.5544E-02	-0.1124E 01	0.1184E-02	0.4936E-02
25	-4.500	-0.7706E-01	0.1228E-02	0.5527E-02	-0.1158E 01	0.1085E-02	0.4886E-02
26	-4.833	-0.7064E-01	0.1125E-02	0.5441E-02	-0.1301E 01	0.1085E-02	0.5248E-02
27	-5.166	-0.5779E-01	0.9212E-03	0.4759E-02	-0.1196E 01	0.8884E-03	0.4590E-02
28	-5.500	-0.6422E-01	0.1023E-02	0.5629E-02	-0.1343E 01	0.8884E-03	0.4886E-02
29	-5.833	-0.5779E-01	0.9212E-03	0.5373E-02	-0.1510E 01	0.8884E-03	0.5182E-02
30	-6.166	-0.5779E-01	0.9212E-03	0.5680E-02	-0.1696E 01	0.8884E-03	0.5478E-02
31	-6.500	-0.5779E-01	0.9212E-03	0.5987E-02	-0.1906E 01	0.8884E-03	0.5775E-02
32	-6.833	-0.5779E-01	0.9212E-03	0.6294E-02	-0.2142E 01	0.8884E-03	0.6071E-02
33	-7.166	-0.5779E-01	0.9212E-03	0.6602E-02	-0.2406E 01	0.8884E-03	0.6367E-02
34	-7.500	-0.5779E-01	0.9212E-03	0.6909E-02	-0.2704E 01	0.8884E-03	0.6663E-02
35	-7.833	-0.5779E-01	0.9212E-03	0.7216E-02	-0.3038E 01	0.8884E-03	0.6959E-02
36	-8.166	-0.5779E-01	0.9212E-03	0.7523E-02	-0.3414E 01	0.8884E-03	0.7255E-02
37	-8.500	-0.5779E-01	0.9212E-03	0.7830E-02	-0.3836E 01	0.8884E-03	0.7552E-02
38	-8.833	-0.5779E-01	0.9212E-03	0.8137E-02	-0.4310E 01	0.8884E-03	0.7848E-02
39	-9.166	-0.5779E-01	0.9212E-03	0.8444E-02	-0.4842E 01	0.8884E-03	0.8144E-02
40	-9.500	-0.5779E-01	0.9212E-03	0.8751E-02	-0.5441E 01	0.8884E-03	0.8440E-02
41	-9.833	-0.5779E-01	0.9212E-03	0.9058E-02	-0.6113E 01	0.8884E-03	0.8736E-02
42	-10.166	-0.5779E-01	0.9212E-03	0.9365E-02	-0.6869E 01	0.8884E-03	0.9032E-02
43	-10.500	-0.2889E-01	0.4606E-03	0.4836E-02	-0.3859E 01	0.4442E-03	0.4664E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.22068 NT (0.04961 LB)			TOTAL LIFT = 0.23553 NT (0.05294 LB)		
		TOTAL L/T = 0.61181			TOTAL L/T = 0.65297		
		TOTAL MOMENT = 0.00592 NT-M (0.00436 LB-FT)			TOTAL MOMENT = 0.00648 NT-M (0.00478 LB-FT)		
		TOTAL M/TD = 1.72395			TOTAL M/TD = 1.88660		

Q = 0.028 CMM (10.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.414
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.414]

THETA = 30.0 DEGREES

PORT NO.	X/D	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.9633E-02	0.1414E-03	-0.6367E-03
3	4.166	-0.1926E-01	0.2829E-03	-0.1179E-02
4	3.833	-0.1926E-01	0.2829E-03	-0.1084E-02
5	3.500	-0.1284E-01	0.1886E-03	-0.6603E-03
6	3.166	-0.1284E-01	0.1886E-03	-0.5974E-03
7	2.833	-0.1284E-01	0.1886E-03	-0.5345E-03
8	2.500	-0.1926E-01	0.2829E-03	-0.7074E-03
9	2.166	-0.3211E-01	0.4716E-03	-0.1021E-02
10	1.833	-0.4495E-01	0.6603E-03	-0.1210E-02
11	1.500	-0.2568E-01	0.3773E-03	-0.5659E-03
12	1.166	-0.4495E-01	0.6603E-03	-0.7703E-03
13	0.833	-0.7064E-01	0.1037E-02	-0.8647E-03
14	-0.833	-0.8348E-01	0.1226E-02	0.1021E-02
15	-1.166	-0.1220E 00	0.1792E-02	0.2091E-02
16	-1.500	-0.1155E 00	0.1697E-02	0.2546E-02
17	-1.833	-0.1284E 00	0.1886E-02	0.3458E-02
18	-2.166	-0.1091E 00	0.1603E-02	0.3474E-02
19	-2.500	-0.1027E 00	0.1509E-02	0.3773E-02
20	-2.833	-0.1027E 00	0.1509E-02	0.4276E-02
21	-3.166	-0.8348E-01	0.1226E-02	0.3883E-02
22	-3.500	-0.7706E-01	0.1131E-02	0.3961E-02
23	-3.833	-0.7706E-01	0.1131E-02	0.4339E-02
24	-4.166	-0.7706E-01	0.1131E-02	0.4716E-02
25	-4.500	-0.7064E-01	0.1037E-02	0.4669E-02
26	-4.833	-0.7064E-01	0.1037E-02	0.5015E-02
27	-5.166	-0.5779E-01	0.8489E-03	0.4386E-02
28	-5.500	-0.5779E-01	0.8489E-03	0.4669E-02
29	-5.833	-0.5779E-01	0.8489E-03	0.4952E-02
30	-6.166	-0.5779E-01	0.8489E-03	0.5235E-02
31	-6.500	-0.5779E-01	0.8489E-03	0.5518E-02
32	-6.833	-0.5779E-01	0.8489E-03	0.5801E-02
33	-7.166	-0.5779E-01	0.8489E-03	0.6084E-02
34	-7.500	-0.5779E-01	0.8489E-03	0.6367E-02
35	-7.833	-0.5779E-01	0.8489E-03	0.6650E-02
36	-8.166	-0.5779E-01	0.8489E-03	0.6933E-02
37	-8.500	-0.5779E-01	0.8489E-03	0.7216E-02
38	-8.833	-0.5779E-01	0.8489E-03	0.7499E-02
39	-9.166	-0.5779E-01	0.8489E-03	0.7782E-02
40	-9.500	-0.5779E-01	0.8489E-03	0.8065E-02
41	-9.833	-0.5779E-01	0.8489E-03	0.8348E-02
42	-10.166	-0.5779E-01	0.8489E-03	0.8631E-02
43	-10.500	-0.2889E-01	0.4244E-03	0.4457E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00

TOTAL LIFT = 0.24876 NT (0.05592 LB)
TOTAL L/T = 0.68967
TOTAL MOMENT = 0.00698 NT-M (0.00515 LB-FT)
TOTAL M/TD = 2.03260

Q = 0.028 CMM (10.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 66.2 M/S (217.2 F/S)
VE = 0.414
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 2531.0 NT/SQ M (52.8 PSF)

TABLE 3

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.345]

PORT		THETA = 0.0 DEGREES			THETA = 2.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.6422E-02	0.3782E-04	-0.1701E-03	-0.7215E-02	0.7557E-04	-0.3400E-03
3	4.166	-0.1284E-01	0.7564E-04	-0.3151E-03	-0.1621E-01	0.1511E-03	-0.6297E-03
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.9109E-02	0.7557E-04	-0.2896E-03
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.5595E-02	-0.3295E-04	0.8238E-04	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.2797E-01	-0.1647E-03	0.3570E-03	0.2843E-01	-0.1316E-03	0.2853E-03
10	1.833	0.5595E-01	-0.3295E-03	0.6041E-03	0.1118E 00	-0.4609E-03	0.8450E-03
11	1.500	0.1231E 00	-0.7250E-03	0.1087E-02	0.2691E 00	-0.9877E-03	0.1481E-02
12	1.166	0.2182E 00	-0.1285E-02	0.1499E-02	0.4839E 00	-0.1580E-02	0.1843E-02
13	0.833	0.3805E 00	-0.2241E-02	0.1867E-02	0.8382E 00	-0.2436E-02	0.2030E-02
14	-0.833	-0.1997E 01	0.1176E-01	0.9802E-02	-0.1168E 02	0.3022E-01	0.2519E-01
15	-1.166	-0.7706E 00	0.4538E-02	0.5295E-02	-0.5777E 01	0.1330E-01	0.1551E-01
16	-1.500	-0.3275E 00	0.1928E-02	0.2893E-02	-0.2987E 01	0.6121E-02	0.9181E-02
17	-1.833	-0.1733E 00	0.1021E-02	0.1872E-02	-0.1657E 01	0.3022E-02	0.5541E-02
18	-2.166	-0.1027E 00	0.6051E-03	0.1311E-02	-0.1117E 01	0.1813E-02	0.3929E-02
19	-2.500	-0.7064E-01	0.4160E-03	0.1040E-02	-0.6801E 00	0.9824E-03	0.2456E-02
20	-2.833	-0.6422E-01	0.3782E-03	0.1071E-02	-0.5290E 00	0.6801E-03	0.1927E-02
21	-3.166	-0.5779E-01	0.3403E-03	0.1077E-02	-0.5284E 00	0.6045E-03	0.1914E-02
22	-3.500	-0.5137E-01	0.3025E-03	0.1059E-02	-0.4452E 00	0.4534E-03	0.1586E-02
23	-3.833	-0.4495E-01	0.2647E-03	0.1014E-02	-0.5003E 00	0.4534E-03	0.1738E-02
24	-4.166	-0.5137E-01	0.3025E-03	0.1260E-02	-0.3747E 00	0.3022E-03	0.1259E-02
25	-4.500	-0.3853E-01	0.2269E-03	0.1021E-02	-0.3158E 00	0.2267E-03	0.1020E-02
26	-4.833	-0.3853E-01	0.2269E-03	0.1096E-02	-0.3548E 00	0.2267E-03	0.1095E-02
27	-5.166	-0.3853E-01	0.2269E-03	0.1172E-02	-0.3987E 00	0.2267E-03	0.1171E-02
28	-5.500	-0.3853E-01	0.2269E-03	0.1248E-02	-0.4479E 00	0.2267E-03	0.1246E-02
29	-5.833	-0.3853E-01	0.2269E-03	0.1323E-02	-0.5033E 00	0.2267E-03	0.1322E-02
30	-6.166	-0.3853E-01	0.2269E-03	0.1399E-02	-0.5655E 00	0.2267E-03	0.1398E-02
31	-6.500	-0.3853E-01	0.2269E-03	0.1475E-02	-0.6354E 00	0.2267E-03	0.1473E-02
32	-6.833	-0.3853E-01	0.2269E-03	0.1550E-02	-0.7140E 00	0.2267E-03	0.1549E-02
33	-7.166	-0.3853E-01	0.2269E-03	0.1626E-02	-0.8022E 00	0.2267E-03	0.1624E-02
34	-7.500	-0.3853E-01	0.2269E-03	0.1701E-02	-0.9014E 00	0.2267E-03	0.1700E-02
35	-7.833	-0.3853E-01	0.2269E-03	0.1777E-02	-0.1012E 01	0.2267E-03	0.1775E-02
36	-8.166	-0.3853E-01	0.2269E-03	0.1853E-02	-0.1138E 01	0.2267E-03	0.1851E-02
37	-8.500	-0.3853E-01	0.2269E-03	0.1928E-02	-0.1278E 01	0.2267E-03	0.1927E-02
38	-8.833	-0.3853E-01	0.2269E-03	0.2004E-02	-0.1436E 01	0.2267E-03	0.2002E-02
39	-9.166	-0.3853E-01	0.2269E-03	0.2080E-02	-0.1614E 01	0.2267E-03	0.2078E-02
40	-9.500	-0.3853E-01	0.2269E-03	0.2155E-02	-0.1813E 01	0.2267E-03	0.2153E-02
41	-9.833	-0.3853E-01	0.2269E-03	0.2231E-02	-0.2037E 01	0.2267E-03	0.2229E-02
42	-10.166	-0.3853E-01	0.2269E-03	0.2307E-02	-0.2289E 01	0.2267E-03	0.2304E-02
43	-10.500	-0.1926E-01	0.1134E-03	0.1191E-02	-0.1286E 01	0.1133E-03	0.1190E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.01111 NT (0.00249 LB)			TOTAL LIFT = 0.04064 NT (0.00913 LB)		
		TOTAL L/T = 0.02139			TOTAL L/T = 0.07825		
		TOTAL MOMENT = 0.00031 NT-M (0.00023 LB-FT)			TOTAL MOMENT = 0.00084 NT-M (0.00062 LB-FT)		
		TOTAL M/TD = 0.06385			TOTAL M/TD = 0.17044		

Q = 0.033 CMM (12.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.345
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 3744.6 NT/SQ M (76.1 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

(V_e = 0.345)

PORT		THETA = 5.0 DEGREES			THETA = 7.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.6422E-02	0.7535E-04	-0.3390E-03	-0.1082E-01	0.1124E-03	-0.5062E-03
3	4.166	-0.1284E-01	0.1507E-03	-0.6279E-03	-0.2432E-01	0.2249E-03	-0.9374E-03
4	3.833	-0.6422E-02	0.7535E-04	-0.2888E-03	-0.9109E-02	0.7499E-04	-0.2874E-03
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	1.833	0.1678E-01	-0.1969E-03	0.3611E-03	0.0000E 00	0.0000E 00	0.0000E 00
11	1.500	0.4476E-01	-0.5252E-03	0.7879E-03	0.0000E 00	0.0000E 00	0.0000E 00
12	1.166	0.5036E-01	-0.5909E-03	0.6894E-03	0.0000E 00	0.0000E 00	0.0000E 00
13	0.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.3900E 00	0.1124E-02	-0.9374E-03
14	-0.833	-0.2260E 01	0.2652E-01	0.2210E-01	-0.7040E 01	0.1807E-01	0.1506E-01
15	-1.166	-0.1419E 01	0.1665E-01	0.1942E-01	-0.6565E 01	0.1499E-01	0.1749E-01
16	-1.500	-0.8284E 00	0.9720E-02	0.1458E-01	-0.4979E 01	0.1012E-01	0.1518E-01
17	-1.833	-0.4623E 00	0.5425E-02	0.9946E-02	-0.3729E 01	0.6749E-02	0.1237E-01
18	-2.166	-0.2889E 00	0.3390E-02	0.7347E-02	-0.2793E 01	0.4499E-02	0.9749E-02
19	-2.500	-0.1733E 00	0.2034E-02	0.5086E-02	-0.2092E 01	0.2999E-02	0.7499E-02
20	-2.833	-0.1220E 00	0.1431E-02	0.4056E-02	-0.1645E 01	0.2099E-02	0.5949E-02
21	-3.166	-0.7706E-01	0.9042E-03	0.2863E-02	-0.1387E 01	0.1574E-02	0.4987E-02
22	-3.500	-0.6422E-01	0.7535E-03	0.2637E-02	-0.1113E 01	0.1124E-02	0.3937E-02
23	-3.833	-0.5137E-01	0.6028E-03	0.2310E-02	-0.1000E 01	0.8999E-03	0.3449E-02
24	-4.166	-0.4495E-01	0.5274E-03	0.2197E-02	-0.9369E 00	0.7499E-03	0.3124E-02
25	-4.500	-0.3211E-01	0.3767E-03	0.1695E-02	-0.9474E 00	0.6749E-03	0.3037E-02
26	-4.833	-0.3211E-01	0.3767E-03	0.1821E-02	-0.9462E 00	0.5999E-03	0.2899E-02
27	-5.166	-0.3211E-01	0.3767E-03	0.1946E-02	-0.1063E 01	0.5999E-03	0.3099E-02
28	-5.500	-0.3211E-01	0.3767E-03	0.2072E-02	-0.1194E 01	0.5999E-03	0.3299E-02
29	-5.833	-0.3211E-01	0.3767E-03	0.2197E-02	-0.1342E 01	0.5999E-03	0.3499E-02
30	-6.166	-0.3211E-01	0.3767E-03	0.2323E-02	-0.1508E 01	0.5999E-03	0.3699E-02
31	-6.500	-0.3211E-01	0.3767E-03	0.2449E-02	-0.1694E 01	0.5999E-03	0.3899E-02
32	-6.833	-0.3211E-01	0.3767E-03	0.2574E-02	-0.1904E 01	0.5999E-03	0.4099E-02
33	-7.166	-0.3211E-01	0.3767E-03	0.2700E-02	-0.2139E 01	0.5999E-03	0.4299E-02
34	-7.500	-0.3211E-01	0.3767E-03	0.2825E-02	-0.2403E 01	0.5999E-03	0.4499E-02
35	-7.833	-0.3211E-01	0.3767E-03	0.2951E-02	-0.2700E 01	0.5999E-03	0.4699E-02
36	-8.166	-0.3211E-01	0.3767E-03	0.3077E-02	-0.3034E 01	0.5999E-03	0.4899E-02
37	-8.500	-0.3211E-01	0.3767E-03	0.3202E-02	-0.3409E 01	0.5999E-03	0.5099E-02
38	-8.833	-0.3211E-01	0.3767E-03	0.3328E-02	-0.3831E 01	0.5999E-03	0.5299E-02
39	-9.166	-0.3211E-01	0.3767E-03	0.3453E-02	-0.4304E 01	0.5999E-03	0.5499E-02
40	-9.500	-0.3211E-01	0.3767E-03	0.3579E-02	-0.4836E 01	0.5999E-03	0.5699E-02
41	-9.833	-0.3211E-01	0.3767E-03	0.3704E-02	-0.5434E 01	0.5999E-03	0.5899E-02
42	-10.166	-0.3211E-01	0.3767E-03	0.3830E-02	-0.6106E 01	0.5999E-03	0.6099E-02
43	-10.500	-0.1605E-01	0.1883E-03	0.1978E-02	-0.3430E 01	0.2999E-03	0.3149E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.07904 NT (0.01777 LB)			TOTAL LIFT = 0.11883 NT (0.02671 LB)		
		TOTAL L/T = 0.15218			TOTAL L/T = 0.22879		
		TOTAL MOMENT = 0.00155 NT-M (0.00115 LB-FT)			TOTAL MOMENT = 0.00244 NT-M (0.00180 LB-FT)		
		TOTAL M/TD = 0.31529			TOTAL M/TD = 0.49413		

Q = 0.033 CMM (12.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.345
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 3644.6 NT/SQ M (76.1 PSF)

TABLE 3 — Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.345]

PORT NO.	X/D	THETA = 10.0 DEGREES CP	L/T	M/TD	THETA = 12.5 DEGREES CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.1605E-01	0.1862E-03	-0.8380E-03	-0.1803E-01	0.1846E-03	-0.8308E-03
3	4.166	-0.3211E-01	0.3724E-03	-0.1551E-02	-0.4053E-01	0.3692E-03	-0.1538E-02
4	3.833	-0.1284E-01	0.1489E-03	-0.5711E-03	-0.2732E-01	0.2215E-03	-0.8492E-03
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1023E-01	0.7384E-04	-0.2584E-03
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.1150E-01	0.7384E-04	-0.2336E-03
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	1.833	0.0000E 00	0.0000E 00	0.0000E 00	0.1597E-01	-0.6434E-04	0.1179E-03
11	1.500	0.0000E 00	0.0000E 00	0.0000E 00	0.3589E-01	-0.1286E-03	0.1930E-03
12	1.166	-0.2568E-01	0.2979E-03	-0.3476E-03	-0.2545E 00	0.8123E-03	-0.9477E-03
13	0.833	-0.1733E 00	0.2011E-02	-0.1676E-02	-0.8060E 00	0.2289E-02	-0.1907E-02
14	-0.833	-0.1040E 01	0.1206E-01	0.1005E-01	-0.2418E 01	0.8640E-02	0.7200E-02
15	-1.166	-0.9697E 00	0.1124E-01	0.1312E-01	-0.3840E 01	0.8640E-02	0.1008E-01
16	-1.500	-0.7513E 00	0.8715E-02	0.1307E-01	-0.3503E 01	0.7015E-02	0.1052E-01
17	-1.833	-0.5715E 00	0.6629E-02	0.1215E-01	-0.3273E 01	0.5834E-02	0.1069E-01
18	-2.166	-0.3981E 00	.4618E-02	0.1000E-01	-0.2793E 01	0.4430E-02	0.9600E-02
19	-2.500	-0.3018E 00	0.3501E-02	0.8753E-02	-0.2406E 01	0.3397E-02	0.8492E-02
20	-2.833	-0.2183E 00	0.2532E-02	0.7176E-02	-0.2175E 01	0.2732E-02	0.7741E-02
21	-3.166	-0.1733E 00	0.2011E-02	0.6369E-02	-0.1981E 01	0.2215E-02	0.7015E-02
22	-3.500	-0.1284E 00	0.1489E-02	0.5214E-02	-0.1706E 01	0.1698E-02	0.5944E-02
23	-3.833	-0.1155E 00	0.1340E-02	0.5140E-02	-0.1667E 01	0.1476E-02	0.5661E-02
24	-4.166	-0.8348E-01	0.9684E-03	0.4035E-02	-0.1592E 01	0.1255E-02	0.5231E-02
25	-4.500	-0.7064E-01	0.8194E-03	0.3687E-02	-0.1368E 01	0.9600E-03	0.4320E-02
26	-4.833	-0.6422E-01	0.7449E-03	0.3600E-02	-0.1301E 01	0.8123E-03	0.3926E-02
27	-5.166	-0.4495E-01	0.5214E-03	0.2694E-02	-0.1196E 01	0.6646E-03	0.3434E-02
28	-5.500	-0.4495E-01	0.5214E-03	0.2868E-02	-0.1343E 01	0.6646E-03	0.3655E-02
29	-5.833	-0.4495E-01	0.5214E-03	0.3041E-02	-0.1510E 01	0.6646E-03	0.3877E-02
30	-6.166	-0.4495E-01	0.5214E-03	0.3215E-02	-0.1508E 01	0.5907E-03	0.3643E-02
31	-6.500	-0.4495E-01	0.5214E-03	0.3389E-02	-0.1694E 01	0.5907E-03	0.3840E-02
32	-6.833	-0.4495E-01	0.5214E-03	0.3563E-02	-0.1904E 01	0.5907E-03	0.4037E-02
33	-7.166	-0.4495E-01	0.5214E-03	0.3737E-02	-0.2139E 01	0.5907E-03	0.4234E-02
34	-7.500	-0.4495E-01	0.5214E-03	0.3910E-02	-0.2403E 01	0.5907E-03	0.4430E-02
35	-7.833	-0.4495E-01	0.5214E-03	0.4084E-02	-0.2700E 01	0.5907E-03	0.4627E-02
36	-8.166	-0.4495E-01	0.5214E-03	0.4258E-02	-0.3034E 01	0.5907E-03	0.4824E-02
37	-8.500	-0.4495E-01	0.5214E-03	0.4432E-02	-0.3409E 01	0.5907E-03	0.5021E-02
38	-8.833	-0.4495E-01	0.5214E-03	0.4606E-02	-0.3831E 01	0.5907E-03	0.5218E-02
39	-9.166	-0.4495E-01	0.5214E-03	0.4780E-02	-0.4304E 01	0.5907E-03	0.5415E-02
40	-9.500	-0.4495E-01	0.5214E-03	0.4953E-02	-0.4836E 01	0.5907E-03	0.5612E-02
41	-9.833	-0.4495E-01	0.5214E-03	0.5127E-02	-0.5434E 01	0.5907E-03	0.5809E-02
42	-10.166	-0.4495E-01	0.5214E-03	0.5301E-02	-0.6106E 01	0.5907E-03	0.6006E-02
43	-10.500	-0.2247E-01	0.2607E-03	0.2737E-02	-0.3430E 01	0.2953E-03	0.3101E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.15431 NT (0.03469 LB)			TOTAL LIFT = 0.18699 NT (0.04203 LB)		
		TOTAL L/T = 0.29710			TOTAL L/T = 0.36001		
		TOTAL MOMENT = 0.00325 NT-M (0.00240 LB-FT)			TOTAL MOMENT = 0.00408 NT-M (0.00301 LB-FT)		
		TOTAL M/TD = 0.65824			TOTAL M/TD = 0.82521		

Q = 0.033 CMM (12.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.345
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 3644.6 NT/SQ M (76.1 PSF)

TABLE 3 -- Continued

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.345]

PORT NO.	X/D	THETA = 15.0 DEGREES CP	L/T	M/TD	THETA = 17.5 DEGREES CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.2247E-01	0.2557E-03	-0.1150E-02	-0.2525E-01	0.2524E-03	-0.1136E-02
3	4.166	-0.4495E-01	0.5114E-03	-0.2131E-02	-0.5675E-01	0.5049E-03	-0.2104E-02
4	3.833	-0.3211E-01	0.3653E-03	-0.1400E-02	-0.6376E-01	0.5049E-03	-0.1935E-02
5	3.500	-0.1284E-01	0.1461E-03	-0.5114E-03	-0.4094E-01	0.2885E-03	-0.1009E-02
6	3.166	-0.6422E-02	0.7306E-04	-0.2313E-03	-0.2300E-01	0.1442E-03	-0.4568E-03
7	2.833	-0.6422E-02	0.7306E-04	-0.2070E-03	-0.1292E-01	0.7214E-04	-0.2044E-03
8	2.500	-0.6422E-02	0.7306E-04	-0.1826E-03	-0.2903E-01	0.1442E-03	-0.3607E-03
9	2.166	-0.1284E-01	0.1461E-03	-0.3166E-03	-0.8156E-01	0.3607E-03	-0.7815E-03
10	1.833	-0.3211E-01	0.3653E-03	-0.6697E-03	-0.1466E 00	0.5771E-03	-0.1058E-02
11	1.500	-0.5137E-01	0.5845E-03	-0.8767E-03	-0.2059E 00	0.7214E-03	-0.1082E-02
12	1.166	-0.8990E-01	0.1022E-02	-0.1193E-02	-0.3702E 00	0.1154E-02	-0.1346E-02
13	0.833	-0.1990E 00	0.2265E-02	-0.1887E-02	-0.7800E 00	0.2164E-02	-0.1803E-02
14	-0.833	-0.5266E 00	0.5991E-02	0.4992E-02	-0.1782E 01	0.4400E-02	0.3667E-02
15	-1.166	-0.5587E 00	0.6356E-02	0.7416E-02	-0.2232E 01	0.4905E-02	0.5723E-02
16	-1.500	-0.4688E 00	0.5333E-02	0.8000E-02	-0.2212E 01	0.4328E-02	0.6492E-02
17	-1.833	-0.4238E 00	0.4822E-02	0.8840E-02	-0.2279E 01	0.3967E-02	0.7274E-02
18	-2.166	-0.3275E 00	0.3726E-02	0.8073E-02	-0.2095E 01	0.3246E-02	0.7033E-02
19	-2.500	-0.2633E 00	0.2995E-02	0.7489E-02	-0.1935E 01	0.2669E-02	0.6673E-02
20	-2.833	-0.2247E 00	0.2557E-02	0.7245E-02	-0.1822E 01	0.2236E-02	0.6336E-02
21	-3.166	-0.1926E 00	0.2191E-02	0.6941E-02	-0.1915E 01	0.2092E-02	0.6625E-02
22	-3.500	-0.1541E 00	0.1753E-02	0.6137E-02	-0.1632E 01	0.1587E-02	0.5554E-02
23	-3.833	-0.1348E 00	0.1534E-02	0.5881E-02	-0.1667E 01	0.1442E-02	0.5530E-02
24	-4.166	-0.1155E 00	0.1315E-02	0.5479E-02	-0.1686E 01	0.1298E-02	0.5410E-02
25	-4.500	-0.1027E 00	0.1169E-02	0.5260E-02	-0.1579E 01	0.1082E-02	0.4869E-02
26	-4.833	-0.8348E-01	0.9498E-03	0.4590E-02	-0.1537E 01	0.9378E-03	0.4532E-02
27	-5.166	-0.6422E-01	0.7306E-03	0.3775E-02	-0.1329E 01	0.7214E-03	0.3727E-02
28	-5.500	-0.6422E-01	0.7306E-03	0.4018E-02	-0.1493E 01	0.7214E-03	0.3967E-02
29	-5.833	-0.6422E-01	0.7306E-03	0.4262E-02	-0.1677E 01	0.7214E-03	0.4208E-02
30	-6.166	-0.5779E-01	0.6575E-03	0.4055E-02	-0.1696E 01	0.6492E-03	0.4003E-02
31	-6.500	-0.5779E-01	0.6575E-03	0.4274E-02	-0.1906E 01	0.6492E-03	0.4220E-02
32	-6.833	-0.5779E-01	0.6575E-03	0.4493E-02	-0.2142E 01	0.6492E-03	0.4436E-02
33	-7.166	-0.5779E-01	0.6575E-03	0.4712E-02	-0.2406E 01	0.6492E-03	0.4653E-02
34	-7.500	-0.5779E-01	0.6575E-03	0.4931E-02	-0.2704E 01	0.6492E-03	0.4869E-02
35	-7.833	-0.5779E-01	0.6575E-03	0.5151E-02	-0.3038E 01	0.6492E-03	0.5086E-02
36	-8.166	-0.5779E-01	0.6575E-03	0.5370E-02	-0.3414E 01	0.6492E-03	0.5302E-02
37	-8.500	-0.5779E-01	0.6575E-03	0.5589E-02	-0.3836E 01	0.6492E-03	0.5518E-02
38	-8.833	-0.5779E-01	0.6575E-03	0.5808E-02	-0.4310E 01	0.6492E-03	0.5735E-02
39	-9.166	-0.5779E-01	0.6575E-03	0.6027E-02	-0.4842E 01	0.6492E-03	0.5951E-02
40	-9.500	-0.5779E-01	0.6575E-03	0.6247E-02	-0.5441E 01	0.6492E-03	0.6168E-02
41	-9.833	-0.5779E-01	0.6575E-03	0.6466E-02	-0.6113E 01	0.6492E-03	0.6384E-02
42	-10.166	-0.5779E-01	0.6575E-03	0.6685E-02	-0.6869E 01	0.6492E-03	0.6600E-02
43	-10.500	-0.2889E-01	0.3287E-03	0.3452E-02	-0.3859E 01	0.3246E-03	0.3408E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.21693 NT (0.04876 LB)			TOTAL LIFT = 0.24395 NT (0.05484 LB)		
		TOTAL L/T = 0.41766			TOTAL L/T = 0.46967		
		TOTAL MOMENT = 0.00487 NT-M (0.00359 LB-FT)			TOTAL MOMENT = 0.00560 NT-M (0.00413 LB-FT)		
		TOTAL M/TD = 0.98612			TOTAL M/TD = 1.13281		

Q = 0.033 CMM (12.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.345
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 3644.6 NT/SQ M (76.1 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.345]

PORT NO.	X/D	THETA = 20.0 DEGREES CP	L/T	M/TD	THETA = 25.0 DEGREES CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.2568E-01	0.2843E-03	-0.1279E-02	-0.3247E-01	0.3085E-03	-0.1388E-02
3	4.166	-0.5137E-01	0.5686E-03	-0.2369E-02	-0.7296E-01	0.6170E-03	-0.2570E-02
4	3.833	-0.4495E-01	0.4975E-03	-0.1907E-02	-0.7287E-01	0.5484E-03	-0.2102E-02
5	3.500	-0.2568E-01	0.2843E-03	-0.9951E-03	-0.8188E-01	0.5484E-03	-0.1919E-02
6	3.166	-0.1926E-01	0.2132E-03	-0.6752E-03	-0.8050E-01	0.4798E-03	-0.1519E-02
7	2.833	-0.1284E-01	0.1421E-03	-0.4027E-03	-0.9045E-01	0.4798E-03	-0.1359E-02
8	2.500	-0.3211E-01	0.3554E-03	-0.8885E-03	-0.1161E 00	0.5484E-03	-0.1371E-02
9	2.166	-0.4495E-01	0.4975E-03	-0.1078E-02	-0.1631E 00	0.6855E-03	-0.1485E-02
10	1.833	-0.5779E-01	0.6397E-03	-0.1172E-02	-0.2016E 00	0.7541E-03	-0.1382E-02
11	1.500	-0.7064E-01	0.7818E-03	-0.1172E-02	-0.2265E 00	0.7541E-03	-0.1131E-02
12	1.166	-0.1091E 00	0.1208E-02	-0.1409E-02	-0.3702E 00	0.1096E-02	-0.1279E-02
13	0.833	-0.1798E 00	0.1990E-02	-0.1658E-02	-0.5980E 00	0.1576E-02	-0.1313E-02
14	-0.833	-0.2954E 00	0.3269E-02	0.2724E-02	-0.8180E 00	0.1919E-02	0.1599E-02
15	-1.166	-0.3339E 00	0.3696E-02	0.4312E-02	-0.1116E 01	0.2330E-02	0.2719E-02
16	-1.500	-0.3082E 00	0.3411E-02	0.5117E-02	-0.1106E 01	0.2056E-02	0.3085E-02
17	-1.833	-0.2954E 00	0.3269E-02	0.5994E-02	-0.1367E 01	0.2262E-02	0.4147E-02
18	-2.166	-0.2440E 00	0.2701E-02	0.5852E-02	-0.1350E 01	0.1988E-02	0.4307E-02
19	-2.500	-0.2055E 00	0.2274E-02	0.5686E-02	-0.1307E 01	0.1713E-02	0.4284E-02
20	-2.833	-0.1862E 00	0.2061E-02	0.5840E-02	-0.1410E 01	0.1645E-02	0.4661E-02
21	-3.166	-0.1669E 00	0.1848E-02	0.5852E-02	-0.1387E 01	0.1439E-02	0.4558E-02
22	-3.500	-0.1348E 00	0.1492E-02	0.5224E-02	-0.1484E 01	0.1371E-02	0.4798E-02
23	-3.833	-0.1284E 00	0.1421E-02	0.5449E-02	-0.1584E 01	0.1302E-02	0.4993E-02
24	-4.166	-0.1155E 00	0.1279E-02	0.5331E-02	-0.1592E 01	0.1165E-02	0.4856E-02
25	-4.500	-0.1027E 00	0.1137E-02	0.5117E-02	-0.1684E 01	0.1096E-02	0.4936E-02
26	-4.833	-0.8990E-01	0.9951E-03	0.4809E-02	-0.1537E 01	0.8912E-03	0.4307E-02
27	-5.166	-0.7064E-01	0.7818E-03	0.4039E-02	-0.1329E 01	0.6855E-03	0.3542E-02
28	-5.500	-0.7064E-01	0.7818E-03	0.4300E-02	-0.1493E 01	0.6855E-03	0.3770E-02
29	-5.833	-0.6422E-01	0.7108E-03	0.4146E-02	-0.1677E 01	0.6855E-03	0.3999E-02
30	-6.166	-0.5779E-01	0.6397E-03	0.3945E-02	-0.1885E 01	0.6855E-03	0.4227E-02
31	-6.500	-0.5779E-01	0.6397E-03	0.4158E-02	-0.2118E 01	0.6855E-03	0.4456E-02
32	-6.833	-0.5779E-01	0.6397E-03	0.4371E-02	-0.2380E 01	0.6855E-03	0.4684E-02
33	-7.166	-0.5779E-01	0.6397E-03	0.4584E-02	-0.2674E 01	0.6855E-03	0.4913E-02
34	-7.500	-0.5779E-01	0.6397E-03	0.4797E-02	-0.3004E 01	0.6855E-03	0.5141E-02
35	-7.833	-0.5779E-01	0.6397E-03	0.5011E-02	-0.3376E 01	0.6855E-03	0.5370E-02
36	-8.166	-0.5779E-01	0.6397E-03	0.5224E-02	-0.3793E 01	0.6855E-03	0.5598E-02
37	-8.500	-0.5779E-01	0.6397E-03	0.5437E-02	-0.4262E 01	0.6855E-03	0.5827E-02
38	-8.833	-0.5779E-01	0.6397E-03	0.5650E-02	-0.4789E 01	0.6855E-03	0.6055E-02
39	-9.166	-0.5779E-01	0.6397E-03	0.5864E-02	-0.5380E 01	0.6855E-03	0.6284E-02
40	-9.500	-0.5779E-01	0.6397E-03	0.6077E-02	-0.6046E 01	0.6855E-03	0.6512E-02
41	-9.833	-0.5779E-01	0.6397E-03	0.6290E-02	-0.6793E 01	0.6855E-03	0.6741E-02
42	-10.166	-0.5779E-01	0.6397E-03	0.6503E-02	-0.7632E 01	0.6855E-03	0.6969E-02
43	-10.500	-0.2889E-01	0.3198E-03	0.3358E-02	-0.4288E 01	0.3427E-03	0.3599E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.26848 NT (0.06035 LB)			TOTAL LIFT = 0.28972 NT (0.06513 LB)		
		TOTAL L/T = 0.51691			TOTAL L/T = 0.55780		
		TOTAL MOMENT = 0.00627 NT-M (0.00463 LB-FT)			TOTAL MOMENT = 0.00688 NT-M (0.00507 LB-FT)		
		TOTAL M/TD = 1.26888			TOTAL M/TD = 1.39100		

Q = 0.033 CMM (12.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.345
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 3644.6 NT/SQ M (76.1 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_R = 0.345]

PORT		THETA = 30.0 DEGREES			THETA = 35.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-01	0.3275E-03	-0.1473E-02	-0.3247E-01	0.2788E-03	-0.1254E-02
3	4.166	-0.6422E-01	0.6550E-03	-0.2729E-02	-0.7296E-01	0.5576E-03	-0.2323E-02
4	3.833	-0.5779E-01	0.5895E-03	-0.2260E-02	-0.8198E-01	0.5576E-03	-0.2137E-02
5	3.500	-0.5137E-01	0.5240E-03	-0.1834E-02	-0.8188E-01	0.4957E-03	-0.1734E-02
6	3.166	-0.5137E-01	0.5240E-03	-0.1659E-02	-0.9200E-01	0.4957E-03	-0.1569E-02
7	2.833	-0.5137E-01	0.5240E-03	-0.1484E-02	-0.9045E-01	0.4337E-03	-0.1228E-02
8	2.500	-0.5779E-01	0.5895E-03	-0.1473E-02	-0.1306E 00	0.5576E-03	-0.1394E-02
9	2.166	-0.6422E-01	0.6550E-03	-0.1419E-02	-0.1631E 00	0.6196E-03	-0.1342E-02
10	1.833	-0.7064E-01	0.7205E-03	-0.1321E-02	-0.2016E 00	0.6815E-03	-0.1249E-02
11	1.500	-0.7706E-01	0.7861E-03	-0.1179E-02	-0.2059E 00	0.6196E-03	-0.9294E-03
12	1.166	-0.8348E-01	0.8516E-03	-0.9935E-03	-0.2545E 00	0.6815E-03	-0.7951E-03
13	0.833	-0.1284E 00	0.1310E-02	-0.1091E-02	-0.3900E 00	0.9294E-03	-0.7745E-03
14	-0.833	-0.1284E 00	0.1310E-02	0.1091E-02	-0.4382E 00	0.9294E-03	0.7745E-03
15	-1.166	-0.1605E 00	0.1637E-02	0.1910E-02	-0.6565E 00	0.1239E-02	0.1445E-02
16	-1.500	-0.1477E 00	0.1506E-02	0.2260E-02	-0.7007E 00	0.1177E-02	0.1765E-02
17	-1.833	-0.1669E 00	0.1703E-02	0.3122E-02	-0.8288E 00	0.1239E-02	0.2271E-02
18	-2.166	-0.1412E 00	0.1441E-02	0.3122E-02	-0.8847E 00	0.1177E-02	0.2550E-02
19	-2.500	-0.1284E 00	0.1310E-02	0.3275E-02	-0.9417E 00	0.1115E-02	0.2788E-02
20	-2.833	-0.1284E 00	0.1310E-02	0.3712E-02	-0.1058E 01	0.1115E-02	0.3160E-02
21	-3.166	-0.1220E 00	0.1244E-02	0.3941E-02	-0.1122E 01	0.1053E-02	0.3335E-02
22	-3.500	-0.1091E 00	0.1113E-02	0.3897E-02	-0.1039E 01	0.8674E-03	0.3036E-02
23	-3.833	-0.1091E 00	0.1113E-02	0.4268E-02	-0.1250E 01	0.9294E-03	0.3562E-02
24	-4.166	-0.9633E-01	0.9826E-03	0.4094E-02	-0.1218E 01	0.8055E-03	0.3356E-02
25	-4.500	-0.8990E-01	0.9171E-03	0.4127E-02	-0.1368E 01	0.8055E-03	0.3624E-02
26	-4.833	-0.8348E-01	0.8516E-03	0.4116E-02	-0.1301E 01	0.6815E-03	0.3294E-02
27	-5.166	-0.6422E-01	0.6550E-03	0.3384E-02	-0.1329E 01	0.6196E-03	0.3201E-02
28	-5.500	-0.6422E-01	0.6550E-03	0.3602E-02	-0.1493E 01	0.6196E-03	0.3407E-02
29	-5.833	-0.6422E-01	0.6550E-03	0.3821E-02	-0.1677E 01	0.6196E-03	0.3614E-02
30	-6.166	-0.6422E-01	0.6550E-03	0.4039E-02	-0.1885E 01	0.6196E-03	0.3821E-02
31	-6.500	-0.6422E-01	0.6550E-03	0.4258E-02	-0.1906E 01	0.5576E-03	0.3624E-02
32	-6.833	-0.6422E-01	0.6550E-03	0.4476E-02	-0.2142E 01	0.5576E-03	0.3810E-02
33	-7.166	-0.6422E-01	0.6550E-03	0.4694E-02	-0.2406E 01	0.5576E-03	0.3996E-02
34	-7.500	-0.6422E-01	0.6550E-03	0.4913E-02	-0.2704E 01	0.5576E-03	0.4182E-02
35	-7.833	-0.6422E-01	0.6550E-03	0.5131E-02	-0.3038E 01	0.5576E-03	0.4368E-02
36	-8.166	-0.6422E-01	0.6550E-03	0.5349E-02	-0.3414E 01	0.5576E-03	0.4554E-02
37	-8.500	-0.6422E-01	0.6550E-03	0.5568E-02	-0.3836E 01	0.5576E-03	0.4740E-02
38	-8.833	-0.6422E-01	0.6550E-03	0.5786E-02	-0.4310E 01	0.5576E-03	0.4926E-02
39	-9.166	-0.6422E-01	0.6550E-03	0.6004E-02	-0.4842E 01	0.5576E-03	0.5111E-02
40	-9.500	-0.6422E-01	0.6550E-03	0.6223E-02	-0.5441E 01	0.5576E-03	0.5297E-02
41	-9.833	-0.6422E-01	0.6550E-03	0.6441E-02	-0.6113E 01	0.5576E-03	0.5483E-02
42	-10.166	-0.6422E-01	0.6550E-03	0.6660E-02	-0.6869E 01	0.5576E-03	0.5669E-02
43	-10.500	-0.3211E-01	0.3275E-03	0.3439E-02	-0.3859E 01	0.2788E-03	0.2927E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.30806 NT (0.06925 LB)			TOTAL LIFT = 0.32338 NT (0.07270 LB)		
		TOTAL L/T = 0.59311			TOTAL L/T = 0.62260		
		TOTAL MOMENT = 0.00741 NT-M (0.00546 LB-FT)			TOTAL MOMENT = 0.00786 NT-M (0.00580 LB-FT)		
		TOTAL M/TD = 1.49882			TOTAL M/TD = 1.58979		

Q = 0.033 CMM (12.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 79.4 M/S (260.7 F/S)
VE = 0.345
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 3644.6 NT/SQ M (76.1 PSF)

TABLE 3

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.296]

PORT		THETA = 0.0 DEGREES			THETA = 2.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-02	0.1389E-04	-0.6252E-04	-0.1803E-01	0.1388E-03	-0.6246E-03
3	4.166	-0.6422E-02	0.2778E-04	-0.1157E-03	-0.4053E-01	0.2776E-03	-0.1156E-02
4	3.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.1821E-01	0.1110E-03	-0.4256E-03
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	1.833	0.3917E-01	-0.1694E-03	0.3107E-03	0.0000E 00	0.0000E 00	0.0000E 00
11	1.500	0.8953E-01	-0.3874E-03	0.5811E-03	0.1615E 00	-0.4354E-03	0.6531E-03
12	1.166	0.1790E 00	-0.7748E-03	0.9039E-03	0.3024E 00	-0.7256E-03	0.8466E-03
13	0.833	0.3525E 00	-0.1525E-02	0.1271E-02	0.5211E 00	-0.1112E-02	0.9272E-03
14	-0.833	-0.1836E 01	0.7947E-02	0.6622E-02	-0.1083E 02	0.2059E-01	0.1716E-01
15	-1.166	-0.7064E 00	0.3056E-02	0.3566E-02	-0.5580E 01	0.9438E-02	0.1101E-01
16	-1.500	-0.2889E 00	0.1250E-02	0.1875E-02	-0.2803E 01	0.4219E-02	0.6329E-02
17	-1.833	-0.1220E 00	0.5279E-03	0.9679E-03	-0.1533E 01	0.2054E-02	0.3766E-02
18	-2.166	-0.7064E-01	0.3056E-03	0.6622E-03	-0.9312E 00	0.1110E-02	0.2405E-02
19	-2.500	-0.4495E-01	0.1945E-03	0.4862E-03	-0.5755E 00	0.6107E-03	0.1526E-02
20	-2.833	-0.3211E-01	0.1389E-03	0.3936E-03	-0.4702E 00	0.4441E-03	0.1258E-02
21	-3.166	-0.2568E-01	0.1111E-03	0.3519E-03	-0.3302E 00	0.2776E-03	0.8790E-03
22	-3.500	-0.1284E-01	0.5557E-04	0.1945E-03	-0.1484E 00	0.1110E-03	0.3886E-03
23	-3.833	-0.2568E-01	0.1111E-03	0.4260E-03	-0.1667E 00	0.1110E-03	0.4256E-03
24	-4.166	-0.3211E-01	0.1389E-03	0.5789E-03	-0.1873E 00	0.1110E-03	0.4626E-03
25	-4.500	-0.2568E-01	0.1111E-03	0.5001E-03	-0.1052E 00	0.5552E-04	0.2498E-03
26	-4.833	-0.1926E-01	0.8336E-04	0.4029E-03	-0.1182E 00	0.5552E-04	0.2683E-03
27	-5.166	-0.1926E-01	0.8336E-04	0.4307E-03	-0.1329E 00	0.5552E-04	0.2868E-03
28	-5.500	-0.1926E-01	0.8336E-04	0.4584E-03	-0.1493E 00	0.5552E-04	0.3053E-03
29	-5.833	-0.1926E-01	0.8336E-04	0.4862E-03	-0.1677E 00	0.5552E-04	0.3238E-03
30	-6.166	-0.1926E-01	0.8336E-04	0.5140E-03	-0.1885E 00	0.5552E-04	0.3423E-03
31	-6.500	-0.1926E-01	0.8336E-04	0.5418E-03	-0.2118E 00	0.5552E-04	0.3608E-03
32	-6.833	-0.1926E-01	0.8336E-04	0.5696E-03	-0.2380E 00	0.5552E-04	0.3793E-03
33	-7.166	-0.1926E-01	0.8336E-04	0.5974E-03	-0.2674E 00	0.5552E-04	0.3979E-03
34	-7.500	-0.1926E-01	0.8336E-04	0.6252E-03	-0.3004E 00	0.5552E-04	0.4164E-03
35	-7.833	-0.1926E-01	0.8336E-04	0.6529E-03	-0.3376E 00	0.5552E-04	0.4349E-03
36	-8.166	-0.1926E-01	0.8336E-04	0.6807E-03	-0.3793E 00	0.5552E-04	0.4534E-03
37	-8.500	-0.1926E-01	0.8336E-04	0.7085E-03	-0.4262E 00	0.5552E-04	0.4719E-03
38	-8.833	-0.1926E-01	0.8336E-04	0.7363E-03	-0.4789E 00	0.5552E-04	0.4904E-03
39	-9.166	-0.1926E-01	0.8336E-04	0.7641E-03	-0.5380E 00	0.5552E-04	0.5089E-03
40	-9.500	-0.1926E-01	0.8336E-04	0.7919E-03	-0.6046E 00	0.5552E-04	0.5274E-03
41	-9.833	-0.1926E-01	0.8336E-04	0.8197E-03	-0.6793E 00	0.5552E-04	0.5459E-03
42	-10.166	-0.1926E-01	0.8336E-04	0.8475E-03	-0.7632E 00	0.5552E-04	0.5644E-03
43	-10.500	-0.9633E-02	0.4168E-04	0.4376E-03	-0.4288E 00	0.2776E-04	0.2914E-03
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.00890 NT (0.00200 LB)			TOTAL LIFT = 0.03602 NT (0.00809 LB)		
		TOTAL L/T = 0.01259			TOTAL L/T = 0.05096		
		TOTAL MOMENT = 0.00020 NT-M (0.00015 LB-FT)			TOTAL MOMENT = 0.00056 NT-M (0.00041 LB-FT)		
		TOTAL M/TD = 0.03058			TOTAL M/TD = 0.08404		

Q = 0.039 CMM (14.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.296
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 4361.8 NT/SQ M (1093.6 PSF)

TABLE 3 -- Continued

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.296]

PORT		THETA = 5.0 DEGREES			THETA = 7.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.9633E-02	0.8304E-04	-0.3737E-03	-0.1082E-01	0.8264E-04	-0.3719E-03
3	4.166	-0.1926E-01	0.1660E-03	-0.6920E-03	-0.2432E-01	0.1652E-03	-0.6887E-03
4	3.833	-0.6422E-02	0.5536E-04	-0.2122E-03	-0.9109E-02	0.5509E-04	-0.2112E-03
5	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	1.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
11	1.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
12	1.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.1851E 00	0.4407E-03	-0.5142E-03
13	0.833	-0.5137E-01	0.4429E-03	-0.3690E-03	-0.8320E 00	0.1763E-02	-0.1469E-02
14	-0.833	-0.2318E 01	0.1998E-01	0.1665E-01	-0.7712E 01	0.1454E-01	0.1212E-01
15	-1.166	-0.1406E 01	0.1212E-01	0.1414E-01	-0.6729E 01	0.1129E-01	0.1317E-01
16	-1.500	-0.7578E 00	0.6532E-02	0.9799E-02	-0.5163E 01	0.7713E-02	0.1157E-01
17	-1.833	-0.3917E 00	0.3377E-02	0.6191E-02	-0.3688E 01	0.4903E-02	0.8990E-02
18	-2.166	-0.2311E 00	0.1993E-02	0.4318E-02	-0.2793E 01	0.3305E-02	0.7162E-02
19	-2.500	-0.1348E 00	0.1162E-02	0.2906E-02	-0.2040E 01	0.2148E-02	0.5372E-02
20	-2.833	-0.7706E-01	0.6643E-03	0.1882E-02	-0.1528E 01	0.1432E-02	0.4058E-02
21	-3.166	-0.6422E-01	0.5536E-03	0.1753E-02	-0.1254E 01	0.1046E-02	0.3315E-02
22	-3.500	-0.2568E-01	0.2214E-03	0.7750E-03	-0.8905E 00	0.6611E-03	0.2314E-02
23	-3.833	-0.1926E-01	0.1660E-03	0.6366E-03	-0.9172E 00	0.6060E-03	0.2323E-02
24	-4.166	-0.1284E-01	0.1107E-03	0.4613E-03	-0.7495E 00	0.4407E-03	0.1836E-02
25	-4.500	-0.6422E-02	0.5536E-04	0.2491E-03	-0.8421E 00	0.4407E-03	0.1983E-02
26	-4.833	-0.6422E-02	0.5536E-04	0.2675E-03	-0.5914E 00	0.2754E-03	0.1331E-02
27	-5.166	-0.6422E-02	0.5536E-04	0.2860E-03	-0.6645E 00	0.2754E-03	0.1423E-02
28	-5.500	-0.6422E-02	0.5536E-04	0.3044E-03	-0.7466E 00	0.2754E-03	0.1515E-02
29	-5.833	-0.6422E-02	0.5536E-04	0.3229E-03	-0.8389E 00	0.2754E-03	0.1607E-02
30	-6.166	-0.6422E-02	0.5536E-04	0.3414E-03	-0.9426E 00	0.2754E-03	0.1698E-02
31	-6.500	-0.6422E-02	0.5536E-04	0.3598E-03	-0.1059E 01	0.2754E-03	0.1790E-02
32	-6.833	-0.6422E-02	0.5536E-04	0.3783E-03	-0.1190E 01	0.2754E-03	0.1882E-02
33	-7.166	-0.6422E-02	0.5536E-04	0.3967E-03	-0.1337E 01	0.2754E-03	0.1974E-02
34	-7.500	-0.6422E-02	0.5536E-04	0.4152E-03	-0.1502E 01	0.2754E-03	0.2066E-02
35	-7.833	-0.6422E-02	0.5536E-04	0.4336E-03	-0.1688E 01	0.2754E-03	0.2158E-02
36	-8.166	-0.6422E-02	0.5536E-04	0.4521E-03	-0.1896E 01	0.2754E-03	0.2249E-02
37	-8.500	-0.6422E-02	0.5536E-04	0.4705E-03	-0.2131E 01	0.2754E-03	0.2341E-02
38	-8.833	-0.6422E-02	0.5536E-04	0.4890E-03	-0.2394E 01	0.2754E-03	0.2433E-02
39	-9.166	-0.6422E-02	0.5536E-04	0.5074E-03	-0.2690E 01	0.2754E-03	0.2525E-02
40	-9.500	-0.6422E-02	0.5536E-04	0.5259E-03	-0.3023E 01	0.2754E-03	0.2617E-02
41	-9.833	-0.6422E-02	0.5536E-04	0.5444E-03	-0.3396E 01	0.2754E-03	0.2709E-02
42	-10.166	-0.6422E-02	0.5536E-04	0.5628E-03	-0.3816E 01	0.2754E-03	0.2800E-02
43	-10.500	-0.3211E-02	0.2768E-04	0.2906E-03	-0.2144E 01	0.1377E-03	0.1446E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.07043 NT (0.01583 LB)			TOTAL LIFT = 0.10993 NT (0.02471 LB)		
		TOTAL L/T = 0.09962			TOTAL L/T = 0.15549		
		TOTAL MOMENT = 0.00100 NT-M (0.00074 LB-FT)			TOTAL MOMENT = 0.00173 NT-M (0.00127 LB-FT)		
		TOTAL M/TD = 0.14951			TOTAL M/TD = 0.25706		

Q = 0.039 CMM (14.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.296
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 4960.8 NT/SQ M (103.6 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.296]

PORT		THETA = 10.0 DEGREES			THETA = 12.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.1605E-01	0.1368E-03	-0.6157E-03	-0.2525E-01	0.1898E-03	-0.8545E-03
3	4.166	-0.3211E-01	0.2736E-03	-0.1140E-02	-0.5675E-01	0.3797E-03	-0.1582E-02
4	3.833	-0.1284E-01	0.1094E-03	-0.4195E-03	-0.3643E-01	0.2170E-03	-0.8319E-03
5	3.500	-0.6422E-02	0.5473E-04	-0.1915E-03	-0.2047E-01	0.1085E-03	-0.3797E-03
6	3.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.1150E-01	0.5425E-04	-0.1718E-03
7	2.833	0.0000E 00	0.0000E 00	0.0000E 00	-0.1292E-01	0.5425E-04	-0.1537E-03
8	2.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1451E-01	0.5425E-04	-0.1356E-03
9	2.166	0.0000E 00	0.0000E 00	0.0000E 00	-0.3262E-01	0.1085E-03	-0.2351E-03
10	1.833	-0.6422E-02	0.5473E-04	-0.1003E-03	-0.1283E 00	0.3797E-03	-0.6962E-03
11	1.500	-0.1926E-01	0.1641E-03	-0.2462E-03	-0.2059E 00	0.5425E-03	-0.8138E-03
12	1.166	-0.8990E-01	0.7662E-03	-0.8939E-03	-0.4628E 00	0.1085E-02	-0.1265E-02
13	0.833	-0.2697E 00	0.2298E-02	-0.1915E-02	-0.1222E 01	0.2550E-02	-0.2125E-02
14	-0.833	-0.1233E 01	0.1050E-01	0.8756E-02	-0.3944E 01	0.7324E-02	0.6103E-02
15	-1.166	-0.1123E 01	0.9577E-02	0.1117E-01	-0.4300E 01	0.7107E-02	0.8292E-02
16	-1.500	-0.8348E 00	0.7114E-02	0.1067E-01	-0.4020E 01	0.5914E-02	0.8871E-02
17	-1.833	-0.5908E 00	0.5035E-02	0.9231E-02	-0.3605E 01	0.4720E-02	0.8654E-02
18	-2.166	-0.4174E 00	0.3557E-02	0.7707E-02	-0.2980E 01	0.3472E-02	0.7523E-02
19	-2.500	-0.3018E 00	0.2572E-02	0.6430E-02	-0.2563E 01	0.2658E-02	0.6646E-02
20	-2.833	-0.2183E 00	0.1860E-02	0.5272E-02	-0.2292E 01	0.2116E-02	0.5995E-02
21	-3.166	-0.1605E 00	0.1368E-02	0.4332E-02	-0.1981E 01	0.1627E-02	0.5154E-02
22	-3.500	-0.1220E 00	0.1039E-02	0.3639E-02	-0.1632E 01	0.1193E-02	0.4177E-02
23	-3.833	-0.8348E-01	0.7114E-03	0.2727E-02	-0.1667E 01	0.1085E-02	0.4159E-02
24	-4.166	-0.6422E-01	0.5473E-03	0.2280E-02	-0.1405E 01	0.8136E-03	0.3391E-02
25	-4.500	-0.5779E-01	0.4925E-03	0.2216E-02	-0.1158E 01	0.5968E-03	0.2685E-02
26	-4.833	-0.5137E-01	0.4378E-03	0.2116E-02	-0.1182E 01	0.5425E-03	0.2622E-02
27	-5.166	-0.3211E-01	0.2736E-03	0.1413E-02	-0.9303E 00	0.3797E-03	0.1962E-02
28	-5.500	-0.3211E-01	0.2736E-03	0.1505E-02	-0.1045E 01	0.3797E-03	0.2088E-02
29	-5.833	-0.3211E-01	0.2736E-03	0.1596E-02	-0.1174E 01	0.3797E-03	0.2215E-02
30	-6.166	-0.3211E-01	0.2736E-03	0.1687E-02	-0.1319E 01	0.3797E-03	0.2342E-02
31	-6.500	-0.3211E-01	0.2736E-03	0.1778E-02	-0.1482E 01	0.3797E-03	0.2468E-02
32	-6.833	-0.3211E-01	0.2736E-03	0.1869E-02	-0.1666E 01	0.3797E-03	0.2595E-02
33	-7.166	-0.3211E-01	0.2736E-03	0.1961E-02	-0.1871E 01	0.3797E-03	0.2721E-02
34	-7.500	-0.3211E-01	0.2736E-03	0.2052E-02	-0.2103E 01	0.3797E-03	0.2848E-02
35	-7.833	-0.3211E-01	0.2736E-03	0.2143E-02	-0.2363E 01	0.3797E-03	0.2975E-02
36	-8.166	-0.3211E-01	0.2736E-03	0.2234E-02	-0.2655E 01	0.3797E-03	0.3101E-02
37	-8.500	-0.3211E-01	0.2736E-03	0.2326E-02	-0.2983E 01	0.3797E-03	0.3228E-02
38	-8.833	-0.3211E-01	0.2736E-03	0.2417E-02	-0.3352E 01	0.3797E-03	0.3354E-02
39	-9.166	-0.3211E-01	0.2736E-03	0.2508E-02	-0.3766E 01	0.3797E-03	0.3481E-02
40	-9.500	-0.3211E-01	0.2736E-03	0.2599E-02	-0.4232E 01	0.3797E-03	0.3608E-02
41	-9.833	-0.3211E-01	0.2736E-03	0.2690E-02	-0.4755E 01	0.3797E-03	0.3734E-02
42	-10.166	-0.3211E-01	0.2736E-03	0.2782E-02	-0.5343E 01	0.3797E-03	0.3861E-02
43	-10.500	-0.1605E-01	0.1368E-03	0.1436E-02	-0.3001E 01	0.1898E-03	0.1993E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.14754 NT (0.03316 LB)			TOTAL LIFT = 0.18371 NT (0.04130 LB)		
		TOTAL L/T = 0.20869			TOTAL L/T = 0.25985		
		TOTAL MOMENT = 0.00244 NT-M (0.00180 LB-FT)			TOTAL MOMENT = 0.00321 NT-M (0.00236 LB-FT)		
		TOTAL M/TD = 0.36310			TOTAL M/TD = 0.47671		

Q = 0.039 CMM (14.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.296
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 4960.8 NT/SQ M (103.6 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

[V_e = 0.296]

PORT		THETA = 15.0 DEGREES			THETA = 17.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.2568E-01	0.2147E-03	-0.9662E-03	-0.3247E-01	0.2385E-03	-0.1073E-02
3	4.166	-0.5137E-01	0.4294E-03	-0.1789E-02	-0.7296E-01	0.4770E-03	-0.1987E-02
4	3.833	-0.4495E-01	0.3757E-03	-0.1440E-02	-0.6376E-01	0.3710E-03	-0.1422E-02
5	3.500	-0.2568E-01	0.2147E-03	-0.7515E-03	-0.5117E-01	0.2650E-03	-0.9275E-03
6	3.166	-0.1926E-01	0.1610E-03	-0.5099E-03	-0.6900E-01	0.3180E-03	-0.1007E-02
7	2.833	-0.1284E-01	0.1073E-03	-0.3041E-03	-0.6461E-01	0.2650E-03	-0.7508E-03
8	2.500	-0.3211E-01	0.2684E-03	-0.6710E-03	-0.1161E 00	0.4240E-03	-0.1060E-02
9	2.166	-0.5137E-01	0.4294E-03	-0.9304E-03	-0.1631E 00	0.5300E-03	-0.1148E-02
10	1.833	-0.6422E-01	0.5368E-03	-0.9841E-03	-0.2016E 00	0.5830E-03	-0.1068E-02
11	1.500	-0.8348E-01	0.6978E-03	-0.1046E-02	-0.3295E 00	0.8480E-03	-0.1272E-02
12	1.166	-0.1412E 00	0.1180E-02	-0.1377E-02	-0.5553E 00	0.1272E-02	-0.1484E-02
13	0.833	-0.2954E 00	0.2469E-02	-0.2057E-02	-0.1040E 01	0.2120E-02	-0.1766E-02
14	-0.833	-0.6422E 00	0.5368E-02	0.4473E-02	-0.2249E 01	0.4081E-02	0.3400E-02
15	-1.166	-0.6614E 00	0.5529E-02	0.6450E-02	-0.2658E 01	0.4293E-02	0.5008E-02
16	-1.500	-0.5715E 00	0.4777E-02	0.7166E-02	-0.2618E 01	0.3763E-02	0.5644E-02
17	-1.833	-0.4945E 00	0.4133E-02	0.7577E-02	-0.2735E 01	0.3498E-02	0.6413E-02
18	-2.166	-0.3853E 00	0.3220E-02	0.6978E-02	-0.2374E 01	0.2703E-02	0.5856E-02
19	-2.500	-0.3146E 00	0.2630E-02	0.6575E-02	-0.2145E 01	0.2173E-02	0.5432E-02
20	-2.833	-0.2504E 00	0.2093E-02	0.5931E-02	-0.2175E 01	0.1961E-02	0.5556E-02
21	-3.166	-0.1990E 00	0.1664E-02	0.5269E-02	-0.1981E 01	0.1590E-02	0.5035E-02
22	-3.500	-0.1605E 00	0.1342E-02	0.4697E-02	-0.1855E 01	0.1325E-02	0.4637E-02
23	-3.833	-0.1348E 00	0.1127E-02	0.4321E-02	-0.1751E 01	0.1113E-02	0.4266E-02
24	-4.166	-0.1155E 00	0.9662E-03	0.4026E-02	-0.1780E 01	0.1007E-02	0.4196E-02
25	-4.500	-0.8990E-01	0.7515E-03	0.3381E-02	-0.1684E 01	0.8480E-03	0.3816E-02
26	-4.833	-0.7064E-01	0.5904E-03	0.2854E-02	-0.1537E 01	0.6890E-03	0.3330E-02
27	-5.166	-0.5779E-01	0.4831E-03	0.2496E-02	-0.1329E 01	0.5300E-03	0.2738E-02
28	-5.500	-0.5779E-01	0.4831E-03	0.2657E-02	-0.1493E 01	0.5300E-03	0.2915E-02
29	-5.833	-0.5779E-01	0.4831E-03	0.2818E-02	-0.1677E 01	0.5300E-03	0.3091E-02
30	-6.166	-0.4495E-01	0.3757E-03	0.2317E-02	-0.1508E 01	0.4240E-03	0.2614E-02
31	-6.500	-0.4495E-01	0.3757E-03	0.2442E-02	-0.1694E 01	0.4240E-03	0.2756E-02
32	-6.833	-0.4495E-01	0.3757E-03	0.2567E-02	-0.1904E 01	0.4240E-03	0.2897E-02
33	-7.166	-0.4495E-01	0.3757E-03	0.2692E-02	-0.2139E 01	0.4240E-03	0.3038E-02
34	-7.500	-0.4495E-01	0.3757E-03	0.2818E-02	-0.2403E 01	0.4240E-03	0.3180E-02
35	-7.833	-0.4495E-01	0.3757E-03	0.2943E-02	-0.2700E 01	0.4240E-03	0.3321E-02
36	-8.166	-0.4495E-01	0.3757E-03	0.3068E-02	-0.3034E 01	0.4240E-03	0.3462E-02
37	-8.500	-0.4495E-01	0.3757E-03	0.3194E-02	-0.3409E 01	0.4240E-03	0.3604E-02
38	-8.833	-0.4495E-01	0.3757E-03	0.3319E-02	-0.3831E 01	0.4240E-03	0.3745E-02
39	-9.166	-0.4495E-01	0.3757E-03	0.3444E-02	-0.4304E 01	0.4240E-03	0.3886E-02
40	-9.500	-0.4495E-01	0.3757E-03	0.3569E-02	-0.4836E 01	0.4240E-03	0.4028E-02
41	-9.833	-0.4495E-01	0.3757E-03	0.3695E-02	-0.5434E 01	0.4240E-03	0.4169E-02
42	-10.166	-0.4495E-01	0.3757E-03	0.3820E-02	-0.6106E 01	0.4240E-03	0.4310E-02
43	-10.500	-0.2247E-01	0.1878E-03	0.1972E-02	-0.3430E 01	0.2120E-03	0.2226E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.21750 NT (0.04889 LB)			TOTAL LIFT = 0.24866 NT (0.05590 LB)		
		TOTAL L/T = 0.30765			TOTAL L/T = 0.35173		
		TOTAL MOMENT = 0.00392 NT-M (0.00289 LB-FT)			TOTAL MOMENT = 0.00462 NT-M (0.00341 LB-FT)		
		TOTAL M/TD = 0.58342			TOTAL M/TD = 0.68704		

Q = 0.039 CMM (14.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.296
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 4960.8 NT/SQ M (103.6 PSF)

TABLE 3 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

(V_e = 0.296)

PORT NO.	X/D	THETA = 20.0 DEGREES CP	L/T	M/TD	THETA = 25.0 DEGREES CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.2889E-01	0.2350E-03	-0.1057E-02	-0.3607E-01	0.2518E-03	-0.1133E-02
3	4.166	-0.5779E-01	0.4700E-03	-0.1958E-02	-0.8107E-01	0.5036E-03	-0.2098E-02
4	3.833	-0.5137E-01	0.4177E-03	-0.1601E-02	-0.8198E-01	0.4533E-03	-0.1737E-02
5	3.500	-0.4495E-01	0.3655E-03	-0.1279E-02	-0.8188E-01	0.4029E-03	-0.1410E-02
6	3.166	-0.4495E-01	0.3655E-03	-0.1157E-02	-0.1035E 00	0.4533E-03	-0.1435E-02
7	2.833	-0.3853E-01	0.3133E-03	-0.8877E-03	-0.1033E 00	0.4029E-03	-0.1141E-02
8	2.500	-0.5779E-01	0.4700E-03	-0.1175E-02	-0.1451E 00	0.5036E-03	-0.1259E-02
9	2.166	-0.6422E-01	0.5222E-03	-0.1131E-02	-0.1957E 00	0.6044E-03	-0.1309E-02
10	1.833	-0.7706E-01	0.6266E-03	-0.1148E-02	-0.2749E 00	0.7555E-03	-0.1385E-02
11	1.500	-0.1027E 00	0.8355E-03	-0.1253E-02	-0.3501E 00	0.8562E-03	-0.1284E-02
12	1.166	-0.1477E 00	0.1201E-02	-0.1401E-02	-0.4628E 00	0.1007E-02	-0.1175E-02
13	0.833	-0.2440E 00	0.1984E-02	-0.1653E-02	-0.7800E 00	0.1511E-02	-0.1259E-02
14	-0.833	-0.3853E 00	0.3133E-02	0.2611E-02	-0.1110E 01	0.1913E-02	0.1594E-02
15	-1.166	-0.4045E 00	0.3290E-02	0.3838E-02	-0.1444E 01	0.2216E-02	0.2585E-02
16	-1.500	-0.3789E 00	0.3081E-02	0.4621E-02	-0.1475E 01	0.2014E-02	0.3022E-02
17	-1.833	-0.3532E 00	0.2872E-02	0.5265E-02	-0.1657E 01	0.2014E-02	0.3693E-02
18	-2.166	-0.3082E 00	0.2506E-02	0.5431E-02	-0.1676E 01	0.1813E-02	0.3928E-02
19	-2.500	-0.2504E 00	0.2036E-02	0.5091E-02	-0.1569E 01	0.1511E-02	0.3777E-02
20	-2.833	-0.2119E 00	0.1723E-02	0.4882E-02	-0.1704E 01	0.1460E-02	0.4138E-02
21	-3.156	-0.1862E 00	0.1514E-02	0.4795E-02	-0.1651E 01	0.1259E-02	0.3987E-02
22	-3.500	-0.1541E 00	0.1253E-02	0.4386E-02	-0.1558E 01	0.1057E-02	0.3702E-02
23	-3.833	-0.1348E 00	0.1096E-02	0.4203E-02	-0.1667E 01	0.1007E-02	0.3861E-02
24	-4.166	-0.1220E 00	0.9922E-03	0.4134E-02	-0.1780E 01	0.9569E-03	0.3987E-02
25	-4.500	-0.1155E 00	0.9400E-03	0.4230E-02	-0.1894E 01	0.9066E-03	0.4079E-02
26	-4.833	-0.9633E-01	0.7833E-03	0.3786E-02	-0.1774E 01	0.7555E-03	0.3651E-02
27	-5.166	-0.7064E-01	0.5744E-03	0.2968E-02	-0.1461E 01	0.5540E-03	0.2862E-02
28	-5.500	-0.7064E-01	0.5744E-03	0.3159E-02	-0.1642E 01	0.5540E-03	0.3047E-02
29	-5.833	-0.6422E-01	0.5222E-03	0.3046E-02	-0.1845E 01	0.5540E-03	0.3231E-02
30	-6.166	-0.5779E-01	0.4700E-03	0.2898E-02	-0.1885E 01	0.5036E-03	0.3106E-02
31	-6.500	-0.5779E-01	0.4700E-03	0.3055E-02	-0.1906E 01	0.4533E-03	0.2946E-02
32	-6.833	-0.5137E-01	0.4177E-03	0.2854E-02	-0.1904E 01	0.4029E-03	0.2753E-02
33	-7.166	-0.5137E-01	0.4177E-03	0.2994E-02	-0.2139E 01	0.4029E-03	0.2887E-02
34	-7.500	-0.5137E-01	0.4177E-03	0.3133E-02	-0.2403E 01	0.4029E-03	0.3022E-02
35	-7.833	-0.5137E-01	0.4177E-03	0.3272E-02	-0.2700E 01	0.4029E-03	0.3156E-02
36	-8.166	-0.5137E-01	0.4177E-03	0.3411E-02	-0.3034E 01	0.4029E-03	0.3290E-02
37	-8.500	-0.5137E-01	0.4177E-03	0.3551E-02	-0.3409E 01	0.4029E-03	0.3424E-02
38	-8.833	-0.5137E-01	0.4177E-03	0.3690E-02	-0.3831E 01	0.4029E-03	0.3559E-02
39	-9.166	-0.5137E-01	0.4177E-03	0.3829E-02	-0.4304E 01	0.4029E-03	0.3693E-02
40	-9.500	-0.5137E-01	0.4177E-03	0.3968E-02	-0.4836E 01	0.4029E-03	0.3827E-02
41	-9.833	-0.5137E-01	0.4177E-03	0.4108E-02	-0.5434E 01	0.4029E-03	0.3962E-02
42	-10.166	-0.5137E-01	0.4177E-03	0.4247E-02	-0.6106E 01	0.4029E-03	0.4096E-02
43	-10.500	-0.2568E-01	0.2088E-03	0.2193E-02	-0.3430E 01	0.2014E-03	0.2115E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.27725 NT (0.06233 LB)			TOTAL LIFT = 0.30118 NT (0.06770 LB)		
		TOTAL L/T = 0.39217			TOTAL L/T = 0.42602		
		TOTAL MOMENT = 0.00528 NT-M (0.00389 LB-FT)			TOTAL MOMENT = 0.00585 NT-M (0.00431 LB-FT)		
		TOTAL M/TD = 0.78499			TOTAL M/TD = 0.86936		

Q = 0.039 CMM (14.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.296
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 4960.8 NT/SQ M (103.6 PSF)

TABLE 3 – Concluded

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.95 cm (3/8 INCH) NOZZLE

(V_e = 0.296)

PORT		THETA = 30.0 DEGREES			THETA = 35.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	4.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	4.500	-0.3211E-01	0.2406E-03	-0.1082E-02	-0.3607E-01	0.2276E-03	-0.1024E-02
3	4.166	-0.6422E-01	0.4812E-03	-0.2005E-02	-0.8107E-01	0.4552E-03	-0.1896E-02
4	3.833	-0.6422E-01	0.4812E-03	-0.1844E-02	-0.9109E-01	0.4552E-03	-0.1745E-02
5	3.500	-0.5779E-01	0.4331E-03	-0.1516E-02	-0.1023E 00	0.4552E-03	-0.1593E-02
6	3.166	-0.6422E-01	0.4812E-03	-0.1524E-02	-0.1150E 00	0.4552E-03	-0.1441E-02
7	2.833	-0.5779E-01	0.4331E-03	-0.1227E-02	-0.1292E 00	0.4552E-03	-0.1289E-02
8	2.500	-0.6422E-01	0.4812E-03	-0.1203E-02	-0.1597E 00	0.5007E-03	-0.1251E-02
9	2.166	-0.7706E-01	0.5775E-03	-0.1251E-02	-0.1957E 00	0.5462E-03	-0.1183E-02
10	1.833	-0.9633E-01	0.7219E-03	-0.1323E-02	-0.2566E 00	0.6373E-03	-0.1168E-02
11	1.500	-0.1027E 00	0.7700E-03	-0.1155E-02	-0.2677E 00	0.5918E-03	-0.8877E-03
12	1.166	-0.1155E 00	0.8663E-03	-0.1010E-02	-0.3702E 00	0.7283E-03	-0.8497E-03
13	0.833	-0.1541E 00	0.1155E-02	-0.9625E-03	-0.5200E 00	0.9104E-03	-0.7587E-03
14	-0.833	-0.1605E 00	0.1203E-02	0.1002E-02	-0.5258E 00	0.8194E-03	0.6828E-03
15	-1.166	-0.1926E 00	0.1443E-02	0.1684E-02	-0.7549E 00	0.1047E-02	0.1221E-02
16	-1.500	-0.1862E 00	0.1395E-02	0.2093E-02	-0.7745E 00	0.9560E-03	0.1434E-02
17	-1.833	-0.1926E 00	0.1443E-02	0.2647E-02	-0.9946E 00	0.1092E-02	0.2003E-02
18	-2.166	-0.1798E 00	0.1347E-02	0.2919E-02	-0.9778E 00	0.9560E-03	0.2071E-02
19	-2.500	-0.1605E 00	0.1203E-02	0.3008E-02	-0.1046E 01	0.9104E-03	0.2276E-02
20	-2.833	-0.1412E 00	0.1058E-02	0.3000E-02	-0.1175E 01	0.9104E-03	0.2579E-02
21	-3.166	-0.1348E 00	0.1010E-02	0.3200E-02	-0.1321E 01	0.9104E-03	0.2883E-02
22	-3.500	-0.1220E 00	0.9144E-03	0.3200E-02	-0.1261E 01	0.7739E-03	0.2708E-02
23	-3.833	-0.1220E 00	0.9144E-03	0.3505E-02	-0.1417E 01	0.7739E-03	0.2966E-02
24	-4.166	-0.1091E 00	0.8181E-03	0.3409E-02	-0.1405E 01	0.6828E-03	0.2845E-02
25	-4.500	-0.8990E-01	0.6738E-03	0.3032E-02	-0.1368E 01	0.5918E-03	0.2663E-02
26	-4.833	-0.8348E-01	0.6256E-03	0.3024E-02	-0.1537E 01	0.5918E-03	0.2860E-02
27	-5.166	-0.7064E-01	0.5294E-03	0.2735E-02	-0.1329E 01	0.4552E-03	0.2352E-02
28	-5.500	-0.7064E-01	0.5294E-03	0.2911E-02	-0.1642E 01	0.5007E-03	0.2754E-02
29	-5.833	-0.7064E-01	0.5294E-03	0.3088E-02	-0.1677E 01	0.4552E-03	0.2655E-02
30	-6.166	-0.6422E-01	0.4812E-03	0.2967E-02	-0.1885E 01	0.4552E-03	0.2807E-02
31	-6.500	-0.6422E-01	0.4812E-03	0.3128E-02	-0.2118E 01	0.4552E-03	0.2959E-02
32	-6.833	-0.5779E-01	0.4331E-03	0.2959E-02	-0.2142E 01	0.4097E-03	0.2799E-02
33	-7.166	-0.5779E-01	0.4331E-03	0.3104E-02	-0.2139E 01	0.3641E-03	0.2610E-02
34	-7.500	-0.5779E-01	0.4331E-03	0.3248E-02	-0.2403E 01	0.3641E-03	0.2731E-02
35	-7.833	-0.5779E-01	0.4331E-03	0.3393E-02	-0.2700E 01	0.3641E-03	0.2852E-02
36	-8.166	-0.5779E-01	0.4331E-03	0.3537E-02	-0.3034E 01	0.3641E-03	0.2974E-02
37	-8.500	-0.5779E-01	0.4331E-03	0.3681E-02	-0.3409E 01	0.3641E-03	0.3095E-02
38	-8.833	-0.5779E-01	0.4331E-03	0.3826E-02	-0.3831E 01	0.3641E-03	0.3217E-02
39	-9.166	-0.5779E-01	0.4331E-03	0.3970E-02	-0.4304E 01	0.3641E-03	0.3338E-02
40	-9.500	-0.5779E-01	0.4331E-03	0.4115E-02	-0.4836E 01	0.3641E-03	0.3459E-02
41	-9.833	-0.5779E-01	0.4331E-03	0.4259E-02	-0.5434E 01	0.3641E-03	0.3581E-02
42	-10.166	-0.5779E-01	0.4331E-03	0.4403E-02	-0.6106E 01	0.3641E-03	0.3702E-02
43	-10.500	-0.2889E-01	0.2165E-03	0.2274E-02	-0.3430E 01	0.1820E-03	0.1912E-02
44	-10.833	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.32148 NT (0.07227 LB)			TOTAL LIFT = 0.33844 NT (0.07608 LB)		
		TOTAL L/T = 0.45473			TOTAL L/T = 0.47872		
		TOTAL MOMENT = 0.00637 NT-M (0.00470 LB-FT)			TOTAL MOMENT = 0.00680 NT-M (0.00501 LB-FT)		
		TOTAL M/TD = 0.94659			TOTAL M/TD = 1.01049		

Q = 0.039 CMM (14.00 CFM)
VINF = 27.4 M/S (90.1 F/S)
VJ = 92.7 M/S (304.2 F/S)
VE = 0.296
DYN PRES INF = 435.7 NT/SQ M (9.1 PSF)
DYN PRES JET = 4960.8 NT/SQ M (103.6 PSF)

TABLE 4

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.510]

PORT		THETA = 0.0 DEGREES			THETA = 2.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.4018E-02	0.1135E-03	-0.7381E-03	-0.1353E-02	0.1512E-03	-0.9832E-03
3	6.000	-0.8037E-02	0.2271E-03	-0.1362E-02	-0.1366E-02	0.3025E-03	-0.1815E-02
4	5.500	-0.8037E-02	0.2271E-03	-0.1249E-02	-0.1035E-02	0.4538E-03	-0.2495E-02
5	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.1168E-01	-0.3302E-03	0.1155E-02	0.7835E-04	-0.5278E-03	0.1847E-02
9	3.000	0.2804E-01	-0.7924E-03	0.2377E-02	0.1088E-03	-0.1451E-02	0.4354E-02
10	2.500	0.6076E-01	-0.1717E-02	0.4292E-02	0.1099E-03	-0.2903E-02	0.7257E-02
11	2.000	0.1121E 00	-0.3169E-02	0.6339E-02	0.1085E-03	-0.5674E-02	0.1134E-01
12	1.500	0.1963E 00	-0.5547E-02	0.8321E-02	0.8921E-04	-0.9237E-02	0.1385E-01
13	1.000	0.3154E 00	-0.8915E-02	0.9915E-02	0.6243E-04	-0.1279E-01	0.1279E-01
14	-1.000	-0.9376E 00	0.2649E-01	0.2649E-01	-0.1181E-03	0.4795E-01	0.4795E-01
15	-1.500	-0.6885E 00	0.1945E-01	0.2918E-01	-0.5458E-04	0.4386E-01	0.6580E-01
16	-2.000	-0.4500E 00	0.1271E-01	0.2543E-01	-0.1815E-04	0.2889E-01	0.5778E-01
17	-2.500	-0.2330E 00	0.6586E-02	0.1646E-01	-0.5185E-05	0.1633E-01	0.4084E-01
18	-3.000	-0.1285E 00	0.3633E-02	0.1089E-01	-0.1454E-05	0.9076E-02	0.2722E-01
19	-3.500	-0.5358E-01	0.1514E-02	0.5299E-02	-0.3429E-06	0.4235E-02	0.1482E-01
20	-4.000	-0.3482E-01	0.9842E-03	0.3936E-02	-0.1113E-06	0.2722E-02	0.1089E-01
21	-4.500	-0.2679E-01	0.7570E-03	0.3406E-02	-0.4373E-07	0.2117E-02	0.9530E-02
22	-5.000	-0.1339E-01	0.3785E-03	0.1892E-02	-0.1262E-07	0.1210E-02	0.6050E-02
23	-5.500	-0.1875E-01	0.5299E-03	0.2914E-02	-0.7171E-08	0.1361E-02	0.7487E-02
24	-6.000	-0.1339E-01	0.3785E-03	0.2271E-02	-0.2816E-08	0.1058E-02	0.6353E-02
25	-6.500	-0.1339E-01	0.3785E-03	0.2460E-02	-0.1625E-08	0.1210E-02	0.7866E-02
26	-7.000	-0.1875E-01	0.5299E-03	0.3709E-02	-0.8211E-09	0.1210E-02	0.8471E-02
27	-7.500	-0.1875E-01	0.5299E-03	0.3974E-02	-0.4147E-09	0.1210E-02	0.9076E-02
28	-8.000	-0.1875E-01	0.5299E-03	0.4239E-02	-0.2094E-09	0.1210E-02	0.9681E-02
29	-8.500	-0.1875E-01	0.5299E-03	0.4504E-02	-0.1057E-09	0.1210E-02	0.1028E-01
30	-9.000	-0.1875E-01	0.5299E-03	0.4769E-02	-0.5342E-10	0.1210E-02	0.1089E-01
31	-9.500	-0.1875E-01	0.5299E-03	0.5034E-02	-0.2698E-10	0.1210E-02	0.1149E-01
32	-10.000	-0.1875E-01	0.5299E-03	0.5299E-02	-0.1362E-10	0.1210E-02	0.1210E-01
33	-10.500	-0.1875E-01	0.5299E-03	0.5564E-02	-0.6883E-11	0.1210E-02	0.1270E-01
34	-11.000	-0.1875E-01	0.5299E-03	0.5829E-02	-0.3476E-11	0.1210E-02	0.1331E-01
35	-11.500	-0.1875E-01	0.5299E-03	0.6094E-02	-0.1755E-11	0.1210E-02	0.1391E-01
36	-12.000	-0.1875E-01	0.5299E-03	0.6359E-02	-0.8867E-12	0.1210E-02	0.1452E-01
37	-12.500	-0.1875E-01	0.5299E-03	0.6624E-02	-0.4478E-12	0.1210E-02	0.1512E-01
38	-13.000	-0.1875E-01	0.5299E-03	0.6889E-02	-0.2261E-12	0.1210E-02	0.1573E-01
39	-13.500	-0.1875E-01	0.5299E-03	0.7154E-02	-0.1142E-12	0.1210E-02	0.1633E-01
40	-14.000	-0.1875E-01	0.5299E-03	0.7419E-02	-0.5769E-13	0.1210E-02	0.1694E-01
41	-14.500	-0.1875E-01	0.5299E-03	0.7684E-02	-0.2913E-13	0.1210E-02	0.1754E-01
42	-15.000	-0.1875E-01	0.5299E-03	0.7949E-02	-0.1471E-13	0.1210E-02	0.1815E-01
43	-15.500	-0.1875E-01	0.5299E-03	0.8214E-02	-0.7432E-14	0.1210E-02	0.1875E-01
44	-16.000	-0.1875E-01	0.5299E-03	0.8479E-02	-0.3753E-14	0.1210E-02	0.1936E-01
45	-16.500	-0.9376E-02	0.2649E-03	0.4372E-02	-0.9479E-15	0.6050E-03	0.9983E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.03336 NT (0.00750 LB)			TOTAL LIFT = 0.11229 NT (0.02524 LB)		
		TOTAL L/T = 0.06424			TOTAL L/T = 0.21620		
		TOTAL MOMENT = 0.00091 NT-M (0.00067 LB-FT)			TOTAL MOMENT = 0.00297 NT-M (0.00219 LB-FT)		
		TOTAL M/TD = 0.27889			TOTAL M/TD = 0.90208		

Q = 0.022 CMM (8.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 119.2 M/S (391.1 F/S)
VE = 0.510
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 8200.5 NT/SQ M (171.2 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.510]

PORT		THETA = 5.0 DEGREES			THETA = 7.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.2679E-02	0.1508E-03	-0.9804E-03	-0.1353E-02	0.1501E-03	-0.9757E-03
3	6.000	-0.5358E-02	0.3016E-03	-0.1810E-02	-0.1366E-02	0.3002E-03	-0.1801E-02
4	5.500	-0.1071E-01	0.6033E-03	-0.3318E-02	-0.6902E-03	0.3002E-03	-0.1651E-02
5	5.000	-0.2679E-02	0.1508E-03	-0.7541E-03	-0.1743E-03	0.1501E-03	-0.7506E-03
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.7011E-02	-0.3947E-03	0.1381E-02	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.1869E-01	-0.1052E-02	0.3157E-02	0.3957E-04	-0.5238E-03	0.1571E-02
10	2.500	0.4206E-01	-0.2368E-02	0.5921E-02	0.5995E-04	-0.1571E-02	0.3928E-02
11	2.000	0.7945E-01	-0.4473E-02	0.8947E-02	0.5551E-04	-0.2880E-02	0.5761E-02
12	1.500	0.1145E 00	-0.6447E-02	0.9671E-02	0.3696E-04	-0.3797E-02	0.5696E-02
13	1.000	0.1168E 00	-0.6579E-02	0.6579E-02	0.1223E-04	-0.2488E-02	0.2488E-02
14	-1.000	-0.6188E 00	0.3484E-01	0.3484E-01	-0.5962E-04	0.2401E-01	0.2401E-01
15	-1.500	-0.6670E 00	0.3755E-01	0.5633E-01	-0.3406E-04	0.2717E-01	0.4075E-01
16	-2.000	-0.5063E 00	0.2850E-01	0.5701E-01	-0.1435E-04	0.2266E-01	0.4533E-01
17	-2.500	-0.3214E 00	0.1810E-01	0.4525E-01	-0.5425E-05	0.1696E-01	0.4240E-01
18	-3.000	-0.1902E 00	0.1070E-01	0.3212E-01	-0.1721E-05	0.1065E-01	0.3197E-01
19	-3.500	-0.1018E 00	0.5731E-02	0.2006E-01	-0.5021E-06	0.6154E-02	0.2154E-01
20	-4.000	-0.6429E-01	0.3620E-02	0.1448E-01	-0.1855E-06	0.4503E-02	0.1801E-01
21	-4.500	-0.5358E-01	0.3016E-02	0.1357E-01	-0.7184E-07	0.3452E-02	0.1553E-01
22	-5.000	-0.2679E-01	0.1508E-02	0.7541E-02	-0.2050E-07	0.1951E-02	0.9757E-02
23	-5.500	-0.2946E-01	0.1659E-02	0.9125E-02	-0.1035E-07	0.1951E-02	0.1073E-01
24	-6.000	-0.2143E-01	0.1206E-02	0.7240E-02	-0.3621E-08	0.1351E-02	0.8106E-02
25	-6.500	-0.2143E-01	0.1206E-02	0.7843E-02	-0.1829E-08	0.1351E-02	0.8782E-02
26	-7.000	-0.2411E-01	0.1357E-02	0.9502E-02	-0.9238E-09	0.1351E-02	0.9457E-02
27	-7.500	-0.1071E-01	0.6033E-03	0.4525E-02	-0.1555E-09	0.4503E-03	0.3377E-02
28	-8.000	-0.2679E-01	0.1508E-02	0.1206E-01	-0.7855E-10	0.4503E-03	0.3602E-02
29	-8.500	-0.2143E-01	0.1206E-02	0.1025E-01	-0.3967E-10	0.4503E-03	0.3828E-02
30	-9.000	-0.2143E-01	0.1206E-02	0.1086E-01	-0.2003E-10	0.4503E-03	0.4053E-02
31	-9.500	-0.2143E-01	0.1206E-02	0.1146E-01	-0.1011E-10	0.4503E-03	0.4278E-02
32	-10.000	-0.2143E-01	0.1206E-02	0.1206E-01	-0.5110E-11	0.4503E-03	0.4503E-02
33	-10.500	-0.2143E-01	0.1206E-02	0.1267E-01	-0.2581E-11	0.4503E-03	0.4728E-02
34	-11.000	-0.2143E-01	0.1206E-02	0.1327E-01	-0.1303E-11	0.4503E-03	0.4953E-02
35	-11.500	-0.2143E-01	0.1206E-02	0.1387E-01	-0.6584E-12	0.4503E-03	0.5179E-02
36	-12.000	-0.2143E-01	0.1206E-02	0.1448E-01	-0.3325E-12	0.4503E-03	0.5404E-02
37	-12.500	-0.2143E-01	0.1206E-02	0.1508E-01	-0.1679E-12	0.4503E-03	0.5629E-02
38	-13.000	-0.2143E-01	0.1206E-02	0.1568E-01	-0.8481E-13	0.4503E-03	0.5854E-02
39	-13.500	-0.2143E-01	0.1206E-02	0.1629E-01	-0.4283E-13	0.4503E-03	0.6079E-02
40	-14.000	-0.2143E-01	0.1206E-02	0.1689E-01	-0.2163E-13	0.4503E-03	0.6305E-02
41	-14.500	-0.2143E-01	0.1206E-02	0.1749E-01	-0.1092E-13	0.4503E-03	0.6530E-02
42	-15.000	-0.2143E-01	0.1206E-02	0.1810E-01	-0.5518E-14	0.4503E-03	0.6755E-02
43	-15.500	-0.2143E-01	0.1206E-02	0.1870E-01	-0.2787E-14	0.4503E-03	0.6980E-02
44	-16.000	-0.2143E-01	0.1206E-02	0.1930E-01	-0.1407E-14	0.4503E-03	0.7205E-02
45	-16.500	-0.1071E-01	0.6033E-03	0.9955E-02	-0.3554E-15	0.2251E-03	0.3715E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.19069 NT (0.04287 LB)			TOTAL LIFT = 0.25381 NT (0.05706 LB)		
		TOTAL L/T = 0.36714			TOTAL L/T = 0.48866		
		TOTAL MOMENT = 0.00497 NT-M (0.00367 LB-FT)			TOTAL MOMENT = 0.00629 NT-M (0.00464 LB-FT)		
		TOTAL M/TD = 1.50889			TOTAL M/TD = 1.90855		

Q = 0.022 CMM (8.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 119.2 M/S (391.1 F/S)
VE = 0.510
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 8200.9 NT/SQ M (171.2 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.510]

PORT		THETA = 10.0 DEGREES			THETA = 12.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.2679E-02	0.1491E-03	-0.9692E-03	-0.2029E-02	0.2217E-03	-0.1441E-02
3	6.000	-0.5358E-02	0.2982E-03	-0.1789E-02	-0.2050E-02	0.4434E-03	-0.2660E-02
4	5.500	-0.1339E-01	0.7455E-03	-0.4100E-02	-0.1725E-02	0.7391E-03	-0.4065E-02
5	5.000	-0.2679E-02	0.1491E-03	-0.7455E-03	-0.3486E-03	0.2956E-03	-0.1478E-02
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.8803E-04	0.1478E-03	-0.6652E-03
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	2.500	0.1635E-01	-0.9105E-03	0.2276E-02	0.4996E-05	-0.1289E-03	0.3223E-03
11	2.000	0.3271E-01	-0.1821E-02	0.3642E-02	0.1766E-04	-0.9026E-03	0.1805E-02
12	1.500	0.3972E-01	-0.2211E-02	0.3316E-02	0.8921E-05	-0.9026E-03	0.1353E-02
13	1.000	0.7011E-02	-0.3902E-03	0.3902E-03	0.0000E 00	0.0000E 00	0.0000E 00
14	-1.000	-0.2893E 00	0.1610E-01	0.1610E-01	-0.2608E-04	0.1034E-01	0.1034E-01
15	-1.500	-0.3482E 00	0.1938E-01	0.2907E-01	-0.1656E-04	0.1300E-01	0.1951E-01
16	-2.000	-0.3000E 00	0.1670E-01	0.3340E-01	-0.7509E-05	0.1167E-01	0.2335E-01
17	-2.500	-0.2545E 00	0.1416E-01	0.3541E-01	-0.3600E-05	0.1108E-01	0.2771E-01
18	-3.000	-0.1661E 00	0.9245E-02	0.2773E-01	-0.1285E-05	0.7834E-02	0.2350E-01
19	-3.500	-0.1071E 00	0.5964E-02	0.2087E-01	-0.4286E-06	0.5173E-02	0.1810E-01
20	-4.000	-0.8037E-01	0.4473E-02	0.1789E-01	-0.1793E-06	0.4286E-02	0.1714E-01
21	-4.500	-0.6697E-01	0.3727E-02	0.1677E-01	-0.7184E-07	0.3400E-02	0.1530E-01
22	-5.000	-0.4018E-01	0.2236E-02	0.1118E-01	-0.2366E-07	0.2217E-02	0.1108E-01
23	-5.500	-0.4018E-01	0.2236E-02	0.1230E-01	-0.1195E-07	0.2217E-02	0.1219E-01
24	-6.000	-0.2679E-01	0.1491E-02	0.8946E-02	-0.4024E-08	0.1478E-02	0.8869E-02
25	-6.500	-0.2679E-01	0.1491E-02	0.9692E-02	-0.2032E-08	0.1478E-02	0.9606E-02
26	-7.000	-0.2679E-01	0.1491E-02	0.1043E-01	-0.1026E-08	0.1478E-02	0.1034E-01
27	-7.500	-0.1071E-01	0.5964E-03	0.4473E-02	-0.2073E-09	0.5913E-03	0.4434E-02
28	-8.000	-0.1071E-01	0.5964E-03	0.4771E-02	-0.1047E-09	0.5913E-03	0.4730E-02
29	-8.500	-0.1071E-01	0.5964E-03	0.5069E-02	-0.5289E-10	0.5913E-03	0.5026E-02
30	-9.000	-0.1071E-01	0.5964E-03	0.5368E-02	-0.2671E-10	0.5913E-03	0.5321E-02
31	-9.500	-0.1071E-01	0.5964E-03	0.5666E-02	-0.1349E-10	0.5913E-03	0.5617E-02
32	-10.000	-0.1071E-01	0.5964E-03	0.5964E-02	-0.6814E-11	0.5913E-03	0.5913E-02
33	-10.500	-0.1071E-01	0.5964E-03	0.6262E-02	-0.3441E-11	0.5913E-03	0.6208E-02
34	-11.000	-0.1071E-01	0.5964E-03	0.6561E-02	-0.1738E-11	0.5913E-03	0.6504E-02
35	-11.500	-0.1071E-01	0.5964E-03	0.6859E-02	-0.8778E-12	0.5913E-03	0.6800E-02
36	-12.000	-0.1071E-01	0.5964E-03	0.7157E-02	-0.4433E-12	0.5913E-03	0.7095E-02
37	-12.500	-0.1071E-01	0.5964E-03	0.7455E-02	-0.2239E-12	0.5913E-03	0.7391E-02
38	-13.000	-0.1071E-01	0.5964E-03	0.7753E-02	-0.1130E-12	0.5913E-03	0.7686E-02
39	-13.500	-0.1071E-01	0.5964E-03	0.8052E-02	-0.5711E-13	0.5913E-03	0.7982E-02
40	-14.000	-0.1071E-01	0.5964E-03	0.8350E-02	-0.2884E-13	0.5913E-03	0.8278E-02
41	-14.500	-0.1071E-01	0.5964E-03	0.8648E-02	-0.1456E-13	0.5913E-03	0.8573E-02
42	-15.000	-0.1071E-01	0.5964E-03	0.8946E-02	-0.7358E-14	0.5913E-03	0.8869E-02
43	-15.500	-0.1071E-01	0.5964E-03	0.9245E-02	-0.3716E-14	0.5913E-03	0.9165E-02
44	-16.000	-0.1071E-01	0.5964E-03	0.9543E-02	-0.1876E-14	0.5913E-03	0.9460E-02
45	-16.500	-0.5358E-02	0.2982E-03	0.4920E-02	-0.4739E-15	0.2956E-03	0.4878E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.30874 NT (0.06940 LB)			TOTAL LIFT = 0.35369 NT (0.07951 LB)		
		TOTAL L/T = 0.59442			TOTAL L/T = 0.68095		
		TOTAL MOMENT = 0.00755 NT-M (0.00557 LB-FT)			TOTAL MOMENT = 0.00864 NT-M (0.00637 LB-FT)		
		TOTAL M/TD = 2.29149			TOTAL M/TD = 2.62170		

Q = 0.022 CMM (8.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 119.2 M/S (391.1 F/S)
VE = 0.510
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 8200.5 NT/SQ M (171.2 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

(V_e = 0.510)

PORT		THETA = 15.0 DEGREES			THETA = 17.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.5358E-02	0.2925E-03	-0.1901E-02	-0.3382E-02	0.3610E-03	-0.2346E-02
3	6.000	-0.1071E-01	0.5850E-03	-0.3510E-02	-0.3416E-02	0.7220E-03	-0.4332E-02
4	5.500	-0.1607E-01	0.8775E-03	-0.4826E-02	-0.2415E-02	0.1010E-02	-0.5559E-02
5	5.000	-0.1071E-01	0.5850E-03	-0.2925E-02	-0.8715E-03	0.7220E-03	-0.3610E-02
6	4.500	-0.8037E-02	0.4387E-03	-0.1974E-02	-0.2641E-03	0.4332E-03	-0.1949E-02
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
11	2.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
12	1.500	0.2337E-02	-0.1275E-03	0.1913E-03	0.0000E 00	0.0000E 00	0.0000E 00
13	1.000	-0.8037E-02	0.4387E-03	-0.4387E-03	-0.3689E-09	0.7220E-03	-0.7220E-03
14	-1.000	-0.1339E 00	0.7312E-02	0.7312E-02	-0.1416E-04	0.5487E-02	0.5487E-02
15	-1.500	-0.1714E 00	0.9360E-02	0.1404E-01	-0.9222E-05	0.7079E-02	0.1061E-01
16	-2.000	-0.1607E 00	0.8775E-02	0.1755E-01	-0.4467E-05	0.6787E-02	0.1357E-01
17	-2.500	-0.1634E 00	0.8921E-02	0.2230E-01	-0.2400E-05	0.7220E-02	0.1805E-01
18	-3.000	-0.1205E 00	0.6581E-02	0.1974E-01	-0.8729E-06	0.5198E-02	0.1559E-01
19	-3.500	-0.8305E-01	0.4533E-02	0.1586E-01	-0.3429E-06	0.4043E-02	0.1415E-01
20	-4.000	-0.7233E-01	0.3948E-02	0.1579E-01	-0.1484E-06	0.3465E-02	0.1386E-01
21	-4.500	-0.5893E-01	0.3217E-02	0.1447E-01	-0.6559E-07	0.3032E-02	0.1364E-01
22	-5.000	-0.4018E-01	0.2193E-02	0.1096E-01	-0.2208E-07	0.2021E-02	0.1010E-01
23	-5.500	-0.4286E-01	0.2340E-02	0.1287E-01	-0.1115E-07	0.2021E-02	0.1111E-01
24	-6.000	-0.2679E-01	0.1462E-02	0.8775E-02	-0.4024E-08	0.1444E-02	0.8664E-02
25	-6.500	-0.2679E-01	0.1462E-02	0.9506E-02	-0.2032E-08	0.1444E-02	0.9386E-02
26	-7.000	-0.2679E-01	0.1462E-02	0.1023E-01	-0.1026E-08	0.1444E-02	0.1010E-01
27	-7.500	-0.1339E-01	0.7312E-03	0.5484E-02	-0.2073E-09	0.5776E-03	0.4332E-02
28	-8.000	-0.1339E-01	0.7312E-03	0.5850E-02	-0.1047E-09	0.5776E-03	0.4621E-02
29	-8.500	-0.1339E-01	0.7312E-03	0.6215E-02	-0.5289E-10	0.5776E-03	0.4909E-02
30	-9.000	-0.1339E-01	0.7312E-03	0.6581E-02	-0.2671E-10	0.5776E-03	0.5198E-02
31	-9.500	-0.1339E-01	0.7312E-03	0.6947E-02	-0.1349E-10	0.5776E-03	0.5487E-02
32	-10.000	-0.1339E-01	0.7312E-03	0.7312E-02	-0.6814E-11	0.5776E-03	0.5776E-02
33	-10.500	-0.1339E-01	0.7312E-03	0.7678E-02	-0.3441E-11	0.5776E-03	0.6065E-02
34	-11.000	-0.1339E-01	0.7312E-03	0.8044E-02	-0.1738E-11	0.5776E-03	0.6353E-02
35	-11.500	-0.1339E-01	0.7312E-03	0.8409E-02	-0.8778E-12	0.5776E-03	0.6642E-02
36	-12.000	-0.1339E-01	0.7312E-03	0.8775E-02	-0.4433E-12	0.5776E-03	0.6931E-02
37	-12.500	-0.1339E-01	0.7312E-03	0.9141E-02	-0.2239E-12	0.5776E-03	0.7220E-02
38	-13.000	-0.1339E-01	0.7312E-03	0.9506E-02	-0.1130E-12	0.5776E-03	0.7509E-02
39	-13.500	-0.1339E-01	0.7312E-03	0.9872E-02	-0.5711E-13	0.5776E-03	0.7798E-02
40	-14.000	-0.1339E-01	0.7312E-03	0.1023E-01	-0.2884E-13	0.5776E-03	0.8086E-02
41	-14.500	-0.1339E-01	0.7312E-03	0.1060E-01	-0.1456E-13	0.5776E-03	0.8375E-02
42	-15.000	-0.1339E-01	0.7312E-03	0.1096E-01	-0.7358E-14	0.5776E-03	0.8664E-02
43	-15.500	-0.1339E-01	0.7312E-03	0.1133E-01	-0.3716E-14	0.5776E-03	0.8953E-02
44	-16.000	-0.1339E-01	0.7312E-03	0.1170E-01	-0.1876E-14	0.5776E-03	0.9242E-02
45	-16.500	-0.6697E-02	0.3656E-03	0.6033E-02	-0.4739E-15	0.2888E-03	0.4765E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.39431 NT (0.08864 LB)			TOTAL LIFT = 0.42825 NT (0.09627 LB)		
		TOTAL L/T = 0.75915			TOTAL L/T = 0.82449		
		TOTAL MOMENT = 0.00971 NT-M (0.00716 LB-FT)			TOTAL MOMENT = 0.01058 NT-M (0.00780 LB-FT)		
		TOTAL M/TD = 2.94647			TOTAL M/TD = 3.20926		

Q = 0.022 CMM (8.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 119.2 M/S (391.1 F/S)
VE = 0.510
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 8200.5 NT/SQ M (171.2 PSF)

TABLE 4 -- Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.510]

PORT		THETA = 20.0 DEGREES			THETA = 25.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.6697E-02	0.3557E-03	-0.2312E-02	-0.4735E-02	0.4803E-03	-0.3121E-02
3	6.000	-0.1339E-01	0.7114E-03	-0.4268E-02	-0.4783E-02	0.9606E-03	-0.5763E-02
4	5.500	-0.1875E-01	0.9959E-03	-0.5477E-02	-0.3106E-02	0.1235E-02	-0.6792E-02
5	5.000	-0.1607E-01	0.8537E-03	-0.4268E-02	-0.1394E-02	0.1097E-02	-0.5489E-02
6	4.500	-0.1339E-01	0.7114E-03	-0.3201E-02	-0.7042E-03	0.1097E-02	-0.4940E-02
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.8892E-04	0.2744E-03	-0.1097E-02
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1122E-03	0.6861E-03	-0.2401E-02
9	3.000	-0.2679E-02	0.1422E-03	-0.4268E-03	-0.6804E-04	0.8233E-03	-0.2470E-02
10	2.500	-0.2679E-02	0.1422E-03	-0.3557E-03	-0.2863E-04	0.6861E-03	-0.1715E-02
11	2.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.8678E-05	0.4116E-03	-0.8233E-03
12	1.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1461E-05	0.1372E-03	-0.2058E-03
13	1.000	-0.1875E-01	0.9959E-03	-0.9959E-03	-0.6641E-05	0.1235E-02	-0.1235E-02
14	-1.000	-0.7501E-01	0.3983E-02	0.3983E-02	-0.5590E-05	0.2058E-02	0.2058E-02
15	-1.500	-0.1018E 00	0.5406E-02	0.8110E-02	-0.4140E-05	0.3019E-02	0.4528E-02
16	-2.000	-0.9644E-01	0.5122E-02	0.1024E-01	-0.2091E-05	0.3019E-02	0.6038E-02
17	-2.500	-0.1125E 00	0.5975E-02	0.1493E-01	-0.1488E-05	0.4254E-02	0.1063E-01
18	-3.000	-0.8573E-01	0.4553E-02	0.1365E-01	-0.5819E-06	0.3293E-02	0.9880E-02
19	-3.500	-0.6697E-01	0.3557E-02	0.1244E-01	-0.2326E-06	0.2607E-02	0.9125E-02
20	-4.000	-0.5893E-01	0.3130E-02	0.1252E-01	-0.1175E-06	0.2607E-02	0.1042E-01
21	-4.500	-0.5358E-01	0.2845E-02	0.1280E-01	-0.5935E-07	0.2607E-02	0.1173E-01
22	-5.000	-0.3750E-01	0.1991E-02	0.9959E-02	-0.2050E-07	0.1783E-02	0.8919E-02
23	-5.500	-0.4018E-01	0.2134E-02	0.1173E-01	-0.1115E-07	0.1921E-02	0.1056E-01
24	-6.000	-0.2679E-01	0.1422E-02	0.8537E-02	-0.4024E-08	0.1372E-02	0.8233E-02
25	-6.500	-0.2679E-01	0.1422E-02	0.9248E-02	-0.2032E-08	0.1372E-02	0.8919E-02
26	-7.000	-0.2679E-01	0.1422E-02	0.9959E-02	-0.1026E-08	0.1372E-02	0.9606E-02
27	-7.500	-0.1339E-01	0.7114E-03	0.5335E-02	-0.3110E-09	0.8233E-03	0.6175E-02
28	-8.000	-0.1339E-01	0.7114E-03	0.5691E-02	-0.1571E-09	0.8233E-03	0.6586E-02
29	-8.500	-0.1339E-01	0.7114E-03	0.6047E-02	-0.7934E-10	0.8233E-03	0.6998E-02
30	-9.000	-0.1339E-01	0.7114E-03	0.6402E-02	-0.4007E-10	0.8233E-03	0.7410E-02
31	-9.500	-0.1339E-01	0.7114E-03	0.6758E-02	-0.2023E-10	0.8233E-03	0.7822E-02
32	-10.000	-0.1339E-01	0.7114E-03	0.7114E-02	-0.1022E-10	0.8233E-03	0.8233E-02
33	-10.500	-0.1339E-01	0.7114E-03	0.7469E-02	-0.5162E-11	0.8233E-03	0.8645E-02
34	-11.000	-0.1339E-01	0.7114E-03	0.7625E-02	-0.2607E-11	0.8233E-03	0.9057E-02
35	-11.500	-0.1339E-01	0.7114E-03	0.8181E-02	-0.1316E-11	0.8233E-03	0.9468E-02
36	-12.000	-0.1339E-01	0.7114E-03	0.8537E-02	-0.6650E-12	0.8233E-03	0.9880E-02
37	-12.500	-0.1339E-01	0.7114E-03	0.8892E-02	-0.3358E-12	0.8233E-03	0.1029E-01
38	-13.000	-0.1339E-01	0.7114E-03	0.9248E-02	-0.1696E-12	0.8233E-03	0.1070E-01
39	-13.500	-0.1339E-01	0.7114E-03	0.9604E-02	-0.8567E-13	0.8233E-03	0.1111E-01
40	-14.000	-0.1339E-01	0.7114E-03	0.9959E-02	-0.4327E-13	0.8233E-03	0.1152E-01
41	-14.500	-0.1339E-01	0.7114E-03	0.1031E-01	-0.2185E-13	0.8233E-03	0.1193E-01
42	-15.000	-0.1339E-01	0.7114E-03	0.1067E-01	-0.1103E-13	0.8233E-03	0.1235E-01
43	-15.500	-0.1339E-01	0.7114E-03	0.1102E-01	-0.5574E-14	0.8233E-03	0.1276E-01
44	-16.000	-0.1339E-01	0.7114E-03	0.1138E-01	-0.2815E-14	0.8233E-03	0.1317E-01
45	-16.500	-0.6697E-02	0.3557E-03	0.5869E-02	-0.7109E-15	0.4116E-03	0.6792E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.45995 NT (0.10340 LB)			TOTAL LIFT = 0.48885 NT (0.10990 LB)		
		TOTAL L/T = 0.88553			TOTAL L/T = 0.94118		
		TOTAL MOMENT = 0.01148 NT-M (0.00847 LB-FT)			TOTAL MOMENT = 0.01232 NT-M (0.00909 LB-FT)		
		TOTAL M/TD = 3.48244			TOTAL M/TD = 3.73799		

Q = 0.022 CMM (8.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 119.2 M/S (391.1 F/S)
VE = 0.510
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 8200.5 NT/SQ M (171.2 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.510]

PORT		THETA = 30.0 DEGREES			THETA = 35.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.1071E-01	0.5245E-03	-0.3409E-02	-0.5412E-02	0.4961E-03	-0.3224E-02
3	6.000	-0.2143E-01	0.1049E-02	-0.6294E-02	-0.5466E-02	0.9922E-03	-0.5953E-02
4	5.500	-0.2679E-01	0.1311E-02	-0.7212E-02	-0.3451E-02	0.1240E-02	-0.6821E-02
5	5.000	-0.2411E-01	0.1180E-02	-0.5900E-02	-0.1743E-02	0.1240E-02	-0.6201E-02
6	4.500	-0.2411E-01	0.1180E-02	-0.5310E-02	-0.8803E-03	0.1240E-02	-0.5581E-02
7	4.000	-0.1071E-01	0.5245E-03	-0.2098E-02	-0.2223E-03	0.6201E-03	-0.2480E-02
8	3.500	-0.1875E-01	0.9179E-03	-0.3212E-02	-0.2021E-03	0.1116E-02	-0.3907E-02
9	3.000	-0.2411E-01	0.1180E-02	-0.3540E-02	-0.1134E-03	0.1240E-02	-0.3720E-02
10	2.500	-0.2143E-01	0.1049E-02	-0.2622E-02	-0.5155E-04	0.1116E-02	-0.2790E-02
11	2.000	-0.1071E-01	0.5245E-03	-0.1049E-02	-0.1735E-04	0.7441E-03	-0.1488E-02
12	1.500	-0.2679E-02	0.1311E-03	-0.1966E-03	-0.4383E-05	0.3720E-03	-0.5581E-03
13	1.000	-0.2411E-01	0.1180E-02	-0.1180E-02	-0.6641E-05	0.1116E-02	-0.1116E-02
14	-1.000	-0.2679E-01	0.1311E-02	0.1311E-02	-0.2608E-05	0.8682E-03	0.8682E-03
15	-1.500	-0.3750E-01	0.1835E-02	0.2753E-02	-0.1882E-05	0.1240E-02	0.1860E-02
16	-2.000	-0.3750E-01	0.1835E-02	0.3671E-02	-0.9506E-06	0.1240E-02	0.2480E-02
17	-2.500	-0.6697E-01	0.3278E-02	0.8195E-02	-0.9602E-06	0.2480E-02	0.6201E-02
18	-3.000	-0.5090E-01	0.2491E-02	0.7474E-02	-0.3637E-06	0.1860E-02	0.5581E-02
19	-3.500	-0.4018E-01	0.1966E-02	0.6884E-02	-0.1347E-06	0.1364E-02	0.4775E-02
20	-4.000	-0.4018E-01	0.1966E-02	0.7867E-02	-0.7422E-07	0.1488E-02	0.5953E-02
21	-4.500	-0.4554E-01	0.2229E-02	0.1003E-01	-0.4685E-07	0.1860E-02	0.8372E-02
22	-5.000	-0.2946E-01	0.1442E-02	0.7212E-02	-0.1577E-07	0.1240E-02	0.6201E-02
23	-5.500	-0.3482E-01	0.1704E-02	0.9375E-02	-0.9561E-08	0.1488E-02	0.8186E-02
24	-6.000	-0.2679E-01	0.1311E-02	0.7867E-02	-0.4024E-08	0.1240E-02	0.7441E-02
25	-6.500	-0.2679E-01	0.1311E-02	0.8523E-02	-0.1829E-08	0.1116E-02	0.7255E-02
26	-7.000	-0.2679E-01	0.1311E-02	0.9179E-02	-0.9238E-09	0.1116E-02	0.7814E-02
27	-7.500	-0.1339E-01	0.6556E-03	0.4917E-02	-0.4665E-09	0.1116E-02	0.8372E-02
28	-8.000	-0.1339E-01	0.6556E-03	0.5245E-02	-0.2356E-09	0.1116E-02	0.8930E-02
29	-8.500	-0.1339E-01	0.6556E-03	0.5573E-02	-0.1190E-09	0.1116E-02	0.9488E-02
30	-9.000	-0.1339E-01	0.6556E-03	0.5900E-02	-0.6010E-10	0.1116E-02	0.1004E-01
31	-9.500	-0.1339E-01	0.6556E-03	0.6228E-02	-0.3035E-10	0.1116E-02	0.1060E-01
32	-10.000	-0.1339E-01	0.6556E-03	0.6556E-02	-0.1533E-10	0.1116E-02	0.1116E-01
33	-10.500	-0.1339E-01	0.6556E-03	0.6884E-02	-0.7743E-11	0.1116E-02	0.1172E-01
34	-11.000	-0.1339E-01	0.6556E-03	0.7212E-02	-0.3910E-11	0.1116E-02	0.1227E-01
35	-11.500	-0.1339E-01	0.6556E-03	0.7539E-02	-0.1975E-11	0.1116E-02	0.1283E-01
36	-12.000	-0.1339E-01	0.6556E-03	0.7867E-02	-0.9975E-12	0.1116E-02	0.1339E-01
37	-12.500	-0.1339E-01	0.6556E-03	0.8195E-02	-0.5038E-12	0.1116E-02	0.1395E-01
38	-13.000	-0.1339E-01	0.6556E-03	0.8523E-02	-0.2544E-12	0.1116E-02	0.1451E-01
39	-13.500	-0.1339E-01	0.6556E-03	0.8851E-02	-0.1285E-12	0.1116E-02	0.1506E-01
40	-14.000	-0.1339E-01	0.6556E-03	0.9179E-02	-0.6490E-13	0.1116E-02	0.1562E-01
41	-14.500	-0.1339E-01	0.6556E-03	0.9506E-02	-0.3278E-13	0.1116E-02	0.1618E-01
42	-15.000	-0.1339E-01	0.6556E-03	0.9834E-02	-0.1655E-13	0.1116E-02	0.1674E-01
43	-15.500	-0.1339E-01	0.6556E-03	0.1016E-01	-0.8361E-14	0.1116E-02	0.1730E-01
44	-16.000	-0.1339E-01	0.6556E-03	0.1049E-01	-0.4223E-14	0.1116E-02	0.1786E-01
45	-16.500	-0.6697E-02	0.3278E-03	0.9409E-02	-0.1066E-14	0.5581E-03	0.9209E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.51320 NT (0.11537 LB)			TOTAL LIFT = 0.53959 NT (0.12130 LB)		
		TOTAL L/T = 0.98806			TOTAL L/T = 1.03885		
		TOTAL MOMENT = 0.01296 NT-M (0.00956 LB-FT)			TOTAL MOMENT = 0.01386 NT-M (0.01022 LB-FT)		
		TOTAL M/TD = 3.93039			TOTAL M/TD = 4.20485		

Q = 0.022 CMM (8.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 119.2 M/S (391.1 F/S)
VE = 0.510
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 8200.5 NT/SQ M (171.2 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.408]

PORT		THETA = 0.0 DEGREES			THETA = 2.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.1561E-02	0.2823E-04	-0.1835E-03	-0.7884E-03	0.5641E-04	-0.3666E-03
3	6.000	-0.3122E-02	0.5646E-04	-0.3387E-03	-0.7963E-03	0.1128E-03	-0.6769E-03
4	5.500	-0.3122E-02	0.5646E-04	-0.3105E-03	-0.4022E-03	0.1128E-03	-0.6205E-03
5	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.1092E-01	-0.1976E-03	0.6917E-03	0.6869E-04	-0.2961E-03	0.1036E-02
9	3.000	0.2731E-01	-0.4940E-03	0.1482E-02	0.1040E-03	-0.8884E-03	0.2665E-02
10	2.500	0.5463E-01	-0.9881E-03	0.2470E-02	0.1109E-03	-0.1875E-02	0.4689E-02
11	2.000	0.1092E 00	-0.1976E-02	0.3952E-02	0.1061E-03	-0.3553E-02	0.7107E-02
12	1.500	0.1884E 00	-0.3409E-02	0.5113E-02	0.8194E-04	-0.5429E-02	0.8144E-02
13	1.000	0.3114E 00	-0.5632E-02	0.5632E-02	0.5492E-04	-0.7206E-02	0.7206E-02
14	-1.000	-0.9959E 00	0.1801E-01	0.1801E-01	-0.1342E-03	0.3486E-01	0.3486E-01
15	-1.500	-0.6462E 00	0.1168E-01	0.1753E-01	-0.5878E-04	0.3023E-01	0.4535E-01
16	-2.000	-0.3965E 00	0.7171E-02	0.1434E-01	-0.1894E-04	0.1929E-01	0.3858E-01
17	-2.500	-0.2123E 00	0.3839E-02	0.9599E-02	-0.5035E-05	0.1015E-01	0.2538E-01
18	-3.000	-0.9366E-01	0.1693E-02	0.5081E-02	-0.1328E-05	0.5302E-02	0.1590E-01
19	-3.500	-0.3122E-01	0.5646E-03	0.1976E-02	-0.2568E-06	0.2030E-02	0.7107E-02
20	-4.000	-0.1248E-01	0.2258E-03	0.9034E-03	-0.7207E-07	0.1128E-02	0.4512E-02
21	-4.500	-0.9366E-02	0.1693E-03	0.7622E-03	-0.2912E-07	0.9025E-03	0.4061E-02
22	-5.000	-0.3122E-02	0.5646E-04	0.2823E-03	-0.3677E-08	0.2256E-03	0.1128E-02
23	-5.500	-0.9366E-02	0.1693E-03	0.9316E-03	-0.2785E-08	0.3384E-03	0.1861E-02
24	-6.000	-0.3122E-02	0.5646E-04	0.3387E-03	-0.9379E-09	0.2256E-03	0.1353E-02
25	-6.500	-0.3122E-02	0.5646E-04	0.3670E-03	-0.4737E-09	0.2256E-03	0.1466E-02
26	-7.000	-0.6244E-02	0.1129E-03	0.7905E-03	-0.2392E-09	0.2256E-03	0.1579E-02
27	-7.500	-0.6244E-02	0.1129E-03	0.8469E-03	-0.1208E-09	0.2256E-03	0.1692E-02
28	-8.000	-0.6244E-02	0.1129E-03	0.9034E-03	-0.6102E-10	0.2256E-03	0.1805E-02
29	-8.500	-0.6244E-02	0.1129E-03	0.9599E-03	-0.3082E-10	0.2256E-03	0.1918E-02
30	-9.000	-0.6244E-02	0.1129E-03	0.1016E-02	-0.1556E-10	0.2256E-03	0.2030E-02
31	-9.500	-0.6244E-02	0.1129E-03	0.1072E-02	-0.7861E-11	0.2256E-03	0.2143E-02
32	-10.000	-0.6244E-02	0.1129E-03	0.1129E-02	-0.3970E-11	0.2256E-03	0.2256E-02
33	-10.500	-0.6244E-02	0.1129E-03	0.1185E-02	-0.2005E-11	0.2256E-03	0.2369E-02
34	-11.000	-0.6244E-02	0.1129E-03	0.1242E-02	-0.1012E-11	0.2256E-03	0.2482E-02
35	-11.500	-0.6244E-02	0.1129E-03	0.1298E-02	-0.5115E-12	0.2256E-03	0.2594E-02
36	-12.000	-0.6244E-02	0.1129E-03	0.1355E-02	-0.2583E-12	0.2256E-03	0.2707E-02
37	-12.500	-0.6244E-02	0.1129E-03	0.1411E-02	-0.1304E-12	0.2256E-03	0.2820E-02
38	-13.000	-0.6244E-02	0.1129E-03	0.1468E-02	-0.6589E-13	0.2256E-03	0.2933E-02
39	-13.500	-0.6244E-02	0.1129E-03	0.1524E-02	-0.3328E-13	0.2256E-03	0.3046E-02
40	-14.000	-0.6244E-02	0.1129E-03	0.1581E-02	-0.1680E-13	0.2256E-03	0.3159E-02
41	-14.500	-0.6244E-02	0.1129E-03	0.1637E-02	-0.8489E-14	0.2256E-03	0.3271E-02
42	-15.000	-0.6244E-02	0.1129E-03	0.1693E-02	-0.4287E-14	0.2256E-03	0.3384E-02
43	-15.500	-0.6244E-02	0.1129E-03	0.1750E-02	-0.2165E-14	0.2256E-03	0.3497E-02
44	-16.000	-0.6244E-02	0.1129E-03	0.1806E-02	-0.1093E-14	0.2256E-03	0.3610E-02
45	-16.500	-0.3122E-02	0.5646E-04	0.9316E-03	-0.2761E-15	0.1128E-03	0.1861E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.02706 NT (0.00608 LB)			TOTAL LIFT = 0.10039 NT (0.02257 LB)		
		TOTAL L/T = 0.03335			TOTAL L/T = 0.12370		
		TOTAL MOMENT = 0.00058 NT-M (0.00043 LB-FT)			TOTAL MOMENT = 0.00193 NT-M (0.00142 LB-FT)		
		TOTAL M/TD = 0.11424			TOTAL M/TD = 0.37619		

Q = 0.028 CMM (10.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 149.0 M/S (488.9 F/S)
VE = 0.408
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 12813.3 NT/SQ M (267.6 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.408]

PORT		THETA = 5.0 DEGREES			THETA = 7.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.1561E-02	0.5625E-04	-0.3656E-03	-0.7884E-03	0.5598E-04	-0.3638E-03
3	6.000	-0.3122E-02	0.1125E-03	-0.6750E-03	-0.7963E-03	0.1119E-03	-0.6717E-03
4	5.500	-0.3122E-02	0.1125E-03	-0.6187E-03	-0.8044E-03	0.2239E-03	-0.1231E-02
5	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.1912E-01	-0.6890E-03	0.2067E-02	0.3469E-04	-0.2939E-03	0.8817E-03
10	2.500	0.4097E-01	-0.1476E-02	0.3691E-02	0.5840E-04	-0.9797E-03	0.2449E-02
11	2.000	0.7376E-01	-0.2657E-02	0.5315E-02	0.5014E-04	-0.1665E-02	0.3330E-02
12	1.500	0.1010E 00	-0.3642E-02	0.5463E-02	0.2830E-04	-0.1861E-02	0.2792E-02
13	1.000	0.8195E-01	-0.2953E-02	0.2953E-02	0.0000E 00	0.0000E 00	0.0000E 00
14	-1.000	-0.7118E 00	0.2565E-01	0.2565E-01	-0.6949E-04	0.1791E-01	0.1791E-01
15	-1.500	-0.7524E 00	0.2711E-01	0.4066E-01	-0.3948E-04	0.2015E-01	0.3023E-01
16	-2.000	-0.5651E 00	0.2036E-01	0.4072E-01	-0.1728E-04	0.1746E-01	0.3493E-01
17	-2.500	-0.3496E 00	0.1260E-01	0.3150E-01	-0.6546E-05	0.1310E-01	0.3275E-01
18	-3.000	-0.1966E 00	0.7087E-02	0.2126E-01	-0.2034E-05	0.8061E-02	0.2418E-01
19	-3.500	-0.9366E-01	0.3375E-02	0.1181E-01	-0.5994E-06	0.4702E-02	0.1645E-01
20	-4.000	-0.5619E-01	0.2025E-02	0.8100E-02	-0.2090E-06	0.3247E-02	0.1298E-01
21	-4.500	-0.3434E-01	0.1237E-02	0.5568E-02	-0.7644E-07	0.2351E-02	0.1058E-01
22	-5.000	-0.1248E-01	0.4500E-03	0.2250E-02	-0.1838E-07	0.1119E-02	0.5598E-02
23	-5.500	-0.1873E-01	0.6750E-03	0.3712E-02	-0.9285E-08	0.1119E-02	0.6158E-02
24	-6.000	-0.6244E-02	0.2250E-03	0.1350E-02	-0.2813E-08	0.6717E-03	0.4030E-02
25	-6.500	-0.6244E-02	0.2250E-03	0.1462E-02	-0.9474E-09	0.4478E-03	0.2911E-02
26	-7.000	-0.6244E-02	0.2250E-03	0.1575E-02	-0.4785E-09	0.4478E-03	0.3135E-02
27	-7.500	-0.6244E-02	0.2250E-03	0.1687E-02	0.0000E 00	0.0000E 00	0.0000E 00
28	-8.000	-0.6244E-02	0.2250E-03	0.1800E-02	-0.1525E-09	0.5598E-03	0.4478E-02
29	-8.500	-0.6244E-02	0.2250E-03	0.1912E-02	-0.6164E-10	0.4478E-03	0.3806E-02
30	-9.000	-0.6244E-02	0.2250E-03	0.2025E-02	-0.2334E-10	0.3358E-03	0.3023E-02
31	-9.500	-0.6244E-02	0.2250E-03	0.2137E-02	-0.1179E-10	0.3358E-03	0.3191E-02
32	-10.000	-0.6244E-02	0.2250E-03	0.2250E-02	-0.5955E-11	0.3358E-03	0.3358E-02
33	-10.500	-0.6244E-02	0.2250E-03	0.2362E-02	-0.3008E-11	0.3358E-03	0.3526E-02
34	-11.000	-0.6244E-02	0.2250E-03	0.2475E-02	-0.1519E-11	0.3358E-03	0.3694E-02
35	-11.500	-0.6244E-02	0.2250E-03	0.2587E-02	-0.7672E-12	0.3358E-03	0.3862E-02
36	-12.000	-0.6244E-02	0.2250E-03	0.2700E-02	-0.3875E-12	0.3358E-03	0.4030E-02
37	-12.500	-0.6244E-02	0.2250E-03	0.2812E-02	-0.1957E-12	0.3358E-03	0.4198E-02
38	-13.000	-0.6244E-02	0.2250E-03	0.2925E-02	-0.9884E-13	0.3358E-03	0.4366E-02
39	-13.500	-0.6244E-02	0.2250E-03	0.3037E-02	-0.4992E-13	0.3358E-03	0.4534E-02
40	-14.000	-0.6244E-02	0.2250E-03	0.3150E-02	-0.2521E-13	0.3358E-03	0.4702E-02
41	-14.500	-0.6244E-02	0.2250E-03	0.3262E-02	-0.1273E-13	0.3358E-03	0.4870E-02
42	-15.000	-0.6244E-02	0.2250E-03	0.3375E-02	-0.6431E-14	0.3358E-03	0.5038E-02
43	-15.500	-0.6244E-02	0.2250E-03	0.3487E-02	-0.3248E-14	0.3358E-03	0.5206E-02
44	-16.000	-0.6244E-02	0.2250E-03	0.3600E-02	-0.1640E-14	0.3358E-03	0.5374E-02
45	-16.500	-0.3122E-02	0.1125E-03	0.1856E-02	-0.4142E-15	0.1679E-03	0.2771E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.17691 NT (0.03977 LB)			TOTAL LIFT = 0.25207 NT (0.05666 LB)		
		TOTAL L/T = 0.21798			TOTAL L/T = 0.31059		
		TOTAL MOMENT = 0.00329 NT-M (0.00242 LB-FT)			TOTAL MOMENT = 0.00475 NT-M (0.00350 LB-FT		
		TOTAL M/TD = 0.63911			TOTAL M/TD = 0.92220		

Q = 0.028 CMM (10.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 149.0 M/S (488.9 F/S)
VE = 0.408
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 12813.3 NT/SQ M (267.6 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

(V_e = 0.408)

PORT		THETA = 10.0 DEGREES			THETA = 12.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.1561E-02	0.5560E-04	-0.3614E-03	-0.7884E-03	0.5512E-04	-0.3583E-03
3	6.000	-0.3122E-02	0.1112E-03	-0.6673E-03	-0.7963E-03	0.1102E-03	-0.6615E-03
4	5.500	-0.9366E-02	0.3336E-03	-0.1835E-02	0.7038E-03	-0.1929E-03	0.1061E-02
5	5.000	-0.3122E-02	0.1112E-03	-0.5560E-03	0.0000E 00	0.0000E 00	0.0000E 00
6	4.500	*0.0000E 00*	*0.0000E 00*	*0.0000E 00*	*0.0000E 00*	*0.0000E 00*	*0.0000E 00*
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	2.500	0.8195E-02	-0.2919E-03	0.7298E-03	0.0000E 00	0.0000E 00	0.0000E 00
11	2.000	0.2185E-01	-0.7785E-03	0.1557E-02	0.0000E 00	0.0000E 00	0.0000E 00
12	1.500	0.2185E-01	-0.7785E-03	0.1167E-02	0.0000E 00	0.0000E 00	0.0000E 00
13	1.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.6879E-05	0.8820E-03	-0.8820E-03
14	-1.000	-0.3494E 00	0.1223E-01	0.1223E-01	-0.3300E-04	0.8379E-02	0.8379E-02
15	-1.500	-0.4183E 00	0.1490E-01	0.2235E-01	-0.2083E-04	0.1047E-01	0.1571E-01
16	-2.000	-0.3684E 00	0.1312E-01	0.2624E-01	-0.9416E-05	0.9371E-02	0.1874E-01
17	-2.500	-0.3090E 00	0.1101E-01	0.2752E-01	-0.4476E-05	0.8820E-02	0.2205E-01
18	-3.000	-0.2123E 00	0.7562E-02	0.2268E-01	-0.1638E-05	0.6394E-02	0.1918E-01
19	-3.500	-0.1404E 00	0.5004E-02	0.1751E-01	-0.5708E-06	0.4410E-02	0.1543E-01
20	-4.000	-0.1030E 00	0.3670E-02	0.1468E-01	-0.2306E-06	0.3528E-02	0.1411E-01
21	-4.500	-0.8429E-01	0.3002E-02	0.1351E-01	-0.1019E-06	0.3087E-02	0.1389E-01
22	-5.000	-0.5307E-01	0.1890E-02	0.9453E-02	-0.3309E-07	0.1984E-02	0.9922E-02
23	-5.500	-0.4370E-01	0.1557E-02	0.8563E-02	-0.1578E-07	0.1874E-02	0.1030E-01
24	-6.000	-0.3122E-01	0.1112E-02	0.6673E-02	-0.5158E-08	0.1212E-02	0.7276E-02
25	-6.500	-0.2497E-01	0.8897E-03	0.5783E-02	-0.2366E-08	0.1102E-02	0.7166E-02
26	-7.000	-0.2497E-01	0.8897E-03	0.6228E-02	-0.1076E-08	0.9922E-03	0.6946E-02
27	-7.500	-0.9366E-02	0.3336E-03	0.2502E-02	-0.2416E-09	0.4410E-03	0.3307E-02
28	-8.000	-0.2185E-01	0.7785E-03	0.6228E-02	-0.2441E-09	0.8820E-03	0.7056E-02
29	-8.500	-0.1561E-01	0.5560E-03	0.4726E-02	-0.1078E-09	0.7717E-03	0.6560E-02
30	-9.000	-0.1561E-01	0.5560E-03	0.5004E-02	-0.5448E-10	0.7717E-03	0.6946E-02
31	-9.500	-0.1561E-01	0.5560E-03	0.5282E-02	-0.1965E-10	0.5512E-03	0.5237E-02
32	-10.000	-0.1561E-01	0.5560E-03	0.5560E-02	-0.9926E-11	0.5512E-03	0.5512E-02
33	-10.500	-0.1561E-01	0.5560E-03	0.5838E-02	-0.5013E-11	0.5512E-03	0.5788E-02
34	-11.000	-0.1561E-01	0.5560E-03	0.6116E-02	-0.2532E-11	0.5512E-03	0.6064E-02
35	-11.500	-0.1561E-01	0.5560E-03	0.6394E-02	-0.1278E-11	0.5512E-03	0.6339E-02
36	-12.000	-0.1561E-01	0.5560E-03	0.6673E-02	-0.6458E-12	0.5512E-03	0.6615E-02
37	-12.500	-0.1561E-01	0.5560E-03	0.6951E-02	-0.3261E-12	0.5512E-03	0.6890E-02
38	-13.000	-0.1561E-01	0.5560E-03	0.7229E-02	-0.1647E-12	0.5512E-03	0.7166E-02
39	-13.500	-0.1561E-01	0.5560E-03	0.7507E-02	-0.8320E-13	0.5512E-03	0.7442E-02
40	-14.000	-0.1561E-01	0.5560E-03	0.7785E-02	-0.4202E-13	0.5512E-03	0.7717E-02
41	-14.500	-0.1561E-01	0.5560E-03	0.8063E-02	-0.2122E-13	0.5512E-03	0.7993E-02
42	-15.000	-0.1561E-01	0.5560E-03	0.8341E-02	-0.1071E-13	0.5512E-03	0.8269E-02
43	-15.500	-0.1561E-01	0.5560E-03	0.8619E-02	-0.5413E-14	0.5512E-03	0.8544E-02
44	-16.000	-0.1561E-01	0.5560E-03	0.8897E-02	-0.2734E-14	0.5512E-03	0.8820E-02
45	-16.500	-0.7805E-02	0.2780E-03	0.4587E-02	-0.6904E-15	0.2756E-03	0.4548E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.32178 NT (0.07234 LB)			TOTAL LIFT = 0.38131 NT (0.08572 LB)		
		TOTAL L/T = 0.39649			TOTAL L/T = 0.46984		
		TOTAL MOMENT = 0.00638 NT-M (0.00470 LB-FT)			TOTAL MOMENT = 0.00790 NT-M (0.00582 LB-FT		
		TOTAL M/TD = 1.23801			TOTAL M/TD = 1.53312		

Q = 0.028 CMM (10.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 149.0 M/S (488.9 F/S)
VE = 0.408
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 12813.3 NT/SQ M (267.6 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.408]

PORT		THETA = 15.0 DEGREES			THETA = 17.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.1561E-02	0.5454E-04	-0.3545E-03	-0.1576E-02	0.1077E-03	-0.7000E-03
3	6.000	-0.3122E-02	0.1090E-03	-0.6545E-03	-0.1592E-02	0.2154E-03	-0.1292E-02
4	5.500	-0.9366E-02	0.3272E-03	-0.1799E-02	-0.2011E-02	0.5385E-03	-0.2961E-02
5	5.000	-0.3122E-02	0.1090E-03	-0.5454E-03	-0.6094E-03	0.3231E-03	-0.1615E-02
6	4.500	-0.3122E-02	0.1090E-03	-0.4908E-03	-0.1025E-03	0.1077E-03	-0.4846E-03
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
11	2.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
12	1.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
13	1.000	-0.3122E-01	0.1090E-02	-0.1090E-02	-0.8599E-05	0.1077E-02	-0.1077E-02
14	-1.000	-0.1748E 00	0.6108E-02	0.6108E-02	-0.1737E-04	0.4308E-02	0.4308E-02
15	-1.500	-0.2154E 00	0.7526E-02	0.1129E-01	-0.1096E-04	0.5385E-02	0.8077E-02
16	-2.000	-0.2029E 00	0.7090E-02	0.1418E-01	-0.5428E-05	0.5277E-02	0.1055E-01
17	-2.500	-0.2029E 00	0.7090E-02	0.1772E-01	-0.2909E-05	0.5600E-02	0.1400E-01
18	-3.000	-0.1561E 00	0.5454E-02	0.1636E-01	-0.1158E-05	0.4415E-02	0.1324E-01
19	-3.500	-0.1123E 00	0.3927E-02	0.1374E-01	-0.4424E-06	0.3338E-02	0.1168E-01
20	-4.000	-0.9366E-01	0.3272E-02	0.1309E-01	-0.1946E-06	0.2908E-02	0.1163E-01
21	-4.500	-0.8429E-01	0.2945E-02	0.1325E-01	-0.8736E-07	0.2584E-02	0.1163E-01
22	-5.000	-0.5619E-01	0.1963E-02	0.9817E-02	-0.3125E-07	0.1830E-02	0.9154E-02
23	-5.500	-0.5619E-01	0.1963E-02	0.1079E-01	-0.1578E-07	0.1830E-02	0.1007E-01
24	-6.000	-0.3434E-01	0.1199E-02	0.7199E-02	-0.5158E-08	0.1184E-02	0.7108E-02
25	-6.500	-0.3122E-01	0.1090E-02	0.7090E-02	-0.2368E-08	0.1077E-02	0.7000E-02
26	-7.000	-0.3122E-01	0.1090E-02	0.7635E-02	-0.1196E-08	0.1077E-02	0.7539E-02
27	-7.500	-0.1248E-01	0.4363E-03	0.3272E-02	-0.3625E-09	0.6462E-03	0.4846E-02
28	-8.000	-0.2809E-01	0.9817E-03	0.7854E-02	-0.2746E-09	0.9693E-03	0.7754E-02
29	-8.500	-0.2185E-01	0.7635E-03	0.6490E-02	-0.1232E-09	0.8616E-03	0.7323E-02
30	-9.000	-0.2185E-01	0.7635E-03	0.6872E-02	-0.5448E-10	0.7539E-03	0.6785E-02
31	-9.500	-0.1873E-01	0.6545E-03	0.6217E-02	-0.2358E-10	0.6462E-03	0.6139E-02
32	-10.000	-0.1248E-01	0.4363E-03	0.4363E-02	-0.7941E-11	0.4308E-03	0.4308E-02
33	-10.500	-0.1873E-01	0.6545E-03	0.6872E-02	-0.5013E-11	0.5385E-03	0.5654E-02
34	-11.000	-0.1873E-01	0.6545E-03	0.7199E-02	-0.2532E-11	0.5385E-03	0.5923E-02
35	-11.500	-0.1873E-01	0.6545E-03	0.7526E-02	-0.1278E-11	0.5385E-03	0.6193E-02
36	-12.000	-0.1873E-01	0.6545E-03	0.7854E-02	-0.6458E-12	0.5385E-03	0.6462E-02
37	-12.500	-0.1873E-01	0.6545E-03	0.8181E-02	-0.3261E-12	0.5385E-03	0.6731E-02
38	-13.000	-0.1873E-01	0.6545E-03	0.8508E-02	-0.1647E-12	0.5385E-03	0.7000E-02
39	-13.500	-0.1873E-01	0.6545E-03	0.8835E-02	-0.8320E-13	0.5385E-03	0.7270E-02
40	-14.000	-0.1873E-01	0.6545E-03	0.9163E-02	-0.4202E-13	0.5385E-03	0.7539E-02
41	-14.500	-0.1873E-01	0.6545E-03	0.9490E-02	-0.2122E-13	0.5385E-03	0.7808E-02
42	-15.000	-0.1873E-01	0.6545E-03	0.9817E-02	-0.1071E-13	0.5385E-03	0.8077E-02
43	-15.500	-0.1873E-01	0.6545E-03	0.1014E-01	-0.5413E-14	0.5385E-03	0.8347E-02
44	-16.000	-0.1873E-01	0.6545E-03	0.1047E-01	-0.2734E-14	0.5385E-03	0.8616E-02
45	-16.500	-0.9366E-02	0.3272E-03	0.5399E-02	-0.6904E-15	0.2692E-03	0.4442E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.43385 NT (0.09753 LB)			TOTAL LIFT = 0.47786 NT (0.10742 LB)		
		TOTAL L/T = 0.53458			TOTAL L/T = 0.58881		
		TOTAL MOMENT = 0.00938 NT-M (0.00692 LB-FT)			TOTAL MOMENT = 0.01064 NT-M (0.00785 LB-FT)		
		TOTAL M/TD = 1.82102			TOTAL M/TD = 2.06613		

Q = 0.028 CMM (10.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 149.0 M/S (488.9 F/S)
VE = 0.408
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 12813.3 NT/SQ M (267.6 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.408]

PORT		THETA = 20.0 DEGREES			THETA = 25.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.4683E-02	0.1591E-03	-0.1034E-02	-0.3153E-02	0.2047E-03	-0.1330E-02
3	6.000	-0.9366E-02	0.3183E-03	-0.1910E-02	-0.3185E-02	0.4094E-03	-0.2456E-02
4	5.500	-0.1561E-01	0.5306E-03	-0.2918E-02	-0.2815E-02	0.7164E-03	-0.3940E-02
5	5.000	-0.1248E-01	0.4244E-03	-0.2122E-02	-0.1218E-02	0.6141E-03	-0.3070E-02
6	4.500	-0.9366E-02	0.3183E-03	-0.1432E-02	-0.5129E-03	0.5117E-03	-0.2302E-02
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.5181E-04	0.1023E-03	-0.4094E-03
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.5233E-04	0.2047E-03	-0.7164E-03
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.7930E-04	0.6141E-03	-0.1842E-02
10	2.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.3337E-04	0.5117E-03	-0.1279E-02
11	2.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.6742E-05	0.2047E-03	-0.4094E-03
12	1.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1702E-05	0.1023E-03	-0.1535E-03
13	1.000	-0.3122E-01	0.1061E-02	-0.1061E-02	-0.8599E-05	0.1023E-02	-0.1023E-02
14	-1.000	-0.9366E-01	0.3183E-02	0.3183E-02	-0.7817E-05	0.1842E-02	0.1842E-02
15	-1.500	-0.1217E 00	0.4138E-02	0.6208E-02	-0.5045E-05	0.2354E-02	0.3531E-02
16	-2.000	-0.1186E 00	0.4032E-02	0.8065E-02	-0.2548E-05	0.2354E-02	0.4708E-02
17	-2.500	-0.1342E 00	0.4563E-02	0.1140E-01	-0.1734E-05	0.3172E-02	0.7932E-02
18	-3.000	-0.1061E 00	0.3608E-02	0.1082E-01	-0.6781E-06	0.2456E-02	0.7369E-02
19	-3.500	-0.8429E-01	0.2865E-02	0.1002E-01	-0.2854E-06	0.2047E-02	0.7164E-02
20	-4.000	-0.7493E-01	0.2546E-02	0.1018E-01	-0.1441E-06	0.2047E-02	0.8188E-02
21	-4.500	-0.6556E-01	0.2228E-02	0.1002E-01	-0.6916E-07	0.1944E-02	0.8751E-02
22	-5.000	-0.4995E-01	0.1697E-02	0.8489E-02	-0.2390E-07	0.1330E-02	0.6652E-02
23	-5.500	-0.4683E-01	0.1591E-02	0.8755E-02	-0.1300E-07	0.1432E-02	0.7881E-02
24	-6.000	-0.3122E-01	0.1061E-02	0.6367E-02	-0.4689E-08	0.1023E-02	0.6141E-02
25	-6.500	-0.3122E-01	0.1061E-02	0.6897E-02	-0.2368E-08	0.1023E-02	0.6652E-02
26	-7.000	-0.3122E-01	0.1061E-02	0.7428E-02	-0.1196E-08	0.1023E-02	0.7164E-02
27	-7.500	-0.1561E-01	0.5306E-03	0.3979E-02	-0.3020E-09	0.5117E-03	0.3838E-02
28	-8.000	-0.2809E-01	0.9550E-03	0.7640E-02	-0.2746E-09	0.9211E-03	0.7369E-02
29	-8.500	-0.2497E-01	0.8489E-03	0.7216E-02	-0.1078E-09	0.7164E-03	0.6089E-02
30	-9.000	-0.2185E-01	0.7428E-03	0.6685E-02	-0.5448E-10	0.7164E-03	0.6448E-02
31	-9.500	-0.1561E-01	0.5306E-03	0.5040E-02	-0.2358E-10	0.6141E-03	0.5834E-02
32	-10.000	-0.1248E-01	0.4244E-03	0.4244E-02	-0.7941E-11	0.4094E-03	0.4094E-02
33	-10.500	-0.1248E-01	0.4244E-03	0.4457E-02	-0.5013E-11	0.5117E-03	0.5373E-02
34	-11.000	-0.1248E-01	0.4244E-03	0.4669E-02	-0.2025E-11	0.4094E-03	0.4503E-02
35	-11.500	-0.1248E-01	0.4244E-03	0.4881E-02	-0.2557E-12	0.1023E-03	0.1177E-02
36	-12.000	-0.1248E-01	0.4244E-03	0.5093E-02	-0.1291E-12	0.1023E-03	0.1228E-02
37	-12.500	-0.1248E-01	0.4244E-03	0.5306E-02	-0.6523E-13	0.1023E-03	0.1279E-02
38	-13.000	-0.1248E-01	0.4244E-03	0.5518E-02	-0.3294E-13	0.1023E-03	0.1330E-02
39	-13.500	-0.1248E-01	0.4244E-03	0.5730E-02	-0.1664E-13	0.1023E-03	0.1381E-02
40	-14.000	-0.1248E-01	0.4244E-03	0.5942E-02	-0.8404E-14	0.1023E-03	0.1432E-02
41	-14.500	-0.1248E-01	0.4244E-03	0.6155E-02	-0.4244E-14	0.1023E-03	0.1484E-02
42	-15.000	-0.1248E-01	0.4244E-03	0.6367E-02	-0.2143E-14	0.1023E-03	0.1535E-02
43	-15.500	-0.1248E-01	0.4244E-03	0.6579E-02	-0.1082E-14	0.1023E-03	0.1586E-02
44	-16.000	-0.1248E-01	0.4244E-03	0.6791E-02	-0.5468E-15	0.1023E-03	0.1637E-02
45	-16.500	-0.6244E-02	0.2122E-03	0.3502E-02	-0.1380E-15	0.5117E-04	0.8444E-03
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.51503 NT (0.11578 LB)			TOTAL LIFT = 0.54356 NT (0.12219 LB)		
		TOTAL L/T = 0.63460			TOTAL L/T = 0.66976		
		TOTAL MOMENT = 0.01169 NT-M (0.00862 LB-FT)			TOTAL MOMENT = 0.01233 NT-M (0.00909 LB-FT		
		TOTAL M/TD = 2.26933			TOTAL M/TD = 2.39284		

Q = 0.028 CMM (10.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 149.0 M/S (488.9 F/S)
VE = 0.408
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 12813.3 NT/SQ M (267.6 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

(V_e = 0.408)

PORT		THETA = 30.0 DEGREES			THETA = 35.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.7805E-02	0.2445E-03	-0.1589E-02	-0.5518E-02	0.3237E-03	-0.2104E-02
3	6.000	-0.1561E-01	0.4890E-03	-0.2934E-02	-0.5574E-02	0.6475E-03	-0.3885E-02
4	5.500	-0.2497E-01	0.7824E-03	-0.4303E-02	-0.3619E-02	0.8325E-03	-0.4579E-02
5	5.000	-0.2185E-01	0.6846E-03	-0.3423E-02	-0.1625E-02	0.7400E-03	-0.3700E-02
6	4.500	-0.2185E-01	0.6846E-03	-0.3080E-02	-0.8207E-03	0.7400E-03	-0.3330E-02
7	4.000	-0.6244E-02	0.1956E-03	-0.7824E-03	-0.2072E-03	0.3700E-03	-0.1480E-02
8	3.500	-0.1873E-01	0.5868E-03	-0.2053E-02	-0.1831E-03	0.6475E-03	-0.2266E-02
9	3.000	-0.2497E-01	0.7824E-03	-0.2347E-02	-0.1057E-03	0.7400E-03	-0.2220E-02
10	2.500	-0.2185E-01	0.6846E-03	-0.1711E-02	-0.5340E-04	0.7400E-03	-0.1850E-02
11	2.000	-0.1561E-01	0.4890E-03	-0.9780E-03	-0.1685E-04	0.4625E-03	-0.9250E-03
12	1.500	-0.9366E-02	0.2934E-03	-0.4401E-03	-0.5108E-05	0.2775E-03	-0.4162E-03
13	1.000	-0.3122E-01	0.9780E-03	-0.9780E-03	-0.7739E-05	0.8325E-03	-0.8325E-03
14	-1.000	-0.3122E-01	0.9780E-03	0.9780E-03	-0.3908E-05	0.8325E-03	0.8325E-03
15	-1.500	-0.4683E-01	0.1467E-02	0.2200E-02	-0.2193E-05	0.9250E-03	0.1387E-02
16	-2.000	-0.4683E-01	0.1467E-02	0.2934E-02	-0.1107E-05	0.9250E-03	0.1850E-02
17	-2.500	-0.7493E-01	0.2347E-02	0.5868E-02	-0.1063E-05	0.1757E-02	0.4394E-02
18	-3.000	-0.5932E-01	0.1858E-02	0.5574E-02	-0.3673E-06	0.1202E-02	0.3607E-02
19	-3.500	-0.4683E-01	0.1467E-02	0.5134E-02	-0.1712E-06	0.1110E-02	0.3885E-02
20	-4.000	-0.4995E-01	0.1564E-02	0.6259E-02	-0.8649E-07	0.1110E-02	0.4440E-02
21	-4.500	-0.4995E-01	0.1564E-02	0.7041E-02	-0.4732E-07	0.1202E-02	0.5411E-02
22	-5.000	-0.3434E-01	0.1075E-02	0.5379E-02	-0.1838E-07	0.9250E-03	0.4625E-02
23	-5.500	-0.3746E-01	0.1173E-02	0.6454E-02	-0.1021E-07	0.1017E-02	0.5596E-02
24	-6.000	-0.3122E-01	0.9780E-03	0.5868E-02	-0.4220E-08	0.8325E-03	0.4995E-02
25	-6.500	-0.2809E-01	0.8802E-03	0.5721E-02	-0.2131E-08	0.8325E-03	0.5411E-02
26	-7.000	-0.2809E-01	0.8802E-03	0.6161E-02	-0.9570E-09	0.7400E-03	0.5180E-02
27	-7.500	-0.1248E-01	0.3912E-03	0.2934E-02	-0.2416E-09	0.3700E-03	0.2775E-02
28	-8.000	-0.2497E-01	0.7824E-03	0.6259E-02	-0.2441E-09	0.7400E-03	0.5920E-02
29	-8.500	-0.2185E-01	0.6846E-03	0.5819E-02	-0.1078E-09	0.6475E-03	0.5504E-02
30	-9.000	-0.2185E-01	0.6846E-03	0.6161E-02	-0.4669E-10	0.5550E-03	0.4995E-02
31	-9.500	-0.1873E-01	0.5868E-03	0.5574E-02	-0.1965E-10	0.4625E-03	0.4394E-02
32	-10.000	-0.1248E-01	0.3912E-03	0.3912E-02	-0.9926E-11	0.4625E-03	0.4625E-02
33	-10.500	-0.1248E-01	0.3912E-03	0.4107E-02	-0.5013E-11	0.4625E-03	0.4856E-02
34	-11.000	-0.9366E-02	0.2934E-03	0.3227E-02	-0.1519E-11	0.2775E-03	0.3052E-02
35	-11.500	-0.3122E-02	0.9780E-04	0.1124E-02	-0.2557E-12	0.9250E-04	0.1063E-02
36	-12.000	-0.3122E-02	0.9780E-04	0.1173E-02	-0.1291E-12	0.9250E-04	0.1110E-02
37	-12.500	-0.3122E-02	0.9780E-04	0.1222E-02	-0.6523E-13	0.9250E-04	0.1156E-02
38	-13.000	-0.3122E-02	0.9780E-04	0.1271E-02	-0.3294E-13	0.9250E-04	0.1202E-02
39	-13.500	-0.3122E-02	0.9780E-04	0.1320E-02	-0.1664E-13	0.9250E-04	0.1248E-02
40	-14.000	-0.3122E-02	0.9780E-04	0.1369E-02	-0.8404E-14	0.9250E-04	0.1295E-02
41	-14.500	-0.3122E-02	0.9780E-04	0.1418E-02	-0.4244E-14	0.9250E-04	0.1341E-02
42	-15.000	-0.3122E-02	0.9780E-04	0.1467E-02	-0.2143E-14	0.9250E-04	0.1387E-02
43	-15.500	-0.3122E-02	0.9780E-04	0.1515E-02	-0.1082E-14	0.9250E-04	0.1433E-02
44	-16.000	-0.3122E-02	0.9780E-04	0.1564E-02	-0.5468E-15	0.9250E-04	0.1480E-02
45	-16.500	-0.1561E-02	0.4890E-04	0.8068E-03	-0.1380E-15	0.4625E-04	0.7631E-03
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.56777 NT (0.12764 LB)			TOTAL LIFT = 0.58864 NT (0.13233 LB)		
		TOTAL L/T = 0.69959			TOTAL L/T = 0.72531		
		TOTAL MOMENT = 0.01281 NT-M (0.00944 LB-FT)			TOTAL MOMENT = 0.01319 NT-M (0.00972 LB-FT)		
		TOTAL M/TD = 2.48605			TOTAL M/TD = 2.55968		

Q = 0.028 CMM (10.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 149.0 M/S (488.9 F/S)
VE = 0.408
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 12813.3 NT/SQ M (267.6 PSF)

TABLE 4

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

(V_e = 0.340)

PORT NO.	X/D	THETA = 0.0 DEGREES CP	L/T	M/TD	THETA = 2.5 DEGREES CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.1561E-02	0.1960E-04	-0.1274E-03	-0.7884E-03	0.3917E-04	-0.2546E-03
3	6.000	-0.3122E-02	0.3921E-04	-0.2352E-03	-0.7983E-03	0.7835E-04	-0.4701E-03
4	5.500	-0.6244E-02	0.7842E-04	-0.4313E-03	-0.8044E-03	0.1567E-03	-0.8618E-03
5	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.5463E-02	-0.6862E-04	0.2401E-03	0.2289E-04	-0.6855E-04	0.2399E-03
9	3.000	0.1912E-01	-0.2401E-03	0.7205E-03	0.6938E-04	-0.4113E-03	0.1234E-02
10	2.500	0.4370E-01	-0.5489E-03	0.1372E-02	0.8177E-04	-0.9597E-03	0.2399E-02
11	2.000	0.8561E-01	-0.1200E-02	0.2401E-02	0.8554E-04	-0.1988E-02	0.3976E-02
12	1.500	0.1666E 00	-0.2092E-02	0.3139E-02	0.6704E-04	-0.3085E-02	0.4627E-02
13	1.000	0.2841E 00	-0.3568E-02	0.3568E-02	0.4213E-04	-0.3839E-02	0.3839E-02
14	-1.000	-0.6337E 00	0.7960E-02	0.7960E-02	-0.1307E-03	0.2358E-01	0.2358E-01
15	-1.500	-0.3559E 00	0.4470E-02	0.6703E-02	-0.4145E-04	0.1480E-01	0.2221E-01
16	-2.000	-0.2185E 00	0.2744E-02	0.5489E-02	-0.1096E-04	0.7756E-02	0.1551E-01
17	-2.500	-0.1061E 00	0.1333E-02	0.3333E-02	-0.2349E-05	0.3290E-02	0.8226E-02
18	-3.000	-0.2497E-01	0.3137E-03	0.9411E-03	-0.3108E-06	0.8618E-03	0.2585E-02
19	-3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
20	-4.000	0.2731E-02	-0.3431E-04	-0.1372E-03	0.0000E 00	0.0000E 00	0.0000E 00
21	-4.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
22	-5.000	0.2731E-02	-0.3431E-04	-0.1715E-03	0.0000E 00	0.0000E 00	0.0000E 00
23	-5.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
24	-6.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
25	-6.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
26	-7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
27	-7.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
28	-8.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
29	-8.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
30	-9.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
31	-9.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
32	-10.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
33	-10.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
34	-11.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
35	-11.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
36	-12.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
37	-12.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
38	-13.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
39	-13.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
40	-14.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
41	-14.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
42	-15.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
43	-15.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
44	-16.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
45	-16.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.01071 NT (0.00240 LB)			TOTAL LIFT = 0.05772 NT (0.01297 LB)		
		TOTAL L/T = 0.00917			TOTAL L/T = 0.04939		
		TOTAL MOMENT = 0.00025 NT-M (0.00019 LB-FT)			TOTAL MOMENT = 0.00090 NT-M (0.00066 LB-FT)		
		TOTAL M/TD = 0.03476			TOTAL M/TD = 0.12162		

Q = 0.033 CMM (12.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 178.8 M/S (586.7 F/S)
VE = 0.340
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 18451.1 NT/SQ M (385.3 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.340]

PORT		THETA = 5.0 DEGREES			THETA = 7.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.1561E-02	0.3906E-04	-0.2539E-03	-0.1576E-02	0.7775E-04	-0.5054E-03
3	6.000	-0.3122E-02	0.7812E-04	-0.4687E-03	-0.1592E-02	0.1555E-03	-0.9330E-03
4	5.500	-0.6244E-02	0.1562E-03	-0.8593E-03	-0.1206E-02	0.2332E-03	-0.1282E-02
5	5.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.8195E-02	-0.2050E-03	0.6152E-03	0.0000E 00	0.0000E 00	0.0000E 00
10	2.500	0.2731E-01	-0.6836E-03	0.1709E-02	0.2929E-04	-0.3401E-03	0.8504E-03
11	2.000	0.5463E-01	-0.1367E-02	0.2734E-02	0.2949E-04	-0.6803E-03	0.1360E-02
12	1.500	0.7102E-01	-0.1777E-02	0.2664E-02	0.1340E-04	-0.6123E-03	0.9184E-03
13	1.000	0.3005E-01	-0.7519E-03	0.7519E-03	-0.7739E-05	0.6997E-03	-0.6997E-03
14	-1.000	-0.8023E 00	0.2007E-01	0.2007E-01	-0.8165E-04	0.1461E-01	0.1461E-01
15	-1.500	-0.6650E 00	0.1664E-01	0.2496E-01	-0.4123E-04	0.1461E-01	0.2192E-01
16	-2.000	-0.4308E 00	0.1078E-01	0.2156E-01	-0.1617E-04	0.1135E-01	0.2270E-01
17	-2.500	-0.2185E 00	0.5468E-02	0.1367E-01	-0.5203E-05	0.7231E-02	0.1807E-01
18	-3.000	-0.1030E 00	0.2578E-02	0.7734E-02	-0.1554E-05	0.4276E-02	0.1282E-01
19	-3.500	-0.3122E-01	0.7812E-03	0.2734E-02	-0.4138E-06	0.2254E-02	0.7892E-02
20	-4.000	-0.9366E-02	0.2343E-03	0.9375E-03	-0.1153E-06	0.1244E-02	0.4976E-02
21	-4.500	-0.3122E-02	0.7812E-04	0.3515E-03	-0.3640E-07	0.7775E-03	0.3498E-02
22	-5.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.1838E-08	0.7775E-04	0.3887E-03
23	-5.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1857E-08	0.1555E-03	0.8552E-03
24	-6.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
25	-6.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
26	-7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
27	-7.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
28	-8.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
29	-8.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
30	-9.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
31	-9.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
32	-10.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
33	-10.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
34	-11.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
35	-11.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
36	-12.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
37	-12.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
38	-13.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
39	-13.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
40	-14.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
41	-14.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
42	-15.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
43	-15.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
44	-16.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
45	-16.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.11864 NT (0.02667 LB)			TOTAL LIFT = 0.19425 NT (0.04142 LB)		
		TOTAL L/T = 0.10152			TOTAL L/T = 0.15766		
		TOTAL MOMENT = 0.00163 NT-M (0.00120 LB-FT)			TOTAL MOMENT = 0.00243 NT-M (0.00179 LB-FT)		
		TOTAL M/TD = 0.22054			TOTAL M/TD = 0.32802		

Q = 0.033 CMM (12.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 178.8 M/S (586.7 F/S)
VE = 0.340
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 18491.1 NT/SQ M (385.3 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

(V_e = 0.340)

PORT		THETA = 10.0 DEGREES			THETA = 12.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.3122E-02	0.7723E-04	-0.5020E-03	-0.1576E-02	0.7656E-04	-0.4976E-03
3	6.000	-0.6244E-02	0.1544E-03	-0.9268E-03	-0.1592E-02	0.1531E-03	-0.9187E-03
4	5.500	-0.9366E-02	0.2317E-03	-0.1274E-02	-0.1608E-02	0.3062E-03	-0.1684E-02
5	5.000	-0.6244E-02	0.1544E-03	-0.7723E-03	-0.4062E-03	0.1531E-03	-0.7656E-03
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1025E-03	0.7656E-04	-0.3445E-03
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	2.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
11	2.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
12	1.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
13	1.000	-0.6244E-01	0.1544E-02	-0.1544E-02	-0.1891E-04	0.1684E-02	-0.1684E-02
14	-1.000	-0.4246E 00	0.1050E-01	0.1050E-01	-0.4039E-04	0.7120E-02	0.7120E-02
15	-1.500	-0.4558E 00	0.1127E-01	0.1691E-01	-0.2347E-04	0.8192E-02	0.1228E-01
16	-2.000	-0.3715E 00	0.9190E-02	0.1838E-01	-0.9748E-05	0.6737E-02	0.1347E-01
17	-2.500	-0.2841E 00	0.7028E-02	0.1757E-01	-0.4587E-05	0.6278E-02	0.1569E-01
18	-3.000	-0.1904E 00	0.4711E-02	0.1413E-01	-0.1667E-05	0.4517E-02	0.1355E-01
19	-3.500	-0.1186E 00	0.2934E-02	0.1027E-01	-0.5708E-06	0.3062E-02	0.1071E-01
20	-4.000	-0.8429E-01	0.2085E-02	0.8341E-02	-0.2234E-06	0.2373E-02	0.9494E-02
21	-4.500	-0.6244E-01	0.1544E-02	0.6951E-02	-0.9101E-07	0.1914E-02	0.8613E-02
22	-5.000	-0.3122E-01	0.7723E-03	0.3861E-02	-0.2757E-07	0.1148E-02	0.5742E-02
23	-5.500	-0.2809E-01	0.6951E-03	0.3823E-02	-0.1207E-07	0.9953E-03	0.5474E-02
24	-6.000	-0.1561E-01	0.3861E-03	0.2317E-02	-0.4220E-08	0.6890E-03	0.4134E-02
25	-6.500	-0.6244E-02	0.1544E-03	0.1004E-02	-0.1421E-08	0.4593E-03	0.2986E-02
26	-7.000	-0.6244E-02	0.1544E-03	0.1081E-02	-0.7177E-09	0.4593E-03	0.3215E-02
27	-7.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.6041E-10	0.7656E-04	0.5742E-03
28	-8.000	-0.6244E-02	0.1544E-03	0.1235E-02	-0.1525E-09	0.3828E-03	0.3062E-02
29	-8.500	-0.3122E-02	0.7723E-04	0.6564E-03	-0.4623E-10	0.2296E-03	0.1952E-02
30	-9.000	-0.3122E-02	0.7723E-04	0.6951E-03	-0.2334E-10	0.2296E-03	0.2067E-02
31	-9.500	-0.3122E-02	0.7723E-04	0.7337E-03	-0.7861E-11	0.1531E-03	0.1454E-02
32	-10.000	-0.3122E-02	0.7723E-04	0.7723E-03	-0.3970E-11	0.1531E-03	0.1531E-02
33	-10.500	-0.3122E-02	0.7723E-04	0.8109E-03	-0.2005E-11	0.1531E-03	0.1607E-02
34	-11.000	-0.3122E-02	0.7723E-04	0.8495E-03	-0.1012E-11	0.1531E-03	0.1684E-02
35	-11.500	-0.3122E-02	0.7723E-04	0.8881E-03	-0.5115E-12	0.1531E-03	0.1761E-02
36	-12.000	-0.3122E-02	0.7723E-04	0.9268E-03	-0.2583E-12	0.1531E-03	0.1837E-02
37	-12.500	-0.3122E-02	0.7723E-04	0.9654E-03	-0.1304E-12	0.1531E-03	0.1914E-02
38	-13.000	-0.3122E-02	0.7723E-04	0.1004E-02	-0.6589E-13	0.1531E-03	0.1990E-02
39	-13.500	-0.3122E-02	0.7723E-04	0.1042E-02	-0.3328E-13	0.1531E-03	0.2067E-02
40	-14.000	-0.3122E-02	0.7723E-04	0.1081E-02	-0.1680E-13	0.1531E-03	0.2143E-02
41	-14.500	-0.3122E-02	0.7723E-04	0.1119E-02	-0.8489E-14	0.1531E-03	0.2220E-02
42	-15.000	-0.3122E-02	0.7723E-04	0.1158E-02	-0.4287E-14	0.1531E-03	0.2296E-02
43	-15.500	-0.3122E-02	0.7723E-04	0.1197E-02	-0.2165E-14	0.1531E-03	0.2373E-02
44	-16.000	-0.3122E-02	0.7723E-04	0.1235E-02	-0.1093E-14	0.1531E-03	0.2450E-02
45	-16.500	-0.1561E-02	0.3861E-04	0.6371E-03	-0.2761E-15	0.7656E-04	0.1263E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.24856 NT (0.05588 LB)			TOTAL LIFT = 0.30646 NT (0.06889 LB)		
		TOTAL L/T = 0.21269			TOTAL L/T = 0.26223		
		TOTAL MOMENT = 0.00337 NT-M (0.00249 LB-FT)			TOTAL MOMENT = 0.00443 NT-M (0.00327 LB-FT)		
		TOTAL M/TD = 0.45517			TOTAL M/TD = 0.59804		

Q = 0.033 CMM (12.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 178.8 M/S (586.7 F/S)
VE = 0.340
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 18491.1 NT/SQ M (385.3 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.340]

PORT		THETA = 15.0 DEGREES			THETA = 17.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.3122E-02	0.7575E-04	-0.4923E-03	-0.2365E-02	0.1121E-03	-0.7292E-03
3	6.000	-0.6244E-02	0.1515E-03	-0.9090E-03	-0.2389E-02	0.2243E-03	-0.1346E-02
4	5.500	-0.1561E-01	0.3787E-03	-0.2083E-02	-0.2413E-02	0.4487E-03	-0.2468E-02
5	5.000	-0.9366E-02	0.2272E-03	-0.1136E-02	-0.8125E-03	0.2991E-03	-0.1495E-02
6	4.500	-0.6244E-02	0.1515E-03	-0.6817E-03	-0.4103E-03	0.2991E-03	-0.1346E-02
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.1321E-04	0.7479E-04	-0.2243E-03
10	2.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1335E-04	0.1495E-03	-0.3739E-03
11	2.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.6742E-05	0.1495E-03	-0.2991E-03
12	1.500	-0.1248E-01	0.3030E-03	-0.4545E-03	-0.1191E-04	0.5235E-03	-0.7853E-03
13	1.000	-0.6868E-01	0.1666E-02	-0.1666E-02	-0.1805E-04	0.1570E-02	-0.1570E-02
14	-1.000	-0.2154E 00	0.5226E-02	0.5226E-02	-0.2171E-04	0.3739E-02	0.3739E-02
15	-1.500	-0.2497E 00	0.6060E-02	0.9090E-02	-0.1316E-04	0.4487E-02	0.6731E-02
16	-2.000	-0.2216E 00	0.5378E-02	0.1075E-01	-0.6093E-05	0.4113E-02	0.8227E-02
17	-2.500	-0.2185E 00	0.5302E-02	0.1325E-01	-0.3301E-05	0.4412E-02	0.1103E-01
18	-3.000	-0.1592E 00	0.3863E-02	0.1159E-01	-0.1271E-05	0.3365E-02	0.1009E-01
19	-3.500	-0.1529E 00	0.3711E-02	0.1299E-01	-0.4852E-06	0.2543E-02	0.8900E-02
20	-4.000	-0.9678E-01	0.2348E-02	0.9393E-02	-0.2162E-06	0.2243E-02	0.8975E-02
21	-4.500	-0.8429E-01	0.2045E-02	0.9203E-02	-0.9465E-07	0.1944E-02	0.8751E-02
22	-5.000	-0.5619E-01	0.1363E-02	0.6817E-02	-0.3309E-07	0.1346E-02	0.6731E-02
23	-5.500	-0.5307E-01	0.1287E-02	0.7082E-02	-0.1671E-07	0.1346E-02	0.7404E-02
24	-6.000	-0.3122E-01	0.7575E-03	0.4545E-02	-0.5158E-08	0.8227E-03	0.4936E-02
25	-6.500	-0.2809E-01	0.6817E-03	0.4431E-02	-0.2368E-08	0.7479E-03	0.4861E-02
26	-7.000	-0.2809E-01	0.6817E-03	0.4772E-02	-0.1196E-08	0.7479E-03	0.5235E-02
27	-7.500	-0.6244E-02	0.1515E-03	0.1136E-02	-0.2416E-09	0.2991E-03	0.2243E-02
28	-8.000	-0.2185E-01	0.5302E-03	0.4242E-02	-0.2441E-09	0.5983E-03	0.4786E-02
29	-8.500	-0.1248E-01	0.3030E-03	0.2575E-02	-0.1078E-09	0.5235E-03	0.4455E-02
30	-9.000	-0.1248E-01	0.3030E-03	0.2727E-02	-0.4669E-10	0.4487E-03	0.4038E-02
31	-9.500	-0.1248E-01	0.3030E-03	0.2878E-02	-0.1965E-10	0.3739E-03	0.3552E-02
32	-10.000	-0.9366E-02	0.2272E-03	0.2272E-02	-0.5955E-11	0.2243E-03	0.2243E-02
33	-10.500	-0.9366E-02	0.2272E-03	0.2386E-02	-0.4010E-11	0.2991E-03	0.3141E-02
34	-11.000	-0.9366E-02	0.2272E-03	0.2499E-02	-0.2025E-11	0.2991E-03	0.3291E-02
35	-11.500	-0.9366E-02	0.2272E-03	0.2613E-02	-0.1023E-11	0.2991E-03	0.3440E-02
36	-12.000	-0.9366E-02	0.2272E-03	0.2727E-02	-0.5166E-12	0.2991E-03	0.3590E-02
37	-12.500	-0.9366E-02	0.2272E-03	0.2840E-02	-0.2609E-12	0.2991E-03	0.3739E-02
38	-13.000	-0.9366E-02	0.2272E-03	0.2954E-02	-0.1317E-12	0.2991E-03	0.3889E-02
39	-13.500	-0.9366E-02	0.2272E-03	0.3067E-02	-0.6656E-13	0.2991E-03	0.4038E-02
40	-14.000	-0.9366E-02	0.2272E-03	0.3181E-02	-0.3361E-13	0.2991E-03	0.4188E-02
41	-14.500	-0.9366E-02	0.2272E-03	0.3295E-02	-0.1697E-13	0.2991E-03	0.4338E-02
42	-15.000	-0.9366E-02	0.2272E-03	0.3408E-02	-0.8575E-14	0.2991E-03	0.4487E-02
43	-15.500	-0.9366E-02	0.2272E-03	0.3522E-02	-0.4330E-14	0.2991E-03	0.4637E-02
44	-16.000	-0.9366E-02	0.2272E-03	0.3636E-02	-0.2187E-14	0.2991E-03	0.4786E-02
45	-16.500	-0.4683E-02	0.1136E-03	0.1874E-02	-0.5523E-15	0.1495E-03	0.2468E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.36059 NT (0.08106 LB)			TOTAL LIFT = 0.40959 NT (0.09207 LB)		
		TOTAL L/T = 0.30855			TOTAL L/T = 0.35047		
		TOTAL MOMENT = 0.00559 NT-M (0.00412 LB-FT)			TOTAL MOMENT = 0.00675 NT-M (0.00498 LB-FT)		
		TOTAL M/TD = 0.75362			TOTAL M/TD = 0.90996		

Q = 0.033 CMM (12.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 178.8 M/S (586.7 F/S)
VE = 0.340
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 18451.1 NT/SQ M (385.3 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.340]

PORT		THETA = 20.0 DEGREES			THETA = 25.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.4683E-02	0.1105E-03	-0.7185E-03	-0.3942E-02	0.1776E-03	-0.1155E-02
3	6.000	-0.9366E-02	0.2210E-03	-0.1326E-02	-0.3981E-02	0.3553E-03	-0.2132E-02
4	5.500	-0.2185E-01	0.5158E-03	-0.2837E-02	-0.3217E-02	0.5686E-03	-0.3127E-02
5	5.000	-0.1561E-01	0.3684E-03	-0.1842E-02	-0.1625E-02	0.5686E-03	-0.2843E-02
6	4.500	-0.1561E-01	0.3684E-03	-0.1658E-02	-0.7181E-03	0.4975E-03	-0.2238E-02
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.1036E-03	0.1421E-03	-0.5686E-03
8	3.500	-0.6244E-02	0.1473E-03	-0.5158E-03	-0.1308E-03	0.3553E-03	-0.1243E-02
9	3.000	-0.1248E-01	0.2947E-03	-0.8843E-03	-0.1189E-03	0.6396E-03	-0.1919E-02
10	2.500	-0.1561E-01	0.3684E-03	-0.9211E-03	-0.6007E-04	0.6396E-03	-0.1599E-02
11	2.000	-0.1561E-01	0.3684E-03	-0.7369E-03	-0.2697E-04	0.5686E-03	-0.1137E-02
12	1.500	-0.2185E-01	0.5158E-03	-0.7738E-03	-0.1362E-04	0.5686E-03	-0.8529E-03
13	1.000	-0.6244E-01	0.1473E-02	-0.1473E-02	-0.1375E-04	0.1137E-02	-0.1137E-02
14	-1.000	-0.1280E 00	0.3021E-02	0.3021E-02	-0.9989E-05	0.1634E-02	0.1634E-02
15	-1.500	-0.1529E 00	0.3611E-02	0.5416E-02	-0.6580E-05	0.2132E-02	0.3198E-02
16	-2.000	-0.1404E 00	0.3316E-02	0.6632E-02	-0.3323E-05	0.2132E-02	0.4264E-02
17	-2.500	-0.1561E 00	0.3684E-02	0.9211E-02	-0.2070E-05	0.2629E-02	0.6574E-02
18	-3.000	-0.1248E 00	0.2947E-02	0.8843E-02	-0.8477E-06	0.2132E-02	0.6396E-02
19	-3.500	-0.9366E-01	0.2210E-02	0.7738E-02	-0.3139E-06	0.1563E-02	0.5472E-02
20	-4.000	-0.8741E-01	0.2063E-02	0.8253E-02	-0.1513E-06	0.1492E-02	0.5970E-02
21	-4.500	-0.7493E-01	0.1768E-02	0.7959E-02	-0.7644E-07	0.1492E-02	0.6716E-02
22	-5.000	-0.5619E-01	0.1326E-02	0.6632E-02	-0.2757E-07	0.1066E-02	0.5330E-02
23	-5.500	-0.5619E-01	0.1326E-02	0.7295E-02	-0.1485E-07	0.1137E-02	0.6254E-02
24	-6.000	-0.3746E-01	0.8843E-03	0.5306E-02	-0.5158E-08	0.7818E-03	0.4691E-02
25	-6.500	-0.3122E-01	0.7369E-03	0.4790E-02	-0.2605E-08	0.7818E-03	0.5082E-02
26	-7.000	-0.3122E-01	0.7369E-03	0.5158E-02	-0.1196E-08	0.7107E-03	0.4975E-02
27	-7.500	-0.1248E-01	0.2947E-03	0.2210E-02	-0.3625E-09	0.4264E-03	0.3198E-02
28	-8.000	-0.2809E-01	0.6632E-03	0.5306E-02	-0.2746E-09	0.6396E-03	0.5117E-02
29	-8.500	-0.2185E-01	0.5158E-03	0.4384E-02	-0.1232E-09	0.5686E-03	0.4833E-02
30	-9.000	-0.2185E-01	0.5158E-03	0.4642E-02	-0.5448E-10	0.4975E-03	0.4477E-02
31	-9.500	-0.1561E-01	0.3684E-03	0.3500E-02	-0.2358E-10	0.4264E-03	0.4051E-02
32	-10.000	-0.1248E-01	0.2947E-03	0.2947E-02	-0.9926E-11	0.3553E-03	0.3553E-02
33	-10.500	-0.1561E-01	0.3684E-03	0.3869E-02	-0.5013E-11	0.3553E-03	0.3731E-02
34	-11.000	-0.1561E-01	0.3684E-03	0.4053E-02	-0.1519E-11	0.2132E-03	0.2345E-02
35	-11.500	-0.1561E-01	0.3684E-03	0.4237E-02	-0.2557E-12	0.7107E-04	0.8173E-03
36	-12.000	-0.1561E-01	0.3684E-03	0.4421E-02	-0.1291E-12	0.7107E-04	0.8529E-03
37	-12.500	-0.1561E-01	0.3684E-03	0.4605E-02	-0.6523E-13	0.7107E-04	0.8884E-03
38	-13.000	-0.1561E-01	0.3684E-03	0.4790E-02	-0.3294E-13	0.7107E-04	0.9240E-03
39	-13.500	-0.1561E-01	0.3684E-03	0.4974E-02	-0.1664E-13	0.7107E-04	0.9595E-03
40	-14.000	-0.1561E-01	0.3684E-03	0.5158E-02	-0.8404E-14	0.7107E-04	0.9950E-03
41	-14.500	-0.1561E-01	0.3684E-03	0.5342E-02	-0.4244E-14	0.7107E-04	0.1030E-02
42	-15.000	-0.1561E-01	0.3684E-03	0.5527E-02	-0.2143E-14	0.7107E-04	0.1066E-02
43	-15.500	-0.1561E-01	0.3684E-03	0.5711E-02	-0.1082E-14	0.7107E-04	0.1101E-02
44	-16.000	-0.1561E-01	0.3684E-03	0.5895E-02	-0.5468E-15	0.7107E-04	0.1137E-02
45	-16.500	-0.7805E-02	0.1842E-03	0.3039E-02	-0.1380E-15	0.3553E-04	0.5863E-03
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.45592 NT (0.10249 LB)			TOTAL LIFT = 0.49114 NT (0.11041 LB)		
		TOTAL L/T = 0.39012			TOTAL L/T = 0.42026		
		TOTAL MOMENT = 0.00791 NT-M (0.00584 LB-FT)			TOTAL MOMENT = 0.00857 NT-M (0.00632 LB-FT)		
		TOTAL M/TD = 1.06719			TOTAL M/TD = 1.15543		

Q = 0.039 CMM (12.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 178.8 M/S (586.7 F/S)
VE = 0.340
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 18451.1 NT/SQ M (385.3 PSF)

TABLE 4 -- Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.291]

PORT		THETA = 5.0 DEGREES			THETA = 7.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.3122E-02	0.5739E-04	-0.3730E-03	-0.1576E-02	0.5712E-04	-0.3713E-03
3	6.000	-0.6244E-02	0.1147E-03	-0.6887E-03	-0.1592E-02	0.1142E-03	-0.6855E-03
4	5.500	-0.9366E-02	0.1721E-03	-0.9470E-03	-0.1206E-02	0.1713E-03	-0.9425E-03
5	5.000	-0.3122E-02	0.5739E-04	-0.2869E-03	-0.4062E-03	0.1142E-03	-0.5712E-03
6	4.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.1025E-03	0.5712E-04	-0.2570E-03
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
10	2.500	0.8195E-02	-0.1506E-03	0.3766E-03	0.0000E 00	0.0000E 00	0.0000E 00
11	2.000	0.2731E-01	-0.5022E-03	0.1004E-02	0.2949E-05	-0.4998E-04	0.9996E-04
12	1.500	0.3005E-01	-0.5524E-03	0.8287E-03	0.0000E 00	0.0000E 00	0.0000E 00
13	1.000	-0.1248E-01	0.2295E-03	-0.2295E-03	-0.2579E-04	0.1713E-02	-0.1713E-02
14	-1.000	-0.7805E 00	0.1434E-01	0.1434E-01	-0.8599E-04	0.1131E-01	0.1131E-01
15	-1.500	-0.5619E 00	0.1033E-01	0.1549E-01	-0.3794E-04	0.9882E-02	0.1482E-01
16	-2.000	-0.3122E 00	0.5739E-02	0.1147E-01	-0.1329E-04	0.6955E-02	0.1371E-01
17	-2.500	-0.1561E 00	0.2869E-02	0.7174E-02	-0.4140E-05	0.4227E-02	0.1056E-01
18	-3.000	-0.7805E-01	0.1434E-02	0.4304E-02	-0.1186E-05	0.2399E-02	0.7197E-02
19	-3.500	-0.3122E-01	0.5739E-03	0.2008E-02	-0.2854E-06	0.1142E-02	0.3998E-02
20	-4.000	-0.1248E-01	0.2295E-03	0.9183E-03	-0.7928E-07	0.6283E-03	0.2513E-02
21	-4.500	-0.6244E-02	0.1147E-03	0.5165E-03	-0.3640E-07	0.5712E-03	0.2570E-02
22	-5.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.1838E-08	0.5712E-04	0.2856E-03
23	-5.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.9285E-09	0.5712E-04	0.3141E-03
24	-6.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
25	-6.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
26	-7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
27	-7.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
28	-8.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
29	-8.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
30	-9.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
31	-9.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
32	-10.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
33	-10.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
34	-11.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
35	-11.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
36	-12.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
37	-12.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
38	-13.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
39	-13.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
40	-14.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
41	-14.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
42	-15.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
43	-15.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
44	-16.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
45	-16.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.10275 NT (0.02310 LB)			TOTAL LIFT = 0.16528 NT (0.03715 LB)		
		TOTAL L/T = 0.06459			TOTAL L/T = 0.10390		
		TOTAL MOMENT = 0.00121 NT-M (0.00089 LB-FT)			TOTAL MOMENT = 0.00184 NT-M (0.00136 LB-FT)		
		TOTAL M/TD = 0.11982			TOTAL M/TD = 0.18267		

Q = 0.039 CMM (14.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 208.6 M/S (684.4 F/S)
VE = 0.291
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 25114.1 NT/SQ M (524.5 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.291]

PORT		THETA = 10.0 DEGREES			THETA = 12.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.4683E-02	0.8511E-04	-0.5532E-03	-0.2365E-02	0.8437E-04	-0.5484E-03
3	6.000	-0.9366E-02	0.1702E-03	-0.1021E-02	-0.2389E-02	0.1687E-03	-0.1012E-02
4	5.500	-0.9366E-02	0.1702E-03	-0.9362E-03	-0.2011E-02	0.2812E-03	-0.1546E-02
5	5.000	-0.9366E-02	0.1702E-03	-0.8511E-03	-0.8125E-03	0.2250E-03	-0.1125E-02
6	4.500	-0.6244E-02	0.1134E-03	-0.5106E-03	-0.2051E-03	0.1125E-03	-0.5062E-03
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
8	3.500	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
9	3.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.2643E-04	0.1125E-03	-0.3375E-03
10	2.500	0.0000E 00	0.0000E 00	0.0000E 00	-0.6675E-05	0.5625E-04	-0.1406E-03
11	2.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.6742E-05	0.1125E-03	-0.2250E-03
12	1.500	-0.1873E-01	0.3404E-03	-0.5106E-03	-0.1872E-04	0.6187E-03	-0.9281E-03
13	1.000	-0.1217E 00	0.2212E-02	-0.2212E-02	-0.3353E-04	0.2193E-02	-0.2193E-02
14	-1.000	-0.4620E 00	0.8398E-02	0.8397E-02	-0.4560E-04	0.5906E-02	0.5906E-02
15	-1.500	-0.4370E 00	0.7944E-02	0.1191E-01	-0.2412E-04	0.6187E-02	0.9281E-02
16	-2.000	-0.3434E 00	0.6241E-02	0.1248E-01	-0.9970E-05	0.5062E-02	0.1012E-01
17	-2.500	-0.2528E 00	0.4596E-02	0.1149E-01	-0.4476E-05	0.4500E-02	0.1125E-01
18	-3.000	-0.1561E 00	0.2837E-02	0.8511E-02	-0.1554E-05	0.3093E-02	0.9281E-02
19	-3.500	-0.9990E-01	0.1815E-02	0.6355E-02	-0.5423E-06	0.2137E-02	0.7481E-02
20	-4.000	-0.6244E-01	0.1134E-02	0.4539E-02	-0.2090E-06	0.1631E-02	0.6525E-02
21	-4.500	-0.4995E-01	0.9078E-03	0.4085E-02	-0.7280E-07	0.1125E-02	0.5062E-02
22	-5.000	-0.2497E-01	0.4539E-03	0.2269E-02	-0.2390E-07	0.7312E-03	0.3656E-02
23	-5.500	-0.2497E-01	0.4539E-03	0.2496E-02	-0.9285E-08	0.5625E-03	0.3093E-02
24	-6.000	-0.9366E-02	0.1702E-03	0.1021E-02	-0.3282E-08	0.3937E-03	0.2362E-02
25	-6.500	-0.6244E-02	0.1134E-03	0.7376E-03	-0.9474E-09	0.2250E-03	0.1462E-02
26	-7.000	-0.6244E-02	0.1134E-03	0.7944E-03	-0.3588E-09	0.1687E-03	0.1181E-02
27	-7.500	-0.6244E-02	0.1134E-03	0.8511E-03	0.0000E 00	0.0000E 00	0.0000E 00
28	-8.000	-0.6244E-02	0.1134E-03	0.9078E-03	-0.9154E-10	0.1687E-03	0.1350E-02
29	-8.500	-0.6244E-02	0.1134E-03	0.9646E-03	-0.3082E-10	0.1125E-03	0.9562E-03
30	-9.000	-0.6244E-02	0.1134E-03	0.1021E-02	-0.1556E-10	0.1125E-03	0.1012E-02
31	-9.500	-0.6244E-02	0.1134E-03	0.1078E-02	-0.7861E-11	0.1125E-03	0.1068E-02
32	-10.000	-0.6244E-02	0.1134E-03	0.1134E-02	-0.3970E-11	0.1125E-03	0.1125E-02
33	-10.500	-0.6244E-02	0.1134E-03	0.1191E-02	-0.2005E-11	0.1125E-03	0.1181E-02
34	-11.000	-0.6244E-02	0.1134E-03	0.1248E-02	-0.1012E-11	0.1125E-03	0.1237E-02
35	-11.500	-0.6244E-02	0.1134E-03	0.1305E-02	-0.5115E-12	0.1125E-03	0.1293E-02
36	-12.000	-0.6244E-02	0.1134E-03	0.1361E-02	-0.2583E-12	0.1125E-03	0.1350E-02
37	-12.500	-0.6244E-02	0.1134E-03	0.1418E-02	-0.1304E-12	0.1125E-03	0.1406E-02
38	-13.000	-0.6244E-02	0.1134E-03	0.1475E-02	-0.6589E-13	0.1125E-03	0.1462E-02
39	-13.500	-0.6244E-02	0.1134E-03	0.1532E-02	-0.3328E-13	0.1125E-03	0.1518E-02
40	-14.000	-0.6244E-02	0.1134E-03	0.1588E-02	-0.1680E-13	0.1125E-03	0.1575E-02
41	-14.500	-0.6244E-02	0.1134E-03	0.1645E-02	-0.8489E-14	0.1125E-03	0.1631E-02
42	-15.000	-0.6244E-02	0.1134E-03	0.1702E-02	-0.4287E-14	0.1125E-03	0.1687E-02
43	-15.500	-0.6244E-02	0.1134E-03	0.1759E-02	-0.2165E-14	0.1125E-03	0.1743E-02
44	-16.000	-0.6244E-02	0.1134E-03	0.1815E-02	-0.1093E-14	0.1125E-03	0.1800E-02
45	-16.500	-0.3122E-02	0.5674E-04	0.9362E-03	-0.2761E-15	0.5625E-04	0.9281E-03
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.22977 NT (0.05165 LB)			TOTAL LIFT = 0.28977 NT (0.06514 LB)		
		TOTAL L/T = 0.14445			TOTAL L/T = 0.18216		
		TOTAL MOMENT = 0.00278 NT-M (0.00205 LB-FT)			TOTAL MOMENT = 0.00372 NT-M (0.00274 LB-FT)		
		TOTAL M/TD = 0.27611			TOTAL M/TD = 0.36855		

Q = 0.039 CMM (14.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 208.6 M/S (684.4 F/S)
VE = 0.291
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 25114.1 NT/SQ M (524.5 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.291]

PORT		THETA = 15.0 DEGREES			THETA = 17.5 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.6244E-02	0.1113E-03	-0.7235E-03	-0.3153E-02	0.1099E-03	-0.7143E-03
3	6.000	-0.1248E-01	0.2226E-03	-0.1335E-02	-0.3185E-02	0.2198E-03	-0.1318E-02
4	5.500	-0.2185E-01	0.3895E-03	-0.2142E-02	-0.3217E-02	0.4396E-03	-0.2417E-02
5	5.000	-0.1561E-01	0.2782E-03	-0.1391E-02	-0.1218E-02	0.3297E-03	-0.1648E-02
6	4.500	-0.1561E-01	0.2782E-03	-0.1252E-02	-0.7181E-03	0.3846E-03	-0.1730E-02
7	4.000	0.0000E 00	0.0000E 00	0.0000E 00	-0.5181E-04	0.5495E-04	-0.2198E-03
8	3.500	-0.3122E-02	0.5565E-04	-0.1947E-03	-0.7850E-04	0.1648E-03	-0.5769E-03
9	3.000	-0.9366E-02	0.1669E-03	-0.5008E-03	-0.9251E-04	0.3846E-03	-0.1153E-02
10	2.500	-0.1561E-01	0.2782E-03	-0.6956E-03	-0.5340E-04	0.4396E-03	-0.1099E-02
11	2.000	-0.1873E-01	0.3339E-03	-0.6678E-03	-0.3371E-04	0.5495E-03	-0.1099E-02
12	1.500	-0.4058E-01	0.7235E-03	-0.1085E-02	-0.2383E-04	0.7693E-03	-0.1153E-02
13	1.000	-0.1092E 00	0.1947E-02	-0.1947E-02	-0.2751E-04	0.1758E-02	-0.1758E-02
14	-1.000	-0.2497E 00	0.4452E-02	0.4452E-02	-0.2605E-04	0.3297E-02	0.3297E-02
15	-1.500	-0.2747E 00	0.4897E-02	0.7346E-02	-0.1491E-04	0.3736E-02	0.5605E-02
16	-2.000	-0.2404E 00	0.4285E-02	0.8570E-02	-0.6647E-05	0.3297E-02	0.6594E-02
17	-2.500	-0.2216E 00	0.3951E-02	0.9878E-02	-0.3413E-05	0.3352E-02	0.8380E-02
18	-3.000	-0.1623E 00	0.2894E-02	0.8682E-02	-0.1384E-05	0.2692E-02	0.8077E-02
19	-3.500	-0.1186E 00	0.2114E-02	0.7402E-02	-0.4995E-06	0.1923E-02	0.6731E-02
20	-4.000	-0.9365E-01	0.1669E-02	0.6678E-02	-0.2162E-06	0.1648E-02	0.6594E-02
21	-4.500	-0.8117E-01	0.1447E-02	0.6511E-02	-0.9829E-07	0.1483E-02	0.6676E-02
22	-5.000	-0.4995E-01	0.8904E-03	0.4452E-02	-0.3125E-07	0.9341E-03	0.4670E-02
23	-5.500	-0.4370E-01	0.7791E-03	0.4285E-02	-0.1578E-07	0.9341E-03	0.5137E-02
24	-6.000	-0.3122E-01	0.5565E-03	0.3339E-02	-0.5158E-08	0.6044E-03	0.3626E-02
25	-6.500	-0.2497E-01	0.4452E-03	0.2894E-02	-0.2368E-08	0.5495E-03	0.3571E-02
26	-7.000	-0.2497E-01	0.4452E-03	0.3116E-02	-0.1076E-08	0.4945E-03	0.3461E-02
27	-7.500	-0.3122E-02	0.5565E-04	0.4174E-03	-0.1812E-09	0.1648E-03	0.1236E-02
28	-8.000	-0.1561E-01	0.2782E-03	0.2226E-02	-0.2441E-09	0.4396E-03	0.3516E-02
29	-8.500	-0.1248E-01	0.2226E-03	0.1892E-02	-0.1078E-09	0.3846E-03	0.3269E-02
30	-9.000	-0.9366E-02	0.1669E-03	0.1502E-02	-0.3891E-10	0.2747E-03	0.2472E-02
31	-9.500	-0.6244E-02	0.1113E-03	0.1057E-02	-0.1572E-10	0.2198E-03	0.2088E-02
32	-10.000	-0.6244E-02	0.1113E-03	0.1113E-02	-0.7941E-11	0.2198E-03	0.2198E-02
33	-10.500	-0.6244E-02	0.1113E-03	0.1168E-02	-0.4010E-11	0.2198E-03	0.2307E-02
34	-11.000	-0.6244E-02	0.1113E-03	0.1224E-02	-0.2025E-11	0.2198E-03	0.2417E-02
35	-11.500	-0.6244E-02	0.1113E-03	0.1280E-02	-0.1023E-11	0.2198E-03	0.2527E-02
36	-12.000	-0.6244E-02	0.1113E-03	0.1335E-02	-0.5166E-12	0.2198E-03	0.2637E-02
37	-12.500	-0.6244E-02	0.1113E-03	0.1391E-02	-0.2609E-12	0.2198E-03	0.2747E-02
38	-13.000	-0.6244E-02	0.1113E-03	0.1447E-02	-0.1317E-12	0.2198E-03	0.2857E-02
39	-13.500	-0.6244E-02	0.1113E-03	0.1502E-02	-0.6656E-13	0.2198E-03	0.2967E-02
40	-14.000	-0.6244E-02	0.1113E-03	0.1558E-02	-0.3361E-13	0.2198E-03	0.3077E-02
41	-14.500	-0.6244E-02	0.1113E-03	0.1614E-02	-0.1697E-13	0.2198E-03	0.3187E-02
42	-15.000	-0.6244E-02	0.1113E-03	0.1669E-02	-0.8575E-14	0.2198E-03	0.3297E-02
43	-15.500	-0.6244E-02	0.1113E-03	0.1725E-02	-0.4330E-14	0.2198E-03	0.3407E-02
44	-16.000	-0.6244E-02	0.1113E-03	0.1780E-02	-0.2187E-14	0.2198E-03	0.3516E-02
45	-16.500	-0.3122E-02	0.5569E-04	0.9183E-03	-0.5523E-15	0.1099E-03	0.1813E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.34696 NT (0.07800 LB)			TOTAL LIFT = 0.40264 NT (0.09051 LB)		
		TOTAL L/T = 0.21812			TOTAL L/T = 0.25312		
		TOTAL MOMENT = 0.00465 NT-M (0.00343 LB-FT)			TOTAL MOMENT = 0.00575 NT-M (0.00424 LB-FT)		
		TOTAL M/TD = 0.46105			TOTAL M/TD = 0.57013		

Q = 0.039 CMM (14.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 208.6 M/S (684.4 F/S)
VE = 0.291
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 25114.1 NT/SQ M (524.5 PSF)

TABLE 4 – Continued

REDUCED PRESSURE DATA FOR CYLINDER WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.291]

PORT		THETA = 20.0 DEGREES			THETA = 25.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.7805E-02	0.1353E-03	-0.8798E-03	-0.5518E-02	0.1827E-03	-0.1188E-02
3	6.000	-0.1561E-01	0.2707E-03	-0.1624E-02	-0.5574E-02	0.3655E-03	-0.2193E-02
4	5.500	-0.2497E-01	0.4331E-03	-0.2382E-02	-0.3619E-02	0.4699E-03	-0.2584E-02
5	5.000	-0.2185E-01	0.3790E-03	-0.1895E-02	-0.1828E-02	0.4699E-03	-0.2349E-02
6	4.500	-0.2185E-01	0.3790E-03	-0.1705E-02	-0.9233E-03	0.4699E-03	-0.2114E-02
7	4.000	-0.9366E-02	0.1624E-03	-0.6497E-03	-0.2590E-03	0.2611E-03	-0.1044E-02
8	3.500	-0.1873E-01	0.3248E-03	-0.1137E-02	-0.2093E-03	0.4177E-03	-0.1462E-02
9	3.000	-0.2809E-01	0.4872E-03	-0.1461E-02	-0.1321E-03	0.5222E-03	-0.1566E-02
10	2.500	-0.3122E-01	0.5414E-03	-0.1353E-02	-0.7342E-04	0.5744E-03	-0.1436E-02
11	2.000	-0.3122E-01	0.5414E-03	-0.1082E-02	-0.3708E-04	0.5744E-03	-0.1148E-02
12	1.500	-0.3746E-01	0.6497E-03	-0.9745E-03	-0.2043E-04	0.6266E-03	-0.9399E-03
13	1.000	-0.9366E-01	0.1624E-02	-0.1624E-02	-0.1805E-04	0.1096E-02	-0.1096E-02
14	-1.000	-0.1498E 00	0.2598E-02	0.2598E-02	-0.1302E-04	0.1566E-02	0.1566E-02
15	-1.500	-0.1623E 00	0.2815E-02	0.4223E-02	-0.7677E-05	0.1827E-02	0.2741E-02
16	-2.000	-0.1561E 00	0.2707E-02	0.5414E-02	-0.3877E-05	0.1827E-02	0.3655E-02
17	-2.500	-0.1592E 00	0.2761E-02	0.6903E-02	-0.2238E-05	0.2088E-02	0.5222E-02
18	-3.000	-0.1280E 00	0.2219E-02	0.6659E-02	-0.8760E-06	0.1618E-02	0.4856E-02
19	-3.500	-0.9990E-01	0.1732E-02	0.6064E-02	-0.3853E-06	0.1409E-02	0.4934E-02
20	-4.000	-0.8741E-01	0.1516E-02	0.6064E-02	-0.1801E-06	0.1305E-02	0.5222E-02
21	-4.500	-0.7493E-01	0.1299E-02	0.5847E-02	-0.8008E-07	0.1148E-02	0.5169E-02
22	-5.000	-0.5307E-01	0.9204E-03	0.4602E-02	-0.3309E-07	0.9399E-03	0.4699E-02
23	-5.500	-0.4995E-01	0.8663E-03	0.4764E-02	-0.1671E-07	0.9399E-03	0.5169E-02
24	-6.000	-0.3434E-01	0.5955E-03	0.3573E-02	-0.5627E-08	0.6266E-03	0.3759E-02
25	-6.500	-0.3122E-01	0.5414E-03	0.3519E-02	-0.2605E-08	0.5744E-03	0.3733E-02
26	-7.000	-0.3122E-01	0.5414E-03	0.3790E-02	-0.1196E-08	0.5222E-03	0.3655E-02
27	-7.500	-0.9366E-02	0.1624E-03	0.1218E-02	-0.4229E-09	0.3655E-03	0.2741E-02
28	-8.000	-0.2185E-01	0.3790E-03	0.3032E-02	-0.3051E-09	0.5222E-03	0.4177E-02
29	-8.500	-0.1873E-01	0.3248E-03	0.2761E-02	-0.1232E-09	0.4177E-03	0.3550E-02
30	-9.000	-0.1248E-01	0.2165E-03	0.1949E-02	-0.5448E-10	0.3655E-03	0.3289E-02
31	-9.500	-0.9366E-02	0.1624E-03	0.1543E-02	-0.2751E-10	0.3655E-03	0.3472E-02
32	-10.000	-0.9366E-02	0.1624E-03	0.1624E-02	-0.9926E-11	0.2611E-03	0.2611E-02
33	-10.500	-0.9366E-02	0.1624E-03	0.1705E-02	-0.6016E-11	0.3133E-03	0.3289E-02
34	-11.000	-0.9366E-02	0.1624E-03	0.1786E-02	-0.2025E-11	0.2088E-03	0.2297E-02
35	-11.500	-0.9366E-02	0.1624E-03	0.1867E-02	-0.2557E-12	0.5222E-04	0.6005E-03
36	-12.000	-0.9366E-02	0.1624E-03	0.1949E-02	-0.1291E-12	0.5222E-04	0.6266E-03
37	-12.500	-0.9366E-02	0.1624E-03	0.2030E-02	-0.6523E-13	0.5222E-04	0.6527E-03
38	-13.000	-0.9366E-02	0.1624E-03	0.2111E-02	-0.3294E-13	0.5222E-04	0.6788E-03
39	-13.500	-0.9366E-02	0.1624E-03	0.2192E-02	-0.1664E-13	0.5222E-04	0.7049E-03
40	-14.000	-0.9366E-02	0.1624E-03	0.2274E-02	-0.8404E-14	0.5222E-04	0.7310E-03
41	-14.500	-0.9366E-02	0.1624E-03	0.2355E-02	-0.4244E-14	0.5222E-04	0.7571E-03
42	-15.000	-0.9366E-02	0.1624E-03	0.2436E-02	-0.2143E-14	0.5222E-04	0.7833E-03
43	-15.500	-0.9366E-02	0.1624E-03	0.2517E-02	-0.1082E-14	0.5222E-04	0.8094E-03
44	-16.000	-0.9366E-02	0.1624E-03	0.2598E-02	-0.5468E-15	0.5222E-04	0.8355E-03
45	-16.500	-0.4683E-02	0.8121E-04	0.1340E-02	-0.1380E-15	0.2611E-04	0.4308E-03
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.45113 NT (0.10141 LB)			TOTAL LIFT = 0.49217 NT (0.11064 LB)		
		TOTAL L/T = 0.28360			TOTAL L/T = 0.30940		
		TOTAL MOMENT = 0.00663 NT-M (0.00489 LB-FT)			TOTAL MOMENT = 0.00732 NT-M (0.00540 LB-FT)		
		TOTAL M/TD = 0.65667			TOTAL M/TD = 0.72498		

Q = 0.039 CMM (14.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 208.6 M/S (684.4 F/S)
VE = 0.291
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 25114.1 NT/SQ M (524.5 PSF)

TABLE 4 -- Concluded

REDUCED PRESSURE DATA FOR CYLINDER
WITH 0.64 cm (1/4 INCH) NOZZLE

[V_e = 0.291]

PORT		THETA = 30.0 DEGREES			THETA = 35.0 DEGREES		
NO.	X/D	CP	L/T	M/TD	CP	L/T	M/TD
1	7.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
2	6.500	-0.1248E-01	0.1995E-03	-0.1297E-02	-0.6307E-02	0.1887E-03	-0.1227E-02
3	6.000	-0.2497E-01	0.3991E-03	-0.2395E-02	-0.6371E-02	0.3775E-03	-0.2265E-02
4	5.500	-0.3122E-01	0.4989E-03	-0.2744E-02	-0.4022E-02	0.4719E-03	-0.2595E-02
5	5.000	-0.3122E-01	0.4989E-03	-0.2494E-02	-0.2031E-02	0.4719E-03	-0.2359E-02
6	4.500	-0.3122E-01	0.4989E-03	-0.2245E-02	-0.1128E-02	0.5191E-03	-0.2336E-02
7	4.000	-0.2185E-01	0.3492E-03	-0.1397E-02	-0.4145E-03	0.3775E-03	-0.1510E-02
8	3.500	-0.3122E-01	0.4989E-03	-0.1746E-02	-0.2616E-03	0.4719E-03	-0.1651E-02
9	3.000	-0.3434E-01	0.5488E-03	-0.1646E-02	-0.1586E-03	0.5663E-03	-0.1699E-02
10	2.500	-0.3434E-01	0.5488E-03	-0.1372E-02	-0.8010E-04	0.5663E-03	-0.1415E-02
11	2.000	-0.3434E-01	0.5488E-03	-0.1097E-02	-0.3709E-04	0.5191E-03	-0.1038E-02
12	1.500	-0.3434E-01	0.5488E-03	-0.8233E-03	-0.1702E-04	0.4719E-03	-0.7079E-03
13	1.000	-0.5619E-01	0.8981E-03	-0.8981E-03	-0.1289E-04	0.7079E-03	-0.7079E-03
14	-1.000	-0.6244E-01	0.9979E-03	0.9979E-03	-0.6514E-05	0.7079E-03	0.7079E-03
15	-1.500	-0.7805E-01	0.1247E-02	0.1871E-02	-0.3728E-05	0.8023E-03	0.1203E-02
16	-2.000	-0.7805E-01	0.1247E-02	0.2494E-02	-0.1883E-05	0.8023E-03	0.1604E-02
17	-2.500	-0.9678E-01	0.1546E-02	0.3867E-02	-0.1398E-05	0.1179E-02	0.2949E-02
18	-3.000	-0.8117E-01	0.1297E-02	0.3892E-02	-0.5651E-06	0.9439E-03	0.2831E-02
19	-3.500	-0.6244E-01	0.9979E-03	0.3492E-02	-0.2426E-06	0.8023E-03	0.2808E-02
20	-4.000	-0.5932E-01	0.9480E-03	0.3792E-02	-0.1225E-06	0.8023E-03	0.3209E-02
21	-4.500	-0.5619E-01	0.8981E-03	0.4041E-02	-0.6188E-07	0.8023E-03	0.3610E-02
22	-5.000	-0.4995E-01	0.7983E-03	0.3991E-02	-0.2390E-07	0.6135E-03	0.3067E-02
23	-5.500	-0.4995E-01	0.7983E-03	0.4391E-02	-0.1392E-07	0.7079E-03	0.3893E-02
24	-6.000	-0.3746E-01	0.5987E-03	0.3592E-02	-0.5158E-08	0.5191E-03	0.3115E-02
25	-6.500	-0.3434E-01	0.5488E-03	0.3567E-02	-0.2368E-08	0.4719E-03	0.3067E-02
26	-7.000	-0.3434E-01	0.5488E-03	0.3842E-02	-0.1196E-08	0.4719E-03	0.3303E-02
27	-7.500	-0.2185E-01	0.3492E-03	0.2619E-02	-0.6041E-09	0.4719E-03	0.3539E-02
28	-8.000	-0.3122E-01	0.4989E-03	0.3991E-02	-0.2135E-09	0.3303E-03	0.2643E-02
29	-8.500	-0.2497E-01	0.3991E-03	0.3393E-02	-0.1541E-09	0.4719E-03	0.4011E-02
30	-9.000	-0.2497E-01	0.3991E-03	0.3592E-02	-0.6226E-10	0.3775E-03	0.3398E-02
31	-9.500	-0.2497E-01	0.3991E-03	0.3792E-02	-0.3144E-10	0.3775E-03	0.3587E-02
32	-10.000	-0.1561E-01	0.2494E-03	0.2494E-02	-0.1191E-10	0.2831E-03	0.2831E-02
33	-10.500	-0.2185E-01	0.3492E-03	0.3667E-02	-0.7018E-11	0.3303E-03	0.3469E-02
34	-11.000	-0.1248E-01	0.1995E-03	0.2195E-02	-0.2025E-11	0.1887E-03	0.2076E-02
35	-11.500	-0.1248E-01	0.1995E-03	0.2295E-02	-0.1023E-11	0.1887E-03	0.2171E-02
36	-12.000	-0.1248E-01	0.1995E-03	0.2395E-02	-0.5166E-12	0.1887E-03	0.2265E-02
37	-12.500	-0.1248E-01	0.1995E-03	0.2494E-02	-0.2609E-12	0.1887E-03	0.2359E-02
38	-13.000	-0.1248E-01	0.1995E-03	0.2594E-02	-0.1317E-12	0.1887E-03	0.2454E-02
39	-13.500	-0.1248E-01	0.1995E-03	0.2694E-02	-0.6656E-13	0.1887E-03	0.2548E-02
40	-14.000	-0.1248E-01	0.1995E-03	0.2794E-02	-0.3361E-13	0.1887E-03	0.2643E-02
41	-14.500	-0.1248E-01	0.1995E-03	0.2894E-02	-0.1697E-13	0.1887E-03	0.2737E-02
42	-15.000	-0.1248E-01	0.1995E-03	0.2993E-02	-0.8575E-14	0.1887E-03	0.2831E-02
43	-15.500	-0.1248E-01	0.1995E-03	0.3093E-02	-0.4330E-14	0.1887E-03	0.2926E-02
44	-16.000	-0.1248E-01	0.1995E-03	0.3193E-02	-0.2187E-14	0.1887E-03	0.3020E-02
45	-16.500	-0.6244E-02	0.9979E-04	0.1646E-02	-0.5523E-15	0.9439E-04	0.1557E-02
46	-17.000	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00	0.0000E 00
		TOTAL LIFT = 0.52947 NT (0.11903 LB)			TOTAL LIFT = 0.56153 NT (0.12623 LB)		
		TOTAL L/T = 0.33285			TOTAL L/T = 0.35301		
		TOTAL MOMENT = 0.00811 NT-M (0.00598 LB-FT)			TOTAL MOMENT = 0.00881 NT-M (0.00649 LB-FT		
		TOTAL M/TD = 0.80349			TOTAL M/TD = 0.87243		

Q = 0.039 CMM (14.00 CFM)
VINF = 60.8 M/S (199.6 F/S)
VJ = 208.6 M/S (684.4 F/S)
VE = 0.291
DYN PRES INF = 2135.9 NT/SQ M (44.6 PSF)
DYN PRES JET = 25114.1 NT/SQ M (524.5 PSF)

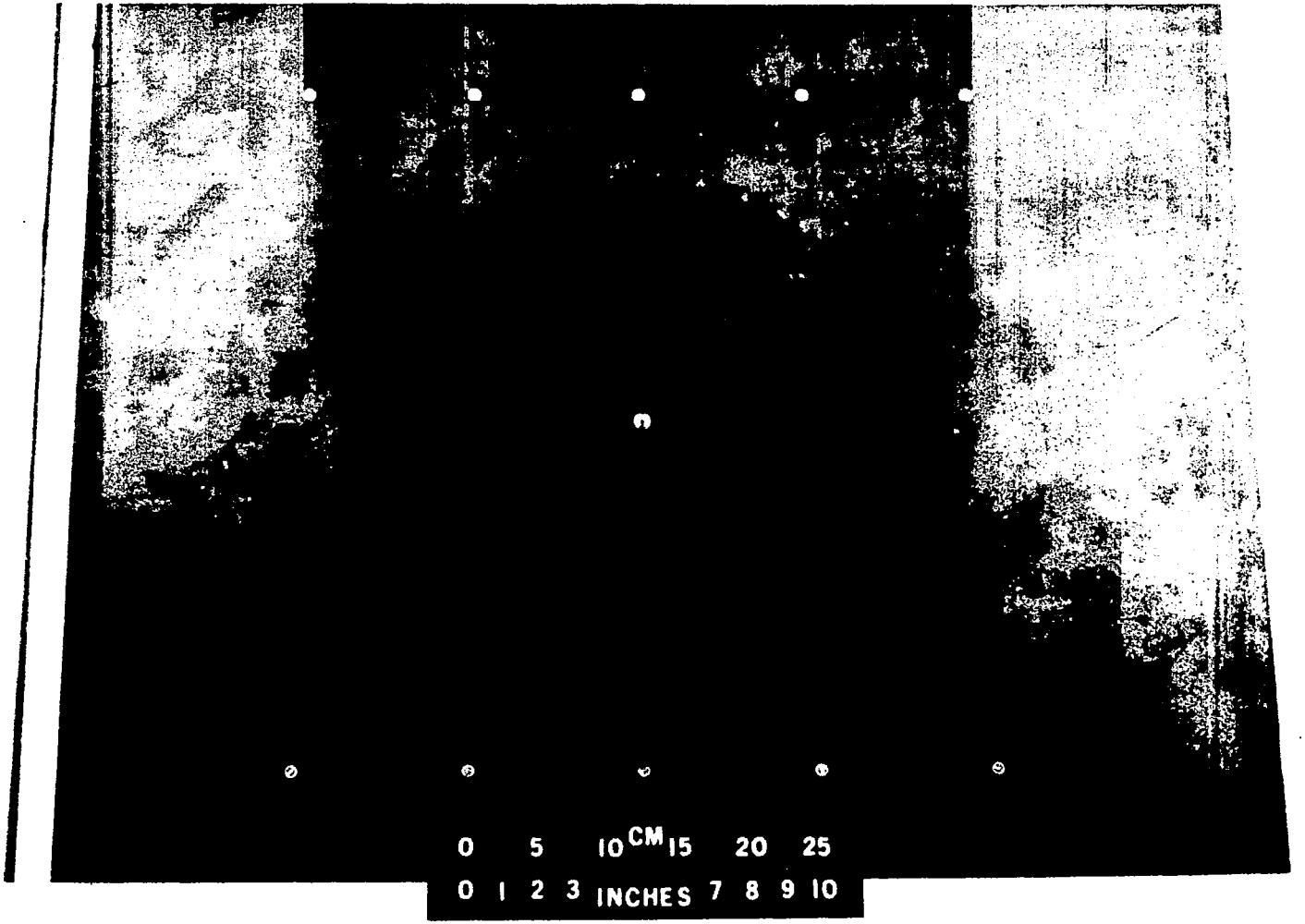


Figure 1. - Flat-plate model.

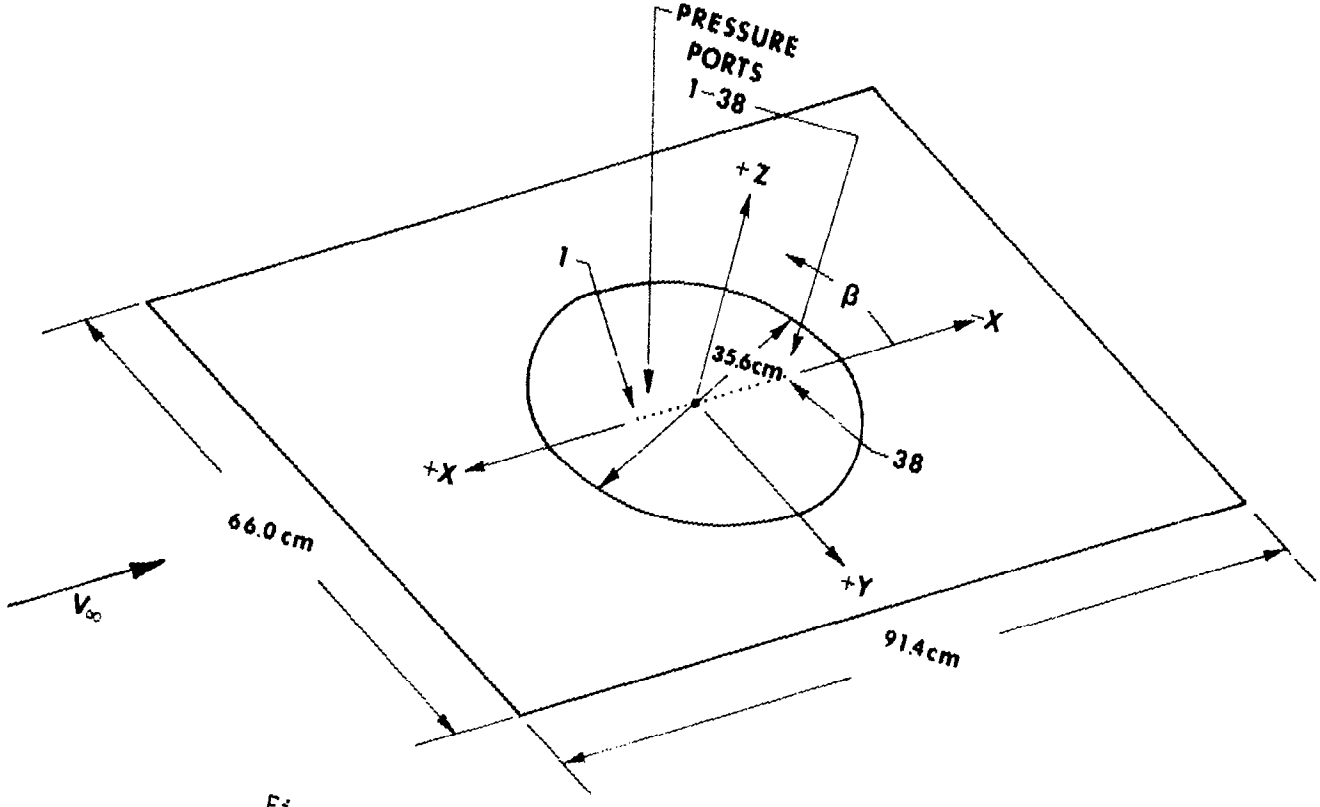


Figure 2. - Schematic of flat-plate model.

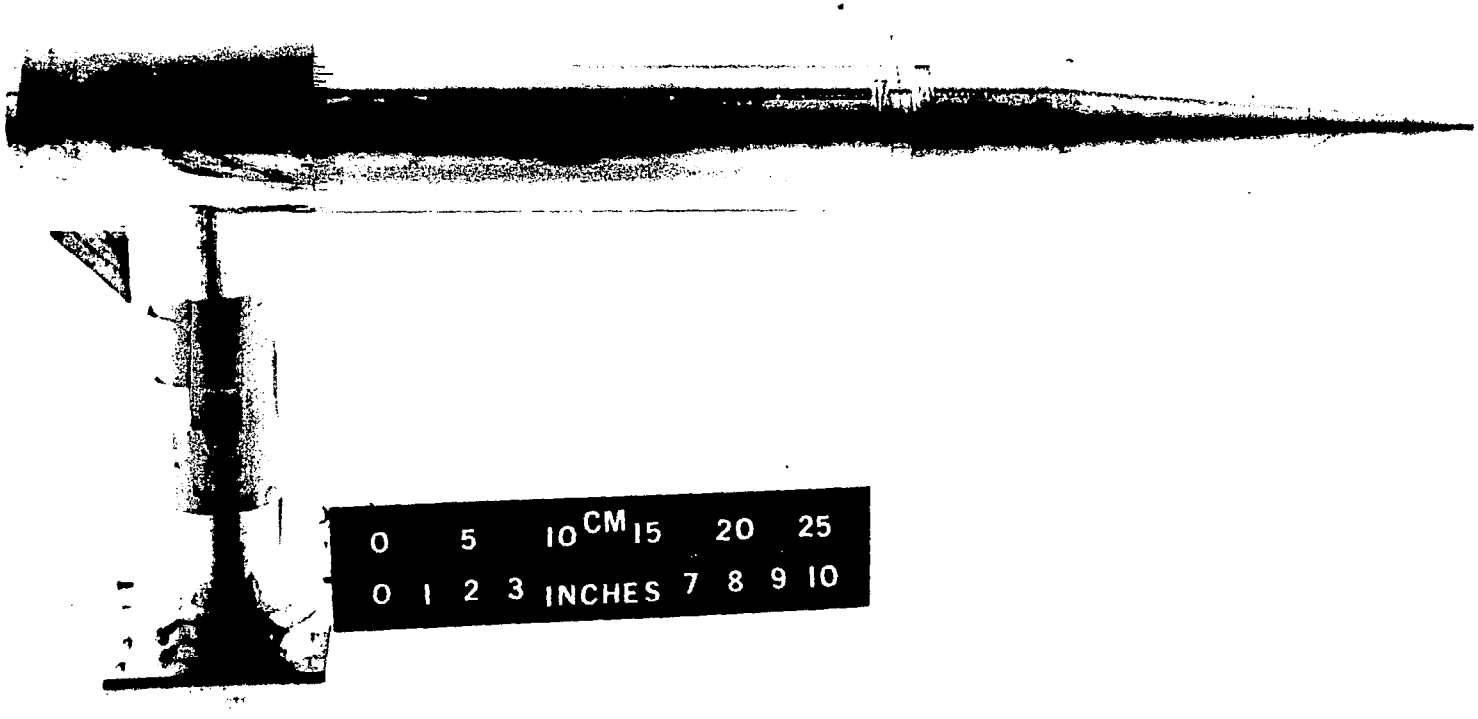


Figure 3. - Cylindrical model.

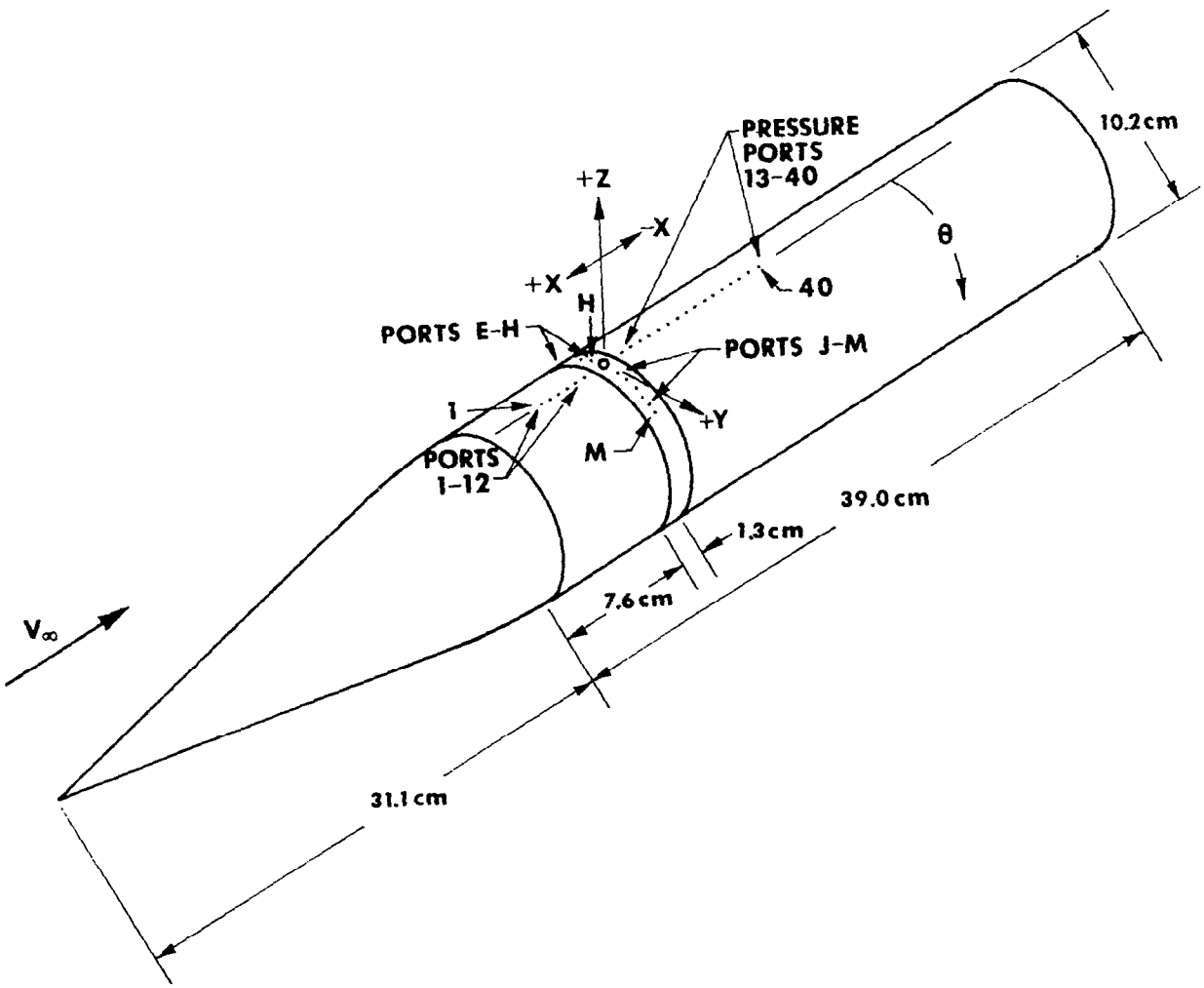


Figure 4. - Schematic of cylindrical model.

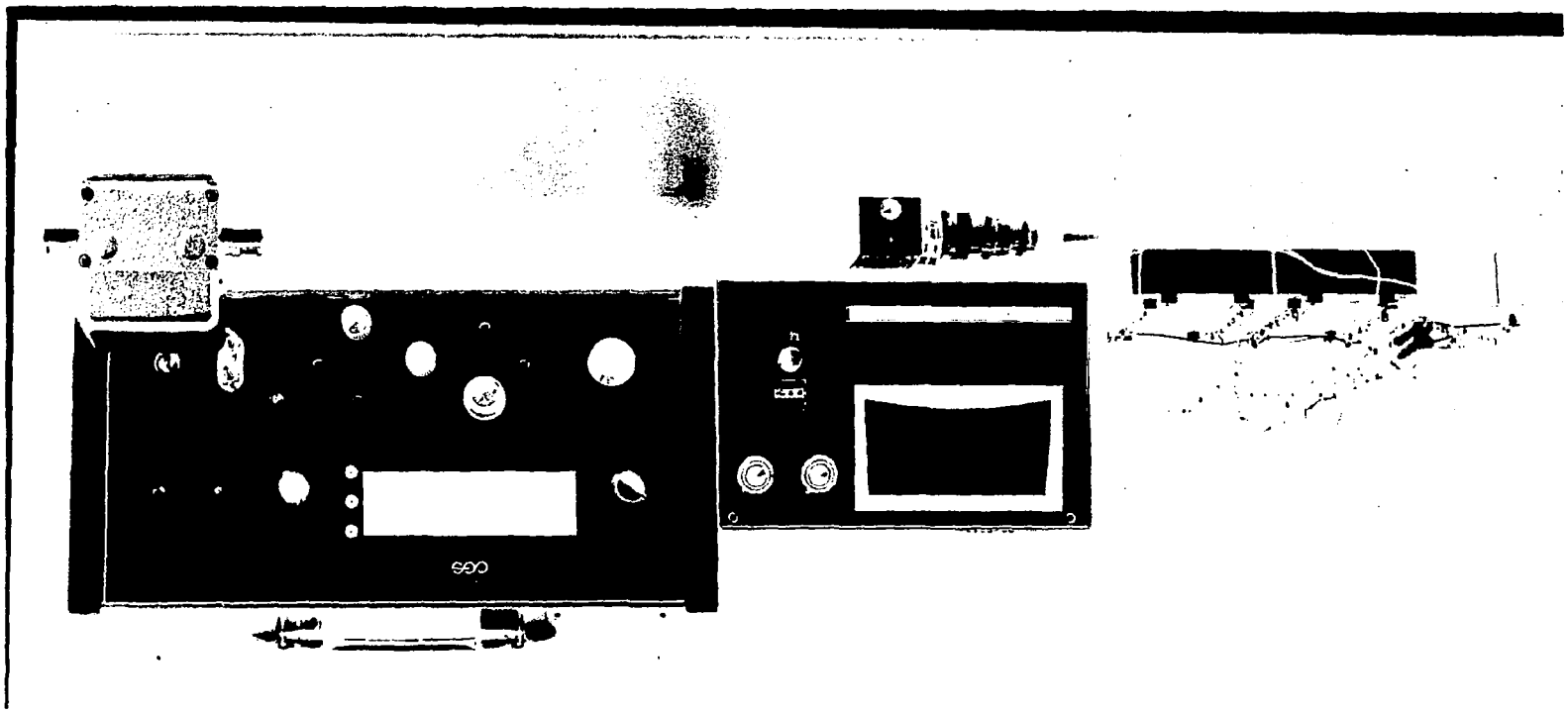
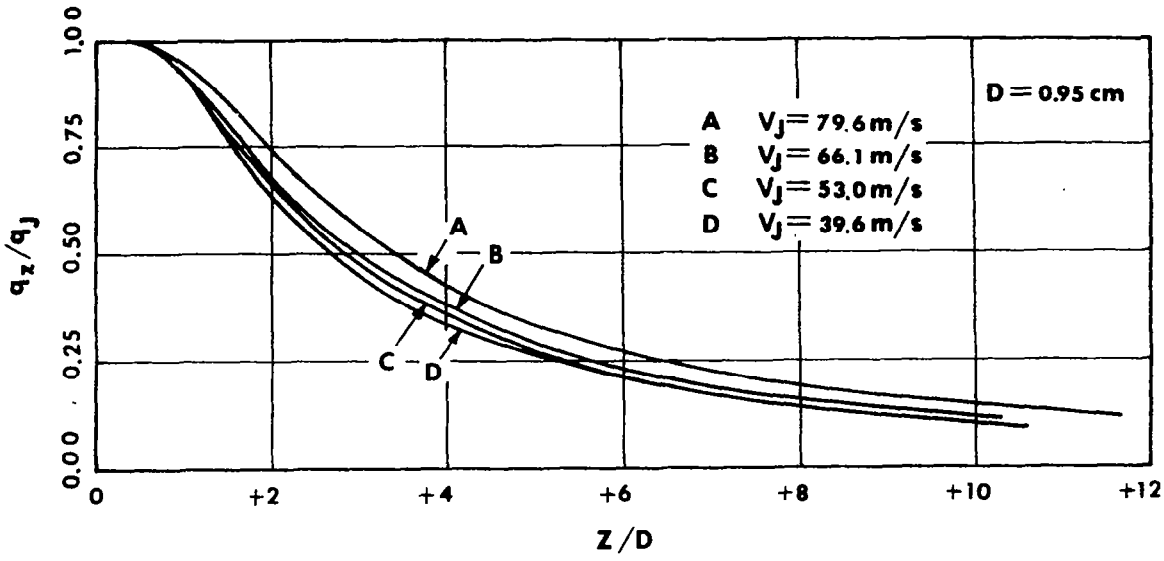
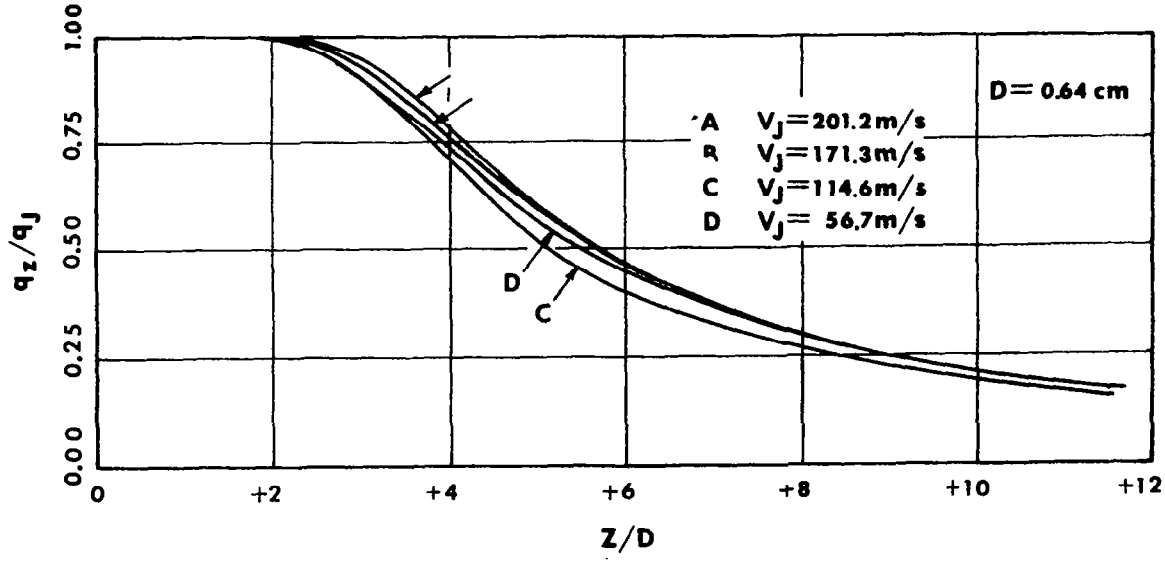


Figure 5. - Pressure-sensing instrumentation.



(a) D = 0.95 cm



(b) D = 0.64 cm

Figure 6. - Static jet dynamic-pressure decay characteristics.

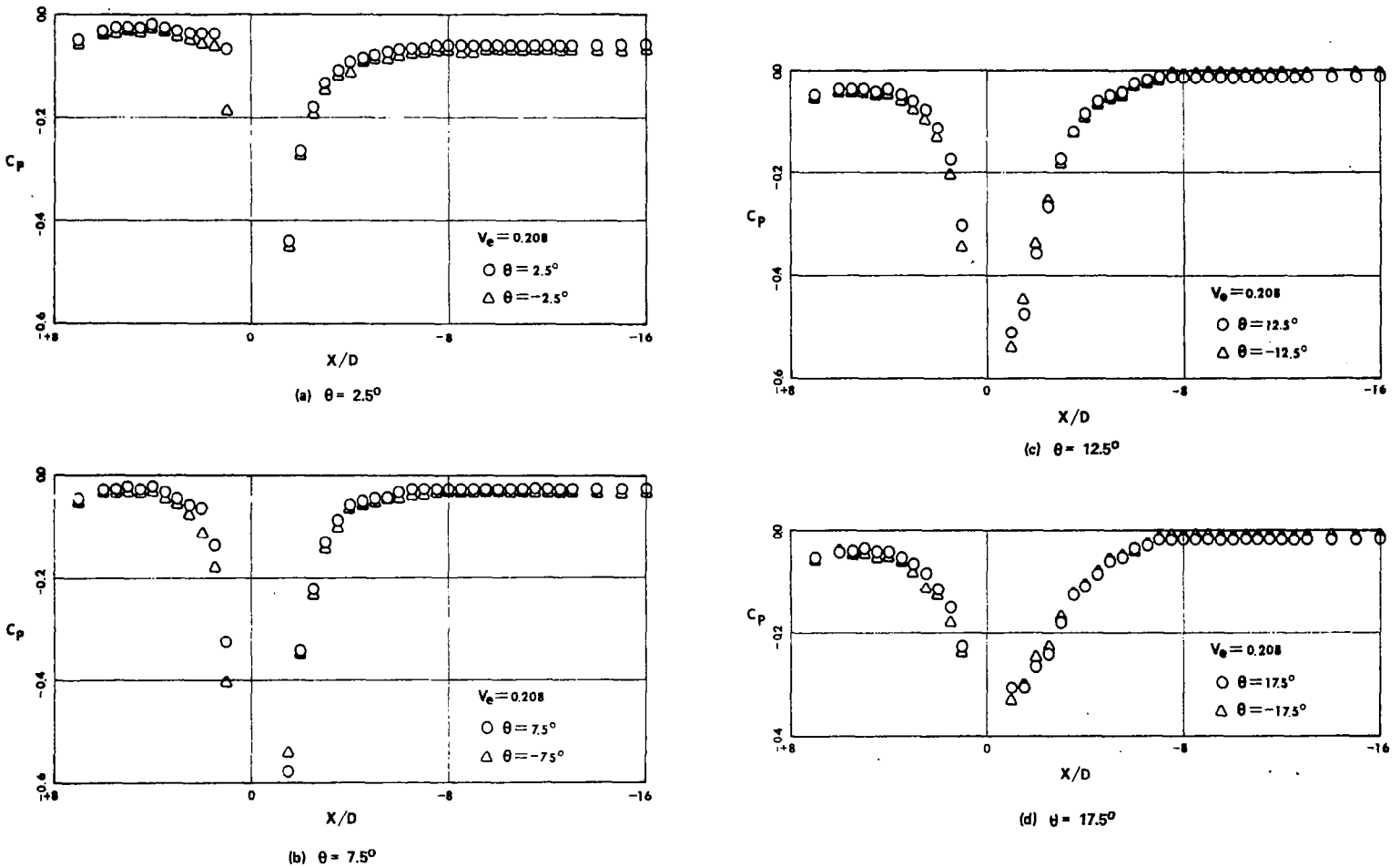


Figure 7. - C_p symmetry on the surface of cylinder.

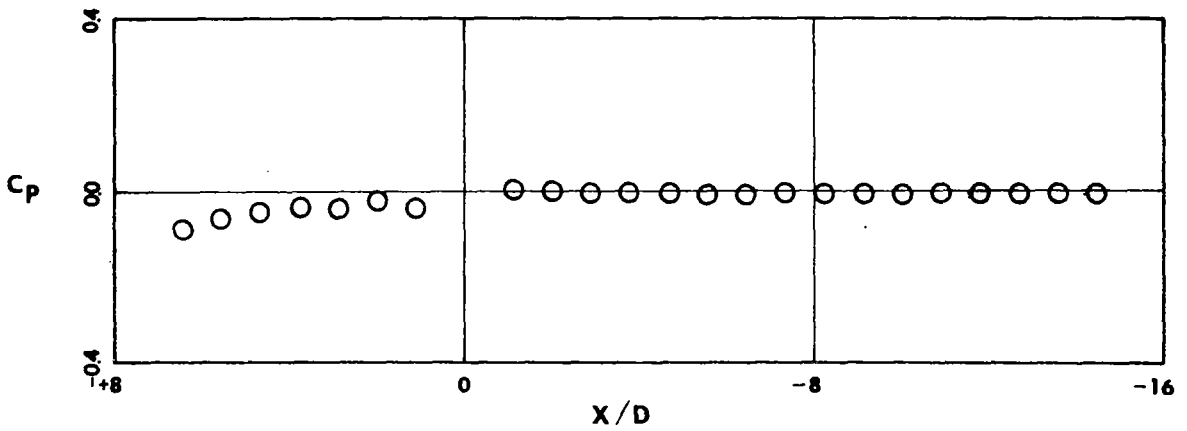


Figure 8. - C_p profile on the cylinder surface with zero jet flow.

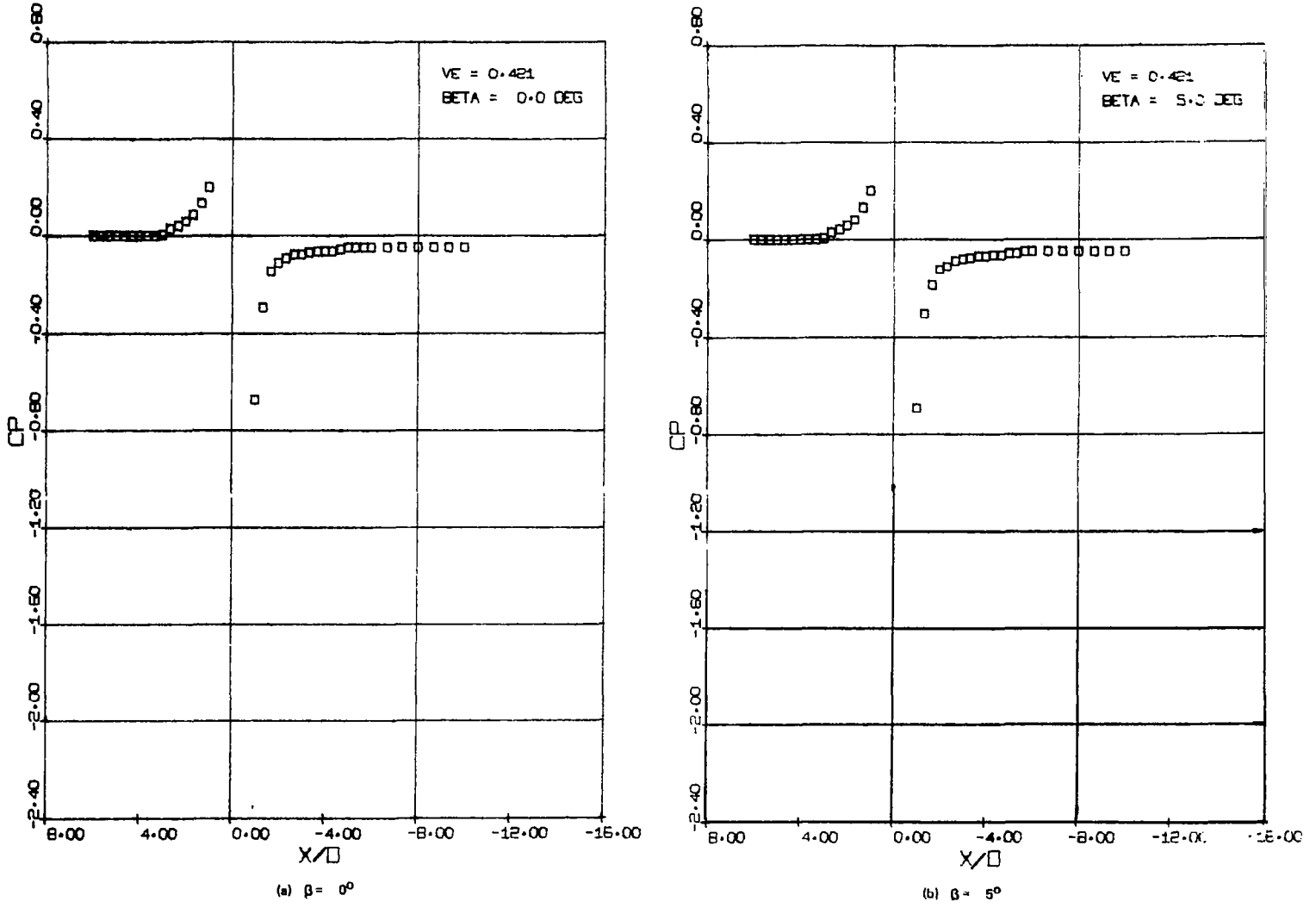
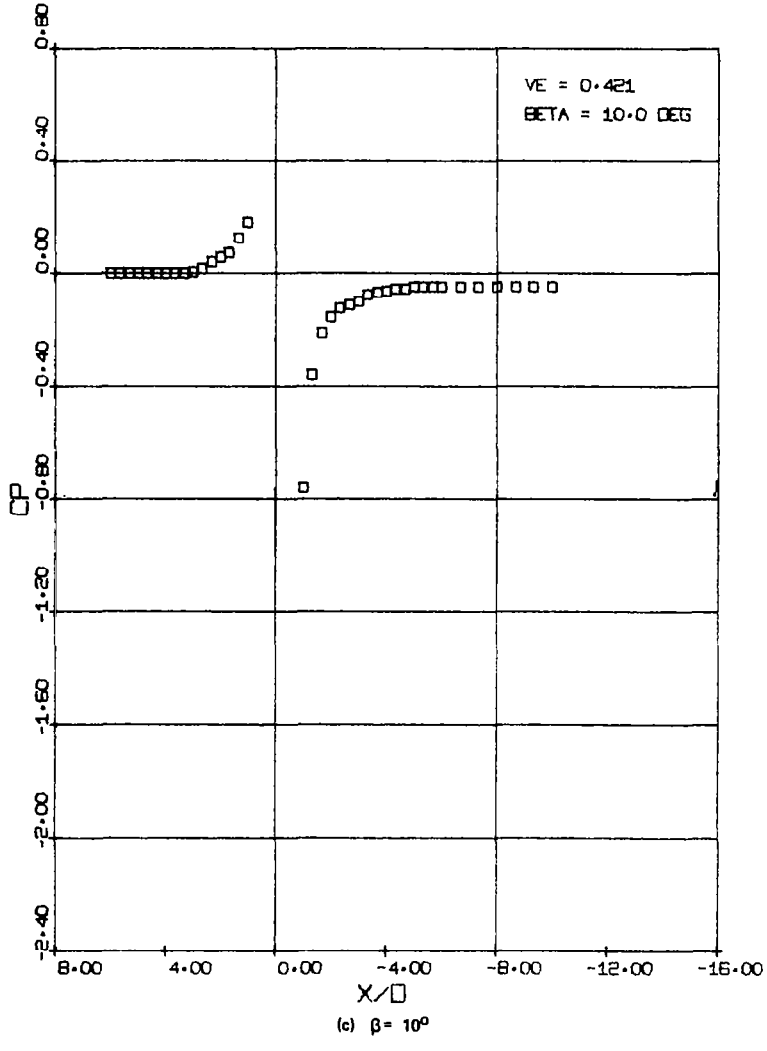
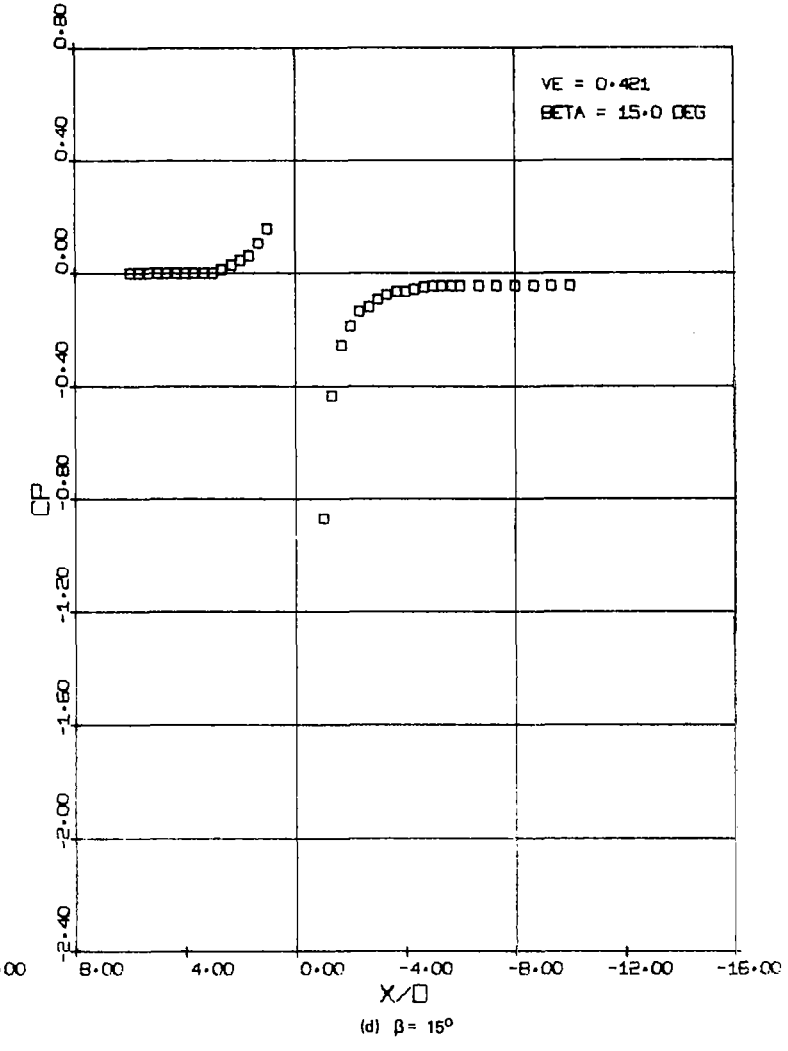


Figure 9. - C_p profiles for V_e = 0.421 with the 0.95-cm (0.375-in.) nozzle in the flat plate.

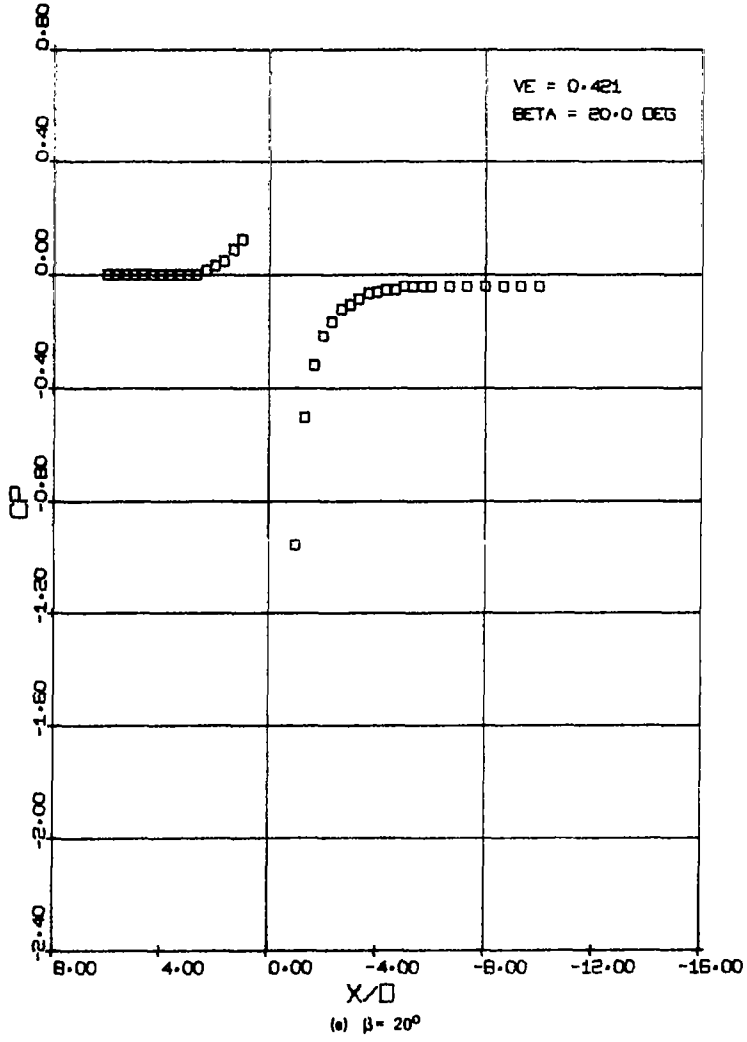


(c) $\beta = 10^{\circ}$

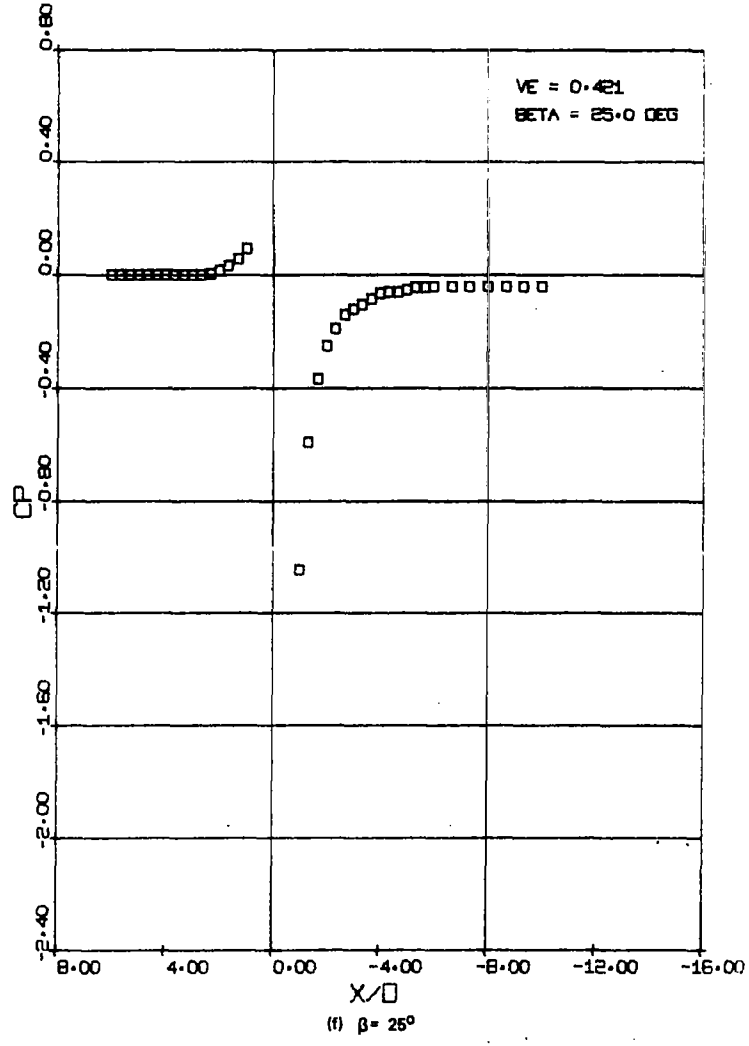


(d) $\beta = 15^{\circ}$

Figure 9. - Continued.



(e) $\beta = 20^{\circ}$



(f) $\beta = 25^{\circ}$

Figure 9. - Continued.

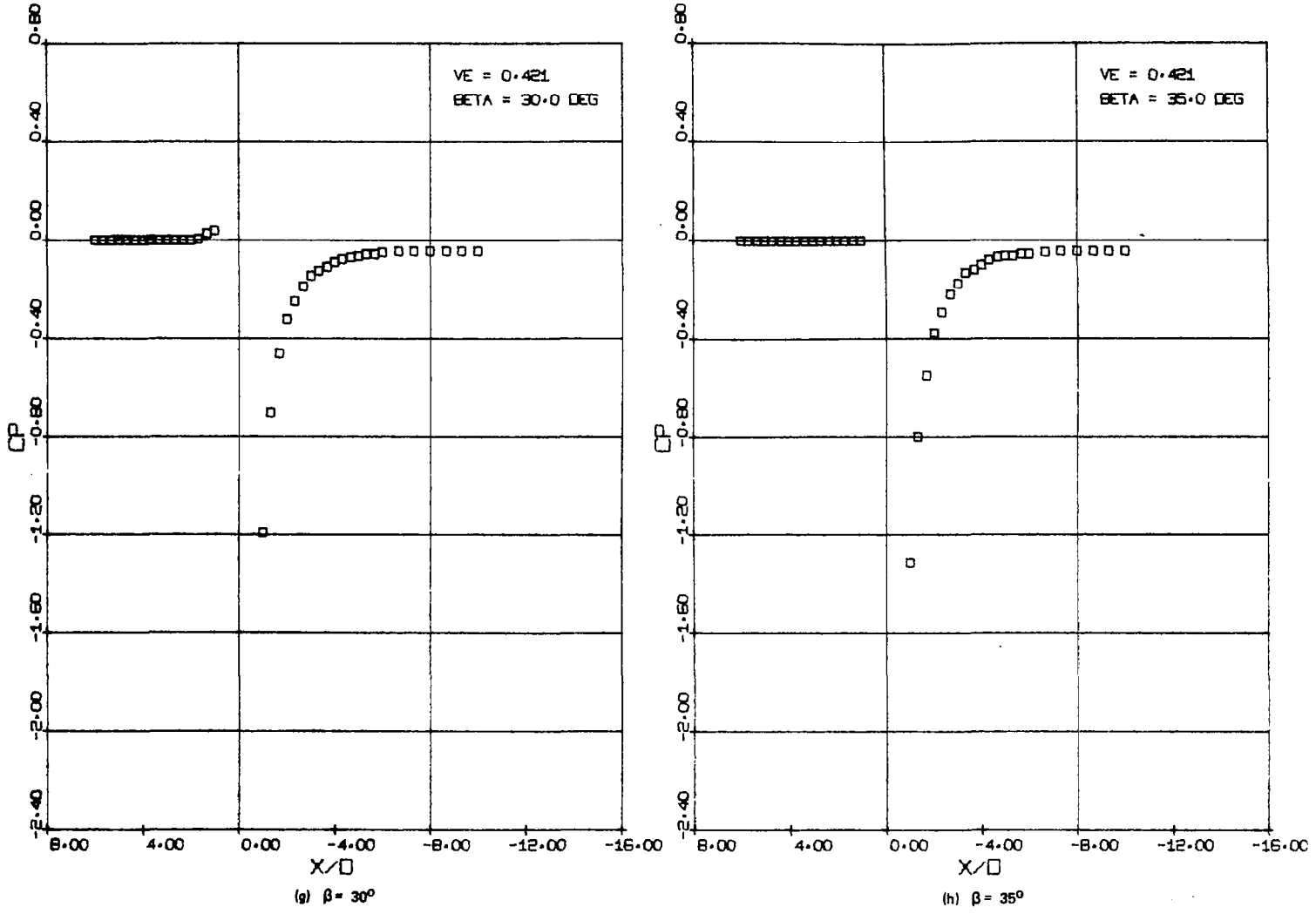


Figure 9. - Continued.

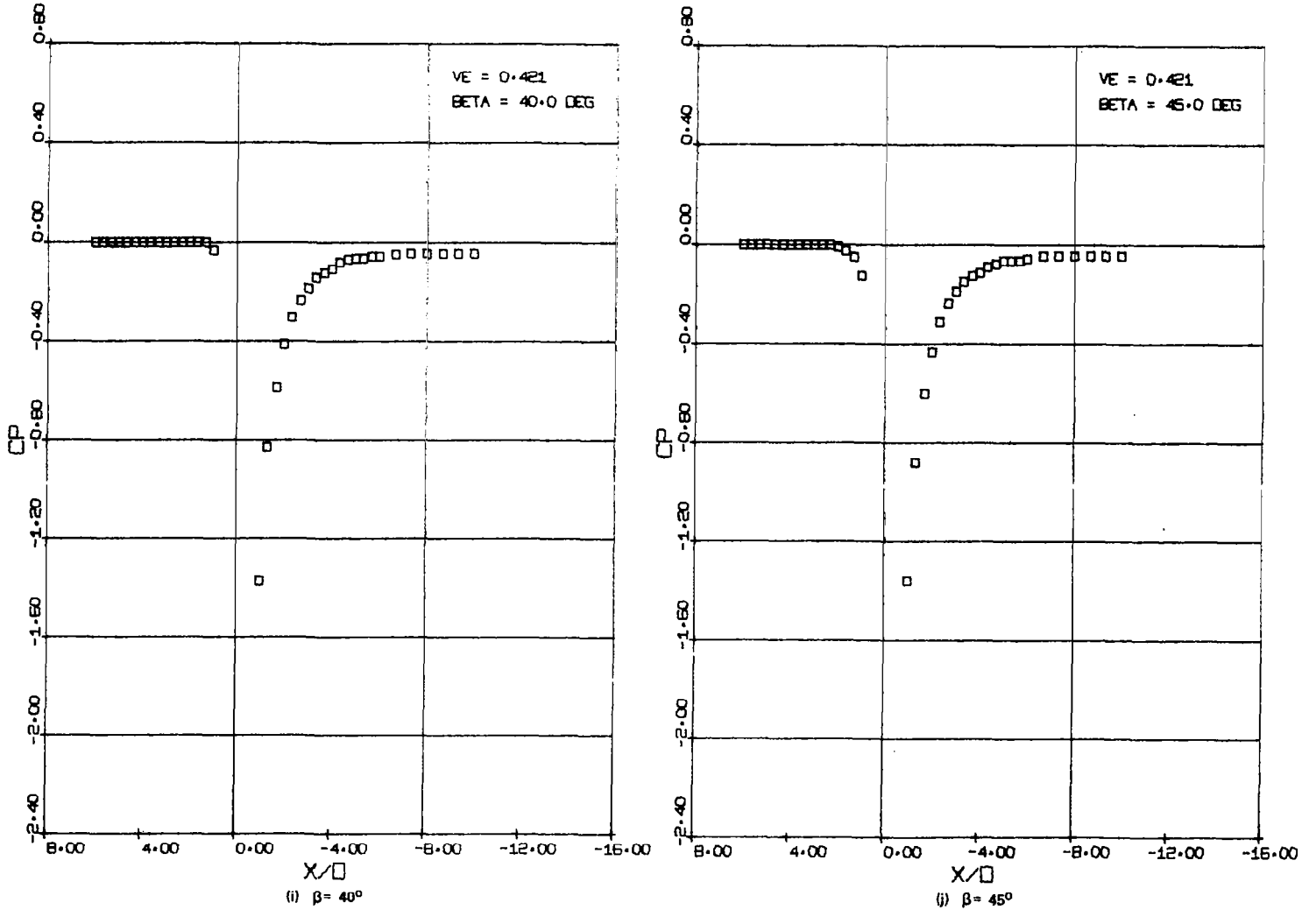
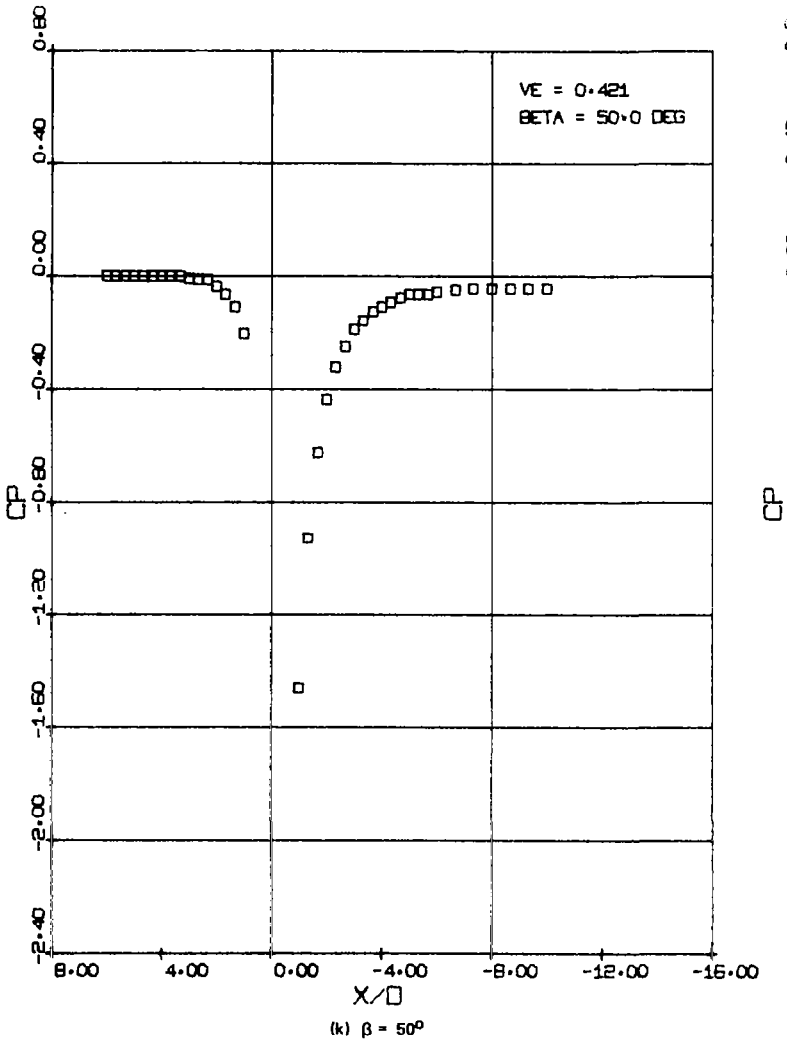
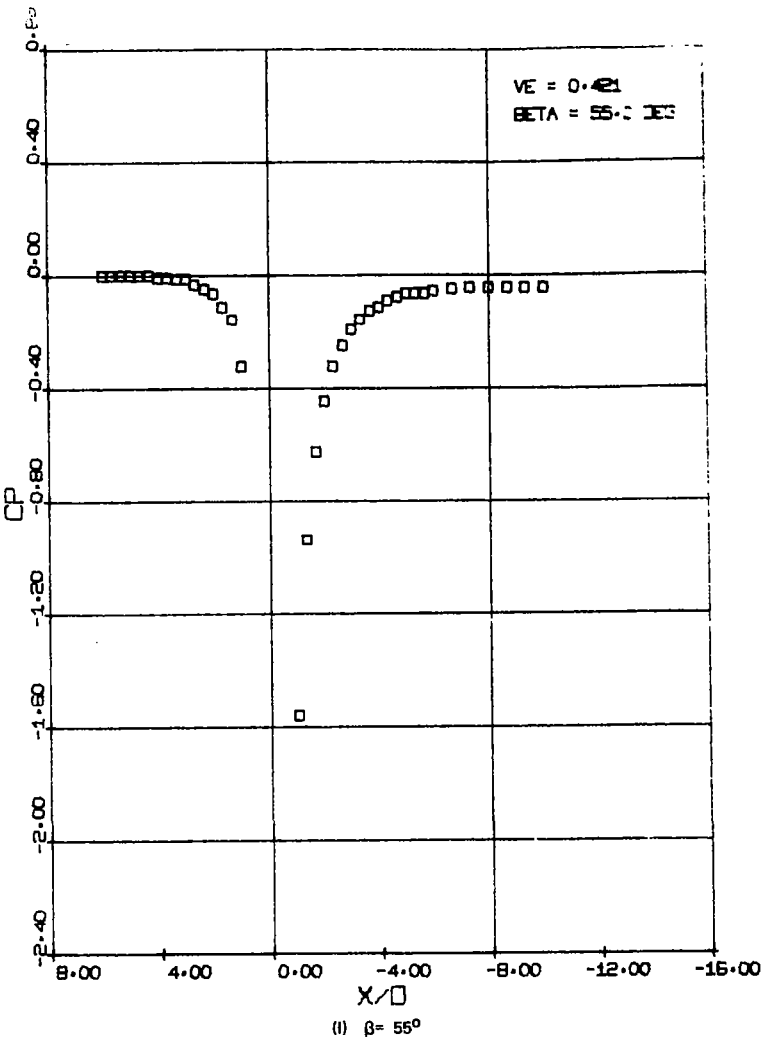


Figure 9. - Continued.

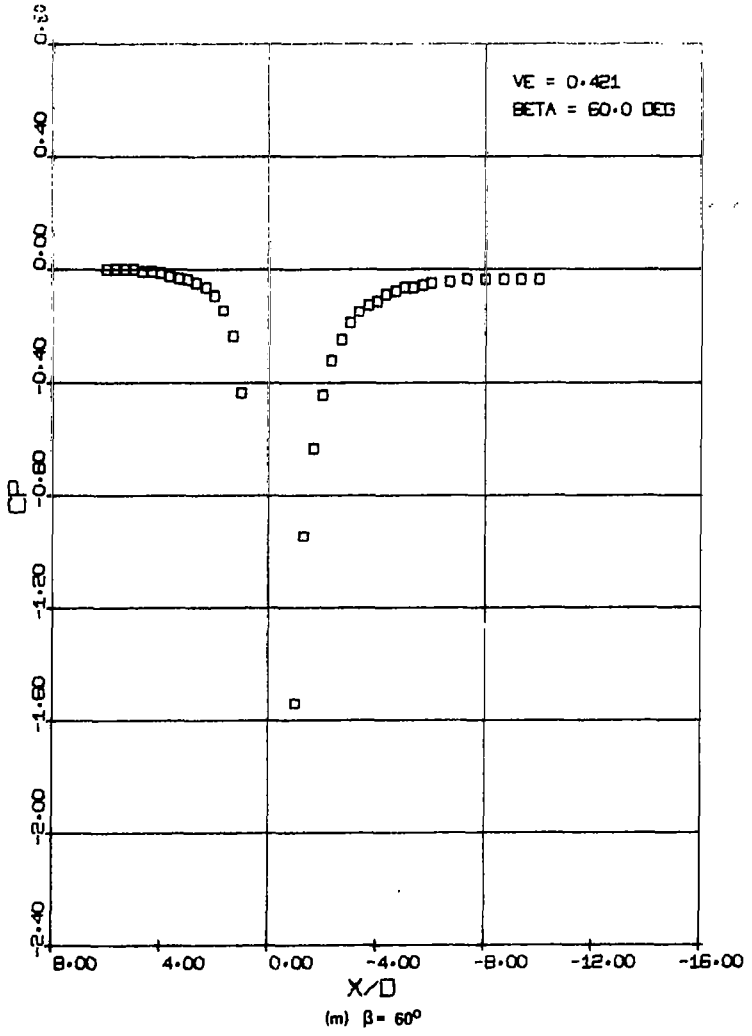


(k) $\beta = 50^{\circ}$

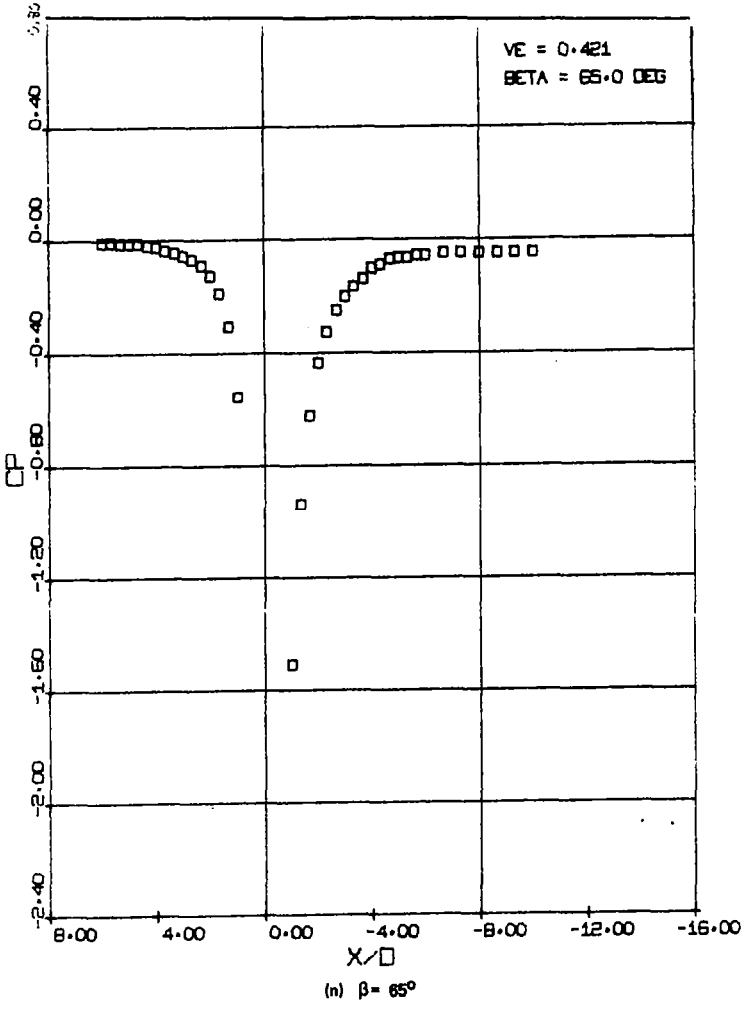


(l) $\beta = 55^{\circ}$

Figure 9. - Continued.

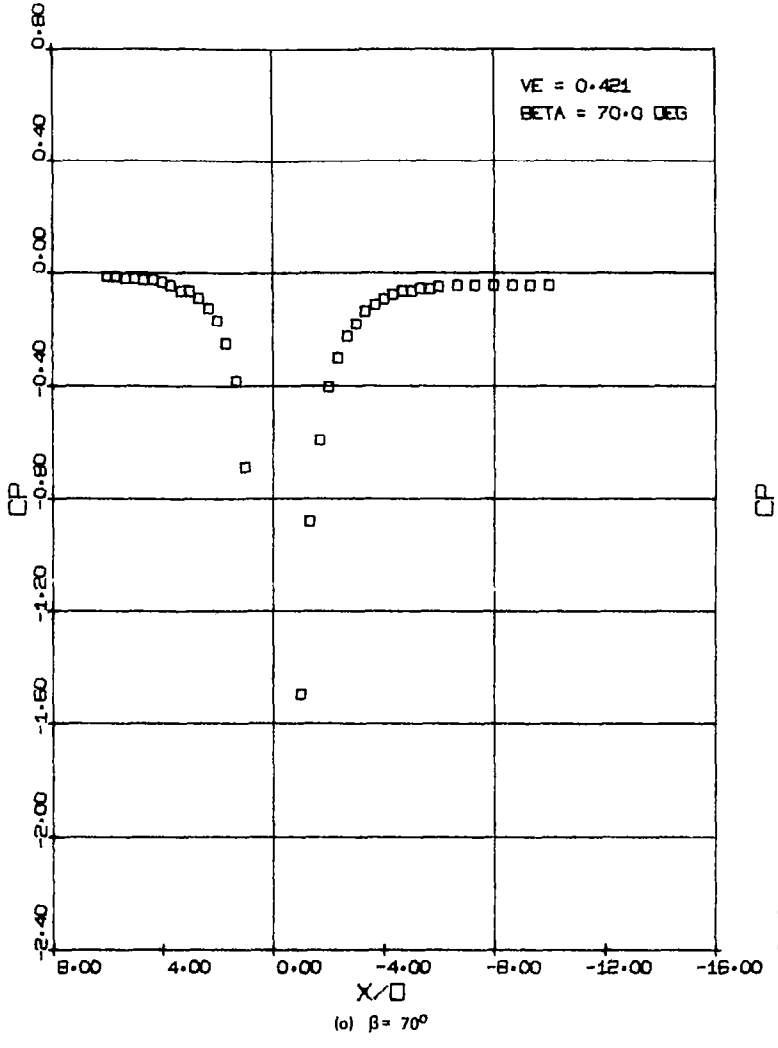


(m) $\beta = 60°$

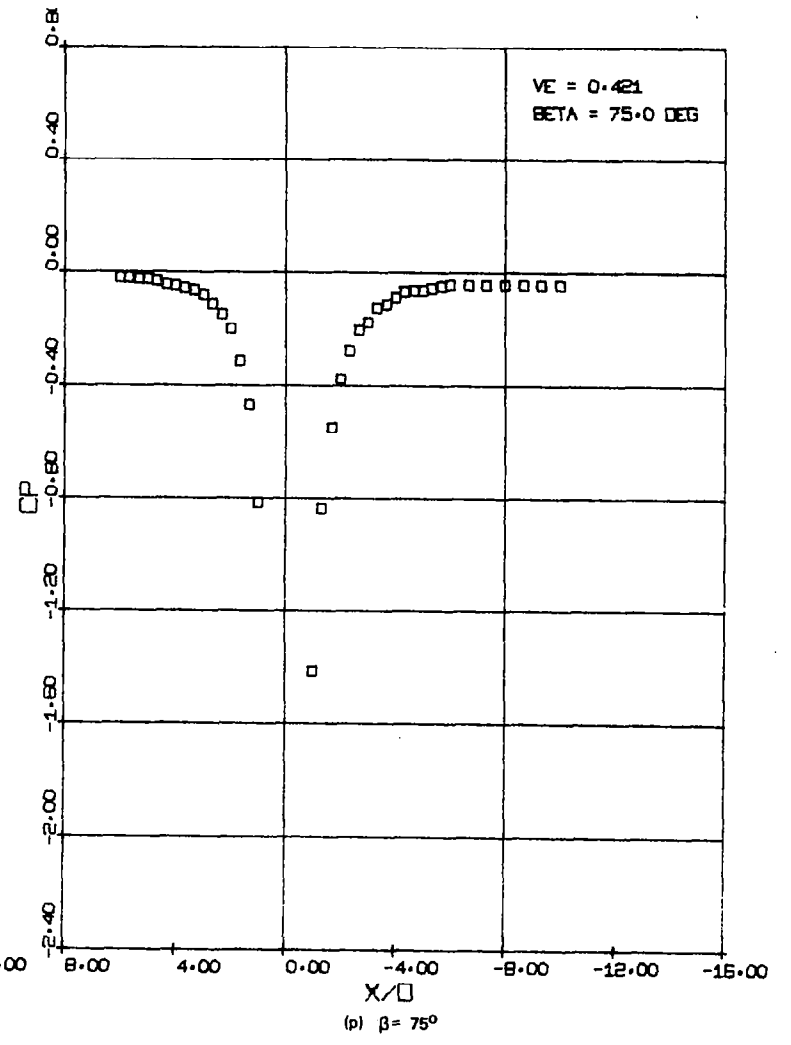


(n) $\beta = 65°$

Figure 9. - Continued.

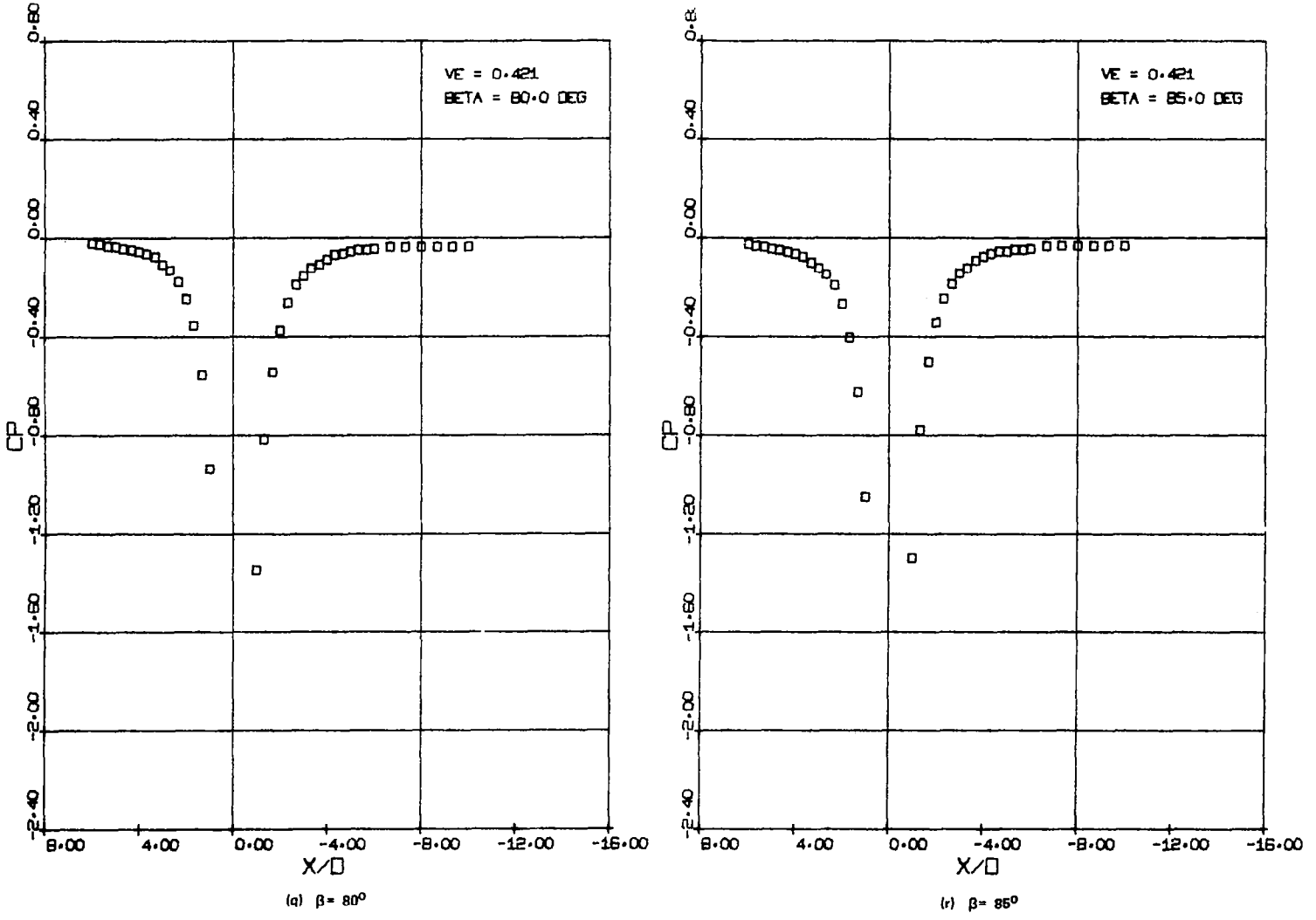


(o) $\beta = 70^{\circ}$



(p) $\beta = 75^{\circ}$

Figure 9. - Continued.



(q) β= 80°

(r) β= 85°

Figure 9. - Continued.

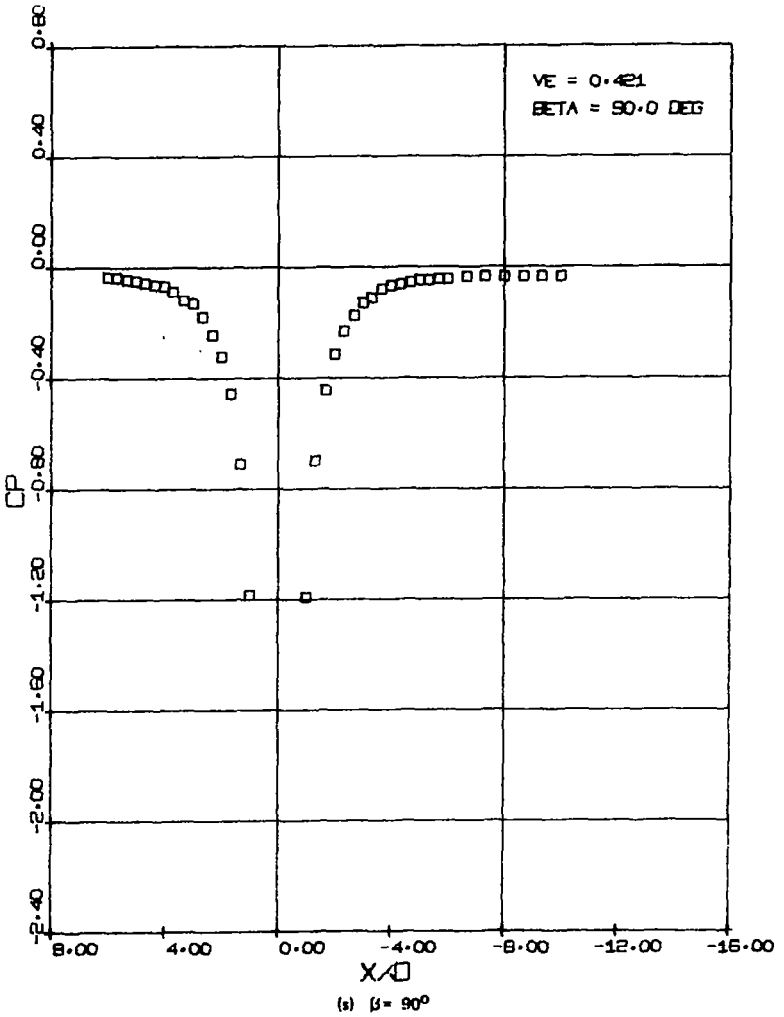


Figure 9. - Concluded.

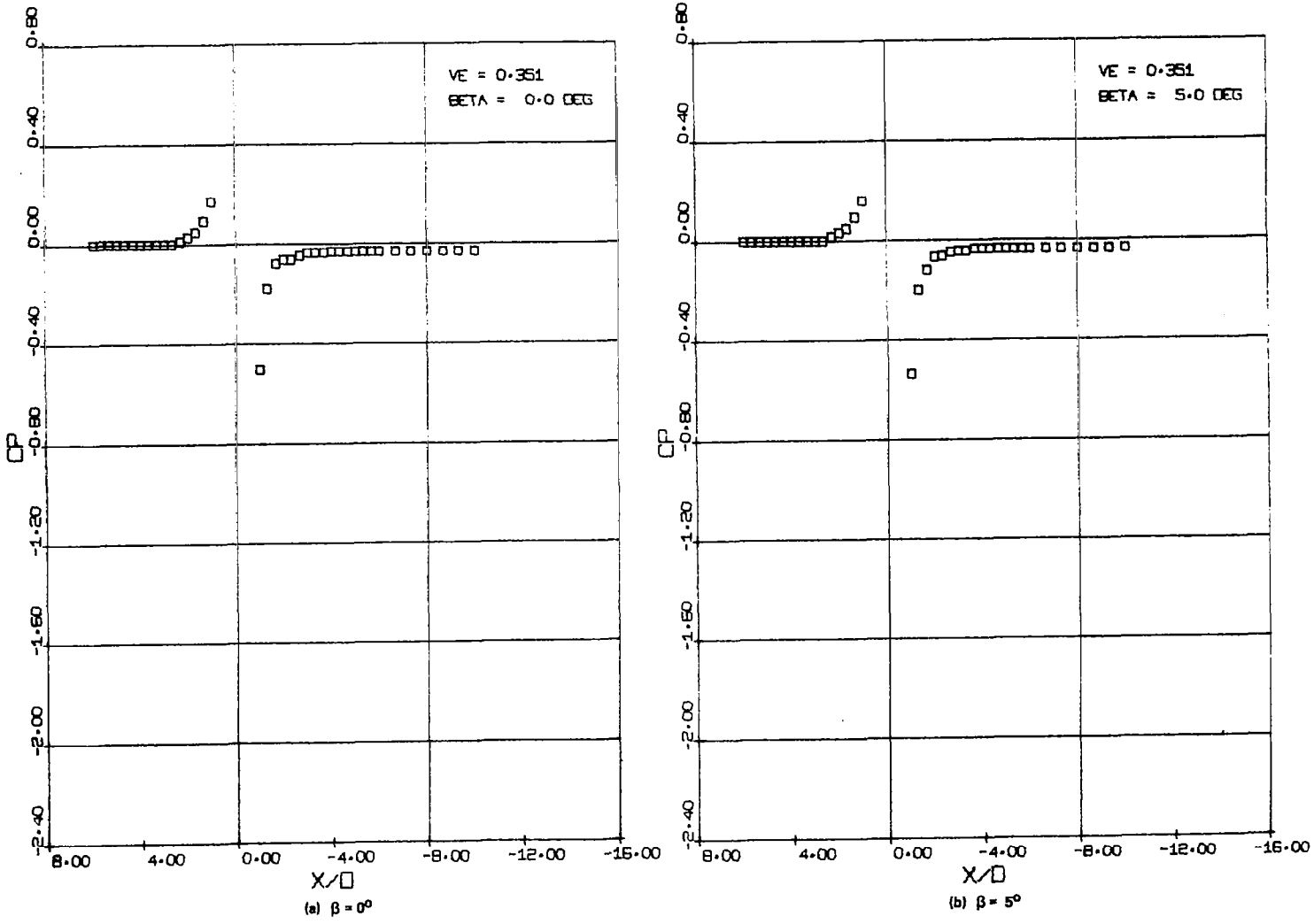
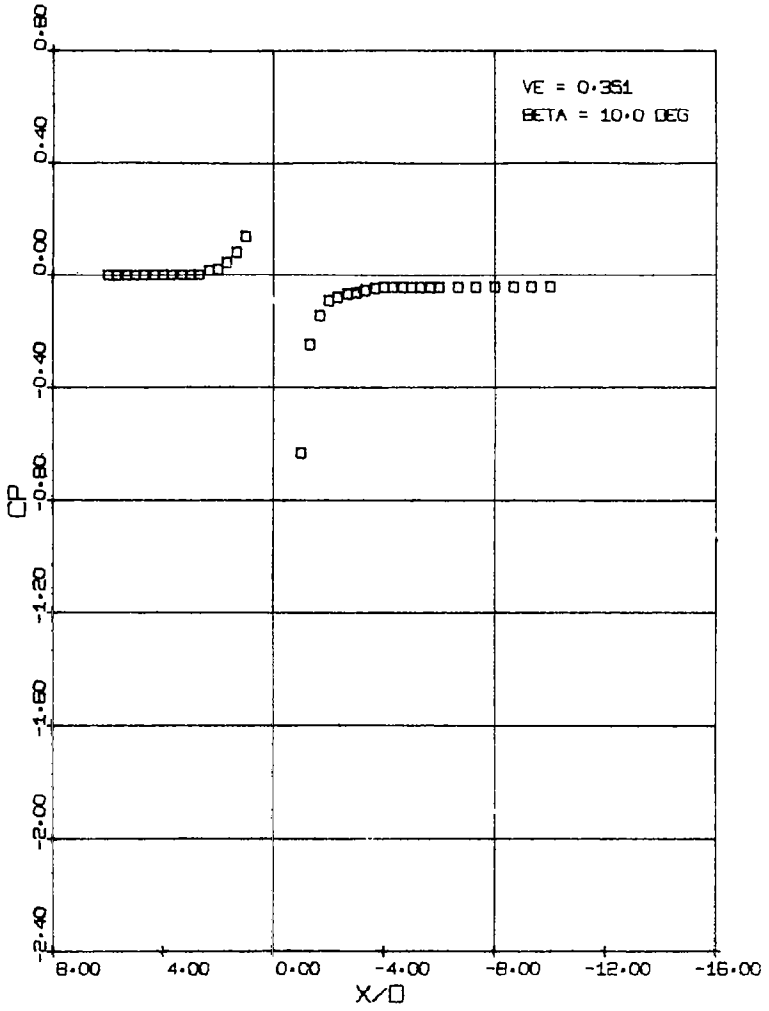
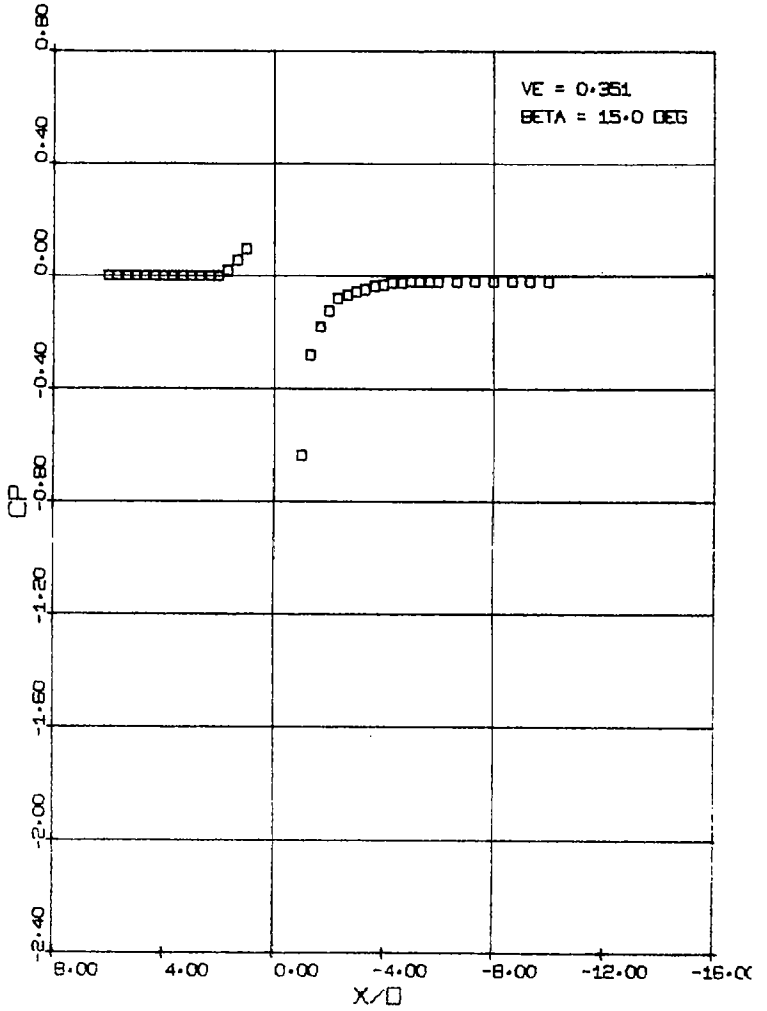


Figure 10. - C_p profiles for V_e = 0.351 with the 0.95-cm (0.375-in.) nozzle in the flat plate.

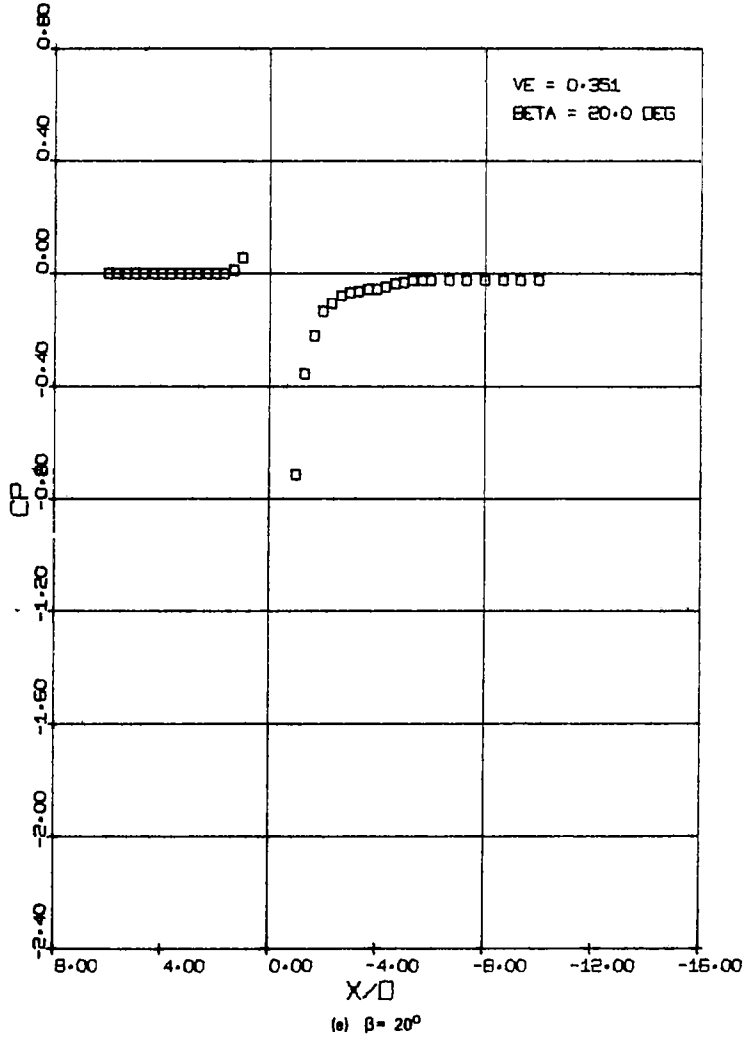


(c) $\beta = 10^{\circ}$

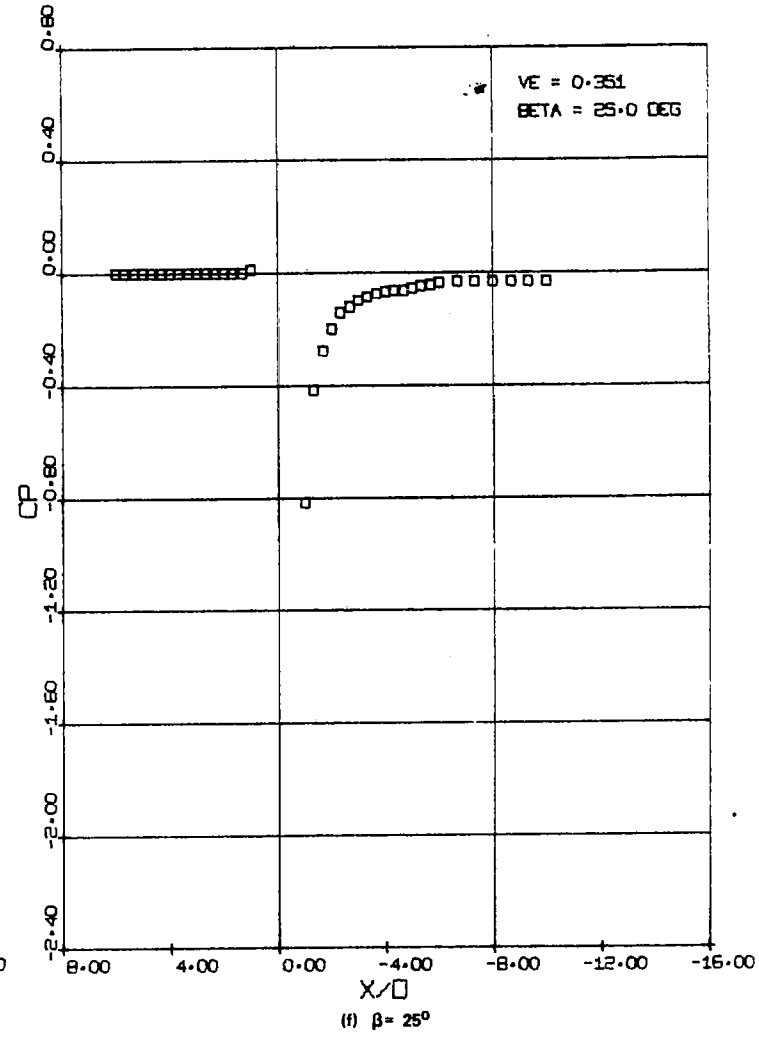


(d) $\beta = 15^{\circ}$

Figure 10. - Continued.



(e) $\beta = 20^{\circ}$



(f) $\beta = 25^{\circ}$

Figure 10. - Continued.

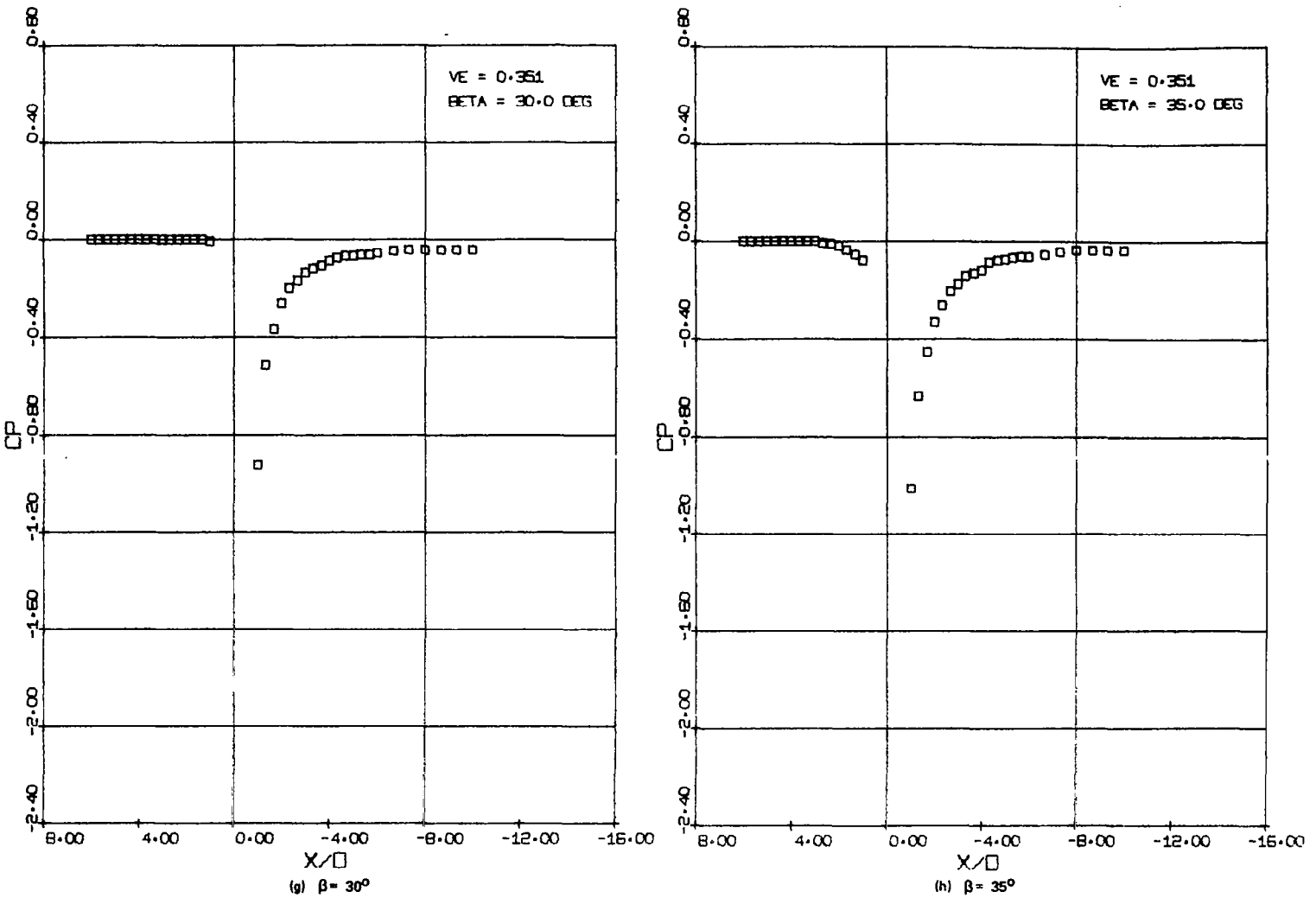


Figure 10. - Continued.

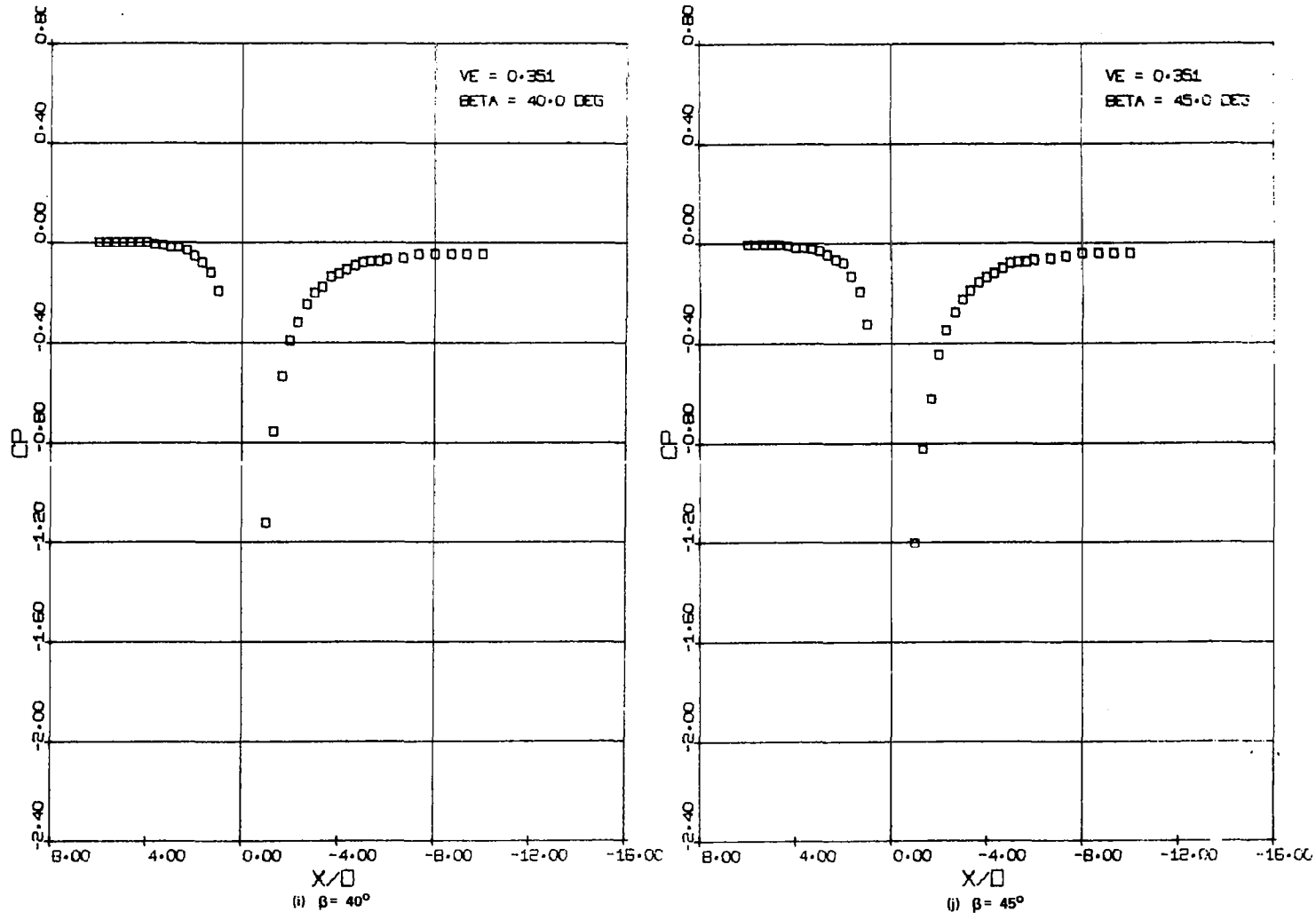
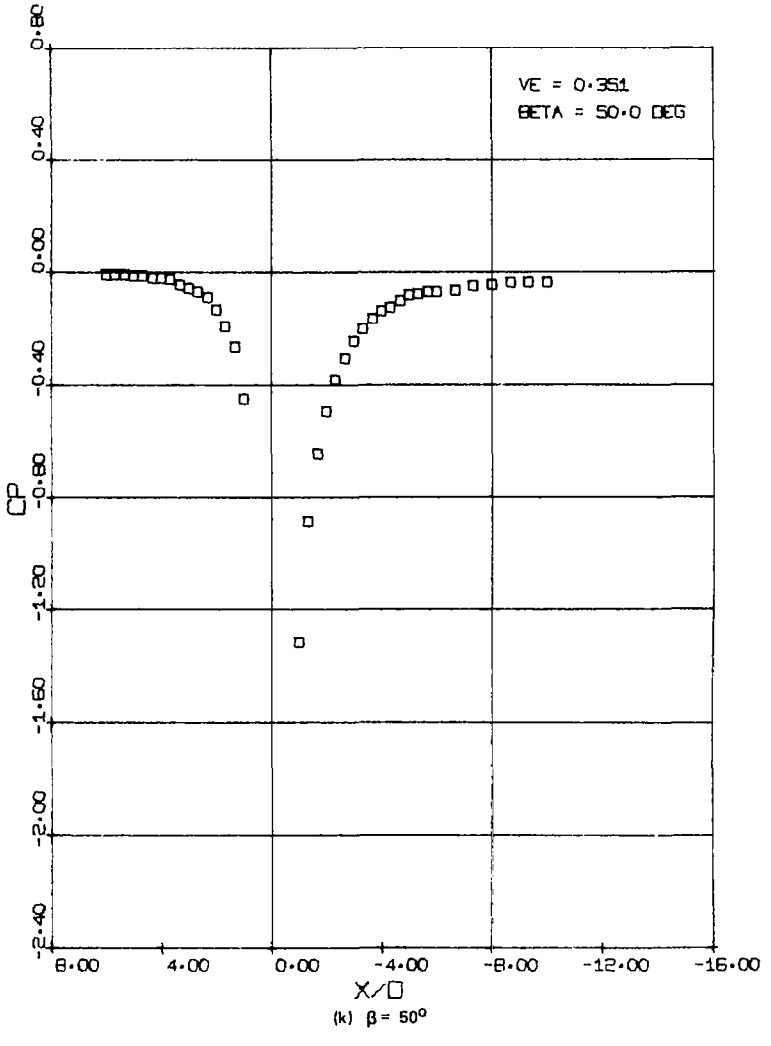
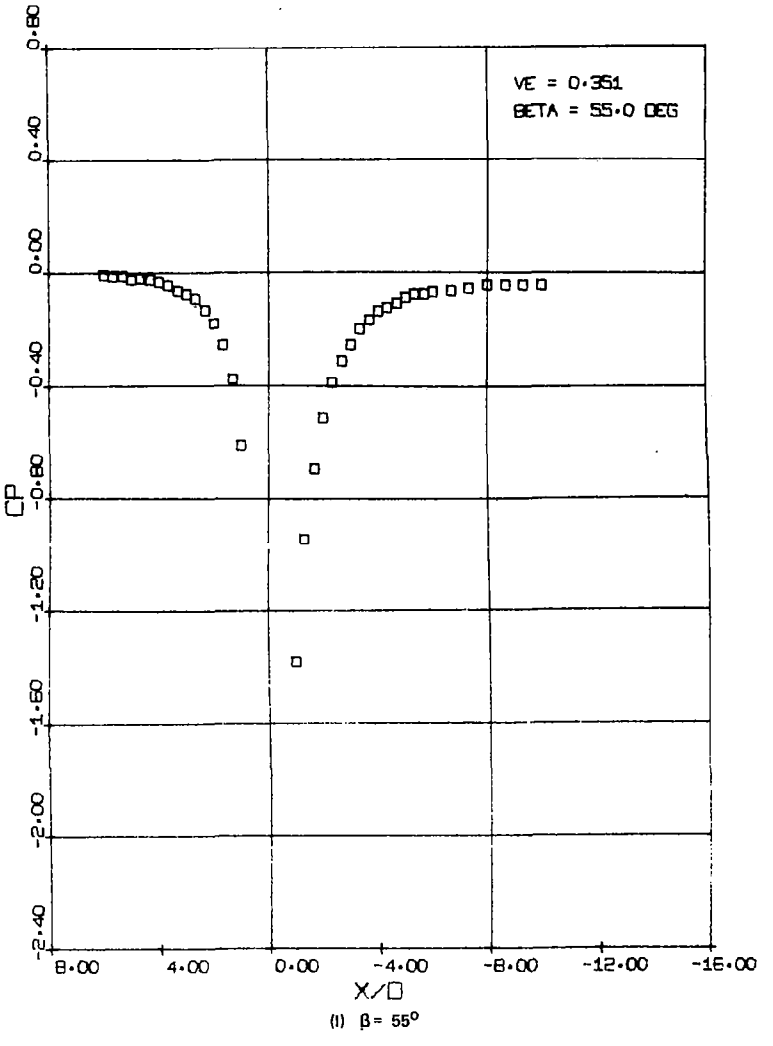


Figure 10. - Continued.



(k) $\beta = 50^{\circ}$



(l) $\beta = 55^{\circ}$

Figure 10. - Continued.

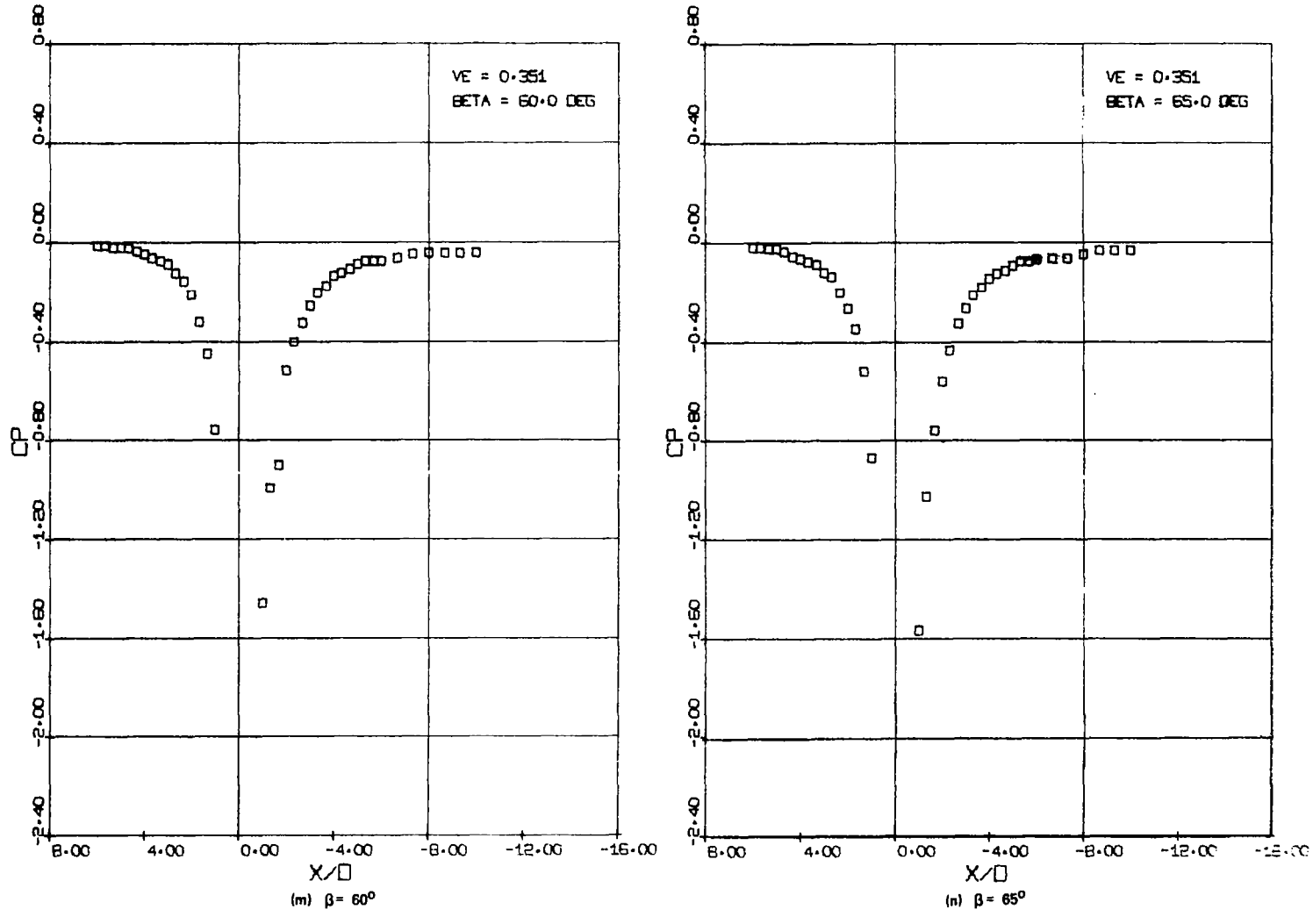
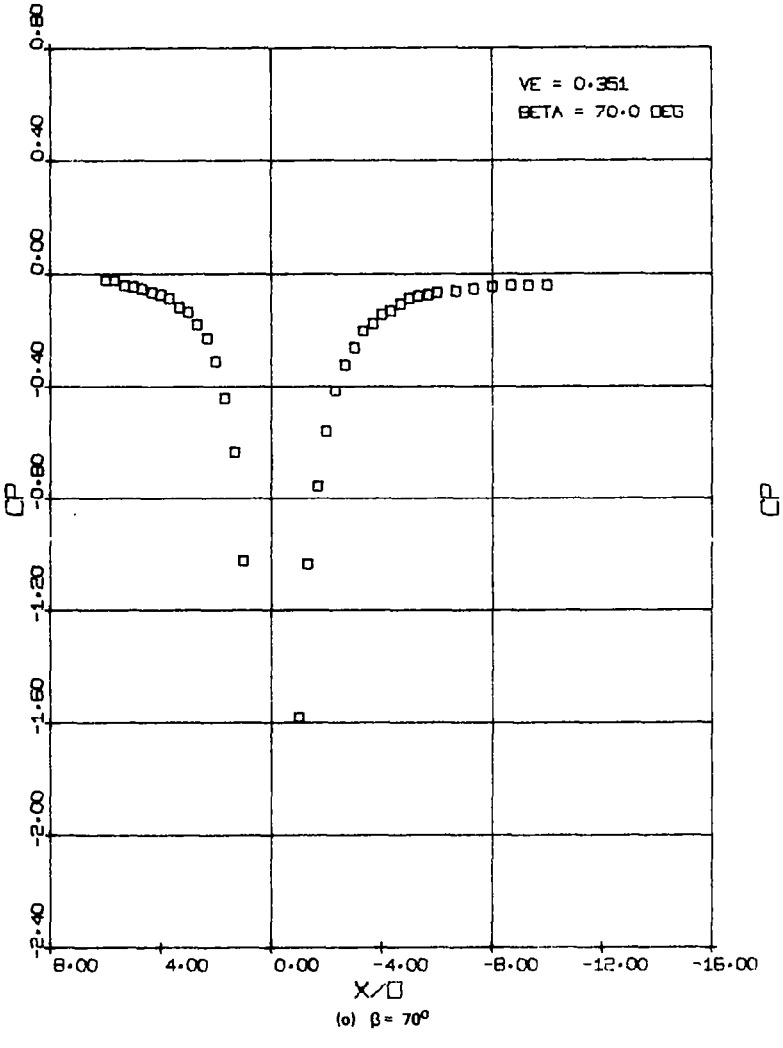
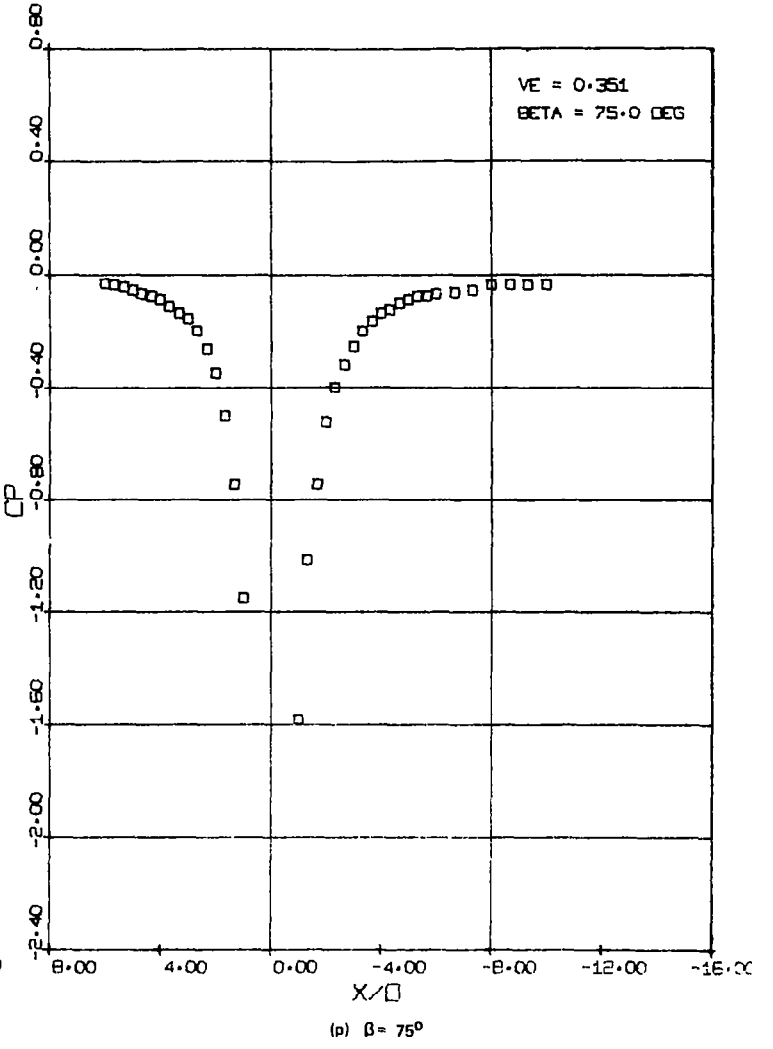


Figure 10. - Continued.

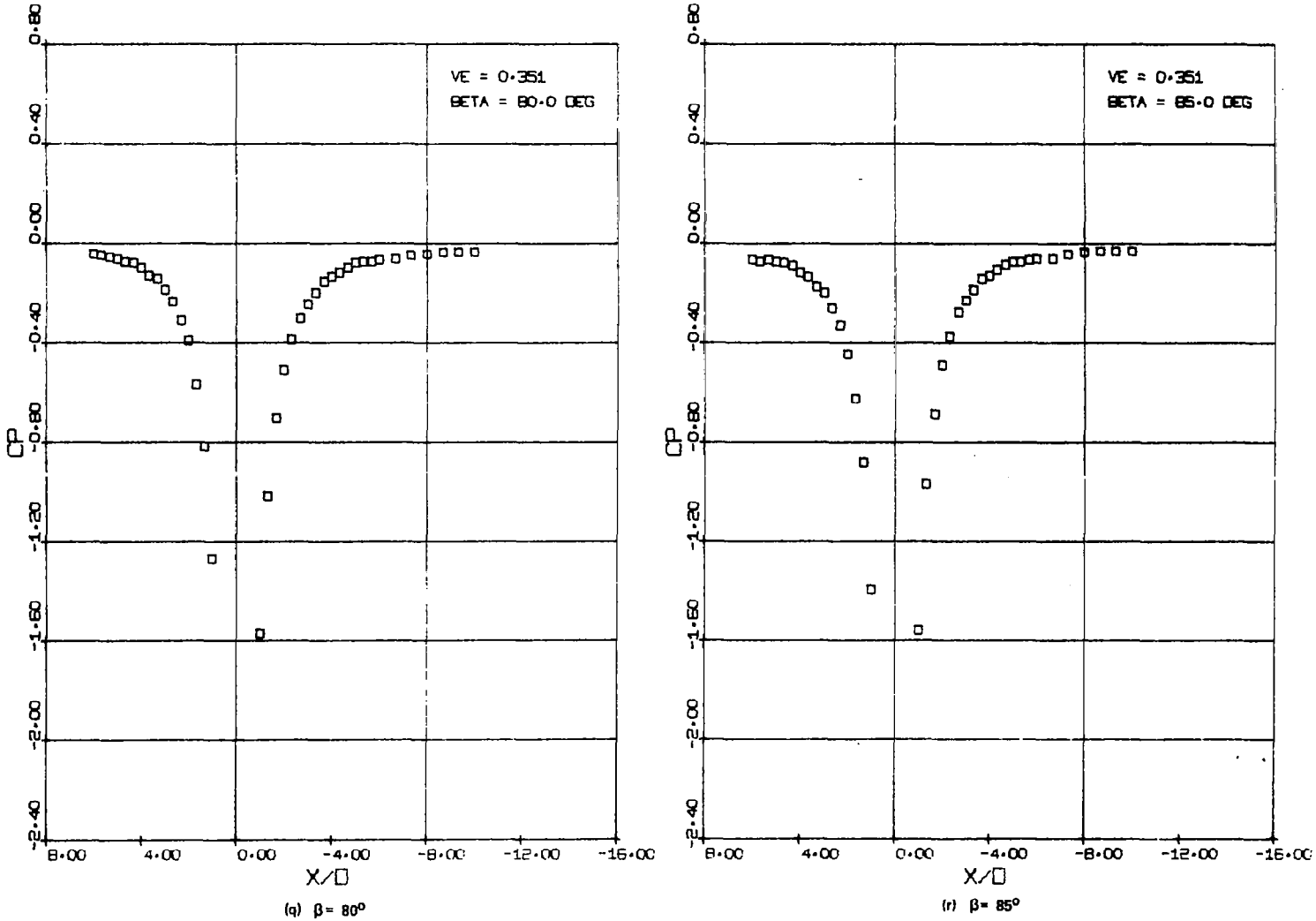


(o) $\beta = 70^{\circ}$



(p) $\beta = 75^{\circ}$

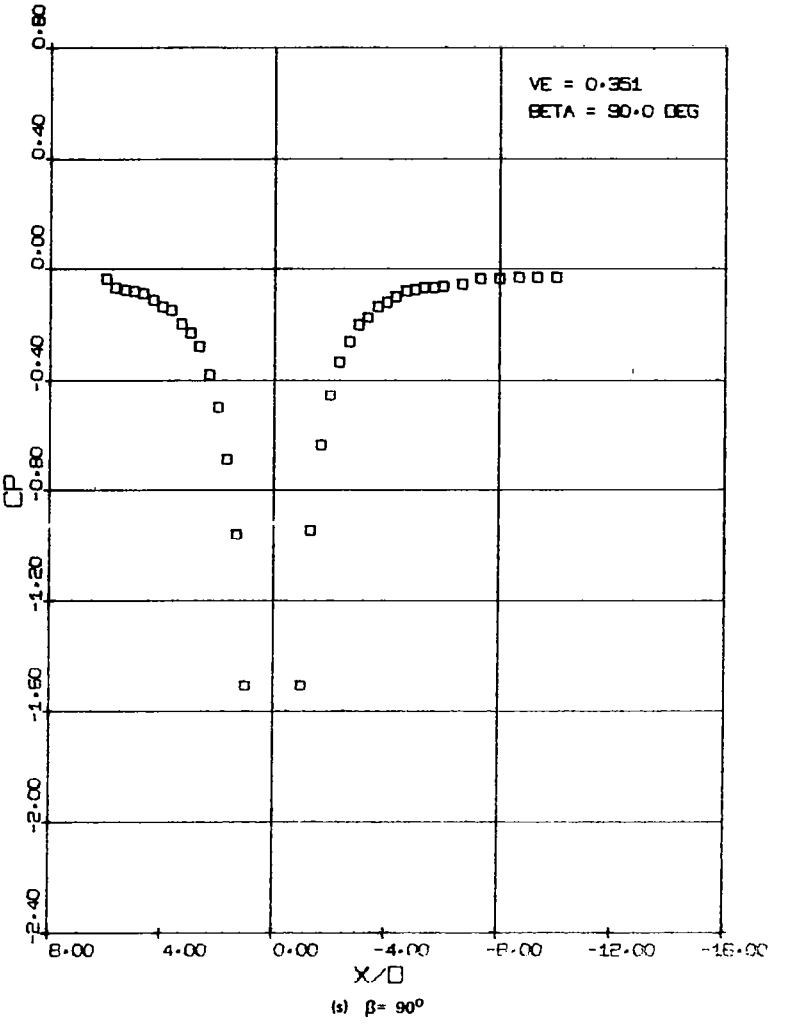
Figure 10. - Continued.



(q) β= 80°

(r) β= 85°

Figure 10. - Continued.



(s) $\beta = 90^{\circ}$

Figure 10. - Concluded.

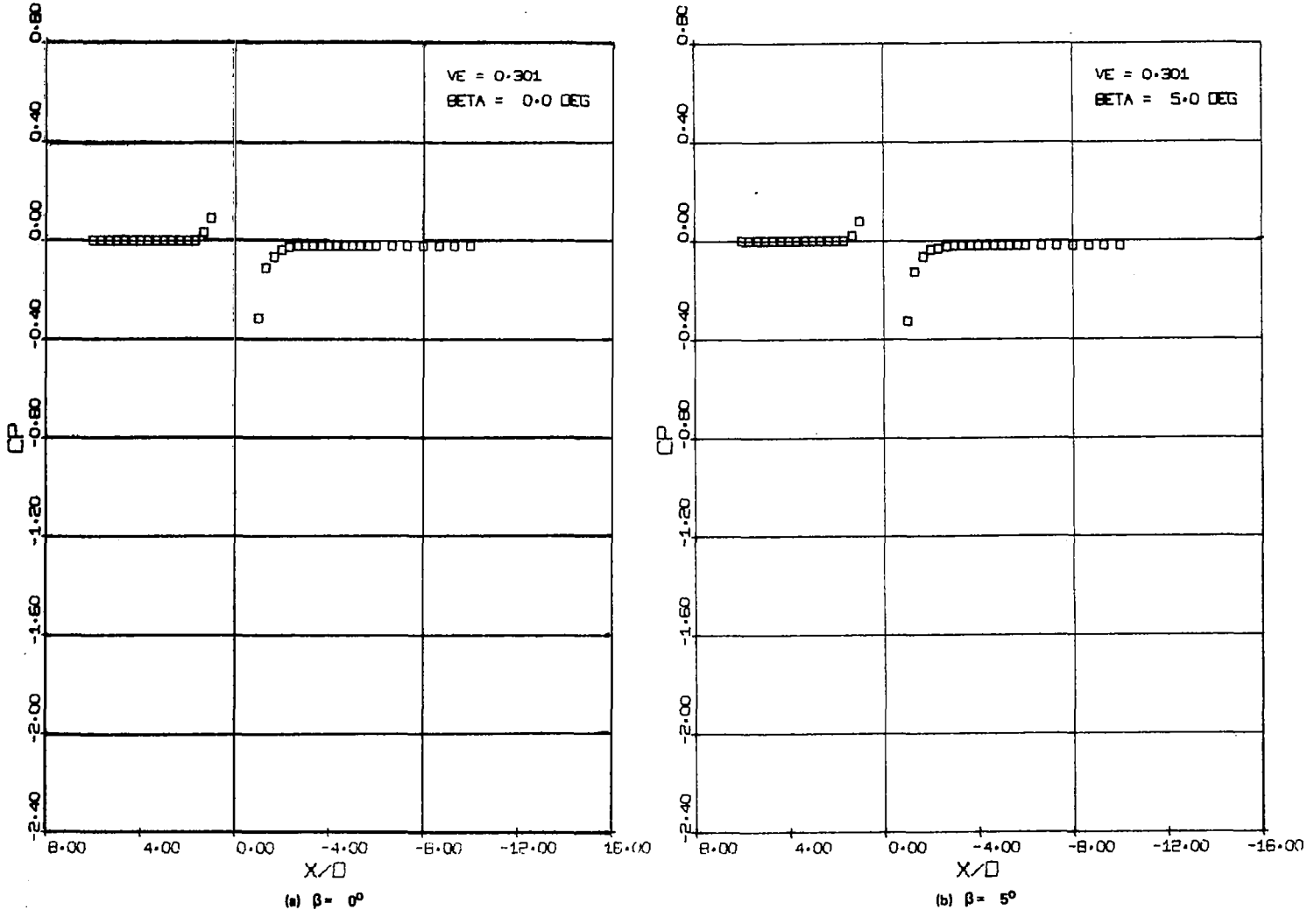
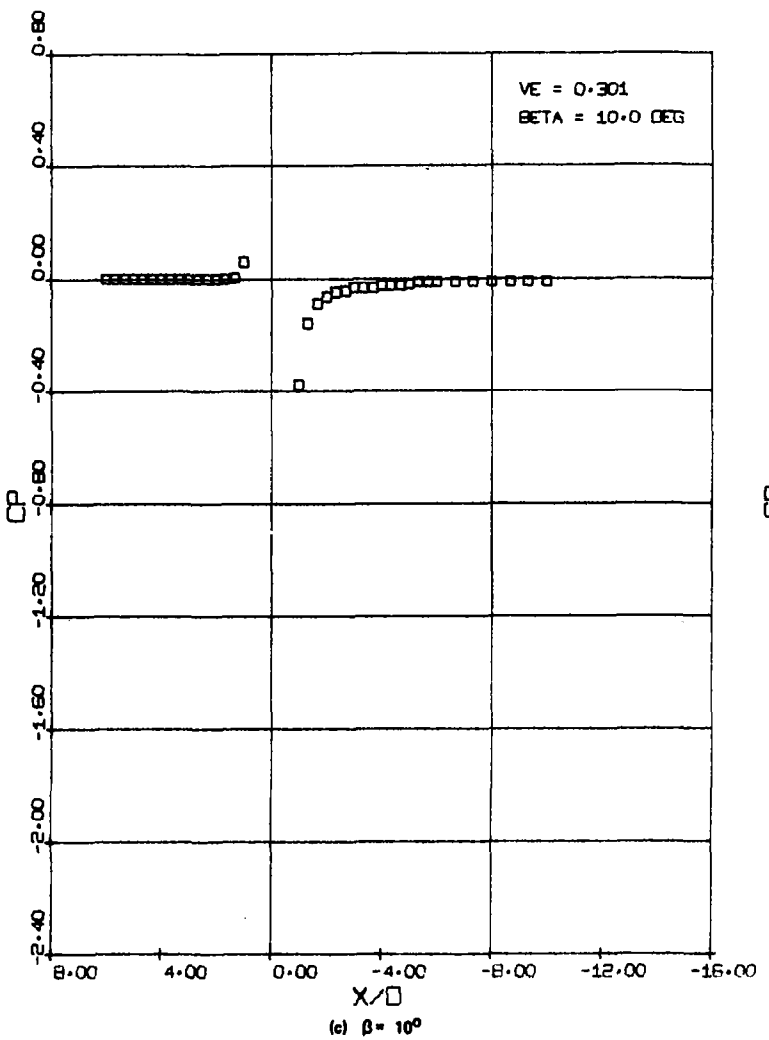
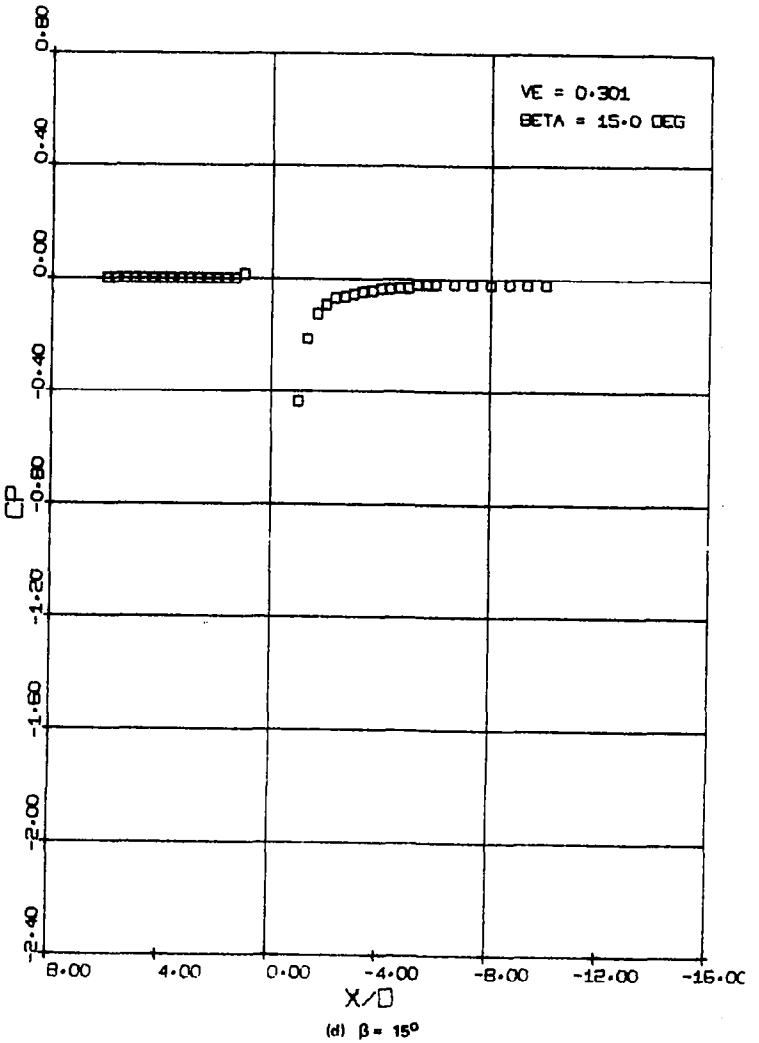


Figure 11. - C_p profiles for V_e = 0.301 with the 0.95-cm (0.375-in.) nozzle in the flat plate.

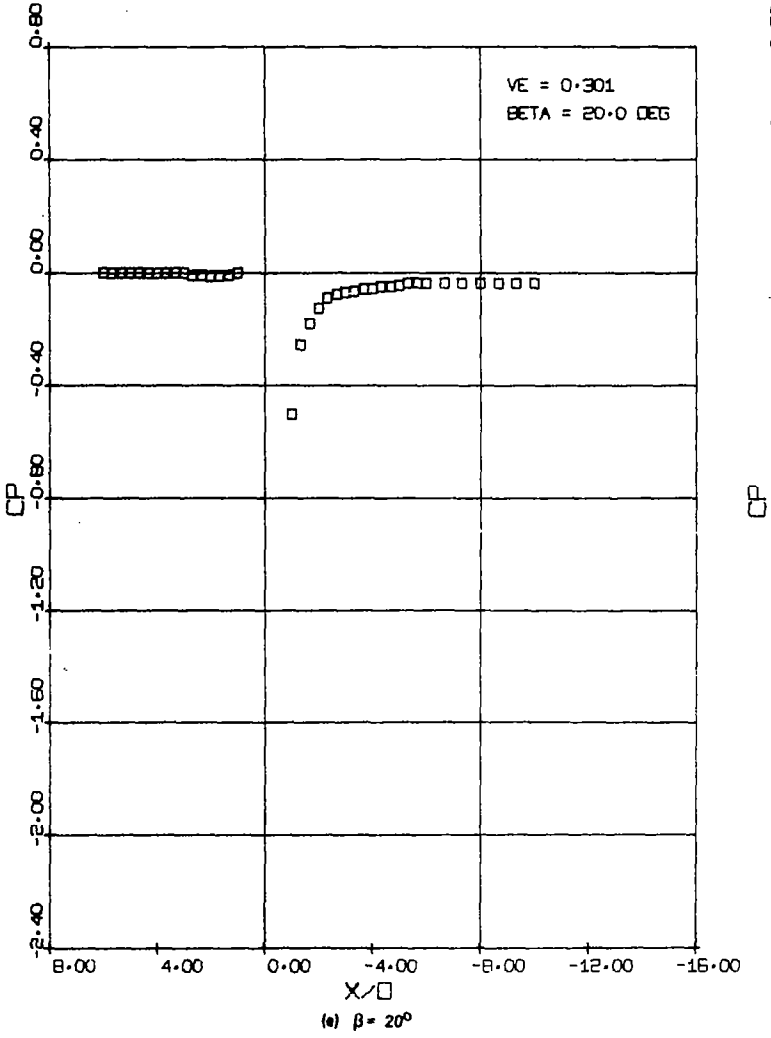


(c) $\beta = 10^{\circ}$

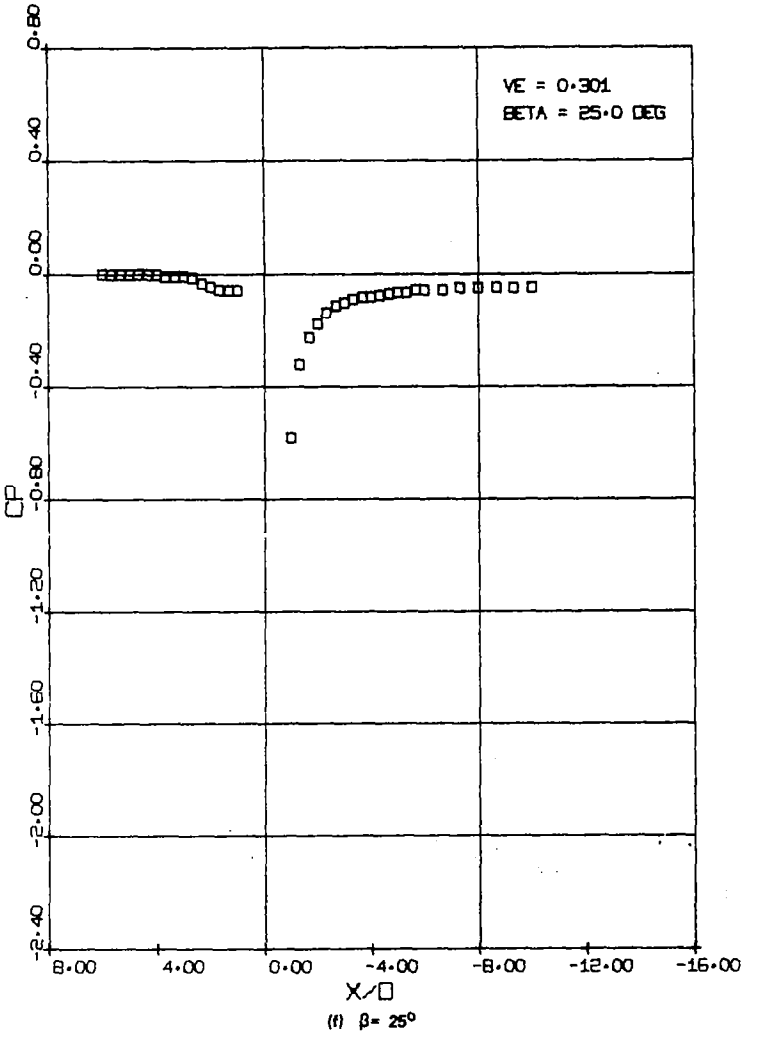


(d) $\beta = 15^{\circ}$

Figure 11. - Continued.

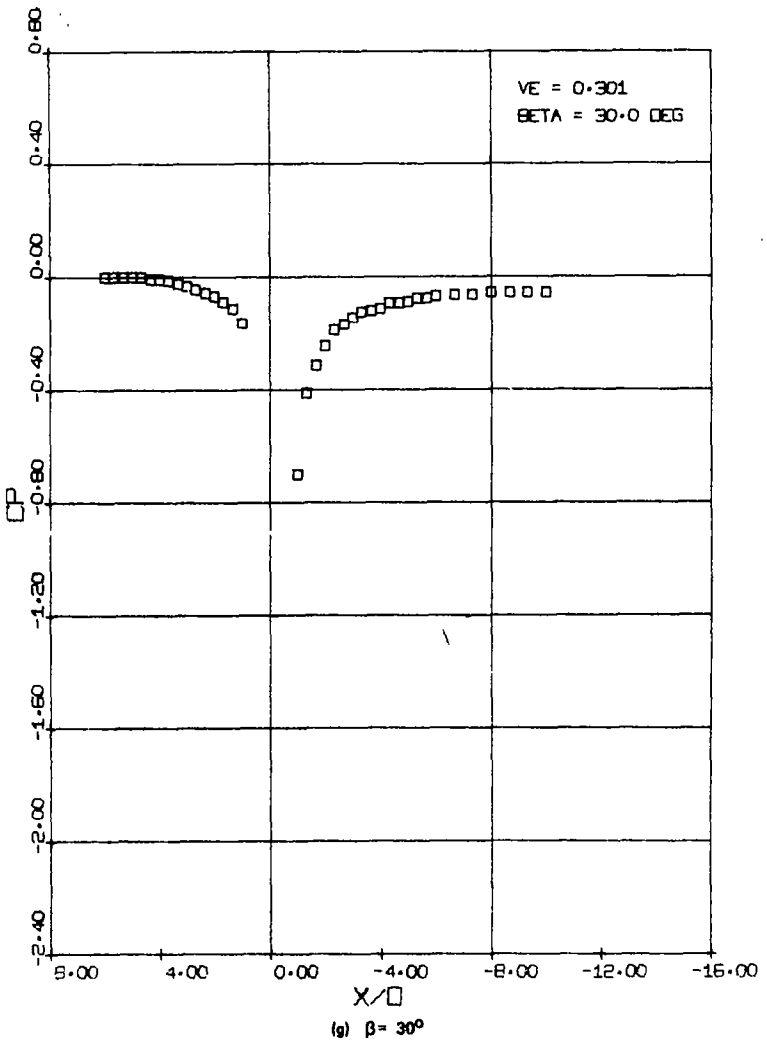


(e) $\beta = 20^{\circ}$

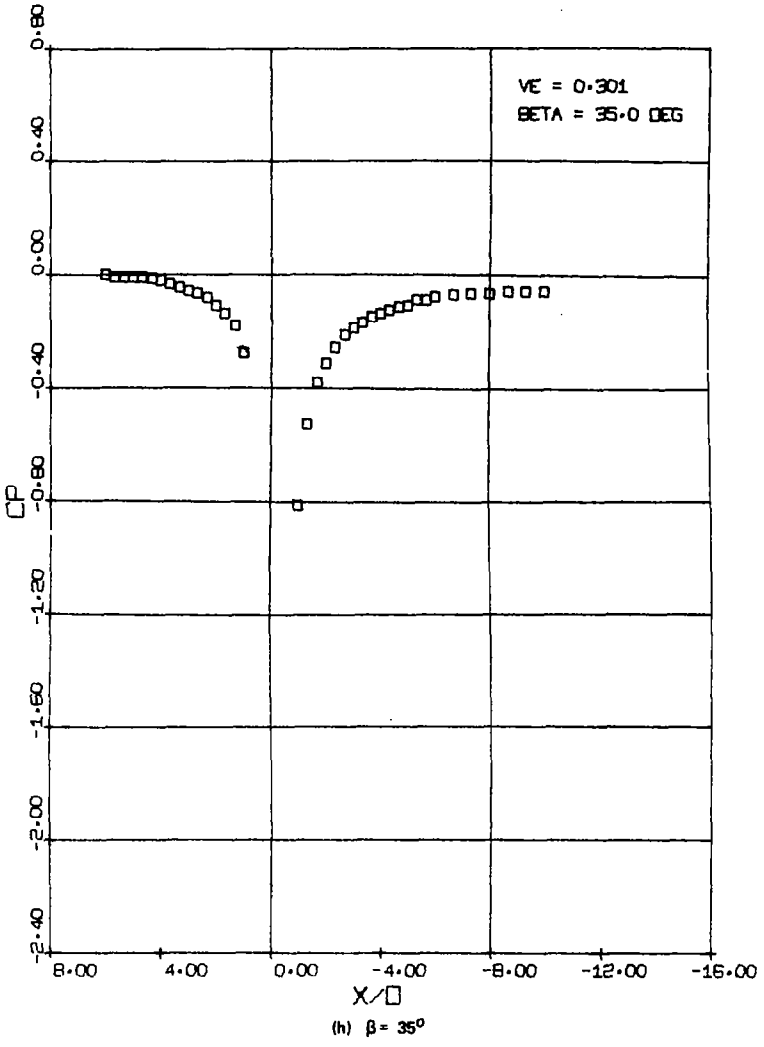


(f) $\beta = 25^{\circ}$

Figure 11. - Continued.



(g) $\beta = 30^{\circ}$



(h) $\beta = 35^{\circ}$

Figure 11. - Continued.

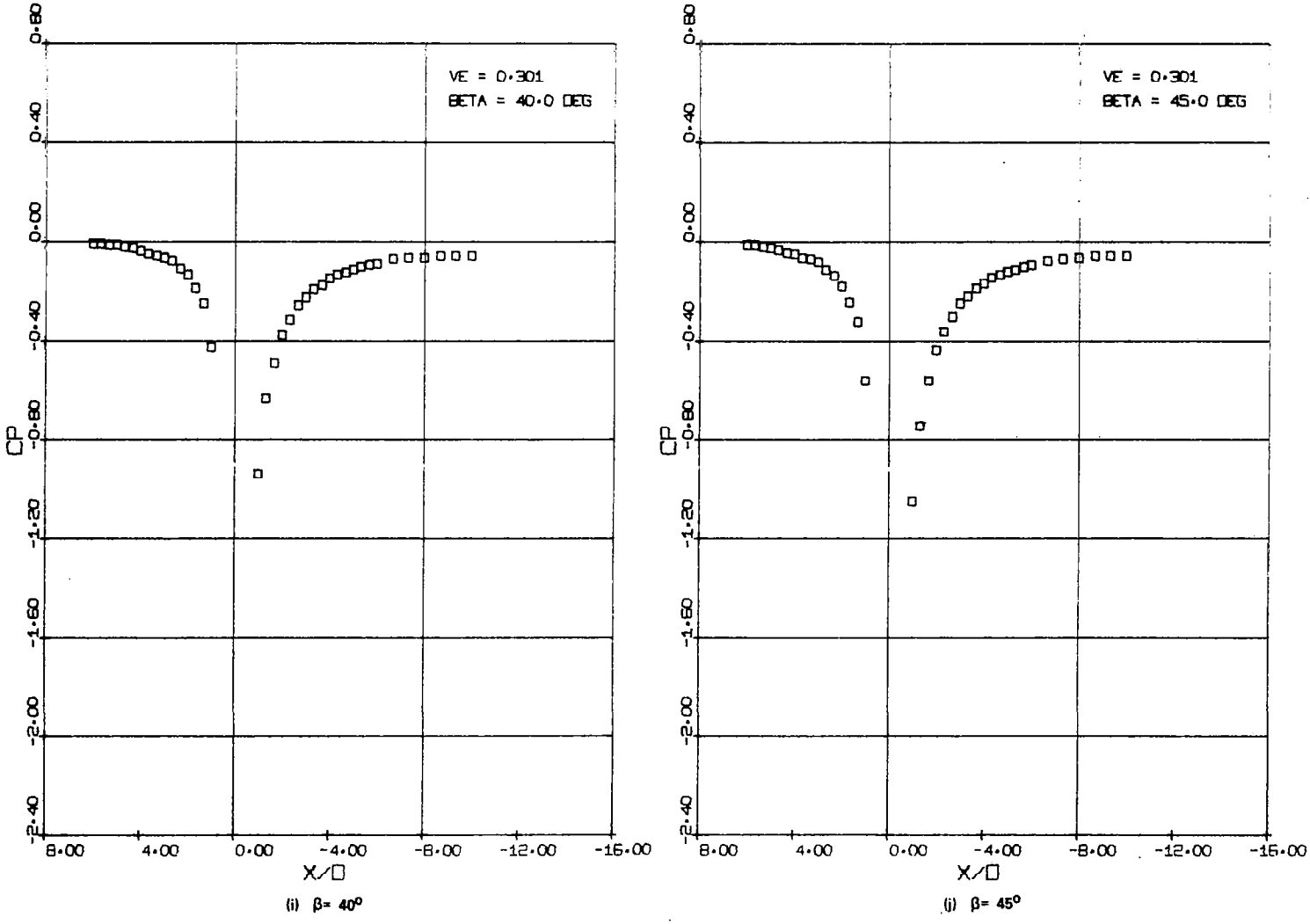
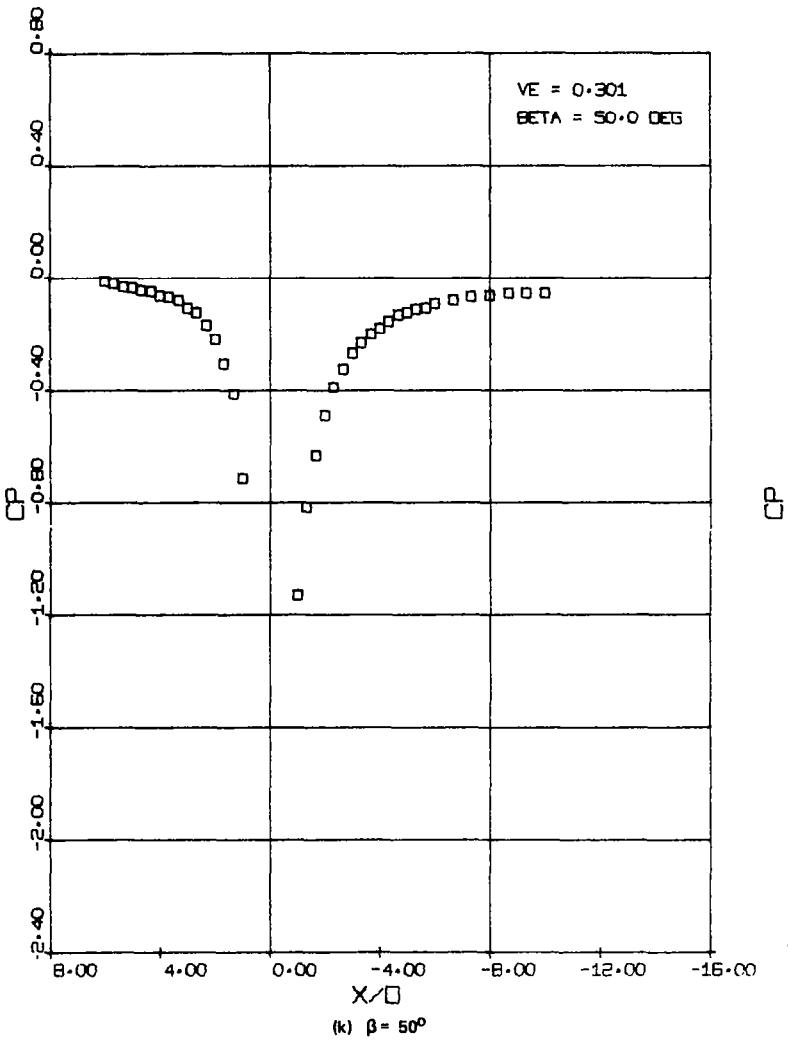
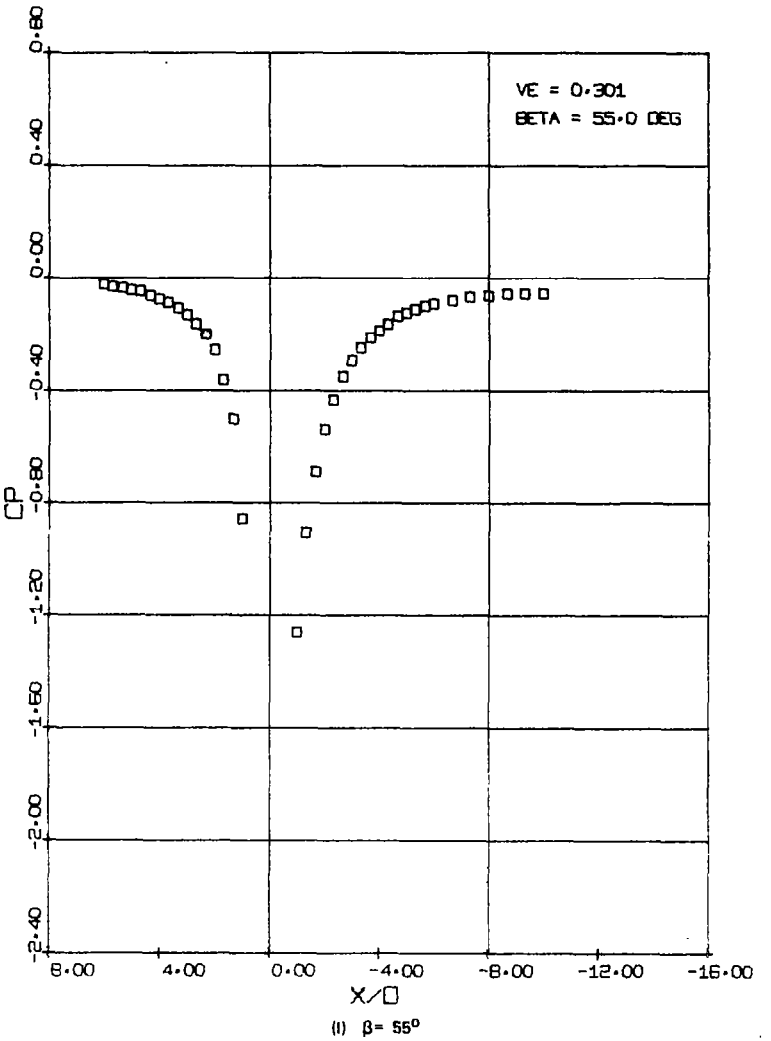


Figure 11. - Continued.



(k) $\beta = 50^{\circ}$



(l) $\beta = 55^{\circ}$

Figure 11. - Continued.

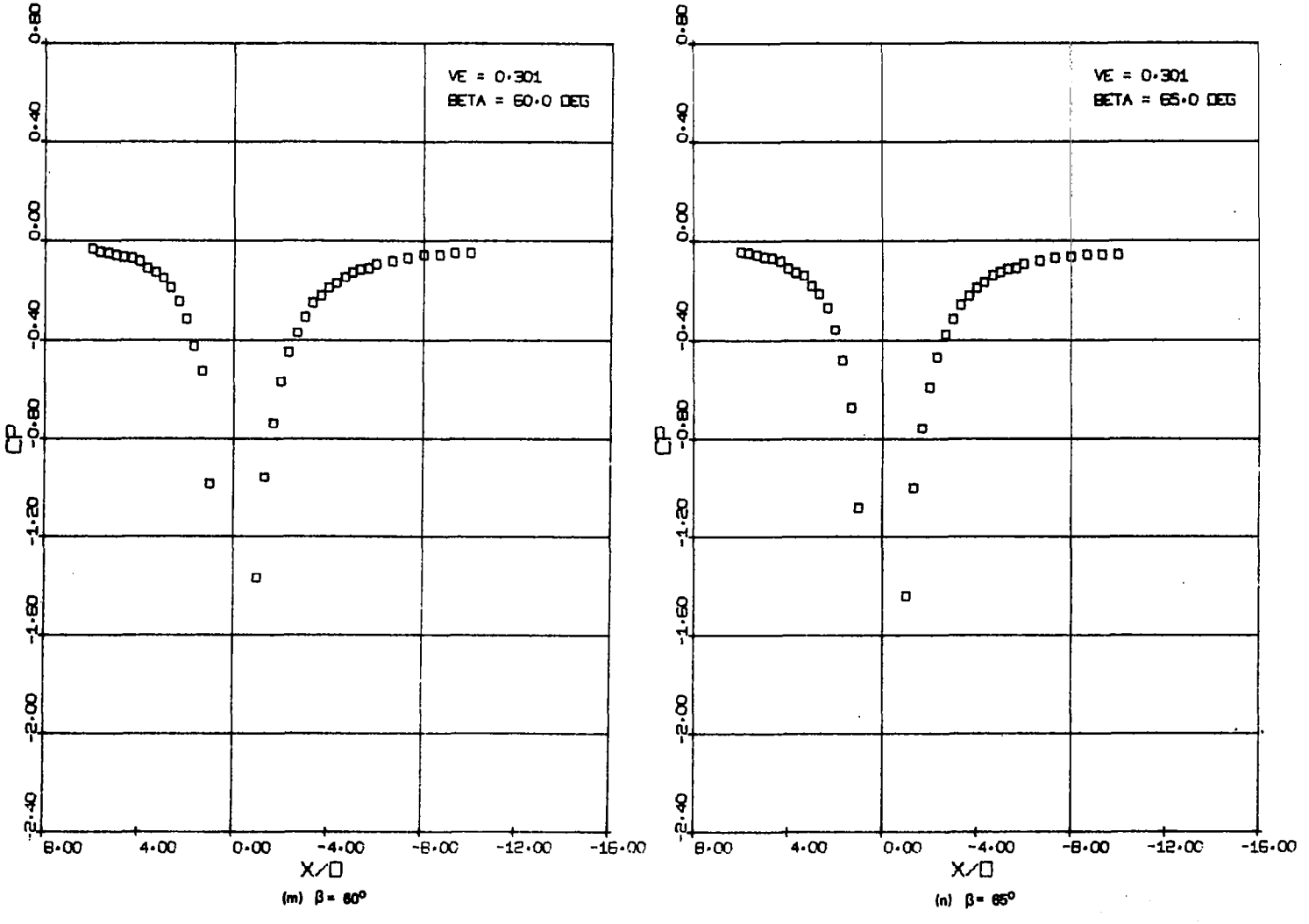
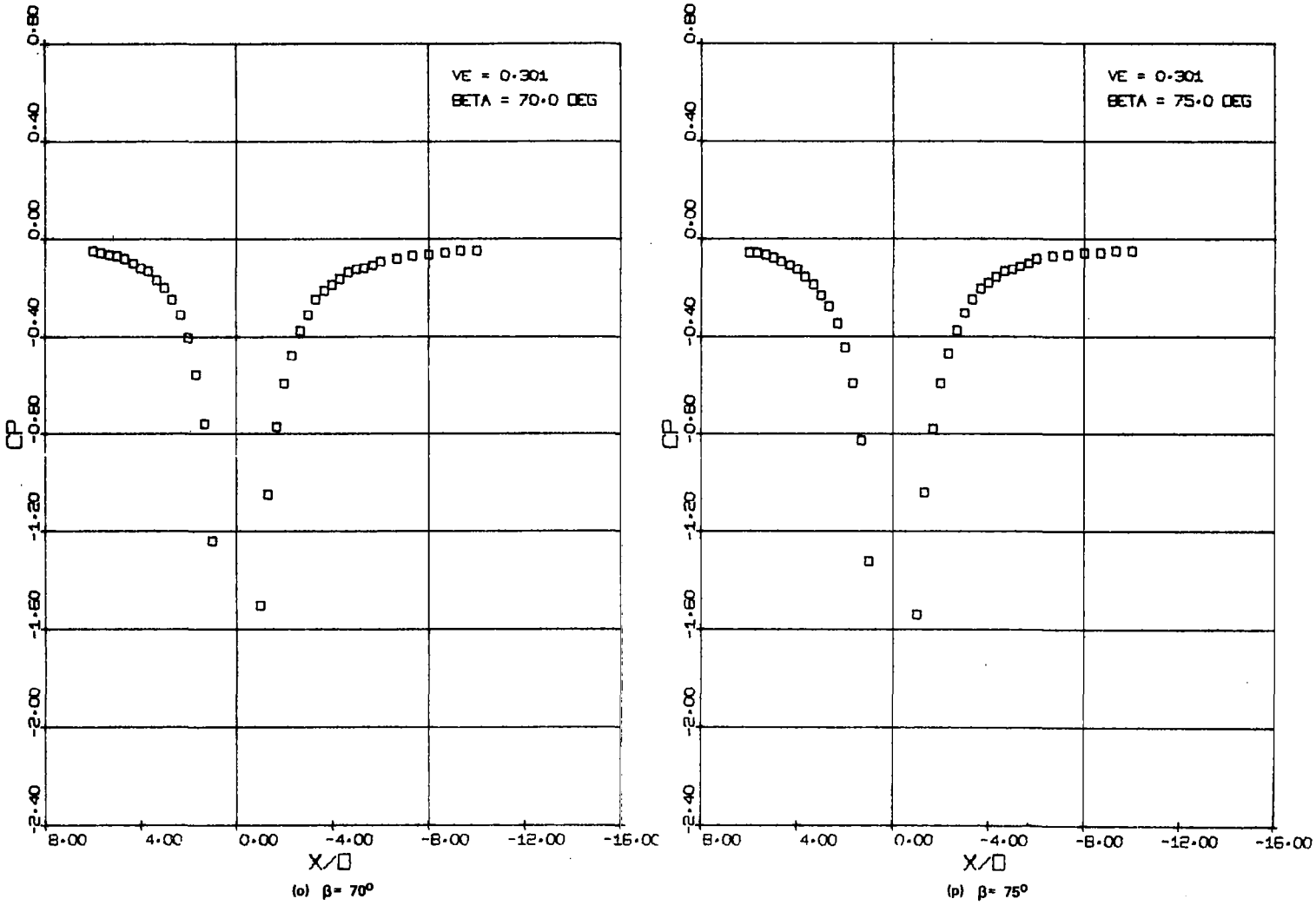


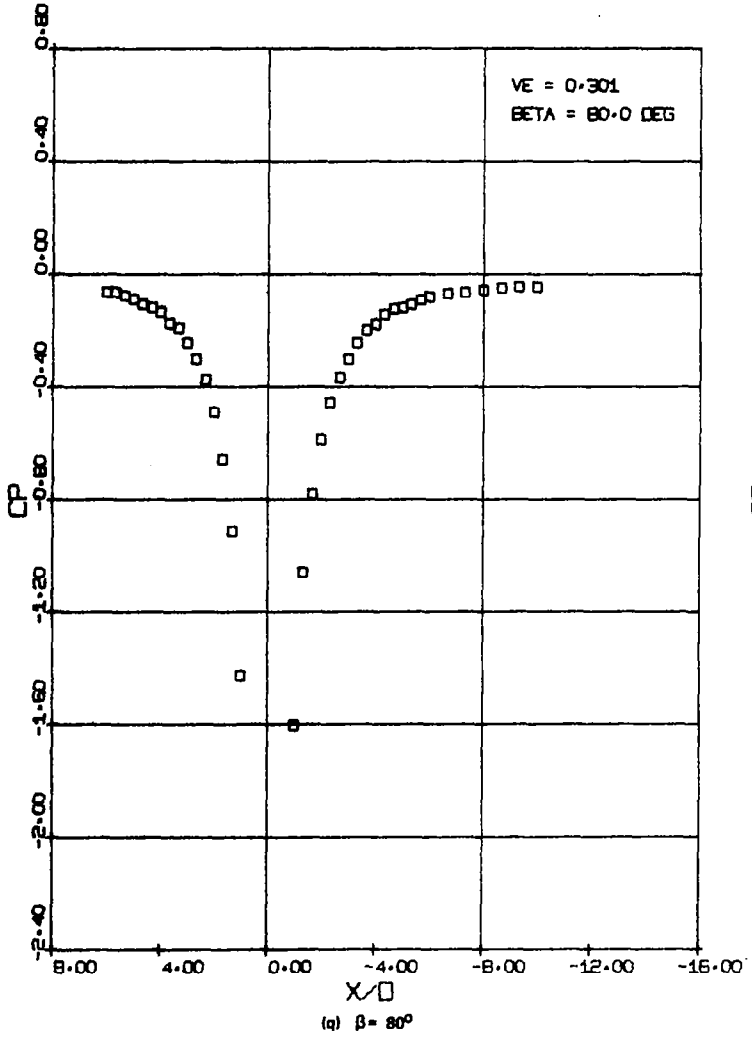
Figure 11. - Continued.



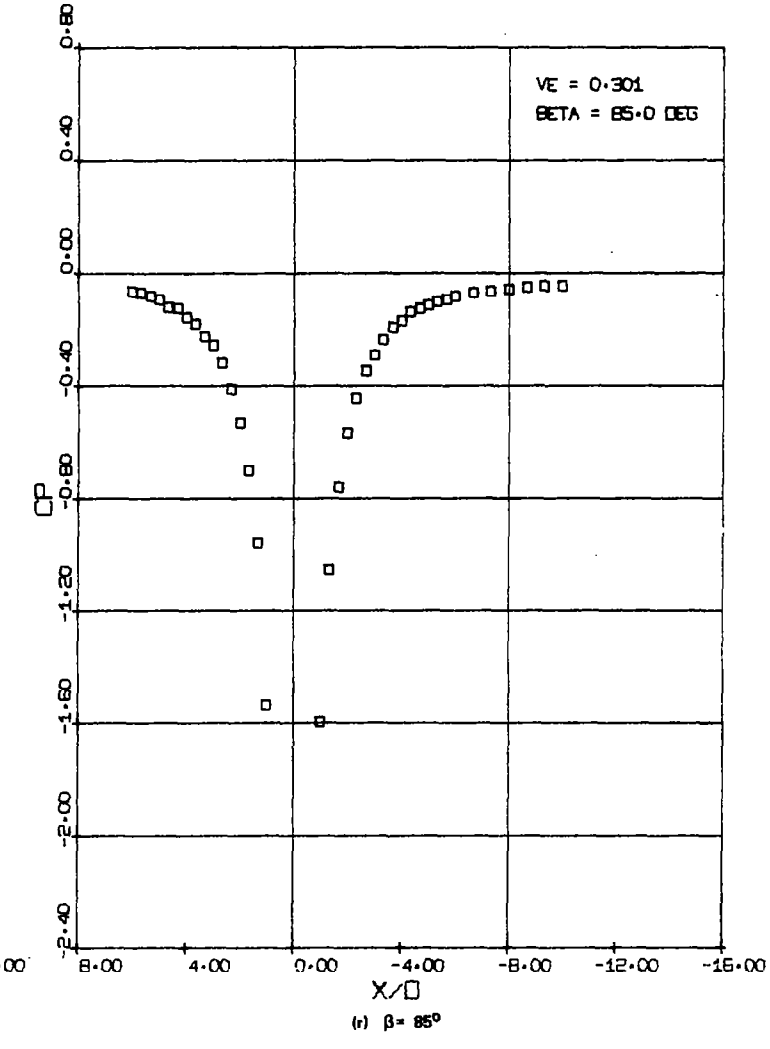
(o) β= 70°

(p) β= 75°

Figure 11. - Continued.



(q) $\beta = 80^\circ$



(r) $\beta = 85^\circ$

Figure 11. - Continued.

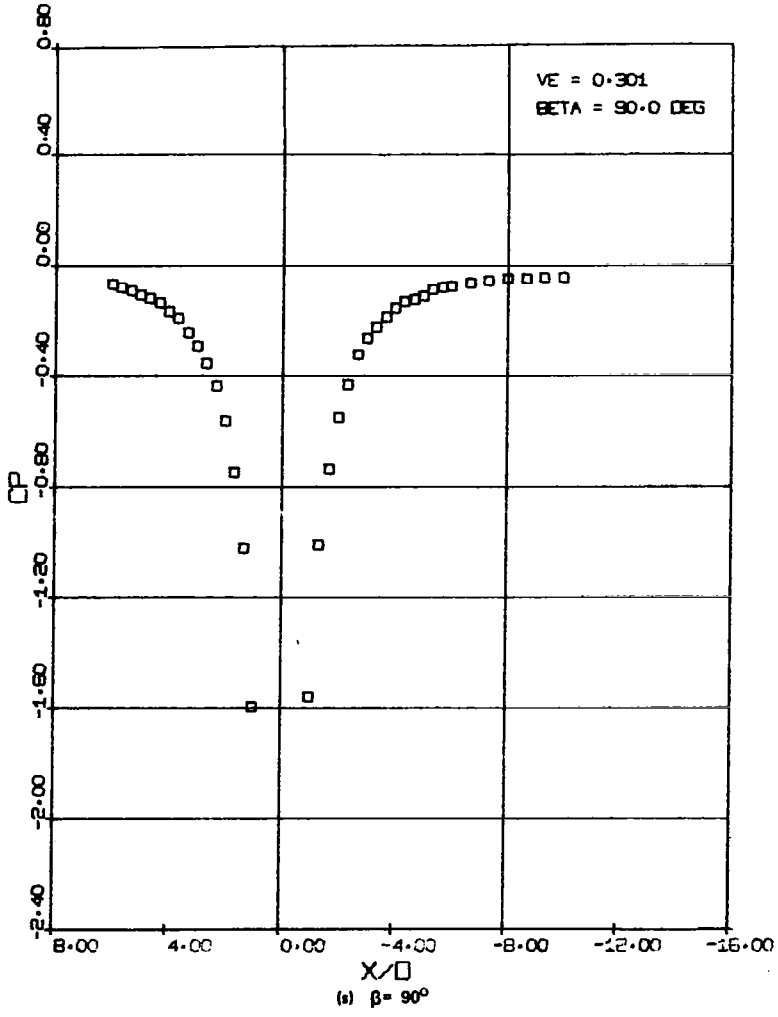
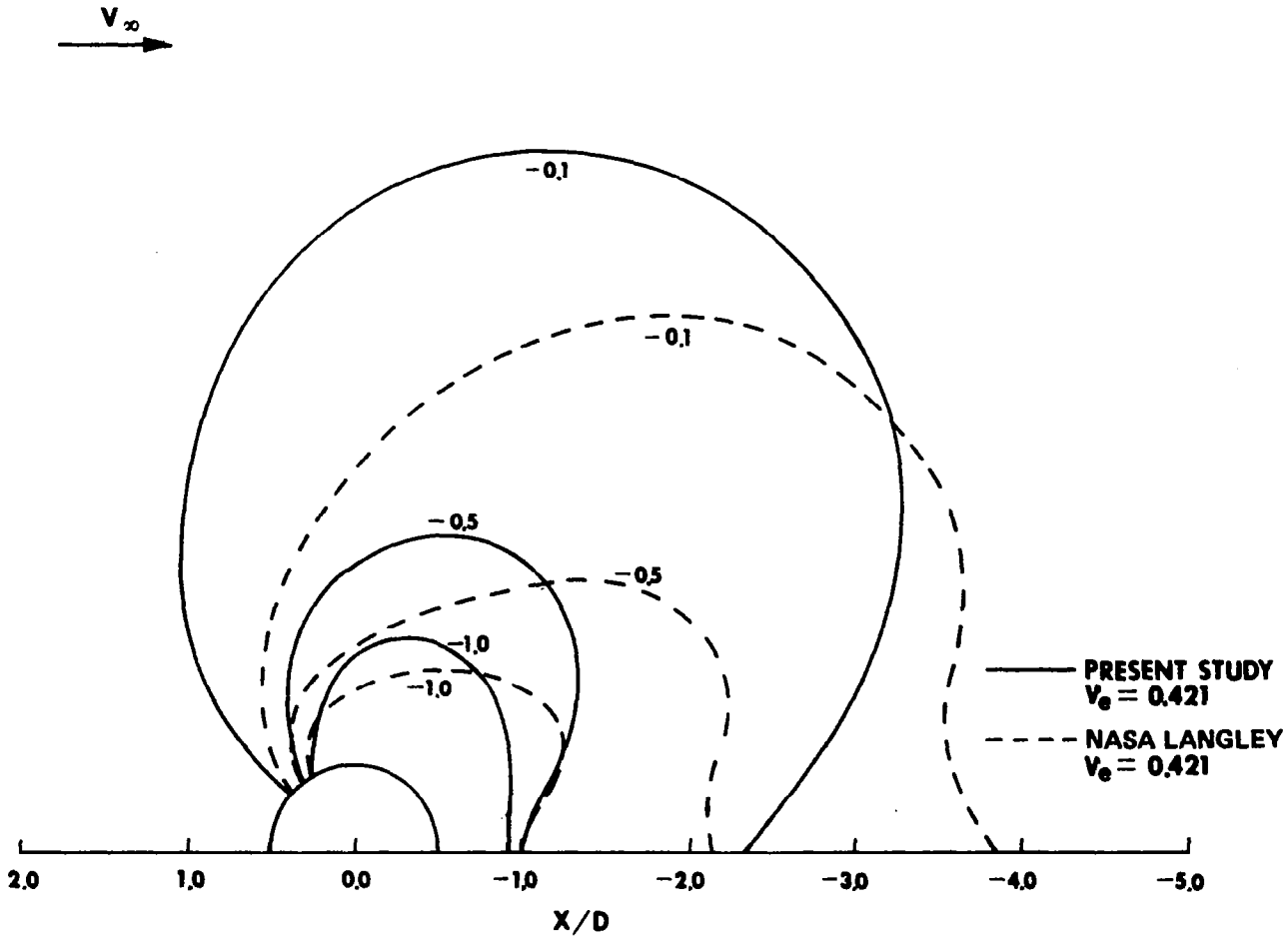
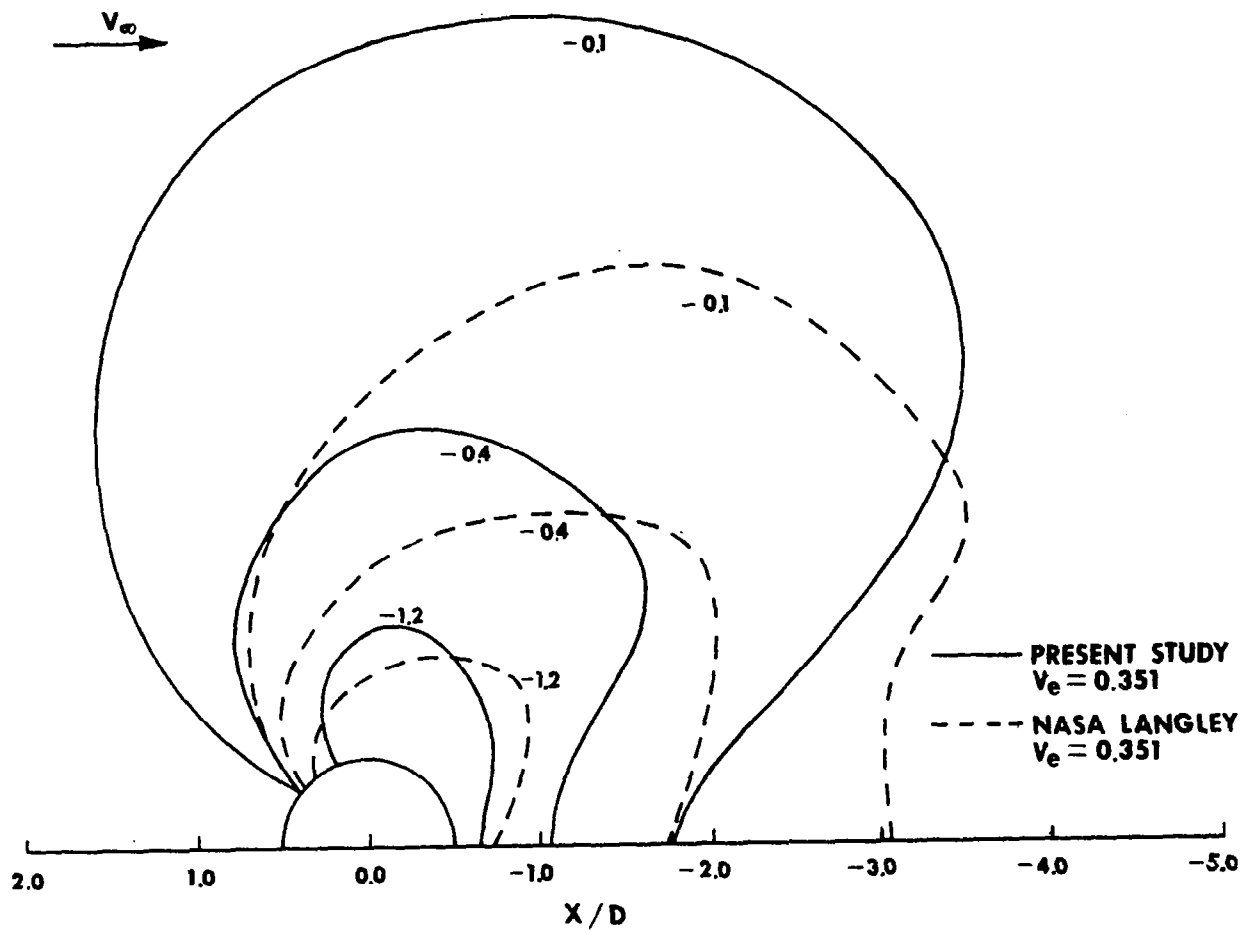


Figure 11. - Concluded.



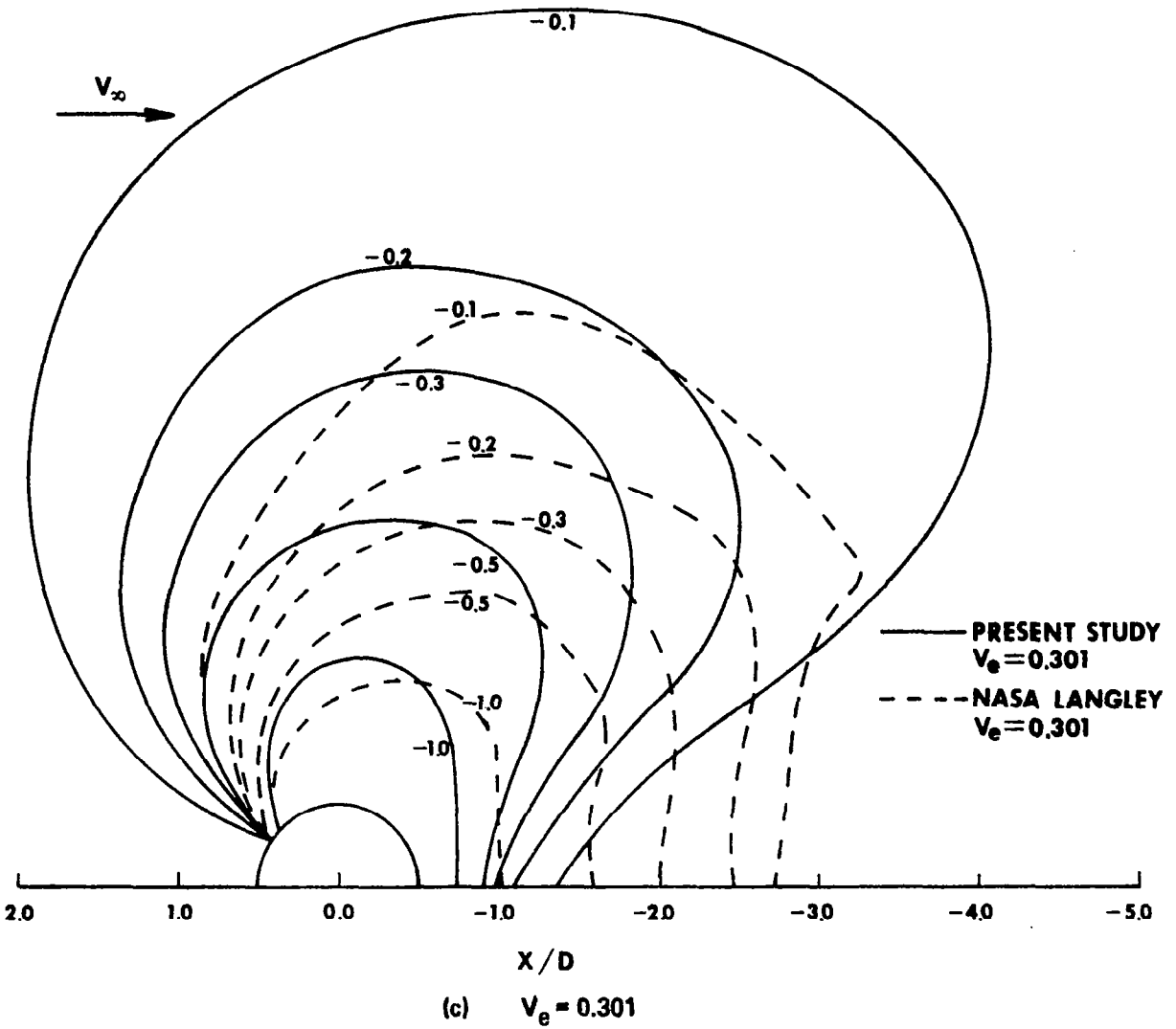
(a) $V_e = 0.421$

Figure 12. - Comparison of flat-plate C_p contour data with other investigations.



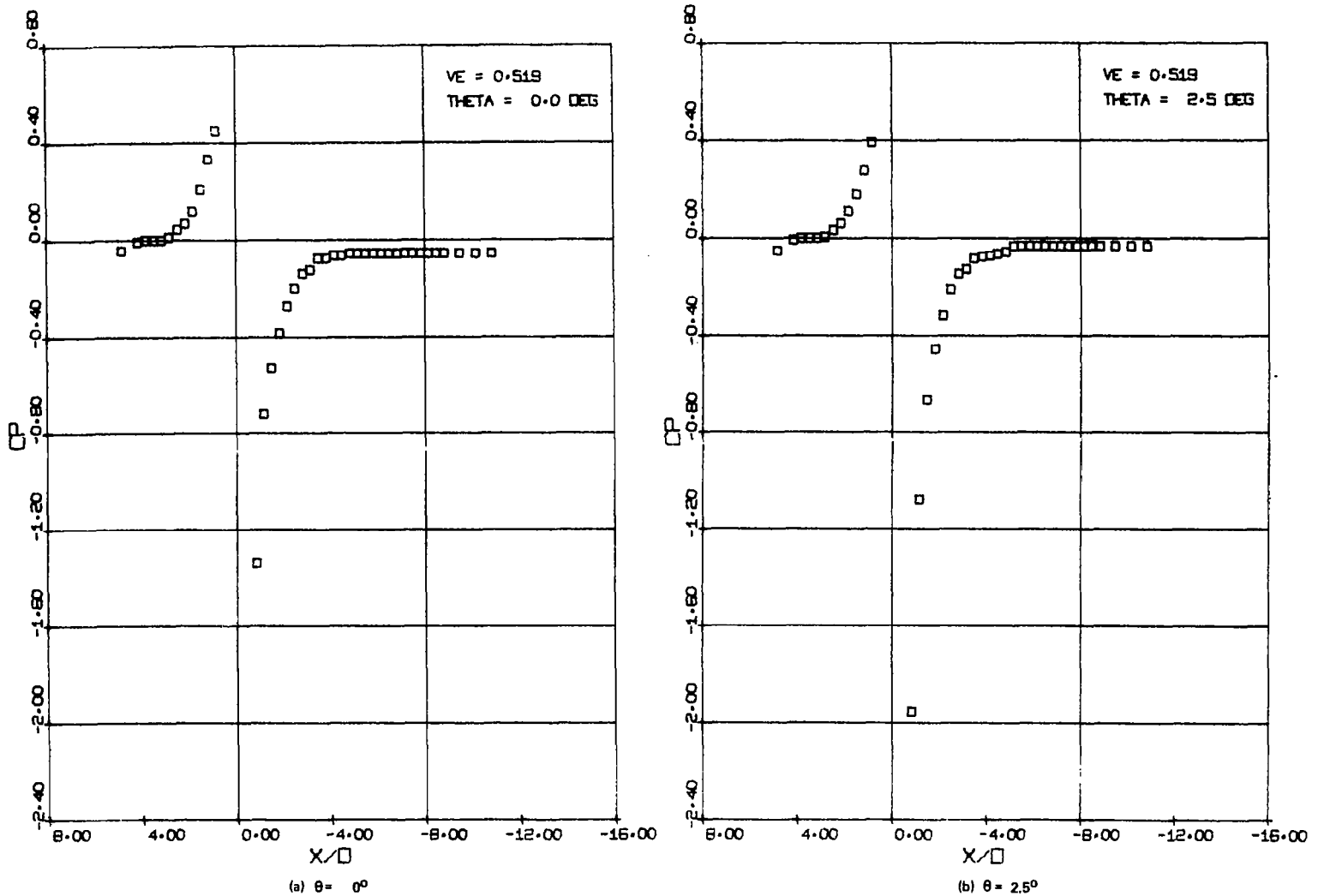
(b) $V_e = 0.351$

Figure 12. - Continued.



(c) $V_e = 0.301$

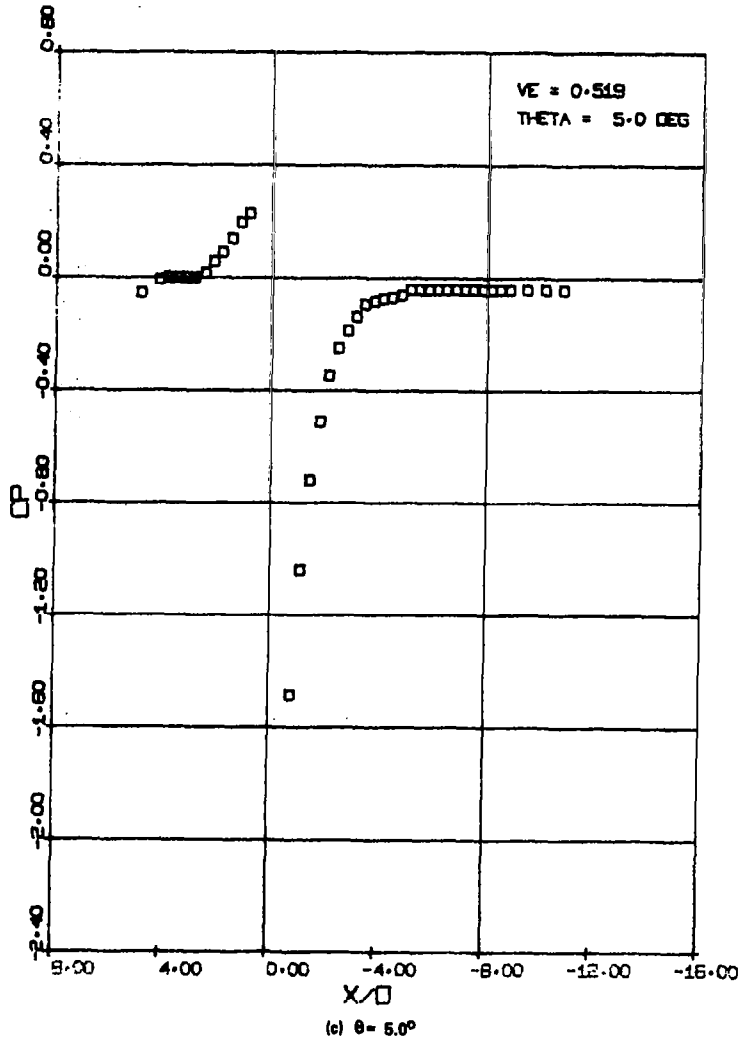
Figure 12. - Concluded.



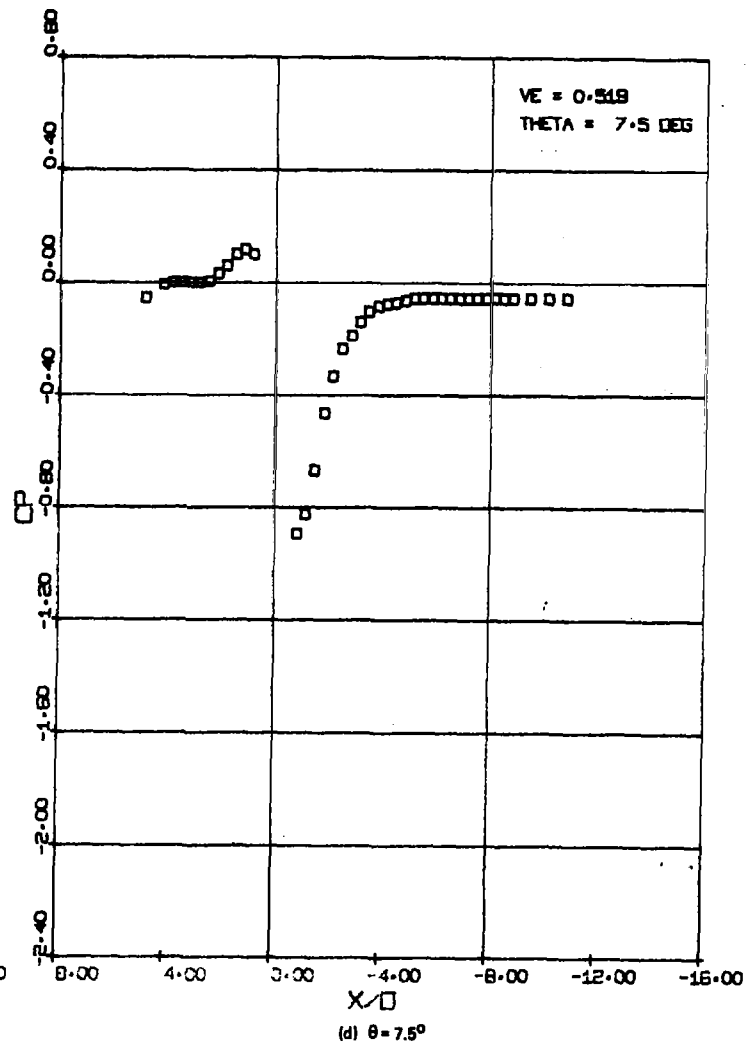
(a) θ= 0°

(b) θ= 2.5°

Figure 13. - C_p profiles for V_e = 0.519 with the 0.95-cm (0.375-in.) nozzle in the cylinder.

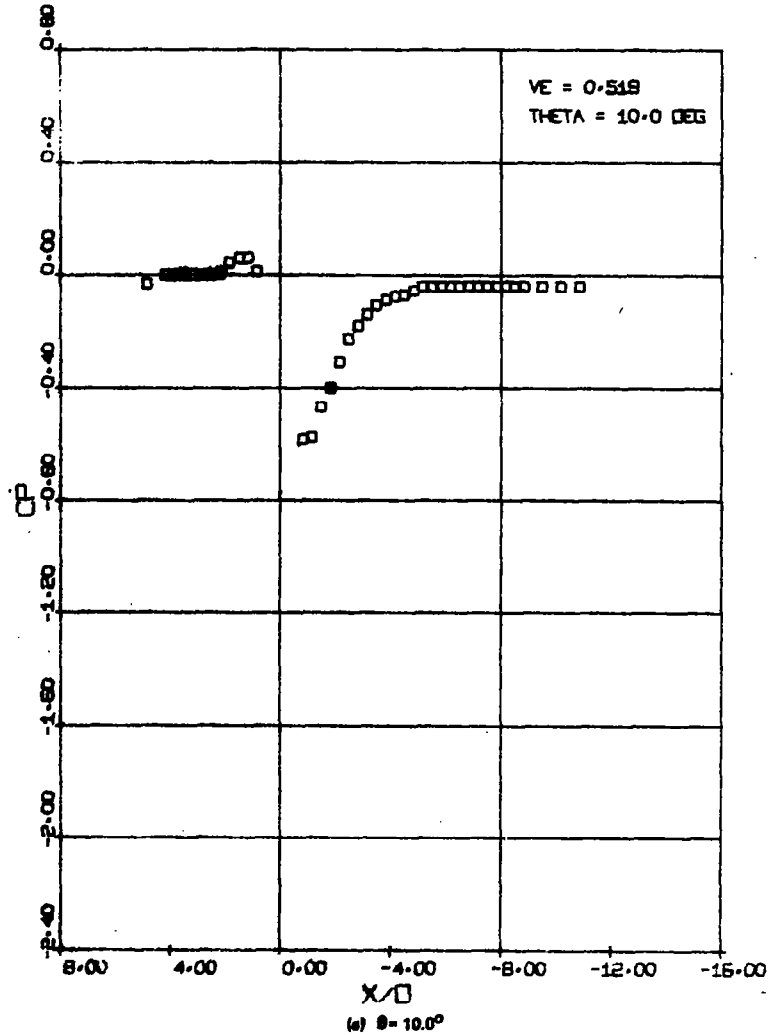


(c) θ= 5.0°

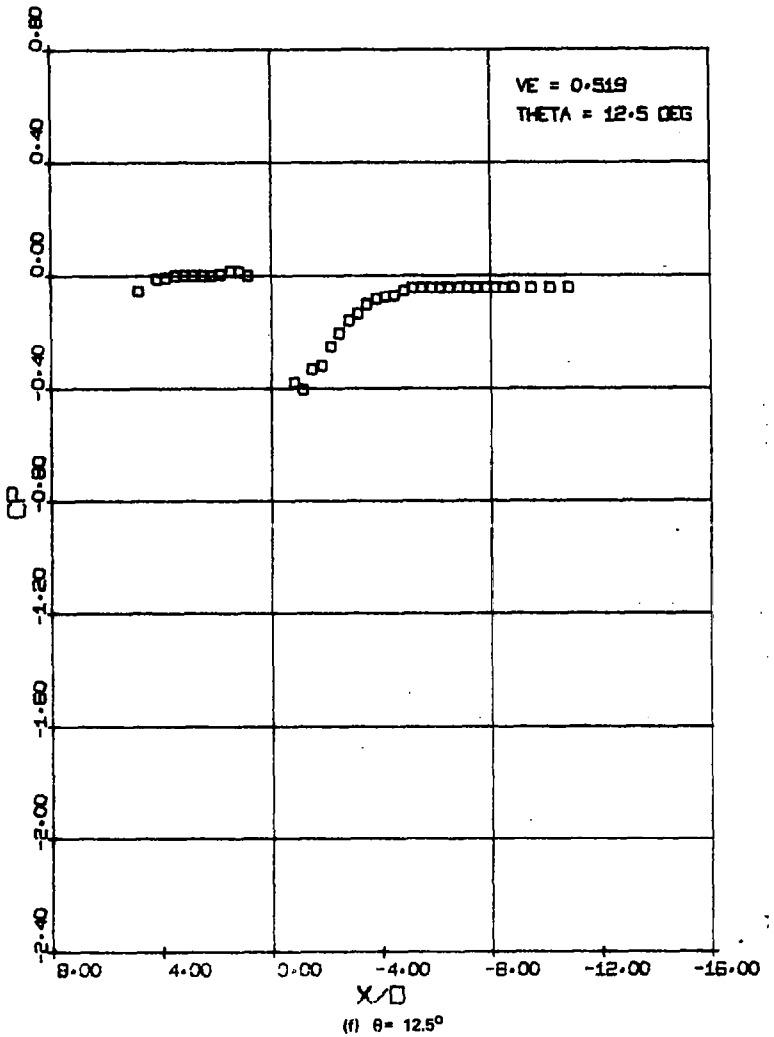


(d) θ= 7.5°

Figure 13. - Continued.



(e) $\theta = 10.0°$



(f) $\theta = 12.5°$

Figure 13. - Continued.

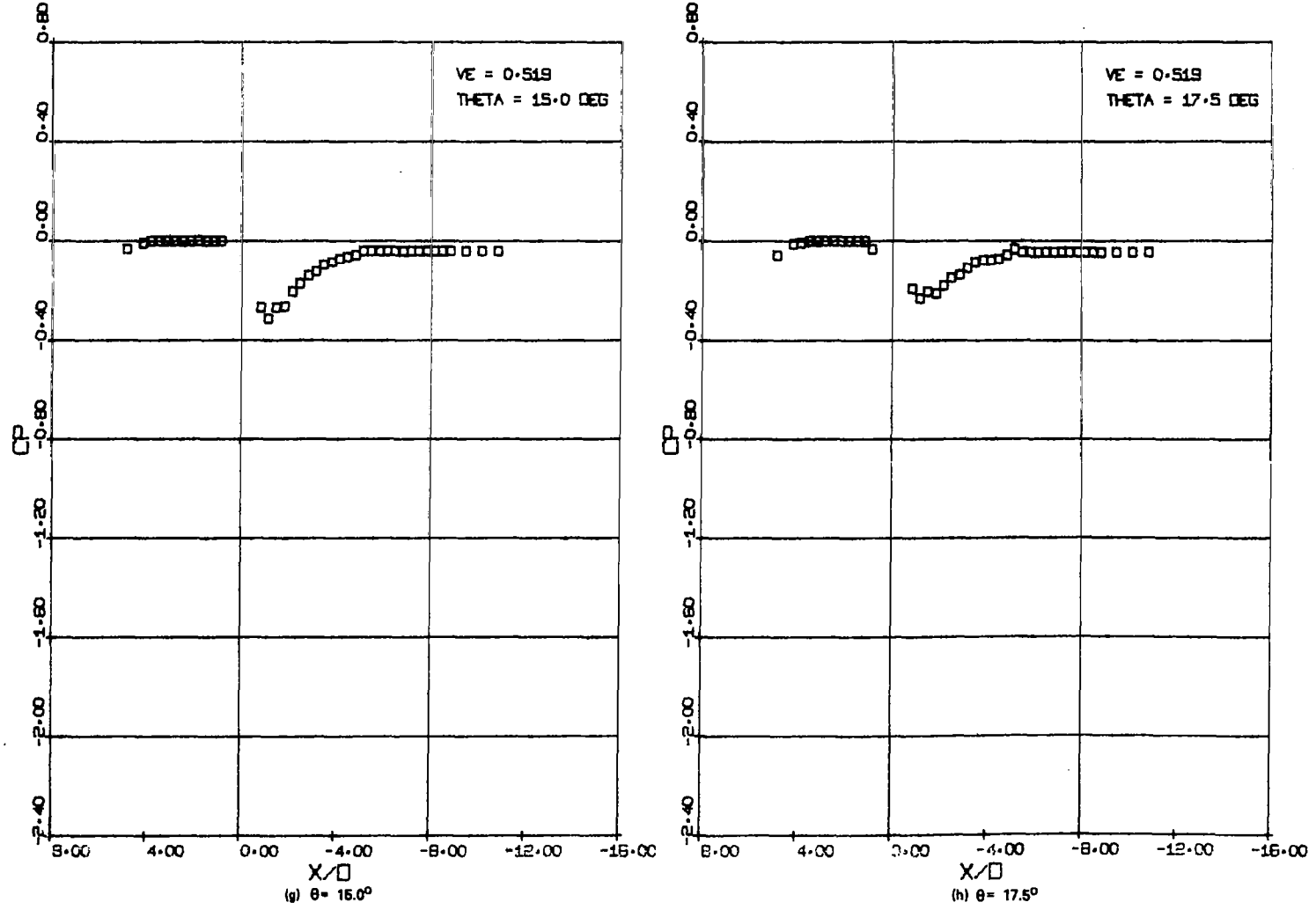


Figure 13. - Continued.

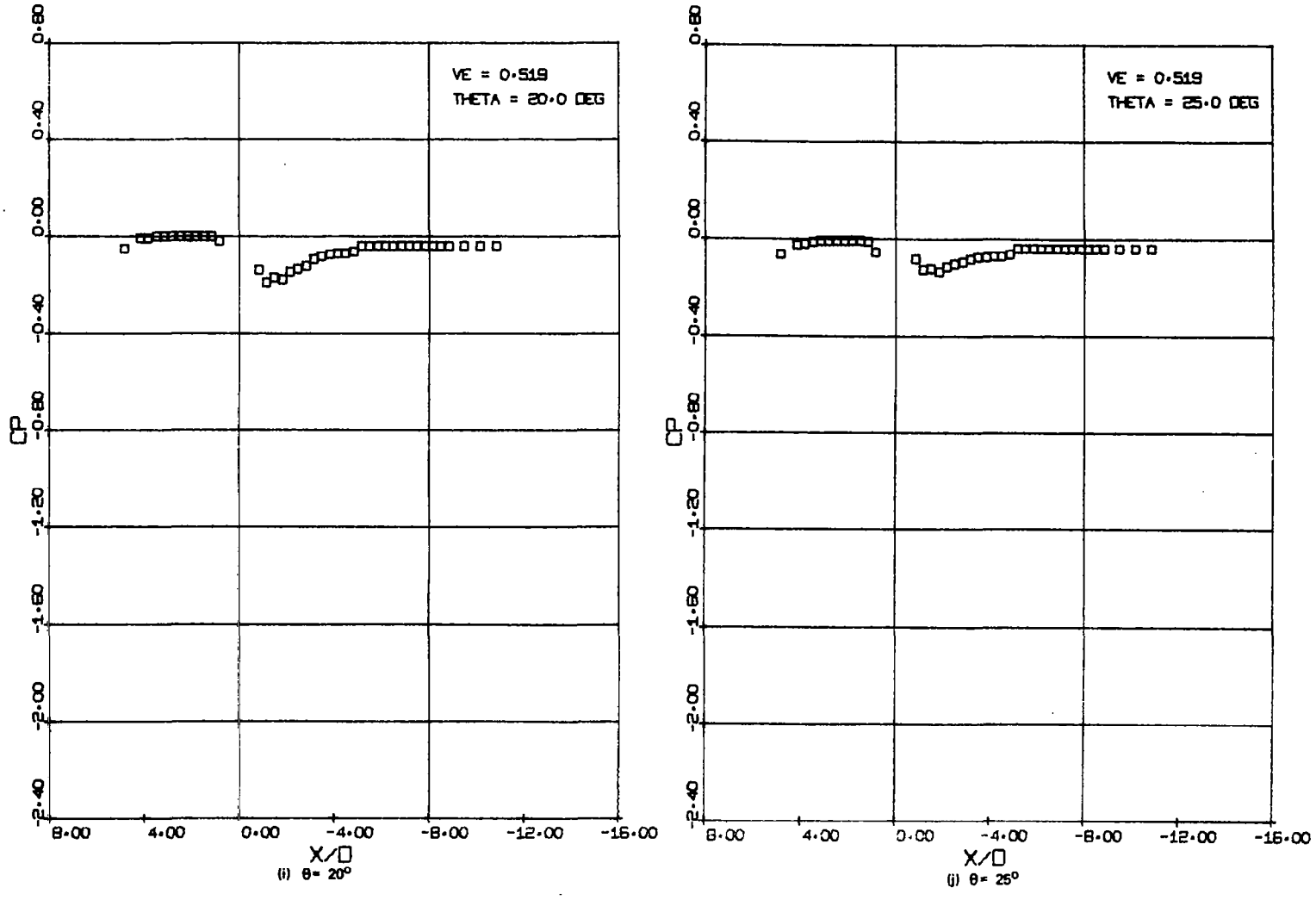


Figure 13. - Concluded.

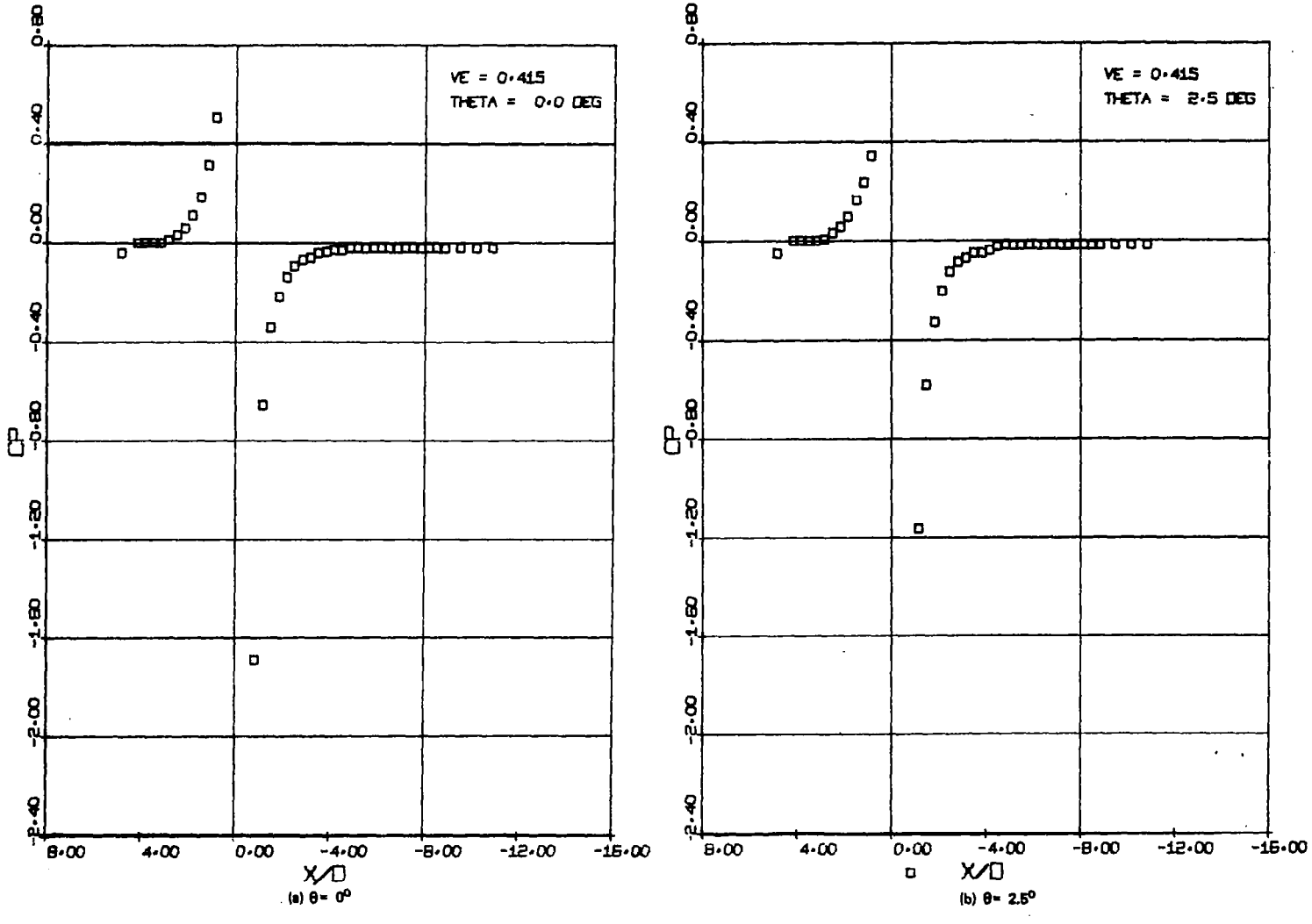
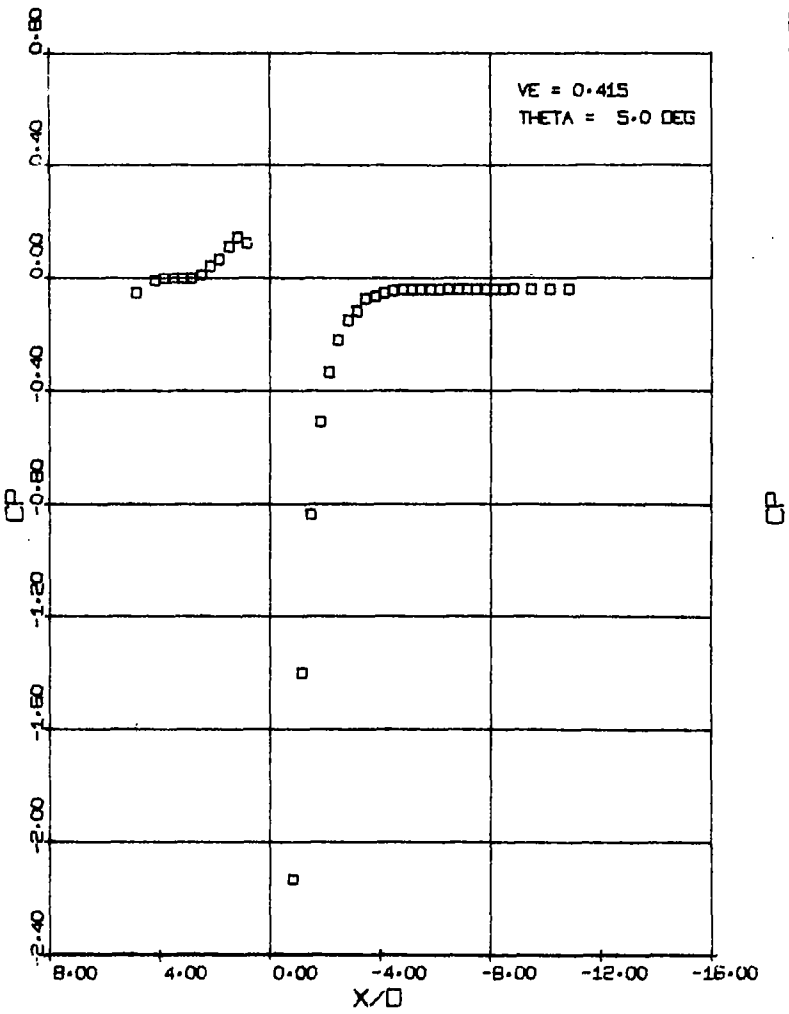
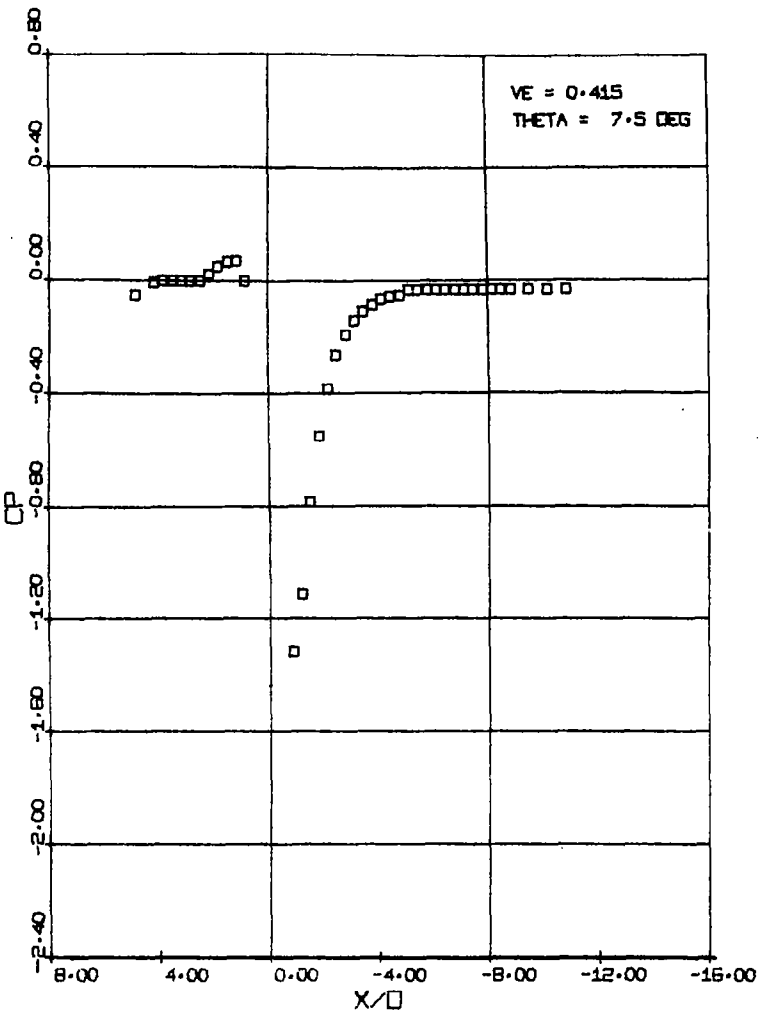


Figure 14. - C_p profiles for V_e = 0.415 with the 0.95-cm (0.375-in.) nozzle in the cylinder.



(c) θ= 5°



(d) θ= 7.5°

Figure 14. - Continued.

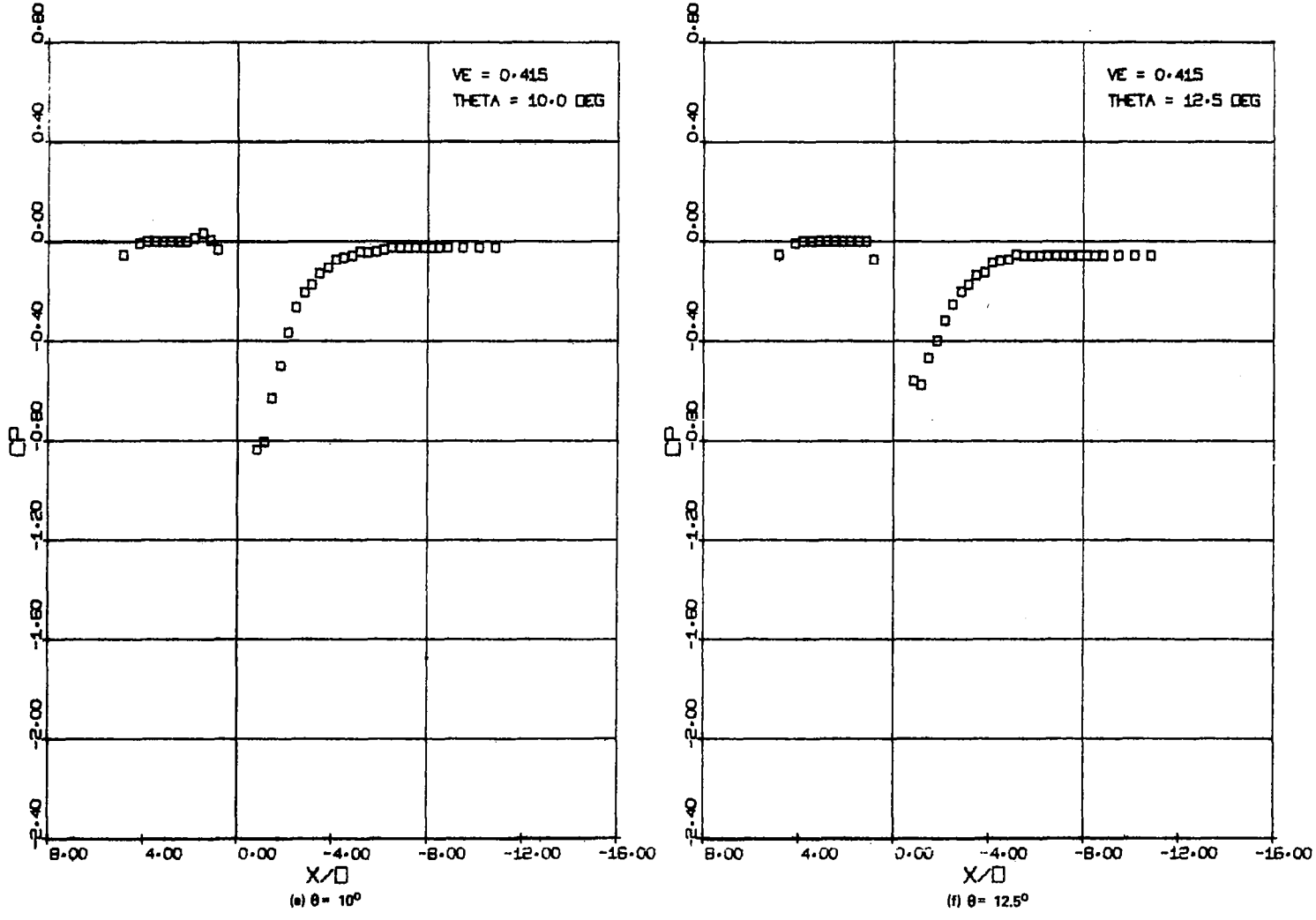


Figure 14. - Continued.

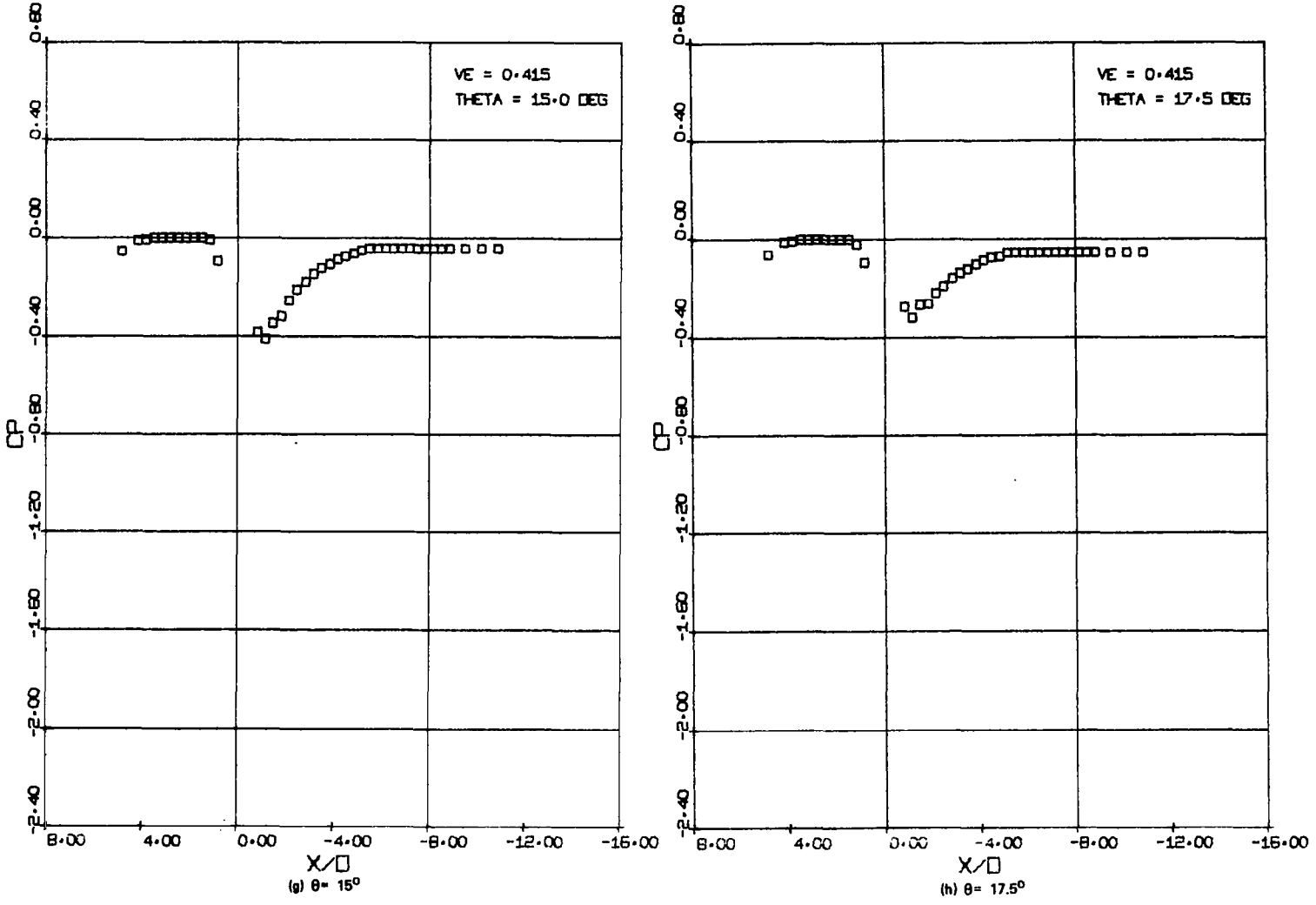
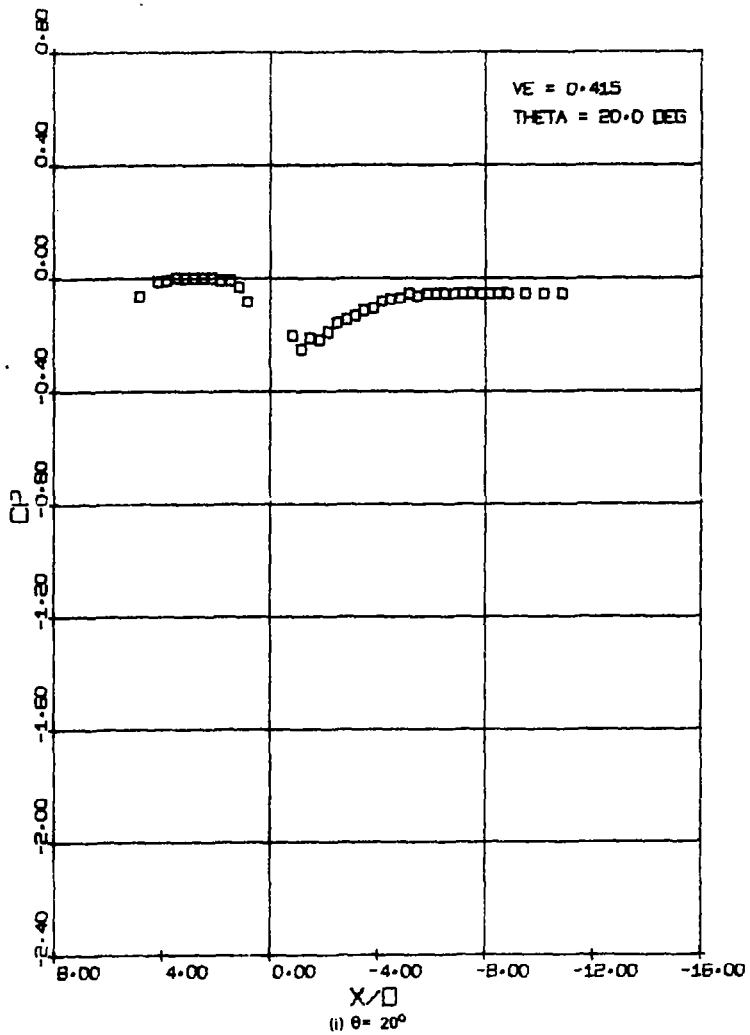
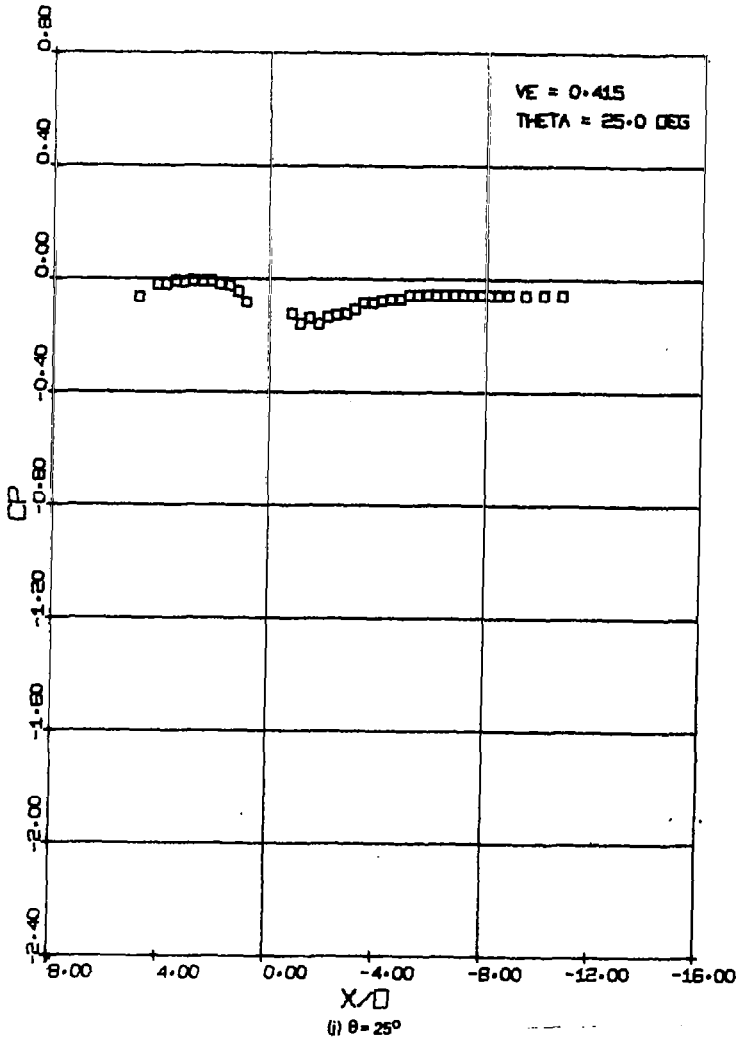


Figure 14. - Continued.

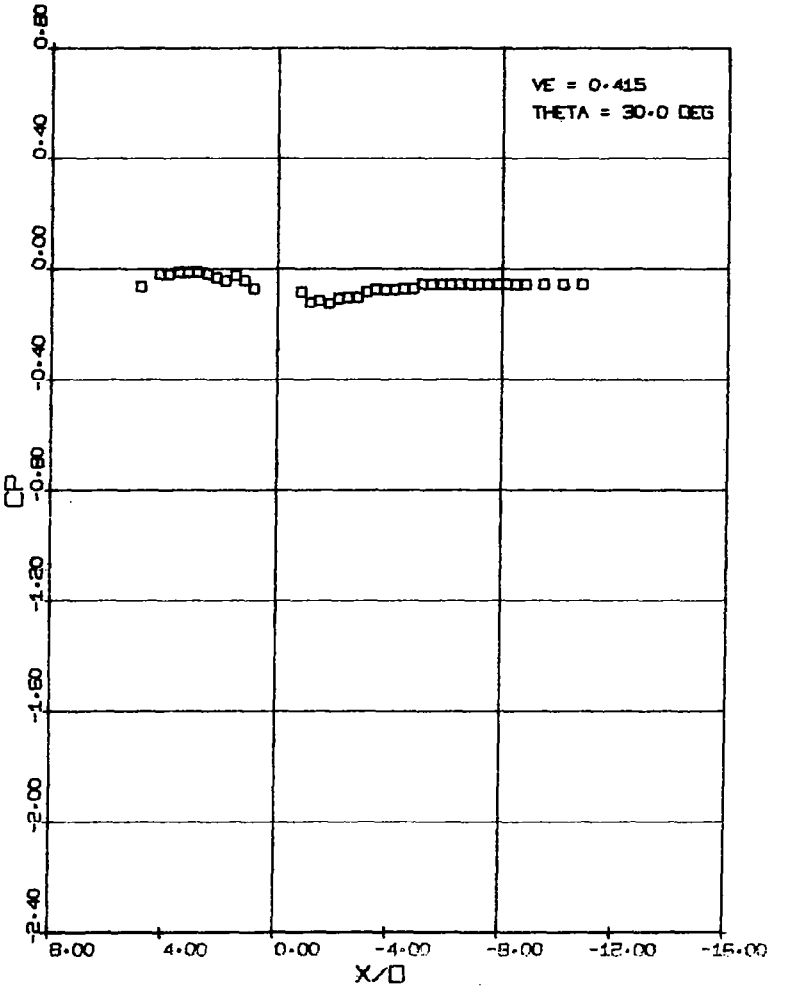


(i) θ= 20°



(j) θ= 25°

Figure 14. - Continued.



(k) $\theta = 25^{\circ}$

Figure 14. - Concluded.

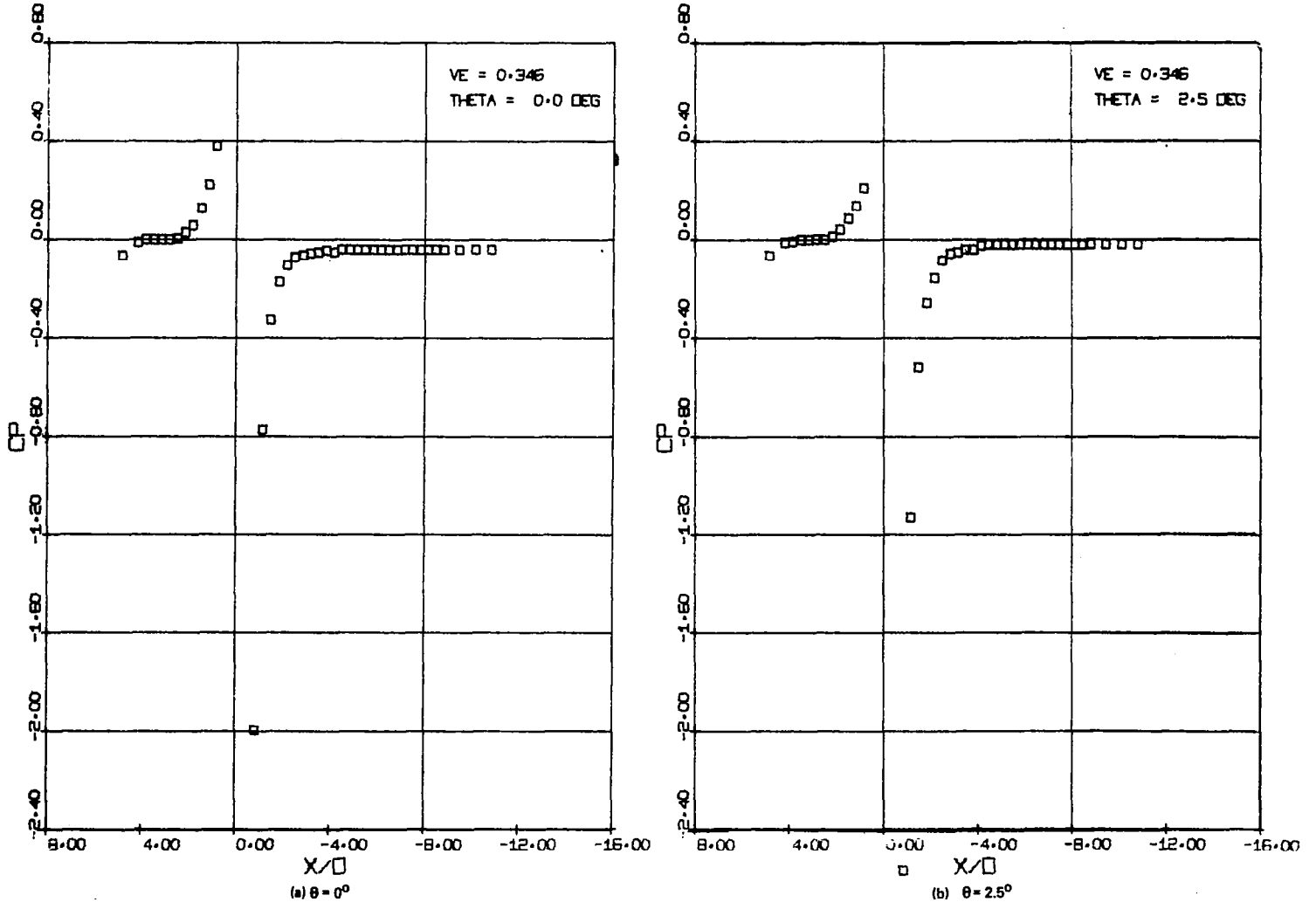


Figure 15. - C_p profiles for V_e = 0.346 with the 0.95-cm (0.375-in.) nozzle in the cylinder.

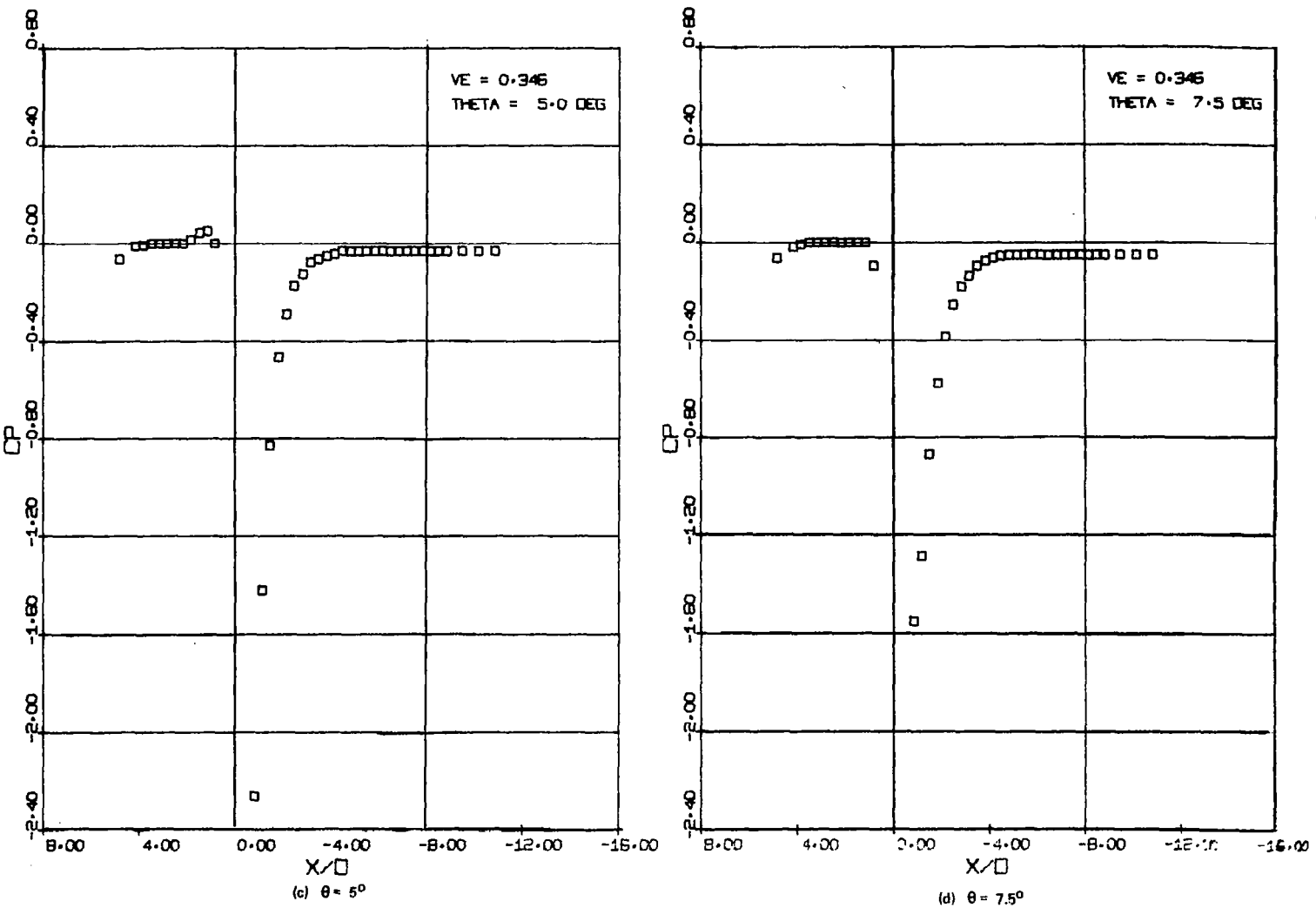


Figure 15. - Continued.

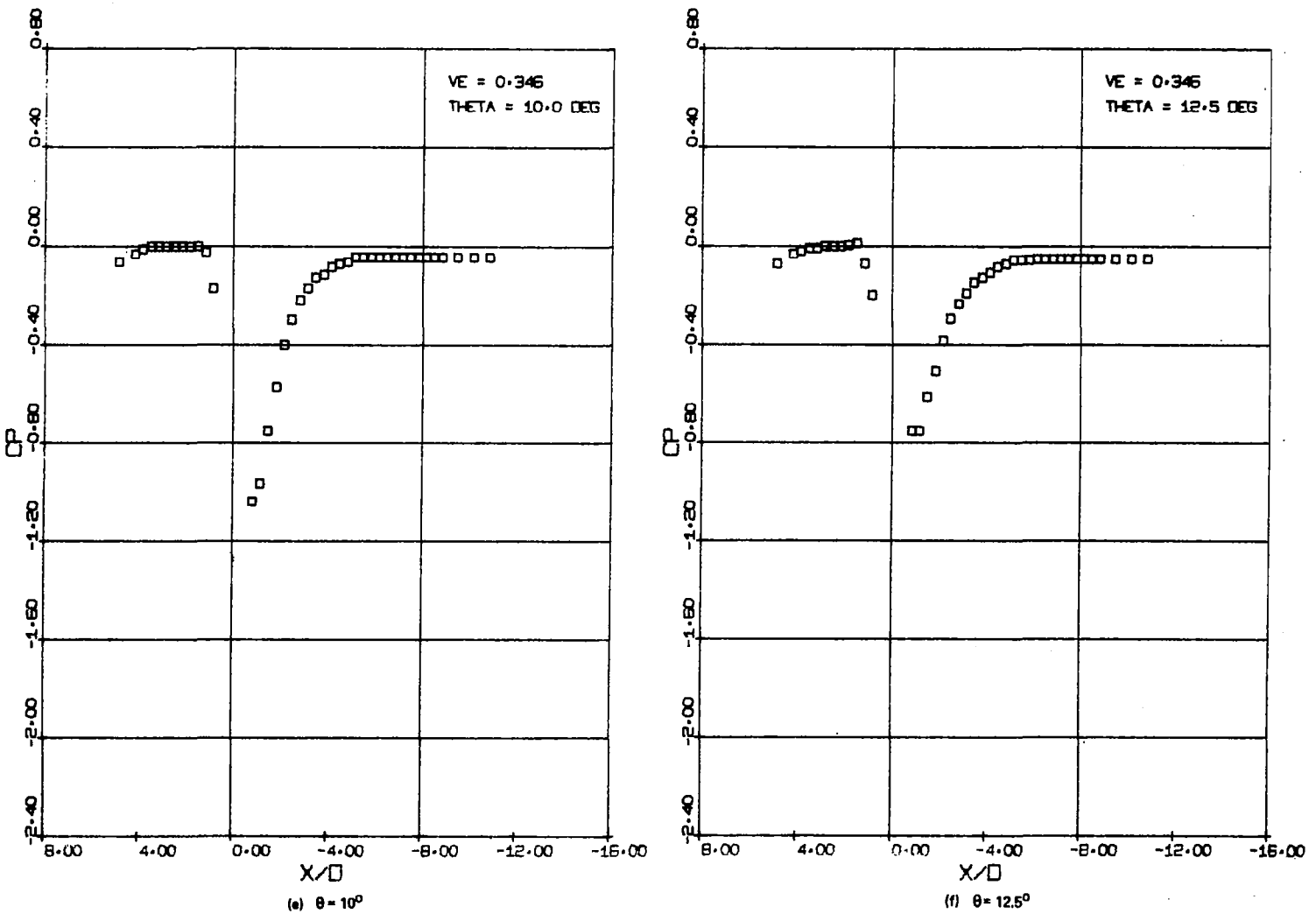
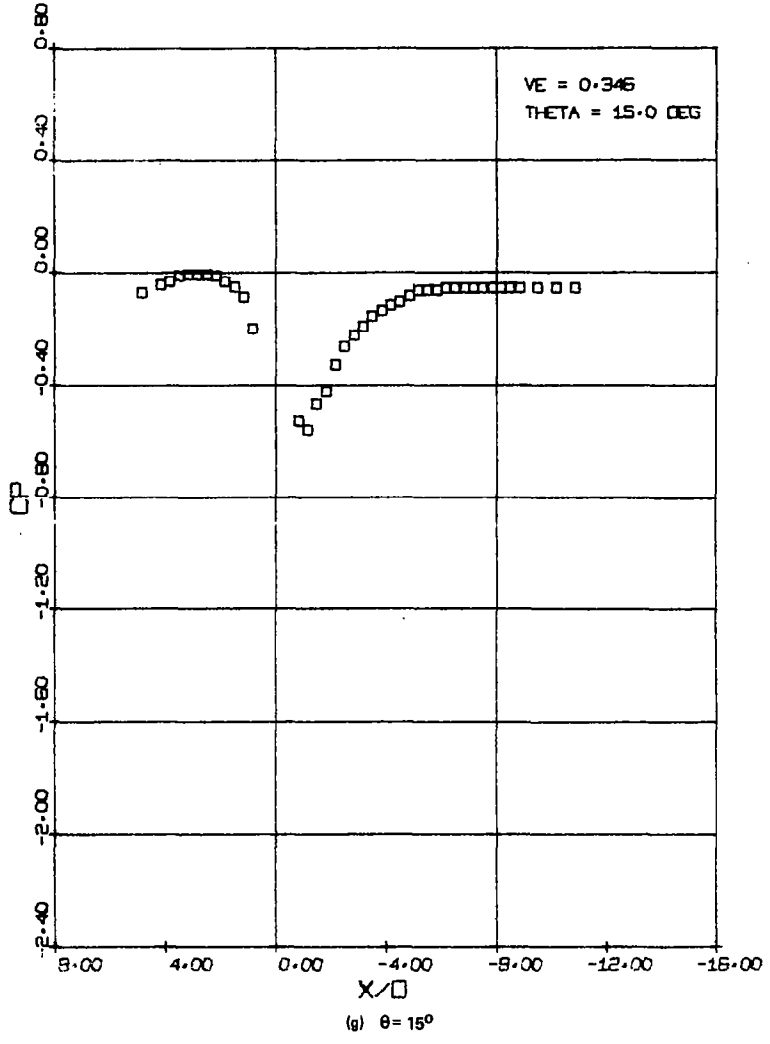
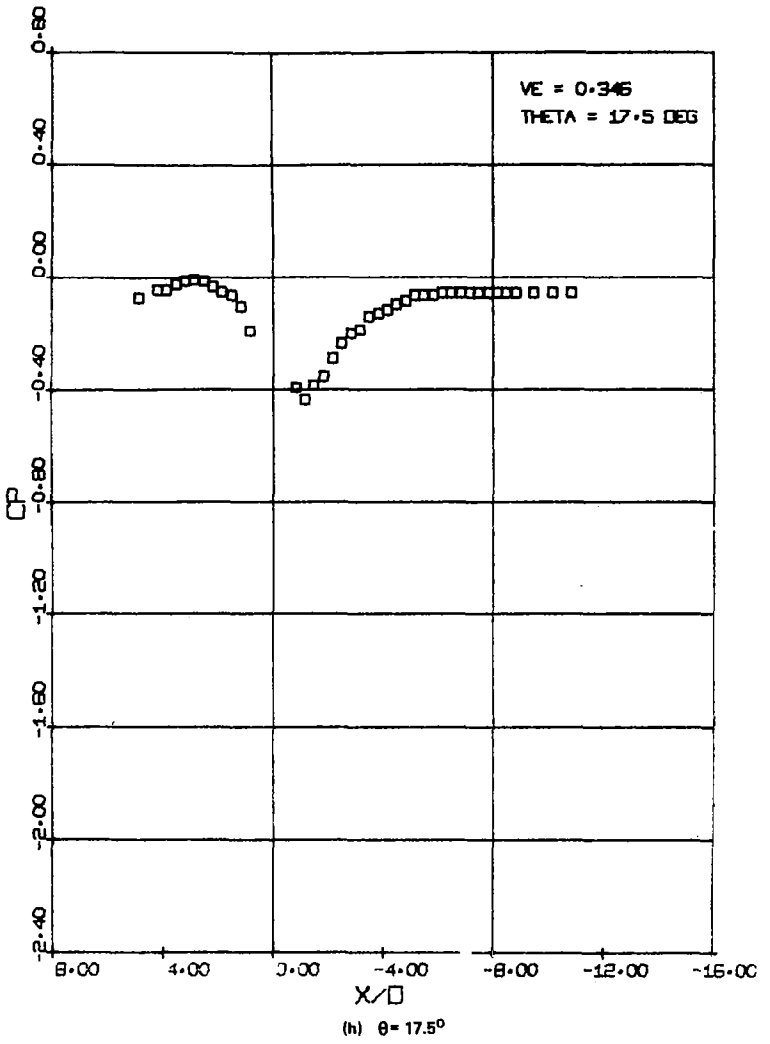


Figure 15. - Continued.



(g) $\theta = 15^{\circ}$



(h) $\theta = 17.5^{\circ}$

Figure 15. - Continued.

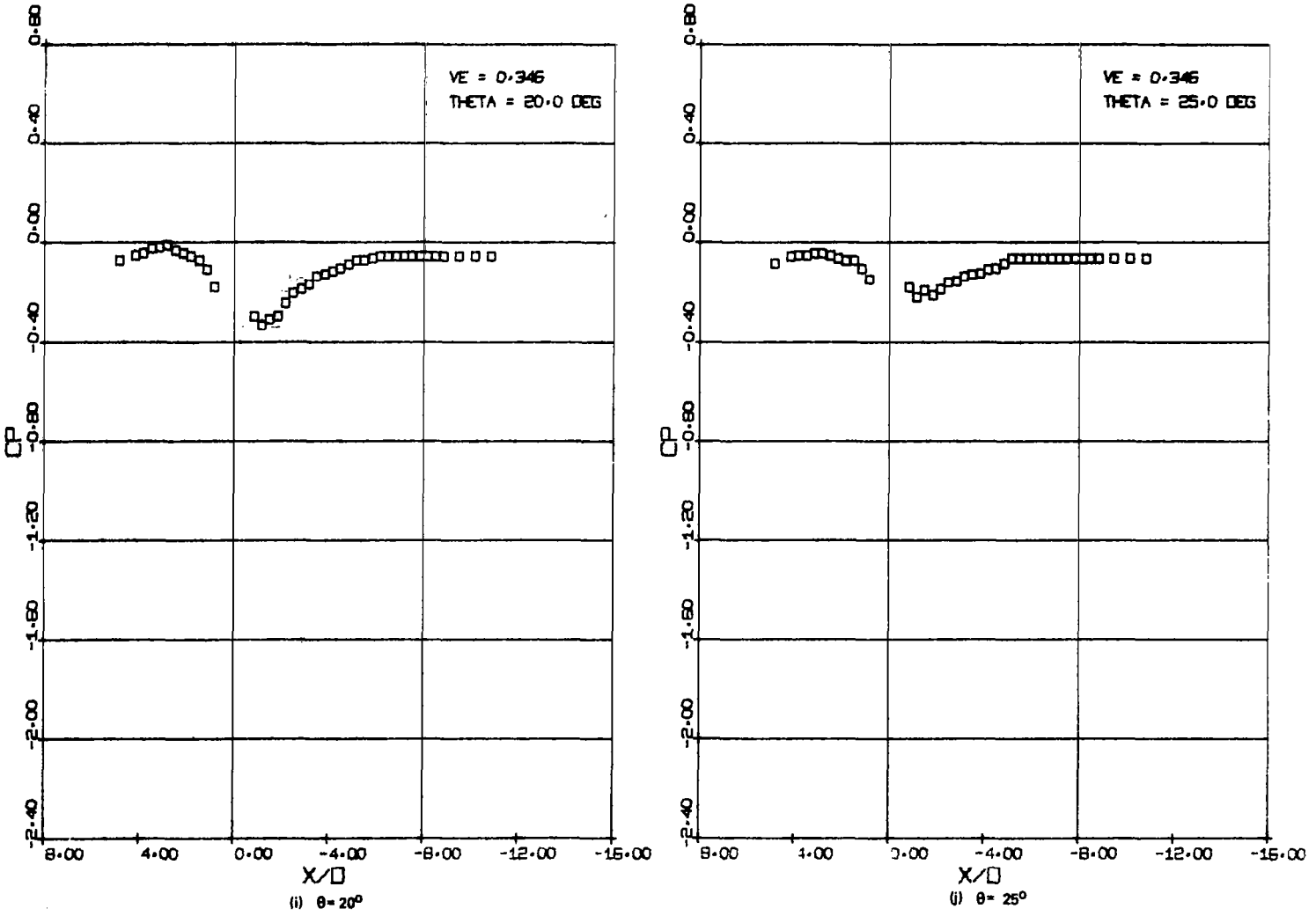


Figure 15. - Concluded.

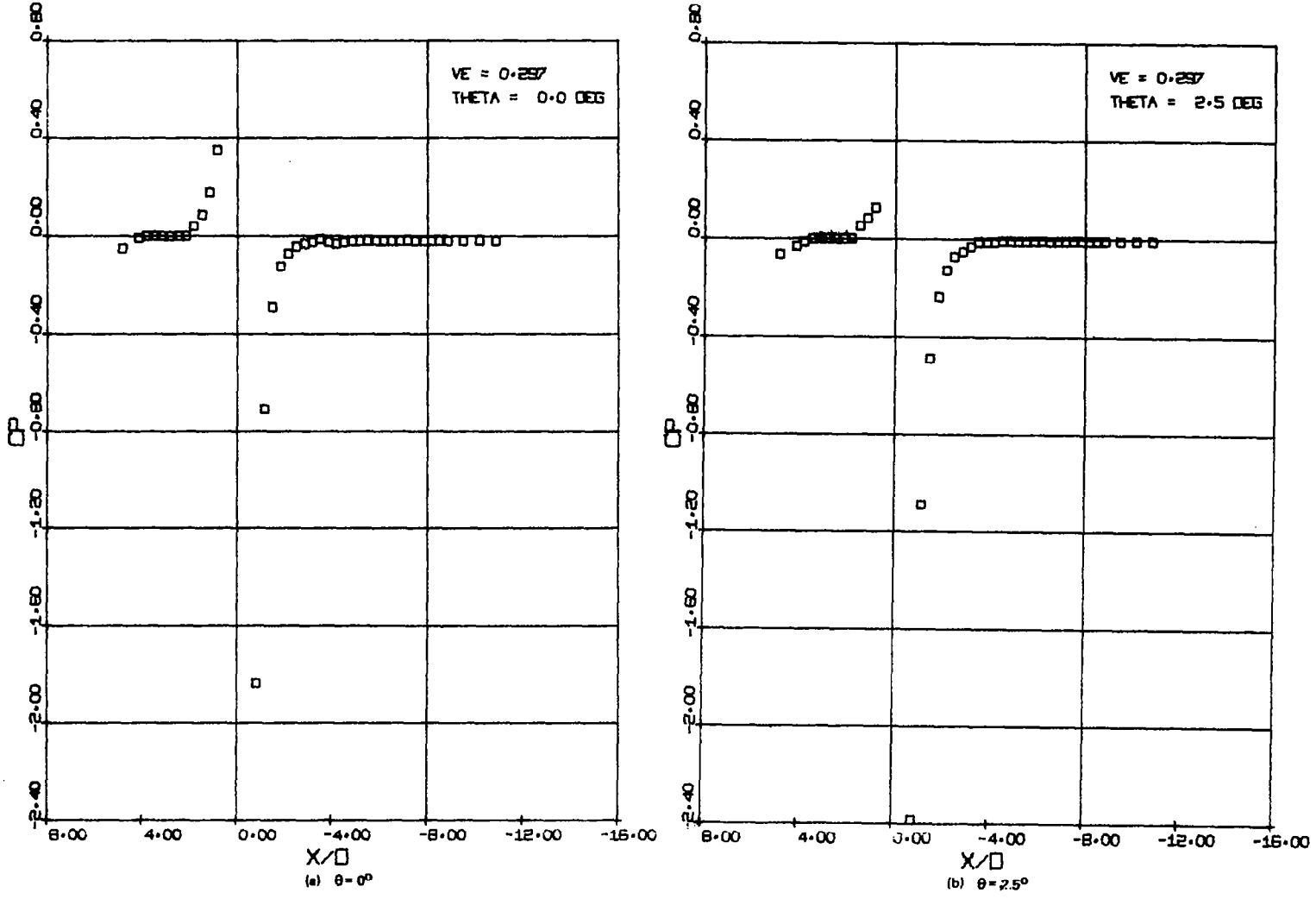


Figure 16. - C_p' profiles for V_e = 0.297 with the 0.95-cm (0.375-in.) nozzle in the cylinder.

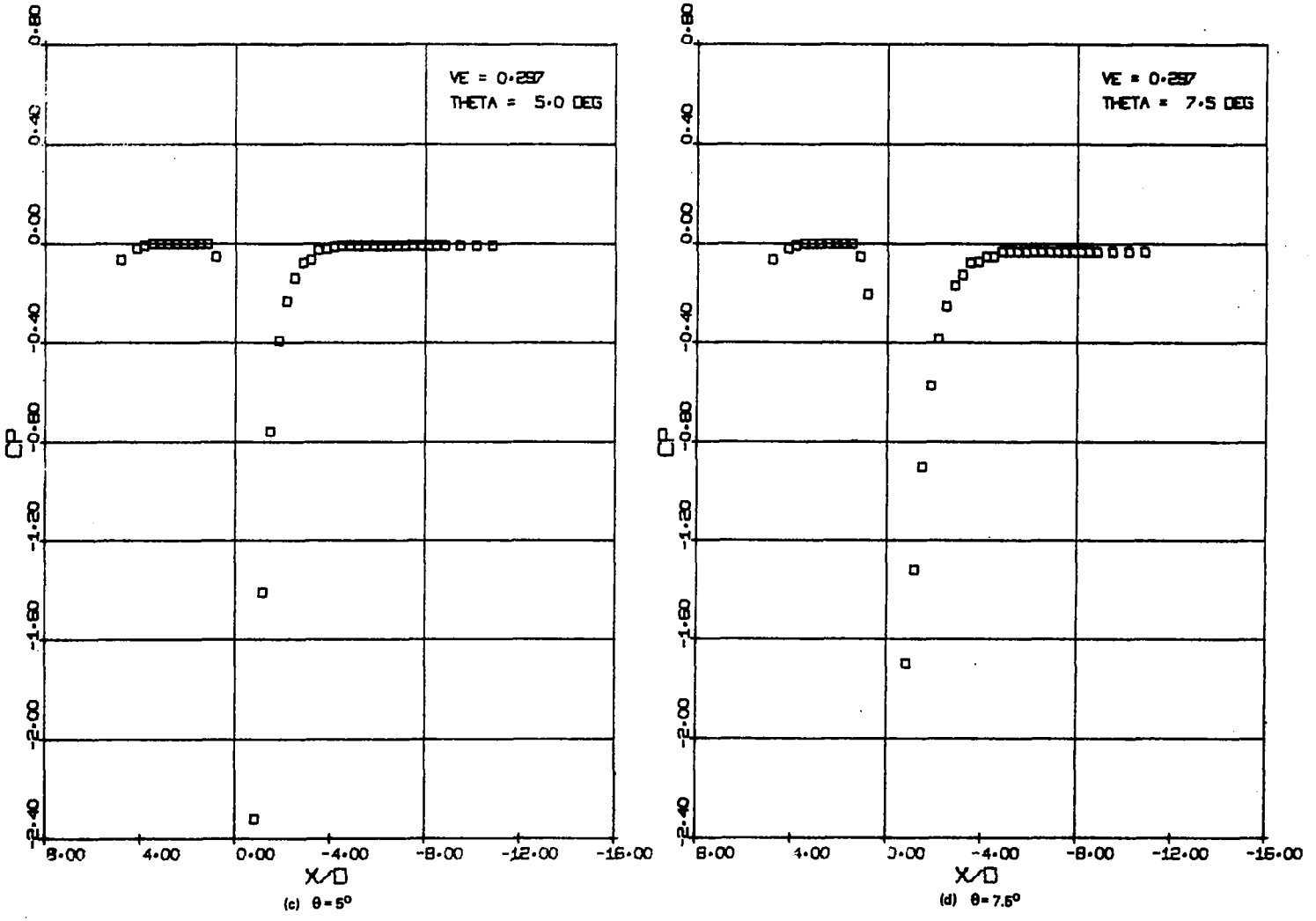
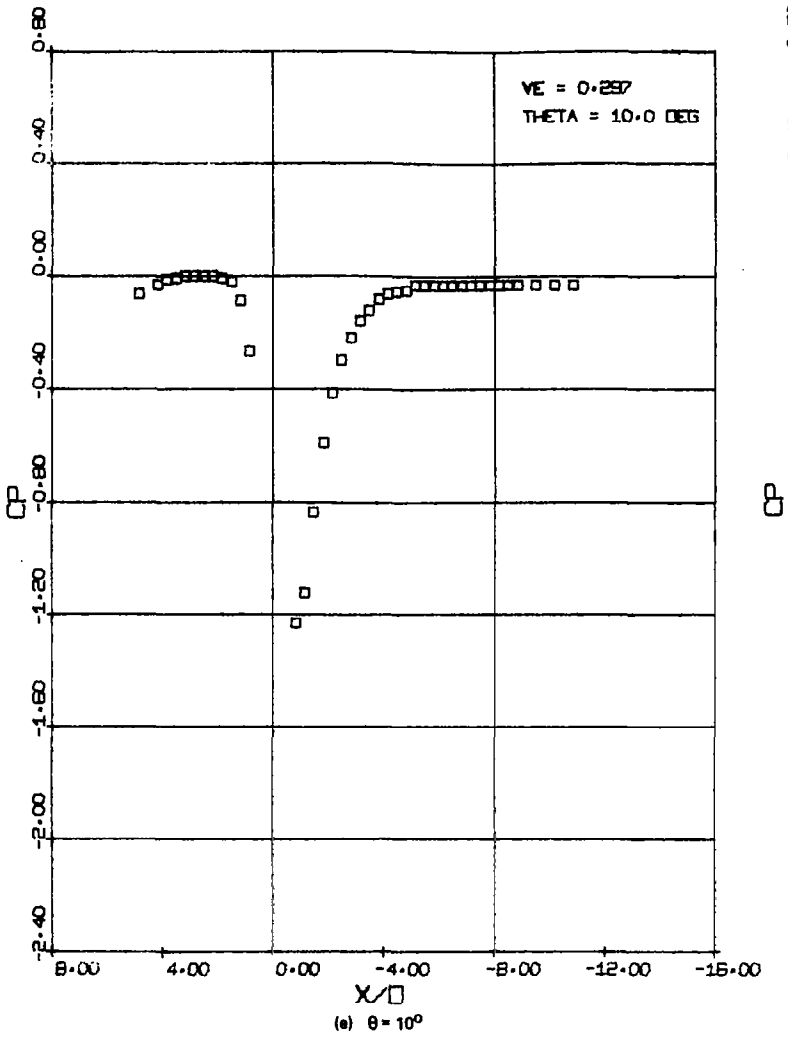
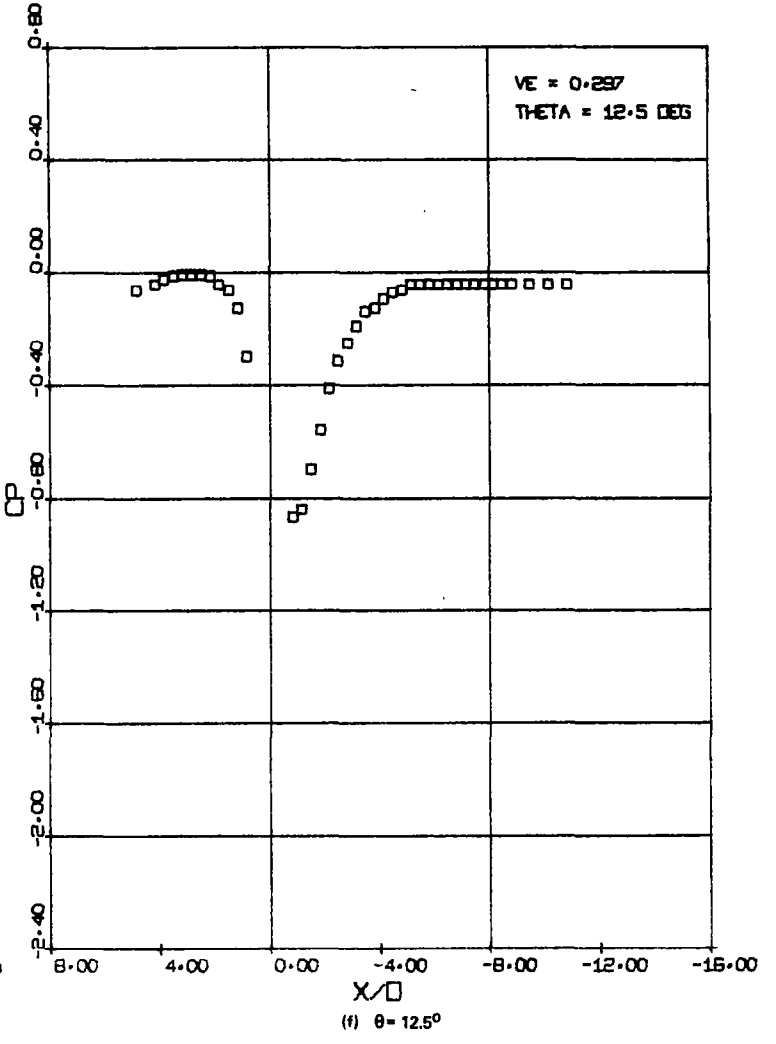


Figure 16. - Continued.



(e) $\theta = 10^{\circ}$



(f) $\theta = 12.5^{\circ}$

Figure 16. - Continued.

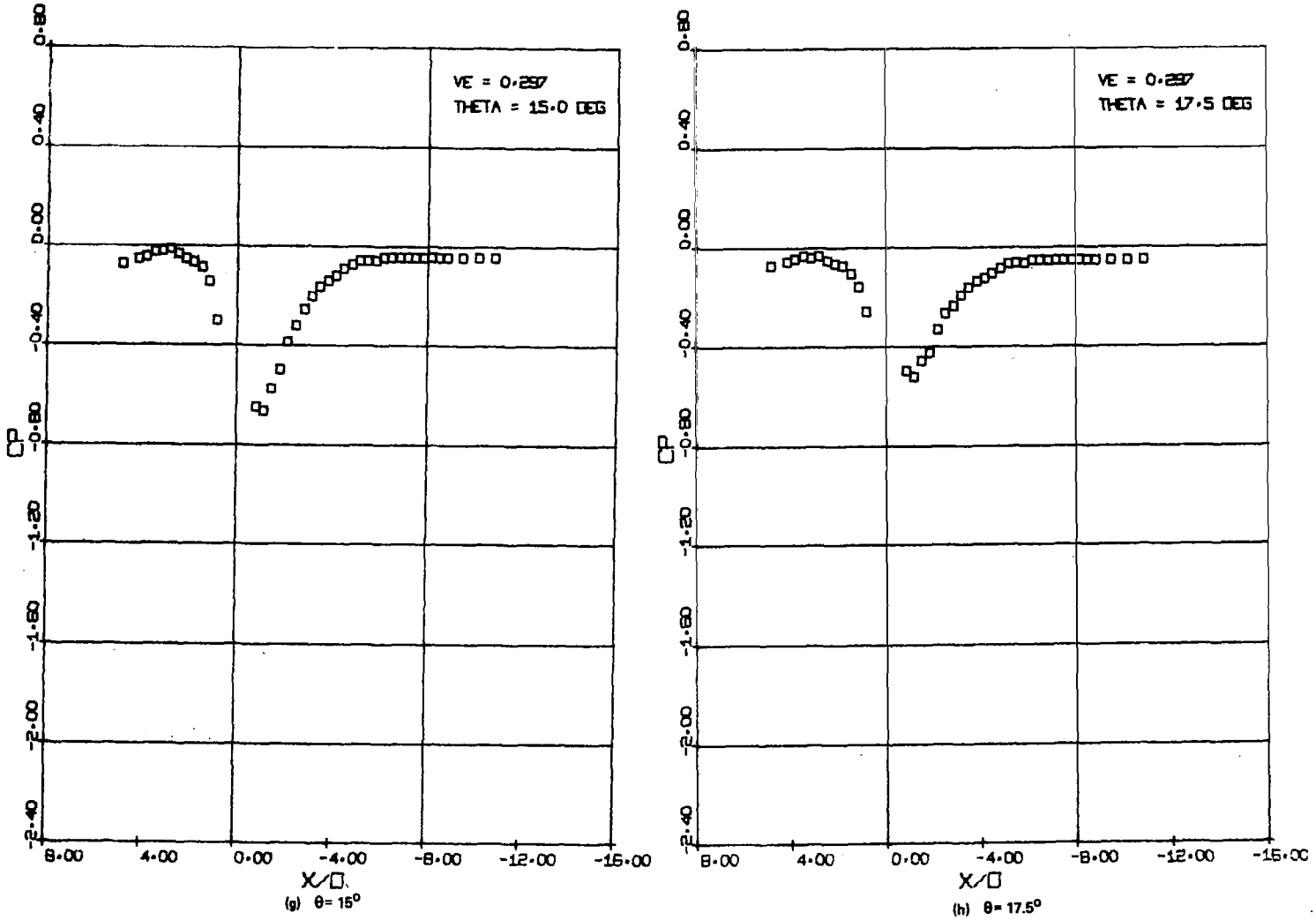
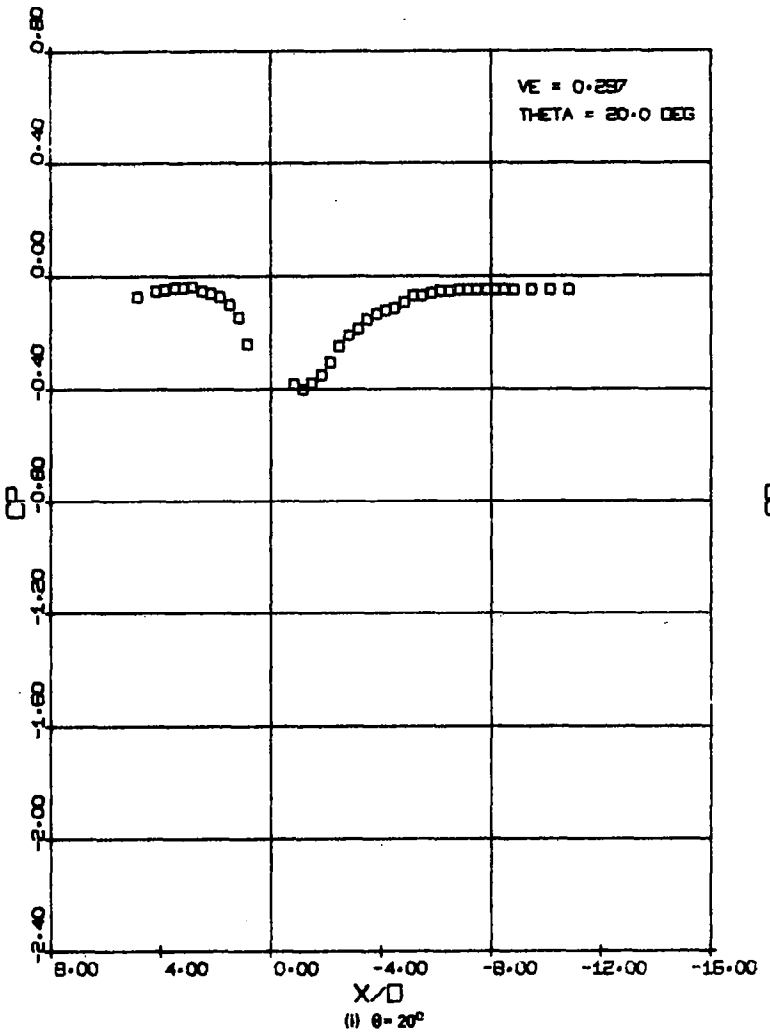
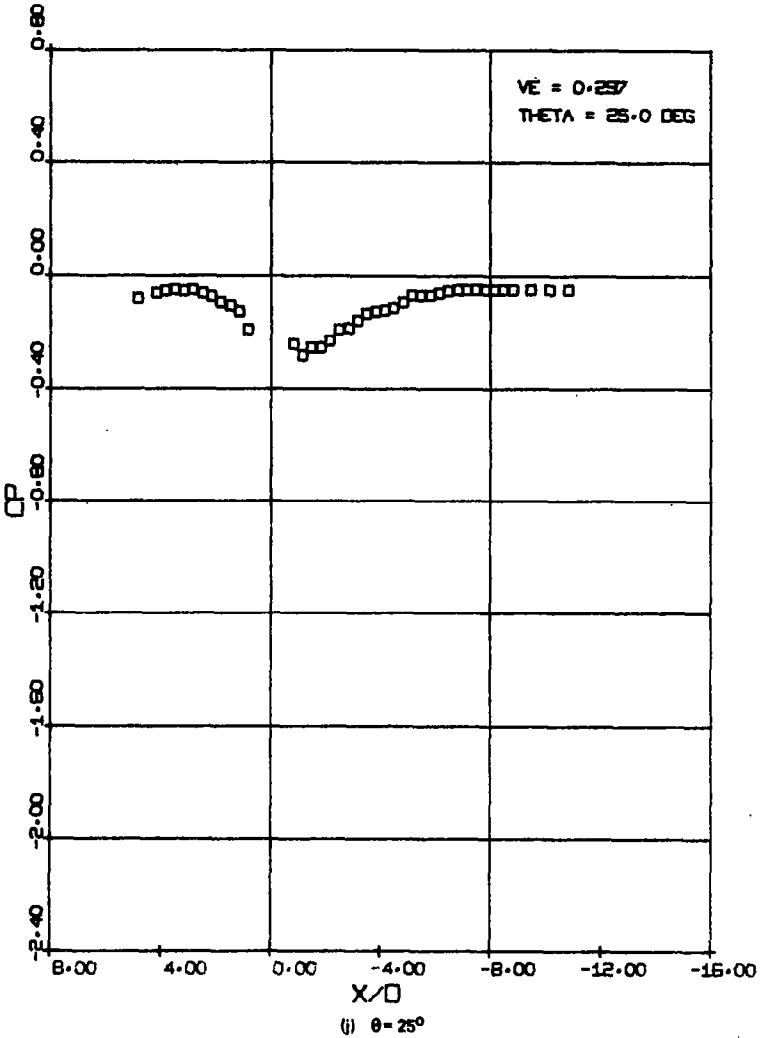


Figure 16. - Continued.



(i) θ = 20°



(j) θ = 25°

Figure 16. - Concluded.

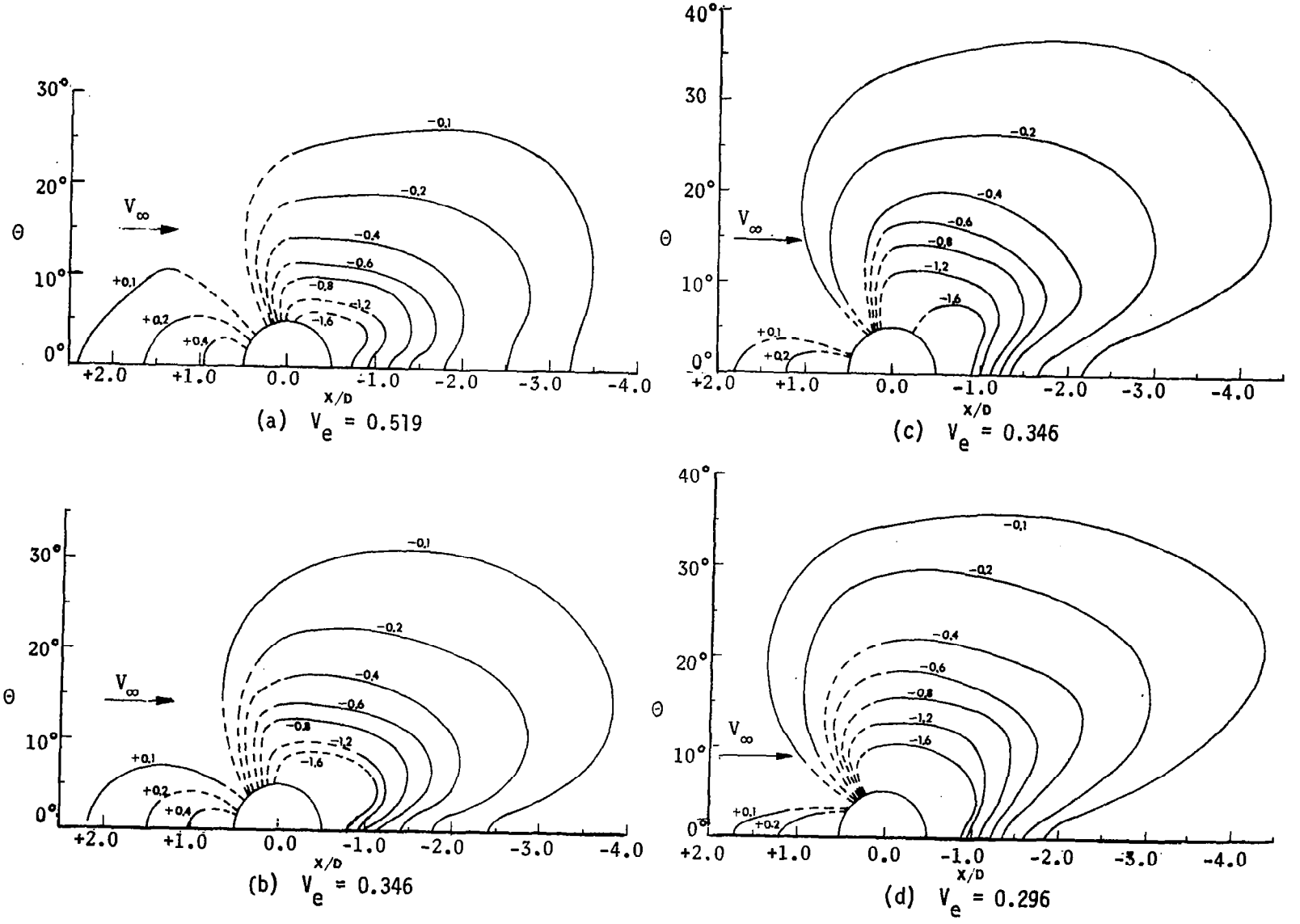


Figure 17. - C_p contours on the cylindrical surface with the 0.95-cm (0.375-in.) nozzle, V_∞ = 27.5 m/sec and D = 0.95 cm.

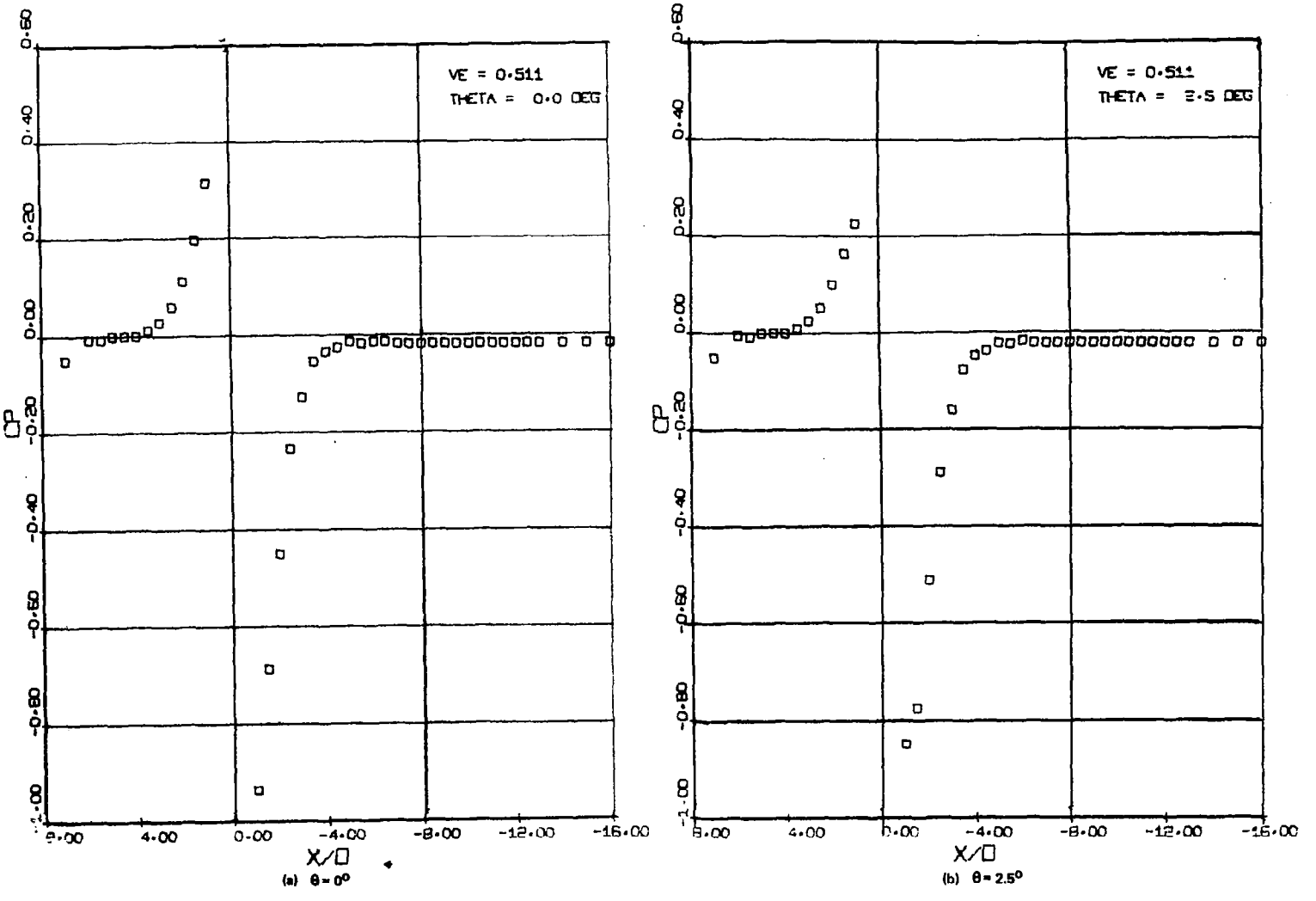


Figure 18. - C_p profiles for V_e = 0.511 with the 0.64-cm (0.25-in.) nozzle in the cylinder.

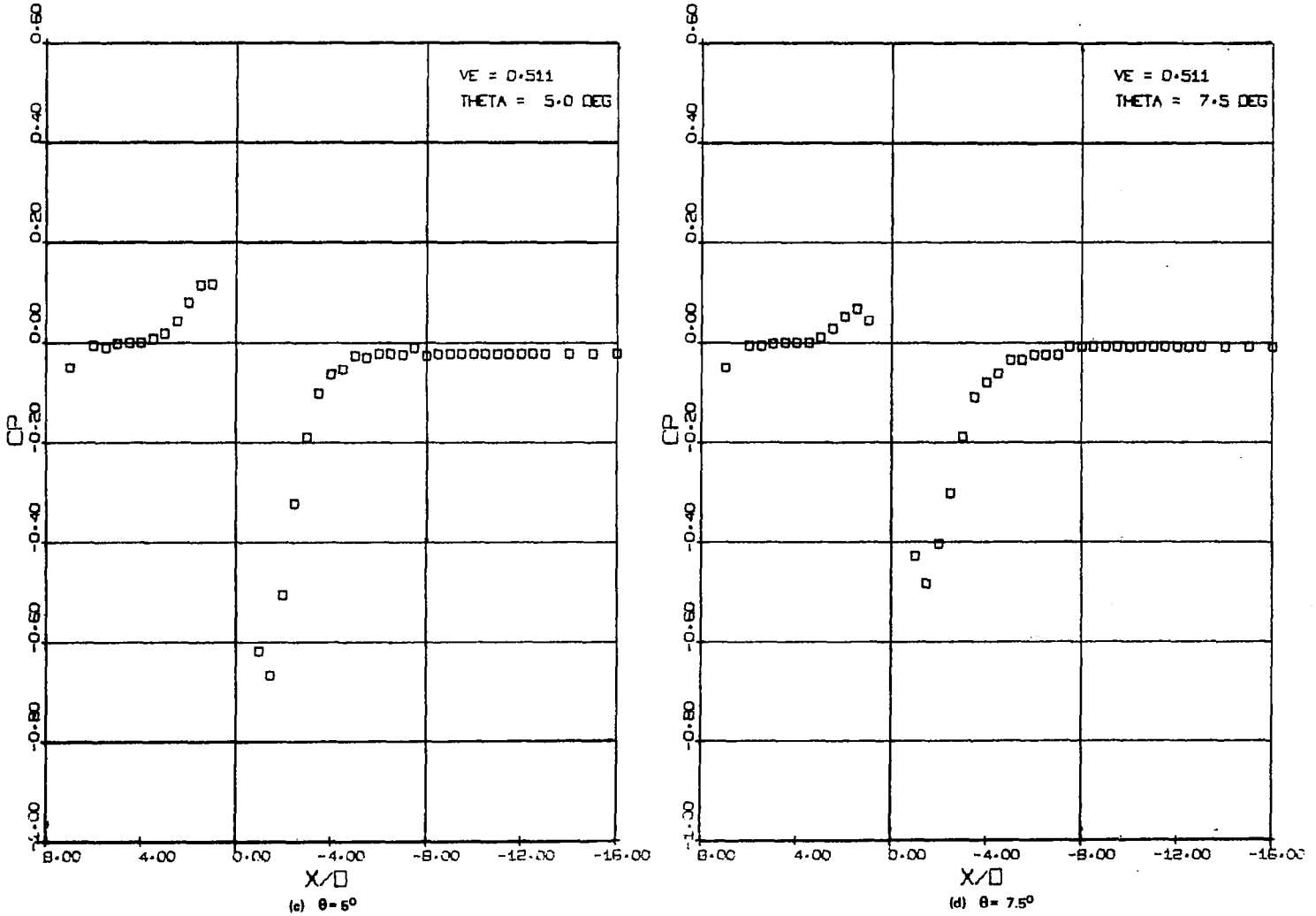


Figure 18. - Continued.

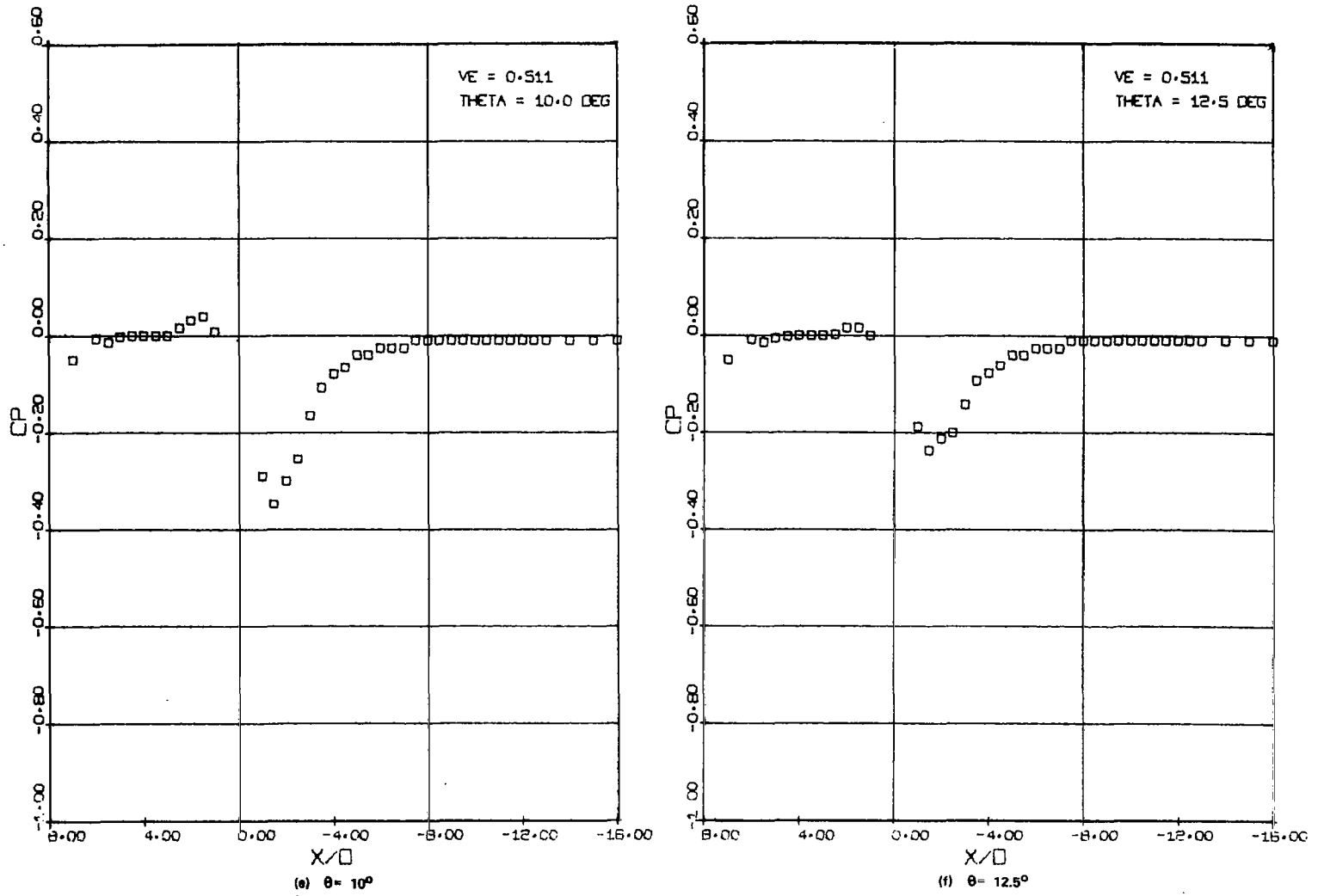
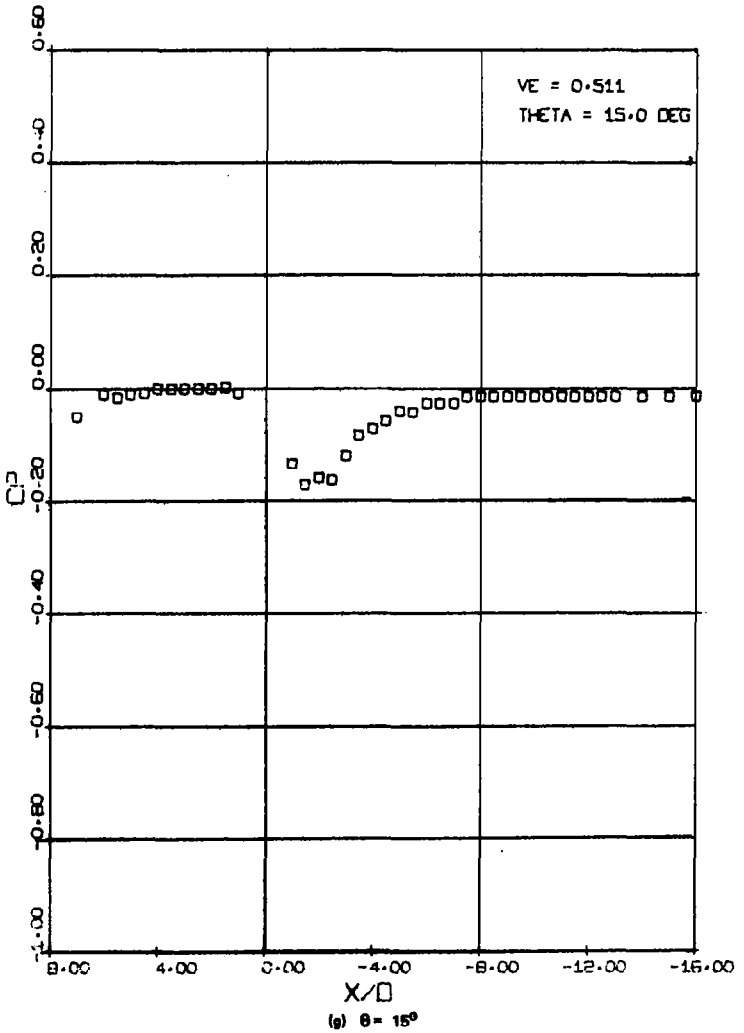
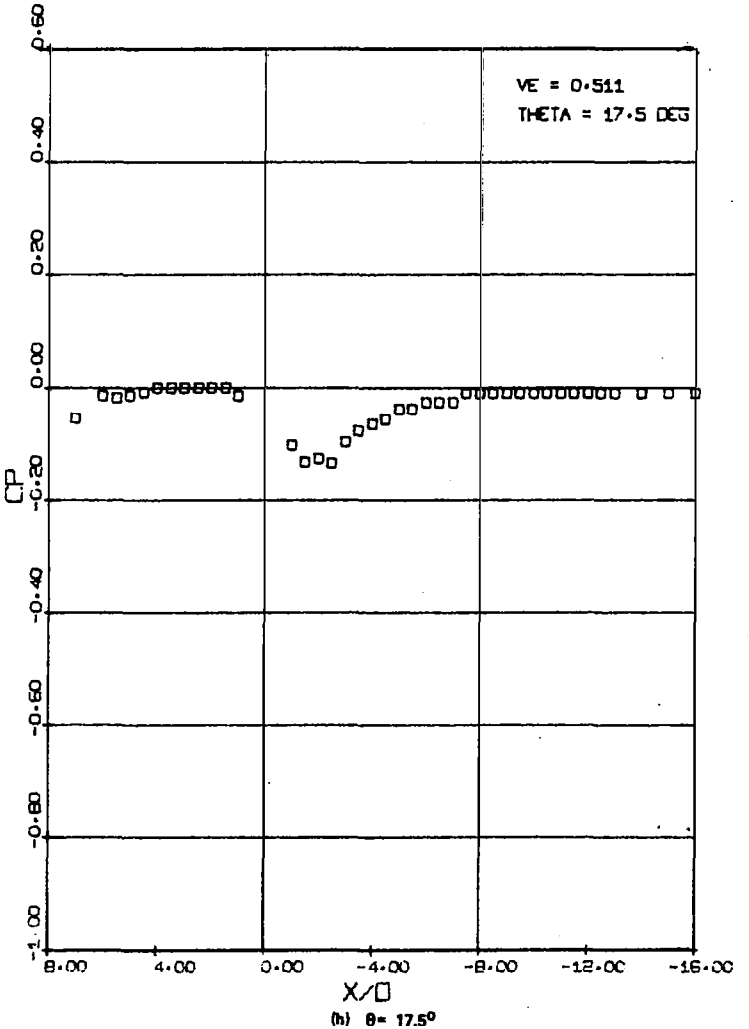


Figure 18. - Continued.

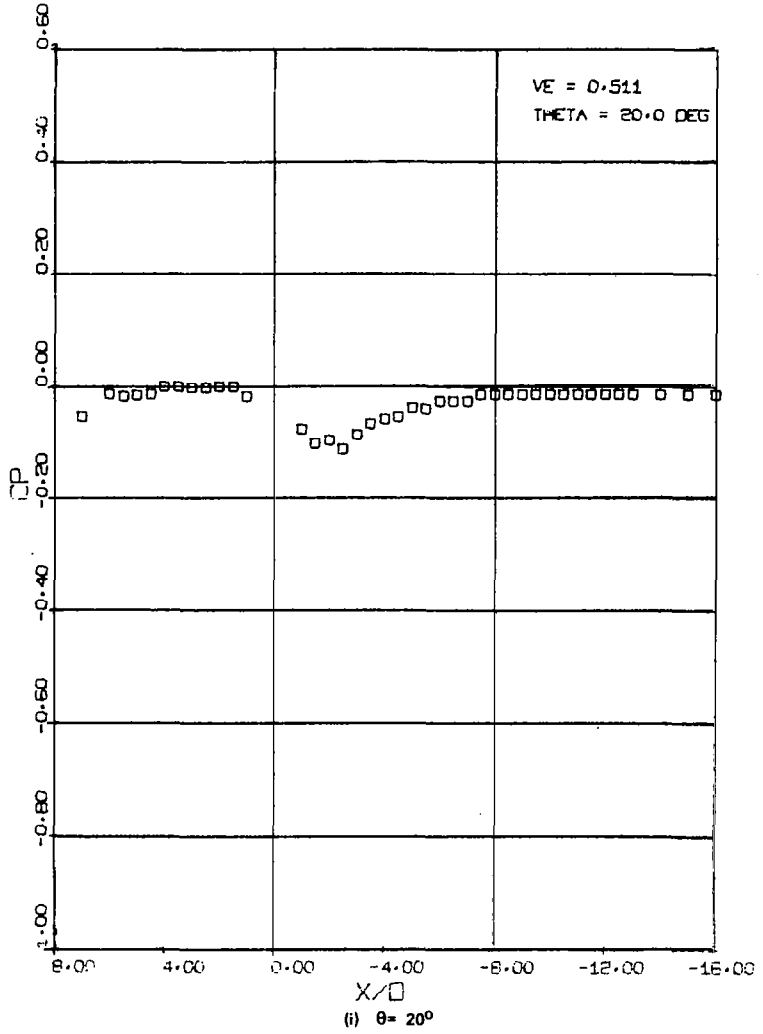


(g) θ= 15°

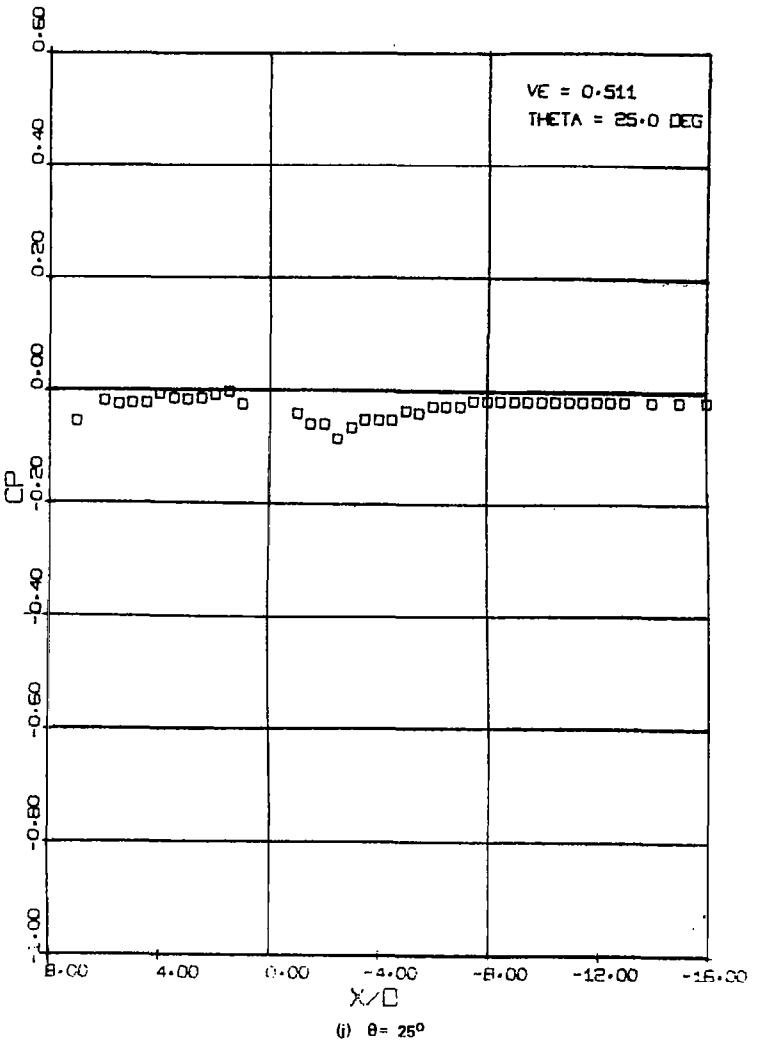


(h) θ= 17.5°

Figure 18. - Continued.



(i) θ= 20°



(j) θ= 25°

Figure 18. - Concluded.

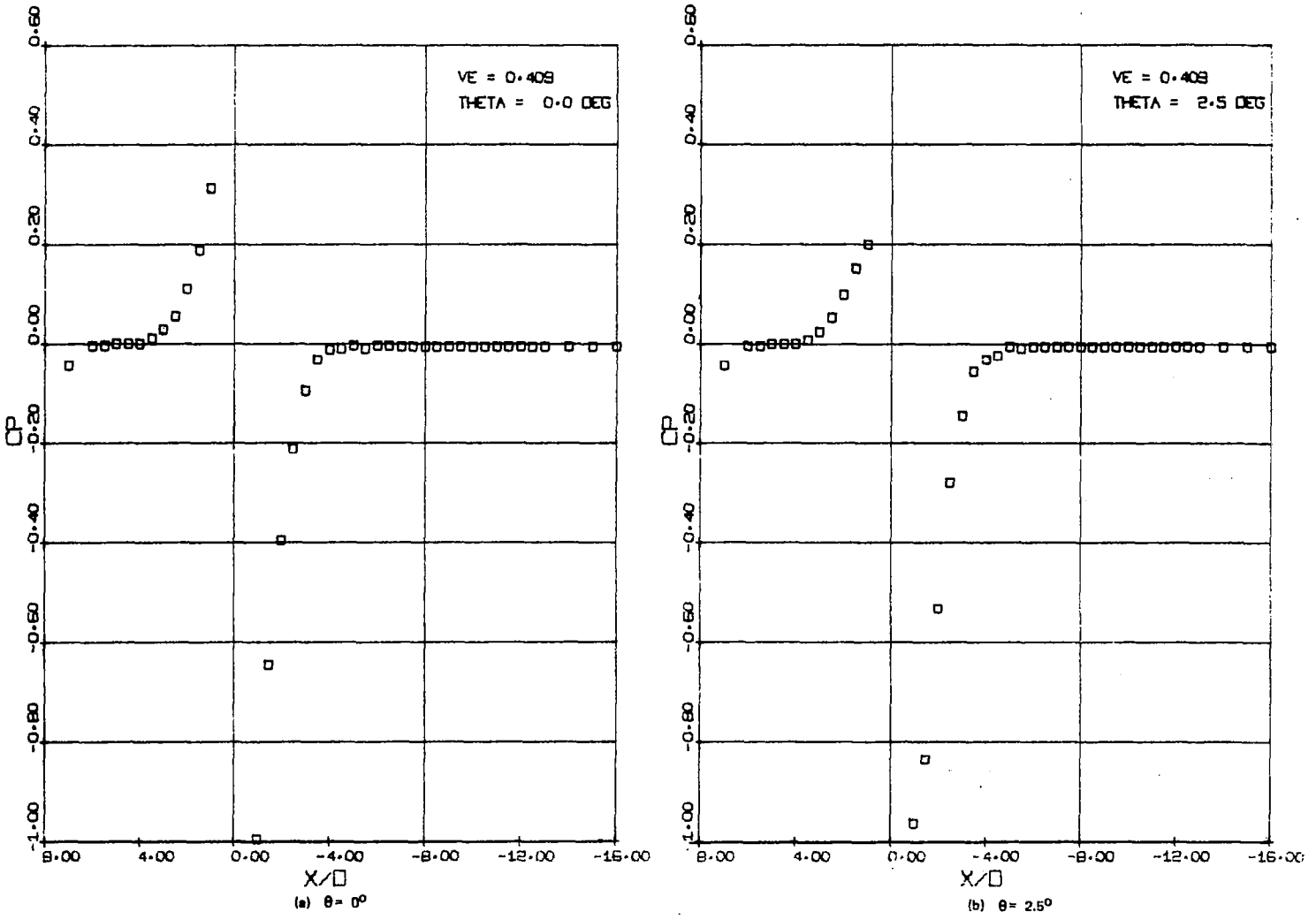


Figure 19. - C_p profiles for V_e = 0.409 with the 0.64-cm (0.25-in.) nozzle in the cylinder.

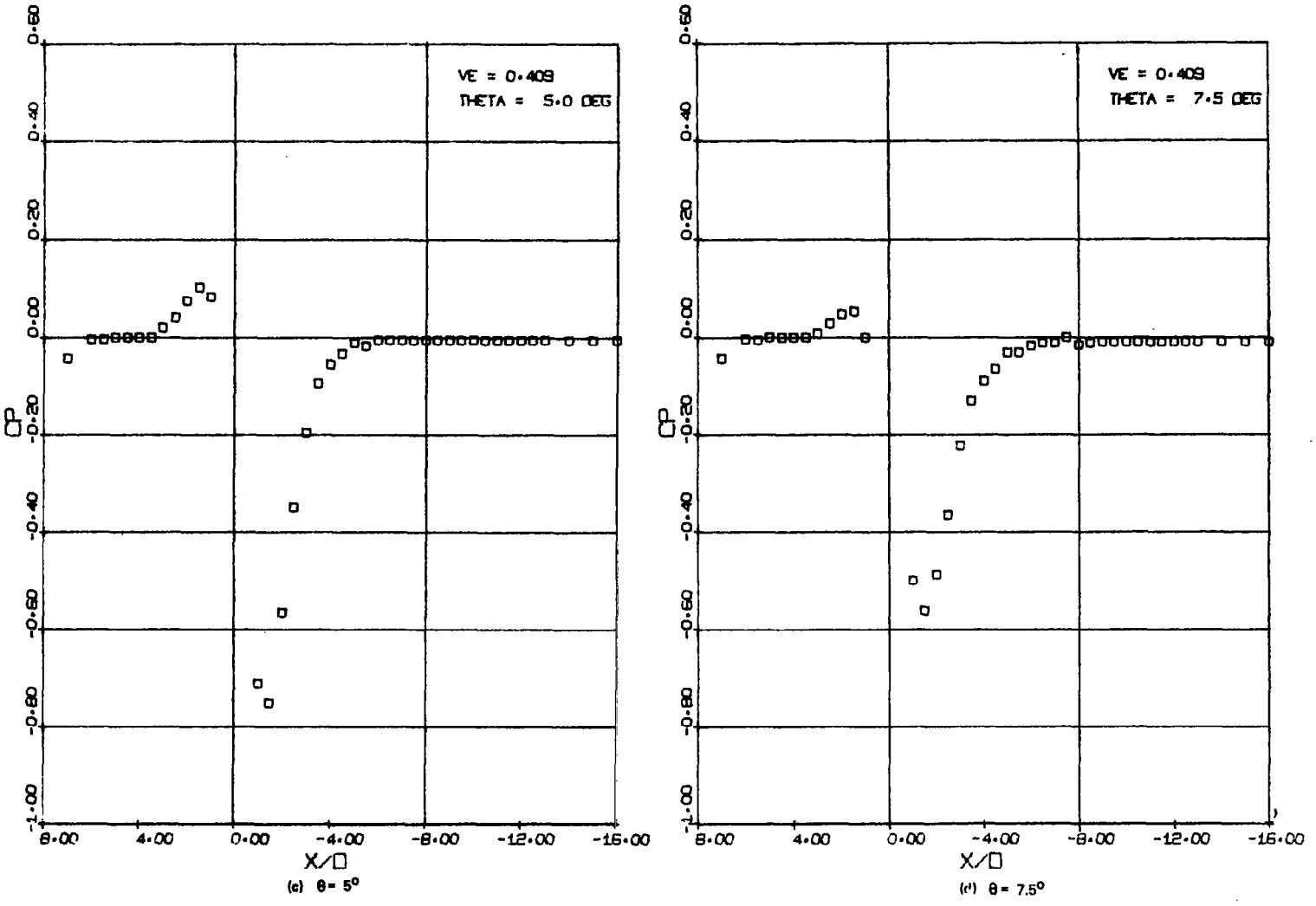


Figure 19. - Continued.

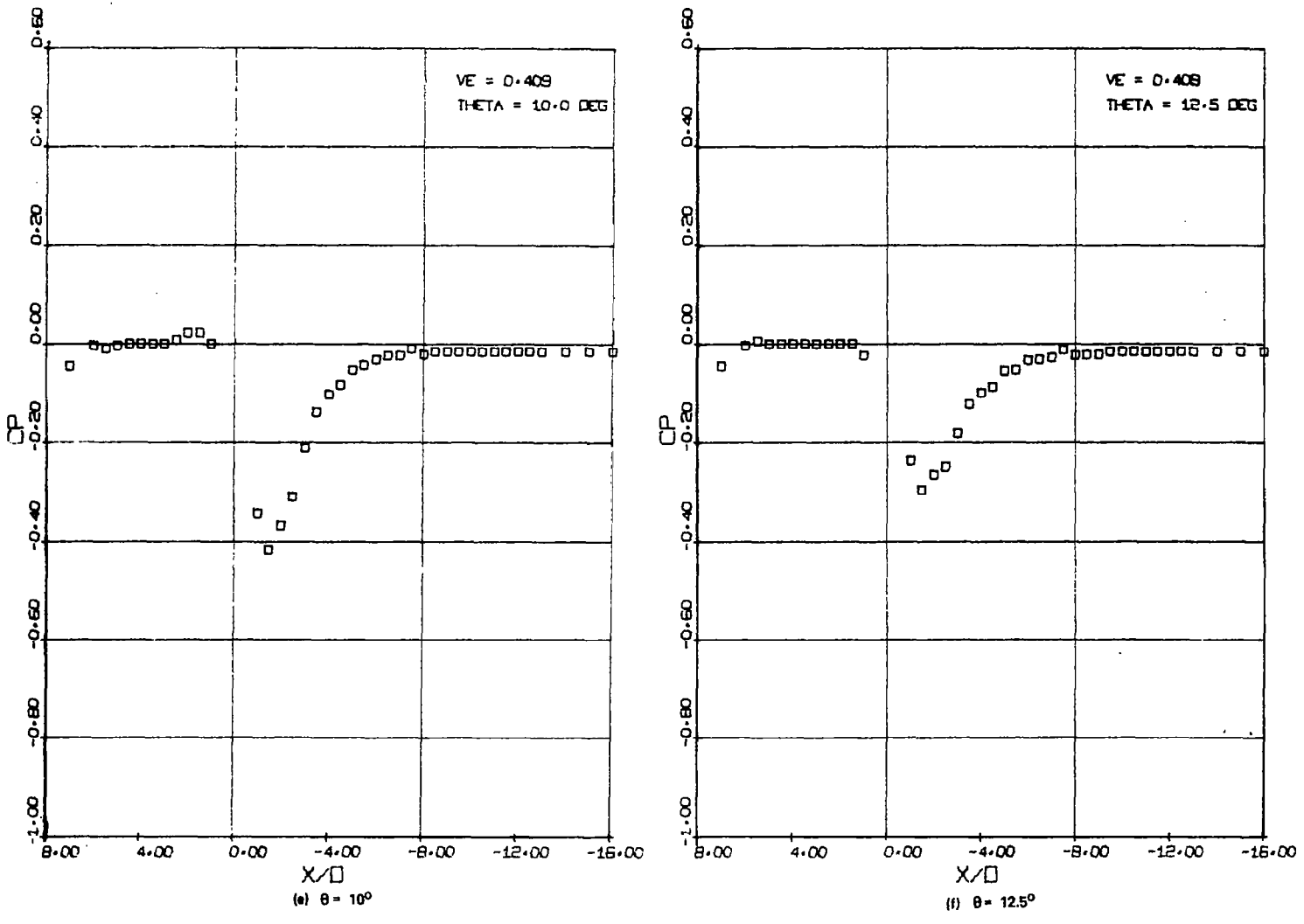
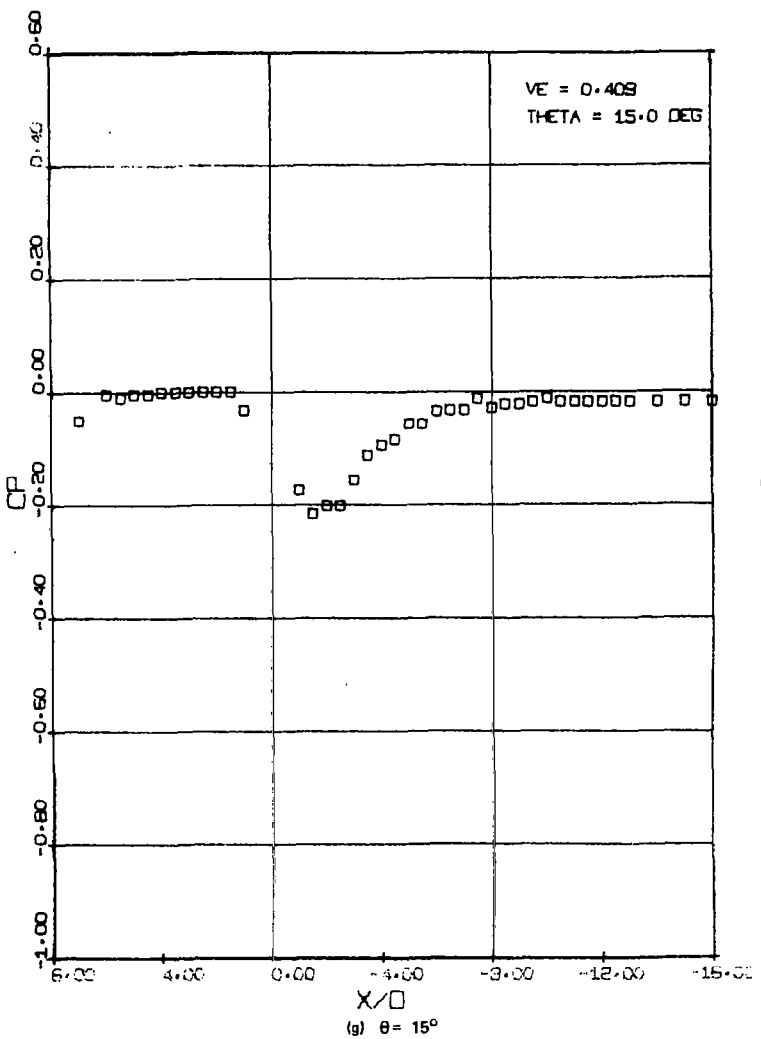


Figure 19. - Continued.



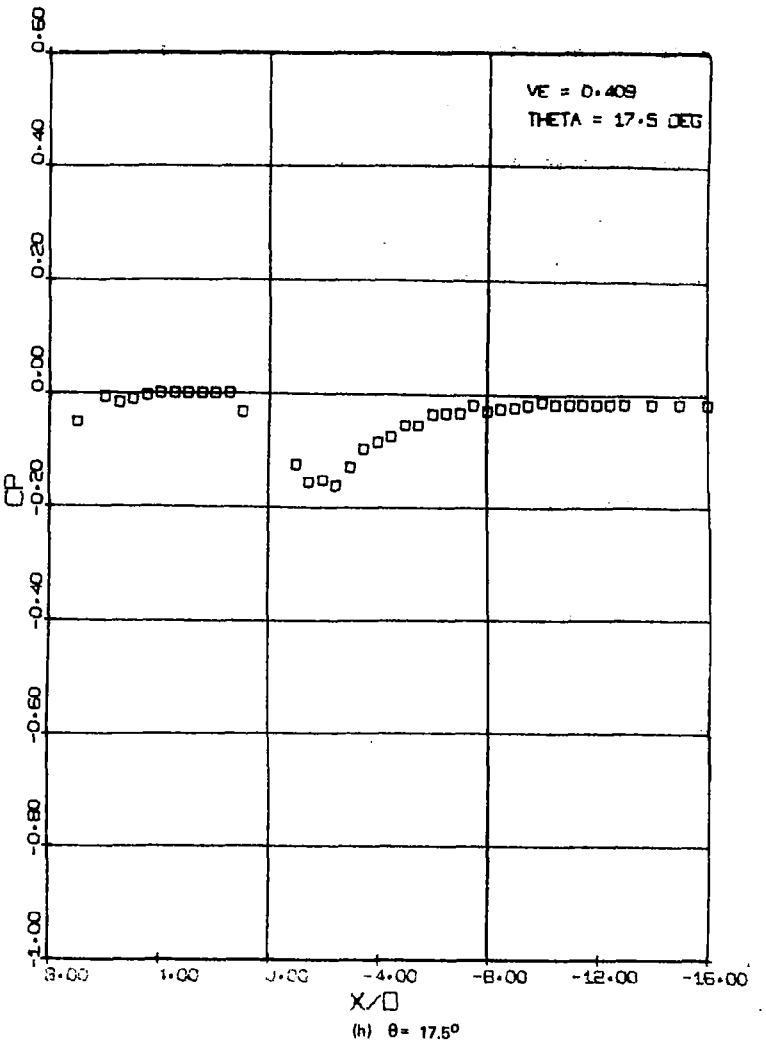


Figure 19. - Continued.

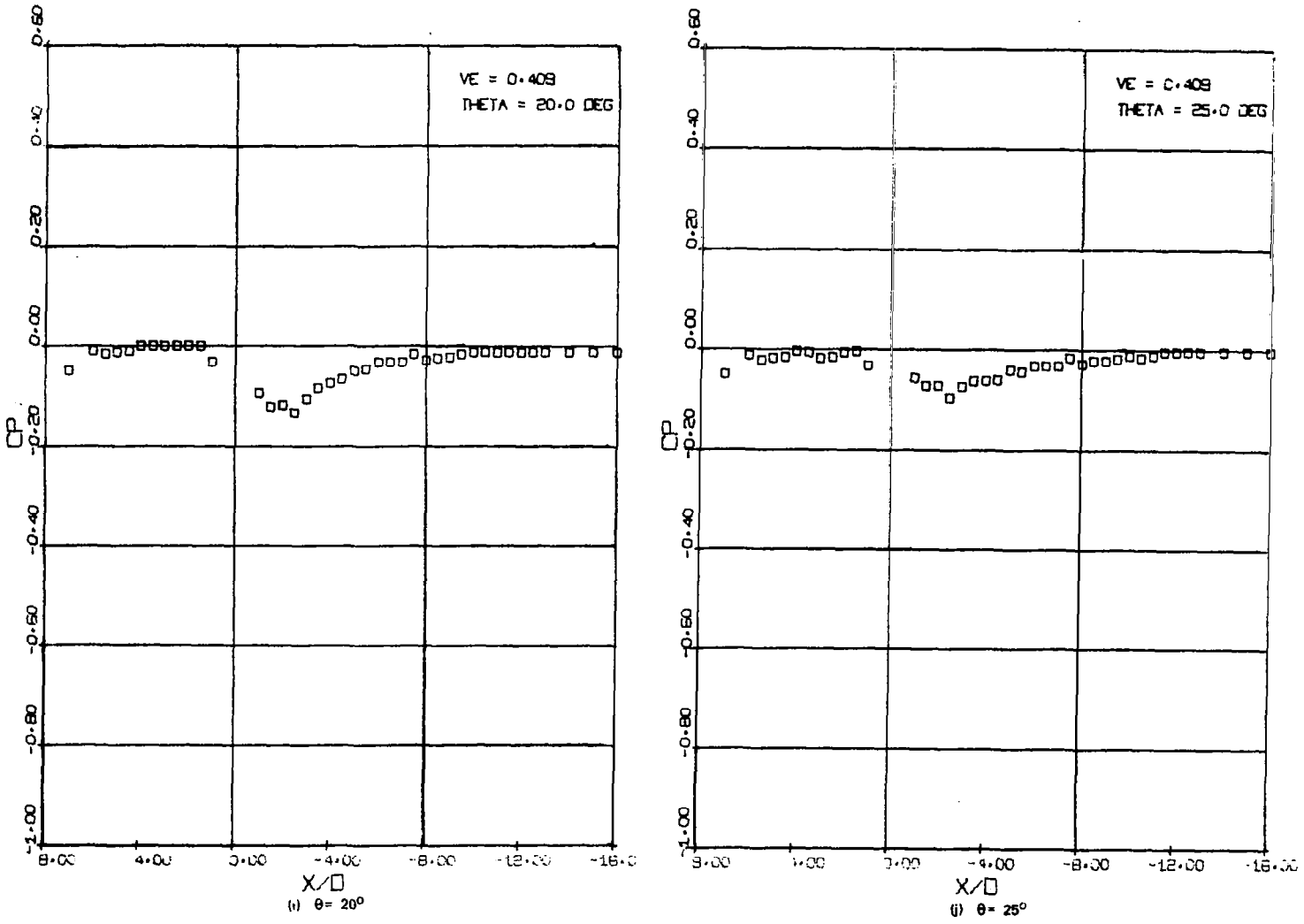


Figure 19. - Concluded.

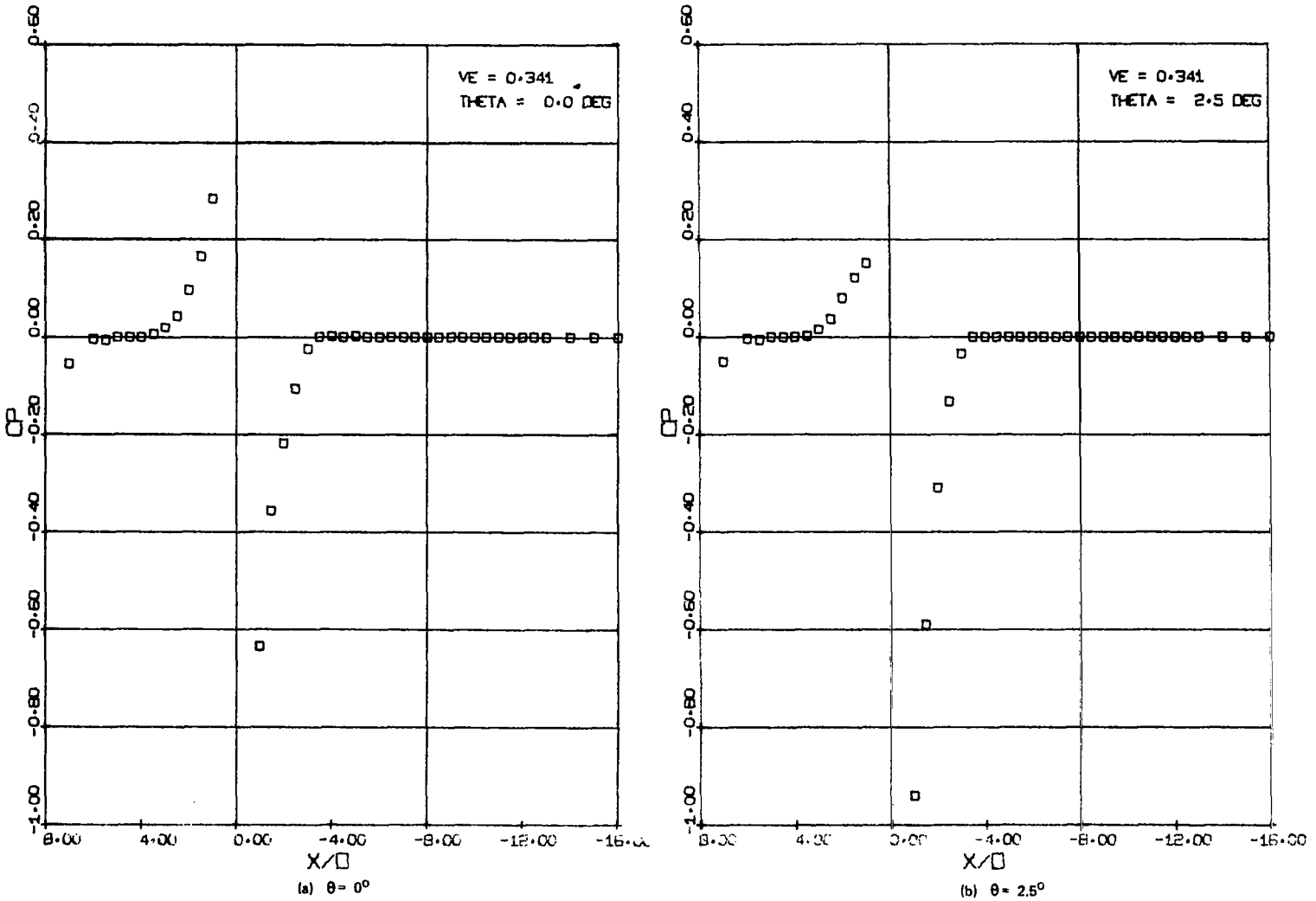
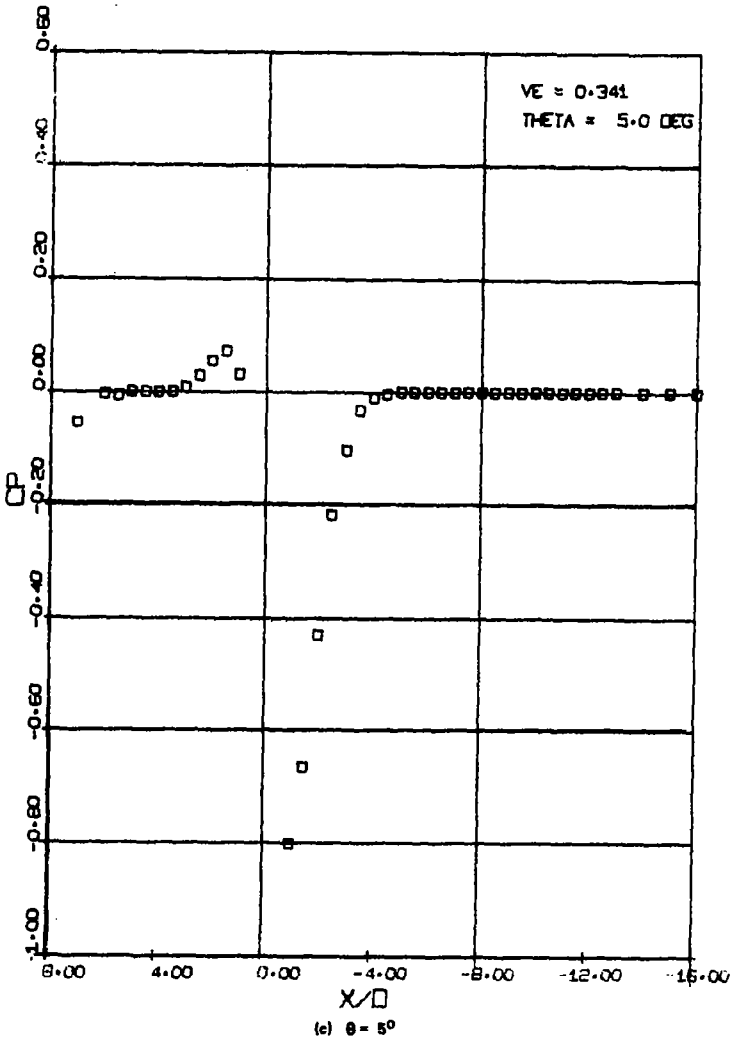
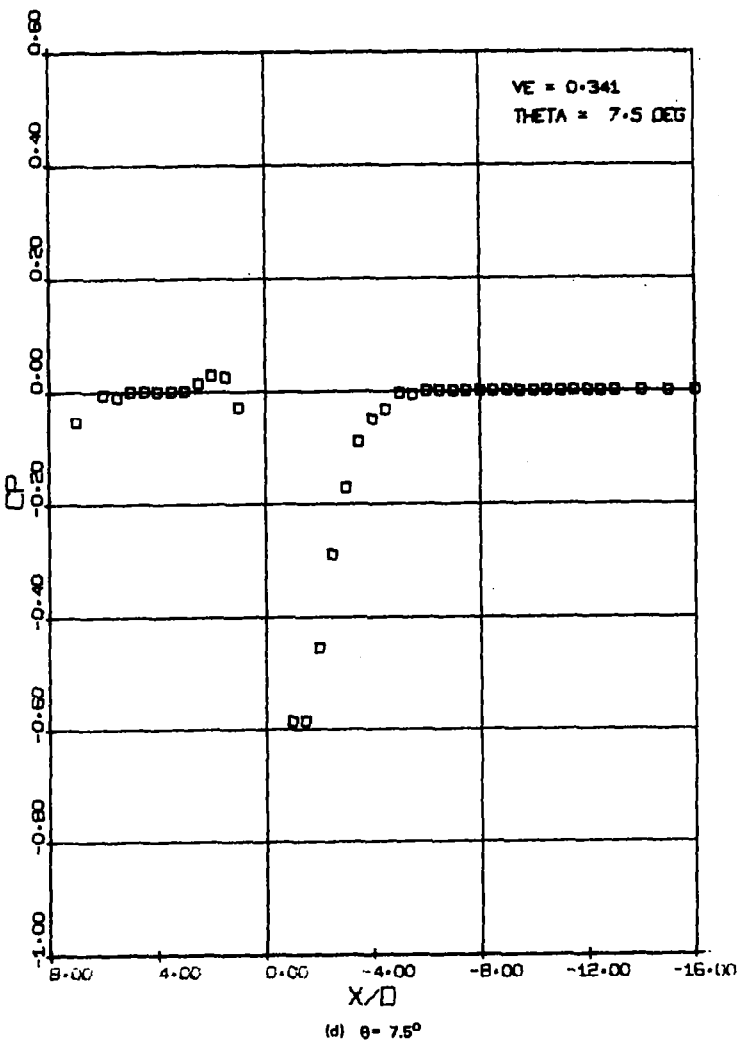


Figure 20. - C_p profiles for V_e = 0.341 with the 0.64-cm (0.25-in.) nozzle in the cylinder.

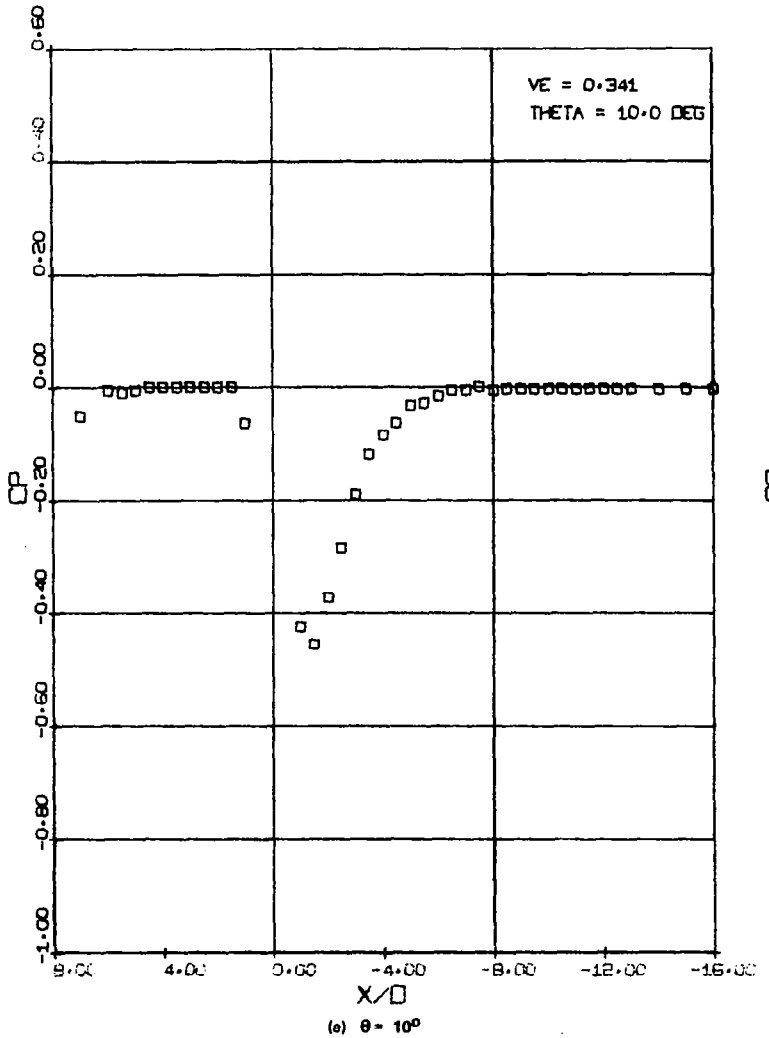


(c) θ = 5°

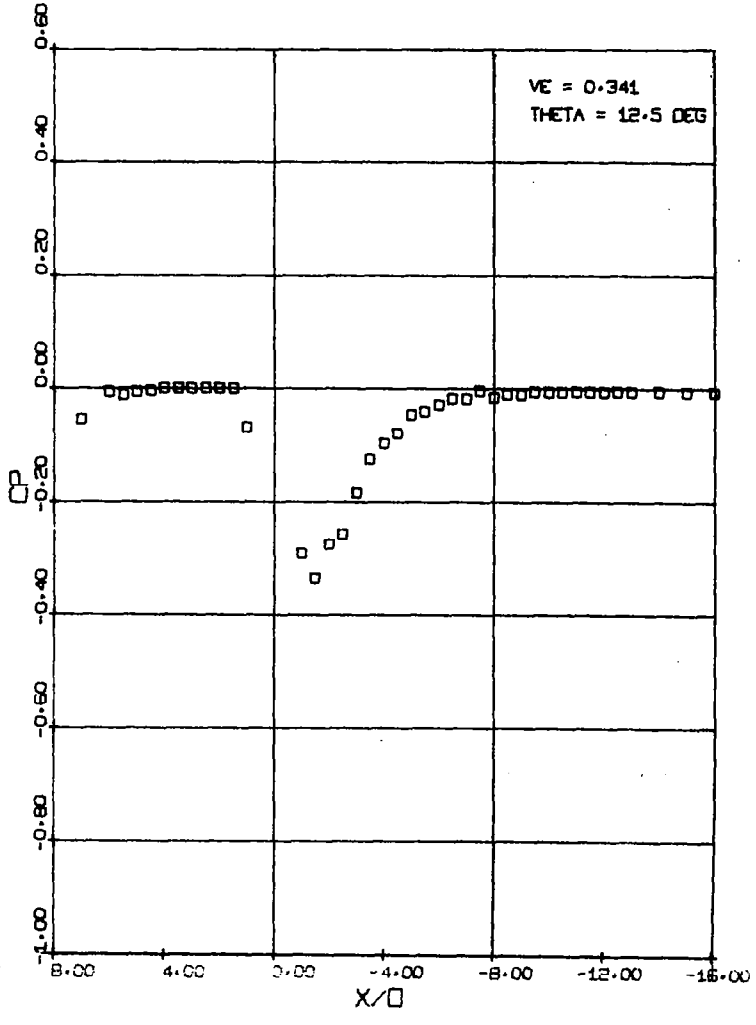


(d) θ = 7.5°

Figure 20. - Continued.

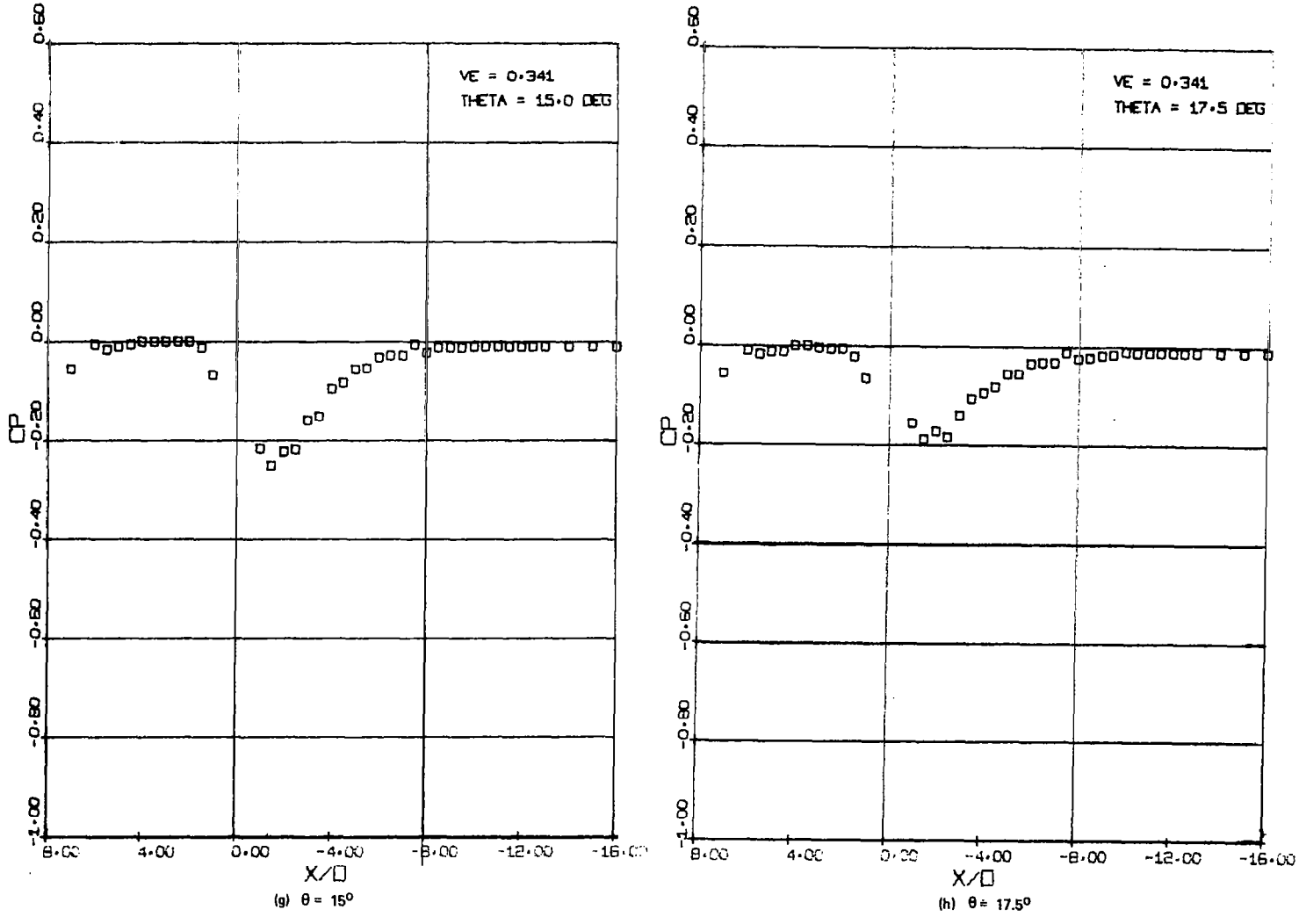


(e) θ = 10°



(f) θ = 12.5°

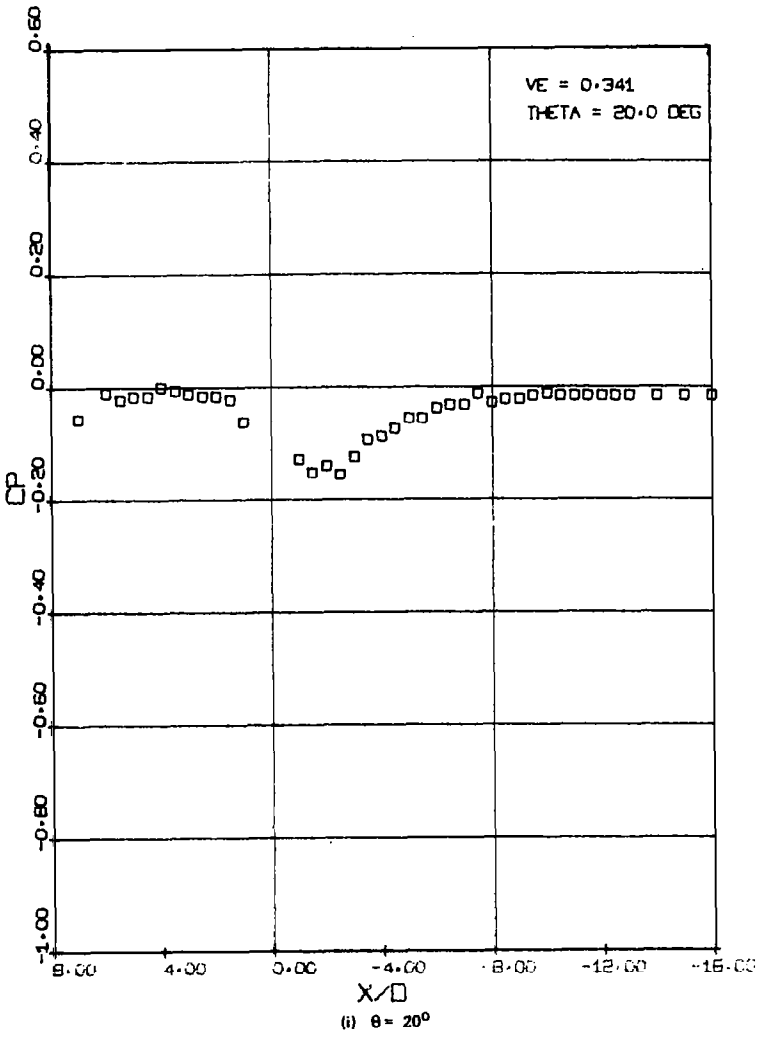
Figure 20. - Continued.



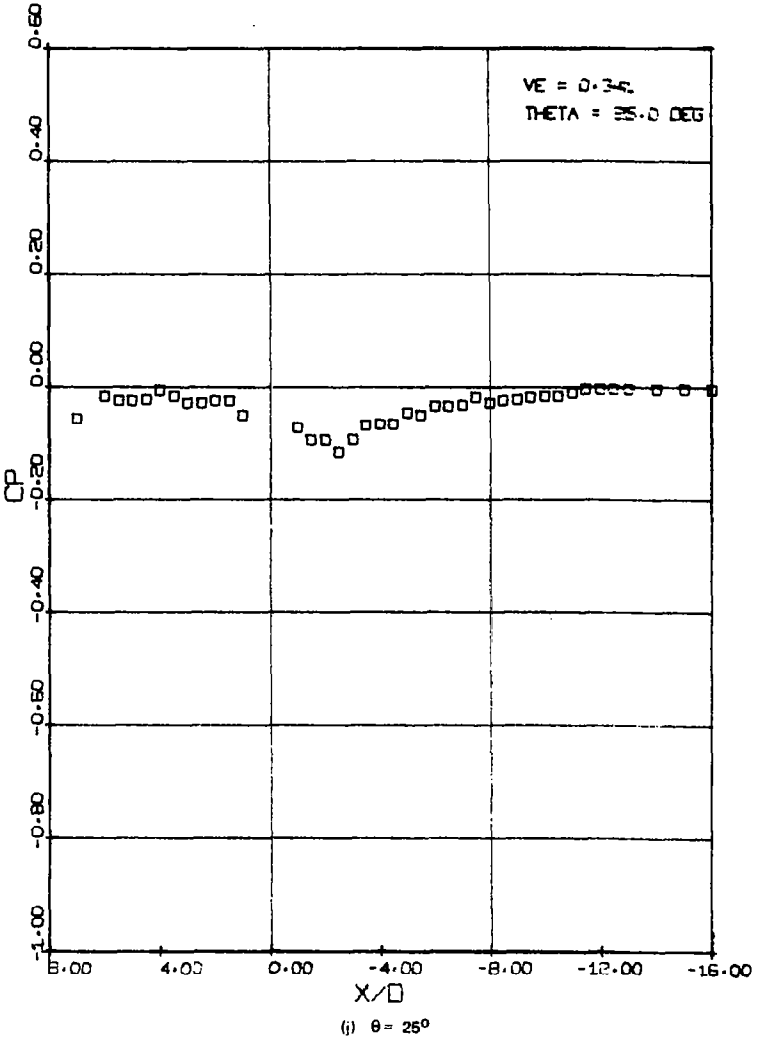
(g) θ = 15°

(h) θ = 17.5°

Figure 20. - Continued.



(i) $\theta = 20^{\circ}$



(j) $\theta = 25^{\circ}$

Figure 20. - Concluded.

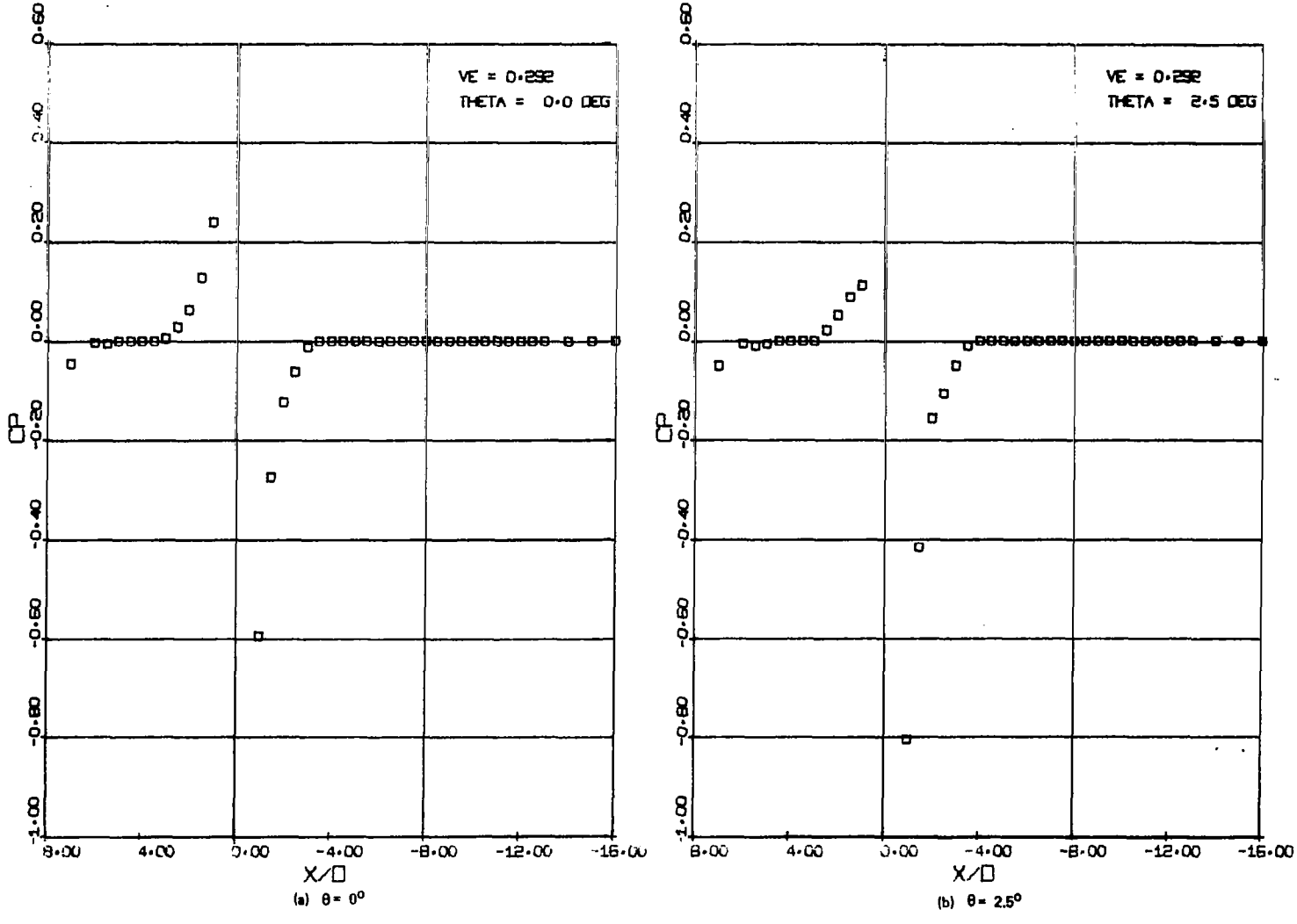


Figure 21. - C_p profiles for V_e = 0.292 with the 0.64-cm (0.25-in.) nozzle in the cylinder.

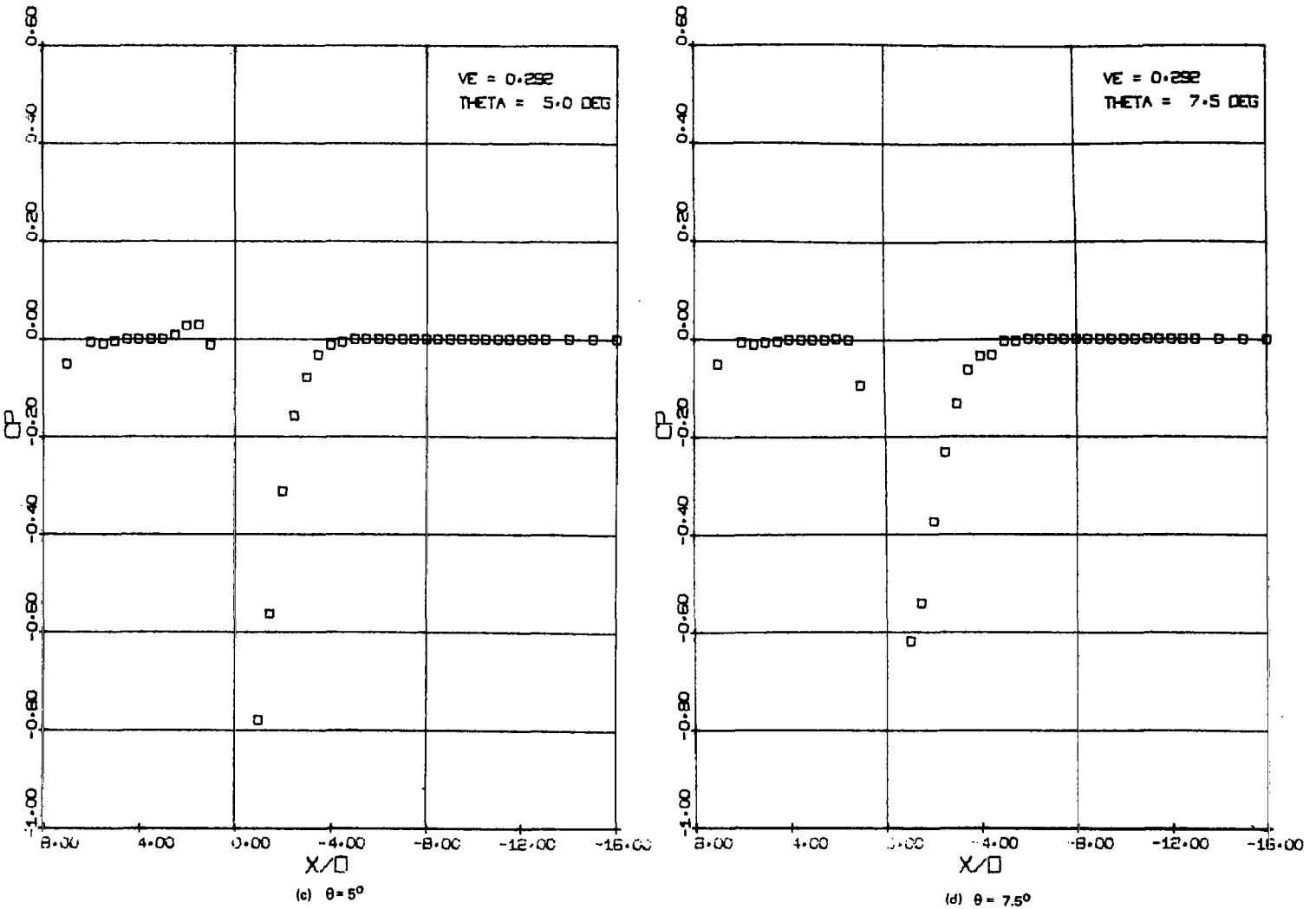
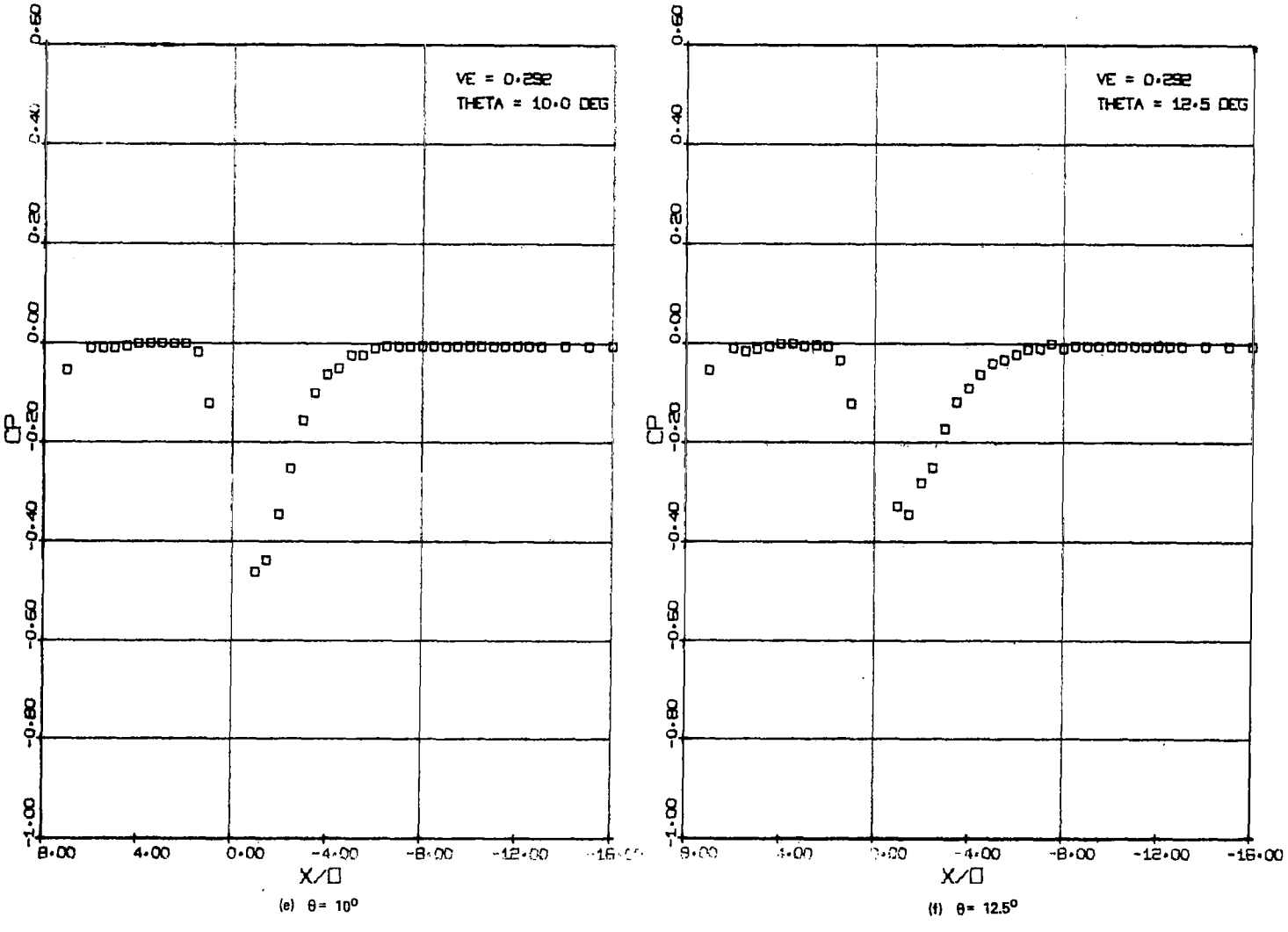


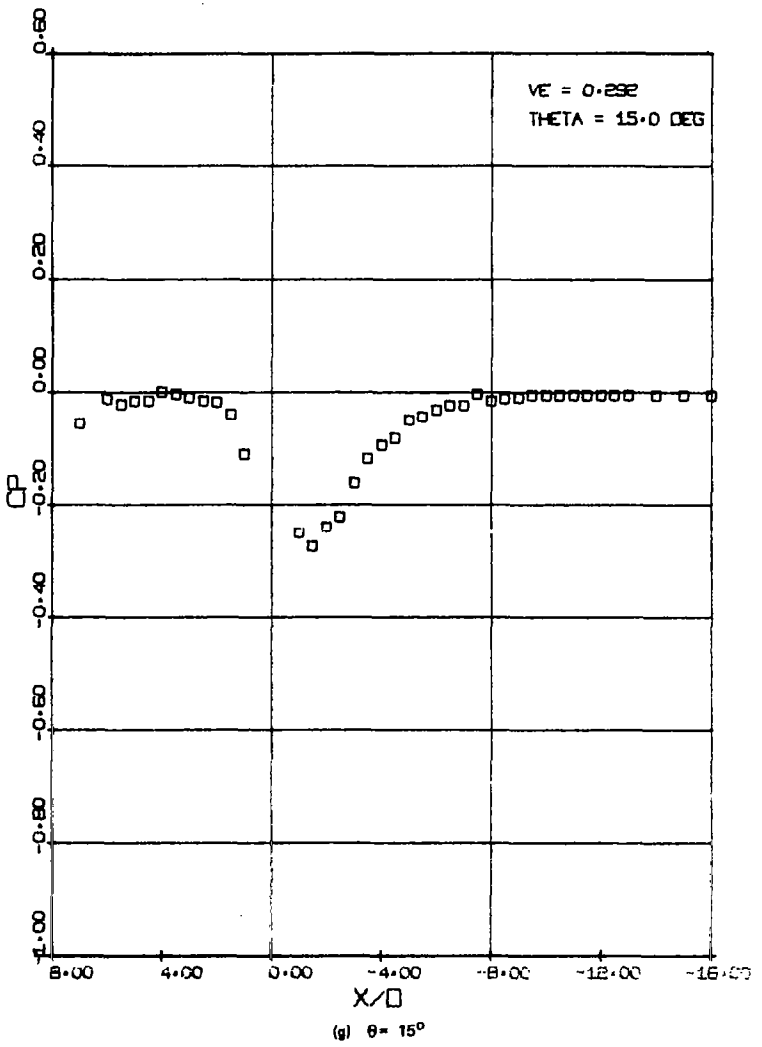
Figure 21. - Continued.



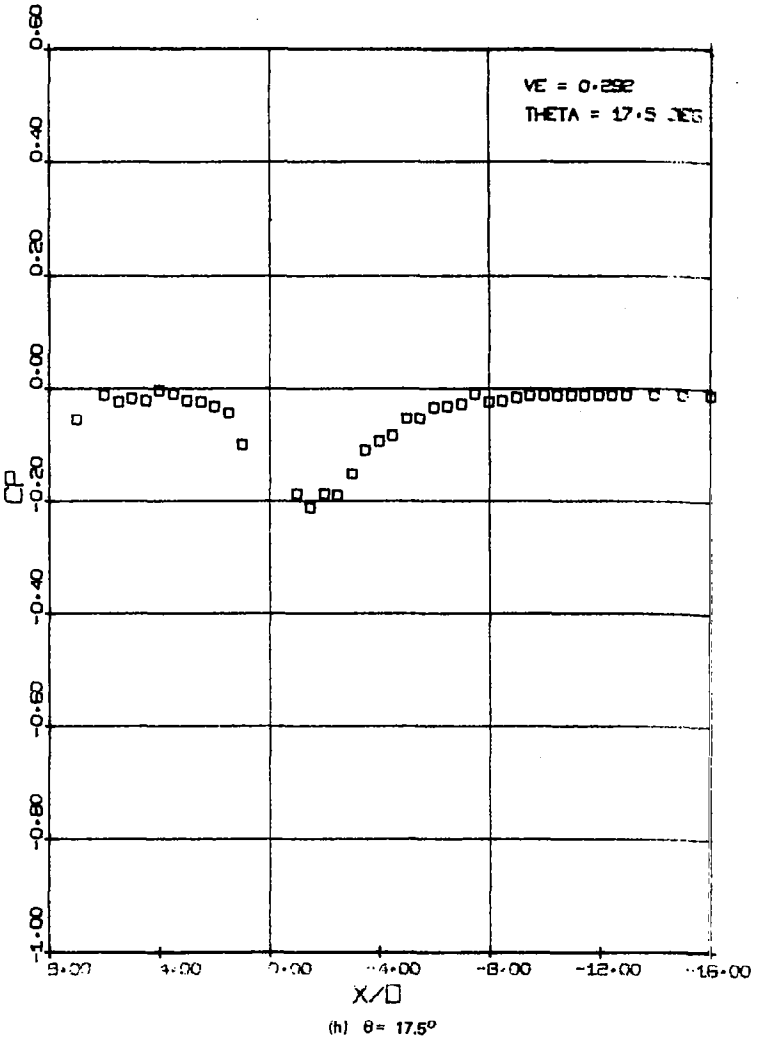
(e) θ= 10°

(f) θ= 12.5°

Figure 21. - Continued.

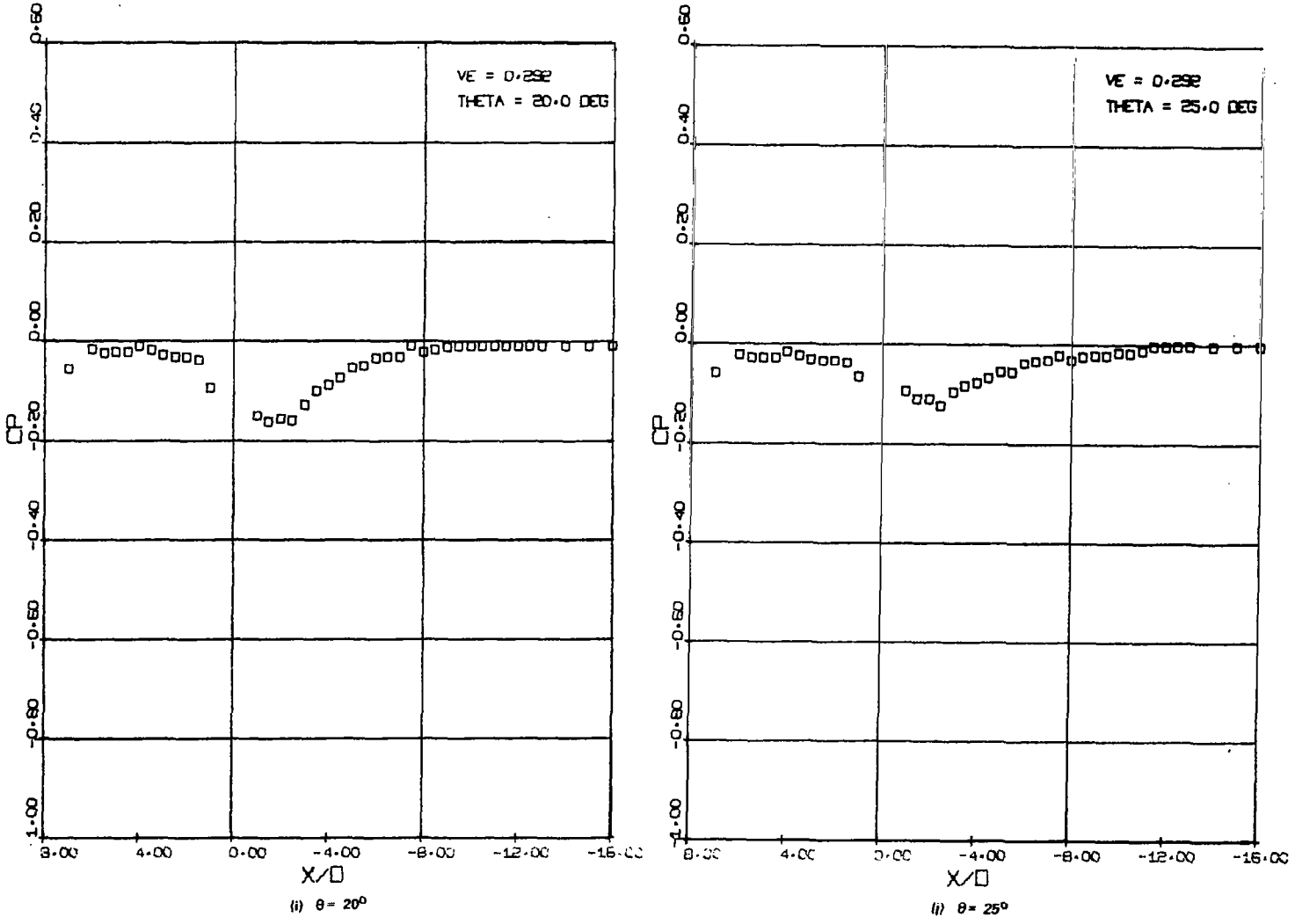


(g) θ= 15°



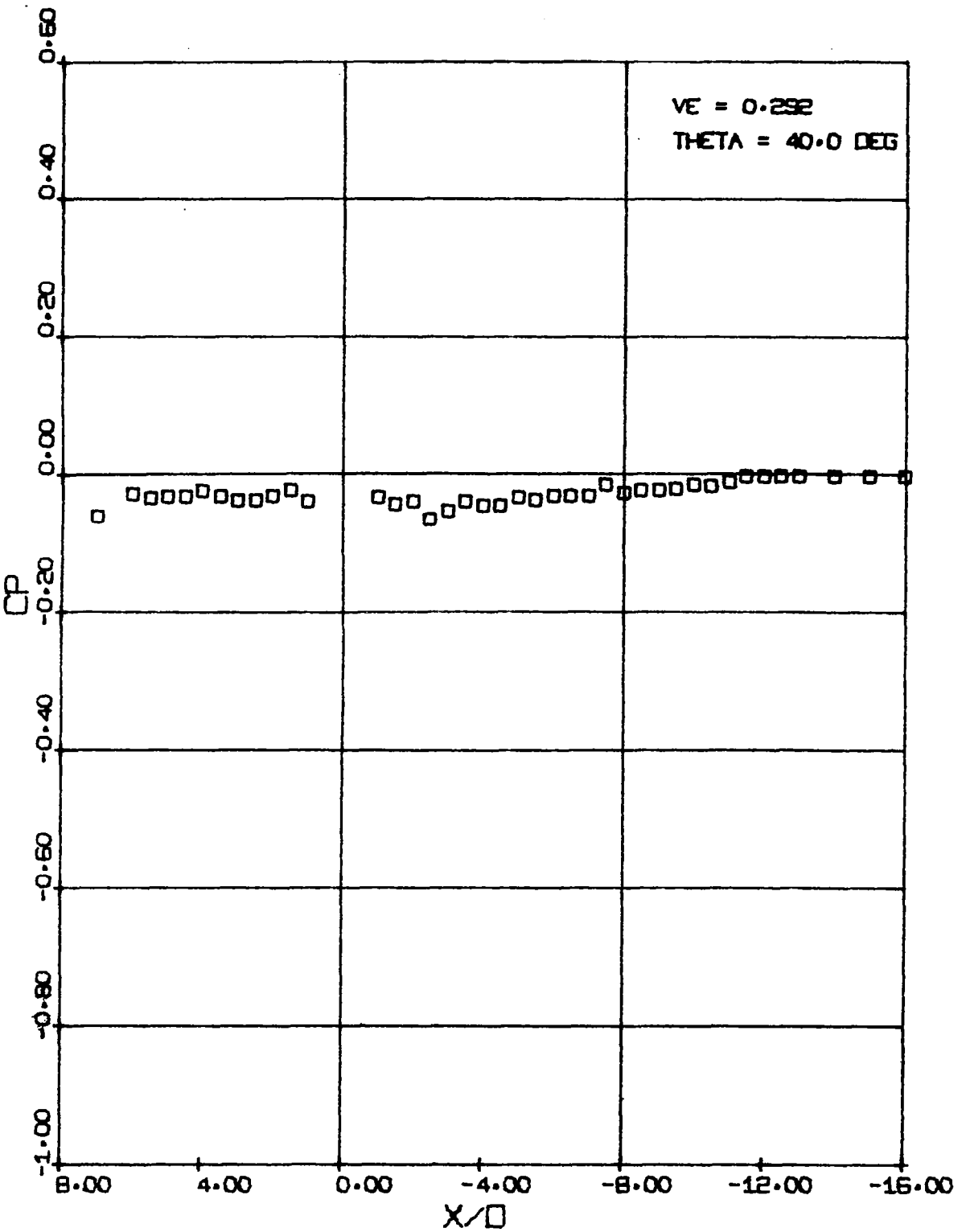
(h) θ= 17.5°

Figure 21. - Continued.



(i) $\theta = 20^{\circ}$ (i) $\theta = 25^{\circ}$

Figure 21. - Continued.



(k) $\theta = 20^{\circ}$

Figure 21. - Concluded.

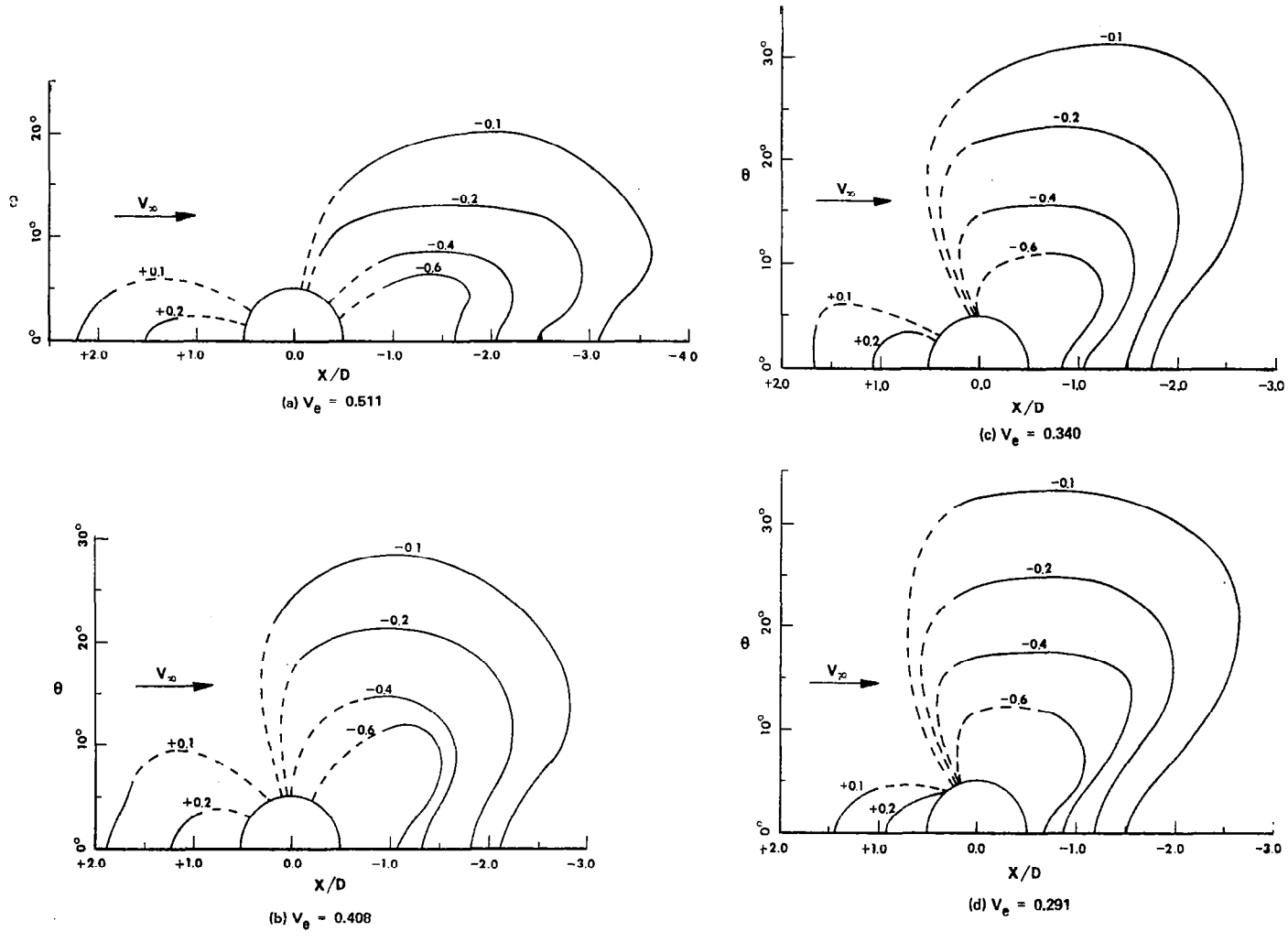
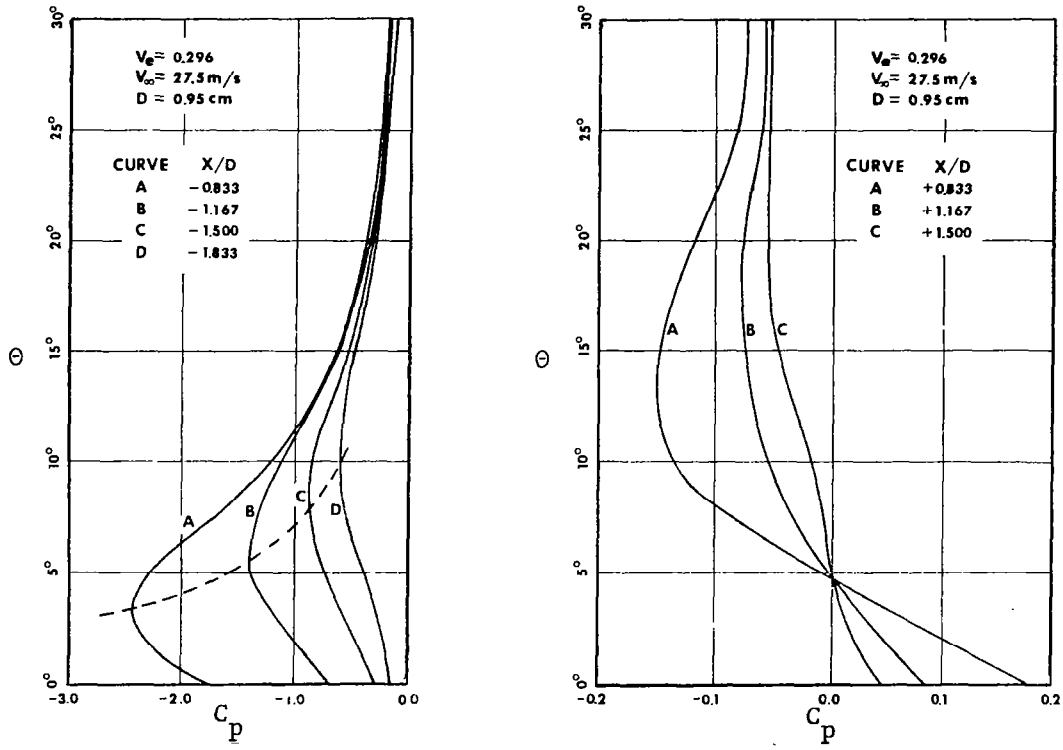


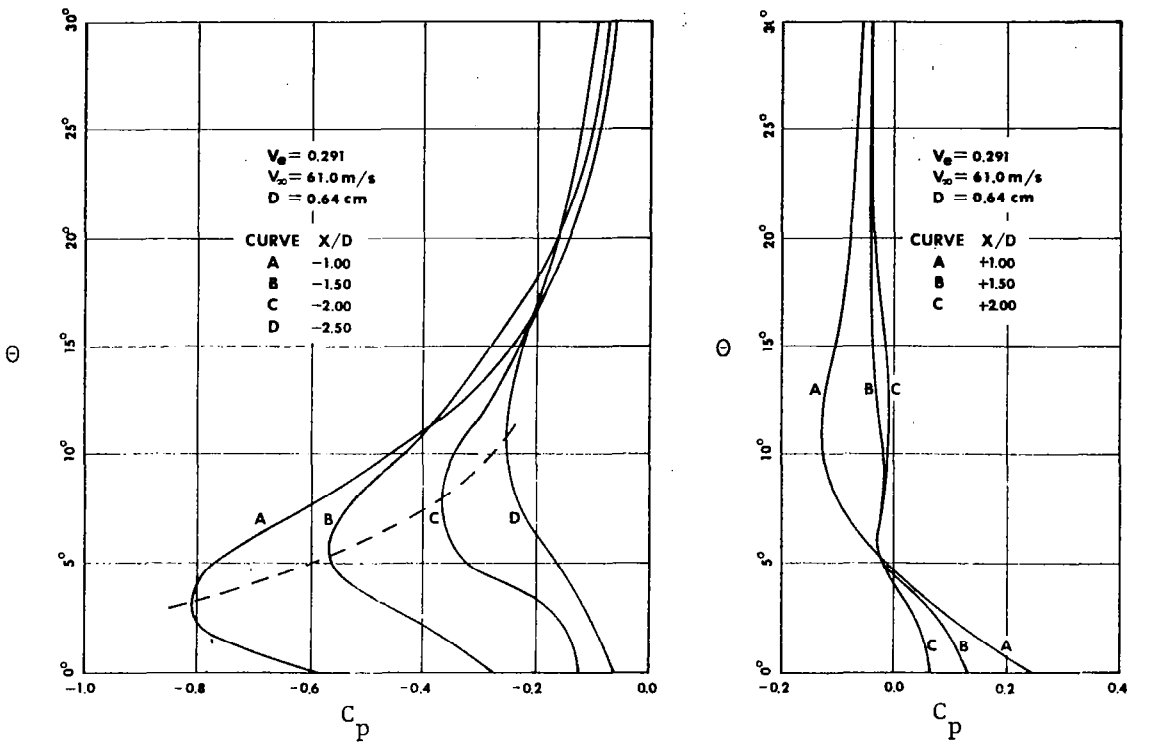
Figure 22. - C_p contours on the cylindrical surface with the 0.64-cm (0.25-in.) nozzle, V_∞ = 61.0 m/sec and D = 0.64 cm.



(a) Negative X/D

(b) Positive X/D

Figure 23. - C_p decay as a function of Θ with the 0.95-cm (0.375-in.) nozzle in the cylinder.



(a) Negative X/D

(b) Positive X/D

Figure 24. - C_p decay as a function of Θ with the 0.64-cm (0.25-in.) nozzle in the cylinder.

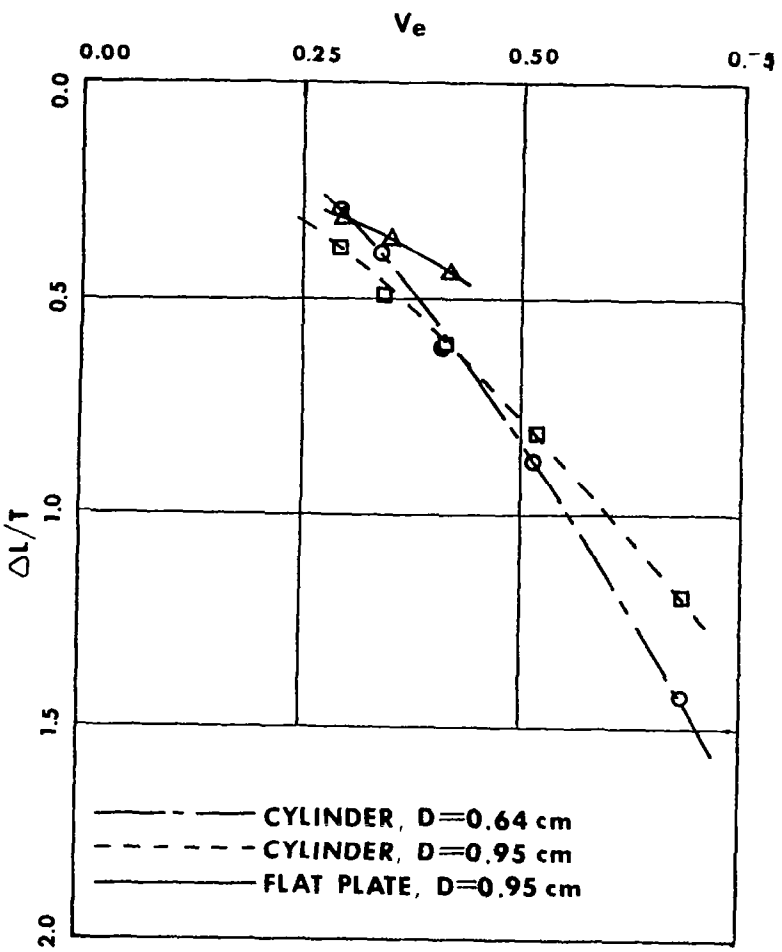


Figure 25. - A comparison of the incremental lift characteristics.

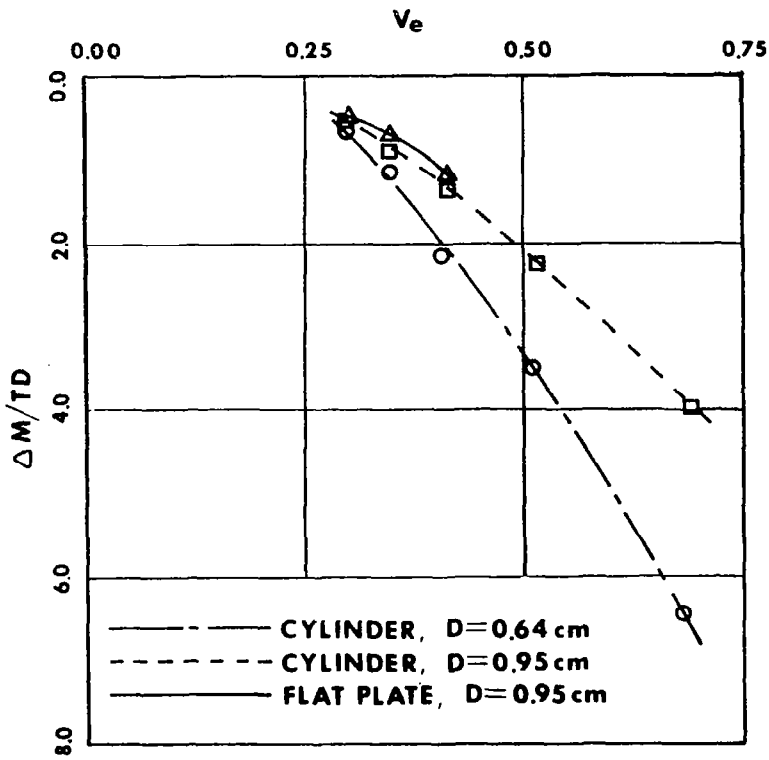


Figure 26. - A comparison of the incremental moment characteristics.

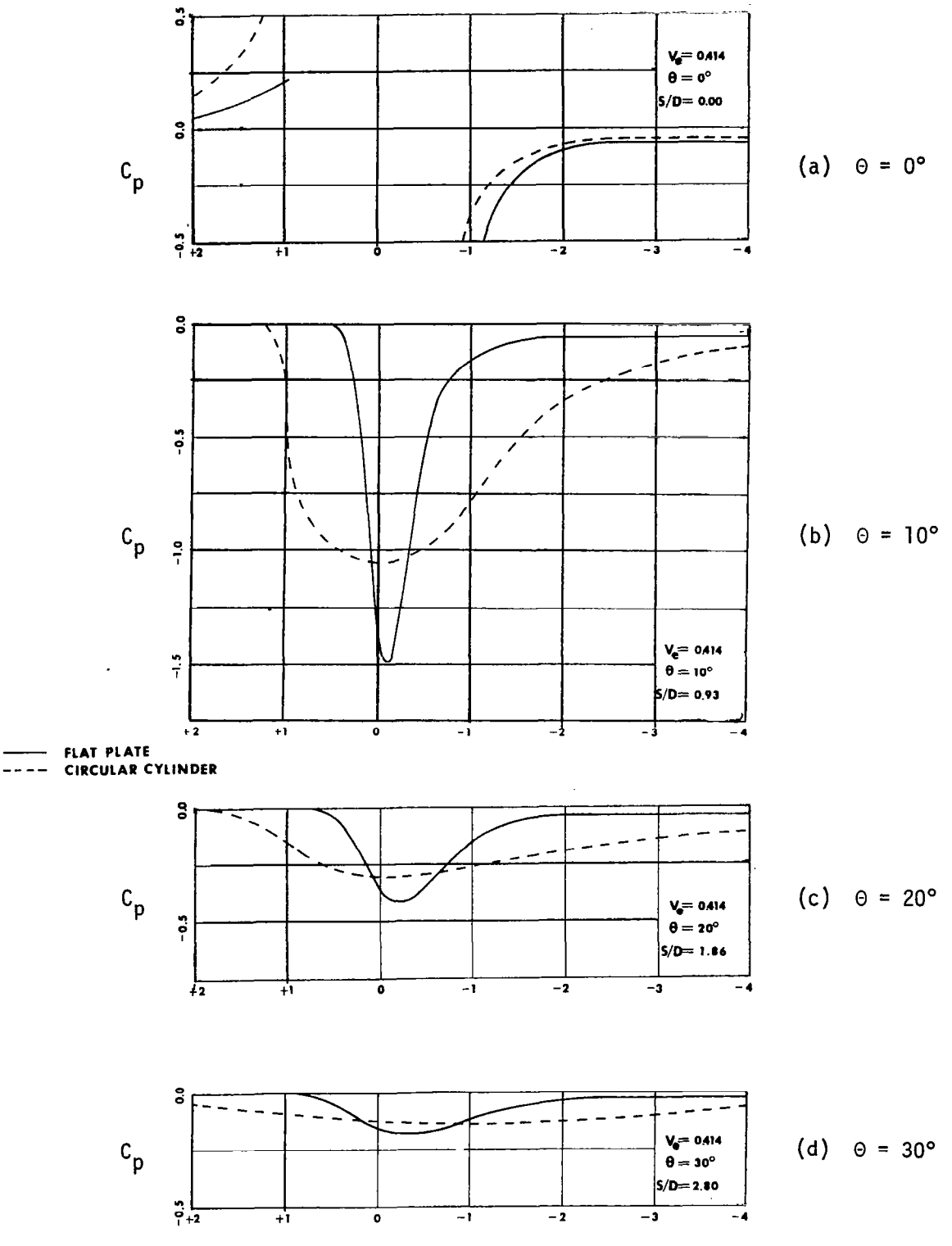


Figure 27. - A comparison of the cylinder and flat-plate C_p characteristics with the 0.95-cm (0.375-in.) nozzle for V_e = 0.414.

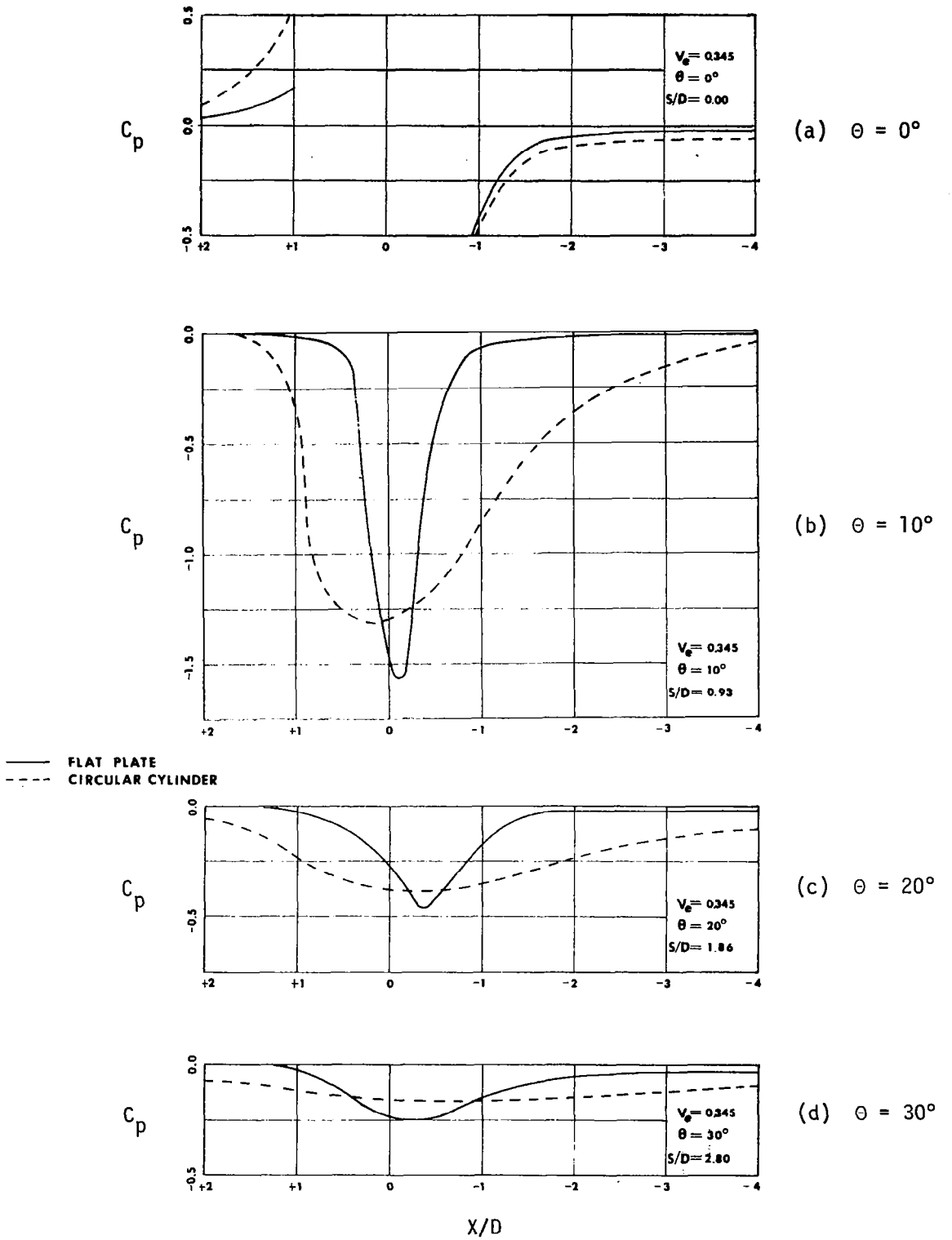


Figure 28. - A comparison of the cylinder and flat-plate C_p characteristics with the 0.95-cm (0.375-in.) nozzle for V_e = 0.345.

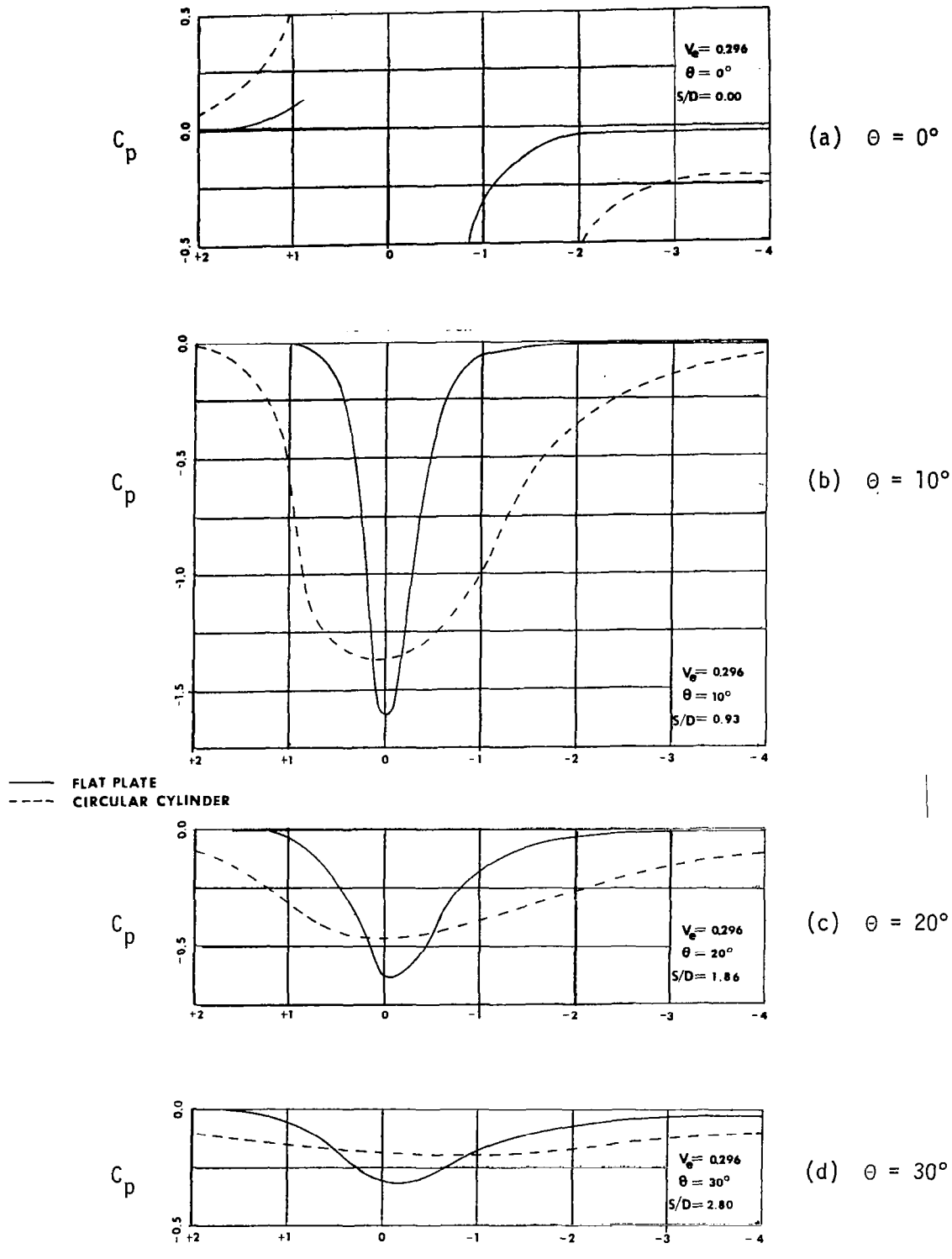


Figure 29. - A comparison of the cylinder and flat-plate C_p characteristics with the 0.95-cm (0.375-in.) nozzle for V_e = 0.296.