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Summary

An experimental investigation has been conducted to measure the forces, moments, and pressure distributions on a generic store separating from a rectangular box cavity contained in a flat-plate surface at supersonic speeds. Pressure distributions inside the cavity and oil flow and vapor-screen photographs of the cavity flow field were also obtained. The measurements were obtained for the store separating from a flat-plate surface, from two shallow cavities having length-to-depth ratios (L/h) of 16.778 and 12.073, and from a deep cavity having $L/h = 6.730$. Measurements for the shallow cavities were obtained both with and without rectangular doors attached to the sides of the cavities. The tests were conducted at free-stream Mach numbers of 1.69, 2.00, and 2.65 for a free-stream Reynolds number per foot of 2×10^6.

Results from the pressure tests and the force and moment tests indicate that for the two shallow cavities the cavity flow field was always of the closed or transitional closed type and for the deep cavity the flow field was always of the open flow type. Vapor-screen photographs and oil flow photographs revealed very complex flow fields for the shallow cavities with closed or transitional closed flow. These flow fields included vortices forming at the side edges of the cavities for the cavities without doors or at the edge of the doors for the cavities with doors, vortices forming on the store when it was near the opening of the cavity, and regions of three-dimensional flow separation and reattachment including embedded vortices on the cavity floor. Although the oil flow photographs for the cavity floor indicated a very complex flow for closed and transitional closed flow fields, pressure measurements obtained at several lateral stations along the cavity floor and on the cavity sidewall generally indicated very small lateral pressure gradients for all cavity flow fields. Results from the oil flow tests and the cavity pressure measurements indicate that the addition of doors to the sides of the shallow cavities resulted in an increase in the extent of flow separation ahead of the cavity rear face and, at Mach numbers of 1.65 and 2.00, a decrease in pressure on the cavity floor immediately behind the front face, and an increase in pressure ahead of the rear face. For the cavities without doors, the store had only small effects on the pressure distributions along the centerline of the cavity floor for all the cavities tested. Longitudinal pressure distributions measured on the store when it was located inside the cavities were essentially the same as the pressure distributions measured on the floor of the cavities at equivalent longitudinal positions. The pressure distributions on the store after it separated from the shallow cavities were significantly affected by the expansion wave from the cavity leading edge and by the cavity impingement and exit shocks. In general, the variations in store pitching-moment coefficients and normal-force coefficients with Mach number, cavity depth, and the addition of cavity doors could be rationalized from the store pressure distributions. The contributions of the different regions of the store to the overall forces and moments could also be assessed from the store pressure distributions.

Introduction

At supersonic speeds, the internal carriage of stores is desirable for numerous reasons such as reduced interference drag, lower radar cross section, and more acceptable thermal environment. Internal carriage does have, however, some undesirable features such as increased aircraft internal volume requirements, more restraints on store geometry and size, large dynamic loadings on weapons bay components when the bay is open, and finally, difficulties with store separation for certain bay geometries. It is the latter undesirable feature that is addressed by the investigation reported in this paper.

Several investigations have been conducted and reported in the literature to define the aerodynamic characteristics of stores separating from cavities at supersonic speeds (e.g., refs. 1 to 8). These investigations are generally for specific missile configurations and include only force and moment measurements on the store. The purpose of the present test is to provide a data base of both pressure and force and moment measurements on a generic store separating from a generic bay cavity. The pressure measurements are required to evaluate the effects of the body-cavity flow field on the local loadings on the store and to understand the contributions of these local loadings to the overall forces and moments. A generic store shape was selected to simplify the store flow field and to make the results more amenable to simulation by computational fluid dynamics techniques.

Measurements were obtained for the store separating from two shallow cavities (length-to-depth ratios (L/h) of 16.778 and 12.073), a deep cavity ($L/h = 6.730$), and a flat plate surface at free-stream Mach numbers of 1.69, 2.00, and 2.65. The cavity was installed in a flat plate that simulated a generic parent body. For the shallow cavities, tests were conducted with and without doors installed on the sides of the cavity.

Symbols

A cross-sectional area of store body, ft^2

C_A axial-force coefficient of store, $\frac{\text{Axial force}}{q_\infty A}$

C_m pitching-moment coefficient of store, $\frac{\text{Pitching moment}}{q_\infty A d}$

C_N normal-force coefficient of store, $\frac{\text{Normal force}}{q_\infty A}$

C_p pressure coefficient, $\frac{p - p_\infty}{q_\infty}$

d store diameter, in.

h cavity depth or height, in.

L cavity length, in.

L_s store length, in.

M free-stream Mach number

p local measured pressure, lb/ft^2

p_t free-stream stagnation pressure, lb/ft^2

p_∞ free-stream static pressure, lb/ft^2

q_∞ free-stream dynamic pressure, lb/ft^2

r_n store model nose radius, in.

R free-stream unit Reynolds number per foot

T_t free-stream stagnation temperature, °R

V_∞ free-stream velocity vector, ft/sec

w cavity width, in.

x cavity longitudinal coordinate relative to cavity front face as defined in figure 3(a), in.

x_s store longitudinal coordinate as defined in figure 4(c), in.

y cavity lateral coordinate relative to cavity longitudinal centerline as defined in figure 3(a), in.

z cavity vertical coordinate relative to cavity floor as defined in figure 3(b), in.

Z_s vertical position of separating store relative to flat plate as shown in figure 4(b), in.

θ angular location on store as defined in figure 4(c), deg

Abbreviations:

FL cavity floor

LOC location

ORF orifice number

RF cavity rear face

ST store

SW sidewall

Wind Tunnel and Test Conditions

The tests were conducted in the low Mach number test section of the Langley Unitary Plan Wind Tunnel (UPWT). This facility is a variable-pressure continuous-flow wind tunnel with two test sections that permit a variation in Mach number from approximately 1.50 to 4.60.

Ahead of each test section is an asymmetric nozzle that permits a continuous variation in Mach number from 1.50 to 2.90 in the low Mach number test section and from 2.30 to 4.60 in the high Mach number test section. The test sections are approximately 7 ft long and have a square cross-sectional area of approximately 16 ft^2. A complete description of the facility is given in reference 9.

The store model was tested at zero angle of attack relative to the splitter plate for the free-stream test conditions shown in the following table:

M	p_t, lb/ft^2	T_t, °R	R	q_∞, lb/ft^2
1.69	1103	585	1.99×10^6	454
2.00	1254	585	2.00×10^6	449
2.65	1732	585	2.00×10^6	395

Models and Instrumentation

The vertical splitter plate used to simulate the parent body is shown in figure 1. The basic dimensions of the plate are shown in figure 1(a), and a photograph of the installation in the low Mach number test section of the Langley Unitary Plan Wind Tunnel is shown in figure 1(b.) The plate was 72.8 in. long and 47.3 in. wide and extended from the floor to the ceiling of the test section. To simulate internal carriage configurations, the plate assembly included a cavity that was 34 in. long, 7.5 in. wide, and 6 in. deep. Inserts were installed in the cavity to obtain a

cavity length of approximately 29 in. and a width of approximately 5.7 in. Cavity depth was varied from 0 in. to 4.363 in. A boundary-layer transition strip was located 0.4 in. downstream of the flat-plate leading edge. The strip consisted of No. 35 sand elements spaced 0.086 in. apart and arranged in a row parallel to the leading edge. As shown in reference 8, this size grit was effective in causing boundary-layer transition to occur near the transition strip on a delta wing model for the range of test conditions of the present tests. Unpublished boundary-layer surveys from previous tests using the present flat plate showed that the boundary-layer thickness at the cavity leading edge was 0.4 in. for a range of Mach number from 1.69 to 2.65. In order to maintain supersonic flow on the back side of the plate, previous tests using this plate have shown that it is necessary to increase the back side discharge area by inclining the plate 1° relative to the free stream as indicated in figure 1(a). Because the flow over the plate ahead of the cavity was two-dimensional and because the centerline of the store model was always parallel to the flat-plate surface, the major effect of this 1° angle was a small change in the local flow conditions on the plate. For example, at a free-stream Mach number of 2.65 and a Reynolds number of 2×10^6, the local plate conditions were 2.61 and 2.044×10^6, respectively. Because of this small difference, all force and moment data and pressure data were reduced based on free-stream conditions rather than local plate conditions. Figure 1(b) is a photograph of the store model and splitter plate assembly that includes a shallow cavity with doors attached to the sides of the cavity. Store forces and moments during separation were obtained with the store model attached to an offset sting that allowed the model to be positioned through a range of locations from inside the cavity to 13 in. away from the plate. Store pressure data were obtained on a separate model that had the same external geometry as the force model.

Shown in figure 2 are the details of the cavity. The cavity length L was 29.362 in. for all cavity depths and was obtained by installing a rear block insert in the 34.000-in. cavity as shown in figure 2. Cavity depth h was varied by using floor supports of various heights. Cavity widths w for the two shallow cavities were the same and were approximately equal to the width of the deep cavity. The slight variation for the deep cavity was a result of using existing hardware from a previous test. Cavity doors were installed on the lateral edges of the cavity for part of the test, and the spacing between the doors was equal to the cavity width. The doors had a rectangular planform and had a uniform thickness of 0.125 in. from the leading edge to the trailing edge. A total of six cavity configurations as defined in the following table were tested:

Configuration	h	L/h	w	Doors
1	4.363	6.731	5.768	No
2	2.432	12.073	5.728	No
3	2.432	12.073	5.728	Yes
4	1.750	16.778	5.728	No
5	1.750	16.778	5.728	Yes
6	0			No

Shown in figure 3 are locations of the cavity pressure orifices. The number of pressure orifices ranged from 86 for the shallow cavities to 100 for the deep cavity. The locations shown in figure 3(a) are for the cavity floor, and these locations were the same for the flat plate and all three cavity depths. The cavity sidewall orifice locations are shown in figure 3(b). Orifices were located at the same x-values for all three cavity depths; however, the values of z were different for all three depths. Also, there were two horizontal rows of orifices for the deep cavities and only one row for the shallow cavities. Orifice locations for the rear block inserts are shown in figure 3(c).

General descriptions of the force and pressure store models are given in figure 4. Both models had the same external geometry that consisted simply of an ogive nose and a cylindrical afterbody. The ogive nose was 3.668 in. long and was blunted with a nose radius of 0.032 in. The models had an overall length of 24.028 in. and were 1.200 in. in diameter. A sketch of the force model is shown in figure 4(a), and the general arrangement of the force model relative to the splitter plate is shown in figure 4(b). A sketch of the pressure model and its sting assembly is shown in figure 4(c). Pressure tubing from the model was routed through the sting to the tunnel instrumentation system. The sting assembly was offset 6.000 in. so that the model could be positioned inside as well as outside the cavity. The sting assembly for the force model had the same external geometry as the pressure model sting. The store pressure model was instrumented with 96 pressure orifices with locations as shown in figure 4(c).

Measurements

Aerodynamic forces and moments of the store were measured with a six-component strain-gage balance. Store chamber pressures were measured by means of a single static-pressure orifice located in the vicinity of the balance and were accurate to

approximately ±3 lb/ft^2. The chamber pressure measurements were used to adjust the balance measurements to a condition of free-stream static pressure over the model base. Positive directions of the store forces and moments are shown in figure 4(b). The quoted accuracy of the strain-gage balance used is 0.5 percent of full-scale values, which are normal force, 150 lb; axial force, 30 lb; and pitching moment, 100 in-lb. Generally the repeatability of the data was better than the quoted accuracy.

Surface pressure measurements on the pressure-instrumented store and in the cavity were obtained using electronically scanned pressure (ESP) transducers, referenced to a vacuum. The overall accuracy of this system including calibration accuracy is approximately ±3.0 lb/ft^2. Tunnel free-stream pressures were measured with precision mercury manometers which have an accuracy of 0.5 lb/ft^2. After completion of the force and moment tests and the pressure tests, a limited number of vapor-screen photographs and oil flow photographs were taken.

Since the store model and sting assembly were rolled 90° in order to be in the proper orientation relative to the vertical splitter plate, the side force direction was in the tunnel vertical plane (see fig. 4(b)). Therefore the tunnel flow angularity (which varied from 0.4° at $M = 1.69$ to 0.8° at $M = 2.00$ and 2.65) would be expected to primarily affect forces in the store model lateral plane rather than in the plane of the longitudinal forces as is normally the case. Lateral force and moment measurements indicate, however, that even in the lateral plane the effects of flow angularity were small. Because these effects were small and because of the lateral symmetry of the model, the lateral force and moment data are not presented. No attempts were made to adjust the model or cavity to correct for flow angularity because it varies with Mach number and because of the complexity of the complete model assembly.

Presentation of Results

A complete set of pressure data is tabulated in tables I through VI and selected pressure data are presented in figure form as identified in the following list of figures. A complete set of store force and moment data is presented in figure form and is also identified in the following list of figures. These force and moment data are not tabulated. Figures 5 and 6, which will be discussed subsequently, present previously published information on cavity flow fields; figures 7 and 8, also to be discussed subsequently, present descriptive information on the vapor-screen photographs shown in figures 9 and 10.

Pressure Tables

Configuration	h	L/h	Doors	Table
1	4.363	6.731	No	I
2	2.432	12.073	No	II
3	2.432	12.073	Yes	III
4	1.750	16.778	No	IV
5	1.750	16.778	Yes	V
6	0		No	VI

Results and Discussion

A Review of Cavity Flow Fields

In general, data available in the literature show that at supersonic speeds there are two fundamentally different types of cavity flow fields, which have

been classified as open cavity and closed cavity flows. The type of flow field appears to be primarily a function of cavity length-to-depth ratio (L/h). As illustrated in figure 5(a), for values of $L/h > 13$ the cavity flow field is generally of the closed flow type. For this case, the shear layer expands over the cavity leading edge, impinges on the cavity floor, and exits ahead of the rear face. Typical cavity floor pressure distributions for this case consist of low pressures in the expansion region behind the front face followed by an increase in pressure and a pressure plateau in the impingement region. Further downstream, as the shear layer approaches the cavity rear face, the pressure levels again increase and reach a maximum value just ahead of the rear face. The local flows over the cavity front and rear faces for the closed cavity flow field are very similar to the flows over rearward-facing and forward-facing steps, respectively. Stores separating from cavities that have closed cavity flow generally experience unfavorable separation characteristics. At $L/h \approx 10$–13, the cavity flow field is on the verge of changing from closed cavity flow to open cavity flow (decreasing L/h) and has previously been referred to as transitional cavity flow (ref. 10). For this case, the shear layer turns through an angle to exit from the cavity coincident with impinging on the cavity floor, resulting in the impingement shock and the exit shock collapsing into a single wave. The corresponding pressure distribution shows that the extent of the plateau pressures in the impingement region has diminished and the pressure increases uniformly from the low values in the region aft of the front face to the peak values ahead of the rear face. Unfavorable store separation characteristics are also generally associated with these types of flow fields. For $L/h < 10$, the high pressures ahead of the rear face vent into the low-pressure region downstream of the front face and cause the shear layer to flow over or bridge the cavity. This type of flow field is generally referred to as open cavity flow. The pressure coefficients over the cavity floor are slightly positive and relatively uniform with the exception of a small adverse gradient occurring ahead of the rear face that is associated with the shear layer impinging on the outer edge of the rear face. Stores separating from a cavity with open cavity flow generally experience favorable separation characteristics.

As discussed in reference 8, the transitional cavity flow field was found to exist in one of two quasi-steady states and was triggered from one state to the other by small movements of the separating store, changes in cavity geometry, changes in Mach number, etc. One of these states was defined as transitional closed and as illustrated in figure 5(b) is the same flow field defined as transitional flow in figure 5(a). The other state defined as transitional open flow is apparently an intermediate type of flow that occurs as the flow changes from transitional closed to open flow. The pressure distributions for the transitional open flow differ from those of open flow in that the pressure gradients on the cavity floor are greater and negative pressure coefficients occur in the region downstream of the cavity front face. These negative pressure coefficients are believed to result from the fact that the flow still expands into the cavity for the transitional open case.

Shown in figure 6 are schlieren photographs from reference 10 that are representative of the different types of flow fields identified in figure 5. These results are for cavities having a depth of 0.5 in., an approaching boundary-layer thickness of 0.22 in. at the cavity front face, and a free-stream Mach number of 2.86. For $L/h = 16$ the flow field is closed, and the impingement and exit shocks are clearly two distinct shocks, as shown in figure 6(a). Decreasing L/h to 11.6, figure 6(b), results in the impingement and exit shocks combining into one shock, which is indicative of transitional closed flow. With a further small decrease in L/h to 11.2, figure 6(c), the flow expansion into the cavity is reduced resulting in the impingement-exit shock being replaced with a series of reduced strength shock waves that coalesce into a well-defined shock wave at approximately 1 cavity length downstream of the cavity and approximately 5 cavity depths above the plate surface. This flow field is typical of transitional open flow. Decreasing L/h to 8, figure 6(d), results in the flow bridging or passing over the cavity, and consequently the impingement and exit shock waves no longer exist. This type flow is representative of open flow.

Flow Visualization Results

Vapor-screen tests. Limited vapor-screen tests were conducted at Mach numbers of 2.00 and 2.65 using the 2.432-in-deep cavity. The vapor-screen technique consists of adding water into the tunnel, resulting in a fog in the test section that when illuminated provides information on the location of shock waves, vortices, flow separation regions, and regions of large temperature gradients. Detailed information on the technique is given in reference 11. Figure 7 is a sketch illustrating the vapor-screen technique as applied to the components of this study. A sheet of light from a mercury vapor source is directed through the test section perpendicular to the sidewalls in order to illuminate the fog. The light sheet is moved upstream and downstream in the test section to investigate the complete store/cavity flow field. Photographs of the

light sheet are obtained with a camera installed inside the test section downstream of the light sheet. Since this camera cannot be remotely focused, the range of longitudinal positions of the light sheet for a given tunnel run is limited. The camera remained focused at $x/L \approx 0.55$, and therefore photographs for only this position are presented.

Salient features of typical vapor-screen photographs obtained in the present study are depicted and identified in figure 8. Figure 8(a) is a photograph of the cavity without doors and shows the area near the cavity. Vortices that form at the edges of the cavity as the flow expands into the cavity are clearly indicated. The bright white lines in the photograph are reflected light from the intersection of the light sheet with the splitter plate, cavity floor, and cavity sidewall surfaces. Two light sources were actually used to form the sheet of light. One source was located at approximately midheight of the test section, resulting in the horizontal shadow from the store shown in the photograph; the other source was located at approximately two thirds of the test section height, resulting in the second store shadow. A typical vapor-screen photograph of the cavity flow field with doors attached to the edges of the cavity is shown in figure 8(b). For this case, the photograph depicts vortices forming at the edges of the doors and the location of the impingement shock. The position of the impingement shock is indicated by the sharp increase in light intensity that occurs behind the shock; the increase in light intensity results from the increase in air density.

Presented in figure 9 are vapor-screen photographs showing the flow fields of the cavity without doors ($L/h = 12.073$) with the store at two separation positions. One position is at the maximum separation distance of 13 in. and the other position is near the cavity opening. Results presented in figure 9(a) for a Mach number of 2.00 show that the cavity edge vortices and the impingement shock exist with the store at either separation position and that these characteristics are surprisingly similar for both positions. An additional barely discernible feature of the store/cavity flow field with the store at $Z_s/d = 0$ consists of a vortex that apparently originates from the surface of the store and is located between the store and the cavity. This store vortex (or pair of vortices, as one is probably on the other side of the store and not in the field of view) is apparently caused by flow expanding into the cavity. The flow over the store is therefore similar to the flow over a store at angle of attack with the side of the store facing the cavity floor being the leeward side. The existence of this vortex, which will be referred to as the store vortex, is more apparent in some of the subsequent photographs. Similar trends are seen in figure 9(b) for $M = 2.65$. These results imply a reduced impingement shock angle at this higher Mach number, as would be expected. Also the store vortex is more clearly seen than at the lower Mach number.

Shown in figure 10 are vapor-screen photographs of the cavity/store flow fields for the cavity with doors ($L/h = 12.073$). At $M = 2.00$, figure 10(a), well-defined vortices occur at the outer edges of the doors. Also, the location of the impingement shock is more clearly defined than for the case without doors. Moving the store into the cavity results in a large distortion of the impingement shock. At $M = 2.65$, figure 10(b), the results indicate that the angle of the impingement shock is less than at $M = 2.00$, similar to the results that were shown for the cavity without doors. At this higher Mach number, the vortices at the door edges are smaller and not as well defined as at $M = 2.00$; however, the store vortex for $Z_s/d = 0$ is better defined at the higher Mach number.

Oil flow tests. Limited oil flow tests using oil mixed with a fluorescent dye and illuminated with ultraviolet lights were also conducted to investigate the local flow direction on the surfaces of the cavity and the flat plate. Some of these results are shown in figure 11 to illustrate the local surface flow for the different types of cavity flow fields that occurred during this study. For all the oil flow tests, two photographs were taken in order to cover the complete cavity and the flat plate regions upstream and downstream of the cavity. The photographs on the left side of the figures cover the plate ahead of the cavity and most of the cavity length except the rear face region. The photographs on the right side cover the downstream region of the cavity and the plate surface downstream of the cavity. The results are presented for $M = 2.65$ and $Z_s/d = 10.83$. The transitional closed flow case shown at the top of the figure was the type of flow field that actually occurred for all the pressure and force tests conducted with the $L/h = 12.073$ cavity. The oil flow photographs indicate that inside this cavity a very complex flow field occurs, consisting of a separated region with reverse flow occurring over the forward part of the cavity followed by the flow attaching and remaining attached up to the separation region that occurs ahead of the rear face. A pair of vortices are embedded in the second separated region. It was found during the oil flow tests that when the tunnel was first started with the store model at the maximum separation distance, the flow field for the $L/h = 12.073$ cavity was in some cases of the transitional open type, as indicated by the oil flow photographs shown in the middle of figure 11.

When the store was moved into the cavity, the flow field would change to the transitional closed type and remain of this type for the remainder of the test. The transitional open flow photograph shows reverse flow occurring over most of the cavity floor. Another significant difference in the oil flow photographs between transitional open flow and transitional closed flow occurs on the flat plate surface above and below the cavity (as viewed from the perspective of the photographs of fig. 11) towards the rear region of the cavity. For transitional closed flow, the flow exiting the cavity apparently causes flow separation to occur in this region, as indicated by the large turning angles of the flow and the coalescing of oil streaks along the swept separation line. For transitional open flow, the amount of flow exiting the cavity is much less, and the separated regions on the upper and lower plate surfaces apparently do not occur. For open flow, as shown in the bottom photographs, reverse flow occurs over the rear section of the cavity, and a large counterclockwise rotating flow occurs over the forward section of the cavity. The shearing stress at the cavity floor is very small for this counterclockwise rotating flow, as indicated by the lack of oil-streaking in this region.

Shown in figure 12 are the effects of Mach number on the cavity oil flows for the $L/h = 12.073$ cavity with and without doors and the $L/h = 6.730$ cavity without doors. These results are for the store at the maximum separation distance, $Z_s/d = 10.83$. For the $L/h = 12.073$ cavity without doors, figure 12(a), the oil flows are representative of transitional closed flow for all test Mach numbers. These flows all have the characteristic separated flow over the forward section of the cavity, followed by a flow impingement region and a separated region with embedded vortices ahead of the rear face. The separated region on the flat plate above and below the cavity is also indicated at all three Mach numbers. The effects of adding doors to the $L/h = 12.073$ cavity may be seen by comparing figure 12(a) with figure 12(b). The most obvious effects occur in the cavity separated region ahead of the rear face and on the flat plate above and below the cavity in this region. The doors appear to cause the separated region in the cavity ahead of the rear face to extend further upstream and to increase the asymmetry of the embedded vortices. In fact, at $M = 1.69$, a pair of vortices are shown for the cavity without doors, whereas for the cavity with doors only one vortex is indicated. The addition of the doors also minimizes the effect of the separated region ahead of the cavity rear face on the flat plate surface above and below the cavity in this region. Oil flows for the $L/h = 6.730$ cavity, which has an open cavity flow field, are shown in figure 12(c). This cavity was only tested without doors. At all three Mach numbers, reverse flow occurs over the rear portion of the cavity and a rotating flow occurs over the forward portion of the cavity. At the two lower Mach numbers, this rotating flow is in the clockwise direction, and at $M = 2.65$ in the counterclockwise direction. The reason for this change in rotation direction is not known.

Oil flow photographs with the store close to the cavity opening are shown in figure 13 for the same cavity configurations and Mach numbers for which data were shown in figure 12. These oil flows are somewhat similar to results shown with the store at the maximum separation distance.

Cavity Pressure Distributions

Cavities without doors. Cavity longitudinal pressure distributions were obtained at various lateral positions for the cavities without doors and are presented in figure 14 for the test range of Mach number and selected store separation positions ranging from the position closest to the flat plate or cavity bottom plate surface to the position at the greatest distance from the plate ($Z_s/d = 10.83$). Results obtained at $M = 1.69$ are presented in figure 14(a) for all four cavity depths. Pressure distributions presented in figure 14(a) for $h = 0$, which is a flush flat plate surface, show that the store model nose shock impingement location varies from $x/L \approx 0.15$ for $Z_s/d = 1.25$ to $x/L \approx 0.55$ for $Z_s/d = 10.83$. The magnitude of the pressure increase associated with this shock impingement decreases with increasing store separation distance as a result of the shock strength decreasing with increasing distance from the store. Expansions and compressions for the store base region result in cyclic pressures on the downstream end of the flat plate surface at $Z_s/d = 1.25$ and 2.92. At greater separation distances, the shock and expansion waves from the store base region impinge on the flat plate downstream of the pressure instrumentation. The pressure distributions presented in figure 14(a) that were measured on the floor of the $h = 1.750$ cavity are representative of closed cavity flow and clearly show the characteristic low pressures in the region behind the front face, the plateau pressures in the flow impingement region, and the large peak pressures occurring in the region ahead of the rear face. These general characteristics are shown for all four store separation positions. The pressure distributions from the four longitudinal rows of orifices on the cavity floor and the one row on the cavity sidewall collapse into a very narrow band. On the cavity rear face, however, large lateral pressure

gradients occur, as indicated by the measurements from the four rows of orifices, and the magnitude of the gradients are effected by the position of the store. This trend would be expected since the store wake at the smaller values of Z_s/d impinges on the rear face. Peak pressures in the cavity were measured on the cavity rear face, which was typical for all cavity depths.

The pressure distributions shown in figure 14(a) for the $h = 2.43$ cavity are also representative of closed or transitional closed cavity flow and are very similar to the distributions shown for the $h = 1.750$ cavity. The primary differences in the data for the two cavity depths are that the pressures in the separated region ahead of the rear face are greater for the $h = 2.43$ cavity and the extent of the plateau pressure region is less for the $h = 2.43$ cavity. Also for this deeper cavity, the position of the store has a significant effect on the plateau pressure region.

The pressure distributions shown in figure 14(a) for the $h = 4.363$ cavity are representative of open cavity flow, as would be expected for a cavity having $L/h = 6.730$. On the cavity floor, the pressure gradients are small with the exception of the adverse gradient occurring at the rear of the cavity, which is due to the shear layer impinging on the rear face. The lateral pressure gradients on the cavity rear face are also smaller for this deep cavity than were shown for the shallow cavities having closed or transitional closed flow.

Pressure distributions presented in figure 14(b) for $M = 2.00$ and in figure 14(c) for $M = 2.65$ show similar trends to those observed at $M = 1.69$ concerning the effects of cavity depth and store separation position.

Summaries of the cavity floor longitudinal centerline pressure distributions are presented in figure 15 for all the cavity depths and Mach numbers for which data were presented in figure 14. Results are presented in figure 15 for all the store separation positions for which data were obtained. These data generally show that for both shallow cavities ($h = 1.750$ and 2.432) and the deep cavity ($h = 4.363$) the store had only small effects on the pressure distributions along the longitudinal centerline of the cavity floor. The largest effect of the store occurred on the flush flat plate surface ($h = 0$) and consisted of pressure peaks resulting from the impingement of the store nose bow shock and from expansions and shocks originating in the store base region. These peaks moved downstream and decreased in magnitude as the store separation distance increased, as discussed previously.

Cavities with doors. Shown in figure 16 are cavity pressure distributions that were obtained for the cavities with doors attached. Only the shallow cavities ($h = 1.750$ or 2.432) were tested with doors attached. A comparison of these data with the data presented in figure 14 for equivalent cavity depths and Mach numbers show that the pressure distributions in the plateau region of the cavity floor are more irregular for the cavities with doors. Pressure coefficients obtained on the floor of the cavities in the flow expansion region immediately behind the front face were less for the cavities with doors than for the cavities without doors at Mach numbers of 1.69 and 2.00. At $M = 2.65$, the minimum pressures in this region were approximately the same with and without doors. Also the peak pressures on the cavity floor in the separated region ahead of the rear face are greater for the cavities with doors at the two lower test Mach numbers; however, at $M = 2.65$ peak pressures in this region were less for the cavities with doors.

Summary plots of the cavity floor longitudinal-centerline pressure distributions are shown in figure 17 for the cavities with doors attached. These results are again presented for the complete range of store separation positions. These summary plots indicate that, similar to the results shown in figure 16, the most noticeable effects of the doors on the cavity pressures occur in the plateau pressure region and result in more irregular pressure distributions than were observed for the cavity without doors (fig. 15). Part of this irregularity at the greater store separation distances is believed to be due to the impingement of the store nose shock on the cavity floor. Why this shock impingement would result in a larger pressure increase on the cavity floor for the cavity with doors is not understood. Another contributor to the irregular pressure distributions could be the shocks off the leading edges of the doors. A comparison of the results presented in figure 17 with the results presented in figure 15 also indicates that the onset of flow separation ahead of the rear face occurs at slightly smaller values of x/L for the cavity with doors. A similar trend was observed from results of the oil flow tests discussed previously.

Store Pressure Distributions

Cavities without doors. Presented in figure 18 are store longitudinal pressure distributions at $\theta = 0°$, 90°, and 180° for several store separation positions relative to the flat plate ($h = 0$) and to the three cavity configurations. Results are shown for Mach numbers of 1.69, 2.00, and 2.65 in figures 18(a),

18(b), and 18(c), respectively. Store pressure distributions for the store in the proximity of the flat plate surface ($h = 0$) presented in figure 18(a) show only small effects of the plate on the store pressure distributions. At $\theta = 0°$, which is the longitudinal ray facing the plate surface, several small perturbations in the pressure distributions occur which are probably due to the reflection of the store nose shock from the flat plate. The location of this perturbation varies from an $x_s/L_s \approx 0.1$ at $Z_s/d = 1.25$ to $x_s/L_s \approx 0.85$ at $Z_s/d = 7.50$. At the maximum store separation distance ($Z_s/d = 10.83$), the reflected nose shock is downstream of the store and the pressure distributions should be representative of the store in the free stream. The pressure measurements at $\theta = 180°$, which are fewer in number than at $\theta = 0°$, also indicate slight perturbations in the pressure distributions that are less in magnitude and always downstream of the perturbations at $\theta = 0°$. These perturbations are also probably due to the reflected shock wave from the store nose.

Store pressure distributions for the store in the $h = 1.750$ cavity flow field shown in figure 18(a) are much more complicated than in the flat plate flow field. These data are presented for separation distances ranging from inside the cavity, $Z_s/d = -0.29$, to the maximum test separation distance, $Z_s/d = 10.83$. With the store inside the cavity at $Z_s/d = -0.29$, the pressures on the store at $\theta = 0°$ are very similar to the pressure distribution on the cavity floor for these same conditions. A direct comparison of these data with the cavity data is difficult to make since the store data in figure 18 are plotted relative to the store coordinate system, x_s/L_s, whereas the cavity data are plotted relative to the cavity coordinate system, x/L. A more direct comparison of the two sets of data will be made subsequently using summary figure 19, where the store data at $\theta = 0°$ are plotted relative to the cavity coordinate system, x/L. In the store nose region, figure 18(a), the pressure measurements at $\theta = 180°$ for $Z_s/d = -0.29$ are greater than the measurements at $\theta = 0°$ because of the flow impinging on the store as it expands into the cavity. For $x_s/L_s \geq 0.2$, the pressures at $\theta = 180°$ are slightly less than at $\theta = 0°$ for this store separation position. The store pressure distributions at $Z_s/d = 0$ are very similar to the results obtained at $Z_s/d = -0.29$. At this separation position, the section of the store from $\theta = 0°$ to 90° is actually inside the cavity since Z_s is measured to the store axis of symmetry. Increasing the separation distance to $Z_s/d = 1.67$ results in significant changes in the store pressure distributions. The pressure coefficients at the most forward instrumented locations on the store nose have maximum values slightly greater than 0.2 and remain at this level for the greater separation distances. This increase in pressure is due to the store nose section passing through the cavity flow field into the free-stream flow and therefore being exposed to free-stream dynamic pressure. Further back on the store at $x_s/L_s \approx 0.15$, the pressures at $\theta = 0°$ are much less than would be expected for the store in free-stream flow (e.g., $Z_s/d = 10.83$) and are probably due to the expansion waves from the cavity leading edge intersecting the store in this region. The large increase in pressure at $x_s/L_s \approx 0.4$ occurs in the approximate vicinity where the impingement shock intersects the store as determined from an unpublished schlieren photograph for a cavity with $L/h = 16$ at a free-stream Mach number of 1.50. An increase in pressure also occurs at $\theta = 180°$ slightly downstream of the increase that occurs at $\theta = 0°$. Another large increase in pressure is indicated by the last instrumented station for $\theta = 0°$. This increase in pressure is probably due to the end of the store intersecting the exit shock that occurs ahead of the cavity rear face, as was also indicated in the $M = 1.50$ schlieren photograph. Similar pressure distributions on the store are shown for $Z_s/d = 3.33$ with the major difference being that the effects of the expansion wave and shock waves occur at greater values of x_s/L_s because the waves are inclined relative to the store. For this separation position, the initial effect of the expansion waves from the cavity leading edge on the store pressure distribution apparently occurs at $x_s/L_s \approx 0.15$ since the pressure distributions ahead of this location are the same at all values of θ and are the same as those shown for the larger separation distances. Also, at this separation position, the impingement shock intersects the store at $x_s/L_s \approx 0.55$, and the exit shock is apparently downstream of the store and does not affect the store pressures. For the maximum store separation position, the cavity leading-edge expansion fan intersects the store at $x_s/L_s \approx 0.6$, and the store pressure distributions at all values of θ are the same up to this location.

Store pressure distributions presented in figure 18(a) for the $h = 2.432$ cavity flow field show results that are similar to the $h = 1.750$ cavity flow field. The primary differences in the two sets of data are that for the $h = 2.432$ cavity the effects of the impingement shock occur further downstream on the store and the effects of the exit shock occur further upstream on the store than for the $h = 1.750$ cavity. The effects of the cavity leading-edge expansion waves occur at the same locations on the store for both cavity depths as would be expected.

Store pressure distributions obtained for the $h = 4.363$ cavity presented in figure 18(a) are representative of the store separating through an open cavity flow field. With the store located inside the cavity at $Z_s/d = -2.45$, the pressures are essentially constant over the store and approximately equal in magnitude to the pressures on the cavity floor shown in figure 15(a) for $h = 4.363$ and $x/L < 0.8$. Increasing Z_s/d to 0 results in little change in the pressure distributions at $\theta = 0°$ since this half of the model is still inside the cavity; however, the pressure distributions at $\theta = 180°$ are similar to the distributions on the store at the maximum store separation distance. With the store positioned at $Z_s/d = 2.50$, a cyclic distribution occurs in the pressures beginning at $x_s/L_s \approx 0.25$ and extending to $x_s/L_s \approx 0.6$. The initial decrease in pressure of this cycle is probably due to an expansion wave intersecting the store that is a reflection of the store nose shock from the free shear layer over the cavity. The increase in pressure following this initial decrease is probably due to a series of weak shock waves created by reflections at the free shear layer of expansion waves originating on the model nose downstream of the nose shock. With increasing store separation distance, the location of these cyclic pressures on the store move downstream and the peak pressure amplitudes decrease. For values of $Z_s/d \geq 8.33$ the existence of these cyclic pressures are no longer apparent. For values of Z_s/d of 8.33 and 10.83, a small pressure peak occurs on the store at $x_s/L_s \approx 0.45$ and 0.6, respectively, and is believed to be due to a weak shock wave that originates at the cavity leading edge.

Store pressure distributions that are very similar to the results shown in figure 18(a) for $M = 1.69$ are presented in figures 18(b) and 18(c) for $M = 2.00$ and 2.65, respectively. One of the major effects of increasing Mach number is the downstream movement of pressure variations on the store that are created by impinging shock waves and expansion waves.

Presented in figure 19 is a summary of the $\theta = 0°$ store pressure distributions for all the store separation positions that were tested. In this figure, the orifice positions on the store have been transformed to the cavity coordinate system x/L so that the store pressure distributions can be directly compared with the flat plate and cavity distributions. These plots are particularly informative when analyzing the store pressure distributions inside and near the cavity, and they clearly show that inside the cavity the store pressures at $\theta = 0°$ are essentially the same as the cavity floor pressure distributions. Since these summary figures include pressure distributions for all the store separation positions, the effects of expansion waves and shock waves on the store pressures can be more confidently identified because of the orderly downstream movements of these effects with increasing separation distance. These summary results are presented for the complete range of cavity depths and free-stream Mach numbers.

Presented in figure 20 are store circumferential pressure distributions that were measured at five axial stations on the store in the flow field of the cavity without doors. These results are presented for the same store separation positions as for the store longitudinal pressure distributions presented in figure 18. These data show that large circumferential pressure gradients can occur with the store in or near the opening of the shallow cavities ($h = 1.750$ or 2.432) but that the gradients decrease with increasing separation distance and are very small at the maximum separation distance, $Z_s/d = 10.83$. Very small circumferential pressure gradients were measured throughout the range of separation distances for the flat plate ($h = 0$) and the deep cavity ($h = 4.363$).

Cavities with doors. Store longitudinal pressure distributions are presented in figure 21 for the shallow cavities ($h = 1.750$ or 2.432) with doors. These data are presented for the same store separation positions for which the store pressure distributions were presented for the cavities without doors in figure 18. A comparison of the data in figures 18 and 21 shows that the cavity doors have several significant effects on the store pressure distributions and that these effects are generally dependent on the store separation position. With the store inside the cavity ($Z_s/d = -0.29$) or at the cavity opening ($Z_s/d = 0$), the pressures in the store nose region for $\theta = 0°$ are less for the cavity with doors, indicating that at the cavity front face the flow is expanding through a greater angle into the cavity. This greater flow expansion angle also apparently results in an increase in the peak pressure on the side of the store facing the cavity opening ($\theta = 180°$) and directly exposed to the flow expanding into the cavity. The pressures on the aft portion of the store that protrudes into the high-pressure region ahead of the cavity rear face are greater for the cavity with doors. These high pressures also extend further upstream on the store ($x_s/L_s \approx 0.8$) for the cavity with doors than for the cavity without doors ($x_s/L_s \approx 0.9$). Increasing the store separation distance to $Z_s/d = 1.67$ results in peak measured pressures on the store nose for the cavity with doors that are of equal value at $\theta = 0°$ and 180° and are approximately two times the peak values measured on the store in this region

for the cavity without doors. The fact that the peak pressures for $\theta = 0°$ and 180° are equal implies that this axial location, which is the location of the first pair of orifices, has passed through the expansion fan originating at the cavity leading edge. The elevated level of these pressures is probably due to the shock waves that originate at the door leading edges and impinge on the store surface ahead of these first orifices. The very rapid decrease in pressure that occurs downstream of this first pair of orifices is probably due to the expansion fan intersecting the store surface. The greatest pressure drop occurs along $\theta = 0°$, the side of the store facing the cavity. The large increase in pressure that occurs at $x_s/L_s \approx 0.3$ for $\theta = 0°$ is believed to be due to the impingement shock originating from the cavity floor. As a result of its inclination relative to the store, the increase in pressure at $\theta = 180°$ due to this shock occurs slightly downstream of $x_s/L_s = 0.4$. Several oscillations occur in the pressure distributions on the store between the increase in pressure associated with the impingement shock and the increase at $x_s/L_s \approx 0.9$ associated with the cavity exit shock ahead of the cavity rear face. Reasons for these oscillations are not clear, although they may be due to reflections of the door leading-edge shocks between doors. Increasing the store separation position to $Z_s/d = 3.33$ results in a reduction in the pressures at the first instrumentation station to a level approximately equal to that measured at this station for the cavity without doors and also approximately equal to the level measured with the store at the maximum separation position, which indicates that the intersection of the door leading-edge shocks is downstream of this position. In fact, the increase in pressure at the next pressure orifice at $\theta = 0°$ suggests that the door leading-edge shock intersects this side of the store between the first and second orifice locations. It should be noted that for this and greater store separation positions the store is beyond the edge of the opened doors ($w/2d = 2.86$) such that the increase in pressure associated with the door leading-edge shock waves will be greatest on the side of the store facing the cavity ($\theta = 0°$) and will be located upstream of the increase on the opposite side of the store associated with these shock waves. This trend is observed in the data. At $Z_s/d = 3.33$ the decrease in pressure resulting from the expansion wave from the cavity leading edge is initially indicated on the side of the store facing the cavity ($\theta = 0°$) at the fourth orifice location, or $x_s/L_s \approx 0.1$. Also at this store separation position, the increases in pressure associated with the cavity impingement and exit shocks are further downstream on the store than occurred at $Z_s/d = 1.67$. Increasing the store separation position to $Z_s/d = 5.00$ results in even further downstream locations of the impingement on the store of the door leading-edge shocks, the cavity leading-edge expansion, the cavity impingement shock, and the cavity exit shock. At the maximum store separation position, only the effects of the cavity door shock ($x_s/L_s \approx 0.42$) and the cavity leading-edge expansion ($x_s/L_s \approx 0.58$) are apparent, as the other shock waves are located downstream of the store.

The results presented in figure 21(a) for the $h = 2.432$ cavity, when compared with the results presented in figure 18(a) for a cavity of the same depth without doors, show that the effects of cavity doors on the store pressure distributions are very similar to the results shown for the $h = 1.750$ cavity.

As can be seen by comparing figures 21(a), 21(b), and 21(c), one of the primary effects of increasing Mach number on the store pressure distributions for the cavity with doors is a downstream movement on the store of the pressure variations created by the shock waves and expansion waves originating in the cavity.

Shown in figure 22 is a summary plot of the store longitudinal pressure distributions at $\theta = 0°$ for the cavity with doors at all store separation positions tested. In this summary figure, the store orifice locations have again been transformed to the cavity coordinates x/L so that the store data for the store positioned inside the cavity can be directly compared with the cavity data in figure 17 and with the store data for the cavity without doors in figure 19. A comparison of figures 22 and 17 shows that the store pressure distributions are very similar to the cavity floor pressure distributions when the store was inside the cavity or near the cavity opening. Because the summary plots are included for all store separation positions and because all plots for a given cavity depth and Mach number are presented on the same page, it is somewhat easier to track the impingements of the shock and expansion waves on the store surface with varying separation position than could be done in figure 21. These results support the discussions and findings from the data presented in figure 21.

Store circumferential pressure distributions for the shallow cavities with doors are shown in figure 23 for all three test Mach numbers. A comparison of these data with the store results presented in figure 20 for the cavity without doors shows that in some cases the presence of the doors on the cavity results in larger circumferential pressure gradients on the store and that these gradients persist to greater values of Z_s/d.

Store Forces And Moments

Cavities without doors. Shown in figure 24 is the effect of cavity depth on the longitudinal aerodynamic characteristics of the store as it separates through the flow field of the cavities without doors. At Mach 1.69, figure 24(a), the maximum pitching-moment coefficients for the store separating from the two shallow cavities ($h = 1.75$ or 2.432) are much greater than from the flat plate ($h = 0$) or the deep cavity ($h = 4.363$). The values of C_m peak shortly after the store leaves the shallow cavities and decrease with further increases in separation distance such that at the maximum separation distance the pitching moments are approximately zero. This variation in pitching moment is typical of closed or transitional closed cavity flow, which, as shown previously from the cavity pressure distributions, occurs for the two shallow cavities. The cavity pressure data also showed that the flow field for the $h = 4.363$ cavity was of the open flow type, which is also indicated by the pitching-moment coefficients presented in figure 24. An examination of the store pressure distributions at $\theta = 0°$ and 180° as shown in figure 18(a) for these cavity configurations gives some insight as to why the pitching moments are different for the different flow fields and what sections of the store are contributing to the large pitching moments associated with the closed cavity flow. The store pressure distributions at $Z_s/d < 3.33$ for the two shallow cavities presented in figure 18(a) generally show that in the nose region of the store greater pressures occur at $\theta = 180°$ than at $\theta = 0°$, and in the tail region greater pressures occur at $\theta = 0°$ than at $\theta = 180°$. This differential pressure in the nose region, which is associated with the flow expanding into the cavity, results in the nose being forced toward the cavity. The differential pressure in the tail region, which is due to the flow exiting from the cavity, results in the tail region being forced away from the cavity. Both forces contribute to a positive pitching moment, and since they are located at long distances from the moment center ($x_s/L_s = 0.56$) the resulting pitching moment can be quite large. Also, since these forces in the nose and tail regions are in opposite directions they have a very small combined contribution to the overall normal force. The normal-force coefficients for all cavity depths for the cavities without doors were approximately zero, as shown in figure 24. The store pressure distributions presented in figure 18(a) show that with increasing store separation distance ($Z_s/d \geq 3.33$) the pressure differences between $\theta = 0°$ and 180° in the nose and tail regions decrease and therefore result in a reduction in pitching moment as shown by the balance data presented in figure 24(a). The store pressure data presented in figure 18(a) also show that the differential pressures in the tail region of the store for the $h = 2.432$ cavity are greater than for the $h = 1.750$ cavity and persist to greater store separation distances. These increased differential pressures are probably the primary reason the pitching moments for the $h = 2.432$ cavity are greater than for the $h = 1.750$ cavity in the range $0 < Z_s/d < 4$. The store pressure distributions for the $h = 0$ and 4.363 cavities are approximately the same at $\theta = 0°$ and 180°, and therefore for these configurations the pitching moments and normal forces would be expected to be small, as is indicated by the balance data presented in figure 24(a). The axial-force coefficients as shown in figure 24(a) for the three cavity configurations increase from near zero values inside the cavity to free-stream values at $Z_s/d \approx 2$ and remain at this level through the range of separation distances. The axial-force coefficients for the flat-plate case, $h = 0$, remain at the approximate free-stream level through the test range of separation distances for this configuration ($1.25 \leq Z_s/d \leq 10.83$).

Forces and moments for the store separating through the flow field of the cavities at Mach 2.00 and 2.65 are shown in figures 24(b) and 24(c,) respectively, and these results are similar to the results shown in figure 24(a) for Mach 1.69. For the shallow cavities, the primary effect of increasing Mach number is a small increase in the peak pitching-moment coefficients and a decrease in the range of Z_s/d over which the cavity flow field influences the store pitching-moment coefficients. There were no significant effects of Mach number on the forces and moments of the store separating from the flat plate ($h = 0$) or the deep cavity ($h = 4.363$). These effects of Mach number are more clearly seen in figure 25, where the forces and moments for all three Mach numbers are presented on one figure for a given cavity configuration.

Cavities with doors. Shown in figure 26 are forces and moments of the store separating from the shallow cavities with doors attached. For comparison purposes, results are also shown for the store separating from the flat plate ($h = 0$). The trends of the effects of cavity depth on the store pitching moments shown in figure 26 are similar to the trends shown in figure 24 for the cavities without doors, although the peak pitching moments are generally larger for the cavities with doors. Another noticeable effect of cavity depth for the cavities with doors that was not observed for the cavities without doors is the increase in normal-force coefficient that occurs within the range $0 < Z_s/d < 4$ when increasing cavity depth from 1.750 to 2.432. This effect tended to

decrease with increasing Mach number and was not discernible at $M = 2.65$. The increase in normal force for the $h = 2.432$ cavity is partially due to the increase in the extent of the low-pressure region at $\theta = 0°$ on the forward section of the store associated with the expansion wave originating at the cavity leading edge. As can be seen in figure 21(a), this low-pressure region with the store at $Z_s/d = 1.67$ for the $h = 1.750$ cavity extends from $0.1 \leq x_s/L_s \leq 0.3$ and for the $h = 2.432$ cavity from $0.1 \leq x_s/L_s \leq 0.4$. A similar extension of this low-pressure region for the $h = 2.432$ cavity occurred at $M = 2.00$, as shown in figure 21(b). The store pressure data presented in figure 21(c) for $M = 2.65$ also indicates an extension of the same low-pressure region for the $h = 2.432$ cavity; however, this local increment of positive normal force is apparently counteracted by the negative normal-force increment occurring in the tail region where the pressures at $\theta = 0°$ are greater than at $\theta = 180°$. It should be noted that for the cavities without doors, the pressure distributions on the forward section of the store at $\theta = 0°$ for $Z_s/d = 1.67$ are approximately the same for the $h = 1.75$ and 2.432 cavities, as shown in figure 18, and therefore the pressures in this region for the deeper cavity do not result in an overall positive normal-force increment. As shown previously in figure 24 for the cavities without doors, the store normal-force coefficients for all cavity depths were approximately zero. This increase in normal-force increment associated with the expansion wave originating from the cavity leading edge can therefore be considered as a door effect on the $h = 2.432$ cavity as well as a cavity depth effect for the cavities with doors.

Shown in figure 27 is the effect of Mach number on the forces and moments of the store separating from the shallow cavities with doors attached. The peak pitching-moment coefficients remain approximately the same through the test Mach number range for both cavity depths. Similar to the results obtained for the store separating from the cavities without doors, increasing Mach number reduced the range of Z_s/d in which the cavity flow field influenced the forces and moments of the store. Also, as shown in figure 27(b) and as discussed previously, elevated store normal-force coefficients occurred in the range $0 < Z_s/d < 4$ at the two lower Mach numbers for the $h = 2.432$ cavity with doors attached.

The effects of the cavity doors on the forces and moments of the separating store are shown in figure 28 for the $h = 1.750$ cavity and in figure 29 for the $h = 2.432$ cavity. The effects of doors can be clearly seen in these figures since results are presented with and without doors on the same figure for a constant cavity depth and Mach number. For the $h = 1.750$ cavity, the effects of doors as shown in figure 28 result in an increase in the peak pitching moment, with the magnitude of the increase decreasing with increasing Mach number from 2.00 to 2.65. There are no significant effects of the doors for this cavity depth on C_A or C_N through the test range of Mach numbers. Similar trends concerning the effect of doors on C_m for the $h = 2.432$ cavity are shown in figure 29 with the exception that the magnitude of the increase in C_m due to doors decreases with increasing Mach number through the test Mach number range. For this cavity depth it is clear that the addition of doors results in an increase in C_N at Mach numbers of 1.69 and 2.00 for a short range of separation distances as the store leaves the cavity. As discussed previously this increase in C_N is probably due to the extended low-pressure region on the forward portion of the store at $\theta = 0°$ that is created by the expansion fan originating at the cavity leading edge.

Concluding Remarks

An experimental investigation has been conducted to measure the forces, moments, and pressure distributions on a generic store separating from a rectangular box cavity contained in a flat-plate surface at supersonic speeds. Pressure distributions inside the cavity and oil flow and vapor-screen photographs of the cavity flow field were also obtained. The measurements were obtained for the store separating from a flat-plate surface, from two shallow cavities having length-to-depth ratios (L/h) of 16.778 and 12.073, and from a deep cavity having $L/h = 6.730$. Measurements for the shallow cavities were obtained both with and without rectangular doors attached to the sides of the cavities. The tests were conducted at free-stream Mach numbers of 1.69, 2.00, and 2.65 for a free-stream Reynolds number per foot of 2×10^6. Results from the tests lead to the following concluding remarks:

1. Results from the pressure tests and the force and moment tests indicate that for the two shallow cavities the cavity flow field was always of the closed or transitional closed type and for the deep cavity the flow field was always of the open flow type.

2. Vapor-screen photographs and oil flow photographs revealed very complex flow fields for the shallow cavities with closed or transitional closed flow. These flow fields included vortices forming at the side edges of the cavities for the cavities without doors or at the edge of the doors for the cavities with doors, vortices forming on the store when it was near the opening of the cavity, and regions of

three-dimensional flow separation and reattachment including embedded vortices on the cavity floor.

3. Although the oil flow photographs for the cavity floor indicated a very complex flow for closed and transitional closed flow fields, pressure measurements obtained at several lateral stations along the cavity floor and on the cavity sidewall generally indicated very small lateral pressure gradients along the length of the cavity floor for closed, transitional closed, and open cavity flow fields.

4. For the cavities without doors, the store had only small effects on the pressure distributions along the centerline of the cavity floor for all the cavities tested. The largest effect of the store occurred when the depth of the cavity was decreased to zero, i.e., when the cavity floor was flush with the flat-plate surface. For this case, the intersection of the store nose bow shock with the plate caused a small increase in pressure that moved downstream and decreased as the store separation distance increased.

5. Results from the oil flow tests and the cavity pressure measurements indicate that the addition of doors to the sides of the shallow cavities resulted in an increase in the extent of flow separation ahead of the cavity rear face, and at Mach numbers of 1.65 and 2.00, a decrease in pressure on the cavity floor immediately behind the front face and an increase in pressure ahead of the rear face.

6. Longitudinal pressure distributions measured on the store when it was inside the cavities were essentially the same as the pressure distributions measured on the floor of the cavities at equivalent longitudinal positions.

7. The pressure distributions on the store after it separated from the shallow cavities were significantly affected by the expansion wave from the cavity leading edge and by the cavity impingement and exit shocks.

8. In general, the variations in pitching-moment coefficient and normal-force coefficient with Mach number, cavity depth, and the addition of cavity doors could be rationalized from the store pressure distributions. The contributions of the different regions of the store to the overall forces and moments could also be assessed from the store pressure distributions.

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Table I. Pressure Coefficients for Configuration 1

(a) $M = 1.69$

		C_p for Z_s/d =						
ORF	LOC	-2.45	-1.67	.00	2.50	5.00	8.33	10.83
1	FL	.0609	.0640	.0520	.0601	.0598	.0584	.0577
2	FL	.0541	.0571	.0442	.0530	.0531	.0515	.0504
3	FL	.0459	.0492	.0374	.0448	.0450	.0431	.0418
4	FL	.0468	.0500	.0394	.0464	.0465	.0447	.0434
5	FL	.0503	.0536	.0440	.0501	.0505	.0484	.0473
6	FL	.0437	.0472	.0387	.0439	.0441	.0418	.0409
7	FL	.0462	.0500	.0429	.0470	.0472	.0453	.0440
8	FL	.0475	.0514	.0449	.0488	.0487	.0467	.0456
9	FL	.0457	.0494	.0438	.0470	.0470	.0449	.0438
10	FL	.0517	.0553	.0491	.0534	.0534	.0517	.0506
11	FL	.0406	.0447	.0376	.0426	.0425	.0403	.0394
12	FL	.0477	.0523	.0447	.0497	.0496	.0475	.0469
13	FL	.0484	.0523	.0464	.0499	.0496	.0480	.0469
14	FL	.0462	.0498	.0440	.0475	.0474	.0456	.0447
15	FL	.0437	.0474	.0411	.0446	.0443	.0427	.0416
16	FL	.0468	.0500	.0436	.0473	.0472	.0453	.0445
17	FL	.0506	.0536	.0471	.0508	.0507	.0491	.0480
18	FL	.0448	.0474	.0409	.0448	.0443	.0427	.0418
19	FL	.0473	.0494	.0429	.0470	.0461	.0447	.0438
20	FL	.0508	.0527	.0469	.0503	.0494	.0482	.0471
21	FL	.0479	.0492	.0445	.0473	.0461	.0449	.0442
22	FL	.0521	.0531	.0493	.0514	.0501	.0491	.0484
23	FL	.0479	.0483	.0462	.0468	.0450	.0445	.0436
24	FL	.0375	.0375	.0372	.0364	.0344	.0336	.0330
25	FL	.0464	.0461	.0469	.0450	.0423	.0422	.0416
26	FL	.0464	.0452	.0480	.0446	.0423	.0420	.0416
27	FL	.0433	.0419	.0464	.0417	.0390	.0387	.0383
28	FL	.0417	.0399	.0462	.0402	.0375	.0372	.0367
29	FL	.0442	.0419	.0478	.0428	.0406	.0398	.0396
30	FL	.0455	.0432	.0489	.0448	.0428	.0420	.0416
31	FL	.0503	.0481	.0546	.0499	.0478	.0473	.0471
32	FL	.0466	.0441	.0522	.0450	.0428	.0422	.0416
33	FL	.0435	.0401	.0500	.0415	.0397	.0383	.0383
34	FL	.0406	.0368	.0482	.0389	.0373	.0354	.0354
35	FL	.0428	.0386	.0517	.0415	.0401	.0383	.0383
36	FL	.0431	.0388	.0533	.0417	.0410	.0392	.0396
37	FL	.0393	.0350	.0504	.0382	.0377	.0356	.0361
38	FL	.0479	.0434	.0597	.0473	.0474	.0458	.0460
39	FL	.0389	.0344	.0517	.0382	.0388	.0370	.0372
40	FL	.0420	.0375	.0557	.0420	.0425	.0411	.0416
41	FL	.0417	.0372	.0559	.0422	.0430	.0416	.0420
42	FL	.0444	.0397	.0590	.0457	.0461	.0451	.0453
43	FL	.0426	.0377	.0573	.0442	.0443	.0440	.0442
44	FL	.0433	.0383	.0575	.0453	.0452	.0447	.0451
45	FL	.0424	.0368	.0553	.0442	.0437	.0438	.0436
46	FL	.0470	.0410	.0590	.0495	.0483	.0489	.0486
47	FL	.0437	.0372	.0544	.0459	.0443	.0449	.0449
48	FL	.0521	.0432	.0606	.0532	.0516	.0517	.0526
49	FL	.0603	.0514	.0659	.0618	.0598	.0606	.0619
50	FL	.0667	.0589	.0709	.0711	.0692	.0709	.0723

		C_p for Z_s/d =						
ORF	LOC	-2.45	-1.67	.00	2.50	5.00	8.33	10.83
51	FL	.0556	.0492	.0656	.0587	.0564	.0579	.0577
52	FL	.0532	.0459	.0610	.0556	.0534	.0544	.0553
53	FL	.0574	.0505	.0641	.0598	.0573	.0586	.0599
54	FL	.0631	.0571	.0690	.0656	.0631	.0645	.0656
55	FL	.0665	.0584	.0685	.0651	.0631	.0643	.0656
56	FL	.0742	.0628	.0712	.0678	.0659	.0672	.0687
57	FL	.0766	.0653	.0720	.0678	.0655	.0685	.0703
58	FL	.0852	.0743	.0782	.0731	.0719	.0742	.0760
59	FL	.0735	.0662	.0674	.0678	.0664	.0676	.0687
60	FL	.0748	.0715	.0670	.0799	.0772	.0778	.0811
61	FL	.1165	.1147	.1089	.1304	.1284	.1294	.1332
62	FL	.0925	.0823	.0831	.0766	.0765	.0784	.0806
63	FL	.0943	.0849	.0826	.0744	.0752	.0762	.0782
64	FL	.1146	.1088	.1025	.0934	.0957	.0965	.0983
65	FL	.1432	.1421	.1323	.1256	.1275	.1299	.1310
66	FL	.2039	.2059	.1992	.2077	.2082	.2117	.2115
67	FL	.2970	.3063	.3020	.3548	.3541	.3558	.3552
68	FL	.3050	.3116	.3035	.3628	.3638	.3620	.3653
69	FL	.3032	.3087	.2969	.3504	.3519	.3503	.3552
70	FL	.3390	.3429	.3223	.3831	.3845	.3814	.3863
71	SW	.0574	.0604	.0495	.0567	.0562	.0550	.0542
72	SW	.0448	.0492	.0407	.0473	.0472	.0451	.0445
73	SW	.0499	.0514	.0449	.0503	.0503	.0486	.0478
74	SW	.0477	.0441	.0495	.0475	.0452	.0445	.0442
75	SW	.0534	.0485	.0619	.0543	.0542	.0539	.0542
76	SW	.0638	.0595	.0676	.0669	.0646	.0678	.0692
77	SW	.0918	.0867	.0833	.1024	.0984	.1003	.1047
78	SW	.2992	.3081	.2883	.3712	.3695	.3655	.3700
79	SW	.0433	.0465	.0354	.0415	.0410	.0396	.0389
80	SW	.0464	.0509	.0425	.0481	.0478	.0460	.0453
81	SW	.0495	.0514	.0451	.0497	.0494	.0475	.0471
82	SW	.0426	.0408	.0471	.0420	.0395	.0387	.0387
83	SW	.0541	.0496	.0670	.0552	.0558	.0546	.0553
84	SW							
85	SW	.0892	.0876	.0826	.0971	.0944	.0976	.1012
86	SW	.2531	.2604	.2517	.2873	.2868	.2888	.2885
87	RF	.3756	.3827	.3693	.6254	.6159	.6162	.6056
88	RF	.5664	.5656	.5141	.6382	.6543	.6162	.6418
89	RF	.4727	.4612	.4487	.4881	.5063	.4799	.5039
90	RF	.3076	.2944	.2757	.3224	.3300	.3207	.3285
91	RF	.3617	.3696	.3722	.5437	.5374	.5381	.5280
92	RF	.2388	.2436	.2623	.3140	.3126	.3106	.3082
93	RF	.2708	.2763	.2545	.3334	.3393	.3223	.3380
94	RF	.2416	.2423	.2170	.2745	.2771	.2691	.2830
95	RF	.3061	.3134	.2958	.3694	.3708	.3667	.3728
96	RF	.1651	.1668	.1711	.1913	.1912	.1899	.1925
97	RF	.1682	.1697	.1667	.1737	.1749	.1760	.1780
98	RF	.1741	.1743	.1700	.1814	.1833	.1830	.1861
99	RF	.1924	.1948	.1899	.2052	.2056	.2069	.2091
100	RF	.2469	.2522	.2453	.2787	.2793	.2797	.2815

Table I. Continued

(a) Concluded

		C_p for Z_s/l =						
ORF	LOC	-2.45	-1.67	.00	2.50	5.00	8.33	10.83
101	ST	.0457	.0500	.0387	.2099	.2076	.2000	.2071
102	ST	.0431	.0470	.0347	.1377	.1330	.1272	.1303
103	ST	.0444	.0481	.0356	.1276	.0990	.0930	.0950
104	ST	.0404	.0441	.0312	.0830	.0419	.0394	.0328
105	ST	.0435	.0472	.0350	.0285	.0079	.0050	-.0021
106	ST	.0395	.0430	.0328	-.0161	-.0329	-.0295	-.0337
107	ST	.0429	.0461	.0381	-.0004	-.0166	-.0057	-.0140
108	ST	.0400	.0441	.0372	.0062	-.0031	.0021	-.0008
109	ST	.0409	.0450	.0396	.0170	.0092	.0085	.0164
110	ST	.0380	.0419	.0374	.0170	.0445	.0122	.0182
111	ST	.0395	.0434	.0392	-.0117	.0525	.0147	.0235
112	ST	.0386	.0419	.0381	-.0403	.0441	.0173	.0233
113	ST	.0391	.0423	.0389	-.0342	.0390	.0206	.0244
114	ST	.0448	.0478	.0440	-.0053	.0406	.0303	.0308
115	ST	.0382	.0406	.0376	.0155	.0364	.0259	.0257
116	ST	.0360	.0386	.0354	.0448	.0364	.0233	.0242
117	ST	.0391	.0410	.0385	.0781	.0401	.0286	.0292
118	ST	.0402	.0412	.0389	.0934	.0397	.0314	.0288
119	ST	.0409	.0414	.0398	.0907	.0414	.0445	.0303
120	ST	.0404	.0406	.0396	.0808	.0421	.0637	.0317
121	ST	.0371	.0364	.0359	.0695	.0412	.0522	.0319
122	ST	.0358	.0344	.0347	.0620	.0432	.0411	.0301
123	ST	.0358	.0337	.0350	.0581	.0443	.0381	.0330
124	ST	.0289	.0264	.0288	.0448	.0306	.0334	.0272
125	ST	.0281	.0251	.0270	.0358	.0167	.0370	.0257
126	ST	.0314	.0275	.0308	.0334	.0072	.0394	.0352
127	ST	.0431	.0388	.0418	.0393	.0145	.0486	.0628
128	ST	.0296	.0242	.0283	.0261	.0112	.0350	.0526
129	ST	.0400	.0355	.0394	.0393	.0412	.0486	.0557
130	ST	.0395	.0328	.0392	.0428	.0587	.0502	.0484
131	ST	.0360	.0282	.0356	.0453	.0690	.0486	.0442
132	ST	.0373	.0293	.0374	.0517	.0765	.0515	.0467
133	ST	.0351	.0262	.0367	.0523	.0728	.0478	.0429
134	ST	.0329	.0236	.0352	.0523	.0639	.0460	.0414
135	ST	.0360	.0269	.0378	.0559	.0571	.0520	.0475
136	ST	.0404	.0322	.0431	.0605	.0518	.0570	.0520
137	ST	.0358	.0267	.0392	.0563	.0450	.0544	.0493
138	ST	.0380	.0286	.0407	.0567	.0465	.0522	.0511
139	ST							
140	ST	.0402	.0311	.0400	.0561	.0492	.0484	.0528
141	ST	.0406	.0315	.0394	.0603	.0523	.0478	.0513
142	ST	.0466	.0379	.0429	.0656	.0564	.0478	.0539
143	ST	.0380	.0313	.0303	.0475	.0373	.0253	.0372
144	ST	.0426	.0348	.0345	.0638	.0525	.0354	.0526
145	ST	.0488	.0403	.0367	.0667	.0558	.0323	.0528
146	ST	.0457	.0383	.0310	.0645	.0558	.0277	.0473
147	ST	.0466	.0514	.1755	.2169	.2135	.2117	.2144
148	ST	.0464	.0520	.0696	.0934	.0926	.0882	.0866

		C_p for Z_s/l =						
ORF	LOC	-2.45	-1.67	.00	2.50	5.00	8.33	10.83
149	ST	.0417	.0476	-.0142	.0016	.0033	.0001	-.0050
150	ST	.0422	.0483	-.0151	.0007	-.0106	-.0041	-.0120
151	ST	.0448	.0483	.0610	.0395	.0256	.0250	.0347
152	ST	.0404	.0408	.0542	.0267	.0452	.0292	.0325
153	ST	.0484	.0459	.0628	.0283	.0514	.0445	.0434
154	ST							
155	ST	.0353	.0311	.0475	.0603	.0481	.0537	.0418
156	ST	.0295	.0271	.0458	.0477	.0328	.0467	.0491
157	ST	.0265	.0244	.0418	.0468	.0556	.0467	.0447
158	ST	.0285	.0236	.0418	.0497	.0531	.0471	.0442
159	ST	.0254	.0165	.0339	.0470	.0388	.0394	.0400
160	ST	.0428	.0322	.0451	.0614	.0487	.0484	.0553
161	ST	.0395	.0436	.0292	.0250	.0037	.0025	-.0010
162	ST	.0709	.0754	.0584	.0583	.0333	.0343	.0341
163	ST	.0367	.0414	.0191	.0234	-.0031	-.0008	.0003
164	ST	.0164	.0216	-.0134	-.0008	-.0236	-.0211	-.0209
165	ST	.0415	.0467	-.0059	.0133	-.0020	-.0001	-.0017
166	ST	.0420	.0476	-.0138	.0038	-.0014	-.0012	-.0061
167	ST	.0373	.0432	-.0158	.0000	-.0005	-.0023	-.0081
168	ST	.0402	.0441	.0376	-.0026	.0551	.0184	.0283
169	ST	.0444	.0485	.0416	.0128	.0560	.0213	.0288
170	ST	.0382	.0419	.0392	.0157	.0386	.0136	.0167
171	ST	.0437	.0474	.0517	.0292	.0322	.0222	.0253
172	ST	.0468	.0505	.0557	.0349	.0269	.0259	.0290
173	ST	.0424	.0465	.0524	.0327	.0205	.0224	.0255
174	ST	.0364	.0403	.0460	.0256	.0132	.0140	.0200
175	ST	.0417	.0395	.0407	.0625	.0501	.0438	.0383
176	ST	.0309	.0278	.0290	.0488	.0368	.0317	.0250
177	ST	.0488	.0439	.0500	.0642	.0516	.0495	.0414
178	ST	.0331	.0289	.0378	.0499	.0375	.0378	.0279
179	ST	.0437	.0399	.0502	.0629	.0494	.0502	.0374
180	ST	.0353	.0315	.0449	.0589	.0443	.0434	.0317
181	ST	.0375	.0333	.0495	.0656	.0474	.0438	.0341
182	ST	.0336	.0229	.0359	.0512	.0514	.0478	.0411
183	ST	.0298	.0194	.0347	.0455	.0467	.0445	.0365
184	ST							
185	ST	.0265	.0238	.0438	.0424	.0501	.0467	.0409
186	ST	.0320	.0331	.0486	.0442	.0536	.0486	.0436
187	ST	.0270	.0275	.0394	.0398	.0498	.0431	.0385
188	ST	.0276	.0271	.0427	.0457	.0556	.0473	.0438
189	ST	.0457	.0324	.0314	.0572	.0476	.0259	.0456
190	ST	.0517	.0319	.0365	.0537	.0441	.0255	.0434
191	ST	.0508	.0311	.0414	.0506	.0414	.0286	.0427
192	ST	.0446	.0282	.0420	.0468	.0373	.0268	.0405
193	ST	.0417	.0295	.0416	.0481	.0384	.0314	.0438
194	ST	.0402	.0297	.0394	.0528	.0425	.0383	.0491
195	ST	.0334	.0214	.0323	.0497	.0384	.0361	.0449
196	ST	.0819	.0359	-.0134	-.0483	-.0444	-.0630	-.0579

Table I. Continued

(b) $M = 2.00$

ORF	LOC	C_p for Z_s/d = -2.45	-1.67	.00	2.50	5.00	8.33	10.83
1	FL	.0363	.0380	.0303	.0357	.0343	.0331	.0316
2	FL	.0325	.0342	.0254	.0312	.0294	.0284	.0267
3	FL	.0314	.0324	.0252	.0292	.0274	.0264	.0249
4	FL	.0258	.0269	.0212	.0241	.0222	.0210	.0195
5	FL	.0278	.0289	.0247	.0263	.0242	.0230	.0220
6	FL	.0267	.0275	.0254	.0261	.0236	.0226	.0211
7	FL	.0249	.0260	.0256	.0252	.0229	.0215	.0204
8	FL	.0225	.0233	.0243	.0232	.0209	.0195	.0184
9	FL	.0249	.0264	.0281	.0270	.0247	.0230	.0222
10	FL	.0238	.0253	.0267	.0254	.0231	.0215	.0204
11	FL	.0269	.0284	.0299	.0290	.0269	.0250	.0244
12	FL	.0285	.0302	.0314	.0306	.0287	.0268	.0262
13	FL	.0256	.0269	.0287	.0277	.0254	.0239	.0229
14	FL	.0256	.0271	.0285	.0277	.0258	.0244	.0235
15	FL	.0271	.0291	.0296	.0297	.0280	.0262	.0255
16	FL	.0265	.0282	.0281	.0288	.0269	.0253	.0249
17	FL	.0280	.0295	.0285	.0297	.0283	.0266	.0260
18	FL	.0285	.0300	.0283	.0299	.0285	.0266	.0262
19	FL	.0296	.0318	.0290	.0308	.0296	.0277	.0273
20	FL	.0336	.0351	.0332	.0348	.0334	.0317	.0313
21	FL	.0316	.0331	.0308	.0324	.0309	.0293	.0289
22	FL	.0267	.0282	.0263	.0268	.0256	.0253	.0249
23	FL	.0298	.0311	.0301	.0301	.0287	.0271	.0267
24	FL	.0251	.0262	.0267	.0257	.0242	.0226	.0220
25	FL	.0287	.0295	.0308	.0286	.0271	.0257	.0253
26	FL	.0305	.0311	.0334	.0304	.0289	.0273	.0271
27	FL	.0276	.0278	.0314	.0272	.0260	.0246	.0244
28	FL	.0280	.0275	.0325	.0272	.0258	.0244	.0244
29	FL	.0298	.0291	.0319	.0290	.0278	.0262	.0260
30	FL	.0300	.0289	.0336	.0295	.0280	.0268	.0267
31	FL	.0320	.0307	.0374	.0324	.0312	.0299	.0300
32	FL	.0262	.0260	.0314	.0254	.0240	.0228	.0226
33	FL	.0283	.0278	.0343	.0274	.0262	.0248	.0249
34	FL	.0278	.0269	.0345	.0266	.0256	.0244	.0244
35	FL	.0283	.0266	.0354	.0268	.0258	.0246	.0244
36	FL	.0271	.0249	.0350	.0250	.0247	.0233	.0233
37	FL	.0283	.0255	.0368	.0261	.0260	.0246	.0244
38	FL	.0269	.0235	.0357	.0243	.0247	.0233	.0229
39	FL	.0278	.0242	.0365	.0254	.0260	.0244	.0240
40	FL	.0276	.0235	.0363	.0254	.0262	.0242	.0238
41	FL	.0280	.0233	.0361	.0257	.0267	.0248	.0244
42	FL	.0276	.0224	.0350	.0257	.0262	.0246	.0242
43	FL	.0287	.0231	.0334	.0270	.0274	.0262	.0255
44	FL	.0274	.0220	.0325	.0261	.0269	.0257	.0249
45	FL	.0294	.0237	.0334	.0283	.0289	.0286	.0275
46	FL	.0298	.0237	.0323	.0283	.0291	.0288	.0280
47	FL	.0338	.0273	.0348	.0324	.0332	.0331	.0322
48	FL	.0334	.0246	.0316	.0308	.0316	.0315	.0304
49	FL	.0394	.0311	.0354	.0393	.0399	.0398	.0396
50	FL	.0432	.0353	.0381	.0466	.0485	.0480	.0483

ORF	LOC	C_p for Z_s/d = -2.45	-1.67	.00	2.50	5.00	8.33	10.83
51	FL	.0332	.0266	.0328	.0321	.0325	.0315	.0318
52	FL	.0332	.0269	.0314	.0315	.0325	.0320	.0316
53	FL	.0361	.0304	.0332	.0344	.0354	.0349	.0347
54	FL	.0352	.0309	.0314	.0335	.0347	.0340	.0340
55	FL	.0399	.0349	.0328	.0364	.0374	.0369	.0371
56	FL	.0450	.0403	.0348	.0397	.0412	.0402	.0407
57	FL	.0537	.0489	.0397	.0453	.0472	.0471	.0474
58	FL	.0559	.0514	.0388	.0457	.0481	.0476	.0483
59	FL	.0608	.0585	.0441	.0553	.0577	.0572	.0579
60	FL	.0691	.0712	.0501	.0736	.0760	.0759	.0777
61	FL	.0842	.0898	.0700	.0977	.0990	.0991	.1011
62	FL	.0595	.0547	.0392	.0455	.0485	.0485	.0489
63	FL	.0691	.0641	.0461	.0513	.0548	.0549	.0552
64	FL	.0773	.0735	.0537	.0589	.0624	.0627	.0630
65	FL	.1019	.0996	.0798	.0875	.0909	.0913	.0915
66	FL	.1469	.1464	.1344	.1499	.1529	.1533	.1530
67	FL	.2207	.2291	.2303	.2706	.2687	.2699	.2700
68	FL	.2243	.2367	.2354	.2815	.2803	.2826	.2836
69	FL	.2270	.2372	.2350	.2775	.2785	.2804	.2816
70	FL	.2765	.2905	.2989	.3311	.3336	.3334	.3362
71	SW	.0374	.0396	.0336	.0373	.0358	.0346	.0336
72	SW	.0227	.0251	.0256	.0250	.0227	.0213	.0202
73	SW	.0303	.0309	.0285	.0310	.0296	.0282	.0278
74	SW	.0356	.0331	.0345	.0355	.0347	.0333	.0333
75	SW	.0396	.0331	.0412	.0395	.0405	.0393	.0398
76	SW	.0439	.0380	.0370	.0466	.0479	.0476	.0466
77	SW	.0691	.0712	.0508	.0770	.0773	.0777	.0795
78	SW	.2268	.2472	.2457	.2987	.2937	.2940	.2981
79	SW	.0367	.0396	.0330	.0368	.0354	.0342	.0331
80	SW	.0256	.0275	.0290	.0279	.0260	.0244	.0238
81	SW	.0318	.0329	.0314	.0326	.0312	.0295	.0289
82	SW	.0307	.0300	.0354	.0306	.0294	.0277	.0273
83	SW	.0332	.0280	.0419	.0321	.0327	.0311	.0307
84	SW							
85	SW	.0646	.0679	.0439	.0710	.0722	.0728	.0743
86	SW	.1674	.1756	.1694	.2070	.2073	.2083	.2101
87	RF	.2818	.2862	.2784	.5031	.4832	.4862	.4778
88	RF	.4801	.5335	.5346	.6117	.5832	.5878	.5834
89	RF	.5191	.5525	.6146	.5753	.5803	.5762	.5812
90	RF	.3327	.3192	.3000	.3297	.3487	.3464	.3443
91	RF	.2676	.2737	.2822	.4265	.4052	.4075	.4022
92	RF	.1668	.1747	.1859	.2213	.2078	.2092	.2103
93	RF	.2069	.2389	.2336	.2811	.2693	.2714	.2769
94	RF	.2377	.2537	.2289	.2771	.2821	.2824	.2883
95	RF	.2464	.2630	.2543	.3063	.3053	.3056	.3108
96	RF	.1077	.1136	.1005	.1247	.1210	.1220	.1249
97	RF	.1201	.1221	.1072	.1238	.1264	.1265	.1278
98	RF	.1242	.1281	.1110	.1354	.1387	.1392	.1412
99	RF	.1344	.1359	.1244	.1524	.1561	.1570	.1586
100	RF	.1672	.1747	.1674	.2030	.2038	.2050	.2067

Table I. Continued

(b) Concluded

		C_p for Z_y/d =						
ORF	LOC	-2.45	-1.67	.00	2.50	5.00	8.33	10.83
101	ST	.0287	.0293	.0236	.1827	.1837	.1831	.1829
102	ST	.0267	.0273	.0207	.1196	.1233	.1189	.1194
103	ST	.0262	.0269	.0198	.0846	.0853	.0855	.0853
104	ST	.0251	.0255	.0180	.0402	.0372	.0393	.0380
105	ST	.0245	.0246	.0187	.0274	-.0034	-.0006	-.0039
106	ST	.0220	.0229	.0178	-.0125	-.0337	-.0332	-.0337
107	ST	.0245	.0253	.0221	-.0060	-.0228	-.0200	-.0222
108	ST	.0222	.0233	.0214	-.0018	-.0168	-.0117	-.0132
109	ST	.0236	.0246	.0243	.0029	-.0083	-.0062	-.0025
110	ST	.0213	.0226	.0227	.0036	-.0027	.0005	.0030
111	ST	.0220	.0237	.0241	.0029	-.0001	.0039	.0048
112	ST	.0233	.0251	.0256	.0058	.0046	.0070	.0102
113	ST	.0236	.0258	.0258	.0051	.0106	.0081	.0108
114	ST	.0233	.0255	.0250	-.0062	.0341	.0099	.0115
115	ST	.0260	.0282	.0281	-.0261	.0399	.0128	.0162
116	ST	.0256	.0273	.0272	-.0370	.0347	.0123	.0160
117	ST	.0269	.0289	.0281	-.0230	.0314	.0126	.0151
118	ST	.0267	.0282	.0281	-.0036	.0254	.0134	.0153
119	ST	.0269	.0287	.0283	.0225	.0231	.0175	.0124
120	ST	.0271	.0284	.0285	.0453	.0231	.0186	.0166
121	ST	.0280	.0284	.0294	.0625	.0249	.0217	.0195
122	ST	.0254	.0258	.0265	.0634	.0220	.0184	.0173
123	ST	.0271	.0271	.0290	.0623	.0269	.0204	.0220
124	ST	.0260	.0258	.0281	.0556	.0285	.0224	.0209
125	ST	.0269	.0262	.0287	.0507	.0303	.0262	.0222
126	ST	.0260	.0249	.0283	.0460	.0298	.0378	.0211
127	ST	.0247	.0233	.0265	.0388	.0260	.0440	.0153
128	ST	.0274	.0253	.0294	.0404	.0291	.0411	.0195
129	ST	.0267	.0244	.0283	.0379	.0280	.0322	.0202
130	ST	.0262	.0235	.0285	.0368	.0267	.0255	.0213
131	ST	.0249	.0222	.0272	.0333	.0225	.0221	.0233
132	ST	.0254	.0224	.0274	.0299	.0158	.0219	.0249
133	ST	.0254	.0220	.0285	.0261	.0069	.0210	.0238
134	ST	.0247	.0209	.0279	.0241	-.0001	.0224	.0253
135	ST	.0236	.0200	.0256	.0225	-.0012	.0224	.0278
136	ST	.0260	.0220	.0290	.0288	.0115	.0259	.0385
137	ST	.0231	.0191	.0250	.0304	.0251	.0246	.0353
138	ST	.0256	.0213	.0265	.0366	.0448	.0271	.0313
139	ST							
140	ST	.0247	.0202	.0218	.0404	.0539	.0244	.0215
141	ST	.0242	.0197	.0201	.0451	.0514	.0264	.0211
142	ST	.0254	.0206	.0192	.0471	.0459	.0304	.0209
143	ST	.0191	.0166	.0102	.0339	.0271	.0181	.0079
144	ST	.0233	.0202	.0134	.0486	.0365	.0306	.0195
145	ST	.0249	.0215	.0116	.0486	.0336	.0295	.0209
146	ST	.0229	.0209	.0069	.0475	.0316	.0284	.0240
147	ST	.0269	.0282	.1509	.1805	.1824	.1822	.1842
148	ST	.0249	.0266	.0611	.0779	.0778	.0768	.0786

		C_p for Z_y/d =						
ORF	LOC	-2.45	-1.67	.00	2.50	5.00	8.33	10.83
149	ST	.0220	.0244	-.0201	-.0062	-.0056	-.0046	-.0046
150	ST	.0213	.0242	-.0368	-.0254	-.0239	-.0195	-.0217
151	ST	.0227	.0246	.0276	.0154	.0024	.0068	.0068
152	ST	.0249	.0245	.0388	.0208	.0120	.0134	.0137
153	ST	.0209	.0186	.0301	.0080	.0245	.0108	.0104
154	ST							
155	ST	.0202	.0166	.0283	.0355	.0225	.0179	.0177
156	ST	.0207	.0186	.0296	.0393	.0251	.0299	.0195
157	ST	.0209	.0186	.0283	.0344	.0267	.0273	.0209
158	ST	.0180	.0133	.0232	.0277	.0129	.0213	.0206
159	ST	.0187	.0113	.0158	.0337	.0278	.0275	.0244
160	ST	.0240	.0159	.0138	.0391	.0367	.0297	.0251
161	ST	.0211	.0217	.0109	.0223	-.0065	-.0026	-.0046
162	ST	.0254	.0258	.0122	.0152	-.0030	.0005	-.0010
163	ST	.0271	.0280	.0100	.0065	.0026	.0059	.0053
164	ST	.0276	.0289	.0002	.0034	.0035	.0068	.0059
165	ST	.0242	.0258	-.0118	-.0031	-.0019	.0014	.0012
166	ST	.0236	.0255	-.0149	-.0040	-.0025	.0010	.0004
167	ST	.0229	.0253	-.0143	-.0031	-.0016	.0001	-.0005
168	ST	.0236	.0249	.0227	.0078	.0013	.0059	.0077
169	ST	.0233	.0249	.0241	.0096	.0010	.0050	.0073
170	ST	.0211	.0224	.0276	.0071	-.0016	.0003	.0037
171	ST	.0227	.0242	.0343	.0098	.0026	.0045	.0073
172	ST	.0220	.0235	.0292	.0094	.0013	.0054	.0064
173	ST	.0218	.0233	.0238	.0100	.0010	.0050	.0061
174	ST	.0225	.0242	.0221	.0103	-.0012	.0027	.0039
175	ST	.0265	.0255	.0281	.0623	.0251	.0208	.0209
176	ST	.0260	.0235	.0285	.0598	.0216	.0188	.0180
177	ST	.0251	.0220	.0350	.0520	.0213	.0199	.0191
178	ST	.0236	.0200	.0377	.0426	.0231	.0210	.0209
179	ST	.0229	.0188	.0341	.0268	.0227	.0186	.0200
180	ST	.0220	.0180	.0330	.0147	.0256	.0197	.0213
181	ST	.0240	.0200	.0339	.0076	.0276	.0204	.0204
182	ST	.0236	.0193	.0279	.0241	-.0019	.0219	.0267
183	ST	.0242	.0191	.0345	.0259	-.0003	.0230	.0255
184	ST							
185	ST	.0216	.0235	.0459	.0286	.0109	.0255	.0238
186	ST	.0236	.0284	.0452	.0306	.0173	.0262	.0220
187	ST	.0200	.0237	.0321	.0281	.0173	.0226	.0166
188	ST	.0198	.0206	.0292	.0319	.0231	.0248	.0189
189	ST	.0341	.0226	.0136	.0449	.0329	.0299	.0209
190	ST	.0414	.0220	.0176	.0413	.0314	.0291	.0211
191	ST	.0405	.0204	.0201	.0399	.0318	.0293	.0229
192	ST	.0336	.0177	.0189	.0375	.0318	.0275	.0226
193	ST	.0278	.0159	.0151	.0364	.0316	.0253	.0226
194	ST	.0242	.0135	.0118	.0382	.0343	.0257	.0258
195	ST	.0213	.0110	.0096	.0375	.0347	.0248	.0258
196	ST	.0668	.0249	-.0248	-.0656	-.0679	-.0757	-.0770

Table I. Continued

(c) $M = 2.65$

ORF	LOC	C_p for Z_s/l = -2.45	-1.67	.00	2.50	5.00	8.33	10.83	ORF	LOC	C_p for Z_s/l = -2.45	-1.67	.00	2.50	5.00	8.33	10.83
1	FL	.0274	.0276	.0192	.0283	.0277	.0263	.0261	51	FL	.0064	.0078	.0195	.0083	.0092	.0089	.0078
2	FL	.0257	.0253	.0164	.0261	.0254	.0243	.0238	52	FL	.0089	.0101	.0207	.0104	.0105	.0099	.0081
3	FL	.0236	.0227	.0159	.0240	.0229	.0218	.0217	53	FL	.0114	.0131	.0220	.0129	.0125	.0122	.0104
4	FL	.0208	.0200	.0141	.0212	.0201	.0192	.0190	54	FL	.0112	.0141	.0207	.0129	.0122	.0117	.0096
5	FL	.0206	.0197	.0154	.0210	.0198	.0187	.0190	55	FL	.0147	.0169	.0220	.0149	.0143	.0137	.0111
6	FL	.0191	.0184	.0154	.0200	.0191	.0177	.0179	56	FL	.0188	.0184	.0220	.0154	.0153	.0149	.0124
7	FL	.0201	.0189	.0172	.0212	.0198	.0187	.0190	57	FL	.0239	.0238	.0245	.0195	.0201	.0208	.0177
8	FL	.0142	.0134	.0121	.0159	.0145	.0134	.0131	58	FL	.0226	.0225	.0230	.0177	.0198	.0205	.0174
9	FL	.0196	.0189	.0177	.0217	.0201	.0187	.0187	59	FL	.0221	.0225	.0225	.0195	.0216	.0223	.0190
10	FL	.0145	.0136	.0121	.0164	.0150	.0139	.0139	60	FL	.0252	.0276	.0256	.0263	.0279	.0289	.0250
11	FL	.0183	.0182	.0157	.0230	.0196	.0182	.0182	61	FL	.0308	.0342	.0304	.0347	.0361	.0377	.0334
12	FL	.0188	.0187	.0154	.0210	.0196	.0185	.0185	62	FL	.0234	.0220	.0220	.0174	.0206	.0218	.0187
13	FL	.0170	.0167	.0154	.0215	.0178	.0165	.0167	63	FL	.0290	.0268	.0258	.0225	.0272	.0281	.0248
14	FL	.0188	.0182	.0167	.0215	.0198	.0187	.0185	64	FL	.0351	.0321	.0291	.0283	.0333	.0344	.0316
15	FL	.0206	.0202	.0182	.0233	.0216	.0203	.0202	65	FL	.0526	.0491	.0436	.0466	.0520	.0529	.0509
16	FL	.0160	.0156	.0134	.0192	.0173	.0162	.0162	66	FL	.0869	.0819	.0720	.0863	.0900	.0901	.0896
17	FL	.0198	.0194	.0162	.0225	.0208	.0200	.0197	67	FL	.1423	.1441	.1215	.1565	.1501	.1483	.1484
18	FL	.0203	.0197	.0162	.0230	.0214	.0203	.0197	68	FL	.1341	.1339	.1142	.1456	.1402	.1387	.1388
19	FL	.0216	.0212	.0172	.0240	.0226	.0215	.0210	69	FL	.1308	.1349	.1101	.1428	.1377	.1364	.1357
20	FL	.0254	.0250	.0210	.0276	.0262	.0248	.0245	70	FL	.1364	.1431	.1162	.1562	.1506	.1483	.1448
21	FL	.0211	.0207	.0167	.0230	.0216	.0208	.0200	71	SW	.0254	.0258	.0182	.0268	.0252	.0241	.0235
22	FL	.0193	.0187	.0146	.0207	.0196	.0185	.0174	72	SW	.0150	.0151	.0101	.0182	.0163	.0152	.0154
23	FL	.0226	.0215	.0179	.0233	.0224	.0213	.0205	73	SW	.0198	.0187	.0159	.0225	.0214	.0200	.0197
24	FL	.0137	.0128	.0101	.0147	.0138	.0127	.0116	74	SW	.0211	.0184	.0202	.0212	.0203	.0192	.0187
25	FL	.0214	.0205	.0179	.0220	.0208	.0200	.0190	75	SW	.0211	.0210	.0281	.0225	.0211	.0208	.0195
26	FL	.0203	.0194	.0182	.0210	.0198	.0190	.0182	76	SW	.0186	.0230	.0271	.0223	.0239	.0228	.0207
27	FL	.0214	.0202	.0197	.0217	.0208	.0200	.0190	77	SW	.0160	.0212	.0212	.0217	.0231	.0235	.0195
28	FL	.0201	.0189	.0192	.0205	.0193	.0185	.0177	78	SW	.0981	.1111	.0872	.1327	.1151	.1103	.1018
29	FL	.0198	.0184	.0197	.0200	.0193	.0182	.0172	79	SW	.0259	.0266	.0190	.0273	.0259	.0251	.0248
30	FL	.0188	.0172	.0187	.0195	.0183	.0177	.0169	80	SW	.0158	.0156	.0124	.0185	.0168	.0155	.0157
31	FL	.0216	.0197	.0210	.0220	.0208	.0203	.0195	81	SW	.0191	.0184	.0154	.0217	.0203	.0192	.0185
32	FL	.0191	.0177	.0192	.0192	.0186	.0175	.0169	82	SW	.0219	.0194	.0210	.0215	.0206	.0198	.0190
33	FL	.0193	.0179	.0207	.0197	.0188	.0182	.0172	83	SW	.0221	.0207	.0278	.0223	.0211	.0208	.0195
34	FL	.0188	.0172	.0212	.0187	.0181	.0175	.0164	84	SW							
35	FL	.0186	.0167	.0217	.0185	.0176	.0172	.0159	85	SW	.0193	.0240	.0184	.0220	.0241	.0256	.0205
36	FL	.0168	.0151	.0212	.0164	.0158	.0155	.0144	86	SW	.1100	.1197	.0933	.1223	.1166	.1172	.1142
37	FL	.0175	.0154	.0233	.0172	.0163	.0160	.0149	87	RF	.2192	.2202	.2022	.4098	.3467	.3229	.3341
38	FL	.0153	.0134	.0223	.0149	.0143	.0137	.0126	88	RF	.3150	.3035	.2647	.3222	.2968	.2715	.2629
39	FL	.0160	.0141	.0240	.0159	.0150	.0144	.0136	89	RF	.2197	.1969	.2048	.2431	.2591	.2523	.2307
40	FL	.0147	.0128	.0243	.0147	.0143	.0134	.0124	90	RF	.1671	.1327	.1266	.1421	.1625	.1642	.1644
41	FL	.0140	.0123	.0243	.0139	.0138	.0132	.0119	91	RF	.1925	.1951	.1769	.3070	.2578	.2419	.2421
42	FL	.0122	.0106	.0238	.0129	.0130	.0124	.0111	92	RF	.0884	.0951	.0796	.1124	.0979	.0962	.0879
43	FL	.0122	.0108	.0248	.0131	.0135	.0127	.0116	93	RF	.0762	.0745	.0631	.0843	.0786	.0754	.0684
44	FL	.0097	.0083	.0225	.0106	.0112	.0104	.0093	94	RF	.0589	.0568	.0527	.0681	.0682	.0663	.0600
45	FL	.0109	.0098	.0243	.0121	.0130	.0122	.0109	95	RF	.0940	.1012	.0839	.1180	.1070	.1030	.0970
46	FL	.0094	.0085	.0228	.0109	.0117	.0111	.0093	96	RF	.0437	.0486	.0365	.0499	.0480	.0494	.0433
47	FL	.0092	.0090	.0223	.0109	.0115	.0109	.0093	97	RF	.0595	.0593	.0479	.0595	.0622	.0638	.0605
48	FL	.0125	.0123	.0240	.0136	.0148	.0144	.0129	98	RF	.0658	.0641	.0527	.0615	.0652	.0671	.0643
49	FL	.0155	.0167	.0245	.0174	.0188	.0187	.0172	99	RF	.0815	.0867	.0664	.0828	.0824	.0838	.0795
50	FL	.0198	.0215	.0268	.0223	.0239	.0246	.0230	100	RF	.0993	.1065	.0850	.1094	.1045	.1048	.1018

Table I. Concluded

(c) Concluded

ORF	LOC	C_p for Z_s/d = -2.45	-1.67	.00	2.50	5.00	8.33	10.83
101	ST	.0219	.0212	.0205	.1644	.1655	.1701	.1238
102	ST	.0201	.0192	.0187	.1114	.1141	.1162	.0805
103	ST	.0196	.0187	.0184	.0744	.0774	.0782	.0757
104	ST	.0188	.0177	.0172	.0377	.0353	.0380	.0438
105	ST	.0181	.0169	.0174	.0076	.0049	.0056	.0091
106	ST	.0191	.0184	.0190	-.0155	-.0217	-.0212	-.0185
107	ST	.0188	.0177	.0190	-.0089	-.0164	-.0159	-.0130
108	ST	.0158	.0151	.0169	.0174	-.0118	-.0121	-.0079
109	ST	.0175	.0167	.0187	.0185	-.0053	-.0048	-.0021
110	ST	.0155	.0149	.0174	.0157	-.0027	-.0028	-.0003
111	ST	.0181	.0174	.0195	.0164	-.0009	-.0007	.0030
112	ST	.0168	.0164	.0182	.0136	.0031	.0028	.0055
113	ST	.0186	.0184	.0197	.0134	.0039	.0033	.0086
114	ST	.0178	.0174	.0184	.0121	.0039	.0051	.0076
115	ST	.0175	.0174	.0177	.0086	.0056	.0058	.0078
116	ST	.0170	.0169	.0169	.0045	.0079	.0056	.0073
117	ST	.0186	.0182	.0177	.0025	.0117	.0066	.0086
118	ST	.0178	.0172	.0164	.0038	.0077	.0058	.0076
119	ST	.0183	.0179	.0172	-.0005	.0115	.0071	.0088
120	ST	.0191	.0184	.0174	-.0054	.0186	.0089	.0091
121	ST	.0231	.0222	.0212	-.0086	.0348	.0109	.0111
122	ST	.0178	.0169	.0162	-.0140	.0287	.0063	.0086
123	ST	.0193	.0182	.0174	-.0071	.0274	.0094	.0104
124	ST	.0183	.0172	.0167	.0063	.0229	.0091	.0098
125	ST	.0188	.0177	.0177	.0212	.0203	.0096	.0106
126	ST	.0175	.0164	.0169	.0339	.0170	.0084	.0098
127	ST	.0193	.0179	.0187	.0423	.0163	.0094	.0104
128	ST	.0191	.0177	.0192	.0433	.0160	.0094	.0109
129	ST	.0183	.0172	.0187	.0382	.0148	.0096	.0109
130	ST	.0168	.0156	.0184	.0344	.0143	.0086	.0104
131	ST	.0155	.0146	.0182	.0324	.0135	.0089	.0096
132	ST	.0158	.0149	.0190	.0324	.0150	.0106	.0111
133	ST	.0147	.0136	.0195	.0309	.0155	.0104	.0114
134	ST	.0135	.0121	.0190	.0296	.0165	.0114	.0119
135	ST	.0127	.0116	.0182	.0273	.0176	.0142	.0114
136	ST	.0155	.0146	.0238	.0311	.0231	.0177	.0149
137	ST	.0104	.0095	.0197	.0268	.0201	.0160	.0121
138	ST	.0147	.0141	.0258	.0316	.0257	.0291	.0185
139	ST							
140	ST	.0087	.0085	.0195	.0271	.0191	.0294	.0142
141	ST	.0069	.0073	.0200	.0276	.0196	.0261	.0142
142	ST	.0074	.0083	.0197	.0273	.0191	.0233	.0152
143	ST	.0059	.0078	.0167	.0195	.0122	.0160	.0104
144	ST	.0043	.0068	.0164	.0215	.0132	.0192	.0144
145	ST	.0051	.0080	.0141	.0200	.0110	.0190	.0157
146	ST	.0033	.0093	.0096	.0187	.0094	.0185	.0157
147	ST	.0188	.0184	.1081	.1621	.1648	.1660	.1585
148	ST	.0181	.0177	.0548	.0668	.0705	.0688	.0628

ORF	LOC	C_p for Z_s/d = -2.45	-1.67	.00	2.50	5.00	8.33	10.83
149	ST	.0155	.0146	-.0008	.0007	.0036	.0015	-.0051
150	ST	.0147	.0141	-.0181	-.0200	-.0172	-.0192	-.0287
151	ST	.0155	.0149	.0136	-.0016	-.0007	-.0015	-.0064
152	ST	.0163	.0154	.0205	.0152	.0023	.0053	.0043
153	ST	.0155	.0139	.0187	.0149	.0029	.0046	.0055
154	ST							
155	ST	.0173	.0167	.0215	.0040	.0178	.0096	.0109
156	ST	.0140	.0149	.0217	.0088	.0198	.0096	.0109
157	ST	.0130	.0144	.0235	.0253	.0198	.0142	.0152
158	ST	.0054	.0068	.0192	.0230	.0158	.0106	.0126
159	ST	.0061	.0052	.0202	.0276	.0206	.0185	.0154
160	ST	.0140	.0118	.0207	.0321	.0234	.0246	.0179
161	ST	.0104	.0095	.0080	-.0016	-.0015	-.0023	.0022
162	ST	.0150	.0144	.0121	.0035	.0034	.0031	.0081
163	ST	.0165	.0159	.0101	.0060	.0072	.0058	.0106
164	ST	.0188	.0182	.0022	.0076	.0112	.0081	.0038
165	ST	.0173	.0167	-.0021	.0050	.0087	.0053	-.0046
166	ST	.0163	.0154	-.0031	.0028	.0056	.0025	-.0064
167	ST	.0173	.0164	.0012	.0040	.0072	.0041	-.0031
168	ST	.0163	.0156	.0167	.0169	-.0007	-.0005	.0025
169	ST	.0163	.0156	.0169	.0172	-.0012	-.0007	.0010
170	ST	.0150	.0144	.0167	.0149	-.0032	-.0030	-.0008
171	ST	.0163	.0161	.0197	.0157	-.0015	-.0005	.0012
172	ST	.0158	.0154	.0162	.0066	-.0030	-.0020	-.0021
173	ST	.0155	.0151	.0124	-.0008	-.0022	-.0018	-.0048
174	ST	.0163	.0154	.0111	-.0031	-.0022	-.0023	-.0071
175	ST	.0191	.0174	.0159	-.0170	.0282	.0084	.0101
176	ST	.0216	.0210	.0179	-.0175	.0287	.0094	.0131
177	ST	.0191	.0172	.0177	-.0137	.0241	.0063	.0086
178	ST	.0198	.0179	.0207	.0005	.0188	.0091	.0109
179	ST	.0181	.0159	.0182	.0040	.0100	.0061	.0081
180	ST	.0163	.0144	.0177	.0088	.0074	.0066	.0088
181	ST	.0178	.0156	.0197	.0134	.0079	.0079	.0106
182	ST	.0145	.0123	.0200	.0286	.0191	.0147	.0124
183	ST	.0155	.0126	.0207	.0293	.0201	.0155	.0142
184	ST							
185	ST	.0147	.0126	.0240	.0276	.0208	.0160	.0154
186	ST	.0191	.0164	.0304	.0299	.0249	.0200	.0202
187	ST	.0117	.0098	.0215	.0233	.0181	.0129	.0134
188	ST	.0102	.0095	.0215	.0223	.0181	.0122	.0126
189	ST	.0023	.0052	.0131	.0202	.0122	.0190	.0157
190	ST	.0028	.0042	.0172	.0205	.0127	.0190	.0152
191	ST	.0038	.0029	.0169	.0207	.0145	.0185	.0142
192	ST	.0051	.0035	.0197	.0225	.0163	.0190	.0139
193	ST	.0054	.0035	.0197	.0235	.0168	.0195	.0139
194	ST	.0048	.0032	.0159	.0255	.0186	.0200	.0144
195	ST	.0054	.0037	.0151	.0273	.0196	.0210	.0154
196	ST	.0229	.0144	-.0110	-.0732	-.0767	-.0756	-.0783

Table II. Pressure Coefficients for Configuration 2

(a) $M = 1.69$

ORF	LOC	C_p for Z_s/l = -.83	.00	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.1419	-.1955	-.1629	-.1700	-.1699	-.1487	-.1420	-.1589
2	FL	-.1433	-.1993	-.1675	-.1741	-.1743	-.1538	-.1473	-.1640
3	FL	-.1417	-.1984	-.1655	-.1728	-.1716	-.1509	-.1445	-.1609
4	FL	-.1463	-.2035	-.1697	-.1775	-.1747	-.1540	-.1475	-.1642
5	FL	-.1446	-.2021	-.1677	-.1755	-.1721	-.1509	-.1447	-.1615
6	FL	-.1448	-.2019	-.1688	-.1764	-.1729	-.1516	-.1456	-.1624
7	FL	-.1446	-.1984	-.1681	-.1757	-.1734	-.1527	-.1464	-.1633
8	FL	-.1448	-.1924	-.1675	-.1741	-.1747	-.1547	-.1489	-.1646
9	FL	-.1397	-.1768	-.1589	-.1636	-.1681	-.1507	-.1458	-.1593
10	FL	-.1428	-.1772	-.1606	-.1649	-.1705	-.1525	-.1471	-.1609
11	FL	-.1400	-.1722	-.1556	-.1598	-.1648	-.1474	-.1416	-.1562
12	FL	-.1384	-.1611	-.1512	-.1545	-.1597	-.1450	-.1400	-.1527
13	FL	-.1327	-.1567	-.1468	-.1486	-.1569	-.1439	-.1396	-.1507
14	FL	-.1258	-.1351	-.1337	-.1325	-.1427	-.1352	-.1328	-.1412
15	FL	-.1128	-.1076	-.1139	-.1102	-.1194	-.1216	-.1198	-.1247
16	FL	-.0994	-.0800	-.0941	-.0890	-.0951	-.1066	-.1059	-.1073
17	FL	-.0806	-.0502	-.0705	-.0643	-.0662	-.0861	-.0876	-.0855
18	FL	-.0621	-.0178	-.0473	-.0400	-.0391	-.0643	-.0684	-.0636
19	FL	-.0391	.0172	-.0204	-.0120	-.0100	-.0381	-.0446	-.0376
20	FL	-.0120	.0540	.0089	.0167	.0187	-.0074	-.0170	-.0081
21	FL	.0081	.0878	.0305	.0407	.0412	.0157	.0035	.0140
22	FL	.0257	.1162	.0490	.0597	.0577	.0347	.0227	.0334
23	FL	.0502	.1488	.0742	.0848	.0815	.0596	.0492	.0596
24	FL	.0683	.1709	.0922	.1025	.0987	.0764	.0695	.0788
25	FL	.0892	.1892	.1132	.1223	.1192	.0953	.0937	.1011
26	FL	.1084	.2024	.1326	.1402	.1404	.1136	.1160	.1213
27	FL	.1248	.2081	.1491	.1554	.1587	.1295	.1336	.1385
28	FL	.1349	.2022	.1586	.1642	.1706	.1392	.1431	.1496
29	FL	.1316	.1964	.1672	.1733	.1794	.1460	.1519	.1597
30	FL	.1470	.2031	.1650	.1667	.1697	.1410	.1486	.1531
31	FL	.1607	.2119	.1701	.1724	.1812	.1493	.1561	.1604
32	FL	.1446	.1949	.1685	.1753	.1823	.1482	.1526	.1628
33	FL	.1552	.1900	.1743	.1837	.1898	.1573	.1581	.1725
34	FL	.1601	.1806	.1773	.1896	.1931	.1610	.1588	.1807
35	FL	.1638	.1742	.1776	.1931	.1946	.1632	.1586	.1897
36	FL	.1645	.1643	.1740	.1914	.1942	.1626	.1579	.2018
37	FL	.1673	.1587	.1732	.1912	.1942	.1650	.1639	.2190
38	FL	.1631	.1506	.1652	.1850	.1867	.1630	.1658	.2243
39	FL	.1640	.1506	.1661	.1865	.1863	.1718	.1771	.2263
40	FL	.1642	.1499	.1714	.1956	.1951	.1882	.1930	.2259
41	FL	.1671	.1440	.1844	.2152	.2149	.2186	.2183	.2303
42	FL	.1803	.1369	.2109	.2465	.2458	.2550	.2481	.2444
43	FL	.2097	.1347	.2591	.2924	.2958	.2997	.2878	.2761
44	FL	.2554	.1460	.3118	.3401	.3494	.3440	.3290	.3182
45	FL	.3173	.2209	.3681	.3910	.4041	.3914	.3749	.3711
46	FL	.3738	.3415	.4111	.4285	.4401	.4287	.4109	.4148
47	FL	.4301	.4336	.4527	.4627	.4764	.4657	.4470	.4558
48	FL	.4217	.4345	.4549	.4651	.4813	.4715	.4521	.4618
49	FL	.4122	.4237	.4604	.4658	.4828	.4783	.4592	.4679
50	FL	.4027	.3986	.4538	.4559	.4731	.4730	.4543	.4598

ORF	LOC	C_p for Z_s/l = -.83	.00	.83	1.67	3.33	5.00	7.50	10.83
51	FL	.4753	.4874	.4825	.4841	.4994	.4924	.4744	.4834
52	FL	.5106	.5249	.5039	.5015	.5148	.5105	.4936	.5021
53	FL	.5437	.5613	.5244	.5143	.5283	.5270	.5094	.5171
54	FL	.5730	.5952	.5440	.5282	.5411	.5425	.5255	.5314
55	FL	.5999	.6265	.5625	.5428	.5536	.5561	.5399	.5447
56	FL	.6224	.6543	.5786	.5580	.5666	.5691	.5529	.5581
57	FL	.6412	.6788	.5949	.5761	.5847	.5850	.5692	.5753
58	FL	.6520	.6977	.6077	.5915	.6030	.5985	.5831	.5910
59	FL	.6573	.7046	.6077	.5790	.5874	.5921	.5787	.5819
60	FL	.6800	.7070	.6015	.5598	.5622	.5762	.5652	.5641
61	FL	.6957	.6997	.6130	.5743	.5761	.5901	.5818	.5788
62	FL	.6626	.7143	.6216	.6098	.6240	.6154	.5996	.6097
63	FL	.6703	.7262	.6359	.6266	.6445	.6329	.6168	.6282
64	FL	.6712	.7204	.6315	.6132	.6310	.6245	.6100	.6207
65	FL	.6665	.6913	.5998	.5507	.5488	.5632	.5544	.5583
66	FL	.6712	.6995	.6049	.5719	.5697	.5786	.5674	.5720
67	FL	.7568	.8097	.7393	.7764	.8116	.7784	.7606	.7782
68	FL	.7643	.8036	.7160	.7460	.7803	.7488	.7306	.7488
69	FL	.7757	.7912	.6917	.7124	.7336	.7094	.6920	.7107
70	FL	.8291	.8631	.7559	.7993	.8323	.7945	.7732	.7995
71	SW	-.1404	-.1979	-.1651	-.1724	-.1718	-.1505	-.1440	-.1611
72	SW	-.1424	-.1889	-.1644	-.1770	-.1699	-.1494	-.1434	-.1593
73	SW	-.0091	.0540	.0201	.0445	-.0261	-.0202	-.0172	-.0094
74	SW	.1384	.1929	.1487	.1594	.1664	.1315	.1268	.1370
75	SW	.1629	.1704	.1676	.1976	.2024	.1807	.1802	.2265
76	SW	.3919	.4067	.4424	.4495	.4667	.4602	.4408	.4494
77	SW	.6151	.6316	.6373	.6284	.6002	.6015	.6069	.6049
78	SW	.7579	.8073	.7292	.7779	.8136	.7711	.7487	.7764
79	SW								
80	SW								
81	SW								
82	SW								
83	SW								
84	SW								
85	SW								
86	SW								
87	RF	.6919	.8818	.8683	1.0057	1.0868	1.0072	.9829	1.0088
88	RF	.7819	1.0028	.8954	1.0299	1.1177	1.0299	.9955	1.0377
89	RF	1.1340	1.1920	1.0758	.9902	.9600	.9484	.9258	.9230
90	RF	.9273	.9367	.7268	.7665	.7988	.7491	.7275	.7647
91	RF	.7614	.9347	.8827	.9919	1.0696	.9940	.9657	.9953
92	RF	.7707	.8968	.8110	.8682	.9333	.8774	.8517	.8798
93	RF	.7468	.8212	.7358	.7568	.7997	.7678	.7496	.7673
94	RF	.7806	.8518	.7277	.7437	.7816	.7561	.7370	.7550
95	RF	.9853	.8529	.6792	.6542	.6670	.6615	.6515	.6628
96	RF	.8613	.8540	.7393	.7784	.8129	.7753	.7527	.7797
97	RF	.7385	.7806	.7030	.7193	.7459	.7239	.7079	.7215
98	RF								
99	RF								
100	RF								

Table II. Continued

(a) Concluded

		C_p for Z_y/d =										C_p for Z_y/d =							
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.1422	-.2070	-.1192	.2081	.2145	.2065	.2005	.2062	149	ST	-.0892	-.1232	-.0910	-.0215	-.0034	-.0012	-.0022	-.0096
102	ST	-.1433	-.2048	-.1668	.0134	.1342	.1337	.1321	.1306	150	ST	-.1064	-.1660	-.1377	-.0775	-.0186	-.0167	-.0137	-.0182
103	ST	-.1435	-.2085	-.1880	-.1313	.0992	.0973	.0973	.0936	151	ST	-.0713	-.1104	-.1126	-.1243	-.0051	.0175	.0179	.0265
104	ST	-.1439	-.2151	-.2149	-.2255	.0454	.0437	.0437	.0345	152	ST	-.0493	-.0749	-.0879	-.0879	-.0660	.0182	.0234	.0294
105	ST	-.1459	-.2198	-.2793	-.2558	.0147	.0058	.0048	-.0026	153	ST	-.0246	-.0584	-.0572	-.0678	-.1037	-.0372	.0265	.0261
106	ST	-.1479	-.2171	-.2848	-.2615	-.0605	-.0359	-.0315	-.0354	154	ST								
107	ST	-.1459	-.2008	-.2409	-.2344	-.0922	-.0198	-.0113	-.0169	155	ST	.1184	.1354	.0512	-.0211	-.0398	-.0566	-.0183	.0307
108	ST	-.1468	-.1990	-.1920	-.2136	-.1231	-.0076	-.0051	-.0028	156	ST	.1336	.1468	.1200	.0870	-.0206	-.0259	-.0377	.0332
109	ST	-.1426	-.1891	-.1567	-.1691	-.1460	.0045	.0018	.0146	157	ST	.1325	.1224	.1202	.1215	.0601	-.0147	-.0412	.0127
110	ST	-.1386	-.1792	-.1346	-.1263	-.1617	.0204	.0090	.0179	158	ST	.1519	.1074	.1123	.1157	.1157	-.0004	-.0161	-.0147
111	ST	-.1329	-.1688	-.1183	-.1133	-.1752	-.0039	.0123	.0210	159	ST	.3890	.3139	.2838	.1973	.1040	.0801	-.0095	-.0286
112	ST	-.1210	-.1494	-.0976	-.1179	-.1802	-.0310	.0220	.0250	160	ST	.4629	.4347	.3352	.3072	.1194	.0828	-.0079	-.0332
113	ST	-.1106	-.1305	-.0859	-.1320	-.1802	-.0603	.0245	.0228	161	ST	-.1483	-.2425	-.2874	-.2675	.0114	.0021	.0009	-.0021
114	ST	-.0956	-.1016	-.0667	-.1373	-.1663	-.0795	.0245	.0239	162	ST	-.1512	-.2855	-.2594	-.2619	.0010	-.0004	.0007	.0012
115	ST	-.0769	-.0827	-.0877	-.1331	-.0914	-.0958	.0284	.0276	163	ST	-.1459	-.2958	-.2466	-.2114	.0048	.0034	.0057	.0074
116	ST	-.0579	-.0427	-.0908	-.1205	-.0645	-.1088	.0278	.0274	164	ST	-.1444	-.2971	-.2133	-.1413	.0032	.0038	.0066	.0078
117	ST	-.0363	-.0196	-.0903	-.0961	-.0539	-.1150	.0355	.0298	165	ST	-.1505	-.2434	-.1789	-.0905	-.0018	-.0010	.0015	-.0004
118	ST	-.0153	.0104	-.1007	-.0830	-.0492	-.1192	.0284	.0274	166	ST	-.1342	-.1810	-.1331	-.0508	-.0034	-.0028	-.0004	-.0070
119	ST	.0054	.0468	-.0817	-.0672	-.0475	-.1188	.0057	.0279	167	ST	-.0996	-.1349	-.0976	-.0244	-.0001	.0012	.0015	-.0063
120	ST	.0284	.0807	-.0445	-.0559	-.0468	-.0982	-.0130	.0292	168	ST	-.1318	-.1962	-.1646	-.1236	-.1765	.0078	.0172	.0272
121	ST	.0511	.0999	-.0202	-.0436	-.0466	-.0484	-.0304	.0340	169	ST	-.1309	-.1953	-.1767	-.1521	-.1721	.0153	.0187	.0259
122	ST	.0692	.1131	.0795	-.0442	-.0495	-.0396	-.0470	.0303	170	ST	-.1349	-.2043	-.2125	-.1827	-.1434	.0199	.0163	.0190
123	ST	.0910	.1288	.1202	-.0352	-.0488	-.0284	-.0540	.0347	171	ST	-.1477	-.2306	-.2431	-.1781	-.1000	.0224	.0214	.0235
124	ST	.1080	.1396	.0722	.1744	-.0514	-.0266	-.0600	.0340	172	ST	-.1477	-.2021	-.1800	-.1805	-.0614	.0175	.0203	.0217
125	ST	.1248	.1501	.1238	.1603	-.0356	-.0248	-.0635	.0356	173	ST	-.1119	-.1541	-.1335	-.1651	-.0298	.0166	.0203	.0219
126	ST	.1362	.1568	.1443	.1435	-.0404	-.0275	-.0710	.0321	174	ST	-.0848	-.1245	-.1225	-.1384	-.0155	.0133	.0157	.0206
127	ST	.1426	.1579	.1299	.1252	-.0488	-.0336	-.0776	.0360	175	ST	.0590	.0937	.0651	-.0625	-.0589	-.0328	-.0518	.0345
128	ST	.1565	.1667	.1489	.1382	-.0457	-.0288	-.0730	.0398	176	ST	.0460	.0805	.0656	-.0475	-.0605	-.0420	-.0441	.0340
129	ST	.1596	.1620	.1546	.1501	-.0497	-.0321	-.0673	.0206	177	ST	.0546	.0944	.0567	-.0603	-.0702	-.0650	-.0335	.0294
130	ST	.1634	.1581	.1551	.1647	-.0497	-.0321	-.0404	.0069	178	ST	.0617	.1039	.0407	-.0861	-.0722	-.0870	-.0176	.0281
131	ST	.1651	.1543	.1683	.2004	.1931	-.0330	-.0210	-.0048	179	ST	.0674	.1052	-.0403	-.0881	-.0667	-.0923	-.0027	.0261
132	ST	.1662	.1537	.1491	.1841	.1918	-.0317	-.0143	-.0147	180	ST	.0661	.1045	-.0526	-.0702	-.0572	-.0797	.0108	.0281
133	ST	.1653	.1528	.1579	.1406	.1893	-.0248	-.0135	-.0242	181	ST	.0614	.0975	-.0339	-.0552	-.0539	-.0689	.0185	.0287
134	ST	.1667	.1530	.1586	.1305	.1783	.0021	-.0108	-.0279	182	ST	.1488	.1199	.0938	.1281	.1331	.0096	-.0135	-.0343
135	ST	.1658	.1477	.1436	.1665	.1691	.0144	-.0132	-.0348	183	ST	.1265	.1021	.1169	.0954	.1186	.0059	-.0141	-.0303
136	ST	.1722	.1457	.1529	.1746	.1664	.0230	-.0110	-.0359	184	ST								
137	ST	.1867	.1400	.1480	.1453	.1682	.0281	-.0152	-.0416	185	ST	.1294	.1219	.1264	.1237	.0989	-.0131	-.0218	-.0120
138	ST	.2203	.1380	.1551	.1391	.1435	.1110	-.0168	-.0445	186	ST	.1296	.1244	.1233	.1170	.0950	-.0178	-.0287	-.0006
139	ST									187	ST	.1272	.1221	.1189	.1135	.0789	-.0182	-.0399	.0021
140	ST	.3321	.2130	.2541	.1541	.1254	.1425	-.0168	-.0467	188	ST	.1312	.1233	.1202	.1188	.0630	-.0140	-.0421	.0098
141	ST	.3939	.3474	.4102	.2379	.1283	.1310	-.0161	-.0484	189	ST	.5419	.5256	.4393	.4660	.3172	.1030	.0840	-.0096
142	ST	.4462	.4392	.5458	.3698	.1311	.1154	-.0141	-.0489	190	ST	.5108	.4277	.3229	.4230	.2634	.0885	.0732	-.0158
143	ST	.4790	.4667	.4975	.4576	.1159	.0841	-.0068	-.0537	191	ST	.4654	.3719	.2503	.3518	.1968	.0801	.0582	-.0275
144	ST	.5287	.5355	.4957	.5271	.1924	.1086	.0695	-.0176	192	ST	.4479	.3911	.2819	.2876	.1508	.0795	.0304	-.0445
145	ST	.5565	.5765	.4697	.4795	.3316	.1041	.0904	-.0070	193	ST	.4636	.4136	.2900	.2796	.1239	.0797	.0004	-.0467
146	ST	.5754	.6058	.4867	.4473	.4601	.1028	.0856	-.0085	194	ST	.4722	.4213	.3026	.2880	.1212	.0841	-.0106	-.0378
147	ST	-.1419	.1010	.1829	.2137	.2134	.2102	.2064	.2093	195	ST	.4676	.4332	.3339	.3043	.1205	.0867	-.0117	-.0312
148	ST	-.1038	-.0189	.0274	.0915	.0910	.0894	.0864	.0819	196	ST	.5384	.4929	.3460	.2392	.2293	.1410	-.0289	-.1249

Table II. Continued

(b) $M = 2.00$

ORF	LOC	C_p for Z_s/d = -.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	C_p for Z_s/d = -.83	.00	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.1544	-.2060	-.1715	-.1704	-.1489	-.1482	-.1711	-.1715	51	FL	.4185	.4114	.4547	.5064	.4848	.4619	.4848	.5003
2	FL	-.1551	-.2103	-.1739	-.1728	-.1527	-.1524	-.1727	-.1728	52	FL	.4504	.4549	.4692	.5158	.5053	.4831	.5029	.5208
3	FL	-.1584	-.2127	-.1782	-.1762	-.1538	-.1536	-.1743	-.1744	53	FL	.4807	.4919	.4841	.5229	.5237	.5020	.5178	.5382
4	FL	-.1578	-.2131	-.1773	-.1749	-.1538	-.1538	-.1745	-.1748	54	FL	.5128	.5280	.5048	.5347	.5404	.5187	.5307	.5529
5	FL	-.1571	-.2080	-.1770	-.1753	-.1530	-.1527	-.1738	-.1739	55	FL	.5409	.5601	.5256	.5481	.5554	.5356	.5439	.5640
6	FL	-.1560	-.2027	-.1766	-.1764	-.1536	-.1536	-.1738	-.1739	56	FL	.5688	.5895	.5505	.5688	.5687	.5519	.5588	.5789
7	FL	-.1484	-.1902	-.1706	-.1726	-.1501	-.1500	-.1709	-.1708	57	FL	.5929	.6167	.5757	.5931	.5861	.5706	.5786	.5968
8	FL	-.1419	-.1744	-.1621	-.1650	-.1518	-.1520	-.1678	-.1679	58	FL	.6134	.6377	.5975	.6203	.6021	.5889	.5996	.6166
9	FL	-.1299	-.1494	-.1445	-.1468	-.1429	-.1431	-.1551	-.1552	59	FL	.6042	.6392	.5610	.5857	.5912	.5771	.5804	.5963
10	FL	-.1245	-.1412	-.1432	-.1428	-.1440	-.1440	-.1549	-.1550	60	FL	.6390	.6412	.5356	.5536	.5772	.5657	.5563	.5736
11	FL	-.1341	-.1267	-.1427	-.1421	-.1414	-.1413	-.1513	-.1512	61	FL	.6959	.6568	.5683	.5857	.6119	.6002	.5831	.6021
12	FL	-.1277	-.0877	-.1240	-.1252	-.1318	-.1326	-.1377	-.1374	62	FL	.6292	.6526	.6163	.6475	.6222	.6085	.6234	.6400
13	FL	-.1159	-.1238	-.1262	-.1265	-.1338	-.1339	-.1415	-.1414	63	FL	.6381	.6597	.6230	.6588	.6349	.6203	.6397	.6563
14	FL	-.1027	-.0975	-.1091	-.1060	-.1245	-.1248	-.1277	-.1276	64	FL	.6408	.6515	.6013	.6145	.5975	.5862	.6022	.6215
15	FL	-.0866	-.0687	-.0908	-.0846	-.1080	-.1083	-.1077	-.1075	65	FL	.6317	.6372	.5588	.5089	.5188	.5185	.5071	.5208
16	FL	-.0688	-.0362	-.0698	-.0619	-.0931	-.0950	-.0905	-.0901	66	FL	.6477	.6704	.5951	.5675	.5767	.5682	.5597	.5696
17	FL	-.0478	-.0005	-.0473	-.0391	-.0710	-.0758	-.0682	-.0678	67	FL	.7447	.8031	.8006	.9336	.8838	.8526	.9012	.9159
18	FL	-.0302	.0312	-.0288	-.0222	-.0492	-.0573	-.0475	-.0469	68	FL	.7904	.7915	.7812	.8910	.8310	.8118	.8528	.8660
19	FL	-.0101	.0641	-.0081	-.0033	-.0249	-.0355	-.0246	-.0239	69	FL	.8357	.7391	.7661	.8229	.7435	.7426	.7742	.7849
20	FL	.0139	.0960	.0155	.0188	-.0009	-.0114	-.0005	-.0001	70	FL	.8580	.8046	.8746	.9490	.8531	.8464	.8927	.9023
21	FL	.0300	.1174	.0305	.0311	.0165	.0082	.0177	.0180	71	SW	-.1553	-.2109	-.1757	-.1746	-.1527	-.1524	-.1734	-.1737
22	FL	.0440	.1361	.0427	.0406	.0287	.0267	.0311	.0313	72	SW	-.1426	-.1610	-.1588	-.1414	-.1460	-.1462	-.1638	-.1641
23	FL	.0632	.1578	.0592	.0554	.0434	.0485	.0505	.0509	73	SW	.0168	-.0319	-.0781	-.1044	-.0476	-.0255	-.0239	-.0239
24	FL	.0733	.1611	.0677	.0625	.0517	.0623	.0621	.0623	74	SW	.1328	.1865	.1072	.1469	.0797	.0812	.1115	.1109
25	FL	.0886	.1602	.0822	.0776	.0646	.0783	.0783	.0786	75	SW	.1462	.1395	.1914	.1398	.1274	.1523	.1754	.1566
26	FL	.1051	.1511	.0967	.0915	.0737	.0933	.0933	.0931	76	SW	.1968	.2088	.4377	.4665	.4316	.4038	.4309	.4468
27	FL	.1125	.1370	.1005	.0993	.0764	.0990	.1017	.1011	77	SW	.6959	.6838	.6722	.6528	.6827	.6813	.6731	.6681
28	FL	.1190	.1339	.1040	.1071	.0802	.1024	.1102	.1084	78	SW	.7606	.7473	.8646	.9561	.8448	.8319	.8876	.8990
29	FL	.1000	.1252	.1121	.1157	.0833	.1100	.1173	.1162	79	SW								
30	FL	.1297	.1546	.1134	.1222	.0806	.1073	.1131	.1127	80	SW								
31	FL	.1460	.1858	.1201	.1456	.0929	.1106	.1222	.1220	81	SW								
32	FL	.1261	.1321	.1125	.1149	.0817	.1033	.1202	.1156	82	SW								
33	FL	.1319	.1301	.1248	.1235	.0902	.1068	.1376	.1238	83	SW								
34	FL	.1335	.1272	.1370	.1325	.0955	.1100	.1645	.1307	84	SW								
35	FL	.1353	.1350	.1564	.1467	.1004	.1105	.1763	.1336	85	SW								
36	FL	.1348	.1451	.1763	.1550	.1071	.1117	.1763	.1356	86	SW								
37	FL	.1330	.1413	.1740	.1541	.1138	.1144	.1750	.1370	87	RF	.7066	.9373	1.1468	1.5159	1.3866	1.3315	1.4331	1.4551
38	FL	.1315	.1324	.1600	.1472	.1151	.1133	.1692	.1332	88	RF	.7777	1.0257	1.2714	1.5251	1.3410	1.2952	1.4070	1.4172
39	FL	.1259	.1188	.1419	.1367	.1165	.1146	.1652	.1301	89	RF	1.1125	1.1252	1.1229	1.1277	.9297	.9577	.9811	1.0122
40	FL	.1252	.1096	.1339	.1403	.1245	.1184	.1605	.1283	90	RF	.9316	.8178	.8581	.9392	.7723	.7880	.8459	.8513
41	FL	.1259	.0962	.1297	.1481	.1396	.1251	.1516	.1276	91	RF	.7512	.9843	1.1049	1.4346	1.3060	1.2560	1.3591	1.3835
42	FL	.1341	.0884	.1390	.1677	.1626	.1400	.1418	.1352	92	RF	.7481	.9379	.9212	1.1460	1.0591	1.0235	1.0994	1.1230
43	FL	.1533	.0873	.1792	.2000	.2053	.1761	.1449	.1662	93	RF	.7157	.8436	.7721	.8986	.8618	.8397	.8816	.9032
44	FL	.1901	.0904	.2405	.2617	.2686	.2367	.1910	.2373	94	RF	.8217	.8514	.7710	.8674	.8324	.8094	.8475	.8622
45	FL	.2479	.1141	.3060	.3611	.3463	.3156	.2953	.3405	95	RF	1.3366	.8347	.6673	.6653	.6435	.6417	.6530	.6632
46	FL	.3148	.1939	.3695	.4355	.4064	.3813	.3900	.4196	96	RF	.9245	.7895	.8485	.9113	.8288	.8165	.8635	.8751
47	FL	.3703	.3276	.4188	.4779	.4525	.4296	.4501	.4708	97	RF	.7195	.7770	.7444	.8197	.7965	.7740	.8007	.8159
48	FL	.3424	.2897	.4415	.4879	.4690	.4401	.4568	.4789	98	RF								
49	FL	.2637	.2177	.4582	.4928	.4757	.4394	.4563	.4722	99	RF								
50	FL	.2713	.2772	.4482	.4830	.4694	.4287	.4497	.4655	100	RF								

Table II. Continued

(b) Concluded

		C_p for Z_s/d =										C_p for Z_s/d =							
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.1600	-.2158	-.0772	.1895	.1824	.1830	.1810	.1838	149	ST	-.0655	-.0830	-.0422	-.0024	-.0053	-.0052	-.0045	-.0046
102	ST	-.1611	-.2203	-.1926	.1142	.1189	.1202	.1211	.1196	150	ST	-.1040	-.1249	-.0865	-.0273	-.0258	-.0244	-.0219	-.0215
103	ST	-.1611	-.2218	-.2169	-.0269	.0849	.0839	.0877	.0859	151	ST	-.0853	-.1329	-.1059	-.0621	.0011	.0024	.0066	.0077
104	ST	-.1605	-.2283	-.2245	-.1354	.0365	.0349	.0391	.0389	152	ST	-.0445	-.0605	-.1191	-.0969	-.0091	.0108	.0131	.0142
105	ST	-.1642	-.2288	-.2305	-.2074	-.0026	-.0025	.0008	-.0032	153	ST	-.0177	-.0317	-.0593	-.0953	-.0512	.0108	.0111	.0122
106	ST	-.1598	-.2332	-.2337	-.2252	-.0360	-.0353	-.0373	-.0333	154	ST								
107	ST	-.1564	-.2176	-.2187	-.2205	-.0222	-.0235	-.0215	-.0219	155	ST	.1116	.1245	-.0319	-.0436	-.0726	-.0431	.0193	.0173
108	ST	-.1533	-.1951	-.2105	-.2167	-.0176	-.0168	-.0123	-.0130	156	ST	.1150	.0896	.0985	-.0213	-.0447	-.0600	.0082	.0200
109	ST	-.1415	-.1708	-.2080	-.2083	-.0432	-.0076	-.0045	-.0021	157	ST	.1096	.1105	.0746	.0879	-.0309	-.0598	-.0170	.0209
110	ST	-.1319	-.1576	-.2040	-.2018	-.0701	-.0025	.0013	.0046	158	ST	.1045	.0882	.0953	.0845	-.0104	-.0377	-.0368	.0171
111	ST	-.1194	-.1458	-.1815	-.1949	-.0931	-.0010	.0019	.0053	159	ST	.2938	.0927	.1194	.0870	.0699	-.0208	-.0448	.0128
112	ST	-.1029	-.1291	-.1730	-.1762	-.1073	.0048	.0064	.0113	160	ST	.4303	.3096	.2806	.1804	.0691	-.0050	-.0455	.0086
113	ST	-.0875	-.1135	-.1576	-.1546	-.1204	.0093	.0073	.0108	161	ST	-.1665	-.2698	-.2533	-.1974	-.0047	-.0050	-.0007	-.0021
114	ST	-.0681	-.0932	-.1414	-.0957	-.1267	.0091	.0088	.0137	162	ST	-.1555	-.2506	-.2457	-.1597	-.0022	-.0023	.0026	.0021
115	ST	-.0505	-.0714	-.1322	-.0906	-.1351	-.0083	.0108	.0164	163	ST	-.1732	-.2693	-.2490	-.1203	.0000	.0019	.0057	.0057
116	ST	-.0318	-.0486	-.1215	-.0884	-.1385	-.0293	.0111	.0160	164	ST	-.1890	-.2600	-.1944	-.0663	.0002	.0024	.0055	.0053
117	ST	-.0113	-.0257	-.1097	-.0895	-.1387	-.0451	.0142	.0155	165	ST	-.1799	-.2033	-.1253	-.0264	-.0035	-.0012	.0013	.0019
118	ST	.0077	-.0038	-.0830	-.0882	-.1387	-.0604	.0157	.0148	166	ST	-.1308	-.1418	-.0765	-.0055	-.0026	-.0016	.0008	.0012
119	ST	.0287	.0361	-.0634	-.0966	-.1296	-.0720	.0191	.0128	167	ST	-.0815	-.0966	-.0475	-.0008	-.0020	-.0014	-.0003	.0001
120	ST	.0483	.0735	-.0533	-.1015	-.1064	-.0803	.0191	.0162	168	ST	-.1248	-.1973	-.2236	-.2328	-.0884	.0008	.0050	.0084
121	ST	.0661	.1014	-.0355	-.1013	-.0639	-.0858	.0213	.0180	169	ST	-.1263	-.1917	-.2245	-.2390	-.0728	.0013	.0055	.0084
122	ST	.0806	.1181	-.0163	-.0962	-.0479	-.0939	.0182	.0166	170	ST	-.1261	-.1741	-.2279	-.2428	-.0474	-.0012	.0030	.0055
123	ST	.0971	.1317	-.0058	-.0904	-.0387	-.0932	.0246	.0213	171	ST	-.1399	-.1748	-.2368	-.2018	-.0191	.0019	.0053	.0079
124	ST	.1078	.1324	.0015	-.0895	-.0365	-.0959	.0226	.0195	172	ST	-.1518	-.1730	-.1998	-.1403	-.0042	.0017	.0046	.0075
125	ST	.1185	.1330	.1921	-.0891	-.0343	-.0970	.0095	.0213	173	ST	-.1172	-.1811	-.1514	-.0940	-.0006	.0008	.0042	.0073
126	ST	.1301	.1375	.2853	-.0157	-.0365	-.0934	-.0056	.0206	174	ST	-.0960	-.1474	-.1206	-.0728	-.0026	-.0014	.0030	.0048
127	ST	.1364	.1364	.2220	.0188	-.0401	-.0898	-.0195	.0155	175	ST	.0454	.0537	-.0836	-.0855	-.0563	-.1025	.0238	.0206
128	ST	.1408	.1428	.1578	.1307	-.0394	-.0823	-.0266	.0177	176	ST	.0275	.0209	-.0671	-.0897	-.0666	-.1041	.0215	.0229
129	ST	.1471	.1555	.1161	.2470	-.0407	-.0567	-.0373	.0197	177	ST	.0496	.0619	-.0524	-.0948	-.1104	-.0963	.0191	.0197
130	ST	.1475	.1671	.0869	.2007	-.0421	-.0359	-.0451	.0204	178	ST	.0525	.0704	-.0787	-.1160	-.1262	-.0760	.0175	.0191
131	ST	.1457	.1658	.0818	.1510	-.0378	-.0290	-.0522	.0217	179	ST	.0630	.0722	-.0897	-.0928	-.1084	-.0493	.0191	.0211
132	ST	.1453	.1562	.1268	.1247	-.0249	-.0255	-.0558	.0238	180	ST	.0518	.0552	-.0689	-.0721	-.0868	-.0284	.0209	.0217
133	ST	.1390	.1381	.1417	.0993	-.0234	-.0259	-.0596	.0229	181	ST	.0432	.0307	-.0471	-.0603	-.0726	-.0175	.0215	.0204
134	ST	.1373	.1324	.1348	.0825	-.0191	-.0270	-.0640	.0238	182	ST	.1105	.0820	.0904	.0739	-.0263	-.0371	-.0691	.0202
135	ST	.1368	.1335	.1312	.0825	-.0131	-.0279	-.0640	.0209	183	ST	.0864	.0742	.1230	.0821	-.0198	-.0368	-.0696	.0213
136	ST	.1397	.1341	.1156	.1193	.0263	-.0266	-.0624	.0258	184	ST								
137	ST	.1453	.1326	.1105	.1554	.1557	-.0308	-.0662	.0213	185	ST	.1014	.0853	.1286	.0636	-.0305	-.0462	-.0509	.0222
138	ST	.1676	.1286	.1252	.1456	.1577	-.0275	-.0640	.0128	186	ST	.1043	.0904	.1132	.0556	-.0316	-.0524	-.0324	.0215
139	ST									187	ST	.1025	.0974	.0862	.0658	-.0360	-.0578	-.0237	.0177
140	ST	.2617	.1212	.1299	.0794	.1160	-.0212	-.0676	-.0074	188	ST	.1072	.1096	.0764	.0770	-.0314	-.0584	-.0170	.0186
141	ST	.3355	.1426	.1324	.0710	.1098	.0817	-.0638	-.0146	189	ST	.4751	.4821	.5253	.5409	.1004	.0910	-.0310	-.0322
142	ST	.3928	.2340	.1789	.1033	.1033	.0988	-.0582	-.0202	190	ST	.4209	.3390	.4636	.4476	.0817	.0632	-.0431	-.0302
143	ST	.4254	.4634	.3475	.1483	.0784	.0790	-.0598	-.0358	191	ST	.3578	.2819	.4353	.4043	.0512	.0471	-.0604	-.0242
144	ST	.4758	.5677	.6147	.3410	.0918	.0950	-.0464	-.0302	192	ST	.3774	.2993	.3717	.3103	.0470	.0440	-.0738	-.0197
145	ST	.5014	.5612	.6546	.6116	.1011	.0979	-.0284	-.0349	193	ST	.4185	.2937	.3042	.2200	.0570	.0407	-.0705	-.0090
146	ST	.5222	.6234	.6076	.6851	.1374	.1006	-.0215	-.0373	194	ST	.4298	.2868	.2641	.1940	.0673	.0291	-.0636	-.0001
147	ST	-.1406	.1138	.1905	.1880	.1833	.1841	.1810	.1838	195	ST	.4365	.3053	.2726	.1862	.0715	.0099	-.0509	.0055
148	ST	-.0429	.0100	.0659	.0819	.0786	.0797	.0788	.0788	196	ST	.4883	.3885	.2371	.2165	.1514	-.0393	-.1520	-.1405

Table II. Continued

(c) $M = 2.65$

		C_p for Z_s/ℓ =										C_p for Z_s/ℓ =							
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.1335	-.1404	-.1287	-.1181	-.1192	-.1258	-.1260	-.1263	51	FL	.3586	.3059	.3753	.3846	.3628	.3736	.3829	.3823
2	FL	-.1373	-.1490	-.1345	-.1226	-.1268	-.1336	-.1341	-.1341	52	FL	.3740	.3142	.3842	.4058	.3858	.3953	.4087	.4076
3	FL	-.1365	-.1495	-.1363	-.1232	-.1278	-.1344	-.1348	-.1351	53	FL	.3819	.3276	.3989	.4286	.4114	.4244	.4419	.4362
4	FL	-.1368	-.1477	-.1375	-.1247	-.1288	-.1356	-.1358	-.1359	54	FL	.3842	.3476	.4207	.4509	.4361	.4598	.4776	.4666
5	FL	-.1299	-.1401	-.1330	-.1216	-.1255	-.1318	-.1323	-.1321	55	FL	.3844	.3709	.4478	.4714	.4592	.4945	.5102	.4947
6	FL	-.1249	-.1333	-.1287	-.1211	-.1245	-.1296	-.1295	-.1295	56	FL	.3791	.3932	.4767	.4894	.4786	.5258	.5394	.5207
7	FL	-.1170	-.1234	-.1198	-.1171	-.1200	-.1235	-.1237	-.1235	57	FL	.3763	.4220	.5079	.5076	.4978	.5547	.5675	.5475
8	FL	-.1112	-.1158	-.1112	-.1143	-.1167	-.1189	-.1191	-.1189	58	FL	.3763	.4466	.5319	.5183	.5110	.5734	.5857	.5627
9	FL	-.0988	-.1014	-.0955	-.1039	-.1063	-.1073	-.1072	-.1073	59	FL	.3918	.4800	.5150	.5160	.5085	.5651	.5799	.5589
10	FL	-.0810	-.0946	-.0965	-.1049	-.1081	-.1086	-.1087	-.1085	60	FL	.4171	.5195	.4962	.5074	.5021	.5501	.5687	.5483
11	FL	-.0879	-.0789	-.0935	-.1026	-.1061	-.1053	-.1052	-.1053	61	FL	.4860	.5651	.5218	.5292	.5272	.5706	.5902	.5675
12	FL	-.0790	-.0508	-.0818	-.0945	-.0967	-.0921	-.0923	-.0918	62	FL	.3885	.4765	.5446	.5190	.5133	.5782	.5908	.5645
13	FL	-.0861	-.0883	-.0810	-.0928	-.0967	-.0962	-.0963	-.0961	63	FL	.4282	.5086	.5302	.4968	.4928	.5537	.5682	.5364
14	FL	-.0747	-.0761	-.0686	-.0821	-.0879	-.0861	-.0862	-.0860	64	FL	.4893	.5367	.4744	.4524	.4508	.4985	.5176	.4840
15	FL	-.0600	-.0599	-.0542	-.0664	-.0747	-.0721	-.0720	-.0719	65	FL	.5486	.5620	.4339	.4459	.4407	.4773	.5004	.4693
16	FL	-.0496	-.0475	-.0448	-.0553	-.0648	-.0618	-.0619	-.0617	66	FL	.6145	.6068	.5304	.5456	.5381	.5883	.6080	.5822
17	FL	-.0352	-.0288	-.0304	-.0396	-.0497	-.0466	-.0467	-.0463	67	FL	.8397	.7726	.9422	.8908	.8984	1.0371	1.0249	1.0227
18	FL	-.0218	-.0098	-.0177	-.0262	-.0370	-.0347	-.0346	-.0344	68	FL	.6669	.7040	.8793	.8523	.8539	.9809	.9743	.9810
19	FL	-.0088	.0105	-.0050	-.0145	-.0193	-.0188	-.0186	-.0182	69	FL	.6674	.6716	.7942	.7986	.7932	.8995	.9034	.9093
20	FL	.0048	.0292	.0077	-.0031	-.0021	-.0046	-.0044	-.0043	70	FL	.7305	.7076	.8867	.8890	.8865	.9991	1.0092	1.0073
21	FL	.0130	.0383	.0125	.0012	.0100	.0027	.0026	.0028	71	SW	-.1363	-.1482	-.1345	-.1229	-.1260	-.1329	-.1330	-.1336
22	FL	.0228	.0456	.0183	.0080	.0234	.0118	.0120	.0121	72	SW	-.1170	-.1531	-.1246	-.1171	-.1217	-.1278	-.1277	-.1280
23	FL	.0335	.0537	.0254	.0174	.0371	.0222	.0221	.0225	73	SW	-.0286	-.1189	-.1160	-.0842	-.0704	-.0921	-.0928	-.0929
24	FL	.0312	.0535	.0203	.0161	.0381	.0214	.0216	.0215	74	SW	.0527	-.0118	-.0048	-.0500	.0090	-.0033	-.0039	-.0025
25	FL	.0436	.0631	.0317	.0295	.0525	.0364	.0363	.0367	75	SW	.0816	.0563	.0657	.0726	.0694	.0930	.0872	.0913
26	FL	.0512	.0702	.0350	.0341	.0598	.0452	.0449	.0450	76	SW	.4123	.2638	.3761	.3782	.3524	.3538	.3664	.3719
27	FL	.0568	.0699	.0370	.0376	.0614	.0495	.0492	.0493	77	SW	.6570	.6499	.6437	.6381	.6281	.6258	.6264	.6260
28	FL	.0621	.0654	.0363	.0371	.0614	.0546	.0518	.0521	78	SW	.6555	.6405	.9087	.8860	.8825	1.0138	1.0135	1.0128
29	FL	.0309	.0431	.0310	.0344	.0656	.0538	.0523	.0526	79	SW								
30	FL	.0717	.0558	.0115	.0100	.0591	.0356	.0351	.0359	80	SW								
31	FL	.0725	.0621	.0223	-.0074	.0538	.0331	.0328	.0342	81	SW								
32	FL	.0669	.0601	.0363	.0366	.0624	.0682	.0551	.0549	82	SW								
33	FL	.0717	.0586	.0383	.0371	.0672	.0908	.0589	.0587	83	SW								
34	FL	.0735	.0626	.0386	.0379	.0737	.0968	.0619	.0615	84	SW								
35	FL	.0715	.0727	.0365	.0366	.0775	.0971	.0642	.0640	85	SW								
36	FL	.0672	.0793	.0348	.0344	.0768	.0951	.0657	.0655	86	SW								
37	FL	.0662	.0780	.0398	.0349	.0755	.0940	.0702	.0701	87	RF	.7574	.7524	1.8742	1.6441	1.7428	2.0496	2.0199	2.0241
38	FL	.0652	.0679	.0472	.0349	.0687	.0882	.0710	.0714	88	RF	.4716	.6597	1.7490	1.6558	1.6604	1.9591	1.9391	1.9799
39	FL	.0740	.0596	.0583	.0422	.0619	.0857	.0733	.0739	89	RF	.9132	.9070	.9764	1.0290	1.1098	1.1876	1.2865	1.3759
40	FL	.1087	.0580	.0804	.0622	.0614	.0872	.0789	.0800	90	RF	.7247	.6711	.8591	.8819	.8850	1.0153	1.0394	1.0288
41	FL	.1728	.0796	.1191	.1012	.0727	.0918	.0913	.0949	91	RF	.8504	.8265	1.6775	1.4375	1.5127	1.8448	1.7935	1.8081
42	FL	.2311	.1358	.1746	.1544	.1038	.1100	.1211	.1288	92	RF	.9282	.8488	1.1528	1.0035	1.0380	1.2850	1.2434	1.2418
43	FL	.2641	.1990	.2337	.2093	.1559	.1532	.1713	.1819	93	RF	.9157	.8060	.8193	.7497	.7672	.9177	.9029	.8856
44	FL	.2846	.2421	.2811	.2559	.2138	.2109	.2267	.2373	94	RF	.7191	.7367	.7934	.7872	.7940	.9253	.9209	.9040
45	FL	.2990	.2694	.3163	.2942	.2667	.2699	.2809	.2846	95	RF	1.2649	1.0341	.5922	.6178	.6114	.6986	.7138	.6882
46	FL	.3119	.2821	.3404	.3261	.3024	.3123	.3239	.3218	96	RF	.8319	.7795	.8150	.8047	.7983	.9015	.9125	.8985
47	FL	.3342	.2952	.3599	.3565	.3362	.3478	.3538	.3540	97	RF	.8780	.7830	.7927	.7773	.7798	.8795	.8824	.8694
48	FL	.3467	.3003	.3508	.3585	.3294	.3270	.3386	.3320	98	RF								
49	FL	.3778	.3094	.3571	.3676	.3357	.3260	.3389	.3317	99	RF								
50	FL	.3920	.3129	.3586	.3689	.3332	.3225	.3335	.3347	100	RF								

Table II. Concluded

(c) Concluded

		C_p for Z_s/l =										C_p for Z_s/l =							
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.1196	-.1260	.0398	.1643	.1660	.1666	.1702	.1227	149	ST	-.0435	-.0364	-.0007	.0027	.0022	.0032	.0024	-.0053
102	ST	-.1226	-.1315	-.0985	.1055	.1137	.1158	.1189	.0777	150	ST	-.0707	-.0678	-.0339	-.0198	-.0183	-.0165	-.0199	-.0288
103	ST	-.1221	-.1310	-.1234	.0187	.0748	.0814	.0789	.0711	151	ST	-.0740	-.0721	-.0486	-.0196	.0007	.0015	.0009	-.0058
104	ST	-.1239	-.1353	-.1337	-.0431	.0376	.0356	.0394	.0448	152	ST	-.0755	-.0764	-.0620	-.0416	.0032	.0030	.0059	.0056
105	ST	-.1234	-.1351	-.1381	-.1105	.0055	.0065	.0100	.0101	153	ST	-.0215	-.0632	-.0689	-.0553	.0019	.0055	.0082	.0083
106	ST	-.1178	-.1326	-.1373	-.1196	-.0219	-.0203	-.0201	-.0177	154	ST								
107	ST	-.1115	-.1285	-.1348	-.1211	-.0165	-.0147	-.0146	-.0121	155	ST	.0494	.0072	-.0402	-.0535	-.0289	.0106	.0115	.0132
108	ST	-.1109	-.1290	-.1378	-.1280	-.0138	-.0099	-.0105	-.0068	156	ST	.0862	.0421	-.0273	-.0421	-.0398	.0012	.0130	.0134
109	ST	-.1016	-.1222	-.1343	-.1259	-.0102	-.0038	-.0039	-.0015	157	ST	.0578	.0598	.0069	-.0249	-.0421	-.0127	.0153	.0159
110	ST	-.0919	-.1131	-.1307	-.1252	-.0100	-.0013	-.0004	.0013	158	ST	.1366	.0537	.0431	-.0016	-.0433	-.0256	.0128	.0142
111	ST	-.0810	-.1014	-.1284	-.1247	-.0125	-.0001	.0014	.0040	159	ST	.3945	.1578	.0657	.0536	-.0355	-.0291	.0108	.0167
112	ST	-.0671	-.0827	-.1254	-.1239	-.0112	.0025	.0044	.0071	160	ST	.3925	.3071	.2281	.0840	-.0312	-.0327	.0077	.0154
113	ST	-.0529	-.0647	-.1231	-.1226	-.0089	.0027	.0034	.0094	161	ST	-.1332	-.1457	-.1497	-.0973	.0012	.0020	.0021	.0058
114	ST	-.0385	-.0576	-.1266	-.1247	-.0340	.0037	.0077	.0111	162	ST	-.1223	-.1358	-.1358	-.0715	.0110	.0106	.0113	.0152
115	ST	-.0240	-.0493	-.1193	-.1221	-.0598	.0037	.0064	.0096	163	ST	-.1299	-.1439	-.1282	-.0485	.0067	.0080	.0070	.0096
116	ST	-.0116	-.0432	-.1152	-.1221	-.0699	.0025	.0059	.0083	164	ST	-.1307	-.1399	-.0917	-.0105	.0057	.0091	.0047	-.0030
117	ST	.0021	-.0336	-.1036	-.1196	-.0737	.0040	.0059	.0094	165	ST	-.1223	-.1169	-.0489	.0004	.0072	.0098	.0059	-.0061
118	ST	.0142	-.0326	-.1064	-.1226	-.0691	.0035	.0052	.0081	166	ST	-.0924	-.0804	-.0197	.0027	.0057	.0065	.0034	-.0058
119	ST	.0284	-.0113	-.0965	-.1105	-.0765	.0022	.0080	.0099	167	ST	-.0560	-.0462	-.0043	.0037	.0050	.0058	.0037	-.0035
120	ST	.0416	.0064	-.0942	-.1042	-.0790	.0032	.0092	.0101	168	ST	-.1026	-.1252	-.1398	-.1338	-.0047	.0002	.0014	.0038
121	ST	.0540	.0302	-.0886	-.0928	-.0795	.0068	.0100	.0111	169	ST	-.1056	-.1270	-.1431	-.1378	-.0041	.0002	.0004	.0030
122	ST	.0575	.0421	-.0859	-.0892	-.0828	-.0021	.0077	.0089	170	ST	-.1026	-.1295	-.1457	-.1302	-.0047	-.0021	-.0019	.0013
123	ST	.0631	.0583	-.0651	-.0791	-.0823	-.0107	.0092	.0104	171	ST	-.1021	-.1277	-.1297	-.1024	-.0016	-.0003	.0001	.0030
124	ST	.0705	.0763	-.0468	-.0755	-.0838	-.0213	.0077	.0086	172	ST	-.1089	-.1229	-.1036	-.0649	-.0021	-.0013	-.0004	.0003
125	ST	.0750	.0836	-.0339	-.0728	-.0838	-.0284	.0082	.0091	173	ST	-.1064	-.1065	-.0727	-.0368	-.0014	-.0011	-.0006	-.0033
126	ST	.0834	.0937	-.0078	-.0692	-.0823	-.0352	.0090	.0099	174	ST	-.0841	-.0812	-.0539	-.0239	-.0011	-.0011	-.0009	-.0063
127	ST	.0887	.0937	.0231	-.0649	-.0785	-.0400	.0115	.0129	175	ST	.0124	-.0146	-.0785	-.1006	-.0876	-.0056	.0092	.0109
128	ST	.0905	.0877	.0528	-.0596	-.0765	-.0436	.0100	.0114	176	ST	-.0012	-.0288	-.0828	-.0877	-.0843	.0022	.0095	.0116
129	ST	.0907	.0796	.0908	-.0279	-.0689	-.0489	.0100	.0121	177	ST	.0033	-.0235	-.0927	-.0887	-.0879	.0070	.0090	.0109
130	ST	.0895	.0677	.1204	-.0290	-.0717	-.0509	.0110	.0114	178	ST	.0076	-.0171	-.0922	-.0938	-.0722	.0055	.0085	.0106
131	ST	.0847	.0677	.1473	-.0193	-.0674	-.0542	.0110	.0111	179	ST	.0104	-.0222	-.0881	-.0976	-.0482	.0060	.0077	.0106
132	ST	.0804	.0768	.1620	.0042	-.0605	-.0549	.0113	.0132	180	ST	-.0002	-.0285	-.0782	-.0834	-.0287	.0058	.0075	.0104
133	ST	.0824	.0831	.1536	.0665	-.0583	-.0567	.0108	.0127	181	ST	-.0066	-.0245	-.0691	-.0654	-.0160	.0070	.0090	.0119
134	ST	.0880	.0803	.1308	.1048	-.0542	-.0577	.0120	.0132	182	ST	.0885	.0494	.0092	.0627	-.0580	-.0608	.0135	.0142
135	ST	.1135	.0826	.1039	.1354	-.0474	-.0572	.0113	.0139	183	ST	.0646	.0505	.0082	.0128	-.0598	-.0646	.0123	.0144
136	ST	.1883	.0839	.0778	.1549	-.0403	-.0517	.0128	.0162	184	ST								
137	ST	.2749	.0872	.0510	.1653	-.0408	-.0577	.0016	.0142	185	ST	.0733	.0545	.0563	.0230	-.0712	-.0517	.0128	.0157
138	ST	.3325	.1097	.0370	.1579	-.0292	-.0489	.0009	.0197	186	ST	.0743	.0573	.0482	-.0011	-.0580	-.0241	.0209	.0220
139	ST									187	ST	.0608	.0535	.0330	-.0153	-.0547	-.0213	.0145	.0157
140	ST	.3413	.2914	.0173	.0898	-.0219	-.0532	-.0176	.0149	188	ST	.0565	.0558	.0168	-.0229	-.0469	-.0160	.0130	.0139
141	ST	.3411	.4200	.0464	.0789	-.0163	-.0532	-.0201	.0157	189	ST	.3806	.4031	.6044	.2473	.1023	-.0443	-.0310	.0167
142	ST	.3522	.4820	.1830	.0620	.0753	-.0486	-.0229	.0164	190	ST	.3864	.2980	.5687	.1721	.0176	-.0491	-.0292	.0162
143	ST	.3631	.4600	.3733	.0622	.1537	-.0481	-.0290	.0127	191	ST	.3877	.2393	.5433	.1511	.0259	-.0585	-.0290	.0152
144	ST	.3796	.4684	.6186	.1091	.1734	-.0463	-.0295	.0159	192	ST	.3821	.2474	.4361	.1187	.0328	-.0628	-.0227	.0142
145	ST	.3819	.4458	.7182	.2620	.1673	-.0431	-.0320	.0157	193	ST	.3844	.2357	.2679	.0946	.0234	-.0592	-.0128	.0162
146	ST	.3717	.4441	.7164	.5603	.1539	-.0388	-.0353	.0167	194	ST	.3928	.2527	.2002	.0911	-.0120	-.0486	-.0049	.0159
147	ST	-.0907	.0973	.1637	.1640	.1633	.1649	.1692	.1604	195	ST	.3940	.2960	.2233	.0946	-.0312	-.0375	.0024	.0172
148	ST	-.0167	.0305	.0697	.0696	.0687	.0718	.0738	.0643	196	ST	.4366	.4036	.1909	.1962	-.0454	-.1065	-.1052	-.0792

Table III. Pressure Coefficients for Configuration 3

(a) $M = 1.69$

		C_p for Z_s/d =										C_p for Z_s/d =							
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.2805	-.3073	-.2949	-.2749	-.2452	-.2793	-.2979	-.2979	51	FL	.6255	.6327	.6583	.6599	.6529	.6740	.6788	.6882
2	FL	-.2840	-.3097	-.2971	-.2778	-.2492	-.2820	-.3001	-.3001	52	FL	.6414	.6541	.6832	.6775	.6712	.6945	.7006	.7091
3	FL	-.2701	-.2965	-.2914	-.2720	-.2450	-.2765	-.2933	-.2937	53	FL	.6550	.6739	.7074	.6945	.6880	.7135	.7215	.7300
4	FL	-.2582	-.2881	-.2861	-.2698	-.2450	-.2740	-.2886	-.2890	54	FL	.6654	.6916	.7286	.7095	.7032	.7300	.7400	.7486
5	FL	-.2375	-.2661	-.2601	-.2524	-.2337	-.2579	-.2703	-.2705	55	FL	.6772	.7081	.7482	.7240	.7173	.7450	.7583	.7664
6	FL	-.2175	-.2396	-.2211	-.2218	-.2192	-.2352	-.2397	-.2397	56	FL	.6808	.7220	.7639	.7348	.7276	.7564	.7718	.7803
7	FL	-.1979	-.2098	-.1783	-.1779	-.2000	-.2064	-.2047	-.2046	57	FL	.6861	.7387	.7775	.7470	.7389	.7683	.7841	.7953
8	FL	-.1790	-.1821	-.1455	-.1358	-.1808	-.1779	-.1716	-.1718	58	FL	.6847	.7546	.7844	.7545	.7453	.7747	.7900	.7995
9	FL	-.1528	-.1488	-.1177	-.0997	-.1539	-.1446	-.1368	-.1368	59	FL	.7048	.7553	.7974	.7688	.7534	.7855	.8044	.8142
10	FL	-.1224	-.1464	-.1323	-.1281	-.1573	-.1493	-.1421	-.1427	60	FL	.7347	.7339	.8150	.7732	.7556	.7902	.8165	.8258
11	FL	-.0610	-.0950	-.1007	-.1036	-.1321	-.1204	-.1115	-.1114	61	FL	.7532	.6988	.8135	.7734	.7556	.7913	.8165	.8257
12	FL	-.1151	-.1389	-.1600	-.1537	-.1630	-.1696	-.1710	-.1709	62	FL	.6872	.7846	.7947	.7688	.7561	.7871	.7993	.8092
13	FL	-.1255	-.1144	-.0976	-.0794	-.1273	-.1138	-.1082	-.1081	63	FL	.6962	.8247	.8053	.7838	.7704	.8014	.8105	.8204
14	FL	-.1015	-.0818	-.0804	-.0717	-.1019	-.0889	-.0866	-.0867	64	FL	.7059	.8499	.8033	.7807	.7596	.7939	.8030	.8147
15	FL	-.0658	-.0388	-.0476	-.0563	-.0689	-.0547	-.0570	-.0572	65	FL	.7261	.8651	.7976	.7417	.7230	.7648	.7907	.8023
16	FL	-.0429	-.0055	-.0300	-.0514	-.0497	-.0327	-.0416	-.0418	66	FL	.7402	.7806	.7989	.7456	.7380	.7739	.7971	.8061
17	FL	-.0182	.0278	-.0148	-.0322	-.0325	-.0064	-.0244	-.0248	67	FL	.8140	.8774	.8629	.8845	.8839	.8953	.8791	.8874
18	FL	.0075	.0593	.0009	.0055	-.0169	.0253	-.0030	-.0039	68	FL	.7975	.8521	.8673	.8651	.8605	.8761	.8747	.8843
19	FL	.0260	.0840	.0099	.0079	-.0103	.0515	.0150	.0138	69	FL	.8019	.8113	.8715	.8250	.8255	.8475	.8456	.8764
20	FL	.0394	.0955	.0150	.0085	-.0094	.0589	.0302	.0281	70	FL	.8195	.8675	.9114	.8775	.8890	.8986	.9027	.9119
21	FL	.0489	.0842	.0163	.0019	-.0175	.0756	.0410	.0371	71	SW	-.2838	-.3091	-.2963	-.2747	-.2436	-.2773	-.2972	-.2976
22	FL	.0498	.0540	.0207	-.0144	-.0343	.0685	.0413	.0329	72	SW	-.1270	-.1677	-.1790	-.1684	-.1678	-.1729	-.1778	-.1784
23	FL	.0561	.0611	.0417	-.0179	-.0277	.0727	.0604	.0422	73	SW	-.0508	.0029	-.1336	-.1746	-.1169	-.0574	-.1086	-.1141
24	FL	.0791	.0840	.0578	-.0117	-.0259	.0632	.0902	.0462	74	SW	.1200	.1230	.0723	.0603	.0552	.0652	.1400	.1077
25	FL	.0929	.1045	.0692	.0068	-.0263	.0507	.1380	.0517	75	SW	.3535	.3373	.3426	.3681	.3867	.3420	.2521	.3124
26	FL	.1101	.1365	.0697	.0438	-.0122	.0438	.1625	.0651	76	SW	.5982	.5895	.6186	.6279	.6322	.6568	.6587	.6648
27	FL	.1264	.1515	.0871	.0696	.0197	.0405	.1618	.0819	77	SW	.7563	.7584	.7650	.7723	.7777	.7840	.7918	.8041
28	FL	.1385	.1537	.1530	.0800	.0629	.0460	.1461	.1004	78	SW	.7867	.8591	.8664	.8453	.8579	.8660	.8590	.8689
29	FL	.1196	.1444	.1479	.0678	.0636	.0502	.1459	.1033	79	SW								
30	FL	.1405	.1570	.1219	.0579	.0680	.0577	.1446	.1077	80	SW								
31	FL	.1577	.1532	.1173	.0707	.0834	.0839	.1691	.1293	81	SW								
32	FL	.1544	.1649	.1911	.0808	.1028	.0568	.1301	.1141	82	SW								
33	FL	.1766	.1770	.1724	.0987	.1412	.0780	.1274	.1328	83	SW								
34	FL	.2043	.1845	.1422	.1386	.1777	.0978	.1241	.1564	84	SW								
35	FL	.2338	.1975	.1270	.2120	.2163	.1199	.1190	.1952	85	SW								
36	FL	.2658	.2416	.1442	.2980	.2615	.1573	.1290	.2606	86	SW								
37	FL	.3072	.3073	.1991	.3152	.3173	.2241	.1790	.3040	87	RF	.6850	.8900	.8291	1.0633	1.0463	1.0209	.9159	.9271
38	FL	.3360	.3250	.2641	.3264	.3558	.2922	.2477	.2928	88	RF	.7325	.8472	.9125	.9987	1.0401	1.0026	.9514	.9604
39	FL	.3769	.3609	.3280	.3791	.4019	.3643	.3048	.3065	89	RF	.7149	.7295	.7877	.8406	.8903	.9176	.9549	1.0133
40	FL	.4104	.3957	.3737	.4289	.4378	.4157	.3476	.3417	90	RF	.7664	.7275	.9208	.8162	.8244	.8367	.9179	.9264
41	FL	.4456	.4295	.4228	.4659	.4715	.4617	.4137	.4061	91	RF	.7792	.9804	.8924	1.0743	1.0472	1.0351	.9507	.9626
42	FL	.4745	.4579	.4630	.4928	.4991	.5008	.4729	.4669	92	RF	.8353	1.0370	.8970	.9910	.9586	.9669	.9190	.9310
43	FL	.5082	.4923	.5002	.5243	.5255	.5387	.5247	.5240	93	RF	.8344	1.0068	.8679	.9057	.8784	.8979	.8738	.8856
44	FL	.5352	.5203	.5320	.5503	.5484	.5682	.5633	.5667	94	RF	.8573	.9894	.9058	.8819	.8707	.8898	.8811	.8923
45	FL	.5656	.5551	.5703	.5843	.5819	.6024	.6021	.6077	95	RF	.9392	.8946	.9493	.8241	.8103	.8431	.8804	.8942
46	FL	.5854	.5791	.5981	.6101	.6055	.6248	.6268	.6344	96	RF	.8485	.8840	.9164	.8633	.8726	.8832	.8874	.8989
47	FL	.6127	.6129	.6347	.6434	.6370	.6566	.6598	.6683	97	RF	.8164	.8741	.8496	.8521	.8453	.8651	.8570	.8658
48	FL	.6165	.6067	.6327	.6403	.6353	.6579	.6605	.6683	98	RF								
49	FL	.6110	.6052	.6369	.6414	.6392	.6643	.6675	.6743	99	RF								
50	FL	.6101	.6052	.6395	.6451	.6426	.6718	.6750	.6809	100	RF								

Table III. Continued

(a) Concluded

		C_p for Z_s/l =										C_p for Z_s/l =							
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.2840	-.3280	-.1691	.3866	.2143	.2069	.1993	.2064	149	ST	-.0343	-.1098	-.1342	-.0895	.0497	-.0007	-.0019	.0023
102	ST	-.2853	-.3132	-.2348	.1994	.2692	.1351	.1327	.1328	150	ST	-.2201	-.2590	-.2603	-.1321	.0019	-.0023	-.0138	-.0213
103	ST	-.2849	-.2782	-.2467	-.0660	.3959	.0978	.0972	.0940	151	ST	-.1798	-.2149	-.1893	-.1424	-.0197	.0542	.0175	.0250
104	ST	-.2820	-.3578	-.2925	-.2174	.1277	.0447	.0441	.0356	152	ST	-.1153	-.1748	-.1876	-.1283	-.0784	.0110	.0752	.0299
105	ST	-.2725	-.3772	-.3311	-.3144	-.0499	.3015	.0056	-.0014	153	ST	-.0176	-.0315	-.1371	-.1341	-.0986	-.0494	.0419	.0217
106	ST	-.2562	-.3902	-.3620	-.3602	-.1685	.0943	-.0310	-.0349	154	ST								
107	ST	-.2318	-.3853	-.3774	-.3516	-.1570	.0158	-.0114	-.0158	155	ST	.1332	.1144	.1327	-.0748	-.0777	-.0739	-.0246	.0539
108	ST	-.2089	-.3536	-.3959	-.3443	-.1601	.0002	-.0050	-.0003	156	ST	.2164	.1643	.1252	.1600	-.0462	-.0600	-.0332	.0310
109	ST	-.1827	-.2200	-.3880	-.3287	-.1731	-.0100	.0029	.0175	157	ST	.3772	.3355	.1953	.0828	.0958	-.0382	-.0427	.0069
110	ST	-.1561	-.0924	-.3842	-.3075	-.1841	-.0214	.0144	.0210	158	ST	.4886	.4645	.4398	.3308	.2256	.1212	-.0405	-.0127
111	ST	-.1296	-.1311	-.3897	-.3022	-.1938	-.0448	.1572	.0213	159	ST	.5806	.5659	.5245	.4157	.2690	.1860	-.0200	-.0184
112	ST	-.0942	-.1424	-.3814	-.3020	-.1963	-.0620	.0866	.0244	160	ST	.6180	.6085	.5606	.4527	.2655	.2510	.0481	-.0288
113	ST	-.0614	-.1056	-.3730	-.3102	-.2000	-.0829	.0653	.0228	161	ST	-.3009	-.4164	-.4131	-.3130	-.0517	.2157	.0018	-.0010
114	ST	-.0282	-.0511	-.3789	-.2996	-.1958	-.0992	.0483	.0221	162	ST	-.3269	-.4186	-.4096	-.3179	-.0620	.1146	-.0094	-.0096
115	ST	.0095	.0016	-.2956	-.3133	-.1808	-.1056	.0432	.0292	163	ST	-.3177	-.4054	-.3994	-.2776	-.0140	.1282	.0102	.0118
116	ST	.0357	.0479	.1151	-.3197	-.1771	-.1142	.0300	.0281	164	ST	-.3115	-.3642	-.3307	-.2231	.0133	.0661	.0170	.0191
117	ST	.0566	.0849	.1832	-.3128	-.1764	-.1149	.0177	.0307	165	ST	-.3265	-.3119	-.2740	-.1916	.0058	.0017	.0029	.0056
118	ST	.0700	.0950	.0818	-.2941	-.1782	-.1149	.0009	.0285	166	ST	-.2102	-.2213	-.2063	-.1413	.0290	-.0025	-.0002	.0043
119	ST	.0797	.0820	.0044	-.2555	-.1795	-.1125	-.0174	.0424	167	ST	-.0786	-.1360	-.1497	-.1003	.0497	.0024	.0029	.0072
120	ST	.0892	.0752	-.0057	-.2368	-.1769	-.1065	-.0312	.1116	168	ST	-.1609	-.2339	-.4036	-.3836	-.1963	-.0329	.1574	.0279
121	ST	.1011	.1045	.0121	-.1244	-.1692	-.1050	-.0438	.0786	169	ST	-.2281	-.3514	-.4120	-.3721	-.1919	-.0188	.1243	.0266
122	ST	.1086	.1257	.1995	-.0444	-.1696	-.1085	-.0566	.0629	170	ST	-.2082	-.3351	-.4098	-.3823	-.1606	-.0007	.0796	.0215
123	ST	.1249	.1307	.3159	-.0089	-.1661	-.1054	-.0568	.0598	171	ST	-.1942	-.2890	-.3924	-.3278	-.1176	.0194	.0313	.0244
124	ST	.1392	.1548	.1744	.1972	-.1663	-.1039	-.0548	.0534	172	ST	-.1983	-.2797	-.3254	-.2551	-.0784	.0319	.0210	.0208
125	ST	.1557	.1753	.0743	.3901	-.1628	-.0957	-.0506	.0519	173	ST	-.1983	-.2828	-.2533	-.1918	-.0435	.0447	.0208	.0221
126	ST	.1643	.1726	.0203	.2563	-.1584	-.0944	-.0575	.0356	174	ST	-.1834	-.2356	-.2072	-.1548	-.0268	.0491	.0172	.0217
127	ST	.1711	.1834	.0216	.1430	-.1509	-.0977	-.0678	.0169	175	ST	.0846	.0710	.1856	-.2623	-.1806	-.1133	-.0566	.0574
128	ST	.2043	.2110	.0648	.0921	-.1143	-.0845	-.0568	.0202	176	ST	.0368	-.0117	-.0888	-.2760	-.1777	-.1228	-.0409	.0660
129	ST	.2235	.2042	.1462	.0590	-.0951	-.0867	-.0658	.0012	177	ST	.0372	.0218	.0216	-.2322	-.2364	-.1413	-.0429	.0532
130	ST	.2541	.2299	.2626	.1404	-.0651	-.0818	-.0667	-.0078	178	ST	.0515	.0360	-.0132	-.2306	-.2185	-.1189	-.0224	.0585
131	ST	.2911	.2915	.2727	.2025	.1956	-.0761	-.0667	-.0155	179	ST	.0471	.0278	-.0538	-.2665	-.1669	-.0933	-.0119	.0521
132	ST	.3272	.3241	.1830	.1900	.2035	-.0666	-.0652	-.0228	180	ST	.0436	.0337	-.1574	-.1795	-.1182	-.0644	.0029	.0537
133	ST	.3629	.3541	.0968	.2243	.1989	.0218	-.0603	-.0259	181	ST	.0500	.0468	-.1214	-.1208	-.0927	-.0496	.0106	.0543
134	ST	.4016	.3997	.1735	.2609	.1877	.1770	-.0524	-.0241	182	ST	.4249	.3988	.4189	.3833	.0783	.1591	-.0500	-.0266
135	ST	.4322	.4299	.4383	.4002	.1467	.2164	-.0502	-.0279	183	ST	.3992	.3287	.3393	.3167	.1275	.1304	-.0550	-.0233
136	ST	.4666	.4658	.5174	.4778	.2187	.2228	-.0416	-.0263	184	ST								
137	ST	.4974	.4980	.4392	.4540	.2873	.2065	-.0409	-.0303	185	ST	.3763	.3263	.2557	.3035	.1661	.0961	-.0632	-.0114
138	ST	.5260	.5282	.5159	.3817	.3142	.1891	-.0385	-.0307	186	ST	.3741	.3320	.2233	.2770	.1526	.0130	-.0579	-.0041
139	ST									187	ST	.3659	.3250	.1945	.1805	.1233	-.0380	-.0531	-.0021
140	ST	.5797	.5860	.5858	.5188	.4371	.1703	-.0130	-.0365	188	ST	.3710	.3311	.1938	.0976	.1022	-.0364	-.0454	.0047
141	ST	.5993	.6133	.6246	.6231	.3261	.1681	.1085	-.0404	189	ST	.6612	.6825	.6969	.6368	.4568	.3176	.1484	-.0338
142	ST	.6182	.6378	.6539	.5728	.2335	.3632	.1772	-.0420	190	ST	.6581	.6422	.5926	.5127	.3845	.3026	.1228	-.0391
143	ST	.6275	.6406	.6455	.5872	.2242	.4838	.1768	-.0554	191	ST	.6447	.5988	.4511	.3449	.3836	.2693	.0990	-.0424
144	ST	.6480	.6821	.7141	.6570	.4925	.4236	.1741	-.0389	192	ST	.6323	.5785	.4114	.3733	.3488	.2265	.0895	-.0435
145	ST	.6559	.6929	.7273	.6685	.5015	.3191	.1506	-.0356	193	ST	.6317	.5924	.4985	.4304	.3098	.2010	.0833	-.0396
146	ST	.6636	.6988	.7414	.6901	.5427	.2512	.1404	-.0352	194	ST	.6310	.6091	.5304	.4452	.2822	.2365	.0785	-.0288
147	ST	-.2351	.0897	.3384	.3720	.2134	.2100	.2056	.2095	195	ST	.6255	.6129	.5527	.4549	.2747	.2563	.0644	-.0228
148	ST	.1779	.2209	.1523	.1919	.1266	.0892	.0860	.0825	196	ST	.6682	.6365	.5591	.4564	.2522	.1900	.1547	-.1271

Table III. Continued

(b) $M = 2.00$

		C_p for Z_s/d =										C_p for Z_s/d =							
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.2304	-.2397	-.2277	-.2037	-.2096	-.2366	-.2366	-.2364	51	FL	.5609	.6139	.5444	.5445	.5385	.5400	.5511	.5620
2	FL	-.2328	-.2411	-.2290	-.2052	-.2123	-.2371	-.2373	-.2373	52	FL	.5756	.6313	.5736	.5708	.5610	.5596	.5714	.5821
3	FL	-.2201	-.2299	-.2226	-.1992	-.2063	-.2297	-.2300	-.2299	53	FL	.5852	.6422	.6012	.5949	.5820	.5776	.5894	.6006
4	FL	-.2148	-.2277	-.2230	-.2021	-.2088	-.2293	-.2300	-.2297	54	FL	.5916	.6507	.6224	.6132	.5969	.5901	.6026	.6126
5	FL	-.1954	-.2121	-.2081	-.1939	-.1992	-.2150	-.2155	-.2155	55	FL	.6057	.6596	.6471	.6345	.6149	.6066	.6206	.6293
6	FL	-.1715	-.1932	-.1849	-.1821	-.1858	-.1952	-.1957	-.1956	56	FL	.6171	.6681	.6661	.6501	.6276	.6179	.6326	.6427
7	FL	-.1472	-.1736	-.1533	-.1600	-.1682	-.1702	-.1705	-.1705	57	FL	.6362	.6866	.6861	.6693	.6452	.6324	.6502	.6603
8	FL	-.1325	-.1578	-.1263	-.1331	-.1482	-.1426	-.1433	-.1433	58	FL	.6471	.7075	.6968	.6737	.6484	.6333	.6529	.6623
9	FL	-.1160	-.1362	-.1002	-.0956	-.1225	-.1123	-.1124	-.1125	59	FL	.6516	.7289	.7129	.6902	.6637	.6460	.6689	.6776
10	FL	-.1156	-.1137	-.0895	-.1012	-.1232	-.1059	-.1061	-.1061	60	FL	.7008	.7429	.7316	.6967	.6800	.6603	.6959	.7026
11	FL	-.0456	-.0617	-.0713	-.0803	-.0982	-.0822	-.0825	-.0825	61	FL	.7481	.7445	.7307	.7034	.6818	.6598	.6975	.7028
12	FL	-.0652	-.0829	-.0958	-.1028	-.1183	-.1121	-.1126	-.1121	62	FL	.6621	.7449	.7022	.6733	.6506	.6315	.6509	.6609
13	FL	-.1020	-.1194	-.0855	-.0631	-.0974	-.0869	-.0874	-.0874	63	FL	.6848	.8113	.7086	.6715	.6519	.6302	.6485	.6609
14	FL	-.0871	-.1056	-.0806	-.0448	-.0746	-.0702	-.0703	-.0702	64	FL	.6855	.8712	.7004	.6492	.6386	.6197	.6360	.6478
15	FL	-.0626	-.0827	-.0719	-.0324	-.0463	-.0517	-.0516	-.0517	65	FL	.6899	.9147	.7084	.6508	.6441	.6322	.6473	.6574
16	FL	-.0461	-.0655	-.0650	-.0377	-.0283	-.0439	-.0440	-.0441	66	FL	.7086	.8434	.7359	.6882	.6744	.6641	.6845	.6917
17	FL	-.0249	-.0426	-.0372	-.0422	-.0073	-.0308	-.0313	-.0312	67	FL	.8093	.9182	.8508	.8288	.7892	.7815	.8099	.8142
18	FL	-.0024	-.0159	-.0069	-.0433	.0140	-.0138	-.0148	-.0150	68	FL	.8454	.8853	.8700	.8513	.8206	.8075	.8447	.8463
19	FL	.0174	.0104	.0101	-.0457	.0303	.0006	-.0008	-.0007	69	FL	.8501	.8554	.8740	.8441	.8360	.8222	.8529	.8550
20	FL	.0357	.0294	.0214	-.0413	.0426	.0144	.0112	.0113	70	FL	.8706	.9356	.9364	.8918	.8990	.8995	.9324	.9385
21	FL	.0491	.0412	.0248	.0015	.0439	.0285	.0179	.0180	71	SW	-.2321	-.2375	-.2268	-.2021	-.2074	-.2339	-.2340	-.2339
22	FL	.0495	.0467	.0172	.0349	.0314	.0494	.0148	.0151	72	SW	-.1067	-.1214	-.1245	-.1097	-.1361	-.1544	-.1547	-.1546
23	FL	.0618	.0721	.0226	.0220	.0321	.0913	.0259	.0260	73	SW	-.0490	-.0644	-.1328	-.1366	-.0595	-.1179	-.1262	-.1259
24	FL	.0611	.0848	.0221	.0111	.0227	.1015	.0279	.0280	74	SW	.0203	.0265	.0814	.0532	-.0383	.0695	.0480	.0456
25	FL	.0575	.0889	.0150	.0019	.0136	.0900	.0284	.0285	75	SW	.1086	.1510	.0685	.1002	.0838	.0949	.1286	.1100
26	FL	.0524	.0880	.0000	-.0061	.0054	.0762	.0271	.0274	76	SW	.5847	.5576	.5979	.5800	.5768	.5776	.6006	.5859
27	FL	.0448	.0730	-.0098	-.0123	-.0002	.0578	.0219	.0220	77	SW	.9384	.9249	.9179	.9014	.8805	.8657	.8487	.8398
28	FL	.0390	.0579	-.0102	-.0246	-.0109	.0401	.0164	.0164	78	SW	.7924	.9254	.8241	.7724	.7769	.7576	.7799	.7910
29	FL	.0012	.0320	-.0078	-.0348	-.0156	.0343	.0081	.0082	79	SW								
30	FL	.0312	.0539	-.0236	-.0273	-.0261	.0784	.0141	.0138	80	SW								
31	FL	.0526	.0813	.0731	.0344	-.0238	.0991	.0556	.0554	81	SW								
32	FL	.0312	.0430	-.0049	-.0348	-.0267	.0191	.0063	.0064	82	SW								
33	FL	.0415	.0441	-.0095	-.0244	-.0314	.0113	.0061	.0062	83	SW								
34	FL	.0491	.0499	-.0044	-.0152	-.0323	.0131	.0135	.0095	84	SW								
35	FL	.0562	.0603	.0299	.0093	-.0254	.0294	.0769	.0214	85	SW								
36	FL	.0615	.0851	.0682	.0701	.0078	.0287	.1222	.0452	86	SW								
37	FL	.0849	.1167	.1228	.1403	.0778	.0552	.1288	.0897	87	RF	.7146	.9597	.8024	.9885	.8175	.7581	.7975	.7832
38	FL	.1456	.1314	.1877	.1864	.1511	.1245	.1328	.1561	88	RF	.8218	.8394	1.0181	1.0239	.9523	.8897	.9371	.9385
39	FL	.2509	.1735	.2554	.2407	.2224	.2194	.1874	.2428	89	RF	1.2269	1.1671	1.1761	1.2424	1.2873	1.3179	1.3763	1.4282
40	FL	.3278	.2296	.3062	.2877	.2732	.2893	.2674	.3058	90	RF	.8700	.7915	1.0101	1.0486	1.0055	1.0174	1.0594	1.0477
41	FL	.3820	.3127	.3519	.3280	.3179	.3395	.3431	.3560	91	RF	.7819	1.0646	.8575	.9611	.8299	.7875	.8224	.8153
42	FL	.4161	.3992	.3829	.3641	.3567	.3751	.3881	.3925	92	RF	.8114	1.1635	.8463	.8417	.7809	.7583	.7834	.7855
43	FL	.4461	.4567	.4118	.3995	.3950	.4103	.4242	.4295	93	RF	.7942	1.1646	.8109	.7646	.7379	.7224	.7442	.7503
44	FL	.4671	.4950	.4323	.4274	.4260	.4391	.4516	.4591	94	RF	.9237	1.0682	.8593	.7878	.7876	.7541	.7881	.7919
45	FL	.4929	.5373	.4608	.4617	.4605	.4707	.4830	.4923	95	RF	1.0881	.9423	.9531	.8301	.8671	.8728	.9244	.9434
46	FL	.5125	.5634	.4842	.4873	.4857	.4923	.5046	.5152	96	RF	.8691	.9494	.8898	.8257	.8337	.8224	.8525	.8639
47	FL	.5457	.5977	.5206	.5229	.5191	.5233	.5353	.5464	97	RF	.7882	.9630	.8229	.7889	.7602	.7505	.7754	.7792
48	FL	.5460	.5870	.5284	.5434	.5225	.5248	.5395	.5491	98	RF								
49	FL	.5740	.5830	.5633	.5610	.5454	.5464	.5645	.5709	99	RF								
50	FL	.5870	.5767	.5919	.5742	.5655	.5654	.5883	.5908	100	RF								

Table III. Continued

(b) Concluded

		C_p for Z_s/d =										C_p for Z_s/d =							
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.2063	-.2493	-.0882	.1859	.1840	.1846	.1832	.1849	149	ST	.1511	.0875	.0517	.0837	.0002	-.0045	-.0028	-.0025
102	ST	-.2123	-.2548	-.2128	.1151	.1223	.1261	.1244	.1225	150	ST	-.0548	-.1034	-.1147	-.0745	.0334	-.0239	-.0213	-.0203
103	ST	-.2099	-.2491	-.2297	.1824	.0865	.0871	.0890	.0877	151	ST	-.1947	-.1990	-.1272	-.0800	.0265	.0296	.0063	.0078
104	ST	-.2161	-.2426	-.2132	.0137	.1990	.0392	.0411	.0405	152	ST	-.1189	-.1578	-.1423	-.1135	-.0187	.0414	.0146	.0160
105	ST	-.2067	-.2433	-.2197	-.1371	.2297	-.0020	.0021	-.0018	153	ST	-.0710	-.1324	-.1446	-.1043	-.0646	.0091	.0242	.0080
106	ST	-.2036	-.2602	-.2493	-.2097	.0793	-.0310	-.0353	-.0314	154	ST								
107	ST	-.1865	-.2665	-.2651	-.2382	-.0236	-.0172	-.0197	-.0203	155	ST	.0061	-.0027	-.0833	-.0865	-.0691	-.0439	.0255	.0162
108	ST	-.1662	-.2654	-.2758	-.2536	-.0933	.1555	-.0113	-.0116	156	ST	.0542	.0488	-.0091	-.0645	-.0675	-.0517	.0006	.0349
109	ST	-.1379	-.2560	-.2756	-.2504	-.0916	.0746	-.0030	-.0005	157	ST	.1449	.1252	.1032	.0093	-.0546	-.0517	-.0195	.0405
110	ST	-.1129	-.2424	-.2758	-.2451	-.1020	.0280	.0037	.0066	158	ST	.4756	.3876	.2033	.1701	.0546	-.0539	-.0322	.0283
111	ST	-.0926	-.1943	-.2725	-.2442	-.1210	.0265	.0030	.0064	159	ST	.5645	.5669	.4548	.4076	.1156	-.0263	-.0313	.0115
112	ST	-.0675	-.1148	-.2673	-.2375	-.1343	.0287	.0101	.0133	160	ST	.5823	.5966	.4738	.3225	.2402	.0920	-.0391	-.0049
113	ST	-.0465	-.0969	-.2678	-.2364	-.1459	.0100	.0135	.0124	161	ST	-.2348	-.2850	-.2849	-.1426	.1956	-.0045	.0003	-.0011
114	ST	-.0227	-.0894	-.2754	-.2344	-.1493	-.0089	.0101	.0124	162	ST	-.2406	-.2910	-.2983	-.1723	.0622	-.0143	-.0110	-.0116
115	ST	.0045	-.0738	-.2502	-.2353	-.1526	-.0288	.0638	.0187	163	ST	-.2225	-.2725	-.2511	-.1377	.0595	.0089	.0115	.0118
116	ST	.0288	-.0535	-.2384	-.2357	-.1526	-.0502	.0854	.0182	164	ST	-.2123	-.2279	-.1751	-.0881	.0693	.0189	.0213	.0216
117	ST	.0544	-.0069	-.2297	-.2344	-.1499	-.0633	.0562	.0182	165	ST	-.1967	-.1589	-.1123	-.0638	.0635	.0024	.0043	.0051
118	ST	.0749	.0474	-.2081	-.2215	-.1462	-.0753	.0473	.0167	166	ST	-.0806	-.0600	-.0260	.0071	.0686	.0009	.0026	.0038
119	ST	.0907	.0897	-.0381	-.2293	-.1441	-.0834	.0411	.0138	167	ST	.0687	.0381	.0370	.0719	.0332	.0017	.0032	.0035
120	ST	.1017	.1071	.0785	-.2264	-.1419	-.0871	.0420	.0171	168	ST	-.1631	-.2458	-.2841	-.2522	-.1098	.0278	.0061	.0098
121	ST	.1072	.1098	.1752	-.1919	-.1341	-.0865	.0451	.0216	169	ST	-.1987	-.2712	-.2876	-.2694	-.0951	.0307	.0063	.0095
122	ST	.1017	.1011	.1420	-.1923	-.1363	-.0909	.0266	.0189	170	ST	-.1891	-.2663	-.2858	-.2638	-.0648	.0361	.0061	.0089
123	ST	.0983	.1004	.1001	-.1801	-.1357	-.0869	.0126	.0242	171	ST	-.1767	-.2638	-.2778	-.2186	-.0305	.0358	.0066	.0095
124	ST	.0894	.0966	.0549	-.1246	-.1361	-.0840	-.0030	.0245	172	ST	-.1798	-.2605	-.2348	-.1629	-.0045	.0231	.0037	.0066
125	ST	.0834	.0987	.0263	-.0433	-.1339	-.0802	-.0119	.0287	173	ST	-.1871	-.2342	-.1767	-.1130	.0134	.0176	.0050	.0080
126	ST	.0693	.0953	.0125	.0164	-.1395	-.0778	-.0248	.0289	174	ST	-.2009	-.2094	-.1363	-.0865	.0221	.0209	.0048	.0069
127	ST	.0549	.0728	.0018	.0414	-.1457	-.0831	-.0400	.0744	175	ST	.0595	.0345	-.0661	-.2081	-.1466	-.0983	.0170	.0216
128	ST	.0729	.0853	.0373	.0610	-.1377	-.0771	-.0337	.0652	176	ST	-.0173	-.0669	-.1998	-.2092	-.1622	-.0932	.0317	.0287
129	ST	.0702	.0808	.1244	.0634	-.1433	-.0822	-.0447	.0483	177	ST	-.0015	-.0515	-.2212	-.2253	-.1934	-.0936	.0284	.0171
130	ST	.0745	.0882	.1012	.0770	-.1410	-.0818	-.0476	.0414	178	ST	.0087	-.0408	-.0904	-.2237	-.1486	-.0664	.0397	.0238
131	ST	.0809	.1080	.0232	.1376	-.1390	-.0805	-.0502	.0412	179	ST	.0067	-.0415	-.0728	-.1896	-.1085	-.0482	.0373	.0191
132	ST	.0930	.1334	-.0191	.1810	-.1337	-.0787	-.0513	.0432	180	ST	.0074	-.0279	-.0788	-.1302	-.0800	-.0288	.0420	.0225
133	ST	.1609	.1597	.0281	.1327	-.1286	-.0762	-.0500	.0470	181	ST	.0156	-.0152	-.0831	-.0961	-.0677	-.0205	.0435	.0211
134	ST	.2859	.2002	.1061	.0814	-.0722	-.0731	-.0467	.0358	182	ST	.3499	.2216	.1034	.0291	.0844	-.0749	-.0549	.0227
135	ST	.3726	.2430	.1406	.0469	.1424	-.0713	-.0509	.0176	183	ST	.2761	.1570	.0727	.0500	.0236	-.0831	-.0551	.0312
136	ST	.4274	.3421	.1852	.1033	.2005	-.0642	-.0471	.0107	184	ST								
137	ST	.4604	.4776	.3385	.2227	.2108	-.0637	-.0507	.0006	185	ST	.2240	.1610	.0426	.0897	-.0822	-.0900	-.0411	.0427
138	ST	.4800	.5295	.6523	.3911	.2090	-.0555	-.0482	-.0034	186	ST	.2028	.1445	.0034	.1244	-.0840	-.0682	-.0264	.0418
139	ST									187	ST	.1705	.1305	.0304	.1004	-.0635	-.0568	-.0213	.0374
140	ST	.5061	.5899	.5631	.5655	.1377	.0164	-.0536	-.0161	188	ST	.1509	.1267	.0803	.0460	-.0539	-.0511	-.0175	.0383
141	ST	.5255	.6142	.5489	.5474	.1092	.1811	-.0505	-.0201	189	ST	.5847	.6378	.6302	.4610	.5831	.2619	-.0380	-.0261
142	ST	.5460	.6344	.6609	.5033	.1299	.2305	-.0456	-.0214	190	ST	.5968	.5954	.4840	.3590	.4284	.1760	-.0424	-.0261
143	ST	.5520	.6170	.6431	.4441	.3175	.2359	-.0525	-.0370	191	ST	.5939	.5631	.3220	.2536	.2867	.0920	-.0482	-.0223
144	ST	.5689	.6583	.6645	.4773	.6227	.2758	-.0420	-.0286	192	ST	.5818	.5687	.3470	.2886	.2444	.0681	-.0542	-.0179
145	ST	.5763	.6576	.6817	.4695	.5730	.2896	-.0398	-.0297	193	ST	.5807	.5827	.4165	.3035	.2560	.0906	-.0531	-.0107
146	ST	.5854	.6551	.6897	.5024	.4449	.2971	-.0362	-.0288	194	ST	.5865	.5945	.4399	.3044	.2685	.0998	-.0471	-.0023
147	ST	-.1392	.1096	.1839	.1835	.1845	.1833	.1818	.1844	195	ST	.5881	.6021	.4669	.3160	.2631	.1040	-.0375	.0017
148	ST	-.0184	.0804	.2995	.2142	.0800	.0799	.0796	.0797	196	ST	.6173	.5968	.4969	.3207	.0914	.1691	-.0785	-.1246

Table III. Continued

(c) $M = 2.65$

		C_p for Z_s/d =								C_p for Z_s/d =					
ORF	LOC	-.83	.00	.83	1.67	3.33	5.00	7.50	10.81	-.83	.00	.83	1.67	3.33	5.00	7.50	10.81
1	FL	-.1383		-.1340	-.1282	-.1381	-.1384	-.1391	-.1394	.4026		.3402	.3380	.3207	.3409	.3595	.3564
2	FL	-.1464		-.1398	-.1330	-.1449	-.1449	-.1452	-.1455	.4429		.3613	.3491	.3318	.3581	.3769	.3708
3	FL	-.1408		-.1385	-.1320	-.1432	-.1432	-.1434	-.1435	.4700		.3833	.3626	.3460	.3753	.3949	.3870
4	FL	-.1355		-.1363	-.1305	-.1396	-.1399	-.1399	-.1402	.4766		.4046	.3757	.3599	.3925	.4119	.4019
5	FL	-.1254		-.1276	-.1234	-.1310	-.1310	-.1313	-.1313	.4721		.4248	.3874	.3731	.4077	.4265	.4156
6	FL	-.1180		-.1185	-.1180	-.1229	-.1229	-.1232	-.1235	.4657		.4437	.3968	.3847	.4209	.4410	.4277
7	FL	-.1066		-.1033	-.1079	-.1105	-.1105	-.1108	-.1108	.4685		.4637	.4067	.3974	.4345	.4546	.4398
8	FL	-.0983		-.0884	-.0990	-.0999	-.0999	-.1002	-.1000	.4771		.4786	.4137	.4075	.4421	.4617	.4446
9	FL	-.0864		-.0676	-.0818	-.0824	-.0824	-.0827	-.0825	.4728		.4814	.4112	.4121	.4477	.4640	.4472
10	FL	-.0618		-.0648	-.0828	-.0809	-.0811	-.0817	-.0815	.5053		.4987	.4132	.4209	.4525	.4721	.4520
11	FL	-.0544		-.0640	-.0770	-.0743	-.0748	-.0756	-.0754	.5562		.5268	.4419	.4488	.4773	.4961	.4770
12	FL	-.0527		-.0531	-.0745	-.0705	-.0705	-.0688	-.0694	.4939		.4893	.4150	.4118	.4470	.4658	.4464
13	FL	-.0778		-.0491	-.0615	-.0659	-.0657	-.0662	-.0658	.5093		.4949	.4160	.4154	.4482	.4655	.4457
14	FL	-.0722		-.0341	-.0403	-.0518	-.0515	-.0521	-.0517	.5189		.5004	.4198	.4197	.4520	.4683	.4492
15	FL	-.0658		-.0273	-.0165	-.0373	-.0371	-.0376	-.0372	.5276		.5161	.4322	.4331	.4644	.4810	.4636
16	FL	-.0628		-.0252	.0008	-.0290	-.0287	-.0290	-.0289	.5678		.5679	.4667	.4733	.5009	.5182	.5023
17	FL	-.0549		-.0237	.0152	-.0201	-.0199	-.0202	-.0200	.7097		.7247	.5701	.5764	.6044	.6252	.6118
18	FL	-.0481		-.0237	.0180	-.0156	-.0153	-.0156	-.0155	.6624		.7057	.5746	.5673	.5958	.6222	.6141
19	FL	-.0370		-.0232	.0160	-.0133	-.0130	-.0139	-.0135	.6667		.7017	.5820	.5739	.6019	.6288	.6270
20	FL	-.0187		-.0194	.0152	-.0090	-.0103	-.0106	-.0099	.7211		.7765	.6342	.6399	.6611	.6893	.6887
21	FL	-.0111		-.0240	.0051	-.0029	-.0153	-.0156	-.0157	-.1467		-.1388	-.1310	-.1439	-.1442	-.1442	-.1445
22	FL	-.0055		-.0227	-.0002	.0229	-.0151	-.0151	-.0152	-.1147		-.0924	-.1008	-.1143	-.1146	-.1138	-.1144
23	FL	-.0017		-.0108	-.0025	.0376	-.0108	-.0111	-.0109	-.0456		-.0889	-.0349	-.0181	-.0951	-.0928	-.0931
24	FL	-.0002		.0042	-.0111	.0406	-.0125	-.0131	-.0130	-.0066		-.0762	-.0755	-.0414	-.0351	-.0447	-.0448
25	FL	.0185		.0222	-.0040	.0558	.0004	-.0002	-.0003	.0434		.1152	.0793	.0249	.0419	.0271	.0306
26	FL	.0309		.0201	-.0033	.0612	.0047	.0046	.0045	.4505		.3851	.3643	.3632	.3733	.3772	.3887
27	FL	.0502		.0168	.0013	.0586	.0118	.0117	.0116	1.9031		1.7672	1.7294	1.6577	1.6158	1.5711	1.5091
28	FL	.0598		.0092	.0081	.0508	.0194	.0190	.0189	.6178		.6459	.5427	.5344	.5685	.5878	.5833
29	FL	-.0005		.0031	-.0106	.0487	.0239	.0221	.0225								
30	FL	.0198		.0009	-.0387	.0270	.0087	.0056	.0055								
31	FL	.0370		.0011	-.0466	.0128	.0014	-.0027	-.0026								
32	FL	.0667		.0039	.0266	.0449	.0277	.0264	.0265								
33	FL	.0674		.0057	.0243	.0541	.0421	.0322	.0323								
34	FL	.0601		.0239	.0170	.0558	.0890	.0347	.0349								
35	FL	.0535		.0546	.0124	.0460	.1064	.0363	.0361								
36	FL	.0441		.0906	.0137	.0336	.0971	.0335	.0338								
37	FL	.0370		.1296	.0426	.0298	.0751	.0332	.0354	.6750		.7093	.6643	.5612	.6252	.6645	.6650
38	FL	.0408		.1610	.1006	.0457	.0596	.0388	.0478	.5803		.7402	.7092	.6053	.7206	.7346	.7482
39	FL	.0809		.1841	.1566	.0943	.0581	.0631	.0837	1.2216		1.1136	1.1021	1.0612	1.0543	1.0575	1.0563
40	FL	.1574		.2036	.1928	.1581	.0951	.1190	.1434	.8430		.9417	.7910	.8235	.7829	.8373	.8119
41	FL	.2202		.2178	.2136	.1989	.1677	.1813	.1990	.7376		.7445	.6248	.5761	.6219	.6569	.6478
42	FL	.2526		.2295	.2323	.2194	.2224	.2215	.2327	.7457		.7088	.5437	.5521	.5753	.5969	.5797
43	FL	.2737		.2404	.2491	.2346	.2452	.2448	.2532	.7146		.6644	.5057	.5301	.5464	.5625	.5435
44	FL	.2937		.2536	.2681	.2495	.2619	.2671	.2742	.6383		.6571	.5267	.5207	.5533	.5782	.5658
45	FL	.3122		.2718	.2848	.2670	.2778	.2878	.2939	.8618		.7323	.5419	.5541	.5697	.5974	.5883
46	FL	.3317		.2903	.3015	.2824	.2971	.3114	.3144	.7016		.7055	.5688	.5627	.5910	.6146	.6081
47	FL	.3603		.3159	.3218	.3019	.3209	.3377	.3371	.7178		.7131	.5584	.5713	.5946	.6131	.5982
48	FL	.3570		.3233	.3190	.3040	.3229	.3410	.3394								
49	FL	.3831		.3567	.3319	.3260	.3472	.3633	.3599								
50	FL	.4130		.3833	.3484	.3432	.3677	.3802	.3763								

Table III. Concluded

(c) Concluded

ORF	LOC	C_p for Z_s/d = −.83	.00	.83	1.67	3.33	5.00	7.50	10.81
101	ST	−.1049		.0551	.1634	.1650	.1634	.1684	.1290
102	ST	−.1115		−.0676	.1120	.1141	.1143	.1190	.0951
103	ST	−.1117		−.1076	.0454	.0738	.0781	.0788	.0822
104	ST	−.1185		−.1266	−.0147	.0361	.0345	.0393	.0440
105	ST	−.1132		−.1259	−.0669	.0039	.0047	.0056	.0091
106	ST	−.1089		−.1243	−.0256	−.0100	−.0211	−.0202	−.0173
107	ST	−.1028		−.1216	−.0494	.0956	−.0153	−.0146	−.0112
108	ST	−.0995		−.1162	−.0823	.1490	−.0087	−.0106	−.0071
109	ST	−.0912		−.1246	−.1041	.0979	.0004	−.0050	−.0026
110	ST	−.0836		−.1297	−.1188	.0508	.0194	−.0015	.0007
111	ST	−.0734		−.1314	−.1246	.0001	.0270	.0008	.0032
112	ST	−.0608		−.1312	−.1264	−.0232	.0816	.0041	.0060
113	ST	−.0473		−.1312	−.1262	−.0437	.0847	.0044	.0083
114	ST	−.0354		−.1355	−.1282	−.0518	.0513	.0066	.0096
115	ST	−.0286		−.1335	−.1277	−.0713	.0378	.0072	.0085
116	ST	−.0230		−.1350	−.1294	−.0791	.0267	.0074	.0078
117	ST	−.0136		−.1355	−.1307	−.0842	.0219	.0084	.0093
118	ST	−.0050		−.1413	−.1376	−.0857	.0209	.0061	.0083
119	ST	.0041		−.1358	−.1330	−.0887	.0206	.0112	.0111
120	ST	.0122		−.1365	−.1332	−.0897	.0087	.0142	.0118
121	ST	.0226		−.1330	−.1310	−.0897	−.0070	.0178	.0154
122	ST	.0302		−.1226	−.1289	−.0913	−.0249	.0137	.0116
123	ST	.0469		−.0111	−.1145	−.0892	−.0371	.0426	.0131
124	ST	.0586		.0802	−.1099	−.0908	−.0465	.0492	.0101
125	ST	.0740		.1532	−.1102	−.0910	−.0518	.0487	.0093
126	ST	.0864		.1861	−.0909	−.0890	−.0541	.0396	.0111
127	ST	.0938		.1529	−.0613	−.0849	−.0523	.0373	.0161
128	ST	.0940		.1071	−.0529	−.0857	−.0541	.0299	.0131
129	ST	.0915		.0799	−.0192	−.0849	−.0548	.0279	.0149
130	ST	.0839		.0703	−.0114	−.0865	−.0548	.0256	.0136
131	ST	.0705		.0564	.0357	−.0867	−.0553	.0287	.0134
132	ST	.0606		.0366	.1021	−.0842	−.0538	.0302	.0156
133	ST	.0555		.0247	.1351	−.0829	−.0538	.0226	.0151
134	ST	.0707		.0239	.1183	−.0842	−.0551	.0097	.0139
135	ST	.1450		.0417	.0836	−.0806	−.0518	.0023	.0169
136	ST	.2848		.1147	.0677	−.0761	−.0460	−.0017	.0192
137	ST	.3461		.2143	.0469	−.0791	−.0477	−.0096	.0192
138	ST	.3350		.3666	.0395	−.0703	−.0406	−.0096	.0230
139	ST								
140	ST	.3322		.5927	.0666	−.0659	−.0467	−.0214	.0513
141	ST	.3497		.5696	.1789	−.0619	−.0455	−.0227	.0467
142	ST	.3798		.4954	.4277	−.0492	−.0457	−.0250	.0389
143	ST	.4120		.4155	.6415	.0280	−.0442	−.0270	.0318
144	ST	.4541		.4279	.7170	.0887	−.0422	−.0255	.0338
145	ST	.4688		.4462	.6309	.1804	−.0414	−.0273	.0303
146	ST	.4637		.4604	.5617	.3389	−.0384	−.0268	.0298
147	ST	−.0415		.1649	.1660	.1637	.1652	.1661	.1608
148	ST	−.0124		.0698	.0692	.0682	.0705	.0707	.0660

ORF	LOC	C_p for Z_s/d = −.83	.00	.83	1.67	3.33	5.00	7.50	10.81
149	ST	−.0484		.0389	.0236	.0017	.0039	.0016	−.0026
150	ST	−.0098		.1294	.1145	−.0173	−.0158	−.0189	−.0253
151	ST	−.0342		−.0628	−.0370	.0328	.0016	.0023	−.0011
152	ST	−.0909		−.0772	−.0514	.0232	.0113	.0072	.0066
153	ST	−.0899		−.0815	−.0661	.0090	.0292	.0117	.0121
154	ST								
155	ST	.0008		−.0625	−.0519	−.0325	.0148	.0178	.0154
156	ST	.0411		−.0437	−.0542	−.0366	−.0034	.0325	.0151
157	ST	.0241		−.0384	−.0438	−.0356	−.0158	.0307	.0174
158	ST	.2005		.0612	−.0324	−.0346	−.0247	.0218	.0164
159	ST	.4262		.2987	.0806	−.0287	−.0229	.0112	.0212
160	ST	.4543		.4041	.2985	−.0161	−.0168	.0127	.0351
161	ST	−.1330		−.1423	−.0099	−.0019	−.0009	.0011	.0040
162	ST	−.1150		−.1112	.1282	.0113	.0100	.0122	.0164
163	ST	−.1211		−.0361	.1822	.0087	.0064	.0056	.0108
164	ST	−.1206		.0445	.1981	.0039	.0054	.0016	.0035
165	ST	−.0978		.1205	.1921	.0060	.0077	.0041	−.0011
166	ST	−.0909		.1649	.1386	.0039	.0062	.0023	−.0036
167	ST	−.0595		.0718	.0474	.0034	.0059	.0026	−.0021
168	ST	−.1135		−.1418	−.1322	.0148	.0135	.0018	.0035
169	ST	−.1193		−.1454	−.1312	.0348	.0113	.0016	.0025
170	ST	−.1170		−.1484	−.1297	.0277	.0070	−.0004	.0002
171	ST	−.1158		−.1342	−.1051	.0201	.0062	.0011	.0020
172	ST	−.1208		−.1122	−.0633	.0103	.0037	.0006	.0007
173	ST	−.0990		−.0919	−.0360	.0118	.0009	.0003	−.0016
174	ST	−.0542		−.0729	−.0481	.0222	−.0009	−.0004	−.0036
175	ST	.0076		−.0977	−.1315	−.0963	−.0320	.0342	.0128
176	ST	−.0529		−.1380	−.1365	−.1011	−.0247	.0226	.0111
177	ST	−.0471		−.1327	−.1365	−.0951	−.0060	.0147	.0134
178	ST	−.0476		−.1289	−.1274	−.0811	.0014	.0084	.0096
179	ST	−.0494		−.1299	−.1127	−.0548	.0178	.0107	.0123
180	ST	−.0517		−.1096	−.0970	−.0358	.0232	.0104	.0123
181	ST	−.0501		−.0881	−.0757	−.0232	.0259	.0115	.0139
182	ST	.1247		.0130	−.0281	−.0867	−.0556	.0051	.0159
183	ST	.0624		−.0344	−.0735	−.0913	−.0629	.0097	.0161
184	ST								
185	ST	.0439		−.0308	−.0461	−.0900	−.0523	.0251	.0166
186	ST	.0383		−.0207	−.0309	−.0495	−.0211	.0373	.0255
187	ST	.0249		−.0432	−.0588	−.0480	−.0237	.0284	.0161
188	ST	.0228		−.0437	−.0509	−.0396	−.0186	.0279	.0154
189	ST	.4627		.4216	.5685	.0933	−.0417	−.0252	.0308
190	ST	.4581		.3430	.4213	.0591	−.0455	−.0260	.0301
191	ST	.4546		.2064	.1943	.0434	−.0546	−.0247	.0283
192	ST	.4490		.1676	.1576	.0184	−.0556	−.0199	.0268
193	ST	.4460		.2115	.1776	−.0191	−.0503	−.0113	.0288
194	ST	.4500		.3063	.1786	−.0325	−.0394	−.0040	.0293
195	ST	.4472		.3823	.2577	−.0302	−.0295	.0016	.0285
196	ST	.4954		.3238	.1069	.0725	−.0963	−.1009	−.0732

Table IV. Pressure Coefficients for Configuration 4

(a) $M = 1.69$

		C_p for Z_s/d =											C_p for Z_s/d =							
ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.1985	-.1813	-.1674	-.1747	-.1814	-.1554	-.1503	-.1732	-.1766	51	FL	.1814	.1781	.2561	.2523	.2536	.2232	.2538	.2255	.2011
2	FL	-.1940	-.1842	-.1716	-.1789	-.1856	-.1598	-.1551	-.1783	-.1815	52	FL	.3109	.3136	.3389	.3395	.3419	.3276	.3395	.3255	.3183
3	FL	-.1898	-.1846	-.1710	-.1776	-.1841	-.1554	-.1505	-.1739	-.1771	53	FL	.3787	.3835	.3910	.3939	.3930	.3898	.3937	.3846	.3817
4	FL	-.1869	-.1881	-.1756	-.1822	-.1894	-.1613	-.1569	-.1788	-.1819	54	FL	.4226	.4300	.4272	.4285	.4239	.4283	.4290	.4211	.4202
5	FL	-.1612	-.1745	-.1646	-.1710	-.1784	-.1551	-.1512	-.1708	-.1733	55	FL	.4635	.4729	.4615	.4585	.4536	.4629	.4625	.4548	.4555
6	FL	-.1347	-.1548	-.1485	-.1532	-.1605	-.1463	-.1435	-.1591	-.1608	56	FL	.4946	.5089	.4910	.4847	.4827	.4933	.4922	.4841	.4857
7	FL	-.1079	-.1293	-.1278	-.1294	-.1350	-.1335	-.1311	-.1422	-.1432	57	FL	.5245	.5439	.5243	.5191	.5201	.5268	.5261	.5194	.5218
8	FL	-.0825	-.1033	-.1078	-.1056	-.1076	-.1192	-.1179	-.1239	-.1242	58	FL	.5428	.5653	.5439	.5429	.5461	.5517	.5515	.5441	.5445
9	FL	-.0521	-.0703	-.0807	-.0756	-.0735	-.0954	-.0952	-.0968	-.0962	59	FL	.5547	.5761	.5500	.5391	.5316	.5416	.5396	.5302	.5339
10	FL	-.0268	-.0698	-.0862	-.0824	-.0759	-.0990	-.0996	-.1005	-.1000	60	FL	.5660	.5593	.5254	.5032	.4873	.5017	.5006	.4892	.4945
11	FL	-.0220	-.0443	-.0569	-.0498	-.0416	-.0736	-.0758	-.0717	-.0700	61	FL	.5635	.5463	.5139	.4918	.4812	.4907	.4915	.4819	.4841
12	FL	-.0013	-.0240	-.0430	-.0342	-.0213	-.0659	-.0701	-.0624	-.0601	62	FL	.5583	.5798	.5589	.5636	.5697	.5711	.5731	.5654	.5649
13	FL	-.0193	-.0365	-.0518	-.0459	-.0409	-.0663	-.0701	-.0675	-.0665	63	FL	.5717	.5924	.5725	.5858	.5917	.5905	.5942	.5870	.5859
14	FL	.0117	-.0070	-.0258	-.0201	-.0143	-.0388	-.0461	-.0408	-.0394	64	FL	.5660	.5849	.5668	.5823	.5704	.5768	.5847	.5729	.5722
15	FL	.0474	.0278	.0059	.0119	.0170	-.0042	-.0141	-.0071	-.0055	65	FL	.5686	.5754	.5496	.5391	.4851	.5131	.5257	.4998	.5035
16	FL	.0717	.0520	.0283	.0339	.0377	.0191	.0099	.0167	.0178	66	FL	.5569	.5565	.5254	.5112	.4829	.5015	.5059	.4890	.4929
17	FL	.0950	.0767	.0517	.0575	.0600	.0412	.0368	.0422	.0427	67	FL	.6208	.6435	.6289	.6632	.7164	.6932	.6905	.6987	.6947
18	FL	.1181	.1023	.0772	.0830	.0840	.0626	.0659	.0697	.0694	68	FL	.6043	.6173	.6036	.6376	.6794	.6669	.6674	.6696	.6682
19	FL	.1336	.1215	.0988	.1040	.1029	.0775	.0894	.0929	.0910	69	FL	.6279	.6157	.5881	.6015	.6094	.6114	.6163	.6086	.6092
20	FL	.1461	.1369	.1180	.1234	.1199	.0905	.1086	.1154	.1106	70	FL	.6803	.6860	.6683	.6793	.7052	.7073	.7119	.7029	.7046
21	FL	.1521	.1468	.1323	.1388	.1336	.0996	.1207	.1341	.1247	71	SW	-.1903	-.1804	-.1665	-.1739	-.1810	-.1547	-.1496	-.1721	-.1753
22	FL	.1466	.1455	.1354	.1443	.1382	.0987	.1209	.1462	.1297	72	SW	-.0242	-.0471	-.0611	-.0564	-.0471	-.0756	-.0793	-.0754	-.0742
23	FL	.1521	.1521	.1442	.1569	.1527	.1112	.1276	.1673	.1416	73	SW	.1355	.1420	.1235	.1315	.1494	.0652	.1115	.1112	.1059
24	FL	.1507	.1512	.1457	.1597	.1600	.1172	.1278	.1812	.1469	74	SW	.1406	.1435	.1376	.1403	.1882	.1679	.1430	.1744	.1562
25	FL	.1470	.1486	.1473	.1577	.1637	.1249	.1293	.1892	.1502	75	SW	.1056	.1120	.1156	.1148	.1274	.1324	.1104	.1138	.1760
26	FL	.1446	.1453	.1470	.1538	.1692	.1346	.1317	.1909	.1522	76	SW	.0904	.1466	.2219	.2589	.2794	.2613	.2752	.2658	.2553
27	FL	.1417	.1422	.1442	.1513	.1725	.1436	.1331	.1861	.1522	77	SW									
28	FL	.1351	.1358	.1371	.1463	.1688	.1454	.1293	.1726	.1476	78	SW	.6378	.6658	.6566	.6751	.7067	.7081	.7156	.7020	.7030
29	FL	.1256	.1331	.1380	.1465	.1758	.1538	.1339	.1764	.1535	79	SW									
30	FL	.1303	.1356	.1336	.1392	.1844	.1558	.1331	.1673	.1482	80	SW									
31	FL	.1417	.1444	.1382	.1414	.1891	.1654	.1414	.1757	.1551	81	SW									
32	FL	.1256	.1270	.1283	.1364	.1637	.1443	.1223	.1563	.1403	82	SW									
33	FL	.1252	.1265	.1270	.1335	.1573	.1483	.1229	.1440	.1407	83	SW									
34	FL	.1203	.1234	.1235	.1284	.1457	.1469	.1187	.1299	.1374	84	SW									
35	FL	.1151	.1188	.1191	.1220	.1354	.1421	.1121	.1156	.1359	85	SW									
36	FL	.1093	.1133	.1151	.1159	.1331	.1353	.1051	.1054	.1456	86	SW									
37	FL	.1095	.1135	.1162	.1159	.1303	.1333	.1051	.1054	.1674	87	RF	.6085	.7021	.7020	.8507	.9781	.8818	.8826	.9201	.9048
38	FL	.0979	.1005	.1028	.1046	.1084	.1192	.0932	.0931	.1612	88	RF	.7056	.8493	.8377	.9108	1.0462	1.0248	1.0184	1.0226	1.0341
39	FL	.1003	.1034	.1052	.1060	.1071	.1225	.0960	.0953	.1608	89	RF	1.0316	1.0329	.9793	.9036	.9217	.9454	.9331	.9201	.9385
40	FL	.0950	.0985	.1010	.1011	.1071	.1238	.0960	.0938	.1509	90	RF	.8702	.7640	.6888	.6727	.6523	.6687	.6749	.6549	.6621
41	FL	.0930	.0935	.0960	.0974	.1012	.1225	.1007	.0955	.1396	91	RF	.6684	.7383	.7306	.8256	.9321	.8621	.8580	.8811	.8773
42	FL	.0860	.0880	.0887	.0921	.0957	.1152	.0998	.0907	.1244	92	RF	.6298	.6523	.6284	.6528	.6763	.6623	.6667	.6661	.6647
43	FL	.0831	.0851	.0871	.0886	.0932	.1110	.1013	.0889	.1134	93	RF	.6340	.6572	.6377	.6601	.7005	.6859	.6839	.6890	.6865
44	FL	.0745	.0765	.0790	.0789	.0816	.1005	.0954	.0812	.0934	94	RF	.6182	.6345	.6194	.6434	.6752	.6676	.6698	.6688	.6685
45	FL	.0774	.0769	.0803	.0789	.0800	.1002	.0993	.0836	.0835	95	RF	.6314	.6265	.6018	.6022	.6008	.6081	.6145	.6031	.6037
46	FL	.0721	.0717	.0832	.0797	.0778	.0952	.1042	.0841	.0687	96	RF	.6796	.7006	.6899	.6969	.7246	.7313	.7359	.7256	.7281
47	FL	.0886	.0906	.1466	.1452	.1402	.1311	.1599	.1284	.0938	97	RF									
48	FL	.0736	.0767	.1305	.1558	.1714	.1430	.1771	.1521	.1125	98	RF									
49	FL	.0778	.0999	.1706	.2201	.2507	.2139	.2412	.2293	.1984	99	RF									
50	FL	.0963	.1547	.2320	.2670	.2858	.2703	.2833	.2733	.2632	100	RF									

Table IV. Continued

(a) Concluded

		C_p for Z_s/d =										C_p for Z_s/d =								
ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.1953	-.1864	-.1190	-.1285	.2153	.2263	.2188	.2134	.2187	149	ST	-.1193	-.1190	-.1064	-.0908	-.0202	-.0022	.0000	-.0007	-.0059
102	ST	-.1933	-.1789	-.2293	-.1838	.0184	.1454	.1452	.1431	.1416	150	ST	-.1649	-.1621	-.1483	-.1406	-.0779	-.0190	-.0170	-.0137	-.0183
103	ST	-.1925	-.1974	-.2366	-.1981	-.1374	.0958	.0943	.0940	.0912	151	ST	-.0812	-.1130	-.1166	-.1316	-.1248	-.0053	.0169	.0175	.0258
104	ST	-.1909	-.2047	-.2496	-.2215	-.2259	.0454	.0443	.0444	.0363	152	ST	.0280	-.0381	-.0798	-.0857	-.1017	-.0637	.0205	.0252	.0306
105	ST	-.1819	-.2025	-.2214	-.2768	-.2643	.0147	.0057	.0043	-.0026	153	ST	.1109	.1074	.0217	-.0225	-.0742	-.1029	-.0395	.0217	.0216
106	ST	-.1658	-.1798	-.2284	-.2975	-.2715	-.0582	-.0346	-.0309	-.0337	154	ST									
107	ST	-.1389	-.1430	-.1870	-.2611	-.2460	-.0906	-.0194	-.0115	-.0154	155	ST	.1036	.1109	.1107	.1093	.1078	-.0331	-.0619	-.0208	.0286
108	ST	-.1123	-.1198	-.1412	-.2171	-.2240	-.1227	-.0084	-.0054	-.0024	156	ST	.0972	.1054	.1078	.1053	.1089	.0824	-.0256	-.0391	.0337
109	ST	-.0808	-.0899	-.0923	-.1644	-.1911	-.1454	.0044	.0021	.0152	157	ST	.0851	.0906	.0938	.0927	.0968	.0921	.0645	-.0532	.0134
110	ST	-.0502	-.0630	-.0556	-.1413	-.1389	-.1606	.0236	.0094	.0194	158	ST	.0714	.0723	.0744	.0747	.0741	.0897	.0835	-.0256	-.0148
111	ST	-.0220	-.0381	-.0542	-.1012	-.1222	-.1736	.0002	.0120	.0211	159	ST	.0624	.0653	.0684	.0643	.0650	.0784	.0756	.0854	-.0273
112	ST	.0142	-.0044	-.0320	-.0346	-.1147	-.1730	-.0271	.0222	.0256	160	ST	.2536	.2202	.1512	.0852	.0606	.0654	.0654	.0812	-.0328
113	ST	.0486	.0238	-.0117	.0284	-.1248	-.1668	-.0566	.0246	.0233	161	ST	-.1929	-.2274	-.2639	-.2783	-.2766	.0092	.0015	.0006	-.0013
114	ST	.0717	.0501	.0167	.0515	-.1361	-.1373	-.0798	.0213	.0209	162	ST	-.2129	-.2730	-.3119	-.2779	-.2770	-.0099	-.0121	-.0111	-.0103
115	ST	.1047	.0847	.0482	.0346	-.1262	-.0749	-.0895	.0303	.0302	163	ST	-.2218	-.2809	-.3020	-.2527	-.2096	.0092	.0081	.0109	.0132
116	ST	.1236	.1065	.0871	.0652	-.1041	-.0553	-.1038	.0294	.0284	164	ST	-.2473	-.2739	-.2467	-.2140	-.1317	.0141	.0152	.0184	.0205
117	ST	.1397	.1250	.1186	.0954	.0487	-.0436	-.1126	.0365	.0313	165	ST	-.2396	-.2296	-.1969	-.1853	-.0898	-.0013	-.0007	.0026	.0018
118	ST	.1494	.1305	.1532	.1699	.1029	-.0421	-.1199	.0294	.0286	166	ST	-.1830	-.1725	-.1481	-.1360	-.0502	-.0033	-.0029	.0001	-.0051
119	ST	.1551	.1411	.1548	.1851	.1102	-.0439	-.1208	.0054	.0275	167	ST	-.1306	-.1280	-.1124	-.0976	-.0226	.0017	.0024	.0041	-.0026
120	ST	.1589	.1464	.1026	.1829	.2270	-.0439	-.1053	-.0131	.0291	168	ST	-.0515	-.0550	-.0719	-.1741	-.1334	-.1743	.0099	.0178	.0280
121	ST	.1618	.1512	.1341	.1289	.2157	-.0388	-.0573	-.0287	.0348	169	ST	-.0678	-.1192	-.1205	-.1904	-.1647	-.1688	.0174	.0197	.0262
122	ST	.1571	.1470	.1519	.1240	.2307	-.0377	-.0419	-.0455	.0306	170	ST	-.0557	-.0894	-.1201	-.2283	-.1925	-.1406	.0231	.0189	.0211
123	ST	.1573	.1477	.1497	.1551	.1657	-.0267	-.0240	-.0534	.0357	171	ST	-.0517	-.0980	-.1765	-.2428	-.1947	-.0987	.0233	.0224	.0244
124	ST	.1540	.1448	.1415	.1383	.1340	.0000	-.0210	-.0593	.0366	172	ST	-.0583	-.1434	-.1961	-.1774	-.2114	-.0615	.0167	.0195	.0211
125	ST	.1523	.1437	.1415	.1392	.1551	.0822	-.0190	-.0620	.0394	173	ST	-.0777	-.1397	-.1511	-.1360	-.1691	-.0289	.0167	.0204	.0225
126	ST	.1430	.1351	.1338	.1388	.1745	.1271	-.0251	-.0728	.0326	174	ST	-.0852	-.1236	-.1269	-.1265	-.1380	-.0137	.0141	.0169	.0218
127	ST	.1294	.1234	.1175	.1377	.1292	.1498	-.0335	-.0842	.0322	175	ST	.1280	.1303	.1415	.1531	.1318	-.0384	-.0309	-.0521	.0337
128	ST	.1375	.1327	.1263	.1417	.1466	.1494	-.0128	-.0739	.0452	176	ST	.1047	.1087	.0957	.1110	.0778	-.0384	-.0377	-.0386	.0381
129	ST	.1243	.1228	.1118	.1198	.1518	.1317	.0370	-.0809	.0207	177	ST	.1007	.1010	.1012	.0919	.0485	-.0597	-.0760	-.0371	.0260
130	ST	.1199	.1190	.1136	.1084	.1347	.1218	.0949	-.0785	.0077	178	ST	.1104	.1155	.1116	.1016	.0745	-.0586	-.0904	-.0146	.0308
131	ST	.1151	.1153	.1122	.1049	.1426	.1168	.1062	-.0699	-.0022	179	ST	.1080	.1140	.1076	.0892	.0789	-.0606	-.0956	-.0038	.0247
132	ST	.1100	.1100	.1120	.0996	.1325	.1121	.1016	-.0450	-.0134	180	ST	.1142	.1199	.1109	.0963	.0789	-.0494	-.0793	.0105	.0282
133	ST	.1060	.1069	.1041	.1013	.1164	.1099	.0974	-.0208	-.0231	181	ST	.1170	.1234	.1083	.1011	.0794	-.0450	-.0672	.0180	.0291
134	ST	.1071	.1076	.0990	.1062	.1012	.1161	.1227	-.0115	-.0271	182	ST	.0919	.0926	.0940	.1009	.0926	.1097	.1060	-.0129	-.0337
135	ST	.0974	.0983	.0955	.1022	.0904	.1093	.1121	-.0133	-.0355	183	ST	.0829	.0847	.0871	.0938	.0941	.1011	.0956	-.0131	-.0277
136	ST	.0985	.0963	.0933	.0956	.0860	.1130	.0993	.0008	-.0368	184	ST									
137	ST	.0895	.0924	.0874	.0848	.0754	.1066	.0916	.0834	-.0432	185	ST	.0838	.0884	.0935	.0967	.0950	.0903	.0745	-.0391	-.0103
138	ST	.0855	.0862	.0830	.0833	.0712	.0974	.0921	.1191	-.0460	186	ST	.0818	.0877	.0922	.0927	.0899	.0890	.0667	-.0602	-.0007
139	ST										187	ST	.0796	.0864	.0900	.0877	.0893	.0857	.0610	-.0640	.0022
140	ST	.0776	.0792	.0779	.0716	.0825	.0819	.0855	.1356	-.0482	188	ST	.0833	.0895	.0929	.0910	.0941	.0888	.0628	-.0565	.0104
141	ST	.0785	.0769	.0757	.0654	.0813	.0785	.0822	.1259	-.0509	189	ST	.3864	.3885	.4254	.4360	.1034	.0745	.0599	.0726	-.0324
142	ST	.0836	.0798	.0799	.0659	.0688	.0760	.0764	.1118	-.0520	190	ST	.3395	.3385	.3754	.3772	.0886	.0725	.0590	.0724	-.0458
143	ST	.1776	.1446	.1380	.0480	.0459	.0537	.0493	.0825	-.0643	191	ST	.2922	.2870	.2994	.2886	.0767	.0740	.0619	.0735	-.0546
144	ST	.3400	.3431	.3785	.1892	.0670	.0740	.0628	.0836	-.0487	192	ST	.2684	.2632	.2508	.2230	.0692	.0722	.0639	.0733	-.0559
145	ST	.4058	.4099	.4432	.4572	.1021	.0745	.0592	.0720	-.0297	193	ST	.2653	.2565	.2215	.1734	.0617	.0654	.0626	.0722	-.0515
146	ST	.4516	.4485	.4492	.5383	.2922	.0738	.0566	.0680	-.0121	194	ST	.2587	.2385	.1856	.1168	.0648	.0694	.0685	.0792	-.0392
147	ST	.0706	.1063	.1248	.1881	.2206	.2205	.2181	.2143	.2176	195	ST	.2545	.2259	.1594	.0923	.0615	.0656	.0654	.0794	-.0341
148	ST	-.0158	-.0158	-.0036	.0286	.0906	.0903	.0894	.0869	.0835	196	ST	.4256	.4090	.3507	.2996	.2737	.1174	-.0346	-.0278	-.0777

Table IV. Continued

(b) $M = 2.00$

		C_p for Z_s/d =											C_p for Z_s/d =								
ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.2032	-.2048	-.1738	-.1785	-.1599	-.1489	-.1761	-.1785	-.1791	51	FL	.2294	.1798	.1279	.1008	.1151	.1388	.1344	.0850	.1317
2	FL	-.2037	-.2097	-.1754	-.1810	-.1628	-.1520	-.1776	-.1803	-.1817	52	FL	.3053	.2990	.2569	.2266	.2534	.2546	.2776	.2320	.2167
3	FL	-.1961	-.2001	-.1738	-.1792	-.1599	-.1496	-.1745	-.1769	-.1777	53	FL	.3401	.3386	.3150	.3202	.3507	.3535	.3576	.3376	.3429
4	FL	-.1834	-.1892	-.1703	-.1747	-.1614	-.1516	-.1734	-.1752	-.1757	54	FL	.3657	.3571	.3525	.3687	.3979	.4025	.3957	.3873	.4099
5	FL	-.1598	-.1674	-.1587	-.1567	-.1545	-.1454	-.1618	-.1634	-.1637	55	FL	.3897	.3781	.3977	.4106	.4371	.4415	.4291	.4267	.4538
6	FL	-.1288	-.1395	-.1311	-.1302	-.1385	-.1322	-.1429	-.1435	-.1439	56	FL	.4071	.4028	.4378	.4431	.4672	.4729	.4576	.4583	.4869
7	FL	-.0970	-.1119	-.1079	-.1039	-.1173	-.1177	-.1225	-.1226	-.1232	57	FL	.4276	.4340	.4747	.4752	.4999	.5057	.4901	.4918	.5223
8	FL	-.0678	-.0861	-.0881	-.0810	-.0948	-.1033	-.1030	-.1025	-.1029	58	FL	.4370	.4500	.4917	.4921	.5197	.5294	.5097	.5122	.5464
9	FL	-.0348	-.0533	-.0636	-.0545	-.0652	-.0812	-.0767	-.0758	-.0764	59	FL	.4423	.4656	.5101	.4872	.5088	.5176	.5003	.5018	.5297
10	FL	-.0264	-.0500	-.0694	-.0509	-.0610	-.0848	-.0781	-.0769	-.0769	60	FL	.4775	.4954	.5023	.4567	.4716	.4802	.4645	.4655	.4865
11	FL	.0309	.0108	-.0271	-.0213	-.0305	-.0569	-.0460	-.0440	-.0446	61	FL	.5105	.5030	.4917	.4435	.4634	.4715	.4620	.4595	.4787
12	FL	.0650	.0511	.0059	.0159	-.0080	-.0443	-.0251	-.0226	-.0228	62	FL	.4523	.4683	.5008	.5066	.5384	.5512	.5306	.5316	.5700
13	FL	-.0039	-.0208	-.0404	-.0306	-.0389	-.0583	-.0513	-.0502	-.0506	63	FL	.4688	.4854	.5117	.5197	.5520	.5704	.5413	.5454	.5884
14	FL	.0235	.0099	-.0195	-.0104	-.0193	-.0358	-.0282	-.0275	-.0277	64	FL	.4777	.4854	.5023	.5003	.5104	.5328	.4868	.4964	.5413
15	FL	.0549	.0453	.0061	.0135	.0009	-.0071	-.0010	-.0010	-.0012	65	FL	.4909	.4910	.4917	.4638	.4398	.4479	.4133	.4240	.4449
16	FL	.0737	.0700	.0217	.0273	.0103	.0132	.0170	.0160	.0155	66	FL	.5013	.4917	.4957	.4765	.4723	.4706	.4574	.4657	.4743
17	FL	.0908	.0912	.0389	.0422	.0221	.0344	.0366	.0336	.0333	67	FL	.6011	.5747	.6262	.6262	.7286	.7461	.7558	.7403	.7881
18	FL	.1135	.1148	.0573	.0593	.0394	.0560	.0598	.0532	.0529	68	FL	.5477	.5313	.5799	.6110	.7132	.7327	.7346	.7241	.7638
19	FL	.1238	.1415	.0703	.0703	.0530	.0693	.0794	.0674	.0669	69	FL	.5996	.5634	.5522	.5732	.6215	.6374	.6311	.6238	.6543
20	FL	.1289	.1640	.0854	.0847	.0664	.0834	.1043	.0843	.0840	70	FL	.6350	.6133	.6335	.6725	.7435	.7650	.7563	.7490	.7843
21	FL	.1258	.1545	.0934	.0903	.0728	.0869	.1215	.0926	.0925	71	SW	-.1997	-.2059	-.1734	-.1785	-.1610	-.1498	-.1750	-.1776	-.1780
22	FL	.1169	.1222	.0919	.0863	.0713	.0805	.1246	.0904	.0901	72	SW	.0373	.0141	-.0231	-.0215	-.0082	-.0594	-.0484	-.0473	-.0471
23	FL	.1227	.1244	.1041	.0970	.0831	.0891	.1371	.1011	.1005	73	SW	.1051	.1170	.0843	.0395	-.0209	.0809	.0763	.0672	.0671
24	FL	.1186	.1248	.1108	.1043	.0831	.0903	.1389	.1046	.1041	74	SW	.1155	.1021	.1224	.1371	.1452	.0976	.1161	.1244	.1243
25	FL	.1113	.1206	.1155	.1108	.0809	.0876	.1391	.1048	.1043	75	SW	.0924	.0934	.1030	.0979	.1327	.0936	.1157	.1313	.1128
26	FL	.1062	.1186	.1199	.1233	.0831	.0856	.1380	.1073	.1067	76	SW	.0656	.0642	.1041	.1769	.2271	.2281	.2427	.2253	.2481
27	FL	.0979	.1057	.1146	.1311	.0875	.0793	.1320	.1048	.1043	77	SW									
28	FL	.0899	.0961	.1057	.1297	.0982	.0747	.1193	.1031	.1021	78	SW	.5483	.5692	.6240	.6714	.7511	.7742	.7627	.7568	.7914
29	FL	.0765	.0923	.1046	.1375	.1160	.0776	.1188	.1100	.1096	79	SW									
30	FL	.0968	.1006	.1059	.1271	.1272	.0782	.1019	.1084	.1081	80	SW									
31	FL	.1124	.0979	.1177	.1291	.1408	.0934	.1124	.1191	.1188	81	SW									
32	FL	.0814	.0874	.0957	.1197	.1107	.0655	.1003	.1028	.0970	82	SW									
33	FL	.0884	.0874	.0990	.1124	.1338	.0691	.0961	.1309	.0998	83	SW									
34	FL	.0908	.0854	.1001	.1017	.1367	.0722	.0921	.1425	.1001	84	SW									
35	FL	.0870	.0865	.0939	.0934	.1285	.0751	.0867	.1400	.0987	85	SW									
36	FL	.0848	.0803	.0870	.0887	.1245	.0753	.0807	.1351	.0976	86	SW									
37	FL	.0866	.0792	.0874	.0941	.1232	.0798	.0801	.1338	.1016	87	RF	.5575	.5892	.7199	.7957	1.0691	1.1026	1.1627	1.1217	1.2122
38	FL	.0770	.0700	.0767	.0941	.1036	.0713	.0687	.1227	.0934	88	RF	.5898	.7028	1.0084	1.0625	1.3401	1.3703	1.3685	1.3623	1.4307
39	FL	.0808	.0761	.0801	.0983	.1004	.0811	.0740	.1253	.0967	89	RF	1.1005	1.0235	1.0516	1.0273	1.0201	1.0463	1.0451	1.0553	1.0797
40	FL	.0777	.0749	.0761	.0892	.0958	.0854	.0754	.1180	.0938	90	RF	.9446	.8329	.6277	.6360	.6489	.6731	.6520	.6495	.6790
41	FL	.0739	.0718	.0720	.0792	.0935	.0898	.0759	.1068	.0916	91	RF	.6722	.6605	.6801	.7277	.9192	1.0082	1.0536	1.0544	1.1147
42	FL	.0688	.0683	.0683	.0676	.0864	.0874	.0756	.0913	.0865	92	RF	.6134	.5977	.6257	.6115	.6830	.7062	.7077	.6980	.7403
43	FL	.0699	.0680	.0729	.0614	.0833	.0878	.0776	.0799	.0858	93	RF	.6096	.5941	.6380	.6251	.7043	.7198	.7260	.7145	.7554
44	FL	.0656	.0629	.0729	.0582	.0777	.0842	.0732	.0696	.0805	94	RF	.5517	.5480	.5950	.6144	.6970	.7169	.7113	.7045	.7382
45	FL	.0676	.0634	.0752	.0669	.0842	.0876	.0756	.0676	.0820	95	RF	.6000	.5591	.5616	.5683	.5999	.6158	.6041	.5991	.6258
46	FL	.0636	.0569	.0654	.0674	.0833	.0862	.0691	.0596	.0811	96	RF	.6136	.6124	.6585	.7015	.7613	.7851	.7665	.7624	.7963
47	FL	.1124	.0758	.0729	.0785	.0895	.1074	.0803	.0636	.1212	97	RF									
48	FL	.0696	.0669	.0618	.0736	.1031	.1152	.1101	.0759	.1359	98	RF									
49	FL	.0625	.0627	.0749	.1155	.1773	.1769	.2028	.1636	.2040	99	RF									
50	FL	.0650	.0645	.1066	.1839	.2338	.2348	.2480	.2298	.2497	100	RF									

Table IV. Continued

(b) Concluded

ORF	LOC	C_p for Z_s/l = -.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.2006	-.2135	-.1816	-.0756	.1909	.1887	.1892	.1879	.1898
102	ST	-.2048	-.2199	-.2057	-.1941	.1176	.1197	.1219	.1198	.1181
103	ST	-.2057	-.2235	-.2206	-.2197	-.0169	.0836	.0843	.0866	.0854
104	ST	-.2019	-.2242	-.2324	-.2251	-.1271	.0368	.0375	.0396	.0400
105	ST	-.1899	-.2150	-.2309	-.2320	-.2010	-.0028	-.0039	.0017	-.0012
106	ST	-.1694	-.1979	-.2255	-.2346	-.2213	-.0338	-.0322	-.0359	-.0310
107	ST	-.1440	-.1371	-.1999	-.2202	-.2182	-.0218	-.0211	-.0195	-.0206
108	ST	-.1155	-.1023	-.1783	-.2117	-.2142	-.0189	-.0157	-.0119	-.0123
109	ST	-.0800	-.0807	-.1516	-.2064	-.2008	-.0436	-.0068	-.0030	-.0003
110	ST	-.0411	-.0623	-.0963	-.1977	-.1924	-.0703	-.0006	.0028	.0066
111	ST	-.0016	-.0407	-.0262	-.1785	-.1872	-.0948	-.0068	.0022	.0055
112	ST	.0416	-.0064	.0244	-.1678	-.1683	-.1075	.0059	.0084	.0126
113	ST	.0728	.0302	.0360	-.1061	-.1309	-.1211	.0072	.0086	.0126
114	ST	.0962	.0720	.0393	.0119	-.0993	-.1295	.0137	.0059	.0108
115	ST	.1242	.1039	.0504	.0796	-.0841	-.1338	.0046	.0128	.0186
116	ST	.1405	.1362	.0656	.1010	-.0797	-.1353	-.0175	.0131	.0182
117	ST	.1498	.1573	.0957	.1531	-.0674	-.1342	-.0337	.0166	.0175
118	ST	.1460	.1687	.0894	.1651	-.0755	-.1351	-.0513	.0173	.0168
119	ST	.1432	.1444	.1068	.1293	-.0748	-.1229	-.0652	.0197	.0137
120	ST	.1449	.1311	.1055	.1741	-.0216	-.1042	-.0734	.0202	.0170
121	ST	.1445	.1478	.1121	.1783	.2055	-.0665	-.0778	.0240	.0204
122	ST	.1345	.1511	.1108	.1442	.1376	-.0463	-.0885	.0197	.0179
123	ST	.1329	.1451	.0959	.1268	.1267	-.0333	-.0890	.0262	.0233
124	ST	.1240	.1344	.0912	.1019	.1708	-.0267	-.0894	.0267	.0244
125	ST	.1191	.1282	.1202	.0883	.1483	-.0209	-.0899	.0148	.0279
126	ST	.1075	.1195	.1259	.0921	.1127	-.0186	-.0921	-.0036	.0239
127	ST	.0937	.1034	.0970	.0992	.0840	.0041	-.0972	-.0235	.0126
128	ST	.1095	.1128	.1001	.1529	.0933	.1190	-.0870	-.0203	.0251
129	ST	.1022	.1001	.0876	.1482	.0773	.1479	-.0865	-.0371	.0208
130	ST	.0997	.0994	.0818	.1251	.0699	.1386	-.0832	-.0448	.0217
131	ST	.0977	.0999	.0807	.0981	.0782	.1295	-.0743	-.0515	.0242
132	ST	.0953	.0932	.0818	.0827	.1227	.1246	-.0560	-.0564	.0251
133	ST	.0917	.0867	.0787	.0683	.1508	.1125	-.0121	-.0593	.0237
134	ST	.0919	.0892	.0796	.0714	.1517	.1030	.1001	-.0620	.0262
135	ST	.0848	.0876	.0736	.0709	.1205	.0865	.1406	-.0649	.0206
136	ST	.0839	.0890	.0720	.0740	.1071	.0796	.1565	-.0636	.0262
137	ST	.0790	.0821	.0658	.0761	.0944	.0698	.1482	-.0671	.0222
138	ST	.0772	.0772	.0671	.0729	.0929	.0638	.1422	-.0649	.0135
139	ST									
140	ST	.0734	.0707	.0776	.0578	.0935	.0533	.1190	-.0662	-.0048
141	ST	.0705	.0718	.0705	.0582	.0840	.0557	.1077	-.0638	-.0119
142	ST	.0843	.0689	.0600	.0600	.0746	.0609	.0936	-.0580	-.0177
143	ST	.1984	.0507	.0384	.0464	.0457	.0473	.0582	-.0573	-.0359
144	ST	.3599	.1781	.0725	.0676	.0548	.0597	.0607	.0398	-.0299
145	ST	.3855	.4491	.2471	.0631	.0526	.0548	.0511	.0839	-.0344
146	ST	.4080	.4770	.4605	.1097	.0501	.0555	.0440	.0928	-.0368
147	ST	.0594	.1083	.1409	.1865	.1866	.1887	.1872	.1866	.1887
148	ST	.0017	.0052	.0213	.0598	.0766	.0785	.0785	.0788	.0785

ORF	LOC	C_p for Z_s/l = -.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
149	ST	-.0863	-.0850	-.0729	-.0433	-.0042	-.0028	-.0037	-.0023	-.0021
150	ST	-.1295	-.1282	-.1155	-.0901	-.0300	-.0247	-.0235	-.0215	-.0212
151	ST	-.1326	-.1373	-.1286	-.1130	-.0646	.0007	.0019	.0059	.0075
152	ST	.0037	-.0199	-.0903	-.1191	-.0959	-.0077	.0130	.0148	.0164
153	ST	.0712	.0522	-.0391	-.0725	-.1055	-.0543	.0090	.0075	.0088
154	ST									
155	ST	.0763	.0781	.0769	.0680	.0544	-.0739	-.0413	.0177	.0161
156	ST	.0754	.0696	.0905	.0908	.0693	-.0336	-.0587	.0057	.0206
157	ST	.0739	.0703	.0761	.0890	.0731	.0633	-.0605	-.0152	.0226
158	ST	.0610	.0593	.0645	.0678	.0780	.0644	.0255	-.0368	.0182
159	ST	.0565	.0558	.0596	.0620	.0722	.0533	.0718	-.0428	.0159
160	ST	.0915	.0480	.0484	.0542	.0606	.0422	.0647	-.0457	.0010
161	ST	-.2150	-.2645	-.2698	-.2569	-.1919	-.0057	-.0068	-.0025	-.0028
162	ST	-.2271	-.2694	-.2765	-.2745	-.1761	-.0173	-.0159	-.0134	-.0128
163	ST	-.2063	-.2536	-.2518	-.2422	-.1049	.0065	.0083	.0104	.0108
164	ST	-.1983	-.2265	-.2039	-.1714	-.0392	.0168	.0186	.0204	.0202
165	ST	-.1985	-.1948	-.1674	-.1235	-.0234	-.0015	.0003	.0026	.0026
166	ST	-.1424	-.1384	-.1159	-.0772	-.0062	-.0017	-.0006	.0010	.0019
167	ST	-.0965	-.0934	-.0790	-.0460	.0002	.0016	.0014	.0028	.0032
168	ST	-.0727	-.0974	-.1698	-.2246	-.2160	-.0877	.0010	.0057	.0090
169	ST	-.0943	-.1369	-.1696	-.2242	-.2309	-.0728	.0010	.0059	.0088
170	ST	-.0736	-.1077	-.1707	-.2228	-.2367	-.0456	.0014	.0053	.0081
171	ST	-.0716	-.0997	-.1794	-.2373	-.1968	-.0180	.0030	.0059	.0086
172	ST	-.0783	-.1030	-.1658	-.2026	-.1412	-.0055	.0001	.0030	.0059
173	ST	-.0916	-.1409	-.1620	-.1538	-.0955	.0003	.0014	.0044	.0075
174	ST	-.1206	-.1449	-.1362	-.1222	-.0726	-.0015	-.0003	.0039	.0059
175	ST	.0957	.0859	.0736	.1324	.0368	-.0538	-.0970	.0242	.0210
176	ST	.0614	.0344	.0413	-.0010	.0454	-.0616	-.0923	.0249	.0253
177	ST	.0732	.0622	.0520	.0193	.0287	-.1133	-.0921	.0160	.0168
178	ST	.0843	.0794	.0680	.0520	.0341	-.1218	-.0660	.0200	.0224
179	ST	.0821	.0772	.0680	.0344	-.0091	-.1115	-.0458	.0171	.0199
180	ST	.0839	.0778	.0801	.0433	-.0623	-.0870	-.0231	.0209	.0226
181	ST	.0821	.0792	.0845	.0424	-.0590	-.0728	-.0128	.0218	.0213
182	ST	.0786	.0714	.0714	.0691	.1192	.0900	.0901	-.0676	.0224
183	ST	.0688	.0587	.0703	.0651	.0858	.0675	.0576	-.0662	.0259
184	ST									
185	ST	.0761	.0709	.0778	.0763	.0880	.0413	-.0061	-.0482	.0259
186	ST	.0745	.0689	.0781	.0845	.0777	.0497	-.0712	-.0284	.0248
187	ST	.0714	.0665	.0747	.0823	.0695	.0513	-.0683	-.0217	.0195
188	ST	.0734	.0689	.0761	.0861	.0702	.0575	-.0611	-.0150	.0206
189	ST	.3525	.3957	.2128	.0605	.0544	.0575	.0527	.0728	-.0313
190	ST	.2668	.2723	.1440	.0544	.0561	.0573	.0562	.0478	-.0288
191	ST	.1915	.1774	.1006	.0540	.0599	.0575	.0625	.0229	-.0228
192	ST	.1766	.1447	.0794	.0560	.0621	.0573	.0678	-.0357	-.0161
193	ST	.1625	.1077	.0600	.0573	.0532	.0450	.0413	-.0651	-.0074
194	ST	.1338	.0725	.0560	.0607	.0637	.0479	.0558	-.0591	.0028
195	ST	.1046	.0553	.0524	.0576	.0633	.0464	.0631	-.0500	.0057
196	ST	.3454	.2814	.2645	.2231	.1661	-.0518	-.0709	-.0669	-.1370

Table IV. Continued

(c) $M = 2.65$

		C_p for Z_s/d =											C_p for Z_s/d =							
ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.1475	-.1472	-.1444	-.1344	-.1197	-.1382	-.1394	-.1398	-.1398	51	FL	.2335	.2654	.2819	.1926	.1184	.1734	.0890	.1025	.1448
2	FL	-.1523	-.1533	-.1500	-.1387	-.1246	-.1453	-.1461	-.1464	-.1464	52	FL	.2575	.2745	.2920	.2439	.2094	.2652	.2145	.1752	.2589
3	FL	-.1338	-.1336	-.1328	-.1306	-.1192	-.1327	-.1326	-.1335	-.1329	53	FL	.2719	.2725	.2927	.2768	.2890	.3084	.2949	.2974	.3182
4	FL	-.1184	-.1217	-.1201	-.1253	-.1185	-.1263	-.1260	-.1261	-.1256	54	FL	.2775	.2682	.2940	.3046	.3335	.3365	.3285	.3569	.3497
5	FL	-.1004	-.1027	-.0976	-.1058	-.1076	-.1097	-.1090	-.1091	-.1088	55	FL	.2897	.2776	.3049	.3357	.3727	.3633	.3577	.3952	.3791
6	FL	-.0923	-.0882	-.0784	-.0831	-.0955	-.0925	-.0920	-.0922	-.0918	56	FL	.3203	.2870	.3160	.3587	.4026	.3830	.3800	.4236	.4022
7	FL	-.0850	-.0796	-.0639	-.0626	-.0833	-.0763	-.0755	-.0757	-.0751	57	FL	.3780	.3070	.3380	.3822	.4319	.4060	.4061	.4535	.4270
8	FL	-.0751	-.0753	-.0553	-.0494	-.0722	-.0629	-.0618	-.0620	-.0617	58	FL	.3937	.3156	.3527	.3928	.4435	.4156	.4183	.4662	.4362
9	FL	-.0546	-.0611	-.0427	-.0348	-.0520	-.0442	-.0435	-.0438	-.0434	59	FL	.3901	.3232	.3773	.4078	.4501	.4242	.4272	.4682	.4448
10	FL	-.0695	-.0627	-.0485	-.0408	-.0588	-.0508	-.0501	-.0504	-.0497	60	FL	.4119	.3604	.4132	.4237	.4278	.4083	.4140	.4398	.4227
11	FL	-.0004	-.0108	-.0131	-.0148	-.0396	-.0267	-.0260	-.0263	-.0262	61	FL	.4474	.4158	.4408	.4202	.4268	.4121	.4148	.4426	.4281
12	FL	-.0007	-.0110	-.0148	-.0059	-.0353	-.0227	-.0222	-.0230	-.0224	62	FL	.3765	.3356	.3702	.3992	.4478	.4095	.4183	.4689	.4349
13	FL	-.0369	-.0480	-.0331	-.0267	-.0333	-.0293	-.0285	-.0288	-.0287	63	FL	.3856	.3723	.3942	.4110	.4390	.3848	.4016	.4472	.4098
14	FL	-.0202	-.0328	-.0234	-.0203	-.0148	-.0149	-.0148	-.0151	-.0150	64	FL	.4182	.3956	.3963	.4050	.3947	.3375	.3523	.3830	.3548
15	FL	-.0050	-.0209	-.0153	-.0133	.0003	-.0020	-.0026	-.0030	-.0028	65	FL	.4547	.4219	.4084	.4047	.3866	.3441	.3495	.3706	.3510
16	FL	.0039	-.0133	-.0133	-.0082	.0054	.0043	.0030	.0026	.0028	66	FL	.4868	.4576	.4684	.4123	.4450	.4272	.4214	.4555	.4374
17	FL	.0216	.0077	-.0067	.0011	.0125	.0175	.0134	.0130	.0132	67	FL	.6364	.6054	.6707	.5501	.7059	.7232	.6948	.7873	.7613
18	FL	.0467	.0295	.0115	.0166	.0175	.0334	.0238	.0234	.0230	68	FL	.5116	.4887	.5687	.5299	.6612	.6608	.6379	.7176	.6949
19	FL	.0629	.0487	.0287	.0292	.0206	.0544	.0327	.0320	.0322	69	FL	.5294	.5039	.5699	.5370	.5795	.5518	.5371	.5941	.5823
20	FL	.0702	.0670	.0441	.0424	.0274	.0761	.0423	.0419	.0421	70	FL	.6119	.5672	.6517	.6530	.6801	.6560	.6316	.7046	.6867
21	FL	.0669	.0783	.0576	.0474	.0299	.0827	.0454	.0449	.0446	71	SW	-.1503	-.1513	-.1475	-.1359	-.1210	-.1412	-.1422	-.1423	-.1428
22	FL	.0629	.0826	.0644	.0505	.0317	.0789	.0461	.0460	.0459	72	SW	-.0166	-.0333	-.0371	-.0277	-.0497	-.0525	-.0526	-.0534	-.0533
23	FL	.0775	.1001	.0809	.0611	.0428	.0840	.0560	.0556	.0558	73	SW	.0530	.0340	-.0381	-.0292	.0251	.0076	.0058	.0052	.0043
24	FL	.0748	.1014	.0831	.0542	.0403	.0774	.0558	.0553	.0550	74	SW	.0727	.0604	.0543	.0540	-.0037	.0516	.0431	.0432	.0426
25	FL	.0727	.0913	.0816	.0527	.0481	.0741	.0606	.0601	.0601	75	SW	.0699	.0621	.0606	.0960	.0663	.0741	.0997	.0804	.0804
26	FL	.0705	.0811	.0712	.0550	.0504	.0680	.0611	.0604	.0606	76	SW	.0550	.0594	.0922	.1139	.1995	.1803	.1749	.1960	.2188
27	FL	.0672	.0789	.0593	.0520	.0499	.0630	.0609	.0594	.0593	77	SW									
28	FL	.0634	.0730	.0472	.0424	.0443	.0594	.0687	.0566	.0565	78	SW	.5392	.5001	.5474	.5924	.6789	.6588	.6331	.7105	.6916
29	FL	.0312	.0538	.0634	.0459	.0375	.0617	.0591	.0543	.0542	79	SW									
30	FL	.0565	.0751	.0965	.0163	-.0004	.0567	.0329	.0325	.0312	80	SW									
31	FL	.0667	.0583	.0664	.0505	-.0057	.0562	.0421	.0419	.0411	81	SW									
32	FL	.0608	.0528	.0416	.0343	.0362	.0584	.0908	.0513	.0512	82	SW									
33	FL	.0603	.0414	.0510	.0459	.0329	.0670	.0903	.0515	.0514	83	SW									
34	FL	.0530	.0386	.0535	.0474	.0274	.0713	.0855	.0503	.0497	84	SW									
35	FL	.0456	.0429	.0467	.0474	.0211	.0680	.0789	.0477	.0474	85	SW									
36	FL	.0429	.0508	.0421	.0568	.0160	.0615	.0708	.0462	.0454	86	SW									
37	FL	.0449	.0586	.0462	.0704	.0183	.0597	.0665	.0487	.0479	87	RF	.5620	.5366	.5132	.5699	1.1334	1.1587	1.0934	1.2772	1.2198
38	FL	.0381	.0477	.0404	.0661	.0163	.0461	.0560	.0437	.0433	88	RF	.4203	.3958	.4606	.7185	1.2459	1.2540	1.2361	1.4067	1.3781
39	FL	.0421	.0444	.0472	.0699	.0266	.0410	.0581	.0487	.0484	89	RF	.8706	.8095	1.1466	1.3108	1.2545	1.1107	1.1254	1.1981	1.1721
40	FL	.0391	.0348	.0563	.0659	.0327	.0314	.0550	.0480	.0474	90	RF	1.0440	.9201	1.1663	.9160	.6501	.5354	.5458	.5853	.5711
41	FL	.0381	.0313	.0687	.0641	.0448	.0256	.0540	.0495	.0489	91	RF	.5304	.5439	.5492	.5607	.7009	1.0129	.9401	1.0861	1.0639
42	FL	.0353	.0308	.0702	.0608	.0560	.0200	.0550	.0495	.0492	92	RF	.6283	.6032	.6175	.5213	.6154	.6150	.5991	.6740	.6358
43	FL	.0375	.0358	.0715	.0608	.0779	.0195	.0644	.0533	.0525	93	RF	.6245	.5991	.6312	.5461	.6652	.6749	.6491	.7318	.7055
44	FL	.0355	.0361	.0669	.0542	.0825	.0160	.0690	.0518	.0512	94	RF	.5170	.4976	.5593	.5309	.6291	.6249	.6052	.6745	.6495
45	FL	.0444	.0814	.0920	.0575	.0873	.0231	.0769	.0632	.0575	95	RF	.5668	.5561	.5958	.5178	.5429	.5109	.5006	.5483	.5333
46	FL	.0851	.1875	.1836	.0674	.0850	.0284	.0659	.0977	.0583	96	RF	.5924	.5644	.6350	.6310	.6647	.6272	.6115	.6742	.6545
47	FL	.1869	.2530	.2664	.1225	.0946	.0703	.0621	.1025	.0758	97	RF									
48	FL	.1353	.2414	.2287	.0950	.0994	.0764	.0662	.1035	.0900	98	RF									
49	FL	.0499	.0989	.0940	.0851	.1530	.1355	.1231	.1458	.1709	99	RF									
50	FL	.0530	.0581	.0978	.1235	.2028	.1899	.1825	.2028	.2239	100	RF									

Table IV. Concluded

(c) Concluded

ORF	LOC	C_p for Z_s/d = −.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
101	ST	−.1303	−.1318	−.1293	.0492	.1614	.1631	.1637	.1661	.1199
102	ST	−.1346	−.1371	−.1381	−.0982	.1063	.1080	.1094	.1111	.0725
103	ST	−.1333	−.1366	−.1385	−.1260	.0704	.0711	.0758	.0736	.0502
104	ST	−.1331	−.1384	−.1414	−.1362	.0256	.0337	.0337	.0366	.0403
105	ST	−.1295	−.1371	−.1412	−.1402	−.0629	.0000	.0027	.0039	.0078
106	ST	−.1156	−.1275	−.1346	−.1372	−.0975	−.0250	−.0229	−.0222	−.0178
107	ST	−.0941	−.1130	−.1267	−.1319	−.1036	−.0199	−.0176	−.0161	−.0127
108	ST	−.0774	−.0963	−.1214	−.1341	−.1152	−.0174	−.0145	−.0131	−.0097
109	ST	−.0516	−.0589	−.1029	−.1260	−.1139	−.0113	−.0067	−.0068	−.0018
110	ST	−.0290	−.0419	−.0943	−.1225	−.1152	−.0088	−.0031	−.0030	.0002
111	ST	−.0100	−.0333	−.0857	−.1210	−.1167	−.0128	−.0026	−.0025	.0007
112	ST	.0100	−.0161	−.0526	−.1116	−.1152	−.0101	.0022	.0029	.0053
113	ST	.0226	.0019	.0183	−.1008	−.1142	−.0272	.0020	.0014	.0040
114	ST	.0305	.0181	.0859	−.1086	−.1200	−.0366	−.0003	−.0007	.0025
115	ST	.0507	.0330	.1074	−.0894	−.1147	−.0566	.0032	.0046	.0073
116	ST	.0710	.0437	.0915	−.0643	−.1122	−.0642	.0027	.0057	.0073
117	ST	.0737	.0609	.0738	.0009	−.1079	−.0682	.0048	.0072	.0086
118	ST	.0748	.0556	.0687	.1362	−.1172	−.0687	.0025	.0029	.0055
119	ST	.0786	.0568	.0910	.1678	−.1063	−.0755	.0007	.0057	.0071
120	ST	.0927	.0730	.0872	.2128	−.1021	−.0786	.0007	.0072	.0076
121	ST	.1051	.1080	.0816	.2017	−.0770	−.0765	.0053	.0102	.0101
122	ST	.0948	.1158	.0922	.1605	−.0586	−.0818	−.0029	.0054	.0063
123	ST	.0920	.1095	.0857	.1551	−.0361	−.0811	−.0100	.0079	.0086
124	ST	.0965	.0971	.0690	.1852	−.0105	−.0813	−.0191	.0079	.0086
125	ST	.0988	.0900	.0520	.1627	.1255	−.0796	−.0242	.0100	.0104
126	ST	.0915	.0963	.0317	.1187	.2526	−.0821	−.0343	.0064	.0071
127	ST	.0773	.1021	.0188	.0737	.2218	−.0846	−.0455	.0026	.0038
128	ST	.0813	.1115	.0295	.0520	.1975	−.0748	−.0407	.0092	.0104
129	ST	.0694	.0920	.0416	.0249	.1576	−.0667	−.0498	.0039	.0058
130	ST	.0624	.0783	.0492	.0171	.1384	−.0738	−.0524	.0046	.0058
131	ST	.0575	.0647	.0535	.0201	.1159	−.0669	−.0559	.0054	.0055
132	ST	.0568	.0561	.0641	.0279	.0969	−.0462	−.0577	.0046	.0073
133	ST	.0568	.0558	.0791	.0282	.0820	−.0419	−.0590	.0044	.0081
134	ST	.0537	.0606	.0768	.0247	.0668	.0023	−.0590	.0059	.0101
135	ST	.0469	.0634	.0621	.0204	.0486	.0769	−.0600	.0048	.0083
136	ST	.0484	.0659	.0540	.0381	.0420	.1388	−.0574	.0072	.0106
137	ST	.0444	.0632	.0452	.0899	.0324	.1649	−.0607	−.0019	.0078
138	ST	.0497	.0632	.0495	.1534	.0324	.1638	−.0536	−.0027	.0134
139	ST									
140	ST	.0464	.0437	.0583	.0833	.0259	.1277	−.0521	−.0194	.0114
141	ST	.0555	.0426	.0601	.0689	.0254	.1143	−.0549	−.0222	.0114
142	ST	.1626	.1553	.0639	.0616	.0264	.0964	−.0508	−.0250	.0119
143	ST	.3048	.4194	.1444	.0449	.0183	.0723	−.0519	−.0334	.0061
144	ST	.3253	.5042	.3998	.0393	.0246	.0701	−.0252	−.0331	.0101
145	ST	.3061	.3356	.5150	.0391	.0350	.0574	.0403	−.0359	.0104
146	ST	.3041	.2923	.4715	.0773	.0565	.0491	.0720	−.0382	.0124
147	ST	.0398	.1054	.1406	.1577	.1591	.1598	.1619	.1618	.1529
148	ST	.0211	.0313	.0439	.0644	.0638	.0637	.0659	.0652	.0583

ORF	LOC	C_p for Z_s/d = −.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
149	ST	−.0402	−.0381	−.0280	−.0042	−.0019	−.0020	−.0008	−.0012	−.0076
150	ST	−.0721	−.0698	−.0612	−.0375	−.0237	−.0232	−.0199	−.0215	−.0300
151	ST	−.0769	−.0746	−.0680	−.0504	−.0110	−.0027	−.0021	−.0027	−.0102
152	ST	−.0743	−.0756	−.0726	−.0623	−.0308	.0026	.0025	.0049	.0035
153	ST	−.0040	−.0356	−.0693	−.0737	−.0530	−.0040	.0004	.0021	.0010
154	ST									
155	ST	.0398	.0318	.0338	−.0110	−.0621	−.0333	.0035	.0039	.0058
156	ST	.0575	.0426	.0257	.0295	−.0199	−.0434	−.0039	.0059	.0078
157	ST	.0474	.0497	.0381	.0340	.0203	−.0442	−.0156	.0105	.0119
158	ST	.0360	.0353	.0462	.0262	.0226	−.0404	−.0293	.0072	.0081
159	ST	.0406	.0404	.0436	.0580	.0299	.0382	−.0295	.0095	.0144
160	ST	.0996	.0819	.0479	.0565	.0261	.0382	−.0376	.0011	.0142
161	ST	−.1477	−.1515	−.1546	−.1546	−.0485	−.0058	−.0039	−.0019	.0030
162	ST	−.1510	−.1568	−.1606	−.1559	−.0323	−.0106	−.0105	−.0065	.0005
163	ST	−.1356	−.1432	−.1439	−.1253	.0031	.0056	.0093	.0092	.0106
164	ST	−.1260	−.1265	−.1194	−.0770	.0150	.0150	.0202	.0176	.0055
165	ST	−.1219	−.1153	−.0953	−.0484	.0013	.0026	.0073	.0052	−.0061
166	ST	−.0888	−.0799	−.0604	−.0221	−.0012	−.0002	.0032	.0019	−.0064
167	ST	−.0493	−.0447	−.0320	−.0054	.0013	.0021	.0037	.0031	−.0026
168	ST	−.0807	−.0943	−.1239	−.1379	−.1268	−.0055	−.0011	−.0017	.0012
169	ST	−.1090	−.1191	−.1338	−.1432	−.1286	−.0042	−.0001	−.0012	.0017
170	ST	−.1055	−.1148	−.1333	−.1427	−.1117	−.0032	.0004	−.0009	.0022
171	ST	−.1009	−.1093	−.1288	−.1283	−.0836	−.0022	−.0001	−.0009	.0022
172	ST	−.1067	−.1163	−.1227	−.1061	−.0510	−.0045	−.0036	−.0040	−.0036
173	ST	−.1070	−.1057	−.0969	−.0742	−.0260	−.0030	−.0029	−.0035	−.0061
174	ST	−.0842	−.0814	−.0743	−.0550	−.0143	−.0025	−.0026	−.0032	−.0089
175	ST	.0464	.0320	.0482	.0841	−.0975	−.0884	−.0074	.0054	.0071
176	ST	.0249	.0014	.0031	.0029	−.0922	−.0859	−.0003	.0105	.0099
177	ST	.0256	.0120	.0138	−.0198	−.0998	−.0932	−.0013	.0001	.0017
178	ST	.0307	.0308	.0272	−.0343	−.1056	−.0735	−.0008	.0019	.0035
179	ST	.0191	.0199	−.0055	−.0416	−.1033	−.0530	−.0018	.0003	.0020
180	ST	.0224	.0226	−.0007	−.0537	−.0833	−.0323	.0004	.0024	.0043
181	ST	.0289	.0305	.0019	−.0643	−.0646	−.0202	.0025	.0044	.0063
182	ST	.0413	.0437	.0464	.0171	.0557	.0203	−.0607	.0082	.0114
183	ST	.0388	.0383	.0398	.0171	.0509	−.0080	−.0618	.0095	.0137
184	ST									
185	ST	.0464	.0394	.0603	.0269	.0195	−.0472	−.0496	.0107	.0144
186	ST	.0520	.0508	.0652	.0408	.0269	−.0515	−.0222	.0204	.0215
187	ST	.0436	.0447	.0396	.0277	.0072	−.0545	−.0242	.0105	.0119
188	ST	.0441	.0462	.0358	.0307	.0150	−.0510	−.0189	.0087	.0101
189	ST	.2947	.3077	.4231	.0391	.0362	.0592	.0169	−.0331	.0132
190	ST	.2299	.2211	.2426	.0325	.0345	.0602	−.0054	−.0313	.0124
191	ST	.1697	.1454	.1603	.0381	.0284	.0582	−.0374	−.0308	.0114
192	ST	.1580	.1553	.1639	.0457	.0226	.0203	−.0564	−.0222	.0129
193	ST	.1461	.1457	.1333	.0512	.0261	.0094	−.0564	−.0141	.0126
194	ST	.1282	.1171	.0776	.0532	.0281	.0223	−.0463	−.0052	.0134
195	ST	.1102	.0913	.0517	.0570	.0279	.0354	−.0387	−.0009	.0124
196	ST	.3522	.2049	.2224	.1251	−.0158	−.0758	−.0818	−.1046	−.0794

Table V. Pressure Coefficients for Configuration 5

(a) $M = 1.69$

ORF	LOC	C_p for Z_s/l = -.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.2697	-.2786	-.2723	-.2662	-.2430	-.2331	-.2814	-.2834	-.2834
2	FL	-.2671	-.2713	-.2651	-.2591	-.2373	-.2300	-.2733	-.2752	-.2755
3	FL	-.2285	-.2440	-.2404	-.2351	-.2155	-.2084	-.2444	-.2455	-.2457
4	FL	-.1957	-.2077	-.2036	-.1959	-.1950	-.1915	-.2116	-.2118	-.2122
5	FL	-.1426	-.1616	-.1547	-.1346	-.1450	-.1595	-.1629	-.1622	-.1629
6	FL	-.0875	-.1209	-.1187	-.0885	-.0877	-.1247	-.1171	-.1159	-.1164
7	FL	-.0659	-.0847	-.0967	-.0674	-.0460	-.0883	-.0816	-.0813	-.0816
8	FL	-.0677	-.0530	-.0824	-.0663	-.0328	-.0575	-.0616	-.0628	-.0627
9	FL	-.0498	-.0209	-.0542	-.0632	-.0335	-.0275	-.0439	-.0465	-.0466
10	FL	-.0754	-.0506	-.0606	-.0564	-.0339	-.0198	-.0323	-.0342	-.0342
11	FL	.0471	.0199	-.0271	-.0266	-.0136	-.0066	-.0126	-.0137	-.0133
12	FL	.0233	-.0074	-.0471	-.0509	-.0414	-.0385	-.0466	-.0478	-.0477
13	FL	-.0194	.0120	-.0160	-.0465	-.0330	.0029	-.0208	-.0260	-.0259
14	FL	.0152	.0338	.0086	-.0121	-.0376	.0241	.0010	-.0093	-.0091
15	FL	.0509	.0609	.0514	.0219	-.0295	.0399	.0316	.0101	.0103
16	FL	.0771	.0827	.0805	.0454	.0016	.0448	.0671	.0238	.0237
17	FL	.0943	.0888	.0961	.0538	.0371	.0430	.1074	.0357	.0354
18	FL	.1060	.0904	.1043	.0633	.0368	.0357	.1297	.0473	.0471
19	FL	.1077	.0884	.1043	.0800	.0265	.0214	.1328	.0562	.0557
20	FL	.1077	.0897	.0979	.0796	.0194	.0100	.1259	.0617	.0612
21	FL	.1002	.0886	.0853	.0754	.0025	-.0028	.1147	.0581	.0565
22	FL	.0949	.0844	.0743	.0668	-.0211	-.0116	.0940	.0553	.0464
23	FL	.1115	.0965	.0796	.0743	-.0013	-.0136	.0764	.0967	.0552
24	FL	.1183	.1100	.0809	.0805	.0547	-.0196	.0587	.1613	.0631
25	FL	.1262	.1247	.0820	.1016	.0884	-.0134	.0521	.1870	.0812
26	FL	.1390	.1413	.1131	.1472	.1257	.0238	.0517	.1835	.1035
27	FL	.1531	.1532	.1265	.1466	.1435	.0761	.0636	.1738	.1259
28	FL	.1602	.1606	.1312	.1221	.1420	.1078	.0794	.1584	.1376
29	FL	.1544	.1578	.1290	.1305	.1391	.1067	.0816	.1617	.1389
30	FL	.1498	.1556	.1409	.1715	.1314	.0955	.0836	.1621	.1314
31	FL	.1553	.1604	.1281	.1885	.1316	.0955	.0953	.1734	.1369
32	FL	.1635	.1695	.1382	.1177	.1545	.1223	.0909	.1421	.1420
33	FL	.1663	.1747	.1475	.1411	.2030	.1334	.1030	.1344	.1515
34	FL	.1672	.1734	.1525	.1506	.2026	.1345	.1145	.1258	.1766
35	FL	.1732	.1743	.1569	.1439	.1907	.1444	.1317	.1269	.2365
36	FL	.1835	.1809	.1649	.1521	.1662	.1686	.1480	.1421	.2605
37	FL	.1939	.1924	.1818	.1781	.1459	.1920	.1541	.1632	.2555
38	FL	.1923	.1959	.1878	.1993	.1744	.2149	.1577	.1820	.2445
39	FL	.1884	.1948	.1874	.1953	.1836	.2488	.1856	.2007	.2308
40	FL	.1840	.1888	.1863	.1821	.1816	.2475	.1944	.1917	.2176
41	FL	.1789	.1844	.1845	.1788	.1973	.2325	.1925	.1853	.2046
42	FL	.1798	.1800	.1851	.1957	.2378	.2211	.1856	.1725	.1856
43	FL	.1824	.1827	.1973	.2158	.2380	.2303	.1876	.1650	.1680
44	FL	.1857	.1913	.2387	.2559	.2616	.2724	.2044	.1758	.1673
45	FL	.2624	.2763	.3271	.3420	.3451	.3506	.2815	.2584	.2339
46	FL	.3589	.3818	.4068	.4220	.4313	.4275	.3793	.3682	.3456
47	FL	.4279	.4457	.4624	.4807	.4970	.4866	.4599	.4545	.4440
48	FL	.4259	.4461	.4657	.4833	.4926	.4897	.4593	.4576	.4443
49	FL	.4274	.4512	.4756	.4910	.4923	.4961	.4659	.4625	.4518
50	FL	.4210	.4380	.4613	.4727	.4736	.4811	.4577	.4462	.4418
51	FL	.4814	.4908	.5027	.5181	.5346	.5238	.5154	.5092	.5038
52	FL	.5239	.5279	.5384	.5507	.5606	.5538	.5588	.5521	.5485
53	FL	.5627	.5627	.5723	.5814	.5827	.5792	.5947	.5878	.5859
54	FL	.5960	.5942	.6027	.6098	.6049	.6021	.6247	.6174	.6161
55	FL	.6253	.6239	.6320	.6367	.6281	.6250	.6505	.6434	.6434
56	FL	.6519	.6539	.6611	.6622	.6508	.6475	.6736	.6663	.6670
57	FL	.6753	.6829	.6889	.6856	.6735	.6702	.6939	.6869	.6881
58	FL	.6938	.7074	.7129	.7056	.6940	.6911	.7100	.7020	.7040
59	FL	.6929	.7025	.7087	.7023	.6935	.6858	.7102	.7017	.7047
60	FL	.6890	.6774	.6867	.6885	.6827	.6724	.7058	.6949	.7016
61	FL	.6890	.6719	.6812	.6871	.6876	.6759	.7122	.7026	.7056
62	FL	.7108	.7285	.7334	.7242	.7158	.7116	.7247	.7158	.7177
63	FL	.7209	.7406	.7442	.7358	.7336	.7277	.7331	.7242	.7260
64	FL	.7200	.7411	.7431	.7387	.7385	.7312	.7329	.7238	.7263
65	FL	.7185	.7354	.7336	.7305	.6984	.6957	.7152	.7035	.7078
66	FL	.7097	.7122	.7085	.7048	.6673	.6677	.6989	.6901	.6930
67	FL	.7427	.7730	.7905	.7786	.8064	.7997	.7913	.7855	.7866
68	FL	.7344	.7594	.7715	.7735	.7911	.7883	.7785	.7736	.7743
69	FL	.7438	.7497	.7572	.7585	.7447	.7466	.7589	.7537	.7558
70	FL	.7879	.8047	.8251	.8198	.7934	.8081	.8080	.8051	.8058
71	SW	-.2682	-.2740	-.2666	-.2606	-.2379	-.2291	-.2744	-.2761	-.2759
72	SW	-.0044	-.0308	-.0672	-.0709	-.0584	-.0471	-.0638	-.0652	-.0651
73	SW	.0617	.0518	.1241	.1045	-.0035	-.0103	.1343	.0678	.0651
74	SW	.1536	.1571	.1257	.1904	.1323	.0968	.0999	.1758	.1398
75	SW	.1895	.1840	.1896	.1997	.1805	.2499	.2052	.2000	.2482
76	SW	.4191	.4356	.4608	.4740	.4762	.4846	.4559	.4429	.4392
77	SW									
78	SW	.7797	.8023	.8205	.8136	.7881	.8028	.7990	.7945	.7952
79	SW									
80	SW									
81	SW									
82	SW									
83	SW									
84	SW									
85	SW									
86	SW									
87	RF	.7143	.8096	.8421	.8469	1.0040	.9467	.8618	.8533	.8538
88	RF	.8789	.9959	1.0466	.9785	1.0025	1.0340	1.0054	1.0186	1.0078
89	RF	.9765	.9805	1.0604	1.0421	.9476	.9952	1.0116	1.0192	1.0226
90	RF	.7678	.7691	.7995	.8070	.7508	.7766	.7917	.7908	.7974
91	RF	.7758	.8301	.8731	.8674	.9866	.9300	.8875	.8674	.8710
92	RF	.7573	.7882	.8019	.7834	.8103	.7885	.7860	.7769	.7800
93	RF	.7544	.7849	.8022	.7839	.8039	.7969	.7946	.7881	.7897
94	RF	.7582	.7818	.7914	.7848	.7909	.7892	.7842	.7782	.7794
95	RF	.7835	.7878	.7889	.7781	.7504	.7539	.7692	.7621	.7650
96	RF	.8104	.8323	.8562	.8436	.8037	.8251	.8236	.8216	.8210
97	RF									
98	RF									
99	RF									
100	RF									

Table V. Continued

(a) Concluded

		C_p for Z_s/d =											C_p for Z_s/d =								
ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.2735	-.2911	-.2602	-.1205	.3941	.2301	.2235	.2203	.2220	149	ST	-.0882	-.1096	-.1328	-.1331	-.0894	.0543	.0026	.0017	.0028
102	ST	-.2752	-.2740	-.2589	-.1994	.1788	.3786	.1491	.1472	.1447	150	ST	-.2497	-.2572	-.2675	-.2578	-.1430	.0049	.0063	-.0086	-.0144
103	ST	-.2684	-.2834	-.2267	-.2064	-.0804	.3881	.0984	.0987	.0929	151	ST	-.1357	-.1806	-.2009	-.1848	-.1401	-.0169	.0574	.0209	.0305
104	ST	-.2538	-.3242	-.2776	-.2611	-.2227	.1250	.0515	.0473	.0387	152	ST	-.0216	-.0255	-.1604	-.1789	-.1271	-.0762	.0127	.0756	.0327
105	ST	-.2274	-.3019	-.3402	-.2948	-.3093	-.0544	.2923	.0088	.0034	153	ST	.0216	.0206	.0049	-.0725	-.1253	-.0932	-.0430	.0496	.0305
106	ST	-.1796	-.2491	-.3578	-.3446	-.3512	-.1756	.0918	-.0273	-.0320	154	ST									
107	ST	-.1168	-.1673	-.3497	-.3713	-.3411	-.1621	.0138	-.0088	-.0113	155	ST	.1434	.1353	.1210	.1285	.1785	-.0687	-.0686	-.0192	.0601
108	ST	-.0677	-.1217	-.3345	-.3856	-.3259	-.1619	-.0016	-.0029	.0056	156	ST	.1564	.1514	.1221	.1569	.0792	.1124	-.0512	-.0295	.0376
109	ST	-.0117	-.0887	-.2725	-.3768	-.3065	-.1734	-.0107	.0088	.0226	157	ST	.1736	.1741	.1664	.1501	.1763	.0706	.1002	-.0401	.0094
110	ST	.0209	-.0246	-.0894	-.3633	-.2961	-.1848	-.0245	.0191	.0206	158	ST	.1465	.1430	.1431	.1411	.1248	.1135	.0810	-.0390	-.0100
111	ST	.0381	.0554	.1098	-.3519	-.3001	-.1941	-.0475	.1513	.0228	159	ST	.4186	.4179	.4152	.3777	.2953	.1155	.0581	.0987	-.0186
112	ST	.0628	.1278	.2034	-.0696	-.3043	-.1961	-.0644	.0850	.0268	160	ST	.5233	.5107	.5104	.4811	.4198	.1664	.0739	.0941	-.0206
113	ST	.0894	.1648	.1750	.1217	-.2941	-.1996	-.0851	.0648	.0257	161	ST	-.2990	-.3872	-.4103	-.3398	-.3138	-.0553	.2105	.0055	.0028
114	ST	.1097	.1534	.1541	.2795	-.2197	-.1928	-.0986	.0485	.0259	162	ST	-.3063	-.3808	-.3971	-.3739	-.3138	-.0526	.1226	.0059	.0045
115	ST	.1269	.1336	.1360	.2334	-.0861	-.1793	-.1074	.0412	.0305	163	ST	-.2913	-.3779	-.4023	-.3915	-.2937	-.0099	.1211	.0097	.0107
116	ST	.1306	.1168	.0999	.1514	.0990	-.1751	-.1149	.0291	.0310	164	ST	-.2882	-.3682	-.3677	-.3413	-.2459	.0062	.0872	.0077	.0109
117	ST	.1289	.1001	.0787	.0787	.0897	-.1735	-.1146	.0167	.0325	165	ST	-.3089	-.3085	-.3016	-.2759	-.2003	.0084	.0085	.0031	.0083
118	ST	.1209	.1010	.0833	.0377	.0728	-.1738	-.1131	.0002	.0303	166	ST	-.2164	-.2184	-.2232	-.2086	-.1465	.0287	.0017	.0020	.0076
119	ST	.1143	.1005	.1074	.0203	.0371	-.1732	-.1109	-.0170	.0557	167	ST	-.1208	-.1367	-.1544	-.1516	-.1033	.0512	.0054	.0053	.0081
120	ST	.1203	.0974	.0494	.0234	.0117	-.1610	-.1054	-.0302	.1125	168	ST	-.0540	-.0788	-.0088	-.3715	-.3422	-.1948	-.0334	.1536	.0288
121	ST	.1311	.1151	.0695	.2605	-.0079	-.1445	-.1056	-.0443	.0816	169	ST	-.2274	-.2156	-.3089	-.3852	-.3616	-.1923	-.0193	.1317	.0305
122	ST	.1331	.1254	.1080	.1583	.0000	-.0390	-.1076	-.0544	.0660	170	ST	-.1902	-.1971	-.2994	-.3843	-.3737	-.1650	-.0030	.0921	.0228
123	ST	.1436	.1404	.0963	.0523	.2497	.0141	-.1056	-.0533	.0614	171	ST	-.1620	-.1724	-.2450	-.3821	-.3342	-.1194	.0202	.0432	.0275
124	ST	.1520	.1499	.1201	.1411	.1671	.0238	-.1056	-.0531	.0526	172	ST	-.1430	-.1599	-.2659	-.3204	-.2576	-.0773	.0356	.0242	.0261
125	ST	.1643	.1624	.1287	.1362	.0833	.0560	-.0999	-.0542	.0486	173	ST	-.1441	-.1482	-.2633	-.2496	-.1912	-.0423	.0477	.0216	.0263
126	ST	.1716	.1728	.1387	.1010	.0474	.2746	-.0935	-.0580	.0374	174	ST	-.1419	-.1682	-.2210	-.2031	-.1547	-.0266	.0497	.0169	.0226
127	ST	.1692	.1756	.1450	.1525	.1173	.2755	-.0842	-.0626	.0246	175	ST	.1364	.1274	.0880	.0300	.1968	-.0727	-.1116	-.0507	.0603
128	ST	.1727	.1805	.1470	.1437	.1360	.2173	.0389	-.0591	.0182	176	ST	.1055	.0869	.0701	.0163	.1080	-.0793	-.1307	-.0448	.0592
129	ST	.1751	.1796	.1506	.1752	.1138	.1574	.1914	-.0622	.0059	177	ST	.0694	.0501	.0789	.0188	.0177	-.1251	-.1380	-.0357	.0563
130	ST	.1815	.1829	.1662	.2123	.1067	.0776	.2445	-.0635	-.0041	178	ST	.0866	.0752	.0860	.0419	.0351	-.2011	-.1219	-.0223	.0543
131	ST	.1923	.1899	.1755	.1618	.1781	.0219	.2127	-.0639	-.0125	179	ST	.0947	.0827	.0893	.0576	.0243	-.1610	-.0911	-.0062	.0579
132	ST	.1956	.1977	.1827	.1389	.2881	.0221	.1640	-.0611	-.0179	180	ST	.0956	.0866	.0853	.0736	-.0341	-.1170	-.0649	.0055	.0576
133	ST	.1954	.2007	.1920	.1578	.2112	.0679	.1301	-.0573	-.0219	181	ST	.0993	.0921	.0904	.0999	-.0553	-.0905	-.0492	.0134	.0579
134	ST	.1923	.1983	.1863	.2215	.1940	.1420	.1209	-.0516	-.0221	182	ST	.1833	.1871	.1805	.1942	.1411	.1259	.0946	-.0456	-.0241
135	ST	.1870	.1921	.1869	.2112	.1472	.1446	.0982	-.0432	-.0228	183	ST	.1756	.1732	.1675	.1788	.1226	.0747	.0960	-.0518	-.0219
136	ST	.1842	.1882	.1865	.2184	.1182	.1781	.0931	-.0042	-.0228	184	ST									
137	ST	.1837	.1851	.1902	.2021	.1371	.2396	.0944	.1121	-.0263	185	ST	.1679	.1648	.1724	.1647	.1387	.0888	.0744	-.0591	-.0091
138	ST	.1833	.1836	.1896	.1713	.1695	.1779	.0920	.1483	-.0270	186	ST	.1721	.1725	.1739	.1567	.1404	.0877	.0781	-.0525	-.0007
139	ST										187	ST	.1688	.1699	.1695	.1481	.1477	.0745	.0832	-.0496	-.0001
140	ST	.2875	.2952	.3365	.2208	.2217	.1021	.0572	.1560	-.0334	188	ST	.1718	.1739	.1682	.1492	.1724	.0688	.0927	-.0419	.0067
141	ST	.3880	.4234	.4467	.5386	.2718	.1422	.0717	.1458	-.0369	189	ST	.5744	.5723	.5730	.5752	.4804	.5106	.1017	.0685	-.0331
142	ST	.4470	.4660	.4826	.5833	.5071	.1457	.1385	.1326	-.0400	190	ST	.5572	.5475	.5302	.5192	.4084	.4322	.0949	.0736	-.0375
143	ST	.4841	.4926	.5027	.4516	.6259	.1675	.1074	.1126	-.0516	191	ST	.5261	.5091	.4789	.4205	.2949	.3290	.0918	.0800	-.0413
144	ST	.5433	.5492	.5606	.6005	.5763	.2792	.1002	.0969	-.0360	192	ST	.5019	.4759	.4511	.3617	.2720	.2764	.0852	.0791	-.0450
145	ST	.5808	.5825	.5919	.5955	.5115	.5289	.1032	.0676	-.0325	193	ST	.5061	.4842	.4703	.4108	.3381	.2228	.0775	.0789	-.0393
146	ST	.6074	.6056	.6127	.6246	.5666	.6327	.1308	.0469	-.0320	194	ST	.5239	.5089	.4981	.4608	.3844	.1889	.0812	.0875	-.0287
147	ST	.0692	.0954	.1470	.3372	.3826	.2208	.2187	.2141	.2152	195	ST	.5248	.5124	.5078	.4789	.4134	.1717	.0764	.0903	-.0245
148	ST	.2732	.2186	.1655	.1539	.1922	.1406	.0946	.0923	.0883	196	ST	.6019	.5757	.5602	.4987	.4049	.2310	.1977	-.0304	-.0710

Table V. Continued

(b) $M = 2.00$

ORF	LOC	C_p for Z_s/d = -.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	C_p for Z_s/d = -.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
1	FL	-.2311	-.2298	-.2213	-.2097	-.1870	-.2228	-.2255	-.2256	-.2256	51	FL	.4300	.4421	.4500	.4228	.4467	.4237	.4174	.4101	.4392
2	FL	-.2289	-.2253	-.2161	-.2057	-.1861	-.2193	-.2217	-.2218	-.2218	52	FL	.4741	.4813	.4934	.4607	.4748	.4627	.4532	.4468	.4812
3	FL	-.1913	-.1997	-.1959	-.1901	-.1725	-.1988	-.2010	-.2011	-.2006	53	FL	.5122	.5141	.5308	.4974	.4995	.4974	.4846	.4805	.5171
4	FL	-.1650	-.1712	-.1707	-.1689	-.1610	-.1781	-.1796	-.1797	-.1793	54	FL	.5460	.5419	.5625	.5302	.5242	.5275	.5127	.5096	.5476
5	FL	-.1378	-.1373	-.1357	-.1306	-.1378	-.1469	-.1469	-.1470	-.1468	55	FL	.5759	.5671	.5925	.5605	.5511	.5540	.5381	.5370	.5736
6	FL	-.1069	-.1082	-.1007	-.0862	-.0995	-.1093	-.1072	-.1071	-.1071	56	FL	.6030	.5911	.6195	.5854	.5763	.5770	.5592	.5602	.5968
7	FL	-.0779	-.0906	-.0793	-.0544	-.0514	-.0738	-.0702	-.0704	-.0702	57	FL	.6293	.6156	.6453	.6066	.6019	.5977	.5788	.5813	.6206
8	FL	-.0612	-.0803	-.0738	-.0457	-.0109	-.0500	-.0475	-.0477	-.0470	58	FL	.6471	.6327	.6641	.6191	.6208	.6104	.5902	.5936	.6337
9	FL	-.0492	-.0650	-.0695	-.0475	.0109	-.0335	-.0348	-.0350	-.0346	59	FL	.6398	.6316	.6736	.6237	.6271	.6175	.5971	.6027	.6415
10	FL	-.0957	-.0607	-.0493	-.0288	.0058	-.0148	-.0152	-.0154	-.0159	60	FL	.6556	.6421	.6727	.6066	.6206	.6177	.5973	.6067	.6464
11	FL	.0521	.0059	-.0045	.0004	.0247	.0034	.0044	.0040	.0042	61	FL	.6836	.6626	.6772	.6110	.6326	.6331	.6140	.6232	.6636
12	FL	.0657	.0297	.0140	.0075	.0145	-.0204	-.0228	-.0234	-.0239	62	FL	.6623	.6474	.6799	.6269	.6378	.6202	.6002	.6040	.6440
13	FL	-.0303	-.0503	-.0631	-.0555	.0109	-.0222	-.0310	-.0312	-.0308	63	FL	.6745	.6579	.6930	.6326	.6480	.6277	.6065	.6109	.6511
14	FL	-.0104	-.0347	-.0571	-.0660	-.0044	-.0055	-.0335	-.0339	-.0337	64	FL	.6687	.6572	.6923	.6318	.6228	.6235	.6007	.6065	.6460
15	FL	.0178	-.0213	-.0379	-.0575	-.0151	.0404	-.0268	-.0272	-.0270	65	FL	.6551	.6586	.6794	.6322	.5792	.6170	.5944	.6025	.6395
16	FL	.0321	.0025	-.0101	-.0274	-.0283	.0678	-.0159	-.0163	-.0161	66	FL	.6496	.6592	.6866	.6293	.6097	.6213	.6005	.6074	.6420
17	FL	.0519	.0453	.0053	.0138	-.0374	.0870	.0013	.0004	.0008	67	FL	.7115	.7343	.8149	.7211	.7883	.6957	.6771	.6813	.7179
18	FL	.0657	.0738	.0276	.0238	-.0427	.1017	.0171	.0160	.0164	68	FL	.7315	.7194	.8028	.7084	.7841	.6903	.6800	.6826	.7221
19	FL	.0762	.0894	.0597	.0314	-.0396	.1039	.0293	.0280	.0284	69	FL	.8008	.7405	.7770	.7244	.7237	.7081	.6953	.7122	.7479
20	FL	.0955	.1014	.0750	.0358	.0316	.0890	.0440	.0407	.0411	70	FL	.8208	.7766	.8463	.8140	.7876	.7487	.7341	.7507	.7876
21	FL	.0998	.1018	.0782	.0407	.0590	.0696	.0757	.0430	.0436	71	SW	-.2224	-.2202	-.2123	-.2045	-.1859	-.2155	-.2173	-.2173	-.2173
22	FL	.0884	.0911	.0715	.0300	.0299	.0491	.1106	.0340	.0342	72	SW	.0156	-.0218	-.0346	-.0368	-.0098	-.0687	-.0740	-.0746	-.0742
23	FL	.0860	.0860	.0753	.0494	.0232	.0406	.1222	.0403	.0411	73	SW	-.0013	.0206	-.0415	-.0468	-.0743	.0549	-.0039	-.0080	-.0081
24	FL	.0724	.0709	.0688	.0539	.0060	.0215	.1122	.0385	.0389	74	SW	.0708	.0675	.1131	.1699	.1016	.0030	.0837	.0757	.0752
25	FL	.0601	.0604	.0603	.0441	-.0089	.0104	.0848	.0369	.0373	75	SW	.1209	.1268	.1200	.0621	.0862	.0596	.0757	.1042	.0888
26	FL	.0508	.0508	.0483	.0434	-.0214	.0057	.0688	.0343	.0349	76	SW	.2187	.2911	.3653	.4030	.4013	.3404	.3345	.3181	.3023
27	FL	.0412	.0428	.0358	.0274	-.0227	-.0064	.0449	.0263	.0264	77	SW									
28	FL	.0405	.0393	.0338	.0191	-.0258	-.0211	.0280	.0173	.0180	78	SW	.7547	.7465	.8376	.7971	.7771	.7204	.7054	.7118	.7508
29	FL	.0261	.0263	.0298	.0318	-.0356	-.0231	.0289	.0102	.0104	79	SW									
30	FL	.0448	.0546	.0811	.0868	.0025	-.0179	.0681	.0340	.0344	80	SW									
31	FL	.0691	.0662	.1100	.1256	.0862	-.0086	.0817	.0679	.0683	81	SW									
32	FL	.0430	.0337	.0303	.0124	-.0071	-.0342	.0111	.0078	.0080	82	SW									
33	FL	.0639	.0475	.0387	.0254	-.0129	-.0358	.0097	.0158	.0126	83	SW									
34	FL	.0731	.0713	.0563	.0323	.0247	-.0320	.0371	.0824	.0211	84	SW									
35	FL	.0822	.0854	.0819	.0456	.0706	-.0211	.0376	.1360	.0416	85	SW									
36	FL	.0844	.0907	.0969	.0770	.0969	-.0041	.0367	.1360	.0594	86	SW									
37	FL	.0849	.0954	.0915	.1080	.1089	.0333	.0509	.1264	.0727	87	RF	.6689	.7379	.8993	.7218	1.0515	.7130	.7138	.6808	.7388
38	FL	.0831	.0887	.0773	.1060	.1000	.0558	.0554	.1135	.0839	88	RF	.7736	.8183	1.2179	.9875	1.1125	.9117	.9179	.8906	.9528
39	FL	.0831	.0838	.0753	.1007	.1056	.0663	.0681	.1040	.0926	89	RF	1.1697	1.0320	1.0989	1.2072	1.0548	.9736	.9544	.9945	1.0307
40	FL	.0835	.0827	.0721	.1109	.1094	.0795	.0737	.0955	.0941	90	RF	.9609	.8361	.8224	.8122	.7373	.8444	.8330	.9066	.9421
41	FL	.0880	.0880	.0706	.1004	.0987	.0874	.0743	.0870	.0981	91	RF	.7152	.7644	.8690	.7884	.9560	.7545	.7225	.7018	.7448
42	FL	.0929	.0969	.0739	.0860	.0980	.0921	.0759	.0757	.1003	92	RF	.7041	.7405	.8138	.7162	.7649	.6819	.6626	.6657	.7043
43	FL	.0958	.1018	.0799	.1234	.1481	.0896	.0763	.0752	.1003	93	RF	.7121	.7468	.8242	.7320	.7771	.6966	.6766	.6802	.7170
44	FL	.0964	.1150	.1254	.2419	.1661	.0981	.0926	.0893	.0939	94	RF	.7319	.7343	.8233	.7257	.7776	.6926	.6818	.6817	.7203
45	FL	.1445	.2145	.2459	.3139	.2552	.1823	.2057	.1848	.1535	95	RF	.8143	.7597	.8055	.7414	.7177	.6988	.6844	.6993	.7366
46	FL	.2857	.3348	.3343	.3499	.3594	.3108	.3258	.3124	.2686	96	RF	.8268	.7906	.8824	.8470	.8041	.7525	.7368	.7505	.7882
47	FL	.3775	.3996	.3983	.3863	.4144	.3801	.3797	.3734	.3815	97	RF									
48	FL	.3570	.3965	.4190	.4007	.4169	.3812	.3795	.3698	.3526	98	RF									
49	FL	.2174	.3403	.3994	.4337	.4282	.3814	.3822	.3640	.3112	99	RF									
50	FL	.2336	.3012	.3713	.4121	.4122	.3498	.3499	.3317	.3145	100	RF									

Table V. Continued

(b) Concluded

		C_p for Z_s/d =											C_p for Z_s/d =							
ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.2322	-.2425	-.2348	-.0760	.1877	.1865	.1868	.1848	.1874	149	ST	.1158	.0883	.0601	.0530	.0871	-.0026	-.0061	-.0049	-.0052
102	ST	-.2327	-.2462	-.2491	-.2057	.1145	.1177	.1202	.1180	.1161	150	ST	-.0866	-.1028	-.1145	-.1130	-.0701	.0335	-.0248	-.0230	-.0221
103	ST	-.2251	-.2389	-.2442	-.2197	.1392	.0816	.0823	.0841	.0830	151	ST	-.2064	-.2086	-.1938	-.1275	-.0784	.0253	.0278	.0049	.0066
104	ST	-.2129	-.2119	-.2199	-.2028	.0172	.1671	.0356	.0369	.0367	152	ST	-.0712	-.1226	-.1495	-.1431	-.1129	-.0190	.0389	.0122	.0137
105	ST	-.1941	-.2082	-.2034	-.2065	-.1338	.2349	-.0056	-.0007	-.0041	153	ST	-.0035	-.0082	-.0916	-.1214	-.1013	-.0609	.0111	.0256	.0100
106	ST	-.1688	-.2286	-.2324	-.2273	-.2051	.0856	-.0337	-.0385	-.0339	154	ST									
107	ST	-.1316	-.2139	-.2402	-.2373	-.2309	-.0164	-.0186	-.0214	-.0221	155	ST	.0241	.0192	.0198	-.0386	-.0483	-.0696	-.0446	.0249	.0149
108	ST	-.0790	-.1656	-.2315	-.2449	-.2463	-.0928	.1567	-.0136	-.0141	156	ST	.0728	.0722	.0922	.0755	.0254	-.0672	-.0529	-.0014	.0324
109	ST	-.0280	-.1066	-.2141	-.2504	-.2411	-.0890	.0790	-.0045	-.0021	157	ST	.0842	.0704	.0699	.0786	.0793	.0845	-.0549	-.0218	.0380
110	ST	.0036	-.0725	-.2070	-.2576	-.2347	-.0999	.0289	.0007	.0039	158	ST	.0844	.0889	.0586	.0666	.0383	.0431	-.0553	-.0363	.0249
111	ST	.0372	-.0583	-.1861	-.2569	-.2296	-.1179	.0240	.0007	.0037	159	ST	.2318	.2461	.2769	.2236	.0737	.0222	.0694	-.0363	.0073
112	ST	.0733	-.0296	.0271	-.2322	-.2229	-.1313	.0260	.0067	.0104	160	ST	.4545	.4261	.4357	.3856	.2937	.0181	.0623	-.0390	-.0016
113	ST	.0786	.0377	.0525	-.2306	-.2200	-.1436	.0068	.0125	.0102	161	ST	-.2260	-.2767	-.2888	-.2769	-.1429	.1631	-.0074	-.0034	-.0041
114	ST	.0708	.1041	.1093	-.1749	-.2124	-.1473	-.0105	.0089	.0104	162	ST	-.2572	-.2747	-.2845	-.2832	-.1694	.0524	-.0068	-.0049	-.0047
115	ST	.0797	.1188	.1321	.0603	-.2064	-.1511	-.0304	.0594	.0157	163	ST	-.2451	-.2692	-.2723	-.2507	-.1452	.0478	.0048	.0067	.0080
116	ST	.0815	.1190	.0871	.1635	-.2048	-.1520	-.0522	.0824	.0149	164	ST	-.2431	-.2380	-.2253	-.1867	-.1051	.0518	.0086	.0102	.0113
117	ST	.0922	.1230	.1185	.1757	-.1514	-.1505	-.0660	.0525	.0149	165	ST	-.1688	-.1670	-.1513	-.1208	-.0757	.0544	-.0012	.0009	.0013
118	ST	.1080	.1179	.1200	.2118	-.1178	-.1473	-.0767	.0441	.0137	166	ST	-.0679	-.0592	-.0466	-.0317	-.0104	.0620	-.0016	.0000	.0008
119	ST	.1091	.1114	.0980	.1755	.1160	-.1442	-.0841	.0389	.0117	167	ST	.0722	.0571	.0387	.0354	.0668	.0337	-.0010	.0002	.0004
120	ST	.1067	.1009	.0670	.1463	.0933	-.1420	-.0876	.0398	.0151	168	ST	-.0953	-.1347	-.2284	-.2691	-.2376	-.1072	.0238	.0038	.0073
121	ST	.0982	.0909	.0474	.0964	.0599	-.1362	-.0892	.0398	.0164	169	ST	-.1892	-.2347	-.2616	-.2754	-.2612	-.0932	.0311	.0042	.0077
122	ST	.0840	.0807	.0300	.0450	.0566	-.1346	-.0927	.0234	.0153	170	ST	-.1728	-.2262	-.2578	-.2761	-.2558	-.0647	.0338	.0024	.0053
123	ST	.0724	.0773	.0251	.0167	.0437	-.1346	-.0898	.0093	.0206	171	ST	-.1572	-.1937	-.2491	-.2698	-.2178	-.0295	.0327	.0042	.0064
124	ST	.0590	.0642	.0269	-.0018	.0172	-.1297	-.0894	-.0080	.0193	172	ST	-.1581	-.1948	-.2360	-.2315	-.1628	-.0021	.0202	.0020	.0048
125	ST	.0550	.0555	.0227	-.0112	.0038	-.1266	-.0885	-.0194	.0206	173	ST	-.1661	-.2019	-.2061	-.1789	-.1133	.0137	.0148	.0029	.0062
126	ST	.0579	.0533	.0303	-.0085	.0031	-.1255	-.0829	-.0290	.0200	174	ST	-.1897	-.2128	-.1765	-.1384	-.0879	.0195	.0169	.0011	.0035
127	ST	.0579	.0488	.0672	.0238	-.0044	-.0119	-.0818	-.0388	.0772	175	ST	.0722	.0604	.0198	-.0047	.0345	-.1462	-.0996	.0156	.0198
128	ST	.0797	.0713	.0875	.0592	-.0156	.0536	-.0816	-.0388	.0600	176	ST	.0334	-.0028	.0022	-.0671	-.1579	-.1716	-.1010	.0222	.0198
129	ST	.0871	.1007	.0721	.0779	-.0035	.1170	-.0827	-.0454	.0485	177	ST	.0054	-.0215	-.0043	-.0555	-.1556	-.1892	-.0916	.0287	.0173
130	ST	.0880	.1072	.0857	.1276	.0595	.2219	-.0832	-.0483	.0398	178	ST	.0281	.0034	.0031	-.0660	-.0746	-.1500	-.0696	.0343	.0182
131	ST	.0929	.0974	.0873	.1659	.0844	.2531	-.0825	-.0517	.0378	179	ST	.0276	.0081	.0000	-.0680	-.0608	-.1077	-.0469	.0374	.0198
132	ST	.0938	.0938	.0733	.1049	.0492	.2540	-.0798	-.0526	.0407	180	ST	.0352	.0295	-.0016	-.0528	-.0813	-.0832	-.0397	.0394	.0202
133	ST	.0900	.0938	.0728	.0909	.0423	.2019	-.0780	-.0532	.0458	181	ST	.0301	.0346	.0107	-.0428	-.0928	-.0689	-.0215	.0409	.0189
134	ST	.0904	.1014	.0744	.1169	.0691	.1159	-.0774	-.0519	.0333	182	ST	.0860	.0916	.0563	.0748	.0610	.0487	-.0725	-.0584	.0215
135	ST	.0924	.1047	.0746	.0819	.1045	.0495	-.0660	-.0523	.0186	183	ST	.0762	.0658	.0425	.0394	.0165	.0126	-.0861	-.0595	.0289
136	ST	.0989	.1099	.0799	.0594	.0924	.0110	.0892	-.0503	.0100	184	ST									
137	ST	.1002	.1099	.0860	.0601	.0846	-.0086	.2000	-.0528	.0004	185	ST	.0771	.0747	.0641	.0621	-.0038	.0253	-.0890	-.0441	.0402
138	ST	.1002	.1136	.0982	.0695	.0824	.0008	.2140	-.0503	-.0047	186	ST	.0815	.0751	.0635	.0648	-.0087	.0384	-.0682	-.0270	.0405
139	ST										187	ST	.0775	.0665	.0597	.0628	.0279	.0511	-.0696	-.0238	.0340
140	ST	.1220	.1352	.1450	.0862	.0704	.0010	.1443	-.0566	-.0179	188	ST	.0817	.0664	.0635	.0670	.0695	.0714	-.0540	-.0196	.0356
141	ST	.2879	.3161	.3094	.2428	.0855	.0202	.1193	-.0530	-.0212	189	ST	.5353	.5599	.5346	.4473	.7709	.0687	.0460	-.0301	-.0299
142	ST	.4320	.5183	.4910	.5803	.1441	.0324	.1011	-.0499	-.0245	190	ST	.4903	.4971	.4578	.3626	.6184	.0498	.0527	-.0419	-.0288
143	ST	.4423	.4775	.5014	.6687	.2390	.0273	.0563	-.0541	-.0383	191	ST	.4062	.3989	.3905	.2406	.3864	.0282	.0645	-.0490	-.0254
144	ST	.5108	.5049	.5132	.5930	.5509	.0500	.0625	-.0448	-.0303	192	ST	.3803	.3430	.3693	.1980	.2859	.0104	.0561	-.0592	-.0228
145	ST	.5409	.5746	.5720	.4814	.7914	.0754	.0454	-.0312	-.0323	193	ST	.4151	.3697	.3829	.2475	.2944	.0061	.0282	-.0575	-.0145
146	ST	.5681	.5800	.6130	.5340	.7558	.0825	.0378	.0728	-.0314	194	ST	.4498	.4129	.4141	.3000	.2991	.0108	.0538	-.0508	-.0050
147	ST	.0610	.1070	.1383	.1820	.1819	.1830	.1821	.1805	.1829	195	ST	.4545	.4281	.4366	.3716	.2980	.0141	.0612	-.0425	-.0021
148	ST	-.0038	.0030	.0741	.2432	.1909	.0767	.0774	.0775	.0776	196	ST	.5482	.4938	.5059	.4105	.2570	.1912	-.0678	-.0804	-.1303

Table V. Continued

(c) $M = 2.65$

ORF	LOC	C_p for Z_s/d = −.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
1	FL	−.1470	−.1480	−.1439	−.1389	−.1332	−.1427	−.1433	−.1433	−.1432
2	FL	−.1497	−.1503	−.1455	−.1384	−.1345	−.1440	−.1448	−.1448	−.1447
3	FL	−.1204	−.1263	−.1250	−.1224	−.1199	−.1255	−.1263	−.1259	−.1257
4	FL	−.1087	−.1126	−.1110	−.1138	−.1133	−.1161	−.1165	−.1165	−.1164
5	FL	−.0905	−.0919	−.0877	−.0928	−.0971	−.0974	−.0980	−.0978	−.0976
6	FL	−.0761	−.0726	−.0665	−.0693	−.0802	−.0792	−.0798	−.0799	−.0792
7	FL	−.0667	−.0544	−.0475	−.0460	−.0618	−.0607	−.0614	−.0612	−.0609
8	FL	−.0619	−.0390	−.0369	−.0298	−.0436	−.0466	−.0470	−.0470	−.0463
9	FL	−.0490	−.0246	−.0267	−.0129	−.0158	−.0283	−.0288	−.0288	−.0283
10	FL	−.0396	−.0130	−.0209	−.0093	−.0168	−.0250	−.0260	−.0256	−.0250
11	FL	.0100	.0045	.0001	.0016	−.0062	−.0099	−.0109	−.0101	−.0098
12	FL	.0103	−.0041	−.0012	.0016	−.0279	−.0296	−.0318	−.0301	−.0303
13	FL	−.0419	−.0236	−.0224	−.0065	.0112	−.0149	−.0154	−.0154	−.0149
14	FL	−.0348	−.0319	−.0239	−.0073	.0314	−.0053	−.0058	−.0061	−.0053
15	FL	−.0231	−.0410	−.0283	−.0126	.0450	−.0008	−.0010	−.0010	.0000
16	FL	−.0163	−.0458	−.0379	−.0212	.0324	−.0035	−.0045	−.0046	−.0035
17	FL	−.0120	−.0400	−.0396	−.0265	.0251	−.0061	−.0068	−.0069	−.0060
18	FL	−.0082	−.0314	−.0391	−.0270	.0155	−.0058	−.0071	−.0069	−.0058
19	FL	−.0087	−.0200	−.0386	−.0283	.0054	−.0063	−.0109	−.0109	−.0098
20	FL	−.0014	−.0099	−.0300	−.0204	.0029	.0139	−.0114	−.0112	−.0103
21	FL	.0017	−.0011	−.0222	−.0161	−.0040	.0213	−.0164	−.0165	−.0154
22	FL	.0034	.0035	−.0075	−.0078	−.0093	.0271	−.0169	−.0170	−.0159
23	FL	.0156	.0161	.0186	.0170	−.0052	.0344	−.0091	−.0091	−.0078
24	FL	.0179	.0182	.0241	.0102	−.0100	.0314	−.0106	−.0106	−.0098
25	FL	.0351	.0359	.0360	.0130	−.0019	.0433	−.0025	−.0026	−.0015
26	FL	.0472	.0500	.0320	.0089	.0039	.0501	−.0012	−.0013	−.0007
27	FL	.0584	.0596	.0279	.0076	.0291	.0524	.0063	.0063	.0069
28	FL	.0662	.0647	.0279	.0069	.0261	.0529	.0152	.0146	.0150
29	FL	.0275	.0240	.0409	.0033	.0127	.0372	.0230	.0219	.0228
30	FL	.0095	.0182	.0360	.0137	−.0413	.0139	.0084	.0038	.0054
31	FL	.0189	.0118	.0087	−.0091	−.0598	−.0003	.0015	−.0066	−.0053
32	FL	.0678	.0629	.0353	.0094	.0140	.0630	.0407	.0235	.0238
33	FL	.0690	.0622	.0447	.0216	.0097	.0592	.0907	.0338	.0345
34	FL	.0637	.0602	.0485	.0337	.0056	.0486	.1051	.0381	.0393
35	FL	.0559	.0579	.0490	.0438	−.0082	.0362	.1041	.0369	.0378
36	FL	.0475	.0503	.0459	.0436	−.0196	.0238	.0789	.0323	.0332
37	FL	.0404	.0376	.0421	.0390	−.0201	.0144	.0597	.0303	.0314
38	FL	.0275	.0194	.0343	.0284	−.0229	.0003	.0420	.0219	.0228
39	FL	.0227	.0111	.0502	.0254	−.0224	−.0071	.0324	.0204	.0211
40	FL	.0159	.0055	.0915	.0317	−.0161	−.0142	.0182	.0149	.0150
41	FL	.0123	.0169	.1365	.0699	−.0153	−.0149	.0061	.0101	.0104
42	FL	.0136	.0680	.1616	.1210	−.0156	−.0073	−.0043	.0045	.0066
43	FL	.0409	.1543	.1821	.1640	.0049	.0407	−.0058	.0025	.0168
44	FL	.1126	.2094	.2024	.1881	.0372	.1146	−.0012	−.0018	.0628
45	FL	.1933	.2375	.2267	.2048	.1087	.1685	.0455	.0101	.1478
46	FL	.2308	.2501	.2429	.2154	.1907	.1908	.1347	.0646	.2010
47	FL	.2592	.2701	.2636	.2367	.2488	.2166	.2088	.1523	.2349
48	FL	.2521	.2650	.2702	.2438	.2415	.2161	.2027	.1248	.2402
49	FL	.2491	.2678	.2846	.2597	.2372	.2335	.2022	.1475	.2503
50	FL	.2002	.2754	.3122	.2736	.2314	.2487	.1911	.1665	.2516
51	FL	.2787	.2797	.2755	.2531	.2816	.2343	.2409	.2420	.2564
52	FL	.3025	.2969	.2958	.2795	.3139	.2593	.2722	.2989	.2870
53	FL	.3205	.3106	.3140	.3027	.3382	.2803	.2982	.3332	.3103
54	FL	.3384	.3258	.3310	.3255	.3594	.2955	.3197	.3615	.3306
55	FL	.3627	.3465	.3487	.3513	.3806	.3150	.3430	.3883	.3531
56	FL	.3901	.3680	.3624	.3721	.3978	.3299	.3601	.4095	.3711
57	FL	.4235	.3963	.3851	.3954	.4172	.3504	.3796	.4325	.3916
58	FL	.4450	.4161	.4056	.4085	.4263	.3585	.3900	.4452	.4030
59	FL	.4352	.4178	.4231	.4235	.4329	.3684	.3986	.4512	.4123
60	FL	.4243	.4274	.4742	.4348	.4253	.3694	.3960	.4459	.4121
61	FL	.4585	.4505	.5289	.4407	.4351	.3884	.4178	.4636	.4318
62	FL	.4587	.4285	.4317	.4161	.4270	.3646	.3960	.4548	.4095
63	FL	.4648	.4416	.4641	.4265	.4192	.3757	.4016	.4580	.4181
64	FL	.4643	.4469	.4816	.4222	.3978	.3709	.3920	.4398	.4133
65	FL	.4671	.4578	.4985	.4235	.4038	.3755	.4011	.4467	.4204
66	FL	.4931	.4899	.5540	.4465	.4515	.3937	.4352	.4937	.4429
67	FL	.6299	.6382	.7783	.6016	.6495	.4845	.5608	.6718	.5475
68	FL	.5202	.5524	.6973	.5763	.6230	.4807	.5439	.6384	.5376
69	FL	.5871	.5825	.6838	.6074	.5642	.4815	.4971	.5530	.5237
70	FL	.7071	.6384	.7330	.6948	.6407	.5240	.5631	.6470	.5723
71	SW	−.1437	−.1440	−.1394	−.1351	−.1312	−.1394	−.1397	−.1395	−.1394
72	SW	−.0350	−.0544	−.0508	−.0473	−.0724	−.0858	−.0867	−.0859	−.0857
73	SW	.0794	.0806	−.0131	−.0106	.0640	.0681	.0468	.0502	.0476
74	SW	.0217	.0055	.0085	−.0164	−.0557	.0005	.0056	−.0061	−.0048
75	SW	.0591	.0682	.0571	.0669	.0362	.0147	.0437	.0222	.0236
76	SW	.1612	.2524	.3196	.2777	.2314	.2388	.1648	.1559	.2301
77	SW									
78	SW	.6129	.5696	.6588	.6206	.6316	.5045	.5649	.6546	.5594
79	SW									
80	SW									
81	SW									
82	SW									
83	SW									
84	SW									
85	SW									
86	SW									
87	RF	.5061	.5468	.7028	.5632	1.0037	.5496	.7438	.9856	.6684
88	RF	.4433	.4704	.6585	.7778	1.0548	.7548	.9417	1.1506	.8580
89	RF	.8565	.9182	1.1418	1.2369	.9252	.6634	.6445	.6703	.6851
90	RF	1.2677	.8843	.9889	.8904	.6051	.5888	.4986	.5273	.6049
91	RF	.5825	.5969	.7317	.6783	.7331	.5612	.6253	.7549	.6591
92	RF	.6035	.6247	.7684	.5535	.5755	.4559	.5297	.6367	.5189
93	RF	.6187	.6285	.7717	.5842	.6182	.4759	.5484	.6503	.5389
94	RF	.5129	.5514	.6985	.5609	.6000	.4790	.5454	.6357	.5391
95	RF	.6182	.6088	.7299	.5735	.5409	.4699	.4883	.5432	.5120
96	RF	.6934	.6359	.7368	.6803	.6338	.5197	.5621	.6432	.5675
97	RF									
98	RF									
99	RF									
100	RF									

Table V. Concluded

(c) Concluded

		C_p for Z_s/d =										C_p for Z_s/d =								
ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83	ORF	LOC	-.29	.00	.42	.83	1.67	3.33	5.00	7.50	10.83
101	ST	-.1361	-.1387	-.1242	.0221	.1579	.1617	.1607	.1632	.1180	149	ST	-.0411	-.0398	-.0224	.0231	.0137	-.0038	-.0035	-.0023	-.0096
102	ST	-.1399	-.1430	-.1418	-.1090	.0988	.1073	.1069	.1084	.0691	150	ST	.0465	.0978	.1186	.1271	.1099	-.0218	-.0210	-.0215	-.0313
103	ST	-.1381	-.1415	-.1439	-.1341	.0415	.0703	.0741	.0715	.0567	151	ST	-.0543	-.0592	-.0662	-.0658	-.0431	.0266	-.0025	-.0033	-.0108
104	ST	-.1333	-.1404	-.1470	-.1427	-.0189	.0326	.0308	.0343	.0413	152	ST	-.1067	-.1083	-.1050	-.0885	-.0662	.0185	.0061	.0038	.0028
105	ST	-.1229	-.1321	-.1452	-.1414	-.0742	-.0003	.0008	.0007	.0089	153	ST	-.0621	-.0833	-.0966	-.0916	-.0747	-.0018	.0207	.0027	.0013
106	ST	-.1029	-.1126	-.1404	-.1379	-.0310	-.0109	-.0253	-.0245	-.0184	154	ST									
107	ST	-.0801	-.0856	-.1325	-.1308	-.0532	.1010	-.0184	-.0177	-.0129	155	ST	.0199	.0240	.0049	-.0253	-.0517	-.0420	.0076	.0103	.0054
108	ST	-.0735	-.0838	-.1394	-.1331	-.0938	.1435	-.0144	-.0149	-.0096	156	ST	.0343	.0361	.0247	.0006	-.0416	-.0443	-.0093	.0202	.0074
109	ST	-.0599	-.0767	-.1341	-.1338	-.1125	.0956	-.0050	-.0081	-.0020	157	ST	.0153	.0131	.0077	-.0134	-.0042	-.0435	-.0202	.0219	.0114
110	ST	-.0409	-.0658	-.1272	-.1351	-.1254	.0453	-.0012	-.0051	-.0010	158	ST	.0103	.0139	.0328	.0188	.0061	-.0390	-.0303	.0129	.0076
111	ST	-.0158	-.0458	-.1212	-.1351	-.1317	-.0170	.0005	-.0036	.0003	159	ST	.1007	.1429	.2735	.0846	.0342	.0109	-.0263	.0065	.0145
112	ST	.0065	-.0122	-.1125	-.1316	-.1327	-.0423	.0665	.0012	.0046	160	ST	.2615	.2504	.3525	.1646	.0531	.0364	-.0316	.0098	.0352
113	ST	.0159	.0134	-.0966	-.1270	-.1315	-.0597	.0920	.0010	.0036	161	ST	-.1429	-.1508	-.1579	-.1564	-.0148	-.0056	-.0045	-.0028	.0031
114	ST	.0189	.0237	-.0384	-.1237	-.1337	-.0663	.0511	-.0003	.0028	162	ST	-.1419	-.1511	-.1609	-.1472	.1064	-.0048	-.0086	-.0053	.0008
115	ST	.0219	.0247	.0409	-.1032	-.1284	-.0820	.0369	.0055	.0066	163	ST	-.1305	-.1407	-.1133	-.0523	.1748	.0134	.0078	.0088	.0122
116	ST	.0207	.0192	.0543	-.0943	-.1269	-.0881	.0238	.0058	.0061	164	ST	-.1156	-.1086	-.0123	.0509	.2026	.0147	.0167	.0154	.0049
117	ST	.0202	.0149	.0520	-.0597	-.1183	-.0906	.0195	.0078	.0076	165	ST	-.0897	-.0614	.0712	.1157	.1824	.0030	.0061	.0050	-.0083
118	ST	.0186	.0106	.0510	.0441	-.1166	-.0921	.0167	.0022	.0049	166	ST	-.0791	-.0580	.0933	.1605	.1427	-.0003	.0023	.0025	-.0073
119	ST	.0229	.0121	.0469	.1635	-.0928	-.0939	.0210	.0081	.0069	167	ST	-.0485	-.0453	-.0060	.0674	.0503	.0013	.0025	.0038	-.0035
120	ST	.0272	.0174	.0236	.1972	-.0868	-.0944	.0091	.0121	.0076	168	ST	-.0945	-.1088	-.1457	-.1475	-.1363	.0025	.0008	-.0026	.0008
121	ST	.0346	.0268	.0204	.1709	-.0575	-.0918	-.0028	.0242	.0092	169	ST	-.1173	-.1222	-.1485	-.1510	-.1363	.0248	.0023	-.0021	.0011
122	ST	.0379	.0301	.0371	.1435	-.0479	-.0951	-.0212	.0192	.0059	170	ST	-.1148	-.1200	-.1508	-.1513	-.1347	.0225	.0005	-.0021	.0013
123	ST	.0516	.0478	.0343	.1446	.0220	-.0931	-.0323	.0444	.0079	171	ST	-.1158	-.1212	-.1462	-.1432	-.1133	.0137	-.0005	-.0018	.0013
124	ST	.0675	.0564	.0300	.1253	.1488	-.0916	-.0424	.0459	.0069	172	ST	-.1224	-.1311	-.1374	-.1229	-.0742	.0018	-.0038	-.0051	-.0043
125	ST	.0789	.0642	.0219	.0909	.2132	-.0901	-.0477	.0374	.0074	173	ST	-.1075	-.1086	-.1062	-.1019	-.0431	.0058	-.0033	-.0041	-.0068
126	ST	.0852	.0844	.0166	.0565	.1561	-.0901	-.0533	.0267	.0059	174	ST	-.0692	-.0734	-.0776	-.0754	-.0497	.0167	-.0038	-.0046	-.0101
127	ST	.0797	.0748	.0216	.0271	.0981	-.0908	-.0584	.0197	.0046	175	ST	.0409	.0283	.0310	.0988	-.0726	-.1020	-.0283	.0341	.0056
128	ST	.0814	.0768	.0277	.0147	.0773	-.0868	-.0546	.0209	.0081	176	ST	-.0216	-.0302	.0047	-.0701	-.1055	-.1015	-.0159	.0321	.0097
129	ST	.0743	.0710	.0300	.0036	.0465	-.0848	-.0591	.0136	.0054	177	ST	-.0310	-.0279	-.0500	-.0774	-.1057	-.1045	-.0111	.0083	.0013
130	ST	.0675	.0639	.0353	-.0030	.0291	-.0888	-.0594	.0146	.0054	178	ST	-.0274	-.0221	-.0422	-.0594	-.1007	-.0855	.0008	.0040	.0011
131	ST	.0579	.0561	.0426	-.0080	.0157	-.0868	-.0601	.0146	.0054	179	ST	-.0214	-.0314	-.0480	-.0584	-.0949	-.0633	.0111	.0025	.0016
132	ST	.0485	.0485	.0533	-.0131	.0173	-.0772	-.0596	.0154	.0071	180	ST	-.0292	-.0418	-.0538	-.0650	-.0933	-.0433	.0162	.0025	.0038
133	ST	.0374	.0379	.0401	-.0184	.0190	-.0552	-.0591	.0073	.0079	181	ST	-.0262	-.0443	-.0720	-.0807	-.0797	-.0304	.0187	.0038	.0056
134	ST	.0293	.0270	.0272	-.0141	.0107	-.0461	-.0586	-.0013	.0094	182	ST	.0252	.0149	.0145	-.0035	-.0115	-.0438	-.0594	-.0069	.0109
135	ST	.0227	.0187	.0186	-.0078	-.0062	-.0078	-.0581	-.0129	.0084	183	ST	.0184	.0093	.0047	.0021	-.0204	-.0643	-.0629	.0007	.0132
136	ST	.0217	.0204	.0454	.0081	-.0113	.0496	-.0531	-.0132	.0102	184	ST									
137	ST	.0164	.0301	.1317	.0314	-.0196	.1068	-.0541	-.0200	.0076	185	ST	.0237	.0207	.0171	-.0002	-.0070	-.0562	-.0505	.0154	.0137
138	ST	.0257	.0824	.2535	.0438	-.0168	.1437	-.0460	-.0182	.0130	186	ST	.0270	.0232	.0247	-.0073	.0021	-.0534	-.0255	.0308	.0203
139	ST										187	ST	.0159	.0139	.0102	-.0197	-.0057	-.0549	-.0280	.0212	.0112
140	ST	.2040	.3399	.3105	.1620	-.0186	.1336	-.0498	-.0286	.0403	188	ST	.0136	.0108	.0052	-.0179	-.0060	-.0481	-.0235	.0204	.0097
141	ST	.3275	.3986	.3153	.2749	-.0166	.1270	-.0510	-.0298	.0451	189	ST	.3329	.3351	.3750	.3857	.0516	.0769	-.0455	-.0319	.0259
142	ST	.3253	.3624	.3254	.3468	.0077	.1037	-.0495	-.0306	.0373	190	ST	.3235	.3154	.3436	.3081	.0200	.1144	-.0500	-.0321	.0249
143	ST	.2845	.2949	.3241	.3539	.0435	.0784	-.0505	-.0354	.0256	191	ST	.2526	.2405	.2975	.2096	.0178	.0582	-.0568	-.0329	.0238
144	ST	.3286	.3280	.3558	.3971	.0715	.0787	-.0495	-.0336	.0266	192	ST	.1642	.1725	.3008	.1570	.0064	.0159	-.0563	-.0263	.0243
145	ST	.3349	.3419	.3737	.4242	.0680	.0691	-.0475	-.0341	.0246	193	ST	.1635	.1651	.3216	.1603	.0008	.0276	-.0528	-.0190	.0238
146	ST	.3503	.3379	.3892	.4161	.1511	.0883	-.0437	-.0349	.0238	194	ST	.2121	.1894	.3380	.1506	.0155	.0311	-.0417	-.0104	.0238
147	ST	.0478	.1067	.1444	.1562	.1564	.1576	.1572	.1591	.1504	195	ST	.2551	.2349	.3461	.1638	.0357	.0324	-.0338	-.0058	.0205
148	ST	.0224	.0311	.0469	.0643	.0637	.0633	.0640	.0641	.0562	196	ST	.3622	.3199	.4120	.2357	.1801	-.0779	-.0960	-.1051	-.0736

Table VI. Pressure Coefficients for Configuration 6

(a) $M = 1.69$

		C_p for Z_s/d =					
ORF	LOC	1.25	1.67	2.92	5.00	7.50	10.83
1	FL	.0398	.0401	.0398	.0402	.0404	.0402
2	FL	.1841	.0429	.0420	.0426	.0429	.0424
3	FL	.1858	.2221	.0444	.0446	.0448	.0448
4	FL	.1666	.1507	.0395	.0400	.0402	.0398
5	FL	.1225	.1439	.0517	.0437	.0442	.0435
6	FL	.0533	.0991	.1857	.0431	.0433	.0429
7	FL	.0026	.0562	.1405	.0429	.0433	.0426
8	FL	-.0168	.0271	.1308	.0415	.0418	.0413
9	FL	-.0133	.0037	.1024	.0418	.0420	.0418
10	FL	-.0129	.0066	.1048	.0400	.0402	.0400
11	FL	-.0014	.0279	.1136	.0380	.0380	.0371
12	FL	.0447	.0619	.1213	.0389	.0391	.0387
13	FL	-.0151	-.0018	.0753	.0424	.0426	.0422
14	FL	-.0144	.0061	.0400	.0464	.0396	.0391
15	FL	-.0133	.0088	.0089	.1377	.0380	.0374
16	FL	-.0010	.0039	-.0076	.1112	.0374	.0369
17	FL	.0085	.0006	-.0012	.1048	.0374	.0371
18	FL	.0178	.0046	.0087	.0861	.0376	.0371
19	FL	.0248	.0074	.0168	.0682	.0378	.0376
20	FL	.0357	.0216	.0239	.0548	.0426	.0426
21	FL	.0383	.0266	.0270	.0354	.0431	.0422
22	FL	.0337	.0244	.0373	.0107	.1050	.0369
23	FL	.0398	.0321	.0367	.0038	.1041	.0409
24	FL	.0383	.0321	.0332	.0102	.0975	.0378
25	FL	.0379	.0348	.0305	.0173	.0836	.0389
26	FL	.0383	.0383	.0296	.0261	.0722	.0411
27	FL	.0374	.0387	.0274	.0263	.0579	.0404
28	FL	.0337	.0363	.0232	.0232	.0424	.0371
29	FL	.0326	.0348	.0228	.0215	.0422	.0365
30	FL	.0310	.0326	.0219	.0190	.0435	.0345
31	FL	.0341	.0332	.0274	.0232	.0510	.0371
32	FL	.0279	.0308	.0184	.0246	.0255	.0332
33	FL	.0304	.0330	.0217	.0274	.0155	.0356
34	FL	.0297	.0317	.0246	.0283	.0063	.0352
35	FL	.0290	.0313	.0287	.0290	.0116	.0867
36	FL	.0297	.0304	.0314	.0296	.0153	.0889
37	FL	.0328	.0324	.0356	.0307	.0208	.0843
38	FL	.0332	.0326	.0380	.0321	.0244	.0739
39	FL	.0374	.0368	.0418	.0360	.0327	.0642
40	FL	.0379	.0368	.0400	.0360	.0329	.0550
41	FL	.0357	.0345	.0362	.0343	.0310	.0448
42	FL	.0359	.0339	.0349	.0336	.0314	.0358
43	FL	.0359	.0354	.0358	.0395	.0329	.0274
44	FL	.0306	.0317	.0298	.0349	.0307	.0142
45	FL	.0330	.0328	.0310	.0343	.0296	.0111
46	FL	.0343	.0313	.0298	.0314	.0250	.0144
47	FL	.0348	.0357	.0351	.0343	.0336	.0221
48	FL	.0310	.0313	.0314	.0310	.0303	.0197
49	FL	.0345	.0343	.0332	.0334	.0314	.0215
50	FL	.0306	.0308	.0294	.0314	.0257	.0169
51	FL	.0350	.0339	.0360	.0332	.0336	.0274
52	FL	.0317	.0319	.0327	.0285	.0316	.0250
53	FL	.0317	.0319	.0327	.0276	.0327	.0257
54	FL	.0343	.0330	.0354	.0292	.0332	.0281
55	FL	.0304	.0321	.0318	.0276	.0307	.0272
56	FL	.0312	.0315	.0310	.0279	.0301	.0274
57	FL	.0129	.0346	.0340	.0323	.0334	.0310
58	FL	-.0587	.0304	.0360	.0356	.0352	.0334
59	FL	-.0347	.0341	.0358	.0356	.0349	.0325
60	FL	.0242	.0321	.0316	.0312	.0307	.0285
61	FL	.0350	.0359	.0360	.0349	.0349	.0347
62	FL	-.0453	-.0351	.0349	.0349	.0336	.0321
63	FL	.0872	-.0534	.0349	.0351	.0343	.0329
64	FL	.0967	.0740	.0338	.0334	.0332	.0321
65	FL	.0323	.0848	.0263	.0343	.0329	.0325
66	FL	-.0614	.0467	-.0136	.0327	.0318	.0314
67	FL	.0665	-.0194	-.0328	.0321	.0318	.0314
68	FL	.0259	.0105	-.0281	.0327	.0327	.0325
69	FL	.0443	.0678	-.0079	.0391	.0385	.0380
70	FL	.0897	.0729	.0298	.0429	.0413	.0411
71	SW						
72	SW						
73	SW						
74	SW						
75	SW						
76	SW						
77	SW						
78	SW						
79	SW						
80	SW						
81	SW						
82	SW						
83	SW						
84	SW						
85	SW						
86	SW						
87	RF						
88	RF						
89	RF						
90	RF						
91	RF						
92	RF						
93	RF						
94	RF						
95	RF						
96	RF						
97	RF						
98	RF						
99	RF						
100	RF						

Table VI. Continued

(a) Concluded

		C_p for Z_s/d =					
ORF	LOC	1.25	1.67	2.92	5.00	7.50	10.83
101	ST	.2297	.2254	.2236	.2219	.2141	.2203
102	ST	.1519	.1490	.1493	.1502	.1476	.1456
103	ST	.1287	.1018	.1041	.1000	.0999	.0951
104	ST	.1316	.0471	.0616	.0481	.0477	.0382
105	ST	.0403	.0209	-.0231	.0118	.0105	.0030
106	ST	.0207	.0447	-.0323	-.0301	-.0257	-.0301
107	ST	.0226	.0175	-.0134	-.0145	-.0051	-.0118
108	ST	.0112	.0465	-.0006	-.0023	.0008	.0030
109	ST	-.0080	.0383	.0089	.0100	.0076	.0195
110	ST	-.0230	.0277	.0175	.0292	.0136	.0215
111	ST	-.0208	.0108	.0206	.0071	.0177	.0252
112	ST	-.0069	.0046	.0312	.0274	.0274	.0294
113	ST	-.0038	-.0036	.0777	.0305	.0299	.0281
114	ST	.0017	.0015	.0687	.0281	.0301	.0299
115	ST	.0125	.0114	.0656	.0338	.0329	.0321
116	ST	.0229	.0156	.0532	.0367	.0321	.0325
117	ST	.0301	.0191	.0433	.0387	.0391	.0343
118	ST	.0330	.0200	.0301	.0345	.0354	.0327
119	ST	.0376	.0235	.0193	.0347	.0138	.0334
120	ST	.0407	.0277	.0102	.0336	.0389	.0345
121	ST	.0429	.0352	.0098	.0356	.0327	.0385
122	ST	.0394	.0354	.0173	.0347	.0332	.0347
123	ST	.0420	.0398	.0259	.0373	.0398	.0387
124	ST	.0392	.0383	.0285	.0354	.0422	.0374
125	ST	.0398	.0412	.0365	.0717	.0420	.0378
126	ST	.0372	.0383	.0448	.0695	.0382	.0363
127	ST	.0310	.0346	.0395	.0559	.0325	.0431
128	ST	.0350	.0381	.0422	.0530	.0374	.0422
129	ST	.0341	.0343	.0380	.0464	.0371	.0266
130	ST	.0323	.0337	.0345	.0404	.0369	.0418
131	ST	.0328	.0343	.0327	.0345	.0358	.0382
132	ST	.0354	.0359	.0318	.0314	.0376	.0413
133	ST	.0363	.0357	.0303	.0263	.0367	.0407
134	ST	.0409	.0381	.0325	.0279	.0396	.0415
135	ST	.0401	.0363	.0318	.0287	.0398	.0400
136	ST	.0394	.0403	.0373	.0334	.0429	.0420
137	ST	.0365	.0370	.0387	.0340	.0400	.0393
138	ST	.0381	.0365	.0411	.0343	.0402	.0411
139	ST						
140	ST	.0352	.0359	.0409	.0376	.0728	.0424
141	ST	.0354	.0354	.0371	.0371	.0656	.0402
142	ST	.0365	.0370	.0365	.0365	.0574	.0385
143	ST	.0180	.0189	.0184	.0208	.0318	.0219
144	ST	.0359	.0359	.0356	.0347	.0424	.0400
145	ST	.0357	.0346	.0367	.0340	.0369	.0393
146	ST	.0337	.0335	.0347	.0329	.0312	.0354
147	ST	.2180	.2160	.2170	.2133	.2093	.2128
148	ST	.0875	.0965	.0956	.0947	.0927	.0880

		C_p for Z_s/d =					
ORF	LOC	1.25	1.67	2.92	5.00	7.50	10.83
149	ST	-.0010	-.0053	.0007	.0029	.0019	-.0078
150	ST	.0105	-.0155	-.0136	-.0118	-.0083	-.0107
151	ST	.0467	.0522	.0208	.0237	.0232	.0323
152	ST	.0202	.0390	.0378	.0283	.0266	.0340
153	ST	.0171	.0209	.0512	.0301	.0338	.0327
154	ST						
155	ST	.0354	.0354	.0246	.0393	.0367	.0360
156	ST	.0363	.0379	.0380	.0543	.0426	.0411
157	ST	.0354	.0385	.0389	.0466	.0385	.0389
158	ST	.0368	.0372	.0336	.0349	.0389	.0380
159	ST	.0339	.0339	.0365	.0329	.0512	.0371
160	ST	.0310	.0346	.0329	.0321	.0479	.0389
161	ST	.0248	.0066	-.0222	.0076	.0056	.0030
162	ST	.0394	.0068	-.0023	.0100	.0116	.0118
163	ST	.0652	.0055	.0085	.0060	.0085	.0094
164	ST	.0520	.0028	.0065	.0027	.0056	.0056
165	ST	.0416	.0024	.0038	.0027	.0058	.0041
166	ST	.0068	.0013	.0014	.0016	.0043	-.0025
167	ST	.0030	.0019	.0041	.0047	.0056	-.0043
168	ST	-.0155	.0178	.0254	.0168	.0228	.0307
169	ST	-.0124	.0240	.0261	.0237	.0241	.0305
170	ST	-.0058	.0253	.0197	.0252	.0193	.0215
171	ST	.0136	.0372	.0237	.0276	.0261	.0281
172	ST	.0266	.0414	.0217	.0232	.0257	.0274
173	ST	.0374	.0460	.0201	.0221	.0248	.0270
174	ST	.0396	.0451	.0164	.0190	.0202	.0241
175	ST	.0429	.0407	.0261	.0380	.0431	.0391
176	ST	.0434	.0405	.0263	.0371	.0437	.0369
177	ST	.0381	.0346	.0208	.0343	.0413	.0358
178	ST	.0345	.0308	.0190	.0316	.0369	.0312
179	ST	.0363	.0293	.0243	.0358	.0380	.0334
180	ST	.0352	.0266	.0303	.0360	.0349	.0327
181	ST	.0350	.0266	.0373	.0373	.0343	.0343
182	ST	.0416	.0370	.0323	.0283	.0424	.0402
183	ST	.0401	.0357	.0312	.0259	.0422	.0391
184	ST						
185	ST	.0383	.0352	.0338	.0316	.0433	.0420
186	ST	.0361	.0352	.0349	.0376	.0429	.0407
187	ST	.0317	.0328	.0329	.0387	.0380	.0352
188	ST	.0341	.0370	.0371	.0451	.0391	.0374
189	ST	.0341	.0328	.0351	.0325	.0360	.0374
190	ST	.0326	.0321	.0343	.0312	.0376	.0360
191	ST	.0334	.0339	.0362	.0321	.0424	.0374
192	ST	.0337	.0346	.0369	.0325	.0462	.0387
193	ST	.0332	.0339	.0358	.0321	.0475	.0398
194	ST	.0359	.0363	.0378	.0340	.0501	.0429
195	ST	.0341	.0341	.0356	.0314	.0484	.0404
196	ST	-.0559	-.0536	-.0531	-.0550	-.0647	-.0565

Table VI. Continued

(b) $M = 2.00$

		C_p for Z_s/d =					
ORF	LOC	1.25	1.67	2.92	5.00	7.50	10.83
1	FL	.0357	.0356	.0356	.0353	.0353	.0364
2	FL	.0379	.0365	.0369	.0365	.0361	.0373
3	FL	.1967	.0868	.0387	.0382	.0379	.0386
4	FL	.1609	.1951	.0347	.0340	.0339	.0348
5	FL	.1237	.1494	.0367	.0365	.0361	.0368
6	FL	.0749	.1222	.0351	.0344	.0344	.0350
7	FL	.0524	.0855	.0351	.0331	.0328	.0335
8	FL	.0012	.0469	.1532	.0309	.0306	.0310
9	FL	.0030	.0137	.1200	.0320	.0317	.0319
10	FL	-.0017	.0255	.1182	.0311	.0310	.0312
11	FL	.0328	.0545	.1276	.0284	.0281	.0281
12	FL	.0644	.0832	.0469	.0300	.0299	.0299
13	FL	.0030	-.0101	.1135	.0331	.0328	.0330
14	FL	-.0039	-.0016	.0839	.0307	.0306	.0306
15	FL	-.0022	.0164	.0603	.0311	.0310	.0308
16	FL	-.0075	.0220	.0380	.0322	.0319	.0319
17	FL	-.0059	.0182	.0171	.0331	.0328	.0332
18	FL	.0036	.0153	.0013	.0489	.0319	.0326
19	FL	.0083	.0128	-.0012	.1051	.0332	.0332
20	FL	.0185	.0153	.0148	.1082	.0393	.0393
21	FL	.0201	.0102	.0189	.0895	.0359	.0361
22	FL	.0185	.0046	.0151	.0661	.0306	.0304
23	FL	.0259	.0177	.0193	.0543	.0326	.0326
24	FL	.0246	.0177	.0177	.0362	.0277	.0277
25	FL	.0272	.0213	.0211	.0249	.0299	.0297
26	FL	.0295	.0251	.0249	.0133	.0324	.0317
27	FL	.0286	.0242	.0222	.0042	.0308	.0297
28	FL	.0275	.0238	.0320	.0071	.0869	.0288
29	FL	.0272	.0240	.0302	.0064	.0860	.0288
30	FL	.0252	.0226	.0202	.0017	.0807	.0268
31	FL	.0272	.0246	.0238	.0053	.0379	.0301
32	FL	.0243	.0220	.0284	.0091	.0818	.0268
33	FL	.0261	.0242	.0278	.0146	.0751	.0286
34	FL	.0250	.0253	.0238	.0160	.0631	.0275
35	FL	.0261	.0267	.0215	.0184	.0526	.0283
36	FL	.0243	.0264	.0189	.0200	.0417	.0277
37	FL	.0246	.0269	.0182	.0224	.0328	.0279
38	FL	.0239	.0260	.0162	.0200	.0226	.0277
39	FL	.0234	.0253	.0151	.0220	.0125	.0266
40	FL	.0241	.0262	.0169	.0238	.0063	.0277
41	FL	.0241	.0255	.0206	.0233	.0094	.0272
42	FL	.0250	.0258	.0244	.0246	.0136	.0277
43	FL	.0268	.0262	.0264	.0253	.0168	.0357
44	FL	.0234	.0238	.0242	.0220	.0152	.0733
45	FL	.0250	.0264	.0267	.0246	.0188	.0667
46	FL	.0237	.0244	.0260	.0238	.0194	.0584
47	FL	.0230	.0262	.0267	.0251	.0221	.0542
48	FL	.0263	.0249	.0255	.0240	.0210	.0513
49	FL	.0277	.0282	.0293	.0275	.0241	.0573
50	FL	.0243	.0244	.0258	.0238	.0203	.0553

		C_p for Z_s/d =					
ORF	LOC	1.25	1.67	2.92	5.00	7.50	10.83
51	FL	.0279	.0300	.0280	.0258	.0243	.0484
52	FL	.0237	.0229	.0249	.0220	.0214	.0377
53	FL	.0221	.0229	.0249	.0218	.0221	.0299
54	FL	.0241	.0242	.0249	.0233	.0234	.0248
55	FL	.0243	.0229	.0220	.0220	.0221	.0174
56	FL	.0234	.0246	.0260	.0242	.0237	.0110
57	FL	.0266	.0273	.0260	.0275	.0263	.0101
58	FL	-.0215	.0273	.0264	.0331	.0272	.0145
59	FL	.0096	.0249	.0242	.0307	.0248	.0114
60	FL	.0228	.0233	.0220	.0275	.0221	.0087
61	FL	.0286	.0287	.0291	.0293	.0283	.0134
62	FL	-.0794	.0220	.0267	.0311	.0275	.0179
63	FL	.0023	-.0339	.0264	.0287	.0255	.0181
64	FL	.0773	-.0667	.0269	.0273	.0248	.0197
65	FL	.0740	.0565	.0271	.0264	.0275	.0226
66	FL	.0119	.0748	.0282	.0264	.0272	.0226
67	FL	-.0614	.0436	.0211	.0229	.0250	.0212
68	FL	-.0202	.0563	.0264	.0260	.0283	.0257
69	FL	.0482	.0603	.0304	.0284	.0304	.0277
70	FL	.0344	-.0137	.0333	.0318	.0326	.0301
71	SW						
72	SW						
73	SW						
74	SW						
75	SW						
76	SW						
77	SW						
78	SW						
79	SW						
80	SW						
81	SW						
82	SW						
83	SW						
84	SW						
85	SW						
86	SW						
87	RF						
88	RF						
89	RF						
90	RF						
91	RF						
92	RF						
93	RF						
94	RF						
95	RF						
96	RF						
97	RF						
98	RF						
99	RF						
100	RF						

Table VI. Continued

(b) Concluded

		C_p for Z_s/d =					
ORF	LOC	1.25	1.67	2.92	5.00	7.50	10.83
101	ST	.1840	.2011	.1982	.2020	.1998	.2016
102	ST	.1321	.1322	.1313	.1302	.1332	.1326
103	ST	.0954	.0930	.0944	.0933	.0960	.0960
104	ST	.0473	.0469	.0454	.0467	.0477	.0477
105	ST	.0905	.0309	.0108	.0086	.0096	.0103
106	ST	.0277	-.0088	-.0188	-.0250	-.0255	-.0211
107	ST	.0471	.0048	-.0288	-.0141	-.0091	-.0088
108	ST	.0337	.0625	-.0039	-.0054	-.0019	.0005
109	ST	.0217	.0512	.0064	.0048	.0063	.0108
110	ST	.0150	.0447	.0126	.0093	.0110	.0141
111	ST	-.0075	.0278	.0140	.0099	.0110	.0163
112	ST	-.0071	.0177	.0195	.0153	.0154	.0212
113	ST	-.0008	.0084	.0204	.0182	.0161	.0208
114	ST	.0012	.0006	.0280	.0251	.0199	.0237
115	ST	.0061	-.0034	.0333	.0122	.0208	.0248
116	ST	.0065	.0062	.0307	.0262	.0208	.0234
117	ST	.0101	.0148	.0723	.0289	.0250	.0243
118	ST	.0165	.0200	.0701	.0298	.0266	.0239
119	ST	.0217	.0215	.0576	.0295	.0310	.0232
120	ST	.0259	.0222	.0463	.0318	.0319	.0255
121	ST	.0275	.0233	.0356	.0324	.0315	.0259
122	ST	.0268	.0197	.0242	.0289	.0266	.0266
123	ST	.0315	.0222	.0204	.0313	.0377	.0292
124	ST	.0297	.0224	.0117	.0295	.0281	.0266
125	ST	.0297	.0260	.0079	.0300	.0161	.0283
126	ST	.0299	.0273	.0091	.0293	.0328	.0286
127	ST	.0279	.0269	.0157	.0258	.0310	.0272
128	ST	.0286	.0280	.0220	.0244	.0330	.0272
129	ST	.0286	.0287	.0264	.0267	.0330	.0290
130	ST	.0272	.0275	.0264	.0271	.0304	.0301
131	ST	.0263	.0264	.0271	.0271	.0279	.0312
132	ST	.0275	.0275	.0291	.0601	.0297	.0337
133	ST	.0252	.0264	.0258	.0603	.0266	.0312
134	ST	.0255	.0262	.0284	.0529	.0268	.0283
135	ST	.0263	.0269	.0289	.0456	.0257	.0288
136	ST	.0297	.0302	.0304	.0411	.0272	.0368
137	ST	.0283	.0287	.0284	.0358	.0252	.0266
138	ST	.0290	.0295	.0278	.0342	.0255	.0172
139	ST						
140	ST	.0263	.0260	.0229	.0197	.0281	.0257
141	ST	.0275	.0269	.0240	.0153	.0317	.0290
142	ST	.0261	.0260	.0222	.0106	.0292	.0277
143	ST	.0159	.0157	.0117	.0028	.0170	.0159
144	ST	.0272	.0278	.0255	.0186	.0290	.0263
145	ST	.0263	.0269	.0269	.0209	.0286	.0272
146	ST	.0261	.0269	.0273	.0224	.0290	.0283
147	ST	.1938	.1930	.1959	.1944	.1956	.1976
148	ST	.0889	.0870	.0899	.0884	.0891	.0914

		C_p for Z_s/d =					
ORF	LOC	1.25	1.67	2.92	5.00	7.50	10.83
149	ST	-.0006	.0042	.0039	.0055	.0056	.0074
150	ST	-.0135	-.0152	-.0146	-.0123	-.0106	-.0091
151	ST	.0415	.0233	.0131	.0122	.0159	.0179
152	ST	.0339	.0454	.0238	.0213	.0223	.0230
153	ST	.0172	.0229	.0280	.0246	.0228	.0248
154	ST						
155	ST	.0214	.0191	.0307	.0275	.0290	.0268
156	ST	.0292	.0267	.0238	.0291	.0283	.0301
157	ST	.0272	.0262	.0235	.0316	.0301	.0286
158	ST	.0243	.0251	.0255	.0387	.0252	.0250
159	ST	.0255	.0253	.0262	.0318	.0292	.0230
160	ST	.0241	.0258	.0229	.0235	.0272	.0277
161	ST	.0916	.0148	.0059	.0053	.0072	.0085
162	ST	.0551	.0182	.0133	.0151	.0172	.0185
163	ST	.0121	.0095	.0093	.0104	.0123	.0130
164	ST	.0079	.0066	.0068	.0073	.0094	.0101
165	ST	.0063	.0015	.0064	.0075	.0096	.0121
166	ST	.0065	.0050	.0075	.0086	.0110	.0139
167	ST	.0045	.0071	.0075	.0082	.0094	.0123
168	ST	-.0002	.0409	.0173	.0122	.0139	.0185
169	ST	.0125	.0451	.0173	.0126	.0159	.0183
170	ST	.0194	.0427	.0115	.0084	.0119	.0139
171	ST	.0281	.0469	.0140	.0126	.0163	.0190
172	ST	.0321	.0416	.0115	.0115	.0157	.0181
173	ST	.0353	.0333	.0084	.0106	.0148	.0165
174	ST	.0359	.0209	.0071	.0077	.0119	.0139
175	ST	.0306	.0209	.0218	.0309	.0361	.0301
176	ST	.0268	.0186	.0233	.0278	.0310	.0279
177	ST	.0248	.0200	.0295	.0293	.0301	.0295
178	ST	.0221	.0195	.0320	.0275	.0279	.0259
179	ST	.0214	.0226	.0398	.0304	.0324	.0301
180	ST	.0199	.0229	.0431	.0293	.0312	.0299
181	ST	.0210	.0246	.0478	.0302	.0312	.0304
182	ST	.0257	.0264	.0284	.0447	.0234	.0281
183	ST	.0259	.0269	.0287	.0456	.0234	.0277
184	ST						
185	ST	.0281	.0284	.0267	.0454	.0266	.0297
186	ST	.0306	.0302	.0275	.0405	.0301	.0304
187	ST	.0259	.0249	.0220	.0291	.0266	.0255
188	ST	.0261	.0246	.0218	.0280	.0281	.0266
189	ST	.0266	.0275	.0271	.0213	.0297	.0263
190	ST	.0261	.0269	.0262	.0213	.0292	.0259
191	ST	.0272	.0282	.0264	.0224	.0304	.0275
192	ST	.0263	.0271	.0240	.0206	.0290	.0266
193	ST	.0275	.0287	.0244	.0231	.0299	.0290
194	ST	.0270	.0287	.0244	.0246	.0290	.0290
195	ST	.0268	.0284	.0242	.0260	.0286	.0290
196	ST	-.0757	-.0767	-.0776	-.0794	-.0765	-.0777

Table VI. Continued

(c) $M = 2.65$

ORF	LOC	C_p for Z_s/d = 1.25	1.67	2.92	5.00	7.50	10.83
1	FL	.0238	.0243	.0237	.0248	.0252	.0251
2	FL	.0248	.0248	.0245	.0253	.0254	.0251
3	FL	.0787	.0243	.0237	.0240	.0241	.0239
4	FL	.1598	.0253	.0242	.0250	.0249	.0249
5	FL	.1335	.0879	.0250	.0258	.0257	.0256
6	FL	.1098	.1331	.0234	.0238	.0236	.0236
7	FL	.0721	.1222	.0250	.0250	.0252	.0249
8	FL	.0350	.0973	.0214	.0215	.0216	.0216
9	FL	.0076	.0674	.0257	.0258	.0257	.0254
10	FL	.0259	.0780	.0219	.0220	.0224	.0223
11	FL	.0605	.0902	.0186	.0189	.0188	.0183
12	FL	.0767	.0752	.0199	.0202	.0204	.0193
13	FL	-.0075	.0402	.0242	.0238	.0241	.0236
14	FL	.0170	.0159	.0478	.0238	.0239	.0239
15	FL	.0180	-.0031	.1009	.0225	.0224	.0223
16	FL	.0168	-.0039	.0938	.0197	.0196	.0196
17	FL	.0150	.0020	.0792	.0240	.0241	.0241
18	FL	.0084	.0050	.0609	.0220	.0221	.0221
19	FL	.0049	.0073	.0455	.0230	.0229	.0228
20	FL	.0041	.0273	.0356	.0270	.0272	.0274
21	FL	-.0009	.0266	.0169	.0227	.0229	.0228
22	FL	.0071	.0238	.0060	.0227	.0229	.0234
23	FL	.0107	.0212	.0022	.0232	.0239	.0241
24	FL	.0028	.0075	-.0029	.0139	.0140	.0142
25	FL	.0112	.0116	.0070	.0574	.0221	.0223
26	FL	.0114	.0091	.0100	.0795	.0221	.0223
27	FL	.0132	.0080	.0093	.0709	.0229	.0231
28	FL	.0119	.0048	.0115	.0607	.0219	.0221
29	FL	.0127	.0068	.0100	.0612	.0206	.0208
30	FL	.0114	.0091	.0083	.0638	.0188	.0188
31	FL	.0112	.0169	.0083	.0701	.0209	.0203
32	FL	.0147	.0086	.0133	.0503	.0214	.0223
33	FL	.0178	.0091	.0151	.0420	.0226	.0231
34	FL	.0185	.0124	.0153	.0324	.0216	.0226
35	FL	.0203	.0177	.0171	.0255	.0229	.0239
36	FL	.0198	.0192	.0174	.0167	.0226	.0234
37	FL	.0210	.0205	.0189	.0106	.0236	.0241
38	FL	.0221	.0212	.0204	.0088	.0244	.0256
39	FL	.0210	.0200	.0189	.0093	.0224	.0231
40	FL	.0223	.0207	.0196	.0121	.0236	.0246
41	FL	.0216	.0202	.0186	.0126	.0381	.0239
42	FL	.0223	.0210	.0232	.0151	.0657	.0249
43	FL	.0228	.0215	.0283	.0164	.0609	.0249
44	FL	.0208	.0200	.0245	.0159	.0535	.0226
45	FL	.0221	.0212	.0237	.0174	.0490	.0236
46	FL	.0210	.0215	.0222	.0177	.0431	.0234
47	FL	.0193	.0202	.0186	.0159	.0348	.0206
48	FL	.0198	.0207	.0202	.0172	.0363	.0221
49	FL	.0188	.0184	.0204	.0159	.0371	.0211
50	FL	.0162	.0157	.0202	.0129	.0381	.0185

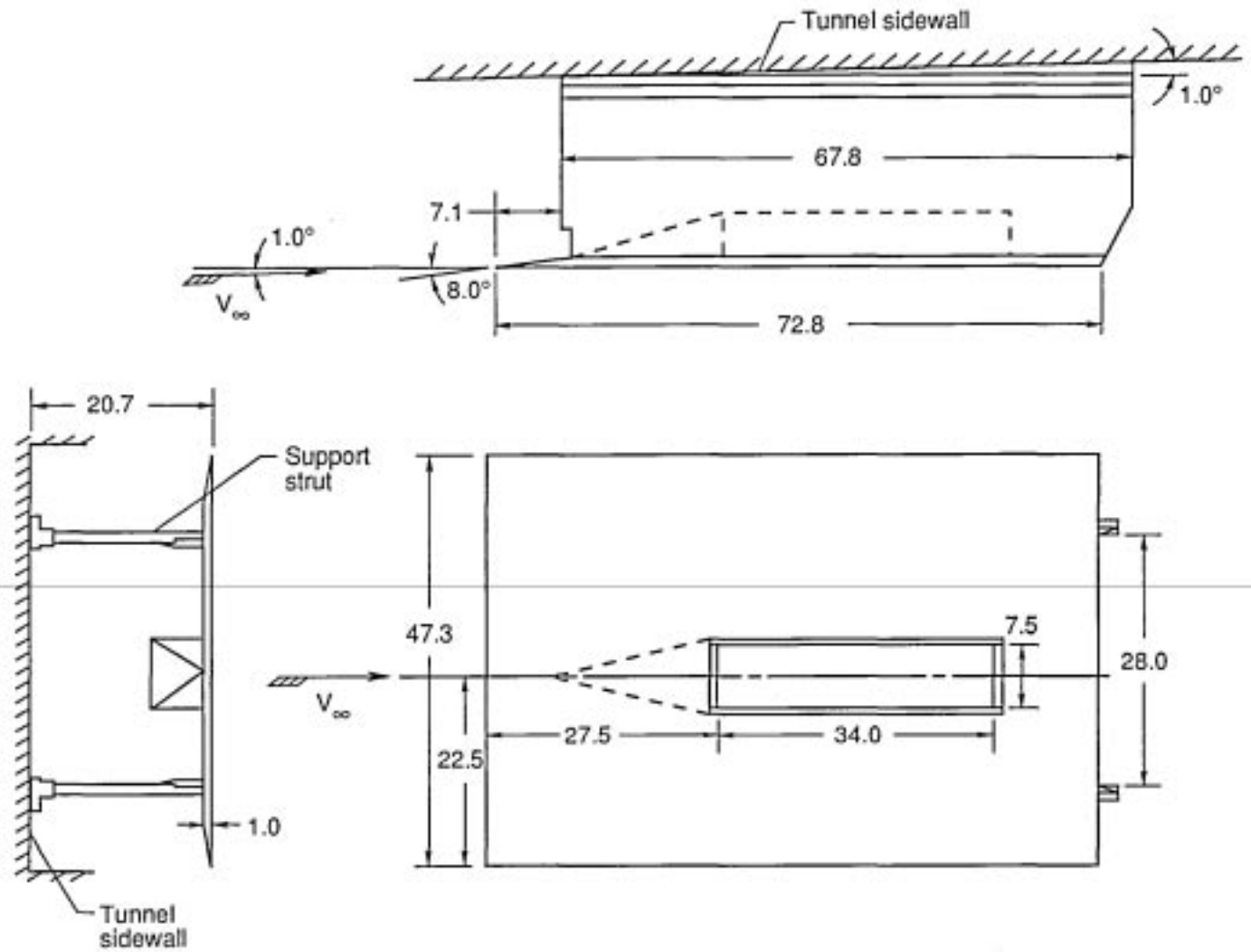
ORF	LOC	C_p for Z_s/d = 1.25	1.67	2.92	5.00	7.50	10.83
51	FL	.0190	.0233	.0217	.0210	.0333	.0251
52	FL	.0203	.0212	.0176	.0184	.0254	.0226
53	FL	.0213	.0202	.0176	.0200	.0206	.0239
54	FL	.0236	.0245	.0194	.0235	.0181	.0264
55	FL	.0226	.0235	.0184	.0222	.0130	.0251
56	FL	.0243	.0235	.0199	.0212	.0130	.0256
57	FL	.0236	.0250	.0224	.0240	.0166	.0264
58	FL	.0233	.0260	.0232	.0245	.0186	.0266
59	FL	.0175	.0192	.0164	.0179	.0112	.0198
60	FL	.0152	.0159	.0128	.0149	.0077	.0170
61	FL	.0203	.0215	.0171	.0195	.0123	.0236
62	FL	-.0063	.0250	.0237	.0248	.0191	.0266
63	FL	-.0487	.0225	.0207	.0220	.0171	.0234
64	FL	-.0495	.0111	.0227	.0227	.0183	.0244
65	FL	.0509	-.0181	.0237	.0235	.0196	.0320
66	FL	.0638	-.0384	.0247	.0243	.0209	.0585
67	FL	.0261	.0009	.0237	.0225	.0198	.0527
68	FL	.0483	-.0356	.0237	.0225	.0198	.0563
69	FL	.0001	-.0046	.0224	.0220	.0193	.0545
70	FL	.0094	.0222	.0229	.0235	.0204	.0555
71	SW						
72	SW						
73	SW						
74	SW						
75	SW						
76	SW						
77	SW						
78	SW						
79	SW						
80	SW						
81	SW						
82	SW						
83	SW						
84	SW						
85	SW						
86	SW						
87	RF						
88	RF						
89	RF						
90	RF						
91	RF						
92	RF						
93	RF						
94	RF						
95	RF						
96	RF						
97	RF						
98	RF						
99	RF						
100	RF						

Table VI. Concluded

(c) Concluded

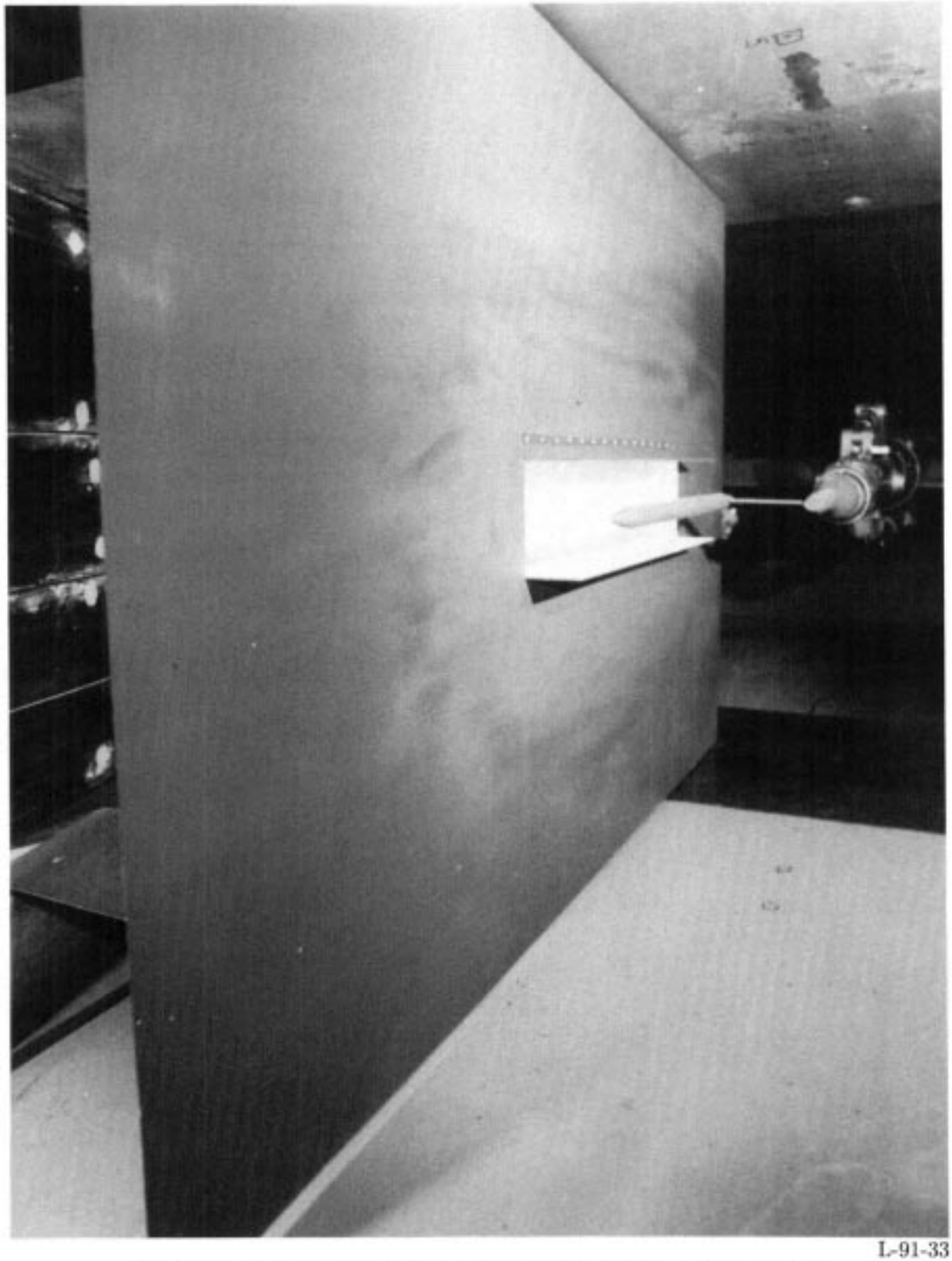
ORF	LOC	C_p for Z_s/l = 1.25	1.67	2.92	5.00	7.50	10.83
101	ST	.1788	.1767	.1766	.1765	.1793	.1335
102	ST	.1217	.1219	.1219	.1225	.1241	.0922
103	ST	.0837	.0894	.0860	.0899	.0864	.0869
104	ST	.0463	.0420	.0457	.0440	.0472	.0507
105	ST	.0137	.0116	.0133	.0149	.0148	.0183
106	ST	-.0181	-.0138	-.0135	-.0125	-.0128	-.0073
107	ST	.0018	-.0067	-.0082	-.0074	-.0067	-.0040
108	ST	.0597	.0022	-.0039	-.0033	-.0032	.0008
109	ST	.0620	.0086	-.0009	.0020	.0024	.0054
110	ST	.0524	.0060	.0062	.0035	.0047	.0074
111	ST	.0365	.0146	.0009	.0055	.0072	.0122
112	ST	.0200	.0666	.0105	.0088	.0100	.0127
113	ST	.0023	.0613	.0138	.0106	.0092	.0155
114	ST	-.0108	.0529	.0146	.0108	.0117	.0175
115	ST	-.0075	.0337	.0143	.0113	.0120	.0147
116	ST	.0074	.0207	.0181	.0111	.0117	.0140
117	ST	.0107	.0116	.0191	.0129	.0123	.0150
118	ST	.0089	.0007	.0166	.0121	.0115	.0150
119	ST	.0087	-.0026	.0179	.0139	.0145	.0170
120	ST	.0076	.0004	.0267	.0159	.0160	.0168
121	ST	.0061	.0042	.0303	.0232	.0185	.0196
122	ST	.0034	.0048	.0237	.0151	.0148	.0170
123	ST	.0097	.0088	.0214	.0101	.0163	.0185
124	ST	.0109	.0174	.0384	.0159	.0143	.0158
125	ST	.0122	.0182	.0455	.0167	.0138	.0153
126	ST	.0150	.0197	.0417	.0187	.0168	.0185
127	ST	.0205	.0228	.0386	.0240	.0221	.0236
128	ST	.0157	.0159	.0272	.0189	.0168	.0178
129	ST	.0183	.0172	.0227	.0230	.0206	.0213
130	ST	.0188	.0146	.0194	.0212	.0204	.0198
131	ST	.0190	.0136	.0138	.0205	.0198	.0196
132	ST	.0216	.0164	.0126	.0217	.0211	.0223
133	ST	.0200	.0159	.0083	.0195	.0206	.0216
134	ST	.0190	.0157	.0083	.0182	.0211	.0203
135	ST	.0203	.0192	.0128	.0200	.0247	.0221
136	ST	.0241	.0243	.0184	.0235	.0234	.0241
137	ST	.0223	.0225	.0169	.0222	.0183	.0239
138	ST	.0253	.0258	.0209	.0253	.0269	.0274
139	ST						
140	ST	.0205	.0215	.0184	.0212	.0221	.0228
141	ST	.0221	.0228	.0209	.0227	.0241	.0246
142	ST	.0205	.0212	.0196	.0210	.0224	.0226
143	ST	.0185	.0197	.0191	.0200	.0204	.0213
144	ST	.0223	.0240	.0242	.0240	.0239	.0254
145	ST	.0223	.0228	.0240	.0225	.0221	.0236
146	ST	.0226	.0253	.0265	.0526	.0239	.0249
147	ST	.1702	.1724	.1728	.1750	.1758	.1671
148	ST	.0774	.0790	.0784	.0802	.0809	.0722

ORF	LOC	C_p for Z_s/l = 1.25	1.67	2.92	5.00	7.50	10.83
149	ST	.0074	.0083	.0080	.0088	.0077	-.0002
150	ST	-.0118	-.0112	-.0115	-.0097	-.0123	-.0214
151	ST	.0046	.0053	.0065	.0073	.0079	.0044
152	ST	.0279	.0118	.0095	.0096	.0110	.0122
153	ST	.0243	.0344	.0161	.0154	.0168	.0193
154	ST						
155	ST	.0162	.0182	.0222	.0200	.0191	.0223
156	ST	.0165	.0192	.0308	.0222	.0211	.0221
157	ST	.0183	.0202	.0265	.0230	.0229	.0236
158	ST	.0180	.0167	.0189	.0202	.0206	.0208
159	ST	.0223	.0222	.0209	.0230	.0226	.0249
160	ST	.0259	.0263	.0240	.0278	.0274	.0294
161	ST	.0059	.0022	.0057	.0083	.0077	.0110
162	ST	.0216	.0098	.0227	.0240	.0254	.0297
163	ST	.0079	.0106	.0093	.0119	.0105	.0142
164	ST	.0013	.0055	.0039	.0075	.0042	.0031
165	ST	.0079	.0108	.0113	.0144	.0117	.0021
166	ST	.0109	.0111	.0118	.0139	.0120	.0021
167	ST	.0099	.0106	.0105	.0116	.0102	.0026
168	ST	.0382	.0037	.0027	.0060	.0072	.0099
169	ST	.0415	.0063	.0070	.0060	.0062	.0089
170	ST	.0372	.0058	.0027	.0022	.0024	.0051
171	ST	.0355	.0088	.0050	.0055	.0059	.0087
172	ST	.0253	.0073	.0055	.0058	.0064	.0079
173	ST	.0109	.0055	.0052	.0050	.0062	.0049
174	ST	.0039	.0032	.0039	.0040	.0049	.0016
175	ST	.0084	.0075	.0199	.0096	.0171	.0193
176	ST	.0035	.0058	.0174	.0103	.0145	.0175
177	ST	.0099	.0096	.0214	.0197	.0186	.0218
178	ST	.0094	.0070	.0166	.0144	.0140	.0173
179	ST	.0152	.0146	.0184	.0167	.0178	.0216
180	ST	.0147	.0177	.0156	.0139	.0155	.0190
181	ST	.0170	.0235	.0176	.0154	.0173	.0208
182	ST	.0213	.0195	.0128	.0202	.0249	.0218
183	ST	.0210	.0182	.0131	.0200	.0231	.0213
184	ST						
185	ST	.0223	.0202	.0191	.0232	.0229	.0234
186	ST	.0301	.0293	.0313	.0319	.0317	.0327
187	ST	.0198	.0200	.0245	.0227	.0226	.0236
188	ST	.0173	.0182	.0245	.0210	.0209	.0216
189	ST	.0233	.0235	.0242	.0232	.0231	.0241
190	ST	.0218	.0228	.0234	.0227	.0229	.0239
191	ST	.0210	.0217	.0224	.0225	.0224	.0234
192	ST	.0193	.0195	.0194	.0200	.0206	.0211
193	ST	.0221	.0222	.0219	.0230	.0236	.0249
194	ST	.0213	.0220	.0207	.0217	.0221	.0239
195	ST	.0236	.0240	.0222	.0238	.0236	.0259
196	ST	-.0745	-.0741	-.0748	-.0684	-.0751	-.0759



(a) Three-view sketch of splitter plate assembly.

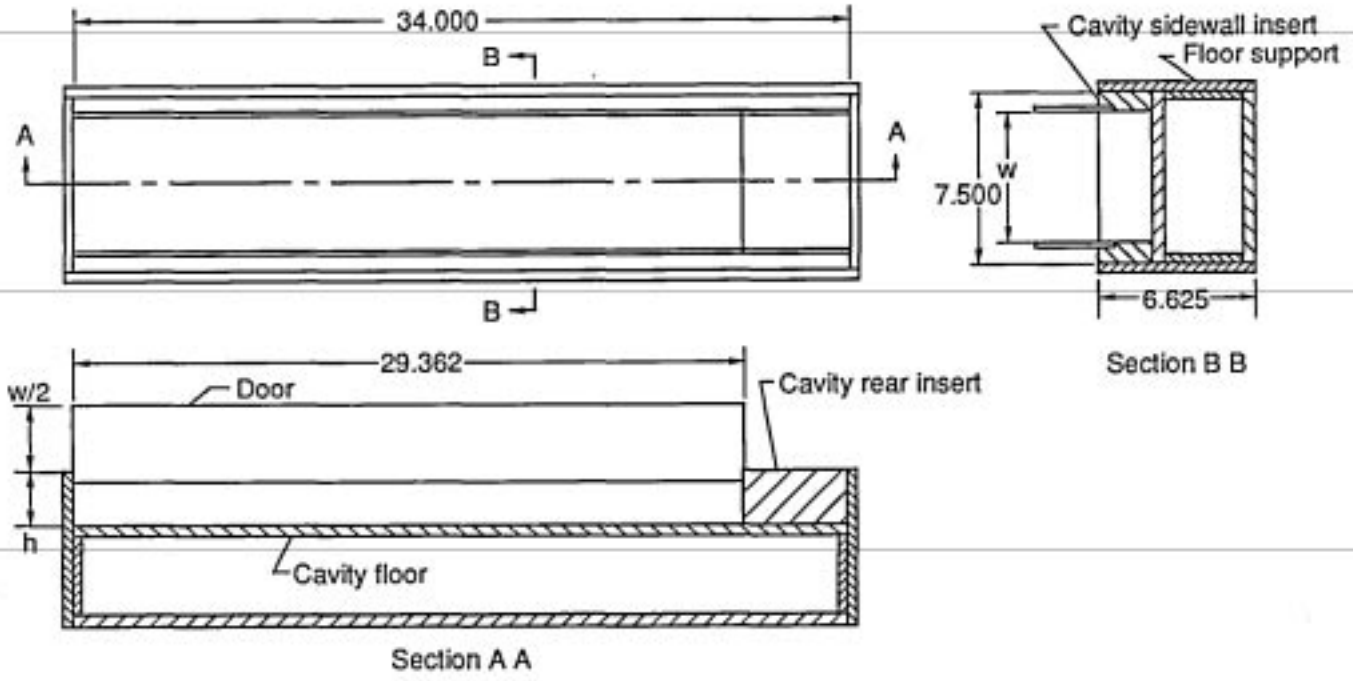
Figure 1. Splitter plate used as parent body. Linear dimensions are in inches.



L-91-33

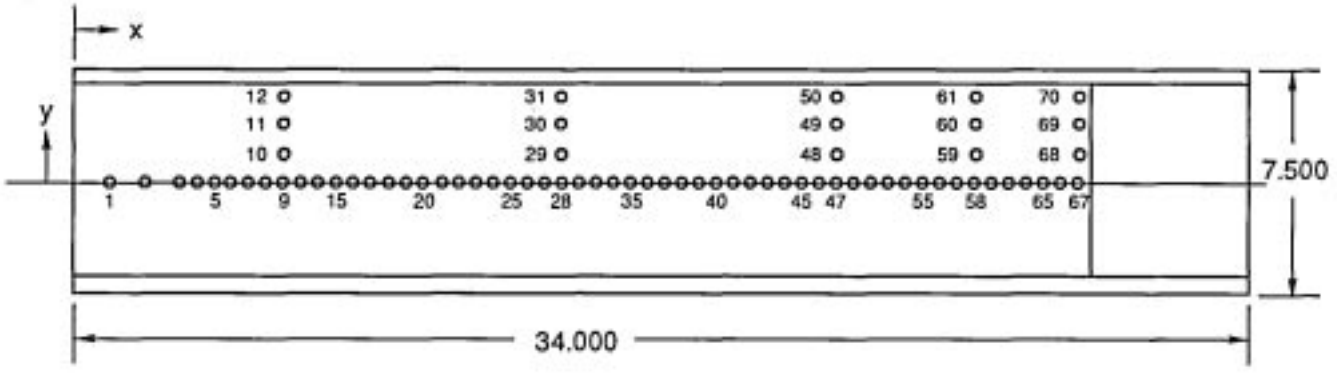
(b) Installation of splitter plate and store model (cavity doors installed).

Figure 1. Concluded.



Configuration	h	*L/h*	w	Doors
1	4.363	6.731	5.768	no
2	2.432	12.073	5.728	no
3	2.432	12.073	5.728	yes
4	1.750	16.778	5.728	no
5	1.750	16.778	5.728	yes
6	0			no

Figure 2. Cavity details. Linear dimensions are in inches.



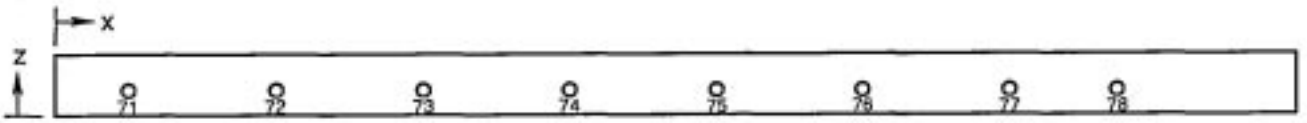
Orifice	x	y
1	1.000	0.000
2	2.000	
3	3.000	
4	3.500	
5	4.000	
6	4.500	
7	5.000	
8	5.500	
9	6.000	
10		0.866
11		1.732
12		2.598
13	6.500	0.000
14	7.000	
15	7.500	
16	8.000	
17	8.500	
18	9.000	
19	9.500	
20	10.000	
21	10.500	
22	11.000	
23	11.500	

Orifice	x	y
24	12.000	0.000
25	12.500	
26	13.000	
27	13.500	
28	14.000	
29		0.866
30		1.732
31		2.598
32	14.500	0.000
33	15.000	
34	15.500	
35	16.000	
36	16.500	
37	17.000	
38	17.500	
39	18.000	
40	18.500	
41	19.000	
42	19.500	
43	20.000	
44	20.500	
45	21.000	
46	21.500	

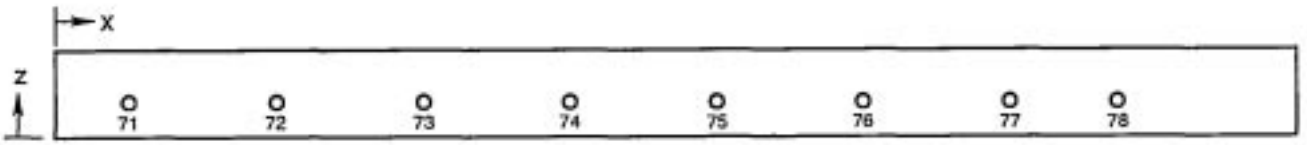
Orifice	x	y
47	22.000	0.000
48		0.866
49		1.732
50		2.598
51	22.500	0.000
52	23.000	
53	23.500	
54	24.000	
55	24.500	
56	25.000	
57	25.500	
58	26.000	
59		0.866
60		1.732
61		2.598
62	26.500	0.000
63	27.000	
64	27.500	
65	28.000	
66	28.500	
67	29.000	
68		0.866
69		1.732
70		2.598

(a) Cavity floor. $z = 0$.

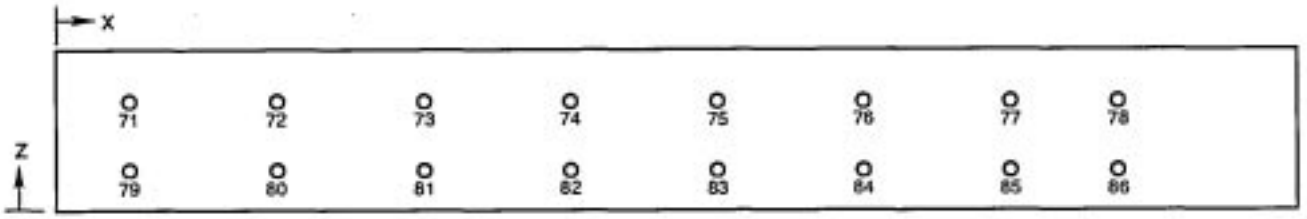
Figure 3. Cavity pressure orifice locations.



h = 1.750



h = 2.432

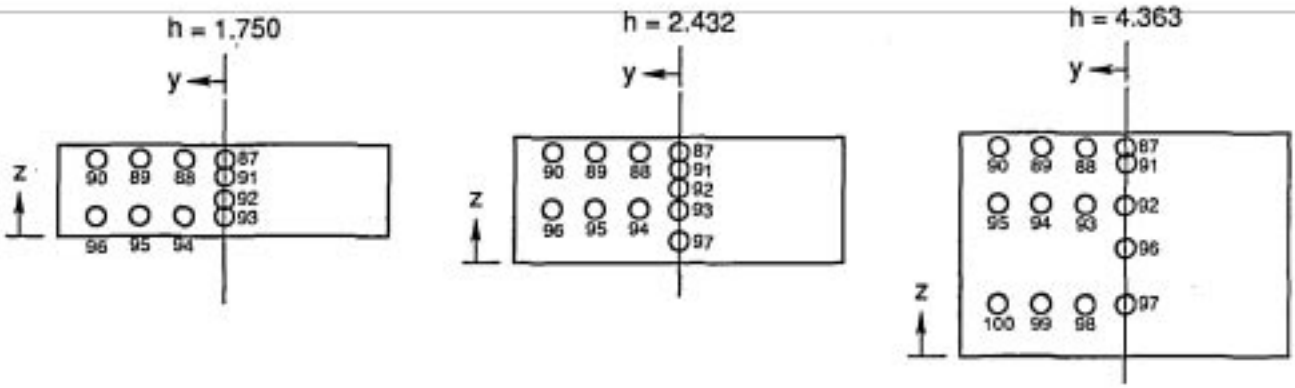


h = 4.363

Orifice	h = 1.750			h = 2.432			h = 4.363		
	x	y	z	x	y	z	x	y	z
71	2.000	2.864	0.367	2.000	2.864	1.050	2.000	2.884	2.980
72	6.000	↓	↓	6.000	↓	↓	6.000	↓	↓
73	10.000			10.000			10.000		
74	14.000			14.000			14.000		
75	18.000			18.000			18.000		
76	22.000			22.000			22.000		
77	26.000			26.000			26.000		
78	29.000			29.000			29.000		↓
79							2.000		1.049
80							6.000		↓
81							10.000		
82							14.000		
83							18.000		
84							22.000		
85							26.000		
86							29.000	↓	↓

(b) Cavity sidewall.

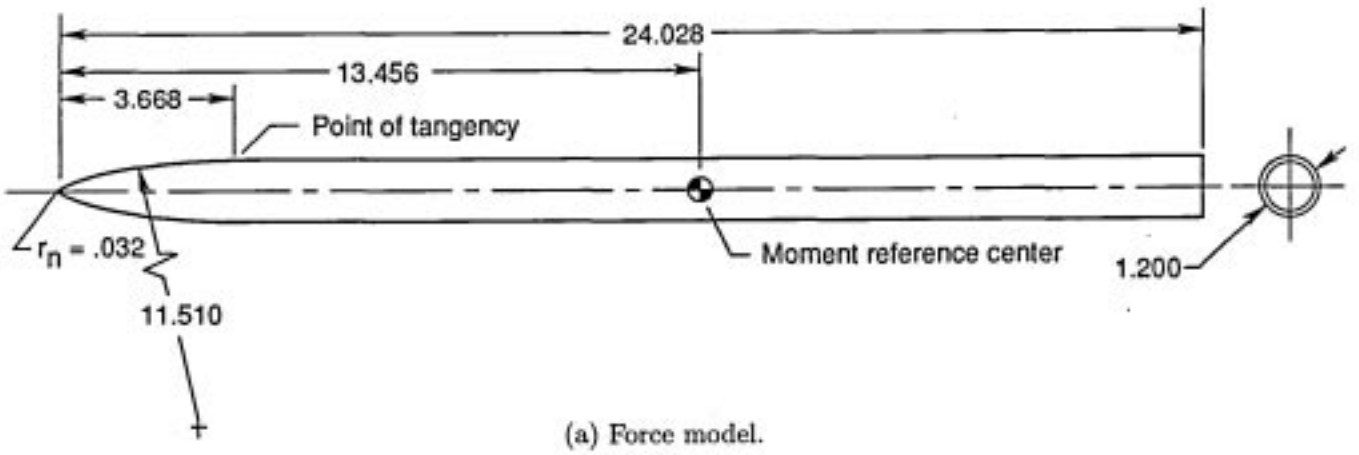
Figure 3. Continued.



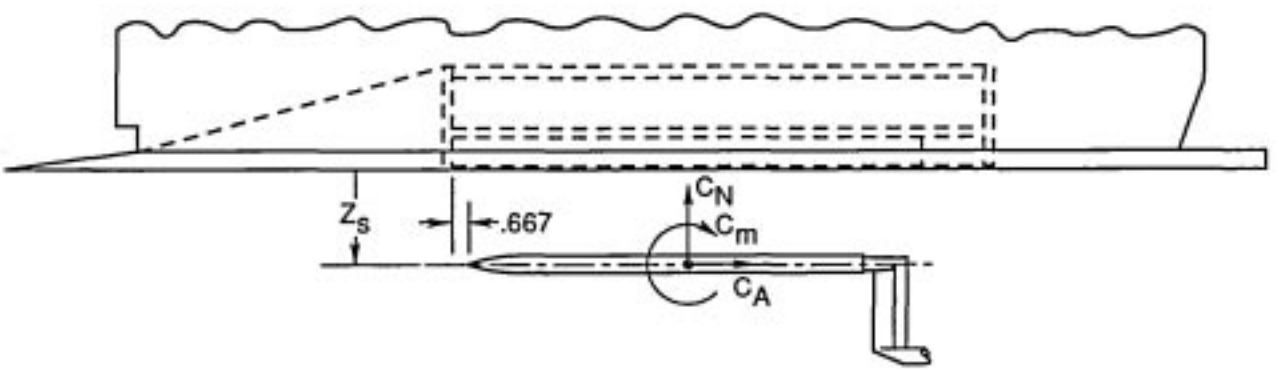
Orifice	h = 1.750			h = 2.432			h = 4.363		
	x	y	z	x	y	z	x	y	z
87	29.362	0.000	1.500	29.362	0.000	2.182	29.362	0.000	4.113
88		0.866			0.866			0.866	
89		1.732			1.732			1.732	
90		2.598			2.598			2.598	
91		0.000	1.250		0.000	1.932		0.000	3.863
92			0.750			1.432		0.000	2.980
93			0.367			1.049		0.866	
94		0.866			0.866			1.732	
95		1.732			1.732			2.598	
96		2.598			2.598			0.000	2.014
97					0.000	0.433		0.000	1.049
98								0.866	
99								1.732	
100								2.598	

(c) Cavity rear block insert.

Figure 3. Concluded.

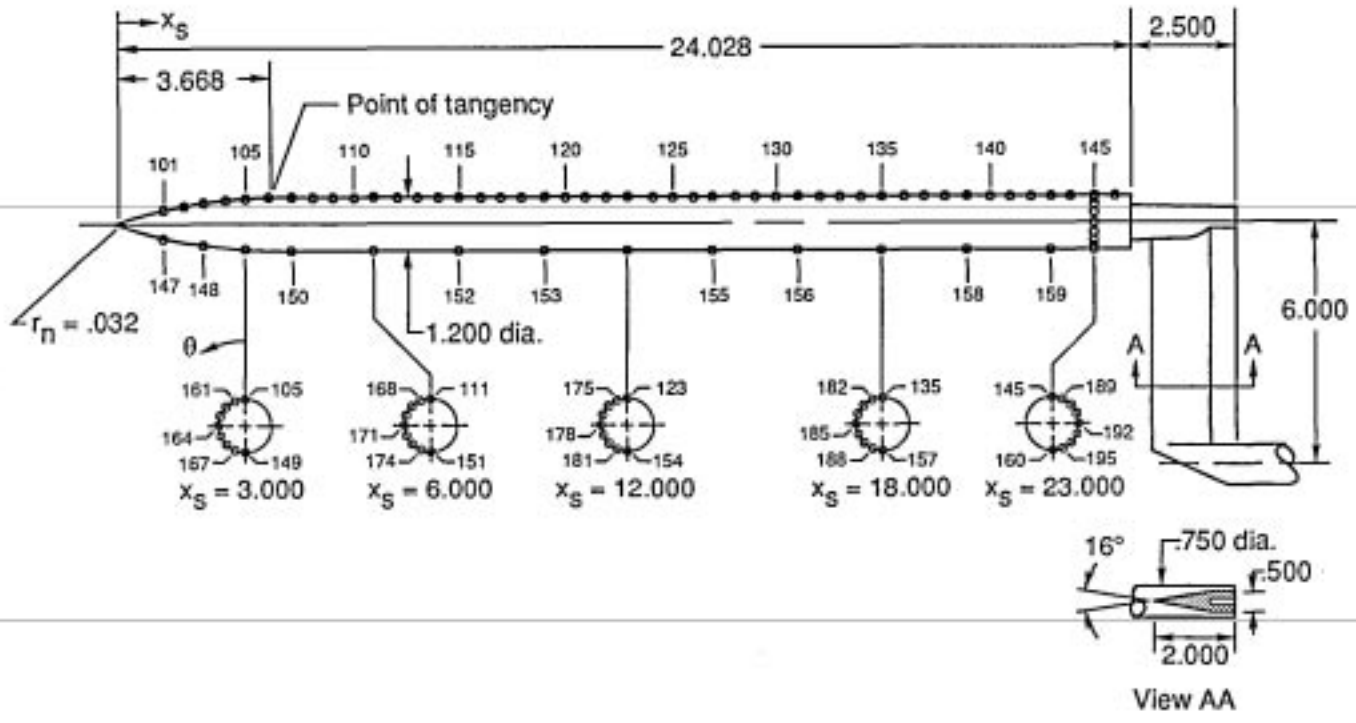


(a) Force model.



(b) General arrangement of store models and splitter plate.

Figure 4. Store models. Linear dimensions are in inches.



Orifice	x_s	θ
101	1.000	0.000
102	1.500	
103	2.000	
104	2.500	
105	3.000	
106	3.500	
107	4.000	
108	4.500	
109	5.000	
110	5.500	
111	6.000	
112	6.500	
113	7.000	
114	7.500	
115	8.000	
116	8.500	
117	9.000	
118	9.500	
119	10.000	
120	10.500	
121	11.000	
122	11.500	
123	12.000	
124	12.500	
125	13.000	

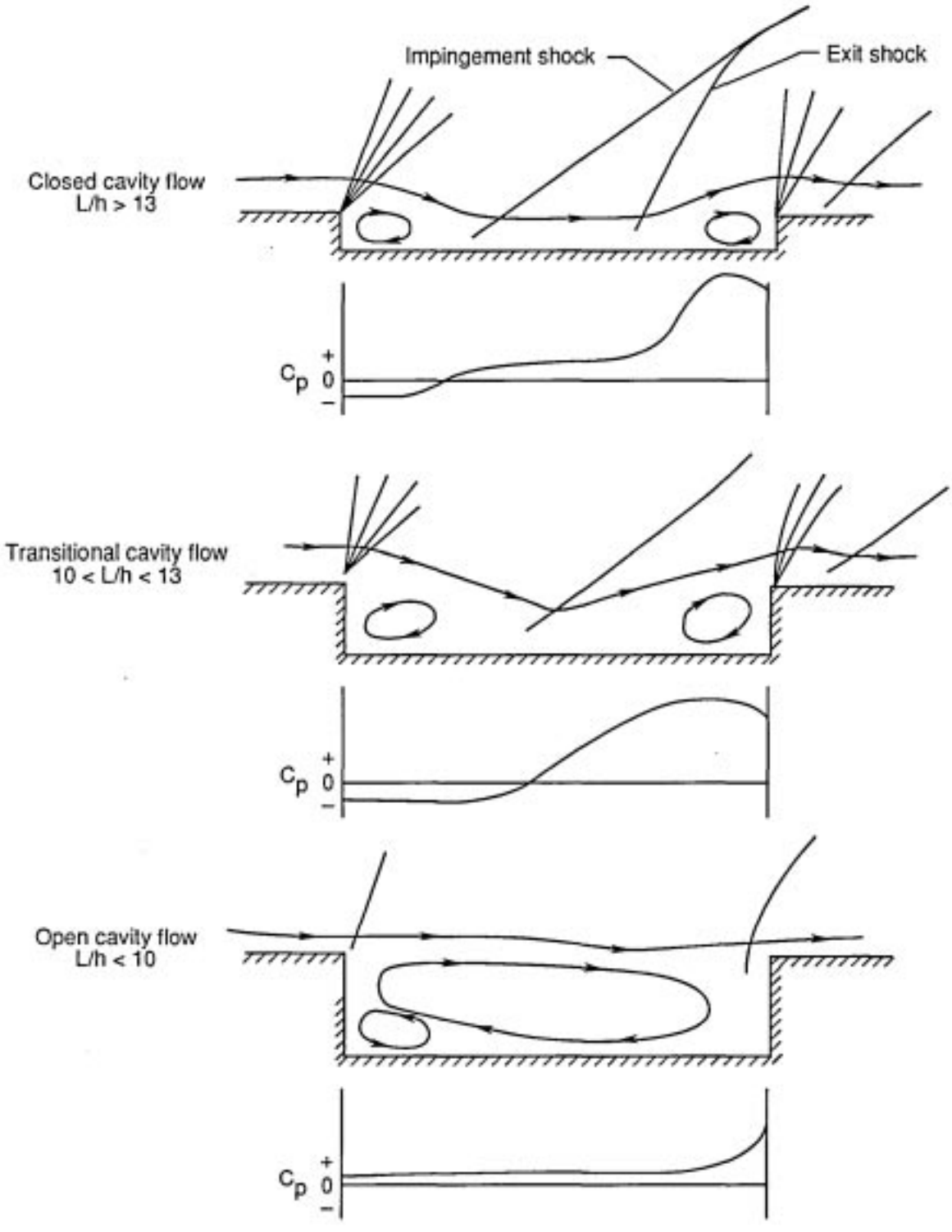
Orifice	x_s	θ
126	13.500	0.000
127	14.000	
128	14.500	
129	15.000	
130	15.500	
131	16.000	
132	16.500	
133	17.000	
134	17.500	
135	18.000	
136	18.500	
137	19.000	
138	19.500	
139	20.000	
140	20.500	
141	21.000	
142	21.500	
143	22.000	
144	22.500	
145	23.000	
146	23.500	
147	1.000	180.0
148	2.000	
149	3.000	
150	4.000	

Orifice	x_s	θ
151	6.000	180.0
152	8.000	
153	10.000	
154	12.000	
155	14.000	
156	16.000	
157	18.000	
158	20.000	
159	22.000	
160	23.000	
161	3.000	22.5
162		45.0
163		67.5
164		90.0
165		112.5
166		135.0
167		157.5
168	6.000	22.5
169		45.0
170		67.5
171		90.0
172		112.5
173		135.0
174		157.5

Orifice	x_s	θ
175	12.000	22.5
176		45.0
177		67.5
178		90.0
179		112.5
180		135.0
181		157.5
182	18.000	22.5
183		45.0
184		67.5
185		90.0
186		112.5
187		135.0
188		157.5
189	23.000	337.5
190		315.0
191		292.5
192		270.0
193		247.5
194		225.0
195		202.5
196	Base	270.0

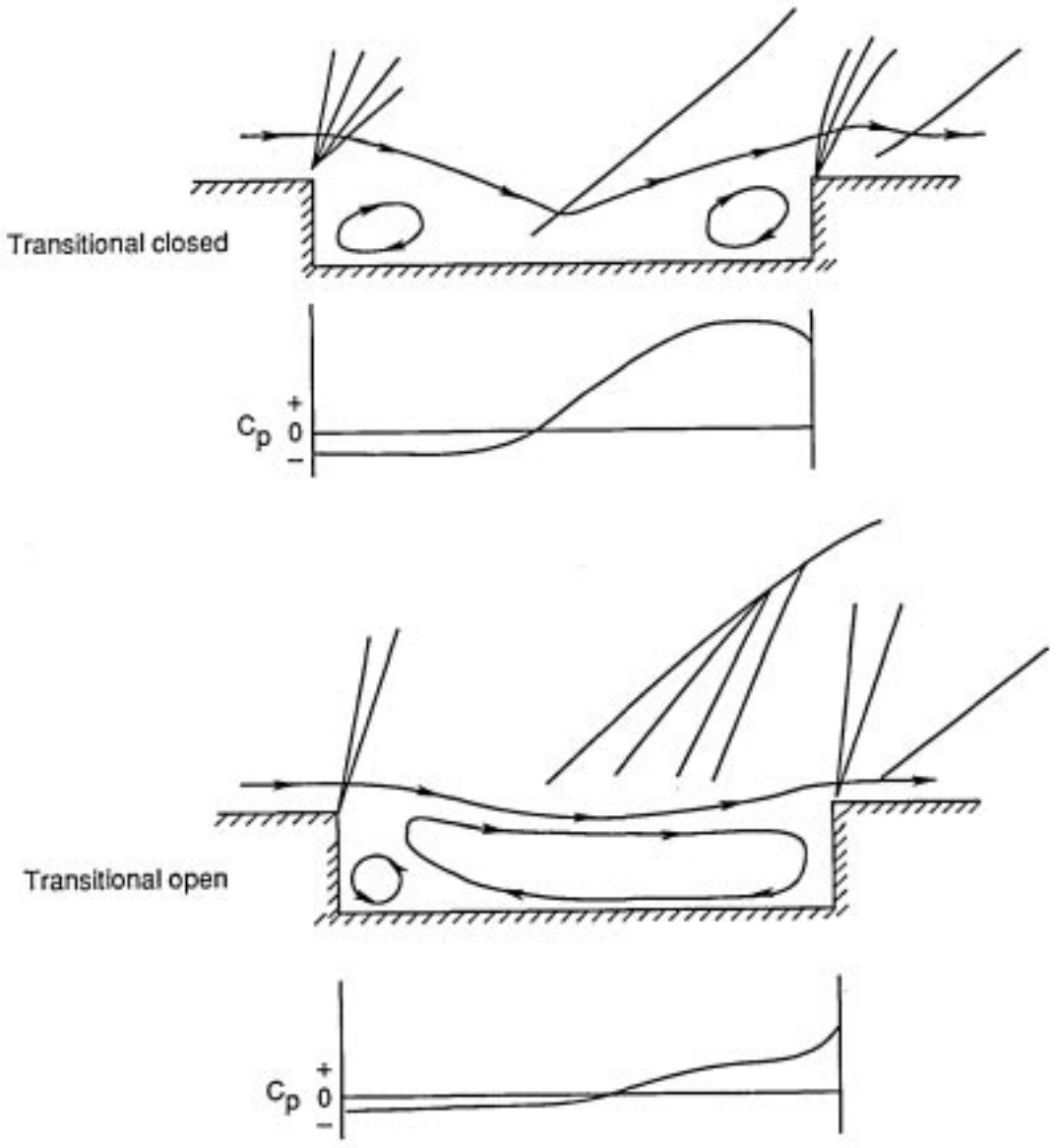
(c) Pressure model. All body cross-sectional views are looking downstream.

Figure 4. Concluded.



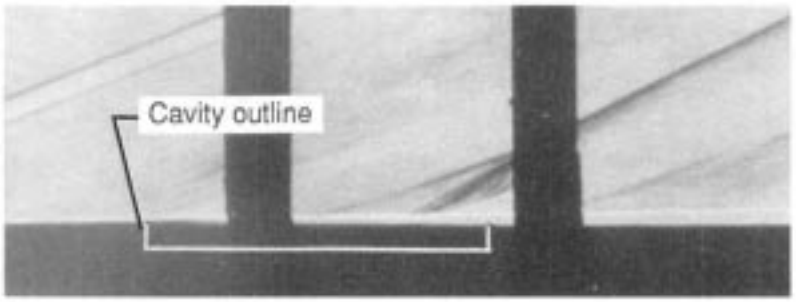
(a) Basic flow field models based on previously published data (ref. 10.)

Figure 5. Sketches of cavity flow field models.

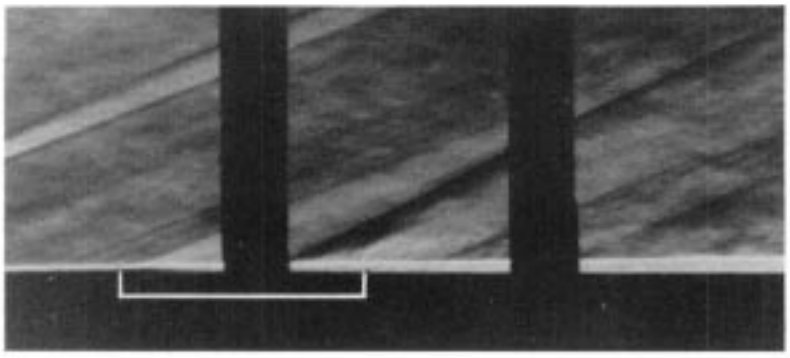


(b) Two quasi-steady states of transitional cavity flow field.

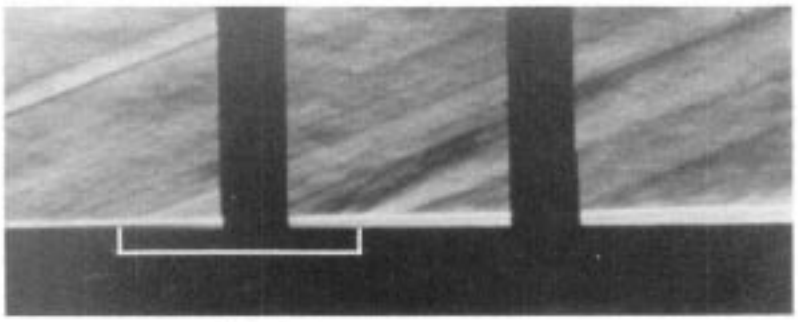
Figure 5. Concluded.



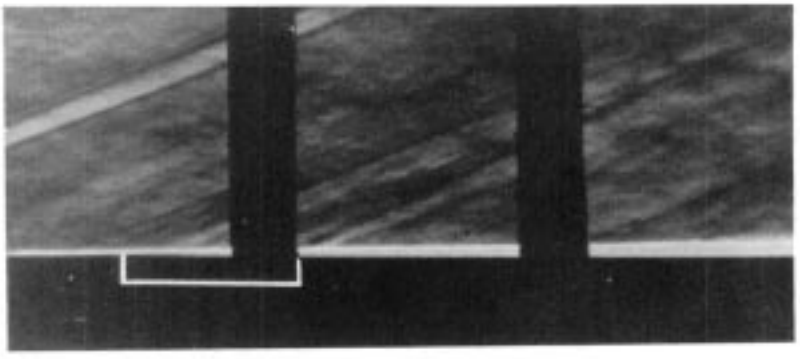
(a) $L/h = 16.0$; closed.



(b) $L/h = 11.6$; transitional closed.



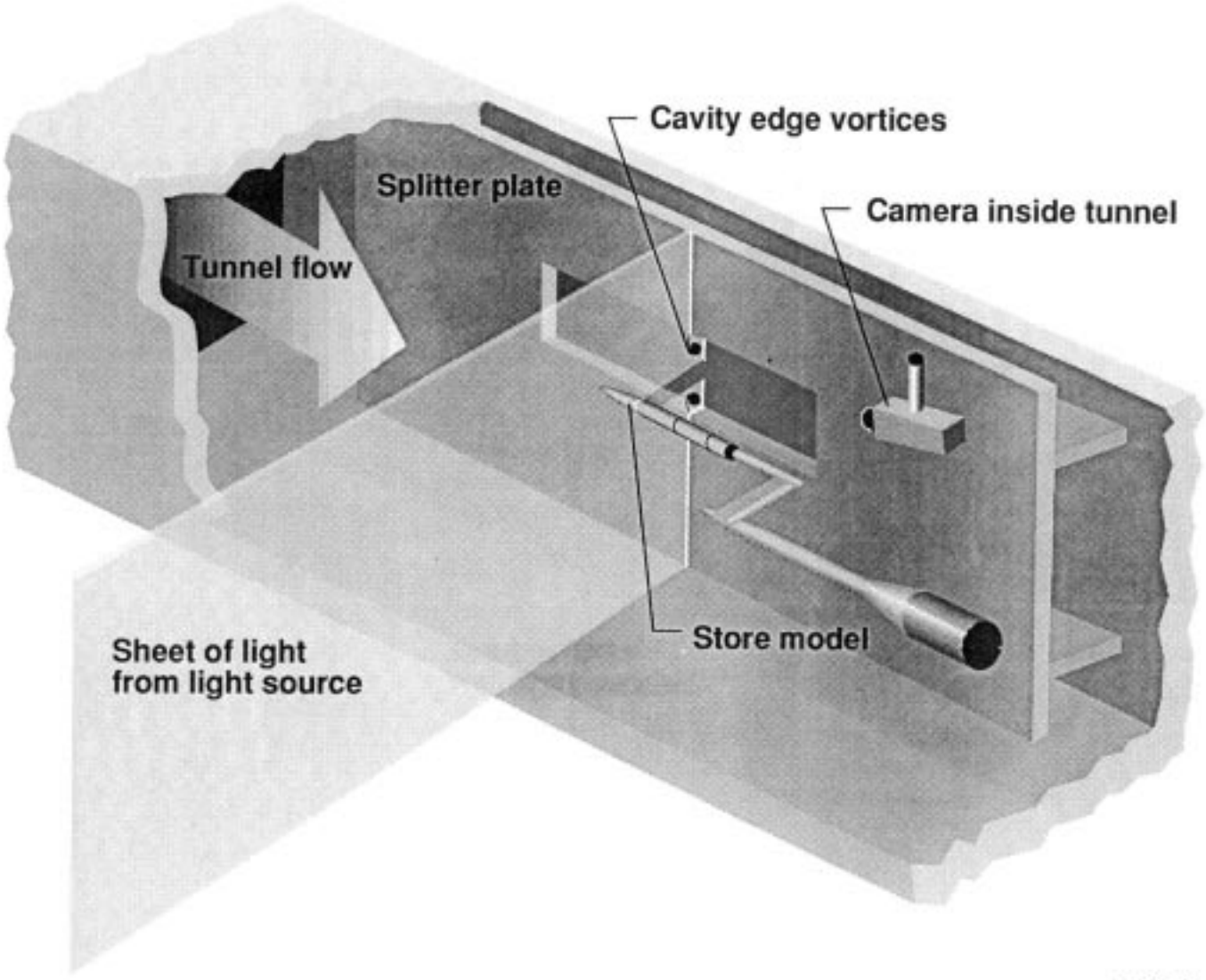
(c) $L/h = 11.2$; transitional open.



(d) $L/h = 8.0$; open.

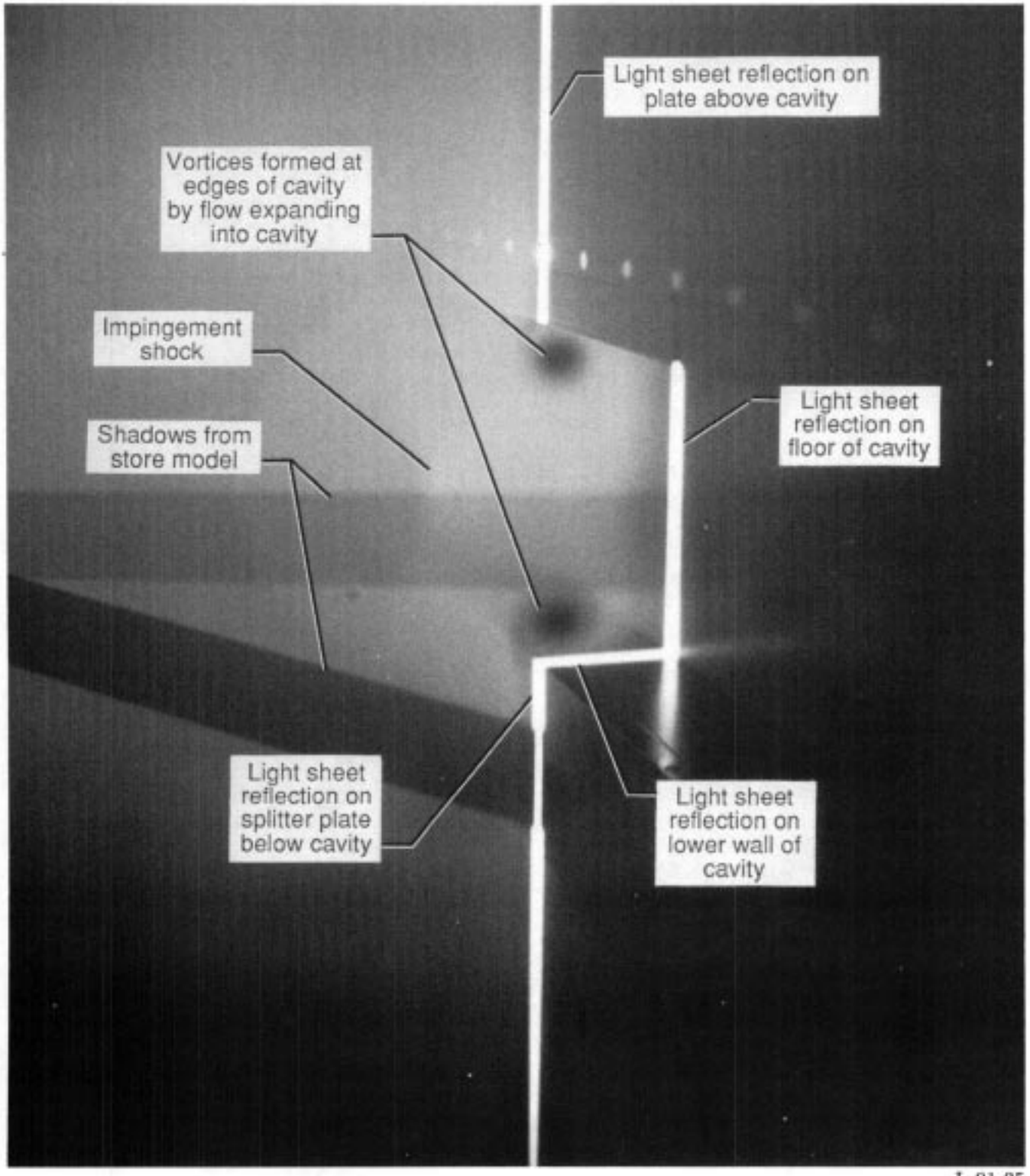
L-91-34

Figure 6. Schlieren photographs of cavity flow fields (ref. 10). $h = 0.5$; $M = 2.86$.



L-91-62

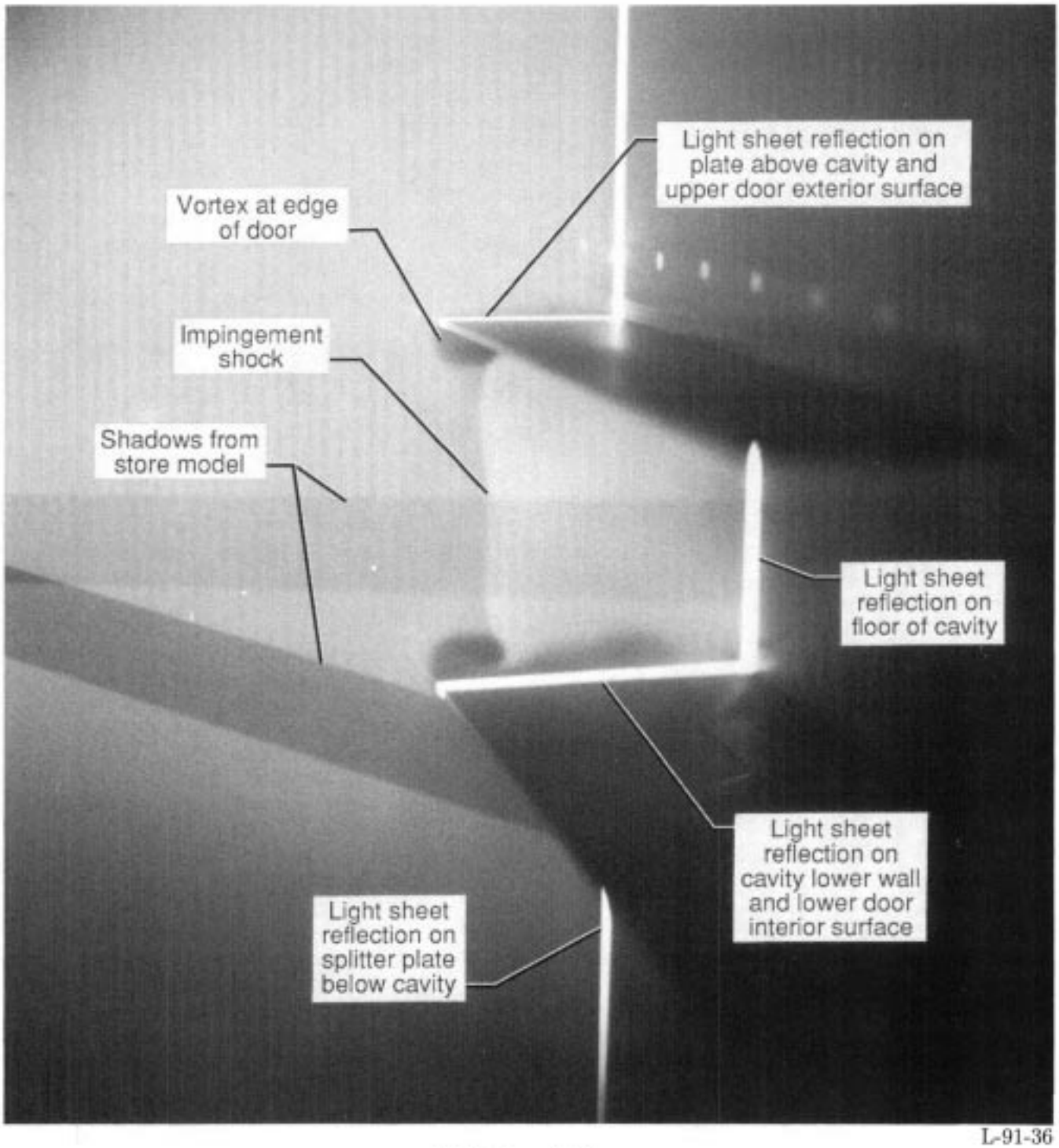
Figure 7. Vapor-screen technique (components not drawn to scale).



L-91-35

(a) Cavity without doors.

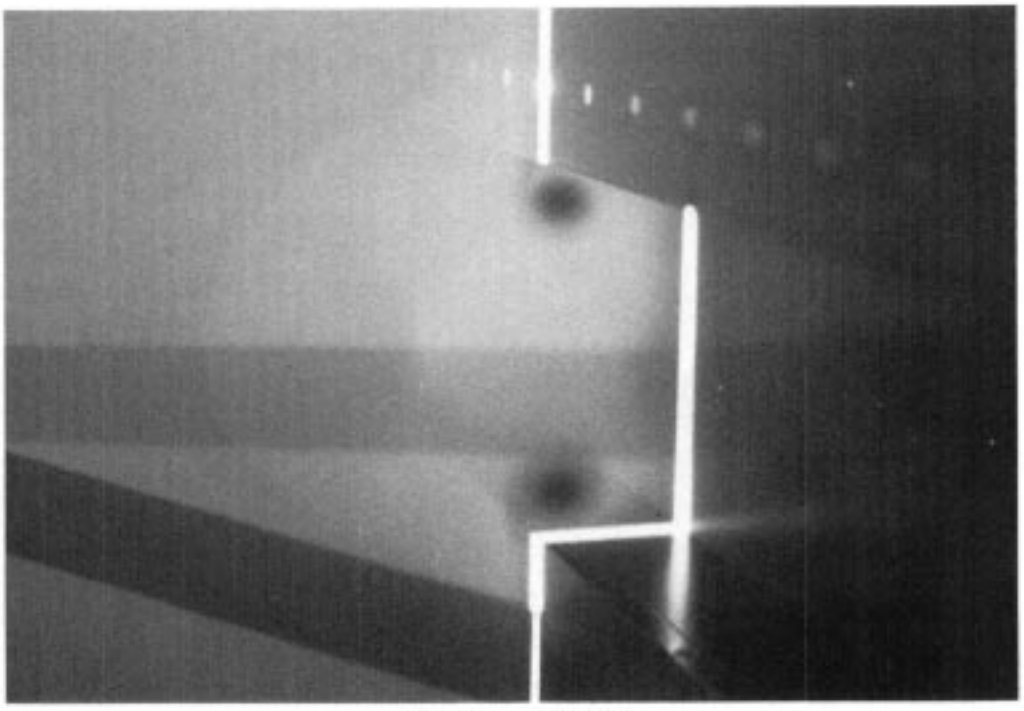
Figure 8. Salient features of cavity vapor-screen photographs.

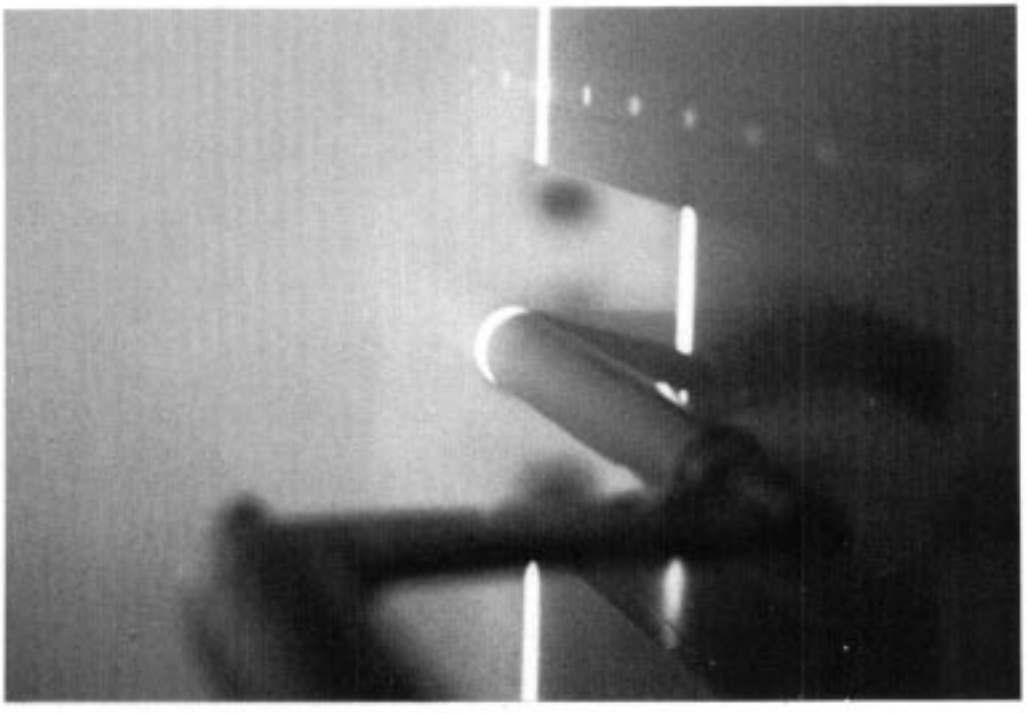


L-91-36

(b) Cavity with doors.

Figure 8. Concluded.

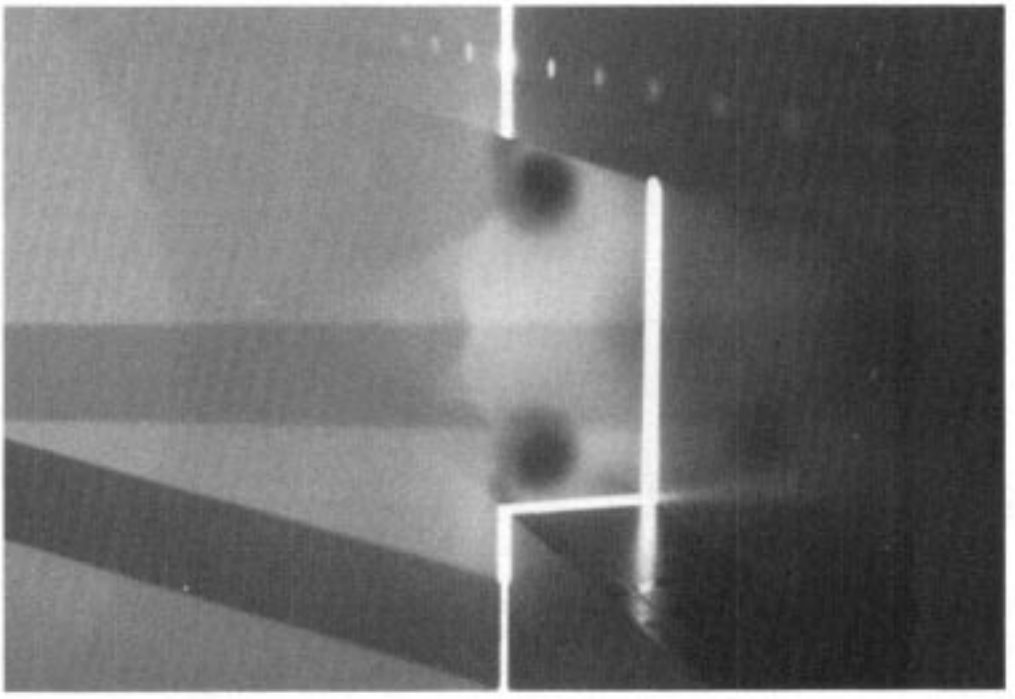




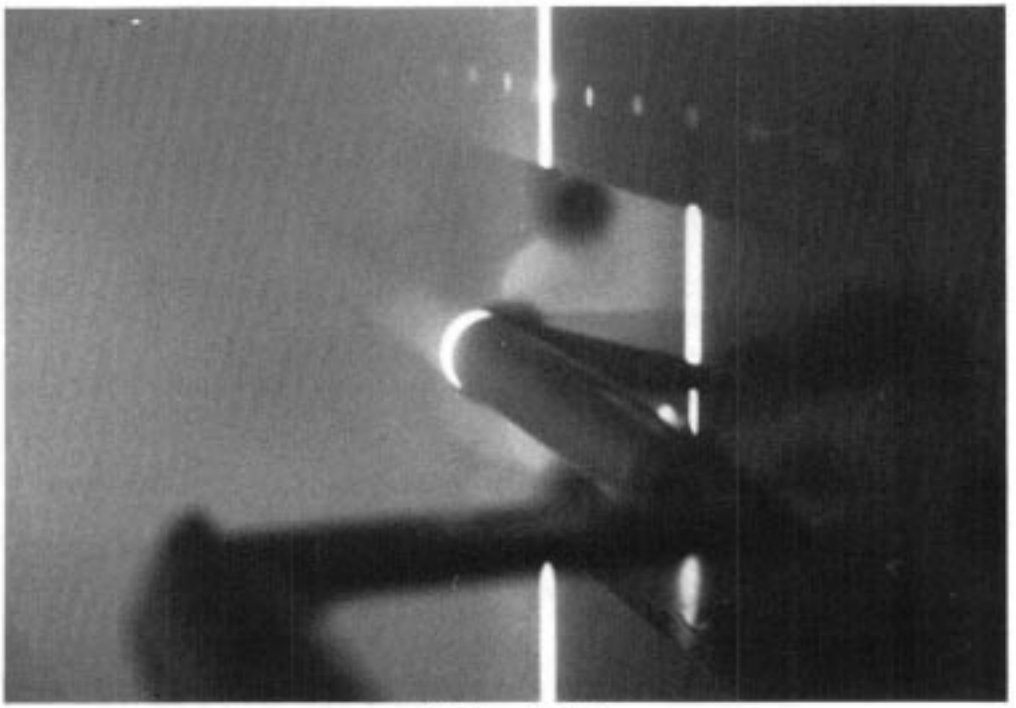
(a) $M = 2.00$.

L-91-37

Figure 9. Vapor-screen photographs for cavities without doors. $h = 2.432$; $x/L = 0.55$; $L/h = 12.073$.



$Z_S/d = 10.83$

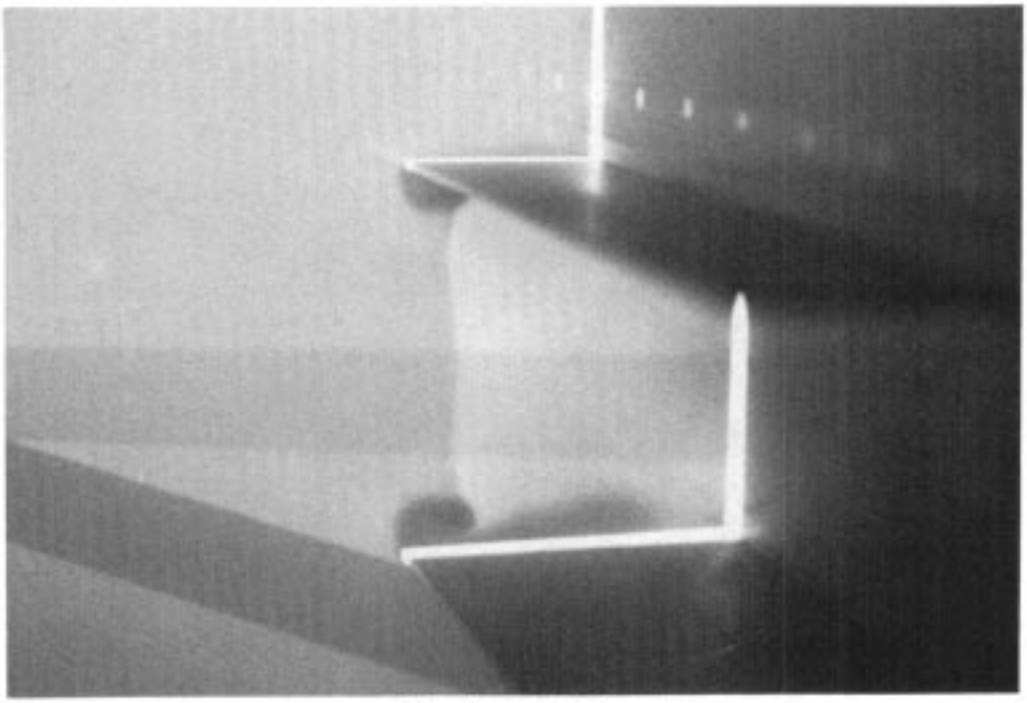


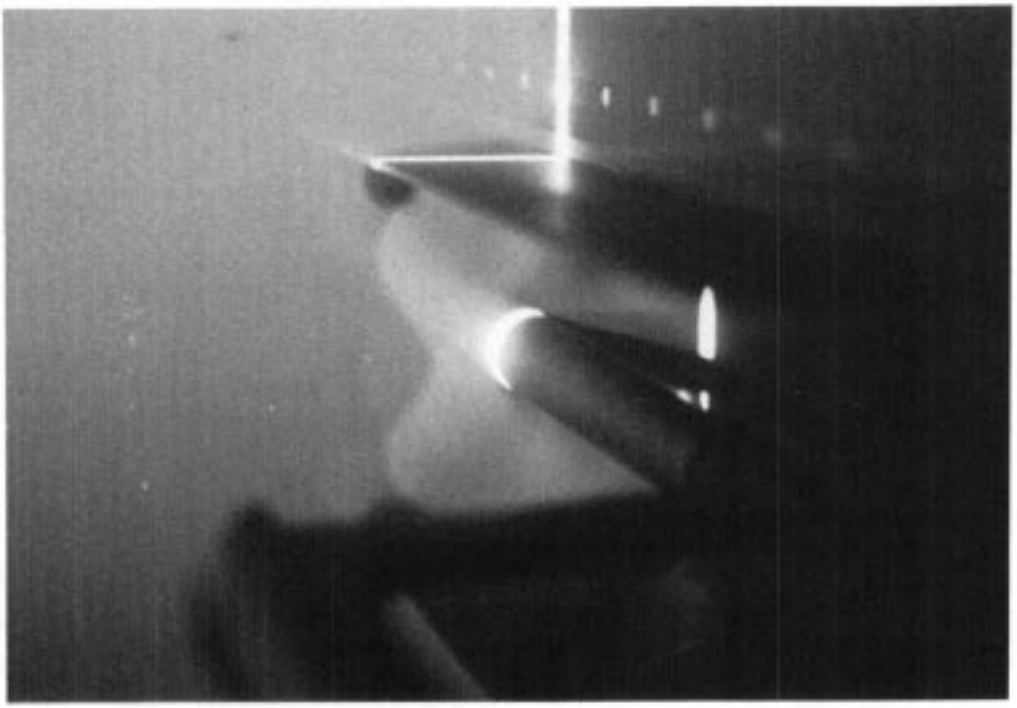
$Z_S/d = 0.42$

(b) $M = 2.65$.

L-91-38

Figure 9. Concluded.

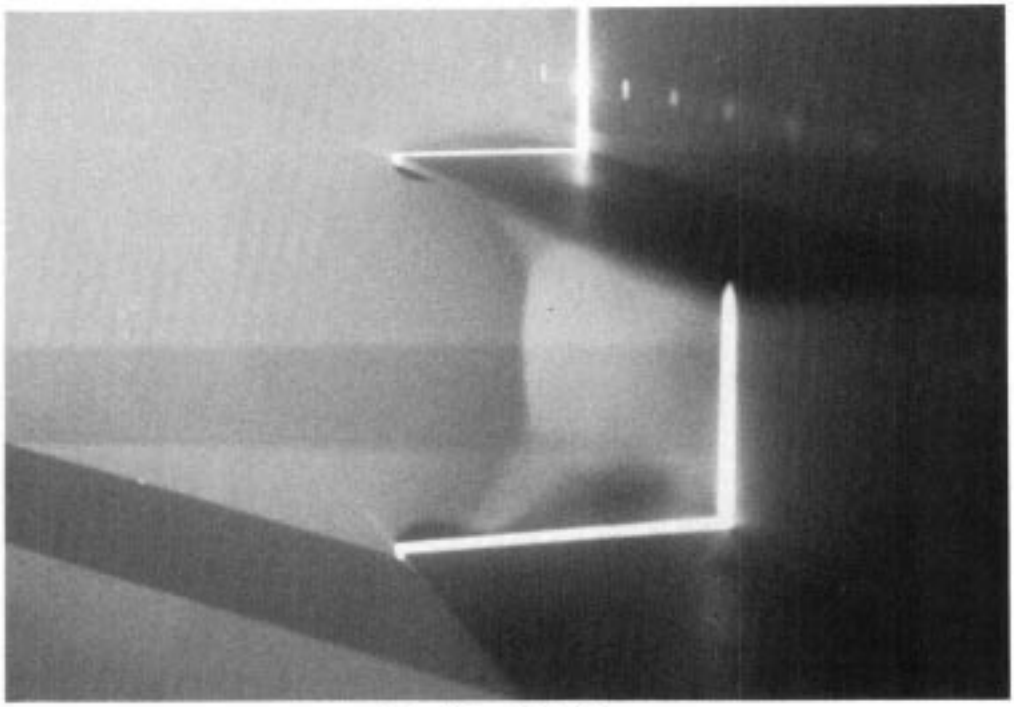




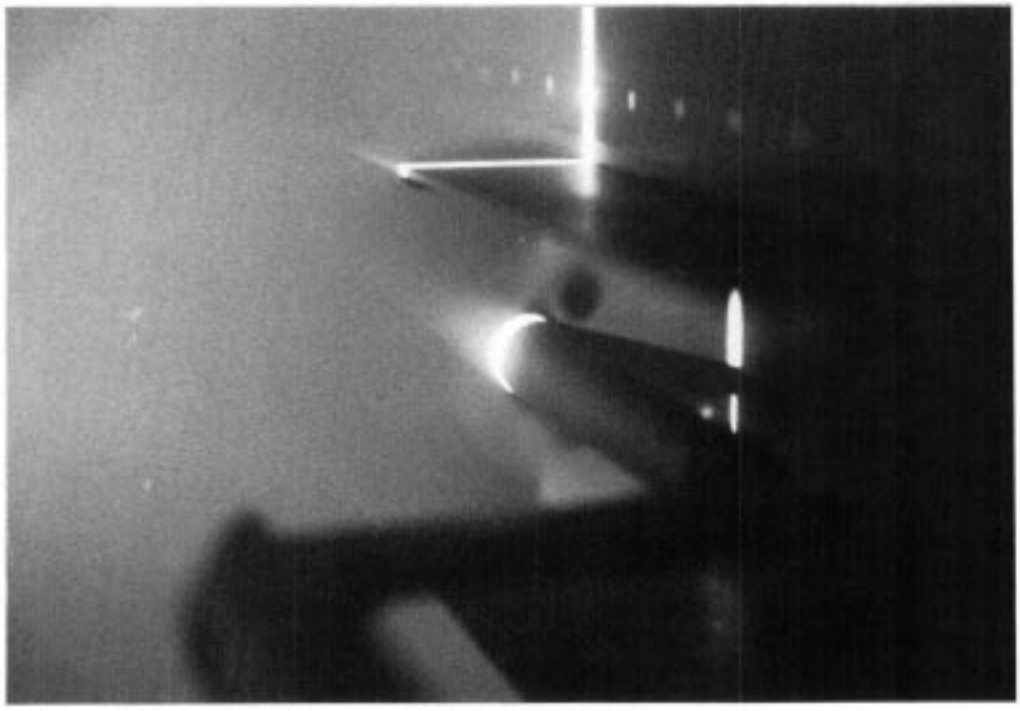
(a) $M = 2.00$.

L-91-39

Figure 10. Vapor-screen photographs for cavities with doors. $h = 2.432$; $x/L = 0.55$; $L/h = 12.073$.



$Z_S/d = 10.83$

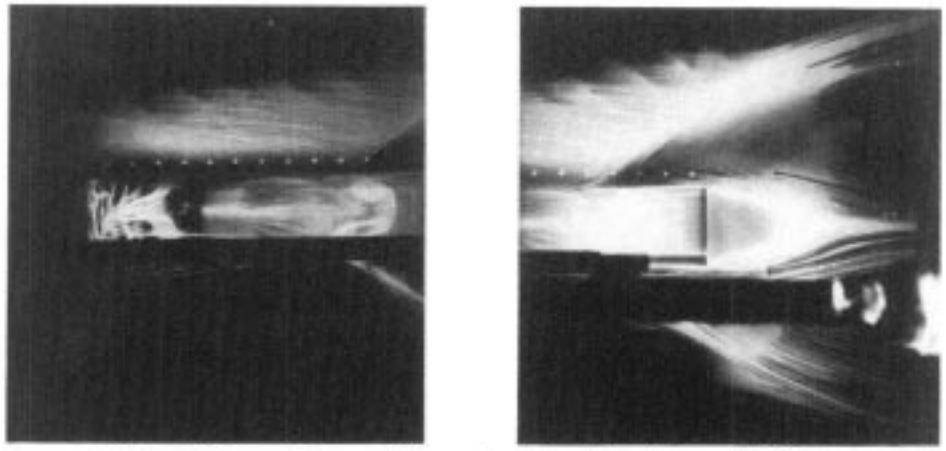


$Z_S/d = 0.42$

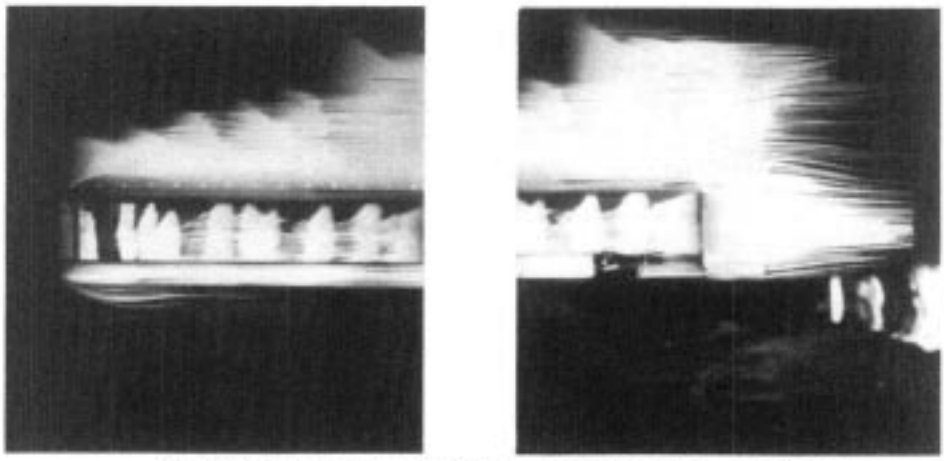
(b) $M = 2.65$.

L-91-40

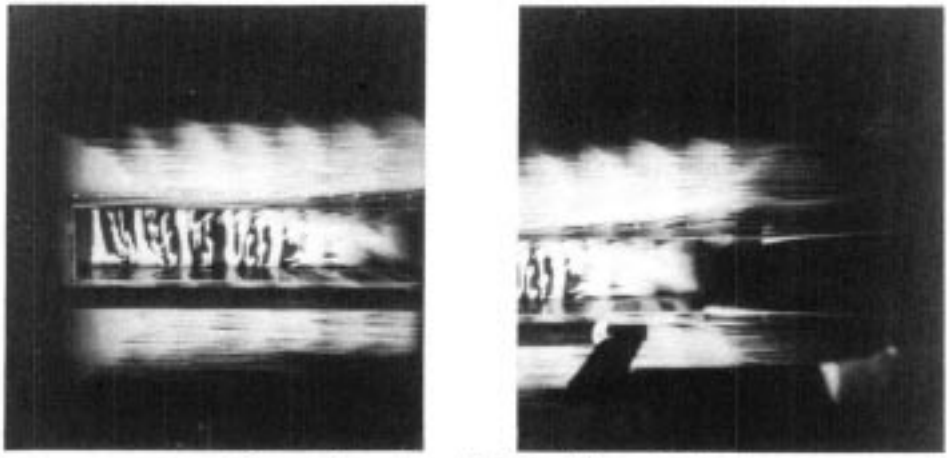
Figure 10. Concluded.



Transitional closed flow; h = 2.432; L/h = 12.073



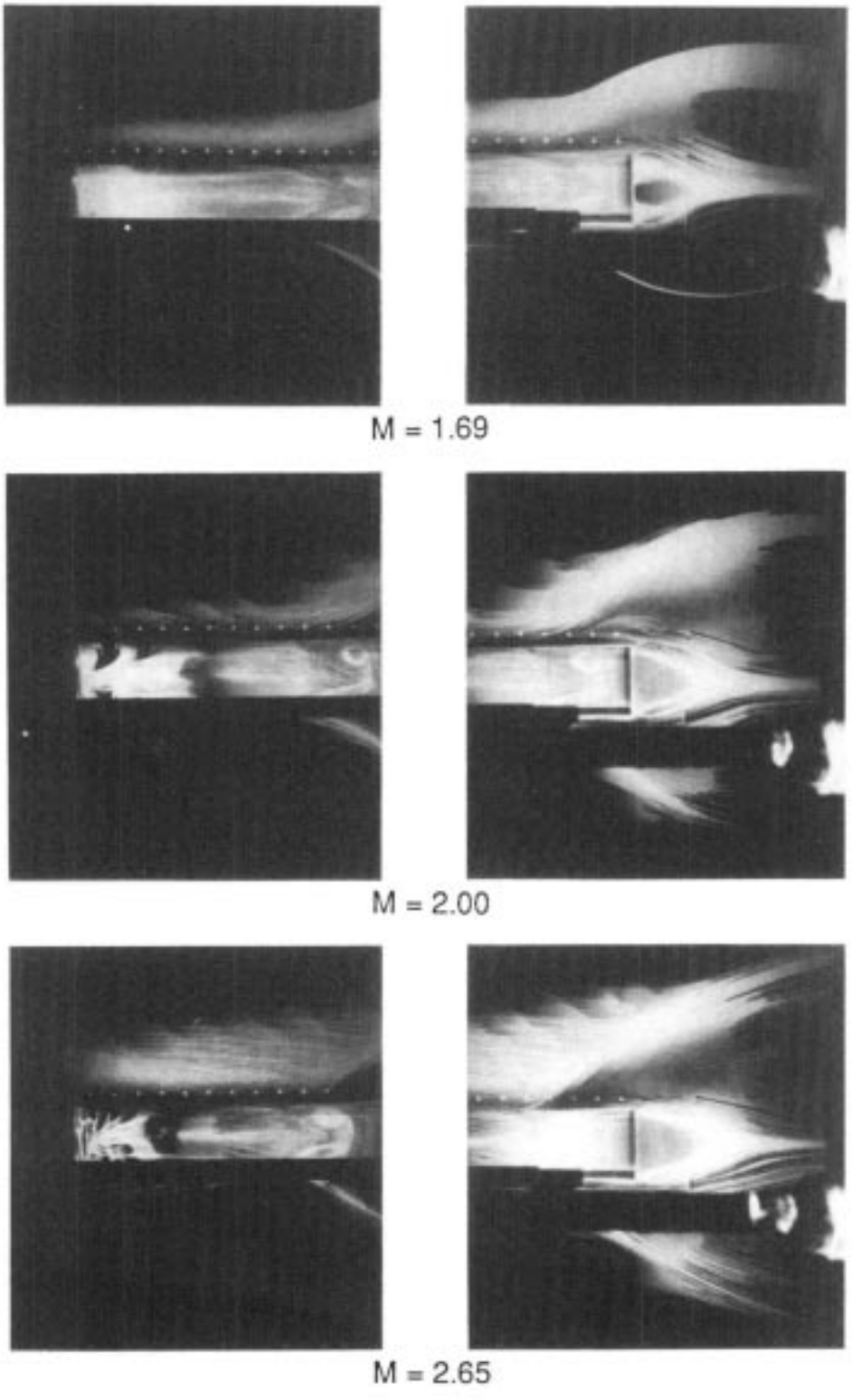
Transitional open flow; h = 2.432; L/h = 12.073



Open flow; h = 4.363; L/h = 6.731

L-91-41

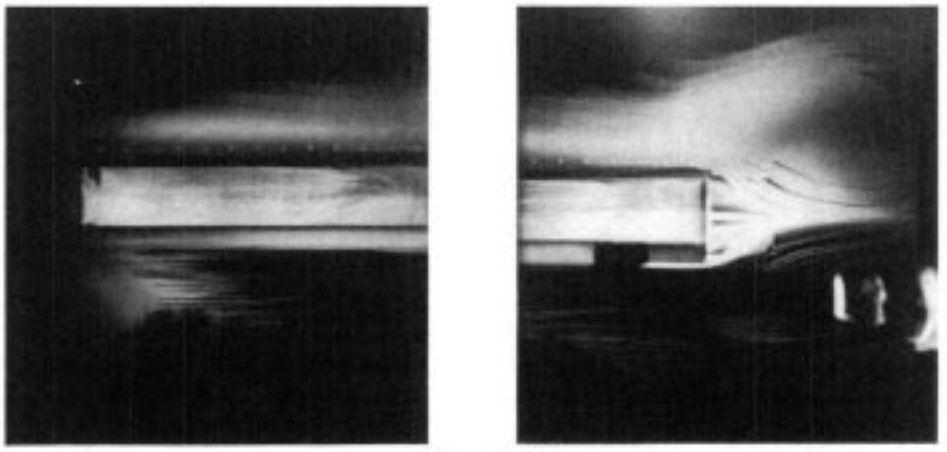
Figure 11. Oil flow traces for different types of cavity flow fields (flow direction is from left to right). Doors off; $M = 2.65$; $Z_s/d = 10.83$.



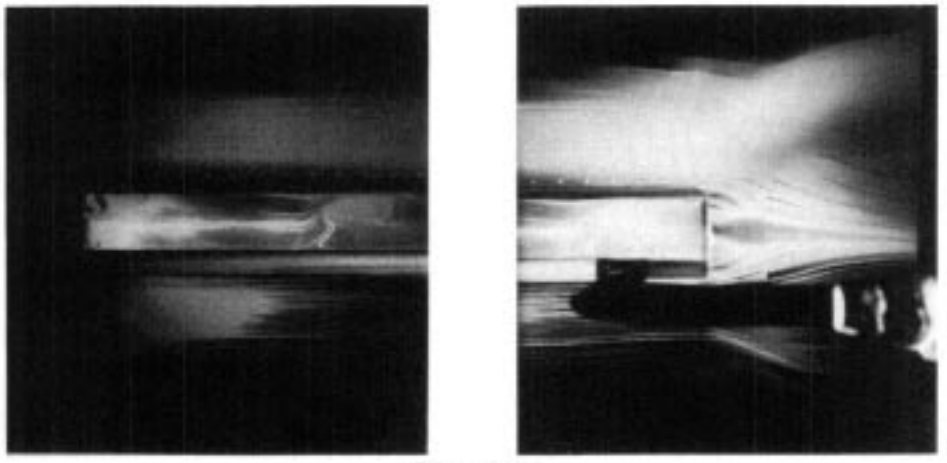
(a) $h = 2.432$; $L/h = 12.073$; doors off.

L-91-42

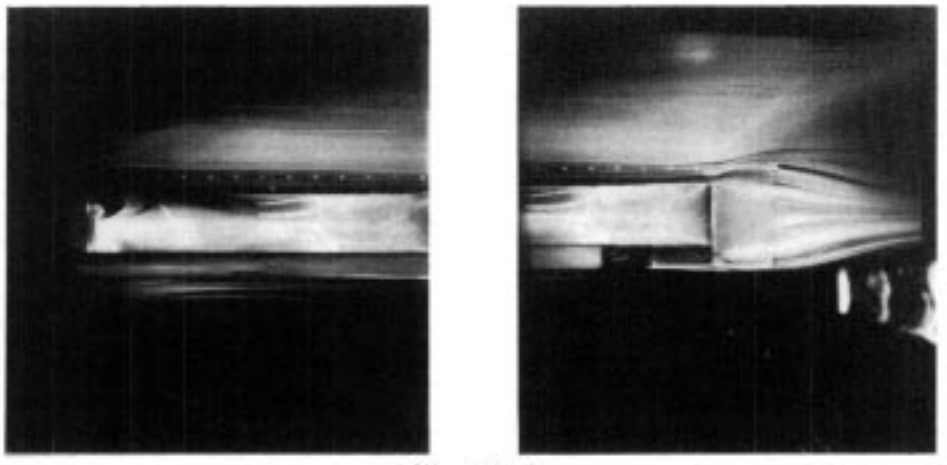
Figure 12. Effect of Mach number on surface oil flow patterns. $Z_s/d = 10.83$.



M = 1.69



M = 2.00

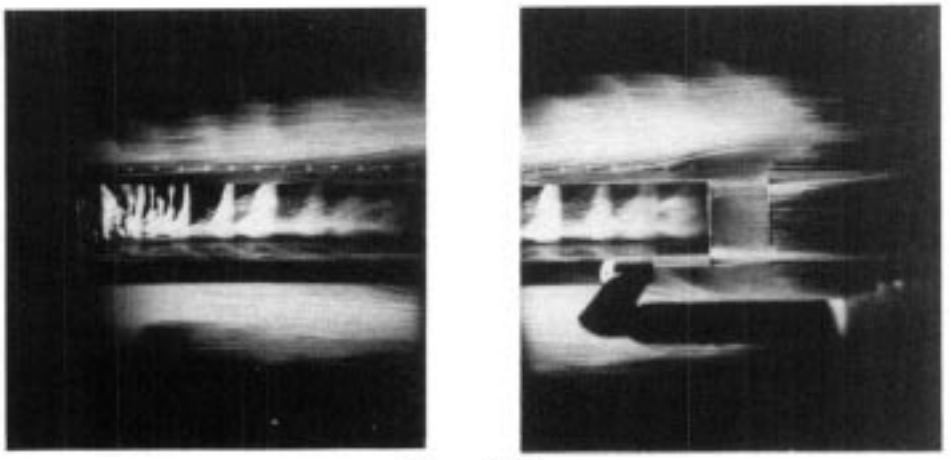


M = 2.65

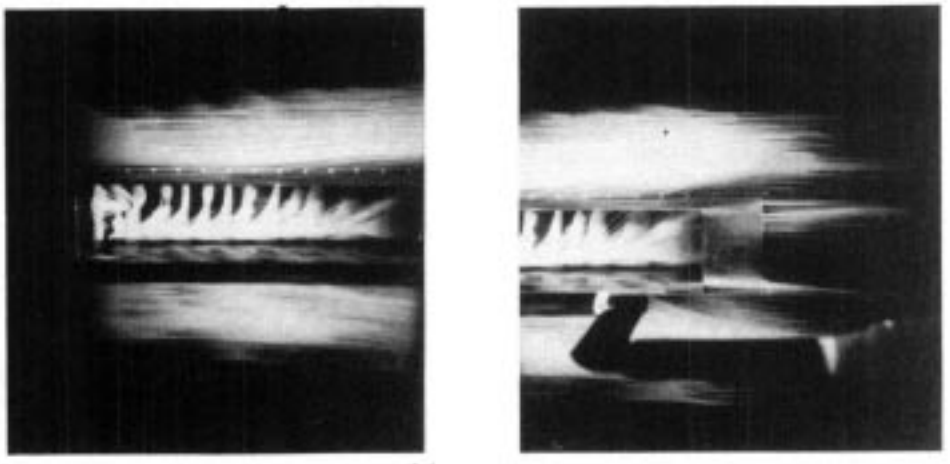
(b) $h = 2.432$; $L/h = 12.073$; doors on.

L-91-43

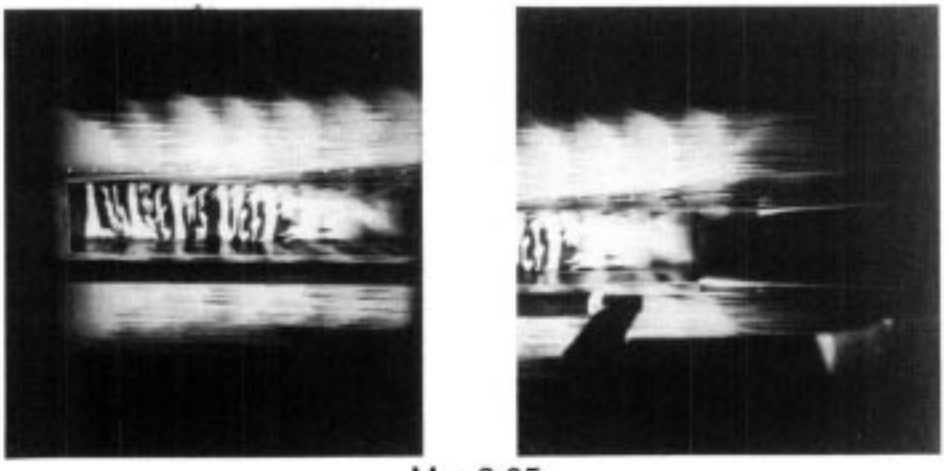
Figure 12. Continued.



M = 1.69



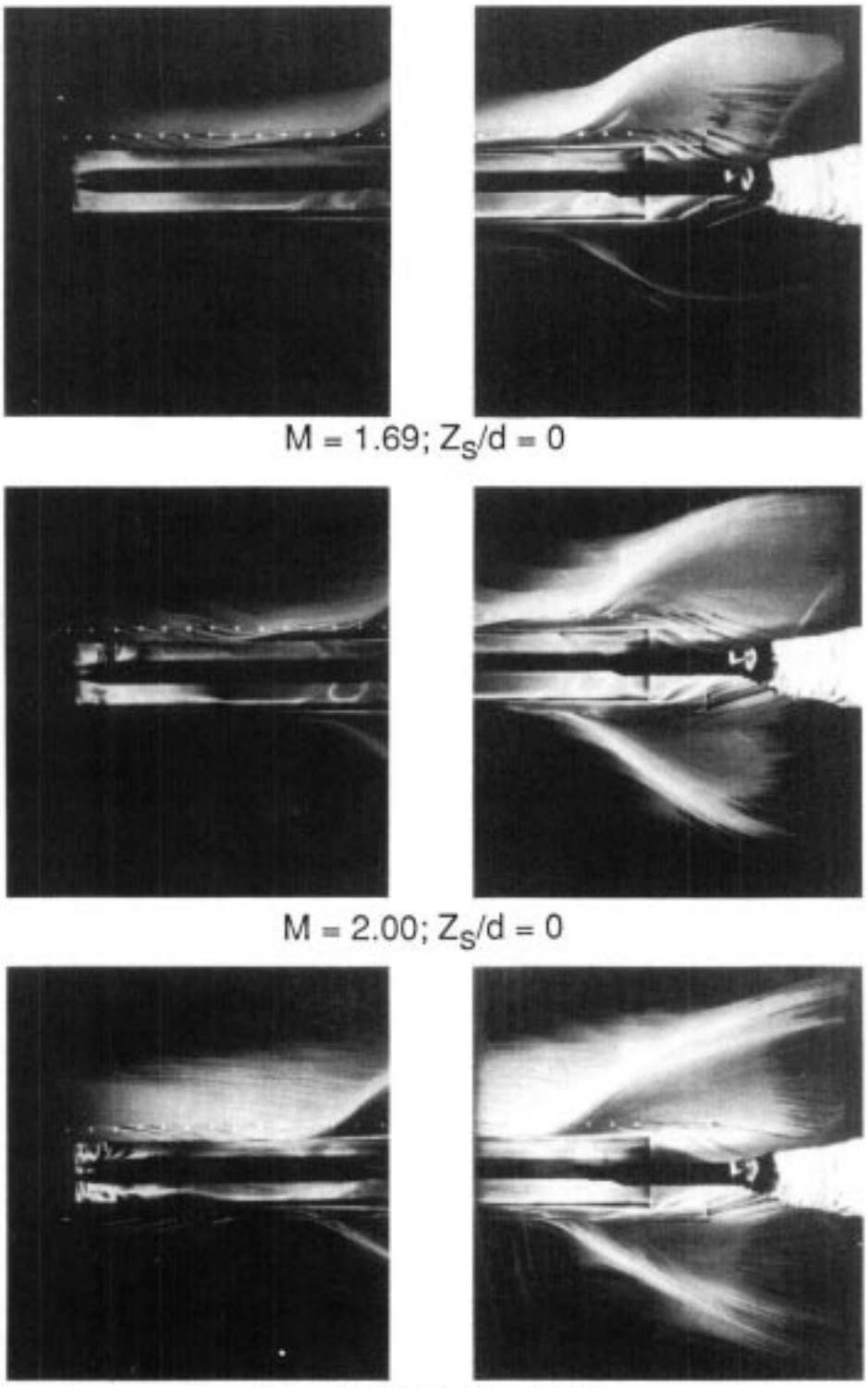
M = 2.00



M = 2.65

(c) $h = 4.363$; $L/h = 6.730$; doors off. L-91-44

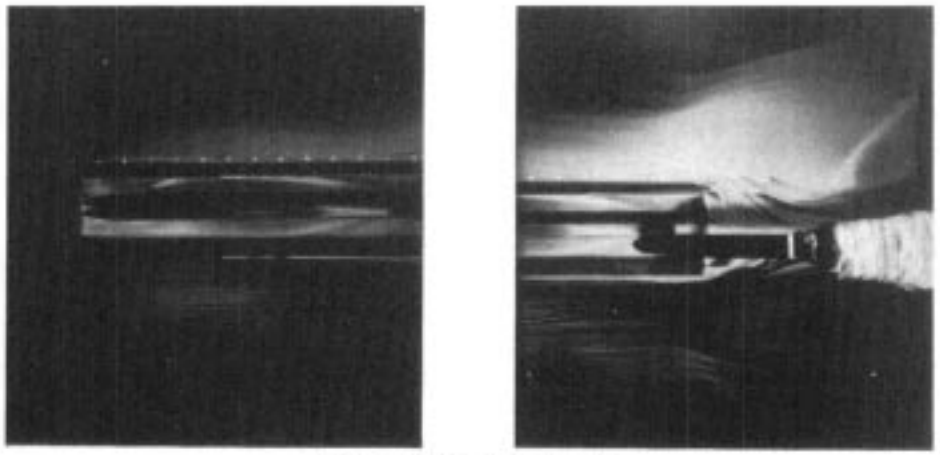
Figure 12. Concluded.



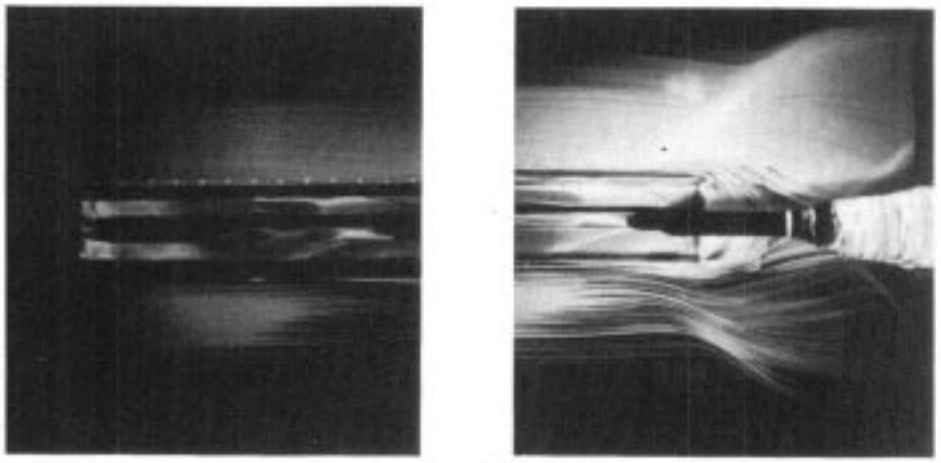
(a) $h = 2.432$; $L/h = 12.073$; doors off.

L-91-45

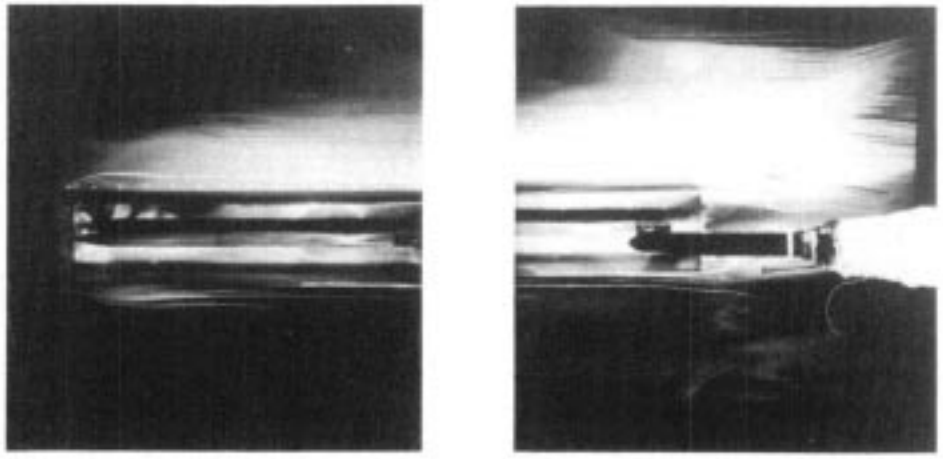
Figure 13. Effect of Mach number on surface oil flow patterns with store close to cavity. $Z_s/d \approx 0$.



M = 1.69; $Z_S/d = 0$



M = 2.00; $Z_S/d = 0$

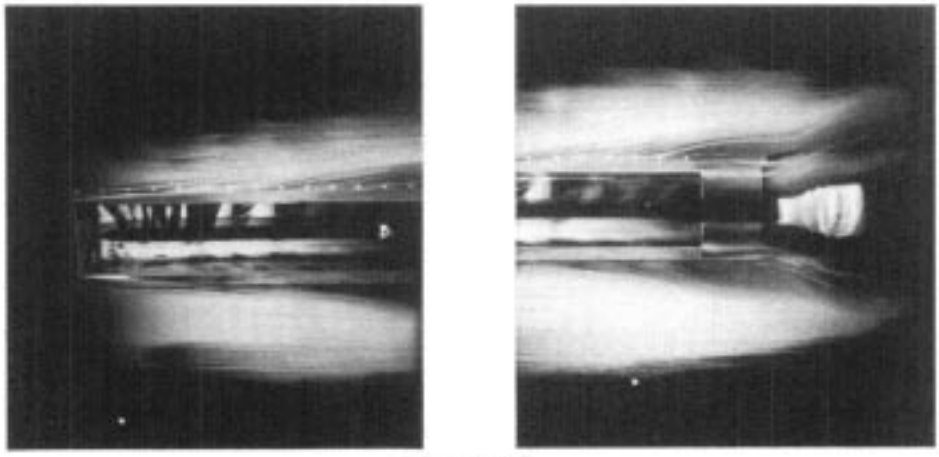


M = 2.65; $Z_S/d = 0.50$

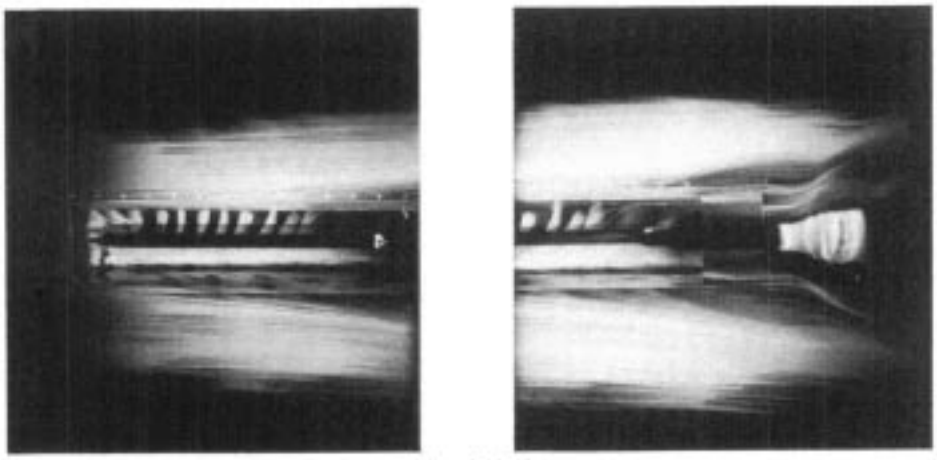
(b) $h = 2.432$; $L/h = 12.073$; doors on.

L-91-46

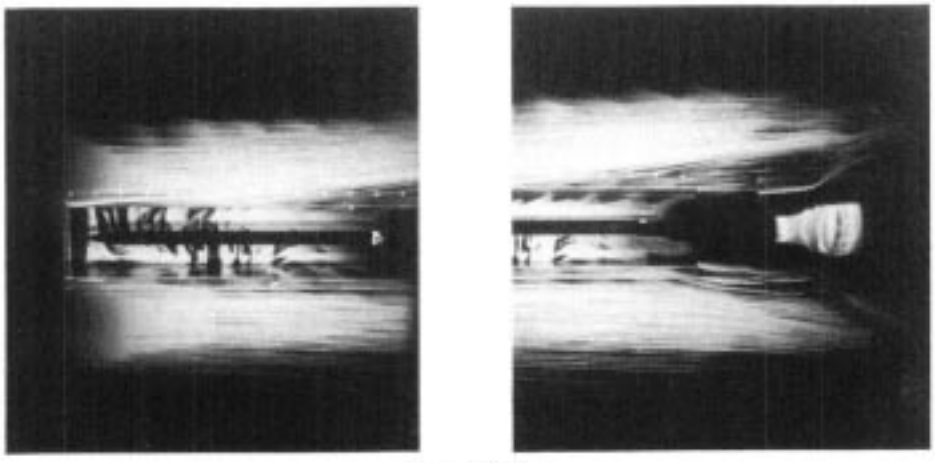
Figure 13. Continued.



M = 1.69



M = 2.00

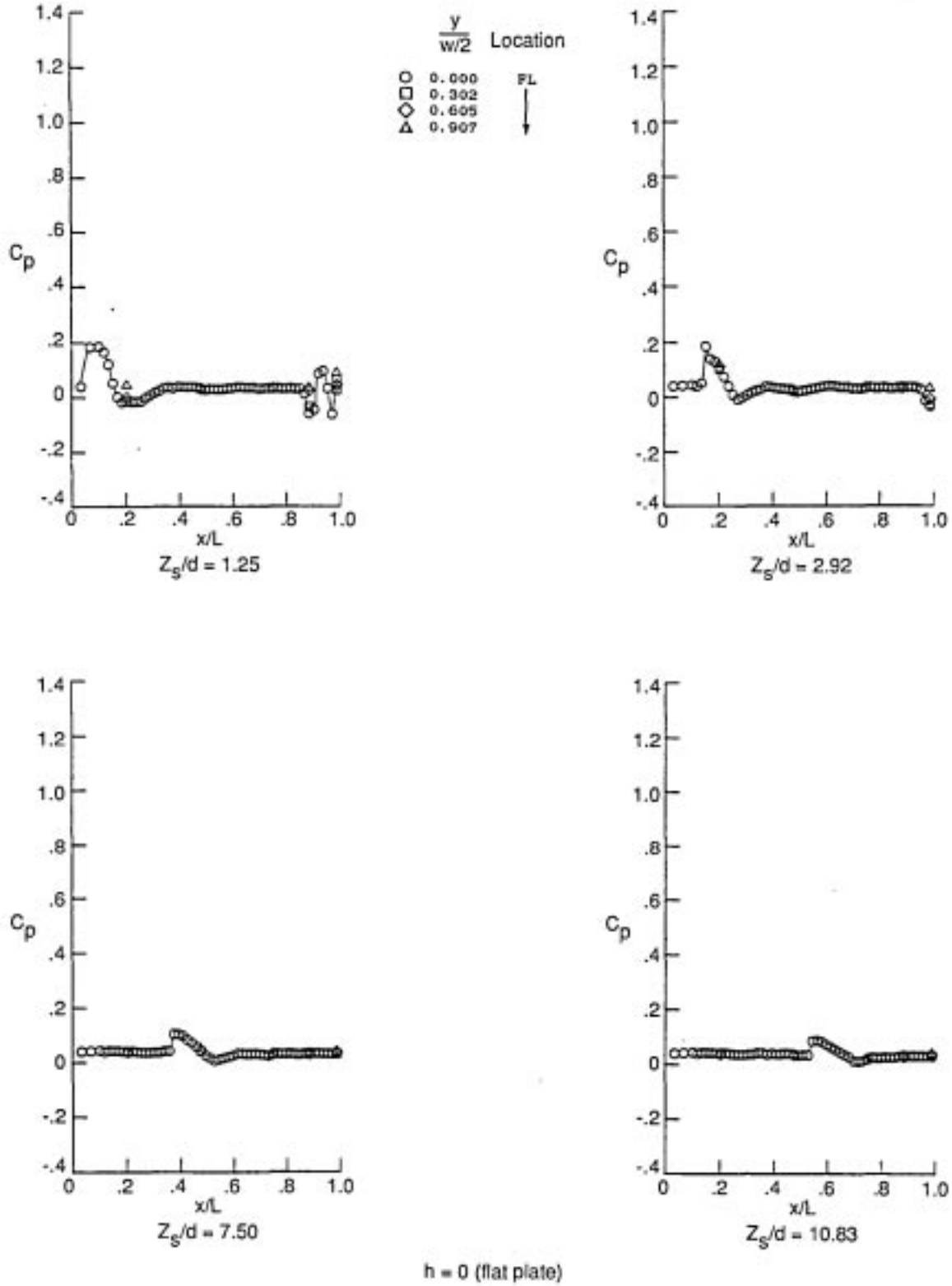


M = 2.65

(c) $h = 4.363$; $L/h = 6.730$; $Z_s/d = -1.67$; doors off.

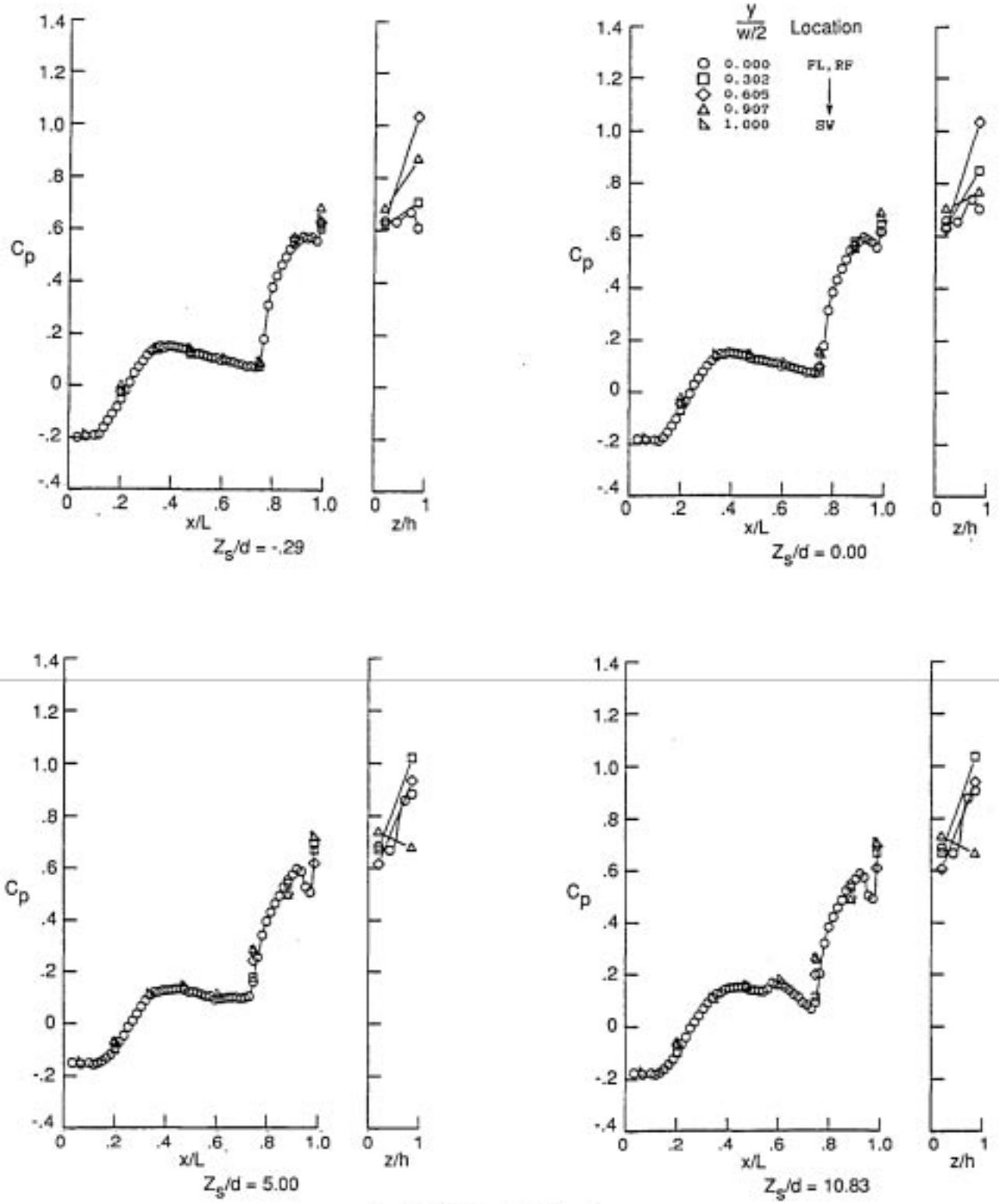
L-91-47

Figure 13. Concluded.



(a) $M = 1.69$.

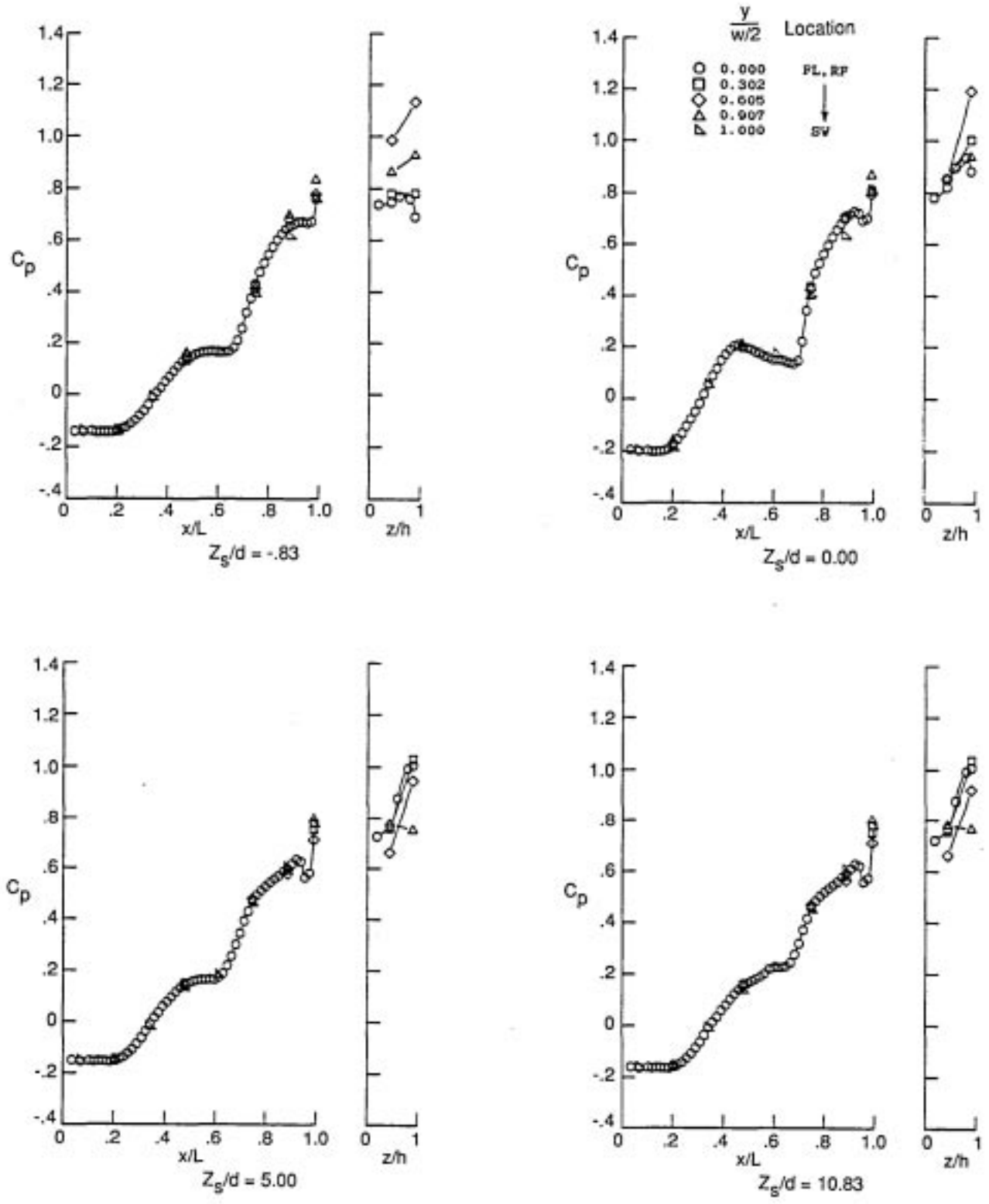
Figure 14. Cavity pressure distributions for cavities without doors.



h = 1.750, L/h = 16.778

(a) Continued.

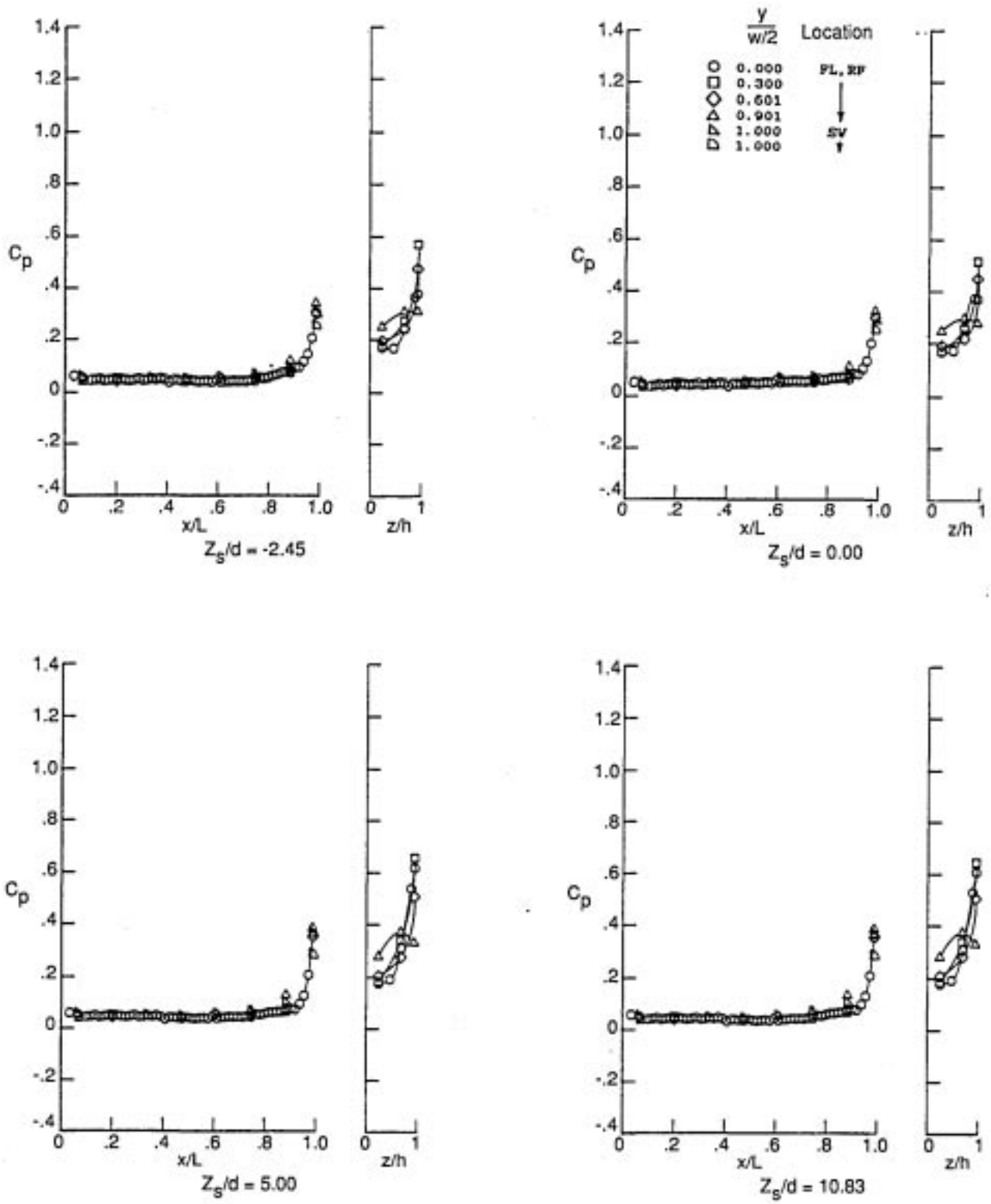
Figure 14. Continued.



h = 2.432, L/h = 12.073

(a) Continued.

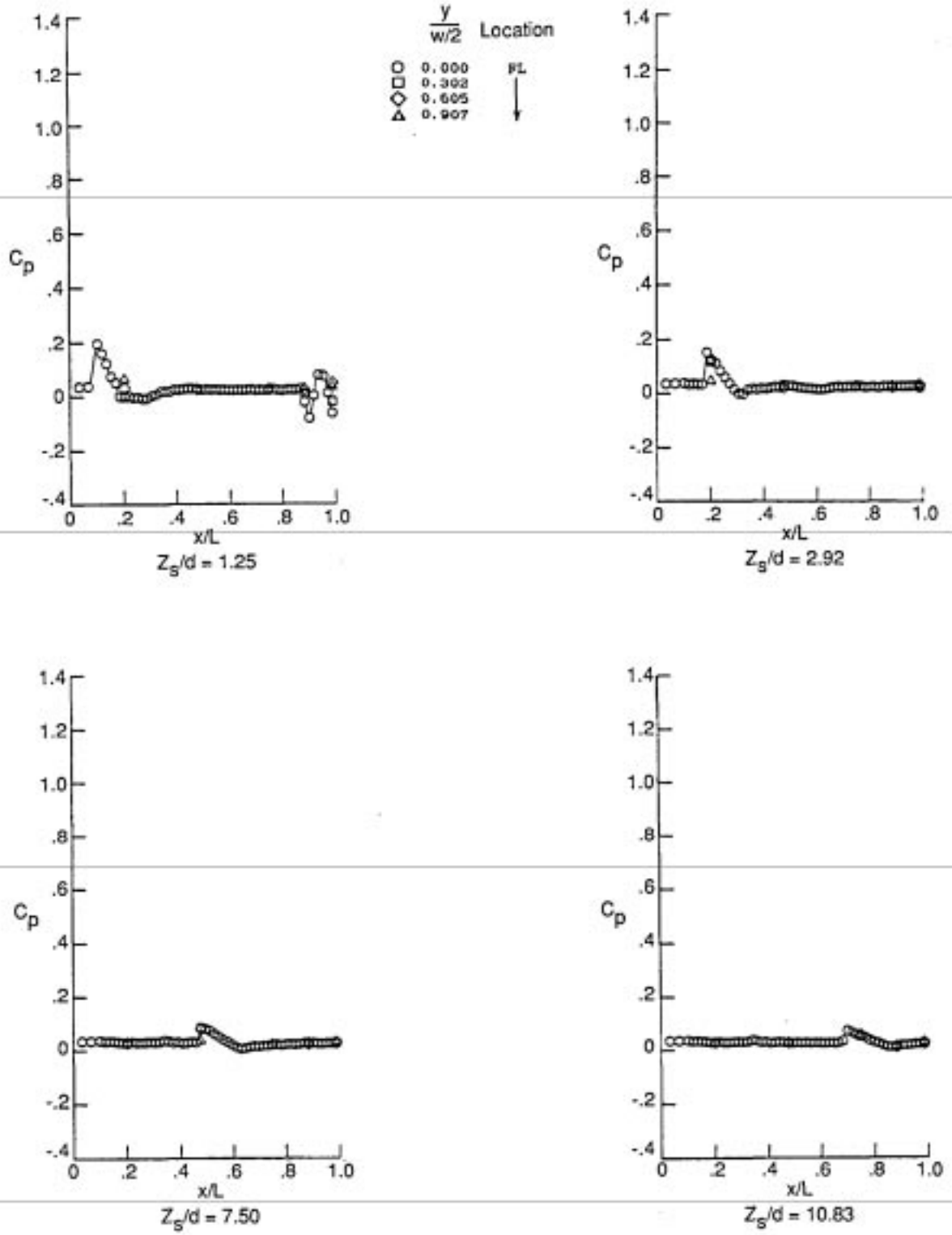
Figure 14. Continued.



h = 4.363, L/h = 6.730

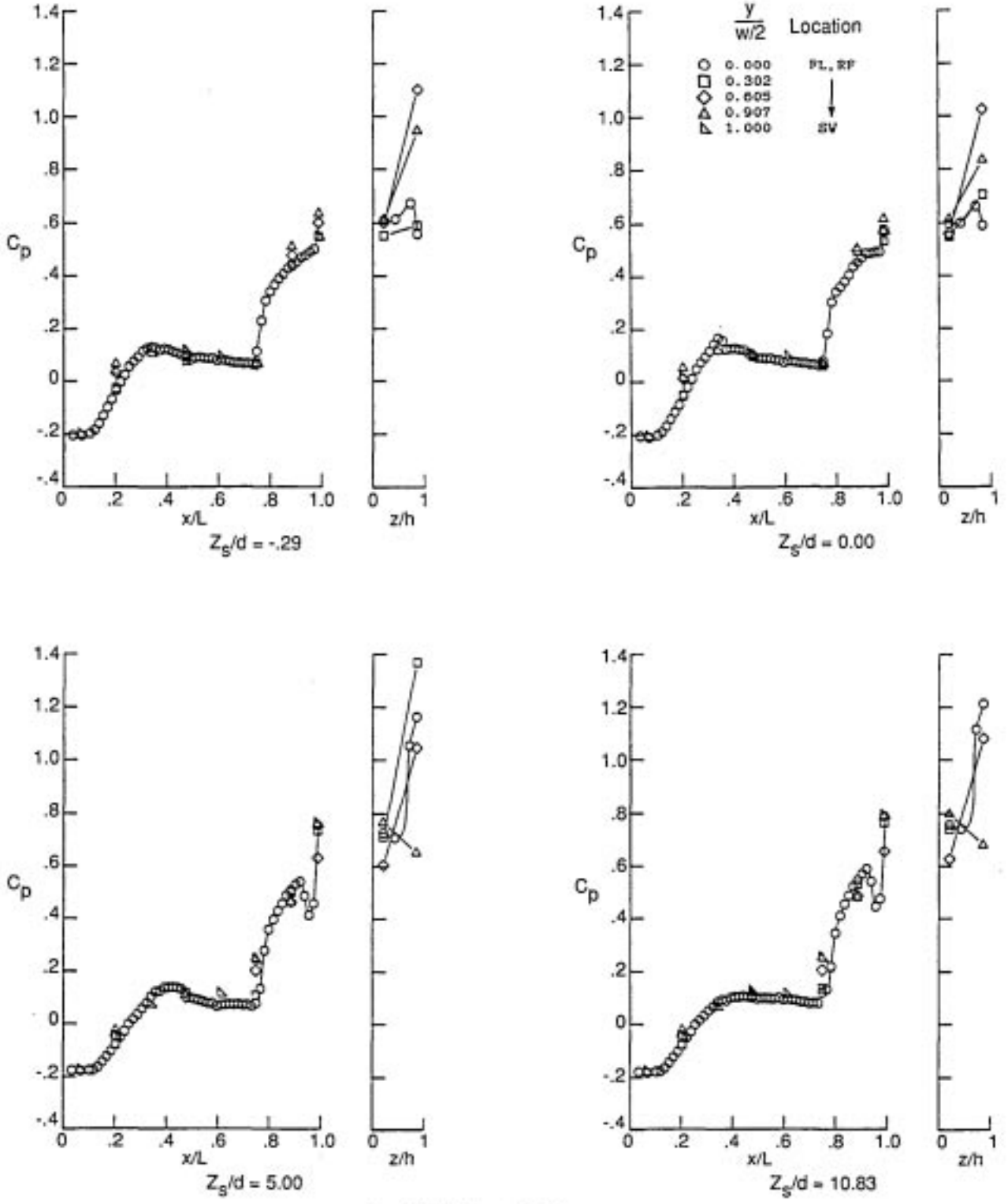
(a) Concluded.

Figure 14. Continued.



(b) $M = 2.00$.

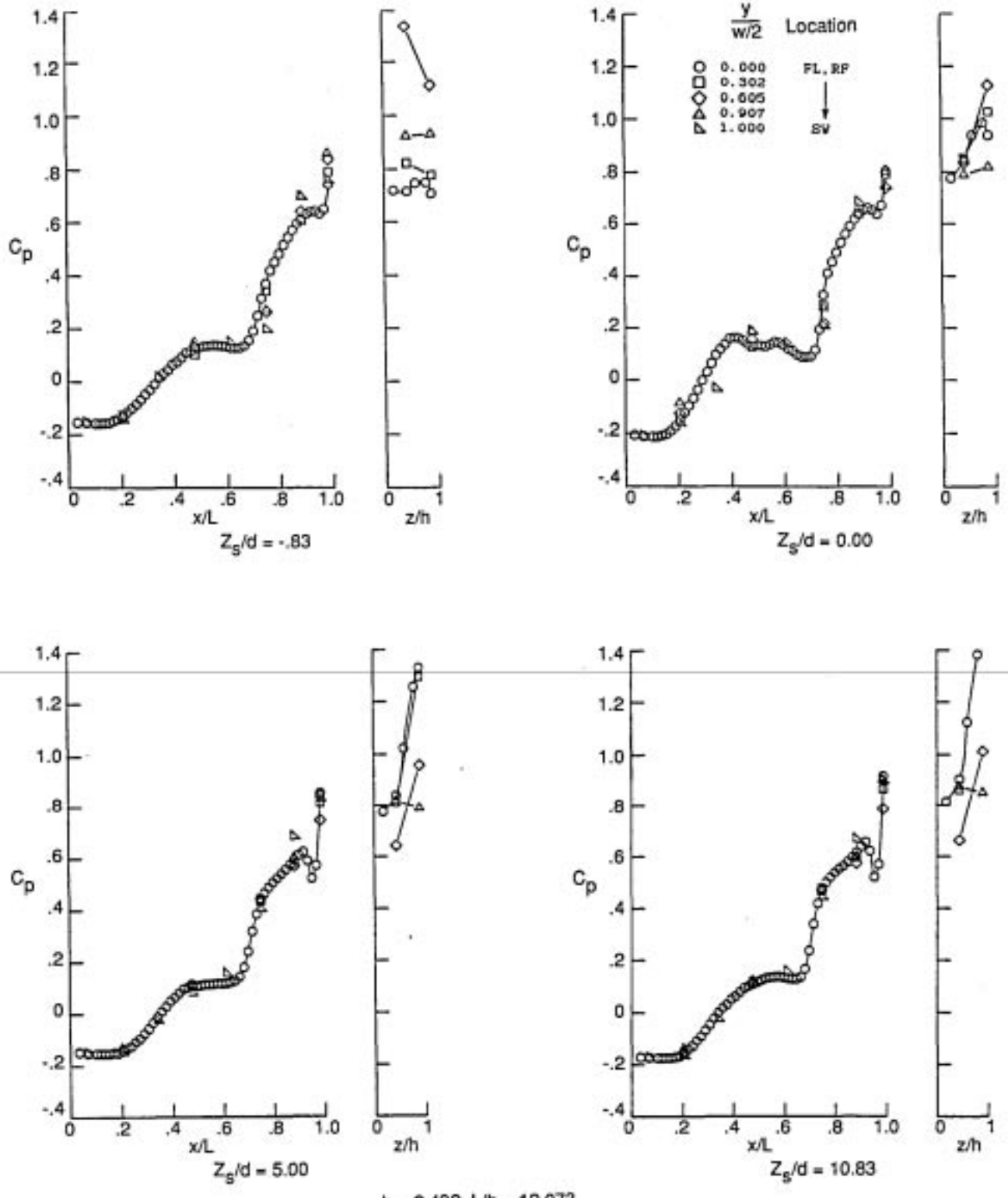
Figure 14. Continued.



h = 1.750, L/h = 16.778

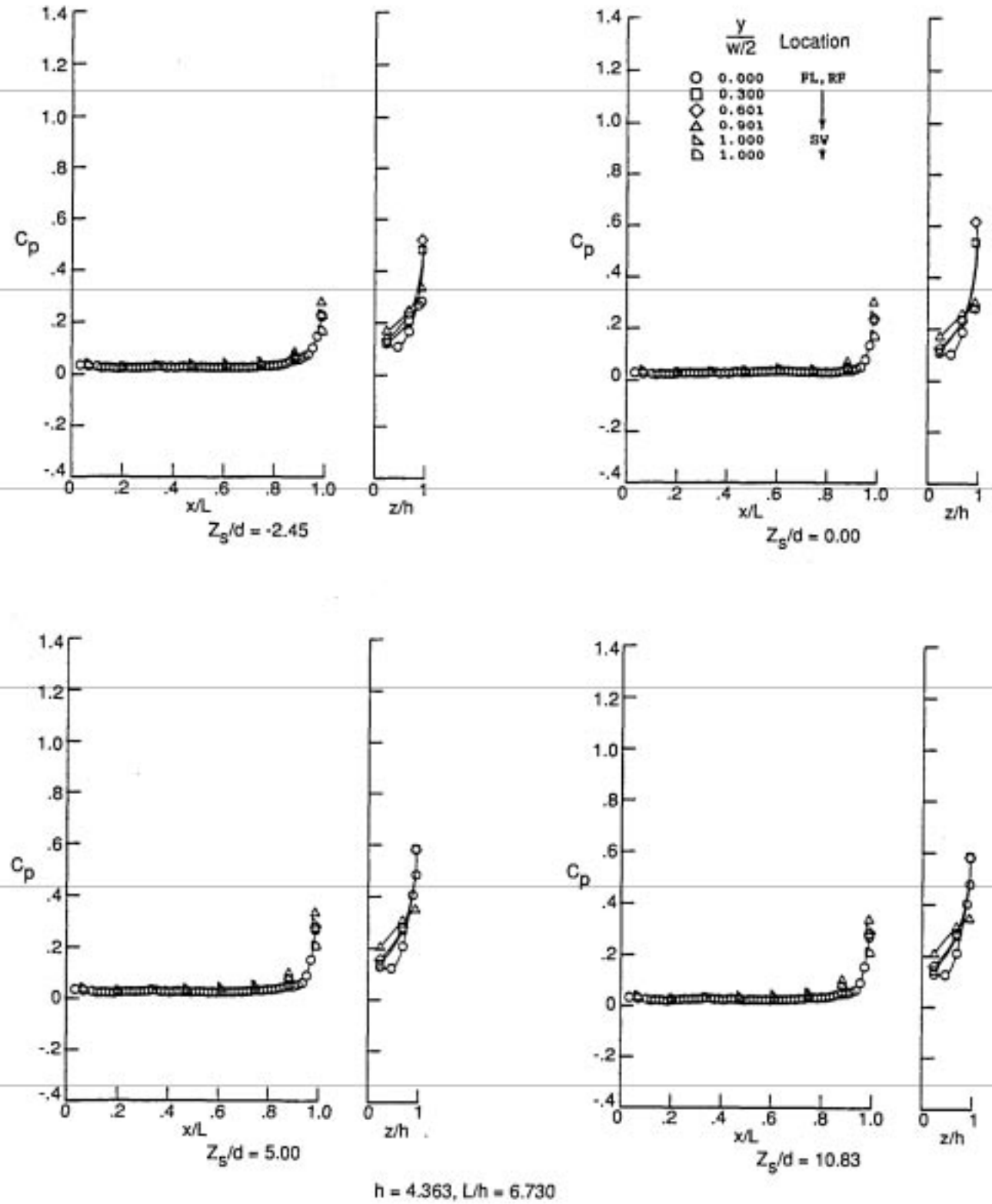
(b) Continued.

Figure 14. Continued.



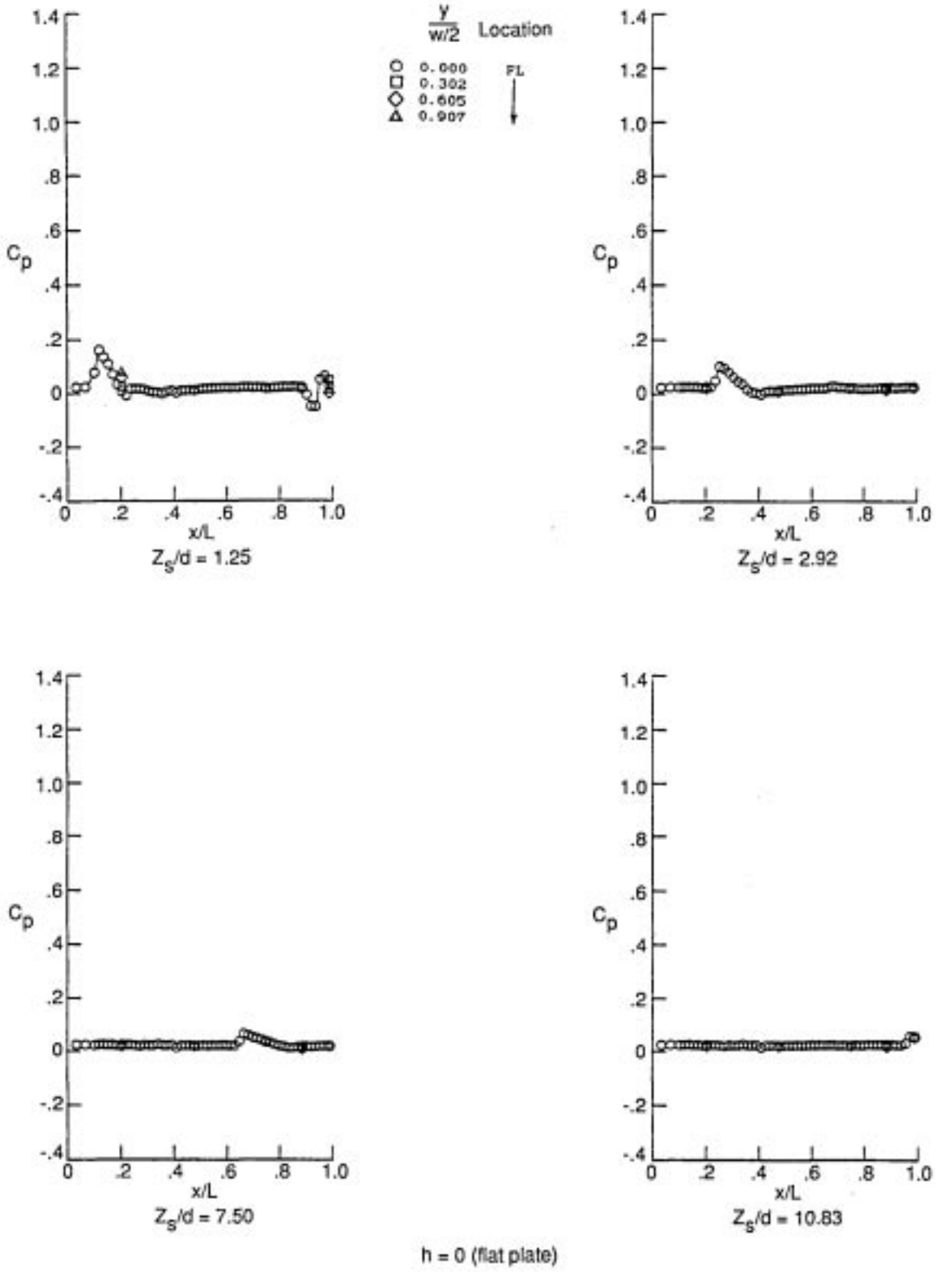
(b) Continued.

Figure 14. Continued.



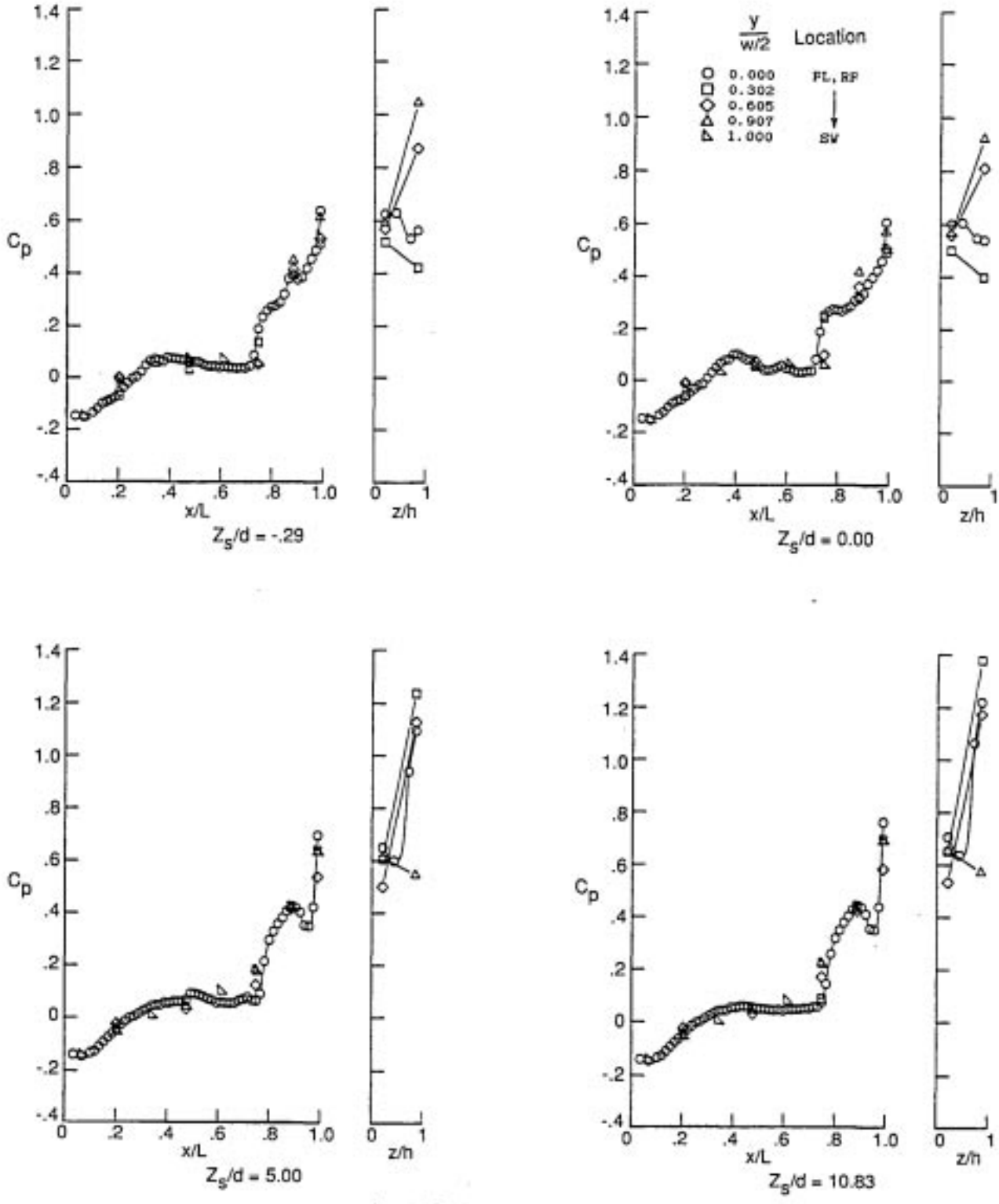
(b) Concluded.

Figure 14. Continued.



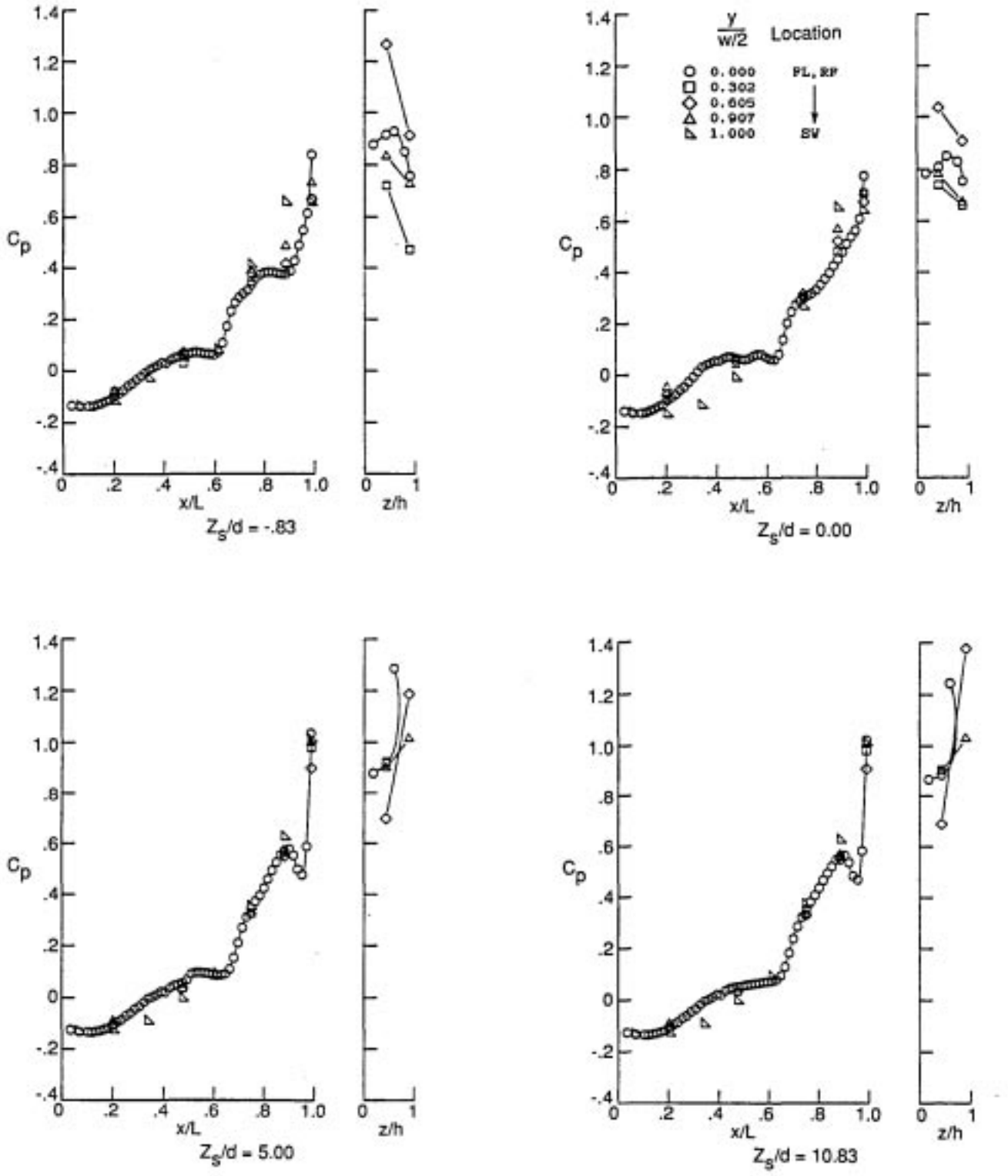
(c) $M = 2.65$.

Figure 14. Continued.



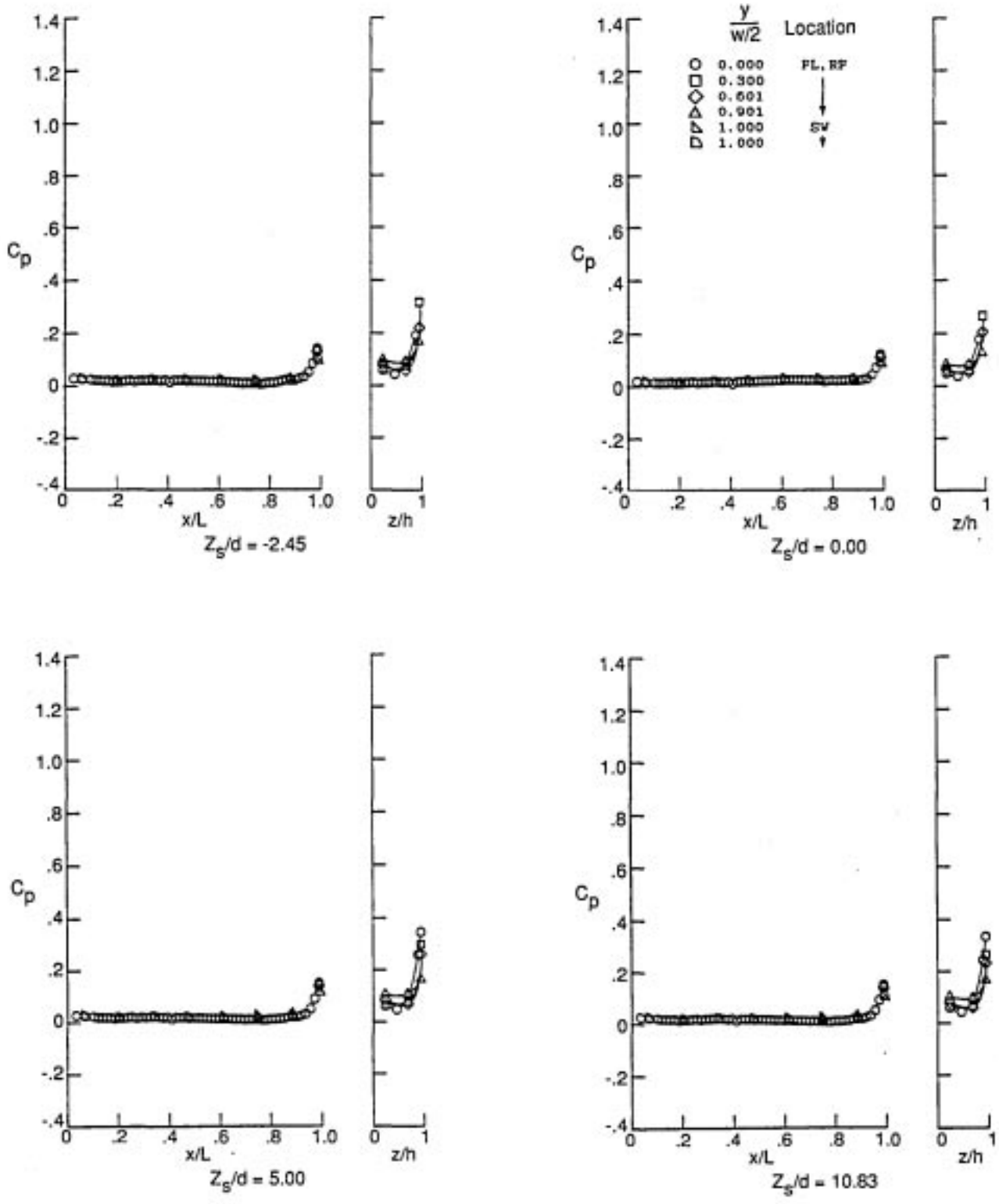
(c) Continued.

Figure 14. Continued.



(c) Continued.

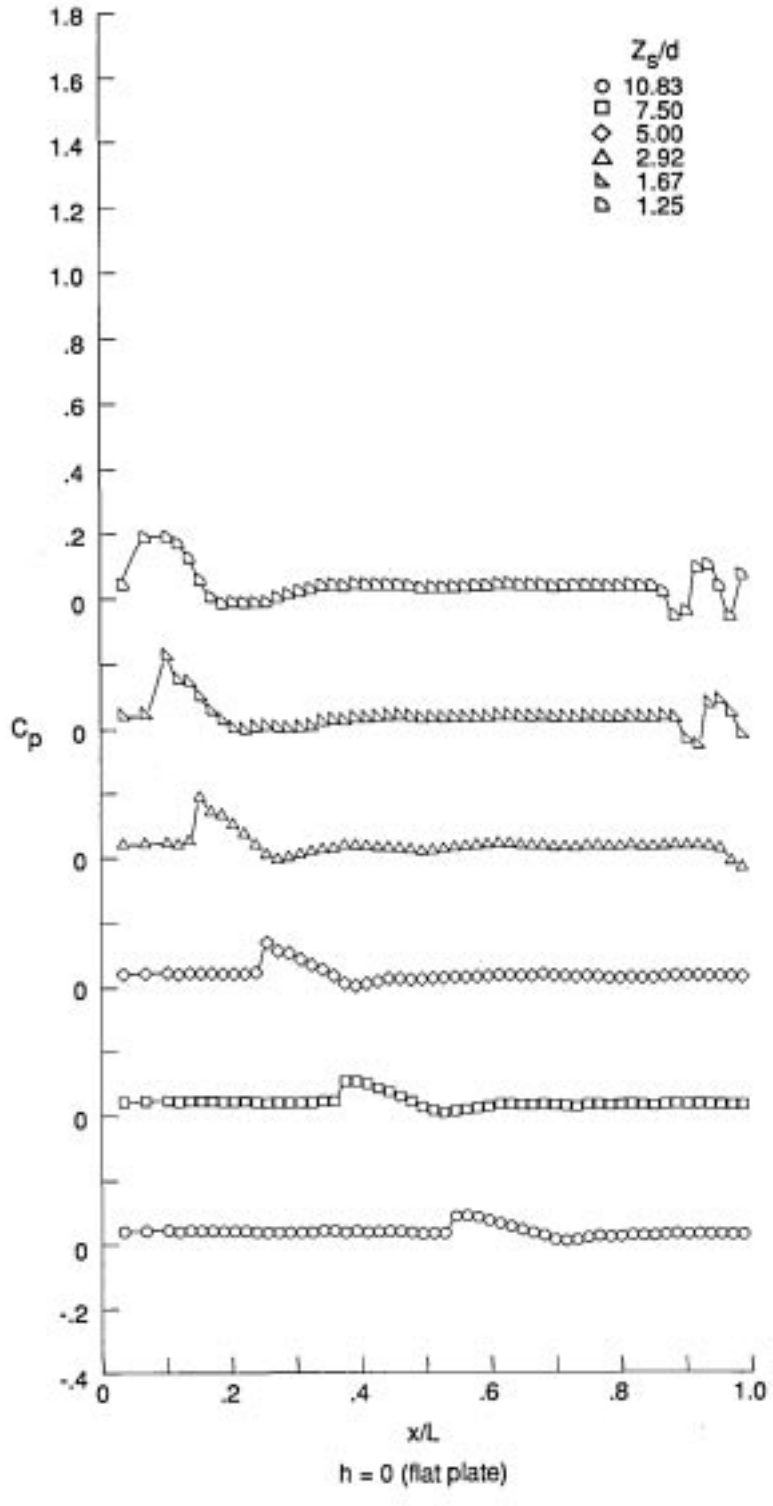
Figure 14. Continued.



h = 4.363, L/h = 6.730

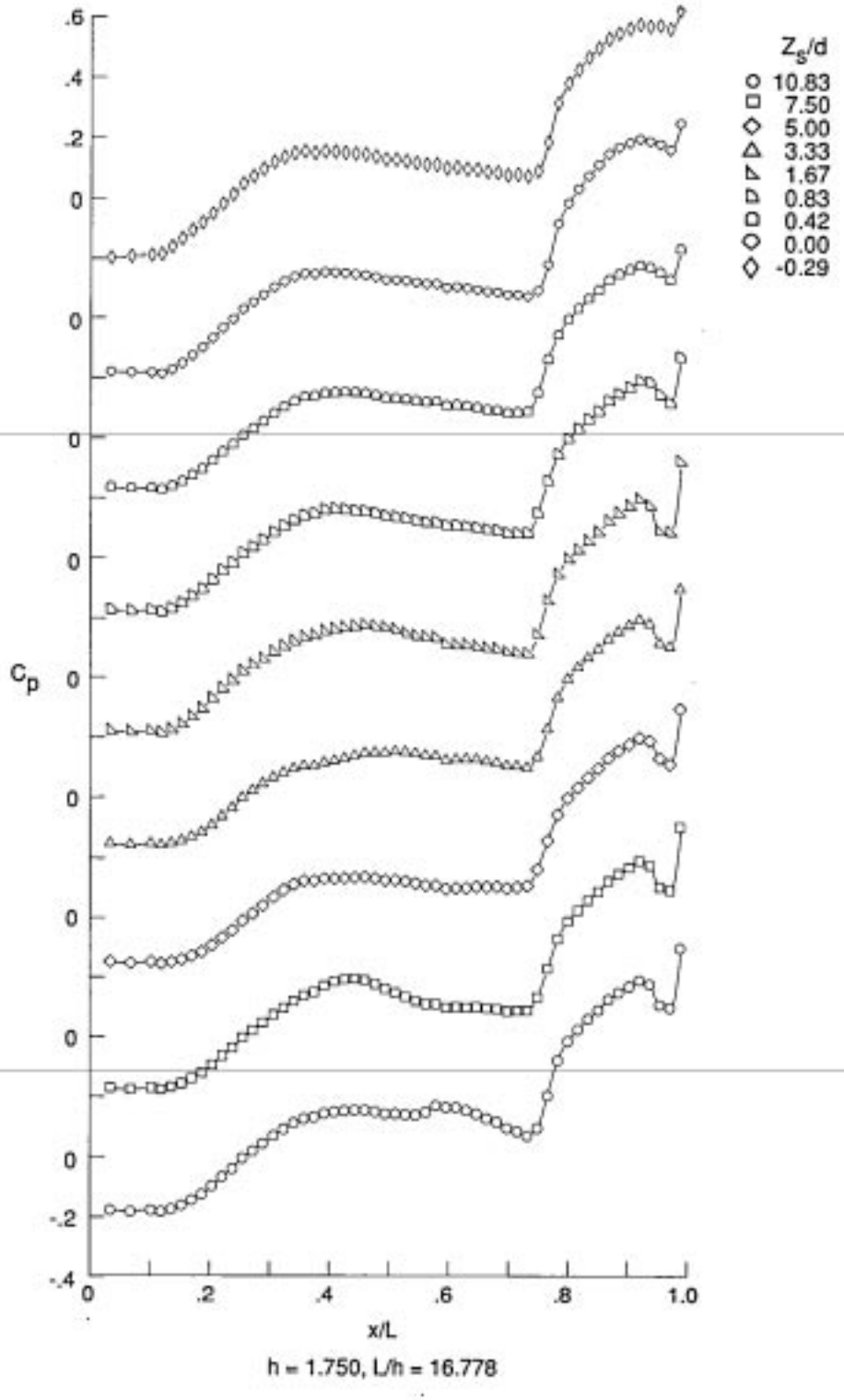
(c) Concluded.

Figure 14. Concluded.



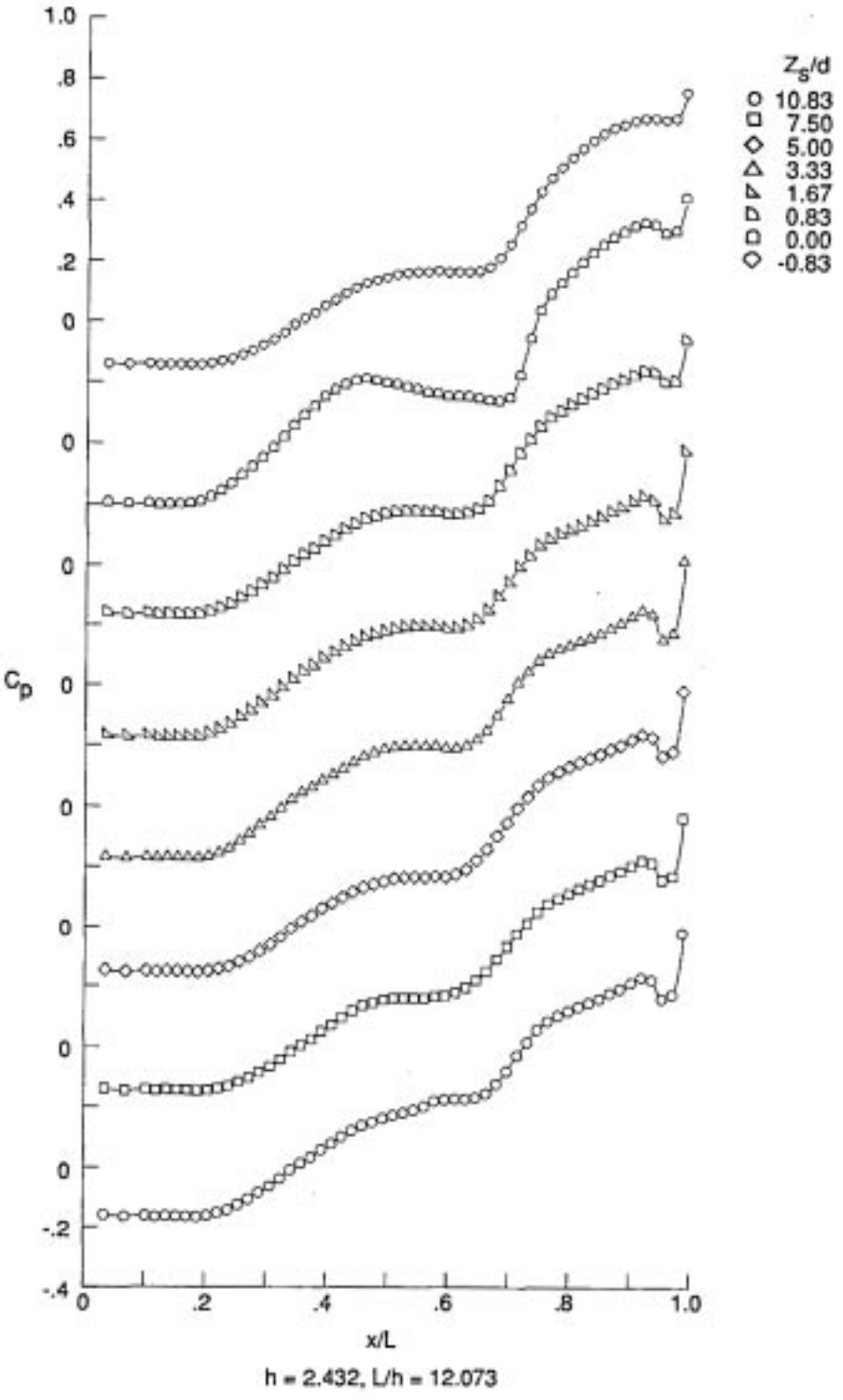
(a) $M = 1.69$.

Figure 15. Summary of cavity pressure distributions for cavities without doors. $y = 0$.



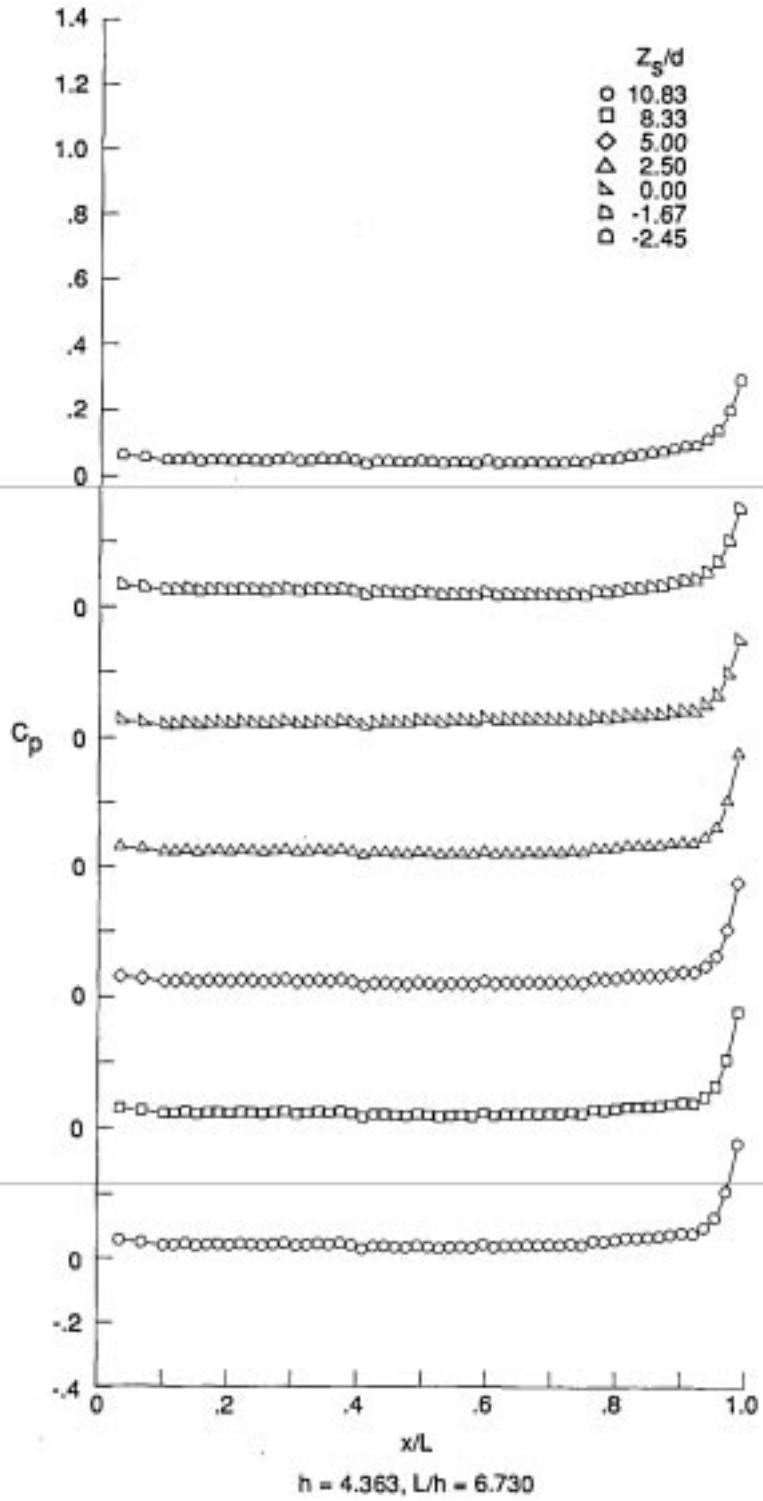
(a) Continued.

Figure 15. Continued.



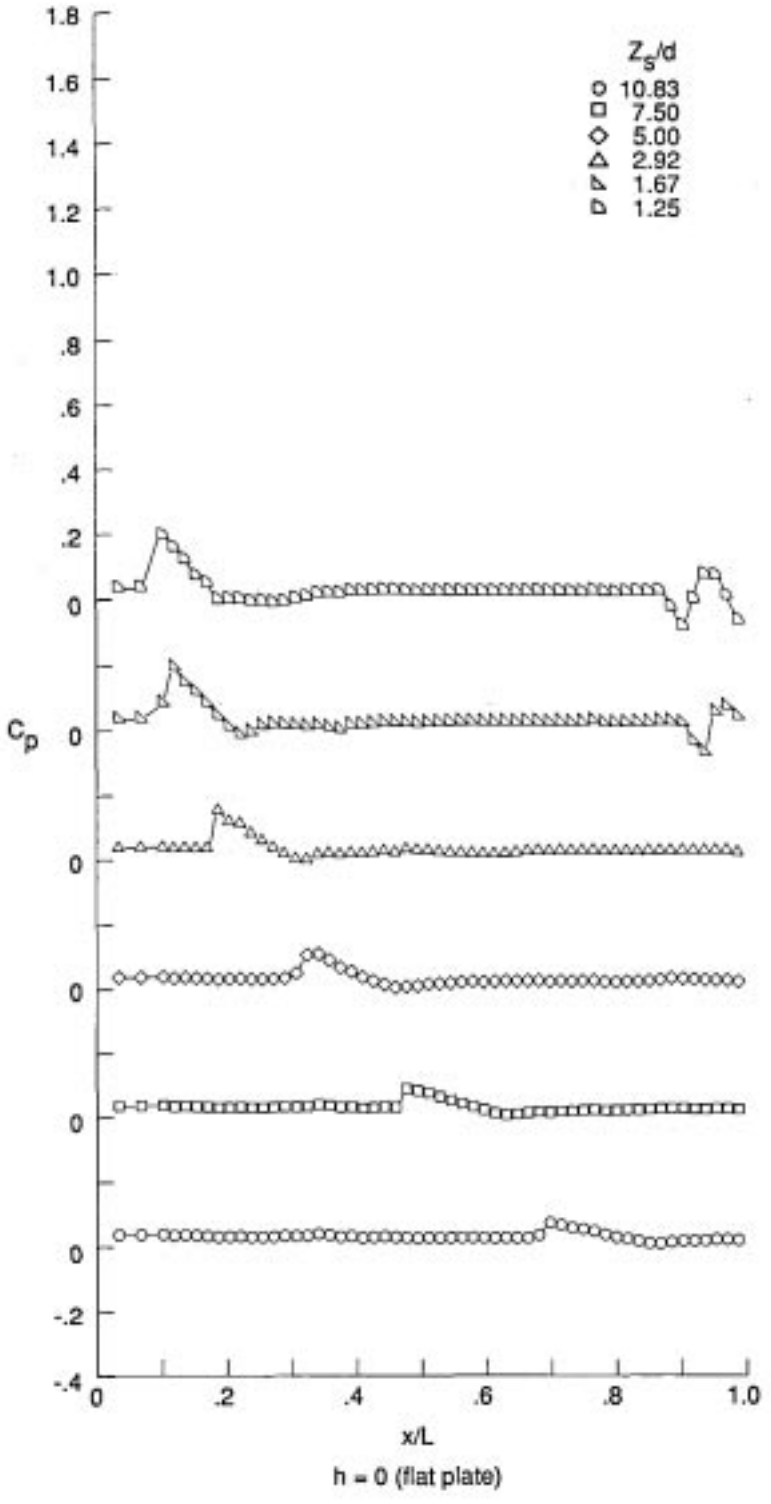
(a) Continued.

Figure 15. Continued.



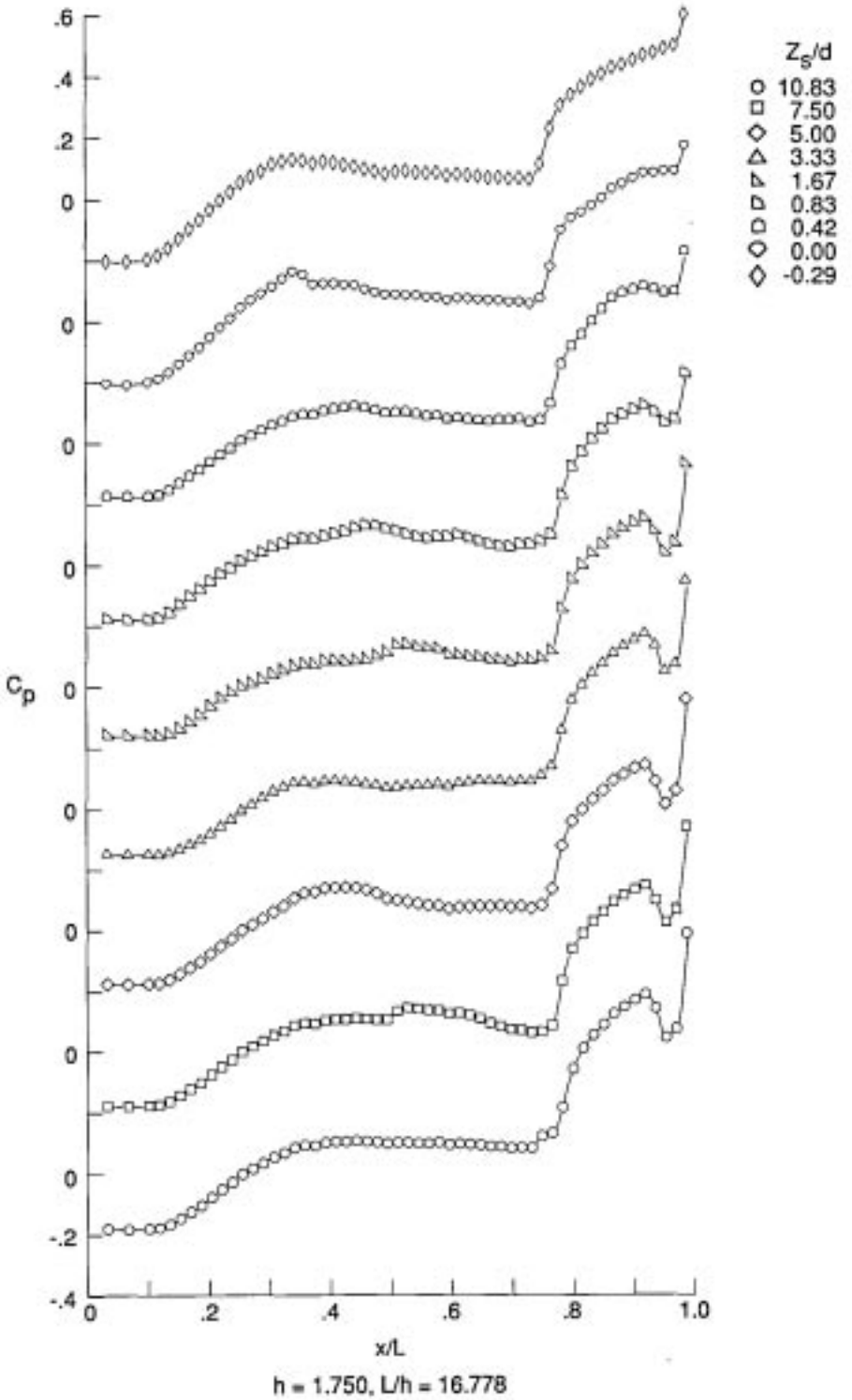
(a) Concluded.

Figure 15. Continued.



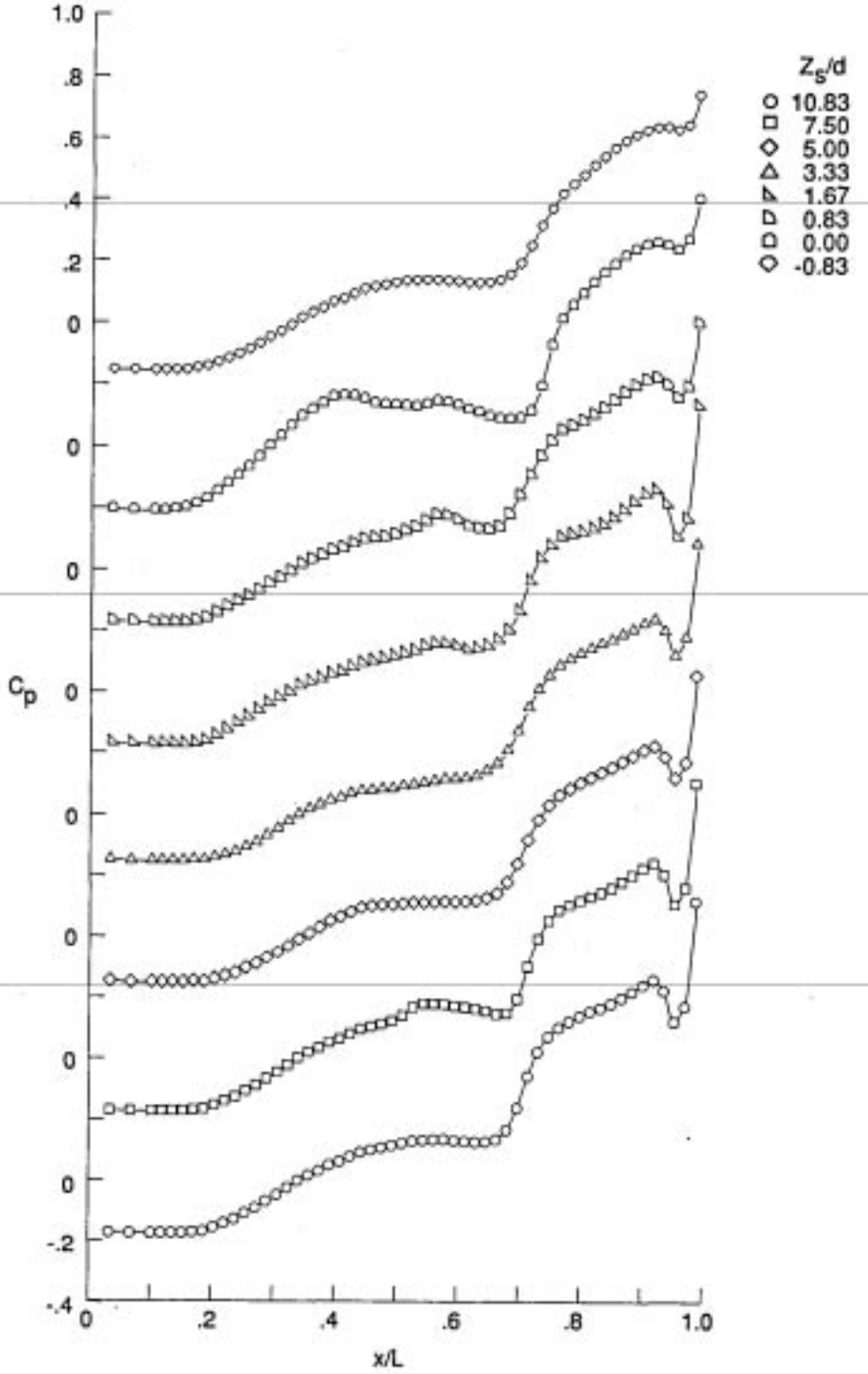
(b) $M = 2.00$.

Figure 15. Continued.



(b) Continued.

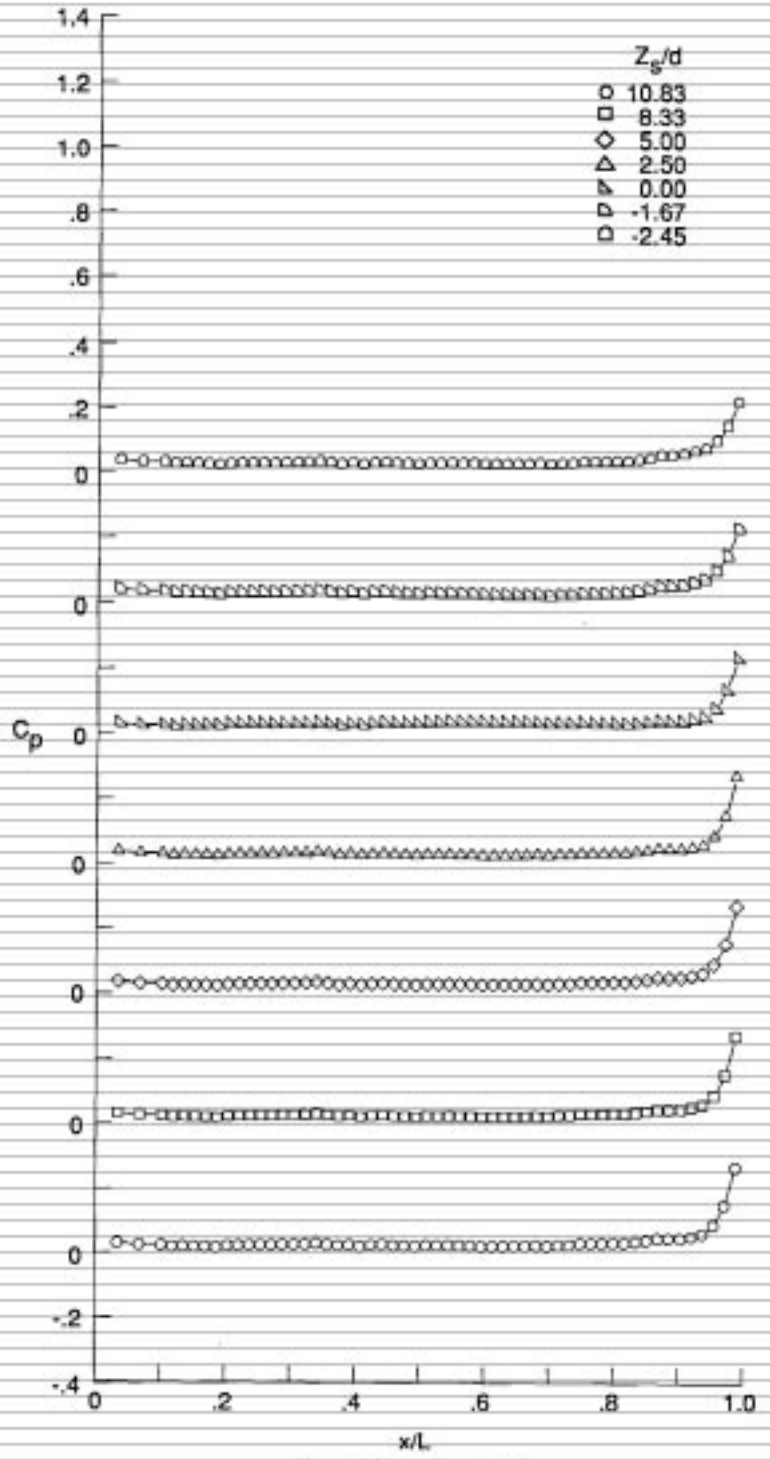
Figure 15. Continued.



h = 2.432, L/h = 12.073

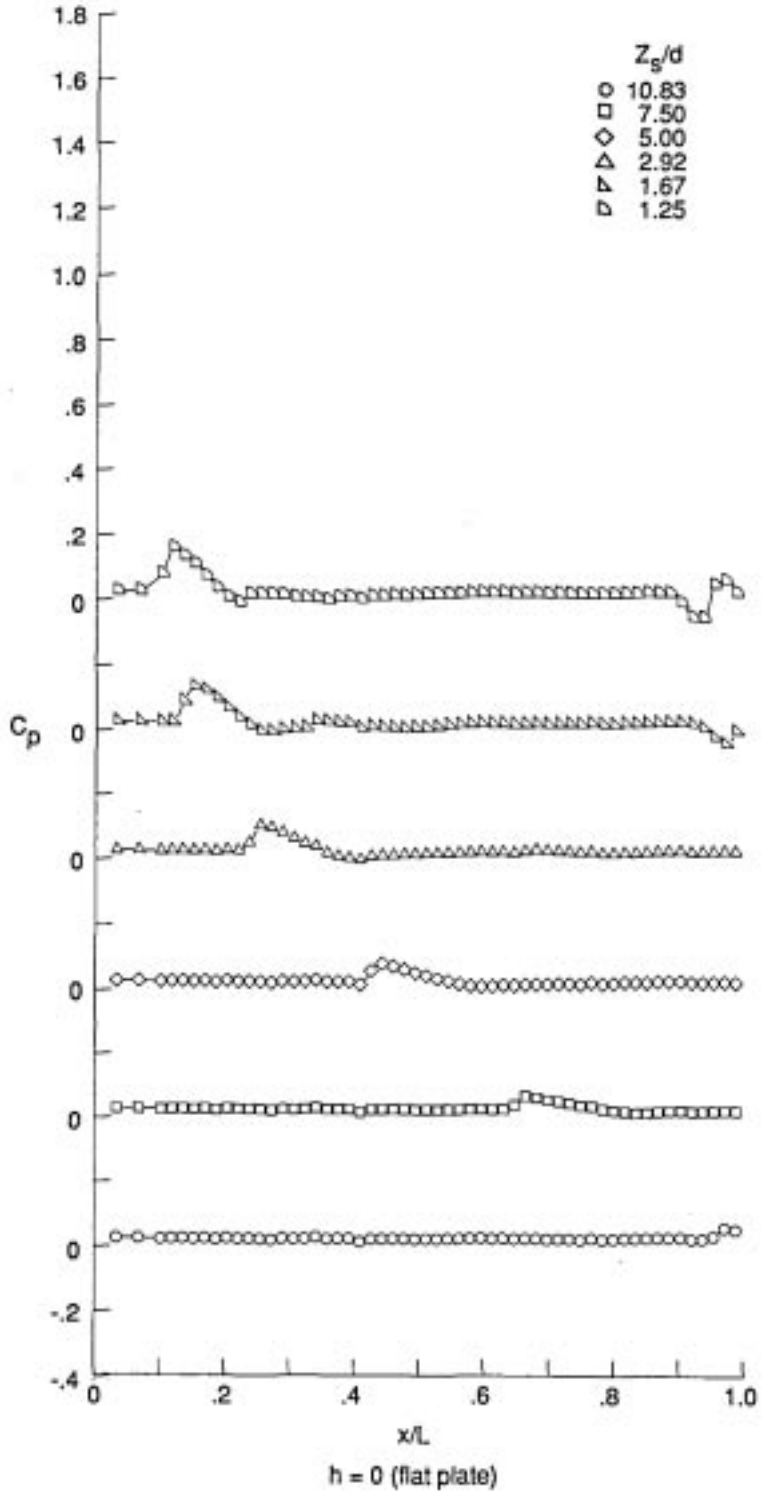
(b) Continued.

Figure 15. Continued.



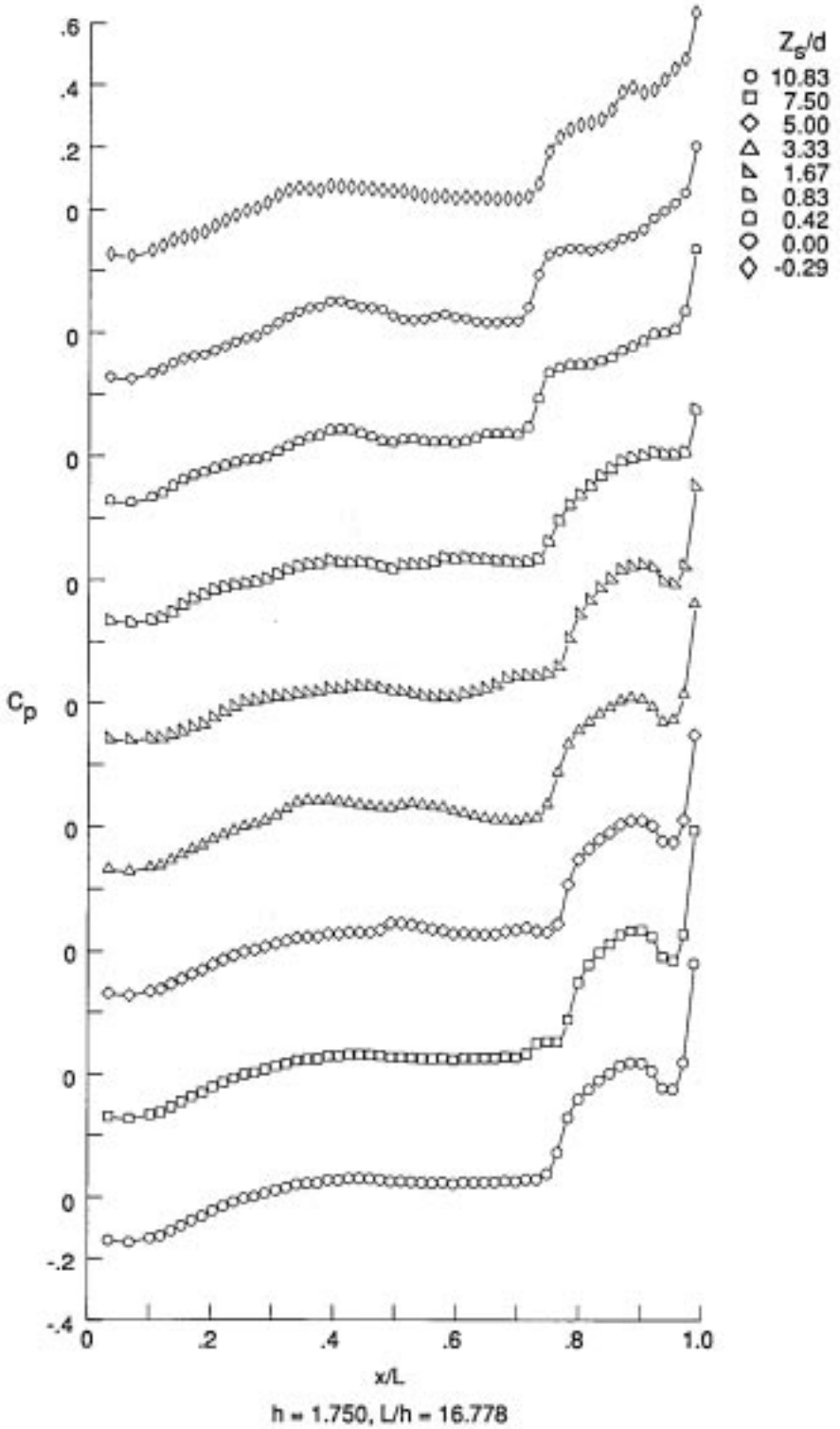
(b) Concluded.

Figure 15. Continued.



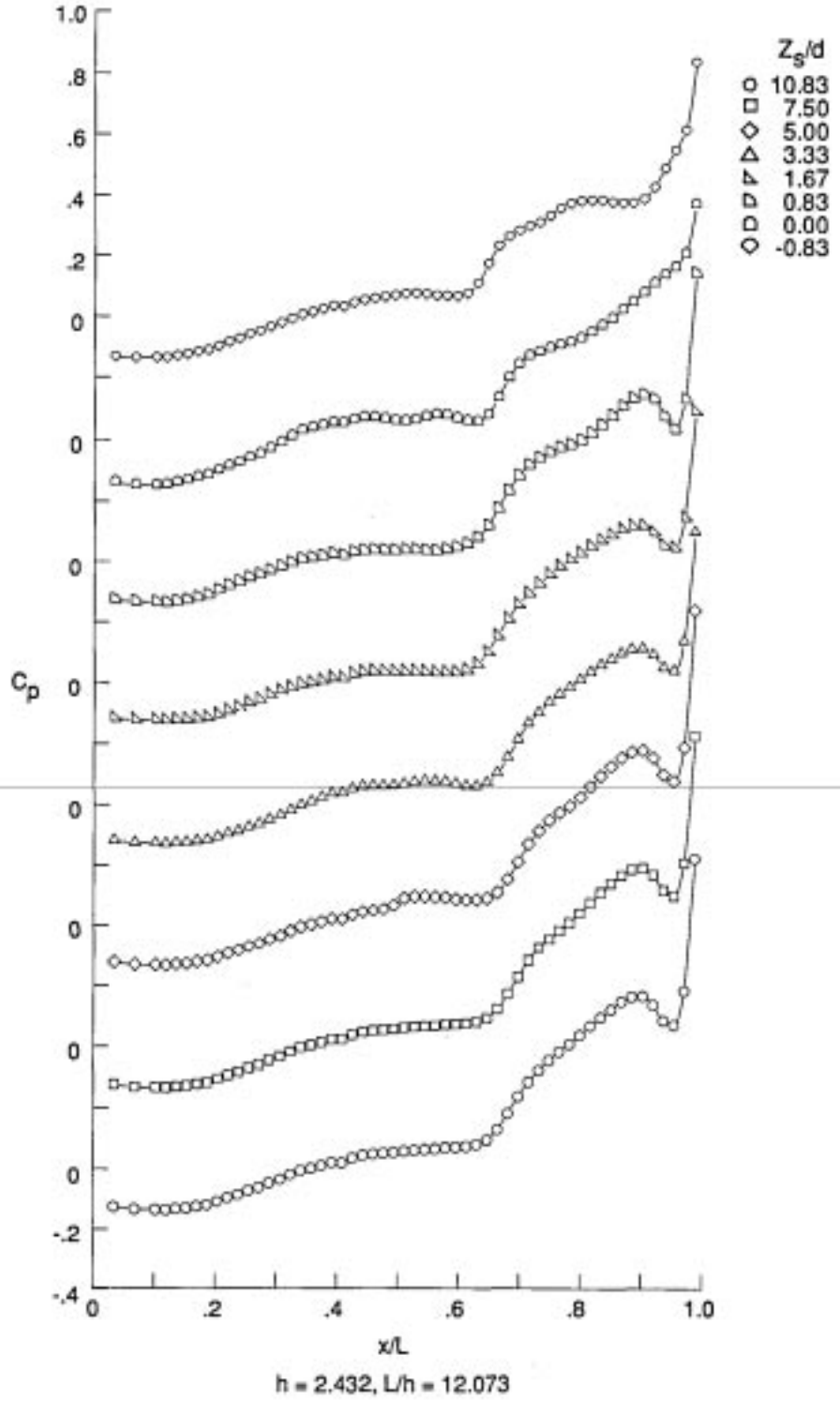
(c) $M = 2.65$.

Figure 15. Continued.



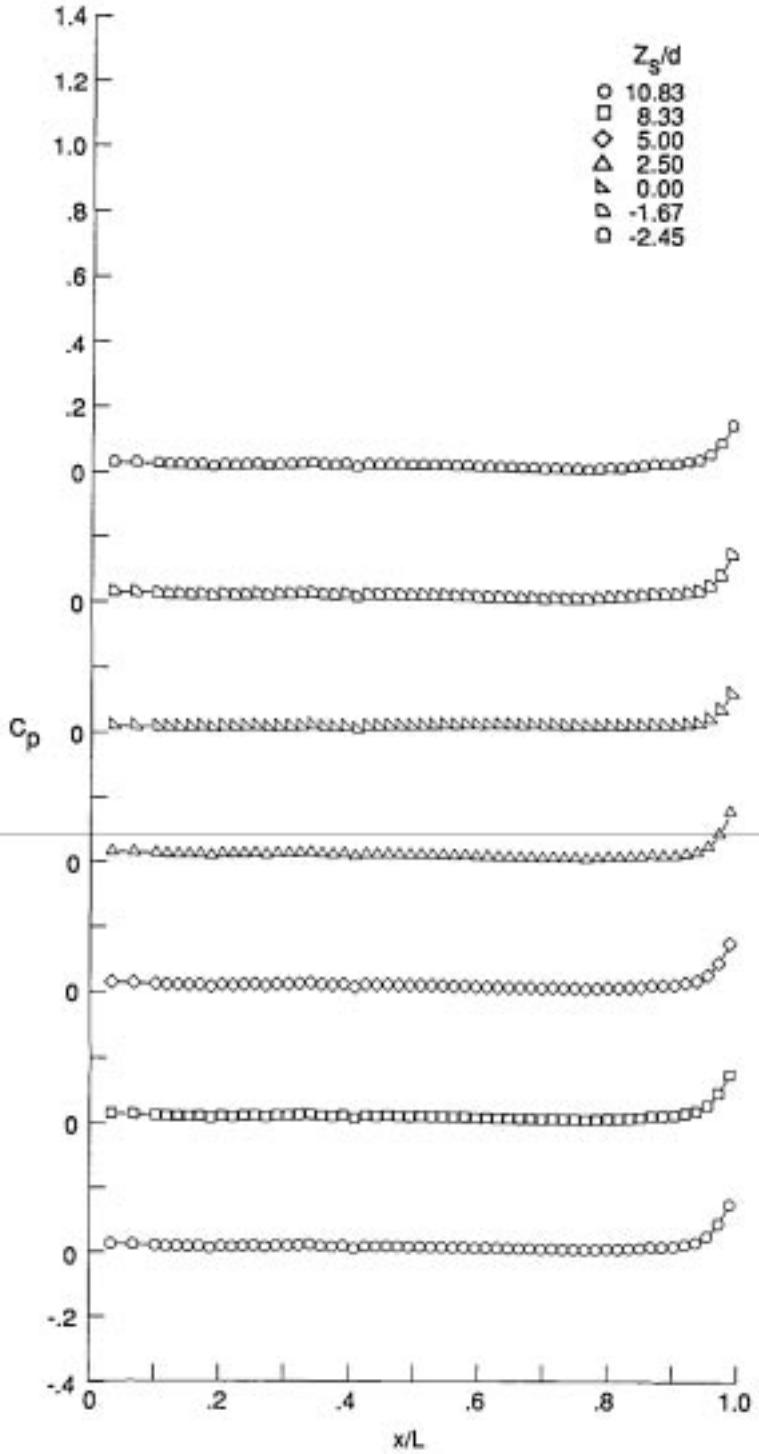
(c) Continued.

Figure 15. Continued.



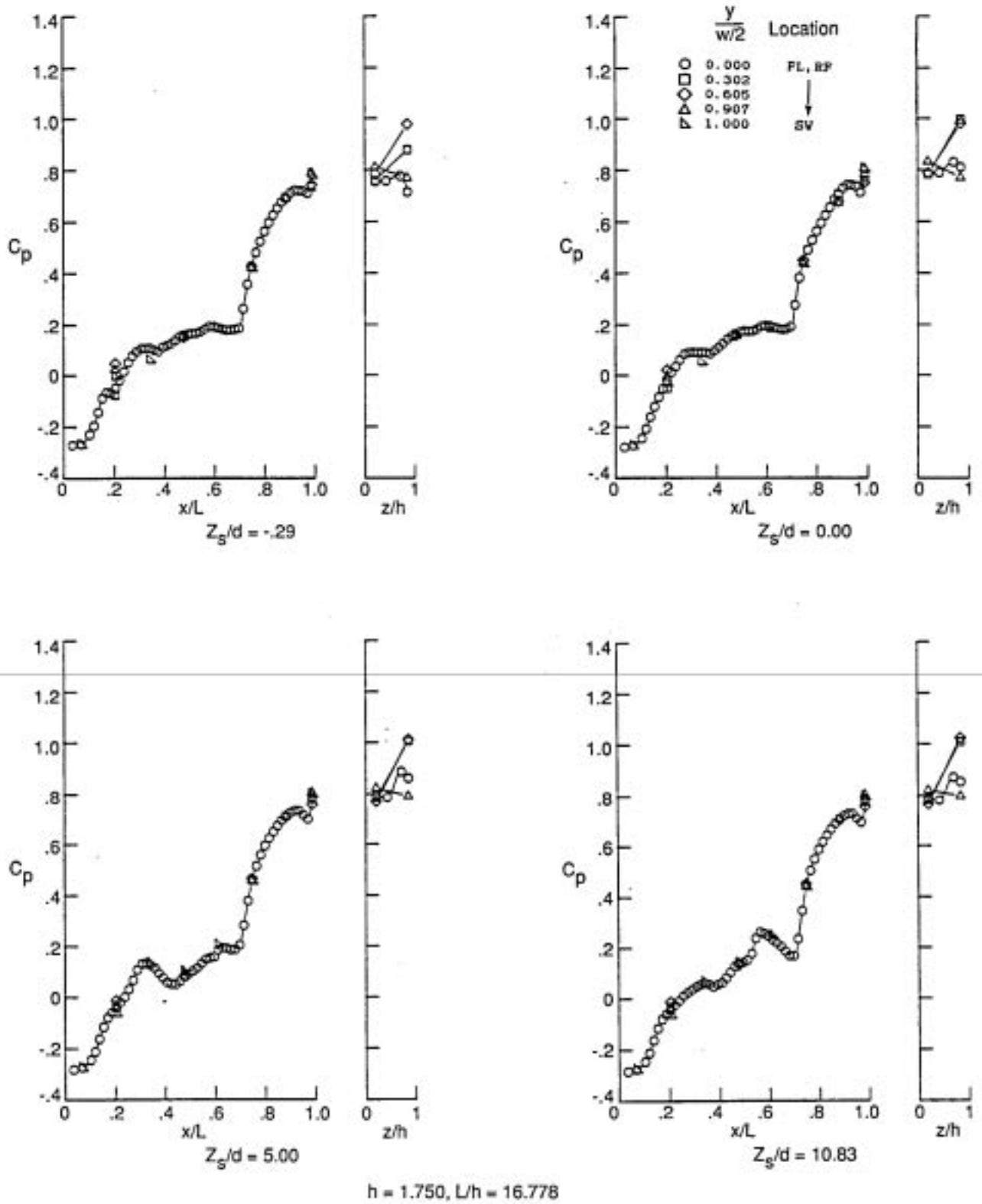
(c) Continued.

Figure 15. Continued.



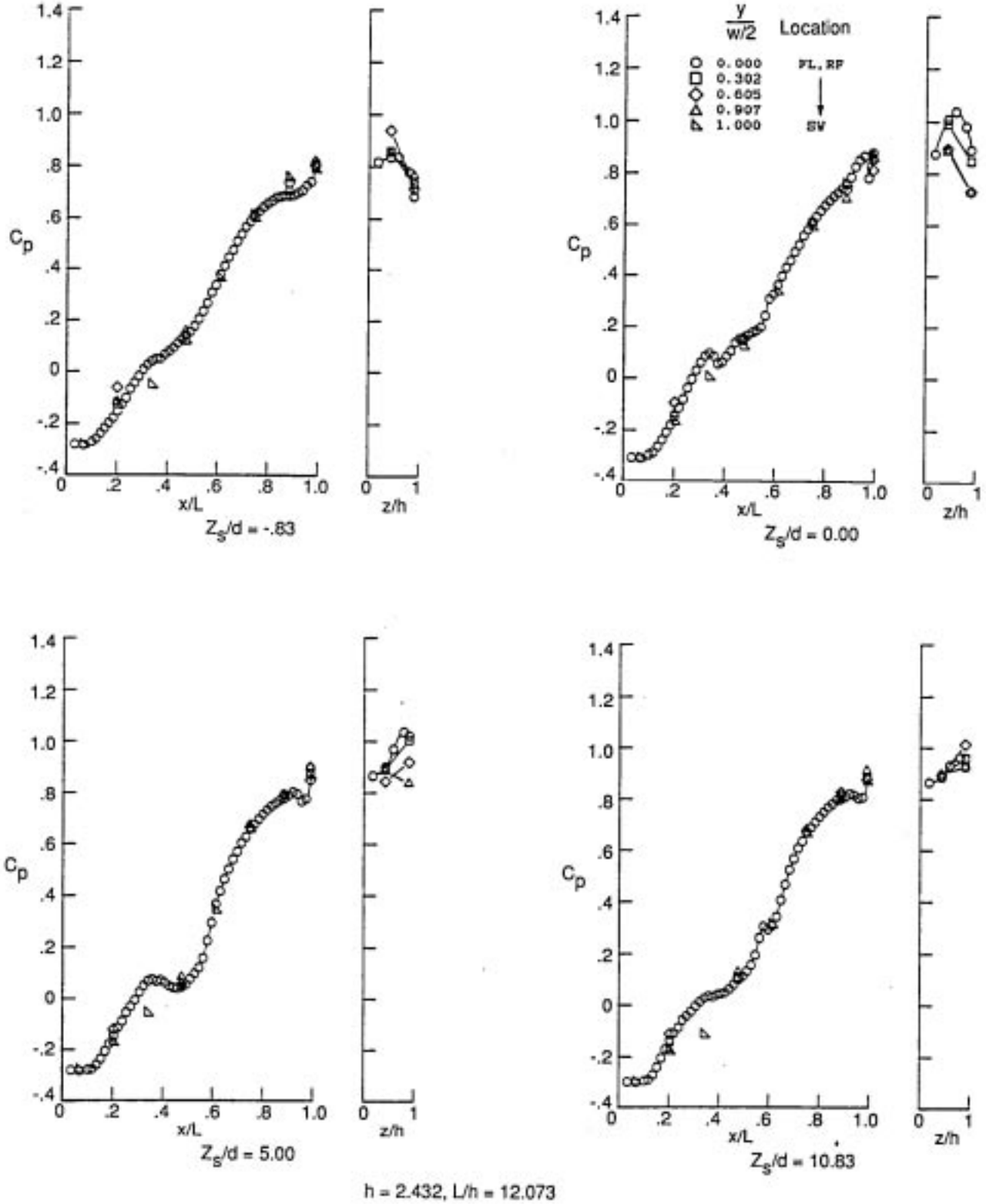
(c) Concluded.

Figure 15. Concluded.



(a) $M = 1.69$.

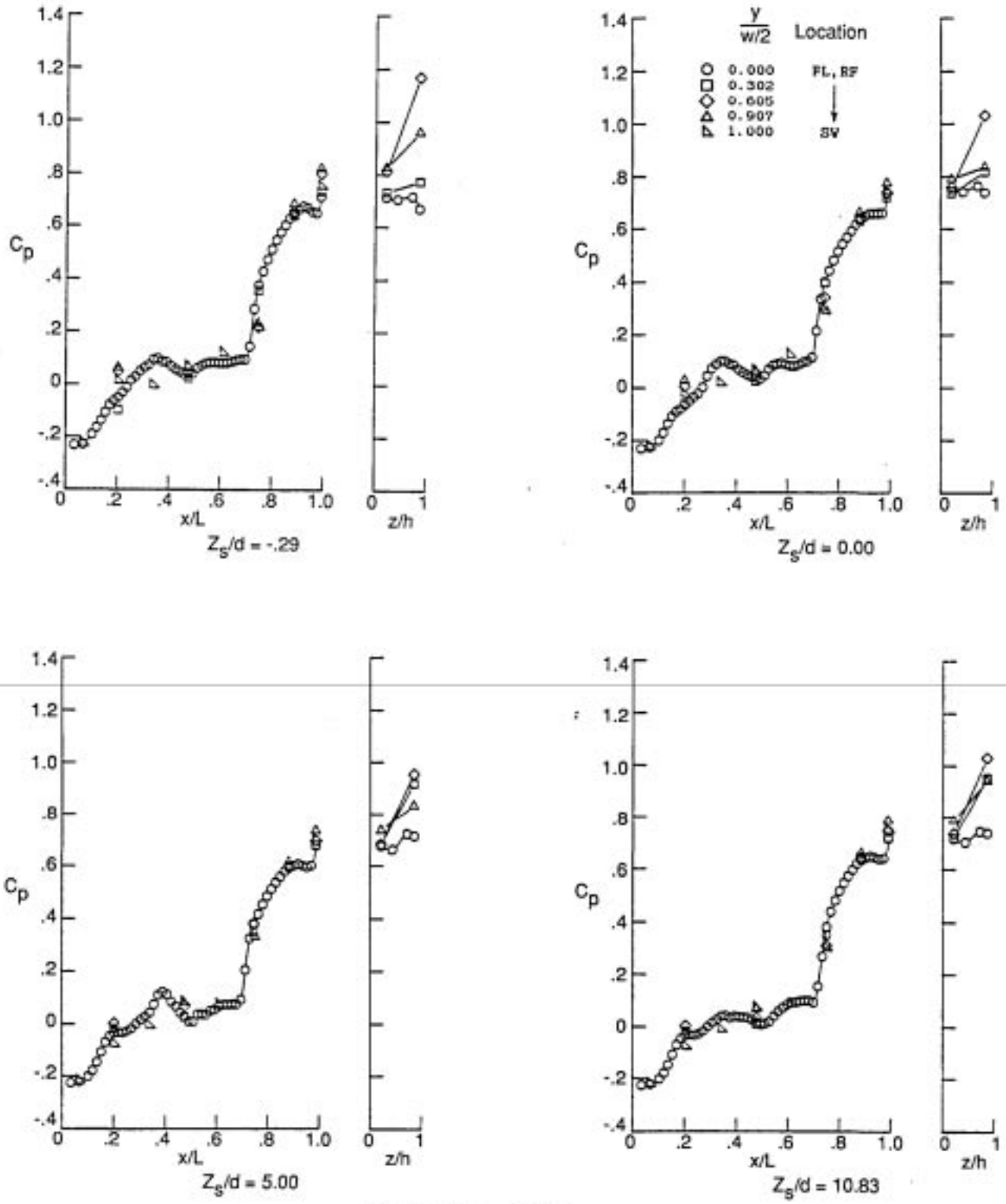
Figure 16. Cavity pressure distributions for cavities with doors.



h = 2.432, L/h = 12.073

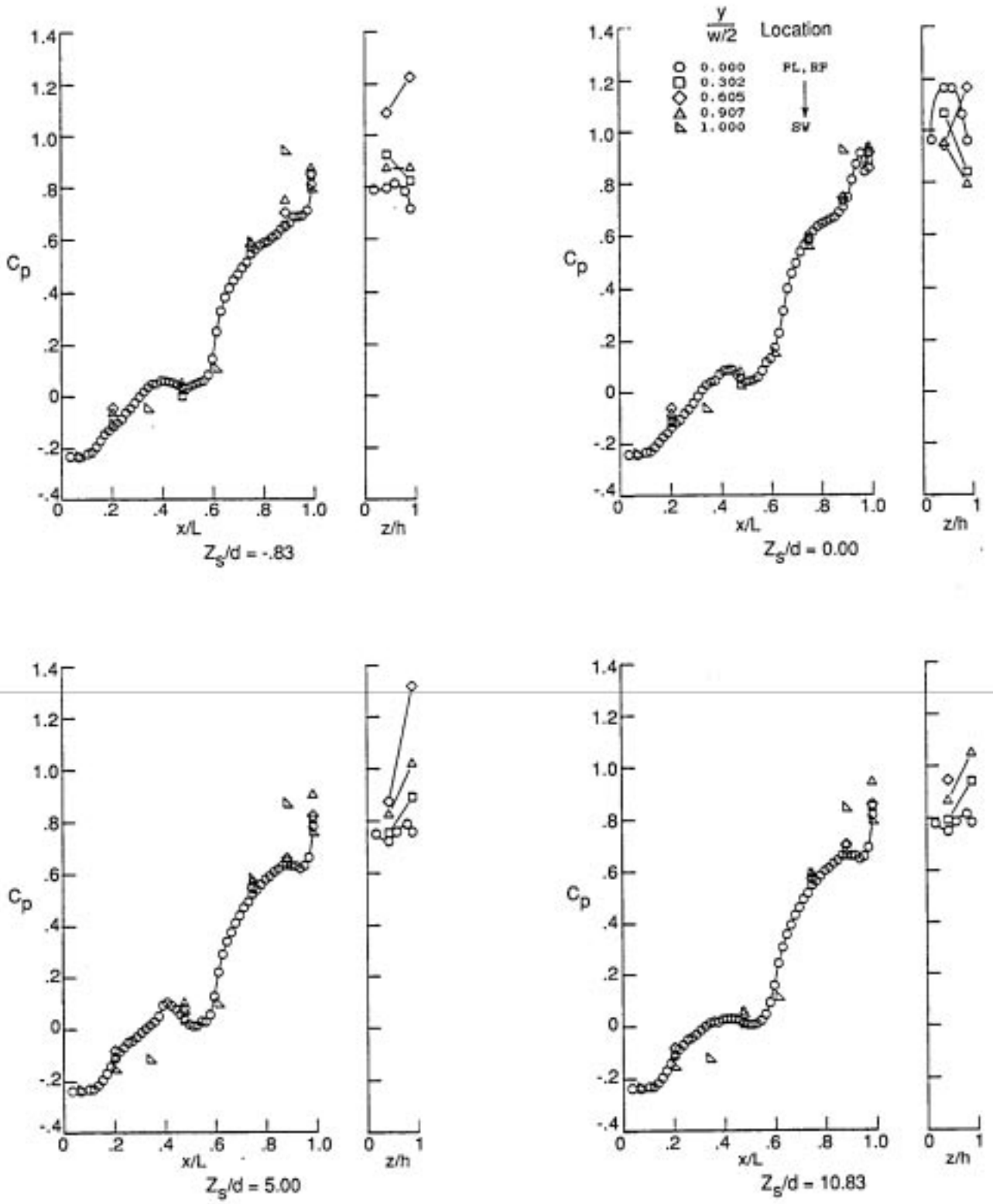
(a) Concluded.

Figure 16. Continued.



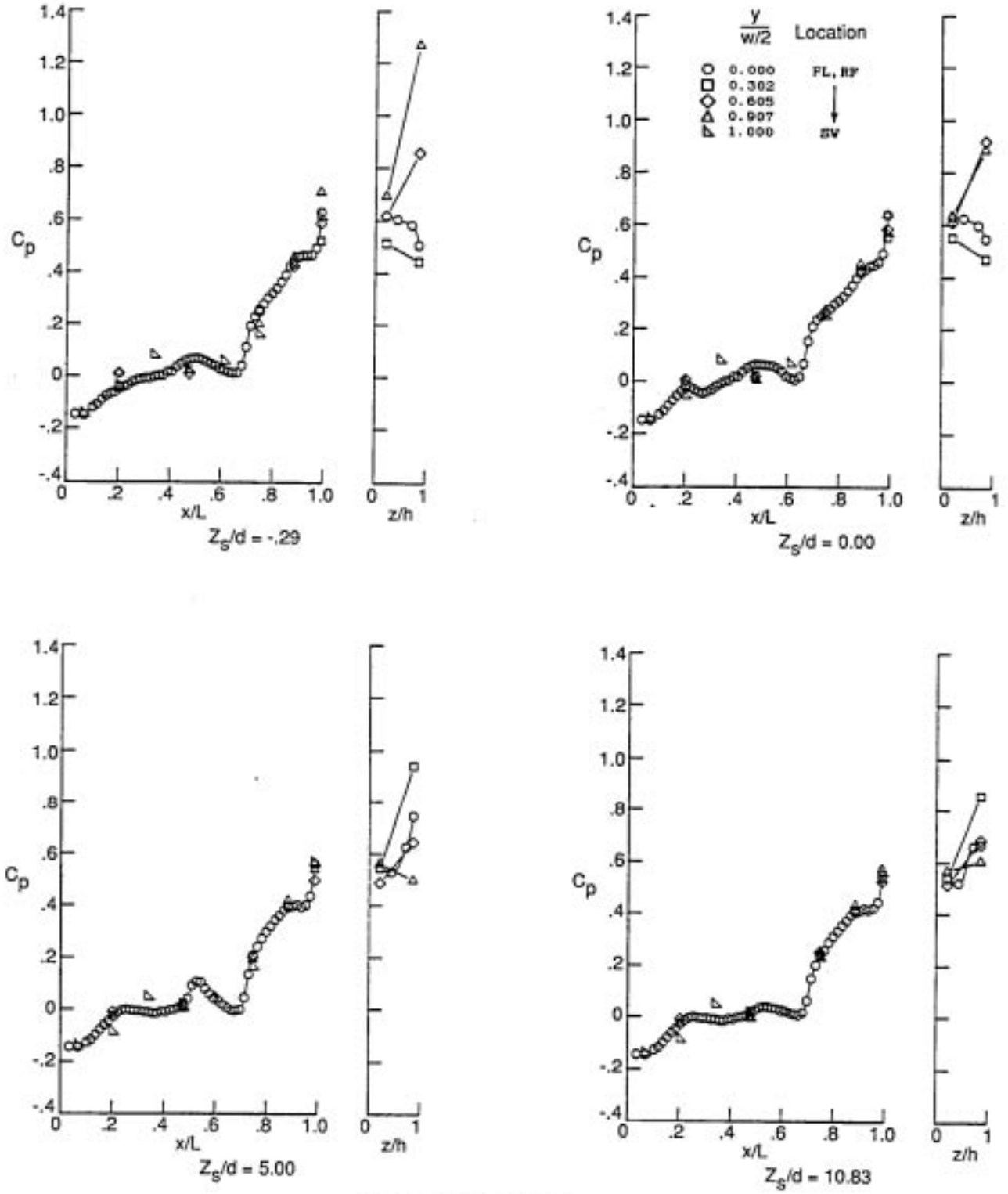
(b) $M = 2.00$.

Figure 16. Continued.



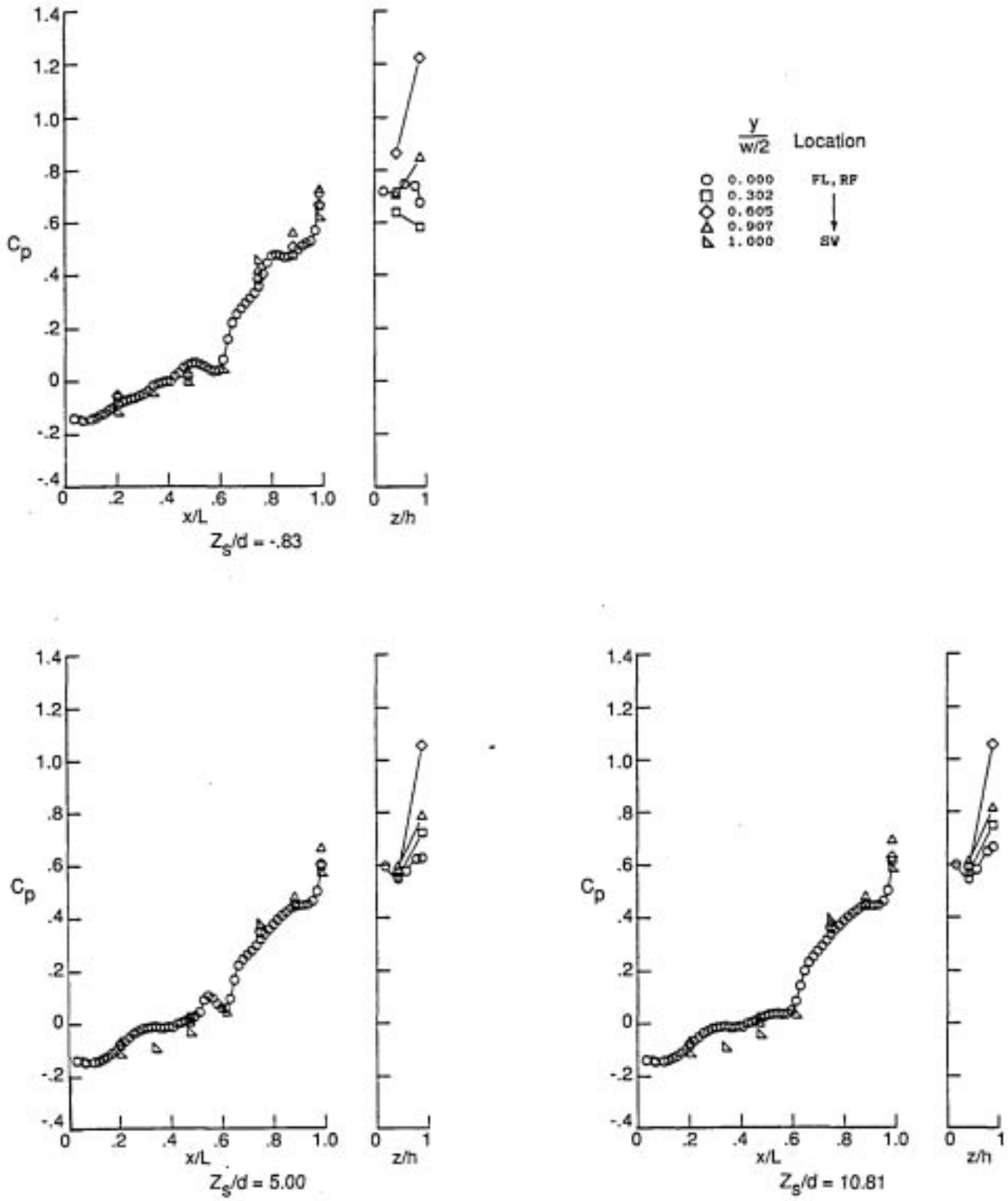
(b) Concluded.

Figure 16. Continued.



(c) $M = 2.65$.

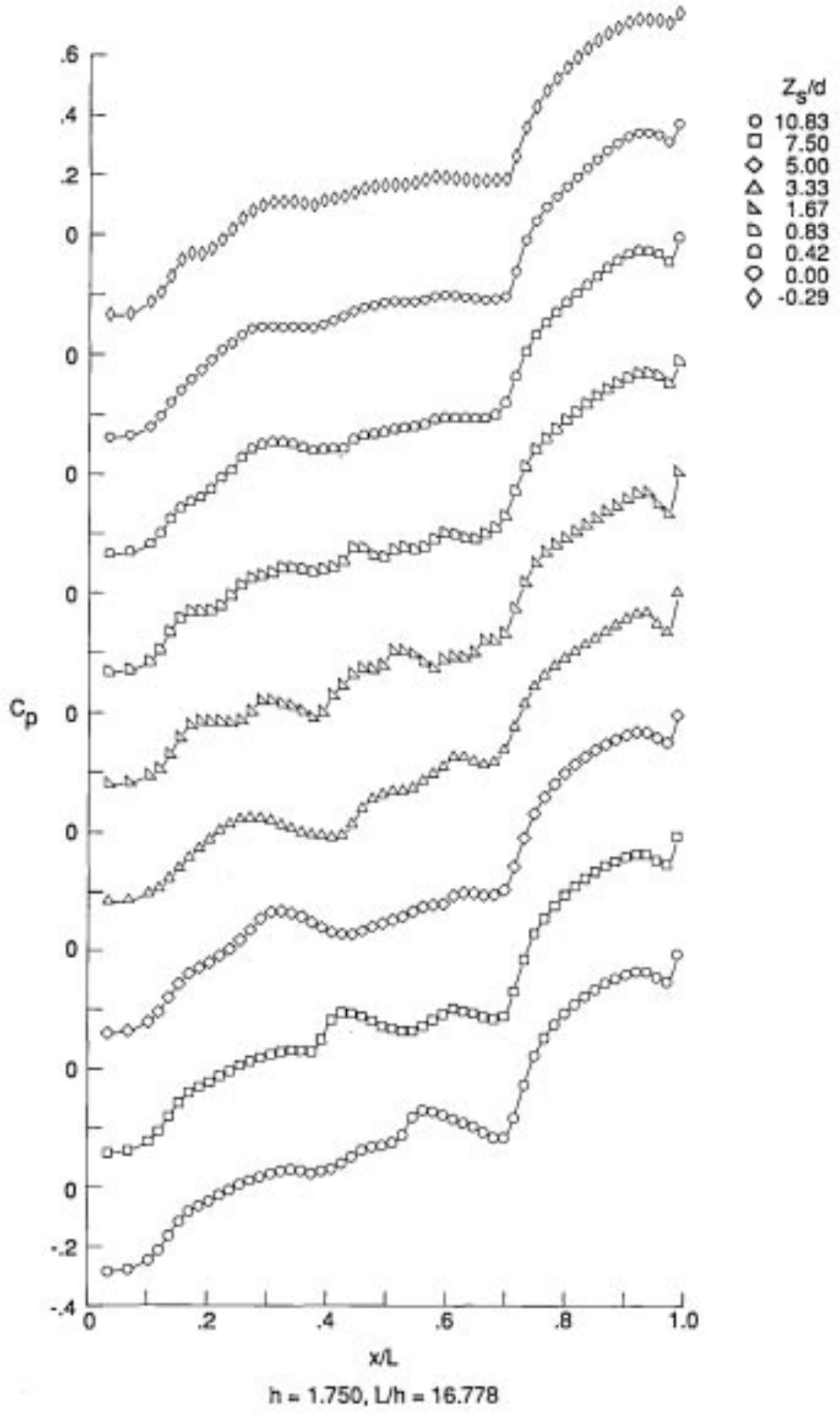
Figure 16. Continued.



h = 2.432, L/h = 12.073

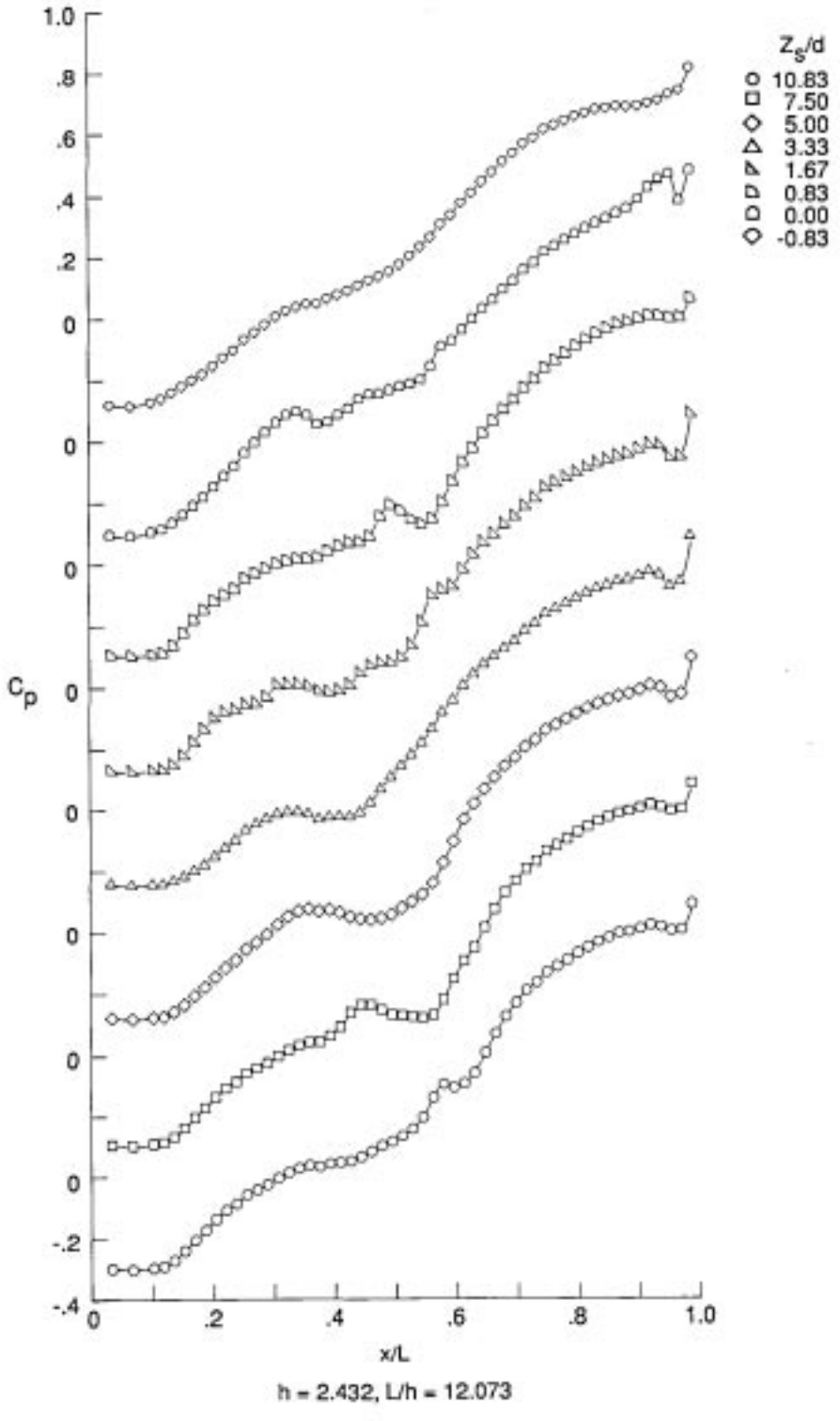
(c) Concluded.

Figure 16. Concluded.



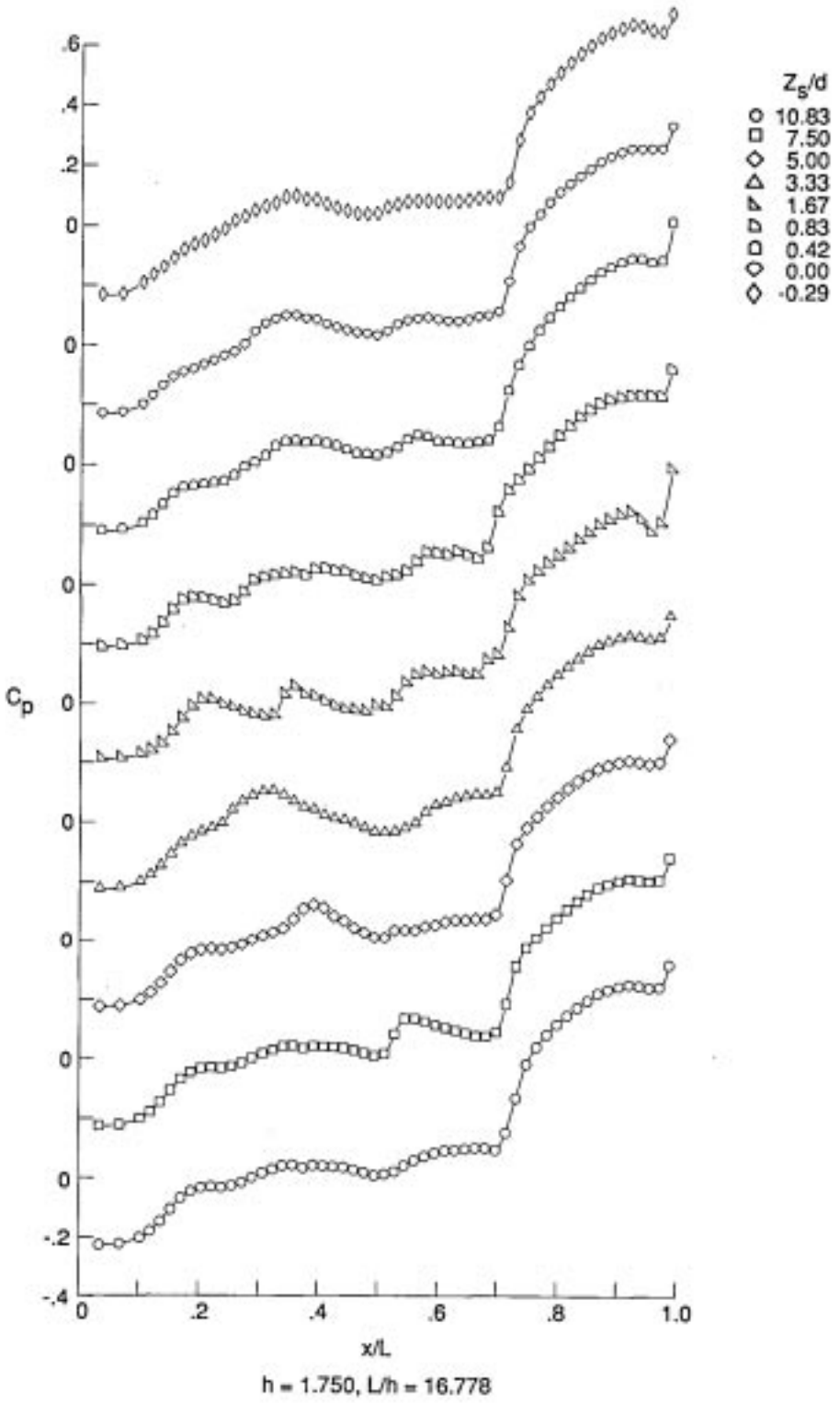
(a) $M = 1.69$.

Figure 17. Summary of cavity pressure distributions for cavities with doors. $y = 0$.



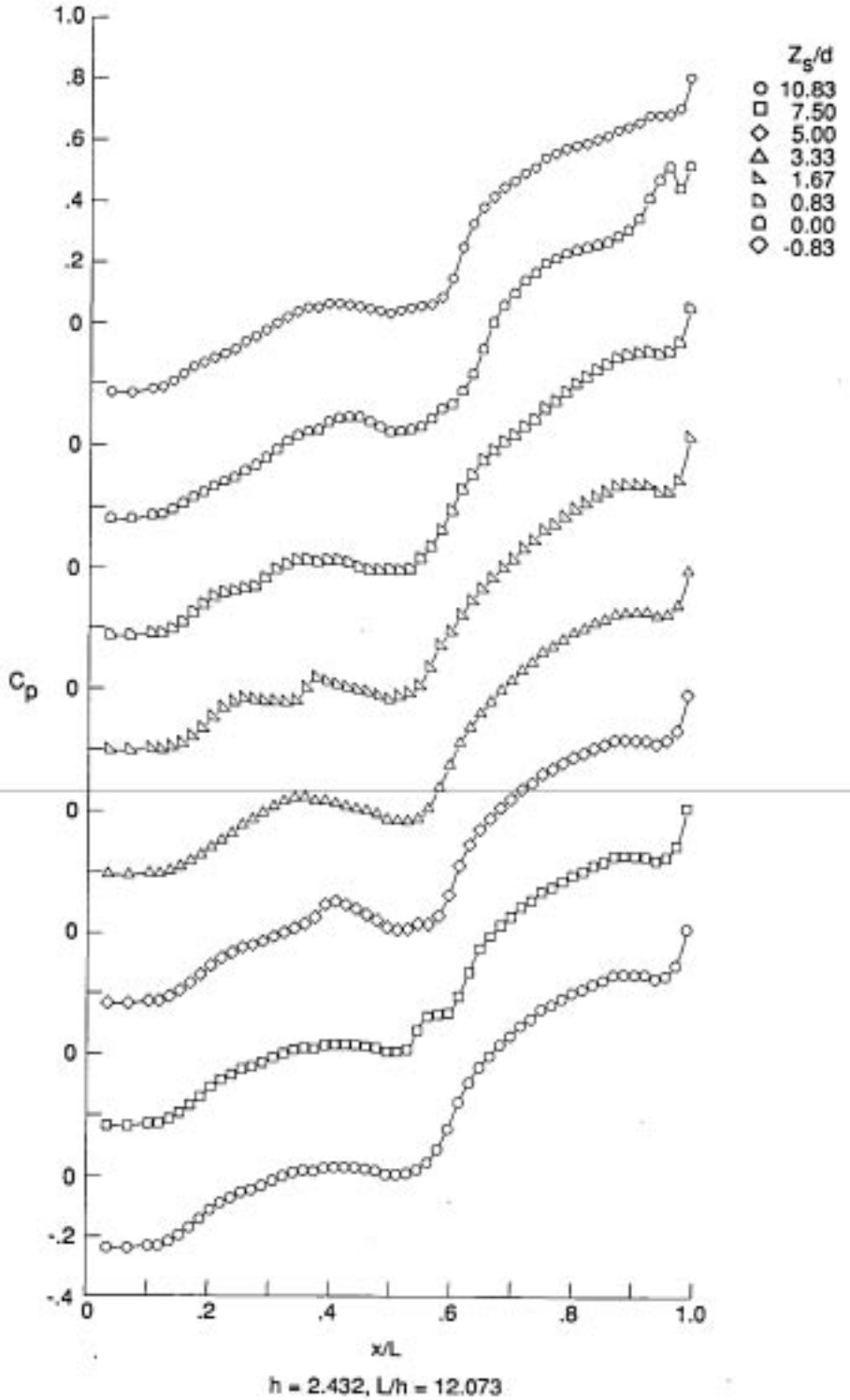
(a) Concluded.

Figure 17. Continued.



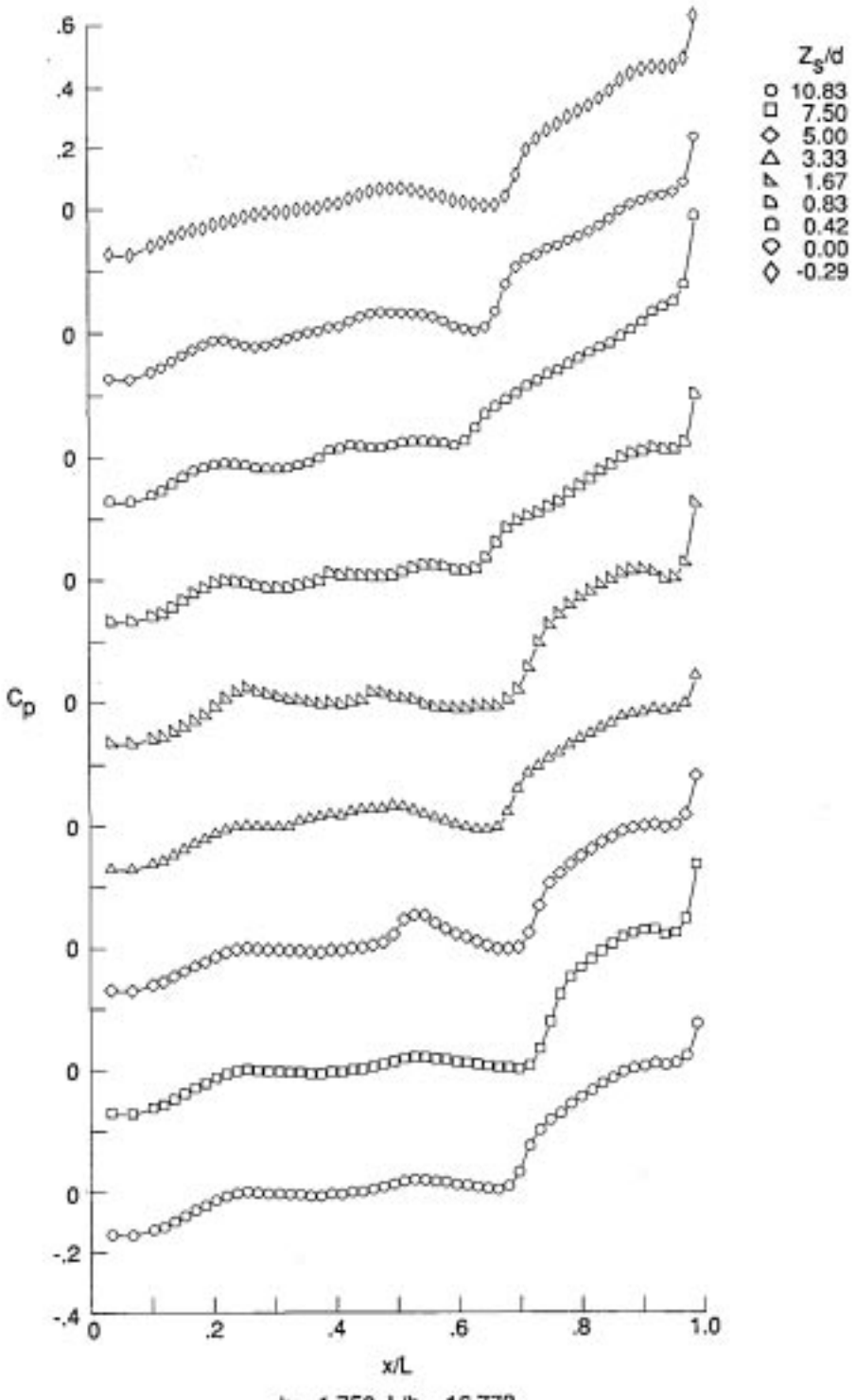
(b) $M = 2.00$.

Figure 17. Continued.



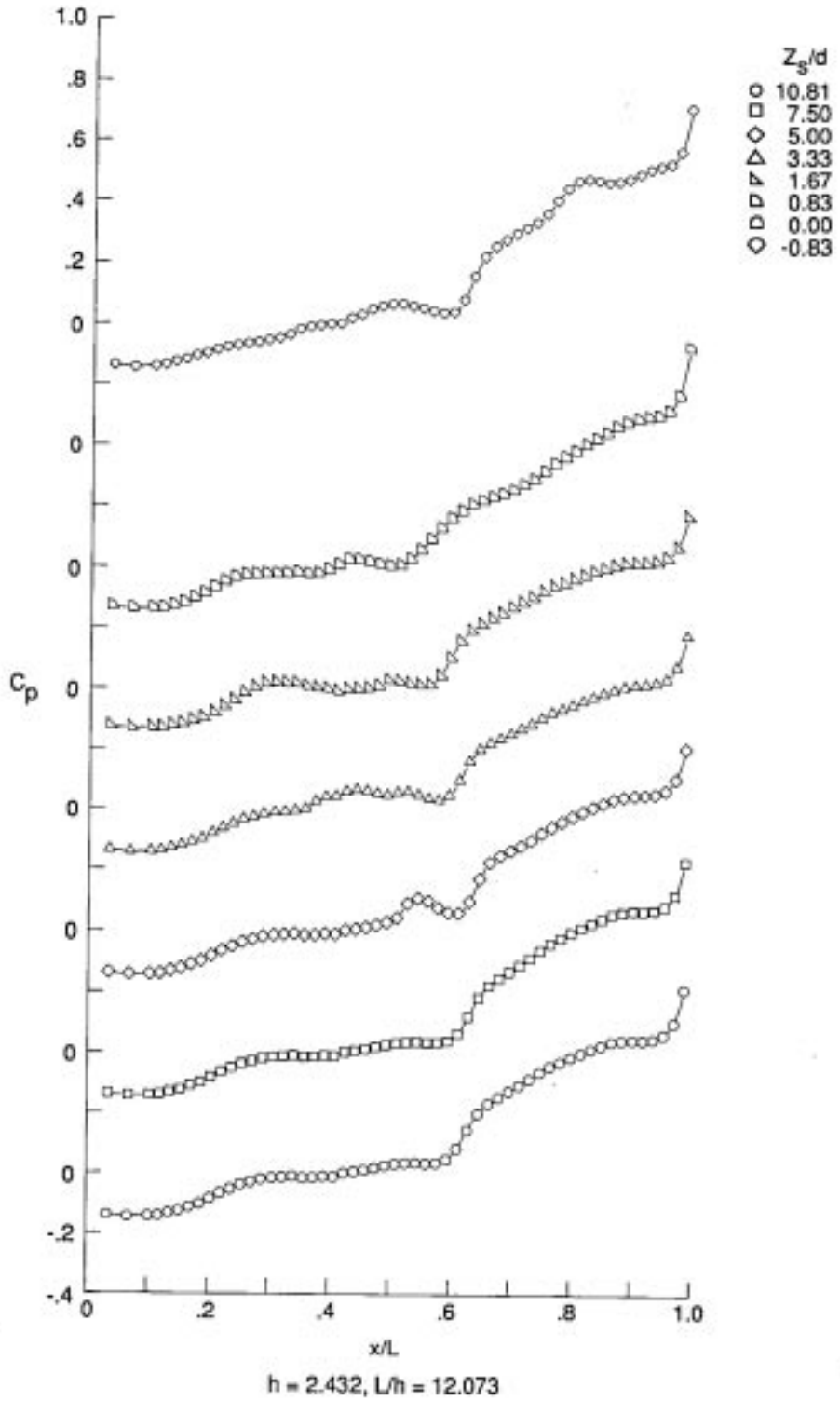
(b) Concluded.

Figure 17. Continued.



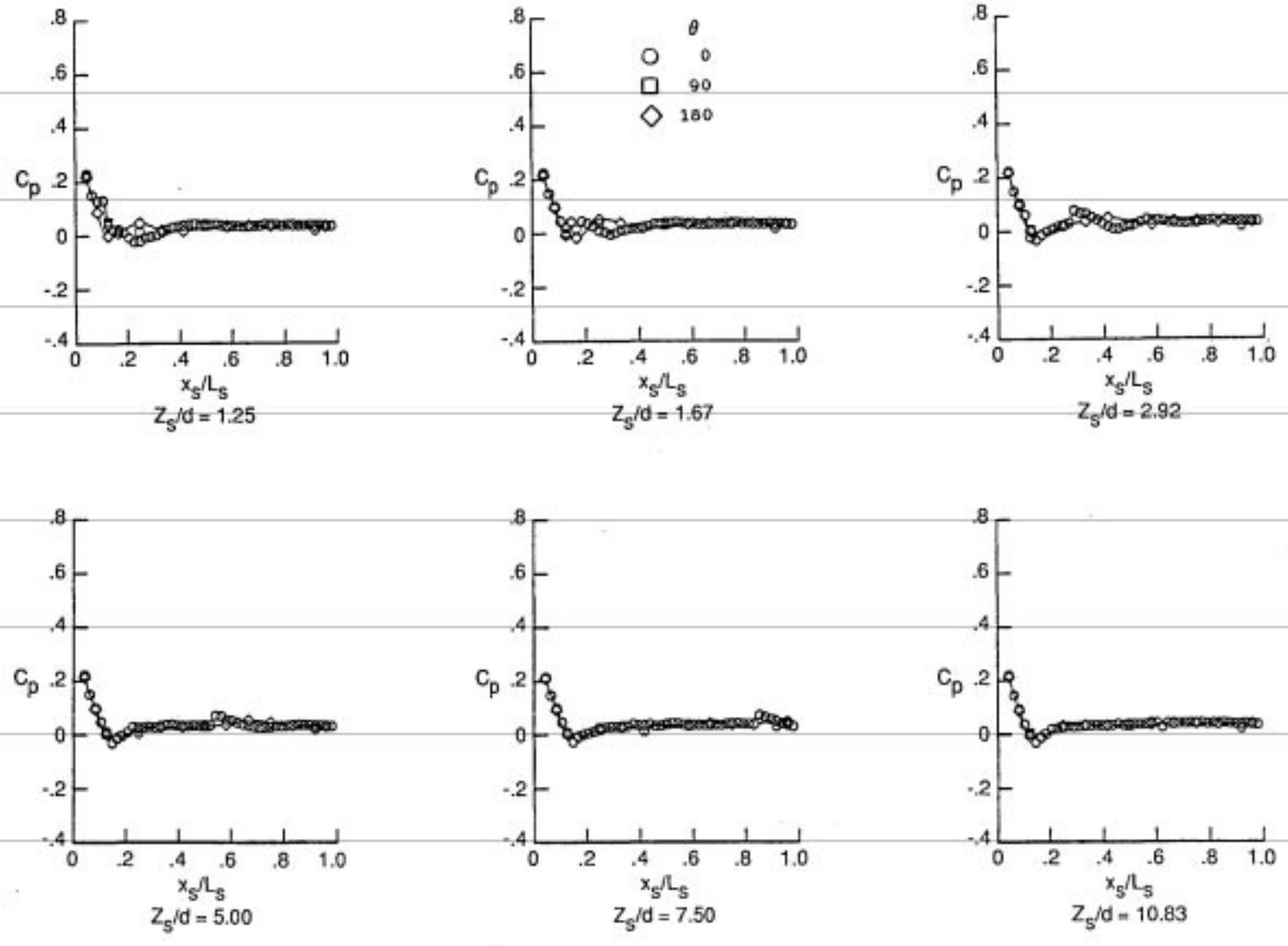
(c) $M = 2.65$.

Figure 17. Continued.



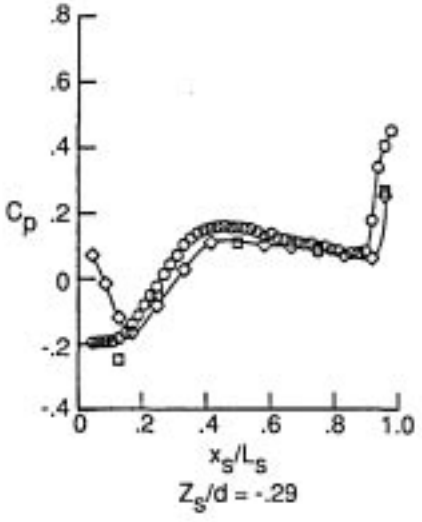
(c) Concluded.

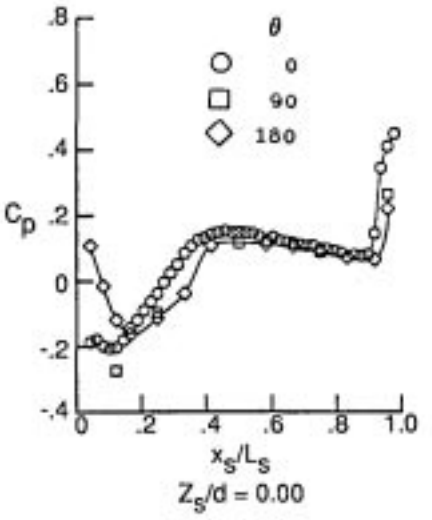
Figure 17. Concluded.

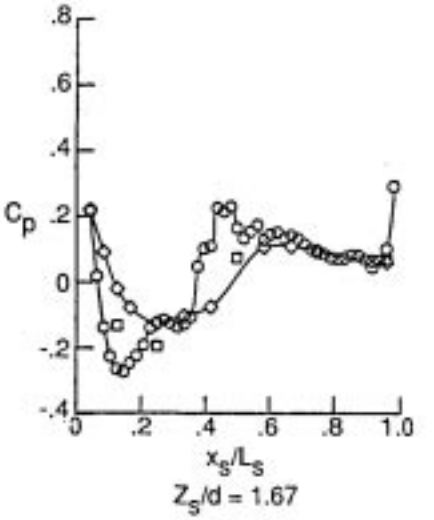


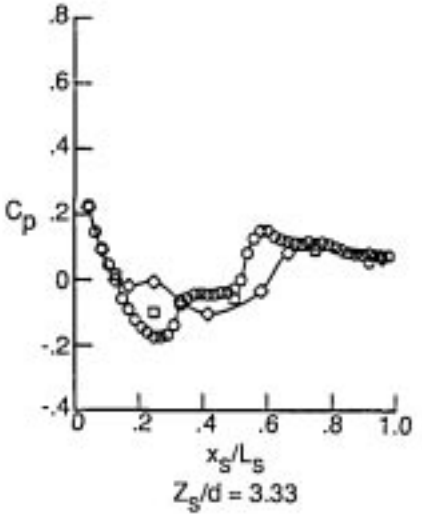
(a) $M = 1.69$.

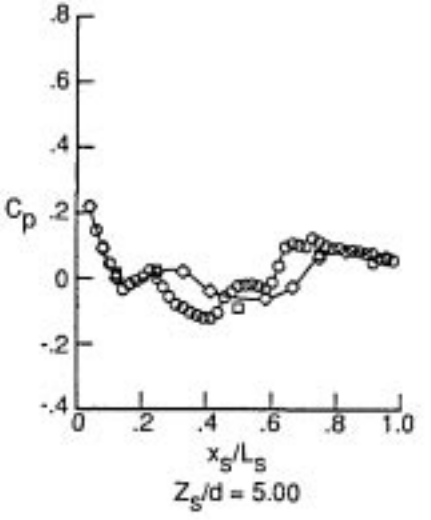
Figure 18. Store longitudinal pressure distributions for cavities without doors.

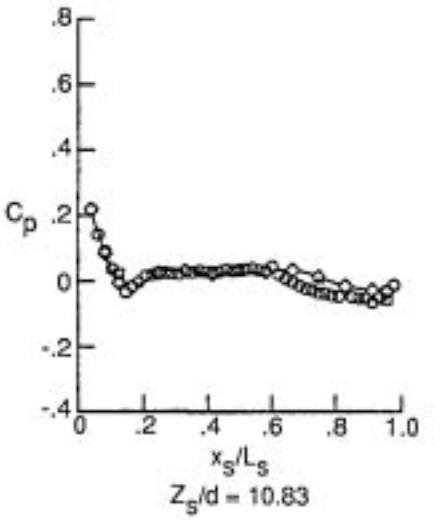








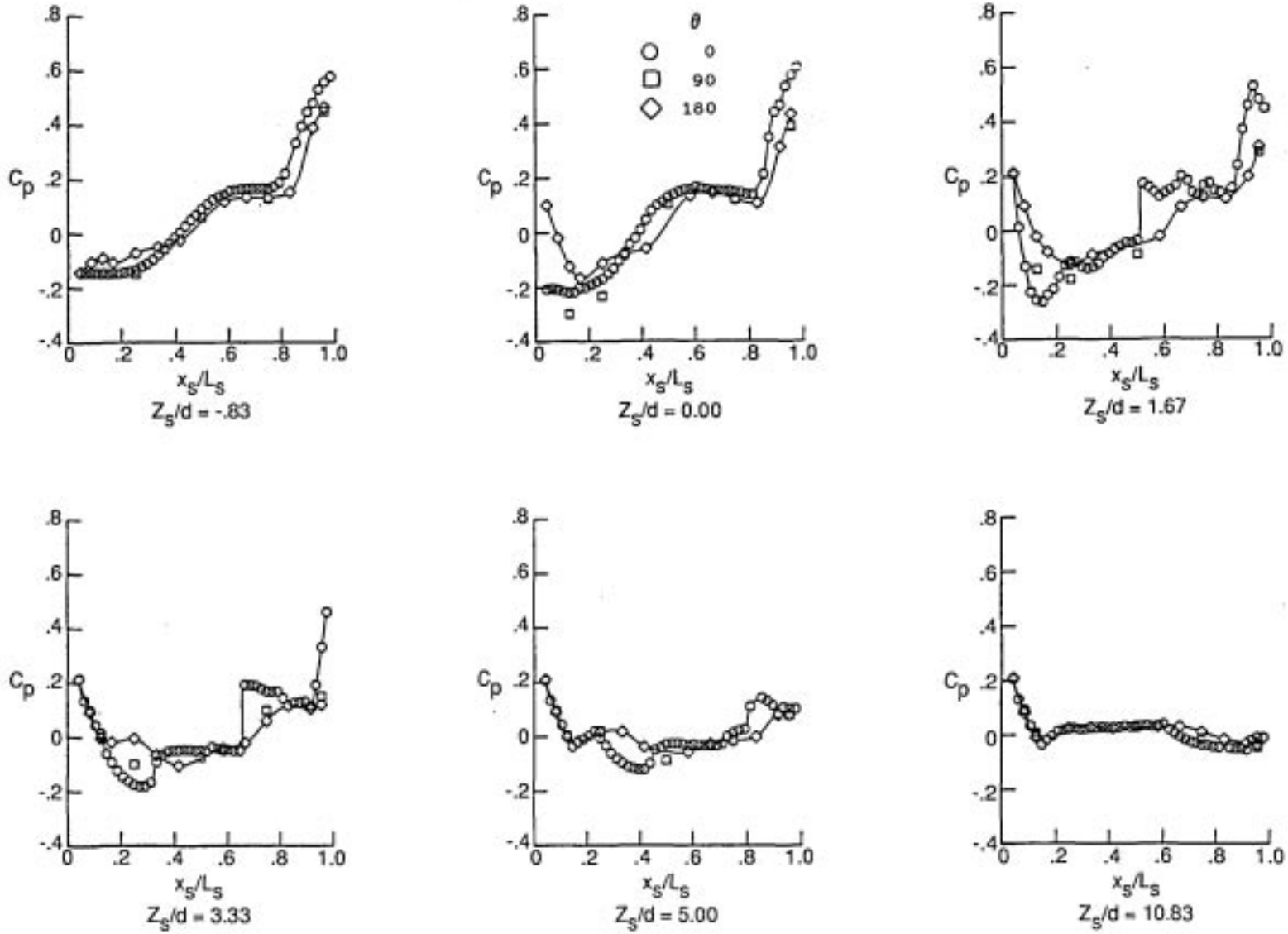




h = 1.750, L/h = 16.778

(a) Continued.

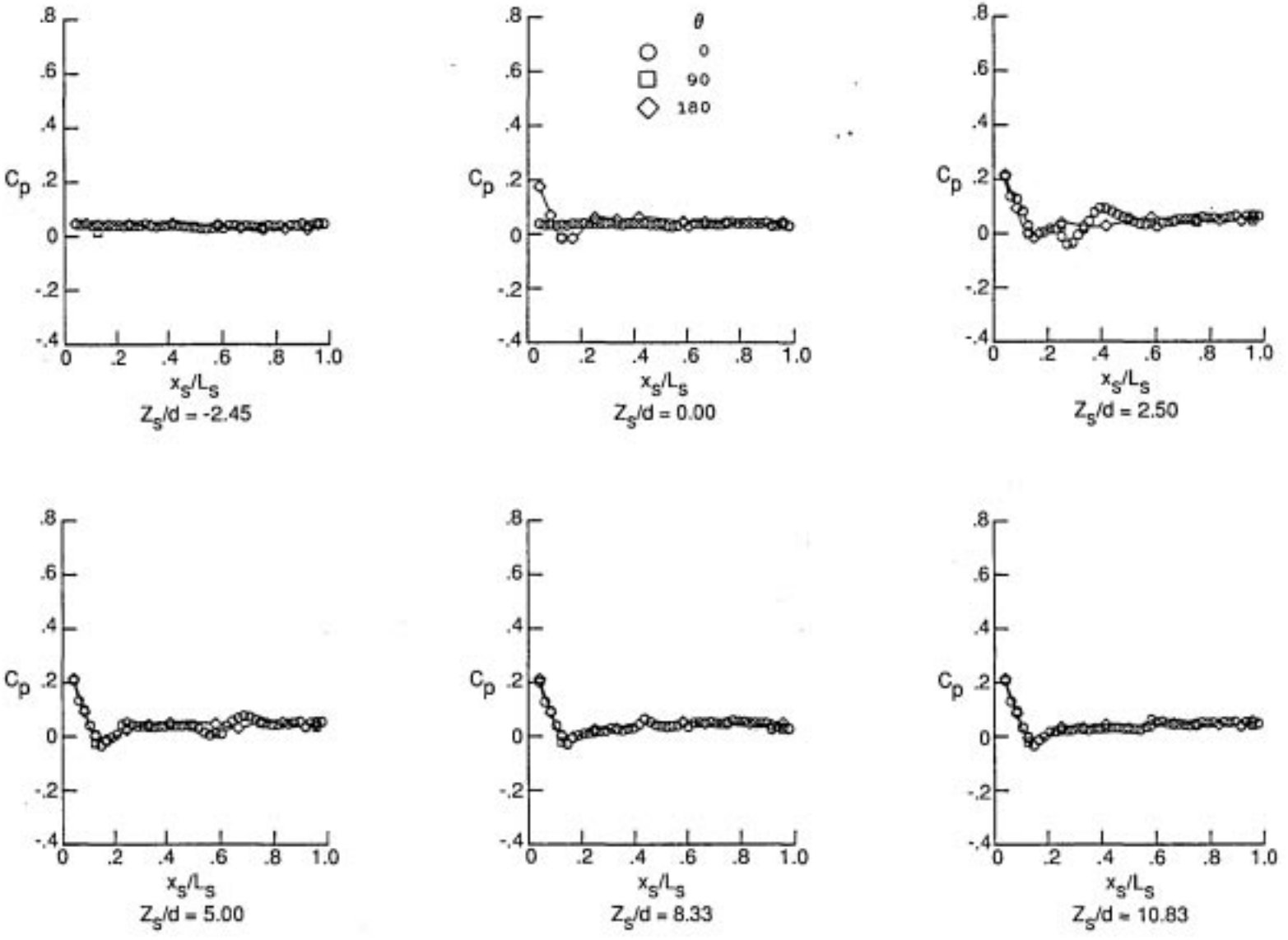
Figure 18. Continued.



h = 2.432, L/h = 12.073

(a) Continued.

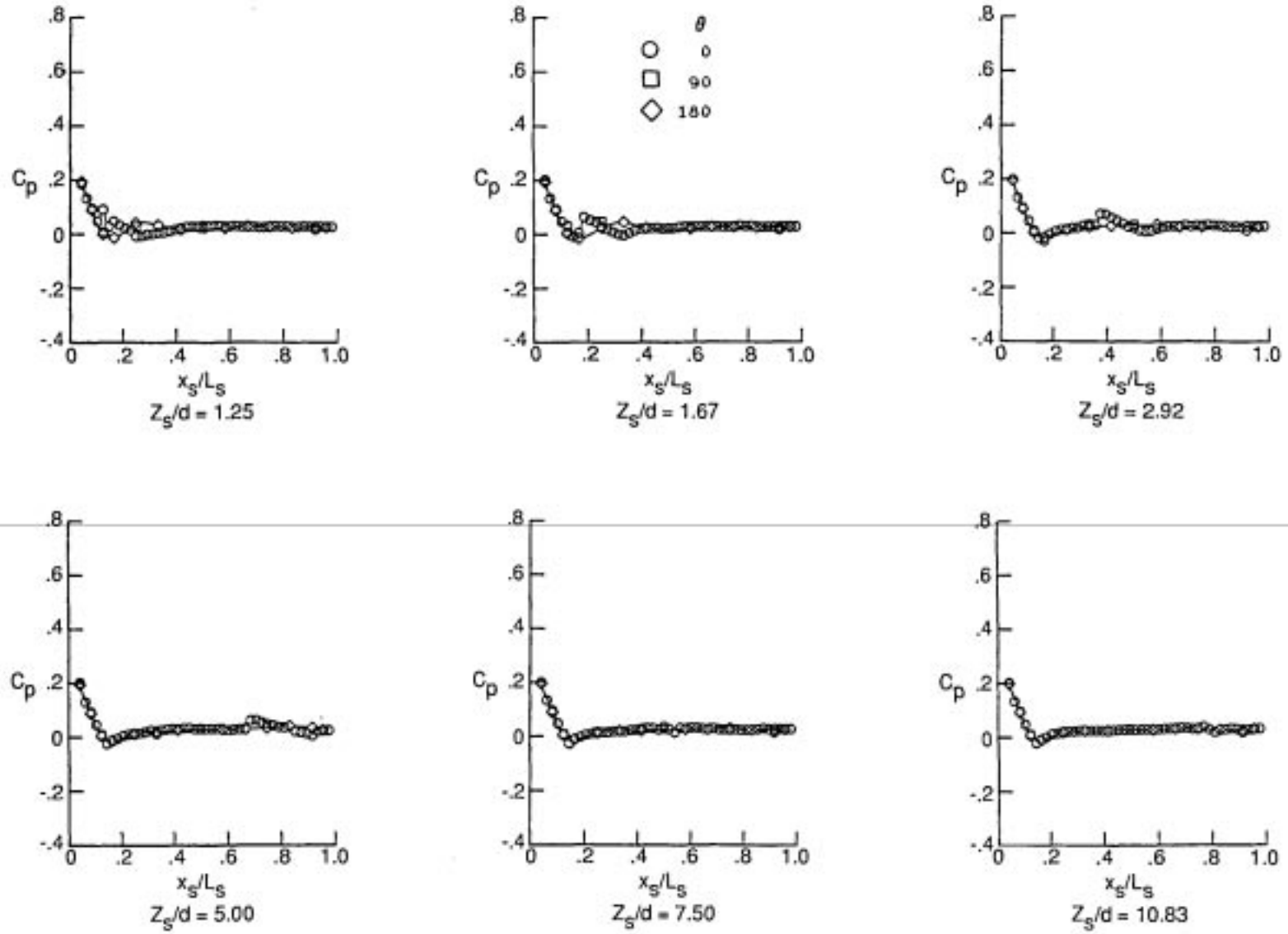
Figure 18. Continued.



h = 4.363, L/h = 6.730

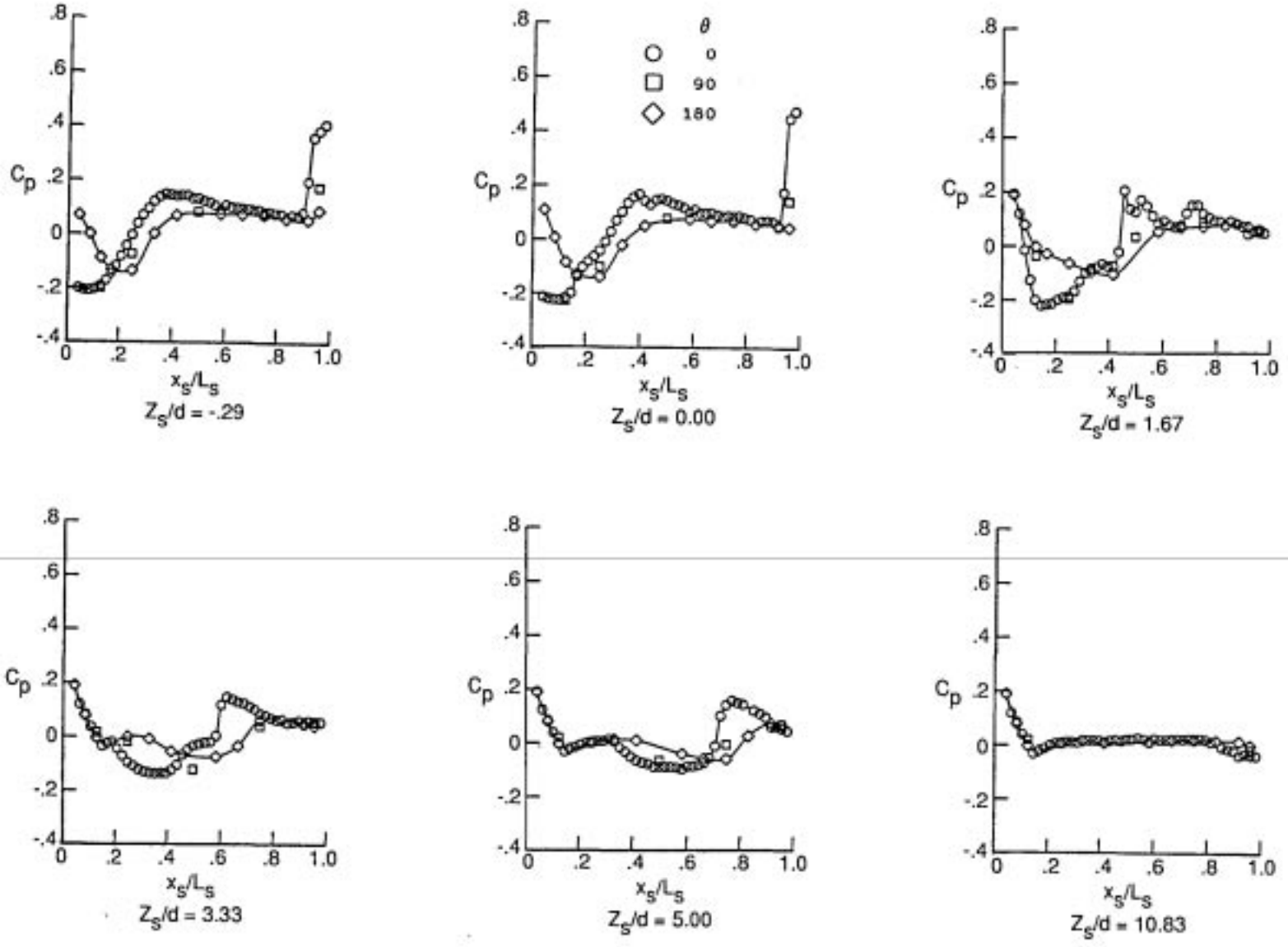
(a) Concluded.

Figure 18. Continued.



(b) $M = 2.00$.

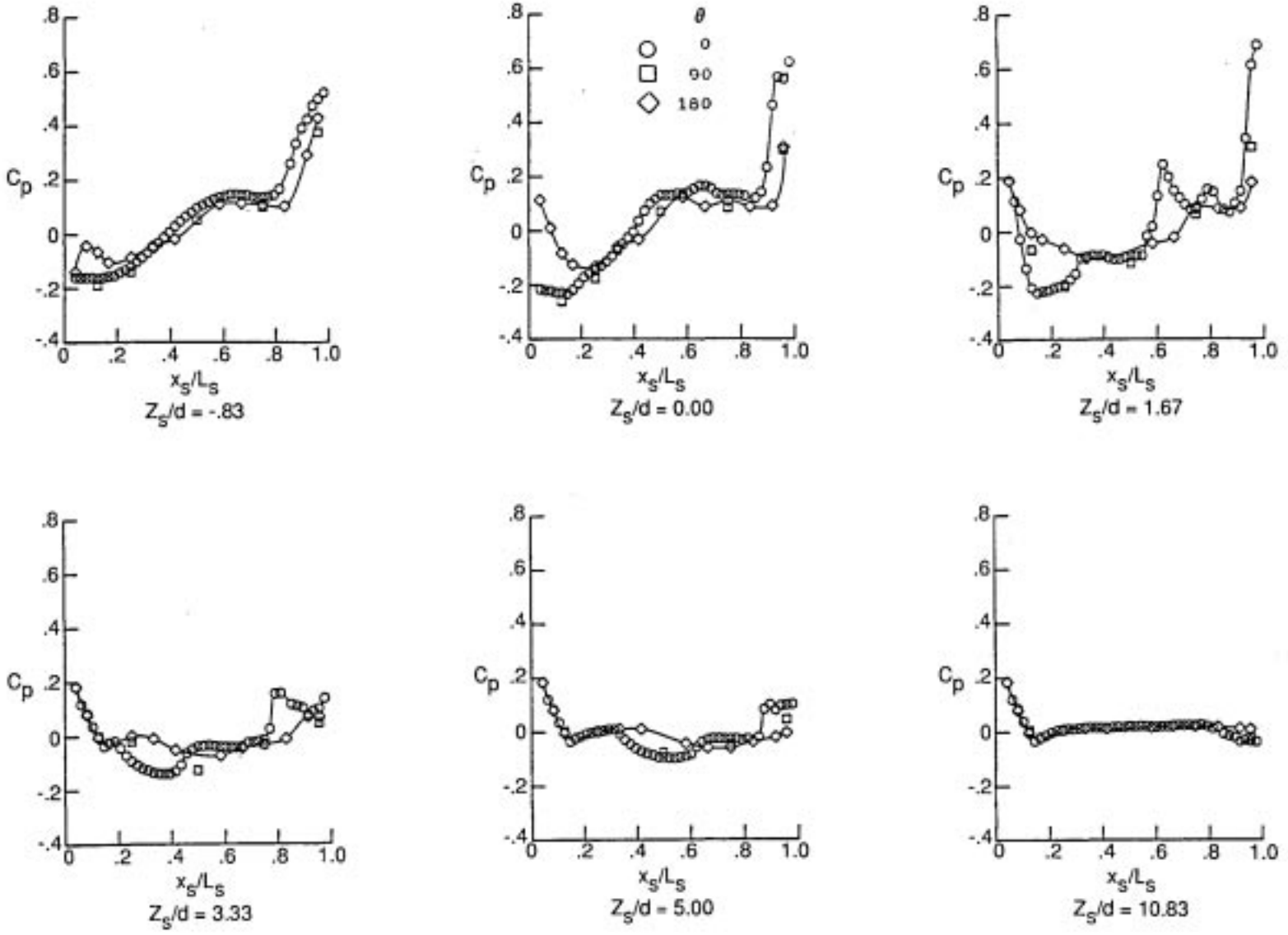
Figure 18. Continued.



h = 1.750, L/h = 16.778

(b) Continued.

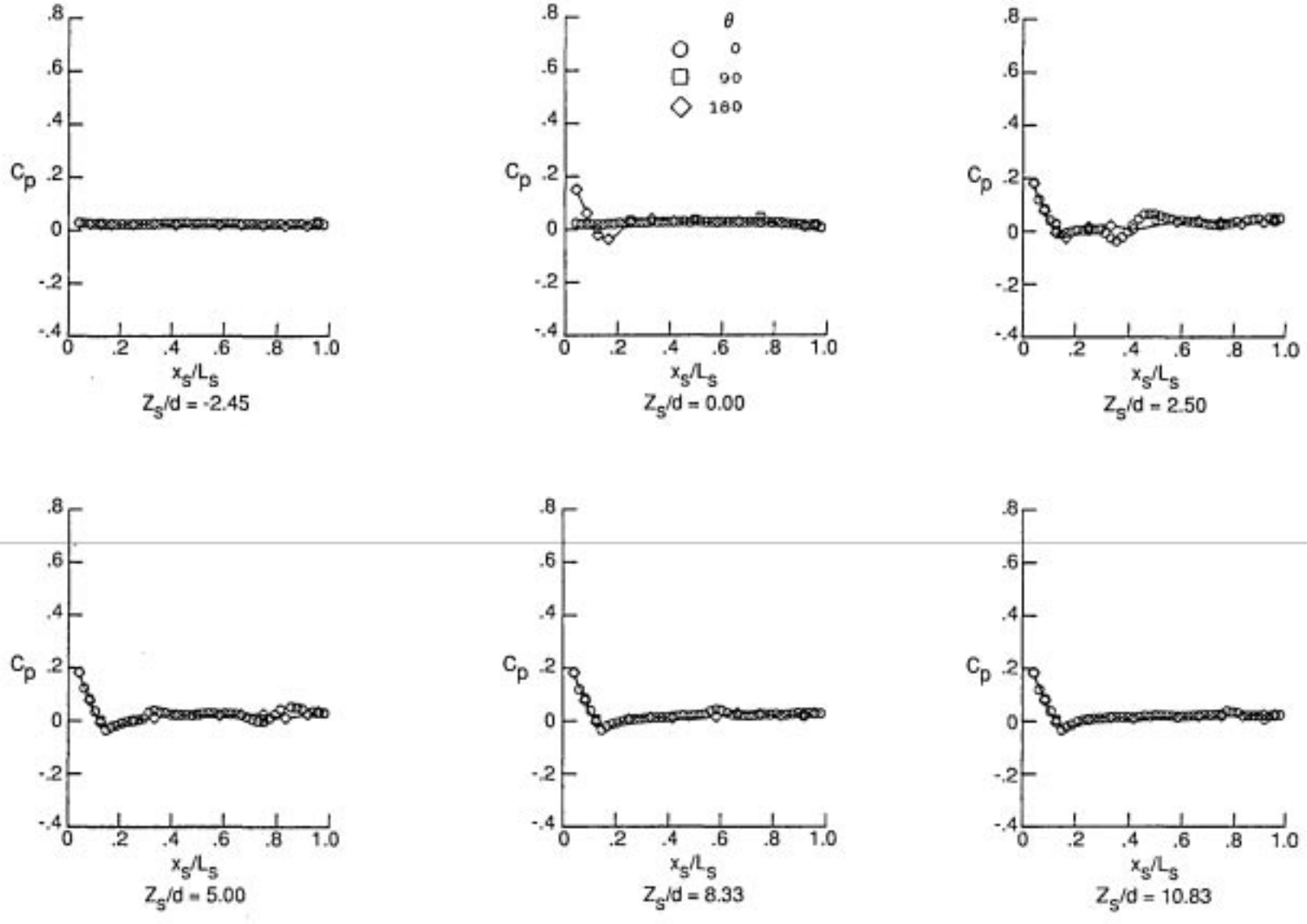
Figure 18. Continued.



h = 2.432, L/h = 12.073

(b) Continued.

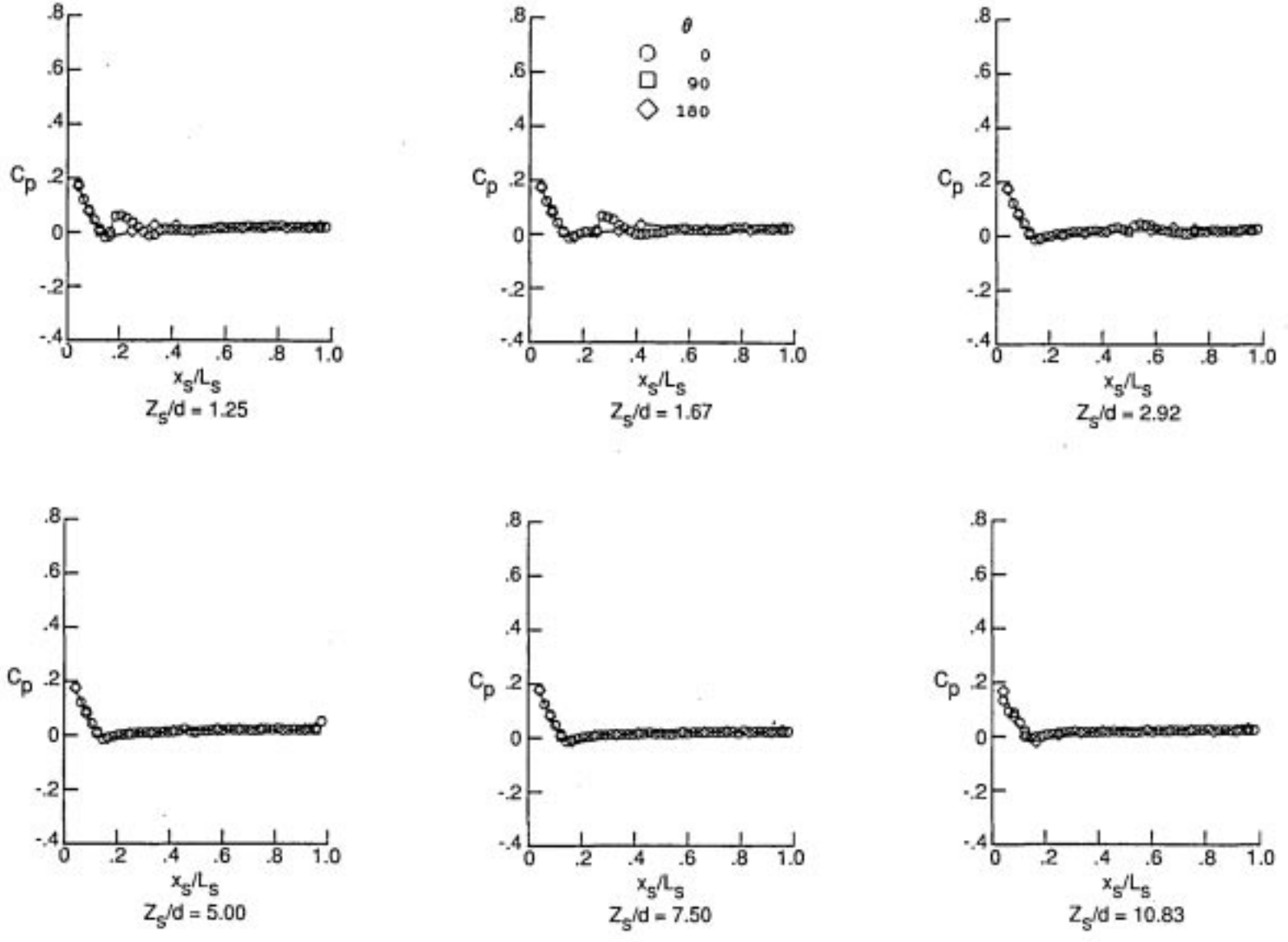
Figure 18. Continued.



h = 4.363, L/h = 6.730

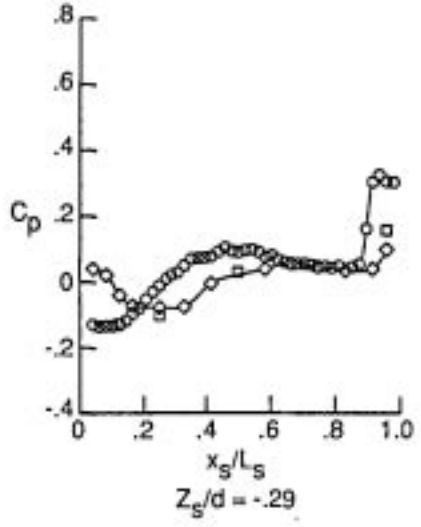
(b) Concluded.

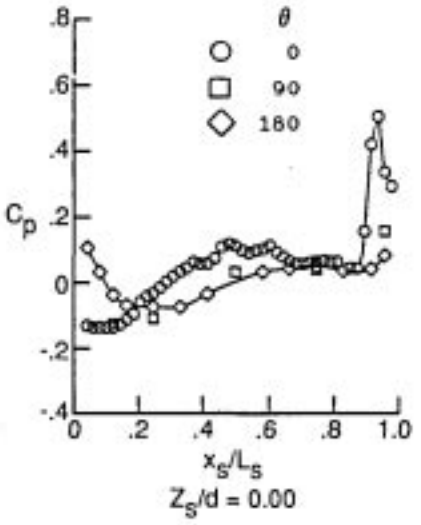
Figure 18. Continued.

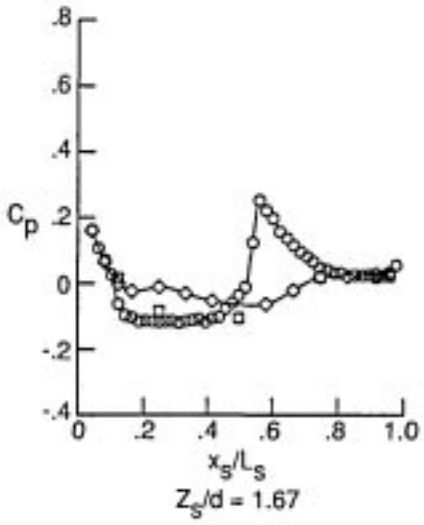


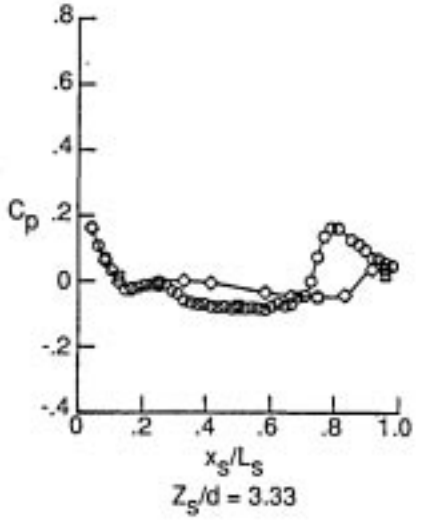
(c) $M = 2.65$.

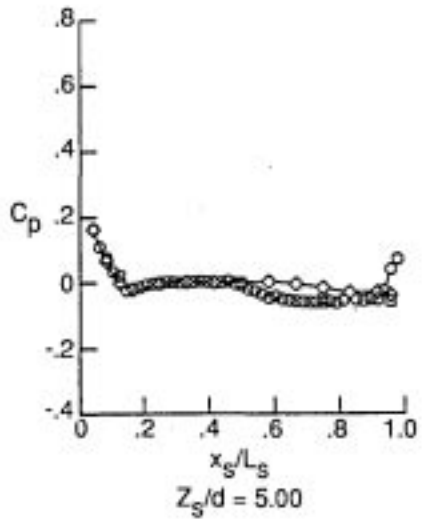
Figure 18. Continued.

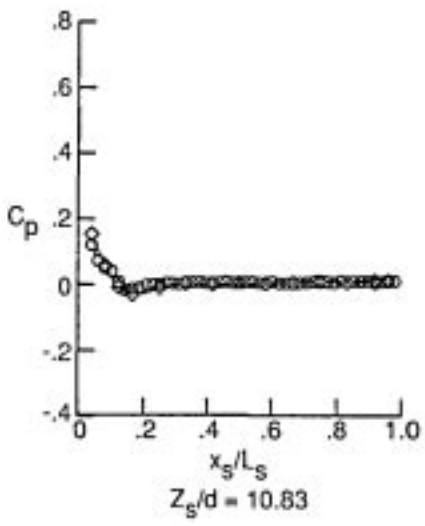








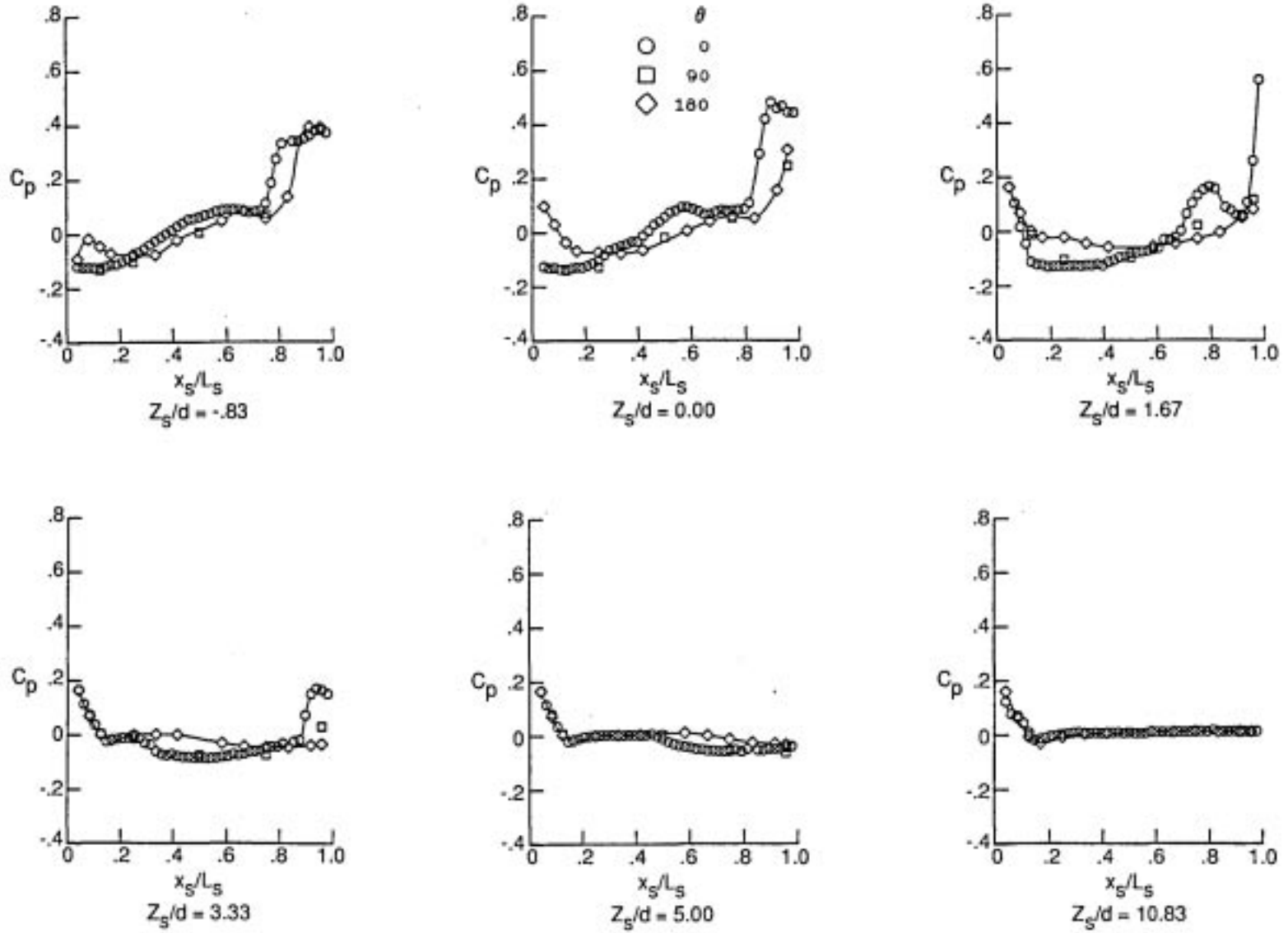




h = 1.750, L/h = 16.778

(c) Continued.

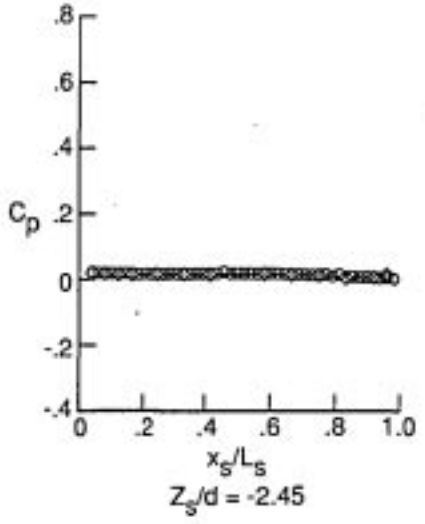
Figure 18. Continued.

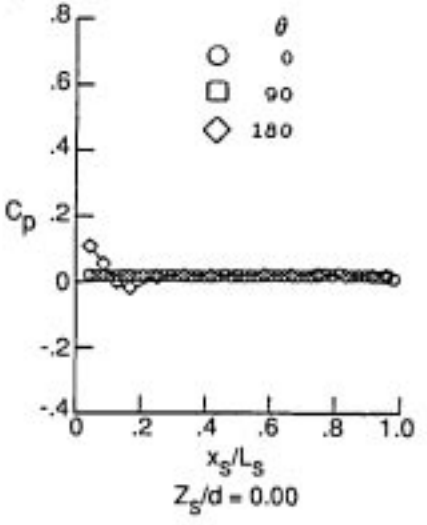


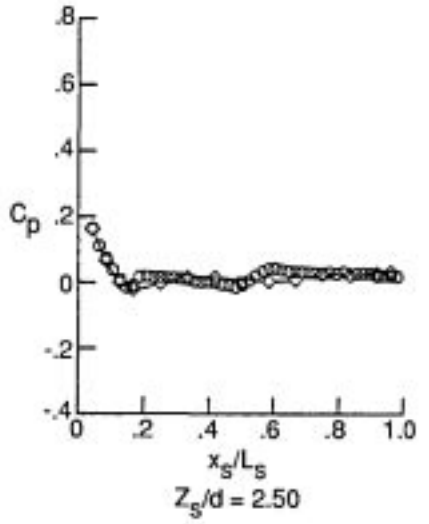
h = 2.432, L/h = 12.073

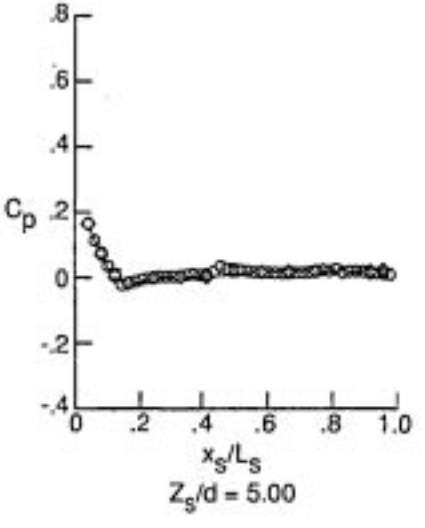
(c) Continued.

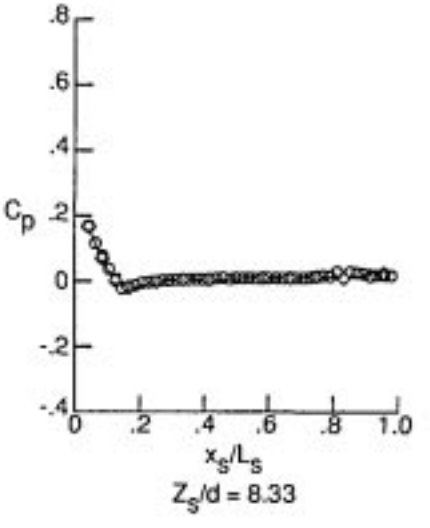
Figure 18. Continued.

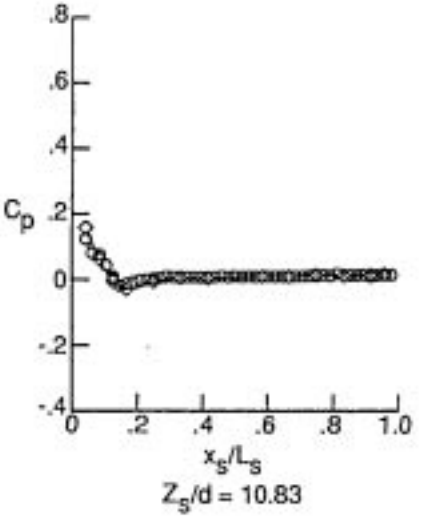








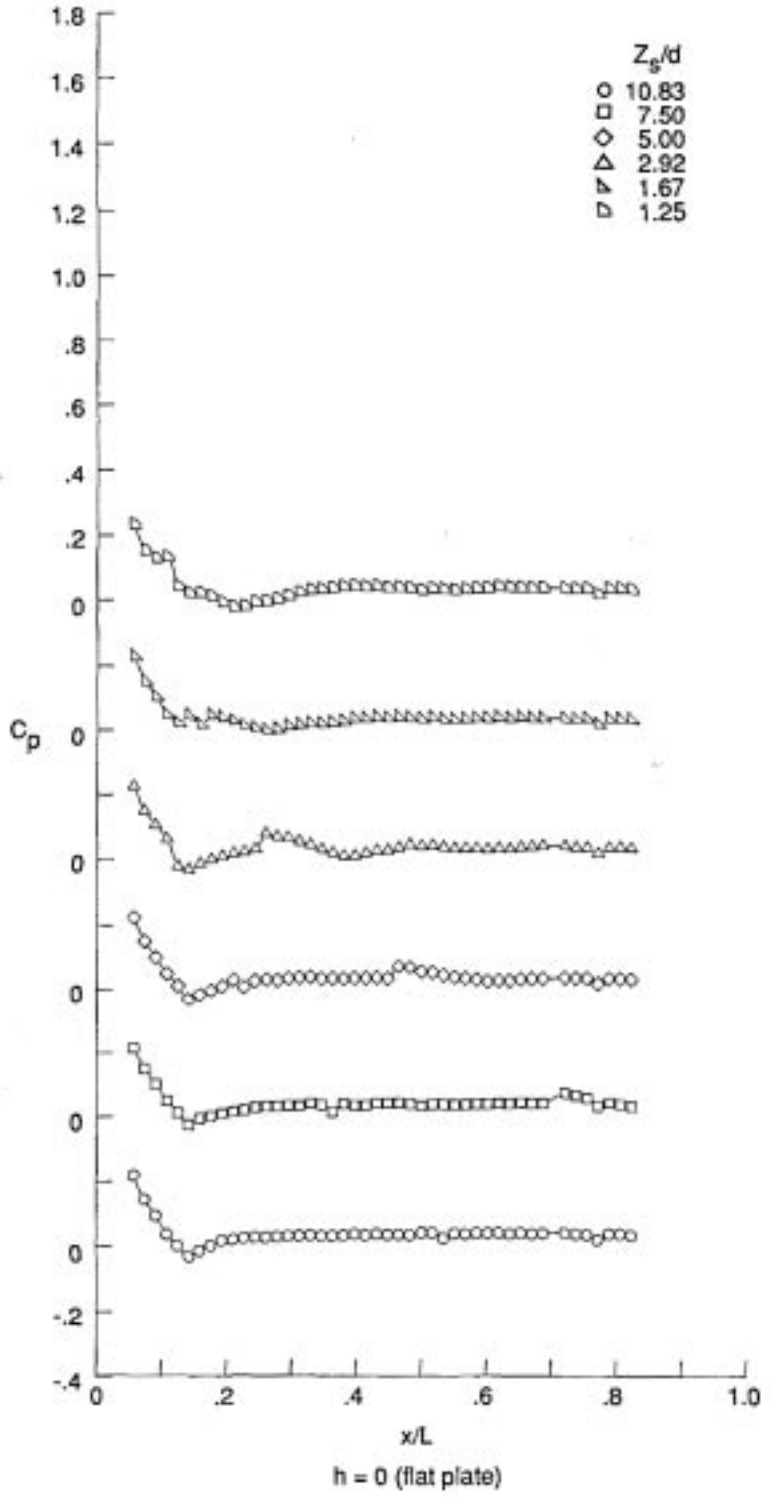




h = 4.363, L/h = 6.730

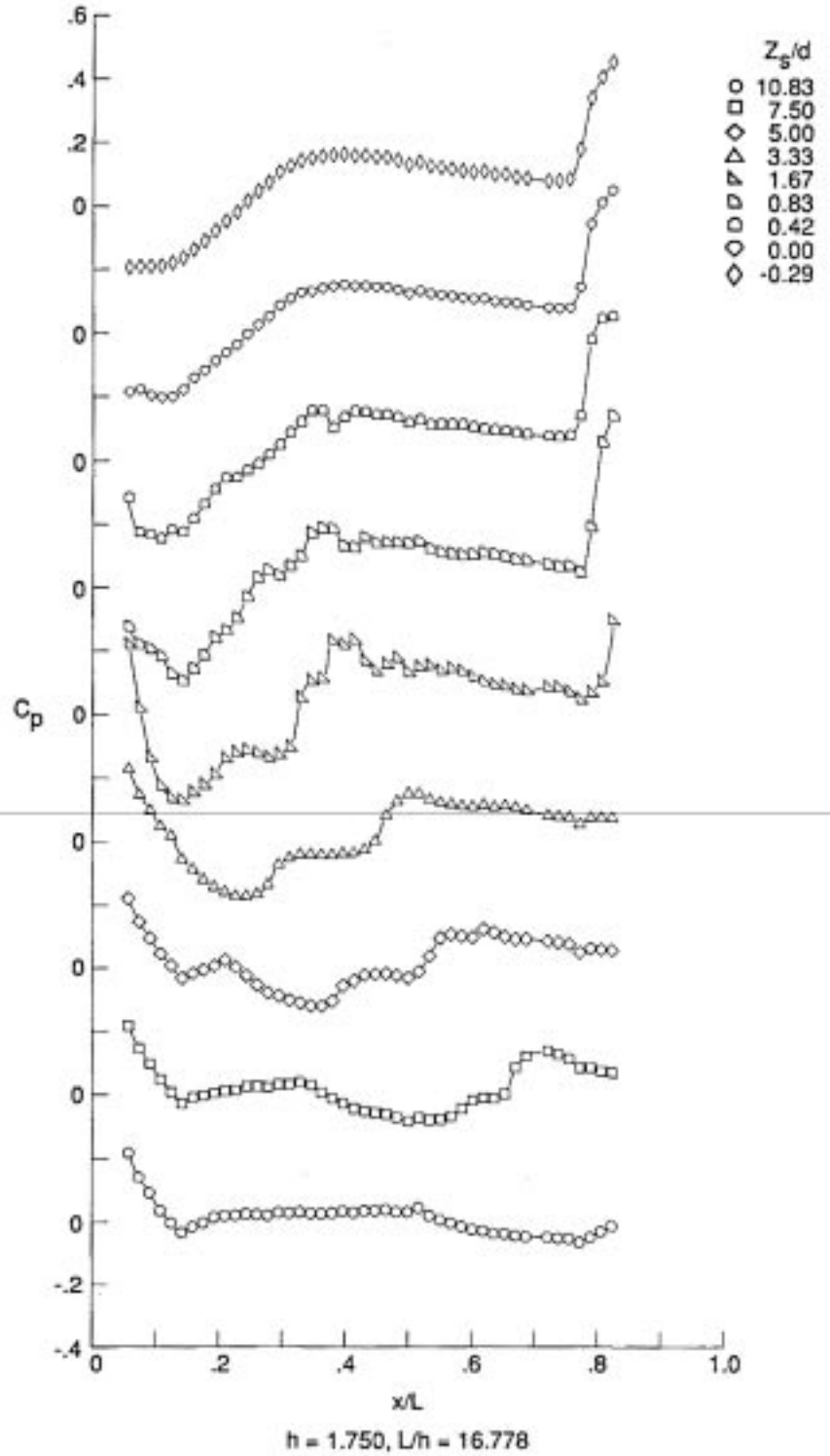
(c) Concluded.

Figure 18. Concluded.



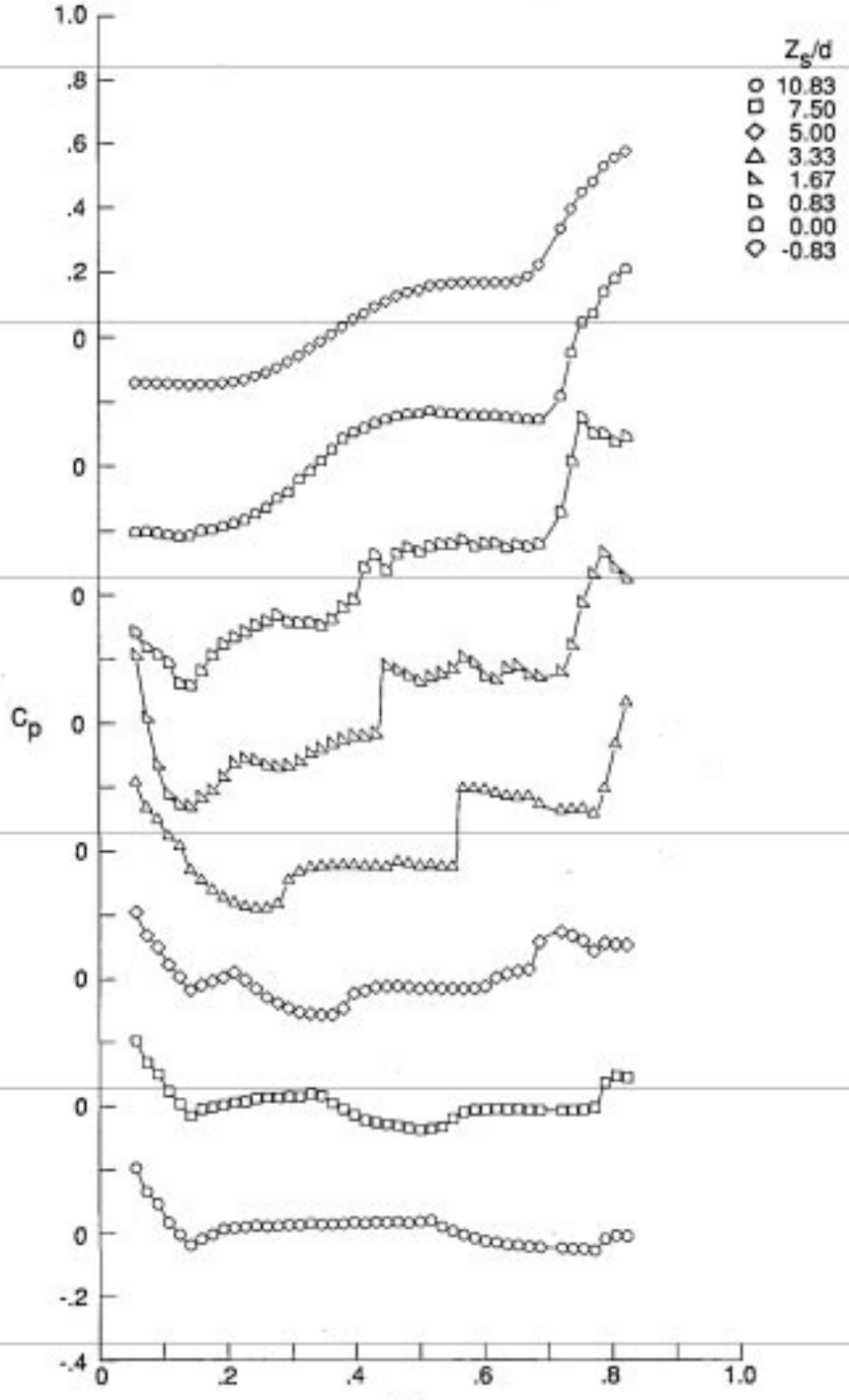
(a) $M = 1.69$.

Figure 19. Summary of store longitudinal pressure distributions for cavities without doors. $\theta = 0°$.



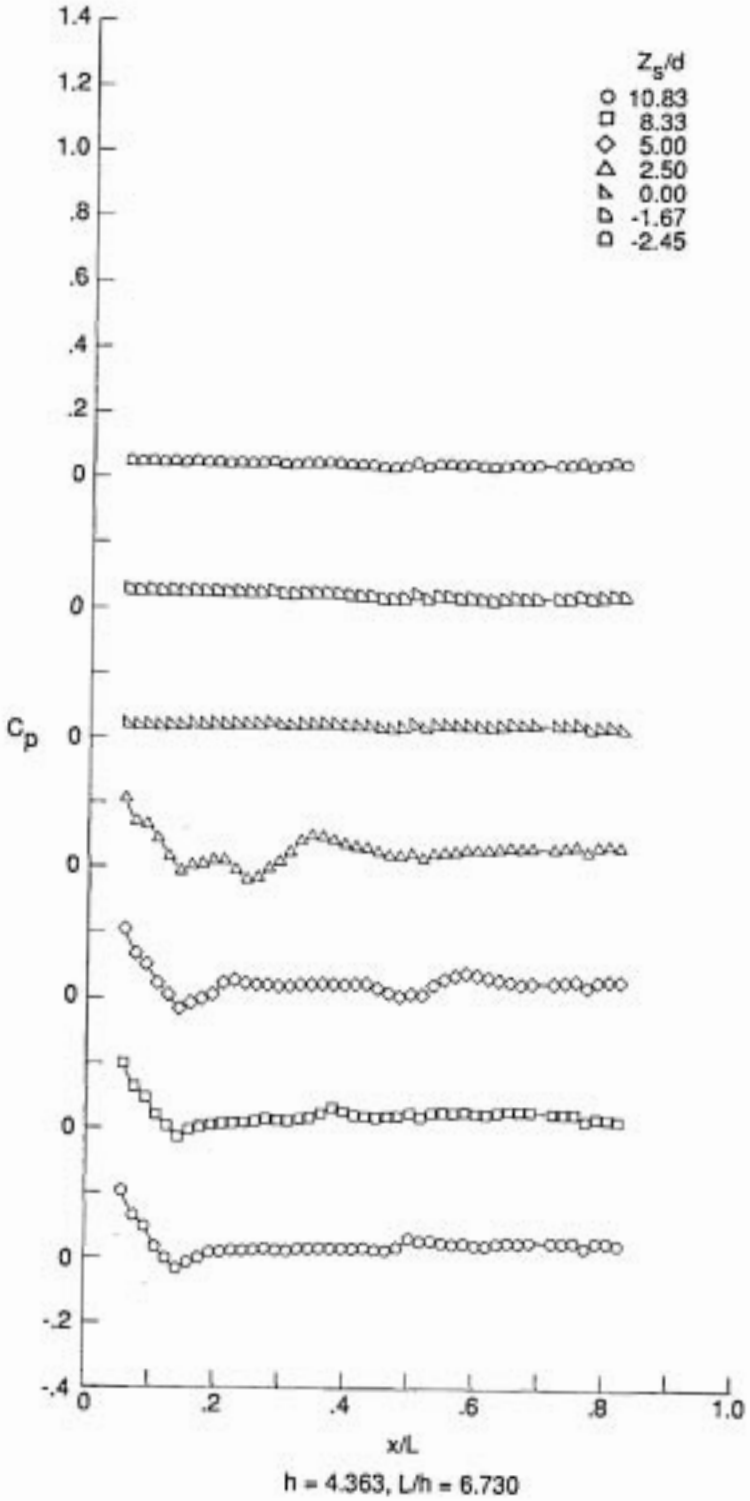
(a) Continued.

Figure 19. Continued.



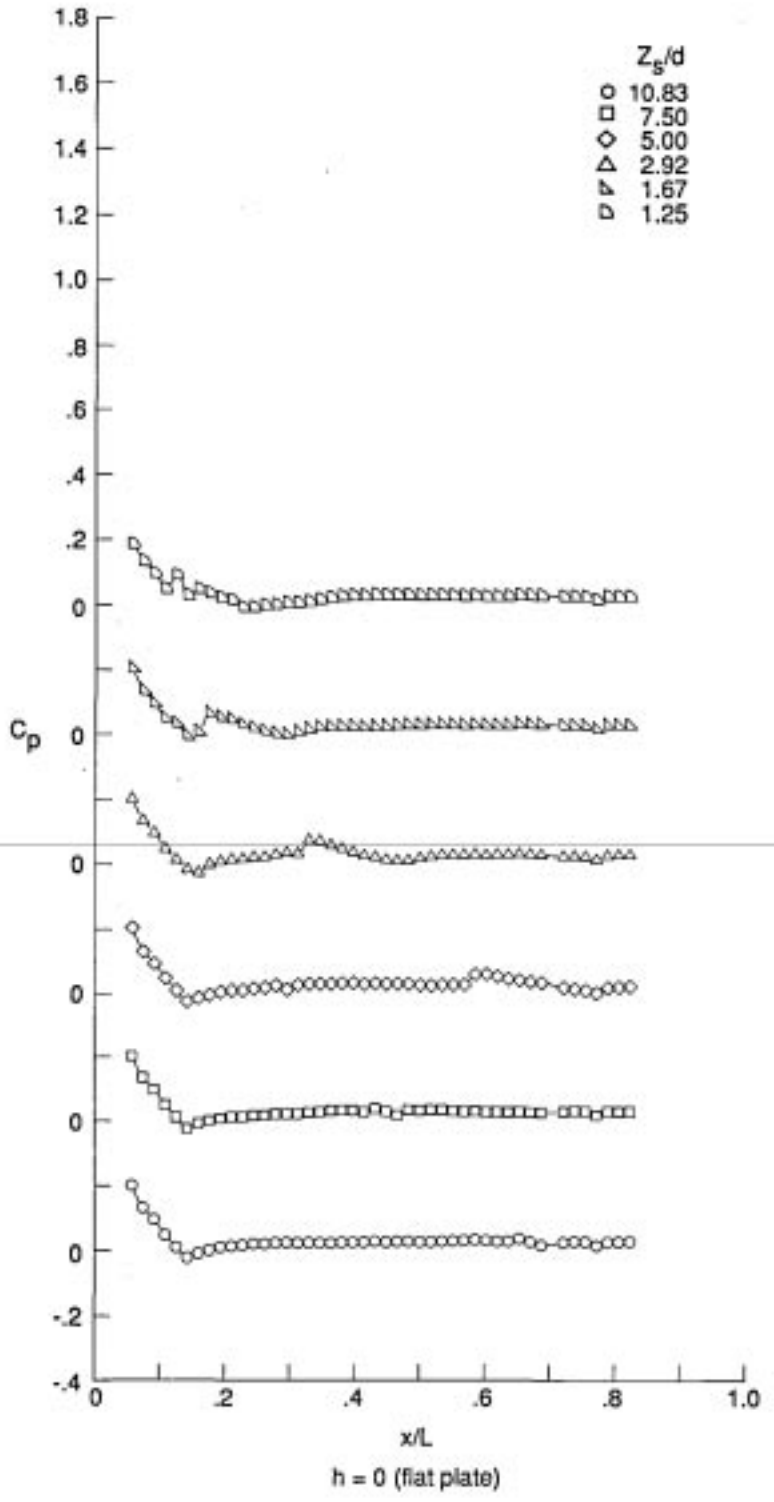
(a) Continued.

Figure 19. Continued.



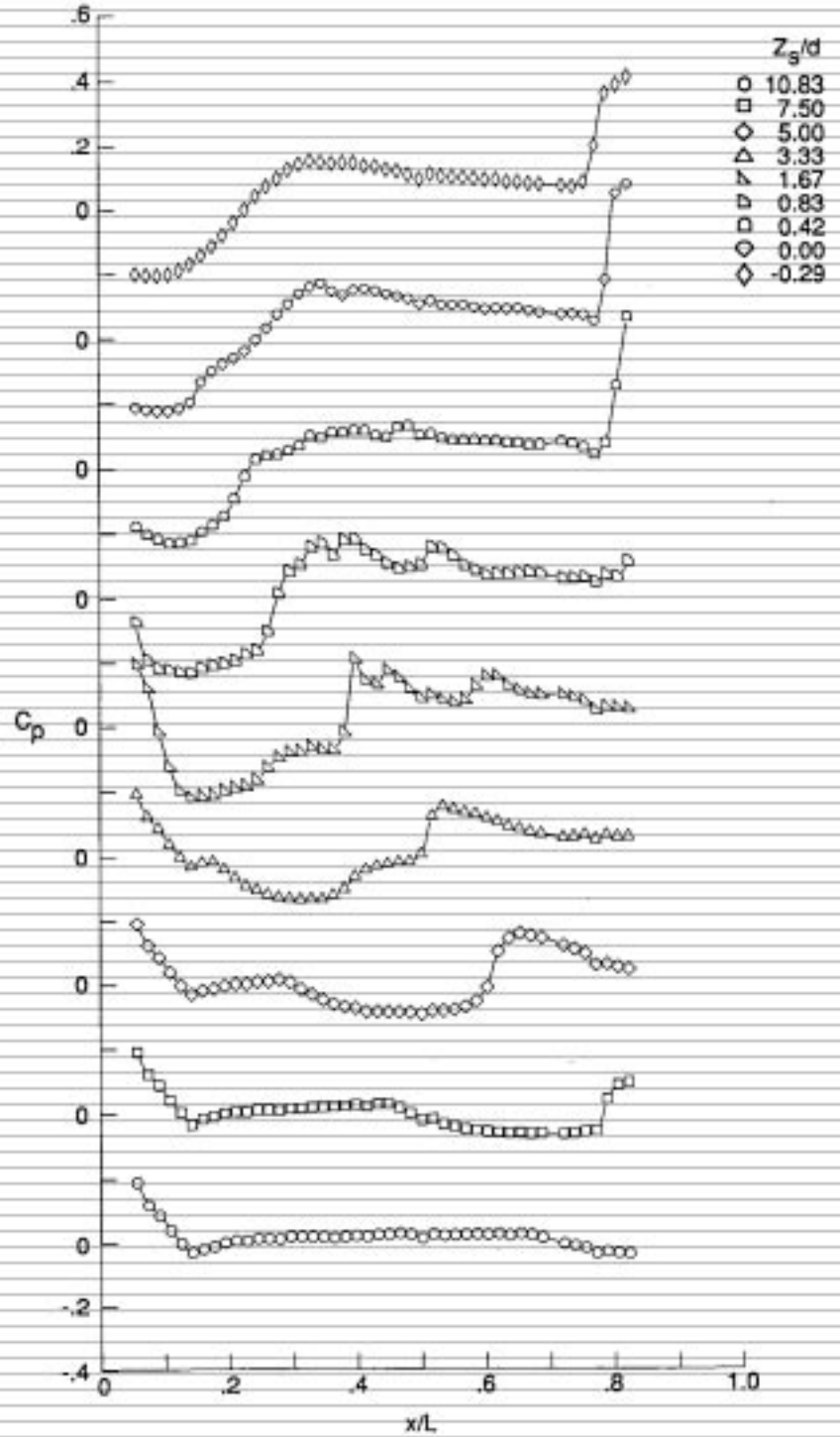
(a) Concluded.

Figure 19. Continued.



(b) $M = 2.00$.

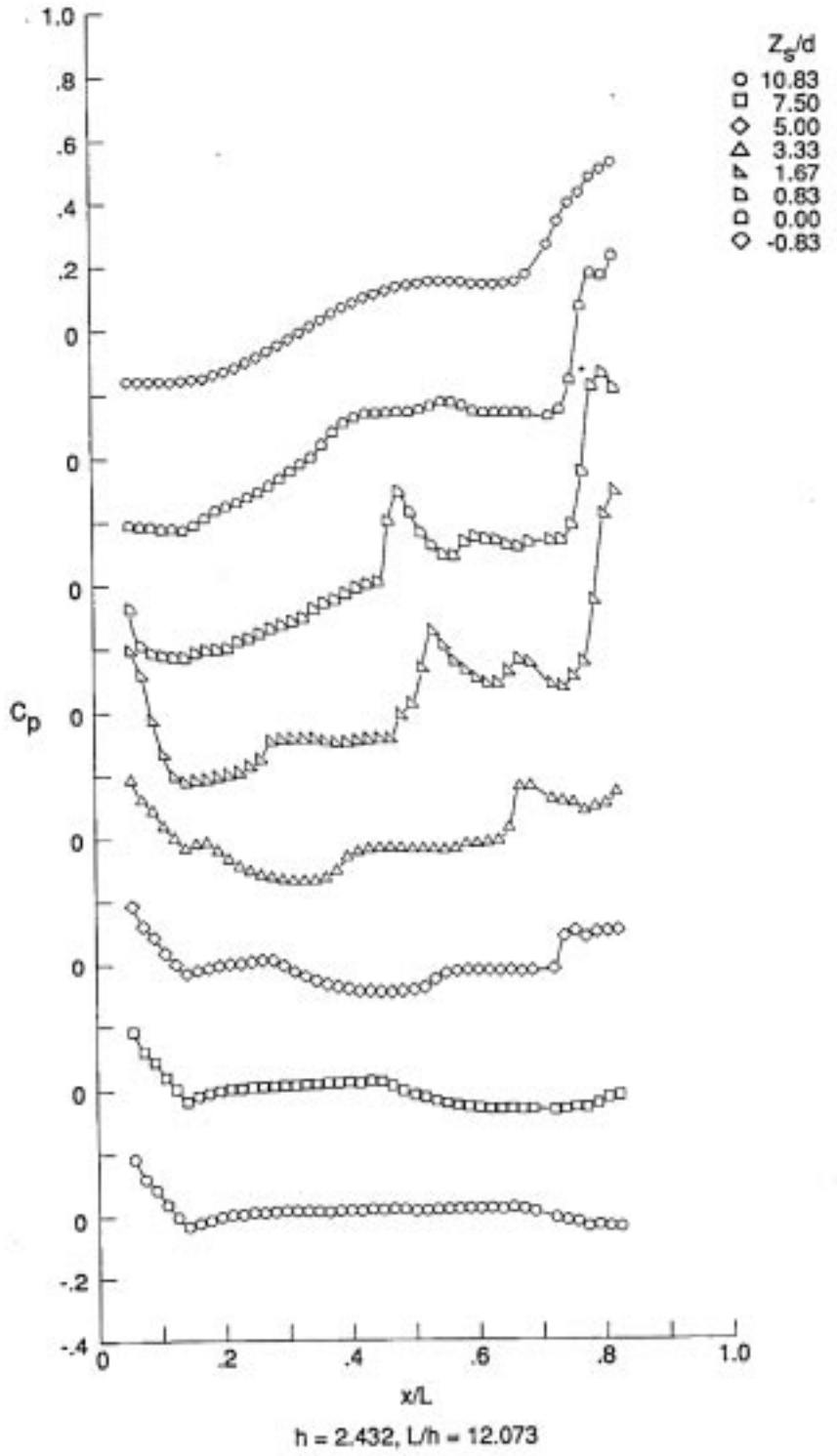
Figure 19. Continued.



h = 1.750, L/h = 16.778

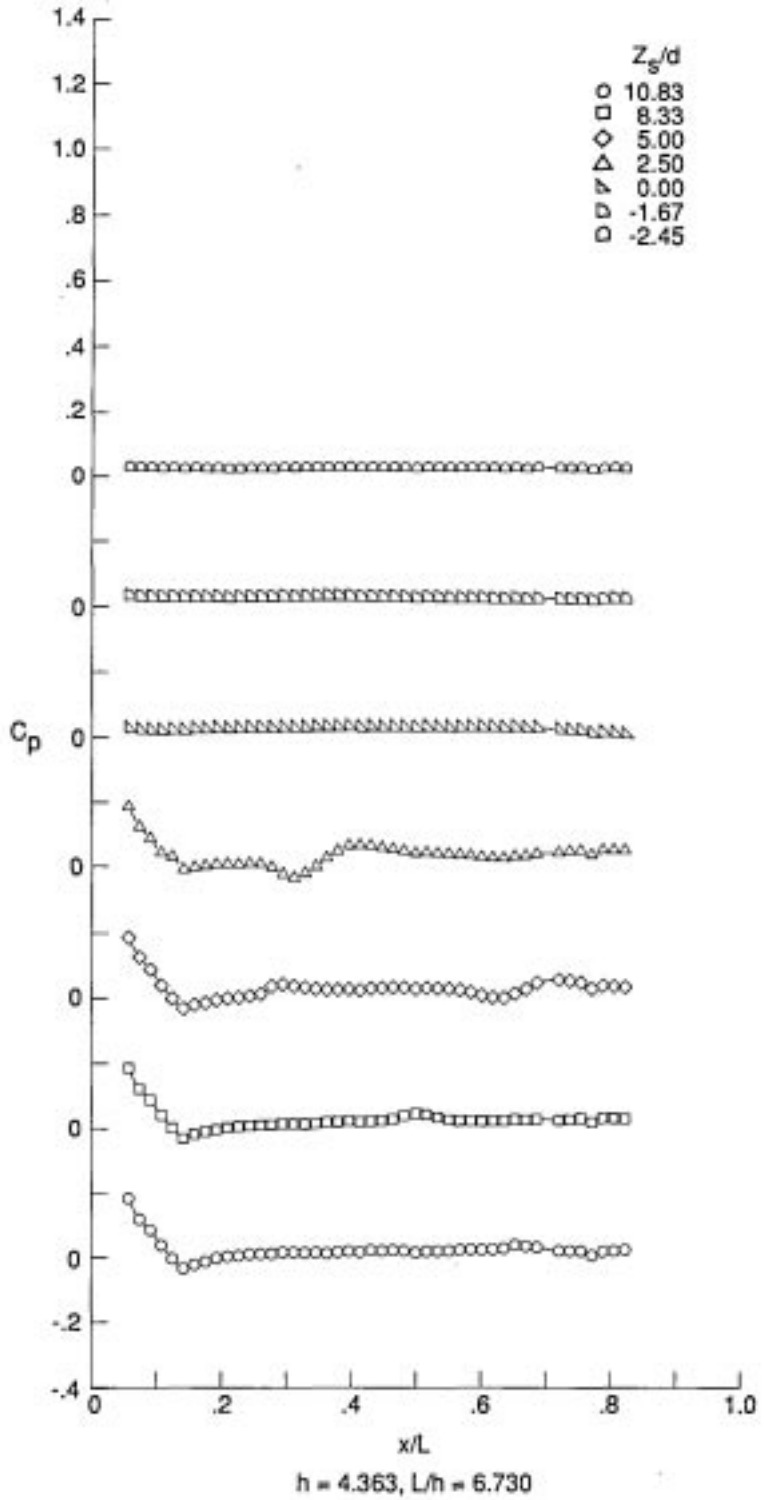
(b) Continued.

Figure 19. Continued.



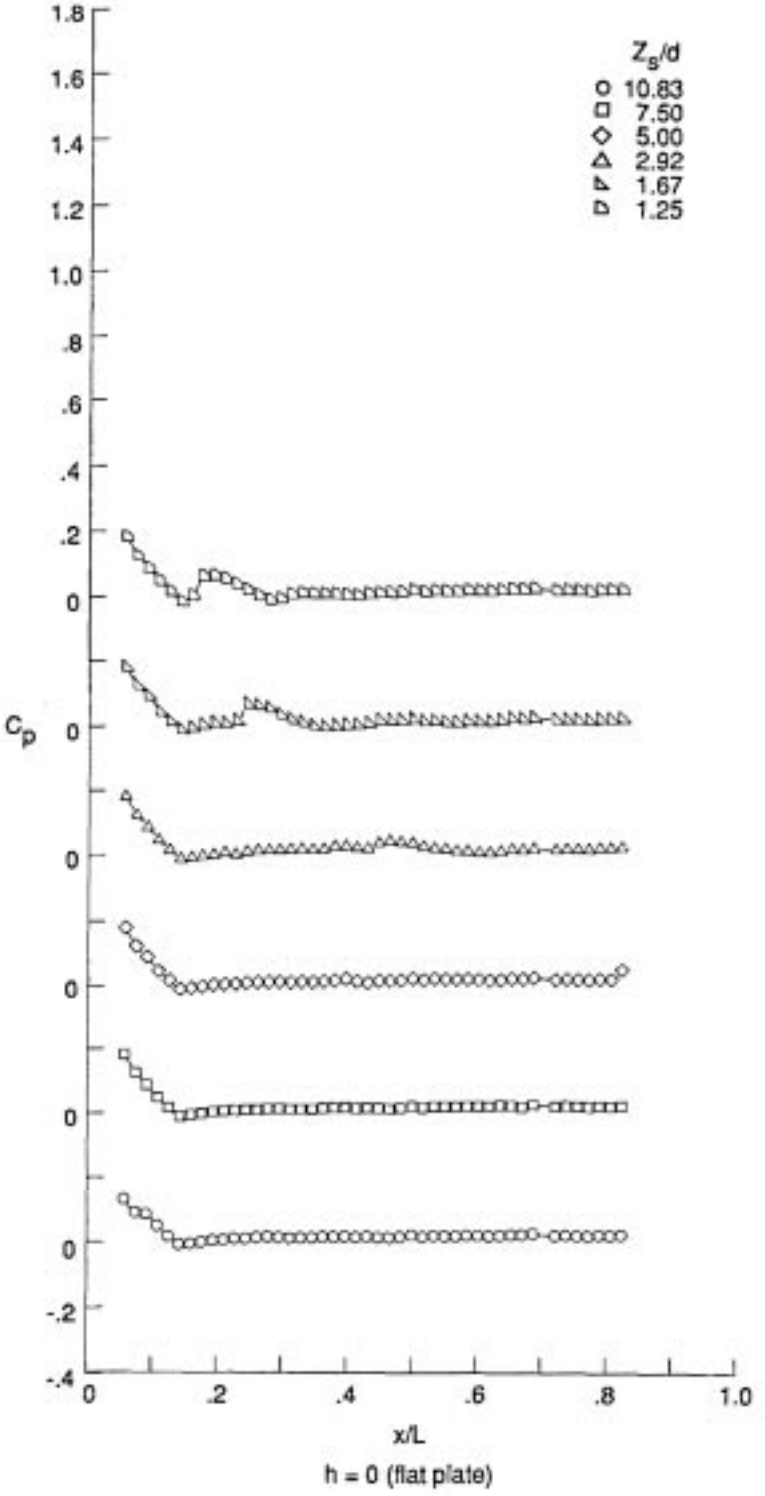
(b) Continued.

Figure 19. Continued.



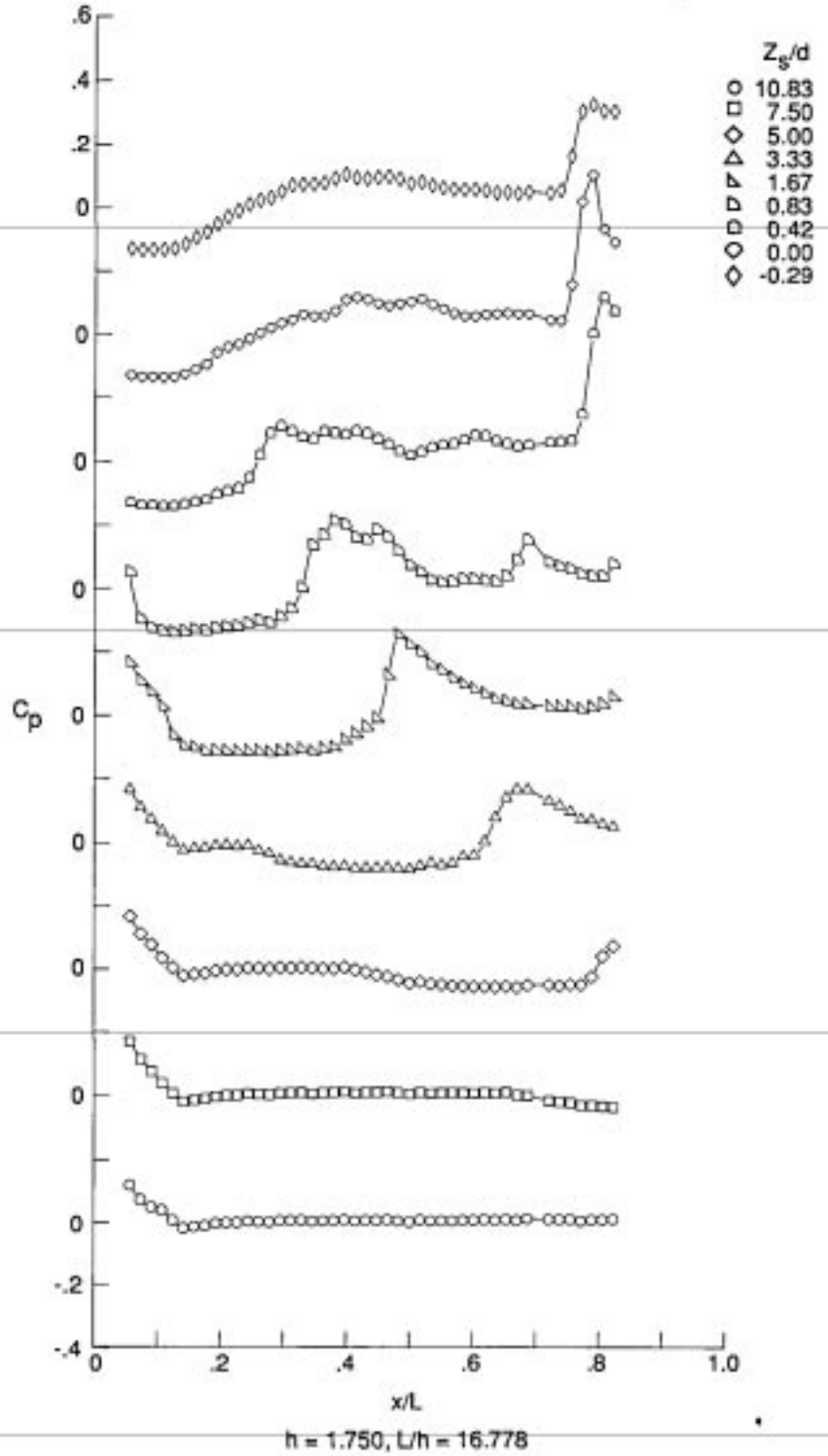
(b) Concluded.

Figure 19. Continued.



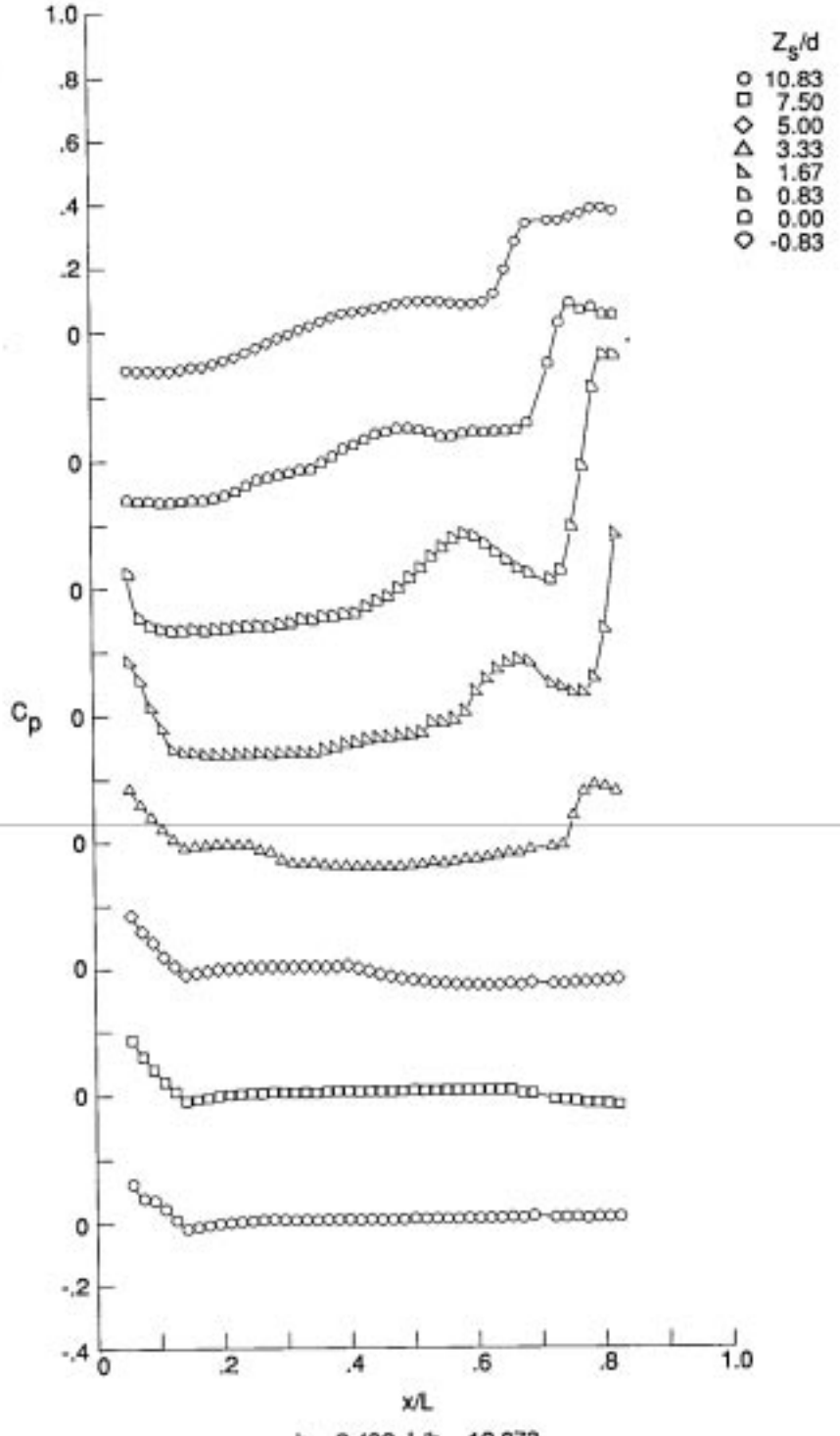
(c) $M = 2.65$.

Figure 19. Continued.



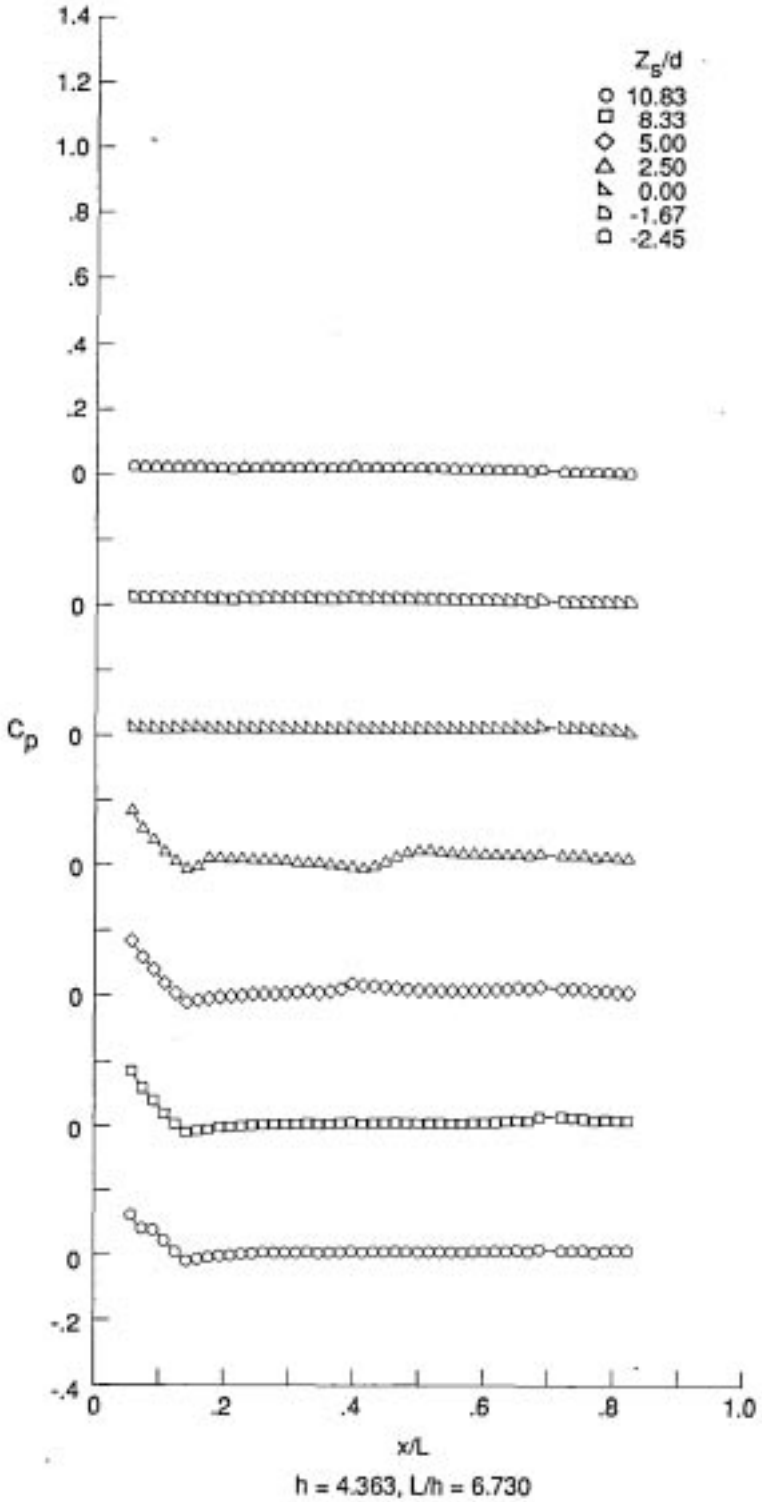
(c) Continued.

Figure 19. Continued.



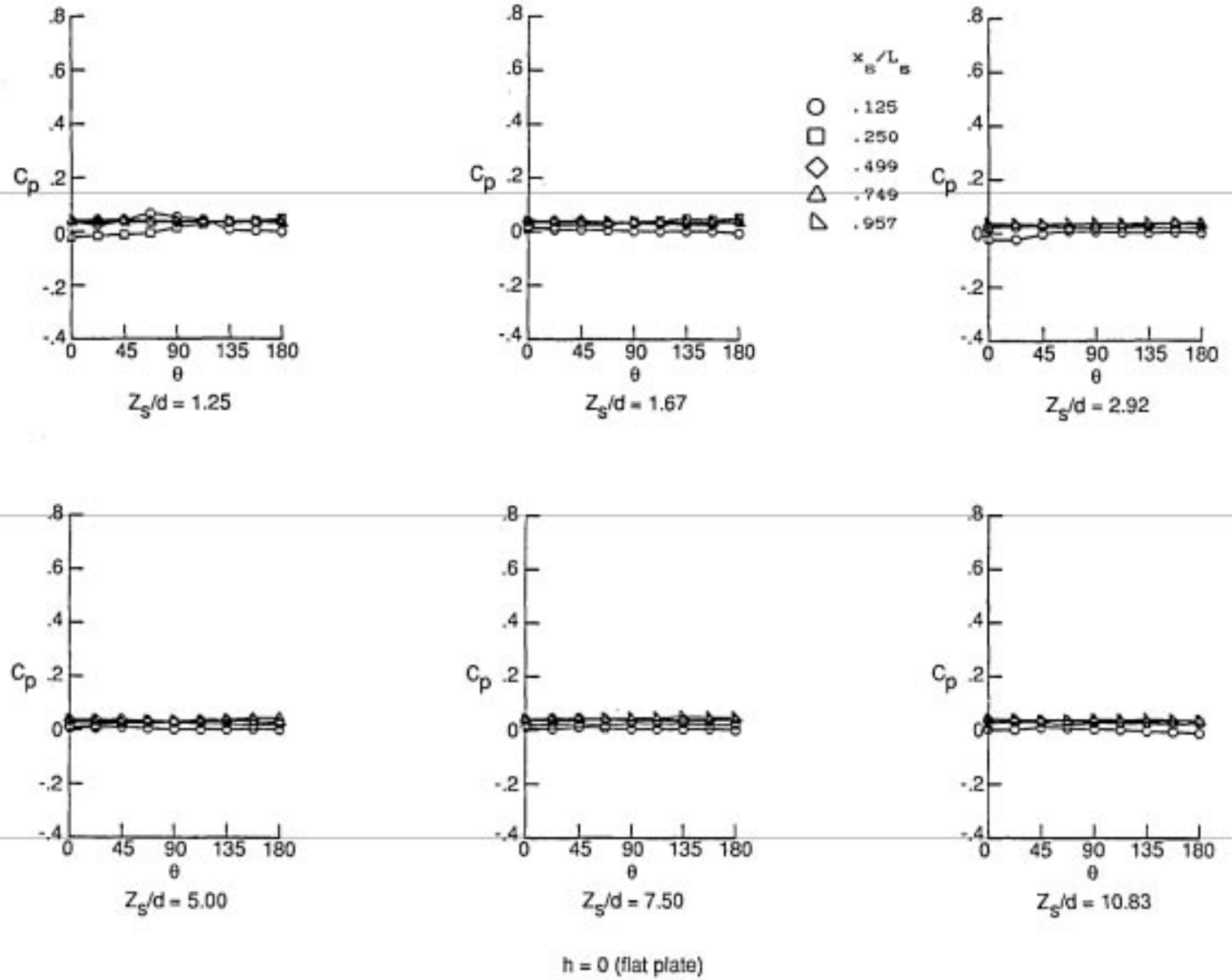
(c) Continued.

Figure 19. Continued.



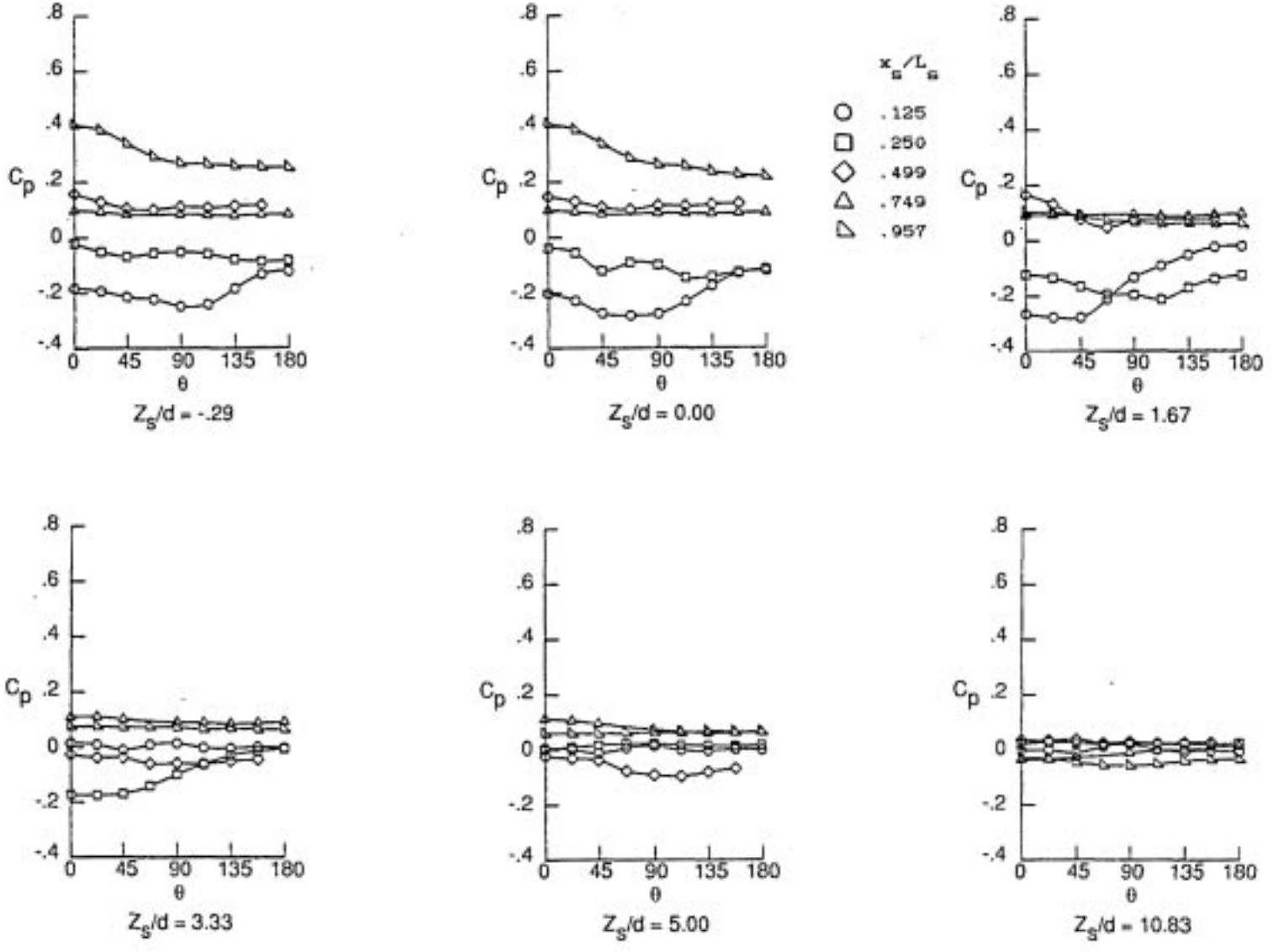
(c) Concluded.

Figure 19. Concluded.



(a) $M = 1.69$.

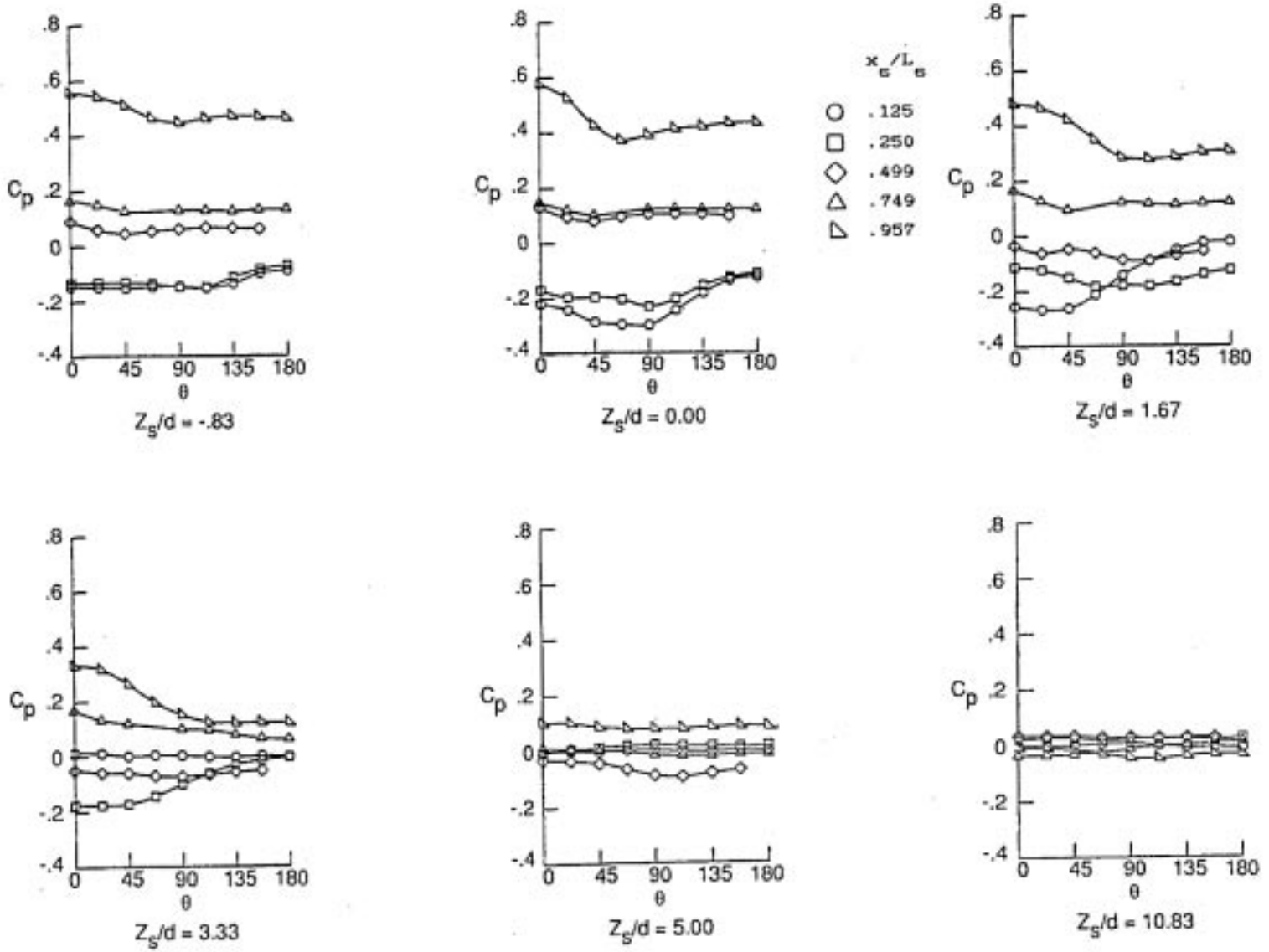
Figure 20. Store circumferential pressure distributions for cavities without doors (θ is negative for $x_s/L_s = 0.957$, see fig. 4(c)).



h = 1.750, L/h = 16.778

(a) Continued.

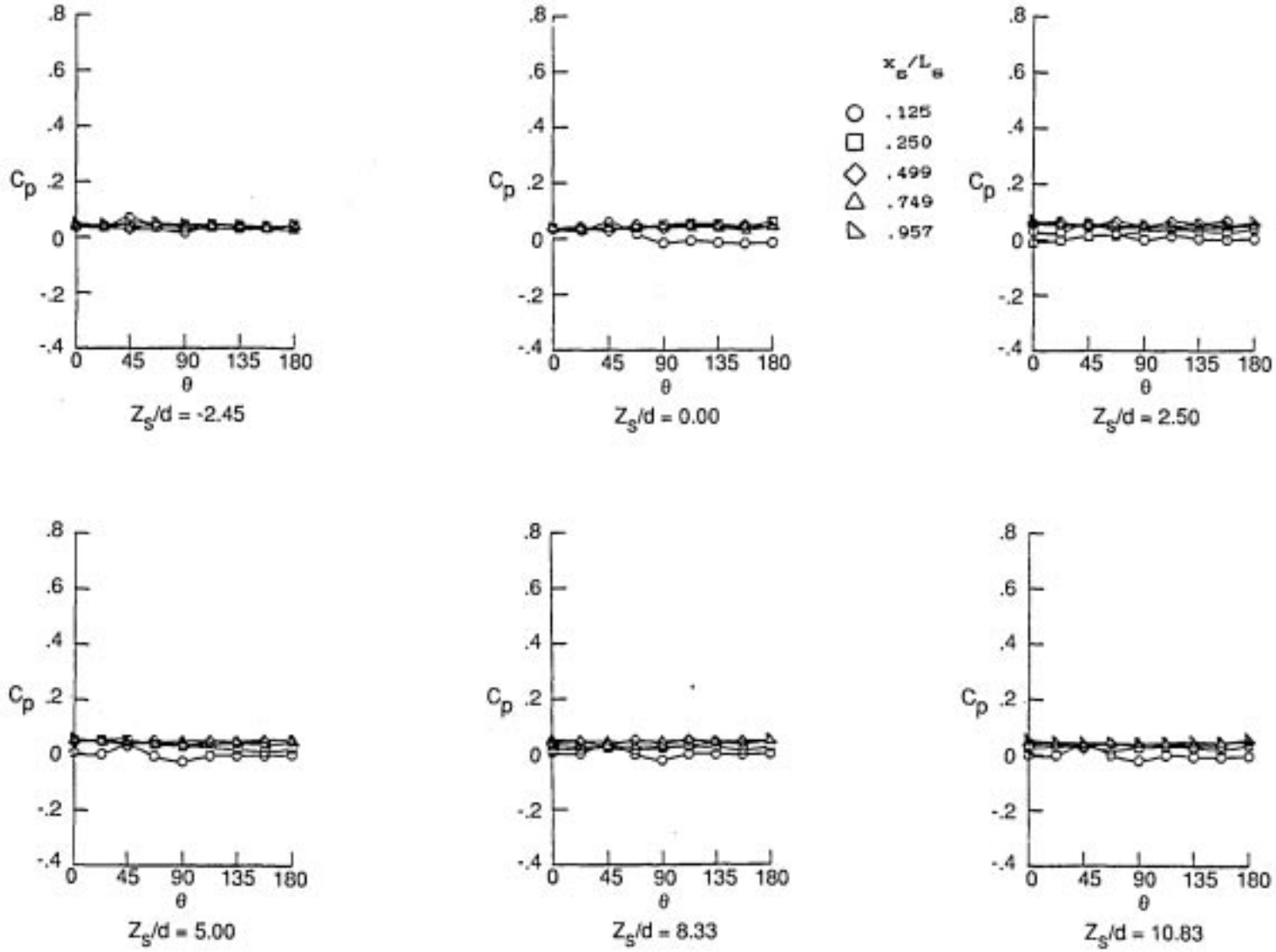
Figure 20. Continued.



h = 2.432, L/h = 12.073

(a) Continued.

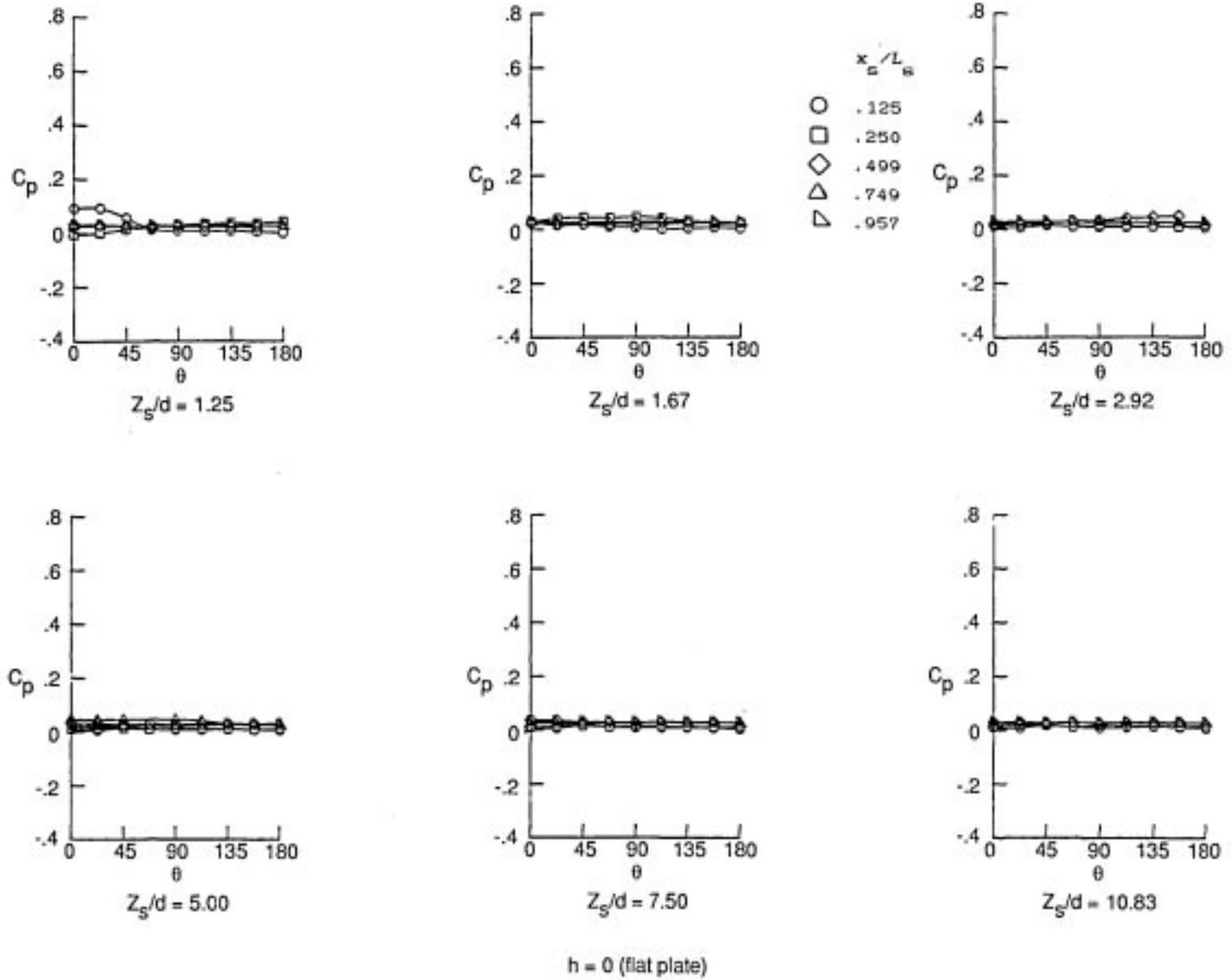
Figure 20. Continued.



h = 4.363, L/h = 6.730

(a) Concluded.

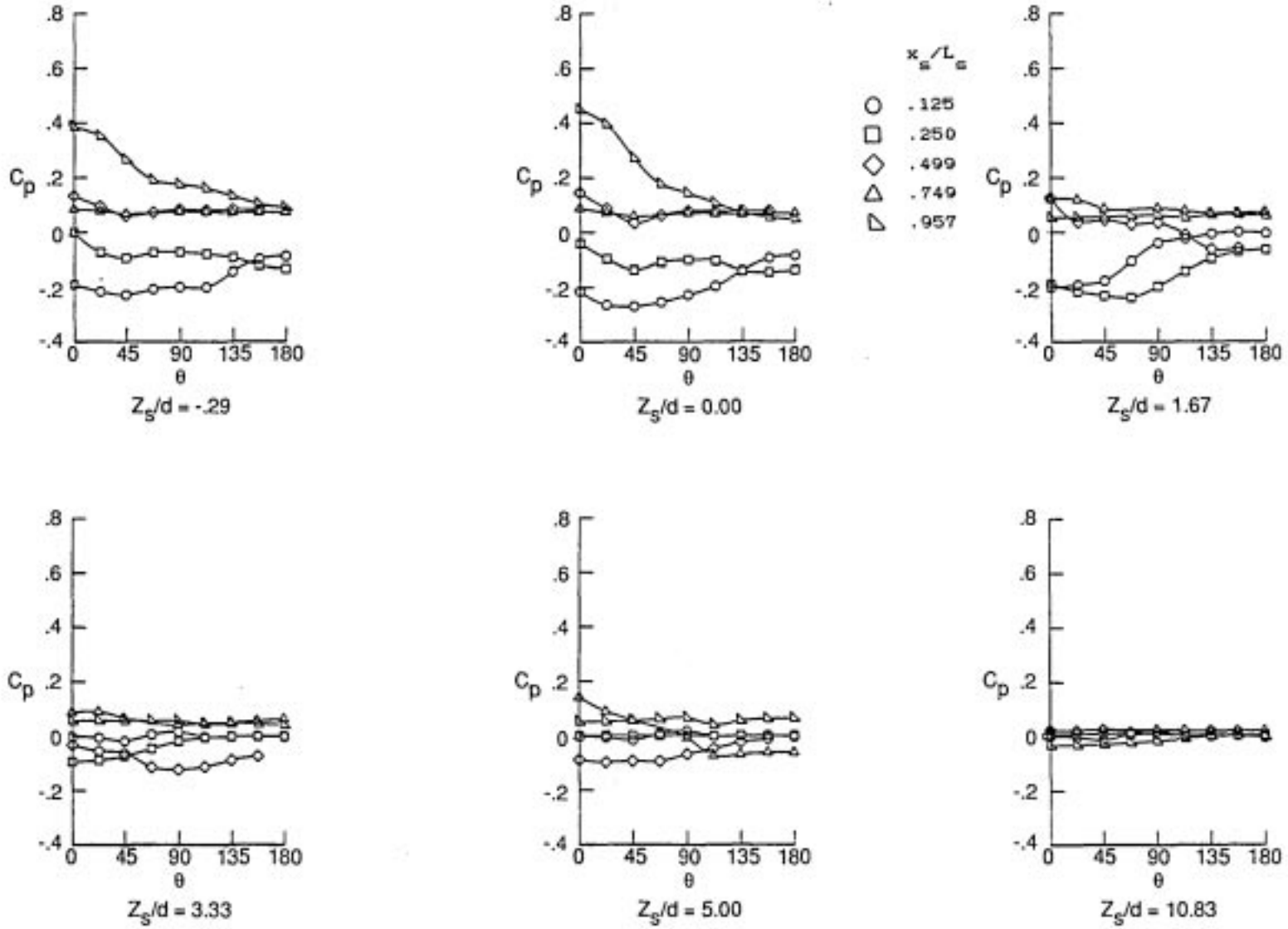
Figure 20. Continued.



h = 0 (flat plate)

(b) $M = 2.00$.

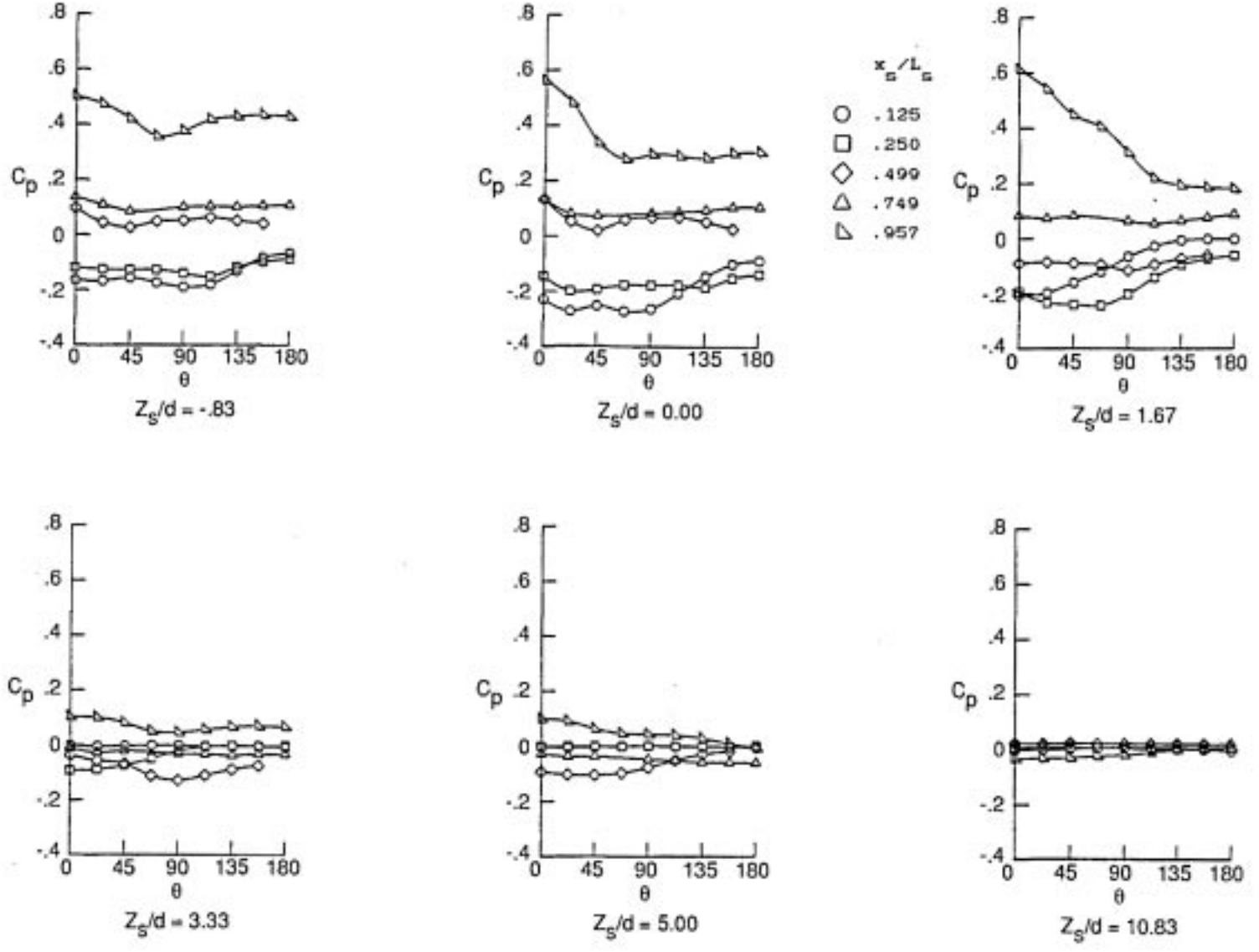
Figure 20. Continued.



h = 1.750, L/h = 16.778

(b) Continued.

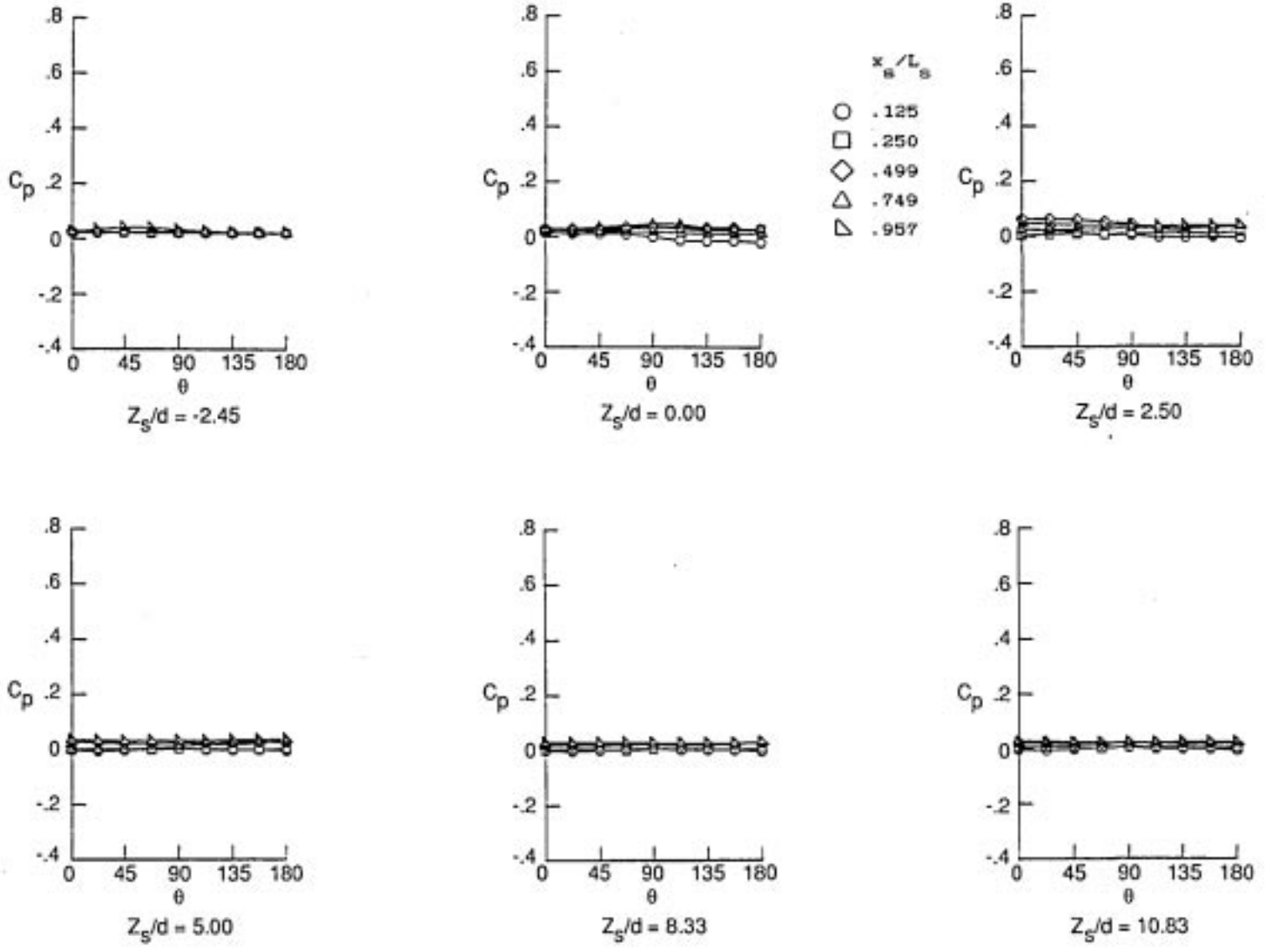
Figure 20. Continued.



h = 2.432, L/h = 12.073

(b) Continued.

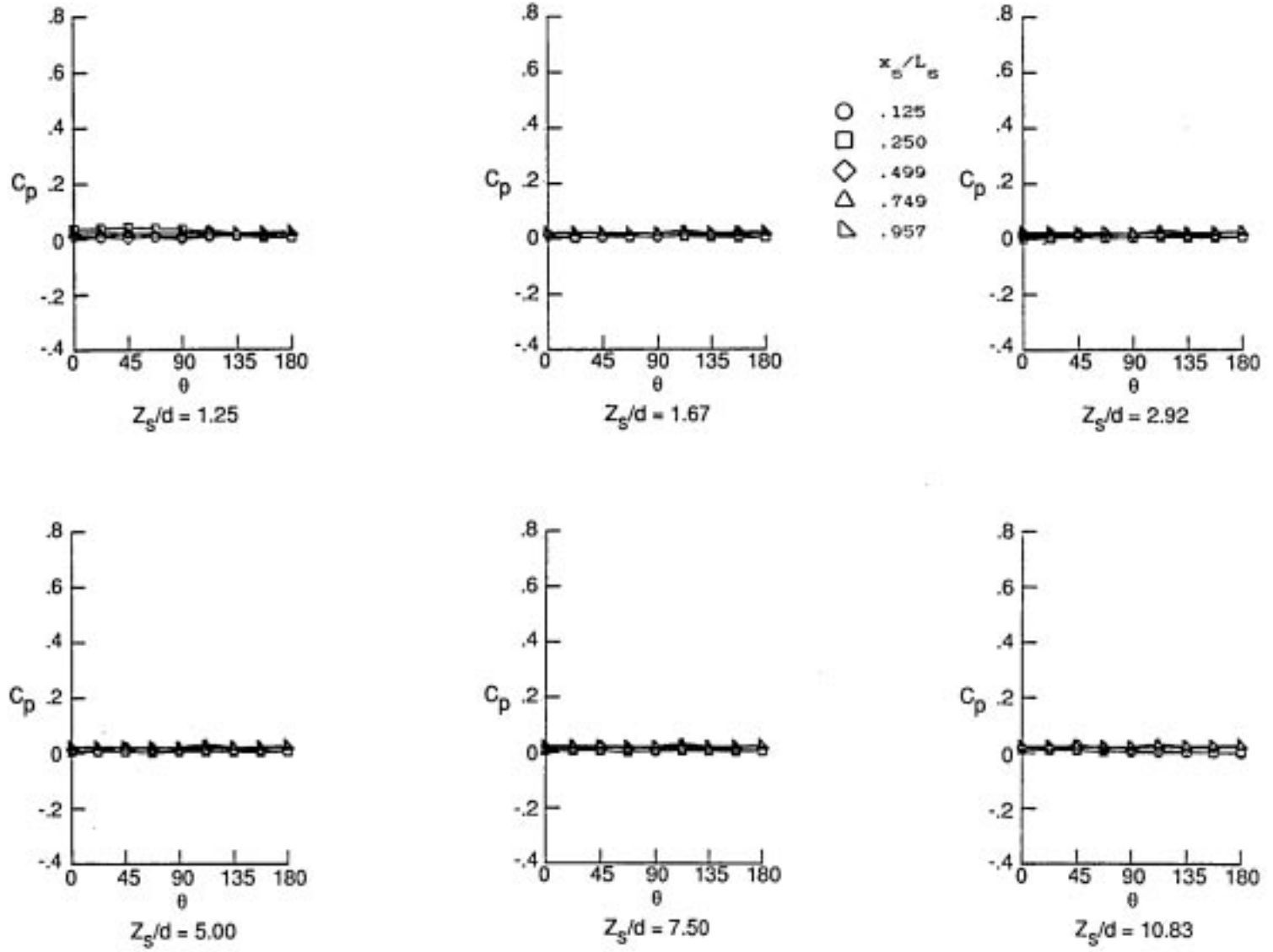
Figure 20. Continued.



h = 4.363, L/h = 6.730

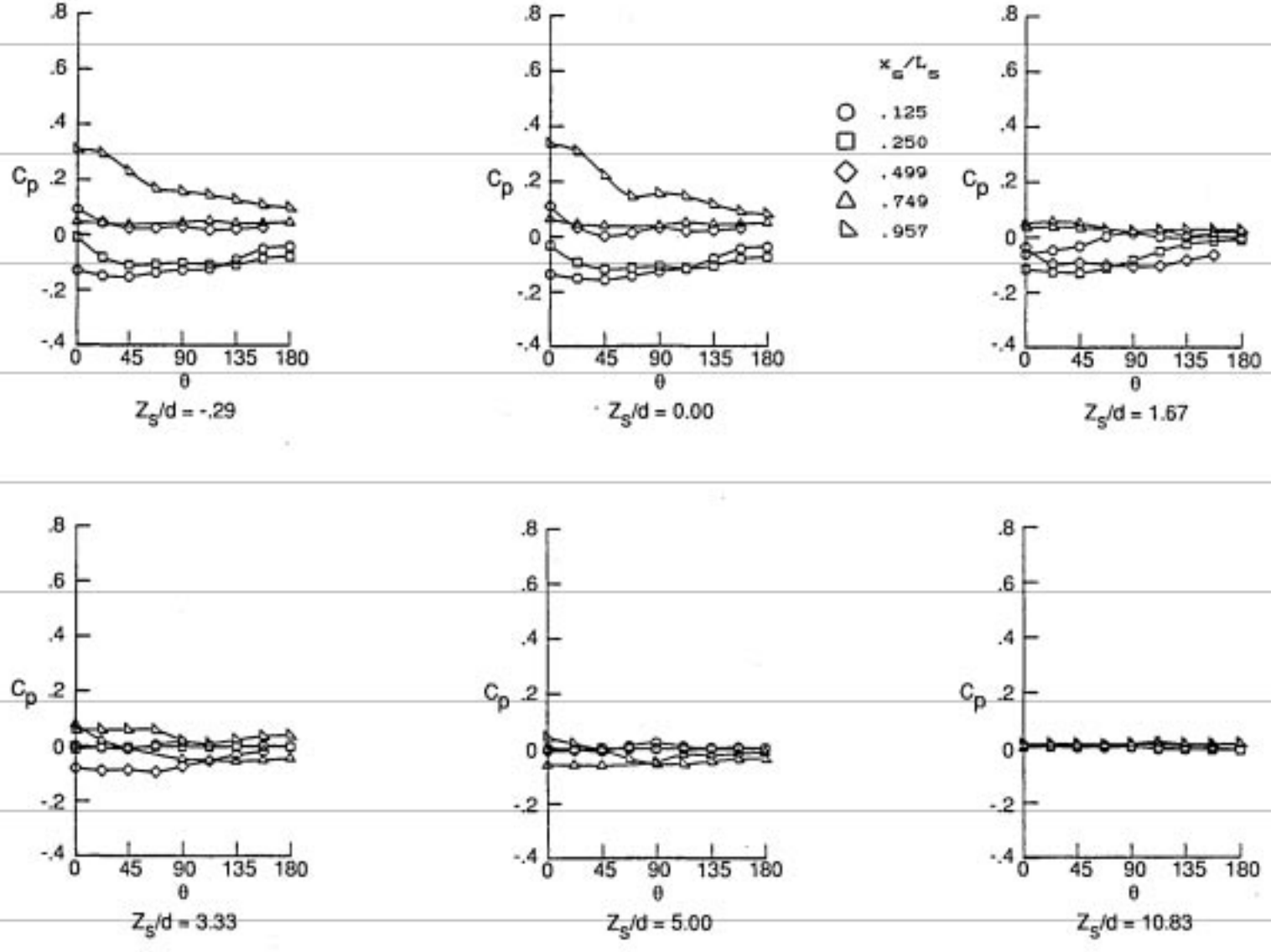
(b) Concluded.

Figure 20. Continued.



(c) $M = 2.65$.

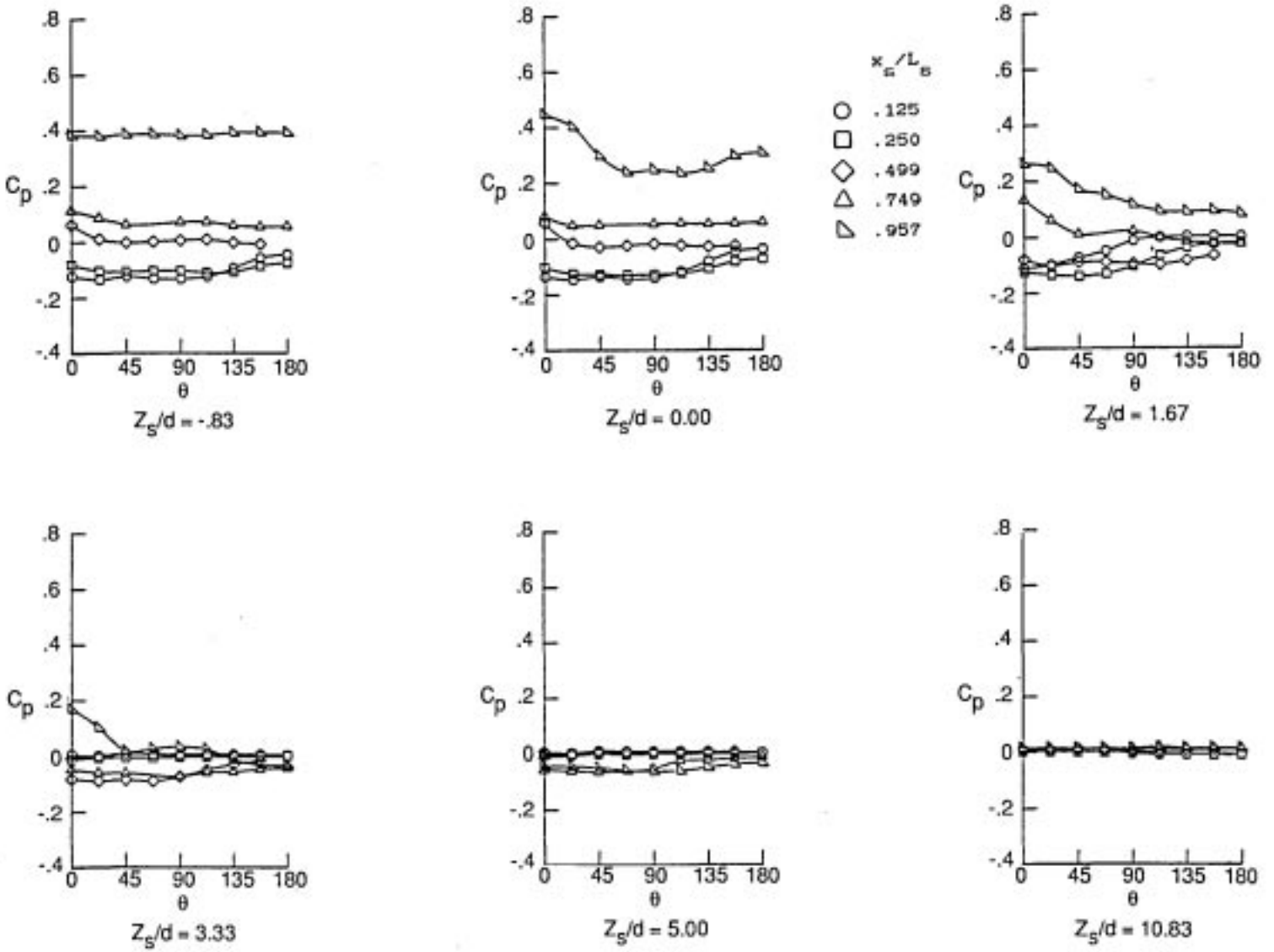
Figure 20. Continued.



h = 1.750, L/h = 16.778

(c) Continued.

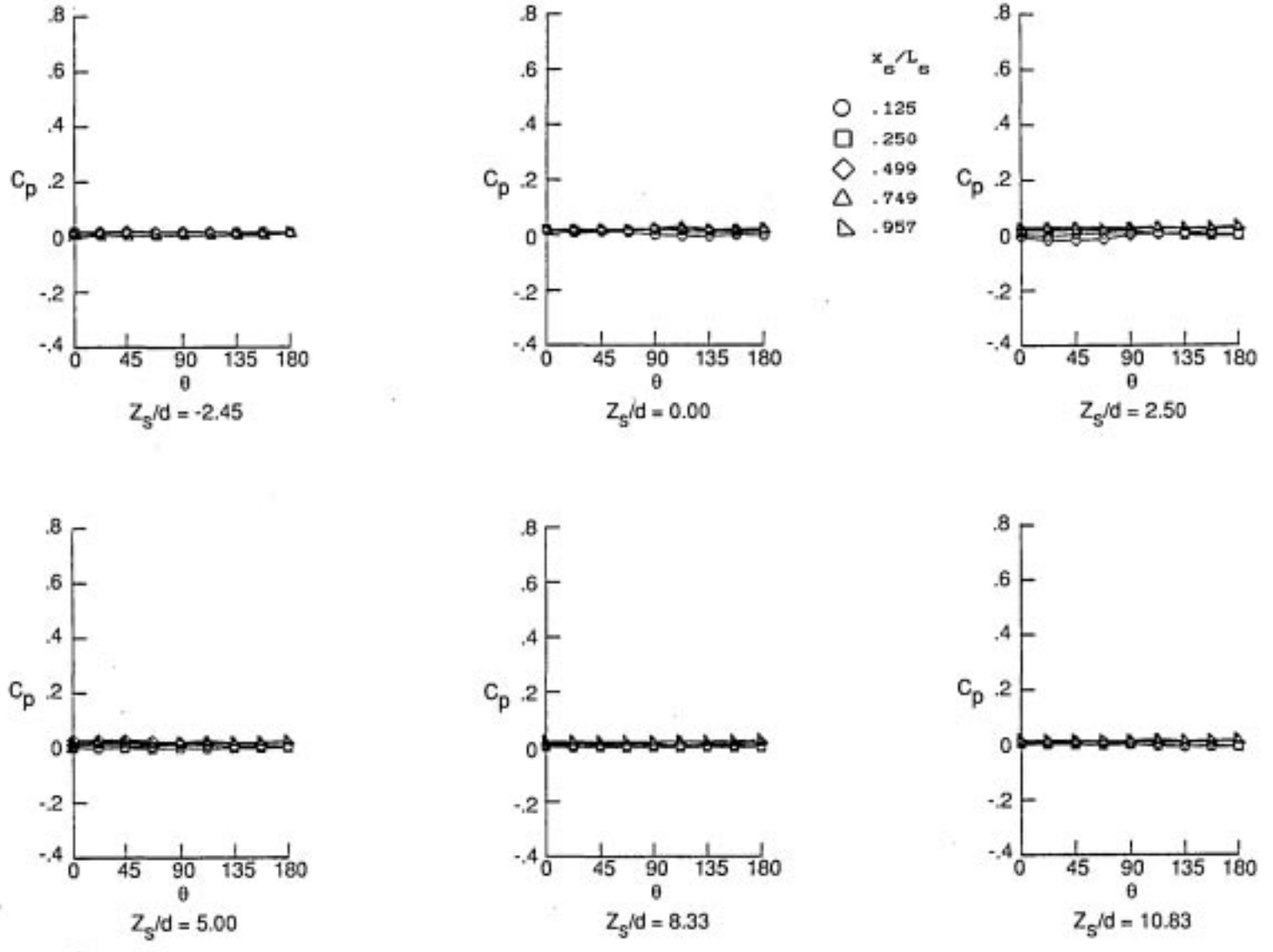
Figure 20. Continued.



h = 2.432, L/h = 12.073

(c) Continued.

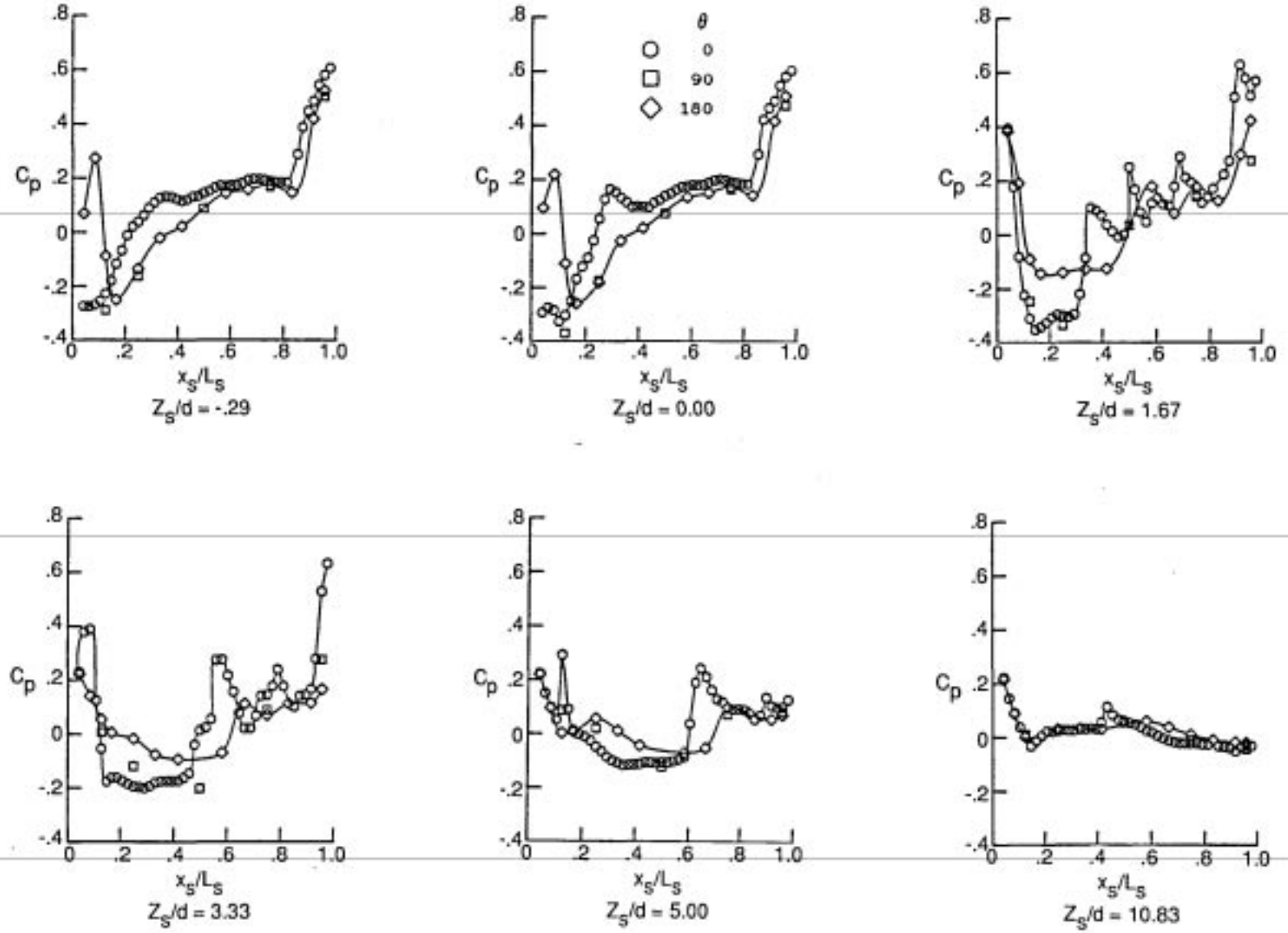
Figure 20. Continued.



h = 4.363, L/h = 6.730

(c) Concluded.

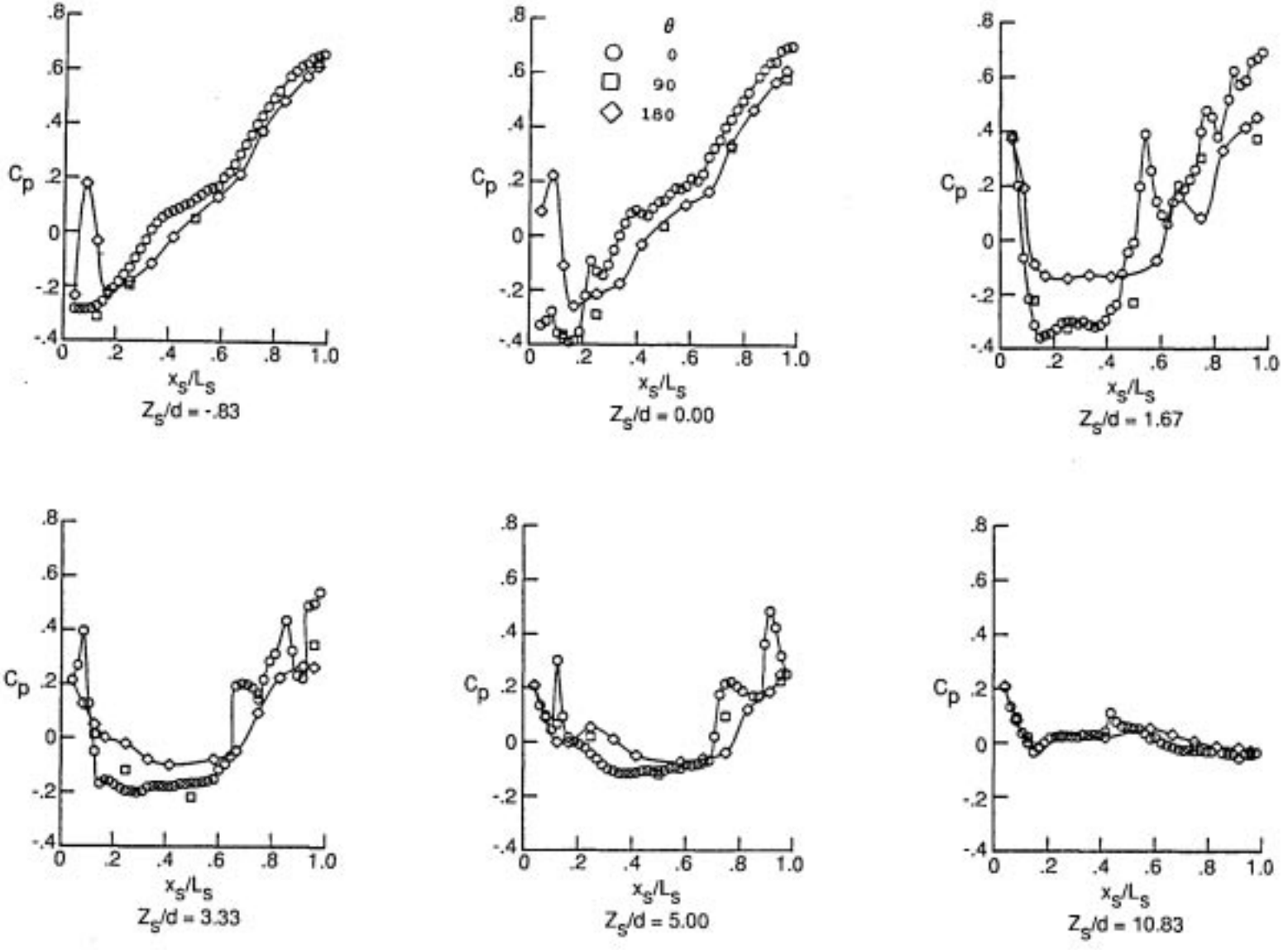
Figure 20. Concluded.



h = 1.750, L/h = 16.778

(a) $M = 1.69$.

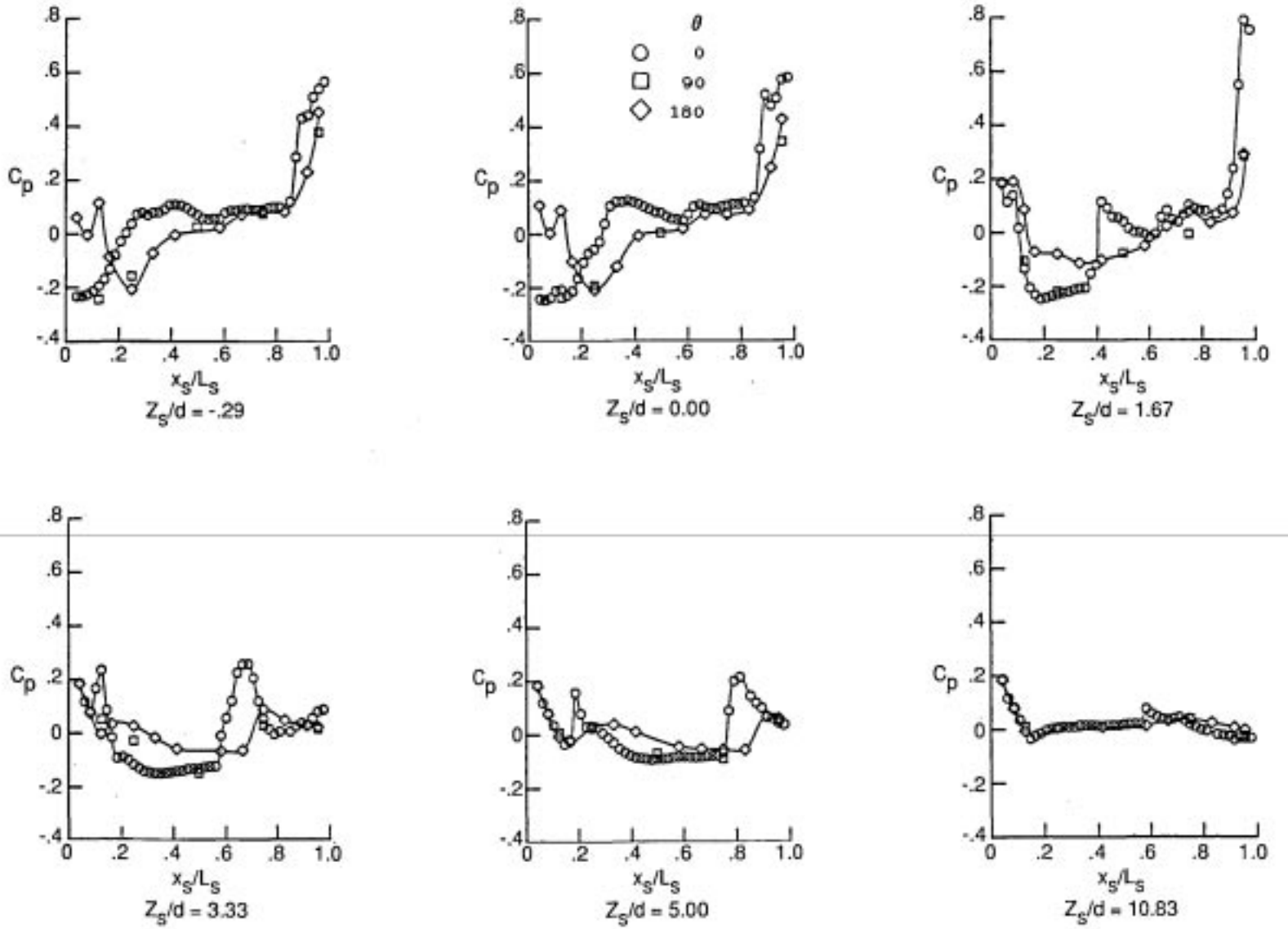
Figure 21. Store longitudinal pressure distributions for cavities with doors.



h = 2.432, L/h = 12.073

(a) Concluded.

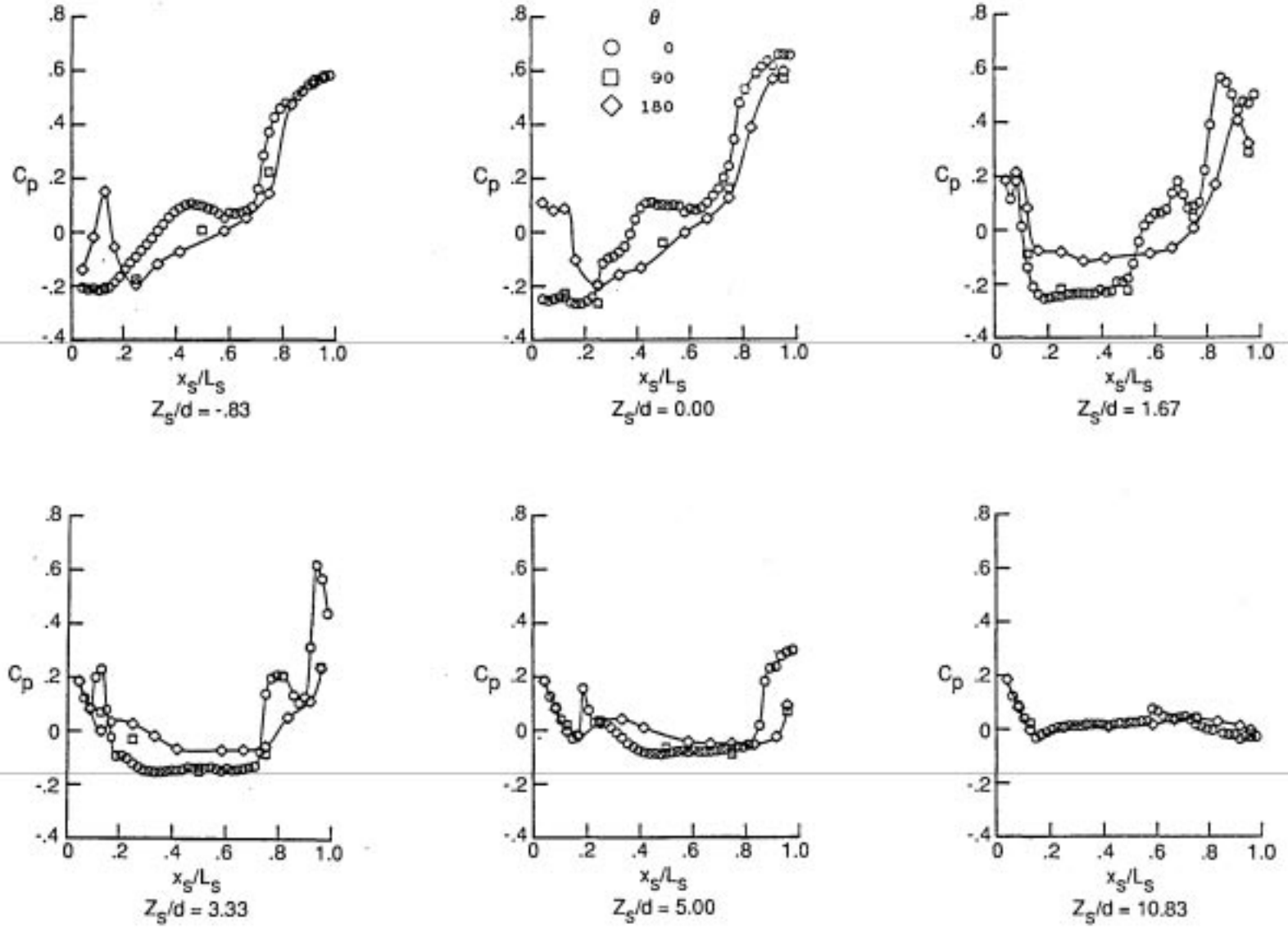
Figure 21. Continued.



h = 1.750, L/h = 16.778

(b) $M = 2.00$.

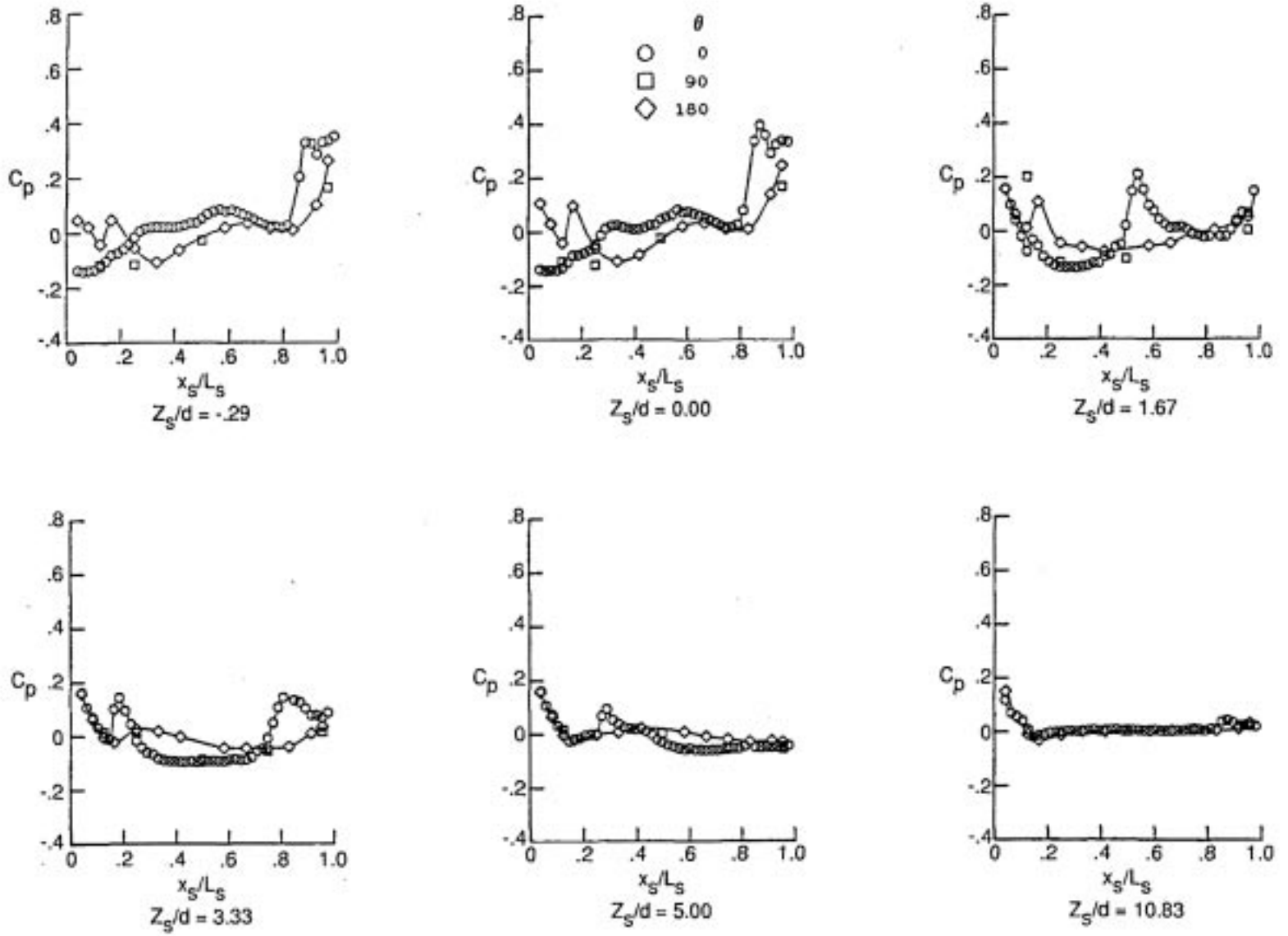
Figure 21. Continued.



h = 2.432, L/h = 12.073

(b) Concluded.

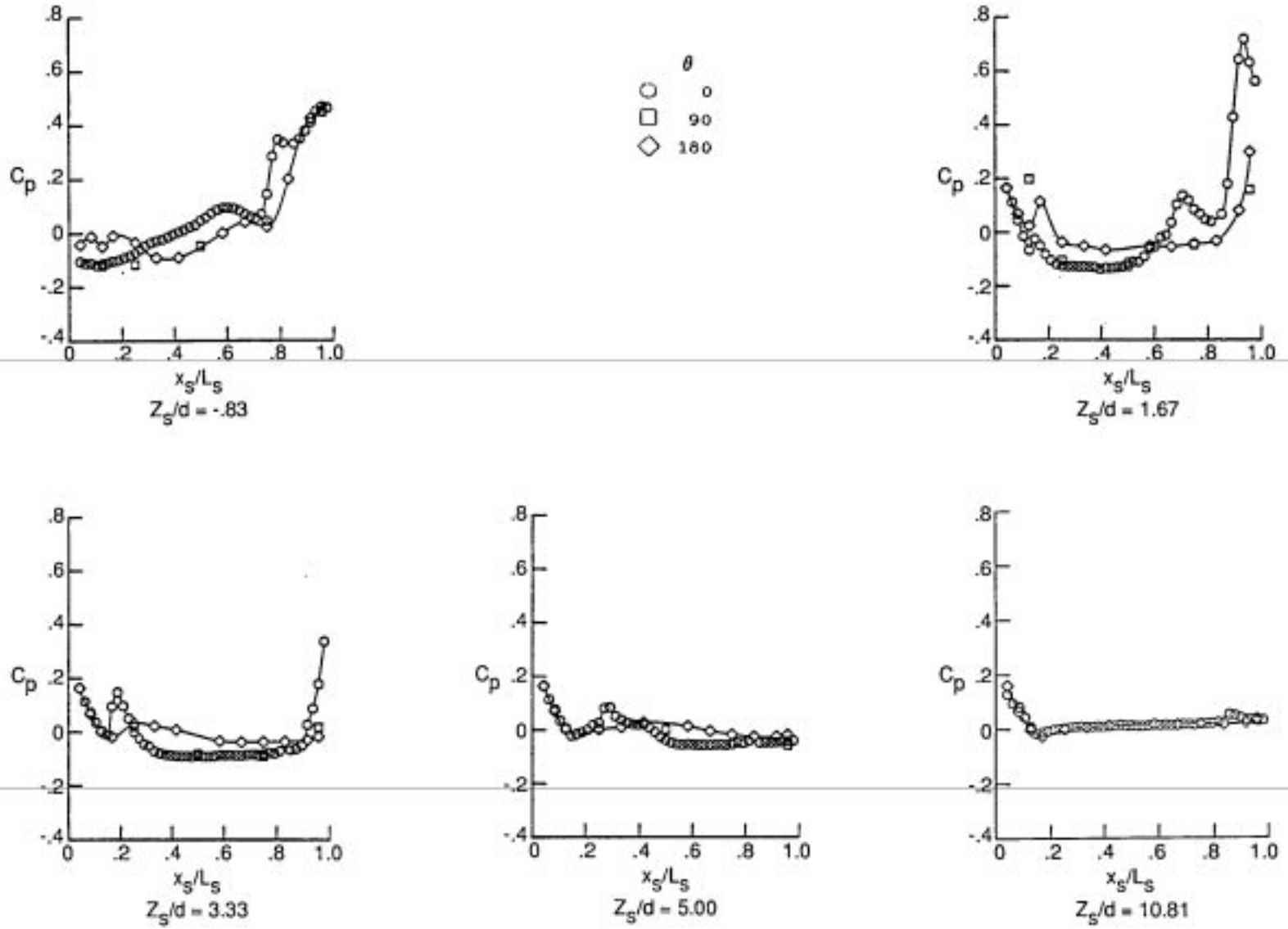
Figure 21. Continued.



h = 1.750, L/h = 16.778

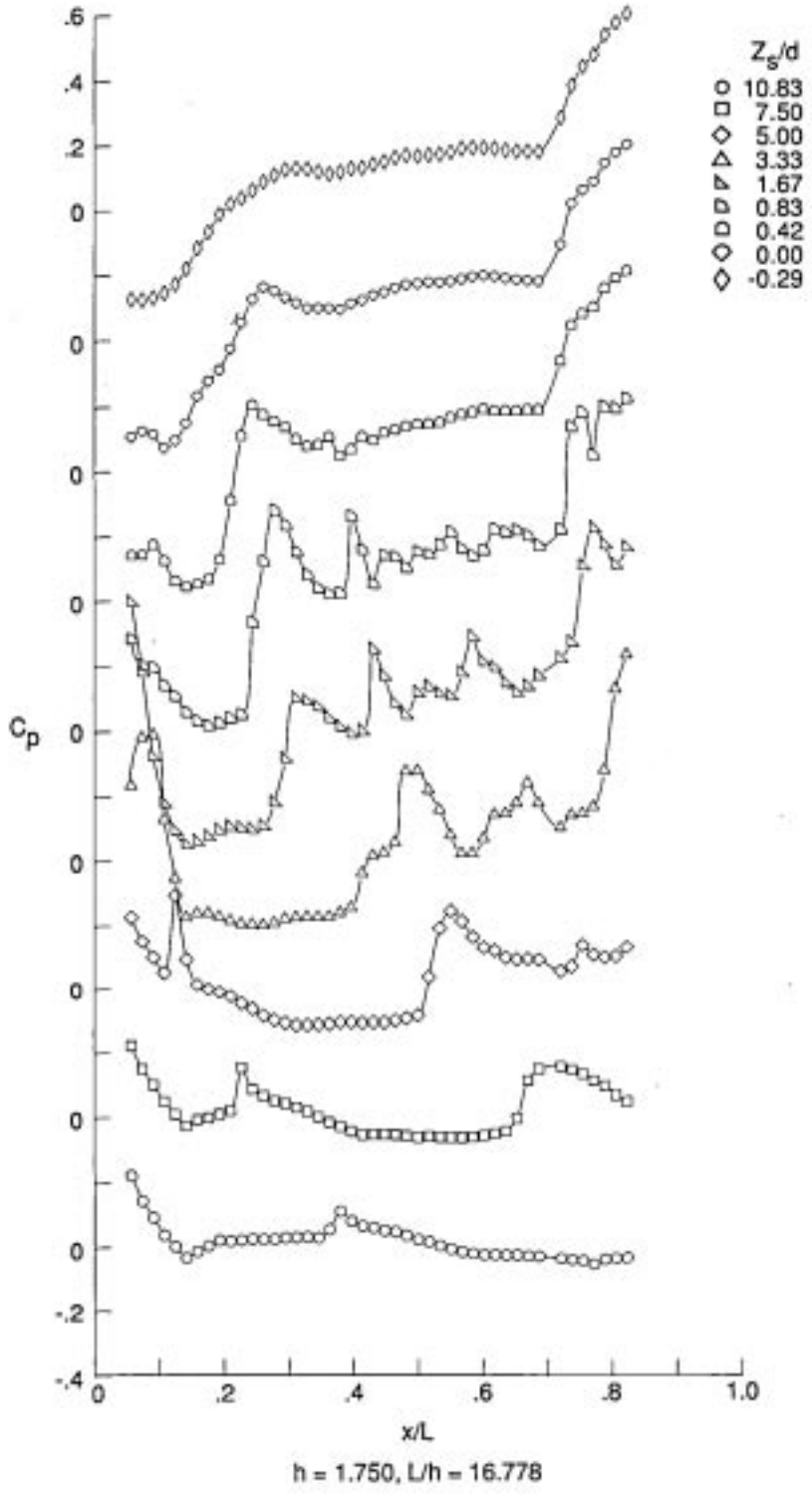
(c) $M = 2.65$.

Figure 21. Continued.



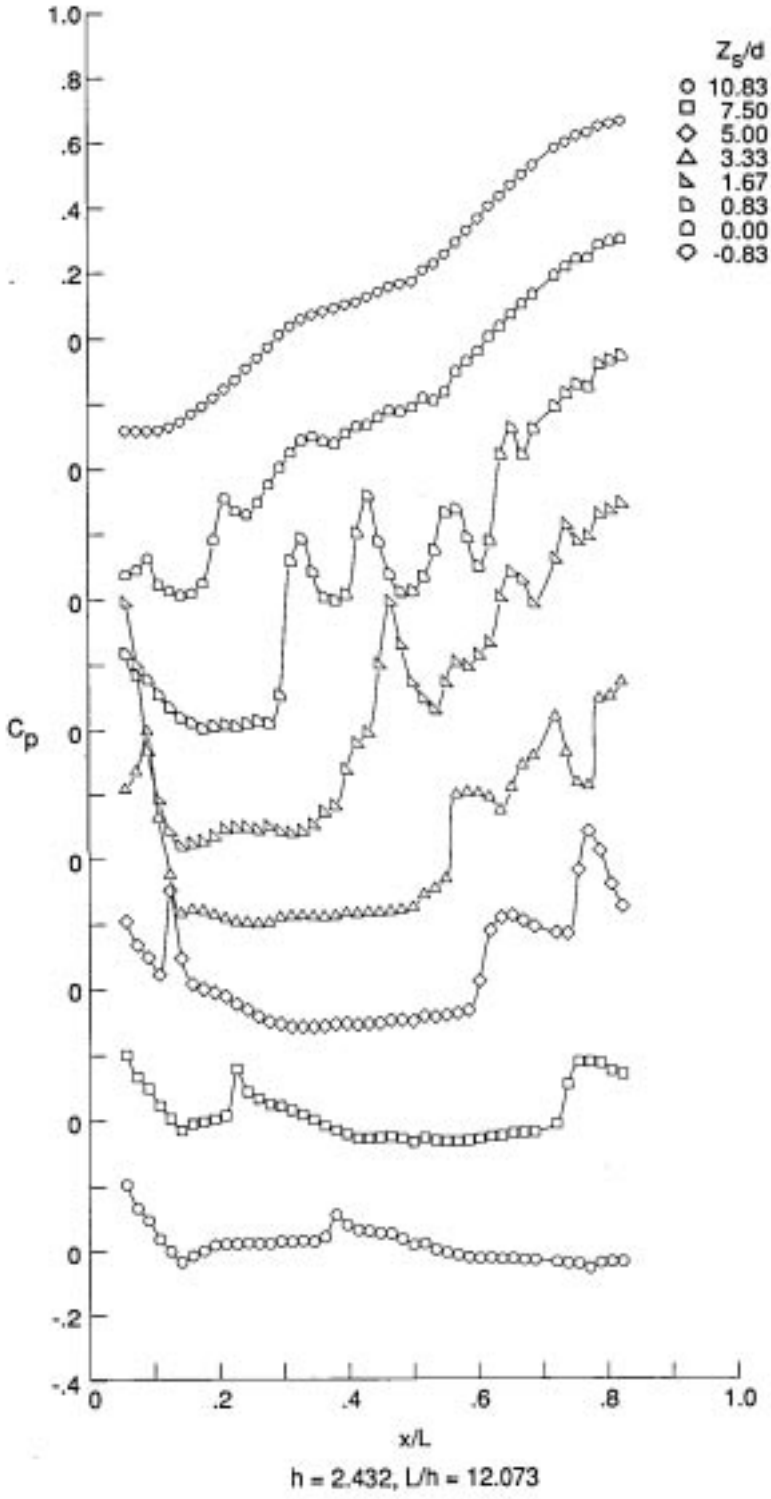
(c) Concluded.

Figure 21. Concluded.



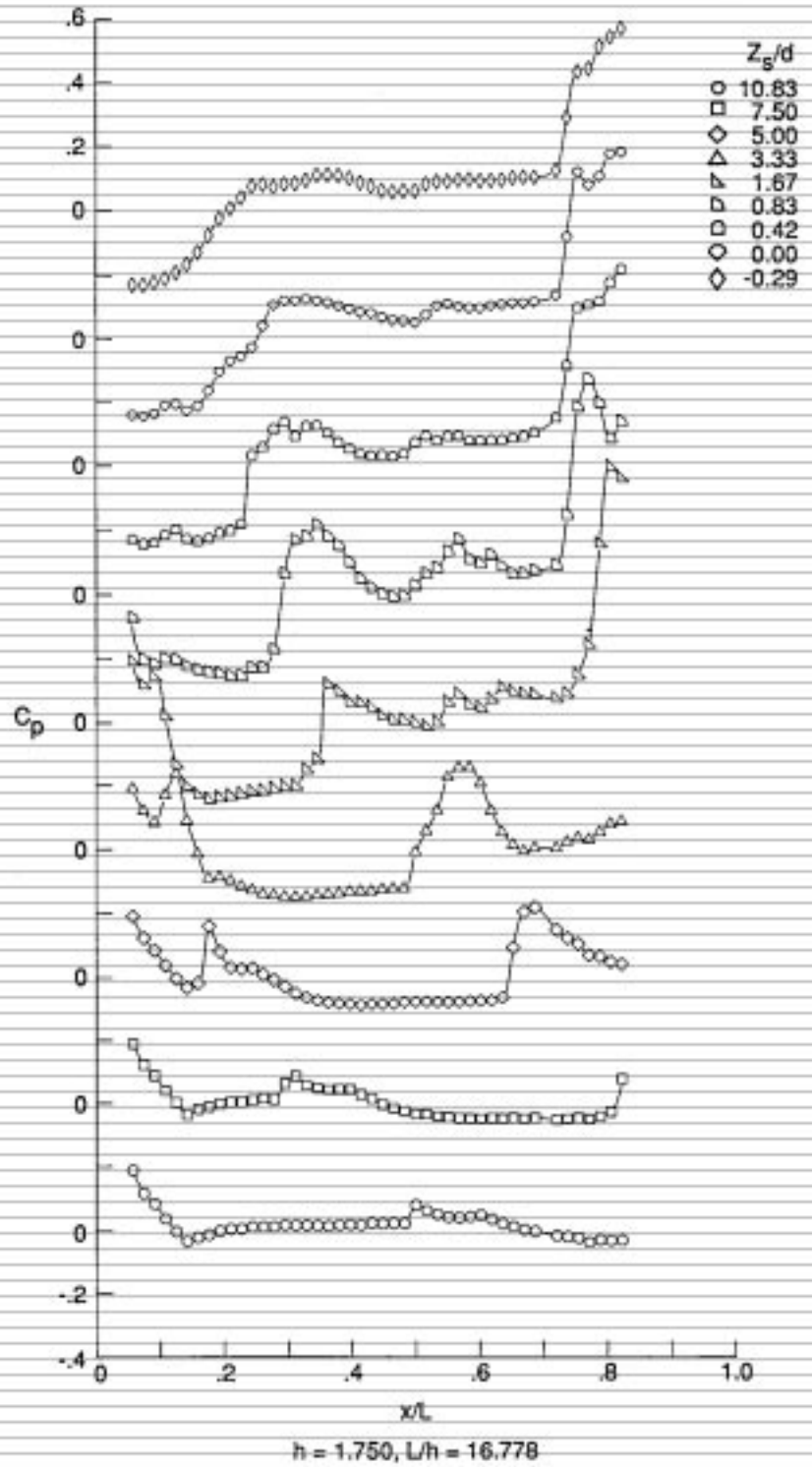
(a) $M = 1.69$.

Figure 22. Summary of store longitudinal pressure distributions for cavities with doors. $\theta = 0°$.



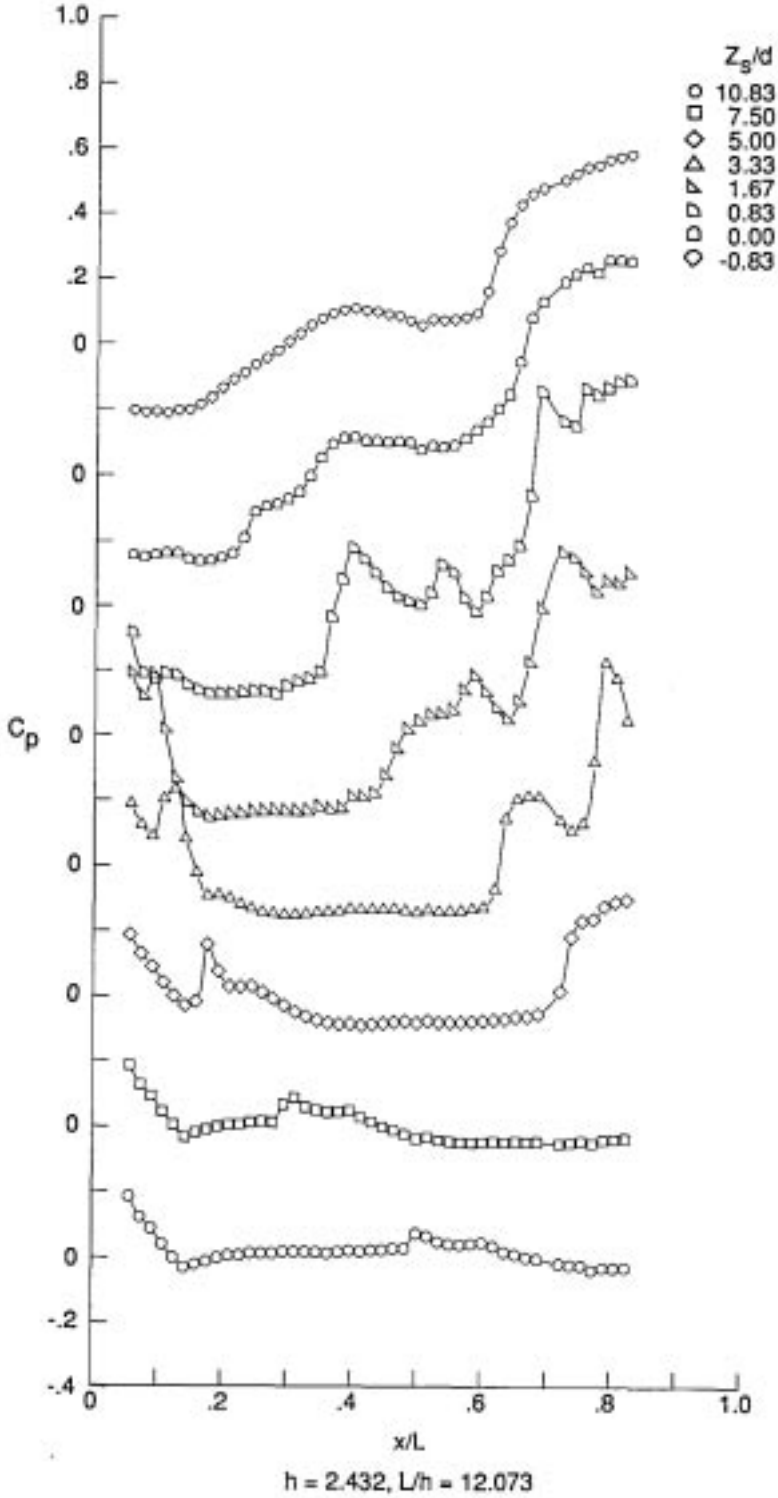
(a) Concluded.

Figure 22. Continued.



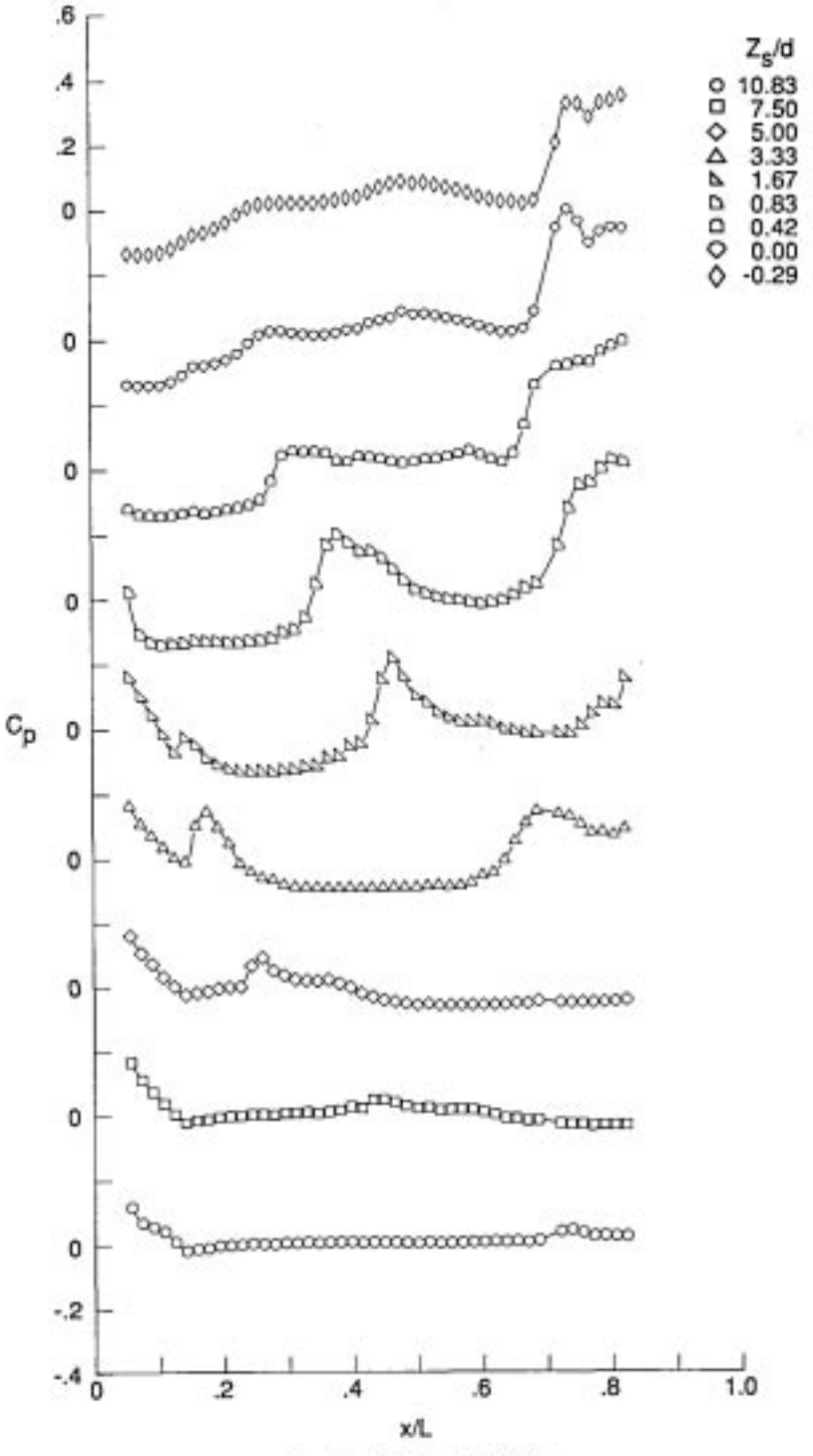
(b) $M = 2.00$.

Figure 22. Continued.



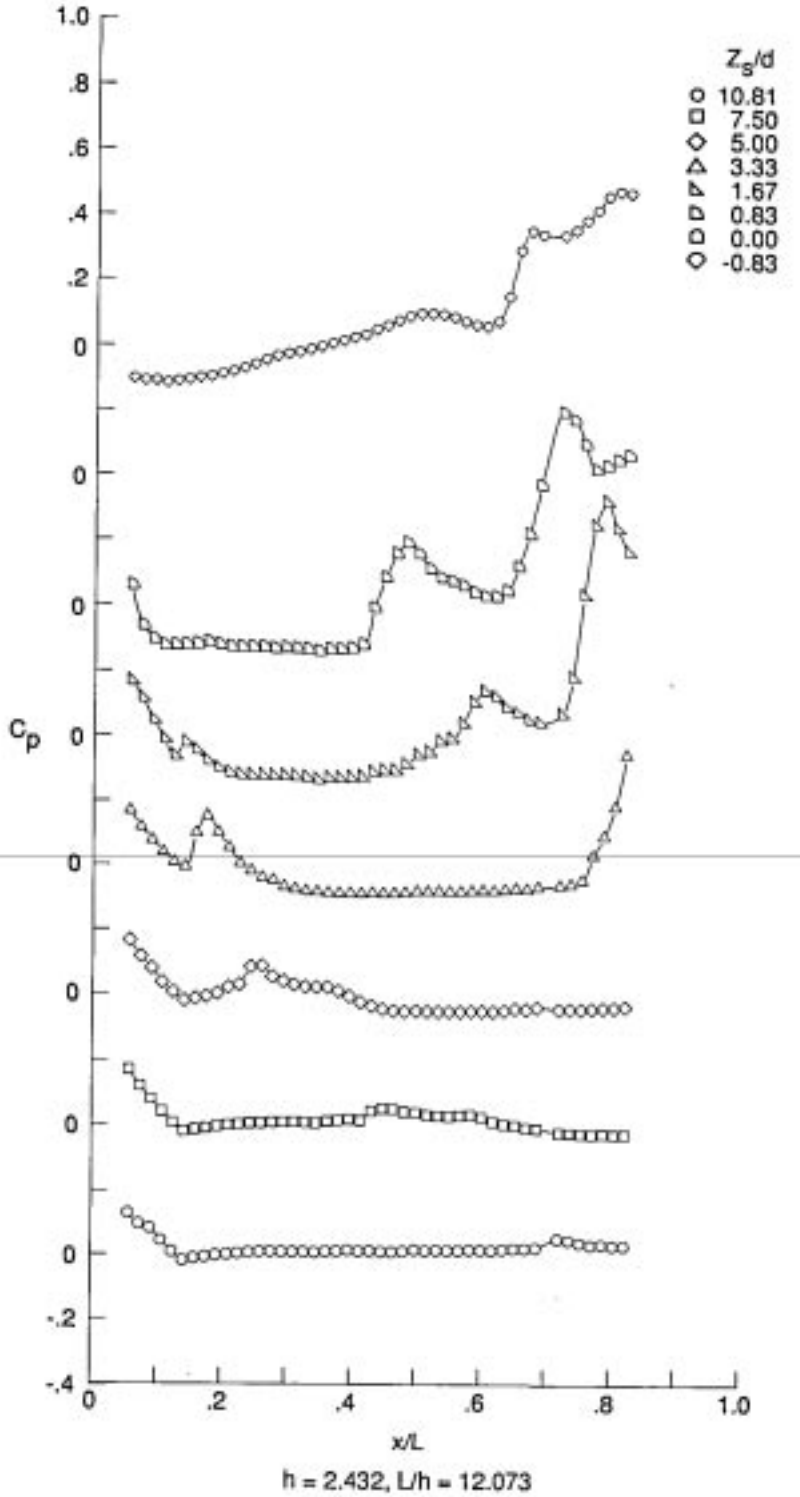
(b) Concluded.

Figure 22. Continued.



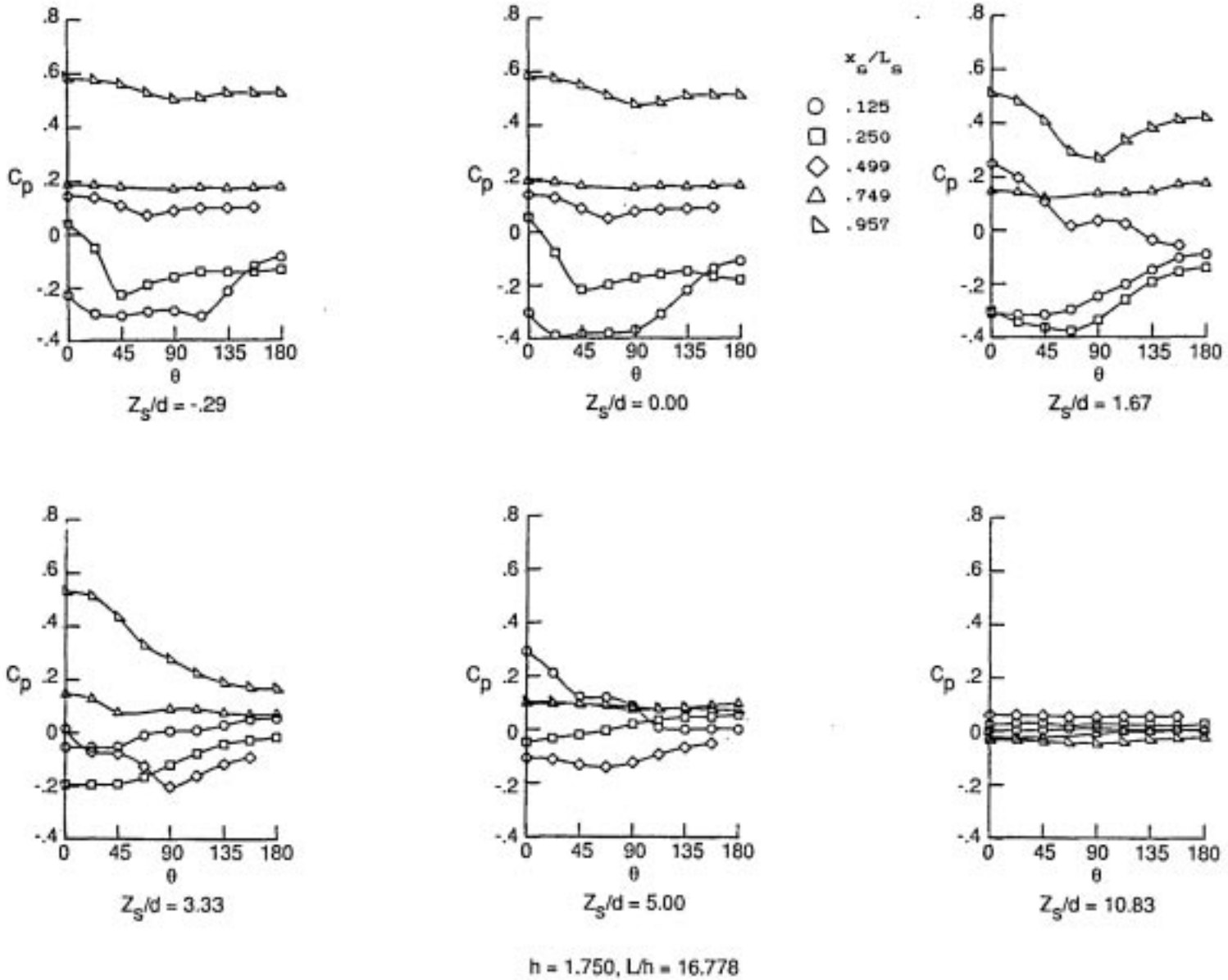
(c) $M = 2.65$.

Figure 22. Continued.



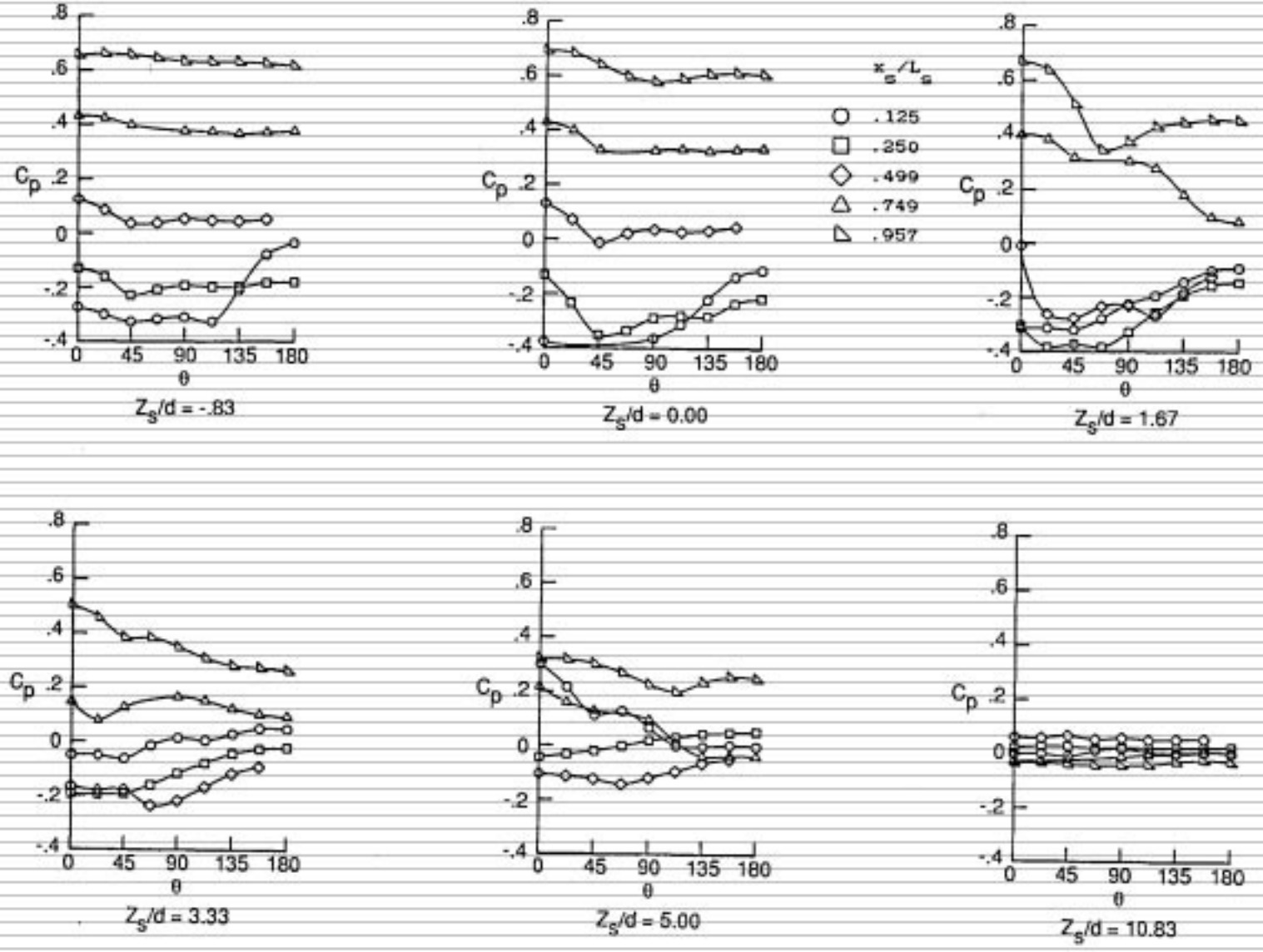
(c) Concluded.

Figure 22. Concluded.



(a) $M = 1.69$.

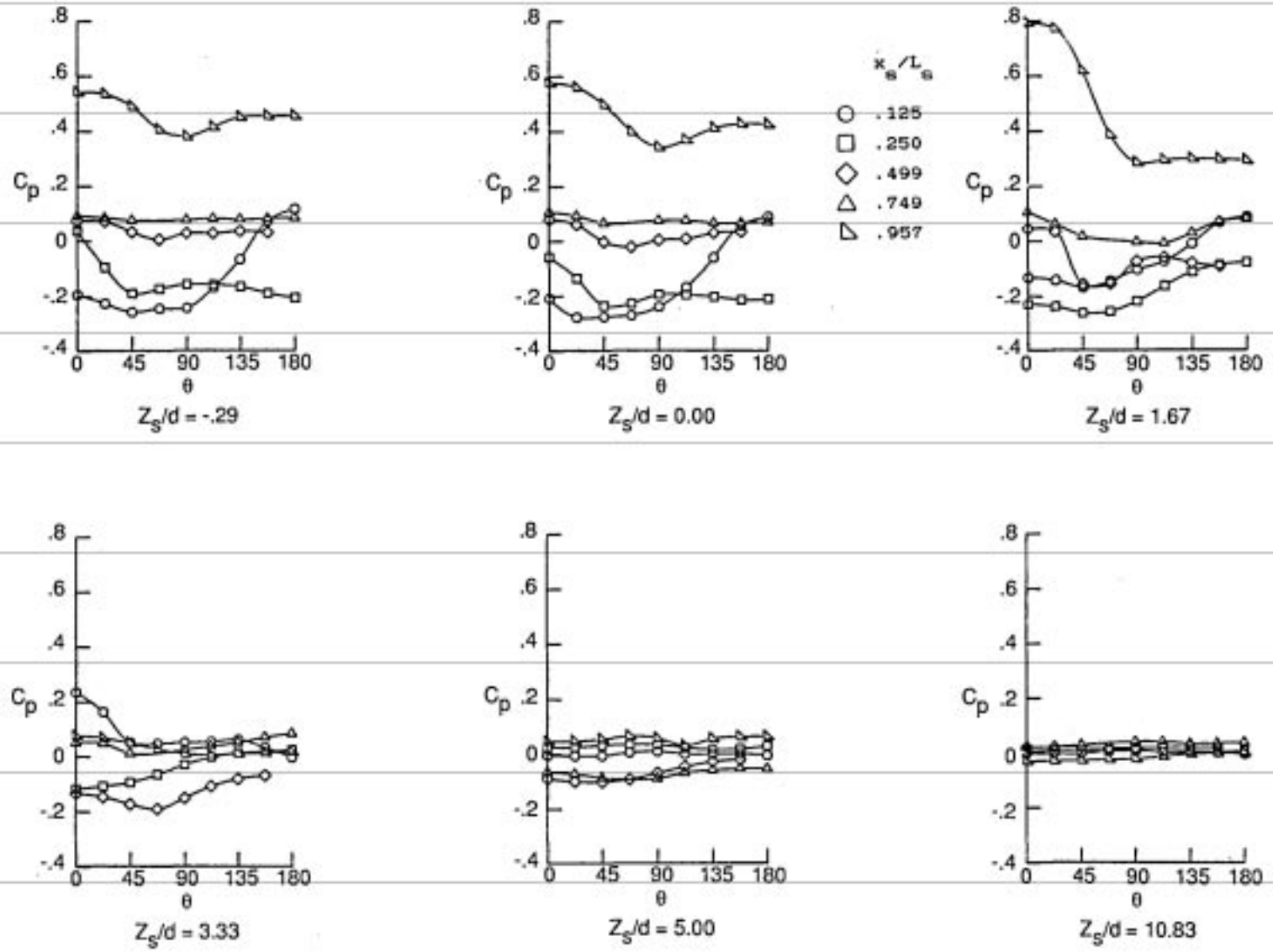
Figure 23. Store circumferential pressure distributions for cavities with doors (θ is negative for $x_s/L_s = 0.957$, see fig. 4(c)).



h = 2.432, L/h = 12.073

(a) Concluded.

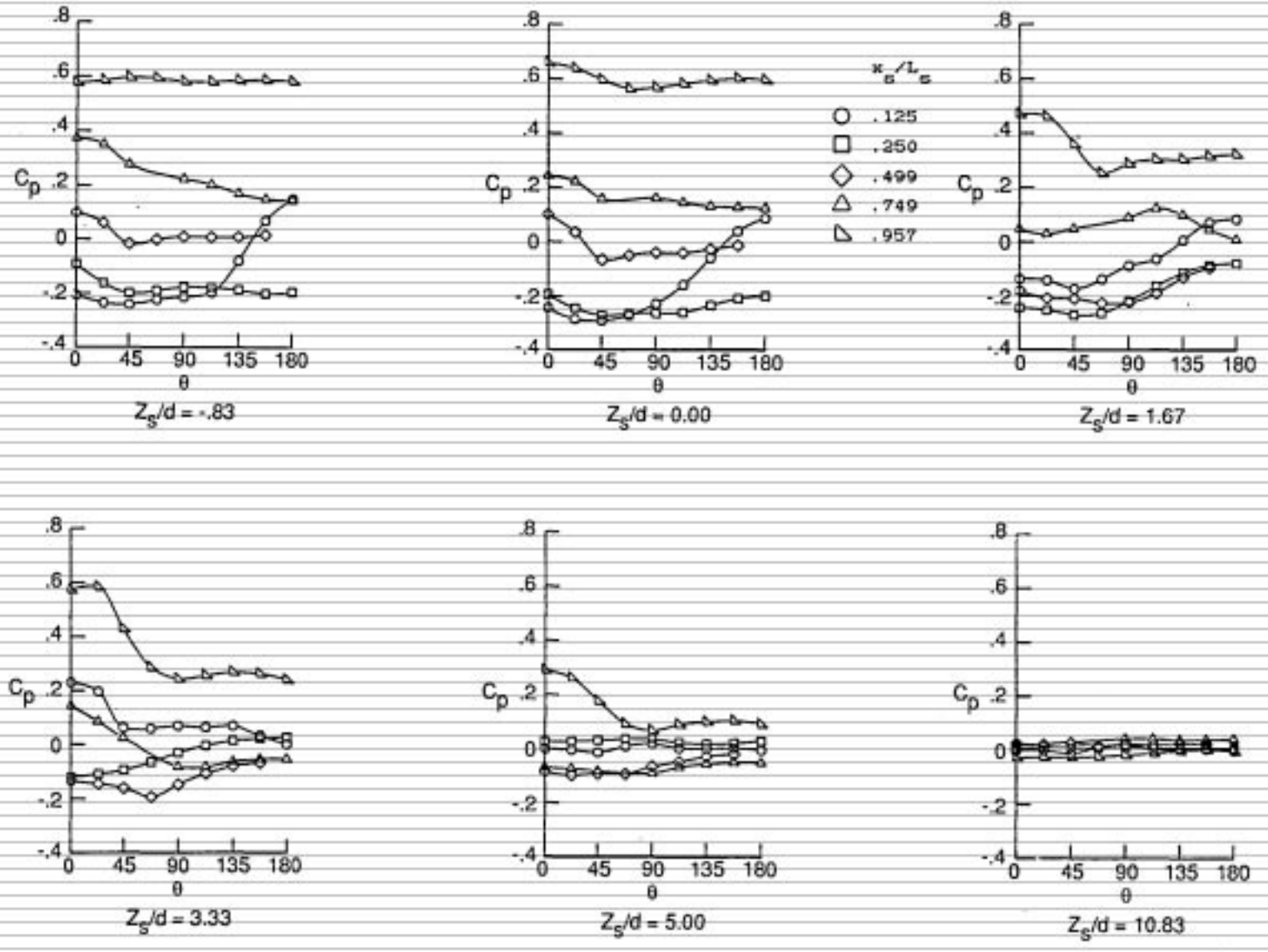
Figure 23. Continued.



h = 1.750, L/h = 16.778

(b) $M = 2.00$.

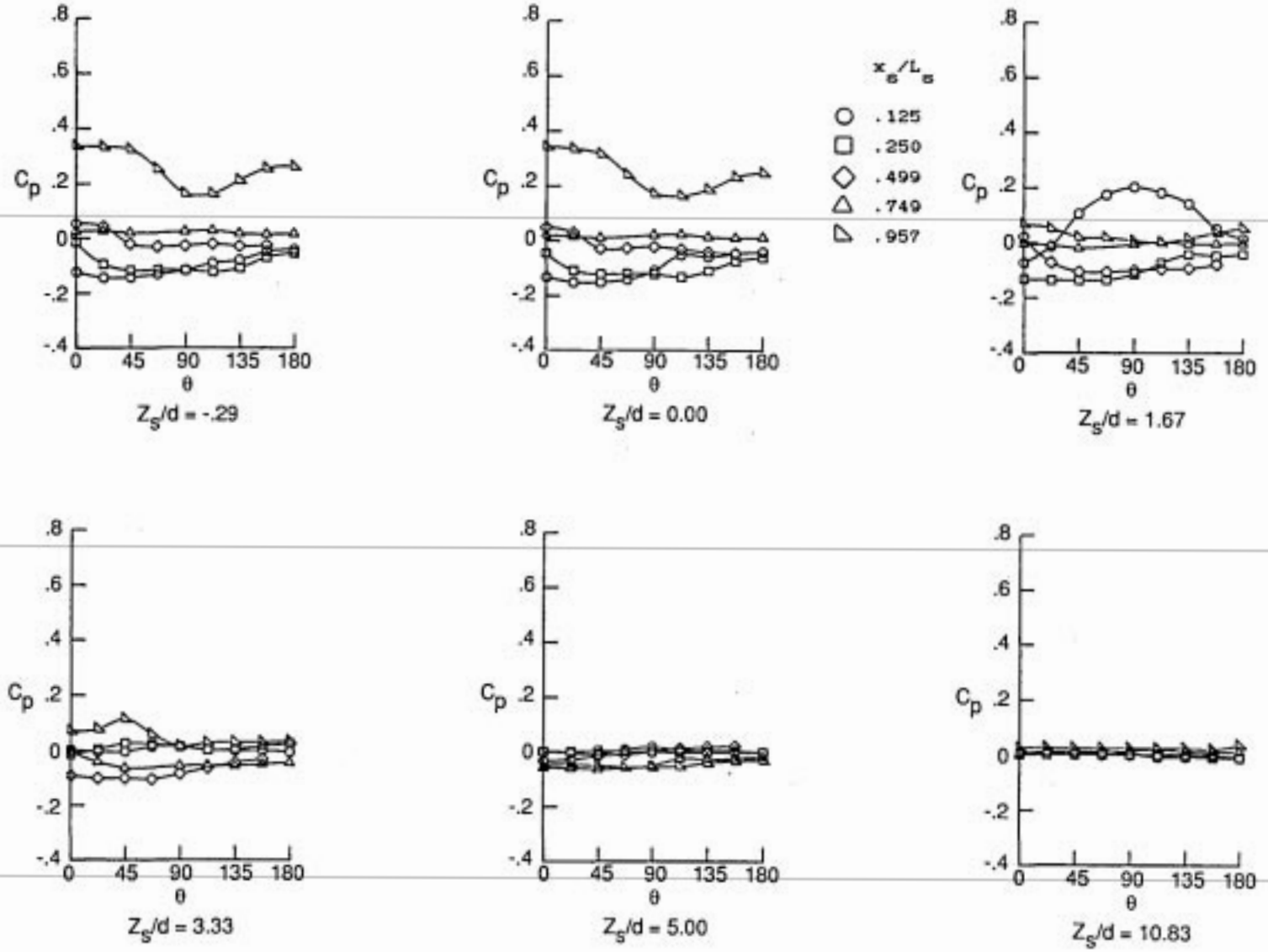
Figure 23. Continued.



h = 2.432, L/h = 12.073

(b) Concluded.

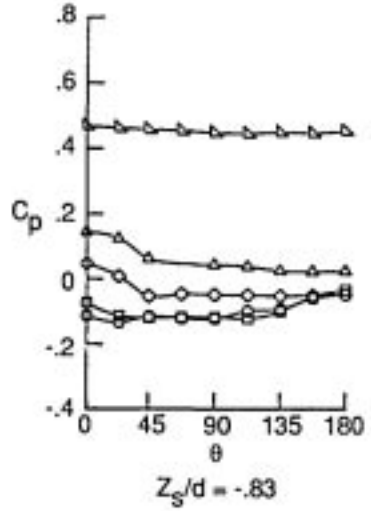
Figure 23. Continued.

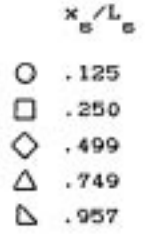


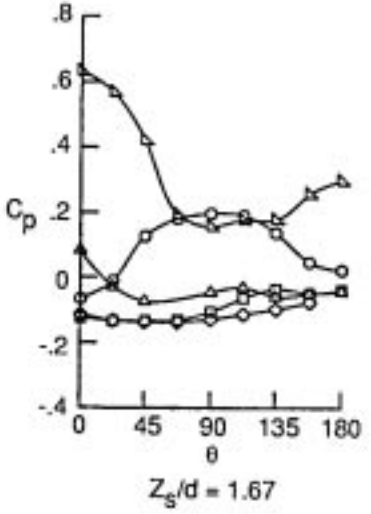
h = 1.750, L/h = 16.778

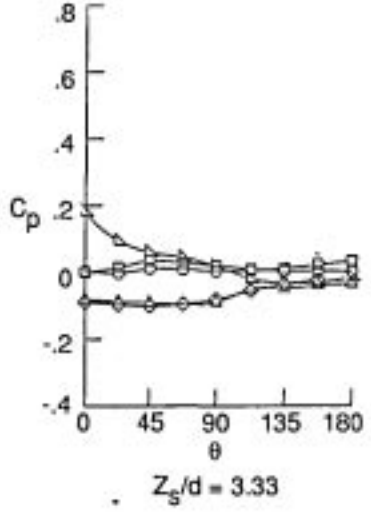
(c) $M = 2.65$.

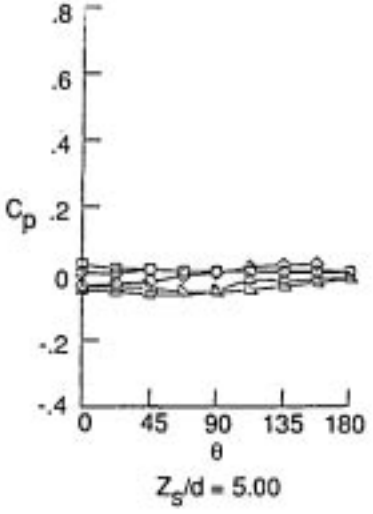
Figure 23. Continued.

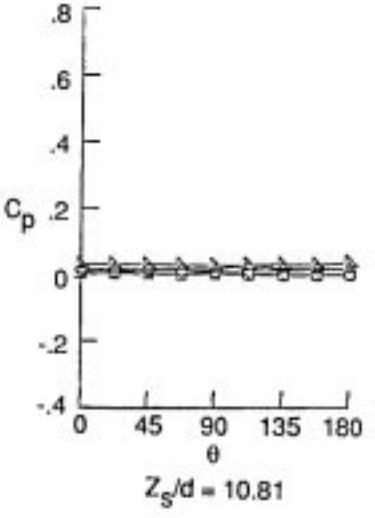








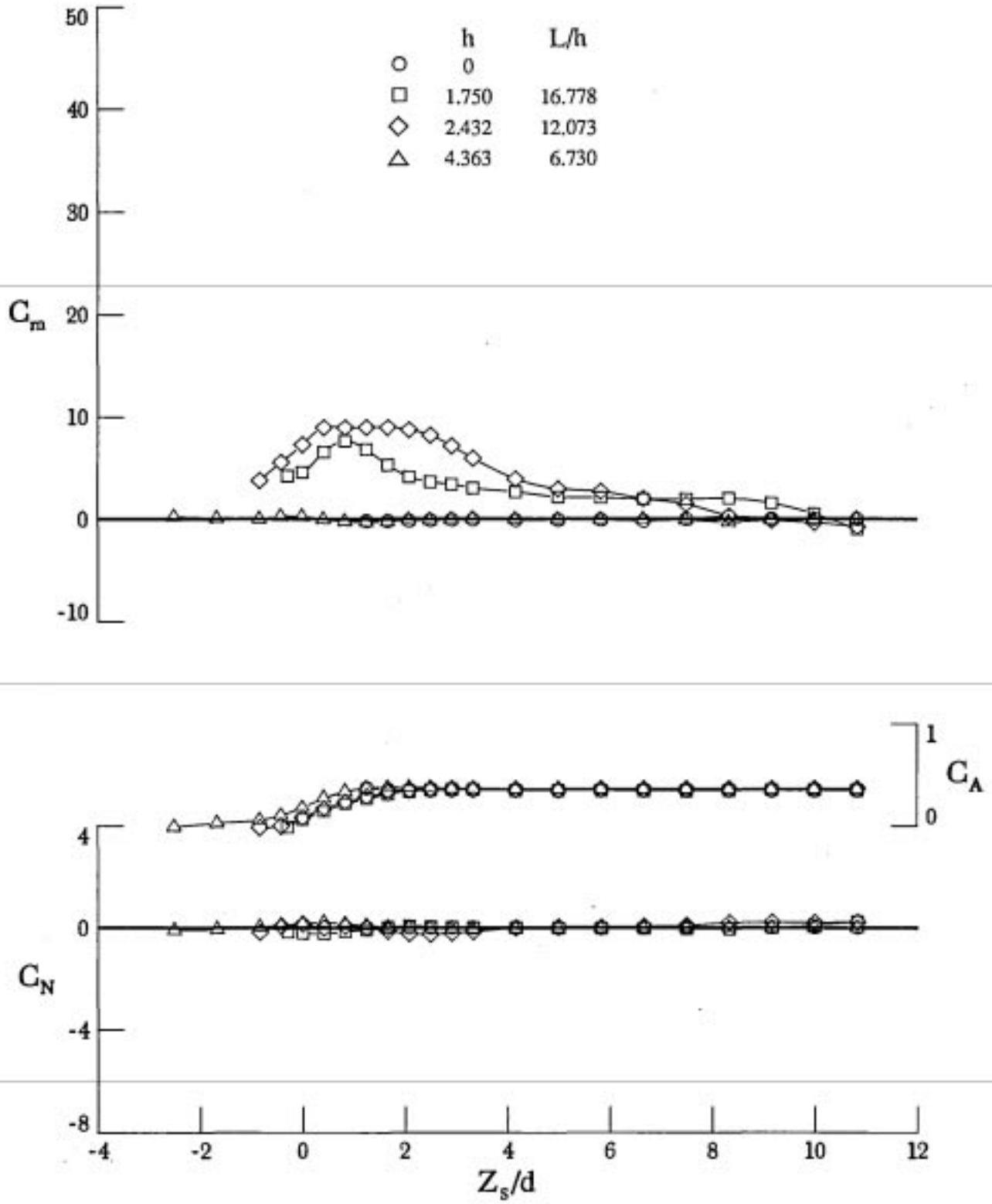




h = 2.432, L/h = 12.073

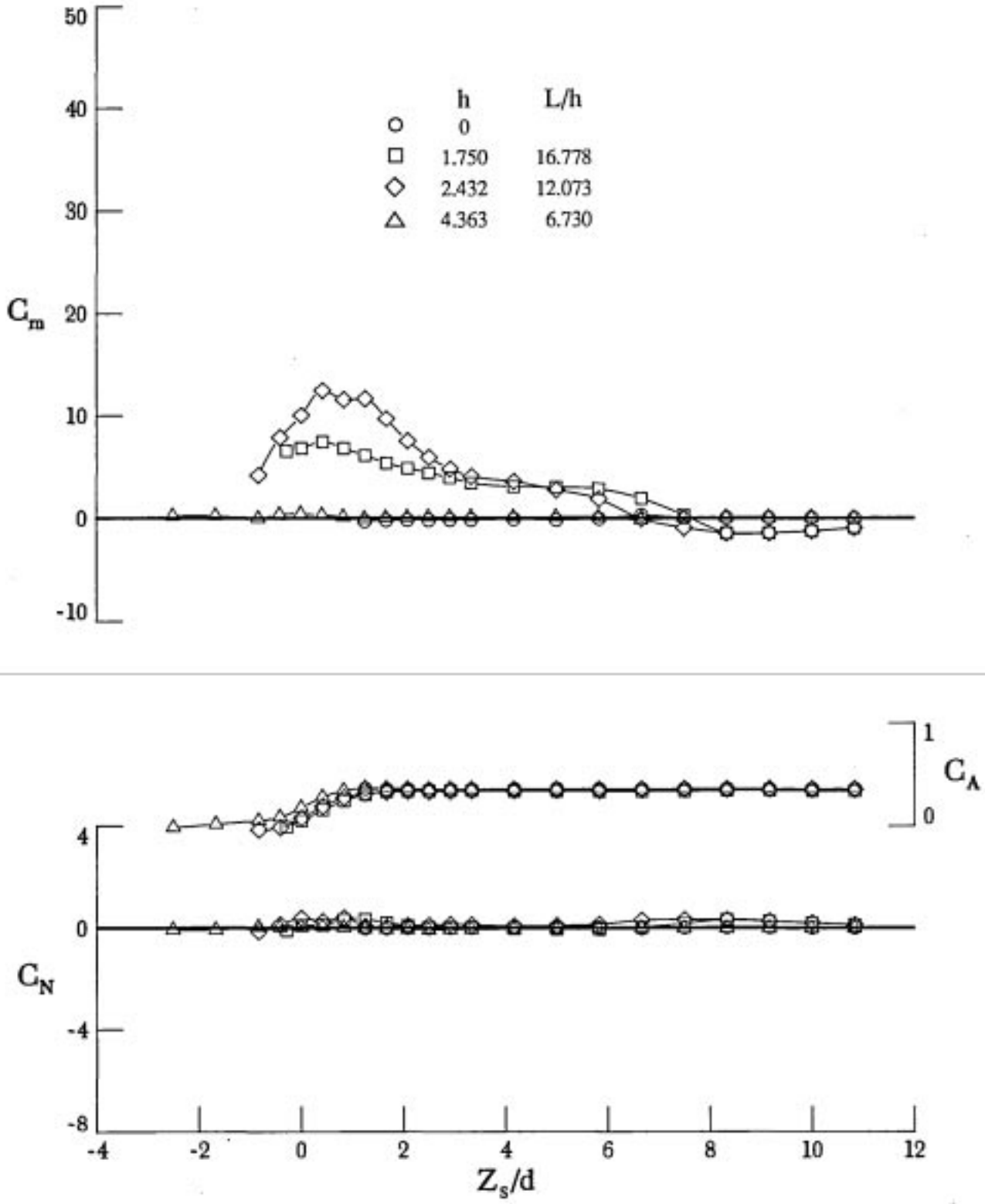
(c) Concluded.

Figure 23. Concluded.



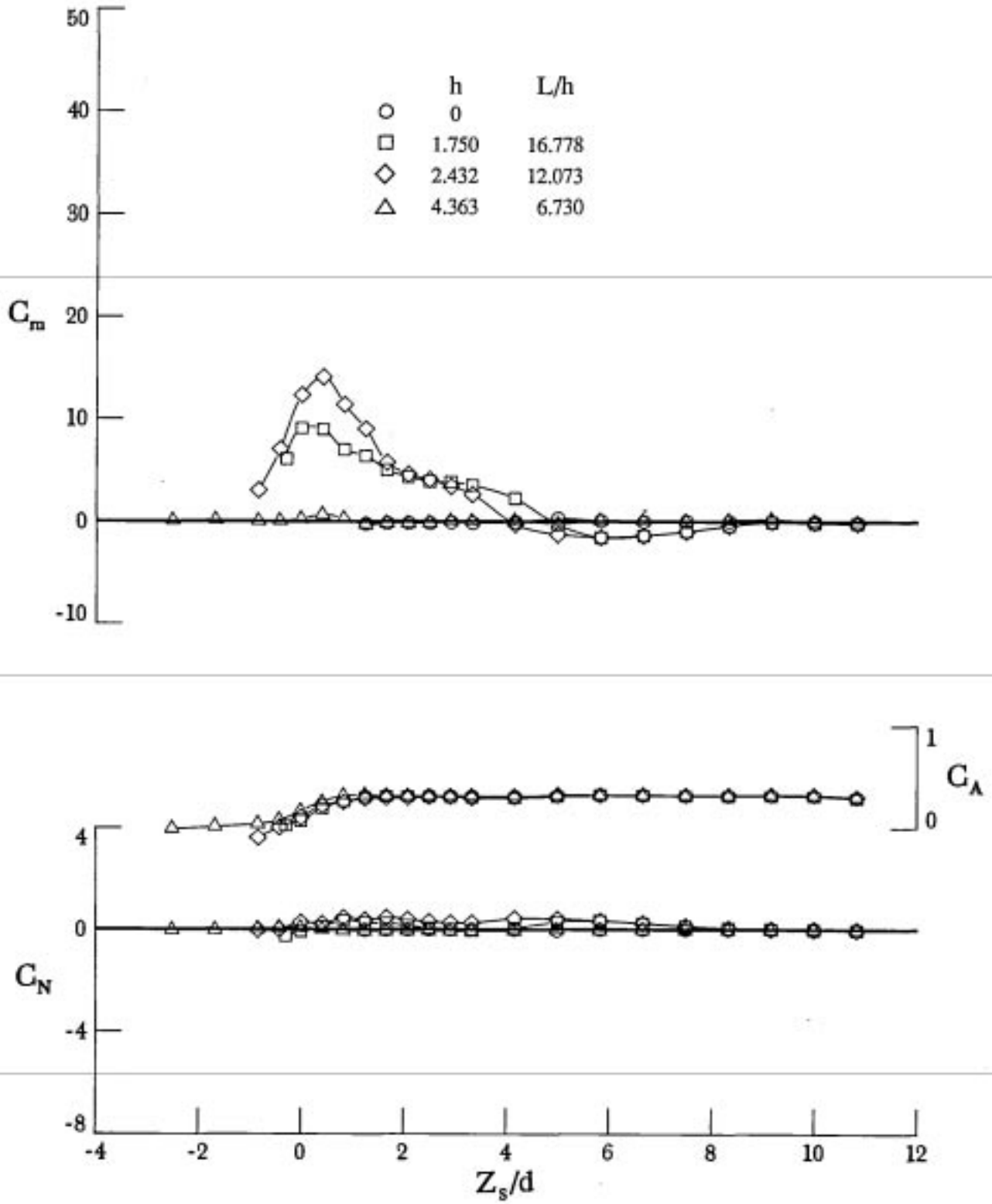
(a) $M = 1.69$.

Figure 24. Effect of cavity depth on longitudinal forces and moments of store as it separates from cavities without doors.



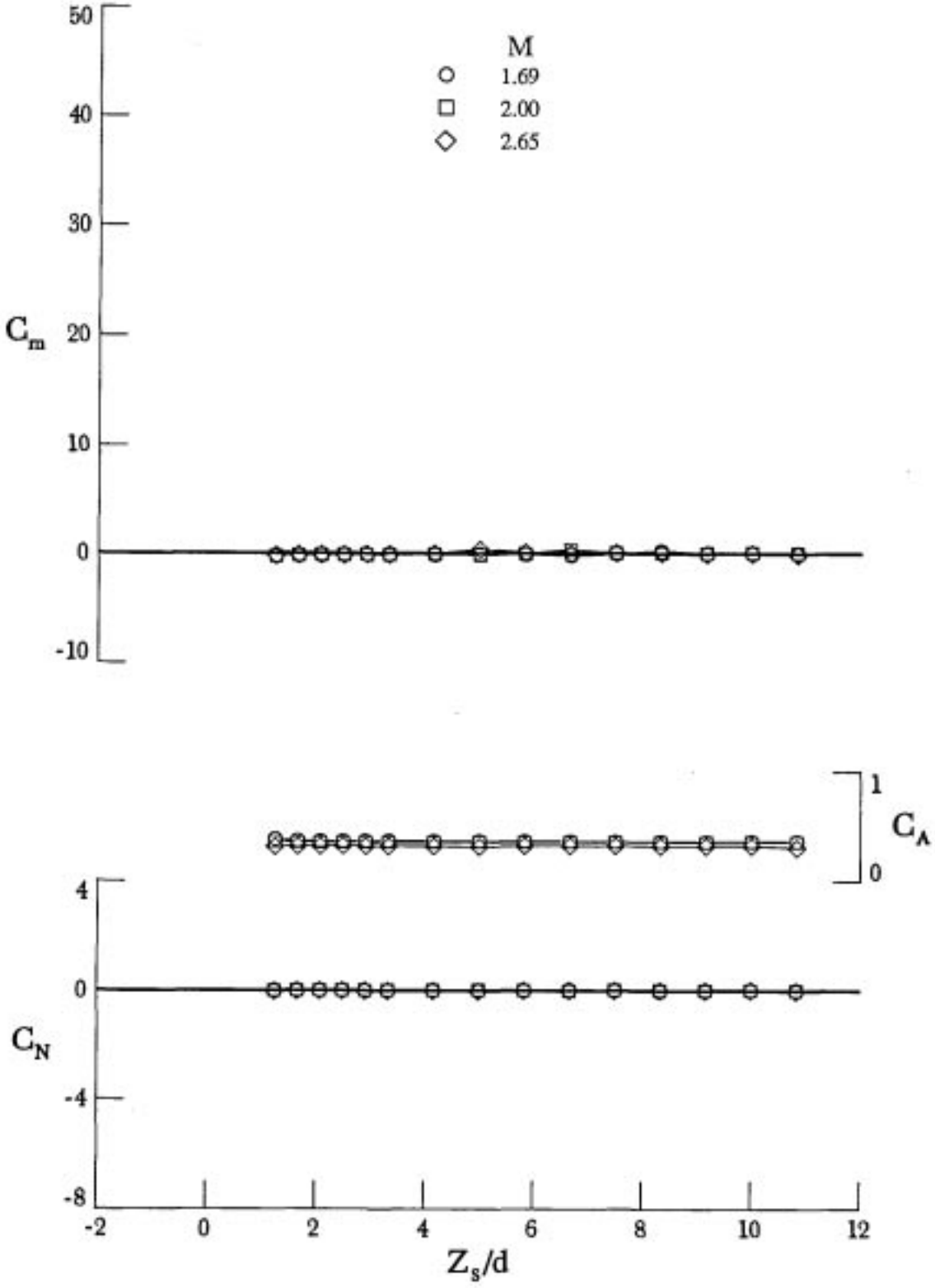
(b) $M = 2.00$.

Figure 24. Continued.



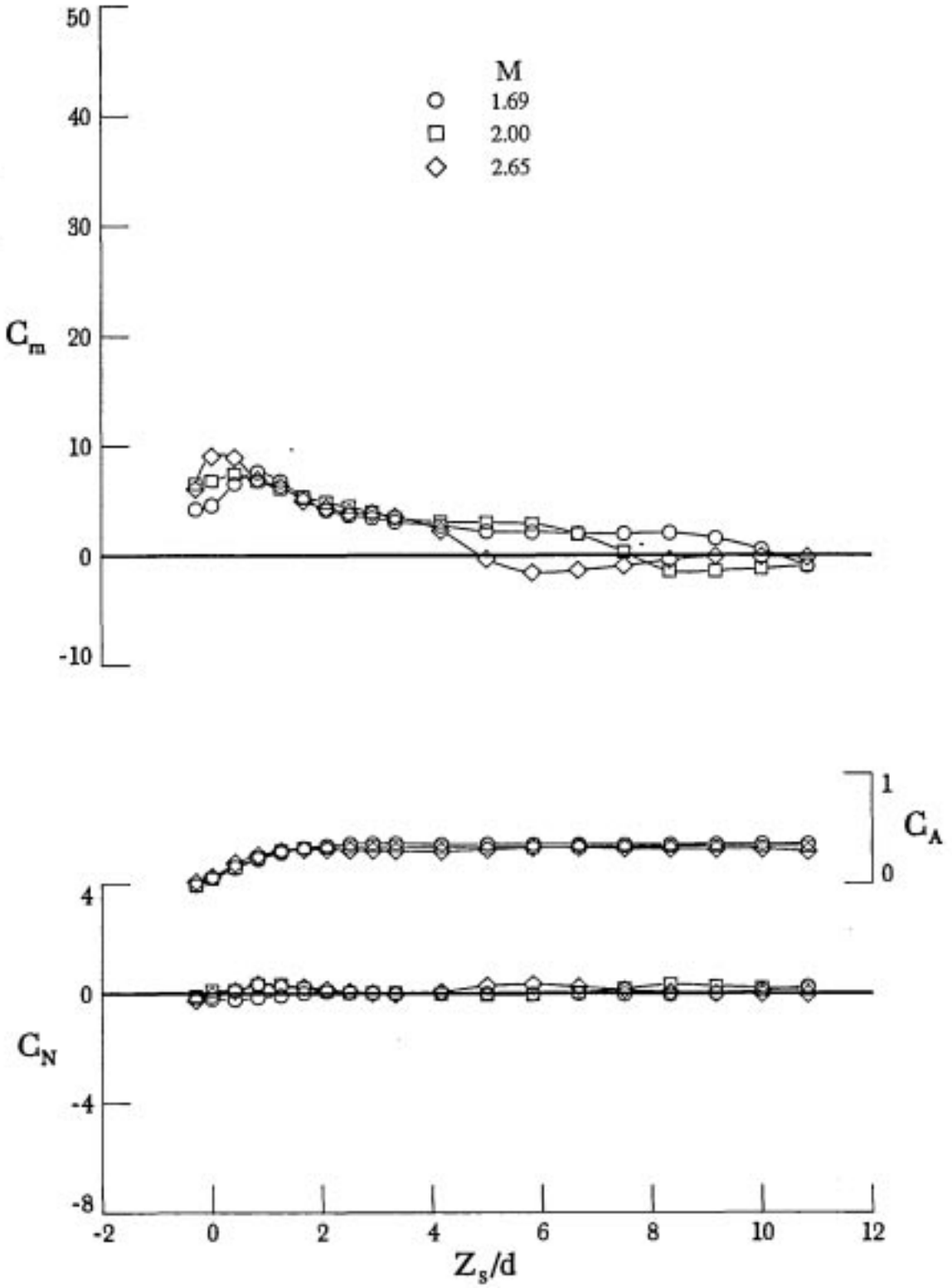
(c) $M = 2.65$.

Figure 24. Concluded.



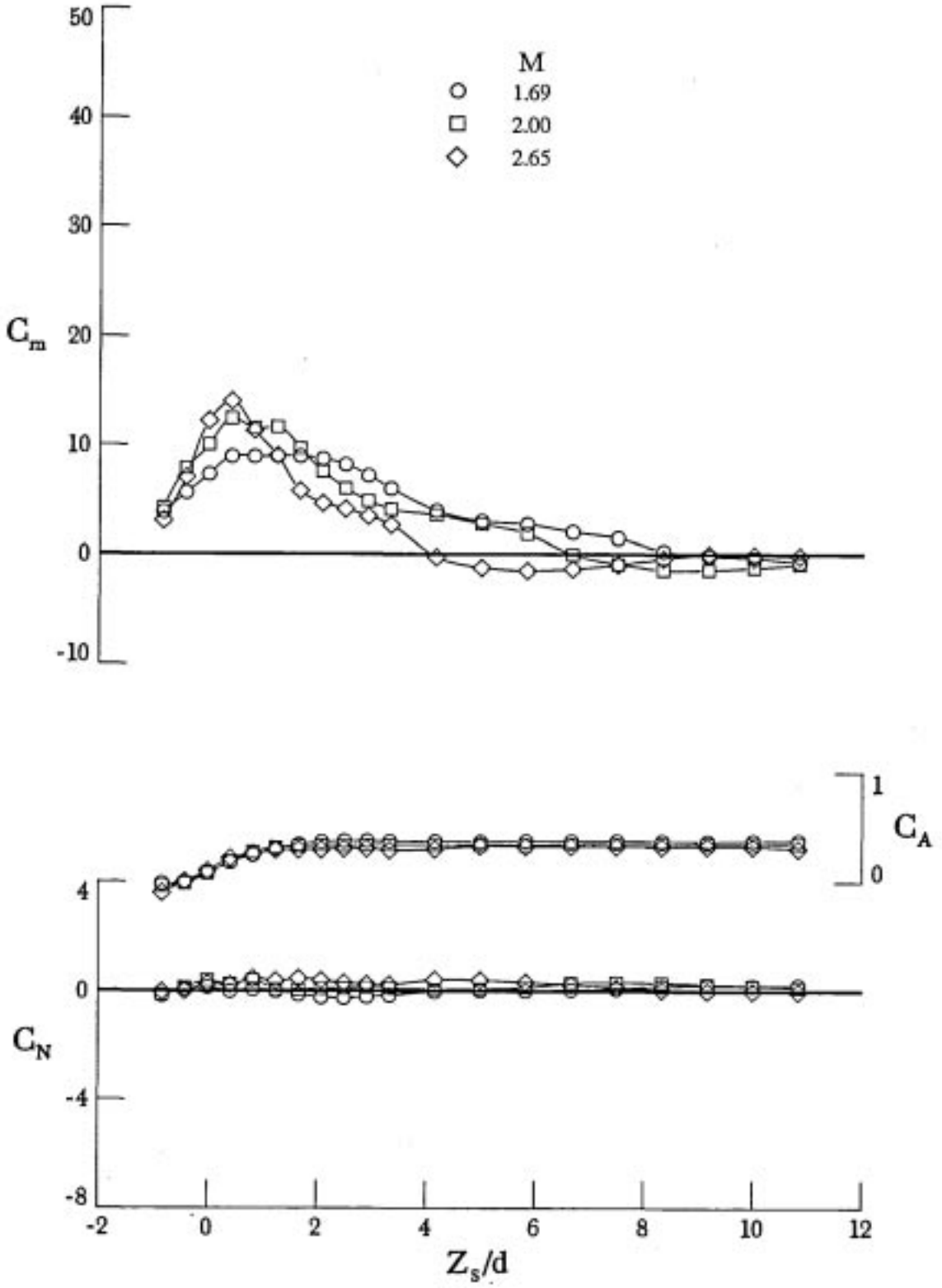
(a) $h = 0$ (flat plate).

Figure 25. Effect of Mach number on longitudinal forces and moments of store as it separates from cavities without doors.



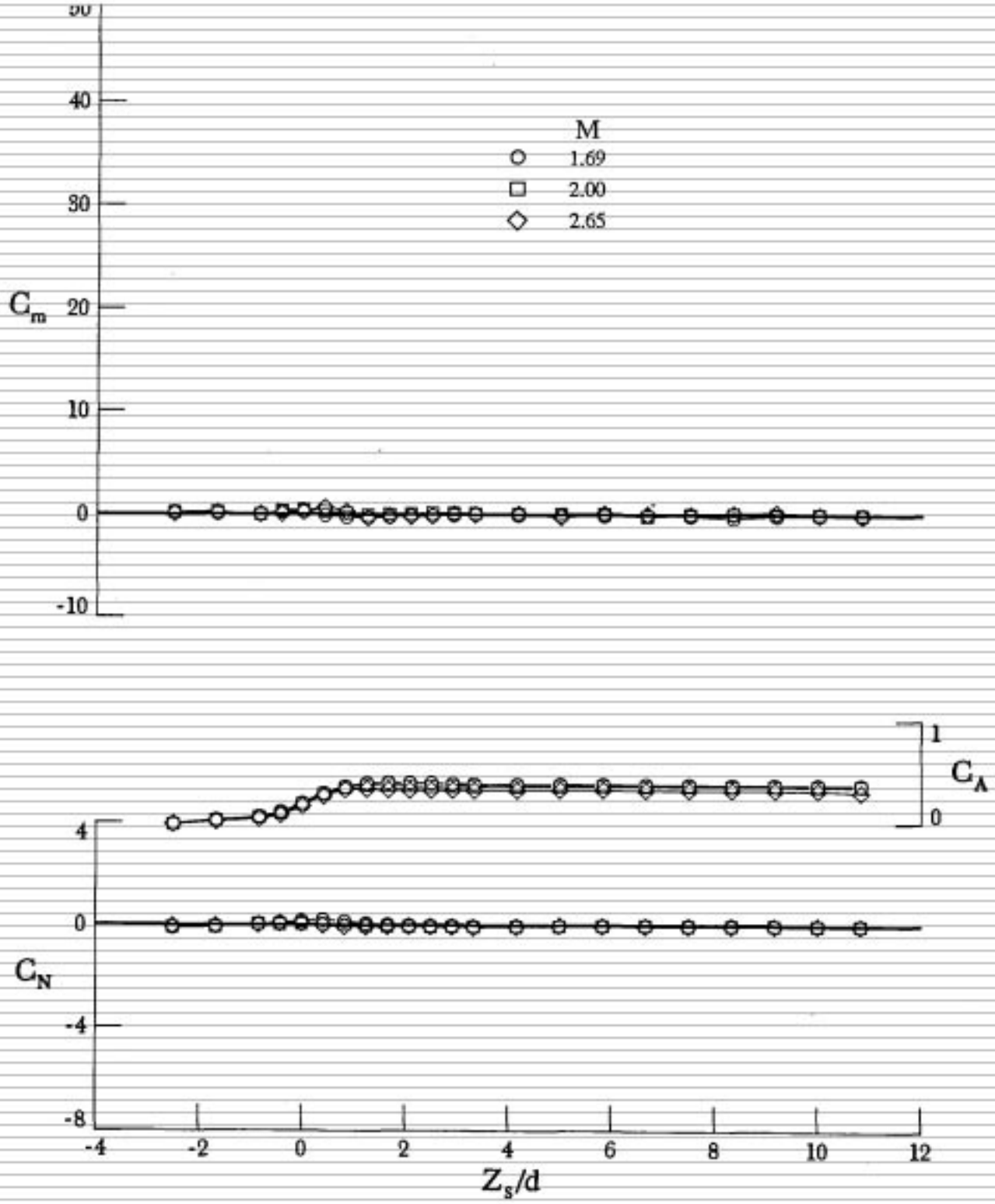
(b) $h = 1.750$; $L/h = 16.778$.

Figure 25. Continued.



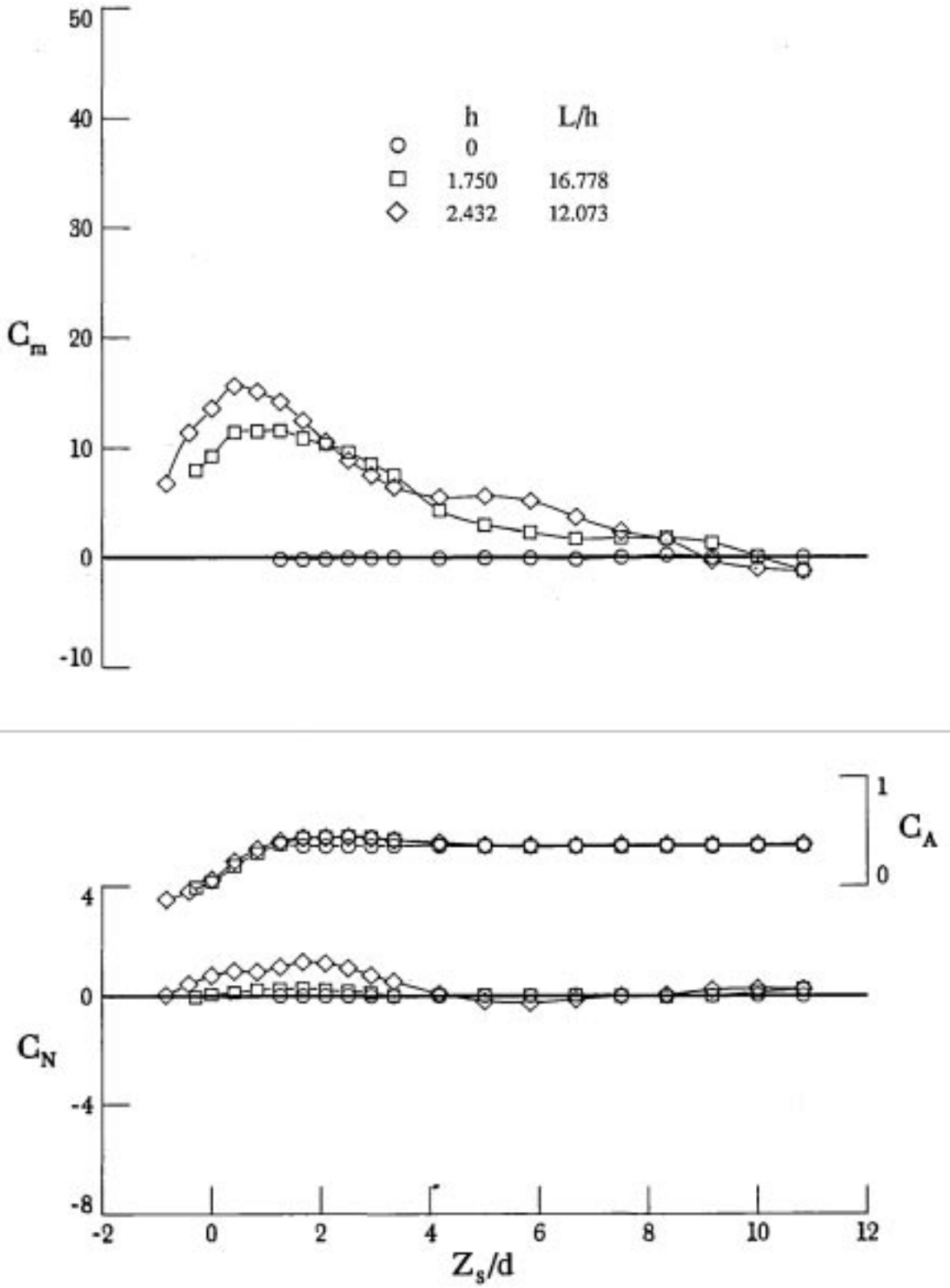
(c) $h = 2.432$; $L/h = 12.073$.

Figure 25. Continued.



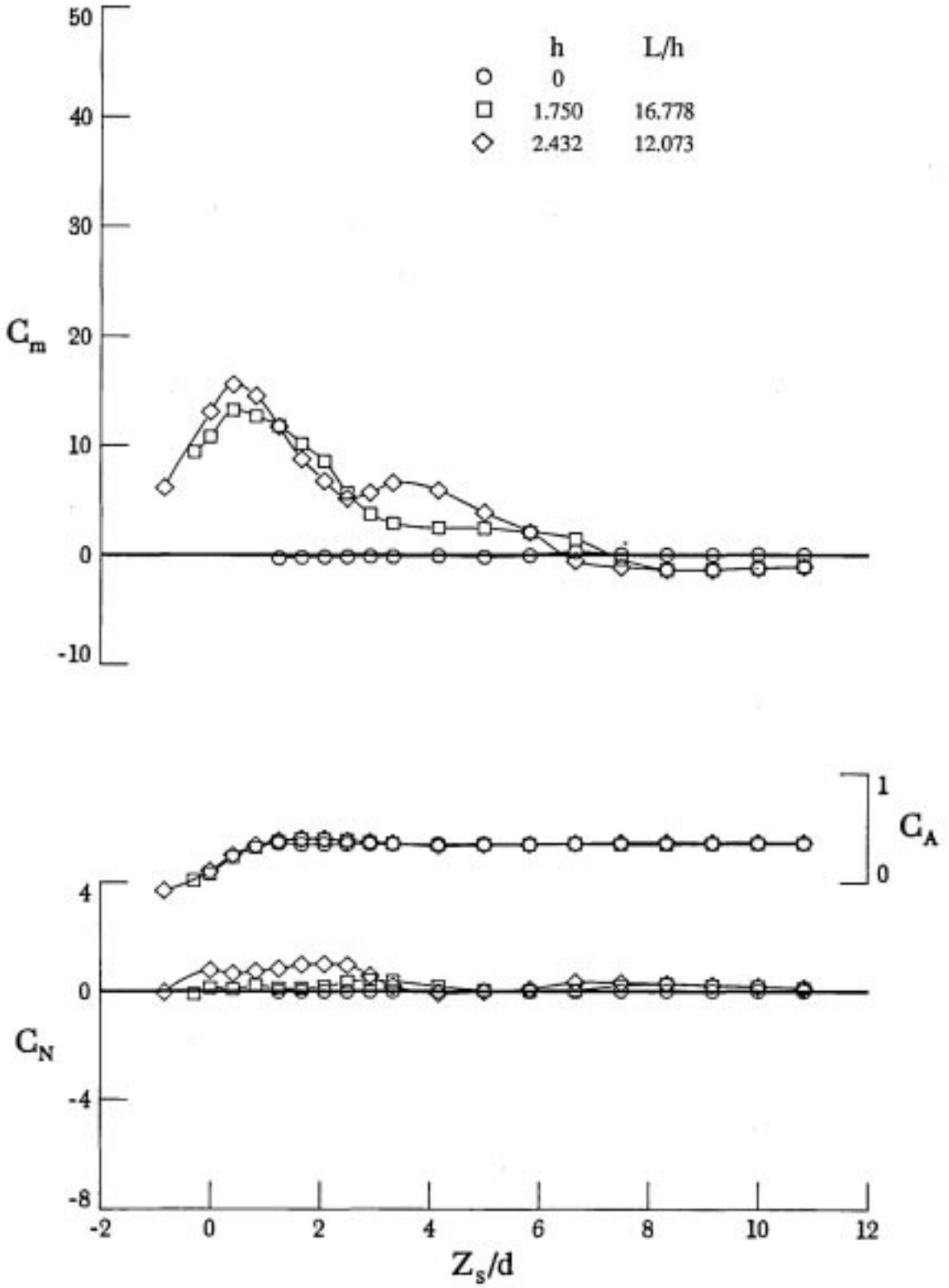
(d) $h = 4.363$; $L/h = 6.730$.

Figure 25. Concluded.



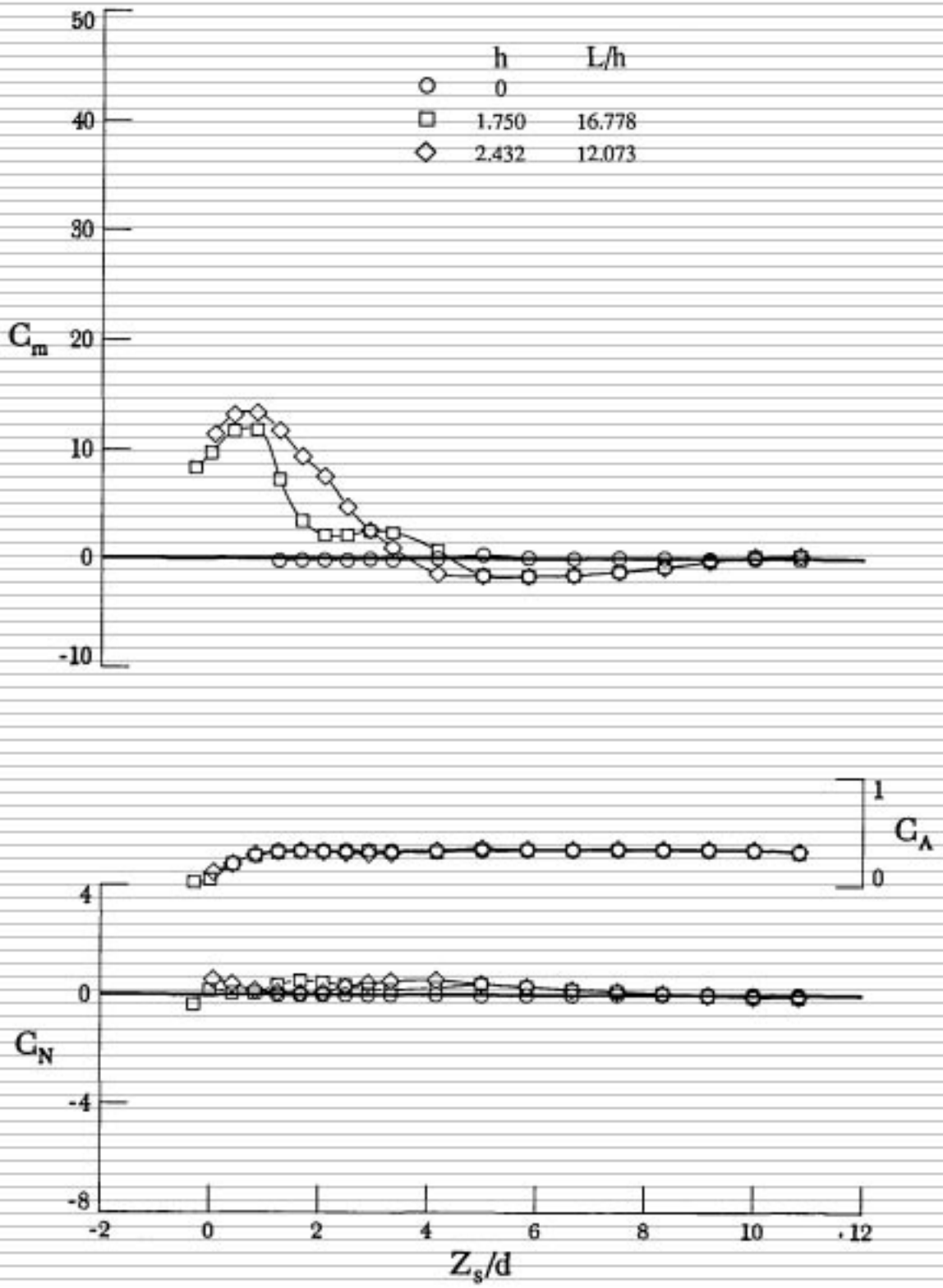
(a) $M = 1.69$.

Figure 26. Effect of cavity depth on longitudinal forces and moments of store as it separates from cavities with doors.



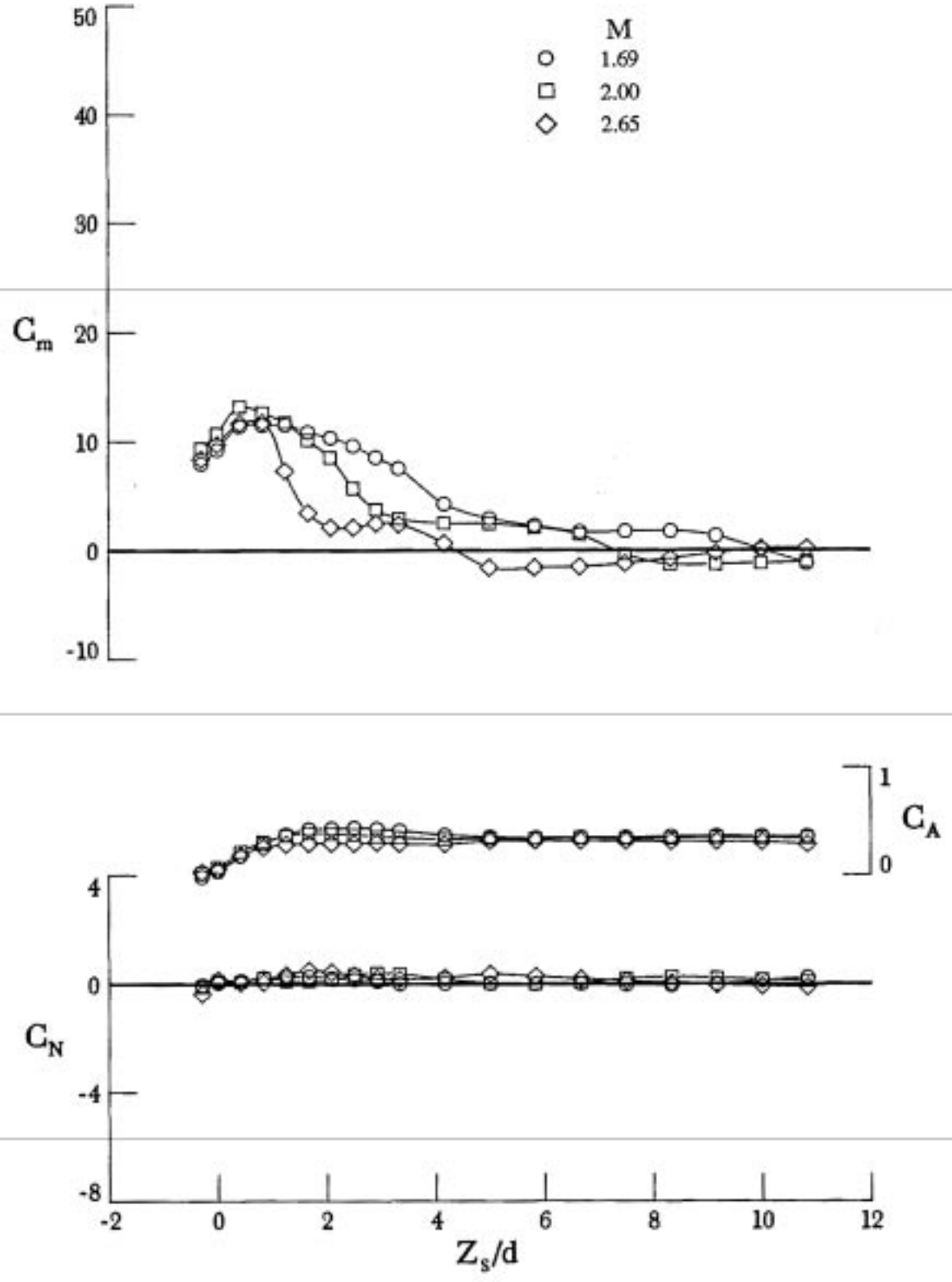
(b) $M = 2.00$.

Figure 26. Continued.



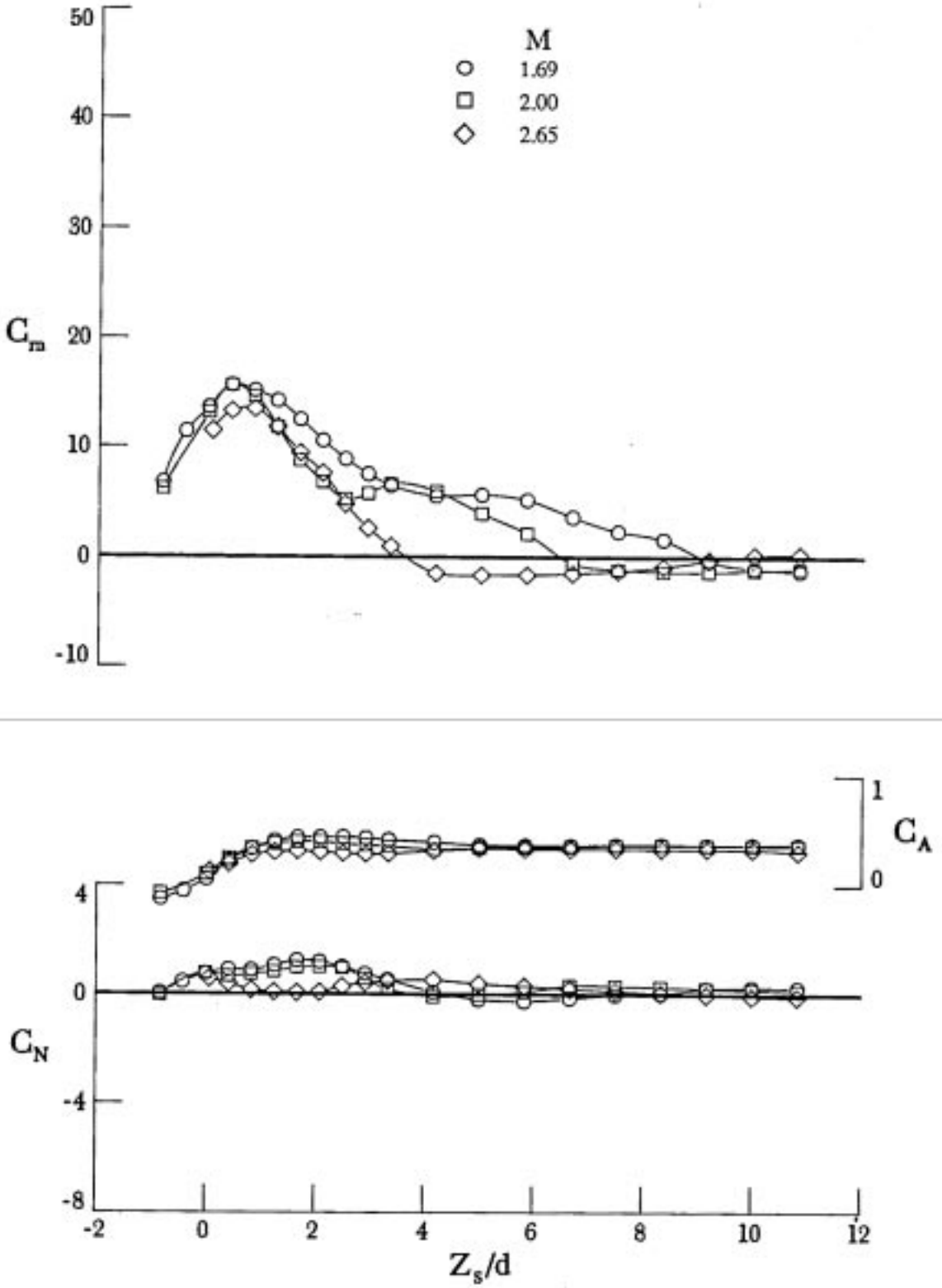
(c) $M = 2.65$.

Figure 26. Concluded.



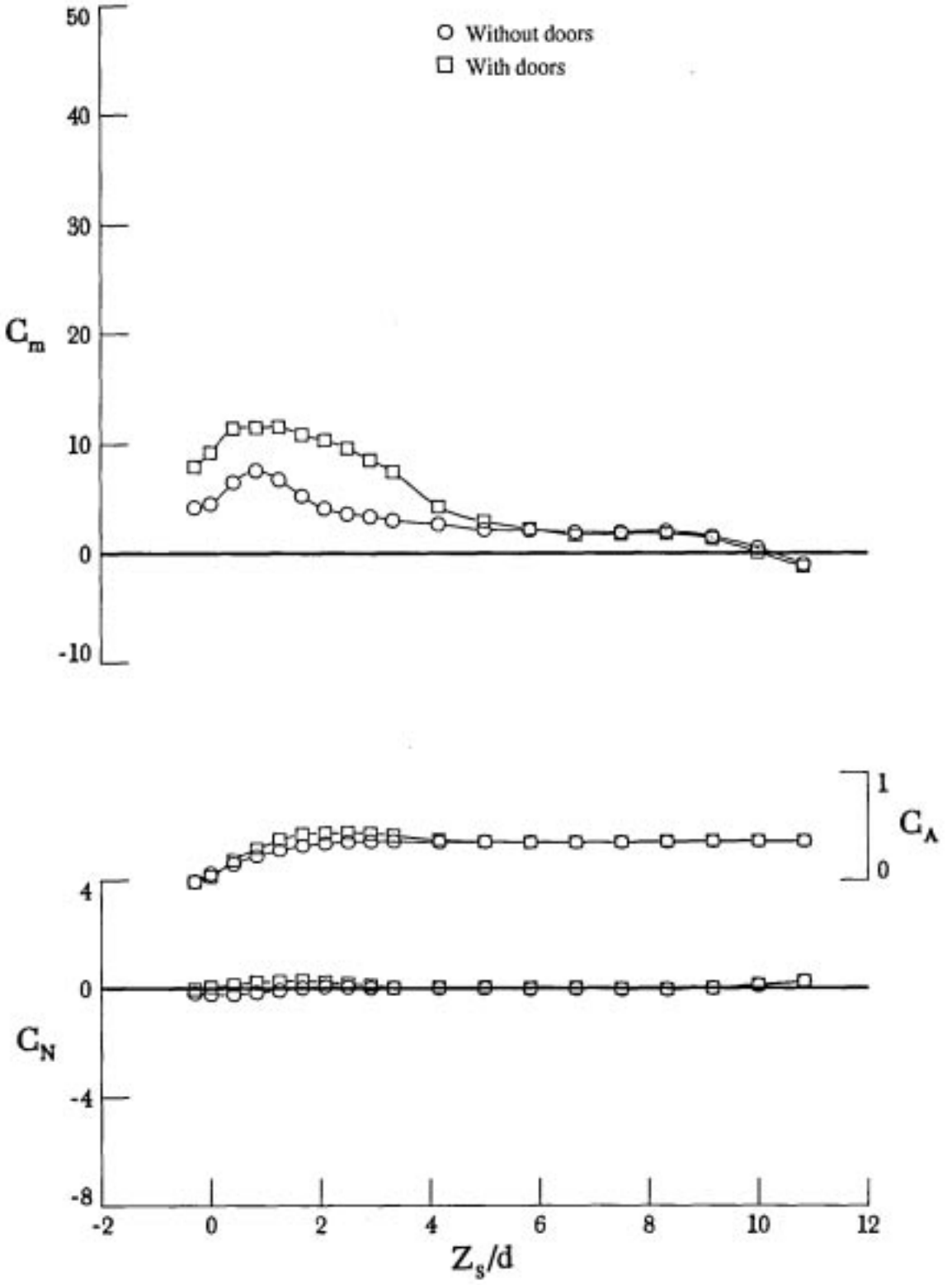
(a) $h = 1.750$; $L/h = 16.778$.

Figure 27. Effect of Mach number on longitudinal forces and moments of store as it separates from cavities with doors.



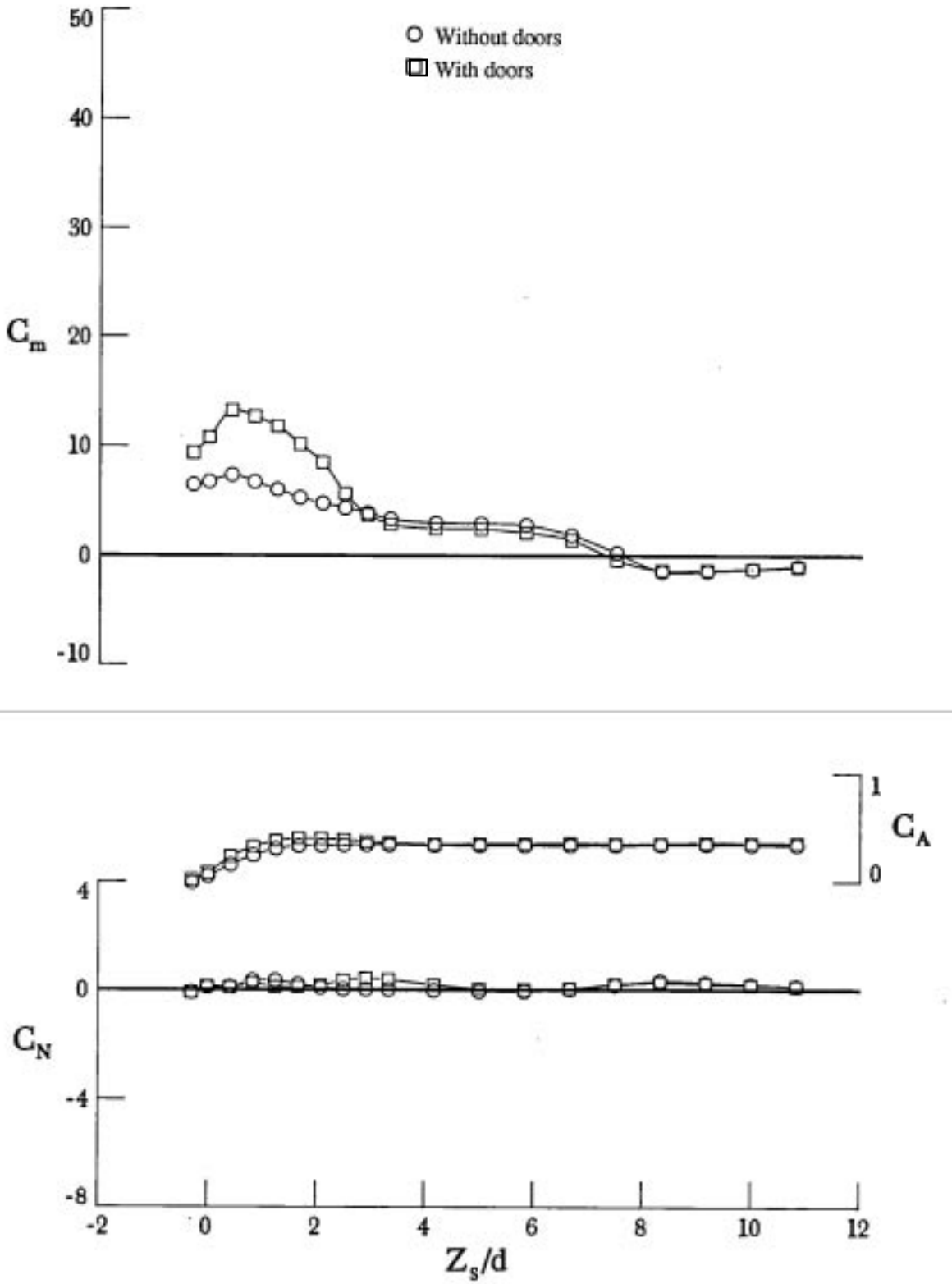
(b) $h = 2.432$; $L/h = 12.073$.

Figure 27. Concluded.



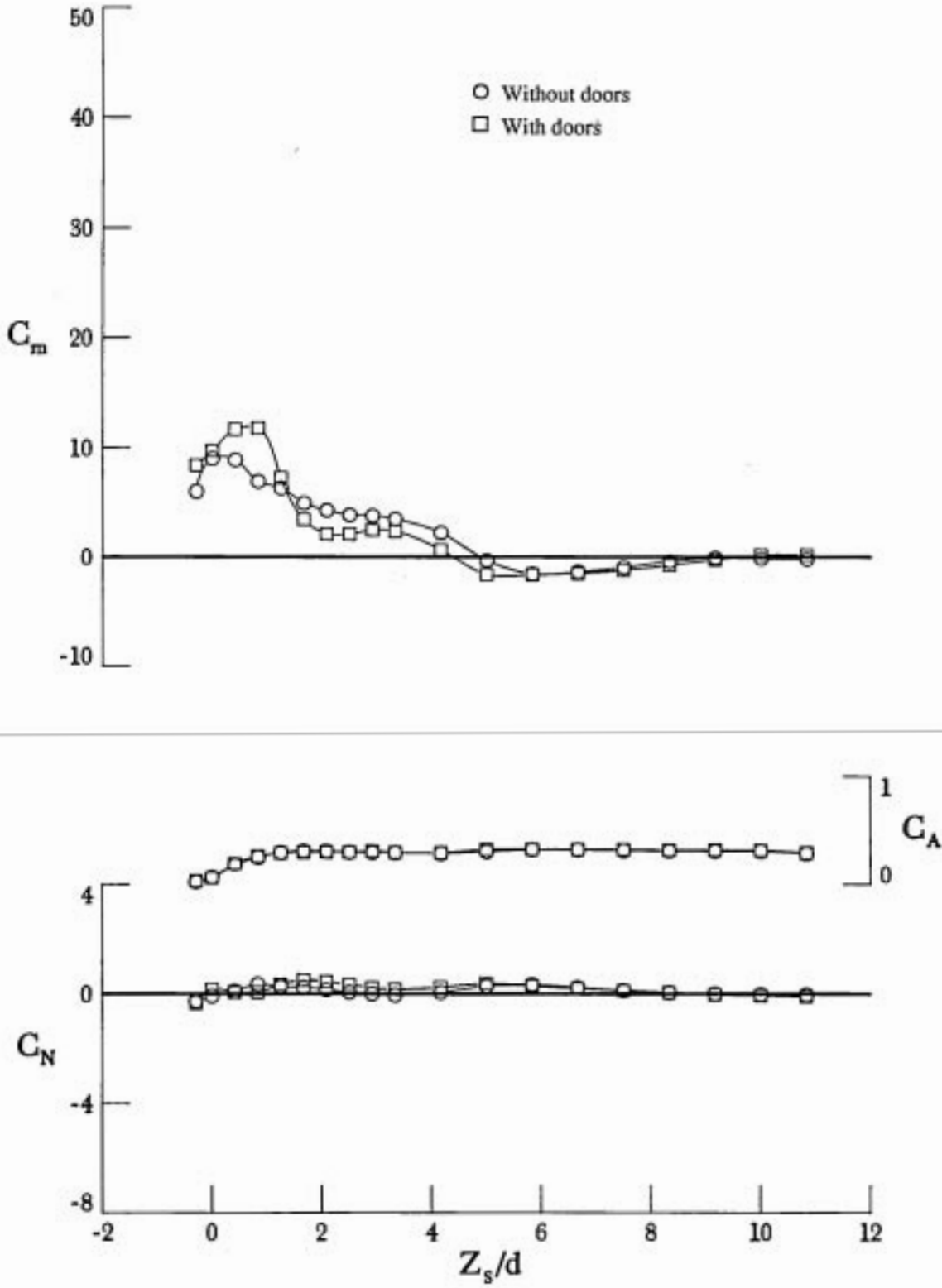
(a) $M = 1.69$.

Figure 28. Effect of cavity doors on longitudinal forces and moments of store as it separates from cavity 1.750 in. deep ($L/h = 16.778$).



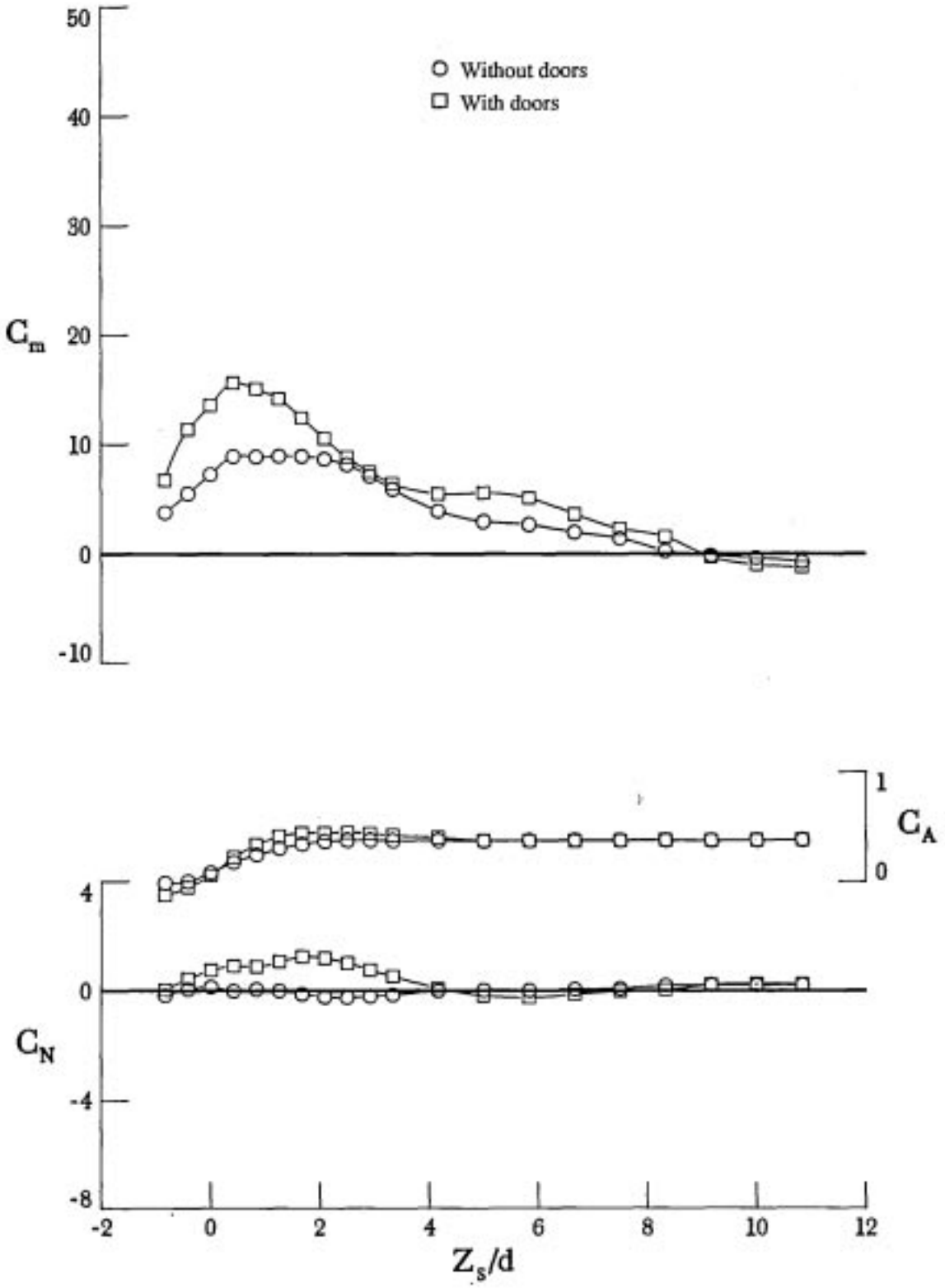
(b) $M = 2.00$.

Figure 28. Continued.



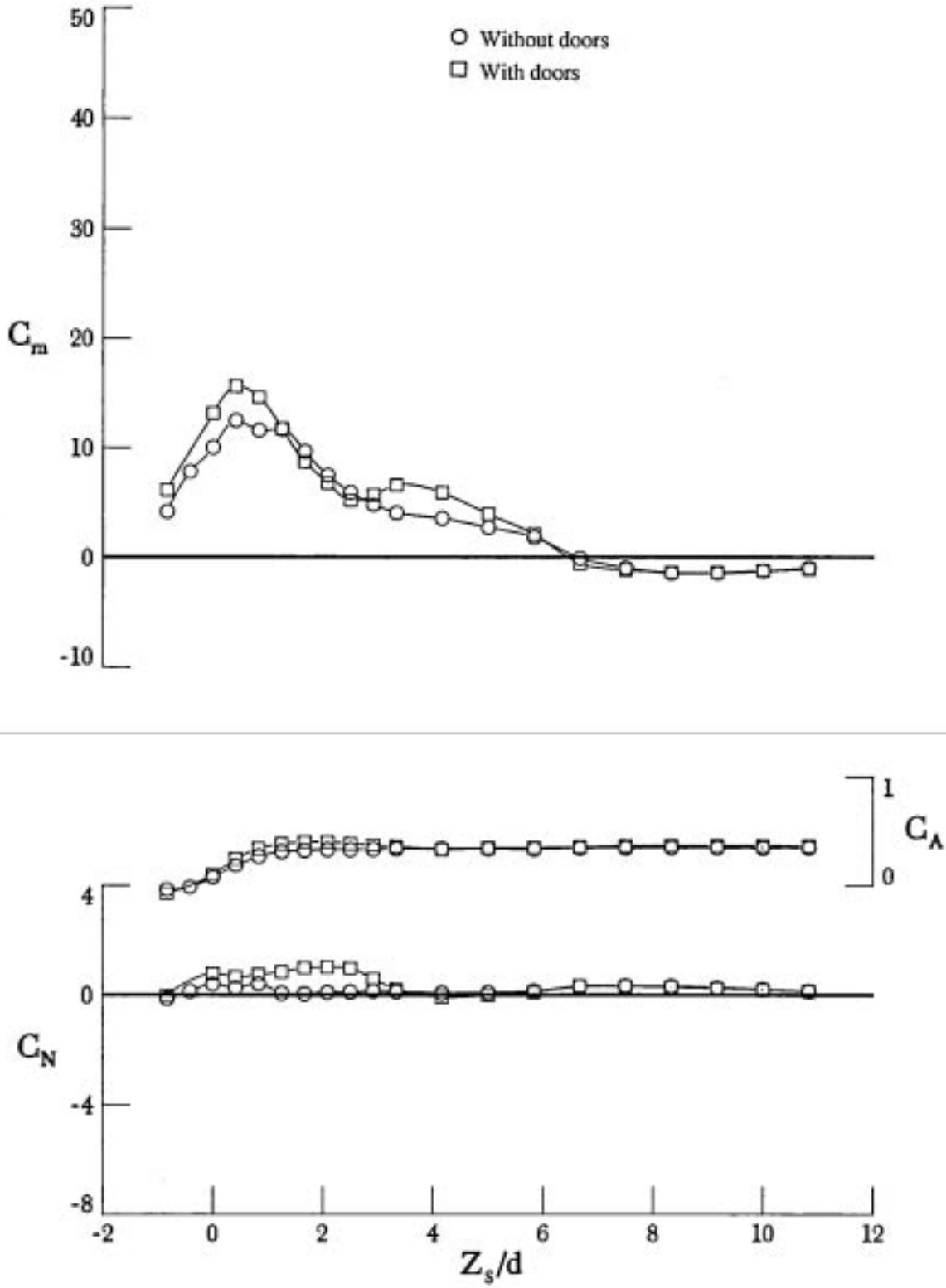
(c) $M = 2.65$.

Figure 28. Concluded.



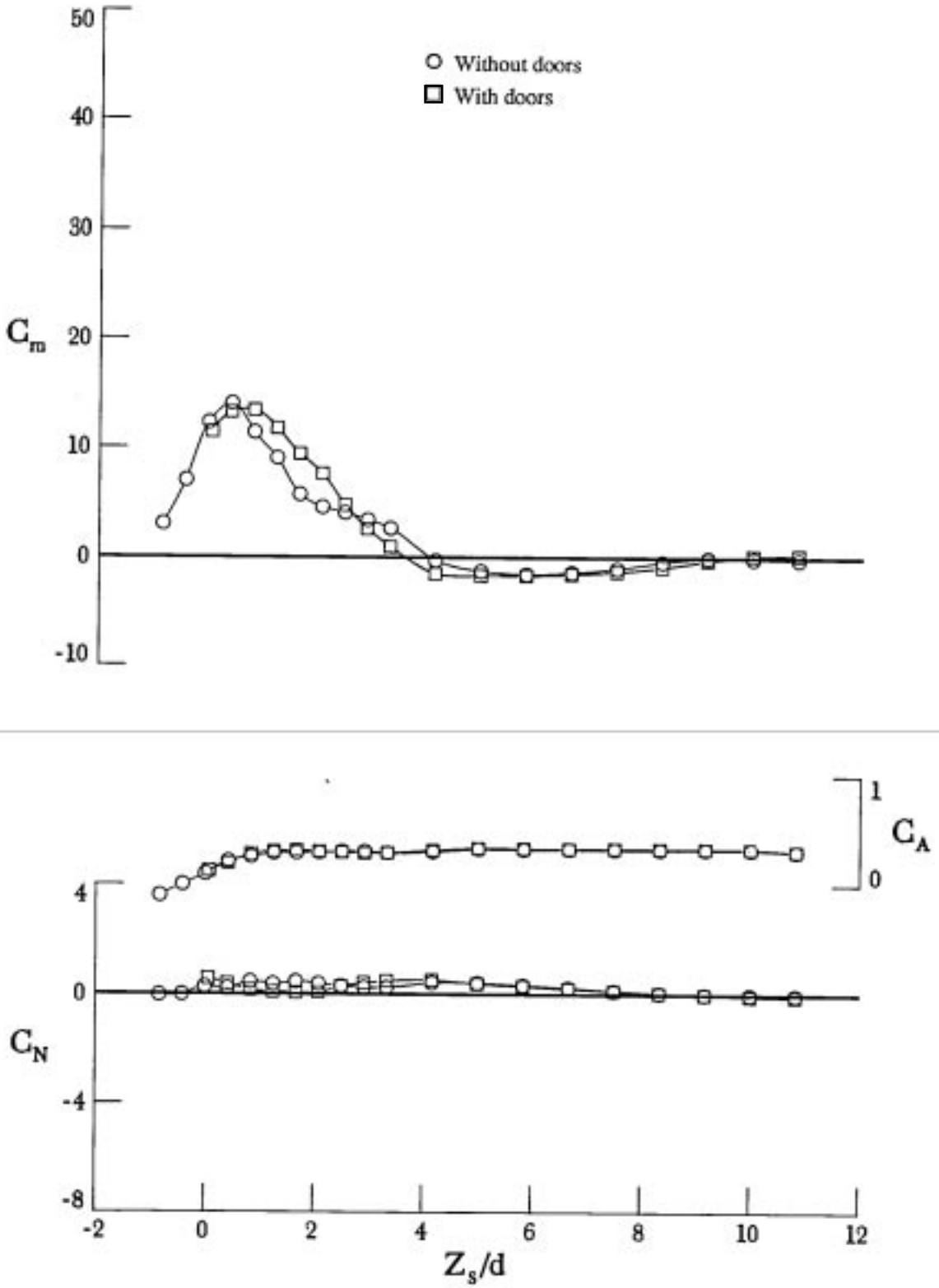
(a) $M = 1.69$.

Figure 29. Effect of cavity doors on longitudinal forces and moments of store as it separates from cavity 2.432 in. deep ($L/h = 12.073$).



(b) $M = 2.00$.

Figure 29. Continued.



(c) $M = 2.65$.

Figure 29. Concluded.

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15. Supplementary Notes

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Floyd J. Wilcox, Jr., and Dana K. Forrest: Langley Research Center, Hampton, Virginia.

16. Abstract

An experimental investigation has been conducted to measure the forces, moments, and pressure distributions on a generic store separating from a rectangular box cavity contained in a flat-plate surface at supersonic speeds. Pressure distributions inside the cavity and oil flow and vapor-screen photographs of the cavity flow field were also obtained. The measurements were obtained for the store separating from a flat-plate surface, from two shallow cavities having length-to-depth ratios (L/h) of 16.778 and 12.073, and from a deep cavity having $L/h = 6.730$. Measurements for the shallow cavities were obtained both with and without rectangular doors attached to sides of the cavities. The tests were conducted at free stream Mach numbers of 1.69, 2.00, and 2.65 for a free-stream Reynolds number per foot of 2×10^6. Presented are a discussion of the results, a complete tabulation of the pressure data, figures of both the pressure and force and moment data, and representative oil flow and vapor-screen photographs.

17. Key Words (Suggested by Author(s))	18. Distribution Statement
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