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Robert L. Stallings, Jr.
Lockheed Engineering & Sciences Company • Hampton, Virginia

Elizabeth B. Plentovich and Maureen B. Tracy
Langley Research Center • Hampton, Virginia

Michael J. Hemsch
Lockheed Engineering & Sciences Company • Hampton, Virginia

National Aeronautics and Space Administration
Langley Research Center • Hampton, Virginia 23681-0001

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Contents

Summary

An experimental study has been conducted at subsonic and transonic speeds to investigate the effects of several passive venting techniques on the pressure distributions of both shallow cavities and deep cavities. For shallow cavities, the passive venting techniques that were investigated consisted of (1) porous floors, (2) slot vents located at each end of solid floors, (3) slot vents located at each end of porous floors, and (4) pipe vents on solid floors. For deep cavities, the passive venting techniques that were investigated consisted of (1) lip vents located at the outer edges of the front and rear walls of a cavity with a solid floor and (2) lip vents located at the outer edges of the front and rear walls of a cavity with a porous floor. The cavity passive venting models were mounted in a flat plate model and were tested at Mach numbers from 0.20 to 0.95. The shallow cavities had lengths of 32.16 and 42.00 in. and a depth of 2.40 in., resulting in cavity length-to-depth ratios (l/h) of 13.40 and 17.50, respectively. The deep cavity had a length of 32.16 in. and a depth of 4.80 in. ($l/h = 6.70$). All cavities had a width of 9.60 in.

Results from the test show that the porous floor and the porous floor combined with slot vents had the greatest effect on the shallow cavity pressure distributions and resulted in distributions that were representative of deeper cavities. These two configurations had similar floor pressure distributions and would therefore be expected to have similar store separation characteristics. For the porous floor configuration, increasing the percentage of floor area that was porous (porous floor area was varied by covering the floor with tape equal distances forward and aft of the cavity midlength for the full cavity width) from 50 percent to 100 percent had no significant impact on the shallow cavity floor pressure distributions. A small amount of floor porosity or slot vents at each end of the 32.16-in-long, solid floor, shallow cavity resulted in the cavity sidewall and floor pressure distributions collapsing into a narrow band. The pipe vents had little effect on the shallow cavity pressure distributions, even though the pipe vent area was double the area that provided significant effects at supersonic speeds. The lip vents had only small effects on the pressure distributions for the deep cavity with either a solid or porous floor for most of the test range of Mach number.

Introduction

For all flight speeds, the internal carriage of stores can result in reduced interference drag and lower radar cross section for the parent aircraft. Internal carriage does have, however, some undesirable features such as increased aircraft volume requirements, more constraints on store geometry and size, adverse store separation characteristics for the more shallow weapons bays, and large dynamic pressure fluctuations for the deeper weapons bays. Several studies reported in the literature indicate that at supersonic speeds, passive venting techniques applied to weapons bays or cavities can improve the latter two undesirable features. For example, as discussed in reference 1, the addition of porosity and a vent chamber to the floor of a shallow cavity could improve store separation characteristics. Also, results presented in reference 2 show that the addition of pipe vents to the floor of a shallow cavity can improve store separation characteristics. Computational results for two-dimensional flow presented in reference 3 suggest that the addition of porosity and a vent chamber to the floor of a deep cavity can result in the attenuation of large dynamic pressure fluctuations that are normally associated with deep cavities.

The purpose of the present investigation was to investigate the effects of these and other passive venting techniques on the flow fields over both deep cavities and shallow cavities at subsonic and transonic speeds. The tests were conducted with cavity models that were mounted in a flat plate surface. Measurements obtained in the cavity consisted of both static pressures and dynamic pressures; however, only the static pressure results will be presented in this report.

The tests were conducted at Mach numbers from 0.20 to 0.95. The shallow cavities tested had lengths of 42.00 in. and 32.16 in. and a depth 2.40 in. The deep cavities tested had a length of 32.16 in. and a depth of 4.80 in. Cavity width was held constant at 9.60 in. Based on boundary layer measurements from reference 4 for similar configurations and test conditions, it is assumed the boundary layer approaching the cavity was turbulent and had a thickness of approximately 0.50 in.

A complete set of tabulated pressure data is presented both in hard copy and on a floppy disk at the back cover of this report.

Symbols

a_F, a_R	height of lip vent openings of forward and rear lip vents respectively, in. (see fig. 4(b))
A_{pv}	internal cross-sectional area of pipe vents, in^2

C_p	pressure coefficient, $\frac{p-p_\infty}{q_\infty}$
CPxxx	pressure coefficients for orifice number xxx (see tables III–X)
FPL	fluctuating pressure level, $20 \log \frac{p'}{q_\infty}$
h	cavity depth (not including vent chamber depth), in.
L_t	length of cavity floor covered with tape, in. (see table I)
l	cavity length, in.
M_∞, Mach	free-stream Mach number
p	measured surface static pressure, psi
p'	fluctuating pressure, psi
p_∞	free-stream static pressure, psi
$p_{t,\infty}$	free-stream total pressure, psi
q_∞	free-stream dynamic pressure, psi
R_∞	free-stream unit Reynolds number, ft^{-1}
$T_{t,\infty}$	free-stream total temperature, °F
U	velocity, ft/sec
U_∞	free-stream velocity, ft/sec
w	cavity width, in.
x	distance in streamwise direction relative to cavity leading edge, in. (see figs. 2–5)
y	distance in spanwise direction relative to cavity centerline, in. (see figs. 2–5)
z	distance normal to flat plate relative to plate surface, in. (see figs. 2–5)
δ	boundary-layer thickness ($U/U_\infty = 0.99$), in.

Experimental Methods

Models

Because of the large number of models and configurations investigated, the tests were conducted during two phases (identified as phase 1 tests and phase 2 tests) with each phase requiring a separate tunnel entry. For these two phases of testing, the cavity models were installed in different flat plate assemblies. The external geometries of the two flat plate assemblies were the same except for the region of the trailing-edge wedge downstream of the cavity and for the fairing aft of the cavity on the lower plate surface. It is assumed that these differences had no significant effect on the cavity flow field.

The cavity/plate assemblies were located approximately on the centerline of the wind tunnel test section. A photograph of a typical model installation is shown in figure 1. Vertical loads on the flat plate were carried by six legs attached to the tunnel floor structure, and lateral loads were carried by four cables attached to the tunnel sidewall. The forward and middle pairs of legs were swept forward to improve the longitudinal cross-sectional area distribution of the plate assembly for blockage considerations. Fairings were mounted around the cavity on the lower side of the flat plate.

Sketches showing dimensions of the three basic cavity/plate assemblies used in the tests are presented in figures 2, 3, and 4. These assemblies were designed to accommodate the porous floor configurations (phase 2 tests, fig. 2), the pipe vent configurations (phase 1 tests, fig. 3), and the lip vent configurations (phase 2 tests, fig. 4). For all assemblies, the flat plate length, width, and thickness were 111.00 in., 48.00 in., and 1.00 in., respectively. The leading-edge cross section of the flat plate was a 12:1 ellipse. The cavity width for all models was 9.60 in. For all cavity models, the origin of the coordinate system used to define the pressure instrumentation location was on the flat plate surface longitudinal centerline at the cavity leading edge (see figs. 2(a), 3(a), and 4(a)). The cavity leading edges for the porous plate and pipe vent models were 36.00 in. downstream of the plate leading edge, and the cavity leading edge for the lip vent models was 39.00 in. downstream of the plate leading edge. This increase in distance from the plate leading edge for the lip vent configurations should result in less than a 2 percent change in boundary-layer thickness at the cavity leading edge based on estimates from equations 27.21 and 27.66a of reference 6. A turbulent boundary layer on the plate surface ahead of the cavity for all three cavity/plate assemblies was obtained by installing a 0.10-in-wide strip of no. 60 grit 1.00 in. downstream from the plate leading edge. The size and location of the grit was determined from references 7 and 8. Boundary-layer profiles measured during the tests of reference 4 with the same flat plate and similar cavity configurations as the phase 1 tests confirmed that the boundary layer was turbulent at the cavity entrance.

The cavity/plate assembly used for the porous floor configurations contained a 2.40-in-deep cavity with a porous floor, as shown in figure 2(a). Beneath the porous floor was a 1.00-in-deep vent chamber that when combined with the porous floor, permitted

flow from the high-pressure regions of the cavity to the low-pressure regions. Cavity lengths of 42.00 and 32.16 in. were obtained by testing with and without a filler block installed in the rear section of the cavity. Details of the porous floor assembly are shown in figure 2(b). The porous floor had a porosity of 11.2 percent $\left(\frac{\sum \text{Hole areas}}{\text{Total floor area}} \times 100\right)$, which is the same porosity as the pressure cavity model of reference 1. This porosity was obtained by a matrix of approximately 6000 holes of 0.098-in. diameter located as shown in figure 2(b). The extent of the floor area that was porous was varied by covering the full width of the floor with tape in patterns that were symmetrical about the lateral centerline (50-percent length) of the cavity (see fig. 2(c)). For the 42.00-in-long cavity, tests were conducted with 100, 75, 50, 25, 8, and 0 percent of the floor area having porosity and for the 32.16-in. cavity, tests were conducted with 100, 75, 50, 25, 10, and 0 percent of the cavity floor area having porosity. The porous floor was made up of six individual plates (see fig. 2(b)) that could be removed to create additional passive venting configurations. Plates 1 and 3 or 1 and 6 could be removed to form transverse-slot passive venting configurations (which will be referred to as slot vent configurations, fig. 2(d)) consisting of a 1.41-in. slot at each end of either the 32.16- or 42.00-in-long cavity, respectively. These slot vent tests were conducted with and without the porous floor covered with tape. Plates 4 and 5 were necessary to adapt the vent chamber for use with the lip vent configurations to be discussed subsequently.

The major differences in the cavity assembly for the pipe vent configurations (phase 1 tests) shown in figure 3(a) and the cavity assembly for the porous plate configurations (phase 2 tests) are that the cavity floor for the pipe vent configurations was solid and the cavity aft wall could be positioned at any cavity length. For the present tests, the cavity length was fixed at 32.16 in. or 42.00 in. As with the porous floor configurations, cavity depth was held constant at 2.40 in.

The cavity/plate assembly used for the pipe vent configuration (phase 1 tests) was originally designed and fabricated to accommodate a wide range of cavity lengths. The sliding plate that provided this capability extended past the flat plate trailing-edge wedge as shown in figure 3(a). This extension resulted in a difference in the plate geometry in this region as compared with the plate used in the phase 2 tests. Also, as previously mentioned, the geometry of the cavity aft fairing on the lower surface of the flat plate was not the same as the fairing used for the phase 2 tests. It is assumed that these differences in the plate geometry had no significant effect on the cavity flow field. More detail on this cavity/plate assembly can be found in reference 4.

Details of the pipe vent configurations are shown in figure 3(b). Although the pipes occupy volume in the cavity, it is anticipated that in a practical application they could be arranged between stores, launchers, etc., to minimize the effects of this reduction in volume. The pipe vent models were fabricated by bonding steel wall pipes of various diameters, lengths, and pipe arrangements to a 0.030-in-thick steel plate. The pipe-plate assembly was then attached to the top of the cavity floor with flathead screws. Because of problems with localized failures of the bond between the pipe and the steel plate, retainer brackets for the pipes were necessary to ensure that the pipes did not separate from the plate. One of these brackets was installed at each end of the pipes, as shown in figure 3(b). For each cavity length, four pipe vent configurations providing venting areas (based on the pipe inside diameters) ranging from 0.88 in^2 to 2.32 in^2 were tested. The pipes were arranged symmetrically about the cavity centerline and were located such that the pressure instrumentation at $y = 0.00$ in. and $y = \pm 2.40$ in. was exposed to the flow.

Shown in figure 4 are sketches of the lip vent model assemblies. The cavity/plate assembly used for the lip vent configurations is essentially the same assembly used for the porous plate tests. The major differences are that the cavity depth for the lip vent models is 4.80 in. and the location of the cavity leading edge, which is the origin for the instrumentation coordinate system, is 39.00 in. downstream of the plate leading edge. Cavity length for the lip vent models was constant at 32.16 in. In order to provide a vent chamber between the forward vent and the aft vent, the porous floor assembly shown in figure 2 was used for these configurations. Tests were conducted with and without the porous floor covered with tape to provide solid floor and porous floor comparisons. A retaining bracket (see fig. 4) was required for the rear lip vent assembly to prevent it from lifting off the cavity floor.

Details of various components of the lip vent models are shown in figure 4(b). Four lower lip blocks for each lip vent assembly were fabricated to provide a lip vent opening range from 0.00 in. to 0.50 in. Since the lip vent assemblies contained sidewalls that were 0.25 in. thick, the width of the lip vent openings was 9.10 in.

A summary of descriptive information for all configurations tested is given in table I.

Wind Tunnel and Test Conditions

The tests were conducted in the NASA Langley 8-Foot Transonic Pressure Tunnel. This facility is a continuous-flow, transonic wind tunnel capable of operating over a Mach number range from 0.2 to 1.3. The tunnel can obtain Reynolds numbers from 0.5×10^6 to 6×10^6 ft^{-1} and stagnation pressures from 3.7 to 29.5 psia. A description of the facility is given in reference 5.

Tests were conducted with the flat plate surface at an angle of attack of 0° relative to the test section centerline for the nominal test conditions shown in the following table. Values of boundary-layer thickness presented in this table are from reference 4 and were measured at a location of 36.00 in. from the plate leading edge. These measurements were obtained with the same flat plate used in the phase 1 tests of the present investigation.

Configuration	M_∞	$p_{t,\infty}$, lb/in^2	$T_{t,\infty}$, °F	R_∞, ft^{-1}	δ, in.	q_∞, lb/in^2
1–4, 7, 8	0.20	23.61	100	2.0×10^6	0.45	0.65
5, 6	.20	25.00	100	2.2	.45	.68
1–6	.40	22.22	100	3.6	.48	2.23
1–6	.60	20.83	100	4.7	.47	4.12
1–6	.80	14.18	100	3.8	.50	4.17
1–6	.90	12.47	100	3.5	.52	4.18
1–6	.95	11.81	100	3.3	.55	4.17

Instrumentation and Measurements

Static pressure orifices with an inner diameter of 0.020 in. were located on the surfaces of the flat plate and the cavities. Based on data from references 4 and 9, lateral pressure gradients on the cavity floor were small, and therefore for the present tests, a single longitudinal row of pressure orifices on the cavity centerline was considered adequate for defining the type of cavity flow field. For the porous floor models and the lip vent models, static pressure orifices were also located on the floor of the vent chamber. Detailed information on the locations of all the orifices is given in table II and figure 5.

Surface pressure measurements on the flat plate, cavities, and vent chambers were obtained by using electronically scanned pressure (ESP) transducers referenced to tunnel static pressure. These transducers had a range of ±5 psid and a quoted accuracy of ±0.01 psi. This increment in pressure corresponds to the following increments in pressure coefficients:

M_∞	ΔC_p
0.20	±0.016
.40	±.004
.60	±.002
.80	±.002
.90	±.002
.95	±.003

As discussed in reference 4, local Mach numbers on the flat plate surface ($h = 0.00$ in.) in the region of the cavity installation could vary by as much as 0.03 from the nominal free-stream values shown in the table above; however, because of the relative insensitivity of the cavity pressure distributions to a Mach number variation of this magnitude at subsonic and transonic speeds, nominal free-stream values were used for reducing all data.

Tunnel free-stream static and stagnation pressures were measured with sonar-sensed mercury manometers having an accuracy of ±0.0035 psi.

For the shallow cavity configurations (configurations 1–6), the pressure measurements are the average values of 10 data samples taken over a period of 1 sec. An indication of the repeatability of data for the shallow cavity configurations with this averaging process is shown in figure 6, where data are presented for three repeat data points. Although the maximum difference in the level of the pressure distributions is somewhat greater than the transducer accuracy, the difference was not considered large enough to justify additional averaging.

The lip vent configurations (configurations 7 and 8) are deep cavities and, as shown in reference 9, can have unsteady flow fields that cause large pressure fluctuations inside the cavities at subsonic and transonic speeds. An indication of the data repeatability for these configurations with 10-data-sample averaging as used for the shallow cavities is shown in figure 7 for 2 sets of 3 repeat data points. Both sets of data are for the same model at the same test conditions. These data show that the cavity flow unsteadiness results in large variations in the pressure levels over the rear portion of the cavity floor. Also shown in figure 7 are average pressure distributions obtained by averaging the pressures from the three repeat data points. A comparison of the average pressure distribution for each set of data is shown in figure 8. These results show that the additional averaging obtained by averaging three repeat data points significantly improved the data repeatability. Therefore, for all the lip vent configurations, three repeat data points were averaged to obtain the data presented in this report.

Presentation of Data

A complete set of pressure data is tabulated in tables III–X both in hard copy and on an ASCII-formatted floppy disk at the back cover of this report. Selected pressure data inside the cavities are presented in figure form as identified in the following figures. Figures 9, 10, and 11, which will be discussed subsequently, present previously published information on cavity flow fields. Figure 12, which will also be discussed subsequently, presents comparisons of cavity floor pressure distributions from the present test with distributions from reference 4.

Results and Discussion

A Review of Cavity Flow Fields

Only limited experimental data are available in the literature detailing cavity flow fields at subsonic and transonic speeds. However, at supersonic speeds numerous studies have been conducted that provide considerable insight about the structure of such flow fields. This is partly because at supersonic speeds the shock wave structure associated with a change in flow direction is readily apparent from schlieren photographs. At subsonic and transonic speeds, shock waves do not occur, so this flow diagnostic is not available.

A comparison of measured cavity pressure distributions obtained at subsonic and transonic speeds with data obtained at supersonic speeds indicates that for many cavity configurations the cavity flow fields over these speed ranges are similar (ref. 4). Therefore, in the present review of cavity flow fields, flow field models from the literature that are representative of supersonic speeds are also presented.

Cavity Flow Fields at Supersonic Speeds

At supersonic speeds, four types of mean cavity flow were defined in references 1, 2, and 10. The four flow types, open, closed, transitional-closed, and transitional-open, will be briefly discussed. The first flow type generally occurs when the cavity is "deep," as found in bomb bays, and is termed open cavity flow. Sketches of a hypothetical two-dimensional open cavity flow field and typical pressure distributions are shown in figure 9(a). Open cavity flow generally occurs for $l/h \lesssim 10$ at supersonic speeds, and for this case, the flow essentially bridges the cavity with a shear layer forming over the cavity. When the cavity flow is open, a nearly uniform longitudinal static pressure distribution is produced, which is desirable for safe store separation; however, high-intensity acoustic tones can develop, as indicated in figure 9(a). These tones can induce vibrations in the surrounding structure, including the separating store, and lead to structural fatigue.

The second type of cavity flow is for "shallow" cavities and is termed closed cavity flow. The cavity configurations typical of missile bays on fighter aircraft are likely to be shallow cavities. Figure 9(a) also provides a sketch of a hypothetical two-dimensional flow field and typical pressure distributions for closed cavity flow. At supersonic speeds, closed cavity flow generally occurs for $l/h \gtrsim 13$. In closed cavity flow, the flow separates at the forward face of the cavity, reattaches at some point along the cavity floor, and separates again before reaching the rear cavity face. This creates two distinct separation regions; one downstream of the forward face and one upstream of the rear face. For shallow cavities where the flow is of the closed type, acoustic tones are not present; however, the flow produces an adverse static pressure gradient that can cause the separating store to experience large nose-into-the-cavity pitching moments.

The third and fourth mean cavity flow types (transitional-closed and transitional-open) occur for cavities with values of l/h that fall between closed cavity flow and open cavity flow, i.e., l/h between 10 and 13. Transitional-closed cavity flow is the type of flow that occurs at the lower l/h boundary of closed cavity flow. For this case, the impingement shock and the exit shock that normally occur for closed cavity flow coincide and produce a single shock, as shown in figure 9(b). As with closed cavity flow, large longitudinal pressure gradients occur in the cavity that can contribute to large nose-into-the-cavity pitching moments of separating stores.

With a very small reduction in l/h from a value corresponding to transitional-closed cavity flow, the impingement-exit shock wave abruptly changes to a series of compression wavelets, indicating that the shear layer still turns into the cavity; however, it no longer impinges on the cavity floor. This type of flow field is referred to as transitional-open cavity flow. For this type of flow field, as also indicated in figure 9(b), longitudinal pressure gradients in the cavity are not as large as shown for transitional-closed cavity flow, and consequently the problem of store nose-into-the-cavity pitching moment is not as severe as can occur for closed cavity flows (ref. 2). The acoustic fields corresponding to the transitional flow fields have not been determined.

The determination of transitional-closed and transitional-open cavity flows, as well as open and closed cavity flows, were made by observation of the static pressure distribution in the cavity and schlieren photographs of the cavity flow field (ref. 11). Figures 9(a) and 9(b) provide typical static pressure distributions for each flow type, which can be used as a guideline for determining the type of cavity flow. Figure 9(a) also provides typical dynamic pressure distributions for open and closed cavity flows. Typical dynamic pressure distributions for transitional-closed and transitional-open cavity flows have not been determined.

Cavity Flow Fields at Subsonic and Transonic Speeds

Cavity pressure distributions measured at subsonic and transonic speeds are presented in reference 4 for a wide range of cavity variables and are used to identify the different types of cavity flow fields in this speed range by comparisons with similar supersonic pressure distributions. These results show that in the subsonic/transonic speed range, three general cavity flow types consisting of open, closed, and transitional can be identified from the cavity floor pressure distributions. Pressure distributions for the open and closed types of flow fields were shown to be similar to the respective open and closed flows at supersonic speeds. The transitional type of flow field for subsonic and transonic speeds occurs over the range of l/h between open flow and closed flow. Shown in figure 10 are sketches of the characteristic pressure distribution for each type of cavity flow as well as at the l/h boundaries of the different flows for subsonic/transonic speeds. These characteristic pressure distributions and flow field types for subsonic/transonic speeds that are illustrated in figure 10 are summarized as follows (from ref. 4):

Open flow (fig. 10(a)):

- Pressure is of uniform value ($C_p \approx 0.0$) for $x/l \lesssim 0.6$.
- At $x/l \gtrsim 0.6$, the pressures increase with increasing x/l and the distribution has a concave-up shape.

Open/transitional flow boundary (fig. 10(b)):

- An inflection point occurs in the pressure distribution at $x \approx 0.5$; over the rear portion of the cavity floor ($x > 0.5$) the pressure distribution changes from a concave-up shape to a concave-down shape.
- The pressure coefficients over the forward portion of the cavity are close to 0.0.

Transitional flow (fig. 10(c)):

- Pressure distributions over the rear portion of the cavity floor ($x \gtrsim 0.6$) have a concave-down shape.
- As the ratio l/h of a cavity increases, the C_p distribution along the cavity floor gradually varies from the shape at the open/transitional flow boundary to that shown at the transitional/closed flow boundary.

Transitional/closed flow boundary (fig. 10(d)):

- Pressure coefficients increase uniformly from negative values in the vicinity of the front face to large positive values ahead of the rear face. The minimum values in the vicinity of the front face and maximum values ahead of the rear face are approximately of the same magnitudes that are measured for closed cavity flow.

Closed flow (figs. 10(e) and 10(f)):

- The flow becomes closed when a second inflection point occurs in the pressure distribution at $x/l \approx 0.5$ as a result of increasing l/h.
- With a further increase in l/h, a plateaued region occurs in the pressure distribution in the vicinity of the second inflection point.
- Still further increase in l/h causes a decrease in pressure to occur downstream of the plateaued region, followed by an increase in pressure to the maximum value ahead of the rear face.
- The maximum pressure ahead of the rear face remains at approximately the same value that was measured at the boundary with transitional flow.

It should be noted that in some cases the experimental pressure distributions only approximately match the generic distribution specified in figure 10, and therefore some interpretation may be required. For this reason and also because of the lack of qualitative flow visualization data, the boundaries presented in reference 4 and used in this report are considered approximate. It is also important to recognize that determination of the boundaries of the transitional flow type, from the pressure distribution, requires that the pressure distribution over the full range of flow types, open to closed, be available for comparison.

Shown in figure 11 are l/h boundaries from reference 4 for the three general flow types at subsonic and transonic Mach numbers. These regimes are shown for several cavity width and cavity depth configurations.

Cavity Pressure Distributions

Although pressure measurements were obtained on the flat plate upper surface as well as the cavity surfaces, only the results from the cavity surfaces will be discussed. A complete set of pressure measurements are presented, however, in tables III–X. A discussion of the effect of similar cavity configurations on the pressure distributions for the flat plate upper surface may be found in reference 4.

Shallow Cavity Porous Floor Configurations

As discussed in the "Models" section, the extent of the cavity floor porosity was varied by covering the porous floor with tape. It was assumed that the section of floor covered with tape is representative of a section of solid floor. Therefore, with the floor fully covered with tape, the cavity configuration should be the same as a solid floor cavity and will be referred to as such in this discussion. Comparisons of the pressure distributions for solid floor cavity configurations (porous floor covered with tape) from the present tests with pressure distributions for cavities with "real" solid floors from reference 4 are shown in figure 12. The pressure distributions are shown for cavities with $l/h = 13.40$ (fig. 12(a)) and $l/h = 17.50$ (fig. 12(b)). Results from the two tests are generally in good agreement except at $M_\infty = 0.20$ for the $l/h = 17.50$ cavity (fig. 12(b)). For this case, large variations occur in the longitudinal distributions for the reference 4 data. It is believed these variations are due to data inaccuracy resulting from the very low values of p at $M_\infty = 0.20$. The data presented in figure 12 indicate that the floor pressure distributions on a solid floor (porous floor covered with tape) are equivalent to pressure distributions on a "real" solid floor. It should be noted, however, that the reference 4 data were obtained with the same plate assembly as the phase 1 tests (see "Models" section) of the present investigation, which was slightly different from the plate assembly used for the porous floor tests (phase 2 tests), as discussed in the "Models" section. The good agreement shown in figure 12 for the cavity pressure distributions for the two plate assemblies suggests that the differences in the cavity plate assemblies did not significantly affect the cavity flow field.

Cavity $l/h = 13.40$. Presented in figure 13 are comparisons of pressure distributions on the cavity floor, sidewalls, and vent chamber floor for the porous floor shallow cavities with various amounts of the cavity floor covered with tape. The results are shown for the cavity with a depth of 2.40 in. and length of 32.16 in. Figure 13(a) is for the case of 100 percent of the floor covered with tape, which is representative of a solid floor cavity. For this case, vent chamber floor pressures are not presented, since the vent chamber is sealed off from the cavity. The results in figure 13(a) show that at the lower Mach numbers, a peak occurs in the cavity floor pressures in the flow impingement region ($x \approx 15$ in.), which is indicative of closed cavity flow. A peak does not occur, however, in the sidewall pressures in this region probably because there is no flow impingement on the sidewalls. With increasing Mach number, the peak in the cavity floor pressures becomes less obvious and at $M_\infty = 0.95$, it is no longer apparent. At this maximum test Mach number, the floor and sidewall pressure distributions essentially overlap. These distributions at $M_\infty = 0.95$ are typical of flow at the boundary between transitional and closed cavity flow.

Shown in figure 13(b) are the cavity pressure distributions for 10 percent of the floor area with porosity (corresponding to 1.66 in. of tape removed from each end of the cavity floor). This small amount of floor area with porosity resulted in significant changes in the pressure distributions. At the lower Mach numbers, the peak pressures observed for the cavity floor data of figure 13(a) no longer occur, and the data on the floor and sidewalls have similar distributions throughout the test range of Mach number. The data at the lower Mach numbers are still representative of closed cavity flow, and the higher Mach number data are representative of flow near the transitional/closed flow boundary. Other general effects that can be seen by comparing figures 13(a) and 13(b) are that the peak pressures at the downstream end of the cavity are reduced and the pressures at the upstream end of the cavity are slightly increased as a result of adding floor area with porosity. The vent chamber pressures for this extent of floor area with porosity remain approximately constant along the length of the vent chamber and have a magnitude nearly equal to the average of the pressures at each end of the cavity floor.

Shown in figure 13(c) are the cavity pressure distributions for 25 percent of the floor area with porosity (corresponding to 4.02 in. of tape removed from each end of the floor). These pressure distributions are similar to the results shown in figure 13(b) except that the increased floor area with porosity resulted in a further reduction in the peak pressure in the downstream end of the cavity and a further increase in the pressures at the upstream end of the cavity. The vent chamber pressure levels under the solid portion of the cavity floor remain approximately constant at a value equal to the average of the pressure levels at each end of the cavity. Further increasing floor area with porosity to 50 percent (corresponding to 8.04 in. of tape removed from each end of the floor), as shown in figure 13(d), has only small effects on the cavity floor pressure distributions. With 50 percent of the floor area having porosity, the vent chamber pressures under the solid portion of the cavity floor are approximately equal to the average of the cavity floor pressures at the upstream and downstream edges of the tape. The vent chamber pressures beneath the downstream section of porous floor follow the cavity floor

distributions, whereas the vent chamber pressures beneath the forward porous section diverge slightly from the cavity floor pressures. The increase in vent chamber pressures in this region is probably associated with a deceleration of the vent chamber flow as it approaches the forward wall of the vent chamber. Further increases in the extent of floor porosity have only minimal effects on the level or distribution of the cavity floor and sidewall pressures, as may be seen by comparing figures 13(d), 13(e), and 13(f). The data therefore suggest that for a porous floor having a hole pattern corresponding to 11.2-percent porosity, a major portion of the favorable effects of porosity on the cavity flow field may be realized with only 50 percent of the floor area being porous. With increasing extent of floor area with porosity, pressure gradients were found to occur over more of the vent chamber floor such that for the case where all the floor is porous (fig. 13(f)), pressure gradients occur for the full length of the vent chamber floor. Over the approximate forward half of the vent chamber floor, the pressures are greater than the cavity values and decrease in value with increasing x. Over the approximate rear half of the vent chamber floor, the pressures are less than the cavity floor values and increase with increasing x. These distributions indicate that over the rear half of the cavity, flow is going from the cavity into the vent chamber, and over the forward half of the cavity, flow is going from the vent chamber into the cavity. Similar trends were observed at supersonic speeds, as reported in reference 1.

A summary of the effects of the extent of floor area with porosity on the pressure distributions at the centerline of the cavity floor for the 32.16-in-long cavity ($l/h = 13.40$) is shown in figure 14. These plots clearly show that throughout the test range of Mach number, increasing the amount of porous floor area from 50 percent to 100 percent has little effect on the cavity pressure distributions. These results also show that at the lower test Mach numbers, the addition of porosity to the solid floor of a cavity with closed cavity flow caused the flow field to change from closed to a transitional type of flow. At the higher Mach numbers, for a solid floor cavity with a flow field similar to flow at the transitional/closed boundary, increasing the floor area with porosity caused the flow field to become transitional and ultimately to approach a type similar to that at the transitional/open boundary. Therefore, the favorable effects of porosity on store separation characteristics for this cavity would probably be greater at the higher Mach numbers, since the flow field is approaching open flow.

Cavity $l/h = 17.50$. Presented in figure 15 are comparisons of surface pressure distributions in the 42-in-long cavity with various amounts of the cavity floor being porous. As shown in figure 15(a), the cavity floor pressure distributions for the solid floor are representative of closed cavity flow throughout the test range of Mach number. As with the results shown in figure 13(a) for the 32.16-in-long cavity, a peak occurs in the pressure distributions on the floor in the flow impingement region that does not occur on the sidewalls. As shown in figure 15(b), this peak in pressure still occurs in the flow impingement region when 8 percent of the floor area is porous (corresponding to 1.66 in. of tape removed from each end of the cavity). As shown in figure 15(c), when 25 percent of the floor area is porous (corresponding to 5.25 in. of tape removed from each end of the cavity), the peak pressures in the flow impingement region are no longer apparent and the cavity floor and sidewall pressure distributions are approximately the same. For this amount of floor area with porosity, the pressure distributions for all Mach numbers are still indicative of closed cavity flow. The vent chamber pressure levels shown in figure 15(c) remain nearly constant under the solid section of the cavity floor at a value that is approximately the average of the pressures on the cavity floor at the upstream and downstream edges of the solid floor section. The results presented in figures 15(a)–15(d) indicate that increasing the amount of floor area with porosity up to 50 percent of the total floor area (removing up to 10.50 in. of tape from each end of the cavity floor) caused the cavity flow field to change in the direction of a less closed type of flow. Further increasing the percentage of floor area with porosity, as shown in figures 15(e) and 15(f), had little effect on the cavity pressure distributions, although at the higher Mach numbers the floor pressure distributions appear to become more representative of flow at the transitional/closed boundary. This trend can be seen more clearly in figure 16, where the cavity floor centerline pressure distributions for all amounts of floor area with porosity tested are plotted on one figure. These data also more clearly show that increasing the amount of floor area with porosity tends to cause the cavity flow fields to change in the direction of a less closed type of flow or toward a transitional type of flow. For this cavity, the flow field apparently does not approach an open type of flow with increasing floor area with porosity, and therefore the addition of porosity to the floor of this cavity would probably have less favorable effects on store separation characteristics than for the 32.16-in. cavity.

The vent chamber height for the present tests was 1.00 in. or 42 percent of the cavity depth (2.40 in.). The vent chamber height for most of the cavity configurations used in the supersonic tests of reference 1 was 38 percent of the cavity depth, although limited tests were conducted with a height that was 75 percent of the cavity depth. These results indicated that increasing the vent chamber height by a factor of 2 had little effect on the cavity flow field for the cavities having l/h ratios up to 17.50. Therefore, based on these results, the ineffectiveness of the porous floor for the cavity with $l/h = 17.50$ is not believed to be due to limitations of the vent chamber cross-sectional area.

Mach number effects. Presented in figure 17 are summary figures showing the effect of Mach number on the porous floor centerline pressure distributions for the shallow cavities with lengths of 32.16 in. (fig. 17(a)) and 42.00 in. (fig. 17(b)). For both cavity lengths, the effect of Mach number on the floor pressure distributions decreases with increasing floor area with porosity. In general, the effects of Mach number are most apparent when the cavity flow field is of the closed type at the lowest Mach number. For this case, increasing Mach number tends to cause the pressure distributions to change to those representative of closed flow for a cavity with a smaller value of l/h or in some cases to those representative of transitional flow. If the pressure distributions at the lowest test Mach number were indicative of transitional flow, then increasing Mach number had little effect on the pressure distributions.

Vent chamber pressures. Presented in figure 18 are summary plots showing the effect of the extent of floor area with porosity on the vent chamber floor pressure distributions. Distributions for the solid floor are not shown, since for this case the vent chamber is sealed from the cavity. The data presented in figure 18 show that the pressures under the solid portion of the floor remain approximately constant and that the pressure level of the constant pressure region is reduced with increasing percentage of floor area with porosity. The pressure levels at the downstream end of the vent floor are relatively unaffected by the percentage of porous floor area, whereas the pressure at the upstream end of the vent floor decreases with increasing the floor area with porosity from 10 percent to 50 percent. Further increases in the percentage of floor area with porosity had little effect on these pressure levels.

Shallow Cavity Slot Vent Configurations

The slot vent configurations consisted of solid floor or porous floor cavities with slots (1.41 in. long by 9.10 in. wide, see fig. 2(d)) at each end of the cavity that opened into the porous floor model vent chamber. Tests were conducted for cavity lengths of 32.16 and 42.00 in.

Cavity $l/h = 13.40$. Comparisons of measured pressure distributions on the cavity floor, sidewalls, and vent chamber of the slot vent configurations are shown in figure 19 for the 32.16-in-long cavity. The slot vents resulted in the pressure distributions on the cavity floor and sidewalls collapsing into a narrow band; this is similar to the effect of porosity that was shown previously. Pressure distributions on the vent chamber floor of the slot vent configurations are considerably different than the vent chamber floor pressure distributions obtained for the porous floor cavities. For the solid floor slot vent configuration (fig. 19(a)), the pressure measurements on the vent floor beneath the downstream slot ($x = 31$ in.) were greater than the other vent chamber pressures. Pressure gradients occurred on the vent chamber floor under the taped section of the cavity floor, as compared with relatively uniform pressures on the vent chamber floor beneath the taped floor section of the porous floor configurations (fig. 13(b)). For the porous floor with slot vents (fig. 19(b)), the vent chamber floor pressures more closely match the cavity floor pressures than was the case for the porous floor cavity (fig. 13(f)), indicating that the flow through the slot vents reduced flow through the porous floor.

The effects of the slot vents on the cavity floor pressure distributions for the 32.16-in-long cavity can be more clearly seen in figure 20, where the floor pressure distributions with and without the slot vents are shown on the same plot. The addition of slot vents to the solid floor cavity (fig. 20(a)) resulted in the floor pressure distribution becoming more representative of transitional flow than closed flow. One feature of the pressure distributions for the cavity with slot vents that is not characteristic of transitional flow is the level of the pressures downstream of the cavity front face. Generally, when a cavity flow changes from closed to transitional, the pressures in the region downstream of the front face tend to increase. The pressures in this region for the slot vent configuration at all Mach numbers decreased as compared with the values for the configurations without slot vents with closed cavity flow. Because of the uncertainty of the type of flow field induced by the slot vents, it is not obvious how the slot vents would affect store separation characteristics.

In figure 20(b), a comparison of cavity floor pressure distributions for the porous floor cavity with and without slot vents is presented. The data show that adding slot vents to the 32.16-in. cavity with a porous

floor has only small effects on the cavity floor pressure distributions. The addition of slot vents to the porous floor slightly decreases the level of the pressures through the range of test Mach number. This small effect on the pressure distributions indicates that a slot vent porous floor configuration would have a similar effect on store separation characteristics as the porous floor cavity.

Cavity $l/h = 17.50$. Pressure distributions on the cavity floor, sidewalls, and vent chamber of the slot vent configurations are shown in figure 21 for the 42.00-in-long cavity. A comparison of these pressure distributions for the solid floor slot vent configuration (fig. 21(a)) with the pressure distributions in figure 15(a) for a solid floor cavity of the same length shows that the slot vents cause the floor and sidewall pressures to collapse into a narrow band for $x < 35$ in. For $x > 35$ in., the sidewall and floor pressures for this configuration begin to differ, with the sidewall pressures being greater than the floor pressures. The maximum difference is at $x = 39$ in., at which point a peak occurs in the pressure distributions for both the sidewall and the floor. For $x > 39$ in., the pressures on the sidewall decrease very rapidly, probably due to the flow expanding into the aft slot vent. The flow into the aft slot vent results in a very large pressure on the vent chamber floor at $x = 41$ in. The pressures on the vent chamber floor beneath the taped portion of the cavity floor generally decrease with decreasing values of x. Results presented in figure 21(b) for the porous floor with slot vents show that the cavity sidewall pressures are slightly greater than the cavity floor pressures for 35 in. $< x <$ 39 in., although the difference is less than was shown for the solid floor cavity in figure 21(a). The pressures on the cavity sidewall and floor for $x < 35$ in. collapse into a narrow band similar to the porous floor cavity data shown in figure 15(f). The vent chamber pressures shown in figure 21(b) closely match the cavity floor pressures, indicating reduced flow through the porous floor as compared with the 100-percent porous floor data shown in figure 15(f).

As shown in figure 22(a), the cavity floor pressure distributions indicate that adding slot vents to the 42.00-in-long cavity with a solid floor causes the cavity flow field to change to one that is similar to the flow field for a cavity with a smaller value of l/h but still in the closed flow regime. A feature of the distributions for the slot vent configurations that is not characteristic of the distributions for a solid floor cavity with closed cavity flow is the reduced level of the peak pressures that occur at the downstream end of the cavity. Generally, when the cavity flow field remains in the closed flow regime, the maximum pressure at the downstream end of the cavity and the minimum pressure at the upstream end of the cavity remain approximately constant with l/h, as shown in reference 4. Again, as with the 32.16-in-long cavity, because of the uncertainty of the type of flow field present with the slot vent configuration, it is not desirable to hypothesize on the effect of slot vents on store separation characteristics.

Shown in figure 22(b) are pressure distributions for a 42.00-in-long porous floor cavity with and without slot vents. The most noticeable effect of adding slot vents is reduced pressure at the upstream and downstream ends of the cavity. This pressure reduction at the downstream end of the cavity becomes less pronounced with increasing Mach number. Because of the small effect of the slot vents on the pressure distributions for the porous floor cavity and because the flow field appeared to remain in the closed or the transitional flow regime when slot vents were added, the store separation characteristics for a cavity with $l/h = 17.50$, a porous floor, and slot vents are expected to be similar to those of a cavity with $l/h = 17.50$, a porous floor, and no slot vents.

Shallow Cavity Pipe Vent Configurations

As discussed in the "Models" section, the pipe vent models (phase 1 tests) were tested with a different cavity/plate assembly than was used for the porous plate and slot vent tests (phase 2 tests). Since the pipe vent data will later be directly compared with data from the other shallow cavity passive venting models, a comparison was made of data from similar cavity configurations installed in the two different cavity/plate assemblies to ensure that the cavity/plate assembly did not significantly affect the cavity flow field. This comparison can be seen in figure 12, where the circular symbols are for the porous plate solid floor configuration (100 percent of floor taped) and the square symbols are for a "real" solid floor cavity configuration of the same dimensions from reference 4, which is the same cavity/plate assembly used for the pipe vent configurations. As previously discussed under the "Shallow Cavity Porous Floor Configurations" section, the pressure distributions for the two cavity/plate assemblies were generally in good agreement, with the exception of the 42.00-in-long cavity at $M_\infty = 0.20$. As previously discussed, it is believed these large variations are due to data inaccuracy. The good agreement of the pressure distributions for all other Mach numbers indicates that the cavity flow fields for the two cavity/plate assemblies were essentially the same.

Cavity $l/h = 13.40$. Comparisons of pressure distributions on the cavity floor and sidewall for the different pipe vent configurations are shown in figure 23 for the 32.16-in-long cavity. The pipe vent models had three rows of pressure orifices on the cavity floor, as shown in figure 5(b). Results presented in figure 23(a) are for the empty cavity. These distributions show the same trends shown in figure 13(a) for the solid floor cavity (porous floor with 100 percent of the floor taped). At the lower Mach numbers, a peak occurs in the floor pressure distributions in the flow impingement region ($x \approx 15$ in.), which is indicative of closed cavity flow. The distributions for the three values of y on the cavity floor are essentially the same, indicating little if any lateral pressure gradients on the cavity floor. A peak does not occur in the sidewall pressure distributions in the region of $x \approx 15$ in. With increasing Mach number, the peak pressures in the floor pressure distributions diminish such that at $M_\infty = 0.95$ the pressure distributions on the floor and sidewall are essentially the same. The distributions at $M_\infty = 0.95$ are indicative of flow at the boundary between transitional and closed cavity flows.

The pressure distributions presented in figures 23(a)–23(f) indicate that the pipe vents did not significantly change the cavity flow field, even though the pipe vent area was varied from 0.88 to 2.32 in^2. This is also shown in figure 24, where the floor pressure distributions at $y = -2.40$ in. are plotted for the range of vent areas tested. Although the pipe vents tended to decrease the magnitude of the peak floor pressure in the flow impingement region, the flow field remained of the same type that occurred for the empty cavity throughout the test Mach number range. Results presented in reference 2 show that at supersonic speeds pipe vents were in some cases successful in causing the cavity flow field, for a cavity of approximately the same length-to-height ratio (12.18) as the shorter cavity of the present tests, to change from closed or transitional-closed flow to transitional-open flow. The pipe vent area for the reference 2 tests (0.51 in^2 or 0.30 percent of the cavity floor area) was considerably less than the maximum pipe area of the present tests (2.32 in^2 or 0.75 percent of the cavity floor area). A possible explanation as to why the pipe vents did not cause the desired flow field change in the present tests is that, as shown in reference 4 for subsonic and transonic speeds, the cavity flow field change from closed to open flow occurs gradually over a finite range of l/h and is defined as transitional flow. At supersonic speeds there is an abrupt change from transitional-closed to transitional-open flow, and this change occurs over a minimal l/h range. For the supersonic tests of reference 2, the pipe vents were in a cavity that had a transitional-closed flow or a closed flow that was approaching transitional-closed. Since a small flow perturbation could trigger the change from transitional-closed to transitional-open flow at supersonic speeds, it is suspected that the pipe vents provided the small perturbation necessary.

The pipe vent model with an area of 2.32 in^2 (maximum vent area) was also tested with the pipes plugged to determine the effect of the pipes without any internal flow on the floor pressure distributions. As shown in figures 23(f) and 24, the results from this configuration are similar to the results obtained with the pipes open except that the flow impingement region on the cavity floor occurs at smaller values of x with the pipes plugged.

Cavity $l/h = 17.50$. As shown in figures 25 and 26, the pipe vents also were not effective in causing the flow field for the 42.00-in-long cavity to change to a transitional flow. This trend is expected, since the pipe vents were not effective for the shorter cavity. These results show, however, that a reduction does occur in the peak pressure measurements ahead of the cavity rear face with the addition of the pipe vents. Since this reduction is approximately of the same magnitude for all pipe vent configurations and since it even occurs when the pipe vents are plugged (fig. 25(f)), it is probably due, at least in part, to the rear pipe retainer bracket.

Summary of Shallow Cavity Passive Venting Configurations

Figure 27 is a comparison of the cavity floor centerline pressure distributions for all the different types of shallow cavity passive venting configurations that were tested. The porous floor data are for the 100-percent porous configuration, and the pipe vent data are for the largest vent area tested (2.32 in^2). These data show that for both cavity lengths, the porous floor, the porous floor with slot vents, and the slot vent configurations were much more effective than the pipe vent configurations in causing the flow field to change from a closed type of flow to a transitional type of flow. The porous floor and the porous floor with slot vents were generally more effective than the slot vents in creating this change.

Deep Cavity Lip Vent Configurations

Rossiter (ref. 12) suggested that the occurrence of tones in deep cavities is associated with the periodic shedding of vortices from the cavity leading

edge. The purpose of the lip vent configurations of the present tests was to investigate the effectiveness of venting high-pressure air from the outer edge of the cavity rear face to the low-pressure region at the cavity leading edge, where these vortices are formed. It was anticipated that this venting process could interact with the vortex shedding, reducing the intensity of the shedding vortices and possibly attenuating the tones that occur in the cavity. Dynamic pressure measurements obtained inside the cavity are used to evaluate the effectiveness of the lip vents in attenuating the tones, and these data, which are not presented in this report, indicate that the tones were not attenuated as expected. Static pressure measurements are presented in this report and are used to determine if the lip vents had any significant effects on the type of cavity flow field.

Solid floor cavities. Shown in figure 28 are cavity pressure distributions for the lip vent models with a solid floor (the porous floor taped over). The results presented in figure 28(a) are for the lip vents closed ($a_F = 0.00$, $a_R = 0.00$) and are therefore representative of a simple box cavity with $l/h = 6.70$. For $M_\infty = 0.20$, the results are indicative of open flow, and for $M_\infty \geq 0.40$, the results are indicative of flow at the boundary of open and transitional. For $M_\infty \geq 0.40$, the cavity sidewall pressures ($z = 1.20$ in.) at $x \leq 24$ in. are approximately the same as the cavity floor pressures. At $x > 24$ in., a local expansion in the flow field causes the pressure on the cavity sidewalls to decrease. This decrease in pressure extends to $x \approx 30$ in. For $x > 30$ in., the pressures rapidly increase as the flow approaches the cavity rear wall. The maximum sidewall pressures in this region are slightly less than the floor pressures.

Comparison of the data in figures 28(a)–28(e) shows that the lip vent configurations had little effect on the cavity pressure distributions for the solid cavity floor. The only significant effect that is apparent occurs at $M_\infty = 0.20$, where it appears that all the lip vent configurations for $a_F > 0.00$ and $a_R > 0.00$ caused the cavity flow field to change from open to transitional. This effect can be more clearly seen in figure 29, where the cavity floor pressure distributions for all lip vent configuration that were tested with a solid floor are shown on the same plot. The results in this figure also show that for the intermediate Mach numbers, $0.40 \leq M_\infty \leq 0.90$, the lip vent tended to reduce the pressure on the cavity floor for $x > 18$ in.; however, the cavity flow field appeared to remain of the transitional type.

Porous floor cavities. Cavity pressure distributions are shown in figure 30 for the lip vent models with a porous floor. The relative magnitude of the pressures on the cavity floor and sidewalls with the lip vents closed off (fig. 30(a)) is similar to that noted earlier for this configuration with a solid floor (fig. 28(a)). It should be noted that as shown in table I, the only lip vent configurations that were duplicated for the solid floor and porous floor comparisons were the vent openings of 0.00 and 0.30 in. For the porous floor, two additional lip vent configurations were tested that had different vent openings for the front and rear lips. These vent openings were $a_F = 0.30$ in., $a_R = 0.00$ in. and $a_F = 0.00$ in., $a_R = 0.30$ in. The purpose of these additional lip vent configurations was to investigate the individual effects of the front and rear vents.

A comparison of figures 30(a)–30(d) shows that contrary to the results shown in figure 28 for the solid cavity floor, the lip vents significantly affect the similarity of the pressure distributions for the cavity floor and sidewalls for the case of the porous floor. An example of this may be seen by comparing the $M_\infty = 0.95$ data in figures 30(a) and 30(d). With the vents closed (fig. 30(a)), the floor and sidewall pressures are essentially the same up to $x \approx 26$ in., whereas when the front and rear vents have an opening of 0.30 in., the floor pressures begin deviating from the sidewall pressures at $x \approx 20$ in. This effect of the lip vents results primarily from a change in the cavity floor pressures rather than a change in the cavity sidewall pressures, as the cavity sidewall pressures remained approximately the same for all four lip vent configurations with a porous floor. The effect of the lip vents on the cavity floor pressure is more clearly shown in figure 31, where the data for all four lip vent configurations are shown on the same plot. Results presented in this figure show that generally the front lip vents have a greater effect on the cavity floor pressure distributions than the rear lip vents. This can be seen by observing that there is a greater difference between the circles and squares or the diamonds and triangles (increasing the front lip vent opening for constant rear lip vent opening) than there is respectively between the circles and diamonds or squares and triangles (increasing rear lip vent opening for constant front lip vent opening). These trends are most apparent for $M_\infty \geq 0.60$.

The results presented in figure 31 also show that for $M_\infty = 0.20$, the cavity flow field for the porous floor cavity remained of the open flow type for all lip vent configurations tested. For $M_\infty \geq 0.60$, the lip vents tended to increase the pressures on the cavity floor for $x > 18$ in.; however, the cavity flow field tended to remain of the open type or of the type at the open/transitional boundary. As shown previously in figure 29, the lip vents generally

tended to decrease the floor pressure distributions at $M_\infty \geq 0.40$ for the solid floor cavity.

Shown in figure 32 are the effects of the porous floor on the cavity floor pressure distributions for lip vent openings of 0.00 and 0.30 in. As mentioned previously, these were the only two lip vent openings for which data were obtained for both porous floor and solid floor cavities. For the lip vents closed ($a_F = 0.00$ in., $a_R = 0.00$ in., see fig. 32(a)), the porous floor for $M_\infty \geq 0.60$ resulted in the pressure distributions changing from a distribution typical of flow near the open/transitional boundary to a distribution more representative of open flow. At $M_\infty = 0.20$, the pressure distributions were typical of open flow for both the solid and porous floor configurations and the floor configuration had little effect on the pressure distributions. At $M_\infty = 0.40$, the pressure distributions were representative of a flow field that was open but approaching the open/transitional boundary, and for this Mach number the floor configuration also had little effect on the pressure distributions.

As shown in figure 32(b), the effect of the porous floor for $a_F = 0.30$ in. and $a_R = 0.30$ in. was strongly dependent upon Mach number. At $M_\infty = 0.20$, the pressure distributions indicate that the flow field for the solid floor cavity was at the open/transitional boundary and that the porous floor caused the flow to change to an open type of flow. At $M_\infty = 0.40$, the floor configuration had little effect on the pressure distributions. For $M_\infty \geq 0.60$, the pressures obtained on the porous floor for $x > 20$ in. are actually greater than those obtained for the solid floor and are therefore more representative of a flow approaching transitional flow than those obtained for the solid floor. This trend of the effect of floor porosity is not understood and is in fact opposite from what was noted in figure 32(a) for the lip vents closed.

Concluding Remarks

An experimental study has been conducted at subsonic and transonic speeds to investigate the effects of several passive venting techniques on the pressure distributions of both shallow cavities and deep cavities. The passive venting techniques for shallow cavities that were investigated consisted of (1) porous floors, (2) slot vents at each end of solid floors, (3) slot vents at each end of porous floors, and (4) pipe vents on solid floors. The passive venting techniques investigated for deep cavities consisted of (1) lip vents at the outer edges of the front and rear walls of a cavity with a solid floor and (2) lip vents at the outer edges of the front and rear walls for a porous floor cavity. The cavity passive venting models were mounted on a flat plate and tested at Mach numbers from 0.20 to 0.95. The shallow cavities had lengths of 32.16 and 42.00 in. and a depth of 2.40 in., resulting in cavity length-to-depth ratios (l/h) of 13.40 and 17.50, respectively. The deep cavity had a length of 32.16 in. and a depth of 4.80 in. ($l/h = 6.70$). All cavities had a width of 9.60 in. Results from the study lead to the following concluding remarks:

1. The porous floor and porous floor with slot vents had the greatest effect on the shallow cavity pressure distributions and resulted in distributions representative of less shallow cavities.
2. The porous floor and porous floor with slot vent configurations had similar floor pressure distributions and would therefore be expected to have similar store separation characteristics.
3. Increasing the percentage of floor area that was porous (porous floor area was varied by covering the floor with tape equal distances forward and aft of the cavity midlength for the full cavity width) from 50 percent to 100 percent had no significant impact on the floor pressure distributions.
4. A small amount of floor porosity or slot vents at each end of the 32.16-in-long, solid floor shallow cavity resulted in the cavity sidewall and floor pressure distributions collapsing into a narrow band.
5. The pipe vents had little effect on the shallow cavity pressure distributions even though the pipe vent area was double the area that provided significant effects at supersonic speeds.
6. The lip vents had only small effects on the pressure distributions for the deep cavity with either a solid floor or a porous floor for most of the test range of Mach number.

NASA Langley Research Center
Hampton, VA 23681-0001
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Table I. Configuration Identification

Configuration	Cavity floor				Pipe vent area, in^2	Lip vent gap		l, in.	h, in.	w, in.	Data tables	
	Porous	Percent porous	L_t, in.	End slots		a_F, in.	a_R, in.				No.	Page
1a	Yes	0	32.16	No				32.16	2.40	9.60	III(a)	27
1b	↓	10	28.84	↓				↓	↓	↓	III(b)	29
1c	↓	25	24.12	↓				↓	↓	↓	III(c)	31
1d	↓	50	16.08	↓				↓	↓	↓	III(d)	33
1e	↓	75	8.04	↓				↓	↓	↓	III(e)	35
1f	↓	100	0.00	↓				↓	↓	↓	III(f)	37
2a	Yes	0	42.00	No				42.00	2.40	9.60	IV(a)	39
2b	↓	8	38.68	↓				↓	↓	↓	IV(b)	41
2c	↓	25	31.50	↓				↓	↓	↓	IV(c)	43
2d	↓	50	21.00	↓				↓	↓	↓	IV(d)	45
2e	↓	75	10.50	↓				↓	↓	↓	IV(e)	47
2f	↓	100	0.00	↓				↓	↓	↓	IV(f)	49
3a	Yes	0	32.16	Yes				32.16	2.40	9.60	V(a)	51
3b	Yes	100	0.00	Yes				32.16	2.40	9.60	V(b)	53
4a	Yes	0	42.00	Yes				42.00	2.40	9.60	VI(a)	55
4b	Yes	100	0.00	Yes				42.00	2.40	9.60	VI(b)	57
5a	No			No	*0.00			32.16	2.40	9.60	VII(a)	59
5b	↓			↓	0.88			↓	↓	↓	VII(b)	61
5c	↓			↓	1.32			↓	↓	↓	VII(c)	63
5d	↓			↓	1.74			↓	↓	↓	VII(d)	65
5e	↓			↓	2.32			↓	↓	↓	VII(e)	67
5f	↓			↓	†2.32P			↓	↓	↓	VII(f)	69
6a	No			No	*0.00			42.00	2.40	9.60	VIII(a)	71
6b	↓			↓	0.88			↓	↓	↓	VIII(b)	73
6c	↓			↓	1.32			↓	↓	↓	VIII(c)	75
6d	↓			↓	1.74			↓	↓	↓	VIII(d)	77
6e	↓			↓	2.32			↓	↓	↓	VIII(e)	79
6f	↓			↓	†2.32P			↓	↓	↓	VIII(f)	81
7a	Yes	0	32.16	No		0.00	0.00	32.16	4.80	9.60	IX(a)	83
7b	↓	↓	↓	↓		0.15	0.15	↓	↓	↓	IX(b)	85
7c	↓	↓	↓	↓		0.15	0.30	↓	↓	↓	IX(c)	87
7d	↓	↓	↓	↓		0.30	0.30	↓	↓	↓	IX(d)	89
7e	↓	↓	↓	↓		0.50	0.50	↓	↓	↓	IX(e)	91
8a	Yes	100	0.00	No		0.00	0.00	32.16	4.80	9.60	X(a)	93
8b	↓	↓	↓	↓		0.30	0.00	↓	↓	↓	X(b)	95
8c	↓	↓	↓	↓		0.00	0.30	↓	↓	↓	X(c)	97
8d	↓	↓	↓	↓		0.30	0.30	↓	↓	↓	X(d)	99

*No pipe vents installed.

†Pipe vents plugged.

Table II. Static Pressure Orifice Locations

(a) Porous floor passive venting models (configurations 1–4)

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
18	−36.0	0.00	0.500	Plate, leading-edge assembly
19	−35.0	↓	.224	↓
20	−34.0	↓	.127	↓
21	−33.0	↓	.067	↓
22	−32.0	↓	.029	↓
23	−31.0	↓	.007	↓
24	−30.0	↓	.000	↓
25	−29.0	↓	↓	Plate, forward of cavity
26	−28.0	↓	↓	↓
27	−27.0	↓	↓	↓
28	−26.0	↓	↓	↓
29	−25.0	↓	↓	↓
30	−24.0	↓	↓	↓
31	−22.0	↓	↓	↓
32	−20.0	↓	↓	↓
33	−18.0	↓	↓	↓
34	−16.0	↓	↓	↓
35	−14.0	↓	↓	↓
36	−12.0	↓	↓	↓
37	−10.0	↓	↓	↓
38	−8.0	↓	↓	↓
39	−6.0	↓	↓	↓
40	−4.0	↓	↓	↓
41	−2.0	↓	↓	↓
42	44.0	↓	↓	Plate, aft of cavity
43	46.0	↓	↓	↓
44	48.0	↓	↓	↓
45	50.0	↓	↓	↓
46	52.0	↓	↓	↓
47	54.0	↓	↓	↓
48	−3.0	7.80	↓	Plate, left of cavity
49	3.0	↓	↓	↓
50	9.0	↓	↓	↓
51	15.0	↓	↓	↓
52	21.0	↓	↓	↓
53	27.0	↓	↓	↓
54	29.0	↓	↓	↓
55	31.0	↓	↓	↓
56	33.0	↓	↓	↓
57	35.0	↓	↓	↓
58	37.0	↓	↓	↓
59	39.0	↓	↓	↓
60	41.0	↓	↓	↓
61	43.0	↓	↓	↓
62	45.0	↓	↓	↓
63	−3.0	−7.80	↓	Plate, right of cavity
64	10.0	↓	↓	↓
65	21.0	↓	↓	↓
66	32.0	↓	↓	↓
67	45.0	↓	↓	↓

Table II. Continued

(a) Continued

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
68	0.0	4.13	1.200	Cavity, forward wall
69	↓	2.75	↓	↓
70	↓	1.38	↓	↓
71	↓	−1.38	↓	↓
72	↓	−2.75	↓	↓
73	↓	−4.13	↓	↓
74	1.0	4.80	↓	Cavity, left sidewall
75	2.0	↓	↓	↓
76	3.0	↓	↓	↓
77	4.0	↓	↓	↓
78	5.0	↓	↓	↓
79	6.0	↓	↓	↓
80	7.0	↓	↓	↓
81	8.0	↓	↓	↓
82	9.0	↓	↓	↓
83	10.0	↓	↓	↓
84	11.0	↓	↓	↓
85	12.0	↓	↓	↓
86	14.0	↓	↓	↓
87	16.0	↓	↓	↓
88	18.0	↓	↓	↓
89	20.0	↓	↓	↓
90	22.0	↓	↓	↓
91	24.0	↓	↓	↓
92	26.0	↓	↓	↓
93	28.0	↓	↓	↓
94	30.0	↓	↓	↓
95	31.0	↓	↓	↓
96	32.0	↓	↓	↓
*97	33.0	↓	↓	↓
*98	34.0	↓	↓	↓
*99	35.0	↓	↓	↓
*100	36.0	↓	↓	↓
*101	37.0	↓	↓	↓
*102	38.0	↓	↓	↓
*103	39.0	↓	↓	↓
*104	40.0	↓	↓	↓
*105	41.0	↓	↓	↓
106	3.0	−4.80	↓	Cavity, right sidewall
107	6.0	↓	↓	↓
108	12.0	↓	↓	↓
109	18.0	↓	↓	↓
110	24.0	↓	↓	↓
111	30.0	↓	↓	↓
*112	36.0	↓	↓	↓
*113	39.0	↓	↓	↓

*Not used for $l = 32.16$ in.

Table II. Continued

(a) Continued

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
114	1.0	0.00	2.400	Cavity, floor
115	2.0	↓	↓	↓
116	3.0			
117	4.0			
118	5.0			
119	6.0			
120	7.0			
121	8.0			
122	9.0			
123	10.0			
124	12.0			
125	13.0			
126	14.0			
127	15.0			
128	16.0			
129	17.0			
130	18.0			
131	20.0			
132	21.0			
133	22.0			
134	23.0			
135	24.0			
136	25.0			
137	26.0			
138	28.0			
139	29.0			
140	30.0			
141	31.0			
142	32.0			
*143	33.0			
*144	34.0			
*145	35.0			
*146	36.0			
*147	37.0			
*148	38.0			
*149	39.0			
*150	40.0			
*151	41.0	↓	↓	↓
152	1.0	1.00	3.650	Vent chamber, floor
153	3.0	↓	↓	↓
154	5.0			
155	7.0			
156	9.0			
157	11.0			
158	13.0			
159	15.0			
160	17.0			
161	19.0			
162	21.0	↓	↓	↓

*Not used for $l = 32.16$ in.

Table II. Continued

(a) Concluded

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
163	23.0	1.00	3.650	Vent chamber, floor
164	25.0	↓	↓	↓
165	27.0	↓	↓	↓
166	29.0	↓	↓	↓
167	31.0	↓	↓	↓
168	33.0	↓	↓	↓
169	35.0	↓	↓	↓
170	37.0	↓	↓	↓
171	39.0	↓	↓	↓
172	41.0	↓	↓	↓
*173	42.0	−4.00	1.200	Cavity, aft wall, $l = 42.00$ in.
*174	42.0	−3.00	↓	↓
*175	↓	−2.00	↓	↓
*176	↓	−1.00	↓	↓
*177	↓	1.00	↓	↓
*178	↓	2.00	↓	↓
*179	↓	3.00	↓	↓
*180	↓	4.00	↓	↓
**181	32.16	.00	.200	Cavity, aft wall, $l = 32.16$ in.
**182	↓	↓	.400	↓
**183	↓	↓	.800	↓
**184	↓	↓	1.600	↓
**185	↓	↓	2.000	↓
**186	↓	↓	2.200	↓

*Not used for $l = 32.16$ in.

**Not used for $l = 42.00$ in.

Table II. Continued

(b) Pipe vent passive venting models (configurations 5 and 6)

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
18	−36.0	0.00	0.500	Plate, leading-edge assembly
19	−35.0	↓	.224	↓
20	−34.0	↓	.127	↓
21	−33.0	↓	.064	↓
22	−32.0	↓	.029	↓
23	−31.0	↓	.007	↓
24	−30.0	↓	.000	↓
25	−29.0	↓	↓	Plate, forward of cavity
26	−28.0	↓	↓	↓
27	−27.0	↓	↓	↓
28	−26.0	↓	↓	↓
29	−25.0	↓	↓	↓
30	−24.0	↓	↓	↓
31	−22.0	↓	↓	↓
32	−20.0	↓	↓	↓
33	−18.0	↓	↓	↓
34	−16.0	↓	↓	↓
35	−14.0	↓	↓	↓
36	−12.0	↓	↓	↓
37	−10.0	↓	↓	↓
38	−8.0	↓	↓	↓
39	−6.0	↓	↓	↓
40	−4.0	↓	↓	↓
41	−2.0	↓	↓	↓
42	−3.0	7.80	↓	Plate, left of cavity
43	3.0	↓	↓	↓
44	9.0	↓	↓	↓
45	15.0	↓	↓	↓
46	21.0	↓	↓	↓
47	27.0	↓	↓	↓
48	29.0	↓	↓	↓
49	31.0	↓	↓	↓
50	33.0	↓	↓	↓
51	35.0	↓	↓	↓
52	37.0	↓	↓	↓
53	39.0	↓	↓	↓
54	41.0	↓	↓	↓
55	43.0	↓	↓	↓
56	45.0	↓	↓	↓
57	−3.0	−7.80	↓	Plate, right of cavity
58	10.0	↓	↓	↓
59	21.0	↓	↓	↓
60	32.0	↓	↓	↓
61	45.0	↓	↓	↓
62	.0	4.13	1.200	Cavity, forward wall
63	↓	2.75	↓	↓
64	↓	1.38	↓	↓
65	↓	−1.38	↓	↓
66	↓	−2.75	↓	↓
67	↓	−4.13	↓	↓

Table II. Continued

(b) Continued

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
68	1.0	4.80	1.200	Cavity, left sidewall
69	2.0	↓	↓	↓
70	3.0	↓	↓	↓
71	4.0	↓	↓	↓
72	5.0	↓	↓	↓
73	6.0	↓	↓	↓
74	7.0	↓	↓	↓
75	8.0	↓	↓	↓
76	9.0	↓	↓	↓
77	10.0	↓	↓	↓
78	11.0	↓	↓	↓
79	12.0	↓	↓	↓
80	14.0	↓	↓	↓
81	16.0	↓	↓	↓
82	18.0	↓	↓	↓
83	20.0	↓	↓	↓
84	22.0	↓	↓	↓
85	24.0	↓	↓	↓
86	26.0	↓	↓	↓
87	28.0	↓	↓	↓
88	30.0	↓	↓	↓
89	31.0	↓	↓	↓
90	32.0	↓	↓	↓
*91	33.0	↓	↓	↓
*92	34.0	↓	↓	↓
*93	35.0	↓	↓	↓
*94	36.0	↓	↓	↓
*95	37.0	↓	↓	↓
*96	38.0	↓	↓	↓
*97	39.0	↓	↓	↓
*98	40.0	↓	↓	↓
*99	41.0	↓	↓	↓
100	3.0	−4.80	↓	Cavity, right sidewall
101	6.0	↓	↓	↓
102	12.0	↓	↓	↓
103	18.0	↓	↓	↓
104	24.0	↓	↓	↓
105	30.0	↓	↓	↓
*106	36.0	↓	↓	↓
*107	39.0	↓	↓	↓
108	4.0	.00	2.400	Cavity, floor
109	10.0	↓	↓	↓
110	12.0	↓	↓	↓
111	14.0	↓	↓	↓
112	18.0	↓	↓	↓
113	20.0	↓	↓	↓
114	22.0	↓	↓	↓
115	24.0	↓	↓	↓
116	26.0	↓	↓	↓

*Not used for $l = 32.16$ in.

Table II. Continued

(b) Concluded

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
117	28.0	0.00	2.400	Cavity, floor
118	30.0	↓	↓	↓
119	34.0	↓	↓	↓
120	36.0	↓	↓	↓
121	37.0	↓	↓	↓
122	38.0	↓	↓	↓
123	39.0	↓	↓	↓
124	40.0	↓	↓	↓
125	41.0	↓	↓	↓
126	1.0	−2.40	↓	↓
127	2.0	↓	↓	↓
128	3.0	↓	↓	↓
129	4.0	↓	↓	↓
130	5.0	↓	↓	↓
131	6.0	↓	↓	↓
132	8.0	↓	↓	↓
133	10.0	↓	↓	↓
134	12.0	↓	↓	↓
135	14.0	↓	↓	↓
136	16.0	↓	↓	↓
137	18.0	↓	↓	↓
138	20.0	↓	↓	↓
139	22.0	↓	↓	↓
140	24.0	↓	↓	↓
141	26.0	↓	↓	↓
142	28.0	↓	↓	↓
143	30.0	↓	↓	↓
144	32.0	↓	↓	↓
*146	34.0	↓	↓	↓
*148	36.0	↓	↓	↓
*147	37.0	↓	↓	↓
*148	38.0	↓	↓	↓
*149	39.0	↓	↓	↓
*150	40.0	↓	↓	↓
*151	41.0	↓	↓	↓
152	2.0	2.40	↓	↓
153	4.0	↓	↓	↓
154	6.0	↓	↓	↓
155	12.0	↓	↓	↓
156	18.0	↓	↓	↓
157	24.0	↓	↓	↓
158	30.0	↓	↓	↓
*159	36.0	↓	↓	↓
*160	38.0	↓	↓	↓
*161	40.0	↓	↓	↓
162	Varies	.00	.400	Cavity, aft wall
163	↓	↓	.800	↓
164	↓	↓	1.590	↓
165	↓	↓	1.990	↓

*Not used for $l = 32.16$ in.

Table II. Continued

(c) Lip vent passive venting models (configurations 7 and 8)

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
18	−39.0	0.00	0.500	Plate, leading-edge assembly
19	−38.0	↓	.224	↓
20	−37.0	↓	.127	↓
21	−36.0	↓	.067	↓
22	−35.0	↓	.029	↓
23	−34.0	↓	.007	↓
24	−33.0	↓	.000	↓
25	−32.0	↓	↓	Plate, forward of cavity
26	−31.0	↓	↓	↓
27	−30.0	↓	↓	↓
28	−29.0	↓	↓	↓
29	−28.0	↓	↓	↓
30	−27.0	↓	↓	↓
31	−25.0	↓	↓	↓
32	−23.0	↓	↓	↓
33	−21.0	↓	↓	↓
34	−19.0	↓	↓	↓
35	−17.0	↓	↓	↓
36	−15.0	↓	↓	↓
37	−13.0	↓	↓	↓
38	−11.0	↓	↓	↓
39	−9.0	↓	↓	↓
40	−7.0	↓	↓	↓
41	−5.0	↓	↓	↓
42	41.0	↓	↓	Plate, aft of cavity
43	43.0	↓	↓	↓
44	45.0	↓	↓	↓
45	47.0	↓	↓	↓
46	49.0	↓	↓	↓
47	51.0	↓	↓	↓
48	−6.0	7.80	↓	Plate, left of cavity
49	.0	↓	↓	↓
50	6.0	↓	↓	↓
51	12.0	↓	↓	↓
52	18.0	↓	↓	↓
53	24.0	↓	↓	↓
54	26.0	↓	↓	↓
55	28.0	↓	↓	↓
56	30.0	↓	↓	↓
57	32.0	↓	↓	↓
58	34.0	↓	↓	↓
59	36.0	↓	↓	↓
60	38.0	↓	↓	↓
61	40.0	↓	↓	↓
62	42.0	↓	↓	↓
63	−6.0	−7.80	.000	Plate, right of cavity
64	7.0	↓	↓	↓
65	18.0	↓	↓	↓
66	29.0	↓	↓	↓
67	42.0	↓	↓	↓

Table II. Continued

(c) Continued

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
68	0.0	4.80	1.200	Cavity, left sidewall
69	1.0	↓	↓	↓
70	2.0	↓	↓	↓
71	3.0	↓	↓	↓
72	4.0	↓	↓	↓
73	5.0	↓	↓	↓
74	6.0	↓	↓	↓
75	7.0	↓	↓	↓
76	8.0	↓	↓	↓
77	9.0	↓	↓	↓
78	11.0	↓	↓	↓
79	13.0	↓	↓	↓
80	15.0	↓	↓	↓
81	17.0	↓	↓	↓
82	19.0	↓	↓	↓
83	21.0	↓	↓	↓
84	23.0	↓	↓	↓
85	25.0	↓	↓	↓
86	27.0	↓	↓	↓
87	28.0	↓	↓	↓
88	29.0	↓	↓	↓
89	30.0	↓	↓	↓
90	31.0	↓	↓	↓
91	32.0	↓	↓	↓
92	3.0	↓	2.400	↓
93	15.0	↓	↓	↓
94	27.0	↓	↓	↓
95	3.0	↓	3.600	↓
96	15.0	↓	↓	↓
97	27.0	↓	↓	↓
98	.0	−4.80	1.200	Cavity, right sidewall
99	3.0	↓	↓	↓
100	11.0	↓	↓	↓
101	15.0	↓	↓	↓
102	21.0	↓	↓	↓
103	27.0	↓	↓	↓
104	.0	.00	4.800	Cavity, floor
105	1.0	↓	↓	↓
106	2.0	↓	↓	↓
107	3.0	↓	↓	↓
108	4.0	↓	↓	↓
109	5.0	↓	↓	↓
110	6.0	↓	↓	↓
111	7.0	↓	↓	↓
112	9.0	↓	↓	↓
113	10.0	↓	↓	↓
114	11.0	↓	↓	↓
115	12.0	↓	↓	↓
116	13.0	↓	↓	↓
117	14.0	↓	↓	↓

Table II. Concluded

(c) Concluded

Orifice no.	x, in.	y, in.	z, in.	Orifice location on model
118	15.0	0.00	4.800	Cavity, floor
119	17.0	↓	↓	↓
120	18.0			
121	19.0			
122	20.0			
123	21.0			
124	22.0			
125	23.0			
126	25.0			
127	26.0			
128	27.0			
129	28.0			
130	29.0			
131	30.0			
132	31.0			
133	32.0			
134	−2.0	1.00	6.050	Vent chamber, floor
135	.0	↓	↓	↓
136	2.0			
137	4.0			
138	6.0			
139	8.0			
140	10.0			
141	12.0			
142	14.0			
143	16.0			
144	18.0			
145	20.0			
146	22.0			
147	24.0			
148	26.0			
149	28.0			
150	30.0			
151	32.0			
152	34.0			
153	36.0			
154	38.0			

Table III. Pressure Coefficients for Porous Floor Cavity Models

[l = 32.16 in.; h = 2.40 in.]

(a) Solid floor (100 percent of cavity floor taped); configuration 1a

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
9.	82.	0.20	2.05	22.94	23.60	0.65	99.7	0.8646	-0.2131	-0.1860	-0.1660	-0.1502	-0.1193	-0.0921	-0
9.	81.	0.40	3.63	19.93	22.24	2.22	99.8	0.9055	-0.2441	-0.2078	-0.1945	-0.1718	-0.1421	-0.1078	-0
9.	80.	0.60	4.69	16.31	20.82	4.13	101.4	0.9959	-0.2760	-0.2320	-0.2166	-0.1900	-0.1590	-0.1156	-0
9.	79.	0.80	3.80	9.30	14.17	4.16	100.1	1.1257	-0.3158	-0.2822	-0.2594	-0.2290	-0.1887	-0.1318	-0
9.	78.	0.90	3.54	7.36	12.46	4.19	98.8	1.1997	-0.3841	-0.3683	-0.3725	-0.3420	-0.1905	-0.1005	-0
9.	77.	0.95	3.40	6.61	11.79	4.16	99.8	1.2335	-0.2812	-0.2915	-0.3138	-0.3250	-0.3631	-0.3683	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
9.	82.	-0.0374	-0.0318	-0.0273	-0.0263	-0.0216	-0.0205	-0.0180	-0.0179	-0.0273	-0.0231	-0.0256	-0.0418	-0.0667	-0
9.	81.	-0.0552	-0.0467	-0.0407	-0.0373	-0.0337	-0.0342	-0.0322	-0.0305	-0.0345	-0.0324	-0.0352	-0.0523	-0.0792	-0
9.	80.	-0.0558	-0.0491	-0.0411	-0.0359	-0.0329	-0.0312	-0.0294	-0.0300	-0.0341	-0.0355	-0.0407	-0.0561	-0.0853	-0
9.	79.	-0.0508	-0.0437	-0.0355	-0.0305	-0.0262	-0.0243	-0.0242	-0.0256	-0.0287	-0.0309	-0.0374	-0.0504	-0.0800	-0
9.	78.	-0.0222	-0.0177	-0.0099	-0.0057	-0.0024	-0.0003	-0.0012	-0.0034	-0.0062	-0.0104	-0.0172	-0.0277	-0.0543	-0
9.	77.	0.0386	0.0311	0.0256	0.0229	0.0208	0.0205	0.0160	0.0109	0.0068	-0.0009	-0.0089	-0.0188	-0.0444	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
9.	82.	-0.0268	-0.0264	-0.0242	-0.0271	0.0119	0.0566	0.0721	0.0555	0.0225	-0.0372	-0.0970	-0.0990	-0.0795	-0
9.	81.	-0.0558	-0.0472	-0.0349	-0.0461	-0.0011	0.0441	0.0659	0.0589	0.0240	-0.0469	-0.1195	-0.1207	-0.0960	-0
9.	80.	-0.0705	-0.0684	-0.0417	-0.0534	-0.0073	0.0501	0.0752	0.0719	0.0300	-0.0643	-0.1661	-0.1727	-0.1392	-0
9.	79.	-0.1772	-0.1878	-0.0447	-0.0655	-0.0273	0.0541	0.0969	0.1019	0.0508	-0.0835	-0.2638	-0.2758	-0.2229	-0
9.	78.	-0.0994	-0.1128	-0.0272	-0.0478	-0.0185	0.0768	0.1467	0.1641	0.1135	-0.0249	-0.2435	-0.2602	-0.1748	-0
9.	77.	-0.0433	-0.0558	-0.0234	-0.0446	-0.0218	0.0771	0.1623	0.1883	0.1375	0.0026	-0.2085	-0.2486	-0.1473	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
9.	82.	-0.0225	0.0187	0.0737	-0.0740	-0.0317	-0.1211	-0.1231	-0.1290	-0.1205	-0.1263	-0.1179	-0.1259	-0.1159	-0
9.	81.	-0.0338	0.0069	0.0619	-0.0927	-0.0472	-0.1325	-0.1348	-0.1373	-0.1310	-0.1381	-0.1250	-0.1391	-0.1297	-0
9.	80.	-0.0422	0.0025	0.0726	-0.1271	-0.0675	-0.1414	-0.1481	-0.1457	-0.1375	-0.1436	-0.1388	-0.1410	-0.1383	-0
9.	79.	-0.0436	-0.0152	0.0959	-0.1898	-0.1339	-0.1368	-0.1398	-0.1382	-0.1305	-0.1410	-0.1360	-0.1390	-0.1386	-0
9.	78.	-0.0267	-0.0062	0.1463	-0.1415	-0.0667	-0.1027	-0.1029	-0.1014	-0.1016	-0.1051	-0.1044	-0.1027	-0.1037	-0
9.	77.	-0.0227	-0.0085	0.1633	-0.1064	-0.0213	-0.0835	-0.0848	-0.0808	-0.0824	-0.0864	-0.0868	-0.0809	-0.0836	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
9.	82.	-0.1185	-0.0541	-0.0393	0.0450	0.0599	0.1095	0.1485	0.1645	0.1760	0.1923	0.2367	0.2896	0.3740	0
9.	81.	-0.1178	-0.0816	-0.0208	0.0323	0.0560	0.1111	0.1408	0.1601	0.1853	0.2013	0.2434	0.3029	0.3901	0
9.	80.	-0.1279	-0.0919	-0.0469	-0.0072	0.0200	0.0969	0.1508	0.1653	0.1912	0.2160	0.2603	0.3265	0.4303	0
9.	79.	-0.1486	-0.1124	-0.0790	-0.0365	0.0000	0.0652	0.1261	0.1764	0.2128	0.2479	0.2982	0.3675	0.4630	0
9.	78.	-0.1125	-0.1005	-0.0727	-0.0383	0.0008	0.0697	0.1368	0.1931	0.2428	0.2914	0.3449	0.4068	0.4865	0
9.	77.	-0.0980	-0.0882	-0.0706	-0.0409	-0.0083	0.0582	0.1249	0.1871	0.2406	0.2890	0.3428	0.4044	0.4702	0

Table III. Continued

(a) Concluded

Run	Point	CP107	CP108	CP109	CP110	CP111	CP114	CP115	CP116	CP118	CP119	CP120	CP121	CP122	C
9.	82.	-0.1470	0.0761	0.1614	0.2360	0.4517	-0.1224	-0.1328	-0.1323	-0.1503	-0.1630	-0.1803	-0.1318	-0.0655	0.
9.	81.	-0.1531	0.0827	0.1729	0.2386	0.4707	-0.1371	-0.1492	-0.1452	-0.1593	-0.1679	-0.1856	-0.1494	-0.0751	0.
9.	80.	-0.1604	0.0658	0.1775	0.2588	0.4761	-0.1440	-0.1514	-0.1539	-0.1704	-0.1793	-0.1998	-0.1521	-0.0880	-0.
9.	79.	-0.1525	0.0252	0.1784	0.2989	0.5016	-0.1396	-0.1448	-0.1461	-0.1556	-0.1619	-0.1772	-0.1528	-0.1208	-0.
9.	78.	-0.1113	0.0120	0.1940	0.3445	0.5188	-0.1039	-0.1068	-0.1100	-0.1183	-0.1229	-0.1346	-0.1230	-0.1042	-0.
9.	77.	-0.0915	-0.0046	0.1847	0.3481	0.4866	-0.0844	-0.0857	-0.0885	-0.0949	-0.1002	-0.1109	-0.1036	-0.0923	-0.

Run	Point	CP127	CP129	CP130	CP131	CP134	CP136	CP137	CP138	CP139	CP140	CP142	CP152	CP154	C
9.	82.	0.2134	0.2105	0.1790	0.1782	0.2328	0.2702	0.3208	0.4011	0.4440	0.4628	0.5463	0.0167	0.0205	0.
9.	81.	0.2060	0.2110	0.1830	0.1770	0.2305	0.2726	0.3274	0.4358	0.4781	0.4916	0.5709	-0.0104	-0.0062	-0.
9.	80.	0.2131	0.2266	0.2015	0.1936	0.2476	0.2947	0.3568	0.4696	0.4946	0.5166	0.5870	-0.0262	-0.0231	-0.
9.	79.	0.1731	0.2253	0.2212	0.2298	0.2830	0.3307	0.3818	0.4705	0.4981	0.5115	0.6190	-0.0282	-0.0265	-0.
9.	78.	0.1424	0.2199	0.2428	0.2776	0.3323	0.3762	0.4133	0.4763	0.4936	0.5184	0.6439	0.0078	0.0079	0.
9.	77.	0.1013	0.1754	0.2113	0.2635	0.3283	0.3694	0.3963	0.4527	0.4724	0.4942	0.6147	0.0206	0.0197	0.

Run	Point	CP159	CP160	CP161	CP162	CP163	CP164	CP165	CP166	CP167	CP168	CP169	CP170	CP171	C
9.	82.	0.0183	0.0181	0.0238	0.0213	0.0168	0.0192	0.0205	0.0172	0.0185	0.0180	0.0158	0.0183	0.0209	0.
9.	81.	-0.0075	-0.0051	-0.0057	-0.0082	-0.0100	-0.0096	-0.0092	-0.0123	-0.0104	-0.0148	-0.0134	-0.0113	-0.0071	-0.
9.	80.	-0.0255	-0.0241	-0.0235	-0.0237	-0.0256	-0.0250	-0.0245	-0.0263	-0.0243	-0.0279	-0.0276	-0.0273	-0.0258	-0.
9.	79.	-0.0281	-0.0267	-0.0267	-0.0265	-0.0287	-0.0269	-0.0268	-0.0284	-0.0269	-0.0295	-0.0287	-0.0288	-0.0268	-0.
9.	78.	0.0078	0.0082	0.0080	0.0086	0.0072	0.0081	0.0076	0.0069	0.0071	0.0074	0.0080	0.0082	0.0090	0.
9.	77.	0.0206	0.0196	0.0198	0.0206	0.0202	0.0205	0.0201	0.0209	0.0212	0.0236	0.0228	0.0223	0.0217	0.

Run	Point	CP184	CP185	CP186
9.	82.	0.5357	0.5310	0.5528
9.	81.	0.5322	0.5346	0.5588
9.	80.	0.5571	0.5532	0.5736
9.	79.	0.5702	0.5715	0.5994
9.	78.	0.5807	0.5833	0.6074
9.	77.	0.5530	0.5583	0.5888

Table III. Continued

(b) 10 percent of cavity floor area with porosity; configuration 1b

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
11.	102.	0.20	2.05	22.95	23.61	0.65	100.9	0.8639	-0.2095	-0.1788	-0.1599	-0.1430	-0.1138	-0.0871	-0
11.	101.	0.40	3.64	19.92	22.24	2.23	99.9	0.9060	-0.2441	-0.2069	-0.1927	-0.1667	-0.1424	-0.1055	-0
11.	100.	0.60	4.68	16.32	20.81	4.11	100.8	0.9939	-0.2725	-0.2282	-0.2118	-0.1834	-0.1557	-0.1112	-0
11.	99.	0.80	3.80	9.30	14.19	4.18	100.9	1.1248	-0.3094	-0.2789	-0.2551	-0.2256	-0.1850	-0.1278	-0
11.	98.	0.90	3.53	7.36	12.48	4.19	100.5	1.1967	-0.3615	-0.3616	-0.3667	-0.3405	-0.1970	-0.0907	-0
11.	97.	0.95	3.40	6.62	11.83	4.18	101.2	1.2378	-0.2636	-0.2876	-0.3102	-0.3242	-0.3609	-0.3645	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
11.	102.	-0.0322	-0.0243	-0.0181	-0.0165	-0.0119	-0.0084	-0.0088	-0.0041	-0.0118	-0.0089	-0.0101	-0.0205	-0.0389	-0
11.	101.	-0.0513	-0.0470	-0.0384	-0.0351	-0.0326	-0.0295	-0.0283	-0.0274	-0.0286	-0.0303	-0.0342	-0.0420	-0.0589	-0
11.	100.	-0.0490	-0.0438	-0.0355	-0.0317	-0.0289	-0.0257	-0.0245	-0.0240	-0.0252	-0.0284	-0.0326	-0.0406	-0.0591	-0
11.	99.	-0.0473	-0.0402	-0.0317	-0.0262	-0.0222	-0.0199	-0.0192	-0.0196	-0.0232	-0.0240	-0.0280	-0.0370	-0.0581	-0
11.	98.	-0.0160	-0.0104	-0.0032	0.0006	0.0039	0.0061	0.0058	0.0049	0.0013	0.0001	-0.0042	-0.0118	-0.0315	-0
11.	97.	0.0421	0.0364	0.0299	0.0272	0.0256	0.0236	0.0198	0.0160	0.0107	0.0069	0.0007	-0.0084	-0.0275	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
11.	102.	-0.0292	-0.0300	-0.0082	-0.0144	0.0077	0.0504	0.0768	0.0628	0.0321	-0.0244	-0.0816	-0.0820	-0.0638	-0
11.	101.	-0.0445	-0.0421	-0.0337	-0.0395	-0.0164	0.0343	0.0627	0.0584	0.0255	-0.0436	-0.1088	-0.1121	-0.0919	-0
11.	100.	-0.0641	-0.0641	-0.0331	-0.0424	-0.0205	0.0361	0.0730	0.0721	0.0340	-0.0546	-0.1424	-0.1454	-0.1176	-0
11.	99.	-0.1675	-0.1841	-0.0338	-0.0512	-0.0339	0.0259	0.0824	0.0908	0.0463	-0.0790	-0.2246	-0.2239	-0.1841	-0
11.	98.	-0.0851	-0.1020	-0.0120	-0.0278	-0.0153	0.0457	0.1178	0.1423	0.1015	-0.0231	-0.1924	-0.1791	-0.1241	-0
11.	97.	-0.0296	-0.0455	-0.0123	-0.0278	-0.0158	0.0437	0.1239	0.1592	0.1228	0.0076	-0.1611	-0.1665	-0.0861	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
11.	102.	-0.0068	0.0158	0.0784	-0.0634	-0.0266	-0.0915	-0.0823	-0.0817	-0.0724	-0.0868	-0.0844	-0.0980	-0.0945	-0
11.	101.	-0.0304	-0.0064	0.0625	-0.0848	-0.0484	-0.1057	-0.0971	-0.0876	-0.0968	-0.1023	-0.1091	-0.1058	-0.1050	-0
11.	100.	-0.0326	-0.0106	0.0718	-0.1116	-0.0617	-0.1056	-0.0949	-0.0905	-0.1006	-0.1034	-0.1039	-0.1079	-0.1069	-0
11.	99.	-0.0328	-0.0269	0.0811	-0.1725	-0.1264	-0.1012	-0.0967	-0.0922	-0.0943	-0.0998	-0.0970	-0.1053	-0.1041	-0
11.	98.	-0.0112	-0.0090	0.1180	-0.1244	-0.0511	-0.0661	-0.0591	-0.0573	-0.0569	-0.0606	-0.0629	-0.0663	-0.0646	-0
11.	97.	-0.0113	-0.0096	0.1236	-0.0884	-0.0049	-0.0510	-0.0450	-0.0434	-0.0416	-0.0459	-0.0485	-0.0526	-0.0532	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
11.	102.	-0.0849	-0.0627	-0.0708	-0.0017	0.0496	0.1147	0.1382	0.1543	0.1804	0.1834	0.2153	0.2733	0.3338	0
11.	101.	-0.1049	-0.0901	-0.0716	-0.0347	0.0130	0.0721	0.1144	0.1542	0.1739	0.1894	0.2220	0.2753	0.3531	0
11.	100.	-0.0995	-0.0927	-0.0684	-0.0473	-0.0089	0.0699	0.1156	0.1505	0.1746	0.2027	0.2421	0.2940	0.3776	0
11.	99.	-0.1108	-0.0989	-0.0855	-0.0599	-0.0292	0.0406	0.0968	0.1425	0.1820	0.2167	0.2598	0.3123	0.3806	0
11.	98.	-0.0672	-0.0648	-0.0587	-0.0412	-0.0179	0.0372	0.0972	0.1474	0.1930	0.2367	0.2823	0.3284	0.3818	0
11.	97.	-0.0534	-0.0533	-0.0467	-0.0367	-0.0168	0.0310	0.0870	0.1380	0.1838	0.2252	0.2710	0.3135	0.3550	0

Table III. Continued

(b) Concluded

Run	Point	CP107	CP108	CP109	CP110	CP111	CP114	CP115	CP116	CP118	CP119	CP120	CP121	CP122	C
11.	102.	-0.0994	0.0495	0.1579	0.2229	0.3829	-0.1098	-0.1018	-0.0999	-0.1081	-0.1099	-0.1183	-0.1085	-0.0927	-0.
11.	101.	-0.1123	0.0224	0.1457	0.2262	0.4134	-0.1206	-0.1090	-0.1126	-0.1174	-0.1211	-0.1311	-0.1264	-0.1134	-0.
11.	100.	-0.1118	0.0083	0.1461	0.2421	0.4074	-0.1215	-0.1082	-0.1110	-0.1180	-0.1227	-0.1320	-0.1235	-0.1076	-0.
11.	99.	-0.1078	-0.0246	0.1403	0.2640	0.4017	-0.1164	-0.1049	-0.1076	-0.1126	-0.1156	-0.1246	-0.1197	-0.1098	-0.
11.	98.	-0.0711	-0.0161	0.1485	0.2824	0.3901	-0.0769	-0.0673	-0.0693	-0.0747	-0.0773	-0.0848	-0.0815	-0.0729	-0.
11.	97.	-0.0574	-0.0140	0.1348	0.2701	0.3641	-0.0624	-0.0528	-0.0546	-0.0596	-0.0626	-0.0682	-0.0665	-0.0625	-0.

Run	Point	CP127	CP129	CP130	CP131	CP134	CP136	CP137	CP138	CP139	CP140	CP142	CP152	CP154	C
11.	102.	0.1543	0.1830	0.1776	0.1782	0.2168	0.2450	0.2882	0.3652	0.3938	0.3952	0.5237	0.1770	0.1773	0.
11.	101.	0.1312	0.1693	0.1704	0.1751	0.2149	0.2344	0.2766	0.3567	0.4029	0.4301	0.5717	0.1709	0.1681	0.
11.	100.	0.1169	0.1705	0.1767	0.1897	0.2276	0.2590	0.2975	0.3713	0.4079	0.4346	0.5569	0.1772	0.1743	0.
11.	99.	0.0719	0.1375	0.1607	0.1956	0.2442	0.2855	0.3186	0.3756	0.4069	0.4111	0.5556	0.1702	0.1690	0.
11.	98.	0.0527	0.1196	0.1506	0.2034	0.2594	0.2927	0.3167	0.3532	0.3768	0.3997	0.5538	0.1779	0.1766	0.
11.	97.	0.0475	0.1024	0.1332	0.1847	0.2454	0.2804	0.3002	0.3385	0.3531	0.3773	0.5237	0.1714	0.1695	0.

Run	Point	CP159	CP160	CP161	CP162	CP163	CP164	CP165	CP166	CP167	CP168	CP169	CP170	CP171	C
11.	102.	0.1762	0.1759	0.1785	0.1713	0.1692	0.1735	0.1736	0.1651	0.1969	0.1821	0.1883	0.1934	0.1959	0.
11.	101.	0.1697	0.1695	0.1668	0.1640	0.1636	0.1633	0.1612	0.1532	0.1881	0.1712	0.1790	0.1809	0.1804	0.
11.	100.	0.1703	0.1689	0.1696	0.1702	0.1691	0.1702	0.1699	0.1614	0.1963	0.1769	0.1880	0.1911	0.1917	0.
11.	99.	0.1686	0.1707	0.1701	0.1693	0.1674	0.1679	0.1653	0.1566	0.1874	0.1677	0.1770	0.1763	0.1773	0.
11.	98.	0.1780	0.1794	0.1789	0.1794	0.1788	0.1787	0.1757	0.1670	0.1922	0.1802	0.1885	0.1890	0.1905	0.
11.	97.	0.1716	0.1723	0.1731	0.1734	0.1722	0.1729	0.1718	0.1641	0.1859	0.1721	0.1820	0.1818	0.1823	0.

Run	Point	CP184	CP185	CP186
11.	102.	0.5356	0.5302	0.5463
11.	101.	0.5463	0.5352	0.5490
11.	100.	0.5787	0.5591	0.5739
11.	99.	0.5340	0.5290	0.5453
11.	98.	0.5028	0.5002	0.5207
11.	97.	0.4810	0.4826	0.5104

Table III. Continued

(c) 25 percent of cavity floor area with porosity; configuration 1c

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
12.	112.	0.20	2.05	22.97	23.62	0.64	97.9	0.8770	-0.2143	-0.1866	-0.1659	-0.1490	-0.1207	-0.0936	-0
12.	111.	0.40	3.62	19.93	22.24	2.22	100.6	0.9095	-0.2412	-0.2036	-0.1894	-0.1645	-0.1389	-0.1022	-0
12.	110.	0.60	4.69	16.30	20.82	4.13	100.7	0.9895	-0.2745	-0.2292	-0.2132	-0.1859	-0.1583	-0.1139	-0
12.	109.	0.80	3.80	9.29	14.18	4.18	101.0	1.1300	-0.3122	-0.2807	-0.2582	-0.2275	-0.1859	-0.1289	-0
12.	108.	0.90	3.53	7.36	12.49	4.20	100.4	1.2042	-0.3661	-0.3633	-0.3725	-0.3452	-0.2108	-0.0931	-0
12.	107.	0.95	3.40	6.59	11.80	4.17	100.1	1.2372	-0.2620	-0.2833	-0.3074	-0.3218	-0.3569	-0.3633	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
12.	112.	-0.0370	-0.0325	-0.0228	-0.0220	-0.0195	-0.0124	-0.0125	-0.0098	-0.0163	-0.0144	-0.0154	-0.0206	-0.0385	-0
12.	111.	-0.0476	-0.0430	-0.0353	-0.0301	-0.0260	-0.0238	-0.0222	-0.0223	-0.0232	-0.0245	-0.0272	-0.0346	-0.0519	-0
12.	110.	-0.0516	-0.0467	-0.0377	-0.0330	-0.0300	-0.0272	-0.0273	-0.0254	-0.0263	-0.0264	-0.0292	-0.0351	-0.0513	-0
12.	109.	-0.0474	-0.0414	-0.0322	-0.0260	-0.0224	-0.0204	-0.0187	-0.0194	-0.0218	-0.0223	-0.0247	-0.0326	-0.0501	-0
12.	108.	-0.0180	-0.0134	-0.0055	-0.0006	0.0026	0.0040	0.0039	0.0032	0.0006	-0.0010	-0.0040	-0.0106	-0.0268	-0
12.	107.	0.0457	0.0391	0.0317	0.0277	0.0261	0.0245	0.0213	0.0173	0.0123	0.0086	0.0038	-0.0042	-0.0213	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
12.	112.	-0.0374	-0.0379	-0.0114	-0.0162	-0.0023	0.0334	0.0592	0.0517	0.0279	-0.0278	-0.0831	-0.0822	-0.0697	-0
12.	111.	-0.0322	-0.0316	-0.0270	-0.0315	-0.0157	0.0229	0.0535	0.0565	0.0283	-0.0367	-0.0955	-0.0979	-0.0789	-0
12.	110.	-0.0709	-0.0693	-0.0315	-0.0380	-0.0263	0.0160	0.0535	0.0597	0.0274	-0.0525	-0.1289	-0.1306	-0.1075	-0
12.	109.	-0.1626	-0.1797	-0.0302	-0.0419	-0.0340	0.0050	0.0576	0.0731	0.0381	-0.0702	-0.1946	-0.1916	-0.1581	-0
12.	108.	-0.0784	-0.0977	-0.0108	-0.0188	-0.0145	0.0237	0.0873	0.1181	0.0891	-0.0148	-0.1549	-0.1394	-0.0968	-0
12.	107.	-0.0267	-0.0424	-0.0073	-0.0142	-0.0102	0.0251	0.0933	0.1328	0.1089	0.0150	-0.1249	-0.1138	-0.0570	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
12.	112.	-0.0093	-0.0017	0.0636	-0.0644	-0.0343	-0.0822	-0.0645	-0.0789	-0.0743	-0.0799	-0.0695	-0.0816	-0.0835	-0
12.	111.	-0.0266	-0.0101	0.0516	-0.0741	-0.0409	-0.0827	-0.0664	-0.0767	-0.0745	-0.0767	-0.0736	-0.0822	-0.0871	-0
12.	110.	-0.0293	-0.0198	0.0528	-0.1029	-0.0622	-0.0929	-0.0791	-0.0867	-0.0856	-0.0868	-0.0844	-0.0872	-0.0935	-0
12.	109.	-0.0297	-0.0307	0.0556	-0.1501	-0.1192	-0.0812	-0.0661	-0.0729	-0.0687	-0.0714	-0.0671	-0.0752	-0.0780	-0
12.	108.	-0.0098	-0.0115	0.0861	-0.1016	-0.0438	-0.0492	-0.0376	-0.0435	-0.0417	-0.0430	-0.0404	-0.0437	-0.0452	-0
12.	107.	-0.0073	-0.0077	0.0928	-0.0679	0.0018	-0.0303	-0.0216	-0.0271	-0.0264	-0.0271	-0.0254	-0.0294	-0.0312	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
12.	112.	-0.0811	-0.0782	-0.0692	-0.0138	-0.0049	0.0428	0.0969	0.0990	0.1189	0.1550	0.2013	0.2397	0.3121	0
12.	111.	-0.0915	-0.0896	-0.0834	-0.0501	-0.0093	0.0572	0.0833	0.1198	0.1409	0.1613	0.1940	0.2365	0.3043	0
12.	110.	-0.0881	-0.0870	-0.0766	-0.0553	-0.0307	0.0266	0.0684	0.1028	0.1388	0.1695	0.1999	0.2427	0.3125	0
12.	109.	-0.0748	-0.0778	-0.0737	-0.0613	-0.0452	0.0007	0.0524	0.0953	0.1371	0.1677	0.2107	0.2542	0.3088	0
12.	108.	-0.0488	-0.0474	-0.0439	-0.0357	-0.0257	0.0127	0.0574	0.0985	0.1410	0.1792	0.2192	0.2606	0.3001	0
12.	107.	-0.0320	-0.0330	-0.0317	-0.0291	-0.0210	0.0086	0.0506	0.0913	0.1309	0.1712	0.2113	0.2462	0.2818	0

Table III. Continued

(c) Concluded

Run	Point	CP107	CP108	CP109	CP110	CP111	CP114	CP115	CP116	CP118	CP119	CP120	CP121	CP122	C
12.	112.	-0.0861	-0.0066	0.1076	0.1928	0.3439	-0.0958	-0.0974	-0.0952	-0.0917	-0.0902	-0.0955	-0.0914	-0.0897	-0.
12.	111.	-0.0887	-0.0095	0.1151	0.1959	0.3500	-0.0976	-0.0938	-0.0952	-0.0891	-0.0886	-0.0919	-0.0944	-0.0870	-0.
12.	110.	-0.0931	-0.0237	0.1076	0.2031	0.3231	-0.1021	-0.0978	-0.0989	-0.0950	-0.0966	-0.1004	-0.1017	-0.0952	-0.
12.	109.	-0.0842	-0.0437	0.0953	0.2102	0.3237	-0.0919	-0.0891	-0.0896	-0.0855	-0.0860	-0.0888	-0.0890	-0.0878	-0.
12.	108.	-0.0501	-0.0227	0.1013	0.2210	0.3133	-0.0573	-0.0551	-0.0555	-0.0506	-0.0511	-0.0530	-0.0533	-0.0537	-0.
12.	107.	-0.0375	-0.0172	0.0926	0.2077	0.2912	-0.0434	-0.0411	-0.0421	-0.0391	-0.0399	-0.0409	-0.0406	-0.0408	-0.

Run	Point	CP127	CP129	CP130	CP131	CP134	CP136	CP137	CP138	CP139	CP140	CP142	CP152	CP154	C
12.	112.	0.0877	0.1141	0.1303	0.1498	0.1734	0.1988	0.2248	0.2753	0.3394	0.3631	0.5173	0.1449	0.1433	0.
12.	111.	0.0616	0.1257	0.1413	0.1606	0.1900	0.2139	0.2420	0.2773	0.3290	0.3811	0.5101	0.1429	0.1336	0.
12.	110.	0.0479	0.1068	0.1237	0.1454	0.1964	0.2185	0.2396	0.2768	0.3426	0.3912	0.5301	0.1385	0.1301	0.
12.	109.	0.0161	0.0704	0.0995	0.1363	0.1889	0.2199	0.2426	0.2749	0.3198	0.3453	0.5050	0.1306	0.1226	0.
12.	108.	0.0215	0.0702	0.0986	0.1408	0.1985	0.2298	0.2509	0.2817	0.3103	0.3398	0.5103	0.1386	0.1311	0.
12.	107.	0.0187	0.0589	0.0858	0.1276	0.1845	0.2157	0.2341	0.2619	0.2815	0.3084	0.4690	0.1307	0.1231	0.

Run	Point	CP159	CP160	CP161	CP162	CP163	CP164	CP165	CP166	CP167	CP168	CP169	CP170	CP171	C
12.	112.	0.1413	0.1408	0.1389	0.1346	0.1278	0.1267	0.1227	0.1569	0.1981	0.1786	0.1847	0.1850	0.1887	0.
12.	111.	0.1352	0.1372	0.1475	0.1530	0.1567	0.1537	0.1466	0.1835	0.2313	0.2128	0.2266	0.2317	0.2351	0.
12.	110.	0.1369	0.1364	0.1336	0.1350	0.1371	0.1370	0.1335	0.1763	0.2209	0.1980	0.2020	0.2024	0.2011	0.
12.	109.	0.1254	0.1274	0.1275	0.1294	0.1271	0.1261	0.1192	0.1535	0.1894	0.1721	0.1786	0.1779	0.1790	0.
12.	108.	0.1364	0.1380	0.1381	0.1407	0.1399	0.1393	0.1334	0.1605	0.1878	0.1769	0.1877	0.1888	0.1899	0.
12.	107.	0.1267	0.1281	0.1270	0.1281	0.1268	0.1282	0.1247	0.1537	0.1842	0.1681	0.1753	0.1756	0.1757	0.

Run	Point	CP184	CP185	CP186
12.	112.	0.4995	0.4934	0.5010
12.	111.	0.5322	0.5209	0.5315
12.	110.	0.5261	0.5191	0.5294
12.	109.	0.4614	0.4621	0.4791
12.	108.	0.4334	0.4382	0.4657
12.	107.	0.4095	0.4155	0.4417

Table III. Continued

(d) 50 percent of cavity floor area with porosity; configuration 1d

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
14.	131.	0.20	2.05	22.95	23.60	0.65	98.5	0.8716	-0.2232	-0.1971	-0.1775	-0.1634	-0.1324	-0.0992	-0
14.	130.	0.40	3.65	19.88	22.23	2.26	100.4	0.9092	-0.2653	-0.2139	-0.1997	-0.1735	-0.1495	-0.1103	-0
14.	129.	0.60	4.70	16.33	20.83	4.11	99.2	0.9956	-0.2885	-0.2314	-0.2149	-0.1860	-0.1591	-0.1140	-0
13.	119.	0.80	3.79	9.31	14.19	4.17	102.3	1.1287	-0.3131	-0.2825	-0.2589	-0.2273	-0.1889	-0.1304	-0
13.	118.	0.90	3.53	7.36	12.48	4.20	99.9	1.2050	-0.3661	-0.3646	-0.3713	-0.3401	-0.2026	-0.0942	-0
13.	117.	0.95	3.41	6.58	11.79	4.17	99.1	1.2387	-0.2614	-0.2875	-0.3084	-0.3222	-0.3613	-0.3653	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
14.	131.	-0.0474	-0.0378	-0.0341	-0.0318	-0.0240	-0.0252	-0.0243	-0.0208	-0.0247	-0.0129	-0.0119	-0.0212	-0.0371	-0
14.	130.	-0.0559	-0.0523	-0.0441	-0.0379	-0.0366	-0.0346	-0.0327	-0.0332	-0.0315	-0.0329	-0.0349	-0.0373	-0.0470	-0
14.	129.	-0.0528	-0.0493	-0.0394	-0.0330	-0.0302	-0.0259	-0.0265	-0.0252	-0.0244	-0.0283	-0.0308	-0.0343	-0.0476	-0
13.	119.	-0.0488	-0.0435	-0.0344	-0.0280	-0.0241	-0.0209	-0.0207	-0.0199	-0.0202	-0.0232	-0.0274	-0.0316	-0.0457	-0
13.	118.	-0.0177	-0.0145	-0.0058	-0.0003	0.0027	0.0059	0.0047	0.0037	0.0029	-0.0019	-0.0059	-0.0100	-0.0219	-0
13.	117.	0.0458	0.0367	0.0305	0.0285	0.0264	0.0260	0.0211	0.0161	0.0133	0.0064	0.0000	-0.0056	-0.0197	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
14.	131.	-0.0370	-0.0298	-0.0122	-0.0239	-0.0090	0.0031	0.0387	0.0482	0.0303	-0.0192	-0.0707	-0.0672	-0.0575	-0
14.	130.	-0.0396	-0.0392	-0.0342	-0.0345	-0.0262	0.0001	0.0314	0.0453	0.0226	-0.0346	-0.0870	-0.0905	-0.0767	-0
14.	129.	-0.0591	-0.0574	-0.0323	-0.0314	-0.0279	0.0015	0.0371	0.0564	0.0277	-0.0468	-0.1113	-0.1146	-0.0952	-0
13.	119.	-0.1648	-0.1829	-0.0306	-0.0356	-0.0342	-0.0082	0.0364	0.0639	0.0312	-0.0686	-0.1738	-0.1749	-0.1479	-0
13.	118.	-0.0768	-0.0954	-0.0115	-0.0109	-0.0118	0.0125	0.0629	0.1054	0.0797	-0.0147	-0.1272	-0.1180	-0.0825	-0
13.	117.	-0.0241	-0.0402	-0.0099	-0.0086	-0.0076	0.0153	0.0705	0.1223	0.1026	0.0150	-0.1029	-0.0927	-0.0478	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
14.	131.	-0.0118	-0.0127	0.0344	-0.0552	-0.0263	-0.0558	-0.0510	-0.0595	-0.0494	-0.0543	-0.0406	-0.0653	-0.0476	-0
14.	130.	-0.0301	-0.0234	0.0294	-0.0706	-0.0427	-0.0664	-0.0575	-0.0623	-0.0628	-0.0620	-0.0604	-0.0656	-0.0657	-0
14.	129.	-0.0303	-0.0243	0.0368	-0.0883	-0.0601	-0.0579	-0.0532	-0.0546	-0.0576	-0.0579	-0.0604	-0.0631	-0.0629	-0
13.	119.	-0.0294	-0.0318	0.0357	-0.1378	-0.1205	-0.0618	-0.0573	-0.0601	-0.0607	-0.0606	-0.0615	-0.0612	-0.0616	-0
13.	118.	-0.0092	-0.0090	0.0633	-0.0860	-0.0429	-0.0290	-0.0250	-0.0268	-0.0288	-0.0277	-0.0296	-0.0281	-0.0314	-0
13.	117.	-0.0085	-0.0054	0.0710	-0.0550	0.0010	-0.0199	-0.0151	-0.0176	-0.0191	-0.0181	-0.0205	-0.0188	-0.0223	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
14.	131.	-0.0482	-0.0362	-0.0448	-0.0497	-0.0293	0.0083	0.0582	0.0787	0.1039	0.1201	0.1663	0.2065	0.2891	0
14.	130.	-0.0633	-0.0719	-0.0772	-0.0590	-0.0422	-0.0051	0.0230	0.0533	0.0925	0.1229	0.1572	0.2099	0.2849	0
14.	129.	-0.0658	-0.0696	-0.0642	-0.0576	-0.0579	-0.0245	0.0253	0.0679	0.1012	0.1275	0.1586	0.2177	0.3101	0
13.	119.	-0.0687	-0.0697	-0.0675	-0.0580	-0.0535	-0.0316	0.0062	0.0459	0.0840	0.1191	0.1586	0.2144	0.2809	0
13.	118.	-0.0305	-0.0335	-0.0319	-0.0268	-0.0223	-0.0049	0.0217	0.0613	0.0939	0.1309	0.1650	0.2164	0.2553	0
13.	117.	-0.0215	-0.0279	-0.0265	-0.0183	-0.0170	-0.0035	0.0210	0.0589	0.0925	0.1286	0.1643	0.2090	0.2427	0

Table III. Continued

(d) Concluded

Run	Point	CP107	CP108	CP109	CP110	CP111	CP114	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CI
14.	131.	-0.0466	-0.0228	0.0977	0.1589	0.2932	-0.0691	-0.0761	-0.0649	-0.0650	-0.0609	-0.0626	-0.0620	-0.0656	-0.
14.	130.	-0.0619	-0.0433	0.0693	0.1513	0.2974	-0.0727	-0.0699	-0.0696	-0.0680	-0.0664	-0.0666	-0.0628	-0.0689	-0.
14.	129.	-0.0608	-0.0496	0.0646	0.1620	0.3077	-0.0728	-0.0699	-0.0712	-0.0706	-0.0708	-0.0709	-0.0665	-0.0716	-0.
13.	119.	-0.0601	-0.0522	0.0468	0.1590	0.3039	-0.0718	-0.0684	-0.0694	-0.0687	-0.0684	-0.0687	-0.0647	-0.0703	-0.
13.	118.	-0.0285	-0.0228	0.0554	0.1663	0.2799	-0.0383	-0.0353	-0.0366	-0.0356	-0.0359	-0.0352	-0.0306	-0.0367	-0.
13.	117.	-0.0212	-0.0168	0.0548	0.1621	0.2687	-0.0289	-0.0256	-0.0272	-0.0258	-0.0262	-0.0248	-0.0203	-0.0259	-0.

Run	Point	CP127	CP129	CP130	CP131	CP134	CP136	CP137	CP138	CP139	CP140	CP142	CP152	CP154	CI
14.	131.	0.0124	0.0522	0.0708	0.0927	0.1355	0.1779	0.2051	0.2757	0.3228	0.3304	0.4690	0.0860	0.0777	0.
14.	130.	-0.0116	0.0514	0.0695	0.0904	0.1361	0.1648	0.2000	0.2606	0.3023	0.3067	0.4722	0.0864	0.0705	0.
14.	129.	-0.0079	0.0409	0.0666	0.1027	0.1417	0.1736	0.2097	0.2848	0.3268	0.3699	0.5131	0.0896	0.0775	0.
13.	119.	-0.0245	0.0218	0.0424	0.0795	0.1296	0.1693	0.2000	0.2530	0.2990	0.3223	0.4837	0.0803	0.0689	0.
13.	118.	-0.0064	0.0255	0.0498	0.0871	0.1435	0.1810	0.2014	0.2529	0.2718	0.2901	0.4627	0.0910	0.0795	0.
13.	117.	-0.0026	0.0255	0.0470	0.0809	0.1342	0.1679	0.1877	0.2354	0.2481	0.2629	0.4549	0.0938	0.0812	0.

Run	Point	CP159	CP160	CP161	CP162	CP163	CP164	CP165	CP166	CP167	CP168	CP169	CP170	CP171	CI
14.	131.	0.0486	0.0552	0.0582	0.0560	0.0515	0.0884	0.1430	0.1842	0.2251	0.2010	0.2076	0.2108	0.2172	0.
14.	130.	0.0475	0.0485	0.0425	0.0460	0.0427	0.0745	0.1309	0.1729	0.2033	0.1910	0.2004	0.2034	0.2048	0.
14.	129.	0.0472	0.0474	0.0447	0.0466	0.0425	0.0718	0.1252	0.1693	0.1969	0.1826	0.1916	0.1923	0.1926	0.
13.	119.	0.0483	0.0485	0.0444	0.0490	0.0476	0.0785	0.1279	0.1670	0.1974	0.1855	0.1959	0.1998	0.2009	0.
13.	118.	0.0642	0.0657	0.0631	0.0658	0.0628	0.0913	0.1375	0.1734	0.1981	0.1905	0.1954	0.1980	0.1975	0.
13.	117.	0.0682	0.0683	0.0673	0.0708	0.0670	0.0897	0.1309	0.1623	0.1818	0.1753	0.1816	0.1810	0.1810	0.

Run	Point	CP184	CP185	CP186
14.	131.	0.4551	0.4475	0.4549
14.	130.	0.4421	0.4323	0.4488
14.	129.	0.4476	0.4370	0.4545
13.	119.	0.4370	0.4387	0.4595
13.	118.	0.3965	0.4061	0.4338
13.	117.	0.3702	0.3813	0.4115

Table III. Continued

(e) 75 percent of cavity floor area with porosity; configuration 1e

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
15.	141.	0.20	2.03	22.95	23.60	0.65	102.6	0.8699	-0.2307	-0.2017	-0.1807	-0.1646	-0.1335	-0.1055
15.	140.	0.40	3.63	19.90	22.22	2.23	101.0	0.9061	-0.2549	-0.2084	-0.1931	-0.1677	-0.1402	-0.1054
15.	139.	0.60	4.68	16.34	20.86	4.13	102.1	0.9947	-0.2850	-0.2316	-0.2139	-0.1856	-0.1560	-0.1125
15.	138.	0.80	3.82	9.30	14.19	4.18	99.3	1.1298	-0.3104	-0.2824	-0.2591	-0.2276	-0.1884	-0.1301
15.	137.	0.90	3.54	7.35	12.48	4.20	99.9	1.2075	-0.3676	-0.3685	-0.3767	-0.3519	-0.2456	-0.0924
15.	136.	0.95	3.40	6.59	11.80	4.18	100.1	1.2421	-0.2658	-0.2906	-0.3127	-0.3249	-0.3637	-0.3686

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
15.	141.	-0.0507	-0.0411	-0.0333	-0.0323	-0.0264	-0.0235	-0.0246	-0.0217	-0.0245	-0.0167	-0.0146	-0.0227	-0.0376
15.	140.	-0.0507	-0.0435	-0.0363	-0.0319	-0.0296	-0.0290	-0.0258	-0.0233	-0.0260	-0.0198	-0.0180	-0.0249	-0.0380
15.	139.	-0.0509	-0.0448	-0.0363	-0.0317	-0.0284	-0.0254	-0.0235	-0.0238	-0.0251	-0.0244	-0.0247	-0.0298	-0.0401
15.	138.	-0.0489	-0.0427	-0.0336	-0.0269	-0.0223	-0.0198	-0.0187	-0.0191	-0.0198	-0.0211	-0.0248	-0.0290	-0.0428
15.	137.	-0.0191	-0.0154	-0.0076	-0.0018	0.0011	0.0039	0.0030	0.0017	0.0011	-0.0029	-0.0075	-0.0110	-0.0222
15.	136.	0.0449	0.0358	0.0294	0.0275	0.0255	0.0253	0.0207	0.0154	0.0128	0.0050	-0.0012	-0.0056	-0.0187

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
15.	141.	-0.0329	-0.0320	-0.0131	-0.0239	-0.0117	-0.0012	0.0321	0.0475	0.0268	-0.0217	-0.0717	-0.0673	-0.0589
15.	140.	-0.0434	-0.0445	-0.0190	-0.0259	-0.0171	-0.0040	0.0335	0.0483	0.0272	-0.0279	-0.0815	-0.0818	-0.0688
15.	139.	-0.0583	-0.0594	-0.0255	-0.0286	-0.0233	-0.0060	0.0336	0.0557	0.0289	-0.0425	-0.1094	-0.1110	-0.0931
15.	138.	-0.1595	-0.1767	-0.0284	-0.0327	-0.0299	-0.0163	0.0248	0.0589	0.0299	-0.0627	-0.1602	-0.1597	-0.1363
15.	137.	-0.0759	-0.0940	-0.0129	-0.0115	-0.0097	0.0054	0.0508	0.0982	0.0758	-0.0113	-0.1177	-0.1090	-0.0771
15.	136.	-0.0244	-0.0398	-0.0107	-0.0078	-0.0050	0.0106	0.0587	0.1144	0.0978	0.0167	-0.0928	-0.0813	-0.0418

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75
15.	141.	-0.0148	-0.0157	0.0325	-0.0552	-0.0283	-0.0578	-0.0504	-0.0595	-0.0521	-0.0563	-0.0417	-0.0645	-0.0541
15.	140.	-0.0192	-0.0172	0.0291	-0.0637	-0.0397	-0.0600	-0.0570	-0.0623	-0.0564	-0.0604	-0.0522	-0.0574	-0.0501
15.	139.	-0.0239	-0.0212	0.0316	-0.0861	-0.0591	-0.0589	-0.0560	-0.0584	-0.0552	-0.0567	-0.0548	-0.0611	-0.0566
15.	138.	-0.0258	-0.0300	0.0233	-0.1258	-0.1151	-0.0548	-0.0498	-0.0527	-0.0537	-0.0536	-0.0536	-0.0558	-0.0544
15.	137.	-0.0105	-0.0088	0.0505	-0.0797	-0.0417	-0.0306	-0.0241	-0.0263	-0.0289	-0.0279	-0.0295	-0.0266	-0.0281
15.	136.	-0.0089	-0.0026	0.0591	-0.0490	0.0006	-0.0204	-0.0136	-0.0164	-0.0199	-0.0180	-0.0218	-0.0182	-0.0219

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93
15.	141.	-0.0417	-0.0391	-0.0453	-0.0440	-0.0382	-0.0149	0.0150	0.0364	0.0879	0.1187	0.1601	0.2061	0.2795
15.	140.	-0.0503	-0.0412	-0.0459	-0.0484	-0.0332	-0.0149	0.0021	0.0388	0.0787	0.1043	0.1613	0.2182	0.2723
15.	139.	-0.0495	-0.0482	-0.0477	-0.0507	-0.0400	-0.0286	-0.0007	0.0414	0.0774	0.1152	0.1657	0.2245	0.2794
15.	138.	-0.0470	-0.0541	-0.0517	-0.0499	-0.0480	-0.0365	-0.0094	0.0208	0.0536	0.0989	0.1509	0.2005	0.2522
15.	137.	-0.0229	-0.0231	-0.0226	-0.0200	-0.0208	-0.0124	0.0068	0.0388	0.0698	0.1110	0.1555	0.2015	0.2482
15.	136.	-0.0160	-0.0178	-0.0154	-0.0116	-0.0139	-0.0062	0.0117	0.0438	0.0701	0.1066	0.1485	0.1932	0.2420

Table III. Continued

(e) Concluded

Run	Point	CP107	CP108	CP109	CP110	CP111	CP114	CP115	CP116	CP118	CP119	CP120	CP121	CP122	C
15.	141.	-0.0510	-0.0409	0.0574	0.1645	0.3010	-0.0641	-0.0682	-0.0610	-0.0575	-0.0550	-0.0570	-0.0568	-0.0523	-0.
15.	140.	-0.0486	-0.0434	0.0481	0.1550	0.3113	-0.0644	-0.0662	-0.0624	-0.0598	-0.0557	-0.0582	-0.0598	-0.0558	-0.
15.	139.	-0.0519	-0.0486	0.0400	0.1620	0.3123	-0.0686	-0.0673	-0.0658	-0.0647	-0.0629	-0.0644	-0.0640	-0.0619	-0.
15.	138.	-0.0508	-0.0487	0.0212	0.1499	0.2836	-0.0624	-0.0600	-0.0601	-0.0583	-0.0578	-0.0581	-0.0573	-0.0567	-0.
15.	137.	-0.0234	-0.0212	0.0348	0.1560	0.2702	-0.0333	-0.0302	-0.0316	-0.0296	-0.0293	-0.0284	-0.0267	-0.0264	-0.
15.	136.	-0.0155	-0.0124	0.0379	0.1530	0.2541	-0.0242	-0.0212	-0.0228	-0.0209	-0.0215	-0.0197	-0.0169	-0.0173	-0.

Run	Point	CP127	CP129	CP130	CP131	CP134	CP136	CP137	CP138	CP139	CP140	CP142	CP152	CP154	C
15.	141.	-0.0137	0.0265	0.0544	0.0783	0.1397	0.1872	0.2099	0.2548	0.3109	0.3313	0.4193	0.0702	0.0611	0.
15.	140.	-0.0193	0.0227	0.0368	0.0518	0.1270	0.1795	0.2047	0.2693	0.2976	0.3262	0.4470	0.0737	0.0511	0.
15.	139.	-0.0271	0.0173	0.0354	0.0610	0.1387	0.1929	0.2116	0.2671	0.3162	0.3517	0.4891	0.0752	0.0538	0.
15.	138.	-0.0391	-0.0061	0.0118	0.0451	0.1177	0.1742	0.1974	0.2474	0.2842	0.3040	0.4357	0.0615	0.0456	0.
15.	137.	-0.0162	0.0073	0.0259	0.0546	0.1162	0.1599	0.1787	0.2292	0.2489	0.2677	0.4371	0.0731	0.0592	0.
15.	136.	-0.0071	0.0134	0.0319	0.0603	0.1173	0.1610	0.1803	0.2214	0.2359	0.2604	0.4376	0.0723	0.0591	0.

Run	Point	CP159	CP160	CP161	CP162	CP163	CP164	CP165	CP166	CP167	CP168	CP169	CP170	CP171	C
15.	141.	-0.0058	-0.0007	-0.0048	0.0321	0.0781	0.1250	0.1696	0.2044	0.2342	0.2219	0.2247	0.2292	0.2338	0.
15.	140.	-0.0070	-0.0056	-0.0134	0.0227	0.0774	0.1249	0.1663	0.2067	0.2398	0.2209	0.2258	0.2311	0.2340	0.
15.	139.	-0.0047	-0.0052	-0.0161	0.0232	0.0788	0.1277	0.1669	0.2018	0.2281	0.2161	0.2257	0.2281	0.2306	0.
15.	138.	-0.0076	-0.0077	-0.0124	0.0164	0.0613	0.1022	0.1403	0.1773	0.2044	0.1933	0.2022	0.2026	0.2030	0.
15.	137.	0.0173	0.0164	0.0107	0.0341	0.0725	0.1082	0.1375	0.1610	0.1780	0.1734	0.1800	0.1804	0.1817	0.
15.	136.	0.0220	0.0210	0.0155	0.0370	0.0736	0.1088	0.1400	0.1673	0.1842	0.1801	0.1870	0.1876	0.1871	0.

Run	Point	CP184	CP185	CP186
15.	141.	0.4264	0.4264	0.4386
15.	140.	0.4260	0.4240	0.4389
15.	139.	0.4473	0.4347	0.4531
15.	138.	0.4024	0.4052	0.4256
15.	137.	0.3628	0.3718	0.4002
15.	136.	0.3570	0.3751	0.4067

Table III. Continued

(f) 100 percent of cavity floor area with porosity; configuration 1f

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
17.	156.	0.20	2.05	22.97	23.62	0.65	98.6	0.8758	-0.2195	-0.1927	-0.1752	-0.1628	-0.1206	-0.1019	-0
17.	155.	0.40	3.63	19.92	22.24	2.23	100.6	0.9114	-0.2566	-0.2091	-0.1947	-0.1703	-0.1421	-0.1074	-0
17.	154.	0.60	4.68	16.32	20.81	4.10	100.7	0.9966	-0.2864	-0.2308	-0.2137	-0.1865	-0.1552	-0.1124	-0
17.	153.	0.80	3.80	9.29	14.17	4.17	100.2	1.1290	-0.3060	-0.2777	-0.2547	-0.2238	-0.1830	-0.1264	-0
17.	152.	0.90	3.52	7.34	12.47	4.20	101.8	1.2045	-0.3616	-0.3640	-0.3713	-0.3471	-0.2385	-0.0889	-0
17.	151.	0.95	3.40	6.62	11.83	4.18	100.5	1.2376	-0.2612	-0.2889	-0.3119	-0.3256	-0.3594	-0.3652	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
17.	156.	-0.0491	-0.0357	-0.0308	-0.0318	-0.0283	-0.0355	-0.0230	-0.0133	-0.0232	-0.0021	0.0079	-0.0124	-0.0343	-0
17.	155.	-0.0541	-0.0471	-0.0391	-0.0355	-0.0338	-0.0314	-0.0288	-0.0257	-0.0273	-0.0237	-0.0220	-0.0295	-0.0419	-0
17.	154.	-0.0511	-0.0443	-0.0360	-0.0316	-0.0289	-0.0258	-0.0229	-0.0217	-0.0225	-0.0205	-0.0212	-0.0288	-0.0449	-0
17.	153.	-0.0451	-0.0390	-0.0298	-0.0247	-0.0203	-0.0177	-0.0160	-0.0152	-0.0170	-0.0168	-0.0192	-0.0262	-0.0407	-0
17.	152.	-0.0161	-0.0112	-0.0029	0.0019	0.0044	0.0065	0.0066	0.0049	0.0031	0.0018	-0.0012	-0.0066	-0.0191	-0
17.	151.	0.0418	0.0372	0.0298	0.0263	0.0250	0.0225	0.0201	0.0165	0.0104	0.0095	0.0063	-0.0020	-0.0174	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
17.	156.	-0.0240	-0.0298	-0.0006	-0.0238	-0.0017	-0.0043	0.0388	0.0453	0.0322	-0.0100	-0.0726	-0.0555	-0.0463	-0
17.	155.	-0.0424	-0.0466	-0.0243	-0.0296	-0.0196	-0.0068	0.0302	0.0461	0.0251	-0.0300	-0.0851	-0.0844	-0.0714	-0
17.	154.	-0.0628	-0.0616	-0.0241	-0.0291	-0.0215	-0.0042	0.0383	0.0600	0.0317	-0.0433	-0.1118	-0.1118	-0.0940	-0
17.	153.	-0.1571	-0.1765	-0.0239	-0.0304	-0.0266	-0.0134	0.0303	0.0649	0.0357	-0.0617	-0.1631	-0.1599	-0.1349	-0
17.	152.	-0.0747	-0.0932	-0.0070	-0.0091	-0.0043	0.0066	0.0529	0.0993	0.0794	-0.0063	-0.1149	-0.1039	-0.0729	-0
17.	151.	-0.0266	-0.0431	-0.0040	-0.0080	0.0002	0.0072	0.0588	0.1124	0.0980	0.0201	-0.0908	-0.0766	-0.0388	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
17.	156.	0.0011	-0.0129	0.0316	-0.0489	-0.0214	-0.0463	-0.0517	-0.0622	-0.0356	-0.0488	-0.0240	-0.0650	-0.0322	-0
17.	155.	-0.0219	-0.0204	0.0282	-0.0668	-0.0423	-0.0570	-0.0539	-0.0606	-0.0532	-0.0572	-0.0496	-0.0624	-0.0545	-0
17.	154.	-0.0227	-0.0213	0.0361	-0.0882	-0.0580	-0.0604	-0.0549	-0.0601	-0.0566	-0.0587	-0.0561	-0.0598	-0.0525	-0
17.	153.	-0.0226	-0.0268	0.0293	-0.1254	-0.1118	-0.0496	-0.0458	-0.0491	-0.0472	-0.0476	-0.0457	-0.0545	-0.0503	-0
17.	152.	-0.0052	-0.0039	0.0524	-0.0746	-0.0383	-0.0244	-0.0190	-0.0227	-0.0223	-0.0222	-0.0212	-0.0249	-0.0234	-0
17.	151.	-0.0036	-0.0007	0.0571	-0.0487	0.0043	-0.0205	-0.0148	-0.0188	-0.0162	-0.0176	-0.0134	-0.0197	-0.0162	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
17.	156.	-0.0180	-0.0117	-0.0329	-0.0395	-0.0291	-0.0148	0.0432	0.0445	0.0877	0.1474	0.1945	0.2184	0.2794	0
17.	155.	-0.0341	-0.0327	-0.0390	-0.0601	-0.0435	-0.0095	0.0058	0.0475	0.0953	0.1205	0.1651	0.2142	0.2782	0
17.	154.	-0.0515	-0.0464	-0.0496	-0.0554	-0.0485	-0.0257	-0.0010	0.0503	0.0895	0.1216	0.1770	0.2303	0.2905	0
17.	153.	-0.0477	-0.0394	-0.0397	-0.0419	-0.0425	-0.0332	-0.0114	0.0197	0.0589	0.1010	0.1528	0.2065	0.2544	0
17.	152.	-0.0183	-0.0151	-0.0140	-0.0153	-0.0129	-0.0072	0.0109	0.0363	0.0722	0.1116	0.1581	0.2058	0.2563	0
17.	151.	-0.0117	-0.0113	-0.0107	-0.0101	-0.0081	-0.0033	0.0118	0.0349	0.0726	0.1100	0.1486	0.1905	0.2311	0

Table III. Concluded

(f) Concluded

Run	Point	CP107	CP108	CP109	CP110	CP111	CP114	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CI
17.	156.	-0.0420	-0.0284	0.0807	0.1795	0.3132	-0.0582	-0.0733	-0.0565	-0.0550	-0.0511	-0.0593	-0.0607	-0.0519	-0.
17.	155.	-0.0530	-0.0427	0.0424	0.1635	0.3020	-0.0672	-0.0696	-0.0653	-0.0627	-0.0625	-0.0632	-0.0643	-0.0614	-0.
17.	154.	-0.0559	-0.0504	0.0431	0.1715	0.3343	-0.0713	-0.0704	-0.0680	-0.0663	-0.0658	-0.0670	-0.0668	-0.0653	-0.
17.	153.	-0.0483	-0.0439	0.0228	0.1431	0.2959	-0.0595	-0.0595	-0.0580	-0.0563	-0.0564	-0.0568	-0.0563	-0.0547	-0.
17.	152.	-0.0202	-0.0132	0.0354	0.1566	0.2699	-0.0300	-0.0290	-0.0283	-0.0267	-0.0263	-0.0260	-0.0246	-0.0232	-0.
17.	151.	-0.0146	-0.0068	0.0378	0.1502	0.2573	-0.0241	-0.0242	-0.0225	-0.0203	-0.0181	-0.0195	-0.0187	-0.0165	-0.

Run	Point	CP127	CP129	CP130	CP131	CP134	CP136	CP137	CP138	CP139	CP140	CP142	CP152	CP154	CI
17.	156.	-0.0132	0.0335	0.0549	0.0864	0.1485	0.1893	0.2266	0.2786	0.3133	0.3217	0.4886	0.0819	0.0750	0.
17.	155.	-0.0237	0.0111	0.0329	0.0676	0.1335	0.1959	0.2271	0.2729	0.3126	0.3377	0.4378	0.0726	0.0576	0.
17.	154.	-0.0262	0.0128	0.0389	0.0918	0.1525	0.1918	0.2223	0.2757	0.3050	0.3245	0.4517	0.0782	0.0611	0.
17.	153.	-0.0284	-0.0030	0.0155	0.0588	0.1211	0.1628	0.1828	0.2419	0.2615	0.2876	0.4315	0.0697	0.0509	0.
17.	152.	-0.0115	0.0066	0.0191	0.0557	0.1192	0.1652	0.1875	0.2350	0.2524	0.2782	0.4315	0.0728	0.0579	0.
17.	151.	-0.0031	0.0132	0.0229	0.0560	0.1124	0.1535	0.1744	0.2145	0.2354	0.2489	0.4099	0.0692	0.0588	0.

Run	Point	CP159	CP160	CP161	CP162	CP163	CP164	CP165	CP166	CP167	CP168	CP169	CP170	CP171	CI
17.	156.	-0.0169	0.0153	0.0470	0.0841	0.1082	0.1448	0.1825	0.2107	0.2384	0.2159	0.2160	0.2217	0.2298	0.
17.	155.	-0.0282	-0.0088	0.0247	0.0734	0.1113	0.1424	0.1652	0.1811	0.1937	0.1801	0.1864	0.1889	0.1921	0.
17.	154.	-0.0300	-0.0062	0.0288	0.0761	0.1139	0.1509	0.1800	0.2083	0.2263	0.2105	0.2250	0.2304	0.2344	0.
17.	153.	-0.0280	-0.0181	0.0050	0.0402	0.0734	0.1142	0.1534	0.1867	0.2088	0.2061	0.2201	0.2266	0.2329	0.
17.	152.	-0.0012	0.0023	0.0191	0.0532	0.0859	0.1201	0.1519	0.1812	0.1993	0.1891	0.1938	0.1935	0.1943	0.
17.	151.	0.0026	0.0072	0.0218	0.0510	0.0774	0.1080	0.1366	0.1639	0.1828	0.1738	0.1807	0.1830	0.1855	0.

Run	Point	CP184	CP185	CP186
17.	156.	0.4397	0.4429	0.4567
17.	155.	0.4069	0.4138	0.4250
17.	154.	0.4518	0.4446	0.4575
17.	153.	0.4114	0.4048	0.4299
17.	152.	0.3641	0.3779	0.4056
17.	151.	0.3468	0.3627	0.3888

Table IV. Pressure Coefficients for Porous Floor Cavity Models

[l = 42.00 in.; h = 2.40 in.]

(a) Solid floor (100 percent of cavity floor taped); configuration 2a

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
1.	8.	0.20	2.03	22.98	23.63	0.64	100.0	0.8335	-0.2728	-0.2637	-0.2531	-0.2579	-0.1820	-0.1679	-0
1.	7.	0.40	3.64	19.93	22.25	2.23	100.0	0.8977	-0.2615	-0.2295	-0.2172	-0.1993	-0.1603	-0.1269	-0
1.	6.	0.60	4.69	16.30	20.83	4.15	100.0	0.9950	-0.2972	-0.2505	-0.2343	-0.2093	-0.1729	-0.1301	-0
1.	5.	0.80	3.80	9.30	14.18	4.17	100.0	1.1233	-0.3317	-0.2942	-0.2705	-0.2426	-0.1961	-0.1407	-0
1.	4.	0.90	3.52	7.35	12.46	4.19	100.0	1.1991	-0.3985	-0.3936	-0.3869	-0.3729	-0.2100	-0.1038	-0
1.	3.	0.95	3.40	6.62	11.82	4.17	100.0	1.2322	-0.2974	-0.3089	-0.3188	-0.3410	-0.3740	-0.3782	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
1.	8.	-0.1375	-0.0841	-0.1066	-0.1078	-0.0974	-0.1328	-0.1044	-0.0901	-0.1186	-0.0473	-0.0222	-0.0867	-0.1484	-0
1.	7.	-0.0783	-0.0606	-0.0607	-0.0578	-0.0535	-0.0613	-0.0526	-0.0490	-0.0602	-0.0431	-0.0413	-0.0672	-0.1056	-0
1.	6.	-0.0708	-0.0591	-0.0540	-0.0497	-0.0444	-0.0467	-0.0434	-0.0442	-0.0507	-0.0448	-0.0473	-0.0663	-0.1024	-0
1.	5.	-0.0599	-0.0484	-0.0434	-0.0401	-0.0353	-0.0371	-0.0344	-0.0344	-0.0418	-0.0372	-0.0410	-0.0611	-0.0989	-0
1.	4.	-0.0313	-0.0210	-0.0173	-0.0144	-0.0096	-0.0123	-0.0107	-0.0121	-0.0195	-0.0150	-0.0203	-0.0389	-0.0755	-0
1.	3.	0.0293	0.0278	0.0172	0.0125	0.0124	0.0074	0.0052	0.0007	-0.0087	-0.0072	-0.0139	-0.0312	-0.0649	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
1.	8.	-0.1349	-0.1254	-0.0368	-0.1330	-0.0296	-0.0740	-0.0197	-0.0097	0.0226	0.0516	-0.0069	0.0502	0.0210	-0
1.	7.	-0.1279	-0.1126	-0.0459	-0.0764	-0.0165	0.0020	0.0175	0.0244	0.0379	0.0503	0.0387	0.0553	0.0374	-0
1.	6.	-0.1639	-0.1431	-0.0518	-0.0762	-0.0222	0.0154	0.0250	0.0321	0.0428	0.0531	0.0524	0.0645	0.0504	-0
1.	5.	-0.2834	-0.2701	-0.0532	-0.0891	-0.0377	0.0201	0.0343	0.0398	0.0528	0.0674	0.0725	0.0874	0.0743	0
1.	4.	-0.2183	-0.1940	-0.0371	-0.0818	-0.0298	0.0487	0.0809	0.0982	0.1149	0.1348	0.1462	0.1658	0.1573	0
1.	3.	-0.1737	-0.1427	-0.0350	-0.0916	-0.0418	0.0516	0.1033	0.1291	0.1475	0.1676	0.1815	0.2017	0.1936	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
1.	8.	-0.0499	-0.0697	-0.0707	0.0029	-0.1035	-0.1989	-0.2294	-0.2412	-0.1666	-0.2012	-0.1153	-0.2366	-0.1396	-0
1.	7.	-0.0465	-0.0199	0.0037	0.0394	-0.1295	-0.1714	-0.1868	-0.1818	-0.1513	-0.1710	-0.1470	-0.1810	-0.1575	-0
1.	6.	-0.0512	-0.0186	0.0164	0.0501	-0.1884	-0.1817	-0.1920	-0.1861	-0.1559	-0.1742	-0.1611	-0.1824	-0.1743	-0
1.	5.	-0.0530	-0.0323	0.0283	0.0682	-0.3534	-0.1804	-0.1918	-0.1917	-0.1680	-0.1779	-0.1658	-0.1816	-0.1744	-0
1.	4.	-0.0371	-0.0233	0.0762	0.1395	-0.3762	-0.1631	-0.1734	-0.1733	-0.1489	-0.1552	-0.1477	-0.1650	-0.1589	-0
1.	3.	-0.0355	-0.0333	0.0989	0.1732	-0.3575	-0.1597	-0.1721	-0.1692	-0.1423	-0.1566	-0.1484	-0.1616	-0.1577	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
1.	8.	-0.1690	-0.0530	-0.0202	-0.0926	-0.0232	0.0534	0.1084	0.0358	0.0879	0.0552	0.1048	0.0685	0.0539	0
1.	7.	-0.1233	-0.1008	-0.0316	-0.0317	0.0023	0.0796	0.1083	0.0817	0.0935	0.0842	0.0941	0.0826	0.0949	0
1.	6.	-0.1421	-0.1061	-0.0590	-0.0416	-0.0062	0.0550	0.0992	0.0975	0.1036	0.0932	0.0970	0.0920	0.1000	0
1.	5.	-0.1636	-0.1247	-0.0865	-0.0605	-0.0224	0.0386	0.0886	0.1006	0.1102	0.1009	0.1039	0.0994	0.1139	0
1.	4.	-0.1570	-0.1236	-0.0906	-0.0675	-0.0327	0.0359	0.0934	0.1185	0.1440	0.1458	0.1554	0.1560	0.1768	0
1.	3.	-0.1608	-0.1339	-0.1046	-0.0769	-0.0387	0.0296	0.0831	0.1164	0.1495	0.1631	0.1802	0.1873	0.2092	0

Table IV. Continued

(a) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
1.	8.	0.1974	0.2252	0.2646	0.2890	0.3546	0.4027	0.4056	0.4422	-0.1417	-0.2066	0.0303	0.1327	0.0788	0.
1.	7.	0.2086	0.2386	0.2844	0.3294	0.3862	0.4358	0.4603	0.4942	-0.1543	-0.1845	0.0504	0.1212	0.0814	0.
1.	6.	0.2291	0.2677	0.3173	0.3722	0.4319	0.4881	0.5133	0.4973	-0.1681	-0.1931	0.0382	0.1131	0.0843	0.
1.	5.	0.2588	0.3034	0.3542	0.4087	0.4670	0.5149	0.5196	0.5166	-0.1708	-0.1895	0.0110	0.1147	0.0940	0.
1.	4.	0.3306	0.3731	0.4204	0.4693	0.5206	0.5598	0.5710	0.5719	-0.1529	-0.1671	0.0006	0.1407	0.1491	0.
1.	3.	0.3582	0.3968	0.4457	0.4903	0.5369	0.5667	0.5640	0.5660	-0.1527	-0.1639	-0.0232	0.1406	0.1770	0.

Run	Point	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	C
1.	8.	-0.2380	-0.2018	-0.2276	-0.1989	-0.2443	-0.2314	-0.1129	-0.0205	0.1131	0.1393	0.1201	0.1470	0.1693	0.
1.	7.	-0.1877	-0.1820	-0.2041	-0.1966	-0.1997	-0.1761	-0.0944	0.0032	0.1328	0.1610	0.1693	0.1679	0.1816	0.
1.	6.	-0.1906	-0.1892	-0.2083	-0.2044	-0.1991	-0.1731	-0.1047	-0.0230	0.1260	0.1630	0.1809	0.1843	0.1954	0.
1.	5.	-0.1922	-0.1891	-0.2010	-0.2009	-0.2036	-0.1870	-0.1374	-0.0806	0.0551	0.1115	0.1477	0.1745	0.1945	0.
1.	4.	-0.1712	-0.1683	-0.1768	-0.1755	-0.1795	-0.1703	-0.1340	-0.0924	0.0185	0.0729	0.1226	0.1643	0.1973	0.
1.	3.	-0.1664	-0.1642	-0.1718	-0.1707	-0.1755	-0.1710	-0.1464	-0.1158	-0.0209	0.0276	0.0766	0.1222	0.1633	0.

Run	Point	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP142	CP143	CP144	CP145	CP146	C
1.	8.	0.0306	0.0022	-0.0273	0.0415	0.0649	0.0448	0.0791	0.0045	0.0587	0.1101	0.1640	0.2320	0.2808	0.
1.	7.	0.0581	0.0361	0.0493	0.0697	0.0676	0.0817	0.0913	0.0707	0.1133	0.1487	0.2111	0.2515	0.3077	0.
1.	6.	0.0619	0.0382	0.0603	0.0707	0.0644	0.0818	0.0856	0.0782	0.1205	0.1574	0.2310	0.2636	0.3251	0.
1.	5.	0.0835	0.0614	0.0764	0.0856	0.0804	0.0971	0.1029	0.1007	0.1524	0.1959	0.2669	0.3095	0.3736	0.
1.	4.	0.1482	0.1295	0.1386	0.1479	0.1451	0.1615	0.1718	0.1731	0.2271	0.2688	0.3314	0.3749	0.4343	0.
1.	3.	0.1823	0.1668	0.1734	0.1824	0.1806	0.1980	0.2096	0.2130	0.2655	0.3045	0.3632	0.4029	0.4530	0.

Run	Point	CP151	CP152	CP154	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	C
1.	8.	0.3953	-0.0742	-0.0151	-0.1003	-0.0019	-0.0577	-0.0717	-0.0842	-0.0291	-0.0270	-0.0448	-0.0831	-0.0551	-0.
1.	7.	0.4728	-0.0503	-0.0350	-0.0580	-0.0312	-0.0473	-0.0514	-0.0546	-0.0391	-0.0389	-0.0445	-0.0550	-0.0455	-0.
1.	6.	0.4714	-0.0603	-0.0521	-0.0637	-0.0488	-0.0569	-0.0591	-0.0613	-0.0534	-0.0529	-0.0556	-0.0608	-0.0566	-0.
1.	5.	0.5130	-0.0549	-0.0476	-0.0594	-0.0461	-0.0530	-0.0552	-0.0565	-0.0494	-0.0496	-0.0521	-0.0570	-0.0528	-0.
1.	4.	0.5410	-0.0190	-0.0122	-0.0244	-0.0104	-0.0170	-0.0203	-0.0210	-0.0134	-0.0135	-0.0156	-0.0210	-0.0170	-0.
1.	3.	0.5380	-0.0125	-0.0061	-0.0186	-0.0039	-0.0102	-0.0139	-0.0147	-0.0068	-0.0065	-0.0087	-0.0140	-0.0103	-0.

Run	Point	CP169	CP170	CP171	CP172	CP173	CP174	CP175	CP176	CP177	CP178	CP179	CP180
1.	8.	-0.1298	-0.0998	-0.0531	-0.0751	0.4106	0.4815	0.5982	0.6226	0.5630	0.5729	0.5826	0.4580
1.	7.	-0.0652	-0.0574	-0.0442	-0.0500	0.4738	0.6230	0.6318	0.6335	0.5599	0.5469	0.6382	0.5450
1.	6.	-0.0703	-0.0657	-0.0583	-0.0614	0.5137	0.6300	0.6665	0.6102	0.6412	0.6670	0.6125	0.5494
1.	5.	-0.0621	-0.0584	-0.0518	-0.0550	0.5433	0.6126	0.6237	0.6326	0.6551	0.6699	0.6541	0.5822
1.	4.	-0.0261	-0.0226	-0.0159	-0.0196	0.5834	0.6535	0.6883	0.6798	0.6912	0.7023	0.6965	0.6219
1.	3.	-0.0195	-0.0165	-0.0097	-0.0133	0.5859	0.6644	0.6670	0.6829	0.7097	0.7308	0.7343	0.6518

Table IV. Continued

(b) 8 percent of cavity floor area with porosity; configuration 2b

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
19.	179.	0.20	2.02	22.96	23.61	0.64	102.7	0.8673	-0.2300	-0.1975	-0.1801	-0.1602	-0.1254	-0.1013	-0
19.	178.	0.40	3.63	19.92	22.22	2.22	100.0	0.9042	-0.2554	-0.2083	-0.1944	-0.1674	-0.1412	-0.1047	-0
19.	177.	0.60	4.70	16.34	20.87	4.14	101.2	0.9924	-0.2809	-0.2294	-0.2136	-0.1848	-0.1557	-0.1113	-0
19.	174.	0.80	3.78	9.31	14.17	4.16	102.3	1.1246	-0.3140	-0.2851	-0.2617	-0.2312	-0.1909	-0.1335	-0
19.	173.	0.90	3.51	7.35	12.46	4.19	101.6	1.2029	-0.3712	-0.3622	-0.3766	-0.3489	-0.2521	-0.0951	-0
19.	172.	0.95	3.39	6.60	11.80	4.17	102.0	1.2382	-0.2681	-0.2901	-0.3145	-0.3267	-0.3637	-0.3685	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
19.	179.	-0.0458	-0.0393	-0.0346	-0.0309	-0.0269	-0.0274	-0.0292	-0.0241	-0.0248	-0.0230	-0.0250	-0.0378	-0.0629	-0
19.	178.	-0.0500	-0.0467	-0.0380	-0.0333	-0.0309	-0.0284	-0.0291	-0.0282	-0.0291	-0.0327	-0.0368	-0.0467	-0.0685	-0
19.	177.	-0.0498	-0.0448	-0.0363	-0.0313	-0.0282	-0.0253	-0.0255	-0.0267	-0.0289	-0.0328	-0.0375	-0.0472	-0.0671	-0
19.	174.	-0.0525	-0.0457	-0.0377	-0.0323	-0.0282	-0.0268	-0.0262	-0.0284	-0.0314	-0.0328	-0.0390	-0.0513	-0.0770	-0
19.	173.	-0.0235	-0.0187	-0.0114	-0.0068	-0.0041	-0.0029	-0.0035	-0.0063	-0.0093	-0.0131	-0.0197	-0.0301	-0.0553	-0
19.	172.	0.0418	0.0334	0.0262	0.0233	0.0203	0.0186	0.0146	0.0082	0.0032	-0.0045	-0.0140	-0.0251	-0.0504	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
19.	179.	-0.0948	-0.0739	-0.0258	-0.0401	-0.0096	0.0257	0.0414	0.0488	0.0510	0.0551	0.0553	0.0607	0.0498	0
19.	178.	-0.1066	-0.0943	-0.0367	-0.0453	-0.0210	0.0236	0.0371	0.0443	0.0466	0.0514	0.0557	0.0554	0.0453	0
19.	177.	-0.1336	-0.1092	-0.0382	-0.0499	-0.0268	0.0232	0.0415	0.0507	0.0550	0.0622	0.0693	0.0729	0.0639	0
19.	174.	-0.2700	-0.2477	-0.0463	-0.0709	-0.0502	0.0080	0.0361	0.0459	0.0540	0.0645	0.0742	0.0834	0.0732	0
19.	173.	-0.1998	-0.1809	-0.0305	-0.0581	-0.0408	0.0285	0.0781	0.1026	0.1153	0.1299	0.1451	0.1583	0.1523	0
19.	172.	-0.1457	-0.1211	-0.0299	-0.0635	-0.0460	0.0315	0.0960	0.1331	0.1468	0.1628	0.1803	0.1933	0.1890	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
19.	179.	-0.0258	-0.0035	0.0378	0.0547	-0.0911	-0.1228	-0.1039	-0.1124	-0.1030	-0.1236	-0.1071	-0.1313	-0.1139	-0
19.	178.	-0.0359	-0.0115	0.0356	0.0531	-0.1215	-0.1239	-0.1148	-0.1130	-0.1190	-0.1227	-0.1218	-0.1260	-0.1267	-0
19.	177.	-0.0377	-0.0174	0.0394	0.0648	-0.1540	-0.1281	-0.1183	-0.1195	-0.1277	-0.1283	-0.1273	-0.1270	-0.1238	-0
19.	174.	-0.0459	-0.0417	0.0334	0.0677	-0.3174	-0.1405	-0.1235	-0.1271	-0.1390	-0.1391	-0.1355	-0.1412	-0.1401	-0
19.	173.	-0.0300	-0.0310	0.0763	0.1362	-0.3242	-0.1146	-0.0997	-0.1070	-0.1149	-0.1138	-0.1130	-0.1170	-0.1136	-0
19.	172.	-0.0294	-0.0344	0.0950	0.1715	-0.2998	-0.1116	-0.0959	-0.1037	-0.1105	-0.1099	-0.1136	-0.1123	-0.1113	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
19.	179.	-0.1248	-0.0944	-0.0478	-0.0242	0.0432	0.1017	0.1225	0.0987	0.1082	0.0930	0.0958	0.0960	0.1070	0
19.	178.	-0.1328	-0.1144	-0.0700	-0.0206	0.0244	0.0756	0.0990	0.0941	0.1002	0.0971	0.0915	0.0955	0.1030	0
19.	177.	-0.1187	-0.1122	-0.0784	-0.0432	0.0019	0.0598	0.0952	0.1027	0.1063	0.1034	0.1034	0.1034	0.1126	0
19.	174.	-0.1424	-0.1289	-0.1046	-0.0781	-0.0422	0.0255	0.0704	0.0910	0.1013	0.1012	0.0997	0.1000	0.1180	0
19.	173.	-0.1130	-0.1119	-0.0997	-0.0767	-0.0473	0.0179	0.0743	0.1116	0.1314	0.1437	0.1505	0.1577	0.1785	0
19.	172.	-0.1160	-0.1130	-0.0992	-0.0754	-0.0495	0.0081	0.0647	0.1119	0.1412	0.1618	0.1743	0.1885	0.2098	0

Table IV. Continued

(b) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
19.	179.	0.1987	0.2294	0.2667	0.3040	0.3512	0.4142	0.4698	0.4262	-0.1202	-0.1233	0.0430	0.1170	0.0977	0
19.	178.	0.1964	0.2320	0.2653	0.3122	0.3652	0.4216	0.4484	0.4063	-0.1307	-0.1324	0.0312	0.0980	0.0888	0
19.	177.	0.2164	0.2540	0.2923	0.3406	0.3913	0.4396	0.4440	0.4501	-0.1328	-0.1345	0.0072	0.1053	0.0968	0
19.	174.	0.2412	0.2801	0.3234	0.3734	0.4232	0.4675	0.4490	0.4728	-0.1455	-0.1474	-0.0275	0.0946	0.0962	0
19.	173.	0.3055	0.3427	0.3829	0.4239	0.4638	0.4978	0.4912	0.5094	-0.1227	-0.1234	-0.0329	0.1143	0.1482	0
19.	172.	0.3351	0.3685	0.4033	0.4421	0.4788	0.4965	0.4779	0.5237	-0.1200	-0.1196	-0.0412	0.1110	0.1720	0

Run	Point	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	C
19.	179.	-0.1249	-0.1247	-0.1355	-0.1447	-0.1383	-0.1309	-0.1095	-0.0631	0.0378	0.0987	0.1335	0.1484	0.1379	0
19.	178.	-0.1323	-0.1343	-0.1405	-0.1476	-0.1433	-0.1385	-0.1200	-0.0599	0.0239	0.0758	0.1162	0.1387	0.1231	0
19.	177.	-0.1326	-0.1357	-0.1422	-0.1470	-0.1433	-0.1377	-0.1187	-0.0764	0.0054	0.0585	0.0926	0.1228	0.1237	0
19.	174.	-0.1465	-0.1493	-0.1544	-0.1564	-0.1590	-0.1559	-0.1411	-0.1111	-0.0444	-0.0060	0.0386	0.0717	0.0949	0
19.	173.	-0.1215	-0.1247	-0.1286	-0.1301	-0.1325	-0.1298	-0.1200	-0.1000	-0.0493	-0.0171	0.0210	0.0546	0.0862	0
19.	172.	-0.1165	-0.1206	-0.1244	-0.1270	-0.1280	-0.1242	-0.1175	-0.1004	-0.0572	-0.0276	0.0108	0.0397	0.0699	0

Run	Point	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP142	CP143	CP144	CP145	CP146	C
19.	179.	0.0477	0.0898	0.0146	0.0213	0.0649	0.0247	0.0974	0.0882	0.1340	0.1829	0.2100	0.2304	0.2732	0
19.	178.	0.0502	0.0900	0.0211	0.0236	0.0546	0.0330	0.0929	0.0886	0.1346	0.1875	0.2139	0.2196	0.2617	0
19.	177.	0.0473	0.0931	0.0216	0.0251	0.0581	0.0360	0.1009	0.0914	0.1452	0.2069	0.2322	0.2457	0.2963	0
19.	174.	0.0709	0.0997	0.0376	0.0421	0.0653	0.0424	0.1072	0.0970	0.1542	0.2157	0.2413	0.2608	0.3107	0
19.	173.	0.1343	0.1567	0.1125	0.1148	0.1350	0.1240	0.1781	0.1749	0.2257	0.2787	0.3040	0.3235	0.3681	0
19.	172.	0.1638	0.1843	0.1553	0.1582	0.1752	0.1701	0.2156	0.2156	0.2626	0.3085	0.3317	0.3488	0.3869	0

Run	Point	CP151	CP152	CP154	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	C
19.	179.	0.4704	0.1707	0.1744	0.1700	0.1743	0.1710	0.1742	0.1715	0.1776	0.1846	0.1752	0.1756	0.1762	0
19.	178.	0.5052	0.1640	0.1596	0.1610	0.1597	0.1609	0.1629	0.1620	0.1605	0.1642	0.1653	0.1671	0.1677	0
19.	177.	0.5140	0.1705	0.1669	0.1672	0.1665	0.1664	0.1678	0.1687	0.1690	0.1698	0.1707	0.1734	0.1721	0
19.	174.	0.5377	0.1809	0.1796	0.1765	0.1810	0.1794	0.1790	0.1791	0.1815	0.1819	0.1816	0.1795	0.1803	0
19.	173.	0.5584	0.2144	0.2124	0.2096	0.2141	0.2127	0.2120	0.2123	0.2138	0.2136	0.2144	0.2139	0.2157	0
19.	172.	0.5603	0.2196	0.2171	0.2167	0.2187	0.2181	0.2188	0.2193	0.2200	0.2202	0.2202	0.2198	0.2203	0

Run	Point	CP169	CP170	CP171	CP172	CP173	CP174	CP175	CP176	CP177	CP178	CP179	CP180
19.	179.	0.1664	0.1678	0.1559	0.2079	0.5357	0.6118	0.6316	0.6557	0.6247	0.6431	0.6617	0.5462
19.	178.	0.1656	0.1627	0.1549	0.1968	0.5400	0.6009	0.6604	0.6841	0.5859	0.6142	0.6109	0.5645
19.	177.	0.1726	0.1718	0.1632	0.2116	0.5552	0.6378	0.6821	0.6237	0.6095	0.6237	0.6585	0.5772
19.	174.	0.1816	0.1810	0.1748	0.2215	0.5576	0.6294	0.6530	0.6428	0.6303	0.6098	0.6085	0.5586
19.	173.	0.2123	0.2107	0.2030	0.2469	0.5926	0.6525	0.6864	0.6893	0.6865	0.6669	0.6444	0.5980
19.	172.	0.2212	0.2191	0.2097	0.2554	0.5802	0.6370	0.6540	0.6598	0.6782	0.6688	0.6408	0.6076

Table IV. Continued

(c) 25 percent of cavity floor area with porosity; configuration 2c

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
3.	29.	0.20	2.01	22.96	23.61	0.64	105.1	0.9110	-0.1959	-0.1649	-0.1459	-0.1258	-0.0995	-0.0682	-0
3.	27.	0.40	3.67	19.88	22.24	2.26	99.5	0.9083	-0.2558	-0.2165	-0.2007	-0.1776	-0.1505	-0.1122	-0
3.	26.	0.60	4.69	16.32	20.82	4.11	100.0	0.9963	-0.2846	-0.2351	-0.2178	-0.1913	-0.1618	-0.1173	-0
3.	25.	0.80	3.82	9.30	14.19	4.18	99.1	1.1281	-0.3269	-0.2868	-0.2627	-0.2315	-0.1921	-0.1338	-0
3.	24.	0.90	3.52	7.36	12.46	4.19	100.1	1.2037	-0.3953	-0.3822	-0.3786	-0.3565	-0.1817	-0.1001	-0
3.	23.	0.95	3.41	6.60	11.81	4.18	99.9	1.2386	-0.2885	-0.2963	-0.3115	-0.3266	-0.3656	-0.3699	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
3.	29.	-0.0131	-0.0074	0.0035	0.0063	0.0113	0.0127	0.0099	0.0158	0.0105	0.0105	0.0090	0.0024	-0.0136	-0
3.	27.	-0.0560	-0.0496	-0.0431	-0.0383	-0.0352	-0.0334	-0.0312	-0.0322	-0.0352	-0.0344	-0.0379	-0.0458	-0.0643	-0
3.	26.	-0.0539	-0.0483	-0.0412	-0.0369	-0.0332	-0.0298	-0.0282	-0.0296	-0.0312	-0.0316	-0.0352	-0.0430	-0.0625	-0
3.	25.	-0.0506	-0.0451	-0.0357	-0.0302	-0.0270	-0.0241	-0.0239	-0.0247	-0.0264	-0.0297	-0.0347	-0.0430	-0.0633	-0
3.	24.	-0.0213	-0.0174	-0.0092	-0.0041	-0.0010	0.0016	0.0006	-0.0017	-0.0037	-0.0088	-0.0143	-0.0210	-0.0418	-0
3.	23.	0.0430	0.0342	0.0275	0.0247	0.0225	0.0220	0.0180	0.0118	0.0072	-0.0006	-0.0085	-0.0167	-0.0389	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
3.	29.	-0.0418	-0.0338	0.0096	0.0074	0.0182	0.0454	0.0654	0.0746	0.0801	0.0821	0.0861	0.0892	0.0830	0
3.	27.	-0.0997	-0.0808	-0.0360	-0.0453	-0.0318	-0.0034	0.0200	0.0312	0.0352	0.0412	0.0432	0.0481	0.0405	0
3.	26.	-0.1363	-0.1121	-0.0371	-0.0458	-0.0364	-0.0044	0.0217	0.0344	0.0395	0.0457	0.0520	0.0577	0.0517	0
3.	25.	-0.2590	-0.2457	-0.0405	-0.0522	-0.0505	-0.0174	0.0171	0.0360	0.0416	0.0502	0.0591	0.0667	0.0616	0
3.	24.	-0.1698	-0.1569	-0.0220	-0.0328	-0.0331	0.0025	0.0516	0.0876	0.0978	0.1103	0.1239	0.1347	0.1337	0
3.	23.	-0.0964	-0.0890	-0.0219	-0.0333	-0.0337	0.0032	0.0630	0.1111	0.1241	0.1380	0.1540	0.1655	0.1654	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
3.	29.	0.0111	0.0218	0.0650	0.0840	-0.0578	-0.0460	-0.0498	-0.0534	-0.0456	-0.0526	-0.0461	-0.0591	-0.0475	-0
3.	27.	-0.0355	-0.0302	0.0179	0.0401	-0.1163	-0.0931	-0.0947	-0.0957	-0.0917	-0.0918	-0.0867	-0.0956	-0.0856	-0
3.	26.	-0.0347	-0.0322	0.0200	0.0471	-0.1545	-0.0985	-0.0994	-0.1012	-0.0994	-0.0986	-0.0957	-0.0959	-0.0880	-0
3.	25.	-0.0394	-0.0473	0.0162	0.0531	-0.2888	-0.0988	-0.0989	-0.0991	-0.0990	-0.0977	-0.0970	-0.0989	-0.0969	-0
3.	24.	-0.0207	-0.0298	0.0514	0.1148	-0.2458	-0.0698	-0.0710	-0.0686	-0.0703	-0.0682	-0.0691	-0.0688	-0.0691	-0
3.	23.	-0.0207	-0.0295	0.0633	0.1444	-0.2276	-0.0626	-0.0630	-0.0614	-0.0635	-0.0609	-0.0645	-0.0629	-0.0626	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
3.	29.	-0.0591	-0.0489	-0.0162	-0.0197	0.0082	0.0546	0.0868	0.1100	0.1279	0.1301	0.1203	0.1180	0.1206	0
3.	27.	-0.0945	-0.0829	-0.0684	-0.0670	-0.0339	0.0058	0.0456	0.0699	0.0742	0.0708	0.0815	0.0848	0.0867	0
3.	26.	-0.1080	-0.0871	-0.0784	-0.0685	-0.0487	-0.0014	0.0383	0.0584	0.0650	0.0788	0.0842	0.0848	0.0949	0
3.	25.	-0.1040	-0.1011	-0.0941	-0.0834	-0.0690	-0.0360	0.0069	0.0373	0.0565	0.0720	0.0791	0.0853	0.0998	0
3.	24.	-0.0763	-0.0724	-0.0667	-0.0578	-0.0501	-0.0224	0.0142	0.0533	0.0802	0.1015	0.1191	0.1343	0.1567	0
3.	23.	-0.0697	-0.0670	-0.0623	-0.0545	-0.0468	-0.0250	0.0094	0.0506	0.0796	0.1079	0.1303	0.1519	0.1776	0

Table IV. Continued

(c) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
3.	29.	0.2061	0.2373	0.2573	0.3045	0.3641	0.3883	0.3910	0.4944	-0.0415	-0.0534	0.0151	0.1092	0.1211	0
3.	27.	0.1685	0.1980	0.2262	0.2720	0.3408	0.3992	0.3247	0.4981	-0.0858	-0.1012	-0.0404	0.0612	0.0790	0
3.	26.	0.1782	0.2028	0.2447	0.2986	0.3628	0.4053	0.3839	0.4882	-0.0915	-0.1034	-0.0518	0.0609	0.0754	0
3.	25.	0.1956	0.2266	0.2586	0.3081	0.3628	0.3858	0.3673	0.4961	-0.0908	-0.1062	-0.0701	0.0383	0.0768	0
3.	24.	0.2513	0.2742	0.3091	0.3496	0.3954	0.4008	0.3837	0.4800	-0.0636	-0.0780	-0.0530	0.0490	0.1177	0
3.	23.	0.2664	0.2872	0.3204	0.3564	0.3856	0.3813	0.3901	0.4663	-0.0587	-0.0713	-0.0504	0.0471	0.1297	0

Run	Point	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	C
3.	29.	-0.0671	-0.0654	-0.0706	-0.0577	-0.0594	-0.0582	-0.0561	-0.0513	-0.0063	0.0255	0.0652	0.0935	0.1103	0
3.	27.	-0.1107	-0.1085	-0.1137	-0.1028	-0.1061	-0.1041	-0.0971	-0.0930	-0.0591	-0.0322	-0.0038	0.0299	0.0640	0
3.	26.	-0.1140	-0.1130	-0.1186	-0.1084	-0.1093	-0.1091	-0.1083	-0.0992	-0.0618	-0.0404	-0.0098	0.0241	0.0453	0
3.	25.	-0.1117	-0.1126	-0.1198	-0.1107	-0.1115	-0.1097	-0.1084	-0.1065	-0.0844	-0.0671	-0.0447	-0.0205	0.0051	0
3.	24.	-0.0833	-0.0848	-0.0920	-0.0825	-0.0831	-0.0807	-0.0798	-0.0780	-0.0647	-0.0541	-0.0347	-0.0166	0.0021	0
3.	23.	-0.0753	-0.0772	-0.0839	-0.0752	-0.0745	-0.0713	-0.0714	-0.0697	-0.0594	-0.0490	-0.0341	-0.0197	-0.0020	0

Run	Point	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP142	CP143	CP144	CP145	CP146	C
3.	29.	0.1313	0.1236	0.1231	0.1233	0.1273	0.1435	0.1450	0.1481	0.1626	0.1712	0.2028	0.2157	0.2446	0
3.	27.	0.0795	0.0697	0.0770	0.0826	0.0822	0.0930	0.0919	0.0870	0.1107	0.1256	0.1649	0.1773	0.2025	0
3.	26.	0.0860	0.0775	0.0858	0.0906	0.0825	0.0904	0.0911	0.0896	0.1183	0.1340	0.1769	0.1878	0.2121	0
3.	25.	0.0821	0.0820	0.0914	0.0959	0.0938	0.1040	0.1032	0.1068	0.1337	0.1532	0.1943	0.2079	0.2364	0
3.	24.	0.1078	0.1140	0.1257	0.1357	0.1384	0.1576	0.1617	0.1698	0.1977	0.2144	0.2458	0.2592	0.2816	0
3.	23.	0.1097	0.1207	0.1372	0.1493	0.1571	0.1765	0.1821	0.1938	0.2200	0.2333	0.2598	0.2708	0.2901	0

Run	Point	CP151	CP152	CP154	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	C
3.	29.	0.5450	0.1587	0.1467	0.1450	0.1448	0.1427	0.1496	0.1511	0.1533	0.1601	0.1590	0.1626	0.1561	0
3.	27.	0.4313	0.1160	0.1137	0.1028	0.1084	0.1058	0.1075	0.1061	0.1077	0.1074	0.1098	0.1044	0.1053	0
3.	26.	0.5006	0.1283	0.1213	0.1109	0.1171	0.1152	0.1166	0.1145	0.1170	0.1164	0.1200	0.1205	0.1184	0
3.	25.	0.4952	0.1303	0.1224	0.1137	0.1155	0.1149	0.1195	0.1205	0.1231	0.1242	0.1281	0.1301	0.1303	0
3.	24.	0.4904	0.1567	0.1485	0.1401	0.1426	0.1422	0.1458	0.1458	0.1477	0.1476	0.1506	0.1506	0.1509	0
3.	23.	0.4730	0.1583	0.1483	0.1414	0.1417	0.1426	0.1481	0.1498	0.1505	0.1501	0.1533	0.1525	0.1523	0

Run	Point	CP169	CP170	CP171	CP172	CP173	CP174	CP175	CP176	CP177	CP178	CP179	CP180
3.	29.	0.1595	0.1741	0.2344	0.2806	0.5842	0.6311	0.6372	0.6248	0.6008	0.6358	0.5963	0.6183
3.	27.	0.1033	0.1236	0.1865	0.2201	0.5272	0.5607	0.5769	0.5756	0.5159	0.5758	0.5937	0.5353
3.	26.	0.1218	0.1415	0.2072	0.2519	0.5567	0.5971	0.6358	0.6107	0.5956	0.6053	0.5801	0.5668
3.	25.	0.1227	0.1389	0.1985	0.2421	0.5847	0.5974	0.6004	0.5921	0.6149	0.6006	0.5799	0.5570
3.	24.	0.1522	0.1715	0.2327	0.2717	0.5515	0.5739	0.5447	0.5484	0.5844	0.6132	0.5981	0.5585
3.	23.	0.1563	0.1745	0.2310	0.2671	0.5271	0.5552	0.5466	0.5469	0.5604	0.5756	0.5550	0.5159

Table IV. Continued

(d) 50 percent of cavity floor area with porosity; configuration 2d

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
4.	39.	0.20	2.04	22.97	23.61	0.63	96.0	0.8829	-0.2311	-0.1945	-0.1836	-0.1601	-0.1334	-0.1030	-0
4.	38.	0.40	3.63	19.89	22.22	2.24	101.0	0.9078	-0.2499	-0.2099	-0.1968	-0.1710	-0.1459	-0.1090	-0
4.	37.	0.60	4.69	16.35	20.86	4.12	101.5	0.9945	-0.2841	-0.2360	-0.2193	-0.1935	-0.1624	-0.1186	-0
4.	36.	0.80	3.80	9.30	14.17	4.16	100.1	1.1279	-0.3242	-0.2843	-0.2612	-0.2300	-0.1889	-0.1318	-0
4.	35.	0.90	3.52	7.36	12.48	4.19	100.9	1.2021	-0.3921	-0.3808	-0.3786	-0.3585	-0.1870	-0.0995	-0
4.	34.	0.95	3.39	6.60	11.82	4.18	102.1	1.2381	-0.2864	-0.2948	-0.3125	-0.3272	-0.3647	-0.3697	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
4.	39.	-0.0469	-0.0416	-0.0316	-0.0305	-0.0230	-0.0217	-0.0235	-0.0192	-0.0222	-0.0204	-0.0202	-0.0284	-0.0412	-0
4.	38.	-0.0531	-0.0488	-0.0404	-0.0359	-0.0297	-0.0273	-0.0261	-0.0248	-0.0261	-0.0268	-0.0295	-0.0350	-0.0483	-0
4.	37.	-0.0576	-0.0497	-0.0419	-0.0377	-0.0341	-0.0316	-0.0300	-0.0300	-0.0323	-0.0287	-0.0302	-0.0377	-0.0549	-0
4.	36.	-0.0495	-0.0439	-0.0343	-0.0291	-0.0257	-0.0231	-0.0220	-0.0226	-0.0247	-0.0250	-0.0281	-0.0358	-0.0522	-0
4.	35.	-0.0213	-0.0164	-0.0087	-0.0035	-0.0010	0.0016	0.0006	-0.0011	-0.0032	-0.0055	-0.0098	-0.0166	-0.0331	-0
4.	34.	0.0422	0.0347	0.0275	0.0245	0.0215	0.0208	0.0173	0.0125	0.0073	0.0019	-0.0042	-0.0135	-0.0314	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
4.	39.	-0.0659	-0.0591	-0.0194	-0.0258	-0.0168	-0.0017	0.0232	0.0348	0.0380	0.0468	0.0497	0.0543	0.0477	0
4.	38.	-0.0968	-0.0829	-0.0298	-0.0330	-0.0259	-0.0089	0.0147	0.0284	0.0335	0.0405	0.0462	0.0516	0.0470	0
4.	37.	-0.1328	-0.1058	-0.0324	-0.0407	-0.0330	-0.0150	0.0111	0.0252	0.0329	0.0412	0.0494	0.0582	0.0527	0
4.	36.	-0.2424	-0.2285	-0.0333	-0.0422	-0.0422	-0.0290	0.0019	0.0246	0.0325	0.0425	0.0545	0.0654	0.0613	0
4.	35.	-0.1502	-0.1454	-0.0169	-0.0228	-0.0236	-0.0105	0.0301	0.0685	0.0811	0.0954	0.1122	0.1268	0.1265	0
4.	34.	-0.0910	-0.0860	-0.0166	-0.0218	-0.0211	-0.0093	0.0390	0.0885	0.1044	0.1214	0.1407	0.1576	0.1586	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
4.	39.	-0.0174	-0.0151	0.0213	0.0425	-0.0881	-0.0604	-0.0661	-0.0672	-0.0633	-0.0664	-0.0577	-0.0641	-0.0591	-0
4.	38.	-0.0263	-0.0240	0.0133	0.0410	-0.1074	-0.0722	-0.0714	-0.0699	-0.0699	-0.0716	-0.0710	-0.0733	-0.0704	-0
4.	37.	-0.0319	-0.0334	0.0084	0.0430	-0.1497	-0.0831	-0.0789	-0.0797	-0.0774	-0.0780	-0.0765	-0.0868	-0.0801	-0
4.	36.	-0.0323	-0.0422	0.0006	0.0470	-0.2599	-0.0759	-0.0770	-0.0769	-0.0754	-0.0766	-0.0752	-0.0763	-0.0702	-0
4.	35.	-0.0156	-0.0235	0.0291	0.1026	-0.2069	-0.0490	-0.0472	-0.0482	-0.0476	-0.0470	-0.0471	-0.0499	-0.0441	-0
4.	34.	-0.0156	-0.0209	0.0387	0.1304	-0.1858	-0.0427	-0.0420	-0.0418	-0.0416	-0.0411	-0.0424	-0.0418	-0.0387	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
4.	39.	-0.0488	-0.0625	-0.0680	-0.0434	-0.0392	-0.0164	0.0169	0.0604	0.0595	0.0606	0.0850	0.0897	0.0835	0
4.	38.	-0.0717	-0.0670	-0.0684	-0.0623	-0.0576	-0.0426	0.0036	0.0313	0.0507	0.0483	0.0641	0.0668	0.0819	0
4.	37.	-0.0912	-0.0739	-0.0747	-0.0905	-0.0769	-0.0420	-0.0023	0.0285	0.0530	0.0641	0.0609	0.0666	0.0834	0
4.	36.	-0.0751	-0.0784	-0.0808	-0.0767	-0.0745	-0.0600	-0.0319	-0.0037	0.0220	0.0401	0.0543	0.0648	0.0775	0
4.	35.	-0.0461	-0.0499	-0.0542	-0.0544	-0.0536	-0.0400	-0.0149	0.0139	0.0411	0.0621	0.0829	0.1002	0.1219	0
4.	34.	-0.0445	-0.0475	-0.0489	-0.0482	-0.0485	-0.0380	-0.0157	0.0116	0.0392	0.0648	0.0903	0.1133	0.1343	0

Table IV. Continued

(d) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
4.	39.	0.1723	0.1910	0.2269	0.2580	0.2880	0.3268	0.3291	0.4411	-0.0558	-0.0560	-0.0439	0.0426	0.0757	0
4.	38.	0.1586	0.1957	0.2283	0.2722	0.3155	0.3309	0.3268	0.4396	-0.0665	-0.0647	-0.0572	0.0336	0.0649	0
4.	37.	0.1828	0.2175	0.2550	0.3043	0.3483	0.3450	0.3210	0.4888	-0.0753	-0.0787	-0.0769	0.0309	0.0594	0
4.	36.	0.1861	0.2217	0.2611	0.3022	0.3394	0.3435	0.3544	0.4583	-0.0709	-0.0722	-0.0748	-0.0043	0.0529	0
4.	35.	0.2314	0.2651	0.2950	0.3238	0.3434	0.3512	0.3685	0.4434	-0.0441	-0.0463	-0.0513	0.0108	0.0830	0
4.	34.	0.2493	0.2774	0.3074	0.3307	0.3453	0.3571	0.3932	0.4484	-0.0387	-0.0404	-0.0473	0.0096	0.0911	0

Run	Point	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	C
4.	39.	-0.0784	-0.0711	-0.0715	-0.0689	-0.0679	-0.0692	-0.0663	-0.0638	-0.0593	-0.0431	-0.0445	-0.0195	-0.0051	0
4.	38.	-0.0816	-0.0791	-0.0772	-0.0756	-0.0754	-0.0753	-0.0751	-0.0770	-0.0765	-0.0672	-0.0457	-0.0291	-0.0094	0
4.	37.	-0.0928	-0.0903	-0.0905	-0.0889	-0.0917	-0.0927	-0.0906	-0.0897	-0.0777	-0.0595	-0.0320	-0.0025	0.0190	0
4.	36.	-0.0843	-0.0831	-0.0827	-0.0818	-0.0837	-0.0842	-0.0844	-0.0864	-0.0873	-0.0792	-0.0676	-0.0514	-0.0370	-0
4.	35.	-0.0574	-0.0566	-0.0561	-0.0549	-0.0571	-0.0575	-0.0579	-0.0600	-0.0612	-0.0567	-0.0465	-0.0353	-0.0230	-0
4.	34.	-0.0500	-0.0501	-0.0496	-0.0493	-0.0505	-0.0511	-0.0517	-0.0532	-0.0543	-0.0504	-0.0427	-0.0326	-0.0216	-0

Run	Point	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP142	CP143	CP144	CP145	CP146	C
4.	39.	0.0839	0.0707	0.0749	0.0802	0.0745	0.0907	0.0903	0.0904	0.1301	0.1428	0.1715	0.2019	0.2331	0
4.	38.	0.0745	0.0718	0.0743	0.0793	0.0808	0.0826	0.0804	0.0738	0.1134	0.1238	0.1540	0.1900	0.2253	0
4.	37.	0.0561	0.0558	0.0628	0.0666	0.0644	0.0684	0.0634	0.0582	0.1148	0.1272	0.1671	0.2015	0.2374	0
4.	36.	0.0395	0.0427	0.0509	0.0575	0.0608	0.0763	0.0785	0.0803	0.1311	0.1489	0.1867	0.2209	0.2524	0
4.	35.	0.0582	0.0705	0.0818	0.0918	0.1001	0.1190	0.1252	0.1311	0.1705	0.1877	0.2170	0.2481	0.2738	0
4.	34.	0.0632	0.0756	0.0897	0.1031	0.1135	0.1368	0.1432	0.1492	0.1852	0.2064	0.2365	0.2628	0.2917	0

Run	Point	CP151	CP152	CP154	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	C
4.	39.	0.5038	0.0611	0.0566	0.0477	0.0351	0.0151	0.0255	0.0278	0.0281	0.0335	0.0377	0.0369	0.0380	0
4.	38.	0.4575	0.0606	0.0514	0.0395	0.0310	0.0096	0.0166	0.0172	0.0173	0.0136	0.0183	0.0165	0.0174	0
4.	37.	0.5682	0.0643	0.0476	0.0382	0.0287	0.0055	0.0140	0.0172	0.0232	0.0234	0.0303	0.0292	0.0281	0
4.	36.	0.4671	0.0650	0.0521	0.0419	0.0289	0.0059	0.0132	0.0157	0.0179	0.0157	0.0245	0.0264	0.0277	0
4.	35.	0.4536	0.0936	0.0742	0.0658	0.0561	0.0340	0.0422	0.0446	0.0475	0.0464	0.0545	0.0550	0.0560	0
4.	34.	0.4388	0.1024	0.0841	0.0760	0.0628	0.0399	0.0484	0.0492	0.0509	0.0495	0.0581	0.0578	0.0548	0

Run	Point	CP169	CP170	CP171	CP172	CP173	CP174	CP175	CP176	CP177	CP178	CP179	CP180
4.	39.	0.1373	0.1911	0.2348	0.2726	0.5036	0.5445	0.5605	0.5817	0.5528	0.5205	0.4846	0.4848
4.	38.	0.1312	0.1756	0.2205	0.2588	0.5447	0.5392	0.5417	0.5415	0.5151	0.5516	0.5506	0.5291
4.	37.	0.1353	0.1811	0.2307	0.2703	0.5552	0.5866	0.6619	0.6649	0.5839	0.5696	0.5538	0.5470
4.	36.	0.1456	0.1933	0.2404	0.2728	0.5249	0.5377	0.5639	0.5761	0.5375	0.5301	0.5200	0.5189
4.	35.	0.1838	0.2253	0.2619	0.2899	0.5131	0.5321	0.5359	0.5288	0.5427	0.5387	0.5285	0.5010
4.	34.	0.1942	0.2354	0.2710	0.2947	0.4602	0.4863	0.5030	0.4908	0.4903	0.4961	0.4909	0.4761

Table IV. Continued

(e) 75 percent of cavity floor area with porosity; configuration 2e

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
6.	51.	0.20	2.02	22.99	23.63	0.64	100.7	0.8804	-0.2111	-0.1854	-0.1637	-0.1512	-0.1198	-0.0915	-0
6.	50.	0.40	3.63	19.88	22.20	2.24	100.9	0.9147	-0.2504	-0.2110	-0.1982	-0.1730	-0.1461	-0.1090	-0
6.	49.	0.60	4.69	16.36	20.85	4.11	100.3	0.9960	-0.2802	-0.2313	-0.2166	-0.1883	-0.1588	-0.1140	-0
6.	48.	0.80	3.81	9.32	14.20	4.17	100.2	1.1259	-0.3192	-0.2837	-0.2607	-0.2328	-0.1890	-0.1331	-0
6.	47.	0.90	3.54	7.40	12.54	4.22	101.7	1.2004	-0.3894	-0.3782	-0.3780	-0.3587	-0.1943	-0.0998	-0
6.	46.	0.95	3.40	6.63	11.84	4.19	101.5	1.2357	-0.2871	-0.2959	-0.3128	-0.3287	-0.3654	-0.3701	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
6.	51.	-0.0390	-0.0265	-0.0224	-0.0229	-0.0127	-0.0101	-0.0116	-0.0071	-0.0142	-0.0050	-0.0055	-0.0137	-0.0331	-0
6.	50.	-0.0529	-0.0478	-0.0386	-0.0343	-0.0316	-0.0291	-0.0284	-0.0268	-0.0288	-0.0278	-0.0284	-0.0362	-0.0496	-0
6.	49.	-0.0530	-0.0477	-0.0387	-0.0341	-0.0282	-0.0238	-0.0229	-0.0240	-0.0265	-0.0279	-0.0293	-0.0358	-0.0546	-0
6.	48.	-0.0533	-0.0436	-0.0367	-0.0328	-0.0273	-0.0274	-0.0247	-0.0238	-0.0278	-0.0233	-0.0251	-0.0345	-0.0555	-0
6.	47.	-0.0246	-0.0165	-0.0107	-0.0075	-0.0020	-0.0026	-0.0005	-0.0025	-0.0066	-0.0038	-0.0064	-0.0157	-0.0346	-0
6.	46.	0.0359	0.0322	0.0243	0.0206	0.0204	0.0170	0.0153	0.0106	0.0043	0.0034	-0.0017	-0.0116	-0.0311	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
6.	51.	-0.0764	-0.0660	-0.0037	-0.0089	-0.0041	0.0057	0.0237	0.0356	0.0420	0.0529	0.0520	0.0616	0.0492	0
6.	50.	-0.0932	-0.0843	-0.0292	-0.0326	-0.0261	-0.0142	0.0086	0.0275	0.0350	0.0423	0.0471	0.0527	0.0465	0
6.	49.	-0.1238	-0.1130	-0.0309	-0.0352	-0.0270	-0.0088	0.0133	0.0302	0.0379	0.0467	0.0563	0.0641	0.0596	0
6.	48.	-0.2380	-0.2284	-0.0304	-0.0449	-0.0393	-0.0388	-0.0100	0.0177	0.0314	0.0446	0.0524	0.0659	0.0600	0
6.	47.	-0.1463	-0.1439	-0.0135	-0.0246	-0.0190	-0.0193	0.0164	0.0595	0.0781	0.0964	0.1096	0.1268	0.1231	0
6.	46.	-0.0847	-0.0837	-0.0132	-0.0222	-0.0156	-0.0155	0.0246	0.0769	0.0980	0.1185	0.1342	0.1515	0.1506	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
6.	51.	-0.0038	-0.0068	0.0281	0.0449	-0.0815	-0.0574	-0.0611	-0.0625	-0.0559	-0.0573	-0.0512	-0.0654	-0.0513	-0
6.	50.	-0.0267	-0.0253	0.0058	0.0432	-0.1066	-0.0671	-0.0653	-0.0673	-0.0639	-0.0662	-0.0640	-0.0686	-0.0605	-0
6.	49.	-0.0294	-0.0260	0.0115	0.0515	-0.1472	-0.0743	-0.0733	-0.0755	-0.0746	-0.0762	-0.0756	-0.0805	-0.0758	-0
6.	48.	-0.0302	-0.0431	-0.0141	0.0463	-0.2547	-0.0740	-0.0732	-0.0746	-0.0687	-0.0716	-0.0644	-0.0763	-0.0648	-0
6.	47.	-0.0136	-0.0228	0.0126	0.1006	-0.1975	-0.0463	-0.0432	-0.0467	-0.0424	-0.0437	-0.0388	-0.0480	-0.0377	-0
6.	46.	-0.0128	-0.0177	0.0217	0.1244	-0.1690	-0.0377	-0.0360	-0.0379	-0.0355	-0.0357	-0.0324	-0.0400	-0.0326	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
6.	51.	-0.0518	-0.0505	-0.0509	-0.0416	-0.0341	-0.0218	0.0074	0.0067	0.0461	0.0636	0.0647	0.0578	0.0871	0
6.	50.	-0.0508	-0.0535	-0.0490	-0.0531	-0.0521	-0.0381	-0.0124	0.0127	0.0347	0.0434	0.0469	0.0542	0.0798	0
6.	49.	-0.0495	-0.0899	-0.1051	-0.0727	-0.0546	-0.0465	0.0022	0.0279	0.0369	0.0483	0.0573	0.0576	0.0811	0
6.	48.	-0.0657	-0.0631	-0.0664	-0.0702	-0.0617	-0.0570	-0.0412	-0.0276	0.0005	0.0184	0.0366	0.0420	0.0706	0
6.	47.	-0.0384	-0.0354	-0.0387	-0.0433	-0.0406	-0.0370	-0.0255	-0.0115	0.0170	0.0365	0.0601	0.0758	0.1099	0
6.	46.	-0.0308	-0.0320	-0.0327	-0.0360	-0.0333	-0.0312	-0.0212	-0.0072	0.0202	0.0420	0.0663	0.0868	0.1251	0

Table IV. Continued

(e) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
6.	51.	0.1830	0.2044	0.2367	0.2650	0.3087	0.3370	0.3039	0.4410	-0.0514	-0.0558	-0.0383	0.0266	0.0610	0.
6.	50.	0.1643	0.1956	0.2291	0.2617	0.3020	0.3476	0.3273	0.4453	-0.0610	-0.0630	-0.0475	0.0122	0.0473	0.
6.	49.	0.1823	0.2131	0.2497	0.2997	0.3463	0.3741	0.3607	0.5164	-0.0750	-0.0761	-0.0616	0.0202	0.0479	0.
6.	48.	0.1902	0.2191	0.2464	0.2856	0.3288	0.3547	0.3590	0.4508	-0.0638	-0.0676	-0.0634	-0.0182	0.0321	0.
6.	47.	0.2322	0.2606	0.2931	0.3196	0.3442	0.3344	0.3481	0.4126	-0.0375	-0.0403	-0.0390	-0.0072	0.0578	0.
6.	46.	0.2414	0.2667	0.2912	0.3116	0.3292	0.3446	0.3498	0.3906	-0.0304	-0.0335	-0.0332	-0.0036	0.0678	0.

Run	Point	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	C
6.	51.	-0.0725	-0.0680	-0.0649	-0.0594	-0.0648	-0.0637	-0.0631	-0.0627	-0.0570	-0.0539	-0.0484	-0.0314	-0.0114	0.
6.	50.	-0.0758	-0.0742	-0.0717	-0.0687	-0.0684	-0.0674	-0.0662	-0.0649	-0.0572	-0.0522	-0.0471	-0.0350	-0.0279	-0.
6.	49.	-0.0900	-0.0890	-0.0862	-0.0854	-0.0848	-0.0829	-0.0789	-0.0758	-0.0616	-0.0495	-0.0303	-0.0144	0.0055	0.
6.	48.	-0.0827	-0.0787	-0.0774	-0.0735	-0.0774	-0.0792	-0.0762	-0.0767	-0.0739	-0.0728	-0.0712	-0.0668	-0.0603	-0.
6.	47.	-0.0544	-0.0510	-0.0494	-0.0455	-0.0492	-0.0511	-0.0484	-0.0492	-0.0470	-0.0463	-0.0464	-0.0420	-0.0402	-0.
6.	46.	-0.0461	-0.0439	-0.0423	-0.0390	-0.0422	-0.0430	-0.0410	-0.0418	-0.0394	-0.0389	-0.0379	-0.0349	-0.0329	-0.

Run	Point	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP142	CP143	CP144	CP145	CP146	C
6.	51.	0.0570	0.0524	0.0587	0.0585	0.0435	0.0857	0.0953	0.0947	0.1331	0.1442	0.1710	0.2038	0.2379	0.
6.	50.	0.0395	0.0375	0.0438	0.0486	0.0390	0.0865	0.1012	0.1096	0.1472	0.1492	0.1788	0.2083	0.2331	0.
6.	49.	0.0540	0.0448	0.0575	0.0535	0.0316	0.0838	0.0987	0.1015	0.1399	0.1385	0.1696	0.2095	0.2377	0.
6.	48.	0.0139	0.0216	0.0263	0.0345	0.0322	0.0741	0.0951	0.1037	0.1441	0.1565	0.1825	0.2128	0.2378	0.
6.	47.	0.0302	0.0372	0.0460	0.0604	0.0656	0.1036	0.1257	0.1365	0.1801	0.1979	0.2228	0.2500	0.2738	0.
6.	46.	0.0335	0.0426	0.0535	0.0670	0.0755	0.1115	0.1320	0.1464	0.1918	0.2093	0.2304	0.2572	0.2743	0.

Run	Point	CP151	CP152	CP154	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	C
6.	51.	0.4411	0.0673	0.0519	0.0373	0.0341	0.0060	-0.0100	-0.0185	-0.0127	-0.0123	-0.0095	-0.0122	-0.0133	0.
6.	50.	0.4446	0.0572	0.0420	0.0277	0.0204	0.0028	-0.0141	-0.0317	-0.0318	-0.0350	-0.0259	-0.0255	-0.0240	0.
6.	49.	0.5181	0.0641	0.0452	0.0353	0.0235	0.0002	-0.0167	-0.0202	-0.0128	-0.0126	-0.0044	-0.0049	-0.0037	0.
6.	48.	0.4289	0.0527	0.0372	0.0205	0.0164	-0.0050	-0.0251	-0.0432	-0.0399	-0.0385	-0.0258	-0.0294	-0.0305	-0.
6.	47.	0.4039	0.0785	0.0605	0.0444	0.0404	0.0209	0.0028	-0.0168	-0.0169	-0.0212	-0.0105	-0.0149	-0.0142	0.
6.	46.	0.3962	0.0856	0.0661	0.0495	0.0450	0.0248	0.0070	-0.0117	-0.0118	-0.0135	-0.0021	-0.0061	-0.0063	0.

Run	Point	CP169	CP170	CP171	CP172	CP173	CP174	CP175	CP176	CP177	CP178	CP179	CP180
6.	51.	0.1535	0.1882	0.2329	0.2588	0.4684	0.5369	0.5554	0.5221	0.4722	0.5322	0.5398	0.5082
6.	50.	0.1515	0.1902	0.2336	0.2654	0.5372	0.5668	0.5271	0.4983	0.5066	0.4945	0.5107	0.5016
6.	49.	0.1603	0.1914	0.2326	0.2734	0.5774	0.6091	0.6156	0.6273	0.6544	0.6861	0.6502	0.6221
6.	48.	0.1547	0.1956	0.2413	0.2615	0.5001	0.5006	0.5014	0.4896	0.5008	0.4965	0.4840	0.4818
6.	47.	0.1979	0.2291	0.2622	0.2807	0.4652	0.4540	0.4525	0.4673	0.4831	0.4761	0.4727	0.4594
6.	46.	0.2050	0.2339	0.2641	0.2795	0.4637	0.4524	0.4432	0.4477	0.4676	0.4598	0.4605	0.4395

Table IV. Continued

(f) 100 percent of cavity floor area with porosity; configuration 2f

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
7.	62.	0.20	2.02	22.96	23.61	0.64	100.7	0.8767	-0.2193	-0.1964	-0.1780	-0.1623	-0.1276	-0.1022	-0
7.	60.	0.40	3.63	19.89	22.23	2.25	102.3	0.9107	-0.2490	-0.2117	-0.1987	-0.1730	-0.1473	-0.1100	-0
7.	59.	0.60	4.71	16.31	20.85	4.15	100.0	0.9995	-0.2780	-0.2319	-0.2158	-0.1879	-0.1584	-0.1141	-0
7.	58.	0.80	3.80	9.29	14.18	4.18	100.5	1.1310	-0.3160	-0.2803	-0.2576	-0.2268	-0.1853	-0.1290	-0
7.	57.	0.90	3.52	7.34	12.46	4.19	100.5	1.2075	-0.3813	-0.3703	-0.3724	-0.3527	-0.2164	-0.0911	-0
7.	56.	0.95	3.40	6.63	11.83	4.18	101.3	1.2368	-0.2838	-0.2922	-0.3110	-0.3244	-0.3613	-0.3681	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
7.	62.	-0.0485	-0.0350	-0.0315	-0.0335	-0.0264	-0.0264	-0.0220	-0.0135	-0.0263	-0.0112	-0.0029	-0.0184	-0.0409	-0
7.	60.	-0.0539	-0.0486	-0.0406	-0.0361	-0.0331	-0.0311	-0.0290	-0.0270	-0.0294	-0.0280	-0.0280	-0.0352	-0.0493	-0
7.	59.	-0.0522	-0.0468	-0.0386	-0.0341	-0.0306	-0.0277	-0.0255	-0.0249	-0.0268	-0.0270	-0.0294	-0.0377	-0.0548	-0
7.	58.	-0.0465	-0.0398	-0.0305	-0.0258	-0.0224	-0.0213	-0.0200	-0.0188	-0.0213	-0.0219	-0.0239	-0.0319	-0.0481	-0
7.	57.	-0.0168	-0.0116	-0.0037	0.0003	0.0033	0.0046	0.0048	0.0042	0.0016	-0.0003	-0.0028	-0.0104	-0.0266	-0
7.	56.	0.0405	0.0342	0.0283	0.0251	0.0241	0.0221	0.0186	0.0150	0.0095	0.0052	0.0004	-0.0081	-0.0253	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
7.	62.	-0.0902	-0.0721	-0.0049	-0.0258	-0.0111	-0.0101	0.0179	0.0263	0.0351	0.0492	0.0374	0.0547	0.0449	0
7.	60.	-0.0908	-0.0778	-0.0283	-0.0341	-0.0279	-0.0150	0.0109	0.0284	0.0341	0.0413	0.0447	0.0502	0.0447	0
7.	59.	-0.1213	-0.1046	-0.0320	-0.0380	-0.0299	-0.0111	0.0167	0.0335	0.0392	0.0469	0.0551	0.0622	0.0574	0
7.	58.	-0.2396	-0.2316	-0.0286	-0.0391	-0.0370	-0.0333	-0.0034	0.0283	0.0382	0.0489	0.0585	0.0689	0.0639	0
7.	57.	-0.1427	-0.1392	-0.0100	-0.0178	-0.0153	-0.0126	0.0235	0.0713	0.0874	0.1029	0.1175	0.1315	0.1299	0
7.	56.	-0.0787	-0.0773	-0.0104	-0.0173	-0.0133	-0.0104	0.0299	0.0871	0.1054	0.1233	0.1403	0.1555	0.1553	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
7.	62.	-0.0075	-0.0184	0.0185	0.0367	-0.0903	-0.0715	-0.0771	-0.0849	-0.0648	-0.0777	-0.0524	-0.0836	-0.0584	-0
7.	60.	-0.0282	-0.0271	0.0092	0.0415	-0.1100	-0.0744	-0.0711	-0.0729	-0.0704	-0.0708	-0.0670	-0.0718	-0.0672	-0
7.	59.	-0.0311	-0.0283	0.0145	0.0489	-0.1492	-0.0863	-0.0870	-0.0867	-0.0857	-0.0881	-0.0859	-0.0886	-0.0825	-0
7.	58.	-0.0281	-0.0381	-0.0056	0.0529	-0.2541	-0.0707	-0.0685	-0.0698	-0.0673	-0.0681	-0.0651	-0.0722	-0.0659	-0
7.	57.	-0.0093	-0.0160	0.0214	0.1102	-0.1951	-0.0410	-0.0361	-0.0388	-0.0377	-0.0380	-0.0366	-0.0419	-0.0369	-0
7.	56.	-0.0099	-0.0126	0.0282	0.1320	-0.1698	-0.0332	-0.0292	-0.0315	-0.0300	-0.0309	-0.0298	-0.0335	-0.0300	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
7.	62.	-0.0421	-0.0505	-0.0592	-0.0718	-0.0475	-0.0251	0.0029	0.0117	0.0510	0.0542	0.0843	0.0782	0.0948	0
7.	60.	-0.0605	-0.0607	-0.0593	-0.0568	-0.0539	-0.0402	-0.0240	0.0077	0.0382	0.0576	0.0703	0.0784	0.0839	0
7.	59.	-0.0804	-0.0855	-0.0800	-0.0818	-0.0678	-0.0515	-0.0217	0.0335	0.0556	0.0574	0.0690	0.0755	0.0923	0
7.	58.	-0.0586	-0.0579	-0.0607	-0.0659	-0.0617	-0.0548	-0.0424	-0.0236	0.0054	0.0283	0.0510	0.0679	0.0900	0
7.	57.	-0.0345	-0.0361	-0.0370	-0.0358	-0.0350	-0.0313	-0.0234	-0.0072	0.0208	0.0453	0.0747	0.0993	0.1255	0
7.	56.	-0.0282	-0.0277	-0.0295	-0.0301	-0.0289	-0.0261	-0.0190	-0.0047	0.0220	0.0479	0.0784	0.1075	0.1347	0

Table IV. Concluded

(f) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
7.	62.	0.1759	0.2018	0.2231	0.2554	0.3127	0.3469	0.3171	0.4113	-0.0586	-0.0626	-0.0531	0.0363	0.0743	0.
7.	60.	0.1641	0.1918	0.2249	0.2659	0.3132	0.3618	0.3343	0.4254	-0.0664	-0.0647	-0.0498	0.0153	0.0635	0.
7.	59.	0.1848	0.2217	0.2593	0.3106	0.3559	0.3692	0.3652	0.5045	-0.0771	-0.0779	-0.0722	0.0218	0.0671	0.
7.	58.	0.1930	0.2224	0.2568	0.2989	0.3395	0.3509	0.3430	0.4356	-0.0626	-0.0630	-0.0609	-0.0214	0.0468	0.
7.	57.	0.2379	0.2671	0.2948	0.3225	0.3458	0.3532	0.3721	0.4113	-0.0348	-0.0348	-0.0341	-0.0069	0.0730	0.
7.	56.	0.2463	0.2727	0.2953	0.3196	0.3402	0.3486	0.3732	0.4010	-0.0299	-0.0302	-0.0287	-0.0041	0.0775	0.

Run	Point	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	C
7.	62.	-0.0913	-0.0753	-0.0708	-0.0678	-0.0742	-0.0781	-0.0720	-0.0712	-0.0702	-0.0567	-0.0490	-0.0267	-0.0109	0.
7.	60.	-0.0812	-0.0784	-0.0757	-0.0747	-0.0757	-0.0750	-0.0747	-0.0732	-0.0708	-0.0631	-0.0559	-0.0452	-0.0290	-0.
7.	59.	-0.0922	-0.0897	-0.0883	-0.0882	-0.0898	-0.0891	-0.0864	-0.0818	-0.0687	-0.0558	-0.0407	-0.0124	0.0069	0.
7.	58.	-0.0761	-0.0744	-0.0731	-0.0716	-0.0736	-0.0726	-0.0719	-0.0724	-0.0717	-0.0687	-0.0692	-0.0640	-0.0588	-0.
7.	57.	-0.0475	-0.0459	-0.0449	-0.0433	-0.0449	-0.0444	-0.0436	-0.0441	-0.0444	-0.0424	-0.0426	-0.0385	-0.0366	-0.
7.	56.	-0.0412	-0.0398	-0.0391	-0.0377	-0.0388	-0.0378	-0.0370	-0.0374	-0.0371	-0.0350	-0.0358	-0.0320	-0.0294	-0.

Run	Point	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP142	CP143	CP144	CP145	CP146	C
7.	62.	0.0790	0.0948	0.0824	0.0922	0.0955	0.1021	0.1099	0.0896	0.1019	0.1201	0.1461	0.1817	0.2182	0.
7.	60.	0.0625	0.0690	0.0657	0.0719	0.0738	0.0766	0.0792	0.0813	0.1229	0.1354	0.1653	0.2020	0.2323	0.
7.	59.	0.0874	0.0888	0.0847	0.0883	0.0885	0.0951	0.0938	0.0898	0.1176	0.1297	0.1675	0.2060	0.2409	0.
7.	58.	0.0220	0.0356	0.0459	0.0575	0.0689	0.0874	0.0969	0.1053	0.1403	0.1559	0.1838	0.2147	0.2446	0.
7.	57.	0.0341	0.0499	0.0629	0.0812	0.0965	0.1229	0.1374	0.1529	0.1919	0.2074	0.2324	0.2567	0.2822	0.
7.	56.	0.0317	0.0478	0.0619	0.0808	0.0963	0.1279	0.1429	0.1587	0.1974	0.2142	0.2370	0.2566	0.2798	0.

Run	Point	CP151	CP152	CP154	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	C
7.	62.	0.4689	0.0631	0.0526	0.0275	0.0248	-0.0092	-0.0232	-0.0352	-0.0101	0.0227	0.0560	0.0680	0.0853	0.
7.	60.	0.4559	0.0642	0.0479	0.0310	0.0158	-0.0093	-0.0229	-0.0364	-0.0219	0.0060	0.0394	0.0608	0.0753	0.
7.	59.	0.5598	0.0672	0.0463	0.0393	0.0227	-0.0074	-0.0263	-0.0278	-0.0005	0.0280	0.0595	0.0738	0.0819	0.
7.	58.	0.4282	0.0686	0.0494	0.0316	0.0152	-0.0078	-0.0220	-0.0409	-0.0468	-0.0347	-0.0014	0.0227	0.0461	0.
7.	57.	0.4135	0.0911	0.0731	0.0569	0.0413	0.0193	0.0063	-0.0126	-0.0217	-0.0150	0.0151	0.0374	0.0657	0.
7.	56.	0.4149	0.0939	0.0764	0.0599	0.0452	0.0243	0.0122	-0.0059	-0.0161	-0.0136	0.0153	0.0399	0.0699	0.

Run	Point	CP169	CP170	CP171	CP172	CP173	CP174	CP175	CP176	CP177	CP178	CP179	CP180
7.	62.	0.1457	0.1883	0.2450	0.2716	0.5328	0.5529	0.5196	0.5077	0.4905	0.5054	0.5735	0.5779
7.	60.	0.1406	0.1741	0.2110	0.2439	0.5290	0.4896	0.4904	0.5229	0.5646	0.5438	0.5706	0.5496
7.	59.	0.1573	0.1972	0.2481	0.2907	0.5447	0.5563	0.5936	0.6321	0.6247	0.6104	0.5928	0.5460
7.	58.	0.1736	0.2091	0.2464	0.2740	0.4779	0.4993	0.5181	0.5118	0.5020	0.5129	0.5183	0.5142
7.	57.	0.2123	0.2460	0.2775	0.2937	0.4751	0.4745	0.4715	0.4777	0.4865	0.4645	0.4674	0.4523
7.	56.	0.2164	0.2431	0.2664	0.2841	0.4694	0.4758	0.4884	0.4939	0.4959	0.4654	0.4657	0.4692

Table V. Pressure Coefficients for Cavity Models With Floor Slot Vents

[l = 32.16 in.; h = 2.40 in.]

(a) Solid floor (100 percent of cavity floor taped); configuration 3a

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
10.	92.	0.20	2.05	22.96	23.62	0.65	99.0	0.8583	-0.2314	-0.2017	-0.1847	-0.1641	-0.1401	-0.1087
10.	91.	0.40	3.64	19.88	22.22	2.24	100.1	0.9159	-0.2437	-0.2072	-0.1933	-0.1691	-0.1424	-0.1056
10.	90.	0.60	4.69	16.33	20.83	4.11	100.5	0.9985	-0.2702	-0.2259	-0.2111	-0.1837	-0.1532	-0.1104
10.	89.	0.80	3.81	9.30	14.18	4.17	100.2	1.1244	-0.3050	-0.2762	-0.2530	-0.2229	-0.1821	-0.1260
10.	88.	0.90	3.53	7.34	12.46	4.19	100.3	1.2042	-0.3633	-0.3652	-0.3720	-0.3465	-0.2044	-0.0919
10.	87.	0.95	3.41	6.63	11.84	4.18	100.5	1.2376	-0.2662	-0.2902	-0.3123	-0.3241	-0.3626	-0.3683

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
10.	92.	-0.0512	-0.0483	-0.0373	-0.0338	-0.0293	-0.0292	-0.0286	-0.0230	-0.0219	-0.0179	-0.0073	0.0027	0.0195
10.	91.	-0.0559	-0.0496	-0.0399	-0.0340	-0.0292	-0.0258	-0.0205	-0.0186	-0.0198	-0.0134	-0.0064	0.0008	0.0233
10.	90.	-0.0494	-0.0432	-0.0337	-0.0278	-0.0237	-0.0205	-0.0184	-0.0166	-0.0168	-0.0125	-0.0071	0.0014	0.0231
10.	89.	-0.0442	-0.0361	-0.0264	-0.0218	-0.0178	-0.0155	-0.0132	-0.0102	-0.0121	-0.0059	-0.0010	0.0039	0.0237
10.	88.	-0.0176	-0.0113	-0.0032	0.0007	0.0055	0.0070	0.0083	0.0098	0.0078	0.0132	0.0172	0.0234	0.0455
10.	87.	0.0410	0.0356	0.0299	0.0272	0.0271	0.0261	0.0237	0.0216	0.0175	0.0186	0.0197	0.0264	0.0499

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
10.	92.	-0.0319	-0.0298	-0.0149	-0.0504	-0.0402	-0.0037	0.0265	0.0304	0.0140	-0.0291	-0.0643	-0.0659	-0.0561
10.	91.	-0.0349	-0.0360	-0.0126	-0.0479	-0.0386	0.0003	0.0322	0.0375	0.0163	-0.0312	-0.0762	-0.0770	-0.0648
10.	90.	-0.0552	-0.0573	-0.0124	-0.0483	-0.0408	-0.0015	0.0351	0.0419	0.0182	-0.0400	-0.0944	-0.0958	-0.0808
10.	89.	-0.1559	-0.1734	-0.0060	-0.0568	-0.0485	-0.0067	0.0375	0.0520	0.0231	-0.0612	-0.1552	-0.1542	-0.1301
10.	88.	-0.0772	-0.0961	0.0147	-0.0426	-0.0322	0.0162	0.0718	0.0989	0.0737	-0.0111	-0.1224	-0.1132	-0.0794
10.	87.	-0.0267	-0.0434	0.0179	-0.0448	-0.0304	0.0216	0.0821	0.1158	0.0939	0.0151	-0.1006	-0.0893	-0.0476

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75
10.	92.	-0.0149	-0.0349	0.0274	-0.0559	-0.0360	-0.0623	-0.0237	-0.0036	-0.0070	-0.0344	-0.0528	-0.1568	-0.1704
10.	91.	-0.0095	-0.0328	0.0301	-0.0646	-0.0393	-0.0536	-0.0330	-0.0082	0.0029	-0.0184	-0.0323	-0.1562	-0.1793
10.	90.	-0.0086	-0.0367	0.0337	-0.0770	-0.0511	-0.0312	-0.0130	0.0137	0.0113	-0.0035	-0.0116	-0.1343	-0.1602
10.	89.	-0.0038	-0.0451	0.0364	-0.1206	-0.1120	-0.0472	-0.0268	0.0019	0.0097	-0.0126	-0.0244	-0.1544	-0.1717
10.	88.	0.0166	-0.0274	0.0709	-0.0793	-0.0410	-0.0162	-0.0024	0.0295	0.0346	0.0144	0.0033	-0.1239	-0.1457
10.	87.	0.0201	-0.0239	0.0815	-0.0516	0.0003	-0.0108	0.0046	0.0374	0.0452	0.0253	0.0107	-0.1186	-0.1391

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93
10.	92.	-0.1304	-0.1354	-0.0943	-0.0725	-0.0555	-0.0152	0.0325	0.0653	0.0860	0.0922	0.1179	0.1634	0.2044
10.	91.	-0.1023	-0.0890	-0.0896	-0.0929	-0.0746	-0.0111	0.0400	0.0603	0.0864	0.0975	0.1333	0.1700	0.2216
10.	90.	-0.0989	-0.0916	-0.0706	-0.0642	-0.0316	0.0068	0.0327	0.0436	0.0793	0.1185	0.1466	0.1835	0.2131
10.	89.	-0.1091	-0.0876	-0.0756	-0.0674	-0.0488	-0.0132	0.0272	0.0506	0.0825	0.1140	0.1501	0.1898	0.2295
10.	88.	-0.0785	-0.0641	-0.0495	-0.0450	-0.0266	0.0055	0.0426	0.0708	0.1069	0.1418	0.1801	0.2175	0.2542
10.	87.	-0.0748	-0.0606	-0.0512	-0.0355	-0.0198	0.0112	0.0441	0.0773	0.1120	0.1432	0.1797	0.2152	0.2426

Table V. Continued

(a) Concluded

Run	Point	CP107	CP108	CP109	CP110	CP111	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CI
10.	92.	-0.1460	-0.0561	0.0652	0.1529	0.1864	-0.1738	-0.1782	-0.1855	-0.1802	-0.1707	-0.1464	-0.1296	-0.0936	-0.
10.	91.	-0.1508	-0.0416	0.0719	0.1525	0.2130	-0.1765	-0.1815	-0.1793	-0.1670	-0.1640	-0.1379	-0.1268	-0.1070	-0.
10.	90.	-0.1451	-0.0453	0.0632	0.1531	0.2357	-0.1679	-0.1739	-0.1715	-0.1613	-0.1591	-0.1375	-0.1171	-0.1033	-0.
10.	89.	-0.1475	-0.0471	0.0594	0.1517	0.2295	-0.1772	-0.1802	-0.1774	-0.1618	-0.1535	-0.1333	-0.1141	-0.0985	-0.
10.	88.	-0.1199	-0.0263	0.0795	0.1785	0.2511	-0.1517	-0.1548	-0.1489	-0.1342	-0.1251	-0.1032	-0.0834	-0.0704	-0.
10.	87.	-0.1091	-0.0198	0.0792	0.1809	0.2489	-0.1422	-0.1461	-0.1389	-0.1262	-0.1150	-0.0921	-0.0770	-0.0631	-0.

Run	Point	CP129	CP130	CP131	CP134	CP136	CP137	CP138	CP139	CP140	CP152	CP154	CP155	CP156	CI
10.	92.	0.0594	0.0794	0.1286	0.1627	0.1632	0.1849	0.2091	0.2234	0.2634	0.0683	0.0016	-0.0008	-0.0211	-0.
10.	91.	0.0522	0.0732	0.1099	0.1425	0.1580	0.1822	0.2149	0.2428	0.2680	0.0769	0.0108	0.0128	0.0242	0.
10.	90.	0.0537	0.0731	0.0990	0.1351	0.1540	0.1742	0.1936	0.2110	0.2283	0.0753	0.0316	0.0389	0.0459	0.
10.	89.	0.0497	0.0687	0.1011	0.1475	0.1699	0.1960	0.2146	0.2258	0.2409	0.0706	0.0252	0.0278	0.0315	0.
10.	88.	0.0617	0.0804	0.1176	0.1619	0.1899	0.2104	0.2270	0.2354	0.2486	0.0938	0.0529	0.0550	0.0572	0.
10.	87.	0.0600	0.0809	0.1181	0.1664	0.1900	0.2099	0.2303	0.2410	0.2562	0.0979	0.0538	0.0576	0.0620	0.

Run	Point	CP161	CP162	CP163	CP164	CP165	CP166	CP167	CP168	CP169	CP170	CP171	CP172	CP181	CI
10.	92.	-0.0202	-0.0009	0.0173	0.0316	0.0403	0.0402	0.2556	0.4228	0.4520	0.4658	0.4648	0.4652	0.2959	0.
10.	91.	0.1153	0.1232	0.1206	0.1130	0.0879	0.0408	0.2087	0.3460	0.3655	0.3647	0.3719	0.3969	0.3645	0.
10.	90.	0.0738	0.1005	0.1095	0.1035	0.0802	0.0587	0.2225	0.3458	0.3640	0.3588	0.3634	0.3896	0.3811	0.
10.	89.	0.0607	0.0764	0.0824	0.0894	0.0783	0.0629	0.2561	0.3690	0.3948	0.4005	0.4074	0.4096	0.4913	0.
10.	88.	0.0766	0.0930	0.0973	0.1004	0.0940	0.0775	0.2472	0.3699	0.4015	0.4152	0.4269	0.4262	0.4909	0.
10.	87.	0.0827	0.0931	0.0916	0.0938	0.0906	0.0875	0.2627	0.3538	0.3809	0.3917	0.3986	0.3991	0.4871	0.

Run	Point	CP186
10.	92.	0.4218
10.	91.	0.4001
10.	90.	0.3892
10.	89.	0.3969
10.	88.	0.3936
10.	87.	0.3719

Table V. Continued

(b) 100 percent of cavity floor area with porosity; configuration 3b

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
18.	167.	0.20	2.04	22.97	23.62	0.65	100.6	0.8707	-0.2187	-0.1882	-0.1685	-0.1497	-0.1203	-0.0923	-0
18.	166.	0.40	3.63	19.91	22.24	2.23	101.1	0.9061	-0.2454	-0.2005	-0.1863	-0.1610	-0.1361	-0.0997	-0
18.	165.	0.60	4.67	16.29	20.82	4.14	103.0	0.9948	-0.2760	-0.2259	-0.2091	-0.1811	-0.1532	-0.1089	-0
18.	163.	0.80	3.80	9.29	14.18	4.17	100.5	1.1260	-0.3064	-0.2791	-0.2561	-0.2264	-0.1856	-0.1287	-0
18.	162.	0.90	3.54	7.34	12.47	4.20	99.3	1.2041	-0.3637	-0.3616	-0.3730	-0.3468	-0.2442	-0.0920	-0
18.	161.	0.95	3.41	6.59	11.81	4.18	99.6	1.2373	-0.2625	-0.2875	-0.3107	-0.3256	-0.3606	-0.3661	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
18.	167.	-0.0371	-0.0289	-0.0252	-0.0216	-0.0149	-0.0130	-0.0086	-0.0090	-0.0066	0.0038	0.0114	0.0154	0.0282	-0
18.	166.	-0.0445	-0.0411	-0.0322	-0.0277	-0.0234	-0.0193	-0.0177	-0.0166	-0.0144	-0.0111	-0.0073	-0.0007	0.0148	-0
18.	165.	-0.0475	-0.0412	-0.0314	-0.0256	-0.0230	-0.0200	-0.0182	-0.0169	-0.0148	-0.0112	-0.0068	0.0005	0.0144	-0
18.	163.	-0.0472	-0.0397	-0.0310	-0.0257	-0.0211	-0.0189	-0.0156	-0.0146	-0.0162	-0.0127	-0.0101	-0.0072	0.0039	-0
18.	162.	-0.0195	-0.0137	-0.0068	-0.0013	0.0026	0.0041	0.0059	0.0059	0.0042	0.0064	0.0076	0.0104	0.0207	-0
18.	161.	0.0443	0.0383	0.0302	0.0273	0.0256	0.0241	0.0216	0.0173	0.0133	0.0124	0.0120	0.0141	0.0237	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
18.	167.	-0.0161	-0.0245	0.0050	-0.0181	-0.0176	-0.0055	0.0334	0.0473	0.0300	-0.0050	-0.0442	-0.0439	-0.0376	-0
18.	166.	-0.0356	-0.0340	-0.0122	-0.0279	-0.0328	-0.0119	0.0229	0.0406	0.0254	-0.0166	-0.0590	-0.0623	-0.0527	-0
18.	165.	-0.0519	-0.0521	-0.0103	-0.0305	-0.0356	-0.0171	0.0210	0.0432	0.0267	-0.0248	-0.0766	-0.0790	-0.0658	-0
18.	163.	-0.1607	-0.1798	-0.0128	-0.0400	-0.0465	-0.0315	0.0090	0.0362	0.0198	-0.0484	-0.1345	-0.1340	-0.1178	-0
18.	162.	-0.0760	-0.0948	0.0053	-0.0195	-0.0256	-0.0104	0.0344	0.0743	0.0649	0.0034	-0.0881	-0.0812	-0.0580	-0
18.	161.	-0.0271	-0.0422	0.0086	-0.0187	-0.0228	-0.0066	0.0429	0.0905	0.0859	0.0307	-0.0642	-0.0523	-0.0254	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
18.	167.	0.0046	-0.0218	0.0312	-0.0324	-0.0188	0.0001	-0.0065	-0.0032	0.0038	-0.0050	0.0009	-0.0621	-0.0796	-0
18.	166.	-0.0096	-0.0308	0.0230	-0.0450	-0.0323	-0.0061	-0.0195	-0.0097	-0.0022	-0.0151	-0.0137	-0.0651	-0.0938	-0
18.	165.	-0.0083	-0.0344	0.0206	-0.0592	-0.0447	-0.0099	-0.0197	-0.0105	-0.0069	-0.0203	-0.0101	-0.0592	-0.0835	-0
18.	163.	-0.0115	-0.0473	0.0077	-0.1043	-0.1112	-0.0141	-0.0278	-0.0193	-0.0109	-0.0224	-0.0169	-0.0669	-0.0927	-0
18.	162.	0.0073	-0.0259	0.0327	-0.0534	-0.0376	0.0100	0.0029	0.0112	0.0110	0.0029	0.0078	-0.0400	-0.0608	-0
18.	161.	0.0100	-0.0223	0.0418	-0.0258	0.0048	0.0167	0.0084	0.0172	0.0206	0.0089	0.0126	-0.0377	-0.0599	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
18.	167.	-0.0663	-0.0682	-0.0648	-0.0650	-0.0616	-0.0483	-0.0206	0.0192	0.0616	0.1088	0.1509	0.1808	0.2329	0
18.	166.	-0.0777	-0.0795	-0.0764	-0.0781	-0.0726	-0.0570	-0.0180	0.0163	0.0475	0.0814	0.1235	0.1638	0.2167	0
18.	165.	-0.0755	-0.0761	-0.0709	-0.0630	-0.0598	-0.0453	-0.0239	0.0125	0.0510	0.0904	0.1334	0.1748	0.2262	0
18.	163.	-0.0810	-0.0761	-0.0731	-0.0727	-0.0647	-0.0497	-0.0274	-0.0046	0.0323	0.0683	0.1090	0.1512	0.1898	0
18.	162.	-0.0512	-0.0491	-0.0468	-0.0451	-0.0390	-0.0269	-0.0072	0.0168	0.0480	0.0808	0.1189	0.1574	0.2062	0
18.	161.	-0.0449	-0.0436	-0.0414	-0.0389	-0.0341	-0.0229	-0.0046	0.0198	0.0495	0.0837	0.1201	0.1563	0.1968	0

Table V. Concluded

(b) Concluded

Run	Point	CP107	CP108	CP109	CP110	CP111	CP115	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CI
18.	167.	-0.0744	-0.0573	0.0347	0.1482	0.2572	-0.1126	-0.0958	-0.0894	-0.0831	-0.0831	-0.0814	-0.0805	-0.0783	-0.
18.	166.	-0.0824	-0.0645	0.0102	0.1218	0.2719	-0.1076	-0.0992	-0.0926	-0.0895	-0.0876	-0.0875	-0.0878	-0.0859	-0.
18.	165.	-0.0837	-0.0668	0.0106	0.1212	0.2568	-0.1088	-0.1006	-0.0917	-0.0883	-0.0874	-0.0862	-0.0837	-0.0824	-0.
18.	163.	-0.0854	-0.0701	0.0002	0.1108	0.2204	-0.1118	-0.1038	-0.0953	-0.0907	-0.0900	-0.0899	-0.0867	-0.0862	-0.
18.	162.	-0.0547	-0.0406	0.0189	0.1181	0.2240	-0.0769	-0.0701	-0.0626	-0.0587	-0.0580	-0.0575	-0.0549	-0.0540	-0.
18.	161.	-0.0473	-0.0349	0.0229	0.1213	0.2237	-0.0703	-0.0637	-0.0566	-0.0534	-0.0521	-0.0513	-0.0497	-0.0486	-0.

Run	Point	CP129	CP130	CP131	CP134	CP136	CP137	CP138	CP139	CP140	CP152	CP154	CP155	CP156	CI
18.	167.	0.0034	0.0227	0.0564	0.1285	0.1436	0.1534	0.2031	0.2359	0.2544	0.0509	-0.0209	-0.0493	-0.0603	-0.
18.	166.	-0.0267	-0.0047	0.0360	0.1077	0.1457	0.1591	0.2105	0.2304	0.2604	0.0438	-0.0257	-0.0480	-0.0662	-0.
18.	165.	-0.0248	-0.0008	0.0364	0.0969	0.1398	0.1544	0.1863	0.2081	0.2232	0.0394	-0.0262	-0.0506	-0.0666	-0.
18.	163.	-0.0289	-0.0186	0.0209	0.0824	0.1250	0.1446	0.1879	0.2081	0.2231	0.0261	-0.0331	-0.0601	-0.0708	-0.
18.	162.	-0.0107	-0.0005	0.0321	0.0802	0.1209	0.1400	0.1819	0.2027	0.2147	0.0456	-0.0050	-0.0290	-0.0394	-0.
18.	161.	-0.0030	0.0067	0.0419	0.0954	0.1273	0.1438	0.1780	0.1969	0.2133	0.0493	-0.0012	-0.0238	-0.0359	-0.

Run	Point	CP161	CP162	CP163	CP164	CP165	CP166	CP167	CP168	CP169	CP170	CP171	CP172	CP181	CI
18.	167.	0.0182	0.0554	0.0866	0.1204	0.1626	0.2050	0.2861	0.3644	0.3922	0.3971	0.4035	0.4009	0.3827	0.
18.	166.	-0.0096	0.0413	0.0810	0.1179	0.1544	0.1942	0.2630	0.3486	0.3703	0.3750	0.3812	0.3879	0.2969	0.
18.	165.	-0.0035	0.0446	0.0794	0.1178	0.1523	0.1891	0.2626	0.3331	0.3692	0.3770	0.3869	0.4055	0.3243	0.
18.	163.	-0.0125	0.0291	0.0602	0.0932	0.1205	0.1473	0.2197	0.2644	0.2900	0.2975	0.3064	0.3101	0.3485	0.
18.	162.	-0.0004	0.0340	0.0593	0.0917	0.1225	0.1526	0.2336	0.2889	0.3149	0.3236	0.3289	0.3275	0.4029	0.
18.	161.	0.0099	0.0464	0.0723	0.1024	0.1272	0.1605	0.2379	0.2844	0.2972	0.2961	0.2983	0.3055	0.4178	0.

Run	Point	CP186
18.	167.	0.3568
18.	166.	0.3396
18.	165.	0.3226
18.	163.	0.2857
18.	162.	0.2856
18.	161.	0.2818

Table VI. Pressure Coefficients for Cavity Models With Floor Slot Vents

[l = 42.00 in.; h = 2.40 in.]

(a) Solid floor (100 percent of cavity floor taped); configuration 4a

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
2.	18.	0.20	2.04	22.94	23.59	0.64	98.1	0.8869	-0.2183	-0.1869	-0.1720	-0.1517	-0.1191	-0.0906
2.	17.	0.40	3.66	19.87	22.22	2.25	98.9	0.9105	-0.2457	-0.2085	-0.1954	-0.1697	-0.1432	-0.1058
2.	16.	0.60	4.67	16.34	20.83	4.11	101.8	0.9936	-0.2839	-0.2375	-0.2208	-0.1946	-0.1627	-0.1189
2.	15.	0.80	3.81	9.32	14.19	4.17	99.3	1.1265	-0.3270	-0.2835	-0.2606	-0.2305	-0.1888	-0.1320
2.	14.	0.90	3.53	7.39	12.50	4.19	100.5	1.2002	-0.3947	-0.3844	-0.3787	-0.3524	-0.1714	-0.1037
2.	13.	0.95	3.41	6.61	11.83	4.18	100.0	1.2344	-0.2867	-0.2983	-0.3116	-0.3297	-0.3660	-0.3698

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
2.	18.	-0.0366	-0.0285	-0.0212	-0.0170	-0.0134	-0.0123	-0.0100	-0.0068	-0.0118	-0.0023	0.0046	0.0054	0.0147
2.	17.	-0.0509	-0.0461	-0.0376	-0.0329	-0.0284	-0.0262	-0.0228	-0.0203	-0.0211	-0.0175	-0.0137	-0.0094	0.0002
2.	16.	-0.0587	-0.0511	-0.0437	-0.0375	-0.0339	-0.0322	-0.0296	-0.0278	-0.0280	-0.0218	-0.0173	-0.0153	-0.0060
2.	15.	-0.0489	-0.0416	-0.0339	-0.0276	-0.0234	-0.0203	-0.0189	-0.0174	-0.0193	-0.0161	-0.0140	-0.0107	0.0007
2.	14.	-0.0223	-0.0156	-0.0088	-0.0043	-0.0005	0.0011	0.0021	0.0021	0.0004	0.0029	0.0043	0.0083	0.0218
2.	13.	0.0394	0.0344	0.0265	0.0236	0.0228	0.0211	0.0188	0.0149	0.0102	0.0107	0.0103	0.0130	0.0280

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
2.	18.	-0.0551	-0.0557	-0.0021	-0.0294	-0.0208	0.0088	0.0363	0.0481	0.0513	0.0544	0.0566	0.0595	0.0490
2.	17.	-0.0508	-0.0575	-0.0210	-0.0480	-0.0400	-0.0055	0.0203	0.0312	0.0342	0.0388	0.0425	0.0437	0.0346
2.	16.	-0.0897	-0.0841	-0.0239	-0.0605	-0.0511	-0.0169	0.0130	0.0268	0.0325	0.0401	0.0420	0.0475	0.0361
2.	15.	-0.2312	-0.2221	-0.0196	-0.0676	-0.0607	-0.0202	0.0127	0.0277	0.0344	0.0414	0.0463	0.0540	0.0445
2.	14.	-0.1537	-0.1467	0.0007	-0.0575	-0.0466	0.0010	0.0458	0.0755	0.0859	0.0968	0.1067	0.1180	0.1135
2.	13.	-0.0951	-0.0877	0.0059	-0.0650	-0.0476	0.0051	0.0595	0.0985	0.1112	0.1235	0.1350	0.1475	0.1427

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75
2.	18.	0.0003	-0.0158	0.0353	0.0550	-0.0659	-0.0559	-0.0206	0.0084	0.0203	-0.0018	-0.0098	-0.1303	-0.1384
2.	17.	-0.0177	-0.0353	0.0179	0.0397	-0.1016	-0.0765	-0.0468	-0.0186	-0.0231	-0.0360	-0.0445	-0.1408	-0.1636
2.	16.	-0.0208	-0.0489	0.0099	0.0387	-0.1365	-0.0810	-0.0577	-0.0312	-0.0189	-0.0344	-0.0544	-0.1638	-0.1865
2.	15.	-0.0168	-0.0572	0.0099	0.0443	-0.2511	-0.0872	-0.0587	-0.0277	-0.0183	-0.0411	-0.0599	-0.1610	-0.1925
2.	14.	0.0036	-0.0415	0.0441	0.1023	-0.2038	-0.0632	-0.0350	0.0021	0.0084	-0.0126	-0.0295	-0.1404	-0.1672
2.	13.	0.0081	-0.0415	0.0581	0.1304	-0.1768	-0.0618	-0.0318	0.0031	0.0062	-0.0108	-0.0245	-0.1374	-0.1626

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93
2.	18.	-0.0999	-0.0751	-0.0582	-0.0491	-0.0230	0.0145	0.0571	0.0623	0.0626	0.0645	0.0918	0.0919	0.0960
2.	17.	-0.1280	-0.0942	-0.0769	-0.0597	-0.0401	-0.0112	0.0243	0.0452	0.0509	0.0632	0.0720	0.0794	0.0864
2.	16.	-0.1275	-0.1049	-0.0896	-0.0845	-0.0666	-0.0300	0.0036	0.0239	0.0465	0.0490	0.0592	0.0630	0.0875
2.	15.	-0.1268	-0.1118	-0.0986	-0.0837	-0.0640	-0.0259	0.0046	0.0215	0.0390	0.0494	0.0592	0.0666	0.0829
2.	14.	-0.1052	-0.0872	-0.0744	-0.0620	-0.0436	-0.0136	0.0183	0.0431	0.0651	0.0826	0.0990	0.1118	0.1316
2.	13.	-0.0961	-0.0794	-0.0678	-0.0564	-0.0416	-0.0077	0.0228	0.0489	0.0737	0.0957	0.1164	0.1308	0.1530

Table VI. Continued

(a) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
2.	18.	0.1704	0.1879	0.2347	0.2751	0.3316	0.4019	0.1830	0.0690	-0.1553	-0.1296	-0.0365	0.0577	0.0851	0
2.	17.	0.1631	0.1818	0.2157	0.2633	0.3263	0.3605	0.2407	0.0300	-0.1770	-0.1455	-0.0530	0.0445	0.0642	0
2.	16.	0.1705	0.1917	0.2211	0.2653	0.3283	0.3687	0.2290	0.0586	-0.1913	-0.1629	-0.0635	0.0301	0.0651	0
2.	15.	0.1705	0.1972	0.2316	0.2779	0.3411	0.3750	0.2836	0.1056	-0.2030	-0.1655	-0.0665	0.0217	0.0624	0
2.	14.	0.2274	0.2558	0.2868	0.3283	0.3804	0.3924	0.2786	0.1989	-0.1811	-0.1425	-0.0457	0.0445	0.1006	0
2.	13.	0.2484	0.2711	0.2969	0.3305	0.3704	0.3838	0.2959	0.2255	-0.1777	-0.1361	-0.0420	0.0502	0.1147	0

Run	Point	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	CP129	C
2.	18.	-0.1631	-0.1555	-0.1465	-0.1393	-0.1372	-0.1193	-0.0924	-0.0512	-0.0170	0.0040	0.0324	0.0475	0.0623	0
2.	17.	-0.1770	-0.1781	-0.1617	-0.1500	-0.1448	-0.1282	-0.1069	-0.0640	-0.0417	-0.0159	0.0031	0.0296	0.0371	0
2.	16.	-0.1951	-0.1871	-0.1702	-0.1625	-0.1527	-0.1315	-0.1113	-0.0751	-0.0561	-0.0342	-0.0120	0.0085	0.0255	0
2.	15.	-0.2023	-0.1962	-0.1803	-0.1668	-0.1517	-0.1347	-0.1145	-0.0831	-0.0632	-0.0401	-0.0192	0.0008	0.0178	0
2.	14.	-0.1830	-0.1749	-0.1586	-0.1450	-0.1295	-0.1078	-0.0895	-0.0562	-0.0348	-0.0175	0.0017	0.0246	0.0387	0
2.	13.	-0.1807	-0.1720	-0.1514	-0.1378	-0.1244	-0.1028	-0.0856	-0.0533	-0.0340	-0.0147	0.0062	0.0265	0.0388	0

Run	Point	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP142	CP143	CP144	CP145	CP146	CP147	C
2.	18.	0.0760	0.0779	0.0877	0.0945	0.1158	0.1162	0.1122	0.1250	0.1368	0.1637	0.1731	0.1974	0.2093	0
2.	17.	0.0660	0.0780	0.0797	0.0791	0.0873	0.0830	0.0799	0.0975	0.1109	0.1624	0.1637	0.1933	0.2110	0
2.	16.	0.0634	0.0696	0.0759	0.0704	0.0821	0.0827	0.0803	0.1056	0.1190	0.1594	0.1631	0.1923	0.2166	0
2.	15.	0.0633	0.0721	0.0771	0.0757	0.0832	0.0843	0.0848	0.1112	0.1264	0.1675	0.1761	0.1994	0.2204	0
2.	14.	0.1031	0.1143	0.1244	0.1249	0.1383	0.1427	0.1424	0.1681	0.1826	0.2161	0.2268	0.2470	0.2687	0
2.	13.	0.1136	0.1262	0.1366	0.1409	0.1587	0.1645	0.1647	0.1899	0.2042	0.2384	0.2479	0.2664	0.2814	0

Run	Point	CP154	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	CP165	CP166	C
2.	18.	0.0097	0.0120	0.0232	0.0180	0.0265	0.0302	0.0351	0.0491	0.0654	0.0735	0.0855	0.0817	0.0988	0
2.	17.	-0.0003	0.0039	0.0073	0.0080	0.0234	0.0250	0.0285	0.0339	0.0481	0.0493	0.0498	0.0447	0.0569	0
2.	16.	-0.0091	-0.0123	-0.0064	-0.0128	0.0011	0.0056	0.0141	0.0124	0.0233	0.0197	0.0207	0.0157	0.0144	0
2.	15.	-0.0019	-0.0008	0.0044	0.0018	0.0184	0.0231	0.0310	0.0291	0.0400	0.0397	0.0454	0.0450	0.0515	0
2.	14.	0.0223	0.0238	0.0291	0.0267	0.0411	0.0445	0.0507	0.0477	0.0600	0.0616	0.0677	0.0669	0.0767	0
2.	13.	0.0242	0.0256	0.0312	0.0288	0.0448	0.0496	0.0582	0.0582	0.0713	0.0725	0.0745	0.0723	0.0850	0

Run	Point	CP171	CP172	CP173	CP174	CP175	CP176	CP177	CP178	CP179	CP180
2.	18.	0.0266	0.5245	0.3786	0.6154	0.6940	0.6783	0.6679	0.7215	0.5941	0.3688
2.	17.	-0.0062	0.5033	0.3859	0.5088	0.5882	0.6643	0.6632	0.6175	0.5629	0.3866
2.	16.	0.0148	0.4792	0.3738	0.4633	0.5881	0.6421	0.6281	0.5877	0.5067	0.3613
2.	15.	0.0328	0.5181	0.4141	0.5435	0.6044	0.6265	0.6744	0.6461	0.5874	0.4155
2.	14.	0.0693	0.5438	0.4532	0.5568	0.6056	0.6200	0.6652	0.6595	0.5732	0.4255
2.	13.	0.0799	0.5249	0.4438	0.5241	0.5969	0.6278	0.5984	0.5911	0.5660	0.4481

Table VI. Continued

(b) 100 percent of cavity floor area with porosity; configuration 4b

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
8.	72.	0.20	2.04	22.95	23.60	0.65	98.9	0.8744	-0.2182	-0.1946	-0.1716	-0.1559	-0.1270	-0.0982	-0
8.	71.	0.40	3.64	19.93	22.24	2.22	98.8	0.9085	-0.2408	-0.2032	-0.1900	-0.1659	-0.1395	-0.1037	-0
8.	70.	0.60	4.69	16.31	20.82	4.12	100.5	0.9936	-0.2733	-0.2288	-0.2132	-0.1864	-0.1569	-0.1139	-0
8.	69.	0.80	3.80	9.32	14.20	4.17	101.1	1.1293	-0.3175	-0.2827	-0.2592	-0.2276	-0.1890	-0.1309	-0
8.	68.	0.90	3.53	7.36	12.47	4.19	100.1	1.2048	-0.3871	-0.3719	-0.3734	-0.3414	-0.1826	-0.0986	-0
8.	67.	0.95	3.39	6.61	11.80	4.16	101.0	1.2396	-0.2863	-0.2947	-0.3138	-0.3254	-0.3644	-0.3683	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
8.	72.	-0.0416	-0.0372	-0.0278	-0.0274	-0.0162	-0.0170	-0.0141	-0.0113	-0.0142	-0.0034	0.0022	0.0036	0.0117	-0
8.	71.	-0.0503	-0.0439	-0.0355	-0.0306	-0.0250	-0.0224	-0.0197	-0.0161	-0.0176	-0.0115	-0.0068	-0.0020	0.0065	-0
8.	70.	-0.0534	-0.0472	-0.0387	-0.0330	-0.0271	-0.0228	-0.0218	-0.0206	-0.0207	-0.0166	-0.0136	-0.0094	0.0022	-0
8.	69.	-0.0480	-0.0429	-0.0332	-0.0266	-0.0233	-0.0199	-0.0191	-0.0191	-0.0182	-0.0186	-0.0178	-0.0121	0.0010	-0
8.	68.	-0.0192	-0.0156	-0.0069	-0.0009	0.0019	0.0050	0.0043	0.0036	0.0041	0.0014	0.0016	0.0076	0.0229	-0
8.	67.	0.0389	0.0308	0.0270	0.0261	0.0244	0.0251	0.0214	0.0167	0.0155	0.0089	0.0067	0.0116	0.0275	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
8.	72.	-0.0609	-0.0608	-0.0015	-0.0313	-0.0276	-0.0111	0.0198	0.0339	0.0366	0.0440	0.0414	0.0471	0.0398	0
8.	71.	-0.0741	-0.0588	-0.0134	-0.0365	-0.0394	-0.0204	0.0129	0.0322	0.0374	0.0408	0.0437	0.0472	0.0414	0
8.	70.	-0.1161	-0.1018	-0.0178	-0.0431	-0.0488	-0.0278	0.0066	0.0281	0.0332	0.0382	0.0436	0.0490	0.0434	0
8.	69.	-0.2241	-0.2186	-0.0217	-0.0522	-0.0622	-0.0390	-0.0034	0.0257	0.0324	0.0401	0.0489	0.0550	0.0498	0
8.	68.	-0.1398	-0.1374	-0.0007	-0.0320	-0.0437	-0.0195	0.0238	0.0694	0.0815	0.0940	0.1079	0.1177	0.1161	0
8.	67.	-0.0824	-0.0794	0.0034	-0.0313	-0.0420	-0.0156	0.0340	0.0886	0.1037	0.1184	0.1352	0.1460	0.1471	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
8.	72.	-0.0021	-0.0309	0.0223	0.0406	-0.0835	-0.0612	-0.0453	-0.0417	-0.0296	-0.0399	-0.0251	-0.0979	-0.1044	-0
8.	71.	-0.0111	-0.0382	0.0118	0.0429	-0.0963	-0.0598	-0.0464	-0.0330	-0.0234	-0.0392	-0.0387	-0.0954	-0.1109	-0
8.	70.	-0.0176	-0.0479	0.0043	0.0406	-0.1351	-0.0626	-0.0500	-0.0406	-0.0321	-0.0417	-0.0370	-0.0881	-0.1119	-0
8.	69.	-0.0185	-0.0599	-0.0043	0.0437	-0.2430	-0.0554	-0.0481	-0.0349	-0.0263	-0.0363	-0.0379	-0.0927	-0.1216	-0
8.	68.	0.0019	-0.0410	0.0230	0.1007	-0.1871	-0.0325	-0.0227	-0.0071	-0.0023	-0.0145	-0.0145	-0.0630	-0.0932	-0
8.	67.	0.0058	-0.0377	0.0340	0.1275	-0.1615	-0.0237	-0.0161	-0.0069	0.0016	-0.0070	-0.0066	-0.0564	-0.0877	-0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
8.	72.	-0.1006	-0.0995	-0.1036	-0.1038	-0.0852	-0.0434	-0.0122	0.0131	0.0592	0.0635	0.0743	0.0824	0.0790	0
8.	71.	-0.0932	-0.0902	-0.0971	-0.0959	-0.0849	-0.0638	-0.0295	0.0019	0.0394	0.0607	0.0779	0.0816	0.0991	0
8.	70.	-0.1009	-0.1043	-0.1021	-0.0961	-0.0901	-0.0632	-0.0324	-0.0049	0.0302	0.0508	0.0651	0.0750	0.0809	0
8.	69.	-0.1119	-0.1096	-0.1063	-0.0978	-0.0918	-0.0758	-0.0489	-0.0159	0.0095	0.0293	0.0483	0.0649	0.0829	0
8.	68.	-0.0828	-0.0823	-0.0774	-0.0710	-0.0664	-0.0522	-0.0334	-0.0033	0.0229	0.0494	0.0735	0.0982	0.1226	0
8.	67.	-0.0784	-0.0774	-0.0724	-0.0626	-0.0587	-0.0453	-0.0260	0.0029	0.0275	0.0569	0.0832	0.1114	0.1416	0

Table VI. Concluded

(b) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
8.	72.	0.1605	0.1900	0.2071	0.2384	0.2905	0.3470	0.2476	0.0796	-0.1138	-0.1068	-0.0855	0.0250	0.0703	0
8.	71.	0.1554	0.1832	0.2095	0.2529	0.3143	0.3527	0.2743	0.1479	-0.1156	-0.1069	-0.0851	0.0076	0.0740	0
8.	70.	0.1613	0.1876	0.2227	0.2677	0.3146	0.3527	0.2986	0.1843	-0.1226	-0.1138	-0.0929	0.0010	0.0649	0
8.	69.	0.1632	0.1931	0.2292	0.2738	0.3272	0.3557	0.3150	0.2099	-0.1265	-0.1163	-0.0929	-0.0205	0.0501	0
8.	68.	0.2190	0.2444	0.2711	0.3051	0.3418	0.3592	0.3345	0.3112	-0.0985	-0.0881	-0.0668	-0.0067	0.0748	0
8.	67.	0.2410	0.2651	0.2879	0.3178	0.3485	0.3635	0.3350	0.3182	-0.0926	-0.0807	-0.0595	-0.0004	0.0834	0

Run	Point	CP116	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	CP129	C
8.	72.	-0.1283	-0.1190	-0.1162	-0.1156	-0.1166	-0.1158	-0.1158	-0.1018	-0.0766	-0.0641	-0.0502	-0.0307	-0.0146	-0
8.	71.	-0.1270	-0.1201	-0.1157	-0.1136	-0.1122	-0.1097	-0.1084	-0.0984	-0.0865	-0.0744	-0.0573	-0.0380	-0.0182	0
8.	70.	-0.1337	-0.1243	-0.1208	-0.1192	-0.1178	-0.1152	-0.1133	-0.1062	-0.0983	-0.0875	-0.0674	-0.0498	-0.0316	-0
8.	69.	-0.1366	-0.1278	-0.1239	-0.1212	-0.1190	-0.1171	-0.1151	-0.1049	-0.0972	-0.0893	-0.0779	-0.0659	-0.0501	-0
8.	68.	-0.1074	-0.0986	-0.0958	-0.0931	-0.0908	-0.0897	-0.0866	-0.0787	-0.0729	-0.0626	-0.0549	-0.0416	-0.0266	-0
8.	67.	-0.0997	-0.0909	-0.0887	-0.0852	-0.0823	-0.0820	-0.0785	-0.0702	-0.0642	-0.0550	-0.0500	-0.0392	-0.0264	-0

Run	Point	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP142	CP143	CP144	CP145	CP146	CP147	C
8.	72.	0.0857	0.0852	0.1058	0.1075	0.1174	0.1143	0.0972	0.1147	0.1248	0.1326	0.1613	0.1833	0.2009	0
8.	71.	0.0897	0.0954	0.0948	0.0968	0.1047	0.1023	0.0951	0.1037	0.1185	0.1421	0.1687	0.1866	0.2070	0
8.	70.	0.0655	0.0743	0.0827	0.0885	0.0918	0.0921	0.0900	0.1118	0.1174	0.1387	0.1697	0.1943	0.2247	0
8.	69.	0.0440	0.0567	0.0716	0.0786	0.0921	0.0944	0.0993	0.1305	0.1387	0.1633	0.1905	0.2134	0.2428	0
8.	68.	0.0593	0.0743	0.0862	0.0986	0.1249	0.1326	0.1420	0.1765	0.1880	0.2120	0.2329	0.2545	0.2725	0
8.	67.	0.0638	0.0822	0.0960	0.1058	0.1388	0.1504	0.1658	0.2010	0.2120	0.2354	0.2524	0.2693	0.2850	0

Run	Point	CP154	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	CP165	CP166	C
8.	72.	-0.0492	-0.0834	-0.0932	-0.1069	-0.0832	-0.0667	-0.0310	0.0058	0.0525	0.0800	0.1008	0.1144	0.1192	0
8.	71.	-0.0505	-0.0747	-0.0935	-0.1050	-0.0867	-0.0709	-0.0341	0.0046	0.0509	0.0776	0.0932	0.1000	0.1104	0
8.	70.	-0.0525	-0.0798	-0.0979	-0.1079	-0.0854	-0.0700	-0.0409	-0.0126	0.0274	0.0505	0.0697	0.0822	0.0972	0
8.	69.	-0.0563	-0.0848	-0.1036	-0.1124	-0.0891	-0.0771	-0.0542	-0.0316	0.0086	0.0343	0.0585	0.0751	0.0983	0
8.	68.	-0.0296	-0.0568	-0.0758	-0.0841	-0.0634	-0.0544	-0.0343	-0.0130	0.0247	0.0484	0.0748	0.0982	0.1291	0
8.	67.	-0.0236	-0.0491	-0.0696	-0.0780	-0.0554	-0.0471	-0.0305	-0.0130	0.0241	0.0495	0.0768	0.1028	0.1397	0

Run	Point	CP171	CP172	CP173	CP174	CP175	CP176	CP177	CP178	CP179	CP180
8.	72.	0.2203	0.4599	0.4177	0.5382	0.5878	0.5552	0.4993	0.5429	0.5105	0.3690
8.	71.	0.2164	0.4193	0.3885	0.5642	0.5621	0.5876	0.5610	0.5764	0.6150	0.4271
8.	70.	0.2157	0.4332	0.4192	0.5345	0.5549	0.5417	0.5634	0.6009	0.6382	0.4441
8.	69.	0.2445	0.4145	0.4247	0.5172	0.5119	0.5025	0.5295	0.5348	0.5513	0.4060
8.	68.	0.2690	0.4098	0.4209	0.5273	0.5134	0.5034	0.4957	0.5181	0.5534	0.4640
8.	67.	0.2813	0.4285	0.4130	0.4829	0.4809	0.4890	0.5199	0.5291	0.5345	0.4208

Table VII. Pressure Coefficients for Cavity Models With Floor Pipe Vents

[l = 32.16 in.; h = 2.40 in.]

(a) Empty cavity; configuration 5a

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
25.	465.	0.20	2.18	24.99	25.69	0.69	104.7	0.8529	-0.2512	-0.2178	-0.1664	-0.1765	-0.1312	0.0279	-0
25.	462.	0.40	3.59	19.91	22.21	2.21	104.0	0.8729	-0.2915	-0.2229	-0.1828	-0.1763	-0.1456	0.0047	-0
25.	459.	0.60	4.67	16.34	20.84	4.11	102.0	0.9693	-0.3371	-0.2566	-0.2150	-0.2033	-0.1709	-0.0095	-0
25.	456.	0.80	3.79	9.31	14.18	4.17	102.2	1.1238	-0.3538	-0.2983	-0.2503	-0.2305	-0.1872	0.0028	-0
25.	453.	0.90	3.46	7.38	12.47	4.18	108.2	1.1986	-0.4012	-0.4044	-0.3957	-0.4131	-0.1484	0.0410	-0
25.	450.	0.95	3.36	6.60	11.79	4.17	105.3	1.2375	-0.2937	-0.3113	-0.3184	-0.3578	-0.3982	0.0421	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
25.	465.	-0.0513	-0.0475	-0.0229	-0.0016	-0.0123	-0.0261	-0.0189	-0.0162	-0.0302	-0.0332	-0.0523	-0.0330	-0.0378	-0
25.	462.	-0.0497	-0.0431	-0.0341	-0.0268	-0.0249	-0.0255	-0.0241	-0.0237	-0.0292	-0.0308	-0.0395	-0.0432	-0.0582	-0
25.	459.	-0.0575	-0.0506	-0.0436	-0.0380	-0.0334	-0.0320	-0.0306	-0.0303	-0.0356	-0.0487	-0.0458	-0.0528	-0.0705	-0
25.	456.	-0.0417	-0.0332	-0.0256	-0.0203	-0.0160	-0.0141	-0.0136	-0.0139	-0.0183	-0.0308	-0.0274	-0.0354	-0.0530	-0
25.	453.	-0.0140	-0.0078	-0.0017	0.0018	0.0063	0.0090	0.0084	0.0071	0.0041	-0.0039	-0.0024	-0.0105	-0.0241	-0
25.	450.	0.0521	0.0463	0.0357	0.0295	0.0300	0.0301	0.0257	0.0210	0.0165	0.0093	0.0092	0.0000	-0.0113	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
25.	465.	0.0621	0.0383	0.0113	-0.0630	-0.1449	-0.1383	-0.0930	-0.0790	-0.0733	-0.0667	-0.0397	-0.0588	0.0229	0
25.	462.	0.0662	0.0552	0.0213	-0.0511	-0.1275	-0.1292	-0.0989	-0.0778	-0.0663	-0.0575	-0.0487	-0.0439	0.0130	0
25.	459.	0.0678	0.0622	0.0195	-0.0767	-0.1825	-0.1863	-0.1477	-0.1170	-0.0998	-0.0897	-0.0813	-0.0535	-0.0013	0
25.	456.	0.1018	0.1040	0.0529	-0.0806	-0.2615	-0.2690	-0.2127	-0.1701	-0.1488	-0.1398	-0.1389	-0.0394	-0.0078	0
25.	453.	0.1527	0.1684	0.1179	-0.0166	-0.2193	-0.2234	-0.1496	-0.1023	-0.0749	-0.0596	-0.0534	-0.0149	0.0067	0
25.	450.	0.1715	0.1961	0.1474	0.0223	-0.1754	-0.1915	-0.0981	-0.0477	-0.0220	-0.0068	-0.0006	-0.0056	0.0090	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
25.	465.	-0.1259	-0.1081	-0.1310	-0.1178	-0.1517	-0.1167	-0.1375	-0.1612	-0.1319	-0.1560	-0.1712	-0.0347	-0.1200	-0
25.	462.	-0.1293	-0.1237	-0.1277	-0.1264	-0.1334	-0.1281	-0.1336	-0.1388	-0.1312	-0.1442	-0.1577	-0.0163	-0.1443	-0
25.	459.	-0.1458	-0.1413	-0.1410	-0.1438	-0.1471	-0.1425	-0.1460	-0.1487	-0.1469	-0.1581	-0.1683	-0.0247	-0.1363	-0
25.	456.	-0.1247	-0.1198	-0.1255	-0.1288	-0.1280	-0.1247	-0.1281	-0.1287	-0.1273	-0.1332	-0.1426	-0.0151	-0.1329	-0
25.	453.	-0.0857	-0.0789	-0.0856	-0.0911	-0.0856	-0.0847	-0.0875	-0.0884	-0.0888	-0.0921	-0.0973	0.0296	-0.0960	-0
25.	450.	-0.0635	-0.0603	-0.0623	-0.0687	-0.0629	-0.0644	-0.0674	-0.0674	-0.0683	-0.0692	-0.0713	0.0468	-0.0749	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP104	CP105	C
25.	465.	0.1254	0.1493	0.1351	0.2041	0.1610	0.2172	0.3281	0.3874	0.4704	0.3994	0.6380	0.2221	0.4656	0
25.	462.	0.1089	0.1470	0.1581	0.1899	0.1949	0.2352	0.3084	0.3981	0.4569	0.4449	0.5918	0.2333	0.4721	0
25.	459.	0.0924	0.1327	0.1633	0.1903	0.2077	0.2542	0.3303	0.4276	0.5029	0.5078	0.6505	0.2508	0.5006	0
25.	456.	0.0816	0.1340	0.1778	0.2206	0.2496	0.3009	0.3740	0.4602	0.4986	0.4837	0.6783	0.2971	0.5081	0
25.	453.	0.0844	0.1482	0.1989	0.2487	0.2917	0.3466	0.4140	0.4780	0.5080	0.5092	0.6700	0.3452	0.5089	0
25.	450.	0.0729	0.1387	0.1957	0.2451	0.2983	0.3517	0.4104	0.4605	0.4734	0.4793	0.6205	0.3494	0.4856	0

Table VII. Continued

(a) Concluded

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
25.	465.	0.2559	0.3025	0.4214	0.4775	-0.0015	0.0310	-0.0171	-0.0324	-0.0120	-0.0485	-0.0411	-0.1305	-0.0830	-0.
25.	462.	0.2552	0.3221	0.4328	0.4919	-0.0102	-0.0033	-0.0131	-0.0167	-0.0123	-0.0198	-0.0183	-0.1360	-0.1256	-0.
25.	459.	0.2696	0.3452	0.4589	0.5154	-0.0209	-0.0170	-0.0231	-0.0248	-0.0219	-0.0267	-0.0256	-0.1473	-0.1450	-0.
25.	456.	0.3144	0.3854	0.4672	0.5095	-0.0122	-0.0096	-0.0139	-0.0154	-0.0132	-0.0169	-0.0160	-0.1299	-0.1269	-0.
25.	453.	0.3537	0.4099	0.4756	0.5214	0.0313	0.0328	0.0293	0.0285	0.0304	0.0282	0.0291	-0.0918	-0.0910	-0.
25.	450.	0.3558	0.4012	0.4518	0.4900	0.0454	0.0448	0.0451	0.0459	0.0450	0.0463	0.0465	-0.0692	-0.0733	-0.

Run	Point	CP132	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	C
25.	465.	-0.1723	-0.0085	0.1394	0.2277	0.2145	0.1684	0.1688	0.2286	0.2358	0.3361	0.3959	0.4671	0.6269	-0.
25.	462.	-0.1297	-0.0190	0.1337	0.2144	0.2125	0.1848	0.1864	0.2148	0.2472	0.3281	0.4213	0.4880	0.5870	-0.
25.	459.	-0.1590	-0.0524	0.1059	0.2012	0.2202	0.2048	0.2031	0.2276	0.2647	0.3504	0.4601	0.5125	0.6079	-0.
25.	456.	-0.1444	-0.0811	0.0219	0.1358	0.2078	0.2321	0.2417	0.2667	0.3144	0.3871	0.4718	0.5240	0.6334	-0.
25.	453.	-0.1086	-0.0665	0.0036	0.0967	0.1890	0.2446	0.2840	0.3160	0.3556	0.4165	0.4765	0.5268	0.6394	0.
25.	450.	-0.0814	-0.0543	-0.0005	0.0727	0.1514	0.2239	0.2747	0.3162	0.3571	0.4066	0.4581	0.4988	0.6020	0.

Run	Point	CP155	CP156	CP157	CP158	CP162	CP163	CP164	CP165
25.	465.	0.1725	0.1732	0.2170	0.5029	0.4920	0.5572	0.5774	0.5244
25.	462.	0.1400	0.1939	0.2530	0.5098	0.4716	0.5507	0.5407	0.5230
25.	459.	0.1146	0.2047	0.2665	0.5356	0.5107	0.5928	0.5699	0.5557
25.	456.	0.0243	0.2338	0.3124	0.5171	0.5210	0.5893	0.5632	0.5586
25.	453.	0.0158	0.2459	0.3551	0.5342	0.5584	0.6060	0.5647	0.5661
25.	450.	0.0008	0.2235	0.3608	0.4949	0.5549	0.5876	0.5392	0.5489

Table VII. Continued

(b) $A_{pv} = 0.88$ in^2; configuration 5b

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
24.	443.	0.20	2.26	25.01	25.71	0.69	90.0	0.8667	-0.2483	-0.2095	-0.1668	-0.1717	-0.1308	0.0242	-0
24.	440.	0.40	3.61	19.86	22.17	2.22	100.8	0.8716	-0.2982	-0.2284	-0.1889	-0.1824	-0.1523	-0.0048	-0
24.	437.	0.60	4.67	16.34	20.84	4.11	102.5	0.9676	-0.3396	-0.2581	-0.2163	-0.2053	-0.1725	-0.0119	-0
24.	431.	0.80	3.76	9.30	14.18	4.18	105.1	1.1244	-0.3534	-0.2995	-0.2503	-0.2320	-0.1871	0.0040	-0
24.	428.	0.90	3.42	7.37	12.47	4.18	113.9	1.1988	-0.4030	-0.4036	-0.3920	-0.4146	-0.1531	0.0433	-0
24.	425.	0.95	3.33	6.61	11.82	4.18	109.9	1.2352	-0.2947	-0.3129	-0.3182	-0.3594	-0.3989	0.0426	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
24.	443.	-0.0474	-0.0351	-0.0169	-0.0004	-0.0057	-0.0189	-0.0121	-0.0087	-0.0228	-0.0244	-0.0381	-0.0223	-0.0261	-0
24.	440.	-0.0557	-0.0469	-0.0387	-0.0318	-0.0286	-0.0296	-0.0268	-0.0255	-0.0310	-0.0382	-0.0397	-0.0415	-0.0528	-0
24.	437.	-0.0591	-0.0507	-0.0432	-0.0382	-0.0334	-0.0329	-0.0317	-0.0318	-0.0367	-0.0435	-0.0445	-0.0498	-0.0635	-0
24.	431.	-0.0414	-0.0328	-0.0235	-0.0170	-0.0131	-0.0132	-0.0121	-0.0121	-0.0169	-0.0248	-0.0256	-0.0301	-0.0434	-0
24.	428.	-0.0148	-0.0073	0.0000	0.0053	0.0084	0.0086	0.0093	0.0085	0.0041	-0.0015	-0.0030	-0.0068	-0.0162	-0
24.	425.	0.0503	0.0457	0.0359	0.0307	0.0306	0.0295	0.0258	0.0215	0.0168	0.0100	0.0083	0.0016	-0.0067	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
24.	443.	0.0616	0.0374	0.0144	-0.0506	-0.1142	-0.1067	-0.0716	-0.0596	-0.0549	-0.0515	-0.0338	-0.0460	0.0219	0
24.	440.	0.0525	0.0378	0.0080	-0.0541	-0.1138	-0.1097	-0.0834	-0.0687	-0.0616	-0.0561	-0.0499	-0.0455	0.0014	0
24.	437.	0.0549	0.0416	0.0044	-0.0750	-0.1566	-0.1534	-0.1212	-0.1006	-0.0903	-0.0848	-0.0807	-0.0520	-0.0110	0
24.	431.	0.0855	0.0768	0.0324	-0.0818	-0.2255	-0.2207	-0.1717	-0.1418	-0.1301	-0.1273	-0.1298	-0.0374	-0.0125	0
24.	428.	0.1322	0.1377	0.0978	-0.0182	-0.1934	-0.1745	-0.1092	-0.0729	-0.0543	-0.0450	-0.0414	-0.0151	0.0007	0
24.	425.	0.1496	0.1668	0.1295	0.0222	-0.1531	-0.1463	-0.0628	-0.0239	-0.0040	0.0061	0.0099	-0.0052	0.0023	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
24.	443.	-0.0956	-0.0809	-0.0993	-0.0889	-0.1231	-0.0951	-0.1113	-0.1295	-0.1050	-0.1389	-0.1539	-0.0290	-0.1124	-0
24.	440.	-0.1116	-0.1016	-0.1107	-0.1103	-0.1241	-0.1152	-0.1200	-0.1239	-0.1205	-0.1346	-0.1619	-0.0223	-0.1352	-0
24.	437.	-0.1231	-0.1150	-0.1186	-0.1207	-0.1298	-0.1242	-0.1295	-0.1284	-0.1331	-0.1419	-0.1601	-0.0267	-0.1502	-0
24.	431.	-0.1053	-0.0996	-0.1034	-0.1037	-0.1144	-0.1066	-0.1114	-0.1148	-0.1115	-0.1186	-0.1325	-0.0170	-0.1310	-0
24.	428.	-0.0714	-0.0653	-0.0694	-0.0706	-0.0785	-0.0711	-0.0755	-0.0792	-0.0751	-0.0808	-0.0893	0.0270	-0.0986	-0
24.	425.	-0.0525	-0.0484	-0.0504	-0.0521	-0.0552	-0.0507	-0.0538	-0.0556	-0.0561	-0.0608	-0.0645	0.0447	-0.0778	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP104	CP105	C
24.	443.	0.1198	0.1518	0.1535	0.2053	0.1713	0.2239	0.2822	0.3291	0.3003	0.2657	0.6034	0.2156	0.3502	0
24.	440.	0.1182	0.1448	0.1518	0.1736	0.1783	0.2276	0.2682	0.3053	0.2731	0.2731	0.5661	0.2110	0.3336	0
24.	437.	0.1020	0.1413	0.1590	0.1835	0.1957	0.2451	0.2776	0.3311	0.3259	0.2901	0.5678	0.2237	0.3573	0
24.	431.	0.0874	0.1340	0.1732	0.2140	0.2363	0.2724	0.3124	0.3672	0.3400	0.3097	0.5882	0.2692	0.3716	0
24.	428.	0.0801	0.1423	0.1911	0.2412	0.2690	0.3106	0.3623	0.3921	0.3842	0.3418	0.5508	0.3070	0.3990	0
24.	425.	0.0665	0.1305	0.1859	0.2360	0.2772	0.3177	0.3574	0.3864	0.3807	0.3529	0.5267	0.3170	0.3925	0

Table VII. Continued

(b) Concluded

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	Cl
24.	443.	0.2542	0.2947	0.3281	0.2785	-0.0018	0.0261	-0.0094	-0.0253	-0.0099	-0.0372	-0.0311	-0.1077	-0.0738	-0.
24.	440.	0.2463	0.2938	0.3232	0.2758	-0.0150	-0.0081	-0.0171	-0.0217	-0.0176	-0.0247	-0.0229	-0.1195	-0.1133	-0.
24.	437.	0.2505	0.3031	0.3375	0.2881	-0.0225	-0.0183	-0.0240	-0.0265	-0.0237	-0.0283	-0.0271	-0.1295	-0.1262	-0.
24.	431.	0.2961	0.3239	0.3543	0.3042	-0.0118	-0.0068	-0.0138	-0.0171	-0.0135	-0.0194	-0.0183	-0.1097	-0.1047	-0.
24.	428.	0.3257	0.3541	0.3826	0.3490	0.0315	0.0365	0.0290	0.0258	0.0297	0.0240	0.0250	-0.0752	-0.0707	-0.
24.	425.	0.3252	0.3555	0.3790	0.3463	0.0451	0.0460	0.0441	0.0431	0.0438	0.0431	0.0436	-0.0543	-0.0571	-0.

Run	Point	CP132	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	Cl
24.	443.	-0.1185	-0.0004	0.1280	0.1925	0.2292	0.2158	0.2196	0.2630	0.2629	0.3165	0.3388	0.3444	0.5104	-0.
24.	440.	-0.1194	-0.0138	0.1034	0.1983	0.2203	0.2055	0.2109	0.2320	0.2502	0.2953	0.3418	0.3434	0.5240	-0.
24.	437.	-0.1311	-0.0491	0.0785	0.1797	0.2207	0.2154	0.2185	0.2419	0.2720	0.3137	0.3592	0.3707	0.5304	-0.
24.	431.	-0.1218	-0.0693	0.0239	0.1181	0.1897	0.2248	0.2457	0.2746	0.2968	0.3390	0.3737	0.3785	0.5249	-0.
24.	428.	-0.0903	-0.0588	0.0109	0.0971	0.1704	0.2223	0.2649	0.3021	0.3298	0.3677	0.3951	0.4120	0.5448	0.
24.	425.	-0.0686	-0.0477	0.0096	0.0783	0.1436	0.2037	0.2495	0.2905	0.3261	0.3593	0.3859	0.4118	0.5223	0.

Run	Point	CP155	CP156	CP157	CP158	CP162	CP163	CP164	CP165
24.	443.	0.1389	0.2064	0.2436	0.3912	0.3507	0.4060	0.3968	0.3766
24.	440.	0.1096	0.2038	0.2463	0.3633	0.3173	0.3686	0.3735	0.3820
24.	437.	0.0952	0.2074	0.2682	0.3912	0.3497	0.3943	0.3871	0.4007
24.	431.	0.0345	0.2270	0.2911	0.3918	0.3967	0.4237	0.4074	0.4210
24.	428.	0.0139	0.2265	0.3240	0.4279	0.4690	0.4777	0.4355	0.4536
24.	425.	0.0068	0.2060	0.3247	0.4169	0.4932	0.4875	0.4373	0.4629

Table VII. Continued

(c) $A_{pv} = 1.32$ in^2; configuration 5c

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
23.	418.	0.20	2.20	25.02	25.72	0.69	100.5	0.8617	-0.2488	-0.2121	-0.1693	-0.1742	-0.1310	0.0243	-0
23.	416.	0.40	3.62	19.90	22.22	2.23	101.5	0.8733	-0.2911	-0.2230	-0.1823	-0.1778	-0.1454	0.0006	-0
23.	413.	0.60	4.64	16.33	20.84	4.13	106.1	0.9682	-0.3376	-0.2575	-0.2151	-0.2048	-0.1715	-0.0103	-0
23.	410.	0.80	3.76	9.30	14.17	4.16	105.0	1.1263	-0.3554	-0.2978	-0.2492	-0.2312	-0.1861	0.0026	-0
23.	407.	0.90	3.42	7.38	12.47	4.18	113.6	1.1996	-0.3970	-0.4039	-0.3948	-0.4137	-0.1442	0.0433	-0
23.	404.	0.95	3.33	6.60	11.81	4.18	110.3	1.2373	-0.2895	-0.3104	-0.3164	-0.3576	-0.3957	0.0447	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
23.	418.	-0.0453	-0.0352	-0.0147	0.0040	-0.0026	-0.0168	-0.0081	-0.0056	-0.0175	-0.0214	-0.0361	-0.0149	-0.0185	-0
23.	416.	-0.0502	-0.0419	-0.0318	-0.0243	-0.0221	-0.0243	-0.0216	-0.0200	-0.0256	-0.0324	-0.0350	-0.0325	-0.0434	-0
23.	413.	-0.0584	-0.0503	-0.0428	-0.0367	-0.0320	-0.0312	-0.0291	-0.0280	-0.0326	-0.0440	-0.0407	-0.0423	-0.0568	-0
23.	410.	-0.0400	-0.0319	-0.0225	-0.0163	-0.0125	-0.0127	-0.0114	-0.0114	-0.0155	-0.0278	-0.0235	-0.0255	-0.0373	-0
23.	407.	-0.0137	-0.0064	0.0011	0.0067	0.0098	0.0100	0.0107	0.0099	0.0055	0.0058	-0.0011	-0.0022	-0.0113	-0
23.	404.	0.0530	0.0485	0.0389	0.0348	0.0336	0.0309	0.0278	0.0235	0.0179	0.0127	0.0095	0.0067	-0.0009	0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
23.	418.	0.0586	0.0323	0.0113	-0.0506	-0.1144	-0.1048	-0.0696	-0.0607	-0.0561	-0.0516	-0.0328	-0.0450	0.0231	0
23.	416.	0.0534	0.0368	0.0091	-0.0500	-0.1071	-0.1039	-0.0783	-0.0651	-0.0579	-0.0528	-0.0447	-0.0407	0.0049	0
23.	413.	0.0509	0.0379	0.0034	-0.0738	-0.1504	-0.1465	-0.1168	-0.0979	-0.0890	-0.0835	-0.0794	-0.0490	-0.0106	0
23.	410.	0.0799	0.0723	0.0312	-0.0784	-0.2170	-0.2114	-0.1665	-0.1395	-0.1288	-0.1262	-0.1295	-0.0345	-0.0117	0
23.	407.	0.1272	0.1356	0.0991	-0.0134	-0.1889	-0.1689	-0.1059	-0.0714	-0.0532	-0.0443	-0.0405	-0.0128	0.0032	0
23.	404.	0.1481	0.1674	0.1333	0.0260	-0.1547	-0.1472	-0.0619	-0.0236	-0.0039	0.0070	0.0122	-0.0040	0.0060	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
23.	418.	-0.0968	-0.0821	-0.1005	-0.0890	-0.1233	-0.0983	-0.1177	-0.1416	-0.1092	-0.1351	-0.1455	-0.0311	-0.1227	-0
23.	416.	-0.1081	-0.1014	-0.1065	-0.1043	-0.1165	-0.1066	-0.1142	-0.1250	-0.1201	-0.1292	-0.1416	-0.0226	-0.1262	-0
23.	413.	-0.1242	-0.1168	-0.1214	-0.1225	-0.1293	-0.1216	-0.1250	-0.1345	-0.1314	-0.1429	-0.1517	-0.0271	-0.1353	-0
23.	410.	-0.1067	-0.0997	-0.1022	-0.1048	-0.1103	-0.1068	-0.1100	-0.1161	-0.1144	-0.1231	-0.1293	-0.0182	-0.1243	-0
23.	407.	-0.0743	-0.0692	-0.0724	-0.0742	-0.0789	-0.0736	-0.0761	-0.0821	-0.0804	-0.0865	-0.0937	0.0256	-0.0884	-0
23.	404.	-0.0584	-0.0546	-0.0553	-0.0581	-0.0613	-0.0581	-0.0596	-0.0633	-0.0631	-0.0680	-0.0748	0.0433	-0.0758	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP104	CP105	C
23.	418.	0.1169	0.1510	0.1436	0.1943	0.1587	0.2123	0.2197	0.2988	0.3497	0.2790	0.6000	0.2086	0.3437	0
23.	416.	0.1066	0.1380	0.1443	0.1714	0.1727	0.2185	0.2173	0.2788	0.3308	0.3193	0.5110	0.2040	0.3459	0
23.	413.	0.1017	0.1347	0.1557	0.1798	0.1932	0.2392	0.2224	0.3004	0.3583	0.3124	0.5192	0.2141	0.3542	0
23.	410.	0.0823	0.1279	0.1636	0.2034	0.2253	0.2454	0.2837	0.3449	0.3808	0.3541	0.5175	0.2497	0.3789	0
23.	407.	0.0793	0.1366	0.1846	0.2338	0.2581	0.2938	0.3404	0.3806	0.4051	0.3786	0.5485	0.2927	0.4151	0
23.	404.	0.0722	0.1286	0.1807	0.2341	0.2687	0.3115	0.3495	0.3871	0.4094	0.3784	0.5474	0.3061	0.4097	0

Table VII. Continued

(c) Concluded

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	Cl
23.	418.	0.2299	0.2510	0.3385	0.3585	-0.0005	0.0275	-0.0130	-0.0302	-0.0112	-0.0421	-0.0349	-0.1101	-0.0673	-0.
23.	416.	0.2091	0.2597	0.3300	0.3578	-0.0115	-0.0026	-0.0148	-0.0198	-0.0145	-0.0246	-0.0229	-0.1178	-0.1037	-0.
23.	413.	0.2255	0.2788	0.3446	0.3686	-0.0217	-0.0160	-0.0241	-0.0273	-0.0235	-0.0300	-0.0286	-0.1255	-0.1214	-0.
23.	410.	0.2656	0.3114	0.3560	0.3822	-0.0118	-0.0070	-0.0140	-0.0171	-0.0141	-0.0203	-0.0185	-0.1132	-0.1055	-0.
23.	407.	0.3098	0.3467	0.3840	0.4160	0.0313	0.0363	0.0286	0.0252	0.0295	0.0233	0.0246	-0.0778	-0.0715	-0.
23.	404.	0.3165	0.3498	0.3837	0.4165	0.0464	0.0492	0.0445	0.0429	0.0451	0.0417	0.0426	-0.0627	-0.0579	-0.

Run	Point	CP132	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	Cl
23.	418.	-0.1231	0.0018	0.0938	0.2039	0.2108	0.1943	0.1897	0.2413	0.2354	0.2915	0.2890	0.3316	0.5211	-0.
23.	416.	-0.1058	-0.0254	0.0771	0.1706	0.1956	0.1951	0.1946	0.2183	0.2326	0.2761	0.2984	0.3562	0.4848	-0.
23.	413.	-0.1225	-0.0453	0.0542	0.1436	0.1862	0.2006	0.2076	0.2265	0.2453	0.2906	0.3214	0.3873	0.5285	-0.
23.	410.	-0.1102	-0.0542	0.0246	0.1087	0.1716	0.2043	0.2273	0.2518	0.2728	0.3092	0.3368	0.4093	0.5119	-0.
23.	407.	-0.0811	-0.0418	0.0127	0.0932	0.1630	0.2091	0.2478	0.2853	0.3106	0.3486	0.3737	0.4358	0.5460	0.
23.	404.	-0.0654	-0.0342	0.0151	0.0768	0.1445	0.1991	0.2458	0.2840	0.3153	0.3491	0.3828	0.4337	0.5338	0.

Run	Point	CP155	CP156	CP157	CP158	CP162	CP163	CP164	CP165
23.	418.	0.1120	0.1914	0.2151	0.4174	0.4783	0.5037	0.4403	0.4276
23.	416.	0.1037	0.1876	0.2266	0.3766	0.4518	0.4817	0.4031	0.4152
23.	413.	0.0715	0.1942	0.2381	0.4031	0.4787	0.4817	0.4056	0.4277
23.	410.	0.0306	0.2064	0.2677	0.4160	0.4961	0.4909	0.4257	0.4464
23.	407.	0.0181	0.2132	0.3085	0.4481	0.5331	0.5199	0.4582	0.4773
23.	404.	0.0149	0.1977	0.3129	0.4482	0.5484	0.5315	0.4679	0.4884

Table VII. Continued

(d) $A_{pv} = 1.74$ in^2; configuration 5d

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
22.	397.	0.20	2.21	24.99	25.69	0.69	97.7	0.8585	-0.2494	-0.2132	-0.1715	-0.1721	-0.1305	0.0182	-0
22.	394.	0.40	3.61	19.94	22.25	2.22	102.7	0.8691	-0.2937	-0.2247	-0.1871	-0.1791	-0.1496	-0.0053	-0
22.	391.	0.60	4.69	16.33	20.81	4.10	99.3	0.9635	-0.3409	-0.2601	-0.2193	-0.2066	-0.1747	-0.0156	-0
22.	388.	0.80	3.78	9.30	14.19	4.18	103.8	1.1260	-0.3566	-0.2996	-0.2509	-0.2316	-0.1880	0.0004	-0
22.	385.	0.90	3.45	7.38	12.47	4.18	109.6	1.2014	-0.3998	-0.4041	-0.3981	-0.4137	-0.1472	0.0412	-0
22.	382.	0.95	3.36	6.61	11.82	4.18	106.3	1.2376	-0.2896	-0.3093	-0.3176	-0.3569	-0.3961	0.0429	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
22.	397.	-0.0458	-0.0404	-0.0189	-0.0022	-0.0064	-0.0197	-0.0112	-0.0095	-0.0205	-0.0255	-0.0343	-0.0182	-0.0188	-0
22.	394.	-0.0517	-0.0449	-0.0368	-0.0309	-0.0274	-0.0271	-0.0254	-0.0254	-0.0288	-0.0330	-0.0351	-0.0365	-0.0446	-0
22.	391.	-0.0618	-0.0539	-0.0460	-0.0411	-0.0357	-0.0339	-0.0334	-0.0328	-0.0364	-0.0453	-0.0431	-0.0469	-0.0567	-0
22.	388.	-0.0410	-0.0330	-0.0240	-0.0182	-0.0140	-0.0132	-0.0121	-0.0122	-0.0163	-0.0272	-0.0233	-0.0269	-0.0362	-0
22.	385.	-0.0138	-0.0069	0.0001	0.0044	0.0083	0.0091	0.0095	0.0084	0.0052	0.0017	-0.0004	-0.0031	-0.0092	-0
22.	382.	0.0529	0.0471	0.0381	0.0331	0.0325	0.0307	0.0275	0.0232	0.0180	0.0127	0.0096	0.0056	0.0005	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
22.	397.	0.0548	0.0288	0.0098	-0.0467	-0.1039	-0.0961	-0.0628	-0.0549	-0.0502	-0.0433	-0.0240	-0.0429	0.0177	0
22.	394.	0.0456	0.0304	0.0042	-0.0485	-0.0997	-0.0981	-0.0763	-0.0637	-0.0562	-0.0513	-0.0452	-0.0397	-0.0006	0
22.	391.	0.0426	0.0285	-0.0041	-0.0722	-0.1406	-0.1382	-0.1124	-0.0947	-0.0865	-0.0815	-0.0787	-0.0501	-0.0159	0
22.	388.	0.0720	0.0605	0.0206	-0.0809	-0.2034	-0.1964	-0.1564	-0.1327	-0.1242	-0.1228	-0.1267	-0.0342	-0.0136	0
22.	385.	0.1190	0.1215	0.0862	-0.0192	-0.1690	-0.1469	-0.0928	-0.0621	-0.0465	-0.0391	-0.0369	-0.0109	0.0023	0
22.	382.	0.1391	0.1524	0.1199	0.0197	-0.1381	-0.1217	-0.0493	-0.0152	0.0023	0.0117	0.0153	-0.0030	0.0045	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
22.	397.	-0.0929	-0.0764	-0.0924	-0.0851	-0.1163	-0.0925	-0.1131	-0.1201	-0.1047	-0.1342	-0.1462	-0.0313	-0.1164	-0
22.	394.	-0.1041	-0.0926	-0.0981	-0.1003	-0.1119	-0.1040	-0.1110	-0.1114	-0.1123	-0.1310	-0.1471	-0.0210	-0.1249	-0
22.	391.	-0.1210	-0.1125	-0.1147	-0.1186	-0.1273	-0.1245	-0.1279	-0.1270	-0.1295	-0.1449	-0.1587	-0.0296	-0.1416	-0
22.	388.	-0.1042	-0.0958	-0.0993	-0.1021	-0.1103	-0.1055	-0.1101	-0.1097	-0.1054	-0.1213	-0.1324	-0.0201	-0.1274	-0
22.	385.	-0.0711	-0.0654	-0.0675	-0.0690	-0.0750	-0.0716	-0.0753	-0.0741	-0.0714	-0.0813	-0.0937	0.0261	-0.0893	-0
22.	382.	-0.0545	-0.0497	-0.0503	-0.0517	-0.0568	-0.0556	-0.0593	-0.0613	-0.0569	-0.0616	-0.0756	0.0427	-0.0780	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP104	CP105	C
22.	397.	0.1244	0.1473	0.1363	0.1875	0.1444	0.1768	0.2620	0.2877	0.2207	0.1092	0.5278	0.1931	0.2776	0
22.	394.	0.1121	0.1338	0.1438	0.1655	0.1658	0.1857	0.2366	0.2894	0.2419	0.1719	0.4760	0.1959	0.2662	0
22.	391.	0.0871	0.1200	0.1467	0.1724	0.1685	0.1999	0.2502	0.2973	0.2454	0.1532	0.5192	0.2003	0.2869	0
22.	388.	0.0795	0.1271	0.1609	0.1909	0.2018	0.2427	0.2905	0.3193	0.2874	0.2075	0.5115	0.2370	0.3029	0
22.	385.	0.0763	0.1328	0.1806	0.2243	0.2500	0.2875	0.3267	0.3339	0.3120	0.2681	0.5320	0.2846	0.3336	0
22.	382.	0.0718	0.1285	0.1780	0.2235	0.2585	0.2981	0.3318	0.3489	0.3403	0.2983	0.5070	0.2937	0.3401	0

Table VII. Continued

(d) Concluded

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	Cl
22.	397.	0.2490	0.2506	0.2723	0.2564	0.0036	0.0263	-0.0103	-0.0258	-0.0080	-0.0370	-0.0306	-0.1001	-0.0619	-0.
22.	394.	0.2242	0.2391	0.2643	0.2804	-0.0160	-0.0117	-0.0192	-0.0229	-0.0189	-0.0245	-0.0234	-0.1129	-0.1026	-0.
22.	391.	0.2307	0.2533	0.2649	0.2933	-0.0266	-0.0244	-0.0290	-0.0311	-0.0289	-0.0322	-0.0315	-0.1272	-0.1195	-0.
22.	388.	0.2589	0.2759	0.2919	0.3218	-0.0142	-0.0107	-0.0168	-0.0195	-0.0164	-0.0218	-0.0204	-0.1106	-0.1016	-0.
22.	385.	0.2921	0.3133	0.3330	0.3632	0.0299	0.0329	0.0272	0.0247	0.0283	0.0241	0.0249	-0.0770	-0.0696	-0.
22.	382.	0.2984	0.3247	0.3395	0.3836	0.0453	0.0467	0.0436	0.0414	0.0438	0.0414	0.0424	-0.0592	-0.0543	-0.

Run	Point	CP132	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	Cl
22.	397.	-0.1119	-0.0027	0.0801	0.1979	0.2114	0.1831	0.1827	0.2196	0.2224	0.2757	0.2768	0.3020	0.5510	-0.
22.	394.	-0.1029	-0.0254	0.0859	0.1585	0.1846	0.1871	0.1862	0.1973	0.2237	0.2567	0.2794	0.2895	0.4784	-0.
22.	391.	-0.1177	-0.0405	0.0537	0.1298	0.1684	0.1821	0.1884	0.2096	0.2243	0.2665	0.2915	0.2989	0.4833	-0.
22.	388.	-0.1092	-0.0563	0.0273	0.1074	0.1655	0.1929	0.2107	0.2357	0.2555	0.2906	0.3090	0.3246	0.5017	-0.
22.	385.	-0.0806	-0.0412	0.0237	0.1017	0.1604	0.2013	0.2347	0.2652	0.2919	0.3220	0.3400	0.3677	0.5220	0.
22.	382.	-0.0668	-0.0351	0.0167	0.0845	0.1456	0.1950	0.2356	0.2709	0.3010	0.3289	0.3500	0.3874	0.5033	0.

Run	Point	CP155	CP156	CP157	CP158	CP162	CP163	CP164	CP165
22.	397.	0.1150	0.1951	0.2117	0.3119	0.3815	0.3721	0.3485	0.3350
22.	394.	0.1029	0.1854	0.2204	0.2976	0.3575	0.3634	0.3256	0.3479
22.	391.	0.0673	0.1831	0.2304	0.3094	0.3948	0.3781	0.3321	0.3567
22.	388.	0.0346	0.1994	0.2530	0.3500	0.4529	0.4334	0.3704	0.3970
22.	385.	0.0266	0.2029	0.2907	0.3782	0.5012	0.4767	0.4106	0.4369
22.	382.	0.0202	0.1950	0.2973	0.3957	0.5138	0.4915	0.4243	0.4525

Table VII. Continued

(e) $A_{pv} = 2.32$ in^2; configuration 5e

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
20.	370.	0.20	2.23	25.01	25.71	0.70	96.2	0.8508	-0.2430	-0.2061	-0.1602	-0.1648	-0.1222	0.0256	-0
20.	367.	0.40	3.61	19.90	22.24	2.24	103.9	0.8748	-0.2918	-0.2225	-0.1819	-0.1758	-0.1448	0.0024	-0
20.	364.	0.60	4.69	16.32	20.81	4.10	99.5	0.9685	-0.3379	-0.2562	-0.2143	-0.2028	-0.1693	-0.0105	-0
20.	360.	0.80	3.80	9.30	14.18	4.17	100.4	1.1272	-0.3539	-0.2997	-0.2513	-0.2318	-0.1875	0.0003	-0
20.	357.	0.90	3.48	7.37	12.46	4.18	105.8	1.2009	-0.3975	-0.4027	-0.3971	-0.4128	-0.1468	0.0418	-0
20.	354.	0.95	3.36	6.59	11.79	4.17	104.7	1.2362	-0.2897	-0.3107	-0.3199	-0.3576	-0.3963	0.0425	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
20.	370.	-0.0411	-0.0335	-0.0130	0.0055	-0.0034	-0.0143	-0.0054	-0.0016	-0.0169	-0.0159	-0.0312	-0.0092	-0.0051	0
20.	367.	-0.0488	-0.0414	-0.0322	-0.0251	-0.0230	-0.0238	-0.0208	-0.0200	-0.0247	-0.0294	-0.0292	-0.0274	-0.0321	-0
20.	364.	-0.0582	-0.0491	-0.0419	-0.0359	-0.0317	-0.0295	-0.0279	-0.0268	-0.0311	-0.0397	-0.0374	-0.0395	-0.0461	-0
20.	360.	-0.0417	-0.0336	-0.0248	-0.0192	-0.0150	-0.0135	-0.0122	-0.0121	-0.0165	-0.0237	-0.0222	-0.0245	-0.0305	-0
20.	357.	-0.0131	-0.0063	0.0010	0.0055	0.0091	0.0102	0.0106	0.0099	0.0060	0.0018	0.0016	-0.0004	-0.0042	-0
20.	354.	0.0510	0.0455	0.0369	0.0326	0.0318	0.0298	0.0266	0.0227	0.0166	0.0155	0.0097	0.0066	0.0042	0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
20.	370.	0.0536	0.0303	0.0147	-0.0406	-0.1011	-0.0902	-0.0575	-0.0488	-0.0454	-0.0411	-0.0199	-0.0363	0.0230	0
20.	367.	0.0454	0.0334	0.0101	-0.0439	-0.0980	-0.0945	-0.0716	-0.0592	-0.0518	-0.0475	-0.0406	-0.0356	0.0048	0
20.	364.	0.0417	0.0325	0.0025	-0.0674	-0.1362	-0.1322	-0.1064	-0.0898	-0.0818	-0.0770	-0.0740	-0.0449	-0.0089	0
20.	360.	0.0646	0.0606	0.0252	-0.0770	-0.2027	-0.1950	-0.1555	-0.1324	-0.1236	-0.1228	-0.1275	-0.0325	-0.0086	0
20.	357.	0.1141	0.1245	0.0921	-0.0157	-0.1715	-0.1498	-0.0943	-0.0627	-0.0468	-0.0395	-0.0380	-0.0093	0.0104	0
20.	354.	0.1365	0.1561	0.1253	0.0210	-0.1468	-0.1331	-0.0554	-0.0197	-0.0012	0.0082	0.0117	-0.0026	0.0134	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
20.	370.	-0.0939	-0.0752	-0.0928	-0.0826	-0.1192	-0.0962	-0.1135	-0.1285	-0.1081	-0.1340	-0.1466	-0.0293	-0.0688	-0
20.	367.	-0.1110	-0.0993	-0.1037	-0.1102	-0.1194	-0.1163	-0.1188	-0.1240	-0.1237	-0.1344	-0.1450	-0.0205	-0.0875	-0
20.	364.	-0.1275	-0.1137	-0.1187	-0.1228	-0.1300	-0.1324	-0.1327	-0.1339	-0.1385	-0.1511	-0.1470	-0.0263	-0.1081	-0
20.	360.	-0.1185	-0.1068	-0.1074	-0.1154	-0.1217	-0.1228	-0.1227	-0.1225	-0.1291	-0.1392	-0.1370	-0.0196	-0.1056	-0
20.	357.	-0.0889	-0.0770	-0.0772	-0.0846	-0.0909	-0.0930	-0.0926	-0.0915	-0.0925	-0.1062	-0.1060	0.0255	-0.0819	-0
20.	354.	-0.0765	-0.0666	-0.0673	-0.0760	-0.0787	-0.0809	-0.0816	-0.0806	-0.0819	-0.0928	-0.0947	0.0409	-0.0737	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP104	CP105	C
20.	370.	0.1105	0.1311	0.1181	0.1841	0.1318	0.1416	0.2477	0.2765	0.2921	0.2386	0.5261	0.1787	0.3143	0
20.	367.	0.0989	0.1184	0.1329	0.1629	0.1527	0.1608	0.2283	0.2762	0.2633	0.2038	0.5256	0.1888	0.3026	0
20.	364.	0.0814	0.1181	0.1348	0.1607	0.1625	0.1756	0.2396	0.2933	0.3061	0.2396	0.5580	0.1877	0.3211	0
20.	360.	0.0772	0.1170	0.1465	0.1755	0.1746	0.2195	0.2682	0.3206	0.3312	0.2931	0.5407	0.2084	0.3391	0
20.	357.	0.0853	0.1299	0.1733	0.2084	0.2329	0.2704	0.3136	0.3533	0.3548	0.3354	0.5660	0.2614	0.3711	0
20.	354.	0.0841	0.1327	0.1749	0.2163	0.2459	0.2871	0.3304	0.3706	0.3762	0.3580	0.5726	0.2781	0.3768	0

Table VII. Continued

(e) Concluded

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	Cl
20.	370.	0.2201	0.2353	0.2590	0.2797	0.0063	0.0299	-0.0062	-0.0225	-0.0052	-0.0344	-0.0272	-0.1076	-0.0673	-0.
20.	367.	0.2111	0.2346	0.2387	0.2580	-0.0106	-0.0030	-0.0142	-0.0197	-0.0134	-0.0226	-0.0205	-0.1249	-0.1101	-0.
20.	364.	0.2172	0.2466	0.2575	0.2861	-0.0207	-0.0174	-0.0229	-0.0257	-0.0231	-0.0277	-0.0265	-0.1410	-0.1334	-0.
20.	360.	0.2373	0.2466	0.2934	0.3066	-0.0154	-0.0115	-0.0171	-0.0200	-0.0168	-0.0216	-0.0201	-0.1336	-0.1223	-0.
20.	357.	0.2759	0.2895	0.3323	0.3418	0.0297	0.0329	0.0273	0.0247	0.0282	0.0237	0.0248	-0.1040	-0.0924	-0.
20.	354.	0.2909	0.3103	0.3485	0.3592	0.0440	0.0465	0.0422	0.0402	0.0422	0.0396	0.0406	-0.0918	-0.0810	-0.

Run	Point	CP132	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	Cl
20.	370.	-0.0882	0.0089	0.0720	0.1611	0.1786	0.1662	0.1690	0.2128	0.2095	0.2597	0.2463	0.3496	0.4914	-0.
20.	367.	-0.0892	0.0043	0.0800	0.1448	0.1698	0.1649	0.1728	0.1884	0.2084	0.2578	0.2621	0.3392	0.5023	-0.
20.	364.	-0.0963	-0.0150	0.0674	0.1293	0.1603	0.1711	0.1759	0.1935	0.2189	0.2627	0.2747	0.3651	0.5375	-0.
20.	360.	-0.0982	-0.0299	0.0417	0.1120	0.1556	0.1746	0.1892	0.2126	0.2395	0.2780	0.2941	0.3736	0.5190	-0.
20.	357.	-0.0713	-0.0157	0.0481	0.1123	0.1649	0.1966	0.2218	0.2511	0.2765	0.3056	0.3430	0.4231	0.5493	0.
20.	354.	-0.0632	-0.0169	0.0387	0.1026	0.1573	0.1968	0.2306	0.2640	0.2927	0.3198	0.3597	0.4295	0.5526	0.

Run	Point	CP155	CP156	CP157	CP158	CP162	CP163	CP164	CP165
20.	370.	0.1025	0.1659	0.2015	0.3398	0.4202	0.4201	0.4063	0.3899
20.	367.	0.0904	0.1670	0.2051	0.3284	0.4241	0.4236	0.3937	0.4013
20.	364.	0.0620	0.1690	0.2159	0.3378	0.4247	0.4437	0.3964	0.4215
20.	360.	0.0460	0.1737	0.2360	0.3691	0.4768	0.4627	0.4185	0.4384
20.	357.	0.0444	0.1945	0.2742	0.4068	0.5108	0.5033	0.4535	0.4746
20.	354.	0.0443	0.1993	0.2857	0.4077	0.5228	0.5113	0.4638	0.4845

Table VII. Continued

(f) $A_{pv} = 2.32$ in^2 (with plugs); configuration 5f

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
19.	347.	0.20	2.23	24.99	25.71	0.71	98.0	0.8429	-0.2571	-0.2199	-0.1775	-0.1761	-0.1395	0.0084	-0
19.	344.	0.40	3.62	19.90	22.21	2.23	101.3	0.8734	-0.2967	-0.2268	-0.1874	-0.1794	-0.1508	-0.0062	-0
19.	341.	0.60	4.69	16.30	20.82	4.13	100.9	0.9713	-0.3394	-0.2577	-0.2164	-0.2037	-0.1723	-0.0125	-0
19.	338.	0.80	3.80	9.29	14.17	4.17	100.9	1.1213	-0.3557	-0.3009	-0.2524	-0.2323	-0.1896	-0.0007	-0
19.	335.	0.90	3.48	7.37	12.48	4.19	106.3	1.2014	-0.3949	-0.4014	-0.3963	-0.4147	-0.1700	0.0417	-0
19.	332.	0.95	3.36	6.59	11.80	4.18	105.5	1.2382	-0.2892	-0.3076	-0.3168	-0.3531	-0.3947	0.0447	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
19.	347.	-0.0569	-0.0478	-0.0286	-0.0138	-0.0189	-0.0304	-0.0230	-0.0227	-0.0323	-0.0384	-0.0499	-0.0390	-0.0478	-0
19.	344.	-0.0528	-0.0461	-0.0375	-0.0318	-0.0294	-0.0300	-0.0276	-0.0276	-0.0326	-0.0334	-0.0431	-0.0486	-0.0653	-0
19.	341.	-0.0579	-0.0502	-0.0434	-0.0387	-0.0340	-0.0327	-0.0312	-0.0303	-0.0342	-0.0425	-0.0434	-0.0530	-0.0725	-0
19.	338.	-0.0420	-0.0339	-0.0255	-0.0201	-0.0160	-0.0149	-0.0141	-0.0147	-0.0193	-0.0235	-0.0283	-0.0369	-0.0554	-0
19.	335.	-0.0130	-0.0066	0.0002	0.0041	0.0077	0.0085	0.0081	0.0066	0.0026	-0.0106	-0.0050	-0.0121	-0.0271	-0
19.	332.	0.0547	0.0487	0.0386	0.0330	0.0323	0.0301	0.0264	0.0218	0.0156	0.0074	0.0057	-0.0030	-0.0166	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
19.	347.	0.0423	0.0233	0.0016	-0.0582	-0.1182	-0.1103	-0.0771	-0.0676	-0.0595	-0.0540	-0.0392	-0.0556	0.0242	0
19.	344.	0.0438	0.0320	0.0046	-0.0545	-0.1123	-0.1104	-0.0850	-0.0706	-0.0619	-0.0572	-0.0514	-0.0479	0.0143	0
19.	341.	0.0477	0.0389	0.0045	-0.0714	-0.1480	-0.1457	-0.1165	-0.0958	-0.0848	-0.0794	-0.0762	-0.0524	0.0057	0
19.	338.	0.0756	0.0727	0.0314	-0.0812	-0.2245	-0.2204	-0.1728	-0.1420	-0.1285	-0.1258	-0.1300	-0.0411	0.0051	0
19.	335.	0.1318	0.1422	0.1061	-0.0093	-0.2029	-0.1892	-0.1154	-0.0753	-0.0536	-0.0429	-0.0400	-0.0189	0.0202	0
19.	332.	0.1595	0.1782	0.1443	0.0332	-0.1738	-0.1936	-0.0763	-0.0295	-0.0066	0.0055	0.0110	-0.0118	0.0202	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
19.	347.	-0.1279	-0.1210	-0.1361	-0.1228	-0.1453	-0.1265	-0.1480	-0.1683	-0.1448	-0.1692	-0.1807	-0.0383	-0.0463	-0
19.	344.	-0.1367	-0.1330	-0.1393	-0.1343	-0.1408	-0.1344	-0.1428	-0.1517	-0.1479	-0.1637	-0.1594	-0.0269	-0.0766	0
19.	341.	-0.1459	-0.1432	-0.1460	-0.1442	-0.1473	-0.1456	-0.1530	-0.1574	-0.1606	-0.1707	-0.1716	-0.0269	-0.0978	-0
19.	338.	-0.1328	-0.1291	-0.1307	-0.1316	-0.1335	-0.1339	-0.1428	-0.1483	-0.1473	-0.1526	-0.1627	-0.0196	-0.1076	-0
19.	335.	-0.1016	-0.0984	-0.0975	-0.0965	-0.1009	-0.0989	-0.1100	-0.1147	-0.1135	-0.1183	-0.1236	0.0278	-0.0976	-0
19.	332.	-0.0879	-0.0864	-0.0836	-0.0850	-0.0871	-0.0853	-0.0954	-0.0962	-0.0985	-0.1027	-0.1077	0.0451	-0.0910	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP104	CP105	C
19.	347.	0.1535	0.1342	0.1194	0.1692	0.1470	0.1358	0.2633	0.3074	0.2692	0.1168	0.5928	0.1879	0.3176	0
19.	344.	0.1455	0.1450	0.1370	0.1556	0.1663	0.1575	0.2426	0.3114	0.3277	0.2021	0.5652	0.1984	0.3326	0
19.	341.	0.1437	0.1529	0.1495	0.1635	0.1848	0.1720	0.2638	0.3402	0.3335	0.2236	0.5250	0.2160	0.3507	0
19.	338.	0.1396	0.1655	0.1782	0.2005	0.2140	0.2183	0.3057	0.3763	0.3755	0.2760	0.5544	0.2294	0.3846	0
19.	335.	0.1490	0.1926	0.2230	0.2507	0.2560	0.3007	0.3569	0.4192	0.4260	0.3618	0.5618	0.2911	0.4381	0
19.	332.	0.1350	0.1904	0.2339	0.2648	0.2892	0.3293	0.3781	0.4362	0.4420	0.3852	0.5656	0.3194	0.4499	0

Table VII. Concluded

(f) Concluded

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	Cl
19.	347.	0.2376	0.2658	0.2742	0.3685	-0.0111	0.0123	-0.0222	-0.0361	-0.0188	-0.0432	-0.0388	-0.1336	-0.1179	-0.
19.	344.	0.2169	0.2630	0.2787	0.3919	-0.0171	-0.0107	-0.0208	-0.0248	-0.0200	-0.0274	-0.0258	-0.1410	-0.1455	-0.
19.	341.	0.2418	0.2769	0.2819	0.4058	-0.0242	-0.0210	-0.0256	-0.0275	-0.0246	-0.0283	-0.0276	-0.1445	-0.1583	-0.
19.	338.	0.2812	0.2858	0.3353	0.4336	-0.0159	-0.0129	-0.0176	-0.0195	-0.0170	-0.0209	-0.0198	-0.1360	-0.1431	-0.
19.	335.	0.3222	0.3318	0.3998	0.4928	0.0311	0.0342	0.0289	0.0271	0.0299	0.0263	0.0272	-0.1033	-0.1088	-0.
19.	332.	0.3360	0.3577	0.4183	0.4985	0.0466	0.0484	0.0446	0.0435	0.0453	0.0433	0.0442	-0.0886	-0.0955	-0.

Run	Point	CP132	CP133	CP134	CP135	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	Cl
19.	347.	-0.0224	0.1216	0.1777	0.2092	0.1954	0.1572	0.1587	0.2122	0.2138	0.2778	0.2859	0.3061	0.5189	-0.
19.	344.	-0.0333	0.1069	0.1964	0.2043	0.1941	0.1744	0.1714	0.1961	0.2243	0.2760	0.3042	0.3492	0.4944	-0.
19.	341.	-0.0620	0.0773	0.1652	0.2070	0.2011	0.1885	0.1876	0.2084	0.2411	0.2946	0.3141	0.3780	0.5126	-0.
19.	338.	-0.0910	0.0238	0.1291	0.1995	0.2215	0.2188	0.2201	0.2406	0.2746	0.3231	0.3417	0.4043	0.5356	-0.
19.	335.	-0.0786	0.0072	0.1010	0.1855	0.2351	0.2547	0.2702	0.2927	0.3270	0.3602	0.4032	0.4631	0.5649	0.
19.	332.	-0.0771	-0.0056	0.0792	0.1616	0.2224	0.2605	0.2852	0.3120	0.3446	0.3633	0.4267	0.4745	0.5650	0.

Run	Point	CP155	CP156	CP157	CP158	CP162	CP163	CP164	CP165
19.	347.	0.2303	0.1660	0.2053	0.3372	0.3338	0.3565	0.3480	0.3507
19.	344.	0.2000	0.1763	0.2254	0.3402	0.3683	0.3740	0.3312	0.3431
19.	341.	0.1793	0.1891	0.2373	0.3662	0.3819	0.4000	0.3552	0.3819
19.	338.	0.1328	0.2194	0.2700	0.3946	0.4262	0.4329	0.3869	0.4122
19.	335.	0.1059	0.2552	0.3237	0.4442	0.4932	0.4928	0.4373	0.4614
19.	332.	0.0818	0.2623	0.3381	0.4542	0.5240	0.5223	0.4524	0.4785

Table VIII. Pressure Coefficients for Cavity Models With Floor Pipe Vents

[l = 42.00 in.; h = 2.40 in.]

(a) Empty cavity; configuration 6a

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
13.	218.	0.20	2.21	25.00	25.70	0.69	99.3	0.8160	-0.2134	-0.1843	-0.1251	-0.1609	-0.0918	0.0655
13.	215.	0.40	3.64	19.92	22.24	2.23	99.1	0.8579	-0.2850	-0.2160	-0.1723	-0.1752	-0.1373	0.0053
13.	212.	0.60	4.65	16.36	20.85	4.11	103.9	0.9493	-0.3364	-0.2551	-0.2102	-0.2052	-0.1669	-0.0158
13.	209.	0.80	3.81	9.30	14.16	4.16	98.9	1.1101	-0.3569	-0.2969	-0.2470	-0.2316	-0.1847	-0.0169
13.	206.	0.90	3.52	7.38	12.48	4.18	100.7	1.1961	-0.3938	-0.4032	-0.3884	-0.4125	-0.1450	0.0420
13.	203.	0.95	3.38	6.61	11.81	4.18	103.5	1.2325	-0.2868	-0.3102	-0.3151	-0.3525	-0.3917	0.0486

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
13.	218.	-0.0471	-0.0367	0.0052	0.0515	0.0197	-0.0189	-0.0019	0.0088	-0.0228	-0.0655	-0.0644	-0.0080	-0.0022
13.	215.	-0.0521	-0.0431	-0.0260	-0.0102	-0.0168	-0.0246	-0.0225	-0.0184	-0.0308	-0.0335	-0.0527	-0.0435	-0.0581
13.	212.	-0.0606	-0.0534	-0.0394	-0.0290	-0.0307	-0.0352	-0.0359	-0.0321	-0.0419	-0.0513	-0.0600	-0.0587	-0.0777
13.	209.	-0.0438	-0.0342	-0.0221	-0.0129	-0.0139	-0.0166	-0.0172	-0.0143	-0.0226	-0.0269	-0.0386	-0.0410	-0.0612
13.	206.	-0.0147	-0.0063	0.0035	0.0110	0.0101	0.0079	0.0066	0.0077	0.0011	-0.0105	-0.0131	-0.0153	-0.0330
13.	203.	0.0517	0.0462	0.0401	0.0386	0.0333	0.0283	0.0232	0.0209	0.0119	0.0046	-0.0032	-0.0063	-0.0223

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
13.	218.	0.0421	0.0180	0.0412	0.0226	-0.0158	0.0093	0.0499	0.0007	-0.0757	-0.1310	-0.0813	-0.0778	0.0387
13.	215.	0.0344	0.0320	0.0420	0.0429	0.0345	0.0429	0.0457	0.0043	-0.0752	-0.1422	-0.1302	-0.0576	0.0079
13.	212.	0.0253	0.0255	0.0355	0.0399	0.0384	0.0463	0.0455	-0.0022	-0.1056	-0.2068	-0.2040	-0.0662	-0.0106
13.	209.	0.0474	0.0485	0.0591	0.0695	0.0751	0.0865	0.0833	0.0247	-0.1334	-0.3475	-0.3652	-0.0508	-0.0163
13.	206.	0.0995	0.1133	0.1284	0.1440	0.1545	0.1707	0.1715	0.1165	-0.0373	-0.2741	-0.3412	-0.0279	-0.0035
13.	203.	0.1254	0.1501	0.1669	0.1837	0.1955	0.2128	0.2142	0.1611	0.0131	-0.2197	-0.3093	-0.0217	-0.0074

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75
13.	218.	-0.1167	-0.0869	-0.1364	-0.0991	-0.1774	-0.1242	-0.1652	-0.2156	-0.1270	-0.1882	-0.2147	-0.0856	-0.0965
13.	215.	-0.1422	-0.1327	-0.1474	-0.1387	-0.1616	-0.1418	-0.1557	-0.1691	-0.1442	-0.1726	-0.1863	-0.0463	-0.1322
13.	212.	-0.1651	-0.1569	-0.1618	-0.1587	-0.1733	-0.1599	-0.1706	-0.1813	-0.1700	-0.1836	-0.1977	-0.0519	-0.1602
13.	209.	-0.1566	-0.1493	-0.1510	-0.1554	-0.1634	-0.1567	-0.1632	-0.1707	-0.1606	-0.1707	-0.1756	-0.0592	-0.1601
13.	206.	-0.1257	-0.1180	-0.1273	-0.1309	-0.1339	-0.1278	-0.1334	-0.1401	-0.1313	-0.1401	-0.1486	0.0138	-0.1361
13.	203.	-0.1166	-0.1083	-0.1156	-0.1177	-0.1211	-0.1166	-0.1224	-0.1268	-0.1199	-0.1291	-0.1347	0.0358	-0.1252

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92
13.	218.	0.0978	0.0822	0.0340	0.1498	-0.0065	0.0246	0.1321	0.1061	0.1458	0.0700	0.2051	0.1227	0.2180
13.	215.	0.0877	0.0991	0.0910	0.1203	0.0670	0.0749	0.1061	0.1057	0.1313	0.1198	0.1732	0.1673	0.2153
13.	212.	0.0650	0.0906	0.0896	0.1084	0.0711	0.0748	0.0941	0.1030	0.1267	0.1262	0.1703	0.1770	0.2239
13.	209.	0.0618	0.0945	0.1084	0.1269	0.0977	0.0984	0.1124	0.1250	0.1520	0.1593	0.2013	0.2207	0.2688
13.	206.	0.0720	0.1166	0.1389	0.1680	0.1529	0.1601	0.1779	0.1942	0.2241	0.2331	0.2764	0.2967	0.3436
13.	203.	0.0584	0.1146	0.1441	0.1813	0.1807	0.1939	0.2144	0.2342	0.2659	0.2756	0.3167	0.3353	0.3779

Table VIII. Continued

(a) Concluded

Run	Point	CP97	CP98	CP99	CP104	CP105	CP106	CP107	CP111	CP112	CP113	CP114	CP115	CP116	CI
13.	218.	0.3377	0.4099	0.4807	0.0696	0.1142	0.2484	0.4070	0.1889	0.2033	0.1331	0.0506	0.1163	0.0540	0.
13.	215.	0.4122	0.4310	0.4344	0.0816	0.1143	0.2758	0.4274	0.1808	0.1549	0.1136	0.0712	0.0941	0.0810	0.
13.	212.	0.4304	0.4577	0.4641	0.0736	0.1101	0.2926	0.4514	0.1648	0.1469	0.1100	0.0744	0.0873	0.0763	0.
13.	209.	0.4637	0.4940	0.4914	0.1005	0.1406	0.3462	0.4991	0.1331	0.1767	0.1457	0.1085	0.1108	0.1009	0.
13.	206.	0.5026	0.5342	0.5375	0.1617	0.2134	0.4133	0.5469	0.1077	0.2129	0.2043	0.1748	0.1775	0.1705	0.
13.	203.	0.5176	0.5440	0.5501	0.1938	0.2531	0.4407	0.5551	0.0704	0.2118	0.2249	0.2117	0.2162	0.2114	0.

Run	Point	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	CP129	CP130	CP131	CP132	CP133	CI
13.	218.	0.3870	0.4044	0.4956	0.4334	0.4236	-0.1236	-0.0163	-0.0416	-0.2127	-0.0554	-0.1875	-0.2033	-0.0033	0.
13.	215.	0.3845	0.4398	0.4993	0.4968	0.4595	-0.1506	-0.1188	-0.1291	-0.1805	-0.1394	-0.1908	-0.1613	-0.0116	0.
13.	212.	0.4052	0.4628	0.5130	0.5061	0.4777	-0.1719	-0.1525	-0.1597	-0.1929	-0.1664	-0.1990	-0.1796	-0.0365	0.
13.	209.	0.4463	0.4934	0.5318	0.5362	0.5071	-0.1606	-0.1497	-0.1524	-0.1755	-0.1596	-0.1812	-0.1800	-0.0929	0.
13.	206.	0.4930	0.5322	0.5683	0.5747	0.5211	-0.1315	-0.1192	-0.1246	-0.1455	-0.1312	-0.1515	-0.1516	-0.0882	0.
13.	203.	0.5096	0.5418	0.5724	0.5743	0.5417	-0.1195	-0.1118	-0.1147	-0.1324	-0.1204	-0.1377	-0.1417	-0.0978	-0.

Run	Point	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	CP147	CP148	CP149	CP150	CI
13.	218.	0.0798	0.1511	0.0642	0.1256	0.0413	0.0743	0.1809	0.1636	0.3617	0.3827	0.3887	0.4097	0.4809	0.
13.	215.	0.1024	0.1092	0.0842	0.1037	0.0883	0.1140	0.1702	0.2092	0.3319	0.3863	0.4333	0.4619	0.4903	0.
13.	212.	0.0989	0.0998	0.0790	0.0924	0.0870	0.1143	0.1714	0.2217	0.3441	0.4011	0.4545	0.4928	0.5173	0.
13.	209.	0.1407	0.1288	0.1073	0.1141	0.1136	0.1427	0.2020	0.2686	0.3918	0.4457	0.4922	0.5217	0.5449	0.
13.	206.	0.1975	0.1908	0.1708	0.1788	0.1822	0.2151	0.2741	0.3390	0.4485	0.4922	0.5226	0.5500	0.5680	0.
13.	203.	0.2242	0.2274	0.2121	0.2208	0.2253	0.2566	0.3122	0.3726	0.4732	0.5099	0.5374	0.5601	0.5797	0.

Run	Point	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	CP165
13.	218.	0.1860	0.0935	0.0343	0.1733	0.3687	0.4021	0.5006	0.5296	0.5569	0.5848	0.4690
13.	215.	0.1406	0.1247	0.0809	0.1382	0.3312	0.4343	0.5054	0.5481	0.5958	0.5603	0.5131
13.	212.	0.1038	0.1310	0.0814	0.1311	0.3450	0.4575	0.5261	0.5592	0.6077	0.5656	0.5338
13.	209.	0.0428	0.1698	0.1062	0.1525	0.3870	0.4956	0.5478	0.5989	0.6484	0.5892	0.5666
13.	206.	0.0132	0.2101	0.1735	0.2233	0.4425	0.5364	0.5916	0.6349	0.6823	0.6255	0.6085
13.	203.	-0.0155	0.2115	0.2117	0.2656	0.4683	0.5456	0.5975	0.6498	0.6896	0.6323	0.6195

Table VIII. Continued

(b) $A_{pv} = 0.88$ in^2; configuration 6b

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
18.	325.	0.20	2.23	24.99	25.70	0.70	97.4	0.8508	-0.2565	-0.2196	-0.1733	-0.1770	-0.1336	0.0020	-0
18.	322.	0.40	3.59	19.91	22.22	2.21	103.5	0.8725	-0.2955	-0.2261	-0.1866	-0.1795	-0.1494	-0.0144	-0
18.	319.	0.60	4.69	16.35	20.86	4.12	100.9	0.9664	-0.3417	-0.2601	-0.2185	-0.2063	-0.1744	-0.0285	-0
18.	316.	0.80	3.79	9.31	14.18	4.16	101.2	1.1139	-0.3587	-0.3007	-0.2525	-0.2322	-0.1897	-0.0292	-0
18.	313.	0.90	3.48	7.39	12.49	4.19	106.1	1.1944	-0.4030	-0.4060	-0.4006	-0.4178	-0.1613	0.0272	-0
18.	310.	0.95	3.38	6.59	11.80	4.18	102.4	1.2351	-0.2927	-0.3103	-0.3193	-0.3550	-0.3966	0.0334	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
18.	325.	-0.0521	-0.0471	-0.0270	-0.0085	-0.0154	-0.0298	-0.0215	-0.0191	-0.0308	-0.0358	-0.0484	-0.0346	-0.0397	-0
18.	322.	-0.0533	-0.0475	-0.0378	-0.0305	-0.0284	-0.0291	-0.0265	-0.0259	-0.0308	-0.0338	-0.0407	-0.0447	-0.0595	-0
18.	319.	-0.0622	-0.0538	-0.0466	-0.0417	-0.0367	-0.0356	-0.0345	-0.0345	-0.0390	-0.0484	-0.0485	-0.0567	-0.0742	-0
18.	316.	-0.0433	-0.0358	-0.0281	-0.0232	-0.0187	-0.0175	-0.0174	-0.0180	-0.0227	-0.0338	-0.0321	-0.0411	-0.0594	-0
18.	313.	-0.0166	-0.0108	-0.0047	-0.0005	0.0030	0.0039	0.0032	0.0015	-0.0026	-0.0032	-0.0106	-0.0191	-0.0352	-0
18.	310.	0.0528	0.0461	0.0352	0.0289	0.0282	0.0266	0.0218	0.0163	0.0105	0.0042	0.0004	-0.0098	-0.0251	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
18.	325.	0.0285	0.0235	0.0357	0.0296	0.0165	0.0217	0.0256	-0.0109	-0.0676	-0.1080	-0.0890	-0.0569	0.0075	0
18.	322.	0.0282	0.0304	0.0356	0.0390	0.0351	0.0356	0.0282	-0.0055	-0.0670	-0.1145	-0.1046	-0.0470	-0.0034	0
18.	319.	0.0207	0.0242	0.0295	0.0350	0.0350	0.0345	0.0230	-0.0169	-0.1001	-0.1701	-0.1592	-0.0578	-0.0203	0
18.	316.	0.0387	0.0416	0.0482	0.0562	0.0579	0.0586	0.0445	-0.0085	-0.1417	-0.3001	-0.2901	-0.0450	-0.0251	0
18.	313.	0.0859	0.1020	0.1129	0.1243	0.1304	0.1357	0.1267	0.0794	-0.0514	-0.2559	-0.2546	-0.0259	-0.0146	0
18.	310.	0.1128	0.1394	0.1518	0.1651	0.1734	0.1795	0.1713	0.1275	0.0023	-0.2043	-0.2457	-0.0174	-0.0169	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
18.	325.	-0.1204	-0.1054	-0.1226	-0.1120	-0.1457	-0.1163	-0.1342	-0.1510	-0.1264	-0.1628	-0.1762	-0.0517	-0.1331	-0
18.	322.	-0.1267	-0.1213	-0.1253	-0.1270	-0.1367	-0.1274	-0.1324	-0.1399	-0.1359	-0.1516	-0.1734	-0.0402	-0.1512	-0
18.	319.	-0.1433	-0.1370	-0.1376	-0.1428	-0.1505	-0.1433	-0.1447	-0.1505	-0.1518	-0.1635	-0.1752	-0.0498	-0.1612	-0
18.	316.	-0.1358	-0.1295	-0.1310	-0.1353	-0.1426	-0.1352	-0.1385	-0.1418	-0.1397	-0.1484	-0.1609	-0.0598	-0.1570	-0
18.	313.	-0.1121	-0.1065	-0.1087	-0.1125	-0.1181	-0.1115	-0.1150	-0.1172	-0.1164	-0.1207	-0.1293	0.0109	-0.1357	-0
18.	310.	-0.1039	-0.0993	-0.0981	-0.1037	-0.1068	-0.1023	-0.1034	-0.1051	-0.1065	-0.1110	-0.1154	0.0343	-0.1262	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	
18.	325.	0.1165	0.1207	0.0937	0.1258	0.0530	0.0673	0.1085	0.0999	0.1272	0.1157	0.1852	0.1771	0.1753	0
18.	322.	0.1098	0.1068	0.1106	0.1087	0.0788	0.0793	0.0899	0.0977	0.1221	0.1334	0.1718	0.1924	0.2023	0
18.	319.	0.0901	0.1145	0.1103	0.1037	0.0807	0.0781	0.0836	0.0941	0.1187	0.1348	0.1691	0.1979	0.2107	0
18.	316.	0.0747	0.1108	0.1227	0.1224	0.1035	0.0996	0.1032	0.1168	0.1488	0.1712	0.2073	0.2190	0.1994	0
18.	313.	0.0743	0.1234	0.1501	0.1624	0.1564	0.1574	0.1647	0.1848	0.2197	0.2418	0.2682	0.2596	0.2656	0
18.	310.	0.0570	0.1170	0.1577	0.1792	0.1870	0.1941	0.2031	0.2269	0.2611	0.2789	0.2877	0.2876	0.3147	0

Table VIII. Continued

(b) Concluded

Run	Point	CP97	CP98	CP99	CP104	CP105	CP106	CP107	CP111	CP112	CP113	CP114	CP115	CP116	CI
18.	325.	0.2290	0.2140	0.2663	0.0731	0.1034	0.2272	0.3020	0.1744	0.1699	0.1061	0.0747	0.0965	0.0750	0.
18.	322.	0.2714	0.2150	0.2659	0.0755	0.1024	0.2406	0.3092	0.1676	0.1500	0.1034	0.0815	0.0876	0.0840	0.
18.	319.	0.2763	0.2344	0.2846	0.0719	0.1007	0.2578	0.3257	0.1524	0.1503	0.1059	0.0789	0.0798	0.0821	0.
18.	316.	0.2870	0.2884	0.2990	0.0938	0.1265	0.2823	0.3472	0.1153	0.1742	0.1377	0.1100	0.1031	0.1017	0.
18.	313.	0.3426	0.3327	0.3488	0.1527	0.1971	0.3355	0.3945	0.0888	0.1969	0.1891	0.1719	0.1661	0.1664	0.
18.	310.	0.3708	0.3723	0.3721	0.1879	0.2379	0.3691	0.4205	0.0620	0.1893	0.2097	0.2047	0.2034	0.2075	0.

Run	Point	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	CP129	CP130	CP131	CP132	CP133	CI
18.	325.	0.2862	0.2735	0.2908	0.2620	0.2970	-0.1291	-0.0926	-0.0911	-0.1586	-0.1171	-0.1599	-0.1455	0.0074	0.
18.	322.	0.2890	0.2865	0.2920	0.2981	0.3314	-0.1285	-0.1238	-0.1189	-0.1425	-0.1394	-0.1548	-0.1285	0.0062	0.
18.	319.	0.2998	0.3000	0.2979	0.2852	0.3395	-0.1497	-0.1449	-0.1437	-0.1572	-0.1586	-0.1699	-0.1424	-0.0437	0.
18.	316.	0.3129	0.3116	0.3146	0.3146	0.3625	-0.1393	-0.1398	-0.1341	-0.1447	-0.1458	-0.1566	-0.1464	-0.0723	0.
18.	313.	0.3591	0.3617	0.3657	0.3624	0.4030	-0.1145	-0.1147	-0.1112	-0.1190	-0.1199	-0.1282	-0.1273	-0.0756	0.
18.	310.	0.3805	0.3828	0.3859	0.3870	0.4303	-0.1041	-0.1075	-0.1037	-0.1079	-0.1124	-0.1169	-0.1176	-0.0807	-0.

Run	Point	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	CP147	CP148	CP149	CP150	CI
18.	325.	0.1305	0.1405	0.1174	0.1304	0.0976	0.1313	0.1962	0.2036	0.2883	0.3055	0.3287	0.2750	0.3007	0.
18.	322.	0.1324	0.1247	0.1207	0.1198	0.1072	0.1318	0.1882	0.2225	0.2817	0.3100	0.3455	0.3124	0.3208	0.
18.	319.	0.1302	0.1147	0.1225	0.1180	0.1101	0.1375	0.1913	0.2282	0.2867	0.3174	0.3553	0.3120	0.3127	0.
18.	316.	0.1606	0.1400	0.1357	0.1292	0.1245	0.1565	0.2150	0.2523	0.3095	0.3358	0.3706	0.3388	0.3404	0.
18.	313.	0.2081	0.1964	0.1951	0.1931	0.1928	0.2251	0.2753	0.3106	0.3630	0.3824	0.4075	0.3855	0.3771	0.
18.	310.	0.2279	0.2288	0.2334	0.2327	0.2350	0.2654	0.3072	0.3441	0.3880	0.4064	0.4300	0.4144	0.3983	0.

Run	Point	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	CP165
18.	325.	0.1545	0.1443	0.0957	0.1548	0.3011	0.3137	0.3257	0.3373	0.3494	0.3618	0.3433
18.	322.	0.1373	0.1622	0.1101	0.1349	0.2940	0.3381	0.3341	0.3185	0.3726	0.3586	0.3616
18.	319.	0.1039	0.1630	0.1092	0.1285	0.2896	0.3585	0.3277	0.3372	0.3798	0.3632	0.3750
18.	316.	0.0391	0.1867	0.1269	0.1515	0.3144	0.3612	0.3481	0.3597	0.3875	0.3762	0.3900
18.	313.	0.0145	0.2101	0.1901	0.2201	0.3634	0.4111	0.3892	0.4217	0.4346	0.4199	0.4344
18.	310.	-0.0075	0.2031	0.2277	0.2596	0.3878	0.4259	0.4041	0.4654	0.4672	0.4395	0.4582

Table VIII. Continued

(c) $A_{pv} = 1.32$ in^2; configuration 6c

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
17.	303.	0.20	2.22	25.02	25.72	0.69	97.2	0.8361	-0.2547	-0.2145	-0.1737	-0.1750	-0.1353	0.0050	-0
17.	300.	0.40	3.64	19.93	22.25	2.23	99.0	0.8642	-0.2964	-0.2264	-0.1878	-0.1795	-0.1507	-0.0176	-0
17.	297.	0.60	4.71	16.34	20.87	4.13	99.5	0.9628	-0.3382	-0.2555	-0.2144	-0.2023	-0.1697	-0.0224	-0
17.	294.	0.80	3.76	9.30	14.17	4.16	105.2	1.1129	-0.3582	-0.3004	-0.2512	-0.2328	-0.1883	-0.0262	-0
17.	291.	0.90	3.43	7.38	12.47	4.18	112.0	1.1941	-0.4014	-0.4069	-0.4000	-0.4182	-0.1507	0.0307	-0
17.	288.	0.95	3.37	6.62	11.84	4.19	105.1	1.2361	-0.2908	-0.3107	-0.3181	-0.3565	-0.3962	0.0359	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
17.	303.	-0.0519	-0.0471	-0.0285	-0.0100	-0.0180	-0.0272	-0.0196	-0.0182	-0.0316	-0.0352	-0.0477	-0.0335	-0.0385	-0
17.	300.	-0.0535	-0.0466	-0.0397	-0.0330	-0.0298	-0.0291	-0.0258	-0.0261	-0.0315	-0.0439	-0.0396	-0.0438	-0.0581	-0
17.	297.	-0.0559	-0.0488	-0.0425	-0.0370	-0.0326	-0.0309	-0.0295	-0.0299	-0.0358	-0.0482	-0.0440	-0.0508	-0.0664	-0
17.	294.	-0.0432	-0.0352	-0.0266	-0.0199	-0.0170	-0.0164	-0.0149	-0.0154	-0.0225	-0.0299	-0.0315	-0.0374	-0.0528	-0
17.	291.	-0.0169	-0.0097	-0.0030	0.0028	0.0052	0.0053	0.0059	0.0044	-0.0021	-0.0078	-0.0099	-0.0151	-0.0280	-0
17.	288.	0.0531	0.0475	0.0370	0.0323	0.0308	0.0289	0.0252	0.0202	0.0126	0.0043	0.0029	-0.0053	-0.0179	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
17.	303.	0.0266	0.0211	0.0305	0.0287	0.0138	0.0196	0.0270	-0.0050	-0.0630	-0.1044	-0.0852	-0.0531	0.0060	0
17.	300.	0.0236	0.0254	0.0295	0.0341	0.0312	0.0316	0.0246	-0.0067	-0.0671	-0.1142	-0.1066	-0.0458	-0.0060	0
17.	297.	0.0215	0.0248	0.0298	0.0354	0.0361	0.0365	0.0268	-0.0108	-0.0937	-0.1630	-0.1565	-0.0523	-0.0164	0
17.	294.	0.0349	0.0355	0.0423	0.0493	0.0504	0.0536	0.0448	-0.0040	-0.1353	-0.2942	-0.2850	-0.0441	-0.0231	0
17.	291.	0.0819	0.0954	0.1064	0.1166	0.1219	0.1302	0.1268	0.0825	-0.0476	-0.2507	-0.2424	-0.0240	-0.0107	0
17.	288.	0.1094	0.1334	0.1457	0.1588	0.1675	0.1759	0.1720	0.1314	0.0065	-0.2007	-0.2330	-0.0143	-0.0105	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
17.	303.	-0.1208	-0.1068	-0.1219	-0.1124	-0.1423	-0.1159	-0.1328	-0.1521	-0.1204	-0.1437	-0.1696	-0.0482	-0.1213	-0
17.	300.	-0.1306	-0.1246	-0.1265	-0.1302	-0.1367	-0.1349	-0.1382	-0.1427	-0.1361	-0.1434	-0.1467	-0.0369	-0.1420	-0
17.	297.	-0.1414	-0.1361	-0.1381	-0.1395	-0.1450	-0.1416	-0.1418	-0.1454	-0.1416	-0.1543	-0.1600	-0.0429	-0.1616	-0
17.	294.	-0.1355	-0.1285	-0.1312	-0.1344	-0.1391	-0.1375	-0.1397	-0.1446	-0.1386	-0.1474	-0.1529	-0.0600	-0.1497	-0
17.	291.	-0.1127	-0.1078	-0.1067	-0.1084	-0.1151	-0.1129	-0.1159	-0.1209	-0.1162	-0.1199	-0.1272	0.0088	-0.1220	-0
17.	288.	-0.1041	-0.0990	-0.0957	-0.1005	-0.1023	-0.1021	-0.1039	-0.1071	-0.1057	-0.1083	-0.1121	0.0349	-0.1162	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	
17.	303.	0.1010	0.1125	0.0936	0.1200	0.0525	0.0622	0.1000	0.0919	0.1216	0.1103	0.1729	0.1528	0.1388	0
17.	300.	0.0846	0.1057	0.1059	0.0998	0.0714	0.0741	0.0805	0.0897	0.1111	0.1242	0.1573	0.1711	0.1546	0
17.	297.	0.0866	0.1049	0.1064	0.1021	0.0806	0.0780	0.0805	0.0934	0.1175	0.1358	0.1700	0.1925	0.1724	0
17.	294.	0.0650	0.1014	0.1125	0.1161	0.0943	0.0916	0.0970	0.1078	0.1361	0.1543	0.1920	0.1980	0.1765	0
17.	291.	0.0665	0.1132	0.1392	0.1556	0.1457	0.1485	0.1587	0.1736	0.2095	0.2281	0.2463	0.2191	0.2493	0
17.	288.	0.0561	0.1118	0.1483	0.1715	0.1771	0.1853	0.1955	0.2163	0.2504	0.2630	0.2596	0.2619	0.2953	0

Table VIII. Continued

(c) Concluded

Run	Point	CP97	CP98	CP99	CP104	CP105	CP106	CP107	CP111	CP112	CP113	CP114	CP115	CP116	CP
17.	303.	0.2773	0.3003	0.2995	0.0690	0.0968	0.2225	0.2964	0.1534	0.1554	0.1223	0.0673	0.0848	0.0671	0.
17.	300.	0.2909	0.3141	0.3072	0.0695	0.0935	0.2338	0.3027	0.1504	0.1322	0.1070	0.0750	0.0791	0.0758	0.
17.	297.	0.3276	0.3276	0.3195	0.0716	0.0964	0.2511	0.3212	0.1351	0.1409	0.1133	0.0808	0.0810	0.0753	0.
17.	294.	0.3432	0.3527	0.3426	0.0865	0.1149	0.2693	0.3357	0.0986	0.1550	0.1327	0.0991	0.0962	0.0900	0.
17.	291.	0.3895	0.3919	0.3862	0.1433	0.1834	0.3175	0.3925	0.0834	0.1812	0.1781	0.1572	0.1564	0.1522	0.
17.	288.	0.4093	0.4174	0.4011	0.1786	0.2261	0.3516	0.4192	0.0650	0.1794	0.1950	0.1903	0.1931	0.1942	0.

Run	Point	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	CP129	CP130	CP131	CP132	CP133	CP
17.	303.	0.2963	0.3141	0.3514	0.3284	0.3416	-0.1293	-0.0954	-0.0969	-0.1502	-0.1018	-0.1444	-0.1244	-0.0057	0.
17.	300.	0.3040	0.3390	0.3609	0.3510	0.3419	-0.1351	-0.1327	-0.1287	-0.1369	-0.1333	-0.1417	-0.1151	0.0033	0.
17.	297.	0.3155	0.3418	0.3594	0.3359	0.3544	-0.1419	-0.1436	-0.1371	-0.1435	-0.1440	-0.1509	-0.1232	-0.0317	0.
17.	294.	0.3366	0.3540	0.3653	0.3401	0.3834	-0.1416	-0.1372	-0.1347	-0.1448	-0.1373	-0.1495	-0.1355	-0.0642	0.
17.	291.	0.3861	0.4021	0.4030	0.3778	0.4260	-0.1174	-0.1135	-0.1095	-0.1203	-0.1126	-0.1230	-0.1153	-0.0630	0.
17.	288.	0.4040	0.4082	0.4066	0.3914	0.4447	-0.1067	-0.1082	-0.1026	-0.1080	-0.1059	-0.1113	-0.1086	-0.0638	0.

Run	Point	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	CP147	CP148	CP149	CP150	CP
17.	303.	0.1056	0.1208	0.1089	0.1331	0.0878	0.1103	0.1759	0.1907	0.2689	0.2866	0.2674	0.3079	0.2867	0.
17.	300.	0.1145	0.1059	0.1172	0.1193	0.1091	0.1287	0.1700	0.2079	0.2688	0.2864	0.2813	0.3465	0.3287	0.
17.	297.	0.1211	0.1099	0.1131	0.1155	0.1066	0.1297	0.1774	0.2228	0.2773	0.2976	0.2998	0.3493	0.3366	0.
17.	294.	0.1417	0.1294	0.1270	0.1316	0.1191	0.1413	0.1929	0.2400	0.2982	0.3072	0.3224	0.3679	0.3558	0.
17.	291.	0.1872	0.1831	0.1818	0.1882	0.1841	0.2064	0.2562	0.2995	0.3502	0.3577	0.3816	0.4201	0.3998	0.
17.	288.	0.2073	0.2136	0.2193	0.2279	0.2286	0.2496	0.2912	0.3332	0.3698	0.3816	0.4053	0.4398	0.4188	0.

Run	Point	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	CP165
17.	303.	0.1255	0.1284	0.0953	0.1383	0.2937	0.2629	0.3307	0.5285	0.5263	0.4201	0.4030
17.	300.	0.1045	0.1490	0.1077	0.1154	0.2751	0.2693	0.3294	0.5096	0.5208	0.4034	0.4099
17.	297.	0.0759	0.1521	0.1095	0.1170	0.2857	0.3073	0.3437	0.5193	0.5036	0.4024	0.4166
17.	294.	0.0281	0.1669	0.1223	0.1331	0.2974	0.3188	0.3577	0.5168	0.5052	0.4135	0.4299
17.	291.	0.0138	0.1906	0.1798	0.2004	0.3385	0.3833	0.4033	0.5438	0.5286	0.4549	0.4732
17.	288.	-0.0024	0.1864	0.2133	0.2398	0.3650	0.4022	0.4217	0.5595	0.5412	0.4734	0.4965

Table VIII. Continued

(d) $A_{pv} = 1.74$ in^2; configuration 6d

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
16.	282.	0.20	2.21	24.99	25.70	0.70	100.7	0.8220	-0.2384	-0.2088	-0.1542	-0.1700	-0.1238	0.0218	-0
16.	279.	0.40	3.66	19.93	22.24	2.22	96.2	0.8643	-0.2921	-0.2227	-0.1806	-0.1768	-0.1453	-0.0116	-0
16.	276.	0.60	4.71	16.28	20.81	4.14	99.5	0.9640	-0.3367	-0.2551	-0.2120	-0.2020	-0.1676	-0.0205	-0
16.	273.	0.80	3.79	9.29	14.18	4.17	102.0	1.1128	-0.3631	-0.3011	-0.2507	-0.2338	-0.1880	-0.0251	-0
16.	270.	0.90	3.47	7.38	12.49	4.19	108.0	1.1972	-0.3969	-0.4052	-0.3948	-0.4177	-0.1638	0.0316	-0
16.	267.	0.95	3.38	6.60	11.81	4.17	102.9	1.2362	-0.2916	-0.3128	-0.3172	-0.3577	-0.3970	0.0360	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
16.	282.	-0.0492	-0.0344	-0.0096	0.0155	0.0038	-0.0161	-0.0042	-0.0006	-0.0164	-0.0289	-0.0398	-0.0141	-0.0096	0
16.	279.	-0.0510	-0.0409	-0.0312	-0.0229	-0.0220	-0.0247	-0.0217	-0.0210	-0.0272	-0.0396	-0.0369	-0.0355	-0.0441	-0
16.	276.	-0.0572	-0.0468	-0.0405	-0.0335	-0.0295	-0.0297	-0.0283	-0.0281	-0.0334	-0.0446	-0.0428	-0.0452	-0.0569	-0
16.	273.	-0.0438	-0.0339	-0.0245	-0.0172	-0.0147	-0.0149	-0.0133	-0.0137	-0.0198	-0.0279	-0.0310	-0.0332	-0.0454	-0
16.	270.	-0.0155	-0.0075	0.0002	0.0059	0.0078	0.0072	0.0081	0.0061	0.0009	-0.0063	-0.0089	-0.0112	-0.0214	-0
16.	267.	0.0513	0.0466	0.0376	0.0335	0.0310	0.0284	0.0252	0.0202	0.0131	0.0060	0.0007	-0.0037	-0.0135	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
16.	282.	0.0359	0.0172	0.0321	0.0212	-0.0019	0.0079	0.0247	-0.0105	-0.0591	-0.0926	-0.0655	-0.0495	0.0201	0
16.	279.	0.0268	0.0246	0.0300	0.0312	0.0241	0.0245	0.0191	-0.0111	-0.0638	-0.1033	-0.0933	-0.0433	-0.0021	0
16.	276.	0.0218	0.0223	0.0273	0.0306	0.0270	0.0262	0.0170	-0.0190	-0.0902	-0.1475	-0.1374	-0.0504	-0.0159	0
16.	273.	0.0335	0.0325	0.0386	0.0429	0.0399	0.0395	0.0279	-0.0196	-0.1377	-0.2720	-0.2575	-0.0425	-0.0228	0
16.	270.	0.0804	0.0927	0.1024	0.1109	0.1123	0.1166	0.1096	0.0669	-0.0515	-0.2310	-0.2024	-0.0214	-0.0098	0
16.	267.	0.1044	0.1265	0.1376	0.1483	0.1522	0.1576	0.1516	0.1124	-0.0016	-0.1890	-0.1965	-0.0149	-0.0107	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
16.	282.	-0.0946	-0.0761	-0.0968	-0.0837	-0.1296	-0.1010	-0.1253	-0.1443	-0.1097	-0.1546	-0.1718	-0.0542	-0.1168	-0
16.	279.	-0.1143	-0.1022	-0.1065	-0.1064	-0.1231	-0.1175	-0.1251	-0.1281	-0.1249	-0.1476	-0.1623	-0.0409	-0.1248	-0
16.	276.	-0.1283	-0.1172	-0.1235	-0.1249	-0.1350	-0.1311	-0.1382	-0.1390	-0.1373	-0.1576	-0.1668	-0.0435	-0.1472	-0
16.	273.	-0.1272	-0.1184	-0.1227	-0.1244	-0.1342	-0.1294	-0.1352	-0.1385	-0.1300	-0.1466	-0.1594	-0.0626	-0.1498	-0
16.	270.	-0.1025	-0.0955	-0.0979	-0.0987	-0.1071	-0.1031	-0.1081	-0.1104	-0.1026	-0.1165	-0.1277	0.0094	-0.1240	-0
16.	267.	-0.0951	-0.0887	-0.0904	-0.0920	-0.0984	-0.0960	-0.1000	-0.1022	-0.0957	-0.1064	-0.1179	0.0316	-0.1173	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	
16.	282.	0.0984	0.1067	0.0733	0.1318	0.0358	0.0457	0.1069	0.0967	0.1287	0.0993	0.1766	0.1146	0.1353	0
16.	279.	0.0858	0.1094	0.1021	0.1056	0.0706	0.0725	0.0853	0.0942	0.1183	0.1251	0.1614	0.1516	0.1377	0
16.	276.	0.0830	0.1051	0.0996	0.1001	0.0766	0.0734	0.0814	0.0946	0.1190	0.1316	0.1634	0.1683	0.1347	0
16.	273.	0.0621	0.0992	0.1086	0.1146	0.0899	0.0867	0.0956	0.1056	0.1340	0.1471	0.1805	0.1661	0.1683	0
16.	270.	0.0661	0.1110	0.1352	0.1547	0.1429	0.1458	0.1585	0.1744	0.2033	0.2131	0.2239	0.2163	0.2640	0
16.	267.	0.0546	0.1078	0.1431	0.1682	0.1686	0.1770	0.1912	0.2110	0.2376	0.2390	0.2440	0.2659	0.3023	0

Table VIII. Continued

(d) Concluded

Run	Point	CP97	CP98	CP99	CP104	CP105	CP106	CP107	CP111	CP112	CP113	CP114	CP115	CP116	CP
16.	282.	0.1887	0.1613	0.1568	0.0643	0.0989	0.1798	0.2283	0.1547	0.1787	0.0948	0.0687	0.0906	0.0642	0.
16.	279.	0.2082	0.1694	0.1252	0.0720	0.0986	0.1933	0.2457	0.1420	0.1524	0.0918	0.0816	0.0783	0.0769	0.
16.	276.	0.2348	0.1783	0.1486	0.0713	0.0992	0.2107	0.2586	0.1321	0.1514	0.0982	0.0861	0.0811	0.0774	0.
16.	273.	0.2457	0.2205	0.1745	0.0846	0.1176	0.2323	0.2650	0.0992	0.1618	0.1184	0.1041	0.0954	0.0927	0.
16.	270.	0.2961	0.2759	0.2485	0.1434	0.1854	0.2927	0.3202	0.0803	0.1782	0.1712	0.1605	0.1567	0.1568	0.
16.	267.	0.3238	0.3005	0.2877	0.1748	0.2218	0.3219	0.3492	0.0639	0.1779	0.1886	0.1887	0.1896	0.1939	0.

Run	Point	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	CP129	CP130	CP131	CP132	CP133	CP
16.	282.	0.2161	0.1975	0.2231	0.1702	0.2431	-0.1112	-0.0541	-0.0494	-0.1473	-0.0729	-0.1366	-0.1252	-0.0103	0.
16.	279.	0.2105	0.2066	0.2157	0.1894	0.2497	-0.1263	-0.1102	-0.0989	-0.1295	-0.1205	-0.1344	-0.1128	-0.0281	0.
16.	276.	0.2153	0.2139	0.2228	0.2182	0.2695	-0.1371	-0.1291	-0.1175	-0.1390	-0.1357	-0.1485	-0.1332	-0.0402	0.
16.	273.	0.2464	0.2369	0.2399	0.2281	0.2889	-0.1349	-0.1247	-0.1159	-0.1364	-0.1304	-0.1419	-0.1306	-0.0660	0.
16.	270.	0.3065	0.2965	0.2986	0.2840	0.3434	-0.1080	-0.0995	-0.0929	-0.1112	-0.1052	-0.1167	-0.1107	-0.0599	0.
16.	267.	0.3284	0.3155	0.3175	0.3134	0.3787	-0.0999	-0.0945	-0.0880	-0.1022	-0.0997	-0.1089	-0.1062	-0.0645	-0.

Run	Point	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	CP147	CP148	CP149	CP150	CP
16.	282.	0.1052	0.1433	0.0916	0.1232	0.0806	0.1169	0.1767	0.1570	0.2494	0.2385	0.2176	0.2100	0.2085	0.
16.	279.	0.1215	0.1262	0.1000	0.1089	0.0987	0.1350	0.1655	0.1858	0.2330	0.2433	0.2565	0.2414	0.2105	0.
16.	276.	0.1304	0.1223	0.1017	0.1059	0.0990	0.1403	0.1673	0.2007	0.2452	0.2526	0.2628	0.2614	0.2305	0.
16.	273.	0.1454	0.1374	0.1172	0.1191	0.1117	0.1497	0.1799	0.2140	0.2600	0.2690	0.2805	0.2771	0.2430	0.
16.	270.	0.1846	0.1871	0.1728	0.1791	0.1787	0.2118	0.2436	0.2739	0.3128	0.3173	0.3254	0.3323	0.3009	0.
16.	267.	0.2000	0.2119	0.2082	0.2135	0.2176	0.2465	0.2734	0.3011	0.3356	0.3444	0.3512	0.3562	0.3278	0.

Run	Point	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	CP165
16.	282.	0.1196	0.1305	0.0725	0.1620	0.2444	0.2522	0.2289	0.3361	0.3201	0.3211	0.2922
16.	279.	0.0964	0.1426	0.0967	0.1362	0.2273	0.2489	0.2194	0.3241	0.3270	0.3043	0.3167
16.	276.	0.0801	0.1498	0.0973	0.1326	0.2306	0.2643	0.2423	0.3455	0.3421	0.3106	0.3293
16.	273.	0.0313	0.1593	0.1081	0.1501	0.2401	0.2816	0.2582	0.3947	0.3625	0.3103	0.3336
16.	270.	0.0161	0.1794	0.1695	0.2148	0.2966	0.3240	0.3149	0.4639	0.4313	0.3708	0.3938
16.	267.	0.0031	0.1755	0.2004	0.2452	0.3235	0.3441	0.3399	0.5061	0.4704	0.3998	0.4277

Table VIII. Continued

(e) $A_{pv} = 2.32$ in^2; configuration 6e

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
15.	260.	0.20	2.22	25.00	25.71	0.70	98.8	0.8279	-0.2470	-0.2125	-0.1645	-0.1746	-0.1303	0.0149	-0
15.	257.	0.40	3.63	19.92	22.23	2.22	99.4	0.8545	-0.3014	-0.2311	-0.1899	-0.1841	-0.1529	-0.0193	-0
15.	254.	0.60	4.69	16.32	20.83	4.12	101.1	0.9648	-0.3393	-0.2562	-0.2138	-0.2033	-0.1690	-0.0223	-0
15.	251.	0.80	3.79	9.30	14.18	4.17	101.6	1.1152	-0.3623	-0.2994	-0.2501	-0.2319	-0.1863	-0.0234	-0
15.	248.	0.90	3.45	7.37	12.47	4.18	109.9	1.1982	-0.3984	-0.4067	-0.3944	-0.4179	-0.1525	0.0305	-0
15.	245.	0.95	3.35	6.61	11.82	4.18	107.4	1.2359	-0.2929	-0.3136	-0.3183	-0.3576	-0.3969	0.0359	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
15.	260.	-0.0545	-0.0513	-0.0276	-0.0047	-0.0115	-0.0344	-0.0203	-0.0153	-0.0329	-0.0566	-0.0535	-0.0232	-0.0209	-0
15.	257.	-0.0599	-0.0533	-0.0433	-0.0347	-0.0322	-0.0355	-0.0312	-0.0298	-0.0364	-0.0417	-0.0482	-0.0433	-0.0508	-0
15.	254.	-0.0588	-0.0505	-0.0423	-0.0357	-0.0318	-0.0323	-0.0294	-0.0285	-0.0333	-0.0421	-0.0443	-0.0427	-0.0524	-0
15.	251.	-0.0430	-0.0356	-0.0262	-0.0191	-0.0160	-0.0166	-0.0148	-0.0149	-0.0206	-0.0282	-0.0315	-0.0313	-0.0406	-0
15.	248.	-0.0164	-0.0100	-0.0021	0.0033	0.0061	0.0054	0.0063	0.0049	-0.0004	-0.0054	-0.0103	-0.0097	-0.0164	-0
15.	245.	0.0504	0.0444	0.0356	0.0314	0.0300	0.0267	0.0237	0.0189	0.0121	0.0027	0.0001	-0.0017	-0.0084	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
15.	260.	0.0168	0.0100	0.0233	0.0155	-0.0055	0.0043	0.0216	-0.0111	-0.0608	-0.0979	-0.0735	-0.0631	0.0014	0
15.	257.	0.0117	0.0128	0.0187	0.0196	0.0133	0.0159	0.0135	-0.0146	-0.0684	-0.1105	-0.1022	-0.0539	-0.0142	0
15.	254.	0.0147	0.0171	0.0221	0.0253	0.0222	0.0235	0.0175	-0.0151	-0.0866	-0.1460	-0.1357	-0.0516	-0.0185	0
15.	251.	0.0261	0.0274	0.0330	0.0369	0.0358	0.0385	0.0313	-0.0121	-0.1309	-0.2639	-0.2509	-0.0416	-0.0215	0
15.	248.	0.0714	0.0848	0.0942	0.1023	0.1056	0.1132	0.1118	0.0729	-0.0475	-0.2236	-0.1984	-0.0212	-0.0058	0
15.	245.	0.0958	0.1187	0.1298	0.1411	0.1474	0.1563	0.1557	0.1196	0.0029	-0.1818	-0.1847	-0.0133	-0.0039	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
15.	260.	-0.1129	-0.0941	-0.1158	-0.0974	-0.1439	-0.1079	-0.1303	-0.1502	-0.1216	-0.1491	-0.1650	-0.0565	-0.0881	-0
15.	257.	-0.1294	-0.1214	-0.1287	-0.1252	-0.1419	-0.1317	-0.1371	-0.1424	-0.1431	-0.1524	-0.1550	-0.0459	-0.1121	-0
15.	254.	-0.1337	-0.1242	-0.1287	-0.1305	-0.1405	-0.1401	-0.1440	-0.1440	-0.1508	-0.1600	-0.1595	-0.0470	-0.1306	-0
15.	251.	-0.1302	-0.1208	-0.1250	-0.1274	-0.1365	-0.1367	-0.1400	-0.1401	-0.1446	-0.1552	-0.1551	-0.0594	-0.1226	-0
15.	248.	-0.1068	-0.0978	-0.1021	-0.1041	-0.1130	-0.1123	-0.1163	-0.1184	-0.1128	-0.1301	-0.1296	0.0090	-0.1058	-0
15.	245.	-0.1016	-0.0946	-0.0981	-0.1009	-0.1070	-0.1083	-0.1108	-0.1111	-0.1082	-0.1223	-0.1256	0.0316	-0.0974	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	
15.	260.	0.0951	0.0979	0.0604	0.1225	0.0299	0.0402	0.0999	0.0812	0.1153	0.0831	0.0925	0.0798	0.1678	0
15.	257.	0.0739	0.0910	0.0842	0.0916	0.0586	0.0574	0.0725	0.0795	0.1056	0.1079	0.1114	0.0875	0.1465	0
15.	254.	0.0733	0.0937	0.0902	0.0938	0.0691	0.0652	0.0740	0.0837	0.1113	0.1207	0.1185	0.0965	0.1639	0
15.	251.	0.0563	0.0865	0.0969	0.1050	0.0816	0.0774	0.0863	0.0980	0.1273	0.1233	0.1069	0.1364	0.1879	0
15.	248.	0.0628	0.1040	0.1250	0.1420	0.1288	0.1313	0.1452	0.1642	0.1766	0.1534	0.2044	0.2313	0.2497	0
15.	245.	0.0611	0.1058	0.1363	0.1585	0.1560	0.1634	0.1790	0.1999	0.1943	0.2126	0.2533	0.2630	0.2762	0

Table VIII. Continued

(e) Concluded

Run	Point	CP97	CP98	CP99	CP104	CP105	CP106	CP107	CP111	CP112	CP113	CP114	CP115	CP116	CP
15.	260.	0.1995	0.2369	0.2614	0.0553	0.0866	0.1569	0.2513	0.1347	0.1432	0.1012	0.0539	0.0767	0.0503	0.
15.	257.	0.2187	0.2443	0.2402	0.0573	0.0825	0.1677	0.2512	0.1192	0.1288	0.1052	0.0628	0.0657	0.0581	0.
15.	254.	0.2473	0.2633	0.2479	0.0636	0.0899	0.1871	0.2715	0.1091	0.1267	0.1058	0.0733	0.0706	0.0667	0.
15.	251.	0.2725	0.2699	0.2870	0.0764	0.1067	0.2015	0.2934	0.0842	0.1327	0.1191	0.0886	0.0848	0.0785	0.
15.	248.	0.3301	0.3340	0.3402	0.1294	0.1729	0.2687	0.3466	0.0811	0.1597	0.1599	0.1407	0.1397	0.1371	0.
15.	245.	0.3551	0.3450	0.3672	0.1600	0.2084	0.3057	0.3750	0.0708	0.1659	0.1764	0.1679	0.1692	0.1730	0.

Run	Point	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	CP129	CP130	CP131	CP132	CP133	CP
15.	260.	0.1638	0.1820	0.2364	0.2419	0.3186	-0.1357	-0.0606	-0.0686	-0.1492	-0.0729	-0.1376	-0.1268	-0.0182	0.
15.	257.	0.1580	0.2029	0.2255	0.2530	0.3243	-0.1468	-0.1179	-0.1143	-0.1365	-0.1177	-0.1338	-0.1070	-0.0139	0.
15.	254.	0.1887	0.2299	0.2456	0.2725	0.3458	-0.1578	-0.1309	-0.1310	-0.1426	-0.1332	-0.1399	-0.1100	-0.0291	0.
15.	251.	0.2148	0.2468	0.2623	0.2935	0.3600	-0.1507	-0.1259	-0.1227	-0.1382	-0.1292	-0.1378	-0.1135	-0.0483	0.
15.	248.	0.2887	0.3135	0.3273	0.3517	0.4149	-0.1293	-0.1051	-0.1015	-0.1156	-0.1069	-0.1140	-0.0977	-0.0430	0.
15.	245.	0.3230	0.3429	0.3528	0.3770	0.4368	-0.1242	-0.1020	-0.0980	-0.1080	-0.1043	-0.1095	-0.0904	-0.0409	0.

Run	Point	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	CP147	CP148	CP149	CP150	CP
15.	260.	0.0946	0.1336	0.0858	0.1157	0.0793	0.0931	0.1577	0.1383	0.2280	0.2140	0.1843	0.2596	0.2712	0.
15.	257.	0.1076	0.1113	0.0900	0.1003	0.0924	0.1102	0.1504	0.1599	0.2137	0.2129	0.1870	0.2930	0.2631	0.
15.	254.	0.1292	0.1209	0.1053	0.1126	0.1087	0.1252	0.1607	0.1793	0.2286	0.2198	0.2132	0.3059	0.2811	0.
15.	251.	0.1335	0.1308	0.1129	0.1197	0.1167	0.1344	0.1705	0.1978	0.2288	0.2133	0.2337	0.3294	0.3029	0.
15.	248.	0.1688	0.1708	0.1605	0.1726	0.1730	0.1926	0.2261	0.2567	0.2662	0.2954	0.3216	0.3819	0.3564	0.
15.	245.	0.1803	0.1893	0.1885	0.2000	0.2061	0.2247	0.2565	0.2860	0.2954	0.3336	0.3510	0.4011	0.3742	0.

Run	Point	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	CP165
15.	260.	0.0945	0.1083	0.0596	0.1357	0.2018	0.2242	0.2918	0.4134	0.4048	0.3989	0.3656
15.	257.	0.0740	0.1097	0.0759	0.1180	0.2019	0.2134	0.2777	0.4130	0.4257	0.3733	0.3829
15.	254.	0.0604	0.1296	0.0911	0.1214	0.2016	0.2375	0.2986	0.4571	0.4479	0.3868	0.4031
15.	251.	0.0288	0.1358	0.1007	0.1347	0.1963	0.2654	0.3124	0.4802	0.4749	0.4028	0.4232
15.	248.	0.0237	0.1589	0.1524	0.1977	0.2577	0.3359	0.3684	0.5259	0.5091	0.4458	0.4662
15.	245.	0.0200	0.1648	0.1810	0.2295	0.3013	0.3590	0.3952	0.5507	0.5353	0.4709	0.4949

Table VIII. Continued

(f) $A_{pv} = 2.32$ in^2 (with plugs); configuration 6f

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
14.	240.	0.20	2.20	24.98	25.69	0.70	102.8	0.7987	-0.2656	-0.2337	-0.1795	-0.1965	-0.1452	-0.0026	-0
14.	237.	0.40	3.61	19.91	22.23	2.23	103.6	0.8683	-0.2885	-0.2175	-0.1763	-0.1717	-0.1402	-0.0070	-0
14.	234.	0.60	4.70	16.35	20.86	4.13	100.6	0.9600	-0.3406	-0.2566	-0.2139	-0.2030	-0.1687	-0.0226	-0
14.	231.	0.80	3.80	9.30	14.18	4.17	100.4	1.1152	-0.3660	-0.3010	-0.2518	-0.2332	-0.1884	-0.0256	-0
14.	228.	0.90	3.49	7.37	12.47	4.18	104.7	1.2000	-0.3975	-0.4089	-0.3938	-0.4188	-0.1550	0.0312	-0
14.	225.	0.95	3.37	6.61	11.82	4.18	104.0	1.2369	-0.2919	-0.3155	-0.3198	-0.3573	-0.3970	0.0370	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
14.	240.	-0.0772	-0.0746	-0.0467	-0.0195	-0.0316	-0.0584	-0.0444	-0.0396	-0.0612	-0.0637	-0.0897	-0.0586	-0.0629	-0
14.	237.	-0.0467	-0.0392	-0.0299	-0.0216	-0.0205	-0.0235	-0.0204	-0.0199	-0.0267	-0.0363	-0.0429	-0.0423	-0.0601	-0
14.	234.	-0.0591	-0.0506	-0.0432	-0.0366	-0.0330	-0.0330	-0.0311	-0.0312	-0.0369	-0.0488	-0.0520	-0.0561	-0.0770	-0
14.	231.	-0.0440	-0.0358	-0.0266	-0.0204	-0.0176	-0.0176	-0.0163	-0.0171	-0.0232	-0.0309	-0.0376	-0.0431	-0.0645	-0
14.	228.	-0.0160	-0.0093	-0.0016	0.0038	0.0061	0.0051	0.0058	0.0038	-0.0022	-0.0057	-0.0153	-0.0192	-0.0379	-0
14.	225.	0.0504	0.0449	0.0356	0.0312	0.0294	0.0260	0.0225	0.0173	0.0101	0.0058	-0.0046	-0.0110	-0.0288	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
14.	240.	-0.0060	-0.0164	0.0003	-0.0109	-0.0373	-0.0227	0.0003	-0.0374	-0.0914	-0.1306	-0.0993	-0.0977	-0.0018	0
14.	237.	0.0275	0.0290	0.0346	0.0370	0.0311	0.0346	0.0317	0.0010	-0.0576	-0.1038	-0.0953	-0.0462	0.0160	0
14.	234.	0.0168	0.0193	0.0251	0.0296	0.0287	0.0306	0.0235	-0.0119	-0.0896	-0.1560	-0.1476	-0.0576	-0.0006	0
14.	231.	0.0306	0.0308	0.0373	0.0435	0.0449	0.0485	0.0406	-0.0052	-0.1333	-0.2856	-0.2757	-0.0487	-0.0052	0
14.	228.	0.0797	0.0896	0.1001	0.1107	0.1168	0.1261	0.1249	0.0842	-0.0434	-0.2474	-0.2348	-0.0293	0.0082	0
14.	225.	0.1075	0.1249	0.1368	0.1496	0.1577	0.1680	0.1684	0.1313	0.0084	-0.2041	-0.2371	-0.0221	0.0049	0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP70	CP71	CP72	CP73	CP74	CP75	
14.	240.	-0.1609	-0.1416	-0.1726	-0.1436	-0.1979	-0.1524	-0.1828	-0.2145	-0.1644	-0.1956	-0.2223	-0.0902	-0.0870	-0
14.	237.	-0.1380	-0.1305	-0.1382	-0.1311	-0.1440	-0.1367	-0.1462	-0.1588	-0.1561	-0.1737	-0.1755	-0.0361	-0.0695	-0
14.	234.	-0.1565	-0.1497	-0.1532	-0.1494	-0.1558	-0.1554	-0.1629	-0.1707	-0.1718	-0.1851	-0.1798	-0.0452	-0.0919	-0
14.	231.	-0.1527	-0.1474	-0.1501	-0.1489	-0.1541	-0.1521	-0.1605	-0.1682	-0.1663	-0.1750	-0.1791	-0.0603	-0.1242	-0
14.	228.	-0.1279	-0.1229	-0.1272	-0.1244	-0.1299	-0.1274	-0.1353	-0.1455	-0.1426	-0.1481	-0.1550	0.0097	-0.1157	-0
14.	225.	-0.1222	-0.1180	-0.1208	-0.1210	-0.1227	-0.1205	-0.1271	-0.1382	-0.1363	-0.1405	-0.1439	0.0336	-0.1179	-0

Run	Point	CP80	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	
14.	240.	0.0929	0.0823	0.0321	0.0937	-0.0124	0.0045	0.0737	0.0615	0.0977	0.0463	0.0857	0.0675	0.1598	0
14.	237.	0.1340	0.1182	0.0990	0.1025	0.0651	0.0668	0.0835	0.0956	0.1251	0.1243	0.1035	0.1200	0.1843	0
14.	234.	0.1178	0.1139	0.0983	0.0919	0.0645	0.0609	0.0713	0.0848	0.1158	0.1232	0.0966	0.1211	0.1839	0
14.	231.	0.1216	0.1276	0.1161	0.1079	0.0812	0.0745	0.0831	0.1040	0.1366	0.1236	0.1079	0.1613	0.2122	0
14.	228.	0.1295	0.1561	0.1583	0.1596	0.1366	0.1327	0.1461	0.1699	0.1930	0.1496	0.2063	0.2491	0.2742	0
14.	225.	0.1199	0.1594	0.1770	0.1848	0.1721	0.1708	0.1830	0.2082	0.2122	0.2021	0.2553	0.2825	0.3024	0

Table VIII. Concluded

(f) Concluded

Run	Point	CP97	CP98	CP99	CP104	CP105	CP106	CP107	CP111	CP112	CP113	CP114	CP115	CP116	CP
14.	240.	0.2192	0.2457	0.2568	0.0221	0.0623	0.1482	0.2605	0.1356	0.1263	0.0800	0.0170	0.0499	0.0142	0.0
14.	237.	0.2762	0.2737	0.2364	0.0667	0.0973	0.2032	0.3053	0.1709	0.1392	0.1100	0.0671	0.0744	0.0704	0.1
14.	234.	0.3110	0.2978	0.2655	0.0596	0.0914	0.2077	0.3150	0.1711	0.1274	0.0981	0.0605	0.0643	0.0657	0.0
14.	231.	0.3320	0.3250	0.2903	0.0746	0.1112	0.2321	0.3471	0.1683	0.1522	0.1212	0.0809	0.0782	0.0767	0.1
14.	228.	0.3841	0.3825	0.3535	0.1326	0.1799	0.2993	0.4056	0.1649	0.1980	0.1773	0.1422	0.1386	0.1369	0.1
14.	225.	0.4108	0.4069	0.3826	0.1670	0.2175	0.3348	0.4350	0.1383	0.2118	0.2052	0.1805	0.1756	0.1759	0.2

Run	Point	CP121	CP122	CP123	CP124	CP125	CP126	CP127	CP128	CP129	CP130	CP131	CP132	CP133	CP
14.	240.	0.1684	0.2008	0.2522	0.2524	0.2756	-0.1641	-0.1042	-0.0642	-0.1890	-0.1008	-0.1742	-0.0792	0.1092	0.1
14.	237.	0.2120	0.2576	0.2834	0.3205	0.3230	-0.1401	-0.1340	-0.0851	-0.1374	-0.1244	-0.1351	-0.0335	0.1045	0.1
14.	234.	0.2215	0.2722	0.2927	0.3348	0.3418	-0.1606	-0.1598	-0.1136	-0.1542	-0.1506	-0.1613	-0.0738	0.0863	0.1
14.	231.	0.2602	0.2970	0.3172	0.3510	0.3640	-0.1576	-0.1556	-0.1197	-0.1517	-0.1481	-0.1573	-0.1024	0.0186	0.1
14.	228.	0.3373	0.3651	0.3791	0.4005	0.4031	-0.1312	-0.1296	-0.0980	-0.1283	-0.1250	-0.1364	-0.1019	-0.0041	0.0
14.	225.	0.3685	0.3938	0.4059	0.4248	0.4298	-0.1253	-0.1258	-0.0969	-0.1212	-0.1217	-0.1300	-0.1039	-0.0234	0.0

Run	Point	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	CP147	CP148	CP149	CP150	CP
14.	240.	0.0795	0.1192	0.0737	0.1131	0.0500	0.0725	0.1551	0.1333	0.2289	0.1993	0.1893	0.2472	0.2636	0.2
14.	237.	0.1367	0.1350	0.1198	0.1307	0.1207	0.1356	0.1793	0.1921	0.2551	0.2439	0.2371	0.3228	0.3118	0.3
14.	234.	0.1268	0.1231	0.1114	0.1165	0.1123	0.1279	0.1713	0.2012	0.2513	0.2385	0.2510	0.3441	0.3321	0.3
14.	231.	0.1487	0.1336	0.1181	0.1239	0.1256	0.1469	0.1878	0.2331	0.2352	0.2647	0.3102	0.3622	0.3507	0.3
14.	228.	0.1992	0.1876	0.1731	0.1804	0.1849	0.2073	0.2474	0.2885	0.2905	0.3459	0.3756	0.4172	0.4049	0.4
14.	225.	0.2244	0.2165	0.2021	0.2115	0.2203	0.2420	0.2778	0.3136	0.3255	0.3838	0.4066	0.4407	0.4270	0.4

Run	Point	CP155	CP156	CP157	CP158	CP159	CP160	CP161	CP162	CP163	CP164	CP165
14.	240.	0.1781	0.0723	0.0309	0.1271	0.1918	0.2394	0.2987	0.3871	0.3837	0.3440	0.3053
14.	237.	0.1961	0.1246	0.0924	0.1359	0.2227	0.2751	0.3398	0.4074	0.4096	0.3513	0.3529
14.	234.	0.1823	0.1227	0.0898	0.1245	0.2069	0.2874	0.3565	0.4254	0.4376	0.3572	0.3695
14.	231.	0.1256	0.1546	0.1066	0.1448	0.2113	0.3142	0.3658	0.4472	0.4472	0.3721	0.3883
14.	228.	0.1010	0.2037	0.1600	0.2108	0.2994	0.3834	0.4157	0.4960	0.4915	0.4206	0.4374
14.	225.	0.0716	0.2211	0.1916	0.2453	0.3340	0.4103	0.4405	0.5294	0.5146	0.4490	0.4667

Table IX. Pressure Coefficients for Cavity Models With Lip Vents

[Floor taped; $l = 32.16$ in.; $h = 4.80$ in.]

(a) $a_F = 0.00$ in.; $a_R = 0.00$ in.; configuration 7a

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
26.	316.	0.20	2.04	22.97	23.62	0.65	100.6	0.8725	-0.2313	-0.1997	-0.1801	-0.1628	-0.1268	-0.1034
26.	313.	0.40	3.62	19.91	22.23	2.23	101.6	0.9089	-0.2528	-0.2075	-0.1918	-0.1666	-0.1402	-0.1051
26.	310.	0.60	4.69	16.36	20.86	4.11	100.8	0.9911	-0.2810	-0.2294	-0.2123	-0.1834	-0.1538	-0.1111
26.	307.	0.80	3.80	9.31	14.18	4.16	100.7	1.1261	-0.3069	-0.2788	-0.2550	-0.2225	-0.1831	-0.1266
26.	304.	0.90	3.51	7.36	12.46	4.18	101.3	1.2032	-0.3555	-0.3504	-0.3750	-0.3468	-0.2182	-0.0988
26.	301.	0.95	3.38	6.60	11.80	4.17	102.1	1.2372	-0.2536	-0.2866	-0.3166	-0.3281	-0.3603	-0.3690

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
26.	316.	-0.0540	-0.0395	-0.0331	-0.0344	-0.0299	-0.0331	-0.0220	-0.0104	-0.0201	-0.0039	0.0063	-0.0026	-0.0120
26.	313.	-0.0514	-0.0456	-0.0369	-0.0317	-0.0277	-0.0250	-0.0211	-0.0167	-0.0177	-0.0140	-0.0109	-0.0126	-0.0156
26.	310.	-0.0506	-0.0457	-0.0365	-0.0304	-0.0265	-0.0231	-0.0196	-0.0161	-0.0167	-0.0144	-0.0128	-0.0134	-0.0182
26.	307.	-0.0437	-0.0377	-0.0275	-0.0216	-0.0177	-0.0140	-0.0125	-0.0113	-0.0123	-0.0117	-0.0120	-0.0137	-0.0163
26.	304.	-0.0173	-0.0101	-0.0034	0.0010	0.0049	0.0063	0.0072	0.0084	0.0058	0.0104	0.0110	0.0083	0.0060
26.	301.	0.0417	0.0376	0.0312	0.0294	0.0289	0.0274	0.0241	0.0214	0.0171	0.0176	0.0155	0.0109	0.0085

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
26.	316.	-0.0195	-0.0274	0.0023	-0.0153	-0.0045	-0.0244	-0.0166	0.0053	0.0027	-0.0019	-0.0352	-0.0538	-0.0482
26.	313.	-0.0348	-0.0347	-0.0133	-0.0164	-0.0149	-0.0182	0.0061	0.0446	0.0340	0.0030	-0.0510	-0.0974	-0.0995
26.	310.	-0.0533	-0.0581	-0.0161	-0.0195	-0.0186	-0.0170	0.0234	0.0725	0.0514	-0.0018	-0.0750	-0.1386	-0.1478
26.	307.	-0.1576	-0.1755	-0.0154	-0.0197	-0.0202	-0.0226	0.0208	0.0755	0.0500	-0.0133	-0.1058	-0.2024	-0.2228
26.	304.	-0.0801	-0.0998	0.0069	0.0035	0.0101	-0.0019	0.0377	0.1014	0.0880	0.0397	-0.0439	-0.1353	-0.1613
26.	301.	-0.0297	-0.0462	0.0086	0.0100	0.0187	0.0076	0.0470	0.1121	0.1052	0.0659	-0.0111	-0.1024	-0.1302

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76
26.	316.	-0.0003	-0.0121	-0.0203	-0.0224	-0.0237	-0.0144	-0.0092	-0.0025	0.0019	0.0039	0.0114	-0.0096	-0.0309
26.	313.	-0.0126	-0.0156	0.0026	-0.0240	-0.0434	-0.0123	-0.0144	-0.0160	-0.0147	-0.0216	-0.0228	-0.0263	-0.0271
26.	310.	-0.0143	-0.0197	0.0211	-0.0424	-0.0702	-0.0355	-0.0381	-0.0403	-0.0427	-0.0386	-0.0365	-0.0478	-0.0658
26.	307.	-0.0144	-0.0207	0.0206	-0.0610	-0.1370	-0.0239	-0.0263	-0.0329	-0.0329	-0.0321	-0.0375	-0.0458	-0.0517
26.	304.	0.0079	0.0058	0.0338	-0.0002	-0.0611	-0.0017	-0.0026	-0.0032	-0.0060	-0.0055	-0.0062	-0.0106	-0.0134
26.	301.	0.0096	0.0158	0.0451	0.0298	-0.0160	0.0120	0.0110	0.0079	0.0061	0.0043	0.0053	0.0036	-0.0022

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93
26.	316.	-0.0363	0.0022	0.0315	0.0351	0.0375	-0.0133	-0.0126	0.0143	0.0396	0.1131	0.3446	-0.0121	-0.0651
26.	313.	-0.0229	0.0079	0.0664	0.1049	0.1043	0.0933	0.0746	0.0827	0.0944	0.1756	0.4143	-0.0180	-0.0621
26.	310.	-0.0184	0.0429	0.1220	0.1543	0.1619	0.1341	0.1236	0.1107	0.1354	0.2628	0.5186	-0.0370	-0.0703
26.	307.	-0.0019	0.0376	0.0855	0.1352	0.1553	0.1091	0.0811	0.0567	0.1000	0.3103	0.5391	-0.0311	-0.0437
26.	304.	0.0070	0.0417	0.0963	0.1404	0.1624	0.1430	0.1080	0.0889	0.1139	0.2799	0.5064	-0.0040	-0.0277
26.	301.	0.0122	0.0507	0.0934	0.1331	0.1704	0.1482	0.1221	0.0995	0.1133	0.2531	0.4868	0.0083	-0.0177

Table IX. Continued

(a) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
26.	316.	0.0104	-0.0034	-0.0117	-0.0203	-0.0057	0.0244	-0.0058	-0.0205	-0.0095	-0.0062	-0.0168	-0.0204	-0.0173	-0.
26.	313.	-0.0130	-0.0217	-0.0366	-0.0611	0.0447	0.1210	-0.0219	-0.0301	-0.0289	-0.0312	-0.0347	-0.0350	-0.0366	-0.
26.	310.	-0.0264	-0.0343	-0.0594	-0.0467	0.1037	0.1272	-0.0322	-0.0361	-0.0381	-0.0407	-0.0435	-0.0461	-0.0486	-0.
26.	307.	-0.0260	-0.0317	-0.0535	-0.0443	0.0867	0.0973	-0.0304	-0.0353	-0.0378	-0.0391	-0.0410	-0.0424	-0.0448	-0.
26.	304.	0.0109	0.0026	-0.0169	-0.0170	0.0998	0.1283	0.0025	-0.0040	-0.0037	-0.0036	-0.0082	-0.0109	-0.0107	-0.
26.	301.	0.0210	0.0134	-0.0038	-0.0086	0.0929	0.1441	0.0141	0.0092	0.0081	0.0081	0.0037	0.0021	0.0010	-0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
26.	316.	-0.0252	-0.0268	-0.0313	-0.0430	-0.0452	-0.0306	-0.0385	-0.0387	-0.0439	-0.0213	-0.0240	-0.0137	0.0112	0.
26.	313.	-0.0533	-0.0537	-0.0632	-0.0544	-0.0446	-0.0171	0.0014	0.0259	0.0387	0.0651	0.0927	0.1122	0.1238	0.
26.	310.	-0.0756	-0.0726	-0.0772	-0.0639	-0.0296	0.0059	0.0377	0.0733	0.1067	0.1422	0.1618	0.1989	0.2197	0.
26.	307.	-0.0705	-0.0685	-0.0743	-0.0565	-0.0262	0.0007	0.0290	0.0609	0.0923	0.1279	0.1521	0.1919	0.2181	0.
26.	304.	-0.0308	-0.0301	-0.0352	-0.0275	-0.0024	0.0214	0.0382	0.0620	0.0849	0.1203	0.1386	0.1708	0.2005	0.
26.	301.	-0.0209	-0.0191	-0.0236	-0.0137	0.0081	0.0257	0.0397	0.0617	0.0812	0.1067	0.1276	0.1652	0.1883	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
26.	316.	0.3937	-0.0124	0.0059	-0.0166	0.0008	-0.0098	-0.0169	-0.0093	-0.0026	-0.0052	-0.0117	-0.0118	-0.0102	-0.
26.	313.	0.4436	0.0009	0.0054	0.0005	0.0036	0.0007	-0.0010	0.0006	0.0015	0.0003	-0.0011	-0.0005	-0.0003	0.
26.	310.	0.5442	0.0275	0.0290	0.0265	0.0285	0.0278	0.0278	0.0289	0.0291	0.0271	0.0258	0.0260	0.0258	0.
26.	307.	0.6323	0.0306	0.0317	0.0299	0.0312	0.0308	0.0300	0.0312	0.0317	0.0312	0.0306	0.0305	0.0301	0.
26.	304.	0.5909	0.0471	0.0489	0.0455	0.0503	0.0483	0.0469	0.0468	0.0505	0.0511	0.0495	0.0474	0.0481	0.
26.	301.	0.5744	0.0543	0.0554	0.0524	0.0562	0.0551	0.0541	0.0536	0.0565	0.0567	0.0551	0.0540	0.0545	0.

Run	Point	CP151	CP152	CP153	CP154
26.	316.	-0.0167	-0.0147	-0.0023	-0.0072
26.	313.	-0.0011	-0.0010	0.0022	0.0015
26.	310.	0.0252	0.0248	0.0277	0.0273
26.	307.	0.0316	0.0304	0.0329	0.0328
26.	304.	0.0446	0.0446	0.0482	0.0473
26.	301.	0.0520	0.0524	0.0547	0.0540

Table IX. Continued

(b) $a_F = 0.15$ in.; $a_R = 0.15$ in.; configuration 7b

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
24.	272.	0.20	2.03	22.96	23.61	0.64	100.8	0.8811	-0.2227	-0.1897	-0.1740	-0.1540	-0.1235	-0.0956	-0
24.	269.	0.40	3.61	19.92	22.23	2.22	102.0	0.9097	-0.2497	-0.2049	-0.1892	-0.1643	-0.1397	-0.1021	-0
24.	266.	0.60	4.70	16.30	20.82	4.13	99.9	0.9918	-0.2812	-0.2290	-0.2110	-0.1834	-0.1548	-0.1103	-0
24.	263.	0.80	3.80	9.29	14.18	4.18	101.1	1.1268	-0.3075	-0.2776	-0.2545	-0.2257	-0.1832	-0.1279	-0
24.	260.	0.90	3.53	7.35	12.47	4.19	100.0	1.2024	-0.3540	-0.3476	-0.3734	-0.3487	-0.2273	-0.0930	-0
24.	257.	0.95	3.40	6.61	11.81	4.17	100.1	1.2363	-0.2549	-0.2843	-0.3146	-0.3271	-0.3630	-0.3707	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
24.	272.	-0.0391	-0.0349	-0.0253	-0.0229	-0.0145	-0.0135	-0.0095	-0.0111	-0.0070	-0.0032	0.0014	-0.0019	-0.0072	-0
24.	269.	-0.0471	-0.0438	-0.0341	-0.0289	-0.0238	-0.0204	-0.0175	-0.0177	-0.0153	-0.0154	-0.0138	-0.0131	-0.0143	-0
24.	266.	-0.0484	-0.0431	-0.0332	-0.0272	-0.0232	-0.0195	-0.0179	-0.0175	-0.0163	-0.0163	-0.0171	-0.0183	-0.0192	-0
24.	263.	-0.0444	-0.0362	-0.0279	-0.0233	-0.0189	-0.0174	-0.0148	-0.0124	-0.0142	-0.0100	-0.0093	-0.0117	-0.0147	-0
24.	260.	-0.0153	-0.0090	-0.0014	0.0035	0.0076	0.0088	0.0096	0.0097	0.0075	0.0092	0.0094	0.0075	0.0073	-0
24.	257.	0.0436	0.0387	0.0323	0.0297	0.0291	0.0272	0.0249	0.0222	0.0175	0.0164	0.0144	0.0118	0.0107	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
24.	272.	-0.0176	-0.0238	-0.0010	-0.0038	-0.0012	-0.0074	0.0036	0.0354	0.0412	0.0231	-0.0124	-0.0524	-0.0627	-0
24.	269.	-0.0289	-0.0318	-0.0151	-0.0132	-0.0136	-0.0122	0.0054	0.0390	0.0322	0.0030	-0.0406	-0.0845	-0.0915	-0
24.	266.	-0.0592	-0.0585	-0.0177	-0.0186	-0.0177	-0.0180	0.0093	0.0547	0.0428	-0.0001	-0.0633	-0.1220	-0.1312	-0
24.	263.	-0.1627	-0.1806	-0.0118	-0.0200	-0.0189	-0.0254	0.0153	0.0635	0.0460	-0.0112	-0.1021	-0.1924	-0.2158	-0
24.	260.	-0.0745	-0.0944	0.0065	0.0071	0.0112	0.0002	0.0256	0.0798	0.0738	0.0392	-0.0306	-0.1120	-0.1339	-0
24.	257.	-0.0269	-0.0434	0.0091	0.0112	0.0182	0.0076	0.0380	0.0935	0.0900	0.0596	-0.0052	-0.0865	-0.1097	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76	
24.	272.	-0.0013	-0.0036	0.0048	-0.0074	-0.0200	-0.0007	-0.0050	-0.0090	-0.0006	-0.0026	-0.0074	-0.0217	-0.0192	-0
24.	269.	-0.0131	-0.0127	0.0045	-0.0201	-0.0400	-0.0116	-0.0136	-0.0199	-0.0193	-0.0210	-0.0232	-0.0282	-0.0339	-0
24.	266.	-0.0166	-0.0186	0.0088	-0.0318	-0.0646	-0.0179	-0.0203	-0.0249	-0.0237	-0.0302	-0.0404	-0.0437	-0.0376	-0
24.	263.	-0.0116	-0.0218	0.0128	-0.0561	-0.1338	-0.0221	-0.0225	-0.0260	-0.0250	-0.0295	-0.0297	-0.0340	-0.0403	-0
24.	260.	0.0075	0.0086	0.0230	0.0056	-0.0521	0.0077	0.0066	0.0048	0.0059	0.0040	0.0033	0.0008	-0.0066	-0
24.	257.	0.0099	0.0174	0.0346	0.0287	-0.0112	0.0202	0.0195	0.0152	0.0160	0.0132	0.0128	0.0085	0.0031	0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
24.	272.	-0.0338	-0.0256	0.0195	0.0907	0.0812	0.1062	0.1209	0.1225	0.0929	0.1104	0.3897	-0.0057	-0.0404	0
24.	269.	-0.0435	0.0008	0.0582	0.0922	0.0997	0.0916	0.0815	0.0582	0.0676	0.1568	0.4009	-0.0184	-0.0468	0
24.	266.	-0.0232	0.0168	0.0797	0.1254	0.1016	0.0878	0.0849	0.0783	0.0822	0.1948	0.4487	-0.0241	-0.0639	0
24.	263.	-0.0164	0.0248	0.0786	0.1177	0.1357	0.1207	0.1028	0.0831	0.0936	0.2432	0.5192	-0.0268	-0.0570	0
24.	260.	-0.0031	0.0248	0.0734	0.1159	0.1262	0.1200	0.1046	0.0871	0.0962	0.2076	0.4446	0.0039	-0.0235	0
24.	257.	0.0091	0.0369	0.0782	0.1142	0.1283	0.1226	0.1065	0.0841	0.0869	0.2040	0.4344	0.0150	-0.0149	0

Table IX. Continued

(b) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
24.	272.	0.0056	-0.0010	-0.0141	-0.0197	0.0418	0.1065	0.0003	-0.0059	-0.0106	-0.0133	-0.0200	-0.0163	-0.0194	-0.
24.	269.	-0.0126	-0.0192	-0.0305	-0.0561	0.0701	0.0973	-0.0156	-0.0193	-0.0215	-0.0245	-0.0274	-0.0282	-0.0324	-0.
24.	266.	-0.0203	-0.0259	-0.0444	-0.0564	0.0676	0.1139	-0.0257	-0.0313	-0.0346	-0.0364	-0.0389	-0.0405	-0.0427	-0.
24.	263.	-0.0216	-0.0291	-0.0509	-0.0433	0.0704	0.1092	-0.0273	-0.0331	-0.0327	-0.0337	-0.0369	-0.0401	-0.0410	-0.
24.	260.	0.0137	0.0073	-0.0074	-0.0189	0.0713	0.1174	0.0085	0.0037	0.0037	0.0021	-0.0004	-0.0021	-0.0020	-0.
24.	257.	0.0232	0.0176	0.0012	-0.0067	0.0776	0.1201	0.0174	0.0125	0.0126	0.0109	0.0098	0.0083	0.0081	0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
24.	272.	-0.0408	-0.0458	-0.0536	-0.0432	-0.0334	-0.0220	-0.0086	-0.0046	0.0089	0.0360	0.0583	0.0844	0.0959	0.
24.	269.	-0.0503	-0.0538	-0.0605	-0.0512	-0.0370	-0.0259	-0.0103	0.0031	0.0252	0.0464	0.0695	0.1015	0.1118	0.
24.	266.	-0.0566	-0.0557	-0.0646	-0.0534	-0.0313	-0.0081	0.0141	0.0380	0.0564	0.0729	0.0999	0.1363	0.1490	0.
24.	263.	-0.0647	-0.0678	-0.0742	-0.0626	-0.0355	-0.0104	0.0085	0.0319	0.0528	0.0860	0.1124	0.1522	0.1846	0.
24.	260.	-0.0211	-0.0253	-0.0318	-0.0285	-0.0189	-0.0056	0.0060	0.0236	0.0365	0.0575	0.0752	0.1076	0.1216	0.
24.	257.	-0.0115	-0.0145	-0.0211	-0.0164	-0.0052	0.0098	0.0229	0.0409	0.0588	0.0826	0.0976	0.1235	0.1388	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
24.	272.	0.4056	0.0443	0.0449	0.0460	0.0464	0.0491	0.0458	0.0467	0.0465	0.0415	0.0408	0.0429	0.0448	0.
24.	269.	0.4469	0.0287	0.0291	0.0308	0.0283	0.0311	0.0318	0.0328	0.0322	0.0307	0.0299	0.0314	0.0312	0.
24.	266.	0.4853	0.0238	0.0269	0.0286	0.0292	0.0295	0.0288	0.0280	0.0271	0.0261	0.0258	0.0268	0.0273	0.
24.	263.	0.5609	0.0272	0.0321	0.0298	0.0342	0.0319	0.0323	0.0319	0.0341	0.0336	0.0327	0.0323	0.0345	0.
24.	260.	0.4825	0.0653	0.0698	0.0681	0.0711	0.0698	0.0704	0.0692	0.0701	0.0694	0.0693	0.0689	0.0701	0.
24.	257.	0.5065	0.0770	0.0798	0.0781	0.0808	0.0795	0.0789	0.0782	0.0788	0.0793	0.0795	0.0798	0.0813	0.

Run	Point	CP151	CP152	CP153	CP154
24.	272.	0.0484	0.0553	0.0563	0.0599
24.	269.	0.0275	0.0307	0.0314	0.0316
24.	266.	0.0291	0.0309	0.0319	0.0346
24.	263.	0.0291	0.0313	0.0358	0.0353
24.	260.	0.0660	0.0689	0.0712	0.0711
24.	257.	0.0785	0.0807	0.0826	0.0831

Table IX. Continued

(c) $a_F = 0.15$ in.; $a_R = 0.30$ in.; configuration 7c

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
25.	294.	0.20	2.04	22.97	23.61	0.64	97.3	0.8838	-0.2253	-0.1904	-0.1754	-0.1541	-0.1287	-0.0987
25.	291.	0.40	3.63	19.87	22.21	2.25	102.4	0.9101	-0.2485	-0.2038	-0.1891	-0.1642	-0.1395	-0.1024
25.	288.	0.60	4.69	16.34	20.85	4.12	101.1	0.9935	-0.2804	-0.2288	-0.2112	-0.1830	-0.1542	-0.1103
25.	285.	0.80	3.81	9.31	14.19	4.17	99.2	1.1262	-0.3063	-0.2767	-0.2522	-0.2227	-0.1812	-0.1259
25.	282.	0.90	3.53	7.35	12.47	4.19	100.4	1.2032	-0.3552	-0.3481	-0.3732	-0.3471	-0.2127	-0.0933
25.	279.	0.95	3.40	6.60	11.80	4.17	100.5	1.2373	-0.2533	-0.2840	-0.3136	-0.3254	-0.3614	-0.3687

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
25.	294.	-0.0452	-0.0372	-0.0274	-0.0228	-0.0202	-0.0164	-0.0109	-0.0104	-0.0113	-0.0075	-0.0002	-0.0064	-0.0043
25.	291.	-0.0480	-0.0433	-0.0341	-0.0285	-0.0255	-0.0217	-0.0179	-0.0161	-0.0159	-0.0145	-0.0118	-0.0125	-0.0124
25.	288.	-0.0485	-0.0441	-0.0347	-0.0293	-0.0257	-0.0217	-0.0194	-0.0171	-0.0162	-0.0148	-0.0135	-0.0140	-0.0143
25.	285.	-0.0439	-0.0354	-0.0276	-0.0221	-0.0165	-0.0143	-0.0126	-0.0107	-0.0124	-0.0085	-0.0078	-0.0113	-0.0130
25.	282.	-0.0161	-0.0087	-0.0016	0.0030	0.0075	0.0086	0.0088	0.0095	0.0081	0.0103	0.0108	0.0084	0.0084
25.	279.	0.0442	0.0389	0.0323	0.0297	0.0293	0.0278	0.0248	0.0230	0.0192	0.0183	0.0163	0.0121	0.0107

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
25.	294.	-0.0132	-0.0160	-0.0042	-0.0048	-0.0052	-0.0060	0.0109	0.0476	0.0387	0.0165	-0.0325	-0.0751	-0.0757
25.	291.	-0.0334	-0.0341	-0.0133	-0.0127	-0.0140	-0.0136	0.0061	0.0412	0.0321	0.0016	-0.0465	-0.0893	-0.0943
25.	288.	-0.0554	-0.0568	-0.0157	-0.0165	-0.0171	-0.0178	0.0085	0.0514	0.0427	0.0056	-0.0575	-0.1180	-0.1312
25.	285.	-0.1586	-0.1744	-0.0109	-0.0182	-0.0190	-0.0250	0.0156	0.0656	0.0499	-0.0074	-0.0977	-0.1911	-0.2130
25.	282.	-0.0767	-0.0947	0.0079	0.0062	0.0081	-0.0008	0.0279	0.0833	0.0787	0.0436	-0.0269	-0.1158	-0.1398
25.	279.	-0.0262	-0.0421	0.0102	0.0121	0.0164	0.0062	0.0359	0.0919	0.0923	0.0643	0.0029	-0.0818	-0.1074

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76
25.	294.	-0.0021	-0.0056	0.0087	-0.0084	-0.0299	-0.0083	-0.0061	-0.0117	-0.0099	-0.0078	-0.0079	-0.0221	-0.0334
25.	291.	-0.0119	-0.0144	0.0027	-0.0225	-0.0425	-0.0153	-0.0166	-0.0218	-0.0179	-0.0177	-0.0205	-0.0269	-0.0399
25.	288.	-0.0134	-0.0182	0.0068	-0.0272	-0.0630	-0.0175	-0.0188	-0.0245	-0.0284	-0.0330	-0.0360	-0.0399	-0.0426
25.	285.	-0.0108	-0.0219	0.0136	-0.0524	-0.1306	-0.0263	-0.0273	-0.0290	-0.0278	-0.0283	-0.0292	-0.0372	-0.0468
25.	282.	0.0084	0.0063	0.0248	0.0104	-0.0522	0.0070	0.0062	0.0041	0.0051	0.0055	0.0032	-0.0018	-0.0067
25.	279.	0.0104	0.0150	0.0347	0.0352	-0.0100	0.0139	0.0125	0.0111	0.0101	0.0098	0.0063	0.0008	-0.0011

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93
25.	294.	-0.0547	-0.0107	0.0738	0.1169	0.1466	0.1455	0.1100	0.1004	0.0892	0.1777	0.4002	-0.0119	-0.0777
25.	291.	-0.0513	-0.0185	0.0563	0.0994	0.1141	0.1014	0.0884	0.0792	0.0980	0.1751	0.4158	-0.0199	-0.0550
25.	288.	-0.0177	0.0216	0.0706	0.1122	0.1589	0.1552	0.1322	0.1024	0.1268	0.2299	0.4639	-0.0288	-0.0462
25.	285.	-0.0186	0.0211	0.0776	0.1243	0.1326	0.0968	0.0752	0.0589	0.0869	0.2471	0.4837	-0.0291	-0.0555
25.	282.	-0.0033	0.0279	0.0747	0.1133	0.1375	0.1284	0.1087	0.0856	0.0944	0.2030	0.4274	0.0045	-0.0318
25.	279.	0.0133	0.0398	0.0723	0.1058	0.1392	0.1371	0.1253	0.1183	0.1175	0.2170	0.4166	0.0095	-0.0146

Table IX. Continued

(c) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
25.	294.	-0.0040	-0.0085	-0.0285	-0.0464	0.0410	0.1276	-0.0112	-0.0111	-0.0171	-0.0151	-0.0200	-0.0212	-0.0276	-0.
25.	291.	-0.0153	-0.0192	-0.0340	-0.0489	0.0533	0.1013	-0.0195	-0.0233	-0.0274	-0.0291	-0.0308	-0.0330	-0.0366	-0.
25.	288.	-0.0235	-0.0296	-0.0492	-0.0516	0.0635	0.1361	-0.0289	-0.0320	-0.0351	-0.0366	-0.0388	-0.0400	-0.0426	-0.
25.	285.	-0.0233	-0.0302	-0.0518	-0.0427	0.0725	0.1012	-0.0291	-0.0349	-0.0354	-0.0359	-0.0396	-0.0420	-0.0435	-0.
25.	282.	0.0100	0.0042	-0.0106	-0.0184	0.0706	0.1249	0.0060	0.0011	0.0011	0.0007	-0.0028	-0.0046	-0.0060	-0.
25.	279.	0.0197	0.0142	-0.0013	-0.0084	0.0755	0.1281	0.0155	0.0114	0.0109	0.0100	0.0081	0.0062	0.0040	0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
25.	294.	-0.0426	-0.0416	-0.0471	-0.0454	-0.0447	-0.0389	-0.0172	0.0004	0.0261	0.0667	0.0817	0.1246	0.1450	0.
25.	291.	-0.0501	-0.0523	-0.0633	-0.0609	-0.0434	-0.0315	-0.0164	0.0096	0.0307	0.0444	0.0659	0.1086	0.1361	0.
25.	288.	-0.0685	-0.0676	-0.0780	-0.0679	-0.0490	-0.0312	-0.0136	0.0175	0.0576	0.0930	0.1197	0.1602	0.1930	0.
25.	285.	-0.0673	-0.0663	-0.0740	-0.0604	-0.0345	-0.0074	0.0144	0.0413	0.0659	0.0931	0.1169	0.1582	0.1785	0.
25.	282.	-0.0257	-0.0274	-0.0349	-0.0306	-0.0186	-0.0026	0.0103	0.0283	0.0488	0.0707	0.0901	0.1252	0.1478	0.
25.	279.	-0.0165	-0.0165	-0.0222	-0.0155	-0.0021	0.0105	0.0233	0.0390	0.0582	0.0815	0.0975	0.1352	0.1544	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
25.	294.	0.4433	0.1160	0.1236	0.1273	0.1222	0.1239	0.1228	0.1206	0.1147	0.1161	0.1163	0.1105	0.1116	0.
25.	291.	0.4060	0.1119	0.1123	0.1120	0.1095	0.1104	0.1112	0.1124	0.1117	0.1114	0.1091	0.1041	0.1032	0.
25.	288.	0.4612	0.1008	0.1050	0.1062	0.1063	0.1062	0.1072	0.1074	0.1065	0.1046	0.1048	0.1033	0.1057	0.
25.	285.	0.5774	0.1225	0.1263	0.1250	0.1268	0.1230	0.1234	0.1230	0.1244	0.1258	0.1272	0.1251	0.1273	0.
25.	282.	0.5008	0.1539	0.1586	0.1577	0.1604	0.1587	0.1609	0.1606	0.1617	0.1599	0.1590	0.1561	0.1573	0.
25.	279.	0.4968	0.1634	0.1680	0.1678	0.1691	0.1672	0.1683	0.1694	0.1713	0.1730	0.1727	0.1704	0.1723	0.

Run	Point	CP151	CP152	CP153	CP154
25.	294.	0.1157	0.1250	0.1283	0.1317
25.	291.	0.1088	0.1208	0.1205	0.1181
25.	288.	0.1085	0.1156	0.1182	0.1207
25.	285.	0.1269	0.1337	0.1405	0.1401
25.	282.	0.1555	0.1639	0.1677	0.1683
25.	279.	0.1713	0.1810	0.1819	0.1830

Table IX. Continued

(d) $a_F = 0.30$ in.; $a_R = 0.30$ in.; configuration 7d

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
23.	248.	0.20	2.03	22.96	23.61	0.64	99.1	0.8723	-0.2275	-0.1957	-0.1772	-0.1534	-0.1289	-0.0978	-0
23.	245.	0.40	3.63	19.91	22.23	2.23	99.8	0.9050	-0.2498	-0.2054	-0.1902	-0.1645	-0.1397	-0.1029	-0
23.	242.	0.60	4.69	16.33	20.85	4.14	102.0	0.9922	-0.2816	-0.2294	-0.2119	-0.1852	-0.1554	-0.1117	-0
23.	239.	0.80	3.79	9.30	14.18	4.17	101.4	1.1269	-0.3078	-0.2770	-0.2528	-0.2222	-0.1821	-0.1253	-0
23.	236.	0.90	3.51	7.35	12.47	4.19	102.0	1.2035	-0.3600	-0.3606	-0.3759	-0.3473	-0.2156	-0.0924	-0
23.	233.	0.95	3.39	6.62	11.83	4.18	102.3	1.2385	-0.2588	-0.2875	-0.3141	-0.3258	-0.3631	-0.3686	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
23.	248.	-0.0410	-0.0383	-0.0302	-0.0234	-0.0195	-0.0196	-0.0144	-0.0161	-0.0128	-0.0101	-0.0075	-0.0082	-0.0112	-0
23.	245.	-0.0471	-0.0437	-0.0348	-0.0296	-0.0264	-0.0235	-0.0205	-0.0192	-0.0169	-0.0148	-0.0134	-0.0120	-0.0145	-0
23.	242.	-0.0486	-0.0425	-0.0330	-0.0281	-0.0253	-0.0218	-0.0193	-0.0192	-0.0192	-0.0170	-0.0152	-0.0157	-0.0129	-0
23.	239.	-0.0419	-0.0358	-0.0254	-0.0198	-0.0167	-0.0135	-0.0113	-0.0097	-0.0111	-0.0098	-0.0098	-0.0112	-0.0108	-0
23.	236.	-0.0134	-0.0088	0.0004	0.0049	0.0081	0.0111	0.0119	0.0114	0.0099	0.0112	0.0114	0.0107	0.0102	-0
23.	233.	0.0464	0.0402	0.0345	0.0315	0.0299	0.0288	0.0265	0.0228	0.0188	0.0177	0.0151	0.0133	0.0118	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
23.	248.	-0.0271	-0.0227	-0.0085	-0.0107	-0.0061	-0.0045	0.0113	0.0525	0.0446	0.0177	-0.0295	-0.0733	-0.0847	-0
23.	245.	-0.0285	-0.0308	-0.0147	-0.0143	-0.0126	-0.0125	0.0039	0.0420	0.0325	0.0001	-0.0476	-0.0894	-0.0948	-0
23.	242.	-0.0553	-0.0568	-0.0156	-0.0176	-0.0151	-0.0189	0.0062	0.0492	0.0390	0.0014	-0.0635	-0.1211	-0.1302	-0
23.	239.	-0.1572	-0.1752	-0.0126	-0.0150	-0.0159	-0.0212	0.0101	0.0569	0.0426	-0.0084	-0.0940	-0.1831	-0.2058	-0
23.	236.	-0.0746	-0.0937	0.0079	0.0094	0.0110	0.0033	0.0250	0.0770	0.0725	0.0399	-0.0290	-0.1127	-0.1339	-0
23.	233.	-0.0248	-0.0412	0.0094	0.0133	0.0187	0.0096	0.0358	0.0912	0.0903	0.0617	-0.0015	-0.0859	-0.1098	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76	
23.	248.	-0.0068	-0.0048	0.0107	-0.0110	-0.0303	-0.0165	-0.0195	-0.0166	-0.0185	-0.0165	-0.0248	-0.0222	-0.0300	-0
23.	245.	-0.0125	-0.0125	0.0004	-0.0204	-0.0389	-0.0182	-0.0216	-0.0233	-0.0266	-0.0278	-0.0317	-0.0356	-0.0361	-0
23.	242.	-0.0143	-0.0172	0.0032	-0.0291	-0.0610	-0.0168	-0.0179	-0.0215	-0.0188	-0.0261	-0.0345	-0.0394	-0.0322	-0
23.	239.	-0.0110	-0.0177	0.0087	-0.0496	-0.1288	-0.0211	-0.0234	-0.0269	-0.0252	-0.0312	-0.0338	-0.0376	-0.0433	-0
23.	236.	0.0095	0.0100	0.0235	0.0075	-0.0494	0.0131	0.0128	0.0108	0.0112	0.0087	0.0078	0.0044	-0.0036	-0
23.	233.	0.0106	0.0174	0.0329	0.0327	-0.0093	0.0177	0.0164	0.0137	0.0133	0.0102	0.0115	0.0100	0.0058	0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
23.	248.	-0.0099	-0.0067	0.0488	0.1274	0.1341	0.1335	0.1159	0.1171	0.1030	0.1904	0.3949	-0.0171	-0.0270	0
23.	245.	-0.0450	0.0131	0.0538	0.1025	0.1449	0.0988	0.0792	0.0494	0.0436	0.1535	0.3986	-0.0208	-0.0612	0
23.	242.	-0.0300	-0.0006	0.0531	0.1077	0.1265	0.1003	0.0805	0.0561	0.0786	0.1808	0.4055	-0.0227	-0.0632	0
23.	239.	-0.0119	0.0208	0.0603	0.0980	0.1324	0.1089	0.0884	0.0830	0.1014	0.2546	0.4996	-0.0264	-0.0428	0
23.	236.	-0.0058	0.0250	0.0586	0.0968	0.1155	0.1067	0.0919	0.0787	0.0766	0.1657	0.3944	0.0113	-0.0243	0
23.	233.	0.0102	0.0356	0.0710	0.1044	0.1357	0.1259	0.1114	0.0937	0.0926	0.2123	0.4388	0.0136	-0.0140	0

Table IX. Continued

(d) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
23.	248.	-0.0140	-0.0140	-0.0333	-0.0450	0.0712	0.1219	-0.0156	-0.0162	-0.0216	-0.0215	-0.0252	-0.0237	-0.0275	-0.
23.	245.	-0.0170	-0.0188	-0.0321	-0.0479	0.0311	0.0988	-0.0174	-0.0217	-0.0234	-0.0247	-0.0279	-0.0294	-0.0332	-0.
23.	242.	-0.0206	-0.0262	-0.0378	-0.0605	0.0584	0.1092	-0.0250	-0.0298	-0.0314	-0.0326	-0.0363	-0.0378	-0.0372	-0.
23.	239.	-0.0230	-0.0276	-0.0450	-0.0435	0.0553	0.1028	-0.0262	-0.0287	-0.0308	-0.0320	-0.0349	-0.0375	-0.0385	-0.
23.	236.	0.0119	0.0082	-0.0042	-0.0195	0.0578	0.1087	0.0092	0.0064	0.0050	0.0038	0.0020	0.0007	-0.0011	-0.
23.	233.	0.0209	0.0169	0.0046	-0.0091	0.0666	0.1246	0.0181	0.0155	0.0138	0.0125	0.0110	0.0098	0.0085	0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
23.	248.	-0.0463	-0.0505	-0.0613	-0.0631	-0.0524	-0.0272	0.0001	0.0268	0.0615	0.0841	0.1034	0.1480	0.1591	0.
23.	245.	-0.0474	-0.0519	-0.0623	-0.0607	-0.0490	-0.0426	-0.0319	-0.0176	0.0032	0.0357	0.0642	0.1149	0.1388	0.
23.	242.	-0.0565	-0.0627	-0.0744	-0.0613	-0.0496	-0.0304	-0.0161	0.0078	0.0346	0.0728	0.1011	0.1383	0.1606	0.
23.	239.	-0.0622	-0.0640	-0.0727	-0.0583	-0.0382	-0.0151	0.0070	0.0293	0.0580	0.0875	0.1087	0.1583	0.1745	0.
23.	236.	-0.0187	-0.0219	-0.0304	-0.0254	-0.0195	-0.0083	0.0054	0.0217	0.0386	0.0603	0.0816	0.1139	0.1315	0.
23.	233.	-0.0085	-0.0109	-0.0181	-0.0121	-0.0042	0.0060	0.0201	0.0408	0.0569	0.0814	0.0966	0.1358	0.1551	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
23.	248.	0.4682	0.0524	0.0544	0.0598	0.0568	0.0566	0.0576	0.0547	0.0556	0.0567	0.0550	0.0536	0.0528	0.
23.	245.	0.4470	0.0526	0.0588	0.0612	0.0626	0.0633	0.0647	0.0616	0.0597	0.0588	0.0575	0.0540	0.0539	0.
23.	242.	0.5231	0.0510	0.0581	0.0572	0.0576	0.0555	0.0539	0.0530	0.0517	0.0504	0.0508	0.0507	0.0508	0.
23.	239.	0.5518	0.0536	0.0613	0.0613	0.0633	0.0629	0.0656	0.0658	0.0658	0.0641	0.0631	0.0607	0.0600	0.
23.	236.	0.5140	0.0900	0.0963	0.0962	0.0961	0.0959	0.0978	0.0982	0.0978	0.0940	0.0938	0.0934	0.0952	0.
23.	233.	0.5197	0.1017	0.1089	0.1087	0.1094	0.1089	0.1099	0.1113	0.1122	0.1128	0.1133	0.1128	0.1146	0.

Run	Point	CP151	CP152	CP153	CP154
23.	248.	0.0610	0.0666	0.0694	0.0710
23.	245.	0.0482	0.0551	0.0558	0.0561
23.	242.	0.0542	0.0654	0.0680	0.0720
23.	239.	0.0644	0.0756	0.0777	0.0787
23.	236.	0.1008	0.1135	0.1123	0.1138
23.	233.	0.1154	0.1260	0.1269	0.1307

Table IX. Continued

(e) $a_F = 0.50$ in.; $a_R = 0.50$ in.; configuration 7e

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
22.	226.	0.20	2.04	22.96	23.61	0.65	100.2	0.8756	-0.2132	-0.1834	-0.1746	-0.1558	-0.1188	-0.0990	-0
22.	223.	0.40	3.63	19.90	22.24	2.24	101.5	0.9071	-0.2522	-0.2033	-0.1896	-0.1654	-0.1376	-0.1029	-0
22.	220.	0.60	4.68	16.30	20.82	4.13	101.9	0.9933	-0.2850	-0.2291	-0.2126	-0.1849	-0.1551	-0.1121	-0
22.	217.	0.80	3.79	9.30	14.18	4.17	102.0	1.1244	-0.3077	-0.2769	-0.2538	-0.2228	-0.1823	-0.1260	-0
22.	214.	0.90	3.52	7.35	12.47	4.19	101.6	1.2001	-0.3621	-0.3628	-0.3785	-0.3477	-0.2136	-0.0929	-0
22.	211.	0.95	3.39	6.61	11.82	4.18	101.5	1.2350	-0.2609	-0.2891	-0.3157	-0.3257	-0.3620	-0.3675	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
22.	226.	-0.0445	-0.0317	-0.0243	-0.0223	-0.0197	-0.0241	-0.0145	-0.0040	-0.0133	0.0003	0.0104	0.0006	-0.0027	-0
22.	223.	-0.0482	-0.0411	-0.0329	-0.0284	-0.0257	-0.0241	-0.0203	-0.0160	-0.0177	-0.0136	-0.0099	-0.0110	-0.0122	-0
22.	220.	-0.0498	-0.0432	-0.0341	-0.0278	-0.0238	-0.0208	-0.0178	-0.0165	-0.0178	-0.0161	-0.0149	-0.0152	-0.0140	-0
22.	217.	-0.0427	-0.0358	-0.0264	-0.0202	-0.0156	-0.0132	-0.0112	-0.0096	-0.0112	-0.0093	-0.0088	-0.0098	-0.0121	-0
22.	214.	-0.0173	-0.0099	-0.0041	0.0004	0.0048	0.0058	0.0076	0.0074	0.0048	0.0106	0.0119	0.0090	0.0059	-0
22.	211.	0.0438	0.0382	0.0304	0.0281	0.0275	0.0271	0.0246	0.0209	0.0168	0.0171	0.0155	0.0134	0.0111	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
22.	226.	-0.0190	-0.0211	0.0052	-0.0111	-0.0020	-0.0113	0.0060	0.0410	0.0488	0.0241	-0.0370	-0.0674	-0.0728	-0
22.	223.	-0.0345	-0.0355	-0.0110	-0.0155	-0.0123	-0.0126	-0.0003	0.0381	0.0399	0.0119	-0.0419	-0.0889	-0.0974	-0
22.	220.	-0.0567	-0.0582	-0.0157	-0.0187	-0.0179	-0.0175	0.0038	0.0487	0.0438	0.0044	-0.0653	-0.1261	-0.1358	-0
22.	217.	-0.1605	-0.1767	-0.0124	-0.0168	-0.0199	-0.0200	0.0150	0.0582	0.0502	-0.0056	-0.1009	-0.1978	-0.2195	-0
22.	214.	-0.0764	-0.0971	0.0084	0.0039	0.0078	-0.0021	0.0235	0.0699	0.0723	0.0394	-0.0339	-0.1146	-0.1401	-0
22.	211.	-0.0281	-0.0454	0.0100	0.0112	0.0159	0.0084	0.0409	0.0894	0.0943	0.0636	-0.0066	-0.0941	-0.1240	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76	
22.	226.	0.0059	-0.0019	-0.0033	-0.0098	-0.0231	-0.0228	-0.0144	-0.0144	-0.0068	-0.0122	-0.0108	-0.0178	-0.0222	-0
22.	223.	-0.0097	-0.0113	-0.0046	-0.0172	-0.0388	-0.0221	-0.0205	-0.0215	-0.0179	-0.0246	-0.0289	-0.0269	-0.0357	-0
22.	220.	-0.0139	-0.0157	-0.0005	-0.0304	-0.0631	-0.0262	-0.0274	-0.0284	-0.0259	-0.0290	-0.0329	-0.0351	-0.0383	-0
22.	217.	-0.0109	-0.0197	0.0134	-0.0517	-0.1309	-0.0258	-0.0282	-0.0352	-0.0334	-0.0374	-0.0386	-0.0427	-0.0448	-0
22.	214.	0.0091	0.0039	0.0191	0.0037	-0.0476	0.0025	0.0035	0.0044	0.0035	0.0051	0.0066	0.0024	-0.0059	-0
22.	211.	0.0112	0.0137	0.0383	0.0315	-0.0102	0.0159	0.0156	0.0139	0.0135	0.0143	0.0142	0.0108	0.0061	0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
22.	226.	-0.0467	-0.0237	0.0549	0.1133	0.1348	0.1123	0.1131	0.0627	0.0961	0.1582	0.3219	-0.0211	-0.0789	0
22.	223.	-0.0457	-0.0077	0.0421	0.0865	0.1135	0.1314	0.1244	0.0991	0.0777	0.1480	0.3811	-0.0246	-0.0633	0
22.	220.	-0.0456	-0.0126	0.0543	0.1084	0.1361	0.1277	0.1051	0.0775	0.0730	0.2049	0.4456	-0.0270	-0.0827	0
22.	217.	-0.0140	0.0142	0.0516	0.0902	0.1264	0.1012	0.0824	0.0749	0.1195	0.2742	0.5065	-0.0355	-0.0531	0
22.	214.	-0.0087	0.0236	0.0619	0.0908	0.1161	0.1100	0.0922	0.0784	0.0868	0.1952	0.4185	0.0037	-0.0325	0
22.	211.	0.0092	0.0303	0.0658	0.1014	0.1231	0.1254	0.1156	0.1050	0.1070	0.2287	0.4178	0.0143	-0.0146	0

Table IX. Concluded

(e) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
22.	226.	0.0000	-0.0099	-0.0196	-0.0523	0.0295	0.1173	-0.0138	-0.0185	-0.0177	-0.0118	-0.0219	-0.0219	-0.0176	-0.
22.	223.	-0.0159	-0.0205	-0.0322	-0.0401	0.0261	0.1279	-0.0202	-0.0234	-0.0227	-0.0219	-0.0257	-0.0271	-0.0290	-0.
22.	220.	-0.0233	-0.0290	-0.0437	-0.0603	0.0479	0.1182	-0.0260	-0.0284	-0.0291	-0.0299	-0.0317	-0.0338	-0.0356	-0.
22.	217.	-0.0277	-0.0331	-0.0501	-0.0446	0.0493	0.1069	-0.0302	-0.0338	-0.0354	-0.0358	-0.0383	-0.0388	-0.0411	-0.
22.	214.	0.0111	0.0038	-0.0056	-0.0199	0.0549	0.1093	0.0033	-0.0034	0.0000	0.0008	-0.0019	-0.0054	-0.0049	-0.
22.	211.	0.0183	0.0129	-0.0001	-0.0080	0.0648	0.1316	0.0142	0.0095	0.0103	0.0099	0.0083	0.0055	0.0045	0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
22.	226.	-0.0325	-0.0465	-0.0462	-0.0440	-0.0424	-0.0324	-0.0254	-0.0271	0.0123	0.0276	0.0713	0.0974	0.1106	0.
22.	223.	-0.0497	-0.0587	-0.0571	-0.0665	-0.0722	-0.0590	-0.0371	-0.0314	0.0110	0.0076	0.0537	0.1086	0.1300	0.
22.	220.	-0.0570	-0.0675	-0.0645	-0.0695	-0.0683	-0.0561	-0.0363	-0.0233	0.0291	0.0356	0.0732	0.1152	0.1357	0.
22.	217.	-0.0701	-0.0815	-0.0743	-0.0727	-0.0516	-0.0340	-0.0046	0.0166	0.0613	0.0761	0.1239	0.1907	0.2158	0.
22.	214.	-0.0242	-0.0304	-0.0301	-0.0383	-0.0350	-0.0208	-0.0130	-0.0010	0.0292	0.0423	0.0792	0.1169	0.1372	0.
22.	211.	-0.0169	-0.0241	-0.0206	-0.0238	-0.0180	-0.0055	0.0052	0.0154	0.0466	0.0585	0.1014	0.1503	0.1770	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
22.	226.	0.4231	0.0693	0.0847	0.0916	0.0798	0.0677	0.0775	0.0745	0.0757	0.0801	0.0710	0.0821	0.0941	0.
22.	223.	0.4448	0.0567	0.0775	0.0804	0.0784	0.0777	0.0834	0.0839	0.0851	0.0807	0.0762	0.0778	0.0810	0.
22.	220.	0.4849	0.0556	0.0748	0.0774	0.0763	0.0749	0.0786	0.0783	0.0788	0.0805	0.0814	0.0854	0.0924	0.
22.	217.	0.6070	0.0687	0.0860	0.0873	0.0866	0.0841	0.0858	0.0854	0.0858	0.0863	0.0884	0.0911	0.0944	0.
22.	214.	0.5211	0.0980	0.1183	0.1121	0.1190	0.1151	0.1149	0.1146	0.1195	0.1191	0.1196	0.1168	0.1201	0.
22.	211.	0.5801	0.1081	0.1247	0.1212	0.1244	0.1220	0.1227	0.1220	0.1250	0.1246	0.1268	0.1267	0.1295	0.

Run	Point	CP151	CP152	CP153	CP154
22.	226.	0.0826	0.1239	0.1280	0.1230
22.	223.	0.0867	0.1105	0.1225	0.1214
22.	220.	0.1016	0.1298	0.1293	0.1334
22.	217.	0.0982	0.1193	0.1302	0.1341
22.	214.	0.1263	0.1542	0.1605	0.1631
22.	211.	0.1353	0.1616	0.1654	0.1704

Table X. Pressure Coefficients for Cavity Models With Lip Vents

[Porous floor; $l = 32.16$ in.; $h = 4.80$ in.]

(a) $a_F = 0.00$ in.; $a_R = 0.00$ in.; configuration 8a

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
28.	345.	0.20	2.06	22.95	23.61	0.65	98.2	0.8657	-0.2190	-0.1897	-0.1739	-0.1591	-0.1204	-0.0979
28.	342.	0.40	3.62	19.93	22.24	2.21	101.0	0.9082	-0.2474	-0.2039	-0.1887	-0.1656	-0.1377	-0.1024
28.	339.	0.60	4.69	16.33	20.84	4.13	101.5	0.9940	-0.2775	-0.2272	-0.2097	-0.1829	-0.1529	-0.1098
28.	336.	0.80	3.80	9.30	14.18	4.17	100.6	1.1255	-0.3030	-0.2761	-0.2515	-0.2212	-0.1803	-0.1242
28.	333.	0.90	3.53	7.35	12.48	4.20	100.3	1.2031	-0.3551	-0.3395	-0.3733	-0.3517	-0.2274	-0.0910
28.	330.	0.95	3.40	6.60	11.81	4.18	100.2	1.2374	-0.2543	-0.2804	-0.3136	-0.3274	-0.3617	-0.3696

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
28.	345.	-0.0462	-0.0370	-0.0283	-0.0291	-0.0230	-0.0277	-0.0223	-0.0097	-0.0127	-0.0017	0.0092	0.0009	-0.0044
28.	342.	-0.0482	-0.0423	-0.0339	-0.0291	-0.0240	-0.0222	-0.0194	-0.0148	-0.0150	-0.0118	-0.0081	-0.0101	-0.0125
28.	339.	-0.0473	-0.0421	-0.0325	-0.0268	-0.0215	-0.0187	-0.0167	-0.0153	-0.0154	-0.0139	-0.0125	-0.0130	-0.0153
28.	336.	-0.0410	-0.0353	-0.0251	-0.0195	-0.0149	-0.0118	-0.0100	-0.0082	-0.0086	-0.0079	-0.0080	-0.0093	-0.0116
28.	333.	-0.0164	-0.0091	-0.0013	0.0028	0.0074	0.0077	0.0083	0.0082	0.0054	0.0088	0.0097	0.0079	0.0059
28.	330.	0.0456	0.0409	0.0337	0.0302	0.0295	0.0269	0.0243	0.0212	0.0166	0.0170	0.0149	0.0118	0.0093

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
28.	345.	-0.0178	-0.0239	0.0036	-0.0131	0.0001	-0.0166	-0.0065	-0.0028	0.0015	-0.0002	-0.0189	-0.0294	-0.0337
28.	342.	-0.0303	-0.0318	-0.0112	-0.0147	-0.0093	-0.0100	0.0024	0.0350	0.0365	0.0131	-0.0410	-0.0889	-0.0949
28.	339.	-0.0527	-0.0535	-0.0144	-0.0175	-0.0126	-0.0099	0.0058	0.0409	0.0399	0.0052	-0.0622	-0.1217	-0.1303
28.	336.	-0.1533	-0.1712	-0.0121	-0.0169	-0.0143	-0.0109	0.0155	0.0426	0.0464	0.0025	-0.0944	-0.1915	-0.2138
28.	333.	-0.0741	-0.0933	0.0070	0.0040	0.0128	0.0056	0.0204	0.0628	0.0693	0.0444	-0.0264	-0.1074	-0.1305
28.	330.	-0.0242	-0.0415	0.0087	0.0084	0.0202	0.0143	0.0332	0.0747	0.0842	0.0646	-0.0008	-0.0812	-0.1034

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76
28.	345.	0.0005	-0.0100	-0.0114	-0.0055	-0.0221	-0.0167	-0.0105	-0.0060	0.0008	-0.0060	0.0084	0.0002	-0.0184
28.	342.	-0.0103	-0.0104	0.0000	-0.0152	-0.0410	-0.0258	-0.0250	-0.0242	-0.0241	-0.0249	-0.0290	-0.0284	-0.0331
28.	339.	-0.0133	-0.0124	0.0040	-0.0299	-0.0605	-0.0362	-0.0377	-0.0369	-0.0362	-0.0353	-0.0324	-0.0303	-0.0446
28.	336.	-0.0115	-0.0145	0.0142	-0.0435	-0.1293	-0.0283	-0.0292	-0.0315	-0.0307	-0.0307	-0.0335	-0.0367	-0.0357
28.	333.	0.0080	0.0104	0.0176	0.0105	-0.0499	0.0079	0.0096	0.0105	0.0100	0.0083	0.0050	0.0022	-0.0051
28.	330.	0.0104	0.0187	0.0303	0.0323	-0.0072	0.0198	0.0201	0.0187	0.0174	0.0166	0.0145	0.0119	0.0060

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93
28.	345.	-0.0012	-0.0028	0.0142	0.0091	-0.0179	0.0022	0.0182	0.0341	0.0671	0.0804	0.2502	-0.0133	-0.0276
28.	342.	-0.0422	-0.0439	0.0050	0.0533	0.0954	0.1110	0.1013	0.0721	0.0688	0.2019	0.4537	-0.0282	-0.0493
28.	339.	-0.0462	-0.0234	0.0166	0.0651	0.1048	0.0996	0.0630	0.0287	0.0760	0.2227	0.4973	-0.0352	-0.0606
28.	336.	-0.0185	0.0047	0.0288	0.0510	0.0963	0.1180	0.1007	0.0831	0.1200	0.2952	0.5372	-0.0308	-0.0403
28.	333.	0.0020	0.0175	0.0455	0.0725	0.1028	0.1155	0.0997	0.0829	0.0951	0.2332	0.4717	0.0061	-0.0114
28.	330.	0.0123	0.0291	0.0548	0.0725	0.1113	0.1342	0.1267	0.0997	0.0956	0.2260	0.4784	0.0174	-0.0010

Table X. Continued

(a) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
28.	345.	0.0054	-0.0012	-0.0046	0.0043	-0.0131	0.0205	-0.0040	-0.0072	-0.0060	-0.0062	-0.0106	-0.0158	-0.0095	-0.
28.	342.	-0.0198	-0.0238	-0.0340	-0.0575	0.0056	0.1161	-0.0336	-0.0302	-0.0306	-0.0305	-0.0315	-0.0319	-0.0305	-0.
28.	339.	-0.0247	-0.0273	-0.0314	-0.0451	0.0182	0.0995	-0.0434	-0.0360	-0.0370	-0.0371	-0.0373	-0.0377	-0.0368	-0.
28.	336.	-0.0302	-0.0315	-0.0414	-0.0324	0.0248	0.0978	-0.0442	-0.0369	-0.0383	-0.0390	-0.0400	-0.0409	-0.0416	-0.
28.	333.	0.0072	0.0017	-0.0036	-0.0033	0.0397	0.1143	-0.0023	-0.0023	0.0005	0.0017	-0.0019	-0.0031	-0.0023	-0.
28.	330.	0.0168	0.0115	0.0070	0.0101	0.0413	0.1188	0.0080	0.0092	0.0107	0.0111	0.0083	0.0077	0.0084	0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
28.	345.	-0.0077	-0.0129	-0.0144	-0.0163	-0.0246	-0.0169	-0.0221	-0.0202	-0.0310	-0.0278	-0.0222	-0.0210	-0.0127	-0.
28.	342.	-0.0262	-0.0287	-0.0318	-0.0360	-0.0394	-0.0295	-0.0233	-0.0038	0.0098	0.0274	0.0546	0.0987	0.1295	0.
28.	339.	-0.0328	-0.0324	-0.0329	-0.0342	-0.0303	-0.0200	-0.0090	0.0040	0.0270	0.0493	0.0780	0.1261	0.1527	0.
28.	336.	-0.0408	-0.0383	-0.0347	-0.0299	-0.0114	-0.0011	0.0118	0.0287	0.0477	0.0772	0.1027	0.1541	0.1850	0.
28.	333.	-0.0065	-0.0060	-0.0063	-0.0087	-0.0016	0.0075	0.0111	0.0200	0.0295	0.0499	0.0729	0.1011	0.1262	0.
28.	330.	0.0065	0.0066	0.0066	0.0041	0.0100	0.0178	0.0233	0.0274	0.0321	0.0489	0.0650	0.0934	0.1090	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
28.	345.	0.3061	0.0061	0.0126	0.0089	-0.0026	-0.0002	-0.0023	-0.0037	-0.0007	-0.0031	-0.0090	-0.0051	-0.0058	-0.
28.	342.	0.5198	0.0288	0.0184	0.0194	0.0110	0.0054	-0.0006	-0.0116	-0.0217	-0.0328	-0.0307	-0.0201	0.0041	0.
28.	339.	0.5476	0.0417	0.0208	0.0238	0.0204	0.0138	0.0059	-0.0053	-0.0159	-0.0256	-0.0268	-0.0201	0.0025	0.
28.	336.	0.5963	0.0519	0.0196	0.0243	0.0248	0.0183	0.0084	-0.0038	-0.0121	-0.0168	-0.0124	-0.0048	0.0165	0.
28.	333.	0.5440	0.0468	0.0399	0.0365	0.0391	0.0324	0.0251	0.0168	0.0114	0.0045	0.0038	0.0028	0.0165	0.
28.	330.	0.5125	0.0519	0.0444	0.0413	0.0440	0.0380	0.0313	0.0244	0.0195	0.0124	0.0106	0.0090	0.0204	0.

Run	Point	CP151	CP152	CP153	CP154
28.	345.	0.0435	0.0440	0.0463	0.0462
28.	342.	0.1388	0.1222	0.1230	0.1210
28.	339.	0.1883	0.1738	0.1797	0.1797
28.	336.	0.1642	0.1638	0.1831	0.1924
28.	333.	0.1286	0.1128	0.1270	0.1276
28.	330.	0.1378	0.1272	0.1435	0.1422

Table X. Continued

(b) $a_F = 0.30$ in.; $a_R = 0.00$ in.; configuration 8b

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
29.	367.	0.20	2.05	22.95	23.61	0.65	99.6	0.8806	-0.2291	-0.1961	-0.1785	-0.1638	-0.1267	-0.1018
29.	364.	0.40	3.61	19.92	22.23	2.22	102.2	0.9073	-0.2482	-0.2035	-0.1878	-0.1644	-0.1374	-0.1012
29.	361.	0.60	4.69	16.34	20.86	4.13	101.7	0.9933	-0.2789	-0.2281	-0.2105	-0.1833	-0.1542	-0.1103
29.	358.	0.80	3.80	9.31	14.18	4.16	100.1	1.1254	-0.3042	-0.2765	-0.2520	-0.2210	-0.1816	-0.1249
29.	355.	0.90	3.53	7.36	12.47	4.19	100.4	1.2010	-0.3578	-0.3365	-0.3700	-0.3527	-0.1997	-0.0948
29.	352.	0.95	3.40	6.62	11.83	4.18	100.7	1.2363	-0.2569	-0.2801	-0.3139	-0.3292	-0.3630	-0.3705

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
29.	367.	-0.0521	-0.0369	-0.0309	-0.0296	-0.0248	-0.0280	-0.0222	-0.0117	-0.0213	0.0005	0.0138	0.0013	-0.0096
29.	364.	-0.0485	-0.0419	-0.0333	-0.0289	-0.0253	-0.0226	-0.0198	-0.0164	-0.0184	-0.0127	-0.0089	-0.0113	-0.0162
29.	361.	-0.0499	-0.0442	-0.0352	-0.0289	-0.0231	-0.0197	-0.0169	-0.0142	-0.0159	-0.0137	-0.0122	-0.0132	-0.0163
29.	358.	-0.0433	-0.0375	-0.0271	-0.0207	-0.0165	-0.0130	-0.0108	-0.0083	-0.0100	-0.0071	-0.0074	-0.0096	-0.0122
29.	355.	-0.0165	-0.0094	-0.0014	0.0020	0.0066	0.0080	0.0096	0.0110	0.0077	0.0101	0.0097	0.0084	0.0055
29.	352.	0.0422	0.0379	0.0325	0.0291	0.0296	0.0284	0.0254	0.0231	0.0182	0.0168	0.0145	0.0132	0.0113

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
29.	367.	-0.0200	-0.0280	0.0046	-0.0133	0.0024	-0.0190	-0.0104	-0.0015	-0.0005	-0.0014	-0.0209	-0.0364	-0.0368
29.	364.	-0.0336	-0.0348	-0.0112	-0.0158	-0.0099	-0.0089	0.0050	0.0359	0.0338	0.0092	-0.0425	-0.0883	-0.0923
29.	361.	-0.0538	-0.0550	-0.0152	-0.0182	-0.0140	-0.0086	0.0103	0.0463	0.0425	0.0029	-0.0721	-0.1347	-0.1399
29.	358.	-0.1559	-0.1733	-0.0131	-0.0177	-0.0176	-0.0101	0.0228	0.0490	0.0560	0.0078	-0.0976	-0.2026	-0.2291
29.	355.	-0.0799	-0.0977	0.0069	0.0045	0.0123	0.0093	0.0399	0.0588	0.0744	0.0510	-0.0370	-0.1337	-0.1578
29.	352.	-0.0265	-0.0457	0.0102	0.0106	0.0212	0.0206	0.0567	0.0778	0.0978	0.0766	-0.0086	-0.1088	-0.1388

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76
29.	367.	0.0035	-0.0109	-0.0179	-0.0068	-0.0213	-0.0227	-0.0146	-0.0081	0.0007	0.0004	0.0095	0.0001	-0.0272
29.	364.	-0.0100	-0.0120	0.0020	-0.0184	-0.0404	-0.0170	-0.0143	-0.0157	-0.0143	-0.0218	-0.0211	-0.0226	-0.0384
29.	361.	-0.0136	-0.0139	0.0061	-0.0328	-0.0645	-0.0345	-0.0347	-0.0346	-0.0345	-0.0360	-0.0408	-0.0434	-0.0394
29.	358.	-0.0115	-0.0179	0.0224	-0.0437	-0.1343	-0.0377	-0.0382	-0.0389	-0.0389	-0.0393	-0.0430	-0.0449	-0.0491
29.	355.	0.0081	0.0103	0.0380	0.0078	-0.0565	0.0003	-0.0002	0.0014	0.0001	0.0007	0.0016	0.0004	-0.0048
29.	352.	0.0109	0.0196	0.0546	0.0369	-0.0160	0.0150	0.0147	0.0146	0.0132	0.0133	0.0127	0.0104	0.0051

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93
29.	367.	-0.0287	-0.0233	-0.0123	0.0172	0.0073	0.0432	0.0795	0.0807	0.0745	0.1158	0.3902	-0.0141	-0.0265
29.	364.	-0.0179	-0.0131	0.0174	0.0735	0.0874	0.0814	0.0752	0.0797	0.0618	0.1525	0.4164	-0.0177	-0.0529
29.	361.	-0.0342	-0.0262	0.0185	0.0742	0.1211	0.0967	0.0812	0.0744	0.0946	0.2547	0.4923	-0.0344	-0.0513
29.	358.	-0.0154	-0.0034	0.0163	0.0467	0.1028	0.1402	0.1362	0.1455	0.2080	0.3643	0.5645	-0.0419	-0.0359
29.	355.	0.0093	0.0280	0.0453	0.0510	0.0931	0.1228	0.1175	0.1140	0.1474	0.3280	0.5614	0.0000	-0.0114
29.	352.	0.0208	0.0477	0.0597	0.0652	0.1126	0.1482	0.1413	0.1296	0.1625	0.3549	0.5902	0.0124	0.0002

Table X. Continued

(b) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
29.	367.	0.0104	-0.0006	-0.0058	-0.0001	-0.0088	0.0421	-0.0050	-0.0122	-0.0091	-0.0072	-0.0143	-0.0160	-0.0124	-0.
29.	364.	-0.0216	-0.0253	-0.0403	-0.0401	0.0382	0.1029	-0.0355	-0.0318	-0.0318	-0.0309	-0.0328	-0.0324	-0.0312	-0.
29.	361.	-0.0301	-0.0323	-0.0395	-0.0466	0.0312	0.1153	-0.0473	-0.0402	-0.0407	-0.0402	-0.0411	-0.0407	-0.0394	-0.
29.	358.	-0.0351	-0.0366	-0.0466	-0.0315	0.0257	0.1293	-0.0550	-0.0471	-0.0486	-0.0490	-0.0506	-0.0502	-0.0506	-0.
29.	355.	0.0056	0.0025	-0.0033	-0.0027	0.0437	0.1283	-0.0076	-0.0057	-0.0039	-0.0030	-0.0051	-0.0063	-0.0054	-0.
29.	352.	0.0145	0.0119	0.0043	0.0082	0.0540	0.1513	0.0036	0.0069	0.0075	0.0074	0.0056	0.0051	0.0051	0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
29.	367.	-0.0109	-0.0163	-0.0180	-0.0196	-0.0233	-0.0117	-0.0214	-0.0144	-0.0316	-0.0209	-0.0090	-0.0063	-0.0006	-0.
29.	364.	-0.0290	-0.0295	-0.0323	-0.0350	-0.0219	-0.0071	-0.0016	0.0102	0.0229	0.0481	0.0714	0.0958	0.1185	0.
29.	361.	-0.0350	-0.0363	-0.0351	-0.0356	-0.0293	-0.0184	-0.0038	0.0187	0.0393	0.0733	0.0991	0.1568	0.1771	0.
29.	358.	-0.0598	-0.0593	-0.0533	-0.0426	-0.0022	0.0224	0.0408	0.0700	0.0980	0.1383	0.1726	0.2463	0.2821	0.
29.	355.	-0.0124	-0.0120	-0.0105	-0.0113	0.0031	0.0137	0.0181	0.0293	0.0457	0.0719	0.1010	0.1650	0.1955	0.
29.	352.	-0.0013	0.0000	0.0027	0.0045	0.0197	0.0290	0.0369	0.0511	0.0635	0.0925	0.1204	0.1807	0.2098	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
29.	367.	0.3168	-0.0053	-0.0051	-0.0026	-0.0039	-0.0123	-0.0012	-0.0038	-0.0036	0.0001	-0.0070	-0.0074	-0.0044	-0.
29.	364.	0.5293	0.0103	0.0070	0.0058	-0.0010	-0.0101	-0.0131	-0.0216	-0.0302	-0.0346	-0.0314	-0.0180	0.0123	0.
29.	361.	0.5786	0.0207	0.0176	0.0105	0.0025	-0.0086	-0.0159	-0.0273	-0.0344	-0.0368	-0.0305	-0.0165	0.0128	0.
29.	358.	0.6635	0.0255	0.0222	0.0158	0.0058	-0.0084	-0.0178	-0.0314	-0.0357	-0.0311	-0.0085	0.0152	0.0538	0.
29.	355.	0.6309	0.0391	0.0375	0.0306	0.0312	0.0218	0.0164	0.0082	0.0056	0.0039	0.0100	0.0138	0.0356	0.
29.	352.	0.6473	0.0535	0.0495	0.0449	0.0436	0.0335	0.0270	0.0185	0.0153	0.0144	0.0179	0.0212	0.0422	0.

Run	Point	CP151	CP152	CP153	CP154
29.	367.	0.0391	0.0393	0.0403	0.0418
29.	364.	0.2101	0.2033	0.2054	0.1994
29.	361.	0.2189	0.2057	0.2132	0.2135
29.	358.	0.2222	0.2295	0.2500	0.2587
29.	355.	0.1701	0.1741	0.1984	0.2040
29.	352.	0.1881	0.1912	0.2158	0.2205

Table X. Continued

(c) $a_F = 0.00$ in.; $a_R = 0.30$ in.; configuration 8c

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24
32.	416.	0.20	2.04	22.96	23.61	0.65	98.8	0.8715	-0.2233	-0.1880	-0.1741	-0.1581	-0.1223	-0.0967
32.	413.	0.40	3.63	19.89	22.22	2.24	101.6	0.9112	-0.2483	-0.2036	-0.1897	-0.1658	-0.1385	-0.1018
32.	409.	0.60	4.70	16.33	20.85	4.13	100.5	0.9922	-0.2771	-0.2276	-0.2103	-0.1834	-0.1530	-0.1095
32.	406.	0.80	3.82	9.30	14.18	4.17	99.0	1.1256	-0.3001	-0.2766	-0.2532	-0.2227	-0.1797	-0.1231
32.	403.	0.90	3.53	7.36	12.49	4.20	100.7	1.2025	-0.3525	-0.3367	-0.3740	-0.3512	-0.2094	-0.0897
32.	400.	0.95	3.40	6.61	11.83	4.18	101.1	1.2374	-0.2518	-0.2803	-0.3145	-0.3271	-0.3602	-0.3674

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41
32.	416.	-0.0463	-0.0381	-0.0286	-0.0294	-0.0174	-0.0202	-0.0164	-0.0123	-0.0140	-0.0047	0.0013	0.0017	-0.0072
32.	413.	-0.0485	-0.0441	-0.0344	-0.0301	-0.0244	-0.0212	-0.0204	-0.0185	-0.0172	-0.0156	-0.0135	-0.0109	-0.0124
32.	409.	-0.0474	-0.0429	-0.0334	-0.0286	-0.0238	-0.0209	-0.0188	-0.0174	-0.0166	-0.0153	-0.0137	-0.0132	-0.0167
32.	406.	-0.0417	-0.0354	-0.0252	-0.0199	-0.0158	-0.0129	-0.0112	-0.0091	-0.0111	-0.0085	-0.0079	-0.0085	-0.0090
32.	403.	-0.0142	-0.0087	0.0005	0.0056	0.0092	0.0106	0.0109	0.0113	0.0092	0.0104	0.0099	0.0089	0.0077
32.	400.	0.0464	0.0403	0.0344	0.0319	0.0307	0.0291	0.0265	0.0237	0.0194	0.0187	0.0160	0.0132	0.0121

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58
32.	416.	-0.0145	-0.0181	0.0028	-0.0059	0.0035	-0.0080	-0.0088	0.0002	-0.0023	-0.0064	-0.0116	-0.0270	-0.0273
32.	413.	-0.0265	-0.0304	-0.0137	-0.0136	-0.0104	-0.0094	-0.0019	0.0275	0.0287	0.0084	-0.0338	-0.0791	-0.0860
32.	409.	-0.0529	-0.0554	-0.0154	-0.0162	-0.0118	-0.0090	0.0021	0.0342	0.0354	0.0049	-0.0564	-0.1199	-0.1285
32.	406.	-0.1554	-0.1750	-0.0118	-0.0169	-0.0140	-0.0108	0.0152	0.0383	0.0460	0.0022	-0.0933	-0.1926	-0.2147
32.	403.	-0.0752	-0.0933	0.0060	0.0070	0.0136	0.0105	0.0282	0.0544	0.0646	0.0429	-0.0245	-0.1134	-0.1348
32.	400.	-0.0246	-0.0429	0.0090	0.0117	0.0220	0.0208	0.0437	0.0680	0.0829	0.0649	-0.0014	-0.0923	-0.1161

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76
32.	416.	0.0001	-0.0043	-0.0079	-0.0171	-0.0188	-0.0082	-0.0029	-0.0052	-0.0031	0.0020	-0.0042	-0.0091	-0.0107
32.	413.	-0.0121	-0.0089	-0.0012	-0.0161	-0.0414	-0.0203	-0.0195	-0.0233	-0.0239	-0.0236	-0.0286	-0.0347	-0.0269
32.	409.	-0.0142	-0.0121	0.0007	-0.0282	-0.0616	-0.0225	-0.0223	-0.0259	-0.0277	-0.0245	-0.0224	-0.0206	-0.0315
32.	406.	-0.0096	-0.0151	0.0132	-0.0397	-0.1308	-0.0350	-0.0373	-0.0378	-0.0380	-0.0382	-0.0361	-0.0392	-0.0441
32.	403.	0.0080	0.0129	0.0259	0.0115	-0.0490	0.0064	0.0055	0.0053	0.0063	0.0054	0.0051	0.0030	-0.0007
32.	400.	0.0110	0.0220	0.0408	0.0347	-0.0083	0.0155	0.0145	0.0136	0.0126	0.0121	0.0126	0.0097	0.0076

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93
32.	416.	-0.0188	-0.0108	0.0004	0.0142	0.0077	0.0311	0.0512	0.0678	0.0852	0.1020	0.3377	-0.0036	-0.0213
32.	413.	-0.0518	-0.0081	0.0107	0.0323	0.1055	0.1115	0.0988	0.0810	0.0877	0.1896	0.3901	-0.0222	-0.0521
32.	409.	-0.0349	-0.0303	0.0094	0.0471	0.1005	0.1227	0.0942	0.0803	0.0892	0.2253	0.4477	-0.0233	-0.0417
32.	406.	-0.0148	-0.0006	0.0191	0.0444	0.0938	0.1084	0.0995	0.1054	0.1574	0.3281	0.5404	-0.0358	-0.0383
32.	403.	-0.0005	0.0148	0.0383	0.0599	0.0834	0.1160	0.1040	0.0875	0.0759	0.1957	0.4281	0.0054	-0.0077
32.	400.	0.0178	0.0341	0.0487	0.0545	0.0968	0.1349	0.1198	0.1026	0.1031	0.2445	0.4651	0.0145	0.0087

Table X. Continued

(c) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
32.	416.	0.0064	-0.0047	-0.0017	0.0005	0.0082	0.0261	-0.0066	-0.0113	-0.0071	0.0013	-0.0039	-0.0074	-0.0065	-0.
32.	413.	-0.0188	-0.0221	-0.0291	-0.0359	0.0054	0.1079	-0.0302	-0.0250	-0.0249	-0.0239	-0.0242	-0.0247	-0.0259	-0.
32.	409.	-0.0258	-0.0276	-0.0329	-0.0375	0.0047	0.1112	-0.0408	-0.0336	-0.0336	-0.0328	-0.0327	-0.0332	-0.0331	-0.
32.	406.	-0.0279	-0.0309	-0.0428	-0.0226	0.0186	0.1147	-0.0498	-0.0404	-0.0421	-0.0427	-0.0448	-0.0471	-0.0473	-0.
32.	403.	0.0078	0.0052	-0.0006	0.0020	0.0330	0.1014	-0.0035	0.0009	-0.0004	-0.0004	-0.0014	-0.0027	-0.0025	-0.
32.	400.	0.0185	0.0160	0.0073	0.0177	0.0425	0.1187	0.0069	0.0115	0.0100	0.0097	0.0092	0.0078	0.0070	0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
32.	416.	-0.0048	-0.0068	-0.0078	-0.0115	-0.0156	-0.0033	-0.0120	-0.0121	-0.0118	-0.0116	-0.0125	-0.0261	-0.0276	-0.
32.	413.	-0.0308	-0.0324	-0.0330	-0.0335	-0.0390	-0.0361	-0.0286	-0.0161	-0.0006	0.0189	0.0364	0.0692	0.0838	0.
32.	409.	-0.0351	-0.0350	-0.0359	-0.0356	-0.0336	-0.0244	-0.0144	0.0035	0.0163	0.0337	0.0607	0.0994	0.1212	0.
32.	406.	-0.0427	-0.0377	-0.0308	-0.0257	-0.0094	0.0030	0.0197	0.0397	0.0624	0.0886	0.1112	0.1707	0.2014	0.
32.	403.	-0.0023	-0.0010	0.0008	0.0011	0.0057	0.0099	0.0132	0.0211	0.0335	0.0493	0.0690	0.1158	0.1402	0.
32.	400.	0.0083	0.0108	0.0134	0.0157	0.0195	0.0224	0.0240	0.0297	0.0397	0.0572	0.0796	0.1221	0.1506	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
32.	416.	0.2515	0.0218	0.0122	0.0031	0.0108	0.0147	0.0197	0.0144	0.0076	0.0165	0.0059	0.0036	0.0071	-0.
32.	413.	0.4351	0.0316	0.0230	0.0248	0.0200	0.0179	0.0145	0.0045	-0.0095	-0.0205	-0.0287	-0.0294	-0.0142	0.
32.	409.	0.5067	0.0410	0.0225	0.0259	0.0280	0.0218	0.0147	0.0026	-0.0104	-0.0215	-0.0211	-0.0176	-0.0044	0.
32.	406.	0.5842	0.0655	0.0279	0.0367	0.0365	0.0285	0.0165	0.0014	-0.0140	-0.0195	-0.0060	0.0014	0.0288	0.
32.	403.	0.5384	0.0649	0.0538	0.0520	0.0497	0.0425	0.0350	0.0260	0.0154	0.0105	0.0150	0.0123	0.0221	0.
32.	400.	0.5717	0.0742	0.0582	0.0582	0.0570	0.0527	0.0468	0.0390	0.0281	0.0237	0.0263	0.0245	0.0327	0.

Run	Point	CP151	CP152	CP153	CP154
32.	416.	0.0729	0.0966	0.0963	0.1051
32.	413.	0.1422	0.1508	0.1484	0.1499
32.	409.	0.1682	0.1756	0.1755	0.1770
32.	406.	0.2596	0.2625	0.2749	0.2855
32.	403.	0.1895	0.2002	0.2082	0.2148
32.	400.	0.2104	0.2244	0.2354	0.2444

Table X. Continued

(d) $a_F = 0.30$ in.; $a_R = 0.30$ in.; configuration 8d

Run	Point	M_∞	$R_\infty \times 10^{-6}$	p_∞, psi	$p_{t,\infty}$, psi	q_∞, psi	$T_{t,\infty}$, °F	CP18	CP19	CP20	CP21	CP22	CP23	CP24	
31.	393.	0.20	2.04	22.97	23.63	0.65	101.1	0.8794	-0.2268	-0.1927	-0.1774	-0.1581	-0.1249	-0.0970	-0
31.	390.	0.40	3.66	19.89	22.24	2.25	99.8	0.9129	-0.2463	-0.2024	-0.1879	-0.1630	-0.1370	-0.0996	-0
31.	387.	0.60	4.70	16.33	20.86	4.14	100.7	0.9912	-0.2779	-0.2283	-0.2110	-0.1836	-0.1546	-0.1099	-0
31.	384.	0.80	3.80	9.30	14.18	4.17	100.9	1.1265	-0.3024	-0.2777	-0.2548	-0.2230	-0.1801	-0.1232	-0
31.	381.	0.90	3.52	7.36	12.46	4.18	100.5	1.2033	-0.3572	-0.3358	-0.3727	-0.3546	-0.1920	-0.0927	-0
31.	378.	0.95	3.40	6.61	11.81	4.17	100.3	1.2379	-0.2561	-0.2830	-0.3191	-0.3285	-0.3619	-0.3675	-0

Run	Point	CP29	CP30	CP31	CP32	CP33	CP34	CP35	CP36	CP37	CP38	CP39	CP40	CP41	
31.	393.	-0.0465	-0.0356	-0.0299	-0.0241	-0.0189	-0.0201	-0.0143	-0.0140	-0.0153	-0.0054	0.0025	-0.0038	-0.0084	-0
31.	390.	-0.0466	-0.0414	-0.0335	-0.0280	-0.0238	-0.0211	-0.0185	-0.0171	-0.0159	-0.0138	-0.0115	-0.0116	-0.0131	-0
31.	387.	-0.0498	-0.0437	-0.0344	-0.0276	-0.0244	-0.0210	-0.0191	-0.0187	-0.0178	-0.0171	-0.0151	-0.0143	-0.0168	-0
31.	384.	-0.0425	-0.0366	-0.0266	-0.0204	-0.0159	-0.0133	-0.0097	-0.0091	-0.0109	-0.0084	-0.0071	-0.0082	-0.0094	-0
31.	381.	-0.0135	-0.0094	-0.0008	0.0057	0.0088	0.0100	0.0126	0.0128	0.0112	0.0116	0.0117	0.0114	0.0092	-0
31.	378.	0.0446	0.0383	0.0332	0.0313	0.0299	0.0286	0.0277	0.0238	0.0198	0.0178	0.0170	0.0150	0.0128	-0

Run	Point	CP46	CP47	CP48	CP49	CP50	CP51	CP52	CP53	CP54	CP55	CP56	CP57	CP58	
31.	393.	-0.0139	-0.0196	0.0030	-0.0086	0.0005	-0.0155	-0.0034	0.0081	0.0099	0.0099	-0.0054	-0.0317	-0.0358	-0
31.	390.	-0.0293	-0.0301	-0.0117	-0.0147	-0.0112	-0.0076	0.0108	0.0465	0.0458	0.0187	-0.0391	-0.0994	-0.1064	-0
31.	387.	-0.0548	-0.0565	-0.0162	-0.0194	-0.0152	-0.0077	0.0140	0.0617	0.0575	0.0121	-0.0730	-0.1495	-0.1581	-0
31.	384.	-0.1559	-0.1745	-0.0110	-0.0174	-0.0174	-0.0120	0.0285	0.0565	0.0666	0.0148	-0.0993	-0.2161	-0.2416	-0
31.	381.	-0.0777	-0.0955	0.0091	0.0080	0.0135	0.0135	0.0459	0.0605	0.0783	0.0530	-0.0357	-0.1442	-0.1677	-0
31.	378.	-0.0292	-0.0476	0.0112	0.0137	0.0223	0.0233	0.0627	0.0789	0.1047	0.0828	-0.0063	-0.1216	-0.1518	-0

Run	Point	CP63	CP64	CP65	CP66	CP67	CP68	CP69	CP71	CP72	CP73	CP74	CP75	CP76	
31.	393.	0.0001	-0.0042	-0.0112	-0.0132	-0.0140	-0.0150	-0.0104	-0.0089	-0.0033	-0.0020	-0.0043	-0.0068	-0.0218	-0
31.	390.	-0.0106	-0.0103	0.0065	-0.0183	-0.0418	-0.0299	-0.0294	-0.0295	-0.0290	-0.0318	-0.0394	-0.0400	-0.0365	-0
31.	387.	-0.0145	-0.0146	0.0113	-0.0337	-0.0677	-0.0356	-0.0355	-0.0363	-0.0382	-0.0430	-0.0556	-0.0583	-0.0450	-0
31.	384.	-0.0094	-0.0187	0.0239	-0.0392	-0.1382	-0.0335	-0.0351	-0.0373	-0.0367	-0.0387	-0.0387	-0.0441	-0.0487	-0
31.	381.	0.0102	0.0126	0.0441	0.0123	-0.0595	0.0094	0.0095	0.0084	0.0095	0.0076	0.0027	-0.0007	-0.0052	-0
31.	378.	0.0126	0.0210	0.0596	0.0433	-0.0174	0.0122	0.0104	0.0099	0.0108	0.0113	0.0104	0.0097	0.0072	0

Run	Point	CP81	CP82	CP83	CP84	CP85	CP86	CP87	CP88	CP89	CP90	CP91	CP92	CP93	
31.	393.	-0.0303	-0.0302	0.0018	0.0162	0.0131	0.0799	0.0973	0.0779	0.0816	0.0511	0.3588	-0.0065	-0.0218	0
31.	390.	-0.0451	-0.0134	0.0340	0.0908	0.1223	0.1691	0.1483	0.1249	0.1335	0.2452	0.4585	-0.0294	-0.0523	0
31.	387.	-0.0440	-0.0126	0.0455	0.1057	0.1461	0.1371	0.1079	0.0740	0.0970	0.2657	0.4878	-0.0421	-0.0545	0
31.	384.	-0.0020	0.0086	0.0289	0.0582	0.1366	0.1547	0.1420	0.1628	0.2231	0.4006	0.6079	-0.0370	-0.0363	0
31.	381.	0.0172	0.0230	0.0402	0.0439	0.0970	0.1392	0.1366	0.1311	0.1673	0.3544	0.5895	0.0022	0.0005	0
31.	378.	0.0300	0.0381	0.0508	0.0564	0.1088	0.1538	0.1413	0.1324	0.1643	0.3308	0.5451	0.0100	0.0059	0

Table X. Concluded

(d) Concluded

Run	Point	CP98	CP99	CP100	CP101	CP102	CP103	CP104	CP105	CP106	CP107	CP108	CP109	CP110	C
31.	393.	0.0008	-0.0014	-0.0065	-0.0170	-0.0217	0.0590	-0.0084	-0.0075	-0.0050	-0.0063	-0.0078	-0.0129	-0.0106	-0.
31.	390.	-0.0252	-0.0273	-0.0433	-0.0529	0.0266	0.1502	-0.0375	-0.0306	-0.0312	-0.0323	-0.0329	-0.0340	-0.0340	-0.
31.	387.	-0.0366	-0.0380	-0.0528	-0.0581	0.0371	0.1307	-0.0532	-0.0436	-0.0456	-0.0465	-0.0472	-0.0482	-0.0485	-0.
31.	384.	-0.0372	-0.0398	-0.0528	-0.0287	0.0120	0.1470	-0.0584	-0.0483	-0.0493	-0.0498	-0.0529	-0.0534	-0.0526	-0.
31.	381.	0.0051	0.0033	-0.0025	-0.0030	0.0353	0.1349	-0.0094	-0.0042	-0.0041	-0.0045	-0.0061	-0.0056	-0.0053	-0.
31.	378.	0.0148	0.0135	0.0035	0.0147	0.0511	0.1560	0.0015	0.0064	0.0053	0.0046	0.0028	0.0030	0.0036	0.

Run	Point	CP115	CP116	CP117	CP118	CP119	CP120	CP121	CP122	CP123	CP124	CP125	CP126	CP127	C
31.	393.	-0.0104	-0.0108	-0.0090	-0.0093	-0.0179	-0.0139	-0.0176	-0.0238	-0.0253	-0.0168	-0.0040	0.0048	0.0184	0.
31.	390.	-0.0406	-0.0433	-0.0472	-0.0481	-0.0351	-0.0182	-0.0092	0.0068	0.0404	0.0735	0.1009	0.1263	0.1328	0.
31.	387.	-0.0551	-0.0587	-0.0574	-0.0553	-0.0155	0.0072	0.0306	0.0642	0.0929	0.1113	0.1432	0.1856	0.2063	0.
31.	384.	-0.0546	-0.0542	-0.0482	-0.0388	-0.0020	0.0198	0.0416	0.0699	0.0931	0.1288	0.1651	0.2210	0.2517	0.
31.	381.	-0.0144	-0.0150	-0.0142	-0.0144	-0.0044	0.0065	0.0135	0.0276	0.0426	0.0719	0.1066	0.1740	0.2074	0.
31.	378.	0.0021	0.0043	0.0089	0.0135	0.0332	0.0421	0.0472	0.0610	0.0763	0.0996	0.1282	0.2047	0.2464	0.

Run	Point	CP133	CP134	CP136	CP137	CP138	CP139	CP140	CP141	CP142	CP143	CP144	CP145	CP146	C
31.	393.	0.3311	0.0192	0.0185	0.0124	0.0162	0.0050	0.0057	0.0054	0.0031	0.0034	-0.0219	-0.0051	-0.0187	-0.
31.	390.	0.5211	0.0229	0.0267	0.0181	0.0137	0.0007	-0.0075	-0.0205	-0.0303	-0.0352	-0.0329	-0.0140	0.0064	0.
31.	387.	0.6170	0.0210	0.0140	0.0135	0.0093	0.0002	-0.0092	-0.0215	-0.0323	-0.0362	-0.0194	0.0108	0.0443	0.
31.	384.	0.6241	0.0453	0.0420	0.0338	0.0209	0.0033	-0.0135	-0.0308	-0.0399	-0.0389	-0.0219	-0.0038	0.0368	0.
31.	381.	0.6395	0.0509	0.0494	0.0436	0.0403	0.0335	0.0261	0.0162	0.0104	0.0014	0.0060	0.0094	0.0305	0.
31.	378.	0.6657	0.0694	0.0652	0.0579	0.0506	0.0428	0.0354	0.0274	0.0254	0.0297	0.0380	0.0414	0.0554	0.

Run	Point	CP151	CP152	CP153	CP154
31.	393.	0.0937	0.1088	0.1096	0.1141
31.	390.	0.1689	0.1691	0.1691	0.1769
31.	387.	0.2357	0.2379	0.2400	0.2447
31.	384.	0.2915	0.2978	0.3126	0.3196
31.	381.	0.2523	0.2538	0.2672	0.2665
31.	378.	0.2432	0.2514	0.2694	0.2835

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Robert L. Stallings, Jr., Elizabeth B. Plentovich,
Maureen B. Tracy, and Michael J. Hemsch

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Hampton, VA 23681-0001

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13. ABSTRACT *(Maximum 200 words)*
The passive venting techniques for shallow cavities that were investigated consisted of (1) porous floors, (2) slot vents at each end of solid floors, (3) slot vents at each end of porous floors, and (4) pipe vents on solid floors. For deep cavities, passive venting techniques that were investigated consisted of (1) lip vents at the outer edges of the front and rear walls of a cavity with a solid floor and (2) lip vents at the outer edges of the front and rear walls of a cavity with a porous floor. The cavity passive venting models were mounted in a flat plate model and were tested at Mach numbers from 0.20 to 0.95. The shallow cavities had lengths of 32.16 and 42.00 in. and a depth of 2.40 in., resulting in cavity length-to-depth ratios (l/h) of 13.40 and 17.50, respectively. The deep cavity had a length of 32.16 in. and a depth of 4.80 in. ($l/h = 6.70$). All cavities had a width of 9.60 in. Results from the test show that the porous floor and the porous floor combined with slot vents had the greatest effect on the shallow cavity pressure distributions and resulted in distributions that were representative of deeper cavities. The lip vents had little effect on the pressure distributions for the deep cavity with solid or porous floors for most of the test range of Mach number.

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Cavity; Passive venting; Porosity; Pressure distributions; Subsonic; Transonic

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